

# HSK E

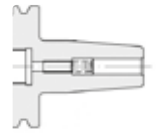


Dati tecnici ed immagini sono indicativi. Mickros si riserva di apportare aggiornamenti in qualsiasi momento e senza obbligo di preavviso.  
Technical data and drawings are for information purposes only. Mickros reserves the right to update specs at anytime and without notice.

**CTO 4,5° Standard**  
similar to DIN 69882-8

Mandrino per calettamento termico  
Shrink fit chuck  
Porte-outils de frettage  
Schrumpfutter

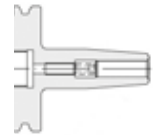
p. 135



**CTF 4,5° Slim**

Mandrino per calettamento termico di finitura  
Finishing shrink fit chuck  
Porte outils de frettage pour finissage  
Schrumpfutter zum schlichten

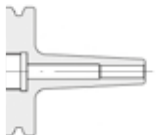
p. 139



**CTF 3° Slim**  
without back up screw

Mandrino per calettamento termico. Ideale per la costruzione di STAMPI e cavità profonde  
Shrink fit chuck. Suitable for the MOLD and for deep cavities  
Porte outils de frettage. Idéal pour la construction de MOLD et des cavités profondes  
Schrumpfutter für tiefe Kavitäten geeignet, speziell für den Gesenk, und Formenbau

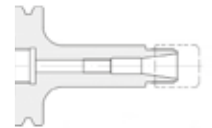
p. 142



**ERM - Mini**  
DIN 6499

Portapinze di precisione ER - Mini DIN 6499  
Precision collet chuck ER - Mini DIN 6499  
Porte pinces de precision ER - Mini DIN 6499  
Präzisions spannzangenfutter ER - Mini DIN 6499

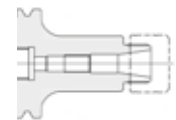
p. 144



**ERH**  
High Performance

Portapinze di precisione ER DIN 6499  
Precision collet chuck ER DIN 6499  
Porte pinces de precision ER DIN 6499  
Präzisions spannzangenfutter ER DIN 6499

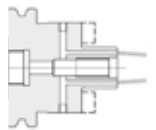
p. 146



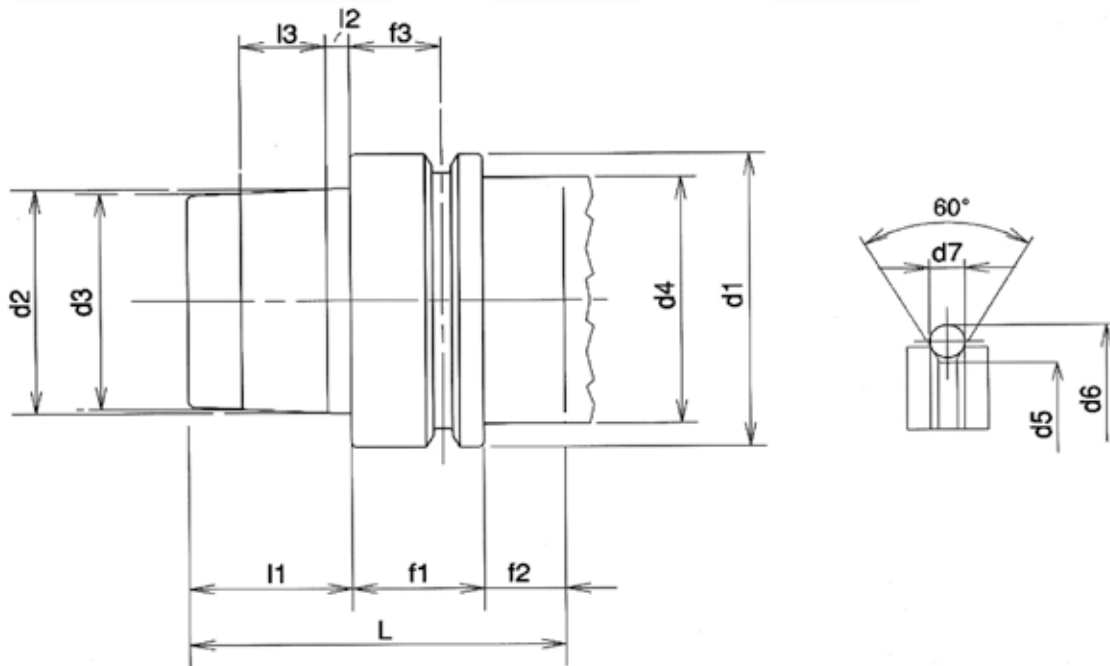
**FSW**  
Cooling Plus  
DIN 6357 B

Portafresa a spianare con trascinatore fisso - con canali di lubrificazione  
Face mill arbor with coolant bores  
Porte-fraises à surfacer avec conduits d'arrosage  
Messerkopf- aufnahme mit Kühlmittelbohrun

p. 148

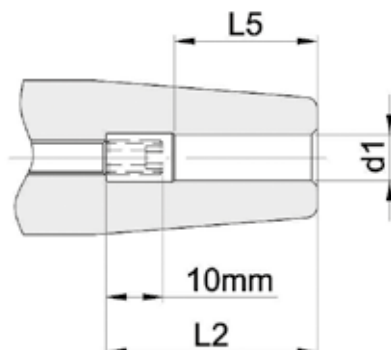



# DIN 69893 - HSK E



	HSK 32	HSK 40	HSK 50	HSK 63
<b>d1</b>	32	40	50	63
<b>d2</b>	24	30	38	48
<b>d3</b>	23,270	29,050	36,900	46,530
<b>d4 (max)</b>	26	34	42	53
<b>d5</b>	26,5	34,8	43	55
<b>d6</b>	37	45	59,3	72,3
<b>d7</b>	4	4	7	7
<b>f1</b>	20	20	26	26
<b>f2</b>	15	15	16	16
<b>f3</b>	16	16	18	18
<b>L</b>	51	55	67	74
<b>l1</b>	16	20	25	32
<b>l2</b>	3,2	4	5	6,3
<b>l3</b>	7,3	9,5	11	14,7

# Shrink fit chuck



d1	L2	L5 minimum grip	RVR CTW 
3	-	9	-
4	-	12	-
5	-	15	-
6	37	22	M5 x 0,8
8	37	26	M6 x 1
10	42	31	M8 x 1
12	47	36	M10 x 1
14	47	36	M10 x 1
16	50	39	M12 x 1
18	50	39	M12 x 1
20	52	41	M16 x 1
25	58	47	M16 x 1
32	62	51	M16 x 1

# CTO 4,5° standard (similar to DIN 69882-8)

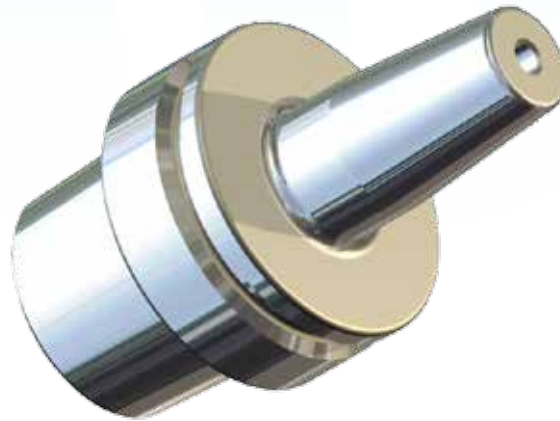
**GRIP PLUS**  
SHRINK FIT TECHNOLOGY

## Mandrino per calettamento termico

*Shrink fit chuck*

*Porte-outils de frettage*

*Schrumpfutter*



## MANDRINI A CALETTAMENTO simile a DIN 69882-8

- Chuck Body Fine Balanced  
G 2,5 - 25.000 Rpm - Or U < 1 gmm
  - Run Out 3 micron
  - Angolo di calettamento esterno 4,5° gradi
  - Con grano di registrazione assiale
  - Ø 3-4-5 senza grano di registrazione assiale
  - Per utensili in HSS e in HM
  - Tolleranza gambo utensile "h6"
  - Raffreddamento con fori di refrigerazione "A RICHIESTA"
- Fori di refrigerazione "A RICHIESTA"

## SHRINK FIT CHUCKS similar to DIN 69882-8

- Chuck Body Fine Balanced  
G 2,5 - 25.000 Rpm - Or U < 1 gmm
  - Run Out 3 micron
  - 4,5° slope at the top
  - With back-up screw
  - Ø 3-4-5 Without back-up screw
  - With coolant channels ON REQUEST
  - For carbide steel and HSS shanks
  - For tools with shank tolerance h6
- Coolant Channels "ON REQUEST"

## Accessori | Accessories

ATR



p. 76

ASC



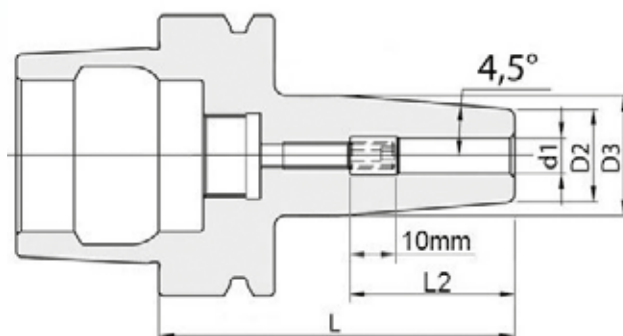
p. 310

## Ricambi | Spare parts

RVR CTW



p. 352

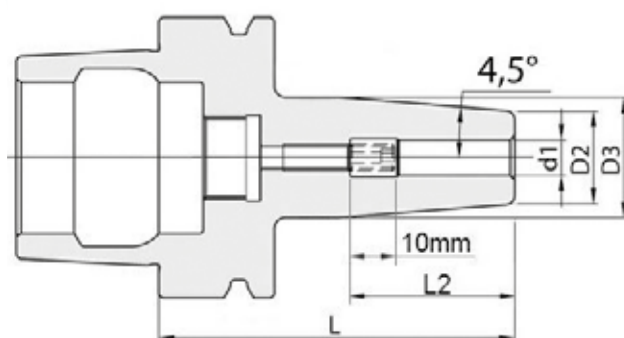


### HSK 040 (E form) - CT0 4,5 STANDARD

codice - code	d1	L	D2	D3	L2	g	L5 minimum grip	Fori Refrigerazione Coolant Channels	APPLICATION
HKE.040.CT003.080	3	80	9	19	-	No RVR	9	-	
HKE.040.CT004.080	4	80	10	19	-	No RVR	12	-	
HKE.040.CT005.080	5	80	11	19	-	No RVR	15	-	
HKE.040.CT006.080	6	80	21	27	37	M5 x 0,8	22	•	
HKE.040.CT008.080	8	80	21	27	37	M6 x 1	26	•	
HKE.040.CT010.080	10	80	24	32	42	M8 x 1	31	•	
HKE.040.CT012.090	12	90	24	32	47	M10 x 1	36	•	
HKE.040.CT016.090	16	90	27	34	50	M12 x 1	39	•	

### HSK 050 (E form) - CT0 4,5 STANDARD

codice - code	d1	L	D2	D3	L2	g	L5 minimum grip	Fori Refrigerazione Coolant Channels	APPLICATION
HKE.050.CT003.080	3	80	9	18	-	No RVR	9	-	
HKE.050.CT004.080	4	80	10	18	-	No RVR	12	-	
HKE.050.CT005.080	5	80	11	18	-	No RVR	15	-	
HKE.050.CT006.080	6	80	21	27	37	M5 x 0,8	22	•	
HKE.050.CT008.080	8	80	21	27	37	M6 x 1	26	•	
HKE.050.CT010.085	10	85	24	32	42	M8 x 1	31	•	
HKE.050.CT012.090	12	90	24	32	47	M10 x 1	36	•	
HKE.050.CT016.095	16	95	27	34	50	M12 x 1	39	•	
HKE.050.CT020.100	20	100	33	42	52	M16 x 1	41	•	



### HSK 063 (E form) - CT0 4,5 STANDARD

codice - code	d1	L	D2	D3	L2	g	L5 minimum grip	Fori Refrigerazione Coolant Channels	APPLICATION
HKE.063.CT006.080	6	80	21	27	37	M5 x 0,8	22	•	
HKE.063.CT008.080	8	80	21	27	37	M6 x 1	26	•	
HKE.063.CT010.085	10	85	24	32	42	M8 x 1	31	•	
HKE.063.CT012.090	12	90	24	32	47	M10 x 1	36	•	
HKE.063.CT014.090	14	90	27	34	47	M10 x 1	36	•	
HKE.063.CT016.095	16	95	27	34	50	M12 x 1	39	•	
HKE.063.CT020.100	20	100	33	42	52	M16 x 1	41	•	
HKE.063.CT025.115	25	115	44	53	58	M16 x 1	47	•	

MICKROS

MICKROS  
CNC TOOL HOLDERS



# CTF slim - 4,5°

**Mandrino per calettamento termico di finitura**

*Finishing shrink fit chuck*

*Porte outils de frettage pour finissage*

*Schrumpfutter zum schlichten*

**GRIP PLUS**  
SHRINK FIT TECHNOLOGY



## MANDRINI A CALETTAMENTO

### Slim - 4,5°

MANDRINO A CALETTAMENTO DI FINITURA

- Chuck Body Fine Balanced  
G 2,5 - 25.000 Rpm - Or U < 1 gmm
- Run Out 3 micron
- Angolo di calettamento esterno 4,5° gradi
- con grano di registrazione assiale
- Solo per utensili in HM
- Tolleranza gambo utensile "h6"

## SHRINK FIT CHUCKS

### Slim - 4,5°

SHRINK FIT CHUCK FOR FINISHING

- Chuck Body Fine Balanced  
G 2,5 - 25.000 Rpm - Or U < 1 gmm
- Run Out 3 micron
- 4,5° slope at the top
- with back-up screw
- Only for carbide steel shanks
- For tools with shank tolerance h6

## Accessori | Accessories

ATR



p. 76

ASC



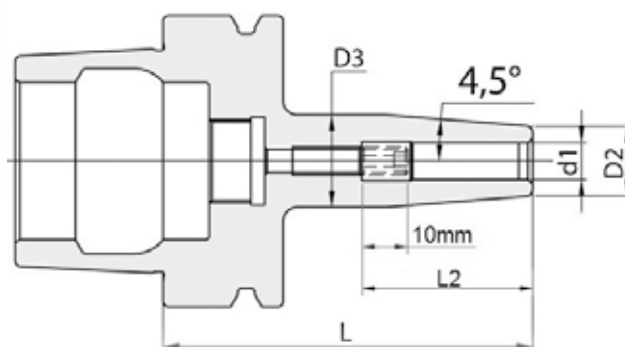
p. 310

## Ricambi | Spare parts

RVR CTW



p. 352

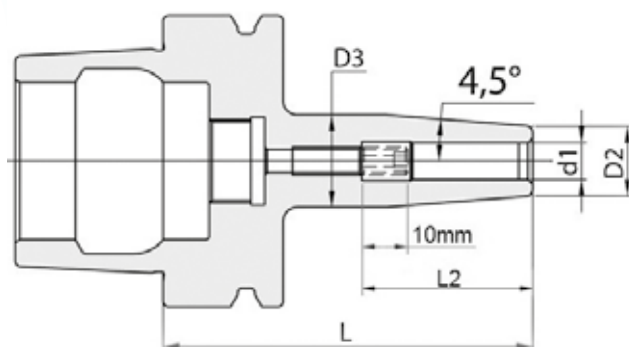


### HSK 032 (E form) - CTF slim - 4,5°

codice - code	d1	L	D2	D3	L2	g	L5 minimum grip	APPLICATION
HKE.032.CTF03.060-45	3	60	9		-	No RVR	9	
HKE.032.CTF04.060-45	4	60	10		-	No RVR	12	
HKE.032.CTF05.060-45	5	60	11		-	No RVR	15	
HKE.032.CTF06.070-45	6	70	15		37	M5 x 0,8	22	
HKE.032.CTF08.070-45	8	70	15		37	M6 x 1	26	
HKE.032.CTF10.080-45	10	80	18		42	M8 x 1	31	

### HSK 040 (E form) - CTF slim - 4,5°

codice - code	d1	L	D2	D3	L2	g	L5 minimum grip	APPLICATION
HKE.040.CTF06.130- 45	6	130	15	30	37	M5 x 0,8	22	
HKE.040.CTF08.130- 45	8	130	15	30	37	M6 x 1	26	
HKE.040.CTF10.130- 45	10	130	18	30	42	M8 x 1	31	
HKE.040.CTF12.130- 45	12	130	18	30	47	M10 x 1	36	



### HSK 050 (E form) - CTF slim - 4,5°

codice - code	d1	L	D2	D3	L2	g	L5 minimum grip	APPLICATION
HKE.050.CTF06.080- 45	6	80	15	20	37	M5 x 0,8	22	
HKE.050.CTF06.130- 45	6	130	15	31	37	M5 x 0,8	22	
HKE.050.CTF08.080- 45	8	80	15	20	37	M6 x 1	26	
HKE.050.CTF08.130- 45	8	130	15	31	37	M6 x 1	26	
HKE.050.CTF10.085- 45	10	85	18	25	42	M8 x 1	31	
HKE.050.CTF10.130- 45	10	130	18	34	42	M8 x 1	31	
HKE.050.CTF12.130- 45	12	130	18	34	47	M10 x 1	36	

### HSK 063 (E form) - CTF slim - 4,5°

codice - code	d1	L	D2	D3	L2	g	L5 minimum grip	APPLICATION
HKE.063.CTF06.130- 45	6	130	15	31	37	M5 x 0,8	22	
HKE.063.CTF08.130- 45	8	130	15	31	37	M6 x 1	26	
HKE.063.CTF10.130- 45	10	130	18	34	42	M8 x 1	31	
HKE.063.CTF12.130- 45	12	130	18	34	47	M10 x 1	36	

# CTF slim - 3°

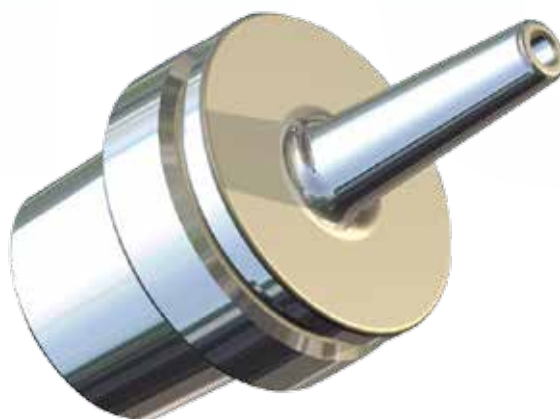
**GRIP PLUS**  
SHRINK FIT TECHNOLOGY

**Mandrino per calettamento termico. Ideale per la costruzione di STAMPI e cavità profonde**

*Shrink fit chuck. Suitable for the MOLD and for deep cavities*

*Porte outils de frettage. Idéal pour la construction de MOLD et des cavités profondes*

*Schrumpfutter für tiefe Kavitäten geeignet, speziell für den Gesenk, und Formenbau*



**G 2,5**  
25.000 RPM  
or  
U < 1 gmm



## MANDRINI A CALETTAMENTO

### Slim - 3°

#### MANDRINO A CALETTAMENTO DI FINITURA

- Chuck Body Fine Balanced  
G 2,5 - 25.000 Rpm - Or U < 1 gmm
- Run Out 3 micron
- Angolo esterno inclinazione di 3° PER STAMPI
- Spessore Parete 3mm
- Senza grano di registrazione assiale
- Solo per utensili in HM
- Tolleranza gambo utensile "h6"

## SHRINK FIT CHUCKS

### Slim - 3°

#### SHRINK FIT CHUCK FOR FINISHING

- Chuck Body Fine Balanced  
G 2,5 - 25.000 Rpm - Or U < 1 gmm
- Run Out 3 micron
- 3° slope at the top .Suitable for the MOLD
- 3 mm. wall thickness
- Without back-up screw
- Only for carbide tools
- For tools with shank tolerance h6

Accessori | Accessories

Ricambi | Spare parts

ATR



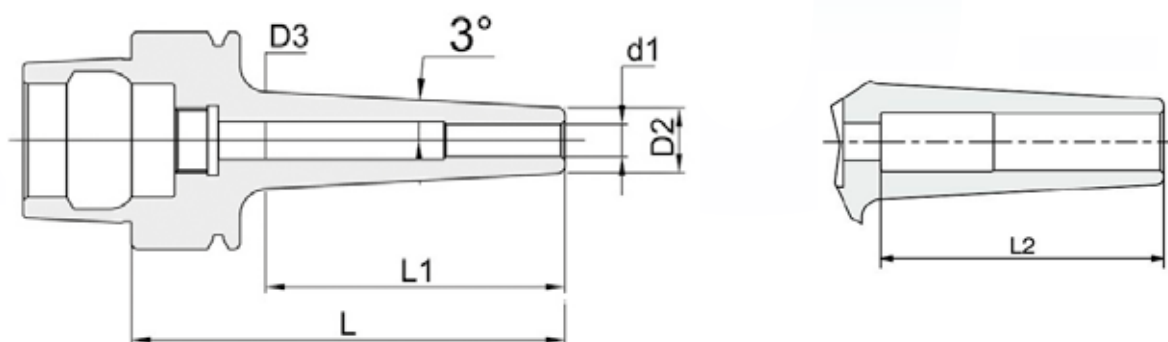
p. 76

ASC



p. 310

spessore parete 3 mm - 3 mm wall thickness



### HSK 040 (E form) - CTF slim - 3°

codice - code	d1	L	D2	D3	L1	L2	L5 minimum grip	APPLICATION
HKE.040.CTF03.080- 30	3	80	9	14,8	55	-	9	
HKE.040.CTF04.080- 30	4	80	10	15,8	55	-	12	
HKE.040.CTF05.080- 30	5	80	11	16,8	55	-	15	
HKE.040.CTF06.080- 30	6	80	12	17,8	55	-	22	
HKE.040.CTF08.080- 30	8	80	14	19,8	55	48	26	
HKE.040.CTF10.080- 30	10	80	16	21,8	55	55	31	
HKE.040.CTF12.080- 30	12	80	18	23,8	55	60	36	

### HSK 050 (E form) - CTF slim - 3°

codice - code	d1	L	D2	D3	L1	L2	L5 minimum grip	APPLICATION
HKE.050.CTF03.080- 30	3	80	9	14,2	50	-	9	
HKE.050.CTF04.080- 30	4	80	10	15,2	50	-	12	
HKE.050.CTF05.080- 30	5	80	11	16,2	50	-	15	
HKE.050.CTF06.080- 30	6	80	12	17,2	50	-	22	
HKE.050.CTF08.080- 30	8	80	14	19,2	50	-	26	
HKE.050.CTF10.085- 30	10	85	16	21,7	55	55	31	
HKE.050.CTF12.090- 30	12	90	18	24,2	60	60	36	

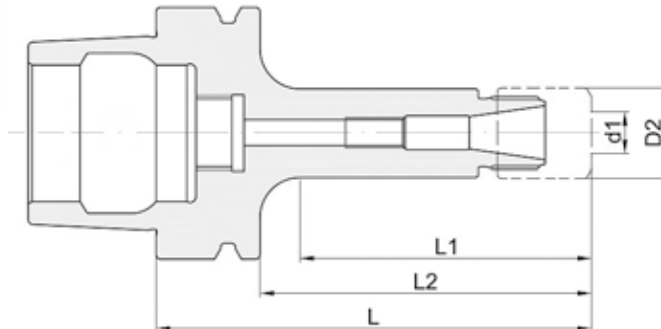
# ERM - Mini DIN 6499

## Portapinze di precisione ER - Mini DIN 6499

Precision collet chuck ER - Mini DIN 6499

Porte pinces de precision ER - Mini DIN 6499

Prazisions spannzangenfutter ER - Mini DIN 6499



## PORTAPINZE ERM - Mini type High Performance

- Chuck Body Fine Balanced  
G 2,5 - 25.000 Rpm - Or U < 1 gmm
- Run Out 3 micron
- Con grano di registrazione assiale

## COLLET CHUCKS ERM - Mini type High Performance

- Chuck Body Fine Balanced  
G 2,5 - 25.000 Rpm - Or U < 1 gmm
- Run Out 3 micron
- With back-up screw

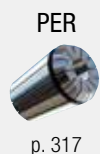
## HSK 032 (E form) - ERM - Mini

codice - code	d1	L	D2	L1	L2	Nuts/Ghiere	APPLICATION
HKE.032.ERM16.070	1-10	70	22	47	50	RGM-mini	
HKE.032.ERM16.090	1-10	90	22	67	70	RGM-mini	
HKE.032.ERM20.070	1-13	70	28	47	50	RGM-mini	

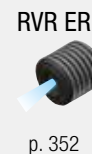
## HSK 040 (E form) - ERM - Mini

codice - code	d1	L	D2	L1	L2	Nuts/Ghiere	APPLICATION
HKE.040.ERM11.050	0,5-7	50	16	27	30	RGM-mini	
HKE.040.ERM16.055	1-10	55	22	32	35	RGM-mini	

### Accessori | Accessories



### Ricambi | Spare parts



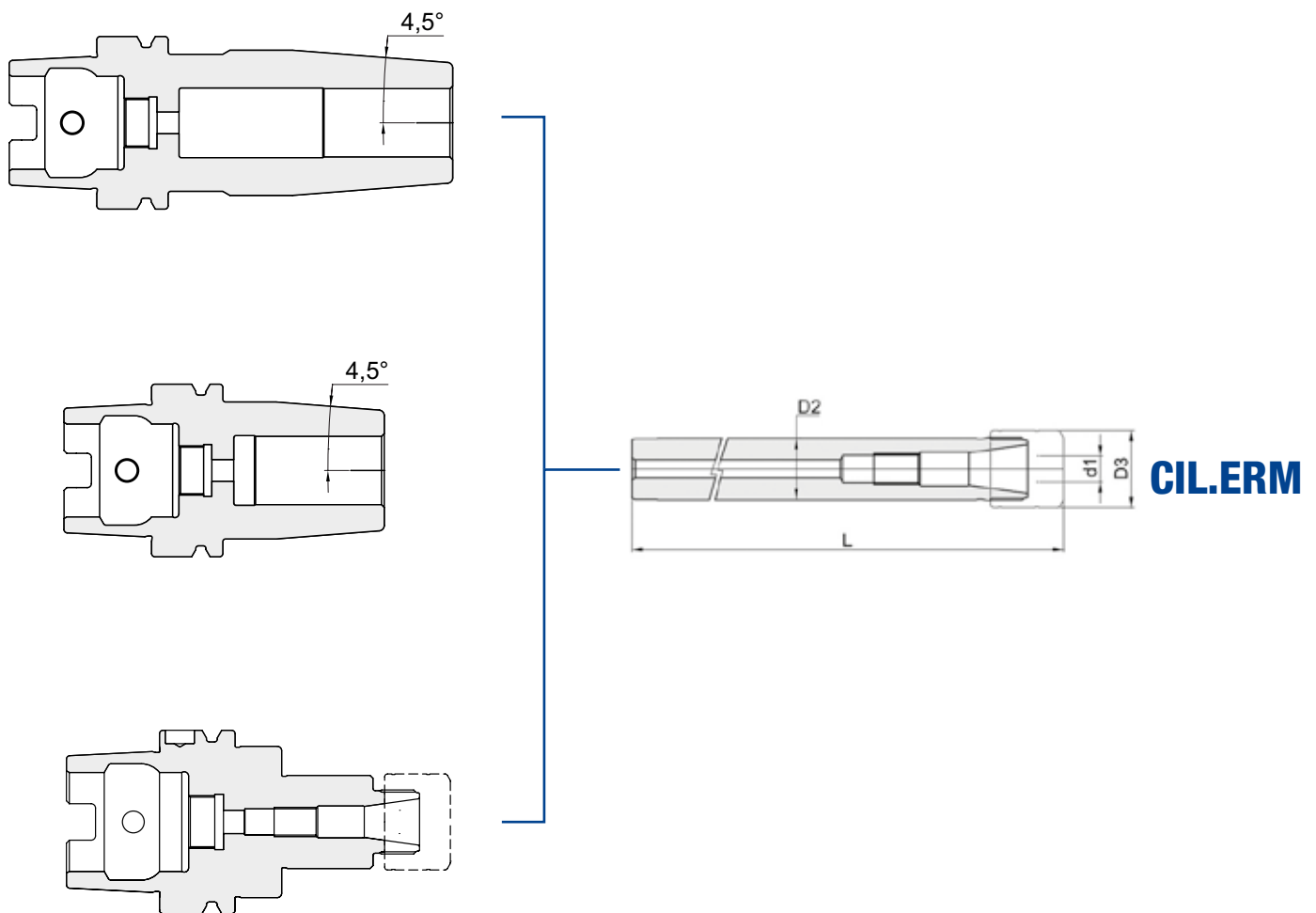
# Prolunghe Extensions

**Prolunga portapinze DIN 6499 con ghiera Mini (acciaio speciale per calettamento)**

Extensions DIN 6499 with mini nuts (**special steel shrinking**)

Rallonges DIN 6499 avec mini ecrous (**en acier special**)

Verlängerungen mit mini spannmutter DIN 6499 (**spezieller stahl**)



# ERH DIN 6499

## Portapinze di precisione ER DIN 6499

Precision collet chuck ER DIN 6499

Porte pinces de precision ER DIN 6499

Prazisions spannzangenfutter ER DIN 6499



### PORTAPINZE - ER type H/P High Performance

- Chuck Body Fine Balanced  
G 2,5 - 25.000 Rpm - Or U < 1 gmm
- Run Out 3 micron
- Con grano di registrazione assiale
- (1) senza grano di registrazione assiale

### COLLET CHUCKS ER type H/P High Performance

- Chuck Body Fine Balanced  
G 2,5 - 25.000 Rpm - Or U < 1 gmm
- Run Out 3 micron
- With back-up screw
- (1) without back-up screw

### Accessori | Accessories

ATR



p. 76

PER Q



p. 322

ACH GS



p. 344

ACH GX



p. 344

ASC



p. 310

### Ricambi | Spare parts

RGX



p. 339

RGE



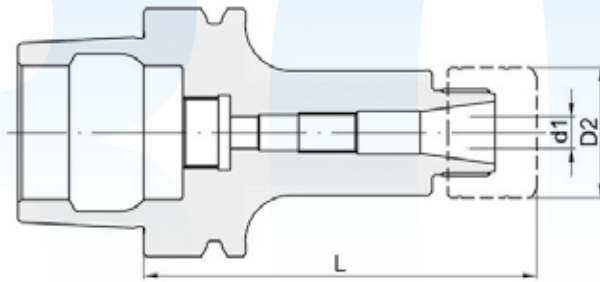
p. 341

RVR ER



p. 352





### HSK 032 (E form) - ERH

codice - code	d1	L	D2	Nuts/ghiere	on-request Nuts/ghiere		APPLICATION
HKE.032.ERH16.060	0,5-10	60	32	RGE	RGX.ER16 D2=28	(1) No RVR	

### HSK 040 (E form) - ERH

codice - code	d1	L	D2	Nuts/ghiere	on-request Nuts/ghiere		APPLICATION
HKE.040.ERH11.060	0,5-7	60	25	RGX			
HKE.040.ERH11.100	0,5-7	100	25	RGX			
HKE.040.ERH16.080	0,5-10	80	32	RGE	RGX.ER16 D2=28		
HKE.040.ERH25.065	1,5-16	65	42	RGE		(1) No RVR	
HKE.040.ERH25.120	1,5-16	120	42	RGE			

### HSK 050 (E form) - ERH

codice - code	d1	L	D2	Nuts/ghiere	on-request Nuts/ghiere		APPLICATION
HKE.050.ERH16.100	0,5-10	100	32	RGE	RGX.ER16 D2=28		
HKE.050.ERH25.080	1,5-16	80	42	RGE		(1) No RVR	
HKE.050.ERH32.070	2,5-20	70	50	RGE		(1) No RVR	

### HSK 063 (E form) - ERH

codice - code	d1	L	D2	Nuts/ghiere	on-request Nuts/ghiere		APPLICATION
HKE.063.ERH32.075	2,5-20	75	50-CH46	RGE		(1) No RVR	
HKE.063.ERH40.080	3-26	80	63	RGE		(1) No RVR	

# FSW Cooling Plus Din 6357-B

Portafrese a spianare con trascinatore fisso - con canali di lubrificazione

Face mill arbor with coolant bores

Porte-fraises à surfer avec conduits d'arrosage

Messerkopf- aufnahme mit Kühlmittelbohrun



**G 2,5**  
25.000 RPM  
or  
U < 1 gmm

**3 μm**



**HPC**

## PORTAFRESE

con canali di lubrificazione

PORTAFRESE A SPIANARE CON TRASCINATORE FISSO

- Chuck Body Fine Balanced  
G 2,5 - 25.000 Rpm - Or U < 1 gmm
- Run Out 3 micron
- Fori di refrigerazione "STANDARD"
- FS : Senza canali di lubrificazione  
ed equilibratura standard G 6,3 15000 RPM

## FACE MILL ARBOR

with coolant channels

FACE MILL ARBOR WITH COOLANT CHANNELS

- Chuck Body Fine Balanced  
G 2,5 - 25.000 Rpm - Or U < 1 gmm
- Run Out 3 micron
- With "STANDARD" coolant channels
- FS : Without coolant bores  
and standard balanced G 6,3 15000 RPM

## Accessori | Accessories

ATR



p. 76

ASC



p. 310

## Ricambi | Spare parts

RVU 5931



p. 355

RCT FM/DP



p. 355

RVU 5933



p. 355

RRS FM



p. 356



### HSK 040 (E form) - FS

codice - code	d1	L	D2	APPLICATION
				FS Senza canali di lubrificazione - Without coolant bores
HKE.040.FS016.050	16	50	32	
HKE.040.FS022.060	22	60	48	

### HSK 050 (E form)- FS

codice - code	d1	L	D2	APPLICATION
				FS Senza canali di lubrificazione - Without coolant bores
HKE.050.FS016.050	16	50	32	
HKE.050.FS022.060	22	60	48	