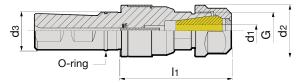
Product information

- compensate synchronisation errors
- minimal length compensation ± 0,15 mm in tension and compression direction balances very small pitch differences between synchro spindle and tap, which can cause high frictional forces on the thread flanks
- length-setting screw allows 2 to 3 mm readjustment
- suitable for internal cooling
- max. coolant pressure up to 50 bar
- combination shank similar to DIN 1835 for side lock holders

Scope of delivery

- incl. sealed IC/ER clamping nut Series no. 4306 (*see torque)
- incl. adjustment key for adjustment screws
- order adjustment screws "plan" Series no. 4364, tapping collet, Series no. 4308, sealing washer, Series no. 4335 and clamping key, Series no. 4913 separately





								,	Series no.	4320
d ₃ ~DIN 1835 mm	nom. size	for thread	d ₁ mm	d ₂ mm	I ₁ mm	torque* Nm	G	kg	Code no.	EDP Number
25 25	ER20 ER32	M4-M14 M4-M30	4-11.0 4-20.0	34 50	73 87.5	35 136	M25x1.5 M40x1.5	0.50 1.30	20.025 32.025	9043260200250 9043260320250
25	LINZ	1414-14100	4-20.0	30	07.5	100	1014071.5	1.00	32.023	3043200320230

HSK-A synchro tapping chucks

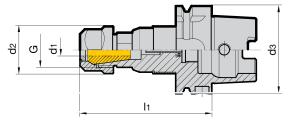
Product information

- compensate synchronisation errors
- guarantee high thread quality and optimal tool life with conventional taps
- minimal length compensation ± 0,15 mm in tension and compression direction between synchronous spindle and tap reduces excessive thread flank friction
- reduces a possible increase in axial forces during the cutting cycle to a minimum
- length-setting screw allows 2 to 3 mm readjustment
- suitable for internal cooling
- max. coolant pressure up to 50 bar
- HSK-A to ISO 12164-1/DIN 69893-1

Scope of delivery

- incl. sealed IC/ER clamping nut Series no. 4306 (*see torque)
- incl. adjustment key for adjustment screws
- order adjustment screws "plan"
 Series no. 4364, tapping collet,
 Series no. 4308, sealing washer,
 Series no. 4325 and clamping key,
 Series no. 4913 separately
- for conventional cooling order coolant supply set Series no. 4949 separately

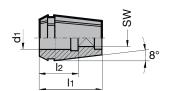




	-		-					;	Series no.	4327
d ₃ ~DIN 1835 mm	nom. size	for thread	d ₁ mm	d ₂ mm	l ₁ mm	torque* Nm	G	kg	Code no.	EDP Number
63	ER20	M4-M14	4.5-11.2	34	95.5	35	M25x1.5	1.00	20.063	9043270200630
63	ER20	M4-M14	4.5-11.2	34	160.0	35	M25x1.5	1.50	20.163	9043270201630
63	ER32	M4-M30	4.5-18.0	50	109.0	136	M40x1.5	1.70	32.063	9043270320630
100	ER20	M4-M14	4.5-11.2	34	102.0	35	M25x1.5	2.50	20.100	9043270201000
100	ER32	M4-M30	4.5-18.0	50	115.5	136	M40x1.5	2.70	32.100	9043270321000

Product information

- for clamping taps with square shank in synchro tapping chucks or collet holders
- smaller Ø4mm are clamped with collet, Series no. 4307 without sq. drive
- tightening torque see clamping nuts Series no. 4306



Clamping range: ER16: Ø 4.5 - Ø 8.0 ER20: Ø 4.0 - Ø 11.0

ER25: Ø 4.5 - Ø 12.0 ER32: Ø 4.0 - Ø 20.0

ER40: Ø 7.0 - Ø 22.0



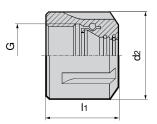
					Series no.	4308
nominal size	for shank Ø d ₁ mm	square SW	l ₁ mm	l ₂ mm	Code no.	EDP Number
ER16	4.5	3.4	27.5	15	4.516	9043080045160
ER16	5.5	4.3	27.5	18	5.516	9043080055160
ER16	6.0	4.9	27.5	18	6.016	9043080060160
ER16	7.0	5.5	27.5	18	7.016	9043080070160
ER16	8.0	6.2/6.3	27.5	22	8.016	9043080080160
ER20	4.0	3.2	31.5	15	4.020	9043080040200
ER20	4.5	3.4	31.5	15	4.520	9043080045200
ER20	5.5	4.3	31.5	18	5.520	9043080055200
ER20	6.0	4.9	31.5	18	6.020	9043080060200
ER20	7.0	5.5	31.5	18	7.020	9043080070200
ER20	8.0	6.2/6.3	31.5	22	8.020	9043080080200
ER20	9.0	7.0/7.1	31.5	22	9.020	9043080090200
ER20	10.0	8.0	31.5	25	10.020	9043080100200
ER20	11.0	9.0	31.5	25	11.020	9043080110200
ER25	4.5	3.4	34.0	15	4.525	9043080045250
ER25	5.5	4.3	34.0	18	5.525	9043080055250
ER25	6.0	4.9	34.0	18	6.025	9043080060250
ER25	7.0	5.5	34.0	18	7.025	9043080070250
ER25	8.0	6.2/6.3	34.0	22	8.025	9043080080250
ER25	9.0	7.0/7.1	34.0	22	9.025	9043080090250
ER25	10.0	8.0	34.0	25	10.025	9043080100250
ER25	11.0	9.0	34.0	25	11.025	9043080110250
ER25	12.0	9.0	34.0	25	12.025	9043080120250
ER32	4.0	3.15/3.2	40.0	15	4.032	9043080040320
ER32	4.5	3.4	40.0	15	4.532	9043080045320
ER32	5.5	4.3	40.0	18	5.532	9043080055320
ER32	6.0	4.9	40.0	18	6.032	9043080060320
ER32	7.0	5.5	40.0	18	7.032	9043080070320
ER32	8.0	6.2/6.3	40.0	22	8.032	9043080080320
ER32	9.0	7.0/7.1	40.0	22	9.032	9043080090320
ER32	10.0	8.0	40.0	25	10.032	9043080100320
ER32	11.0	9.0	40.0	25	11.032	9043080110320
ER32	12.0	9.0	40.0	25	12.032	9043080120320
ER32	14.0	11.0/11.2	40.0	25	14.032	9043080140320
ER32	16.0	12.0/12.5	40.0	25	16.032	9043080160320
ER32	18.0	14.5	40.0	25	18.032	9043080180320
ER32	20.0	16.0	40.0	28	20.032	9043080200320
ER40	7.0	5.5	46.0	18	7.040	9043080070400
ER40	8.0	6.2/6.3	46.0	22	8.040	9043080080400
ER40	9.0	7.0/7.1	46.0	22	9.040	9043080090400
ER40	10.0	8.0	46.0	25	10.040	9043080100400
ER40	11.0	9.0	46.0	25	11.040	9043080110400
ER40	12.0	9.0	46.0	25	12.040	9043080120400
ER40	14.0	11.0/11.2	46.0	25	14.040	9043080140400
ER40	16.0	12.0/12.5	46.0	25	16.040	9043080160400
ER40	18.0	14.5	46.0	25	18.040	9043080180400
ER40	20.0	16.0	46.0	28	20.040	9043080200400
ER40	22.0	18.0	46.0	28	22.040	9043080220400
•		. 5.0	. 5.0			

Product information

- for collets DIN ISO 15488
- for application with internal cooling IC/ER for sealing washer
- for increased clamping version ER or IC/ER with glide ring
- suitable for up to 150 bar coolant pressure

Scope of delivery

- version for internal cooling IC/ER: order sealing washer article no. 4335 separately
- IC/ER versions for internal cooling





					. т	Series no.	4306
for sealing washer no. 4335	with glide ring	nom. size	d ₂ mm	I ₁ mm	G	max. torque Nm	EDP Number
-	-	ER16 mini	22	18.0	M19x1.0	55	9043060162000
_	_	ER20 mini	28	19.0	M24x1.0	75	9043060202000
-	-	ER25 mini	35	20.0	M30x1.0	100	9043060252000
_	_	ER11	19	11.3	M14x0.75	25	9043060110000
-	_	ER16	28	17.5	M22x1.5	55	9043060160000
_	_	ER20	34	19.0	M25x1.5	75	9043060200000
-	-	ER25	42	20.0	M32x1.5	100	9043060250000
_	_	ER32	50	22.5	M40x1.5	140	9043060320000
-	-	ER40	63	25.5	M50x1.5	200	9043060400000
Х	-	IC/ER16 mini	22	22.0	M19x1.0	55	9043060163000
X	-	IC/ER20 mini	28	24.0	M24x1.0	75	9043060203000
Х	-	IC/ER25 mini	35	25.0	M30x1.0	100	9043060253000
Х	-	IC/ER16	28	22.5	M22x1.5	55	9043060166000
х	_	IC/ER20	34	24.0	M25x1.5	75	9043060206000
Х	_	IC/ER25	42	25.0	M32x1.5	100	9043060256000
х	_	IC/ER32	50	27.5	M40x1.5	140	9043060326000
Х	-	IC/ER40	63	30.5	M50x1.5	200	9043060406000
-	x	ER16	28	20.3	M22x1.5	55	9043060164000
-	Х	ER20	34	21.8	M25x1.5	75	9043060204000
-	x	ER25	42	22.4	M32x1.5	100	9043060254000
-	Х	ER32	50	25.0	M40x1.5	140	9043060324000
-	х	ER40	63	28.3	M50x1.5	200	9043060404000
Х	Х	IC/ER16	28	22.7	M22x1.5	55	9043060165000
х	х	IC/ER20	34	24.2	M25x1.5	75	9043060205000
Х	Х	IC/ER25	42	25.2	M32x1.5	100	9043060255000
х	х	IC/ER32	50	27.4	M40x1.5	140	9043060325000
Х	Х	IC/ER40	63	30.7	M50x1.5	200	9043060405000

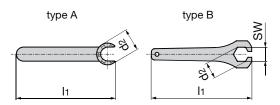
					Series no.	4335
nominal size	d ₁ mm	Sealing Range	d_2 mm	B mm	Code no.	EDP Number
FDOO	40	40.51.40	40	4	40.000	9043350130200
ER20	13	12.5 to 13	16	4	13.020	
ER25	13	12.5 to 13	21	4	13.025	9043350130250
ER32	13	12.5 to 13	27	4	13.032	9043350130320
ER40	13	12.5 to 13	33.5	4	13.040	9043350130400
EN40	13	12.5 10 15	33.3	4	13.040	3040030100400
ER25	13.5	13 to 13.5	21	4	13.525	9043350135250
ER32	13.5	13 to 13.5	27	4	13.532	9043350135320
ER40	13.5	13 to 13.5	33.5	4	13.540	9043350135400
LITTO	10.0	10 10 10.0	00.0	7	10.040	00.0000.00
						0040050440050
ER25	14	13.5 to 14	21	4	14.025	9043350140250
ER32	14	13.5 to 14	27	4	14.032	9043350140320
ER40	14	13.5 to 14	33.5	4	14.040	9043350140400
	• • •		00.0			
FDOF	445	441-445	04	4	44.505	0042250445050
ER25	14.5	14 to 14.5	21	4	14.525	9043350145250
ER32	14.5	14 to 14.5	27	4	14.532	9043350145320
ER40	14.5	14 to 14.5	33.5	4	14.540	9043350145400
EDOE	15	115 +0 15	01	4	15 005	9043350150250
ER25	15	14.5 to 15	21	4	15.025	
ER32	15	14.5 to 15	27	4	15.032	9043350150320
ER40	15	14.5 to 15	33.5	4	15.040	9043350150400
ER25	15 5	15 to 15.5	21	1	15.525	9043350155250
	15.5			4		
ER32	15.5	15 to 15.5	27	4	15.532	9043350155320
ER40	15.5	15 to 15.5	33.5	4	15.540	9043350155400
ER25	16	15.5 to 16	21	4	16.025	9043350160250
ER32	16	15.5 to 16	27	4	16.032	9043350160320
ER40	16	15.5 to 16	33.5	4	16.040	9043350160400
ER32	16.5	16 to 16.5	27	4	16.532	9043350165320
						9043350165400
ER40	16.5	16 to 16.5	33.5	4	16.540	
ER32	17	16.5 to 17	27	4	17.032	9043350170320
ER40	17	16.5 to 17	33.5	4	17.040	9043350170400
ER32	17.5	17 to 17.5	27	4	17.532	9043350175320
ER40	17.5	17 to 17.5	33.5	4	17.540	9043350175400
ER32	18	17.5 to 18	27	4	18.032	9043350180320
ER40	18	17.5 to 18	33.5	4	18.040	9043350180400
ED00	40.5	10 1 - 10 5	07	4	40.500	9043350185320
ER32	18.5	18 to 18.5	27	4	18.532	
ER40	18.5	18 to 18.5	33.5	4	18.540	9043350185400
ER32	19	18.5 to 19	27	4	19.032	9043350190320
ER40	19	18.5 to 19	33.5	4	19.040	9043350190400
		. 0.0 10 . 0	00.0		1010.0	
ED00	10.5	10 1- 10 5	07	4	10 500	0042250405200
ER32	19.5	19 to 19.5	27	4	19.532	9043350195320
ER40	19.5	19 to 19.5	33.5	4	19.540	9043350195400
ER32	20	19.5 to 20	27	4	20.032	9043350200320
ER40	20	19.5 to 20	33.5	4	20.040	9043350200400
LI ITO	20	10.0 10 20	50.0	7	_0.0+0	111111111111
ED 10	00.5	00: 00 =	00.5	4	00.546	0042250005400
ER40	20.5	20 to 20.5	33.5	4	20.540	9043350205400
ER40	21	20.5 to 21	33.5	4	21.040	9043350210400
ER40	21.5	21 to 21.5	33.5	4	21.540	9043350215400
ER40	22	21.5 to 22	33.5	4	22.040	9043350220400
ER40	22.5	22 to 22.5	33.5	4	22.540	9043350225400
ER40	23	22.5 to 23	33.5	4	23.040	9043350230400
LITU	20	22.0 10 20	00.0	7	20.070	
ED (C	00 =	00 1 00 5	00 =		00.510	004005005400
ER40	23.5	23 to 23.5	33.5	4	23.540	9043350235400
ER40	24	23.5 to 24	33.5	4	24.040	9043350240400
ER40	24.5	24 to 24.5	33.5	4	24.540	9043350245400
ER40	25	24.5 to 25	33.5	4	25.040	9043350250400
ER40	25.5	25 to 25.5	33.5	4	25.540	9043350255400
ER40	26	25.5 to 26	33.5	4	26.040	9043350260400
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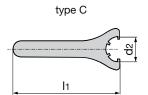
Clamping key

Product information

- for clamping nuts
- Type A with special hook key for clamping nuts System DIN 6499 mini design
- Type B for clamping nuts with hexagonal design
- Type C for clamping nuts for external slots







				Series no.	4913
nom. size mm	type	l ₁ mm	for ER d ₂	SW	EDP Number
ER16 mini	Α	122	22	-	9049130162000
ER20 mini	Α	139	28	-	9049130202000
ER25 mini	Α	143	35	-	9049130252000
ER11	В	141	19	17	9049130110000
ER16	В	178	28	25	9049130160000
ER16	С	161	32	=	9049130160320
ER20	В	200	34	30	9049130200000
ER20	С	183	35	=	9049130201000
ER25	С	210	42	-	9049130250000
ER32	С	250	50	=	9049130320000
ER40	С	290	63	-	9049130400000



4949

HSK-A coolant supply set for conventional cooling (automatic tool change)



4949

HSK-A coolant supply set for conventional cooling (automatic tool change)



4949

HSK-A coolant supply set for conventional cooling (automatic tool change)



4328

HSK-A quick change chuck with internal cooling



4000

Whistle-Notch MAS/BT side lock holders



4329

Weldon
4334

Whistle-Notch HSK-A side lock holders



HSK-A adaptors for tapping chucks



4327

HSK-A synchro tapping chuck with internal cooling



4340

quick change chuck without internal cooling



4342

quick change chuck with internal cooling



4326

synchro tapping chuck with straight shank with internal cooling



4206

quick change tapping chuck adaptors



4364

adjustment screw "plan" for synchro tapping chuck with internal cooling



4308

tap collet



tap



4335

sealing washer for retaining nuts



tap