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Revolving lathe centres
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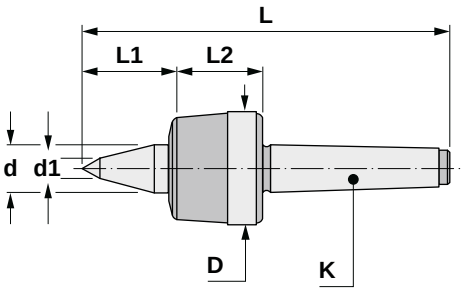
Characteristics:
All-round revolving lathe centre with extended centerpoint.
It enlarges the work area between centerpoint and workpiece and improves the workpiece accessibility.

Eigenschaften:
Mitlaufende Allround-Zentrierspitze mit verlängerter Laufspitze.
Sie vergrößert den Arbeitsraum zwischen Spitze und Werkstück und verbessert die Werkstückzugänglichkeit.

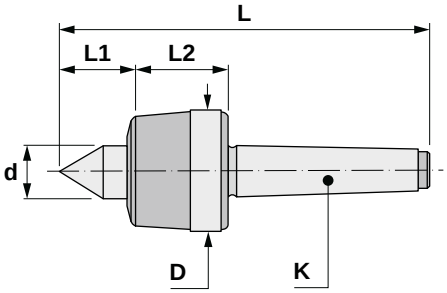


RC

Reference Bezeichnung	K	D	d	d1	L1	L2	L	Kg
R-300-C	MK3	49	22	10	38	47	174	0,900
R-400-C	MK4	63	30	11	46	52	207	1,950
R-500-C	MK5	85	35	18	64	64	266	4,000

Characteristics:
All-round revolving lathe centre, standard design.
An economic solution for almost every standard workholding situation.

Eigenschaften:
Mitlaufende Allround-Zentrierspitze, Standard-Ausführung.
Eine wirtschaftliche Lösung für nahezu jede Standard-Spannsituation.

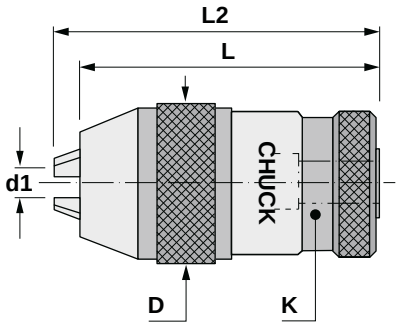


RN

Reference Bezeichnung	K	D	d	L1	L2	L	Kg
R-200-N	MK2	42	18	24	39	137	0,500
R-300-N	MK3	49	22	29	47	163	0,850
R-400-N	MK4	63	30	35	52	196	1,900
R-500-N	MK5	85	35	48	64	250	3,950

Characteristics:
Keyless drill chucks, standard class.
DIN 238

Eigenschaften:
Selbstspann-Bohrfutter, Standard-Ausführung.
DIN 238



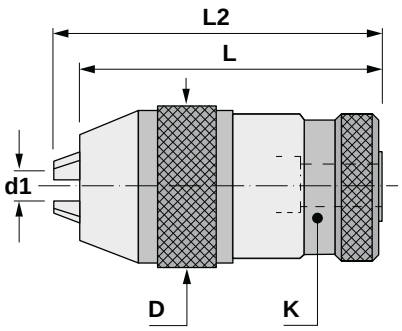
MU

Reference Bezeichnung	K DIN 238	d1	D	L	L2	Kg
MU08B12	B-12	0,8-8	37	72	78	0,340
MU10B12	B-12	0,8-10	40	79	86	0,610
MU13B16	B-16	1-13	47	93	103	0,940
MU16B16	B-16	3-16	52	95	105	1,150
MU16B18	B-18	3-16	52	95	105	1,140
MU20B18	B-18	5-20	64	121	131	2,250

Reference Bezeichnung	3x
MU08B12	60328
MU10B12	60330
MU13B16	60333
MU16B16	60336
MU16B18	60336
MU20B18	60336

Characteristics:
Super precision keyless drill chucks.
DIN 238

Eigenschaften:
Höchst-Genauigkeit-Selbstspannbohrfutter.
DIN 238



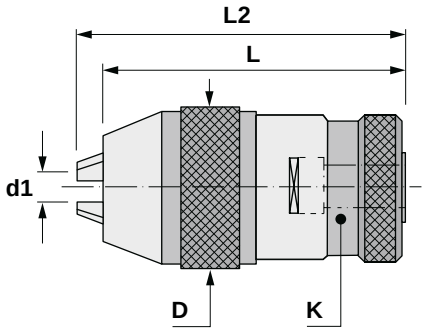
MP

Reference Bezeichnung	K DIN 238	d1	D	L	L2	Kg
MP08B12	B-12	0,3-8	38	67	74	0,500
MP10B12	B-12	0,5-10	43	81	89	0,720
MP10B16	B-16	0,5-10	43	81	89	0,740
MP13B16	B-16	1-13	49	91	103	0,990
MP16B16	B-16	3-16	55	95	107	1,320
MP16B18	B-18	3-16	55	95	107	1,270

Reference Bezeichnung	3x
MP08B12	60308
MP10B12	60310
MP10B16	60310
MP13B16	60313
MP16B16	60313
MP16B18	60313

Characteristics:
Super precision keyless drill chucks, with supplementary gripping tongue.
DIN 238

Eigenschaften:
Höchst-Genauigkeit-Selbstspannbohrfutter mit Schlüsselflächen zur Spannkrafterhöhung.
DIN 238



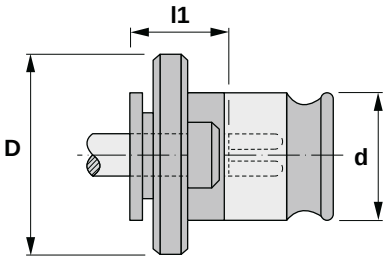
MK

Reference Bezeichnung	K DIN 238	d1	D	L	L2	Kg
M□08B12	B-12	0,3-8	38	67	74	0,480
M□10B12	B-12	0,5-10	43	81	89	0,940
M□10B16	B-16	0,5-10	43	81	89	0,940
M□13B16	B-16	1-13	49	91	103	1,150
M□16B16	B-16	3-16	55	95	107	1,540
M□16B18	B-18	3-16	55	95	107	1,260

Reference Bezeichnung		3x 
M□08B12	50008	60308
M□10B12	50010	60310
M□10B16	50010	60310
M□13B16	50013	60313
M□16B16	50016	60313
M□16B18	50016	60313

Characteristics:
Quick change adapter without overload clutch.
BILZ system.

Eigenschaften:
Wechseleinsatz für Gewindebohrer ohne Sicherheitskupplung.
BILZ System.

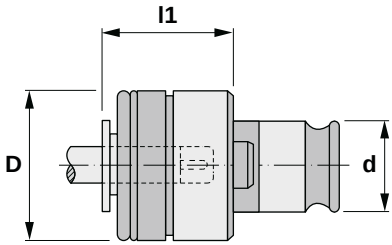


7 1/2 0XX

Reference Bezeichnung	DIN d1 x a	d	D	l1
71002	2,8□x□2,1	19	30	11
71003	3,5□x□2,7	19	30	11
71004	4,0□x□3,0	19	30	11
71005	4,5□x□3,4	19	30	11
71006	5,5□x□4,3	19	30	11
71007	6,0□x□4,9	19	30	11
71008	7,0□x□5,5	19	30	11
71009	8,0□x□6,2	19	30	11
71010	9,0□x□7,0	19	30	11
71011	10,0□x□8,0	19	30	11
71012	11,0□x□9,0	19	30	11
71013	12,0□x□9,0	19	30	11
72007	6,0□x□4,9	31	48	11
72008	7,0□x□5,5	31	48	11
72009	8,0□x□6,2	31	48	11
72010	9,0□x□7,0	31	48	11
72011	10,0□x□8,0	31	48	11
72012	11,0□x□9,0	31	48	11
72013	12,0□x□9,0	31	48	11
72014	14,0□x□11,0	31	48	11
72015	16,0□x□12,0	31	48	11
72016	18,0□x□14,5	31	48	11
72017	20,0□x□16,0	31	48	11
72018	22,0□x□18,0	31	48	11
73012	11,0□x□9,0	48	70	14
73013	12,0□x□9,0	48	70	14
73014	14,0□x□11,0	48	70	14
73015	16,0□x□12,0	48	70	14
73016	18,0□x□14,5	48	70	14
73017	20,0□x□16,0	48	70	14
73018	22,0□x□18,0	48	70	14
73019	25,0□x□20,0	48	70	14
73020	28,0□x□22,0	48	70	14
73021	32,0□x□24,0	48	70	14
73022	36,0□x□29,0	48	70	14

Characteristics:
Quick change adapter with overload clutch.
BILZ system.

Eigenschaften:
Wechseleinsatz für Gewindebohrer mit Sicherheitskupplung.
BILZ System.



$7^{5}_{6}_{7}$0XX

Reference Bezeichnung	DIN d1 x a	d	D	l1
75002	2,8□x□2,1	19	32	25
75003	3,5□x□2,7	19	32	25
75004	4,0□x□3,0	19	32	25
75005	4,5□x□3,4	19	32	25
75006	5,5□x□4,3	19	32	25
75007	6,0□x□4,9	19	32	25
75008	7,0□x□5,5	19	32	25
75009	8,0□x□6,2	19	32	25
75010	9,0□x□7,0	19	32	25
75011	10,0□x□8,0	19	32	25
75012	11,0□x□9,0	19	32	25
75013	12,0□x□9,0	19	32	25
76007	6,0□x□4,9	31	50	34
76008	7,0□x□5,5	31	50	34
76009	8,0□x□6,2	31	50	34
76010	9,0□x□7,0	31	50	34
76011	10,0□x□8,0	31	50	34
76012	11,0□x□9,0	31	50	34
76013	12,0□x□9,0	31	50	34
76014	14,0□x□11,0	31	50	34
76015	16,0□x□12,0	31	50	34
76016	18,0□x□14,5	31	50	34
76017	20,0□x□16,0	31	50	34
76018	22,0□x□18,0	31	50	34
77010	9,0□x□7,0	48	72	45
77012	11,0□x□7,0	48	72	45
77013	12,0□x□9,0	48	72	45
77014	14,0□x□11,0	48	72	45
77015	16,0□x□12,0	48	72	45
77016	18,0□x□14,5	48	72	45
77017	20,0□x□16,0	48	72	45
77018	22,0□x□18,0	48	72	45
77019	25,0□x□20,0	48	72	45
77020	28,0□x□22,0	48	72	45
77021	32,0□x□24,0	48	72	45
77022	36,0□x□29,0	48	72	45

Selection table of tap adapters
Auswahltabelle von Wechseleinsätzen für Gewindebohrer

"XX"	Ø X □	DIN 352	DIN 5156/ 5157	DIN 371	DIN 374	DIN 376	DIN 371	DIN 374/ 376
01	2,5 x 2,1	M 1/1,8		M 1/1,8	M 3,5	M 3,5	1/16"	
							Nr. 0/1	
02	2,8 x 2,1	M 2		M 2	M 4	M 4	3/32"	
		M 2,2		M 2,2			Nr. 2	
		M 2,5		M 2,5			Nr. 3	
03	3,5 x 2,7	M 3		M 3	M 5	M 5	1/8"	
							Nr. 4	
							Nr. 5	
04	4 x 3	M 3,5		M 3,5	M 5,5	M 5,5	Nr. 6	
05	4,5 x 3,4	M 4		M 4	M 6	M 6	5/32"	
							Nr. 8	
06	5,5 x 4,3				M 7	M 7		
07	6 x 4,9	M 4,5	G 1/16"	M 4,5	M 8	M 8	Nr. 10/12	
		M 5		M 5			3/16"	1/4"
		M 6		M 6			7/32"	5/16"
		M 7						
		M 8						
08	7 x 5,5	M 10	G 1/8"	M 7	M 10	M 10	1/4"	3/8"
09	8 x 6,2	M 11		M 8	M 11	M 11	5/16"	7/16"
10	9 x 7	M 12		M 9	M 12	M 12	3/8"	1/2"
11	10 x 8			M 10				
12	11 x 9	M 14	G 1/4"		M 14	M 14	9/16"	
13	12 x 9	M 16	G 3/8"		M 16	M 16	5/8"	
14	14 x 11	M 18			M 18	M 18	11/16"	
								3/4"
15	16 x 12	M 20	G 1/2"		M 20	M 20	13/16"	
16	18 x 14,5	M 22	G 5/8"		M 22	M 22	7/8"	
		M 24			M 24	M 24	15/16"	
17	20 x 16	M 27	G 3/4"		M 27	M 27	1"	
18	22 x 18	M 30	G 7/8"		M 30	M 30	1.1/8"	
19	25 x 20	M 33	G 1"		M 33	M 33	1.1/4"	
20	28 x 22	M 36	G 1.1/8"		M 36	M 36	1.3/8"	
21	32 x 24	M 39	G 1.1/4"		M 39	M 39	1.1/2"	
		M 42			M 42	M 42	1.5/8"	
22	36 x 29	M 45	G 1.3/8"		M 45	M 45	1.3/4"	
		M 48	G 1.1/2"		M 48	M 48		1.7/8"

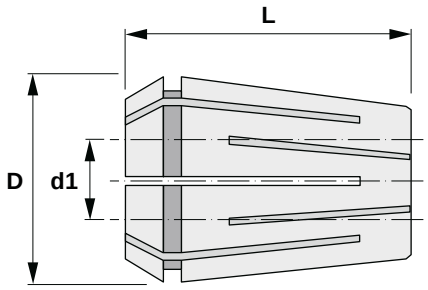
A = REDUCED SHANK / B = REINFORCED SHANK

A = REDUZIERTE AUFNAHME / B = VERSTÄRKTE AUFNAHME

"XX"	Ø X □	M - MF		UNC - UNF		BSW - BSF		BA
		A	B	A	B	A	B	A
30	2,24 x 1,8	M 3		Nr. 5		1/8		
31	2,5 x 2	M 3,5	M 1,0/2	Nr. 6	Nr. 0			Nr. 11
					Nr. 1			Nr. 10
								Nr. 9
32	2,8 x 2,24		M 2,2		Nr. 2			Nr. 8
			M 2,5		Nr. 3			Nr. 7
								Nr. 6
33	3,15 x 2,5	M 4	M 3		Nr. 4		1/8	Nr. 5
				Nr. 8	Nr. 5			
34	3,55 x 2,8	M 4,5	M 3,5	Nr. 10	Nr. 6	3/16		Nr. 4
35	4 x 3,15	M 5	M 4	Nr. 12		7/32		
36	4,5 x 3,55	M 6	M 4,5	1/4	Nr. 8	1/4		Nr. 3
37	5 x 4		M 5		Nr. 10		3/16	Nr. 2
38	5,6 x 4,5	M 7			Nr. 12	9/32	7/32	Nr. 1
39	6,3 x 5	M 8	M 6	5/16	1/4	5/16	1/4	Nr. 0
40	7,1 x 5,6	M 9	M 7	3/8		3/8	9/32	
41	8 x 6,3	M 10	M 8	7/16	5/16	7/16	5/16	
42	9 x 7,1	M 12	M 9	1/2		1/2		
11	10 x 8		M 10		3/8		3/8	
43	11,2 x 9	M 14		9/16		9/16		
44	12,5 x 10	M 16		5/8		5/8		
45	14 x 11,2	M 18				11/16		
		M 20		3/4		3/4		
46	16 x 12,5	M 22		7/8		7/8		
47	18 x 14	M 24		1		1		
17	20 x 16	M 27		1.1/8		1.1/8		
		M 30						
48	22,4 x 18	M 33		1.1/4		1.1/4		
19	25 x 20	M 36		1.3/8		1.3/8		
49	28 x 22,4	M 39		1.1/2		1.1/2		
		M 42				1.5/8		
50	31,5 x 25	M 45		1.3/4		1.3/4		
		M 48						
51	35,45 x 28	M 52		2		2		

Characteristics:
Collets with double slot DIN 6388 - Form B.
For tools with cylindrical shank
DIN 1835 - A.

Eigenschaften:
Spannzangen mit Doppelnut DIN 6388 - FORM-B, für Werkzeuge mit Zylinderschaft DIN 1835-A.



BXX

Reference Bezeichnung		d1	D	L
B1602□0	B16	2,0-1,5	25,50	40
B1602□5	B16	2,5-2,0	25,50	40
B1603□0	B16	3,0-2,5	25,50	40
B1603□5	B16	3,5-3,0	25,50	40
B1604□0	B16	4,0-3,5	25,50	40
B1604□5	B16	4,5-4,0	25,50	40
B1605□0	B16	5,0-4,5	25,50	40
B1605□5	B16	5,5-5,0	25,50	40
B1606□0	B16	6,0-5,5	25,50	40
B1606□5	B16	6,5-6,0	25,50	40
B1607□0	B16	7,0-6,5	25,50	40
B1607□5	B16	7,5-7,0	25,50	40
B1608□0	B16	8,0-7,5	25,50	40
B1608□5	B16	8,5-8,0	25,50	40
B1609□0	B16	9,0-8,5	25,50	40
B1609□5	B16	9,5-9,0	25,50	40
B1610□0	B16	10,0-9,5	25,50	40
B1610□5	B16	10,5-10,0	25,50	40
B1611□0	B16	11,0-10,5	25,50	40
B1611□5	B16	11,5-11,0	25,50	40
B1612□0	B16	12,0-11,5	25,50	40
B1612□5	B16	12,5-12,0	25,50	40
B1613□0	B16	13,0-12,5	25,50	40
B1613□5	B16	13,5-13,0	25,50	40
B1614□0	B16	14,0-13,5	25,50	40
B1614□5	B16	14,5-14,0	25,50	40
B1615□0	B16	15,0-14,5	25,50	40
B1615□5	B16	15,5-15,0	25,50	40
B1616□0	B16	16,0-15,5	25,50	40
B2503□0	B25	3,0-2,5	35,05	52
B2503□5	B25	3,5-3,0	35,05	52
B2504□0	B25	4,0-3,5	35,05	52
B2504□5	B25	4,5-4,0	35,05	52
B2505□0	B25	5,0-4,5	35,05	52
B2505□5	B25	5,5-5,0	35,05	52
B2506□0	B25	6,0-5,5	35,05	52
B2506□5	B25	6,5-6,0	35,05	52
B2507□0	B25	7,0-6,5	35,05	52
B2507□5	B25	7,5-7,0	35,05	52
B2508□0	B25	8,0-7,5	35,05	52

Reference Bezeichnung		d1	D	L
B2508□5	B25	8,5-8,0	35,05	52
B2509□0	B25	9,0-8,5	35,05	52
B2509□5	B25	9,5-9,0	35,05	52
B2510□0	B25	10,0-9,5	35,05	52
B2510□5	B25	10,5-10,0	35,05	52
B2511□0	B25	11,0-10,5	35,05	52
B2511□5	B25	11,5-11,0	35,05	52
B2512□0	B25	12,0-11,5	35,05	52
B2512□5	B25	12,5-12,0	35,05	52
B2513□0	B25	13,0-12,5	35,05	52
B2513□5	B25	13,5-13,0	35,05	52
B2514□0	B25	14,0-13,5	35,05	52
B2514□5	B25	14,5-14,0	35,05	52
B2515□0	B25	15,0-14,5	35,05	52
B2515□5	B25	15,5-15,0	35,05	52
B2516□0	B25	16,0-15,5	35,05	52
B2516□5	B25	16,5-16,0	35,05	52
B2517□0	B25	17,0-16,5	35,05	52
B2517□5	B25	17,5-17,0	35,05	52
B2518□0	B25	18,0-17,5	35,05	52
B2518□5	B25	18,5-18,0	35,05	52
B2519□0	B25	19,0-18,5	35,05	52
B2519□5	B25	19,5-19,0	35,05	52
B2520□0	B25	20,0-19,5	35,05	52
B2520□5	B25	20,5-20,0	35,05	52
B2521□0	B25	21,0-20,5	35,05	52
B2521□5	B25	21,5-21,0	35,05	52
B2522□0	B25	22,0-21,5	35,05	52
B2522□5	B25	22,5-22,0	35,05	52
B2523□0	B25	23,0-22,5	35,05	52
B2523□5	B25	23,5-23,0	35,05	52
B2524□0	B25	24,0-23,5	35,05	52
B2524□5	B25	24,5-24,0	35,05	52
B2525□0	B25	25,0-24,5	35,05	52
B3204□0	B32	4,0-3,5	43,70	60
B3204□5	B32	4,5-4,0	43,70	60
B3205□0	B32	5,0-4,5	43,70	60
B3205□5	B32	5,5-5,0	43,70	60
B3206□0	B32	6,0-5,5	43,70	60
B3206□5	B32	6,5-6,0	43,70	60
B3207□0	B32	7,0-6,5	43,70	60
B3207□5	B32	7,5-7,0	43,70	60
B3208□0	B32	8,0-7,5	43,70	60
B3208□5	B32	8,5-8,0	43,70	60
B3209□0	B32	9,0-8,5	43,70	60
B3209□5	B32	9,5-9,0	43,70	60
B3210□0	B32	10,0-9,5	43,70	60
B3210□5	B32	10,5-10,0	43,70	60
B3211□0	B32	11,0-10,5	43,70	60
B3211□5	B32	11,5-11,0	43,70	60
B3212□0	B32	12,0-11,5	43,70	60
B3212□5	B32	12,5-12,0	43,70	60
B3213□0	B32	13,0-12,5	43,70	60

Reference Bezeichnung		d1	D	L
B3213□5	B32	13,5-13,0	43,70	60
B3214□0	B32	14,0-13,5	43,70	60
B3214□5	B32	14,5-14,0	43,70	60
B3215□0	B32	15,0-14,5	43,70	60
B3215□5	B32	15,5-15,0	43,70	60
B3216□0	B32	16,0-15,5	43,70	60
B3216□5	B32	16,5-16,0	43,70	60
B3217□0	B32	17,0-16,5	43,70	60
B3217□5	B32	17,5-17,0	43,70	60
B3218□0	B32	18,0-17,5	43,70	60
B3218□5	B32	18,5-18,0	43,70	60
B3219□0	B32	19,0-18,5	43,70	60
B3219□5	B32	19,5-19,0	43,70	60
B3220□0	B32	20,0-19,5	43,70	60
B3220□5	B32	20,5-20,0	43,70	60
B3221□0	B32	21,0-20,5	43,70	60
B3221□5	B32	21,5-21,0	43,70	60
B3222□0	B32	22,0-21,5	43,70	60
B3222□5	B32	22,5-22,0	43,70	60
B3223□0	B32	23,0-22,5	43,70	60
B3223□5	B32	23,5-23,0	43,70	60
B3224□0	B32	24,0-23,5	43,70	60
B3224□5	B32	24,5-24,0	43,70	60
B3225□0	B32	25,0-24,5	43,70	60
B3225□5	B32	25,5-25,0	43,70	60
B3226□0	B32	26,0-25,5	43,70	60
B3226□5	B32	26,5-26,0	43,70	60
B3227□0	B32	27,0-26,5	43,70	60
B3227□5	B32	27,5-27,0	43,70	60
B3228□0	B32	28,0-27,5	43,70	60
B3228□5	B32	28,5-28,0	43,70	60
B3229□0	B32	29,0-28,5	43,70	60
B3229□5	B32	29,5-29,0	43,70	60
B3230□0	B32	30,0-29,5	43,70	60
B3230□5	B32	30,5-30,0	43,70	60
B3231□0	B32	31,0-30,5	43,70	60
B3231□5	B32	31,5-31,0	43,70	60
B3232□0	B32	32,0-31,5	43,70	60

I

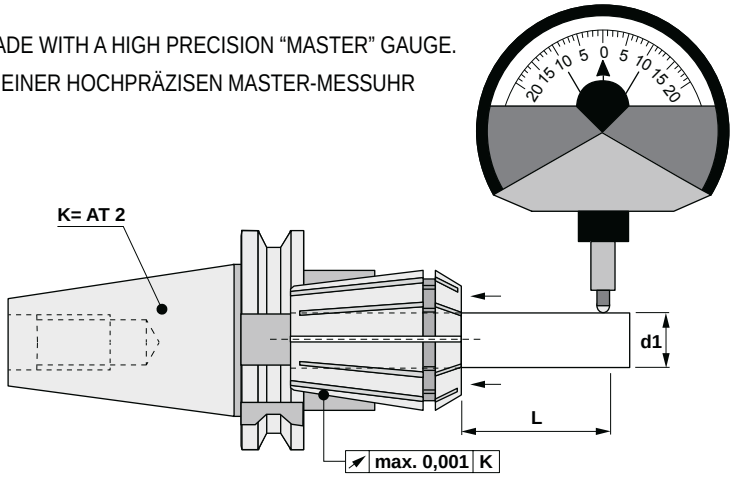
DIN 6499 ERXX/X - Runout table for collets DIN 6499
Rundlauftabelle der Spannzangen DIN 6499

Runout table of Mexin collets according to DIN 6499 showing the high precision of normal collets type ER/XX, in comparison with other brands.

Rundlauftabelle der Spannzangen Mexin nach DIN 6499. Die Tabelle zeigt die Hochgenauigkeit der normalen Spannzangen Typ ERXX im Vergleich mit anderen Marken.

THE CONTROL MUST BE MADE WITH A HIGH PRECISION "MASTER" GAUGE.

DIE KONTROLLE MUSS MIT EINER HOCHPRÄZISEN MASTER-MESSUHR GEMACHT WERDEN.



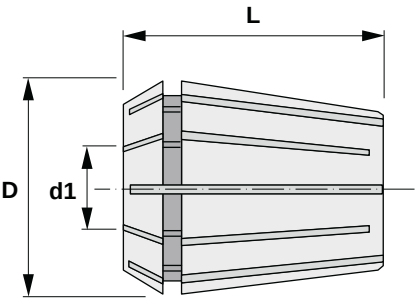
d1 mm	L mm	DIN CLASS / KLASSE 2 mm 452XX ERXX	DIN CLASS / KLASSE 1 mm	mexin NORMAL mm ERXX	mexin SUPER mm
1,0 - 1,6	6	0,015	0,010	0,010	0,005
>1,6 - 3,0	10	0,015	0,010	0,010	0,005
>3,0 - 7,0	16	0,015	0,010	0,010	0,005
>7,0 - 10,0	25	0,015	0,010	0,010	0,005
>10,0 - 18,0	40	0,020	0,015	0,015	0,005
>18,0 - 26,0	50	0,020	0,015	0,015	0,005
>26,0 - 34,0	60	0,025	0,020	0,020	0,010

RECOMMENDED CLAMPING TORQUE FOR NUTS FOR DIN 6499 ER COLLETS.
EMPFOHLENES ANZUGSMOMENT FÜR SPANNMUTTER FÜR SPANNZANGEN DIN 6499 ER.

		Normal  453 / 456 Max. Torque Nm Max. Anzugsmoment Nm	Bearings / Kugellager  451 Max. Torque Nm Max. Anzugsmoment Nm	Mini  455 Max. Torque Nm Max. Anzugsmoment Nm
ER16		35 / 60	50 / 70	25 / 30
ER20		40 / 100	50 / 100	25 / 35
ER25		80 / 120	90 / 130	35 / 40
ER32		100 / 130	130 / 170	
ER40		170 / 200	220 / 220	
ER50		280 / 300	300 / 300	

Characteristics:
Collets with double slot DIN 6499 - Form B (ER).
For tools with cylindrical shank
DIN 1835-A.

Eigenschaften:
Spannzangen mit Doppelnut DIN 6499 - FORM B (ER) für Werkzeuge mit Zylinderschaft DIN 1835-A.



ERXX

Reference Bezeichnung		d1	D	L
□□1601	□□16	1,0-0,5	17	27,5
□□1601□5	□□16	1,5-1,0	17	27,5
□□1602	□□16	2,0-1,5	17	27,5
□□1602□5	□□16	2,5-2,0	17	27,5
□□1603	□□16	3,0-2,5	17	27,5
□□1604	□□16	4,0-3,0	17	27,5
□□1605	□□16	5,0-4,0	17	27,5
□□1606	□□16	6,0-5,0	17	27,5
□□1607	□□16	7,0-6,0	17	27,5
□□1608	□□16	8,0-7,0	17	27,5
□□1609	□□16	9,0-8,0	17	27,5
□□1610	□□16	10,0-9,0	17	27,5
□□2001	□□20	1,0-0,5	21	31,5
□□2001□5	□□20	1,5-1,0	21	31,5
□□2002	□□20	2,0-1,5	21	31,5
□□2002□5	□□20	2,5-2,0	21	31,5
□□2003	□□20	3,0-2,5	21	31,5
□□2004	□□20	4,0-3,0	21	31,5
□□2005	□□20	5,0-4,0	21	31,5
□□2006	□□20	6,0-5,0	21	31,5
□□2007	□□20	7,0-6,0	21	31,5
□□2008	□□20	8,0-7,0	21	31,5
□□2009	□□20	9,0-8,0	21	31,5
□□2010	□□20	10,0-9,0	21	31,5
□□2011	□□20	11,0-10,0	21	31,5
□□2012	□□20	12,0-11,0	21	31,5
□□2013	□□20	13,0-12,0	21	31,5
□□2501	□□25	1,0-0,5	26	34,0
□□2501□5	□□25	1,5-1,0	26	34,0
□□2502	□□25	2,0-1,5	26	34,0
□□2502□5	□□25	2,5-2,0	26	34,0
□□2503	□□25	3,0-2,5	26	34,0
□□2504	□□25	4,0-3,0	26	34,0
□□2505	□□25	5,0-4,0	26	34,0
□□2506	□□25	6,0-5,0	26	34,0
□□2507	□□25	7,0-6,0	26	34,0
□□2508	□□25	8,0-7,0	26	34,0
□□2509	□□25	9,0-8,0	26	34,0
□□2510	□□25	10,0-9,0	26	34,0
□□2511	□□25	11,0-10,0	26	34,0

Reference Bezeichnung		d1	D	L
□□2512	□□25	12,0-11,0	26	34,0
□□2513	□□25	13,0-12,0	26	34,0
□□2514	□□25	14,0-13,0	26	34,0
□□2515	□□25	15,0-14,0	26	34,0
□□2516	□□25	16,0-15,0	26	34,0
□□3202	□□32	2,0-1,5	33	40,0
□□3202□5	□□32	2,5-2,0	33	40,0
□□3203	□□32	3,0-2,5	33	40,0
□□3204	□□32	4,0-3,0	33	40,0
□□3205	□□32	5,0-4,0	33	40,0
□□3206	□□32	6,0-5,0	33	40,0
□□3207	□□32	7,0-6,0	33	40,0
□□3208	□□32	8,0-7,0	33	40,0
□□3209	□□32	9,0-8,0	33	40,0
□□3210	□□32	10,0-9,0	33	40,0
□□3211	□□32	11,0-10,0	33	40,0
□□3212	□□32	12,0-11,0	33	40,0
□□3213	□□32	13,0-12,0	33	40,0
□□3214	□□32	14,0-13,0	33	40,0
□□3215	□□32	15,0-14,0	33	40,0
□□3216	□□32	16,0-15,0	33	40,0
□□3217	□□32	17,0-16,0	33	40,0
□□3218	□□32	18,0-17,0	33	40,0
□□3219	□□32	19,0-18,0	33	40,0
□□3220	□□32	20,0-19,0	33	40,0
□□4003	□□40	3-2	41	46,0
□□4004	□□40	4-3	41	46,0
□□4005	□□40	5-4	41	46,0
□□4006	□□40	6-5	41	46,0
□□4007	□□40	7-6	41	46,0
□□4008	□□40	8-7	41	46,0
□□4009	□□40	9-8	41	46,0
□□4010	□□40	10-9	41	46,0
□□4011	□□40	11-10	41	46,0
□□4012	□□40	12-11	41	46,0
□□4013	□□40	13-12	41	46,0
□□4014	□□40	14-13	41	46,0
□□4015	□□40	15-14	41	46,0
□□4016	□□40	16-15	41	46,0
□□4017	□□40	17-16	41	46,0
□□4018	□□40	18-17	41	46,0
□□4019	□□40	19-18	41	46,0
□□4020	□□40	20-19	41	46,0
□□4021	□□40	21-20	41	46,0
□□4022	□□40	22-21	41	46,0
□□4023	□□40	23-22	41	46,0
□□4024	□□40	24-23	41	46,0
□□4025	□□40	25-24	41	46,0
□□4026	□□40	26-25	41	46,0
□□4027	□□40	27-26	41	46,0
□□4028	□□40	28-27	41	46,0
□□4029	□□40	29-28	41	46,0
□□4030	□□40	30-29	41	46,0

Reference Bezeichnung		d1	D	L
□□5006	□□50	6-4	52	60,0
□□5008	□□50	8-6	52	60,0
□□5010	□□50	10-8	52	60,0
□□5012	□□50	12-10	52	60,0
□□5014	□□50	14-12	52	60,0
□□5016	□□50	16-14	52	60,0
□□5018	□□50	18-16	52	60,0
□□5020	□□50	20-18	52	60,0
□□5022	□□50	22-20	52	60,0
□□5024	□□50	24-22	52	60,0
□□5026	□□50	26-24	52	60,0
□□5028	□□50	28-26	52	60,0
□□5030	□□50	30-28	52	60,0
□□5032	□□50	32-30	52	60,0
□□5034	□□50	34-32	52	60,0

Characteristics:
Set of collets DIN 6499 (ER) Form B in a plastic box.
DIN 6499-B

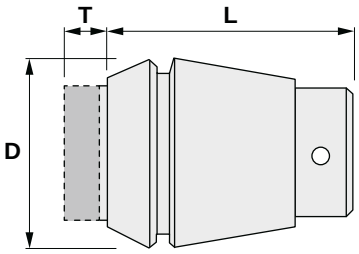
Eigenschaften:
Spannzangensatz DIN 6499 (ER) Form B im Etui.
DIN 6499-B

SET-ER

Reference Bezeichnung		CAP	nº	Ø
□□□-□□16	□□16	1-10	10	1-2-3-4-5-6-7-8-9-10
□□□-□□20	□□20	2-13	12	2-3-4-5-6-7-8-9-10-11-12-13
□□□-□□25	□□25	2-16	15	2-3-4-5-6-7-8-9-10-11-12-13-14-15-16
□□□-□□32	□□32	3-20	18	3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20
□□□-□□40	□□40	4-26	23	4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26

Characteristics:
Collets DIN 6499 - Form Mexin (ER).
With square locking drive and tension length-adjustment.

Eigenschaften:
Spannzangen DIN 6499 - Form Mexin (ER) mit vierkantigem Antrieb und Zuglängenausgleich.

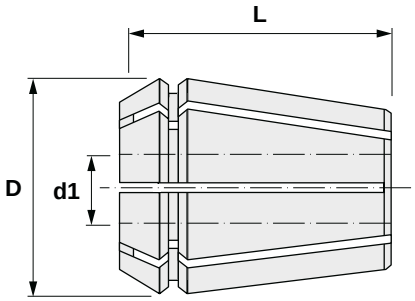


ERBXX

Reference Bezeichnung		DIN d1 x a	D	L	T
□□B1601	□□16	2,5□x□2,1	17	27	7
□□B1602	□□16	2,8□x□2,1	17	27	7
□□B1603	□□16	3,5□x□2,7	17	27	7
□□B1604	□□16	4,0□x□3,0	17	27	7
□□B1605	□□16	4,5□x□3,4	17	27	7
□□B1606	□□16	5,5□x□4,3	17	27	7
□□B1607	□□16	6,0□x□4,9	17	27	7
□□B2001	□□20	2,5□x□2,1	21	31	7
□□B2002	□□20	2,8□x□2,1	21	31	7
□□B2003	□□20	3,5□x□2,7	21	31	7
□□B2004	□□20	4,0□x□3,0	21	31	7
□□B2005	□□20	4,5□x□3,4	21	31	7
□□B2006	□□20	5,5□x□4,3	21	31	7
□□B2007	□□20	6,0□x□4,9	21	31	7
□□B2008	□□20	7,0□x□5,5	21	31	7
□□B2501	□□25	2,5□x□2,1	26	34	8
□□B2502	□□25	2,8□x□2,1	26	34	8
□□B2503	□□25	3,5□x□2,7	26	34	8
□□B2504	□□25	4,0□x□3,0	26	34	8
□□B2505	□□25	4,5□x□3,4	26	34	8
□□B2506	□□25	5,5□x□4,3	26	34	8
□□B2507	□□25	6,0□x□4,9	26	34	8
□□B2508	□□25	7,0□x□5,5	26	34	8
□□B2509	□□25	8,0□x□6,2	26	34	8
□□B2510	□□25	9,0□x□7,0	26	34	8
□□B3205	□□32	4,5□x□3,4	33	43	10
□□B3206	□□32	5,5□x□4,3	33	43	10
□□B3207	□□32	6,0□x□4,9	33	43	10
□□B3208	□□32	7,0□x□5,5	33	43	10
□□B3209	□□32	8,0□x□6,2	33	43	10
□□B3210	□□32	9,0□x□7,0	33	43	10
□□B3211	□□32	10,0□x□8,0	33	43	10
□□B3212	□□32	11,0□x□9,0	33	43	10
□□B3213	□□32	12,0□x□9,0	33	43	10
□□B4007	□□40	6,0□x□4,9	41	54	13
□□B4008	□□40	7,0□x□5,5	41	54	13
□□B4009	□□40	8,0□x□6,2	41	54	13
□□B4010	□□40	9,0□x□7,0	41	54	13
□□B4011	□□40	10,0□x□8,0	41	54	13
□□B4012	□□40	11,0□x□9,0	41	54	13
□□B4013	□□40	12,0□x□9,0	41	54	13
□□B4014	□□40	14,0□x□11,0	41	54	13
□□B4015	□□40	16,0□x□12,0	41	54	13

Characteristics:
Sealed collets DIN 6499 (ER).
For tools with cylindrical shank DIN 1835-A and coolant channel.

Eigenschaften:
Abgedichtete Spannzangen DIN 6499 (ER) für Werkzeuge mit Zylinderschaft DIN 1835-A und Innenkühlung.



ERCXX

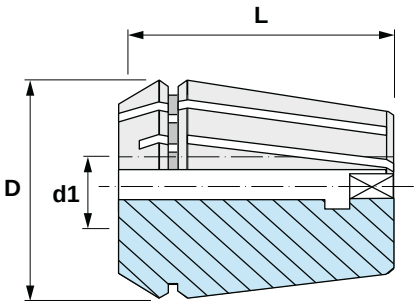
Reference Bezeichnung		D	L	d1
□□□1604	□□16	17	27,5	4
□□□1605	□□16	17	27,5	5
□□□1606	□□16	17	27,5	6
□□□1607	□□16	17	27,5	7
□□□1608	□□16	17	27,5	8
□□□1609	□□16	17	27,5	9
□□□1610	□□16	17	27,5	10
□□□2004	□□20	21	31,5	4
□□□2005	□□20	21	31,5	5
□□□2006	□□20	21	31,5	6
□□□2007	□□20	21	31,5	7
□□□2008	□□20	21	31,5	8
□□□2009	□□20	21	31,5	9
□□□2010	□□20	21	31,5	10
□□□2011	□□20	21	31,5	11
□□□2012	□□20	21	31,5	12
□□□2013	□□20	21	31,5	13
□□□2504	□□25	26	34,0	4
□□□2505	□□25	26	34,0	5
□□□2506	□□25	26	34,0	6
□□□2507	□□25	26	34,0	7
□□□2508	□□25	26	34,0	8
□□□2509	□□25	26	34,0	9
□□□2510	□□25	26	34,0	10
□□□2511	□□25	26	34,0	11
□□□2512	□□25	26	34,0	12
□□□2513	□□25	26	34,0	13
□□□2514	□□25	26	34,0	14
□□□2515	□□25	26	34,0	15
□□□2516	□□25	26	34,0	16
□□□3204	□□32	33	40,0	4
□□□3205	□□32	33	40,0	5
□□□3206	□□32	33	40,0	6
□□□3207	□□32	33	40,0	7
□□□3208	□□32	33	40,0	8
□□□3209	□□32	33	40,0	9
□□□3210	□□32	33	40,0	10
□□□3211	□□32	33	40,0	11
□□□3212	□□32	33	40,0	12
□□□3213	□□32	33	40,0	13

Reference Bezeichnung		D	L	d1
□□□3214	□□32	33	40,0	14
□□□3215	□□32	33	40,0	15
□□□3216	□□32	33	40,0	16
□□□3217	□□32	33	40,0	17
□□□3218	□□32	33	40,0	18
□□□3219	□□32	33	40,0	19
□□□3220	□□32	33	40,0	20
□□□4004	□□40	41	46,0	4
□□□4005	□□40	41	46,0	5
□□□4006	□□40	41	46,0	6
□□□4007	□□40	41	46,0	7
□□□4008	□□40	41	46,0	8
□□□4009	□□40	41	46,0	9
□□□4010	□□40	41	46,0	10
□□□4011	□□40	41	46,0	11
□□□4012	□□40	41	46,0	12
□□□4013	□□40	41	46,0	13
□□□4014	□□40	41	46,0	14
□□□4015	□□40	41	46,0	15
□□□4016	□□40	41	46,0	16
□□□4017	□□40	41	46,0	17
□□□4018	□□40	41	46,0	18
□□□4019	□□40	41	46,0	19
□□□4020	□□40	41	46,0	20
□□□4021	□□40	41	46,0	21
□□□4022	□□40	41	46,0	22
□□□4023	□□40	41	46,0	23
□□□4024	□□40	41	46,0	24
□□□4025	□□40	41	46,0	25
□□□4026	□□40	41	46,0	26
□□□5012	□□50	52	60,0	12
□□□5014	□□50	52	60,0	14
□□□5016	□□50	52	60,0	16
□□□5018	□□50	52	60,0	18
□□□5020	□□50	52	60,0	20
□□□5022	□□50	52	60,0	22
□□□5024	□□50	52	60,0	24
□□□5026	□□50	52	60,0	26
□□□5028	□□50	52	60,0	28
□□□5030	□□50	52	60,0	30
□□□5032	□□50	52	60,0	32
□□□5034	□□50	52	60,0	34

I

Characteristics:
Collets DIN 6499 - Form Mexin (ER).
With square locking drive.

Eigenschaften:
Spannzangen DIN 6499 - Form Mexin (ER) mit vierkantigem Antrieb.



ERTXX

Reference Bezeichnung		d1	D	L
□□□1605	□□16	4,5□x□3,4	17	27,5
□□□1606	□□16	5,5□x□4,3	17	27,5
□□□1607	□□16	6,0□x□4,9	17	27,5
□□□1608	□□16	7,0□x□5,5	17	27,5
□□□2005	□□20	4,5□x□3,4	21	31,5
□□□2006	□□20	5,5□x□4,3	21	31,5
□□□2007	□□20	6,0□x□4,9	21	31,5
□□□2008	□□20	7,0□x□5,5	21	31,5
□□□2009	□□20	8,0□x□6,2	21	31,5
□□□2010	□□20	9,0□x□7,0	21	31,5
□□□2011	□□20	10,0□x□8,0	21	31,5
□□□2505	□□25	4,5□x□3,4	26	34,0
□□□2506	□□25	5,5□x□4,3	26	34,0
□□□2507	□□25	6,0□x□4,9	26	34,0
□□□2508	□□25	7,0□x□5,5	26	34,0
□□□2509	□□25	8,0□x□6,2	26	34,0
□□□2510	□□25	9,0□x□7,0	26	34,0
□□□2511	□□25	10,0□x□8,0	26	34,0
□□□2512	□□25	11,0□x□9,0	26	34,0
□□□2513	□□25	12,0□x□9,0	26	34,0
□□□3205	□□32	4,5□x□3,4	33	40,0
□□□3206	□□32	5,5□x□4,3	33	40,0
□□□3207	□□32	6,0□x□4,9	33	40,0
□□□3208	□□32	7,0□x□5,5	33	40,0
□□□3209	□□32	8,0□x□6,2	33	40,0
□□□3210	□□32	9,0□x□7,0	33	40,0
□□□3211	□□32	10,0□x□8,0	33	40,0
□□□3212	□□32	11,0□x□9,0	33	40,0
□□□3213	□□32	12,0□x□9,0	33	40,0
□□□3214	□□32	14,0□x□11,0	33	40,0
□□□3215	□□32	16,0□x□12,0	33	40,0
□□□4008	□□40	7,0□x□5,5	41	46,0
□□□4009	□□40	8,0□x□6,2	41	46,0
□□□4010	□□40	9,0□x□7,0	41	46,0
□□□4011	□□40	10,0□x□8,0	41	46,0
□□□4012	□□40	11,0□x□9,0	41	46,0
□□□4013	□□40	12,0□x□9,0	41	46,0
□□□4014	□□40	14,0□x□11,0	41	46,0
□□□4015	□□40	16,0□x□12,0	41	46,0
□□□4016	□□40	18,0□x□14,5	41	46,0

Reference Bezeichnung		d1	D	L
□□□4017	□□40	20,0□x□16,0	41	46,0
□□□5013	□□50	12,0□x□9,0	52	60,0
□□□5014	□□50	14,0□x□11,0	52	60,0
□□□5015	□□50	16,0□x□12,0	52	60,0
□□□5016	□□50	18,0□x□14,5	52	60,0
□□□5017	□□50	20,0□x□16,0	52	60,0
□□□5018	□□50	22,0□x□18,0	52	60,0
□□□5019	□□50	25,0□x□20,0	52	60,0
□□□5020	□□50	28,0□x□22,0	52	60,0
□□□5021	□□50	32,0□x□24,0	52	60,0

Characteristics: Eigenschaften:
Wrenches Schlüssel
DIN 6499 DIN 6499

50XX

Reference Bezeichnung	CAP
50008	0□8
50010	0-10
50013	0-13
50016	3-16

Characteristics: Eigenschaften:
Wrenches Schlüssel
DIN 6499 DIN 6499

50XX

Reference Bezeichnung	CAP
50116	16
50125	25
50132	32
50140	40

Characteristics: Eigenschaften:
Wrenches Schlüssel
DIN 6499 DIN 6499

50XX

Reference Bezeichnung	ER	CAP
50216	16	10
50220	20	13
50225	25	16
50232	32	20
50240	40	30
50250	50	34

Characteristics: Eigenschaften:
Wrenches Schlüssel
DIN 6499 DIN 6499

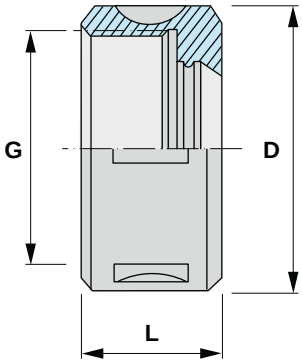
50XX

Reference Bezeichnung	ER	CAP
50907	07	-
50908	08	-
50916	16	10
50920	20	13
50925	25	16

Characteristics:
Nut for collet chucks
DIN 6388-D

*** STANDARD**

Eigenschaften:
Spannmutter für Spannzangen
DIN 6388-D



433XX

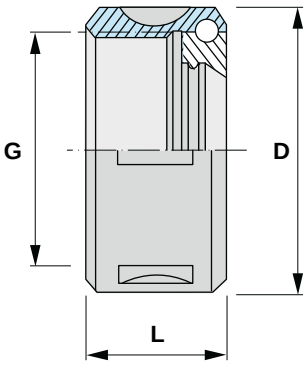
Reference Bezeichnung	d1 max	D	L	G
43316	16	43	24,0	M 33 x 1,5
43325	25	60	30,0	M 48 x 2,0
43332	32	72	33,5	M 60 x 2,5

Characteristics:
Nut for collet chucks
DIN 6388-D

*** BALL BEARING NUT**

Eigenschaften:
Spannmutter für Spannzangen
DIN 6388-D

*** KUGELLAGER-MUTTER**



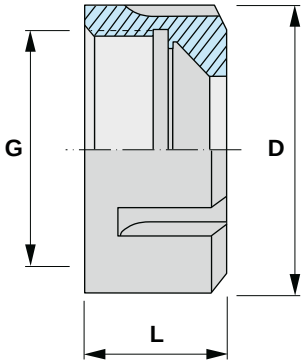
431XX

Reference Bezeichnung	d1 max	D	L	G
43116	16	43	24,0	M 33 x 1,5
43125	25	60	30,0	M 48 x 2,0
43132	32	72	33,5	M 60 x 2,5

Characteristics:
Nut for collet chucks DIN 6499 (ER) D-F

*** STANDARD**

Eigenschaften:
Spannmutter für Spannzangen DIN 6499 (ER) D-F



453XX

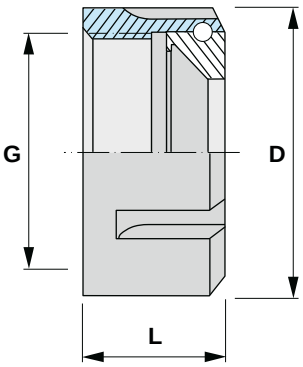
Reference Bezeichnung		d1 max	D	L	G
45316	□□16	10	32	17,5	M□22x□1,5
45320	□□20	13	35	19,0	M□25x□1,5
45325	□□25	16	42	20,0	M□32x□1,5
45332	□□32	20	50	22,5	M□40x□1,5
45340	□□40	26	63	25,5	M□50x□1,5
45350	□□50	34	78	35,5	M□64x□2,0

Characteristics:
Nut for collet chucks DIN 6499 (ER) D-F

*** BALL BEARING NUT**

Eigenschaften:
Spannmutter für Spannzangen DIN 6499 (ER) D-F

*** KUGELLAGER-MUTTER**



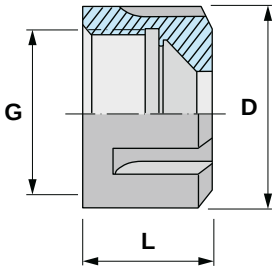
451XX

Reference Bezeichnung		d1 max	D	L	G
45116	□□16	10	29	19,5	M□22x□1,5
45120	□□20	13	34	21,0	M□25x□1,5
45125	□□25	16	42	22,7	M□32x□1,5
45132	□□32	20	50	26,5	M□40x□1,5
45140	□□40	26	63	29,8	M□50x□1,5
45150	□□50	34	78	40,0	M□64x□2,0

Characteristics:
Nut for collet chucks DIN 6499 (ER) D-F

*** MINI**

Eigenschaften:
Spannmutter für Spannzangen DIN 6499 (ER) D-F

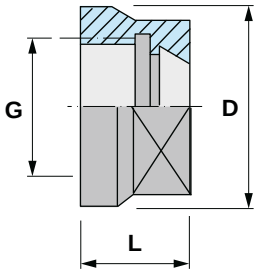


455XX

Reference Bezeichnung		d1 max	D	L	G
45516	□□16	13	22	19	M□19□x□1
45520	□□20	16	28	20	M□24□x□1
45525	□□25	-	35	-	M□30□x□1

Characteristics:
Nut for collet chucks DIN 6499 (ER) D-F

Eigenschaften:
Spannmutter für Spannzangen DIN 6499 (ER) D-F



456XX

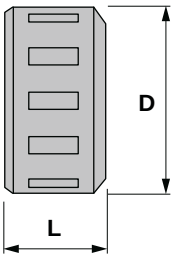
Reference Bezeichnung		d1 max	D	L	G
45616	□□16	10	28	17,5	M□22□x□1,5
45620	□□20	13	34	19,0	M□25□x□1,5

Characteristics:
Nut for collet chucks DIN 6499 (ER) D-F

*** SPECIAL 457**

Eigenschaften:
Spannmutter für Spannzangen DIN 6499 (ER) D-F

*** SONDER 457**

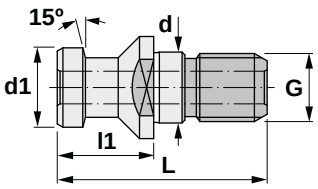


457XX

Reference Bezeichnung		d1 max	D	L	G
45732	□□32	20	54	40	M□45□x□1,5
45740	□□40	30	65	50	M□56□x□2,0

Characteristics: Pull Studs - DIN 69872-A
Eigenschaften: Anzugsbolzen - DIN 69872-A

*** Without central hole**
*** Ohne zentraler Bohrung**

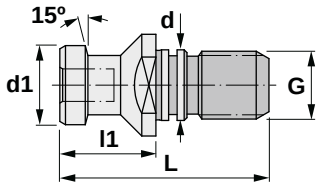


91.. DIN 69872-A

Reference Bezeichnung	K ISO	G	d	d1	L	l1
91103	30	M 12	13	13	44	24
91104	40	M 16	17	19	54	26
91105	50	M 24	25	28	74	34

Characteristics: Pull Studs - DIN 69872-B
Eigenschaften: Anzugsbolzen - DIN 69872-B

With half hole
Mit Sachlochbohrung

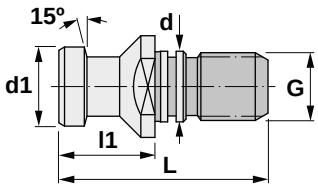


91.. DIN 69872-B

Reference Bezeichnung	K ISO	G	d	d1	L	l1
91154	40	M 16	17	19	54	26
91155	50	M 24	25	28	74	34

Characteristics: Pull Studs - DIN 69872-B
Eigenschaften: Anzugsbolzen - DIN 69872-B

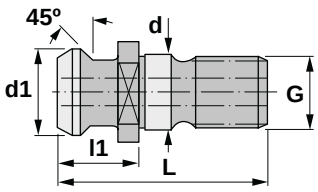
Without central hole
Ohne zentraler Bohrung



91.. DIN 69872-B

Reference Bezeichnung	K ISO	G	d	d1	L	l1
91164	40	M 16	17	19	54	26
91165	50	M 24	25	28	74	34

Characteristics: Pull Studs - ISO 7388/2-B
Eigenschaften: Anzugsbolzen - ISO 7388/2-B

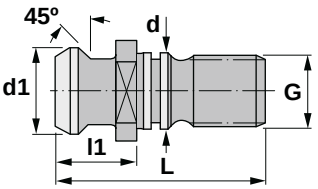


91.. ISO 7388/2-B

Reference Bezeichnung	K ISO	G	d	d1	L	l1
91304	40	M16	17	18,95	44,5	16,40
91305	50	M24	25	29,10	65,5	25,55

Characteristics: Pull Studs - ISO 7388/2-B
Eigenschaften: Anzugsbolzen - ISO 7388/2-B

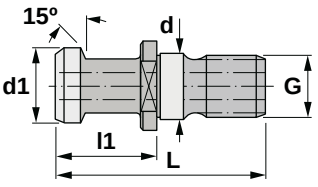
Without central hole
Ohne zentraler Bohrung



91.. ISO 7388/2-B

Reference Bezeichnung	K ISO	G	d	d1	L	l1
91114	40	M16	17	18,95	44,5	16,40
91115	50	M24	25	29,10	65,5	25,55

Characteristics: Pull Studs - ISO 7388/2-A
Eigenschaften: Anzugsbolzen - ISO 7388/2-A

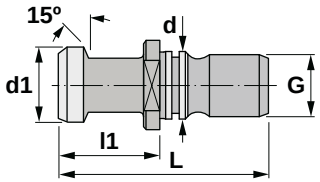


91.. ISO 7388/2-A

Reference Bezeichnung	K ISO	G	d	d1	L	l1
91354	40	M16	17	19	54	26
91355	50	M24	25	28	74	34

Characteristics: Pull Studs - ISO 7388/2-A
Eigenschaften: Anzugsbolzen - ISO 7388/2-A

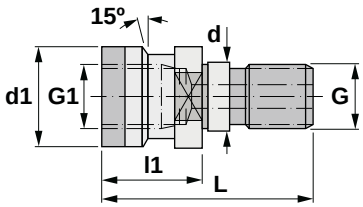
Without central hole
Ohne zentraler Bohrung



91.. ISO 7388/2-A

Reference Bezeichnung	K ISO	G	d	d1	L	l1
91263	30	M 12	13	12	44	24
91264	40	M 16	17	19	54	26
91265	50	M 24	25	28	74	34

Characteristics: Pull Studs
Eigenschaften: Anzugsbolzen



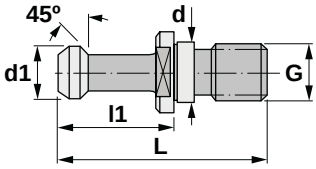
91.. MAHO - OTT / DIN 69871 - BT

Reference Bezeichnung	K ISO	G	G1	d	d1	L	l1	
91004	40	M 16	M 16	17	25,00	53	25	69871
91014	40	M 16	M 16	17	25,00	56	28	B
91005	50	M 24	M 24	25	39,60	65	25	69871 B

Accessory to assemble DIN-69872-A (Ref. 91004) and JIS 6339-BT (Ref. 91014) on DIN 2080 machines.
Ersatzteil um die DIN-69872-A (Bez. 91004) und die JIS 6339-BT (Bez. 91014) auf Maschinen DIN 2080 zu montieren.

Characteristics: Pull Studs - JIS 6339 B-BT
Eigenschaften: Anzugsbolzen - JIS 6339 B-BT

*** Without central hole**
*** Ohne zentraler Bohrung**

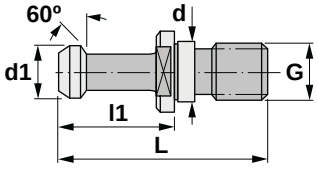


92.. BT - TYPE / TYP I (45º)

Reference Bezeichnung	K ISO	G	d	d1	L	l1
92003	30	M 12	12,5	11	43	23
92004	40	M 16	17,0	15	60	35
92005	50	M 24	25,0	23	85	45
92304	40	M 16	17,0	15	60	35
92305	50	M 24	25,0	23	85	45

Characteristics: Pull Studs - JIS 6339 B-BT
Eigenschaften: Anzugsbolzen - JIS 6339 B-BT

*** Without central hole**
*** Ohne zentraler Bohrung**

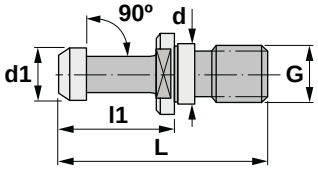


92.. BT - TYPE / TYP II (60º)

Reference Bezeichnung	K ISO	G	d	d1	L	l1
92013	30	M 12	12,5	11	43	23
92014	40	M 16	17,0	15	60	35
92015	50	M 24	25,0	23	85	45
92314	40	M 16	17,0	15	60	35
92315	50	M 24	25,0	23	85	45

Characteristics: Pull Studs - JIS 6339 B-BT
Eigenschaften: Anzugsbolzen - JIS 6339 B-BT

*** Without central hole**
*** Ohne zentraler Bohrung**

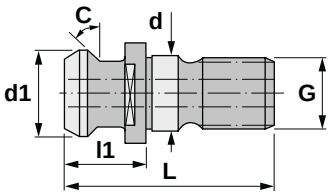


92.. BT - TYPE / TYP III (90º)

Reference Bezeichnung	K ISO	G	d	d1	L	l1
92024	40	M 16	17	15	60	35
92025	50	M 24	25	23	85	45
92324	40	M 16	17	15	60	35
92325	50	M 24	25	23	85	45

Characteristics: Pull Studs
Eigenschaften: Anzugsbolzen

*** Without central hole**
*** Ohne zentraler Bohrung**



9... SPECIAL / SONDER

Reference Bezeichnung	K ISO	C	G	d	d1	L	l1	Type Typ
9□□40	40	45□	M□16	17	18,18	41,25	16,25	M□□□□
9□□41	40	45□	M□16	17	18,18	44,10	19,10	M□□□□
9□□50□	50		M□24	-	20,00	76,00	36,00	□□□□□□
9M□40	40	15□	M□16	17	19,00	54,00	29,00	M□□□□□□
9□□35□	35							□□□□M□□□
9□□40□	40							□□□□□□□□□
9□□50□	50			23	22,00	90,00	46,00	□□□□□

Characteristics:
Assembly fixture for toolholders.
It can be used with all sizes of DIN 2080, DIN 69871/A, MAS BT, HSK and PSC adaptors.
It can be tightened on a bench or with a clamp.
Useful for assembling and disassembling the tools in any toolholder.

*** Combined stainless steel / blackened**

Eigenschaften:
Montagevorrichtung für Werkzeughalter. Verwendbar mit allen Größen von Aufnahmen DIN 2080, DIN 69871/A, MAS BT, HSK und PSC.
Sie kann auf einer Bank oder mit einem Schraubstock befestigt werden. Nützlich, um die Werkzeuge in jedem Werkzeughalter zu montieren und demontieren.

*** Kombiniert rostfrei / brüniert**

02_70/80

Reference Bezeichnung	DIN 2080	DIN 69871/A	MAS BT	HSK	PSC
02□30□70	30	30	□	50	□5
02□30□80	□	□	30	□	□
02□40□70	40	40	40	63	□6
02□50□70	50	50	□	100	□
02□50□80	□	□	50	□	□

Characteristics:
Assembly fixture for toolholders.
It can be used with all sizes of DIN 2080, DIN 69871/A, MAS BT, HSK and PSC adaptors.
It can be tightened on a bench or with a clamp.
Useful for assembling and disassembling the tools in any toolholder.

*** 100% stainless steel**

Eigenschaften:
Montagevorrichtung für Werkzeughalter. Verwendbar mit allen Größen von Aufnahmen DIN 2080, DIN 69871/A, MAS BT, HSK und PSC.
Sie kann auf einer Bank oder mit einem Schraubstock befestigt werden. Nützlich, um die Werkzeuge in jedem Werkzeughalter zu montieren und demontieren.

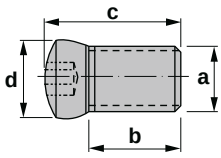
*** 100% rostfreier Stahl**

02_71/81

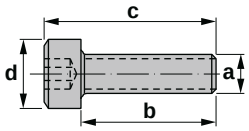
Reference Bezeichnung	DIN 2080	DIN 69871/A	MAS BT	HSK	PSC
02□30□71	30	30	□	50	□5
02□30□81	□	□	30	□	□
02□40□71	40	40	40	63	□6
02□50□71	50	50	□	100	□
02□50□81	□	□	50	□	□

SPARE PARTS
ERSATZTEILE

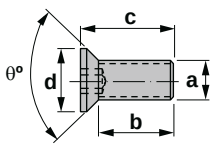
Screws (Allen) / Schrauben (Imbus)



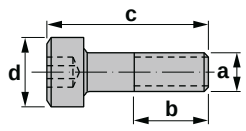
Reference Bezeichnung	a	b	c	d	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
1006	M6x1	11,2	17,0	9,0	□4	3□5



Reference Bezeichnung	a	b	c	d	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
1075	M5x0□8	25,0	30,1	8,35	□4	3□5
1076	M6x1	30,0	36,0	10,00	□5	4□0
1078	M8x1□25	40,0	48,1	12,60	□6	-
1093	M3x0□5	8,0	11,2	5,40	□2□5	2□0
1095	M5x0□8	8,2	11,8	8,40	□4	3□5
1096	M6x1	25,0	31,0	10,00	□5	4□0
1296	M6x1	10,0	14,0	9,80	□5	4□0
1392	M2□5	9,6	12,5	4,40	□2	1□4
1393	M3x0□5	4,0	7,0	5,50	□2□5	2□0
1394	M4	6,1	8,6	6,90	□2□5	2□0
1396	M6x1	16,0	21,9	9,75	□5	4□0
1494	M4x0□7	12,0	16,0	7,00	□3	3□0
1495	M5x0□8	16,0	21,2	8,40	□4	3□5
1496	M6x1	12,0	16,0	9,80	□4	3□5
1695	M5x0□8	20,0	23,6	8,30	□4	3□5
1696	M6x1	25,0	29,0	10,00	□4	3□5
1905	M5x0□8	12,0	16,9	8,30	□4	3□5
1906	M6x1	20,0	26,0	10,00	□5	4□0
1916	M6x1	12,0	18,0	10,00	□5	4□0



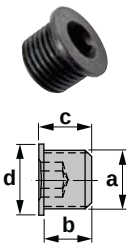
Reference Bezeichnung	a	b	c	d	θ°	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
1059	M10x1□5	13,2	18,5	11,5	60	□6	
1192	M8x1□25	13,8	20,0	14,1	70	□5	4□0



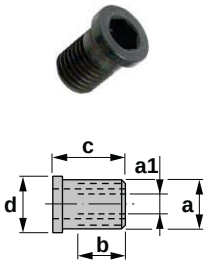
Reference Bezeichnung	a	b	c	d	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
1614	□1□4	12	25	10	□4	3□5

J

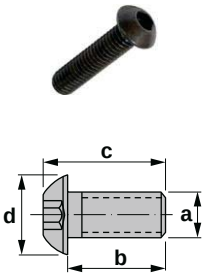
Screws (Allen) / Screws (Imbus)



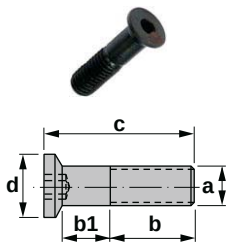
Reference Bezeichnung	a	b	c	d	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
1598	1□8□□ □□	7,0	8,0	11,5	□5	4□0



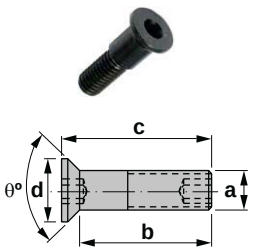
Reference Bezeichnung	a	a1	b	c	d	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
1750	M5x0□5	M3□5x0□6	5,0	8,5	6,2	□3□5	-
1760	M6x0□75	M4x0□5	5,5	10,0	7,7	□4	3□5
1764	M5x0□8	M5x0□8	5,8	8,0	6,3	□2	1□4
1765	M6x0□75	M4x0□5	6,0	10,0	7,5	□4	3□5
1766	M6x1	M6x1	6,5	10,0	7,8	□2□5	2□0
1768	M6x1	M6x1	13,3	15,5	10,4	□3	3□0
1770	M6x1	M6x1	11,0	15,0	11,9	□3	3□0



Reference Bezeichnung	a	b	c	d	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
1803	M3	8,0	9,4	5,5	□2	1□4
1804	M4x0□7	10,0	12,1	7,5	□2□5	2□0
1806	M6x1	25,0	28,2	10,5	□4	3□5
1808	M8x1□25	30,0	34,3	14,0	□5	4□0
1810	M10x1□5	40,0	45,3	18,0	□6	-
1813	M3	4,5	5,9	5,5	□2	1□4
1814	M4	3,5	5,5	7,5	□2□5	2□0
1815	M5x0□8	12,5	15,0	9,3	□3	3□0
1816	M6x1	20,0	23,2	10,5	□4	3□5



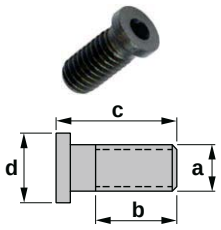
Reference Bezeichnung	a	b	b1	c	d	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
1907	M7x0□75	14,0	10,6	27,5	10,7	□4	3□5
1915	M5x0□8	12,1	8,0	23,0	8,7	□2□5	2□0



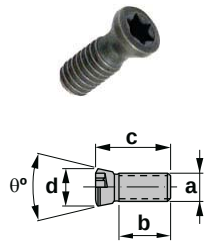
Reference Bezeichnung	a	b	c	d	θº	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
1935	M3□5x0□6	11,5	13	5,6	90	□2	1□4
1950	M5x0□8	16,7	19	7,9	92	□2□5	2□0
1955	M5x0□8	16,9	19	8,9	90	□3	3□0

J

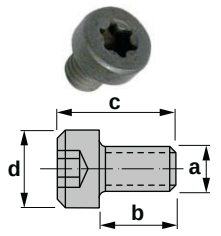
Screws (Torx) / Schrauben (Torx)



Reference Bezeichnung	a	b	c	d	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
1140	M4x0□7	3,2	7,5	5,0	□15	3□0
1150	M5x0□8	10,0	13,5	6,4	□9	1□4
1151	M5x0□8	7,0	10,5	6,4	□9	1□4
1160	M6x1	9,5	13,5	7,8	□20	4□0
1161	M6x1	6,5	10,5	7,9	□20	4□0
1180	M8x1	9,5	13,5	11,0	□25	5□0



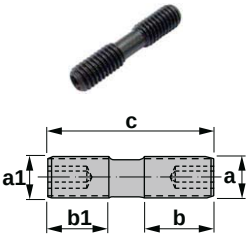
Reference Bezeichnung	a	b	c	d	θº	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
1182	M8x1	9,5	13,5	10,5	60	□25	5□0
1220	M2x0□4	3,7	5,5	3,3	55	□6	0□6
1222	M2□2x0□45	3,5	6,0	3,3	55	□6	0□6
1225	M2□5x0□45	4,0	7,0	3,3	55	□7	0□9
1226	M2□5	6,0	8,3	4,0	94	□8	1□2
1230	M3x0□5	5,6	9,0	4,4	55	□8	1□2
1235	M3□5	6,5	9,5	5,3	55	□15	3□0
1240	M4x0□7	6,2	11,0	5,3	55	□15	3□0
1244	M4x0□7	8,0	12,0	7,0	55	□20	4□0
1250	M5x0□8	6,0	12,0	7,0	55	□20	4□0
1255	M5x0□8	9,0	12,0	7,0	94	□20	4□0
1260	M6x1	11,5	16,0	7,9	55	□25	5□0
1334	M3□5x0□6	7,2	12,0	5,3	55	□15	3□0
1335	M3□5x0□6	10,2	15,0	5,3	55	□20	3□0
1340	M4x0□7	11,2	16,0	5,3	55	□15	3□0
1350	M5x0□8	17,8	22,0	7,0	55	□20	4□0
1360	M6x1	17,0	22,5	7,9	55	□25	5□0
1415	M1□6x0□35	1,5	3,2	2,6	60	□6	0□6
1420	M2x0□4	2,2	4,3	3,3	55	□6	0□6
1422	M2□2x0□45	1,8	4,3	3,3	55	□6	0□6
1425	M2□5x0□45	3,0	5,5	3,3	55	□7	0□9
1430	M3x0□5	2,8	5,8	4,4	55	□8	1□2
1440	M4x0□7	3,2	7,5	5,3	55	□15	3□0
1450	M5x0□8	11,0	17,0□	7,0	55	□20	4□0
1535	M3□5	7,5	10,0	5,0	94	□10	2□0
1540	M4x0□5	7,9	14,1	6,8	60	□15	3□0
1622	M2□2x0□45	4,0	6,0	3,4	60	□7	0□9
1625	M2□5x0□45	3,6	6,5	3,8	60	□8	1□2
1630	M3x0□5	5,2	8,3	4,3	60	□9	1□4
1635	M3□5x0□6	5,5	9,0	4,7	60	□10	2□0
1640	M4	7,0	10,5	5,5	60	□15	3□0
□□3	5-40□□□-3□	12,0	15,0	5,5	60	□10	2□0
□□3□	5-40□□□-3□	9,5	12,5	5,5	60	□10	2□0
□□4	8-□□□	11,0	15,0	7,5	60	□20	4□0
□□5	10-32□□□	16,8	22,0	8,2	60	□25	5□0
□□3	5-40□□□-3□	6,5	9,5	5,5	60	□10	2□0
□□4	8-□□□	8,0	12,0	7,5	60	□20	4□0



Reference Bezeichnung	a	b	c	d	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
□□3	5-40□□□	4,2	6,9	5,4	□10	2□0
□□4	8-32□□□	5,3	9,1	6,8	□20	4□0
□□5	10-32□□□	5□8	9,2	8,4	□25	5□0

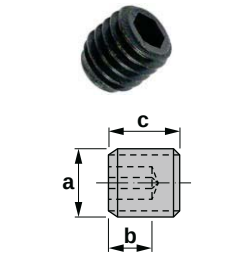
J

Clamp screws / Schrauben für Pratzen



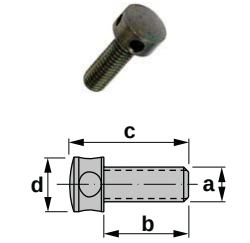
Reference Bezeichnung	a	a1	b	b1	c	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
1085	M5x0□8□	M5x0□8□	7,9	7,9	21,3	□2□5	2□0
1086	M6x1□	M6x1□	11,4	11,4	29,4	□3	3□0
1098	M8x1□	M8x1□	12,7	10,4	29,4	□4	3□5
1186	M6x1□	M6x1□	7,1	7,1	20,5	□3	3□0

Screws / Schrauben



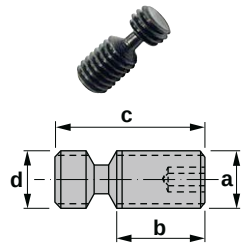
Reference Bezeichnung	a	b	c	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
1503	M3x0□5	2,0	4	□1□5	0□6
1504	M4x0□7	2,0	4	□2	1□4
1505	M5x0□8□	3,0	5	□2□5	2□0
1506	M6x1□	4,0	5	□3	3□0
1508	M8x1□25□	5,0	8	□4	3□5
1592	1□8□□□□	3,7	8	□5	4□0

Adjustable screws / Verstellbare Schrauben

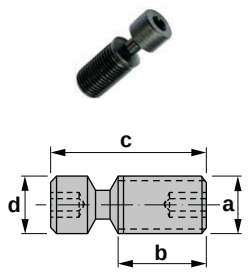


Reference Bezeichnung	a	b	c	d	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
1403	M3x0□5	6,5	9,5	4	□4	3□5
1404	M4x0□7	9,0	12,5	7	□2□5	2□0
1405	M5x0□8	10,5	16,5	9	□2	1□4
1406	M6x1	12,0	18,0	11	□2□5	2□0
1408	M8x1□25	15,0	21,0	13	□3	3□0

Lever lock system - Screws / Schrauben für Kniehebel-System

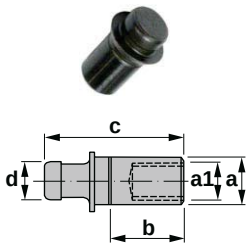


Reference Bezeichnung	a	b	c	d	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
1605	M5x0□8	6,1	12,0	5	□2	1□4
1705	M5x0□8	8,1	14,0	5	□2	1□4
1715	M5x0□8	4,3	9,6	5	□2	1□4

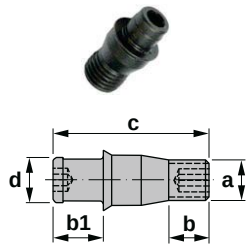


Reference Bezeichnung	a	b	c	d	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
1606	M6x1	8,6	16,7	6	□2□5	2□0
1608	M8x1	8,7	20,7	8	□3	3□0
1610	M10x1	13,3	27,2	10	□4	3□5
1612	M12x1	17,3	36,0	12	□5	4□0
1618	M8x1	11,2	22,5	8	□3	3□0
1626	M6x1	8,0	13,4	6	□2□5	2□0
1638	M8x1	10,3	21,1	8	□3	3□0
1648	M8x1	9,1	17,0	8	□3	3□0
1706	M6x1	12,6	20,7	6	□2□5	2□0
1708	M8x1	12,2	23,5	8	□3	3□0
1710	M10x1	17,3	30,4	10	□4	3□5

Lock pins / Rohrstifte

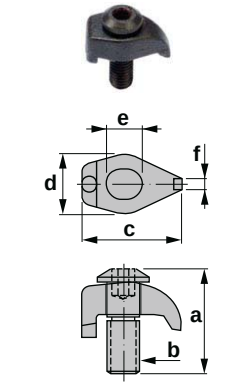


Reference Bezeichnung	a	a1	b	c	d
1642	4,5	M3x0,5	7,6	13,2	3,7
1643	4,5	M3x0,5	3,4	8,5	3,7
1644	4,5	M3x0,5	5,0	10,1	3,7
1647	6,0	M4x0,7	3,1	8,5	5,0
1661	6,0	M4x0,7	5,6	13,5	5,0
1682	8,0	M6x1	9,2	16,5	7,7

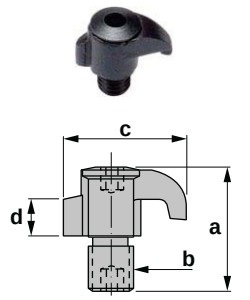


Reference Bezeichnung	a	b	b1	c	d	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
1656	1/4"-26 UNF	4,0	5,5	17,2	4,9	□2,5	2,0
1657	M6x1	5,0	7,0	18,6	5,0	□2,5	2,0
1665	M5x0,8	2,3	5,0	13,0	3,6	□2	1,4
1666	1/4"-26 UNF	2,9	6,9	18,6	5,0	□2,5	2,0
1670	3/8"-24 UNF	4,5	7,8	21,9	7,4	□4	3,5
1673	M6	4,8	6,3	22,0	6,3	□3	3,0
1674	M6	4,5	6,3	21,9	7,7	□4	3,5
1675	M5x0,8	3,4	5,0	16,2	3,6	□2	1,4
1686	1/4"-26 UNF	3,5	5,5	13,3	5,0	□2,5	2,0

Top clamp (C) system - Clamps / Obere-Klemmung-Pratzen



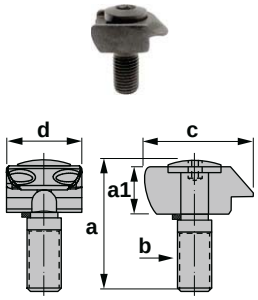
Reference Bezeichnung	a	b	c	d	e	f	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
2000	9,5	M3x0,5	9,5	5,4	3,2	2	□1,5	0,6
2304	14,0	M4x0,7	13,2	8,0	5,0	2	□2,5	2,0
2305	18,7	M5x0,8	16,8	10,0	5,5	2	□3	3,0



Reference Bezeichnung	a	b	c	d	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
2107	14,0	M5x0,8	13,8	4,1	□2,5	2,0
2109	16,3	M6x1	16,2	5,0	□3	3,0
2119	15,3	M6x1	16,5	5,2	□3	3,0
2207	15,8	M5x0,8	13,8	4,1	□2,5	2,0
2209	21,0	M6x1	16,5	5,0	□3	3,0
2211	24,0	M8x1	20,5	7,6	□4	3,5
2307	14,0	M5x0,8	13,8	4,1	□2,5	2,0
2516	15,8	M5x0,8	14,8	7,3	□15	3,0
2522	20,0	M6x1	18,0	9,5	□15	3,0
2527	26,0	M8x1,25	24,5	13,0	□25	5,0

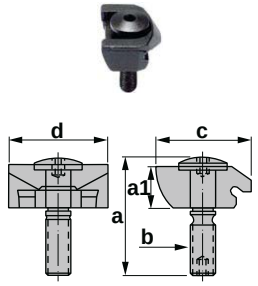
J

Wedge clamp (M) system - Clamps / M-Klemmung-Pratzen

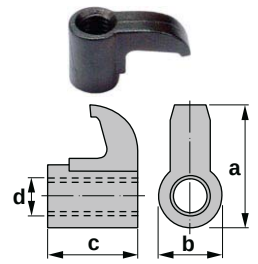


Reference Bezeichnung	a	a1	b	c	d	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
2006	19,5	6,8	M5x0□5	14,7	11	□2□5	2□0
2011	26,0	8,1	M8x1	22,0	17	□5	4□0
2014	26,0	8,3	M8x1	21,4	15	□5	4□0
2015	26,0	8,2	M8x1	22,1	12	□5	4□0
2024	24,0	9,2	M8x1	22,5	17	□5	4□0

Wedge clamp (M-K) system - Clamps / M/K-Klemmung-Pratzen

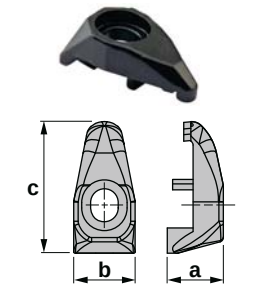


Reference Bezeichnung	a	a1	b	c	d	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
2017	24	8,0	M5x0□8	15,7	18,6	□2□5	2□0
2018	24	8,4	M5x0□8	15,7	18,6	□2□5	2□0
2023	24	7,3	M6x1	15,7	24,4	□3	3□0



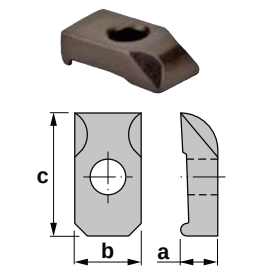
Reference Bezeichnung	a	b	c	d
2604	14,8	7,9	11,2	M5x0□8□
2613	18,5	9,5	13,5	M6x1□
2614	21,7	9,5	13,5	M6x1□
2616	24,0	9,5	13,5	M6x1□
2621	22,4	10,9	16,8	M8x1□

Dimple lock system - Clamps / Dimple-Lock-Pratzen



Reference Bezeichnung	a	b	c
2308	9,4	10,9	24,8
2312	12,0	14,0	28,8
2319	13,4	15,9	33,3
2708	11,3	12,9	24,2
2712	12,6	13,8	29,6
2716	14,2	13,8	33,9
2719	14,2	13,8	35,4

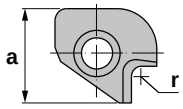
Threading - Clamps / Gewindedreh-Pratzen



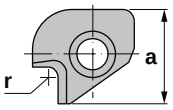
Reference Bezeichnung	a	b	c	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
2101	5,3	9,5	17,8	□15	0□6

J

KNUX - Clamps / KNUX-Pratzen

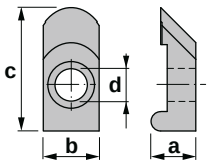


Reference Bezeichnung	a	r
2316	23,5	2,5

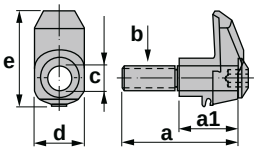


Reference Bezeichnung	a	r
2326	23,5	2,5

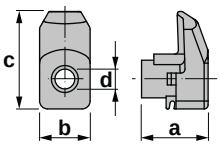
Ceramic tools - Clamps / Keramikwerkzeug-Pratzen



Reference Bezeichnung	a	b	c	d	θ°	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
2120	7,0	5,5	18,7	5,1	40	□15	3□0
2121	6,9	8,6	19,0	7,5	45	□20	4□0
2122	8,5	11,8	24,7	8,2	45	□25	5□0



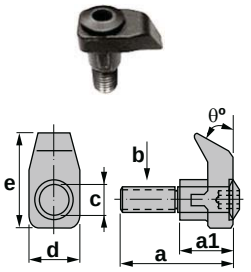
Reference Bezeichnung	a	a1	b	c	d	e	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
2413	29,7	16,0	M8x1□25	8,2	12,7	21,9	□4	3□5
2417	29,7	17,6	M8x1□25	8,0	12,7	24,6	□4	3□5



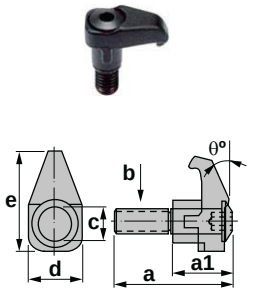
Reference Bezeichnung	a	b	c	d	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
2713	8,2	12,7	22,4	5,0	□3	3□0
2717	8,1	12,7	24,6	5,0	□3	3□0

J

Ceramic tools - Clamps / Keramikwerkzeug-Pratzen

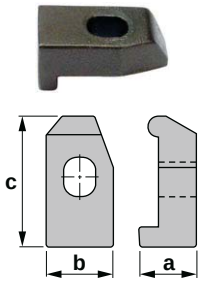


Reference Bezeichnung	a	a1	b	c	d	e	θº	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
2414	29,7	15,1	M8x1□25	8,2	12,7	22,5	20	□4	3□5

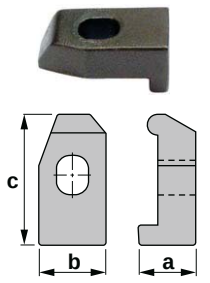


Reference Bezeichnung	a	a1	b	c	d	e	θº	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
2415	29,7	15,7	M8x1□25	8,2	13	25,9	8	□4	3□5
2428	29,7	15,7	M8x1□25	8,2	13	28,6	7	□4	3□5
2432	29,7	15,7	M8x1□25	8,2	13	28,6	7	□4	3□5
2471	29,7	15,7	M8x1□25	8,2	13	25,9	8	□4	3□5

Notch tools - Clamps / “Notch” Werkzeug-Pratzen

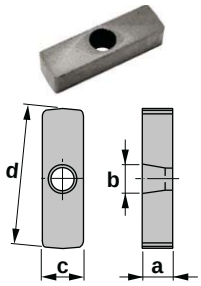


Reference Bezeichnung	a	b	c
□□-146	5,5	9,0	13,7
□□-72	9,7	11,3	22,0
□□-74	7,2	9,0	13,7



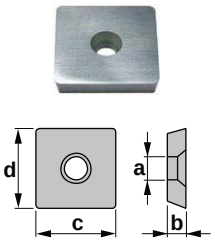
Reference Bezeichnung	a	b	c
□□-147	5,5	9,0	13,7
□□-73	9,7	11,3	22,0
□□-75	7,2	9,0	13,7

Shim seat / Unterlegplatten

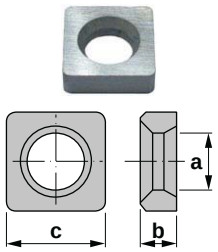


Reference Bezeichnung	a	b	c	d
3521	4,76	4,2	6,3	22,2

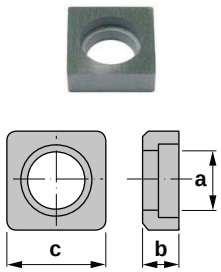
Square shim seats / Vierkantige Unterlegplatten



Reference Bezeichnung	a	b	c	d
3109	2,3	3,18	8,14	8,14
3112	2,3	3,18	11,3	11,3
3119	3,3	3,18	17,3	17,3

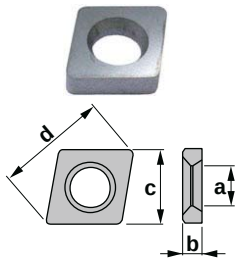


Reference Bezeichnung	a	b	c
3509	4,9	3,18	8,5
3512	6,4	3,18	11,6
3515	7,9	4,76	14,6
3519	9,6	4,76	17,8
3525	12,8	6,35	24,2

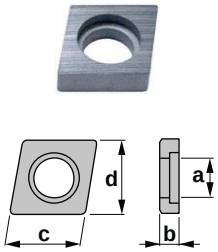


Reference Bezeichnung	a	b	c
3514	6,6	3,96	11,4
□□□-422	8,0	3,15	12,4
□□□-432	7,4	4,76	12,4
□□□-434	7,4	4,76	12,4
□□□-442	7,4	6,35	12,4
□□□-454	7,4	7,92	12,4
□□□-533	9,3	4,76	15,6
□□□-534	9,6	4,80	15,7
□□□-633	11,3	4,76	18,8

80º Rhombic shim seats / 80º rhombische Unterlegplatten

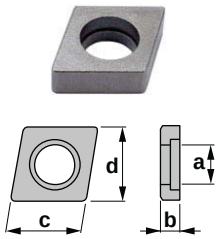


Reference Bezeichnung	a	b	c	d
3609	4,8	3,18	8,5	12,4
3612	6,4	3,18	11,6	17,1
3616	7,9	4,76	14,6	20,9
3619	9,6	4,76	17,8	26,0
3625	12,8	6,35	24,2	36,0



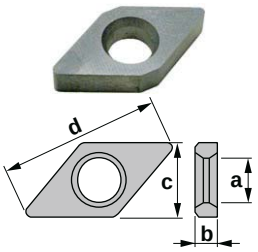
Reference Bezeichnung	a	b	c	d
3614	6,5	3,95	11,4	11,4
□□□-332	6,2	5,00	9,0	9,0
□□□-422	7,2	3,00	12,5	12,5
□□□-432	7,4	4,76	12,4	12,4
□□□-434	7,4	4,76	12,4	12,4
□□□-442	7,4	6,35	12,4	12,4
□□□-443	7,7	6,40	12,4	12,4
□□□-454	7,4	7,94	12,4	12,4
□□□-523	9,9	3,18	15,6	15,6
□□□-533	9,9	4,76	15,6	15,6
□□□-623	11,3	3,18	18,8	18,8
□□□-633	11,3	4,76	18,8	18,8

75º Rhombic shim seats / 75º rhombische Unterlegplatten

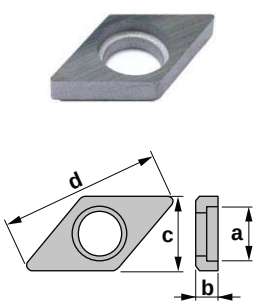


Reference Bezeichnung	a	b	c	d
□□□-432	7,4	4,76	12,4	12,4

55º Rhombic shim seats / 55º rhombische Unterlegplatten



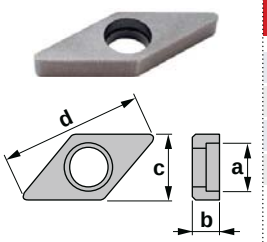
Reference Bezeichnung	a	b	c	d
3711	4,9	2,70	8,5	17,0
3715	6,4	3,18	11,6	23,4
3725	6,5	4,77	11,7	23,4



Reference Bezeichnung	a	b	c	d
3714	6,6	3,18	8,50	17,4
□□□-322	6,4	3,18	9,39	18,2
□□□-334	6,8	4,76	9,95	17,8
□□□-354	6,8	7,92	9,95	17,8
□□□-422	8,2	4,76	12,60	25,6
□□□-432	8,2	4,76	12,50	25,6
□□□-434	8,2	4,76	12,50	23,4

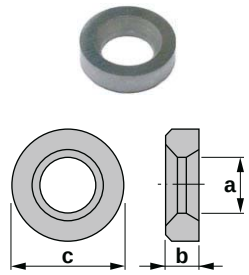
J

35º Rhombic shim seats / 35º rhombische Unterlegplatten

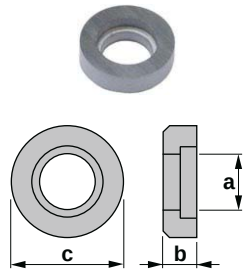


Reference Bezeichnung	a	b	c	d
3718	6,7	3,18	8,4	26,0
3722	8,1	3,97	11,0	27,3
□□□□-322	6,6	3,18	9,4	25,9
□□□□-342	6,6	6,35	9,2	26,9

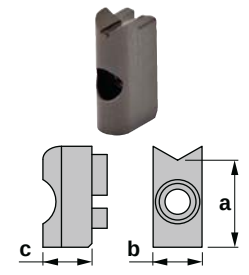
Round shim seats / Runde Unterlegplatten



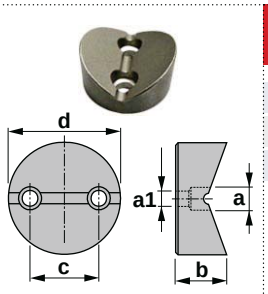
Reference Bezeichnung	a	b	c
3810	4,9	3,18	8,34
3812	4,9	3,18	9,90
3816	6,4	4,76	13,55
3820	8,0	4,76	17,25
3825	9,6	6,35	21,90
3832	12,6	6,35	28,00
3909	4,9	3,18	8,80
3912	6,4	3,18	11,60
3915	8,0	4,76	15,20
3919	9,6	4,76	18,40
3925	12,9	6,35	24,80



Reference Bezeichnung	a	b	c
3811	5,3	3,18	8,80
3814	5,3	3,18	10,60
□□□□-42	7,4	2,38	12,45
□□□□-43	7,4	4,76	12,45
□□□□-44	7,3	6,40	12,45
□□□□-45	7,4	7,92	12,45
□□□□-53	9,8	4,76	15,60
□□□□-63	11,3	4,76	18,80
□□□□-84	14,5	6,35	25,15



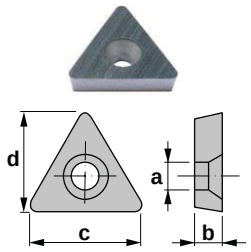
Reference Bezeichnung	a	b	c
3806	13,95	5,0	8,6
3807	15,55	5,0	8,6
3808	17,15	5,0	8,6
3849	13,75	7,7	7,7
3852	15,20	11,1	10,8



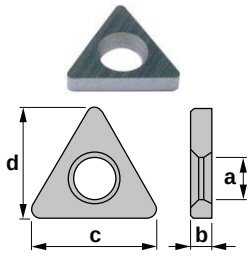
Reference Bezeichnung	a	a1	b	c	d
3817	4,5	3	7,75	7,0	13,55
3819	4,5	3	8,51	8,4	16,55
3835	4,5	3	10,04	13,5	22,00

J

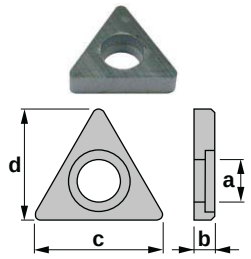
Triangular shim seats / Dreikantige Unterlegplatten



Reference Bezeichnung	a	b	c	d
3116	2,3	3,18	13,03	11,5
3122	3,3	3,18	17,19	15,1

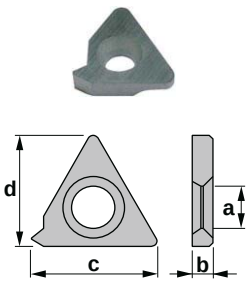


Reference Bezeichnung	a	b	c	d
3416	4,9	2,76	13,52	11,9
3422	6,3	3,18	18,92	16,6
3427	8,0	4,76	24,60	24,6
3433	9,8	4,76	28,50	27,8

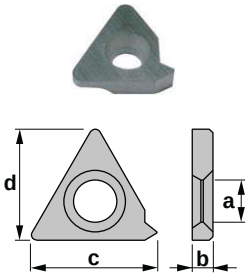


Reference Bezeichnung	a	b	c	d
3414	5,30	3,18	13,55	11,9
□□□-322	5,90	3,18	14,60	12,9
□□□-324	5,70	3,30	14,25	12,8
□□□-342	5,90	6,35	14,90	13,1
□□□-433	7,40	4,76	19,70	17,3
□□□-443	7,65	6,35	20,20	17,8

Shim seats for threading / Unterlegplatten für Gewindedrehwerkzeuge



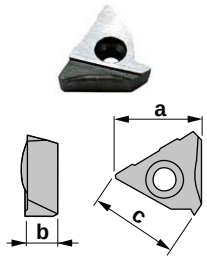
Reference Bezeichnung	a	b	c	d
3424□1□	3,95	3,2	12,8	12,8
3424□2□	3,95	3,2	12,8	12,8
3424□3□	3,95	3,2	12,8	12,8
3424-1□	3,95	3,2	12,8	12,8
3424-2□	3,95	3,2	12,8	12,8
3424-3□	3,95	3,2	12,8	12,8
□□3	3,95	3,2	12,7	12,4
□□4	5,30	4,0	17,3	17,3
□□5	6,30	5,8	23,6	22,3



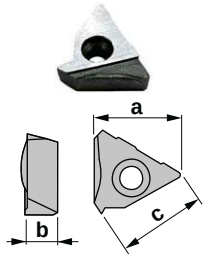
Reference Bezeichnung	a	b	c	d
3425□1□	3,95	3,2	12,8	12,8
3425□2□	3,95	3,2	12,8	12,8
3425□3□	3,95	3,2	12,8	12,8
3425-1□	3,95	3,2	12,8	12,8
3425-2□	3,95	3,2	12,8	12,8
3425-3□	3,95	3,2	12,8	12,8
□□3	3,95	3,2	12,8	12,8
□□4	5,30	4,0	17,3	17,3
□□5	6,30	5,8	23,6	22,3

J

Threading shim seats / Unterlegplatten für Gewindedrehwerkzeuge

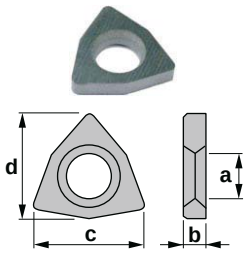


Reference Bezeichnung	a	b	c
3126□	12,8	4,76	11,2
3132□	16,9	4,76	14,0

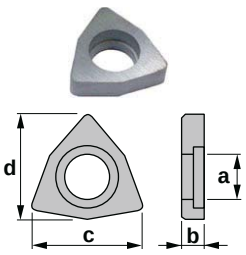


Reference Bezeichnung	a	b	c
3132□	16,9	4,76	14,0

Trigon shim seats / Trigon Unterlegplatten

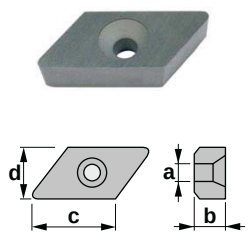


Reference Bezeichnung	a	b	c	d
3007	4,9	3,18	11,3	10,8
3008	6,4	3,18	15,8	15,2



Reference Bezeichnung	a	b	c	d
3006	5,1	3,18	11,3	10,8
□□-322	5,7	3,18	11,9	11,4
□□-433	7,3	4,76	16,0	15,3

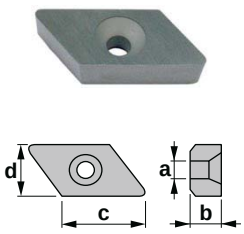
KNUX - Shim seats / KNUX - Unterlegplatten



Reference Bezeichnung	a	b	c	d
3226	3,3	4,76	14,5	9,25

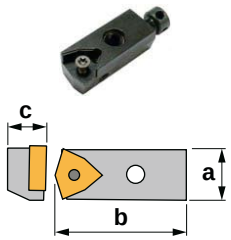
J

KNUX - Shim seats / KNUX - Unterlegplatten

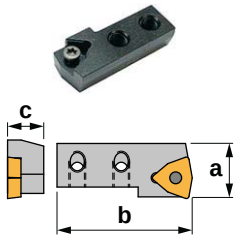


Reference Bezeichnung	a	b	c	d
3236	3,3	4,76	14,5	9,25

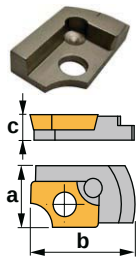
Seats / Kassetten



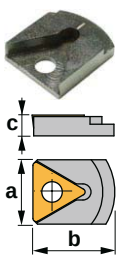
Reference Bezeichnung	a	b	c
6806	12,8	32	10,7



Reference Bezeichnung	a	b	c
6816	16,3	40	10,7

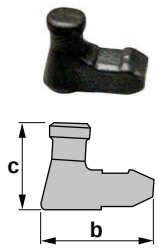


Reference Bezeichnung	a	b	c
6925	12,7	22	4,8

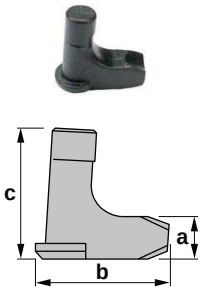


Reference Bezeichnung	a	b	c
6926	16	19,5	4,8

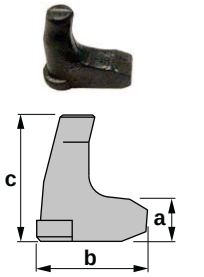
Levers / Kniehebel



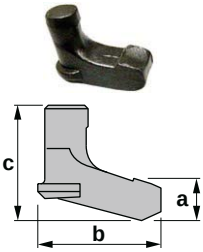
Reference Bezeichnung	a	b	c
8005	2,3	10,1	7,8



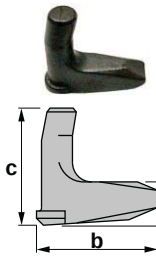
Reference Bezeichnung	a	b	c
8009	3,4	10,2	12,0
8012	4,2	13,5	13,1
8015	5,3	19,2	17,2
8016	5,4	16,5	17,1
8019	8,2	20,6	21,0
8025	8,2	25,7	25,2



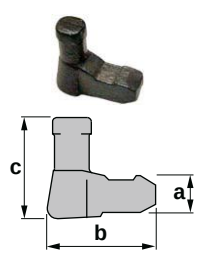
Reference Bezeichnung	a	b	c
8110	4,0	11,0	11,6
8112	4,2	13,0	13,1
8120	6,8	20,4	18,4
8125	7,6	23,7	22,9
8132	9,0	30,2	26,7



Reference Bezeichnung	a	b	c
8212	4,7	13,4	12,1
8219	7,2	20,5	20,2

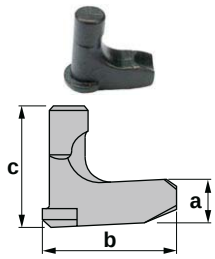


Reference Bezeichnung	a	b	c
8116	6,7	18,6	17,7
8312	4,2	13,5	13,2

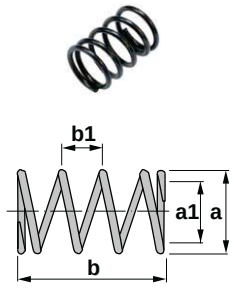


Reference Bezeichnung	a	b	c
8216	3,4	10,1	9,5

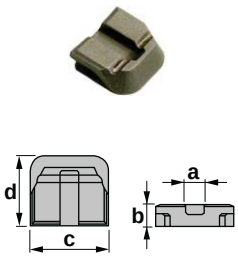
Levers and others / Kniehebel und Andere



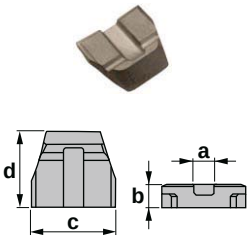
Reference Bezeichnung	a	b	c
8415	5,9	16,2	14,7



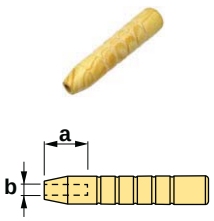
Reference Bezeichnung	a	a1	b	b1
4294	6,9	5,3	12,5	2,5
4295	9,5	7,0	16,5	3,5



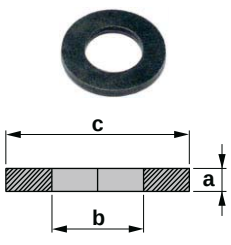
Reference Bezeichnung	a	b	c	d
9414	2,6	2	12,6	11



Reference Bezeichnung	a	b	c	d
9416	3	3,5	12,6	11



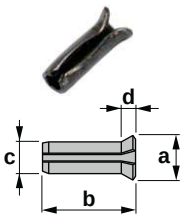
Reference Bezeichnung	a	b
0009	15	4,0
0012	15	5,0
0015	15	6,3
0019	12	8,5
0025	14	12,0



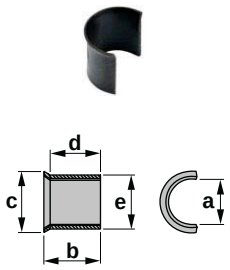
Reference Bezeichnung	a	b	c
2803	0,5	3,2	6,8
2804	0,8	4,3	9,0
2806	1,5	6,4	12,0
2808	1,6	8,4	16,0
2810	2,5	10,5	21,0

J

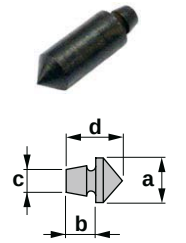
Others / Andere



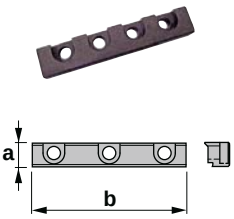
Reference Bezeichnung	a	b	c	d
4002	2,7	10	2,1	1,1
4012	3,6	10	3,0	1,5
4022	4,5	10	4,0	1,5□



Reference Bezeichnung	a	b	c	d	e
4109	4,4	5,2	5,7	4,6	4,9
4110	4,4	6,8	5,6	6,1	4,9
4112	5,5	5,9	7,0	5,2	6,6
4115	7,0	9,2	9,0	7,7	8,2
4116	5,4	9,2	6,8	8,5	6,5
4119	8,5	11,3	10,5	9,8	9,7
4125	10,0	11,9	15,2	9,7	13,2
4129	8,3	9,2	10,5	8,4	9,8
4133	8,3	9,2	10,4	8,4	9,8
4135	5,5	7,7	7,2	6,8	6,6

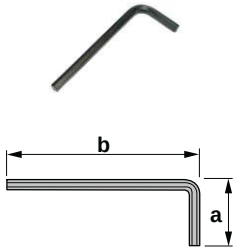


Reference Bezeichnung	a	b	c	d
4201	4,8	3,1	2,5	5,9
4202	4,8	3,1	2,5	8,1
4203	4,8	3,1	2,5	12,5
4204	4,8	3,1	2,5	14,5



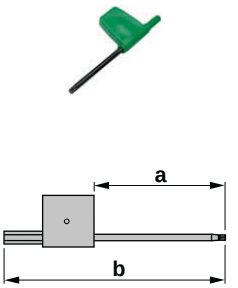
Reference Bezeichnung	a	b
2916	10,0	64
2920	16,2	75
2930	19,3	84
2935	19,3	94
2942	19,3	104
2950	21,0	110

Wrenches (Allen) / Schlüssel (Imbus)



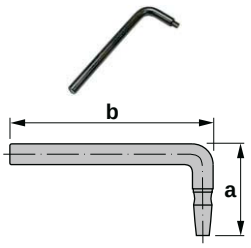
Reference Bezeichnung	a	b	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
5002	18,0	51,5	□2	1□4
5003	22,2	64,4	□3	3□0
5004	27,6	72,6	□4	3□5
5005	32,0	83,0	□5	4□0
5006	37,0	96,0	□6	-
5015	14,4	45,5	□1□5	0□6
5025	19,0	57,3	□2□5	2□0

Wrenches (Torx) / Schlüssel (Torx)

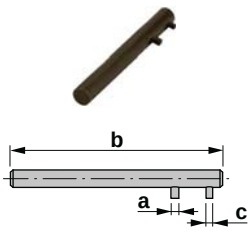


Reference Bezeichnung	a	b	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
5506	34,5	62,0	□6	0□6
5507	35,0	63,0	□7	0□9
5508	44,0	72,0	□8	1□2
5509	38,0	74,0	□9	1□4
5510	38,0	74,0	□10	2□0
5515	45,5	82,5	□15	3□0
5516	42,7	86,7	□15□□3□5	3□0□□-
5517	45,7	95,7	□15□□4	3□0□□3□5
5520	45,9	80,0	□20	4□0
5525	53,0	92,0	□25	5□0

Wrenches for blades / Schlüssel (Stechschwerter)

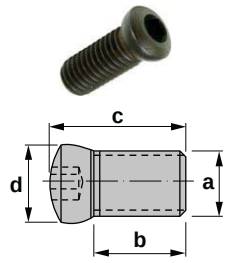


Reference Bezeichnung	a	b
5732	27,5	81

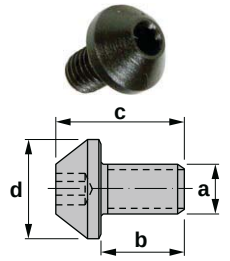


Reference Bezeichnung	a	b	c
5735	3	80	2,5

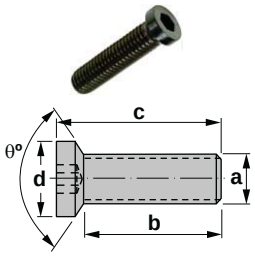
Screws (Allen) / Schrauben (Imbus)



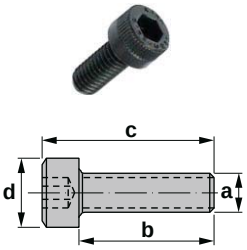
Reference Bezeichnung	a	b	c	d	θº	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
1004	M4x0□7	6,8	10,0	5,6	-	□2	1□4
1005	M5x0□8	8,7	12,0	6,8	-	□2□5	2□0
1006	M6x1	11,2	17,0	9,0	-	□4	3□5
1006□	M6x1□	11,2	17,0	9,0	-	□4	3□5
1008	M8x1□25	16,6	22,0	11,0	-	□5	4□0
1016	M6x1	6,6	12,4	9,0	-	□4	3□5



Reference Bezeichnung	a	b	c	d	θº	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
1025	M5x0□8	8,0	12,5	9,8	-	□3	3□0

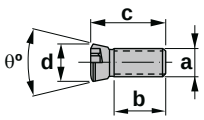


Reference Bezeichnung	a	b	c	d	θº	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
1058	M8x1□25	29,0	35,0	11,0	45	□5	4□0
1175	M5x0□8	9,7	14,7	8,6	88	□4	3□5

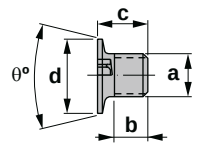


Reference Bezeichnung	a	b	c	d	θº	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
1076	M6x1	30,0	36,0	10,0	-	□5	4□0
1095	M5x0□8	8,2	11,8	8,4	-	□4	3□5
1195	M5x0□8	6,0	10,8	8,3	-	□4	3□5
1296	M6x1	10,0	14,0	9,8	-	□5	4□0
1396	M6x1	16,0	21,9	9,75	-	□5	4□0
912□10	M10x1□5	25,0	35,0	16,0	-	□8	-
912□11	M10	25,0	31,0	16,0	-	□7	-
912□12	M12x1□7	30,0	42,0	18,0	-	□10	-
912□16	M16x2	35,0	51,0	24,0	-	□14	-
912□17	M16x2	35,0	44,0	24,0	-	□12	-
912□20	M20x2□5	39,5	51,0	30,0	-	□14	-
912□52	M12	50,0	62,0	18,0	-	□10	-
912□56	M16x2	47,0	63,0	24,0	-	□14	-

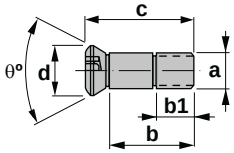
Screws (Torx) / Schrauben (Torx)



Reference Bezeichnung	a	b	c	d	θ°	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
1182	M8x1	9,5	13,5	10,5	60	□25	5□0
1222	M2□2x0□45	3,5	6,0	3,3	55	□6	0□6
1225	M2□5x0□45	4,0	7,0	3,3	55	□7	0□9
1230	M3x0□5	5,6	9,0	4,4	55	□8	1□2
1235	M3□5	6,5	9,5	5,3	55	□15	3□0
1240	M4x0□7	6,2	11,0	5,3	55	□15	3□0
1240-□P	M4x0□7	6,5	10,0	5,3	60	□15-□P	3□5
1244	M4x0□7	8,0	12,0	7,0	55	□20	4□0
1245	M4□5x0□75	7,4	11,4	6,4	55	□15	3□0
1250	M5x0□8	6,0	12,0	7,0	55	□20	4□0
1261	M6x1	8,5	13,0	7,9	55	□25	5□0
1335	M3□5x0□6	10,2	15,0	5,3	55	□15	3□0
1425	M2□5x0□45	3,0	5,5	3,3	55	□7	0□9
1430	M3x0□5	2,8	5,8	4,4	55	□8	1□2
1430-□P	M3x0□5	4,0	6,7	3,9	60	□10-□P	2□5
1435	M3□5	3,1	7,0	5,3	55	□15	3□0
1440	M4x0□7	3,2	7,5	5,3	55	□15	3□0
1440-□P	M4x0□7	4,2	8,0	5,3	60	□15-□P	3□5
1445	M4□5x0□75	5,4	9,0	6,3	55	□15	3□0
1550	M5x0□8	5,9	11,0	6,4	43	□20	4□0
1622	M2□2x0□45	4,0	6,0	3,4	60	□7	0□9
1625	M2□5x0□45	3,6	6,5	3,8	60	□8	1□2
1630	M3x0□5	5,2	8,3	4,3	60	□9	1□4
1635	M3□5x0□6	5,5	9,0	4,7	60	□10	2□0
1640	M4	7,0	10,5	5,5	60	□15	3□0
1840	M4	3,2	7,5	5,0	40	□15	3□0
1845	M4□5x0□75	6,9	9,0	6,5	90	□15	3□0
1846	M4□5x0□75	6,5	11,2	6,5	90	□15	3□0
1847	M4□5x0□75	8,0	11,0	6,7	90	□15	3□0
1908	M8x1	13,0	20,0	10,4	60	□15	3□0
1910	M10x2□5	17,5	25,0	15,0	60	□15	3□0

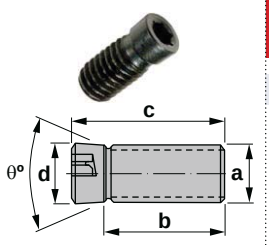


Reference Bezeichnung	a	b	c	d	θ°	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
1735	M3□5	1,0	3,0	5,2	90	□7	0□9
1745	M4□5x0□75	3,8	5,2	6,7	100	□15	3□0
1835	M3□5x0□6	2,0	4,0	5,2	90	□7	0□9



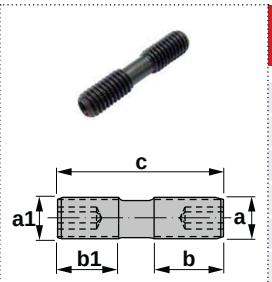
Reference Bezeichnung	a	b	b1	c	d	θ°	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
1353	M3x0□35	6,0	2,8	7,9	3,7	40	□8	1□2
1354	M3□5x0□6	7,2	3,7	9,6	4,7	40	□10	2□0
1359	M4x0□5	6,8	3,2	8,8	5,8	62	□15	3□0
1509	M5x0□5	7,9	3,6	9,5	6,7	62	□20	4□0
1519	M5x0□5	10,0	4,5	12,8	7,5	62	□20	4□0
1529	M5x0□5	12,7	4,7	15,5	7,5	62	□20	4□0
1609	M6x0□75	17,6	7,1	20,6	9,5	62	□30	7□0
1619	M4x0□7	10,4	5,6	13,6	5,7	42	□15	3□0
1629	M5x0□8	13,5	6,0	16,8	6,9	40	□20	4□0
1649	M8x1	21,2	8,0	26,4	11,9	60	□30	7□0
1809	M8x0□75	21,5	8,8	26,2	11,9	62	□30	7□0

Screws (Torx) / Schrauben (Torx)



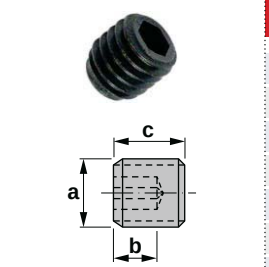
Reference Bezeichnung	a	b	c	d	θº	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
1460	M6x1	8,7	13,6	6,3	120	□20	4□0

Clamp screws / Schrauben für Pratzen



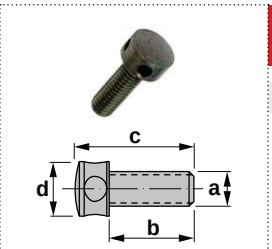
Reference Bezeichnung	a	a1	b	b1	c	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
1066	M6x1□	M6x1□	8,0	9,0	21	□15	3□0
1077	M7x0□75□	M7x0□75□	7,5	7,5	18	□20	4□0
1088	M8x1□25□	M8x1□25□	10,0	10,0	24	□4	3□5
1166	M6x1□	M6x1□	4,5	4,5	13	□15	3□0
1188	M8x1□	M8x1□	7,0	7,2	18	□4	3□5
1266	M6x1□	M6x1□	6,0	6,0	16	□15	3□0
1888	M8x1□	M8x1□	9,5	9,5	22	□4	3□5

Set screws / Schrauben



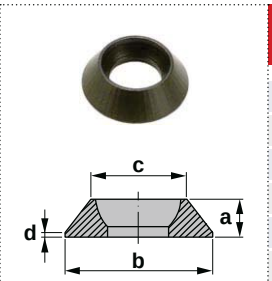
Reference Bezeichnung	a	b	c	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
1503	M3x0□5	2,0	4	□1□5	0□6
1504	M4x0□7	2,0	4	□2	1□4
1505	M5x0□8	3,0	5	□2□5	2□0
1506	M6x1	4,0	5	□3	3□0
1508	M8x1□25	5,0	8	□4	3□5
1515	M5x0□8	4,0	8	□4	3□5
1517	M5x0□8	3,5	12	□2□5	2□0
1518	M5x0□8	3,5	16	□2□5	2□0
1534	M4x0□7	3,5	8	□2	1□4

Adjustable screws / Verstellbare Schrauben



Reference Bezeichnung	a	b	c	d	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
1405	M5x0□8	10,5	16,5	9	□2	1□4

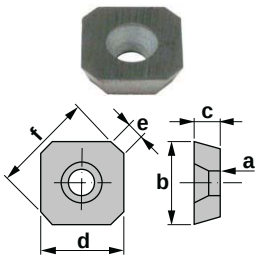
Washers / Unterlegscheiben



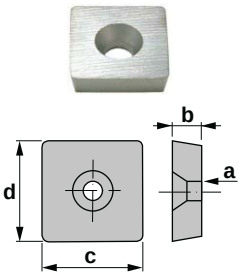
Reference Bezeichnung	a	b	c	d
2009	3,0	9	6,2	0,4
2010	3,2	10	7,2	0,6
2054	3,7	14	7,2	0,6
2063	4,2	14	10,2	0,6
2064	4,2	14	10,2	0,6
2066	4,2	16	10,2	0,6
2088	5,2	18	12,2	1,4

J

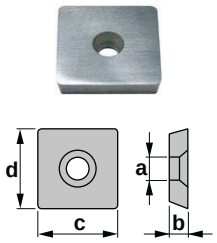
Square shim seats / Vierkantige Unterlegplatten



Reference Bezeichnung	a	b	c	d	e	f
3010	3,2	10,35	3,18	10,3	2,44	12

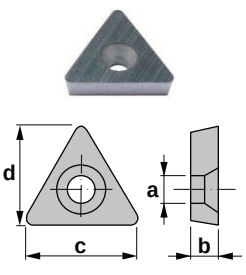


Reference Bezeichnung	a	b	c	d
3012	3,3	3,18	11,2	11,2



Reference Bezeichnung	a	b	c	d
3212	3,3	3,18	12,5	12,5

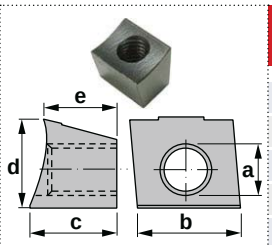
Triangular shim seats / Dreikantige Unterlegplatten



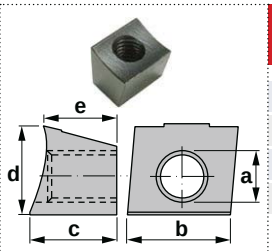
Reference Bezeichnung	a	b	c	d
3016	3,3	3,18	13,00	11,5
3022	4,3	3,18	17,19	15,1

J

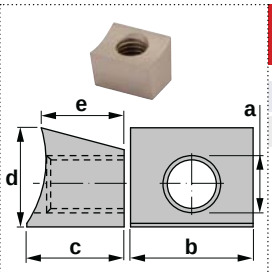
Wedges and seats / Keile und Kassetten



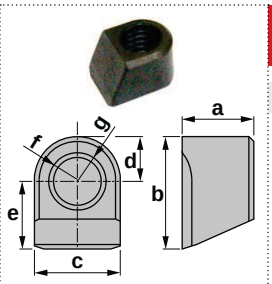
Reference Bezeichnung	a	b	c	d	e
6031	M6x1□	13,0	6,0	8,3	4,8
6032	M6x1□	13,0	6,0	8,5	4,8
6055	M8x1□	14,6	10,0	13,5	10,0
6434	M7x0□75□	15,0	10,0	11,8	10,0
6437	M7x0□75□	13,8	8,5	11,8	8,5



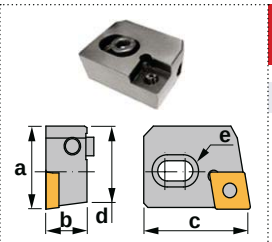
Reference Bezeichnung	a	b	c	d	e
6432	M7x0□75□	12,3	8,5	14,0	8,5
6433	M7x0□75□	15,0	8,5	11,8	8,5
6488	M7x0□75□	12,0	8,0	12,4	8,0
6490	M7x0□75□	10,7	8,0	11,9	8,0



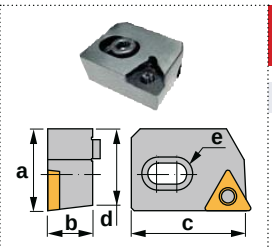
Reference Bezeichnung	a	b	c	d	e
6112	M6x1□	10,2	10,0	10,2	8,5
6113	M8x1□	13,2	10,5	13,0	8,5



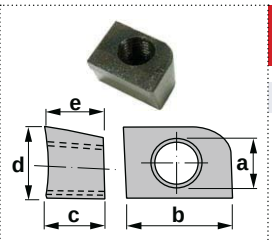
Reference Bezeichnung	a	b	c	d	e	f	g
6226	7,5	11,8	9	4,7	7,1	□4,5	M6



Reference Bezeichnung	a	b	c	d	e
6412	27,8	15,3	38,2	25,9	□5□5



Reference Bezeichnung	a	b	c	d	e
6416	27,8	17,5	38,5	25,9	□5□5



Reference Bezeichnung	a	b	c	d	e
6435	M7x0□75□	15,0	8,5	11,8	8,5

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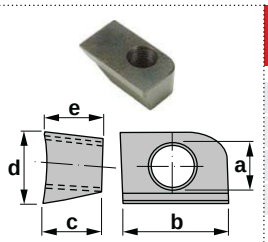
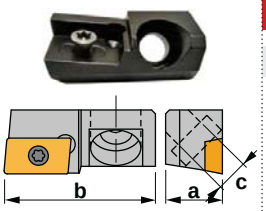
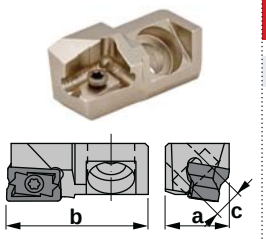
Seats and cartridges / Kassetten



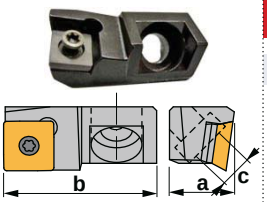
Reference Bezeichnung	a	b	c	d	e
6436	M7x0□75□	15,5	10,0	11,8	10,0
6438	M7x0□75□	18,0	8,5	11,8	8,5
6489	M7x0□75□	21,8	8,0	12,5	8,0
6491	M7x0□75□	21,0	8,0	12,6	8,0



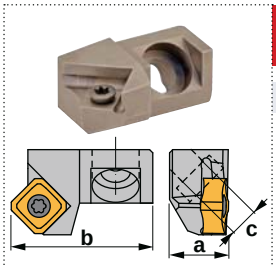
Reference Bezeichnung	a	b	c
6230	15	40	8,3



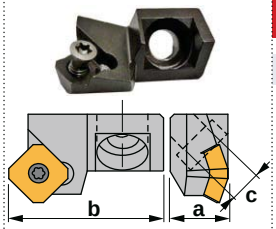
Reference Bezeichnung	a	b	c
6232	15	40	8,3



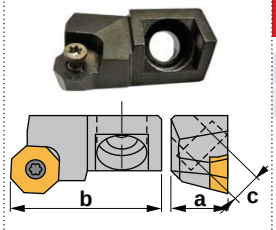
Reference Bezeichnung	a	b	c
6255	15	40	8,3



Reference Bezeichnung	a	b	c
6742	15	40	8,3



Reference Bezeichnung	a	b	c
6748	15	40	8,3



Reference Bezeichnung	a	b	c
6845	15	40	8,3
6846	15	40	8,3

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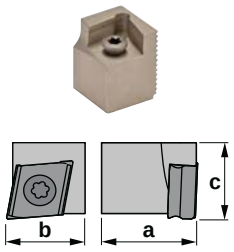
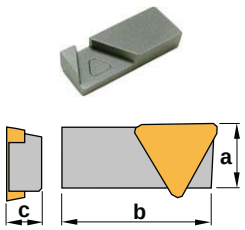
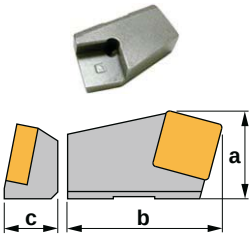
Seats and cartridges / Kassetten



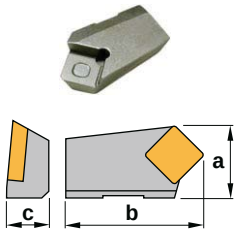
Reference Bezeichnung	a	b	c
6938	17,5	14	13,0
6939	17,5	14	13,0
6940	19,0	18	16,2
6941	19,0	18	16,2



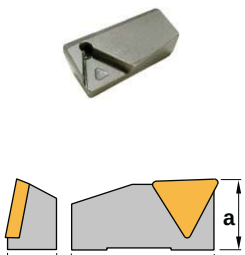
Reference Bezeichnung	a	b	c
6526	11,5	27	5,93



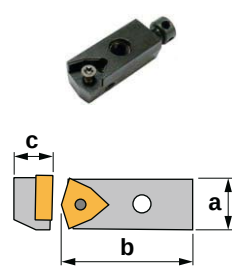
Reference Bezeichnung	a	b	c
6912	18,9	33,2	12
6914	19,0	32,6	12



Reference Bezeichnung	a	b	c
6918	19,2	35	11,2
6920	20,6	35	11,3



Reference Bezeichnung	a	b	c
6927	15,5	33,2	11,8
6942	18,1	31,2	12,5



Reference Bezeichnung	a	b	c
6806	12,8	32	10,7

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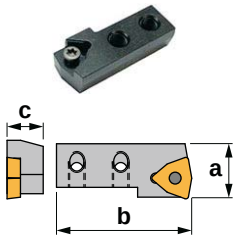
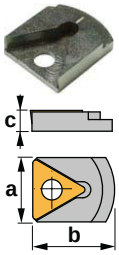
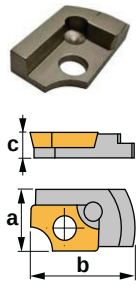
Seats and cartridges / Kassetten



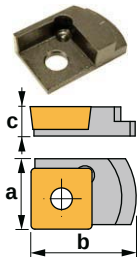
Reference Bezeichnung	a	b	c
6816	16,3	40	10,7



Reference Bezeichnung	a	b	c
6921	11	12,9	2,9
6926	16	19,5	4,8



Reference Bezeichnung	a	b	c
6925	12,7	22	4,8



Reference Bezeichnung	a	b	c
6944	14,3	21,7	5,9

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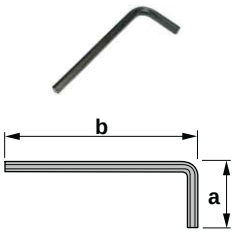
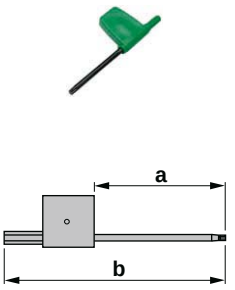
Wrenches (Allen) / Schlüssel (Imbus)

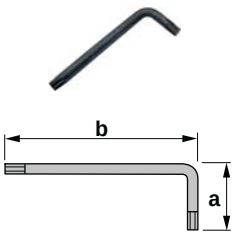


Reference Bezeichnung	a	b	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
5002	18,0	51,5	□2	1□4
5003	22,2	64,4	□3	3□0
5004	27,6	72,6	□4	3□5
5005	32,0	83,0	□5	4□0
5006	37,0	96,0	□6	-
5015	14,4	45,5	□1□5	0□6
5025	19,0	57,3	□2□5	2□0

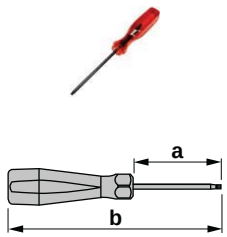
Wrenches (Torx) / Schlüssel (Torx)



Reference Bezeichnung	a	b	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
5506	34,5	62,0	□6	0□6
5507	35,0	63,0	□7	0□9
5508	44,0	72,0	□8	1□2
5509	38,0	74,0	□9	1□4
5510	38,0	74,0	□10	2□0
5510-□P	38,0	74,0	□10-□P	2□5
5515	45,5	82,5	□15	3□0
5515-□P	45,5	82,5	□15-□P	3□5
5520	45,9	80,0	□20	4□0
5525	53,0	92,0	□25	5□0

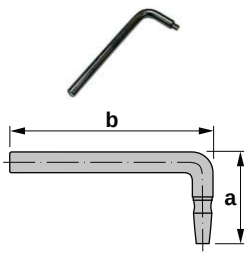


Reference Bezeichnung	a	b	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
5530	27,6	77,6	□30	7□0



Reference Bezeichnung	a	b	Wrench Schlüssel	Torque (N.m) Drehmoment (N·m)
5607	50,8	129,3	□7	0□9
5608	59,0	136,0	□8	1□2
5610	79,2	177,0	□10	2□0
5615	66,6	99,0	□15	3□0
5620	100,0	207,7	□20	4□0
5625	100,0	208,0	□25	5□0

Wrenches for blades / Schlüssel (Stechschwerter)



Reference Bezeichnung	a	b
5732	27,5	81

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