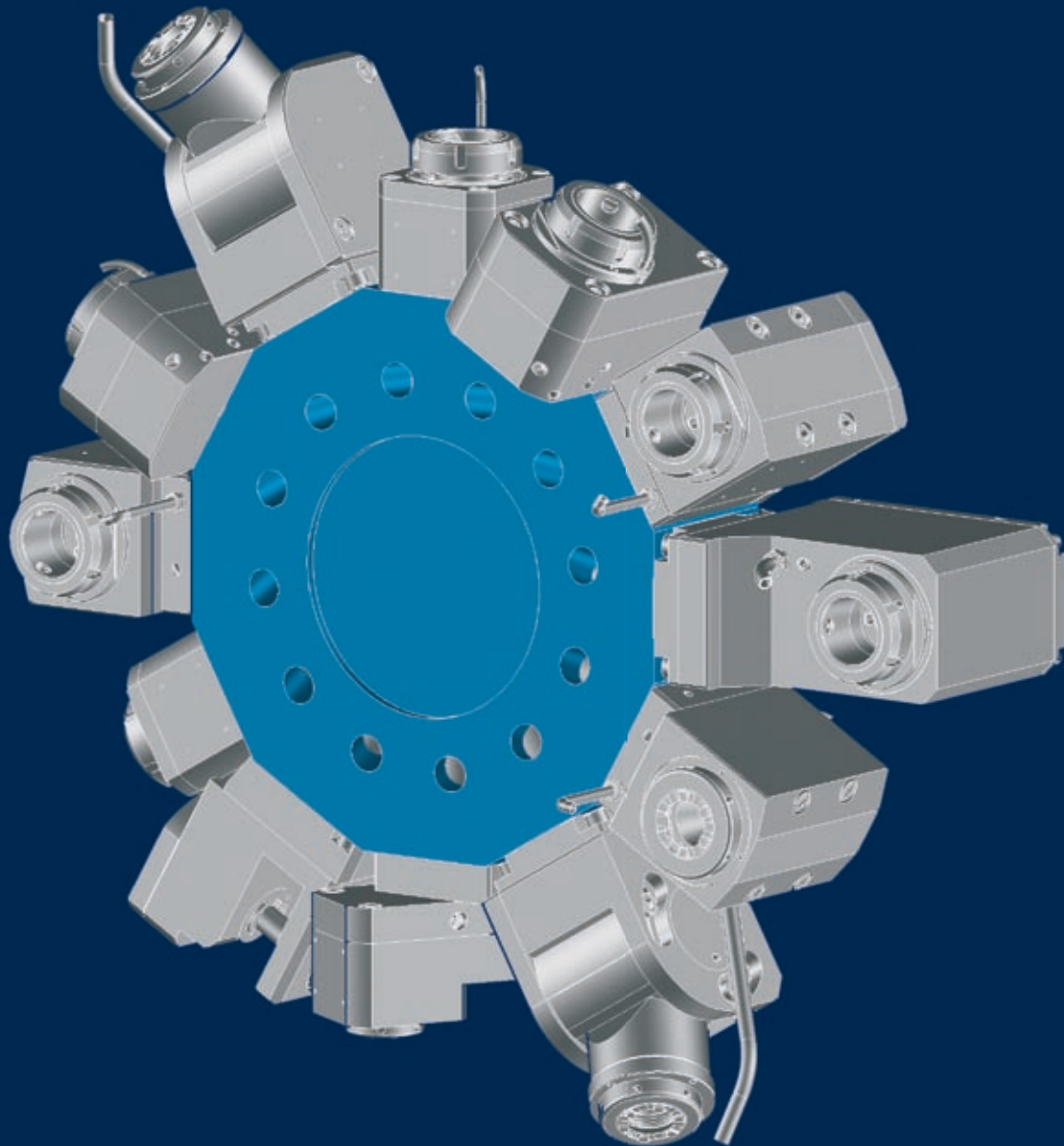


**Driven Toolholders  
for CNC Turning Machines**

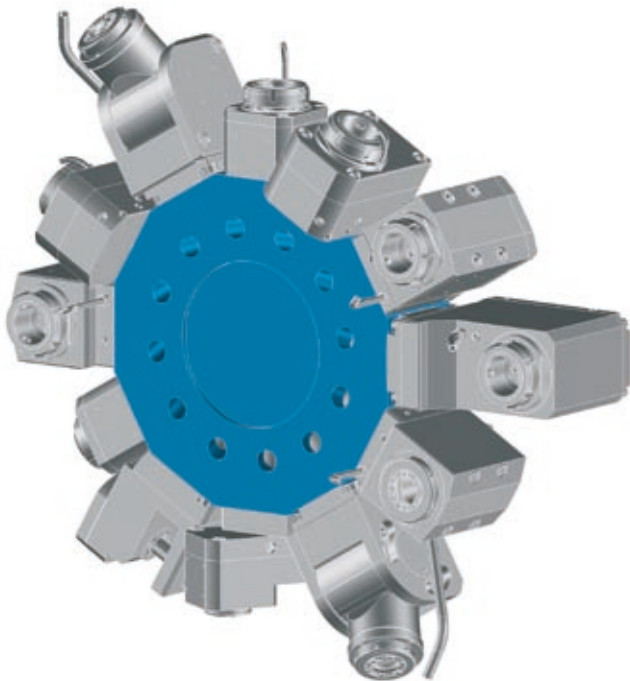


**Data**

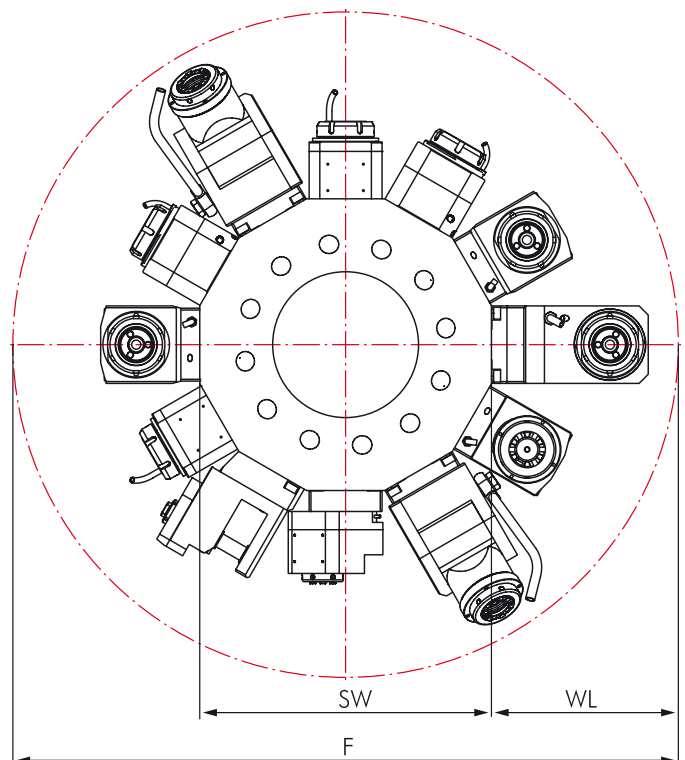
Machine type Series		Turret Stations
<b>NL</b>	<b>1500</b>	12
<b>NL</b>	<b>2000</b>	12
<b>NL</b>	<b>2500</b>	12
<b>NL</b>	<b>3000</b>	12



**Star-type Turret „BMT“**

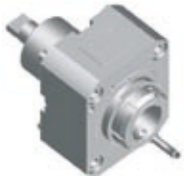




**Interference Circles**



Machine type Series	F	SW	WL
<b>NL 1500/2000/2500</b>	732	420	156
<b>NL 3000</b>	781	470	155,5

## Driven Toolholders

	Page		Page
<b>Straight Unit</b>	252		
<b>Angle Unit</b>	253		
		<b>Angle Unit, 2-Axis</b>	254
			

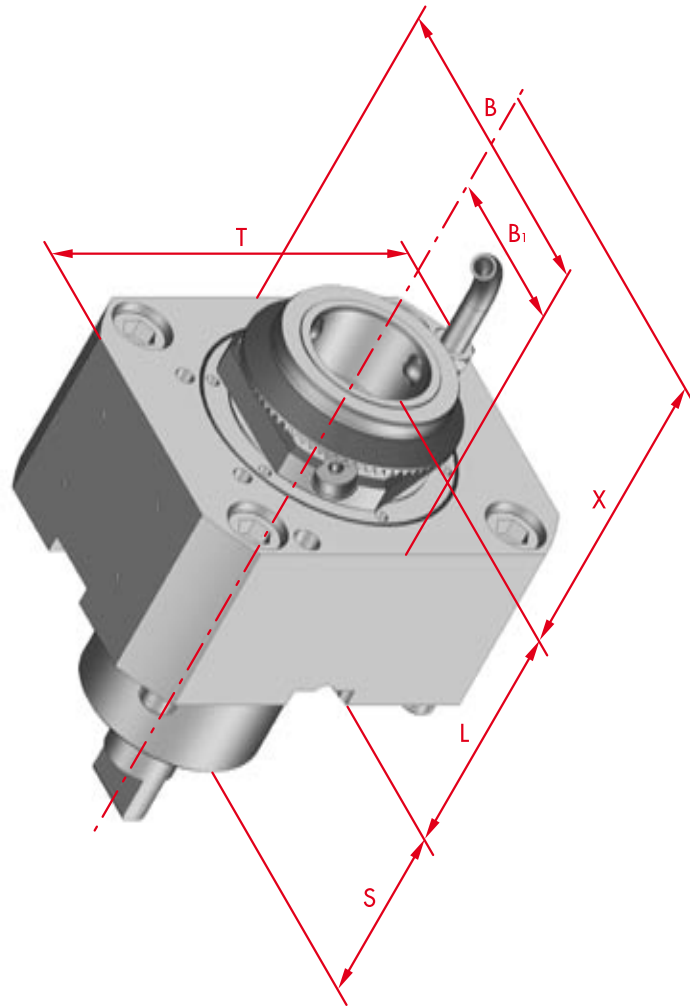
## Options and Accessories

<b>mi Toolholders</b>		mi System Description Toolholders Accessories	283 287-291 290-292
<b>Accessories</b>		Collets DIN 6499 Threading Collets Wrenches Clamping Nuts Sleeves and Bushings	317 317 317 317 318



# Straight Unit

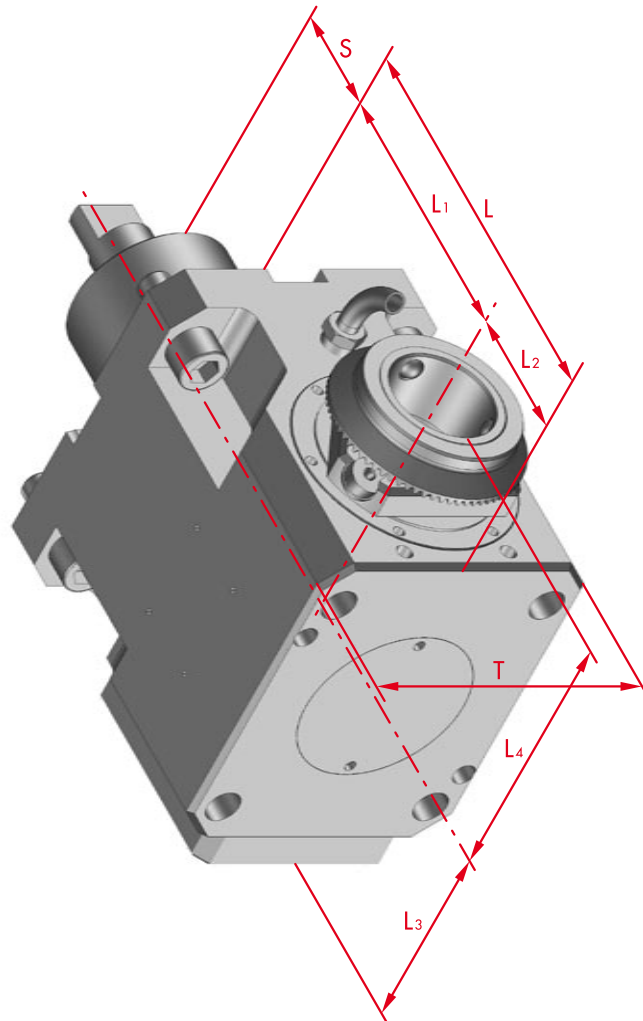
for Manufacturer	
<b>MORI SEIKI</b> THE MACHINE TOOL COMPANY	
for Machine type	
<b>NL 1500 / 2000 / 2500 / 3000</b>	
Dimensions	
Turret type	Star-type Turret
Shank	BMT Ø 60 mm
Drive	Tang
SW	7.9 mm



Order No.	Tool holder	Clamping range mm	Torque max.	n1/n2 (max.) (r.p.m.)	Gear Ratio	Coolant	X mm	L mm	B mm	B1 mm	S mm	T mm	MORI SEIKI Ref. #
100471	ER 40	2,5-30	70 Nm	6.500 / 6.500	i = 1:1	external	-	115	108	54	53	130	T32213
124262	ER 40	2,5-30	70 Nm	6.500 / 6.500	i = 1:1	internal	-	115	108	54	53	130	-
124263	mi 50		70 Nm	6.500 / 6.500	i = 1:1	internal	-	94	108	54	53	130	-

# Angle Unit

for Manufacturer	
<b>MORI SEIKI</b> THE MACHINE TOOL COMPANY	
for Machine type	
<b>NL 1500 / 2000 / 2500 / 3000</b>	
Dimensions	
Turret type	Star-type Turret
Shank	BMT Ø 60 mm
Drive	Tang
SW	7.9 mm

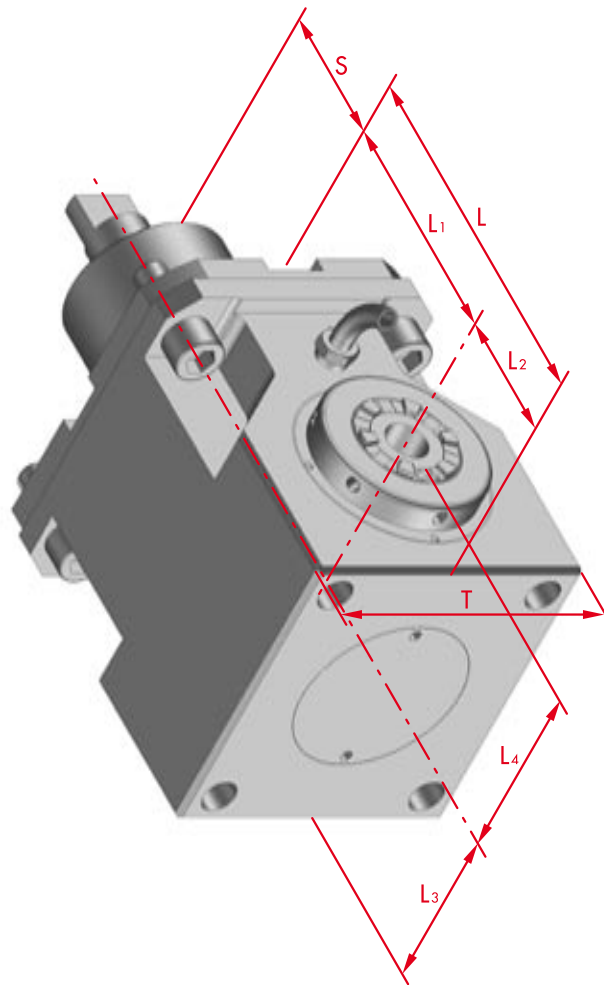


Order No.	Tool holder	Clamping range mm	Torque max.	n1/n2 (max.) (r.p.m.)	Gear Ratio	Coolant	L mm	L1 mm	L2 mm	L3 mm	L4 mm	S mm	T mm	MORI SEIKI Ref. #
101219	ER 40	2,5-30	70 Nm	6.500 / 6.500	i = 1:1	external	139	90	49	75,5	117	53	130	T32214
124882	ER 40	2,5-30	70 Nm	6.500 / 6.500	i = 1:1	internal	139	90	49	75,5	117	53	130	-
124883	mi 50		70 Nm	6.500 / 6.500	i = 1:1	internal	139	90	49	75,5	96	53	130	-



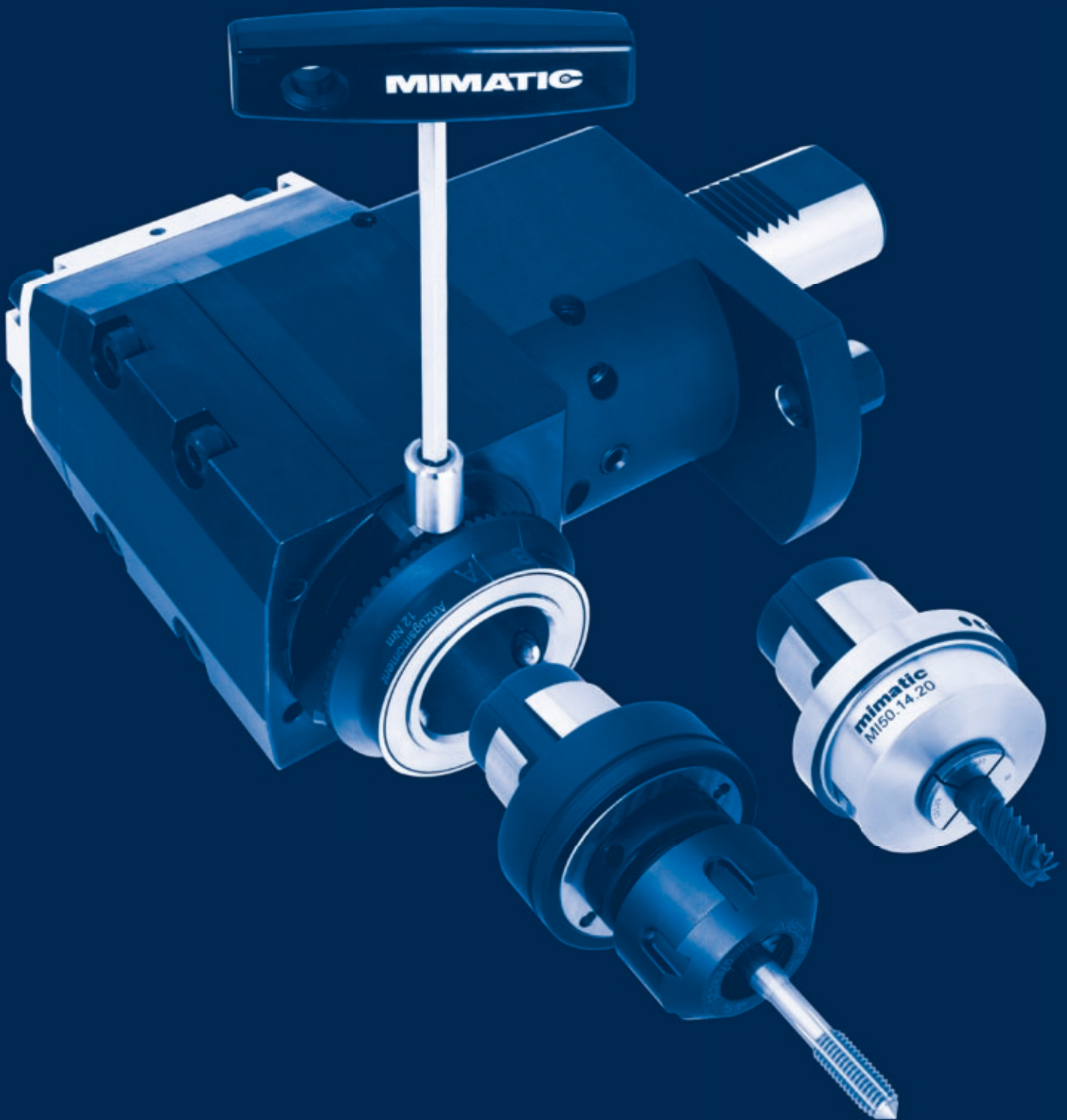
## Angle Unit, 2-Axis

for Manufacturer	
<b>MORI SEIKI</b> THE MACHINE TOOL COMPANY	
for Machine type	
<b>NL 1500 / 2000 / 2500 / 3000</b>	
Dimensions	
Turret type	Star-type Turret
Shank	BMT Ø 60 mm
Drive	Tang
SW	7.9 mm



Order No.	Tool holder	Clamping range mm	Torque max.	n1/n2 (max.) (r.p.m.)	Gear Ratio	Coolant	L mm	L1 mm	L2 mm	L3 mm	L4 mm	S mm	T mm	MORI SEIKI Ref. #
101218	2 x ER 32	1,0-20	70 Nm	6.500 / 6.500	i = 1:1	external	139	90	49	70	70	53	108	T32216
169193	2 x mi 40		70 Nm	6.500 / 6.500	i = 1:1	internal	129	90	39	105	82,5	53	108	

**Modular Quick Change System**  
**mimatic mi**



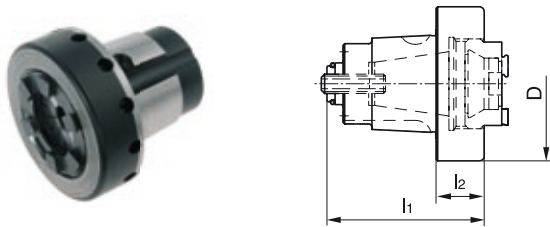
## Table of Contents

		Size	Standard	Page
<b>Collet Chucks</b>		ER 11 - ER 40	DIN 6499	287
<b>Combination Shell End Mill Arbors</b>		Ø 16-27 mm		287
<b>Weldon Toolholders Whistle-Notch Toolholders</b>		Ø 6-25 mm Ø 1/4"-1/0"	DIN 1835 B DIN 1835 B	288 288
<b>Synax® Tapping Quick Change Holders</b>		Ø 3,5-16 mm		289
<b>Softsynchro Chucks (Licence Emuge)</b>		M4-M12		289
<b>Hydraulic Chucks</b>		Ø 12 + 20 mm		289
		Accessories		290
<b>Shrink fit Chucks</b>		Ø 8-20 mm		291
		Accessories		291
<b>Accessories</b>		Blank		291
		Tool-presetting unit		292
		Assembling jig		292
		Wrench, collets, reducing sleeves		292-318



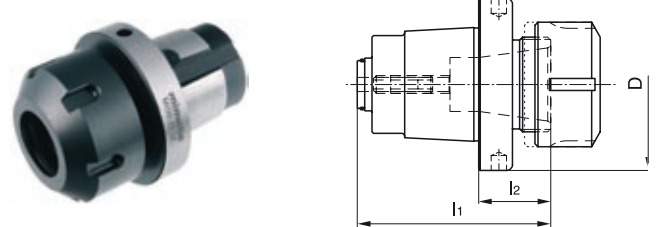
## Collet Chucks DIN 6499 - Type ER

short type, clamping nut inside



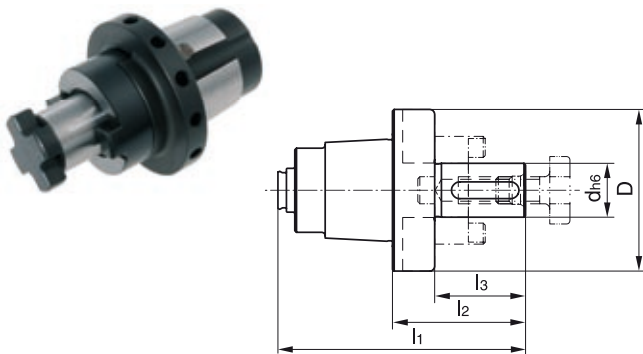
Order No.	Size	Collet	l1 mm	l2 mm	D mm
121479	mi 32	ER 11	41,5	15	42
155357	mi 32	ER 16	41,5	15	42
155388	mi 40	ER 16	45,0	11	48
155335	mi 40	ER 20	49,0	15	48
155367	mi 40	ER 25	55,0	21	48
155418	mi 50	ER 25	55,0	14	58
155460	mi 50	ER 32	59,0	18	58
155471	mi 63	ER 32	63,0	14	75
155496	mi 63	ER 40	69,0	20	75

long type, clamping nut outside



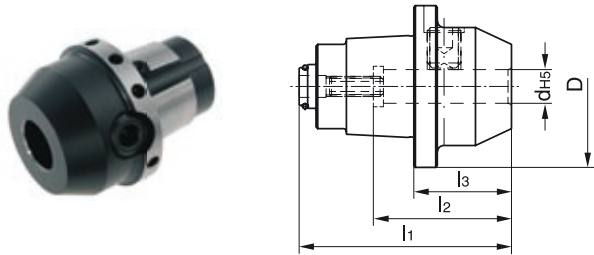
Order No.	Size	Collet	l1 mm	l2 mm	D mm
155358	mi 32	ER 11	62,5	36,0	42
155319	mi 32	ER 16	50,5	24,0	42
121460	mi 40	ER 16	58,0	24,0	48
121502	mi 40	ER 20	64,0	30,0	48
155448	mi 50	ER 25	65,3	41,0	58
155445	mi 50	ER 32	72,0	47,0	58
155475	mi 63	ER 32	80,0	47,0	75
155451	mi 63	ER 40	84,0	45,5	75

## Combination Shell End Mill Arbor



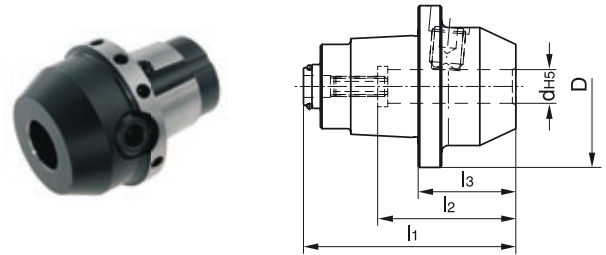
Order No.	Size	l1 mm	l2 mm	l3 mm	d h6 mm	D mm
121486	mi 32	66,0	39,5	27	16	42
155365	mi 40	73,5	39,5	25	16	48
155447	mi 50	82,0	41,0	27	16	58
155413	mi 50	88,0	47,0	31	22	58
155512	mi 63	96,0	47,0	31	22	75
155465	mi 63	98,0	49,0	33	27	75

**Weldon Toolholder DIN 1835 B**



Order No.	Size	l1 mm	l2 mm	l3 mm	d H5 mm / "	D mm
121436	mi 32	52,5	37	26,0	6	42
121478	mi 32	52,5	37	26,0	8	42
121469	mi 32	55,5	41	29,0	10	42
121439	mi 32	57,5	46	31,0	12	42
121449	mi 32	52,5	37	26,0	1/4"	42
121472	mi 32	55,5	41	29,0	3/8"	42
121448	mi 32	57,5	46	31,0	1/2"	42
155330	mi 40	60,0	37	26,0	6	48
155346	mi 40	60,0	37	26,0	8	48
155321	mi 40	63,0	41	29,0	10	48
155331	mi 40	65,0	46	31,0	12	48
155326	mi 40	65,0	46	31,0	14	48
155379	mi 40	68,0	49	34,0	16	48
121497	mi 40	60,0	37	26,0	1/4"	48
121475	mi 40	63,0	41	29,0	3/8"	48
121474	mi 40	65,0	46	31,0	1/2"	48
121499	mi 40	68,0	49	34,0	5/8"	48
155419	mi 50	65,0	37	24,0	6	58
155411	mi 50	66,0	37	25,0	8	58
155400	mi 50	70,0	41	29,0	10	58
155406	mi 50	73,0	46	32,0	12	58
155412	mi 50	73,0	46	32,0	14	58
155407	mi 50	74,0	49	33,0	16	58
155427	mi 50	78,0	51	37,0	20	58
121489	mi 50	65,0	37	24,0	1/4"	58
121529	mi 50	40,0	41	29,0	3/8"	58
121525	mi 50	73,0	46	32,0	1/2"	58
121520	mi 50	75,0	49	34,0	5/8"	58
121526	mi 50	78,0	51	37,0	3/4"	58
155470	mi 63	81,0	37	32,0	6	75
155459	mi 63	82,0	37	33,0	8	75
155490	mi 63	85,0	41	36,0	10	75
155509	mi 63	88,5	46	39,5	12	75
155463	mi 63	88,5	46	39,5	14	75
155482	mi 63	91,0	49	42,0	16	75
155474	mi 63	93,0	51	44,0	20	75
155464	mi 63	110	59	61,0	25	75
166815	mi 63	81,0	37	32,0	1/4"	75
166805	mi 63	85,0	41	36,0	3/8"	75
166813	mi 63	88,5	46	39,5	1/2"	75
166807	mi 63	91,0	49	42,0	5/8"	75
166804	mi 63	93,0	51	44,0	3/4"	75
166812	mi 63	110	59	61,0	1/0"	75

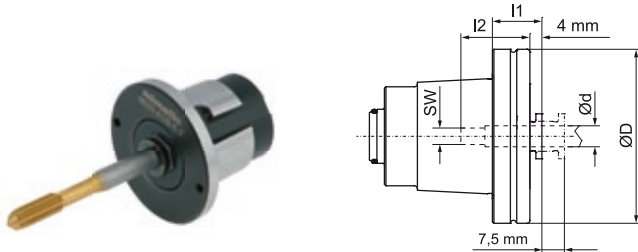
**Whistle Notch Toolholder DIN 1835 E**



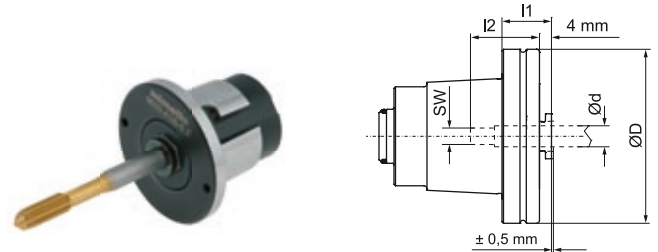
Order No.	Size	l1 mm	l2 mm	l3 mm	d H5 mm / "	D mm
121463	mi 32	52,5	36	26,0	6	42
121464	mi 32	52,5	36	26,0	8	42
121443	mi 32	55,5	40	29,0	10	42
121453	mi 32	57,5	45	31,0	12	42
121442	mi 32	52,5	36	26,0	1/4"	42
121485	mi 32	55,5	40	29,0	3/8"	42
121480	mi 32	57,5	45	31,0	1/2"	42
155369	mi 40	60,0	36	26,0	6	48
155363	mi 40	60,0	36	26,0	8	48
155370	mi 40	63,0	40	29,0	10	48
155364	mi 40	65,0	45	31,0	12	48
155333	mi 40	65,0	45	31,0	14	48
155382	mi 40	68,0	48	34,0	16	48
121492	mi 40	60,0	36	26,0	1/4"	48
121493	mi 40	63,0	40	29,0	3/8"	48
121455	mi 40	65,0	45	31,0	1/2"	48
121494	mi 40	68,0	48	34,0	5/8"	48
155416	mi 50	65,0	36	24,0	6	58
155401	mi 50	66,0	36	25,0	8	58
155383	mi 50	70,0	40	29,0	10	58
155408	mi 50	73,0	45	32,0	12	58
155435	mi 50	73,0	45	32,0	14	58
155436	mi 50	75,5	48	34,5	16	58
155384	mi 50	78,0	50	37,0	20	58
166816	mi 50	65,0	36	24,0	1/4"	58
155440	mi 50	70,0	40	29,0	3/8"	58
155434	mi 50	73,0	45	32,0	1/2"	58
155428	mi 50	75,0	48	34,0	5/8"	58
155385	mi 50	78,0	50	37,0	3/4"	58
166104	mi 63	81,0	36	32,0	6	75
166105	mi 63	82,0	36	33,0	8	75
166110	mi 63	85,0	40	36,0	10	75
166112	mi 63	88,5	45	39,5	12	75
166113	mi 63	88,5	45	39,5	14	75
166114	mi 63	91,0	48	42,0	16	75
166115	mi 63	93,0	50	44,0	20	75
166116	mi 63	110	56	61,0	25	75
166797	mi 63	81,0	36	32,0	1/4"	75
166799	mi 63	85,0	40	36,0	3/8"	75
166796	mi 63	88,5	45	39,5	1/2"	75
166803	mi 63	91,0	48	42,0	5/8"	75
166798	mi 63	93,0	50	44,0	3/4"	75
166795	mi 63	110	56	61,0	1/0"	75

## SYNAX® Tapping Quick Change Holder

without internal coolant,  
with synchronisation and length compensation



with internal coolant (70 bar),  
only synchronisation

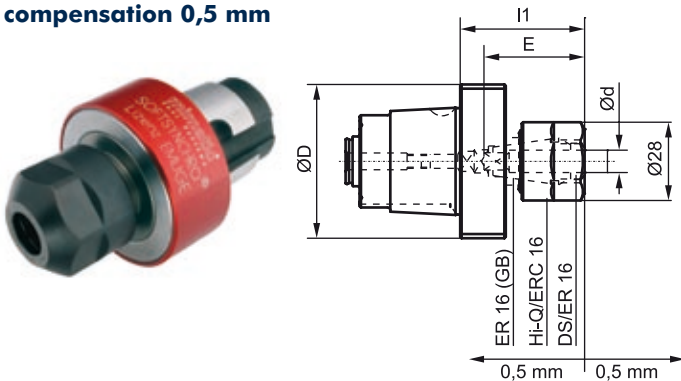


Order No.	Size	l1 mm	l2 mm	d mm	D mm	SW
121510	mi 40	17,0	25	3,5	48	2,7
155397	mi 40	17,0	25	4,5	48	3,4
155377	mi 40	17,0	27	6,0	48	4,9
155378	mi 40	17,0	27	8,0	48	6,2
155403	mi 40	38,0	28	9,0	48	7,0
121451	mi 40	38,0	29	10,0	48	8,0
121498	mi 40	38,0	30	12,0	48	9,0
155450	mi 50	16,5	25	3,5	58	2,7
155487	mi 50	16,5	25	4,5	58	3,4
155422	mi 50	16,5	27	6,0	58	4,9
155455	mi 50	16,5	27	8,0	58	6,2
155423	mi 50	16,5	28	9,0	58	7,0
155466	mi 50	16,5	29	10,0	58	8,0
155449	mi 50	16,5	30	12,0	58	9,0
155479	mi 50	44,0	33	16,0	58	12,0

Order No.	Size	l1 mm	l2 mm	d mm	D mm	SW
155389	mi 40	17,0	27	6	48	4,9
121522	mi 40	17,0	27	8	48	6,2
121515	mi 40	38,0	28	9	48	7,0
121504	mi 40	38,0	29	10	48	8,0
121517	mi 40	38,0	30	12	48	9,0
155432	mi 50	16,5	27	6	58	4,9
155498	mi 50	16,5	27	8	58	6,2
155473	mi 50	16,5	28	9	58	7,0
155467	mi 50	16,5	29	10	58	8,0
155446	mi 50	16,5	30	12	58	9,0
121534	mi 50	44,0	33	16	58	12,0

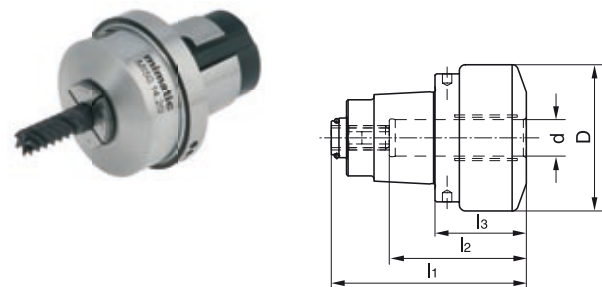
## Softsynchro Chuck (Licence Emuge)

with internal coolant,  
with push and pull length  
compensation 0,5 mm



Order No.	Size	Collet	Thread	l1 mm	d mm	D mm
121503	mi 40	ER-GB 16	M4-M12	47,5	4,5-10	45
121530	mi 50	ER-GB 16	M4-M12	44,5	4,5-10	50

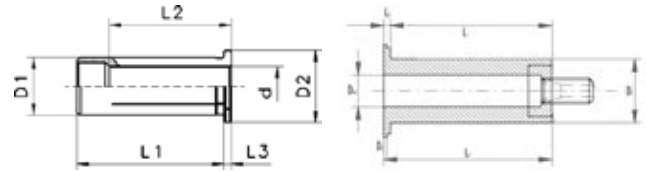
## Hydraulic Chuck



Order No.	Size	l1 mm	l2 mm	l3 mm	d h6 mm	D mm
155391	mi 40	64	45	30	12	48
155417	mi 50	71	52	30	20	58

## Accessories for Hydraulic Chucks

### Sleeve



without horizontal adjustment      with horizontal adjustment

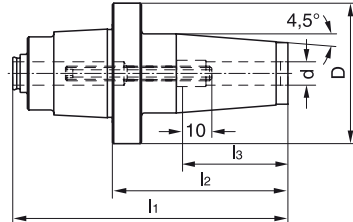
Order No.	D1 mm	d h6 mm / "	L1 mm	L2 mm	L3 mm	D2 mm
119790	12	3	40	29	4	16
119793	12	1/8"	40	29	4	16
119797	12	4	40	29	4	16
119798	12	3/16"	40	29	4	16
119819	12	5	40	29	4	16
119812	12	6	40	36	4	16
119813	12	1/4"	40	36	4	16
119791	12	7	40	37	4	16
119799	12	5/16"	40	37	4	16
119810	12	8	40	37	4	16
119792	12	9	40	37	4	16
119815	12	3/8"	40	40	4	16
119814	12	10	40	40	4	16
119816	20	3	50	28	4	25
119823	20	1/8"	50	28	4	25
119817	20	4	50	28	4	25
119837	20	3/16"	50	28	4	25
119800	20	5	50	28	4	25
119801	20	6	50	36	4	25
119822	20	1/4"	50	36	4	25
119818	20	7	50	38	4	25
119839	20	5/16"	50	37	4	25
119820	20	8	50	37	4	25
119802	20	9	50	38	4	25
119838	20	3/8"	50	38	4	25
119824	20	10	50	40	4	25
119825	20	11	50	40	4	25
119830	20	7/16"	50	45	4	25
119826	20	12	50	45	4	25
119821	20	1/2"	50	45	4	25
119827	20	14	50	45	4	25
119846	20	9/16"	50	45	4	25
119829	20	5/8"	50	48	4	25
119828	20	16	50	48	4	25
119847	25	3	56	29	4	30
119848	25	4	56	29	4	30
119831	25	5	56	29	4	30
119849	25	6	56	37	4	30
119832	25	7	56	37	4	30
119833	25	8	56	37	4	30
119834	25	9	56	38	4	30
119850	25	10	56	40	4	30
119835	25	12	56	46	4	30
119851	25	14	56	47	4	30
119836	25	16	56	48	4	30
119841	25	18	56	48	4	30
119842	25	20	56	50	4	30
119844	32	6	60	36	4	36

Order No.	D1 mm	d h6 mm / "	L1 mm	L2 mm	L3 mm	D2 mm
119857	32	1/4"	60	36	4	36
119845	32	7	60	37	4	36
119879	32	5/16"	60	36	4	36
119852	32	8	60	36	4	36
119855	32	9	60	37	4	36
119884	32	3/8"	60	37	4	36
119864	32	10	60	40	4	36
119853	32	11	60	40	4	36
119858	32	12	60	45	4	36
119856	32	1/2"	60	45	4	36
119859	32	13/16"	60	45	4	36
119865	32	14	60	46	4	36
119854	32	15/16"	60	46	4	36
119861	32	5/8"	60	46	4	36
119866	32	16	60	48	4	36
119870	32	18	60	49	4	36
119878	32	3/4"	60	50	4	36
119877	32	20	60	50	4	36
119867	32	25	60	56	4	36

### with horizontal adjustment

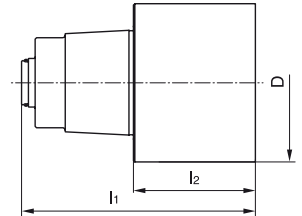
119909	20	6	50	52	-	28
119889	20	8	50	52	-	28
152696	20	10	50	52	-	28
119910	20	12	50	52	-	28
119901	20	14	50	52	-	28
119911	20	16	50	52	-	28
119892	20	18	50	52	-	28
119893	25	10	56	59	-	32
119912	25	12	56	59	-	32
119894	25	14	56	59	-	32
119895	25	16	56	59	-	32
167144	25	18	56	59	-	32
167045	25	20	56	59	-	32

## Shrink fit Chuck



Order No.	Size	l1 mm	l2 mm	l3 mm	d h6 mm	D mm
155381	mi 40	94	60	36	8	48
121482	mi 40	94	60	42	10	48
155334	mi 40	99	65	47	12	48
121501	mi 40	104	70	50	16	48
155421	mi 50	101	60	36	8	58
155409	mi 50	101	60	42	10	58
155444	mi 50	106	65	47	12	58
155438	mi 50	106	65	47	14	58
155430	mi 50	111	70	50	16	58
155431	mi 50	116	75	50	18	58
155454	mi 50	116	75	52	20	58

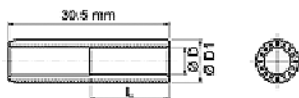
## Blank



Order No.	Size	l1 mm	l2 mm	D mm
121457	mi 32	76,5	50	42
166791	mi 40	94,0	60	48
166789	mi 50	111,0	70	58
121557	mi 63	129,0	80	75

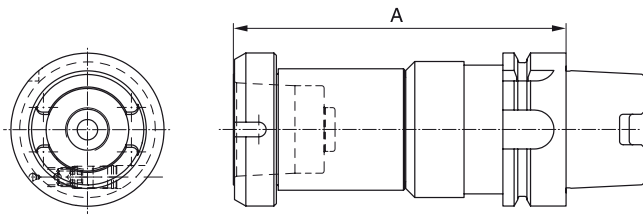
## Accessories for Shrink fit Chucks

### Sleeve



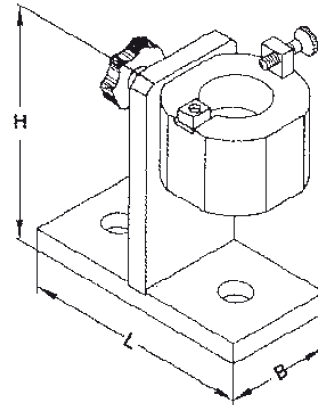
Order No.	L mm	L1 mm	d h6 mm	D mm
119807	30,5	7,5	2,5	8
119787	30,5	9,0	3,0	8
119808	30,5	10,5	3,5	8
119809	30,5	12,0	4,0	8
119788	30,5	13,5	4,5	8
119789	30,5	15,0	5,0	8
119796	30,5	16,5	5,5	8

**Tool Presetting Unit**

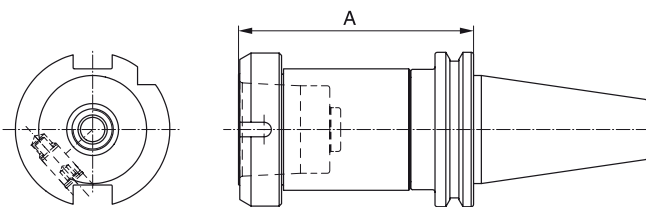


Order No.	Size	HSK	A mm
155380	mi 40	63	96,7
155429	mi 50	63	96,7

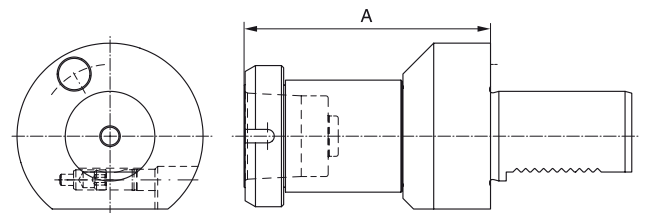
**Assembling Jig**



Order No.	Size	L mm	B mm	H mm
166774	SK 40	130	64	136
166775	HSK 63	130	64	136
121571	VDI 40	130	64	136



Order No.	Size	SK	A mm
121471	mi 40	40	134,5
155405	mi 50	40	136,9



Order No.	Size	VDI	A mm
155368	mi 40	40	108
155356	mi 50	40	110

**Accessories for mi-system**

**Complete wrench for one-hand operation**



Order No.	Size
173988	mi 25, mi 32, mi 40
173985	mi 50, mi 63

**Socket wrench for torque wrench**



Order No.	Size	L mm	Wrench size
170734	mi 25, mi 32, mi 40	50	1/4"
170419	mi 50, mi 63	50	1/4"

## Accessories

### Wrenches and Clamping Nuts



#### Hook wrench to hold against

Order No.	Size	Type	DIN
107557	ER 16	inlying	1810-B
107608	ER 20	inlying	1810-B
107446	ER 25	inlying	1810-B
107558	ER 25	outlying	1810-A
107642	ER 32	inlying	1810-B
107607	ER 32	outlying	1810-B
107566	ER 40	inlying	1810-B
107628	ER 40	outlying	1810-A
107605		Sawblade holder	1810-A
107447		Milling arbor 22	1810-B

#### Wrench for ER Clamping Nuts

Order No.	Size	Type
112912	ER 11	inlying
112954	ER 16	inlying
112929	ER 20	inlying
112913	ER 25	inlying
112900	ER 32	inlying
112867	ER 40	inlying
107628	ER 40	outlying

#### ER Clamping Nuts

Order No.	Size	Type	Internal coolant
112953	ER 11	inlying	
112860	ER 16	inlying	
112938	ER 20	inlying	
112961	ER 25	inlying	
112977	ER 32	inlying	
112946	ER 40	inlying	
112962	ER 16	inlying	✓
112940	ER 20	inlying	✓
112901	ER 25	inlying	✓
112963	ER 32	inlying	✓
112978	ER 40	inlying	✓
112513	ER 40	outlying	
117744	ER 40	outlying	✓

### Collet Sets



#### DIN 6499-B, Class 2

Order No.	Pieces	Size	Range
152712	10	ER 16	1-10
120174	12	ER 20	2-13
152713	15	ER 25	2-16
152715	18	ER 32	3-20
152716	23	ER 40	4-26

#### DIN 6499-B, (6 µm)

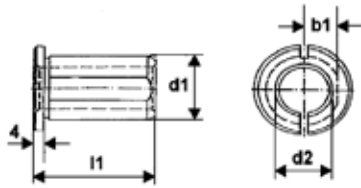
Order No.	Pieces	Size	Range
120131	10	ER 16	1-10
120154	12	ER 20	2-13
120349	15	ER 25	2-16
120612	18	ER 32	3-20
120730	23	ER 40	4-26

#### Threading Collets Type ET with length compensation

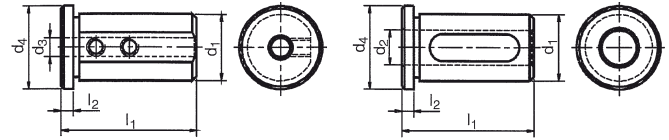
Order No.	ET	Pieces	Size	Range
152717	16	9	2,5-6	M1-M8
152718	25	8	2,8-9	M2-M12
120847	32	8	4,5-12	M4-M16
120827	40	9	6,0-16	M4-M22

## Accessories

### Reducing Sleeve, slotted



### Reducing Sleeve



Pict. 1

Pict. 2

Order No.	d1 mm	d2 mm	d3 mm	l1 mm	b1 mm
104492	20	8	24	30	4
104481	20	10	24	30	4
104461	20	12	24	30	4
104462	20	14	24	30	4
104501	20	15	24	30	4
104451	20	16	24	30	4
104536	25	8	29	40	4
104493	25	10	29	40	4
104484	25	12	29	40	4
104504	25	14	29	40	4
104463	25	15	29	40	4
104545	25	16	29	40	4
104485	25	18	29	40	4
104511	25	20	29	40	4
104453	32	8	36	50	4
104529	32	10	36	50	4
104486	32	12	36	50	4
104563	32	14	36	50	4
104497	32	15	36	50	4
104547	32	16	36	50	4
104488	32	18	36	50	4
104498	32	20	36	50	4
104543	32	25	36	50	4
104508	40	10	44	78	4
104565	40	12	44	78	4
104550	40	14	44	78	4
104523	40	15	44	78	4
104582	40	16	44	78	4
104524	40	18	44	78	4
104591	40	20	44	78	4
104584	40	25	44	78	4
104608	40	32	44	78	4

Order No.	Pict.	d1 mm	d2 mm	d3 mm	d4 mm	l1 mm	l2 mm
104527	1	25		6	29	50	4
104444	1	25		8	29	50	4
104445	1	25		10	29	50	4
104494	1	25		12	29	50	4
104537	2	25	16		29	50	4
104469	2	25	20		29	50	4
104528	1	32		6	40	58	5
104519	1	32		8	40	58	5
104454	1	32		10	40	58	5
104487	1	32		12	40	58	5
104548	2	32	16		40	58	5
104489	2	32	20		40	58	5
104522	2	32	25		40	58	5
104507	1	40		8	44	58	5
104549	1	40		10	44	58	5
104531	1	40		12	44	58	5
104514	2	40	16		44	58	5
104555	2	40	20		44	58	5
104551	2	40	25		44	58	5
104609	2	40	32		44	58	5
104558	1	50		12	54	75	5
104525	2	50	16		54	75	5
104586	2	50	20		54	75	5
104587	2	50	25		54	75	5
104588	2	50	32		54	75	5
104559	2	50	40		54	75	5