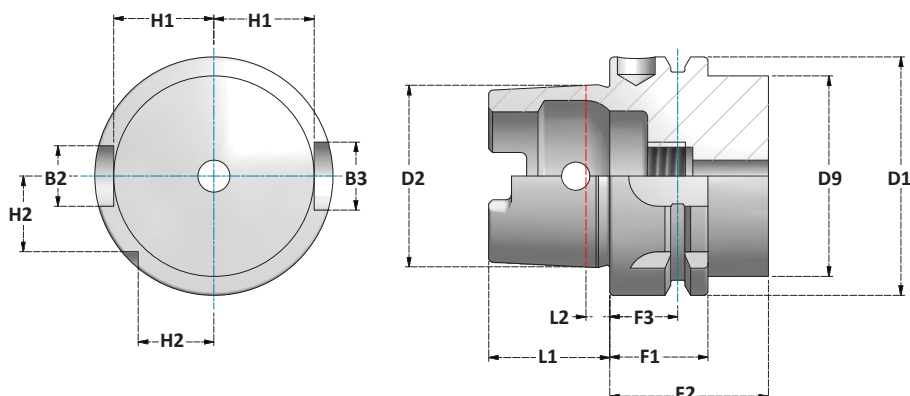


**MANDRINI HSK FORMA A**
HSK FORM A TOOLHOLDERS**DIMENSIONI DELL'ATTACCO**
SHANK DIMENSIONS

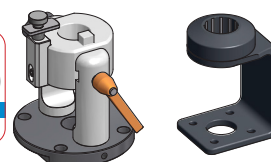
ATTACCO SHANK	D1	D2	D9	L1	L2	F1	F2	F3	H1	H2	B2	B3
	h10		max	0 -0,2		0 -0,1	min	±0,1	0 -0,2	0 -0,3	H10	H10
HSK50A	50	38,009	42	25	5	26	42	18	21	15,5	12	14
HSK63A	63	48,010	53	32	6,3	26	42	18	26,5	20	16	18
HSK100A	100	75,013	88	50	10	29	45	20	44	31,5	20	22

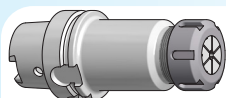
CARATTERISTICHE:

Tolleranza di precisione degli attacchi a norma DIN.
 Costruiti in acciaio certificato in barre.
 Eseguiti trattamenti termici da fornitori certificati.
 Rettificati di precisione esternamente e internamente.
 Controllati con strumenti di misura certificati.
 Prebilanciati nei gradi indicati nelle pagine di catalogo.

FEATURES:

Precision tolerance of shanks according to DIN standard.
 Made of certified steel.
 Heat treatments performed by certified suppliers.
 Precision grinding externally and internally.
 Checked with certified measuring instruments.
 Pre-balanced as indicated in the catalog pages.

BILANCIATURA
BALANCING **P.360**RACCORDI PER REFRIGERANTE
COOLING TUBES **P.306**SUPPORTI DI MONTAGGIO
ASSEMBLY DEVICES **P.310**

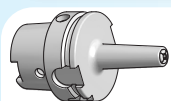


MANDRINI PORTAPINZA ER

COLLET CHUCKS ER

DIN ISO 15488 (DIN6499)

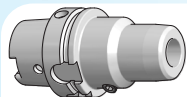
PAG. 22



MANDRINI PORTAPINZA SLC

COLLET CHUCKS SLC

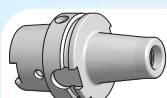
PAG. 27



MANDRINI A SERRAGGIO IDRAULICO

HYDRAULIC CHUCKS

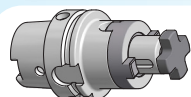
PAG. 31



MANDRINI PORTAFRESA CON ATTACCO FILETTATO

SCREW IN MILL CHUCKS

PAG. 33

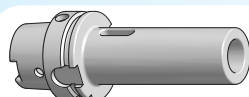


MANDRINI PORTAFRESA COMBI

COMBI SHELL MILL HOLDERS

DIN 6358

PAG. 39

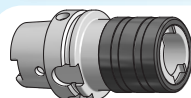


RIDUZIONI A CONO MORSE PER PUNTE

MORSE TAPER ADAPTERS FOR DRILLS

DIN 6383

PAG. 42



PORTAMASCHI

TAPPING CHUCKS

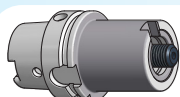
PAG. 43



MANDRINI PORTAPUNTA

DRILL CHUCKS

PAG. 44



MANDRINI MODULARI TIPO VARILOCK

MODULAR TOOLHOLDERS VARILOCK TYPE

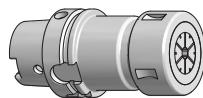
PAG. 46



BARRE DI COLLAUDO

TEST ARBORS

PAG. 330

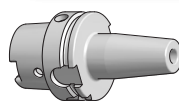


MANDRINI PORTAPINZA EOC

COLLET CHUCKS EOC

DIN ISO 10897 (DIN6388)

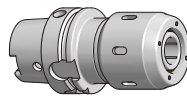
PAG. 26



MANDRINI A CALETTAMENTO A CALDO

SHRINK FIT CHUCKS

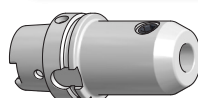
PAG. 28



MANDRINI A FORTE SERRAGGIO

POWER MILLING CHUCKS

PAG. 32

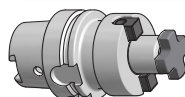


MANDRINI PORTAFRESA WELDON

END MILL HOLDERS WELDON

DIN 1835-2

PAG. 34

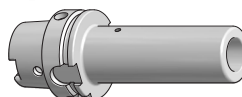


MANDRINI PORTAFRESA FISSI

SHELL MILL HOLDERS

DIN 6357

PAG. 40

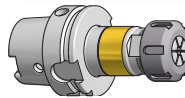


RIDUZIONI A CONO MORSE PER FRESE

MORSE TAPER ADAPTERS FOR THREADED MILLS

DIN 6364

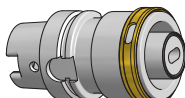
PAG. 42



MANDRINI PER MASCHIATURA SINCRONIZZATA

CHUCKS FOR SYNC TAPPING

PAG. 43



RIDUZIONI

ADAPTERS

PAG. 45



MANDRINI CON STELO LAVORABILE

BLANK ARBORS

PAG. 47



**DIN 69893-1****MANDRINI PORTAPINZA ER**
ER COLLET CHUCKS

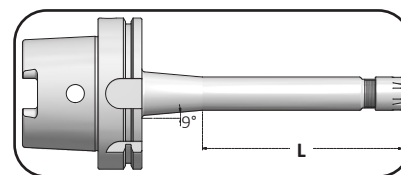
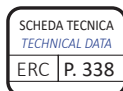
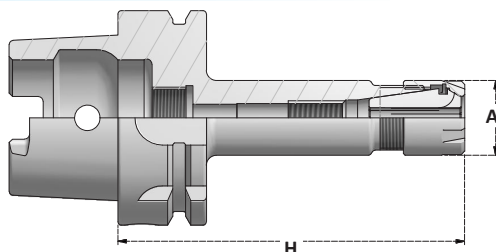
DIN ISO 15488 (DIN6499)

ERC MINI	CON GHIERA MINI
Pag. 22	<i>WITH MINI NUT</i>
ERC	CON GHIERA STANDARD
Pag. 23	<i>WITH STANDARD NUT</i>
ERC NF	CON GHIERA "NF" SENZA TACCHE - BILANCIATI PER ALTE VELOCITÀ
Pag. 24	<i>WITH "NF" NOTCH FREE NUT - BALANCED FOR HIGH SPEEDS</i>
ERC RG	A CENTRATURA REGOLABILE
Pag. 25	<i>ADJUSTABLE RUNOUT</i>

DIN 69893-1

HSK

ERC MINI

DIN ISO 15488 (DIN6499)**MANDRINI PORTAPINZA ER CON GHIERA MINI**
ER COLLET CHUCKS WITH MINI NUT

Articolo	H
HSK50A.H100.ERC11M	100
HSK50A.H100.ERC16M	100

Articolo	H
HSK63A.H100.ERC11M	100
HSK63A.H130.ERC11M	130
HSK63A.H160.ERC11M	160
HSK63A.H100.ERC16M	100
HSK63A.H130.ERC16M	130
HSK63A.H160.ERC16M	160
HSK63A.H100.ERC20M	100
HSK63A.H130.ERC20M	130
HSK63A.H160.ERC20M	160
HSK63A.H100.ERC25M	100
HSK63A.H130.ERC25M	130
HSK63A.H160.ERC25M	160

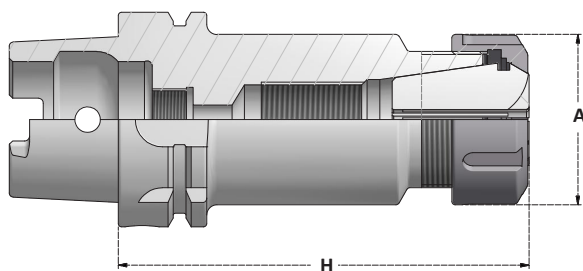
Articolo	H	L
HSK100A.H100.ERC16M	100	-
HSK100A.H130.ERC16M	130	-
HSK100A.H160.ERC16M	160	100
HSK100A.H200.ERC16M	200	100
HSK100A.H100.ERC20M	100	-
HSK100A.H130.ERC20M	130	-
HSK100A.H160.ERC20M	160	-
HSK100A.H200.ERC20M	200	-
HSK100A.H100.ERC25M	100	-
HSK100A.H130.ERC25M	130	-
HSK100A.H160.ERC25M	160	-

	A	Collets Range	Ghiera Nut
...ERC11M	16	1÷7	G11M
...ERC16M	22	1÷10	G16M
...ERC20M	28	1÷14	G20M
...ERC25M	35	1÷20	G25M



Fornibili a richiesta con diverse ghiera e gradi di bilanciatura.

*Available on request with different nuts and balancing.***ACCESSORI - ACCESSORIES**

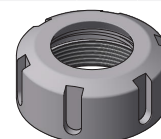
**MANDRINI PORTAPINZA ER**
ER COLLET CHUCKSSCHEDA TECNICA
TECHNICAL DATA
ERC P. 338

Articolo	H
HSK50A.H100.ERC16	100
HSK50A.H100.ERC20	100
HSK50A.H100.ERC25	100
HSK50A.H100.ERC32	100

Articolo	H
HSK63A.H100.ERC16	100
HSK63A.H130.ERC16	130
HSK63A.H160.ERC16	160
HSK63A.H200.ERC16	200
HSK63A.H100.ERC20	100
HSK63A.H130.ERC20	130
HSK63A.H160.ERC20	160
HSK63A.H200.ERC20	200
HSK63A.H100.ERC25	100
HSK63A.H130.ERC25	130
HSK63A.H160.ERC25	160
HSK63A.H200.ERC25	200
HSK63A.H80.ERC32	80
HSK63A.H100.ERC32	100
HSK63A.H130.ERC32	130
HSK63A.H160.ERC32	160
HSK63A.H200.ERC32	200
HSK63A.H100.ERC40	100
HSK63A.H130.ERC40	130
HSK63A.H160.ERC40	160
HSK63A.H200.ERC40	200

Articolo	H
HSK100A.H100.ERC16	100
HSK100A.H130.ERC16	130
HSK100A.H160.ERC16	160
HSK100A.H200.ERC16	200
HSK100A.H100.ERC20	100
HSK100A.H130.ERC20	130
HSK100A.H160.ERC20	160
HSK100A.H200.ERC20	200
HSK100A.H100.ERC25	100
HSK100A.H130.ERC25	130
HSK100A.H160.ERC25	160
HSK100A.H200.ERC25	200
HSK100A.H80.ERC32	80
HSK100A.H100.ERC32	100
HSK100A.H130.ERC32	130
HSK100A.H160.ERC32	160
HSK100A.H200.ERC32	200
HSK100A.H250.ERC32	250
HSK100A.H100.ERC40	100
HSK100A.H130.ERC40	130
HSK100A.H160.ERC40	160
HSK100A.H200.ERC40	200
HSK100A.H250.ERC40	250

	A	Collets Range	Ghiera Nut
...ERC16	28	1÷10	G16SE
...ERC20	34	1÷14	G20SE
...ERC25	42	1÷20	G25S
...ERC32	50	2÷22	G32S
...ERC40	63	3÷30	G40S



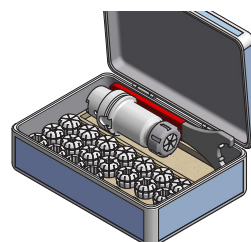
Fornibili a richiesta con diverse ghiera e gradi di bilanciatura.

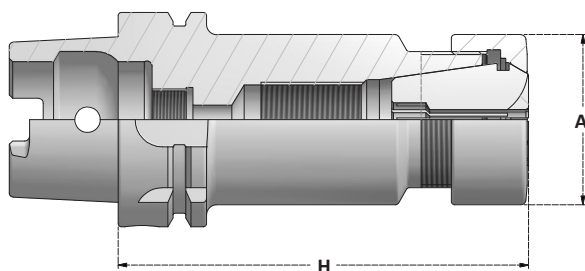
Available on request with different nuts and balancing.

KIT - MANDRINO, CHIAVE E PINZE

KIT - TOOLHOLDER, WRENCH AND COLLETS

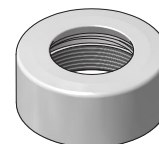
Articolo	Pinze Collets		Mandrino Toolholder	Chiave Wrench
BX.HSK63A.ERC32-6	ERC32.D6-D8-D10-D12-D16-D20		HSK63A.H100.ERC32	CH32S
BX.HSK63A.ERC40-7	ERC40.D6-D8-D10-D12-D16-D20-D25		HSK63A.H100.ERC40	CH40S
Articolo	Pinze Collets	Ø Pinze Collets	Mandrino Toolholder	Chiave Wrench
BX.HSK63A.ERC25	ERC25	D2÷16	HSK63A.H100.ERC25	CH25S
BX.HSK63A.ERC32	ERC32	D3÷20	HSK63A.H100.ERC32	CH32S
BX.HSK63A.ERC40	ERC40	D4÷26	HSK63A.H100.ERC40	CH40S
BX.HSK100A.ERC25	ERC25	D2÷16	HSK100A.H100.ERC25	CH25S
BX.HSK100A.ERC32	ERC32	D3÷20	HSK100A.H100.ERC32	CH32S
BX.HSK100A.ERC40	ERC40	D4÷26	HSK100A.H100.ERC40	CH40S

**ACCESSORI - ACCESSORIES**

**MANDRINI PORTAPINZA ER PER ALTE VELOCITA'**
ER COLLET CHUCKS FOR HIGH SPEEDSSCHEDA TECNICA
TECHNICAL DATA
ERC P. 338

	A	Collets Range	Ghiera Nut
...ERC11MNF	34	1÷7	G11NFM
...ERC16MNF	28	1÷10	G16NFM
...ERC20MNF	34	1÷14	G20NFM
...ERC25MNF	42	1÷20	G25NFM

	A	Collets Range	Ghiera Nut
...ERC16NF	28	1÷10	G16NF
...ERC20NF	34	1÷14	G20NF
...ERC25NF	42	1÷20	G25NF
...ERC32NF	50	2÷22	G32NF



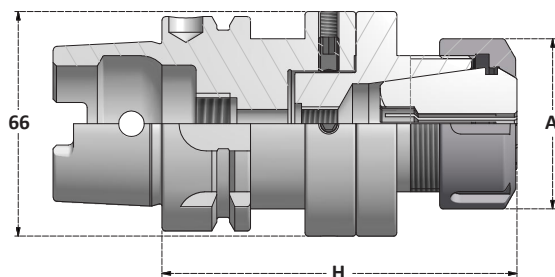
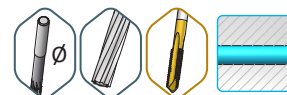
Articolo	H
HSK63A.H100.ERC11MNF	100
HSK63A.H130.ERC11MNF	130
HSK63A.H160.ERC11MNF	160
HSK63A.H100.ERC16MNF	100
HSK63A.H130.ERC16MNF	130
HSK63A.H160.ERC16MNF	160
HSK63A.H100.ERC20MNF	100
HSK63A.H130.ERC20MNF	130
HSK63A.H160.ERC20MNF	160
HSK63A.H100.ERC25MNF	100
HSK63A.H130.ERC25MNF	130
HSK63A.H160.ERC25MNF	160

Articolo	H
HSK63A.H100.ERC16NF	100
HSK63A.H130.ERC16NF	130
HSK63A.H160.ERC16NF	160
HSK63A.H100.ERC20NF	100
HSK63A.H130.ERC20NF	130
HSK63A.H160.ERC20NF	160
HSK63A.H100.ERC25NF	100
HSK63A.H130.ERC25NF	130
HSK63A.H160.ERC25NF	160
HSK63A.H100.ERC32NF	100
HSK63A.H130.ERC32NF	130
HSK63A.H160.ERC32NF	160

Mandrini prebilanciati a G2,5 / 25000r.p.m. forniti con ghiera "NF" senza tacche.
Toolholders balanced G2,5 / 25000r.p.m. supplied with "NF" notch free nut.

ACCESSORI - ACCESSORIES



**MANDRINI PORTAPINZA ER A CENTRATURA REGOLABILE**
RUNOUT ADJUSTABLE ER COLLET CHUCKS

±0,1mm Centatura regolabile
Adjustable runout

SCHEDA TECNICA
TECHNICAL DATA
ERC P. 338

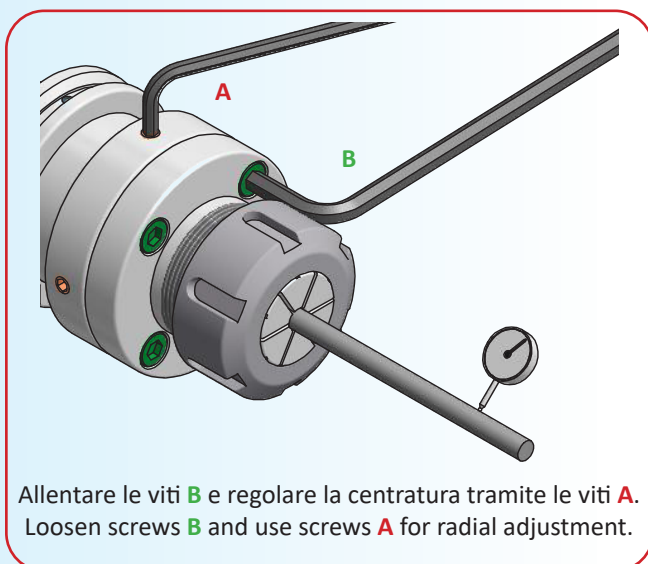
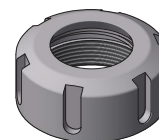
Articolo	H
HSK63A.H100.ERC16RG	100
HSK63A.H102.ERC20RG	102
HSK63A.H103.ERC25RG	103
HSK63A.H104.ERC32RG	104
HSK63A.H138.ERC40RG	138

Articolo	H
HSK100A.H103.ERC16RG	103
HSK100A.H105.ERC20RG	105
HSK100A.H106.ERC25RG	106
HSK100A.H107.ERC32RG	107
HSK100A.H141.ERC40RG	141

	A	Collets Range	Ghiera Nut
...ERC16	28	1÷10	G16SE
...ERC20	34	1÷14	G20SE

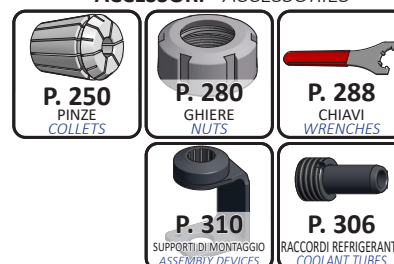


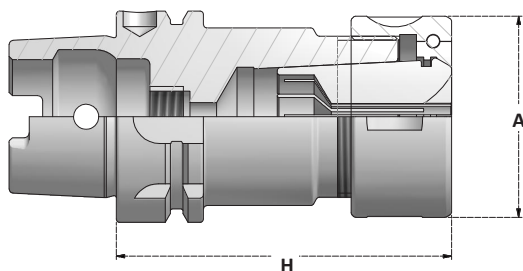
...ERC25	42	1÷20	G25S
...ERC32	50	2÷22	G32S
...ERC40	63	3÷30	G40S



Allentare le viti **B** e regolare la centratura tramite le viti **A**.
Loosen screws **B** and use screws **A** for radial adjustment.

ACCESSORI - ACCESSORIES

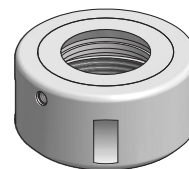


**MANDRINI PORTAPINZA EOC**
EOC COLLET CHUCKS**G6,3**
15000r.p.m.

Articolo	H
HSK63A.H100.EOC16	100
HSK63A.H100.EOC25	100
HSK63A.H130.EOC32	130

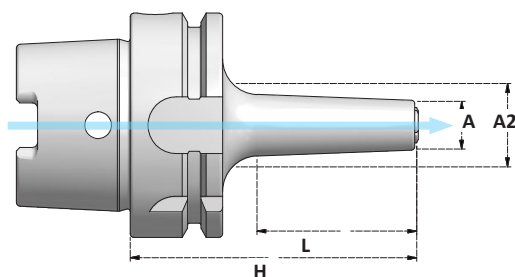
Articolo	H
HSK100A.H130.EOC32	130

	A	Collets Range	Ghiera Nut
...EOC16	43	2÷16	G16OCC
...EOC25	60	2÷25	G25OCC
...EOC32	72	3÷32	G32OCC

**ACCESSORI - ACCESSORIES**

**MANDRINI PER PINZE SLC**
SLC COLLET CHUCKS**G2,5**

25000 r.p.m.

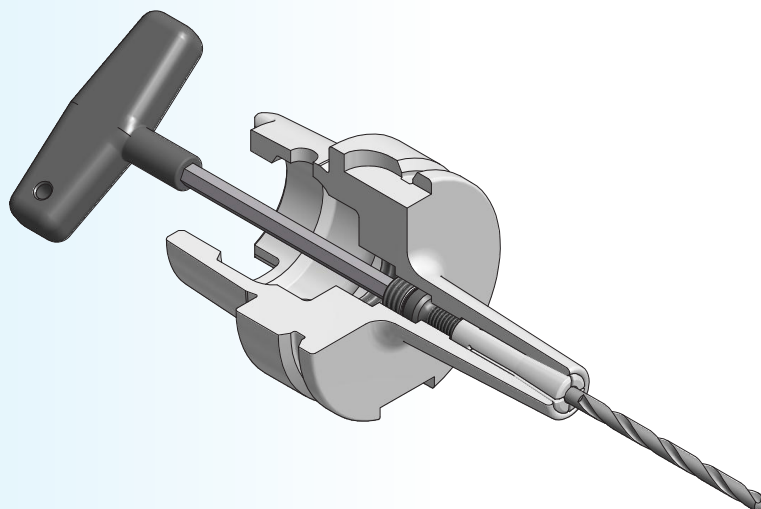


Articolo	H	L	A2
HSK63A.H80.SLC6	80	39	18
HSK63A.H120.SLC6	120	79	22
HSK63A.H110.SLC12	110	79	37
HSK63A.H150.SLC12	150	119	42

	A	Collets Range	MT
...SLC6	14	3÷6	12
...SLC12	26	3÷12	45
...SLC25	40	6÷25	90

Momento torcente consigliato: **MT**
Recommended tightening torque:

Articolo	H	L	A2
HSK100A.H120.SLC6	120	76	22
HSK100A.H120.SLC12	120	81	37
HSK100A.H150.SLC25	150	111	49

SISTEMA A TIRAGGIO POSTERIORE
BACK PULLING SYSTEM

ACCESSORI - ACCESSORIES

**P. 273**
PINZE
COLLETS**P. 310**SUPPORTI DI MONTAGGIO
ASSEMBLY DEVICES**P. 306**RACCORDI REFRIGERANTE
COOLANT TUBES

**MANDRINI A CALETTAMENTO A CALDO**
SHRINK FIT CHUCKS

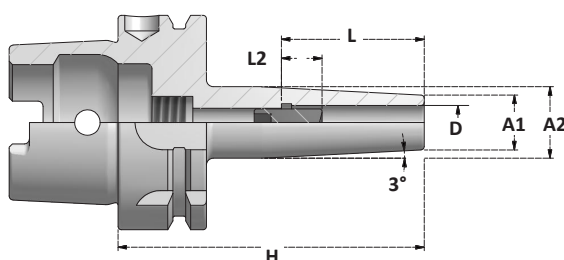
TM SL	SLIM
Pag. 28	<i>SLIM FIT</i>
TM	STANDARD
Pag. 29	<i>STANDARD</i>
TM JET	CON FORI DI LUBRIFICAZIONE
Pag. 30	<i>WITH COOLANT HOLES</i>

HSK

TM SL

MANDRINI A CALETTAMENTO A CALDO SLIM
SLIM SHRINK FIT CHUCKS**G2,5**

25000r.p.m.



SCHEDA TECNICA
TECHNICAL DATA
TM | P. 340

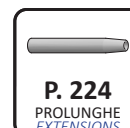
Articolo	H	A2
HSK63A.H80.TM3SL	80	13
HSK63A.H120.TM3SL	120	16
HSK63A.H80.TM4SL	80	15
HSK63A.H120.TM4SL	120	20
HSK63A.H80.TM5SL	80	16
HSK63A.H120.TM5SL	120	20
HSK63A.H80.TM6SL	80	17
HSK63A.H130.TM6SL	130	19
HSK63A.H160.TM6SL	160	19
HSK63A.H80.TM8SL	80	19
HSK63A.H130.TM8SL	130	21
HSK63A.H160.TM8SL	160	21
HSK63A.H85.TM10SL	85	21
HSK63A.H130.TM10SL	130	23
HSK63A.H160.TM10SL	160	23
HSK63A.H90.TM12SL	90	23
HSK63A.H130.TM12SL	130	25
HSK63A.H160.TM12SL	160	25
HSK63A.H90.TM14SL	90	25
HSK63A.H130.TM14SL	130	27
HSK63A.H160.TM14SL	160	27
HSK63A.H95.TM16SL	95	29
HSK63A.H130.TM16SL	130	31
HSK63A.H160.TM16SL	160	31
HSK63A.H95.TM18SL	95	34
HSK63A.H130.TM18SL	130	35
HSK63A.H160.TM18SL	160	35
HSK63A.H100.TM20SL	100	39
HSK63A.H130.TM20SL	130	39
HSK63A.H160.TM20SL	160	39

	D	L	A1	
TM3SL	*	3	12	9
TM4SL	*	4	16	10
TM5SL	*	5	20	11
TM6SL		6	36	12
TM8SL		8	36	14
TM10SL		10	41	16
TM12SL		12	46	18
TM14SL		14	46	22
TM16SL		16	49	24
TM18SL		18	49	28
TM20SL		20	51	32

Profondità regolabile: **L2 = 10mm**
Adjustable depth:

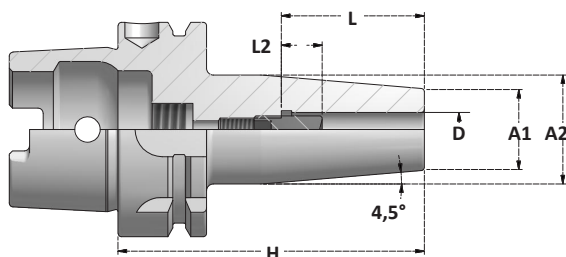
* Senza vite di regolazione
* *Without adjusting screw*

ACCESSORI - ACCESSORIES



**MANDRINI A CALETTAMENTO A CALDO**
SHRINK FIT CHUCKS**G2,5**

25000 r.p.m.

SCHEDA TECNICA
TECHNICAL DATA
TM P. 340

Articolo	H
HSK63A.H80.TM3	80
HSK63A.H120.TM3	120
HSK63A.H160.TM3	160
HSK63A.H80.TM4	80
HSK63A.H120.TM4	120
HSK63A.H160.TM4	160
HSK63A.H80.TM5	80
HSK63A.H120.TM5	120
HSK63A.H160.TM5	160
HSK63A.H80.TM6	80
HSK63A.H130.TM6	130
HSK63A.H160.TM6	160
HSK63A.H80.TM8	80
HSK63A.H130.TM8	130
HSK63A.H160.TM8	160
HSK63A.H85.TM10	85
HSK63A.H130.TM10	130
HSK63A.H160.TM10	160
HSK63A.H90.TM12	90
HSK63A.H130.TM12	130
HSK63A.H160.TM12	160
HSK63A.H90.TM14	90
HSK63A.H130.TM14	130
HSK63A.H160.TM14	160
HSK63A.H95.TM16	95
HSK63A.H130.TM16	130
HSK63A.H160.TM16	160
HSK63A.H95.TM18	95
HSK63A.H130.TM18	130
HSK63A.H160.TM18	160
HSK63A.H100.TM20	100
HSK63A.H130.TM20	130
HSK63A.H160.TM20	160
HSK63A.H115.TM25	115
HSK63A.H130.TM25	130
HSK63A.H160.TM25	160
HSK63A.H120.TM32	120
HSK63A.H160.TM32	160

Articolo	H
HSK100A.H85.TM6	85
HSK100A.H130.TM6	130
HSK100A.H160.TM6	160
HSK100A.H200.TM6	200
HSK100A.H85.TM8	85
HSK100A.H130.TM8	130
HSK100A.H160.TM8	160
HSK100A.H200.TM8	200
HSK100A.H90.TM10	90
HSK100A.H130.TM10	130
HSK100A.H160.TM10	160
HSK100A.H200.TM10	200
HSK100A.H95.TM12	95
HSK100A.H130.TM12	130
HSK100A.H160.TM12	160
HSK100A.H200.TM12	200
HSK100A.H95.TM14	95
HSK100A.H130.TM14	130
HSK100A.H160.TM14	160
HSK100A.H200.TM14	200
HSK100A.H100.TM16	100
HSK100A.H130.TM16	130
HSK100A.H160.TM16	160
HSK100A.H200.TM16	200
HSK100A.H100.TM18	100
HSK100A.H130.TM18	130
HSK100A.H160.TM18	160
HSK100A.H200.TM18	200
HSK100A.H105.TM20	105
HSK100A.H130.TM20	130
HSK100A.H160.TM20	160
HSK100A.H200.TM20	200
HSK100A.H115.TM25	115
HSK100A.H160.TM25	160
HSK100A.H200.TM25	200
HSK100A.H120.TM32	120
HSK100A.H160.TM32	160
HSK100A.H200.TM32	200

		D	L	A1	A2
TM3	*	3	12	10	20
TM4	*	4	16	15	25
TM5	*	5	20	15	25
TM6		6	36	21	27
TM8		8	36	21	27
TM10		10	41	24	32
TM12		12	46	24	32
TM14		14	46	24	32
TM16		16	49	24	32
TM18		18	49	33	42
TM20		20	51	33	42
TM25		25	57	44	53
TM32		32	61	44	53

* Senza vite di regolazione

* Without adjusting screw

Profondità regolabile: **L2= 10mm**
Adjustable depth:

ACCESSORI - ACCESSORIES

**P. 224**
PROLUNGHE
EXTENSIONS**P. 310**
SUPPORTI DI MONTAGGIO
ASSEMBLY DEVICES**P. 306**
RACCORDI REFRIGERANTE
COOLANT TUBES

**DIN 69893-1**

HSK A

TM JET

NEW MANDRINI A CALETTAMENTO A CALDO JET

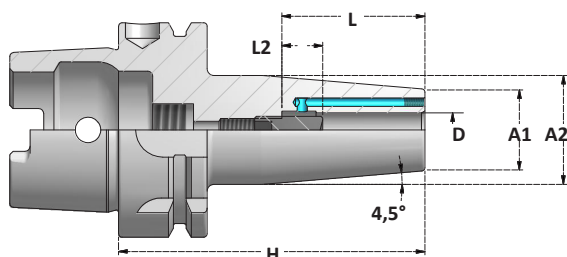
CON FORI PER IL REFRIGERANTE

SHRINK FIT CHUCKS **JET** TYPE

WITH HOLES FOR COOLANT

**G2,5**

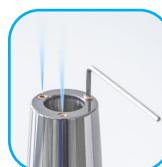
25000 r.p.m.

SCHEDA TECNICA
TECHNICAL DATA
TM P. 340

Articolo	H
HSK63A.H80.TM6JET	80
HSK63A.H120.TM6JET	120
HSK63A.H80.TM8JET	80
HSK63A.H120.TM8JET	120
HSK63A.H85.TM10JET	85
HSK63A.H120.TM10JET	120
HSK63A.H90.TM12JET	90
HSK63A.H120.TM12JET	120
HSK63A.H90.TM14JET	90
HSK63A.H120.TM14JET	120
HSK63A.H95.TM16JET	95
HSK63A.H120.TM16JET	120
HSK63A.H95.TM18JET	95
HSK63A.H120.TM18JET	120
HSK63A.H100.TM20JET	100
HSK63A.H130.TM20JET	130
HSK63A.H115.TM25JET	115
HSK63A.H120.TM32JET	120

Articolo	H
HSK100A.H85.TM6JET	85
HSK100A.H130.TM6JET	130
HSK100A.H85.TM8JET	85
HSK100A.H130.TM8JET	130
HSK100A.H90.TM10JET	90
HSK100A.H130.TM10JET	130
HSK100A.H95.TM12JET	95
HSK100A.H130.TM12JET	130
HSK100A.H95.TM14JET	95
HSK100A.H130.TM14JET	130
HSK100A.H100.TM16JET	100
HSK100A.H130.TM16JET	130
HSK100A.H100.TM18JET	100
HSK100A.H130.TM18JET	130
HSK100A.H100.TM20JET	100
HSK100A.H130.TM20JET	130
HSK100A.H115.TM25JET	115
HSK100A.H120.TM32JET	120

	D	L	A1	A2
...TM6	6	36	21	27
...TM8	8	36	21	27
...TM10	10	41	24	32
...TM12	12	46	24	32
...TM14	14	46	24	32
...TM16	16	49	24	32
...TM18	18	49	33	42
...TM20	20	51	33	42
...TM25	25	57	44	53
...TM32	32	61	44	53

Profondità regolabile: **L2= 10mm**
Adjustable depth:Altre lunghezze fornibili a richiesta
Other lengths available on request**3 DIVERSE MODALITÀ DI UTILIZZO****3 DIFFERENT APPLICATIONS**

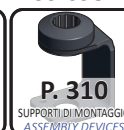
Senza montare i grani in dotazione si ha la massima portata del liquido refrigerante

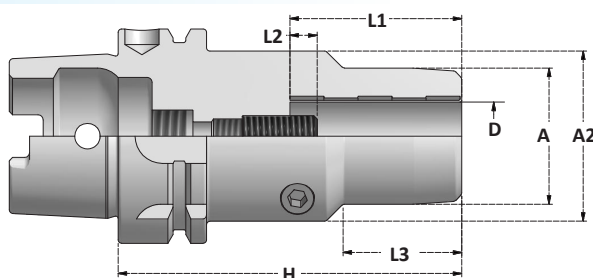
Not using supplied plugs you have maximum flow of coolant

Con l'utilizzo dei grani forati aumenta la pressione - ideale per lavorazioni ad alte velocità

Using plugs with hole the pressure increases - it's used for high speed works

Con l'utilizzo dei grani di chiusura si può lavorare con utensili con fori per il refrigerante

*Mounting sealing plugs tools with coolant through can be used***ACCESSORI - ACCESSORIES****P. 224**
PROLUNGHE
EXTENSIONS**P. 310**
SUPPORTI DI MONTAGGIO
ASSEMBLY DEVICES**P. 306**
RACCORDI REFRIGERANTE
COOLANT TUBES

**MANDRINI IDRAULICI**
HYDRAULIC CHUCKS**G2,5**
25000 r.p.m.SCHEDA TECNICA
TECHNICAL DATA
HY P. 342

Articolo	H	L3
HSK63A.H70.HY6	70	26
HSK63A.H150.HY6	150	105
HSK63A.H200.HY6	200	155
HSK63A.H70.HY8	70	26
HSK63A.H150.HY8	150	105
HSK63A.H200.HY8	200	155
HSK63A.H80.HY10	80	35
HSK63A.H150.HY10	150	105
HSK63A.H200.HY10	200	155
HSK63A.H85.HY12	85	40
HSK63A.H150.HY12	150	105
HSK63A.H200.HY12	200	155
HSK63A.H85.HY14	85	40
HSK63A.H150.HY14	150	105
HSK63A.H200.HY14	200	155
HSK63A.H90.HY16	90	46
HSK63A.H150.HY16	150	105
HSK63A.H200.HY16	200	155
HSK63A.H90.HY18	90	46
HSK63A.H150.HY18	150	105
HSK63A.H200.HY18	200	155
HSK63A.H90.HY20	90	46
HSK63A.H150.HY20	150	105
HSK63A.H200.HY20	200	155
HSK63A.H120.HY25	120	55
HSK63A.H125.HY32	125	60

Articolo	H	L3
HSK100A.H75.HY6	75	26
HSK100A.H150.HY6	150	105
HSK100A.H200.HY6	200	155
HSK100A.H75.HY8	75	26
HSK100A.H150.HY8	150	105
HSK100A.H200.HY8	200	155
HSK100A.H90.HY10	90	35
HSK100A.H150.HY10	150	105
HSK100A.H200.HY10	200	155
HSK100A.H95.HY12	95	40
HSK100A.H150.HY12	150	105
HSK100A.H200.HY12	200	155
HSK100A.H95.HY14	95	40
HSK100A.H150.HY14	150	105
HSK100A.H200.HY14	200	155
HSK100A.H100.HY16	100	46
HSK100A.H150.HY16	150	105
HSK100A.H200.HY16	200	155
HSK100A.H100.HY18	100	46
HSK100A.H150.HY18	150	105
HSK100A.H200.HY18	200	155
HSK100A.H105.HY20	105	46
HSK100A.H150.HY20	150	105
HSK100A.H200.HY20	200	155
HSK100A.H115.HY25	115	60
HSK100A.H120.HY32	120	65

Profondità regolabile: **L2= 10mm**
Adjustable depth:

	D	L1	A	A2
...HY6	6	37	26	49,5
...HY8	8	37	28	49,5
...HY10	10	41	30	49,5
...HY12	12	46	32	49,5
...HY14	14	46	34	49,5
...HY16	16	49	38	49,5
...HY18	18	49	40	49,5
...HY20	20	51	42	49,5
...HY25	25	57	49,5	55
...HY32	32	61	56	63

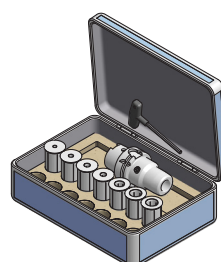
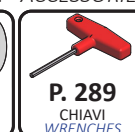
Forza di serraggio
Clamping force

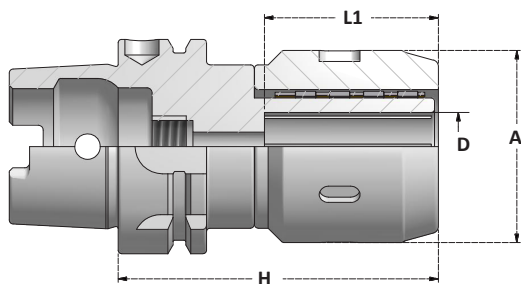
HY6	12Nm
HY8	30Nm
HY10	40Nm
HY12	70Nm
HY14	100Nm
HY16	135Nm
HY18	180Nm
HY20	220Nm
HY25	500Nm
HY32	700Nm

KIT - MANDRINO, CHIAVE E PINZE

KIT - TOOLHOLDERS, WRENCH AND COLLETS

Articolo	Pinze Collets	Ø Pinze Ø Collets	Mandrino con chiave Toolholder with wrench
BX.HSK63A.HY12	6SR12	D4 D6 D8 D10	HSK63A.H85.HY12
BX.HSK63A.HY20	6SR20	D6 D8 D10 D12 D16	HSK63A.H90.HY20
BX.HSK63A.HY32	6SR32	D6 D8 D10 D12 D16 D20 D25	HSK63A.H125.HY32
BX.HSK100A.HY12	6SR12	D4 D6 D8 D10	HSK100A.H95.HY12
BX.HSK100A.HY20	6SR20	D6 D8 D10 D12 D16	HSK100A.H105.HY20
BX.HSK100A.HY32	6SR32	D6 D8 D10 D12 D16 D20 D25	HSK100A.H120.HY32

**ACCESSORI - ACCESSORIES****P. 277**
PINZE
COLLETS**P. 289**
CHIAVI
WRENCHES**P. 310**
SUPPORTI DI MONTAGGIO
ASSEMBLY DEVICES**P. 306**
RACCORDI REFRIGERANTE
COOLANT TUBES

**MANDRINI A FORTE SERRAGGIO**
POWER MILLING CHUCKSSCHEDA TECNICA
TECHNICAL DATA
FS | P. 344

Articolo	H
HSK63A.H120.FS20	120
HSK63A.H120.FS32	120

Articolo	H
HSK100A.H120.FS20	120
HSK100A.H120.FS32	120

Serrare la ghiera di bloccaggio
fino al finecorsa
*Tighten the locking nut
up to the limit*



0,005

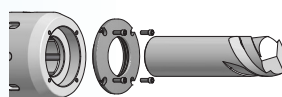


	D	A	L1
...FS20	20	66	59,3
...FS32	32	69	71,7

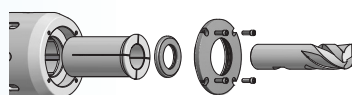
Forza di serraggio
Clamping force
FS20 **500Nm**
FS32 **1000Nm**

DISCHI DI TENUTA PER MANDRINI A FORTE SERRAGGIO
SEALED CAPS FOR POWER MILLING CHUCKS**DISCHI DI TENUTA PER DIAMETRO NOMINALE**
SEALED CAPS FOR NOMINAL DIAMETER

Articolo	D
CFS20.D20	20
CFS32.D32	32

**DISCHI DI TENUTA PER L'UTILIZZO DELLE PINZE DI RIDUZIONE**
SEALED CAPS FOR REDUCTION COLLETS USING

Articolo	D	RG Range
CFS20.RG	RG32	D4÷D16
CFS32.RG	RG40	D6÷D25

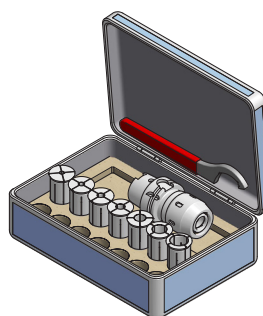
SCHEDA TECNICA
TECHNICAL DATA
FS | P. 344

P. 284
DISCHETTI RG
RG SEALED DISCS

KIT - MANDRINO, CHIAVE E PINZE

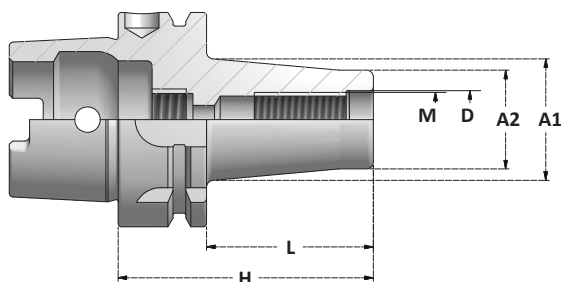
KIT - TOOLHOLDER, WRENCH AND COLLETS

Articolo	Pinze Collets	Ø Pinze Ø Collets	Mandrino con chiave Toolholder with wrench
BX.HSK63A.FS20	4SR20	D6 D8 D10 D12 D16	HSK63A.H120.FS20
BX.HSK63A.FS32	4SR32	D6 D8 D10 D12 D16 D20 D25	HSK63A.H120.FS32
BX.HSK100A.FS20	4SR20	D6 D8 D10 D12 D16	HSK100A.H120.FS20
BX.HSK100A.FS32	4SR32	D6 D8 D10 D12 D16 D20 D25	HSK100A.H120.FS32

**ACCESSORI - ACCESSORIES**

**MANDRINI PER FRESE CON ATTACCO FILETTATO**
SCREW IN MILL CHUCKS**G2,5**

25000 r.p.m.

SCHEDA TECNICA
TECHNICAL DATA
CPY | P. 346

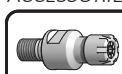
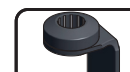
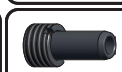
Articolo	H	L	A1
HSK63A.H59.M8CPY	59	33	15
HSK63A.H84.M8CPY	84	58	23
HSK63A.H109.M8CPY	109	83	23
HSK63A.H134.M8CPY	134	108	25
HSK63A.H59.M10CPY	59	33	20
HSK63A.H84.M10CPY	84	58	25
HSK63A.H109.M10CPY	109	83	28
HSK63A.H134.M10CPY	134	108	28
HSK63A.H159.M10CPY	159	133	34
HSK63A.H176.M10CPY	176	150	34
HSK63A.H59.M12CPY	59	33	24
HSK63A.H84.M12CPY	84	58	24
HSK63A.H109.M12CPY	109	83	31
HSK63A.H134.M12CPY	134	108	31
HSK63A.H159.M12CPY	159	133	38
HSK63A.H176.M12CPY	176	150	42
HSK63A.H59.M16CPY	59	33	34
HSK63A.H84.M16CPY	84	58	34
HSK63A.H109.M16CPY	109	83	34
HSK63A.H134.M16CPY	134	108	39
HSK63A.H159.M16CPY	159	133	39
HSK63A.H184.M16CPY	184	158	39

Articolo	H	L	A1
HSK100A.H79.M8CPY	79	53	23
HSK100A.H79.M10CPY	79	53	23
HSK100A.H129.M10CPY	129	103	32
HSK100A.H179.M10CPY	179	153	36,5
HSK100A.H79.M12CPY	79	53	24
HSK100A.H129.M12CPY	129	103	33
HSK100A.H179.M12CPY	179	153	40
HSK100A.H79.M16CPY	79	53	34
HSK100A.H129.M16CPY	129	103	36
HSK100A.H179.M16CPY	179	153	42,5
HSK100A.H229.M16CPY	229	203	55

	M	D	A2	Nm
M8CPY	M8	8,5	13	25Nm
M10CPY	M10	10,5	18	40Nm
M12CPY	M12	12,5	21	60Nm
M16CPY	M16	17	29	80Nm

Momento torcente consigliato: **Nm**
Recommended tightening torque:

ACCESSORI - ACCESSORIES

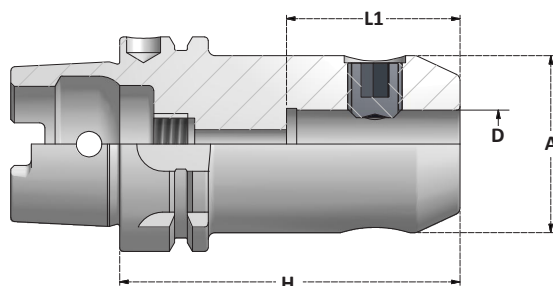
**P. 201**
RIDUZIONI ER
ER ADAPTERS**P. 310**
SUPPORTI DI MONTAGGIO
ASSEMBLY DEVICES**P. 306**
RACCORDI REFRIGERANTE
COOLANT TUBES

**MANDRINI PORTAFRESA WELDON - DIN1835-2**
END MILL HOLDERS WELDON - DIN1835-2

WE	STANDARD
Pag. 34-35	<i>STANDARD</i>
WE RG	A CENTRATURA REGOLABILE
Pag. 36	<i>ADJUSTABLE RUNOUT</i>
WE C	CON CANALI DI LUBRIFICAZIONE
Pag. 37	<i>WITH COOLANT CHANNELS</i>
WHN	WHISTLE NOTCH - GRANI INCLINATI A 2° (DIN 1835-2 Form E)
Pag. 38	<i>WHISTLE NOTCH - 2° INCLINED SCREWS (DIN 1835-2 Form E)</i>

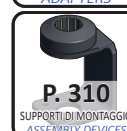
HSK A

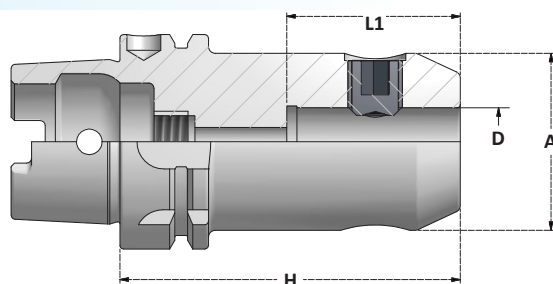
WE

DIN 1835-2 Form B**MANDRINI PORTAFRESA WELDON**
END MILL HOLDERS WELDON**G6,3**
15000 r.p.m.SCHEDA TECNICA
TECHNICAL DATA
WE P. 347

Articolo	H
HSK50A.H65.WE6	65
HSK50A.H65.WE8	65
HSK50A.H65.WE10	65
HSK50A.H80.WE12	80
HSK50A.H80.WE14	80
HSK50A.H80.WE16	80
HSK50A.H80.WE18	80
HSK50A.H80.WE20	80

	D	L1	A	Grano Screw
...WE6	6	37	25	GR.WE6
...WE8	8	37	28	GR.WE8
...WE10	10	41	35	GR.WE10
...WE12	12	46	42	GR.WE12-14
...WE14	14	46	44	GR.WE12-14
...WE16	16	49	48	GR.WE16-18
...WE18	18	49	50	GR.WE16-18
...WE20	20	51	52	GR.WE20

ACCESSORI - ACCESSORIES**P. 225**
RIDUZIONI
ADAPTERS**P. 303**
GRANI
SCREWS**P. 310**
SUPPORTI DI MONTAGGIO
ASSEMBLY DEVICES**P. 306**
RACCORDI REFRIGERANTE
COOLANT TUBES

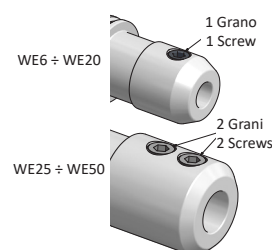
**MANDRINI PORTAFRESA WELDON**
END MILL HOLDERS WELDON**G6,3**
15000r.p.m.SCHEDA TECNICA
TECHNICAL DATA
WE P. 347

Articolo	H
HSK63A.H65.WE6	65
HSK63A.H100.WE6	100
HSK63A.H130.WE6	130
HSK63A.H160.WE6	160
HSK63A.H65.WE8	65
HSK63A.H100.WE8	100
HSK63A.H130.WE8	130
HSK63A.H160.WE8	160
HSK63A.H65.WE10	65
HSK63A.H100.WE10	100
HSK63A.H130.WE10	130
HSK63A.H160.WE10	160
HSK63A.H80.WE12	80
HSK63A.H100.WE12	100
HSK63A.H130.WE12	130
HSK63A.H160.WE12	160
HSK63A.H80.WE14	80
HSK63A.H100.WE14	100
HSK63A.H130.WE14	130
HSK63A.H160.WE14	160
HSK63A.H80.WE16	80
HSK63A.H100.WE16	100
HSK63A.H130.WE16	130
HSK63A.H160.WE16	160
HSK63A.H80.WE18	80
HSK63A.H100.WE18	100
HSK63A.H130.WE18	130
HSK63A.H160.WE18	160
HSK63A.H80.WE20	80
HSK63A.H100.WE20	100
HSK63A.H130.WE20	130
HSK63A.H160.WE20	160
HSK63A.H110.WE25	110
HSK63A.H130.WE25	130
HSK63A.H160.WE25	160
HSK63A.H110.WE32	110
HSK63A.H130.WE32	130
HSK63A.H160.WE32	160
HSK63A.H125.WE40	125

Articolo	H
HSK100A.H80.WE6	80
HSK100A.H130.WE6	130
HSK100A.H160.WE6	160
HSK100A.H80.WE8	80
HSK100A.H130.WE8	130
HSK100A.H160.WE8	160
HSK100A.H80.WE10	80
HSK100A.H130.WE10	130
HSK100A.H160.WE10	160
HSK100A.H200.WE10	200
HSK100A.H80.WE12	80
HSK100A.H130.WE12	130
HSK100A.H160.WE12	160
HSK100A.H200.WE12	200
HSK100A.H80.WE14	80
HSK100A.H130.WE14	130
HSK100A.H160.WE14	160
HSK100A.H100.WE16	100
HSK100A.H130.WE16	130
HSK100A.H160.WE16	160
HSK100A.H200.WE16	200
HSK100A.H100.WE18	100
HSK100A.H130.WE18	130
HSK100A.H160.WE18	160
HSK100A.H100.WE20	100
HSK100A.H130.WE20	130
HSK100A.H160.WE20	160
HSK100A.H200.WE20	200
HSK100A.H100.WE25	100
HSK100A.H130.WE25	130
HSK100A.H160.WE25	160
HSK100A.H200.WE25	200
HSK100A.H100.WE32	100
HSK100A.H130.WE32	130
HSK100A.H160.WE32	160
HSK100A.H200.WE32	200
HSK100A.H120.WE40	120
HSK100A.H160.WE40	160
HSK100A.H200.WE40	200
HSK100A.H130.WE50	130

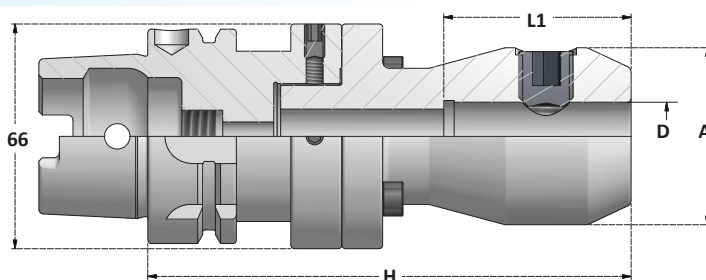
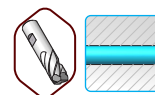
	D	L1	A	Grano Screw
...WE6	6	37	25	GR.WE6
...WE8	8	37	28	GR.WE8
...WE10	10	41	35	GR.WE10
...WE12	12	46	42	GR.WE12-14
...WE14	14	46	44	GR.WE12-14
...WE16	16	49	48	GR.WE16-18
...WE18	18	49	50	GR.WE16-18
...WE20	20	51	52	GR.WE20

	D	L1	A	Grani Screws
..WE25	25	59	65	2x GR.WE25
..WE32	32	63	72	2x GR.WE32-40
..WE40	40	73	80	2x GR.WE32-40
..WE50	50	83	100	2x GR.WE50



ACCESSORI - ACCESSORIES

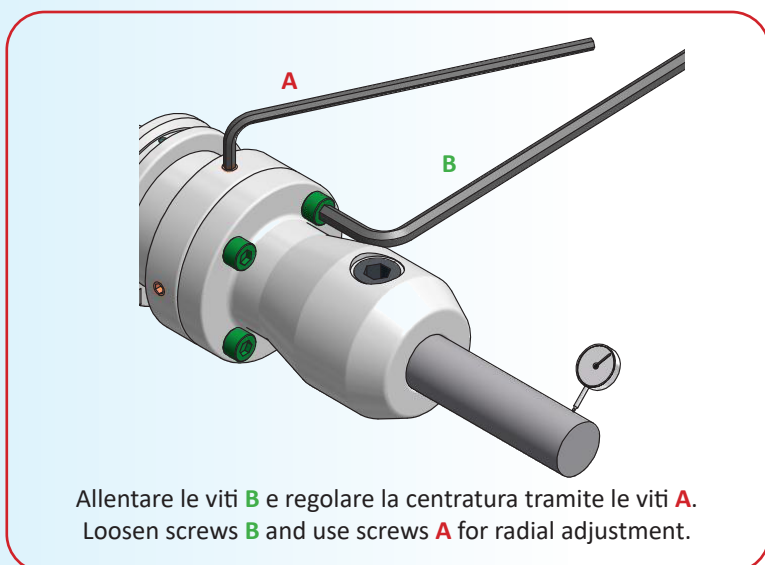


**MANDRINI PORTAFRESA WELDON A CENTRATURA REGOLABILE**
RUNOUT ADJUSTABLE END MILL HOLDERS WELDONSCHEDA TECNICA
TECHNICAL DATA
WE P. 347

Articolo	H
HSK63A.H107.WE6RG	107
HSK63A.H107.WE8RG	107
HSK63A.H107.WE10RG	107
HSK63A.H117.WE12RG	117
HSK63A.H117.WE14RG	117
HSK63A.H137.WE16RG	137
HSK63A.H137.WE18RG	137
HSK63A.H142.WE20RG	142

	D	L1	A	Grano Screw
...WE6	6	37	25	GR.WE6
...WE8	8	37	28	GR.WE8
...WE10	10	41	35	GR.WE10
...WE12	12	46	42	GR.WE12-14
...WE14	14	46	44	GR.WE12-14
...WE16	16	49	48	GR.WE16-18
...WE18	18	49	50	GR.WE16-18
...WE20	20	51	52	GR.WE20

Articolo	H
HSK100A.H110.WE6RG	110
HSK100A.H110.WE8RG	110
HSK100A.H110.WE10RG	110
HSK100A.H120.WE12RG	120
HSK100A.H120.WE14RG	120
HSK100A.H140.WE16RG	140
HSK100A.H140.WE18RG	140
HSK100A.H145.WE20RG	145



Allentare le viti **B** e regolare la centratura tramite le viti **A**.
Loosen screws **B** and use screws **A** for radial adjustment.

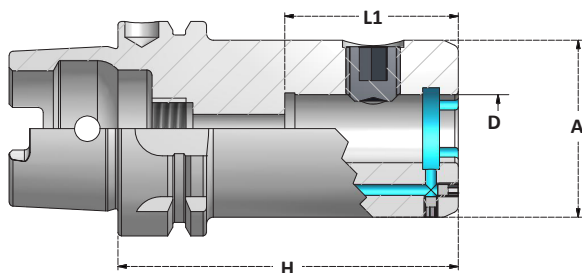
ACCESSORI - ACCESSORIES

**P. 303**
GRANI
SCREWS**P. 310**
SUPPORTI DI MONTAGGIO
ASSEMBLY DEVICES**P. 306**
RACCORDI REFRIGERANTE
COOLANT TUBES



MANDRINI PORTAFRESA WELDON CON CANALI DI LUBRIFICAZIONE END MILL HOLDERS WELDON WITH COOLANT CHANNELS

G6,3
15000r.p.m.



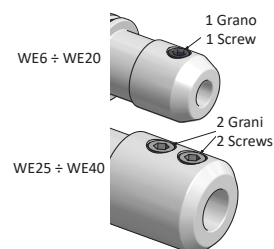
SCHEDA TECNICA
TECHNICAL DATA
WE P. 347

Articolo	H
HSK63A.H75.WE6C	75
HSK63A.H75.WE8C	75
HSK63A.H75.WE10C	75
HSK63A.H80.WE12C	80
HSK63A.H80.WE14C	80
HSK63A.H80.WE16C	80
HSK63A.H80.WE18C	80
HSK63A.H80.WE20C	80
HSK63A.H110.WE25C	110
HSK63A.H110.WE32C	110
HSK63A.H120.WE40C	120

Articolo	H
HSK100A.H100.WE16C	100
HSK100A.H100.WE20C	100
HSK100A.H100.WE25C	100
HSK100A.H100.WE32C	100
HSK100A.H120.WE40C	120

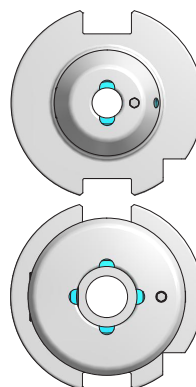
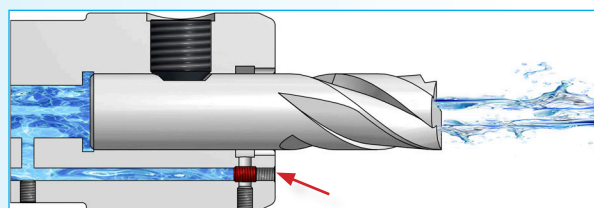
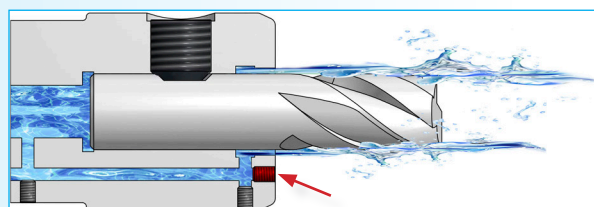
	D	L1	A	Grano Screw
...WE6	6	37	25	GR.WE6
...WE8	8	37	28	GR.WE8
...WE10	10	41	35	GR.WE10
...WE12	12	46	42	GR.WE12-14
...WE14	14	46	44	GR.WE12-14
...WE16	16	49	48	GR.WE16-18
...WE18	18	49	50	GR.WE16-18
...WE20	20	51	52	GR.WE20

	D	L1	A	Grani Screws
..WE25	25	59	65	2x GR.WE25
..WE32	32	63	72	2x GR.WE32-40
..WE40	40	73	80	2x GR.WE32-40



Regolando il grano si può scegliere se indirizzare il liquido refrigerante ai fori del mandrino o attraverso l'utensile.

Lock screw for coolant through tool.
Unlock screw for coolant through toolholder.



WE6 ÷ WE14C

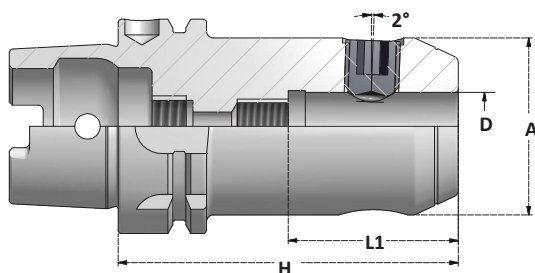
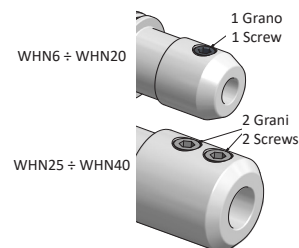
WE16C ÷ WE40C

ACCESSORI - ACCESSORIES



**MANDRINI PORTAFRESA WHISTLE NOTCH**
END MILL HOLDERS WHISTLE NOTCH**G6,3**

15000 r.p.m.

SCHEDA TECNICA
TECHNICAL DATA
WE P. 347

Articolo	H
HSK63A.H80.WHN6	80
HSK63A.H80.WHN8	80
HSK63A.H80.WHN10	80
HSK63A.H90.WHN12	90
HSK63A.H100.WHN16	100
HSK63A.H100.WHN18	100
HSK63A.H100.WHN20	100
HSK63A.H110.WHN25	110
HSK63A.H110.WHN32	110

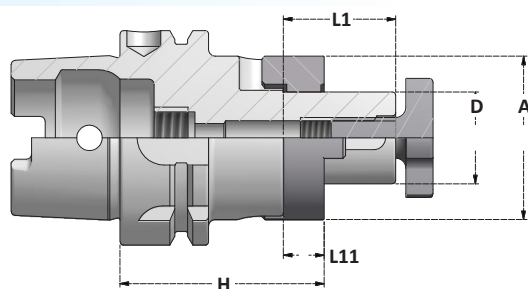
Articolo	H
HSK100A.H90.WHN6	90
HSK100A.H90.WHN8	90
HSK100A.H90.WHN10	90
HSK100A.H100.WHN12	100
HSK100A.H100.WHN16	100
HSK100A.H100.WHN18	100
HSK100A.H110.WHN20	110
HSK100A.H120.WHN25	120
HSK100A.H120.WHN32	120
HSK100A.H120.WHN40	120

	D	L1	A	Grano Screw
WHN6	6	37	25	GR.WE6
WHN8	8	37	28	GR.WE8
WHN10	10	41	35	GR.WE10
WHN12	12	46	42	GR.WE12-14
WHN14	14	46	44	GR.WE12-14
WHN16	16	49	48	GR.WE16-18
WHN18	18	49	50	GR.WE16-18
WHN20	20	51	52	GR.WE20

	D	L1	A	Grano Screw
WHN25	25	59	65	2x GR.WE25
WHN32	32	63	72	2x GR.WE32-40
WHN40	40	73	80	2x GR.WE32-40

ACCESSORI - ACCESSORIES

**P. 303**
GRANI
SCREWS**P. 310**SUPPORTI DI MONTAGGIO
ASSEMBLY DEVICES**P. 306**RACCORDI REFRIGERANTE
COOLANT TUBES

**MANDRINI PORTAFRESA COMBINATI**
COMBI SHELL MILL HOLDERSSCHEDA TECNICA
TECHNICAL DATA
D C P. 348

Articolo	H
HSK50A.H50.D16C	50
HSK50A.H50.D22C	50
HSK50A.H65.D27C	65
HSK50A.H65.D32C	65

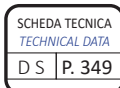
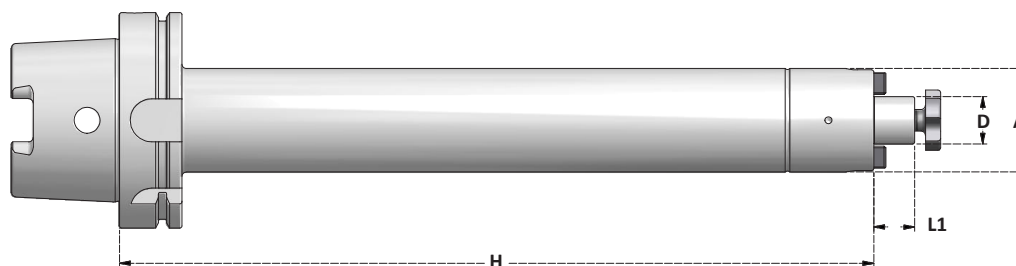
	D	A	L1	L11	ATR	VTC	CHV
D16C	16	32	27	10	ATR.D16	VTC.D16	CHV.D16
D22C	22	40	31	12	ATR.D22	VTC.D22	CHV.D22
D27C	27	48	33	12	ATR.D27	VTC.D27	CHV.D27
D32C	32	58	38	14	ATR.D32	VTC.D32	CHV.D32
D40C	40	70	41	14	ATR.D40	VTC.D40	CHV.D40

Articolo	H
HSK63A.H60.D16C	60
HSK63A.H100.D16C	100
HSK63A.H160.D16C	160
HSK63A.H60.D22C	60
HSK63A.H100.D22C	100
HSK63A.H160.D22C	160
HSK63A.H60.D27C	60
HSK63A.H100.D27C	100
HSK63A.H160.D27C	160
HSK63A.H60.D32C	60
HSK63A.H100.D32C	100
HSK63A.H160.D32C	160
HSK63A.H70.D40C	70
HSK63A.H100.D40C	100

Articolo	H
HSK100A.H60.D16C	60
HSK100A.H100.D16C	100
HSK100A.H160.D16C	160
HSK100A.H60.D22C	60
HSK100A.H100.D22C	100
HSK100A.H160.D22C	160
HSK100A.H60.D27C	60
HSK100A.H100.D27C	100
HSK100A.H160.D27C	160
HSK100A.H60.D32C	60
HSK100A.H100.D32C	100
HSK100A.H160.D32C	160
HSK100A.H70.D40C	70
HSK100A.H100.D40C	100
HSK100A.H160.D40C	160

ACCESSORI - ACCESSORIES

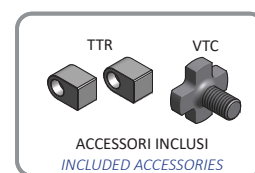
**P. 304-305**
ACCESSORI
ACCESSORIES**P. 310**SUPPORTI DI MONTAGGIO
ASSEMBLY DEVICES**P. 306**RACCORDI REFRIGERANTE
COOLANT TUBES

**MANDRINI PORTAFRESA ANTIVIBRANTI**
DAMPING VIBRATIONS SHELL MILL HOLDERS

Articolo	H
HSK100A.H350.D22SAV	350
HSK100A.H400.D22SAV	400
HSK100A.H500.D22SAV	500

	D	A	L1	TTR	VTC
...D22S	22	48	19	TTR.D22	VTC.D22
...D27S	27	58	21	TTR.D27	VTC.D27

Articolo	H
HSK100A.H350.D27SAV	350
HSK100A.H400.D27SAV	400
HSK100A.H500.D27SAV	500

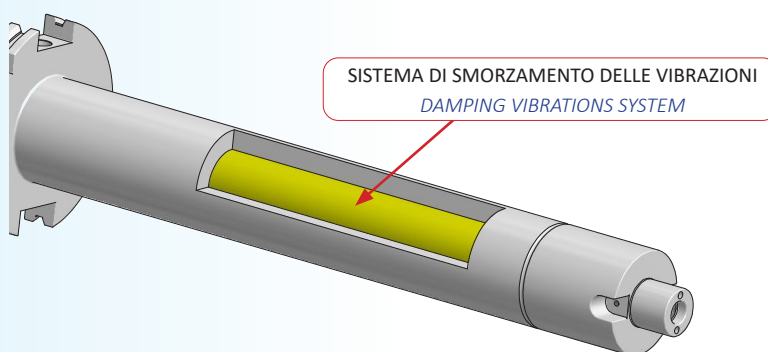
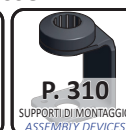


I mandrini portafresa antivibranti sono dotati di un sistema interno che smorza le vibrazioni trasmesse dalla fresa all'attacco. In questo modo viene prolungata la durata dell'utensile e del mandrino macchina.

Il sistema antivibrante consente di lavorare con sporgenze molto lunghe mantenendo parametri di taglio elevati. Le lavorazioni sono più silenziose e stabili, e permettono di ottenere una migliore finitura superficiale.

Damping vibrations shell mill holders have an internal system that dampens the vibrations transmitted from the mill to the shank. In this way, the life of the tool and the machine spindle is extended.

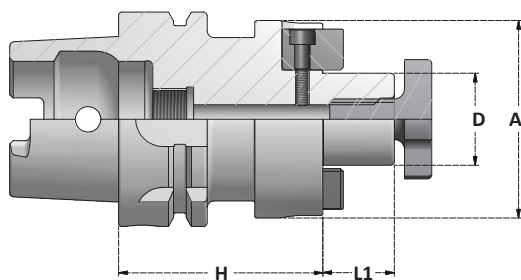
Damping vibrations system allows to work with very long overhangs while maintaining high cutting parameters. The processes are quieter and more stable, and allow to obtain a better surface finish.

**ACCESSORI - ACCESSORIES**



MANDRINI PORTAFRESA FISSI

SHELL MILL HOLDERS

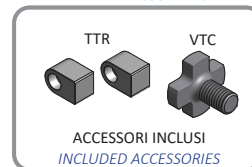


SCHEDA TECNICA
TECHNICAL DATA
D S P. 349

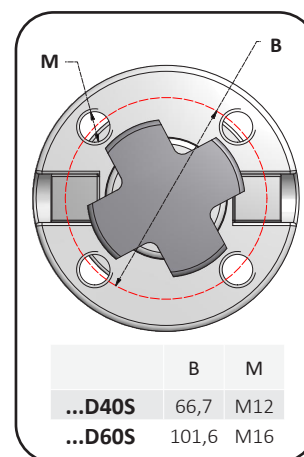
Articolo	H
HSK50A.H50.D16S	50
HSK50A.H60.D22S	60
HSK50A.H60.D27S	60
HSK50A.H60.D32S	60

Articolo	H
HSK63A.H50.D16S	50
HSK63A.H100.D16S	100
HSK63A.H130.D16S	130
HSK63A.H160.D16S	160
HSK63A.H50.D22S	50
HSK63A.H100.D22S	100
HSK63A.H130.D22S	130
HSK63A.H160.D22S	160
HSK63A.H60.D27S	60
HSK63A.H100.D27S	100
HSK63A.H130.D27S	130
HSK63A.H160.D27S	160
HSK63A.H60.D32S	60
HSK63A.H100.D32S	100
HSK63A.H130.D32S	130
HSK63A.H160.D32S	160
HSK63A.H60.D40S	60
HSK63A.H100.D40S	100
HSK63A.H130.D40S	130
HSK63A.H160.D40S	160

Articolo	H
HSK100A.H50.D16S	50
HSK100A.H100.D16S	100
HSK100A.H130.D16S	130
HSK100A.H160.D16S	160
HSK100A.H200.D16S	200
HSK100A.H50.D22S	50
HSK100A.H100.D22S	100
HSK100A.H130.D22S	130
HSK100A.H160.D22S	160
HSK100A.H200.D22S	200
HSK100A.H50.D27S	50
HSK100A.H100.D27S	100
HSK100A.H130.D27S	130
HSK100A.H160.D27S	160
HSK100A.H200.D27S	200
HSK100A.H50.D32S	50
HSK100A.H100.D32S	100
HSK100A.H130.D32S	130
HSK100A.H160.D32S	160
HSK100A.H60.D40S	60
HSK100A.H100.D40S	100
HSK100A.H130.D40S	130
HSK100A.H160.D40S	160
HSK100A.H70.D60S	70



	D	A	L1	TTR	VTC
...D16S	16	38	17	TTR.D16	VTC.D16
...D22S	22	48	19	TTR.D22	VTC.D22
...D27S	27	58	21	TTR.D27	VTC.D27
...D32S	32	78	24	TTR.D32	VTC.D32
...D40S	40	88	27	TTR.D40	VTC.D40
...D60S	60	129	40	TTR.D60	VTC.D60



	B	M
...D40S	66,7	M12
...D60S	101,6	M16

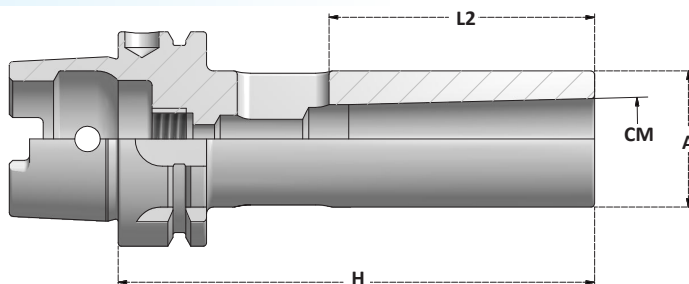
ACCESSORI - ACCESSORIES



**MANDRINI DI RIDUZIONE CONO MORSE PER PUNTE**
MORSE TAPER ADAPTERS FOR DRILLS

G6,3

15000 r.p.m.

SCHEDA TECNICA
TECHNICAL DATA
CM P | P. 350

Articolo	H
HSK63A.H100.CM1P	100
HSK63A.H120.CM2P	120
HSK63A.H140.CM3P	140
HSK63A.H160.CM4P	160

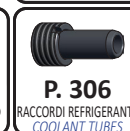
	CM	A	L2
...CM1P	1	25	56
...CM2P	2	32	67
...CM3P	3	40	84
...CM4P	4	48	107
...CM5P	5	63	135

PER UTENSILI DIN228B CON TENONE

FOR TOOLS DIN228B WITH TANG

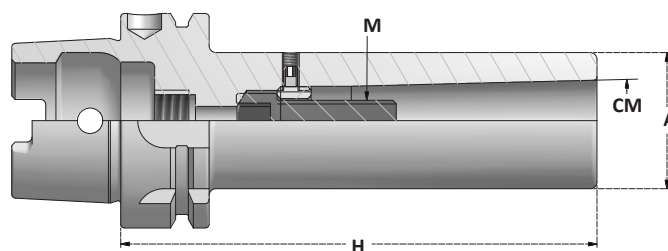
Articolo	H
HSK100A.H110.CM1P	110
HSK100A.H120.CM2P	120
HSK100A.H150.CM3P	150
HSK100A.H170.CM4P	170
HSK100A.H200.CM5P	200

ACCESSORI - ACCESSORIES

P. 308
ESTRATTORI
PULLERSP. 310
SUPPORTI DI MONTAGGIO
ASSEMBLY DEVICESP. 306
RACCORDI REFRIGERANTE
COOLANT TUBES**MANDRINI DI RIDUZIONE CONO MORSE PER FRESE**
MORSE TAPER ADAPTERS FOR THREADED MILLS

G6,3

15000 r.p.m.

SCHEDA TECNICA
TECHNICAL DATA
CMFV | P. 351

Articolo	H
HSK63A.H100.CM1FV	100
HSK63A.H120.CM2FV	120
HSK63A.H150.CM3FV	150
HSK63A.H170.CM4FV	170

	CM	A	M
...CM1FV	1	25	M6
...CM2FV	2	32	M10
...CM3FV	3	40	M12
...CM4FV	4	48	M16
...CM5FV	5	63	M20

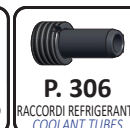
PER UTENSILI DIN228A CON FILETTO

FOR TOOLS DIN228A WITH THREAD

FORNITI CON VITE SENZA FORO
PER IL PASSAGGIO DEL REFRIGERANTESUPPLIED WITH SCREW
WITHOUT COOLANT THROUGH

Articolo	H
HSK100A.H120.CM1FV	120
HSK100A.H120.CM2FV	120
HSK100A.H150.CM3FV	150
HSK100A.H170.CM4FV	170
HSK100A.H200.CM5FV	200

ACCESSORI - ACCESSORIES

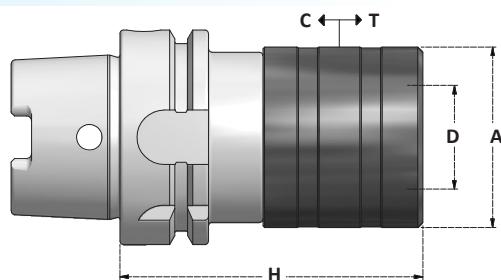
P. 275
PINZE
COLLETSP. 310
SUPPORTI DI MONTAGGIO
ASSEMBLY DEVICESP. 306
RACCORDI REFRIGERANTE
COOLANT TUBES



DIN 69893-1

HSK A

MCR TC

MASCHIATORI A CAMBIO RAPIDO CON COMPENSAZIONE ASSIALE
QUICK CHANGE TAPPING CHUCKS WITH AXIAL COMPENSATIONSCHEDA TECNICA
TECHNICAL DATA
MCR | P. 352Corsa di compressione: **C**
Compression stroke:Corsa di trazione: **T**
Extension stroke:

Articolo	H
HSK63A.MCR1TC	81
HSK63A.MCR2TC	119
HSK63A.MCR3TC	176

Articolo	H
HSK100A.MCR1TC	90
HSK100A.MCR2TC	138
HSK100A.MCR3TC	190
HSK100A.MCR4TC	225

	Bussola Adapter	D	Tapping Range	A	T	C
MCR1	B1 / BF1	19	M2÷M14	36	7,5	7,5
MCR2	B2 / BF2	31	M6÷M27	53	12,5	12,5
MCR3	B3 / BF3	48	M14÷M45	78	20	20
MCR4	BF4	60	M22÷M45	96	22,5	22,5

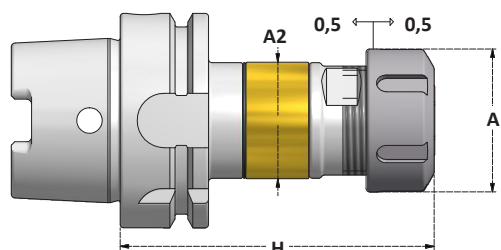
ACCESSORI - ACCESSORIES

P. 336
MASCHI
TAPSP. 310
SUPPORTI DI MONTAGGIO
ASSEMBLY DEVICESP. 298
INSERZIONI
ADAPTERS

DIN 69893-1

HSK A

ERC SY

MANDRINI PER MASCHIATURA SINCRONIZZATA
TAPPING CHUCKS FOR SYNCHRONIZED TAPPINGSCHEDA TECNICA
TECHNICAL DATA
SY | P. 353VANTAGGI RISPETTO AL SISTEMA CON BUSSOLE
ADVANTAGES COMPARED TO ADAPTERS SYSTEM

- PASSAGGIO DEL REFRIGERANTE
 - ADATTO PER MASCHIATURA AD ALTE VELOCITÀ
 - SISTEMA PORTAPINZE ER
- COOLANT THROUGH
- SUITABLE FOR HIGH SPEED TAPPING
- ER COLLET SYSTEM

Articolo	H
HSK63A.ERC16MSY	89

Articolo	H
HSK63A.ERC16SY	89
HSK63A.ERC20SY	90
HSK63A.ERC25SY	94
HSK63A.ERC32SY	105
HSK63A.ERC40SY	133

Articolo	H
HSK100A.ERC16MSY	96

Articolo	H
HSK100A.ERC16SY	96
HSK100A.ERC20SY	97
HSK100A.ERC25SY	102
HSK100A.ERC32SY	110
HSK100A.ERC40SY	133
HSK100A.ERC50SY	133

	A	A2	Collets Range	Tapping Range	Ghiera Nut
ERC16MSY	22	34	3,5 ÷ 10	M3 ÷ M12	G16M
ERC16SY	32	34	3,5 ÷ 10	M3 ÷ M12	G16S
ERC20SY	35	34	3,5 ÷ 12	M3 ÷ M16	G20S
ERC25SY	42	45	3,5 ÷ 16	M3 ÷ M20	G25S
ERC32SY	50	45	3,5 ÷ 20	M3 ÷ M27	G32S
ERC40SY	63	62	6 ÷ 25	M5 ÷ M33	G40S
ERC50SY	78	62	8 ÷ 32	M10-M42	G50S

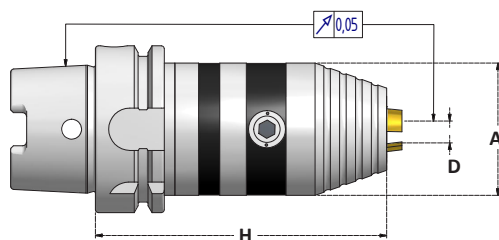
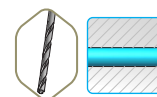
ACCESSORI - ACCESSORIES

P. 265
PINZE CON QUADRO
COLLETS WITH SQUAREP. 280
GHIERE
NUTSP. 288
CHIAVI
WRENCHESP. 336
MASCHI
TAPSP. 310
SUPPORTI DI MONTAGGIO
ASSEMBLY DEVICESP. 306
RACCORDI REFRIGERANTE
COOLANT TUBES

**DIN 69893-1**

HSK A

CP

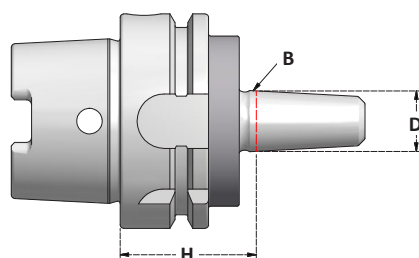
MANDRINI PORTAPUNTA CON PASSAGGIO DEL REFRIGERANTE
ROTAZIONE DESTRA E SINISTRA*DRILL CHUCKS WITH COOLANT THROUGH - RIGHT AND LEFT ROTATION*

Articolo	D	H	A	Chiave Wrench
HSK63A.H105.CP13S	1-13	105	50,5	CH.EX6
HSK63A.H110.CP16S	2,5-16	110	57	CH.EX6

ACCESSORI - ACCESSORIES**DIN 69893-1**

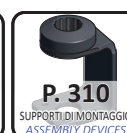
HSK A

B

DIN 238**ATTACCHI PER MANDRINI AUTOSERRANTI***DRILL CHUCKS ARBORS*

Articolo	H
HSK63A.H45.B12	45
HSK63A.H45.B16	45
HSK63A.H45.B18	45

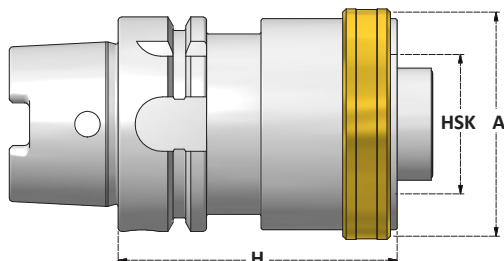
B	D
...B12	12,065
...B16	15,733
...B18	17,78

ACCESSORI - ACCESSORIES

**DIN 69893-1**

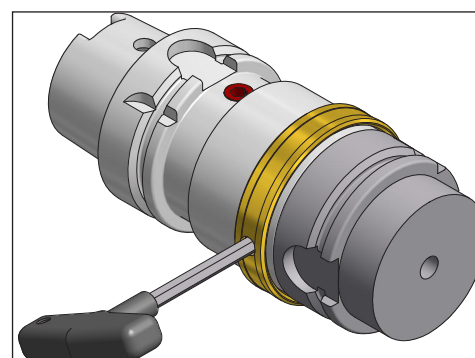
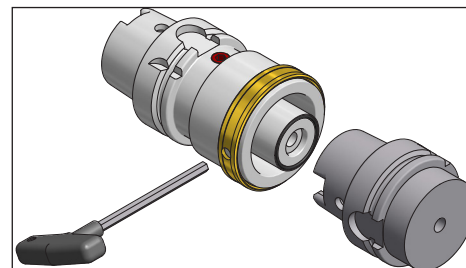
HSK A

HSK AC

DIN 69893**ADATTATORI HSK FORMA A/C**
ADAPTERS HSK FORM A/C

Articolo	H	A	HSK A/C
HSK63A.H80.HSK50AC	80	55	50
HSK63A.H80.HSK63AC	80	70	63
HSK63A.H120.HSK63AC	120	70	63

Articolo	H	A	HSK A/C
HSK100A.H100.HSK63AC	100	70	63
HSK100A.H140.HSK100AC	140	110	100
HSK100A.H200.HSK100AC	200	110	100

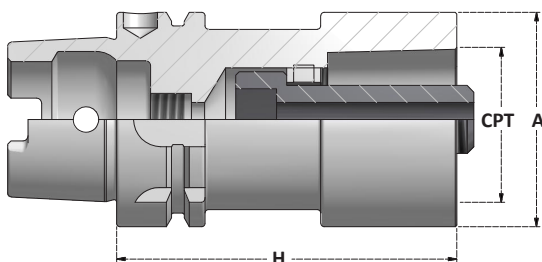
**DIN 69893-1**

HSK A

CPT

DIN ISO 26623-1

NEW

ADATTATORI CPT
ADAPTERS CPT

Articolo	H	A	CPT
HSK63A.H80.CPT40	80	40	40
HSK63A.H90.CPT50	90	50	50

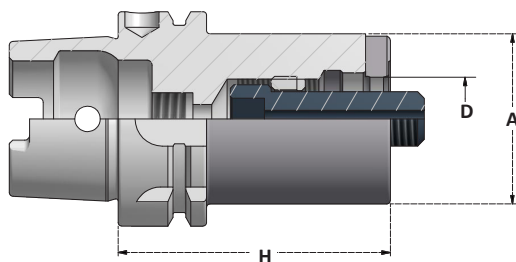
Articolo	H	A	CPT
HSK100A.H90.CPT40	90	40	40
HSK100A.H100.CPT50	100	50	50
HSK100A.H110.CPT63	110	63	63
HSK100A.H120.CPT80	120	80	80
HSK100A.H155.CPT100	155	100	100

ACCESSORI - ACCESSORIES

**P. 310**SUPPORTI DI MONTAGGIO
ASSEMBLY DEVICES**P. 306**RACCORDI REFRIGERANTE
COOLANT TUBES

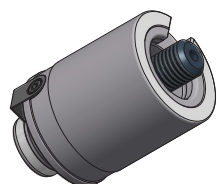


MANDRINI MODULARI TIPO VARILOCK
MODULAR TOOLHOLDERS VARILOCK TYPE

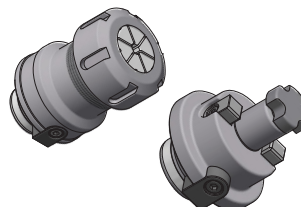


Articolo	A	H	D	Attacco
HSK63A.H80.MD50	50	80	27,3 / 27	MD50
HSK63A.H90.MD63	63	90	32,3 / 32	MD63

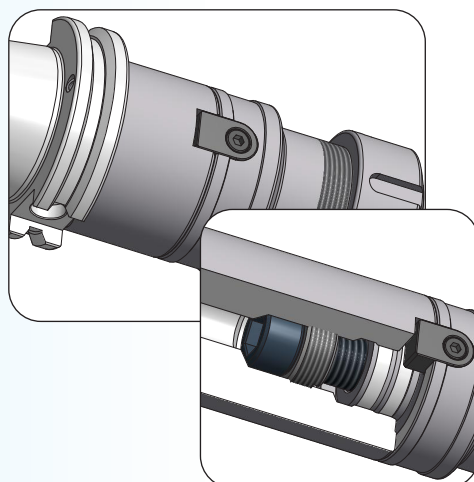
Articolo	A	H	D	Attacco
HSK100A.H85.MD50	50	85	27,3 / 27	MD50
HSK100A.H95.MD63	63	95	32,3 / 32	MD63
HSK100A.H95.MD80	80	95	32,3 / 32	MD80



RIDUZIONI E PROLUNGHE
EXTENSIONS AND REDUCTIONS
PAG. 203



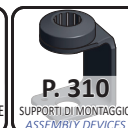
INSERZIONI PORTAUTENSILI
TOOLHOLDER ADAPTERS
PAG. 202



ACCESSORI - ACCESSORIES

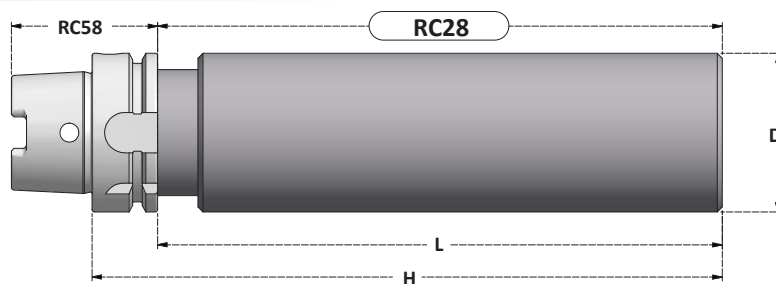


P. 306
RACCORDI REFRIGERANTE
COOLANT TUBES



P. 310
SUPPORTI DI MONTAGGIO
ASSEMBLY DEVICES

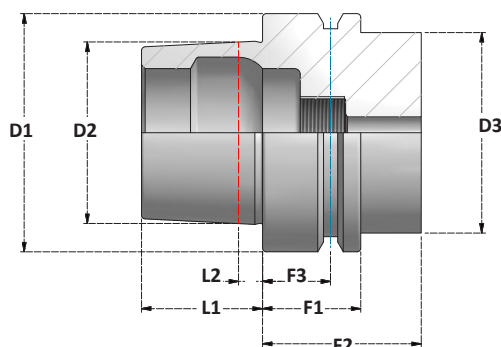
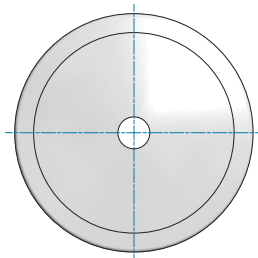


**MANDRINI CON STELO LAVORABILE***BLANK ARBORS*

Articolo	D	H	L
HSK63A.H150.D63BL	63	150	124
HSK63A.H250.D63BL	63	250	224
HSK63A.H250.D80BL	80	250	224

Articolo	D	H	L
HSK100A.H250.D97BL	97	250	221



**MANDRINI HSK FORMA E**
HSK FORM E TOOLHOLDERS**DIMENSIONI DELL'ATTACCO***SHANK DIMENSIONS*

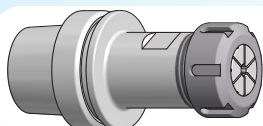
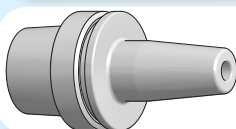
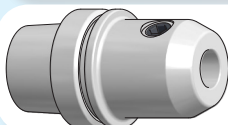
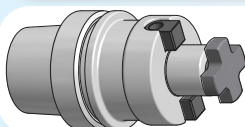
ATTACCO SHANK	D1	D2	D3	L1	L2	F1	F2	F3
	h10		max	0 -0,2		0 -0,1	min	±0,1
50	50	38,009	42	25	5	26	42	18
63	63	48,010	53	32	6,3	26	42	18

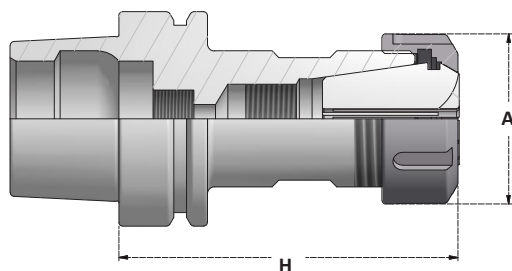
CARATTERISTICHE:

Tolleranza di precisione dei coni: AT2.
Costruiti in acciaio certificato in barre.
Eseguiti trattamenti termici da fornitori certificati.
Rettificati di precisione esternamente e internamente.
Controllati con strumenti di misura certificati.
Prebilanciati nei gradi indicati nelle pagine di catalogo.

FEATURES:

The precision tolerance of tapers is AT2.
Made of certified steel.
Heat treatments performed by certified suppliers.
Precision grinding externally and internally.
Checked with certified measuring instruments.
Pre-balanced as indicated in the catalog pages.

SUPPORTI DI MONTAGGIO
ASSEMBLY DEVICES **P.310****MANDRINI PORTAPINZA ER STANDARD**
*COLLET CHUCKS ER STANDARD***DIN ISO 15488** (DIN6499) *PAG. 49***MANDRINI A CALETTAMENTO A CALDO**
*SHRINK FIT CHUCKS**PAG. 20***MANDRINI PORTAFRESA WELDON**
*END MILL HOLDERS WELDON***DIN 1835-2** *PAG. 51***MANDRINI PORTAFRESA FISSI**
*SHELL MILL HOLDERS***DIN 6357** *PAG. 51*

**MANDRINI PORTAPINZA ER PER ROTAZIONE DESTRA**
RIGHT ROTATION ER COLLET CHUCKSSCHEDA TECNICA
TECHNICAL DATA
ERC P. 338

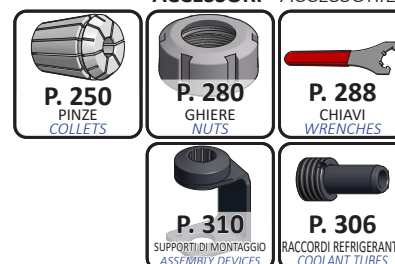
Articolo	H
HSK50E.H100.ERC16	100
HSK50E.H100.ERC20	100
HSK50E.H100.ERC25	100
HSK50E.H100.ERC32	100

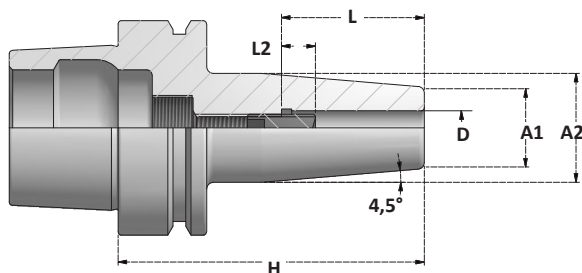
MANDRINI PER ROTAZIONE SINISTRA A RICHIESTA
LEFT ROTATION COLLET CHUCKS ON REQUEST

Articolo	H
HSK63E.H73.ERC32	73
HSK63E.H78.ERC40	78

MANDRINI PER ROTAZIONE SINISTRA A RICHIESTA
*LEFT ROTATION COLLET CHUCKS ON REQUEST***Fornibili a richiesta con diverse ghiera e gradi di bilanciatura.***Available on request with different nuts and balancing.*

	A	Collets Range	Ghiera Nut
...ERC16	32	1÷10	G16WD
...ERC20	35	1÷14	G20WD
...ERC25	42	1÷20	G25WD
...ERC32	50	2÷22	G32WD
...ERC40	63	3÷30	G40WD

GHIERE CONCENTRICHE
*CONCENTRIC NUTS WITH SLOTS***ACCESSORI - ACCESSORIES**

**MANDRINI A CALETTAMENTO A CALDO**
SHRINK FIT CHUCKS**G2,5**
25000 r.p.m.SCHEDA TECNICA
TECHNICAL DATA
TM P. 340

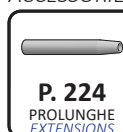
Articolo	H
HSK50E.H80.TM3	80
HSK50E.H80.TM4	80
HSK50E.H80.TM5	80
HSK50E.H80.TM6	80
HSK50E.H80.TM8	80
HSK50E.H85.TM10	85
HSK50E.H90.TM12	90
HSK50E.H90.TM14	90
HSK50E.H95.TM16	95
HSK50E.H95.TM18	95
HSK50E.H100.TM20	100

Articolo	H
HSK63E.H80.TM4	80
HSK63E.H80.TM6	80
HSK63E.H80.TM8	80
HSK63E.H85.TM10	85
HSK63E.H90.TM12	90
HSK63E.H95.TM16	95
HSK63E.H95.TM18	95
HSK63E.H100.TM20	100

		D	L	A1	A2
TM3	*	3	12	10	20
TM4	*	4	16	15	25
TM5	*	5	20	15	25
TM6		6	36	21	27
TM8		8	36	21	27
TM10		10	41	24	32
TM12		12	46	24	32
TM14		14	46	24	32
TM16		16	49	24	32
TM18		18	49	33	42
TM20		20	51	33	42

Profondità regolabile: **L2= 10mm**
*Adjustable depth:** Senza vite di regolazione
* *Without adjusting screw*

ACCESSORI - ACCESSORIES

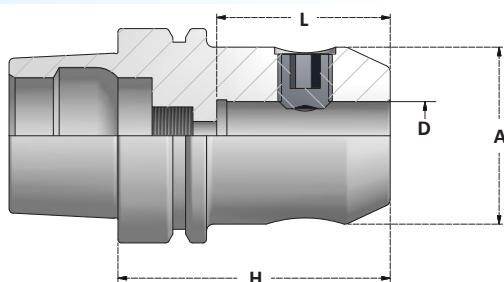
**P. 224**
PROLUNGHE
EXTENSIONS**P. 310**
SUPPORTI DI MONTAGGIO
ASSEMBLY DEVICES**P. 306**
RACCORDI REFRIGERANTE
COOLANT TUBES



DIN 69893-5

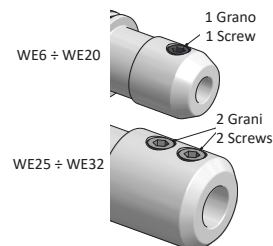
HSK E

WE

MANDRINI PORTAFRESA WELDON
END MILL HOLDERS WELDON**G6,3**
24000r.p.m.SCHEDA TECNICA
TECHNICAL DATA
WE P. 347

Articolo	H
HSK50E.H65.WE6	65
HSK50E.H65.WE8	65
HSK50E.H65.WE10	65
HSK50E.H80.WE12	80
HSK50E.H80.WE14	80
HSK50E.H80.WE16	80
HSK50E.H80.WE18	80
HSK50E.H80.WE20	80

Articolo	H
HSK63E.H80.WE16	80
HSK63E.H80.WE20	80
HSK63E.H110.WE25	110
HSK63E.H110.WE32	110



	D	L	A	Grano Screw
WE6	6	37	25	GR.WE6
WE8	8	37	28	GR.WE8
WE10	10	41	35	GR.WE10
WE12	12	46	42	GR.WE12-14
WE14	14	46	44	GR.WE12-14
WE16	16	49	48	GR.WE16-18
WE18	18	49	50	GR.WE16-18
WE20	20	51	52	GR.WE20

	D	L	A	Grano Screw
WE25	25	59	65	2x GR.WE25
WE32	32	63	72	2x GR.WE32-40

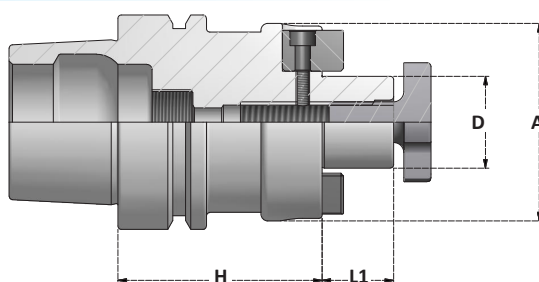
ACCESSORI - ACCESSORIES



DIN 69893-5

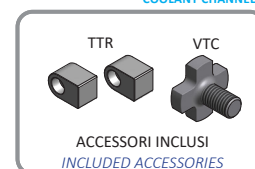
HSK E

D S

MANDRINI PORTAFRESA FISSI
SHELL MILL HOLDERS**G6,3**
24000r.p.m.SCHEDA TECNICA
TECHNICAL DATA
D S P. 349

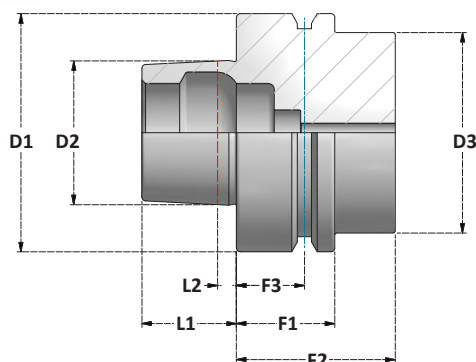
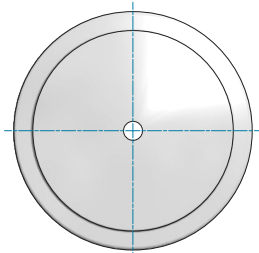
Articolo	H
HSK50E.H50.D16S	50
HSK50E.H60.D22S	60
HSK50E.H60.D27S	60
HSK50E.H60.D32S	60

Articolo	H
HSK63E.H50.D16S	50
HSK63E.H50.D22S	50
HSK63E.H60.D27S	60



	D	A	L1	TTR	VTC
D16S	16	38	17	TTR.D16	VTC.D16
D22S	22	48	19	TTR.D22	VTC.D22
D27S	27	58	21	TTR.D27	VTC.D27
D32S	32	78	24	TTR.D32	VTC.D32



**DIN 69893-6****MANDRINI HSK FORMA F**
HSK FORM F TOOLHOLDERS**DIMENSIONI DELL'ATTACCO**
SHANK DIMENSIONS

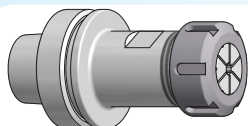
ATTACCO SHANK	D1	D2	D3	L1	L2	F1	F2	F3
	h10		max	0 -0,2		0 -0,1	min	±0,1
63	63	38,009	53	25	5	26	42	18

CARATTERISTICHE:

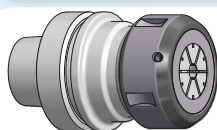
Tolleranza di precisione dei coni: AT2.
Costruiti in acciaio certificato in barre.
Eseguiti trattamenti termici da fornitori certificati.
Rettificati di precisione esternamente e internamente.
Controllati con strumenti di misura certificati.
Prebilanciati nei gradi indicati nelle pagine di catalogo.

FEATURES:

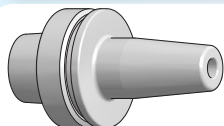
The precision tolerance of tapers is AT2.
Made of certified steel.
Heat treatments performed by certified suppliers.
Precision grinding externally and internally.
Checked with certified measuring instruments.
Pre-balanced as indicated in the catalog pages.



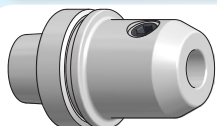
MANDRINI PORTAPINZA ER STANDARD
COLLET CHUCKS ER STANDARD
DIN ISO 15488 (DIN6499)

PAG. 53

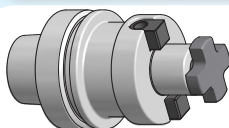
MANDRINI PORTAPINZA EOC
EOC COLLET CHUCKS
DIN ISO 10897 (DIN6388)

PAG. 53

MANDRINI A CALETTAMENTO A CALDO
SHRINK FIT CHUCKS

PAG. 54

MANDRINI PORTAFRESA WELDON
END MILL HOLDERS WELDON
DIN 1835-2

PAG. 55

MANDRINI PORTAFRESA FISSI
SHELL MILL HOLDERS
DIN 6357

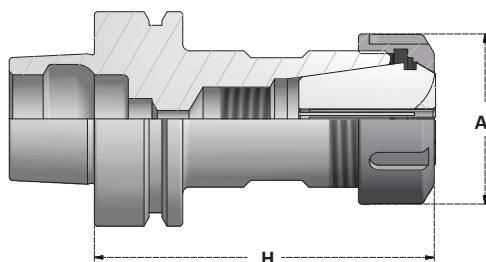
PAG. 55

MANDRINI DI COLLAUDO
TEST ARBORS

PAG. 330

SUPPORTI DI MONTAGGIO
ASSEMBLY DEVICES **P.310**



**MANDRINI PORTAPINZA ER PER ROTAZIONE DESTRA**
RIGHT ROTATION ER COLLET CHUCKSSCHEDA TECNICA
TECHNICAL DATA
ERC P. 338

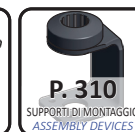
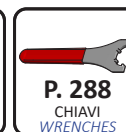
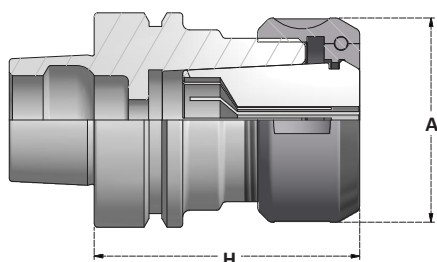
Articolo	H	Range ERC	Ghiera Nut
HSK63F.H70.ERC16	70	1÷10	G16WD
HSK63F.H100.ERC16	100	1÷10	G16WD
HSK63F.H70.ERC20	70	1÷14	G20WD
HSK63F.H100.ERC20	100	1÷14	G20WD
HSK63F.H70.ERC25	70	1÷20	G25WD
HSK63F.H100.ERC25	100	1÷20	G25WD
HSK63F.H73.ERC32	73	2÷22	G32WD
HSK63F.H100.ERC32	100	2÷22	G32WD
HSK63F.H78.ERC40	78	3÷30	G40WD
HSK63F.H100.ERC40	100	3÷30	G40WD

MANDRINI PER ROTAZIONE SINISTRA A RICHIESTA
LEFT ROTATION COLLET CHUCKS ON REQUESTFornibili a richiesta con diverse ghiera e gradi di bilanciatura.
Available on request with different nuts and balancing.

	A	Collets Range	Ghiera Nut
...ERC16	32	1÷10	G16WD
...ERC20	35	1÷14	G20WD
...ERC25	42	1÷20	G25WD
...ERC32	50	2÷22	G32WD
...ERC40	63	3÷30	G40WD

GHIERE CONCENTRICHE
CONCENTRIC NUTS WITH SLOTS

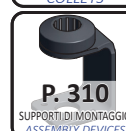
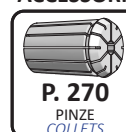
ACCESSORI - ACCESSORIES

**MANDRINI PORTAPINZA EOC PER ROTAZIONE DESTRA**
RIGHT ROTATION EOC COLLET CHUCKS

Articolo	H	A	Range EOC	Ghiera Nut
HSK63F.H78.EOC25	78	60	2÷25	G25OCC

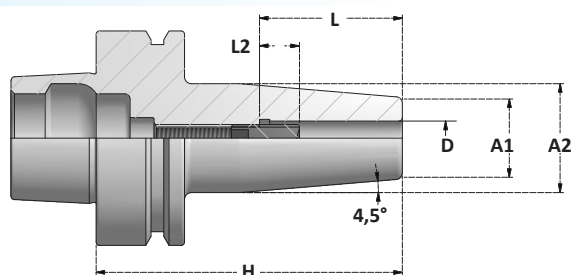
MANDRINI PER ROTAZIONE SINISTRA A RICHIESTA
LEFT ROTATION COLLET CHUCKS ON REQUEST

ACCESSORI - ACCESSORIES



**MANDRINI A CALETTAMENTO A CALDO**
SHRINK FIT CHUCKS**G2,5**

25000 r.p.m.

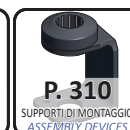
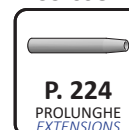
SCHEDA TECNICA
TECHNICAL DATA
TM | P. 340

Articolo	H
HSK63F.H80.TM3	80
HSK63F.H120.TM3	120
HSK63F.H160.TM3	160
HSK63F.H80.TM4	80
HSK63F.H120.TM4	120
HSK63F.H160.TM4	160
HSK63F.H80.TM5	80
HSK63F.H120.TM5	120
HSK63F.H160.TM5	160
HSK63F.H80.TM6	80
HSK63F.H120.TM6	120
HSK63F.H160.TM6	160
HSK63F.H80.TM8	80
HSK63F.H120.TM8	120
HSK63F.H160.TM8	160
HSK63F.H85.TM10	85
HSK63F.H120.TM10	120
HSK63F.H160.TM10	160
HSK63F.H90.TM12	90
HSK63F.H120.TM12	120
HSK63F.H160.TM12	160
HSK63F.H90.TM14	90
HSK63F.H95.TM16	95
HSK63F.H120.TM16	120
HSK63F.H160.TM16	160
HSK63F.H95.TM18	95
HSK63F.H100.TM20	100
HSK63F.H160.TM20	160
HSK63F.H125.TM25	125
HSK63F.H125.TM32	125

		D	L	A1	A2
TM3	*	3	12	10	20
TM4	*	4	16	15	25
TM5	*	5	20	15	25
TM6		6	36	21	27
TM8		8	36	21	27
TM10		10	41	24	32
TM12		12	46	24	32
TM14		14	46	24	32
TM16		16	49	24	32
TM18		18	49	33	42
TM20		20	51	33	42
TM25		25	57	44	53
TM32		32	61	44	53

Profondità regolabile: **L2= 10mm**
*Adjustable depth:** Senza vite di regolazione
* *Without adjusting screw*

ACCESSORI - ACCESSORIES



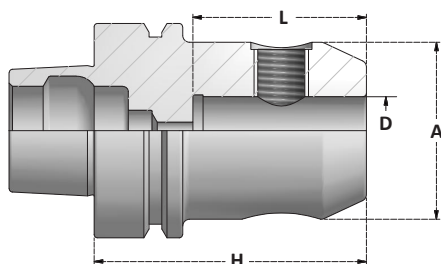


DIN 69893-6

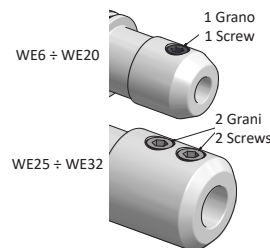
HSK F

WE

MANDRINI PORTAFRESA WELDON END MILL HOLDERS WELDON



SCHEDA TECNICA
TECHNICAL DATA
WE P. 347



Articolo	H
HSK63F.H65.WE6	65
HSK63F.H65.WE8	65
HSK63F.H65.WE10	65
HSK63F.H80.WE12	80
HSK63F.H80.WE14	80
HSK63F.H80.WE16	80
HSK63F.H80.WE18	80
HSK63F.H80.WE20	80
HSK63F.H110.WE25	110
HSK63F.H110.WE32	110

	D	L	A	Grano Screw
WE6	6	37	25	GR.WE6
WE8	8	37	28	GR.WE8
WE10	10	41	35	GR.WE10
WE12	12	46	42	GR.WE12-14
WE14	14	46	44	GR.WE12-14
WE16	16	49	48	GR.WE16-18
WE18	18	49	50	GR.WE16-18
WE20	20	51	52	GR.WE20

	D	L	A	Grano Screw
WE25	25	59	65	2x GR.WE25
WE32	32	63	72	2x GR.WE32-40

ACCESSORI - ACCESSORIES

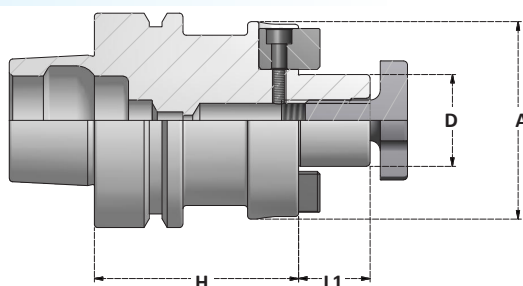


DIN 69893-6

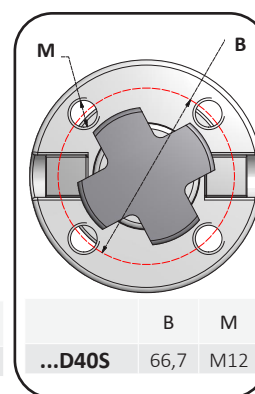
HSK F

D S

MANDRINI PORTAFRESA FISSI SHELL MILL HOLDERS



SCHEDA TECNICA
TECHNICAL DATA
D S P. 349



Articolo	H
HSK63F.H50.D16S	50
HSK63F.H50.D22S	50
HSK63F.H60.D27S	60
HSK63F.H60.D32S	60
HSK63F.H60.D40S	60

	D	A	L1	TTR	VTC
D16S	16	38	17	TTR.D16	VTC.D16
D22S	22	48	19	TTR.D22	VTC.D22
D27S	27	58	21	TTR.D27	VTC.D27
D32S	32	78	24	TTR.D32	VTC.D32
D40S	40	88	27	TTR.D40	VTC.D40



ACCESSORI - ACCESSORIES

