


# serinex

CNC TOOLHOLDER SYSTEM 

MANDRINI  
*TOOLHOLDERS*  
MANDRIN  
*SPANNFUTTER*



[WWW.SERINEX.IT](http://WWW.SERINEX.IT)

# MANDRINI COLLET CHUCKS

## MANDRINI - INTRODUZIONE



Serinx produce mandrini TC-SK DIN69871, BT-MAS403, ISO DIN2080, CILINDRICI, HSK-DIN63893, CAPTO POLIGONALE ISO26623-1, ADATTATORI VARILOCK, PORTA ALESATORI OSCILLANTI, MANDRINI TCL PER LEGNO E ALLUMINIO E MANDRINI SPECIALI SU RICHIESTA.

Tutti i mandrini sono prodotti con un elevato standard qualitativo per una massima sicurezza operativa.

Abbiamo un'unità produttiva dedicata alla produzione di mandrini nei più diffusi standard internazionali, dotata di macchinari CNC di ultima generazione, con i più severi controlli di produzione in ottemperanza alle procedure dettate dalla certificazione ISO 9001: 2008. Per la nostra produzione utilizziamo soltanto barre di acciai legati di altissima qualità provenienti da acciaierie qualificate, fornite con certificati di qualità e controllate singolarmente con unità di controllo ad "ultrasuoni" per scongiurare difetti interni del materiale come cricche o microlesioni. Tutte le lavorazioni meccaniche sono eseguite nella nostra moderna unità produttiva di Annone Brianza, situata a breve distanza da Lecco, in un comparto di oltre 7000 mq. dotato di un ampio parco macchine con una produzione giornaliera elevata. Il nostro ufficio tecnico è in grado di fornire una consulenza specifica per la messa in produzione di "mandrini speciali" dalle particolari forme e caratteristiche per soddisfare tutte le esigenze dei nostri clienti.

### PORTAUTENSILI BILANCIATI

I portautensili bilanciati sono l'ideale per equipaggiare l'ultima generazione di macchine utensili ad alta velocità e per l'ottenimento delle migliori prestazioni e finiture superficiali. Tutti i portautensili presenti nel catalogo possono essere bilanciati. A tale scopo abbiamo a disposizione bilanciatrici qualificate che ci permettono di soddisfare ogni esigenza di equilibratura.

Prevediamo due diverse classi di equilibratura:

\* grado G 2,5 con tolleranza più stretta;

\* grado G 6,3 con tolleranza maggiore e diverse

Classi di velocità di rotazione:

10.000 RPM

15.000 RPM

20.000 RPM

30.000 RPM

### CLASSIFICAZIONE DEI ROTORI, GRADI DI EQUILIBRATURA - GRADO G mm/s

G 0.4: giroscopi, mandrini dischi e indotti di rettifiche di alta precisione;

G 1.0: indotti di piccoli motori veloci con elevate esigenze di equilibratura, azionamenti di rettifiche di alta precisione, rotor di turbine di motori molto veloci.

G 2.5: rotor di turbine a vapore e a gas, turbopompe turboalternatori, turbosoffianti, turbine di propulsione navi mercantili. Indotti di motori medi e grandi con elevate esigenze di equilibratura. Azionamenti di macchine utensili, ingranaggi veloci di riduttori.

G 6.3: indotti di piccoli motori elettrici prodotti in serie in applicazioni non sensibili alle vibrazioni, macchine utensili e parti di macchine utensili in generali. Parti veloci di macchine operatrici, ceste di centrifughe, rotor di macchine idrauliche, volani, ventilatori, pompe, ingranaggi di riduttori.

G 16: alberi di trasmissione, alberi cardanici con elevate esigenze di equilibratura, parti di macchine agricole. Parti di motore per vetture, autocarri, locomotori a benzina o diesel. Cerchi di ruote per autovetture e motocicli.

## ATTENZIONE / ATTENTION

DATI TECNICI ED IMMAGINI SONO INDICATIVI. SERINEX SI RISERVA DI APPORTARE AGGIORNAMENTI IN QUALSIASI MOMENTO E SENZA OBBLIGO DI PREAVVISO.

TECHNICAL DATA AND DRAWINGS ARE FOR INFORMATION PURPOSES ONLY. SERINEX RESERVES THE RIGHT TO UPDATE SPECS AT ANYTIME AND WITHOUT NOTICE.

# MANDRINI COLLET CHUCKS

## COLLET CHUCKS - INTRODUCTION



Serinx produces adapters TC-SK DIN69871, BT-MAS403, ISO DIN2080, STRAIGHT SHANK, HSK-DIN63893, CAPTO MODULARS TOOLS, TOOL HOLDERS FOR VARILOCK SYSTEM, FLOATING REAMER HOLDERS, TOOLHOLDERS TCL SUITABLE FOR WOOD AND ALUWORKING MACHINES E SPECIAL TOOLHOLDERS.

Every adapter is produced following a high-qualitative standard to pursue maximum operative safety. We have a productive unit dedicated to adapters production supplied with last generation CNC machines, with all the most severe production controls, following the norm of the certification ISO 9001: 2008. For our production we only use high-quality steel bar, produced in qualified steel plant, provided with quality certifications and individually controlled with ultrasounds in order to avoid internal deficiency of the material. Furthermore all our production of tool holders undergoes a specific heat-treatment to obtain superior quality of RESISTANCE and RESILIENCE. All the mechanical workings are performed in our modern division in Annone Brianza, not far from Lecco, in a place of more than 7000 mq. , supplied with a wide rolling stock with a high daily production. Our technical office can provide expert advice for the production of "special toolholders" with specific characteristics, in order to satisfy the desires of our clients.

### BALANCED BROACH HOLDER

Balanced tool holders are the best way to equip the latest generation of high speed machines tools and to obtain better results and superficial finishings.

Every BALANCED BROACH HOLDER in the catalogue can be balances. For this purpose there are a machines which allows us to satisfy balancing necessities.

We provide for two different classes of balancing:

\* degree G 2,5 with tight tolerance

\* degree G 6,3 with different and higher tolerance

Classes of speed rotation:

10.000 RPM

15.000 RPM

20.000 RPM

30.000 RPM

### ROTORS CLASSIFICATION, BALANCING DEGREE - DEGREE G mm/s

G 0.4: adapters disks and adjustment high precision rotor

G 1.0: rotors of small motors with balancing needs, high precision adjutment. Turbine high speed rotors.

G 2.5: Turbine rotors, both steam and gas, turbo-pomp, turbo-blowing,propulsion turbines for mercantile ships. Medium motor rotors with high balancing needs. Activation of tools machines, high speeds gears of adapters.

G 6.3: Small electric motors rotors, produced in applications non perceptible to vibrations, tools machines and in general parts of tools machines. High speed part of operatives machines, spin cycles. Hydraulic machines rotors, fly-wheels, fans, poms, adaptors gears

G 16: Transmission shafts, cardan shafts with strong balancing needs, parts of farming machines. Parts of enigine for vehicles, lorries, petrol and diesel locomotives. Wheels for cars and motocycles.

## AVERTISSEMENT / WARNUNG

DONNÉES TECHNIQUES ET PHOTOS SONT À TITRE INDICATIF. SERINEX SE RÉSERVE LE DROIT DE METTRE À JOUR À TOUT MOMENT ET SANS PRÉAVIS.

TECHNISCHE DATEN UND BILDER SIND RICHTWERTE. SERINEX BEHÄLT SICH DAS RECHT VOR, JEDERZEIT UND OHNE VORHERIGE ANKÜNDIGUNG ZU AKTUALISIEREN.

# MANDRINI MANDRIN

## MANDRIN - INTRODUCTION



Serinox produit des mandrins TC-SK DIN69871, BT-MAS403, ISO DIN2080, MANDRIN CYLINDRIQUE, HSK-DIN63893, PORTE-OUTILS POUR SYSTEME MODULAIRE CAPOT, ADAPTATEUR FOR VARILOCK SYSTEM, MANDRIN FLOTTANT, MANDRIN TCL POUR BOIS ET ALUMINIUM ET MANDRIN SPECIAL. Tous les mandrins sont produits avec un standard de qualité très élevé pour une sécurité opérationnelle maximale. Nous avons une unité de production dédiée à la production de mandrins (mandrin porte pinces, mandrin pour fraises, mandrins pour fraiseuses) selon les standards internationaux les plus utilisés et dotée de machines à CN de dernière génération, avec les contrôles les plus sévères, respectant les procédures dictées par la certification ISO 9001: 2008. Nous utilisons pour la production des barres d'alliage d'acier de très haute qualité provenant d'aciéries qualifiées, fournies avec certificat de qualité et soumises à une unité de contrôle à "ultrasons" pour éviter les défauts internes du matériel telles les fissures les micro lésions. En outre, toute notre production de subit un traitement thermique spécifique pour obtenir une meilleure qualité de résistance et résilience du produit fini. Toutes les fabrications mécaniques de mandrin pour fraises, mandrins porte pinces, mandrin porte-fraises et mandrins pour fraiseuses, sont effectuées au sein de notre unité moderne de production d'Annone Brianza, sise à une brève distance de Lecco, dans un compartiment de plus de 7000 m<sup>2</sup>, doté d'un ample parc de machines avec une production journalière élevée. Notre bureau technique est en mesure de fournir des conseils spécifiques pour la mise en production de « mandrins spéciaux » à caractéristiques ou formes particulières pour satisfaire toutes les exigences de nos clients.

### PORTE-OUTILS EQUILIBRES

Les porte-outils équilibrés sont l'idéal pour équiper la dernière génération de machines-outils à grande vitesse et pour l'obtention de meilleures prestations et finitions de surfaces. Tous les porte-outils présents sur le catalogue peuvent être équilibrés. Nous possédons pour cela une équilibreuse qui nous permet de satisfaire toutes exigences d'équilibrage.

On prévoit deux classes diverses d'équilibrage:

- Degrés G2,5 avec tolérance étroite
- Degrés G6,3 avec tolérance majeure et différente.

Classes de vitesse de rotation :

10.000 RPM  
15.000 RPM  
20.000 RPM  
30.000 RPM

### CLASSIFICATION DES ROTORS, DEGRES D'EQUILIBRAGE - DEGRES G mm/s

**G 0.4:** Gyroscopes, mandrins disques et inducteurs de rectifieuses à haute précision;

**G 1.0:** Inducteurs de petit moteur rapide avec des exigences d'équilibrage élevées, entraînements de rectifieuses à haute précision. Rotor de turbines de moteurs très rapide.

**G 2.5:** Rotors de turbines à vapeur et à gaz, turbopompes, turbo-alternateurs, turbo-souffleurs, turbine de propulsion de navires marchands. Inducteurs de moteur moyen et grand avec des exigences d'équilibrage élevées. Entraînements de machines-outils, engrenages rapide de réducteurs.

**G 6.3:** Inducteurs de petits moteurs électriques produits en série en applications non sensibles aux vibrations, machines-outils et pièces de machines-outils en général. Pièces rapides d'engins d'exploitations, récipients pour centrifugeuse, rotors de machines hydrauliques, volants d'inertie, ventilateurs, pompes, engrenages de réducteurs.

**G 16:** Arbres de transmission, arbres de cardans avec des exigences d'équilibrage élevées, pièces pour machines agricoles. Pièces de moteur pour véhicules, camions, locomotives a essence ou gasoil. Jantes de roues pour véhicules et motorcycle.

## ATTENZIONE / ATTENTION

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# MANDRINI SPANNFUTTER

## SPANNFUTTER - EINFÜHRUNG



Serinox produziert alle Sorten Spannfutter: TC-TCB, BT-BTB, ISO, ZYLINDRISCHE, HSK (Spannfutter für Fräser, Spannzangenhalter, zylindrische Spannzangenhalter, Spannzangenfutter, Spannfutter für Fräsmaschinen, Hülsen für Morsekonus). Alle Spannfutter sind mit einem Qualitätsstandard für die höchste Betriebssicherheit hergestellt. Wir verfügen über eine Abteilung für die Herstellung von Spannfuttern (Spannfutter für Fräser, Spannzangenhalter, Spannfutter für Fräsmaschinen) in den verbreitetsten internationalen Standards; diese Abteilung ist mit den modernsten CNC Maschinen und den sorgfältigsten Produktionskontrollen unter Beachtung der Vorgänge der ISO 9001:2000 Zertifizierung ausgestattet. Für unsere Produktion verwenden wir nur legierte Stähle höher Qualität (16NiCr4), die aus qualifizierten Stahlwerken kommen, mit Qualitätszertifikaten geliefert und mit Ultraschall-Prüfeinheiten einzeln kontrolliert werden, um innere Fehler wie Risse oder Mikrobeschädigungen abzuwenden. Zudem erfährt unsere ganze Produktion von Spannfuttern TC-TCB, BT-BTB, ISO, ZYLINDRISCHE, HSK (Spannfutter für Fräser, Spannzangenhalter, Spannfutter für Fräsmaschinen, Hülsen für Morsekonus) eine spezifische Wärmebehandlung, um die beste Eigenschaften von FESTIGKEIT und KERBSCHLAGZÄHIGKEIT des Endprodukts zu erzielen. Unser Büro für Betriebstechnik kann eine individuelle Beratung für die Produktion von speziellen Spannfuttern mit besonderen Eigenschaften oder Gestalten bieten, um alle Anforderungen unserer Kunden zu befriedigen.

### AUSWUCHTETE WERKZEUGSPANNER

Die ausgewuchteten Werkzeugspanner sind die beste Lösung, um die modernsten Hochgeschwindigkeitswerkzeugmaschinen auszurüsten, und um die besten Leistungen und oberflächliche Feinbearbeitungen zu erzielen. Alle Werkzeugspanner des Katalogs können ausgewuchtet werden.

Dazu verfügen wir über eine CEMB – Auswuchtmaschine, durch die wir alle Bedürfnisse nachdem Auswuchten befriedigen können.

Wir bieten zwei verschiedene Auswuchtensklassen an:

\* Grad G 2,5 mit engerer Toleranz

\* Grad G 6.3 mit verschiedener und höher Toleranz

Drehgeschwindigkeitsklassen:

\* 10.000 RPM

\* 15.000 RPM

\* 20.000 RPM

\* 30.000 RPM

### KLASSIFIZIERUNG DER ROTOREN, AUSWUCHTSGRADE – GRAD G mm/s

**G 0.4:** Gyroscopie, Disk-Futter und Rotoren von Schleifmaschinen hoher Genauigkeit;

**G 1.0:** Rotoren von kleinen geschwindigen Motoren mit hohen Auswuchtbedürfnissen, Antriebe von hochgenauen Schleifmaschinen, Turbinenrotoren von Hochgeschwindigkeitsmotoren.

**G 2.5:** Rotoren von Gas- Dampfturbinen, Turbopumpen, Turbo-Wechselstromgeneratoren, Turbo-Verdichtern, Antriebsturbinen für Handelsschiffen. Rotoren von mittleren und großen Motoren mit hohen Auswuchtbedürfnissen. Antriebe von Werkzeugmaschinen, schnelle Getriebe von Untersetzungsgetrieben.

**G 6.3:** Rotoren von kleinen elektrischen Motoren, die in Serien mit vibrationsbeständigem Einbau erzeugt werden, Werkzeugmaschinen und Komponenten für Werkzeugmaschinen. Hochgeschwindigkeitskomponente von Baumaschinen, Zentrifugenkörbe, Rotoren von hydraulischen Maschinen, Schwungrädern, Lüftern, Pumpen, Getriebe von Untersetzungsgetrieben.


**G 16:** Antriebswellen, Gelenkwellen mit hohen Auswuchtbedürfnissen, Komponenten von Landmaschinen. Komponenten von Motoren für Diesel- bzw. Benzinantrieben, Fahrzeuge, Lastwagen. Radfelgen für Fahrzeuge und Krafträder.


## AVERTISSEMENT / WARNUNG


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	<b>SK-DIN69871</b>	PORTAUTENSILE CON ATTACCO DIN69871 <i>TOOLHOLDER DIN69871</i> PORTE-OUTILS DIN69871 <i>WERKZEUGAUFNAHMEN DIN69871</i>	<b>166</b>
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	<b>MAS 403 BT/JIS 6339</b>	PORTAUTENSILE CON ATTACCO MAS403-BT/JIS6339 <i>TOOLHOLDER MAS403-BT/JIS6339</i> PORTE-OUTILS MAS403-BT/JIS6339 <i>WERKZEUGAUFNAHMEN JIS6339 (MAS 403-BT)</i>	<b>216</b>
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	<b>HSK DIN 63893 ISO 12164-1</b>	PORTAUTENSILE CON ATTACCO HSK-DIN63893 - ISO12164-1 <i>TOOLHOLDER HSK-DIN63893 - ISO12164-1</i> PORTE-OUTILS HSK-DIN63893 - ISO12164-1 <i>WERKZEUGAUFNAHMEN HSK-DIN63893 - ISO12164-1</i>	<b>264</b>
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	<b>CAPTO POLIGONALE ISO 26623-1</b>	PORTAUTENSILE CON ATTACCO CAPTO - POLIGONALE ISO26623-1 <i>TOOL HOLDERS CAPTO</i> PORTE-OUTILS CAPTO <i>WERKZEUGHALTER MIT VIELECKIGEM CAPTO ANSCHLUSS ISO 26623-1</i>	<b>348</b>
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	<b>DIN 2080</b>	PORTAUTENSILE CON ATTACCO DIN2080 <i>TOOLHOLDER DIN2080</i> PORTE-OUTILS DIN2080 <i>WERKZEUGAUFNAHMEN DIN2080</i>	<b>356</b>
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	<b>VARIOLOCK</b>	PORTAUTENSILI MODULARI SISTEMA VARIOLOCK <i>TOOL HOLDERS FOR VARIOLOCK SYSTEM</i> ADAPTATEUR MODULAIRE POUR OUTILS VARIOLOCK <i>WERKZEUGHALTER MASSEINHEITLICH SYSTEM VARIOLOCK</i>	<b>376</b>
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	<b>CILINDRICI</b>	MANDRINI CILINDRICI <i>STRAIGHT SHANK</i> MANDRIN CYLINDRIQUE <i>ZYLINDERSCHÄFTE</i>	<b>391</b>
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	<b>PORTA ALESATORI OSCILLANTI</b>	PORTA ALESATORI OSCILLANTI <i>FLOATING REAMER HOLDERS</i> MANDRIN FLOTTANT <i>SCHWINGENDE REIBAHLEHALTER</i>	<b>413</b>
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	<b>TCL</b>	MANDRINI TCL PER LEGNO E ALLUMINIO <i>TOOLHOLDER TCL SUITABLE FOR WOOD AND ALUWORKING MACHINES</i> MANDRIN TCL POUR BOIS ET ALUMINIUM <i>SPANNFUTTER TCL FÜR HOLZ UND ALLUMINIUM</i>	<b>417</b>
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	<b>SPECIALI</b>	SPECIALI <i>SPECIALS</i> SPECIAL <i>SPECIALS</i>	<b>427</b>
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# SK - DIN69871

## SK - DIN69871



### CALETTAMENTO A CALDO STANDARD

SHRINK FIT HOLDERS STANDARD



### CALETTAMENTO A CALDO SLIM TYPE

SHRINK FIT HOLDERS SLIM TYPE



### PORTAPINZA PER SKS

COLLET CHUCK FOR SKS



### PORTA TESTINE FILETTATE (TIPO CPY)

FOR SCREWED MILLING CUTTERS



### FORTE SERRAGGIO

POWER MILLING CHUCKS



### IDRAULICO

HYDRAULIC EXPANSIONS CHUCK



### PORTAPINZA ER DIN6499

COLLET CHUCK FOR ER DIN6499



### PORTAPINZA EOC DIN6388

COLLET CHUCK FOR EOC DIN6388



### PER FRESE WELDON

END MILL HOLDERS



### PORTAFRESE FISSI

SHELL END MILL HOLDERS



### PORTAFRESE COMBINATI

COMBI SHELL END MILL HOLDERS



### PORTA PUNTE AUTOSERRANTI CON CHIAVE A SETTORE

DRILL CHUCKS WITH HOOK WRENCH



### PORTA PUNTE CON CHIAVE ESAGONALE

HEX KEY LOCK DRILL CHUCKS



### CONO MORSE PUNTE/ FRESE

MORSE TAPER FOR DRILLS/MILLS



### STELO TENERO LAVORABILE

BLANK ARBORS



### BARRA DI CONTROLLO

TEST ARBORS

## CARATTERISTICHE / SPECIFICATION / CARACTÉRISTIQUES/ TECHNISCHE DATEN

### CARATTERISTICHE TECNICHE

- Costruiti in acciaio certificato in barre.
- Eseguiti trattamenti termici da fornitori certificati ISO 9001.
- Rettificati di precisione esternamente, internamente e nelle filettature delle ghiera chiudipinza.
- Controllati con strumenti di misura certificati.
- La tolleranza di precisione dei coni ISO è AT2.
- L'errore di concentricità massimo tra il cono e la sede utensile è di 0.003mm.

### TECHNICAL FEATURES

- Manufactured with certificate steel.
- Heat treatments are performed by certified suppliers ISO 9001.
- Precision ground on shanks, inside tapers and collet nut threads.
- Tested with high precision inspection and gaging equipment.
- Taper accuracy of ISO SHANKS lower than AT2.
- The maximum error of concentricity between the cone and the seat of tool is 0.003mm.

### CARACTÉRISTIQUES

- Fabriqués en bar d'acier certifié.
- Réalisation du traitement thermique par des fournisseurs certifiés ISO 9001.
- Rectification de précision extérieurement, intérieurement et dans les filetages des écrous serre-pince.
- Contrôlés par des instruments de mesure certifiés.
- La tolérance de précision des cônes ISO est AT2.
- L'erreur de concentricité maximum entre le cône et le siège de l'outil est de 0.003 mm.

### MERKMALE

- Gebaut aus zertifiziertem Stabstahl
- Warmbehandlungen von Lieferanten mit Zeugnis ISO 9001
- Genauigkeitgeschliffen aussen, innen und in den Gewinden der Spannmutter für den Zangenverschluss
- Geprüft mit zertifizierten Messinstrumente
- Die Präzisionstoleranz der Konen ISO ist AT2
- Die max konzentrische Abweichung zwischen Konus und Werkzeugsitz ist 0.003 mm

## ISTRUZIONI / INSTRUCTIONS / INSTRUCTIONS ET QUOTES / ANWEISUNGEN

### ISTRUZIONI

- I mandrini vengono forniti in forma ad o ad/b. nel caso dell'ad/b, il lubrificante passa dai fori presenti sulla flangia. L'operatore dovrà togliere le viti di chiusura che troverà già montate sul mandrino.

### INSTRUCTIONS

- The tool holders are provided to form ad or ad/b. in case of ad/b, the lubricant pass from holes on the flange. The operator will have to remove screw closure that he will find on the flange.

### INSTRUCTIONS:

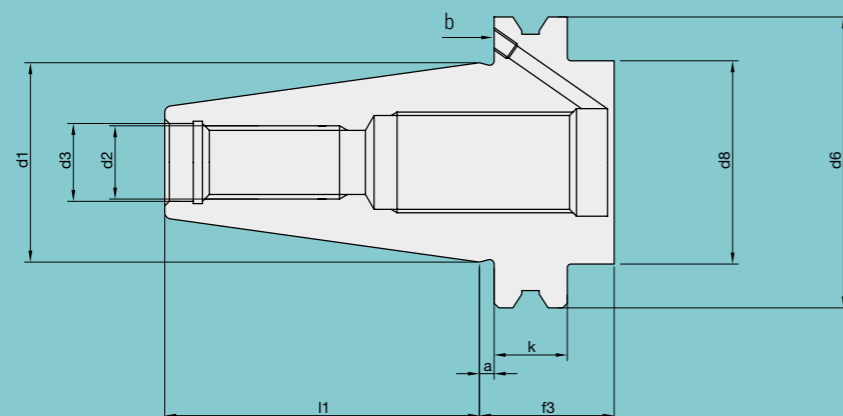
- Les mandrins doivent être fournis en forme AD ou AD/B. pour l'AD/B, le lubrifiant passe par les trous présents sur la flange. L'opérateur doit enlever les vis de fermeture qu'il trouvera déjà monté sur le mandrin.

### TECHNISCHE DATEN

- Die Spannfutter werden in der form AD oder AD/B geliefert. Im falle von AD/B, fließt der Schmierstoff durch die vorhandenen Bohrungen auf der Flansche

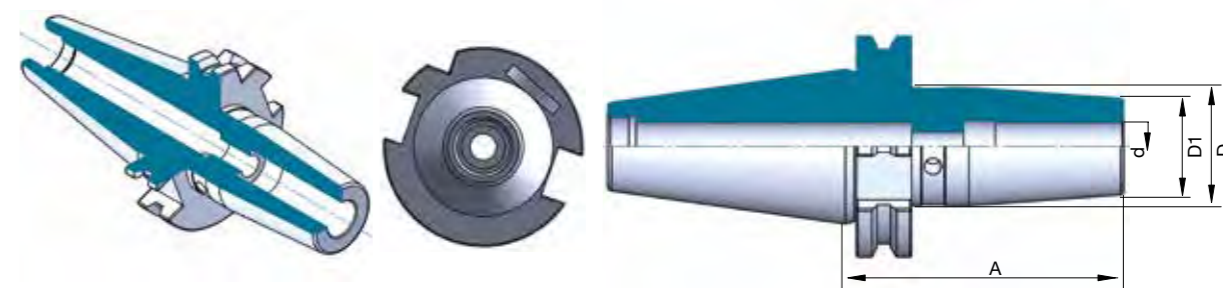
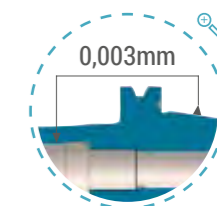
## QUOTE DEI CONI DI ATTACCO / QUOTE / QUOTES / ABMESSUNGEN

CONO/TAPER	d1	d2	d3	d6	d8 MAX	L1	a	k	f3
TC30	31,75	M12	13	50	45	47,8	3,2	15,9	35
TCB40	44,45	M16	17	63,55	50	68,4	3,2	15,9	35
TCB45	57,15	M20	21	82,55	63	82,7	3,2	15,9	35
TCB50	69,85	M24	25	97,5	80	101,8	3,2	15,9	35



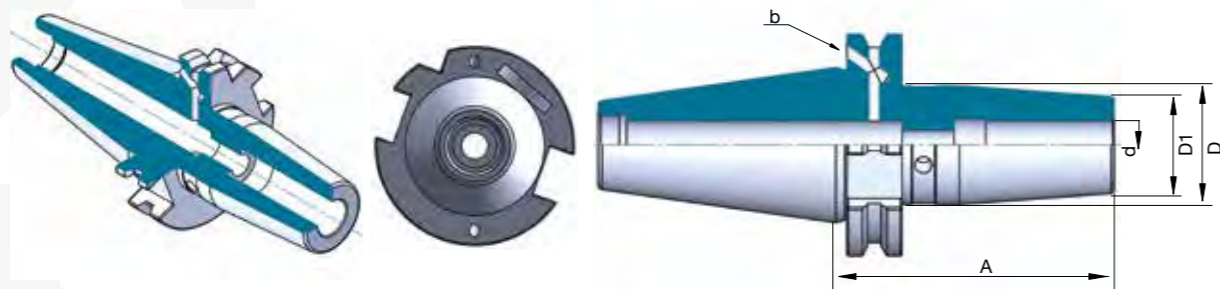
## CALETTAMENTO A CALDO STANDARD

## SHRINK FIT HOLDERS STANDARD



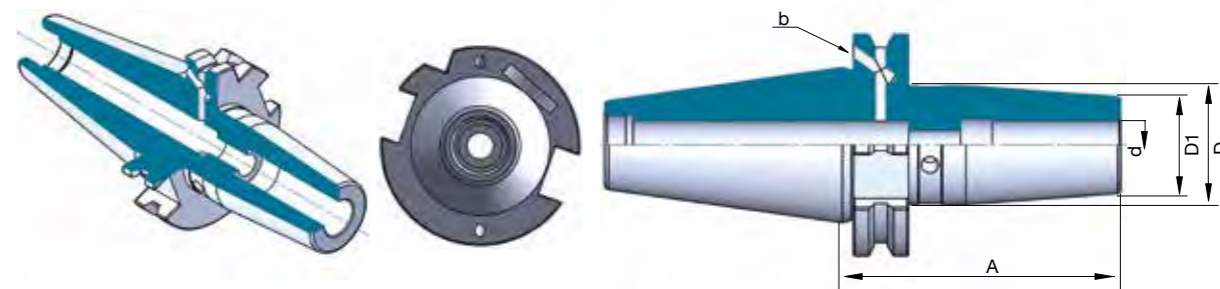
## CALETTAMENTO STANDARD - SHRINK FIT HOLDERS STANDARD - SK30

Cod.	TYPE	d	A	AT2		G2.5/25000		AD	
				D1	D	D1	D	D1	D
SK.30.80.CL3	TC30 H80 CL3	3	80	10	20				
SK.30.80.CL4	TC30 H80 CL4	4	80	15	24				
SK.30.80.CL5	TC30 H80 CL5	5	80	15	24				
SK.30.80.CL6	TC30 H80 CL6	6	80	20	27				
SK.30.80.CL8	TC30 H80 CL8	8	80	20	27				
SK.30.80.CL10	TC30 H80 CL10	10	80	24	31				
SK.30.80.CL12	TC30 H80 CL12	12	80	24	31				
SK.30.80.CL14	TC30 H80 CL14	14	80	27	34				
SK.30.80.CL16	TC30 H80 CL16	16	80	27	34				
SK.30.80.CL18	TC30 H80 CL18	18	80	33	40				
SK.30.80.CL20	TC30 H80 CL20	20	80	33	40				



### CALETTAMENTO STANDARD - SHRINK FIT HOLDERS STANDARD - SKB40

Cod.	TYPE	d	A	AT2		G2.5/25000		AD/B	
				D1	D	D1	D	D1	D
SKB.40.80.CL3	TCB40 H80 CL3	3	80	10	20				
SKB.40.120.CL3	TCB40 H120 CL3	3	120	10	20				
SKB.40.160.CL3	TCB40 H160 CL3	3	160	10	20				
SKB.40.80.CL4	TCB40 H80 CL4	4	80	15	25				
SKB.40.120.CL4	TCB40 H120 CL4	4	120	15	25				
SKB.40.160.CL4	TCB40 H160 CL4	4	160	15	25				
SKB.40.80.CL5	TCB40 H80 CL5	5	80	15	25				
SKB.40.120.CL5	TCB40 H120 CL5	5	120	15	25				
SKB.40.160.CL5	TCB40 H160 CL5	5	160	15	25				
SKB.40.80.CL6	TCB40 H80 CL6	6	80	21	27				
SKB.40.130.CL6	TCB40 H130 CL6	6	130	21	27				
SKB.40.160.CL6	TCB40 H160 CL6	6	160	21	27				
SKB.40.80.CL8	TCB40 H80 CL8	8	80	21	27				
SKB.40.130.CL8	TCB40 H130 CL8	8	130	21	27				
SKB.40.160.CL8	TCB40 H160 CL8	8	160	21	27				
SKB.40.80.CL10	TCB40 H80 CL10	10	80	24	32				
SKB.40.130.CL10	TCB40 H130 CL10	10	130	24	32				
SKB.40.160.CL10	TCB40 H160 CL10	10	160	24	32				
SKB.40.80.CL12	TCB40 H80 CL12	12	80	24	32				
SKB.40.130.CL12	TCB40 H130 CL12	12	130	24	32				
SKB.40.160.CL12	TCB40 H160 CL12	12	160	24	32				
SKB.40.80.CL14	TCB40 H80 CL14	14	80	27	34				
SKB.40.130.CL14	TCB40 H130 CL14	14	130	27	34				
SKB.40.160.CL14	TCB40 H160 CL14	14	160	27	34				
SKB.40.80.CL16	TCB40 H80 CL16	16	80	27	34				
SKB.40.130.CL16	TCB40 H130 CL16	16	130	27	34				
SKB.40.160.CL16	TCB40 H160 CL16	16	160	27	34				
SKB.40.80.CL18	TCB40 H80 CL18	18	80	33	42				
SKB.40.130.CL18	TCB40 H130 CL18	18	130	33	42				
SKB.40.160.CL18	TCB40 H160 CL18	18	160	33	42				
SKB.40.80.CL20	TCB40 H80 CL20	20	80	33	42				
SKB.40.130.CL20	TCB40 H130 CL20	20	130	33	42				
SKB.40.160.CL20	TCB40 H160 CL20	20	160	33	42				
SKB.40.100.CL25	TCB40 H100 CL25	25	100	44	53				
SKB.40.130.CL25	TCB40 H130 CL25	25	130	44	53				
SKB.40.160.CL25	TCB40 H160 CL25	25	160	44	53				
SKB.40.100.CL32	TCB40 H100 CL32	32	100	44	53				
SKB.40.130.CL32	TCB40 H130 CL32	32	130	44	53				
SKB.40.160.CL32	TCB40 H160 CL32	32	160	44	53				



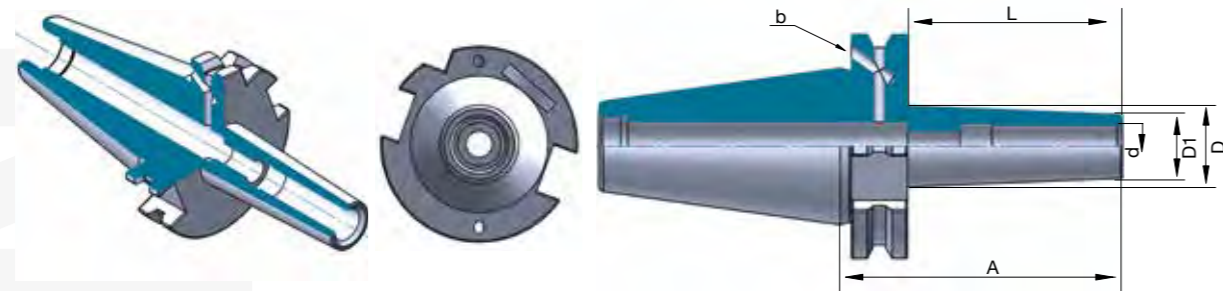
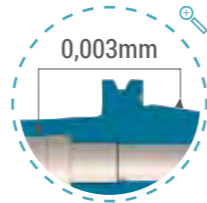
### CALETTAMENTO STANDARD - SHRINK FIT HOLDERS STANDARD - SKB50

Cod.	TYPE	d	A	AT2		G2.5/25000		AD/B	
				D1	D	D1	D	D1	D
SKB.50.80.CL3	TCB50 H80 CL3	3	80	10	20				
SKB.50.120.CL3	TCB50 H120 CL3	3	120	10	20				
SKB.50.160.CL3	TCB50 H160 CL3	3	160	10	20				
SKB.50.80.CL4	TCB50 H80 CL4	4	80	15	25				
SKB.50.120.CL4	TCB50 H120 CL4	4	120	15	22				
SKB.50.160.CL4	TCB50 H160 CL4	4	160	15	22				
SKB.50.80.CL5	TCB50 H80 CL5	5	80	15	25				
SKB.50.120.CL5	TCB50 H120 CL5	5	120	15	22				
SKB.50.160.CL5	TCB50 H160 CL5	5	160	15	22				
SKB.50.80.CL6	TCB50 H80 CL6	6	80	20	27				
SKB.50.120.CL6	TCB50 H120 CL6	6	120	20	27				
SKB.50.160.CL6	TCB50 H160 CL6	6	160	20	27				
SKB.50.80.CL8	TCB50 H80 CL8	8	80	20	27				
SKB.50.120.CL8	TCB50 H120 CL8	8	120	20	27				
SKB.50.160.CL8	TCB50 H160 CL8	8	160	20	27				
SKB.50.80.CL10	TCB50 H80 CL10	10	80	24	31				
SKB.50.120.CL10	TCB50 H120 CL10	10	120	24	31				
SKB.50.160.CL10	TCB50 H160 CL10	10	160	24	31				
SKB.50.80.CL12	TCB50 H80 CL12	12	80	24	31				
SKB.50.120.CL12	TCB50 H120 CL12	12	120	24	31				
SKB.50.160.CL12	TCB50 H160 CL12	12	160	24	31				
SKB.50.80.CL14	TCB50 H80 CL14	14	80	27	34				
SKB.50.120.CL14	TCB50 H120 CL14	14	120	27	34				
SKB.50.160.CL14	TCB50 H160 CL14	14	160	27	34				
SKB.50.80.CL16	TCB50 H80 CL16	16	80	27	34				
SKB.50.120.CL16	TCB50 H120 CL16	16	120	27	34				
SKB.50.160.CL16	TCB50 H160 CL16	16	160	27	34				
SKB.50.80.CL18	TCB50 H80 CL18	18	80	33	40				
SKB.50.120.CL18	TCB50 H120 CL18	18	120	33	40				
SKB.50.160.CL18	TCB50 H160 CL18	18	160	33	40				
SKB.50.80.CL20	TCB50 H80 CL20	20	80	33	40				
SKB.50.120.CL20	TCB50 H120 CL20	20	120	33	40				
SKB.50.160.CL20	TCB50 H160 CL20	20	160	33	40				
SKB.50.100.CL25	TCB50 H100 CL25	25	100	44	53				
SKB.50.120.CL25	TCB50 H120 CL25	25	120	44	53				
SKB.50.160.CL25	TCB50 H160 CL25	25	160	44	53				
SKB.50.100.CL32	TCB50 H100 CL32	32	100	44	53				
SKB.50.120.CL32	TCB50 H120 CL32	32	120	44	53				
SKB.50.160.CL32	TCB50 H160 CL32	32	160	44	53				



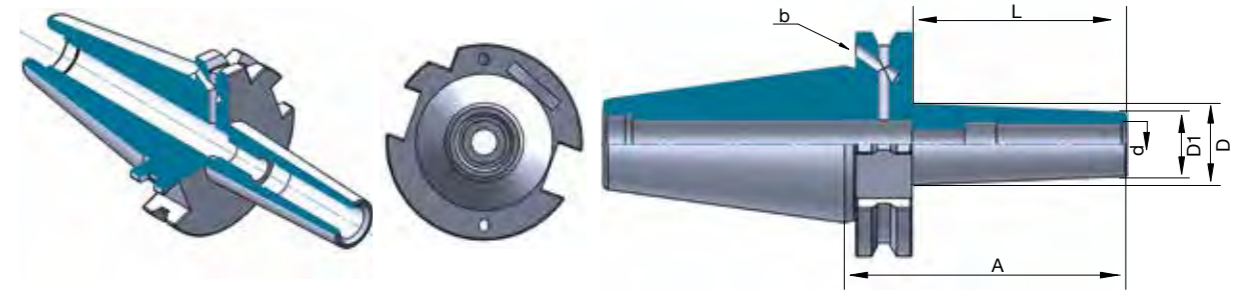
# CALETTAMENTO A CALDO SLIM TYPE

## SHRINK FIT HOLDERS SLIM TYPE



## CALETTAMENTO TIPO SLIM - SHRINK FIT HOLDERS SLIM TYPE - SKB40

Cod.	TYPE	d	A	D1	D	L	AT2	G2.5/25000	AD/B
SKB.40.80.CL3.SL	SLIM TYPE TCB40 H80 CL3	3	80	9	13	52			
SKB.40.120.CL3.SL	SLIM TYPE TCB40 H120 CL3	3	120	9	16	92			
SKB.40.80.CL4.SL	SLIM TYPE TCB40 H80 CL4	4	80	10	15	52			
SKB.40.120.CL4.SL	SLIM TYPE TCB40 H120 CL4	4	120	10	20	92			
SKB.40.80.CL5.SL	SLIM TYPE TCB40 H80 CL5	5	80	11	16	52			
SKB.40.120.CL5.SL	SLIM TYPE TCB40 H120 CL5	5	120	11	20	92			
SKB.40.80.CL6.SL	SLIM TYPE TCB40 H80 CL6	6	80	12	17	60,9			
SKB.40.130.CL6.SL	SLIM TYPE TCB40 H130 CL6	6	130	12	19	110,9			
SKB.40.160.CL6.SL	SLIM TYPE TCB40 H160 CL6	6	160	12	19	140,9			
SKB.40.80.CL8.SL	SLIM TYPE TCB40 H80 CL8	8	80	14	19	60,9			
SKB.40.130.CL8.SL	SLIM TYPE TCB40 H130 CL8	8	130	14	21	110,9			

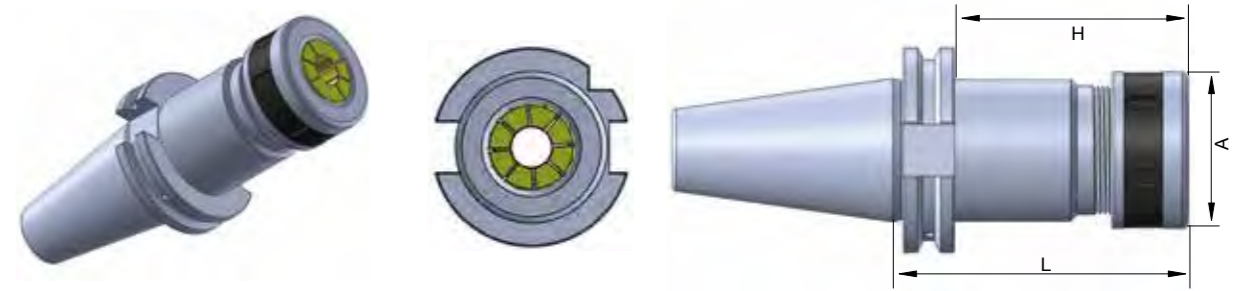
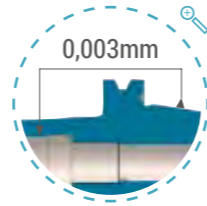


## CALETTAMENTO TIPO SLIM - SHRINK FIT HOLDERS SLIM TYPE - SKB40

Cod.	TYPE	d	A	D1	D	L	AT2	G2.5/25000	AD/B
SKB.40.160.CL8.SL	SLIM TYPE TCB40 H160 CL8	8	160	14	21	140,9			
SKB.40.80.CL10.SL	SLIM TYPE TCB40 H80 CL10	10	80	16	21	60,9			
SKB.40.130.CL10.SL	SLIM TYPE TCB40 H130 CL10	10	130	16	23	110,9			
SKB.40.160.CL10.SL	SLIM TYPE TCB40 H160 CL10	10	160	16	23	140,9			
SKB.40.80.CL12.SL	SLIM TYPE TCB40 H80 CL12	12	80	18	23	60,9			
SKB.40.130.CL12.SL	SLIM TYPE TCB40 H130 CL12	12	130	18	25	110,9			
SKB.40.160.CL12.SL	SLIM TYPE TCB40 H160 CL12	12	160	18	25	140,9			
SKB.40.80.CL14.SL	SLIM TYPE TCB40 H80 CL14	14	80	22	25	60,9			
SKB.40.130.CL14.SL	SLIM TYPE TCB40 H130 CL14	14	130	22	27	110,9			
SKB.40.160.CL14.SL	SLIM TYPE TCB40 H160 CL14	14	160	22	27	140,9			
SKB.40.80.CL16.SL	SLIM TYPE TCB40 H80 CL16	16	80	24	29	60,9			
SKB.40.130.CL16.SL	SLIM TYPE TCB40 H130 CL16	16	130	24	31	110,9			
SKB.40.160.CL16.SL	SLIM TYPE TCB40 H160 CL16	16	160	24	31	140,9			
SKB.40.80.CL20.SL	SLIM TYPE TCB40 H80 CL20	20	80	32	39	60,9			
SKB.40.130.CL20.SL	SLIM TYPE TCB40 H130 CL20	20	130	32	39	110,9			
SKB.40.160.CL20.SL	SLIM TYPE TCB40 H160 CL20	20	160	32	39	140,9			

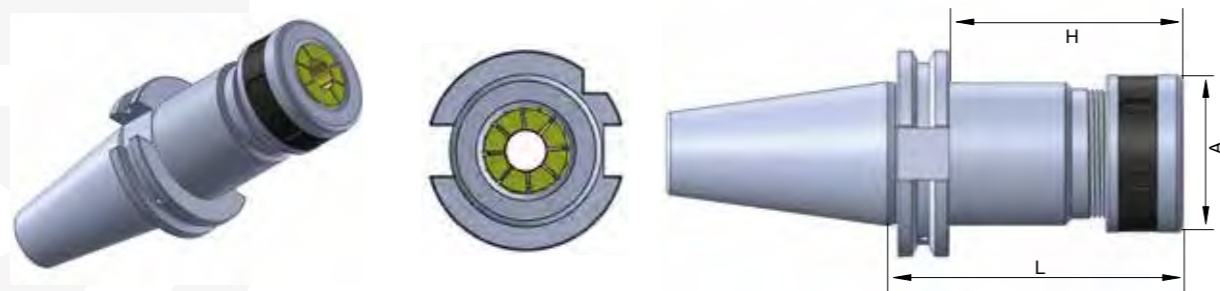
# PORTAPINZA PER SKS

## COLLET CHUCK FOR SKS



### PORTAPINZA PER SKS - COLLET CHUCKS FOR SKS - SK50

Cod.	TYPE	H	SK50		
			AT2	G2.5/25000	AD
SK.50.105.SKS10	TC50 H105 SKS10	70	L	A	
SK.50.165.SKS10	TC50 H165 SKS10	130	L	A	
SK.50.105.SKS20	TC50 H105 SKS20	80	L	A	
SK.50.165.SKS20	TC50 H165 SKS20	140	L	A	



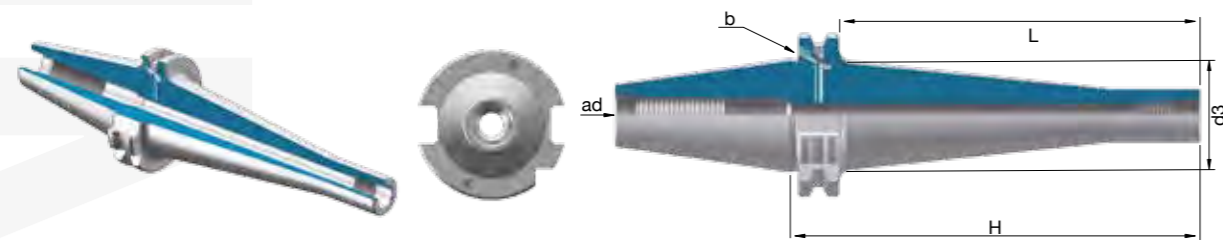
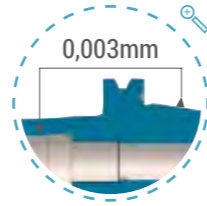
### PORTAPINZA PER SKS - COLLET CHUCKS FOR SKS - SK40

Cod.	TYPE	H	SK40		
			AT2	G2.5/25000	AD
SK.40.90.SKS10	TC40 H90 SKS10	52	L	A	
SK.40.120.SKS10	TC40 H120 SKS10	82	L	A	
SK.40.90.SKS20	TC40 H90 SKS20	70	L	A	
SK.40.120.SKS20	TC40 H120 SKS20	100	L	A	



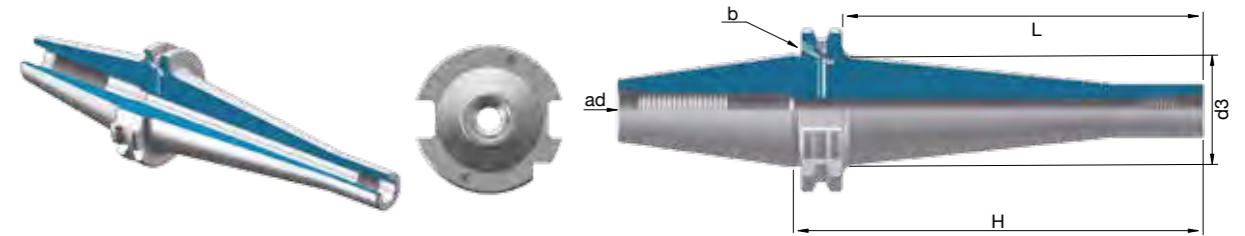
# PORTA TESTINE FILETTATE (TIPO CPY)

## TOOLHOLDERS FOR SCREWED MILLING CUTTERS



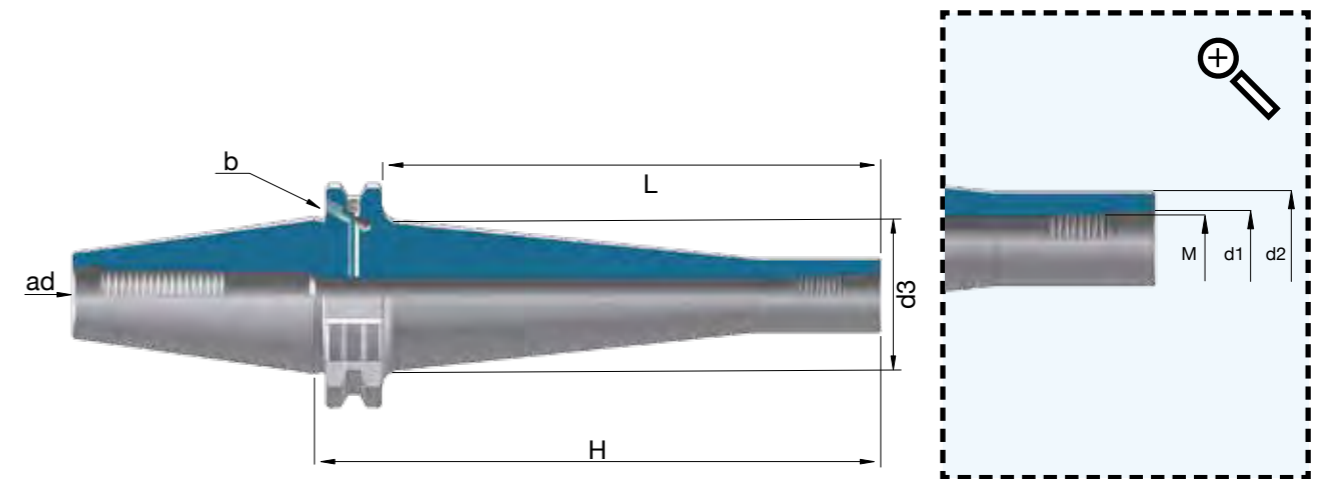
### PORTA TESTINE FILETTATE - FOR SCREWED MILLING CUTTER - SKB40

Cod.	TYPE	M	d1	d2	d3	L	H	AT2	G2.5/25000	AD/B
SKB.40.44.M6CPY	TCB40 H 44 M 6 CPY	M6	6,5	10	13	25	44			
SKB.40.69.M6CPY	TCB40 H 69 M 6 CPY	M6	6,5	10	20	50	69			
SKB.40.94.M6CPY	TCB40 H 94 M 6 CPY	M6	6,5	10	23	75	94			
SKB.40.55.M8CPY	TCB40 H 55 M 8 CPY	M8	8,5	13	15	36	55			
SKB.40.75.M8CPY	TCB40 H 75 M 8 CPY	M8	8,5	13	23	56	75			
SKB.40.95.M8CPY	TCB40 H 95 M 8 CPY	M8	8,5	13	23	76	95			
SKB.40.115.M8CPY	TCB40 H115 M 8 CPY	M8	8,5	13	25	96	115			
SKB.40.55.M10CPY	TCB40 H 55 M10 CPY	M10	10,5	18	20	36	55			
SKB.40.75.M10CPY	TCB40 H 75 M10 CPY	M10	10,5	18	25	56	75			
SKB.40.95.M10CPY	TCB40 H 95 M10 CPY	M10	10,5	18	28	76	95			
SKB.40.105.M10CPY	TCB40 H115 M10 CPY	M10	10,5	18	28	96	115			
SKB.40.145.M10CPY	TCB40 H145 M10 CPY	M10	10,5	18	34	126	145			
SKB.40.55.M12CPY	TCB40 H 55 M12 CPY	M12	12,5	21	24	36	55			



### PORTA TESTINE FILETTATE - FOR SCREWED MILLING CUTTER - SKB40

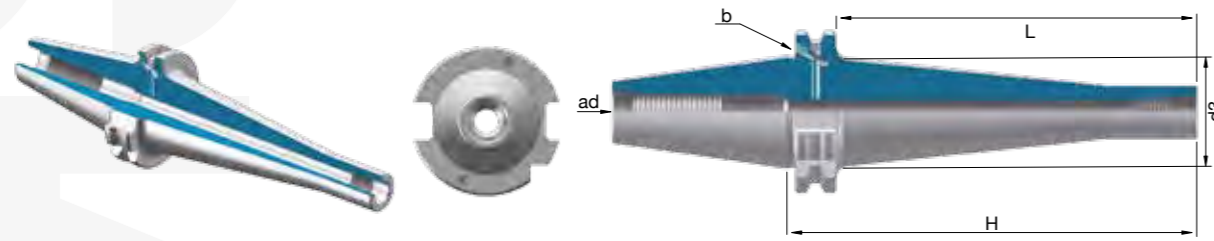
Cod.	TYPE	M	d1	d2	d3	L	H	AT2	G2.5/25000	AD/B
SKB.40.75.M12CPY	TCB40 H 75 M12 CPY	M12	12,5	21	24	56	75			
SKB.40.95.M12CPY	TCB40 H 95 M12 CPY	M12	12,5	21	31	76	95			
SKB.40.115.M12CPY	TCB40 H115 M12 CPY	M12	12,5	21	31	96	115			
SKB.40.145.M12CPY	TCB40 H145 M12 CPY	M12	12,5	21	38	126	145			
SKB.40.175.M12CPY	TCB40 H175 M12 CPY	M12	12,5	21	42	156	175			
SKB.40.55.M16CPY	TCB40 H 55 M16 CPY	M16	17	29	34	36	55			
SKB.40.75.M16CPY	TCB40 H 75 M16 CPY	M16	17	29	34	56	75			
SKB.40.95.M16CPY	TCB40 H 95 M16 CPY	M16	17	29	34	76	95			
SKB.40.115.M16CPY	TCB40 H115 M16 CPY	M16	17	29	39	96	115			
SKB.40.145.M16CPY	TCB40 H145 M16 CPY	M16	17	29	39	126	145			
SKB.40.175.M16CPY	TCB40 H175 M16 CPY	M16	17	29	39	156	175			



# FORTE SERRAGGIO

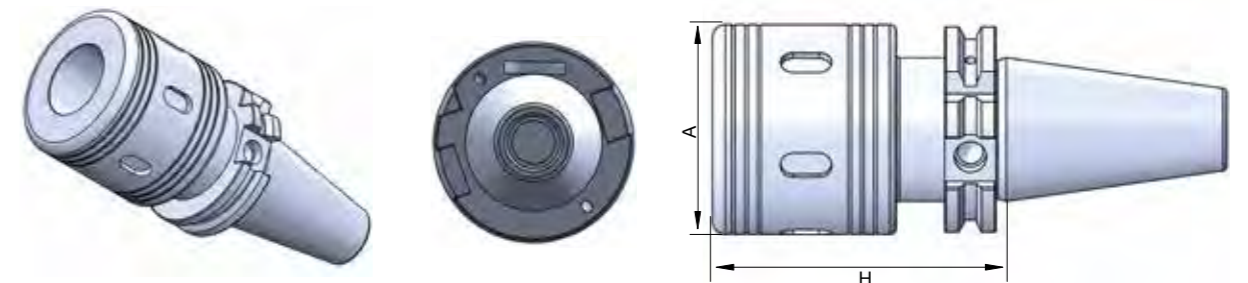
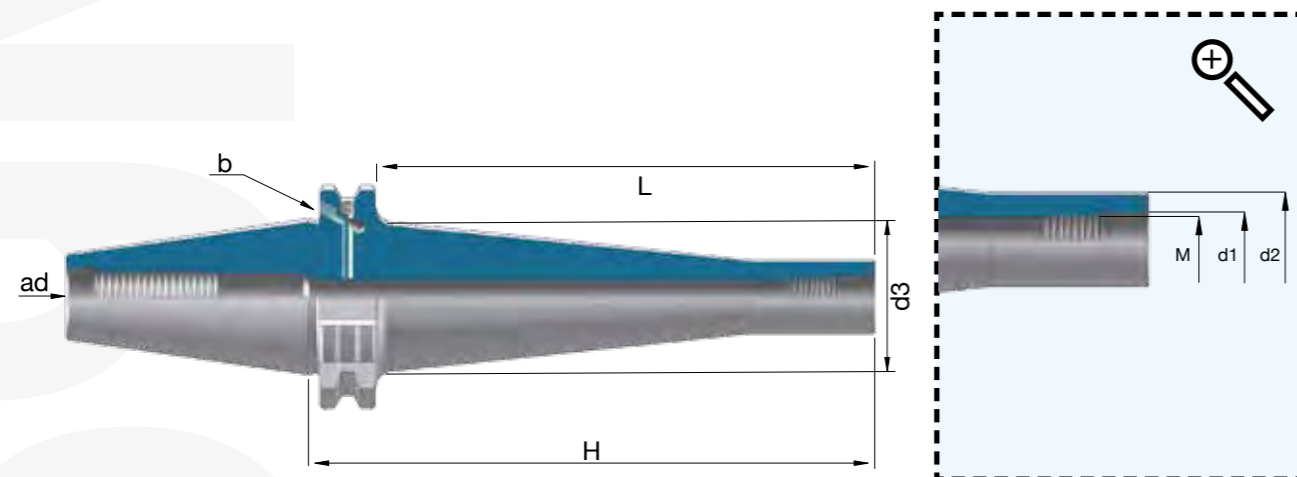
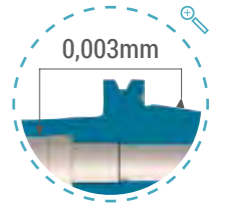
## POWER MILLING CHUCKS

SK-DIN69871



### PORTA TESTINE FILETTATE - FOR SCREWED MILLIN CUTTER - SKB50

Cod.	TYPE	M	d1	d2	d3	L	H	AT2	G2.5/25000	AD/B
SKB.50.69.M8CPY	TCB50 H 69 M8 CPY	M8	8,5	13	23	50	69			
SKB.50.119.M8CPY	TCB50 H 119 M8 CPY	M8	8,5	13	25	100	119			
SKB.50.169.M8CPY	TCB50 H 169 M8 CPY	M8	8,5	13	30	150	169			
SKB.50.85.M10CPY	TCB50 H 85 M10 CPY	M10	10,5	18	23	50	85			
SKB.50.135.M10CPY	TCB50 H 135 M10 CPY	M10	10,5	18	32	100	135			
SKB.50.185.M10CPY	TCB50 H 185 M10 CPY	M10	10,5	18	36.5	150	185			
SKB.50.85.M12CPY	TCB50 H 85 M12 CPY	M12	12,5	21	24	50	85			
SKB.50.135.M12CPY	TCB50 H 135 M12 CPY	M12	12,5	21	33	100	125			
SKB.50.185.M12CPY	TCB50 H 185 M12 CPY	M12	12,5	21	40	150	185			
SKB.50.85.M16CPY	TCB50 H 85 M16 CPY	M16	17	29	34	50	85			
SKB.50.135.M16CPY	TCB50 H 135 M16 CPY	M16	17	29	36	100	135			
SKB.50.185.M16CPY	TCB50 H 185 M16 CPY	M16	17	29	42.5	150	185			

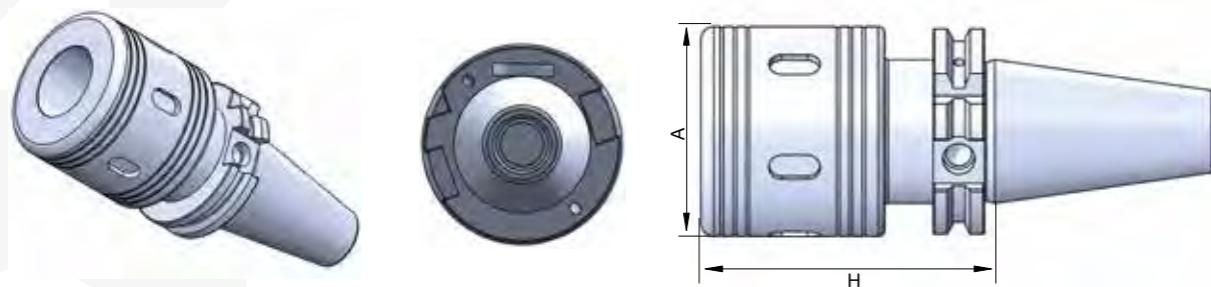


### FORTE SERRAGGIO - POWER MILLING CHUCK - SKB40

Cod.	TYPE	A	H	PINZE	AT2	G6.3/15000	AD/B
SKB.40.75.FP20	TCB40 H75 D20	46	75	4SR20 - Ø 3 al Ø18			
SKB.40.95.FP32	TCB40 H95 D32	62	95	4SR32 - Ø 6 al Ø25			

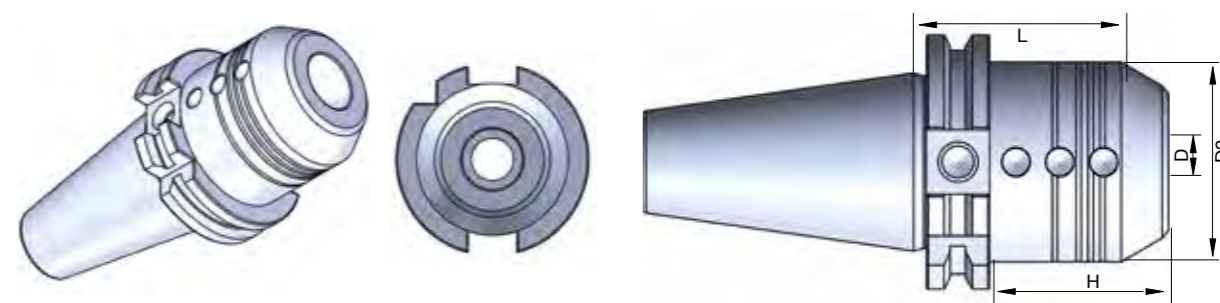
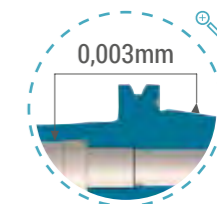
# IDRAULICO

## HYDRAULIC EXPANSIONS CHUCK



### FORTE SERRAGGIO - POWER MILLING CHUCK - SKB50

Cod.	TYPE	A	H	PINZE	AT2	G6.3/15000	AD/B
SKB.50.85.FP20	TCB50 H85 D20	46	85	4SR20 - Ø 3 al Ø18			
SKB.50.85.FP32	TCB50 H85 D32	62	85	4SR32 - Ø 6 al Ø25			

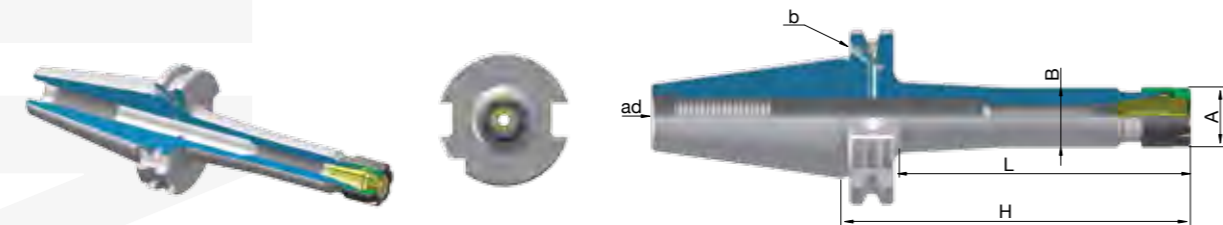
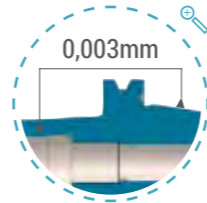


### IDRAULICO - HYDRAULIC EXPANSIONS CHUCK - SKB40 - SKB50

Cod.	TYPE	L	H	D2	D	AT2	G6.3/15000	AD/B
SKB.40.77.HY12	TCB40 H77 D12	77	58	32	12			
SKB.40.82.HY20	TCB40 H82 D20	82	63	42	20			
SKB.40.117.HY25	TCB40 H117 D25	117	98	50	25			
SKB.40.117.HY32	TCB40 H117 D32	117	98	60	32			
SKB.50.82.HY20	TCB50 H82 D20	82	63	42	20			
SKB.50.91.HY32	TCB50 H91 D32	91	72	60	32			

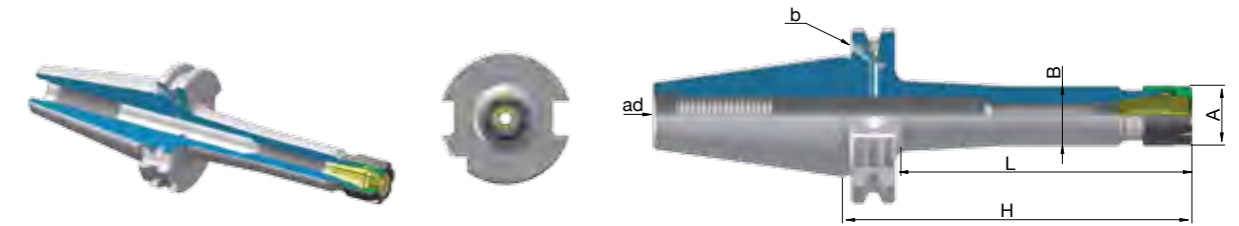
# PORTAPINZA ER DIN6499

## COLLET CHUCK FOR ER DIN6499



## PORTAPINZA ER MINI - COLLET CHUCK ER MINI - SKB40

Cod.	TYPE	CAPACITÀ RANGE	AT2				G6.3/15000			AD/B	
			A	B	L	H	A	B	L	H	
SKB.40.130.ER8M	TCB40 H130 ERX8M	1 ÷ 5 mm	12	12	110,9	130					
SKB.40.100.ER11M	TCB40 H100 ERX11M	1 ÷ 7 mm	16	16	80,9	100					
SKB.40.125.ER11M	TCB40 H125 ERX11M	1 ÷ 7 mm	16	16	105,9	125					
SKB.40.150.ER11M	TCB40 H150 ERX11M	1 ÷ 7 mm	16	16	130,9	150					
SKB.40.70.ER16M	TCB40 H 70 ERX16M	1 ÷ 10 mm	22	22	50,9	70					
SKB.40.100.ER16M	TCB40 H100 ERX16M	1 ÷ 10 mm	22	22	80,9	100					
SKB.40.125.ER16M	TCB40 H125 ERX16M	1 ÷ 10 mm	22	22	105,9	125					
SKB.40.150.ER16M	TCB40 H150 ERX16M	1 ÷ 10 mm	22	22	130,9	150					
SKB.40.100.ER20M	TCB40 H100 ERX20M	1 ÷ 13 mm	28	28	80,9	100					
SKB.40.135.ER20M	TCB40 H135 ERX20M	1 ÷ 13 mm	28	28	115,9	135					
SKB.40.150.ER20M	TCB40 H150 ERX20M	1 ÷ 13 mm	28	28	130,9	150					
SKB.40.100.ER25M	TCB40 H100 ERX25M	1 ÷ 16 mm	35	30	80,9	100					
SKB.40.150.ER25M	TCB40 H150 ERX25M	1 ÷ 16 mm	35	30	130,9	150					
SKB.40.200.ER25M	TCB40 H200 ERX25M	1 ÷ 16 mm	35	30	180,9	200					



## PORTAPINZA ER MINI - COLLET CHUCK ER MINI - SKB50

Cod.	TYPE	CAPACITÀ RANGE	AT2		G6.3/15000		AD/B	
			A	B	L	H	A	B
SKB.50.130.ER16M	TCB50 H130 ERX16M	1 ÷ 10 mm	22	22	110,9	130		
SKB.50.160.ER16M	TCB50 H160 ERX16M	1 ÷ 10 mm	22	22	140,9	160		
SKB.50.200.ER16M	TCB50 H200 ERX16M	1 ÷ 10 mm	22	22	180,9	200		
SKB.50.130.ER20M	TCB50 H130 ERX20M	1 ÷ 13 mm	28	28	110,9	130		
SKB.50.130.ER25M	TCB50 H130 ERX25M	1 ÷ 16 mm	35	35	110,9	130		
SKB.50.160.ER25M	TCB50 H160 ERX25M	1 ÷ 16 mm	35	35	140,9	160		



## PORTAPINZA ER - COLLET CHUCK ER - SK30

Cod.	TYPE	CAPACITÀ RANGE	AT2		G6.3/15000		AD	
			A	H	A	H	A	H
SK.30.63.ER16	TC30 H 63 ERX16	1 ÷ 10 mm	32	63				
SK.30.100.ER16	TC30 H100 ERX16	1 ÷ 10 mm	32	100				
SK.30.63.ER20	TC30 H 63 ERX20	1 ÷ 13 mm	35	63				
SK.30.63.ER25	TC30 H 63 ERX25	1 ÷ 16 mm	42	63				
SK.30.90.ER25	TC30 H 90 ERX25	1 ÷ 16 mm	42	90				
SK.30.63.ER32	TC30 H 63 ERX32	2 ÷ 20 mm	50	63				
SK.30.100.ER32	TC30 H100 ERX32	2 ÷ 20 mm	50	100				





## PORTAPINZA ER - COLLET CHUCK ER - SKB40

Cod.	TYPE	CAPACITÀ RANGE	AD/B	
			A	H
SKB.40.70.ER16	TCB40 H 70 ERX16	1 ÷ 10 mm	32	70
SKB.40.100.ER16	TCB40 H100 ERX16	1 ÷ 10 mm	32	100
SKB.40.120.ER16	TCB40 H120 ERX16	1 ÷ 10 mm	32	120
SKB.40.130.ER16	TCB40 H130 ERX16	1 ÷ 10 mm	32	130
SKB.40.150.ER16	TCB40 H150 ERX16	1 ÷ 10 mm	32	150
SKB.40.160.ER16	TCB40 H160 ERX16	1 ÷ 10 mm	32	160
SKB.40.200.ER16	TCB40 H200 ERX16	1 ÷ 10 mm	32	200
SKB.40.70.ER20	TCB40 H 70 ERX20	1 ÷ 13 mm	35	70
SKB.40.100.ER20	TCB40 H100 ERX20	1 ÷ 13 mm	35	100
SKB.40.130.ER20	TCB40 H130 ERX20	1 ÷ 13 mm	35	130
SKB.40.160.ER20	TCB40 H160 ERX20	1 ÷ 13 mm	35	160
SKB.40.70.ER25	TCB40 H 70 ERX25	1 ÷ 16 mm	42	70
SKB.40.100.ER25	TCB40 H100 ERX25	1 ÷ 16 mm	42	100
SKB.40.130.ER25	TCB40 H130 ERX25	1 ÷ 16 mm	42	130
SKB.40.160.ER25	TCB40 H160 ERX25	1 ÷ 16 mm	42	160
SKB.40.200.ER25	TCB40 H200 ERX25	1 ÷ 16 mm	42	200
SKB.40.47.ER32	TCB40 H 47 ERX32	2 ÷ 20 mm	50	47
SKB.40.70.ER32	TCB40 H 70 ERX32	2 ÷ 20 mm	50	70
SKB.40.100.ER32	TCB40 H100 ERX32	2 ÷ 20 mm	50	100
SKB.40.130.ER32	TCB40 H130 ERX32	2 ÷ 20 mm	50	130
SKB.40.160.ER32	TCB40 H160 ERX32	2 ÷ 20 mm	50	160
SKB.40.200.ER32	TCB40 H200 ERX32	2 ÷ 20 mm	50	200
SKB.40.70.ER40	TCB40 H 70 ERX40	3 ÷ 26 mm	63	70
SKB.40.100.ER40	TCB40 H100 ERX40	3 ÷ 26 mm	63	100
SKB.40.130.ER40	TCB40 H130 ERX40	3 ÷ 26 mm	63	130
SKB.40.160.ER40	TCB40 H160 ERX40	3 ÷ 26 mm	63	160
SKB.40.200.ER40	TCB40 H200 ERX40	3 ÷ 26 mm	63	200



## PORTAPINZA ER - COLLET CHUCK ER - SKB45

Cod.	TYPE	CAPACITÀ RANGE	AD/B	
			A	H
SKB.45.80.ER32	TCB45 H80 ERX32	2 ÷ 20 mm	50	80
SKB.45.100.ER32	TCB45 H100 ERX32	2 ÷ 20 mm	50	100
SKB.45.80.ER40	TCB45 H80 ERX40	3 ÷ 26 mm	63	80



## PORTAPINZA ER - COLLET CHUCK ER - SKB50

Cod.	TYPE	CAPACITÀ RANGE	AD/B	
			A	H
SKB.50.100.ER16	TCB50 H100 ERX16	1 ÷ 10 mm	32	100
SKB.50.160.ER16	TCB50 H160 ERX16	1 ÷ 10 mm	32	160
SKB.50.200.ER16	TCB50 H200 ERX16	1 ÷ 10 mm	32	200
SKB.50.100.ER20	TCB50 H100 ERX20	1 ÷ 13 mm	35	100
SKB.50.160.ER20	TCB50 H160 ERX20	1 ÷ 13 mm	35	160
SKB.50.80.ER25	TCB50 H 80 ERX25	1 ÷ 16 mm	42	80
SKB.50.100.ER25	TCB50 H100 ERX25	1 ÷ 16 mm	42	100
SKB.50.130.ER25	TCB50 H130 ERX25	1 ÷ 16 mm	42	130
SKB.50.160.ER25	TCB50 H160 ERX25	1 ÷ 16 mm	42	160
SKB.50.200.ER25	TCB50 H200 ERX25	1 ÷ 16 mm	42	200
SKB.50.80.ER32	TCB50 H 80 ERX32	2 ÷ 20 mm	50	80
SKB.50.100.ER32	TCB50 H100 ERX32	2 ÷ 20 mm	50	100
SKB.50.130.ER32	TCB50 H130 ERX32	2 ÷ 20 mm	50	130
SKB.50.160.ER32	TCB50 H160 ERX32	2 ÷ 20 mm	50	160
SKB.50.200.ER32	TCB50 H200 ERX32	2 ÷ 20 mm	50	200
SKB.50.250.ER32	TCB50 H250 ERX32	2 ÷ 20 mm	50	250
SKB.50.80.ER40	TCB50 H 80 ERX40	3 ÷ 30 mm	63	80
SKB.50.100.ER40	TCB50 H100 ERX40	3 ÷ 30 mm	63	100
SKB.50.130.ER40	TCB50 H130 ERX40	3 ÷ 30 mm	63	130
SKB.50.160.ER40	TCB50 H160 ERX40	3 ÷ 30 mm	63	160
SKB.50.200.ER40	TCB50 H200 ERX40	3 ÷ 30 mm	63	200
SKB.50.100.ER50	TCB50 H100 ERX50	6 ÷ 34 mm	78	100
SKB.50.130.ER50	TCB50 H130 ERX50	6 ÷ 34 mm	78	130
SKB.50.160.ER50	TCB50 H160 ERX50	6 ÷ 34 mm	78	160



Fig.1

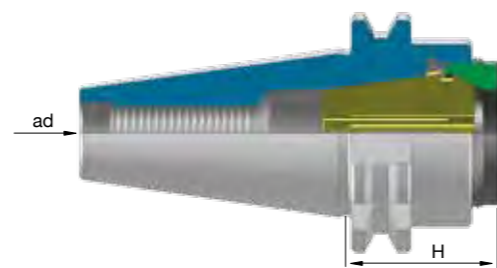
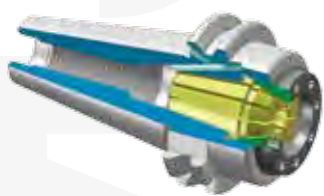
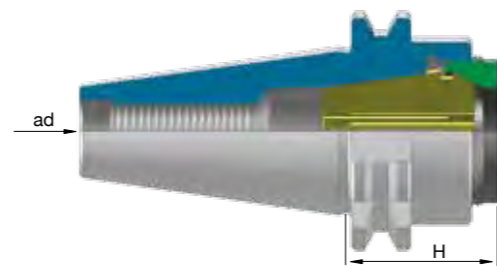


Fig.2



### PORTAPINZA ER EXTRACORTO - SHORTS COLLET CHUCK ER - SK40 - SK50

Cod.	TYPE	CAPACITÀ RANGE	AT2 G6.3/15000 AD	
				H
SK.40.21.ER25	TC40 H21 ERX25	1 ÷ 16 mm		21
SK.40.21.ER32	TC40 H21 ERX32	2 ÷ 20 mm		21
SK.50.21.ER32	TC50 H21 ERX32	2 ÷ 20 mm		21

FORNIBILI CON GHIERA CON FILETTO ESTERNO FORMA A CON FORI (Fig.1) E CON ESAGONO (Fig.2)  
 AVAILABLE WITH EXTERNALLY THREADED NUTS ( Fig.1 ) AND EXTERNALLY THREADED HEXAGONAL NUTS ( Fig.2 )

Fig.1

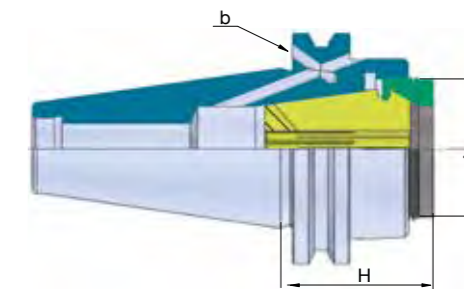
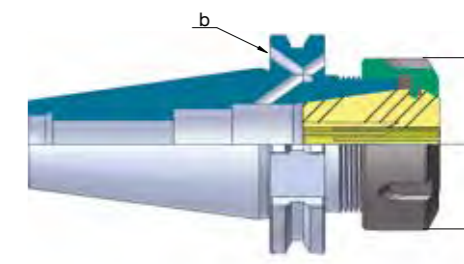


Fig.2



### PORTAPINZA ER EXTRACORTO - SHORTS COLLET CHUCK ER - SKB40 - SKB50

Cod.	TYPE	CAPACITÀ RANGE	AT2 G6.3/15000 AD/B	
			A	H
SKB.40.40.ER32	TCB40 H40 ERX32	2 ÷ 20 mm	Hex 32	40
SKB.40.47.ER32	TCB40 H47 ERX32	2 ÷ 20 mm	40	47
SKB.50.40.ER32	TCB50 H40 ERX32	2 ÷ 20 mm	Hex 32	40
SKB.50.47.ER32	TCB50 H47 ERX32	2 ÷ 20 mm	40	47

FORNIBILI CON GHIERA CON FILETTO ESTERNO FORMA A CON FORI (Fig.1), CON ESAGONO E CON GHIERA STANDARD (Fig.2)  
 AVAILABLE WITH EXTERNALLY THREADED NUTS ( Fig.1 ), EXTERNALLY THREADED HEXAGONAL NUTS AND STANDARD CLAMPING NUT ( Fig.2 )

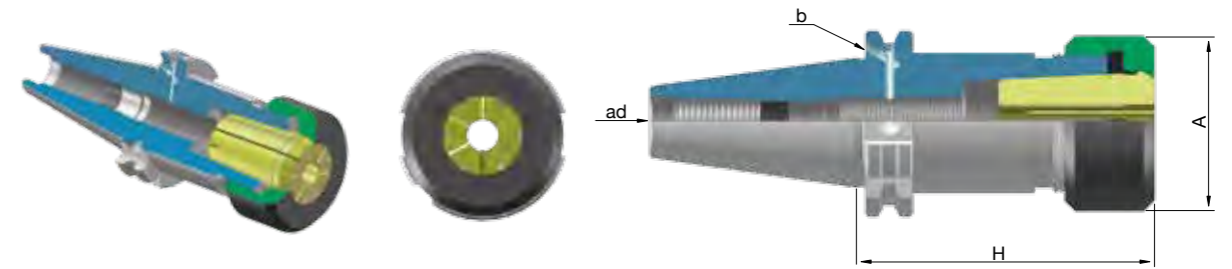
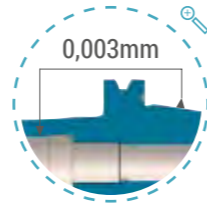


### CASSETTA MANDRINO PORTAPINZE - COLLET CHUCKS KIT

Cod.	Portapinze	Pinze nella serie	Chiave
KIT578	TCB40 H70 ERX32	ERX32: Ø 3 ÷ 20 progress. 1,0 mm - 18 pinze	ERX32 STAND
KIT579	TCB40 H70 ERX40	ERX40: Ø 4 ÷ 26 progress. 1,0 mm - 23 pinze	ERX40 STAND
KIT580	TCB50 H80 ERX32	ERX32: Ø 3 ÷ 20 progress. 1,0 mm - 18 pinze	ERX32 STAND
KIT581	TCB50 H80 ERX40	ERX40: Ø 4 ÷ 26 progress. 1,0 mm - 23 pinze	ERX40 STAND

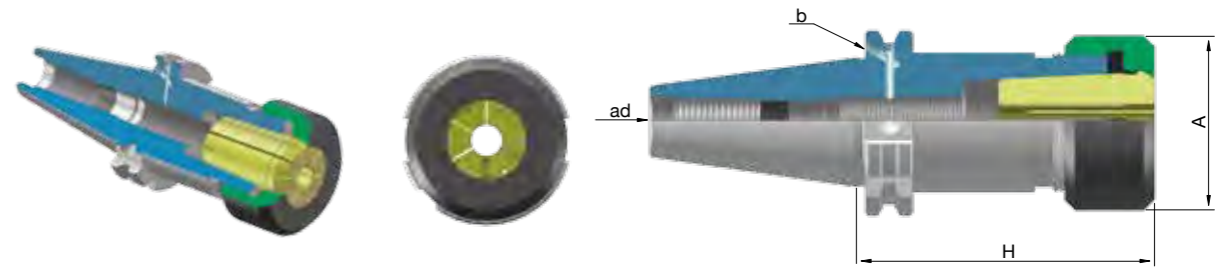
# PORTAPINZA EOC DIN6388

## COLLET CHUCK FOR EOC DIN6388



### PORTAPINZA PER EOC - COLLET CHUCK FOR EOC - SKB40

Cod.	TYPE	CAPACITÀ RANGE	AD/B	
			A	H
SKB.40.70.EOC16	TCB40 H 70 EOC16	2 ÷ 16 mm	43	70
SKB.40.100.EOC16	TCB40 H100 EOC16	2 ÷ 16 mm	43	100
SKB.40.70.EOC25	TCB40 H 70 EOC25	2 ÷ 25 mm	60	70
SKB.40.100.EOC25	TCB40 H100 EOC25	2 ÷ 25 mm	60	100
SKB.40.90.EOC32	TCB40 H 90 EOC32	4 ÷ 32 mm	72	90



### PORTAPINZA PER EOC - COLLET CHUCK FOR EOC - SKB50

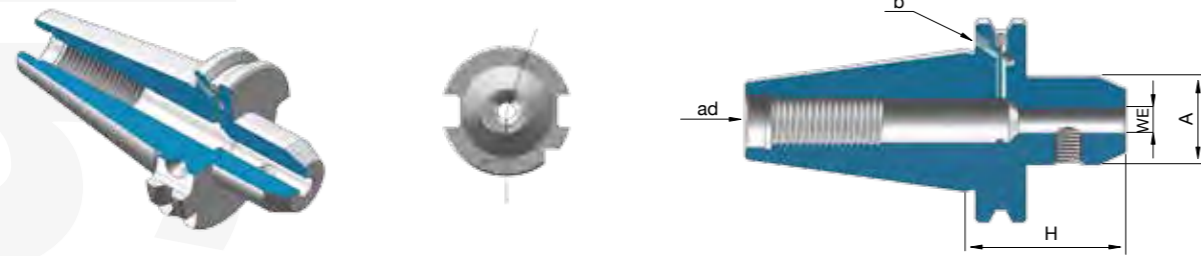
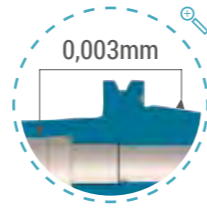
Cod.	TYPE	CAPACITÀ RANGE	AD/B	
			A	H
SKB.50.70.EOC16	TCB50 H 70 EOC16	2 ÷ 16 mm	43	70
SKB.50.70.EOC25	TCB50 H 70 EOC25	2 ÷ 25 mm	60	70
SKB.50.80.EOC32	TCB50 H 80 EOC32	4 ÷ 32 mm	72	80
SKB.50.100.EOC32	TCB50 H100 EOC32	4 ÷ 32 mm	72	100

### PORTAPINZA PER EOC - COLLET CHUCK FOR EOC - SK30

Cod.	TYPE	CAPACITÀ RANGE	AD	
			A	H
SK.30.60.EOC16	TC30 H60 EOC16	2 ÷ 16 mm	43	60
SK.30.80.EOC25	TC30 H80 EOC25	2 ÷ 25 mm	60	80

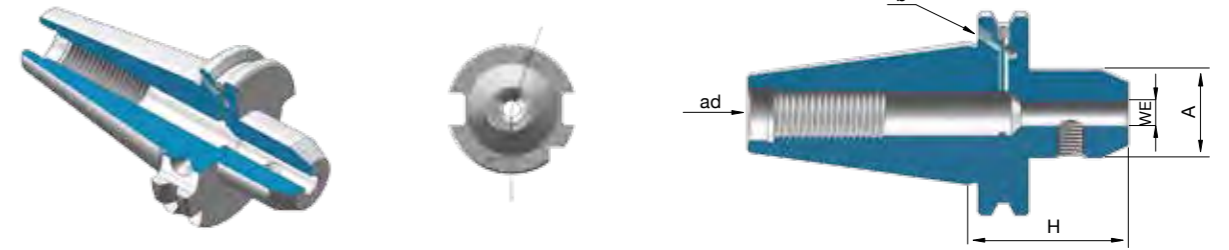
# PER FRESE WELDON

## END MILL HOLDERS



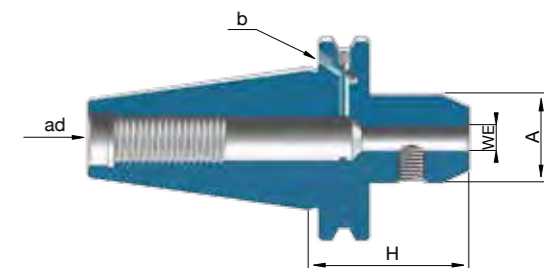
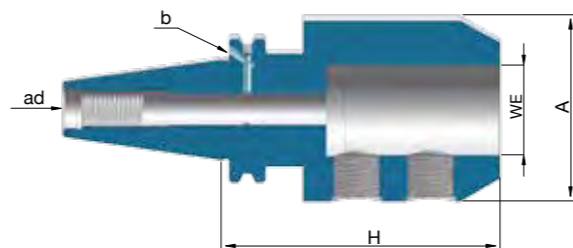
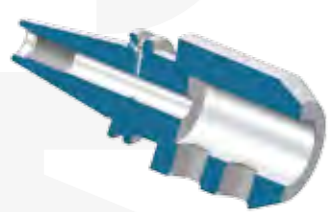
### PER FRESE WELDON - END MILL HOLDERS - SKB40

Cod.	TYPE	AT2			G6.3/15000			AD/B		
		A	H	WE	A	H	WE	A	H	WE
SKB.40.50.WE6	TCB40 H 50 WE6	25	50	6						
SKB.40.100.WE6	TCB40 H100 WE6	25	100	6						
SKB.40.130.WE6	TCB40 H130 WE6	25	130	6						
SKB.40.160.WE6	TCB40 H160 WE6	25	160	6						



### PER FRESE WELDON - END MILL HOLDERS - SKB40

Cod.	TYPE	AT2			G6.3/15000			AD/B		
		A	H	WE	A	H	WE	A	H	WE
SKB.40.200.WE6	TCB40 H200 WE6	25	200	6						
SKB.40.50.WE8	TCB40 H 50 WE8	28	50	8						
SKB.40.100.WE8	TCB40 H100 WE8	28	100	8						
SKB.40.130.WE8	TCB40 H130 WE8	28	130	8						
SKB.40.160.WE8	TCB40 H160 WE8	28	160	8						
SKB.40.200.WE8	TCB40 H200 WE8	28	200	8						
SKB.40.50.WE10	TCB40 H 50 WE10	35	50	10						
SKB.40.100.WE10	TCB40 H100 WE10	35	100	10						
SKB.40.130.WE10	TCB40 H130 WE10	35	130	10						
SKB.40.160.WE10	TCB40 H160 WE10	35	160	10						
SKB.40.200.WE10	TCB40 H200 WE10	35	200	10						
SKB.40.50.WE12	TCB40 H 50 WE12	42	50	12						
SKB.40.100.WE12	TCB40 H100 WE12	42	100	12						
SKB.40.130.WE12	TCB40 H130 WE12	42	130	12						
SKB.40.160.WE12	TCB40 H160 WE12	42	160	12						
SKB.40.200.WE12	TCB40 H200 WE12	42	200	12						
SKB.40.50.WE14	TCB40 H 50 WE14	44	50	14						
SKB.40.100.WE14	TCB40 H100 WE14	44	100	14						
SKB.40.130.WE14	TCB40 H130 WE14	44	130	14						
SKB.40.160.WE14	TCB40 H160 WE14	44	160	14						
SKB.40.200.WE14	TCB40 H200 WE14	44	200	14						
SKB.40.63.WE16	TCB40 H 63 WE16	48	63	16						
SKB.40.100.WE16	TCB40 H100 WE16	48	100	16						
SKB.40.130.WE16	TCB40 H130 WE16	48	130	16						
SKB.40.160.WE16	TCB40 H160 WE16	48	160	16						
SKB.40.200.WE16	TCB40 H200 WE16	48	200	16						



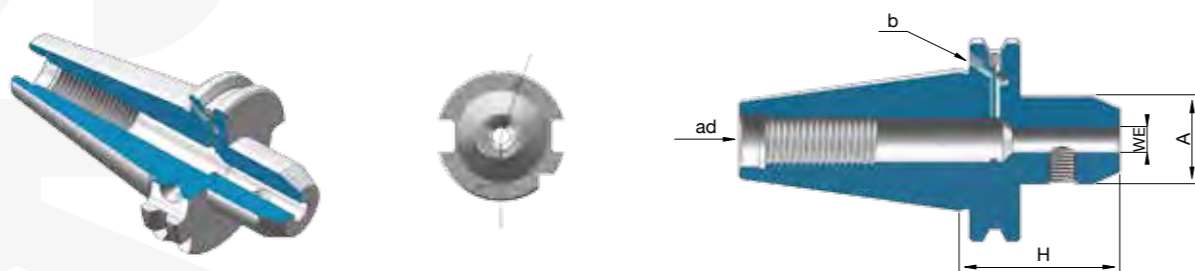
### PER FRESE WELDON - END MILL HOLDERS - SKB40

Cod.	TYPE	AT2 G6.3/15000 AD/B		
		A	H	WE
SKB.40.63.WE18	TCB40 H 63 WE18	50	63	18
SKB.40.100.WE18	TCB40 H100 WE18	50	100	18
SKB.40.130.WE18	TCB40 H130 WE18	50	130	18
SKB.40.160.WE18	TCB40 H160 WE18	50	160	18
SKB.40.200.WE18	TCB40 H200 WE18	50	200	18
SKB.40.63.WE20	TCB40 H 63 WE20	52	63	20
SKB.40.100.WE20	TCB40 H100 WE20	52	100	20
SKB.40.130.WE20	TCB40 H130 WE20	52	130	20
SKB.40.160.WE20	TCB40 H160 WE20	52	160	20
SKB.40.200.WE20	TCB40 H200 WE20	52	200	20
SKB.40.100.WE25	TCB40 H100 WE25	65	100	25
SKB.40.130.WE25	TCB40 H130 WE25	65	130	25
SKB.40.160.WE25	TCB40 H160 WE25	65	160	25
SKB.40.100.WE32	TCB40 H100 WE32	72	100	32
SKB.40.130.WE32	TCB40 H130 WE32	72	130	32
SKB.40.160.WE32	TCB40 H160 WE32	72	160	32
SKB.40.120.WE40	TCB40 H120 WE40	80	120	40

### PER FRESE WELDON - END MILL HOLDERS - SKB50

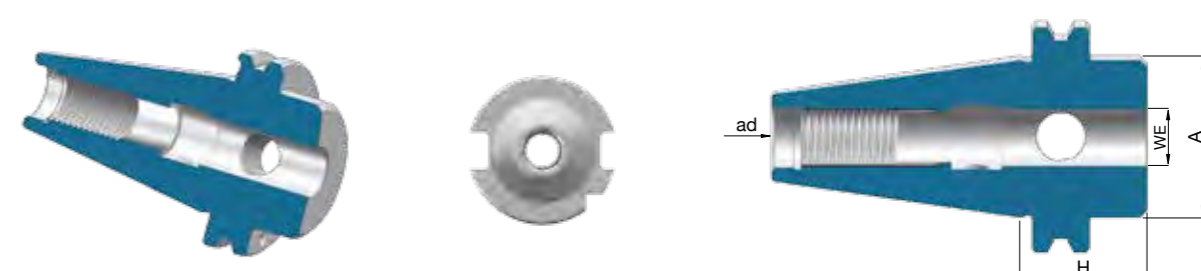
Cod.	TYPE	AT2 G6.3/15000 AD/B		
		A	H	WE
SKB.50.63.WE6	TCB50 H 63 WE 6	25	63	6
SKB.50.100.WE6	TCB50 H100 WE 6	25	100	6
SKB.50.130.WE6	TCB50 H130 WE 6	25	130	6
SKB.50.160.WE6	TCB50 H160 WE 6	25	160	6
SKB.50.200.WE6	TCB50 H200 WE 6	25	200	6
SKB.50.63.WE8	TCB50 H 63 WE 8	28	63	8
SKB.50.100.WE8	TCB50 H100 WE 8	28	100	8
SKB.50.130.WE8	TCB50 H130 WE 8	28	130	8
SKB.50.160.WE8	TCB50 H160 WE 8	28	160	8
SKB.50.200.WE8	TCB50 H200 WE 8	28	200	8
SKB.50.63.WE10	TCB50 H 63 WE10	35	63	10
SKB.50.100.WE10	TCB50 H100 WE10	35	100	10
SKB.50.130.WE10	TCB50 H130 WE10	35	130	10
SKB.50.160.WE10	TCB50 H160 WE10	35	160	10
SKB.50.200.WE10	TCB50 H200 WE10	35	200	10
SKB.50.63.WE12	TCB50 H 63 WE12	42	63	12
SKB.50.100.WE12	TCB50 H100 WE12	42	100	12
SKB.50.130.WE12	TCB50 H130 WE12	42	130	12
SKB.50.160.WE12	TCB50 H160 WE12	42	160	12
SKB.50.200.WE12	TCB50 H200 WE12	42	200	12
SKB.50.63.WE14	TCB50 H 63 WE14	44	63	14
SKB.50.100.WE14	TCB50 H100 WE14	44	100	14
SKB.50.130.WE14	TCB50 H130 WE14	44	130	14
SKB.50.160.WE14	TCB50 H160 WE14	44	160	14
SKB.50.200.WE14	TCB50 H200 WE14	44	200	14
SKB.50.63.WE16	TCB50 H 63 WE16	48	63	16
SKB.50.100.WE16	TCB50 H100 WE16	48	100	16
SKB.50.130.WE16	TCB50 H130 WE16	48	130	16
SKB.50.160.WE16	TCB50 H160 WE16	48	160	16
SKB.50.200.WE16	TCB50 H200 WE16	48	200	16
SKB.50.63.WE18	TCB50 H 63 WE18	50	63	18
SKB.50.100.WE18	TCB50 H100 WE18	50	100	18
SKB.50.130.WE18	TCB50 H130 WE18	50	130	18
SKB.50.160.WE18	TCB50 H160 WE18	50	160	18
SKB.50.200.WE18	TCB50 H200 WE18	50	200	18





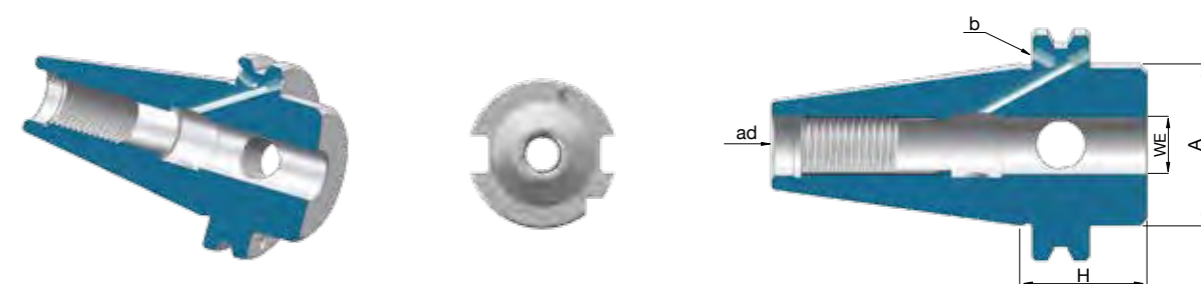
### PER FRESE WELDON - END MILL HOLDERS - SKB50

Cod.	TYPE	AT2		
		A	H	WE
SKB.50.63.WE20	TCB50 H 63 WE20	52	63	20
SKB.50.100.WE20	TCB50 H100 WE20	52	100	20
SKB.50.130.WE20	TCB50 H130 WE20	52	130	20
SKB.50.160.WE20	TCB50 H160 WE20	52	160	20
SKB.50.200.WE20	TCB50 H200 WE20	52	200	20
SKB.50.250.WE20	TCB50 H250 WE20	52	250	20
SKB.50.80.WE25	TCB50 H 80 WE25	65	80	25
SKB.50.100.WE25	TCB50 H100 WE25	65	100	25
SKB.50.130.WE25	TCB50 H130 WE25	65	130	25
SKB.50.160.WE25	TCB50 H160 WE25	65	160	25
SKB.50.200.WE25	TCB50 H200 WE25	65	200	25
SKB.50.250.WE25	TCB50 H250 WE25	65	250	25
SKB.50.100.WE32	TCB50 H100 WE32	72	100	32
SKB.50.130.WE32	TCB50 H130 WE32	72	130	32
SKB.50.160.WE32	TCB50 H160 WE32	72	160	32
SKB.50.200.WE32	TCB50 H200 WE32	72	200	32
SKB.50.250.WE32	TCB50 H250 WE32	72	250	32
SKB.50.112.WE40	TCB50 H112 WE40	80	112	40
SKB.50.130.WE40	TCB50 H130 WE40	80	130	40
SKB.50.160.WE40	TCB50 H160 WE40	80	160	40
SKB.50.200.WE40	TCB50 H200 WE40	80	200	40
SKB.50.130.WE50	TCB50 H130 WE50	90	130	50



### EXTRACORTI PER FRESE WELDON - SHORTS END MILL HOLDERS - SK30

Cod.	TYPE	A	AT2		
			SCREWS	H	WE
SK.30.35.WE16	TC 30 H 35 WE 16	32	M14 x 10	35	16
SK.30.35.WE20	TC 30 H 35 WE 20	36	M16 x 10	35	20



### EXTRACORTI PER FRESE WELDON - SHORTS END MILL HOLDERS - SKB40

Cod.	TYPE	A	AT2		
			SCREWS	H	WE
SKB.40.35.WE16	TCB40 H 35 WE16	44,4	M14x16	35	16
SKB.40.35.WE20	TCB40 H 35 WE20	44,4	M16x16	35	20
SKB.40.35.WE25	TCB40 H 35 WE25	44,4	M16x10	35	25
SKB.40.60.WE25	TCB40 H 60 WE25	50	M18x2x12 + M16x1x8	60	25
SKB.40.40.WE32	TCB40 H 40 WE32	72	M20x2x20 + M16x1x8	40	32
SKB.40.70.WE32	TCB40 H 70 WE32	72	M20x2x20 + M16x1x8	70	32



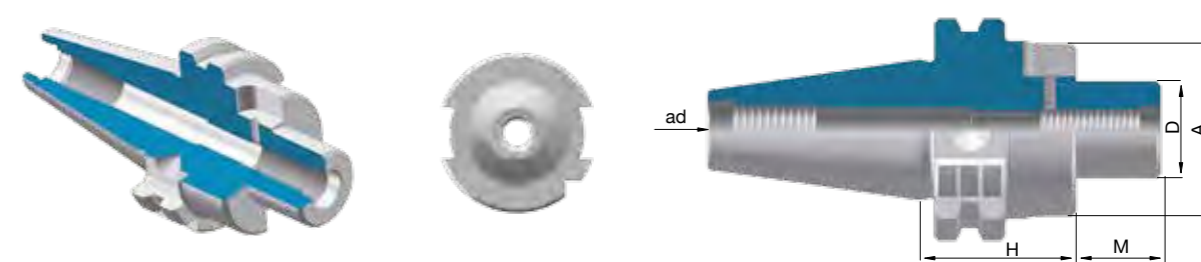
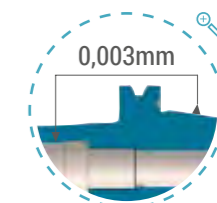
# PORTAFRESE FISSI

## SHELL END MILL HOLDERS



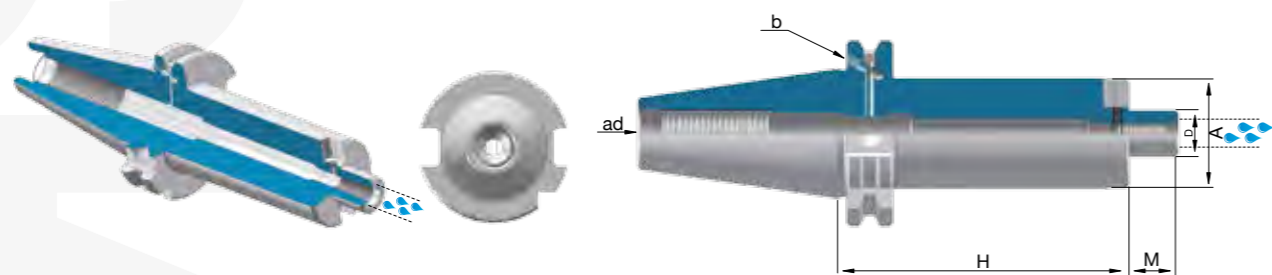
### EXTRACORTI PER FRESE WELDON - SHORTS END MILL HOLDERS - SKB50

Cod.	TYPE	A	SCREWS	AT2	
				G6.3/15000	AD/B
SKB.50.35.WE16	TCB50 H 35 WE16	70	M14x16	35	16
SKB.50.35.WE20	TCB50 H35 WE20	70	M16x16	35	20
SKB.50.35.WE25	TCB50 H35 WE25	70	M8x2x20	35	25
SKB.50.35.WE32	TCB50 H 35 WE32	70	M20x2x20	35	32
SKB.50.35.WE40	TCB50 H 35 WE40	80	M20x2x20	35	40



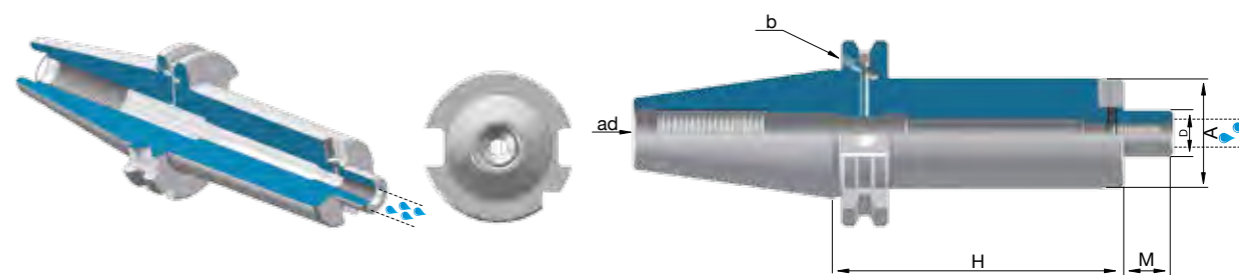
### PORTAFRESE FISSI - SHELL END MILL HOLDERS - SK30

Cod.	TYPE	A	D	AT2	
				G6.3/15000	AD
SK.30.35.D16S	TC30 H35 D16S	32	16	17	35
SK.30.35.D22S	TC30 H35 D22S	40	22	19	35
SK.30.60.D27S	TC30 H60 D27S	50	27	21	60
SK.30.60.D32S	TC30 H60 D32S	58	32	24	60



### PORTAFRESE FISSI - SHELL END MILL HOLDERS - SKB40

Cod.	TYPE	A	D	AT2		G6.3/15000		AD/B	
				M	H	M	H	M	H
SKB.40.35.D16S	TCB40 H 35 D16S	38	16	17	35				
SKB.40.50.D16S	TCB40 H 50 D16S	38	16	17	50				
SKB.40.100.D16S	TCB40 H100 D16S	38	16	17	100				
SKB.40.130.D16S	TCB40 H130 D16S	38	16	17	130				
SKB.40.160.D16S	TCB40 H160 D16S	38	16	17	160				
SKB.40.200.D16S	TCB40 H200 D16S	38	16	17	200				
SKB.40.35.D22S	TCB40 H 35 D22S	48	22	19	35				
SKB.40.45.D22S	TCB40 H 45 D22S	48	22	19	45				
SKB.40.100.D22S	TCB40 H100 D22S	48	22	19	100				
SKB.40.130.D22S	TCB40 H130 D22S	48	22	19	130				
SKB.40.160.D22S	TCB40 H160 D22S	48	22	19	160				
SKB.40.200.D22S	TCB40 H200 D22S	48	22	19	200				
SKB.40.35.D27S	TCB40 H 35 D27S	58	27	21	35				
SKB.40.50.D27S	TCB40 H 50 D27S	58	27	21	50				
SKB.40.100.D27S	TCB40 H100 D27S	58	27	21	100				
SKB.40.130.D27S	TCB40 H130 D27S	58	27	21	130				
SKB.40.160.D27S	TCB40 H160 D27S	58	27	21	160				
SKB.40.200.D27S	TCB40 H200 D27S	58	27	21	200				
SKB.40.50.D32S	TCB40 H 50 D32S	78	32	24	50				
SKB.40.55.D32S	TCB40 H 55 D32S	78	32	24	55				
SKB.40.100.D32S	TCB40 H100 D32S	78	32	24	100				
SKB.40.130.D32S	TCB40 H130 D32S	78	32	24	130				
SKB.40.160.D32S	TCB40 H160 D32S	78	32	24	160				
SKB.40.200.D32S	TCB40 H200 D32S	78	32	24	200				
SKB.40.50.D40S	TCB40 H 50 D40S	88	40	27	50				
SKB.40.60.D40S	TCB40 H 60 D40S	88	40	27	60				
SKB.40.100.D40S	TCB40 H100 D40S	88	40	27	100				
SKB.40.130.D40S	TCB40 H130 D40S	88	40	27	130				
SKB.40.160.D40S	TCB40 H160 D40S	88	40	27	160				
SKB.40.200.D40S	TCB40 H200 D40S	88	40	27	200				

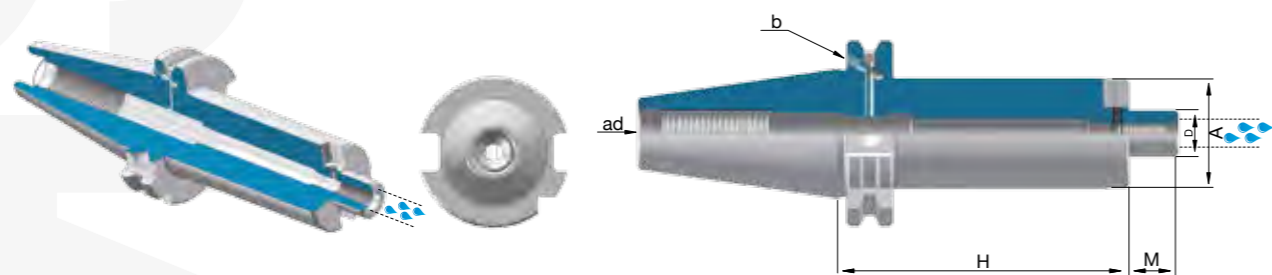


### PORTAFRESE FISSI - SHELL END MILL HOLDERS - SKB50

D32SCod.	TYPE	A	D	AT2		G6.3/15000		AD/B	
				M	H	M	H	M	H
SKB.50.35.D16S	TCB50 H 35 D16S	38	16	17	35				
SKB.50.45.D16S	TCB50 H 45 D16S	38	16	17	45				
SKB.50.100.D16S	TCB50 H100 D16S	38	16	17	100				
SKB.50.130.D16S	TCB50 H130 D16S	38	16	17	130				
SKB.50.160.D16S	TCB50 H160 D16S	38	16	17	160				
SKB.50.200.D16S	TCB50 H200 D16S	38	16	17	200				
SKB.50.250.D16S	TCB50 H250 D16S	38	16	17	250				
SKB.50.300.D16S	TCB50 H300 D16S	38	16	17	300				
SKB.50.350.D16S	TCB50 H350 D16S	38	16	17	350				
SKB.50.35.D22S	TCB50 H 35 D22S	48	22	19	35				
SKB.50.45.D22S	TCB50 H 45 D22S	48	22	19	45				
SKB.50.100.D22S	TCB50 H100 D22S	48	22	19	100				
SKB.50.130.D22S	TCB50 H130 D22S	48	22	19	130				
SKB.50.160.D22S	TCB50 H160 D22S	48	22	19	160				
SKB.50.200.D22S	TCB50 H200 D22S	48	22	19	200				
SKB.50.250.D22S	TCB50 H250 D22S	48	22	19	250				
SKB.50.300.D22S	TCB50 H300 D22S	48	22	19	300				
SKB.50.350.D22S	TCB50 H350 D22S	48	22	19	350				
SKB.50.400.D22S	TCB50 H400 D22S	48	22	19	400				
SKB.50.35.D27S	TCB50 H 35 D27S	58	27	21	35				
SKB.50.45.D27S	TCB50 H 45 D27S	58	27	21	45				
SKB.50.100.D27S	TCB50 H100 D27S	58	27	21	100				
SKB.50.130.D27S	TCB50 H130 D27S	58	27	21	130				
SKB.50.160.D27S	TCB50 H160 D27S	58	27	21	160				
SKB.50.200.D27S	TCB50 H200 D27S	58	27	21	200				
SKB.50.250.D27S	TCB50 H250 D27S	58	27	21	250				
SKB.50.300.D27S	TCB50 H300 D27S	58	27	21	300				
SKB.50.350.D27S	TCB50 H350 D27S	58	27	21	350				
SKB.50.400.D27S	TCB50 H400 D27S	58	27	21	400				
SKB.50.35.D32S	TCB50 H 35 D32S	78	32	24	35				
SKB.50.50.D32S	TCB50 H 50 D32S	78	32	24	50				
SKB.50.100.D32S	TCB50 H100 D32S	78	32	24	100				
SKB.50.130.D32S	TCB50 H130 D32S	78	32	24	130				
SKB.50.160.D32S	TCB50 H160 D32S	78	32	24	160				
SKB.50.200.D32S	TCB50 H200 D32S	78	32	24	200				
SKB.50.250.D32S	TCB50 H250 D32S	78	32	24	250				
SKB.50.300.D32S	TCB50 H300 D32S	78	32	24	300				
SKB.50.350.D32S	TCB50 H350 D32S	78	32	24	350				

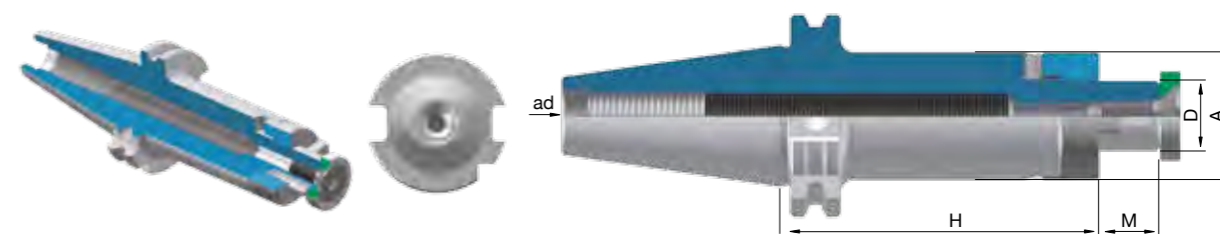
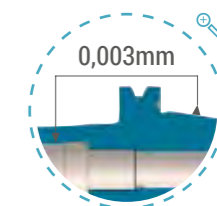
# PORTAFRESE COMBINATI

## COMBI SHELL END MILL HOLDERS



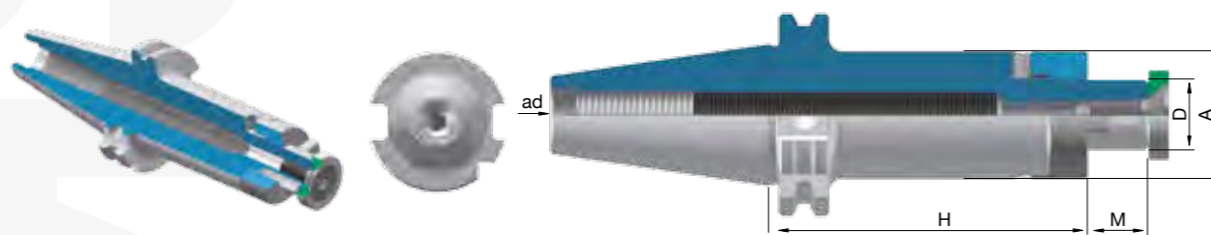
### PORTAFRESE FISSI - SHELL END MILL HOLDERS - SKB50

Cod.	TYPE	A	D	AT2		G6.3/15000		AD/B	
SKB.50.35.D40S	TCB50 H 35 D40S	88	40			27		35	
SKB.50.50.D40S	TCB50 H 50 D40S	88	40			27		50	
SKB.50.100.D40S	TCB50 H100 D40S	88	40			27		100	
SKB.50.130.D40S	TCB50 H130 D40S	88	40			27		130	
SKB.50.160.D40S	TCB50 H160 D40S	88	40			27		160	
SKB.50.200.D40S	TCB50 H200 D40S	88	40			27		200	



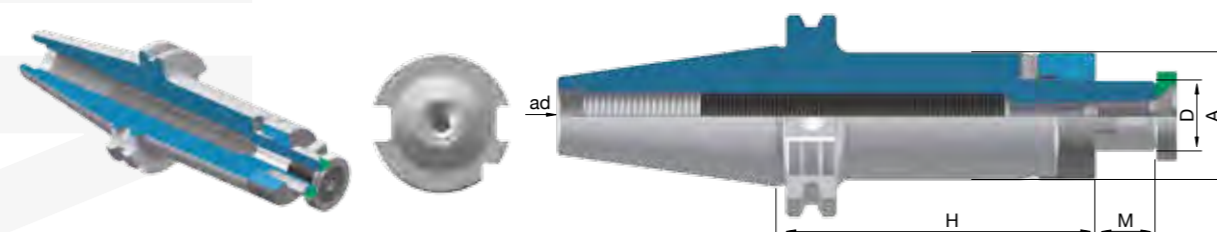
### PORTAFRESE COMBINATO - COMBI SHELL END MILL HOLDERS - SK30

Cod.	TYPE	A	D	AT2		G6.3/15000		AD	
SK.30.50.D16C	TC30 H 50 D16C	32	16			17		50	
SK.30.50.D22C	TC30 H 50 D22C	40	22			19		50	
SK.30.55.D27C	TC30 H 55 D27C	48	27			21		55	
SK.30.60.D32C	TC30 H 60 D32C	58	32			24		60	



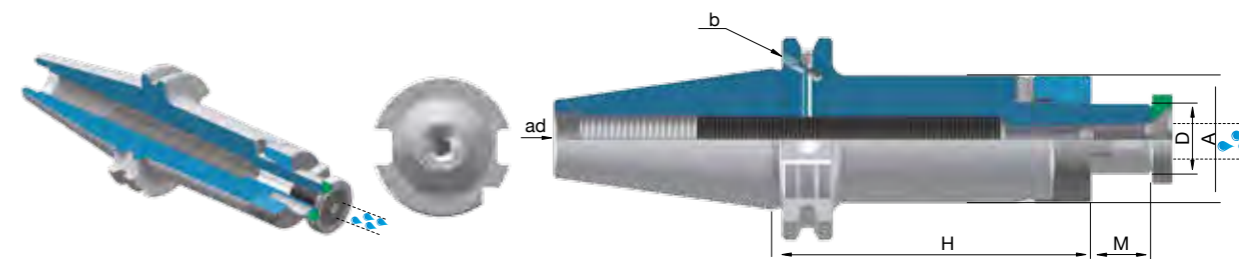
### PORTAFRESE COMBINATO - COMBI SHELL END MILL HOLDERS - SK40

Cod.	TYPE	A	D	M	H	AT2	G6.3/15000	AD
SK.40.55.D16C	TC40 H 55 D16C	32	16	17	55			
SK.40.100.D16C	TC40 H100 D16C	32	16	17	100			
SK.40.55.D22C	TC40 H 55 D22C	40	22	19	55			
SK.40.100.D22C	TC40 H100 D22C	40	22	19	100			
SK.40.55.D27C	TC40 H 55 D27C	48	27	21	55			
SK.40.100.D27C	TC40 H100 D27C	48	27	21	100			
SKB.40.60.D32C	TC40 H60 D32C	58	34	24	60			
SK.40.100.D32C	TC40 H100 D32C	58	32	24	100			
SKB.40.60.D40C	TC40 H60 D40C	70	40	27	60			
SK.40.100.D40C	TC40 H100 D40C	70	40	27	100			



### PORTAFRESE COMBINATO - COMBI SHELL END MILL HOLDERS - SK50

Cod.	TYPE	A	D	M	H	AT2	G6.3/15000	AD
SK.50.55.D16C	TC50 H 55 D16C	32	16	17	55			
SK.50.100.D16C	TC50 H100 D16C	32	16	17	100			
SK.50.55.D22C	TC50 H 55 D22C	40	22	19	55			
SK.50.100.D22C	TC50 H100 D22C	40	22	19	100			
SK.50.55.D27C	TC50 H 55 D27C	48	27	21	55			
SK.50.100.D27C	TC50 H100 D27C	48	27	21	100			
SK.50.55.D32C	TC50 H 55 D32C	58	32	24	55			
SK.50.100.D32C	TC50 H100 D32C	58	32	24	100			
SK.50.55.D40C	TC50 H 55 D40C	70	40	27	55			
SK.50.100.D40C	TC50 H100 D40C	70	40	27	100			
SK.50.70.D50C	TC50 H 70 D50C	90	50	30	70			



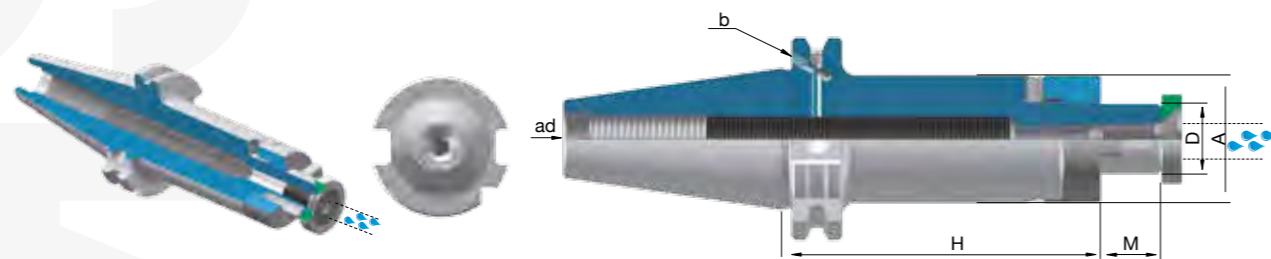
### PORTAFRESE COMBINATO - COMBI SHELL END MILL HOLDERS - SKB40

Cod.	TYPE	A	D	M	H	AT2	G6.3/15000	AD/B
SKB.40.55.D16C	TCB40 H 55 D16C	32	16	17	55			
SKB.40.100.D16C	TCB40 H100 D16C	32	16	17	100			
SKB.40.130.D16C	TCB40 H130 D16C	32	16	17	130			
SKB.40.160.D16C	TCB40 H160 D16C	32	16	17	160			
SKB.40.200.D16C	TCB40 H200 D16C	32	16	17	200			
SKB.40.55.D22C	TCB40 H 55 D22C	40	22	19	55			
SKB.40.100.D22C	TCB40 H100 D22C	40	22	19	100			
SKB.40.130.D22C	TCB40 H130 D22C	40	22	19	130			
SKB.40.160.D22C	TCB40 H160 D22C	40	22	19	160			
SKB.40.200.D22C	TCB40 H200 D22C	40	22	19	200			
SKB.40.55.D27C	TCB40 H 55 D27C	48	27	21	55			
SKB.40.100.D27C	TCB40 H100 D27C	48	27	21	100			
SKB.40.130.D27C	TCB40 H130 D27C	48	27	21	130			
SKB.40.160.D27C	TCB40 H160 D27C	48	27	21	160			
SKB.40.200.D27C	TCB40 H200 D27C	48	27	21	200			
SKB.40.60.D32C	TCB40 H 60 D32C	58	32	24	60			
SKB.40.100.D32C	TCB40 H100 D32C	58	32	24	100			
SKB.40.130.D32C	TCB40 H130 D32C	58	32	24	130			
SKB.40.160.D32C	TCB40 H160 D32C	58	32	24	160			
SKB.40.200.D32C	TCB40 H200 D32C	58	32	24	200			
SKB.40.60.D40C	TCB40 H 60 D40C	70	40	27	60			
SKB.40.100.D40C	TCB40 H100 D40C	70	40	27	100			
SKB.40.130.D40C	TCB40 H130 D40C	70	40	27	130			
SKB.40.160.D40C	TCB40 H160 D40C	70	40	27	160			
SKB.40.200.D40C	TCB40 H200 D40C	70	40	27	200			



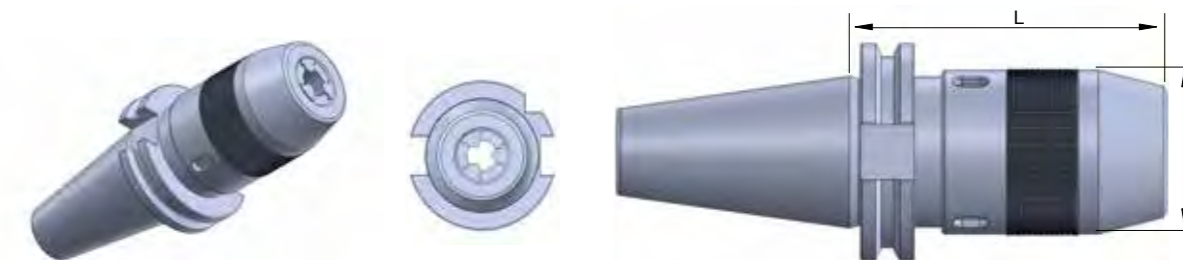
# PORTA PUNTE AUTOSERRANTI CON CHIAVE A SETTORE

## DRILL CHUCKS WITH HOOK WRENCH



### PORTAFRESE COMBINATO - COMBI SHELL END MILL HOLDERS - SKB50

Cod.	TYPE	A	D	AT2		G6.3/15000		AD/B	
SKB.50.55.D16C	TCB50 H 55 D16C	32	16			17		55	
SKB.50.100.D16C	TCB50 H100 D16C	32	16			17		100	
SKB.50.130.D16C	TCB50 H130 D16C	32	16			17		130	
SKB.50.160.D16C	TCB50 H160 D16C	32	16			17		160	
SKB.50.55.D22C	TCB50 H 55 D22C	40	22			19		55	
SKB.50.100.D22C	TCB50 H100 D22C	40	22			19		100	
SKB.50.130.D22C	TCB50 H130 D22C	40	22			19		130	
SKB.50.160.D22C	TCB50 H160 D22C	40	22			19		160	
SKB.50.55.D27C	TCB50 H 55 D27C	48	27			21		55	
SKB.50.100.D27C	TCB50 H100 D27C	48	27			21		100	
SKB.50.130.D27C	TCB50 H130 D27C	48	27			21		130	
SKB.50.160.D27C	TCB50 H160 D27C	48	27			21		160	
SKB.50.55.D32C	TCB50 H 55 D32C	58	32			24		55	
SKB.50.100.D32C	TCB50 H100 D32C	58	32			24		100	
SKB.50.130.D32C	TCB50 H130 D32C	58	32			24		130	
SKB.50.160.D32C	TCB50 H160 D32C	58	32			24		160	
SKB.50.55.D40C	TCB50 H 55 D40C	70	40			27		55	
SKB.50.100.D40C	TCB50 H100 D40C	70	40			27		100	
SKB.50.130.D40C	TCB50 H130 D40C	70	40			27		130	
SKB.50.160.D40C	TCB50 H160 D40C	70	40			27		160	



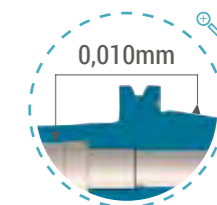
### AUTOSERRANTI CON CHIAVE A SETTORE - DRILL CHUCK - SK30

Cod.	TYPE	CAPACITÀ RANGE	AT2		G6.3/12000		AD	
SK.30.80.DCK8	TC30 H 80 DCK8	1 ÷ 8 mm			37		80	



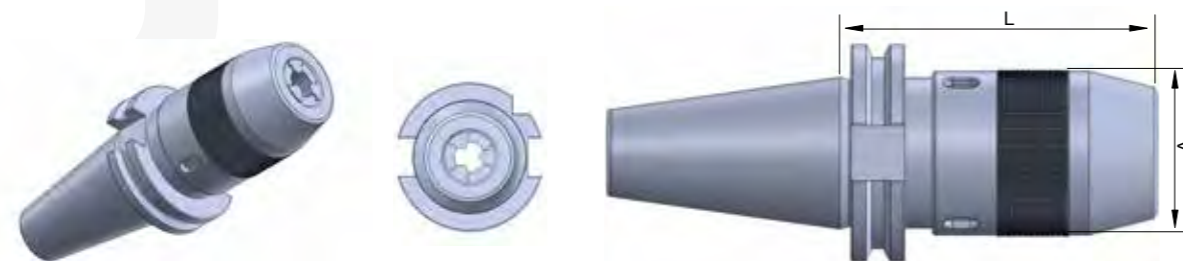
# PORTA PUNTE AUTOSERRANTI CON CHIAVE ESAGONALE

## HEX KEY LOCK DRILL CHUCK



### AUTOSERRANTI CON CHIAVE A SETTORE - DRILL CHUCK - SK40

Cod.	TYPE	CAPACITÀ RANGE	AT2		G6.3/12000		AD	
			A	L	A	L	A	L
SK.40.75.DCK8	TC40 H 75 DCK8	1 ÷ 8 mm	37	75				
SK.40.100.DCK13	TC40 H100 DCK13	1 ÷ 13 mm	50	100				
SK.40.115.DCK16	TC40 H115 DCK16	3 ÷ 16 mm	58	115				

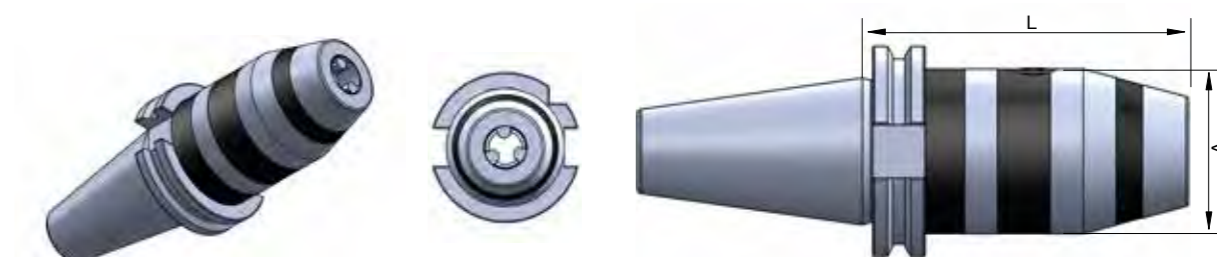


### AUTOSERRANTI CON CHIAVE A SETTORE - DRILL CHUCK - SK50

Cod.	TYPE	CAPACITÀ RANGE	AT2		G6.3/12000		AD	
			A	L	A	L	A	L
SK.50.88.DCK13	TC50 H88 DCK13	1 ÷ 13 mm	88	88				
SK.50.90.DCK16	TC50 H90 DCK16	3 ÷ 16 mm	90	90				

### RICAMBI AUTOSERRANTI CHIAVE A SETTORE - SPARE PARTS FOR DRILL CHUCK

Cod.	TYPE
RIC.DCK8	RICAMBI PER / SPARE PARTS FOR DCK8
RIC.DCK13	RICAMBI PER / SPARE PARTS FOR DCK13
RIC.DCK16	RICAMBI PER / SPARE PARTS FOR DCK16

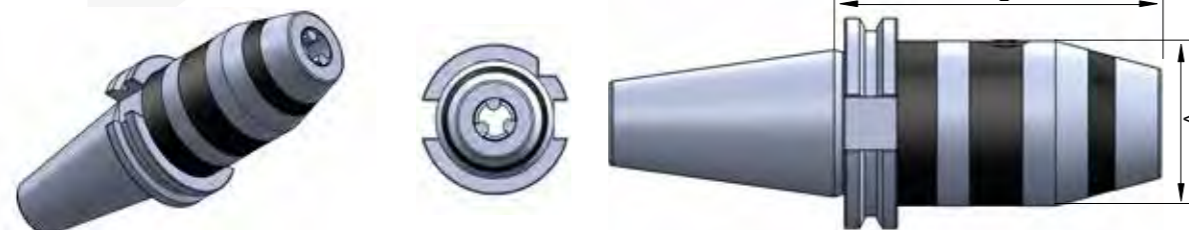


### PORTAPUNTE CON CHIAVE ESAGONALE - DRILL CHUCK WITH HEX KEY - SK40

Cod.	TYPE	CAPACITÀ RANGE	AT2		G6.3/12000		AD	
			A	L	A	L	A	L
SK.40.90.HD13	TC40 H90 HD13	1 ÷ 13 mm	50	90				
SK.40.95.HD16	TC40 H95 HD16	3 ÷ 16 mm	58	95				

# CONO MORSE PUNTE / FRESE

## MORSE TAPER ADAPTERS FOR DRILLS / FOR MILLS



### PORTAPUNTE CON CHIAVE ESAGONALE - DRILL CHUCK WITH HEX KEY - SK50

Cod.	TYPE	CAPACITÀ RANGE	AT2		G6.3/12000		AD	
			A	L	A	L	A	L
SK.50.90.HD13	TC50 H90 HD13	1 ÷ 13 mm	90	90				
SK.50.95.HD16	TC50 H95 HD16	3 ÷ 16 mm	95	95				

### RICAMBI PORTAPUNTE - SPARE PARTS FOR DRILL CHUCK HEX KEY

Cod.	TYPE
RIC.HD13	RICAMBI PER/SPARE PARTS FOR HD13
RIC.HD16	RICAMBI PER/SPARE PARTS FOR HD16



### CONO MORSE PER PUNTE - MORSE TAPER FOR DRILLS - SK30

Cod.	TYPE	AT2		G6.3/15000		AD	
		A	L	A	L	A	L
SK.30.50.CM1P	TC 30 H 50 CM1 P	25	31	50			
SK.30.65.CM2P	TC 30 H 65 CM2 P	32	46	65			
SK.30.80.CM3P	TC 30 H 80 CM3 P	40	61	80			



**CONO MORSE PER PUNTE - MORSE TAPER FOR DRILLS - SK40**

Cod.	TYPE	AT2 G6.3/15000 AD		
		A	L	H
SK.40.50.CM1P	TC4 0 H 50 CM1 P	25	31	50
SK.40.50.CM2P	TC 40 H 50 CM2 P	32	31	50
SK.40.117.CM2P	TC 40 H 117 CM2 P	32	98	117
SK.40.70.CM3P	TC 40 H 70 CM3 P	40	51	70
SK.40.133.CM3P	TC 40 H 133 CM3 P	40	114	133
SK.40.95.CM4P	TC 40 H 95 CM4 P	48	76	95
SK.40.156.CM4P	TC 40 H 156 CM4 P	48	137	156



**CONO MORSE PER PUNTE - MORSE TAPER FOR DRILLS - SKB40**

Cod.	TYPE	AT2 G6.3/15000 AD/B	
		A	H
SKB.40.50.CM1P	TCB40 H 50 CM1 P	25	50
SKB.40.50.CM2P	TCB40 H 50 CM2 P	32	50
SKB.40.70.CM3P	TCB40 H 70 CM3 P	40	70
SKB.40.95.CM4P	TCB40 H 95 CM4 P	48	95



**CONO MORSE PER PUNTE - MORSE TAPER FOR DRILLS - SK50**

Cod.	TYPE	AT2 G6.3/15000 AD		
		A	L	H
SK.50.45.CM1P	TC 50 H 45 CM1 P	25	26	45
SK.50.120.CM1P	TC 50 H120 CM1 P	25	101	120
SK.50.60.CM2P	TC 50 H 60 CM2 P	32	41	60
SK.50.135.CM2P	TC 50 H135 CM2 P	32	116	135
SK.50.65.CM3P	TC 50 H 65 CM3 P	40	46	65
SK.50.155.CM3P	TC 50 H155 CM3 P	40	136	155
SK.50.95.CM4P	TC 50 H 95 CM4 P	48	76	95
SK.50.180.CM4P	TC 50 H 180 CM4 P	48	161	180
SK.50.105.CM5P	TC 50 H105 CM5 P	63	86	105
SK.50.215.CM5P	TC 50 H 215 CM5 P	63	196	215

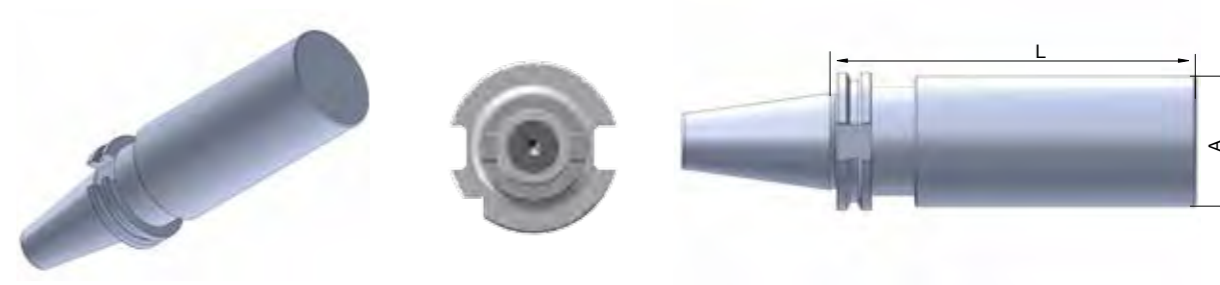


**CONO MORSE PER PUNTE - MORSE TAPER FOR DRILLS - SKB50**

Cod.	TYPE	AT2 G6.3/15000 AD/B	
		A	H
SKB.50.45.CM1P	TCB50 H 45 CM1 P	25	45
SKB.50.60.CM2P	TCB50 H 60 CM2 P	32	60
SKB.50.65.CM3P	TCB50 H 65 CM3 P	40	65
SKB.50.95.CM4P	TCB50 H 95 CM4 P	48	95
SKB.50.105.CM5P	TCB50 H105 CM5 P	63	105

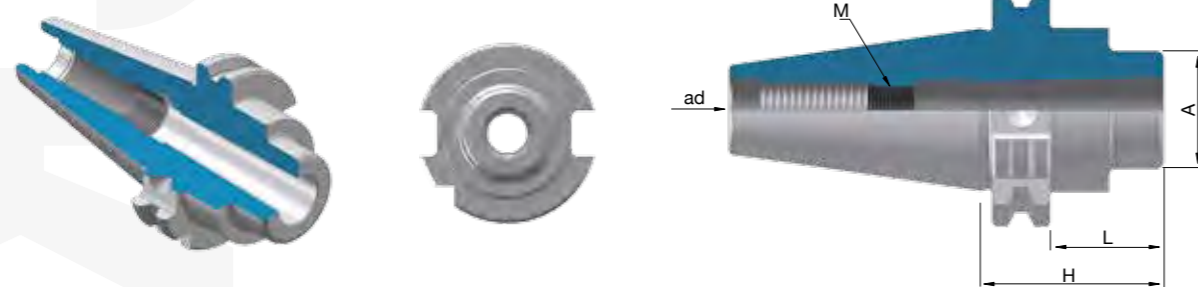
# STELO TENERO LAVORABILE

## BLANK ARBORS



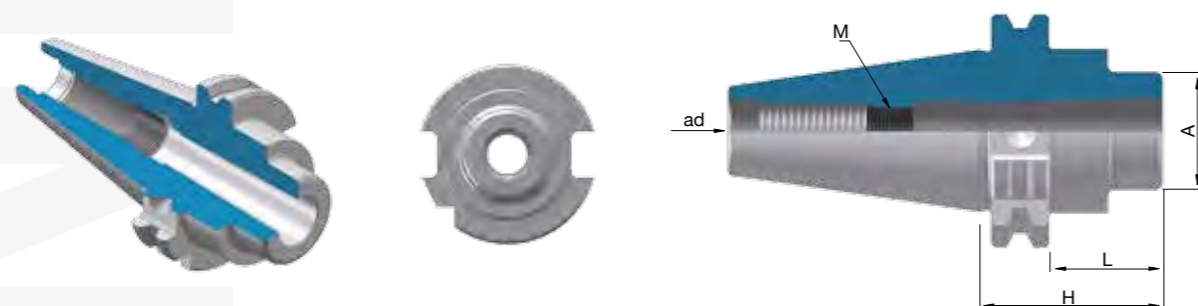
### STELO TENERO LAVORABILE - BLANK ARBORS - SK40

Cod.	TYPE	A	AT2	
			AD	42HRC
SK.40.250.D40BL	TC40 H 250 D40	40	250	
SK.40.250.D63BL	TC40 H 250 D63	63	250	



### CONO MORSE PER FRESE - MORSE TAPER FOR MILLS - SK40

Cod.	TYPE	A	M	AT2	
				G6.3/15000	AD
SK.40.50.CM1F	TC40 H 50 CM1 FV	25	M6	31	50
SK.40.50.CM2F	TC40 H 50 CM2 FV	32	M10	31	50
SK.40.70.CM3F	TC40 H 70 CM3 FV	40	M12	51	70
SK.40.95.CM4F	TC40 H 95 CM4 FV	48	M16	76	95
SK.40.110.CM4F	TC40 H110 CM4 FV	48	M16	146	110



### CONO MORSE PER FRESE - MORSE TAPER FOR MILLS - SK50

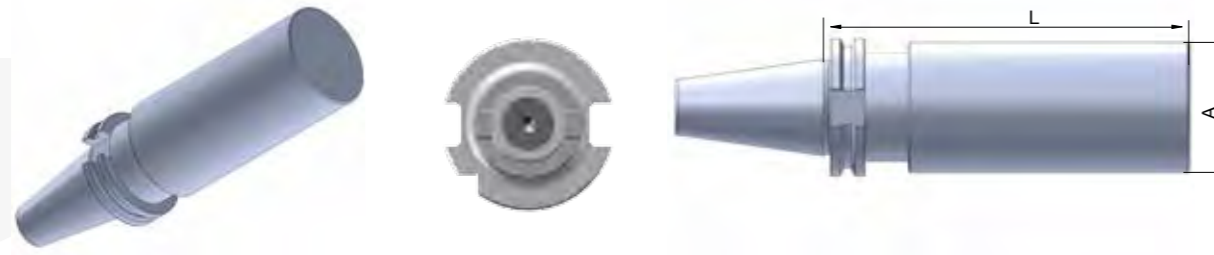
Cod.	TYPE	A	M	AT2	
				G6.3/15000	AD
SK.50.45.CM1F	TC50 H 45 CM1 FV	25	M6	26	45
SK.50.60.CM2F	TC50 H 60 CM2 FV	32	M10	41	60
SK.50.65.CM3F	TC50 H 65 CM3 FV	40	M12	46	65
SK.50.70.CM4F	TC50 H 70 CM4 FV	48	M16	51	70
SK.50.85.CM4F	TC50 H 85 CM4 FV	48	M16	66	85
SK.50.100.CM5F	TC50 H 100 CM5 FV	63	M20	81	100
SK.50.118.CM5F	TC50 H 118 CM5 FV	63	M20	99	118



# BARRA DI CONTROLLO

## TEST ARBORS

SK-DIN69871



### STELO TENERO LAVORABILE - BLANK ARBORS - SK50

Cod.	TYPE	A	L	AT2	AD	42HRC
SK.50.315.D63BL	TC50 H 315 D63	63	315			
SK.50.315.D97BL	TC50 H 315 D97	97	315			



### BARRA DI CONTROLLO - TEST ARBORS - SK30 - SK40 - SK50

Cod.	TYPE	L	A	AT2	AD
SK.30.200.D32	TC30 H 200 D 32	200	32		
SK.40.300.D40	TC40 H 300 D 40	300	40		
SK.50.300.D50	TC50 H 300 D 50	300	50		

FORNITE COMPLETE DI CERTIFICATO E COFANETTO DI LEGNO  
PROVIDED WITH WOODEN BOX AND SPECIFIC CERTIFICATE

# MAS 403 - BT / JIS6339

## MAS 403 - BT / JIS6339



**CALETTAMENTO A CALDO STANDARD**  
*SHRINK FIT HOLDERS STANDARD*



**CALETTAMENTO A CALDO SLIM TYPE**  
*SHRINK FIT HOLDERS SLIM TYPE*



**PORTAPINZA PER SKS**  
*COLLET CHUCK FOR SKS*



**PORTA TESTINE FILETTATE (TIPO CPY)**  
*FOR SCREWED MILLING CUTTERS*



**FORTE SERRAGGIO**  
*POWER MILLING CHUCKS*



**IDRAULICO**  
*HYDRAULIC EXPANSIONS CHUCK*



**PORTAPINZA ER DIN6499**  
*COLLET CHUCK FOR ER DIN6499*



**PORTAPINZA EOC DIN6388**  
*COLLET CHUCK FOR EOC DIN6388*



**PER FRESE WELDON**  
*END MILL HOLDERS*



**PORTAFRESE FISSI**  
*SHELL END MILL HOLDERS*



**PORTAFRESE COMBINATI**  
*COMBI SHELL END MILL HOLDERS*



**PORTA PUNTE AUTOSERRANTI CON CHIAVE A SETTORE**  
*DRILL CHUCKS WITH HOOK WRENCH*



**PORTA PUNTE CON CHIAVE ESAGONALE**  
*HEX KEY LOCK DRILL CHUCKS*



**CONO MORSE PUNTE/ FRESE**  
*MORSE TAPER FOR DRILLS/MILLS*



**STELO TENERO LAVORABILE**  
*BLANK ARBORS*



**BARRA DI CONTROLLO**  
*TEST ARBORS*

## CARATTERISTICHE / SPECIFICATION / CARACTÉRISTIQUES/ TECHNISCHE DATEN

### CARATTERISTICHE TECNICHE

- Costruiti in acciaio certificato in barre.
- Eseguiti trattamenti termici da fornitori certificati ISO 9001.
- Rettificati di precisione esternamente, internamente e nelle filettature delle ghiera chiudipinza.
- Controllati con strumenti di misura certificati.
- La tolleranza di precisione dei coni ISO è AT2.
- L'errore di concentricità massimo tra il cono e la sede utensile è di 0.003mm.

### TECHNICAL FEATURES

- Manufactured with certificate steel.
- Heat treatments are performed by certified suppliers ISO 9001.
- Precision ground on shanks, inside tapers and collet nut threads.
- Tested with high precision inspection and gaging equipment.
- Taper accuracy of ISO SHANKS lower than AT2.
- The maximum error of concentricity between the cone and the seat of tool is 0.003mm.

### CARACTÉRISTIQUES

- Fabriqués en bar d'acier certifié.
- Réalisation du traitement thermique par des fournisseurs certifiés ISO 9001.
- Rectification de précision extérieurement, intérieurement et dans les filetages des écrous serre-pince.
- Contrôlés par des instruments de mesure certifiés.
- La tolérance de précision des cônes ISO est AT2.
- L'erreur de concentricité maximum entre le cône et le siège de l'outil est de 0.003 mm.

### MERKMALE

- Gebaut aus zertifiziertem Stabstahl
- Warmbehandlungen von Lieferanten mit Zeugnis ISO 9001
- Genauigkeitsgeschliffen aussen, innen und in den Gewinden der Spannmutter für den Zangenverschluss
- Geprüft mit zertifizierten Messinstrumente
- Die Präzisionstoleranz der Kone ISO ist AT2
- Die max konzentrische Abweichung zwischen Konus und Werkzeugsitz ist 0.003 mm

## ISTRUZIONI / INSTRUCTIONS / INSTRUCTIONS ET QUOTES / ANWEISUNGEN

### ISTRUZIONI

- I mandrini vengono forniti in forma ad o ad/b. nel caso dell'ad/b, il lubrificante passa dai fori presenti sulla flangia. L'operatore dovrà togliere le viti di chiusura che troverà già montate sul mandrino.

### INSTRUCTIONS

- The tool holders are provided to form ad or ad/b. in case of ad/b, the lubricant pass from holes on the flange. The operator will have to remove screw closure that he will find on the flange.

### INSTRUCTIONS

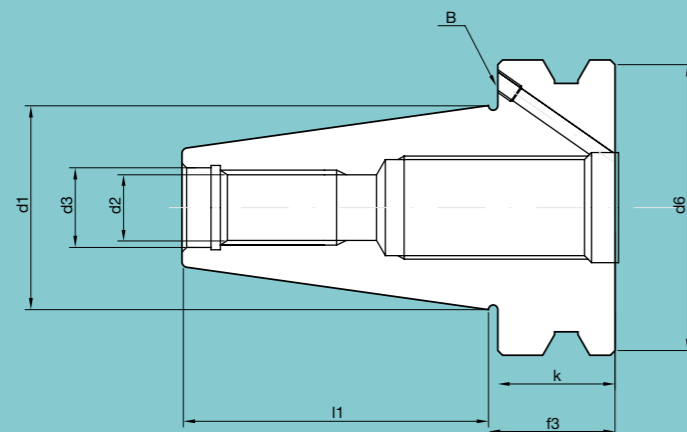
- Les mandrins doivent être fournis en forme AD ou AD/B. Le lubrifiant passe par les trous présents sur la flange. L'opérateur doit enlever les vis de fermeture qu'il trouvera déjà monté sur le mandrin.

### ANWEISUNGEN UND ABMESSUNGEN

- Die Spannfutter werden in der form AD oder AD/B geliefert. Im falle von AD/B, fließt der Schmierstoff durch die vorhandenen Bohrungen auf der Flansche.

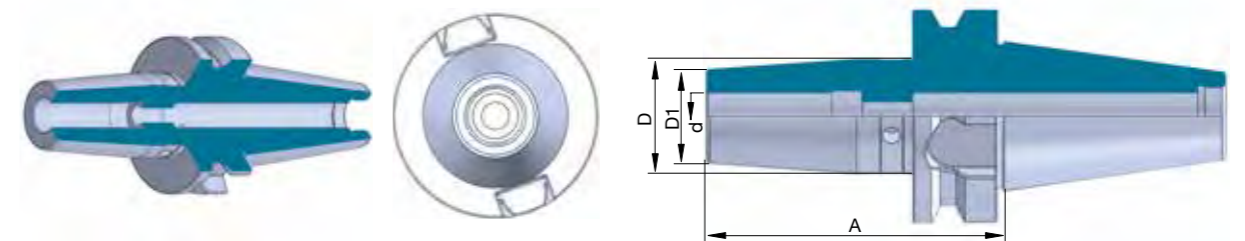
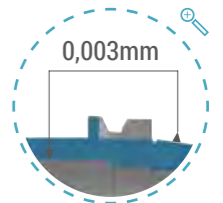
## QUOTE DEI CONI DI ATTACCO / QUOTE / QUOTES / ABMESSUNGEN

CONO/TAPER	d1	d2	d3	d6	L1	a	k	f3
BT30	31,75	M12	12,5	46	48,4	2	20	22
BTB40	44,45	M16	17	63	65,4	2	25	27
BTB50	69,85	M24	25	100	101,8	3	35	38



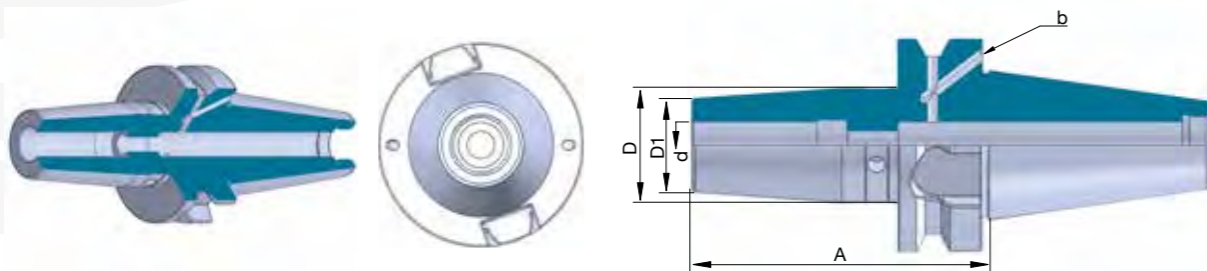
# CALETTAMENTO A CALDO STANDARD

## SHRINK FIT HOLDERS STANDARD



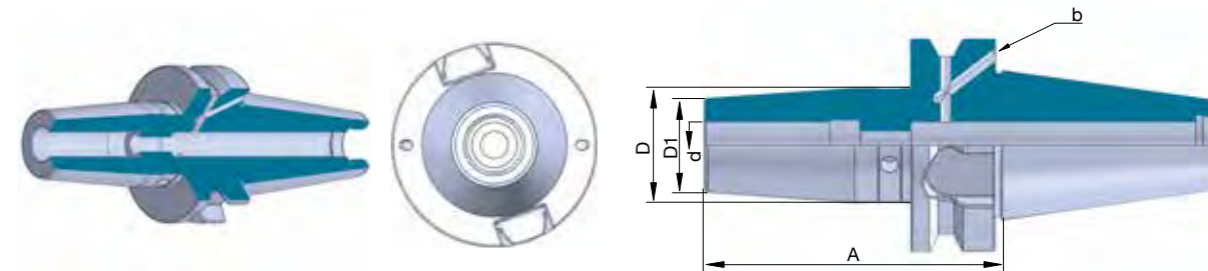
## CALETTAMENTO STANDARD - SHRINK FIT HOLDERS - BT30

Cod.	TYPE	d	A	AT2		G2.5/25000		AD	
				D1	D	D1	D	D1	D
BT.30.80.CL3	BT30 H80 CL3	3	80	10	20				
BT.30.80.CL4	BT30 H80 CL4	4	80	15	24				
BT.30.80.CL5	BT30 H80 CL5	5	80	15	24				
BT.30.80.CL6	BT30 H80 CL6	6	80	20	27				
BT.30.80.CL8	BT30 H80 CL8	8	80	20	27				
BT.30.80.CL10	BT30 H80 CL10	10	80	24	31				
BT.30.80.CL12	BT30 H80 CL12	12	80	24	31				
BT.30.80.CL14	BT30 H80 CL14	14	80	27	34				
BT.30.80.CL16	BT30 H80 CL16	16	80	27	34				
BT.30.90.CL18	BT30 H90 CL18	18	90	33	40				
BT.30.90.CL20	BT30 H90 CL20	20	90	33	40				



### CALETTAMENTO STANDARD - SHRINK FIT HOLDERS - BTB40

Cod.	TYPE	d	A	AT2		G2.5/25000		AD/B	
				D1	D	D1	D	D1	D
BTB.40.90.CL3	BTB40 H90 CL3	3	90	10	20				
BTB.40.120.CL3	BTB40 H120 CL3	3	120	10	20				
BTB.40.160.CL3	BTB40 H160 CL3	3	160	10	20				
BTB.40.90.CL4	BTB40 H90 CL4	4	90	15	22				
BTB.40.120.CL4	BTB40 H120 CL4	4	120	15	22				
BTB.40.160.CL4	BTB40 H160 CL4	4	160	15	22				
BTB.40.90.CL5	BTB40 H90 CL5	5	90	15	22				
BTB.40.120.CL5	BTB40 H120 CL5	5	120	15	22				
BTB.40.160.CL5	BTB40 H160 CL5	5	160	15	22				
BTB.40.90.CL6	BTB40 H90 CL6	6	90	21	27				
BTB.40.130.CL6	BTB40 H130 CL6	6	130	21	27				
BTB.40.160.CL6	BTB40 H160 CL6	6	160	21	27				
BTB.40.90.CL8	BTB40 H90 CL8	8	90	21	27				
BTB.40.130.CL8	BTB40 H130 CL8	8	130	21	27				
BTB.40.160.CL8	BTB40 H160 CL8	8	160	21	27				
BTB.40.90.CL10	BTB40 H90 CL10	10	90	24	32				
BTB.40.130.CL10	BTB40 H130 CL10	10	130	24	32				
BTB.40.160.CL10	BTB40 H160 CL10	10	160	24	32				
BTB.40.90.CL12	BTB40 H90 CL12	12	90	24	32				
BTB.40.130.CL12	BTB40 H130 CL12	12	130	24	32				
BTB.40.160.CL12	BTB40 H160 CL12	12	160	24	32				
BTB.40.90.CL14	BTB40 H90 CL14	14	90	27	34				
BTB.40.130.CL14	BTB40 H130 CL14	14	130	27	34				
BTB.40.160.CL14	BTB40 H160 CL14	14	160	27	34				
BTB.40.90.CL16	BTB40 H90 CL16	16	90	27	34				
BTB.40.130.CL16	BTB40 H130 CL16	16	130	27	34				
BTB.40.160.CL16	BTB40 H160 CL16	16	160	27	34				
BTB.40.90.CL18	BTB40 H90 CL18	18	90	33	42				
BTB.40.130.CL18	BTB40 H130 CL18	18	130	33	42				
BTB.40.160.CL18	BTB40 H160 CL18	18	160	33	42				
BTB.40.90.CL20	BTB40 H90 CL20	20	90	33	42				
BTB.40.130.CL20	BTB40 H130 CL20	20	130	33	42				
BTB.40.160.CL20	BTB40 H160 CL20	20	160	33	42				
BTB.40.100.CL25	BTB40 H100 CL25	25	100	44	53				
BTB.40.130.CL25	BTB40 H130 CL25	25	130	44	53				
BTB.40.160.CL25	BTB40 H160 CL25	25	160	44	53				
BTB.40.100.CL32	BTB40 H100 CL32	32	100	44	53				
BTB.40.130.CL32	BTB40 H130 CL32	32	130	44	53				
BTB.40.160.CL32	BTB40 H160 CL32	32	160	44	53				



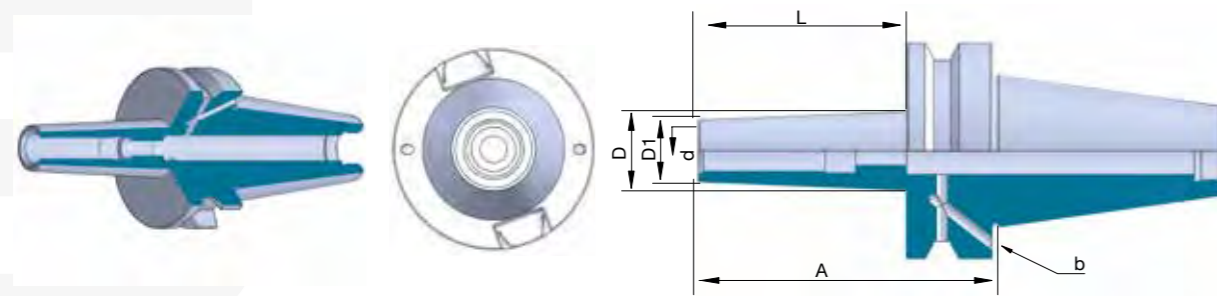
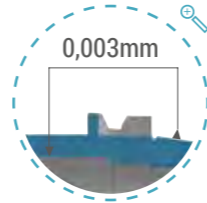
### CALETTAMENTO STANDARD - SHRINK FIT HOLDERS - BTB50

Cod.	TYPE	d	A	AT2		G2.5/25000		AD/B	
				D1	D	D1	D	D1	D
BTB.50.100.CL3	BTB50 H100 CL3	3	100	10	20				
BTB.50.120.CL3	BTB50 H120 CL3	3	120	10	20				
BTB.50.160.CL3	BTB50 H160 CL3	3	160	10	20				
BTB.50.100.CL4	BTB50 H100 CL4	4	100	15	25				
BTB.50.120.CL4	BTB50 H120 CL4	4	120	15	22				
BTB.50.160.CL4	BTB50 H160 CL4	4	160	15	22				
BTB.50.100.CL5	BTB50 H100 CL5	5	100	15	25				
BTB.50.120.CL5	BTB50 H120 CL5	5	120	15	22				
BTB.50.160.CL5	BTB50 H160 CL5	5	160	15	22				
BTB.50.100.CL6	BTB50 H100 CL6	6	100	20	27				
BTB.50.120.CL6	BTB50 H120 CL6	6	120	20	27				
BTB.50.160.CL6	BTB50 H160 CL6	6	160	20	27				
BTB.50.100.CL8	BTB50 H100 CL8	8	100	20	27				
BTB.50.120.CL8	BTB50 H120 CL8	8	120	20	27				
BTB.50.160.CL8	BTB50 H160 CL8	8	160	20	27				
BTB.50.100.CL10	BTB50 H100 CL10	10	100	24	31				
BTB.50.120.CL10	BTB50 H120 CL10	10	120	24	31				
BTB.50.160.CL10	BTB50 H160 CL10	10	160	24	31				
BTB.50.100.CL12	BTB50 H100 CL12	12	100	24	31				
BTB.50.120.CL12	BTB50 H120 CL12	12	120	24	31				
BTB.50.160.CL12	BTB50 H160 CL12	12	160	24	31				
BTB.50.100.CL14	BTB50 H100 CL14	14	100	27	34				
BTB.50.120.CL14	BTB50 H120 CL14	14	120	27	34				
BTB.50.160.CL14	BTB50 H160 CL14	14	160	27	34				
BTB.50.100.CL16	BTB50 H100 CL16	16	100	27	34				
BTB.50.120.CL16	BTB50 H120 CL16	16	120	27	34				
BTB.50.160.CL16	BTB50 H160 CL16	16	160	27	34				
BTB.50.100.CL18	BTB50 H100 CL18	18	100	33	40				
BTB.50.120.CL18	BTB50 H120 CL18	18	120	33	40				
BTB.50.160.CL18	BTB50 H160 CL18	18	160	33	40				
BTB.50.90.CL20	BTB50 H100 CL20	20	100	33	40				
BTB.50.120.CL20	BTB50 H120 CL20	20	120	33	40				
BTB.50.160.CL20	BTB50 H160 CL20	20	160	33	40				
BTB.50.110.CL25	BTB50 H110 CL25	25	110	44	53				
BTB.50.120.CL25	BTB50 H120 CL25	25	120	44	53				
BTB.50.160.CL25	BTB50 H160 CL25	25	160	44	53				
BTB.50.110.CL32	BTB50 H110 CL32	32	110	44	53				
BTB.50.120.CL32	BTB50 H120 CL32	32	120	44	53				
BTB.50.160.CL32	BTB50 H160 CL32	32	160	44	53				



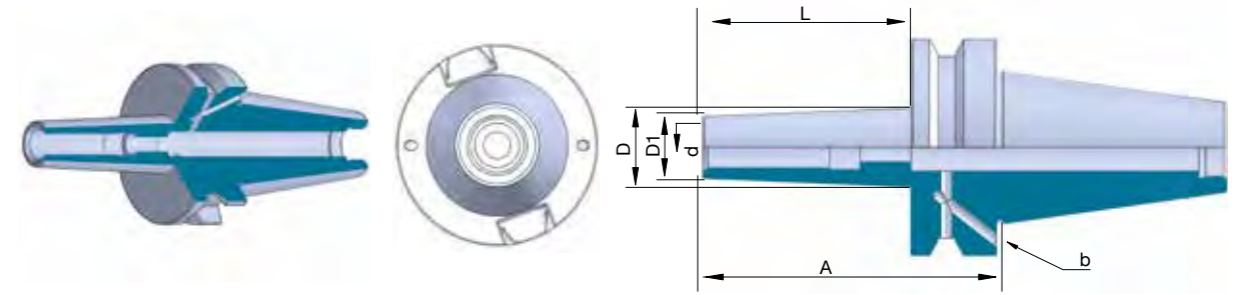
# CALETTAMENTO A CALDO SLIM TYPE

## SHRINK FIT HOLDERS SLIM TYPE



### CALETTAMENTO TIPO SLIM - SHRINK FIT HOLDERS SLIM TYPE - BTB40

Cod.	TYPE	d	A	AT2		G2.5/25000		AD/B
				D1	D	D1	D	
BTB.40.90.CL3.SL	SLIM TYPE BTB40 H90 CL3	3	90	9	13	9	13	63
BTB.40.120.CL3.SL	SLIM TYPE BTB40 H120 CL3	3	120	9	16	9	16	93
BTB.40.90.CL4.SL	SLIM TYPE BTB40 H90 CL4	4	90	10	15	10	15	63
BTB.40.120.CL4.SL	SLIM TYPE BTB40 H120 CL4	4	120	10	15	10	15	93
BTB.40.90.CL5.SL	SLIM TYPE BTB40 H90 CL5	5	90	11	16	11	16	63
BTB.40.120.CL5.SL	SLIM TYPE BTB40 H120 CL5	5	120	11	20	11	20	93
BTB.40.90.CL6.SL	SLIM TYPE BTB40 H90 CL6	6	90	12	17	12	17	63
BTB.40.130.CL6.SL	SLIM TYPE BTB40 H130 CL6	6	130	12	19	12	19	103
BTB.40.160.CL6.SL	SLIM TYPE BTB40 H160 CL6	6	160	12	19	12	19	133
BTB.40.90.CL8.SL	SLIM TYPE BTB40 H90 CL8	8	90	14	19	14	19	63
BTB.40.130.CL8.SL	SLIM TYPE BTB40 H130 CL8	8	130	14	21	14	21	103

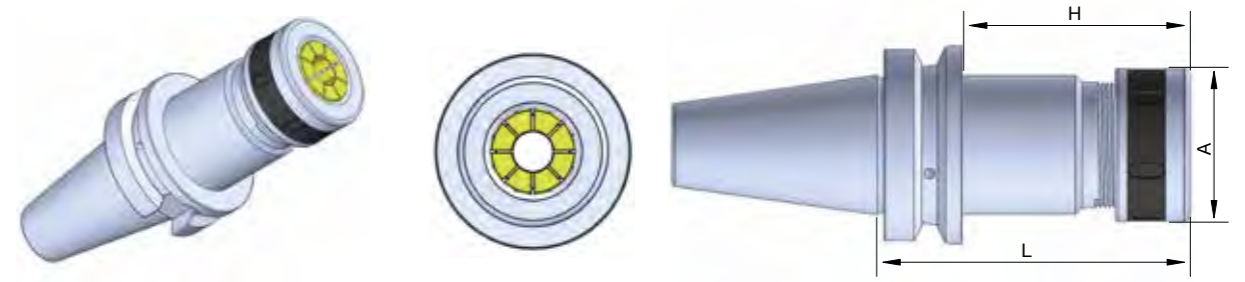
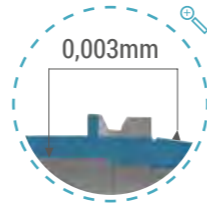


### CALETTAMENTO TIPO SLIM - SHRINK FIT HOLDERS SLIM TYPE - BTB40

Cod.	TYPE	d	A	AT2		G2.5/25000		AD/B
				D1	D	D1	D	
BTB.40.160.CL8.SL	SLIM TYPE BTB40 H160 CL8	8	160	14	21	14	21	133
BTB.40.90.CL10.SL	SLIM TYPE BTB40 H90 CL10	10	90	16	21	16	21	63
BTB.40.130.CL10.SL	SLIM TYPE BTB40 H130 CL10	10	130	16	23	16	23	103
BTB.40.160.CL10.SL	SLIM TYPE BTB40 H160 CL10	10	160	16	23	16	23	133
BTB.40.90.CL12.SL	SLIM TYPE BTB40 H90 CL12	12	90	18	23	18	23	63
BTB.40.130.CL12.SL	SLIM TYPE BTB40 H130 CL12	12	130	18	25	18	25	103
BTB.40.160.CL12.SL	SLIM TYPE BTB40 H160 CL12	12	160	18	25	18	25	133
BTB.40.90.CL14.SL	SLIM TYPE BTB40 H90 CL14	14	90	22	25	22	25	63
BTB.40.130.CL14.SL	SLIM TYPE BTB40 H130 CL14	14	130	22	27	22	27	103
BTB.40.160.CL14.SL	SLIM TYPE BTB40 H160 CL14	14	160	22	27	22	27	133
BTB.40.90.CL16.SL	SLIM TYPE BTB40 H90 CL16	16	90	24	29	24	29	63
BTB.40.130.CL16.SL	SLIM TYPE BTB40 H130 CL16	16	130	21	31	21	31	103
BTB.40.160.CL16.SL	SLIM TYPE BTB40 H160 CL16	16	160	24	31	24	31	133
BTB.40.90.CL20.SL	SLIM TYPE BTB40 H90 CL20	20	90	28	33	28	33	63
BTB.40.130.CL20.SL	SLIM TYPE BTB40 H130 CL20	20	130	28	35	28	35	103
BTB.40.160.CL20.SL	SLIM TYPE BTB40 H160 CL20	20	160	28	35	28	35	133

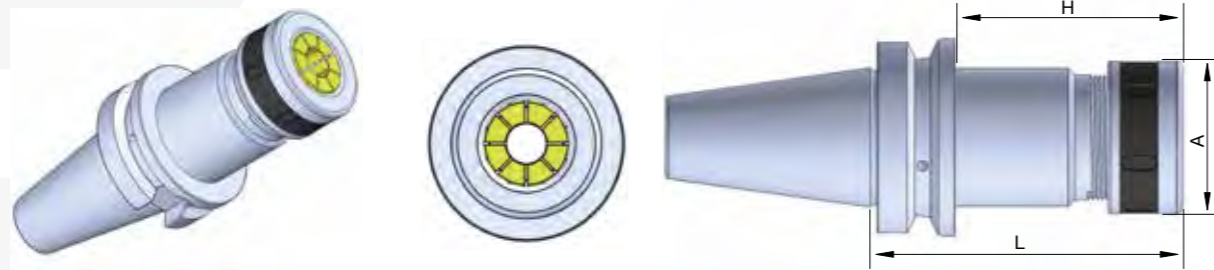
# PORTAPINZA PER SKS

## COLLET CHUCK FOR SKS



### PORTAPINZA PER SKS - COLLET CHUCK FOR SKS - SK50

Cod.	TYPE	H	BT50		
			AT2	G2.5/25000	AD
BT.50.105.SKS10	BT50 H105 SKS10	57		105	30
BT.50.165.SKS10	BT50 H165 SKS10	108		165	30
BT.50.105.SKS20	BT50 H105 SKS20	62		105	48.5
BT.50.165.SKS20	BT50 H165 SKS20	122		105	48.5

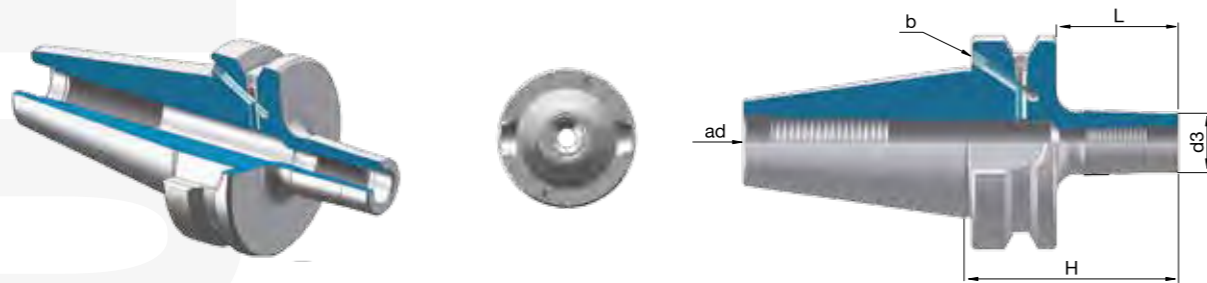
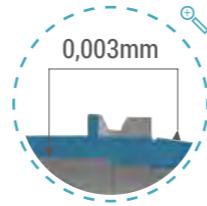


### PORTAPINZA PER SKS - COLLET CHUCK FOR SKS - SK40

Cod.	TYPE	H	BT40		
			AT2	G2.5/25000	AD
BT.40.90.SKS10	BT40 H90 SKS10	45		90	30
BT.40.120.SKS10	BT40 H120 SKS10	74		120	30
BT.40.90.SKS20	BT40 H90 SKS20	60		90	48.5
BT.40.120.SKS20	BT40 H120 SKS20	88		120	48.5

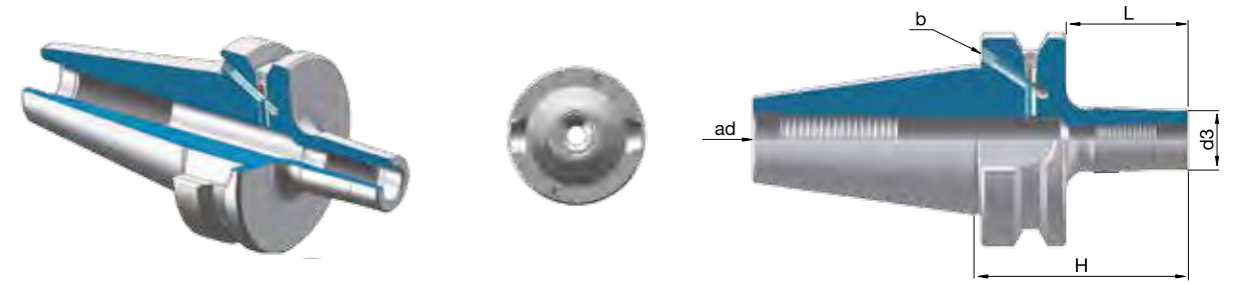
# PORTA TESTINE FILETTATE (TIPO CPY)

## TOOLHOLDERS FOR SCREWED MILLING CUTTERS



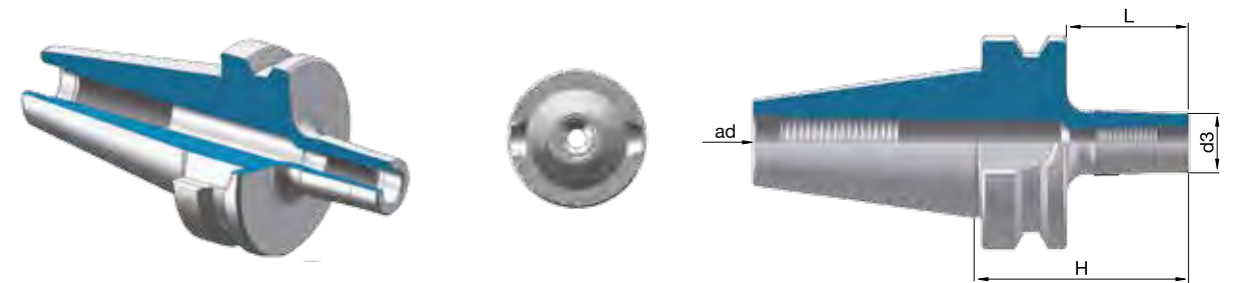
### PORTA TESTINE FILETTATE - FOR SCREWED MILLING CUTTERS - BTB40

Cod.	TYPE	M	d1	AT2			G2.5/25000		AD/B
				d2	d3	L	H		
BTB.40.52.M6CPY	BTB40 H52 M6CPY	M6	6,5	10	13	25	52		
BTB.40.77.M6CPY	BTB40 H77 M6CPY	M6	6,5	10	20	50	77		
BTB.40.102.M6CPY	BTB40 H102 M6CPY	M6	6,5	10	23	75	102		
BTB.40.63.M8CPY	BTB40 H 63 M 8 CPY	M8	8,5	13	15	36	63		
BTB.40.83.M8CPY	BTB40 H 83 M 8 CPY	M8	8,5	13	23	56	83		
BTB.40.103.M8CPY	BTB40 H103 M 8 CPY	M8	8,5	13	23	76	103		
BTB.40.123.M8CPY	BTB40 H123 M 8 CPY	M8	8,5	13	25	96	123		
BTB.40.63.M10CPY	BTB40 H 63 M10 CPY	M10	10,5	18	20	36	63		
BTB.40.83.M10CPY	BTB40 H 83 M10 CPY	M10	10,5	18	25	56	83		
BTB.40.103.M10CPY	BTB40 H103 M10 CPY	M10	10,5	18	28	76	103		
BTB.40.123.M10CPY	BTB40 H123 M10 CPY	M10	10,5	18	28	96	123		
BTB.40.63.M12CPY	BTB40 H 63 M12 CPY	M12	12,5	21	24	36	63		



### PORTA TESTINE FILETTATE - FOR SCREWED MILLING CUTTERS - BTB40

Cod.	TYPE	M	d1	AT2			G2.5/25000		AD/B
				d2	d3	L	H		
BTB.40.83.M12CPY	BTB40 H 83 M12 CPY	M12	12,5	21	24	56	83		
BTB.40.103.M12CPY	BTB40 H103 M12 CPY	M12	12,5	21	31	76	103		
BTB.40.123.M12CPY	BTB40 H123 M12 CPY	M12	12,5	21	31	96	123		
BTB.40.63.M16CPY	BTB40 H 63 M16 CPY	M16	17	29	34	36	63		
BTB.40.83.M16CPY	BTB40 H 83 M16 CPY	M16	17	29	34	56	83		
BTB.40.103.M16CPY	BTB40 H103 M16 CPY	M16	17	29	34	76	103		
BTB.40.123.M16CPY	BTB40 H123 M16 CPY	M16	17	29	39	96	123		
BTB.40.153.M16CPY	BTB40 H153 M16 CPY	M16	17	29	39	126	153		

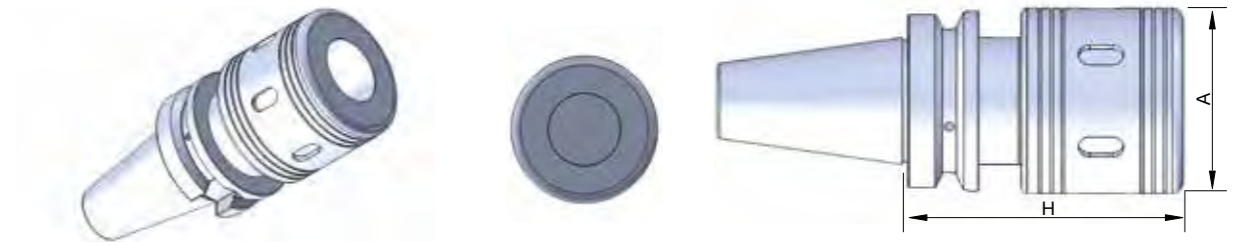
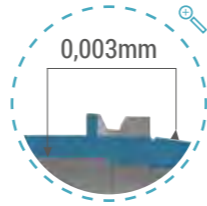


### PORTA TESTINE FILETTATE - FOR SCREWED MILLING CUTTERS - BT50

Cod.	TYPE	M	d1	AT2			G2.5/25000		AD
				d2	d3	L	H		
BT.50.88.M8CPY	BT50 H88 M8 CPY	M8	8,5	13	23	50	88		
BT.50.138.M8CPY	BT50 H138 M8 CPY	M8	8,5	13	25	100	138		
BT.50.188.M8CPY	BT50 H188 M8 CPY	M8	8,5	13	30	150	188		
BT.50.88.M10CPY	BT50 H88 M10 CPY	M10	10,5	18	23	50	88		
BT.50.138.M10CPY	BT50 H138 M10 CPY	M10	10,5	18	32	100	138		
BT.50.188.M10CPY	BT50 H188 M10 CPY	M10	10,5	18	36,5	150	188		
BT.50.88.M12CPY	BT50 H88 M12 CPY	M12	12,5	21	24	50	88		
BT.50.138.M12CPY	BT50 H138 M12 CPY	M12	12,5	21	33	100	138		
BT.50.188.M12CPY	BT50 H188 M12 CPY	M12	12,5	21	40	150	188		
BT.50.88.M16CPY	BT50 H88 M16 CPY	M16	17	29	34	50	88		
BT.50.138.M16CPY	BT50 H138 M16 CPY	M16	17	29	36	100	138		
BT.50.188.M16CPY	BT50 H188 M16 CPY	M16	17	29	42,5	150	188		

# FORTE SERRAGGIO

## POWER MILLING CHUCKS



### A FORTE SERRAGGIO - POWER MILLING CHUCKS - BTB50

Cod.	TYPE	A	H	PINZE	AT2	G6.3/15000	AD/B
BTB.50.100.FP20	BTB50 H100 D20	46	100	4SR20- Ø3 al Ø18			
BTB.50.100.FP32	BTB50 H100 D32	62	100	4SR32- Ø6 al Ø25			



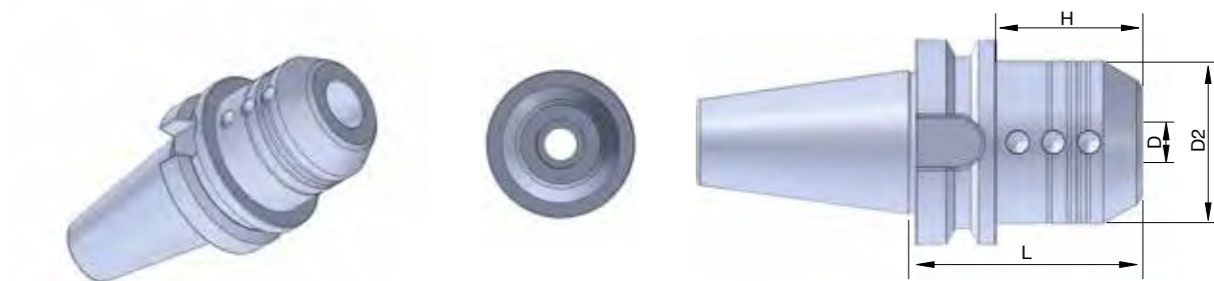
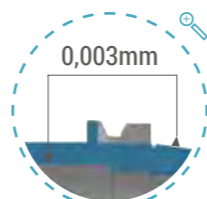
### A FORTE SERRAGGIO - POWER MILLING CHUCKS - BTB40

Cod.	TYPE	A	H	PINZE	AT2	G6.3/15000	AD/B
BTB.40.80.FP20	BTB40 H80 D20	46	80	4SR20- Ø3 al Ø18			
BTB.40.85.FP32	BTB40 H85 D32	62	85	4SR32 - Ø6 al Ø25			



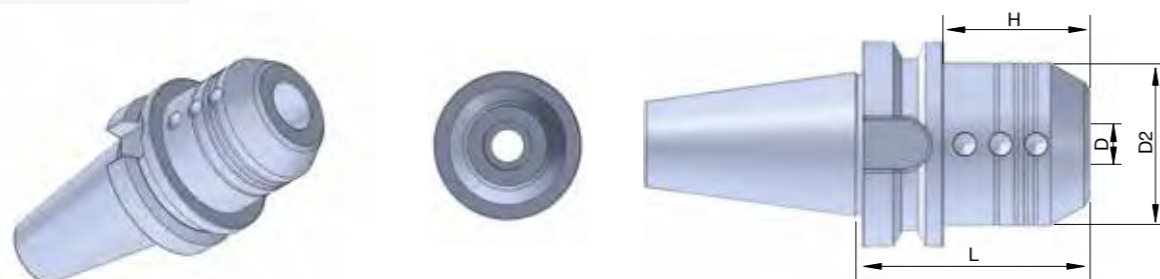
# IDRAULICO

## HYDRAULIC EXPANSIONS CHUCK



### IDRAULICO - HYDRAULIC EXPANSIONS CHUCK - BTB50

Cod.	TYPE	L	H	AT2	
				G2.5/20000	AD/B
BTB.50.110.HY12	BTB50 H110 D12	110	72	32	12
BTB.50.110.HY20	BTB50 H110 D20	110	72	42	20
BTB.50.110.HY25	BTB50 H110 D25	110	72	50	25
BTB.50.110.HY32	BTB50 H110 D32	110	72	60	32

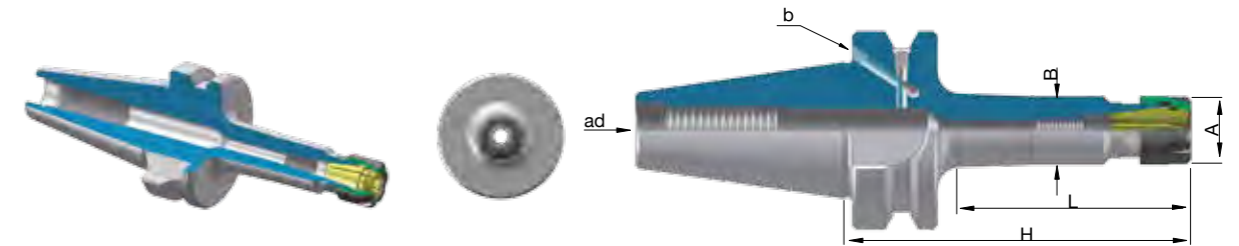


### IDRAULICO - HYDRAULIC EXPANSIONS CHUCK - BTB40

Cod.	TYPE	L	H	AT2	
				G2.5/20000	AD/B
BTB.40.90.HY12	BTB40 H90 D12	90	63	32	12
BTB.40.90.HY20	BTB40 H90 D20	90	63	42	20
BTB.40.90.HY25	BTB40 H90 D25	90	63	50	25
BTB.40.110.HY32	BTB40 H110 D32	110	81.5	60	32

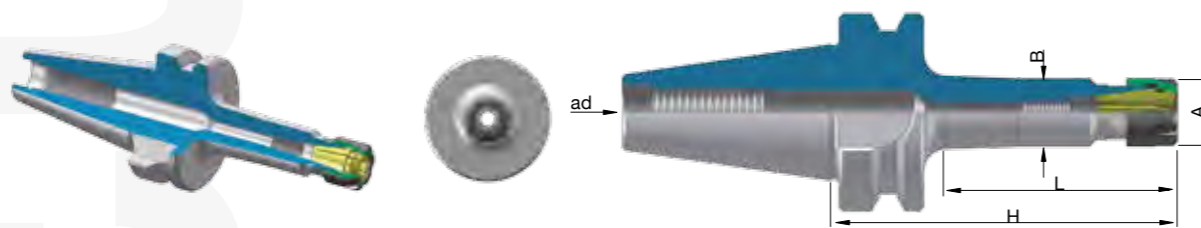
# PORTAPINZA ER DIN6499

## COLLET CHUCK FOR ER DIN6499



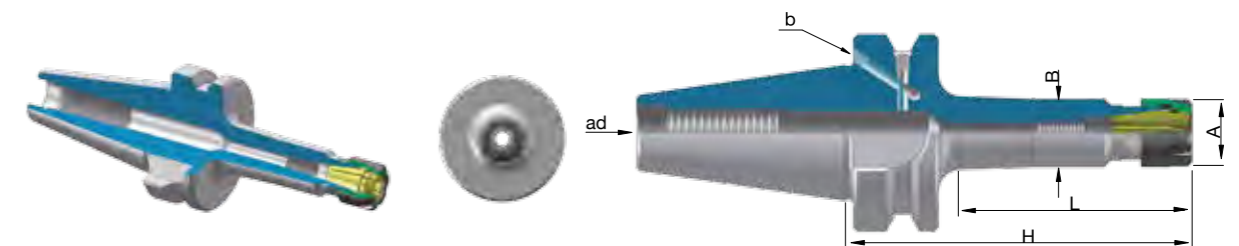
### PORTAPINZA ER MINI - COLLET CHUCK ER MINI - BTB40

Cod.	TYPE	CAPACITÀ RANGE	AT2		G6.3/15000		AD/B
			A	B	L	H	
BTB.40.100.ER11M	BTB40 H100 ERX11M	1 ÷ 7 mm	16	16	73	100	
BTB.40.125.ER11M	BTB40 H125 ERX11M	1 ÷ 7 mm	16	16	98	125	
BTB.40.150.ER11M	BTB40 H150 ERX11M	1 ÷ 7 mm	16	16	123	150	
BTB.40.100.ER16M	BTB40 H100 ERX16M	1 ÷ 10 mm	22	22	73	100	
BTB.40.125.ER16M	BTB40 H125 ERX16M	1 ÷ 10 mm	22	22	98	125	
BTB.40.150.ER16M	BTB40 H150 ERX16M	1 ÷ 10 mm	22	22	123	150	
BTB.40.100.ER20M	BTB40 H100 ERX20M	1 ÷ 13 mm	28	28	73	100	
BTB.40.135.ER20M	BTB40 H135 ERX20M	1 ÷ 13 mm	28	28	108	135	
BTB.40.150.ER20M	BTB40 H150 ERX20M	1 ÷ 13 mm	28	28	123	150	
BTB.40.100.ER25M	BTB40 H100 ERX25M	1 ÷ 16 mm	35	35	73	100	
BTB.40.150.ER25M	BTB40 H150 ERX25M	1 ÷ 16 mm	35	35	123	150	
BTB.40.200.ER25M	BTB40 H200 ERX25M	1 ÷ 16 mm	35	35	173	200	



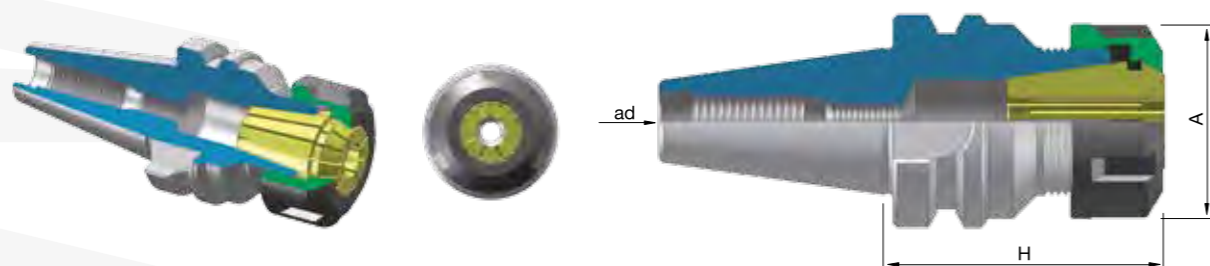
### PORTAPINZA ER MINI - COLLET CHUCK ER MINI - BT30

Cod.	TYPE	CAPACITÀ RANGE	AT2		G6.3/15000		AD
			A	B	L	H	
BT.30.55.ER11M	BT 30 H 55 ERX11M	1 ÷ 7 mm	16	16	33	55	
BT.30.60.ER11M	BT 30 H 60 ERX11M	1 ÷ 7 mm	16	16	38	60	
BT.30.80.ER11M	BT 30 H 80 ERX11M	1 ÷ 7 mm	16	16	58	80	
BT.30.100.ER11M	BT 30 H100 ERX11M	1 ÷ 7 mm	16	16	78	100	
BT.30.130.ER11M	BT 30 H130 ERX11M	1 ÷ 7 mm	16	16	108	130	
BT.30.60.ER16M	BT 30 H60 ERX16M	1 ÷ 10 mm	22	22	38	60	
BT.30.120.ER16M	BT 30 H120 ERX16M	1 ÷ 10 mm	22	22	98	120	



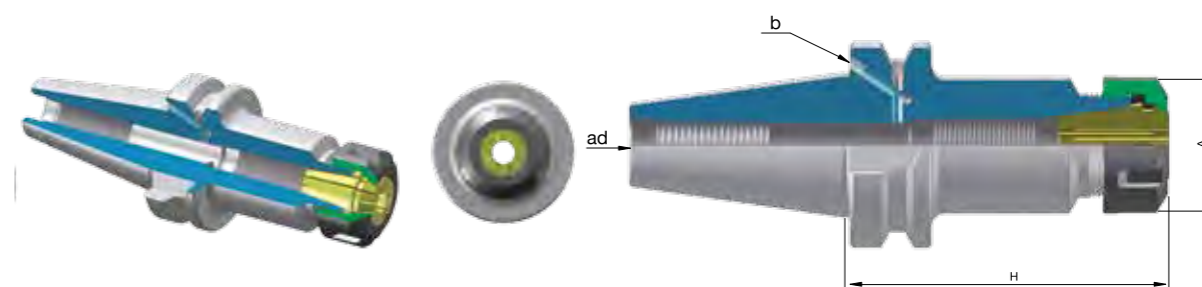
### PORTAPINZA ER MINI - COLLET CHUCK ER MINI - BTB50

Cod.	TYPE	CAPACITÀ RANGE	AT2		G6.3/15000		AD/B
			A	B	L	H	
BTB.50.135.ER16M	BTB50 H135 ERX16M	1 ÷ 10 mm	22	22	97	135	
BTB.50.160.ER16M	BTB50 H160 ERX16M	1 ÷ 10 mm	22	22	122	160	
BTB.50.200.ER16M	BTB50 H200 ERX16M	1 ÷ 10 mm	22	22	162	200	
BTB.50.135.ER20M	BTB50 H135 ERX20M	1 ÷ 13 mm	28	28	97	135	



### PORTAPINZA ER - COLLET CHUCK ER - BT30

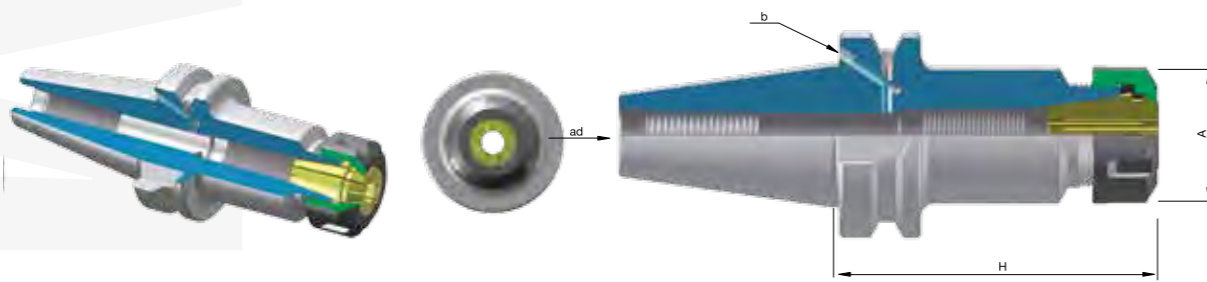
Cod.	TYPE	CAPACITÀ RANGE	G6.3/15000	
			AT2	AD
			A	H
BT.30.55.ER16	BT 30 H 55 ERX16	1 ÷ 10 mm	32	55
BT.30.70.ER16	BT 30 H 70 ERX16	1 ÷ 10 mm	32	70
BT.30.100.ER16	BT 30 H100 ERX16	1 ÷ 10 mm	32	100
BT.30.70.ER20	BT 30 H 70 ERX20	1 ÷ 13 mm	35	70
BT.30.60.ER25	BT 30 H 60 ERX25	1 ÷ 16 mm	42	60
BT.30.90.ER25	BT 30 H 90 ERX25	1 ÷ 16 mm	42	90
BT.30.60.ER32	BT 30 H 60 ERX32	2 ÷ 20 mm	50	60
BT.30.70.ER32	BT 30 H 70 ERX32	2 ÷ 20 mm	50	70
BT.30.100.ER32	BT 30 H100 ERX32	2 ÷ 20 mm	50	100
BT.30.60.ER40	BT 30 H 80 ERX40	3 ÷ 20 mm	63	80



### PORTAPINZA ER - COLLET CHUCK ER - BTB40

Cod.	TYPE	CAPACITÀ RANGE	G6.3/15000	
			AT2	AD/B
			A	H
BTB.40.70.ER16	BTB40 H 70 ERX16	1 ÷ 10 mm	32	70
BTB.40.100.ER16	BTB40 H100 ERX16	1 ÷ 10 mm	32	100
BTB.40.120.ER16	BTB40 H120 ERX16	1 ÷ 10 mm	32	120
BTB.40.150.ER16	BTB40 H150 ERX16	1 ÷ 10 mm	32	150
BTB.40.200.ER16	BTB40 H200 ERX16	1 ÷ 10 mm	32	200
BTB.40.70.ER20	BTB40 H 70 ERX20	1 ÷ 13 mm	35	70
BTB.40.100.ER20	BTB40 H100 ERX20	1 ÷ 13 mm	35	100
BTB.40.160.ER20	BTB40 H160 ERX20	1 ÷ 13 mm	35	160
BTB.40.70.ER25	BTB40 H 70 ERX25	1 ÷ 16 mm	42	70
BTB.40.100.ER25	BTB40 H100 ERX25	1 ÷ 16 mm	42	100
BTB.40.130.ER25	BTB40 H130 ERX25	1 ÷ 16 mm	42	130
BTB.40.160.ER25	BTB40 H160 ERX25	1 ÷ 16 mm	42	160
BTB.40.200.ER25	BTB40 H200 ERX25	1 ÷ 16 mm	42	200
BTB.40.70.ER32	BTB40 H 70 ERX32	2 ÷ 20 mm	50	70
BTB.40.100.ER32	BTB40 H100 ERX32	2 ÷ 20 mm	50	100
BTB.40.130.ER32	BTB40 H130 ERX32	2 ÷ 20 mm	50	130
BTB.40.150.ER32	BTB40 H150 ERX32	2 ÷ 20 mm	50	150
BTB.40.200.ER32	BTB40 H200 ERX32	2 ÷ 20 mm	50	200
BTB.40.70.ER40	BTB40 H 70 ERX40	3 ÷ 26 mm	63	70
BTB.40.100.ER40	BTB40 H100 ERX40	3 ÷ 26 mm	63	100
BTB.40.130.ER40	BTB40 H130 ERX40	3 ÷ 26 mm	63	130
BTB.40.150.ER40	BTB40 H150 ERX40	3 ÷ 26 mm	63	150
BTB.40.200.ER40	BTB40 H200 ERX40	3 ÷ 26 mm	63	200
BTB.40.85.ER50	BTB40 H 85 ERX50	6 ÷ 34 mm	78	85





### PORTAPINZA ER - COLLET CHUCK ER - BTB50

Cod.	TYPE	CAPACITÀ RANGE	AT2	
			G6.3/15000	AD/B
BTB.50.100.ER16	BTB50 H100 ERX16	2 ÷ 20 mm	32	100
BTB.50.160.ER16	BTB50 H160 ERX16	2 ÷ 20 mm	32	160
BTB.50.200.ER16	BTB50 H200 ERX16	2 ÷ 20 mm	32	200
BTB.50.100.ER20	BTB50 H100 ERX20	1 ÷ 13 mm	35	100
BTB.50.160.ER20	BTB50 H160 ERX20	1 ÷ 13 mm	35	160
BTB.50.85.ER25	BTB50 H 80 ERX25	1 ÷ 16 mm	42	80
BTB.50.100.ER25	BTB50 H100 ERX25	1 ÷ 16 mm	42	100
BTB.50.130.ER25	BTB50 H130 ERX25	1 ÷ 16 mm	42	130
BTB.50.160.ER25	BTB50 H160 ERX25	1 ÷ 16 mm	42	160
BTB.50.200.ER25	BTB50 H200 ERX25	1 ÷ 16 mm	42	200
BTB.50.85.ER32	BTB50 H 80 ERX32	2 ÷ 20 mm	50	80
BTB.50.100.ER32	BTB50 H100 ERX32	2 ÷ 20 mm	50	100
BTB.50.120.ER32	BTB50 H120 ERX32	2 ÷ 20 mm	50	120
BTB.50.160.ER32	BTB50 H160 ERX32	2 ÷ 20 mm	50	160
BTB.50.200.ER32	BTB50 H200 ERX32	2 ÷ 20 mm	50	200
BTB.50.250.ER32	BTB50 H250 ERX32	2 ÷ 20 mm	50	250
BTB.50.80.ER40	BTB50 H 80 ERX40	3 ÷ 30 mm	63	80
BTB.50.100.ER40	BTB50 H100 ERX40	3 ÷ 30 mm	63	100
BTB.50.130.ER40	BTB50 H130 ERX40	3 ÷ 30 mm	63	130
BTB.50.160.ER40	BTB50 H160 ERX40	3 ÷ 30 mm	63	160
BTB.50.200.ER40	BTB50 H200 ERX40	3 ÷ 30 mm	63	200
BTB.50.300.ER40	BTB50 H300 ERX40	3 ÷ 30 mm	63	300
BTB.50.100.ER50	BTB50 H100 ERX50	6 ÷ 34 mm	78	100
BTB.50.120.ER50	BTB50 H120 ERX50	6 ÷ 34 mm	78	120
BTB.50.160.ER50	BTB50 H160 ERX50	6 ÷ 34 mm	78	160



### CASSETTA CON MANDRINO PORTAPINZE - KIT

Cod.	Portapinze	Pinze nella serie	AT2	
			G6.3/15000	AD/B
KIT577	BTB40 H70 ERX32	ERX32: Ø 3 ÷ 20 progress. 1,0 mm - 18 pinze	ERX32	STAND
KIT582	BTB40 H70 ERX40	ERX40: Ø 4 ÷ 26 progress. 1,0 mm - 23 pinze	ERX40	STAND
KIT583	BTB50 H80 ERX32	ERX32: Ø 3 ÷ 20 progress. 1,0 mm - 18 pinze	ERX32	STAND
KIT584	BTB50 H80 ERX40	ERX40: Ø 4 ÷ 26 progress. 1,0 mm - 23 pinze	ERX40	STAND

Fig.1



Fig.2



### PORTAPINZA EXTRACORTO - SHORTS COLLET CHUCK - BT40

Cod.	TYPE	CAPACITÀ RANGE	AT2	
			G6.3/15000	AD
BT.40.29.ER32	BT 40 H 29 ERX32	2 ÷ 20 mm		29

FORNIBILI CON GHIERA CON FILETTO ESTERNO FORMA A CON FORI (Fig.1) E CON ESAGONO (Fig.2)  
AVAILABLE WITH EXTERNALLY THREADED NUTS ( Fig.1 ) AND EXTERNALLY THREADED EXAGONAL NUTS ( Fig.2 )

Fig.1



Fig.2



### PORTAPINZA EXTRACORTO - SHORTS COLLET CHUCK - BTB40 - BTB50

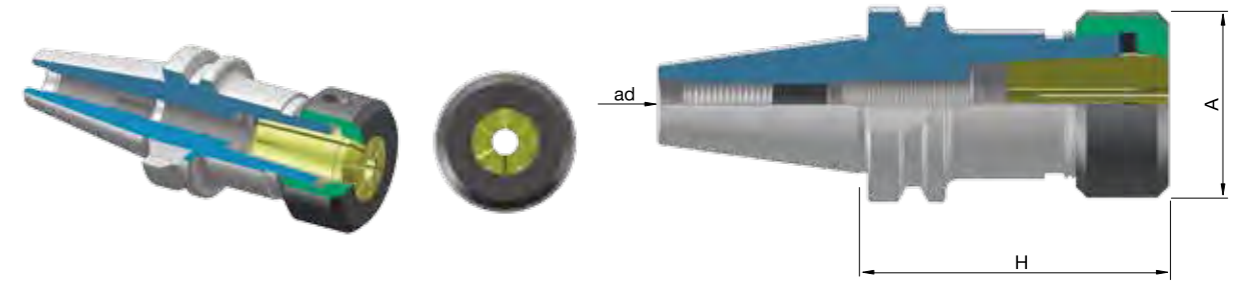
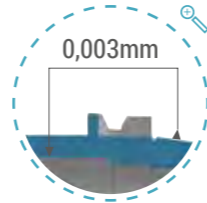
Cod.	TYPE	CAPACITÀ RANGE	AT2	
			G6.3/15000	AD/B
BTB.40.50.ER32	BTB40 H 50 ERX32	2 ÷ 20 mm	Hex 32	50
BTB.40.55.ER32	BTB40 H 55 ERX32	2 ÷ 20 mm	40	55
BTB.50.40.ER32	BTB50 H 40 ERX32	2 ÷ 20 mm	Hex 32	40

FORNIBILI CON GHIERA CON FILETTO ESTERNO FORMA A CON FORI, CON ESAGONO (Fig.2) E STANDARD (Fig.1)  
AVAILABLE WITH EXTERNALLY THREADED NUTS, EXTERNALLY THREADED EXAGONAL NUTS ( Fig.2 ) AND STANDARD CLAMPING NUT ( Fig.1 )



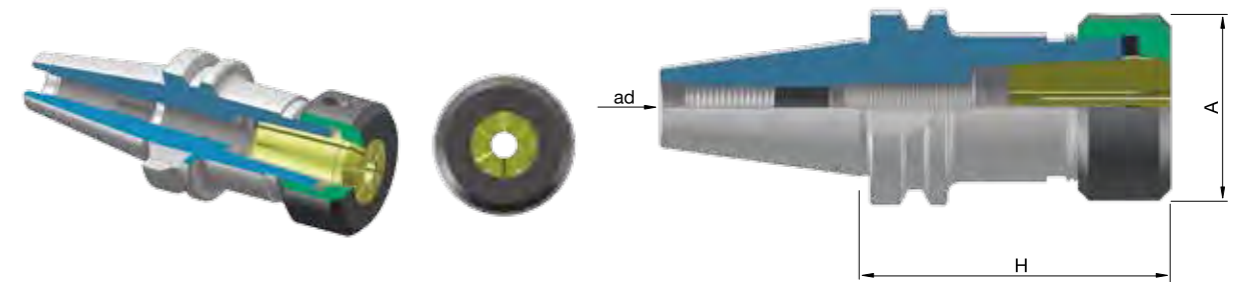
# PORTAPINZA EOC DIN6388

## COLLET CHUCK FOR EOC DIN6388



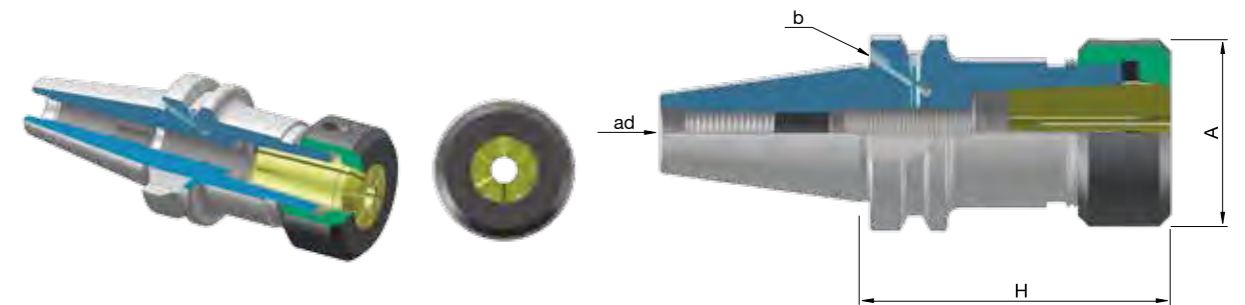
### PORTAPINZA PER EOC - COLLET CHUCK FOR EOC - BT40

Cod.	TYPE	CAPACITÀ RANGE	G6.3/15000	
			AT2	AD
BT.40.70.EOC16	BT40 H 70 EOC16	2 ÷ 16 mm	A	H
BT.40.70.EOC25	BT40 H70 EOC25	2 ÷ 25 mm	43	70
BT.40.90.EOC32	BT40 H90 EOC32	4 ÷ 32 mm	60	70



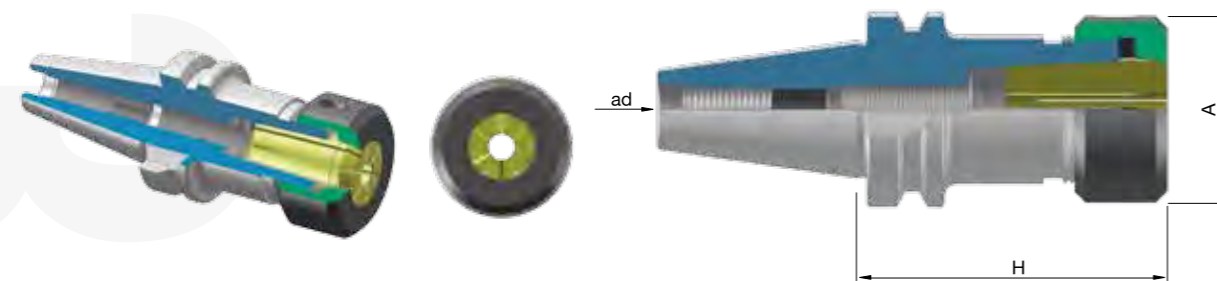
### PORTAPINZA PER EOC - COLLET CHUCK FOR EOC - BT50

Cod.	TYPE	CAPACITÀ RANGE	G6.3/15000	
			AT2	AD
BT.50.85.EOC25	BT50 H85 EOC25	2 ÷ 25 mm	A	H
BT.50.90.EOC32	BT50 H90 EOC32	4 ÷ 32 mm	60	85



### PORTAPINZA PER EOC - COLLET CHUCK FOR EOC - BTB40

Cod.	TYPE	CAPACITÀ RANGE	G6.3/15000	
			AT2	AD/B
BTB.40.70.EOC16	BTB40 H 70 EOC16	2 ÷ 16 mm	A	H
BTB.40.70.EOC25	BTB40 H 70 EOC25	2 ÷ 25 mm	43	70
BTB.40.90.EOC32	BTB40 H 90 EOC32	4 ÷ 32 mm	60	70



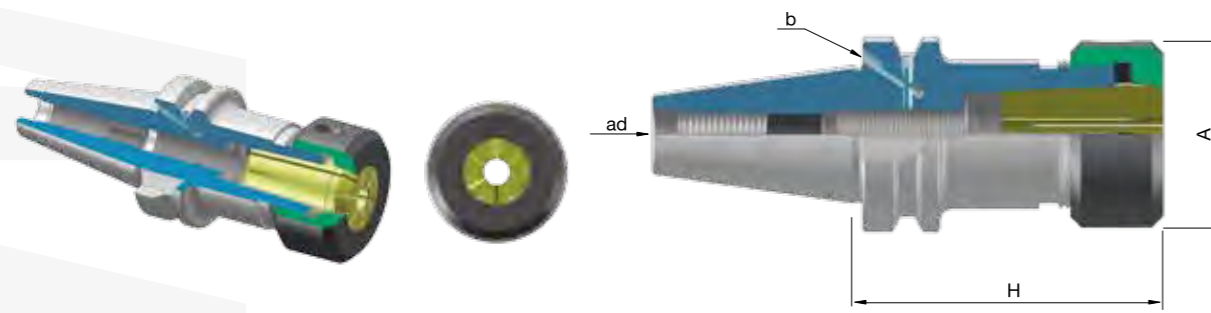
### PORTAPINZA PER EOC - COLLET CHUCK FOR EOC - BT30

Cod.	TYPE	CAPACITÀ RANGE	G6.3/15000	
			AT2	AD
BT.30.60.EOC16	BT30 H60 EOC16	2 ÷ 16 mm	A	H
BT.30.80.EOC25	BT30 H80 EOC25	2 ÷ 25 mm	43	60

# PER FRESE WELDON

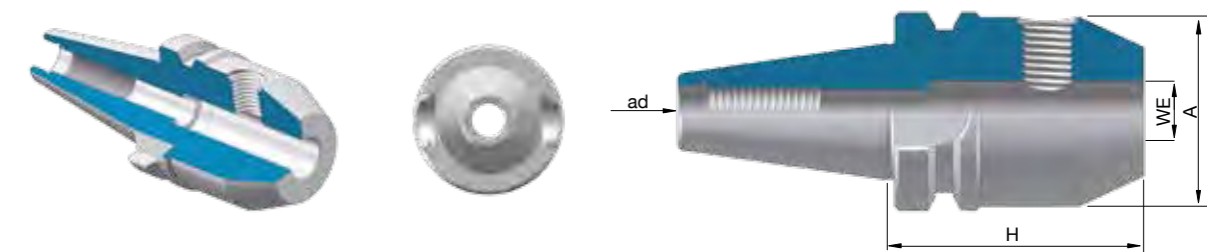
## END MILL HOLDERS

MAS 403 - BT / JIS6339



### PORTAPINZA PER EOC - COLLET CHUCK FOR EOC - BTB50

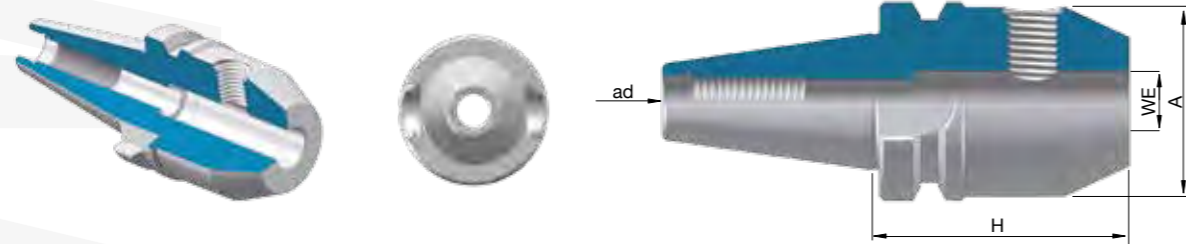
Cod.	TYPE	CAPACITÀ RANGE	AT2		G6.3/15000		AD/B	
			A	H	A	H	A	H
BTB.50.85.EOC25	BTB50 H 85 EOC25	2 ÷ 25 mm	60	85				



### PER FRESE WELDON - END MILL HOLDER - BT30

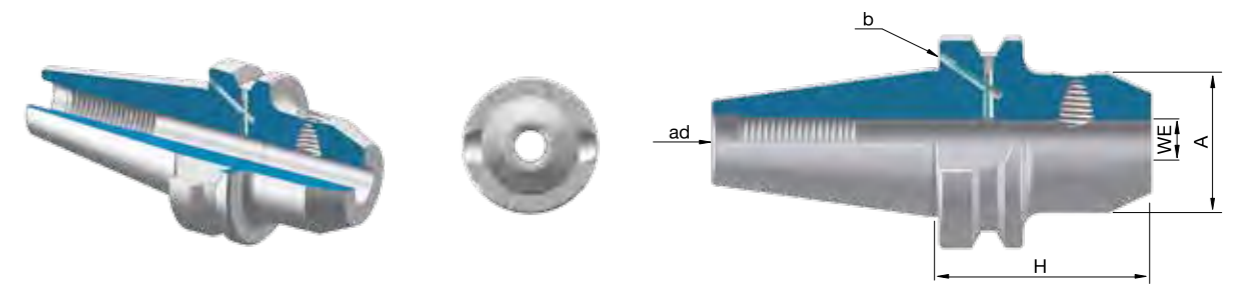
Cod.	TYPE	AT2		G6.3/15000		AD	
		A	H	A	H	WE	WE
BT.30.50.WE6	BT 30 H50 WE 6	25	50			6	6
BT.30.100.WE6	BT 30 H100 WE 6	25	100			6	6
BT.30.50.WE8	BT 30 H 50 WE 8	28	50			8	8
BT.30.100.WE8	BT 30 H100 WE 8	28	100			8	8

MAS 403-B



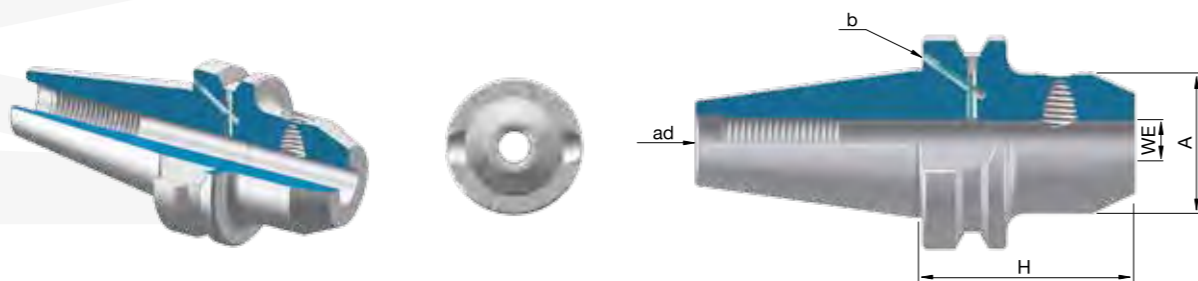
### PER FRESE WELDON - END MILL HOLDER - BT30

Cod.	TYPE	AT2 G6.3/15000 AD		
		A	H	WE
BT.30.50.WE10	BT 30 H 50 WE10	35	50	10
BT.30.100.WE10	BT 30 H100 WE10	35	100	10
BT.30.50.WE12	BT 30 H 50 WE12	42	50	12
BT.30.100.WE12	BT 30 H100 WE12	42	100	12
BT.30.50.WE14	BT 30 H 50 WE14	44	50	14
BT.30.100.WE14	BT 30 H100 WE14	44	100	14
BT.30.63.WE16	BT 30 H 63 WE16	48	63	16
BT.30.100.WE16	BT 30 H100 WE16	48	100	16
BT.30.63.WE18	BT 30 H 63 WE18	50	63	18
BT.30.100.WE18	BT 30 H100 WE18	50	100	18
BT.30.63.WE20	BT 30 H 63 WE20	52	63	20
BT.30.100.WE20	BT 30 H100 WE20	52	100	20



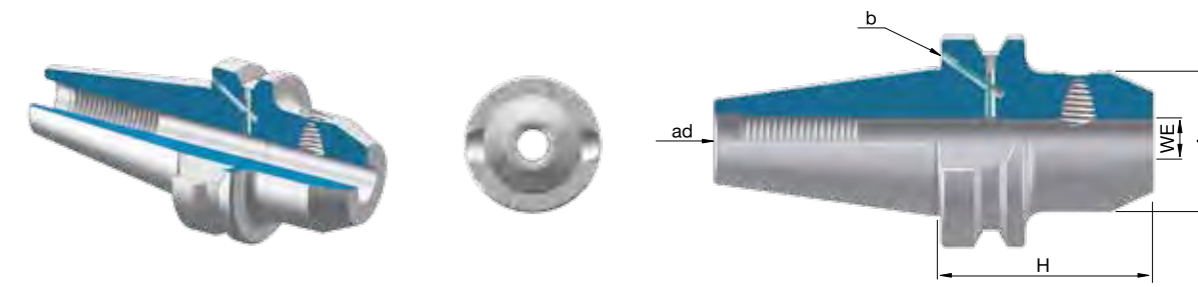
### PER FRESE WELDON - END MILL HOLDER - BT40

Cod.	TYPE	AT2 G6.3/15000 AD/B		
		A	H	WE
BTB.40.50.WE6	BTB40 H 50 WE 6	25	50	6
BTB.40.100.WE6	BTB40 H100 WE 6	25	100	6
BTB.40.130.WE6	BTB40 H130 WE 6	25	130	6
BTB.40.160.WE6	BTB40 H160 WE 6	25	160	6
BTB.40.50.WE8	BTB40 H 50 WE 8	28	50	8
BTB.40.100.WE8	BTB40 H100 WE 8	28	100	8
BTB.40.130.WE8	BTB40 H130 WE 8	28	130	8
BTB.40.160.WE8	BTB40 H160 WE 8	28	160	8
BTB.40.63.WE10	BTB40 H 63 WE10	35	63	10
BTB.40.100.WE10	BTB40 H100 WE10	35	100	10
BTB.40.130.WE10	BTB40 H130 WE10	35	130	10
BTB.40.160.WE10	BTB40 H160 WE10	35	160	10
BTB.40.63.WE12	BTB40 H 63 WE12	42	63	12
BTB.40.100.WE12	BTB40 H100 WE12	42	100	12
BTB.40.130.WE12	BTB40 H130 WE12	42	130	12
BTB.40.160.WE12	BTB40 H160 WE12	42	160	12
BTB.40.63.WE14	BTB40 H 63 WE14	44	63	14
BTB.40.100.WE14	BTB40 H100 WE14	44	100	14
BTB.40.130.WE14	BTB40 H130 WE14	44	130	14
BTB.40.160.WE14	BTB40 H160 WE14	44	160	14
BTB.40.63.WE16	BTB40 H 63 WE16	48	63	16
BTB.40.100.WE16	BTB40 H100 WE16	48	100	16
BTB.40.130.WE16	BTB40 H130 WE16	48	130	16
BTB.40.160.WE16	BTB40 H160 WE16	48	160	16
BTB.40.63.WE18	BTB40 H 63 WE18	50	63	18
BTB.40.100.WE18	BTB40 H100 WE18	50	100	18
BTB.40.130.WE18	BTB40 H130 WE18	50	130	18
BTB.40.160.WE18	BTB40 H160 WE18	50	160	18
BTB.40.63.WE20	BTB40 H 63 WE20	52	63	20
BTB.40.100.WE20	BTB40 H100 WE20	52	100	20
BTB.40.130.WE20	BTB40 H130 WE20	52	130	20
BTB.40.160.WE20	BTB40 H160 WE20	52	160	20
BTB.40.90.WE25	BTB40 H90 WE25	65	90	25
BTB.40.130.WE25	BTB40 H130 WE25	65	130	25
BTB.40.160.WE25	BTB40 H160 WE25	65	160	25
BTB.40.100.WE32	BTB40 H100 WE32	72	100	32
BTB.40.130.WE32	BTB40 H130 WE32	72	130	32
BTB.40.160.WE32	BTB40 H160 WE32	72	160	32
BTB.40.120.WE40	BTB40 H120 WE40	80	120	40



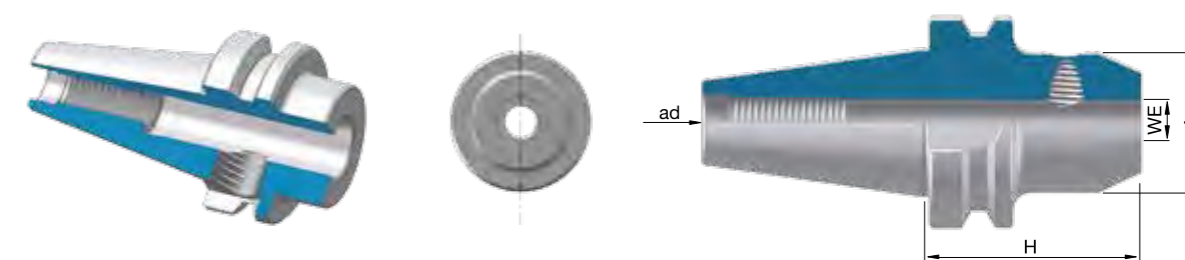
PER FRESE WELDON - END MILL HOLDER - BTB50

Cod.	TYPE	AT2		
		A	H	WE
BTB.50.63.WE6	BTB50 H 63 WE 6	25	63	6
BTB.50.100.WE6	BTB50 H100 WE 6	25	100	6
BTB.50.130.WE6	BTB50 H130 WE 6	25	130	6
BTB.50.160.WE6	BTB50 H160 WE 6	25	160	6
BTB.50.200.WE6	BTB50 H200 WE 6	25	200	6
BTB.50.63.WE8	BTB50 H 63 WE 8	28	63	8
BTB.50.100.WE8	BTB50 H100 WE 8	28	100	8
BTB.50.130.WE8	BTB50 H130 WE 8	28	130	8
BTB.50.160.WE8	BTB50 H160 WE 8	28	160	8
BTB.50.200.WE8	BTB50 H200 WE 8	28	200	8
BTB.50.63.WE10	BTB50 H 63 WE10	35	63	10
BTB.50.100.WE10	BTB50 H100 WE10	35	100	10
BTB.50.130.WE10	BTB50 H130 WE10	35	130	10
BTB.50.160.WE10	BTB50 H160 WE10	35	160	10
BTB.50.200.WE10	BTB50 H200 WE10	35	200	10
BTB.50.80.WE12	BTB50 H 80 WE12	42	80	12
BTB.50.100.WE12	BTB50 H100 WE12	42	100	12
BTB.50.130.WE12	BTB50 H130 WE12	42	130	12
BTB.50.160.WE12	BTB50 H160 WE12	42	160	12
BTB.50.200.WE12	BTB50 H200 WE12	42	200	12
BTB.50.80.WE14	BTB50 H 80 WE14	44	80	14
BTB.50.100.WE14	BTB50 H100 WE14	44	100	14
BTB.50.130.WE14	BTB50 H130 WE14	44	130	14
BTB.50.160.WE14	BTB50 H160 WE14	44	160	14
BTB.50.200.WE14	BTB50 H200 WE14	44	200	14
BTB.50.80.WE16	BTB50 H 80 WE16	48	80	16
BTB.50.100.WE16	BTB50 H100 WE16	48	100	16
BTB.50.130.WE16	BTB50 H130 WE16	48	130	16
BTB.50.160.WE16	BTB50 H160 WE16	48	160	16
BTB.50.200.WE16	BTB50 H200 WE16	48	200	16
BTB.50.80.WE18	BTB50 H 80 WE18	50	80	18
BTB.50.100.WE18	BTB50 H100 WE18	50	100	18
BTB.50.130.WE18	BTB50 H130 WE18	50	130	18
BTB.50.160.WE18	BTB50 H160 WE18	50	160	18
BTB.50.200.WE18	BTB50 H200 WE18	50	200	18
BTB.50.80.WE20	BTB50 H 80 WE20	52	80	20
BTB.50.100.WE20	BTB50 H100 WE20	52	100	20
BTB.50.130.WE20	BTB50 H130 WE20	52	130	20
BTB.50.160.WE20	BTB50 H160 WE20	52	160	20



PER FRESE WELDON - END MILL HOLDER - BTB50

Cod.	TYPE	AT2		
		A	H	WE
BTB.50.200.WE20	BTB50 H200 WE20	52	200	20
BTB.50.100.WE25	BTB50 H100 WE25	65	100	25
BTB.50.130.WE25	BTB50 H130 WE25	65	130	25
BTB.50.160.WE25	BTB50 H160 WE25	65	160	25
BTB.50.200.WE25	BTB50 H200 WE25	65	200	25
BTB.50.105.WE32	BTB50 H105 WE32	72	105	32
BTB.50.130.WE32	BTB50 H130 WE32	72	130	32
BTB.50.160.WE32	BTB50 H160 WE32	72	160	32
BTB.50.200.WE32	BTB50 H200 WE32	72	200	32
BTB.50.120.WE40	BTB50 H120 WE40	80	120	40
BTB.50.160.WE40	BTB50 H160 WE40	80	160	40
BTB.50.200.WE40	BTB50 H200 WE40	80	200	40
BTB.50.125.WE50	BTB50 H125 WE50	90	125	50



EXTRACORTI PER FRESE WELDON - SHORTS END MILL HOLDER - BT30

Cod.	TYPE	AT2			
		A	SCREWS	H	WE
BT.30.32.WE6	BT30 H32 WE6	25	M6x10	32	6
BT.30.32.WE8	BT30 H32 WE8	28	M8x10	32	8
BT.30.32.WE10	BT30 H32 WE10	32	M10x12	32	10
BT.30.32.WE12	BT30 H32 WE12	32	M12x16	32	12
BT.30.35.WE16	BT30 H35 WE16	32	M14x10	35	16
BT.30.35.WE20	BT30 H35 WE20	36	M16x10	35	20



# PORTAFRESE FISSI

## SHELL END MILL HOLDERS



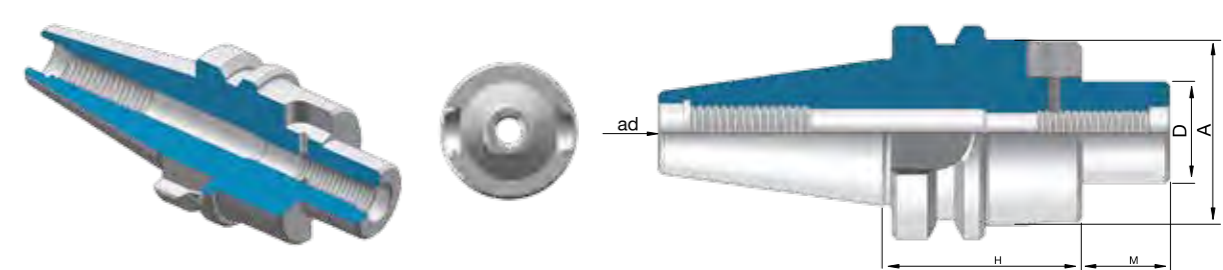
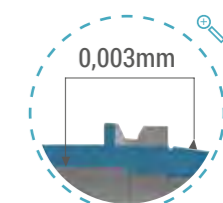
### EXTRACORTI PER FRESE WELDON - SHORTS END MILL HOLDER - BTB40

Cod.	TYPE	A	SCREWS	AT2		G6.3/15000		AD/B	
				H	WE	H	WE	H	WE
BTB.40.35.WE16	BTB40 H 35 WE16	43,5	M14x16	35	16				
BTB.40.35.WE20	BTB40 H 35 WE20	43,5	M16x16	35	20				
BTB.40.35.WE25	BTB40 H 35 WE25	43,5	M16x10	35	25				
BTB.40.60.WE25	BTB40 H 60 WE25	50	M18x2x12+ M16x1x8	60	25				
BTB.40.40.WE32	BTB40 H40 WE32	50	M20x2x20+M16x1x8	40	32				
BTB.40.70.WE32	BTB40 H 70 WE32	72	M20x2x20+ M16x1x8	70	32				



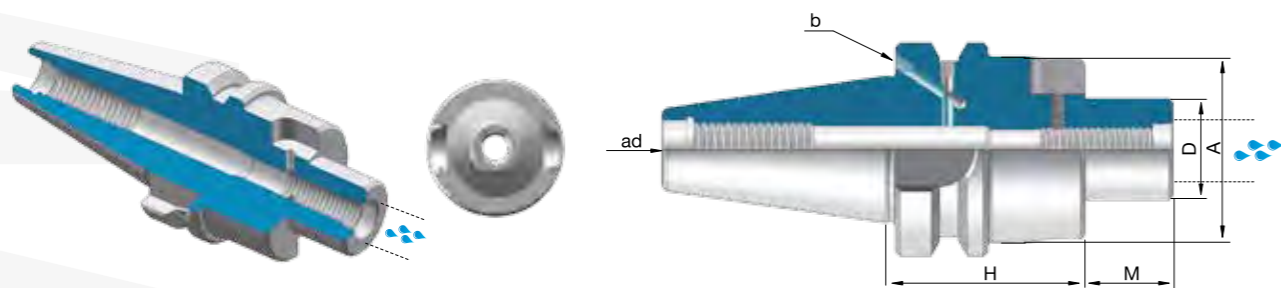
### EXTRACORTI PER FRESE WELDON - SHORTS END MILL HOLDER - BTB50

Cod.	TYPE	A	SCREWS	AT2		G6.3/15000		AD/B	
				H	WE	H	WE	H	WE
BTB.50.44.WE16	BTB50 H 44 WE16	70	M14x16	44	16				
BTB.50.44.WE20	BTB50 H 44 WE20	70	M16x16	44	20				
BTB.50.44.WE25	BTB50 H 44 WE25	70	M18x2x20	44	25				
BTB.50.44.WE32	BTB50 H 44 WE32	70	M20x2x20	44	32				
BTB.50.44.WE40	BTB50 H 44 WE40	80	M20x2x20	44	40				



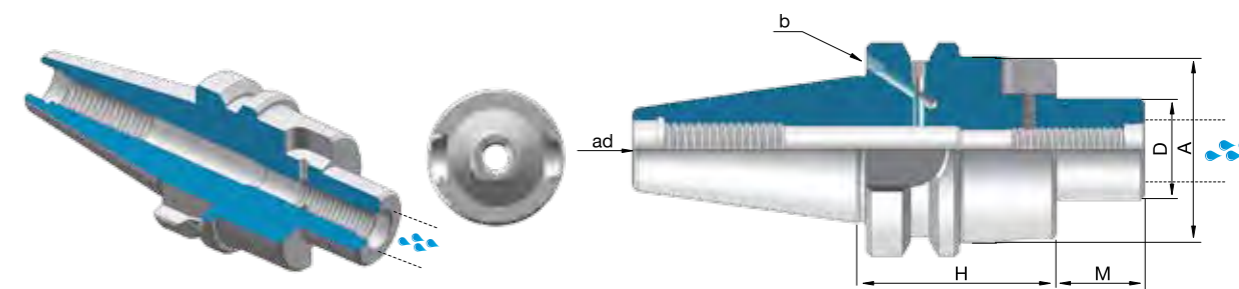
### PORTAFRESE FISSI - SHELL END MILL HOLDERS - BT30

Cod.	TYPE	A	D	M	H	AT2		G6.3/15000		AD	
						H	WE	H	WE	H	WE
BT.30.43.D16S	BT30 H43 D16S	32	16	17	43						
BT.30.43.D22S	BT30 H43 D22S	40	22	19	43						
BT.30.50.D27S	BT30 H50 D27S	50	27	21	50						
BT.30.45.D32S	BT30 H45 D32S	58	32	24	45						



PORTAFRESE FISSI - SHELL END MILL HOLDERS - BTB40

Cod.	TYPE	AD/B			
		A	D	M	H
BTB.40.35.D16S	BTB40 H 35 D16S	38	16	17	35
BTB.40.45.D16S	BTB40 H 45 D16S	38	16	17	45
BTB.40.100.D16S	BTB40 H100 D16S	38	16	17	100
BTB.40.130.D16S	BTB40 H130 D16S	38	16	17	130
BTB.40.160.D16S	BTB40 H160 D16S	38	16	17	160
BTB.40.200.D16S	BTB40 H200 D16S	38	16	17	200
BTB.40.35.D22S	BTB40 H 35 D22S	48	22	19	35
BTB.40.45.D22S	BTB40 H 45 D22S	48	22	19	45
BTB.40.100.D22S	BTB40 H100 D22S	48	22	19	100
BTB.40.130.D22S	BTB40 H130 D22S	48	22	19	130
BTB.40.160.D22S	BTB40 H160 D22S	48	22	19	160
BTB.40.200.D22S	BTB40 H200 D22S	48	22	19	200
BTB.40.35.D27S	BTB40 H 35 D27S	58	27	21	35
BTB.40.45.D27S	BTB40 H 45 D27S	58	27	21	45
BTB.40.100.D27S	BTB40 H100 D27S	58	27	21	100
BTB.40.130.D27S	BTB40 H130 D27S	58	27	21	130
BTB.40.160.D27S	BTB40 H160 D27S	58	27	21	160
BTB.40.200.D27S	BTB40 H200 D27S	58	27	21	200
BTB.40.50.D32S	BTB40 H 50 D32S	78	32	24	50
BTB.40.56.D32S	BTB40 H 56 D32S	63	32	24	56
BTB.40.100.D32S	BTB40 H100 D32S	63	32	24	100
BTB.40.130.D32S	BTB40 H130 D32S	63	32	24	130
BTB.40.160.D32S	BTB40 H160 D32S	63	32	24	160
BTB.40.200.D32S	BTB40 H200 D32S	63	32	24	200
BTB.40.50.D40S	BTB40 H 50 D40S	88	40	27	50
BTB.40.60.D40S	BTB40 H 60 D40S	80	40	27	60
BTB.40.100.D40S	BTB40 H100 D40S	80	40	27	100
BTB.40.130.D40S	BTB40 H130 D40S	80	40	27	130
BTB.40.160.D40S	BTB40 H160 D40S	80	40	27	160
BTB.40.200.D40S	BTB40 H200 D40S	80	40	27	200

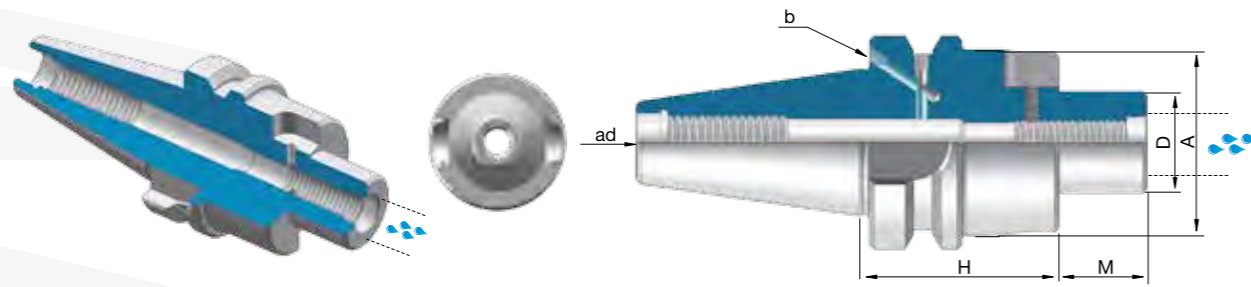


PORTAFRESE FISSI - SHELL END MILL HOLDERS - BTB50

Cod.	TYPE	AD/B			
		A	D	M	H
BTB.50.50.D16S	BTB50 H 50 D16S	38	16	17	50
BTB.50.75.D16S	BTB50 H 75 D16S	38	16	17	75
BTB.50.100.D16S	BTB50 H100 D16S	38	16	17	100
BTB.50.130.D16S	BTB50 H130 D16S	38	16	17	130
BTB.50.160.D16S	BTB50 H160 D16S	38	16	17	160
BTB.50.200.D16S	BTB50 H200 D16S	38	16	17	200
BTB.50.250.D16S	BTB50 H250 D16S	38	16	17	250
BTB.50.300.D16S	BTB50 H300 D16S	38	16	17	300
BTB.50.350.D16S	BTB50 H350 D16S	38	16	17	350
BTB.50.55.D22S	BTB50 H 55 D22S	48	22	19	55
BTB.50.75.D22S	BTB50 H 75 D22S	48	22	19	75
BTB.50.100.D22S	BTB50 H100 D22S	48	22	19	100
BTB.50.130.D22S	BTB50 H130 D22S	48	22	19	130
BTB.50.160.D22S	BTB50 H160 D22S	48	22	19	160
BTB.50.200.D22S	BTB50 H200 D22S	48	22	19	200
BTB.50.250.D22S	BTB50 H250 D22S	48	22	19	250
BTB.50.300.D22S	BTB50 H300 D22S	48	22	19	300
BTB.50.350.D22S	BTB50 H350 D22S	48	22	19	350
BTB.50.55.D27S	BTB50 H 55 D27S	58	27	21	55
BTB.50.75.D27S	BTB50 H 75 D27S	58	27	21	75
BTB.50.100.D27S	BTB50 H100 D27S	58	27	21	100
BTB.50.130.D27S	BTB50 H130 D27S	58	27	21	130
BTB.50.160.D27S	BTB50 H160 D27S	58	27	21	160
BTB.50.200.D27S	BTB50 H200 D27S	58	27	21	200
BTB.50.250.D27S	BTB50 H250 D27S	58	27	21	250
BTB.50.300.D27S	BTB50 H300 D27S	58	27	21	300
BTB.50.350.D27S	BTB50 H350 D27S	58	27	21	350
BTB.50.55.D32S	BTB50 H 55 D32S	78	32	24	55
BTB.50.75.D32S	BTB50 H 75 D32S	78	32	24	75
BTB.50.100.D32S	BTB50 H100 D32S	78	32	24	100
BTB.50.130.D32S	BTB50 H130 D32S	78	32	24	130
BTB.50.160.D32S	BTB50 H160 D32S	78	32	24	160
BTB.50.200.D32S	BTB50 H200 D32S	78	32	24	200
BTB.50.250.D32S	BTB50 H250 D32S	78	32	24	250
BTB.50.300.D32S	BTB50 H300 D32S	78	32	24	300
BTB.50.350.D32S	BTB50 H350 D32S	78	32	24	350
BTB.50.55.D40S	BTB50 H 55 D40S	88	40	27	55
BTB.50.75.D40S	BTB50 H 75 D40S	88	40	27	75
BTB.50.100.D40S	BTB50 H100 D40S	88	40	27	100

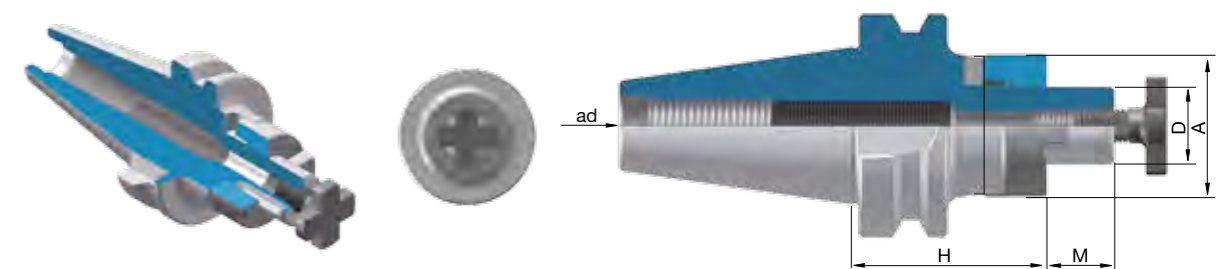
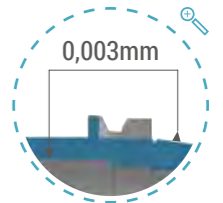
# PORTAFRESE COMBINATI

## COMBI SHELL END MILL HOLDERS



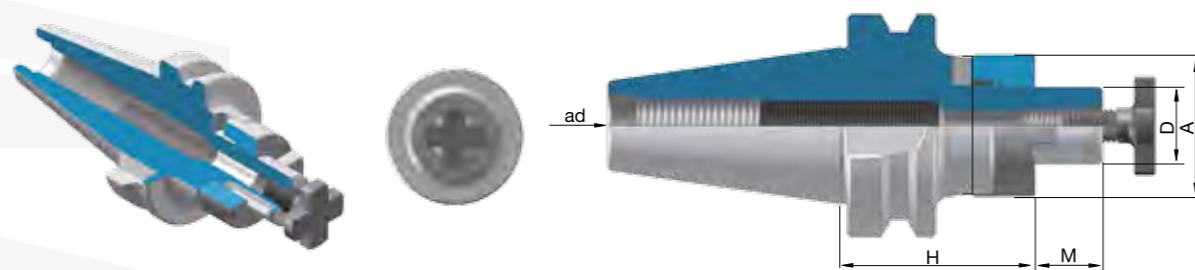
### PORTAFRESE FISSI - SHELL END MILL HOLDERS - BTB50

Cod.	TYPE	AT2		G6.3/15000		AD/B
		A	D	M	H	
BTB.50.130.D40S	BTB50 H130 D40S	88	40	27	130	
BTB.50.160.D40S	BTB50 H160 D40S	88	40	27	160	
BTB.50.200.D40S	BTB50 H200 D40S	88	40	27	200	



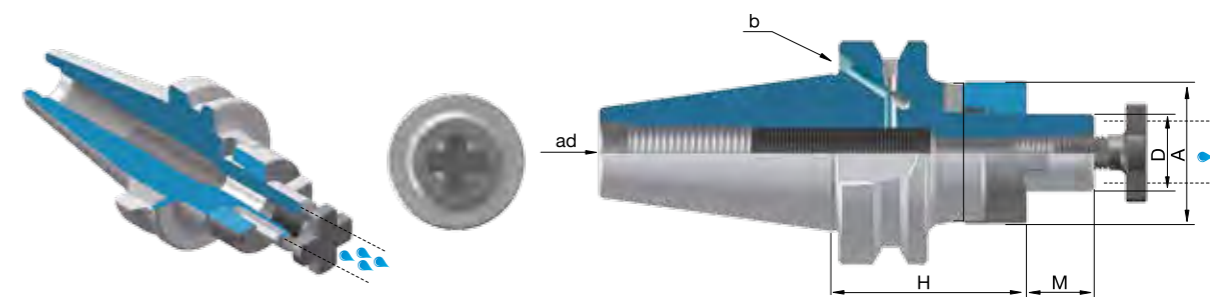
### PORTAFRESE COMBINATO - COMBI SHELL END MILL HOLDER - BT30

Cod.	TYPE	AT2		G6.3/15000		AD
		A	D	M	H	
BT.30.50.D13C	BT30 H 50 D13C	28	13	12	50	
BT.30.43.D16C	BT30 H 43 D16C	32	16	17	43	
BT.30.50.D22C	BT30 H 50 D22C	40	22	19	50	
BT.30.50.D27C	BT30 H 50 D27C	48	27	21	50	
BT.30.57.D32C	BT30 H 57 D32C	58	32	24	57	



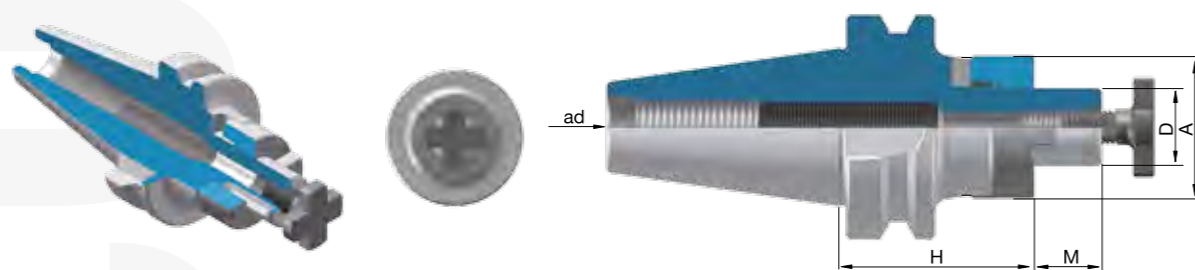
**PORTAFRESE COMBINATO - COMBI SHELL END MILL HOLDER - BT40**

Cod.	TYPE	AT2 G6.3/15000 AD			
		A	D	M	H
BT.40.100.D13C	BT40 H100 D13C	28	13	12	100
BT.40.55.D16C	BT40 H55 D16C	32	16	17	55
BT.40.100.D16C	BT40 H100 D16C	32	16	17	100
BT.40.55.D22C	BT40 H55 D22C	40	22	19	55
BT.40.100.D22C	BT40 H100 D22C	40	22	19	100
BT.40.55.D27C	BT40 H55 D27C	48	27	21	55
BT.40.100.D27C	BT40 H100 D27C	48	27	21	100
BT.40.60.D32C	BT40 H60 D32C	58	32	24	60
BT.40.100.D32C	BT40 H100 D32C	58	32	24	100
BT.40.60.D40C	BT40 H60 D40C	70	40	27	60
BT.40.100.D40C	BT40 H100 D40C	70	40	27	100



**PORTAFRESE COMBINATO - COMBI SHELL END MILL HOLDER - BTB40**

Cod.	TYPE	AT2 G6.3/15000 AD/B			
		A	D	M	H
BTB.40.55.D16C	BTB40 H55 D16C	32	16	17	55
BTB.40.100.D16C	BTB40 H100 D16C	32	16	17	100
BTB.40.130.D16C	BTB40 H130 D16C	32	16	17	130
BTB.40.160.D16C	BTB40 H160 D16C	32	16	17	160
BTB.40.200.D16C	BTB40 H200 D16C	32	16	17	200
BTB.40.55.D22C	BTB40 H55 D22C	40	22	19	55
BTB.40.100.D22C	BTB40 H100 D22C	40	22	19	100
BTB.40.130.D22C	BTB40 H130 D22C	40	22	19	130
BTB.40.160.D22C	BTB40 H160 D22C	40	22	19	160
BTB.40.200.D22C	BTB40 H200 D22C	40	22	19	200
BTB.40.55.D27C	BTB40 H55 D27C	48	27	21	55
BTB.40.100.D27C	BTB40 H100 D27C	48	27	21	100
BTB.40.130.D27C	BTB40 H130 D27C	48	27	21	130
BTB.40.160.D27C	BTB40 H160 D27C	48	27	21	160
BTB.40.200.D27C	BTB40 H200 D27C	48	27	21	200
BTB.40.60.D32C	BTB40 H60 D32C	58	32	24	60
BTB.40.100.D32C	BTB40 H100 D32C	58	32	24	100
BTB.40.130.D32C	BTB40 H130 D32C	58	32	24	130
BTB.40.160.D32C	BTB40 H160 D32C	58	32	24	160
BTB.40.200.D32C	BTB40 H200 D32C	58	32	24	200
BTB.40.60.D40C	BTB40 H60 D40C	70	40	27	60
BTB.40.100.D40C	BTB40 H100 D40C	70	40	27	100
BTB.40.130.D40C	BTB40 H130 D40C	70	40	27	130
BTB.40.160.D40C	BTB40 H160 D40C	70	40	27	160
BTB.40.200.D40C	BTB40 H200 D40C	70	40	27	200



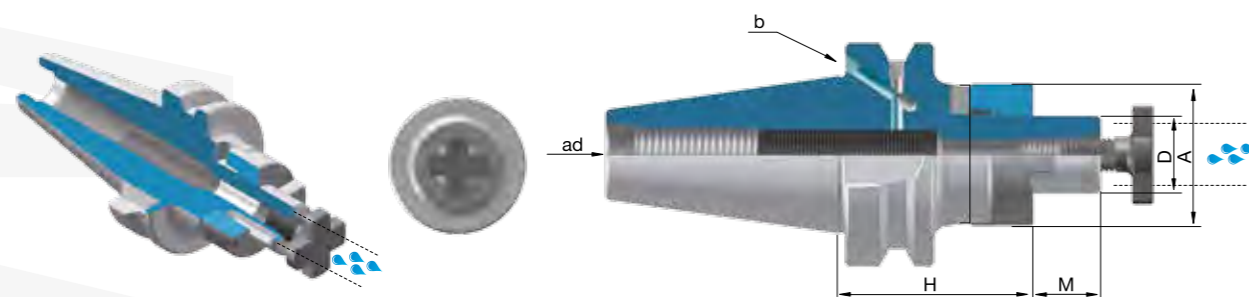
**PORTAFRESE COMBINATO - COMBI SHELL END MILL HOLDER - BT50**

Cod.	TYPE	AT2 G6.3/15000 AD			
		A	D	M	H
BT.50.70.D16C	BT50 H70 D16C	32	16	17	70
BT.50.70.D22C	BT50 H70 D22C	40	22	19	70
BT.50.70.D27C	BT50 H70 D27C	48	27	21	70
BT.50.70.D32C	BT50 H70 D32C	58	32	24	70
BT.50.70.D40C	BT50 H70 D40C	70	40	27	70



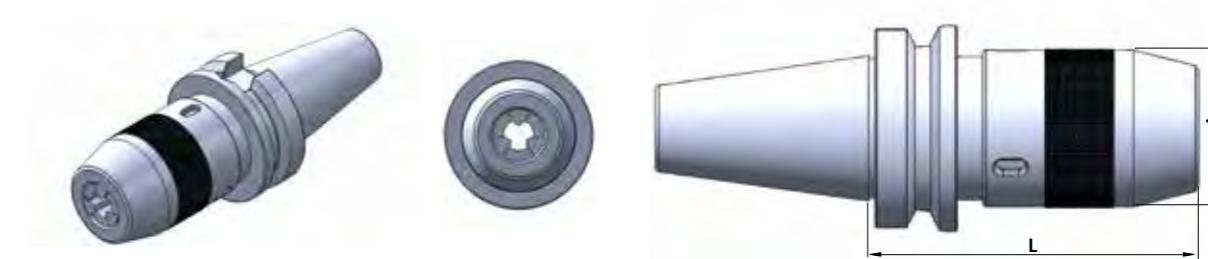
# PORTA PUNTE AUTOSERRANTI CON CHIAVE A SETTORE

## DRILL CHUCKS WITH HOOK WRENCH



### PORTAFRESE COMBINATO - COMBI SHELL END MILL HOLDER - BT50

Cod.	TYPE	AT2		G6.3/15000		AD/B
		A	D	M	H	
BTB.50.70.D16C	BTB50 H70 D16C	32	16	17	70	
BTB.50.100.D16C	BTB50 H100 D16C	32	16	17	100	
BTB.50.130.D16C	BTB50 H130 D16C	32	16	17	130	
BTB.50.160.D16C	BTB50 H160 D16C	32	16	17	160	
BTB.50.200.D16C	BTB50 H200 D16C	32	16	17	200	
BTB.50.70.D22C	BTB50 H70 D22C	40	22	19	70	
BTB.50.100.D22C	BTB50 H100 D22C	40	22	19	100	
BTB.50.130.D22C	BTB50 H130 D22C	40	22	19	130	
BTB.50.160.D22C	BTB50 H160 D22C	40	22	19	160	
BTB.50.200.D22C	BTB50 H200 D22C	40	22	19	200	
BTB.50.70.D27C	BTB50 H70 D27C	48	27	21	70	
BTB.50.100.D27C	BTB50 H100 D27C	48	27	21	100	
BTB.50.130.D27C	BTB50 H130 D27C	48	27	21	130	
BTB.50.160.D27C	BTB50 H160 D27C	48	27	21	160	
BTB.50.200.D27C	BTB50 H200 D27C	48	27	21	200	
BTB.50.70.D32C	BTB50 H70 D32C	58	32	24	70	
BTB.50.100.D32C	BTB50 H100 D32C	58	32	24	100	
BTB.50.130.D32C	BTB50 H130 D32C	58	32	24	130	
BTB.50.160.D32C	BTB50 H160 D32C	58	32	24	160	
BTB.50.200.D32C	BTB50 H200 D32C	58	32	24	200	
BTB.50.70.D40C	BTB50 H70 D40C	70	40	27	70	
BTB.50.100.D40C	BTB50 H100 D40C	70	40	27	100	
BTB.50.130.D40C	BTB50 H130 D40C	70	40	27	130	
BTB.50.160.D40C	BTB50 H160 D40C	70	40	27	160	
BTB.50.200.D40C	BTB50 H200 D40C	70	40	27	200	

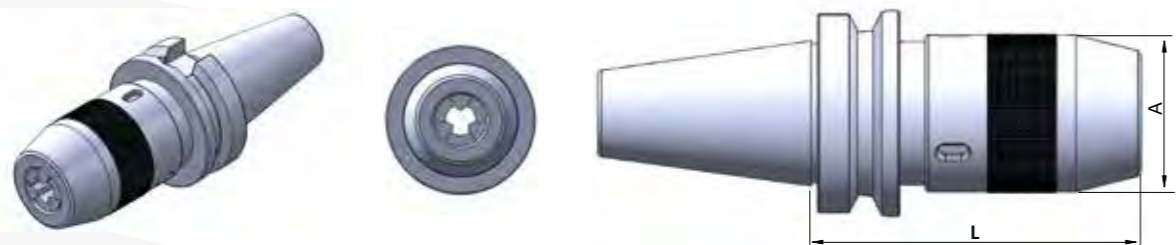


### AUTOSERRANTI CON CHIAVE A SETTORE - DRILL CHUCK- BT30

Cod.	TYPE	AT2		G6.3/12000		AD
		CAPACITÀ RANGE	A	L		
BT.30.80.DCK8	BT30 H80 DCK 8	1 ÷ 8 mm	37	80		
BT.30.110.DCK13	BT30 H110 DCK13	1 ÷ 13 mm	50	110		

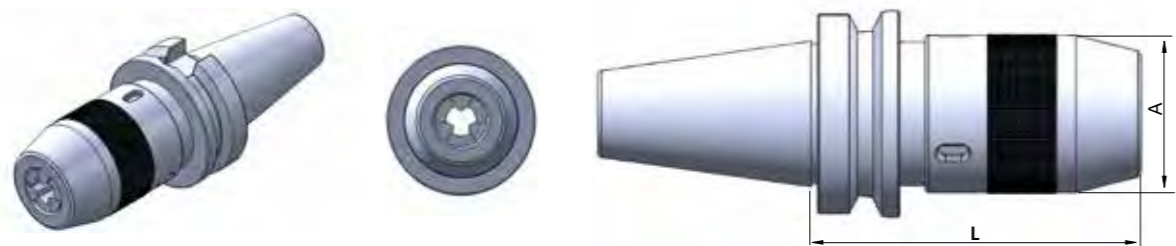
# PORTA PUNTE AUTOSERRANTI CON CHIAVE ESAGONALE

DRILL CHUCKS WITH HEX KEY



## AUTOSERRANTI CON CHIAVE A SETTORE - DRILL CHUCK- BT40

Cod.	TYPE	AT2 G6.3/12000 AD		
		CAPACITÀ RANGE	A	L
BT.40.85.DCK8	BT40 H85 DCK 8	1 ÷ 8 mm	37	85
BT.40.98.DCK13	BT40 H98 DCK13	1 ÷ 13 mm	50	98
BT.40.105.DCK16	BT40 H105 DCK16	3 ÷ 16 mm	58	105

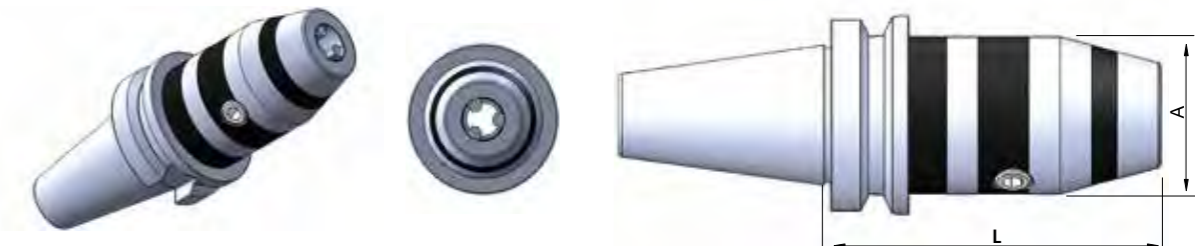
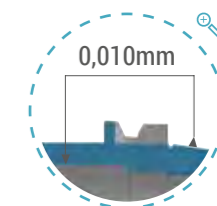


## AUTOSERRANTI CON CHIAVE A SETTORE - DRILL CHUCK- BT50

Cod.	TYPE	AT2 G6.3/12000 AD		
		CAPACITÀ RANGE	A	L
BT.50.105.DCK13	BT50 H105 DCK13	1 ÷ 13 mm	50	105
BT.50.115.DCK16	BT50 H115 DCK16	3 ÷ 16 mm	58	115

## RICAMBI AUTOSERRANTI CHIAVE A SETTORE - SPARE PARTS FOR DRILL CHUCK

Cod.	TYPE
RIC.DCK8	RICAMBI PER / SPARE PARTS FOR DCK8
RIC.DCK13	RICAMBI PER / SPARE PARTS FOR DCK13
RIC.DCK16	RICAMBI PER / SPARE PARTS FOR DCK16

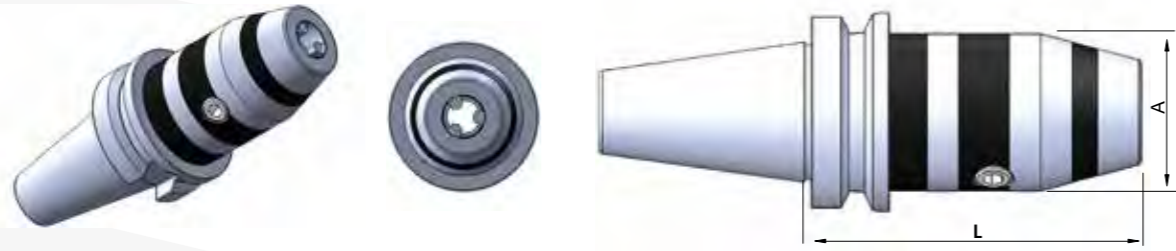


## PORTAPUNTE CON CHIAVE ESAGONALE - DRILL CHUCK FOR HEX KEY - BT40

Cod.	TYPE	AT2 G6.3/12000 AD		
		CAPACITÀ RANGE	L	A
BT.40.98.HD13	BT40 H98 HD13	1 ÷ 13 mm	98	50
BT.40.103.HD16	BT40 H103 HD16	3 ÷ 16 mm	103	58

# CONO MORSE PUNTE / FRESE

MORSE TAPER ADAPTERS FOR DRILLS / FOR MILLS



## PORTAPUNTE CON CHIAVE ESAGONALE - DRILL CHUCK FOR HEX KEY - BT50

Cod.	TYPE	AT2 G6.3/12000 AD		
		CAPACITÀ RANGE	L	A
BT50.109.HD13	BT50 H109 HD13	1 ÷ 13 mm	109	50
BT50.114.HD16	BT50 H114 HD16	3 ÷ 16 mm	114	58

## RICAMBI PORTAPUNTE - SPARE PARTS FOR DRILL CHUCK HEX KEY

Cod.	TYPE
RIC.HD13	RICAMBI PER/SPARE PARTS FOR HD13
RIC.HD16	RICAMBI PER/SPARE PARTS FOR HD16



## CONO MORSE PER PUNTE - MORSE TAPER FOR DRILLS - BT30

Cod.	TYPE	AT2 G6.3/15000 AD		
		A	L	H
BT.30.45.CM1P	BT30 H45 CM1 P	25	23	45
BT.30.60.CM2P	BT30 H60 CM2 P	32	38	60
BT.30.75.CM3P	BT30 H75 CM3 P	40	53	75



**CONO MORSE PER PUNTE - MORSE TAPER FOR DRILLS - BT40**

Cod.	TYPE	AT2			G6.3/15000			AD		
		A	L	H	A	L	H	A	L	H
BT.40.50.CM1P	BT40 H50 CM1 P	25	23	50						
BT.40.50.CM2P	BT40 H50 CM2 P	32	23	50						
BT.40.70.CM3P	BT40 H70 CM3 P	40	43	70						
BT.40.95.CM4P	BT40 H95 CM4 P	48	68	95						



**CONO MORSE PER FRESE - MORSE TAPER FOR MILLS - BT40**

Cod.	TYPE	AT2			G6.3/15000			AD			
		A	M	L	H	A	L	H	A	L	H
BT.40.50.CM1F	BT40 H50 CM1 FV	25	M6	23	50						
BT.40.50.CM2F	BT40 H50 CM2 FV	32	M10	23	50						
BT.40.70.CM3F	BT40 H70 CM3 FV	40	M12	43	70						
BT.40.95.CM4F	BT40 H95 CM4 FV	48	M16	68	95						
BT.40.110.CM4F	BT40 H110 CM4 FV	48	M16	83	110						



**CONO MORSE PER PUNTE - MORSE TAPER FOR DRILLS - BT50**

Cod.	TYPE	AT2			G6.3/15000			AD		
		A	L	H	A	L	H	A	L	H
BT.50.45.CM1P	BT50 H45 CM1 P	25	7	45						
BT.50.120.CM1P	BT50 H120 CM1 P	25	82	120						
BT.50.60.CM2P	BT50 H60 CM2 P	32	22	60						
BT.50.135.CM2P	BT50 H135 CM2 P	32	97	135						
BT.50.65.CM3P	BT50 H65 CM3 P	40	27	65						
BT.50.155.CM3P	BT50 H155 CM3 P	40	117	155						
BT.50.95.CM4P	BT50 H95 CM4 P	40	57	95						
BT.50.180.CM4P	BT50 H180 CM4 P	48	142	180						
BT.50.105.CM5P	BT50 H105 CM5 P	48	67	105						
BT.50.215.CM5P	BT50 H215 CM5 P	48	177	215						



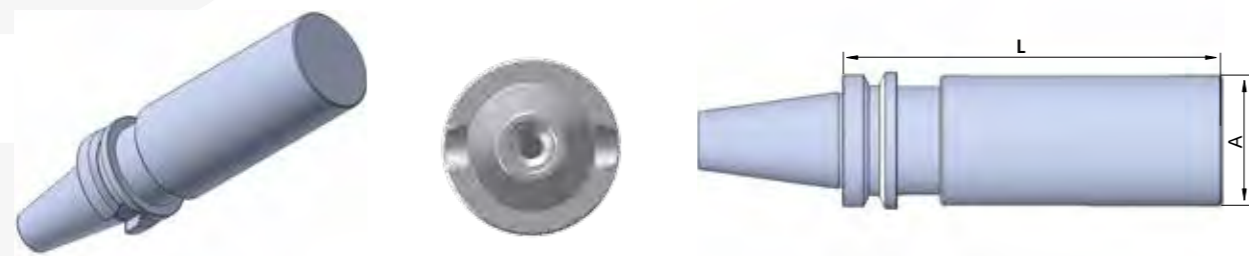
**CONO MORSE PER FRESE - MORSE TAPER FOR MILLS - BT50**

Cod.	TYPE	AT2			G6.3/15000			AD			
		A	M	L	H	A	L	H	A	L	H
BT.50.45.CM1F	BT50 H45 CM1 FV	25	M6	7	45						
BT.50.60.CM2F	BT50 H60 CM2 FV	32	M10	22	60						
BT.50.65.CM3F	BT50 H65 CM3 FV	40	M12	27	65						
BT.50.70.CM4F	BT50 H70 CM4 FV	48	M16	32	70						
BT.50.85.CM4F	BT50 H85 CM4 FV	48	M16	47	85						
BT.50.100.CM5F	BT50 H100 CM5 FV	63	M20	62	100						
BT.50.118.CM5F	BT50 H118 CM5 FV	63	M20	80	118						



# STELO TENERO LAVORABILE

BLANK ARBORS



## STELO TENERO LAVORABILE - BLANK ARBORS - BT40-BT50

Cod.	TYPE	A	L	AT2	AD	42HRC
BT.40.250.D40BL	BT40 H250 D40	40	250			
BT.40.250.D63BL	BT40 H250 D63	63	250			
BT.50.315.D97BL	BT50 H315 D97	97	315			

# BARRA DI CONTROLLO

TEST ARBORS



## BARRE DI CONTROLLO - TEST ARBORS - BT30- BT40 - BT50

Cod.	TYPE	A	L	AT2	AD
BT.30.200.D32	BT30 H200 D32	32	200		
BT.40.300.D40	BT40 H300 D40	40	300		
BT.50.300.D50	BT50 H300 D50	50	300		

FORNITO COMPLETO DI CERTIFICATO E COFANETTO IN LEGNO  
PROVIDED WITH WOODEN BOX AND SPECIFIC CERTIFICATE

# HSK - DIN63893 FORMA A

## HSK - DIN63893 FORMA A



**CALETTAMENTO A CALDO STANDARD**

*SHRINK FIT HOLDERS STANDARD*



**CALETTAMENTO A CALDO SLIM TYPE**

*SHRINK FIT HOLDERS SLIM TYPE*



**PORTAPINZE PER SKS**

*COLLET CHUCK FOR SKS*



**PORTA TESTINE FILETTATE (TIPO CPY)**

*FOR SCREWED MILLING CUTTERS*



**FORTE SERRAGGIO**

*POWER MILLING CHUCKS*



**IDRAULICO**

*HYDRAULIC EXPANSIONS CHUCK*



**PORTAPINZA ER DIN6499**

*COLLET CHUCK FOR ER DIN6499*



**PORTAPINZA EOC DIN6388**

*COLLET CHUCK FOR EOC DIN6388*



**PER FRESE WELDON**

*END MILL HOLDERS*



**PORTAFRESE FISSI**

*SHELL END MILL HOLDERS*



**PORTAFRESE COMBINATI**

*COMBI SHELL END MILL HOLDERS*



**PORTA PUNTE CON CHIAVE ESAGONALE**

*HEX KEY LOCK DRILL CHUCKS*



**STELO TENERO LAVORABILE**

*BLANK ARBORS*



**BARRA DI CONTROLLO**

*TEST ARBORS*

## CARATTERISTICHE / SPECIFICATION / CARACTÉRISTIQUES/ TECHNISCHE DATEN

### CARATTERISTICHE TECNICHE

- Costruiti in acciaio certificato in barre.
- Eseguiti trattamenti termici da fornitori certificati ISO 9001.
- Rettificati di precisione esternamente, internamente e nelle filettature delle ghiera chiudipinza.
- Controllati con strumenti di misura certificati.
- La tolleranza di precisione dei coni HSK-A è AT2.
- L'errore di concentricità massimo tra il cono e la sede utensile è 0.003 mm.

### CARACTÉRISTIQUES

- Fabriqués en bar d'acier certifié.
- Réalisation du traitement thermique par des fournisseurs certifiés ISO 9001.
- Rectification de précision extérieurement, intérieurement et dans les filetages des écrous serre-pince.
- Contrôlés par des instruments de mesure certifiés.
- La tolérance de précision des cônes HSK-A est AT2.
- L'erreur de concentricité maximum entre le cône et le siège de l'outil est de 0.003 mm.

### TECHNICAL FEATURES

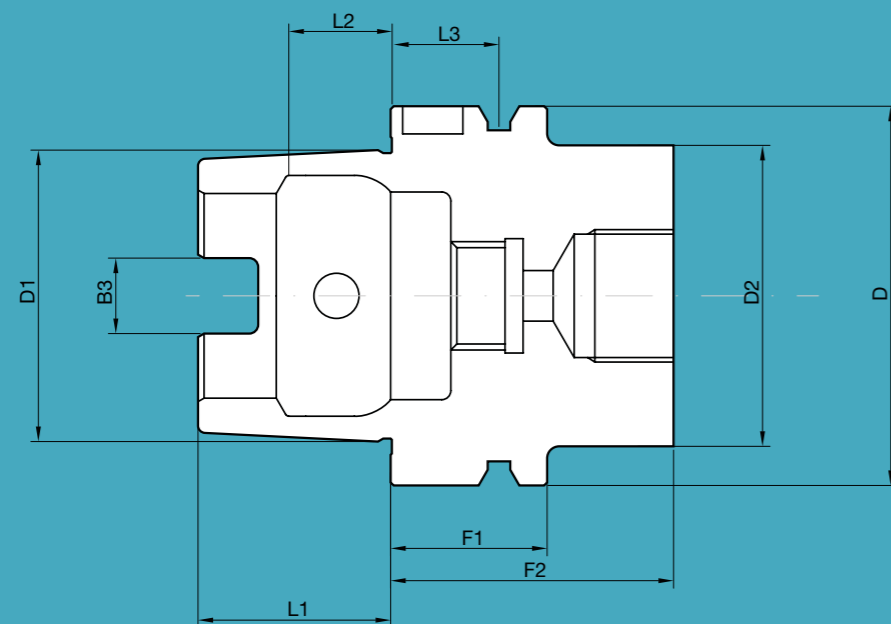
- Manufactured with certificate steel.
- Heat treatments are performed by certified suppliers ISO 9001.
- Precision ground on shank, inside tapers and collet nut threads.
- Tested with high precision inspection and gaging equipment.
- Taper accuracy of HSK-A shanks lower than AT2.
- The maximum error of concentricity between the cone and the seat of tool is 0.003 mm.

### MERKMALE

- Gebaut aus zertifiziertem Stabstahl
- Warmbehandlungen von Lieferanten mit Zeugnis ISO 9001
- Genauigkeitgeschliffen aussen, innen und in den Gewinden der Spannmutter für den Zangenverschluss
- Geprüft mit zertifizierten Messinstrumente
- Die Präzisionstoleranz der Konen HSK-A ist AT2
- Die max konzentrische Abweichung zwischen Konus und Werkzeugsitz ist 0.003 mm

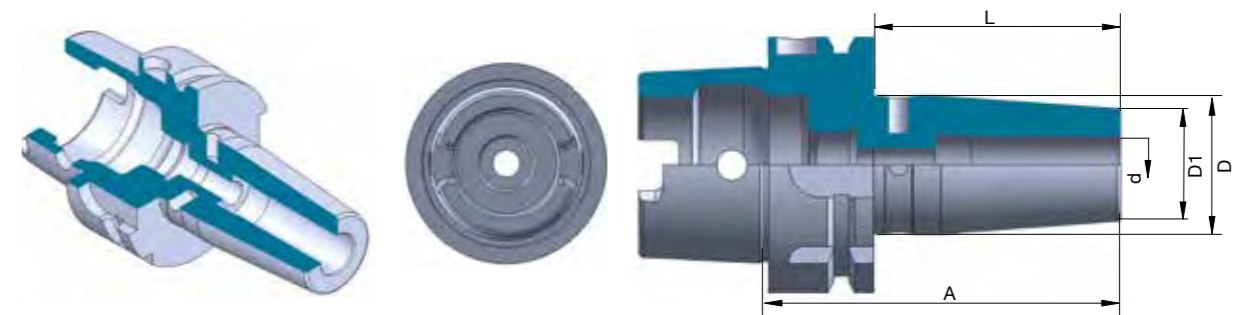
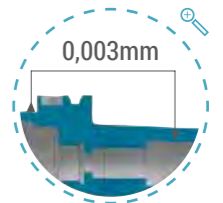
## QUOTE / QUOTE / QUOTES / ABMESSUNGEN

HSK	D	D1	D2	B3	L1	L2	L3	F1	F2	COOLANT TUBE
32	32	24	26	7	16	8,92	16	20	35	M10X1
40	40	30	34	8	20	11,42	16	20	35	M12X1
50	50	38	42	10,54	25	14,13	18	26	42	M16X1
63	63	48	53	12,54	32	18,13	18	26	42	M18X1
80	80	60	68	16,04	40	22,85	18	26	42	M20X1,5
100	100	75	85	20,02	50	28,56	20	29	45	M24X1,5



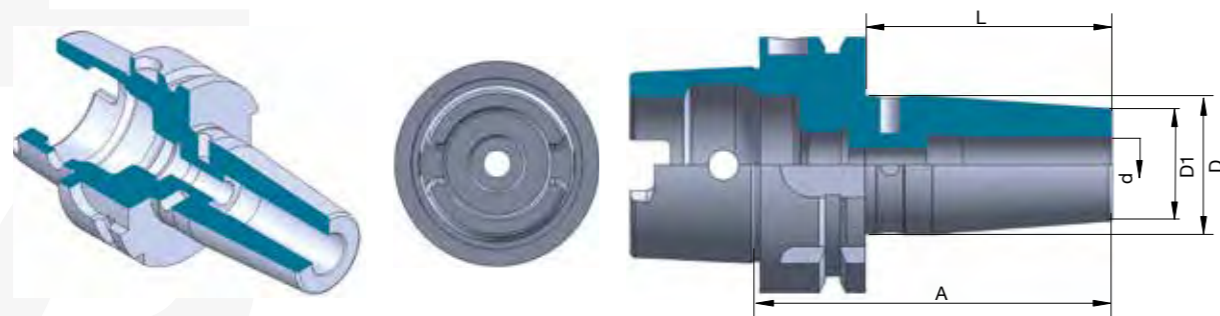
# CALETTAMENTO A CALDO STANDARD

## SHRINK FIT HOLDERS STANDARD - FORM A



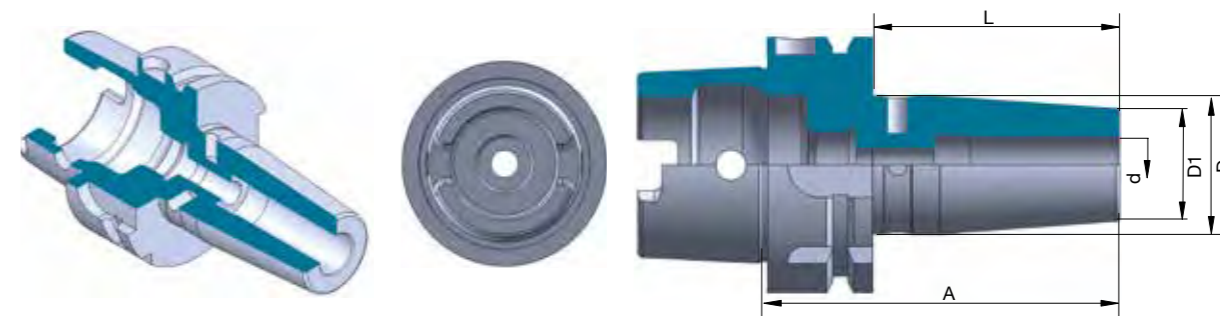
## CALETTAMENTO STANDARD - SHRINK FIT HOLDER - HSK32A

Cod.	TYPE	d	A	AT2		G2.5/25000		
				D1	D	D1	D	L
HSK.A.32.60.CL3	HSK32A H60 CL3	3	60	10	16	10	16	40
HSK.A.32.60.CL4	HSK32A H60 CL4	4	60	10	21	10	21	40
HSK.A.32.60.CL5	HSK32A H60 CL5	5	60	10	21	10	21	40
HSK.A.32.70.CL6	HSK32A H70 CL6	6	70	20	25	20	25	50
HSK.A.32.70.CL8	HSK32A H70 CL8	8	70	20	25	20	25	50
HSK.A.32.70.CL10	HSK32A H70 CL10	10	70	24	29	24	29	50
HSK.A.32.80.CL12	HSK32A H80 CL12	12	80	24	29	24	29	60
HSK.A.32.90.CL14	HSK32A H90 CL14	14	90	27	34	27	34	70
HSK.A.32.90.CL16	HSK32A H90 CL16	16	90	27	34	27	34	70
HSK.A.32.100.CL20	HSK32A H100 CL20	20	100	33	40	33	40	80



### CALETTAMENTO STANDARD - SHRINK FIT HOLDER - HSK40A

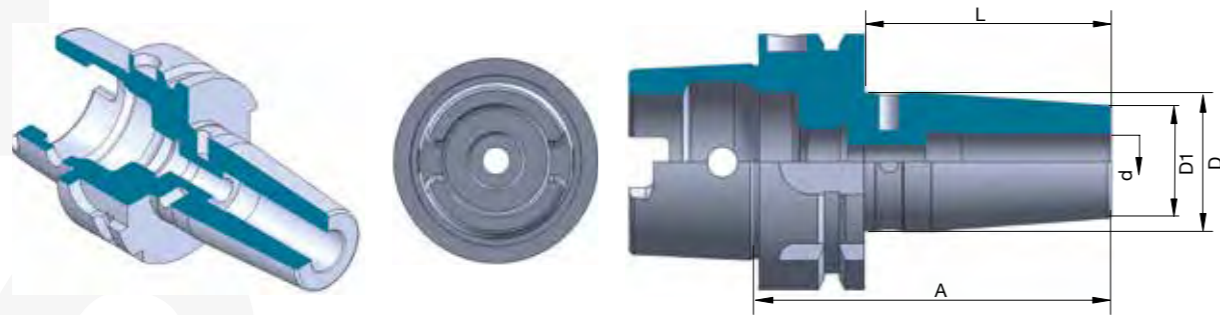
Cod.	TYPE	d	A	D1	AT2 G2.5/25000	
					D	L
HSK.A.40.60.CL3	HSK40A H60 CL3	3	60	10	16	40
HSK.A.40.120.CL3	HSK40A H120 CL3	3	120	10	20	100
HSK.A.40.160.CL3	HSK40A H160 CL3	3	160	10	20	140
HSK.A.40.60.CL4	HSK40A H60 CL4	4	60	10	16	40
HSK.A.40.120.CL4	HSK40A H120 CL4	4	120	15	22	100
HSK.A.40.160.CL4	HSK40A H160 CL4	4	160	15	22	140
HSK.A.40.60.CL5	HSK40A H60 CL5	5	60	10	16	40
HSK.A.40.120.CL5	HSK40A H120 CL5	5	120	15	22	100
HSK.A.40.160.CL5	HSK40A H160 CL5	5	160	15	22	140
HSK.A.40.80.CL6	HSK40A H80 CL6	6	80	20	27	60
HSK.A.40.120.CL6	HSK40A H120 CL6	6	120	20	27	100
HSK.A.40.160.CL6	HSK40A H160 CL6	6	160	20	27	140
HSK.A.40.80.CL8	HSK40A H80 CL8	8	80	20	27	60
HSK.A.40.120.CL8	HSK40A H120 CL8	8	120	20	27	100
HSK.A.40.160.CL8	HSK40A H160 CL8	8	160	20	27	140
HSK.A.40.80.CL10	HSK40A H80 CL10	10	80	24	31	60
HSK.A.40.120.CL10	HSK40A H120 CL10	10	120	24	31	100
HSK.A.40.160.CL10	HSK40A H160 CL10	10	160	24	31	140
HSK.A.40.90.CL12	HSK40A H90 CL12	12	90	24	31	70
HSK.A.40.120.CL12	HSK40A H120 CL12	12	120	24	31	100
HSK.A.40.160.CL12	HSK40A H160 CL12	12	160	24	31	140
HSK.A.40.90.CL14	HSK40A H90 CL14	14	90	27	34	70
HSK.A.40.120.CL14	HSK40A H120 CL14	14	120	27	34	100
HSK.A.40.160.CL14	HSK40A H160 CL14	14	160	27	34	140
HSK.A.40.90.CL16	HSK40A H90 CL16	16	90	27	34	70
HSK.A.40.120.CL16	HSK40A H120 CL16	16	120	27	34	100
HSK.A.40.160.CL16	HSK40A H160 CL16	16	160	27	34	140



### CALETTAMENTO STANDARD - SHRINK FIT HOLDER - HSK50A

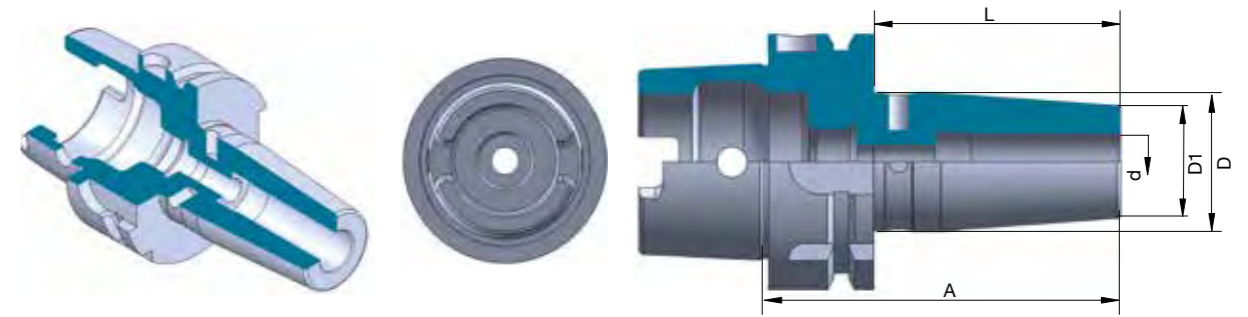
Cod.	TYPE	d	A	D1	AT2 G2.5/25000	
					D	L
HSK.A.50.80.CL3	HSK50A H80 CL3	3	80	10	15	54
HSK.A.50.120.CL3	HSK50A H120 CL3	3	120	10	20	94
HSK.A.50.160.CL3	HSK50A H160 CL3	3	160	10	20	134
HSK.A.50.80.CL4	HSK50A H80 CL4	4	80	15	22	54
HSK.A.50.120.CL4	HSK50A H120 CL4	4	120	15	22	94
HSK.A.50.160.CL4	HSK50A H160 CL4	4	160	15	22	134
HSK.A.50.80.CL5	HSK50A H80 CL5	5	80	15	22	54
HSK.A.50.120.CL5	HSK50A H120 CL5	5	120	15	22	94
HSK.A.50.160.CL5	HSK50A H160 CL5	5	160	15	22	134
HSK.A.50.80.CL6	HSK50A H80 CL6	6	80	20	27	54
HSK.A.50.120.CL6	HSK50A H120 CL6	6	120	20	27	94
HSK.A.50.160.CL6	HSK50A H160 CL6	6	160	20	27	134
HSK.A.50.80.CL8	HSK50A H80 CL8	8	80	20	27	54
HSK.A.50.120.CL8	HSK50A H120 CL8	8	120	20	27	94
HSK.A.50.160.CL8	HSK50A H160 CL8	8	160	20	27	134
HSK.A.50.85.CL10	HSK50A H85 CL10	10	85	24	31	59
HSK.A.50.120.CL10	HSK50A H120 CL10	10	120	24	31	94
HSK.A.50.160.CL10	HSK50A H160 CL10	10	160	24	31	134
HSK.A.50.90.CL12	HSK50A H90 CL12	12	90	24	31	64
HSK.A.50.120.CL12	HSK50A H120 CL12	12	120	24	31	94
HSK.A.50.160.CL12	HSK50A H160 CL12	12	160	24	31	134
HSK.A.50.90.CL14	HSK50A H90 CL14	14	90	27	34	64
HSK.A.50.120.CL14	HSK50A H120 CL14	14	120	27	34	94
HSK.A.50.160.CL14	HSK50A H160 CL14	14	160	27	34	134
HSK.A.50.95.CL16	HSK50A H95 CL16	16	95	27	34	69
HSK.A.50.120.CL16	HSK50A H120 CL16	16	120	27	34	94
HSK.A.50.160.CL16	HSK50A H160 CL16	16	160	27	34	134
HSK.A.50.95.CL18	HSK50A H95 CL18	18	95	33	40	69
HSK.A.50.120.CL18	HSK50A H120 CL18	18	120	33	40	94
HSK.A.50.160.CL18	HSK50A H160 CL18	18	160	33	40	134
HSK.A.50.100.CL20	HSK50A H100 CL20	20	100	33	40	74
HSK.A.50.120.CL20	HSK50A H120 CL20	20	120	33	40	94
HSK.A.50.160.CL20	HSK50A H160 CL20	20	160	33	40	134





### CALETTAMENTO STANDARD - SHRINK FIT HOLDER - HSK63A

Cod.	TYPE	d	A	D1	D	L	G2.5/25000	
							AT2	
HSK.A.63.80.CL3	HSK63A H80 CL3	3	80	10	15	54		
HSK.A.63.120.CL3	HSK63A H120 CL3	3	120	10	20	94		
HSK.A.63.160.CL3	HSK63A H160 CL3	3	160	10	20	134		
HSK.A.63.80.CL4	HSK63A H80 CL4	4	80	15	22	54		
HSK.A.63.120.CL4	HSK63A H120 CL4	4	120	15	22	94		
HSK.A.63.160.CL4	HSK63A H160 CL4	4	160	15	22	134		
HSK.A.63.80.CL5	HSK63A H80 CL5	5	80	15	22	54		
HSK.A.63.120.CL5	HSK63A H120 CL5	5	120	15	22	94		
HSK.A.63.160.CL5	HSK63A H160 CL5	5	160	15	22	134		
HSK.A.63.90.CL6	HSK63A H90 CL6	6	90	21	27	64		
HSK.A.63.130.CL6	HSK63A H130 CL6	6	130	21	27	104		
HSK.A.63.160.CL6	HSK63A H160 CL6	6	160	21	27	134		
HSK.A.63.90.CL8	HSK63A H90 CL8	8	90	21	27	64		
HSK.A.63.130.CL8	HSK63A H130 CL8	8	130	21	27	104		
HSK.A.63.160.CL8	HSK63A H160 CL8	8	160	21	27	134		
HSK.A.63.90.CL10	HSK63A H90 CL10	10	90	24	32	64		
HSK.A.63.130.CL10	HSK63A H130 CL10	10	130	24	32	104		
HSK.A.63.160.CL10	HSK63A H160 CL10	10	160	24	32	134		
HSK.A.63.90.CL12	HSK63A H90 CL12	12	90	24	32	64		
HSK.A.63.130.CL12	HSK63A H130 CL12	12	130	24	32	104		
HSK.A.63.160.CL12	HSK63A H160 CL12	12	160	24	32	134		
HSK.A.63.90.CL14	HSK63A H90 CL14	14	90	27	34	64		
HSK.A.63.130.CL14	HSK63A H130 CL14	14	130	27	34	104		
HSK.A.63.160.CL14	HSK63A H160 CL14	14	160	27	34	134		
HSK.A.63.90.CL16	HSK63A H90 CL16	16	90	27	34	64		
HSK.A.63.130.CL16	HSK63A H130 CL16	16	130	27	34	104		
HSK.A.63.160.CL16	HSK63A H160 CL16	16	160	27	34	134		
HSK.A.63.95.CL18	HSK63A H95 CL18	18	95	33	42	69		
HSK.A.63.130.CL18	HSK63A H130 CL18	18	130	33	42	104		
HSK.A.63.160.CL18	HSK63A H160 CL18	18	160	33	42	134		
HSK.A.63.100.CL20	HSK63A H100 CL20	20	100	32	42	74		
HSK.A.63.130.CL20	HSK63A H130 CL20	20	130	32	42	104		
HSK.A.63.160.CL20	HSK63A H160 CL20	20	160	32	42	134		
HSK.A.63.115.CL25	HSK63A H115 CL25	25	115	44	53	89		
HSK.A.63.130.CL25	HSK63A H130 CL25	25	130	44	53	104		
HSK.A.63.160.CL25	HSK63A H160 CL25	25	160	44	53	134		
HSK.A.63.120.CL32	HSK63A H120 CL32	32	120	44	53	94		
HSK.A.63.160.CL32	HSK63A H160 CL32	32	160	44	53	134		

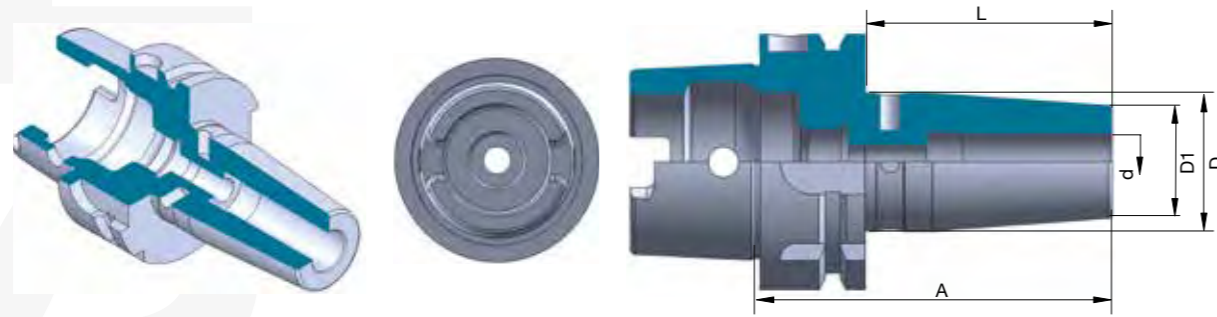


### CALETTAMENTO STANDARD - SHRINK FIT HOLDER - HSK80A

Cod.	TYPE	d	A	D1	D	L	G2.5/25000	
							AT2	
HSK.A.80.85.CL6	HSK80A H85 CL6	6	85	20	27	59		
HSK.A.80.120.CL6	HSK80A H120 CL6	6	120	20	27	94		
HSK.A.80.160.CL6	HSK80A H160 CL6	6	160	20	27	134		
HSK.A.80.85.CL8	HSK80A H85 CL8	8	85	20	27	59		
HSK.A.80.120.CL8	HSK80A H120 CL8	8	120	20	27	94		
HSK.A.80.160.CL8	HSK80A H160 CL8	8	160	20	27	134		
HSK.A.80.90.CL10	HSK80A H90 CL10	10	90	24	31	64		
HSK.A.80.120.CL10	HSK80A H120 CL10	10	120	24	31	94		
HSK.A.80.160.CL10	HSK80A H160 CL10	10	160	24	31	134		
HSK.A.80.95.CL12	HSK80A H95 CL12	12	95	24	31	69		
HSK.A.80.120.CL12	HSK80A H120 CL12	12	120	24	31	94		
HSK.A.80.160.CL12	HSK80A H160 CL12	12	160	24	31	134		
HSK.A.80.95.CL14	HSK80A H95 CL14	14	95	27	34	69		
HSK.A.80.120.CL14	HSK80A H120 CL14	14	120	27	34	94		
HSK.A.80.160.CL14	HSK80A H160 CL14	14	160	27	34	134		
HSK.A.80.100.CL16	HSK80A H100 CL16	16	100	27	34	74		
HSK.A.80.120.CL16	HSK80A H120 CL16	16	120	27	34	94		
HSK.A.80.160.CL16	HSK80A H160 CL16	16	160	27	34	134		
HSK.A.80.100.CL18	HSK80A H100 CL18	18	100	33	40	74		
HSK.A.80.120.CL18	HSK80A H120 CL18	18	120	33	40	94		
HSK.A.80.160.CL18	HSK80A H160 CL18	18	160	33	40	134		
HSK.A.80.105.CL20	HSK80A H105 CL20	20	105	33	40	79		
HSK.A.80.120.CL20	HSK80A H120 CL20	20	120	33	40	94		
HSK.A.80.160.CL20	HSK80A H160 CL20	20	160	33	40	134		
HSK.A.80.115.CL25	HSK80A H115 CL25	25	115	44	53	89		
HSK.A.80.120.CL25	HSK80A H120 CL25	25	120	44	53	94		
HSK.A.80.160.CL25	HSK80A H160 CL25	25	160	44	53	134		
HSK.A.80.120.CL32	HSK80A H120 CL32	32	120	44	53	94		
HSK.A.80.160.CL32	HSK80A H160 CL32	32	160	44	53	134		

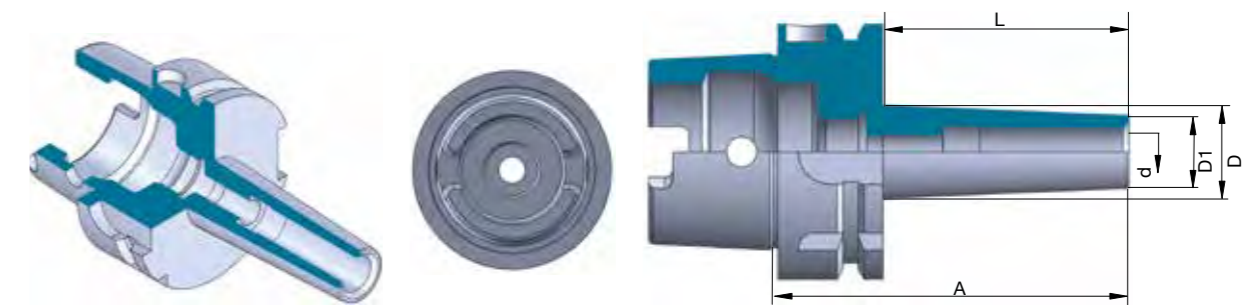
# CALETTAMENTO A CALDO SLIM TYPE

## SHRINK FIT HOLDERS SLIM TYPE - FORM A



### CALETTAMENTO STANDARD - SHRINK FIT HOLDER - HSK100A

Cod.	TYPE	d	A	D1	AT2		L
					G2.5/25000		
HSK.A.100.85.CL6	HSK100A H85 CL6	6	85	20	27	56	
HSK.A.100.120.CL6	HSK100A H120 CL6	6	120	20	27	91	
HSK.A.100.160.CL6	HSK100A H160 CL6	6	160	20	27	131	
HSK.A.100.85.CL8	HSK100A H85 CL8	8	85	20	27	56	
HSK.A.100.120.CL8	HSK100A H120 CL8	8	120	20	27	91	
HSK.A.100.160.CL8	HSK100A H160 CL8	8	160	20	27	131	
HSK.A.100.90.CL10	HSK100A H90 CL10	10	90	24	31	61	
HSK.A.100.120.CL10	HSK100A H120 CL10	10	120	24	31	91	
HSK.A.100.160.CL10	HSK100A H160 CL10	10	160	24	31	131	
HSK.A.100.95.CL12	HSK100A H95 CL12	12	95	24	31	66	
HSK.A.100.120.CL12	HSK100A H120 CL12	12	120	24	31	91	
HSK.A.100.160.CL12	HSK100A H160 CL12	12	160	24	31	131	
HSK.A.100.95.CL14	HSK100A H95 CL14	14	95	27	34	66	
HSK.A.100.120.CL14	HSK100A H120 CL14	14	120	27	34	91	
HSK.A.100.160.CL14	HSK100A H160 CL14	14	160	27	34	131	
HSK.A.100.100.CL16	HSK100A H100 CL16	16	100	27	34	71	
HSK.A.100.120.CL16	HSK100A H120 CL16	16	120	27	34	91	
HSK.A.100.160.CL16	HSK100A H160 CL16	16	160	27	34	131	
HSK.A.100.100.CL18	HSK100A H100 CL18	18	100	33	40	71	
HSK.A.100.120.CL18	HSK100A H120 CL18	18	120	33	40	91	
HSK.A.100.160.CL18	HSK100A H160 CL18	18	160	33	40	131	
HSK.A.100.105.CL20	HSK100A H105 CL20	20	105	33	40	76	
HSK.A.100.120.CL20	HSK100A H120 CL20	20	120	33	40	91	
HSK.A.100.160.CL20	HSK100A H160 CL20	20	160	33	40	131	
HSK.A.100.115.CL25	HSK100A H115 CL25	25	115	44	53	86	
HSK.A.100.120.CL25	HSK100A H120 CL25	25	120	44	53	91	
HSK.A.100.160.CL25	HSK100A H160 CL25	25	160	44	53	131	
HSK.A.100.120.CL32	HSK100A H120 CL32	32	120	44	53	91	
HSK.A.100.160.CL32	HSK100A H160 CL32	32	160	44	53	131	

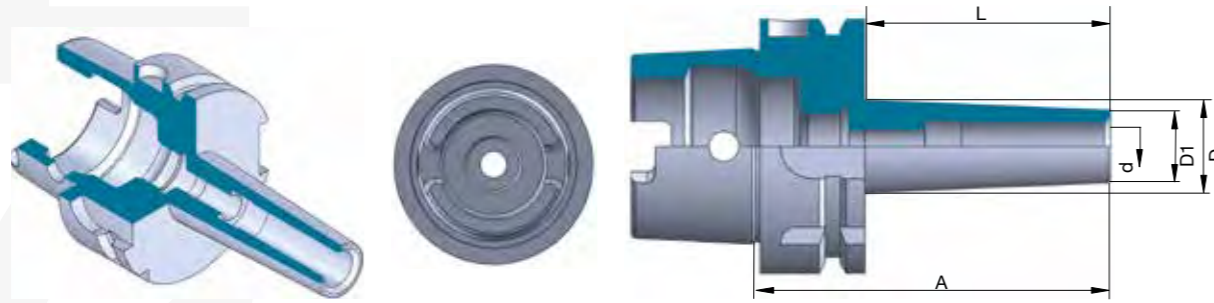


### CALETTAMENTO TIPO SLIM - SHRINK FIT HOLDER SLIM TYPE - HSK63A

Cod.	TYPE	d	A	D1	AT2		L
					G2.5/25000		
HSK.A.63.80.CL3.SL	SLIM TYPE HSK63A H80 CL3	3	80	9	13	54	
HSK.A.63.120.CL3.SL	SLIM TYPE HSK63A H120 CL3	3	120	9	16	94	
HSK.A.63.80.CL4.SL	SLIM TYPE HSK63A H80 CL4	4	80	10	15	54	
HSK.A.63.120.CL4.SL	SLIM TYPE HSK63A H120 CL4	4	120	10	20	94	
HSK.A.63.80.CL5.SL	SLIM TYPE HSK63A H80 CL5	5	80	11	16	54	
HSK.A.63.120.CL5.SL	SLIM TYPE HSK63A H120 CL5	5	120	11	16	94	
HSK.A.63.90.CL6.SL	SLIM TYPE HSK63A H90 CL6	6	90	12	17	64	
HSK.A.63.130.CL6.SL	SLIM TYPE HSK63A H130 CL6	6	130	12	19	104	
HSK.A.63.160.CL6.SL	SLIM TYPE HSK63A H160 CL6	6	160	12	19	134	

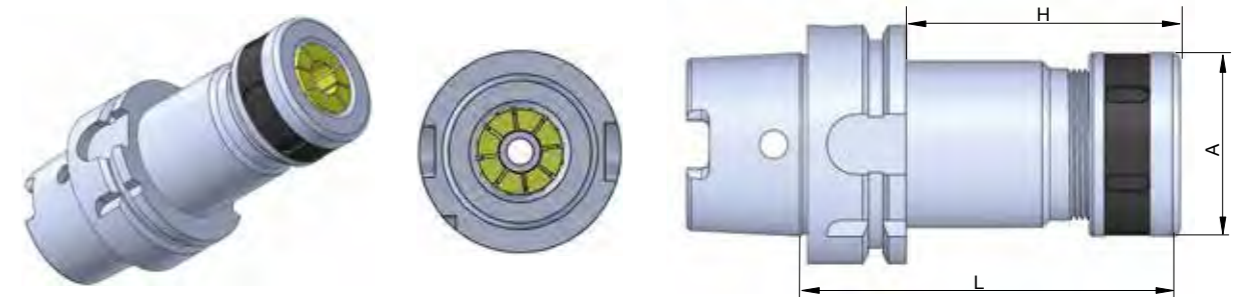
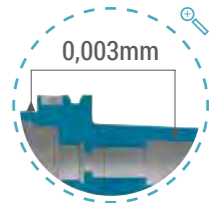
# PORTAPINZE PER SKS

## COLLET CHUCK FOR SKS - FORM A



### CALETTAMENTO TIPO SLIM - SHRINK FIT HOLDER SLIM TYPE - HSK63A

Cod.	TYPE	d	A	AT2			G2.5/25000		
				D1	D	L	D1	D	L
HSK.A.63.90.CL8.SL	SLIM TYPE HSK63A H90 CL8	8	90	14	19	64			
HSK.A.63.130.CL8.SL	SLIM TYPE HSK63A H130 CL8	8	130	14	21	104			
HSK.A.63.160.CL8.SL	SLIM TYPE HSK63A H160 CL8	8	160	14	21	134			
HSK.A.63.90.CL10.SL	SLIM TYPE HSK63A H90 CL10	10	90	16	21	64			
HSK.A.63.130.CL10.SL	SLIM TYPE HSK63A H130 CL10	10	130	16	23	104			
HSK.A.63.160.CL10.SL	SLIM TYPE HSK63A H160 CL10	10	160	16	23	134			
HSK.A.63.90.CL12.SL	SLIM TYPE HSK63A H90 CL12	12	90	18	23	64			
HSK.A.63.130.CL12.SL	SLIM TYPE HSK63A H130 CL12	12	130	18	25	104			
HSK.A.63.160.CL12.SL	SLIM TYPE HSK63A H160 CL12	12	160	18	25	134			
HSK.A.63.90.CL14.SL	SLIM TYPE HSK63A H90 CL14	14	90	18	23	64			
HSK.A.63.130.CL14.SL	SLIM TYPE HSK63A H130 CL14	14	130	18	25	104			
HSK.A.63.160.CL14.SL	SLIM TYPE HSK63A H160 CL14	14	160	18	25	134			
HSK.A.63.90.CL16.SL	SLIM TYPE HSK63A H90 CL16	16	90	24	29	64			
HSK.A.63.130.CL16.SL	SLIM TYPE HSK63A H130 CL16	16	130	24	31	104			
HSK.A.63.160.CL16.SL	SLIM TYPE HSK63A H160 CL16	16	160	24	31	134			
HSK.A.63.95.CL18.SL	SLIM TYPE HSK63A H95 CL18	18	95	24	29	69			
HSK.A.63.130.CL18.SL	SLIM TYPE HSK63A H130 CL18	18	130	24	31	104			
HSK.A.63.160.CL18.SL	SLIM TYPE HSK63A H160 CL18	18	160	24	31	134			
HSK.A.63.100.CL20.SL	SLIM TYPE HSK63A H100 CL20	20	100	32	39	74			
HSK.A.63.130.CL20.SL	SLIM TYPE HSK63A H130 CL20	20	130	32	39	104			
HSK.A.63.160.CL20.SL	SLIM TYPE HSK63A H160 CL20	20	160	32	39	134			



### PORTAPINZA PER SKS - COLLET CHUCK FOR SKS - HSK63A

Cod.	TYPE	L	AT2		G2.5/25000	
			H	A	H	A
HSK.A.63.90.SKS10	HSK63A H90 SKS10	90	64	30		
HSK.A.63.120.SKS10	HSK63A H120 SKS10	120	94	30		
HSK.A.63.90.SKS20	HSK63A H90 SKS20	90	64	48,5		
HSK.A.63.135.SKS20	HSK63A H135 SKS20	135	109	48,5		



# PORTA TESTINE FILETTATE (TIPO CPY)

## TOOLHOLDERS FOR SCREWED MILLING CUTTERS - FORM A



### PORTA TESTINE FILETTATE - FOR SCREWED MILLING CHUCK - HSK50A

Cod.	TYPE	H	M	d1	d2	d3	L	AT2	
								G2.5/25000	
HSK.A.50.59.M6CPY	HSK50A H59 M6 CPY	59	M6	6,5	9,7	13	33		
HSK.A.50.84.M6CPY	HSK50A H84 M6 CPY	84	M6	6,5	9,7	20	58		
HSK.A.50.109.M6CPY	HSK50A H109 M6 CPY	109	M6	6,5	9,7	23	83		
HSK.A.50.59.M8CPY	HSK50A H59 M8 CPY	59	M8	8,5	13	15	33		
HSK.A.50.84.M8CPY	HSK50A H84 M8 CPY	84	M8	8,5	13	23	58		
HSK.A.50.109.M8CPY	HSK50A H109 M8 CPY	109	M8	8,5	13	23	83		
HSK.A.50.134.M8CPY	HSK50A H134 M8 CPY	134	M8	8,5	13	25	108		
HSK.A.50.59.M10CPY	HSK50A H59 M10 CPY	59	M10	10,5	18	20	33		
HSK.A.50.84.M10CPY	HSK50A H84 M10 CPY	84	M10	10,5	18	25	58		
HSK.A.50.109.M10CPY	HSK50A H109 M10 CPY	109	M10	10,5	18	28	83		
HSK.A.50.134.M10CPY	HSK50A H134 M10 CPY	134	M10	10,5	18	30	108		
HSK.A.50.59.M12CPY	HSK50A H59 M12 CPY	59	M12	12,5	21	24	33		
HSK.A.50.84.M12CPY	HSK50A H84 M12 CPY	84	M12	12,5	21	24	58		
HSK.A.50.109.M12CPY	HSK50A H109 M12 CPY	109	M12	12,5	21	31	83		
HSK.A.50.134.M12CPY	HSK50A H134 M12 CPY	134	M12	12,5	21	31	108		



### PORTA TESTINE FILETTATE - FOR SCREWED MILLING CHUCK - HSK63A

Cod.	TYPE	H	M	d1	d2	d3	L	AT2	
								G2.5/25000	
HSK.A.63.59.M8CPY	HSK63A H59 M8 CPY	59	M8	8,5	13	15	33		
HSK.A.63.84.M8CPY	HSK63A H84 M8 CPY	84	M8	8,5	13	23	58		
HSK.A.63.109.M8CPY	HSK63A H109 M8 CPY	109	M8	8,5	13	23	83		
HSK.A.63.134.M8CPY	HSK63A H134 M8 CPY	134	M8	8,5	13	25	108		
HSK.A.63.59.M10CPY	HSK63A H59 M10 CPY	59	M10	10,5	18	19,5	33		
HSK.A.63.84.M10CPY	HSK63A H84 M10 CPY	84	M10	10,5	18	25	58		
HSK.A.63.109.M10CPY	HSK63A H109 M10 CPY	109	M10	10,5	18	28	83		
HSK.A.63.134.M10CPY	HSK63A H134 M10 CPY	134	M10	10,5	18	28	108		
HSK.A.63.159.M10CPY	HSK63A H159 M10 CPY	159	M10	10,5	18	34	133		
HSK.A.63.176.M10CPY	HSK63A H176 M10 CPY	176	M10	10,5	18	36,5	150		
HSK.A.63.59.M12CPY	HSK63A H59 M12 CPY	59	M12	12,5	21	24	33		
HSK.A.63.84.M12CPY	HSK63A H84 M12 CPY	84	M12	12,5	21	24	58		
HSK.A.63.109.M12CPY	HSK63A H109 M12 CPY	109	M12	12,5	21	31	83		
HSK.A.63.134.M12CPY	HSK63A H134 M12 CPY	134	M12	12,5	21	31	108		
HSK.A.63.159.M12CPY	HSK63A H159 M12 CPY	159	M12	12,5	21	31	133		
HSK.A.63.176.M12CPY	HSK63A H176 M12 CPY	176	M12	12,5	21	40	150		
HSK.A.63.59.M16CPY	HSK63A H59 M16 CPY	59	M16	17	29	34	33		
HSK.A.63.84.M16CPY	HSK63A H84 M16 CPY	84	M16	17	29	34	58		
HSK.A.63.109.M16CPY	HSK63A H109 M16 CPY	109	M16	17	29	34	83		
HSK.A.63.134.M16CPY	HSK63A H134 M16 CPY	134	M16	17	29	39	108		
HSK.A.63.159.M16CPY	HSK63A H159 M16 CPY	159	M16	17	29	39	133		
HSK.A.63.176.M16CPY	HSK63A H176 M16 CPY	176	M16	17	29	42,5	150		





### PORTA TESTINE FILETTATE - FOR SCREWED MILLING CHUCK - HSK80A

Cod.184	TYPE	H	M	AT2		G2.5/25000		L
				d1	d2	d3	L	
HSK.A.80.84.M6CPY	HSK80A H84 M6 CPY	84	M6	6,5	9,7	20	58	
HSK.A.80.109.M6CPY	HSK80A H109 M6 CPY	109	M6	6,5	9,7	23	83	
HSK.A.80.84.M8CPY	HSK80A H84 M8 CPY	84	M8	8,5	13	23	58	
HSK.A.80.109.M8CPY	HSK80A H109 M8 CPY	109	M8	8,5	13	23	83	
HSK.A.80.134.M8CPY	HSK80A H134 M8 CPY	134	M8	8,5	13	25	108	
HSK.A.80.84.M10CPY	HSK80A H84 M10 CPY	84	M10	10,5	18	25	58	
HSK.A.80.109.M10CPY	HSK80A H109 M10 CPY	109	M10	10,5	18	28	83	
HSK.A.80.134.M10CPY	HSK80A H134 M10 CPY	134	M10	10,5	18	30	108	
HSK.A.80.84.M12CPY	HSK80A H84 M12 CPY	84	M12	12,5	21	24	58	
HSK.A.80.109.M12CPY	HSK80A H109 M12 CPY	109	M12	12,5	21	31	83	
HSK.A.80.134.M12CPY	HSK80A H134 M12 CPY	134	M12	12,5	21	31	108	
HSK.A.80.84.M16CPY	HSK80A H84 M16 CPY	84	M16	17	29	34	58	
HSK.A.80.109.M16CPY	HSK80A H109 M16 CPY	109	M16	17	29	34	83	
HSK.A.80.134.M16CPY	HSK80A H134 M16 CPY	134	M16	17	29	39	108	
HSK.A.80.159.M16CPY	HSK80A H159 M16 CPY	159	M16	17	29	55	133	
HSK.A.80.184.M16CPY	HSK80A H184 M16 CPY	184	M16	17	29	55	158	



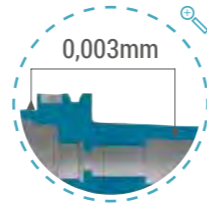
### PORTA TESTINE FILETTATE - FOR SCREWED MILLING CHUCK - HSK100A

Cod.	TYPE	H	M	AT2		G2.5/25000		L
				d1	d2	d3	L	
HSK.A.100.79.M8CPY	HSK100A H79 M8 CPY	79	M8	8,5	13	23	50	
HSK.A.100.79.M10CPY	HSK100A H79 M10 CPY	79	M10	10,5	18	23	50	
HSK.A.100.129.M10CPY	HSK100A H129 M10 CPY	129	M10	10,5	18	32	100	
HSK.A.100.179.M10CPY	HSK100A H179 M10 CPY	179	M10	10,5	18	36,5	150	
HSK.A.100.79.M12CPY	HSK100A H79 M12 CPY	79	M12	12,5	21	24	50	
HSK.A.100.87.M12CPY	HSK100A H87 M12 CPY	87	M12	12,5	21	24	58	
HSK.A.100.129.M12CPY	HSK100A H129 M12 CPY	129	M12	12,5	21	33	100	
HSK.A.100.137.M12CPY	HSK100A H137 M12 CPY	137	M12	12,5	21	47	108	
HSK.A.100.179.M12CPY	HSK100A H179 M12 CPY	179	M12	12,5	21	40	150	
HSK.A.100.187.M12CPY	HSK100A H187 M12 CPY	187	M12	12,5	21	55	158	
HSK.A.100.79.M16CPY	HSK100A H79 M16 CPY	79	M16	17	29	34	50	
HSK.A.100.87.M16CPY	HSK100A H87 M16 CPY	87	M16	17	29	31,5	58	
HSK.A.100.129.M16CPY	HSK100A H129 M16 CPY	129	M16	17	29	36	100	
HSK.A.100.137.M16CPY	HSK100A H137 M16 CPY	137	M16	17	29	47	108	
HSK.A.100.179.M16CPY	HSK100A H179 M16 CPY	179	M16	17	29	42,5	150	
HSK.A.100.187.M16CPY	HSK100A H187 M16 CPY	187	M16	17	29	55	158	
HSK.A.100.208.M16CPY	HSK100A H208 M16 CPY	208	M16	17	29	55	179	

SU RICHIESTA: HSK.A.32.59.M6CPY - HSK.A.32.84.M6CPY - HSK.A.32.109.M6CPY - HSK.A.40.59.M6CPY - HSK.A.40.84.M6CPY - HSK.A.40.109.M6CPY  
 ON REQUEST: HSK.A.32.59.M6CPY - HSK.A.32.84.M6CPY - HSK.A.32.109.M6CPY - HSK.A.40.59.M6CPY - HSK.A.40.84.M6CPY - HSK.A.40.109.M6CPY

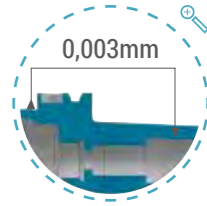
# FORTE SERRAGGIO

## POWER MILLING CHUCKS - FORM A

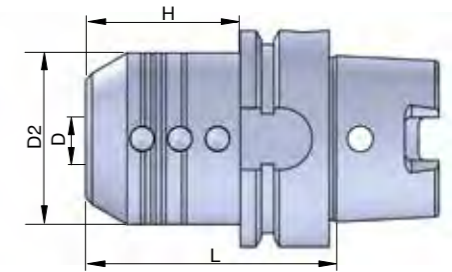
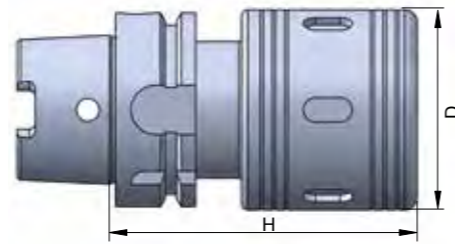


# IDRAULICO

## HYDRAULIC EXPANSION CHUCK - FORM A



HSK - DIN63893 FORMA A



### FORTE SERRAGGIO - POWER MILLING CHUCKS - HSK63A

Cod.	TYPE	D	H	AT2	
				G6.3/15000	
				PINZE	
HSK.A.63.85.FP20	HSK63A H85 D20	20	85	4SR20 / 3 ÷ 16	
HSK.A.63.110.FP32	HSK63A H110 D32	32	110	4SR32 / 6 ÷ 25	

### IDRAULICO - HYDRAULIC EXPANSION CHUCK - HSK32A

Cod.	TYPE	L	H	AT2	
				G6.3/25000	
				D2	D
HSK.A.32.90.HY12	HSK32A H90 D12	90	70	32	12
HSK.A.32.100.HY20	HSK32A H100 D20	100	80	42	20



**IDRAULICO - HYDRAULIC EXPANSION CHUCK - HSK40A**

Cod.	TYPE	L	H	AT2		G6.3/25000	
				D2	D		
HSK.A.40.90.HY12	HSK40A H90 D12	90	70	32	12		
HSK.A.40.90.HY20	HSK40A H90 D20	90	70	42	20		



**IDRAULICO - HYDRAULIC EXPANSION CHUCK - HSK80A**

Cod.	TYPE	L	H	AT2		G6.3/25000	
				D2	D		
HSK.A.80.95.HY12	HSK80A H95 D12	95	69	32	12		
HSK.A.80.105.HY20	HSK80A H105 D20	105	79	42	20		
HSK.A.80.115.HY25	HSK80 H115 D25	115	89	50	25		
HSK.A.80.120.HY32	HSK80A H120 D32	120	94	60	32		



**IDRAULICO - HYDRAULIC EXPANSION CHUCK - HSK50A**

Cod.	TYPE	L	H	AT2		G6.3/25000	
				D2	D		
HSK.A.50.90.HY12	HSK50A H90 D12	90	64	32	12		
HSK.A.50.100.HY20	HSK50A H100 D20	100	74	42	20		
HSK.A.50.120.HY25	HSK50A H120 D25	120	94	50	25		



**IDRAULICO - HYDRAULIC EXPANSION CHUCK - HSK100A**

Cod.	TYPE	L	H	AT2		G6.3/25000	
				D2	D		
HSK.A.100.95.HY12	HSK100A H95 D12	95	66	32	12		
HSK.A.100.105.HY20	HSK100A H105 D20	105	76	42	20		
HSK.A.100.115.HY25	HSK100A H115 D25	115	86	50	25		
HSK.A.100.120.HY32	HSK100A H120 D32	120	91	60	32		



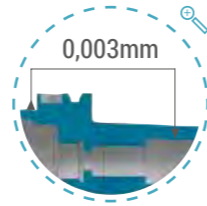
**IDRAULICO - HYDRAULIC EXPANSION CHUCK - HSK63A**

Cod.	TYPE	L	H	AT2		G6.3/25000	
				D2	D		
HSK.A.63.90.HY12	HSK63A H90 D12	90	64	32	12		
HSK.A.63.100.HY20	HSK63A H100 D20	100	74	42	20		
HSK.A.63.120.HY25	HSK63A H120 D25	120	94	50	25		
HSK.A.63.125.HY32	HSK63A H125 D32	125	99	60	32		



# PORTAPINZA ER DIN6499

## COLLET CHUCK FOR ER DIN6499 - FORM A



### PORTAPINZE ER MINI - COLLET CHUCKS ER MINI - HSK40A

Cod.	TYPE	CAPACITÀ RANGE	AT2		G6.3/18000	
			A	D	L	H
HSK.A.40.80.ER11M	HSK40A H80 ERX11M	1 ÷ 7 mm	16	16	60	80
HSK.A.40.80.ER16M	HSK40A H80 ERX16M	1 ÷ 10 mm	22	22	60	80
HSK.A.40.80.ER25M	HSK40A H80 ERX25M	1 ÷ 16 mm	35	35	60	80



### PORTAPINZE ER MINI - COLLET CHUCKS ER MINI - HSK50A

Cod.	TYPE	CAPACITÀ RANGE	AT2		G6.3/18000	
			A	D	L	H
HSK.A.50.100.ER11M	HSK50A H100 ERX11M	1 ÷ 7 mm	16	16	74	100
HSK.A.50.100.ER16M	HSK50A H100 ERX16M	1 ÷ 10 mm	22	22	74	100



### PORTAPINZE ER MINI - COLLET CHUCKS ER MINI - HSK32A

Cod.	TYPE	CAPACITÀ RANGE	AT2		G6.3/18000	
			A	D	L	H
HSK.A.32.80.ER11M	HSK32A H80 ERX11M	1 ÷ 7 mm	16	16	60	80
HSK.A.32.80.ER16M	HSK32A H80 ERX16M	1 ÷ 10 mm	22	22	60	80





### PORTAPINZE ER MINI - COLLET CHUCKS ER MINI - HSK63A

Cod.	TYPE	CAPACITÀ RANGE	AT2		G6.3/18000	
			A	D	L	H
HSK.A.63.100.ER11M	HSK63A H100 ERX11M	1 ÷ 7 mm	16	16	74	100
HSK.A.63.160.ER11M	HSK63A H160 ERX11M	1 ÷ 7 mm	16	16	134	160
HSK.A.63.100.ER16M	HSK63A H100 ERX16M	1 ÷ 10 mm	22	22	74	100
HSK.A.63.160.ER16M	HSK63A H160 ERX16M	1 ÷ 10 mm	22	22	134	160
HSK.A.63.110.ER20M	HSK63A H110 ERX20M	1 ÷ 13 mm	28	28	84	110
HSK.A.63.100.ER25M	HSK63A H100 ERX25M	1 ÷ 16 mm	35	35	74	100
HSK.A.63.160.ER25M	HSK63A H160 ERX25M	1 ÷ 16 mm	35	35	134	160



### PORTAPINZE ER MINI - COLLET CHUCKS ER MINI - HSK100A

Cod.	TYPE	CAPACITÀ RANGE	AT2		G6.3/18000	
			A	D	L	H
HSK.A.100.160.ER16M	HSK100A H160 ERX16M	1 ÷ 10 mm	22	22	131	160



### PORTAPINZE ER - COLLET CHUCKS ER - HSK32A

Cod.	TYPE	CAPACITÀ RANGE	AT2		G6.3/18000	
			A	H	L	H
HSK.A.32.80.ER16	HSK32A H80 ERX16	1 ÷ 10 mm	32	80		
HSK.A.32.80.ER25	HSK32A H80 ERX25	1 ÷ 16 mm	42	80		



### PORTAPINZE ER - COLLET CHUCKS ER - HSK40A

Cod.	TYPE	CAPACITÀ RANGE	AT2		G6.3/18000	
			A	H	L	H
HSK.A.40.80.ER16	HSK40A H80 ERX16	1 ÷ 10 mm	32	80		
HSK.A.40.80.ER25	HSK40A H80 ERX25	1 ÷ 16 mm	42	80		
HSK.A.40.100.ER32	HSK40A H100 ERX32	2 ÷ 20 mm	50	100		



### PORTAPINZE ER - COLLET CHUCKS ER - HSK50A

Cod.	TYPE	CAPACITÀ RANGE	AT2		G6.3/18000	
			A	H	L	H
HSK.A.50.100.ER16	HSK50A H100 ERX16	1 ÷ 10 mm	32	100		
HSK.A.50.100.ER25	HSK50A H100 ERX25	1 ÷ 16 mm	42	100		
HSK.A.50.100.ER32	HSK50A H100 ERX32	2 ÷ 20 mm	50	100		



### PORTAPINZE ER - COLLET CHUCKS ER - HSK63A

Cod.	TYPE	CAPACITÀ RANGE	G6.3/18000	
			A	H
HSK.A.63.100.ER16	HSK63A H100 ERX16	1 ÷ 10 mm	32	100
HSK.A.63.160.ER16	HSK63A H160 ERX16	1 ÷ 10 mm	32	160
HSK.A.63.200.ER16	HSK63A H200 ERX16	1 ÷ 10 mm	32	200
HSK.A.63.100.ER20	HSK63A H100 ERX20	1 ÷ 13 mm	35	100
HSK.A.63.100.ER25	HSK63A H100 ERX25	1 ÷ 16 mm	42	100
HSK.A.63.160.ER25	HSK63A H160 ERX25	1 ÷ 16 mm	42	160
HSK.A.63.200.ER25	HSK63A H200 ERX25	1 ÷ 16 mm	42	200
HSK.A.63.70.ER32	HSK63A H70 ERX32	2 ÷ 20 mm	50	70
HSK.A.63.80.ER32	HSK63A H80 ERX32	2 ÷ 20 mm	50	80
HSK.A.63.100.ER32	HSK63A H100 ERX32	2 ÷ 20 mm	50	100
HSK.A.63.120.ER32	HSK63A H120 ERX32	2 ÷ 20 mm	50	120
HSK.A.63.130.ER32	HSK63A H130 ERX32	2 ÷ 20 mm	50	130
HSK.A.63.160.ER32	HSK63A H160 ERX32	2 ÷ 20 mm	50	160
HSK.A.63.200.ER32	HSK63A H200 ERX32	2 ÷ 20 mm	50	200
HSK.A.63.65.ER40	HSK63A H65 ERX40	3 ÷ 30 mm	63	65
HSK.A.63.120.ER40	HSK63A H120 ERX40	3 ÷ 30 mm	63	120
HSK.A.63.160.ER40	HSK63A H160 ERX40	3 ÷ 30 mm	63	160



### PORTAPINZE ER - COLLET CHUCKS ER - HSK100A

Cod.	TYPE	CAPACITÀ RANGE	G6.3/18000	
			A	H
HSK.A.100.100.ER16	HSK100A H100 ERX16	1 ÷ 10	32	100
HSK.A.100.160.ER16	HSK100A H160 ERX16	1 ÷ 10	32	160
HSK.A.100.100.ER20	HSK100A H100 ERX20	1 ÷ 13	35	100
HSK.A.100.100.ER25	HSK100A H100 ERX25	1 ÷ 16	42	100
HSK.A.100.160.ER25	HSK100A H160 ERX25	1 ÷ 16	42	160
HSK.A.100.200.ER25	HSK100A H200 ERX25	1 ÷ 16	42	200
HSK.A.100.80.ER32	HSK100A H80 ERX32	2 ÷ 20	50	80
HSK.A.100.100.ER32	HSK100A H100 ERX32	2 ÷ 20	50	100
HSK.A.100.160.ER32	HSK100A H160 ERX32	2 ÷ 20	50	160
HSK.A.100.200.ER32	HSK100A H200 ERX32	2 ÷ 20	50	200
HSK.A.100.100.ER40	HSK100A H100 ERX40	3 ÷ 30	63	100
HSK.A.100.160.ER40	HSK100A H160 ERX40	3 ÷ 30	63	160
HSK.A.100.200.ER40	HSK100A H200 ERX40	3 ÷ 30	63	200

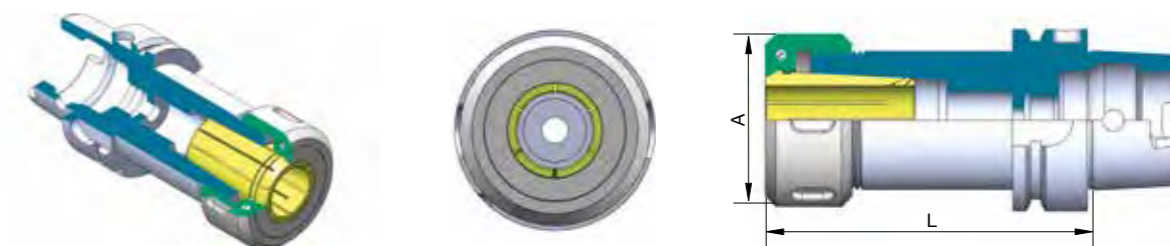
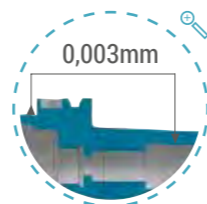


### PORTAPINZE ER - COLLET CHUCKS ER - HSK80A

Cod.	TYPE	CAPACITÀ RANGE	G6.3/18000	
			A	H
HSK.A.80.100.ER32	HSK80A H100 ERX32	2 ÷ 20 mm	50	100
HSK.A.80.120.ER40	HSK80A H120 ERX40	3 ÷ 30 mm	63	120

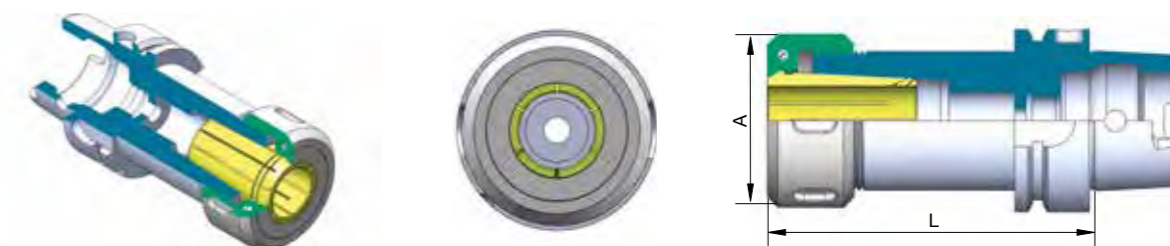
# PORTAPINZA EOC DIN6388

COLLET CHUCK FOR EOC DIN6388 - FORM A



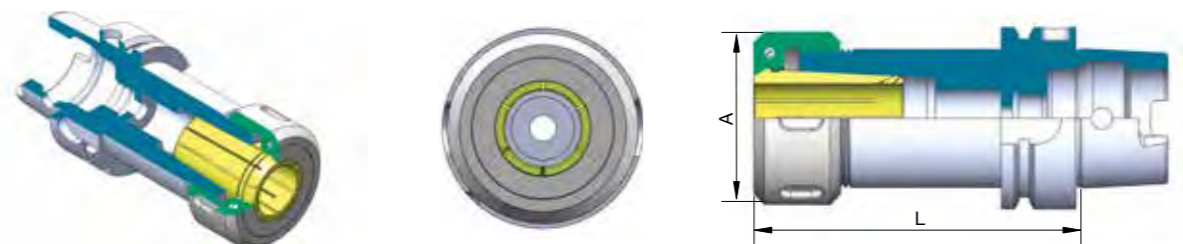
## PORTAPINZA PER EOC - COLLET CHUCK FOR EOC - HSK63A

Cod.	TYPE	CAPACITÀ RANGE	AT2 G6.3/15000	
			A	L
HSK.A.63.100.EOC16	HSK63A H100 EOC16	2 ÷ 16	43	100
HSK.A.63.100.EOC25	HSK63A H100 EOC25	2 ÷ 25	60	100
HSK.A.63.120.EOC32	HSK63A H120 EOC32	3 ÷ 32	72	100



## PORTAPINZA PER EOC - COLLET CHUCK FOR EOC - HSK100A

Cod.	TYPE	CAPACITÀ RANGE	AT2 G6.3/15000	
			A	L
HSK.A.100.110.EOC16	HSK100A H110 EOC16	2 ÷ 16	43	110
HSK.A.100.120.EOC25	HSK100A H120 EOC25	2 ÷ 25	60	120
HSK.A.100.130.EOC32	HSK100A H130 EOC32	3 ÷ 32	72	130



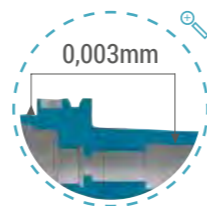
## PORTAPINZA PER EOC - COLLET CHUCK FOR EOC - HSK50A

Cod.	TYPE	CAPACITÀ RANGE	AT2 G6.3/15000	
			A	L
HSK.A.50.100.EOC16	HSK50A H100 EOC16	2 ÷ 16	43	100
HSK.A.50.100.EOC25	HSK50A H100 EOC25	2 ÷ 25	60	100



# PER FRESE WELDON

## END MILL HOLDERS - FORM A



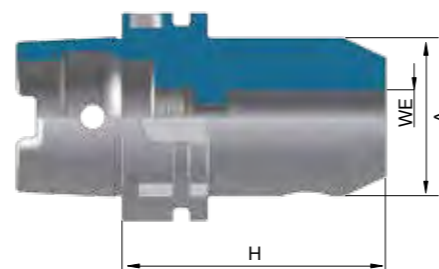
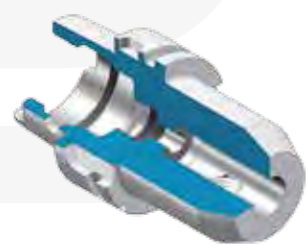
### PER FRESE WELDON - END MILL HOLDERS - HSK40A

Cod.	TYPE	H	G6.3/15000	
			AT2	WE
HSK.A.40.60.WE6	HSK40A H60 WE6	60	25	6
HSK.A.40.60.WE8	HSK40A H60 WE8	60	28	8
HSK.A.40.60.WE10	HSK40A H60 WE10	60	35	10
HSK.A.40.70.WE12	HSK40A H70 WE12	70	42	12
HSK.A.40.75.WE16	HSK40A H75 WE16	75	48	16



### PER FRESE WELDON - END MILL HOLDERS - HSK50A

Cod.	TYPE	H	G6.3/15000	
			AT2	WE
HSK.A.50.65.WE6	HSK50A H65 WE6	65	25	6
HSK.A.50.65.WE8	HSK50A H65 WE8	65	28	8
HSK.A.50.65.WE10	HSK50A H65 WE10	65	35	10
HSK.A.50.80.WE12	HSK50A H80 WE12	80	42	12
HSK.A.50.80.WE14	HSK50A H80 WE14	80	44	14
HSK.A.50.80.WE16	HSK50A H80 WE16	80	48	16
HSK.A.50.80.WE18	HSK50A H80 WE18	80	50	18
HSK.A.50.80.WE20	HSK50A H80 WE20	80	52	20



### PER FRESE WELDON - END MILL HOLDERS - HSK32A

Cod.	TYPE	H	G6.3/15000	
			AT2	WE
HSK.A.32.60.WE6	HSK32A H60 WE6	60	25	6
HSK.A.32.60.WE8	HSK32A H60 WE8	60	28	8
HSK.A.32.65.WE10	HSK32A H65 WE10	65	35	10
HSK.A.32.65.WE12	HSK32A H65 WE12	65	42	12





### PER FRESE WELDON - END MILL HOLDERS - HSK63A

Cod.	TYPE	H	AT2 G6.3/15000		
			A	WE	
HSK.A.63.65.WE6	HSK63A H65 WE6	65	25	6	
HSK.A.63.100.WE6	HSK63A H100 WE6	100	25	6	
HSK.A.63.160.WE6	HSK63A H160 WE6	160	25	6	
HSK.A.63.65.WE8	HSK63A H65 WE8	65	28	8	
HSK.A.63.100.WE8	HSK63A H100 WE8	100	28	8	
HSK.A.63.160.WE8	HSK63A H160 WE8	160	28	8	
HSK.A.63.65.WE10	HSK63A H65 WE10	65	35	10	
HSK.A.63.100.WE10	HSK63A H100 WE10	100	35	10	
HSK.A.63.160.WE10	HSK63A H160 WE10	160	35	10	
HSK.A.63.80.WE12	HSK63A H80 WE12	80	42	12	
HSK.A.63.100.WE12	HSK63A H100 WE12	100	42	12	
HSK.A.63.160.WE12	HSK63A H160 WE12	160	42	12	
HSK.A.63.80.WE14	HSK63A H80 WE14	80	44	14	
HSK.A.63.100.WE14	HSK63A H100 WE14	100	44	14	
HSK.A.63.160.WE14	HSK63A H160 WE14	160	44	14	
HSK.A.63.80.WE16	HSK63A H80 WE16	80	48	16	
HSK.A.63.100.WE16	HSK63A H100 WE16	100	48	16	
HSK.A.63.160.WE16	HSK63A H160 WE16	160	48	16	
HSK.A.63.80.WE18	HSK63A H80 WE18	80	48	18	
HSK.A.63.100.WE18	HSK63A H100 WE18	100	48	18	
HSK.A.63.160.WE18	HSK63A H160 WE18	160	48	18	
HSK.A.63.80.WE20	HSK63A H80 WE20	80	52	20	
HSK.A.63.100.WE20	HSK63A H100 WE20	100	52	20	
HSK.A.63.160.WE20	HSK63A H160 WE20	160	52	20	
HSK.A.63.110.WE25	HSK63A H110 WE25	110	65	25	
HSK.A.63.160.WE25	HSK63A H160 WE25	160	65	25	
HSK.A.63.110.WE32	HSK63A H110 WE32	110	72	32	
HSK.A.63.160.WE32	HSK63A H160 WE32	160	72	32	



### PER FRESE WELDON - END MILL HOLDERS - HSK80A

Cod.	TYPE	H	AT2 G6.3/15000		
			A	WE	
HSK.A.80.80.WE6	HSK80A H80 WE6	80	25	6	
HSK.A.80.80.WE8	HSK80A H80 WE8	80	28	8	
HSK.A.80.80.WE10	HSK80A H80 WE10	80	35	10	
HSK.A.80.80.WE12	HSK80A H80 WE12	80	42	12	
HSK.A.80.80.WE14	HSK80A H80 WE14	80	44	14	
HSK.A.80.100.WE16	HSK80A H100 WE16	100	48	16	
HSK.A.80.100.WE18	HSK80A H100 WE18	100	50	18	
HSK.A.80.100.WE20	HSK80A H100 WE20	100	52	20	
HSK.A.80.100.WE25	HSK80A H100 WE25	100	65	25	
HSK.A.80.110.WE32	HSK80A H110 WE32	110	72	32	

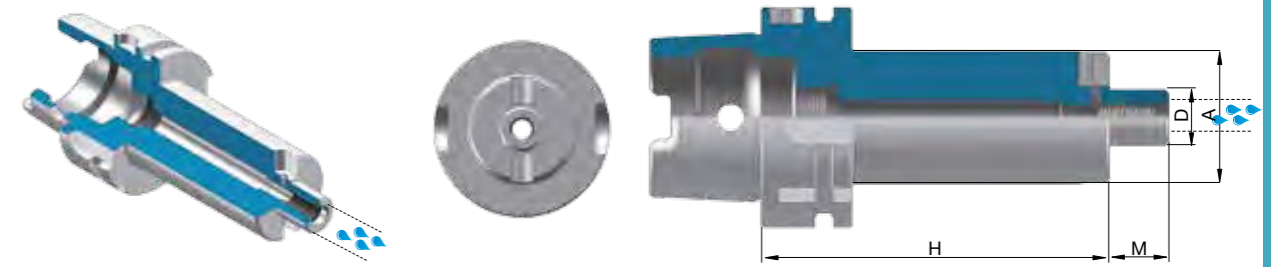
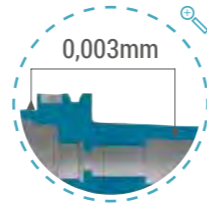


### PER FRESE WELDON - END MILL HOLDERS - HSK100A

Cod.	TYPE	H	AT2 G6.3/15000		
			A	WE	
HSK.A.100.80.WE6	HSK100A H80 WE6	80	25	6	
HSK.A.100.80.WE8	HSK100A H80 WE8	80	28	8	
HSK.A.100.80.WE10	HSK100A H80 WE10	80	35	10	
HSK.A.100.100.WE12	HSK100A H100 WE12	100	42	12	
HSK.A.100.100.WE14	HSK100A H100 WE14	100	44	14	
HSK.A.100.100.WE16	HSK100A H100 WE16	100	48	16	
HSK.A.100.100.WE18	HSK100A H100 WE18	100	50	18	
HSK.A.100.100.WE20	HSK100A H100 WE20	100	52	20	
HSK.A.100.100.WE25	HSK100A H100 WE25	100	65	25	
HSK.A.100.100.WE32	HSK100A H100 WE32	100	72	32	
HSK.A.100.105.WE40	HSK100A H105 WE40	100	80	40	

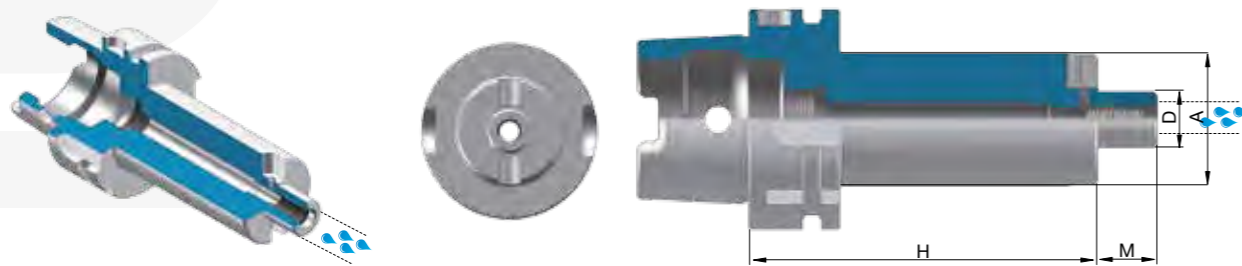
# PORTAFRESE FISSI

## SHELL END MILL HOLDERS - FORM A



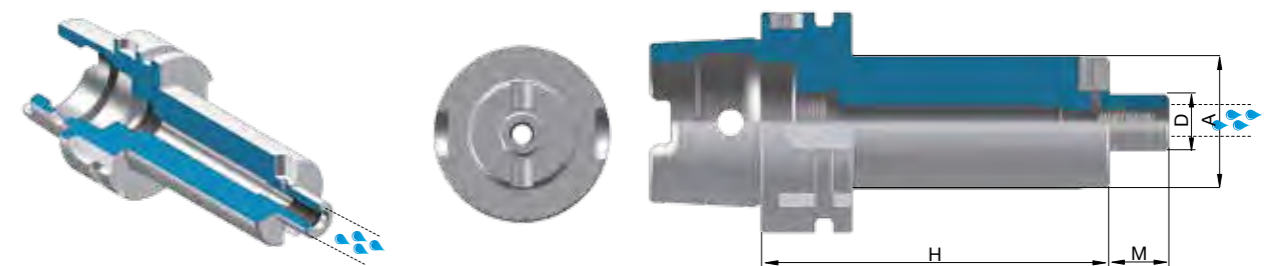
### PORTAFRESE FISSI - SHELL END MILL HOLDERS - HSK63A

Cod.	TYPE	AT2 G6.3/18000			
		H	D	M	A
HSK.A.63.50.D16S	HSK63A H50 D16S	50	16	17	38
HSK.A.63.100.D16S	HSK63A H100 D16S	100	16	17	38
HSK.A.63.160.D16S	HSK63A H160 D16S	160	16	17	38
HSK.A.63.50.D22S	HSK63A H50 D22S	50	22	19	48
HSK.A.63.100.D22S	HSK63A H100 D22S	100	22	19	48
HSK.A.63.160.D22S	HSK63A H160 D22S	160	22	19	48
HSK.A.63.60.D27S	HSK63A H60 D27S	60	27	21	58
HSK.A.63.100.D27S	HSK63A H100 D27S	100	27	21	58
HSK.A.63.160.D27S	HSK63A H160 D27S	160	27	21	58
HSK.A.63.60.D32S	HSK63A H60 D32S	60	32	24	78
HSK.A.63.100.D32S	HSK63A H100 D32S	100	32	24	78
HSK.A.63.60.D40S	HSK63A H60 D40S	60	40	27	88



### PORTAFRESE FISSI - SHELL END MILL HOLDERS - HSK50A

Cod.	TYPE	AT2 G6.3/18000			
		H	D	M	A
HSK.A.50.50.D16S	HSK50A H50 D16S	50	16	17	38
HSK.A.50.60.D22S	HSK50A H60 D22S	60	22	19	48
HSK.A.50.60.D27S	HSK50A H60 D27S	60	27	21	58
HSK.A.50.60.D32S	HSK50A H60 D32S	60	32	24	78

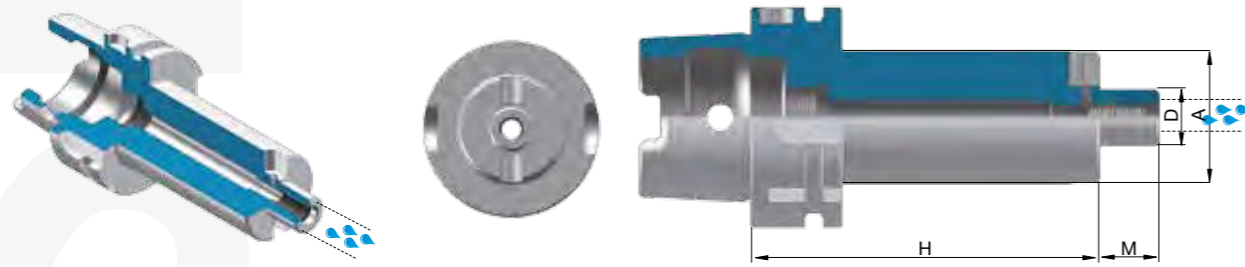


### PORTAFRESE FISSI - SHELL END MILL HOLDERS - HSK80A

Cod.	TYPE	AT2 G6.3/18000			
		H	D	M	A
HSK.A.80.50.D22S	HSK80A H50 D22S	50	22	19	48
HSK.A.80.50.D27S	HSK80A H50 D27S	50	27	21	58
HSK.A.80.60.D32S	HSK80A H60 D32S	60	32	24	78
HSK.A.80.60.D40S	HSK80A H60 D40S	60	40	27	88

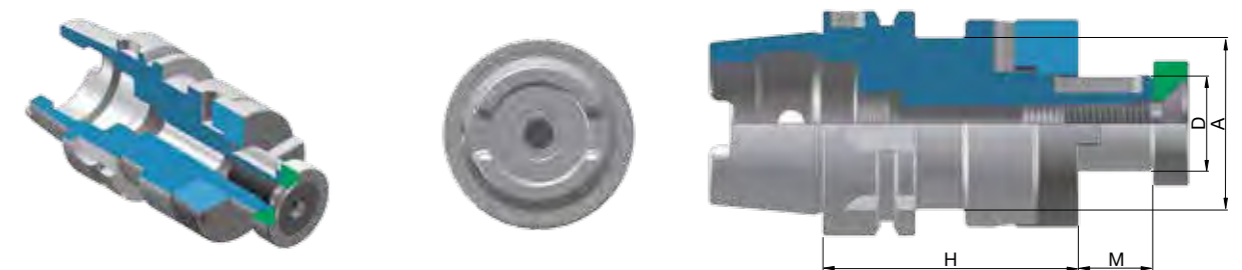
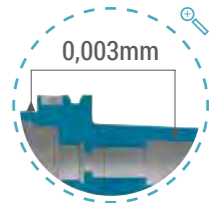
# PORTAFRESE COMBINATI

## COMBI SHELL END MILL HOLDERS - FORM A



### PORTAFRESE FISSI - SHELL END MILL HOLDERS - HSK100A

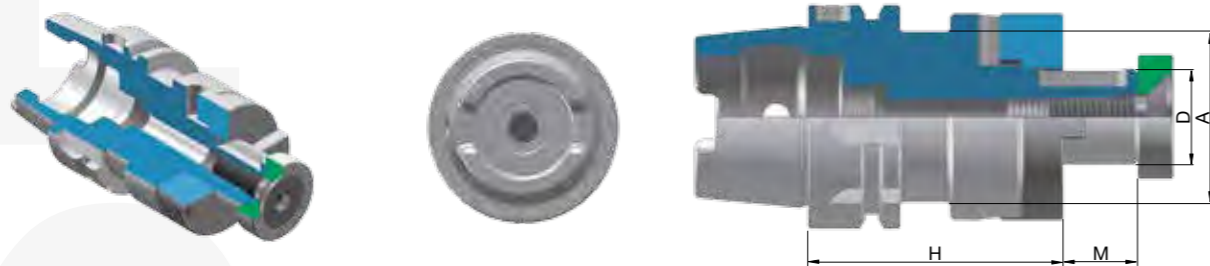
Cod.	TYPE	H	D	AT2		G6.3/18000	
				M	A	M	A
HSK.A.100.50.D16S	HSK100A H50 D16S	50	16	17	38		
HSK.A.100.100.D16S	HSK100A H100 D16S	100	16	17	38		
HSK.A.100.160.D16S	HSK100A H160 D16S	160	16	17	38		
HSK.A.100.55.D22S	HSK100A H50 D22S	50	22	19	48		
HSK.A.100.100.D22S	HSK100A H100 D22S	100	22	19	48		
HSK.A.100.160.D22S	HSK100A H160 D22S	160	22	19	48		
HSK.A.100.50.D27S	HSK100A H50 D27S	50	27	21	58		
HSK.A.100.100.D27S	HSK100A H100 D27S	100	27	21	58		
HSK.A.100.160.D27S	HSK100A H160 D27S	160	27	21	58		
HSK.A.100.50.D32S	HSK100A H50 D32S	50	32	24	66		
HSK.A.100.100.D32S	HSK100A H100 D32S	100	32	24	66		
HSK.A.100.160.D32S	HSK100A H160 D32S	160	32	24	66		
HSK.A.100.60.D40S	HSK100A H60 D40S	60	40	27	80		
HSK.A.100.100.D40S	HSK100A H100 D40S	100	40	27	80		
HSK.A.100.160.D40S	HSK100A H160 D40S	160	40	27	80		



### PORTAFRESE COMBINATO - COMBI SHELL END MILL HOLDERS - HSK32A

Cod.	TYPE	H	D	AT2		G6.3/18000	
				M	A	M	A
HSK.A.32.55.D16C	HSK32A H55 D16C	55	16	17	32		
HSK.A.32.55.D22C	HSK32A H55 D22C	55	22	19	40		
HSK.A.32.65.D27C	HSK32A H65 D27C	65	27	21	48		





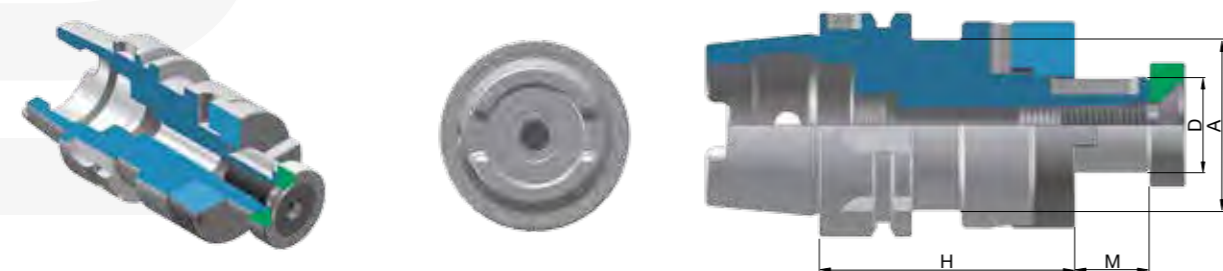
**PORTAFRESE COMBINATO - COMBI SHELL END MILL HOLDERS - HSK40A**

Cod.	TYPE	AT2 G6.3/18000			
		H	D	M	A
HSK.A.40.50.D16C	HSK40A H50 D16C	50	16	17	32
HSK.A.40.50.D22C	HSK40A H50 D22C	50	22	19	40
HSK.A.40.65.D27C	HSK40A H65 D27C	65	27	21	48



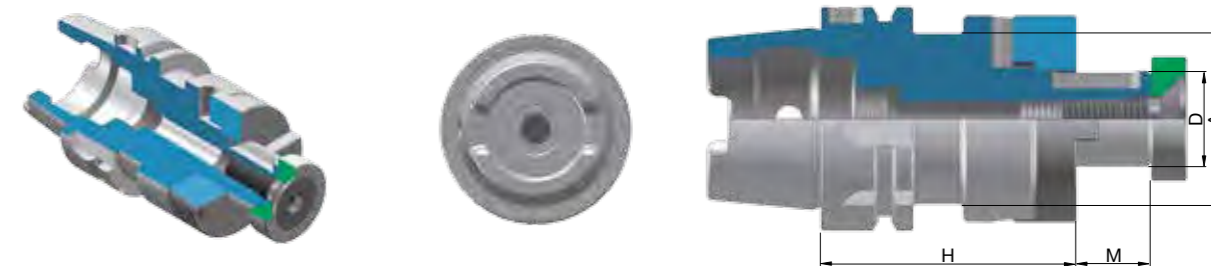
**PORTAFRESE COMBINATO - COMBI SHELL END MILL HOLDERS - HSK50A**

Cod.	TYPE	AT2 G6.3/18000			
		H	D	M	A
HSK.A.50.50.D16C	HSK50A H50 D16C	50	16	17	32
HSK.A.50.50.D22C	HSK50A H50 D22C	50	22	19	40
HSK.A.50.65.D27C	HSK50A H65 D27C	65	27	21	48
HSK.A.50.65.D32C	HSK50A H65 D32C	65	32	24	58



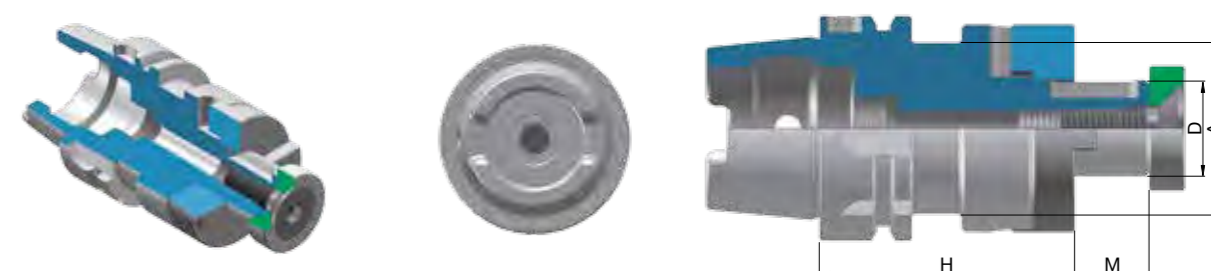
**PORTAFRESE COMBINATO - COMBI SHELL END MILL HOLDERS - HSK80A**

Cod.	TYPE	AT2 G6.3/18000			
		H	D	M	A
HSK.A.80.60.D16C	HSK80A H60 D16C	60	16	17	32
HSK.A.80.60.D22C	HSK80A H60 D22C	60	22	19	40
HSK.A.80.60.D27C	HSK80A H60 D27C	60	27	21	48
HSK.A.80.60.D32C	HSK80A H60 D32C	60	32	24	58
HSK.A.80.70.D40C	HSK80A H70 D40C	70	40	27	70



**PORTAFRESE COMBINATO - COMBI SHELL END MILL HOLDERS - HSK63A**

Cod.	TYPE	AT2 G6.3/18000			
		H	D	M	A
HSK.A.63.60.D16C	HSK63A H60 D16C	60	16	17	32
HSK.A.63.100.D16C	HSK63A H100 D16C	100	16	17	32
HSK.A.63.160.D16C	HSK63A H160 D16C	160	16	17	32
HSK.A.63.60.D22C	HSK63A H60 D22C	60	22	19	40
HSK.A.63.100.D22C	HSK63A H100 D22C	100	22	19	40
HSK.A.63.160.D22C	HSK63A H160 D22C	160	22	19	40
HSK.A.63.60.D27C	HSK63A H60 D27C	60	27	21	48
HSK.A.63.100.D27C	HSK63A H100 D27C	100	27	21	48
HSK.A.63.160.D27C	HSK63A H160 D27C	160	27	21	48
HSK.A.63.60.D32C	HSK63A H60 D32C	60	32	24	58
HSK.A.63.100.D32C	HSK63A H100 D32C	100	32	24	58
HSK.A.63.160.D32C	HSK63A H160 D32C	160	32	24	58
HSK.A.63.70.D40C	HSK63A H70 D40C	70	40	27	70
HSK.A.63.100.D40C	HSK63A H100 D40C	100	40	27	70
HSK.A.63.100.D40C	HSK63A H160 D40C	160	40	27	70



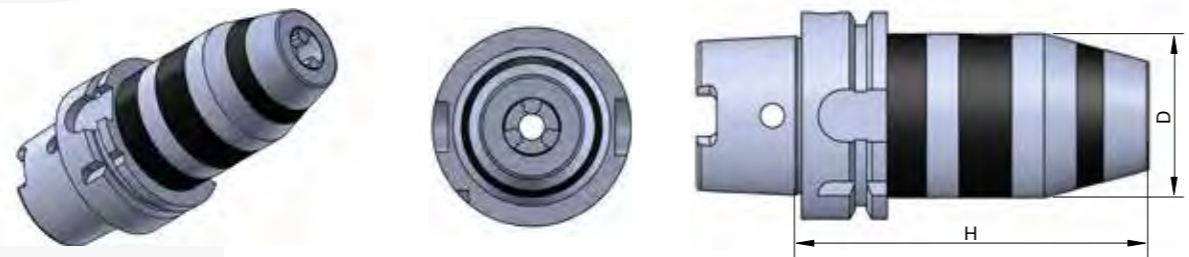
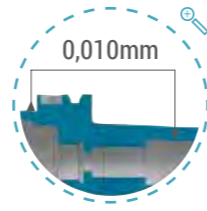
**PORTAFRESE COMBINATO - COMBI SHELL END MILL HOLDERS - HSK100A**

Cod.	TYPE	AT2 G6.3/18000			
		H	D	M	A
HSK.A.100.60.D16C	HSK100A H60 D16C	60	16	17	32
HSK.A.100.60.D22C	HSK100A H60 D22C	60	22	19	40
HSK.A.100.60.D27C	HSK100A H60 D27C	60	27	21	48
HSK.A.100.60.D32C	HSK100A H60 D32C	60	32	24	58
HSK.A.100.70.D40C	HSK100A H70 D40C	70	40	27	70



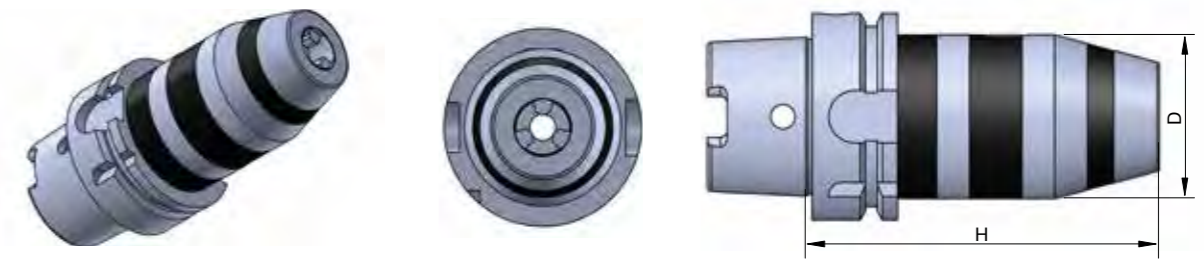
# PORTA PUNTE CON CHIAVE ESAGONALE

HEX KEY LOCK DRILL CHUCKS WITH COOLANT THROUGH - FORM A



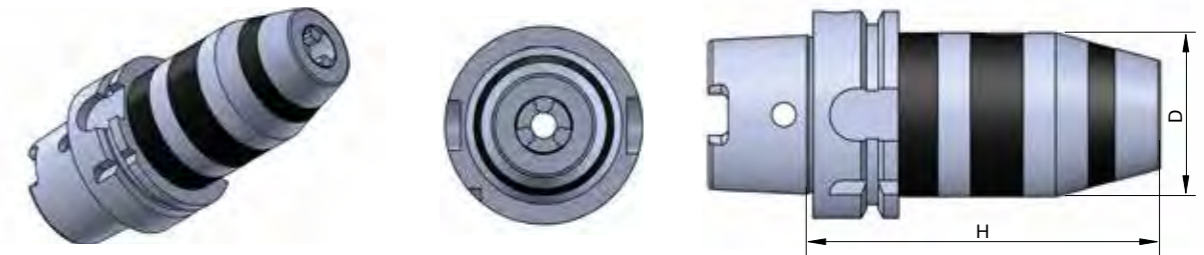
## PORTAPUNTE CON CHIAVE ESAGONALE - DRILL CHUCKS WITH HEX KEY - HSK50A

Cod.	TYPE	H	D	AT2 G6.3/12000	
				CAPACITA' RANGE	
HSK.A.50.116.HD13	HSK50A H116 HD13	116	50	1 ÷ 13	
HSK.A.50.121.HD16	HSK50A H121 HD16	121	57	3 ÷ 16	



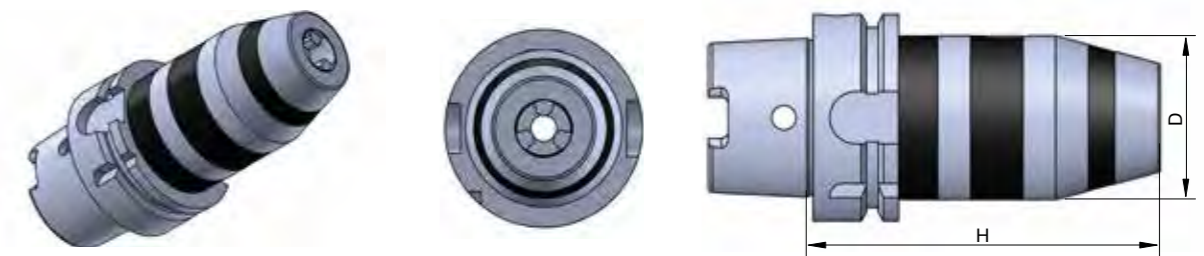
## PORTAPUNTE CON CHIAVE ESAGONALE - DRILL CHUCKS WITH HEX KEY - HSK63A

Cod.	TYPE	H	D	AT2 G6.3/12000	
				CAPACITA' RANGE	
HSK.A.63.101.HD13	HSK63A H101 HD13	101	50	1 ÷ 13	
HSK.A.63.106.HD16	HSK63A H106 HD16	106	57	3 ÷ 16	



## PORTAPUNTE CON CHIAVE ESAGONALE - DRILL CHUCKS WITH HEX KEY - HSK80A

Cod.	TYPE	H	D	AT2 G6.3/12000	
				CAPACITA' RANGE	
HSK.A.80.109.HD13	HSK100A H110 HD13	109	50	1 ÷ 13	
HSK.A.80.114.HD16	HSK100A H115 HD16	114	57	3 ÷ 16	



## PORTAPUNTE CON CHIAVE ESAGONALE - DRILL CHUCKS WITH HEX KEY - HSK100A

Cod.	TYPE	H	D	AT2 G6.3/12000	
				CAPACITA' RANGE	
HSK.A.100.110.HD13	HSK100A H110 HD13	110	50	1 ÷ 13	
HSK.A.100.115.HD16	HSK100A H115 HD16	115	57	3 ÷ 16	

# STELO TENERO LAVORABILE

## BLANK ARBORS - FORM A

HSK - DIN63893 FORMA A

### RICAMBI PORTAPUNTE - SPARE PARTS FOR DRILL CHUCK HEX KEY

Cod.	TYPE
RIC.HD13	RICAMBI PER/SPARE PARTS FOR HD13
RIC.HD16	RICAMBI PER/SPARE PARTS FOR HD16

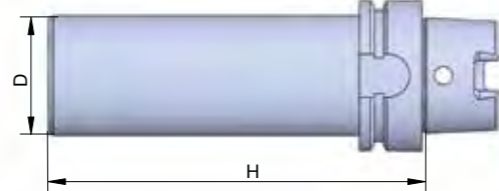
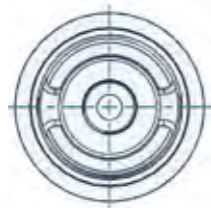


### STELO TENERO LAVORABILE - BLANK ARBORS

Cod.	TYPE	D	Material	
			AT2	42HRC
HSK.A.32.150.D25BL	HSK32A H150 D25	25		150
HSK.A.40.150.D40BL	HSK40A H150 D40	40		150
HSK.A.50.150.D50BL	HSK50A H150 D50	50		150
HSK.A.63.160.D63BL	HSK63A H160 D63	63		160
HSK.A.63.250.D63BL	HSK63A H250 D63	63		250
HSK.A.80.250.D80BL	HSK80A H250 D80	80		250
HSK.A.100.250.D97BL	HSK100A H250 D97	97		250

# BARRA DI CONTROLLO

TEST ARBORS



## BARRA DI CONTROLLO - TEST ARBORS

AT2

Cod.	TYPE	H	D
HSK.A.32.150.D25	HSK32A H150 D25	150	25
HSK.A.40.150.D25	HSK40A H150 D25	150	25
HSK.A.50.200.D32	HSK50A H200 D32	200	32
HSK.A.63.300.D40	HSK63A H300 D40	300	40
HSK.A.80.300.D40	HSK80A H300 D40	300	40
HSK.A.100.300.D50	HSK100A H300 D50	300	50

# HSK - DIN63893 FORMA C

HSK - DIN 63893 FORM C



PORTAPINZA ER DIN6499  
COLLET CHUCK FOR ER DIN6499



PER FRESE WELDON  
END MILL HOLDERS



STELO TENERO LAVORABILE  
BLANK ARBORS

## CARATTERISTICHE / SPECIFICATION / CARACTÉRISTIQUES/ TECHNISCHE DATEN

### CARATTERISTICHE TECNICHE

- Costruiti in acciaio certificato in barre.
- Eseguiti trattamenti termici da fornitori certificati ISO 9001.
- Rettificati di precisione esternamente, internamente e nelle filettature delle ghiera chiudipinza.
- Controllati con strumenti di misura certificati.
- La tolleranza di precisione dei coni HSK-C è AT2.
- L'errore di concentricità massimo tra il cono e la sede utensile è 0.003 mm.

### TECHNICAL FEATURES

- Manufactured with certificate steel.
- Heat treatments are performed by certified suppliers ISO 9001.
- Precision ground on shank, inside tapers and collet nut threads.
- Tested with high precision inspection and ganging equipment.
- Taper accuracy of HSK-C shanks lower than AT2.
- The maximum error of concentricity between the cone and the seat of tool is 0.003 mm.

### CARACTÉRISTIQUES

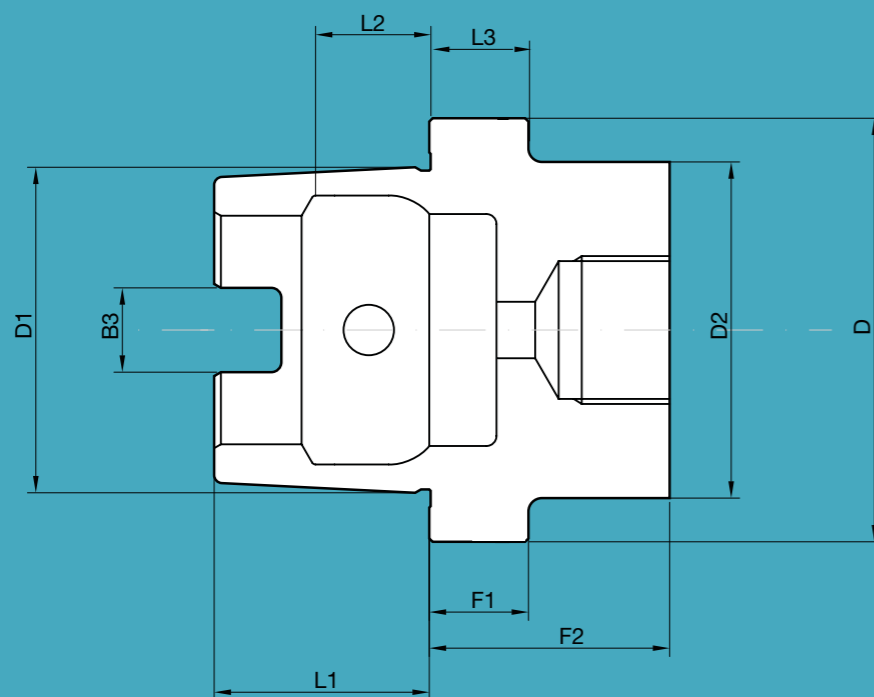
- Fabriqués en bar d'acier certifié.
- Réalisation du traitement thermique par des fournisseurs certifiés ISO 9001.
- Rectification de précision extérieurement, intérieurement et dans les filetages des écrous serre-pince.
- Contrôlés par des instruments de mesure certifiés.
- La tolérance de précision des cônes HSK-C est AT2.
- L'erreur de concentricité maximum entre le cône et le siège de l'outil est de 0.003 mm.

### MERKMALE

- Gebaut aus zertifiziertem Stabstahl
- Warmbehandlungen von Lieferanten mit Zeugnis ISO 9001
- Genauigkeitgeschliffen aussen, innen und in den Gewinden der Spannmutter für den Zangenverschluss
- Geprüft mit zertifizierten Messinstrumente
- Die Präzisionstoleranz der Kone HSK-C ist AT2
- Die max konzentrische Abweichung zwischen Konus und Werkzeugsitz ist 0.003 mm

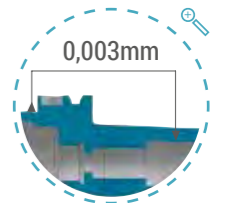
## QUOTE / QUOTE / QUOTES / ABMESSUNGEN

HSK	D	D1	D2	B3	L1	L2	L3	F1	F2	COOLANT TUBE
32	32	24	26	7	16	8,92	16	20	35	M10X1
40	40	30	34	8	20	11,42	16	20	35	M12X1
50	50	38	42	10,54	25	14,13	18	26	42	M16X1
63	63	48	53	12,54	32	18,13	18	26	42	M18X1
80	80	60	68	16,04	40	22,85	18	26	42	M20X1,5
100	100	75	88	20,02	50	28,56	20	29	45	M24X1,5

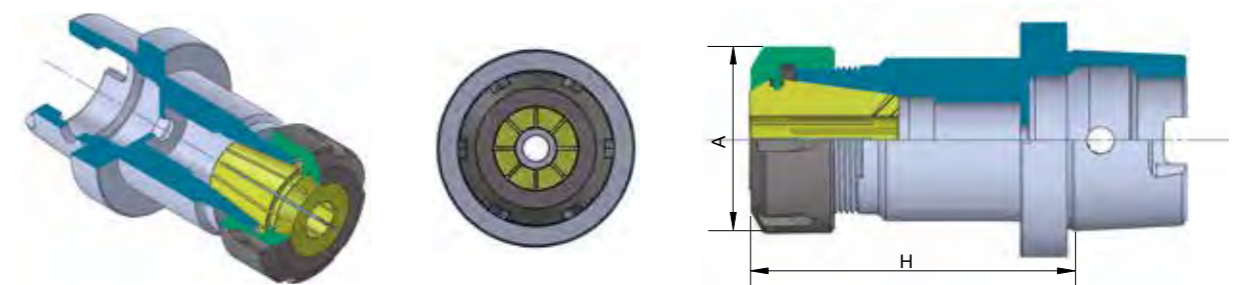


# PORTAPINZA ER DIN6499

## COLLET CHUCK ER DIN6499 - FORM C



HSK - DIN63893 FORMA C



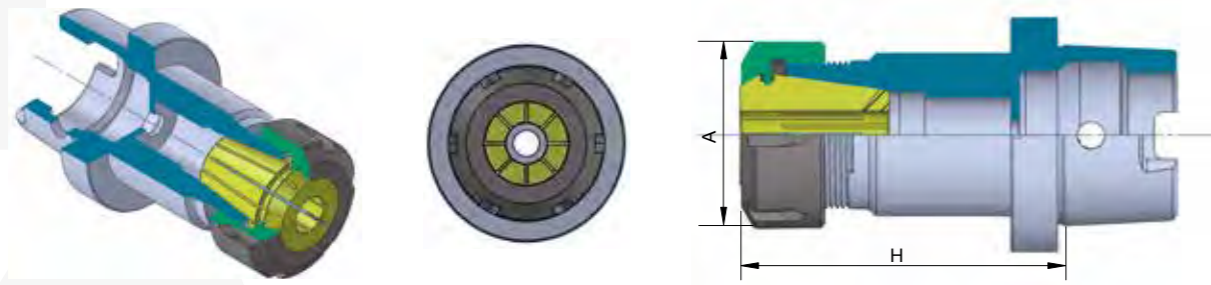
## PORTAPINZA ER DIN6499 - COLLET CHUCK ER DIN6499 - HSK32C

Cod.	TYPE	CAPACITA' RANGE	AT2	G6.3/18000
			A	H
HSK.C.32.60.ER16	HSK32C H60 ERX16	1 ÷ 10	32	60



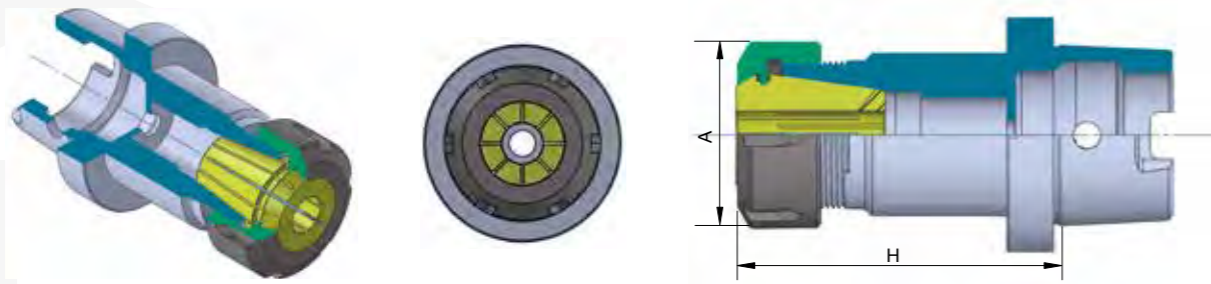
# PER FRESE WELDON WHISTLE NOTCH END MILL HOLDERS WHISTLE NOTCH - FORM C

HSK - DIN63893 FORMA C



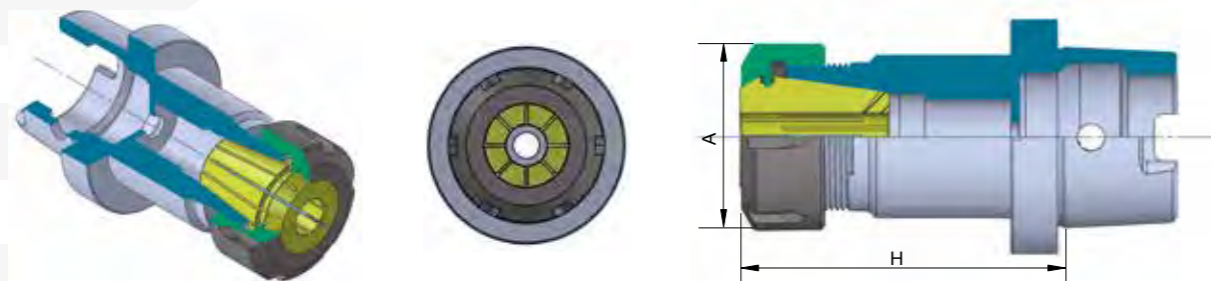
## PORTAPINZA ER - COLLET CHUCK ER - HSK40C

Cod.	TYPE	CAPACITA' RANGE	AT2 G6.3/18000	
			A	H
HSK.C.40.60.ER16	HSK40C H60 ERX16	1 ÷ 10	32	60
HSK.C.40.70.ER25	HSK40C H70 ERX25	2 ÷ 16	42	70
HSK.C.40.75.ER32	HSK40C H75 ERX32	2 ÷ 20	50	75



## PORTAPINZA ER - COLLET CHUCK ER - HSK50C

Cod.	TYPE	CAPACITA' RANGE	AT2 G6.3/18000	
			A	H
HSK.C.50.60.ER16	HSK50C H60 ERX16	1 ÷ 10	32	60
HSK.C.50.70.ER25	HSK50C H70 ERX25	2 ÷ 16	42	70
HSK.C.50.75.ER32	HSK50C H75 ERX32	2 ÷ 20	50	75
HSK.C.50.80.ER40	HSK50C H80 ERX40	3 ÷ 26	63	80



## PORTAPINZA ER - COLLET CHUCK ER - HSK63C

Cod.	TYPE	CAPACITA' RANGE	AT2 G6.3/18000	
			A	H
HSK.C.63.70.ER25	HSK63C H70 ERX25	2 ÷ 16	42	70
HSK.C.63.75.ER32	HSK63C H75 ERX32	2 ÷ 20	50	75
HSK.C.63.80.ER40	HSK63C H80 ERX40	3 ÷ 26	63	80



## PER FRESE WELDON WHISTLE NOTCH - END MILL HOLDER WHISTLE NOTCH - HSK32C

Cod.	TYPE	WE	AT2 G6.3/18000	
			H	A
HSK.C.32.60.WE6	HSK32C H60 WE6	6	60	25
HSK.C.32.60.WE8	HSK32C H60 WE8	8	60	28
HSK.C.32.65.WE10	HSK32C H65 WE10	10	65	35



PER FRESE WELDON WHISTLE NOTCH - END MILL HOLDER WHISTLE NOTCH - HSK40C

AT2 G6.3/18000

Cod.	TYPE	d	A	D
HSK.C.40.60.WE6	HSK40C H60 WE6	6	60	25
HSK.C.40.60.WE8	HSK40C H60 WE8	8	60	28
HSK.C.40.65.WE10	HSK40C H65 WE10	10	65	35
HSK.C.40.70.WE12	HSK40C H70 WE12	12	70	42
HSK.C.40.70.WE14	HSK40C H70 WE14	14	70	44
HSK.C.40.75.WE16	HSK40C H75 WE16	16	75	48



PER FRESE WELDON WHISTLE NOTCH - END MILL HOLDER WHISTLE NOTCH - HSK63C

AT2 G6.3/18000

Cod.	TYPE	WE	H	A
HSK.C.63.60.WE6	HSK63C H60 WE6	6	60	25
HSK.C.63.60.WE8	HSK63C H60 WE8	8	60	28
HSK.C.63.65.WE10	HSK63C H65 WE10	10	65	35
HSK.C.63.75.WE12	HSK63C H75 WE12	12	75	42
HSK.C.63.75.WE14	HSK63C H75 WE14	14	75	44
HSK.C.63.80.WE16	HSK63C H80 WE16	16	80	48
HSK.C.63.80.WE18	HSK63C H80 WE18	18	80	50
HSK.C.63.80.WE20	HSK63C H80 WE20	20	80	52
HSK.C.63.95.WE25	HSK63C H95 WE25	25	95	63
HSK.C.63.100.WE32	HSK63C H100 WE32	32	100	72



PER FRESE WELDON WHISTLE NOTCH - END MILL HOLDER WHISTLE NOTCH - HSK50C

AT2 G6.3/18000

Cod.	TYPE	d	A	D
HSK.C.50.60.WE6	HSK50C H60 WE6	6	60	25
HSK.C.50.60.WE8	HSK50C H60 WE8	8	60	28
HSK.C.50.65.WE10	HSK50C H65 WE10	10	65	35
HSK.C.50.75.WE12	HSK50C H75 WE12	12	75	42
HSK.C.50.75.WE14	HSK50C H75 WE14	14	75	44
HSK.C.50.80.WE16	HSK50C H80 WE16	16	80	48
HSK.C.50.80.WE18	HSK50C H80 WE18	18	80	50
HSK.C.50.80.WE20	HSK50C H80 WE20	20	80	52

# STELO TENERO LAVORABILE

## BLANK ARBORS - FORM C



### STELO TENERO LAVORABILE - BLANK ARBORS

Cod.	TYPE	A	D	Material	
				AT2	42HRC
HSK.C.32.160.D40BL	HSK32C H160 BLANKS D40	160	40		
HSK.C.40.160.D50BL	HSK40C H160 BLANKS D50	160	50		
HSK.C.50.200.D63BL	HSK50C H200 BLANKS D63	200	63		
HSK.C.63.200.D80BL	HSK63C H200 BLANKS D80	200	80		



HSK - DIN63893 FORMA C

# HSK - DIN63893 FORMA E

*HSK - DIN63893 FORMA E*



**CALETTAMENTO A CALDO  
STANDARD**  
*SHRINK FIT HOLDERS STANDARD*



**PORTAPINZA ER DIN6499**  
*COLLET CHUCK FOR ER DIN6499*



**PORTAPINZA EOC DIN6388**  
*COLLET CHUCK FOR EOC DIN6388*



**PER FRESE WELDON**  
*END MILL HOLDERS*



**PORTAFRESE FISSI**  
*SHELL END MILL HOLDERS*



**ALBERATI**  
*CUTTER ARBORS - FORMA E*



## CARATTERISTICHE / SPECIFICATION / CARACTÉRISTIQUES/ TECHNISCHE DATEN

### CARATTERISTICHE TECNICHE

- Costruiti in acciaio certificato in barre.
- Eseguiti trattamenti termici da fornitori certificati ISO 9001.
- Rettificati di precisione esternamente, internamente e nelle filettature delle ghiera chiudipinza.
- Controllati con strumenti di misura certificati.
- La tolleranza di precisione dei coni HSK-E è AT2.
- L'errore di concentricità massimo tra il cono e la sede utensile è 0.003 mm.

### TECHNICAL FEATURES

- Manufactured with certificate steel.
- Heat treatments are performed by certified suppliers ISO 9001.
- Precision ground on shank, inside tapers and collet nut threads.
- Tested with high precision inspection and ganging equipment.
- Taper accuracy of HSK-E shanks lower than AT2.
- The maximum error of concentricity between the cone and the seat of tool is 0.003 mm.

### CARACTÉRISTIQUES

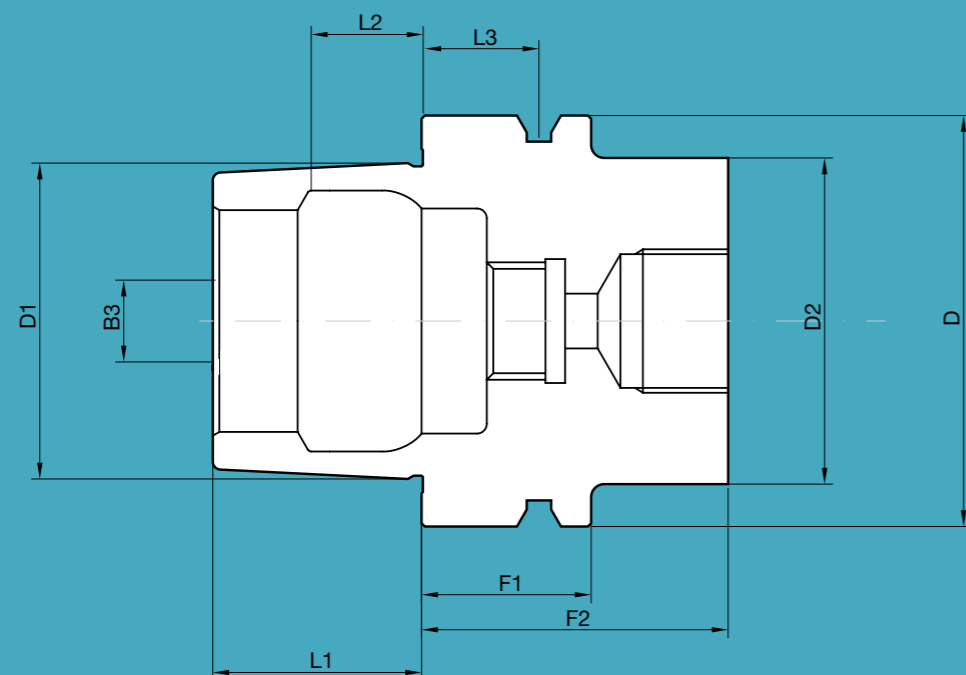
- Fabriqués en bar d'acier certifié.
- Réalisation du traitement thermique par des fournisseurs certifiés ISO 9001.
- Rectification de précision extérieurement, intérieurement et dans les filetages des écrous serre-pince.
- Contrôlés par des instruments de mesure certifiés.
- La tolérance de précision des cônes HSK-E est AT2.
- L'erreur de concentricité maximum entre le cône et le siège de l'outil est de 0.003 mm.

### MERKMALE

- Gebaut aus zertifiziertem Stabstahl
- Warmbehandlungen von Lieferanten mit Zeugnis ISO 9001
- Genauigkeitgeschliffen aussen, innen und in den Gewinden der Spannmutter für den Zangenverschluss
- Geprüft mit zertifizierten Messinstrumente
- Die Präzisionstoleranz der Kone HSK-E ist AT2
- Die max konzentrische Abweichung zwischen Konus und Werkzeugsitz ist 0.003 mm

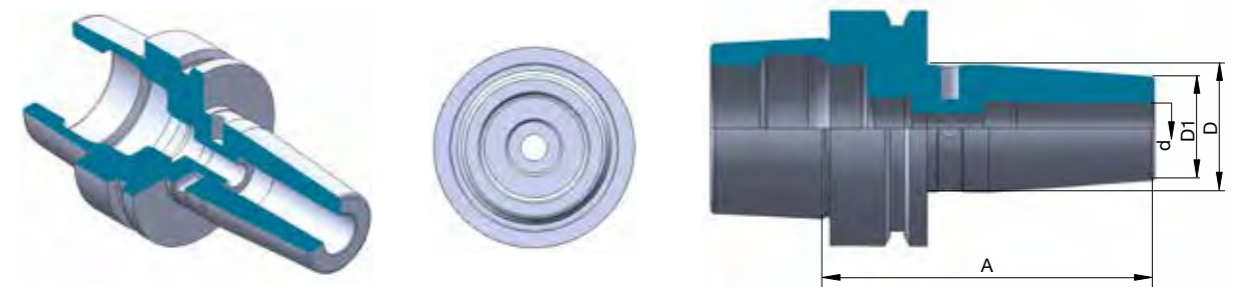
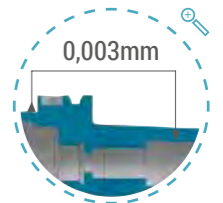
## QUOTE / QUOTE / QUOTES / ABMESSUNGEN

HSK	D	D1	D2	L1	L2	L3	F1	F2	COOLANT TUBE
25	32	19	20	13	10,5	-	10	20	M5X10
32	32	24	26	16	8,92	16	20	35	M10X1
40	40	30	34	20	11,42	16	20	35	M12X1
50	50	38	42	25	14,13	18	26	42	M16X1
63	63	48	53	32	18,13	18	26	42	M18X1
80	80	60	68	40	22,85	18	26	42	M20X1,5
100	100	75	85	50	28,56	20	29	45	M24X1,5



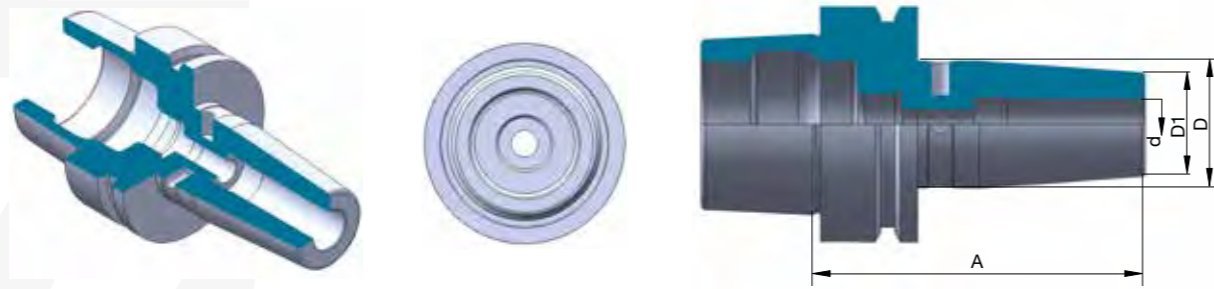
# CALETTAMENTO A CALDO STANDARD

## SHRINK FIT HOLDERS STANDARD - FORM E



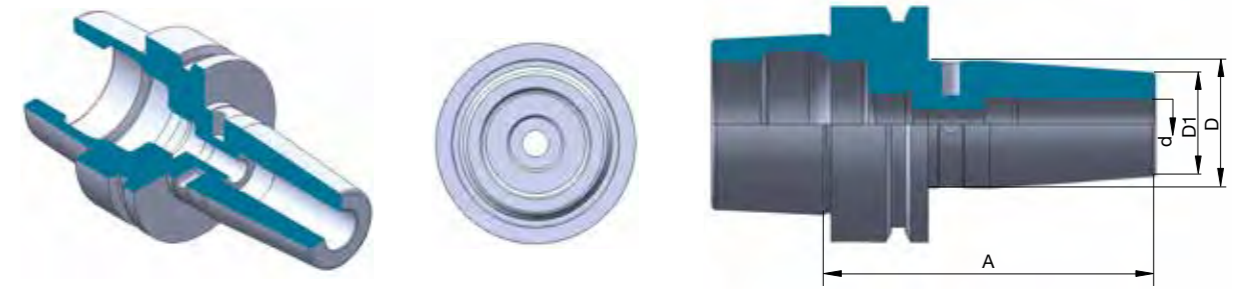
## CALETTAMENTO STANDARD - SHRINK FIT HOLDERS - HSK32E

Cod.	TYPE	d	A	AT2	G2.5/25000
				D1	D
HSK.E.32.60.CL3	HSK32E H60 CL3	3	60	10	16
HSK.E.32.60.CL4	HSK32E H60 CL4	4	60	10	16
HSK.E.32.60.CL5	HSK32E H60 CL5	5	60	10	16
HSK.E.32.70.CL6	HSK32E H70 CL6	6	70	20	25
HSK.E.32.70.CL8	HSK32E H70 CL8	8	70	20	25
HSK.E.32.70.CL10	HSK32E H70 CL10	10	70	24	29
HSK.E.32.80.CL12	HSK32E H80 CL12	12	80	24	29
HSK.E.32.90.CL14	HSK32E H90 CL14	14	90	27	34
HSK.E.32.90.CL16	HSK32E H90 CL16	16	90	27	34
HSK.E.32.100.CL20	HSK32E H100 CL20	20	100	33	40



### CALETTAMENTO STANDARD - SHRINK FIT HOLDERS - HSK40E

Cod.	TYPE	d	A	AT2		G2.5/25000	
				D1	D		
HSK.E.40.60.CL3	HSK40E H60 CL3	3	60	10	16		
HSK.E.40.120.CL3	HSK40E H120 CL3	3	120	10	20		
HSK.E.40.160.CL3	HSK40E H160 CL3	3	160	10	20		
HSK.E.40.60.CL4	HSK40E H60 CL4	4	60	10	16		
HSK.E.40.120.CL4	HSK40E H120 CL4	4	120	15	22		
HSK.E.40.160.CL4	HSK40E H160 CL4	4	160	15	22		
HSK.E.40.60.CL5	HSK40E H60 CL5	5	60	10	16		
HSK.E.40.120.CL5	HSK40E H120 CL5	5	120	15	22		
HSK.E.40.160.CL5	HSK40E H160 CL5	5	160	15	22		
HSK.E.40.80.CL6	HSK40E H80 CL6	6	80	20	27		
HSK.E.40.120.CL6	HSK40E H120 CL6	6	120	20	27		
HSK.E.40.160.CL6	HSK40E H160 CL6	6	160	20	27		
HSK.E.40.80.CL8	HSK40E H80 CL8	8	80	20	27		
HSK.E.40.120.CL8	HSK40E H120 CL8	8	120	20	27		
HSK.E.40.160.CL8	HSK40E H160 CL8	8	160	20	27		
HSK.E.40.80.CL10	HSK40E H80 CL10	10	80	24	31		
HSK.E.40.120.CL10	HSK40E H120 CL10	10	120	24	31		
HSK.E.40.160.CL10	HSK40E H160 CL10	10	160	24	31		
HSK.E.40.90.CL12	HSK40E H90 CL12	12	90	24	31		
HSK.E.40.120.CL12	HSK40E H120 CL12	12	120	24	31		
HSK.E.40.160.CL12	HSK40E H160 CL12	12	160	24	31		
HSK.E.40.90.CL14	HSK40E H90 CL14	14	90	27	34		
HSK.E.40.120.CL14	HSK40E H120 CL14	14	120	27	34		
HSK.E.40.160.CL14	HSK40E H160 CL14	14	160	27	34		
HSK.E.40.90.CL16	HSK40E H90 CL16	16	90	27	34		
HSK.E.40.120.CL16	HSK40E H120 CL16	16	120	27	34		
HSK.E.40.160.CL16	HSK40E H160 CL16	16	160	27	34		

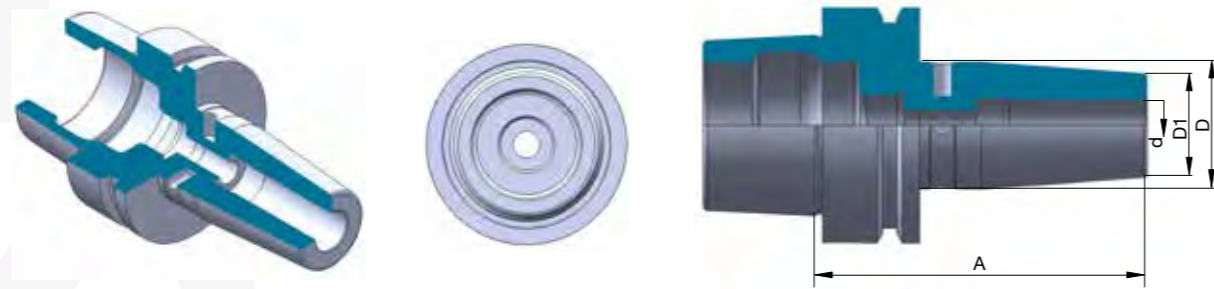


### CALETTAMENTO STANDARD - SHRINK FIT HOLDERS - HSK50E

Cod.	TYPE	d	A	AT2		G2.5/25000	
				D1	D		
HSK.E.50.80.CL3	HSK50E H80 CL3	3	80	10	15		
HSK.E.50.120.CL3	HSK50E H120 CL3	3	120	10	20		
HSK.E.50.160.CL3	HSK50E H160 CL3	3	160	10	20		
HSK.E.50.80.CL4	HSK50E H80 CL4	4	80	15	22		
HSK.E.50.120.CL4	HSK50E H120 CL4	4	120	15	22		
HSK.E.50.160.CL4	HSK50E H160 CL4	4	160	15	22		
HSK.E.50.80.CL5	HSK50E H80 CL5	5	80	15	22		
HSK.E.50.120.CL5	HSK50E H120 CL5	5	120	15	22		
HSK.E.50.160.CL5	HSK50E H160 CL5	5	160	15	22		
HSK.E.50.80.CL6	HSK50E H80 CL6	6	80	20	27		
HSK.E.50.120.CL6	HSK50E H120 CL6	6	120	20	27		
HSK.E.50.160.CL6	HSK50E H160 CL6	6	160	20	27		
HSK.E.50.80.CL8	HSK50E H80 CL8	8	80	20	27		
HSK.E.50.120.CL8	HSK50E H120 CL8	8	120	20	27		
HSK.E.50.160.CL8	HSK50E H160 CL8	8	160	20	27		
HSK.E.50.85.CL10	HSK50E H85 CL10	10	85	24	31		
HSK.E.50.120.CL10	HSK50E H120 CL10	10	120	24	31		
HSK.E.50.160.CL10	HSK50E H160 CL10	10	160	24	31		
HSK.E.50.90.CL12	HSK50E H90 CL12	12	90	24	31		
HSK.E.50.120.CL12	HSK50E H120 CL12	12	120	24	31		
HSK.E.50.160.CL12	HSK50E H160 CL12	12	160	24	31		
HSK.E.50.90.CL14	HSK50E H90 CL14	14	90	27	34		
HSK.E.50.120.CL14	HSK50E H120 CL14	14	120	27	34		
HSK.E.50.160.CL14	HSK50E H160 CL14	14	160	27	34		
HSK.E.50.95.CL16	HSK50E H95 CL16	16	95	27	34		
HSK.E.50.120.CL16	HSK50E H120 CL16	16	120	27	34		
HSK.E.50.160.CL16	HSK50E H160 CL16	16	160	27	34		
HSK.E.50.95.CL18	HSK50E H95 CL18	18	95	33	40		
HSK.E.50.120.CL18	HSK50E H120 CL18	18	120	33	40		
HSK.E.50.160.CL18	HSK50E H160 CL18	18	160	33	40		
HSK.E.50.100.CL20	HSK50- H100 CL20	20	100	33	40		
HSK.E.50.120.CL20	HSK50- H120 CL20	20	120	33	40		
HSK.E.50.160.CL20	HSK50E H160 CL20	20	160	33	40		

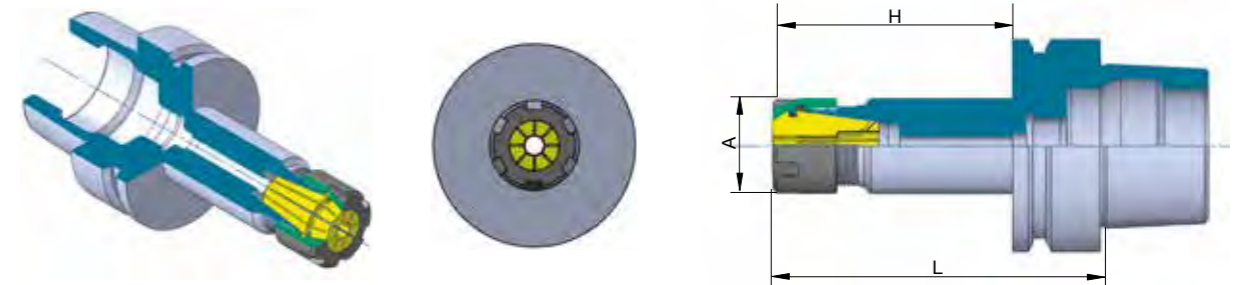
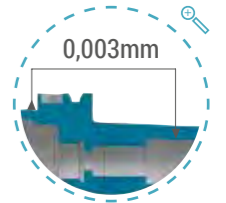
# PORTAPINZA ER DIN6499

## COLLET CHUCK ER DIN 6499 - FORM E



### CALETTAMENTO STANDARD - SHRINK FIT HOLDERS - HSK63E

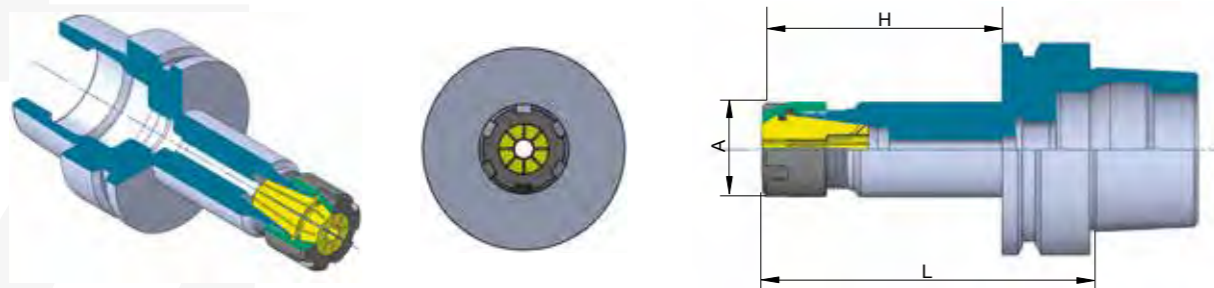
Cod.	TYPE	d	A	AT2		G2.5/25000	
				D1	D		
HSK.E.63.80.CL3	HSK63E H80 CL3	3	80	10	15		
HSK.E.63.120.CL3	HSK63E H120 CL3	3	120	10	20		
HSK.E.63.160.CL3	HSK63E H160 CL3	3	160	10	20		
HSK.E.63.80.CL4	HSK63E H80 CL4	4	80	15	22		
HSK.E.63.120.CL4	HSK63E H120 CL4	4	120	15	22		
HSK.E.63.160.CL4	HSK63E H160 CL4	4	160	15	22		
HSK.E.63.80.CL5	HSK63E H80 CL5	5	80	15	22		
HSK.E.63.120.CL5	HSK63E H120 CL5	5	120	15	22		
HSK.E.63.160.CL5	HSK63E H160 CL5	5	160	15	22		
HSK.E.63.80.CL6	HSK63E H80 CL6	6	80	20	27		
HSK.E.63.120.CL6	HSK63E H120 CL6	6	120	20	27		
HSK.E.63.160.CL6	HSK63E H160 CL6	6	160	20	27		
HSK.E.63.80.CL8	HSK63E H80 CL8	8	80	20	27		
HSK.E.63.120.CL8	HSK63E H120 CL8	8	120	20	27		
HSK.E.63.160.CL8	HSK63E H160 CL8	8	160	20	27		
HSK.E.63.85.CL10	HSK63E H85 CL10	10	85	24	31		
HSK.E.63.120.CL10	HSK63E H120 CL10	10	120	24	31		
HSK.E.63.160.CL10	HSK63E H160 CL10	10	160	24	31		
HSK.E.63.90.CL12	HSK63E H90 CL12	12	90	24	31		
HSK.E.63.120.CL12	HSK63E H120 CL12	12	120	24	31		
HSK.E.63.160.CL12	HSK63E H160 CL12	12	160	24	31		
HSK.E.63.90.CL14	HSK63E H90 CL14	14	90	27	34		
HSK.E.63.120.CL14	HSK63E H120 CL14	14	120	27	34		
HSK.E.63.160.CL14	HSK63E H160 CL14	14	160	27	34		
HSK.E.63.95.CL16	HSK63E H95 CL16	16	95	27	34		
HSK.E.63.120.CL16	HSK63E H120 CL16	16	120	27	34		
HSK.E.63.160.CL16	HSK63E H160 CL16	16	160	27	34		
HSK.E.63.95.CL18	HSK63E H95 CL18	18	95	33	40		
HSK.E.63.120.CL18	HSK63E H120 CL18	18	120	33	40		
HSK.E.63.160.CL18	HSK63E H160 CL18	18	160	33	40		
HSK.E.63.100.CL20	HSK63E H100 CL20	20	100	33	40		
HSK.E.63.120.CL20	HSK63E H120 CL20	20	120	33	40		
HSK.E.63.160.CL20	HSK63E H160 CL20	20	160	33	40		
HSK.E.63.115.CL25	HSK63E H115 CL25	25	115	44	53		
HSK.E.63.120.CL25	HSK63E H120 CL25	25	120	44	53		
HSK.E.63.160.CL25	HSK63E H160 CL25	25	160	44	53		
HSK.E.63.120.CL32	HSK63E H120 CL32	32	120	44	53		
HSK.E.63.160.CL32	HSK63E H160 CL32	32	160	44	53		



### PORTAPINZA ER MINI - COLLET CHUCK ER MINI - HSK25E

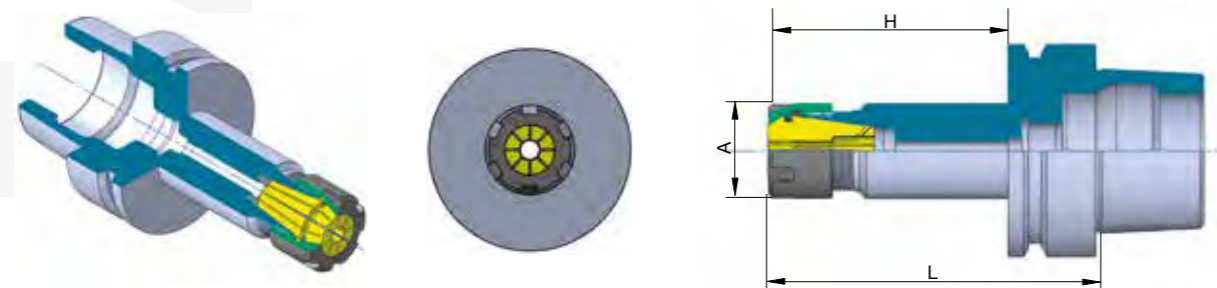
Cod.	TYPE	CAPACITA' RANGE	AT2			G6.3/24000		
			A	L	H			
HSK.E.25.55.ER11M	HSK25E H55 ERX11M	1 ÷ 7	16	45	55			
HSK.E.25.55.ER16M	HSK25E H55 ERX16M	1 ÷ 10	22	45	55			





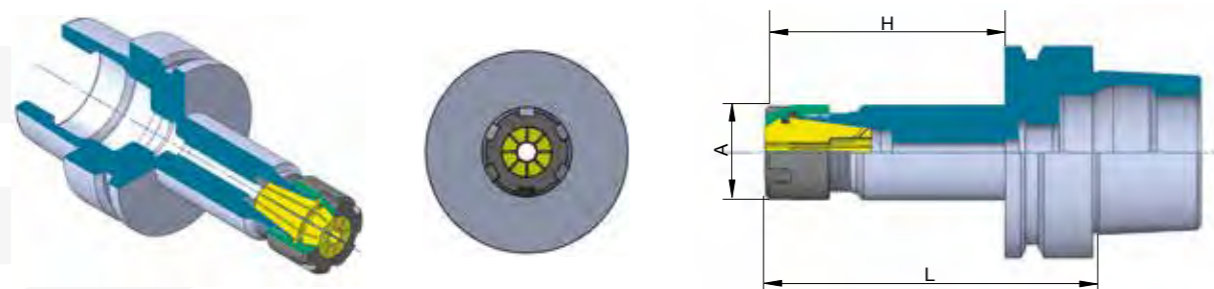
### PORTAPINZA ER MINI - COLLET CHUCK ER MINI - HSK32E

Cod.	TYPE	CAPACITA' RANGE	AT2 G6.3/24000		
			A	L	H
HSK.E.32.80.ER11M	HSK32E H80 ERX11M	1 ÷ 7	16	60	80
HSK.E.32.80.ER16M	HSK32E H80 ERX16M	1 ÷ 10	22	60	80



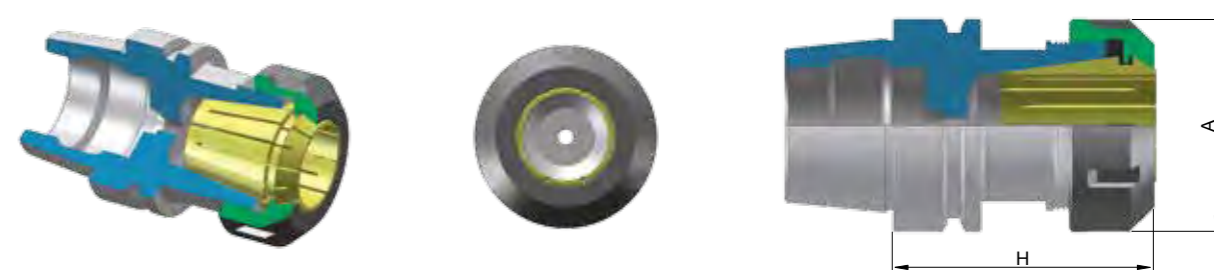
### PORTAPINZA ER MINI - COLLET CHUCK ER MINI - HSK40E

Cod.	TYPE	CAPACITA' RANGE	AT2 G6.3/24000		
			A	L	H
HSK.E.40.80.ER11M	HSK40E H80 ERX11M	1 ÷ 7	16	60	80
HSK.E.40.80.ER16M	HSK40E H80 ERX16M	1 ÷ 10	22	60	80



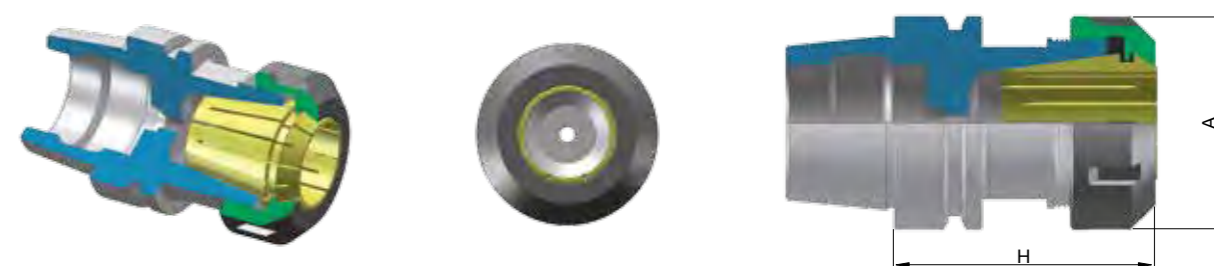
### PORTAPINZA ER MINI - COLLET CHUCK ER MINI - HSK50E

Cod.	TYPE	CAPACITA' RANGE	AT2 G6.3/24000		
			A	L	H
HSK.E.50.100.ER11M	HSK50E H100 ERX11M	1 ÷ 7	16	74	100



### PORTAPINZA ER - COLLET CHUCK ER - HSK32E

Cod.	TYPE	CAPACITA' RANGE	AT2 G6.3/24000	
			A	H
HSK.E.32.60.ER16	HSK32E H60 ERX16	1 ÷ 10	32	60
HSK.E.32.80.ER25	HSK32E H80 ERX25	2 ÷ 16	42	80



### PORTAPINZA ER - COLLET CHUCK ER - HSK40E

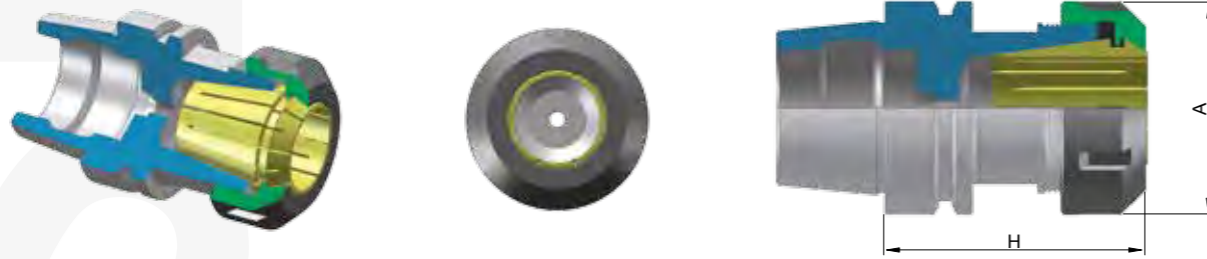
Cod.	TYPE	CAPACITA' RANGE	AT2 G6.3/24000	
			A	H
HSK.E.40.60.ER16	HSK40E H60 ERX16	1 ÷ 10	32	60
HSK.E.40.70.ER25	HSK40E H70 ERX25	2 ÷ 16	42	70



# PORTAPINZA EOC DIN 6388

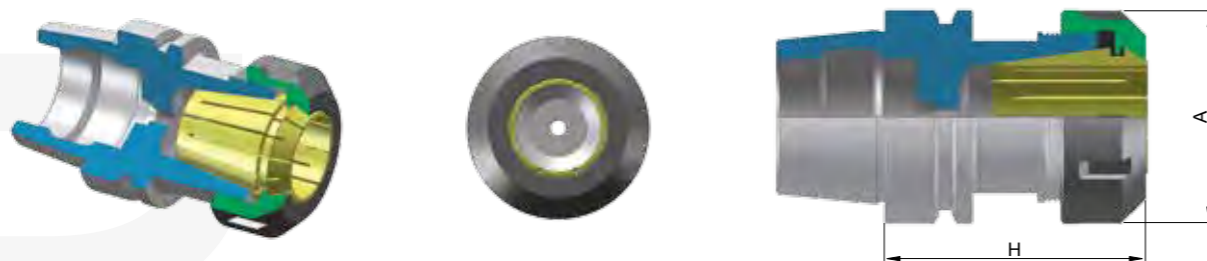
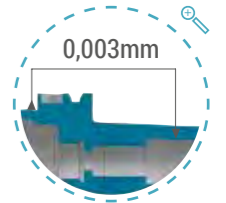
## COLLET CHUCK FOR EOC DIN6388 - FORM E

HSK - DIN63893 FORMA E



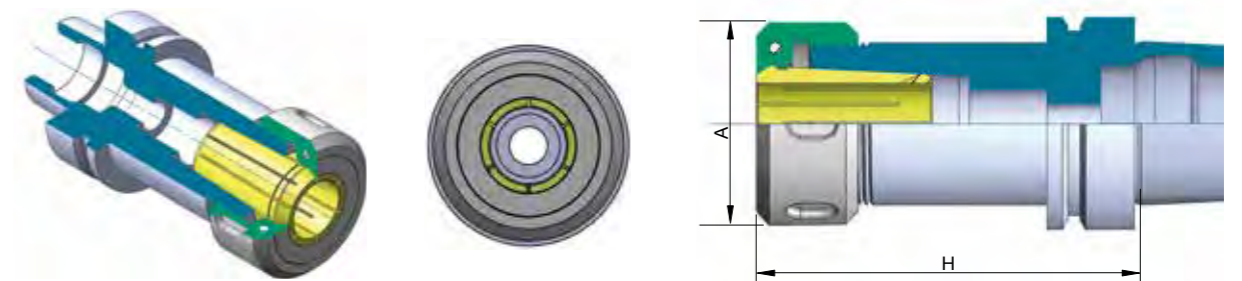
### PORTAPINZA ER - COLLET CHUCK ER - HSK50E

Cod.	TYPE	CAPACITA' RANGE	AT2 G6.3/24000	
			A	H
HSK.E.50.100.ER16	HSK50E H100 ERX16	1 ÷ 10	32	100
HSK.E.50.70.ER25	HSK50E H50 ERX25	2 ÷ 16	42	70
HSK.E.50.73.ER32.DX	HSK50E H73 ERX32 DX	3 ÷ 20	50	73
HSK.E.50.73.ER32.SX	HSK50E H73 ERX32 SX	3 ÷ 20	50	73
HSK.E.50.75.ER40.DX	HSK50E H75 ERX40 DX	4 ÷ 30	63	75
HSK.E.50.75.ER40.SX	HSK50E H75 ERX40 SX	4 ÷ 30	63	75



### PORTAPINZA ER - COLLET CHUCK ER - HSK63E

Cod.	TYPE	CAPACITA' RANGE	AT2 G6.3/24000	
			A	H
HSK.E.63.73.ER32.DX	HSK63E H73 ERX32 DX	3 ÷ 20	50	73
HSK.E.63.73.ER32.SX	HSK63E H73 ERX32 SX	3 ÷ 20	50	73
HSK.E.63.78.ER40.DX	HSK63E H78 ERX40 DX	4 ÷ 30	63	78
HSK.E.63.78.ER40.SX	HSK63E H78 ERX40 SX	4 ÷ 30	63	78

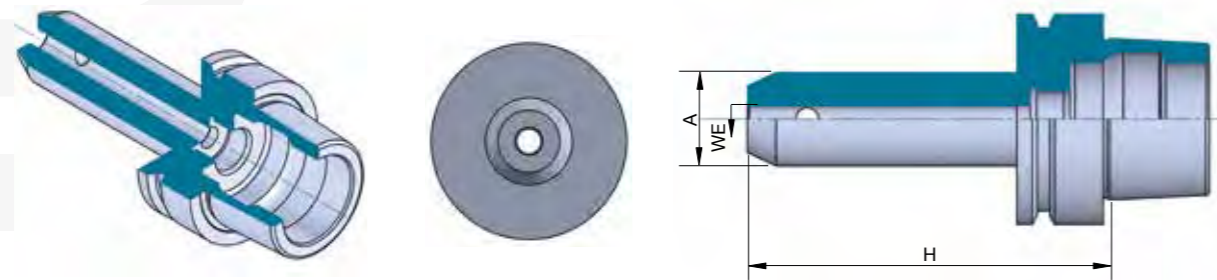
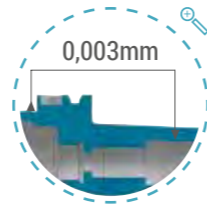


### PORTAPINZA PER EOC - COLLET CHUCK FOR EOC - HSK63E

Cod.	TYPE	CAPACITA' RANGE	AT2 G6.3/24000	
			H	A
HSK.E.63.80.EOC25.DX	HSK63E H80 EOC25 DX	2 ÷ 25	80	60
HSK.E.63.80.EOC25.SX	HSK63E H80 EOC25 SX	2 ÷ 25	80	60

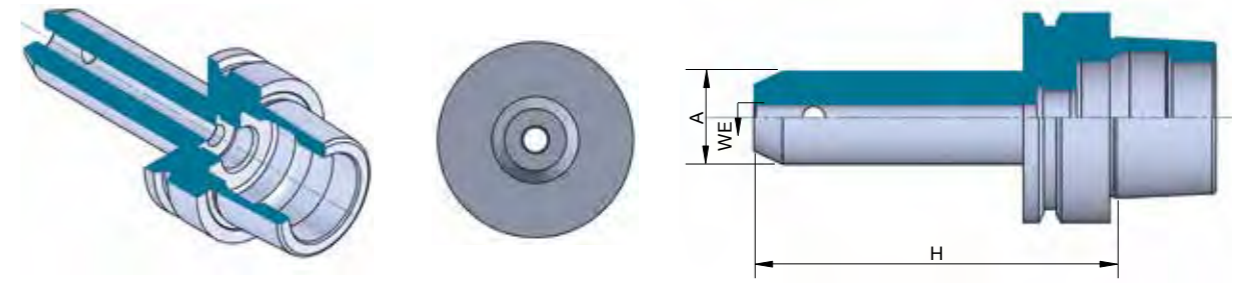
# PER FRESE WELDON

## END MILL HOLDERS - FORM E



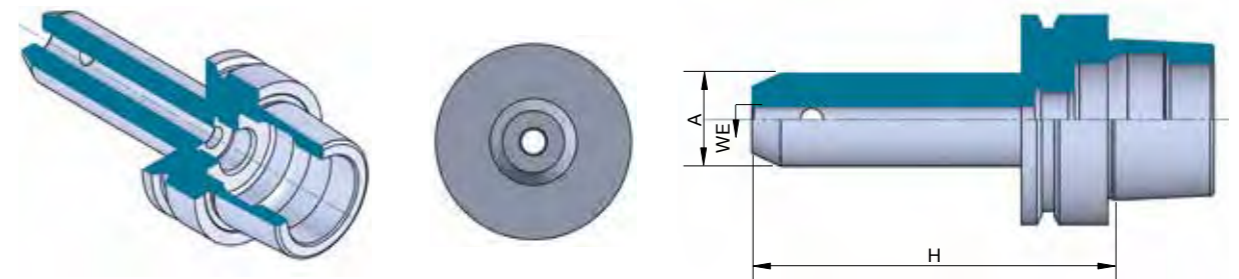
### PER FRESE WELDON - END MILL HOLDER - HSK32E

Cod.	TYPE	WE	H	A	AT2	G6.3/24000
HSK.E.32.55.WE6	HSK32E H55 WE6	6	55	25		
HSK.E.32.55.WE8	HSK32E H55 WE8	8	55	28		
HSK.E.32.60.WE10	HSK32E H60 WE10	10	60	35		
HSK.E.32.65.WE12	HSK32E H65 WE12	12	65	42		



### PER FRESE WELDON - END MILL HOLDER - HSK40E

Cod.	TYPE	WE	H	A	AT2	G6.3/24000
HSK.E.40.60.WE6	HSK40E H60 WE6	6	60	25		
HSK.E.40.60.WE8	HSK40E H60 WE8	8	60	28		
HSK.E.40.60.WE10	HSK40E H60 WE10	10	60	35		
HSK.E.40.70.WE12	HSK40E H70 WE12	12	70	42		
HSK.E.40.70.WE14	HSK40E H70 WE14	14	70	44		
HSK.E.40.75.WE16	HSK40E H75 WE16	16	75	48		

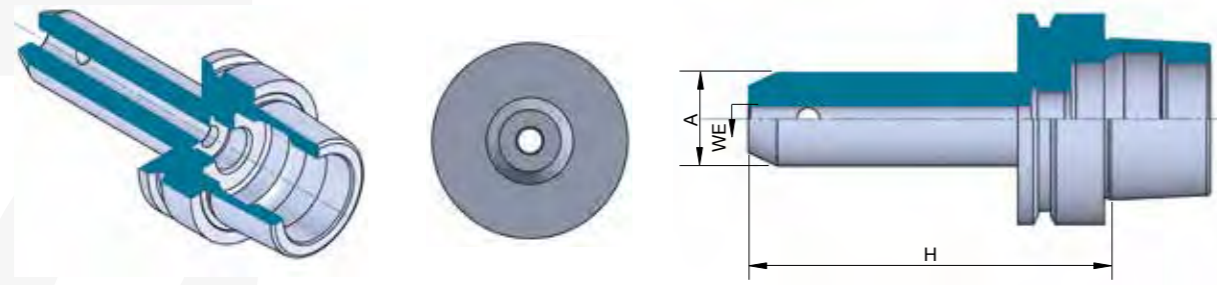


### PER FRESE WELDON - END MILL HOLDER - HSK50E

Cod.	TYPE	WE	H	A	AT2	G6.3/24000
HSK.E.50.65.WE6	HSK50E H65 WE6	6	65	25		
HSK.E.50.65.WE8	HSK50E H65 WE8	8	65	28		
HSK.E.50.65.WE10	HSK50E H65 WE10	10	65	35		
HSK.E.50.80.WE12	HSK50E H80 WE12	12	80	42		
HSK.E.50.80.WE14	HSK50E H80 WE14	14	80	44		
HSK.E.50.80.WE16	HSK50E H80 WE16	16	80	48		

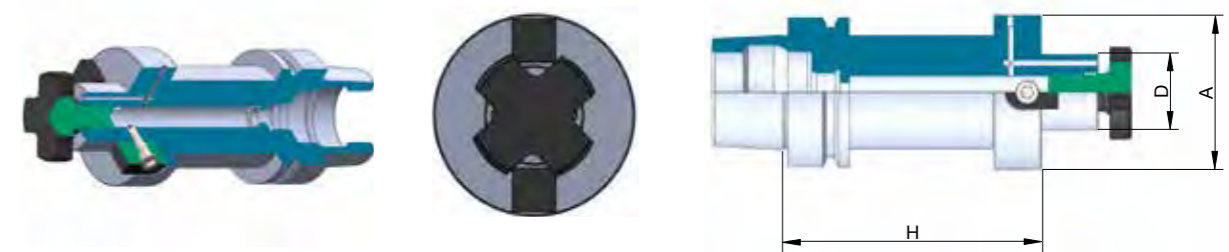
# PORTA FRESE FISSO

## END MILL HOLDERS - FORM E



### PER FRESE WELDON - END MILL HOLDER - HSK63E

Cod.	TYPE	WE	H	A	AT2	G6.3/24000
HSK.E.63.65.WE6	HSK63E H65 WE6	6	65	25		
HSK.E.63.65.WE8	HSK63E H65 WE8	8	65	28		
HSK.E.63.65.WE10	HSK63E H65 WE10	10	65	35		
HSK.E.63.80.WE12	HSK63E H80 WE12	12	80	42		
HSK.E.63.80.WE14	HSK63E H80 WE14	14	80	44		
HSK.E.63.80.WE16	HSK63E H80 WE16	16	80	48		
HSK.E.63.80.WE18	HSK63E H80 WE18	18	80	50		
HSK.E.63.80.WE20	HSK63E H80 WE20	20	80	52		

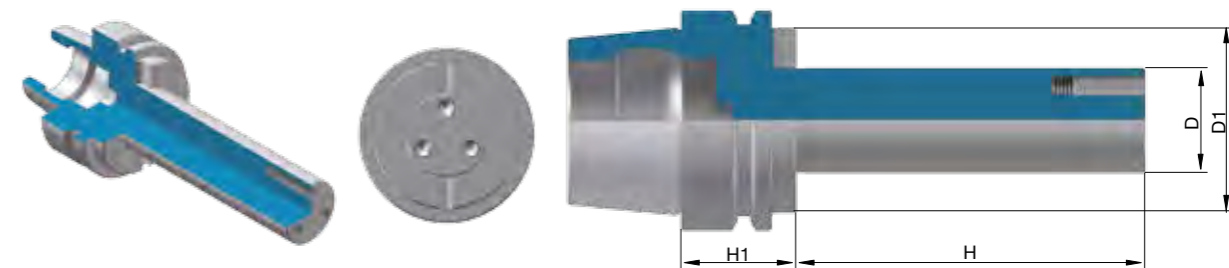


### PORTAFRESE FISSO - SHELL END MILL HOLDER - HSK40E

Cod.	TYPE	D	H	A	AT2	G6.3/24000
HSK.E.40.50.D16S	HSK40E H50 D16 FISSO	16	50	38		

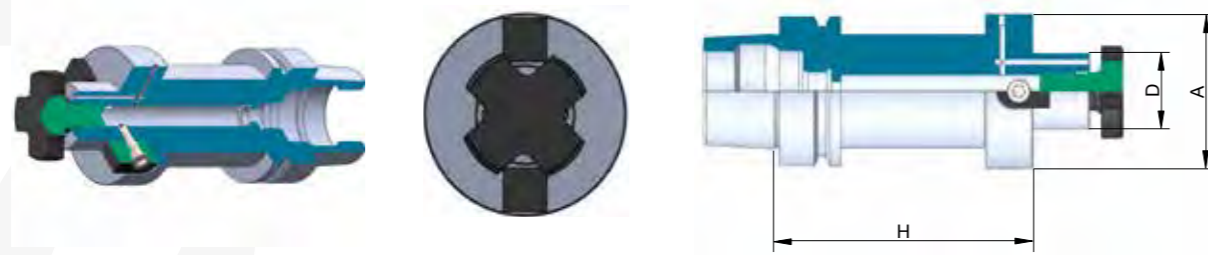
# ALBERATI

## CUTTER ARBORS - FORM E



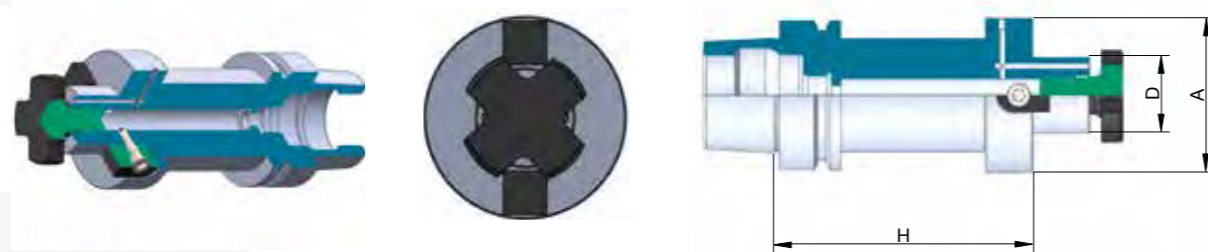
### ALBERO PORTA FRESE - CUTTER ARBORS - HSK50E

Cod.	TYPE	AT2 G6.3/24000			
		H1	D	H	D1
HSK.E.50.30X100.42	HSK50E D30x100 A=42	42	30	100	45
HSK.E.50.30X150.42	HSK50E D30x150 A=42	42	30	150	45
HSK.E.50.30X200.42	HSK50E D30x200 A=42	42	30	200	45
HSK.E.50.35X100.42	HSK50E D35x100 A=42	42	35	100	49
HSK.E.50.35X150.42	HSK50E D35x150 A=42	42	35	150	49
HSK.E.50.35X200.42	HSK50E D35x200 A=42	42	35	200	49



### PORTAFRESE FISSO - SHELL END MILL HOLDER - HSK50E

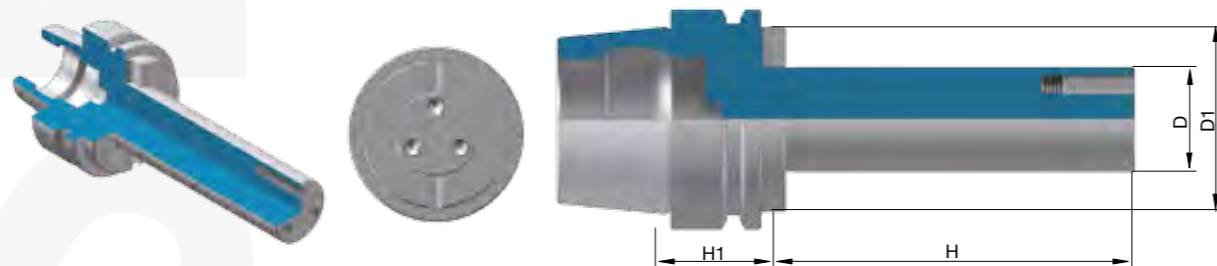
Cod.	TYPE	AT2 G6.3/24000		
		D	H	A
HSK.E.50.50.D16S	HSK50E H50 D16 FISSO	16	50	38
HSK.E.50.60.D22S	HSK50E H60 D22 FISSO	22	60	48



### PORTAFRESE FISSO - SHELL END MILL HOLDER - HSK63E

Cod.	TYPE	AT2 G6.3/24000		
		D	H	A
HSK.E.63.50.D16S	HSK63E H50 D16 FISSO	16	50	38
HSK.E.63.50.D22S	HSK63E H50 D22 FISSO	22	50	48





### ALBERO PORTA FRESE - CUTTER ARBORS - HSK63E - A=33

Cod.	TYPE	H1	D	AT2		D1
				G6.3/24000		
HSK.E.63.30X100.33	HSK63E D30X100 A=33	33	30	100		45
HSK.E.63.30X150.33	HSK63E D30X150 A=33	33	30	150		45
HSK.E.63.30X200.33	HSK63E D30X200 A=33	33	30	200		45
HSK.E.63.35X100.33	HSK63E D35X100 A=33	33	35	100		50
HSK.E.63.35X150.33	HSK63E D35X150 A=33	33	35	150		50
HSK.E.63.35X200.33	HSK63E D35X200 A=33	33	35	200		50
HSK.E.63.40X100.33	HSK63E D40X100 A=33	33	40	100		53
HSK.E.63.40X150.33	HSK63E D40X150 A=33	33	40	150		53
HSK.E.63.40X200.33	HSK63E D40X200 A=33	33	40	200		53

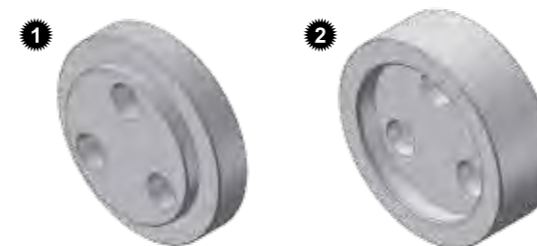


### ALBERO PORTA FRESE - CUTTER ARBORS - HSK63E - A=42

Cod.	TYPE	H1	D	AT2		D1
				G6.3/24000		
HSK.E.63.30X100.42	HSK63E D30x100 A=42	42	30	100		45
HSK.E.63.30X150.42	HSK63E D30x150 A=42	42	30	150		45
HSK.E.63.30X200.42	HSK63E D30X200 A=42	42	30	200		45
HSK.E.63.35X100.42	HSK63E D35x100 A=42	42	35	100		50
HSK.E.63.35X150.42	HSK63E D35x150 A=42	42	35	150		50
HSK.E.63.35X200.42	HSK63E D35X200 A=42	42	35	200		50
HSK.E.63.40X100.42	HSK63E D40x100 A=42	42	40	100		53
HSK.E.63.40X150.42	HSK63E D40x150 A=42	42	40	150		53
HSK.E.63.40X200.42	HSK63E D40x200 A=42	42	40	200		53T

### FLANGIA DI RICAMBIO

Cod.	TYPE	Fig.
FLM.30	FLANGIA DI RICAMBIO MASCHIO D.30	1
FLM.35	FLANGIA DI RICAMBIO MASCHIO D.35	1
FLM.40	FLANGIA DI RICAMBIO MASCHIO D.40	1
FLF.30	FLANGIA DI RICAMBIO FEMMINA D.30	2
FLF.35	FLANGIA DI RICAMBIO FEMMINA D.35	2
FLF.40	FLANGIA DI RICAMBIO FEMMINA D.40	2



# HSK - DIN63893 FORMA F

## HSK - DIN63893 FORMA F



### CALETTAMENTO A CALDO STANDARD

SHRINK FIT HOLDERS STANDARD



### IDRAULICO

HYDRAULIC EXPANSIONS CHUCK



### PORTAPINZA ER DIN6499

COLLET CHUCK FOR ER DIN6499



### PORTAPINZA EOC DIN6388

COLLET CHUCK FOR EOC DIN6388



### ALBERATI

CUTTER ARBORS - FORM F

## CARATTERISTICHE / SPECIFICATION / CARACTÉRISTIQUES/ TECHNISCHE DATEN

### CARATTERISTICHE TECNICHE

- Costruiti in acciaio certificato in barre.
- Eseguiti trattamenti termici da fornitori certificati ISO 9001.
- Rettificati di precisione esternamente, internamente e nelle filettature delle ghiera chiudipinza.
- Controllati con strumenti di misura certificati.
- La tolleranza di precisione dei coni HSK-F è AT2.
- L'errore di concentricità massimo tra il cono e la sede utensile è 0.003 mm.

### CARACTÉRISTIQUES

- Fabriqués en bar d'acier certifié.
- Réalisation du traitement thermique par des fournisseurs certifiés ISO 9001.
- Rectification de précision extérieurement, intérieurement et dans les filetages des écrous serre-pince.
- Contrôlés par des instruments de mesure certifiés.
- La tolérance de précision des cônes HSK-F est AT2.
- L'erreur de concentricité maximum entre le cône et le siège de l'outil est de 0.003 mm.

### TECHNICAL FEATURES

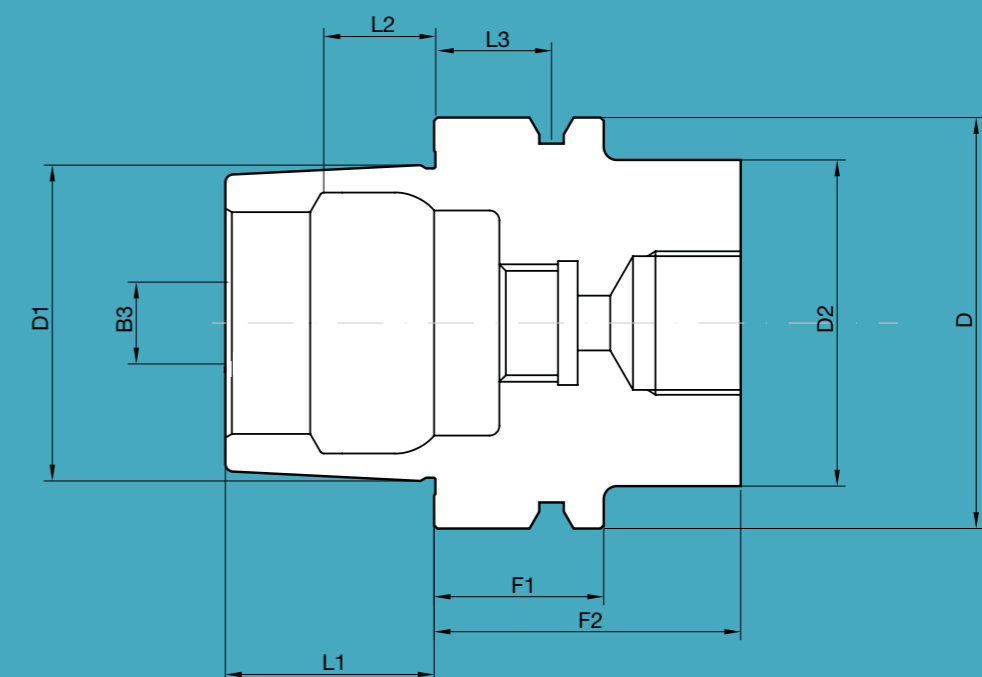
- Manufactured with certificate steel.
- Heat treatments are performed by certified suppliers ISO 9001.
- Precision ground on shank, inside tapers and collet nut threads.
- Tested with high precision inspection and gaging equipment.
- Taper accuracy of HSK-F shanks lower than AT2.
- The maximum error of concentricity between the cone and the seat of tool is 0.003 mm.

### MERKMALE

- Gebaut aus zertifiziertem Stabstahl
- Warmbehandlungen von Lieferanten mit Zeugnis ISO 9001
- Genauigkeitgeschliffen aussen, innen und in den Gewinden der Spannmutter für den Zangenverschluss
- Geprüft mit zertifizierten Messinstrumente
- Die Präzisionstoleranz der Kone HSK-F ist AT2
- Die max konzentrische Abweichung zwischen Konus und Werkzeugsitz ist 0.003 mm

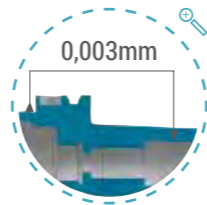
## QUOTE / QUOTE / QUOTES / ABMESSUNGEN

HSK	D	D1	D2	L1	L2	L3	F1	F2	COOLANT TUBE
50	50	30	42	20	11,42	18	26	42	M16X1
63	63	38	53	25	14,13	18	26	42	M18X1



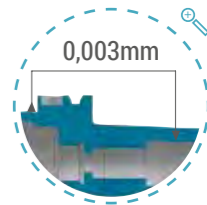
# CALETTAMENTO A CALDO STANDARD

## SHRINK FIT HOLDERS STANDARD - FORM F



# IDRAULICO

## HYDRAULIC EXPANSIONS CHUCK - FORM F



### CALETTAMENTO STANDARD - SHRINK FIT HOLDER - HSK63F

Cod.	TYPE	d	A	D1	D	L	AT2	
							G6.3/25000	
HSK.F.63.76.CL6	HSK63F H76 CL6	6	76	21	29	50		
HSK.F.63.76.CL8	HSK63F H76 CL8	8	76	21	29	50		
HSK.F.63.76.CL10	HSK63F H76 CL10	10	76	24	32	50		
HSK.F.63.76.CL12	HSK63F H76 CL12	12	76	24	32	50		
HSK.F.63.76.CL16	HSK63F H76 CL16	16	76	27	34	50		
HSK.F.63.76.CL20	HSK63F H76 CL20	20	76	33	42	50		
HSK.F.63.76.CL25	HSK63F H76 CL25	25	76	44	53	50		
HSK.F.63.76.CL30	HSK63F H76 CL30	30	76	44	53	50		

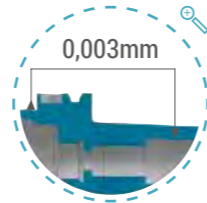


### IDRAULICO - HYDRAULIC EXPANSIONS CHUCK - HSK63F

Cod.	TYPE	L	H	D2	L2	D	AT2	
							G6.3/24000	
HSK.F.63.100.HY20	HSK63F H100 D20	100	74	42	58	20		
HSK.F.63.125.HY32	HSK63F H125 D32	125	99	60	99	32		

# PORTAPINZA ER DIN6499

## COLLET CHUCK ER DIN6499 - FORM F



### PORTAPINZA ER - COLLET CHUCK ER - HSK63F

Cod.	TYPE	H	AT2 G6.3/24000	
			CAPACITÀ RANGE	A
HSK.F.63.73.ER32.DX	HSK63F H73 ERX32 DX	73	3 ÷ 20	50
HSK.F.63.73.ER32.SX	HSK63F H73 ERX32 SX	73	3 ÷ 20	50
HSK.F.63.78.ER40.DX	HSK63F H78 ERX40 DX	78	4 ÷ 30	63
HSK.F.63.78.ER40.SX	HSK63F H78 ERX40 SX	78	4 ÷ 30	63



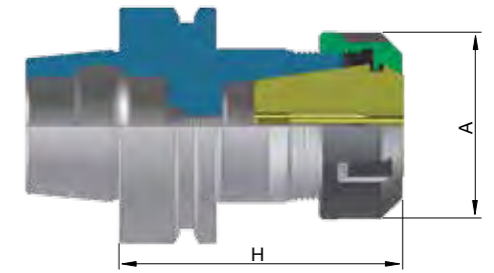
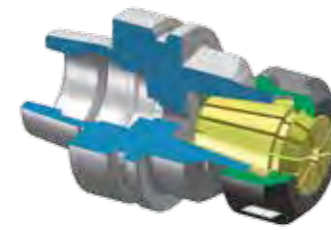
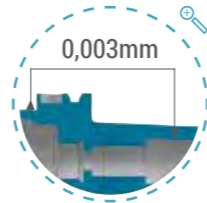
### PORTAPINZA ER - COLLET CHUCK ER - HSK50F

Cod.	TYPE	H	AT2 G6.3/24000	
			CAPACITÀ RANGE	A
HSK.F.50.73.ER32.DX	HSK50F H73 ERX32 SX	73	3 ÷ 20	50
HSK.F.50.73.ER32.SX	HSK50F H73 ERX32 SX	73	3 ÷ 20	50
HSK.F.50.75.ER40.DX	HSK50F H75 ERX40 SX	75	4 ÷ 30	63
HSK.F.50.75.ER40.SX	HSK50F H75 ERX40 SX	75	4 ÷ 30	63



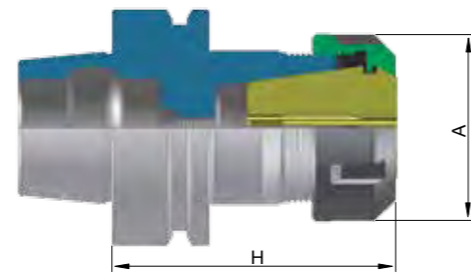
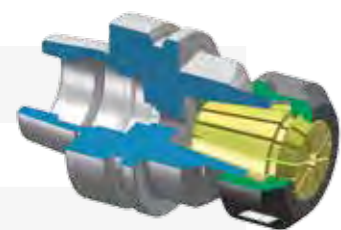
# PORTAPINZA EOC DIN6388

## COLLET CHUCK EOC DIN6388 - FORM F



### PORTAPINZA PER EOC - COLLET CHUCK FOR EOC - HSK63F

Cod.	TYPE	H	AT2 G6.3/24000	
			CAPACITÀ RANGE	A
HSK.F.63.78.EOC25.DX	HSK63F H78 EOC25 DX	78	2 ÷ 25	60
HSK.F.63.78.EOC25.SX	HSK63F H78 EOC25 SX	78	2 ÷ 25	60

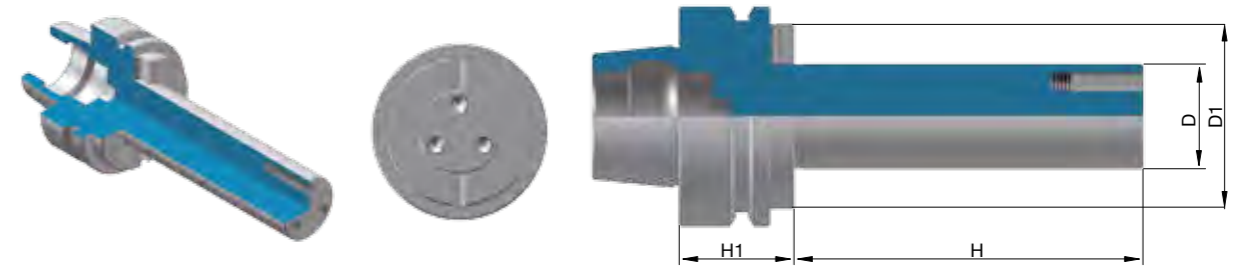
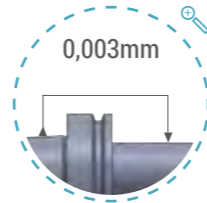


### PORTAPINZA PER EOC - COLLET CHUCK FOR EOC - HSK50F

Cod.	TYPE	H	AT2 G6.3/24000	
			CAPACITÀ RANGE	A
HSK.F.50.80.EOC25.DX	HSK50F H80 EOC25 DX	80	2 ÷ 25	60
HSK.F.50.80.EOC25.SX	HSK50F H80 EOC25 SX	80	2 ÷ 25	60

# ALBERATI

## CUTTER ARBORS - FORM F

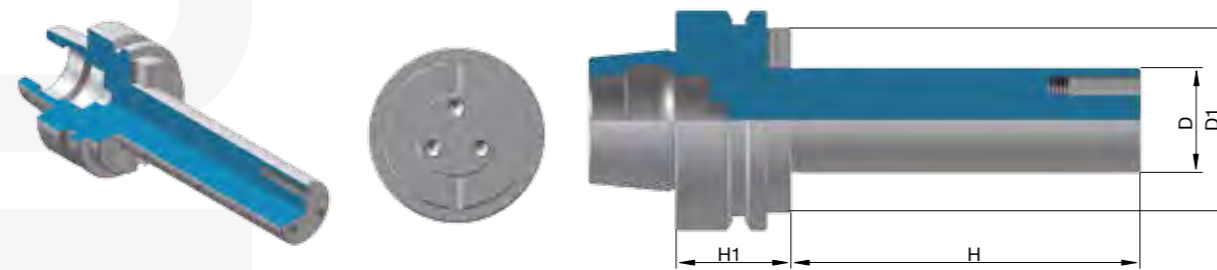


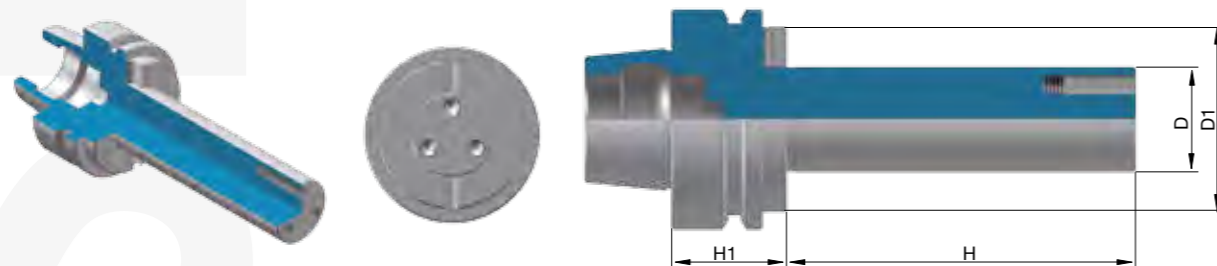
### ALBERO PORTA FRESE - CUTTER ARBORS - HSK63F - A=33

Cod.	TYPE	H1	D	AT2	
				H	D1
HSK.F.63.30X80.33	HSK63F D30x80 A=33	33	30	80	45
HSK.F.63.30X100.33	HSK63F D30x100 A=33	33	30	100	45
HSK.F.63.30X110.33	HSK63F D30x110 A=33	33	30	110	45
HSK.F.63.30X120.33	HSK63F D30x120 A=33	33	30	120	45
HSK.F.63.30X130.33	HSK63F D30x130 A=33	33	30	130	45
HSK.F.63.30X160.33	HSK63F D30x160 A=33	33	30	160	45
HSK.F.63.30X200.33	HSK63F D30x200 A=33	33	30	200	45
HSK.F.63.35X80.33	HSK63F D35x80 A=33	33	35	80	50
HSK.F.63.35X100.33	HSK63F D35x100 A=33	33	35	100	50
HSK.F.63.35X110.33	HSK63F D35x110 A=33	33	35	110	50
HSK.F.63.35X120.33	HSK63F D35x120 A=33	33	35	120	50
HSK.F.63.35X130.33	HSK63F D35x130 A=33	33	35	130	50
HSK.F.63.35X160.33	HSK63F D35x160 A=33	33	35	160	50
HSK.F.63.35X200.33	HSK63F D35x200 A=33	33	35	200	50
HSK.F.63.40X80.33	HSK63F D40x80 A=33	33	40	80	53
HSK.F.63.40X100.33	HSK63F D40x100 A=33	33	40	100	53
HSK.F.63.40X110.33	HSK63F D40x110 A=33	33	40	110	53
HSK.F.63.40X120.33	HSK63F D40x120 A=33	33	40	120	53
HSK.F.63.40X130.33	HSK63F D40x130 A=33	33	40	130	53
HSK.F.63.40X160.33	HSK63F D40x160 A=33	33	40	160	53
HSK.F.63.40X200.33	HSK63F D40x200 A=33	33	40	200	53

### ALBERO PORTA FRESE - CUTTER ARBORS - HSK50F - A=42

Cod.	TYPE	H1	D	AT2	
				H	D1
HSK.F.50.30X100.42	HSK50F D30x100 A=42	42	30	100	45
HSK.F.50.30X150.42	HSK50F D30x150 A=42	42	30	150	45
HSK.F.50.30X200.42	HSK50F D30x200 A=42	42	30	200	45
HSK.F.50.35X100.42	HSK50F D35x100 A=42	42	35	100	49
HSK.F.50.35X150.42	HSK50F D35x150 A=42	42	35	150	49
HSK.F.50.35X200.42	HSK50F D35x200 A=42	42	35	200	49





## ALBERO PORTA FRESE - CUTTER ARBORS - HSK63F - A=42

Cod.	TYPE	AT2 G6.3/24000			
		H1	D	H	D1
HSK.F.63.30X80.42	HSK63F D30x80 A=42	42	30	80	45
HSK.F.63.30X100.42	HSK63F D30x100 A=42	42	30	100	45
HSK.F.63.30X110.42	HSK63F D30x110 A=42	42	30	110	45
HSK.F.63.30X120.42	HSK63F D30x120 A=42	42	30	120	45
HSK.F.63.30X130.42	HSK63F D30x130 A=42	42	30	130	45
HSK.F.63.30X160.42	HSK63F D30x160 A=42	42	30	160	45
HSK.F.63.30X200.42	HSK63F D30x200 A=42	42	30	200	45
HSK.F.63.35X80.42	HSK63F D35x80 A=42	42	35	80	50
HSK.F.63.35X100.42	HSK63F D35x100 A=42	42	35	100	50
HSK.F.63.35X110.42	HSK63F D35x110 A=42	42	35	110	50
HSK.F.63.35X120.42	HSK63F D35x120 A=42	42	35	120	50
HSK.F.63.35X130.42	HSK63F D35x130 A=42	42	35	130	50
HSK.F.63.35X160.42	HSK63F D35x160 A=42	42	35	160	50
HSK.F.63.35X200.42	HSK63F D35x200 A=42	42	35	200	50
HSK.F.63.40X80.42	HSK63F D40x80 A=42	42	40	80	53
HSK.F.63.40X100.42	HSK63F D40x100 A=42	42	40	100	53
HSK.F.63.40X110.42	HSK63F D40x110 A=42	42	40	110	53
HSK.F.63.40X120.42	HSK63F D40x120 A=42	42	40	120	53
HSK.F.63.40X130.42	HSK63F D40x130 A=42	42	40	130	53
HSK.F.63.40X160.42	HSK63F D40x160 A=42	43	40	160	53
HSK.F.63.40X200.42	HSK63F D40x200 A=42	43	40	200	53

## FLANGIA DI RICAMBIO

Cod.	TYPE	Fig.
FLM.30	FLANGIA DI RICAMBIO MASCHIO D.30	1
FLM.35	FLANGIA DI RICAMBIO MASCHIO D.35	1
FLM.40	FLANGIA DI RICAMBIO MASCHIO D.40T	1
FLF.30	FLANGIA DI RICAMBIO FEMMINA D.30	2
FLF.35	FLANGIA DI RICAMBIO FEMMINA D.35	2
FLF.40	FLANGIA DI RICAMBIO FEMMINA D.40	2



# CAPTO TRILOBATO EPS ISO 26623-1

## TOOL HOLDERS CAPTO EPS ISO 26623-1



### CALETTAMENTO A CALDO STANDARD

SHRINK FIT HOLDERS STANDARD



### PORTAPINZA ER DIN6499

COLLET CHUCK FOR ER DIN6499



### PER FRESE WELDON

END MILL HOLDERS



### PORTAFRESE FISSI

SHELL END MILL HOLDERS



### STELO TENERO LAVORABILE

BLANK ARBORS

## CARATTERISTICHE / SPECIFICATION / CARACTÉRISTIQUES/ TECHNISCHE DATEN

### CARATTERISTICHE TECNICHE

- Costruiti in acciaio certificato in barre
- Eseguiti trattamenti termici da fornitori certificati ISO 9001
- Rettificati di precisione esternamente, internamente e nelle filettature delle ghiera chiudipinza
- Controllati con strumenti di misura certificati
- L'errore di concentricità massimo tra il cono e la sede utensile è 0.003 mm

### CARACTÉRISTIQUES

- Fabriqués en bar d'acier certifié.
- Réalisation du traitement thermique par des fournisseurs certifiés ISO 9001.
- Rectification de précision extérieurement, intérieurement et dans les filetages des écrous serre-pince.
- Contrôlés par des instruments de mesure certifiés.
- L'erreur de concentricité maximum entre le cône et le siège de l'outil est de 0.003 mm.

### TECHNICAL FEATURES

- Manufactured with certificate steel
- Heat treatments are performed by certified suppliers ISO 9001
- Precision ground on shank, inside tapers and collet nut threads
- Tested with high precision inspection and gaging equipment
- The maximum error of concentricity between the cone and the seat of tool is 0.003 mm.

### MERKMALE

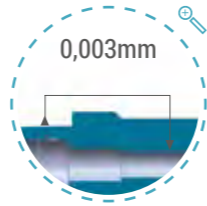
- Gebaut aus zertifiziertem Stabstahl
- Warmbehandlungen von Lieferanten mit Zeugnis ISO 9001
- Genauigkeitgeschliffen aussen, innen und in den Gewinden der Spannmutter für den Zangenverschluss
- Geprüft mit zertifizierten Messinstrumente
- Die max konzentrische Abweichung zwischen Konus und Werkzeugsitz ist 0.003 mm





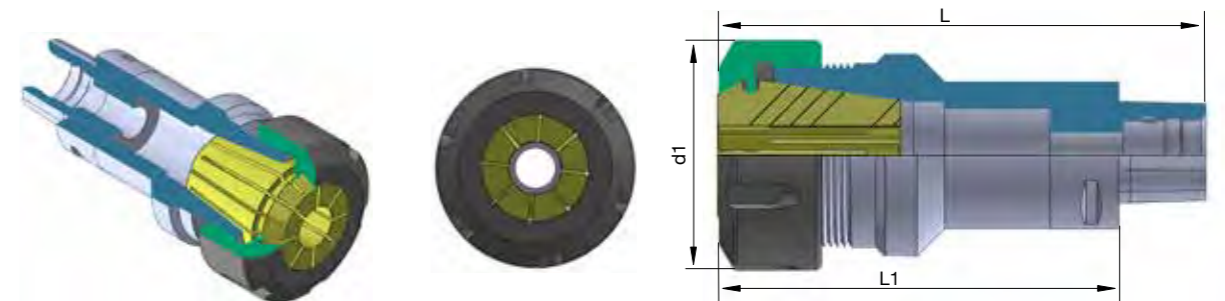
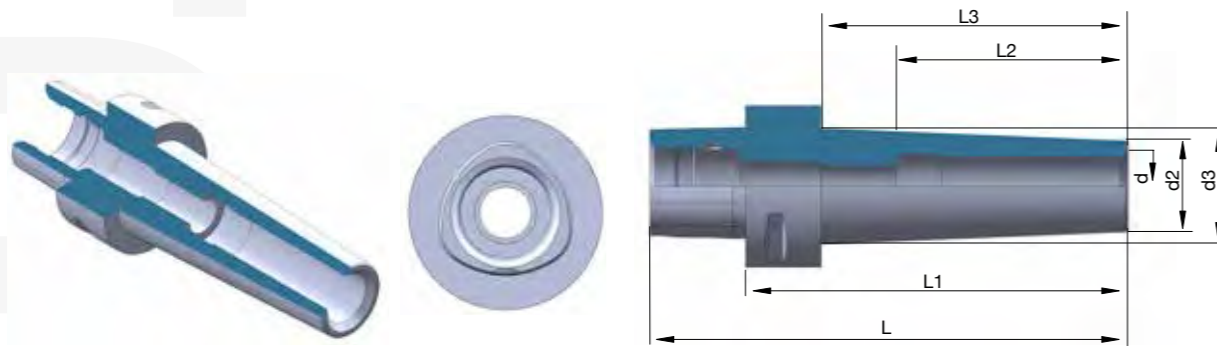
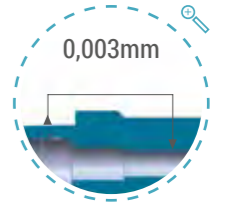
# CALETTAMENTO A CALDO

## SHRINK FIT HOLDERS



# PORTAPINZA ER DIN6499

## COLLET CHUCK ER DIN6499



### CALETTAMENTO STANDARD - SHRINK FIT HOLDERS

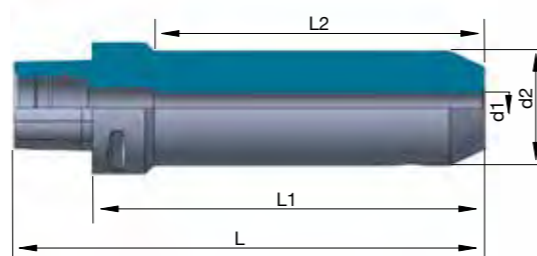
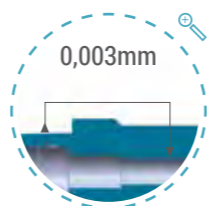
Cod.	TYPE	L	l1	l2	l3	AT2		G2.5/25000	
						d1	d2	d3	
CPT.63.80.CL6	CAPTO63 H80 CL6	118	80	36	53	6	20	26	
CPT.63.80.CL8	CAPTO63 H80 CL8	118	80	36	53	8	20	26	
CPT.63.80.CL10	CAPTO63 H80 CL10	118	80	42	53	10	24	32	
CPT.63.80.CL12	CAPTO63 H80 CL12	118	80	47	56	12	24	32	
CPT.63.85.CL14	CAPTO63 H85 CL14	123	85	47	58	14	27	34	
CPT.63.85.CL16	CAPTO63 H85 CL16	123	85	50	58	16	27	34	
CPT.63.85.CL18	CAPTO63 H85 CL18	123	85	52	58	18	33	42	
CPT.63.85.CL20	CAPTO63 H85 CL20	123	85	52	58	20	33	42	
CPT.63.90.CL25	CAPTO63 H90 CL25	128	90	58	66	25	44	53	
CPT.63.95.CL32	CAPTO63 H95 CL32	133	95	58	71	32	44	53	

### PORTAPINZA ER - COLLET CHUCK ER

Cod.	TYPE	L	l1	AT2		G2.5/25000	
				d1	CAPACITÀ RANGE		
CPT.63.100.ER16	CAPTO63 H100 ER16	138	100	28	1 ÷ 10 mm		
CPT.63.60.ER20	CAPTO63 H60 ER20	98	60	34	2 ÷ 13 mm		
CPT.63.60.ER25	CAPTO63 H60 ER25	98	60	42	2 ÷ 16 mm		
CPT.63.100.ER25	CAPTO63 H100 ER25	138	100	42	2 ÷ 16 mm		
CPT.63.70.ER32	CAPTO63 H70 ER32	108	70	50	3 ÷ 20 mm		
CPT.63.100.ER32	CAPTO63 H100 ER32	138	100	50	3 ÷ 20 mm		
CPT.63.65.ER40	CAPTO63 H65 ER40	103	65	63	3 ÷ 26 mm		

# PER FRESE WELDON

## END MILL HOLDERS

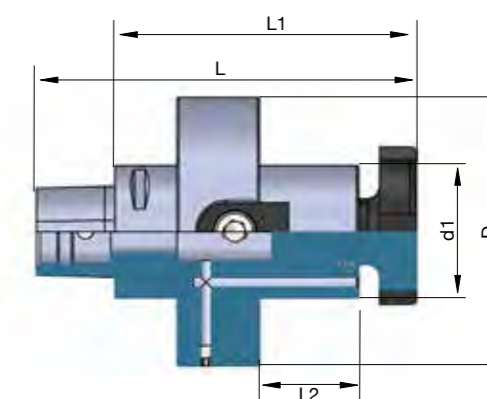
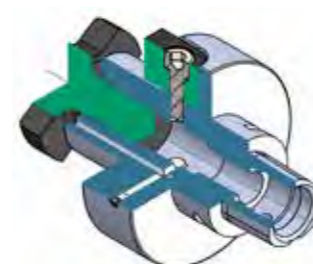
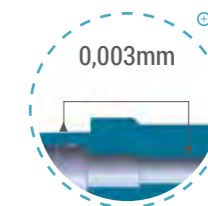


### PER FRESE WELDON - END MILL HOLDERS

Cod.	TYPE	L	l1	L2	AT2		T
					d1	d2	
CPT.63.55.WE6	CAPTO63 H55 WE6	93	55	25	6	25	M6
CPT.63.55.WE8	CAPTO63 H55 WE8	93	55	26	8	28	M8
CPT.63.60.WE10	CAPTO63 H60 WE10	98	60	30	10	35	M10
CPT.63.60.WE12	CAPTO63 H60 WE12	98	60	33	12	42	M12
CPT.63.60.WE14	CAPTO63 H60 WE14	98	60	33,5	14	44	M12
CPT.63.65.WE16	CAPTO63 H65 WE16	103	65	35,5	16	48	M14
CPT.63.65.WE18	CAPTO63 H65 WE18	103	65	39	18	50	M14
CPT.63.65.WE20	CAPTO63 H65 WE20	103	65	37,5	20	52	M16
CPT.63.80.WE25	CAPTO63 H80 WE25	118	80	58	25	65	M18
CPT.63.90.WE32	CAPTO63 H90 WE32	128	90	68	32	72	M20
CPT.63.100.WE40	CAPTO63 H100 WE40	138	100	77	40	90	M20

# PORTAFRESE FISSI

## SHELL END MILL HOLDERS

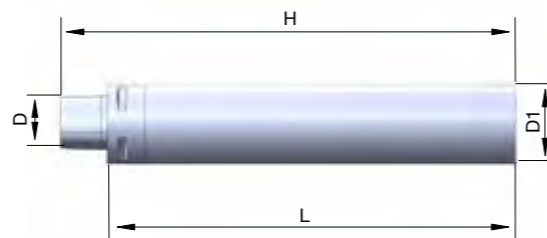


### PORTAFRESE FISSI - SHELL END MILL HOLDERS

Cod.	TYPE	L	l1	l2	AT2	
					D	d1
CPT.63.35.D16S	CAPTO63 H35 D16S	90	35	17	38	16
CPT.63.40.D22S	CAPTO63 H40 D22S	92	40	19	48	22
CPT.63.40.D27S	CAPTO63 H40 D27S	99	40	21	60	27
CPT.63.40.D32S	CAPTO63 H40 D32S	102	40	24	78	32
CPT.63.45.D40S	CAPTO63 H45 D40S	110	45	27	80	40

# STELO TENERO LAVORABILE

## BLANK ARBORS



### STELO TENERO LAVORABILE - BLANK ARBORS

Cod.	TYPE	D	D1	AT2 G6.3/10000	
				H	L
CPT.63.180.BL63	CAPTO63 H180 D63BL	63	63	180	158
CPT.63.180.BL120	CAPTO63 H180 D120BL	63	120	180	158



# DIN 2080

*DIN 2080*



**PORTAFRESE FISSI**  
*SHELL END MILL HOLDERS*



**PORTAFRESE COMBINATI**  
*COMBI SHELL END MILL HOLDERS*



**CONO MORSE PUNTE/ FRESE**  
*MORSE TAPER FOR DRILLS/MILLS*



**PORTAPINZA ER DIN6499**  
*COLLET CHUCK FOR ER DIN6499*



**PORTA PUNTE AUTOSERRANTI  
CON CHIAVE A SETTORE**  
*DRILL CHUCKS WITH HOOK WRENCH*



**PORTAPINZA EOC DIN6388**  
*COLLET CHUCK FOR EOC DIN6388*



**STELO TENERO LAVORABILE**  
*BLANK ARBORS*



**PER FRESE WELDON**  
*END MILL HOLDERS*



**BARRA DI CONTROLLO**  
*TEST ARBORS*



CARATTERISTICHE / SPECIFICATION / CARACTÉRISTIQUES/ TECHNISCHE DATEN

**CARATTERISTICHE TECNICHE**

- Costruiti in acciaio certificato in barre.
- Eseguiti trattamenti termici da fornitori certificati ISO 9001.
- Rettificati di precisione esternamente, internamente e nelle filettature delle ghiere chiudipinza.
- Controllati con strumenti di misura certificati.
- La tolleranza di precisione dei coni ISO è AT2.
- L'errore di concentricità massimo tra il cono e la sede utensile è di 0.003mm.

**CARACTÉRISTIQUES**

- Fabriqués en bar d'acier certifié.
- Réalisation du traitement thermique par des fournisseurs certifiés ISO 9001.
- Rectification de précision extérieurement, intérieurement et dans les filetages des écrous serre-pince.
- Contrôlés par des instruments de mesure certifiés.
- La tolérance de précision des cônes ISO est AT2.
- L'erreur de concentricité maximum entre le cône et le siège de l'outil est de 0.003 mm.

**TECHNICAL FEATURES**

- Manufactured with certificate steel.
- Heat treatments are performed by certified suppliers ISO 9001.
- Precision ground on shanks, inside tapers and collet nut threads.
- Tested with high precision inspection and ganging equipment.
- Taper accuracy of ISO SHANKS lower than AT2.
- The maximum error of concentricity between the cone and the seat of tool is 0.003mm.

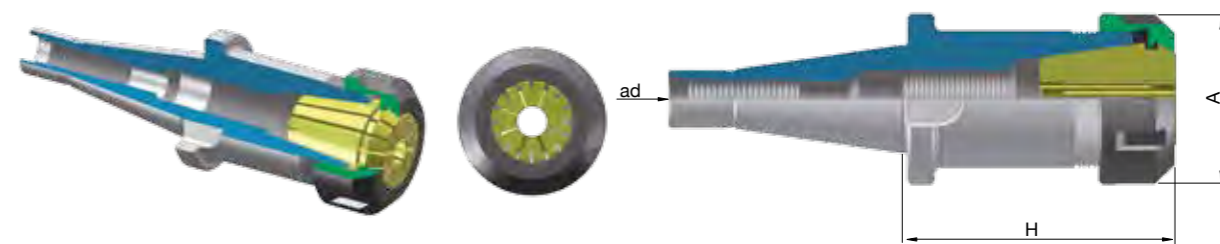
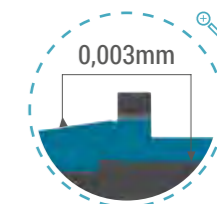
**MERKMALE**

- Gebaut aus zertifiziertem Stabstahl
- Warmbehandlungen von Lieferanten mit Zeugnis ISO 9001
- Genauigkeitsgeschliffen aussen, innen und in den Gewinden der Spannmutter für den Zangenverschluss
- Geprüft mit zertifizierten Messinstrumente
- Die Präzisionstoleranz der Kone ISO ist AT2
- Die max konzentrische Abweichung zwischen Konus und Werkzeugsitz ist 0.003 mm



# PORTAPINZA ER DIN6499

## COLLET CHUCK FOR ER DIN6499

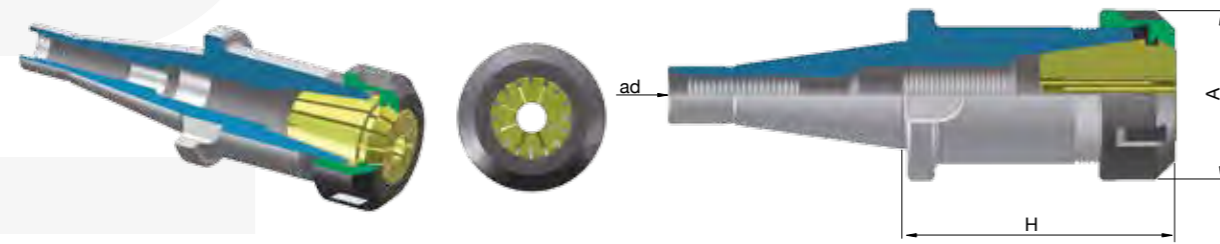


PORTAPINZA ER - COLLET CHUCK ER -ISO30

Cod.	TYPE	A	AT2 G6.3/12000	
			CAPACITÀ RANGE	H
ISO.30.50.ER25	ISO30 H50 ERX25	42	1 ÷ 16 mm	50
ISO.30.50.ER32	ISO30 H50 ERX32	50	2 ÷ 20 mm	50
ISO.30.70.ER40	ISO30 H70 ERX40	63	3 ÷ 30 mm	70

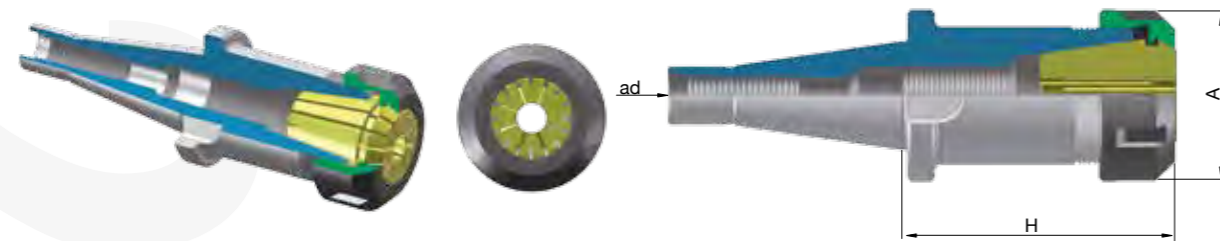
# PORTAPINZA EOC DIN6388

COLLET CHUCK FOR ER DIN6388



## PORTAPINZA ER - COLLET CHUCK - ISO40

Cod.	TYPE	A	CAPACITÀ RANGE	G6.3/12000	
				AT2	H
ISO.40.47.ER16	ISO40 H47 ERX16	32	1 ÷ 10 mm		47
ISO.40.47.ER25	ISO40 H47 ERX25	42	1 ÷ 16 mm		47
ISO.40.49.ER32	ISO40 H49 ERX32	50	2 ÷ 20 mm		49
ISO.40.70.ER40	ISO40 H70 ERX40	63	3 ÷ 30 mm		80



## PORTAPINZA ER - COLLET CHUCK - ISO50

Cod.	TYPE	A	CAPACITÀ RANGE	G6.3/12000	
				AT2	H
ISO.50.80.ER25	ISO50 H80 ERX25	42	1 ÷ 16 mm		80
ISO.50.69.ER32	ISO50 H69 ERX32	50	2 ÷ 20 mm		69
ISO.50.63.ER40	ISO50 H63 ERX40	63	3 ÷ 30 mm		63



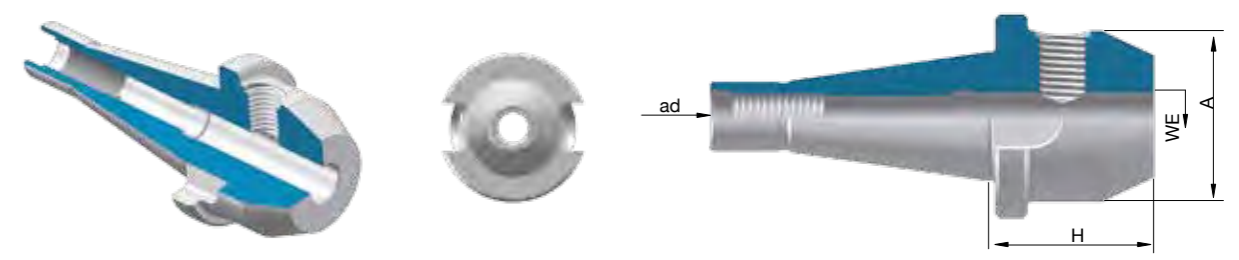
## PORTAPINZA PER EOC - COLLET CHUCK FOR EOC - ISO30

Cod.	TYPE	CAPACITÀ RANGE	G6.3/12000	
			AT2	H
ISO.30.50.EOC16	ISO30 H50 EOC16	2 - 16 mm	43	50
ISO.30.80.EOC25	ISO30 H80 EOC25	2 - 25 mm	60	80



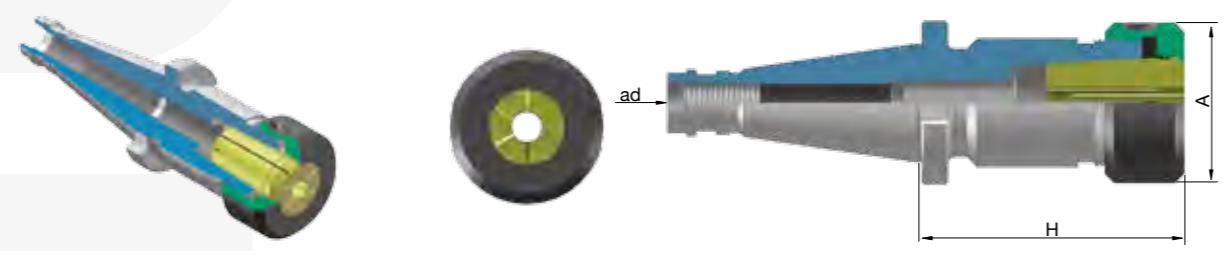
# PER FRESE WELDON

## END MILL HOLDERS



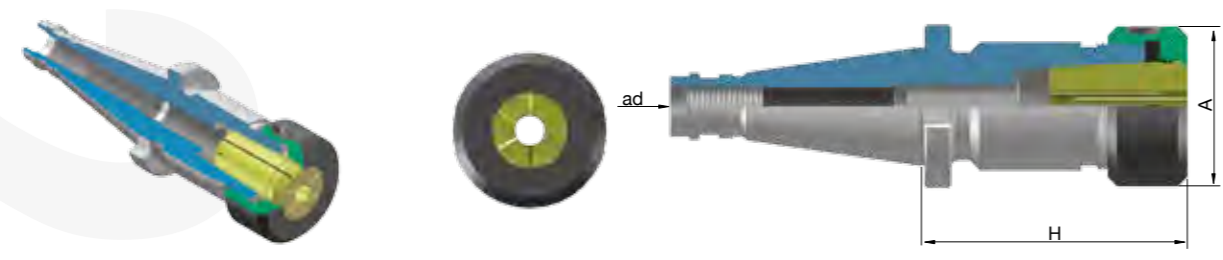
### PER FRESE WELDON -END MILL HOLDERS - ISO30

Cod.	TYPE	G6.3/12000		
		A	H	WE
ISO.30.40.WE6	ISO30 H40 WE6	25	40	6
ISO.30.40.WE8	ISO30 H40 WE8	28	40	8
ISO.30.40.WE10	ISO30 H40 WE10	35	40	10
ISO.30.40.WE12	ISO30 H40 WE12	42	40	12
ISO.30.50.WE14	ISO30 H50 WE14	44	50	14
ISO.30.50.WE16	ISO30 H50 WE16	48	50	16
ISO.30.50.WE18	ISO30 H50 WE18	50	50	18
ISO.30.63.WE20	ISO30 H63 WE20	52	63	20



### PORTAPINZA PER EOC - COLLET CHUCK FOR EOC - ISO40

Cod.	TYPE	CAPACITÀ RANGE	G6.3/12000	
			A	H
ISO.40.55.EOC16	ISO40 H55 EOC16	2 - 16 mm	43	55
ISO.40.66.EOC25	ISO40 H66 EOC25	2 - 25 mm	60	66
ISO.40.95.EOC32	ISO40 H95 EOC32	4 - 32 mm	72	95

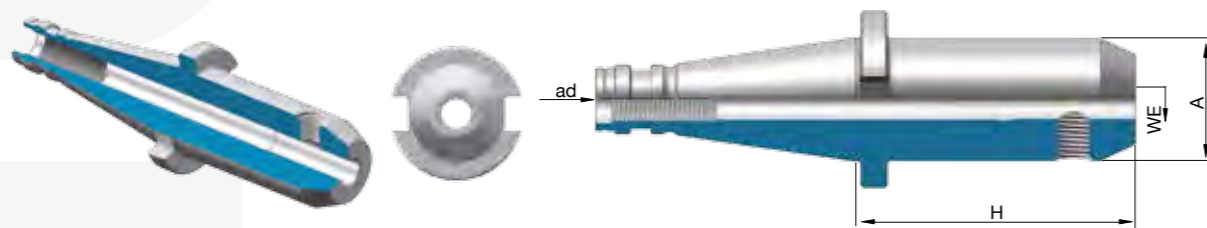


### PORTAPINZA PER EOC - COLLET CHUCK FOR EOC - ISO50

Cod.	TYPE	CAPACITÀ RANGE	G6.3/12000	
			A	H
ISO.50.71.EOC25	ISO50 H71 EOC25	2 - 25 mm	60	71
ISO.50.73.EOC32	ISO50 H73 EOC32	4 - 32 mm	72	73

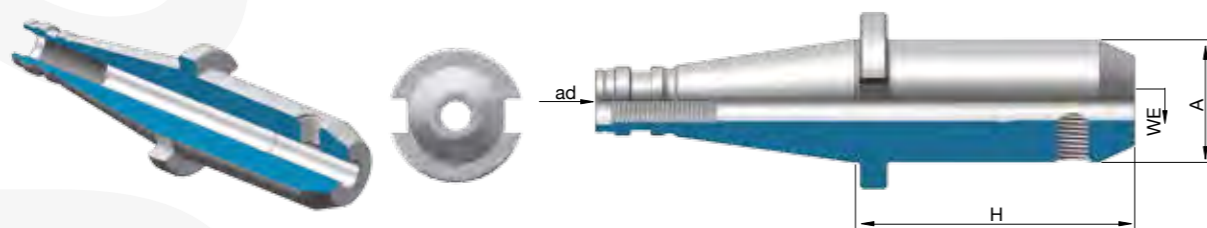
# PORTAFRESE FISSI

## SHELL END MILL HOLDERS



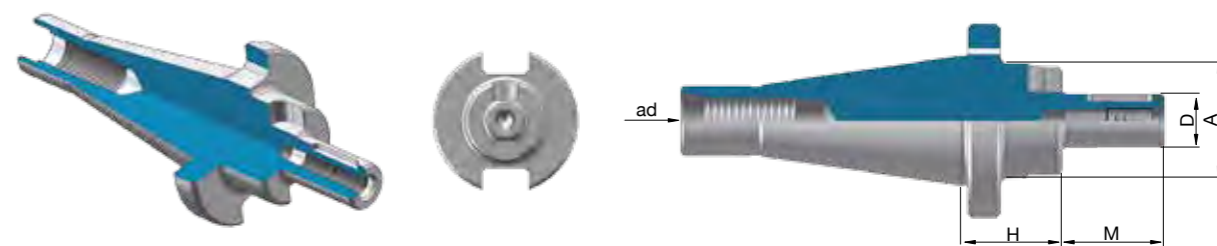
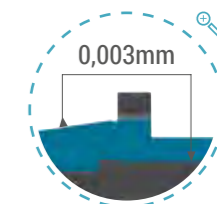
### PER FRESE WELDON -END MILL HOLDERS - ISO40

Cod.	TYPE	A	G6.3/12000	
			AT2	WE
ISO.40.50.WE6	ISO40 H50 WE6	25	50	6
ISO.40.50.WE8	ISO40 H50 WE8	28	50	8
ISO.40.50.WE10	ISO40 H50 WE10	35	50	10
ISO.40.50.WE12	ISO40 H50 WE12	42	50	12
ISO.40.50.WE14	ISO40 H50 WE14	44	50	14
ISO.40.63.WE16	ISO40 H63 WE16	48	63	16
ISO.40.63.WE18	ISO40 H63 WE18	50	63	18
ISO.40.63.WE20	ISO40 H63 WE20	52	63	20
ISO.40.80.WE25	ISO40 H80 WE25	63	80	25
ISO.40.80.WE32	ISO40 H80 WE32	72	80	32
ISO.40.90.WE40	ISO40 H90 WE40	90	90	40



### PER FRESE WELDON -END MILL HOLDERS - ISO50

Cod.	TYPE	A	G6.3/12000	
			AT2	WE
ISO.50.63.WE6	ISO50 H63 WE6	25	63	6
ISO.50.63.WE8	ISO50 H63 WE8	28	63	8
ISO.50.63.WE10	ISO50 H63 WE10	35	63	10
ISO.50.63.WE12	ISO50 H63 WE12	42	63	12
ISO.50.63.WE14	ISO50 H63 WE14	44	63	14
ISO.50.63.WE16	ISO50 H63 WE16	48	63	16
ISO.50.63.WE18	ISO50 H63 WE18	50	63	18
ISO.50.63.WE20	ISO50 H63 WE20	52	63	20
ISO.50.80.WE25	ISO50 H80 WE25	65	80	25
ISO.50.80.WE32	ISO50 H80 WE32	72	80	32
ISO.50.90.WE40	ISO50 H90 WE40	90	90	40



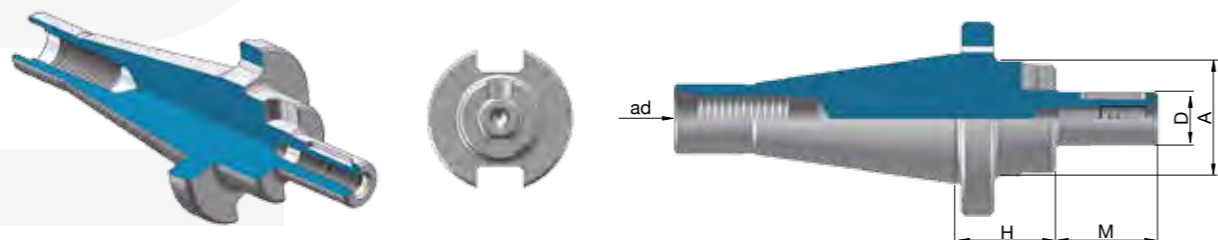
### PORTAFRESE FISSO - SHELL END MILL HOLDERS - ISO30

Cod.	TYPE	A	M	G6.3/12000	
				AT2	D
ISO.30.35.D16S	ISO30 H35 D16S	32	17	35	16
ISO.30.35.D22S	ISO30 H35 D22S	40	19	35	22
ISO.30.35.D27S	ISO30 H35 D27S	48	21	35	27
ISO.30.35.D32S	ISO30 H35 D32S	58	24	35	32



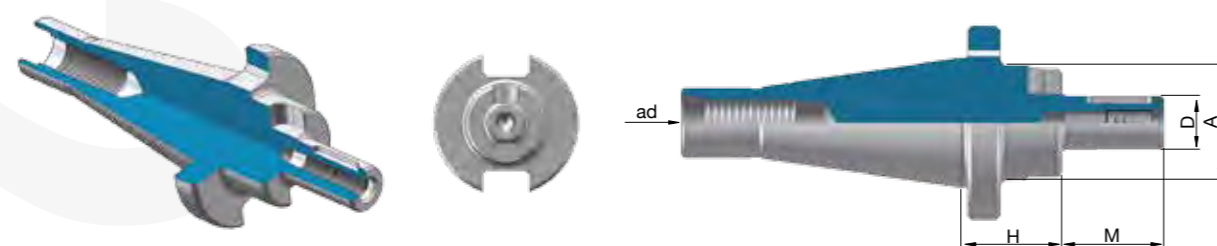
# PORTAFRESE COMBINATI

## COMBI SHELL END MILL HOLDERS



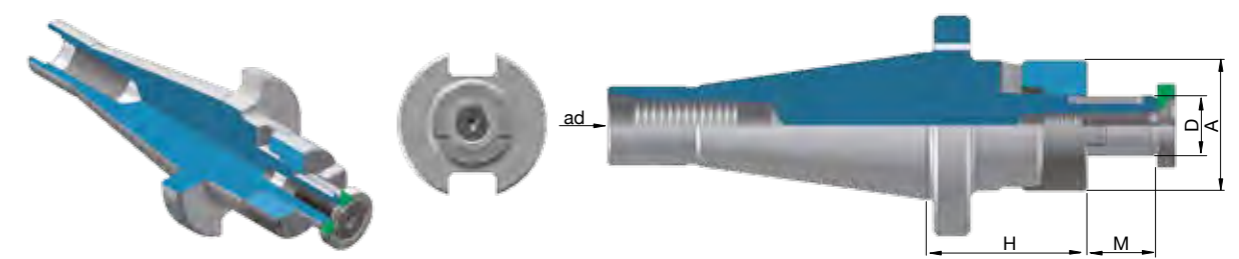
### PORTAFRESE FISSO - SHELL END MILL HOLDERS - ISO40

Cod.	TYPE	A	M	AT2		G6.3/12000	
				H	D		
ISO.40.30.D16S	ISO40 H30 D16S	38	17	30	16		
ISO.40.35.D22S	ISO40 H35 D22S	48	19	35	22		
ISO.40.35.D27S	ISO40 H35 D27S	58	21	35	27		
ISO.40.35.D32S	ISO40 H35 D32S	63	24	35	32		
ISO.40.35.D40S	ISO40 H35 D40S	79	27	35	40		



### PORTAFRESE FISSO - SHELL END MILL HOLDERS - ISO50

Cod.	TYPE	A	M	AT2		G6.3/12000	
				H	D		
ISO.50.45.D16S	ISO50 H45 D16S	38	17	45	16		
ISO.50.45.D22S	ISO50 H45 D22S	48	19	45	22		
ISO.50.45.D27S	ISO50 H45 D27S	58	21	45	27		
ISO.50.45.D32S	ISO50 H45 D32S	65	24	45	32		
ISO.50.45.D40S	ISO50 H45 D40S	80	27	45	40		

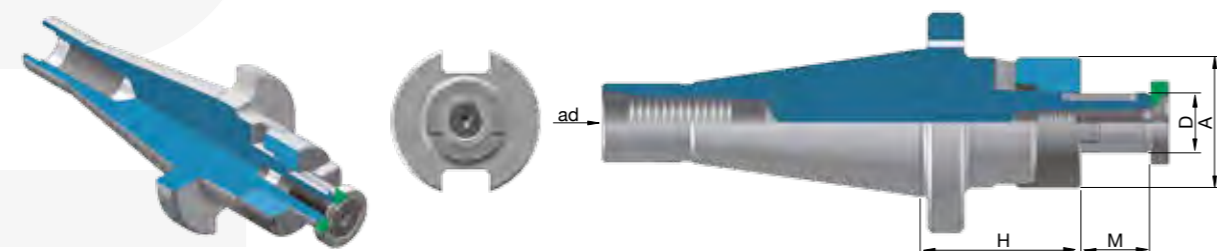


### PORTAFRESE COMBINATO - COMBI SHELL END MILL HOLDERS - ISO30

Cod.	TYPE	A	M	AT2		G6.3/12000	
				H	D		
ISO.30.35.D16C	ISO30 H35 D16C	32	17	35	16		
ISO.30.35.D22C	ISO30 H35 D22C	40	19	35	22		
ISO.30.35.D27C	ISO30 H35 D27C	48	21	35	27		
ISO.30.50.D32C	ISO30 H50 D32C	58	24	50	32		

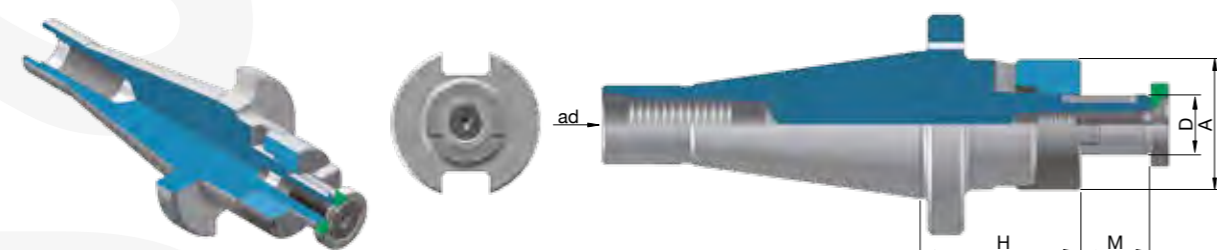
# CONO MORSE PUNTE / FRESE

MORSE TAPER ADAPTERS FOR DRILLS / FOR MILLS



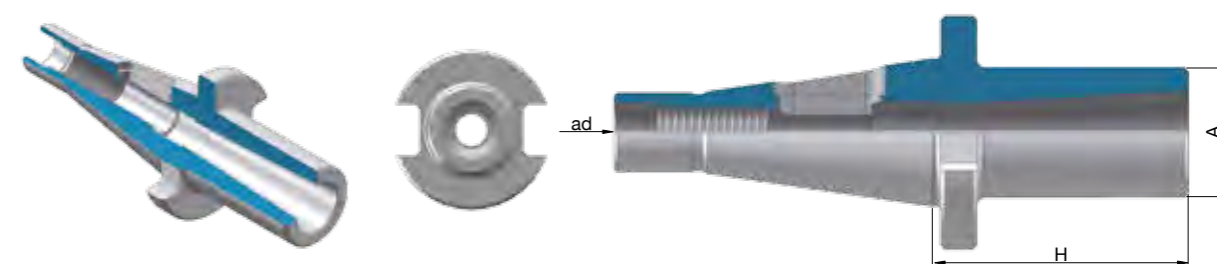
## PORTAFRESE COMBINATO - COMBI SHELL END MILL HOLDERS - ISO40

Cod.	TYPE	A	M	AT2		G6.3/12000	
				H	D	H	D
ISO.40.52.D16C	ISO40 H52 D16C	32	17	52	16		
ISO.40.52.D22C	ISO40 H52 D22C	40	19	52	22		
ISO.40.52.D27C	ISO40 H52 D27C	48	21	52	27		
ISO.40.52.D32C	ISO40 H52 D32C	58	24	52	32		
ISO.40.52.D40C	ISO40 H52 D40C	70	27	52	40		



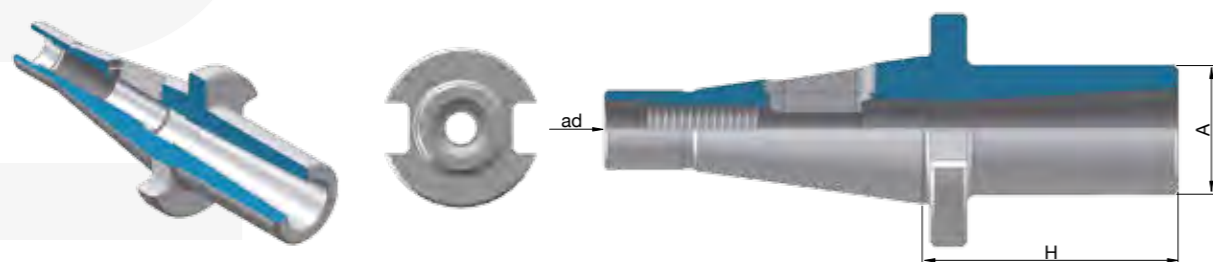
## PORTAFRESE COMBINATO - COMBI SHELL END MILL HOLDERS - ISO50

Cod.	TYPE	A	M	AT2		G6.3/12000	
				H	D	H	D
ISO.50.55.D16C	ISO50 H55 D16C	32	17	55	16		
ISO.50.55.D22C	ISO50 H55 D22C	40	19	55	22		
ISO.50.55.D27C	ISO50 H55 D27C	48	21	55	27		
ISO.50.55.D32C	ISO50 H55 D32C	58	24	55	32		
ISO.50.55.D40C	ISO50 H55 D40C	70	27	55	40		



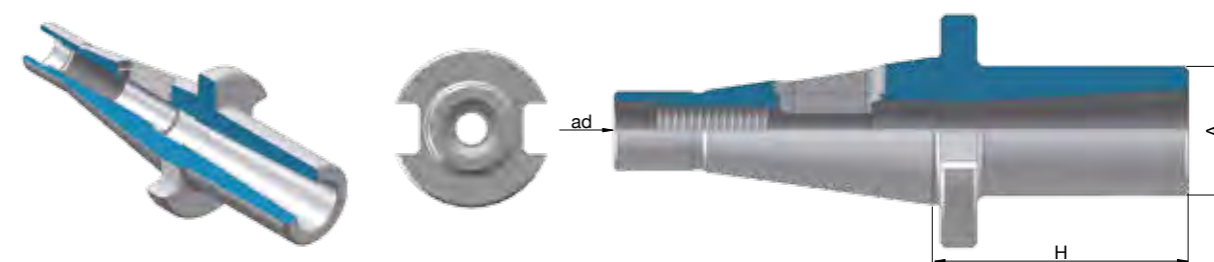
## CONO MORSE PER PUNTE - MORSE TAPER FOR DRILLS - ISO30

Cod.	TYPE	AT2		G6.3/12000	
		A	H	A	H
ISO.30.50.CM1P	ISO30 H50 CM1 P	25	50		
ISO.30.50.CM2P	ISO30 H50 CM2 P	32	50		
ISO.30.75.CM3P	ISO30 H75 CM3 P	40	75		



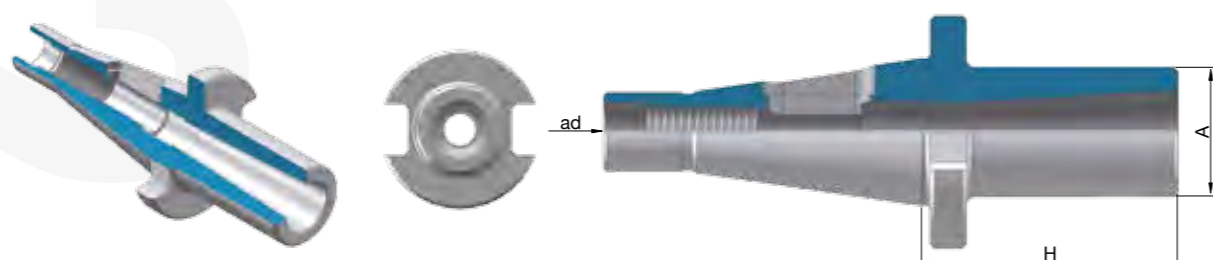
**CONO MORSE PER PUNTE - MORSE TAPER FOR DRILLS - ISO40**

Cod.	TYPE	G6.3/12000	
		A	H
ISO.40.50.CM1P	ISO40 H50 CM1 P	25	50
ISO.40.50.CM2P	ISO40 H50 CM2 P	32	50
ISO.40.65.CM3P	ISO40 H65 CM3 P	40	65
ISO.40.95.CM4P	ISO40 H95 CM4 P	48	95



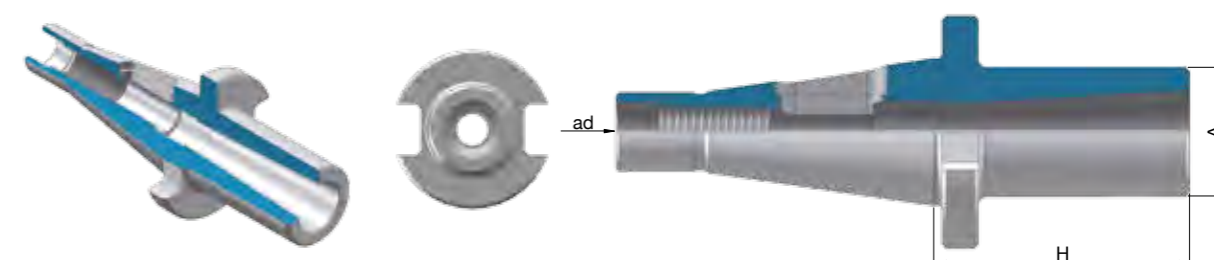
**CONO MORSE PER FRESE - MORSE TAPER FOR MILLS - ISO40**

Cod.	TYPE	G6.3/12000	
		A	H
ISO.40.50.CM1F	ISO40 H50 CM1 FV	25	50
ISO.40.50.CM2F	ISO40 H50 CM2 FV	32	50
ISO.40.65.CM3F	ISO40 H65 CM3 FV	40	65
ISO.40.95.CM4F	ISO40 H95 CM4 FV	48	95
ISO.40.110.CM4F	ISO40 H110 CM4 FV	63	110



**CONO MORSE PER PUNTE - MORSE TAPER FOR DRILLS - ISO50**

Cod.	TYPE	G6.3/12000	
		A	H
ISO.50.45.CM1P	ISO50 H45 CM1 P	25	45
ISO.50.60.CM2P	ISO50 H60 CM2 P	32	60
ISO.50.65.CM3P	ISO50 H65 CM3 P	40	65
ISO.50.70.CM4P	ISO50 H70 CM4 P	48	70
ISO.50.105.CM5P	ISO50 H105 CM5 P	63	105

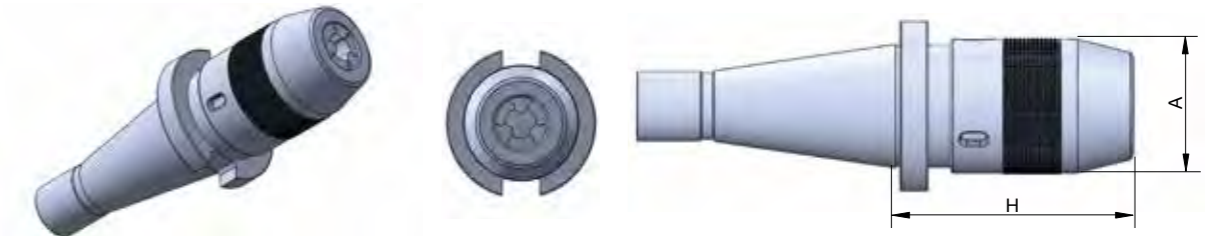
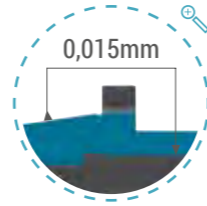


**CONO MORSE PER FRESE - MORSE TAPER FOR MILLS - ISO50**

Cod.	TYPE	G6.3/12000	
		A	H
ISO.50.60.CM1F	ISO50 H60 CM1 FV	25	60
ISO.50.60.CM2F	ISO50 H60 CM2 FV	32	60
ISO.50.65.CM3F	ISO50 H65 CM3 FV	40	65
ISO.50.65.CM4F	ISO50 H65 CM4 FV	48	65
ISO.50.80.CM4F	ISO50 H80 CM4 FV	63	80
ISO.50.120.CM5F	ISO50 H120 CM5 FV	63	120
ISO.50.138.CM5F	ISO50 H138 CM5 FV	78	138

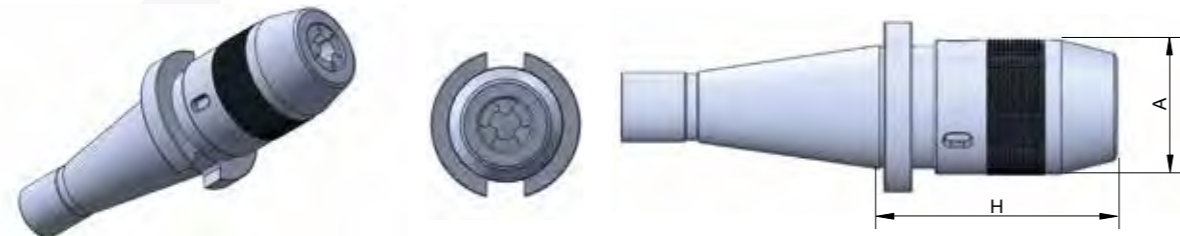
# PORTAPUNTE AUTOSERRANTE

DRILL CHUCK



## AUTOSERRANTE CON CHIAVE A SETTORE - DRILL CHUCK - ISO50

Cod.	TYPE	A	G6.3/12000	
			AT2	H
ISO.50.80.DCK13	ISO50 H80 DCK13	50	CAPACITÀ RANGE 1 ÷ 13 mm	80
ISO.50.90.DCK16	ISO50 H90 DCK16	58	3 ÷ 16 mm	90



## AUTOSERRANTE CON CHIAVE A SETTORE - DRILL CHUCK - ISO40

Cod.	TYPE	A	G6.3/12000	
			AT2	H
ISO.40.88.DCK13	ISO40 H88 DCK13	50	CAPACITÀ RANGE 1 ÷ 13 mm	88
ISO.40.100.DCK16	ISO40 H100 DCK16	58	3 ÷ 16 mm	100



# STELO TENERO LAVORABILE

BLANKS ARBORS

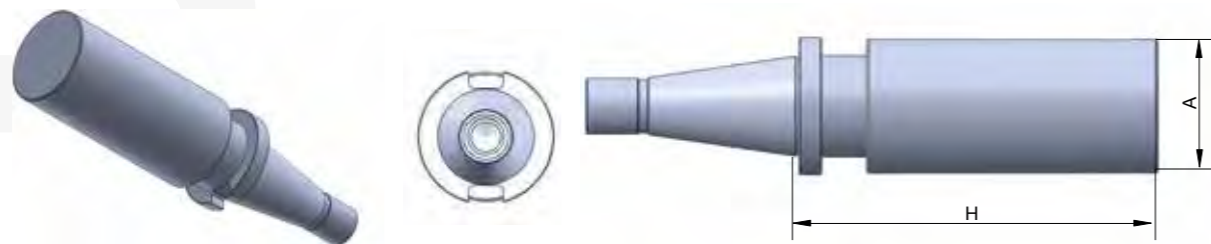


# BARRA DI CONTROLLO

TEST ARBORS



DIN 2080



## STELO TENERO LAVORABILE - BLANKS ARBORS - ISO40

Cod.	TYPE	A	H
ISO.40.250.D63BL	ISO40 H250 D63	63	250
ISO.50.315.D97BL	ISO40 H315 D97	97	315



## BARRA DI CONTROLLO - TEST ARBORS

Cod.	TYPE	A	H
ISO.30.200.D32	ISO30 H200 D32	32	200
ISO.40.300.D40	ISO40 H300 D40	40	300
ISO.50.300.D50	ISO50 H300 D50	50	300

# ADATTATORI VARILOCK

TOOL HOLDER FOR VARILOCK SYSTEM



**ATTACCO BASE TC-SK  
DIN69871**

*MODULAR BASIC MOUNTING FOR  
TC-SK DIN69871*



**ATTACCO BASE BT MAS 403 /  
JIS6399**

*MODULAR BASIC MOUNTING FOR BT  
MAS 403 / JIS6399*



**ATTACCO BASE PER HSK DIN  
63893**

*MODULAR BASIC MOUNTING FOR  
HSK DIN 63893*



**PROLUNGHE MODULARI  
MODULAR EXTENSIONS ADAPTERS**



**ADATTATORI MODULARI PER  
WELDON**

*MODULAR END MILL ADAPTERS*



**ADATTATORI MODULARI PER  
FRESE**

*MODULAR SHELL END MILL  
HOLDERS*

# ATTACCO BASE TC-SK DIN69871

## MODULAR BASIC MOUNTING FOR TC-SK DIN69871

### CARATTERISTICHE / SPECIFICATION / CARACTÉRISTIQUES/ TECHNISCHE DATEN

#### 🇮🇹 CARATTERISTICHE TECNICHE

- Costruiti in acciaio certificato in barre
- Eseguiti trattamenti termici da fornitori certificati ISO 9001
- Rettificati di precisione esternamente, internamente e nelle filettature delle ghiera chiudipinza
- Controllati con strumenti di misura certificati
- La tolleranza di precisione dei coni VARILOCK è AT2
- L'errore di concentricità massimo tra il cono e la sede utensile è 0.003 mm.

#### 🇬🇧 TECHNICAL FEATURES

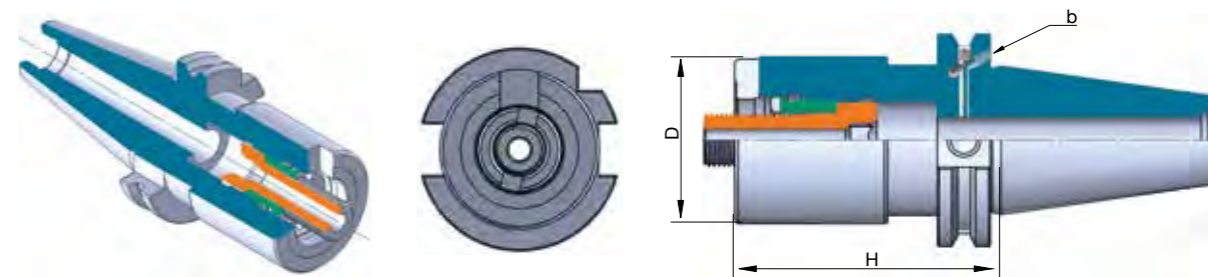
- Manufactured with certificate steel
- Heat treatments are performed by certified suppliers ISO 9001
- Precision ground on shank, inside tapers and collet nut threads
- Tested with high precision inspection and gaging equipment
- Taper accuracy of TOOLHOLDER FOR VARILOCK SYSTEM lower than AT2
- The maximum error of concentricity between the cone and the seat of tool is 0.003 mm.

#### 🇫🇷 CARACTÉRISTIQUES

- Fabriqués en bar d'acier certifié.
- Réalisation du traitement thermique par des fournisseurs certifiés ISO 9001.
- Rectification de précision extérieurement, intérieurement et dans les filetages des écrous serre-pince.
- Contrôlés par des instruments de mesure certifiés.
- La tolérance de précision des cônes VARILOCK est AT2.
- L'erreur de concentricité maximum entre le cône et le siège de l'outil est de 0.003 mm.

#### 🇩🇪 MERKMALE

- Gebaut aus zertifiziertem Stabstahl
- Warmbehandlungen von Lieferanten mit Zeugnis ISO 9001
- Genauigkeitgeschliffen aussen, innen und in den Gewinden der Spannmutter für den Zangenverschluss
- Geprüft mit zertifizierten Messinstrumente
- Die Präzisionstoleranz der VARILOCK ist AT2
- Die max konzentrische Abweichung zwischen Konus und Werkzeugsitz ist 0.003 mm.

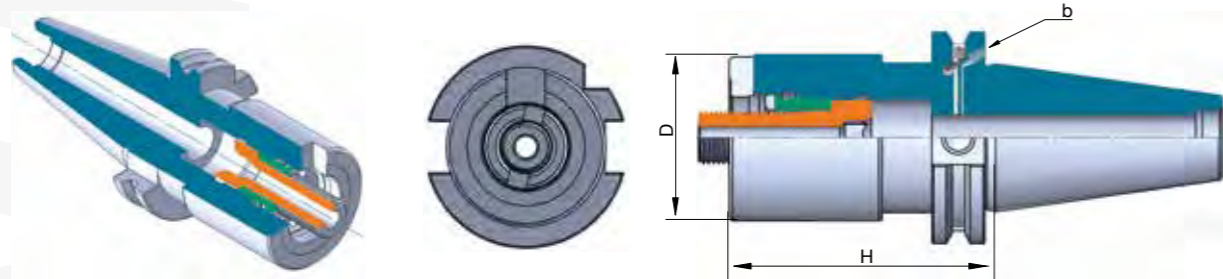


### ATTACCO BASE TCB40 - MODULAR BASIC COUNTING FOR SKB40

Cod.	TYPE	AT2	G6.3/12000	AD/B
		H	D	
SKB.40.27.VAR50	TC40-SK40 DIN69871 H27 VARILOCK50	27	50	
SKB.40.50.VAR50	TC40-SK40 DIN69871 H50 VARILOCK50	50	50	
SKB.40.27.VAR63	TC40-SK40 DIN69871 H27 VARILOCK63	27	63	
SKB.40.50.VAR63	TC40-SK40 DIN69871 H50 VARILOCK63	50	63	

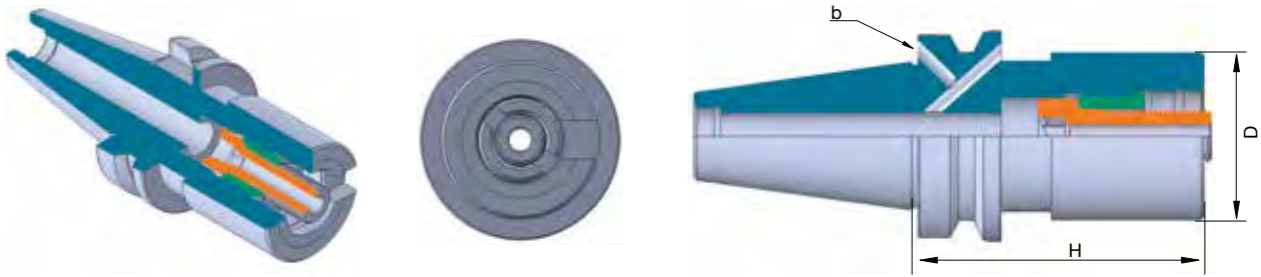
# ATTACCO BASE BT MAS 403 / JIS6399

MODULAR BASIC MOUNTING FOR  
BT MAS 403 / JIS6399



## ATTACCO BASE TCB50 - MODULAR BASIC COUNTING FOR SKB50

Cod.	TYPE	AT2		G6.3/12000		AD/B	
		H	D	H	D	H	D
SKB.50.27.VAR50	TC50-SK50 DIN69871 H27 VARILOCK50	27	50				
SKB.50.50.VAR50	TC50-SK50 DIN69871 H50 VARILOCK50	50	50				
SKB.50.27.VAR63	TC50-SK50 DIN69871 H27 VARILOCK63	27	63				
SKB.50.50.VAR63	TC50-SK50 DIN69871 H50 VARILOCK63	50	63				
SKB.50.27.VAR80	TC50-SK50 DIN69871 H27 VARILOCK80	27	80				
SKB.50.50.VAR80	TC50-SK50 DIN69871 H50 VARILOCK80	50	80				



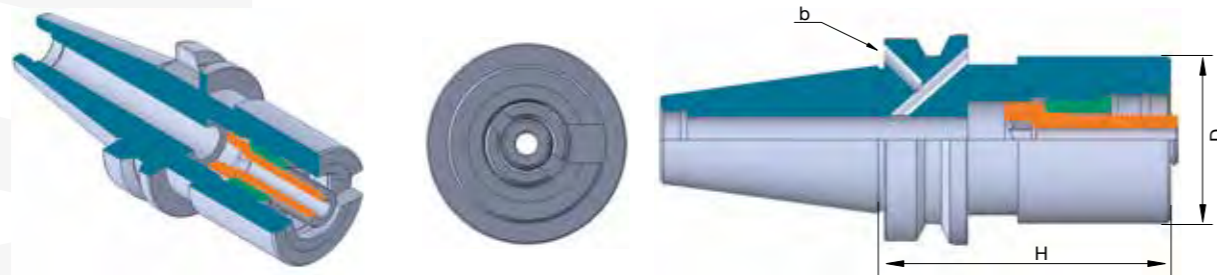
## ATTACCO BASE BTB40 - MODULAR BASIC COUNTING FOR BTB40

Cod.	TYPE	AT2		G6.3/12000		AD/B	
		H	D	H	D	H	D
BTB.40.27.VAR50	BTB40 MAS403 H27 VARILOCK50	27	50				
BTB.40.50.VAR50	BTB40 MAS403 H50 VARILOCK50	50	50				
BTB.40.27.VAR63	BTB40 MAS403 H27 VARILOCK63	27	63				
BTB.40.50.VAR63	BTB40 MAS403 H50 VARILOCK63	50	63				



# ATTACCO BASE PER HSK DIN 63893

MODULAR TOOL HOLDERS VARILOCK SYSTEM  
SUPPLIED WITH COOLING TUBE



## ATTACCO BASE BTB50 - MODULAR BASIC COUNTING FOR BTB50

Cod.	TYPE	G6.3/12000	
		AT2	AD/B
		H	D
BTB.50.50.VAR50	BTB50 MAS403 H50 VARILOCK50	50	50
BTB.50.50.VAR63	BTB50 MAS403 H50 VARILOCK63	50	63
BTB.50.50.VAR80	BTB50 MAS403 H50 VARILOCK80	50	80



## ATTACCO BASE PER HSK63A - MODULAR BASIC MOUNTING FOR HSK63A

Cod.	TYPE	G6.3/12000	
		AT2	AD/B
		H	D
HSK.A.63.80.VAR50	HSK63A H80 VARILOCK 50	80	50
HSK.A.63.90.VAR63	HSK63A H90 VARILOCK 63	90	63

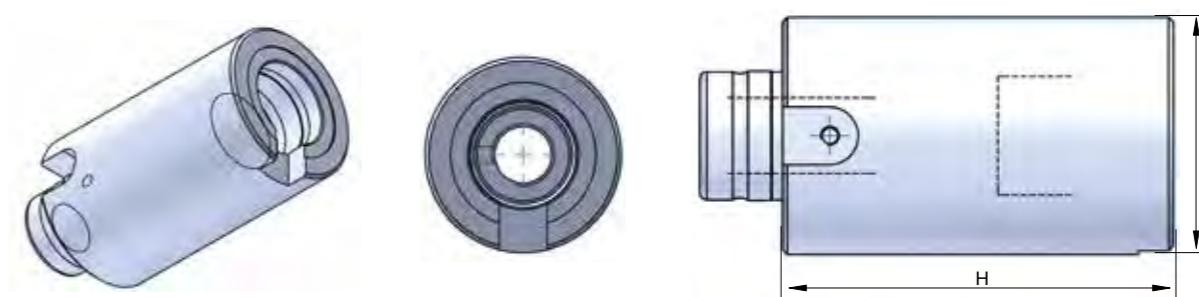
# PROLUNGHE MODULARI

## MODULAR EXTENSIONS ADAPTERS



### ATTACCO BASE PER HSK63A - MODULAR BASIC MOUNTING FOR HSK100A

Cod.	TYPE	G6.3/12000	
		AT2	
HSK.A.100.85.VAR50	HSK100A H85 VARILOCK 50	85	50
HSK.A.100.95.VAR63	HSK100A H95 VARILOCK 63	95	63
HSK.A.100.95.VAR80	HSK100A H95 VARILOCK 80	95	80

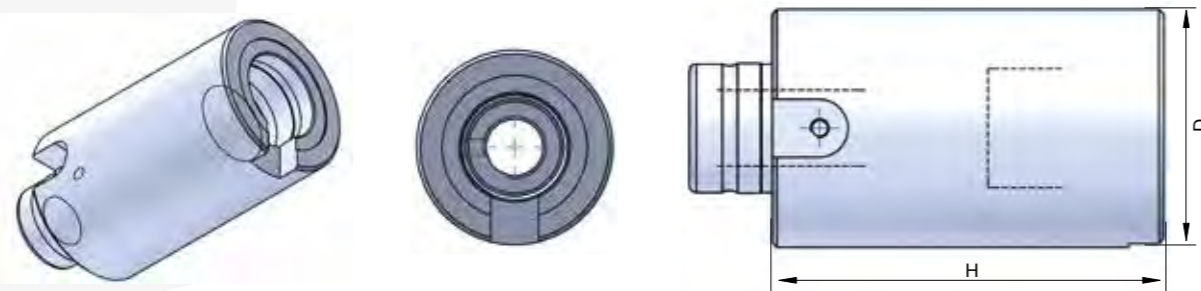


### PROLUNGHE MODULARI - MODULAR EXTESIONS ADAPTERS - VARILOCK 50

Cod.	TYPE	H	D
VAR50.60.VAR50	VARILOCK50 H63 VARILOCK 50	63	50
VAR50.100.VAR50	VARILOCK50 H100 VARILOCK 50	100	50

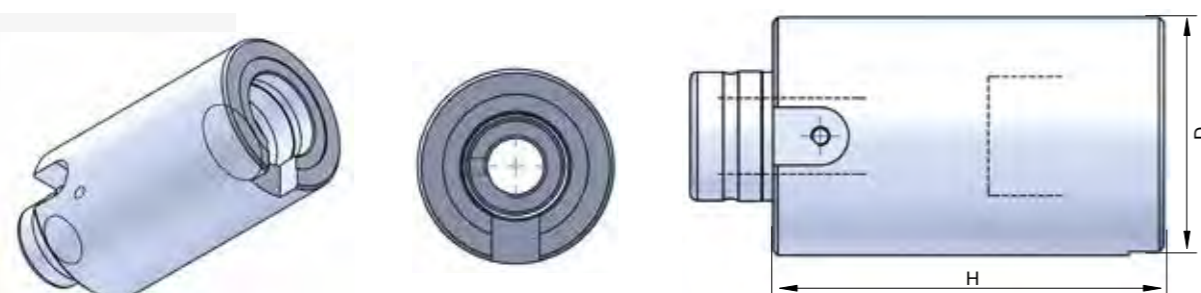
# ADATTATORI MODULARI PER WELDON

## MODULAR END MILL ADAPTERS



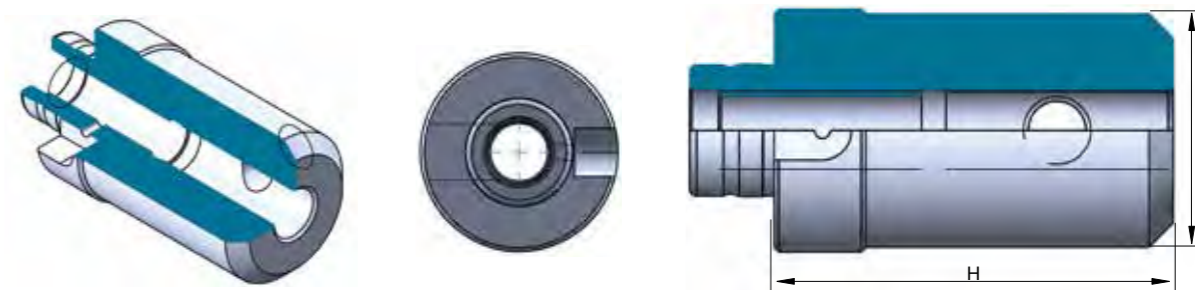
### PROLUNGHE MODULARI - MODULAR EXTESIONS ADAPTERS - VARILOCK 63

Cod.	TYPE	H	D
VAR63.80.VAR63	VARILOCK63 H80 VARILOCK 63	80	63
VAR63.120.VAR63	VARILOCK63 H120 VARILOCK 63	120	63



### PROLUNGHE MODULARI - MODULAR EXTESIONS ADAPTERS - VARILOCK 80

Cod.	TYPE	H	D
VAR80.80.VAR80	VARILOCK63 H80 VARILOCK 80	80	80

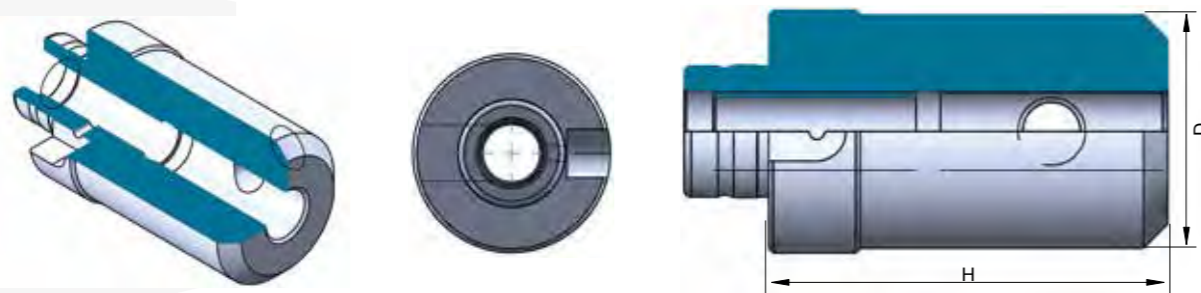


### ADATTATORI MODULARI WELDON - MODULAR END MILL ADAPTERS - VAR50

Cod.	TYPE	H	D
VAR50.50.WE6	VARILOCK50 H50 WELDON6	50	6
VAR50.50.WE8	VARILOCK50 H50 WELDON8	50	8
VAR50.50.WE10	VARILOCK50 H50 WELDON10	50	10
VAR50.60.WE12	VARILOCK50 H60 WELDON12	60	12
VAR50.60.WE14	VARILOCK50 H60 WELDON14	60	14
VAR50.60.WE16	VARILOCK50 H60 WELDON16	60	16
VAR50.60.WE18	VARILOCK50 H60 WELDON18	60	18
VAR50.60.WE20	VARILOCK50 H60 WELDON20	60	20

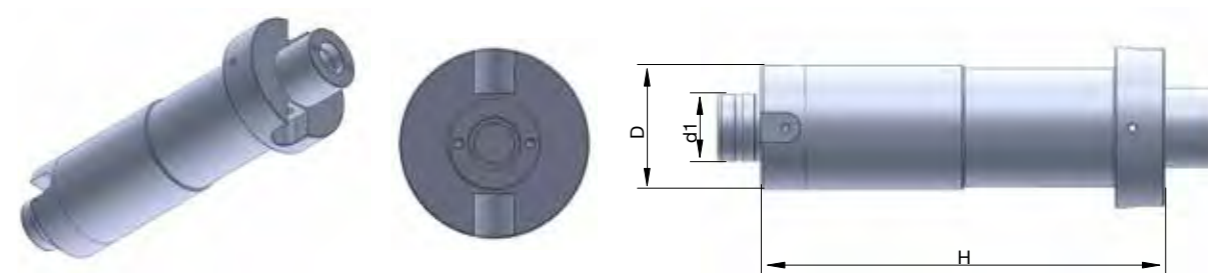
# ADATTATORI MODULARI PER FRESE

## MODULAR SHELL END MILL HOLDERS



### ADATTATORI MODULARI WELDON - MODULAR END MILL ADAPTERS - VAR63

Cod.	TYPE	H	D
VAR63.70.WE6	VARILOCK63 H70 WELDON6	70	6
VAR63.70.WE8	VARILOCK63 H70 WELDON8	70	8
VAR63.70.WE10	VARILOCK63 H70 WELDON10	70	10
VAR63.70.WE12	VARILOCK63 H70 WELDON12	70	12
VAR63.70.WE14	VARILOCK63 H70 WELDON14	70	14
VAR63.70.WE16	VARILOCK63 H70 WELDON16	70	16
VAR63.70.WE18	VARILOCK63 H70 WELDON18	70	18
VAR63.70.WE20	VARILOCK63 H70 WELDON20	70	20
VAR63.80.WE25	VARILOCK63 H80 WELDON25	80	25
VAR63.80.WE32	VARILOCK63 H80 WELDON32	80	32



### ADATTATORI MODULARI PORTA FRESE - MODULAR SHELL END MILL HOLDERS - VAR50

Cod.	TYPE	D	H	d1
VAR50.30.D16S	VARILOCK50 H30 D16S	50	30	16
VAR50.20.D22S	VARILOCK50 H20 D22S	50	20	22
VAR50.20.D27S	VARILOCK50 H20 D27S	50	20	27
VAR50.25.D32S	VARILOCK50 H25 D32S	50	25	32
VAR50.25.D40S	VARILOCK50 H25 D40S	50	25	40



# CILINDRICI

## CYLINDRICAL



CALETTAMENTO A CALDO  
STANDARD

SHRINK FIT HOLDERS STANDARD



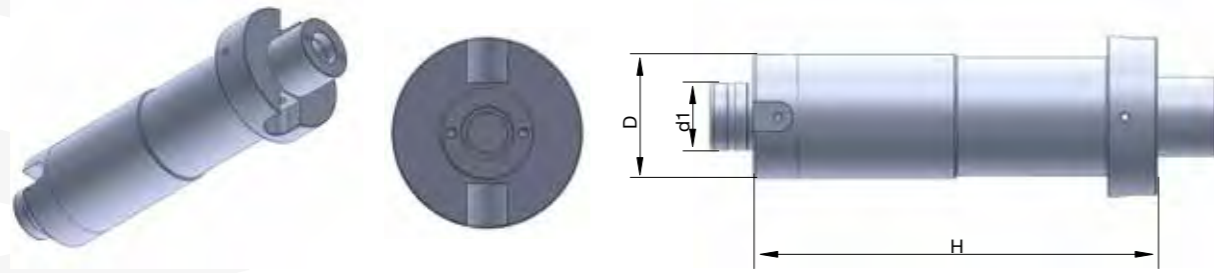
PORTA TESTINE FILETTATE  
(CPY)

FOR SCREWED MILLING CUTTERS



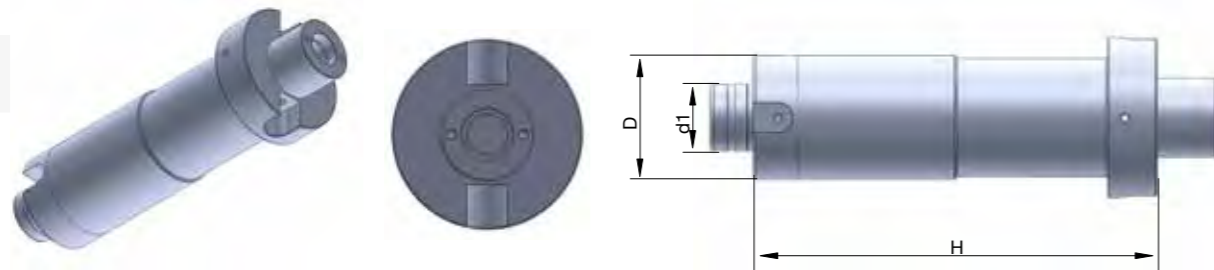
PORTAPINZA ER DIN6499

COLLET CHUCK FOR ER DIN6499



### ADATTATORI MODULARI PORTA FRESE - MODULAR SHELL END MILL HOLDERS - VAR63

Cod.	TYPE	D	H	d1
VAR63.40.D16S	VARILOCK63 H40 D16S	63	40	16
VAR63.30.D22S	VARILOCK63 H30 D22S	63	30	22
VAR63.30.D27S	VARILOCK63 H30 D27S	63	30	27
VAR63.30.D32S	VARILOCK63 H30 D32S	63	30	32
VAR63.30.D40S	VARILOCK63 H30 D40S	63	30	40



### ADATTATORI MODULARI PORTA FRESE - MODULAR SHELL END MILL HOLDERS - VAR80

Cod.	TYPE	D	H	d1
VAR80.30.D22S	VARILOCK80 H30 D22S	80	30	22
VAR80.30.D27S	VARILOCK80 H30 D27S	80	30	27
VAR80.30.D32S	VARILOCK80 H30 D32S	80	30	32
VAR80.30.D40S	VARILOCK80 H30 D40S	80	30	40

CARATTERISTICHE / SPECIFICATION / CARACTÉRISTIQUES/ TECHNISCHE DATEN

**CARATTERISTICHE TECNICHE**

- Costruiti in acciaio certificato in barre
- Eseguiti trattamenti termici da fornitori certificati ISO 9001
- Rettificati di precisione esternamente, internamente e nelle filettature delle ghiere chiudipinza
- Controllati con strumenti di misura certificati
- L'errore di concentricità massimo tra il cono e la sede utensile è 0.003 mm
- Fornibili con o senza piano.

**TECHNICAL FEATURES**

- Manufactured with certificate steel
- Heat treatments are performed by certified suppliers ISO 9001
- Precision ground on shank, inside tapers and collet nut threads
- Tested with high precision inspection and gaging equipment
- The maximum error of concentricity between the cone and the seat of tool is 0.003 mm
- Available with or without plan.

**CARACTÉRISTIQUES**

- Fabriqués en bar d'acier certifié.
- Réalisation du traitement thermique par des fournisseurs certifiés ISO 9001.
- Rectification de précision extérieurement, intérieurement et dans les filetages des écrous serre-pince.
- Contrôlés par des instruments de mesure certifiés.
- L'erreur de concentricité maximum entre le cône et le siège de l'outil est de 0.003 mm.
- Peuvent être fournis avec ou sans meplat.

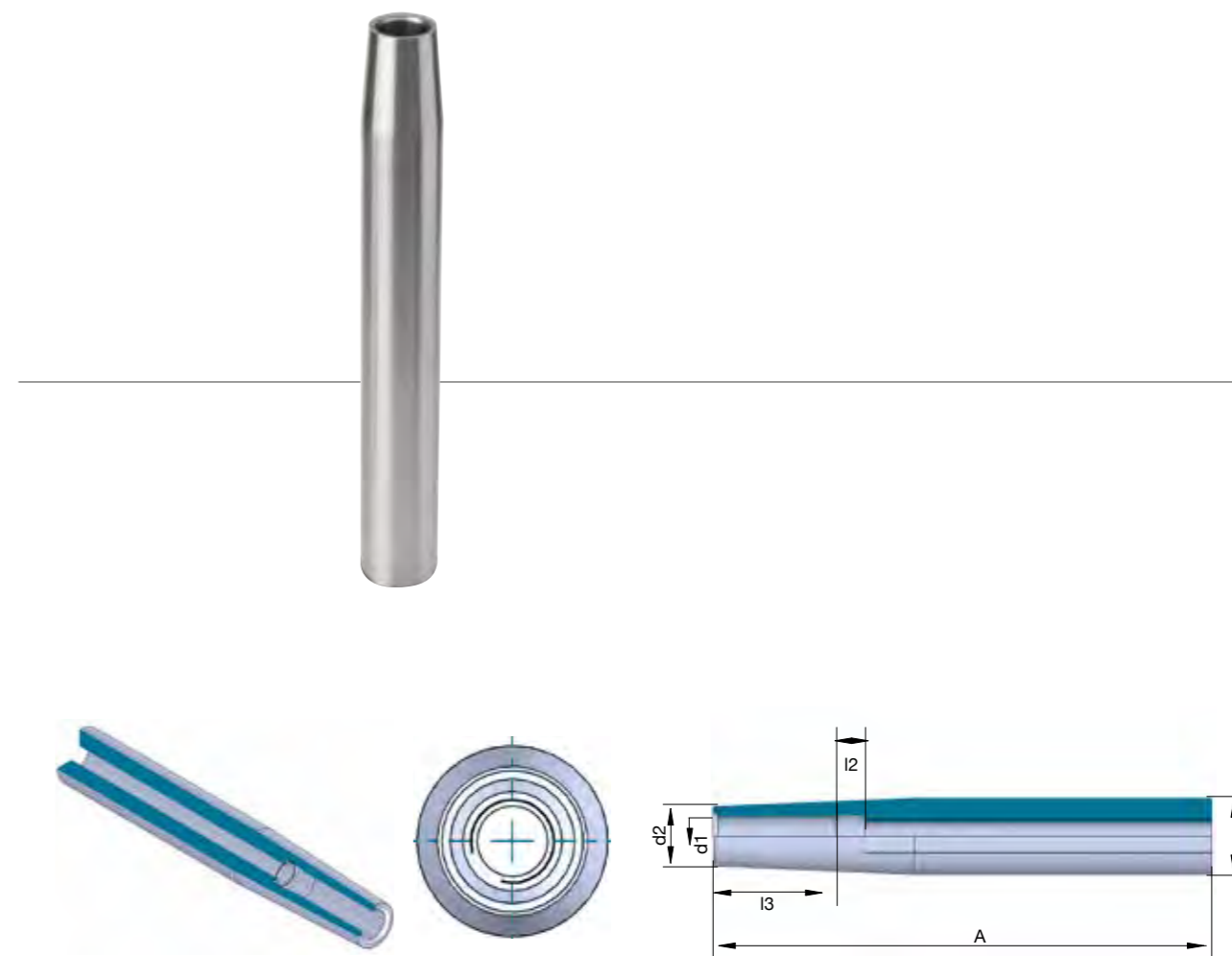
**MERKMALE**

- Gebaut aus zertifiziertem Stabstahl
- Warmbehandlungen von Lieferanten mit Zeugnis ISO 9001
- Genauigkeitgeschliffen aussen, innen und in den Gewinden der Spannmutter für den Zangenverschluss
- Geprüft mit zertifizierten Messinstrumente
- Die max konzentrische Abweichung zwischen Konus und Werkzeugsitz ist 0.003 mm
- Erhältlich mit oder ohne top.



CALETTAMENTO A CALDO

CYLINDRICAL SHRINK FIT HOLDERS

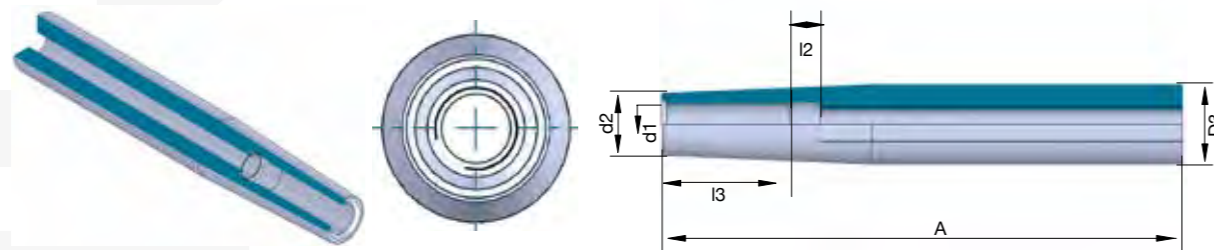


CALETTAMENTO A CALDO - CYLINDRICAL SHRINK FIT HOLDERS

Cod.	TYPE	d1	d2	D3	A	l2	l3	M
D12.150.CL3	D12 L150 CL3	3	8	12	150	-	12	M5
D12.150.CL4	D12 L150 CL4	4	8	12	150	-	16	M5
D16.150.CL3	D16 L150 CL3	3	10	16	150	-	12	M5
D16.150.CL4	D16 L150 CL4	4	10	16	150	-	16	M5
D16.150.CL5	D16 L150 CL5	5	10	16	150	-	20	M6
D16.150.CL6	D16 L150 CL6	6	10	16	150	10	26	M5
D20.150.CL3	D20 L150 CL3	3	10	20	150	-	12	M5
D20.150.CL4	D20 L150 CL4	4	10	20	150	-	16	M5
D20.150.CL5	D20 L150 CL5	5	10	20	150	-	20	M6
D20.150.CL6	D20 L150 CL6	6	10	20	150	10	26	M5
D20.150.CL8	D20 L150 CL8	8	12	20	150	10	26	M6

# PORTA TESTINE FILETTATE (CPY)

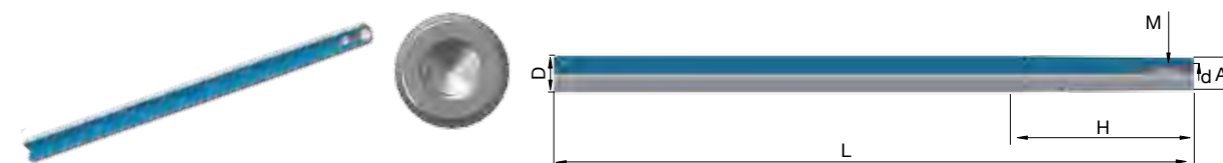
## EXTENTIONS FOR SCREWED MILLING CUTTERS



### CALETTAMENTO A CALDO - CYLINDRICAL SHRINK FIT HOLDERS

Cod.	TYPE	d1	d2	D3	A	l2	l3	M
D20.150.CL10	D20 L150 CL10	10	14	20	150	10	32	M6
D20.150.CL12	D20 L150 CL12	12	16	20	150	10	37	M10
D25.150.CL8	D25 L150 CL8	8	20	25	150	10	26	M6
D25.150.CL10	D25 L150 CL10	10	20	25	150	10	32	M6
D25.150.CL12	D25 L150 CL12	12	20	25	150	10	37	M10
D25.150.CL14	D25 L150 CL14	14	20	25	150	10	37	M10
D25.150.CL16	D25 L150 CL16	16	22	25	150	10	40	M10
D32.150.CL10	D32 L150 CL10	10	24	32	150	10	32	M6
D32.150.CL12	D32 L150 CL12	12	24	32	150	10	37	M10
D32.150.CL14	D32 L150 CL14	14	27	32	150	10	37	M10
D32.150.CL16	D32 L150 CL16	16	27	32	150	10	40	M10
D32.150.CL18	D32 L150 CL18	18	27	32	150	10	40	M10
D32.150.CL20	D32 L150 CL20	20	27	32	150	10	42	M10

SU RICHIESTA: POSSIBILE FORNIRE LUNGHEZZA FINO A 500 MM  
ON REQUEST: AVAILABLE UP TO LENGTH 500 MM

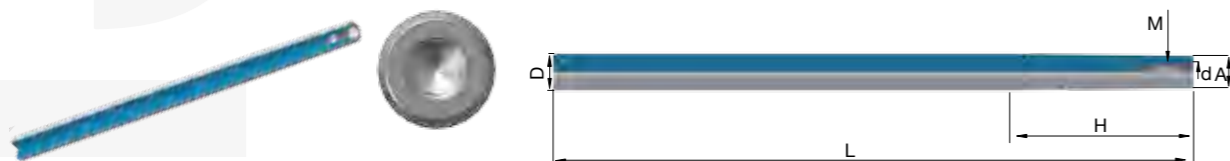


### PORTA TESTINE FILETTATE - EXTENSIONS FOR SCREWED MILLING CUTTERS

Cod.	TYPE	H	M	d	A	D	L
D12.65.M5CPY	D.12 L65 M5 CPY	20	M5	5,5	10	12	65
D20.75.M6CPY	D.20 L75 M6 CPY	25	M6	6,5	10	20	75
D20.100.M6CPY	D.20 L100 M6 CPY	50	M6	6,5	10	20	100
D20.125.M6CPY	D.20 L125 M6 CPY	75	M6	6,5	10	20	125
D16.88.M8CPY	D.16 L88 M8 CPY	40	M8	8,5	12,8	16	88
D20.75.M8CPY	D.20 L75 M8 CPY	25	M8	8,5	12,8	20	75
D20.100.M8CPY	D.20 L100 M8 CPY	50	M8	8,5	12,8	20	100
D20.125.M8CPY	D.20 L125 M8 CPY	75	M8	8,5	12,8	20	125
D20.150.M8CPY	D.20 L150 M8 CPY	100	M8	8,5	12,8	20	150
D20.75.M10CPY	D.20 L75 M10 CPY	25	M10	10,5	17,8	20	75

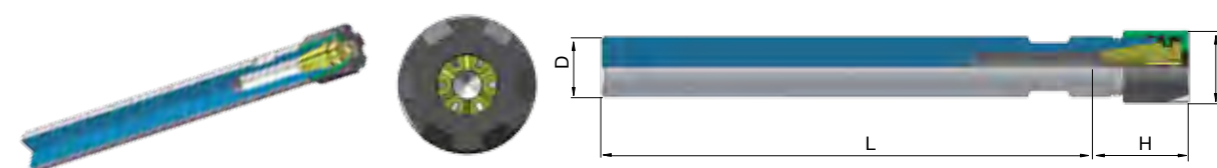
# PORTA PINZA ER DIN6499

## CYLINDRICAL COLLET CHUCKS FOR ER DIN6499



### PORTA TESTINE FILETTATE - EXTENSIONS FOR SCREWED MILLING CUTTERS

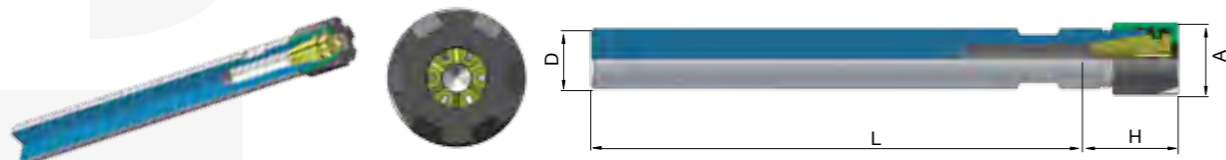
Cod.	TYPE	H	M	d	A	D	L
D20.80.M10CPY	D.20 L80 M10 CPY	25	M10	10,5	17,8	20	80
D20.100.M10CPY	D.20 L100 M10 CPY	50	M10	10,5	17,8	20	100
D20.125.M10CPY	D.20 L125 M10 CPY	75	M10	10,5	17,8	20	125
D20.150.M10CPY	D.20 L150 M10 CPY	100	M10	10,5	17,8	20	150
D25.81.M12CPY	D.25 L81 M12 CPY	25	M12	12,5	20,8	25	81
D25.101.M12CPY	D.25 L101 M12 CPY	50	M12	12,5	20,8	25	101
D25.131.M12CPY	D.25 L131 M12 CPY	75	M12	12,5	20,8	25	131
D25.170.M12CPY	D.25 L170 M12 CPY	100	M12	12,5	20,8	25	170
D25.181.M12CPY	D.25 L181 M12 CPY	125	M12	12,5	20,8	25	181
D32.170.M12CPY	D.32 L170 M12 CPY	100	M12	17	28,8	32	170
D32.85.M16CPY	D.32 L85 M16 CPY	25	M16	17	28,8	32	85
D32.105.M16CPY	D.32 L105 M16 CPY	50	M16	17	28,8	32	105
D32.135.M16CPY	D.32 L135 M16 CPY	75	M16	17	28,8	32	135
D32.185.M16CPY	D.32 L185 M16 CPY	125	M16	17	28,8	32	185



### PORTAPINZE CILINDRICI PER ER MINI - CYLINDRICAL COLLETS CHUCK ER MINI

Cod.	TYPE	TOOL DIA.	H	A	D	L
D5.30.ER8M	D. 5 L30 ERX8M	1 ÷ 5 mm	25	12	5	30
D5.45.ER8M	D. 5 L45 ERX8M	1 ÷ 5 mm	25	12	5	45
D6.30.ER8M	D. 6 L30 ERX8M	1 ÷ 5 mm	25	12	6	30
D6.45.ER8M	D. 6 L45 ERX8M	1 ÷ 5 mm	25	12	6	45
D7.45.ER8M	D. 7 L45 ERX8M	1 ÷ 5 mm	25	12	7	45
D8.55.ER8M	D. 8 L55 ERX8M	1 ÷ 5 mm	25	12	8	55
D8.80.ER8M	D. 8 L80 ERX8M	1 ÷ 5 mm	25	12	8	80
D8.100.ER8M	D. 8 L100 ERX8M	1 ÷ 5 mm	25	12	8	100





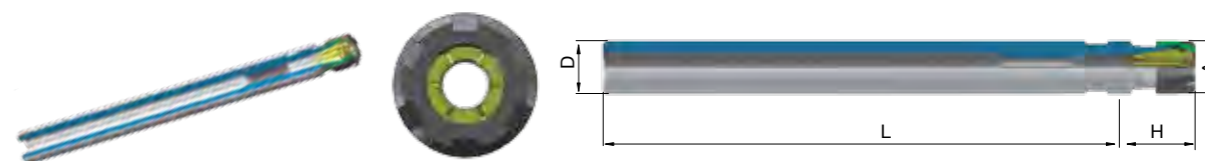
**PORTAPINZE CILINDRICI PER ER MINI - CYLINDRICAL COLLETS CHUCK ER MINI**

Cod.	TYPE	TOOL DIA.	H	A	D	L
D8.130.ER8M	D. 8 L130 ERX8M	1 ÷ 5 mm	25	12	8	130
D10.80.ER8M	D.10 L80 ERX8M	1 ÷ 5 mm	25	12	10	80
D10.100.ER8M	D.10 L100 ERX8M	1 ÷ 5 mm	19	12	10	100
D12.80.ER8M	D.12 L80 ERX8M	1 ÷ 5 mm	19	12	12	80
D12.100.ER8M	D.12 L100 ERX8M	1 ÷ 5 mm	19	12	12	100
D12.130.ER8M	D.12 L130 ERX8M	1 ÷ 5 mm	19	12	12	130
D12.160.ER8M	D.12 L160 ERX8M	1 ÷ 5 mm	19	12	12	160
D12.200.ER8M	D.12 L200 ERX8M	1 ÷ 5 mm	19	12	12	200



**CASSETTA CON MANDRINO CILINDRICO - KIT**

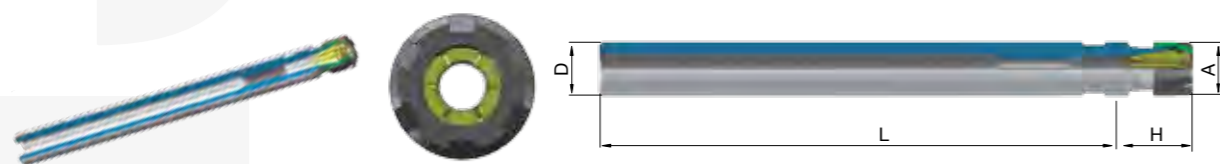
Cod.	Type Mandr.	Collets in Kit - 9 Pcs
B-MND0108-9	D.12 L100 ERX8M	1 ÷ 5 x 0,5 mm
B-MND0271-9	D.12 L130 ERX8M	1 ÷ 5 x 0,5 mm
B-MND0272-9	D.12 L160 ERX8M	1 ÷ 5 x 0,5 mm
B-MND0273-9	D.12 L200 ERX8M	1 ÷ 5 x 0,5 mm



**PORTAPINZE CILINDRICI PER ER MINI - CYLINDRICAL COLLETS CHUCK ER MINI**

Cod.	TYPE	TOOL DIA.	H	A	D	L
D6.45.ER11M	D. 6 L45 ERX11M	1 ÷ 7 mm	37	16	6	45
D7.45.ER11M	D. 7 L45 ERX11M	1 ÷ 7 mm	37	16	7	45
D8.55.ER11M	D. 8 L55 ERX11M	1 ÷ 7 mm	26	16	8	55
D10.60.ER11M	D.10 L60 ERX11M	1 ÷ 7 mm	26	16	10	60
D10.100.ER11M	D.10 L100 ERX11M	1 ÷ 7 mm	26	16	10	100
D12.70.ER11M	D.12 L70 ERX11M	1 ÷ 7 mm	26	16	12	70
D12.100.ER11M	D.12 L100 ERX11M	1 ÷ 7 mm	26	16	12	100
D12.140.ER11M	D.12 L140 ERX11M	1 ÷ 7 mm	26	16	12	140
D16.40.ER11M	D.16 L40 ERX11M	1 ÷ 7 mm	19	16	16	40
D16.60.ER11M	D.16 L60 ERX11M	1 ÷ 7 mm	19	16	16	60
D16.100.ER11M	D.16 L100 ERX11M	1 ÷ 7 mm	19	16	16	100
D16.130.ER11M	D.16 L130 ERX11M	1 ÷ 7 mm	19	16	16	130
D16.160.ER11M	D.16 L160 ERX11M	1 ÷ 7 mm	19	16	16	160
D.16.200.ER11M	D.16 L200 ERX11M	1 ÷ 7 mm	19	16	16	200
D.16.250.ER11M	D.16 L250 ERX11M	1 ÷ 7 mm	19	16	16	250
D16.300.ER11M	D.16 L300 ERX11M	1 ÷ 7 mm	19	16	16	300
D20.70.ER11M	D.20 L70 ERX11M	1 ÷ 7 mm	19	16	20	70
D20.100.ER11M	D.20 L100 ERX11M	1 ÷ 7 mm	19	16	20	100
D20.130.ER11M	D.20 L130 ERX11M	1 ÷ 7 mm	19	16	20	130
D20.160.ER11M	D.20 L160 ERX11M	1 ÷ 7 mm	19	16	20	160
D25.100.ER11M	D.25 L100 ERX11M	1 ÷ 7 mm	19	16	25	100
D25.160.ER11M	D.25 L160 ERX11M	1 ÷ 7 mm	19	16	25	160

FORNIBILI ANCHE CON PIANO  
ALSO AVAILABLE WITH FLAT



**PORTAPINZE CILINDRICI PER ER MINI - CYLINDRICAL COLLETS CHUCK ER MINI**

Cod.	TYPE	TOOL DIA.	H	A	D	L
MND1911	D.5/8" L2.5 ERX11M	1 ÷ 7 mm	.75	.629	5/8"	2.5
MND1448	D.5/8" L4.00 ERX11M	1 ÷ 7 mm	.75	.629	5/8"	4.00
MND0151	D.5/8" L5.11 ERX11M	1 ÷ 7 mm	.75	.629	5/8"	5.11
MND1463	D.3/4" L2.50 ERX11M	1 ÷ 7 mm	.75	.629	3/4"	2.50
MND1464	D.3/4" L3.93 ERX11M	1 ÷ 7 mm	.75	.629	3/4"	3.93
MND1465	D.3/4" L5.11 ERX11M	1 ÷ 7 mm	.75	.629	3/4"	5.11
MND1466	D.3/4" L6.30 ERX11M	1 ÷ 7 mm	.75	.629	3/4"	6.30

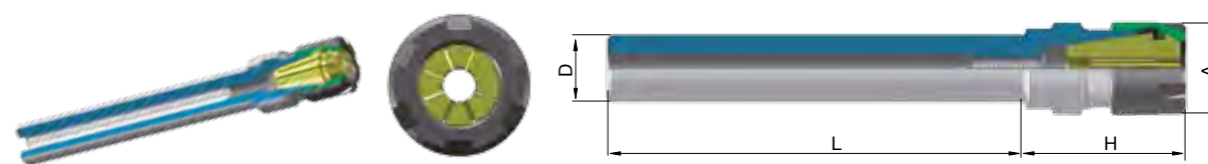
FORNIBILI ANCHE CON PIANO  
ALSO AVAILABLE WITH FLAT



**CASSETTA CON MANDRINO CILINDRICO - KIT**

Cod.	Type Mandr.	Collets in Kit - 13 Pcs
B-MND0056-13	D.12 L100 ERX11M	D1 ÷ 7 x 0,5 mm
B-MND0012-13	D.16 L100 ERX11M	D1 ÷ 7 x 0,5 mm
B-MND0060-13	D.16 L130 ERX11M	D1 ÷ 7 x 0,5 mm
B-MND0005-13	D.16 L160 ERX11M	D1 ÷ 7 x 0,5 mm
B-MND0004-13	D.20 L100 ERX11M	D1 ÷ 7 x 0,5 mm
B-MND1209-13	D.25 L100 ERX11M	D1 ÷ 7 x 0,5 mm
B-MND0156-13	D.1/2" L4.00 ERX11M	D1 ÷ 7 x 0,5 mm
B-MND1448-13	D.5/8" L4.00 ERX11M	D1 ÷ 7 x 0,5 mm
B-MND1253-13	D.5/8" L6.00 ERX11M	D1 ÷ 7 x 0,5 mm

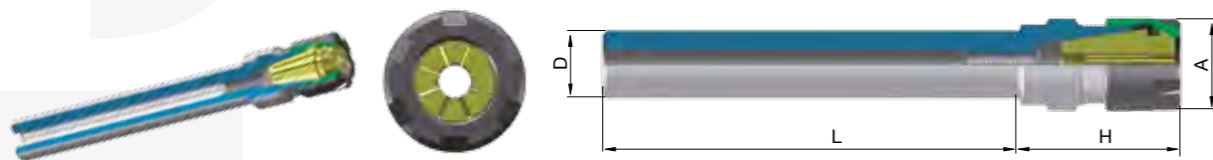
FORNIBILI ANCHE CON PIANO  
ALSO AVAILABLE WITH FLAT



**PORTAPINZE CILINDRICI PER ER MINI - CYLINDRICAL COLLETS CHUCK ER MINI**

Cod.	TYPE	TOOL DIA.	H	A	D	L
D10.80.ER16M	D.10 L80 ERX16M	1 ÷ 10 mm	38	22	10	80
D12.80.ER16M	D.12 L80 ERX16M	1 ÷ 10 mm	38	22	12	80
D16.35.ER16M	D.16 L35 ERX16M	1 ÷ 10 mm	38	22	16	35
D16.80.ER16M	D.16 L80 ERX16M	1 ÷ 10 mm	38	22	16	80
D16.100.ER16M	D.16 L100 ERX16M	1 ÷ 10 mm	38	22	16	100
D16.130.ER16M	D.16 L130 ERX16M	1 ÷ 10 mm	38	22	16	130
D16.160.ER16M	D.16 L160 ERX16M	1 ÷ 10 mm	38	22	16	160
D16.200.ER16M	D.16 L200 ERX16M	1 ÷ 10 mm	38	22	16	200
D20.60.ER16M	D.20 L60 ERX16M	1 ÷ 10 mm	31	22	20	60
D20.100.ER16M	D.20 L100 ERX16M	1 ÷ 10 mm	31	22	20	100
D20.130.ER16M	D.20 L130 ERX16M	1 ÷ 10 mm	31	22	20	130
D20.160.ER16M	D.20 L160 ERX16M	1 ÷ 10 mm	31	22	20	160
D20.200.ER16M	D.20 L200 ERX16M	1 ÷ 10 mm	31	22	20	200
D20.270.ER16M	D.20 L270 ERX16M	1 ÷ 10 mm	31	22	20	270
D20.300.ER16M	D.20 L300 ERX16M	1-10 mm	31	22	20	300
D22.80.ER16M	D.22 L80 ERX16M	1 ÷ 10 mm	28	22	22	80
D25.60.ER16M	D.25 L60 ERX16M	1 ÷ 10 mm	28	22	25	60
D25.100.ER16M	D.25 L100 ERX16M	1 ÷ 10 mm	28	22	25	100
D25.130.ER16M	D.25 L130 ERX16M	1 ÷ 10 mm	28	22	25	130
D25.160.ER16M	D.25 L160 ERX16M	1 ÷ 10 mm	28	22	25	160
D32.90.ER16M	D.32 L90 ERX16M	1 ÷ 10 mm	28	22	32	90

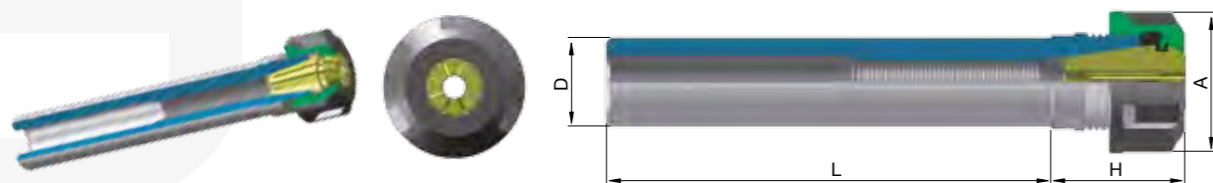
FORNIBILI ANCHE CON PIANO  
ALSO AVAILABLE WITH FLAT



**PORTAPINZE CILINDRICI PER ER MINI - CYLINDRICAL COLLETS CHUCK ER MINI**

Cod.	TYPE	TOOL DIA.	H	A	D	L
MND0013	D1/2" L4.00 ERX16M	1 ÷ 10 mm	1.5	.866	1/2"	4.00
MND1251	D5/8" L3.93 ERX16M	1 ÷ 10 mm	1.5	.866	5/8"	3.93
MND1250	D5/8" L4.84 ERX16M	1 ÷ 10 mm	1.5	.866	5/8"	4.84
MND0031	D5/8" L5.11 ERX16M	1 ÷ 10 mm	1.5	.866	5/8"	5.11
MND1249	D5/8" L7.87 ERX16M	1 ÷ 10 mm	1.5	.866	5/8"	6.29
MND1445	D3/4" L2.50 ERX16M	1 ÷ 10 mm	1.1	.866	3/4"	2.50
MND1443	D3/4" L4.00 ERX16M	1 ÷ 10 mm	1.1	.866	3/4"	4.00
MND4829	D3/4" L5.11 ERX16M	1 ÷ 10 mm	1.1	.866	3/4"	5.11
MND0155	D3/4" L6.29 ERX16M	1 ÷ 10 mm	1.1	.866	3/4"	6.29
MND0084	D1" L2.36 ERX16M	1 ÷ 10 mm	1.1	.866	1"	2.36
MND0087	D1" L6.29 ERX16M	1 ÷ 10 mm	1.1	.866	1"	6.29

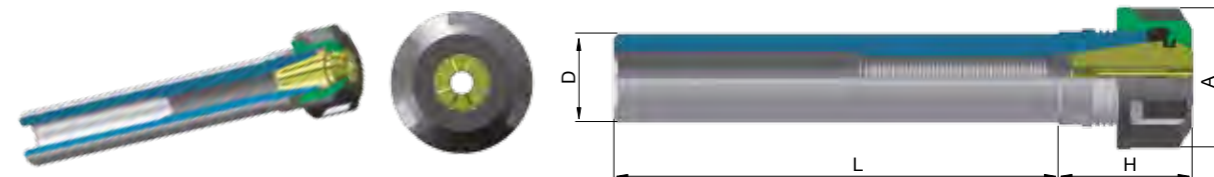
FORNIBILI ANCHE CON PIANO  
ALSO AVAILABLE WITH FLAT



**PORTAPINZE CILINDRICI PER ER MINI - CYLINDRICAL COLLETS CHUCK ER**

Cod.	TYPE	TOOL DIA.	H	A	D	L
D16.35.ER16	D.16 L35 ERX16	1 ÷ 10 mm	38	32	16	35
D16.60.ER16	D.16 L60 ERX16	1 ÷ 10 mm	38	32	16	60
D16.160.ER16	D.16 L160 ERX16	1 ÷ 10 mm	38	32	16	160
D20.50.ER16	D.20 L50 ERX16	1 ÷ 10 mm	31	32	20	50
D20.60.ER16	D.20 L60 ERX16	1 ÷ 10 mm	31	32	20	60
D20.100.ER16	D.20 L100 ERX16	1 ÷ 10 mm	31	32	20	100
D20.160.ER16	D.20 L160 ERX16	1 ÷ 10 mm	31	32	20	160
D20.200.ER16	D.20 L200 ERX16	1 ÷ 10 mm	31	32	20	200

FORNIBILI ANCHE CON PIANO  
ALSO AVAILABLE WITH FLAT



**PORTAPINZE CILINDRICI PER ER MINI - CYLINDRICAL COLLETS CHUCK ER**

Cod.	TYPE	TOOL DIA.	H	A	D	L
MND4830	D1/2" L2.36 ERX16	1 ÷ 10 mm	1.1	1.10	3/4"	2.36
MND4831	D3/4" L1.80 ERX16	1 ÷ 10 mm	1.1	1.10	3/4"	1.80
MND1445	D3/4" L2.50 ERX16	1 ÷ 10 mm	1.1	1.10	3/4"	2.50
MND1247	D3/4" L4.00 ERX16	1 ÷ 10 mm	1.1	1.10	3/4"	4.00
MND1203	D3/4" L6.00 ERX16	1 ÷ 10 mm	1.1	1.10	3/4"	6.00
MND0084	D1" L2.36 ERX16	1 ÷ 10 mm	1.1	1.10	1"	2.36
MND0086	D1" L5.11 ERX16	1 ÷ 10 mm	1.1	1.10	1"	5.11

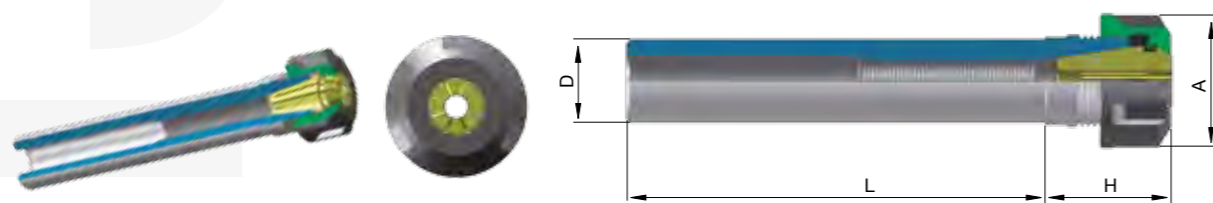
FORNIBILI ANCHE CON PIANO  
ALSO AVAILABLE WITH FLAT



**CASSETTA CON MANDRINO CILINDRICO - KIT**

Cod.	Type Mandr.	Collets in Kit - 10 Pcs
B-MND0007-10	D.12 L80 ERX16M	D1 ÷ 10 x 1,0 mm
B-MND0077-10	D.16 L100 ERX16M	D1 ÷ 10 x 1,0 mm
B-MND0078-10	D.16 L130 ERX16M	D1 ÷ 10 x 1,0 mm
B-MND0079-10	D.16 L160 ERX16M	D1 ÷ 10 x 1,0 mm
B-MND0080-10	D.16 L200 ERX16M	D1 ÷ 10 x 1,0 mm
B-MND0017-10	D.20 L100 ERX16M	D1 ÷ 10 x 1,0 mm
B-MND0082-10	D.20 L130 ERX16M	D1 ÷ 10 x 1,0 mm
B-MND0115-10	D.20 L160 ERX16M	D1 ÷ 10 x 1,0 mm
B-MND0083-10	D.20 L200 ERX16M	D1 ÷ 10 x 1,0 mm
B-MND0632-10	D.25 L100 ERX16M	D1 ÷ 10 x 1,0 mm
B-MND0633-10	D.25 L130 ERX16M	D1 ÷ 10 x 1,0 mm
B-MND0318-10	D.25 L160 ERX16M	D1 ÷ 10 x 1,0 mm
B-MND0031-10	D5/8" L5.11 ERX16M	D1 ÷ 10 x 1,0 mm
B-MND1443-10	D3/4" L4.00 ERX16M	D1 ÷ 10 x 1,0 mm
B-MND0155-10	D3/4" L6.29 ERX16M	D1 ÷ 10 x 1,0 mm

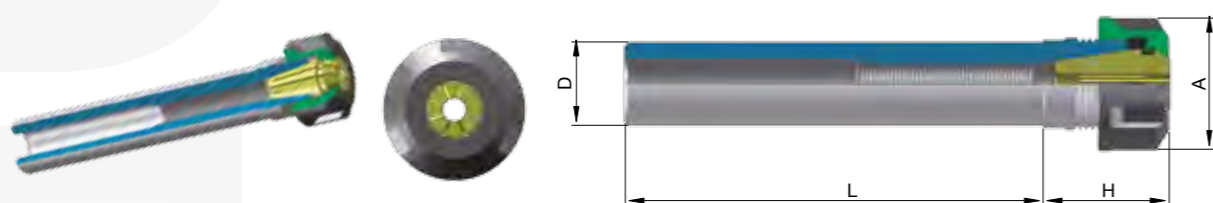
FORNIBILI ANCHE CON PIANO  
ALSO AVAILABLE WITH FLAT



**PORTAPINZE CILINDRICI PER ER - CYLINDRICAL COLLETS CHUCK ER MINI**

Cod.	TYPE	TOOL DIA.	H	A	D	L
D16.100.ER20M	D.16 L100 ERX20M	1 ÷ 13 mm	42	28	16	100
D16.130.ER20M	D.16 L130 ERX20M	1 ÷ 13 mm	42	28	16	130
D16.160.ER20M	D.16 L160 ERX20M	1 ÷ 13 mm	42	28	16	160
D20.46.ER20M	D.20 L46 ERX20M	1 ÷ 13 mm	36	28	20	46
D20.60.ER20M	D.20 L60 ERX20M	1 ÷ 13 mm	36	28	20	60
D20.100.ER20M	D.20 L100 ERX20M	1 ÷ 13 mm	36	28	20	100
D20.130.ER20M	D.20 L130 ERX20M	1 ÷ 13 mm	36	28	20	130
D20.160.ER20M	D.20 L160 ERX20M	1 ÷ 13 mm	36	28	20	160
D20.200.ER20M	D.20 L200 ERX20M	1 ÷ 13 mm	36	28	20	200
D25.60.ER20M	D.25 L60 ERX20M	1 ÷ 13 mm	28	28	25	60
D25.130.ER20M	D.25 L130 ERX20M	1 ÷ 13 mm	28	28	25	130
D25.160.ER20M	D.25 L160 ERX20M	1 ÷ 13 mm	28	28	25	160
D25.240.ER20M	D.25 L240 ERX20M	1 ÷ 13 mm	28	28	25	240
D25.300.ER20M	D.25 L300 ERX20M	1 ÷ 13 mm	28	28	25	300
D32.95.ER20M	D.32 L95 ERX20M	1 ÷ 13 mm	28	28	32	95

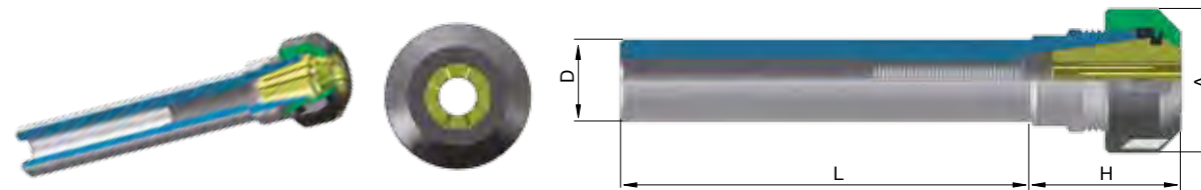
FORNIBILI ANCHE CON PIANO  
ALSO AVAILABLE WITH FLAT



**PORTAPINZE CILINDRICI PER ER - CYLINDRICAL COLLETS CHUCK ER MINI**

Cod.	TYPE	TOOL DIA.	H	A	D	L
MND0152	D3/4" L2.50 ERX20M	1 ÷ 13 mm	1.41	1.10	3/4"	2.50
MND1446	D3/4" L4.00 ERX20M	1 ÷ 13 mm	1.41	1.10	3/4"	4.00
MND0319	D1" L3.93 ERX20M	1 ÷ 13 mm	1.41	1.10	1"	3.39
MND0963	D1" L5.50 ERX20M	1 ÷ 13 mm	1.41	1.10	1"	5.50

FORNIBILI ANCHE CON PIANO  
ALSO AVAILABLE WITH FLAT



**PORTAPINZE CILINDRICI PER ER - CYLINDRICAL COLLETS CHUCK ER**

Cod.	TYPE	TOOL DIA.	H	A	D	L
D20.50.ER20	D.20 L50 ERX20	1 ÷ 13 mm	36	35	20	50
D20.60.ER20	D.20 L60 ERX20	1 ÷ 13 mm	36	35	20	60
D20.100.ER20	D.20 L100 ERX20	1 ÷ 13 mm	36	35	20	100
D20.130.ER20	D.20 L130 ERX20	1 ÷ 13 mm	36	35	20	130
D20.160.ER20	D.20 L160 ERX20	1 ÷ 13 mm	36	35	20	160
D20.200.ER20	D.20 L200 ERX20	1 ÷ 13 mm	36	35	20	200
D25.100.ER20	D.25 L100 ERX20	1 ÷ 13 mm	28	35	25	100

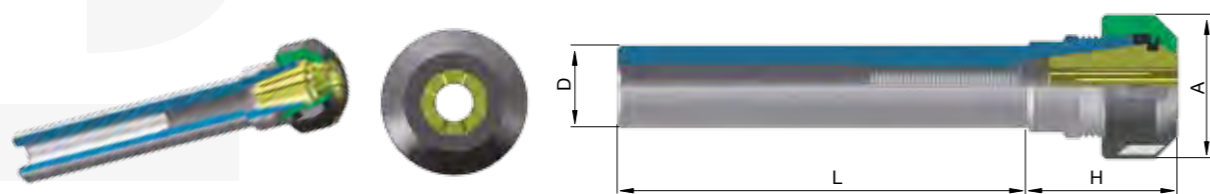
FORNIBILI ANCHE CON PIANO  
ALSO AVAILABLE WITH FLAT

**CASSETTA CON MANDRINO CILINDRICO - KIT**



Cod.	Type Mandr.	Collets in Kit - 12 Pcs
B-MND0089-12	D.20 L100 ERX20M	D2 ÷ 13 x 1,0 mm
B-MND0090-12	D.20 L130 ERX20M	D2 ÷ 13 x 1,0 mm
B-MND0091-12	D.20 L160 ERX20M	D2 ÷ 13 x 1,0 mm
B-MND0092-12	D.20 L200 ERX20M	D2 ÷ 13 x 1,0 mm
B-MND0152-12	D3/4 L2.50 ERX20M	D2 ÷ 13 x 1,0 mm
B-MND1446-12	D3/4 L4.00 ERX20M	D2 ÷ 13 x 1,0 mm
B-MND0849-12	D3/4 L6.00 ERX20M	D2 ÷ 13 x 1,0 mm

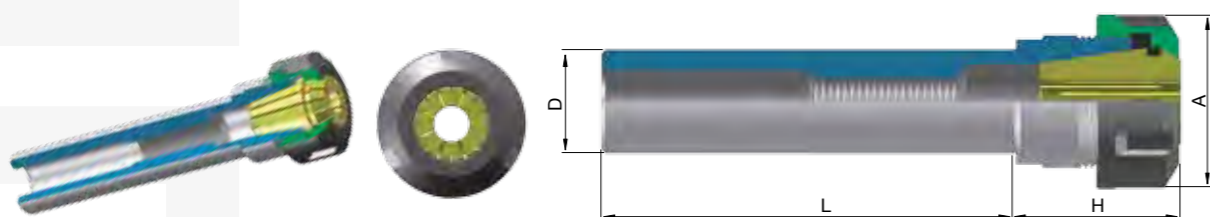




**PORTAPINZE CILINDRICI PER ER - CYLINDRICAL COLLETS CHUCK ER**

Cod.	TYPE	TOOL DIA.	H	A	D	L
MND1469	D3/4" L2.50 ERX20	1 ÷ 13 mm	1.41	1.33	3/4"	2.50
MND1470	D3/4" L3.93 ERX20	1 ÷ 13 mm	1.41	1.33	3/4"	3.93
MND1471	D3/4" L4.00 ERX20	1 ÷ 13 mm	1.41	1.33	3/4"	6.00
MND4832	D1" L1.96 ERX20	1 ÷ 13 mm	1.41	1.33	1"	1.96
MND4833	D1" L4.00 ERX20	1 ÷ 13 mm	1.41	1.33	1"	4.00
MND4834	D1" L5.11 ERX20	1 ÷ 13 mm	1.41	1.33	1"	5.11

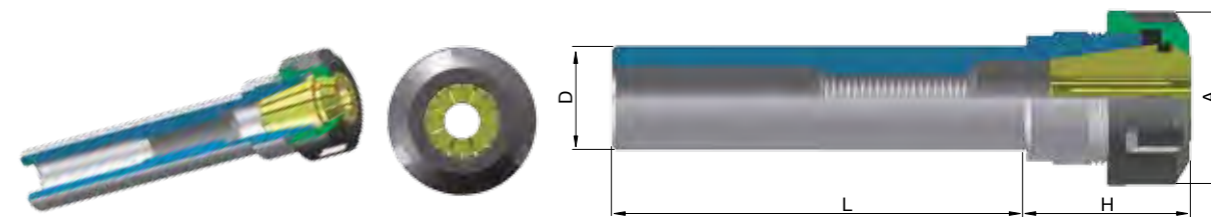
FORNIBILI ANCHE CON PIANO  
ALSO AVAILABLE WITH FLAT



**PORTAPINZE CILINDRICI PER ER - CYLINDRICAL COLLETS CHUCK ER MINI**

Cod.	TYPE	TOOL DIA.	H	A	D	L
D20.46.ER25M	D.20 L46 ERX25M	1 ÷ 16 mm	46	35	20	46
D20.60.ER25M	D.20 L60 ERX25M	1 ÷ 16 mm	46	35	20	60
D20.100.ER25M	D.20 L100 ERX25M	1 ÷ 16 mm	46	35	20	100
D20.130.ER25M	D.20 L130 ERX25M	1 ÷ 16 mm	46	35	20	130
D20.160.ER25M	D.20 L160 ERX25M	1 ÷ 16 mm	46	35	20	160
D20.200.ER25M	D.20 L200 ERX25M	1 ÷ 16 mm	46	35	20	200
D25.70.ER25M	D.25 L70 ERX25M	1 ÷ 16 mm	40	35	25	70
D25.100.ER25M	D.25 L100 ERX25M	1 ÷ 16 mm	40	35	25	100
D25.130.ER25M	D.25 L130 ERX25M	1 ÷ 16 mm	40	35	25	130
D25.160.ER25M	D.25 L160 ERX25M	1 ÷ 16 mm	40	35	25	160
D25.260.ER25M	D.25 L260 ERX25M	1 ÷ 16 mm	40	35	25	260

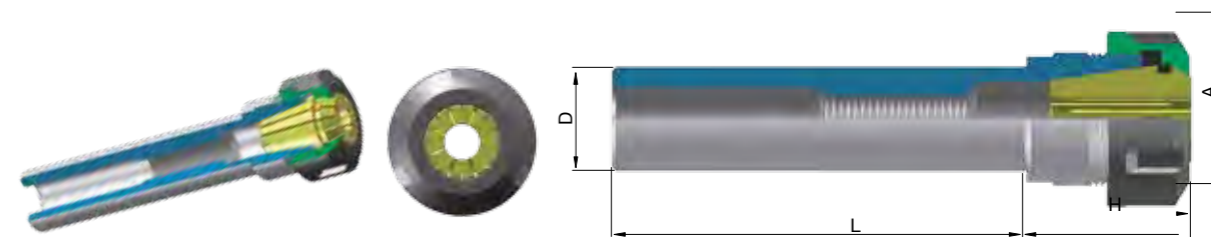
FORNIBILI ANCHE CON PIANO  
ALSO AVAILABLE WITH FLAT



**PORTAPINZE CILINDRICI PER ER - CYLINDRICAL COLLETS CHUCK ER MINI**

Cod.	TYPE	TOOL DIA.	H	A	D	L
MND0126	D 1" L5.11 ERX25M	1 ÷ 16 mm	1.57	1.37	1"	5.11
MND1254	D 1" L6.30 ERX25M	1 ÷ 16 mm	1.57	1.37	1"	6.30

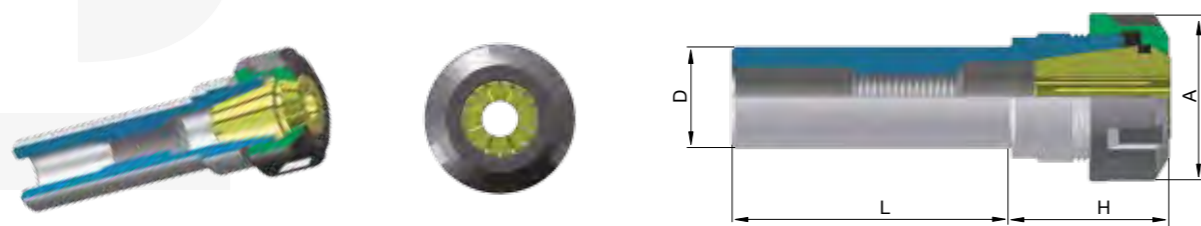
FORNIBILI ANCHE CON PIANO  
ALSO AVAILABLE WITH FLAT



**PORTAPINZE CILINDRICI PER ER - CYLINDRICAL COLLETS CHUCK ER**

Cod.	TYPE	TOOL DIA.	H	A	D	L
D20.50.ER25	D.20 L50 ERX25	1 ÷ 16 mm	46	42	20	50
D20.60.ER25	D.20 L60 ERX25	1 ÷ 16 mm	46	42	20	60
D20.100.ER25	D.20 L100 ERX25	1 ÷ 16 mm	46	42	20	100
D20.130.ER25	D.20 L130 ERX25	1 ÷ 16 mm	46	42	20	130
D20.160.ER25	D.20 L160 ERX25	1 ÷ 16 mm	46	42	20	160
D25.50.ER25	D.25 L50 ERX25	1 ÷ 16 mm	40	42	25	50
D25.70.ER25	D.25 L70 ERX25	1 ÷ 16 mm	40	42	25	70
D25.100.ER25	D.25 L100 ERX25	1 ÷ 16 mm	40	42	25	100
D25.130.ER25	D.25 L130 ERX25	1 ÷ 16 mm	40	42	25	130
D25.160.ER25	D.25 L160 ERX25	1 ÷ 16 mm	40	42	25	160
D32.80.ER25	D.32 L80 ERX25	1 ÷ 16 mm	27	42	32	80
D32.100.ER25	D.32 L100 ERX25	1 ÷ 16 mm	27	42	32	100
D40.80.ER25	D.40 L80 ERX25	1 ÷ 16 mm	27	42	40	80

FORNIBILI ANCHE CON PIANO  
ALSO AVAILABLE WITH FLAT



**PORTAPINZE CILINDRICI PER ER - CYLINDRICAL COLLETS CHUCK ER**

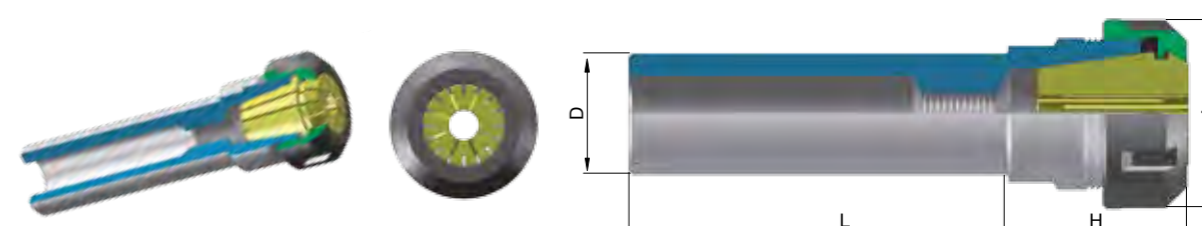
Cod.	TYPE	TOOL DIA.	H	A	D	L
MND1916	D3/4" L2.50 ERX25	1 ÷ 16 mm	1.81	1.65	3/4"	2.50
MND1457	D3/4" L4.00 ERX25	1 ÷ 16 mm	1.81	1.65	3/4"	4.00
MND1245	D1" L2.00 ERX25	1 ÷ 16 mm	1.57	1.65	1"	2.00
MND0359	D1" L3.93 ERX25	1 ÷ 16 mm	1.57	1.65	1"	3.93
MND1244	D1" L5.11 ERX25	1 ÷ 16 mm	1.57	1.65	1"	5.11
MND1917	D1" 1/4" L2.00 ERX25	1 ÷ 16 mm	1.06	1.65	1" 1/4"	2.00
MND1918	D1" 1/2" L3.14 ERX25	1 ÷ 16 mm	1.06	1.65	1" 1/2"	3.14
MND1424	D1" 3/4" L5.11 ERX25	1 ÷ 16 mm	1.06	1.65	1" 3/4"	5.11

FORNIBILI ANCHE CON PIANO  
ALSO AVAILABLE WITH FLAT



**CASSETTA CON MANDRINO CILINDRICO - KIT**

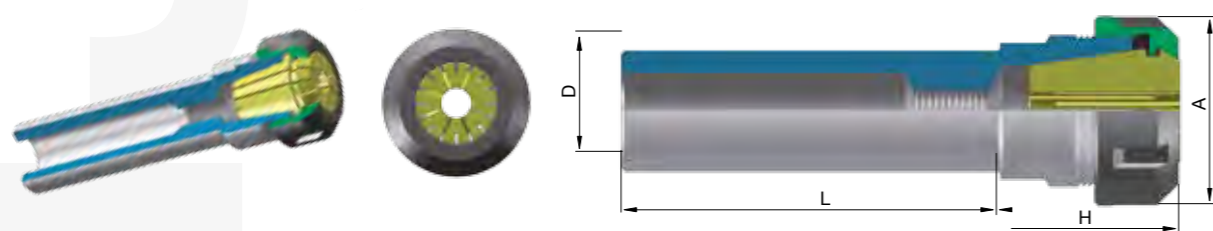
Cod.	Type Mandr.	Collets in Kit - 15 Pcs
B-MND0114-15	D.20 L100 ERX25M	D2 ÷ 16 x 1,0 mm
B-MND0838-15	D.20 L130 ERX25M	D2 ÷ 16 x 1,0 mm
B-MND0358-15	D.20 L160 ERX25M	D2 ÷ 16 x 1,0 mm
B-MND0328-15	D.20 L200 ERX25M	D2 ÷ 16 x 1,0 mm
B-MND0556-15	D.25 L100 ERX25M	D2 ÷ 16 x 1,0 mm
B-MND0125-15	D.25 L160 ERX25M	D2 ÷ 16 x 1,0 mm
B-MND0159-15	D.20 L50 ERX25	D2 ÷ 16 x 1,0 mm
B-MND0634-15	D.25 L100 ERX25	D2 ÷ 16 x 1,0 mm
B-MND0164-15	D.32 L80 ERX25	D2 ÷ 16 x 1,0 mm
B-MND1455-15	D3/4" L2.00 ERX25	D2 ÷ 16 x 1,0 mm
B-MND1457-15	D3/4" L4.00 ERX25	D2 ÷ 16 x 1,0 mm
B-MND1245-15	D1" L2.00 ERX25	D2 ÷ 16 x 1,0 mm



**PORTAPINZE CILINDRICI PER ER - CYLINDRICAL COLLETS CHUCK ER**

Cod.	TYPE	TOOL DIA.	H	A	D	L
D20.50.ER32	D.20 L50 ERX32	2 ÷ 20 mm	53	50	20	50
D20.100.ER32	D.20 L100 ERX32	2 ÷ 20 mm	53	50	20	100
D20.130.ER32	D.20 L130 ERX32	2 ÷ 20 mm	53	50	20	130
D20.160.ER32	D.20 L160 ERX32	2 ÷ 20 mm	53	50	20	160
D25.50.ER32	D.25 L50 ERX32	2 ÷ 20 mm	53	50	25	50
D25.70.ER32	D.25 L70 ERX32	2 ÷ 20 mm	53	50	25	70
D25.100.ER32	D.25 L100 ERX32	2 ÷ 20 mm	53	50	25	100
D25.130.ER32	D.25 L130 ERX32	2 ÷ 20 mm	53	50	25	130
D25.160.ER32	D.25 L160 ERX32	2 ÷ 20 mm	53	50	25	160
D32.50.ER32	D.32 L50 ERX32	2 ÷ 20 mm	48	50	32	50
D32.70.ER32	D.32 L70 ERX32	2 ÷ 20 mm	48	50	32	70
D32.100.ER32	D.32 L100 ERX32	2 ÷ 20 mm	48	50	32	100
D32.130.ER32	D.32 L130 ERX32	2 ÷ 20 mm	48	50	32	130
D32.160.ER32	D.32 L160 ERX32	2 ÷ 20 mm	48	50	32	160
D40.80.ER32	D.40 L80 ERX32	2 ÷ 20 mm	33	50	40	80
D40.130.ER32	D.40 L130 ERX32	2 ÷ 20 mm	33	50	40	130
D40.160.ER32	D.40 L160 ERX32	2 ÷ 20 mm	33	50	40	160
D50.160.ER32	D.50 L160 ERX32	2 ÷ 20 mm	33	50	50	160
D60.160.ER32	D.60 L160 ERX32	2 ÷ 20 mm	33	50	60	160

FORNIBILI ANCHE CON PIANO  
ALSO AVAILABLE WITH FLAT



**PORTAPINZE CILINDRICI PER ER - CYLINDRICAL COLLETS CHUCK ER**

Cod.	TYPE	TOOL DIA.	H	A	D	L
MND0786	D3/4 L2.12 ERX32	2 ÷ 20 mm	2.08	1.96	3/4	2.12
MND0787	D1" L2.00 ERX32	2 ÷ 20 mm	2.08	1.96	1"	2.00
MND1240	D1" L3.93 ERX32	2 ÷ 20 mm	2.08	1.96	1"	3.93
MND1241	D1" L5.11 ERX32	2 ÷ 20 mm	2.08	1.96	1"	5.11
MND1242	D1" L6.30 ERX32	2 ÷ 20 mm	2.08	1.96	1"	6.30
MND1472	D1" 1/4" L2.35 ERX32	2 ÷ 20 mm	1.85	1.96	1" 1/4"	2.35
MND1919	D1" 1/2" L3.14 ERX32	2 ÷ 20 mm	1.30	1.96	1" 1/2"	3.14
MND1921	D1" 3/4" L3.14 ERX32	2 ÷ 20 mm	1.30	1.96	1" 3/4"	3.14
MND1922	D1" 3/4" L5.11 ERX32	2 ÷ 20 mm	1.30	1.96	1" 3/4"	5.11
MND1450	D2" L3.14 ERX32	2 ÷ 20 mm	1.30	1.96	2"	3.14
MND1425	D2" L6.30 ERX32	2 ÷ 20 mm	1.30	1.96	2"	6.30
MND1923	D2" 1/2 L6.30 ERX32	2 ÷ 20 mm	1.30	1.96	2" 1/2"	6.30

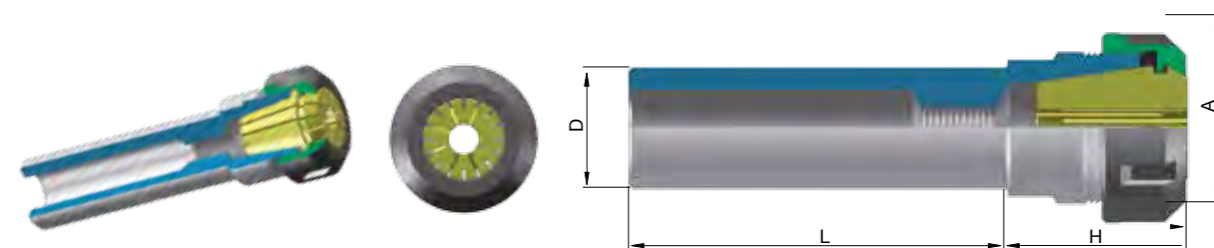
FORNIBILI ANCHE CON PIANO  
ALSO AVAILABLE WITH FLAT



**CASSETTA CON MANDRINO CILINDRICO - KIT**

Cod.	Type Mandr.	Collets in Kit - ERX32
B-MND0593-6	D.20 L50 ERX32	6 pcs.
B-MND0195-6	D.25 L50 ERX32	6 pcs.
B-MND0071-6	D.32 L70 ERX32	6 pcs.
B-MND0593-9	D.20 L50 ERX32	9 pcs.
B-MND0195-9	D.25 L50 ERX32	9 pcs.
B-MND0071-9	D.32 L70 ERX32	9 pcs.
B-MND0593-18	D.20 L50 ERX32	18 pcs.
B-MND0195-18	D.25 L50 ERX32	18 pcs.
B-MND0071-18	D.32 L70 ERX32	18 pcs.
B-MND0786-11	D.3/4" L2.12 ERX32	11 pcs.
B-MND0787-11	D1" L2.00 ERX32	11 pcs.
B-MND1240-11	D1" L3.93 ERX32	11 pcs.
B-MND1472-11	D1" 1/4" L2.35 ERX32	11 pcs.

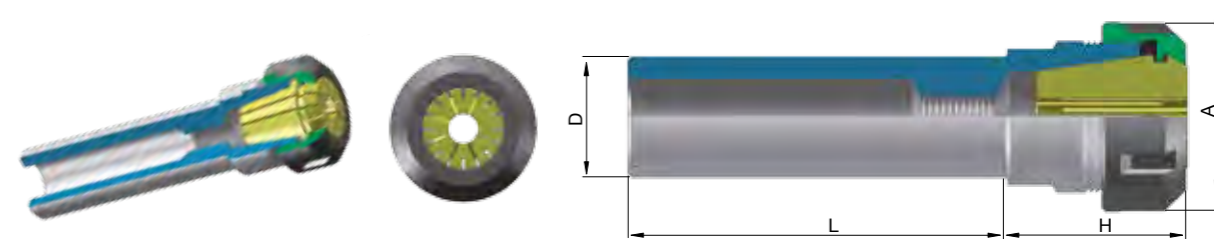
FORNIBILI ANCHE CON PIANO  
ALSO AVAILABLE WITH FLAT



**PORTAPINZE CILINDRICI PER ER - CYLINDRICAL COLLETS CHUCK ER**

Cod.	TYPE	TOOL DIA.	H	A	D	L
D25.60.ER40	D.25 L60 ERX40	3 ÷ 30 mm	60	63	25	60
D25.100.ER40	D.25 L100 ERX40	3 ÷ 30 mm	60	63	25	100
D32.70.ER40	D.32 L70 ERX40	3 ÷ 30 mm	60	63	32	70
D32.100.ER40	D.32 L100 ERX40	3 ÷ 30 mm	60	63	32	100
D32.130.ER40	D.32 L130 ERX40	3 ÷ 30 mm	60	63	32	130
D40.80.ER40	D.40 L80 ERX40	3 ÷ 30 mm	50	63	40	80
D40.130.ER40	D.40 L130 ERX40	3 ÷ 30 mm	50	63	40	130
D40.160.ER40	D.40 L160 ERX40	3 ÷ 30 mm	50	63	40	160
D50.120.ER40	D.50 L120 ERX40	3 ÷ 30 mm	35	63	50	120
D50.160.ER40	D.50 L160 ERX40	3 ÷ 30 mm	35	63	50	160
D60.160.ER40	D.60 L160 ERX40	3 ÷ 30 mm	35	63	60	160

FORNIBILI ANCHE CON PIANO  
ALSO AVAILABLE WITH FLAT



**PORTAPINZE CILINDRICI PER ER - CYLINDRICAL COLLETS CHUCK ER**

Cod.	TYPE	TOOL DIA.	H	A	D	L
MND0825	D.1" L2.36 ERX40	3 ÷ 30 mm	2.36	2.48	1"	2.36
MND1243	D.1" L3.93 ERX40	3 ÷ 30 mm	2.36	2.48	1"	3.93
MND1255	D.1" 1/4" L2.00 ERX40	3 ÷ 30 mm	2.36	2.48	1" 1/4"	2.00
MND0568	D.1" 1/4" L2.36 ERX40	3 ÷ 30 mm	2.36	2.48	1" 1/4"	2.36
MND1252	D.2" L6.30 ERX40	3 ÷ 30 mm	1.37	2.48	2"	6.30
MND1925	D.2" 1/4" L6.30 ERX40	3 ÷ 30 mm	1.37	2.48	2" 1/4"	6.30
MND1926	D.2" 1/2" L6.30 ERX40	3 ÷ 30 mm	1.37	2.48	2" 1/2"	6.30

FORNIBILI ANCHE CON PIANO  
ALSO AVAILABLE WITH FLAT

# PORTA ALESATORI OSCILLANTI

## FLOATING REAMER HOLDERS



### CASSETTA CON MANDRINO CILINDRICO - KIT



Cod.	Type Mandr.	Collets in Kit - ERX40
B-MND0822-7	D.25 L60 ERX40	7 pcs.
B-MND0601-7	D.32 L70 ERX40	7 pcs.
B-MND0247-7	D.40 L80 ERX40	7 pcs.
B-MND0822-13	D.25 L60 ERX40	13 pcs.
B-MND0601-13	D.32 L70 ERX40	13 pcs.
B-MND0247-13	D.40 L80 ERX40	13 pcs.
B-MND0822-23	D.25 L60 ERX40	23 pcs.
B-MND0601-23	D.32 L70 ERX40	23 pcs.
B-MND0247-23	D.40 L80 ERX40	23 pcs.
B-MND0825-15	D.1"L2.36 ERX40	15 pcs.

FORNIBILI ANCHE CON PIANO  
ALSO AVAILABLE WITH FLAT

PORTA ALESATORI OSCILLANTI

FLOATING REAMER HOLDERS



# PORTA ALESATORI OSCILLANTI

## FLOATING REAMER HOLDERS

### CARATTERISTICHE / SPECIFICATION / CARACTÉRISTIQUES/ TECHNISCHE DATEN

#### CARATTERISTICHE TECNICHE

- Costruiti in acciaio certificato in barre
- Eseguiti trattamenti termici da fornitori certificati ISO 9001
- Rettificati di precisione esternamente, internamente e nelle filettature delle ghiera chiudipinza
- Controllati con strumenti di misura certificati
- L'errore di concentricità massimo tra il cono e la sede utensile è 0.003 mm
- Oscillazione radiale 3 mm

#### CARACTÉRISTIQUES

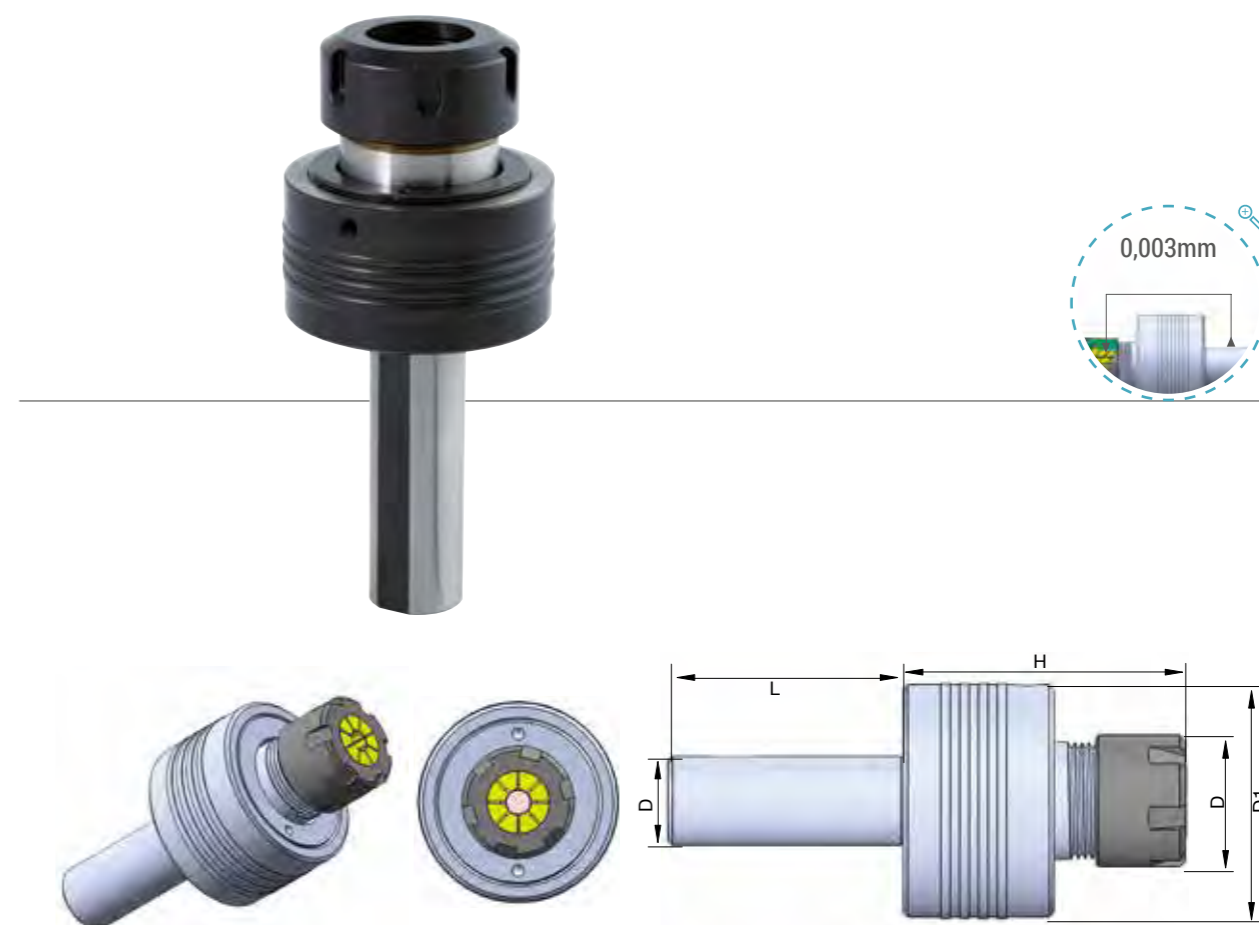
- Fabriqués en bar d'acier certifié.
- Réalisation du traitement thermique par des fournisseurs certifiés ISO 9001.
- Rectification de précision extérieurement, intérieurement et dans les filetages des écrous serre-pince.
- Contrôlés par des instruments de mesure certifiés.
- L'erreur de concentricité maximum entre le cône et le siège de l'outil est de 0.003 mm.
- Oscillation 3mm.

#### TECHNICAL FEATURES

- Manufactured with certificate steel
- Heat treatments are performed by certified suppliers ISO 9001
- Precision ground on shank, inside tapers and collet nut threads
- Tested with high precision inspection and gaging equipment
- The maximum error of concentricity between the cone and the seat of tool is 0.003 mm
- Radial oscillation 3 mm

#### MERKMALE

- Gebaut aus zertifiziertem Stabstahl
- Warmbehandlungen von Lieferanten mit Zeugnis ISO 9001
- Genauigkeitsgeschliffen aussen, innen und in den Gewinden der Spannmutter für den Zangenverschluss
- Geprüft mit zertifizierten Messinstrumente
- Die max konzentrische Abweichung zwischen Konus und Werkzeugsitz ist 0.003 mm
- Fluktuation 3mm



### PORTA ALESATORI OSCILLANTI - FLOATING REAMER HOLDERS

Cod.	TYPE	D	A	H	D1	L
D16.L46.RM11	D16 L46 ER11	16	22	40	42	46
D20.L46.RM11	D20 L46 ER11	20	22	40	42	46
D16.L46.RM16	D16 L46 ER16	16	28	44	42	46
D20.L46.RM16	D20 L46 ER16	20	28	44	42	46
D25.L46.RM16	D25 L46 ER16	25	28	44	42	46
D16.L46.RM20	D16 L46 ER20	16	34	50	50	46
D20.L46.RM20	D20 L46 ER20	20	34	50	50	46
D25.L46.RM20	D25 L46 ER20	25	34	50	50	46
D16.L46.RM25	D16 L46 ER25	16	42	53	57	46

SU RICHIESTA FORNIBILI ANCHE CON LUNGHEZZA 100 MM  
ON REQUEST ALSO AVAILABLE WITH L. 100 MM

# TCL-ISO30 PER LEGNO E ALLUMINIO

TCL-ISO30 FOR WOOD AND ALUWORKING



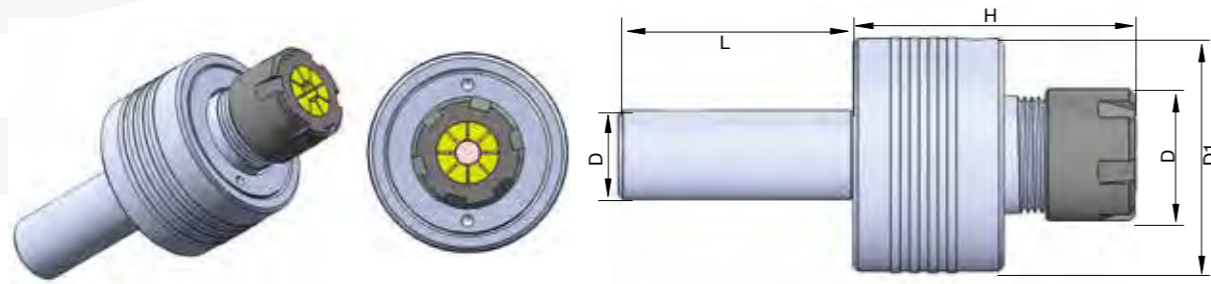
**PORTAPINZA ER DIN6499**  
COLLET CHUCK FOR ER DIN6499



**ALBERATI**  
CUTTER ARBORS TCL



**FLANGIA DENTATA (SCM)**  
WITH TOOTHED FLANGE



## PORTA ALESATORI OSCILLANTI - FLOATING REAMER HOLDERS

Cod.	TYPE	D	A	H	D1	L
D20.L46.RM25	D20 L46 ER25	20	42	53	57	46
D25.L46.RM25	D25 L46 ER25	25	42	53	57	46
D25.L50.RM32	D25 L50 ER32	25	50	58	69	50
D32.L50.RM32	D32 L50 ER32	32	50	58	69	50
D25.L50.RM40	D25 L50 ER40	25	63	64	79	50
D32.L50.RM40	D32 L50 ER40	32	63	64	79	50

SU RICHIESTA FORNIBILI ANCHE CON LUNGHEZZA 100 MM  
ON REQUEST ALSO AVAILABLE WITH L. 100 MM

## CARATTERISTICHE / SPECIFICATION / CARACTÉRISTIQUES/ TECHNISCHE DATEN

### CARATTERISTICHE TECNICHE

- Costruiti in acciaio certificato in barre.
- Eseguiti trattamenti termici da fornitori certificati ISO 9001.
- Rettificati di precisione esternamente, internamente e nelle filettature delle ghiera chiudipinza.
- Controllati con strumenti di misura certificati.
- La tolleranza di precisione dei coni ISO è AT2.
- L'errore di concentricità massimo tra il cono e la sede utensile è di 0.003mm.

### TECHNICAL FEATURES

- Manufactured with certificate steel.
- Heat treatments are performed by certified suppliers ISO 9001.
- Precision ground on shanks, inside tapers and collet nut threads.
- Tested with high precision inspection and gaging equipment.
- Taper accuracy of ISO SHANKS lower than AT2.
- The maximum error of concentricity between the cone and the seat of tool is 0.003mm.

### CARACTÉRISTIQUES

- Fabriqués en bar d'acier certifié.
- Réalisation du traitement thermique par des fournisseurs certifiés ISO 9001.
- Rectification de précision extérieurement, intérieurement et dans les filetages des écrous serre-pince.
- Contrôlés par des instruments de mesure certifiés.
- La tolérance de précision des cônes ISO est AT2.
- L'erreur de concentricité maximum entre le cône et le siège de l'outil est de 0.003 mm.

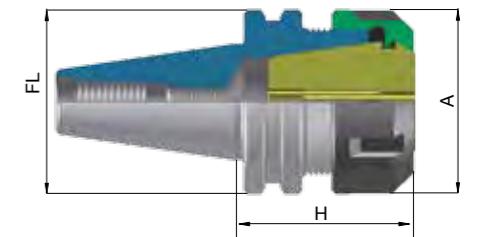
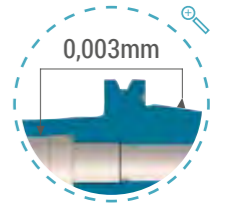
### MERKMALE

- Gebaut aus zertifiziertem Stabstahl
- Warmbehandlungen von Lieferanten mit Zeugnis ISO 9001
- Genauigkeitgeschliffen aussen, innen und in den Gewinden der Spannmutter für den Zangenverschluss
- Geprüft mit zertifizierten Messinstrumente
- Die Präzisionstoleranz der Konen ISO ist AT2
- Die max konzentrische Abweichung zwischen Konus und Werkzeugsitz ist 0.003 mm



# PORTA PINZA ER DIN6499

## COLLET CHUCK ISO30 FOR ER DIN6499

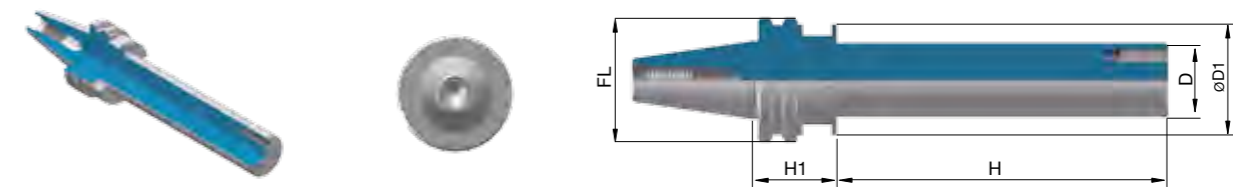


### PORTAPINZA TCL30 FL50 - COLLET CHUCKS TCL30 FL50

Cod.	TYPE	AT2 G6.3/24000		
		H	FL	A
TCL.30.50.FL50.ER16	TCL30 H50 FL50 ERX16 DX	50	50	32
TCL.30.50.FL50.ER32.DX	TCL30 H50 FL50 ERX32 DX	50	50	50
TCL.30.50.FL50.ER32.SX	TCL30 H50 FL50 ERX32 SX	50	50	50
TCL.30.67.FL50.ER32.DX	TCL30 H67 FL50 ERX32 DX	67	50	50
TCL.30.67.FL50.ER32.SX	TCL30 H67 FL50 ERX32 SX	67	50	50
TCL.30.57.FL50.ER40.DX	TCL30 H57 FL50 ERX40 DX	57	50	63
TCL.30.57.FL50.ER40.SX	TCL30 H57 FL50 ERX40 SX	57	50	63
TCL.30.65.FL50.ER40.DX	TCL30 H65 FL50 ERX40 DX	65	50	63
TCL.30.65.FL50.ER40.SX	TCL30 H65 FL50 ERX40 SX	65	50	63
TCL.30.70.FL50.EOC25.DX	TCL30 H70 FL50 EOC25 DX	70	50	60
TCL.30.80.FL50.EOC25.DX	TCL30 H80 FL50 EOC25 DX	80	50	60
TCL.30.80.FL50.EOC25.SX	TCL30 H80 FL50 EOC25 SX	80	50	60

# ALBERATI

## CUTTER ARBORS TCL



### ALBERO PORTAFRESE TCL30 FL50 - CUTTER ARBORS TCL30 FL50

Cod.	TYPE	FL	H1	D	H	D1	AT2	
							G6.3/24000	
TCL.30.30X80.FL50.35	TCL30 D30x 80 FL.50 A=35	50	35	30	80	45		
TCL.30.30X100.FL50.35	TCL30 D30x 100 FL.50 A=35	50	35	30	100	45		
TCL.30.30X150.FL50.35	TCL30 D30x 150 FL.50 A=35	50	35	30	150	45		
TCL.30.30X200.FL50.35	TCL30 D30x 200 FL.50 A=35	50	35	30	200	45		
TCL.30.35X80.FL50.35	TCL30 D35x 80 FL.50 A=35	50	35	35	80	48		
TCL.30.35X100.FL50.35	TCL30 D35x 100 FL.50 A=35	50	35	35	100	48		
TCL.30.35X150.FL50.35	TCL30 D35x 150 FL.50 A=35	50	35	35	150	48		
TCL.30.35X200.FL50.35	TCL30 D35x 200 FL.50 A=35	50	35	35	200	48		



### PORTAPINZA TCL30 FL58 - COLLET CHUCKS TCL30 FL58

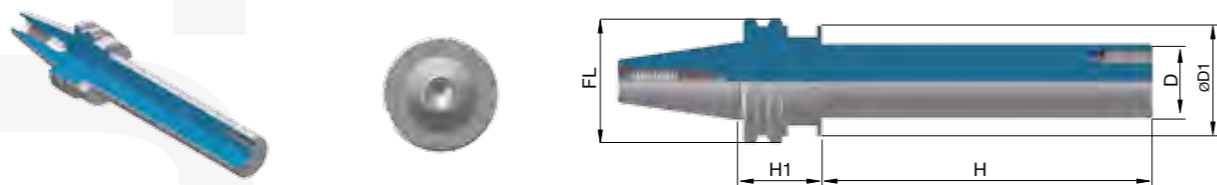
Cod.	TYPE	H	FL	A	AT2	
					G6.3/24000	
TCL.30.50.FL58.ER32.DX	TCL30 H50 FL58 ERX32 DX	50	58	50		
TCL.30.50.FL58.ER32.SX	TCL30 H50 FL58 ERX32 SX	50	58	50		
TCL.30.57.FL58.ER40.DX	TCL30 H57 FL58 ERX40 DX	57	58	63		
TCL.30.57.FL58.ER40.SX	TCL30 H57 FL58 ERX40 SX	57	58	63		



### PORTAPINZA TCL30 FL46 - COLLET CHUCKS TCL30 FL46

Cod.	TYPE	H	FL	A	AT2	
					G6.3/24000	
TCL.30.60.FL46.ER32.DX	TCL30 H60 FL46 ERX32 DX	60	46	50		
TCL.30.60.FL46.ER32.SX	TCL30 H60 FL46 ERX32 SX	60	46	50		
TCL.30.65.FL46.ER40.DX	TCL30 H65 FL46 ERX40 DX	65	46	63		
TCL.30.65.FL46.ER40.SX	TCL30 H65 FL46 ERX40 SX	65	46	63		
TCL.30.80.FL46.EOC25.DX	TCL30 H80 FL46 EOC 25 DX	80	46	60		
TCL.30.80.FL46.EOC25.SX	TCL30 H80 FL46 EOC 25 SX	80	46	60		

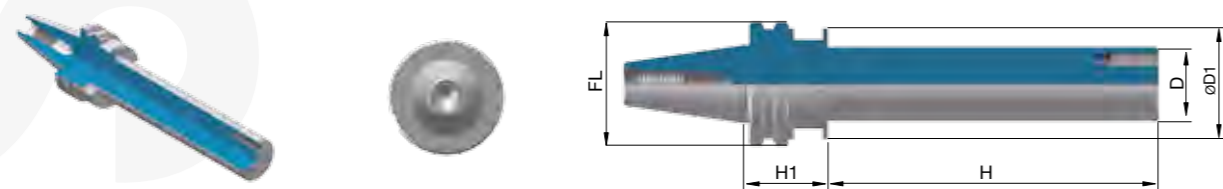




### ALBERO PORTAFRESE TCL30 FL46 - CUTTER ARBORS TCL30 FL46

AT2 G6.3/24000

Cod.	TYPE	FL	H1	D	H	D1
TCL.30.30X80.FL46.35	TCL30 D30x 80 FL.46 A=35	46	35	30	80	45
TCL.30.30X100.FL46.35	TCL30 D30x 100 FL.46 A=35	46	35	30	100	45
TCL.30.30X150.FL46.35	TCL30 D30x 150 FL.46 A=35	46	35	30	150	45
TCL.30.30X200.FL46.35	TCL30 D30x 200 FL.46 A=35	46	35	30	200	45
TCL.30.35X80.FL46.35	TCL30 D35x 80 FL.46 A=35	46	35	35	80	50
TCL.30.35X100.FL46.35	TCL30 D35x 100 FL.46 A=35	46	35	35	100	50
TCL.30.35X150.FL46.35	TCL30 D35x 150 FL.46 A=35	46	35	35	150	50
TCL.30.35X200.FL46.35	TCL30 D35x 200 FL.46 A=35	46	35	35	200	50



### ALBERO PORTAFRESE TCL30 FL58 - CUTTER ARBORS TCL30 FL58

AT2 G6.3/24000

Cod.	TYPE	FL	H1	D	H	D1
TCL.30.30X80.FL58.35	TCL30 D30x 80 FL.58 A=35	58	35	30	80	45
TCL.30.30X100.FL58.35	TCL30 D30x 100 FL.58 A=35	58	35	30	100	45
TCL.30.30X150.FL58.35	TCL30 D30x 150 FL.58 A=35	58	35	30	150	45
TCL.30.30X200.FL58.35	TCL30 D30x 200 FL.58 A=35	58	35	30	200	45
TCL.30.35X80.FL58.35	TCL30 D35x 80 FL.58 A=35	58	35	35	80	50
TCL.30.35X100.FL58.35	TCL30 D35x 100 FL.58 A=35	58	35	35	100	50
TCL.30.35X150.FL58.35	TCL30 D35x 150 FL.58 A=35	58	35	35	150	50
TCL.30.35X200.FL58.35	TCL30 D35x 200 FL.58 A=35	58	35	35	200	50

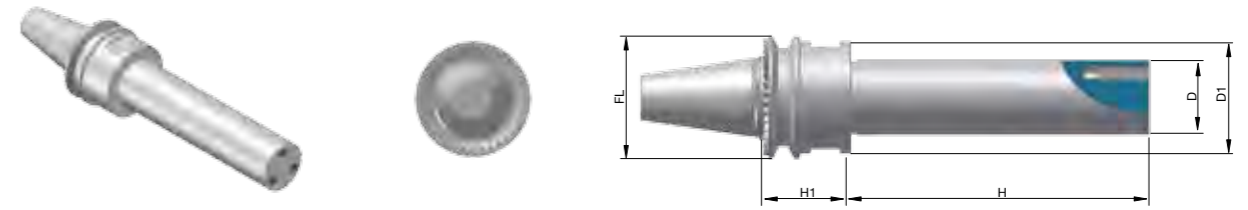
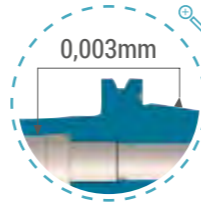
### FLANGIA DI RICAMBIO

Cod.	TYPE	Fig.
FLM.30	FLANGIA DI RICAMBIO MASCHIO D.30	1
FLM.35	FLANGIA DI RICAMBIO MASCHIO D.35	1
FLM.40	FLANGIA DI RICAMBIO MASCHIO D.40T	1
FLF.30	FLANGIA DI RICAMBIO FEMMINA D.30	2
FLF.35	FLANGIA DI RICAMBIO FEMMINA D.35	2
FLF.40	FLANGIA DI RICAMBIO FEMMINA D.40	2



# FLANGIA DENTATA (SCM)

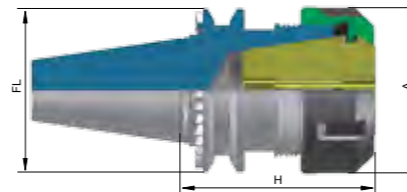
WITH TOOTHED FLANGE



## ALBERO PORTAFRESE TCL30 A=41 SCM - CUTTER ARBORS TCL30 A=41 SCM

AT2 G6.3/20000

Cod.	TYPE	FL	H1	D	H	D1
TCL.30.30X80.41.SCM	TCL30 D30x 80 A=41 SCM	49	41	30	80	45
TCL.30.30X100.41.SCM	TCL30 D30x100 A=41 SCM	49	41	30	100	45
TCL.30.30X150.41.SCM	TCL30 D30x150 A=41 SCM	49	41	30	150	45
TCL.30.30X200.41.SCM	TCL30 D30x200 A=41 SCM	49	41	30	200	45
TCL.30.35X80.41.SCM	TCL30 D35x 80 A=41 SCM	49	41	35	80	50
TCL.30.35X100.41.SCM	TCL30 D35x100 A=41 SCM	49	41	35	100	50
TCL.30.35X150.41.SCM	TCL30 D35x150 A=41 SCM	49	41	35	150	50
TCL.30.35X200.41.SCM	TCL30 D35x200 A=41 SCM	49	41	35	200	50
TCL.30.40X80.41.SCM	TCL30 D40x 80 A=41 SCM	49	41	40	80	53
TCL.30.40X100.41.SCM	TCL30 D40x100 A=41 SCM	49	41	40	100	53
TCL.30.40X150.41.SCM	TCL30 D40x150 A=41 SCM	49	41	40	150	53
TCL.30.40X200.41.SCM	TCL30 D40x200 A=41 SCM	49	41	40	200	53



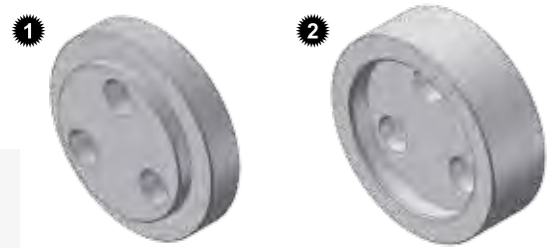
## PORTAPINZA TCL30 FL50 SCM - COLLET CHUCK TCL30 FL50 SCM

AT2 G6.3/20000

Cod.	TYPE	H	FL	A
TCL.30.55.ER32.SCM.DX	TCL30 H55 ERX32 FL.DENTATA DX	55	49	50
TCL.30.55.ER32.SCM.SX	TCL30 H55 ERX32 FL.DENTATA SX	55	49	50
TCL.30.74.ER40.SCM.DX	TCL30 H74 ERX40 FL.DENTATA DX	74	49	63
TCL.30.74.ER40.SCM.SX	TCL30 H74 ERX40 FL.DENTATA SX	74	49	63
TCL.30.70.EOC25.SCM.DX	TCL30 H70 EOC25 FL.DENTATA DX	70	49	60
TCL.30.70.EOC25.SCM.SX	TCL30 H70 EOC25 FL.DENTATA SX	70	49	60

## FLANGIA DI RICAMBIO

		AT2	G6.3/20000
Cod.	TYPE	Fig.	
FLM.30	FLANGIA DI RICAMBIO MASCHIO D.30	1	
FLM.35	FLANGIA DI RICAMBIO MASCHIO D.35	1	
FLM.40	FLANGIA DI RICAMBIO MASCHIO D.40	1	
FLF.30	FLANGIA DI RICAMBIO FEMMINA D.30	2	
FLF.35	FLANGIA DI RICAMBIO FEMMINA D.35	2	
FLF.40	FLANGIA DI RICAMBIO FEMMINA D.40	2	



## SPECIALI SPECIAL

Infine SERINEX ha ampliato la produzione dei suoi mandrini, inserendo nella sua gamma produttiva anche i mandrini specifici per il marmo.

SERINEX a agrandi la production de ses mandrins en insérant aussi dans sa gamme productive les mandrins spécifiques pour le marbre.

Finally, SERINEX has expanded its production of collet chucks, inserting in its products line also specific chucks for marble.

Schließlich SERINEX hat die Produktion erweitert sein Spannfutter, Einsetzen in der Produktkatalog Spannfutter auch für Marmor



[WWW.SERINEX.IT](http://WWW.SERINEX.IT)