



KINTEK srl
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KINTEK's main long-term target is the improvement of the services and products offered to the customers, in order to increase their satisfaction and the commercial activity in the various national and international markets.

In order to achieve these targets, KINTEK must pursue, ensure and improve the following:

- The observance of the law and technical requirements about the supplied products (with a staff's constant updating through exhibitions and company courses);
- The satisfaction of the customer's explicit requests (by means of a commercial office for the foreign and Italian market, with high competence and stronger and stronger experience in the field of mechanical tooling);
- The satisfaction of the customer's implicit requests (considering the received orders or the sent offers critically, checking periodically and frequently the observance of deliveries to the customer, also visiting the customer directly);
- The service provided by the staff's experience;
- The management of claims and possible faulty products (for both manufactured goods and internal industrial processes);
- The constant updating in the technical and computer field.

These activities are based on the following principles:

- Internal and external staff's involvement in quality;
- Identification of the industrial processes that condition the customer's satisfaction and definition of the ways to perform and check these processes;
- Research development in the field of quality of service and/or manufactured goods;
- Constant analysis and control of the processes in order to find the margins of improvement.

The above mentioned principles will be developed according to the following operating procedures:

- Planning and implementation of a Quality System certified according to the UNI EN ISO 9001:2008 Norms
- Arrangement, in this system, for specific control and improvement of the processes that determine the customer's satisfaction.



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Основной целью компании KINTEK в долгосрочных отношениях с клиентами – улучшение сервиса и продукции, которую мы предлагаем, для удовлетворения требований наших клиентов, а также для увеличения продаж на национальном и международном рынках.

Для достижения поставленной цели KINTEK осуществлять, гарантировать и улучшать следующее:

- Соблюдение законов и технических требований к поставляемой продукции (сотрудники компании должны постоянно изучать эти пункты на выставках и курсах)
- Удовлетворение четко поставленных требований клиентов (с помощью офиса продаж на зарубежный и итальянский рынки, где работают квалифицированные сотрудники, и с помощью накопления все большего опыта в области механообработки)
- Удовлетворение неясных требований клиентов (проверяя все заказы, получаемые от клиентов, тщательная подготовка коммерческих предложений клиентам, проверяя периодически отгрузки клиентам, посещение клиентов)
- Сервис, предлагаемый опытными профессионалами
- Устранение жалоб и возможно бракованной продукции (проверяя саму продукцию и процесс ее изготовления)
- Постоянное улучшение технических и компьютерных навыков персонала

Эти действия основаны на следующих принципах:

- Вовлечение персонала в решение вопросов качества продукции
- Идентификация промышленных процессов производства для удовлетворения клиентов, влияние на процессы производства и контроль над ними
- Постоянное развитие в области качества сервиса и/или предлагаемой продукции
- Постоянный анализ и контроль над процессами производства для поиска решений по его улучшению

Эти действия основаны на следующих принципах:

- Планирование и внедрение системы качества в соответствии с UNI EN ISO 9001:2008.

Соответствие качества нашей продукции данному стандарту говорит об удовлетворении всех нужд клиентов.



Le but principal à long terme de la KINTEK est celui d'améliorer les services et les produits offerts au client pour augmenter la satisfaction du client même et la couverture commerciale dans les différents marchés nationaux et internationaux.

À cette fin, KINTEK s'engage à poursuivre, garantir et améliorer:

- Le respect des conditions requises au niveau législatif et technique par rapport aux produits fournis (grâce à une formation permanente du personnel obtenu à travers la participation aux foires commerciales et à travers des cours internes);
- Le respect des demandes explicites du client (mettant à disposition une division commerciale très professionnelle et très qualifiée pour le marché étranger et italien et avec une expérience consolidée dans le domaine de l'outillage mécanique);
- Le respect des demandes implicites du client (à travers une analyse critique des ordres reçus ou des offres envoyées, à travers un contrôle régulier et fréquent du respect des délais de livraison au client et à travers des visites directes chez le client) ;
- Le service grâce à l'expérience du personnel;
- La gestion des plaintes et la gestion des non-conformités par rapport aux produits finaux et aux procédés d'entreprise;
- Formation continue dans le domaine technique et informatique.

Ces activités sont basées sur les principes suivants:

- Participation du personnel interne et externe envers la qualité;
- Identification des procédés d'entreprise qui influencent la satisfaction du client et définition des modalités d'exécution et contrôle de ces procédés;
- Développement des activités de recherche pour la gestion des procédés qui influencent la qualité du service et/ou du produit fourni;
- Analyse et supervision continue des procédés afin de déterminer les marges d'amélioration.

Les principes ci-dessus seront développés à travers les modalités opérationnelles suivantes:

- Conception de projet et mise en œuvre d'un système de management de la qualité qui est certifié selon la norme UNI EN ISO 9001:2000;
- Prédisposition (dans ce système) des activités spécifiques de contrôle et amélioration des procédés qui influent sur la satisfaction du client.



L'obiettivo che la KINTEK intende perseguire e garantire nel tempo è il miglioramento dei servizi e dei prodotti offerti al cliente per aumentare la soddisfazione del cliente stesso e aumentare la copertura commerciale nei vari mercati nazionali ed internazionali.

La KINTEK per raggiungere ciò, si impone di perseguire, garantire e migliorare:

- Il rispetto dei requisiti sia di legge che tecnici relativi ai prodotti forniti (mediante un continuo aggiornamento del proprio personale ottenuto tramite partecipazione a fiere, e a corsi interni);
- Il rispetto delle richieste esplicite del cliente (mettendo a disposizione un ufficio commerciale per il mercato estero e Italia, di elevata professionalità e con un'esperienza che è sempre più consolidata nel settore della utensileria meccanica);
- Il rispetto delle richieste implicite del cliente (mediante un'analisi critica degli ordini ricevuti o dell'offerte inviate, mediante un controllo periodico e frequente sul rispetto delle consegne al cliente, mediante visite dirette presso il cliente);
- Il servizio attraverso l'esperienza del proprio personale;
- La gestione dei reclami e delle eventuali non conformità riscontrate (sia relative al prodotto finito che ai propri processi aziendali);
- Il continuo aggiornamento in campo tecnico e informatico.

Tali attività si fondano sui seguenti principi:

- Coinvolgimento di tutto il personale aziendale interno ed esterno verso la qualità;
- Individuazione dei processi aziendali che influenzano la soddisfazione del Cliente e definizione delle modalità di esecuzione e controllo di tali processi;
- Sviluppo delle attività di ricerca finalizzate alla gestione dei processi che influenzano la qualità del servizio e/o prodotto fornito;
- Analisi e monitoraggio continuo dei processi allo scopo di identificare i margini di miglioramento.

I principi individuati saranno sviluppati attraverso le seguenti modalità operative:

- Progettazione ed Implementazione di un Sistema di Gestione per la Qualità certificabile ai sensi delle Norme UNI EN ISO 9001:2008
- Predisposizione, nell'ambito del sistema, di specifiche attività di monitoraggio e miglioramento dei processi che influenzano la soddisfazione del Cliente.



KINTEK 的主要长期目标是通过提高向客户提供的产品和服务的水平，从而加强客户满意度，并逐渐增加在各个国家性及全球性市场上的商业活动。

为了达到这些目标, KINTEK 追求、确保并改进:

- 遵守法律, 遵循所提供的产品的技术要求 (通过参加展会和公司培训课程使员工持续得到提升);
- 满足客户提出的明确要求 (通过为国外市场和意大利市场建立一间商务办公室, 在机械工具领域取得高的竞争力和越来越丰富的经验)
- 满足客户未明确提出暗示性的要求 (仔细考虑收到的订单和发出的报价, 定期、频繁地检查向客户交付货物的质量, 也可以直接拜访客户);
- 以员工的经验提供服务;
- 对索赔及可能存在问题的产品进行管理 (既包括制成品, 也包括内部工业过程);
- 不断地对技术和计算机应用领域进行更新。

这些业务是依据下列原则:

- 内部及外部员工对于质量的参与;
- 找出影响客户满意度的工业过程, 确定对这些过程进行处理和检查的方法;
- 在服务及或产品质量领域进行研发;
- 对过程进行持续的分析和控制, 以找出可改进处。

上述原则是根据下列操作程序制定出来的:

- 规划及实施符合 UNI EN ISO 9001:2008 标准认证质量体系;

在此系统中, 安排决定客户满席度的、具体的过程控制和改进措施。



DET NORSKE VERITAS

QUALITY MANAGEMENT SYSTEM CERTIFICATE

Certificato No. / Certificate No. **CERT-15223-2004-AQ-TRI-SINCERT**

Si attesta che / This certifies that

Il sistema di gestione per la qualità di / the quality management system of

KINTEK S.r.l.

Via Goretta, 88/G – 10072 Caselle Torinese, Frazione Mappano (TO) - Italy

È conforme ai requisiti della norma per i sistemi di gestione per la qualità
Conforms to the quality management systems standard

UNI EN ISO 9001:2008 (ISO 9001:2008)

Questa certificazione è valida per il seguente campo applicativo:
This certificate is valid for the following products or services:

(Ulteriori chiarimenti riguardanti lo scopo e l'applicabilità dei requisiti della normativa si possono ottenere consultando l'organizzazione certificata)
(Further clarifications regarding the scope and the applicability of the requirements of the standard(s) may be obtained by consulting the certified organization)

Commercializzazione di portautensili per tornio CNC, mandrini (ISO-HSK-Calettamento), utensili a fissaggio meccanico, utensili con attacco HSK, accessori per macchine utensili sia in versione standard, sia speciali

Marketing of toolholder for CNC lathers Standard and HSK toolholder (shrink fit chucks) turning tools, HSK holder and toolholders, accessories for N/CMachine

Vertrieb von Werkzeughaltern fur CNC-Drehmaschinen, ISO-und HSK-Steilgekelaufnahmen, Klemmhaltern, Zubehör für Standard und Sonder – Werkzeugmaschinen

Data Prima Emissione

First Issue Date

2004-12-10

Luogo e data
Place and date

Agrate Brianza, (MI) 2010-09-24

Settore EA : 29a - 17

Marco Salerno
Lead Auditor

Data di scadenza

Expiry Date

2013-10-08

per l'Organismo di Certificazione
for the Accredited Unit

DET NORSKE VERITAS ITALIA S.R.L.

SINCERT
ACCREDITAMENTO ORGANISMO DI CERTIFICAZIONE E ISPEZIONE

SGQ Registrazione N. 003A
SGA Registrazione N. 003D
PRO Registrazione N. 003B

Membro degli Accordi di Mutuo Riconoscimento EA e IAF
Signatory of EA and IAF Mutual Recognition Agreements

Vittore Marangon
Management Representative



STANDARD STEILKEGELAUFNAHMEN, ZUBEH R UND KIT
STANDARD TOOLHOLDERS, ACCESSORIES AND KITS
ОПРАВКИ SK(7:24), ЗАПАСНЫЕ ЧАСТИ И ПРИНАДЛЕЖНОСТИ

MANDRINS STANDARD, ACCESSOIRES ET KITS
MANDRINI STANDARD, ACCESSORI E KIT
标准刀柄、附件及组套

PAG.
006-179



HSK STEILKEGELAUFNAHMEN UND ZUBEH R
TOOLHOLDERS AND ACCESSORIES
ОПРАВКИ HSK, ЗАПАСНЫЕ ЧАСТИ
И ПРИНАДЛЕЖНОСТИ
MANDRINS HSK ET ACCESSOIRES
MANDRINI CON ATTACCO HSK E ACCESSORI
HSK刀柄及附件



WERKZEUGHALTER DIN ISO 26623-1
TOOLHOLDERS DIN ISO 26623-1
СТАНКОВ DIN ISO 26623-1
PORTE-OUTILS DIN ISO 26623-1
PORTAUTENSILI DIN ISO 26623-1
刀柄 DIN ISO 26623-1

PAG.
180-275



ANGETRIEBENE WERKZEUGHALTER F R CNC-DREHMASCHINEN NACH DIN 69880
DRIVEN TOOLS FOR CNC LATHES TO DIN 69880
ПРИВОДНЫЕ ТОКАРНЫЕ ГОЛОВКИ ПО DIN 69880 ДЛЯ СТАНКОВ С ЧПУ
PORTE-OUTILS TOURNANTS VDI POUR TOURS CNC SELON DIN 69880
PORTAUTENSILI ROTANTI VDI PER TORNi CNC SECONDO DIN 69880
符合 DIN 69880 标准的 CNC 数控车床驱动工具

PAG.
276-311



WERKZEUGHALTER F R CNC-DREHEMASCHINEN
TOOLHOLDERS FOR CNC LATHES
РЕЗЦЕДЕРЖАТЕЛИ ДЛЯ ТОКАРНЫХ СТАНКОВ
PORTE-OUTILS POUR TOURS CNC
PORTAUTENSILI PER TORNi CNC
数控车床刀柄

PAG.
312-373



SONDER-WERKZEUGHALTER
SPECIAL TOOLHOLDERS
СПЕЦИАЛЬНЫЕ РЕЗЦЕДЕРЖАТЕЛИ
PORTE-OUTILS SPECIAUX
PORTAUTENSILI SPECIALI
特殊刀柄

PAG.
374-425



HSK KLEMMHALTER UND WERKZEUGHALTER
HSK HOLDERS AND TOOLHOLDERS
ДЕРЖАВКИ И РЕЗЦЕДЕРЖАТЕЛИ С ХВОСТОВИКОМ HSK
OUTILS ET PORTE-OUTILS AVEC ATTACHEMENT HSK
UTENSILI E PORTAUTENSILI CON ATTACCO HSK
HSK 柄及刀柄

PAG.
426-465



RAIMAX AUSDREHKOPF
RAIMAX BORING HEAD
РАСТОЧНЫЕ ГОЛОВКИ РЕГУЛИРУЕМЫЕ RAIMAX
RAIMAX T TE
TESTINE RAIMAX
RAIMAX 镗头

PAG.
466-473



EINBAUHALTER
CARTRIDGES
КАРТРИДЖИ
CARTOUCHES
CARTUCCE
刀头

PAG.
474-487



KLEMMHALTER F R AUSSENBEARBEITUNG
UND BOHRSTANGEN F R INNENBEARBEITUNG
EXTERNAL (O.D.) TURNING TOOLS AND INTERNAL (I.D.) BORING BARS
ТОКАРНЫЙ ИНСТРУМЕНТ ДЛЯ ВНЕШНЕЙ И ВНУТРЕННЕЙ ОБРАБОТКИ

PAG.
488-511

PORTE-PLAQUETTES EXTERIEURES, INTERIEURES
PORTA INSERTI PER ESTERNI E BARENI PER INTERNI
外部车刀-内部镗头

KANTEK





STANDARD STEILKEGELAUFNAHMEN UND ZUBEH R



STANDARD TOOLHOLDERS AND ACCESSORIES



ОПРАВКИ SK (7:24) И ЗАПАСНЫЕ ЧАСТИ



MANDRINS STANDARD ET ACCESSOIRES



MANDRINI STANDARD E ACCESSORI



和元件安装

● DIN 2080

PAG. 008 - 027

● DIN 69871 A-AD/B-AD

PAG. 028 - 071

● JIS B 6339

MAS 403/BT A-AD/B-AD

PAG. 072 - 117

● ACCESSORIES - ACCESSORI

PAG. 118 - 174

● KIT

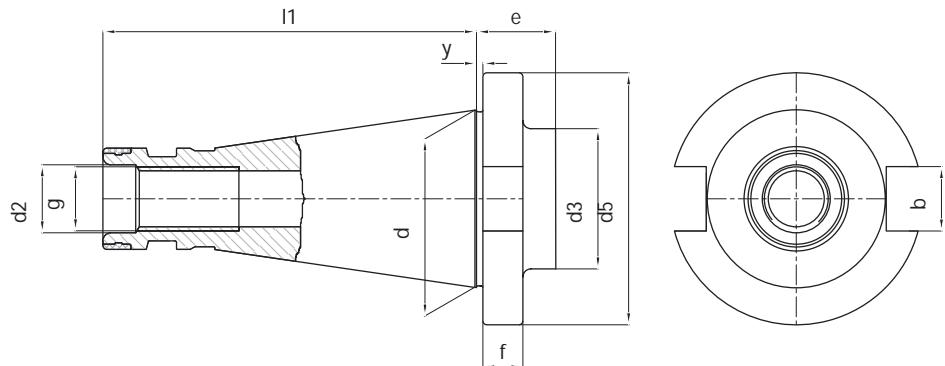
PAG. 175 - 179

KLIMATEK

DIN 2080



TECHNISCHE DATEN DER STEILKEGELWERKZEUGE
TAPER SHANKS DATA SHEET
КОНСТРУКТИВНЫЕ РАЗМЕРЫ
DONNEES TECHNIQUES QUEUE D'OUTILS
DATI TECNICI CONI D'ATTACCO
锥柄数据表



| ISO | d | l1 | d2 | g | y | d5 | f | d3 | e | b |
|-----|-------|-------|----|-----|-----|------|----|----|------|------|
| 30 | 31,75 | 68,4 | 13 | M12 | 1,6 | 50 | 8 | 36 | 18,6 | 16,1 |
| 40 | 44,45 | 93,4 | 17 | M16 | 1,6 | 63 | 10 | 50 | 22,6 | 16,1 |
| 50 | 69,85 | 126,8 | 26 | M24 | 3,2 | 97,5 | 12 | 78 | 31,2 | 25,7 |



KINTEK - STEILKEGELAUFNAHMEN

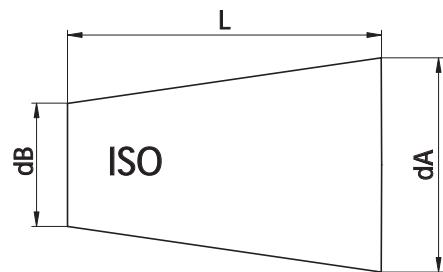
TECHNISCHE DATEN

Alle Kintek-Steilkegelaufnahmen werden nach den DIN-Normen angefertigt.

KEGELSCHAFTTOLERANZ

In Klasse AT3 angefertigt.

| ISO | L | dA-dB | AT3 |
|-----|----|--------|--------|
| 30 | 42 | 12.250 | +0.002 |
| 40 | 59 | 17.208 | +0.003 |
| 50 | 92 | 26.833 | +0.004 |



RUNDLAUFGENAUGKEIT DER SPANNZANGENAUFNAHME

Die DIN 6391- Norm schreibt eine Rundlaufgenauigkeit zwischen Aussenkegel und Innenkegel / Spannzangensitz vom 0,016 vor. Unsere Spannzangenfutter weisen einen Rundlauffehler zwischen ISO-Kegelaufnahme und Spannzangensitz, der zwischen 0,003 und 0,010 mm liegt.

AUFSTECKFRÄSDORNE - RUNDLAUFGENAUGKEIT

Kintek- Aufsteckfräsdorne entsprechen der DIN 6358- Norm, die einen höchsten Rundlauffehler zwischen ISO 30- und ISO40- Kegel und den Durchmessern 16-22-27-32-40 vom 0,01 vorsieht.

Der mögliche höchste Rundlauffehler für ISO 50 ist 0,015 mm.

WELDON AUFSTECKFRÄSDORNE - RUNDLAUFGENAUGKEIT

Nach der DIN 6359-1-Norm müssen die Weldon- Aufsteckfräsdorne die folgenden Forderungen aufweisen:

Bohrung: Toleranz H5

Rundlaufgenauigkeit: höchster möglicher Rundlauffehler zwischen Kegel und Weldonsitz < 0,01 (für ISO 40)

Die vorgeschriebene Toleranz der Bohrung und eine durchschnittliche Rundlaufgenauigkeit von 0,005 sind verischert.

KONSTRUKTIONSDATEN

- aus legiertem Einsatzstahl angefertigt
- in der Einsatzhärtetiefe von 0,4-0,5 mm
- gehärtet, angelassen
- Härte HRC58 +2, Festigkeit 800-1000 N/mm²
- brüniert
- inneres, äußeres Schleifen und am Gewinde der Spannzangenmutter



KINTEK DIN TOOLHOLDERS

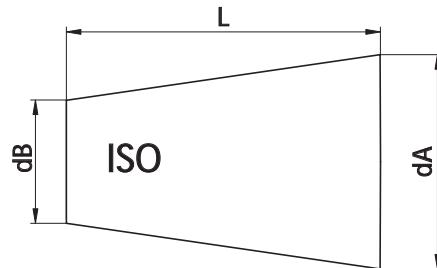
TECHNICAL FEATURES

ALL KINTEK TOOLHOLDERS ARE MANUFACTURED ACCORDING TO DIN NORM.

CONE'S TOLERANCE

ACCORDING TO THE CLASS AT3.

| ISO | L | dA-dB | AT3 |
|-----|----|--------|--------|
| 30 | 42 | 12.250 | +0.002 |
| 40 | 59 | 17.208 | +0.003 |
| 50 | 92 | 26.833 | +0.004 |



COLLET CHUCK'S RUNOUT ACCURACY

The norm DIN6391 permits a runout error between external cone and internal cone / collet seat of 0.016. Our production has a runout accuracy which is guaranteed to be within 0,003 / 0,010 m at the tool seat.

SHELL END MILL ADAPTOR'S RUNOUT ACCURACY

Our shell end mill adaptors meet the requirements of the norm DIN6358, which prescribes for diameters 16-22-27-32-40 a runout accuracy of: 0, 01 for SK 30/40 0,015 for SK 50.

WELDON END MILL HOLDER'S RUNOUT ACCURACY

According to the norm DIN6359-1 Weldon end mill holders have to meet the following requirements:

Bore: H5 tolerance

Runout accuracy: < 0.01 (for SK 40)

Our end mill adaptors ensure the prescribed holes' tolerance and have a runout accuracy which is normally 0.005

CONSTRUCTIVE FEATURES

- Manufactured with Casehardening Steel.
- Casehardened with depth 0,4 - 0,5 mm
- Hardened-Tempered
- Hardness HRC 58+-2, Strength 800-1000 N/mm²
- Black oxidized
- Internal and external grinding finished.



ОПРАВКИ KINTEK ПО DIN

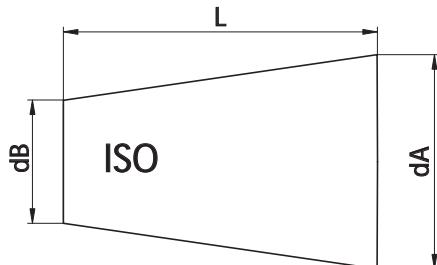
ТЕХНИЧЕСКОЕ ОПИСАНИЕ

Все оправки Kintek произведены согласно стандарту DIN.

ТОЧНОСТЬ КОНУСА

Соответствует классу AT3.

| ISO | L | dA-dB | AT3 |
|-----|----|--------|--------|
| 30 | 42 | 12.250 | +0.002 |
| 40 | 59 | 17.208 | +0.003 |
| 50 | 92 | 26.833 | +0.004 |



БИЕНИЕ ЦАНГОВЫХ ПАТРОНОВ

В соответствие с нормами DIN 6391, допустимое биение конуса оправки относительно конического отверстия под цангу составляет 0,016 мм.

Гарантируемая точность биения отверстия под инструмент - 0,003 мм/0,010 м.

БИЕНИЕ ОПРАВОК ДЛЯ НАСАДНЫХ ФРЕЗ

Патроны изготовлены в соответствие с требованиями DIN 6358, согласно которым биение для диаметров 16-22-27-32-40 составляет 0,01 мм для SK 30/40 и 0,015 мм для SK 50.

БИЕНИЕ ПАТРОНОВ С КРЕПЛЕНИЕМ WELDON

Оправки соответствуют следующим требованиям DIN 6359-1:

Точность отверстия: H5

Биение: < 0,01 (для SK 40)

Оправки Kintek изготовлены с гарантированной точностью отверстий и биением 0,005 мм.

КОНСТРУКТИВНЫЕ ОСОБЕННОСТИ

- Изготовлены из стали с последующей цементацией
- Цементация на глубину 0,4 - 0,5 мм
- Оправки подвергнуты закалке и отпуску
- Твердость 58+/-2 HRC, прочность 800-1000 Н/мм²
- Защитно-декоративное покрытие черного цвета
- Шлифованные внутренняя и внешняя поверхности



MANDRINS KINTEK AVEC ATTACHEMENT ISO

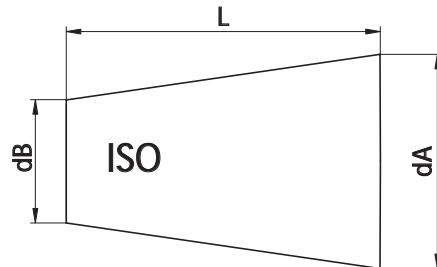
DONNEES TECHNIQUES

TOUS LES MANDRINS PORTE-OUTILS KINTEK SONT PRODUITS SUivant LES SPÈCIFICATIONS DIN

TOLERANCE DU CONE

EN CLASSE AT3.

| ISO | L | dA-dB | AT3 |
|-----|----|--------|--------|
| 30 | 42 | 12.250 | +0.002 |
| 40 | 59 | 17.208 | +0.003 |
| 50 | 92 | 26.833 | +0.004 |



COAXIALITE' PORTE-PINCE

La norme DIN6391 admet une erreur maximum du 0.016 soit pour les porte-pinces DIN6499 soit pour DIN6388. Dans notre production l'écart d'excentricité maximum entre cône ISO et logement de la pince est compris entre: 0,003 et 0,0010 mm.

COAXIALITE' PORTE-FRAISES FIXES ET COMBINES

Les porte-fraises fixes et combinés de notre production suivent la spécification de la norme DIN6358, qui prévoit pour les diamètres 16-22-27-32-40 une concentricité de 0,01 pour ISO 30 et ISO 40 0,015 pour ISO 50

COAXIALITE' PORTE-FRAISES WELDON

Suivant les spécifications DIN 6359-1 les porte-fraises WELDON doivent suivre les conditions suivantes:
Trou : tolérance H5

Coaxialité: écart maximum toléré entre cône et logement du Weldon <0.01 (pour ISO 40).
Nous assurons la tolérance prévue sur le trou et une coaxialité en moyenne de 0.005.

ELEMENTS DE CONSTRUCTION

- Produits en acier cémenté allié.
- Cémentés avec une profondeur 0,4 - 0,5 mm
- Trempés - Revenus
- Dureté HRC 58 +- 2 résistance 800-1000 N/ mm²
- Brunis
- Rectification du cône intérieur, extérieur et dans le filetage des écrous qui serrent la pince.



MANDRINI KINTEK CON ATTACCO ISO

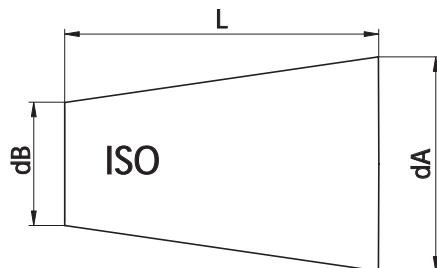
DATI TECNICI

TUTTI I MANDRINI PORTAUTENSILI KINTEK VENGONO PRODOTTI SECONDO LE NORMATIVE DIN

TOLLERANZA DEL CONO

PRODOTTI IN CLASSE AT3.

| ISO | L | dA-dB | AT3 |
|-----|----|--------|--------|
| 30 | 42 | 12.250 | +0.002 |
| 40 | 59 | 17.208 | +0.003 |
| 50 | 92 | 26.833 | +0.004 |



COASSIALITÀ PORTAPINZE

La norma DIN6391 ammette un'errore massimo di 0.016 sia per i portapinze DIN6499 che per DIN6388.

La nostra produzione normalmente presenta uno scostamento massimo di eccentricità tra cono ISO e sede pinza compreso tra i 0,003 e 0,010 mm.

COASSIALITÀ PORTAFRESE FISSI E COMBINATI

I portafrese fissi e combinati di nostra produzione rispondono ai criteri prescritti dalla norma DIN6358, la quale prevede un errore massimo di coassialità tra cono ISO 30 e ISO 40 ed i diametri 16-22-27-32-40, di 0,01. Mentre per ISO 50 è ammesso un errore massimo di 0,015 mm.

COASSIALITÀ PORTAFRESE WELDON-WHISTLE NOTCH

Rispettando la normativa DIN 6359-1 i portafrese WELDON devono rispondere ai seguenti requisiti:
foro: tolleranza H5

coassialità: scostamento massimo consentito tra cono e sede Weldon <0.01 (per ISO 40)
Garantiamo la tolleranza prescritta sul foro e un valore di coassialità mediamente di 0.005.

DATI COSTRUTTIVI

- Costruiti in acciaio da cementazione legato.
- Cementati con profondità 0,4 - 0,5 mm
- Temprati-rinvenuti
- Durezza HRC 58 +- 2 resistenza 800-1000 N/ mm²
- Bruniti
- Finitura di rettifica interna, esterna e nelle filettature delle ghiere chiudipinza



KINTEK 符合 ISO 标的刀柄

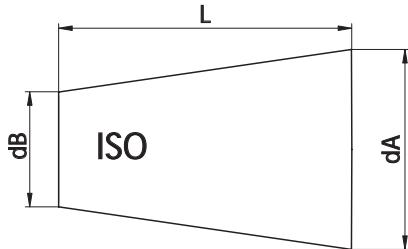
技术特点

所有 KINTEK 刀柄均根据 DIN 标准来制造。

锥体的误差

根据 AT3 级别

| ISO | L | dA-dB | AT3 |
|-----|----|--------|--------|
| 30 | 42 | 12.250 | +0.002 |
| 40 | 59 | 17.208 | +0.003 |
| 50 | 92 | 26.833 | +0.004 |



弹簧夹头的径向跳动精度

DIN6391 标准允许在外部锥体与内部锥体/夹头座之间的径向跳动误差为 0.016。
我公司的生产保证在工具底座处径向跳动精度为 0,003 / 0,010 米之间。

平面铣接头的径向跳动精度

我公司的平面铣接头满足 DIN6358 标准要求，该标准规定了直径为 16-22-27-32-40 的径向跳动精度，
对于 SK 30/40 为 0,01, 对于 SK 50 为 0,015。

威尔登式端铣夹具的径向跳动精度

根据 DIN6359-1 标准规定，威尔登式端铣夹具必须要达到下列要求：

孔: H5 误差

径向跳动精度: < 0.01 (对于 SK 40)

我公司的平面铣接头确保可达到规定的孔的误差，通常的径向跳动精度为 0.005。

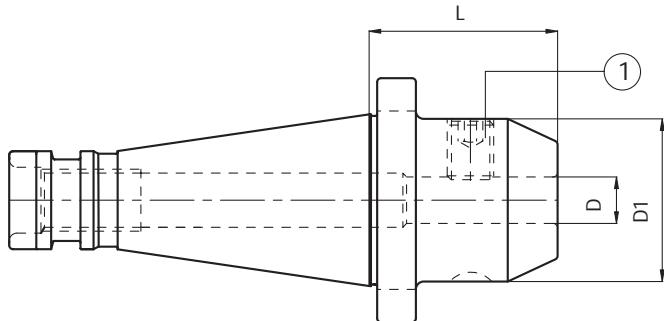
结构特点

- 用表面硬化钢材制造。
- 硬化深度达 0.4 - 0.5 毫米。
- 经过硬化及回火处理。
- 硬度达 HRC 58+-2, 强度达 800-1000 N/平方毫米。
- 黑色氧化。
- 内部及外部表面打磨处理。

ZYLINDERSCHAFTAUFNAHME WELDON
END MILL HOLDERS WELDON
ОПРАВКИ С КРЕПЛЕНИЕМ WELDON

MANDRINS POUR OUTILS TYPE WELDON
MANDRINI PORTAFRESE TIPO WELDON
威尔登式端铣夹具

DIN 1835 B



| Code N. | Description | ISO | D | L | D1 |
|-----------|--------------|-----|----|----|----|
| 213-11102 | ISO40H50WE06 | 40 | 6 | 50 | 25 |
| 213-11103 | ISO40H50WE08 | 40 | 8 | 50 | 28 |
| 213-11104 | ISO40H50WE10 | 40 | 10 | 50 | 35 |
| 213-11105 | ISO40H50WE12 | 40 | 12 | 50 | 42 |
| 213-11106 | ISO40H50WE14 | 40 | 14 | 50 | 44 |
| 213-11107 | ISO40H63WE16 | 40 | 16 | 63 | 48 |
| 213-11108 | ISO40H63WE18 | 40 | 18 | 63 | 50 |
| 213-11109 | ISO40H63WE20 | 40 | 20 | 63 | 52 |
| 213-11110 | ISO40H90WE25 | 40 | 25 | 90 | 65 |
| 213-11111 | ISO40H90WE32 | 40 | 32 | 90 | 72 |
| 213-11112 | ISO50H63WE06 | 50 | 6 | 63 | 25 |
| 213-11113 | ISO50H63WE08 | 50 | 8 | 63 | 28 |
| 213-11114 | ISO50H63WE10 | 50 | 10 | 63 | 35 |
| 213-11115 | ISO50H63WE12 | 50 | 12 | 63 | 42 |
| 213-11116 | ISO50H63WE14 | 50 | 14 | 63 | 44 |
| 213-11117 | ISO50H63WE16 | 50 | 16 | 63 | 48 |
| 213-11118 | ISO50H63WE18 | 50 | 18 | 63 | 50 |
| 213-11119 | ISO50H63WE20 | 50 | 20 | 63 | 52 |
| 213-11120 | ISO50H80WE25 | 50 | 25 | 80 | 65 |
| 213-11121 | ISO50H85WE32 | 50 | 32 | 85 | 72 |
| 213-11122 | ISO50H95WE40 | 50 | 40 | 95 | 78 |

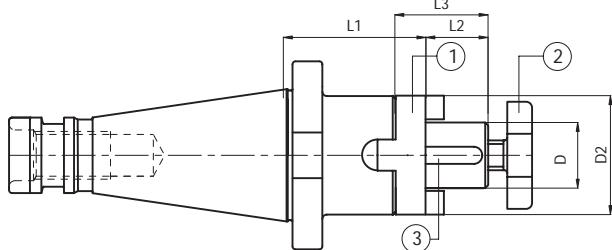
Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| D | Locking screw | Quantity |
|----|---------------|----------|
| | | |
| 6 | 811-106001 | 1 |
| 8 | 811-106002 | 1 |
| 10 | 811-106004 | 1 |
| 12 | 811-106005 | 1 |
| 14 | 811-106005 | 1 |
| 16 | 811-106006 | 1 |
| 18 | 811-106006 | 1 |
| 20 | 811-106007 | 1 |
| 25 | 811-106008 | 2 |
| 32 | 811-106009 | 2 |
| 40 | 811-106009 | 2 |

KOMBI - AUFSTECKFRÄSDORNE
COMBI-SHELL MILL ADAPTORS
КОМБИНИРОВАННЫЕ ОПРАВКИ ДЛЯ НАСАДНЫХ ФРЕЗ

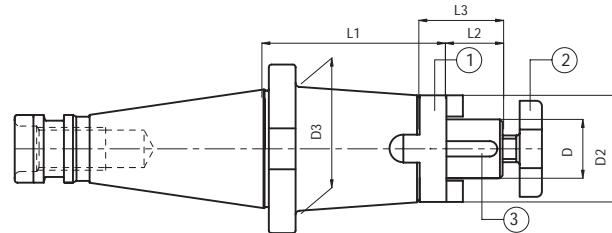
MANDRINS PORTE- FRAISES A DOUBLE USAGE
MANDRINI PORTAFRESE COMBINATI
复合式平面铣刀接头

DIN 6358



| | Code N. | Description | ISO | D | L1 | L2 | L3 | D2 |
|--|-----------|--------------|-----|----|----|----|----|----|
| | 216-11101 | ISO40H52D16C | 40 | 16 | 52 | 17 | 27 | 32 |
| | 216-11102 | ISO40H52D22C | 40 | 22 | 52 | 19 | 31 | 40 |
| | 216-11103 | ISO40H52D27C | 40 | 27 | 52 | 21 | 33 | 48 |
| | 216-11104 | ISO40H52D32C | 40 | 32 | 52 | 24 | 38 | 58 |
| | 216-11105 | ISO40H52D40C | 40 | 40 | 52 | 27 | 41 | 70 |
| | 216-11106 | ISO50H55D16C | 50 | 16 | 55 | 17 | 27 | 32 |
| | 216-11107 | ISO50H55D22C | 50 | 22 | 55 | 19 | 31 | 40 |
| | 216-11108 | ISO50H55D27C | 50 | 27 | 55 | 21 | 33 | 48 |
| | 216-11109 | ISO50H55D32C | 50 | 32 | 55 | 24 | 38 | 58 |
| | 216-11110 | ISO50H55D40C | 50 | 40 | 55 | 27 | 41 | 70 |

STANDARD



| | Code N. | Description | ISO | D | L1 | L2 | L3 | D2 | D3 |
|--|-----------|---------------|-----|----|-----|----|----|----|----|
| | 216-11120 | ISO40H100D16C | 40 | 16 | 100 | 17 | 27 | 32 | 40 |
| | 216-11121 | ISO40H100D22C | 40 | 22 | 100 | 19 | 31 | 40 | 44 |
| | 216-11122 | ISO40H100D27C | 40 | 27 | 100 | 21 | 33 | 48 | - |
| | 216-11123 | ISO40H100D32C | 40 | 32 | 100 | 24 | 38 | 58 | - |
| | 216-11125 | ISO50H100D16C | 50 | 16 | 100 | 17 | 27 | 32 | 50 |
| | 216-11126 | ISO50H100D22C | 50 | 22 | 100 | 19 | 31 | 40 | 60 |
| | 216-11127 | ISO50H100D27C | 50 | 27 | 100 | 21 | 33 | 48 | 60 |
| | 216-11128 | ISO50H100D32C | 50 | 32 | 100 | 24 | 38 | 58 | - |
| | 216-11129 | ISO50H100D40C | 50 | 40 | 100 | 27 | 41 | 70 | - |

EXTENDED

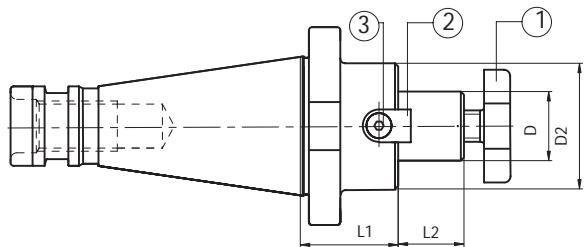
Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| D | Ring | Cross screw | Key | Wrench |
|----|-----------|-------------|------------|------------|
| | | | | |
| 16 | 814-30001 | 811-107003 | 814-201010 | 816-130002 |
| 22 | 814-30002 | 811-107004 | 814-201020 | 816-130003 |
| 27 | 814-30003 | 811-107005 | 814-201030 | 816-130004 |
| 32 | 814-30004 | 811-107006 | 814-201040 | 816-130005 |
| 40 | 814-30005 | 811-107007 | 814-201050 | 816-130006 |

AUFSTECKFRÄSDORNE FÜR FRÄSER MIT QUERNUT
FACE MILL HOLDERS-TENONS DRIVE
ОПРАВКИ ДЛЯ НАСАДНЫХ ФРЕЗ С УВЕЛИЧЕННЫМ ДИАМЕТРОМ КОРПУСА

MANDRINS PORTE-FRAISE-ENTRAINEMENT PAR TENONS
MANDRINI PORTAFRESE A TRASCINAMENTO FISSO
平面铣刀柄 - 凸榫驱动带有更大的法兰直径

ISO 3937



| | Code N. | Description | ISO | D | L1 | L2 | D2 |
|----------|-----------|--------------|-----|----|----|----|----|
| STANDARD | 216-71105 | ISO40H45D16F | 40 | 16 | 45 | 17 | 38 |
| | 216-71106 | ISO40H45D22F | 40 | 22 | 45 | 19 | 48 |
| | 216-71107 | ISO40H45D27F | 40 | 27 | 45 | 21 | 58 |
| | 216-71108 | ISO40H50D32F | 40 | 32 | 50 | 24 | 78 |
| | 216-71109 | ISO40H55D40F | 40 | 40 | 55 | 27 | 88 |
| | 216-71115 | ISO50H45D16F | 50 | 16 | 45 | 17 | 38 |
| | 216-71116 | ISO50H45D22F | 50 | 22 | 45 | 19 | 48 |
| | 216-71117 | ISO50H45D27F | 50 | 27 | 45 | 21 | 58 |
| | 216-71118 | ISO50H50D32F | 50 | 32 | 50 | 24 | 78 |
| | 216-71119 | ISO50H50D40F | 50 | 40 | 50 | 27 | 88 |



pag. 468-469



pag. 468-469



pag. 468-469

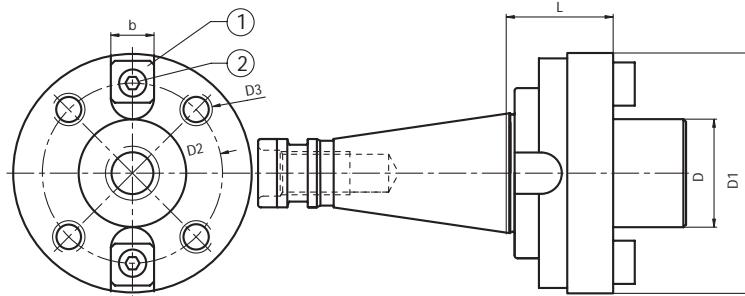
Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| D/D2 | Cross screw | Tenon | Screw | Wrench |
|-------|-------------|------------|------------|------------|
| | | | | |
| 16/32 | 811-107003 | 814-20214 | 811-101003 | 816-130002 |
| 16/38 | 811-107003 | 814-202280 | 811-101004 | 816-130002 |
| 22/40 | 811-107004 | 814-202150 | 811-101010 | 816-130003 |
| 22/48 | 811-107004 | 814-202250 | 811-101011 | 816-130003 |
| 27/48 | 811-107005 | 814-202160 | 811-101017 | 816-130004 |
| 27/58 | 811-107005 | 814-202270 | 811-101018 | 816-130004 |
| 32/58 | 811-107006 | 814-202170 | 811-101027 | 816-130005 |
| 32/78 | 811-107006 | 814-202630 | 811-101029 | 816-130005 |
| 40/70 | 811-107007 | 814-202180 | 811-101028 | 816-130006 |
| 40/88 | 811-107007 | 814-202710 | 811-101029 | 816-130006 |

AUFSTECKFRÄSDORNE FÜR MESSERKÖPFE
MIT GRÖSSEREM BUNDDURCHMESSER
FACE MILL HOLDER FOR FACE MILLING CUTTERS
ОПРАВКИ ДЛЯ ФЛАНЦЕВОГО КРЕПЛЕНИЯ ФРЕЗ

MANDRINS PORTE-FRAISE POUR FRAISES A SURFACER
MANDRINI PORTAFRESE A SPIANARE
CON FLANGIA MAGGIORATA
平面铣刀柄-夹持端铣刀

DIN 6357



| Code N. | Description | ISO | D | L | D1 | D2 | D3 | b |
|-------------|---------------|-----|----|------|-----|-------|-----|------|
| ▲ 216-21101 | ISO40H46.6D40 | 40 | 40 | 46.6 | 89 | 66.7 | M12 | 15.9 |
| ▲ 216-21102 | ISO50H53.2D40 | 50 | 40 | 53.2 | 89 | 66.7 | M12 | 15.9 |
| 216-21104 | ISO50H70.2D60 | 50 | 60 | 70.2 | 129 | 101.6 | M16 | 25.4 |

▲ INKLUSIVE INNENSCHARUBE • SUPPLIED WITH INTERNAL SCREW • ПОСТАВЛЯЕТСЯ С ВНУТРЕННИМ ВИНТОМ
VIS INTERNE INCLUSE • FORNITO CON VITE CENTRALE INCLUSA • 供货时提供内部螺丝

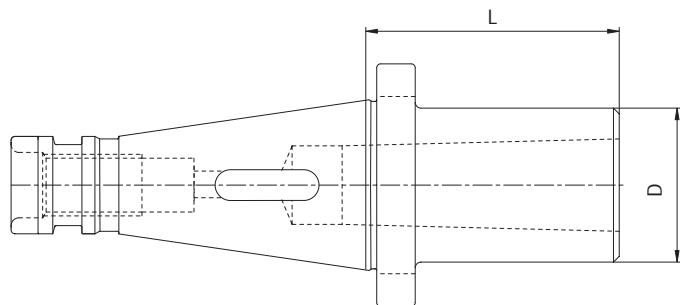
Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| D | Tenon | Screw | Cross screw | Wrench |
|----|------------|------------|-------------|------------|
| 40 | 814-202080 | 811-101028 | 811-107007 | 816-130006 |
| 60 | 814-202120 | 811-101063 | - | - |

ZWISCHENHÜLSEN FÜR MORSEKEGEL MIT AUSTREIBBLAPPEN
MORSE TAPER ADAPTORS FOR DRILLS
ОПРАВКИ ДЛЯ КОНУСА МОРЗЕ С ЛАПКОЙ

DOUILLES POUR CONE MORSE A TENON
MANDRINI PORTAPUNTE ATTACCO CONO MORSE
莫氏锥度钻接头

DIN 228-2 FORM D

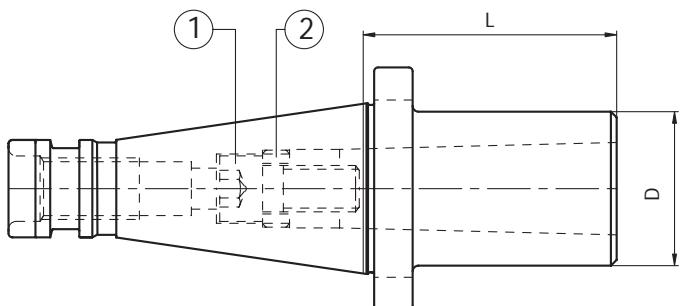


| Code N. | Description | ISO | MORSE | D | L |
|-----------|--------------|-----|-------|----|----|
| 212-41102 | ISO40H50CM2P | 40 | 2 | 32 | 50 |
| 212-41103 | ISO40H65CM3P | 40 | 3 | 40 | 65 |
| 212-41104 | ISO40H95CM4P | 40 | 4 | 48 | 95 |
| 212-41105 | ISO50H60CM2P | 50 | 2 | 32 | 60 |
| 212-41106 | ISO50H65CM3P | 50 | 3 | 40 | 65 |
| 212-41107 | ISO50H70CM4P | 50 | 4 | 48 | 70 |

ZWISCHENHÜLSEN FÜR MORESEKEGEL MIT ANZUGSGEWINDE
MORSE TAPER ADAPTER WITH THREAD
ОПРАВКИ ДЛЯ КОНУСА МОРЗЕ С РЕЗЬБОЙ

DOUILLES POUR CONE MORSE AVEC TARAUDAGE
MANDRINI PORTAFRESE ATTACCO CONO MORSE
螺纹莫氏锥度接头

DIN 228-2 FORM C

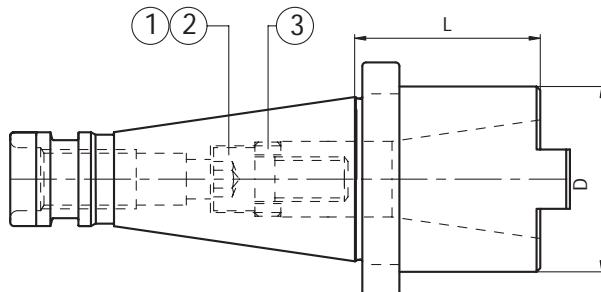


| Code N. | Description | ISO | MORSE | D | L |
|-----------|---------------|-----|-------|----|-----|
| 212-21102 | ISO40H50CM2F | 40 | 2 | 32 | 50 |
| 212-21103 | ISO40H65CM3F | 40 | 3 | 40 | 65 |
| 212-21104 | ISO40H95CM4F | 40 | 4 | 48 | 95 |
| 212-21105 | ISO50H60CM2F | 50 | 2 | 32 | 60 |
| 212-21106 | ISO50H65CM3F | 50 | 3 | 40 | 65 |
| 212-21107 | ISO50H95CM4F | 50 | 4 | 48 | 95 |
| 212-21108 | ISO50H120CM5F | 50 | 5 | 63 | 120 |

Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| ISO/MORSE | Screw | Ring |
|-----------|------------|------------|
| | | |
| 40/2 | 811-111007 | 811-302031 |
| 40/3 | 811-101065 | 811-302032 |
| 40/4 | 811-111005 | 811-302036 |
| 50/2 | 811-101054 | 811-302032 |
| 50/3 | 811-101065 | 811-302032 |
| 50/4 | 811-401037 | 811-302036 |
| 50/5 | 811-101092 | 811-302034 |

ZWISCHENHÜLSEN SK X SK DOUILLES INTERMEDIAIRES SA X SA
 ISO TAPER ADAPTORS MANDRINI RIDUZIONE DA DIN2080 A DIN/2080/DIN69871/MAS 403BT
 ПЕРЕХОДНЫЕ ОПРАВКИ SK - SK ISO 锥度接头



| Code N. | Description | ISO | ISO | D | L |
|-----------|---------------------|-----|-----|-----|-----|
| 212-11102 | ISO40H50ISO30/TC30 | 40 | 30 | 50 | 50 |
| 212-11101 | ISO50H63ISO40/TC40 | 50 | 40 | 78 | 63 |
| 212-11112 | ISO50H100ISO50/TC50 | 50 | 50 | 100 | 100 |

Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| Outside | Inside | Screw (ISO) | Screw (TC) | Ring | Wrench |
|---------|--------|-------------|------------|------------|--------------|
| | | | | | |
| 40 | 30 | 811-101065 | 811-101069 | 811-302032 | 816-20206002 |
| 50 | 40 | 811-401037 | 811-401055 | 811-302036 | 816-20207002 |
| 50 | 50 | 811-401052 | 811-401135 | 811-302047 | 816-202090 |

Verschlußschraube für DIN69871/MAS BT/DIN2080 werden mitgeliefert
 Supplied with a screw DIN69871/MAS BT/DIN2080

Livré avec une vis de serrage DIN69871/MAS BT/DIN2080

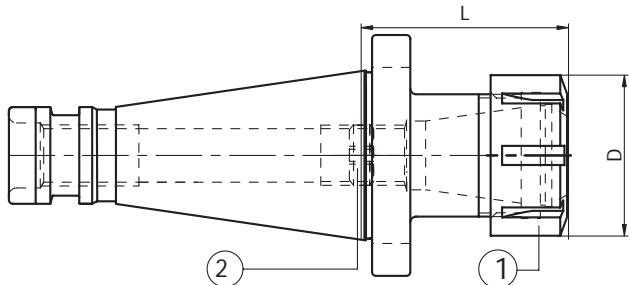
In dotazione vite per chiusura DIN69871/MAS BT/DIN2080

Поставляется с винтом для DIN69871/MAS BT/DIN2080

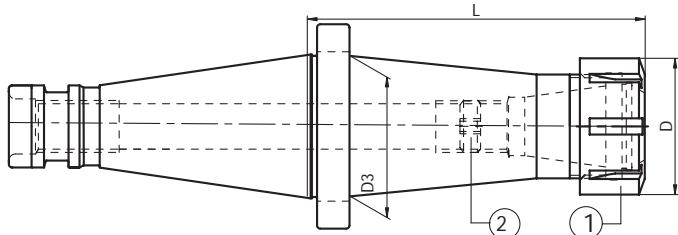
供货时提供符合DIN69871/MAS BIT/DIN2080螺丝

SPANNZANGENFUTTER ER TYP
ER COLLET CHUCK
ЦАНГОВЫЕ ПАТРОНЫ ER
MANDRINS A PINCES TYPE ER
MANDRINI PORTAPINZA TIPO ER
ER 弹簧夹头

DIN 6499



| STANDARD | Code N. | Description | ISO | ER | D | L |
|----------|-----------|--------------|-----|----|----|----|
| | 214-31105 | ISO30H42ER16 | 30 | 16 | 32 | 42 |
| | 214-31106 | ISO30H42ER25 | 30 | 25 | 42 | 42 |
| | 214-31107 | ISO30H50ER32 | 30 | 32 | 50 | 50 |
| | 214-31152 | ISO40H55ER16 | 40 | 16 | 32 | 55 |
| | 214-31101 | ISO40H53ER25 | 40 | 25 | 42 | 53 |
| | 214-31102 | ISO40H68ER32 | 40 | 32 | 50 | 68 |
| | 214-31114 | ISO40H80ER40 | 40 | 40 | 63 | 80 |
| | 214-31137 | ISO50H65ER25 | 50 | 25 | 42 | 65 |
| | 214-31103 | ISO50H68ER32 | 50 | 32 | 50 | 68 |
| | 214-31104 | ISO50H76ER40 | 50 | 40 | 63 | 76 |



| EXTENDED | Code N. | Description | ISO | ER | D | D3 | L |
|----------|-----------|---------------|-----|----|----|----|-----|
| | 214-31108 | ISO40H110ER25 | 40 | 25 | 42 | 44 | 110 |
| | 214-31109 | ISO40H110ER32 | 40 | 32 | 50 | 50 | 110 |
| | 214-31138 | ISO50H140ER25 | 50 | 25 | 42 | 44 | 140 |
| | 214-31110 | ISO50H140ER32 | 50 | 32 | 50 | 50 | 140 |
| | 214-31111 | ISO50H140ER40 | 50 | 40 | 63 | 60 | 140 |

Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| ER | Nut | Stop screw | Stop screw |
|----------|------------|------------|------------|
| 16 | ① | ② | ② |
| 25 | 812-203005 | 811-303119 | - |
| ISO30/25 | 812-203001 | 811-303121 | - |
| 32 | 812-203002 | 811-303118 | 811-303001 |
| ISO30/32 | 812-203002 | - | 811-303001 |
| 40 | 812-203003 | 811-303122 | - |

Zubehör
Accessories
Accessoires
Accessori
Принадлежности
零件



pag. 155



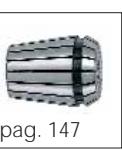
pag. 176



pag. 147



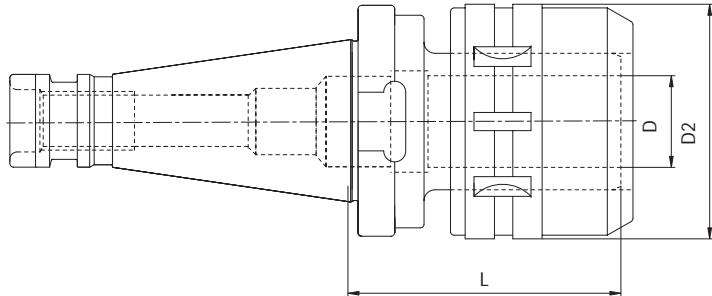
pag. 155



pag. 147

KRAFTSPANNFUTTER
MILLING CHUCK
УСИЛЕННЫЕ ОПРАВКИ

MANDRINS A FORT SERRAGE
MANDRINI A FORTE SERRAGGIO
铣夹头



| Code N. | Description | ISO | D | D2 | L | G6,3 12000 RPM |
|-----------|-------------|-----|----|----|----|----------------|
| 214-01101 | ISO40H83C32 | 40 | 32 | 72 | 83 | • |
| 214-01102 | ISO50H85C32 | 50 | 32 | 72 | 85 | • |

INKLUSIVE SPANNSCHLÜSSEL • SUPPLIED WITH WRENCH • ПОСТАВЛЯЕТСЯ С КЛЮЧОМ
CLÉ INCLUSE • FORNITI CON CHIAVE INCLUSA • 供货时提供扳手

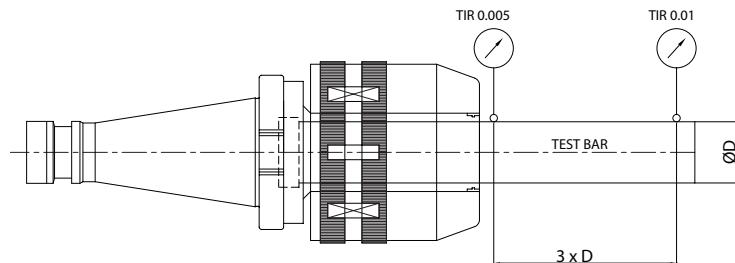
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Accessories
Accessoires
Accessori
Приналежности
零件



pag. 178



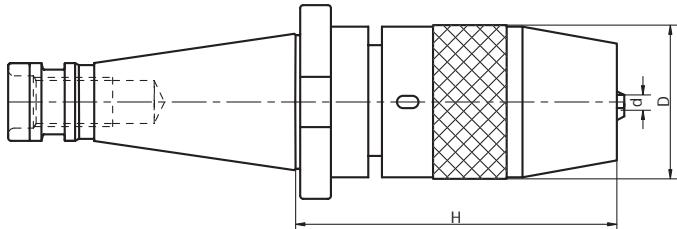
pag. 153



| Milling chuck (diameter) | Specification (DIN) | Tolerance (Taper shank) | Run-out (3xD) | Clamping torque |
|--------------------------|---------------------|---------------------------------------|---------------|---------------------|
| C32 | AT3 | ISO40 (0~+0,003) ISO50 (0~-+0,004) | 0~0,01 | 3430M.m (350 Kgf.m) |

KURZBOHRFUTTER
UNIVERSAL DRILL CHUCKS
УНИВЕРСАЛЬНЫЕ СВЕРЛИЛЬНЫЕ ПАТРОНЫ

MANDRINS UNIVERSELS DE PERCAGE
MANDRINI PORTAPUNTE INTEGRALI
万能钻夹头



| Code N. | Description | ISO | H | D | Clamping capacity | Wrench |
|-----------|----------------|-----|-----|----|-------------------|------------|
| 252-11100 | ISO30H100R1-13 | 30 | 100 | 50 | 1-13 | 816-111024 |
| 252-11101 | ISO40H95R1-13 | 40 | 95 | 50 | 1-13 | 816-111024 |
| 252-11102 | ISO40H105R3-16 | 40 | 105 | 57 | 3-16 | 816-111025 |
| 252-11103 | ISO50H80R1-13 | 50 | 80 | 50 | 1-13 | 816-111024 |
| 252-11104 | ISO50H100R3-16 | 50 | 100 | 57 | 3-16 | 816-111025 |

RUNDLAUFGENAUGKEIT 0.04 MM

Zur Erhöhung der Spannkraft werden diese Futter mit Spannschlüssel geliefert.
BEI LINKS LAUFENDEN BEARBEITUNGEN SIND DIESE
FUTTER NICHT ZU BENUTZEN.

RUNOUT ACCURACY 0.04 MM T.I.R.

Supplied with spanner wrench to allow the application
of supplementary gripping torque.

DO NOT USE IN REVOLUTION IN COUNTER-CLOCKWISE DIRECTION.

БИЕНИЕ 0,04 ММ

Поставляется с ключом для более сильного зажима.
НЕ ВРАЩАТЬ ПРОТИВ ЧАСОВОЙ СТРЕЛКИ!

PRECISION DE ROTATION 0.04 MM

Les mandrins sont fournis avec clé de blocage
pour augmenter la force de serrage.
NE PAS UTILISER DANS USINAGE AVEC ROTATION A' GAUCHE

PRECISIONE DI ROTAZIONE 0.04 MM

Per incrementare la forza di serraggio i mandrini sono forniti
con chiavi di bloccaggio.

NON DEVONO ESSERE USATI PER LAVORAZIONI
CON ROTAZIONE A SINISTRA.

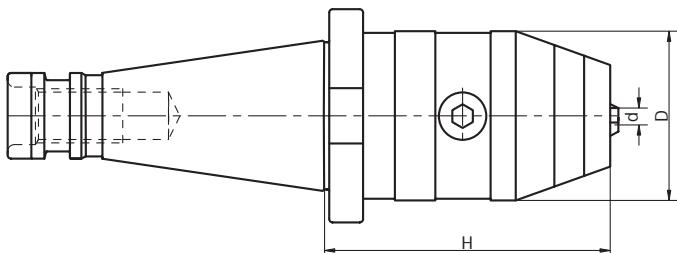
径向跳动精度 0.04 MM T.I.R.

提供活动扳手，以便施加补充夹紧力。

不得用于逆时针方向旋转。

KURZBOHRFUTTER FÜR RECHTS-UND LINKSLAUF
UNIVERSAL DRILL CHUCKS FOR LEFT AND RIGHT ROTATION
СВЕРЛИЛЬНЫЕ ПАТРОНЫ С ВРАЩЕНИЕМ ПО- И ПРОТИВ
ЧАСОВОЙ СТРЕЛКИ ДЛЯ СТАНКОВ С ЧПУ

MANDRINS DE PERCAGE POUR ROTATION GAUCHE-DROITE
MANDRINI PORTAPUNTE INTEGRALI PER ROTAZIONE
DESTRA E SINISTRA
左右旋转 NC 钻夹头



| Code N. | Description | ISO | H | D | Clamping capacity | Wrench |
|-----------|-----------------|-----|-----|----|-------------------|------------|
| 252-11105 | ISO40H90R1-13X | 40 | 90 | 50 | 1-13 | 816-152001 |
| 252-11106 | ISO40H100R3-16X | 40 | 100 | 50 | 3-16 | 816-152001 |
| 252-11107 | ISO50H87R1-13X | 50 | 87 | 50 | 1-13 | 816-152001 |
| 252-11108 | ISO50H100R3-16X | 50 | 100 | 50 | 3-16 | 816-152001 |

RUNDLAUFGENAUGKEIT 0.03 MM

Sowohl für rechts- als auch links laufende Bearbeitungen geeignet,
mit Höchstgeschwindigkeit von 7000 u/min.

RUNOUT ACCURACY 0.03 MM T.I.R.

Suitable for right and left rotation up to 7000 rpm.

БИЕНИЕ 0,03 ММ

Можно вращать по- и против часовой стрелки
со скоростью до 7000 об/мин.

PRECISION DE ROTATION 0.03 MM

Utilisables pour rotation droite et gauche,
avec maximale vitesse 7000 rpm

PRECISIONE DI ROTAZIONE 0.03 MM.

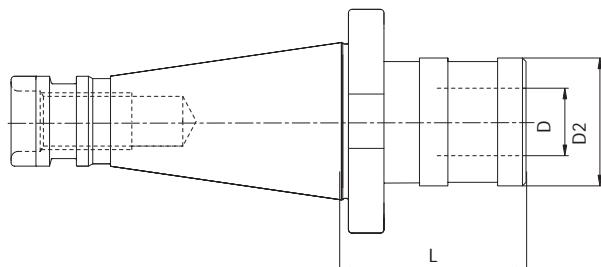
Adatti per rotazione sia destra che sinistra,
con velocità max di 7000 g/min.

径向跳动精度 0.03 MM T.I.R.

适用于最高转速达 7000 转/分钟的左右旋转

GEWINDESCHNEID-SCHNELLWECHSELFUTTER
MIT LÄNGENAUSGLEICH
TENSION AND COMPRESSION TAPPING HEAD
РЕЗЬБОНАРЕЗНЫЕ ПАТРОНЫ С КОМПЕНСАЦИЕЙ

MANDRINS DE TARAUDAGE A CHANGEMENT
RAPIDE A DOUBLE USAGE
MASCHIATORI A DOPPIA COMPENSAZIONE
张力和压缩丝攻头

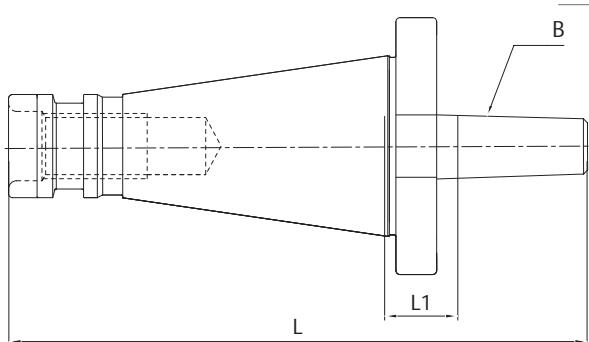


| Code N. | Description | ISO | SIZE | Top range | PRESS. | EXT. | D | D2 | L |
|---------|----------------|-----|------|-----------|--------|------|----|----|-----|
| M-1020 | ISO40H52GR1DC | 40 | 1 | M3-M12 | 9 | 9 | 19 | 36 | 52 |
| M-1120 | ISO40H77GR2DC | 40 | 2 | M6-M20 | 15 | 15 | 31 | 53 | 77 |
| M-1130 | ISO50H79GR2DC | 50 | 2 | M6-M20 | 15 | 15 | 31 | 53 | 79 |
| M-1230 | ISO50H125GR3DC | 50 | 3 | M14-M33 | 24 | 24 | 48 | 78 | 125 |

Zubehör
Accessories
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Accessori
Принадлежности
零件



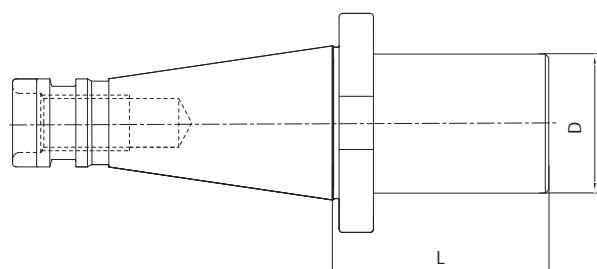
BOHRFUTTERAUFNAHMEN
ARBRES POUR MANDRINS DE PERCAGE
ARBORS FOR DRILL CHUCKS
ATTACCO PER MANDRINI PORTAPUNTE
ОПРАВКИ ДЛЯ СВЕРЛИЛЬНЫХ ПАТРОНОВ
钻夹头刀杆



DIN 238

| Code N. | Description | ISO | B | L | L1 |
|-----------|-------------|-----|----|-------|----|
| 216-31102 | ISO40H17B16 | 40 | 16 | 134.4 | 17 |
| 216-31103 | ISO40H17B18 | 40 | 18 | 142.4 | 17 |
| 216-31104 | ISO50H20B16 | 50 | 16 | 170.8 | 20 |
| 216-31105 | ISO50H20B18 | 50 | 18 | 178.8 | 20 |

ROHLINGE MIT WEICHEM SCHAFT
BLANK TOOLHOLDER WITH SOFT SHANK
BARRES D'ALESGAGE SEMI-FINIES
MANDRINI SEMILAVORATI A STELO TENERO
ЗАГОТОВКИ ДЛЯ ОПРАВОК НЕЗАКАЛЕННЫЕ
带软柄的切断刀柄



| Code N. | Description | ISO | D | L |
|-----------|------------------|-----|------|-----|
| 217-41101 | ISO40H160D40.5SM | 40 | 40.5 | 160 |
| 217-41102 | ISO40H160D63.5SM | 40 | 63.5 | 160 |
| 217-41103 | ISO40H250D63.5SM | 40 | 63.5 | 250 |
| 217-41104 | ISO50H160D80SM | 50 | 80 | 160 |
| 217-41106 | ISO50H300D80SM | 50 | 80 | 300 |

KINTEK
SONDERWERKZEUGHALTER
SPECIAL TOOLS
СПЕЦИАЛЬНЫЕ ИНСТРУМЕНТЫ

PORTE-Outils SPÉCIAUX
PRODOTTI SPECIALI
特殊工具



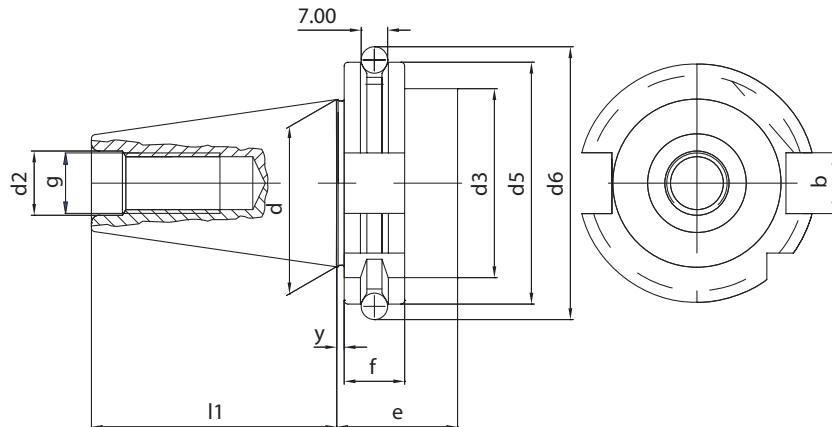
KLIMATEK

DIN 69871 A-AD/B-AD

TECHNISCHE DATEN DER STEILKEGELWERKZEUGE
TAPER SHANKS DATA SHEET
КОНСТРУКТИВНЫЕ РАЗМЕРЫ

DONNEES TECHNIQUES QUEUE D'OUTILS
DATI TECNICI CONI D'ATTACCO
锥柄数据表

DIN 69871/A

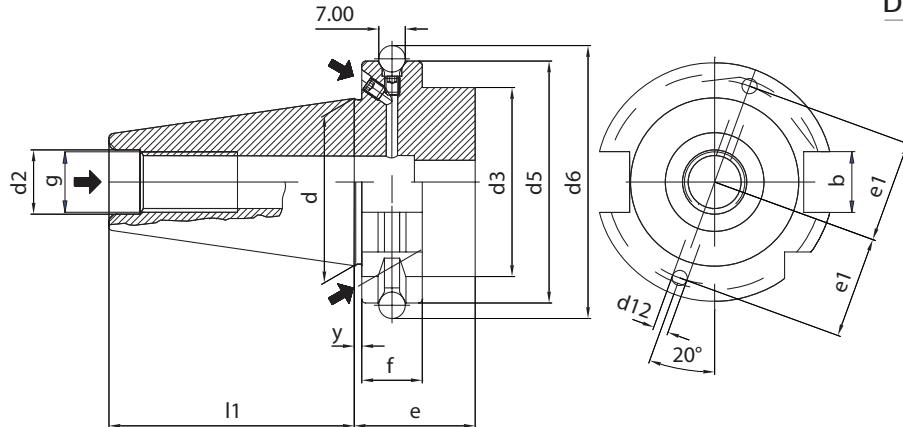


| ISO | d | l1 | d2 | g | y | d5 | f | d3 | d6 | e | b |
|-----|-------|--------|----|-----|-----|-------|------|----|--------|----|------|
| 30 | 31,75 | 47,8 | 13 | M12 | 3,2 | 50 | 15,9 | 45 | 59,3 | 35 | 16,1 |
| 40 | 44,45 | 68,4 | 17 | M16 | 3,2 | 63,55 | 15,9 | 50 | 72,3 | 35 | 16,1 |
| 50 | 69,85 | 101,75 | 25 | M24 | 3,2 | 97,5 | 15,9 | 80 | 107,25 | 35 | 25,7 |

TECHNISCHE DATEN DER STEILKEGELWERKZEUGE
TAPER SHANKS DATA SHEET
КОНСТРУКТИВНЫЕ РАЗМЕРЫ

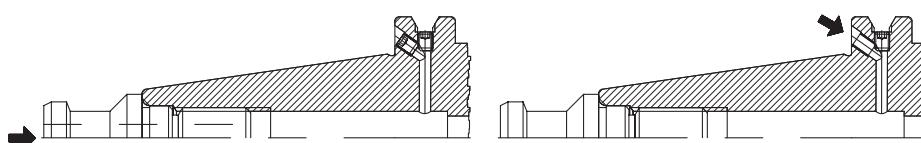
DONNEES TECHNIQUES QUEUE D'OUTILS
DATI TECNICI CONI D'ATTACCO
锥柄数据表

DIN 69871 AD/B



FORM AD

FORM B



| ISO | d | l1 | d2 | g | y | d5 | f | d3 | d6 | e | b | d12 | el |
|-----|-------|--------|----|-----|-----|-------|------|----|--------|----|------|-----|----|
| 40 | 44,45 | 68,4 | 17 | M16 | 3,2 | 63,55 | 15,9 | 50 | 72,3 | 35 | 16,1 | 4 | 27 |
| 50 | 69,85 | 101,75 | 26 | M24 | 3,2 | 97,5 | 15,9 | 80 | 107,25 | 35 | 25,7 | 5 | 42 |

Das Kühlmittel geht durch die Löcher am Bund (B) oder, wenn die Löcher mit den Schrauben geschlossen werden, zentral durch Aufnahme (AD). For coolant through V-flange bores (B) or center of toolholders (AD). For central coolant, the V-flange channels are closed by socket screws.

Для подачи СОЖ через отверстия во фланце (форма В) или через центральное отверстие (форма АД). Для подачи СОЖ через центральное отверстие боковые должны быть закрыты винтами.

Le lubrifiant passe par les trous de la bride (B) ou, si on ferme les trous avec des vis, par le centre du mandrin (AD).

Il lubrificante passa dai fori sulla flangia (B) oppure, chiudendo i fori con le apposite viti, dal centro del mandrino (AD).

冷却剂需通过V型法兰孔 (B) 或刀柄 (AD)。对于中央冷却剂, V型法兰通道是由凹头螺丝拧紧的。



KINTEK - STEILKEGELAUFNAHMEN

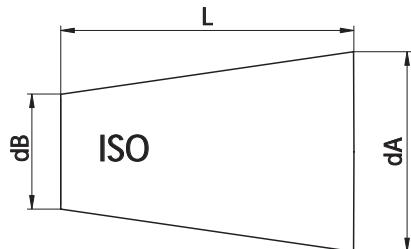
TECHNISCHE DATEN

Alle Kintek-Steilkegelaufnahmen werden nach den DIN-Normen angefertigt.

KEGELSCHAFTTOLERANZ

In Klasse AT3 angefertigt.

| ISO | L | dA-dB | AT3 |
|-----|----|--------|--------|
| 30 | 42 | 12.250 | +0.002 |
| 40 | 59 | 17.208 | +0.003 |
| 50 | 92 | 26.833 | +0.004 |



SPANNZANGENAUFNAHME RUNDLAUFGENAUGKEIT

Die DIN 6391- Norm schreibt eine Rundlaufgenauigkeit zwischen Aussenkegel und Innenkegel / Spannzangensitz vom 0,016 vor. Unsere Spannzangenfutter weisen einen Rundlauffehler zwischen ISO-Kegelaufnahme und Spannzangensitz, der zwischen 0,003 und 0,010 mm liegt.

AUFSTECKFRÄSDORNE - RUNDLAUFGENAUGKEIT

Kintek- Aufsteckfräsdorne entsprechen der DIN 6358- Norm, die einen höchsten Rundlauffehler zwischen ISO 30- und ISO40- Kegel und den Durchmessern 16-22-27-32-40 vom 0,01 vorsieht.

Der mögliche höchste Rundlauffehler für ISO 50 ist 0,015 mm.

WELDON AUFSTECKFRÄSDORNE - RUNDLAUFGENAUGKEIT

Nach der DIN 6359-1-Norm müssen die Weldon- Aufsteckfräsdorne die folgenden Forderungen aufweisen:

Bohrung: Toleranz H5

Rundlaufgenauigkeit: höchster möglicher Rundlauffehler zwischen Kegel und Weldonsitz < 0,01 (für ISO 40)

Die vorgeschriebene Toleranz der Bohrung und eine durchschnittliche Rundlaufgenauigkeit von 0,005 sind erreicht.

WUCHTUNG

Die meisten Werkzeughalter dieser Gruppe sind in Klasse G6,3 auf 8.000 U/Min -1 vorgewuchtet oder auf 12.000 U/Min -1 gewuchtet.

Neben der Übersichtstabelle der Produkte wird die Wuchtgüte angegeben.

KONSTRUKTIONSDATEN

- aus legiertem Einsatzstahl angefertigt
- in der Einsatzhärtetiefe von 0,4-0,5 mm
- gehärtet, angelassen
- Härte HRC58 +-2, Festigkeit 800-1000 N/mm²
- brüniert
- inneres, äußeres Schleifen und am Gewinde der Spannzangenmutter

WUCHTUNG FÜR HÖHERE DREHZAHLEN

Die Hochgeschwindigkeit- Steilkegelaufnahmen der neuen Linie werden in Klasse G2,5 auf 25.000 U/Min -1 gewuchtet.

KONSTRUKTIONSDATEN

- aus legiertem Einsatzstahl angefertigt
- in der Einsatzhärtetiefe von 0,4-0,5 mm
- gehärtet, angelassen
- Härte HRC 58 +- 2, Festigkeit 800-1000 N/mm²
- brüniert
- inneres, äußeres Schleifen des Kegels
- Schleifen der Vorderseite und am Gewinde der Spannzangenmutter
- 100% durch zertifizierte Meßinstrumente geprüft und mit Wuchtungsprotokoll geliefert



KINTEK DIN TOOLHOLDERS

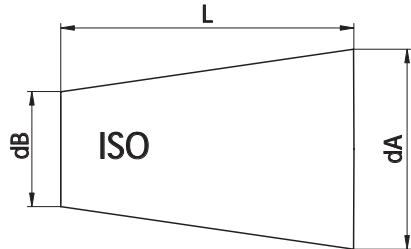
TECHNICAL FEATURES

ALL KINTEK TOOLHOLDERS ARE MANUFACTURED ACCORDING TO DIN NORM.

CONE'S TOLERANCE

ACCORDING TO THE CLASS AT3.

| ISO | L | dA-dB | AT3 |
|-----|----|--------|--------|
| 30 | 42 | 12.250 | +0.002 |
| 40 | 59 | 17.208 | +0.003 |
| 50 | 92 | 26.833 | +0.004 |



COLLET CHUCK'S RUNOUT ACCURACY

The norm DIN6391 permits a runout error between external cone and internal cone / collet seat of 0.016. Our production has a runout accuracy which is guaranteed to be within 0,003 / 0,010 m at the tool seat.

SHELL END MILL ADAPTOR'S RUNOUT ACCURACY

Our shell end mill adaptors meet the requirements of the norm DIN6358, which prescribes for diameters 16-22-27-32-40 a runout accuracy of: 0, 01 for SK 30/40 0,015 for SK 50.

WELDON END MILL HOLDER'S RUNOUT ACCURACY

According to the norm DIN6359-1 Weldon end mill holders have to meet the following requirements:

Bore: H5 tolerance

Runout accuracy: < 0.01 (for SK 40)

Our end mill adaptors ensure the prescribed holes' tolerance and have a runout accuracy which is normally 0.005

BALANCING

The major part of toolholders of this category can run up to 8000 rpm grade G 6,3 or 12000 rpm. Besides the descriptive and dimensional table of products, you can find the addictive balancing grade.

CONSTRUCTIVE FEATURES

- Manufactured with Casehardening Steel.
- Casehardened with depth 0,4 - 0,5 mm
- Hardened-Tempered
- Hardness HRC 58+-2, Strength 800-1000 N/mm²
- Black oxidized
- Internal and external grinding finished.

NEW HIGH-SPEED BALANCING TOOLHOLDERS

The new high-speed toolholders are balanced in the Grade G 2,5 at 25000 rpm.

CONSTRUCTIVE FEATURES FOR HIGH-SPEED TOOLHOLDERS

- Manufactured with casehardening Steel.
- Casehardened with depth 0,4 - 0,5 mm
- Hardened-Tempered
- Hardness HRC 58+-2, Strength 800-1000 N/mm²
- Black oxidized
- Internal and external grinding finish of the cone
- Grinding finish on the front side and on the thread of collet nuts.
- Tested 100% with certified measuring instruments and supplied with balancing certificate



ОПРАВКИ KINTEK ПО DIN

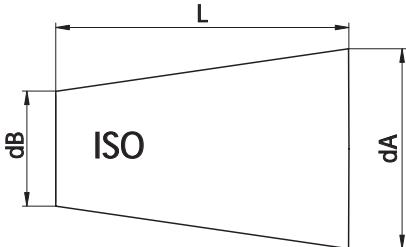
ТЕХНИЧЕСКОЕ ОПИСАНИЕ

Все оправки Kintek произведены согласно стандарту DIN.

ТОЧНОСТЬ КОНУСА

Соответствует классу AT3.

| ISO | L | dA-dB | AT3 |
|-----|----|--------|--------|
| 30 | 42 | 12.250 | +0.002 |
| 40 | 59 | 17.208 | +0.003 |
| 50 | 92 | 26.833 | +0.004 |



БИЕНИЕ ЦАНГОВЫХ ПАТРОНОВ

В соответствии с нормами DIN6391, допустимое биение конуса оправки относительно конического отверстия под цангу составляет 0,016 мм. Гарантируемая точность биения отверстия под инструмент - 0,003 мм/0,010 м.

БИЕНИЕ ОПРАВОК ДЛЯ НАСАДНЫХ ФРЕЗ

Патроны изготовлены в соответствие с требованиями DIN 6358, согласно которым биение для диаметров 16-22-27-32-40 составляет 0,01 мм для SK 30/40 и 0,015 мм для SK 50.

БИЕНИЕ ПАТРОНОВ С КРЕПЛЕНИЕМ WELDON

Оправки соответствуют следующим требованиям DIN 6359-1:

Точность отверстия: H5

Биение: < 0,01 (для SK 40)

Оправки Kintek изготовлены с гарантированной точностью отверстий и биением 0,005 мм.

БАЛАНСИРОВКА

Оправки данной категории предварительно сбалансированы по классу G6,3 при 8000 об/мин или 12000 об/мин.

КОНСТРУКТИВНЫЕ ОСОБЕННОСТИ

- Изготовлены из стали с последующей цементацией
- Цементация на глубину 0,4 - 0,5 мм
- Оправки подвергнуты закалке и отпуску
- Твердость 58+/- HRC, прочность 800-1000 Н/мм²
- Защитно-декоративное покрытие черного цвета
- Шлифованные внутренняя и внешняя поверхности

НОВЫЕ ВЫСОКОСКОРОСТНЫЕ СБАЛАНСИРОВАННЫЕ ОПРАВКИ

Новые высокоскоростные оправки сбалансированы до класса G 2,5 при 25000 об/мин.

КОНСТРУКТИВНЫЕ ОСОБЕННОСТИ ВЫСОКОСКОРОСТНЫХ ОПРАВОК

- Изготовлены из стали с последующей цементацией
- Цементация на глубину 0,4 - 0,5 мм
- Оправки подвергнуты закалке и отпуску
- Твердость 58+/- HRC, прочность 800-1000 Н/мм²
- Защитно-декоративное покрытие черного цвета
- Шлифованные внутренняя и внешняя поверхности
- Шлифованный торец и резьба под гайку в цанговых патронах
- Каждая оправка испытана и поставляется с сертификатом о балансировке



MANDRINS KINTEK AVEC ATTACHEMENT ISO

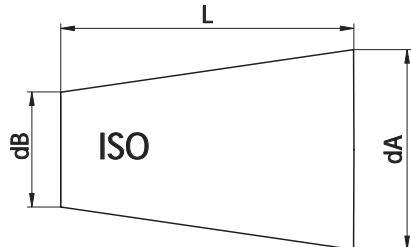
DONNEES TECHNIQUES

TOUS LES MANDRINS PORTE-OUTILS KINTEK SONT PRODUITS SUivant LES SPÉCIFICATIONS DIN

TOLERANCE DU CONE

EN CLASSE AT3.

| ISO | L | dA-dB | AT3 |
|-----|----|--------|--------|
| 30 | 42 | 12.250 | +0.002 |
| 40 | 59 | 17.208 | +0.003 |
| 50 | 92 | 26.833 | +0.004 |



COAXIALITE' PORTE-PINCE

La norme DIN6391 admet une erreur maximum du 0.016 soit pour les porte-pinces DIN6499 soit pour DIN6388. Dans notre production l'écart d'excentricité maximum entre cône ISO et logement de la pince est compris entre: 0,003 et 0,0010 mm.

COAXIALITE' PORTE-FRAISES FIXES ET COMBINES

Les porte-fraises fixes et combinés de notre production suivent la spécification de la norme DIN6358, qui prévoit pour les diamètres 16-22-27-32-40 une concentricité de 0,01 pour ISO 30 et ISO 40, 0,015 pour ISO 50

COAXIALITE' PORTE-FRAISES WELDON

Suivant les spécifications DIN 6359-1 les porte-fraises WELDON doivent suivre les conditions suivantes:
Trou : tolérance H5

Coaxialité: écart maximum toléré entre cône et logement du Weldon <0.01 (pour ISO 40).

Nous assurons la tolérance prévue sur le trou et une coaxialité en moyenne de 0.005.

EQUILIBRAGE

La plupart des porte-outils sont pré-équilibrés en classe G 6,3 8000 Tr/Min -1. ou équilibrés à 12000 Tr/Min-1.
A côté du tableau de description et dimensions des produits il y a l'indication de la valeur d'équilibrage additionnel.

ELEMENTS DE CONSTRUCTION

- Produits en acier cémenté allié.
- Cémentés avec une profondeur 0,4 - 0,5 mm
- Trempés - Revenus
- Dureté HRC 58 +- 2 résistance 800-1000 N/ mm²
- Brunis
- Rectification du cône intérieur, extérieur et dans le filetage des écrous qui serrent la pince.

EQUILIBRAGE MANDRINS POUR HAUTE VITESSE

Les mandrins de la nouvelle ligne à haute vitesse sont équilibrés en classe G 2,5 à 25000 Tr/mn-1.

ELEMENTS DE CONSTRUCTION POUR MANDRINS HAUTE VITESSE

- Produits en acier cémenté allié.
- Cémentés avec une profondeur 0,4 - 0,5 mm
- Trempé - Revenu
- Dureté HRC 58 +- 2 résistance 800-1000 N/ mm²
- Brunis
- Finition de rectification intérieure, extérieure et du cône
- Rectification du cône intérieur et dans le filetage des écrous qui serrent la pince.
- Contrôlés à 100 % avec des instruments de mesure certifiés et livrés avec un certificat d'équilibrage.



MANDRINI KINTEK CON ATTACCO ISO

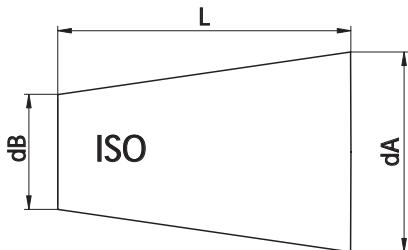
DATI TECNICI

TUTTI I MANDRINI PORTAUTENSILI KINTEK VENGONO PRODOTTI SECONDO LE NORMATIVE DIN

TOLLERANZA DEL CONO

PRODOTTI IN CLASSE AT3.

| ISO | L | dA-dB | AT3 |
|-----|----|--------|--------|
| 30 | 42 | 12.250 | +0.002 |
| 40 | 59 | 17.208 | +0.003 |
| 50 | 92 | 26.833 | +0.004 |



COASSIALITÀ PORTAPINZE

La norma DIN6391 ammette un errore massimo di 0.016 sia per i portapinze DIN6499 che per DIN6388.

La nostra produzione normalmente presenta uno scostamento massimo di eccentricità tra cono ISO e sede pinza compreso tra i 0,003 e 0,010 mm.

COASSIALITÀ PORTAFRESE FISSI E COMBINATI

I portafrese fissi e combinati di nostra produzione rispondono ai criteri prescritti dalla norma DIN6358, la quale prevede un errore massimo di coassialità tra cono ISO 30 e ISO 40 ed i diametri 16-22-27-32-40, di 0,01. Mentre per ISO 50 è ammesso un errore massimo di 0,015 mm.

COASSIALITÀ PORTAFRESE WELDON - WHISTLE NOTCH

Rispettando la normativa DIN 6359-1 i portafrese WELDON devono rispondere ai seguenti requisiti:
foro: tolleranza H5

coassialità: scostamento massimo consentito tra cono e sede Weldon <0.01 (per ISO 40)

Garantiamo la tolleranza prescritta sul foro e un valore di coassialità mediamente di 0.005.

EQUILIBRATURA

La maggior parte dei portautensili presenti in questa categoria sono prebilanciati in classe G 6,3 8000 rpm min -1. o bilanciati a 12000 giri rpm min-1.

A fianco della tabella descrittiva e dimensionale dei prodotti viene elencato il grado di equilibratura aggiuntiva.

DATI COSTRUTTIVI

- Costruiti in acciaio da cementazione legato.
- Cementati con profondità 0,4 - 0,5 mm
- Temprati-rinvenuti
- Durezza HRC 58 +- 2 resistenza 800-1000 N/ mm²
- Bruniti
- Finitura di rettifica interna, esterna e nelle filettature delle ghiere chiudipinza

EQUILIBRATURA MANDRINI PER ALTE VELOCITA'

I mandrini presenti nella linea nuova ad alta velocità vengono bilanciati in classe G 2,5 a 25000 rpm min - 1.

DATI COSTRUTTIVI MANDRINI PER ALTE VELOCITA'

- Costruiti in acciaio da cementazione legato.
- Cementati con profondità 0,4 - 0,5 mm
- Temprati-rinvenuti
- Durezza HRC 58 +- 2 resistenza 800-1000 N/ mm²
- Bruniti
- Finitura di rettifica interna, esterna del cono
- Rettifica parte anteriore e nelle filettature delle ghiere chiudipinza
- Collaudati 100% con strumenti di misura certificati e forniti con certificato di bilanciatura.



KINTEK 符合 DIN 标的刀柄

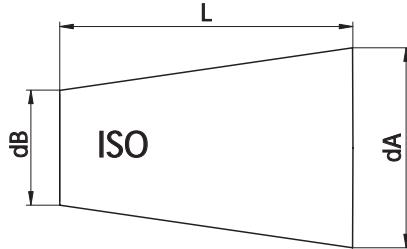
技术特点

所有 KINTEK 刀柄均根据 DIN 标准来制造。

锥体的误差

根据 AT3 级别

| ISO | L | dA-dB | AT3 |
|-----|----|--------|--------|
| 30 | 42 | 12.250 | +0.002 |
| 40 | 59 | 17.208 | +0.003 |
| 50 | 92 | 26.833 | +0.004 |



弹簧夹头的径向跳动精度

DIN6391 标准允许在外部锥体与内部锥体/夹头座之间的径向跳动误差为 0.016。
我公司的生产保证在工具底座处径向跳动精度为 0,003 / 0,010 米之间。

平面铣接头的径向跳动精度

我公司的平面铣接头满足 DIN6358 标准要求，该标准规定了直径为 16-22-27-32-40 的径向跳动精度，对于 SK 30/40 为 0,01，对于 SK 50 为 0,015。

威尔登式端铣夹具的径向跳动精度

根据 DIN6359-1 标准规定，威尔登式端铣夹具必须要达到下列要求：

孔: H5 误差

径向跳动精度: < 0.01 (对于 SK 40)

我公司的平面铣接头确保可达到规定的孔的误差，通常的径向跳动精度为 0.005。

平衡

这种类型的刀柄的主要部分最高转速可达到 G 6,3 级的 8000 转/分钟或 12000 转/分钟。

结构特点

- 用表面硬化钢材制造。
- 硬化深度达 0,4 - 0,5 毫米。
- 经过硬化及回火处理。
- 硬度达 HRC 58+-2，强度达 800-1000 N/平方毫米。
- 黑色氧化。
- 内部及外部表面打磨处理。

新型高速平衡刀柄

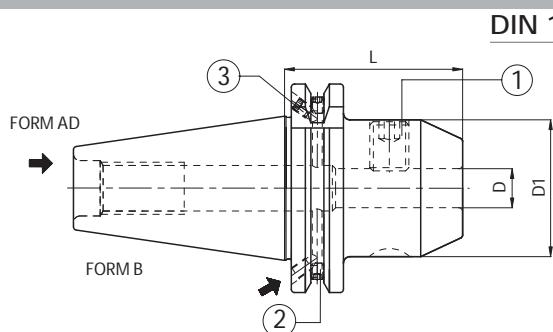
新型高速平衡刀柄在 G 2,5 级，25000 转/分钟达到平衡。

高速刀柄的结构特点

- 用表面硬化钢材制造。
- 硬化深度达 0,4 - 0,5 毫米。
- 经过硬化及回火处理。
- 硬度达 HRC 58+-2，强度达 800-1000 N/平方毫米。
- 黑色氧化。
- 锥体内部及外部表面打磨处理。
- 夹头螺母螺纹正面和上面进行打磨处理。
- 使用经过认证的测量仪器检测，供货时提供平衡检测证书。

ZYLINDERSCHAFTAUFNAHME WELDON
END MILL HOLDERS WELDON
ОПРАВКИ С КРЕПЛЕНИЕМ WELDON

MANDRINS POUR OUTILS TYPE WELDON
MANDRINI PORTAFRESE TIPO WELDON
威尔登式端铣夹具



| Code N. | Description | ISO | D | L | D1 | G2,5 25000 RPM |
|-----------|-------------------|-----|----|-----|----|----------------|
| 213-91301 | TC40H50WE06 AD+B | 40 | 6 | 50 | 25 | • |
| 213-91302 | TC40H50WE08 AD+B | 40 | 8 | 50 | 28 | • |
| 213-91303 | TC40H50WE10 AD+B | 40 | 10 | 50 | 35 | • |
| 213-91304 | TC40H50WE12 AD+B | 40 | 12 | 50 | 42 | • |
| 213-91305 | TC40H50WE14 AD+B | 40 | 14 | 50 | 44 | • |
| 213-91306 | TC40H63WE16 AD+B | 40 | 16 | 63 | 48 | • |
| 213-91307 | TC40H63WE18 AD+B | 40 | 18 | 63 | 50 | • |
| 213-91308 | TC40H63WE20 AD+B | 40 | 20 | 63 | 52 | • |
| 213-91309 | TC40H100WE25 AD+B | 40 | 25 | 100 | 65 | • |
| 213-91310 | TC40H100WE32 AD+B | 40 | 32 | 100 | 72 | • |
| 213-91312 | TC50H63WE06 AD+B | 50 | 6 | 63 | 25 | • |
| 213-91313 | TC50H63WE08 AD+B | 50 | 8 | 63 | 28 | • |
| 213-91314 | TC50H63WE10 AD+B | 50 | 10 | 63 | 35 | • |
| 213-91315 | TC50H63WE12 AD+B | 50 | 12 | 63 | 42 | • |
| 213-91316 | TC50H63WE14 AD+B | 50 | 14 | 63 | 44 | • |
| 213-91317 | TC50H63WE16 AD+B | 50 | 16 | 63 | 48 | • |
| 213-91318 | TC50H63WE18 AD+B | 50 | 18 | 63 | 50 | • |
| 213-91319 | TC50H63WE20 AD+B | 50 | 20 | 63 | 52 | • |
| 213-91320 | TC50H80WE25 AD+B | 50 | 25 | 80 | 65 | • |
| 213-91321 | TC50H100WE32 AD+B | 50 | 32 | 100 | 72 | • |

High balanced

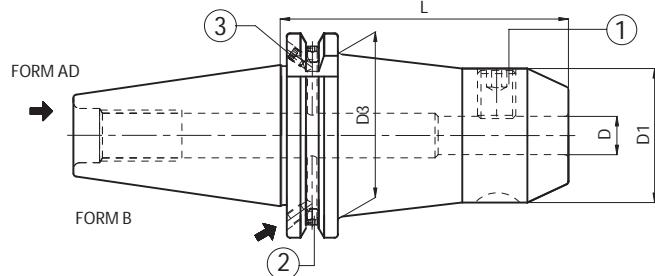
Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| Tape | Screw | Quantity | Screw | Quantity | D | Locking screw | Quantity |
|--------|-----------------|----------|-----------------|----------|-------|---------------|----------|
| | | | | | | | |
| ISO 40 | 811-102002 M4X5 | 2 | 811-102002 M4X5 | 2 | 6 | 811-106001 | 1 |
| ISO 50 | 811-102001 M4X4 | 2 | 811-102010 M5X6 | 2 | 8 | 811-106002 | 1 |
| | | | | | 10 | 811-106004 | 1 |
| | | | | | 12,14 | 811-106005 | 1 |
| | | | | | 16,18 | 811-106006 | 1 |
| | | | | | 20 | 811-106007 | 1 |
| | | | | | 25 | 811-106008 | 2 |
| | | | | | 32 | 811-106009 | 2 |

ZYLINDERSCHAFTAUFNAHME WELDON-LANG
END MILL HOLDERS WELDON-LONG PROJECTION TYPE
ОПРАВКИ С КРЕПЛЕНИЕМ WELDON. УДЛИНЕННОЕ ИСПОЛНЕНИЕ

MANDRINS POUR OUTILS TYPE WELDON-SÉRIE LONGUE
MANDRINI PORTAFRESE TIPO WELDON-SERIE LUNGA
威尔登式端铣夹具-长形凸点式

DIN 1835 B



| | Code N. | Description | ISO | D | L | D1 | D3 | G2,5 25000 RPM |
|------|-----------|-------------------|-----|----|-----|----|----|----------------|
| H100 | 213-91324 | TC40H100WE06 AD+B | 40 | 6 | 100 | 25 | 35 | • |
| | 213-91325 | TC40H100WE08 AD+B | 40 | 8 | 100 | 28 | 38 | • |
| | 213-91326 | TC40H100WE10 AD+B | 40 | 10 | 100 | 35 | 40 | • |
| | 213-91327 | TC40H100WE12 AD+B | 40 | 12 | 100 | 42 | - | • |
| | 213-91328 | TC40H100WE14 AD+B | 40 | 14 | 100 | 44 | - | • |
| | 213-91329 | TC40H100WE16 AD+B | 40 | 16 | 100 | 48 | - | • |
| | 213-91330 | TC40H100WE18 AD+B | 40 | 18 | 100 | 50 | - | • |
| | 213-91331 | TC40H100WE20 AD+B | 40 | 20 | 100 | 50 | - | • |
| | 213-91332 | TC50H100WE06 AD+B | 50 | 6 | 100 | 25 | 35 | • |
| | 213-91333 | TC50H100WE08 AD+B | 50 | 8 | 100 | 28 | 38 | • |
| | 213-91334 | TC50H100WE10 AD+B | 50 | 10 | 100 | 35 | 42 | • |
| | 213-91335 | TC50H100WE12 AD+B | 50 | 12 | 100 | 42 | 48 | • |
| | 213-91336 | TC50H100WE14 AD+B | 50 | 14 | 100 | 44 | 50 | • |
| | 213-91337 | TC50H100WE16 AD+B | 50 | 16 | 100 | 48 | 54 | • |
| | 213-91338 | TC50H100WE18 AD+B | 50 | 18 | 100 | 50 | 56 | • |
| | 213-91339 | TC50H100WE20 AD+B | 50 | 20 | 100 | 52 | 59 | • |
| | 213-91340 | TC50H100WE25 AD+B | 50 | 25 | 100 | 65 | - | • |

High balanced

Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

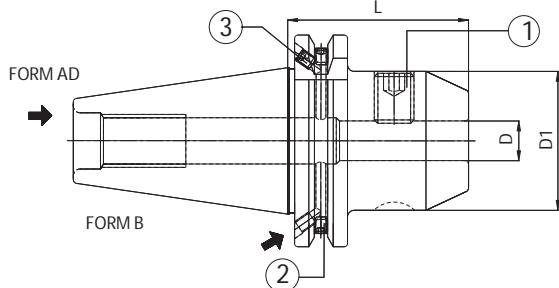
| Tape | Screw | Quantity | Screw | Quantity | D | Locking screw | Quantity |
|--------|-----------------|----------|-----------------|----------|-------|---------------|----------|
| | ② | | ③ | | | ① | |
| ISO 40 | 811-102002 M4X5 | 2 | 811-102002 M4X5 | 2 | 6 | 811-106001 | 1 |
| ISO 50 | 811-102001 M4X4 | 2 | 811-102010 M5X6 | 2 | 8 | 811-106002 | 1 |
| | | | | | 10 | 811-106004 | 1 |
| | | | | | 12,14 | 811-106005 | 1 |
| | | | | | 16,18 | 811-106006 | 1 |
| | | | | | 20 | 811-106007 | 1 |
| | | | | | 25 | 811-106008 | 2 |
| | | | | | 32 | 811-106009 | 2 |

ZYLINDERSCHAFTAUFNAHME WELDON
END MILL HOLDERS WELDON
ОПРАВКИ С КРЕПЛЕНИЕМ WELDON

MANDRINS POUR OUTILS TYPE WELDON
MANDRINI PORTAFRESE TIPO WELDON
威尔登式端铣夹具



DIN 1835 B



| Code N. | Description | ISO | D | L | D1 | G6,3 12000 RPM |
|-------------|-------------------|-----|----|-----|-----|----------------|
| * 263-11201 | TC30H45WE06 | 30 | 6 | 45 | 25 | • |
| * 263-11202 | TC30H45WE08 | 30 | 8 | 45 | 28 | • |
| * 263-11203 | TC30H50WE10 | 30 | 10 | 50 | 35 | • |
| * 263-11204 | TC30H50WE12 | 30 | 12 | 50 | 42 | • |
| * 263-11205 | TC30H70WE16 | 30 | 16 | 70 | 48 | • |
| * 263-11206 | TC30H70WE20 | 30 | 20 | 70 | 52 | • |
| 213-11326 | TC40H50WE06 AD+B | 40 | 6 | 50 | 25 | • |
| 213-11327 | TC40H50WE08 AD+B | 40 | 8 | 50 | 28 | • |
| 213-11328 | TC40H50WE10 AD+B | 40 | 10 | 50 | 35 | • |
| 213-11329 | TC40H50WE12 AD+B | 40 | 12 | 50 | 42 | • |
| 213-11330 | TC40H50WE14 AD+B | 40 | 14 | 50 | 44 | • |
| 213-11324 | TC40H63WE16 AD+B | 40 | 16 | 63 | 48 | • |
| 213-11331 | TC40H63WE18 AD+B | 40 | 18 | 63 | 50 | • |
| 213-11325 | TC40H63WE20 AD+B | 40 | 20 | 63 | 52 | • |
| 213-11323 | TC40H100WE25 AD+B | 40 | 25 | 100 | 65 | • |
| 213-11332 | TC40H100WE32 AD+B | 40 | 32 | 100 | 72 | • |
| 213-11393 | TC40H115WE40 AD+B | 40 | 40 | 115 | 80 | • |
| 213-11333 | TC50H63WE06 AD+B | 50 | 6 | 63 | 25 | • |
| 213-11334 | TC50H63WE08 AD+B | 50 | 8 | 63 | 28 | • |
| 213-11335 | TC50H63WE10 AD+B | 50 | 10 | 63 | 35 | • |
| 213-11336 | TC50H63WE12 AD+B | 50 | 12 | 63 | 42 | • |
| 213-11337 | TC50H63WE14 AD+B | 50 | 14 | 63 | 44 | • |
| 213-11338 | TC50H63WE16 AD+B | 50 | 16 | 63 | 48 | • |
| 213-11339 | TC50H63WE18 AD+B | 50 | 18 | 63 | 50 | • |
| 213-11340 | TC50H63WE20 AD+B | 50 | 20 | 63 | 52 | • |
| 213-11341 | TC50H80WE25 AD+B | 50 | 25 | 80 | 65 | • |
| 213-11342 | TC50H100WE32 AD+B | 50 | 32 | 100 | 72 | • |
| 213-11343 | TC50H120WE40 AD+B | 50 | 40 | 120 | 80 | • |
| 263-11343 | TC50H120WE50 AD+B | 50 | 50 | 120 | 100 | • |

Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| Tape | Screw | Quantity | Screw | Quantity | D | Locking screw | Quantity |
|--------|-----------------|----------|-----------------|----------|-------|---------------|----------|
| | ② | | ③ | | | ① | |
| ISO 40 | 811-102002 M4X5 | 2 | 811-102002 M4X5 | 2 | 6 | 811-106001 | 1 |
| ISO 50 | 811-102001 M4X4 | 2 | 811-102010 M5X6 | 2 | 8 | 811-106002 | 1 |
| | | | | | 10 | 811-106004 | 1 |
| | | | | | 12,14 | 811-106005 | 1 |
| | | | | | 16,18 | 811-106006 | 1 |
| | | | | | 20 | 811-106007 | 1 |
| | | | | | 25 | 811-106008 | 2 |
| | | | | | 32 | 811-106009 | 2 |
| | | | | | 40 | 811-106009 | 2 |
| | | | | | 50 | 811-106011 | 2 |

* Ausführung Form AD

* Execution form AD

* Forme AD

* Forma AD

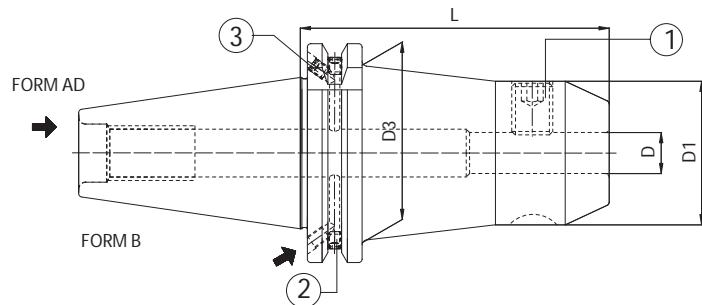
* Исполнение AD

* 执行形式 AD

ZYLINDERSCHAFTAUFNAHME WELDON-LANG
END MILL HOLDERS WELDON-LONG PROJECTION TYPE
ОПРАВКИ С КРЕПЛЕНИЕМ WELDON. УДЛЕНННОЕ ИСПОЛНЕНИЕ

MANDRINS POUR OUTILS TYPE WELDON-SERIE LONGUE
MANDRINI PORTAFRESE TIPO WELDON-SERIE LUNGA
威尔登式端铣夹具-长形凸点式

DIN 1835 B

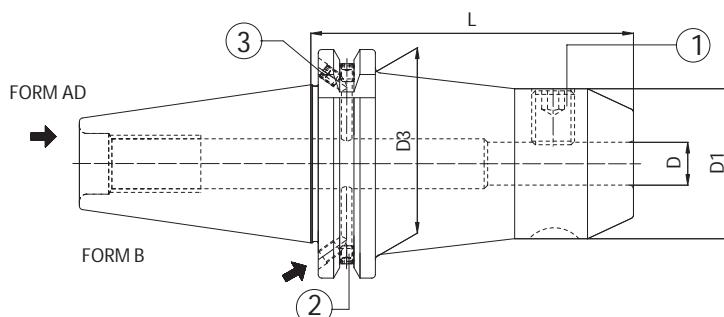


| | Code N. | Description | ISO | D | L | D1 | D3 | G6,3 12000 RPM | G6,3 8000 RPM |
|-------|-----------|-------------------|-----|----|-----|----|----|----------------|---------------|
| H 100 | 213-11344 | TC40H100WE06 AD+B | 40 | 6 | 100 | 25 | 35 | ● | |
| | 213-11345 | TC40H100WE08 AD+B | 40 | 8 | 100 | 28 | 38 | ● | |
| | 213-11346 | TC40H100WE10 AD+B | 40 | 10 | 100 | 35 | 40 | ● | |
| | 213-11347 | TC40H100WE12 AD+B | 40 | 12 | 100 | 42 | - | ● | |
| | 213-11348 | TC40H100WE14 AD+B | 40 | 14 | 100 | 44 | - | ● | |
| | 213-11349 | TC40H100WE16 AD+B | 40 | 16 | 100 | 48 | - | ● | |
| | 213-11370 | TC40H100WE18 AD+B | 40 | 18 | 100 | 50 | - | ● | |
| | 213-11350 | TC40H100WE20 AD+B | 40 | 20 | 100 | 50 | - | ● | |
| | 213-11351 | TC50H100WE06 AD+B | 50 | 6 | 100 | 25 | 35 | | ● |
| | 213-11352 | TC50H100WE08 AD+B | 50 | 8 | 100 | 28 | 38 | | ● |
| | 213-11353 | TC50H100WE10 AD+B | 50 | 10 | 100 | 35 | 42 | | ● |
| | 213-11354 | TC50H100WE12 AD+B | 50 | 12 | 100 | 42 | 48 | | ● |
| | 213-11355 | TC50H100WE14 AD+B | 50 | 14 | 100 | 44 | 50 | | ● |
| | 213-11356 | TC50H100WE16 AD+B | 50 | 16 | 100 | 48 | 54 | | ● |
| | 213-11357 | TC50H100WE18 AD+B | 50 | 18 | 100 | 50 | 56 | | ● |
| | 213-11358 | TC50H100WE20 AD+B | 50 | 20 | 100 | 52 | 59 | | ● |
| | 213-11359 | TC50H100WE25 AD+B | 50 | 25 | 100 | 65 | - | | ● |
| H 160 | 213-11362 | TC40H160WE06 AD+B | 40 | 6 | 160 | 25 | 35 | ● | |
| | 213-11363 | TC40H160WE08 AD+B | 40 | 8 | 160 | 28 | 38 | ● | |
| | 213-11371 | TC40H160WE10 AD+B | 40 | 10 | 160 | 35 | 40 | ● | |
| | 213-11372 | TC40H160WE12 AD+B | 40 | 12 | 160 | 42 | - | ● | |
| | 213-11394 | TC40H160WE14 AD+B | 40 | 14 | 160 | 44 | - | ● | |
| | 213-11360 | TC40H160WE16 AD+B | 40 | 16 | 160 | 48 | - | ● | |
| | 213-11395 | TC40H160WE18 AD+B | 40 | 18 | 160 | 50 | - | ● | |
| | 213-11361 | TC40H160WE20 AD+B | 40 | 20 | 160 | 50 | - | ● | |
| | 213-11396 | TC40H160WE25 AD+B | 40 | 25 | 160 | 65 | - | ● | |
| | 213-11397 | TC40H160WE32 AD+B | 40 | 32 | 160 | 72 | - | ● | |
| | 213-11364 | TC50H160WE06 AD+B | 50 | 6 | 160 | 25 | 35 | | ● |
| | 213-11365 | TC50H160WE08 AD+B | 50 | 8 | 160 | 28 | 38 | | ● |
| | 213-11366 | TC50H160WE10 AD+B | 50 | 10 | 160 | 35 | 42 | | ● |
| | 213-11367 | TC50H160WE12 AD+B | 50 | 12 | 160 | 42 | 48 | | ● |
| | 213-11398 | TC50H160WE14 AD+B | 50 | 14 | 160 | 44 | 50 | | ● |
| | 213-11368 | TC50H160WE16 AD+B | 50 | 16 | 160 | 48 | 54 | | ● |
| | 213-11399 | TC50H160WE18 AD+B | 50 | 18 | 160 | 50 | 56 | | ● |
| | 213-11369 | TC50H160WE20 AD+B | 50 | 20 | 160 | 52 | 59 | | ● |
| | 263-11301 | TC50H160WE25 AD+B | 50 | 25 | 160 | 65 | 70 | | ● |
| | 263-11302 | TC50H160WE32 AD+B | 50 | 32 | 160 | 72 | - | | ● |

ZYLINDERSCHAFTAUFNAHME WELDON-LANG
END MILL HOLDERS WELDON-LONG PROJECTION TYPE
ОПРАВКИ С КРЕПЛЕНИЕМ WELDON. УДЛЕННЕННОЕ ИСПОЛНЕНИЕ

MANDRINS POUR OUTILS TYPE WELDON-SÉRIE LONGUE
MANDRINI PORTAFRESE TIPO WELDON-SERIE LUNGA
威尔登式端铣夹具-长形凸点式

DIN 1835 B



| Code N. | Description | ISO | D | L | D1 | D3 | G6,3 8000 RPM |
|-----------|-------------------|-----|----|-----|----|----|---------------|
| 263-11303 | TC40H200WE06 AD+B | 40 | 6 | 200 | 25 | 38 | • |
| 263-11304 | TC40H200WE08 AD+B | 40 | 8 | 200 | 28 | 41 | • |
| 263-11305 | TC40H200WE10 AD+B | 40 | 10 | 200 | 35 | 43 | • |
| 263-11306 | TC40H200WE12 AD+B | 40 | 12 | 200 | 42 | 48 | • |
| 263-11307 | TC40H200WE14 AD+B | 40 | 14 | 200 | 44 | 48 | • |
| 263-11308 | TC40H200WE16 AD+B | 40 | 16 | 200 | 48 | - | • |
| 263-11309 | TC40H200WE18 AD+B | 40 | 18 | 200 | 50 | - | • |
| 263-11310 | TC40H200WE20 AD+B | 40 | 20 | 200 | 50 | - | • |
| 263-11311 | TC40H200WE25 AD+B | 40 | 25 | 200 | 65 | - | • |
| 263-11312 | TC40H200WE32 AD+B | 40 | 32 | 200 | 72 | - | • |
| 263-11313 | TC50H200WE06 AD+B | 50 | 6 | 200 | 25 | 38 | • |
| 263-11314 | TC50H200WE08 AD+B | 50 | 8 | 200 | 28 | 41 | • |
| 263-11315 | TC50H200WE10 AD+B | 50 | 10 | 200 | 35 | 45 | • |
| 263-11316 | TC50H200WE12 AD+B | 50 | 12 | 200 | 42 | 51 | • |
| 263-11317 | TC50H200WE14 AD+B | 50 | 14 | 200 | 44 | 53 | • |
| 263-11318 | TC50H200WE16 AD+B | 50 | 16 | 200 | 48 | 57 | • |
| 263-11319 | TC50H200WE18 AD+B | 50 | 18 | 200 | 50 | 59 | • |
| 263-11320 | TC50H200WE20 AD+B | 50 | 20 | 200 | 52 | 61 | • |
| 263-11321 | TC50H200WE25 AD+B | 50 | 25 | 200 | 65 | 72 | • |
| 263-11381 | TC50H200WE32 AD+B | 50 | 32 | 200 | 72 | - | • |

H 200

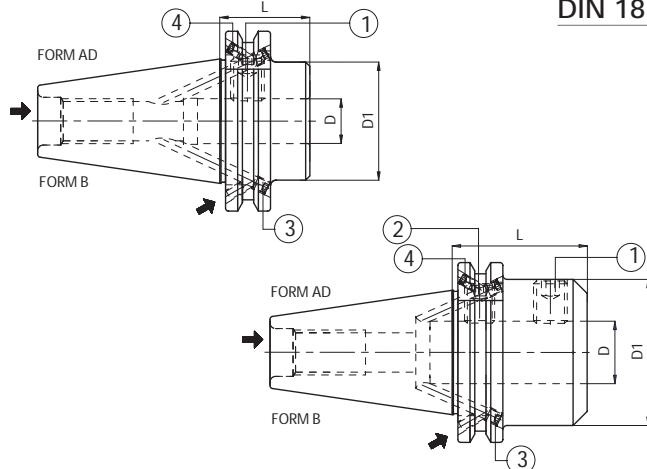
Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| Tape | Screw | Quantity | Screw | Quantity | D | Locking screw | Quantity |
|--------|-----------------|----------|-----------------|----------|-------|---------------|----------|
| | | | | | | | |
| ISO 40 | 811-102002 M4X5 | 2 | 811-102002 M4X5 | 2 | 6 | 811-106001 | 1 |
| ISO 50 | 811-102001 M4X4 | 2 | 811-102010 M5X6 | 2 | 8 | 811-106002 | 1 |
| | | | | | 10 | 811-106004 | 1 |
| | | | | | 12,14 | 811-106005 | 1 |
| | | | | | 16,18 | 811-106006 | 1 |
| | | | | | 20 | 811-106007 | 1 |
| | | | | | 25 | 811-106008 | 2 |
| | | | | | 32 | 811-106009 | 2 |

KURZE ZYLINDERSCHAFTAUFNAHME WELDON
SHORT END MILL WELDON HOLDERS

ОПРАВКИ С КРЕПЛЕНИЕМ WELDON. КОРОТКОЕ ИСПОЛНЕНИЕ

MANDRINS COURTS PORTE-FRAISE TYPE WELDON
MANDRINI CORTI PORTAFRESE TIPO WELDON
威尔登式短端铣刀夹具



| Code N. | Description | ISO | D | L | D1 | G6,3 12000 RPM |
|-----------|------------------|-----|----|----|----|----------------|
| 263-11322 | TC40H35WE16 AD+B | 40 | 16 | 35 | 44 | • |
| 263-11323 | TC40H35WE20 AD+B | 40 | 20 | 35 | 44 | • |
| 263-11324 | TC40H35WE25 AD+B | 40 | 25 | 35 | 44 | • |
| 263-11325 | TC40H60WE25 AD+B | 40 | 25 | 60 | 49 | • |
| 263-11326 | TC40H70WE32 AD+B | 40 | 32 | 70 | 72 | • |
| 263-11327 | TC50H35WE16 AD+B | 50 | 16 | 35 | 70 | • |
| 263-11328 | TC50H35WE20 AD+B | 50 | 20 | 35 | 70 | • |
| 263-11329 | TC50H35WE25 AD+B | 50 | 25 | 35 | 70 | • |
| 263-11330 | TC50H35WE32 AD+B | 50 | 32 | 35 | 80 | • |

Extrakurze und feste Ausführung

Extra short and Rigid Version

Экстракороткое и жесткое исполнение

Extra courts et version rigide

Extra corti e versione rigida

超短及坚固型

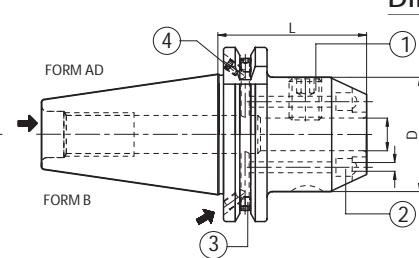
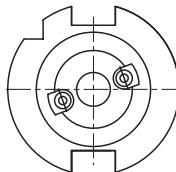
Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| Type | Screw | Quantity | Screw | Quantity |
|-------|-----------------|----------|-----------------|----------|
| | (3) | | (4) | |
| ISO40 | 811-102002 M4X5 | 2 | 811-102002 M4X5 | 2 |
| ISO50 | 811-102001 M4X4 | 2 | 811-102010 M5X6 | 2 |

| Code N. | Locking screw | Quantity | Locking screw | Quantity |
|-----------|---------------|----------|---------------|----------|
| | (1) | | (2) | |
| 263-11322 | 811-106006 | 1 | - | - |
| 263-11323 | 811-106007 | 1 | - | - |
| 263-11324 | 811-106014 | 1 | - | - |
| 263-11325 | 811-106014 | 2 | - | - |
| 263-11326 | 811-106009 | 1 | 811-106026 | 1 |
| 263-11327 | 811-106006 | 1 | - | - |
| 263-11328 | 811-106007 | 1 | - | - |
| 263-11329 | 811-106008 | 1 | - | - |
| 263-11330 | 811-106009 | 1 | - | - |

ZYLINDERSCHAFTAUFNAHME WELDON MIT SPRITZDÜSEN
END MILL HOLDERS WELDON
WITH COOLANT NOSE FRONT FACE
ОПРАВКИ С КРЕПЛЕНИЕМ
WELDON И ОТВЕРСТИЯМИ ДЛЯ СОЖ НА ТОРЦЕ

MANDRINS POUR OUTILS TYPE WELDON
AVEC BUSE D'ARROSAGE
MANDRINI PORTAFRESE TIPO WELDON
CON SFERE DI LUBRIFICAZIONE
威尔登式端铣夹具，配备出水结构



DIN 1835 B

| Code N. | Description | ISO | D | L | D1 | G6,3 8000 RPM |
|-----------|------------------------|-----|----|-----|----|---------------|
| 213-11383 | TC40H50WE06-CNFF AD+B | 40 | 6 | 50 | 25 | • |
| 213-11384 | TC40H50WE08-CNFF AD+B | 40 | 8 | 50 | 28 | • |
| 213-11385 | TC40H50WE10-CNFF AD+B | 40 | 10 | 50 | 35 | • |
| 213-11386 | TC40H50WE12-CNFF AD+B | 40 | 12 | 50 | 42 | • |
| 213-11387 | TC40H50WE14-CNFF AD+B | 40 | 14 | 50 | 44 | • |
| 213-11388 | TC40H63WE16-CNFF AD+B | 40 | 16 | 63 | 48 | • |
| 213-11389 | TC40H63WE18-CNFF AD+B | 40 | 18 | 63 | 50 | • |
| 213-11390 | TC40H63WE20-CNFF AD+B | 40 | 20 | 63 | 52 | • |
| 213-11391 | TC40H100WE25-CNFF AD+B | 40 | 25 | 100 | 65 | • |
| 213-11392 | TC40H100WE32-CNFF AD+B | 40 | 32 | 100 | 72 | • |
| 263-11331 | TC40H115WE40-CNFF AD+B | 40 | 40 | 115 | 80 | • |
| 263-11332 | TC50H63WE06-CNFF AD+B | 50 | 6 | 63 | 25 | • |
| 263-11333 | TC50H63WE08-CNFF AD+B | 50 | 8 | 63 | 28 | • |
| 263-11334 | TC50H63WE10-CNFF AD+B | 50 | 10 | 63 | 35 | • |
| 263-11335 | TC50H63WE12-CNFF AD+B | 50 | 12 | 63 | 42 | • |
| 263-11336 | TC50H63WE14-CNFF AD+B | 50 | 14 | 63 | 44 | • |
| 263-11337 | TC50H63WE16-CNFF AD+B | 50 | 16 | 63 | 48 | • |
| 263-11338 | TC50H63WE18-CNFF AD+B | 50 | 18 | 63 | 50 | • |
| 263-11339 | TC50H63WE20-CNFF AD+B | 50 | 20 | 63 | 52 | • |
| 263-11340 | TC50H80WE25-CNFF AD+B | 50 | 25 | 80 | 65 | • |
| 263-11341 | TC50H100WE32-CNFF AD+B | 50 | 32 | 100 | 72 | • |
| 263-11342 | TC50H120WE40-CNFF AD+B | 50 | 40 | 120 | 80 | • |

Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

Ausführung mit Kühlmittelzufuhr zentral und an dem Bund.

Durch die seitlichen Bohrungen und die Kühlmitteldüsen ermöglicht dieses System das Kühlmittel direkt an den Kontaktpunkt des Werkzeugs zu leiten.
Außerdem erfolgt Zentral-Kühlmittelzufuhr, wenn zwei Schrauben die Bohrungen verschließen.

With central and lateral cooling possibility.

This type of system, thanks to two lateral holes, permits to direct the cooling jet through the two balls to the connection point of the tool.
Besides, with the application of two screws on the balls, you can have the lubrication trough the centre.

Avec possibilité d'arrosage soit central, soit latéral.

Ce système, avec les trous latéraux, permet, avec les deux billes d'arrosage de diriger le liquide sur le point de contact de l'outil.
De plus, il est possible d'avoir l'arrosage au centre en bouchant avec des vis les trous des billes.

Con possibilità di refrigerazione sia centrale che laterale.

Questo tipo di sistema grazie ai due fori laterali, permette, mediante le due sfere di dirigere il getto del refrigerante nel punto di contatto dell'utensile. Inoltre, con l'applicazione di due grani sulle sfere si ottiene la lubrificazione attraverso il centro.

Возможность центрального и бокового охлаждения

Благодаря двум боковым отверстиям, эта система позволяет направлять СОЖ к месту крепления режущего инструмента.
Если закрепить два винта в отверстиях фланца, СОЖ подается через центр.

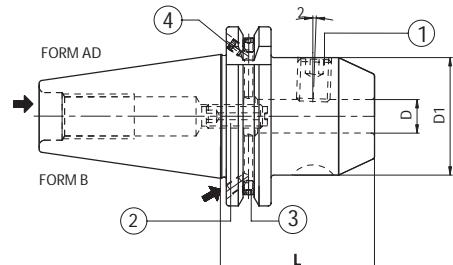
具备中央及侧面冷却能力

这种类型的系统，由于具备两个侧孔，它可将冷却喷嘴通过两个球头导向工具的连接点。
另外，在球头上使用两个螺丝，可使润滑剂通过中心。

| Type | Screw | Quantity | Screw | Quantity |
|-------|-----------------|----------|-----------------|----------|
| | ③ | | ④ | |
| ISO40 | 811-102002 M4X5 | 2 | 811-102002 M4X5 | 2 |
| ISO50 | 811-102001 M4X4 | 2 | 811-102010 M5X6 | 2 |
| D | Locking screw | Quantity | Coolant noose | M |
| | ① | | ② | |
| 6 | 811-106001 | 1 | PWZ1005D6x4.5 | D2.5 |
| 8 | 811-106002 | 1 | PWZ1005D6x4.5 | D2.5 |
| 10 | 811-106004 | 1 | PWZ1005D6x4.5 | D2.5 |
| 12,14 | 811-106005 | 1 | PWZ1005D6x4.5 | D2.5 |
| 16,18 | 811-106006 | 1 | PWZ1008D10x7 | M4 |
| 20 | 811-106007 | 1 | PWZ1008D10x7 | M4 |
| 25 | 811-106008 | 2 | PWZ1012D12x8 | M5 |
| 32 | 811-106009 | 2 | PWZ1012D12x8 | M5 |
| 40 | 811-106009 | 2 | PWZ1012D12x8 | M5 |

ZYLINDERSCHAFTAUFNAHME WHISTLE NOTCH
END MILL HOLDERS WHISTLE NOTCH
ОПРАВКИ С КРЕПЛЕНИЕМ WHISTLE NOTCH

MANDRINS POUR OUTILS TYPE WHISTLE NOTCH
MANDRINI PORTAFRESE TIPO WHISTLE NOTCH
侧固式铣刀柄



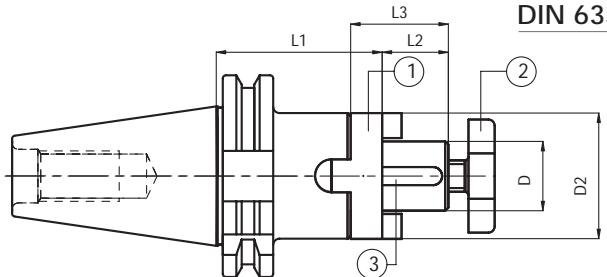
DIN 1835 E

| Code N. | Description | ISO | D | L | D1 | G6,3 12000 RPM |
|-----------|-------------------|-----|----|-----|----|----------------|
| 213-31317 | TC40H50WN06 AD+B | 40 | 6 | 50 | 25 | • |
| 213-31318 | TC40H50WN08 AD+B | 40 | 8 | 50 | 28 | • |
| 213-31319 | TC40H50WN10 AD+B | 40 | 10 | 50 | 35 | • |
| 213-31320 | TC40H50WN12 AD+B | 40 | 12 | 50 | 42 | • |
| 213-31321 | TC40H50WN14 AD+B | 40 | 14 | 50 | 44 | • |
| 213-31322 | TC40H63WN16 AD+B | 40 | 16 | 63 | 48 | • |
| 213-31323 | TC40H63WN18 AD+B | 40 | 18 | 63 | 50 | • |
| 213-31324 | TC40H63WN20 AD+B | 40 | 20 | 63 | 52 | • |
| 213-31325 | TC40H100WN25 AD+B | 40 | 25 | 100 | 65 | • |
| 213-31326 | TC40H100WN32 AD+B | 40 | 32 | 100 | 72 | • |
| 213-31327 | TC40H115WN40 AD+B | 40 | 40 | 115 | 80 | • |
| 213-31328 | TC50H63WN06 AD+B | 50 | 6 | 63 | 25 | • |
| 213-31329 | TC50H63WN08 AD+B | 50 | 8 | 63 | 28 | • |
| 213-31330 | TC50H63WN10 AD+B | 50 | 10 | 63 | 35 | • |
| 213-31331 | TC50H63WN12 AD+B | 50 | 12 | 63 | 42 | • |
| 213-31332 | TC50H63WN14 AD+B | 50 | 14 | 63 | 44 | • |
| 213-31333 | TC50H63WN16 AD+B | 50 | 16 | 63 | 48 | • |
| 213-31334 | TC50H63WN18 AD+B | 50 | 18 | 63 | 50 | • |
| 213-31335 | TC50H63WN20 AD+B | 50 | 20 | 63 | 52 | • |
| 213-31336 | TC50H80WN25 AD+B | 50 | 25 | 80 | 65 | • |
| 213-31337 | TC50H100WN32 AD+B | 50 | 32 | 100 | 72 | • |
| 213-31338 | TC50H120WN40 AD+B | 50 | 40 | 120 | 80 | • |

Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| Type | Screw | Quantity | Screw | Quantity |
|-----------|-----------------|----------|-----------------|----------|
| | ③ | | ④ | |
| ISO40 | 811-102002 M4X5 | 2 | 811-102002 M4X5 | 2 |
| ISO50 | 811-102001 M4X4 | 2 | 811-102010 M5X6 | 2 |
| D | Locking screw | Quantity | Stop screw | M |
| | ① | | ② | |
| 6 | 811-106001 | 1 | 811-303043 | 1 |
| 8 | 811-106002 | 1 | 811-303081 | 1 |
| 10 | 811-106004 | 1 | 811-303082 | 1 |
| 12,14 | 811-106005 | 1 | 811-303083 | 1 |
| 16,18 | 811-106006 | 1 | 811-303084 | 1 |
| 20 | 811-106007 | 1 | 811-303084 | 1 |
| ISO 40/25 | 811-106008 | 2 | 811-303098 | 1 |
| ISO 50/25 | 811-106008 | 2 | 811-303085 | 1 |
| ISO 40/32 | 811-106009 | 2 | 811-303098 | 1 |
| ISO 50/32 | 811-106009 | 2 | 811-303085 | 1 |
| ISO 40/40 | 811-106009 | 2 | 811-303098 | 1 |
| ISO 50/40 | 811-106009 | 2 | 811-303085 | 1 |

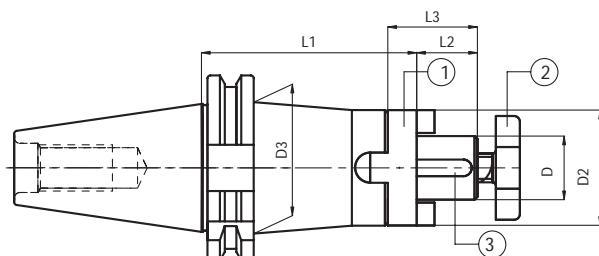
KOMBI - AUFSTECKFRÄSDORNE
COMBI-SHELL MILL ADAPTORS
КОМБИНИРОВАННЫЕ ОПРАВКИ ДЛЯ НАСАДНЫХ ФРЕЗ
MANDRINS PORTE- FRAISES A DOUBLE USAGE
MANDRINI PORTAFRESE COMBINATI
复合式平面铣刀接头



STANDARD

| Code N. | Description | ISO | D | L1 | L2 | L3 | D2 | G6,3 8000 RPM |
|-----------|-------------|-----|----|----|----|----|----|---------------|
| 216-11201 | TC40H55D16C | 40 | 16 | 55 | 17 | 27 | 32 | • |
| 216-11202 | TC40H55D22C | 40 | 22 | 55 | 19 | 31 | 40 | • |
| 216-11203 | TC40H55D27C | 40 | 27 | 55 | 21 | 33 | 48 | • |
| 216-11204 | TC40H60D32C | 40 | 32 | 60 | 24 | 38 | 58 | • |
| 216-11205 | TC40H60D40C | 40 | 40 | 60 | 27 | 41 | 70 | • |
| 216-11206 | TC50H55D16C | 50 | 16 | 55 | 17 | 27 | 32 | • |
| 216-11207 | TC50H55D22C | 50 | 22 | 55 | 19 | 31 | 40 | • |
| 216-11208 | TC50H55D27C | 50 | 27 | 55 | 21 | 33 | 48 | • |
| 216-11209 | TC50H55D32C | 50 | 32 | 55 | 24 | 38 | 58 | • |
| 216-11210 | TC50H55D40C | 50 | 40 | 55 | 27 | 41 | 70 | • |
| 216-11211 | TC50H70D50C | 50 | 50 | 70 | 30 | 46 | 90 | • |

H100



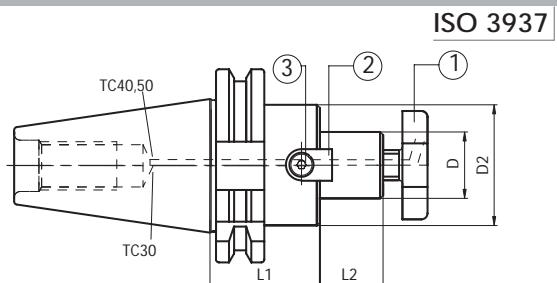
| Code N. | Description | ISO | D | L1 | L2 | L3 | D2 | D3 | G6,3 8000 RPM |
|-----------|--------------|-----|----|-----|----|----|----|----|---------------|
| 216-11213 | TC40H100D16C | 40 | 16 | 100 | 17 | 27 | 32 | 44 | • |
| 216-11214 | TC40H100D22C | 40 | 22 | 100 | 19 | 31 | 40 | - | • |
| 216-11215 | TC40H100D27C | 40 | 27 | 100 | 21 | 33 | 48 | - | • |
| 216-11216 | TC40H100D32C | 40 | 32 | 100 | 24 | 38 | 58 | - | • |
| 216-11217 | TC40H100D40C | 40 | 40 | 100 | 27 | 41 | 70 | - | • |
| 216-11218 | TC50H100D16C | 50 | 16 | 100 | 17 | 27 | 32 | 50 | • |
| 216-11219 | TC50H100D22C | 50 | 22 | 100 | 19 | 31 | 40 | 60 | • |
| 216-11220 | TC50H100D27C | 50 | 27 | 100 | 21 | 33 | 48 | 60 | • |
| 216-11221 | TC50H100D32C | 50 | 32 | 100 | 24 | 38 | 58 | - | • |
| 216-11222 | TC50H100D40C | 50 | 40 | 100 | 27 | 41 | 70 | - | • |

Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| D | Ring | Cross screw | Key | Wrench |
|----|-------------|--------------|--------------|------------|
| 16 | ① 814-30001 | ② 811-107003 | ③ 814-201010 | 816-130002 |
| 22 | 814-30002 | 811-107004 | 814-201020 | 816-130003 |
| 27 | 814-30003 | 811-107005 | 814-201030 | 816-130004 |
| 32 | 814-30004 | 811-107006 | 814-201040 | 816-130005 |
| 40 | 814-30005 | 811-107007 | 814-201050 | 816-130006 |
| 50 | 814-30006 | 811-107009 | 814-201060 | 816-130007 |

AUFSTECKFRÄSDORNE FÜR FRÄSER
MIT QUERNUT MIT GRÖBEREM BUND
FACE MILL HOLDERS-TENONS DRIVE
WITH BIGGER FLANGE DIAMETER
ОПРАВКИ ДЛЯ НАСАДНЫХ ФРЕЗ С УВЕЛИЧЕННЫМ
ДИАМЕТРОМ КОРПУСА

MANDRINS PORTE-FRAISE-ENTRAINEMENT
PAR TENONS BRIDE AJOUTEE
MANDRINI PORTAFRESE A TRASCINAMENTO FISSO
CON FLANGIA MAGGIORATA
平面铣刀柄 - 凸榫驱动带有更大的法兰直径



| Code N. | Description | ISO | D | L1 | L2 | D2 | G6,3 8000 RPM |
|-------------|-------------|-----|----|----|----|----|---------------|
| 216-71204 | TC40H45D16F | 40 | 16 | 45 | 17 | 38 | • |
| 216-71205 | TC40H45D22F | 40 | 22 | 45 | 19 | 48 | • |
| 216-71206 | TC40H50D27F | 40 | 27 | 50 | 21 | 58 | • |
| 216-71207 | TC40H55D32F | 40 | 32 | 55 | 24 | 78 | • |
| ▲ 216-71208 | TC40H55D40F | 40 | 40 | 55 | 27 | 88 | • |
| 216-71214 | TC50H45D16F | 50 | 16 | 45 | 17 | 38 | • |
| 216-71215 | TC50H45D22F | 50 | 22 | 45 | 19 | 48 | • |
| 216-71216 | TC50H45D27F | 50 | 27 | 45 | 21 | 58 | • |
| 216-71217 | TC50H50D32F | 50 | 32 | 50 | 24 | 78 | • |
| ▲ 216-71218 | TC50H55D40F | 50 | 40 | 55 | 27 | 88 | • |

▲ Zur gebohrten Ausführung, siehen Sie bitte Seite 49

▲ For drilled version, please see on page 49

▲ Pour le modèle percé voir à la page 49

▲ Per versione forata vedi pag 49

▲ Оправки для фланцевого крепления фрез на стр. 49



pag. 468-469



pag. 468-469



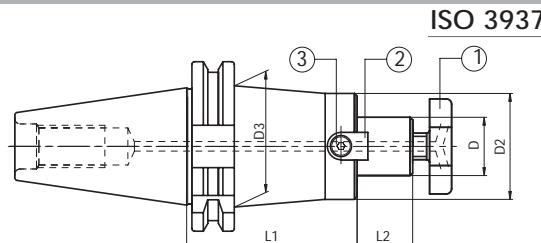
pag. 468-469

Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| D | Cross screw | Cross screw on enquiry | Tenon | Screw | Wrench |
|----|-------------|------------------------|------------|------------|------------|
| | | | | | |
| 16 | 811-107003 | 811-107013 | 814-202280 | 811-101004 | 816-130002 |
| 22 | 811-107004 | 811-107014 | 814-202250 | 811-101011 | 816-130003 |
| 27 | 811-107005 | 811-107015 | 814-202270 | 811-101018 | 816-130004 |
| 32 | 811-107006 | 811-107016 | 814-202630 | 811-101029 | 816-130005 |
| 40 | 811-107007 | 811-107017 | 814-202710 | 811-101029 | 816-130006 |

AUFSTECKFRÄSDORNE FÜR FRÄSER
MIT QUERNUT-LANGE AUSFÜHRUNG
FACE MILL HOLDERS-TENONS DRIVE-LONG PROJECTION TYPE
ОПРАВКИ ДЛЯ НАСАДНЫХ ФРЕЗ. УДЛИНЕННОЕ ИСПОЛНЕНИЕ

MANDRINS PORTE-FRAISE-ENTRAINEMENT
PAR TENONS-SÉRIE LONGUE
MANDRINI PORTAFRESE A TRASCINAMENTO FISSO-SÉRIE LUNGA
平面铣刀柄 - 凸榫驱动 - 长形凸点式



| | Code N. | Description | ISO | D | L1 | L2 | D2 | D3 | | G6,3 8000 RPM |
|-------|-----------|--------------|-----|----|-----|----|----|----|---|---------------|
| H 100 | 216-71255 | TC40H100D16F | 40 | 16 | 100 | 17 | 39 | - | - | ● |
| | 216-71259 | TC40H100D22F | 40 | 22 | 100 | 19 | 46 | 48 | A | ● |
| | 266-71273 | TC40H100D27F | 40 | 27 | 100 | 21 | 55 | - | C | ● |
| | 266-71274 | TC40H100D32F | 40 | 32 | 100 | 24 | 66 | - | - | ● |
| | 266-71275 | TC40H100D40F | 40 | 40 | 100 | 27 | 70 | - | - | ● |
| | 266-71233 | TC50H100D16F | 50 | 16 | 100 | 17 | 38 | - | - | ● |
| | 216-71267 | TC50H100D22F | 50 | 22 | 100 | 19 | 46 | 48 | A | ● |
| | 216-71272 | TC50H100D22F | 50 | 22 | 100 | 19 | 50 | 60 | B | ● |
| | 216-71277 | TC50H100D27F | 50 | 27 | 100 | 21 | 55 | 78 | C | ● |
| | 266-71256 | TC50H100D32F | 50 | 32 | 100 | 24 | 66 | 78 | - | ● |
| | 266-71276 | TC50H100D40F | 50 | 40 | 100 | 27 | 70 | 78 | - | ● |
| H 160 | 216-71256 | TC40H160D16F | 40 | 16 | 160 | 17 | 39 | - | - | ● |
| | 216-71260 | TC40H160D22F | 40 | 22 | 160 | 19 | 46 | 48 | A | ● |
| | 266-71234 | TC50H160D16F | 50 | 16 | 160 | 17 | 38 | - | - | ● |
| | 216-71268 | TC50H160D22F | 50 | 22 | 160 | 19 | 46 | 48 | A | ● |
| | 216-71273 | TC50H160D22F | 50 | 22 | 160 | 19 | 50 | 60 | B | ● |
| | 216-71278 | TC50H160D27F | 50 | 27 | 160 | 21 | 55 | 78 | C | ● |
| | 266-71257 | TC50H160D32F | 50 | 32 | 160 | 24 | 66 | 78 | - | ● |
| | 266-71287 | TC50H160D40F | 50 | 40 | 160 | 27 | 70 | 78 | - | ● |
| H 200 | 216-71257 | TC40H200D16F | 40 | 16 | 200 | 17 | 39 | - | - | ● |
| | 216-71261 | TC40H200D22F | 40 | 22 | 200 | 19 | 46 | 48 | A | ● |
| | 266-71250 | TC50H200D16F | 50 | 16 | 200 | 17 | 39 | - | - | ● |
| | 216-71269 | TC50H200D22F | 50 | 22 | 200 | 19 | 46 | 48 | A | ● |
| | 216-71274 | TC50H200D22F | 50 | 22 | 200 | 19 | 50 | 60 | B | ● |
| | 216-71279 | TC50H200D27F | 50 | 27 | 200 | 21 | 55 | 78 | C | ● |
| | 266-71258 | TC50H200D32F | 50 | 32 | 200 | 24 | 66 | 78 | - | ● |
| | 266-71288 | TC50H200D40F | 50 | 40 | 200 | 27 | 70 | 78 | - | ● |

A/Für Fräser D50 - B/Für Fräser D63 - C/Für Fräser D80

A/Suitable for milling cutters D50 - B/Suitable for milling cutters D63 - C/Suitable for milling cutters D80

A/подходит для фрез D50 - B/подходит для фрез D63 - C/подходит для фрез D80

A/Adaptes pour fraises D50 - B/Adaptes pour fraises D63 - C/Adaptes pour fraises D80

A/Adatti per frese D50 - B/Adatti per frese D63 - C/Adatti per frese D80

A/适用于 D50 铣刀 - B/适用于 D63 铣刀 - C/适用于 D80 铣刀

Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

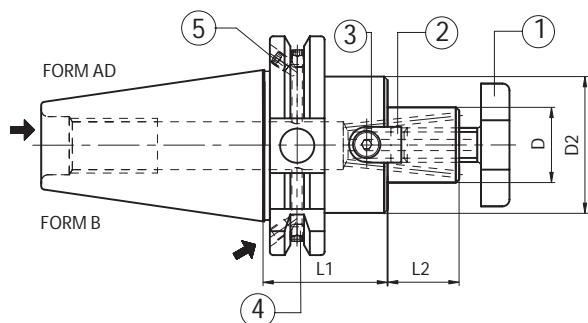
| D/D2 | Cross Screw | Cross screw on enquiry | Tenon | Screw | Wrench | |
|-------|-------------|------------------------|------------|------------|------------|--------------|
| | | | | | | |
| 16 | 811-107003 | 811-107013 | 814-202280 | 811-101004 | 816-130002 | |
| 22/46 | 811-107004 | 811-107014 | 814-202250 | 811-101011 | 816-130003 | |
| 22/50 | 811-107004 | 811-107014 | 814-202260 | 811-101012 | 816-130003 | |
| 27 | 811-107005 | 811-107015 | 814-202270 | 811-101017 | 816-130004 | |
| 32 | 811-107006 | 811-107016 | 814-202290 | 811-101029 | 816-130005 | |
| 40 | 811-107007 | 811-107017 | 814-202180 | 811-101028 | 816-130006 | |
| | | | | | | pag. 468-469 |
| | | | | | | pag. 468-469 |
| | | | | | | pag. 468-469 |



AUFSTECKFRÄSDORNE FÜR FRÄSER MIT QUERNUT
UND KÜHLMITTELZUFUHR MIT GRÖßEREM BUND
FACE MILL HOLDERS-TENONS DRIVE WITH INTERNAL
COOLANT SUPPLY WITH BIGGER FLANGE DIAMETER
ОПРАВКИ ДЛЯ НАСАДНЫХ ФРЕЗ С ВНУТРЕННЕЙ ПОДАЧЕЙ
СОЖ И УВЕЛИЧЕННЫМ ДИАМЕТРОМ КОРПУСА

MANDRINS PORTE-FRAISE-ENTRAINEMENT PAR TENONS
AVEC ARROSAGE INTERNE BRIDE AJOUTEE
MANDRINI PORTAFRESE A TRASCINAMENTO FISSO
CON PASSAGGIO REFRIGERANTE CON FLANGIA MAGGIORATA
平面铣刀柄 - 凸榫驱动配备内部冷却剂供应带更大法兰直径

ISO 3937



| Code N. | Description | ISO | D | L1 | L2 | D2 | G6,3 8000 RPM |
|-----------|------------------|-----|----|----|----|----|---------------|
| 216-71301 | TC40H45D16F AD+B | 40 | 16 | 45 | 17 | 38 | • |
| 216-71302 | TC40H45D22F AD+B | 40 | 22 | 45 | 19 | 48 | • |
| 216-71303 | TC40H50D27F AD+B | 40 | 27 | 50 | 21 | 58 | • |
| 216-71304 | TC40H55D32F AD+B | 40 | 32 | 55 | 24 | 78 | • |
| 216-71305 | TC40H55D40F AD+B | 40 | 40 | 55 | 27 | 88 | • |
| 216-71306 | TC50H45D16F AD+B | 50 | 16 | 45 | 17 | 38 | • |
| 216-71307 | TC50H45D22F AD+B | 50 | 22 | 45 | 19 | 48 | • |
| 216-71308 | TC50H45D27F AD+B | 50 | 27 | 45 | 21 | 58 | • |
| 216-71309 | TC50H55D32F AD+B | 50 | 32 | 55 | 24 | 78 | • |
| 216-71310 | TC50H55D40F AD+B | 50 | 40 | 55 | 27 | 88 | • |



pag. 468-469



pag. 468-469



pag. 468-469

Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

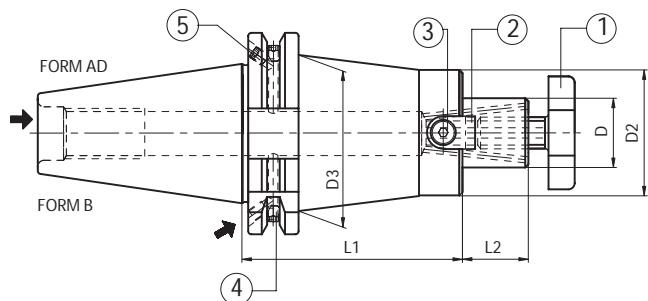
| Tape | Screw | Quantity | Screw | Quantity |
|--------|-----------------|----------|-----------------|----------|
| | ④ | | ⑤ | |
| ISO 40 | 811-102002 M4X5 | 2 | 811-102002 M4X5 | 2 |
| ISO 50 | 811-102001 M4X4 | 2 | 811-102010 M5X6 | 2 |

| D | Cross screw | Tenon | Screw | Wrench |
|----|-------------|------------|------------|------------|
| 16 | ① | ② | ③ | |
| 22 | 811-107003 | 814-202280 | 811-101004 | 816-130002 |
| 27 | 811-107004 | 814-202250 | 811-101011 | 816-130003 |
| 32 | 811-107005 | 814-202270 | 811-101018 | 816-130004 |
| 40 | 811-107006 | 814-202630 | 811-101029 | 816-130005 |
| | 811-107007 | 814-202710 | 811-101029 | 816-130006 |

AUFSTECKFRÄSDORNE FÜR FRÄSER MIT QUERNUT UND
KÜHLMITTELZUFUHR-LANGE AUSFÜHRUNG
FACE MILL HOLDERS-TENONS DRIVE-WITH INTERNAL
COOLANT SUPPLY-LONG
ОПРАВКИ ДЛЯ НАСАДНЫХ ФРЕЗ С ВНУТРЕННЕЙ ПОДАЧЕЙ СОЖ.
УДЛИНЕННОЕ ИСПОЛНЕНИЕ

MANDRINS PORTE-FRAISE-ENTRAINEMENT PAR TENONS
AVEC ARROSAGE INTERNE-LONGUE
MANDRINI PORTAFRESE A TRASCINAMENTO FISSO
CON PASSAGGIO REFRIGERANTE-LUNGA
平面铣刀柄 - 凸榫驱动配备内部冷却剂供应加长

ISO 3937



| | Code N. | Description | ISO | D | L1 | L2 | D2 | D3 | G6,3 8000 RPM |
|-------|-----------|-------------------|-----|----|-----|----|----|----|---------------|
| H 100 | 216-71321 | TC40H100D16F AD+B | 40 | 16 | 100 | 17 | 32 | 42 | • |
| | 216-71322 | TC40H100D22F AD+B | 40 | 22 | 100 | 19 | 40 | 49 | • |
| | 216-71323 | TC40H100D27F AD+B | 40 | 27 | 100 | 21 | 48 | - | • |
| | 216-71324 | TC40H100D32F AD+B | 40 | 32 | 100 | 24 | 58 | - | • |
| | 216-71326 | TC40H100D40F AD+B | 40 | 40 | 100 | 27 | 70 | - | • |
| | 216-71312 | TC50H100D16F AD+B | 50 | 16 | 100 | 17 | 32 | 42 | • |
| | 216-71313 | TC50H100D22F AD+B | 50 | 22 | 100 | 19 | 40 | 55 | • |
| | 216-71314 | TC50H100D27F AD+B | 50 | 27 | 100 | 21 | 48 | 60 | • |
| | 216-71315 | TC50H100D32F AD+B | 50 | 32 | 100 | 24 | 58 | 68 | • |
| | 216-71316 | TC50H100D40F AD+B | 50 | 40 | 100 | 27 | 70 | - | • |



pag. 468-469



pag. 468-469



pag. 468-469

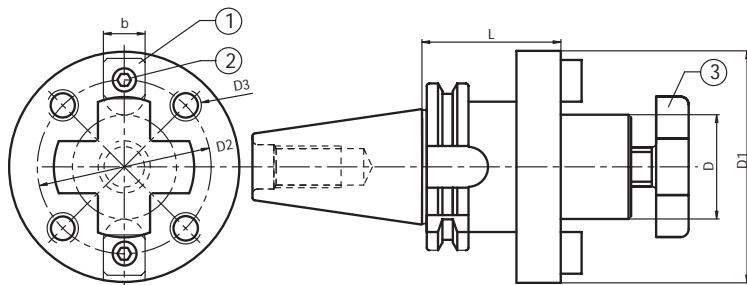
Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| Tape | Screw | Quantity | Screw | Quantity |
|--------|-----------------|-----------|-----------------|------------|
| | ④ | | ⑤ | |
| ISO 40 | 811-102002 M4X5 | 2 | 811-102002 M4X5 | 2 |
| ISO 50 | 811-102001 M4X4 | 2 | 811-102010 M5X6 | 2 |
| D | Cross screw | Tenon | Screw | Wrench |
| 16 | ① | ② | ③ | |
| 22 | 811-107003 | 814-20214 | 811-101003 | 816-130002 |
| 27 | 811-107004 | 814-20215 | 811-101010 | 816-130003 |
| 32 | 811-107005 | 814-20216 | 811-101017 | 816-130004 |
| 40 | 811-107006 | 814-20217 | 811-101027 | 816-130005 |
| | 811-107007 | 814-20218 | 811-101028 | 816-130006 |

AUFSTECKFRÄSERDORNE FÜR MESSERKÖPFE
FACE MILL HOLDER FOR FACE MILLING CUTTERS
ОПРАВКИ ДЛЯ ФЛАНЦЕВОГО КРЕПЛЕНИЯ ФРЕЗ

MANDRINS PORTE-FRAISE POUR FRAISES A SURFACER
MANDRINI PORTAFRESE PER FRESE A SPIANARE
平面铣刀柄-夹持端铣刀

DIN 6357



| Code N. | Description | ISO | D | L | D1 | D2 | D3 | b | G6,3 8000 RPM |
|-------------|-------------|-----|----|----|-----|-------|-----|------|---------------|
| ▲ 216-21201 | TC40H60D40 | 40 | 40 | 60 | 89 | 66.7 | M12 | 15.9 | • |
| ▲ 216-21202 | TC50H70D40 | 50 | 40 | 70 | 89 | 66.7 | M12 | 15.9 | • |
| 216-21203 | TC50H70D60 | 50 | 60 | 70 | 129 | 101.6 | M16 | 25.4 | • |

▲ INKLUSIVE INNENSCHARUBE • SUPPLIED WITH INTERNAL SCREW • ПОСТАВЛЯЕТСЯ С ВНУТРЕННИМ ВИНТОМ
VIS INTERNE INCLUSE • FORNITO CON VITE CENTRALE INCLUSA • 供货时提供内部螺丝

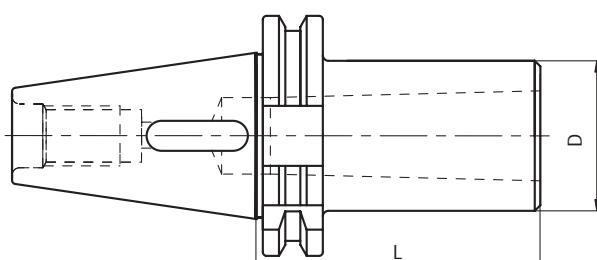
Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| D | Tenon | Screw | Screw | Wrench |
|----|------------|------------|------------|------------|
| 40 | 814-202080 | 811-101028 | 811-107007 | 816-130006 |
| 60 | 814-202120 | 811-101063 | - | - |

ZWISCHENHÜLSEN FÜR MORSEKEGEL MIT AUSTREIBBLAPPEN
MORSE TAPER ADAPTORS FOR DRILLS
ОПРАВКИ ДЛЯ КОНУСА МОРЗЕ С ЛАПКОЙ

DOUILLES POUR CONE MORSE A TENON
MANDRINI PORTAPUNTE ATTACCO CONO MORSE
莫氏锥度钻接头

DIN 69871 AD

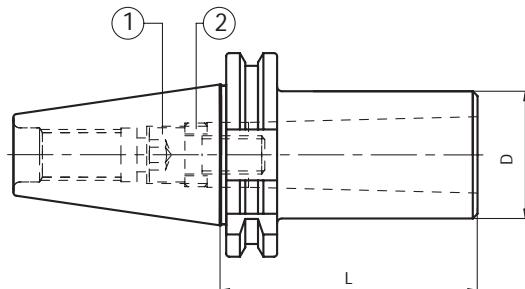


| Code N. | Description | ISO | MORSE | D | L | G6,3 8000 RPM |
|-----------|--------------|-----|-------|----|-----|---------------|
| 212-41201 | TC40H50CM1P | 40 | 1 | 25 | 50 | • |
| 212-41202 | TC40H50CM2P | 40 | 2 | 32 | 50 | • |
| 212-41203 | TC40H70CM3P | 40 | 3 | 40 | 70 | • |
| 212-41204 | TC40H95CM4P | 40 | 4 | 48 | 95 | • |
| 212-41205 | TC50H50CM1P | 50 | 1 | 25 | 50 | • |
| 212-41206 | TC50H60CM2P | 50 | 2 | 32 | 60 | • |
| 212-41207 | TC50H65CM3P | 50 | 3 | 40 | 65 | • |
| 212-41208 | TC50H95CM4P | 50 | 4 | 48 | 95 | • |
| 212-41209 | TC50H120CM5P | 50 | 5 | 63 | 120 | • |

ZWISCHENHÜLSEN FÜR MORSEKEGEL MIT ANZUGSGEWINDE
MORSE TAPER ADAPTER WITH THREAD
ОПРАВКИ ДЛЯ КОНУСА МОРЗЕ С РЕЗЬБОЙ

DOUILLES POUR CONE MORSE AVEC TARAUADAGE
MANDRINI PORTAFRESE ATTACCO CONO MORSE
螺纹莫氏锥度接头

DIN 228-2 FORM C



| Code N. | Description | ISO | MORSE | D | L | G6,3 8000 RPM |
|-----------|--------------|-----|-------|----|-----|---------------|
| 212-21201 | TC40H50CM1F | 40 | 1 | 25 | 50 | • |
| 212-21202 | TC40H50CM2F | 40 | 2 | 32 | 50 | • |
| 212-21203 | TC40H70CM3F | 40 | 3 | 40 | 70 | • |
| 212-21204 | TC40H95CM4F | 40 | 4 | 48 | 95 | • |
| 212-21205 | TC50H45CM1F | 50 | 1 | 25 | 45 | • |
| 212-21206 | TC50H60CM2F | 50 | 2 | 32 | 60 | • |
| 212-21207 | TC50H65CM3F | 50 | 3 | 40 | 65 | • |
| 212-21208 | TC50H95CM4F | 50 | 4 | 48 | 95 | • |
| 212-21209 | TC50H120CM5F | 50 | 5 | 63 | 120 | • |

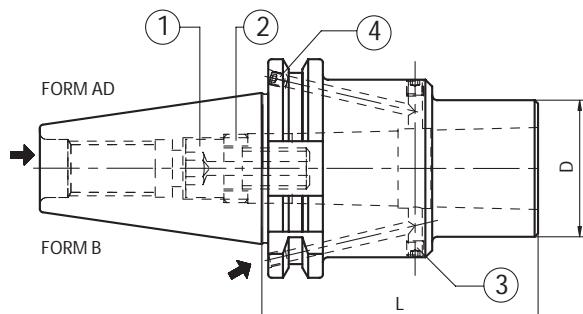
Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| TC/MORSE | Screw (TCA) | On enquiry | Ring |
|----------|-------------|------------|------------|
| | | | |
| 40/1 | 811-101029 | - | 811-302030 |
| 40/2 | 811-111007 | 811-111038 | 811-302031 |
| 40/3 | 811-111008 | 811-401098 | 811-302032 |
| 40/4 | 811-111005 | 811-401083 | 811-302036 |
| 50/1 | 811-101029 | - | 811-302030 |
| 50/2 | 811-101054 | 811-401084 | 811-302032 |
| 50/3 | 811-101065 | 811-401085 | 811-302032 |
| 50/4 | 811-401037 | 811-401086 | 811-302036 |
| 50/5 | 811-101092 | 811-401087 | 811-302034 |

ZWISCHENHÜLSEN FÜR MORSEKEGEL MIT ANZUGSGEWINDE
MORSE TAPER ADAPTER WITH THREAD
ОПРАВКИ ДЛЯ КОНУСА МОРЗЕ С РЕЗЬБОЙ

DOUILLES POUR CONE MORSE AVEC TARAUDAGE
MANDRINI PORTAFRESE ATTACCO CONO MORSE
螺纹莫氏锥度接头

DIN 228-2 FORM C



| Code N. | Description | ISO | MORSE | D | L | G6,3 8000 RPM |
|-----------|------------------|-----|-------|----|----|---------------|
| 212-31321 | TC40H50CM2F AD+B | 40 | 2 | 32 | 50 | • |
| 212-31322 | TC40H70CM3F AD+B | 40 | 3 | 40 | 70 | • |
| 212-31323 | TC40H95CM4F AD+B | 40 | 4 | 48 | 95 | • |
| 212-31324 | TC50H60CM2F AD+B | 50 | 2 | 32 | 60 | • |
| 212-31325 | TC50H65CM3F AD+B | 50 | 3 | 40 | 65 | • |
| 212-31326 | TC50H95CM4F AD+B | 50 | 4 | 48 | 95 | • |

Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

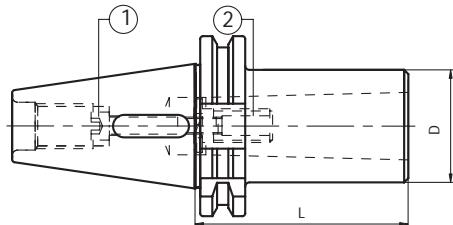
| Tape/Morse | Screw | Quantity | Screw | Quantity |
|------------|-----------------|----------|-----------------|----------|
| | ③ | | ④ | |
| 40/2 | 811-102002 M4X5 | 2 | 811-102002 M4X5 | 2 |
| 40/3,4 | - | - | 811-102002 M4X5 | 2 |
| 50/2,3 | 811-102001 M4X4 | 2 | 811-102010 M5X6 | 2 |
| 50/4,5 | - | - | 811-102010 M5X6 | 2 |

| TC/MORSE | Screw (TCA) | On enquiry | Ring |
|----------|-------------|------------|------------|
| | ① | ① | ② |
| 40/2 | 811-111007 | 811-111038 | 811-302031 |
| 40/3 | 811-111008 | 811-401098 | 811-302032 |
| 40/4 | 811-111005 | 811-401083 | 811-302036 |
| 50/2 | 811-101054 | 811-401084 | 811-302032 |
| 50/3 | 811-101065 | 811-401085 | 811-302032 |
| 50/4 | 811-401037 | 811-401086 | 811-302036 |

ZWISCHENHÜLSEN FÜR MORSEKEGEL
MIT AUSTREIBBLAPPEN ODER ANZUGSGEWINDE
MORSE TAPER ADAPTORS FOR DRILLS AND MILLS
ОПРАВКИ ДЛЯ КОНУСОВ МОРЗЕ С ЛАПКОЙ И С РЕЗЬБОЙ

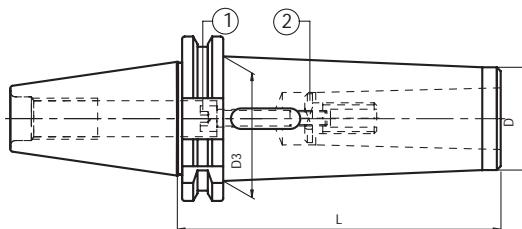
DOUILLES POUR CONE MORSE A TENON
ET AVEC TARAUDAGE
MANDRINI PORTAPUNTE-PORTAFRESE ATTACCO CONO MORSE
莫氏锥度钻铣接头

DIN 228-2 FORM C/D



Kombi Version

| Code N. | Description | ISO | MORSE | D | L | G6,3 8000 RPM |
|-----------|----------------|-----|-------|----|-----|---------------|
| 212-61201 | TC40H50CM1P/F | 40 | 1 | 25 | 50 | • |
| 212-61202 | TC40H60CM2P/F | 40 | 2 | 32 | 60 | • |
| 212-61203 | TC40H75CM3P/F | 40 | 3 | 40 | 75 | • |
| 212-61205 | TC50H45CM1P/F | 50 | 1 | 25 | 45 | • |
| 212-61206 | TC50H60CM2P/F | 50 | 2 | 32 | 60 | • |
| 212-61207 | TC50H65CM3P/F | 50 | 3 | 40 | 65 | • |
| 212-61208 | TC50H95CM4P/F | 50 | 4 | 48 | 95 | • |
| 212-61209 | TC50H120CM5P/F | 50 | 5 | 63 | 120 | • |



Kombi Version

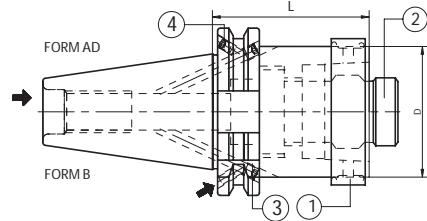
| Code N. | Description | ISO | MORSE | D | D3 | L | G6,3 8000 RPM |
|-----------|----------------|-----|-------|----|----|-----|---------------|
| 212-61210 | TC40H115CM1P/F | 40 | 1 | 18 | 25 | 115 | • |
| 212-61211 | TC40H125CM2P/F | 40 | 2 | 25 | 32 | 125 | • |
| 212-61212 | TC40H140CM3P/F | 40 | 3 | 33 | 40 | 140 | • |
| 212-61214 | TC50H120CM1P/F | 50 | 1 | 18 | 25 | 120 | • |
| 212-61215 | TC50H140CM2P/F | 50 | 2 | 25 | 32 | 140 | • |
| 212-61216 | TC50H150CM3P/F | 50 | 3 | 33 | 40 | 150 | • |
| 212-61217 | TC50H180CM4P/F | 50 | 4 | 40 | 48 | 180 | • |
| 212-61218 | TC50H220CM5P/F | 50 | 5 | 55 | 63 | 220 | • |

Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| Code N. | Screw | Ring | Code N. | Screw | Ring |
|-----------|------------|------------|-----------|------------|------------|
| | | | | | |
| 212-61201 | 811-101033 | - | 212-61210 | 811-101037 | - |
| 212-61202 | 811-401018 | - | 212-61211 | 811-401015 | - |
| 212-61203 | 811-101034 | 811-302006 | 212-61212 | 811-101081 | 811-302006 |
| 212-61205 | 811-101033 | - | 212-61214 | 811-101077 | - |
| 212-61206 | 811-101057 | - | 212-61215 | 811-101078 | - |
| 212-61207 | 811-101070 | - | 212-61216 | 811-101079 | - |
| 212-61208 | 811-401016 | - | 212-61217 | 811-401030 | - |
| 212-61209 | 811-101071 | 811-302008 | 212-61218 | 811-101080 | 811-302008 |

ZWISCHENHÜLSEN SK X HSK A+C – MANUELLES SPANNSYSTEM
TAPER ADAPTER SA X HSK A+C – MANUAL CLAMPING
ПЕРЕХОДНЫЕ ОПРАВКИ SK – HSK A+C – РУЧНАЯ УСТАНОВКА

DOUILLES INTERMEDIAIRES SA X HSK A+C – SERRAGE MANUEL
MANDRINI RIDUZIONE DA TC A HSK A+C – CHIUSURA MANUALE
SA X HSK A+C 锥度接头 – 手动夹紧

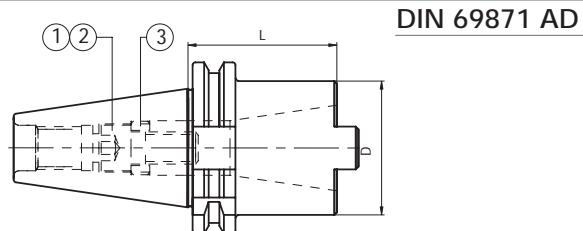


| Code N. | Description | ISO | HSK | D | L | ^① Ring (complete) | ^② Locking unit (complete) |
|-----------|-------------------|-----|-----|----|----|------------------------------|--------------------------------------|
| 212-91305 | TC40H50HSK40 AD+B | 40 | 40 | 40 | 50 | H40A-AN | H40A-UBL |
| 212-91301 | TC40H60HSK50 AD+B | 40 | 50 | 50 | 60 | H50A-AN | H50A-UBL |
| 212-91302 | TC40H80HSK63 AD+B | 40 | 63 | 63 | 80 | H63A-AN | H63A-UBL |
| 212-91306 | TC50H50HSK40 AD+B | 50 | 40 | 40 | 50 | H40A-AN | H40A-UBL |
| 212-91303 | TC50H50HSK50 AD+B | 50 | 50 | 50 | 50 | H50A-AN | H50A-UBL |
| 212-91304 | TC50H60HSK63 AD+B | 50 | 63 | 63 | 60 | H63A-AN | H63A-UBL |

Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| Tape | Screw | Quantity | Screw | Quantity |
|--------|-----------------|----------|-----------------|----------|
| | ③ | | ④ | |
| ISO 40 | 811-102002 M4X5 | 2 | 811-102002 M4X5 | 2 |
| ISO 50 | 811-102001 M4X4 | 2 | 811-102010 M5X6 | 2 |

ZWISCHENHÜLSEN SK X SK DOUILLES INTERMEDIAIRES TC X SA
ISO TAPER ADAPTORS MANDRINI RIDUZIONE E PROLUNGHE DA DIN69871 A DIN2080/DIN69871/MAS403BT
ПЕРЕХОДНЫЕ ОПРАВКИ SK-SK ISO 锥度接头



| Code N. | Description | ISO | ISO | D | L | G6.3 8000 RPM |
|-----------|--------------------|-----|-----|-----|-----|---------------|
| 212-11204 | TC40H60ISO30/TC30 | 40 | 30 | 49 | 60 | • |
| 212-11213 | TC40H100ISO40/TC40 | 40 | 40 | 68 | 100 | • |
| 212-11201 | TC50H70ISO40/TC40 | 50 | 40 | 68 | 70 | • |
| 212-11214 | TC50H120ISO50/TC50 | 50 | 50 | 100 | 120 | • |

Ersatzteile • Spare parts • Pièces détachées • Componenti

| OUTSIDE | INSIDE | Screw (ISO) | Screw (TC) | Ring | Wrench |
|---------|--------|-------------|------------|------------|--------------|
| | | ① | ② | ③ | |
| 40 | 30 | 811-401085 | 811-401146 | 811-302032 | 816-20206002 |
| 40 | 40 | 811-401147 | 811-401150 | 811-302036 | 816-20207002 |
| 50 | 40 | 811-401147 | 811-401150 | 811-302036 | 816-20207002 |
| 50 | 50 | 811-401151 | 811-401152 | 811-302047 | 816-20209002 |

Verschlußschraube für DIN69871/MAS BT/DIN2080 wird mitgeliefert und ist durchbohrt
Supplied with a bored screw DIN69871/MAS BT/DIN2080

Livré avec une vis de serrage DIN69871/MAS BT/DIN2080 percée

In dotazione vite per chiusura DIN69871/MAS BT/DIN2080 forata

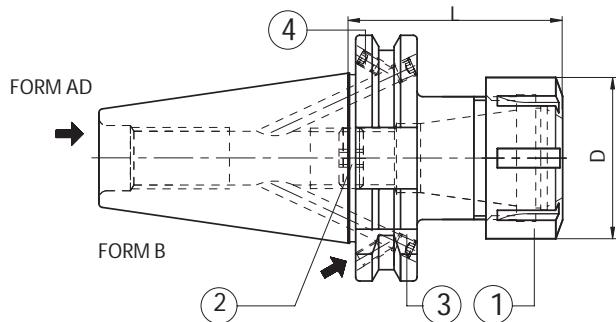
Поставляется с винтом с отверстием для DIN69871/MAS BT/DIN2080

提供 DIN69871/MAS BT/DIN2080 无铆螺钉一个

SPANNZANGENFUTTER ER TYP
ER COLLET CHUCK
ЦАНГОВЫЕ ПАТРОНЫ ER

MANDRINS A PINCES TYPE ER
MANDRINI PORTAPINZA TIPO ER
ER 弹簧夹头

DIN 6499



| Code N. | Description | ISO | ER | D | L | G2,5 25000 RPM |
|-----------|------------------|-----|----|----|----|----------------|
| 214-91301 | TC40H70ER16 AD+B | 40 | 16 | 32 | 70 | • |
| 214-91302 | TC40H70ER25 AD+B | 40 | 25 | 42 | 70 | • |
| 214-91303 | TC40H70ER32 AD+B | 40 | 32 | 50 | 70 | • |
| 214-91304 | TC40H70ER40 AD+B | 40 | 40 | 63 | 70 | • |
| 214-91305 | TC50H70ER25 AD+B | 50 | 25 | 42 | 70 | • |
| 214-91306 | TC50H70ER32 AD+B | 50 | 32 | 50 | 70 | • |
| 214-91307 | TC50H80ER40 AD+B | 50 | 40 | 63 | 80 | • |

Zubehör
Accessories
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Принадлежности
零件



pag. 156

High balanced

Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| Tape | Screw | Quantity | Screw | Quantity | ER | Nut | Stop screw |
|--------|-----------------|----------|-----------------|----------|----|------------|------------|
| | | | | | | | |
| ISO 40 | 811-102002 M4X5 | 2 | 811-102002 M4X5 | 2 | 16 | 812-203069 | 811-303119 |
| ISO 50 | 811-102001 M4X4 | 2 | 811-102010 M5X6 | 2 | 25 | 812-203070 | 811-303121 |
| | | | | | 32 | 812-203071 | 811-303118 |
| | | | | | 40 | 812-203072 | 811-303122 |

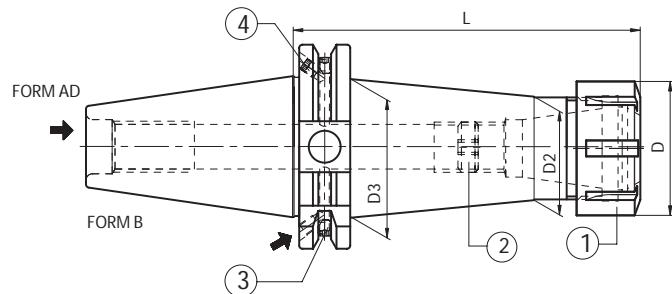
SPANNZANGENFUTTER ER TYP-LANG
ER COLLET CHUCK-LONG

ЦАНГОВЫЕ ПАТРОНЫ ER. УДЛИНЕННОЕ ИСПОЛНЕНИЕ

MANDRINS A PINCES TYPE ER-SERIE LONGUE
MANDRINI PORTAPINZA TIPO ER-SERIE LUNGA

ER 弹簧夹头-加长

DIN 6499



| | Code N. | Description | ISO | ER | D | L | D2 | D3 | G2,5 25000 RPM |
|-------|-----------|-------------------|-----|----|----|-----|----|----|----------------|
| H 100 | 214-91308 | TC40H100ER16 AD+B | 40 | 16 | 32 | 100 | 22 | 32 | • |
| | 214-91309 | TC40H100ER25 AD+B | 40 | 25 | 42 | 100 | 32 | 42 | • |
| | 214-91310 | TC40H100ER32 AD+B | 40 | 32 | 50 | 100 | 40 | 50 | • |
| | 214-91311 | TC40H100ER40 AD+B | 40 | 40 | 63 | 100 | 50 | 50 | • |
| | 214-91312 | TC50H100ER16 AD+B | 50 | 16 | 32 | 100 | 22 | 32 | • |
| | 214-91313 | TC50H100ER25 AD+B | 50 | 25 | 42 | 100 | 32 | 42 | • |
| | 214-91314 | TC50H100ER32 AD+B | 50 | 32 | 50 | 100 | 40 | 50 | • |
| | 214-91315 | TC50H100ER40 AD+B | 50 | 40 | 63 | 100 | 50 | 63 | • |
| H 160 | 214-91316 | TC40H160ER16 AD+B | 40 | 16 | 32 | 160 | 22 | 32 | • |
| | 214-91317 | TC40H160ER25 AD+B | 40 | 25 | 42 | 160 | 32 | 42 | • |
| | 214-91318 | TC40H160ER32 AD+B | 40 | 32 | 50 | 160 | 40 | 50 | • |
| | 214-91319 | TC40H160ER40 AD+B | 40 | 40 | 63 | 160 | 50 | 50 | • |

Zubehör
Accessories
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Причадлежности
零件



pag. 156



pag. 156

High balanced

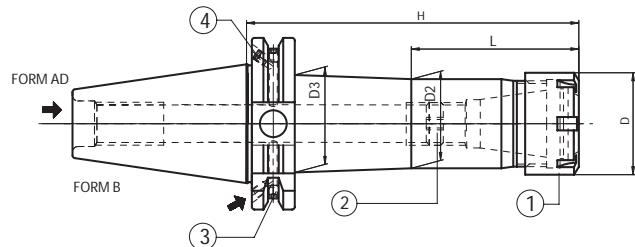
Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| Tape | Screw | Quantity | Screw | Quantity | ER | Nut | Stop screw |
|--------|-----------------|----------|-----------------|----------|----|------------|------------|
| | | | | | | | |
| ISO 40 | 811-102002 M4X5 | 2 | 811-102002 M4X5 | 2 | 16 | 812-203069 | 811-303119 |
| ISO 50 | 811-102001 M4X4 | 2 | 811-102010 M5X6 | 2 | 25 | 812-203070 | 811-303121 |
| | | | | | 32 | 812-203071 | 811-303118 |
| | | | | | 40 | 812-203072 | 811-303122 |

SPANNZANGENFUTTER ER MINI
ER MINI COLLET CHUCK
ЦАНГОВЫЕ МИНИ-ПАТРОНЫ ER

MANDRINS A PINCES TYPE ER MINI
MANDRINI PORTAPINZA TIPO ER MINI EXTRA SOTTILI
ER 迷你弹簧夹头

DIN 6499



| Code N. | Description | ISO | ER | D | H | L | D2 | D3 | G6,3 12000 RPM |
|-----------|--------------------|-----|-----|----|-----|-----|----|----|----------------|
| 214-91333 | TC40H70ER11M AD+B | 40 | 11M | 16 | 70 | 22 | 14 | 20 | • |
| 214-91334 | TC40H100ER11M AD+B | 40 | 11M | 16 | 100 | 40 | 14 | 21 | • |
| 214-91335 | TC40H160ER11M AD+B | 40 | 11M | 16 | 160 | 50 | 14 | 29 | • |
| 214-91336 | TC40H70ER16M AD+B | 40 | 16M | 22 | 70 | 27 | 20 | 26 | • |
| 214-91337 | TC40H100ER16M AD+B | 40 | 16M | 22 | 100 | 47 | 20 | 27 | • |
| 214-91338 | TC40H160ER16M AD+B | 40 | 16M | 22 | 160 | 97 | 20 | 27 | • |
| 214-91348 | TC40H70ER20M AD+B | 40 | 20M | 28 | 70 | - | 26 | - | • |
| 214-91349 | TC40H100ER20M AD+B | 40 | 20M | 28 | 100 | 48 | 26 | 31 | • |
| 214-91350 | TC40H160ER20M AD+B | 40 | 20M | 28 | 160 | 98 | 26 | 33 | • |
| 214-91339 | TC40H70ER25M AD+B | 40 | 25M | 35 | 70 | - | 33 | - | • |
| 214-91340 | TC40H100ER25M AD+B | 40 | 25M | 35 | 100 | - | 33 | - | • |
| 214-91341 | TC40H160ER25M AD+B | 40 | 25M | 35 | 160 | 103 | 33 | 36 | • |
| 214-91342 | TC50H70ER16M AD+B | 50 | 16M | 22 | 70 | - | 22 | - | • |
| 214-91343 | TC50H100ER16M AD+B | 50 | 16M | 22 | 100 | 47 | 22 | 28 | • |
| 214-91344 | TC50H160ER16M AD+B | 50 | 16M | 22 | 160 | 97 | 22 | 30 | • |
| 214-91351 | TC50H70ER20M AD+B | 50 | 20M | 28 | 70 | - | 28 | - | • |
| 214-91352 | TC50H100ER20M AD+B | 50 | 20M | 28 | 100 | 48 | 28 | 33 | • |
| 214-91353 | TC50H160ER20M AD+B | 50 | 20M | 28 | 160 | 98 | 28 | 35 | • |
| 214-91345 | TC50H70ER25M AD+B | 50 | 25M | 35 | 70 | - | 35 | - | • |
| 214-91346 | TC50H100ER25M AD+B | 50 | 25M | 35 | 100 | - | 35 | - | • |
| 214-91347 | TC50H160ER25M AD+B | 50 | 25M | 35 | 160 | 103 | 35 | 42 | • |

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零件



pag. 154

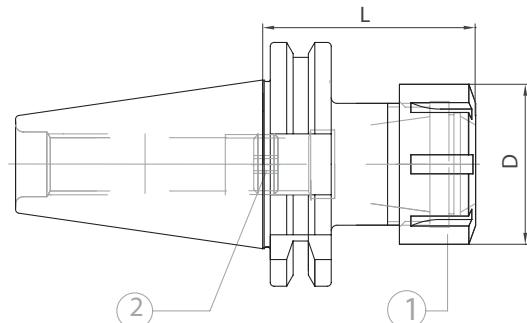
Slim Line

Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| Tape | Screw | Quantity | Screw | Quantity | ER | Nut | Stop screw |
|--------|-----------------|----------|-----------------|----------|-----|------------|------------|
| | ③ | | | | ④ | | ② |
| ISO 40 | 811-102002 M4X5 | 2 | 811-102002 M4X5 | 2 | 11M | 812-203012 | 811-303081 |
| ISO 50 | 811-102001 M4X4 | 2 | 811-102010 M5X6 | 2 | 16M | 812-203013 | 811-303119 |
| | | | | | 20M | 812-203014 | 811-303120 |
| | | | | | 25M | 812-203015 | 811-303121 |

SPANNZANGENFUTTER ER TYP
ER COLLET CHUCK
ЦАНГОВЫЕ ПАТРОНЫ ER
MANDRINS A PINCES TYPE ER
MANDRINI PORTAPINZA TIPO ER
ER 弹簧夹头

DIN 6499



| Code N. | Description | ISO | ER | D | L | G6,3 12000 RPM |
|-----------|-------------|-----|----|----|----|----------------|
| 214-31211 | TC30H55ER16 | 30 | 16 | 32 | 55 | • |
| 214-31212 | TC30H55ER25 | 30 | 25 | 42 | 55 | • |
| 214-31228 | TC30H60ER32 | 30 | 32 | 50 | 60 | • |
| 214-31241 | TC40H70ER16 | 40 | 16 | 32 | 70 | • |
| 214-31201 | TC40H70ER25 | 40 | 25 | 42 | 70 | • |
| 214-31202 | TC40H70ER32 | 40 | 32 | 50 | 70 | • |
| 214-31215 | TC40H70ER40 | 40 | 40 | 63 | 70 | • |
| 264-31233 | TC50H70ER16 | 50 | 16 | 32 | 70 | • |
| 214-31250 | TC50H70ER25 | 50 | 25 | 42 | 70 | • |
| 214-31203 | TC50H70ER32 | 50 | 32 | 50 | 70 | • |
| 214-31204 | TC50H80ER40 | 50 | 40 | 63 | 80 | • |

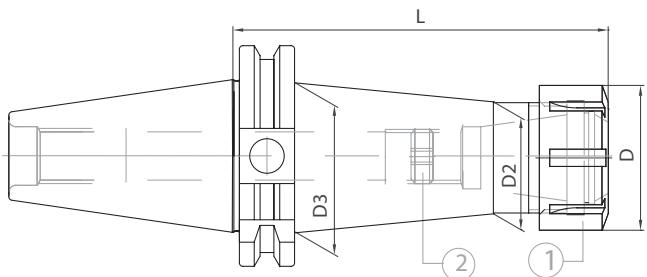
Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| ER | Nut | Stop screw |
|----|------------|------------|
| | | |
| 16 | 812-203005 | 811-303119 |
| 25 | 812-203001 | 811-303121 |
| 32 | 812-203002 | 811-303118 |
| 40 | 812-203003 | 811-303122 |

SPANNZANGENFUTTER ER TYP-LANG
ER COLLET CHUCK-LONG
ЦАНГОВЫЕ ПАТРОНЫ ER. УДЛЕННЕННОЕ ИСПОЛНЕНИЕ

MANDRINS A PINCES TYPE ER-SERIE LONGUE
MANDRINI PORTAPINZA TIPO ER- SERIE LUNGA
ER 弹簧夹头-加长

DIN 6499



| Code N. | Description | ISO | ER | D | L | D2 | D3 | G6,3 12000 RPM |
|-----------|--------------|-----|----|----|-----|----|----|----------------|
| 214-31242 | TC40H100ER16 | 40 | 16 | 32 | 100 | 22 | 31 | • |
| 214-31232 | TC40H100ER25 | 40 | 25 | 42 | 100 | 32 | 41 | • |
| 214-31230 | TC40H100ER32 | 40 | 32 | 50 | 100 | 40 | 44 | • |
| 214-31286 | TC40H100ER40 | 40 | 40 | 63 | 100 | 50 | 50 | • |

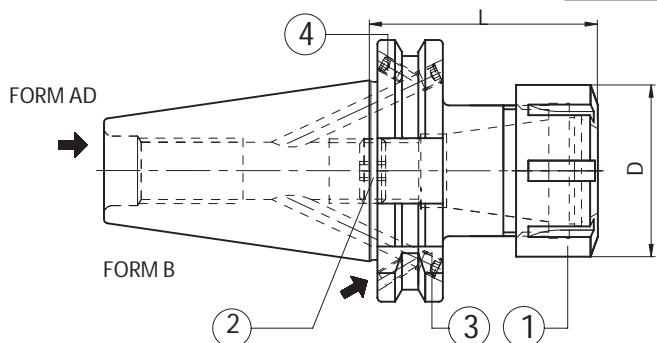
Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| ER | Nut | Stop screw |
|----|------------|------------|
| | ① | ② |
| 16 | 812-203005 | 811-303119 |
| 25 | 812-203001 | 811-303121 |
| 32 | 812-203002 | 811-303118 |
| 40 | 812-203003 | 811-303122 |

SPANNZANGENFUTTER ER TYP
ER COLLET CHUCK
ЦАНГОВЫЕ ПАТРОНЫ ER

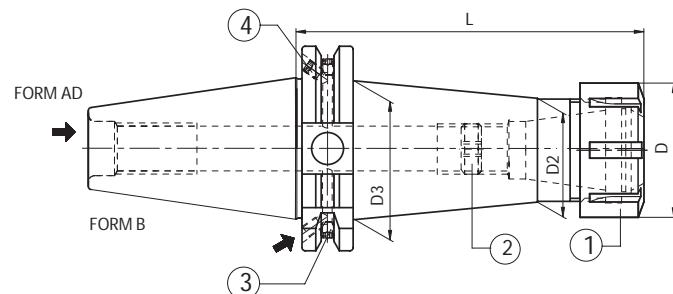
MANDRINS A PINCES TYPE ER
MANDRINI PORTAPINZA TIPO ER
ER 弹簧夹头

DIN 6499



| Code N. | Description | ISO | ER | D | L | G6,3 12000 RPM |
|-----------|------------------|-----|----|----|----|----------------|
| 214-31362 | TC40H70ER16 AD+B | 40 | 16 | 32 | 70 | • |
| 214-31329 | TC40H70ER25 AD+B | 40 | 25 | 42 | 70 | • |
| 214-31331 | TC40H70ER32 AD+B | 40 | 32 | 50 | 70 | • |
| 214-31333 | TC40H70ER40 AD+B | 40 | 40 | 63 | 70 | • |
| 214-31381 | TC50H70ER16 AD+B | 50 | 16 | 32 | 70 | • |
| 214-31341 | TC50H70ER25 AD+B | 50 | 25 | 42 | 70 | • |
| 214-31335 | TC50H70ER32 AD+B | 50 | 32 | 50 | 70 | • |
| 214-31338 | TC50H80ER40 AD+B | 50 | 40 | 63 | 80 | • |

STANDARD



| H 100 | Code N. | Description | ISO | ER | D | L | D2 | D3 | G6,3 12000 RPM |
|-------|-----------|-------------------|-----|----|----|-----|----|----|----------------|
| | 214-31363 | TC40H100ER16 AD+B | 40 | 16 | 32 | 100 | 22 | 32 | • |
| | 214-31347 | TC40H100ER25 AD+B | 40 | 25 | 42 | 100 | 32 | 42 | • |
| | 214-31348 | TC40H100ER32 AD+B | 40 | 32 | 50 | 100 | 40 | 50 | • |
| | 214-31364 | TC40H100ER40 AD+B | 40 | 40 | 63 | 100 | 50 | 50 | • |
| | 214-31365 | TC50H100ER16 AD+B | 50 | 16 | 32 | 100 | 22 | 32 | • |
| | 214-31342 | TC50H100ER25 AD+B | 50 | 25 | 42 | 100 | 32 | 42 | • |
| | 214-31336 | TC50H100ER32 AD+B | 50 | 32 | 50 | 100 | 40 | 50 | • |
| | 214-31339 | TC50H100ER40 AD+B | 50 | 40 | 63 | 100 | 50 | 63 | • |

- * Ausführung Form AD
- * Execution form AD
- * Forme AD
- * Forma AD
- * Исполнение AD
- * 执行形式 AD

Zubehör
Accessories
Accessoires
Accessori
Причадлежности
零件



pag. 176



pag. 147



pag. 155



pag. 147

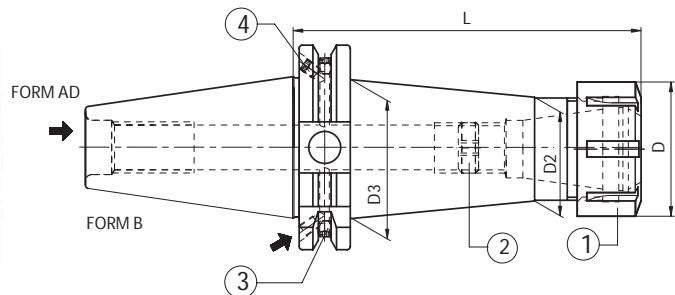


pag. 155

SPANNZANGENFUTTER ER TYP-LÄNGE AUSFÜHRUNG
ER COLLET CHUCK-LONG
ЦАНГОВЫЕ ПАТРОНЫ ER. УДЛИНЕННОЕ ИСПОЛНЕНИЕ

MANDRINS A PINCES TYPE ER-SÉRIE LONGUE
MANDRINI PORTAPINZA TIPO ER-SÉRIE LUNGA
ER 弹簧夹头-加长

DIN 6499



| | Code N. | Description | ISO | ER | D | L | D2 | D3 | G6,3 8000 RPM |
|-------|-----------|-------------------|-----|----|----|-----|----|----|---------------|
| H 160 | 214-31359 | TC40H160ER16 AD+B | 40 | 16 | 32 | 160 | 22 | 32 | • |
| | 214-31345 | TC40H160ER25 AD+B | 40 | 25 | 42 | 160 | 32 | 42 | • |
| | 214-31346 | TC40H160ER32 AD+B | 40 | 32 | 50 | 160 | 40 | 50 | • |
| | 214-31366 | TC40H160ER40 AD+B | 40 | 40 | 63 | 160 | 50 | 50 | • |
| | 214-31367 | TC50H160ER16 AD+B | 50 | 16 | 32 | 160 | 22 | 32 | • |
| | 214-31368 | TC50H160ER25 AD+B | 50 | 25 | 42 | 160 | 32 | 42 | • |
| | 214-31337 | TC50H160ER32 AD+B | 50 | 32 | 50 | 160 | 40 | 50 | • |
| | 214-31340 | TC50H160ER40 AD+B | 50 | 40 | 63 | 160 | 50 | 63 | • |
| H 200 | 214-31369 | TC40H200ER16 AD+B | 40 | 16 | 32 | 200 | 22 | 32 | • |
| | 214-31370 | TC40H200ER25 AD+B | 40 | 25 | 42 | 200 | 32 | 42 | • |
| | 214-31371 | TC40H200ER32 AD+B | 40 | 32 | 50 | 200 | 40 | 50 | • |
| | 214-31372 | TC40H200ER40 AD+B | 40 | 40 | 63 | 200 | 50 | 50 | • |
| | 214-31373 | TC50H200ER16 AD+B | 50 | 16 | 32 | 200 | 22 | 32 | • |
| | 214-31374 | TC50H200ER25 AD+B | 50 | 25 | 42 | 200 | 32 | 42 | • |
| | 214-31375 | TC50H200ER32 AD+B | 50 | 32 | 50 | 200 | 40 | 50 | • |
| | 214-31376 | TC50H200ER40 AD+B | 50 | 40 | 63 | 200 | 50 | 63 | • |

Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| Tape | Screw | Quantity | Screw | Quantity | ER | Nut | Stop screw |
|--------|-----------------|----------|-----------------|----------|----|------------|------------|
| | | | | | | | |
| ISO 40 | 811-102002 M4X5 | 2 | 811-102002 M4X5 | 2 | 16 | 812-203005 | 811-303119 |
| ISO 50 | 811-102001 M4X4 | 2 | 811-102010 M5X6 | 2 | 25 | 812-203001 | 811-303121 |
| | | | | | 32 | 812-203002 | 811-303118 |
| | | | | | 40 | 812-203003 | 811-303122 |

Zubehör
Accessories
Accessoires
Accessori
Приадлежности
零件



pag. 176



pag. 147



pag. 155



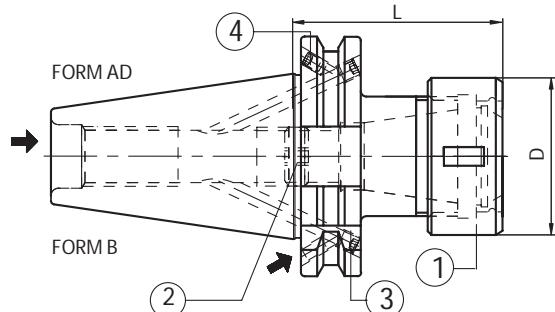
pag. 147



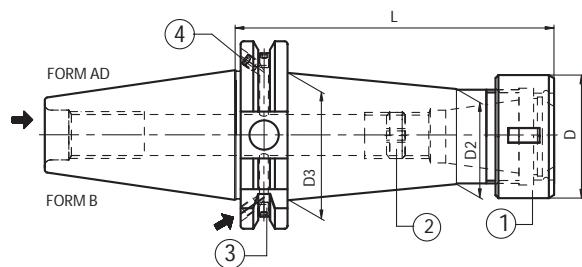
pag. 155

SPANNZANGENFUTTER EOC TYP
ER COLLET CHUCK
ЦАНГОВЫЕ ПАТРОНЫ ЕОС
MANDRINS A PINCES TYPE EOC
MANDRINI PORTAPINZA TIPO EOC
ER 弹簧夹头

DIN 6388



| Code N. | Description | ISO | EOC | D | L | G6,3 12000 RPM |
|-----------|-------------------|-----|-----|----|----|----------------|
| 214-11320 | TC40H70EOC16 AD+B | 40 | 16 | 43 | 70 | • |
| 214-11321 | TC40H70EOC25 AD+B | 40 | 25 | 60 | 70 | • |
| 214-11322 | TC50H70EOC25 AD+B | 50 | 25 | 60 | 70 | • |
| 214-11323 | TC50H80EOC32 AD+B | 50 | 32 | 72 | 80 | • |



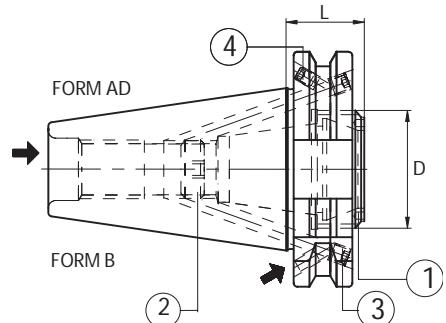
| Code N. | Description | ISO | EOC | D | L | D2 | D3 | G6,3 8000 RPM |
|-----------|--------------------|-----|-----|----|-----|----|----|---------------|
| 214-11324 | TC40H130EOC16 AD+B | 40 | 16 | 43 | 130 | 33 | 40 | • |
| 214-11325 | TC40H130EOC25 AD+B | 40 | 25 | 60 | 130 | 48 | 49 | • |
| 214-11326 | TC50H130EOC25 AD+B | 50 | 25 | 60 | 130 | 48 | 58 | • |
| 214-11327 | TC50H130EOC32 AD+B | 50 | 32 | 72 | 130 | 60 | 62 | • |

Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| Tape | Screw | Quantity | Screw | Quantity | Zubehör Accessories Accessoires Accessori Причадлжности 零件 |
|--------|-----------------|------------|-----------------|----------|---|
| | | | | | |
| ISO 40 | 811-102002 M4X5 | 2 | 811-102002 M4X5 | 2 | |
| ISO 50 | 811-102001 M4X4 | 2 | 811-102010 M5X6 | 2 | |
| EOC | Nut | Stop screw | Wrench | | |
| | | | | | |
| 16 | GOC16 | 811-303121 | 816-203033 | | |
| 25 | GOC25 | 811-303123 | 816-203034 | | |
| 32 | GOC32 | 811-303123 | 816-203036 | | |

SPANNZANGENFUTTER ER TYP-LÄNGE EXTRAKURZ
ER COLLET CHUCK WITH INSIDE NUT
ЦАГНОВЫЕ ПАТРОНЫ ER С ВНУТРЕННЕЙ ГАЙКОЙ

MANDRINS COURTS A PINCES TYPE ER
MANDRINI PORTAPINZA TIPO ER EXTRACORTI
ER 弹簧夹头带内部螺母



| Code N. | Description | ISO | ER | D | L | G6,3 12000 RPM |
|------------|-------------------|-----|----|----|----|----------------|
| 214-31377 | TC40H21ER25A AD+B | 40 | 25 | 32 | 21 | • |
| *264-31215 | TC40H21ER32A | 40 | 32 | 40 | 21 | • |
| 214-31378 | TC50H21ER32A AD+B | 50 | 32 | 40 | 21 | • |

Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

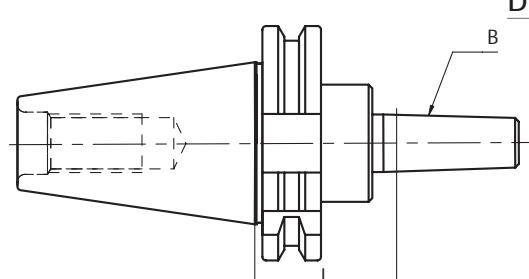
| Tape | Screw | Quantity | Screw | Quantity |
|--------|-----------------|----------|-----------------|----------|
| | ③ | | ④ | |
| ISO 40 | 811-102002 M4X5 | 2 | 811-102002 M4X5 | 2 |
| ISO 50 | 811-102063 M5X4 | 2 | 811-102010 M5X6 | 2 |

- * Ausführung Form AD
- * Execution form AD
- * Forme AD
- * Forma AD
- * Исполнение AD
- * 执行形式 AD

| ER | Nut | Stop screw | Wrench |
|-----|------------|------------|----------|
| 25A | 812-203057 | 811-303121 | CHER25EX |
| 32A | 812-203032 | 811-303118 | CHER32EX |

DIN 69871 A

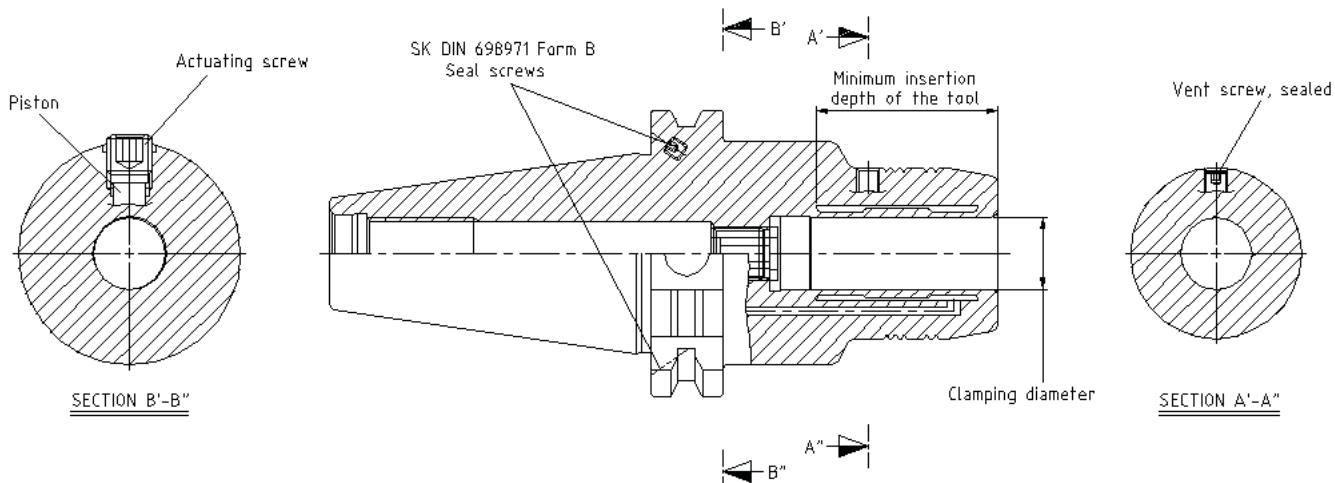
BOHRFUTTERAUFNAHMEN ARBRES POUR MANDRINS DE PERCAGE
ARBORS FOR DRILL CHUCKS ATTACCO PER MANDRINI PORTAPUNTE
ОПРАВКИ ДЛЯ СВЕРЛИЛЬНЫХ ПАТРОНОВ 钻夹头刀杆



DIN 238

| Code N. | Description | ISO | B | L | G6,3 8000 RPM |
|-----------|-------------|-----|----|----|---------------|
| 216-31201 | TC40H40B16 | 40 | 16 | 40 | • |
| 216-31202 | TC40H40B18 | 40 | 18 | 40 | • |
| 216-31203 | TC50H40B16 | 50 | 16 | 40 | • |
| 216-31204 | TC50H40B18 | 50 | 18 | 40 | • |

OPERATING MANUAL FOR HIDRAULIC EXPANSION CHUCKS MANUALE OPERATIVO PER L'UTILIZZO DEI MANDRINI IDRAULICI ИНСТРУКЦИЯ ПО ПРИМЕНЕНИЮ ГИДРАВЛИЧЕСКИХ ПАТРОНОВ



- Please follow our operating instruction carefully to save time and avoid problems
Пожалуйста, следуйте нашим инструкциям, чтобы избежать проблем и потери времени.
Raccomandiamo di seguire le nostre istruzioni operative per risparmiare tempo ed evitare problemi

Chart of technical data

Таблица с техническими характеристиками:

Tabella delle informazioni tecniche

| Chuck Diameter (HC) | Shaft Clamping | Depending on the mounting shank (max RPM) | Minimum clamping lenght (mm) | Operating temperature | Max coolant pressure (bar) | Moment (Nm) |
|---------------------|----------------|---|------------------------------|-----------------------|----------------------------|-------------|
| HC6 | 6 hb | 40.000 | 27 | 20-50 | 80 | 8 Nm |
| HC8 | 8 hb | 40.000 | 27 | 20-50 | 80 | 15 Nm |
| HC10 | 10 hb | 40.000 | 32 | 20-50 | 80 | 30 Nm |
| HC12 | 12 hb | 40.000 | 37 | 20-50 | 80 | 45 Nm |
| HC14 | 14 hb | 40.000 | 37 | 20-50 | 80 | 75 Nm |
| HC16 | 16 hb | 40.000 | 42 | 20-50 | 80 | 120 Nm |
| HC18 | 18 hb | 40.000 | 42 | 20-50 | 80 | 170 Nm |
| HC20 | 20 hb | 40.000 | 42 | 20-50 | 80 | 230 Nm |
| HC25 | 25 hb | 25.000 | 48 | 20-50 | 80 | 300 Nm |
| HC32 | 32 hb | 25.000 | 55 | 20-50 | 80 | 400 Nm |

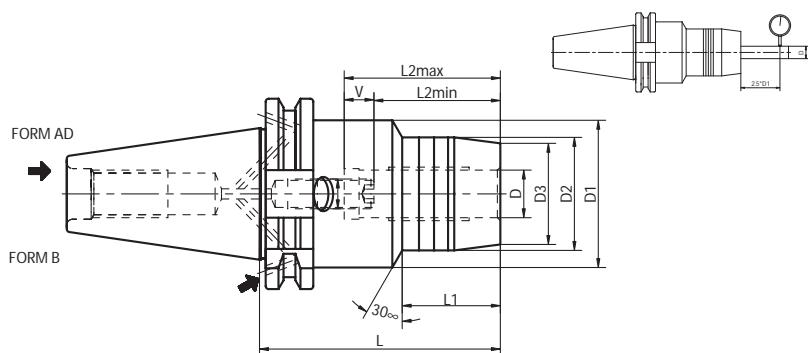
- The clamping force must be checked periodically. We recommend to check it before initial use and approximately after 100 operations or every 3 months.
Усилие зажима необходимо периодически проверять. Мы рекомендуем производить проверку перед первым использованием, далее примерно каждые 100 операций или каждые 3 месяца.
La verifica della forza di serraggio deve essere fatta periodicamente. Si raccomanda di controllarla prima dell'utilizzo e dopo circa 100 operazioni o ogni 3 mesi

ATTENTION / ВНИМАНИЕ / ATTENZIONE

- When tools or endmills are clamped into the hydraulic chucks, be sure that oils and dust are completely removed from the internal surface of the hydraulic chuck and the external surface of the tool.
При установке инструмента в гидропатроне, убедитесь, что на внутренней поверхности патрона и внешней поверхности инструмента нет масла и пыли.
Quando si montano gli utensili o le frese nel mandrino idraulico, la superficie interna del mandrino idraulico e quella esterna dell'utensile devono essere pulite da oli, polveri e residui

HYDRO-DEHNSPANNFUTTER FÜR WERKZEUGE MIT ZYLINDERSCHAFT
HYDRO-EXPANSION CHUCKS FOR TOOLS WITH CYLINDRICAL SHANK
ГИДРАВЛИЧЕСКИЕ ПАТРОНЫ ДЛЯ ИНСТРУМЕНТА
С ЦИЛИНДРИЧЕСКИМ ХВОСТОВИКОМ

MANDRINS HYDRO-EXPANDABLES POUR OUTILS
A QUEUE CYLINDRIQUE
MANDRINI IDRAULICI PER UTENSILI ATTACCO CILINDRICO
适用圆柱刀柄的液压膨胀夹头



| Code N. | Description | ISO | D | D1 | D2 | L | L1 | L2 min | L2 max | V | M | G2,5 25.000 |
|-----------|----------------|-----|----|------|----|------|------|--------|--------|----|---------|-------------|
| 252-11305 | SK40-HC6-80.5 | 40 | 6 | 49,5 | 26 | 80,5 | 29,5 | 27 | 37 | 10 | M5*0.8 | • |
| 252-11307 | SK40-HC8-80.5 | 40 | 8 | 49,5 | 28 | 80,5 | 30 | 27 | 37 | 10 | M6*1.0 | • |
| 252-11309 | SK40-HC10-80.5 | 40 | 10 | 49,5 | 30 | 80,5 | 35 | 31 | 41 | 10 | M8*1.0 | • |
| 252-11311 | SK40-HC12-80.5 | 40 | 12 | 49,5 | 32 | 80,5 | 40 | 36 | 46 | 10 | M10*1.0 | • |
| 252-11313 | SK40-HC16-80.5 | 40 | 16 | 49,5 | 38 | 80,5 | 45 | 39 | 49 | 10 | M12*1.0 | • |
| 252-11315 | SK40-HC20-80.5 | 40 | 20 | 49,5 | 42 | 80,5 | 47 | 41 | 51 | 10 | M16*1.0 | • |
| 252-11317 | SK40-HC25-80.5 | 40 | 25 | 63 | 55 | 80,5 | 28 | 47 | 57 | 10 | M16*1.0 | • |
| 252-11318 | SK40-HC32-80.5 | 40 | 32 | 70 | 63 | 80,5 | 25,5 | 51 | 61 | 10 | M16*1.0 | • |
| 252-11319 | SK50-HC6-80.5 | 50 | 6 | 49,5 | 26 | 80,5 | 29,5 | 27 | 37 | 10 | M5*0.8 | • |
| 252-11320 | SK50-HC8-80.5 | 50 | 8 | 49,5 | 28 | 80,5 | 30 | 27 | 37 | 10 | M6*1.0 | • |
| 252-11321 | SK50-HC10-80.5 | 50 | 10 | 49,5 | 30 | 80,5 | 35 | 31 | 41 | 10 | M8*1.0 | • |
| 252-11322 | SK50-HC12-80.5 | 50 | 12 | 49,5 | 32 | 80,5 | 40 | 36 | 46 | 10 | M10*1.0 | • |
| 252-11323 | SK50-HC16-80.5 | 50 | 16 | 49,5 | 38 | 80,5 | 45 | 39 | 49 | 10 | M12*1.0 | • |
| 252-11324 | SK50-HC20-80.5 | 50 | 20 | 49,5 | 42 | 80,5 | 42 | 41 | 51 | 10 | M16*1.0 | • |
| 252-11331 | SK50-HC25-100 | 50 | 25 | 63 | 55 | 100 | 48 | 47 | 57 | 10 | M16*1.0 | • |
| 252-11332 | SK50-HC32-100 | 50 | 32 | 70 | 63 | 100 | 61 | 51 | 61 | 10 | M16*1.0 | • |

High quality

| Code N. | Description | ISO | D | D1 | D2 | L | L1 | L2 min | L2 max | V | M | G6,3 15000 |
|-----------|-----------------|-----|----|------|----|------|----|--------|--------|----|---------|------------|
| 252-11325 | SK40-G20CS-64.5 | 40 | 20 | 49,5 | - | 64,5 | - | 41 | 51 | 10 | M16*1.0 | • |
| 252-11326 | SK50-G32CS-81 | 50 | 32 | 72 | - | 81 | - | 51 | 61 | 10 | M16*1.0 | • |

Zubehör
Accessories
Accessoires
Accessori
Причадлежности
零件



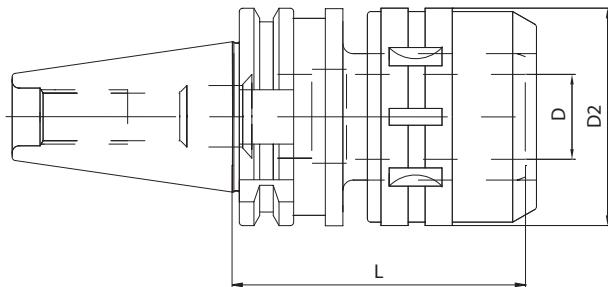
pag. 152



pag. 179

Short Heavy Design

KRAFTSPANNFUTTER MANDRINS A FORT SERRAGE
 MILLING CHUCK MANDRINI A FORTE SERRAGGIO
 УСИЛЕННЫЕ ОПРАВКИ 铣夹头



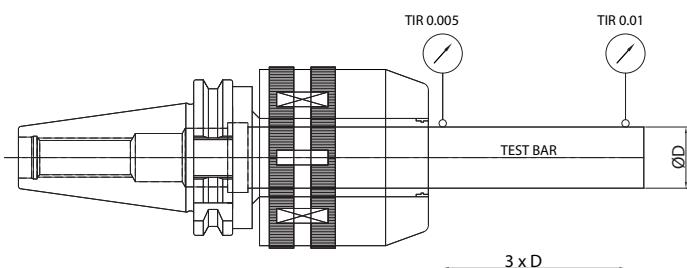
| Code N. | Description | ISO | D | D2 | L | G6,3 12000 RPM |
|-----------|-------------|-----|----|----|-----|----------------|
| 214-01301 | TC40H105C20 | 40 | 20 | 54 | 105 | - |
| 214-01302 | TC40H105C32 | 40 | 32 | 72 | 105 | - |
| 214-01304 | TC50H105C20 | 50 | 20 | 54 | 105 | - |
| 214-01305 | TC50H105C32 | 50 | 32 | 72 | 105 | - |
| 214-01306 | TC50H135C32 | 50 | 32 | 72 | 135 | - |

INKLUSIVE SPANNSCHLÜSSEL • SUPPLIED WITH WRENCH • ПОСТАВЛЯЕТСЯ С КЛЮЧОМ
 CLÉ INCLUSE • FORNITI CON CHIAVE INCLUSA • 供货时提供扳手

Zubehör
 Accessories
 Accessoires
 Accessori
 Принадлежности
 零件



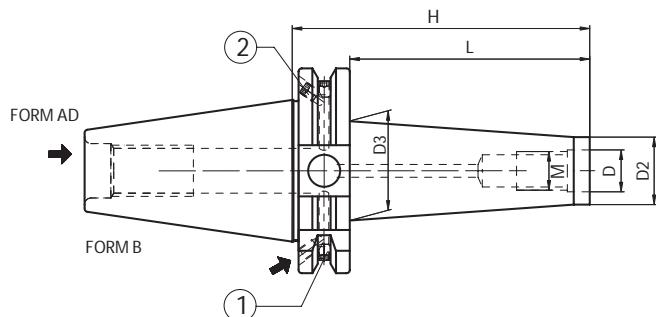
p.178 pag. 153



| Milling chuck (diameter) | Specification (DIN) | Tolerance (Taper shank) | Run-out (3xD) | Clamping torque |
|--------------------------|---------------------|-------------------------|---------------|---------------------|
| C20 | AT3 | TC40 (0~+0,003) | 0~0,01 | 980M.m (100 Kgf.m) |
| C32 | | TC50 (0~+0,004) | | 3430M.m (350 Kgf.m) |

SPANFUTTER FÜR EINSCHRAUBFRÄSER
MILLING CUTTER ARBORS FOR SCREW-ON TYPE MILLING CUTTERS
ОПРАВКИ ДЛЯ ФРЕЗЕРНЫХ ГОЛОВОК

MANDRINS POUR FRAISER A VISSEZ
MANDRINI PER FRESE CON ATTACCO FILETTATO
螺纹连接型铣刀的铣刀杆



| Code N. | Description | ISO | M | D | D2 | D3 | H | L | G6,3 12000 RPM |
|-----------|------------------|-----|-----|------|----|------|-----|-----|----------------|
| 217-81320 | TC40H55M8 AD+B | 40 | M8 | 8,5 | 13 | 15 | 55 | 36 | • |
| 217-81301 | TC40H69M8AD+B | 40 | M8 | 8.5 | 13 | 23 | 69 | 50 | • |
| 217-81302 | TC40H94M8AD+B | 40 | M8 | 8.5 | 13 | 23 | 94 | 75 | • |
| 217-81303 | TC40H119M8AD+B | 40 | M8 | 8.5 | 13 | 25 | 119 | 100 | • |
| 217-81321 | TC40H55M10 AD+B | 40 | M10 | 10,5 | 18 | 20 | 55 | 36 | • |
| 217-81304 | TC40H69M10AD+B | 40 | M10 | 10.5 | 18 | 23 | 69 | 50 | • |
| 217-81305 | TC40H94M10AD+B | 40 | M10 | 10.5 | 18 | 28 | 94 | 75 | • |
| 217-81306 | TC40H119M10AD+B | 40 | M10 | 10.5 | 18 | 32 | 119 | 100 | • |
| 217-81322 | TC40H145M10 AD+B | 40 | M10 | 10,5 | 18 | 34 | 145 | 126 | • |
| 217-81323 | TC40H55M12 AD+B | 40 | M12 | 12,5 | 21 | 24 | 55 | 36 | • |
| 217-81307 | TC40H69M12AD+B | 40 | M12 | 12,5 | 21 | 24 | 69 | 50 | • |
| 217-81308 | TC40H94M12AD+B | 40 | M12 | 12,5 | 21 | 31 | 94 | 75 | • |
| 217-81309 | TC40H119M12AD+B | 40 | M12 | 12,5 | 21 | 33 | 119 | 100 | • |
| 217-81324 | TC40H145M12 AD+B | 40 | M12 | 12,5 | 21 | 38 | 145 | 126 | • |
| 217-81326 | TC40H55M16 AD+B | 40 | M16 | 17 | 29 | 32 | 55 | 36 | • |
| 217-81310 | TC40H69M16AD+B | 40 | M16 | 17 | 29 | 34 | 69 | 50 | • |
| 217-81311 | TC40H94M16AD+B | 40 | M16 | 17 | 29 | 34 | 94 | 75 | • |
| 217-81312 | TC40H119M16AD+B | 40 | M16 | 17 | 29 | 36 | 119 | 100 | • |
| 217-81313 | TC40H145M16AD+B | 40 | M16 | 17 | 29 | 40 | 145 | 126 | • |
| 217-81327 | TC40H175M16 AD+B | 40 | M16 | 17 | 29 | 39 | 175 | 156 | • |
| 217-81314 | TC50H69M12AD+B | 50 | M12 | 12,5 | 21 | 24 | 69 | 50 | • |
| 217-81315 | TC50H119M12AD+B | 50 | M12 | 12,5 | 21 | 33 | 119 | 100 | • |
| 217-81316 | TC50H169M12AD+B | 50 | M12 | 12,5 | 21 | 40 | 169 | 150 | • |
| 217-81317 | TC50H69M16AD+B | 50 | M16 | 17 | 29 | 34 | 69 | 50 | • |
| 217-81318 | TC50H119M16AD+B | 50 | M16 | 17 | 29 | 36 | 119 | 100 | • |
| 217-81319 | TC50H169M16AD+B | 50 | M16 | 17 | 29 | 42,5 | 169 | 150 | • |



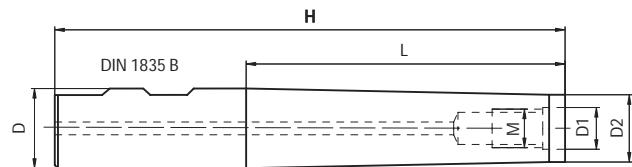
pag. 67

Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| Tape | Screw | Quantity | Screw | Quantity |
|--------|-----------------|----------|-----------------|----------|
| | | | | |
| ISO 40 | 811-102002 M4X5 | 2 | 811-102002 M4X5 | 2 |
| ISO 50 | 811-102001 M4X4 | 2 | 811-102010 M5X6 | 2 |

VERLÄNGERUNG FÜR EINSCHRAUBFRÄSER
EXTENSION FOR SCREW IN TYPE MILLS
КОРПУСА ДЛЯ ФРЕЗЕРНЫХ ГОЛОВОК

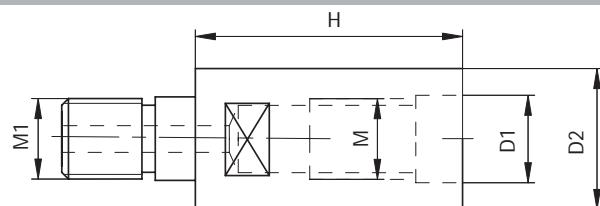
RALLONGES POUR FRAISES À VISSEZ
PROLUNGHÉ PER FRESE CON ATTACCO FILETTATO
铣刀内部螺丝加长



| Code N. | Description | D | M | D1 | D2 | H | L |
|-----------|-------------|----|-----|------|------|-----|-----|
| 217-85201 | D16H115M8 | 16 | M8 | 8.5 | 12.8 | 115 | 60 |
| 217-85202 | D16H160M8 | 16 | M8 | 8.5 | 12.8 | 160 | 100 |
| 217-85203 | D20H120M10 | 20 | M10 | 10.5 | 17.8 | 120 | 60 |
| 217-85204 | D20H160M10 | 20 | M10 | 10.5 | 17.8 | 160 | 100 |
| 217-85205 | D25H160M12 | 25 | M12 | 12.5 | 20.8 | 160 | 100 |
| 217-85206 | D32H160M16 | 32 | M16 | 17 | 28.8 | 160 | 100 |

VERLÄNGERUNG FÜR EINSCHRAUBFRÄSER
EXTENSION FOR SCREW IN END MILLS
УДЛИНИТЕЛИ ДЛЯ ФРЕЗЕРНЫХ ГОЛОВОК

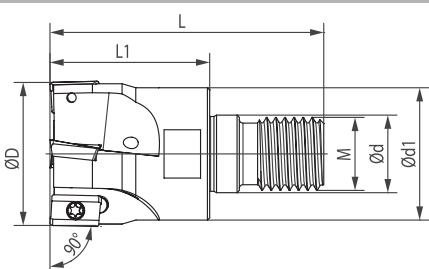
RALLONGES POUR FRAISES FILETEE
PROLUNGHÉ PER FRESE FILETTATE
铣刀内部螺丝加长



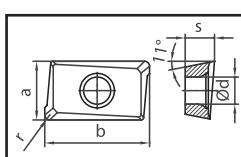
| Code N. | Description | M | M1 | D1 | D2 | H |
|-----------|-------------|-----|-----|------|------|----|
| 217-85709 | M8H30M8 | M8 | M8 | 8.5 | 12.8 | 30 |
| 217-85710 | M10H35M10 | M10 | M10 | 10.5 | 17.8 | 35 |
| 217-85711 | M12H40M12 | M12 | M12 | 12.5 | 20.8 | 40 |
| 217-85712 | M16H40M16 | M16 | M16 | 17 | 28.8 | 40 |

ECKFRÄSER
SHOULDER MILLING CUTTERS
ФРЕЗЫ ДЛЯ ОБРАБОТКИ УСТУПОВ

FRAISES À DRESSER
FRESE PER SPALLAMENTI
肩铣刀



| Code N. | Z | D | M | d | d1 | L | L1 | Insert | Screw | Wrench |
|-----------|---|----|-----|------|----|----|----|-------------|-------|------------|
| 454-01023 | 3 | 20 | M10 | 10,5 | 18 | 50 | 30 | | | |
| 454-01024 | 3 | 25 | M12 | 12,5 | 21 | 57 | 35 | | | |
| 454-01025 | 4 | 25 | M12 | 12,5 | 21 | 57 | 35 | | | |
| 454-01026 | 4 | 32 | M16 | 17 | 29 | 60 | 35 | | | |
| 454-01027 | 5 | 32 | M16 | 17 | 29 | 60 | 35 | APHT 1003.. | KV25c | 816-123002 |
| 454-01028 | 5 | 40 | M16 | 17 | 37 | 60 | 35 | APHX 1003.. | | |
| | | | | | | | | APKT 1003.. | | |



APHT 1003..
APHX 1003..
APKT 1003..

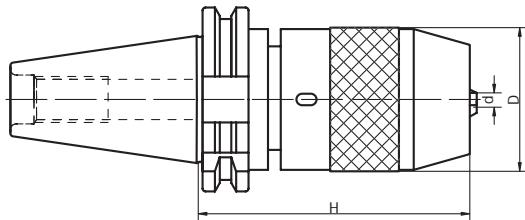
a b s d r

6.7 10.8 3.55 2.8 0.5

Mit Luft- und Kühlbohrungen
With Coolant and air holes
с отверстием под охлаждение/воздух
Avec trou pour arrosage et air
Con fori per il passaggio dell'aria e del refrigerante

NC-BOHRFUTTER
UNIVERSAL DRILL CHUCKS
УНИВЕРСАЛЬНЫЕ СВЕРЛИЛЬНЫЕ ПАТРОНЫ

MANDRINS UNIVERSELS DE PERCAGE
MANDRINI PORTAPUNTE INTEGRALI
万能钻夹头



| Code N. | Description | ISO | H | D | Clamping capacity | Wrench |
|-----------|---------------|-----|-----|----|-------------------|------------|
| 252-11200 | TC30H110R1-13 | 30 | 110 | 50 | 1-13 | 816-111024 |
| 252-11211 | TC40H100R1-13 | 40 | 100 | 50 | 1-13 | 816-111024 |
| 252-11212 | TC40H115R3-16 | 40 | 115 | 57 | 3-16 | 816-111025 |
| 252-11213 | TC50H100R1-13 | 50 | 100 | 50 | 1-13 | 816-111024 |
| 252-11214 | TC50H105R3-16 | 50 | 105 | 57 | 3-16 | 816-111025 |

RUNDLAUFGENAUGKEIT 0.04 MM

Zur Erhöhung der Spannkraft werden diese Futter mit Spannschlüssel geliefert.
BEI LINKS LAUFENDEN BEARBEITUNGEN SIND DIESE
FUTTER NICHT ZU BENUTZEN.

RUNOUT ACCURACY 0.04 MM T.I.R.

Supplied with spanner wrench to allow the application
of supplementary gripping torque.
DO NOT USE IN REVOLUTION IN COUNTER-CLOCKWISE DIRECTION.

БИЕНИЕ 0,04 ММ

Поставляется с ключом для более сильного зажима.
НЕ ВРАЩАТЬ ПРОТИВ ЧАСОВОЙ СТРЕЛКИ!

PRECISION DE ROTATION 0.04 MM

Les mandrins sont fournis avec clé de blocage
pour augmenter la force de serrage.
NE PAS UTILISER DANS USINAGE AVEC ROTATION A' GAUCHE

PRECISIONE DI ROTAZIONE 0.04 MM

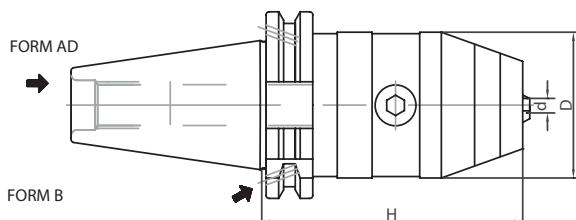
Per incrementare la forza di serraggio i mandrini sono forniti
con chiave di bloccaggio.
NON DEVONO ESSERE USATI PER LAVORAZIONI
CON ROTAZIONE A SINISTRA.

径向跳动精度 0.04 MM T.I.R.

提供活动扳手，以便施加补充夹紧力。
不得用于逆时针方向旋转。

NC-BOHRFUTTER FÜR RECHTS-UND LINKSLAUF
NC DRILL CHUCKS FOR LEFT AND RIGHT ROTATION
СВЕРЛИЛЬНЫЕ ПАТРОНЫ С ВРАЩЕНИЕМ ПО- И ПРОТИВ
ЧАСОВОЙ СТРЕЛКИ ДЛЯ СТАНКОВ С ЧПУ

MANDRIN DE PERCAGE CNC POUR ROTATION GAUCHE-DROITE
MANDRINI PORTAPUNTE INTEGRALI PER ROTAZIONE
DESTRA E SINISTRA
左右旋转 NC 钻夹头



| Code N. | Description | ISO | H | D | Clamping capacity | Wrench |
|-----------|----------------|-----|-----|----|-------------------|------------|
| 252-11300 | TC30H120R1-13X | 30 | 120 | 50 | 1-13 | 816-152001 |
| 252-11301 | TC40H90R1-13X | 40 | 90 | 50 | 1-13 | 816-152001 |
| 252-11302 | TC40H95R3-16X | 40 | 95 | 57 | 3-16 | 816-152001 |
| 252-11303 | TC50H90R1-13X | 50 | 90 | 50 | 1-13 | 816-152001 |
| 252-11304 | TC50H95R3-16X | 50 | 95 | 57 | 3-16 | 816-152001 |

RUNDLAUFGENAUGKEIT 0.03 MM

Sowohl für rechts- als auch links laufende Bearbeitungen geeignet,
mit Höchstgeschwindigkeit von 7000 u/min.

RUNOUT ACCURACY 0.03 MM T.I.R.

Suitable for right and left rotation up to 7000 rpm.

БИЕНИЕ 0,03 ММ

Можно вращать по- и против часовой стрелки
со скоростью до 7000 об/мин.

PRECISION DE ROTATION 0.03 MM

Utilisables pour rotation droite et gauche,
avec maximale vitesse 7000 rpm

PRECISIONE DI ROTAZIONE 0.03 MM.

Adatti per rotazione sia destra che sinistra,
con velocità max di 7000 g/min.

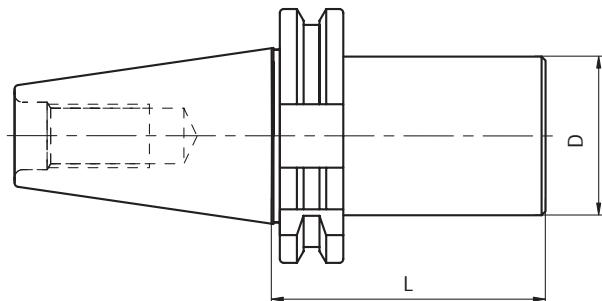
径向跳动精度 0.03 MM T.I.R.

适用于最高转速达 7000 转/分钟的左右旋转

ROHLINGE MIT WEICHEM SCHAFT
BLANK TOOLHOLDER WITH SOFT SHANK
ЗАГОТОВКИ ДЛЯ ОПРАВОК НЕЗАКАЛЕННЫЕ

BARRES D'ALESAGE SEMI-FINIES
MANDRINI SEMILAVORATI A STELO TENERO
带软柄的切断刀柄

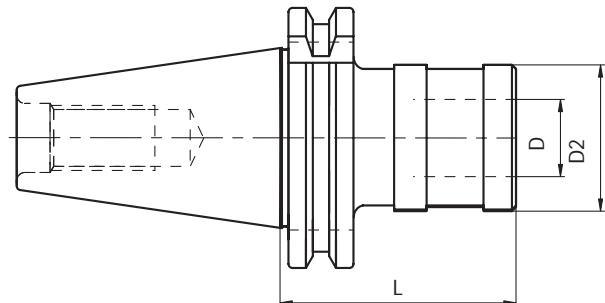
DIN 69871 A



| Code N. | Description | ISO | D | L |
|-----------|-----------------|-----|------|-----|
| 217-41204 | TC40H160D40.5SM | 40 | 40.5 | 160 |
| 217-41205 | TC40H160D63.5SM | 40 | 63.5 | 160 |
| 217-41206 | TC40H250D63.5SM | 40 | 63.5 | 250 |
| 217-41207 | TC50H160D80SM | 50 | 80 | 160 |
| 217-41208 | TC50H200D80SM | 50 | 80 | 200 |
| 217-41209 | TC50H300D80SM | 50 | 80 | 300 |

GEWINDESCHNEID-SCHNELLWECHSELFUTTER
MIT LÄNGENAUSGLEICH
TENSION AND COMPRESSION TAPPING HEAD
РЕЗЬБОНАРЕЗНЫЕ ПАТРОНЫ С КОМПЕНСАЦИЕЙ

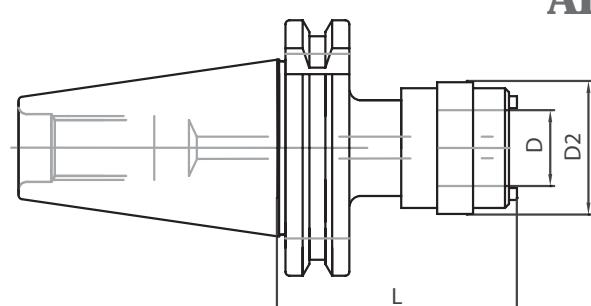
MANDRINS DE TARAUDAGE A CHANGEMENT
RAPIDE A DOUBLE USAGE
MASCHIATORI A DOPPIA COMPENSAZIONE
张力和压缩丝攻头



| Code N. | Description | ISO | SIZE | Top range | PRESS. | EXT. | D | D2 | L |
|---------|----------------|-----|------|-----------|--------|------|----|----|-----|
| M3008 | TC30H60GR1.DC | 30 | 1 | M3-M12 | 9 | 9 | 19 | 38 | 60 |
| M3010 | TC40H60GR1.DC | 40 | 1 | M3-M12 | 9 | 9 | 19 | 38 | 60 |
| M3110 | TC40H92GR2.DC | 40 | 2 | M6-M20 | 15 | 15 | 31 | 53 | 92 |
| M3210 | TC40H138GR3.DC | 40 | 3 | M14-M33 | 24 | 24 | 48 | 78 | 138 |
| M3030 | TC50H62GR1.DC | 50 | 1 | M3-M12 | 9 | 9 | 19 | 38 | 62 |
| M3130 | TC50H83GR2.DC | 50 | 2 | M6-M20 | 15 | 15 | 31 | 53 | 83 |
| M3230 | TC50H133GR3.DC | 50 | 3 | M14-M33 | 24 | 24 | 48 | 78 | 133 |

GEWINDESCHNEID-SCHNELLWECHSELFUTTER
OHNE LÄNGENAUSGLEICH
SOLID TAPPING HEAD
РЕЗЬБОНАРЕЗНЫЕ ПАТРОНЫ БЕЗ КОМПЕНСАЦИИ

MANDRINS DE TARAUDAGE A CHANGEMENT
RAPIDE SANS COMPENSATION
MASCHIATORI RIGIDI SENZA COMPENSAZIONE
固定攻丝头



AD

| Code N. | Description | ISO | SIZE | Top range | D | D2 | L |
|---------|---------------|-----|------|-----------|----|----|----|
| M5020 | TC40H59GR1.SC | 40 | 1 | M3-M12 | 19 | 33 | 59 |
| M5040 | TC40H82GR2.SC | 40 | 2 | M6-M20 | 31 | 50 | 82 |

Zubehör
Accessories
Accessoires
Accessori
Прина́длежно́сти
零件



pag. 143



pag. 144

KINTEK
SONDERWERKZEUGHALTER
SPECIAL TOOLS
СПЕЦИАЛЬНЫЕ ИНСТРУМЕНТЫ

PORTE-Outils SPÉCIAUX
PRODOTTI SPECIALI
特殊工具



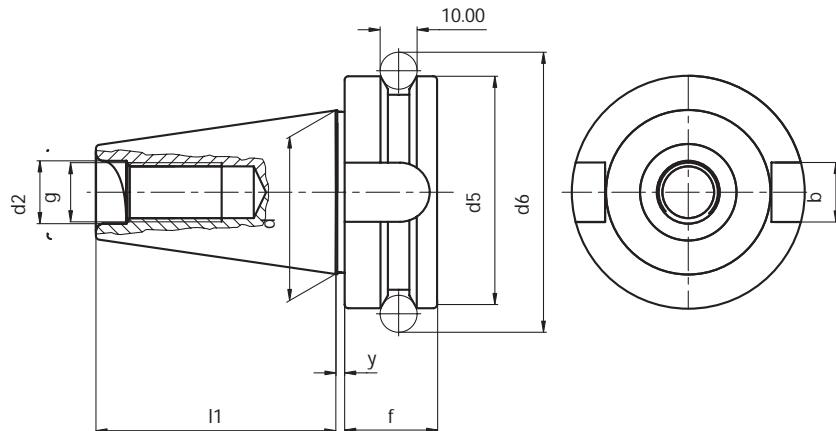
KLATTEK

**JIS B 6339
(MAS 403BT A-AD/B-AD)**

TECHNISCHE DATEN DER STEILKEGELWERKZEUGE
TAPER SHANKS DATA SHEET
КОНСТРУКТИВНЫЕ РАЗМЕРЫ

DONNEES TECHNIQUES QUEUE D'OUTILS
DATI TECNICI CONI D'ATTACCO
锥柄数据表

MAS 403/BT A

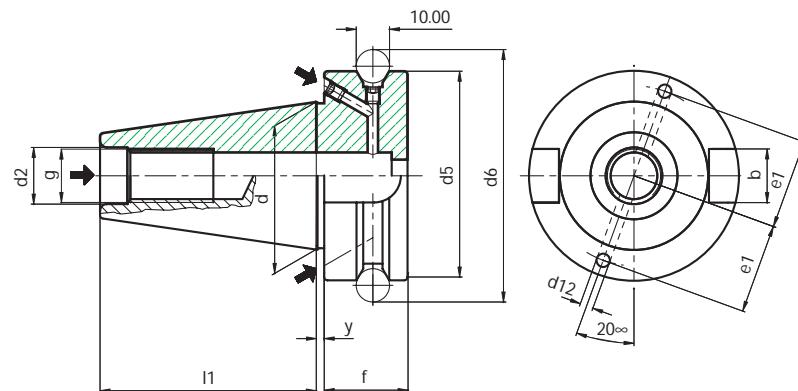


| BT | d | l1 | d2 | g | y | d5 | f | d6 | b |
|----|-------|-------|------|-----|---|-----|----|--------|------|
| 30 | 31,75 | 48,4 | 12,5 | M12 | 2 | 46 | 20 | 56,144 | 16,1 |
| 40 | 44,45 | 65,4 | 17 | M16 | 2 | 63 | 25 | 75,68 | 16,1 |
| 50 | 69,85 | 101,8 | 25 | M24 | 3 | 100 | 35 | 110,02 | 25,7 |

TECHNISCHE DATEN DER STEILKEGELWERKZEUGE
TAPER SHANKS DATA SHEET
КОНСТРУКТИВНЫЕ РАЗМЕРЫ

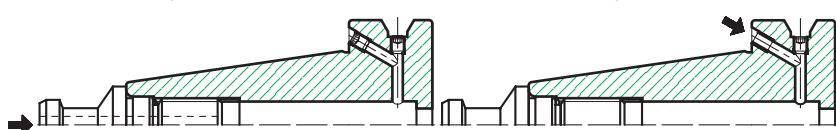
DONNEES TECHNIQUES QUEUE D'OUTILS
DATI TECNICI CONI D'ATTACCO
锥柄数据表

MAS 403/BT AD/B



FORM AD

FORM B



| BT | d | l1 | d2 | g | y | d5 | f | d6 | d12 | el | b |
|----|-------|-------|----|-----|---|-----|----|--------|-----|----|------|
| 40 | 44,45 | 65,4 | 17 | M16 | 2 | 63 | 25 | 75,68 | 4 | 27 | 16,1 |
| 50 | 69,85 | 101,8 | 25 | M24 | 3 | 100 | 35 | 110,02 | 5 | 42 | 25,7 |

Das Kühlmittel geht durch die Löcher am Bund (B) oder, wenn die Löcher mit den Schrauben geschlossen werden, zentral durch Aufnahme (AD). For coolant through V-flange bores (B) or center of toolholders (AD). For central coolant, the V-flange channels are closed by socket screws.

Для подачи СОЖ через отверстия во фланце (форма В) или через центральное отверстие (форма АД). Для подачи СОЖ через центральное отверстие боковые должны быть закрыты винтами.

Le lubrifiant passe par les trous de la bride (B) ou, si on ferme les trous avec des vis, par le centre du mandrin (AD).

Il lubrificante passa dai fori sulla flangia (B) oppure, chiudendo i fori con le apposite viti, dal centro del mandrino (AD).

冷却剂需通过V型法兰孔 (B) 或刀柄 (AD)。对于中央冷却剂, V型法兰通道是由凹头螺丝拧紧的。



KINTEK - STEILKEGELAUFNAHMEN

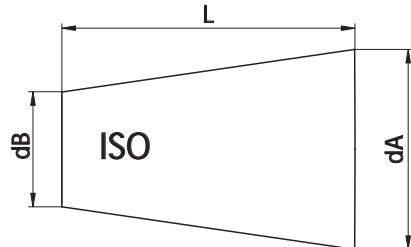
TECHNISCHE DATEN

Alle Kintek-Steilkegelaufnahmen werden nach den DIN-Normen angefertigt.

KEGELSCHAFTTOLERANZ

In Klasse AT3 angefertigt.

| ISO | L | dA-dB | AT3 |
|-----|----|--------|--------|
| 30 | 42 | 12.250 | +0.002 |
| 40 | 59 | 17.208 | +0.003 |
| 50 | 92 | 26.833 | +0.004 |



SPANNZANGENAUFNAHME RUNDLAUFGENAUGKEIT

Die DIN 6391- Norm schreibt eine Rundlaufgenauigkeit zwischen Aussenkegel und Innenkegel / Spannzangensitz vom 0,016 vor. Unsere Spannzangenfutter weisen einen Rundlauffehler zwischen ISO-Kegelaufnahme und Spannzangensitz, der zwischen 0,003 und 0,010 mm liegt.

AUFSTECKFRÄSDORNE - RUNDLAUFGENAUGKEIT

Kintek- Aufsteckfräsdorne entsprechen der DIN 6358- Norm, die einen höchsten Rundlauffehler zwischen ISO 30- und ISO40- Kegel und den Durchmessern 16-22-27-32-40 vom 0,01 vorsieht.

Der mögliche höchste Rundlauffehler für ISO 50 ist 0,015 mm.

WELDON AUFSTECKFRÄSDORNE - RUNDLAUFGENAUGKEIT

Nach der DIN 6359-1-Norm müssen die Weldon- Aufsteckfräsdorne die folgenden Forderungen aufweisen:

Bohrung: Toleranz H5

Rundlaufgenauigkeit: höchster möglicher Rundlauffehler zwischen Kegel und Weldonsitz < 0,01 (für ISO 40)

Die vorgeschriebene Toleranz der Bohrung und eine durchschnittliche Rundlaufgenauigkeit von 0,005 sind erreicht.

WUCHTUNG

Die meisten Werkzeughalter dieser Gruppe sind in Klasse G6,3 auf 8.000 U/Min -1 vorgewuchtet oder auf 12.000 U/Min -1 gewichtet.

Neben der Übersichtstabelle der Produkte wird die Wuchtgüte angegeben.

KONSTRUKTIONSDATEN

- aus legiertem Einsatzstahl angefertigt
- in der Einsatzhärtetiefe von 0,4 - 0,5 mm
- gehärtet, angelassen
- Härte HRC58 +-2, Festigkeit 800-1000 N/mm²
- brüniert
- inneres, äußeres Schleifen und am Gewinde der Spannzangenmutter

WUCHTUNG FÜR HÖHERE DREHZAHLEN

Die Steilkegelaufnahmen der neuen Linie werden in Klasse G2,5 auf 25.000 U/Min -1 gewichtet.

KONSTRUKTIONSDATEN

- aus legiertem Einsatzstahl angefertigt
- in der Einsatzhärtetiefe von 0,4 - 0,5 mm
- gehärtet, angelassen
- Härte HRC 58 +- 2, Festigkeit 800-1000 N/mm²
- brüniert
- inneres, äußeres Schleifen des Kegels
- Schleifen der Vorderseite und am Gewinde der Spannzangenmutter
- 100% durch zertifizierte Meßinstrumente geprüft und mit Wuchtungsprotokoll geliefert



KINTEK DIN TOOLHOLDERS

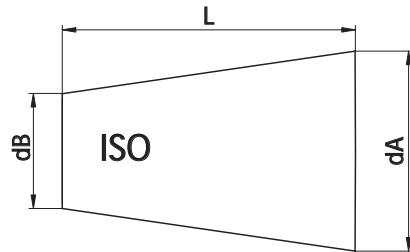
TECHNICAL FEATURES

ALL KINTEK TOOLHOLDERS ARE MANUFACTURED ACCORDING TO DIN NORM.

CONE'S TOLERANCE

ACCORDING TO THE CLASS AT3.

| ISO | L | dA-dB | AT3 |
|-----|----|--------|--------|
| 30 | 42 | 12.250 | +0.002 |
| 40 | 59 | 17.208 | +0.003 |
| 50 | 92 | 26.833 | +0.004 |



COLLET CHUCK'S RUNOUT ACCURACY

The norm DIN6391 permits a runout error between external cone and internal cone / collet seat of 0.016. Our production has a runout accuracy which is guaranteed to be within 0,003 / 0,010 m at the tool seat.

SHELL END MILL ADAPTOR'S RUNOUT ACCURACY

Our shell end mill adaptors meet the requirements of the norm DIN6358, which prescribes for diameters 16-22-27-32-40 a runout accuracy of: 0, 01 for SK 30/40 0,015 for SK 50.

WELDON END MILL HOLDER'S RUNOUT ACCURACY

According to the norm DIN6359-1 Weldon end mill holders have to meet the following requirements:

Bore: H5 tolerance

Runout accuracy: < 0.01 (for SK 40)

Our end mill adaptors ensure the prescribed holes' tolerance and have a runout accuracy which is normally 0.005

BALANCING

The major part of toolholders of this category can run up to 8000 rpm grade G 6,3 or 12000 rpm. Besides the descriptive and dimensional table of products, you can find the addictive balancing grade.

CONSTRUCTIVE FEATURES

- Manufactured with Casehardening Steel.
- Casehardened with depth 0,4 - 0,5 mm
- Hardened-Tempered
- Hardness HRC 58+-2, Strength 800-1000 N/mm²
- Black oxidized
- Internal and external grinding finished.

NEW HIGH-SPEED BALANCING TOOLHOLDERS

The new high-speed toolholders are balanced in the Grade G 2,5 at 25000 rpm.

CONSTRUCTIVE FEATURES FOR HIGH-SPEED TOOLHOLDERS

- Manufactured with casehardening Steel.
- Casehardened with depth 0,4 - 0,5 mm
- Hardened-Tempered
- Hardness HRC 58+-2, Strength 800-1000 N/mm²
- Black oxidized
- Internal and external grinding finish of the cone
- Grinding finish on the front side and on the thread of collet nuts.
- Tested 100% with certified measuring instruments and supplied with balancing certificate



ОПРАВКИ KINTEK ПО DIN

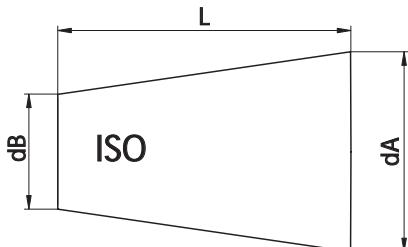
ТЕХНИЧЕСКОЕ ОПИСАНИЕ

Все оправки Kintek произведены согласно стандарту DIN.

ТОЧНОСТЬ КОНУСА

Соответствует классу AT3.

| ISO | L | dA-dB | AT3 |
|-----|----|--------|--------|
| 30 | 42 | 12.250 | +0.002 |
| 40 | 59 | 17.208 | +0.003 |
| 50 | 92 | 26.833 | +0.004 |



БИЕНИЕ ЦАНГОВЫХ ПАТРОНОВ

В соответствии с нормами DIN6391, допустимое биение конуса оправки относительно конического отверстия под цангу составляет 0,016 мм. Гарантируемая точность биения отверстия под инструмент - 0,003 мм/0,010 м.

БИЕНИЕ ОПРАВОК ДЛЯ НАСАДНЫХ ФРЕЗ

Патроны изготовлены в соответствие с требованиями DIN 6358, согласно которым биение для диаметров 16-22-27-32-40 составляет 0,01 мм для SK 30/40 и 0,015 мм для SK 50.

БИЕНИЕ ПАТРОНОВ С КРЕПЛЕНИЕМ WELDON

Оправки соответствуют следующим требованиям DIN 6359-1:

Точность отверстия: H5

Биение: < 0,01 (для SK 40)

Оправки Kintek изготовлены с гарантированной точностью отверстий и биением 0,005 мм.

БАЛАНСИРОВКА

Оправки данной категории предварительно сбалансированы по классу G6,3 при 8000 об/мин или 12000 об/мин.

КОНСТРУКТИВНЫЕ ОСОБЕННОСТИ

- Изготовлены из стали с последующей цементацией
- Цементация на глубину 0,4 - 0,5 мм
- Оправки подвергнуты закалке и отпуску
- Твердость 58+/- HRC, прочность 800-1000 Н/мм²
- Защитно-декоративное покрытие черного цвета
- Шлифованные внутренняя и внешняя поверхности

НОВЫЕ ВЫСОКОСКОРОСТНЫЕ СБАЛАНСИРОВАННЫЕ ОПРАВКИ

Новые высокоскоростные оправки сбалансированы до класса G 2,5 при 25000 об/мин.

КОНСТРУКТИВНЫЕ ОСОБЕННОСТИ ВЫСОКОСКОРОСТНЫХ ОПРАВОК

- Изготовлены из стали с последующей цементацией
- Цементация на глубину 0,4 - 0,5 мм
- Оправки подвергнуты закалке и отпуску
- Твердость 58+/- HRC, прочность 800-1000 Н/мм²
- Защитно-декоративное покрытие черного цвета
- Шлифованные внутренняя и внешняя поверхности
- Шлифованный торец и резьба под гайку в цанговых патронах
- Каждая оправка испытана и поставляется с сертификатом о балансировке



MANDRINS KINTEK AVEC ATTACHEMENT ISO

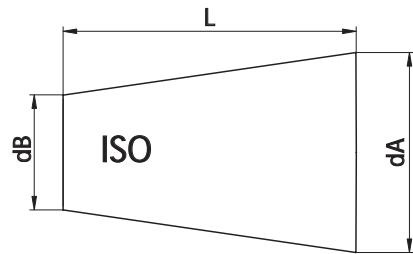
DONNEES TECHNIQUES

TOUS LES MANDRINS PORTE-OUTILS KINTEK SONT PRODUITS SUivant LES SPÉCIFICATIONS DIN

TOLLERANCE DU CONE

EN CLASSE AT3.

| ISO | L | dA-dB | AT3 |
|-----|----|--------|--------|
| 30 | 42 | 12.250 | +0.002 |
| 40 | 59 | 17.208 | +0.003 |
| 50 | 92 | 26.833 | +0.004 |



COAXIALITE' PORTE-PINCE

La norme DIN6391 admet une erreur maximum du 0.016 soit pour les porte-pinces DIN6499 soit pour DIN6388. Dans notre production l'écart d'excentricité maximum entre cône ISO et logement de la pince est compris entre: 0,003 et 0,0010 mm.

COAXIALITE' PORTE-FRAISES FIXES ET COMBINES

Les porte-fraises fixes et combinés de notre production suivent la spécification de la norme DIN6358, qui prévoit pour les diamètres 16-22-27-32-40 une concentricité de 0,01 pour ISO 30 et ISO 40, 0,015 pour ISO 50

COAXIALITE' PORTE-FRAISES WELDON

Suivant les spécifications DIN 6359-1 les porte-fraises WELDON doivent suivre les conditions suivantes:
Trou : tolérance H5

Coaxialité: écart maximum toléré entre cône et logement du Weldon <0.01 (pour ISO 40).

Nous assurons la tolérance prévue sur le trou et une coaxialité en moyenne de 0.005.

EQUILIBRAGE

La plupart des porte-outils sont pré-équilibrés en classe G 6,3 8000 Tr/Min -1. ou équilibrés à 12000 Tr/Min-1.
A côté du tableau de description et dimensions des produits il y a l'indication de la valeur d'équilibrage additionnel.

ELEMENTS DE CONSTRUCTION

- Produits en acier cémenté allié.
- Cémentés avec une profondeur 0,4 - 0,5 mm
- Trempés - Revenus
- Dureté HRC 58 +- 2 résistance 800-1000 N/ mm²
- Brunis
- Rectification du cône intérieur, extérieur et dans le filetage des écrous qui serrent la pince.

EQUILIBRAGE MANDRINS POUR HAUTE VITESSE

Les mandrins de la nouvelle ligne à haute vitesse sont équilibrés en classe G 2,5 à 25000 Tr/mn-1.

ELEMENTS DE CONSTRUCTION POUR MANDRINS HAUTE VITESSE

- Produits en acier cémenté allié.
- Cémentés avec une profondeur 0,4 - 0,5 mm
- Trempés - Revenus
- Dureté HRC 58 +- 2 résistance 800-1000 N/ mm²
- Brunis
- Finition de rectification intérieure, extérieure et du cône
- Rectification du cône intérieur et dans le filetage des écrous qui serrent la pince.
- Contrôlés à 100 % avec des instruments de mesure certifiés et livrés avec un certificat d'équilibrage.



MANDRINI KINTEK CON ATTACCO ISO

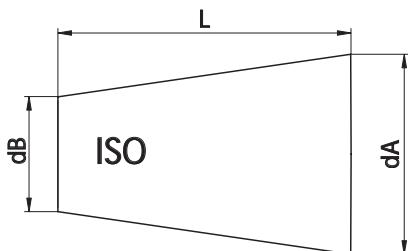
DATI TECNICI

TUTTI I MANDRINI PORTAUTENSILI KINTEK VENGONO PRODOTTI SECONDO LE NORMATIVE DIN

TOLLERANZA DEL CONO

PRODOTTI IN CLASSE AT3.

| ISO | L | dA-dB | AT3 |
|-----|----|--------|--------|
| 30 | 42 | 12.250 | +0.002 |
| 40 | 59 | 17.208 | +0.003 |
| 50 | 92 | 26.833 | +0.004 |



COASSIALITÀ PORTAPINZE

La norma DIN6391 ammette un'errore massimo di 0.016 sia per i portapinze DIN6499 che per DIN6388.

La nostra produzione normalmente presenta uno scostamento massimo di eccentricità tra cono ISO e sede pinza compreso tra i 0,003 e 0,010 mm.

COASSIALITÀ PORTAFRESE FISSI E COMBINATI

I portafrese fissi e combinati di nostra produzione rispondono ai criteri prescritti dalla norma DIN6358, la quale prevede un errore massimo di coassialità tra cono ISO 30 e ISO 40 ed i diametri 16-22-27-32-40, di 0,01. Mentre per ISO 50 è ammesso un errore massimo di 0,015 mm.

COASSIALITÀ PORTAFRESE WELDON

Rispettando la normativa DIN 6359-1 i portafrese WELDON devono rispondere ai seguenti requisiti:
foro: tolleranza H5

coassialità: scostamento massimo consentito tra cono e sede Weldon <0.01 (per ISO 40)

Garantiamo la tolleranza prescritta sul foro e un valore di coassialità mediamente di 0.005.

EQUILIBRATURA

La maggior parte dei portautensili presenti in questa categoria sono prebilanciati in classe G 6,3 8000 rpm min -1. o bilanciati a 12000 giri rpm min-1.

A fianco della tabella descrittiva e dimensionale dei prodotti viene elencato il grado di equilibratura aggiuntiva.

DATI COSTRUTTIVI

- Costruiti in acciaio da cementazione legato.
- Cementati con profondità 0,4 - 0,5 mm
- Temprati-rinvenuti
- Durezza HRC 58 +- 2 resistenza 800-1000 N/ mm²
- Bruniti
- Finitura di rettifica interna, esterna e nelle filettature delle ghiere chiudipinza

EQUILIBRATURA MANDRINI PER ALTE VELOCITA'

I mandrini presenti nella linea nuova ad alta velocità vengono bilanciati in classe G 2,5 a 25000 rpm min - 1.

DATI COSTRUTTIVI PER MANDRINI PER ALTE VELOCITA'

- Costruiti in acciaio da cementazione legato.
- Cementati con profondità 0,4 - 0,5 mm
- Temprati-rinvenuti
- Durezza HRC 58 +- 2 resistenza 800-1000 N/ mm²
- Bruniti
- Finitura di rettifica interna, esterna del cono
- Rettifica parte anteriore e nelle filettature delle ghiere chiudipinza
- Collaudati 100% con strumenti di misura certificati e forniti con certificato di bilanciatura.



KINTEK 符合 DIN 标的刀柄

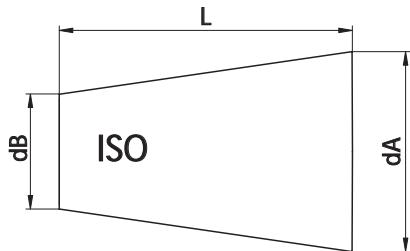
技术特点

所有 KINTEK 刀柄均根据 DIN 标准来制造。

锥体的误差

根据 AT3 级别

| ISO | L | dA-dB | AT3 |
|-----|----|--------|--------|
| 30 | 42 | 12.250 | +0.002 |
| 40 | 59 | 17.208 | +0.003 |
| 50 | 92 | 26.833 | +0.004 |



弹簧夹头的径向跳动精度

DIN6391 标准允许在外部锥体与内部锥体/夹头座之间的径向跳动误差为 0.016。
我公司生产可保证在工具底座处径向跳动精度为 0.003 / 0.010 米之间。

平面铣接头的径向跳动精度

我公司的平面铣接头满足 DIN6358 标准要求，该标准描述了直径为 16-22-27-32-40 的径向跳动精度，对于 SK 30/40 为 0.01，对于 SK 50 为 0.015。

威尔登式端铣夹具的径向跳动精度

根据 DIN6359-1 标准规定，威尔登式端铣夹具必须要达到下列要求：

孔: H5 误差

径向跳动精度: < 0.01 (对于 SK 40)

我公司的平面铣接头确保可达到规定的孔的误差，通常的径向跳动精度为 0.005。

平衡

这种类型的刀柄的主要部分最高转速可达到 G 6.3 级的 8000 转/分钟或 12000 转/分钟。
除了产品的描述性和尺寸表格以外，还可找到平衡等级。

结构特点

- 用表面硬化钢材制造。
- 硬化深度达 0.4 - 0.5 毫米
- 经过硬化及回火处理。
- 硬度达 HRC 58+-2，强度达 800-1000 N / 平方毫米。
- 黑色氧化。
- 内部及外部表面打磨处理。

新型高速平衡刀柄

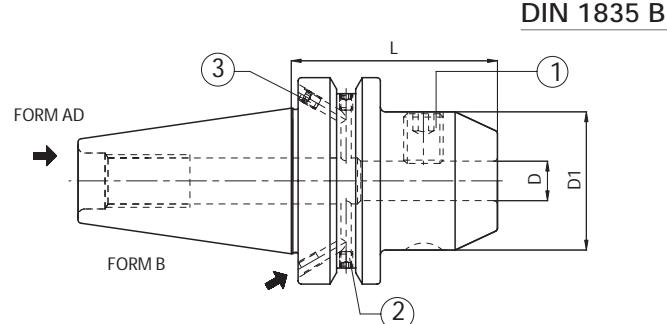
新型高速平衡刀柄以 G 2.5 级，25000 转/分钟来平衡。

高速刀柄的结构特点

- 用表面硬化钢材制造。
- 硬化深度达 0.4 - 0.5 毫米。
- 经过硬化及回火处理。
- 硬度达 HRC 58+-2，强度达 800-1000 N / 平方毫米。
- 黑色氧化。
- 锥体内部及外部表面打磨处理。
- 夹头螺母螺纹正面和上面进行打磨处理。
- 100% 使用经认证的测量仪器检测，供货时提供平衡检验证书。

ZYLINDERSCHAFTAUFNAHME WELDON
END MILL HOLDERS WELDON
ОПРАВКИ С КРЕПЛЕНИЕМ WELDON

MANDRINS POUR OUTILS TYPE WELDON
MANDRINI PORTAFRESE TIPO WELDON
威尔登式端铣夹具



DIN 1835 B

| Code N. | Description | ISO | D | L | D1 | G2,5 25000 RPM |
|-----------|-------------------|-----|----|-----|----|----------------|
| 213-91401 | BT40H50WE06 AD+B | 40 | 6 | 50 | 25 | • |
| 213-91402 | BT40H50WE08 AD+B | 40 | 8 | 50 | 28 | • |
| 213-91403 | BT40H63WE10 AD+B | 40 | 10 | 63 | 35 | • |
| 213-91404 | BT40H63WE12 AD+B | 40 | 12 | 63 | 42 | • |
| 213-91405 | BT40H63WE14 AD+B | 40 | 14 | 63 | 44 | • |
| 213-91406 | BT40H63WE16 AD+B | 40 | 16 | 63 | 48 | • |
| 213-91407 | BT40H63WE18 AD+B | 40 | 18 | 63 | 50 | • |
| 213-91408 | BT40H63WE20 AD+B | 40 | 20 | 63 | 52 | • |
| 213-91409 | BT40H90WE25 AD+B | 40 | 25 | 90 | 65 | • |
| 213-91410 | BT40H100WE32 AD+B | 40 | 32 | 100 | 72 | • |
| 213-91412 | BT50H63WE06 AD+B | 50 | 6 | 63 | 25 | • |
| 213-91413 | BT50H63WE08 AD+B | 50 | 8 | 63 | 28 | • |
| 213-91414 | BT50H70WE10 AD+B | 50 | 10 | 70 | 35 | • |
| 213-91415 | BT50H80WE12 AD+B | 50 | 12 | 80 | 42 | • |
| 213-91416 | BT50H80WE14 AD+B | 50 | 14 | 80 | 44 | • |
| 213-91417 | BT50H80WE16 AD+B | 50 | 16 | 80 | 48 | • |
| 213-91418 | BT50H80WE18 AD+B | 50 | 18 | 80 | 50 | • |
| 213-91419 | BT50H80WE20 AD+B | 50 | 20 | 80 | 52 | • |
| 213-91420 | BT50H100WE25 AD+B | 50 | 25 | 100 | 65 | • |
| 213-91421 | BT50H105WE32 AD+B | 50 | 32 | 105 | 72 | • |

High balanced

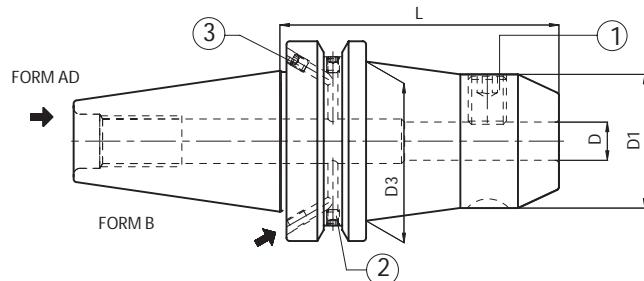
Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| Tape | Screw | Quantity | Screw | Quantity | D | Locking screw | Quantity |
|--------|-----------------|----------|-----------------|----------|-------|---------------|----------|
| | | | | | | | |
| ISO 40 | 811-102002 M4X5 | 2 | 811-102002 M4X5 | 2 | 6 | 811-106001 | 1 |
| ISO 50 | 811-102002 M4X5 | 2 | 811-102010 M5X6 | 2 | 8 | 811-106002 | 1 |
| | | | | | 10 | 811-106004 | 1 |
| | | | | | 12,14 | 811-106005 | 1 |
| | | | | | 16,18 | 811-106006 | 1 |
| | | | | | 20 | 811-106007 | 1 |
| | | | | | 25 | 811-106008 | 2 |
| | | | | | 32 | 811-106009 | 2 |

ZYLINDERSCHAFTAUFNAHME WELDON-LANG
END MILL HOLDERS WELDON-LONG PROJECTION TYPE
ОПРАВКИ С КРЕПЛЕНИЕМ WELDON. УДЛЕННЕННОЕ ИСПОЛНЕНИЕ

MANDRINS POUR OUTILS TYPE WELDON-SERIE LONGUE
MANDRINI PORTAFRESE TIPO WELDON-SERIE LUNGA
威尔登式端铣夹具-加长凸点式

DIN 1835 B



| Code N. | Description | ISO | D | L | D1 | D3 | G2,5 25000 RPM |
|---------|-------------------|-----|----|-----|----|----|----------------|
| H 100 | BT40H100WE06 AD+B | 40 | 6 | 100 | 25 | 35 | • |
| | BT40H100WE08 AD+B | 40 | 8 | 100 | 28 | 38 | • |
| | BT40H100WE10 AD+B | 40 | 10 | 100 | 35 | 40 | • |
| | BT40H100WE12 AD+B | 40 | 12 | 100 | 42 | - | • |
| | BT40H100WE14 AD+B | 40 | 14 | 100 | 44 | - | • |
| | BT40H100WE16 AD+B | 40 | 16 | 100 | 48 | - | • |
| | BT40H100WE18 AD+B | 40 | 18 | 100 | 50 | - | • |
| | BT40H100WE20 AD+B | 40 | 20 | 100 | 52 | - | • |
| | BT50H100WE06 AD+B | 50 | 6 | 100 | 25 | 35 | • |
| | BT50H100WE08 AD+B | 50 | 8 | 100 | 28 | 38 | • |
| | BT50H100WE10 AD+B | 50 | 10 | 100 | 35 | 42 | • |
| | BT50H100WE12 AD+B | 50 | 12 | 100 | 42 | 48 | • |
| | BT50H100WE14 AD+B | 50 | 14 | 100 | 44 | 50 | • |
| | BT50H100WE16 AD+B | 50 | 16 | 100 | 48 | 54 | • |
| | BT50H100WE18 AD+B | 50 | 18 | 100 | 50 | 62 | • |
| | BT50H100WE20 AD+B | 50 | 20 | 100 | 52 | 66 | • |

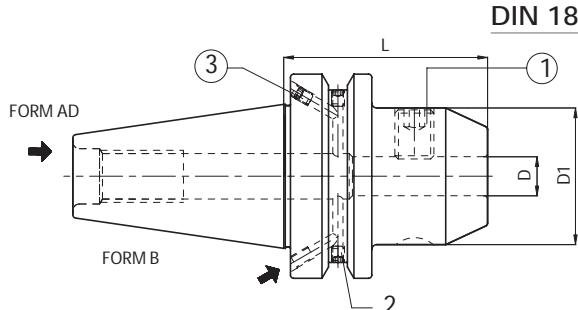
High balanced

Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| Tape | Screw | Quantity | Screw | Quantity | D | Locking screw | Quantity |
|--------|-----------------|----------|-----------------|----------|-------|---------------|----------|
| | | | | | | | |
| ISO 40 | 811-102002 M4X5 | 2 | 811-102002 M4X5 | 2 | 6 | 811-106001 | 1 |
| ISO 50 | 811-102002 M4X5 | 2 | 811-102010 M5X6 | 2 | 8 | 811-106002 | 1 |
| | | | | | 10 | 811-106004 | 1 |
| | | | | | 12,14 | 811-106005 | 1 |
| | | | | | 16,18 | 811-106006 | 1 |
| | | | | | 20 | 811-106007 | 1 |
| | | | | | 25 | 811-106008 | 2 |
| | | | | | 32 | 811-106009 | 2 |

ZYLINDERSCHAFTAUFNAHME WELDON
END MILL HOLDERS WELDON
ОПРАВКИ С КРЕПЛЕНИЕМ WELDON

MANDRINS POUR OUTILS TYPE WELDON
MANDRINI PORTAFRESE TIPO WELDON
威尔登式端铣夹具



| Code N. | Description | ISO | D | L | D1 | G6,3 12000 RPM |
|------------|-------------------|-----|----|-----|-----|----------------|
| *263-11501 | BT30H50WE06 | 30 | 6 | 50 | 25 | • |
| *263-11502 | BT30H50WE08 | 30 | 8 | 50 | 28 | • |
| *263-11503 | BT30H50WE10 | 30 | 10 | 50 | 35 | • |
| *263-11504 | BT30H55WE12 | 30 | 12 | 55 | 42 | • |
| *263-11505 | BT30H63WE16 | 30 | 16 | 63 | 48 | • |
| *263-11506 | BT30H70WE20 | 30 | 20 | 70 | 52 | • |
| 213-11413 | BT40H50WE06 AD+B | 40 | 6 | 50 | 25 | • |
| 213-11414 | BT40H50WE08 AD+B | 40 | 8 | 50 | 28 | • |
| 213-11415 | BT40H63WE10 AD+B | 40 | 10 | 63 | 35 | • |
| 213-11416 | BT40H63WE12 AD+B | 40 | 12 | 63 | 42 | • |
| 213-11417 | BT40H63WE14 AD+B | 40 | 14 | 63 | 44 | • |
| 213-11418 | BT40H63WE16 AD+B | 40 | 16 | 63 | 48 | • |
| 213-11419 | BT40H63WE18 AD+B | 40 | 18 | 63 | 50 | • |
| 213-11420 | BT40H63WE20 AD+B | 40 | 20 | 63 | 52 | • |
| 213-11421 | BT40H90WE25 AD+B | 40 | 25 | 90 | 65 | • |
| 213-11422 | BT40H100WE32 AD+B | 40 | 32 | 100 | 72 | • |
| 213-11465 | BT40H105WE40 AD+B | 40 | 40 | 105 | 80 | • |
| 213-11423 | BT50H63WE06 AD+B | 50 | 6 | 63 | 25 | • |
| 213-11424 | BT50H63WE08 AD+B | 50 | 8 | 63 | 28 | • |
| 213-11425 | BT50H70WE10 AD+B | 50 | 10 | 70 | 35 | • |
| 213-11426 | BT50H80WE12 AD+B | 50 | 12 | 80 | 42 | • |
| 213-11427 | BT50H80WE14 AD+B | 50 | 14 | 80 | 44 | • |
| 213-11428 | BT50H80WE16 AD+B | 50 | 16 | 80 | 48 | • |
| 213-11429 | BT50H80WE18 AD+B | 50 | 18 | 80 | 50 | • |
| 213-11430 | BT50H80WE20 AD+B | 50 | 20 | 80 | 52 | • |
| 213-11431 | BT50H100WE25 AD+B | 50 | 25 | 100 | 65 | • |
| 213-11432 | BT50H105WE32 AD+B | 50 | 32 | 105 | 72 | • |
| 213-11433 | BT50H120WE40 AD+B | 50 | 40 | 120 | 80 | • |
| 263-11425 | BT50H125WE50 AD+B | 50 | 50 | 125 | 100 | • |

Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

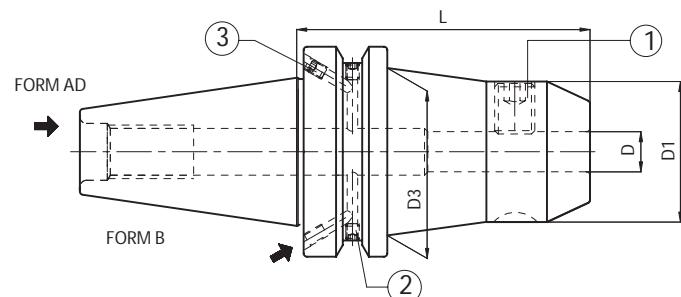
| Tape | Screw | Quantity | Screw | Quantity | D | Locking screw | Quantity |
|--------|-----------------|----------|-----------------|----------|-------|---------------|----------|
| | ② | | ③ | | | ① | |
| ISO 40 | 811-102002 M4X5 | 2 | 811-102002 M4X5 | 2 | 6 | 811-106001 | 1 |
| ISO 50 | 811-102002 M4X4 | 2 | 811-102010 M5X6 | 2 | 8 | 811-106002 | 1 |
| | | | | | 10 | 811-106004 | 1 |
| | | | | | 12,14 | 811-106005 | 1 |
| | | | | | 16,18 | 811-106006 | 1 |
| | | | | | 20 | 811-106007 | 1 |
| | | | | | 25 | 811-106008 | 2 |
| | | | | | 32 | 811-106009 | 2 |
| | | | | | 40 | 811-106009 | 2 |
| | | | | | 50 | 811-106011 | 2 |

- * Ausführung Form AD
- * Execution form AD
- * Forme AD
- * Forma AD
- * Исполнение AD
- * 执行形式 AD

ZYLINDERSCHAFTAUFNAHME WELDON-LANG
END MILL HOLDERS WELDON-LONG PROJECTION TYPE
ОПРАВКИ С КРЕПЛЕНИЕМ WELDON. УДЛИНЕННОЕ ИСПОЛНЕНИЕ.

MANDRINS POUR OUTILS TYPE WELDON-SÉRIE LONGUE
MANDRINI PORTAFRESE TIPO WELDON-SERIE LUNGA
威尔登式端铣夹具-加长凸点式

DIN 1835 B

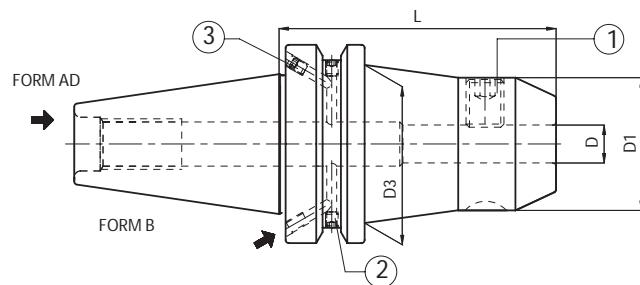


| | Code N. | Description | ISO | D | L | D1 | D3 | G6,3 12000 RPM | G6,3 8000 RPM |
|-------|-----------|-------------------|-----|----|-----|----|----|----------------|---------------|
| H 100 | 213-11434 | BT40H100WE06 AD+B | 40 | 6 | 100 | 25 | 35 | • | |
| | 213-11435 | BT40H100WE08 AD+B | 40 | 8 | 100 | 28 | 38 | • | |
| | 213-11436 | BT40H100WE10 AD+B | 40 | 10 | 100 | 35 | 40 | • | |
| | 213-11437 | BT40H100WE12 AD+B | 40 | 12 | 100 | 42 | - | • | |
| | 213-11438 | BT40H100WE14 AD+B | 40 | 14 | 100 | 44 | - | • | |
| | 213-11439 | BT40H100WE16 AD+B | 40 | 16 | 100 | 48 | - | • | |
| | 213-11440 | BT40H100WE18 AD+B | 40 | 18 | 100 | 50 | - | • | |
| | 213-11441 | BT40H100WE20 AD+B | 40 | 20 | 100 | 52 | - | • | |
| | 213-11448 | BT50H100WE06 AD+B | 50 | 6 | 100 | 25 | 35 | | • |
| | 213-11449 | BT50H100WE08 AD+B | 50 | 8 | 100 | 28 | 38 | | • |
| | 213-11450 | BT50H100WE10 AD+B | 50 | 10 | 100 | 35 | 42 | | • |
| | 213-11451 | BT50H100WE12 AD+B | 50 | 12 | 100 | 42 | 48 | | • |
| | 213-11452 | BT50H100WE14 AD+B | 50 | 14 | 100 | 44 | 50 | | • |
| | 213-11453 | BT50H100WE16 AD+B | 50 | 16 | 100 | 48 | 54 | | • |
| | 213-11454 | BT50H100WE18 AD+B | 50 | 18 | 100 | 50 | 62 | | • |
| | 213-11455 | BT50H100WE20 AD+B | 50 | 20 | 100 | 52 | 66 | | • |
| H 160 | 213-11442 | BT40H160WE06 AD+B | 40 | 6 | 160 | 25 | 35 | • | |
| | 213-11443 | BT40H160WE08 AD+B | 40 | 8 | 160 | 28 | 38 | • | |
| | 213-11444 | BT40H160WE10 AD+B | 40 | 10 | 160 | 35 | 40 | • | |
| | 213-11445 | BT40H160WE12 AD+B | 40 | 12 | 160 | 42 | - | • | |
| | 213-11466 | BT40H160WE14 AD+B | 40 | 14 | 160 | 44 | - | • | |
| | 213-11446 | BT40H160WE16 AD+B | 40 | 16 | 160 | 48 | - | • | |
| | 213-11467 | BT40H160WE18 AD+B | 40 | 18 | 160 | 50 | - | • | |
| | 213-11447 | BT40H160WE20 AD+B | 40 | 20 | 160 | 52 | - | • | |
| | 213-11468 | BT40H160WE25 AD+B | 40 | 25 | 160 | 65 | - | • | |
| | 213-11469 | BT40H160WE32 AD+B | 40 | 32 | 160 | 72 | - | • | |
| | 213-11457 | BT50H160WE06 AD+B | 50 | 6 | 160 | 25 | 42 | | • |
| | 213-11458 | BT50H160WE08 AD+B | 50 | 8 | 160 | 28 | 45 | | • |
| | 213-11459 | BT50H160WE10 AD+B | 50 | 10 | 160 | 35 | 49 | | • |
| | 213-11460 | BT50H160WE12 AD+B | 50 | 12 | 160 | 42 | 55 | | • |
| | 213-11470 | BT50H160WE14 AD+B | 50 | 14 | 160 | 44 | 57 | | • |
| | 213-11461 | BT50H160WE16 AD+B | 50 | 16 | 160 | 48 | 60 | | • |
| | 213-11471 | BT50H160WE18 AD+B | 50 | 18 | 160 | 50 | 63 | | • |
| | 213-11462 | BT50H160WE20 AD+B | 50 | 20 | 160 | 52 | 69 | | • |
| | 213-11472 | BT50H160WE25 AD+B | 50 | 25 | 160 | 65 | 72 | | • |
| | 213-11473 | BT50H160WE32 AD+B | 50 | 32 | 160 | 72 | - | | • |

ZYLINDERSCHAFTAUFNAHME WELDON-LANG AUSFÜRUNG
END MILL HOLDERS WELDON-LONG PROJECTION TYPE
ОПРАВКИ С КРЕПЛЕНИЕМ WELDON. УДЛИНЕННОЕ ИСПОЛНЕНИЕ.

MANDRINS POUR OUTILS TYPE WELDON-SÉRIE LONGUE
MANDRINI PORTAFRESE TIPO WELDON-SERIE LUNGA
威尔登式端铣夹具-加长凸点式

DIN 1835 B



| Code N. | Description | ISO | D | L | D1 | D3 | G6,3 8000 RPM |
|-----------|-------------------|-----|----|-----|----|----|---------------|
| 213-11474 | BT40H200WE06 AD+B | 40 | 6 | 200 | 25 | 38 | • |
| 213-11475 | BT40H200WE08 AD+B | 40 | 8 | 200 | 28 | 41 | • |
| 213-11476 | BT40H200WE10 AD+B | 40 | 10 | 200 | 35 | 43 | • |
| 213-11477 | BT40H200WE12 AD+B | 40 | 12 | 200 | 42 | 48 | • |
| 213-11478 | BT40H200WE14 AD+B | 40 | 14 | 200 | 44 | 48 | • |
| 213-11479 | BT40H200WE16 AD+B | 40 | 16 | 200 | 48 | - | • |
| 213-11480 | BT40H200WE18 AD+B | 40 | 18 | 200 | 50 | - | • |
| 213-11481 | BT40H200WE20 AD+B | 40 | 20 | 200 | 52 | - | • |
| 213-11482 | BT40H200WE25 AD+B | 40 | 25 | 200 | 65 | - | • |
| 213-11483 | BT40H200WE32 AD+B | 40 | 32 | 200 | 72 | - | • |
| 213-11484 | BT50H200WE06 AD+B | 50 | 6 | 200 | 25 | 42 | • |
| 213-11485 | BT50H200WE08 AD+B | 50 | 8 | 200 | 28 | 45 | • |
| 213-11486 | BT50H200WE10 AD+B | 50 | 10 | 200 | 35 | 49 | • |
| 213-11487 | BT50H200WE12 AD+B | 50 | 12 | 200 | 42 | 55 | • |
| 213-11488 | BT50H200WE14 AD+B | 50 | 14 | 200 | 44 | 57 | • |
| 213-11489 | BT50H200WE16 AD+B | 50 | 16 | 200 | 48 | 60 | • |
| 213-11490 | BT50H200WE18 AD+B | 50 | 18 | 200 | 50 | 63 | • |
| 213-11491 | BT50H200WE20 AD+B | 50 | 20 | 200 | 52 | 63 | • |
| 213-11492 | BT50H200WE25 AD+B | 50 | 25 | 200 | 65 | 72 | • |
| 213-11463 | BT50H200WE32 AD+B | 50 | 32 | 200 | 72 | - | • |

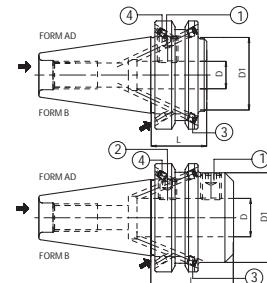
H 200

Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| Tape | Screw | Quantity | Screw | Quantity | D | Locking screw | Quantity |
|--------|-----------------|----------|-----------------|----------|-------|---------------|----------|
| | | | | | | | |
| ISO 40 | 811-102002 M4X5 | 2 | 811-102002 M4X5 | 2 | 6 | 811-106001 | 1 |
| ISO 50 | 811-102002 M4X5 | 2 | 811-102010 M5X6 | 2 | 8 | 811-106002 | 1 |
| | | | | | 10 | 811-106004 | 1 |
| | | | | | 12,14 | 811-106005 | 1 |
| | | | | | 16,18 | 811-106006 | 1 |
| | | | | | 20 | 811-106007 | 1 |
| | | | | | 25 | 811-106008 | 2 |
| | | | | | 32 | 811-106009 | 2 |

KURZE ZYLINDERSCHAFTAUFNAHME WELDON
SHORT END MILL WELDON HOLDERS
ОПРАВКИ С КРЕПЛЕНИЕМ WELDON. КОРОТКОЕ ИСПОЛНЕНИЕ

MANDRINS COURTS PORTE-FRAISE TYPE WELDON
MANDRINI CORTI PORTAFRESE TIPO WELDON
威尔登式短铣刀夹具



DIN 1835 B

| Code N. | Description | ISO | D | L | D1 | G6,3 12000 |
|--------------|------------------|-----|----|----|------|-----------------------|
| * 263-115600 | BT30H35WE06 AD | 30 | 6 | 35 | 25 | - |
| * 263-115610 | BT30H35WE08 AD | 30 | 8 | 35 | 28 | - |
| * 263-115620 | BT30H35WE10 AD | 30 | 10 | 35 | 35 | - |
| * 263-115630 | BT30H35WE12 AD | 30 | 12 | 35 | 42 | - |
| * 263-115640 | BT30H35WE16 AD | 30 | 16 | 35 | 42 | - |
| * 263-115650 | BT30H35WE20 AD | 30 | 20 | 35 | 43 | - |
| * 263-115660 | BT30H35WE25 AD | 30 | 25 | 35 | 45,5 | - |
| 213-11493 | BT40H35WE16 AD+B | 40 | 16 | 35 | 44 | ● *Ausführung Form AD |
| 213-11494 | BT40H35WE20 AD+B | 40 | 20 | 35 | 44 | ● *Execution form AD |
| 213-11495 | BT40H35WE25 AD+B | 40 | 25 | 35 | 44 | ● *Forme AD |
| 213-11496 | BT40H60WE25 AD+B | 40 | 25 | 60 | 49 | ● *Forma AD |
| 213-11497 | BT40H70WE32 AD+B | 40 | 32 | 70 | 72 | ● *Исполнение AD |
| 213-11498 | BT50H44WE16 AD+B | 50 | 16 | 44 | 70 | ● *执行形式 AD |
| 213-11499 | BT50H44WE20 AD+B | 50 | 20 | 44 | 70 | ● |
| 263-11401 | BT50H44WE25 AD+B | 50 | 25 | 44 | 70 | ● |
| 263-11402 | BT50H44WE32 AD+B | 50 | 32 | 44 | 80 | ● |

Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

Extrakurze und feste Ausführung

| Type | Screw | Quantity | Screw | Quantity |
|-------|-----------------|----------|-----------------|----------|
| | ③ | | ④ | |
| ISO40 | 811-102002 M4X5 | 2 | 811-102002 M4X5 | 2 |
| ISO50 | 811-102002 M4X5 | 2 | 811-102010 M5X6 | 2 |

Extra short and Rigid Version

Экстракороткое и жесткое исполнение

Extra courts et version rigide

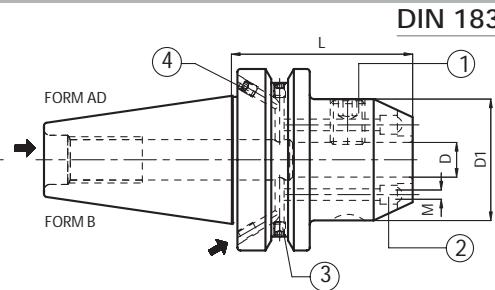
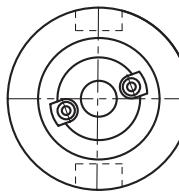
Extra corti e versione rigida

超短及坚固型

| Code N. | Locking screw | Quantity | Locking screw | Quantity |
|------------|---------------|----------|---------------|----------|
| 263-115600 | 811-106001 | 1 | | |
| 263-115610 | 811-106002 | 1 | | |
| 263-115620 | 811-106004 | 1 | | |
| 263-115630 | 811-106013 | 1 | | |
| 263-115640 | 811-106026 | 1 | | |
| 263-115650 | 811-106024 | 1 | | |
| 263-115660 | 811-106026 | 1 | | |
| 213-11493 | 811-106006 | 1 | | |
| 213-11494 | 811-106027 | 1 | | |
| 213-11495 | 811-106027 | 1 | | |
| 213-11496 | 811-106014 | 1 | 811-106027 | 1 |
| 213-11497 | 811-106009 | 1 | 811-106046 | 1 |
| 213-11498 | 811-106006 | 1 | - | |
| 213-11499 | 811-106007 | 1 | - | |
| 263-11401 | 811-106008 | 1 | - | |
| 263-11402 | 811-106009 | 1 | - | |

ZYLINDERSCHAFTAUFNAHME WELDON MIT SPRITZDÜSEN
END MILL HOLDERS WELDON
WITH COOLANT NOSE FRONT FACE
ОПРАВКИ С КРЕПЛЕНИЕМ WELDON И ОТВЕРСТИЯМИ
ДЛЯ СОЖ НА ТОРЦЕ

MANDRINS POUR Outils TYPE WELDON
AVEC BUSE D'ARROSAGE
MANDRINI PORTAFRESE TIPO WELDON
CON SFERE DI LUBRIFICAZIONE
威尔登式端铣夹具，配备出水结构



| Code N. | Description | ISO | D | L | D1 | G6,3 8000 RPM |
|-----------|------------------------|-----|----|-----|----|---------------|
| 263-11403 | BT40H50WE06-CNFF AD+B | 40 | 6 | 50 | 25 | • |
| 263-11404 | BT40H50WE08-CNFF AD+B | 40 | 8 | 50 | 28 | • |
| 263-11405 | BT40H63WE10-CNFF AD+B | 40 | 10 | 63 | 35 | • |
| 263-11406 | BT40H63WE12-CNFF AD+B | 40 | 12 | 63 | 42 | • |
| 263-11407 | BT40H63WE14-CNFF AD+B | 40 | 14 | 63 | 44 | • |
| 263-11408 | BT40H63WE16-CNFF AD+B | 40 | 16 | 63 | 48 | • |
| 263-11409 | BT40H63WE18-CNFF AD+B | 40 | 18 | 63 | 50 | • |
| 263-11410 | BT40H63WE20-CNFF AD+B | 40 | 20 | 63 | 52 | • |
| 263-11411 | BT40H90WE25-CNFF AD+B | 40 | 25 | 90 | 65 | • |
| 263-11412 | BT40H100WE32-CNFF AD+B | 40 | 32 | 100 | 72 | • |
| 263-11413 | BT40H105WE40-CNFF AD+B | 40 | 40 | 105 | 80 | • |
| 263-11414 | BT50H63WE06-CNFF AD+B | 50 | 6 | 63 | 25 | • |
| 263-11415 | BT50H63WE08-CNFF AD+B | 50 | 8 | 63 | 28 | • |
| 263-11416 | BT50H70WE10-CNFF AD+B | 50 | 10 | 70 | 35 | • |
| 263-11417 | BT50H80WE12-CNFF AD+B | 50 | 12 | 80 | 42 | • |
| 263-11418 | BT50H80WE14-CNFF AD+B | 50 | 14 | 80 | 44 | • |
| 263-11419 | BT50H80WE16-CNFF AD+B | 50 | 16 | 80 | 48 | • |
| 263-11420 | BT50H80WE18-CNFF AD+B | 50 | 18 | 80 | 50 | • |
| 263-11421 | BT50H80WE20-CNFF AD+B | 50 | 20 | 80 | 52 | • |
| 263-11422 | BT50H100WE25-CNFF AD+B | 50 | 25 | 100 | 65 | • |
| 263-11423 | BT50H105WE32-CNFF AD+B | 50 | 32 | 105 | 72 | • |
| 263-11424 | BT50H120WE40-CNFF AD+B | 50 | 40 | 120 | 80 | • |

Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| Type | Screw | Quantity | Screw | Quantity |
|-------|-----------------|----------|-----------------|----------|
| | | | | |
| ISO40 | 811-102002 M4X5 | 2 | 811-102002 M4X5 | 2 |
| ISO50 | 811-102002 M4X5 | 2 | 811-102010 M5X6 | 2 |
| D | Locking screw | Quantity | Coolant nozzle | M |
| | | | | |
| 6 | 811-106001 | 1 | PWZ1005D6x4.5 | D2.5 |
| 8 | 811-106002 | 1 | PWZ1005D6x4.5 | D2.5 |
| 10 | 811-106004 | 1 | PWZ1005D6x4.5 | D2.5 |
| 12,14 | 811-106005 | 1 | PWZ1005D6x4.5 | D2.5 |
| 16,18 | 811-106006 | 1 | PWZ1008D10x7 | M4 |
| 20 | 811-106007 | 1 | PWZ1008D10x7 | M4 |
| 25 | 811-106008 | 2 | PWZ1012D12x8 | M5 |
| 32 | 811-106009 | 2 | PWZ1012D12x8 | M5 |
| 40 | 811-106009 | 2 | PWZ1012D12x8 | M5 |

Ausführung mit Kühlmittelzufuhr zentral und an dem Bund.

Durch die seitlichen Bohrungen und die Kühlmitteldüsen ermöglicht dieses System das Kühlmittel direkt an den Kontaktpunkt des Werkzeugs zu leiten.

Außerdem erfolgt Zentral-Kühlmittelzufuhr, wenn zwei Schrauben die Bohrungen verschließen.

With central and lateral cooling possibility.

This type of system, thanks to two lateral holes, permits to direct the cooling jet through the two balls to the connection point of the tool.

Besides, with the application of two screws on the balls, you can have the lubrication trough the centre.

Avec possibilité d'arrosage soit central, soit latéral.

Ce système, avec les trous latéraux, permet, avec les deux billes d'arrosage de diriger le liquide sur le point de contact de l'outil. De plus, il est possible d'avoir l'arrosage au centre en bouchant avec des vis les trous des billes.

Con possibilità di refrigerazione sia centrale che laterale.

Questo tipo di sistema grazie ai due fori laterali, permette, mediante le due sfere di dirigere il getto del refrigerante sul punto di contatto dell'utensile. Inoltre, con l'applicazione di due grani sulle sfere si ottiene la lubrificazione attraverso il centro.

Возможность центрального и бокового охлаждения

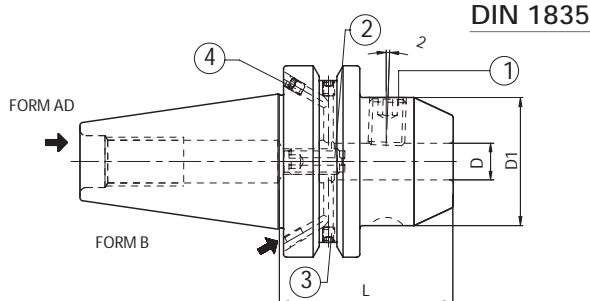
Благодаря двум боковым отверстиям, эта система позволяет направлять СОЖ к месту крепления режущего инструмента. Если закрепить два винта в отверстиях фланца, СОЖ подается через центр.

具备中央及侧面冷却能力

这种类型的系统，由于具备两个侧孔，它可将冷却喷嘴通过两个球头导向工具的连接点。

另外，在球头上使用两个螺丝，可使润滑剂通过中心。

ZYLINDERSCHAFTAUFNAHME WHISTLE NOTCH
END MILL HOLDERS WHISTLE NOTCH
ОПРАВКИ С КРЕПЛЕНИЕМ WHISTLE NOTCH MANDRINS POUR OUTILS TYPE WHISTLE NOTCH
MANDRINI PORTAFRESE TIPO WHISTLE NOTCH
侧固式铣刀柄



| Code N. | Description | ISO | D | L | D1 | G6,3 12000 RPM |
|-----------|-------------------|-----|----|-----|----|----------------|
| 213-31412 | BT40H50WN06 AD+B | 40 | 6 | 50 | 25 | • |
| 213-31413 | BT40H50WN08 AD+B | 40 | 8 | 50 | 28 | • |
| 213-31414 | BT40H63WN10 AD+B | 40 | 10 | 63 | 35 | • |
| 213-31415 | BT40H63WN12 AD+B | 40 | 12 | 63 | 42 | • |
| 213-31416 | BT40H63WN14 AD+B | 40 | 14 | 63 | 44 | • |
| 213-31417 | BT40H63WN16 AD+B | 40 | 16 | 63 | 48 | • |
| 213-31418 | BT40H63WN18 AD+B | 40 | 18 | 63 | 50 | • |
| 213-31419 | BT40H63WN20 AD+B | 40 | 20 | 63 | 52 | • |
| 213-31420 | BT40H90WN25 AD+B | 40 | 25 | 90 | 65 | • |
| 213-31421 | BT40H100WN32 AD+B | 40 | 32 | 100 | 72 | • |
| 213-31422 | BT40H105WN40 AD+B | 40 | 40 | 105 | 80 | • |
| 213-31423 | BT50H63WN06 AD+B | 50 | 6 | 63 | 25 | • |
| 213-31424 | BT50H63WN08 AD+B | 50 | 8 | 63 | 28 | • |
| 213-31425 | BT50H70WN10 AD+B | 50 | 10 | 70 | 35 | • |
| 213-31426 | BT50H80WN12 AD+B | 50 | 12 | 80 | 42 | • |
| 213-31427 | BT50H80WN14 AD+B | 50 | 14 | 80 | 44 | • |
| 213-31428 | BT50H80WN16 AD+B | 50 | 16 | 80 | 48 | • |
| 213-31429 | BT50H80WN18 AD+B | 50 | 18 | 80 | 50 | • |
| 213-31430 | BT50H80WN20 AD+B | 50 | 20 | 80 | 52 | • |
| 213-31431 | BT50H100WN25 AD+B | 50 | 25 | 100 | 65 | • |
| 213-31432 | BT50H105WN32 AD+B | 50 | 32 | 105 | 72 | • |
| 213-31433 | BT50H120WN40 AD+B | 50 | 40 | 120 | 80 | • |

Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

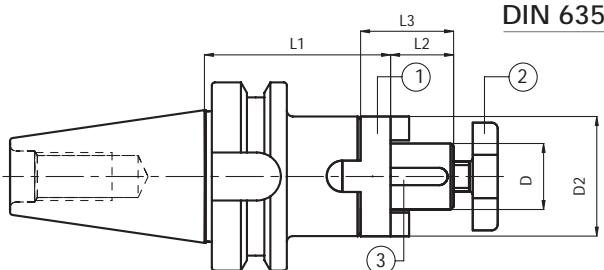
| Type | Screw | Quantity | Screw | Quantity |
|-------|-----------------|----------|-----------------|----------|
| | ③ | | ④ | |
| ISO40 | 811-102002 M4X5 | 2 | 811-102002 M4X5 | 2 |
| ISO50 | 811-102002 M4X5 | 2 | 811-102010 M5X6 | 2 |
| D | Locking screw | Quantity | Stop screw | M |
| | ① | | ② | |
| 6 | 811-106001 | 1 | 811-303043 | 1 |
| 8 | 811-106002 | 1 | 811-303081 | 1 |
| 10 | 811-106004 | 1 | 811-303082 | 1 |
| 12,14 | 811-106005 | 1 | 811-303083 | 1 |
| 16,18 | 811-106006 | 1 | 811-303084 | 1 |
| 20 | 811-106007 | 1 | 811-303084 | 1 |
| 25 | 811-106008 | 2 | 811-303085 | 1 |
| 32 | 811-106009 | 2 | 811-303085 | 1 |
| 40 | 811-106009 | 2 | 811-303085 | 1 |

KOMBI - AUFSTECKFRÄSDORNE
COMBI-SHELL MILL ADAPTORS

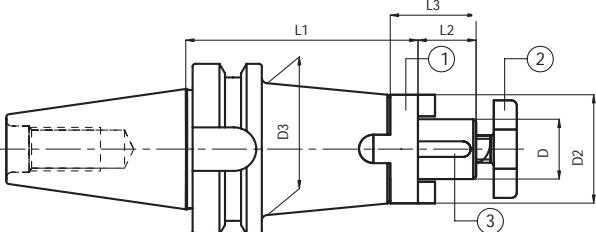
КОМБИНИРОВАННЫЕ ОПРАВКИ ДЛЯ НАСАДНЫХ ФРЕЗ

MANDRINS PORTE- FRAISES A DOUBLE USAGE
MANDRINI PORTAFRESE COMBINATI

复合式平面铣刀接头



| | Code N. | Description | ISO | D | L1 | L2 | L3 | D2 | G6,3 8000 RPM |
|----------|-----------|-------------|-----|----|----|----|----|----|---------------|
| STANDARD | 216-11527 | BT30H50D16C | 30 | 16 | 50 | 17 | 27 | 32 | • |
| | 216-11528 | BT30H50D22C | 30 | 22 | 50 | 19 | 31 | 40 | • |
| | 216-11529 | BT30H55D27C | 30 | 27 | 55 | 21 | 33 | 48 | • |
| | 216-11501 | BT40H55D16C | 40 | 16 | 55 | 17 | 27 | 32 | • |
| | 216-11502 | BT40H55D22C | 40 | 22 | 55 | 19 | 31 | 40 | • |
| | 216-11503 | BT40H55D27C | 40 | 27 | 55 | 21 | 33 | 48 | • |
| | 216-11504 | BT40H60D32C | 40 | 32 | 60 | 24 | 38 | 58 | • |
| | 216-11505 | BT40H60D40C | 40 | 40 | 60 | 27 | 41 | 70 | • |
| | 216-11507 | BT50H70D16C | 50 | 16 | 70 | 17 | 27 | 32 | • |
| | 216-11508 | BT50H70D22C | 50 | 22 | 70 | 19 | 31 | 40 | • |
| | 216-11509 | BT50H70D27C | 50 | 27 | 70 | 21 | 33 | 48 | • |
| | 216-11510 | BT50H70D32C | 50 | 32 | 70 | 24 | 38 | 58 | • |
| | 216-11511 | BT50H70D40C | 50 | 40 | 70 | 27 | 41 | 70 | • |



| | Code N. | Description | ISO | D | L1 | L2 | L3 | D2 | D3 | G6,3 8000 RPM |
|-------|-----------|--------------|-----|----|-----|----|----|----|----|---------------|
| H 100 | 216-11536 | BT30H100D16C | 30 | 16 | 100 | 17 | 27 | 32 | - | • |
| | 216-11537 | BT30H100D22C | 30 | 22 | 100 | 19 | 31 | 40 | - | • |
| | 216-11538 | BT30H100D27C | 30 | 27 | 100 | 21 | 33 | 48 | - | • |
| | 216-11517 | BT40H100D16C | 40 | 16 | 100 | 17 | 27 | 32 | 44 | • |
| | 216-11518 | BT40H100D22C | 40 | 22 | 100 | 19 | 31 | 40 | - | • |
| | 216-11519 | BT40H100D27C | 40 | 27 | 100 | 21 | 33 | 48 | - | • |
| | 216-11520 | BT40H100D32C | 40 | 32 | 100 | 24 | 38 | 58 | - | • |
| | 216-11521 | BT40H100D40C | 40 | 40 | 100 | 27 | 41 | 70 | - | • |
| | 216-11522 | BT50H100D16C | 50 | 16 | 100 | 17 | 27 | 32 | 44 | • |
| | 216-11523 | BT50H100D22C | 50 | 22 | 100 | 19 | 31 | 40 | 50 | • |
| | 216-11524 | BT50H100D27C | 50 | 27 | 100 | 21 | 33 | 48 | 60 | • |
| | 216-11525 | BT50H100D32C | 50 | 32 | 100 | 24 | 38 | 58 | - | • |
| | 216-11526 | BT50H100D40C | 50 | 40 | 100 | 27 | 41 | 70 | - | • |

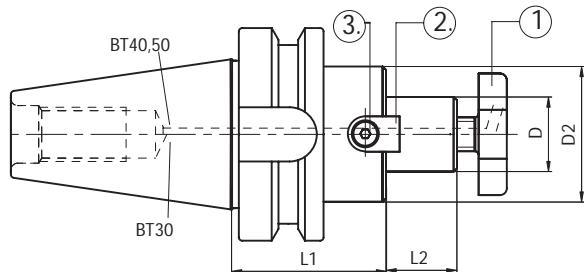
Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| D | Ring | Cross screw | Key | Wrench |
|----|-----------|-------------|------------|------------|
| 16 | ① | ② | ③ | |
| 22 | 814-30001 | 811-107003 | 814-201010 | 816-130002 |
| 27 | 814-30002 | 811-107004 | 814-201020 | 816-130003 |
| 32 | 814-30003 | 811-107005 | 814-201030 | 816-130004 |
| 40 | 814-30004 | 811-107006 | 814-211040 | 816-130005 |
| | 814-30005 | 811-107007 | 814-201050 | 816-130006 |

AUFSTECKFRÄSDORNE FÜR FRÄSER
MIT QUERNUT MIT GRÖßEREM BUND
FACE MILL HOLDERS-TENONS DRIVE
WITH BIGGER FLANGE DIAMETER
ОПРАВКИ ДЛЯ НАСАДНЫХ ФРЕЗ С УВЕЛИЧЕННЫМ
ДИАМЕТРОМ КОРПУСА

MANDRINS PORTE-FRAISE-ENTRAINEMENT
PAR TENONS BRIDE AJOUTEE
MANDRINI PORTAFRESE A TRASCINAMENTO
FISSO CON FLANGIA MAGGIORATA
平面铣刀柄 - 凸榫驱动 - 配备更大法兰直径

ISO 3937



| Code N. | Description | ISO | D | L1 | L2 | D2 | G6,3 8000 RPM |
|-------------|-------------|-----|----|----|----|----|---------------|
| 216-71501 | BT30H35D16F | 30 | 16 | 35 | 17 | 38 | • |
| 216-71502 | BT30H40D22F | 30 | 22 | 40 | 19 | 48 | • |
| 216-71503 | BT30H40D27F | 30 | 27 | 40 | 21 | 58 | • |
| 216-71507 | BT40H45D16F | 40 | 16 | 45 | 17 | 38 | • |
| 216-71508 | BT40H45D22F | 40 | 22 | 45 | 19 | 48 | • |
| 216-71509 | BT40H45D27F | 40 | 27 | 45 | 21 | 58 | • |
| 216-71510 | BT40H50D32F | 40 | 32 | 50 | 24 | 78 | • |
| ▲ 216-71511 | BT40H55D40F | 40 | 40 | 55 | 27 | 88 | • |
| ▲ 216-71517 | BT50H60D16F | 50 | 16 | 60 | 17 | 38 | • |
| 216-71518 | BT50H60D22F | 50 | 22 | 60 | 19 | 48 | • |
| 216-71519 | BT50H60D27F | 50 | 27 | 60 | 21 | 58 | • |
| 216-71520 | BT50H60D32F | 50 | 32 | 60 | 24 | 78 | • |
| ▲ 216-71521 | BT50H60D40F | 50 | 40 | 60 | 27 | 88 | • |

▲ Zur gebohrten Ausführung, siehen Sie bitte Seite 93

▲ For drilled version, please see on page 93

▲ Pour le modèle percé voir à la page 93

▲ Per versione forata vedi pag 93

▲ Оправки для фланцевого крепления фрез на стр. 93

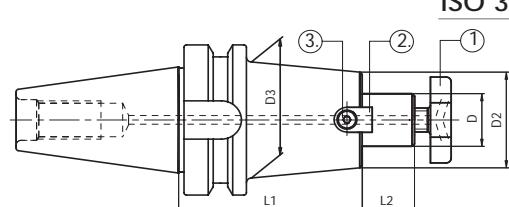


Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| D | Cross screw | Cross screw on enquiry | Tenon | Screw | Wrench |
|----|-------------|---------------------------|------------|------------|------------|
| 16 | ① | ① | ② | ③ | |
| 16 | 811-107003 | 811-107013 | 814-202280 | 811-101004 | 816-130002 |
| 22 | 811-107004 | 811-107014 | 814-202250 | 811-101011 | 816-130003 |
| 27 | 811-107005 | 811-107015 | 814-202270 | 811-101018 | 816-130004 |
| 32 | 811-107006 | 811-107016 | 814-202630 | 811-101029 | 816-130005 |
| 40 | 811-107007 | 811-107017 | 814-202710 | 811-101029 | 816-130006 |

AUFSTECKFRÄSDORNE FÜR FRÄSER
MIT QUERNUT-LANGE AUSFÜHRUNG
FACE MILL HOLDERS-TENONS DRIVE-LONG PROJECTION TYPE
ОПРАВКИ ДЛЯ НАСАДНЫХ ФРЕЗ. УДЛИНЕННОЕ ИСПОЛНЕНИЕ

MANDRINS PORTE-FRAISE-ENTRAINEMENT
PAR TENONS-SÉRIE LONGUE
MANDRINI PORTAFRESE A TRASCINAMENTO FISSO-SÉRIE LUNGA
平面铣刀柄 - 凸榫驱动加长凸点式



ISO 3937

| | Code N. | Description | ISO | D | L1 | L2 | D2 | D3 | | G6,3 8000 |
|-------|-----------|--------------|-----|----|-----|----|----|----|---|-----------|
| H 100 | 216-71522 | BT40H100D16F | 40 | 16 | 100 | 17 | 39 | - | - | • |
| | 216-71526 | BT40H100D22F | 40 | 22 | 100 | 19 | 46 | 48 | A | • |
| | 216-71530 | BT40H100D22F | 40 | 22 | 100 | 19 | 50 | 59 | B | • |
| | 216-71599 | BT40H100D27F | 40 | 27 | 100 | 21 | 55 | - | C | • |
| | 266-71501 | BT40H100D32F | 40 | 32 | 100 | 24 | 66 | - | - | • |
| | 266-71502 | BT40H100D40F | 40 | 40 | 100 | 27 | 70 | - | - | • |
| | 216-71589 | BT50H100D16F | 50 | 16 | 100 | 17 | 39 | - | - | • |
| | 216-71534 | BT50H100D22F | 50 | 22 | 100 | 19 | 46 | 49 | A | • |
| | 216-71539 | BT50H100D22F | 50 | 22 | 100 | 19 | 50 | 60 | B | • |
| | 216-71544 | BT50H100D27F | 50 | 27 | 100 | 21 | 55 | 78 | C | • |
| H 160 | 216-71590 | BT50H100D32F | 50 | 32 | 100 | 24 | 66 | 78 | - | • |
| | 266-71503 | BT50H100D40F | 50 | 40 | 100 | 27 | 70 | 78 | - | • |
| | 216-71523 | BT40H160D16F | 40 | 16 | 160 | 17 | 39 | - | - | • |
| | 216-71527 | BT40H160D22F | 40 | 22 | 160 | 19 | 46 | 48 | A | • |
| | 216-71531 | BT40H160D22F | 40 | 22 | 160 | 19 | 50 | 59 | B | • |
| | 216-71591 | BT50H160D16F | 50 | 16 | 160 | 17 | 39 | - | - | • |
| | 216-71535 | BT50H160D22F | 50 | 22 | 160 | 19 | 46 | 49 | A | • |
| | 216-71540 | BT50H160D22F | 50 | 22 | 160 | 19 | 50 | 60 | B | • |
| | 216-71545 | BT50H160D27F | 50 | 27 | 160 | 21 | 55 | 78 | C | • |
| | 216-71592 | BT50H160D32F | 50 | 32 | 160 | 24 | 66 | 78 | - | • |
| H 200 | 266-71511 | BT50H160D40F | 50 | 40 | 160 | 27 | 70 | 78 | - | • |
| | 216-71524 | BT40H200D16F | 40 | 16 | 200 | 17 | 39 | - | - | • |
| | 216-71528 | BT40H200D22F | 40 | 22 | 200 | 19 | 46 | 48 | A | • |
| | 216-71593 | BT50H200D16F | 50 | 16 | 200 | 17 | 39 | - | - | • |
| | 216-71536 | BT50H200D22F | 50 | 22 | 200 | 19 | 46 | 49 | A | • |
| | 216-71541 | BT50H200D22F | 50 | 22 | 200 | 19 | 50 | 60 | B | • |
| | 216-71546 | BT50H200D27F | 50 | 27 | 200 | 21 | 55 | 78 | C | • |
| | 216-71594 | BT50H200D32F | 50 | 32 | 200 | 24 | 66 | 78 | - | • |
| | 266-71512 | BT50H200D40F | 50 | 40 | 200 | 27 | 70 | 78 | - | • |

A/Für Fräser D50 - B/Für Fräser D63 - C/Für Fräser D80

A/Suitable for milling cutters D50 - B/Suitable for milling cutters D63 - C/Suitable for milling cutters D80

A/подходит для фрез D50 - B/подходит для фрез D63 - C/подходит для фрез D80

A/Adaptes pour fraises D50 - B/Adaptes pour fraises D63 - C/Adaptes pour fraises D80

A/Adatti per frese D50 - B/Adatti per frese D63 - C/Adatti per frese D80

A/适用于 D50 铣刀 - B/适用于 D63 铣刀 - C/适用于 D80 铣刀

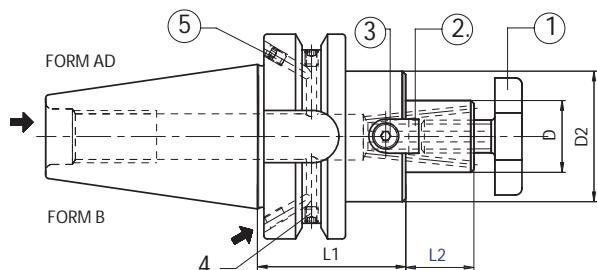
Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| D/D2 | Cross screw | Cross screw on enquiry | Tenon | Screw | Wrench | |
|-------|-------------|------------------------|------------|------------|------------|--------------|
| | ① | ① | ② | ③ | | |
| 16 | 811-107003 | 811-107013 | 814-202280 | 811-101004 | 816-130002 | pag. 468-469 |
| 22/46 | 811-107004 | 811-107014 | 814-202250 | 811-101011 | 816-130003 | pag. 468-469 |
| 22/50 | 811-107004 | 811-107014 | 814-202260 | 811-101012 | 816-130003 | pag. 468-469 |
| 27 | 811-107005 | 811-107015 | 814-202270 | 811-101017 | 816-130004 | pag. 468-469 |
| 32 | 811-107006 | 811-107016 | 814-202290 | 811-101029 | 816-130005 | pag. 468-469 |
| 40 | 811-107007 | 811-107017 | 814-202180 | 811-101028 | 816-130006 | pag. 468-469 |

AUFSTECKFRÄSDORNE FÜR FRÄSER MIT QUERNUT
UND KÜHLMITTELZUFUHR MIT GRÖBEREM BUND
FACE MILL HOLDERS-TENONS DRIVE WITH INTERNAL
COOLANT SUPPLY WITH BIGGER FLANGE DIAMETER
ОПРАВКИ ДЛЯ НАСАДНЫХ ФРЕЗ С ВНУТРЕННЕЙ ПОДАЧЕЙ
СОЖ И УВЕЛИЧЕННЫМ ДИАМЕТРОМ КОРПУСА

MANDRINS PORTE-FRAISE-ENTRAINEMENT
PAR TENONS AVEC ARROSAGE INTERNE BRIDE AJOUTEE
MANDRINI PORTAFRESE A TRASCINAMENTO FISSO
CON PASSAGGIO REFRIGERANTE CON FLANGIA MAGGIORATA
平面铣刀柄 - 凸榫驱动配备内部冷却剂供应带更大法兰直径

ISO 3937



| Code N. | Description | ISO | D | L1 | L2 | D2 | G6,3 8000 RPM |
|-----------|------------------|-----|----|----|----|----|---------------|
| 216-71401 | BT40H45D16F AD+B | 40 | 16 | 45 | 17 | 38 | • |
| 216-71402 | BT40H45D22F AD+B | 40 | 22 | 45 | 19 | 48 | • |
| 216-71403 | BT40H45D27F AD+B | 40 | 27 | 45 | 21 | 58 | • |
| 216-71404 | BT40H50D32F AD+B | 40 | 32 | 50 | 24 | 78 | • |
| 216-71405 | BT40H55D40F AD+B | 40 | 40 | 55 | 27 | 88 | • |
| 216-71406 | BT50H60D16F AD+B | 50 | 16 | 60 | 17 | 38 | • |
| 216-71407 | BT50H60D22F AD+B | 50 | 22 | 60 | 19 | 48 | • |
| 216-71408 | BT50H60D27F AD+B | 50 | 27 | 60 | 21 | 58 | • |
| 216-71409 | BT50H60D32F AD+B | 50 | 32 | 60 | 24 | 78 | • |
| 216-71410 | BT50H60D40F AD+B | 50 | 40 | 60 | 27 | 88 | • |



pag. 468-469

pag. 468-469

pag. 468-469

Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

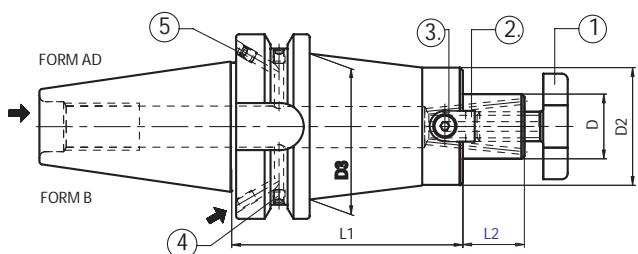
| Tape | Screw | Quantity | Screw | Quantity |
|--------|-----------------|----------|-----------------|----------|
| | ④ | | ⑤ | |
| ISO 40 | 811-102002 M4X5 | 2 | 811-102002 M4X5 | 2 |
| ISO 50 | 811-102002 M4X5 | 2 | 811-102010 M5X6 | 2 |

| D | Cross screw | Tenon | Screw | Wrench |
|----|-------------|------------|------------|------------|
| 16 | ① | ② | ③ | |
| 22 | 811-107003 | 814-202280 | 811-101004 | 816-130002 |
| 27 | 811-107004 | 814-202250 | 811-101011 | 816-130003 |
| 32 | 811-107005 | 814-202270 | 811-101018 | 816-130004 |
| 40 | 811-107006 | 814-202630 | 811-101029 | 816-130005 |
| | 811-107007 | 814-202710 | 811-101029 | 816-130006 |

AUFSTECKFRÄSDORNE FÜR FRÄSER UND QUERNUT MIT
KÜHLMITTELZUFUHR-LANGE AUSFÜHRUNG
FACE MILL HOLDERS-TENONS DRIVE-WITH INTERNAL
COOLANT SUPPLY-LONG
ОПРАВКИ ДЛЯ НАСАДНЫХ ФРЕЗ С ВНУТРЕННЕЙ ПОДАЧЕЙ СОЖ.
УДЛИНЕННОЕ ИСПОЛНЕНИЕ

MANDRINS PORTE-FRAISE-ENTRAINEMENT PAR TENONS
AVEC ARROSAGE INTERNE-LONGUE
MANDRINI PORTAFRESE A TRASCINAMENTO FISSO
CON PASSAGGIO REFRIGERANTE-LUNGA
平面铣刀柄 - 凸榫驱动配备内部冷却剂供应加长

ISO 3937



| | Code N. | Description | ISO | D | L1 | L2 | D2 | D3 | G6,3 8000 RPM |
|-------|-----------|-------------------|-----|----|-----|----|----|----|---------------|
| H 100 | 216-71411 | BT40H100D16F AD+B | 40 | 16 | 100 | 17 | 32 | 40 | • |
| | 216-71412 | BT40H100D22F AD+B | 40 | 22 | 100 | 19 | 40 | 48 | • |
| | 216-71413 | BT40H100D27F AD+B | 40 | 27 | 100 | 21 | 48 | - | • |
| | 216-71414 | BT40H100D32F AD+B | 40 | 32 | 100 | 24 | 58 | - | • |
| | 216-71425 | BT40H100D40F AD+B | 40 | 40 | 100 | 27 | 70 | - | • |
| | 216-71415 | BT50H100D16F AD+B | 50 | 16 | 100 | 17 | 32 | 40 | • |
| | 216-71416 | BT50H100D22F AD+B | 50 | 22 | 100 | 19 | 40 | 52 | • |
| | 216-71417 | BT50H100D27F AD+B | 50 | 27 | 100 | 21 | 48 | 55 | • |
| | 216-71418 | BT50H100D32F AD+B | 50 | 32 | 100 | 24 | 58 | 65 | • |
| | 216-71419 | BT50H100D40F AD+B | 50 | 40 | 100 | 27 | 70 | - | • |



pag. 468-469



pag. 468-469



pag. 468-469

Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

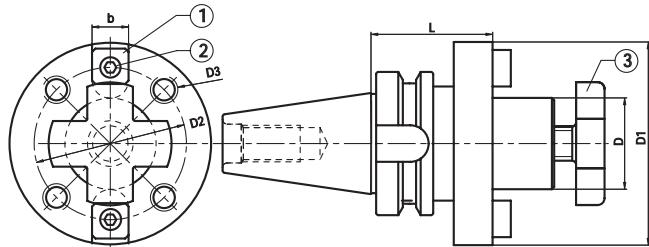
| Tape | Screw | Quantity | Screw | Quantity |
|--------|-----------------|----------|-----------------|----------|
| | ④ | | ⑤ | |
| ISO 40 | 811-102002 M4X5 | 2 | 811-102002 M4X5 | 2 |
| ISO 50 | 811-102002 M4X5 | 2 | 811-102010 M5X6 | 2 |

| D | Cross screw | Tenon | Screw | Wrench |
|----|-------------|-----------|------------|------------|
| | ① | ② | ③ | |
| 16 | 811-107003 | 814-20214 | 811-101003 | 816-130002 |
| 22 | 811-107004 | 814-20215 | 811-101010 | 816-130003 |
| 27 | 811-107005 | 814-20216 | 811-101017 | 816-130004 |
| 32 | 811-107006 | 814-20217 | 811-101027 | 816-130005 |
| 40 | 811-107007 | 814-20218 | 811-101028 | 816-130006 |

AUFSTECKFRÄSERDORNE FÜR MESSERKÖPFE
FACE MILL HOLDER FOR FACE MILLING CUTTERS
ОПРАВКИ ДЛЯ ФЛАНЦЕВОГО КРЕПЛЕНИЯ ФРЕЗ

MANDRINS PORTE-FRAISE POUR FRAISES A SURFACER
MANDRINI PORTAFRESE PER FRESE A SPIANARE
平面铣刀柄-夹持端铣刀

DIN 6357



| Code N. | Description | ISO | D | L | D1 | D2 | D3 | b | G6,3 8000 RPM |
|-------------|-------------|-----|----|----|-----|-------|-----|------|---------------|
| ▲ 216-21501 | BT40H60D40 | 40 | 40 | 60 | 89 | 66.7 | M12 | 15.9 | • |
| ▲ 216-21502 | BT50H70D40 | 50 | 40 | 70 | 89 | 66.7 | M12 | 15.9 | • |
| 216-21503 | BT50H80D60 | 50 | 60 | 80 | 129 | 101.6 | M16 | 25.4 | • |

▲ INKLUSIVE INNENSCHARUBE • SUPPLIED WITH INTERNAL SCREW • ПОСТАВЛЯЕТСЯ С ВНУТРЕННИМ ВИНТОМ
VIS INTERNE INCLUSE • FORNITO CON VITE CENTRALE INCLUSA • 供货时提供内部螺丝

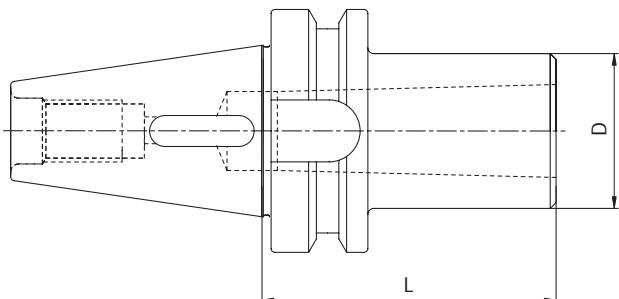
Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| D | Tenon | Screw | Cross screw | Wrench |
|----|------------|------------|-------------|------------|
| 40 | 814-202080 | 811-101028 | 811-107007 | 816-130006 |
| 60 | 814-202120 | 811-101063 | - | - |

ZWISCHENHÜLSEN FÜR MORSEKEGEL MIT AUSTREIBBLAPPEN
MORSE TAPER ADAPTORS FOR DRILLS
ОПРАВКИ ДЛЯ КОНУСА МОРЗЕ С ЛАПКОЙ

DOUILLES POUR CONE MORSE A TENON
MANDRINI PORTAPUNTE ATTACCO CONO MORSE
莫氏锥度钻接头

DIN 228-2 FORM D

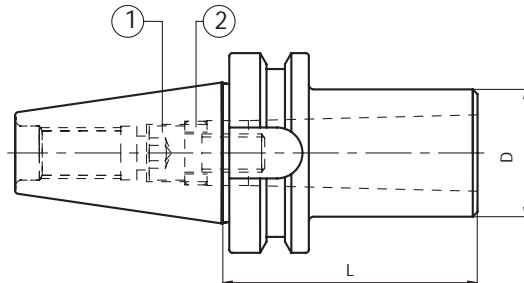


| Code N. | Description | ISO | MORSE | D | L | G6,3 8000 RPM |
|-----------|--------------|-----|-------|----|-----|---------------|
| 212-41512 | BT30H50CM1P | 30 | 1 | 25 | 50 | • |
| 212-41513 | BT30H60CM2P | 30 | 2 | 32 | 60 | • |
| 212-41518 | BT30H79CM3P | 30 | 3 | 40 | 79 | • |
| 212-41501 | BT40H50CM1P | 40 | 1 | 25 | 50 | • |
| 212-41502 | BT40H50CM2P | 40 | 2 | 32 | 50 | • |
| 212-41503 | BT40H70CM3P | 40 | 3 | 40 | 70 | • |
| 212-41504 | BT40H95CM4P | 40 | 4 | 48 | 95 | • |
| 212-41519 | BT50H45CM1P | 50 | 1 | 25 | 45 | • |
| 212-41505 | BT50H60CM2P | 50 | 2 | 32 | 60 | • |
| 212-41506 | BT50H65CM3P | 50 | 3 | 40 | 65 | • |
| 212-41507 | BT50H70CM4P | 50 | 4 | 48 | 70 | • |
| 212-41508 | BT50H105CM5P | 50 | 5 | 63 | 105 | • |

ZWISCHENHÜLSEN FÜR MORSEKEGEL MIT ANZUGSGEWINDE
MORSE TAPER ADAPTER WITH THREAD
ОПРАВКИ ДЛЯ КОНУСА МОРЗЕ С РЕЗЬБОЙ

DOUILLES POUR CONE MORSE AVEC TARAUDAGE
MANDRINI PORTAFRESE ATTACCO CONO MORSE
螺纹莫氏锥度接头

DIN 228-2 FORM C



| Code N. | Description | ISO | MORSE | D | L | G6,3 8000 RPM |
|-----------|-------------|-----|-------|----|----|---------------|
| 212-21502 | BT40H50CM2F | 40 | 2 | 32 | 50 | • |
| 212-21503 | BT40H70CM3F | 40 | 3 | 40 | 70 | • |
| 212-21504 | BT40H95CM4F | 40 | 4 | 48 | 95 | • |
| 212-21505 | BT50H60CM2F | 50 | 2 | 32 | 60 | • |
| 212-21506 | BT50H65CM3F | 50 | 3 | 40 | 65 | • |
| 212-21507 | BT50H90CM4F | 50 | 4 | 48 | 90 | • |

Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| BT/MORSE | Screw (BTA) | On enquiry | Ring |
|----------|-------------|------------|------------|
| | | | |
| 40/1 | 811-101029 | - | 811-302030 |
| 40/2 | 811-111007 | 811-111038 | 811-302031 |
| 40/3 | 811-111008 | 811-401098 | 811-302032 |
| 40/4 | 811-111005 | 811-401083 | 811-302036 |
| 50/1 | 811-101031 | - | 811-302030 |
| 50/2 | 811-101054 | 811-401084 | 811-302032 |
| 50/3 | 811-101065 | 811-401085 | 811-302032 |
| 50/4 | 811-401037 | 811-401086 | 811-302036 |
| 50/5 | 811-101092 | 811-401087 | 811-302034 |

ZWISCHENHÜLSEN FÜR MORSEKEGEL MIT ANZUGSGEWINDE
MORSE TAPER ADAPTER WITH THREAD
ОПРАВКИ ДЛЯ КОНУСА МОРЗЕ С РЕЗЬБОЙ

DOUILLES POUR CONE MORSE AVEC TARAUDAGE
MANDRINI PORTAFRESE ATTACCO CONO MORSE
螺纹莫氏锥度接头

DIN 228-2 FORM C



| Code N. | Description | ISO | MORSE | D | L | G6,3 8000 RPM |
|-----------|------------------|-----|-------|----|----|---------------|
| 212-31405 | BT40H50CM2F AD+B | 40 | 2 | 32 | 50 | • |
| 212-31406 | BT40H75CM3F AD+B | 40 | 3 | 40 | 75 | • |
| 212-31407 | BT40H95CM4F AD+B | 40 | 4 | 48 | 95 | • |
| 212-31408 | BT50H60CM2F AD+B | 50 | 2 | 32 | 60 | • |
| 212-31409 | BT50H65CM3F AD+B | 50 | 3 | 40 | 65 | • |
| 212-31410 | BT50H95CM4F AD+B | 50 | 4 | 48 | 95 | • |

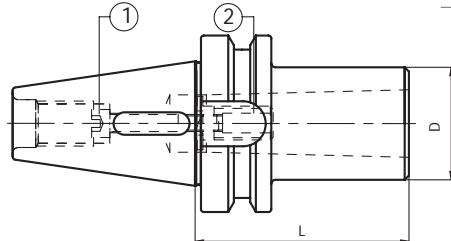
Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| Tape/Morse | Screw | Quantity | Screw | Quantity |
|------------|-----------------|----------|-----------------|----------|
| | | | | |
| 40/2 | 811-102002 M4X5 | 2 | 811-102002 M4X5 | 2 |
| 40/3:4 | - | - | 811-102002 M4X5 | 2 |
| 50/2:3:4 | 811-102002 M4X5 | 2 | 811-102010 M5X6 | 2 |
| 50/5 | - | - | 811-102010 M5X6 | 2 |

| BT/MORSE | Screw (BTA) | On enquiry | Ring |
|----------|-------------|------------|------------|
| | | | |
| 40/2 | 811-111007 | 811-111038 | 811-302031 |
| 40/3 | 811-111008 | 811-401098 | 811-302032 |
| 40/4 | 811-111005 | 811-401083 | 811-302036 |
| 50/2 | 811-101054 | 811-401084 | 811-302032 |
| 50/3 | 811-101065 | 811-401085 | 811-302032 |
| 50/4 | 811-401037 | 811-401086 | 811-302036 |

ZWISCHENHÜLSEN FÜR MORSEKEGEL
MIT AUSTREIBBLAPPEN ODER ANZUGSGEWINDE
MORSE TAPER ADAPTORS FOR DRILLS AND MILLS
ОПРАВКИ ДЛЯ КОНУСОВ МОРЗЕ С ЛАПКОЙ И С РЕЗЬБОЙ

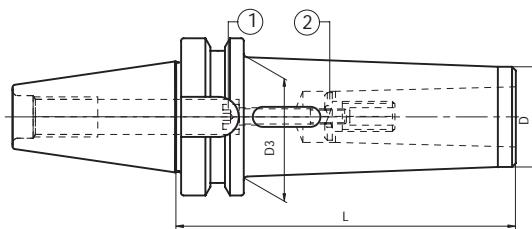
DOUILLES POUR CONE MORSE A TENON ET AVEC TARAUDAGE
MANDRINI PORTAPUNTE-PORTAFRESE
ATTACCO CONO MORSE
莫氏锥度钻铣接头



DIN 228-2 FORM C/D

Kombi Version

| | Code N. | Description | ISO | MORSE | D | L | G6,3 8000 RPM |
|----------|-----------|----------------|-----|-------|----|-----|---------------|
| STANDARD | 212-61518 | BT40H50CM1P/F | 40 | 1 | 25 | 50 | • |
| | 212-61519 | BT40H60CM2P/F | 40 | 2 | 32 | 60 | • |
| | 212-61520 | BT40H76CM3P/F | 40 | 3 | 40 | 76 | • |
| | 212-61522 | BT50H45CM1P/F | 50 | 1 | 25 | 45 | • |
| | 212-61523 | BT50H60CM2P/F | 50 | 2 | 32 | 60 | • |
| | 212-61524 | BT50H65CM3P/F | 50 | 3 | 40 | 65 | • |
| | 212-61525 | BT50H95CM4P/F | 50 | 4 | 48 | 95 | • |
| | 212-61526 | BT50H120CM5P/F | 50 | 5 | 63 | 120 | • |



Kombi Version

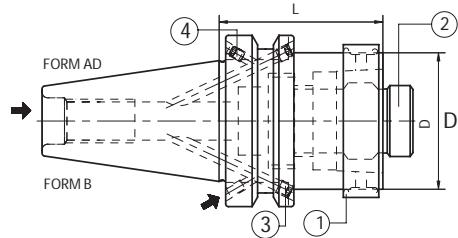
| | Code N. | Description | ISO | MORSE | D | D3 | L | G6,3 8000 RPM |
|----------|-----------|----------------|-----|-------|----|----|-----|---------------|
| EXTENDED | 212-61502 | BT40H125CM2P/F | 40 | 2 | 25 | 32 | 125 | • |
| | 212-61503 | BT40H140CM3P/F | 40 | 3 | 33 | 40 | 140 | • |
| | 212-61505 | BT50H120CM1P/F | 50 | 1 | 18 | 25 | 120 | • |
| | 212-61506 | BT50H140CM2P/F | 50 | 2 | 25 | 32 | 140 | • |
| | 212-61507 | BT50H150CM3P/F | 50 | 3 | 33 | 40 | 150 | • |
| | 212-61508 | BT50H180CM4P/F | 50 | 4 | 40 | 48 | 180 | • |

Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| STANDARD | Code N. | Screw | Ring | EXTENDED | Code N. | Screw | Ring |
|----------|-----------|------------|------------|----------|-----------|------------|------------|
| | | ① | ② | | | ① | ② |
| | 212-61518 | 811-101033 | - | | 212-61502 | 811-401015 | - |
| | 212-61519 | 811-401018 | - | | 212-61503 | 811-101081 | 811-302006 |
| | 212-61520 | 811-101034 | 811-302006 | | 212-61505 | 811-101077 | - |
| | 212-61523 | 811-101057 | - | | 212-61506 | 811-101078 | - |
| | 212-61524 | 811-101071 | - | | 212-61507 | 811-101079 | - |
| | 212-61525 | 811-401016 | - | | 212-61508 | 811-401030 | - |
| | 212-61526 | 811-101071 | 811-302008 | | | | |

ZWISCHENHÜLSEN BT X HSK A+C - MANUELLES SPANNSYSTEM
TAPER ADAPTER BT X HSK A+C - MANUAL CLAMPING
ПЕРЕХОДНЫЕ ОПРАВКИ BT - HSK A+C - РУЧНАЯ УСТАНОВКА

DOUILLES INTERMEDIAIRES BT X HSK A+C - SERRAGE MANUEL
MANDRINI RIDUZIONE DA BT A HSK A+C - CHIUSURA MANUALE
BT X HSK A+C 锥度接头 - 手动夹紧

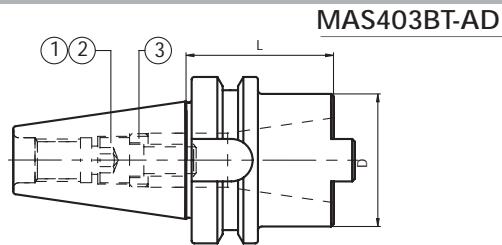


| Code N. | Description | ISO | HSK | D | L | ① Ring (complete) | ② Locking unit (complete) |
|-----------|-------------------|-----|-----|----|----|-------------------|---------------------------|
| 212-91401 | BT40H60HSK50 AD+B | 40 | 50 | 50 | 60 | H50A-AN | H50A-UBL |
| 212-91402 | BT40H80HSK63 AD+B | 40 | 63 | 63 | 80 | H63A-AN | H63A-UBL |
| 212-91403 | BT50H65HSK50 AD+B | 50 | 50 | 50 | 65 | H50A-AN | H50A-UBL |
| 212-91404 | BT50H70HSK63 AD+B | 50 | 63 | 63 | 70 | H63A-AN | H63A-UBL |

Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| Tape | Screw | Quantity | Screw | Quantity |
|--------|-----------------|----------|-----------------|----------|
| | ③ | | ④ | |
| ISO 40 | 811-102002 M4X5 | 2 | 811-102002 M4X5 | 2 |
| ISO 50 | 811-102010 M5X6 | 2 | 811-102010 M5X6 | 2 |

ZWISCHENHÜLSEN BT X SK
ISO TAPER ADAPTORS
ПЕРЕХОДНЫЕ ОПРАВКИ BT - SK
DOUILLES INTERMEDIAIRES BT X SA
MANDRINI RIDUZIONE E PROLUNGHE DA MS403/BT A DIN2080/DIN69871/MAS403BT
ISO 锥度接头



| Code N. | Description | ISO | ISO | D | L |
|-----------|--------------------|-----|-----|-----|-----|
| 212-11504 | BT40H63ISO30/TC30 | 40 | 30 | 52 | 63 |
| 212-11508 | BT40H100ISO40/TC40 | 40 | 40 | 68 | 100 |
| 212-11507 | BT50H70ISO40/TC40 | 50 | 40 | 78 | 70 |
| 212-11509 | BT50H120ISO50/TC50 | 50 | 50 | 100 | 120 |

Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| OUTSIDE | INSIDE | Screw (ISO) | Screw (TC) | Ring | Wrench |
|---------|--------|-------------|------------|------------|--------------|
| | | ① | ② | ③ | |
| 40 | 30 | 811-401098 | 811-401145 | 811-302032 | 816-20206002 |
| 40 | 40 | 811-401147 | 811-401150 | 811-302036 | 816-20207002 |
| 50 | 40 | 811-401147 | 811-401150 | 811-302036 | 816-20207002 |
| 50 | 50 | 811-401151 | 811-401152 | 811-302047 | 816-202090 |

Verschlußschraube für DIN69871/MAS BT/DIN2080 wird mitgeliefert und ist durchbohrt
Supplied with a bored screw DIN69871/MAS BT/DIN2080

Livré avec une vis de serrage DIN69871/MAS BT/DIN2080 percée

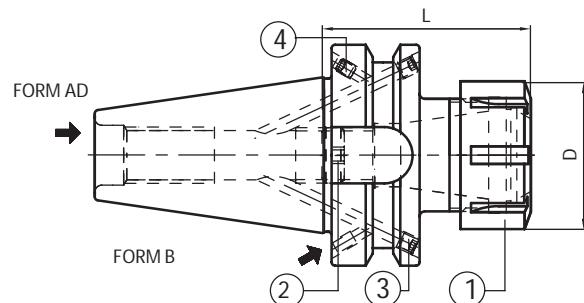
In dotazione vite per chiusura DIN69871/MAS BT/DIN2080 forata

Поставляется с винтом с отверстием для DIN69871/MAS BT/DIN2080

提供 DIN69871/MAS BT/DIN2080 无铆螺钉一个

SPANNZANGENFUTTER ER TYP
ER COLLET CHUCK
ЦАНГОВЫЕ ПАТРОНЫ ER
MANDRINS A PINCES TYPE ER
MANDRINI PORTAPINZA TIPO ER
ER 弹簧夹头

DIN 6499



| Code N. | Description | ISO | ER | D | L | G2,5 25000 RPM |
|-----------|------------------|-----|----|----|----|----------------|
| 214-91401 | BT40H70ER16 AD+B | 40 | 16 | 32 | 70 | • |
| 214-91402 | BT40H70ER25 AD+B | 40 | 25 | 42 | 70 | • |
| 214-91403 | BT40H70ER32 AD+B | 40 | 32 | 50 | 70 | • |
| 214-91404 | BT40H70ER40 AD+B | 40 | 40 | 63 | 70 | • |
| 214-91405 | BT50H80ER25 AD+B | 50 | 25 | 42 | 80 | • |
| 214-91406 | BT50H80ER32 AD+B | 50 | 32 | 50 | 80 | • |
| 214-91407 | BT50H80ER40 AD+B | 50 | 40 | 63 | 80 | • |

Zubehör
Accessories
Accessoires
Accessori
Приналежности
零件



High balanced

Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| Tape | Screw | Quantity | Screw | Quantity | ER | Nut | Stop screw |
|--------|-----------------|----------|-----------------|----------|----|------------|------------|
| | | | | | | | |
| | | | | | | | |
| ISO 40 | 811-102002 M4X5 | 2 | 811-102002 M4X5 | 2 | 16 | 812-203069 | 811-303119 |
| ISO 50 | 811-102002 M4X5 | 2 | 811-102010 M5X6 | 2 | 25 | 812-203070 | 811-303121 |
| | | | | | 32 | 812-203071 | 811-303118 |
| | | | | | 40 | 812-203072 | 811-303122 |

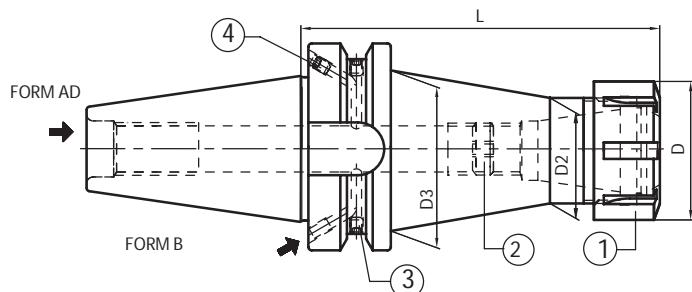
SPANNZANGENFUTTER ER TYP-LANG
ER COLLET CHUCK-LONG

ЦАНГОВЫЕ ПАТРОНЫ ER. УДЛИНЕННОЕ ИСПОЛНЕНИЕ

MANDRINS A PINCES TYPE ER-SERIE LONGUE
MANDRINI PORTAPINZA TIPO ER-SERIE LUNGA

ER 弹簧夹头-加长

DIN 6499



H 100

| Code N. | Description | ISO | ER | D | L | D2 | D3 | G2,5 25000 RPM |
|-----------|-------------------|-----|----|----|-----|----|----|----------------|
| 214-91408 | BT40H100ER16 AD+B | 40 | 16 | 32 | 100 | 22 | 32 | • |
| 214-91409 | BT40H100ER25 AD+B | 40 | 25 | 42 | 100 | 32 | 42 | • |
| 214-91410 | BT40H100ER32 AD+B | 40 | 32 | 50 | 100 | 40 | 50 | • |
| 214-91411 | BT40H100ER40 AD+B | 40 | 40 | 63 | 100 | 50 | 50 | • |
| 214-91412 | BT50H100ER16 AD+B | 50 | 16 | 32 | 100 | 22 | 32 | • |
| 214-91413 | BT50H100ER25 AD+B | 50 | 25 | 42 | 100 | 32 | 42 | • |
| 214-91414 | BT50H100ER32 AD+B | 50 | 32 | 50 | 100 | 40 | 50 | • |
| 214-91415 | BT50H100ER40 AD+B | 50 | 40 | 63 | 100 | 50 | 63 | • |

Zubehör
Accessories
Accessoires
Accessori
Принадлежности
零件



High balanced

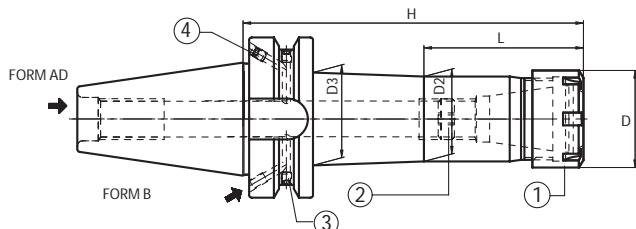
Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| Tape | Screw | Quantity | Screw | Quantity | ER | Nut | Stop screw |
|--------|-----------------|----------|-----------------|----------|----|------------|------------|
| | | | | | | | |
| ISO 40 | 811-102002 M4X5 | 2 | 811-102002 M4X5 | 2 | 16 | 812-203069 | 811-303119 |
| ISO 50 | 811-102002 M4X5 | 2 | 811-102010 M5X6 | 2 | 25 | 812-203070 | 811-303121 |
| | | | | | 32 | 812-203071 | 811-303118 |
| | | | | | 40 | 812-203072 | 811-303122 |

SPANNZANGENFUTTER ER MINI
ER MINI COLLET CHUCK
ЦАНГОВЫЕ МИНИ-ПАТРОНЫ ER

MANDRINS A PINCES TYPE ER MINI
MANDRINI PORTAPINZA TIPO ER MINI EXTRA SOTTILI
ER 迷你弹簧夹头

DIN 6499



| Code N. | Description | ISO | ER | D | H | L | D2 | D3 | G6,3 12000 RPM |
|------------|--------------------|-----|-----|----|-----|-----|----|----|----------------|
| 214-91448* | BT30H70ER11M | 30 | 11M | 16 | 70 | 20 | 14 | 19 | • |
| 214-91449* | BT30H100ER11M | 30 | 11M | 16 | 100 | 20 | 14 | 20 | • |
| 214-91433 | BT40H70ER11M AD+B | 40 | 11M | 16 | 70 | 20 | 14 | 20 | • |
| 214-91434 | BT40H100ER11M AD+B | 40 | 11M | 16 | 100 | 40 | 14 | 20 | • |
| 214-91435 | BT40H160ER11M AD+B | 40 | 11M | 16 | 160 | 50 | 14 | 28 | • |
| 214-91436 | BT40H70ER16M AD+B | 40 | 16M | 22 | 70 | 27 | 20 | 25 | • |
| 214-91437 | BT40H100ER16M AD+B | 40 | 16M | 22 | 100 | 47 | 20 | 26 | • |
| 214-91438 | BT40H160ER16M AD+B | 40 | 16M | 22 | 160 | 97 | 20 | 26 | • |
| 214-91450 | BT40H70ER20M AD+B | 40 | 20M | 28 | 70 | - | 26 | - | • |
| 214-91451 | BT40H100ER20M AD+B | 40 | 20M | 28 | 100 | 48 | 26 | 30 | • |
| 214-91452 | BT40H160ER20M AD+B | 40 | 20M | 28 | 160 | 98 | 26 | 31 | • |
| 214-91439 | BT40H70ER25M AD+B | 40 | 25M | 35 | 70 | - | 33 | - | • |
| 214-91440 | BT40H100ER25M AD+B | 40 | 25M | 35 | 100 | - | 33 | - | • |
| 214-91441 | BT40H160ER25M AD+B | 40 | 25M | 35 | 160 | 103 | 33 | 35 | • |
| 214-91442 | BT50H70ER16M AD+B | 50 | 16M | 22 | 70 | - | 22 | - | • |
| 214-91443 | BT50H100ER16M AD+B | 50 | 16M | 22 | 100 | 47 | 22 | 26 | • |
| 214-91444 | BT50H160ER16M AD+B | 50 | 16M | 22 | 160 | 97 | 22 | 28 | • |
| 214-91445 | BT50H70ER25M AD+B | 50 | 25M | 35 | 70 | - | 35 | - | • |
| 214-91446 | BT50H100ER25M AD+B | 50 | 25M | 35 | 100 | - | 35 | - | • |
| 214-91447 | BT50H160ER25M AD+B | 50 | 25M | 35 | 160 | 103 | 35 | 40 | • |

- * BT30 nur AD Ausführung
- * BT30 only AD version
- * BT 30 только с AD исполнением
- * BT30 seulement Version AD
- * BT30 solo versione AD
- * BT30 只在 AD 版本下



pag. 154

Slim Line

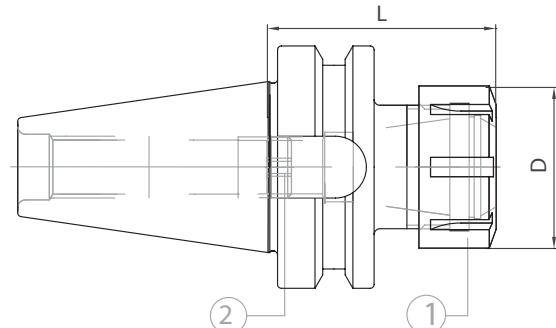
Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| Tape | Screw | Quantity | Screw | Quantity | ER | Nut | Stop screw |
|--------|-----------------|----------|-----------------|----------|-----|------------|------------|
| | ③ | | ④ | | | ① | ② |
| ISO 40 | 811-102002 M4X5 | 2 | 811-102002 M4X5 | 2 | 11M | 812-203012 | 811-303081 |
| ISO 50 | 811-102002 M4X5 | 2 | 811-102010 M5X6 | 2 | 16M | 812-203013 | 811-303119 |
| | | | | | 20M | 812-203014 | 811-303120 |
| | | | | | 25M | 812-203015 | 811-303121 |

SPANNZANGENFUTTER ER TYP
ER COLLET CHUCK
ЦАНГОВЫЕ ПАТРОНЫ ER

MANDRINS A PINCES TYPE ER
MANDRINI PORTAPINZA TIPO ER
ER 弹簧夹头

DIN 6499



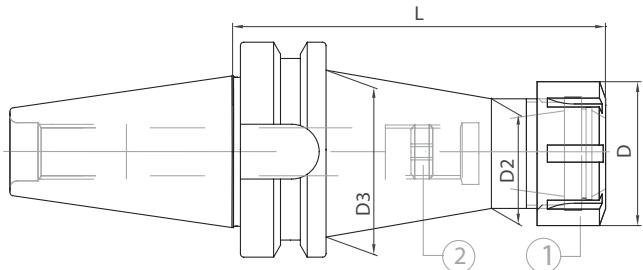
| Code N. | Description | ISO | ER | D | L | G6,3 12000 RPM |
|-----------|-------------|-----|----|----|----|----------------|
| 214-31511 | BT30H60ER16 | 30 | 16 | 32 | 60 | • |
| 214-31512 | BT30H60ER25 | 30 | 25 | 42 | 60 | • |
| 214-31513 | BT30H60ER20 | 30 | 20 | 35 | 60 | • |
| 214-31525 | BT30H60ER32 | 30 | 32 | 50 | 60 | • |
| 214-31539 | BT40H70ER16 | 40 | 16 | 32 | 70 | • |
| 214-31501 | BT40H70ER25 | 40 | 25 | 42 | 70 | • |
| 214-31502 | BT40H70ER32 | 40 | 32 | 50 | 70 | • |
| 214-31515 | BT40H70ER40 | 40 | 40 | 63 | 70 | • |
| 214-31584 | BT50H70ER16 | 50 | 16 | 32 | 70 | • |
| 214-31549 | BT50H80ER25 | 50 | 25 | 42 | 80 | • |
| 214-31503 | BT50H80ER32 | 50 | 32 | 50 | 80 | • |
| 214-31504 | BT50H80ER40 | 50 | 40 | 63 | 80 | • |

Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| ER | Nut | Stop screw |
|----|------------|------------|
| | | |
| 16 | 812-203005 | 811-303119 |
| 25 | 812-203001 | 811-303121 |
| 32 | 812-203002 | 811-303118 |
| 40 | 812-203003 | 811-303122 |

SPANNZANGENFUTTER ER TYP-LANG
ER COLLET CHUCK-LONG
ЦАНГОВЫЕ ПАТРОНЫ ER. УДЛЕННЕННОЕ ИСПОЛНЕНИЕ
MANDRINS A PINCES TYPE ER-SERIE LONGUE
MANDRINI PORTAPINZA TIPO ER-SERIE LUNGA
ER 弹簧夹头-加长

DIN 6499



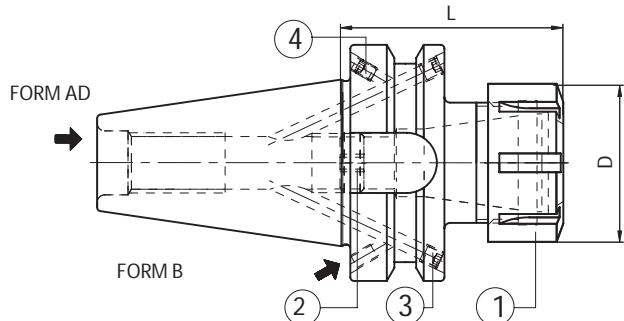
| Code N. | Description | ISO | ER | D | L | D2 | D3 | G6,3 12000 RPM |
|-----------|--------------|-----|----|----|-----|----|----|----------------|
| 214-31520 | BT30H100ER16 | 30 | 16 | 32 | 100 | 22 | 24 | • |
| 214-31538 | BT30H100ER25 | 30 | 25 | 42 | 100 | 32 | 40 | • |
| 214-31527 | BT40H100ER16 | 40 | 16 | 32 | 100 | 22 | 28 | • |
| 214-31542 | BT40H100ER25 | 40 | 25 | 42 | 100 | 32 | 42 | • |
| 214-31545 | BT40H100ER32 | 40 | 32 | 50 | 100 | 40 | 50 | • |
| 214-31583 | BT40H100ER40 | 40 | 40 | 63 | 100 | 50 | 50 | • |

Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| ER | Nut | Stop screw |
|----|------------|------------|
| | | |
| ① | | ② |
| 16 | 812-203005 | 811-303119 |
| 25 | 812-203001 | 811-303121 |
| 32 | 812-203002 | 811-303118 |
| 40 | 812-203003 | 811-303122 |

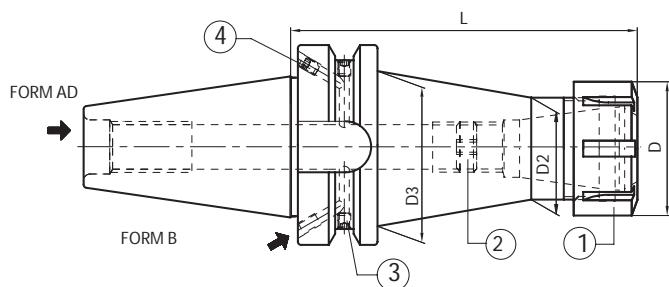
SPANNZANGENFUTTER ER TYP
ER COLLET CHUCK
ЦАНГОВЫЕ ПАТРОНЫ ER
MANDRINS A PINCES TYPE ER
MANDRINI PORTAPINZA TIPO ER
ER 弹簧夹头

DIN 6499



STANDARD

| Code N. | Description | ISO | ER | D | L | G6,3 12000 RPM |
|-----------|------------------|-----|----|----|----|----------------|
| 214-31447 | BT40H70ER16 AD+B | 40 | 16 | 32 | 70 | • |
| 214-31422 | BT40H70ER25 AD+B | 40 | 25 | 42 | 70 | • |
| 214-31423 | BT40H70ER32 AD+B | 40 | 32 | 50 | 70 | • |
| 214-31424 | BT40H70ER40 AD+B | 40 | 40 | 63 | 70 | • |
| 214-31469 | BT50H80ER16 AD+B | 50 | 16 | 32 | 80 | • |
| 214-31429 | BT50H80ER25 AD+B | 50 | 25 | 42 | 80 | • |
| 214-31430 | BT50H80ER32 AD+B | 50 | 32 | 50 | 80 | • |
| 214-31431 | BT50H80ER40 AD+B | 50 | 40 | 63 | 80 | • |



H 100

| Code N. | Description | ISO | ER | D | L | D2 | D3 | G6,3 12000 RPM |
|-----------|-------------------|-----|----|----|-----|----|----|----------------|
| 214-31520 | BT30H100ER16 AD+B | 30 | 16 | 32 | 100 | 22 | 32 | • |
| 214-31538 | BT30H100ER25 AD+B | 30 | 25 | 42 | 100 | 32 | 42 | • |
| 214-31448 | BT40H100ER16 AD+B | 40 | 16 | 32 | 100 | 22 | 32 | • |
| 214-31439 | BT40H100ER25 AD+B | 40 | 25 | 42 | 100 | 32 | 42 | • |
| 214-31440 | BT40H100ER32 AD+B | 40 | 32 | 50 | 100 | 40 | 50 | • |
| 214-31449 | BT40H100ER40 AD+B | 40 | 40 | 63 | 100 | 50 | 50 | • |
| 214-31450 | BT50H100ER16 AD+B | 50 | 16 | 32 | 100 | 22 | 32 | • |
| 214-31438 | BT50H100ER25 AD+B | 50 | 25 | 42 | 100 | 32 | 42 | • |
| 214-31434 | BT50H100ER32 AD+B | 50 | 32 | 50 | 100 | 40 | 50 | • |
| 214-31436 | BT50H100ER40 AD+B | 50 | 40 | 63 | 100 | 50 | 63 | • |

* Ausführung Form AD

* Execution form AD

* Forme AD

* Forma AD

* Исполнение AD

* 执行形式 AD

Zubehör
Accessories
Accessoires
Accessori
Прина́длежно́сти
零件



pag. 176



pag. 147



pag. 155



pag. 147

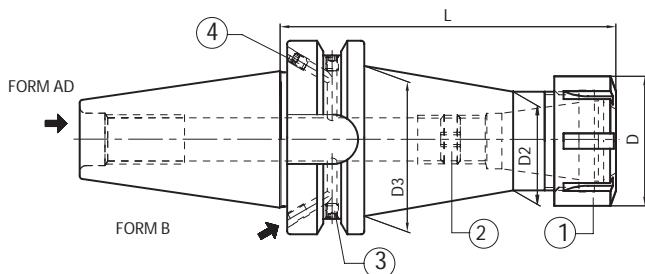


pag. 154

SPANNZANGENFUTTER ER TYP-LANGE AUSFÜHRUNG
ER COLLET CHUCK-LONG
ЦАНГОВЫЕ ПАТРОНЫ ER. УДЛИНЕННОЕ ИСПОЛНЕНИЕ

MANDRINS A PINCES TYPE ER-SERIE LONGUE
MANDRINI PORTAPINZA TIPO ER-SERIE LUNGA
ER 弹簧夹头-加长

DIN 6499



| | Code N. | Description | ISO | ER | D | L | D2 | D3 | G6,3 8000 RPM |
|-------|-----------|-------------------|-----|----|----|-----|----|----|---------------|
| H 160 | 214-31442 | BT40H160ER16 AD+B | 40 | 16 | 32 | 160 | 22 | 32 | • |
| | 214-31432 | BT40H160ER25 AD+B | 40 | 25 | 42 | 160 | 32 | 42 | • |
| | 214-31433 | BT40H160ER32 AD+B | 40 | 32 | 50 | 160 | 40 | 50 | • |
| | 214-31451 | BT40H160ER40 AD+B | 40 | 40 | 63 | 160 | 50 | 50 | • |
| | 214-31452 | BT50H160ER16 AD+B | 50 | 16 | 32 | 160 | 22 | 32 | • |
| | 214-31453 | BT50H160ER25 AD+B | 50 | 25 | 42 | 160 | 32 | 42 | • |
| | 214-31435 | BT50H160ER32 AD+B | 50 | 32 | 50 | 160 | 40 | 50 | • |
| | 214-31437 | BT50H160ER40 AD+B | 50 | 40 | 63 | 160 | 50 | 63 | • |
| H 200 | 214-31454 | BT40H200ER16 AD+B | 40 | 16 | 32 | 200 | 22 | 32 | • |
| | 214-31455 | BT40H200ER25 AD+B | 40 | 25 | 42 | 200 | 32 | 42 | • |
| | 214-31456 | BT40H200ER32 AD+B | 40 | 32 | 50 | 200 | 40 | 50 | • |
| | 214-31457 | BT40H200ER40 AD+B | 40 | 40 | 63 | 200 | 50 | 50 | • |
| | 214-31458 | BT50H200ER16 AD+B | 50 | 16 | 32 | 200 | 22 | 32 | • |
| | 214-31459 | BT50H200ER25 AD+B | 50 | 25 | 42 | 200 | 32 | 42 | • |
| | 214-31460 | BT50H200ER32 AD+B | 50 | 32 | 50 | 200 | 40 | 50 | • |
| | 214-31461 | BT50H200ER40 AD+B | 50 | 40 | 63 | 200 | 50 | 63 | • |

Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| Tape | Screw | Quantity | Screw | Quantity | ER | Nut | Stop screw |
|--------|-----------------|----------|-----------------|----------|----|------------|------------|
| | | | | | | | |
| ③ | | | ④ | | | ① | ② |
| ISO 40 | 811-102002 M4X5 | 2 | 811-102002 M4X5 | 2 | 16 | 812-203005 | 811-303119 |
| ISO 50 | 811-102002 M4X5 | 2 | 811-102010 M5X6 | 2 | 25 | 812-203001 | 811-303121 |
| | | | | | 32 | 812-203002 | 811-303118 |
| | | | | | 40 | 812-203003 | 811-303122 |

Zubehör
Accessories
Accessoires
Accessori
Причадлежности
零件



pag. 176



pag. 147



pag. 155



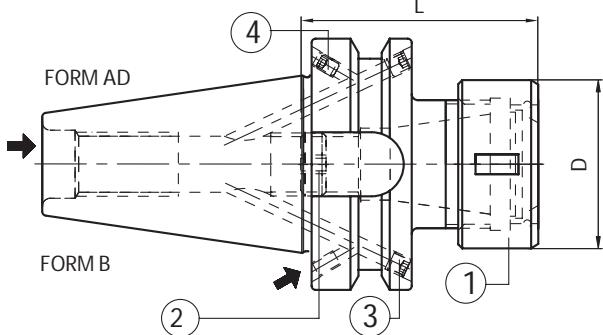
pag. 147



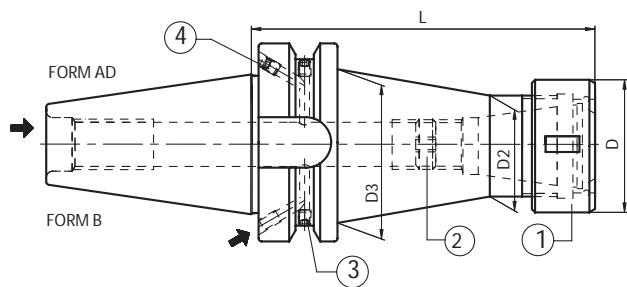
pag. 155

SPANNZANGENFUTTER EOC TYP
ER COLLET CHUCK
ЦАНГОВЫЕ ПАТРОНЫ ЕОС
MANDRINS A PINCES TYPE EOC
MANDRINI PORTAPINZA TIPO EOC
ER 弹簧夹头

DIN 6388



| Code N. | Description | ISO | EOC | D | L | G6,3 12000 RPM |
|-----------|-------------------|-----|-----|----|----|----------------|
| 214-11401 | BT40H70EOC16 AD+B | 40 | 16 | 43 | 70 | • |
| 214-11402 | BT40H70EOC25 AD+B | 40 | 25 | 60 | 70 | • |
| 214-11403 | BT50H85EOC25 AD+B | 50 | 25 | 60 | 85 | • |
| 214-11404 | BT50H90EOC32 AD+B | 50 | 32 | 72 | 90 | • |



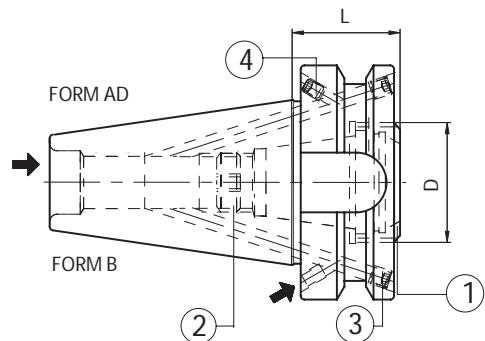
| Code N. | Description | ISO | EOC | D | L | D2 | D3 | G6,3 8000 RPM |
|-----------|--------------------|-----|-----|----|-----|----|----|---------------|
| 214-11405 | BT40H130EOC16 AD+B | 40 | 16 | 43 | 130 | 33 | 42 | • |
| 214-11406 | BT40H130EOC25 AD+B | 40 | 25 | 60 | 130 | 48 | 48 | • |
| 214-11408 | BT50H130EOC25 AD+B | 50 | 25 | 60 | 130 | 48 | 48 | • |
| 214-11409 | BT50H130EOC32 AD+B | 50 | 32 | 72 | 130 | 60 | 60 | • |

Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| Tape | Screw | Quantity | Screw | Quantity | Zubehör Accessories Accessoires Accessori Приналежности 零件 |
|--------|-----------------|------------|-----------------|----------|---|
| | ③ | | ④ | | pag. 156 |
| ISO 40 | 811-102002 M4X5 | 2 | 811-102002 M4X5 | 2 | pag. 156 |
| ISO 50 | 811-102002 M4X5 | 2 | 811-102010 M5X6 | 2 | pag. 152 |
| EOC | Nut | Stop screw | Wrench | | |
| 16 | GOC16 | 811-303121 | 816-203033 | | pag. 156 |
| 25 | GOC25 | 811-303123 | 816-203034 | | |
| 32 | GOC32 | 811-303123 | 816-203036 | | |

SPANNZANGENFUTTER ER TYP-LÄNGE EXTRAKURZ
ER COLLET CHUCK WITH INSIDE NUT
ЦАНГОВЫЕ ПАТРОНЫ ER С ВНУТРЕННЕЙ ГАЙКОЙ

MANDRINS COURTS A PINCES TYPE ER
MANDRINI PORTAPINZA TIPO ER EXTRACORTI
ER 弹簧夹头带内部螺母



| Code N. | Description | ISO | ER | D | L | G6,3 12000 RPM |
|------------|-------------------|-----|-----|----|----|----------------|
| 214-31462 | BT40H29ER25A AD+B | 40 | 25A | 32 | 29 | • |
| *214-31571 | BT40H29ER32A | 40 | 32A | 40 | 29 | • |
| 214-31463 | BT50H40ER32A AD+B | 50 | 32A | 40 | 40 | • |

Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| Tape | Screw | Quantity | Screw | Quantity |
|--------|-----------------|----------|-----------------|----------|
| | ③ | | ④ | |
| ISO 40 | 811-102002 M4X5 | 2 | 811-102002 M4X5 | 2 |
| ISO 50 | 811-102010 M5X6 | 2 | 811-102010 M5X6 | 2 |

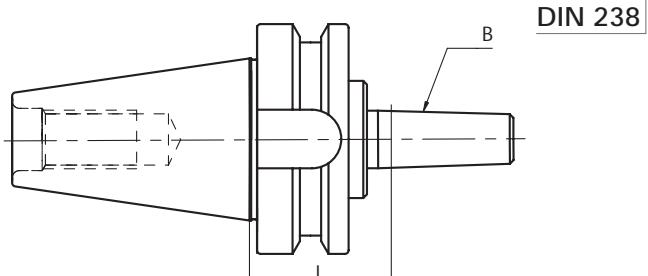
| ER | Nut | Stop screw | Wrench |
|-----|------------|------------|----------|
| | ① | ② | |
| 25A | 812-203057 | 811-303121 | CHER25EX |
| 32A | 812-203032 | 811-303118 | CHER32EX |

* Ausführung Form AD
* Execution form AD
* Forme AD
* Forma AD
* Исполнение AD
* 执行形式 AD

MAS 403/BT A

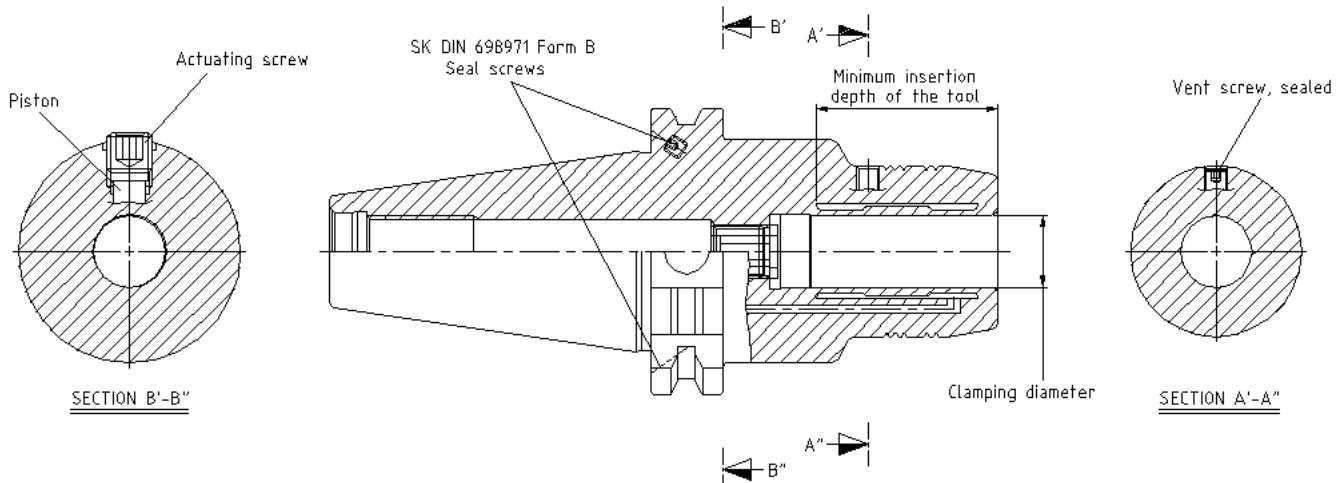
BOHRFUTTERAUFNAHMEN
ARBORS FOR DRILL CHUCKS
ОПРАВКИ ДЛЯ СВЕРЛИЛЬНЫХ ПАТРОНОВ

ARBRES POUR MANDRINS DE PERCAGE
ATTACCO PER MANDRINI PORTAPUNTE
钻夹头刀杆



| Code N. | Description | ISO | B | L | G6,3 8000 RPM |
|-----------|-------------|-----|----|----|---------------|
| 216-31502 | BT40H40B16 | 40 | 16 | 40 | • |
| 216-31503 | BT40H40B18 | 40 | 18 | 40 | • |
| 216-31505 | BT50H50B16 | 50 | 16 | 50 | • |
| 216-31506 | BT50H50B18 | 50 | 18 | 50 | • |

OPERATING MANUAL FOR HIDRAULIC EXPANSION CHUCKS MANUALE OPERATIVO PER L'UTILIZZO DEI MANDRINI IDRAULICI ИНСТРУКЦИЯ ПО ПРИМЕНЕНИЮ ГИДРАВЛИЧЕСКИХ ПАТРОНОВ



- Please follow our operating instruction carefully to save time and avoid problems
Пожалуйста, следуйте нашим инструкциям, чтобы избежать проблем и потери времени.
Raccomandiamo di seguire le nostre istruzioni operative per risparmiare tempo ed evitare problemi

Chart of technical data

Таблица с техническими характеристиками:

Tabella delle informazioni tecniche

| Chuck Diameter (HC) | Shaft Clamping | Depending on the mounting shank (max RPM) | Minimum clamping lenght (mm) | Operating temperature | Max coolant pressure (bar) | Moment (Nm) |
|---------------------|----------------|---|------------------------------|-----------------------|----------------------------|-------------|
| HC6 | 6 hb | 40.000 | 27 | 20-50 | 80 | 8 Nm |
| HC8 | 8 hb | 40.000 | 27 | 20-50 | 80 | 15 Nm |
| HC10 | 10 hb | 40.000 | 32 | 20-50 | 80 | 30 Nm |
| HC12 | 12 hb | 40.000 | 37 | 20-50 | 80 | 45 Nm |
| HC14 | 14 hb | 40.000 | 37 | 20-50 | 80 | 75 Nm |
| HC16 | 16 hb | 40.000 | 42 | 20-50 | 80 | 120 Nm |
| HC18 | 18 hb | 40.000 | 42 | 20-50 | 80 | 170 Nm |
| HC20 | 20 hb | 40.000 | 42 | 20-50 | 80 | 230 Nm |
| HC25 | 25 hb | 25.000 | 48 | 20-50 | 80 | 300 Nm |
| HC32 | 32 hb | 25.000 | 55 | 20-50 | 80 | 400 Nm |

- The clamping force must be checked periodically. We recommend to check it before initial use and approximately after 100 operations or every 3 months.

Усилие зажима необходимо периодически проверять. Мы рекомендуем производить проверку перед первым использованием, далее примерно каждые 100 операций или каждые 3 месяца.

La verifica della forza di serraggio deve essere fatta periodicamente. Si raccomanda di controllarla prima dell'utilizzo e dopo circa 100 operazioni o ogni 3 mesi

ATTENTION / ВНИМАНИЕ / ATTENZIONE

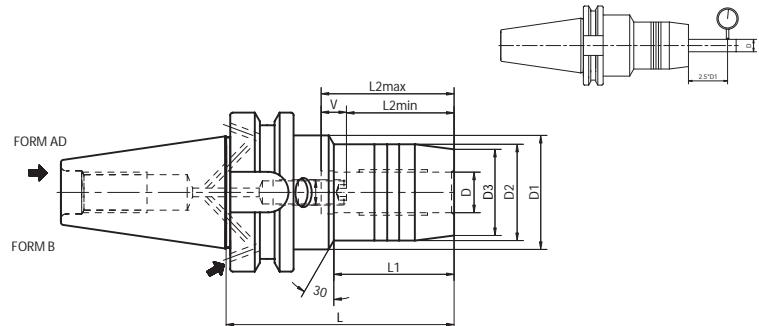
- When tools or endmills are clamped into the hydraulic chucks, be sure that oils and dust are completely removed from the internal surface of the hydraulic chuck and the external surface of the tool

При установке инструмента в гидропатроне, убедитесь, что на внутренней поверхности патрона и внешней поверхности инструмента нет масла и пыли.

Quando si montano gli utensili o le frese nel mandrino idraulico, la superficie interna del mandrino idraulico e quella esterna dell'utensile devono essere pulite da oli, polveri e residui

HYDRO-DEHNSPANNFUTTER FÜR WERKZEUGE MIT ZYLINDERSCHAFT
 HYDRO-EXPANSION CHUCKS FOR TOOLS WITH CYLINDRICAL SHANK
 ГИДРАВЛИЧЕСКИЕ ПАТРОНЫ ДЛЯ ИНСТРУМЕНТА
 С ЦИЛИНДРИЧЕСКИМ ХВОСТОВИКОМ

MANDRINS HYDRO-EXPANDABLES POUR OUTILS
 A QUEUE CYLINDRIQUE
 MANDRINI IDRAULICI PER UTENSILI ATTACCO CILINDRICO
 适用圆柱刀柄的液压膨胀夹头



| Code N. | Description | ISO | D | D1 | D2 | L | L1 | L2 min | L2 max | V | M | G6,3 15000 |
|-----------|----------------|-----|----|------|----|------|------|--------|--------|----|---------|------------|
| 252-11414 | BT30-HC6-50,8 | 30 | 6 | 45 | 26 | 50,8 | 12 | 27 | 37 | 10 | M5*0.8 | • |
| 252-11415 | BT30-HC8-50,8 | 30 | 8 | 45 | 28 | 50,8 | 12,5 | 27 | 37 | 10 | M6*1.0 | • |
| 252-11416 | BT30-HC10-50,8 | 30 | 10 | 45 | 30 | 50,8 | 12,5 | 31 | 41 | 10 | M8*1.0 | • |
| 252-11417 | BT30-HC12-50,8 | 30 | 12 | 45 | 32 | 50,8 | 14 | 36 | 46 | 10 | M8*1.0 | • |
| 252-11419 | BT30-HC16-90 | 30 | 16 | 45 | 38 | 90 | 50 | 39 | 49 | 10 | M8*1.0 | • |
| 252-11421 | BT30-HC20-90 | 30 | 20 | 45 | 42 | 90 | 50 | 41 | 51 | 10 | M8*1.0 | • |
| 252-11422 | BT40-HC6-90 | 40 | 6 | 49,5 | 26 | 90 | 29 | 27 | 37 | 10 | M5*0.8 | • |
| 252-11423 | BT40-HC8-90 | 40 | 8 | 49,5 | 28 | 90 | 30 | 27 | 37 | 10 | M6*1.0 | • |
| 252-11424 | BT40-HC10-90 | 40 | 10 | 49,5 | 30 | 90 | 35 | 31 | 41 | 10 | M8*1.0 | • |
| 252-11425 | BT40-HC12-90 | 40 | 12 | 49,5 | 32 | 90 | 40 | 36 | 46 | 10 | M10*1.0 | • |
| 252-11427 | BT40-HC16-90 | 40 | 16 | 49,5 | 38 | 90 | 45 | 39 | 49 | 10 | M12*1.0 | • |
| 252-11429 | BT40-HC20-90 | 40 | 20 | 49,5 | 42 | 90 | 47 | 41 | 51 | 10 | M16*1.0 | • |
| 252-11430 | BT40-HC25-90 | 40 | 25 | 52 | 55 | 90 | 50 | 47 | 57 | 10 | M16*1.0 | • |
| 252-11431 | BT40-HC32-90 | 40 | 32 | 62 | 63 | 90 | 48 | 51 | 61 | 10 | M16*1.0 | • |
| 252-11432 | BT50-HC6-90 | 50 | 6 | 49,5 | 26 | 90 | 29 | 27 | 37 | 10 | M5*0.8 | • |
| 252-11433 | BT50-HC8-90 | 50 | 8 | 49,5 | 28 | 90 | 30 | 27 | 37 | 10 | M6*1.0 | • |
| 252-11434 | BT50-HC10-90 | 50 | 10 | 49,5 | 30 | 90 | 34 | 31 | 41 | 10 | M8*1.0 | • |
| 252-11435 | BT50-HC12-90 | 50 | 12 | 49,5 | 32 | 90 | 34 | 36 | 46 | 10 | M10*1.0 | • |
| 252-11437 | BT50-HC16-90 | 50 | 16 | 49,5 | 38 | 90 | 35 | 39 | 49 | 10 | M12*1.0 | • |
| 252-11439 | BT50-HC20-90 | 50 | 20 | 49,5 | 42 | 90 | 35 | 41 | 51 | 10 | M16*1.0 | • |
| 252-11440 | BT50-HC25-110 | 50 | 25 | 63 | 55 | 110 | 48 | 47 | 57 | 10 | M16*1.0 | • |
| 252-11441 | BT50-HC32-110 | 50 | 32 | 70 | 63 | 110 | 50 | 51 | 61 | 10 | M16*1.0 | • |

High quality

| Code N. | Description | ISO | D | D1 | D2 | L | L1 | L2 min | L2 max | V | M | G6,3 15000 |
|-----------|-----------------|-----|----|------|----|------|----|--------|--------|----|---------|------------|
| 252-11443 | BT40-G20CS-72,5 | 40 | 20 | 49,5 | - | 72,5 | - | 41 | 51 | 10 | M16*1.0 | • |
| 252-11444 | BT50-G32CS-90 | 50 | 32 | 72 | - | 90 | - | 51 | 61 | 10 | M16*1.0 | • |

Zubehör
 Accessories
 Accessoires
 Accessori
 Принадлежности
 零件



pag. 152

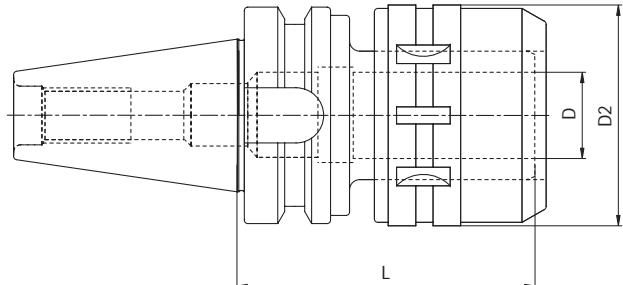


pag.179

Short Heavy Design

KRAFTSPANNFUTTER
MILLING CHUCK
УСИЛЕННЫЕ ОПРАВКИ

MANDRINS A FORT SERRAGE
MANDRINI A FORTE SERRAGGIO
铣夹头



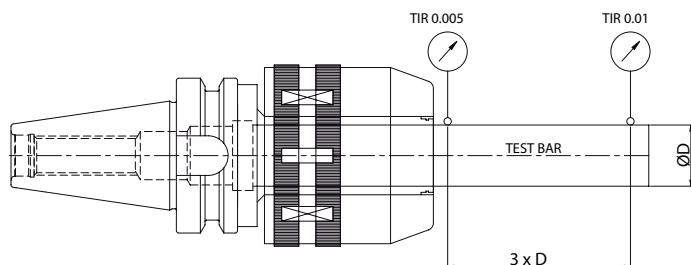
| Code N. | Description | ISO | D | D2 | L | G6,3 12000 RPM |
|-----------|-------------|-----|----|----|-----|----------------|
| 214-01501 | BT40H105C20 | 40 | 20 | 54 | 105 | • |
| 214-01502 | BT40H105C32 | 40 | 32 | 72 | 105 | • |
| 214-01504 | BT50H105C20 | 50 | 20 | 54 | 105 | • |
| 214-01505 | BT50H105C32 | 50 | 32 | 72 | 105 | • |
| 214-01506 | BT50H135C32 | 50 | 32 | 72 | 135 | • |

INKLUSIVE SPANNSCHLÜSSEL • SUPPLIED WITH WRENCH • ПОСТАВЛЯЕТСЯ С КЛЮЧОМ
CLÉ INCLUSE • FORNITI CON CHIAVE INCLUSA • 供货时提供扳手

Zubehör
Accessories
Accessoires
Accessori
Причадлежности
零件



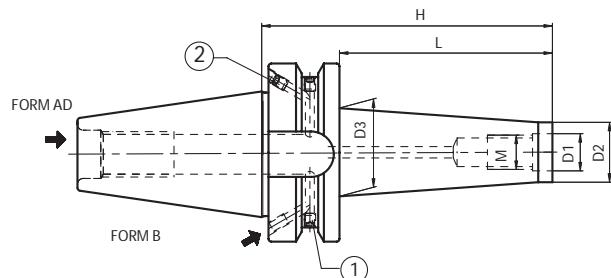
p.178 pag. 153



| Milling chuck (diameter) | Specification (DIN) | Tolerance (Taper shank) | Run-out (3xD) | Clamping torque |
|--------------------------|---------------------|------------------------------------|---------------|---------------------|
| C20 | AT3 | BT40 (0~+0,003) BT50 (0~+0,004) | 0~0,01 | 980M.m (100 Kgf.m) |
| C32 | | | | 3430M.m (350 Kgf.m) |

SPANNFUTTER FÜR EIN SCHRAUBFRÄSER
 MILLING CUTTER ARBORS FOR SCREW-ON TYPE MILLING CUTTERS
 ОПРАВКИ ДЛЯ ФРЕЗЕРНЫХ ГОЛОВОК

MANDRINS POUR FRAISER A VISSEZ
 MANDRINI PER FRESE CON ATTACCO FILETTATO
 螺纹连接型铣刀的铣刀杆



| Code N. | Description | ISO | M | D1 | D2 | D3 | H | L | G6,3 12000 RPM |
|-----------|-------------|-----|-----|------|----|------|-----|-----|----------------|
| 217-81420 | BT40H55M8 | 40 | M8 | 8,5 | 13 | 15 | 55 | 28 | • |
| 217-81401 | BT40H77M8 | 40 | M8 | 8,5 | 13 | 23 | 77 | 50 | • |
| 217-81402 | BT40H102M8 | 40 | M8 | 8,5 | 13 | 23 | 102 | 75 | • |
| 217-81403 | BT40H127M8 | 40 | M8 | 8,5 | 13 | 25 | 127 | 100 | • |
| 217-81421 | BT40H55M10 | 40 | M10 | 10,5 | 18 | 20 | 55 | 28 | • |
| 217-81404 | BT40H77M10 | 40 | M10 | 10,5 | 18 | 23 | 77 | 50 | • |
| 217-81405 | BT40H102M10 | 40 | M10 | 10,5 | 18 | 28 | 102 | 75 | • |
| 217-81406 | BT40H127M10 | 40 | M10 | 10,5 | 18 | 32 | 127 | 100 | • |
| 217-81422 | BT40H55M12 | 40 | M12 | 12,5 | 21 | 24 | 55 | 28 | • |
| 217-81407 | BT40H77M12 | 40 | M12 | 12,5 | 21 | 24 | 77 | 50 | • |
| 217-81408 | BT40H102M12 | 40 | M12 | 12,5 | 21 | 31 | 102 | 75 | • |
| 217-81409 | BT40H127M12 | 40 | M12 | 12,5 | 21 | 33 | 127 | 100 | • |
| 217-81423 | BT40H55M16 | 40 | M16 | 17 | 29 | 32 | 55 | 28 | • |
| 217-81410 | BT40H77M16 | 40 | M16 | 17 | 29 | 34 | 77 | 50 | • |
| 217-81411 | BT40H102M16 | 40 | M16 | 17 | 29 | 34 | 102 | 75 | • |
| 217-81412 | BT40H127M16 | 40 | M16 | 17 | 29 | 36 | 127 | 100 | • |
| 217-81413 | BT40H152M16 | 40 | M16 | 17 | 29 | 40 | 152 | 125 | • |
| 217-81414 | BT50H88M12 | 50 | M12 | 12,5 | 21 | 24 | 88 | 50 | • |
| 217-81415 | BT50H138M12 | 50 | M12 | 12,5 | 21 | 33 | 138 | 100 | • |
| 217-81416 | BT50H188M12 | 50 | M12 | 12,5 | 21 | 40 | 188 | 150 | • |
| 217-81417 | BT50H88M16 | 50 | M16 | 17 | 29 | 34 | 88 | 50 | • |
| 217-81418 | BT50H138M16 | 50 | M16 | 17 | 29 | 36 | 138 | 100 | • |
| 217-81419 | BT50H188M16 | 50 | M16 | 17 | 29 | 42,5 | 188 | 150 | • |



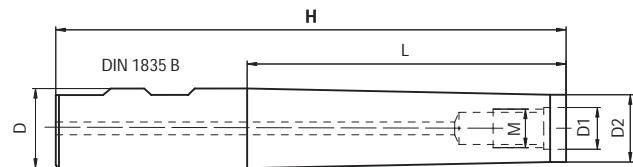
pag. 111

Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| Tape | Screw | Quantity | Screw | Quantity |
|--------|-----------------|----------|-----------------|----------|
| | | | | |
| ISO 40 | 811-102002 M4X5 | 2 | 811-102002 M4X5 | 2 |
| ISO 50 | 811-102002 M4X5 | 2 | 811-102010 M5X6 | 2 |

VERLÄNGERUNG FÜR EINSCHRAUBFRÄSER
EXTENSION FOR SCREW IN TYPE MILLS
КОРПУСА ДЛЯ ФРЕЗЕРНЫХ ГОЛОВОК

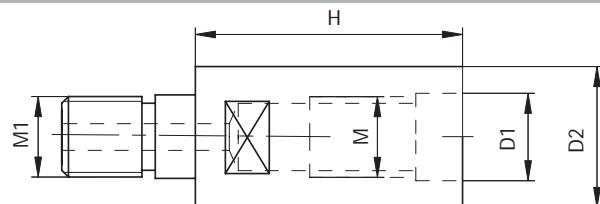
RALLONGES POUR FRAISES À VISSEZ
PROLUNGHE PER FRESE CON ATTACCO FILETTATO
铣刀内部螺丝加长



| Code N. | Description | D | M | D1 | D2 | H | L |
|-----------|-------------|----|-----|------|------|-----|-----|
| 217-85201 | D16H115M8 | 16 | M8 | 8.5 | 12.8 | 115 | 60 |
| 217-85202 | D16H160M8 | 16 | M8 | 8.5 | 12.8 | 160 | 100 |
| 217-85203 | D20H120M10 | 20 | M10 | 10.5 | 17.8 | 120 | 60 |
| 217-85204 | D20H160M10 | 20 | M10 | 10.5 | 17.8 | 160 | 100 |
| 217-85205 | D25H160M12 | 25 | M12 | 12.5 | 20.8 | 160 | 100 |
| 217-85206 | D32H160M16 | 32 | M16 | 17 | 28.8 | 160 | 100 |

VERLÄNGERUNG FÜR EINSCHRAUBFRÄSER
EXTENSION FOR SCREW IN END MILLS
УДЛИНИТЕЛИ ДЛЯ ФРЕЗЕРНЫХ ГОЛОВОК

RALLONGES POUR FRAISES FILETEES
PROLUNGHE PER FRESE FILETTATE
铣刀内部螺丝加长



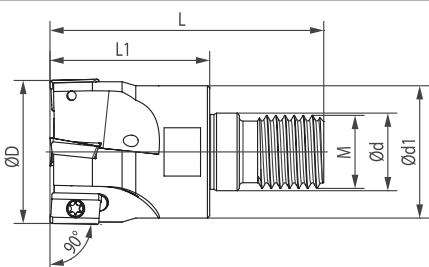
| Code N. | Description | M | M1 | D1 | D2 | H |
|-----------|-------------|-----|-----|------|------|----|
| 217-85709 | M8H30M8 | M8 | M8 | 8.5 | 12.8 | 30 |
| 217-85710 | M10H35M10 | M10 | M10 | 10.5 | 17.8 | 35 |
| 217-85711 | M12H40M12 | M12 | M12 | 12.5 | 20.8 | 40 |
| 217-85712 | M16H40M16 | M16 | M16 | 17 | 28.8 | 40 |

ECKFRÄSER
SHOULDER MILLING CUTTERS
ФРЕЗЫ ДЛЯ ОБРАБОТКИ УСТУПОВ

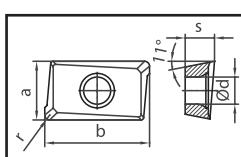
FRAISES À DRESSER

FRESE PER SPALLAMENTI

肩铣刀



| Code N. | Z | D | M | d | d1 | L | L1 | Insert | Screw | Wrench |
|-----------|---|----|-----|------|----|----|----|-------------|-------|------------|
| 454-01023 | 3 | 20 | M10 | 10,5 | 18 | 50 | 30 | | | |
| 454-01024 | 3 | 25 | M12 | 12,5 | 21 | 57 | 35 | | | |
| 454-01025 | 4 | 25 | M12 | 12,5 | 21 | 57 | 35 | | | |
| 454-01026 | 4 | 32 | M16 | 17 | 29 | 60 | 35 | | | |
| 454-01027 | 5 | 32 | M16 | 17 | 29 | 60 | 35 | APHT 1003.. | KV25c | 816-123002 |
| 454-01028 | 5 | 40 | M16 | 17 | 37 | 60 | 35 | APHX 1003.. | | |
| | | | | | | | | APKT 1003.. | | |



APHT 1003..
APHX 1003..
APKT 1003..

a b s d r

6.7 10.8 3.55 2.8 0.5

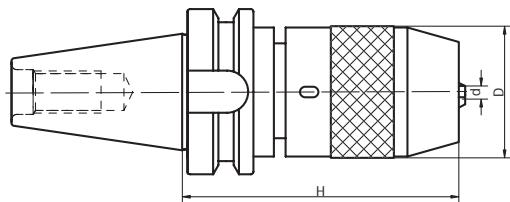
Mit Luft- und Kühlbohrungen
With Coolant and air holes
с отверстием под охлаждение/воздух
Avec trou pour arrosage et air
Con fori per il passaggio dell'aria e del refrigerante

NC-BOHRFUTTER
UNIVERSAL DRILL CHUCKS
УНИВЕРСАЛЬНЫЕ СВЕРЛИЛЬНЫЕ ПАТРОНЫ

MANDRINS UNIVERSELLES DE PERCAGE
MANDRINI PORTAPUNTE INTEGRALI
万能钻夹头



MAS 403BT ADB



| Code N. | Description | ISO | H | D | Clamping capacity | Wrench |
|-----------|---------------|-----|-----|----|-------------------|------------|
| 252-11500 | BT30H100R1-13 | 30 | 100 | 50 | 1-13 | 816-111024 |
| 252-11501 | BT40H95R1-13 | 40 | 95 | 50 | 1-13 | 816-111024 |
| 252-11502 | BT40H116R3-16 | 40 | 116 | 57 | 3-16 | 816-111025 |
| 252-11503 | BT50H110R1-13 | 50 | 110 | 50 | 1-13 | 816-111024 |
| 252-11504 | BT50H110R3-16 | 50 | 110 | 57 | 3-16 | 816-111025 |

RUNDLAUFGENAUGKEIT 0.04 MM

Zur Erhöhung der Spannkraft werden diese Futter mit Spannschlüssel geliefert.
BEI LINKS LAUFENDEN BEARBEITUNGEN SIND DIESE
FUTTER NICHT ZU BENUTZEN.

RUNOUT ACCURACY 0.04 MM T.I.R.

Supplied with spanner wrench to allow the application
of supplementary gripping torque.

DO NOT USE IN REVOLUTION IN COUNTER-CLOCKWISE DIRECTION.

БИЕНИЕ 0,04 ММ

Поставляется с ключом для более сильного зажима.
НЕ ВРАЩАТЬ ПРОТИВ ЧАСОВОЙ СТРЕЛКИ!

PRECISION DE ROTATION 0.04 MM

Les mandrins sont fournis avec clé de blocage
pour augmenter la force de serrage.
NE PAS UTILISER DANS USINAGE AVEC ROTATION A' GAUCHE

PRECISIONE DI ROTAZIONE 0.04 MM

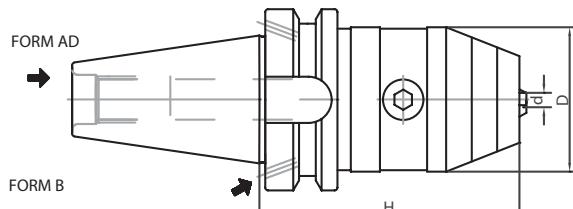
Per incrementare la forza di serraggio i mandrini sono forniti
con chiave di bloccaggio.
NON DEVONO ESSERE USATI PER LAVORAZIONI
CON ROTAZIONE A SINISTRA.

径向跳动精度 0.04 MM T.I.R.

提供活动扳手，以便施加补充夹紧力。
不得用于逆时针方向旋转。

NC-BOHRFUTTER FÜR RECHTS-UND LINKSLAUF
NC DRILL CHUCKS FOR LEFT AND RIGHT ROTATION
СВЕРЛИЛЬНЫЕ ПАТРОНЫ С ВРАЩЕНИЕМ ПО- И ПРОТИВ
ЧАСОВОЙ СТРЕЛКИ ДЛЯ СТАНКОВ С ЧПУ

MANDRIN DE PERCAGE CNC POUR ROTATION GAUCHE-DROITE
MANDRINI PORTAPUNTE INTEGRALI PER ROTAZIONE
DESTRA E SINISTRA
左右旋转 NC 钻夹头



| Code N. | Description | ISO | H | D | Clamping capacity | Wrench |
|-----------|----------------|-----|-----|----|-------------------|------------|
| 252-11400 | BT30H110R1-13X | 30 | 110 | 50 | 1-13 | 816-152001 |
| 252-11410 | BT40H98R1-13X | 40 | 98 | 50 | 1-13 | 816-152001 |
| 252-11411 | BT40H103R3-16X | 40 | 103 | 50 | 3-16 | 816-152002 |
| 252-11412 | BT50H109R1-13X | 50 | 109 | 50 | 1-13 | 816-152001 |
| 252-11413 | BT50H114R3-16X | 50 | 114 | 50 | 3-16 | 816-152002 |

RUNDLAUFGENAUGKEIT 0.03 MM

Sowohl für rechts- als auch links laufende Bearbeitungen geeignet,
mit Höchstgeschwindigkeit von 7000 u/min.

RUNOUT ACCURACY 0.03 MM T.I.R.

Suitable for right and left rotation up to 7000 rpm.

БИЕНИЕ 0,03 ММ

Можно вращать по- и против часовой стрелки
со скоростью до 7000 об/мин.

PRECISION DE ROTATION 0.03 MM

Utilisables pour rotation droite et gauche,
avec maximale vitesse 7000 rpm

PRECISIONE DI ROTAZIONE 0.03 MM.

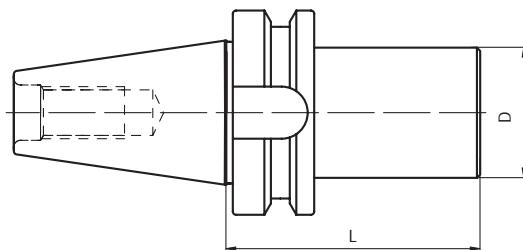
Adatti per rotazione sia destra che sinistra,
con velocità max di 7000 g/min.

径向跳动精度 0.03 MM T.I.R.

适用于最高转速达 7000 转/分钟的左右旋转

ROHLINGE MIT WEICHEM SCHAFT
BLANK TOOLHOLDER WITH SOFT SHANK
ЗАГОТОВКИ ДЛЯ ОПРАВОК НЕЗАКАЛЕННЫЕ

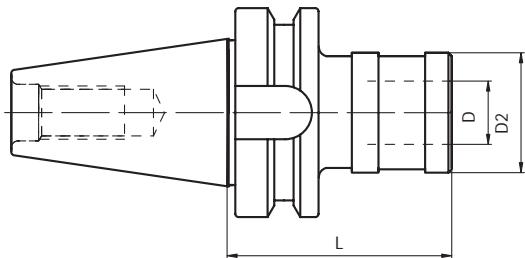
BARRES D'ALESAGE SEMI-FINIES
MANDRINI SEMILAVORATI A STELO TENERO
带软柄的切断刀柄



| Code N. | Description | ISO | D | L |
|-----------|-----------------|-----|------|-----|
| 217-41502 | BT40H160D40.5SM | 40 | 40.5 | 160 |
| 217-41503 | BT40H160D63.5SM | 40 | 63.5 | 160 |
| 217-41504 | BT40H250D63.5SM | 40 | 63.5 | 250 |
| 217-41505 | BT50H160D80SM | 50 | 80 | 160 |
| 217-41506 | BT50H200D80SM | 50 | 80 | 200 |
| 217-41507 | BT50H300D80SM | 50 | 80 | 300 |

GEWINDESCHNEID-SCHNELLWECHSELFUTTER
MIT LÄNGENAUSGLEICH
TENSION AND COMPRESSION TAPPING HEAD
РЕЗЬБОНАРЕЗНЫЕ ПАТРОНЫ С КОМПЕНСАЦИЕЙ

MANDRINS DE TARAUDAGE A CHANGEMENT
RAPIDE A DOUBLE USAGE
MASCHIATORI A DOPPIA COMPENSAZIONE
张力和压缩丝攻头

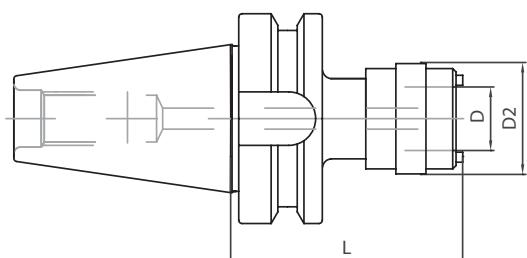


| Code N. | Description | ISO | SIZE | Top range | PRESS. | EXT. | D | D2 | L |
|---------|----------------|-----|------|-----------|--------|------|----|----|-----|
| M-3310 | BT40H67GR1.DC | 40 | 1 | M3-M12 | 9 | 9 | 19 | 38 | 67 |
| M-3410 | BT40H93GR2.DC | 40 | 2 | M6-M20 | 15 | 15 | 31 | 53 | 93 |
| M-3510 | BT40H138GR3.DC | 40 | 3 | M14-M33 | 24 | 24 | 48 | 78 | 138 |
| M-3320 | BT50H81GR1.DC | 50 | 1 | M3-M12 | 9 | 9 | 19 | 38 | 80 |
| M-3430 | BT50H102GR2.DC | 50 | 2 | M6-M20 | 15 | 15 | 31 | 53 | 102 |
| M-3530 | BT50H135GR3.DC | 50 | 3 | M14-M33 | 24 | 24 | 48 | 78 | 135 |

GEWINDESCHNEID-SCHNELLWECHSELFUTTER
OHNE LÄNGENAUSGLEICH
SOLID TAPPING HEAD
РЕЗЬБОНАРЕЗНЫЕ ПАТРОНЫ БЕЗ КОМПЕНСАЦИИ

MANDRINS DE TARAUDAGE A CHANGEMENT
RAPIDE SANS COMPENSATION
MASCHIATORI RIGIDI SENZA COMPENSAZIONE
固体丝攻头

AD



| Code N. | Description | ISO | SIZE | Top range | D | D2 | L |
|---------|---------------|-----|------|-----------|----|----|----|
| M6010 | BT40H67GR1.SC | 40 | 1 | M3-M12 | 19 | 33 | 67 |
| M6020 | BT40H90GR2.SC | 40 | 2 | M6-M20 | 31 | 50 | 90 |

Zubehör
Accessories
Accessoires
Accessori
Принадлежности
零件



GREIFER FÜR WERKZEUGMAGAZIN

Dank unserer intensiven und engen Zusammenarbeit mit den berühmtesten Maschinenherstellern Europas haben wir eine sehr gute Erfahrung auch in dem Bereich Magazinkassetten entwickelt. Gerne bieten wir Ihnen folgende Ausführungen: für ISO, HSK, und alle andere, nach Ihrem Wunsch.

CLAMPING FINGERS FOR TOOL MAGAZINES

Thanks to our constant and exhaustive co-operation with the most famous machine tool makers we developed a very good experience into the manufacturing of high precision clamping fingers for tool magazines. Our range includes clampers for the most popular attachements: ISO CONES, HSK, but of course we are open to any new version, according to the customer's drawing.

ЗАХВАТЫ ДЛЯ ИНСТРУМЕНТАЛЬНОГО МАГАЗИНА

Благодаря постоянному и тесному сотрудничеству с самыми известными производителями инструмента мы получили большой опыт в изготовлении высокоточных захватов для инструментальных магазинов. Линейка захватов включает в себя самые часто используемые модели: для конусов ISO и HSK. Разумеется, мы готовы изготовить специальный захват по чертежам заказчика.

PINCES DE LOGEMENT POUR LE MAGASIN DES MACHINES OUTILS

Grâce à notre constante et intensive collaboration avec les plus célèbres constructeurs des machine outils, nous avons développé une bonne expérience pour la production de pinces de logement pour le magasin des machine outils. Dans notre gamme il y a attachements: ISO, HSK et autres. Naturellement nous sommes ouverts à construire autres types de pinces suite aux différents plans du client.

PINZE ALLOGGIAMENTO PORTAUTENSILI PER MAGAZZINI MACCHINE UTENSILI

Grazie alla nostra costante ed intensa collaborazione con i più famosi costruttori di macchine utensili, abbiamo sviluppato una buona esperienza nella produzione di Pinze ad alta precisione per l'alloggiamento nei magazzini di macchine utensili.

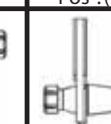
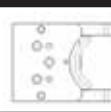
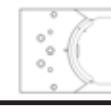
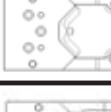
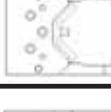
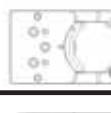
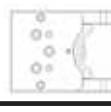
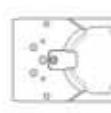
Nella nostra gamma sono presenti attacchi: ISO, HSK ed altri, e naturalmente siamo aperti ad altre versioni secondo disegno del cliente.

刀具库使用的夹具

由于我公司长期与最为著名的机器工具制造商进行全面的合作，我公司已经积累了制造工具库使用的高精度夹具的丰富经验。我们的经营范围包括最为受欢迎的附件夹具：ISO 锥体、HSK，当然，我公司也欢迎由客户提供的图纸的任何新版本。



GREIFER / CLAMPING FINGERS / ЗАХВАТЫ / PINCES / PINZE / 夹具

| | | Peso del mandrino / Toolholder's weight | | | Lunghezza del mandrino (mm) Tool's length (mm) | Molla/Spring | | |
|-------------|---|---|---|--|---|--------------|---------------|---|
| | | Max. Load in vertical Pos .(kg) | Max. Load in upper Pos .(kg) | Max. Load in lower Pos .(kg) | | | | |
| Codice/Code | |  |  |  | | | | |
| CAS-HSK63A |  | 832-018030 | 14,6 | 7,8 | 4,1 | 250 | SN 2540-16-76 | A |
| | | 832-018470 | 21 | 11,2 | 5,9 | 250 | SN 2560-16-76 | B |
| CAS-HSK100A |  | 832-018020 | 40 | 20,5 | 11 | 400 | SDF600-20x102 | A |
| | | 832-018480 | 80 | 50 | 27 | 400 | SDF700-20x102 | B |
| CAS-C6 |  | 832-007940 | 15,6 | 8,3 | 4,4 | 250 | SN 2540-16-76 | A |
| | | 832-018490 | 22,3 | 11,9 | 6,3 | 250 | SN 2560-16-76 | B |
| CAS-C8 |  | 832-018050 | 18,2 | 10,5 | 5,1 | 250 | SDF600-16x89 | A |
| | | 832-018500 | 29 | 16,7 | 8,2 | 250 | SDF700-16x89 | B |
| CAS-KM 63-2 |  | 832-007980 | 14,4 | 7,7 | 4 | 250 | SN 2540-16-76 | A |
| | | 832-018510 | 20,5 | 10,9 | 5,8 | 250 | SN 2560-16-76 | B |
| CAS-TC 40 |  | 832-018520 | 14,6 | 7,8 | 4,1 | 250 | SN 2540-16-76 | A |
| | | 832-018530 | 21 | 11,2 | 5,9 | 250 | SN 2560-16-76 | B |
| CAS-TC50 |  | 832-018360 | 25 | 13 | 7 | 400 | SDF500-20x102 | C |
| | | 832-018210 | 40 | 27 | 15 | 400 | SDF600-20x102 | A |
| CAS-BT 40 |  | 832-018540 | 14,6 | 7,8 | 4,1 | 250 | SN 2540-16-76 | A |
| | | 832-018550 | 21 | 11,2 | 5,9 | 250 | SN 2560-16-76 | B |
| CAS-BT 50 |  | 832-018370 | 25 | 13 | 7 | 400 | SDF500-20x102 | C |
| | | 832-018200 | 61 | 31 | 17 | 400 | SDF600-20x102 | A |

A- Mittelkraft Feder / Middle Strength Spring / Пружина средней жесткости / Ressort moyen force / Molla Forza Media / 中等强度的弹簧

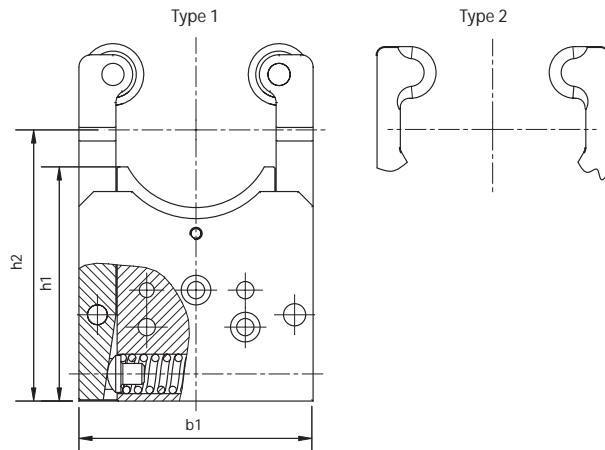
B- Verstärkte Feder / Stiffened Spring / Пружина повышенной жесткости / Ressort renforcé / Molla Rinforzata / 强化弹簧

C- Normale Feder / Normal Spring / Пружина нормальной жесткости / Ressort normal / Molla Normale / 正常弹簧

GREIFER FÜR WERKZEUGMAGAZIN
CLAMPING FINGERS
3AXBATЫ 夹具

PINCES DE LOGEMENT POUR LE MAGASIN DES MACHINES OUTILS

PINZE PER MAGAZZINI UTENSILI



| Code N. | Tool | b1 | h1 | h2 | Type | Type spring |
|------------|----------|-----|-----|-----|------|-------------|
| 832-018030 | HSK 63A | 95 | 95 | 110 | 1 | A |
| 832-018470 | HSK 63A | 95 | 95 | 110 | 1 | B |
| 832-018020 | HSK 100A | 135 | 118 | 139 | 2 | A |
| 832-018480 | HSK 100A | 135 | 118 | 139 | 2 | B |
| 832-007940 | CAPTO 6 | 95 | 91 | 110 | 1 | A |
| 832-018490 | CAPTO 6 | 95 | 91 | 110 | 1 | B |
| 832-018050 | CAPTO 8 | 105 | 85 | 110 | 1 | A |
| 832-018500 | CAPTO 8 | 105 | 85 | 110 | 1 | B |
| 832-007980 | KM 63 | 95 | 100 | 110 | 2 | A |
| 832-018510 | KM 63 | 95 | 100 | 110 | 2 | B |
| 832-018520 | TC 40 | 95 | 95 | 110 | 1 | A |
| 832-018530 | TC 40 | 95 | 95 | 110 | 1 | B |
| 832-018360 | TC 50 | 135 | 118 | 139 | 2 | C |
| 832-018210 | TC 50 | 135 | 118 | 139 | 2 | A |
| 832-018540 | BT 40 | 95 | 95 | 110 | 1 | A |
| 832-018550 | BT 40 | 95 | 95 | 110 | 1 | B |
| 832-018370 | BT 50 | 135 | 118 | 139 | 2 | C |
| 832-018200 | BT 50 | 135 | 118 | 139 | 2 | A |

A- Mittelkraft Feder / Middle Strength Spring / Пружина средней жесткости / Ressort moyen force / Molla Forza Media / 中等强度的弹簧

B- Verstärkte Feder / Stiffened Spring / Пружина повышенной жесткости / Ressort renforcé / Molla Rinforzata / 强化弹簧

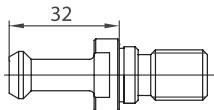
C- Normale Feder / Normal Spring / Пружина нормальной жесткости / Ressort normal / Molla Normale / 正常弹簧

KLIMATEK

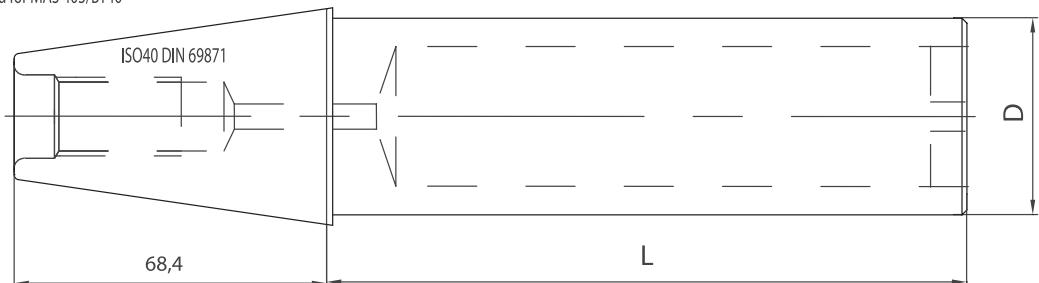
ACCESSORIES AND KIT



PRÜFDORNE
CONTROL PINS
КОНТРОЛЬНЫЕ ОПРАВКИ
BARRES DE CONTRÔLE
BARRE DI CONTROLLO
控制销



Special pull stud for MAS 403/BT40



DIN 69871 A
DIN 2080
MAS 403BT

| Code N. | Description | ISO | D | L |
|-----------|---------------|-----|----|-----|
| 217-71201 | TC40H300D40BC | 40 | 40 | 300 |
| 217-71202 | TC50H350D50BC | 50 | 50 | 350 |

IM HOLZKASTEN UND MIT MESSPROTOKOLL GELIEFERT
SUPPLIED IN WOODEN BOXES AND WITH TEST CERTIFICATE
FOURNIES EN BOÎTES DE BOIS ET AVEC CERTIFICAT DE CONTRÔLE
FORNITE IN CASSSETTA DI LEGNO E CON CERTIFICATO DI COLLAUDO
ПОСТАВЛЯЮТСЯ В ДЕРЕВЯННОМ ЯЩИКЕ С СЕРТИФИКАТОМ СООТВЕТСТВИЯ
提供木箱，配备检测证书





ISO - PRÜFDORNE

TECHNISCHE DATEN

KEGELSCHAFTTOLERANZEN

IN KLASSE AT3 ANGEFERTIGT

PRÜFDORNTOLERANZEN

| Durchmesser | Rundlaufgenauigkeit | Zylindrität |
|-------------|---------------------|-------------|
| +/-0.05 | 0.005 | 0.003 |

KONSTRUKTIONSDATEN

- aus Einsatzstahl zertifiziert und legiert angefertigt
- in der Einsatztiefe von 0,4-0,5 mm
- Gehärtet, angelassen, brüniert
- Härte HRC58 +-2, Festigkeit 800-1000 N / mm2
- Außengeschliffen
- 100% durch zertifizierte Meßinstrumente geprüft

Für DIN 2080 - DIN 69871 - MAS BT geeignet



ISO CONTROL PINS

TECHNICAL FEATURES

CONE'S TOLERANCE

ACCORDING TO THE CLASS AT3.

PIN'S TOLERANCE

| Diameter | Runout accuracy | Cilindricity |
|----------|-----------------|--------------|
| +/-0.05 | 0.005 | 0.003 |

CONSTRUCTIVE FEATURES

- Manufactured with casehardening Steel
- Casehardened with depth 0,8 - 1mm
- Hardened - Tempered - Black oxidized
- Hardness HRC 58+-2, Strength 800-100 N/mm2
- External grinding finish
- Tested 100% with certified measuring instruments

Suitable for DIN 2080 - DIN 69871 - MAS BT



КОНТРОЛЬНЫЕ ОПРАВКИ ISO

ТЕХНИЧЕСКОЕ ОПИСАНИЕ

ТОЧНОСТЬ КОНУСА

Соответствует классу AT3.

ТОЧНОСТЬ ЦИЛИНДРА

| Diameter | Runout accuracy | Cilindricity |
|----------|-----------------|--------------|
| +/-0.05 | 0.005 | 0.003 |

КОНСТРУКТИВНЫЕ ОСОБЕННОСТИ

- Изготовлены из стали с последующей цементацией
- Цементация на глубину 0,8 - 1 мм
- Оправки подвергнуты закалке и отпуску.
Защитно-декоративное покрытие черного цвета.
- Твердость 58+-2 HRC, прочность 800-1000 Н/мм2
- Шлифованная внешняя поверхность
- Каждая оправка испытана на сертифицированном оборудовании

Подходит для DIN 2080 - DIN 69871 - MAS BT



BARRES DE CONTROLE ISO

DONNEES TECHNIQUES

TOLERANCE DU CONE

FABRIQUEES EN CLASSE AT3

TOLERANCE DE LA BARRE

| Diamètre | Coaxialité | Cylindricité |
|----------|------------|--------------|
| +/-0.05 | 0.005 | 0.003 |

ELEMENTS DE CONSTRUCTION

- Produites en acier cémenté certifié et allié au Ni.Cr.Mo.
- Cementeés avec profondeur 0,8 - 1mm
- Trempées - Revenues - Brunies
- Dureté HRC 58 +- 2 résistance 800-1000 N/ mm²
- Finition de rectification extérieure
- Contrôlées à 100% avec des instruments de mesure certifiés

Utilisable pour DIN 2080 - DIN 69871 - MAS BT



BARRE DI CONTROLLO ISO

DATI TECNICI

TOLLERANZA DEL CONO

PRODOTTI IN CLASSE AT3.

TOLLERANZE DELLA BARRA

| Diametro | Coassialità | Cilindricità |
|----------|-------------|--------------|
| +/-0.05 | 0.005 | 0.003 |

DATI COSTRUTTIVI

- Costruite in acciaio da cementazione certificato e legato
- Cementate con profondità 0,4 - 0,5 mm
- Temprate-rinvenute-brunite
- Durezza HRC 58 +- 2 resistenza 800-1000 N/ mm²
- Finitura di rettifica esterna
- Collaudate 100% con strumenti di misura certificati

Utilizzabile per DIN 2080 - DIN 69871 - MAS BT



插销ISO控制

技术特点

锥体的误差

符合 AT3 级别。

插销的误差

| Diameter | Runout accuracy | Cilindricity |
|----------|-----------------|--------------|
| +/-0.05 | 0.005 | 0.003 |

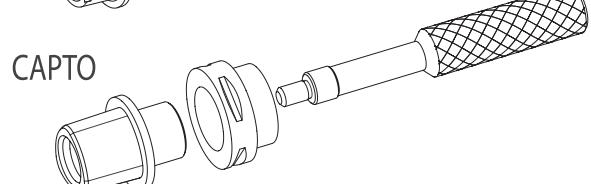
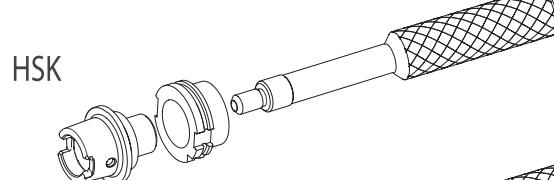
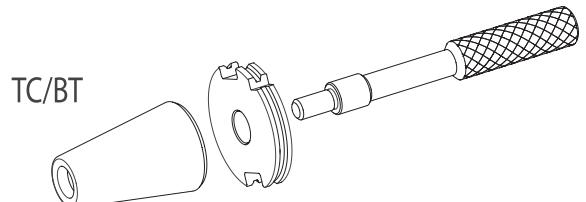
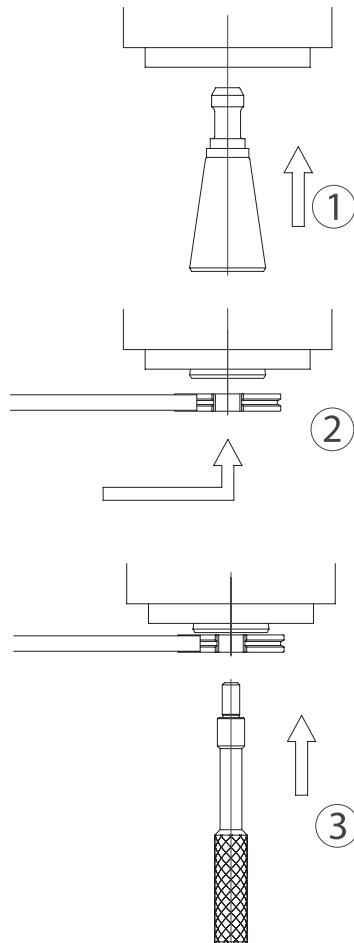
结构特点

- 用表面硬化钢材制造。
- 硬化深度达 0.8 - 1 毫米。
- 经过硬化及回火处理。黑色氧化。
- 硬度达 HRC 58+-2，强度达 800-1000 N / 平方毫米。
- 外部表面打磨处理。
- 100% 使用经过认证的测量仪器检测。

适用于 DIN 2080 - DIN 69871 - MAS BT。

POSITIONSPRÜFUNG DES WERKZEUGWECHSLERS
POSITIONING CONTROL OF THE TOOL CHANGER ARM
ПРИБОР ДЛЯ КОНТРОЛЯ ПОЗИЦИОНИРОВАНИЯ ЗАХВАТЧИКА ДЛЯ СМЕНЫ ИНСТРУМЕНТА

| Code | Cone |
|------------------|---------|
| KIT.PRUEFD-TC40 | TC40 |
| KIT.PRUEFD-TC50 | TC50 |
| KIT.PRUEFD-BT40 | BT40 |
| KIT.PRUEFD-BT50 | BT50 |
| KIT.PRUEFD-H40A | HSK40A |
| KIT.PRUEFD-H50A | HSK50A |
| KIT.PRUEFD-H63A | HSK63A |
| KIT.PRUEFD-H100A | HSK100A |
| KIT.PRUEFD-C4 | CAPTO4 |
| KIT.PRUEFD-C5 | CAPTO5 |
| KIT.PRUEFD-C6 | CAPTO6 |



- Nach der Montage der üblichen Anzugsbolzen spannen Sie die Aufnahme manuell in die Spindel.
- Spannen Sie den Flansch in den Werkzeugwechsler Arm und gehen Sie näher an der Spindel.
- Nach der Positionierung versuchen Sie, die Doppel-Durchmesser-Prüfdorne zwischen den beiden Stücken einzusetzen. Stellen Sie den Arm entsprechend ein, bis Sie die perfekte Rundlaufgenauigkeit bekommen, wenn die Dorne in die Bohrungen des Flansches und der Aufnahme ohne Übermaß hineingeht.



- After assembling the usual pull stud, insert the cone into the spindle manually.
- Set up the flange into the tool changer arm and go closer to the spindle.
- After positioning, try to insert the double-diameter control pin between the two pieces. Adjust the arm accordingly until you get the perfect coaxiality so that the control bar enters the flange and the cone holes with no interferences.



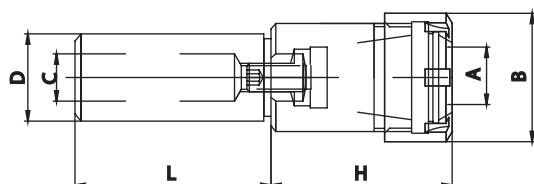
- Après le montage de la tirette, insérez manuellement le cône dans le mandrin de la machine.
- Montez la bride dans le bras changeur d'outil et rapprochez de la machine.
- Après le positionnement, essayez d'insérer la barre de contrôle à double diamètre entre les deux pièces. Ajustez le bras en conséquence jusqu'à ce que vous obtenez la coaxialité parfaite quand la barre entre sans interférences dans les trous de la bride et du cône.

- Inserire manualmente il cono nel mandrino della macchina, dopo aver montato il codolo normalmente usato.
- Montare la flangia nel braccetto cambia utensile ed avvicinarsi al naso macchina.
- Una volta in posizione provare ad inserire la spina di controllo a doppio diametro tra i 2 pezzi. Regolare di conseguenza il braccetto cambia utensile fino a raggiungere la perfetta coassialità quando la spina entra senza interferenze nei fori della flangia e del cono.

SPANNFUTTER MIT ZYLINDERSCHAFT MIT MINI SPANNMUTTER
 CYLINDRICAL COLLET CHUCKS WITH MINI NUT
 ЦАНГОВЫЕ ПАТРОНЫ С ЦИЛИНДРИЧЕСКИМ
 ХВОСТОВИКОМ С МИНИ-ГАЙКОЙ

PORTE PINCES QUEUE CYLINDRIQUE AVEC ECROU MINI
 PORTAPINZA GAMBO CILINDRICO CON GHIERA MINI
 带微型螺母的圆柱式弹簧夹头

DIN 6499



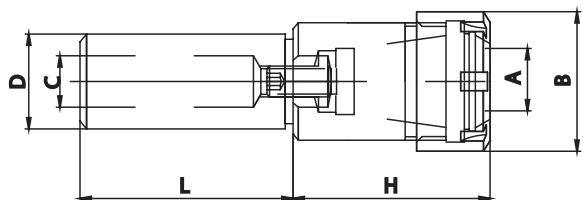
| Code N. | Description | Dh6 | L | H | B | C | Clamping capacity | Nut | Description |
|-----------|--------------|-----|-----|----|----|---|-------------------|------------|-------------|
| 264-35114 | D5L45ER8M | 5 | 45 | 24 | 12 | - | 1÷5 | 812-203011 | ER8M |
| 214-35101 | D6L45ER8M | 6 | 45 | 24 | 12 | - | 1÷5 | 812-203011 | ER8M |
| 214-35139 | D6L45ER11M | 6 | 45 | 25 | 16 | - | 1÷7 | 812-203012 | ER11M |
| 264-35115 | D7L45ER11M | 7 | 45 | 25 | 16 | - | 1÷7 | 812-203012 | ER11M |
| 214-35102 | D8L55ER8M | 8 | 55 | 24 | 12 | - | 1÷5 | 812-203011 | ER8M |
| 214-35108 | D8L80ER8M | 8 | 80 | 24 | 12 | - | 1÷5 | 812-203011 | ER8M |
| 214-35714 | D8L100ER8M | 8 | 100 | 24 | 12 | - | 1÷5 | 812-203011 | ER8M |
| 214-35715 | D8L130ER8M | 8 | 130 | 24 | 12 | - | 1÷5 | 812-203011 | ER8M |
| 214-35109 | D8L55ER11M | 8 | 55 | 25 | 16 | - | 1÷7 | 812-203012 | ER11M |
| 264-35116 | D8L100ER11M | 8 | 100 | 25 | 16 | - | 1÷7 | 812-203012 | ER11M |
| 214-35716 | D8L55ER16M | 8 | 55 | 37 | 22 | - | 1÷10 | 812-203013 | ER16M |
| 214-35717 | D8L100ER16M | 8 | 100 | 37 | 22 | - | 1÷10 | 812-203013 | ER16M |
| 264-35117 | D10L55ER8M | 10 | 55 | 24 | 12 | 5 | 1÷5 | 812-203011 | ER8M |
| 214-35718 | D10L80ER8M | 10 | 80 | 24 | 12 | 5 | 1÷5 | 812-203011 | ER8M |
| 264-35118 | D10L100ER8M | 10 | 100 | 24 | 12 | 5 | 1÷5 | 812-203011 | ER8M |
| 214-35719 | D10L130ER8M | 10 | 130 | 24 | 12 | 5 | 1÷5 | 812-203011 | ER8M |
| 214-35110 | D10L55ER11M | 10 | 55 | 25 | 16 | 5 | 1÷7 | 812-203012 | ER11M |
| 214-35720 | D10L80ER11M | 10 | 80 | 25 | 16 | 5 | 1÷7 | 812-203012 | ER11M |
| 264-35119 | D10L100ER11M | 10 | 100 | 25 | 16 | 5 | 1÷7 | 812-203012 | ER11M |
| 214-35721 | D10L130ER11M | 10 | 130 | 25 | 16 | 5 | 1÷7 | 812-203012 | ER11M |
| 214-35113 | D10L60ER16M | 10 | 60 | 37 | 22 | 5 | 1÷10 | 812-203013 | ER16M |
| 214-35722 | D10L80ER16M | 10 | 80 | 37 | 22 | 5 | 1÷10 | 812-203013 | ER16M |
| 264-35120 | D10L100ER16M | 10 | 100 | 37 | 22 | 5 | 1÷10 | 812-203013 | ER16M |
| 214-35723 | D12L55ER8M | 12 | 55 | 15 | 12 | 5 | 1÷5 | 812-203011 | ER8M |
| 214-35724 | D12L70ER8M | 12 | 70 | 15 | 12 | 5 | 1÷5 | 812-203011 | ER8M |
| 214-35140 | D12L100ER8M | 12 | 100 | 15 | 12 | 5 | 1÷5 | 812-203011 | ER8M |
| 264-35121 | D12L140ER8M | 12 | 140 | 15 | 12 | 5 | 1÷5 | 812-203011 | ER8M |
| 264-35122 | D12L55ER11M | 12 | 55 | 25 | 16 | 7 | 1÷7 | 812-203012 | ER11M |
| 214-35141 | D12L70ER11M | 12 | 70 | 25 | 16 | 7 | 1÷7 | 812-203012 | ER11M |
| 214-35142 | D12L100ER11M | 12 | 100 | 25 | 16 | 7 | 1÷7 | 812-203012 | ER11M |
| 214-35143 | D12L140ER11M | 12 | 140 | 25 | 16 | 7 | 1÷7 | 812-203012 | ER11M |
| 264-35123 | D12L55ER16M | 12 | 55 | 37 | 22 | 7 | 1÷10 | 812-203013 | ER16M |
| 214-35114 | D12L80ER16M | 12 | 80 | 37 | 22 | 7 | 1÷10 | 812-203013 | ER16M |
| 264-35124 | D12L120ER16M | 12 | 120 | 37 | 22 | 7 | 1÷10 | 812-203013 | ER16M |
| 264-35125 | D15L100ER20M | 15 | 100 | 41 | 28 | 9 | 1÷13 | 812-203014 | ER20M |
| 264-35126 | D16L40ER11M | 16 | 40 | 22 | 16 | 7 | 1÷7 | 812-203012 | ER11M |
| 214-35725 | D16L60ER11M | 16 | 60 | 22 | 16 | 7 | 1÷7 | 812-203012 | ER11M |
| 264-35127 | D16L80ER11M | 16 | 80 | 22 | 16 | 7 | 1÷7 | 812-203012 | ER11M |
| 264-35128 | D16L100ER11M | 16 | 100 | 22 | 16 | 7 | 1÷7 | 812-203012 | ER11M |
| 264-35129 | D16L130ER11M | 16 | 130 | 22 | 16 | 7 | 1÷7 | 812-203012 | ER11M |
| 264-35130 | D16L160ER11M | 16 | 160 | 22 | 16 | 7 | 1÷7 | 812-203012 | ER11M |
| 214-35726 | D16L200ER11M | 16 | 200 | 22 | 16 | 7 | 1÷7 | 812-203012 | ER11M |
| 264-35131 | D16L35ER16M | 16 | 35 | 37 | 22 | 7 | 1÷10 | 812-203013 | ER16M |
| 264-35132 | D16L60ER16M | 16 | 60 | 37 | 22 | 7 | 1÷10 | 812-203013 | ER16M |
| 214-35115 | D16L80ER16M | 16 | 80 | 37 | 22 | 7 | 1÷10 | 812-203013 | ER16M |
| 214-35145 | D16L100ER16M | 16 | 100 | 37 | 22 | 7 | 1÷10 | 812-203013 | ER16M |
| 214-35146 | D16L130ER16M | 16 | 130 | 37 | 22 | 7 | 1÷10 | 812-203013 | ER16M |
| 214-35147 | D16L160ER16M | 16 | 160 | 37 | 22 | 7 | 1÷10 | 812-203013 | ER16M |
| 214-35727 | D16L200ER16M | 16 | 200 | 37 | 22 | 7 | 1÷10 | 812-203013 | ER16M |
| 264-35133 | D16L55ER20M | 16 | 55 | 40 | 28 | 9 | 1÷13 | 812-203014 | ER20M |
| 214-35148 | D16L100ER20M | 16 | 100 | 40 | 28 | 9 | 1÷13 | 812-203014 | ER20M |
| 264-35134 | D16L130ER20M | 16 | 130 | 40 | 28 | 9 | 1÷13 | 812-203014 | ER20M |
| 264-35135 | D16L160ER20M | 16 | 160 | 40 | 28 | 9 | 1÷13 | 812-203014 | ER20M |

D5÷D16 Zylinderschaft • Shank without flat • Queue cylindrique • Stelo senza piano • Хвостовик без лыски • 柄不带平面

SPANNFUTTER MIT ZYLINDERSCHAFT MIT MINI SPANNMUTTER
 CYLINDRICAL COLLET CHUCKS WITH MINI NUT
 ЦАНГОВЫЕ ПАТРОНЫ С ЦИЛИНДРИЧЕСКИМ
 ХВОСТОВИКОМ С МИНИ-ГАЙКОЙ

PORTE PINCES QUEUE CYLINDRIQUE AVEC ECROU MINI
 PORTAPINZA GAMBO CILINDRICO CON GHIERA MINI
 带微型螺母的圆柱式弹簧夹头

DIN 6499



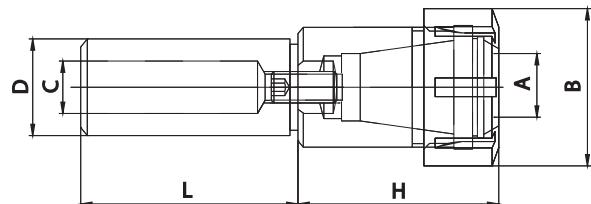
| Code N. | Description | Dh6 | L | H | B | C | Clamping capacity | Nut | Description |
|-----------|-----------------|-------|-----|----|----|----|-------------------|------------|-------------|
| 214-35728 | D19,05L50ER11M | 19,05 | 50 | 18 | 16 | 7 | 1÷7 | 812-203012 | ER11M |
| 214-35729 | D19,05L100ER11M | 19,05 | 100 | 18 | 16 | 7 | 1÷7 | 812-203012 | ER11M |
| 214-35730 | D19,05L60ER16M | 19,05 | 60 | 30 | 22 | 11 | 1÷10 | 812-203013 | ER16M |
| 214-35731 | D19,05L100ER16M | 19,05 | 100 | 30 | 22 | 11 | 1÷10 | 812-203013 | ER16M |
| 214-35732 | D19,05L50ER20M | 19,05 | 50 | 37 | 28 | 11 | 1÷13 | 812-203014 | ER20M |
| 214-35733 | D19,05L100ER20M | 19,05 | 100 | 37 | 28 | 11 | 1÷13 | 812-203014 | ER20M |
| 214-35734 | D19,05L50ER25M | 19,05 | 50 | 46 | 35 | 11 | 1÷16 | 812-203015 | ER25M |
| 214-35735 | D19,05L100ER25M | 19,05 | 100 | 46 | 35 | 11 | 1÷16 | 812-203015 | ER25M |
| 264-35136 | D20L50ER11M | 20 | 50 | 22 | 16 | 7 | 1÷7 | 812-203012 | ER11M |
| 264-35137 | D20L100ER11M | 20 | 100 | 22 | 16 | 7 | 1÷7 | 812-203012 | ER11M |
| 214-35736 | D20L130ER11M | 20 | 130 | 22 | 16 | 7 | 1÷7 | 812-203012 | ER11M |
| 214-35737 | D20L160ER11M | 20 | 160 | 22 | 16 | 7 | 1÷7 | 812-203012 | ER11M |
| 214-35738 | D20L200ER11M | 20 | 200 | 22 | 16 | 7 | 1÷7 | 812-203012 | ER11M |
| 214-35149 | D20L60ER16M | 20 | 60 | 30 | 22 | 11 | 1÷10 | 812-203013 | ER16M |
| 214-35150 | D20L100ER16M | 20 | 100 | 30 | 22 | 11 | 1÷10 | 812-203013 | ER16M |
| 264-35138 | D20L130ER16M | 20 | 130 | 30 | 22 | 11 | 1÷10 | 812-203013 | ER16M |
| 214-35151 | D20L160ER16M | 20 | 160 | 30 | 22 | 11 | 1÷10 | 812-203013 | ER16M |
| 264-35139 | D20L200ER16M | 20 | 200 | 30 | 22 | 11 | 1÷10 | 812-203013 | ER16M |
| 214-35739 | D20L250ER16M | 20 | 250 | 30 | 22 | 11 | 1÷10 | 812-203013 | ER16M |
| 264-35140 | D20L46ER20M | 20 | 46 | 37 | 28 | 11 | 1÷13 | 812-203014 | ER20M |
| 214-35152 | D20L60ER20M | 20 | 60 | 37 | 28 | 11 | 1÷13 | 812-203014 | ER20M |
| 214-35111 | D20L100ER20M | 20 | 100 | 37 | 28 | 11 | 1÷13 | 812-203014 | ER20M |
| 214-35153 | D20L130ER20M | 20 | 130 | 37 | 28 | 11 | 1÷13 | 812-203014 | ER20M |
| 214-35154 | D20L160ER20M | 20 | 160 | 37 | 28 | 11 | 1÷13 | 812-203014 | ER20M |
| 264-35141 | D20L200ER20M | 20 | 200 | 37 | 28 | 11 | 1÷13 | 812-203014 | ER20M |
| 214-35740 | D20L250ER20M | 20 | 250 | 37 | 28 | 11 | 1÷13 | 812-203014 | ER20M |
| 264-35142 | D20L46ER25M | 20 | 46 | 46 | 35 | 11 | 1÷16 | 812-203015 | ER25M |
| 214-35155 | D20L60ER25M | 20 | 60 | 46 | 35 | 11 | 1÷16 | 812-203015 | ER25M |
| 214-35116 | D20L100ER25M | 20 | 100 | 46 | 35 | 11 | 1÷16 | 812-203015 | ER25M |
| 214-35156 | D20L130ER25M | 20 | 130 | 46 | 35 | 11 | 1÷16 | 812-203015 | ER25M |
| 214-35741 | D20L160ER25M | 20 | 160 | 46 | 35 | 11 | 1÷16 | 812-203015 | ER25M |
| 214-35742 | D22L80ER16M | 22 | 80 | 27 | 22 | 11 | 1÷10 | 812-203013 | ER16M |
| 214-35743 | D22L80ER20M | 22 | 80 | 30 | 28 | 11 | 1÷13 | 812-203014 | ER20M |
| 264-35143 | D25L100ER11M | 25 | 100 | 18 | 16 | 7 | 1÷7 | 812-203012 | ER11M |
| 214-35744 | D25L130ER11M | 25 | 130 | 18 | 16 | 7 | 1÷7 | 812-203012 | ER11M |
| 214-35745 | D25L160ER11M | 25 | 160 | 18 | 16 | 7 | 1÷7 | 812-203012 | ER11M |
| 264-35144 | D25L60ER16M | 25 | 60 | 27 | 22 | 11 | 1÷10 | 812-203013 | ER16M |
| 214-35157 | D25L100ER16M | 25 | 100 | 27 | 22 | 11 | 1÷10 | 812-203013 | ER16M |
| 264-35145 | D25L130ER16M | 25 | 130 | 27 | 22 | 11 | 1÷10 | 812-203013 | ER16M |
| 264-35146 | D25L160ER16M | 25 | 160 | 27 | 22 | 11 | 1÷10 | 812-203013 | ER16M |
| 214-35746 | D25L200ER16M | 25 | 200 | 27 | 22 | 11 | 1÷10 | 812-203013 | ER16M |
| 214-35158 | D25L60ER20M | 25 | 60 | 28 | 28 | 13 | 1÷13 | 812-203014 | ER20M |
| 214-35159 | D25L100ER20M | 25 | 100 | 28 | 28 | 13 | 1÷13 | 812-203014 | ER20M |
| 264-35147 | D25L130ER20M | 25 | 130 | 28 | 28 | 13 | 1÷13 | 812-203014 | ER20M |
| 214-35160 | D25L160ER20M | 25 | 160 | 28 | 28 | 13 | 1÷13 | 812-203014 | ER20M |
| 214-35747 | D25L200ER20M | 25 | 200 | 28 | 28 | 13 | 1÷13 | 812-203014 | ER20M |
| 264-35148 | D25L50ER25M | 25 | 50 | 32 | 35 | 13 | 1÷16 | 812-203015 | ER25M |
| 214-35161 | D25L70ER25M | 25 | 70 | 32 | 35 | 13 | 1÷16 | 812-203015 | ER25M |
| 264-35149 | D25L100ER25M | 25 | 100 | 32 | 35 | 13 | 1÷16 | 812-203015 | ER25M |
| 214-35162 | D25L130ER25M | 25 | 130 | 32 | 35 | 13 | 1÷16 | 812-203015 | ER25M |
| 264-35150 | D25L160ER25M | 25 | 160 | 32 | 35 | 13 | 1÷16 | 812-203015 | ER25M |
| 214-35748 | D25L200ER25M | 25 | 200 | 32 | 35 | 13 | 1÷16 | 812-203015 | ER25M |
| 214-35749 | D25,4L60ER16M | 25,4 | 60 | 27 | 22 | 11 | 1÷10 | 812-203013 | ER16M |
| 214-35750 | D25,4L100ER16M | 25,4 | 100 | 27 | 22 | 11 | 1÷10 | 812-203013 | ER16M |
| 214-35751 | D25,4L140ER16M | 25,4 | 140 | 27 | 22 | 11 | 1÷10 | 812-203013 | ER16M |
| 214-35752 | D25,4L70ER20M | 25,4 | 70 | 28 | 28 | 13 | 1÷13 | 812-203014 | ER20M |
| 214-35753 | D25,4L100ER20M | 25,4 | 100 | 28 | 28 | 13 | 1÷13 | 812-203014 | ER20M |
| 214-35754 | D25,4L140ER20M | 25,4 | 140 | 28 | 28 | 13 | 1÷13 | 812-203014 | ER20M |
| 214-35755 | D25,4L70ER25M | 25,4 | 70 | 32 | 35 | 13 | 1÷16 | 812-203015 | ER25M |
| 214-35756 | D25,4L100ER25M | 25,4 | 100 | 32 | 35 | 13 | 1÷16 | 812-203015 | ER25M |
| 214-35757 | D25,4L140ER25M | 25,4 | 140 | 32 | 35 | 13 | 1÷16 | 812-203015 | ER25M |
| 264-35151 | D32L90ER16M | 32 | 90 | 30 | 22 | 11 | 1÷10 | 812-203013 | ER16M |
| 214-35163 | D32L90ER20M | 32 | 90 | 27 | 28 | 13 | 1÷13 | 812-203014 | ER20M |

D19,05÷D32 Zylinderschaft mit Fläche • Shank with flat • Queue cylindrique avec plat • Stelo con piano • Хвостовик с лыской • 柄带平面

SPANNFUTTER MIT ZYLINDERSCHAFT MIT STANDARD SPANNMUTTER
 CYLINDRICAL COLLET CHUCKS WITH STANDARD NUT
 ЦАНГОВЫЕ ПАТРОНЫ С ЦИЛИНДРИЧЕСКИМ
 ХВОСТОВИКОМ СО СТАНДАРТНОЙ ГАЙКОЙ

PORTE PINCES QUEUE CYLINDRIQUE AVEC ECROU STANDARD
 PORTAPINZA GAMBO CILINDRICO CON GHIERA STANDARD
 带标准螺母的圆柱式弹簧夹头

DIN 6499



| Code N. | Description | Dh6 | L | H | B | C | Clamping capacity | Nut | Description |
|-----------|----------------|-------|-----|----|----|----|-------------------|------------|-------------|
| 264-35152 | D14L60ER16 | 14 | 60 | 36 | 32 | 7 | 1÷10 | 812-203005 | ER16 |
| 214-35144 | D16L60ER16 | 16 | 60 | 36 | 32 | 7 | 1÷10 | 812-203005 | ER16 |
| 214-35758 | D16L80ER16 | 16 | 80 | 36 | 32 | 7 | 1÷10 | 812-203005 | ER16 |
| 214-35126 | D16L100ER16 | 16 | 100 | 36 | 32 | 7 | 1÷10 | 812-203005 | ER16 |
| 214-35759 | D16L130ER16 | 16 | 130 | 36 | 32 | 7 | 1÷10 | 812-203005 | ER16 |
| 214-35760 | D16L160ER16 | 16 | 160 | 36 | 32 | 7 | 1÷10 | 812-203005 | ER16 |
| 214-35761 | D16L200ER16 | 16 | 200 | 36 | 32 | 7 | 1÷10 | 812-203005 | ER16 |
| 264-35153 | D16L60ER20 | 16 | 60 | 40 | 35 | 9 | 1÷13 | 812-203006 | ER20 |
| 264-35154 | D16L35ER25 | 16 | 35 | 46 | 42 | 9 | 1÷16 | 812-203001 | ER25 |
| 264-35155 | D16L70ER25 | 16 | 70 | 46 | 42 | 9 | 1÷16 | 812-203001 | ER25 |
| 214-35762 | D19,05L50ER16 | 19,05 | 50 | 32 | 32 | 11 | 1÷10 | 812-203005 | ER16 |
| 214-35763 | D19,05L100ER16 | 19,05 | 100 | 32 | 32 | 11 | 1÷10 | 812-203005 | ER16 |
| 214-35764 | D19,05L50ER20 | 19,05 | 50 | 36 | 35 | 11 | 1÷13 | 812-203006 | ER20 |
| 214-35765 | D19,05L100ER20 | 19,05 | 100 | 36 | 35 | 11 | 1÷13 | 812-203006 | ER20 |
| 214-35766 | D19,05L50ER25 | 19,05 | 50 | 46 | 42 | 11 | 1÷16 | 812-203001 | ER25 |
| 214-35767 | D19,05L100ER25 | 19,05 | 100 | 46 | 42 | 11 | 1÷16 | 812-203001 | ER25 |
| 214-35768 | D19,05L50ER32 | 19,05 | 50 | 54 | 50 | 13 | 2÷20 | 812-203002 | ER32 |
| 214-35769 | D19,05L100ER32 | 19,05 | 100 | 54 | 50 | 13 | 2÷20 | 812-203002 | ER32 |
| 264-35156 | D20L50ER16 | 20 | 50 | 31 | 32 | 11 | 1÷10 | 812-203005 | ER16 |
| 214-35127 | D20L100ER16 | 20 | 100 | 31 | 32 | 11 | 1÷10 | 812-203005 | ER16 |
| 214-35770 | D20L130ER16 | 20 | 130 | 31 | 32 | 11 | 1÷10 | 812-203005 | ER16 |
| 264-35157 | D20L160ER16 | 20 | 160 | 31 | 32 | 11 | 1÷10 | 812-203005 | ER16 |
| 214-35771 | D20L200ER16 | 20 | 200 | 31 | 32 | 11 | 1÷10 | 812-203005 | ER16 |
| 264-35158 | D20L46ER20 | 20 | 46 | 36 | 35 | 11 | 1÷13 | 812-203006 | ER20 |
| 264-35159 | D20L60ER20 | 20 | 60 | 36 | 35 | 11 | 1÷13 | 812-203006 | ER20 |
| 264-35160 | D20L100ER20 | 20 | 100 | 36 | 35 | 11 | 1÷13 | 812-203006 | ER20 |
| 214-35772 | D20L130ER20 | 20 | 130 | 36 | 35 | 11 | 1÷13 | 812-203006 | ER20 |
| 214-35773 | D20L160ER20 | 20 | 160 | 36 | 35 | 11 | 1÷13 | 812-203006 | ER20 |
| 214-35774 | D20L200ER20 | 20 | 200 | 36 | 35 | 11 | 1÷13 | 812-203006 | ER20 |
| 214-35119 | D20L50ER25 | 20 | 50 | 46 | 42 | 11 | 1÷16 | 812-203001 | ER25 |
| 214-35128 | D20L100ER25 | 20 | 100 | 46 | 42 | 11 | 1÷16 | 812-203001 | ER25 |
| 264-35161 | D20L130ER25 | 20 | 130 | 46 | 42 | 11 | 1÷16 | 812-203001 | ER25 |
| 264-35162 | D20L160ER25 | 20 | 160 | 46 | 42 | 11 | 1÷16 | 812-203001 | ER25 |
| 264-35163 | D20L50ER32 | 20 | 50 | 54 | 50 | 13 | 2÷20 | 812-203002 | ER32 |
| 214-35129 | D20L100ER32 | 20 | 100 | 54 | 50 | 13 | 2÷20 | 812-203002 | ER32 |
| 264-35164 | D20L130ER32 | 20 | 130 | 54 | 50 | 13 | 2÷20 | 812-203002 | ER32 |
| 264-35165 | D20L160ER32 | 20 | 160 | 54 | 50 | 13 | 2÷20 | 812-203002 | ER32 |
| 264-35166 | D22L80ER16 | 22 | 80 | 26 | 32 | 11 | 1÷10 | 812-203005 | ER16 |
| 264-35167 | D22L80ER20 | 22 | 80 | 36 | 35 | 11 | 1÷13 | 812-203006 | ER20 |
| 264-35168 | D22L50ER25 | 22 | 50 | 42 | 42 | 13 | 1÷16 | 812-203001 | ER25 |
| 264-35169 | D22L80ER25 | 22 | 80 | 42 | 42 | 13 | 1÷16 | 812-203001 | ER25 |
| 264-35170 | D22L50ER32 | 22 | 50 | 53 | 50 | 13 | 2÷20 | 812-203002 | ER32 |
| 214-35775 | D25L60ER16 | 25 | 60 | 27 | 32 | 11 | 1÷10 | 812-203005 | ER16 |
| 214-35776 | D25L100ER16 | 25 | 100 | 27 | 32 | 11 | 1÷10 | 812-203005 | ER16 |
| 214-35777 | D25L130ER16 | 25 | 130 | 27 | 32 | 11 | 1÷10 | 812-203005 | ER16 |
| 214-35778 | D25L160ER16 | 25 | 160 | 27 | 32 | 11 | 1÷10 | 812-203005 | ER16 |
| 214-35779 | D25L200ER16 | 25 | 200 | 27 | 32 | 11 | 1÷10 | 812-203005 | ER16 |
| 264-35171 | D25L60ER20 | 25 | 60 | 28 | 35 | 13 | 1÷13 | 812-203006 | ER20 |
| 264-35172 | D25L100ER20 | 25 | 100 | 28 | 35 | 13 | 1÷13 | 812-203006 | ER20 |
| 214-35780 | D25L130ER20 | 25 | 130 | 28 | 35 | 13 | 1÷13 | 812-203006 | ER20 |
| 214-35781 | D25L160ER20 | 25 | 160 | 28 | 35 | 13 | 1÷13 | 812-203006 | ER20 |
| 214-35120 | D25L50ER25 | 25 | 50 | 32 | 42 | 13 | 1÷16 | 812-203001 | ER25 |
| 214-35782 | D25L70ER25 | 25 | 70 | 32 | 42 | 13 | 1÷16 | 812-203001 | ER25 |
| 214-35130 | D25L100ER25 | 25 | 100 | 32 | 42 | 13 | 1÷16 | 812-203001 | ER25 |
| 264-35173 | D25L130ER25 | 25 | 130 | 32 | 42 | 13 | 1÷16 | 812-203001 | ER25 |
| 264-35174 | D25L160ER25 | 25 | 160 | 32 | 42 | 13 | 1÷16 | 812-203001 | ER25 |

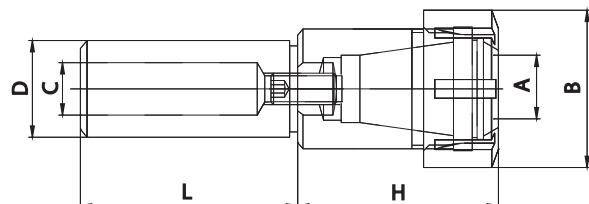
D14÷D16 Zylinderschaft • Shank without flat • Queue cylindrique • Stelo senza piano • Хвостовик без лыски • 柄不带平面

D19,05÷D25 Zylinderschaft mit Fläche • Shank with flat • Queue cylindrique avec plat • Stelo con piano • Хвостовик с лыской • 柄带平面

SPANNFUTTER MIT ZYLINDERSCHAFT UND STANDARD SPANNMUTTER
 CYLINDRICAL COLLET CHUCKS WITH STANDARD NUT
 ЦАНГОВЫЕ ПАТРОНЫ С ЦИЛИНДРИЧЕСКИМ
 ХВОСТОВИКОМ СО СТАНДАРТНОЙ ГАЙКОЙ

PORTE PINCES QUEUE CYLINDRIQUE AVEC ECROU STANDARD
 PORTAPINZA GAMBO CILINDRICO CON GHIERA STANDARD
 带标准螺母的圆柱式弹簧夹头

DIN 6499



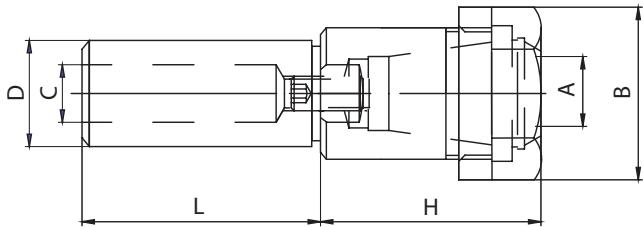
| Code N. | Description | Dh6 | L | H | B | C | Clamping capacity | Nut | Description |
|-----------|----------------|-------|-----|----|----|----|-------------------|------------|-------------|
| 264-35175 | D25L50ER32 | 25 | 50 | 54 | 50 | 13 | 2÷20 | 812-203002 | ER32 |
| 264-35176 | D25L70ER32 | 25 | 70 | 54 | 50 | 13 | 2÷20 | 812-203002 | ER32 |
| 214-35131 | D25L100ER32 | 25 | 100 | 54 | 50 | 13 | 2÷20 | 812-203002 | ER32 |
| 264-35177 | D25L130ER32 | 25 | 130 | 54 | 50 | 13 | 2÷20 | 812-203002 | ER32 |
| 264-35178 | D25L160ER32 | 25 | 160 | 54 | 50 | 13 | 2÷20 | 812-203002 | ER32 |
| 264-35179 | D25L50ER40 | 25 | 50 | 60 | 63 | 13 | 3÷30 | 812-203003 | ER40 |
| 264-35180 | D25L100ER40 | 25 | 100 | 60 | 63 | 13 | 3÷30 | 812-203003 | ER40 |
| 264-35726 | D25,4L60ER16 | 25,4 | 60 | 27 | 32 | 11 | 1÷10 | 812-203005 | ER16 |
| 264-35727 | D25,4L100ER16 | 25,4 | 100 | 27 | 32 | 11 | 1÷10 | 812-203005 | ER16 |
| 264-35728 | D25,4L60ER20 | 25,4 | 60 | 28 | 35 | 13 | 1÷13 | 812-203006 | ER20 |
| 264-35729 | D25,4L100ER20 | 25,4 | 100 | 28 | 35 | 13 | 1÷13 | 812-203006 | ER20 |
| 264-35730 | D25,4L50ER25 | 25,4 | 50 | 32 | 42 | 13 | 1÷16 | 812-203001 | ER25 |
| 264-35731 | D25,4L70ER25 | 25,4 | 70 | 32 | 42 | 13 | 1÷16 | 812-203001 | ER25 |
| 264-35732 | D25,4L100ER25 | 25,4 | 100 | 32 | 42 | 13 | 1÷16 | 812-203001 | ER25 |
| 264-35733 | D25,4L50ER32 | 25,4 | 50 | 54 | 50 | 13 | 2÷20 | 812-203002 | ER32 |
| 264-35734 | D25,4L70ER32 | 25,4 | 70 | 54 | 50 | 13 | 2÷20 | 812-203002 | ER32 |
| 264-35735 | D25,4L100ER32 | 25,4 | 100 | 54 | 50 | 13 | 2÷20 | 812-203002 | ER32 |
| 264-35736 | D25,4L50ER40 | 25,4 | 50 | 60 | 63 | 13 | 3÷30 | 812-203003 | ER40 |
| 264-35181 | D30L50ER25 | 30 | 50 | 45 | 42 | 19 | 1÷16 | 812-203001 | ER25 |
| 264-35182 | D30L50ER32 | 30 | 50 | 53 | 50 | 23 | 2÷20 | 812-203002 | ER32 |
| 264-35183 | D30L50ER40 | 30 | 50 | 60 | 63 | 23 | 3÷30 | 812-203003 | ER40 |
| 264-35737 | D31,75L50ER32 | 31,75 | 50 | 44 | 50 | 23 | 2÷20 | 812-203002 | ER32 |
| 264-35738 | D31,75L50ER40 | 31,75 | 50 | 60 | 63 | 23 | 3÷30 | 812-203003 | ER40 |
| 264-35739 | D32L100ER16 | 32 | 100 | 27 | 32 | 11 | 1÷10 | 812-203005 | ER16 |
| 264-35740 | D32L150ER16 | 32 | 150 | 27 | 32 | 11 | 1÷10 | 812-203005 | ER16 |
| 264-35741 | D32L100ER20 | 32 | 100 | 28 | 35 | 13 | 1÷13 | 812-203006 | ER20 |
| 264-35742 | D32L150ER20 | 32 | 150 | 28 | 35 | 13 | 1÷13 | 812-203006 | ER20 |
| 214-35132 | D32L70ER25 | 32 | 70 | 28 | 42 | 19 | 1÷16 | 812-203001 | ER25 |
| 264-35743 | D32L100ER25 | 32 | 100 | 28 | 42 | 19 | 1÷16 | 812-203001 | ER25 |
| 264-35184 | D32L120ER25 | 32 | 120 | 28 | 42 | 19 | 1÷16 | 812-203001 | ER25 |
| 264-35744 | D32L150ER25 | 32 | 150 | 28 | 42 | 19 | 1÷16 | 812-203001 | ER25 |
| 264-35185 | D32L50ER32 | 32 | 50 | 38 | 50 | 23 | 2÷20 | 812-203002 | ER32 |
| 214-35117 | D32L70ER32 | 32 | 70 | 38 | 50 | 23 | 2÷20 | 812-203002 | ER32 |
| 264-35186 | D32L100ER32 | 32 | 100 | 38 | 50 | 23 | 2÷20 | 812-203002 | ER32 |
| 214-35133 | D32L120ER32 | 32 | 120 | 38 | 50 | 23 | 2÷20 | 812-203002 | ER32 |
| 214-35134 | D32L150ER32 | 32 | 150 | 38 | 50 | 23 | 2÷20 | 812-203002 | ER32 |
| 264-35187 | D32L50ER40 | 32 | 50 | 60 | 63 | 23 | 3÷30 | 812-203003 | ER40 |
| 264-35188 | D32L70ER40 | 32 | 70 | 60 | 63 | 23 | 3÷30 | 812-203003 | ER40 |
| 264-35745 | D32L100ER40 | 32 | 100 | 60 | 63 | 23 | 3÷30 | 812-203003 | ER40 |
| 264-35746 | D32L130ER40 | 32 | 130 | 60 | 63 | 23 | 3÷30 | 812-203003 | ER40 |
| 264-35747 | D35L80ER32 | 35 | 80 | 38 | 50 | 23 | 2÷20 | 812-203002 | ER32 |
| 264-35189 | D40L70ER25 | 40 | 70 | 42 | 42 | 19 | 1÷16 | 812-203001 | ER25 |
| 214-35135 | D40L120ER25 | 40 | 120 | 42 | 42 | 19 | 1÷16 | 812-203001 | ER25 |
| 214-35136 | D40L70ER32 | 40 | 70 | 30 | 50 | 23 | 2÷20 | 812-203002 | ER32 |
| 264-35748 | D40L100ER32 | 40 | 100 | 30 | 50 | 23 | 2÷20 | 812-203002 | ER32 |
| 214-35137 | D40L130ER32 | 40 | 130 | 30 | 50 | 23 | 2÷20 | 812-203002 | ER32 |
| 264-35749 | D40L160ER32 | 40 | 160 | 30 | 50 | 23 | 2÷20 | 812-203002 | ER32 |
| 264-35190 | D40L50ER40 | 40 | 50 | 60 | 63 | 28 | 3÷30 | 812-203003 | ER40 |
| 214-35138 | D40L80ER40 | 40 | 80 | 60 | 63 | 28 | 3÷30 | 812-203003 | ER40 |
| 264-35191 | D40L130ER40 | 40 | 130 | 60 | 63 | 28 | 3÷30 | 812-203003 | ER40 |
| 264-35750 | D44,45L160ER32 | 44,45 | 160 | 33 | 50 | 23 | 2÷20 | 812-203002 | ER32 |
| 264-35751 | D44,45L160ER40 | 44,45 | 160 | 40 | 63 | 28 | 3÷30 | 812-203003 | ER40 |
| 264-35192 | D50L125ER32 | 50 | 125 | 32 | 50 | 23 | 2÷20 | 812-203002 | ER32 |
| 264-35193 | D50L160ER32 | 50 | 160 | 32 | 50 | 23 | 2÷20 | 812-203002 | ER32 |
| 264-35752 | D50L125ER40 | 50 | 125 | 37 | 63 | 28 | 3÷30 | 812-203003 | ER40 |
| 264-35194 | D50L160ER40 | 50 | 160 | 37 | 63 | 28 | 3÷30 | 812-203003 | ER40 |
| 264-35753 | D50,8L160ER32 | 50,8 | 160 | 32 | 50 | 23 | 2÷20 | 812-203002 | ER32 |
| 264-35754 | D50,8L160ER40 | 50,8 | 160 | 37 | 63 | 28 | 3÷30 | 812-203003 | ER40 |
| 264-35755 | D60L160ER32 | 60 | 160 | 32 | 50 | 23 | 2÷20 | 812-203002 | ER32 |
| 264-35756 | D60L160ER40 | 60 | 160 | 37 | 63 | 28 | 3÷30 | 812-203003 | ER40 |

D25÷D60 Zylinderschaft mit Fläche • Shank with flat • Queue cylindrique avec plat • Stelo con piano • Хвостовик с лыской • 柄不带平面

SPANNFUTTER MIT ZYLINDERSCHAFT MIT SECHSKANT MUTTER
 CYLINDRICAL COLLET CHUCKS WITH HEXAGONAL NUT
 ЦАНГОВЫЕ ПАТРОНЫ С ЦИЛИНДРИЧЕСКИМ
 ХВОСТОВИКОМ С ШЕСТИГРАННОЙ ГАЙКОЙ

PORTE PINCES QUEUE CYLINDRIQUE AVEC ECROU EXAGONAL
 PORTAPINZA GAMBO CILINDRICO CON GHIERA ESAGONALE
 带六角螺母的圆柱式弹簧夹头

DIN 6499



| Code N. | Description | Dh6 | L | H | B | C | Clamping capacity | Nut | Description |
|-----------|-----------------|-------|-----|----|----|----|-------------------|------------|-------------|
| 214-35783 | D14L60ER16E | 14 | 60 | 36 | 28 | 7 | 1÷10 | 812-203009 | ER16 |
| 214-35784 | D16L60ER16E | 16 | 60 | 36 | 28 | 7 | 1÷10 | 812-203009 | ER16 |
| 214-35785 | D16L80ER16E | 16 | 80 | 36 | 28 | 7 | 1÷10 | 812-203009 | ER16 |
| 214-35786 | D16L100ER16E | 16 | 100 | 36 | 28 | 7 | 1÷10 | 812-203009 | ER16 |
| 214-35787 | D16L130ER16E | 16 | 130 | 36 | 28 | 7 | 1÷10 | 812-203009 | ER16 |
| 214-35788 | D16L160ER16E | 16 | 160 | 36 | 28 | 7 | 1÷10 | 812-203009 | ER16 |
| 214-35789 | D16L200ER16E | 16 | 200 | 36 | 28 | 7 | 1÷10 | 812-203009 | ER16 |
| 214-35790 | D16L60ER20E | 16 | 60 | 40 | 34 | 9 | 1÷13 | 812-203010 | ER20 |
| 214-35791 | D19,05L50ER16E | 19,05 | 50 | 32 | 28 | 11 | 1÷10 | 812-203009 | ER16 |
| 214-35792 | D19,05L100ER16E | 19,05 | 100 | 32 | 28 | 11 | 1÷10 | 812-203009 | ER16 |
| 214-35793 | D19,05L50ER20E | 19,05 | 50 | 36 | 34 | 11 | 1÷13 | 812-203010 | ER20 |
| 214-35794 | D19,05L100ER20E | 19,05 | 100 | 36 | 34 | 11 | 1÷13 | 812-203010 | ER20 |
| 214-35795 | D20L50ER16E | 20 | 50 | 31 | 28 | 11 | 1÷10 | 812-203009 | ER16 |
| 214-35796 | D20L100ER16E | 20 | 100 | 31 | 28 | 11 | 1÷10 | 812-203009 | ER16 |
| 214-35797 | D20L130ER16E | 20 | 130 | 31 | 28 | 11 | 1÷10 | 812-203009 | ER16 |
| 214-35798 | D20L160ER16E | 20 | 160 | 31 | 28 | 11 | 1÷10 | 812-203009 | ER16 |
| 214-35799 | D20L200ER16E | 20 | 200 | 31 | 28 | 11 | 1÷10 | 812-203009 | ER16 |
| 264-35701 | D20L46ER20E | 20 | 46 | 36 | 34 | 11 | 1÷13 | 812-203010 | ER20 |
| 264-35702 | D20L60ER20E | 20 | 60 | 36 | 34 | 11 | 1÷13 | 812-203010 | ER20 |
| 264-35703 | D20L100ER20E | 20 | 100 | 36 | 34 | 11 | 1÷13 | 812-203010 | ER20 |
| 264-35704 | D20L130ER20E | 20 | 130 | 36 | 34 | 11 | 1÷13 | 812-203010 | ER20 |
| 264-35705 | D20L160ER20E | 20 | 160 | 36 | 34 | 11 | 1÷13 | 812-203010 | ER20 |
| 264-35706 | D20L200ER20E | 20 | 200 | 36 | 34 | 11 | 1÷13 | 812-203010 | ER20 |
| 264-35707 | D22L80ER16E | 22 | 80 | 26 | 28 | 11 | 1÷10 | 812-203009 | ER16 |
| 264-35708 | D22L80ER20E | 22 | 80 | 36 | 34 | 11 | 1÷13 | 812-203010 | ER20 |
| 264-35709 | D25L60ER16E | 25 | 60 | 27 | 28 | 11 | 1÷10 | 812-203009 | ER16 |
| 264-35710 | D25L100ER16E | 25 | 100 | 27 | 28 | 11 | 1÷10 | 812-203009 | ER16 |
| 264-35711 | D25L130ER16E | 25 | 130 | 27 | 28 | 11 | 1÷10 | 812-203009 | ER16 |
| 264-35712 | D25L160ER16E | 25 | 160 | 27 | 28 | 11 | 1÷10 | 812-203009 | ER16 |
| 264-35713 | D25L200ER16E | 25 | 200 | 27 | 28 | 11 | 1÷10 | 812-203009 | ER16 |
| 264-35714 | D25L60ER20E | 25 | 60 | 28 | 34 | 13 | 1÷13 | 812-203010 | ER20 |
| 264-35715 | D25L100ER20E | 25 | 100 | 28 | 34 | 13 | 1÷13 | 812-203010 | ER20 |
| 264-35716 | D25L130ER20E | 25 | 130 | 28 | 34 | 13 | 1÷13 | 812-203010 | ER20 |
| 264-35717 | D25L160ER20E | 25 | 160 | 28 | 34 | 13 | 1÷13 | 812-203010 | ER20 |
| 264-35718 | D25,4L60ER16E | 25,4 | 60 | 27 | 28 | 11 | 1÷10 | 812-203009 | ER16 |
| 264-35719 | D25,4L100ER16E | 25,4 | 100 | 27 | 28 | 11 | 1÷10 | 812-203009 | ER16 |
| 264-35720 | D25,4L60ER20E | 25,4 | 60 | 28 | 34 | 13 | 1÷13 | 812-203010 | ER20 |
| 264-35721 | D25,4L100ER20E | 25,4 | 100 | 28 | 34 | 13 | 1÷13 | 812-203010 | ER20 |
| 264-35722 | D32L100ER16E | 32 | 100 | 27 | 28 | 11 | 1÷10 | 812-203009 | ER16 |
| 264-35723 | D32L150ER16E | 32 | 150 | 27 | 28 | 11 | 1÷10 | 812-203009 | ER16 |
| 264-35724 | D32L100ER20E | 32 | 100 | 28 | 34 | 13 | 1÷13 | 812-203010 | ER20 |
| 264-35725 | D32L150ER20E | 32 | 150 | 28 | 34 | 13 | 1÷13 | 812-203010 | ER20 |

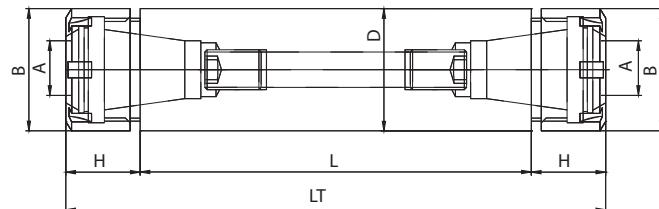
D14÷D16 Zylinderschaft • Shank without flat • Queue cylindrique • Stelo senza piano • Хвостовик без лыски • 柄不带平面

D19,05÷D32 Zylinderschaft mit Fläche • Shank with flat • Queue cylindrique avec plat • Stelo con piano • Хвостовик с лыской • 柄带平面

SPANNFUTTER MIT ZYLINDERSCHAFT MIT MINI SPANNMUTTER
CYLINDRICAL DOUBLE COLLET CHUCKS WITH MINI NUT
ДВУСТОРОННИЕ ЦАНГОВЫЕ ПАТРОНЫ С МИНИ-ГАЙКОЙ

PORTE PINCES QUEUE CYLINDRIQUE AVEC ECROU MINI
PORTAPINZA DOPPI GAMBO CILINDRICO CON GHIERA MINI
带微型螺母的圆柱式双弹簧夹头

DIN 6499

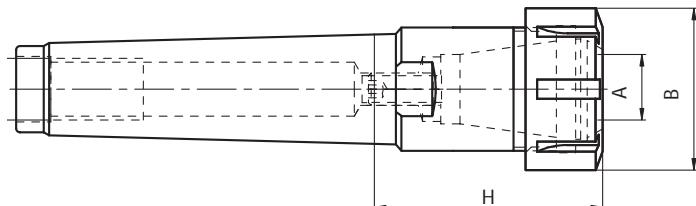


| Code N. | Description | Dh6 | L | H | LT | B | Clamping capacity | Nut | Description |
|-----------|---------------|-----|-----|------|-----|----|-------------------|------------|-------------|
| 264-35198 | D20L42ER11MD | 20 | 42 | 14 | 70 | 16 | 1÷7 | 812-203012 | ER11M |
| 264-35199 | D20L52ER11MD | 20 | 52 | 14 | 80 | 16 | 1÷7 | 812-203012 | ER11M |
| 214-35702 | D20L62ER11MD | 20 | 62 | 14 | 90 | 16 | 1÷7 | 812-203012 | ER11M |
| 214-35703 | D20L37ER16MD | 20 | 37 | 21,5 | 80 | 22 | 1÷10 | 812-203013 | ER16M |
| 214-35704 | D20L57ER16MD | 20 | 57 | 21,5 | 100 | 22 | 1÷10 | 812-203013 | ER16M |
| 214-35705 | D20L67ER16MD | 20 | 67 | 21,5 | 110 | 22 | 1÷10 | 812-203013 | ER16M |
| 214-35706 | D20L122ER16MD | 20 | 122 | 21,5 | 165 | 22 | 1÷10 | 812-203013 | ER16M |
| 214-35707 | D22L47ER16MD | 22 | 47 | 21,5 | 90 | 22 | 1÷10 | 812-203013 | ER16M |
| 214-35708 | D22L67ER16MD | 22 | 67 | 21,5 | 110 | 22 | 1÷10 | 812-203013 | ER16M |
| 214-35709 | D22L102ER16MD | 22 | 102 | 21,5 | 145 | 22 | 1÷10 | 812-203013 | ER16M |
| 214-35710 | D25L27ER16MD | 25 | 27 | 21,5 | 70 | 22 | 1÷10 | 812-203013 | ER16M |
| 214-35711 | D25L47ER16MD | 25 | 47 | 21,5 | 90 | 22 | 1÷10 | 812-203013 | ER16M |
| 214-35712 | D25L67ER16MD | 25 | 67 | 21,5 | 110 | 22 | 1÷10 | 812-203013 | ER16M |
| 214-35713 | D25L82ER20MD | 25 | 82 | 24 | 130 | 28 | 1÷13 | 812-203014 | ER20M |
| 264-35757 | D32L57ER20MD | 32 | 57 | 24 | 105 | 28 | 1÷13 | 812-203014 | ER20M |
| 264-35758 | D32L82ER20MD | 32 | 82 | 24 | 130 | 28 | 1÷13 | 812-203014 | ER20M |

SPANNZANGENAUFNAHME MIT MORSEKEGEL UND ANZUGSGEWINDE
COLLET CHUCKS WITH MORSE TAPER
ЦАНГОВЫЕ ПАТРОНЫ С КОНУСОМ МОРЗЕ

PORTE-OUTIL POUR SERRAGE PAR PINCE MK
PORTAPINZA CON ATTACCO CONO MORSE
莫氏锥度弹簧夹头

DIN 6499

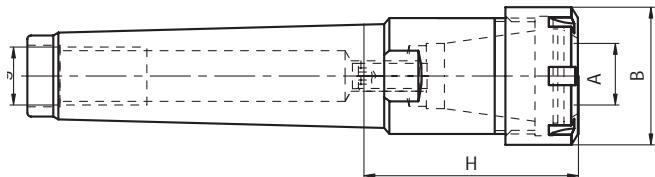


| Code N. | Description | MK Morse | H | g | B | Clamping capacity | Nut | Description |
|-----------|-------------|----------|----|-----|----|-------------------|------------|-------------|
| 214-33102 | CM1H40ER16 | 1 | 40 | M6 | 32 | 0,5÷10 | 812-203005 | ER16 |
| 214-33103 | CM2H42ER16 | 2 | 42 | M10 | 32 | 0,5÷10 | 812-203005 | ER16 |
| 214-33104 | CM2H50ER20 | 2 | 50 | M10 | 35 | 0,5÷13 | 812-203006 | ER20 |
| 214-33106 | CM3H53ER25 | 3 | 53 | M12 | 42 | 0,5÷16 | 812-203001 | ER25 |
| 214-33107 | CM3H70ER32 | 3 | 70 | M12 | 50 | 2÷20 | 812-203002 | ER32 |
| 214-33109 | CM4H60ER32 | 4 | 60 | M16 | 50 | 2÷20 | 812-203002 | ER32 |
| 214-33110 | CM4H81ER40 | 4 | 81 | M16 | 63 | 3÷30 | 812-203003 | ER40 |

SPANNZANGENAUFNAHME MIT MORSEKEGEL,
ANZUGSGEWINDE UND MINI MUTTER
COLLET CHUCKS WITH MORSE TAPER, WITH MINI NUT
ЦАНГОВЫЕ ПАТРОНЫ С КОНУСОМ МОРЗЕ С МИНИ-ГАЙКОЙ

PORTE-OUTIL POUR SERRAGE PAR PINCE MK, AVEC ECRU MINI
PORTAPINZA CON ATTACCO CONO MORSE, CON GHIERA MINI
带微型螺母的莫氏锥度弹簧夹头

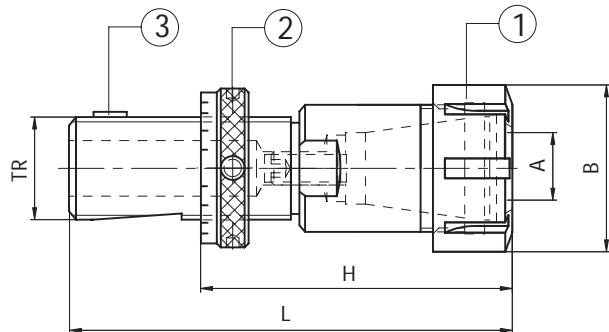
DIN 6499



| Code N. | Description | MK Morse | H | g | B | Clamping capacity | Nut | Description |
|-----------|-------------|----------|----|-----|----|-------------------|------------|-------------|
| 214-33119 | CM1H25ER11M | 1 | 25 | M6 | 16 | 0,5÷7 | 812-203012 | ER11M |
| 214-33120 | CM1H40ER16M | 1 | 40 | M6 | 22 | 0,5÷10 | 812-203013 | ER16M |
| 214-33121 | CM2H42ER16M | 2 | 42 | M10 | 22 | 0,5÷10 | 812-203013 | ER16M |
| 214-33122 | CM2H50ER20M | 2 | 50 | M10 | 28 | 0,5÷13 | 812-203014 | ER20M |
| 214-33123 | CM2H54ER25M | 2 | 54 | M10 | 35 | 0,5÷16 | 812-203015 | ER25M |
| 214-33124 | CM3H43ER16M | 3 | 43 | M12 | 22 | 0,5÷10 | 812-203013 | ER16M |
| 214-33125 | CM3H47ER20M | 3 | 47 | M12 | 28 | 0,5÷13 | 812-203014 | ER20M |
| 214-33126 | CM3H58ER25M | 3 | 58 | M12 | 35 | 0,5÷16 | 812-203015 | ER25M |

SPANNZANGENFUTTER DIN 6327
COLLET CHUCK DIN 6327
ЦАНГОВЫЕ ПАТРОНЫ ПО DIN 6327

MANDRIN A PINCES DIN 6327
PORTAPINZE ATTACCO DIN 6327
DIN 6327 弹簧夹头



DIN 6499

| Code N. | Description | Tr | H min. | L | B | Clamping capacity | Type |
|-----------|------------------|--------|--------|-----|----|-------------------|------|
| 214-34302 | TR16X1.5L122ER16 | 16x1,5 | 46 | 122 | 28 | 0,5÷10 | ER16 |
| 214-34303 | TR20X2L128ER16 | 20x2 | 55 | 128 | 28 | 0,5÷10 | ER16 |
| 214-34306 | TR28X2L140ER20 | 28x2 | 61 | 140 | 34 | 0,5÷13 | ER20 |
| 214-34307 | TR28X2L140ER25 | 28x2 | 61 | 140 | 42 | 0,5÷16 | ER25 |
| 214-34308 | TR28X2L147ER32 | 28x2 | 68 | 147 | 50 | 2÷20 | ER32 |
| 214-34310 | TR36X2L165ER32 | 36x2 | 65 | 165 | 50 | 2÷20 | ER32 |
| 214-34311 | TR36X2L186ER40 | 36x2 | 86 | 186 | 63 | 3÷30 | ER40 |

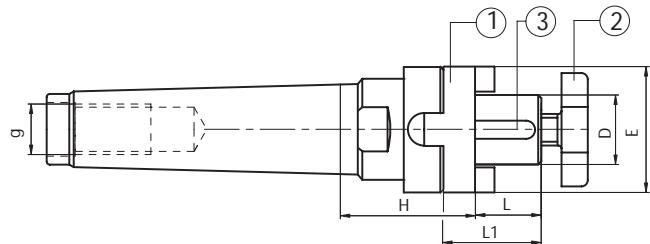
Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| Code N. | Nut | Nut | Tenon |
|-----------|------------|------------|-----------|
| | | | |
| 214-34302 | 812-203005 | 812-204030 | 814-20279 |
| 214-34303 | 812-203005 | 812-204040 | 814-20279 |
| 214-34306 | 812-203006 | 812-204010 | 814-20281 |
| 214-34307 | 812-203001 | 812-204010 | 814-20281 |
| 214-34308 | 812-203002 | 812-204010 | 814-20282 |
| 214-34310 | 812-203002 | 812-204020 | 814-20283 |
| 214-34311 | 812-203003 | 812-204020 | 814-20283 |

KOMBI-AUFLAUFSTCKFRÄSDORNE MIT MORSEKEGEL
COMBI-SHELL MILL ADAPTORS WITH MORSE TAPER
КОМБИНИРОВАННЫЕ ОПРАВКИ ДЛЯ НАСАДНЫХ ФРЕЗ С КОНУСОМ МОРЗЕ

MANDRINS PORTE-FRAISES A DOUBLE USAGE MK
PORTAFRESE COMBINATI CON ATTACCO CONO MORSE
复合式平面铣刀弹簧夹头

DIN 6358



| Code N. | Description | MK Morse | D | H | L1 | L | E | g |
|-----------|-------------|----------|----|----|----|----|----|-----|
| 216-13118 | CM2H37D16C | 2 | 16 | 37 | 27 | 17 | 32 | M10 |
| 216-13119 | CM2H42D22C | 2 | 22 | 42 | 31 | 19 | 40 | M10 |
| 216-13120 | CM3H37D16C | 3 | 16 | 37 | 27 | 17 | 32 | M12 |
| 216-13121 | CM3H42D22C | 3 | 22 | 42 | 31 | 19 | 40 | M12 |
| 216-13122 | CM3H42D27C | 3 | 27 | 42 | 33 | 21 | 48 | M12 |
| 216-13123 | CM3H63D32C | 3 | 32 | 63 | 38 | 24 | 58 | M12 |
| 216-13124 | CM4H55D16C | 4 | 16 | 55 | 27 | 17 | 32 | M16 |
| 216-13125 | CM4H55D22C | 4 | 22 | 55 | 31 | 19 | 40 | M16 |
| 216-13126 | CM4H55D27C | 4 | 27 | 55 | 33 | 21 | 48 | M16 |
| 216-13127 | CM4H55D32C | 4 | 32 | 55 | 38 | 24 | 58 | M16 |
| 216-13128 | CM5H75D22C | 5 | 22 | 75 | 31 | 19 | 40 | M20 |
| 216-13129 | CM5H75D27C | 5 | 27 | 75 | 33 | 21 | 48 | M20 |
| 216-13130 | CM5H75D32C | 5 | 32 | 75 | 38 | 24 | 58 | M20 |
| 216-13131 | CM5H75D40C | 5 | 40 | 75 | 41 | 27 | 70 | M20 |

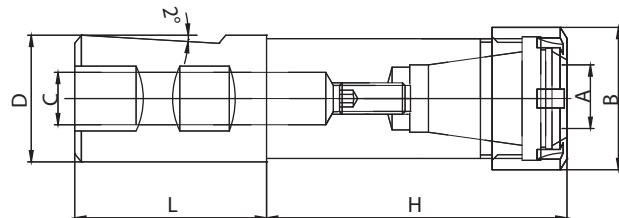
Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| D | Ring | Screw | Key | Wrench |
|----|-----------|------------|------------|------------|
| | | | | |
| 16 | 814-30001 | 811-107003 | 814-201010 | 816-130002 |
| 22 | 814-30002 | 811-107004 | 814-201020 | 816-130003 |
| 27 | 814-30003 | 811-107005 | 814-201030 | 816-130004 |
| 32 | 814-30004 | 811-107006 | 814-201040 | 816-130005 |
| 40 | 814-30005 | 811-107007 | 814-201050 | 816-130006 |

SPANNFUTTER MIT ZYLINDERSCHAFT MIT MINI SPANNMUTTER
WELDON COLLET CHUCKS WITH MINI NUT
ЦАНГОВЫЕ ПАТРОНЫ С ХВОСТОВИКОМ WELDON С МИНИ-ГАЙКОЙ

PORTE PINCES QUEUE WELDON AVEC ECROU MINI
PORTAPINZA GAMBO WELDON CON GHIERA MINI
带微型螺母的威尔登式弹簧夹头

DIN 6499

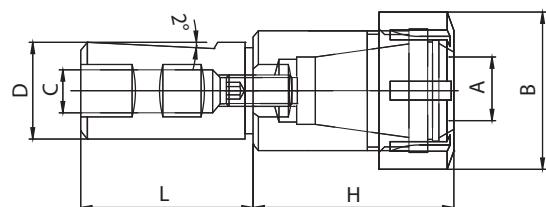


| Code N. | Description | Dh6 | L | H | B | C | Clamping capacity | Nut | Description |
|-----------|--------------|-----|----|----|----|----|-------------------|------------|-------------|
| 214-35208 | WE16H80ER11M | 16 | 48 | 80 | 16 | 7 | 1÷7 | 812-203012 | ER11M |
| 214-35209 | WE16H80ER16M | 16 | 48 | 80 | 22 | 9 | 1÷10 | 812-203013 | ER16M |
| 214-35210 | WE20H80ER16M | 20 | 50 | 80 | 22 | 11 | 1÷10 | 812-203013 | ER16M |
| 214-35211 | WE20H80ER20M | 20 | 50 | 80 | 28 | 11 | 1÷13 | 812-203014 | ER20M |
| 214-35212 | WE25H80ER16M | 25 | 56 | 80 | 22 | 11 | 1÷10 | 812-203013 | ER16M |
| 214-35213 | WE25H80ER20M | 25 | 56 | 80 | 28 | 13 | 1÷13 | 812-203014 | ER20M |

SPANNFUTTER MIT ZYLINDERSCHAFT MIT STANDARD SPANNMUTTER
WELDON COLLET CHUCKS WITH STANDARD NUT
ЦАНГОВЫЕ ПАТРОНЫ С ХВОСТОВИКОМ WELDON СО СТАНДАРТНОЙ ГАЙКОЙ

PORTE PINCES QUEUE WELDON AVEC ECROU STANDARD
PORTAPINZA GAMBO WELDON CON GHIERA STANDARD
带标准螺母的威尔登式弹簧夹头

DIN 6499



| Code N. | Description | Dh6 | L | H | B | C | Clamping capacity | Nut | Description |
|-----------|--------------|-----|----|-----|----|----|-------------------|------------|-------------|
| 214-35214 | WE20H55ER32 | 20 | 50 | 55 | 50 | 11 | 2÷20 | 812-203002 | ER32 |
| 214-35215 | WE20H100ER32 | 20 | 50 | 100 | 50 | 11 | 2÷20 | 812-203002 | ER32 |
| 214-35216 | WE25H55ER32 | 25 | 56 | 55 | 50 | 13 | 2÷20 | 812-203002 | ER32 |
| 214-35217 | WE25H100ER32 | 25 | 56 | 100 | 50 | 13 | 2÷20 | 812-203002 | ER32 |
| 214-35218 | WE32H55ER32 | 32 | 60 | 55 | 50 | 23 | 2÷20 | 812-203002 | ER32 |
| 214-35219 | WE32H100ER32 | 32 | 60 | 100 | 50 | 23 | 2÷20 | 812-203002 | ER32 |

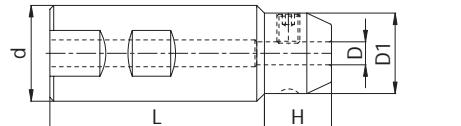
WELDON REDUZIERHÜLSEN
WELDON REDUCTION SLEEVES
ПЕРЕХОДНИКИ WELDON НА УМЕНЬШЕНИЕ

DOUILLES DE REDUCTION WELDON
BUSSOLE DI RIDUZIONE WELDON
威尔登式铣刀套

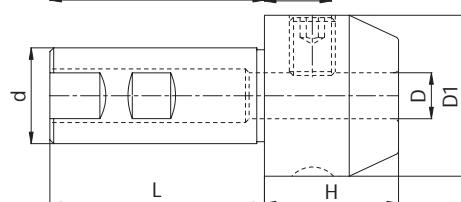


DIN 1835 B

Type A



Type B

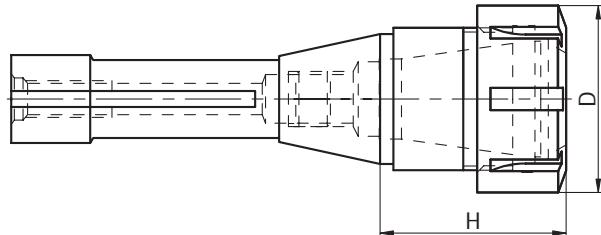


| Code N. | Description | d | D | H | L | D1 | Type |
|-----------|-------------|----|----|----|----|----|------|
| 213-15203 | WE20H30WE06 | 20 | 6 | 30 | 50 | 25 | B |
| 213-15204 | WE20H30WE08 | 20 | 8 | 30 | 50 | 28 | B |
| 213-15205 | WE20H30WE10 | 20 | 10 | 30 | 50 | 35 | B |
| 213-15206 | WE20H35WE12 | 20 | 12 | 35 | 50 | 42 | B |
| 213-15207 | WE20H35WE14 | 20 | 14 | 35 | 50 | 44 | B |
| 213-15208 | WE20H60WE16 | 20 | 16 | 60 | 50 | 48 | B |
| 213-15209 | WE25H25WE06 | 25 | 6 | 25 | 56 | 25 | A |
| 213-15210 | WE25H30WE08 | 25 | 8 | 30 | 56 | 28 | B |
| 213-15211 | WE25H30WE10 | 25 | 10 | 30 | 56 | 35 | B |
| 213-15212 | WE25H35WE12 | 25 | 12 | 35 | 56 | 42 | B |
| 213-15213 | WE25H35WE14 | 25 | 14 | 35 | 56 | 44 | B |
| 213-15214 | WE25H40WE16 | 25 | 16 | 40 | 56 | 48 | B |
| 213-15215 | WE32H30WE06 | 32 | 6 | 30 | 60 | 25 | A |
| 213-15216 | WE32H30WE08 | 32 | 8 | 30 | 60 | 28 | A |
| 213-15217 | WE32H30WE10 | 32 | 10 | 30 | 60 | 35 | B |
| 213-15218 | WE32H35WE12 | 32 | 12 | 35 | 60 | 42 | B |
| 213-15219 | WE32H35WE14 | 32 | 14 | 35 | 60 | 44 | B |
| 213-15220 | WE32H40WE16 | 32 | 16 | 40 | 60 | 48 | B |
| 213-15221 | WE32H40WE18 | 32 | 18 | 40 | 60 | 50 | B |
| 213-15222 | WE32H40WE20 | 32 | 20 | 40 | 60 | 52 | B |
| 213-15223 | WE32H65WE25 | 32 | 25 | 65 | 60 | 65 | B |

SPANNZANGENFUTTER BRIDGEPORT R8
COLLET CHUCK BRIDGEPORT R8
ЦАНГОВЫЕ ПАТРОНЫ БРИДЖПОРТ R8

MANDRINS A PINCES BRIDGEPORT R8
PORTAPINZE ATTACCO BRIDGEPORT R8
R8 弹簧夹头桥路端口

DIN 6499

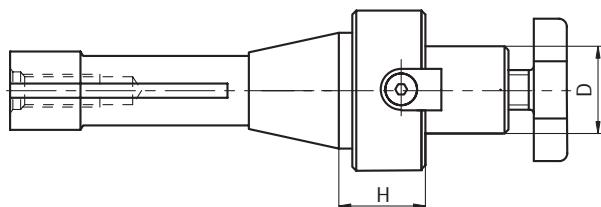


| Code N. | Description | H | D | Clamping capacity | Type | Nut |
|-----------|-------------|----|----|-------------------|------|------------|
| 214-36401 | R8H40ER32 | 40 | 50 | 2÷20 | ER32 | 812-203002 |
| 214-36402 | R8H73ER40 | 73 | 63 | 3÷30 | ER40 | 812-203003 |

AUFSTECKFRÄSDORNE FÜR FRÄSER MIT QUERNUT BRIDGEPORT R8
MILL HOLDERS-TENONS DRIVE BRIDGEPORT R8
ОПРАВКИ БРИДЖПОРТ R8 ДЛЯ НАСАДНЫХ ФРЕЗ

PORTE-FRAISE-ENTRAINEMENT PAR TENONS BRIDGEPORT R8
PORTAFRESE A TRASCINAMENTO FISSO BRIDGEPORT R8
R8 铣刀夹具 - 凸榫驱动桥路端口

ISO 3937

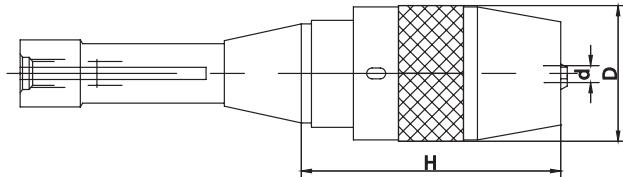


Ersatzteile • Spare parts • Pièces détachées • Componenti • Запасные части • 零件

| Code N. | Description | D | H |
|-----------|-------------|----|----|
| 216-76401 | R8H19D16F | 16 | 19 |
| 216-76402 | R8H23D22F | 22 | 23 |
| 216-76403 | R8H23D27F | 27 | 23 |
| 216-76404 | R8H24D32F | 32 | 24 |

PRÄZISIONSBOHRFUTTER - RECHTLAUF
MONOLITHIC DRILL CHUCKS - RIGHT SPIN
СВЕРЛИЛЬНЫЕ ПАТРОНЫ. ВРАЩЕНИЕ ПО ЧАСОВОЙ СТРЕЛКЕ.

MANDRINS DE PERCAGE - ROTATION DROITE
MANDRINI AUTOSERRANTI INTEGRALI - ROTAZIONE DESTRA
合成钻夹头-右旋转



| Code N. | Description | H | D | Clamping capacity | Type |
|-----------|-------------|----|----|-------------------|------------|
| 252-16401 | R8H81R1-13 | 81 | 50 | 1-13 | 816-152001 |

RUNDLAUFGENAUGKEIT 0.05 MM
RUNOUT ACCURACY 0.05 MM

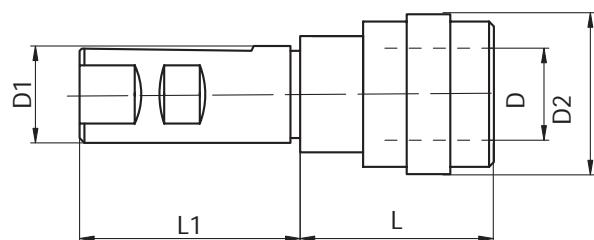
БИЕНИЕ 0.05 ММ
PRECISION DE ROTATION 0.05 MM
PRECISIONE DI ROTAZIONE 0.05 MM
跳动精度0.05MM

GEWINDESCHNID-SCHNELLWECHSELFUTTER
MIT LANGENAUSGLEICH MIT ZYLINDERSCHAFT
CYLINDRICAL TAP CHUCKS

РЕЗЬБОНАРЕЗНЫЕ ПАТРОНЫ С ЦИЛИНДРИЧЕСКИМ ХВОСТОВИКОМ

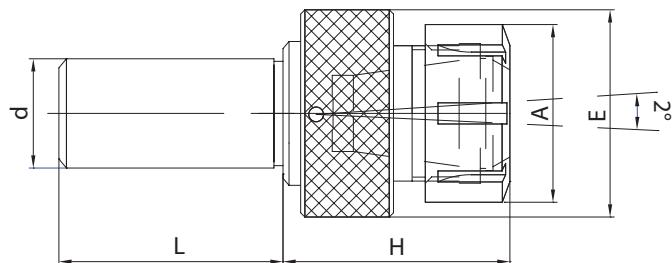
MANDRIN DE TARAUDAGE AVEC QUEUE CYLINDRIQUE
MASCHIATORE A DOPPIA COMPENSAZIONE
CON CODOLO CILINDRICO
筒式丝锥夹头

DIN 1835 B+E



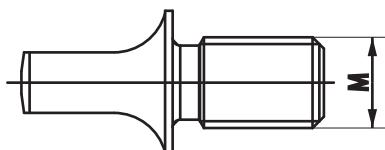
| Code N. | Description | D1 | Size | Top range | D | D2 | L | L1 | Comp | Ext |
|---------|-------------------|----|------|-----------|----|----|-----|----|------|-----|
| M401020 | M3-M12CIL.D20GR1 | 20 | 1 | M3÷M12 | 19 | 38 | 41 | 50 | 9 | 9 |
| M401025 | M3-M12CIL.D25GR1 | 25 | 1 | M3÷M12 | 19 | 38 | 41 | 56 | 9 | 9 |
| M401032 | M3-M12CIL.D32GR1 | 32 | 1 | M3÷M12 | 19 | 38 | 41 | 61 | 9 | 9 |
| M401040 | M3-M12CIL.D40GR1 | 40 | 1 | M3÷M12 | 19 | 38 | 41 | 72 | 9 | 9 |
| M402020 | M6-M20CIL.D20GR2 | 20 | 2 | M6÷M20 | 31 | 55 | 63 | 50 | 15 | 15 |
| M402025 | M6-M20CIL.D25GR2 | 25 | 2 | M6÷M20 | 31 | 55 | 63 | 56 | 15 | 15 |
| M402032 | M6-M20CIL.D32GR2 | 32 | 2 | M6÷M20 | 31 | 55 | 63 | 61 | 15 | 15 |
| M402040 | M6-M20CIL.D40GR2 | 40 | 2 | M6÷M20 | 31 | 55 | 63 | 72 | 15 | 15 |
| M403032 | M14-M33CIL.D32GR3 | 32 | 3 | M14÷M33 | 48 | 79 | 109 | 61 | 24 | 24 |
| M403040 | M14-M33CIL.D40GR3 | 40 | 3 | M14÷M33 | 48 | 79 | 98 | 72 | 24 | 24 |

PENDELHALTER PORTE-Outils FLOTTANTS A PINCES RD/ER
 FLOATING TOOLHOLDERS FOR RD/ER COLLETS PORTA ALESATORI OSCILLANTE
 ПЛАВАЮЩИЕ ПАТРОНЫ ДЛЯ RD/ER ЦАНГ RD/ER 弹簧夹头筒夹浮动刀柄



| Code N. | d | L | H | d1 | ER |
|------------|----|----|----|------|------|
| 832-021184 | 16 | 46 | 40 | 2-7 | ER11 |
| 832-021185 | 25 | 46 | 48 | 2-13 | ER20 |
| 832-021186 | 25 | 46 | 50 | 2-16 | ER25 |
| 832-021187 | 25 | 50 | 58 | 3-20 | ER32 |

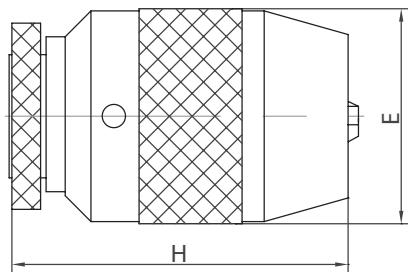
MK AUFNAHMESCHAFT TONQUES
 TENONS TENONI
 ШПИЛЬКИ 凸榫



| Type | M |
|------------|-----|
| TENONE CM1 | M6 |
| TENONE CM2 | M10 |
| TENONE CM3 | M12 |
| TENONE CM4 | M16 |
| TENONE CM5 | M20 |

SCHNELLSPANNBOHRFUTTER
KEYLESS DRILL CHUCKS
САМОЗАЖИМНЫЕ СВЕРЛИЛЬНЫЕ ПАТРОНЫ

MANDRINS PORTE-FORET A SERRAGE RAPIDE
MANDRINI AUTOSERRANTI
自紧式钻夹头



| Code N. | Type | Clamping capacity | H | E | Wrench | Jaws |
|-----------|----------|-------------------|----|----|------------|------------|
| 252-16601 | B10-DC6 | 0,5 - 6,5 | 60 | 35 | -- | 832-012014 |
| 252-16602 | B10-DC8 | 0 - 8 | 69 | 38 | -- | 832-012015 |
| 252-16603 | B10-DC10 | 0 - 10 | 79 | 43 | 816-152005 | 832-012016 |
| 252-16604 | B12-DC8 | 0 - 8 | 69 | 38 | --- | 832-012015 |
| 252-16605 | B12-DC10 | 0 - 10 | 79 | 43 | 816-152005 | 832-012016 |
| 252-16606 | B12-DC13 | 0 - 13 | 90 | 51 | 816-152001 | 832-012017 |
| 252-16607 | B16-DC10 | 0 - 10 | 79 | 43 | 816-152005 | 832-012018 |
| 252-16608 | B16-DC13 | 0 - 13 | 90 | 51 | 816-152001 | 832-012017 |
| 252-16609 | B16-DC16 | 3 - 16 | 94 | 57 | 816-152001 | 832-012019 |
| 252-16610 | B18-DC16 | 3 - 16 | 94 | 57 | 816-152001 | 832-012019 |

RUNDLAUFGENAUGKEIT 0.07 MM • RUNOUT ACCURACY 0.07 MM • БИЕНИЕ 0.07 ММ
PRECISION DE ROTATION 0.07 MM • PRECISIONE DI ROTAZIONE 0.07 MM • 跳动精度0.07MM

PRAZISSIONS SCHNELLSPANNBOHRFUTTER

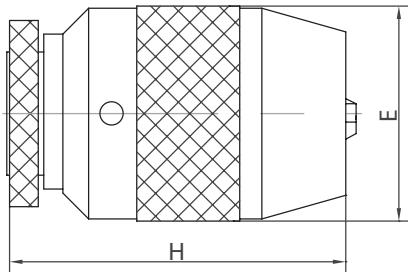
MANDRINS PORTE-FORET A SERRAGE RAPIDE

KEYLESS PRECISION DRILL CHUCKS

MANDRINI AUTOSERRANTI DI ALTA PRECISIONE

САМОЗАЖИМНЫЕ ПРЕЦИЗИОННЫЕ СВЕРЛИЛЬНЫЕ ПАТРОНЫ

自紧式精密钻夹头



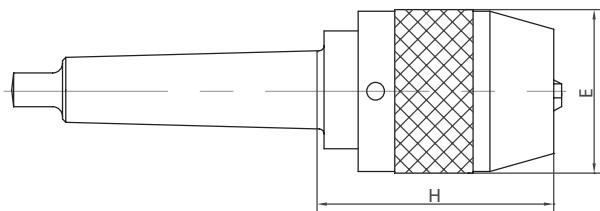
| Code N. | Type | Clamping capacity | H | E | Wrench | Jaws |
|-----------|--------------------|-------------------|----|----|------------|------------|
| 252-16611 | B10-DC8 Precision | 0 – 8 | 69 | 38 | -- | 832-012015 |
| 252-16612 | B10-DC10 Precision | 0 – 10 | 79 | 43 | 816-152005 | 832-012016 |
| 252-16613 | B12-DC8 Precision | 0 – 8 | 69 | 38 | --- | 832-012015 |
| 252-16614 | B12-DC10 Precision | 0 – 10 | 79 | 43 | 816-152005 | 832-012016 |
| 252-16615 | B12-DC13 Precision | 0 – 13 | 90 | 51 | 816-152001 | 832-012020 |
| 252-16616 | B16-DC10 Precision | 0 – 10 | 79 | 43 | 816-152005 | 832-012018 |
| 252-16617 | B16-DC13 Precision | 0 – 13 | 90 | 51 | 816-152001 | 832-012020 |
| 252-16618 | B16-DC16 Precision | 3 – 16 | 95 | 57 | 816-152001 | 832-012021 |
| 252-16619 | B18-DC16 Precision | 3 – 16 | 95 | 57 | 816-152001 | 832-012021 |

RUNDLAUFGENAUIGKEIT ≤0.05 MM • RUNOUT ACCURACY ≤0.05 MM • БИЕННИЕ ≤0.05 MM

PRECISION DE ROTATION ≤0.05 MM • PRECISIONE DI ROTAZIONE ≤0.05 MM • 跳动精度不大于0.05MM

PRÄZISIONSBOHRFUTTER - RECHTS LAUF
 MONOLITHIC DRILL CHUCKS - RIGHT SPIN
 ПРЕЦИЗИОННЫЕ СВЕРЛИЛЬНЫЕ ПАТРОНЫ - ВРАЩЕНИЕ ВПРАВО

MANDRINS DE PERCAGE - ROTATION DROITE
 MANDRINI AUTOSERRANTI INTEGRALI - ROTAZIONE DESTRA
 整体式钻夹头-右旋

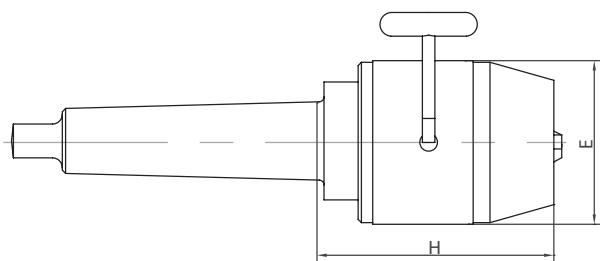


| Code N. | Type | Clamping capacity | H | E | Wrench |
|-----------|----------|-------------------|----|----|------------|
| 252-13301 | CM2-DC13 | 1 – 13 | 86 | 50 | 816-152001 |
| 252-13302 | CM3-DC13 | 1 – 13 | 86 | 50 | 816-152001 |
| 252-13303 | CM3-DC16 | 3 – 16 | 90 | 57 | 816-152001 |
| 252-13304 | CM4-DC13 | 1 – 13 | 87 | 50 | 816-152001 |
| 252-13305 | CM4-DC16 | 3 – 16 | 91 | 57 | 816-152001 |

RUNDLAUFGENAUGKEIT 0.05 MM • RUNOUT ACCURACY 0.05 MM • БИЕНИЕ 0.05 ММ
 PRECISION DE ROTATION 0.05 MM • PRECISIONE DI ROTAZIONE 0.05 MM • 跳动精度不大于0.05MM

PRÄZISIONSBOHRFUTTER - RECHTS- UND LINKSLAUF
 MONOLITHIC DRILL CHUCKS - RIGHT & LEFT SPIN
 ПРЕЦИЗИОННЫЕ СВЕРЛИЛЬНЫЕ ПАТРОНЫ
 ВРАЩЕНИЕ ВПРАВО И ВЛЕВО

MANDRINS DE PERCAGE - ROTATION GAUCHE-DROITE
 MANDRINI AUTOSERRANTI INTEGRALI
 ROTAZIONE DESTRA E SINISTRA
 整体式钻夹头-左右旋转

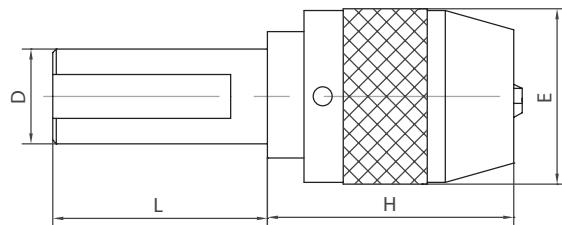


| Code N. | Type | Clamping capacity | H | E | Wrench |
|-----------|-----------|-------------------|----|----|------------|
| 252-13307 | CM3-DCU13 | 1 – 13 | 87 | 50 | 816-111028 |
| 252-13308 | CM3-DCU16 | 3 – 16 | 92 | 50 | 816-111028 |
| 252-13309 | CM4-DCU13 | 1 – 13 | 88 | 50 | 816-111028 |
| 252-13310 | CM4-DCU16 | 3 – 16 | 94 | 50 | 816-111028 |

RUNDLAUFGENAUGKEIT 0.05 MM • RUNOUT ACCURACY 0.05 MM • БИЕНИЕ 0.05 ММ
 PRECISION DE ROTATION 0.05 MM • PRECISIONE DI ROTAZIONE 0.05 MM • 跳动精度0.05MM

SCHNELLSPANNBOHRFUTTER
MIT ZYLINDERSCHAFT - RECHTSLAUF
STRAIGHT SHANK MONOLITHIC DRILL CHUCKS - RIGHT SPIN
СВЕРЛИЛЬНЫЕ ПАТРОНЫ С ЦИЛИНДРИЧЕСКИМ ХВОСТОВИКОМ
ВРАЩЕНИЕ ВПРАВО

MANDRINS DE PERCAGE
AVEC QUEUE CYLINDRIQUE - ROTATION DROITE
MANDRINI AUTOSERRANTI INTEGRALI
CON ATTACCO CILINDRICO - ROTAZIONE DESTRA
整体式钻夹头-右旋



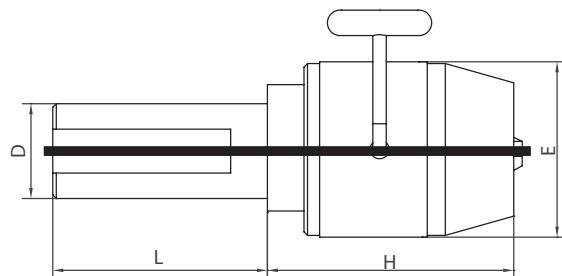
| Code N. | Type | Clamping capacity | H | E | L | Wrench |
|-----------|----------|-------------------|----|----|----|------------|
| 252-15701 | D20-DC13 | 1 – 13 | 81 | 50 | 60 | 816-152001 |
| 252-15702 | D25-DC13 | 1 – 13 | 81 | 50 | 80 | 816-152001 |
| 252-15703 | D32-DC13 | 1 – 13 | 81 | 50 | 60 | 816-152001 |
| 252-15704 | D32-DC16 | 3 – 16 | 85 | 57 | 60 | 816-152001 |
| 252-15705 | D40-DC13 | 1 – 13 | 81 | 50 | 70 | 816-152001 |
| 252-15706 | D40-DC16 | 3 – 16 | 85 | 57 | 70 | 816-152001 |

RUNDLAUFGENAUGKEIT 0.05 MM • RUNOUT ACCURACY 0.05 MM • БИЕНИЕ 0.05 MM
PRECISION DE ROTATION 0.05 MM • PRECISIONE DI ROTAZIONE 0.05 MM • 跳动精度不大于0.05MM

SCHNELLSPANNBOHRFUTTER
MIT ZYLINDERSCHAFT UND IK - RECHTS- UND LINKSLAUF
STRAIGHT SHANK INSIDE

COOLING MONOLITHIC DRILL CHUCKS - RIGHT & LEFT
СВЕРЛИЛЬНЫЕ ПАТРОНЫ С ВНУТРЕННИМ ПОДВОДОМ СОЖ С
ЦИЛИНДРИЧЕСКИМ ХВОСТОВИКОМ - ВРАЩЕНИЕ ВПРАВО, ВЛЕВО

MANDRINS DE PERCAGE AVEC QUEUE CYLINDRIQUE
ET ARROSAGE CENTRALE - ROTATION DROITE ET GAUCHE
MANDRINI AUTOSERRANTI INTEGRALI
CON ATTACCO CILINDRICO - ROTAZIONE DESTRA E SINISTRA
CON PASSAGGIO REFRIGERANTE
整体式钻夹头-左右旋转



| Code N. | Type | Clamping capacity | H | E | L | Wrench |
|-----------|------------|-------------------|----|----|----|------------|
| 252-15709 | D32-DCU13C | 1 – 13 | 82 | 50 | 60 | 816-111028 |
| 252-15710 | D32-DCU16C | 3 – 16 | 87 | 57 | 60 | 816-111028 |
| 252-15711 | D40-DCU13C | 1 – 13 | 82 | 50 | 70 | 816-111028 |
| 252-15712 | D40-DCU16C | 3 – 16 | 87 | 57 | 70 | 816-111028 |

RUNDLAUFGENAUGKEIT 0.05 MM • RUNOUT ACCURACY 0.05 MM • БИЕНИЕ 0.05 MM
PRECISION DE ROTATION 0.05 MM • PRECISIONE DI ROTAZIONE 0.05 MM • 跳动精度0.05MM

FRASDORNRINGE FÜR KOMBI AUFSTECKFRASDORNE
 SPACING COLLARS FOR COMBI-SHELL MILL HOLDERS
 КОЛЬЦА К КОМБИНИРОВАННЫМ ОПРАВКАМ ДЛЯ НАСАДНЫХ ФРЕЗ

BAGUES D'ESPACEMENT POUR PORTE FRAISES COMBINES
 ANELLI DISTANZIATORI PER MANDRINI PORTAFRESE COMBINATI
 复合式平面铣刀杆间隔铆合扣件

| Code N. | S mm | Code N. | S mm | Code N. | S mm | Code N. | S mm | |
|---------|------------|------------|------------|------------|------------|---------|------------|----|
| | K4084SP003 | 0,03 | K4084SP010 | 0,1 | K4084BSP01 | 1 | K4084BSP10 | 10 |
| | K4084SP004 | 0,04 | K4084SP020 | 0,2 | K4084BSP02 | 2 | K4084BSP20 | 20 |
| | K4084SP005 | 0,05 | K4084SP030 | 0,3 | K4084BSP03 | 3 | K4084BSP30 | 30 |
| | K4084SP006 | 0,06 | K4084SP040 | 0,4 | K4084BSP04 | 4 | | |
| | | K4084SP050 | 0,5 | K4084BSP05 | 5 | | | |
| | | K4084SP060 | 0,6 | K4084BSP06 | 6 | | | |

| Code N. | S mm | Code N. | S mm | Code N. | S mm | Code N. | S mm | |
|---------|------------|------------|------------|------------|------------|---------|------------|----|
| | K4085SP003 | 0,03 | K4085SP010 | 0,1 | K4085BSP01 | 1 | K4085BSP10 | 10 |
| | K4085SP004 | 0,04 | K4085SP020 | 0,2 | K4085BSP02 | 2 | K4085BSP20 | 20 |
| | K4085SP005 | 0,05 | K4085SP030 | 0,3 | K4085BSP03 | 3 | K4085BSP30 | 30 |
| | K4085SP006 | 0,06 | K4085SP040 | 0,4 | K4085BSP04 | 4 | K4085BSP60 | 60 |
| | | K4085SP050 | 0,5 | K4085BSP05 | 5 | | | |
| | | K4085SP060 | 0,6 | K4085BSP06 | 6 | | | |

| Code N. | S mm | Code N. | S mm | Code N. | S mm | Code N. | S mm | |
|---------|------------|------------|------------|------------|------------|---------|------------|----|
| | K4086SP003 | 0,03 | K4086SP010 | 0,1 | K4086BSP01 | 1 | K4086BSP10 | 10 |
| | K4086SP004 | 0,04 | K4086SP020 | 0,2 | K4086BSP02 | 2 | K4086BSP20 | 20 |
| | K4086SP005 | 0,05 | K4086SP030 | 0,3 | K4086BSP03 | 3 | K4086BSP30 | 30 |
| | K4086SP006 | 0,06 | K4086SP040 | 0,4 | K4086BSP04 | 4 | K4086BSP60 | 60 |
| | | K4086SP050 | 0,5 | K4086BSP05 | 5 | | | |
| | | K4086SP060 | 0,6 | K4086BSP06 | 6 | | | |

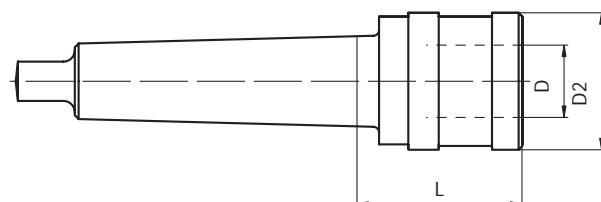
| Code N. | S mm | Code N. | S mm | Code N. | S mm | Code N. | S mm | |
|---------|------------|------------|------------|------------|------------|---------|------------|----|
| | K4087SP003 | 0,03 | K4087SP010 | 0,1 | K4087BSP01 | 1 | K4087BSP10 | 10 |
| | K4087SP004 | 0,04 | K4087SP020 | 0,2 | K4087BSP02 | 2 | K4087BSP20 | 20 |
| | K4087SP005 | 0,05 | K4087SP030 | 0,3 | K4087BSP03 | 3 | K4087BSP30 | 30 |
| | K4087SP006 | 0,06 | K4087SP040 | 0,4 | K4087BSP04 | 4 | K4087BSP60 | 60 |
| | | K4087SP050 | 0,5 | K4087BSP05 | 5 | | | |
| | | K4087SP060 | 0,6 | K4087BSP06 | 6 | | | |

| Code N. | S mm | Code N. | S mm | Code N. | S mm | Code N. | S mm | |
|---------|------------|------------|------------|------------|------------|---------|------------|----|
| | K4088SP003 | 0,03 | K4088SP010 | 0,1 | K4088BSP01 | 1 | K4088BSP10 | 10 |
| | K4088SP004 | 0,04 | K4088SP020 | 0,2 | K4088BSP02 | 2 | K4088BSP20 | 20 |
| | K4088SP005 | 0,05 | K4088SP030 | 0,3 | K4088BSP03 | 3 | K4088BSP30 | 30 |
| | K4088SP006 | 0,06 | K4088SP040 | 0,4 | K4088BSP04 | 4 | K4088BSP60 | 60 |
| | | K4088SP050 | 0,5 | K4088BSP05 | 5 | | | |
| | | K4088SP060 | 0,6 | K4088BSP06 | 6 | | | |

GEWINDESCHNID-SCHNELLWECHSELFUTTER
 MIT LÄNGENAUSGLEICH UND MORSEKEGELSCHAFT
 QUICK CHANGE TAP HOLDER WITH MORSE TAPER SHANK
 БЫСТРОСМЕННЫЕ РЕЗЬБОНАРЕЗНЫЕ ПАТРОНЫ
 С КОНУСОМ МОРЗЕ С ЛАПКОЙ

MANDRIN DE TARAUDAGE CONE MORSE
 A CHANGEMENT RAPIDE
 MASCHIATORE A DOPPIA COMPENSAZIONE
 ATTACCO CONO MORSE
 快换丝锥夹头带莫氏锥柄

DIN 228-B

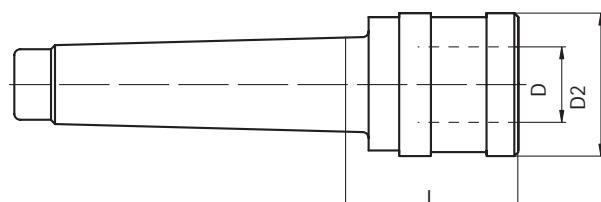


| Code N. | Description | Size | Top range | Press | Ext | Mk Morse | D | D2 | L |
|---------|----------------|------|-----------|-------|-----|----------|----|----|-----|
| M-1810 | M3-M12CM2BGR1 | 1 | M3÷M12 | 9 | 9 | 2 | 19 | 38 | 46 |
| M-1820 | M3-M12CM3BGR1 | 1 | M3÷M12 | 9 | 9 | 3 | 19 | 38 | 46 |
| M-1920 | M6-M20CM3BGR2 | 2 | M6÷M20 | 15 | 15 | 3 | 31 | 55 | 69 |
| M-1930 | M6-M20CM4BGR2 | 2 | M6÷M20 | 15 | 15 | 4 | 31 | 55 | 70 |
| M-2030 | M14-M33CM4BGR3 | 3 | M14÷M33 | 24 | 24 | 4 | 48 | 79 | 108 |
| M-2040 | M14-M33CM5BGR3 | 3 | M14÷M33 | 24 | 24 | 5 | 48 | 79 | 103 |

GEWINDESCHNID-SCHNELLWECHSELFUTTER
 MIT LÄNGENAUSGLEICH UND MORSEKEGELSCHAFT
 QUICK CHANGE TAP HOLDER WITH MT SHANK
 БЫСТРОСМЕННЫЕ РЕЗЬБОНАРЕЗНЫЕ ПАТРОНЫ
 С КОНУСОМ МОРЗЕ С РЕЗЬБОЙ

MANDRIN DE TARAUDAGE CONE MORSE
 A CHANGEMENT RAPIDE
 MASCHIATORE A DOPPIA COMPENSAZIONE
 ATTACCO CONO MORSE
 快换丝锥夹头带MT柄

DIN 228-A

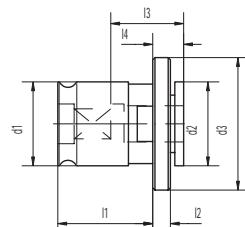


| Code N. | Description | Size | Top range | Press | Ext | Mk Morse | D | D2 | L |
|---------|---------------|------|-----------|-------|-----|----------|----|----|----|
| M-2210 | M3-M12CM2AGR1 | 1 | M3÷M12 | 9 | 9 | 2 | 19 | 36 | 46 |
| M-2220 | M3-M12CM3AGR1 | 1 | M3÷M12 | 9 | 9 | 3 | 19 | 36 | 46 |
| M-2320 | M6-M20CM3AGR2 | 2 | M6÷M20 | 15 | 15 | 3 | 31 | 53 | 68 |
| M-2330 | M6-M20CM4AGR2 | 2 | M6÷M20 | 15 | 15 | 4 | 31 | 53 | 70 |

SCHNELLWECHSELEINSÄTZE OHNE SICHERHEITSKUPPLUNG
 QUICK CHANGE TAPPING ADAPTERS WITHOUT SAFETY COUPLING
 БЫСТРОСМЕННЫЕ РЕЗЬБОНАРЕЗНЫЕ АДАПТЕРЫ
 БЕЗ ПРЕДОХРАНЯЮЩЕЙ МУФТЫ

ADAPTEURS A CHANGEMENT RAPIDE SANS
 COUPLAGE DE SECURITE
 BUSSOLA PER MASCHIARE SENZA FRIZIONE
 快换丝锥接头不带安全连接器

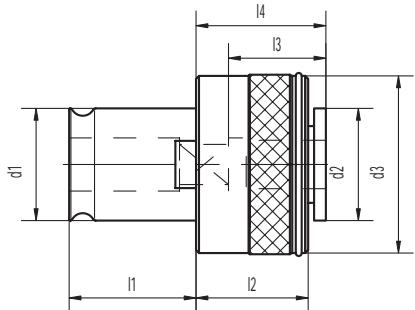
IBC



| | Code N. | Top shank | <input checked="" type="checkbox"/> | Size | l1 | l2 | l3 | l4 | d1 | d2 | d3 |
|-------|-----------|-----------|-------------------------------------|------|------|----|----|----|----|----|----|
| IBC 1 | IBC1-2,80 | 2,8 | <input checked="" type="checkbox"/> | 1 | 21,5 | 4 | 17 | 7 | 19 | 19 | 30 |
| | IBC1-3,15 | 3,15 | <input checked="" type="checkbox"/> | 1 | 21,5 | 4 | 17 | 7 | 19 | 19 | 30 |
| | IBC1-3,50 | 3,5 | <input checked="" type="checkbox"/> | 1 | 21,5 | 4 | 17 | 7 | 19 | 19 | 30 |
| | IBC1-4,0 | 4 | <input checked="" type="checkbox"/> | 1 | 21,5 | 4 | 17 | 7 | 19 | 19 | 30 |
| | IBC1-4,0 | 4 | <input checked="" type="checkbox"/> | 1 | 21,5 | 4 | 17 | 7 | 19 | 19 | 30 |
| | IBC1-4,0 | 5 | <input checked="" type="checkbox"/> | 1 | 21,5 | 4 | 17 | 7 | 19 | 19 | 30 |
| | IBC1-4,5 | 4,5 | <input checked="" type="checkbox"/> | 1 | 21,5 | 4 | 17 | 7 | 19 | 19 | 30 |
| | IBC1-5,0 | 5 | <input checked="" type="checkbox"/> | 1 | 21,5 | 4 | 17 | 7 | 19 | 19 | 30 |
| | IBC1-5,5 | 5,5 | <input checked="" type="checkbox"/> | 1 | 21,5 | 4 | 17 | 7 | 19 | 19 | 30 |
| | IBC1-6,0 | 6 | <input checked="" type="checkbox"/> | 1 | 21,5 | 4 | 17 | 7 | 19 | 19 | 30 |
| | IBC1-6,3 | 6,3 | <input checked="" type="checkbox"/> | 1 | 21,5 | 4 | 17 | 7 | 19 | 19 | 30 |
| | IBC1-7,0 | 7 | <input checked="" type="checkbox"/> | 1 | 21,5 | 4 | 17 | 7 | 19 | 19 | 30 |
| | IBC1-8,0 | 8 | <input checked="" type="checkbox"/> | 1 | 21,5 | 4 | 17 | 7 | 19 | 19 | 30 |
| | IBC1-8,0 | 8 | <input checked="" type="checkbox"/> | 1 | 21,5 | 4 | 17 | 7 | 19 | 19 | 30 |
| | IBC1-9,0 | 9 | <input checked="" type="checkbox"/> | 1 | 21,5 | 4 | 17 | 7 | 19 | 19 | 30 |
| IBC 2 | IBC1-10 | 10 | <input checked="" type="checkbox"/> | 1 | 21,5 | 4 | 17 | 7 | 19 | 19 | 30 |
| | IBC1-11 | 11 | <input checked="" type="checkbox"/> | 1 | 21,5 | 4 | 17 | 7 | 19 | 19 | 30 |
| | IBC1-12 | 12 | <input checked="" type="checkbox"/> | 1 | 21,5 | 4 | 17 | 7 | 19 | 19 | 30 |
| | IBC2-6,0 | 6 | <input checked="" type="checkbox"/> | 2 | 35 | 5 | 30 | 11 | 31 | 30 | 48 |
| | IBC2-6,5 | 6,3 | <input checked="" type="checkbox"/> | 2 | 35 | 5 | 30 | 11 | 31 | 30 | 48 |
| | IBC2-7,0 | 7 | <input checked="" type="checkbox"/> | 2 | 35 | 5 | 30 | 11 | 31 | 30 | 48 |
| | IBC2-8,0 | 8 | <input checked="" type="checkbox"/> | 2 | 35 | 5 | 30 | 11 | 31 | 30 | 48 |
| | IBC2-9,0 | 9 | <input checked="" type="checkbox"/> | 2 | 35 | 5 | 30 | 11 | 31 | 30 | 48 |
| | IBC2-10 | 10 | <input checked="" type="checkbox"/> | 2 | 35 | 5 | 30 | 11 | 31 | 30 | 48 |
| | IBC2-11 | 11 | <input checked="" type="checkbox"/> | 2 | 35 | 5 | 30 | 11 | 31 | 30 | 48 |
| | IBC2-12 | 12 | <input checked="" type="checkbox"/> | 2 | 35 | 5 | 30 | 11 | 31 | 30 | 48 |
| | IBC2-12,5 | 12,5 | <input checked="" type="checkbox"/> | 2 | 35 | 5 | 30 | 11 | 31 | 30 | 48 |
| | IBC2-14 | 14 | <input checked="" type="checkbox"/> | 2 | 35 | 5 | 30 | 11 | 31 | 30 | 48 |
| | IBC2-16 | 16 | <input checked="" type="checkbox"/> | 2 | 35 | 5 | 30 | 11 | 31 | 30 | 48 |
| | IBC2-16 | 16 | <input checked="" type="checkbox"/> | 2 | 35 | 5 | 30 | 11 | 31 | 30 | 48 |
| | IBC2-18 | 18 | <input checked="" type="checkbox"/> | 2 | 35 | 5 | 30 | 11 | 31 | 30 | 48 |
| | IBC2-20 | 20 | <input checked="" type="checkbox"/> | 2 | 35 | 5 | 30 | 11 | 31 | 30 | 48 |
| IBC 3 | IBC3-11 | 11 | <input checked="" type="checkbox"/> | 3 | 55,5 | 6 | 44 | 14 | 48 | 48 | 70 |
| | IBC3-12 | 12 | <input checked="" type="checkbox"/> | 3 | 55,5 | 6 | 44 | 14 | 48 | 48 | 70 |
| | IBC3-14 | 14 | <input checked="" type="checkbox"/> | 3 | 55,5 | 6 | 44 | 14 | 48 | 48 | 70 |
| | IBC3-16 | 16 | <input checked="" type="checkbox"/> | 3 | 55,5 | 6 | 44 | 14 | 48 | 48 | 70 |
| | IBC3-18 | 18 | <input checked="" type="checkbox"/> | 3 | 55,5 | 6 | 44 | 14 | 31 | 30 | 70 |
| | IBC3-20 | 20 | <input checked="" type="checkbox"/> | 3 | 55,5 | 6 | 44 | 14 | 48 | 48 | 70 |
| | IBC3-22 | 22 | <input checked="" type="checkbox"/> | 3 | 55,5 | 6 | 44 | 14 | 48 | 48 | 70 |
| | IBC3-25 | 25 | <input checked="" type="checkbox"/> | 3 | 55,5 | 6 | 44 | 14 | 48 | 48 | 70 |
| | IBC3-28 | 28 | <input checked="" type="checkbox"/> | 3 | 55,5 | 6 | 44 | 14 | 48 | 48 | 70 |
| | IBC3-32 | 32 | <input checked="" type="checkbox"/> | 3 | 55,5 | 6 | 44 | 14 | 48 | 48 | 70 |
| | IBC3-36 | 36 | <input checked="" type="checkbox"/> | 3 | 5,55 | 6 | 44 | 14 | 48 | 48 | 70 |

SCHNELLWECHSELEINSÄTZE MIT SICHERHEITSKUPPLUNG
 QUICK CHANGE TAPPING ADAPTERS WITH SAFETY COUPLING
 БЫСТРОСМЕННЫЕ РЕЗЬБОНАРЕЗНЫЕ АДАПТЕРЫ
 С ПРЕДОХРАНЯЮЩЕЙ МУФТОЙ

ADAPTEURS A CHANGEMENT RAPIDE
 AVEC COUPLAGE DE SECURITE
 BUSSOLA PER MASCHIARE CON FRIZIONE
 快换丝锥接头带安全连接器

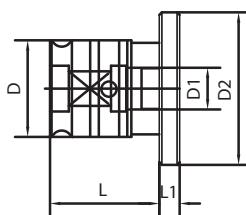


IBS

| | Code N. | Top shank | | Size | l1 | l2 | l3 | l4 | d1 | d2 | d3 |
|-------|----------|-----------|------|------|------|----|----|----|----|----|----|
| IBS 1 | IBS1-3,5 | 3,5 | 2,7 | 1 | 21,5 | 25 | 17 | 25 | 19 | 19 | 32 |
| | IBS1-4,5 | 4,5 | 3,4 | 1 | 21,5 | 25 | 17 | 25 | 19 | 19 | 32 |
| | IBS1-5,5 | 5,5 | 4,3 | 1 | 21,5 | 25 | 17 | 25 | 19 | 19 | 32 |
| | IBS1-6 | 6 | 4,9 | 1 | 21,5 | 25 | 17 | 25 | 19 | 19 | 32 |
| | IBS1-7 | 7 | 5,5 | 1 | 21,5 | 25 | 17 | 25 | 19 | 19 | 32 |
| | IBS1-8 | 8 | 6,2 | 1 | 21,5 | 25 | 17 | 25 | 19 | 19 | 32 |
| | IBS1-9 | 9 | 7 | 1 | 21,5 | 25 | 17 | 25 | 19 | 19 | 32 |
| | IBS1-10 | 10 | 8 | 1 | 21,5 | 25 | 17 | 25 | 19 | 19 | 32 |
| | IBS1-11 | 11 | 9 | 1 | 21,5 | 25 | 17 | 25 | 19 | 19 | 32 |
| | IBS2-6 | 6 | 4,9 | 2 | 35 | 31 | 30 | 34 | 31 | 30 | 50 |
| | IBS2-7 | 7 | 5,5 | 2 | 35 | 31 | 30 | 34 | 31 | 30 | 50 |
| IBS 2 | IBS2-8 | 8 | 6,2 | 2 | 35 | 31 | 30 | 34 | 31 | 30 | 50 |
| | IBS2-9 | 9 | 7 | 2 | 35 | 31 | 30 | 34 | 31 | 30 | 50 |
| | IBS2-10 | 10 | 8 | 2 | 35 | 31 | 30 | 34 | 31 | 30 | 50 |
| | IBS2-11 | 11 | 9 | 2 | 35 | 31 | 30 | 34 | 31 | 30 | 50 |
| | IBS2-12 | 12 | 9 | 2 | 35 | 31 | 30 | 34 | 31 | 30 | 50 |
| | IBS2-14 | 14 | 11 | 2 | 35 | 31 | 30 | 34 | 31 | 30 | 50 |
| | IBS2-16 | 16 | 12 | 2 | 35 | 31 | 30 | 34 | 31 | 30 | 50 |
| | IBS2-18 | 18 | 14,5 | 2 | 35 | 31 | 30 | 34 | 31 | 30 | 50 |
| | IBS3-11 | 11 | 9 | 3 | 55,5 | 41 | 44 | 45 | 48 | 48 | 72 |
| | IBS3-12 | 12 | 9 | 3 | 55,5 | 41 | 44 | 45 | 48 | 48 | 72 |
| | IBS3-14 | 14 | 11 | 3 | 55,5 | 41 | 44 | 45 | 48 | 48 | 72 |
| IBS 3 | IBS3-16 | 16 | 12 | 3 | 55,5 | 41 | 44 | 45 | 48 | 48 | 72 |
| | IBS3-18 | 18 | 14,5 | 3 | 55,5 | 41 | 44 | 45 | 48 | 48 | 72 |
| | IBS3-20 | 20 | 16 | 3 | 55,5 | 41 | 44 | 45 | 48 | 48 | 72 |
| | IBS3-22 | 22 | 18 | 3 | 55,5 | 41 | 44 | 45 | 48 | 48 | 72 |
| | IBS3-25 | 25 | 20 | 3 | 55,5 | 41 | 44 | 45 | 48 | 48 | 72 |
| | IBS3-28 | 28 | 22 | 3 | 55,5 | 41 | 44 | 45 | 48 | 48 | 72 |

REDUZIERUNGEN FÜR EINSÄTZE
 REDUCTIONS FROM ADAPTER TO ADAPTER
 RIDUZIONI DA BUSSOLA A BUSSOLA
 ПЕРЕХОДНИКИ К АДАПТЕРАМ
 接头与接头之间的缩小

| Code N. | D | D1 | D2 | L | L1 |
|---------|----|----|----|------|----|
| IBC1/0 | 19 | 13 | 30 | 21,5 | 4 |
| IBC2/1 | 31 | 19 | 48 | 35 | 5 |
| IBC3/2 | 48 | 31 | 70 | 55,5 | 6 |



TECHNISCHE DATEN
TECHNICAL INFORMATIONS
ТЕХНИЧЕСКАЯ ИНФОРМАЦИЯ

DONNÉES TECHNIQUES
INFORMAZIONI TECNICHE
技术信息

Tap Shank Dimension ISO 529 - 1975

| Dimension Dia. x Square | Metric | | UNC | | UNF | | BSW | | BSF | | BA | |
|----------------------------|--------|------------------------|-----------|------------------------|-----------|------------------------|-----------|------------------------|-----------|------------------------|-------|------------------------|
| | | Shank dia. enlarged | | Shank dia. enlarged | | Shank dia. enlarged | | Shank dia. enlarged | | Shank dia. enlarged | | Shank dia. enlarged |
| 3.15 x 2.5 | M 4 | M 3 | - | No. 4-40 | - | No. 4-48 | - | - | - | - | - | No. 5 |
| | - | - | No. 8.32 | No. 5-40 | No. 8-36 | No. 5-44 | - | - | - | - | No. 3 | - |
| 3.55 x 2.8 | M 4.5 | M 3.5 | No. 10-24 | No. 6-32 | No. 10-32 | No. 6-40 | 3/16"-24 | - | 3/16"-32 | - | No. 2 | No. 4 |
| 4 x 3.15 | M 5 | M 4 | No. 12-24 | - | No. 12-28 | - | - | - | 7/32"-28 | - | No. 1 | - |
| 4.5 x 3.55 | M 6 | - | 1/4"-20 | No. 8-32 | 1/4"-28 | No. 3-36 | 1/4"-20 | - | 1/4"-26 | - | No. 0 | No. 3 |
| 5 x 4 | - | M 5 | - | No. 10-24 | - | No. 10-32 | - | 3/16"-24 | - | 3/16"-32 | - | No. 2 |
| 5.6 x 4.5 | - | - | - | No. 12-24 | - | No. 12-28 | - | - | 9/32"-26 | 7/32"-28 | - | No. 1 |
| 6.3 x 5 | M 8 | M 6 | 5/16"-18 | 1/4"-20 | 5/16"-24 | 1/4"-28 | 5/16"-18 | 1/4"-20 | 5/16"-22 | 1/4"-26 | - | No. 0 |
| 7.1 x 5.6 | - | - | 3/8"-16 | - | 3/8"-24 | - | 3/8"-16 | - | 3/8"-20 | 9/32"-36 | - | - |
| 8 x 6.3 | M 10 | M 8 | 7/16"-14 | 5/16"-18 | 7/16"-20 | - | 7/16"-14 | 5/16"-18 | 7/16"-18 | 5/16"-22 | - | - |
| 9 x 7.1 | M 12 | - | 1/2"-13 | - | 1/2"-20 | - | 1/2"-12 | - | 1/2"-12 | - | - | - |
| 10 x 8 | - | M 10 | - | 3/8"-16 | - | 3/8"-24 | - | 3/8"-16 | - | 3/8"-20 | - | - |
| 11.2 x 9 | M 14 | - | 9/16"-12 | - | 9/16"-18 | - | 9/16"-12 | - | 9/16"-16 | - | - | - |
| 12.5 x 10 | M 16 | - | 5/8"-11 | - | 5/8"-18 | - | 5/8"-11 | - | 3/8"-14 | - | - | - |
| 14 x 11.2 | M 18 | - | 3/4"-10 | - | 3/4"-16 | - | 11/16"-11 | - | 11/16"-14 | - | - | - |
| | M 20 | - | - | - | - | - | 3/4"-10 | - | 3/4"-12 | - | - | - |
| 16 x 12.5 | M 22 | - | 7/8"-9 | - | 7/8"-14 | - | 7/8"-9 | - | 7/8"-11 | - | - | - |
| 18 x 14 | M 24 | - | 1"-8 | - | 1"-12 | - | 1"-8 | - | 1"-10 | - | - | - |
| 20 x 16 | M 27 | - | 1 1/8"-7 | - | 1 1/8"-12 | - | 1 1/8"-7 | - | 1 1/8"-9 | - | - | - |
| M 30 | - | - | - | - | - | - | - | - | - | - | - | - |
| 22.4 x 18 | M 33 | - | 1 1/4"-4 | - | 1 1/4"-12 | - | 1 1/4"-7 | - | 1 1/4"-9 | - | - | - |
| 25 x 20 | M 36 | - | 1 3/8"-6 | - | 1 3/8"-12 | - | - | - | 1 3/8"-8 | - | - | - |
| 28 x 22.4 | M 39 | - | 1 1/8"-6 | - | 1 1/8"-12 | - | 1 1/8"-6 | - | 1 1/8"-8 | - | - | - |
| | M 42 | - | - | - | - | - | - | - | - | - | - | - |
| 31.5 x 25 | M 45 | - | 1 3/4"-5 | - | - | - | 1 3/4"-5 | - | 1 3/4"-7 | - | - | - |
| | M 48 | - | - | - | - | - | - | - | - | - | - | - |

Tap Shank Dimension DIN

| Dimension Dia. x Square | DIN 352 | DIN 353 | DIN 371 | DIN 374 | DIN 376 | DIN 2182 | DIN 2183 |
|----------------------------|---------|----------|---------|---------|---------|----------|----------|
| 3.5 x 2.7 | M 3 | - | M 3 | M 5 | M 5 | 1/8" | - |
| 4 x 3 | M 4 | - | M 3.5 | - | - | - | - |
| 4.5 x 3.4 | M 4 | - | M 4 | M 6 | M 6 | 5/32" | 1/4" |
| | M 5 | - | M 5 | - | - | 7/32" | - |
| 6 x 4.9 | M 6 | - | M 6 | - | - | - | - |
| | M 8 | - | - | M 8 | M 8 | - | - |
| 7 x 5.5 | M 10 | G 1 1/8" | - | M 10 | M 10 | 1/4" | 3/8" |
| 8 x 6.2 | - | - | M 8 | - | - | 5/16" | 7/16" |
| 9 x 7 | M 12 | - | - | M 12 | M 12 | 3/8" | 1/2" |
| 10 x 8 | - | - | M 10 | - | - | - | - |
| 11 x 9 | M 14 | G 1/4" | - | M 14 | M 14 | - | 9/16" |
| 12 x 9 | M 16 | G 3/8" | - | M 16 | M 16 | - | 5/8" |
| 14 x 11 | M 18 | - | - | M 18 | M 18 | - | 11/16" |
| 16 x 12 | M 20 | G 1/2" | - | M 20 | M 20 | - | 13/16" |
| 18 x 14.5 | M 22 | G 5/8" | - | M 22 | M 22 | - | 7/8" |
| M 24 | - | - | M 24 | M 24 | M 24 | - | 15/16" |
| 20 x 16 | M 27 | G 3/4" | - | M 27 | M 27 | - | 1" |
| 22 x 18 | M 30 | G 7/8" | - | M 30 | M 30 | - | 1 1/8" |
| 25 x 20 | M 33 | G 1" | - | M 33 | M 33 | - | 1 1/4" |
| 28 x 22 | M 36 | G 1 1/8" | - | M 36 | M 36 | - | 1 3/8" |
| 32 x 24 | M 39 | G 1 1/8" | - | M 39 | M 39 | - | 1 1/2" |
| M 42 | - | - | M 42 | M 42 | M 42 | - | 1 5/8" |
| | M 45 | G 3/8" | - | M 45 | M 45 | - | 1 3/4" |
| | M 48 | G 1 1/2" | - | M 48 | M 48 | - | 1 7/8" |
| 36 x 29 | - | G 1 3/8" | - | - | - | - | - |
| | - | G 2" | - | - | - | - | - |

Tap Shank Dimensions ANSI (US Standards)

Tap Shank Dimensions (JIS Standards)

| Dimension in Inch. Dia. x Square | Metric Conversions | Tap Size | Dimension in Inch. Dia. x Square | Metric Conversions | Tap Size | Dimension in mm. Dia. x Square | Tap Size |
|-------------------------------------|-----------------------|----------|-------------------------------------|-----------------------|----------|-----------------------------------|----------|
| 0.141 0.110 | 3.59 | 2.80 | 1/8" No.6 | 0.590 | 0.442 | 14.99 | 11.23 |
| 0.168 0.131 | 4.27 | 3.33 | 5/32" No.8 | 0.652 | 0.489 | 16.57 | 12.43 |
| 0.194 0.152 | 4.93 | 3.87 | 3/16" No. 10 | 0.688 | 0.615 | 17.47 | 13.09 |
| 0.220 0.165 | 5.59 | 4.20 | No. 12 | 0.697 | 0.523 | 17.71 | 13.29 |
| 0.255 0.191 | 6.48 | 4.86 | 1/4" No. 14 | 0.700 | 0.531 | 17.78 | 13.49 |
| 0.312 0.234 | 7.94 | 5.95 | 1/16"Ps 1/8"Ps | 0.760 | 0.570 | 19.31 | 14.48 |
| 0.318 0.238 | 8.08 | 6.05 | 5/16" 3/8" | 0.800 | 0.600 | 20.32 | 15.24 |
| 0.323 0.242 | 8.21 | 6.15 | 5/16" 7/16" | 0.896 | 0.672 | 22.76 | 17.07 |
| 0.367 0.275 | 9.33 | 6.99 | 1/2" | 0.906 | 0.679 | 23.02 | 17.25 |
| 0.381 0.286 | 9.68 | 7.27 | 3/8" | 1.021 | 0.766 | 25.94 | 19.46 |
| 0.429 0.322 | 10.90 | 8.18 | 9/16" | 1.108 | 0.833 | 28.15 | 21.11 |
| 0.438 0.328 | 11.12 | 8.34 | 1/8"Ps | 1.125 | 0.843 | 28.58 | 21.42 |
| 0.480 0.360 | 12.20 | 9.15 | 5/8" | 1.233 | 0.925 | 31.32 | 23.50 |
| 0.542 0.406 | 13.77 | 10.31 | 11/16" | 1.132 | 0.984 | 33.34 | 25.00 |
| 0.663 0.421 | 14.29 | 10.70 | 1/4"Ps | 1.430 | 1.072 | 36.33 | 27.23 |

TECHNISCHE DATEN
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ТЕХНИЧЕСКАЯ ИНФОРМАЦИЯ

DONNÉES TECHNIQUES
INFORMAZIONI TECNICHE
技术信息

| TAP MASCHIO | TORQUE - MOMENTO TORCENTE Nm | | | | |
|----------------|---------------------------------|---------|---------|---------|---------|
| | IBS 0 | IBS 1 | IBS 2 | IBS 3 | IBS 4 |
| M2 | 0,6 | 0,6 | - | - | - |
| M3 | 1 | 1 | - | - | - |
| M3,5 | 1,5-2 | 1,5-2 | - | - | - |
| M4 | 1,8-3 | 1,8-3 | - | - | - |
| M5 | 3,5-5,5 | 3,5-5,5 | - | - | - |
| M6-M7 | 5,5-9 | 5,5-9 | 5,5-9 | - | - |
| M8-M9 | 14-18 | 14-18 | 14-18 | - | - |
| M10-M11 | 21-25 | 21-25 | 21-25 | - | - |
| M12 | 21-25 | 33-39 | 33-39 | 33-39 | - |
| M14 | - | 45-50 | 45-50 | 45-50 | - |
| M16 | - | 45-50 | 50-57 | 45-50 | - |
| M18 | - | - | 80-87 | 80-87 | - |
| M20 | - | - | 90-100 | 90-100 | 90-100 |
| M22 | - | - | 100-110 | 100-110 | 100-110 |
| M24 | - | - | 100-110 | 140-150 | 140-150 |
| M27 | - | - | - | 150-160 | 150-160 |
| M30 | - | - | - | 240-250 | 240-250 |
| M33 | - | - | - | 260-270 | 260-270 |
| M36 | - | - | - | 260-270 | 350-400 |
| M39 | - | - | - | 260-270 | 380-430 |
| M42 | - | - | - | - | 500-550 |
| M45 | - | - | - | - | 550-600 |
| M48 | - | - | - | - | 630-680 |
| M52 | - | - | - | - | - |



- Mit den hier aufgeführten Werten sind alle unsere SWE's voreigestellt. Sollten Sie einmal eine andere Einstellung wünschen, so wollen Sie dies bitte bei Bestellung aufgeben.



- The calibration values shown in the table are the average values produced during testing. Alternative calibration values should be requested when placing the order.



- Значения по калибровке, указанные в таблице, являются усредненными, полученными во время тестирования. Если нужны другие значения, указывайте при заказе.



- Les valeurs de tarage indiquées sur le tableau sont les valeurs réalisées pendant le montage. Pour tarages différents est nécessaire l'indiquer sur la commande.



- I valori in tabella sono quelli realizzati in fase di montaggio. Per tarature diverse siete pregati di farne richiesta al momento dell'ordine.

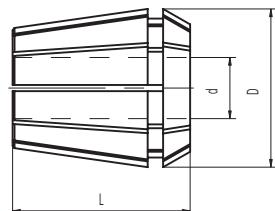


- 表格中显示的校对数值是测量中产生的平均值。
如需其他校对值可在下单时提出要求。

ER TYP SPANNZANGEN
COLLETS ER TYPE
НАБОРЫ ЦАНГ ER
PINCES TYPE ER
PINZE TIPO ER
ER 类型的夹头

DIN 6499/R

RUNOUT $\leq 0,010$



| Type | D | L | Clamping capacity | Clamping range | DIN |
|---------|------|------|-------------------|------------------|-------|
| ER8D.. | 8.5 | 13.5 | 1÷5 | mm 0,5 | 4004E |
| ER11D.. | 11.5 | 18 | 1÷7 | mm 0,5 | 4008E |
| ER16D.. | 17 | 27.5 | 1÷3 4÷10 | mm 0,5 mm 1,0 | 426E |
| ER20D.. | 21 | 31.5 | 1÷3 4÷13 | mm 0,5 mm 1,0 | 428E |
| ER25D.. | 26 | 34.5 | 1÷3 4÷16 | mm 0,5 mm 1,0 | 430E |
| ER32D.. | 33 | 40 | 2÷20 | mm 1,0 | 470E |
| ER40D.. | 41 | 46 | 3÷30 | mm 1,0 | 472E |
| ER50D.. | 52 | 60 | 6÷34 | mm 2,0 | 477E |

ER - SPANNZANGENSATZ
ER COLLET SETS
НАБОРЫ ЦАНГ ER
JEUX DE PINCES TYPE ER
SERIE PINZE TIPO ER
ER 夹头组套

RUNOUT $\leq 0,010$

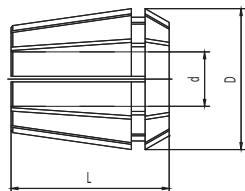


| Type | Number of collets | Clamping capacity |
|-------------|-------------------|--|
| SERIE-ER8 | (1÷5) 9 collets | Ø 1-1,5-2-2,5-3-3,5-4-4,5-5 |
| SERIE-ER11 | (1÷7) 13 collets | Ø 1-1,5-2-2,5-3-3,5-4-4,5-5-5-6,5-7 |
| SERIE-ER16 | (1÷10) 10 collets | Ø 1-2-3-4-5-6-7-8-9-10 |
| SERIE-ER20 | (2÷13) 12 collets | Ø 2-3-4-5-6-7-8-9-10-11-12-13 |
| SERIE-ER25 | (2÷16) 15 collets | Ø 2-3-4-5-6-7-8-9-10-11-12-13-14-15-16 |
| SERIE-ER32 | (3÷20) 18 collets | Ø 3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20 |
| SERIE-ER40 | (4÷26) 23 collets | Ø 4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26 |
| SERIE-ER40C | (3÷30) 26 collets | Ø 3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29-30 |

HOCHPRÄZISIONS-ER SPANNZANGEN
HIGH PRECISION ER COLLETS
ВЫСОКОТОЧНЫЕ ЦАНГИ ER
高精度 ER 夹头

DIN 6499/B

RUNOUT \leq 0,005



| Type | D | L | Clamping capacity |
|---------|------|------|-------------------|
| ER 8 HP | 8,5 | 13,5 | 1÷5 |
| ER11 HP | 11,5 | 18 | 1÷7 |
| ER16 HP | 17 | 27,5 | 1÷10 |
| ER20 HP | 21 | 31,5 | 1÷13 |
| ER25 HP | 26 | 34 | 1÷16 |
| ER32 HP | 33 | 40 | 2÷20 |
| ER40 HP | 41 | 46 | 3÷30 |
| ER50 HP | 52 | 60 | 6÷34 |

HOCHPRÄZISIONS-ER SPANNZANGENSÄTZE (Reduzierte Version)

REDUCED SETS OF COLLETS ER-HP TYPE

СОКРАЩЕННЫЕ НАБОРЫ ВЫСОКОТОЧНЫХ ЦАНГ ER

JEUX REDUITS DE PINCES ER DE HAUTE PRECISION

SERIE RIDOTTA DI PINZE ER-HP

ER-HP 夹头简装版

RUNOUT \leq 0,005



| Type | Diameters | No. collets |
|---------------|----------------------|-------------|
| SERIE-ER 8 HP | 1-2-3-4-5 | 5 |
| SERIE-ER11 HP | 1-2-3-4-5-6-7 | 7 |
| SERIE-ER16 HP | 2-4-6-8-10 | 5 |
| SERIE-ER20 HP | 2-4-6-8-10-12 | 6 |
| SERIE-ER25 HP | 4-6-8-10-12-16 | 6 |
| SERIE-ER32 HP | 4-6-8-10-12-16-20 | 7 |
| SERIE-ER40 HP | 4-6-8-10-12-16-20-25 | 8 |

HOCHPRÄZISIONS-ER SPANNZANGENSÄTZE (Komplette Version)

COMPLETE SETS OF COLLETS ER-HP TYPE

ПОЛНЫЕ НАБОРЫ ВЫСОКОТОЧНЫХ ЦАНГ ER

JEUX COMPLETS DE PINCES ER DE HAUTE PRECISION

SERIE COMPLETA DI PINZE ER-HP

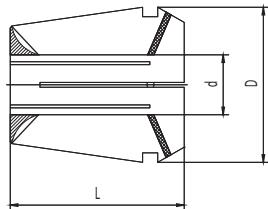
ER-HP 夹头的完整版

RUNOUT \leq 0,005



| Type | Diameters | No. collets |
|----------------|-----------|-------------|
| SERIE-ER 8 HPC | 1÷5 | 9 |
| SERIE-ER11 HPC | 1÷7 | 13 |
| SERIE-ER16 HPC | 1÷10 | 10 |
| SERIE-ER20 HPC | 2÷13 | 12 |
| SERIE-ER25 HPC | 2÷16 | 15 |
| SERIE-ER32 HPC | 3÷20 | 18 |
| SERIE-ER40 HPC | 4÷26 | 23 |

ER-SPANNZANGEN ABGEDICHTET
WATERTIGHT ER COLLETS
ЦАНГИ ER ДЛЯ ВНУТРЕННЕЙ ПОДАЧИ СОЖ
PINCES ER ETANCHES
PINZE ER A TENUTA STAGNA
水密性 ER 夹头



DIN 6499/A

RUNOUT \leq 0,010

| Type | D | L | Clamping capacity | Progressione |
|--------|------|------|-------------------|--------------|
| ER11VG | 11,5 | 18 | 1÷7 | 0,5 |
| ER16VG | 17 | 27,5 | 1÷10 | 0,5 |
| ER20VG | 21 | 31,5 | 3÷13 | 0,5 |
| ER25VG | 26 | 34 | 2÷16 | 0,5 |
| ER32VG | 33 | 40 | 3÷20 | 0,5 |
| ER40VG | 41 | 46 | 4÷26 | 0,5 |

ER VG SPANNZANGENSÄTZE (Reduzierte Version)
REDUCED SETS OF COLLETS VG TYPE
СОКРАЩЕННЫЕ НАБОРЫ ЦАНГ ER ДЛЯ ВНУТРЕННЕЙ ПОДАЧИ СОЖ

JEUX REDUITS DE PINCES ER VG
SERIE RIDOTTA DI PINZE VG
VG 型夹头简装版

RUNOUT \leq 0,010



| Type | Diameters | No. collets |
|--------------|----------------------|-------------|
| SERIE-ER16VG | 4-6-8-10 | 4 |
| SERIE-ER20VG | 4-6-8-10-12 | 5 |
| SERIE-ER25VG | 4-6-8-10-12-16 | 6 |
| SERIE-ER32VG | 4-6-8-10-12-16-20 | 7 |
| SERIE-ER40VG | 4-6-8-10-12-16-20-25 | 8 |

ER VG SPANNZANGENSÄTZE (Komplette Version)
COMPLETE SETS OF COLLETS VG TYPE
ПОЛНЫЕ НАБОРЫ ЦАНГ ER ДЛЯ ВНУТРЕННЕЙ ПОДАЧИ СОЖ

JEUX COMPLETS DE PINCES ER VG
SERIE COMPLETA DI PINZE VG
VG 型夹头完整版

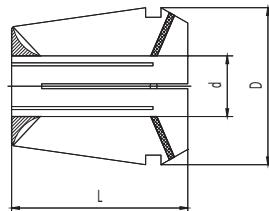
RUNOUT \leq 0,010



| Type | Diameters | No. collets |
|----------------|-----------|-------------|
| SERIE-ER16VG-C | 3÷10 | 8 |
| SERIE-ER20VG-C | 3÷13 | 11 |
| SERIE-ER25VG-C | 3÷16 | 14 |
| SERIE-ER32VG-C | 3÷20 | 18 |
| SERIE-ER40VG-C | 4÷26 | 23 |

DICHTE ER-SPANNZANGE
ULTRA PRECISION WATERTIGHT ER COLLETS
ВЫСОКОТОЧНЫЕ ЦАНГИ ER ДЛЯ ВНУТРЕННЕЙ ПОДАЧИ СОЖ

PINCES ER ETANCHES
PINZE ER A TENUTA STAGNA DI ULTRA PRECISIONE
超高精度水密性 ER 夹头



DIN 6499/A

RUNOUT $\leq 0,005$

| Type | D | L | Clamping capacity | Progressione |
|-----------|------|------|-------------------|--------------|
| ER11VG-HP | 11,5 | 18 | 1÷7 | 0,5 |
| ER16VG-HP | 17 | 27,5 | 3÷10 | 1 |
| ER20VG-HP | 21 | 31,5 | 3÷13 | 1 |
| ER25VG-HP | 26 | 34 | 2÷16 | 1 |
| ER32VG-HP | 33 | 40 | 3÷20 | 1 |
| ER40VG-HP | 41 | 46 | 4÷26 | 1 |

Spannzangen mit den gleichen Eigenschaften wie die abgedichteten aber mit Hochpräzision und Rundlauf $< 0,0005$. Arbeitsdruck: max. 40 Bar/600 PSI. Diese Spannzangen spannen nur den Nenndurchmesser.

Collets with the same characteristics od VG type but with an ultra precision < 0.005 runout accuracy. Working pressure: max 40Bar/600 PSI. Those collets clamp only nominal diameter.

Цанги с такими же характеристиками, как у обычных цанг для внутреннего подвода СОЖ, но с меньшим биением $< 0,005$. Рабочее давление: макс. 40 бар/600 фунт сил. Данные цанги существуют только номинального диаметра.

Pinces avec les mêmes caractéristiques des pinces étanches mais ultra-précises avec concentricité $< 0,005$. Pression de service : max 40 Bar/600 PSI. Ces pinces bloquent seulement le diamètre nominal.

Pinze con le medesime caratteristiche delle VG ma di altissima precisione concentricità $< 0,005$ mm. Pressione di esercizio: max 40 Bar/600 PSI. Bloccano solo il diametro nominale.

这些夹头与 VG 类型的夹头的特点相同，但精度超高，径向跳动精度 < 0.005 。
工作压力：最高为 40Bar/600 PSI。这些夹头只能用于夹持常规直径。

ER VG UP SPANNZANGENSÄTZE (Reduzierte Version)
REDUCED SETS OF COLLETS VG-UP TYPE

СОКРАЩЕННЫЕ НАБОРЫ ВЫСОКОТОЧНЫХ ЦАНГ ER ДЛЯ ВНУТРЕННЕЙ ПОДАЧИ СОЖ

JEUX REDUITS DE PINCES ER VG UP
SERIE RIDOTTA DI PINZE VG-UP
VG - UP 型夹头简装版

RUNOUT $\leq 0,005$

| Type | Diameters | No. collets |
|-----------------|----------------------|-------------|
| SERIE-ER16VG-HP | 4-6-8-10 | 4 |
| SERIE-ER20VG-HP | 4-6-8-10-12 | 5 |
| SERIE-ER25VG-HP | 4-6-8-10-12-16 | 6 |
| SERIE-ER32VG-HP | 4-6-8-10-12-16-20 | 7 |
| SERIE-ER40VG-HP | 4-6-8-10-12-16-20-25 | 8 |



ER VG UP SPANNZANGENSÄTZE (Komplette Version)
COMPLETE SETS OF COLLETS VG-UP TYPE

ПОЛНЫЕ НАБОРЫ ВЫСОКОТОЧНЫХ ЦАНГ ER ДЛЯ ВНУТРЕННЕЙ ПОДАЧИ СОЖ

JEUX COMPLETS DE PINCES ER VG UP
SERIE COMPLETA DI PINZE VG-UP
VG - UP 型夹头完整版

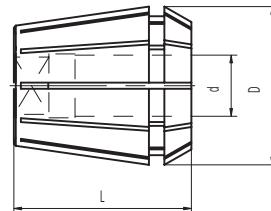
RUNOUT $\leq 0,005$

| Type | Diameters | No. collets |
|------------------|-----------|-------------|
| SERIE-ER16VG-HPC | 3÷10 | 8 |
| SERIE-ER20VG-HPC | 3÷13 | 11 |
| SERIE-ER25VG-HPC | 3÷16 | 14 |
| SERIE-ER32VG-HPC | 3÷20 | 18 |
| SERIE-ER40VG-HPC | 4÷26 | 23 |



ER TYP SPANNZANGEN MIT INNENVIERIANT
 ER TAPPING COLLETS WITH SQUARE
 PINCES DE TARAUDAGE
 PINZE ER CON QUADRO PER MASCHIATURA
 ЦАНГИ ЕР С КВАДРАТОМ
 ER 粗丝锥夹头

DIN 6499/A



| Type | D | L | Clamping capacity |
|----------|----|------|-------------------|
| ER16MD.. | 17 | 27.5 | 3.5÷8 |
| ER20MD.. | 21 | 31.5 | 3.5÷10 |
| ER25MD.. | 26 | 34 | 3.5÷12 |
| ER32MD.. | 33 | 40 | 3.5÷16 |
| ER40MD.. | 41 | 46 | 4.5÷20 |

TECHNISCHE DATEN
 TECHNICAL INFORMATIONS
 ТЕХНИЧЕСКАЯ ИНФОРМАЦИЯ

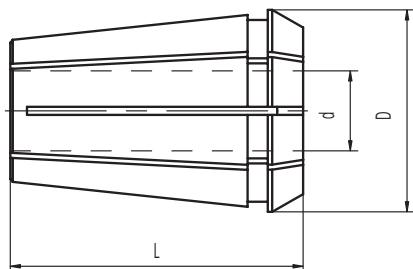
DONNÉES TECHNIQUES
 INFORMAZIONI TECNICHE
 技术信息

| TAPE MASCHIO M | SHANK - GAMBO | |
|-------------------|---------------|-----|
| | Ø D | SQ |
| M3 | 3,5 | 2,7 |
| M3,5 | 4 | 3 |
| M4 | 4,5 | 3,4 |
| M4 | 5 | 4 |
| M5 | 5,5 | 4,3 |
| M5 | 6 | 4,9 |
| M6 | 6 | 4,9 |
| M6 | 6,3 | 5 |
| M8 | 6 | 4,9 |
| M8 | 6,3 | 5 |
| M7 | 7 | 5,5 |
| M10 | 7 | 5,5 |
| M8 | 8 | 6,2 |
| M9 | 9 | 7 |

| TAPE MASCHIO M | SHANK - GAMBO | |
|-------------------|---------------|------|
| | Ø D | SQ |
| M12 | 9 | 7 |
| M10 | 10 | 8 |
| M14 | 11 | 9 |
| M14 | 11,2 | 9 |
| M16 | 12 | 9 |
| M16 | 12,5 | 10 |
| M18 | 14 | 11 |
| M20 | 16 | 12 |
| M24 | 18 | 14,5 |
| M27 | 20 | 16 |
| M30 | 22 | 18 |
| M33 | 25 | 20 |
| M36 | 28 | 22 |
| M39-42 | 32 | 24 |

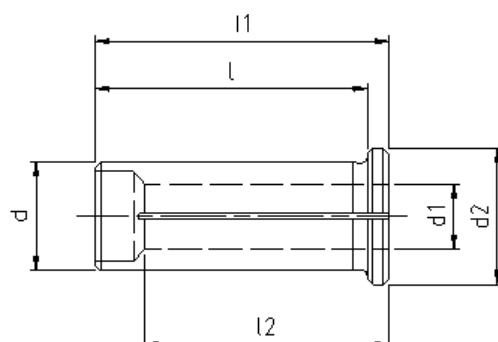
EOC TYP SPANNZANGEN
COLLETS EOC TYPE
PINCES TIPO EOC
ЦАНГИ ЕОС
EOC 夹头

DIN 6388



| Type | D | L | Clamping capacity | DIN | Progressione |
|----------|-------|----|-------------------|------|--------------|
| EOC16D.. | 25,50 | 40 | 2÷16 | 415E | mm 0,5 |
| EOC25D.. | 35,05 | 52 | 2÷25 | 462E | mm 0,5 |
| EOC32D.. | 43,70 | 60 | 3÷32 | 467E | mm 0,5 |

ABGEDICHTETE SPANNZANGEN FÜR HYDRODEHNSPANNFUTTER
COLLETS FOR HYDRAULIC CHUCKS
PINCES POUR MANDRINS HYDRAULIQUES
PINZE PER MANDRINI IDRAULICI
ЦАНГИ ДЛЯ ГИДРАВЛИЧЕСКИХ ПАТРОНОВ
液压卡盘夹头



| Type | D1 | D2 | L1 | L2 | D hole size |
|---------|----|----|----|----|--------------------------|
| GX12D.. | 12 | 16 | 36 | 40 | 3;4;5;6;8 |
| GX20D.. | 20 | 25 | 50 | 54 | 3;4;5;6;8;10;12;14;16 |
| GX32D.. | 32 | 36 | 60 | 64 | 6;8;10;12;14;16;18;20;25 |

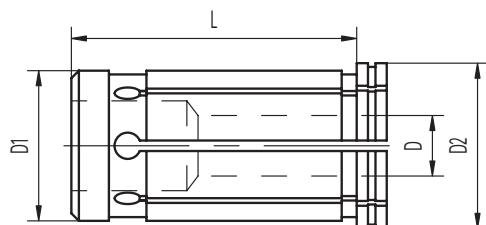
KÜHLMITTEL BIS 80 BAR • COOLANT RESISTANT UP TO 80 BAR

ПОДВОД СОЖ ДО 80 БАР • LUBRIFIANT JUSQU'À 80 BAR.

REFRIGERANTE RESISTENTE FINO A 80 BAR • 耐冷却液值达80杆

SPANNZANGEN FÜR KRAFTSPANNFUTTER
COLLETS FOR MILLING CHUCK
ЦАНГИ ДЛЯ УСИЛЕННЫХ ПАТРОНОВ

PINCES POUR MANDRINS A FORT SERRAGE
PINZE PER MANDRINI A FORTE SERRAGGIO
铣夹头用夹头



| Type | D1 | D2 | L | D hole size |
|--------|----|----|----|--------------------------|
| K20D.. | 20 | 25 | 50 | 3;4;5;6;8;10;12;14;16 |
| K32D.. | 32 | 37 | 60 | 6;8;10;12;14;16;18;20;25 |



KONSTRUKTIONSDATEN:

- für Werkzeuge mit Schaft Toleranz h6;
- sehr hohe Maß- und Formgenauigkeit;
- Max. Rundlauf Fehler zwischen D und D1 - 0,005 mm.



MANUFACTURING SPECIFICATIONS

- For tool shank tolerance h6
- Maximum form and dimensional precision
- Max concentricity error between D and D1: 0,005mm.



СТРОИТЕЛЬСТВО ХАРАКТЕРИСТИКИ

- Для инструментов с допуском h6 на хвостовик
- Максимальная точность форм и размеров
- Максимальное биение диаметра D относительно D1: 0.005мм



CARACTÉRISTIQUES CONSTRUCTIVES:

- pour outils avec queue en tolérance h6;
- très haute précision dimensionnelle et de forme;
- erreur maximale de concentricité entre D et D1 - 0,005 mm.



CARATTERISTICHE COSTRUTTIVE

- Per utensili con gambo in tolleranza h6
- Altissima precisione dimensionale e di forma
- Max errore di concentricità tra D e D1 - 0,005 mm.

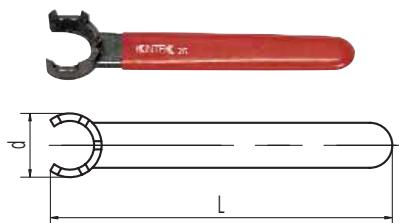


施工特点

- 刀柄公差为H6
- 最大结构和尺寸精度
- 与D1之间最大同心度误差：0.005mm

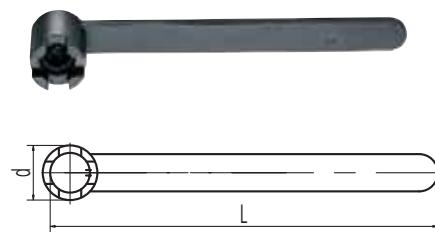
SPANNSCHLÜSSEL FÜR MINI SPANNMUTTER
WRENCHES FOR MINI NUT
КЛЮЧИ ДЛЯ МИНИ-ГАЕК
CLES DE SERRAGE POUR ECROU MINI
CHIAVI PER GHIERA MINI
微型螺母用扳手

| Code N. | ER | d | L |
|------------|-----|------|-----|
| 816-203007 | 8M | 12,4 | 70 |
| 816-203008 | 11M | 16,8 | 90 |
| 816-203009 | 16M | 22,5 | 110 |
| 816-203010 | 20M | 29 | 120 |
| 816-203011 | 25M | 36 | 130 |



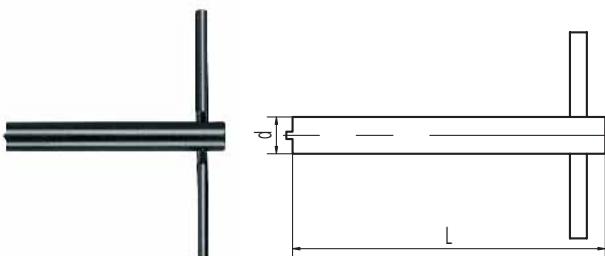
SPANNSCHLÜSSEL FÜR FRÄSERANZUGSSCHRAUBEN
WRENCHES FOR TOOLS RETAINING SCREW
НАКИДНЫЕ КЛЮЧИ ДЛЯ КРЕСТООБРАЗНЫХ ВИНТОВ
CLE A VIS A CROSSE
CHIAVE PER VITE TESTA A CROCE
使螺丝保持就位工具用扳手

| Code N. | Size | d | L |
|------------|--------|----|-----|
| 816-130002 | 16/M08 | 22 | 180 |
| 816-130003 | 22/M10 | 28 | 200 |
| 816-130004 | 27/M12 | 35 | 225 |
| 816-130005 | 32/M16 | 42 | 250 |
| 816-130006 | 40/M20 | 52 | 280 |
| 816-130007 | 50/M24 | 63 | 315 |



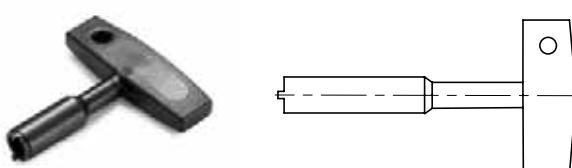
SPANNSCHLÜSSEL FÜR ÜBERWURFMUTTERN
WRENCHES FOR LOCKNUT
ПОВОРОТНЫЕ КЛЮЧИ
CLES POUR COLLIERE D'ETANCHEITE
CHIAVI PER GHIERA DI TENUTA
自锁螺母用扳手

| Code N. | Size | d | L |
|--------------|---------|------|-----|
| 816-20204002 | M10/MK1 | 9,9 | 85 |
| 816-20205002 | M15/MK2 | 14,8 | 110 |
| 816-20206002 | M20/MK3 | 19,2 | 115 |
| 816-20207002 | M24/MK4 | 23 | 140 |
| 816-20208002 | M36/MK5 | 37 | 172 |



SPANNSCHLÜSSEL FÜR KÜHLMITTELÜBERGABESATZ
KEY FOR COOLANT SUPPLY UNIT
КЛЮЧИ ДЛЯ ВИНТОВ, НАПРАВЛЯЮЩИХ СОЖ
CLES POUR LE DISPOSITIF DE TRANSFERT DE LIQUIDE DE LUBRIFICATION
CHIAVI PER ADDUTTORE REFRIGERANTE
冷却剂供应装置键

| HSK | Code N. |
|-----|------------|
| 40 | 816-204022 |
| 63 | 816-204024 |
| 100 | 816-204025 |



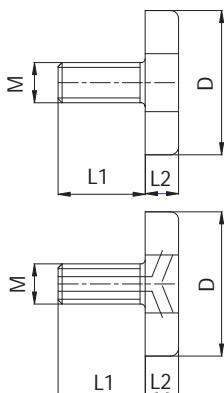
KREUZKOPFSCHRAUBEN FÜR AUFSTECKFRASDORNE
UND KOMBI-AUFSTECKFRASDORNE
CROSS HEAD SCREW FOR FACE MILL HOLDERS
AND COMBI-SHELL MILL ADAPTORS
КРЕСТООБРАЗНЫЕ ВИНТЫ К ОПРАВКАМ ДЛЯ НАСАДНЫХ ФРЕЗ

VIS CRUCIFORMES POUR PORTE-FRAISES
FIxes ET COMBINES
VITI TESTA CROCE PER PORTAFRESE
FISSI E COMBINATI
平面铣夹具和复合式平面铣接头十字头螺丝

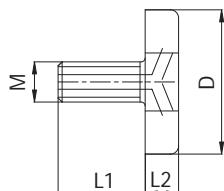
| Code N. | M | D | L1 | L2 | Type |
|------------|-----|----|----|----|------|
| 811-107003 | M8 | 20 | 16 | 6 | A |
| 811-107004 | M10 | 28 | 18 | 7 | A |
| 811-107005 | M12 | 35 | 22 | 8 | A |
| 811-107006 | M16 | 42 | 26 | 9 | A |
| 811-107007 | M20 | 52 | 30 | 10 | A |
| 811-107009 | M24 | 63 | 36 | 12 | A |
| 811-107013 | M8 | 20 | 16 | 6 | B |
| 811-107014 | M10 | 28 | 18 | 7 | B |
| 811-107015 | M12 | 35 | 22 | 8 | B |
| 811-107016 | M16 | 42 | 26 | 9 | B |
| 811-107017 | M20 | 52 | 30 | 10 | B |
| 811-107027 | M24 | 63 | 36 | 12 | B |



Type A



Type B



GEWUCHTETE SPANNMUTTER
BALANCED NUT
СБАЛАНСИРОВАННЫЕ ГАЙКИ

ECROU EQUILIBRE
GHIERA BILANCIATA STANDARD
平衡螺母

DIN 6499

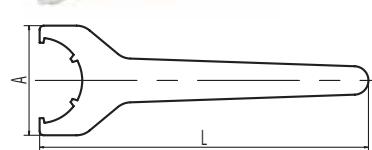
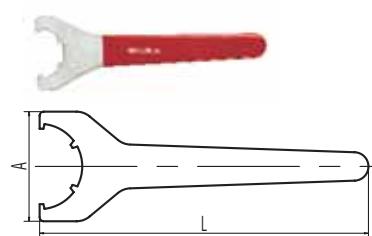
| Code N. | ER | D | L | M |
|------------|----|----|------|---------|
| 812-203005 | 16 | 32 | 18 | M22X1,5 |
| 812-203006 | 20 | 35 | 19 | M25X1,5 |
| 812-203001 | 25 | 42 | 20 | M32X1,5 |
| 812-203002 | 32 | 50 | 22,5 | M40X1,5 |
| 812-203003 | 40 | 63 | 25,5 | M50X1,5 |



SPANNSCHLÜSSEL FÜR STANDARD SPANNMUTTER
WRENCHES FOR STANDARD NUT
КЛЮЧИ ДЛЯ СТАНДАРТНЫХ ГАЕК

CLES DE SERRAGE POUR ECROU STANDARD
CHIAVI PER GHIERA STANDARD
标准螺母用扳手

| Code N. | ER | A | L |
|------------|----|----|-----|
| 816-203000 | 16 | 54 | 165 |
| 816-203005 | 20 | 60 | 180 |
| 816-203001 | 25 | 70 | 200 |
| 816-203002 | 32 | 80 | 250 |
| 816-203003 | 40 | 95 | 280 |



MINI SPANNMUTTER
MINI NUT
МИНИ-ГАЙКИ

ECROU MINI
GHIERA MINI
微型螺母

DIN 6499

| Code N. | ER | D | L | M |
|------------|-----|----|----|----------|
| 812-203011 | 8M | 12 | 11 | M10X0,75 |
| 812-203012 | 11M | 16 | 12 | M13X0,75 |
| 812-203013 | 16M | 22 | 18 | M19X1 |
| 812-203014 | 20M | 28 | 19 | M24X1 |
| 812-203015 | 25M | 35 | 20 | M30X1 |



EOC SPANNMUTTER
EOC NUT
ГАЙКИ EOC

ECROU EOC
GHIERA EOC
EOC 螺母

DIN 6388

| Code N. | EOC | D | L | M |
|---------|-----|----|----|---------|
| GOC16 | 16 | 43 | 24 | M33X1,5 |
| GOC20 | 20 | 50 | 28 | M42X2 |
| GOC25 | 25 | 60 | 30 | M48X2 |
| GOC32 | 32 | 72 | 34 | M60X2,5 |



GEWUCHTETE SPANNMUTTER
BALANCED NUT
СБАЛАНСИРОВАННЫЕ ГАЙКИ

ECROU EQUILIBRÉ
GHIERA BILANCIATA
平衡螺母

DIN 6499

| Code N. | ER | D | L | M |
|------------|----|----|------|---------|
| 812-203069 | 16 | 32 | 18 | M22x1,5 |
| 812-203070 | 25 | 42 | 20 | M32x1,5 |
| 812-203071 | 32 | 50 | 22,5 | M40x1,5 |
| 812-203072 | 40 | 63 | 25,5 | M50x1,5 |



* Für Aufnahmen mit 25.000 U/m G2,5 Wuchtung

* For balanced toolholders, G2,5 25000 RPM

* Для сбалансированных оправок с классом G2,5 при 25000 об/мин

* Pour mandrins équilibrés à 25.000 tours G2,5

* Per mandrini bilanciati in classe G2,5 25000 RPM

* 用于平衡刀柄G2.5 25000 RPM

SPANNSCHLÜSSEL
WRENCHES FOR BALANCED NUTS
КЛЮЧИ ДЛЯ СБАЛАНСИРОВАННЫХ ГАЕК

CLES DE SERRAGE
CHIAVI PER GHIERE BILANCiate
平衡螺母扳手

| Code N. | Type | ER | Dimension |
|------------|-----------|----|-----------|
| 816-203031 | - | 16 | 30/32 |
| 816-203032 | - | 25 | 40/42 |
| 816-203033 | GOC 16/20 | 32 | 45/50 |
| 816-203034 | GOC 25 | 40 | 58/62 |
| 816-203036 | GOC 32 | - | 68/75 |



KEGELWISCHER CONES DE NETTOYAGE
TAPER WIPERS PULITORI PER CONI
ПРОТИРОЧНЫЕ КОНУСЫ 锥形刷



Code N.

| | |
|------------|--------|
| 832-021100 | HSK40 |
| 832-021101 | HSK50 |
| 832-021102 | HSK63 |
| 832-021099 | HSK100 |



Code N.

| | |
|------------|-----|
| 832-021103 | MK1 |
| 832-021104 | MK2 |
| 832-021105 | MK3 |
| 832-021106 | MK4 |
| 832-021107 | MK5 |



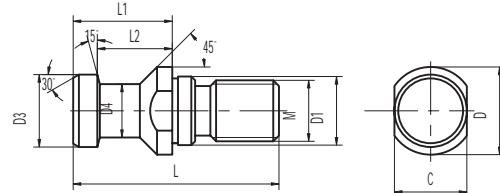
Code N.

| | |
|------------|------|
| 832-021108 | SK30 |
| 832-021109 | SK40 |
| 832-021110 | SK50 |

SPANNBOLZEN DIN 69872
DIN 69872 PULL STUDS
TЯНУЩИЕ ШТАНГИ DIN 69872
TIROTTES DIN 69872
CODOLI DI AGGANCIO DIN 69872
DIN 69872 拉动式双头螺柱

DIN 69872

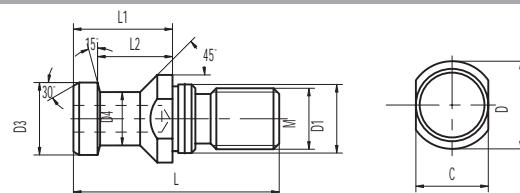
Ohne Bohrung • Not drilled • Non Percée • Non forato • Без отверстия • 未钻孔的



DIN 69872 B

| Code N. | ISO | M | D | D1 | D3 | D4 | L | L1 | L2 | C |
|-----------|-----|-----|----|----|----|----|----|----|----|----|
| 217-21206 | 30 | M12 | 17 | 13 | 13 | 9 | 44 | 24 | 19 | 14 |
| 217-21207 | 40 | M16 | 23 | 17 | 19 | 14 | 54 | 26 | 20 | 19 |
| 217-21208 | 50 | M24 | 36 | 25 | 28 | 21 | 74 | 34 | 25 | 30 |

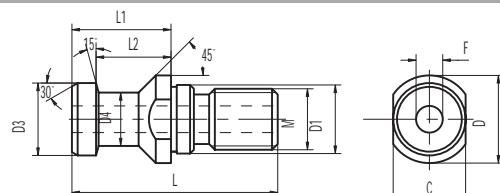
Ohne Bohrung • Not drilled • Non Percée • Non forato • Без отверстия • 未钻孔的
Mit O'Ring • With O'ring • Avec joint torique • Con OR di tenuta • С кольцом • 带O'令



DIN 69872 B

| Code N. | ISO | M | D | D1 | D3 | D4 | L | L1 | L2 | C |
|-----------|-----|-----|----|----|----|----|----|----|----|----|
| 217-21301 | 40 | M16 | 23 | 17 | 19 | 14 | 54 | 26 | 20 | 19 |
| 217-21302 | 50 | M24 | 36 | 25 | 28 | 21 | 74 | 34 | 25 | 30 |

Gebohrt • Drilled • Percée • Forato • С отверстием • 钻孔的



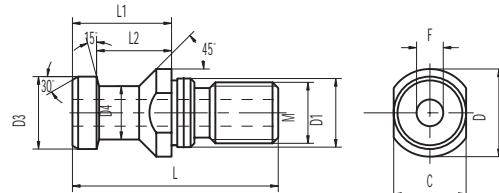
DIN 69872 A

| Code N. | ISO | M | D | D1 | D3 | D4 | L | L1 | L2 | C | f |
|-----------|-----|-----|----|----|----|----|----|----|----|----|------|
| 217-21201 | 40 | M16 | 23 | 17 | 19 | 14 | 54 | 26 | 20 | 19 | 7 |
| 217-21202 | 50 | M24 | 36 | 25 | 28 | 21 | 74 | 34 | 25 | 30 | 11,5 |

SPANNBOLZEN DIN 69872 TIRETTES DIN 69872
 DIN 69872 PULL STUDS CODOLI DI AGGANCIO DIN 69872
 ТЯНУЩИЕ ШТАНГИ DIN 69872 DIN 69872 拉动式双头螺柱

DIN 69872

Gebohrt • Drilled • Percée • Forato • С отверстием • 钻孔的
 Mit O'Ring • With O'ring • Avec joint torique • Con OR di tenuta • С кольцом • 带 O'令



DIN 69872 A

| Code N. | ISO | M | D | D1 | D3 | D4 | L | L1 | L2 | C | f |
|-----------|-----|-----|----|----|----|----|----|----|----|----|------|
| 217-21305 | 40 | M16 | 23 | 17 | 19 | 14 | 54 | 26 | 20 | 19 | 7 |
| 217-21306 | 50 | M24 | 36 | 25 | 28 | 21 | 74 | 34 | 25 | 30 | 11,5 |

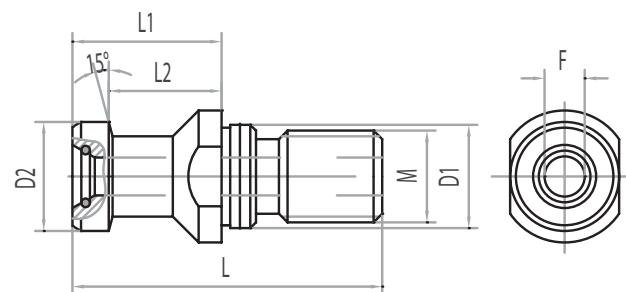
ABGEDICHTETE ANZUGSBOLZEN MIT DOPPELTEM O-RING
 FÜR HOCHKÜHLMITTELDRUCK

SEALED PULL STUDS WITH DOUBLE O-RING
 FOR HIGH PRESSURE COOLANT

ШТРЕВЕЛИ С ДВОЙНЫМ УПЛОТНИТЕЛЬНЫМ КОЛЬЦОМ
 ДЛЯ РАБОТЫ ПОД БОЛЬШИМ ДАВЛЕНИЕМ СЖ

TIRETTES ETANCHES AVEC DOUBLE O-RING
 POUR ARROSAGE A HAUTE PRESSION
 CODOLI CON DOPPIO O-RING PER REFRIGERANTE
 AD ALTA PRE压
 用于高压冷却剂带双O环的密封拉钉

DIN 69872

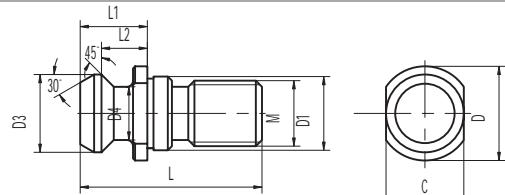


| Code N. | ISO | M | D1 | D2 | L | L1 | L2 | F |
|-----------|-----|-----|----|----|----|----|----|------|
| 217-21307 | 40 | M16 | 17 | 19 | 54 | 26 | 20 | 7 |
| 217-21308 | 40 | M16 | 17 | 19 | 54 | 29 | 23 | 7 |
| 217-21309 | 50 | M24 | 25 | 28 | 74 | 34 | 25 | 11,5 |

SPANNBOLZEN ISO 7388/2-B TIRETTES ISO 7388/2-B
 ISO 7388/2-B PULL STUDS CODOLI DI AGGANCIO ISO 7388/2-B
 ТЯНУЩИЕ ШТАНГИ ISO 7388/2-B ISO 7388/2-B 拉动式双头螺柱

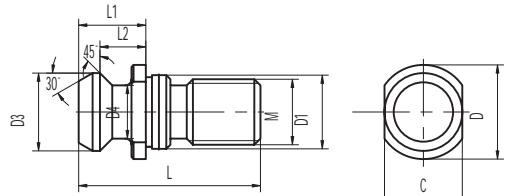
ISO 7388/2-B

Ohne Bohrung • Not drilled • Non Percée • Non forato • Без отверстия • 未钻孔的



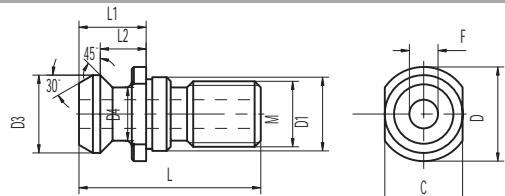
| Code N. | ISO | M | D | D1 | D3 | D4 | L | L1 | L2 | C |
|-----------|-----|-----|------|------|------|------|------|------|------|----|
| 217-21607 | 30 | M12 | 17 | 12,5 | 13,3 | 9,3 | 34 | 11,8 | 8,1 | 14 |
| 217-21608 | 40 | M16 | 22,5 | 17 | 18,9 | 12,9 | 44,5 | 16,4 | 11,2 | 18 |
| 217-21609 | 50 | M24 | 37 | 25 | 29,1 | 19,6 | 65,5 | 25,5 | 17,9 | 30 |

Ohne Bohrung • Not drilled • Non Percée • Non forato • Без отверстия • 未钻孔的
 Mit O'Ring • With O'ring • Avec joint torique • Con OR di tenuta • С кольцом • 带O'令



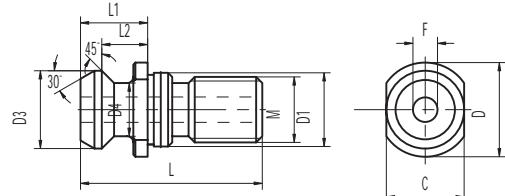
| Code N. | ISO | M | D | D1 | D3 | D4 | L | L1 | L2 | C |
|-----------|-----|-----|------|----|------|------|------|------|------|----|
| 217-21611 | 40 | M16 | 22,5 | 17 | 18,9 | 12,9 | 44,5 | 16,4 | 11,2 | 18 |
| 217-21612 | 50 | M24 | 37 | 25 | 29,1 | 19,6 | 65,5 | 25,5 | 17,9 | 30 |

Gebohrt • Drilled • Percée • Forato • С отверстием • 钻孔的



| Code N. | ISO | M | D | D1 | D3 | D4 | L | L1 | L2 | C | f |
|-----------|-----|-----|------|----|------|------|------|------|------|----|------|
| 217-21601 | 40 | M16 | 22,5 | 17 | 18,9 | 12,9 | 44,5 | 16,4 | 11,2 | 18 | 7,3 |
| 217-21602 | 50 | M24 | 37 | 25 | 29,1 | 19,6 | 65,5 | 25,5 | 17,9 | 30 | 11,5 |

Gebohrt • Drilled • Percée • Forato • С отверстием • 钻孔的
 Mit O'Ring • With O'ring • Avec joint torique • Con OR di tenuta • С кольцом • 带O'令

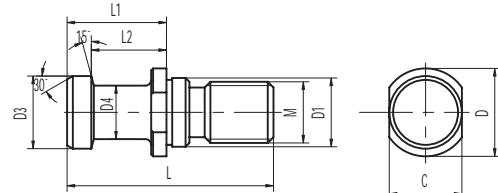


| Code N. | ISO | M | D | D1 | D3 | D4 | L | L1 | L2 | C | f |
|-----------|-----|-----|------|----|------|------|------|------|------|----|------|
| 217-21621 | 40 | M16 | 22,5 | 17 | 18,9 | 12,9 | 44,5 | 16,4 | 11,2 | 18 | 7,3 |
| 217-21622 | 50 | M24 | 37 | 25 | 29,1 | 19,6 | 65,5 | 25,5 | 17,9 | 30 | 11,5 |

SPANNBOLZEN ISO 7388/2-A TIRETTES ISO 7388/2-A
 ISO 7388/2-A PULL STUDS CODOLI DI AGGANCIO ISO 7388/2-A
 ТЯНУЩИЕ ШТАНГИ ISO 7388/2-A ISO 7388/2-A 拉动式双头螺柱

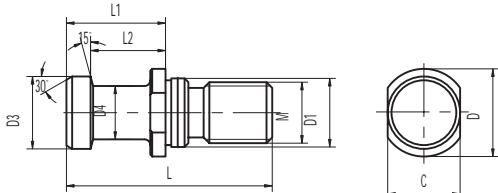
ISO 7388/2-A

Ohne Bohrung • Not drilled • Non Percée • Non forato • Без отверстия • 未钻孔的



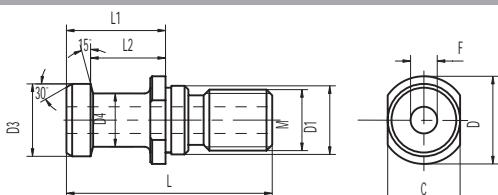
| Code N. | ISO | M | D | D1 | D3 | D4 | L | L1 | L2 | C |
|-----------|-----|-----|----|----|----|----|----|----|----|----|
| 217-21616 | 30 | M12 | 16 | 13 | 12 | 8 | 44 | 24 | 19 | 14 |
| 217-21617 | 40 | M16 | 23 | 17 | 19 | 14 | 54 | 26 | 20 | 19 |
| 217-21618 | 50 | M24 | 36 | 25 | 28 | 21 | 74 | 34 | 25 | 30 |

Ohne Bohrung • Not drilled • Non Percée • Non forato • Без отверстия • 未钻孔的
 Mit O'Ring • With O'ring • Avec joint torique • Con OR di tenuta • С кольцом • 带O'令



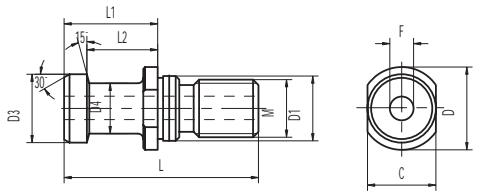
| Code N. | ISO | M | D | D1 | D3 | D4 | L | L1 | L2 | C |
|-----------|-----|-----|----|----|----|----|----|----|----|----|
| 217-21619 | 40 | M16 | 23 | 17 | 19 | 14 | 54 | 26 | 20 | 19 |
| 217-21620 | 50 | M24 | 36 | 25 | 28 | 21 | 74 | 34 | 25 | 30 |

Gebohrt • Drilled • Percée • Forato • С отверстием • 钻孔的



| Code N. | ISO | M | D | D1 | D3 | D4 | L | L1 | L2 | C | f |
|-----------|-----|-----|----|----|----|----|----|----|----|----|----|
| 217-21614 | 40 | M16 | 23 | 17 | 19 | 14 | 54 | 26 | 20 | 19 | 7 |
| 217-21615 | 50 | M24 | 36 | 25 | 28 | 21 | 74 | 34 | 25 | 30 | 11 |

Gebohrt • Drilled • Percée • Forato • С отверстием • 钻孔的
 Mit O'Ring • With O'ring • Avec joint torique • Con OR di tenuta • С кольцом • 带O'令



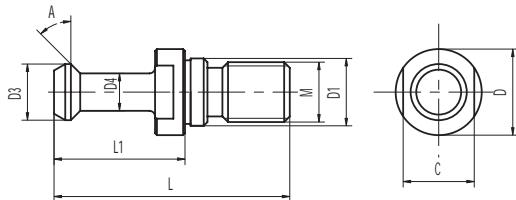
| Code N. | ISO | M | D | D1 | D3 | D4 | L | L1 | L2 | C | f |
|-----------|-----|-----|----|----|----|----|----|----|----|----|------|
| 217-21623 | 40 | M16 | 23 | 17 | 19 | 14 | 54 | 26 | 20 | 19 | 7 |
| 217-21624 | 50 | M24 | 36 | 25 | 28 | 21 | 74 | 34 | 25 | 30 | 11,5 |

SPANNBOLZEN ISO MAS-BT
MAS-BT PULL STUDS
ТЯНУЩИЕ ШТАНГИ MAS-BT

TIRETTES MAS-BT
CODOLI DI AGGANCIO MAS-BT
MAS-BT 拉动式双头螺柱

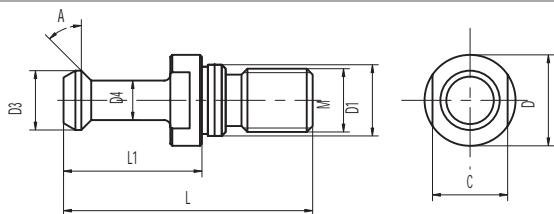
MAS-BT

Ohne Bohrung • Not drilled • Non Percée • Non forato • Без отверстия • 未钻孔的



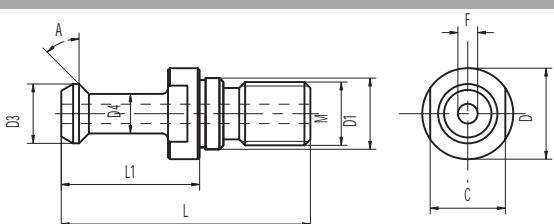
| Code N. | ISO | A | M | L1 | L | D | D1 | D3 | D4 | C |
|-----------|-----|-----|-----|----|----|----|------|----|----|----|
| 217-21508 | 30 | 30° | M12 | 23 | 43 | 16 | 12,5 | 11 | 7 | 13 |
| 217-21507 | 30 | 45° | M12 | 23 | 43 | 16 | 12,5 | 11 | 7 | 13 |
| 217-21502 | 40 | 30° | M16 | 35 | 60 | 23 | 17 | 15 | 10 | 19 |
| 217-21501 | 40 | 45° | M16 | 35 | 60 | 23 | 17 | 15 | 10 | 19 |
| 217-21503 | 40 | 90° | M16 | 35 | 60 | 23 | 17 | 15 | 10 | 19 |
| 217-21505 | 50 | 30° | M24 | 45 | 85 | 38 | 25 | 23 | 17 | 30 |
| 217-21504 | 50 | 45° | M24 | 45 | 85 | 38 | 25 | 23 | 17 | 30 |
| 217-21506 | 50 | 90° | M24 | 45 | 85 | 38 | 25 | 23 | 17 | 30 |

Ohne Bohrung • Not drilled • Non Percée • Non forato • Без отверстия • 未钻孔的
Mit O'Ring • With O'ring • Avec joint torique • Con OR di tenuta • С кольцом • 带O'令



| Code N. | ISO | A | M | L1 | L | D | D1 | D3 | D4 | C |
|-----------|-----|-----|-----|----|----|----|----|----|----|----|
| 217-21401 | 40 | 30° | M16 | 35 | 60 | 23 | 17 | 15 | 10 | 19 |
| 217-21402 | 40 | 45° | M16 | 35 | 60 | 23 | 17 | 15 | 10 | 19 |
| 217-21403 | 40 | 90° | M16 | 35 | 60 | 23 | 17 | 15 | 10 | 19 |
| 217-21404 | 50 | 30° | M24 | 45 | 85 | 38 | 25 | 23 | 17 | 30 |
| 217-21405 | 50 | 45° | M24 | 45 | 85 | 38 | 25 | 23 | 17 | 30 |
| 217-21406 | 50 | 90° | M24 | 45 | 85 | 38 | 25 | 23 | 17 | 30 |

Gebohrt • Drilled • Percée • Forato • С отверстием • 钻孔的



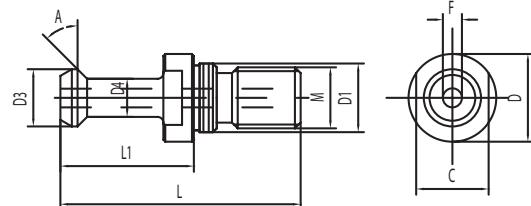
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|-----------|-----|-----|-----|----|----|----|----|----|----|----|---|
| 217-22206 | 40 | 30° | M16 | 35 | 60 | 23 | 17 | 15 | 10 | 19 | 4 |
| 217-22207 | 40 | 45° | M16 | 35 | 60 | 23 | 17 | 15 | 10 | 19 | 4 |
| 217-22208 | 40 | 90° | M16 | 35 | 60 | 23 | 17 | 15 | 10 | 19 | 4 |
| 217-22209 | 50 | 30° | M24 | 45 | 85 | 38 | 25 | 23 | 17 | 30 | 6 |
| 217-22210 | 50 | 45° | M24 | 45 | 85 | 38 | 25 | 23 | 17 | 30 | 6 |
| 217-22211 | 50 | 90° | M24 | 45 | 85 | 38 | 25 | 23 | 17 | 30 | 6 |

SPANNBOLZEN MAS-BT
MAS-BT PULL STUDS
ТЯНУЩИЕ ШТАНГИ MAS-BT

TIRETTES MAS-BT
CODOLI DI AGGANCIO MAS-BT
MAS-BT 拉动式双头螺柱

MAS-BT

Gebohrt • Drilled • Percée • Forato • С отверстием • 钻孔的
Mit O'Ring • With O'ring • Avec joint torique • Con OR di tenuta • С кольцом • 带O'令



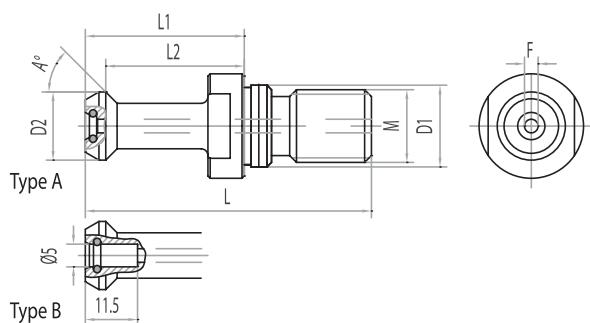
| Code N. | ISO | A | M | L1 | L | D | D1 | D3 | D4 | C | F |
|-----------|-----|-----|-----|----|----|----|----|----|----|----|---|
| 217-22316 | 40 | 30° | M16 | 35 | 60 | 23 | 17 | 15 | 10 | 19 | 4 |
| 217-22317 | 40 | 45° | M16 | 35 | 60 | 23 | 17 | 15 | 10 | 19 | 4 |
| 217-22318 | 40 | 90° | M16 | 35 | 60 | 23 | 17 | 15 | 10 | 19 | 4 |
| 217-22319 | 50 | 30° | M24 | 45 | 85 | 38 | 25 | 23 | 17 | 30 | 6 |
| 217-22320 | 50 | 45° | M24 | 45 | 85 | 38 | 25 | 23 | 17 | 30 | 6 |
| 217-22321 | 50 | 90° | M24 | 45 | 85 | 38 | 25 | 23 | 17 | 30 | 6 |

ABGEDICHTETE ANZUGSBOLZEN MIT DOPPELTEM
O-RING FÜR HOCHKÜHLMITTELDRUCK

SEALED PULL STUDS WITH DOUBLE
O-RING FOR HIGH PRESSURE COOLANT
ШТРЕВЕЛЯ С ДВОЙНЫМ УПЛОТНИТЕЛЬНЫМ КОЛЬЦОМ
ДЛЯ РАБОТЫ ПОД БОЛЬШИМ ДАВЛЕНИЕМ СЖ

TIRETTES ETANCHES AVEC DOUBLE O-RING
POUR ARROSAGE A HAUTE PRESSION

CODOLI CON DOPPIO O-RING
PER REFRIGERANTE AD ALTA PRESSIONE
用于高压冷却剂带双O环的密封拉钉



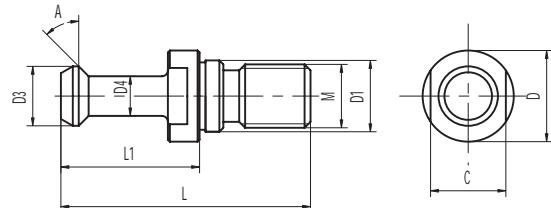
| Code N. | ISO | A | M | L1 | L2 | L | D1 | D2 | F | Type |
|-----------|-----|-----|-----|----|----|----|----|----|---|------|
| 217-21410 | 40 | 45° | M16 | 35 | 28 | 60 | 17 | 15 | 3 | A |
| 217-21411 | 40 | 45° | M16 | 35 | 28 | 60 | 17 | 15 | 3 | B |
| 217-21412 | 50 | 45° | M24 | 45 | 35 | 85 | 25 | 23 | 6 | A |
| 217-21413 | 50 | 60° | M24 | 45 | 35 | 85 | 25 | 23 | 6 | A |
| 217-21414 | 50 | 90° | M24 | 45 | 35 | 85 | 25 | 23 | 6 | A |

SPANNBOLZEN MAS-BT->DIN 69871
 MAS-BT->DIN 69871 PULL STUDS
 ТЯНУЩИЕ ШТАНГИ MAS-BT -> DIN 69871

TIRETTES MAS-BT->DIN 69871
 CODOLI DI AGGANCIO MAS-BT->DIN 69871
 MAS-BT->DIN 69871 拉动式双头螺柱

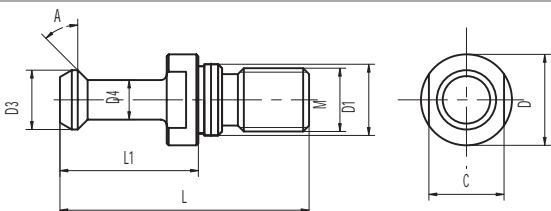
MAS-BT->DIN 69871

Ohne Bohrung • Not drilled • Non Percée • Non forato • Без отверстия • 未钻孔的



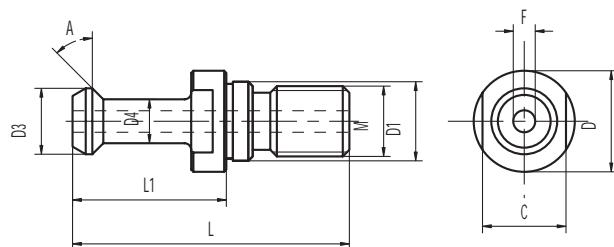
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|-----------|-----|-----|-----|----|----|----|----|----|----|----|
| 217-22060 | 40 | 30° | M16 | 32 | 57 | 23 | 17 | 15 | 10 | 19 |
| 217-22090 | 40 | 45° | M16 | 32 | 57 | 23 | 17 | 15 | 10 | 19 |
| 217-22027 | 40 | 90° | M16 | 32 | 57 | 23 | 17 | 15 | 10 | 19 |

Ohne Bohrung • Not drilled • Non Percée • Non forato • Без отверстия • 未钻孔的
 Mit O'Ring • With O'ring • Avec joint torique • Con OR di tenuta • С кольцом • 带O'环



| Code N. | ISO | A | M | L1 | L | D | D1 | D3 | D4 | C |
|-----------|-----|-----|-----|----|----|----|----|----|----|----|
| 217-21407 | 40 | 30° | M16 | 32 | 57 | 23 | 17 | 15 | 10 | 19 |
| 217-21408 | 40 | 45° | M16 | 32 | 57 | 23 | 17 | 15 | 10 | 19 |
| 217-21409 | 40 | 90° | M16 | 32 | 57 | 23 | 17 | 15 | 10 | 19 |

Gebohrt • Drilled • Percée • Forato • С отверстием • 钻孔的



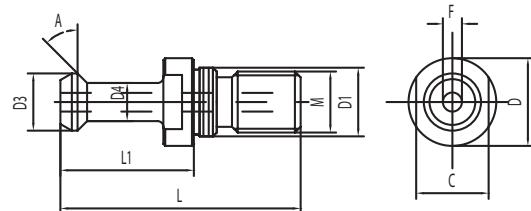
| Code N. | ISO | A | M | L1 | L | D | D1 | D3 | D4 | C | F |
|-----------|-----|-----|-----|----|----|----|----|----|----|----|---|
| 217-22212 | 40 | 30° | M16 | 32 | 57 | 23 | 17 | 15 | 10 | 19 | 4 |
| 217-22213 | 40 | 45° | M16 | 32 | 57 | 23 | 17 | 15 | 10 | 19 | 4 |
| 217-22214 | 40 | 90° | M16 | 32 | 57 | 23 | 17 | 15 | 10 | 19 | 4 |

SPANNBOLZEN MAS-BT->DIN 69871
 MAS-BT->DIN 69871 PULL STUDS
 ТЯНУЩИЕ ШТАНГИ MAS-BT -> DIN 69871

TIRETTES MAS-BT->DIN 69871
 CODOLI DI AGGANCIO MAS-BT->DIN 69871
 MAS-BT->DIN 69871 拉动式双头螺柱

MAS-BT->DIN 69871

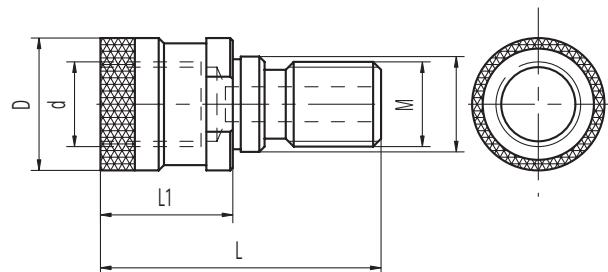
Gebohrt • Drilled • Percée • Forato • С отверстием • 钻孔的
 Mit O'Ring • With O'ring • Avec joint torique • Con OR di tenuta • С кольцом • 带O'令



| Code N. | ISO | A | M | L1 | L | D | D1 | D3 | D4 | C | F |
|-----------|-----|-----|-----|----|----|----|----|----|----|----|---|
| 217-22322 | 40 | 30° | M16 | 32 | 57 | 23 | 17 | 15 | 10 | 19 | 4 |
| 217-22323 | 40 | 45° | M16 | 32 | 57 | 23 | 17 | 15 | 10 | 19 | 4 |
| 217-22324 | 40 | 90° | M16 | 32 | 57 | 23 | 17 | 15 | 10 | 19 | 4 |

SPANNBOLZEN MIT RINGNUT NACH DIN 2080
 ADAPTOR PULL STUDS ACCORDING TO DIN 2080
 ПЕРЕХОДНИКИ К ТЯНУЩИМ ШТАНГАМ ПО DIN 2080

ADAPTATION SUIVANT DIN 2080
 CODOLO ADATTATORE DIN 2080
 符合 DIN 2080 标准的拉动式双头螺柱接头



| Code N. | ISO | M | d | D | D1 | L | L1 |
|-----------|------|-----|-----|------|----|----|----|
| 217-22025 | TC40 | M16 | M16 | 25,3 | 17 | 53 | 25 |
| 217-22040 | BT40 | M16 | M16 | 25,3 | 17 | 56 | 28 |
| 217-22024 | 50 | M24 | M24 | 39,6 | 25 | 65 | 25 |

SPANNBOLZEN JIS. B6339

JIS. B6339 PULL STUD

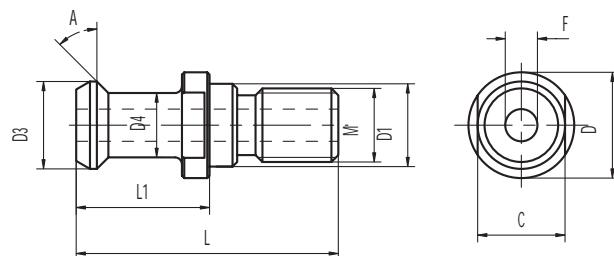
ТЯНУЩИЕ ШТАНГИ ПО JIS. B6339

TIRETTE JIS. B6339

CODOLO DI AGGANCIO JIS. B6339

JIS. B6339*双头螺柱

JIS. B6339



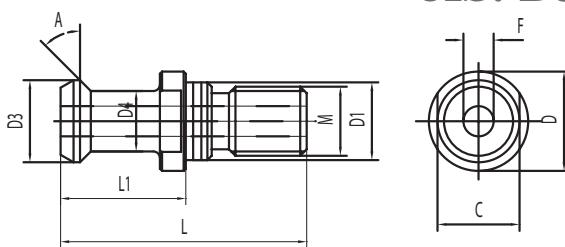
| Code N. | ISO | A | M | D | D1 | D3 | D4 | L | L1 | C | F |
|-----------|-----|-----|-----|------|------|----|----|----|------|----|---|
| 217-22325 | 30 | 15° | M12 | 16,5 | 12,5 | 12 | 8 | 43 | 23,4 | 14 | 4 |
| 217-22134 | 40 | 15° | M16 | 23 | 17 | 19 | 14 | 54 | 29 | 19 | 7 |

Gebohrt • Drilled • Percée • Forato • С отверстием • 钻孔的

Gebohrt • Drilled • Percée • Forato • С отверстием • 钻孔的

Mit O'Ring • With O'ring • Avec joint torique • Con OR di tenuta • С кольцом • 带O'令

JIS. B6339

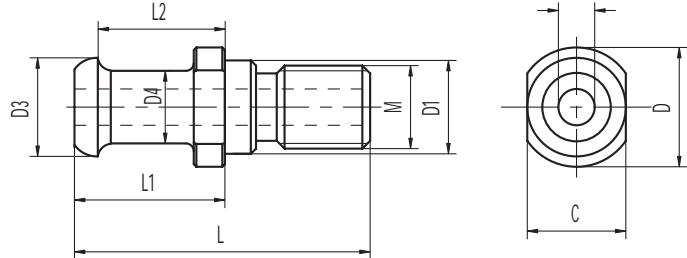


| Code N. | ISO | A | M | D | D1 | D3 | D4 | L | L1 | C | F |
|-----------|-----|-----|-----|----|----|----|----|----|----|----|----|
| 217-22326 | 40 | 15° | M16 | 23 | 17 | 19 | 14 | 54 | 29 | 19 | 4 |
| 217-22327 | 40 | 15° | M16 | 23 | 17 | 19 | 14 | 54 | 29 | 19 | 7 |
| 217-22328 | 50 | 15° | M24 | 38 | 25 | 28 | 21 | 74 | 34 | 30 | 10 |

SPANNBOLZEN CB FERRARI
CB FERRARI PULL STUD
TЯНУЩИЕ ШТАНГИ ДЛЯ СТАНКОВ CB FERRARI

TIRETTE CB FERRARI
CODOLO DI AGGANCIO CB FERRARI
CB 法拉利拉动式双头螺柱

CB FERRARI

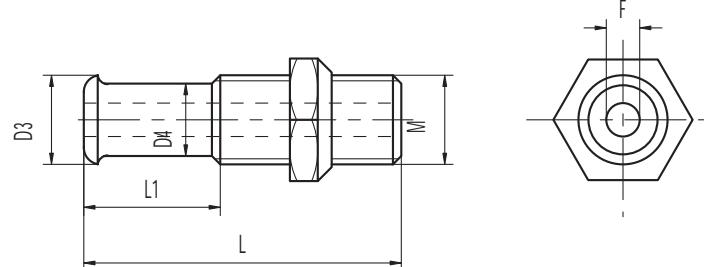


| Code N. | ISO | M | D | D1 | D3 | D4 | L | L1 | L2 | C | F |
|-----------|-----|-----|----|----|----|----|----|----|-------|----|---|
| 217-22017 | 40 | M16 | 23 | 17 | 19 | 15 | 54 | 26 | 20,31 | 19 | 5 |

SPANNBOLZEN CB FERRARI WITH NUT PULL STUD
JIS. B6339 PULL STUD
TЯНУЩИЕ ШТАНГИ ДЛЯ СТАНКОВ CB FERRARI

TIRETTE CB FERRARI AVEC ECROU
CODOLO DI AGGANCIO CB FERRARI
JIS. B6339 拉动式双头螺柱

CB FERRARI

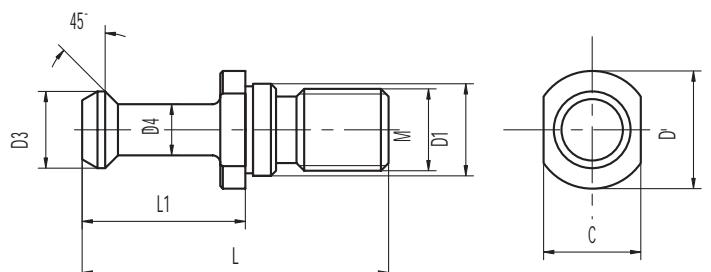


| Code N. | ISO | M | D3 | D4 | L | L1 | F |
|-----------|-----|-----|----|----|----|----|---|
| 217-22046 | 40 | M16 | 16 | 12 | 57 | 23 | 5 |

SPANNBOLZEN CHIRON
CHIRON PULL STUD
ТЯНУЩИЕ ШТАНГИ ДЛЯ СТАНКОВ CHIRON

TIRETTE CHIRON
CODOLO DI AGGANCIO CHIRON
凯龙拉动式双头螺柱

CHIRON



| Code N. | ISO | M | D | D1 | D3 | D4 | L | L1 | C |
|-----------|-----|-----|----|----|----|----|----|----|----|
| 217-22048 | 30 | M12 | 16 | 13 | 10 | 6 | 36 | 20 | 14 |

SPANNBOLZEN CORREA

CORREA PULL STUD

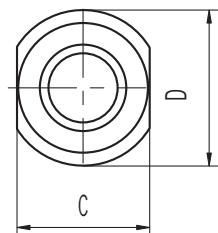
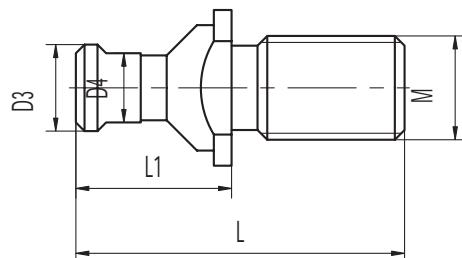
ТЯНУЩИЕ ШТАНГИ ДЛЯ СТАНКОВ CORREA

TIRETTE CORREA

CODOLO DI AGGANCIO CORREA

科里亚拉动式双头螺柱

CORREA



Code N.

ISO

M

D

D3

D4

L

L1

C

217-22135

50

M24

36

20

16

76

36

30

SPANNBOLZEN CORTINI

CORTINI PULL STUD

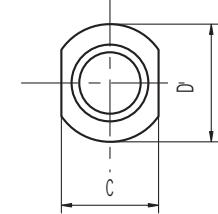
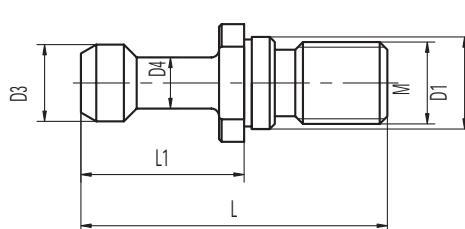
ТЯНУЩИЕ ШТАНГИ ДЛЯ СТАНКОВ CORTINI

TIRETTE CORTINI

CODOLO DI AGGANCIO CORTINI

CORTINI 拉动式双头螺柱

CORTINI



Code N.

ISO

M

D

D1

D3

D4

L

C

217-22254

30

M12

16

13

10

7

39

21

SPANNBOLZEN TYP FAMUP

FAMUP TYPE PULL STUDS

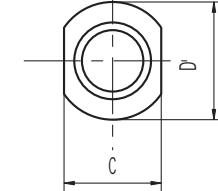
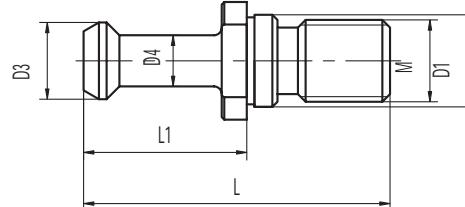
ТЯНУЩИЕ ШТАНГИ ДЛЯ СТАНКОВ FAMUP

TIRETTES TYPE FAMUP

CODOLO DI AGGANCIO TIPO FAMUP

FAMUP 类型拉动式双头螺柱

FAMUP



Code N.

ISO

M

D

D1

D3

D4

L

C

217-22137

30

M12

16

13

9,8

5,8

40

20

217-22051

40

M16

23

17

13,8

9,8

55

27

217-22052

40

M16

23

17

13,8

9,8

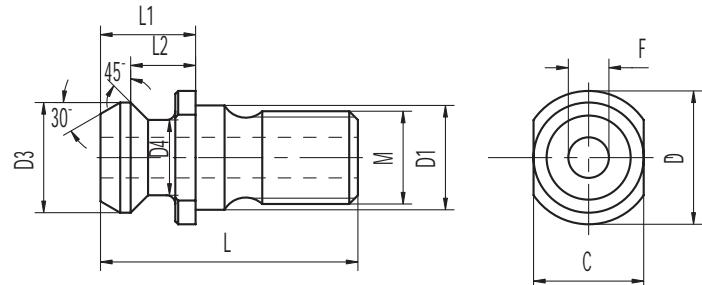
58

30

SPANNBOLZEN TYP MAZAK
MAZAK TYPE PULL STUDS
ТЯНУЩИЕ ШТАНГИ ДЛЯ СТАНКОВ MAZAK

TIRETTES TYPE MAZAK
CODOLI DI AGGANCIO TIPO MAZAK
MAZAK 型拉动式双头螺柱

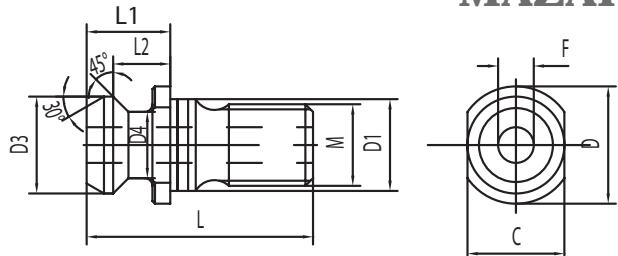
MAZAK



| Code N. | ISO | M | D | D1 | D3 | D4 | L | L1 | L2 | C | F |
|-----------|-----|-----|------|----|-------|-------|-------|-------|-------|----|----|
| 217-22003 | 40 | M16 | 21,8 | 17 | 18,79 | 12,44 | 41,25 | 16,25 | 11,17 | 19 | 7 |
| 217-22047 | 40 | M16 | 22 | 17 | 18,79 | 12,44 | 44,10 | 19,1 | 14,02 | 19 | 7 |
| 217-22187 | 50 | M24 | 35,5 | 25 | 28,95 | 20,8 | 65,4 | 25,4 | 17,78 | 30 | 10 |

Gebohrt • Drilled • Percée • Forato • С отверстием • 钻孔的
Mit O'Ring • With O'ring • Avec joint torique • Con OR di tenuta • С кольцом • 带O'令

MAZAK

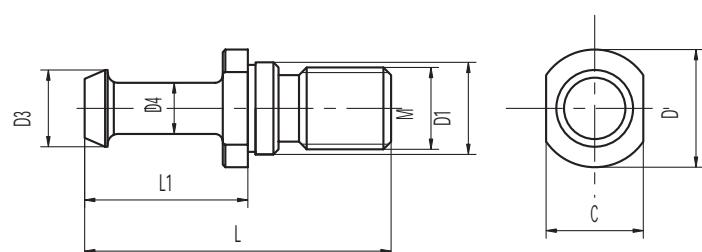


| Code N. | ISO | M | D | D1 | D3 | D4 | L | L1 | L2 | C | F |
|-----------|-----|-----|------|----|-------|-------|-------|-------|-------|----|----|
| 217-22313 | 40 | M16 | 21,8 | 17 | 18,79 | 12,44 | 41,25 | 16,25 | 11,17 | 19 | 7 |
| 217-22314 | 40 | M16 | 22 | 17 | 18,79 | 12,44 | 44,10 | 19,1 | 14,02 | 19 | 7 |
| 217-22315 | 50 | M24 | 35,5 | 25 | 28,95 | 20,8 | 65,4 | 25,4 | 17,78 | 30 | 10 |

SPANNBOLZEN OLIVETTI OCN
OLIVETTI OCN PULL STUD
ТЯНУЩИЕ ШТАНГИ ДЛЯ СТАНКОВ OLIVETTI OCN

TIRETTE OLIVETTI OCN
CODODO DI AGGANCIO OLIVETTI OCN
OLIVETTI OCN 拉动式双头螺柱

OLIVETTI OCN

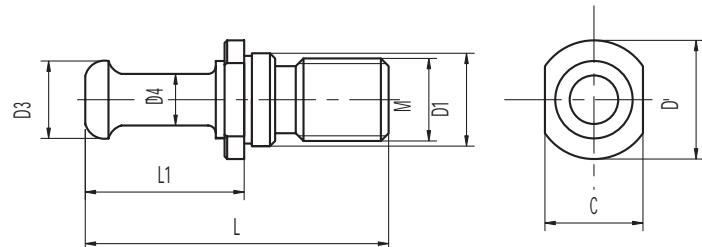


| Code N. | ISO | M | D | D1 | D3 | D4 | L | L1 | C |
|-----------|-----|-----|----|----|------|----|----|----|----|
| 217-22136 | 40 | M16 | 23 | 17 | 14,3 | 10 | 58 | 33 | 19 |

SPANNBOLZEN TYP RAMBAUDI
 RAMBAUDI TYPE PULL STUDS
 ТЯНУЩИЕ ШТАНГИ ДЛЯ СТАНКОВ RAMBAUDI

TIRETTES TYPE RAMBAUDI
 CODOLO DI AGGANCIO TIPO RAMBAUDI
 RAMBAUDI 型拉动式双头螺柱

RAMBAUDI

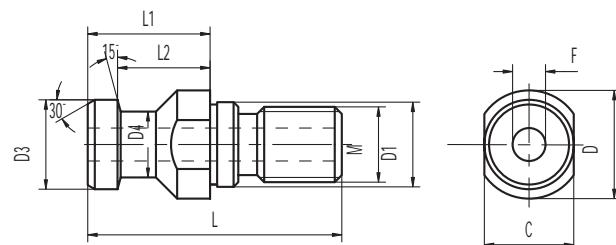


| Code N. | ISO | M | D | D1 | D3 | D4 | L | L1 | C |
|-----------|-----|-----|------|----|------|----|------|------|----|
| 217-22049 | 40 | M16 | 24 | 17 | 14,6 | 10 | 52 | 27 | 19 |
| 217-22050 | 50 | M24 | 35,8 | 25 | 20 | 16 | 79,5 | 39,5 | 30 |

SPANNBOLZEN BRIDGEPORT
 BRIDGEPORT PULL STUD
 ТЯНУЩИЕ ШТАНГИ ДЛЯ СТАНКОВ БРИДЖПОРТ

TIRETTE BRIDGEPORT
 CODOLO DI AGGANCIO BRIDGEPORT
 BRIDGEPORT 拉动式双头螺柱

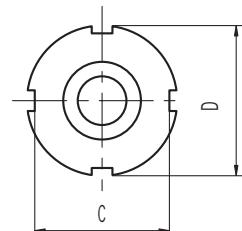
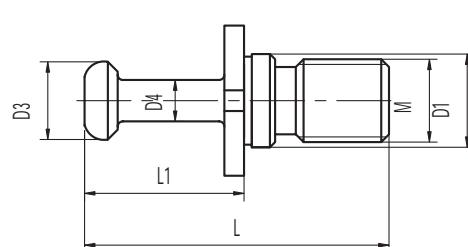
BRIDGEPORT



| Code N. | ISO | M | D | D1 | D3 | D4 | L | L1 | L2 | C | F |
|-----------|-----|-----|----|----|----|----|----|----|----|----|---|
| 217-22253 | 40 | M16 | 23 | 17 | 19 | 14 | 54 | 29 | 23 | 19 | 7 |

SPANNBOLZEN SECMU
SECMU PULL STUD
ТЯНУЩИЕ ШТАНГИ ДЛЯ СТАНКОВ SECMU
SEC MU 拉动式双头螺柱

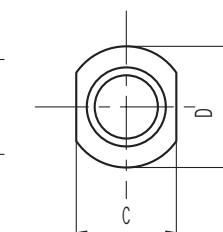
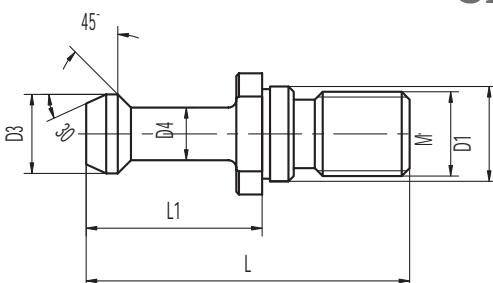
SEC MU



| Code N. | ISO | M | D | D1 | D3 | D4 | L | L1 | C |
|-----------|-----|-----|----|----|------|-----|----|----|----|
| 217-22138 | 50 | M24 | 40 | 25 | 17,5 | 9,8 | 64 | 29 | 36 |

SPANNBOLZEN CINCINNATI
CINCINNATI PULL STUD
ТЯНУЩИЕ ШТАНГИ ДЛЯ СТАНКОВ CINCINNATI
辛辛那提拉动式双头螺柱

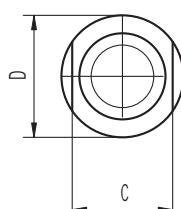
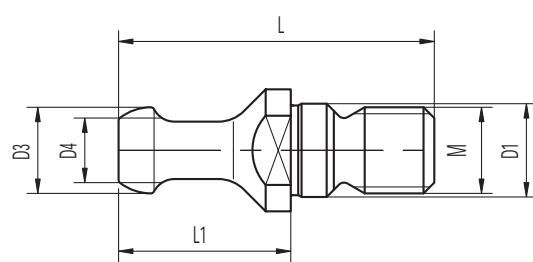
CINCINNATI



| Code N. | ISO | M | D | D1 | D3 | D4 | L | L1 | C | F |
|-----------|-----|-----|------|----|----|------|------|------|----|-----|
| 217-22010 | 40 | M16 | 22,2 | 17 | 15 | 10,3 | 67,3 | 39,4 | 19 | 3,8 |
| 217-22030 | 40 | M16 | 22,2 | 17 | 15 | 10,3 | 67,3 | 36,6 | 18 | 3,8 |

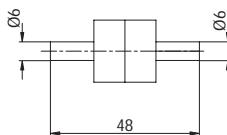
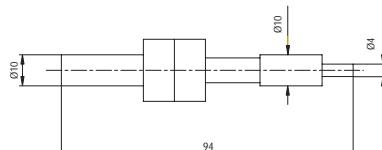
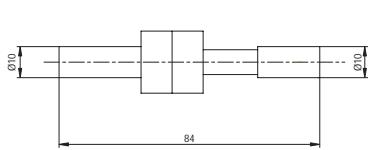
SPANNBOLZEN BIESSE
BIESSE PULL STUD
ТЯНУЩИЕ ШТАНГИ ДЛЯ СТАНКОВ BIESSE
BIESSE 拉动式双头螺柱

BIESSE



| Code N. | ISO | M | D | D1 | D3 | D4 | L | L1 | C |
|-----------|-----|-----|----|----|----|----|----|----|----|
| 217-22158 | 30 | M12 | 17 | 13 | 12 | 8 | 44 | 24 | 14 |

KANTENTASTER MECHANISCHE
EDGE FINDER MECHANICAL
PINULE DE CENTRAGE MECANIQUE
TASTATORE MECCANICO
ЦЕНТРОИСКАТЕЛИ 偏心式巡边器



| Code N. | | L | D |
|------------|---------|----|----|
| 832-021113 | 10 x 10 | 84 | 10 |
| 832-021114 | 10 x 4 | 94 | 4 |

MONTAGEBLOCK
ASSEMBLY SUPPORTS
СТОЙКА ДЛЯ СБОРКИ ИНСТРУМЕНТА

SUPPORTS D'ASSEMBLAGE
SUPPORTO DI MONTAGGIO
支撑组件

| Code N. | ISO | Attack |
|-----------|-----|------------|
| 237-32110 | 30 | DIN 2080 |
| 237-32310 | 40 | DIN 2080 |
| 237-32510 | 50 | DIN 2080 |
| 237-32120 | 30 | DIN 69871 |
| 237-32320 | 40 | DIN 69871 |
| 237-32520 | 50 | DIN 69871 |
| 237-32130 | 30 | MAS 403/BT |
| 237-32330 | 40 | MAS 403/BT |
| 237-32530 | 50 | MAS 403/BT |



Dieses unkompliziertes System erlaubt die schnelle und sichere Montage und Demontage von Steilkegelaufnahmen in horizontaler und vertikaler Lage. Das Risiko der Werkzeugbeschädigung ist ausgeschlossen. Dieses einfache und sichere System eignet sich für alle Steilkegelaufnahmen.

It is very useful for all assembly and disassembly operations of the tools on the toolholders, either in horizontal or in vertical position. This process is carried out without any risk to damage casually the tool or the toolholder.

It is a very simple system suitable for monolithic toolholders.

Приспособление очень удобно для операций сборки и демонтажа инструмента, как в вертикальном, так и в горизонтальном положении. Оно позволяет избежать повреждения оправок или режущего инструмента. Это простое приспособление подходит для монолитных оправок.

Il permet d'effectuer toutes les opérations de montage / assemblage / démontage des outils sur les mandrins. Ces proces se déroulent avec rationalité, sûreté, vitesse et sans aucun risque d'endommagement accidentel du mandrin ou de l'outil. C'est un système qui offre la plus haute simplicité d'usage et il est bien indiqué pour les mandrin monolithiques.

Consente di effettuare tutte le operazioni di montaggio e smontaggio degli utensili sui mandrini, sia in orizzontale che in verticale. Questi procedimenti avvengono con razionalità, sicurezza, rapidità e senza alcun rischio di danneggiare il mandrino o l'utensile.

È il sistema che offre la massima semplicità d'uso per i mandrini monolitici.

它对于所有将工具以垂直或水平方向安装在刀柄上和从刀柄上拆除，均非常有用。这一过程的执行不会对工具或刀柄产生任何破坏的风险。

这一非常简单的系统适用于整体式刀柄。

MONTAGEBLOCK
ASSEMBLY SUPPORT ECONOMIC VERSION
УСТРОЙСТВО ДЛЯ СБОРКИ ИНСТРУМЕНТА. ЭКОНОМИЧНАЯ ВЕРСИЯ.
SUPPORT D'ASSEMBLAGE
SUPPORTO DI MONTAGGIO VERSIONE ECONOMICA
经济型支撑组件



Economic Version

| Code N. | ISO | Attack |
|-----------|-----|---|
| 268-30001 | 40 | DIN 2080/DIN 69871 MAS 403BT / ANSI B5.50 CAT / HSK63A-C-D-E |
| 268-30002 | 50 | DIN 2080/DIN 69871 MAS 403BT / ANSI B5.50 CAT / HSK 100A-C-D-E |

SK-SPANNFUTTERSATZ
TOOL HOLDERS KIT
НАБОРЫ ИНСТРУМЕНТАЛЬНЫХ ОПРАВОК

JEUX PORTE-PINCES
KIT MANDRINI
刀柄组套



ISO 40

| CODE DIN 69871 | CODE MAS 403/BT | CODE DIN 2080 | DESCRIZIONE DESCRIPTION |
|-------------------|--------------------|-------------------|--|
| KIT MAN TC 40 | KIT MAN BT 40 | KIT MAN ISO 40 | N°2 portapinze ER25 N°5 portapinze ER32 N°1 portafrese fisso D16 N°1 portafrese fisso D22 N°1 portafrese fisso D27 N°1 portafrese weldon Ø16 N°1 portafrese weldon Ø20 N°1 portafrese weldon Ø25 N°1 portapunte/frese CM2 N°1 portapunte/frese CM3 N°1 maschiatore M3-M12 N°5 bussole portamaschi (Ø4.5-6-8-9-10) N°10 pinze ER25 (Ø2 3 4 5 6 10 12 14 16) N°10 pinze ER32 (Ø3 4 6 8 10 12 14 16 18 20) N°1 chiave per ER25 N°1 chiave per ER32 |
| | | | N°2 collet chucks ER25 N°5 collet chucks ER32 N°1 milling arbor D16 N°1 milling arbor D22 N°1 milling arbor D27 N°1 side lock holder Ø16 N°1 side lock holder Ø20 N°1 side lock holder Ø25 N°1 adaptor mills/drills MT2 N°1 adaptor mills/drills MT3 N°1 tap holder M3-M12 N°5 tap adaptors (Ø4.5-6-8-9-10) N°10 collets ER25 (Ø2 3 4 5 6 10 12 14 16) N°10 collets ER32 (Ø3 4 6 8 10 12 14 16 18 20) N°1 wrench ER25 N°1 wrench ER32 |



ISO 50

| CODE DIN 69871 | CODE MAS 403/BT | CODE DIN 2080 | DESCRIZIONE DESCRIPTION |
|-------------------|--------------------|-------------------|---|
| KIT MAN TC 50 | KIT MAN BT 50 | KIT MAN ISO 50 | N°1 portapinze ER25 N°1 portapinze ER25 prolungato N°3 portapinze ER32 N°1 portapinze ER32 prolungato N°1 portafrese fisso D22 N°1 portafrese fisso D27 N°1 portafrese fisso D32 N°1 portafrese weldon Ø16 N°1 portafrese weldon Ø20 N°1 portafrese weldon Ø25 N°1 portafrese weldon Ø32 N°1 portapunte/frese CM2 N°1 portapunte/frese CM3 N°1 maschiatore M6-M20 N°5 bussole portamaschi (Ø6 8 10 12 16) N°10 pinze ER25 (Ø2 3 4 5 6 8 10 12 14 16) N°10 pinze ER32 (Ø3 4 6 8 10 12 14 16 18 20) N°1 chiave per ER25 N°1 chiave per ER32 |
| | | | N°1 collet chuck ER25 N°1 collet chuck ER25 extended N°3 collet chucks ER32 N°1 collet chuck ER32 extended N°1 milling arbor D22 N°1 milling arbor D27 N°1 milling arbor D32 N°1 side lock holder Ø16 N°1 side lock holder Ø20 N°1 side lock holder Ø25 N°1 side lock holder Ø32 N°1 adaptor mills/drills MT2 N°1 adaptor mills/drills MT3 N°1 tap holder M6-M20 N°5 tap adaptors (Ø6 8 10 12 16) N°10 collets ER25 (Ø2 3 4 5 6 8 10 12 14 16) N°10 collets ER32 (Ø3 4 6 8 10 12 14 16 18 20) N°1 wrench ER25 N°1 wrench ER32 |

SPANNFUTTERSATZ
COLLET CHUCK KITS
НАБОРЫ ОПРАВОК С ЦАНГАМИ

JEUX PORTE-PINCES
KIT PORTAPINZE
夹头变径套组套

DIN 6499

Ausstattungskasten : 1 Spannzangenfutter + 10 Spannzangen + Spannschlüssel

Kit Box: 1 Collet chuck + 10 Collets + Wrench

Набор из цангового патрона и цанг

Boite d'équipement: 1 Porte-pince + 10 pinces + Clé de serrage

Cassetta corredo : 1 Portapinze + 10 pinze + chiave



| | CODE DIN 2080 | CODE DIN 69871 | CODE MAS 403 BT | DESCRIZIONE - DESCRIPTION |
|--------|------------------|-------------------|--------------------|---|
| ISO 30 | KIT ISO30ER25 | KIT TC30ER25 | KIT BT30ER25 | N°1 portapinze + 10 pinze ER25 + chiave N°1 collet chuck + 10 collets ER25 + wrench (ER25 Ø 2-3-4-5-6-8-10-12-14-16) |
| | KIT ISO30ER32 | KIT TC30ER32 | KIT BT30ER32 | N°1 portapinze + 10 pinze ER32 + chiave N°1 collet chuck + 10 collets ER32 + wrench (ER32 Ø 3-4-6-8-10-12-14-16-18-20) |
| | KIT ISO40ER25 | KIT TC40ER25 | KIT BT40ER25 | N°1 portapinze + 10 pinze ER25 + chiave N°1 collet chuck + 10 collets ER25 + wrench (ER25 Ø 2-3-4-5-6-8-10-12-14-16) |
| | KIT ISO40ER32 | KIT TC40ER32 | KIT BT40ER32 | N°1 portapinze + 10 pinze ER32 + chiave N°1 collet chuck + 10 collets ER32 + wrench (ER32 Ø 3-4-6-8-10-12-14-16-18-20) |
| | KIT ISO40ER40 | KIT TC40ER40 | KIT BT40ER40 | N°1 portapinze + 10 pinze ER40 + chiave N°1 collet chuck + 10 collets ER40 + wrench (ER40 Ø 5-6-8-10-12-16-20-22-24-26) |
| | KIT ISO50ER25 | KIT TC50ER25 | KIT BT50ER25 | N°1 portapinze + 10 pinze ER25 + chiave N°1 collet chuck + 10 collets ER25 + wrench (ER25 Ø 2-3-4-5-6-8-10-12-14-16) |
| ISO 40 | KIT ISO50ER32 | KIT TC50ER32 | KIT BT50ER32 | N°1 portapinze + 10 pinze ER32 + chiave N°1 collet chuck + 10 collets ER32 + wrench (ER32 Ø 3-4-6-8-10-12-14-16-18-20) |
| | KIT ISO50ER40 | KIT TC50ER40 | KIT BT50ER40 | N°1 portapinze + 10 pinze ER40 + chiave N°1 collet chuck + 10 collets ER40 + wrench (ER40 Ø 5-6-8-10-12-16-20-22-24-26) |
| ISO 50 | | | | |
| | | | | |

ZYLINDRISCHE SPANNFUTTER-SATZ
 EXTENSION COLLET CHUCKS KITS
 НАБОРЫ УДЛИНИТЕЛЕЙ С ЦАНГАМИ

JEUX PORTE-PINCES À QUEUE CYLINDRIQUE
 KIT PORTAPINZE CILINDRICI
 加长夹头变径套组套



| CODICE CODE | DESCRIZIONE DESCRIPTION |
|----------------|--|
| KIT PPC-ER16M | <p>N°1 portapinze cilindrici Ø 12x80 ER16M N°1 portapinze cilindrici Ø 16x125 ER16M N°1 portapinze cilindrici Ø 20x160 ER16M N°10 pinze ER16 (Ø 1 2 3 4 5 6 7 8 9 10) N°1 chiave per ER16M</p> <p>N°1 extension collet chuck Ø 12x80 ER16M N°1 extension collet chuck Ø 16x125 ER16M N°1 extension collet chuck Ø 20x160 ER16M N°10 collets ER16 (Ø 1 2 3 4 5 6 7 8 9 10) N°1 wrench ER16M</p> |
| KIT PPC-ER20M | <p>N°1 portapinze cilindrici Ø 16x100 ER20M N°1 portapinze cilindrici Ø 20x120 ER20M N°1 portapinze cilindrici Ø 25x160 ER20M N°10 pinze ER20 (Ø 3 4 5 6 7 8 9 10 12 13) N°1 chiave per ER20M</p> <p>N°1 extension collet chuck Ø 16x100 ER20M N°1 extension collet chuck Ø 20x120 ER20M N°1 extension collet chuck Ø 25x160 ER20M N°10 collets ER20 (Ø 3 4 5 6 7 8 9 10 12 13) N°1 wrench ER20M</p> |
| KIT PPC-ER25M | <p>N°1 portapinze cilindrici Ø 20x100 ER25M N°1 portapinze cilindrici Ø 25x70 ER25M N°1 portapinze cilindrici Ø 25x120 ER25M N°10 pinze ER25 (Ø 2 3 4 5 6 8 10 12 14 16) N°1 chiave per ER25M</p> <p>N°1 extension collet chuck Ø 20x100 ER25M N°1 extension collet chuck Ø 25x70 ER25M N°1 extension collet chuck Ø 25x120 ER25M N°10 collets ER25 (Ø 2 3 4 5 6 8 10 12 14 16) N°1 wrench ER25M</p> |

KRAFTSPANNFUTTERSATZ JEUX À FORT SERRAGE
 MILLING CHUCK KITS KIT FORTE SERRAGGIO
 НАБОРЫ СИЛОВЫХ ПАТРОНОВ С ЦАНГАМИ К НИМ 铣夹头组套

Ausstattungskasten: 1 Kraftspannfutter + 1 Spannzangensatz + 1 Spannschlüssel
 Kit Box: 1 milling chuck + 1 collets kit + 1 wrench

Набор: 1 патрон + 1 набор цанг + 1 ключ

Boîte d'équipement : 1 mandrin à fort serrage + 1 jeux de pince + 1 clé

Cassetta Corredo: 1 mandrino forte serraggio + 1 serie pinze + 1 chiave

组件盒：1个铣夹头 +1个夹头套装 +1个扳手



ISO 40 ISO 50

CODICE ORDINAZIONE
Order Code

COMPOSIZIONE
Composition

KIT BT40 C20 N°1 BT40 L105 C20 + n°5 pinze K20: Ø6,8,10,12,16

KIT BT40 C32 N°1 BT40 L105 C32 + n°7 pinze K32: Ø6,8,10,12,16,20,25

KIT TC40 C20 N°1 TC 40 L105 C20 + n°5 pinze K20: Ø6,8,10,12,16

KIT TC40 C32 N°1 TC 40 L105 C32 + n°7 pinze K32: Ø6,8,10,12,16,20,25

KIT ISO40 C32 N°1 ISO 40 L83 C32 + n°7 pinze K32: Ø6,8,10,12,16,20,25

KIT BT50 C20 N°1 BT 50 L105 C20 + n°5 pinze K20: Ø6,8,10,12,16

KIT BT50 C32 N°1 BT 50 L105 C32 + n°7 pinze K32: Ø6,8,10,12,16,20,25

KIT TC50 C20 N°1 TC 50 L105 C20 + n°5 pinze K20: Ø6,8,10,12,16

KIT TC50 C32 N°1 TC 50 L105 C32 + n°7 pinze K32: Ø6,8,10,12,16,20,25

KIT ISO50 C32 N°1 ISO 50 L85 C32 + n°7 pinze K32: Ø6,8,10,12,16,20,25

Ausstattungskasten: 1 Hydro-Dehnspannfutter + 1 Spannzangensatz + 1 Spannschlüssel

Kit Box: 1 hydraulic chuck + 1 collets kit + 1 wrench

Набор: 1 гидропластовый патрон + 1 ключ + 1 набор втулок

Boîte d'équipement : 1 mandrin hydraulique + 1 jeux de pince + 1 clé

Cassetta Corredo: 1 mandrino "idraulico" + 1 serie pinze + 1 chiave

组套箱：1个液压夹头+1个夹头组套+1个扳手



| CODICE ORDINAZIONE Order Code | COMPOSIZIONE Composition |
|----------------------------------|--|
| KIT BT40 G20 | N°1 BT40 H90 G20-WO + n°5 pinze GX20: Ø6,8,10,12,16 |
| KIT BT40 G32 | N°1 BT40 H105 G32-WO + n°7 pinze GX32: Ø10,12,14,16,18,20,25 |
| KIT TC40 G20 | N°1 TC40 H80,5 G20-WO + n°5 pinze GX20: Ø6,8,10,12,16 |
| KIT TC40 G32 | N°1 TC40 H110 G32-WO + n°7 pinze GX32: Ø10,12,14,16,18,20,25 |
| ISO 40 | |
| | |
| ISO 50 | |
| KIT BT50 G20 | N°1 BT50 H90 G20-WO + n°5 pinze GX20: Ø6,8,10,12,16 |
| KIT TC50 G20 | N°1 TC50 H80,5 G20-WO + n°5 pinze GX20: Ø6,8,10,12,16 |