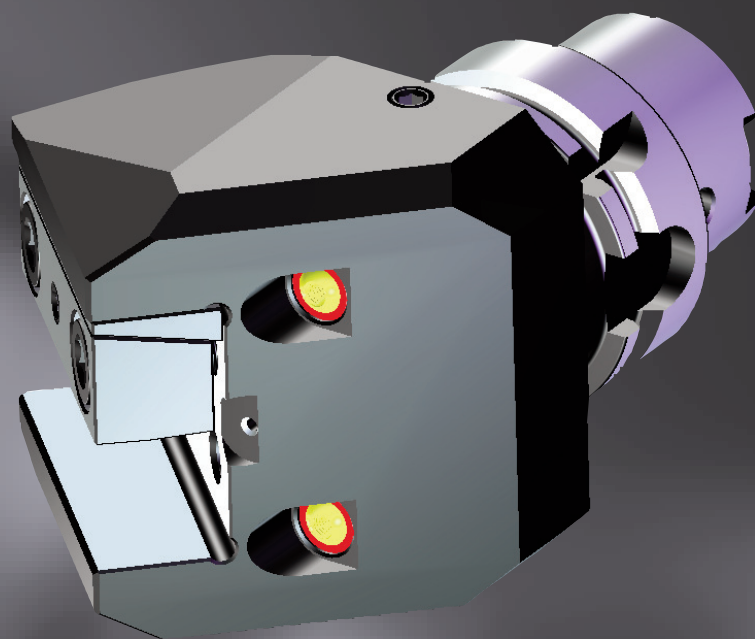


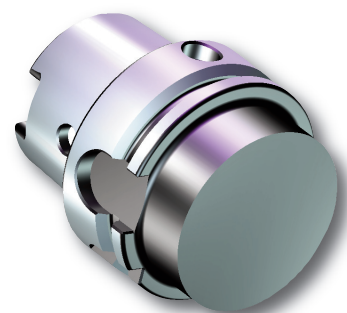
ACCESSORI PER MACCHINE UTENSILI

16. **2013**

PORTAUTENSILI HSK-T-63/100
TOOL HOLDERS HSK-T-63/100

ISO 12164-3:2008

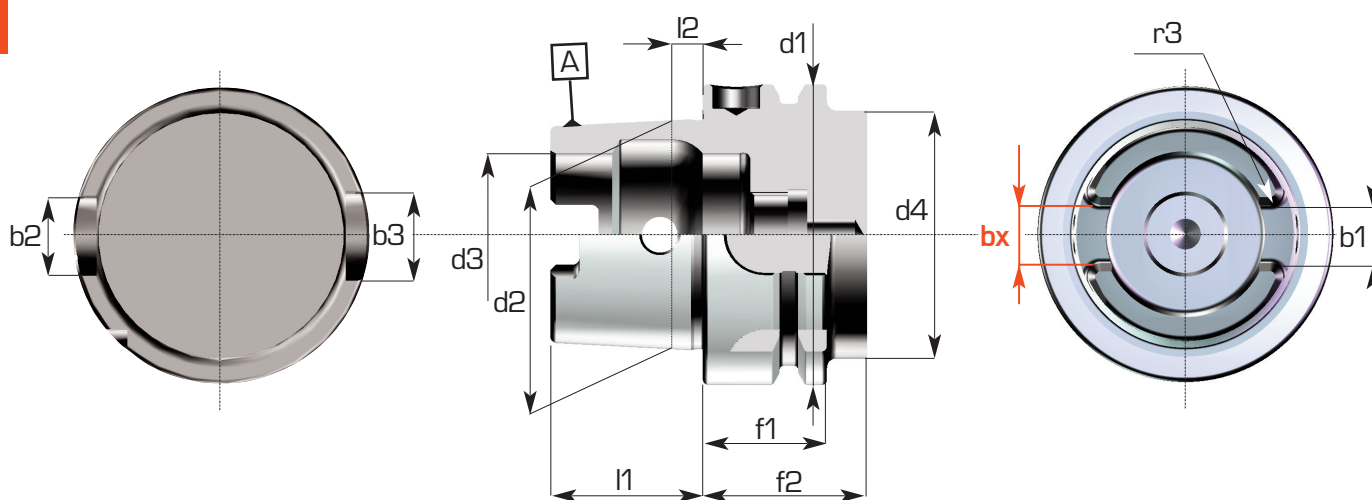




ICTM Standard

Attacchi HSK-T ICTM Standard
ISO 12164-3:2008

16.
2



Riferimento Item	d1	d2	d3	d4 max	l1	l2	r3 +0.05 -0.05	f1	f2 min	bx +0.035 0	b1 +0.04 -0.04	b2	b3
HSKT-63	63	48.010	34	62	32	6.3	2.88	26	30	124.25	12.54	16	18
HSKT-100	100	75.013	53	99	50	10	4.88	29	34	19.91	20.02	20	22

CARATTERISTICHE TECNICHE
DEI MANDRINI HSK

- Costruiti in acciaio da cementazione legato
- Cementati con profondità 0,8-1mm
Temprati • Rinvenuti • Sabbati e bruniti
- Durezza HRC 58±2 • Resistenza al nucleo
800-1000 N/mm²
- Rettificati di precisione esternamente,
internamente e nelle filettature delle ghiera
chiudi pinza
- Controllati con strumenti di misura certificati
- La tolleranza di precisione dei coni HSK è AT2

STANDARD FEATURES
OF HSK TOOLING

- Manufactured with Nickel Chrome Molybdenum
steel
- Carburized with depth of case 0.8-1 mm
• Hardened and tempered • Black oxidized
- Surface Hardness RC 58±2 • Tensile strenght
of core 800-1000 N/mm²
- Precision ground on shanks,inside tapers and
collet nut threads
- Tested with high precision inspection and
gaging equipment
- Taper accuracy of HSK SHANKS is AT2



Adduttore Refrigerante per HSK da ordinare a parte Pag:15
Coolant pipe for HSK to be ordered separately Pag:15

ICTM Standard

Attacchi HSK-T ICTM Standard
ISO 12164-3:2008

16.
3

CARATTERISTICHE TECNICHE DEI MANDRINI
HSK-A ICTM

Lo standard ISO mostrato sulla destra, risente del gioco tra la chiave e il trascinatore. Di conseguenza, al cambio dell'utensile (ATC), avviene una variazione nell'altezza dell'orlo di taglio dell'utensile. Ciò provoca variazioni dei diametri di taglio ed un uso non corretto dell'inserto, che utilizzato con angoli di taglio non ottimali non ne permette la massima resa.

Lo standard ICTM riduce al minimo il gioco tra la chiave ed il trascinatore evitando queste variazioni.

STANDARD FEATURES OF HSK-A ICTM TOOLING

The ISO standard HSK as shown on the right, suffers from gap between the key and key way. Thus when tool changing (ATC), a variation in cutting edge tool heights occurs. This can result in variations of cutting diameters.

ICTM standard set up the gap between the key and key way as small as possible and avoid these variations.

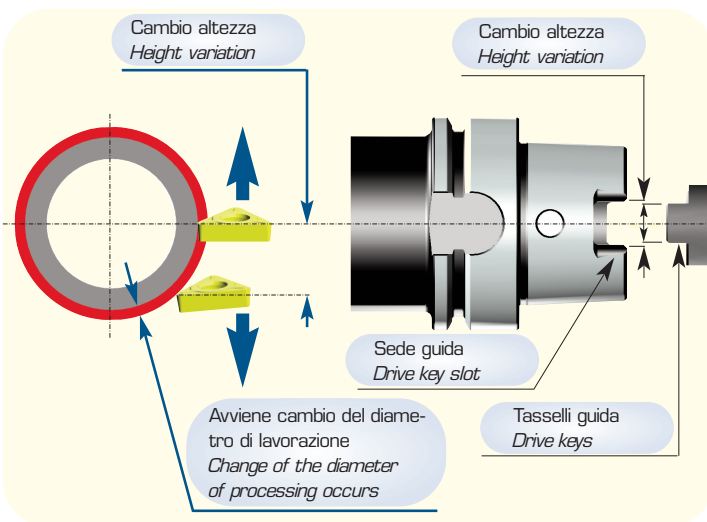


Fig 1 - Variazione dovuta al gioco
Fig 1 - Variation by the gap

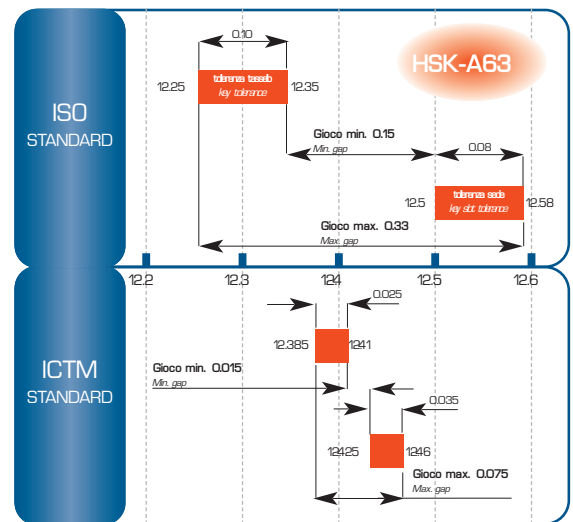
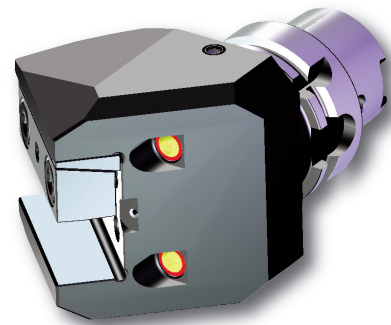


Grafico 1 - Comparazione del gioco tassello e sede (mm)
Graph 1 - Comparison of the gap of a key and key slot (mm)

16. PORTAUTENSILI HSK-T
TOOL HOLDERS HSK-T

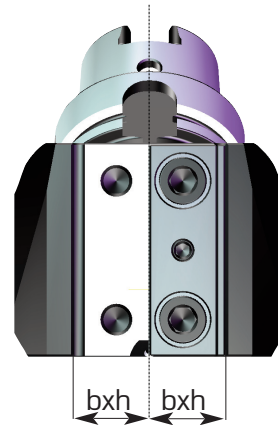
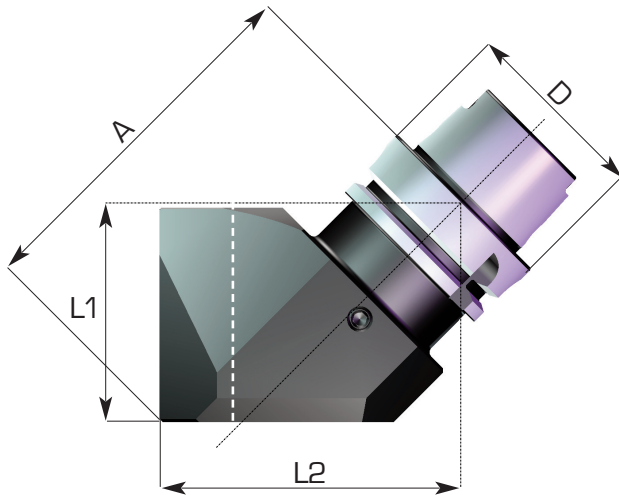
Portautensile a 45°
 45° tool holder
 Werkzeughalter 45°
 Porte-outil à 45°

DIN 69893/1-A ICTM Standard



ART: HSKA.904
 standard / standard length

16.
4



Codice di ord. Code	Descrizione Description	D	L1	L2	A	bXh
HSKA.904.63.2573	H63ARD25X25L	63	73	101	122	25X25
HSKA.904.100.2576	H100ARD25X25L	100	76	102	125	25X25

ACCESSORI PER MACCHINE UTENSILI

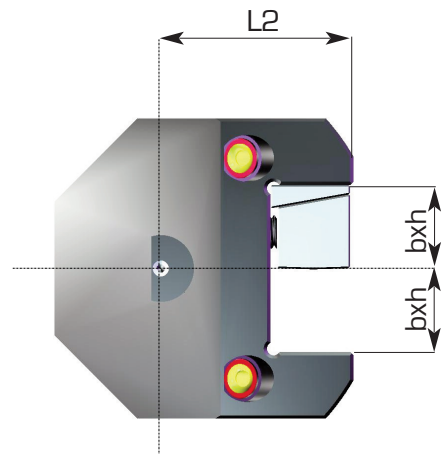
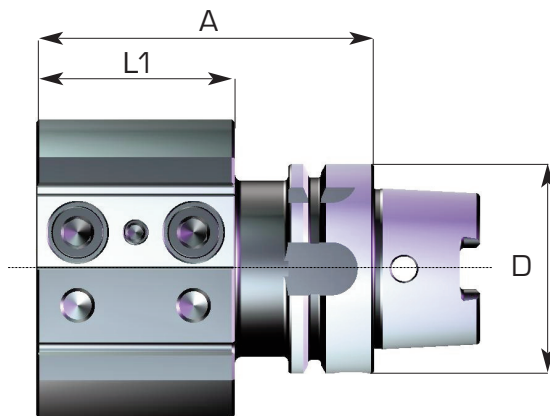


Portautensile assiale
Axial tool holder
Axial werkzeughalter
Porte-outil axial

DIN 69893/1-A ICTM Standard

ART: HSKA.905
standard / standard length

16.
5



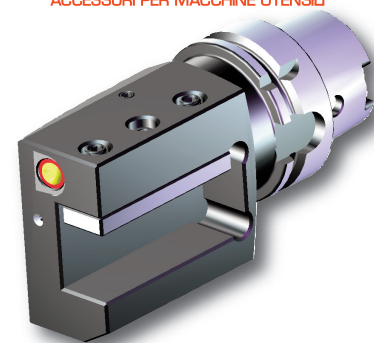
Codice di ord. Code	Descrizione Description	D	L1	L2	A	bXh
HSKA.905.63.2560	H63AD25R	63	60	58	102	25X25
HSKA.905.100.2511	H100AD25R	100	70	76	115	25X25

16. PORTAUTENSILI HSK-T TOOL HOLDERS HSK-T



ACCESSORI PER MACCHINE UTENSILI

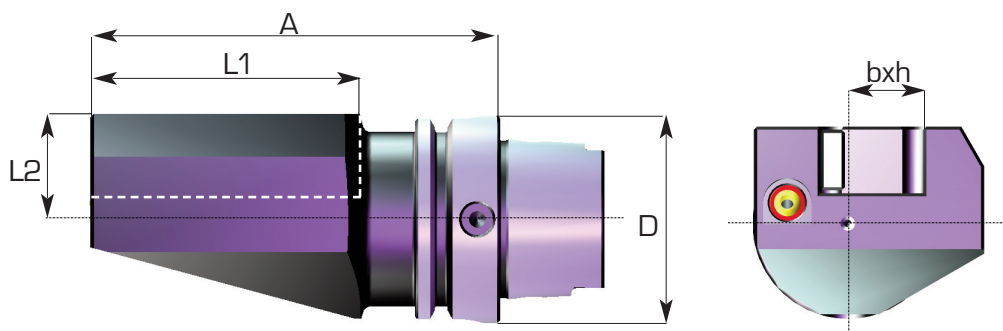
Portautensile assiale
Axial tool holder
Axial werkzeughalter
Porte-outil axial



DIN 69893/1-A ICTM Standard

ART: HSKA.906 / 908
standard / standard length

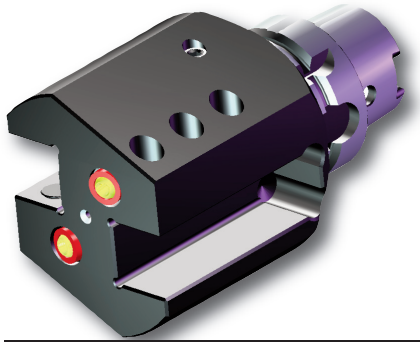
16.
6



In figura: Tipo destro
In the picture: Right type

Codice di ord. Code	Descrizione Description	D	L1	L2	A	bXh
HSKA.906.63.2576	HSK63AL25X25	63	73	32	115	25X25
HSKA.908.63.2576	HSK63AR25X25	63	76	32	115	25X25
HSKA.906.100.2510	HSK100AL25X25	100	100	55	160	25X25
HSKA.908.100.2510	HSK100AR25X25	100	100	55	160	25X25
HSKA.906.100.3210	HSK100AL32X32	100	100	50	146	32X32
HSKA.908.100.3210	HSK100AR32X32	100	100	50	146	32X32

ACCESSORI PER MACCHINE UTENSILI

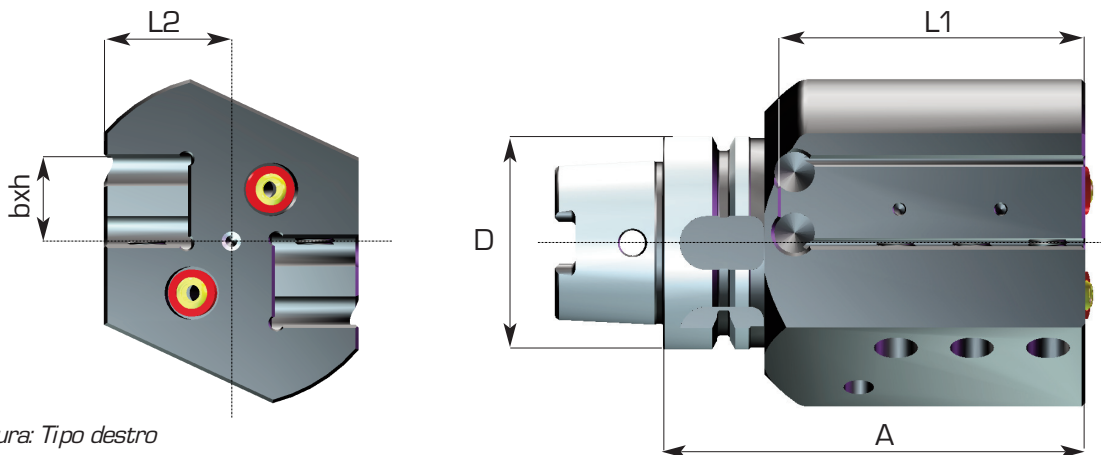


Portautensile assiale doppio
Double axial tool holder
Doppel-axial Werkzeughalter
Porte-outil axial double

DIN 69893/1-A ICTM Standard

ART: HSKA.912 / 913
standard / standard lenght

16.
7



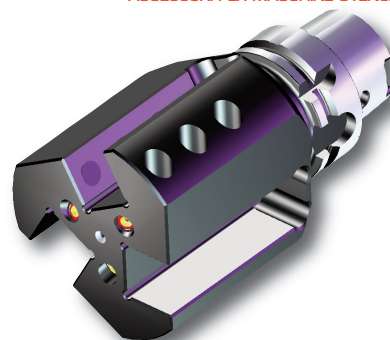
In figura: Tipo destro
In the picture: Right tipe

Codice di ord. Code	Descrizione Description	D	L1	L2	A	bXh
HSKA.912.63.2590	H63ADS25X25L	63	90	38	125	25X25
HSKA.913.63.2590	H100ADS25X25R	63	90	38	125	25X25

16. PORTAUTENSILI HSK-T
TOOL HOLDERS HSK-T

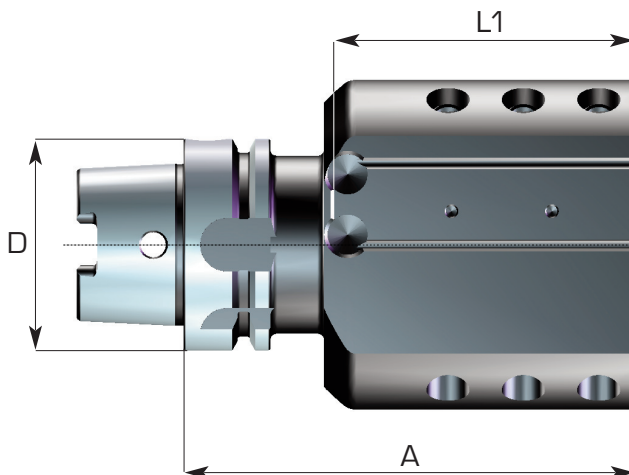
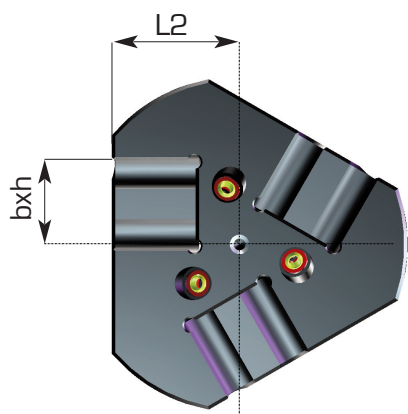
Portautensile assiale triplo
Triple axial tool holder
Triple-axial Werkzeughalter
Porte-outil axial triple

DIN 69893/1-A ICTM Standard



ART: HSKA.915 / 916
standard / standard length

16.
8

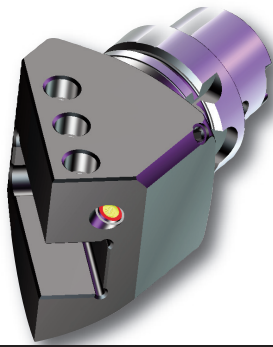


In figura: Tipo destro
In the picture: Right type

Codice di ord. Code	Descrizione Description	D	L1	L2	A	bXh
HSKA.915.63.2083	H63AT20X20L	63	83	36	120	20X20
HSKA.916.63.2083	H63AT20X20R	63	83	36	120	20X20
HSKA.915.63.2590	H63AT25X25L	63	90	38	135	25X25
HSKA.916.63.2590	H63AT25X25R	63	90	38	135	25X25
HSKA.915.100.3210	H100AT32X32L	100	100	51	160	32X32
HSKA.916.100.3210	H100AT32X32R	100	100	51	160	32X32

ACCESSORI PER MACCHINE UTENSILI

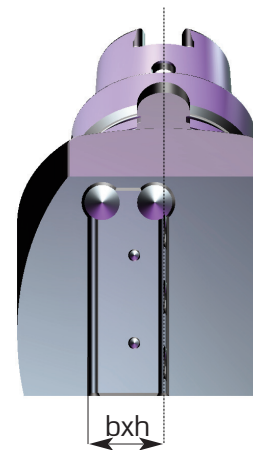
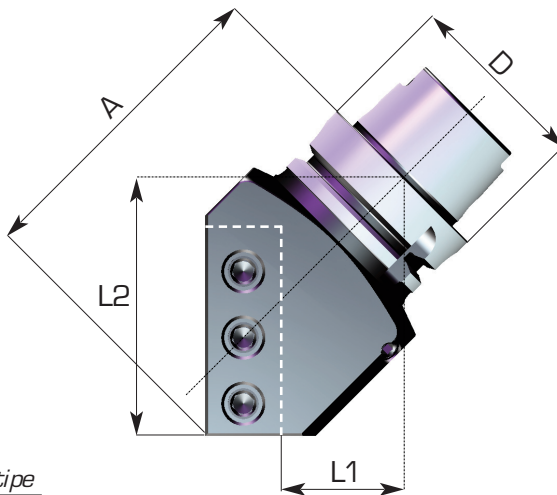
Portautensile a 45°
45° tool holder
Werkzeughalter 45°
Porte-outil à 45°



DIN 69893/1-A ICTM Standard

ART: HSKA.918 / 919
standard / standard lenght

16.
9



In figura: Tipo destro
In the picture: Right tipe

Codice di ord. Code	Descrizione Description	D	L1	L2	A	bXh
HSKA.918.63.2575	H63AR25X25L	63	42.2	884	110	25X25
HSKA.919.63.2575	H63AR25X25R	63	42.2	884	110	25X25
HSKA.918.100.2575	H100AR25X25L	100	83	139	172	25X25

16. PORTAUTENSILI HSK-T
TOOL HOLDERS HSK-T



ACCESSORI PER MACCHINE UTENSILI

Portalam
Bladeholder
Messerhalter
Porte-lame

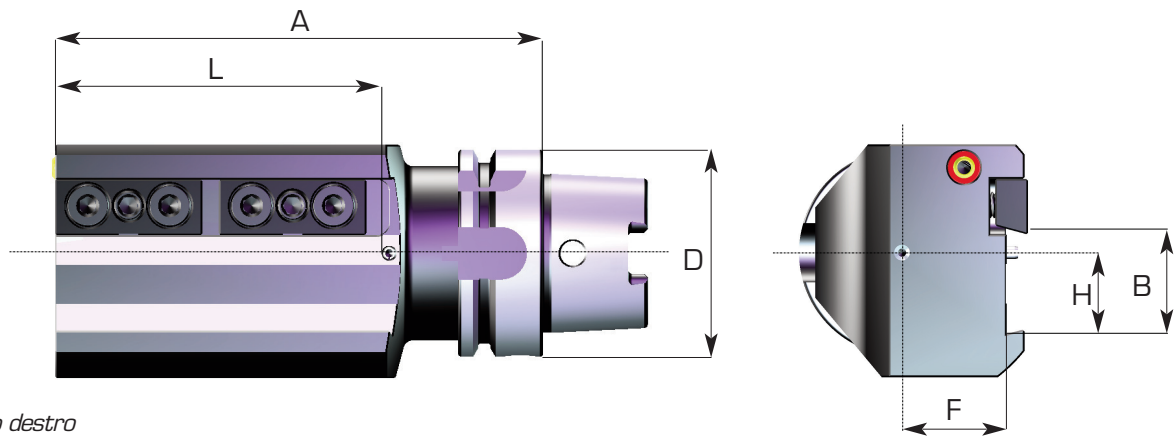


DIN 69893/1-A ICTM Standard

ART: HSKA.910

standard / standard lenght

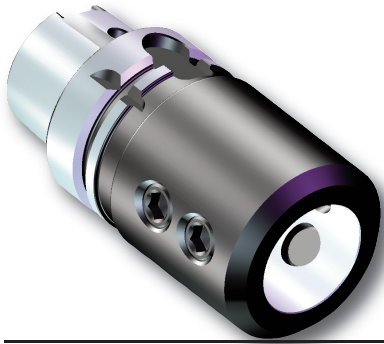
16.
10



In figura: Tipo destro
In the picture: Right tipe

Codice di ord. Code	Descrizione Description	D	B	H	F	L	A
HSKA.909.63.2615	H63ASCA26L	63	26	21.4	32	82	135
HSKA.910.63.2615	H63ASCA26R	63	26	21.4	32	82	135
HSKA.909.63.3215	H63ASCA32L	63	32	24.8	32	100	149
HSKA.910.63.3215	H63ASCA32R	63	32	24.8	32	100	149

ACCESSORI PER MACCHINE UTENSILI

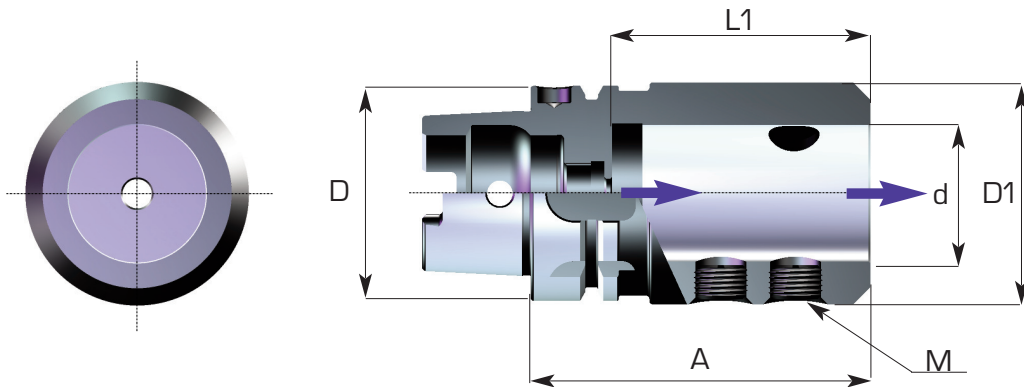


Portautensile per punte ad inserti
Tool holder for indexable insertdrills
Werkzeughalter für Wendelplattenbohrer
Porte-outil pour fûrets à plaquettes

DIN 69893/1-A ICTM Standard

ART: HSKA.940
standard / standard length

16.
11



Codice di ord Code	Descrizione Description	D	d H5	D1	A	L1	M
HSKA.940.0200	H40AAX-E1X20	40	20	40	77	54	M10X1
HSKA.940.63.0160	H63AAX-E1X16	63	16	36	80	54	M10X1
HSKA.940.63.0200	H63AAX-E1X20	63	20	40	80	54	M10X1
HSKA.940.63.0250	H63AAX-E1X25	63	25	45	90	64	M12X1
HSKA.940.63.0320	H63AAX-E1X32	63	32	52	90	64	M12X1
HSKA.940.63.0400	H63AAX-E1X40	63	40	65	100	76	M16X1
HSKA.940.100.0160	H100AAX-E1X16	100	16	36	85	54	M10X1
HSKA.940.100.0200	H100AAX-E1X20	100	20	40	85	54	M10X1
HSKA.940.100.0250	H100AAX-E1X25	100	25	45	90	64	M12X1
HSKA.940.100.0320	H100AAX-E1X32	100	32	52	95	64	M12X1
HSKA.940.100.0400	H100AAX-E1X40	100	40	65	105	73	M16X1

16. PORTAUTENSILI HSK-T TOOL HOLDERS HSK-T



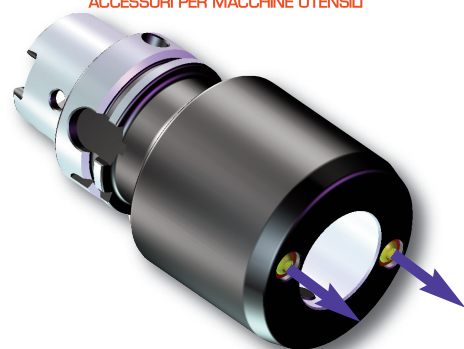
Portautensile per utensili cilindrici

Tool holder for tools with cylindrical shaft

Zylinderaufnahme für Drehwerkzeuge mit Zylinderschaft

Porte-outil pour outils cylindriques de tour

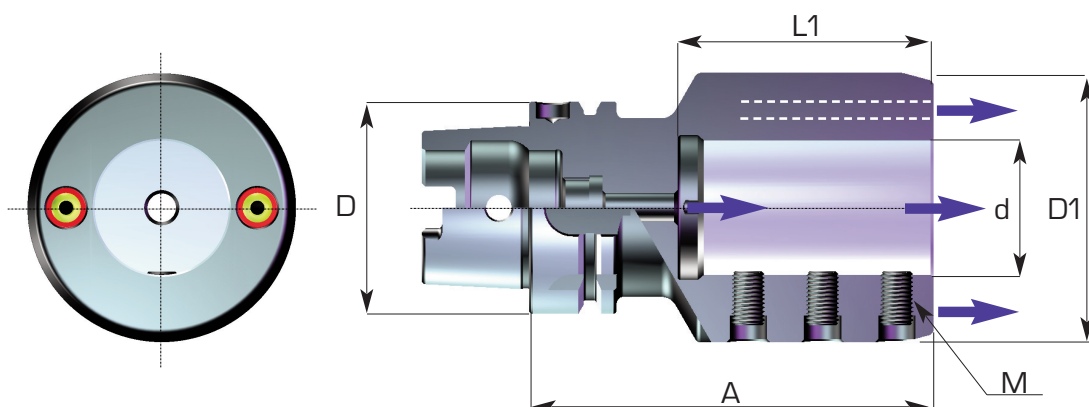
ACCESSORI PER MACCHINE UTENSILI



DIN 69893/1-A ICTM Standard

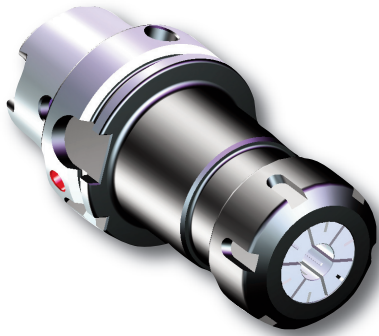
ART: HSKA.942
standard / standard lenght

16.
12



Codice di ord Code	Descrizione Description	D	d H5	D1	A	L1	M
HSKA.94240.0080	H40AAX-E2X08	40	8	32	60	37	M6
HSKA.94240.0100	H40AAX-E2X10	40	10	34	60	40	M6
HSKA.94240.0120	H40AAX-E2X12	40	12	36	65	45	M8
HSKA.94240.0160	H40AAX-E2X160	40	16	40	70	50	M8
HSKA.94240.0200	H40AAX-E2X20	40	20	45	70	50	M8
HSKA.942.63.0080	H63AAX-E2X08	63	8	32	70	37	M6
HSKA.942.63.0100	H63AAX-E2X10	63	10	38	75	45	M6
HSKA.942.63.0120	H63AAX-E2X12	63	12	40	75	45	M8
HSKA.942.63.0160	H63AAX-E2X16	63	16	45	80	50	M8
HSKA.942.63.0200	H63AAX-E2X20	63	20	50	80	50	M8
HSKA.942.63.0250	H63AAX-E2X25	63	25	55	85	52	M8
HSKA.942.63.0320	H63AAX-E2X32	63	32	68	95	58	M8
HSKA.942.63.0400	H100AAX-E2X40	100	40	80	110	76	M10
HSKA.942.100.0080	H100AAX-E2X08	100	8	32	80	37	M6
HSKA.942.100.0100	H100AAX-E2X10	100	10	38	80	40	M6
HSKA.942.100.0120	H100AAX-E2X12	100	12	40	80	45	M8
HSKA.942.100.0160	H100AAX-E2X16	100	16	45	80	50	M8
HSKA.942.100.0200	H100AAX-E2X20	100	20	50	80	50	M8
HSKA.942.100.0250	H100AAX-E2X25	100	25	55	85	52	M8
HSKA.942.100.0320	H100AAX-E2X32	100	32	72	95	58	M8
HSKA.942.100.0400	H100AAX-E2X40	100	40	80	105	71	M10
HSKA.942.100.0500	H100AAX-E2X50	100	50	90	125	83	M10

ACCESSORI PER MACCHINE UTENSILI

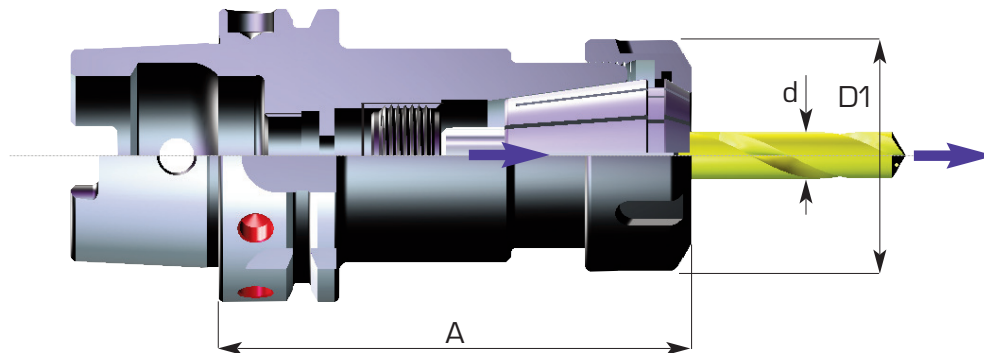


Mandrini portapinze ER DIN 6499
Collet chucks ER DIN 6499
Spannzangenhalter ER DIN 6499
Mandrins porte-pinces ER DIN 6499

DIN 69893/1-A

ART: HSKA.607
standard / standard length

16.
13



Codice di ord Code	Descrizione Description	ER	A	D1	Cap. di chiusura Pinza "t" Capacity range "t"	Ghiera Nut
HSKA.60763.0160	HSK 63	ER 16	100	28	0,5-10	245.22.ER16
HSKA.60763.0162M	HSK 63	ER 16	160	22	0,5-10	245.19.ER16M
HSKA.60763.0250	HSK 63	ER 25	100	42	1-16	245.32.ER25
HSKA.60763.0320	HSK 63	ER 32	100	50	2-20	24540.ER32
HSKA.60763.0322	HSK 63	ER 32	150	50	2-20	24540.ER32
HSKA.60763.0400	HSK 63	ER 40	100	63	4-30	245.50.ER40

16. PORTAUTENSILI HSK-T TOOL HOLDERS HSK-T



ACCESSORI PER MACCHINE UTENSILI

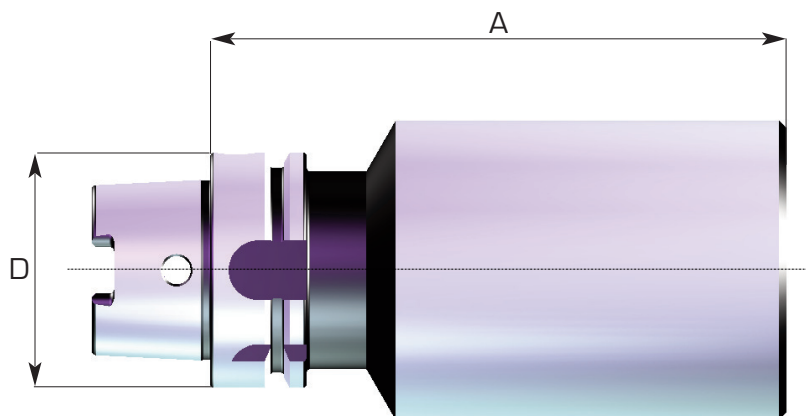
Barre semifinite con tratto cilindrico privo di cementazione per esecuzioni speciali
Unfinished taper-shank blanks for special applications
Rohlinge für spezielle Anwendungen
Ebauches pour applications spéciales



DIN 69893/1-A ICTM Standard

ART: HSKA.424...i
standard / standard length

16.
14



Codice di ord. Code	Descrizione Description	D	d	L	A
HSKA424.63.0634I	H63A063326SML	63	63	300	326
HSKA424.63.0800I	H63A080190SML	63	80	164	190
HSKA424.63.1002I	H63A098226SML	63	98	200	226
HSKA424.63.1100I	H63A110085SML	63	110	59	85
HSKA424.63.1300I	H63A120095SML	63	130	69	95

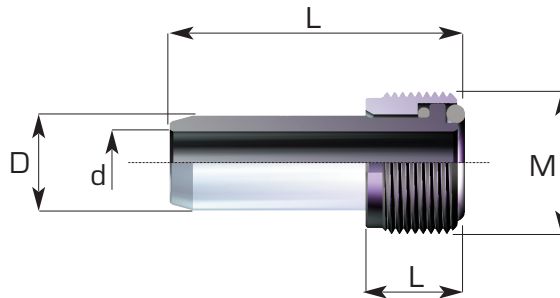
Adduttore refrigerante per HSK
Coolant pipe for HSK
Kühlmittelrohre für HSK
Adducteur réfrigérant pour HSK

DIN 69893



ART: HSK

16.
15

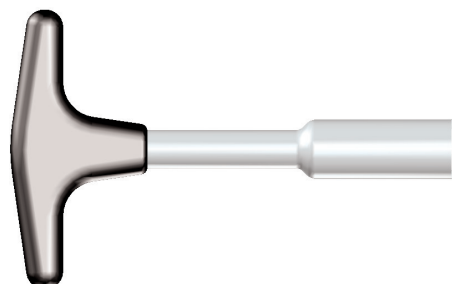


Codice di ord Code	D	M	d	L	L1	L2
HSKA.32.0100	6	M10 X 1	3,5	25,7	5,5	HSKA32 - HSKE25 - HSKE32
HSKA40.0120	8	M12 X 1	5	29	7,5	HSKA40 - HSKE40 - HSKF50
HSKA.50.0160	10	M16 X 1	6,4	33	10	HSKA50 - HSKE50 - HSKF63
HSKA.63.0180	12	M18 X 1	8	36,2	11,5	HSKA63 - HSKE63
HSKA.80.0200	14	M20 X 1,5	10	39,6	13,5	HSKA80
HSKA.100.0240	16	M24 X 1,5	12	43,6	15,5	HSKA100

Chiave per il montaggio del tubetto per l'adduzione del refrigerante
Key for the setting up of the coolant pipe
Schlüssel für Kühlmittelrohre
Clé pour le montage de l'adducteur réfrigérant



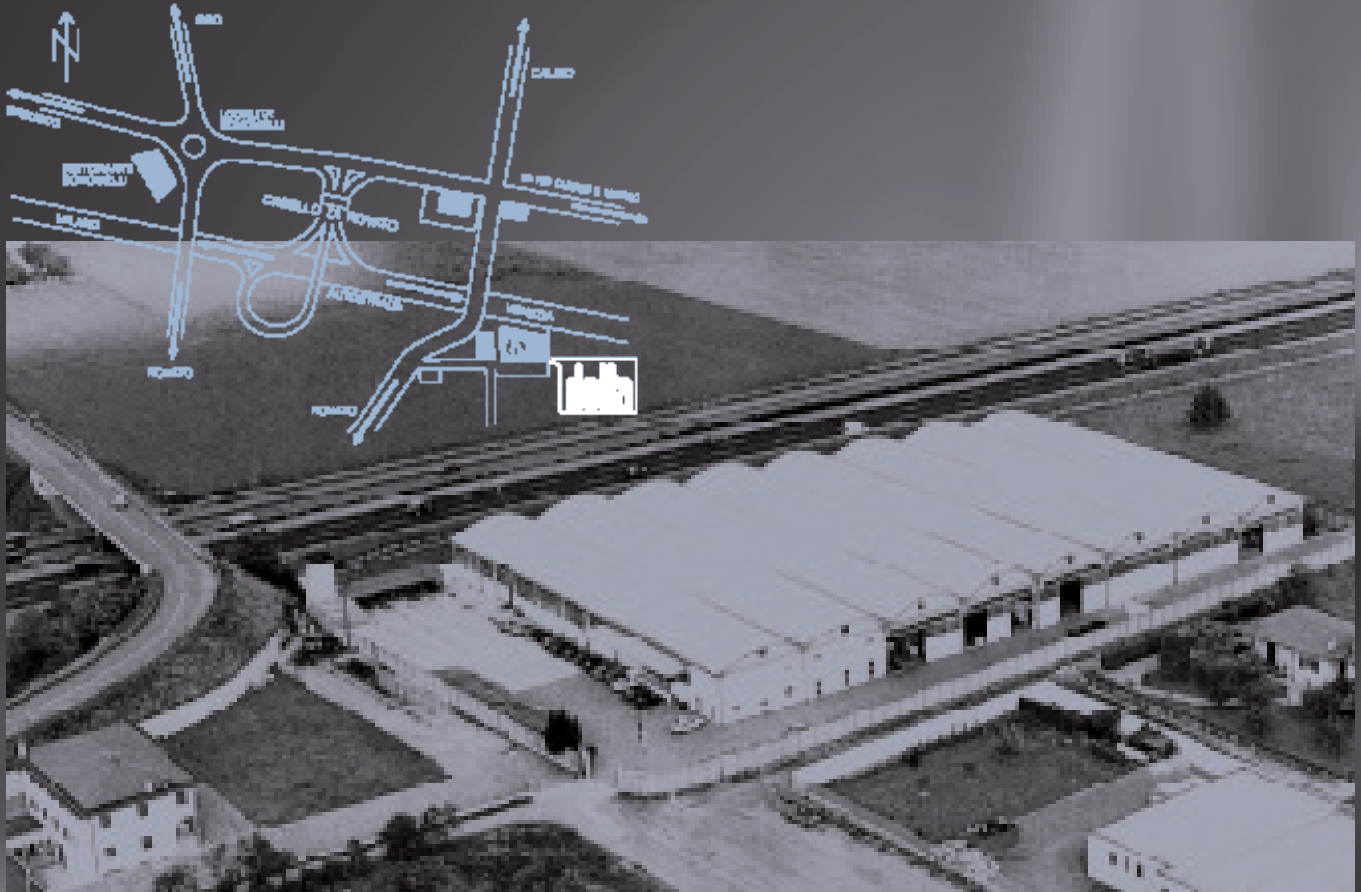
ART: CH.HSK



Codice di ord Code	per tubetto For Pipe
CH.HSK.0320	HSKA.32.0100
CH.HSK.0400	HSKA.40.0120
CH.HSK.0500	HSKA.50.0160
CH.HSK.0630	HSKA.63.0180
CH.HSK.0800	HSKA.80.0200
CH.HSK.1000	HSKA.100.0240

DIN 69893/1-A ICTM Standard

NOTE



ACCESSORI PER MACCHINE UTENSILI

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WEB: www.delta-industrie.it
E-mail: info@delta-industrie.it