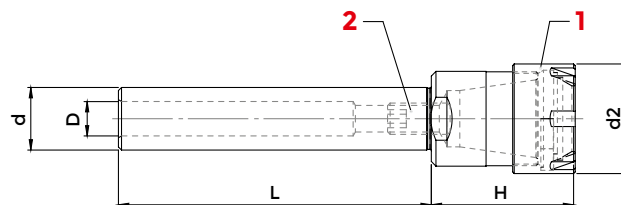




ACCESSORIES
AND SPARE PARTS

STRAIGHT SHANK ER COLLET CHUCKS WITH MINI NUT

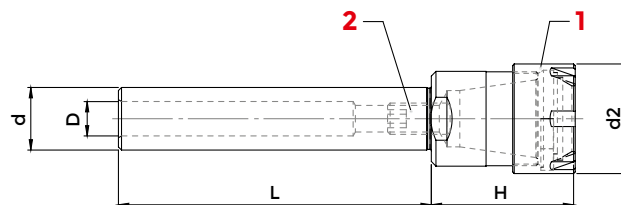


DIN 1835A

COD. (WITHOUT FLAT)	COD. (WITH FLAT)	DESCRIPTION	d	ER	H	d2	D	2	1	WRENCH	COLLET
								NUT	SCREW		
											
3207	-	d 5 - ER 8 GM / L 45	5	ER 8 1÷ 5	24	12	-	0373	-	5717	0554
0394	-	d 6 - ER 8 GM / L 45	6	ER 8 1÷ 5	24	12	-	0373	-	5717	0554
0157	-	d 6 - ER11 GM / L 45	6	ER 11 1÷ 8	25	16	-	0432	-	5718	5573
0187	-	d 7 - ER11 GM / L 45	7	ER 11 1÷ 8	25	16	-	0432	-	5718	5573
0395	-	d 8 - ER 8 GM / L 55	8	ER 8 1÷ 5	24	12	-	0373	-	5717	0554
0155	-	d 8 - ER 8 GM / L 80	8	ER 8 1÷ 5	24	12	-	0373	-	5717	0554
2000	-	d 8 - ER 8 GM / L 100	8	ER 8 1÷ 5	24	12	-	0373	-	5717	0554
2001	-	d 8 - ER 8 GM / L 130	8	ER 8 1÷ 5	24	12	-	0373	-	5717	0554
2889	-	d 8 - ER11 GM / L 55	8	ER 11 1÷ 8	25	16	-	0432	-	5718	5573
2894	-	d 8 - ER11 GM / L 100	8	ER 11 1÷ 8	25	16	-	0432	-	5718	5573
2026	-	d 8 - ER16 GM / L 55	8	ER 16 1÷12	37	22	-	1229	-	5719	0364
2027	-	d 8 - ER16 GM / L 100	8	ER 16 1÷12	37	22	-	1229	-	5719	0364
2937	-	d 10 - ER 8 GM / L 55	10	ER 8 1÷ 5	24	12	-	0373	0173	5717	0554
5138	-	d 10 - ER 8 GM / L 80	10	ER 8 1÷ 5	24	12	-	0373	0173	5717	0554
2938	-	d 10 - ER 8 GM / L 100	10	ER 8 1÷ 5	24	12	-	0373	0173	5717	0554
5139	-	d 10 - ER 8 GM / L 130	10	ER 8 1÷ 5	24	12	-	0373	0173	5717	0554
2890	-	d 10 - ER11 GM / L 55	10	ER 11 1÷ 8	25	16	5	0432	0173	5718	5573
5140	-	d 10 - ER11 GM / L 80	10	ER 11 1÷ 8	25	16	5	0432	0173	5718	5573
2896	-	d 10 - ER11 GM / L 100	10	ER 11 1÷ 8	25	16	5	0432	0173	5718	5573
5141	-	d 10 - ER11 GM / L 130	10	ER 11 1÷ 8	25	16	5	0432	0173	5718	5573
2891	-	d 10 - ER16 GM / L 60	10	ER 16 1÷12	37	22	5	1229	0173	5719	0364
5142	-	d 10 - ER16 GM / L 80	10	ER 16 1÷12	37	22	5	1229	0173	5719	0364
2956	-	d 10 - ER16 GM / L 100	10	ER 16 1÷12	37	22	5	1229	0173	5719	0364
2002	-	d 12 - ER 8 GM / L 55	12	ER 8 1÷ 5	15	12	5	0373	0173	5717	0554
5143	-	d 12 - ER 8 GM / L 70	12	ER 8 1÷ 5	15	12	5	0373	0173	5717	0554
2962	-	d 12 - ER 8 GM / L 100	12	ER 8 1÷ 5	15	12	5	0373	0173	5717	0554
2991	-	d 12 - ER 8 GM / L 140	12	ER 8 1÷ 5	15	12	5	0373	0173	5717	0554
2892	-	d 12 - ER11 GM / L 55	12	ER 11 1÷ 8	25	16	7	0432	0181	5718	5573
3208	-	d 12 - ER11 GM / L 70	12	ER 11 1÷ 8	25	16	7	0432	0181	5718	5573
3003	-	d 12 - ER11 GM / L 100	12	ER 11 1÷ 8	25	16	7	0432	0181	5718	5573
0217	-	d 12 - ER11 GM / L 140	12	ER 11 1÷ 8	25	16	7	0432	0181	5718	5573
2893	-	d 12 - ER16 GM / L 55	12	ER 16 1÷12	37	22	7	1229	0181	5719	0364
3209	-	d 12 - ER16 GM / L 80	12	ER 16 1÷12	37	22	7	1229	0181	5719	0364
3214	-	d 12 - ER16 GM / L 120	12	ER 16 1÷12	37	22	7	1229	0181	5719	0364
3210	-	d 15 - ER20 GM / L 100	15	ER 20 1÷15	41	28	9	1230	0183	5720	0787
0214 SP	0214	d 16 - ER11 GM / L 40	16	ER 11 1÷ 8	22	16	7	0432	0181	5718	5573
0292 SP	0292	d 16 - ER11 GM / L 60	16	ER 11 1÷ 8	22	16	7	0432	0181	5718	5573
0441 SP	0441	d 16 - ER11 GM / L 80	16	ER 11 1÷ 8	22	16	7	0432	0181	5718	5573

follows >>

STRAIGHT SHANK ER COLLET CHUCKS WITH MINI NUT

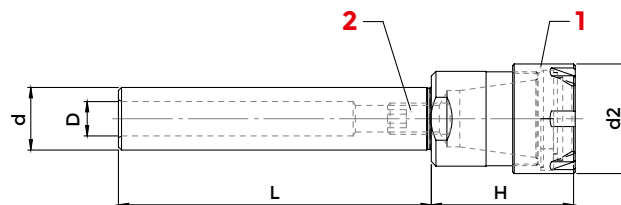


DIN 1835A

COD. (WITHOUT FLAT)	COD. (WITH FLAT)	DESCRIPTION	d	ER	H	d2	D	2	1	WRENCH	COLLET
								NUT	SCREW		
											
2963 SP	2963	d 16 - ER11 GM / L 100	16	ER 11 1÷ 8	22	16	7	0432	0181	5718	5573
3903 SP	3903	d 16 - ER11 GM / L 130	16	ER 11 1÷ 8	22	16	7	0432	0181	5718	5573
3904 SP	3904	d 16 - ER11 GM / L 160	16	ER 11 1÷ 8	22	16	7	0432	0181	5718	5573
3913 SP	3913	d 16 - ER11 GM / L 200	16	ER 11 1÷ 8	22	16	7	0432	0181	5718	5573
2591 SP	2591	d 16 - ER16 GM / L 35	16	ER 16 1÷12	37	22	7	1229	0181	5719	0364
3211 SP	3211	d 16 - ER16 GM / L 60	16	ER 16 1÷12	37	22	7	1229	0181	5719	0364
3212 SP	3212	d 16 - ER16 GM / L 80	16	ER 16 1÷12	37	22	7	1229	0181	5719	0364
3226 SP	3226	d 16 - ER16 GM / L 100	16	ER 16 1÷12	37	22	7	1229	0181	5719	0364
3393 SP	3393	d 16 - ER16 GM / L 130	16	ER 16 1÷12	37	22	7	1229	0181	5719	0364
3490 SP	3490	d 16 - ER16 GM / L 160	16	ER 16 1÷12	37	22	7	1229	0181	5719	0364
2005 SP	2005	d 16 - ER16 GM / L 200	16	ER 16 1÷12	37	22	7	1229	0181	5719	0364
2895 SP	2895	d 16 - ER20 GM / L 55	16	ER 20 1÷15	40	28	9	1230	0183	5720	0787
3213 SP	3213	d 16 - ER20 GM / L 100	16	ER 20 1÷15	40	28	9	1230	0183	5720	0787
2982 SP	2982	d 16 - ER20 GM / L 130	16	ER 20 1÷15	40	28	9	1230	0183	5720	0787
2983 SP	2983	d 16 - ER20 GM / L 160	16	ER 20 1÷15	40	28	9	1230	0183	5720	0787
-	0189	d 19,05 - ER11GM / L 50	19,05	ER 11 1÷ 8	18	16	7	0432	0181	5718	5573
-	3013	d 19,05 - ER11GM / L 100	19,05	ER 11 1÷ 8	18	16	7	0432	0181	5718	5573
-	0215	d 19,05 - ER16GM / L 60	19,05	ER 16 1÷12	30	22	11	1229	0186	5719	0364
-	3394	d 19,05 - ER16GM / L 100	19,05	ER 16 1÷12	30	22	11	1229	0186	5719	0364
-	0226	d 19,05 - ER20GM / L 50	19,05	ER 20 1÷15	37	28	11	1230	0186	5720	0787
-	3397	d 19,05 - ER20GM / L 100	19,05	ER 20 1÷15	37	28	11	1230	0186	5720	0787
-	2897	d 19,05 - ER25GM / L 50	19,05	ER 25 1÷20	46	35	11	1231	0186	5721	0996
0216 SP	0216	d 20 - ER11 GM / L 50	20	ER 11 1÷ 8	22	16	7	0432	0181	5718	5573
1222 SP	1222	d 20 - ER11 GM / L 100	20	ER 11 1÷ 8	22	16	7	0432	0181	5718	5573
2042 SP	2042	d 20 - ER11 GM / L 130	20	ER 11 1÷ 8	22	16	7	0432	0181	5718	5573
2043 SP	2043	d 20 - ER11 GM / L 160	20	ER 11 1÷ 8	22	16	7	0432	0181	5718	5573
5144 SP	5144	d 20 - ER11 GM / L 200	20	ER 11 1÷ 8	22	16	7	0432	0181	5718	5573
3905 SP	3905	d 20 - ER16 GM / L 60	20	ER 16 1÷12	30	22	11	1229	0186	5719	0364
3520 SP	3520	d 20 - ER16 GM / L 100	20	ER 16 1÷12	30	22	11	1229	0186	5719	0364
3909 SP	3909	d 20 - ER16 GM / L 130	20	ER 16 1÷12	30	22	11	1229	0186	5719	0364
3521 SP	3521	d 20 - ER16 GM / L 160	20	ER 16 1÷12	30	22	11	1229	0186	5719	0364
3522 SP	3522	d 20 - ER16 GM / L 200	20	ER 16 1÷12	30	22	11	1229	0186	5719	0364
3528 SP	3528	d 20 - ER16 GM / L 250	20	ER 16 1÷12	30	22	11	1229	0186	5719	0364
3215 SP	3215	d 20 - ER20 GM / L 46	20	ER 20 1÷15	37	28	11	1230	0186	5720	0787
0220 SP	0220	d 20 - ER20 GM / L 60	20	ER 20 1÷15	37	28	11	1230	0186	5720	0787
3216 SP	3216	d 20 - ER20 GM / L 100	20	ER 20 1÷15	37	28	11	1230	0186	5720	0787
3217 SP	3217	d 20 - ER20 GM / L 130	20	ER 20 1÷15	37	28	11	1230	0186	5720	0787
0225 SP	0225	d 20 - ER20 GM / L 160	20	ER 20 1÷15	37	28	11	1230	0186	5720	0787

follows >>

STRAIGHT SHANK ER COLLET CHUCKS WITH MINI NUT



DIN 1835A

COD. (WITHOUT FLAT)	COD. (WITH FLAT)	DESCRIPTION	d	ER	H	d2	D	2	1	WRENCH	COLLET
								NUT	SCREW		
											
3227 SP	3227	d 20 - ER20 GM / L 200	20	ER 20 1÷15	37	28	11	1230	0186	5720	0787
3285 SP	3285	d 20 - ER20 GM / L 250	20	ER 20 1÷15	37	28	11	1230	0186	5720	0787
2899 SP	2899	d 20 - ER25 GM / L 46	20	ER 25 1÷20	46	35	11	1231	0186	5721	0996
3906 SP	3906	d 20 - ER25 GM / L 60	20	ER 25 1÷20	46	35	11	1231	0186	5721	0996
3218 SP	3218	d 20 - ER25 GM / L 100	20	ER 25 1÷20	46	35	11	1231	0186	5721	0996
0228 SP	0228	d 20 - ER25 GM / L 130	20	ER 25 1÷20	46	35	11	1231	0186	5721	0996
3319 SP	3319	d 20 - ER25 GM / L 160	20	ER 25 1÷20	46	35	11	1231	0186	5721	0996
-	0408	d 22 - ER16 GM / L 80	22	ER 16 1÷12	27	22	11	1229	0186	5719	0364
-	0412	d 22 - ER20 GM / L 80	22	ER 20 1÷15	30	28	11	1230	0186	5720	0787
0451 SP	0451	d 25 - ER11 GM / L 100	25	ER 11 1÷8	18	16	7	0432	0181	5718	0787
5145 SP	5145	d 25 - ER11 GM / L 130	25	ER 11 1÷8	18	16	7	0432	0181	5718	5573
5146 SP	5146	d 25 - ER11 GM / L 160	25	ER 11 1÷8	18	16	7	0432	0186	5718	5573
0218 SP	0218	d 25 - ER16 GM / L 60	25	ER 16 1÷12	27	22	11	1229	0186	5719	0364
0219 SP	0219	d 25 - ER16 GM / L 100	25	ER 16 1÷12	27	22	11	1229	0186	5719	0364
0231 SP	0231	d 25 - ER16 GM / L 130	25	ER 16 1÷12	27	22	11	1229	0186	5719	0364
3029 SP	3029	d 25 - ER16 GM / L 160	25	ER 16 1÷12	27	22	11	1229	0186	5719	0364
3063 SP	3063	d 25 - ER16 GM / L 200	25	ER 16 1÷12	27	22	11	1229	0186	5719	0364
3907 SP	3907	d 25 - ER20 GM / L 60	25	ER 20 1÷15	28	28	13	1230	4973	5720	0787
0221 SP	0221	d 25 - ER20 GM / L 100	25	ER 20 1÷15	28	28	13	1230	4973	5720	0787
0222 SP	0222	d 25 - ER20 GM / L 130	25	ER 20 1÷15	28	28	13	1230	4973	5720	0787
3219 SP	3219	d 25 - ER20 GM / L 160	25	ER 20 1÷15	28	28	13	1230	4973	5720	0787
4004 SP	4004	d 25 - ER20 GM / L 200	25	ER 20 1÷15	28	28	13	1230	4973	5720	0787
0227 SP	0227	d 25 - ER25 GM / L 50	25	ER 25 1÷20	32	35	13	1231	4973	5721	0996
3908 SP	3908	d 25 - ER25 GM / L 70	25	ER 25 1÷20	32	35	13	1231	4973	5721	0996
0426 SP	0426	d 25 - ER25 GM / L 100	25	ER 25 1÷20	32	35	13	1231	4973	5721	0996
0446 SP	0446	d 25 - ER25 GM / L 130	25	ER 25 1÷20	32	35	13	1231	4973	5721	0996
0449 SP	0449	d 25 - ER25 GM / L 160	25	ER 25 1÷20	32	35	13	1231	4973	5721	0996
0462 SP	0462	d 25 - ER25 GM / L 200	25	ER 25 1÷20	32	35	13	1231	4973	5721	0996
-	3030	d 25,4 - ER16 GM / L 60	25,4	ER 16 1÷12	27	22	11	1229	0186	5719	0364
-	3031	d 25,4 - ER16 GM / L 100	25,4	ER 16 1÷12	27	22	11	1229	0186	5719	0364
-	3912	d 25,4 - ER20 GM / L 70	25,4	ER 20 1÷15	28	28	13	1230	4973	5720	0787
-	0421	d 25,4 - ER20 GM / L 100	25,4	ER 20 1÷15	28	28	13	1230	4973	5720	0787
-	3914	d 25,4 - ER25 GM / L 70	25,4	ER 25 1÷20	32	35	13	1231	4973	5721	0996
-	0433	d 25,4 - ER25 GM / L 100	25,4	ER 25 1÷20	32	35	13	1231	4973	5721	0996
-	3395	d 32 - ER16 GM / L 90	32	ER 16 1÷12	30	22	11	1229	0186	5719	0364
-	3396	d 32 - ER20 GM / L 90	32	ER 20 1÷15	28	28	13	1230	4973	5720	0787

ACCESSORIES

p. 632



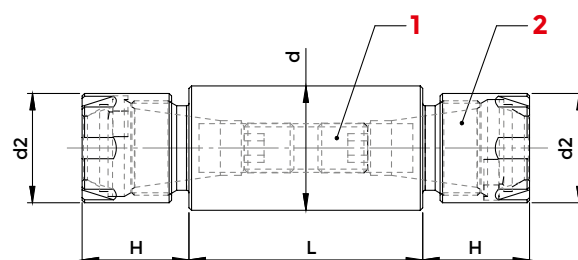
p. 615



p. 635



STRAIGHT SHANK ER DOUBLE COLLET CHUCKS WITH MINI NUT



DIN 1835A

COD.	DESCRIPTION	d	H	L	d2	ER	2	1	WRENCH	COLLET
							NUT	SCREW		
										
8779	d 20 DP - ER 11 GM / L 42	20	14	70	16	ER 11 1÷ 8	0432	0020	5718	5773
8780	d 20 DP - ER 11 GM / L 52	20	14	80	16	ER 11 1÷ 8	0432	0375	5718	5773
8781	d 20 DP - ER 11 GM / L 62	20	14	90	16	ER 11 1÷ 8	0432	0375	5718	5773
8782	d 20 DP - ER 16 GM / L 37	20	21,5	80	22	ER 16 1÷ 12	1229	-	5719	0364
8783	d 20 DP - ER 16 GM / L 57	20	21,5	100	22	ER 16 1÷ 12	1229	0060	5719	0364
8784	d 20 DP - ER 16 GM / L 67	20	21,5	110	22	ER 16 1÷ 12	1229	4972	5719	0364
8988	d 20 DP - ER 16 GM / L 122	20	21,5	165	22	ER 16 1÷ 12	1229	4973	5719	0364
8785	d 22 DP - ER 16 GM / L 47	22	21,5	90	22	ER 16 1÷ 12	1229	0060	5719	0364
8786	d 22 DP - ER 16 GM / L 67	22	21,5	110	22	ER 16 1÷ 12	1229	4972	5719	0364
8787	d 22 DP - ER 16 GM / L 102	22	21,5	145	22	ER 16 1÷ 12	1229	0186	5719	0364
8788	d 25 DP - ER 16 GM / L 27	25	21,5	70	22	ER 16 1÷ 12	1229	-	5719	0364
8789	d 25 DP - ER 16 GM / L 47	25	21,5	90	22	ER 16 1÷ 12	1229	0060	5719	0364
8790	d 25 DP - ER 16 GM / L 67	25	21,5	110	22	ER 16 1÷ 12	1229	4972	5719	0364
8791	d 25 DP - ER 20 GM / L 82	25	24	130	28	ER 20 1÷ 15	1230	0186	5720	0787
8792	d 32 DP - ER 20 GM / L 57	32	24	105	28	ER 20 1÷ 15	1230	0060	5720	0787
8793	d 32 DP - ER 20 GM / L 82	32	24	130	28	ER 20 1÷ 15	1230	0186	5720	0787

ACCESSORIES

p. 632



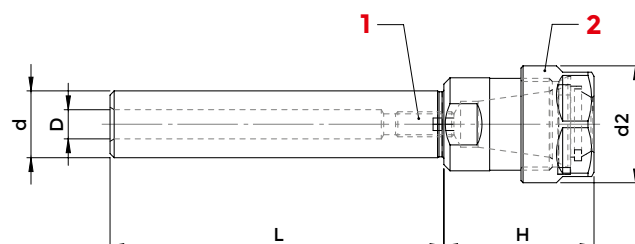
p. 615



p. 635



STRAIGHT SHANK ER COLLET CHUCKS WITH HEXAGONAL NUT

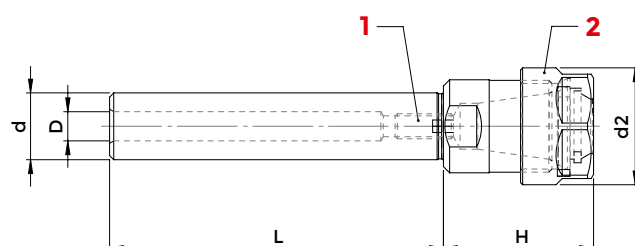


DIN 1835A

COD. (WITHOUT FLAT)	COD. (WITH FLAT)	DESCRIPTION	d	ER	H	d2	D	2 1			
								NUT	SCREW	WRENCH	COLLET
5244	-	d 14 - ER 16 GE / L 60	14	ER 16 1÷12	36	28	7				
5245 SP	5245	d 16 - ER 16 GE / L 60	16	ER 16 1÷12	36	28	7	1214	0181	2906	0364
5246 SP	5246	d 16 - ER 16 GE / L 80	16	ER 16 1÷12	36	28	7	1214	0181	2906	0364
5247 SP	5247	d 16 - ER 16 GE / L 100	16	ER 16 1÷12	36	28	7	1214	0181	2906	0364
5248 SP	5248	d 16 - ER 16 GE / L 130	16	ER 16 1÷12	36	28	7	1214	0181	2906	0364
5249 SP	5249	d 16 - ER 16 GE / L 160	16	ER 16 1÷12	36	28	7	1214	0181	2906	0364
5251 SP	5251	d 16 - ER 20 GE / L 60	16	ER 20 1÷15	40	34	9	1215	0183	2907	0787
-	5252	d 19,05 - ER 16 GE / L 50	19,05	ER 16 1÷12	32	28	11	1214	0186	2906	0364
-	5253	d 19,05 - ER 16 GE / L 100	19,05	ER 16 1÷12	32	28	11	1214	0186	2906	0364
-	5254	d 19,05 - ER 20 GE / L 50	19,05	ER 20 1÷15	36	34	11	1215	0186	2907	0787
5256 SP	5256	d 20 - ER 16 GE / L 50	20	ER 16 1÷12	31	28	11	1214	0186	2906	0364
5257 SP	5257	d 20 - ER 16 GE / L 100	20	ER 16 1÷12	31	28	11	1214	0186	2906	0364
5258 SP	5258	d 20 - ER 16 GE / L 130	20	ER 16 1÷12	31	28	11	1214	0186	2906	0364
5259 SP	5259	d 20 - ER 16 GE / L 160	20	ER 16 1÷12	31	28	11	1214	0186	2906	0364
5260 SP	5260	d 20 - ER 16 GE / L 200	20	ER 16 1÷12	31	28	11	1214	0186	2906	0364
5261 SP	5261	d 20 - ER 20 GE / L 46	20	ER 20 1÷15	36	34	11	1215	0186	2907	0787
5262 SP	5262	d 20 - ER 20 GE / L 60	20	ER 20 1÷15	36	34	11	1215	0186	2907	0787
5263 SP	5263	d 20 - ER 20 GE / L 100	20	ER 20 1÷15	36	34	11	1215	0186	2907	0787
5264 SP	5264	d 20 - ER 20 GE / L 130	20	ER 20 1÷15	36	34	11	1215	0186	2907	0787
5265 SP	5265	d 20 - ER 20 GE / L 160	20	ER 20 1÷15	36	34	11	1215	0186	2907	0787
5266 SP	5266	d 20 - ER 20 GE / L 200	20	ER 20 1÷15	36	34	11	1215	0186	2907	0787
-	5267	d 22 - ER 16 GE / L 80	22	ER 16 1÷12	26	28	11	1214	0186	2906	0364
-	5268	d 22 - ER 20 GE / L 80	22	ER 20 1÷15	36	34	11	1215	0186	2907	0787
5269 SP	5269	d 25 - ER 16 GE / L 60	25	ER 16 1÷12	27	28	11	1214	0186	2906	0364
5270 SP	5270	d 25 - ER 16 GE / L 100	25	ER 16 1÷12	27	28	11	1214	0186	2906	0364
5271 SP	5271	d 25 - ER 16 GE / L 130	25	ER 16 1÷12	27	28	11	1214	0186	2906	0364
-	5272	d 25 - ER 16 GE / L 160	25	ER 16 1÷12	27	28	11	1214	0186	2906	0364
5274 SP	5274	d 25 - ER 20 GE / L 60	25	ER 20 1÷15	28	34	13	1215	4973	2907	0787

follows >>

STRAIGHT SHANK ER COLLET CHUCKS WITH HEXAGONAL NUT



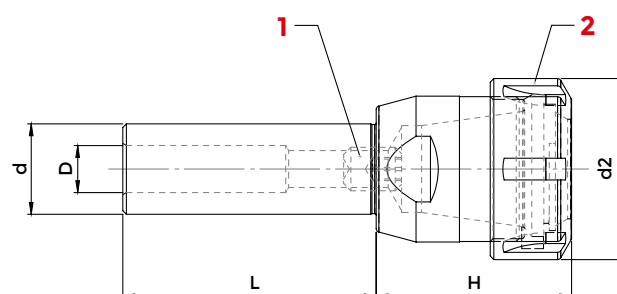
DIN 1835A

COD. (WITHOUT FLAT)	COD. (WITH FLAT)	DESCRIPTION	d	ER	H	d2	D	2 1			
								NUT	SCREW	WRENCH	COLLET
5275 SP	5275	d 25 - ER 20 GE / L 100	25	ER 20 1÷15	28	34	13				
5276 SP	5276	d 25 - ER 20 GE / L 130	25	ER 20 1÷15	28	34	13	1215	4973	2907	0787
5277 SP	5277	d 25 - ER 20 GE / L 160	25	ER 20 1÷15	28	34	13	1215	4973	2907	0787
-	5278	d 25,4 - ER 16 GE / L 60	25,4	ER 16 1÷12	27	28	11	1214	0186	2906	0364
-	5279	d 25,4 - ER 16 GE / L 100	25,4	ER 16 1÷12	27	28	11	1214	0186	2906	0364
-	5280	d 25,4 - ER 20 GE / L 60	25,4	ER 20 1÷15	28	34	13	1215	4973	2907	0787
-	5281	d 25,4 - ER 20 GE / L 100	25,4	ER 20 1÷15	28	34	13	1215	4973	2907	0787
-	5284	d 32 - ER 16 GE / L 100	32	ER 16 1÷12	27	28	11	1214	0186	2906	0364
-	5285	d 32 - ER 16 GE / L 150	32	ER 16 1÷12	27	28	11	1214	0186	2906	0364
-	5286	d 32 - ER 20 GE / L 100	32	ER 20 1÷15	28	34	13	1215	4973	2907	0787
-	5287	d 32 - ER 20 GE / L 150	32	ER 20 1÷15	28	34	13	1215	4973	2907	0787

ACCESSORIES



STRAIGHT SHANK ER COLLET CHUCKS WITH STANDARD NUT

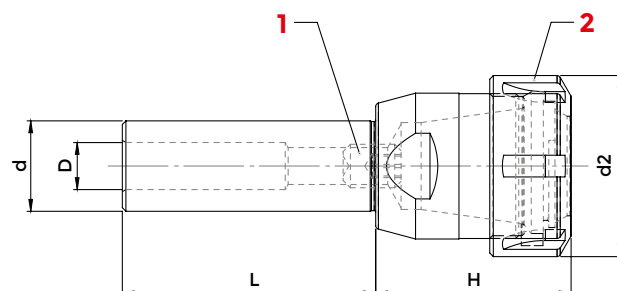


DIN 1835A

COD. (WITHOUT FLAT)	COD. (WITH FLAT)	DESCRIPTION	d	ER	H	d2	D	2 1			
								NUT	SCREW	WRENCH	COLLET
											
3915	-	d 14 - ER 16 / L 60	14	ER 16 1÷12	36	32	7	4993	0181	3698	0364
3916 SP	3916	d 16 - ER 16 / L 60	16	ER 16 1÷12	36	32	7	4993	0181	3698	0364
5009 SP	5009	d 16 - ER 16 / L 80	16	ER 16 1÷12	36	32	7	4993	0181	3698	0364
3185 SP	3185	d 16 - ER 16 / L 100	16	ER 16 1÷12	36	32	7	4993	0181	3698	0364
5087 SP	5087	d 16 - ER 16 / L 130	16	ER 16 1÷12	36	32	7	4993	0181	3698	0364
3206 SP	3206	d 16 - ER 16 / L 160	16	ER 16 1÷12	36	32	7	4993	0181	3698	0364
3529 SP	3529	d 16 - ER 20 / L 60	16	ER 20 1÷15	40	35	9	4994	0183	3699	0787
0573 SP	0573	d 16 - ER 25 / L 35	16	ER 25 1÷20	46	42	9	4995	0183	3669	0996
0574 SP	0574	d 16 - ER 25 / L 70	16	ER 25 1÷20	46	42	9	4995	0183	3669	0996
-	3929	d 19,05 - ER16 / L 50	19,05	ER 16 1÷12	32	32	11	4993	0186	3698	0364
-	0229	d 19,05 - ER16 / L 100	19,05	ER 16 1÷12	32	32	11	4993	0186	3698	0364
-	3930	d 19,05 - ER20 / L 50	19,05	ER 20 1÷15	36	35	11	4994	0186	3699	0787
-	2379	d 19,05 - ER25 / L 50	19,05	ER 25 1÷20	46	42	11	4995	0186	3669	0996
-	5096	d 19,05 - ER32 / L 50	19,05	ER 32 2÷25	54	50	13	4996	4973	3670	0988
3917 SP	3917	d 20 - ER 16 / L 50	20	ER 16 1÷12	31	32	11	4993	0186	3698	0364
3918 SP	3918	d 20 - ER 16 / L 100	20	ER 16 1÷12	31	32	11	4993	0186	3698	0364
5098 SP	5098	d 20 - ER 16 / L 130	20	ER 16 1÷12	31	32	11	4993	0186	3698	0364
3228 SP	3228	d 20 - ER 16 / L 160	20	ER 16 1÷12	31	32	11	4993	0186	3698	0364
5099 SP	5099	d 20 - ER 16 / L 200	20	ER 16 1÷12	31	32	11	4993	0186	3698	0364
3919 SP	3919	d 20 - ER 20 / L 46	20	ER 20 1÷15	36	35	11	4994	0186	3699	0787
3920 SP	3920	d 20 - ER 20 / L 60	20	ER 20 1÷15	36	35	11	4994	0186	3699	0787
0381 SP	0381	d 20 - ER 20 / L 100	20	ER 20 1÷15	36	35	11	4994	0186	3699	0787
5147 SP	5147	d 20 - ER 20 / L 130	20	ER 20 1÷15	36	35	11	4994	0186	3699	0787
5148 SP	5148	d 20 - ER 20 / L 160	20	ER 20 1÷15	36	35	11	4994	0186	3699	0787
5149 SP	5149	d 20 - ER 20 / L 200	20	ER 20 1÷15	36	35	11	4994	0186	3699	0787
2600 SP	2600	d 20 - ER 25 / L 50	20	ER 25 1÷20	46	42	11	4995	0186	3669	0996
3921 SP	3921	d 20 - ER 25 / L 100	20	ER 25 1÷20	46	42	11	4995	0186	3669	0996
3911 SP	3911	d 20 - ER 25 / L 160	20	ER 25 1÷20	46	42	11	4995	0186	3669	0996
3203 SP	3203	d 20 - ER 32 / L 50	20	ER 32 2÷25	54	50	13	4996	4973	3670	0988
3922 SP	3922	d 20 - ER 32 / L 100	20	ER 32 2÷25	54	50	13	4996	4973	3670	0988
3931 SP	3931	d 20 - ER 32 / L 130	20	ER 32 2÷25	54	50	13	4996	4973	3670	0988
3932 SP	3932	d 20 - ER 32 / L 160	20	ER 32 2÷25	54	50	13	4996	4973	3670	0988
-	0434	d 22 - ER 16 / L 80	22	ER 16 1÷12	26	32	11	4993	0186	3698	0364
-	0436	d 22 - ER 20 / L 80	22	ER 20 1÷15	36	35	11	4994	0186	3699	0787
-	3177	d 22 - ER 25 / L 50	22	ER 25 1÷20	42	42	13	4995	4973	3669	0996
-	3178	d 22 - ER 32 / L 50	22	ER 32 2÷25	53	50	13	4996	4973	3670	0988

follows >>

STRAIGHT SHANK ER COLLET CHUCKS WITH STANDARD NUT

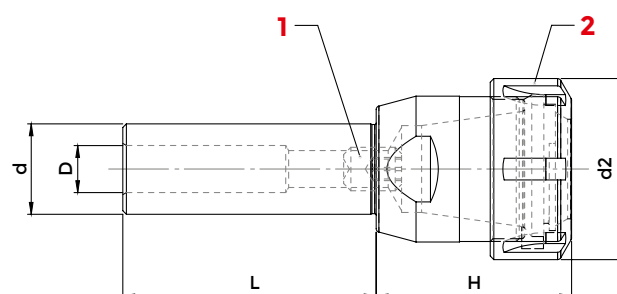


DIN 1835A

COD. (WITHOUT FLAT)	COD. (WITH FLAT)	DESCRIPTION	d	ER	H	d2	D	2 1			
								NUT	SCREW	WRENCH	COLLET
											
5163 SP	5163	d 25 - ER 16 / L 60	25	ER 16 1÷12	27	32	11	4993	0186	3698	0364
5164 SP	5164	d 25 - ER 16 / L 100	25	ER 16 1÷12	27	32	11	4993	0186	3698	0364
5165 SP	5165	d 25 - ER 16 / L 130	25	ER 16 1÷12	27	32	11	4993	0186	3698	0364
-	5166	d 25 - ER 16 / L 160	25	ER 16 1÷12	27	32	11	4993	0186	3698	0364
0230 SP	0230	d 25 - ER 20 / L 60	25	ER 20 1÷15	28	35	13	4994	4973	3699	0787
0383 SP	0383	d 25 - ER 20 / L 100	25	ER 20 1÷15	28	35	13	4994	4973	3699	0787
5168 SP	5168	d 25 - ER 20 / L 130	25	ER 20 1÷15	28	35	13	4994	4973	3699	0787
5169 SP	5169	d 25 - ER 20 / L 160	25	ER 20 1÷15	28	35	13	4994	4973	3699	0787
3923 SP	3923	d 25 - ER 25 / L 50	25	ER 25 1÷20	32	42	13	4995	4973	3669	0996
5183 SP	5183	d 25 - ER 25 / L 70	25	ER 25 1÷20	32	42	13	4995	4973	3669	0996
0391 SP	0391	d 25 - ER 25 / L 100	25	ER 25 1÷20	32	42	13	4995	4973	3669	0996
0392 SP	0392	d 25 - ER 25 / L 130	25	ER 25 1÷20	32	42	13	4995	4973	3669	0996
0393 SP	0393	d 25 - ER 25 / L 160	25	ER 25 1÷20	32	42	13	4995	4973	3669	0996
1216 SP	1216	d 25 - ER 32 / L 50	25	ER 32 2÷25	54	50	13	4996	4973	3670	0988
1221 SP	1221	d 25 - ER 32 / L 70	25	ER 32 2÷25	54	50	13	4996	4973	3670	0988
3924 SP	3924	d 25 - ER 32 / L 100	25	ER 32 2÷25	54	50	13	4996	4973	3670	0988
3927 SP	3927	d 25 - ER 32 / L 130	25	ER 32 2÷25	54	50	13	4996	4973	3670	0988
3928 SP	3928	d 25 - ER 32 / L 160	25	ER 32 2÷25	54	50	13	4996	4973	3670	0988
2901 SP	2901	d 25 - ER 40 / L 50	25	ER 40 3÷32	60	63	16	4997	4973	3671	0821
3266 SP	3266	d 25 - ER 40 / L 100	25	ER 40 3÷32	60	63	16	4997	4973	3671	0821
-	5184	d 25,4 - ER 16 / L 60	25,4	ER 16 1÷12	27	32	11	4993	0186	3698	0364
-	5185	d 25,4 - ER 16 / L 100	25,4	ER 16 1÷12	27	32	11	4993	0186	3698	0364
-	0296	d 25,4 - ER 20 / L 60	25,4	ER 20 1÷15	28	35	13	4994	4973	3699	0787
-	0386	d 25,4 - ER 20 / L 100	25,4	ER 20 1÷15	28	35	13	4994	4973	3699	0787
-	3933	d 25,4 - ER 25 / L 50	25,4	ER 25 1÷20	32	42	13	4995	4973	3669	0996
-	5186	d 25,4 - ER 25 / L 70	25,4	ER 25 1÷20	32	42	13	4995	4973	3669	0996
-	3934	d 25,4 - ER 25 / L 100	25,4	ER 25 1÷20	32	42	13	4995	4973	3669	0996
-	1217	d 25,4 - ER 32 / L 50	25,4	ER 32 2÷25	54	50	16	4996	4973	3670	0988
-	5187	d 25,4 - ER 32 / L 70	25,4	ER 32 2÷25	54	50	16	4996	4973	3670	0988
-	3935	d 25,4 - ER 32 / L 100	25,4	ER 32 2÷25	54	50	16	4996	4973	3670	0988
-	1917	d 25,4 - ER 40 / L 50	25,4	ER 40 3÷32	54	50	16	4997	4973	3671	0821
-	3925	d 30 - ER 25 / L 50	30	ER 25 1÷20	45	42	19	4995	0190	3669	0996
-	2593	d 30 - ER 32 / L 50	30	ER 32 2÷25	53	50	23	4996	0191	3670	0988
-	1218	d 31,75 - ER32 / L 50	31,75	ER 32 2÷25	44	50	23	4996	0191	3670	0988
-	3938	d 31,75 - ER40 / L 50	31,75	ER 40 3÷32	60	63	23	4997	0191	3671	0821
-	5188	d 32 - ER 16 / L 100	32	ER 16 1÷12	27	32	11	4993	0186	3698	0364
-	5189	d 32 - ER 16 / L 150	32	ER 16 1÷12	27	32	11	4993	0186	3698	0364

follows >>

STRAIGHT SHANK ER COLLET CHUCKS WITH STANDARD NUT



DIN 1835A

COD. (WITHOUT FLAT)	COD. (WITH FLAT)	DESCRIPTION	d	ER	H	d2	D	2 1			
								NUT	SCREW	WRENCH	COLLET
											
-	5190	d 32 - ER 20 / L 100	32	ER 20 1÷15	28	35	13	4994	4973	3699	0787
-	5191	d 32 - ER 20 / L 150	32	ER 20 1÷15	28	35	13	4994	4973	3699	0787
-	0307	d 32 - ER 25 / L 70	32	ER 25 1÷20	28	42	19	4995	0190	3669	0996
-	5192	d 32 - ER 25 / L 100	32	ER 25 1÷20	28	42	19	4995	0190	3669	0996
-	0309	d 32 - ER 25 / L 120	32	ER 25 1÷20	28	42	19	4995	0190	3669	0996
-	1424	d 32 - ER 32 / L 50	32	ER 32 2÷25	38	50	23	4996	0191	3670	0988
-	3181	d 32 - ER 32 / L 70	32	ER 32 2÷25	38	50	23	4996	0191	3670	0988
-	0402	d 32 - ER 32 / L 100	32	ER 32 2÷25	38	50	23	4996	0191	3670	0988
-	0450	d 32 - ER 32 / L 120	32	ER 32 2÷25	38	50	23	4996	0191	3670	0988
-	3398	d 32 - ER 32 / L 150	32	ER 32 2÷25	38	50	23	4996	0191	3670	0988
-	0405	d 32 - ER 40 / L 70	32	ER 40 3÷32	60	63	23	4997	0191	3671	0821
-	5194	d 32 - ER 40 / L 100	32	ER 40 3÷32	60	63	23	4997	0191	3671	0821
-	5195	d 32 - ER 40 / L 130	32	ER 40 3÷32	60	63	23	4997	0191	3671	0821
-	5196	d 35 - ER 32 / L 80	35	ER 32 2÷25	38	50	23	4996	0191	3670	0988
-	3405	d 40 - ER 25 / L 70	40	ER 25 1÷20	42	42	19	4995	0190	3669	0996
-	3406	d 40 - ER 25 / L 120	40	ER 25 1÷20	42	42	19	4995	0190	3669	0996
-	3204	d 40 - ER 32 / L 70	40	ER 32 2÷25	30	50	23	4996	0191	3670	0988
-	3356	d 40 - ER 32 / L 100	40	ER 32 2÷25	30	50	23	4996	0191	3670	0988
-	3399	d 40 - ER 32 / L 130	40	ER 32 2÷25	30	50	23	4996	0191	3670	0988
-	3357	d 40 - ER 32 / L 160	40	ER 32 2÷25	30	50	23	4996	0191	3670	0988
-	3205	d 40 - ER 40 / L 50	40	ER 40 3÷32	60	63	28	4997	0195	3671	0821
-	0406	d 40 - ER 40 / L 80	40	ER 40 3÷32	60	63	28	4997	0195	3671	0821
-	3942	d 40 - ER 40 / L 130	40	ER 40 3÷32	60	63	28	4997	0195	3671	0821
-	3424	d 44,45 - ER32 / L 160	44,45	ER 32 2÷25	33	50	23	4996	0191	3670	0988
-	3428	d 44,45 - ER40 / L 160	44,45	ER 40 3÷32	40	63	28	4997	0195	3671	0821
-	3409	d 50 - ER 32 / L 125	50	ER 32 2÷25	32	50	23	4996	0191	3670	0988
-	3519	d 50 - ER 32 / L 160	50	ER 32 2÷25	32	50	23	4996	0191	3670	0988
-	5197	d 50 - ER 40 / L 125	50	ER 40 3÷32	37	63	28	4997	0195	3671	0821
-	3412	d 50 - ER 40 / L 160	50	ER 40 3÷32	37	63	28	4997	0195	3671	0821
-	3422	d 50,8 - ER 32 / L 160	50,8	ER 32 2÷25	32	50	23	4996	0191	3670	0988
-	3426	d 50,8 - ER 40 / L 160	50,8	ER 40 3÷32	37	63	28	4997	0195	3671	0821
-	3514	d 60 - ER 32 / L 160	60	ER 32 2÷25	32	50	23	4996	0191	3670	0988
-	3515	d 60 - ER 40 / L 160	60	ER 40 3÷32	37	63	28	4997	0195	3671	0821

ACCESSORIES

p. 633



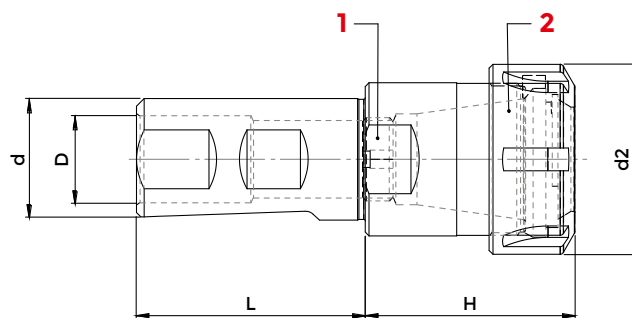
p. 615



p. 636



WELDON SHANK ER COLLET CHUCKS WITH STANDARD NUT



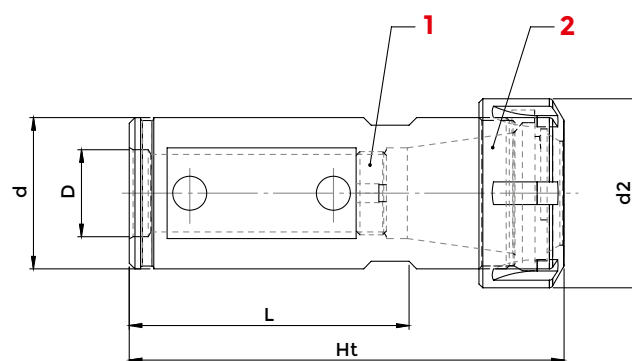
DIN 1835 B+E

COD.	DESCRIPTION	d	H	L	d2	D	ER	2	1	WRENCH	COLLET
								NUT	SCREW		
3313	WE 20 - ER 32 / H 55	20	55	50	50	11	ER 32 2÷25				
3314	WE 20 - ER 32 / H 100	20	100	50	50	11	ER 32 2÷25	1215	4973	2907	0787
3320	WE 25 - ER 32 / H 55	25	55	56	50	13	ER 32 2÷25	1215	4973	2907	0787
3321	WE 25 - ER 32 / H 100	25	100	56	50	13	ER 32 2÷25	1215	4973	2907	0787
3323	WE 32 - ER 32 / H 55	32	55	60	50	23	ER 32 2÷25	1214	0186	2906	0364
3324	WE 32 - ER 32 / H 100	32	100	60	50	23	ER 32 2÷25	1214	0186	2906	0364

ACCESSORIES



STRAIGHT SHANK ER COLLET CHUCKS WITH COOLING HOLES - STANDARD NUT



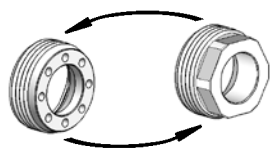
DIN 1835 A

COD.	DESCRIPTION	d	H	L	d2	D	ER	2	1	WRENCH	COLLET
								NUT	SCREW		
3408	d 32 NC - ER 25	32	42	110	70	19	ER 25 1÷20				
3401	d 32 NC - ER 32	32	50	118	70	23	ER 32 2÷25	4995	0190	3669	0996
3402	d 40 NC - ER 32	40	50	115	75	23	ER 32 2÷25	4996	0191	3670	0988
3404	d 40 NC - ER 40	40	63	130	75	23	ER 40 3÷32	4997	0191	3671	0821

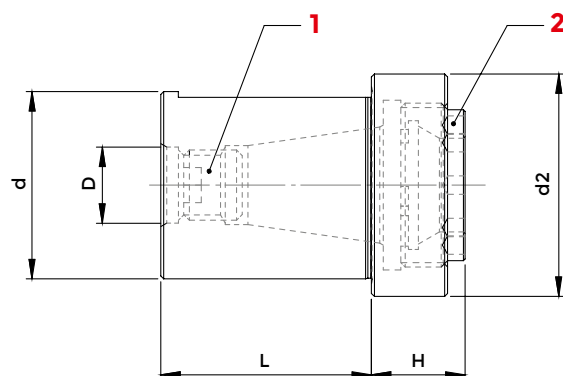
ACCESSORIES



STRAIGHT SHANK ER COLLET CHUCKS WITH INNER NUT



Nut "GA" type can be replaced by nut "GA-E" type (p. 635) with hexagonal wrench hold.



DIN 1835 A

COD.	DESCRIPTION	d	ER	H	L	d2	D	2	1
								NUT	SCREW WRENCH COLLET
2939	d 20 - ER 16 GA	20	ER 16 1÷12	14	34	32	11		
3200	d 25 - ER 20 GA	25	ER 20 1÷15	18	34	38	13		
2940	d 32 - ER 20 GA	32	ER 20 1÷15	16	36	38	13		
2942	d 32 - ER 25 GA	32	ER 25 1÷20	19	36	40	19		
2943	d 40 - ER 32 GA	40	ER 32 2÷25	21	45	48	23		

ACCESSORIES



p. 634



p. 615



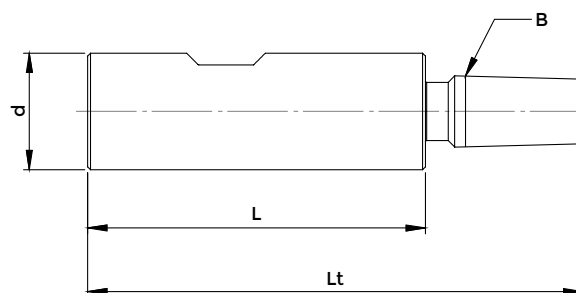
p. 634



SHANKS FOR KEYLESS DRILL CHUCKS



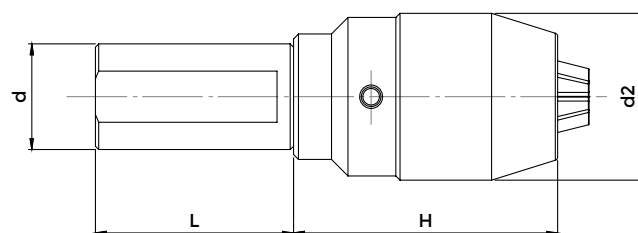
DIN 238 shank keyless drill chucks you can find at p. 599



DIN 238

COD.	DESCRIPTION	d	B	L	Lt
402308B10	d 8 - B 10	8	10	35	55
402310B10	d 10 - B 10	10	10	50	70
402310B12	d 10 - B 12	10	12	50	75
402310B16	d 10 - B 16	10	16	50	82
402312B16	d 12 - B 16	12	16	50	82
402312B16L	d 12 - B 16	12	16	60	92
402316B16	d 16 - B 16	16	16	50	81
402316B16L	d 16 - B 16	16	16	70	101
402320B12	d 20 - B 12	20	12	60	85
402320B16	d 20 - B 16	20	16	60	92
402320B18	d 20 - B 18	20	18	60	100
402325B16	d 25 - B 16	25	16	75	107

STRAIGHT SHANK DRILL CHUCKS - RIGHT SPIN



DIN 1835 A

COD.	DESCRIPTION	d	ER	H	L	d2	CLAMPS	SCREW	WRENCH
									
*1419	d 20 - DC 13	20	0,5 ÷ 13	50	80	60	9016	9021	2370
1422	d 25 - DC 13	25	0,5 ÷ 13	50	80	80	9016	9021	2370
1425	d 32 - DC 13	32	0,5 ÷ 13	50	80	60	9016	9021	2370
1426	d 32 - DC 16	32	3 ÷ 16	57	85	60	9017	9023	2371
1427	d 40 - DC 13	40	0,5 ÷ 13	50	80	70	9016	9021	2370
1428	d 40 - DC 16	40	3 ÷ 16	57	85	70	9017	9023	2371

*Supplied only with cylindrical connection WITHOUT FLAT
 Supplied complete with suitable wrench

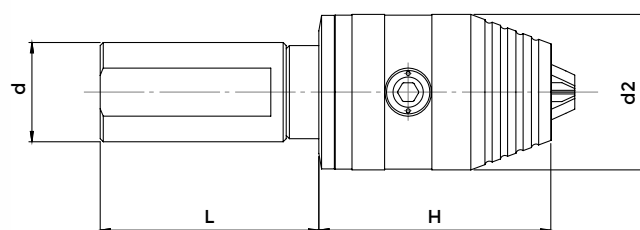
STRAIGHT SHANK DRILL CHUCKS - LEFT & RIGHT SPIN



Straight shank
 adapters to DIN238
 you can find at p. 575



DIN 238 shank
 keyless drill chucks
 you can find at p. 599

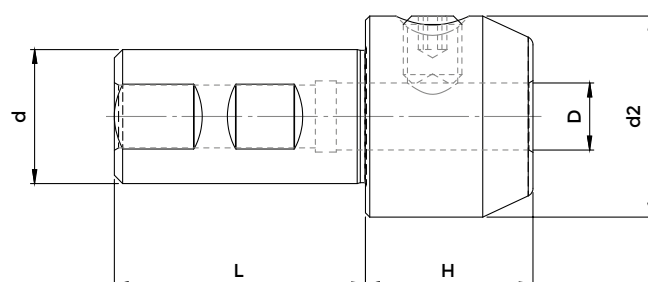


DIN 1835 A

COD.	DESCRIPTION	d	ER	H	L	d2	CLAMPS	SCREW	WRENCH
									
8607	d 25 - DCU13	25	0,5 ÷ 13	50	85	70	9016	9021	2372
8608	d 25 - DCU16	25	3 ÷ 16	50	89	70	9016	9021	2372
8609	d 32 - DCU13	32	0,5 ÷ 13	50	85	60	9016	9021	2372
8610	d 32 - DCU16	32	3 ÷ 16	57	89	60	9017	9023	2372
8611	d 40 - DCU13	40	0,5 ÷ 13	50	85	70	9016	9021	2372
8612	d 40 - DCU16	40	3 ÷ 16	57	89	70	9017	9023	2372

Supplied complete with suitable wrench

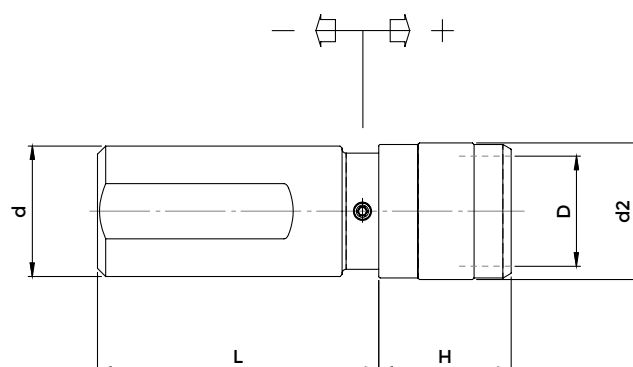
CYLINDRICAL SHANK WELDON REDUCTION SLEEVES



DIN 1835 B

COD.	DESCRIPTION	d	D	H	L	d2	SCREW
							
3044	WE 20 - d 6	20	6	30	50	25	4970
3046	WE 20 - d 8	20	8	30	50	28	4971
3064	WE 20 - d 10	20	10	30	50	35	4972
3065	WE 20 - d 12	20	12	35	50	42	4973
4518	WE 20 - d 14	20	14	35	50	44	4973
3066	WE 20 - d 16	20	16	60	50	48	4974
3121	WE 25 - d 6	25	6	25	56	25	4970
3122	WE 25 - d 8	25	8	30	56	28	4971
3123	WE 25 - d 10	25	10	30	56	35	4972
3124	WE 25 - d 12	25	12	35	56	42	4973
4519	WE 25 - d 14	25	14	35	56	44	4973
3125	WE 25 - d 16	25	16	40	56	48	4974
3760	WE 32 - d 6	32	6	30	60	25	4970
3761	WE 32 - d 8	32	8	30	60	28	4971
3762	WE 32 - d 10	32	10	30	60	35	4972
3763	WE 32 - d 12	32	12	35	60	42	4973
4520	WE 32 - d 14	32	14	35	60	44	4973
3764	WE 32 - d 16	32	16	40	60	48	4974
4521	WE 32 - d 18	32	18	40	60	50	4974
3765	WE 32 - d 20	32	20	40	60	52	4975
3126	WE 32 - d 25	32	25	65	60	65	4976

STRAIGHT SHANK TAPPING CILINDRIC CHUCKS - TENSION/COMPRESSION

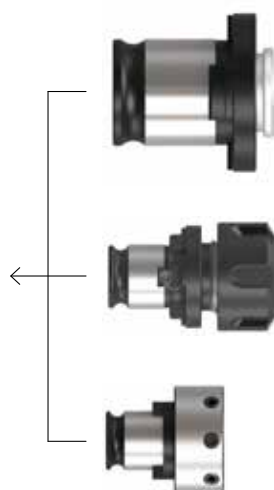


DIN 1835 A

COD.	DESCRIPTION	d	H	L	d2	D	RANGE	TAP SIZE RANGE
3807	d 16 - B. 0	16	37	56	26	13	- 6,5 + 6,5	M 1 ÷ M 10
3808	d 16 - B. 1	16	39	56	36	19	-7,5 + 7,5	M 3 ÷ M 12 (* M 18)
3809	d 20 - B. 0	20	37	56	26	13	- 6,5 + 6,5	M 1 ÷ M 10
3851	d 20 - B. 1	20	40	50	38	19	-7,5 + 7,5	M 3 ÷ M 12 (* M 18)
3852	d 20 - B. 2	20	63	50	53	31	-12,5 + 12,5	M 6 ÷ M 20 (* M 30)
4451	d 25 - B. 1	25	40	53	38	19	-7,5 + 7,5	M 3 ÷ M 12 (* M 18)
4452	d 25 - B. 2	25	63	53	53	31	-12,5 + 12,5	M 6 ÷ M 20 (* M 30)
4453	d 32 - B. 1	32	40	60	38	19	-7,5 + 7,5	M 3 ÷ M 12 (* M 18)
4454	d 32 - B. 2	32	63	77	53	31	-12,5 + 12,5	M 6 ÷ M 20 (* M 30)
4486	d 32 - B. 3	32	98	100	79	48	-20,0 + 20,0	M 14 ÷ M 33 (* M 48)
4455	d 40 - B. 1	40	40	58	38	19	-7,5 + 7,5	M 3 ÷ M 12 (* M 18)
4456	d 40 - B. 2	40	63	77	53	31	-12,5 + 12,5	M 6 ÷ M 20 (* M 30)
4487	d 40 - B. 3	40	98	100	79	48	-20,0 + 20,0	M 14 ÷ M 33 (* M 48)

*Adapters with SCREWS

BORING BAR SLEEVE



Tapping adapters
from p. 654

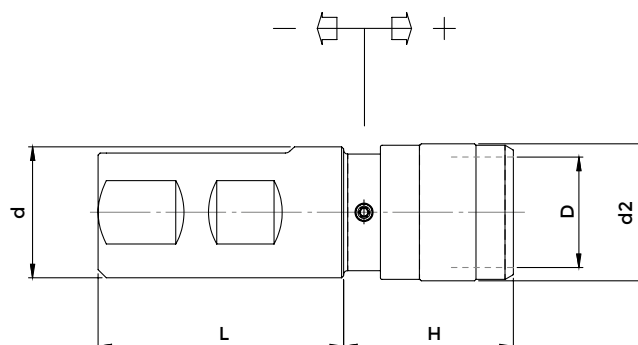
Tapping adapters
with ER collet p. 655

Threading die
adapters p. 656

WELDON STRAIGHT SHANK TAPPING CHUCKS - TENSION/COMPRESSION



Tapping adapters
from p. 654



DIN 1835 B+E

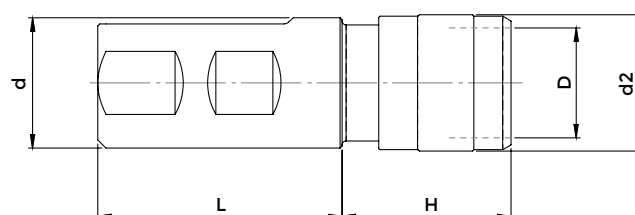
COD.	DESCRIPTION	d	H	L	d2	D	RANGE	TAP SIZE RANGE
3127	WE 20 - B. 0	20	37	50	26	13	- 6,5 + 6,5	M 1 ÷ M 10
3176	WE 20 - B. 1	20	40	50	38	19	-7,5 + 7,5	M 3 ÷ M 12 (* M 18)
3179	WE 20 - B. 2	20	63	50	53	31	-12,5 + 12,5	M 6 ÷ M 20 (* M 30)
3963	WE 25 - B. 1	25	40	53	38	19	-7,5 + 7,5	M 3 ÷ M 12 (* M 18)
3964	WE 25 - B. 2	25	63	53	53	31	-12,5 + 12,5	M 6 ÷ M 20 (* M 30)
3853	WE 32 - B. 1	32	40	60	38	19	-7,5 + 7,5	M 3 ÷ M 12 (* M 18)
3854	WE 32 - B. 2	32	63	60	53	31	-12,5 + 12,5	M 6 ÷ M 20 (* M 30)
3598	WE 32 - B. 3	32	120	60	79	48	-20,0 + 20,0	M 14 ÷ M 33 (* M 48)
3855	WE 40 - B. 1	40	40	72	38	19	-7,5 + 7,5	M 3 ÷ M 12 (* M 18)
3856	WE 40 - B. 2	40	63	72	55	31	-12,5 + 12,5	M 6 ÷ M 20 (* M 30)
3857	WE 40 - B. 3	40	98	72	79	48	-20,0 + 20,0	M 14 ÷ M 33 (* M 48)

*Adapters with SCREWS

WELDON STRAIGHT SHANK TAPPING CHUCKS - WITHOUT TENSION/COMPRESSION



Tapping adapters
from p. 654

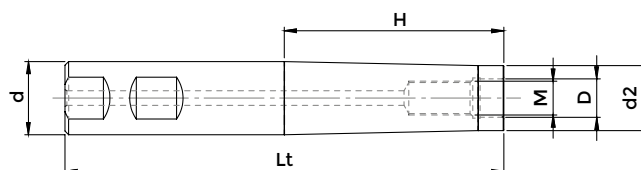


DIN 1835 B+E

COD.	DESCRIPTION	d	H	L	d2	D	TAP SIZE RANGE
2059	WE 20 - B. 1 FISSO	20	40	50	33	19	M 3 ÷ M 12 (* M 18)
2060	WE 20 - B. 2 FISSO	20	60	50	50	31	M 6 ÷ M 20 (* M 30)
2061	WE 25 - B. 1 FISSO	25	40	56	33	19	M 3 ÷ M 12 (* M 18)
2062	WE 25 - B. 2 FISSO	25	60	56	50	31	M 6 ÷ M 20 (* M 30)
2067	WE 32 - B. 1 FISSO	32	40	60	33	19	M 3 ÷ M 12 (* M 18)
2068	WE 32 - B. 2 FISSO	32	60	60	50	31	M 6 ÷ M 20 (* M 30)
2080	WE 40 - B. 1 FISSO	40	40	72	33	19	M 3 ÷ M 12 (* M 18)
2081	WE 40 - B. 2 FISSO	40	60	72	50	31	M 6 ÷ M 20 (* M 30)

*Adapters with SCREWS

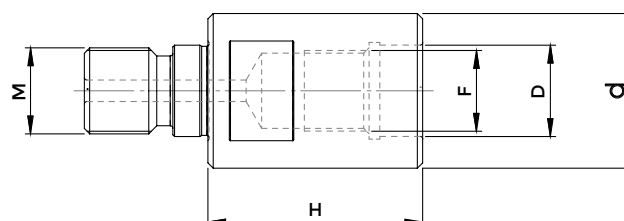
DIN 1835 B SHANKS FOR MILLING CUTTERS WITH THREADED SHANK



DIN 1835 B

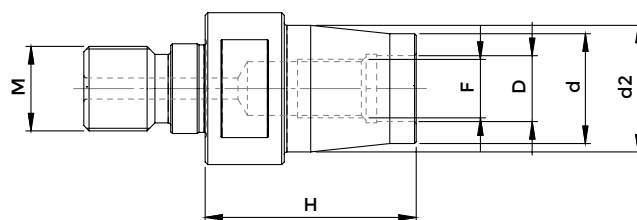
COD.	DESCRIPTION	d	M	D	d2	H	Lt
6480	WE 16 - M 8	16	M8	8,5	12,8	60	115
6481	WE 16 - M 8	16	M8	8,5	12,8	100	160
6482	WE 20 - M 10	20	M10	10,5	17,8	60	120
6483	WE 20 - M 10	20	M10	10,5	17,8	100	160
6484	WE 25 - M 12	25	M12	12,5	20,8	100	160
6485	WE 32 - M 16	32	M16	17	28,8	100	160

EXTENSIONS FOR MILLING CUTTERS WITH THREADED SHANK



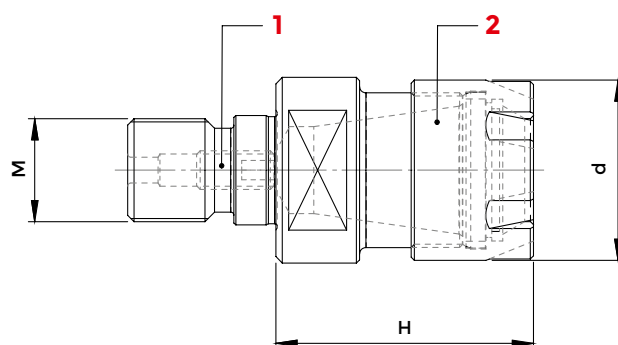
COD.	DESCRIPTION	M	F	D	d	H
6486	M 8 - M 8	M8	M8	8,5	12,8	30
6487	M 10 - M 10	M10	M10	10,5	17,8	35
6488	M 12 - M 12	M12	M12	12,5	20,8	40
6489	M 16 - M 16	M16	M16	17	28,8	40

REDUCTIONS FOR MILLING CUTTERS WITH THREADED SHANK



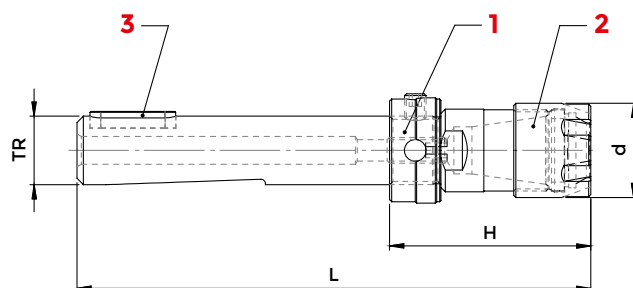
COD.	DESCRIPTION	M	F	D	d	d2	H
6490	M 10 - M 8	M10	M8	8,5	12,8	17,8	30
6491	M 12 - M 8	M12	M8	8,5	12,8	20,8	40
6492	M 12 - M 10	M12	M10	10,5	17,8	20,8	35
6493	M 16 - M 10	M16	M10	10,5	17,8	28,8	60
6494	M 16 - M 12	M16	M12	12,5	20,8	28,8	40

ER COLLET CHUCKS WITH THREADED SHANK



COD.	DESCRIPTION	M	ER	d	H	2	1	WRENCH	COLLET
						NUT	SCREW		
6460	M 12 - ER 16 GM	M12	ER 16 1÷12	22	35				
6461	M 16 - ER 16 GM	M16	ER 16 1÷12	22	40	1229	0371	5719	0364
6462	M 16 - ER 20 GM	M16	ER 20 1÷15	28	40	1230	0371	5720	0787
6463	M 16 - ER 25 GM	M16	ER 25 1÷20	35	45	1231	0371	5721	0996

TRAPEZOIDAL SHANK ER COLLET CHUCKS WITH MINI NUT



DIN 6327

COD.	DESCRIPTION	TR	ER	L	H	d	1 ADJUSTMENT NUT	3 KEY	2 NUT	WRENCH	COLLET
* 3146	TR 8 - ER 8 GM	8x1	ER 8 1÷ 5	75	35	12					
3147	TR10 - ER 11 GM	10x1,5	ER 11 1÷ 8	95	45	16	2964	0101	0373	5717	0554
3148	TR12 - ER 11 GM	12x1,5	ER 11 1÷ 8	95	45	16	2965	0103	0432	5718	5573
3149	TR12 - ER 16 GM	12x1,5	ER 16 1÷12	103	53	22	2966	0103	0432	5718	5573
3150	TR16 - ER 16 GM	16x1,5	ER 16 1÷12	120	47	22	2966	0103	1229	5719	0364
3151	TR16 - ER 20 GM	16x2	ER 20 1÷15	130	57	28	2967	0107	1229	5719	0364
3153	TR20 - ER 16 GM	20x2	ER 16 1÷12	135	59	22	2967	0107	1230	5720	0787
3154	TR20 - ER 20 GM	20x2	ER 20 1÷15	135	59	28	2968	0107	1229	5719	0364
3155	TR20 - ER 25 GM	20x2	ER 25 1÷20	135	59	35	2968	0107	1230	5720	0787
							2968	0107	1231	5721	0996

Supplied complete with adjustment nut

*Woodruff Key

ACCESSORIES



p. 632



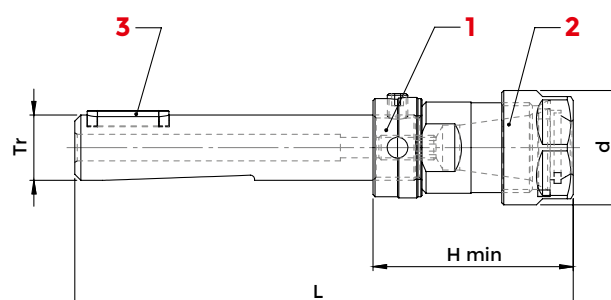
p. 615



p. 635



TRAPEZOIDAL SHANK ER COLLET CHUCKS WITH EXAGONAL NUT



DIN 6327

COD.	DESCRIPTION	TR	ER	L	H MIN	d	1	3	2
							ADJUSTMENT NUT	KEY	NUT WRENCH COLLET
									 
3137	TR 16 - ER11 GE	16x1,5	ER 11 1÷ 8	110	37	19	2967	0107	1157 2905 5573
3138	TR 16 - ER16 GE	16x1,5	ER 16 1÷12	122	49	28	2967	0107	1214 2906 0364
3139	TR 20 - ER16 GE	20x2	ER 16 1÷12	128	52	28	2968	0107	1214 2906 0364
3140	TR 20 - ER20 GE	20x2	ER 20 1÷15	135	59	34	2968	0107	1215 2907 0787
3141	TR 28 - ER20 GE	28x2	ER 20 1÷15	140	57	34	2969	0108	1215 2907 0787

Supplied complete with adjustment nut

ACCESSORIES



p. 633



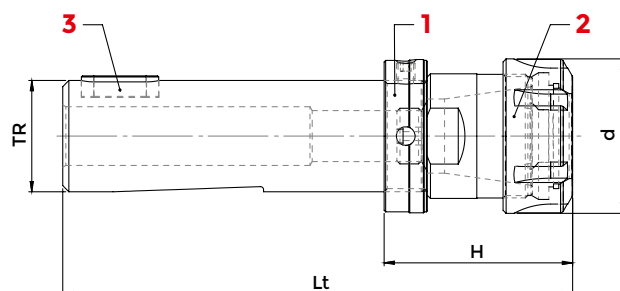
p. 615



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TRAPEZOIDAL SHANK ER COLLET CHUCKS WITH STANDARD NUT



DIN 6327

							1	3	2		
COD.	DESCRIPTION	TR	ER	L	H	d	ADJUSTMENT NUT	KEY	NUT	WRENCH	COLLET
											
3142	TR 28 - ER 25	28x2	ER 25 1÷20	140	57	42	2969	108	4995	3669	0996
3143	TR 28 - ER 32	28x2	ER 32 2÷25	147	64	50	2969	108	4996	3670	0988
3162	TR 28 - ER 40	28x2	ER 40 3÷32	190	107	63	2969	108	4997	3671	0821
3973	TR 36 - ER 25	36x2	ER 25 1÷20	163	57	42	2970	111	4995	3669	0996
3144	TR 36 - ER 32	36x2	ER 32 2÷25	165	61	50	2970	111	4996	3670	0988
3145	TR 36 - ER 40	36x2	ER 40 3÷32	186	82	63	2970	111	4997	3671	0821
3667	TR 48 - ER 32	48x2	ER 32 2÷25	200	74	50	2971	114	4996	3670	0988

Supplied complete with adjustment nut

ACCESSORIES



p. 633



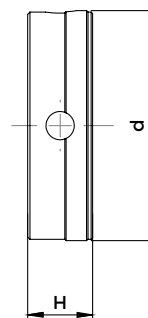
p. 615



p. 636



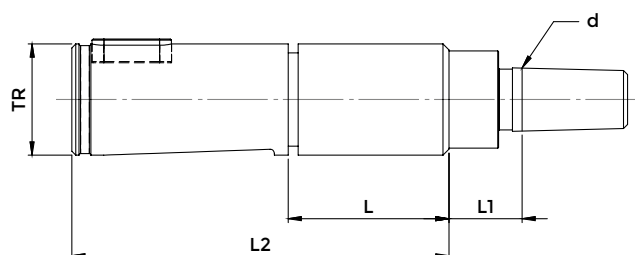
DIN 6327 ADJUSTMENT NUTS



DIN 6327

COD.	DESCRIPTION	TR	H	d	SCREW
					
2964	GH - TR 8 x 1	8x1	10	14,8	0011
2965	GH - TR10 x1,5	10x1,5	12	17,8	0017
2966	GH - TR12 x1,5	12x1,5	12	19,7	0017
2967	GH - TR16 x1,5	16x1,5	12	24,6	0019
2968	GH - TR20 x 2	20x2	12	31,6	0019
2969	GH - TR28 x 2	28x2	12	39,6	0020
2970	GH - TR36 x 2	36x2	14	49,6	0020
2971	GH - TR48 x 2	48x2	18	66,6	0021

SHANKS FOR DRILL CHUCKS DIN 238 / ISO 239 TYPE



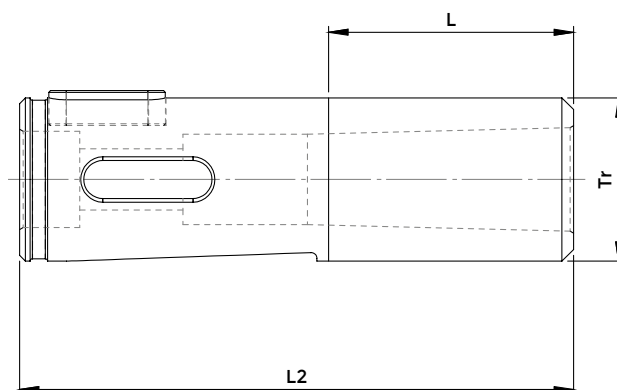
DIN 6327

COD.	DESCRIPTION	TR	L	L1	L2	d	ADJUSTMENT NUT
							
2774	TR 28 - B 16	28x2	42	21	95	15,733	2969
2775	TR 36 - B 16	36x2	50	21	118	15,733	2970

ACCESSORIES



DIN 6327 ADJUSTABLE MORSE TAPER ADAPTERS - "E" TYPE



DIN 6327

COD.	DESCRIPTION	TR	L	L2	ADJUSTMENT NUT
					
2984	E 16 x 1	16	40	85	2967
2985	E 20 x 1	20	40	88	2968
2986	E 28 x 1	28	42	95	2969
3167	E 28 x 2	28	42	95	2969
3168	E 36 x 2	36	50	118	2970
3410	E 36 x 3	36	50	118	2970
3198	E 48 x 2	48	65	144	2971

ACCESSORIES

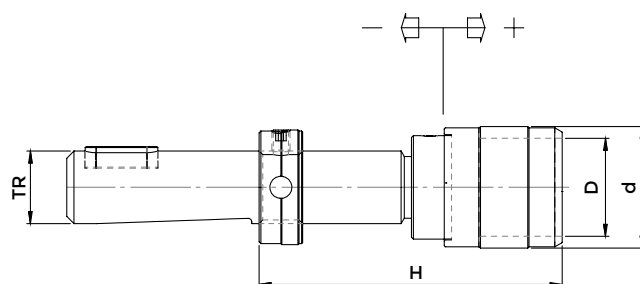


p. 585

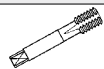
TENSION/COMPRESSION QUICK CHANGE TAPPING HEADS



Tapping adapters
from p. 654



DIN 6327

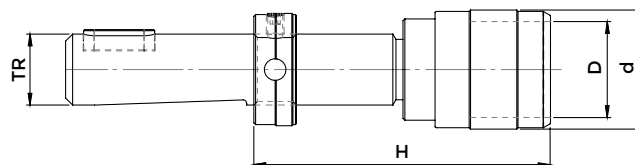
COD.	DESCRIPTION	TR	H	d	D	RANGE	TAP SIZE RANGE
							
3811	TR 16 - B. 0	16x2	49	26	13	- 6,5 + 6,5	M 1 ÷ M 10
3564	TR 16 - B. 1	16x2	51	36	19	-7,5 + 7,5	M 3 ÷ M 12 (* M 18)
3156	TR 20 - B. 0	20x2	49	26	13	- 6,5 + 6,5	M 1 ÷ M 10
3565	TR 20 - B. 1	20x2	51	38	19	-7,5 + 7,5	M 3 ÷ M 12 (* M 18)
3926	TR 20 - B. 2	20x2	75	55	31	-12,5 + 12,5	M 6 ÷ M 20 (* M 30)
3566	TR 28 - B. 1	28x2	51	38	19	-7,5 + 7,5	M 3 ÷ M 12 (* M 18)
3567	TR 28 - B. 2	28x2	76	55	31	-12,5 + 12,5	M 6 ÷ M 20 (* M 30)
3220	TR 28 - B. 3	28x2	108	79	48	-20,0 + 20,0	M14 ÷ M 33 (* M 48)
3568	TR 36 - B. 1	36x2	53	38	19	-7,5 + 7,5	M 3 ÷ M 12 (* M 18)
3569	TR 36 - B. 2	36x2	78	55	31	-12,5 + 12,5	M 6 ÷ M 20 (* M 30)
3570	TR 36 - B. 3	36x2	110	79	48	-20,0 + 20,0	M14 ÷ M 33 (* M 48)
3571	TR 48 - B. 3	48x2	114	79	48	-20,0 + 20,0	M14 ÷ M 33 (* M 48)

*Adapters with SCREWS
Supplied complete with adjustment nut

SOLID TAPPING HEADS



Tapping adapters
from p. 654

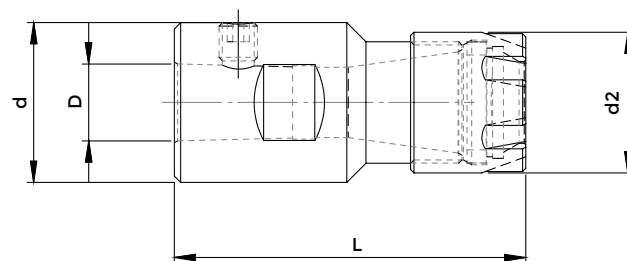


DIN 6327

COD.	DESCRIPTION	TR	H	d	D	TAP SIZE RANGE
5198	TR 16 - B. 0 FISSO	16x2	45	23	13	M 1 ÷ M 10
5199	TR 16 - B. 1 FISSO	16x2	49	32	19	M 3 ÷ M 12 (* M 18)
5211	TR 20 - B. 1 FISSO	20x2	49	32	19	M 3 ÷ M 12 (* M 18)
5212	TR 20 - B. 2 FISSO	20x2	66	50	31	M 6 ÷ M 20 (* M 30)
5213	TR 28 - B. 1 FISSO	28x2	49	32	19	M 3 ÷ M 12 (* M 18)
5214	TR 28 - B. 2 FISSO	28x2	66	50	31	M 6 ÷ M 20 (* M 30)
5215	TR 36 - B. 1 FISSO	36x2	49	32	19	M 3 ÷ M 12 (* M 18)
5216	TR 36 - B. 2 FISSO	36x2	68	50	31	M 6 ÷ M 20 (* M 30)

Supplied complete with adjustment nut

ER COLLET CHUCKS WITH MINI NUT



DIN 238

COD.	DESCRIPTION	d	ER	L	d2	d	NUT	WRENCH	COLLET
3193	"B12" - ER 11 GM	25	ER 11 1÷ 8	63	12,06	16	0432	5718	5573
3194	"B12" - ER 16 GM	25	ER 16 1÷12	55	12,06	22	1229	5719	0364
3221	"B12" - ER 20 GM	25	ER 20 1÷15	67	12,06	28	1230	5720	0787
3195	"B16" - ER 16 GM	25	ER 16 1÷12	85	15,73	22	1229	5719	0364
3196	"B16" - ER 20 GM	25	ER 20 1÷15	80	15,73	28	1230	5720	0787
3197	"B18" - ER 20 GM	28	ER 20 1÷15	74	17,78	28	1230	5720	0787

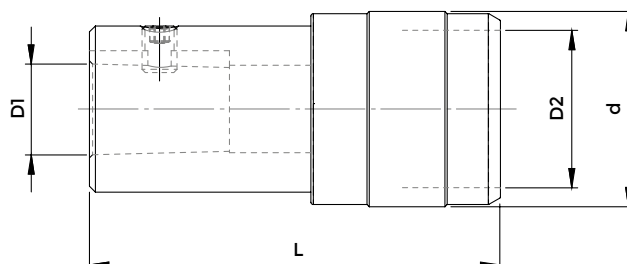
ACCESSORIES



SOLID TAPPING HEADS



Tapping adapters
from p. 654

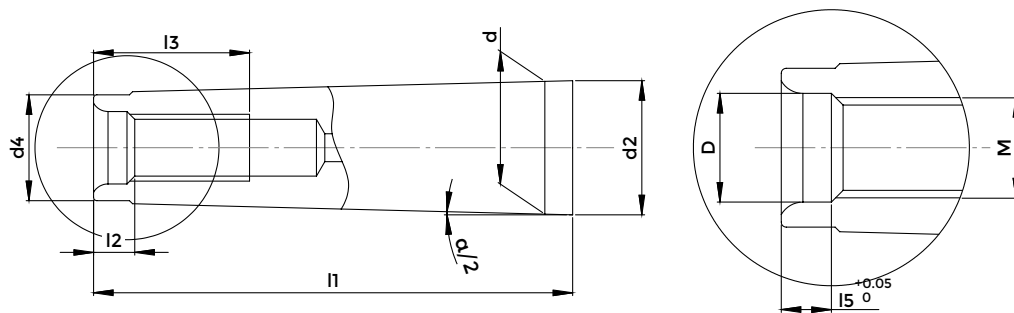


DIN 238

COD.	DESCRIPTION	L	D1	d	D2	TAP SIZE RANGE
0244	"B 12" - B. 0 FISSO	55	12,06	26	13	M 1 ÷ M 10
0320	"B 12" - B. 1 FISSO	59	12,06	33	19	M 3 ÷ M 12 (* M 18)
0340	"B 16" - B. 1 FISSO	65	15,73	33	19	M 3 ÷ M 12 (* M 18)
0071	"B 16" - B. 2 FISSO	84	15,73	50	31	M 6 ÷ M 20 (* M 30)
0384	"B 18" - B. 1 FISSO	73	17,78	33	19	M 3 ÷ M 12 (* M 18)
0072	"B 18" - B. 2 FISSO	92	17,78	50	31	M 6 ÷ M 20 (* M 30)

*Adapters with SCREWS

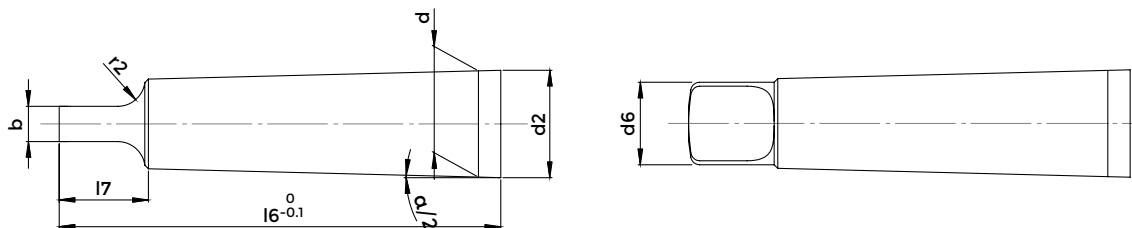
MORSE TAPER DIN 228-A STANDARD FEATURES (WITH THREAD)



DIN 288-A

CONE	d	d2	d4	D	M	l1	l2	l3	l5	α/2
CM 0	9,045	9,2	6	-	-	50	4	-	-	1° 29' 27"
CM 1	12,065	12,2	9	6,4	M 6	53,5	5	16	4	1° 25' 43"
CM 2	17,78	18	14	10,5	M 10	64	5	24	5	1° 25' 50"
CM 3	23,825	24,1	19	13	M 12	81	7	24	5,5	1° 26' 16"
CM 4	31,267	31,6	25	17	M 16	102,5	9	32	8,2	1° 29' 15"
CM 5	44,399	44,7	35,7	21	M 20	129,5	10	40	10	1° 30' 26"
CM 6	63,348	63,8	51	25	M 24	182	16	47	11,5	1° 29' 36"

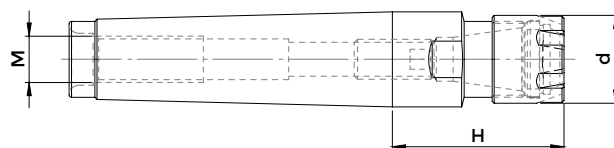
MORSE TAPER DIN 228-B STANDARD FEATURES (WITH TENON)



DIN 288-A

CONE	b	d	d2	d6	l6	l7	r2	α/2
CM 0	3,9	9,045	9,2	6	56,5	10,5	4	1° 29' 27"
CM 1	5,2	12,065	12,2	8,7	62	13,5	5	1° 25' 43"
CM 2	6,3	17,78	18	13,5	75	16	6	1° 25' 50"
CM 3	7,9	23,825	24,1	18,5	94	20	7	1° 26' 16"
CM 4	11,9	31,267	31,6	24,5	117,5	24	8	1° 29' 15"
CM 5	15,9	44,399	44,7	35,7	149,5	29	10	1° 30' 26"
CM 6	19	63,348	63,8	51	210	40	13	1° 29' 36"

MORSE TAPER SHANK ER COLLET CHUCKS WITH THREAD - MINI NUT



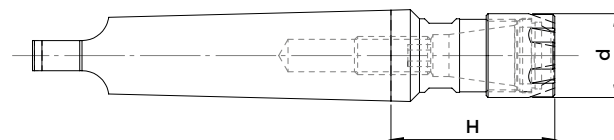
DIN 228-A

COD.	DESCRIPTION	CM	ER	H	d	M	NUT	WRENCH	COLLET
									
3509	CM 1 A - ER 11 GM	1	ER 11 1÷ 8	25	16	M 6	0432	5718	5573
3510	CM 1 A - ER 16 GM	1	ER 16 1÷ 12	40	22	M 6	1229	5719	0364
3511	CM 2 A - ER 16 GM	2	ER 16 1÷ 12	42	22	M 10	1229	5719	0364
3512	CM 2 A - ER 20 GM	2	ER 20 1÷ 15	50	28	M 10	1230	5720	0787
3513	CM 2 A - ER 25 GM	2	ER 25 1÷ 20	54	35	M 10	1231	5721	0996
3516	CM 3 A - ER 16 GM	3	ER 16 1÷ 12	43	22	M 12	1229	5719	0364
3517	CM 3 A - ER 20 GM	3	ER 20 1÷ 15	47	28	M 12	1230	5720	0787
3518	CM 3 A - ER 25 GM	3	ER 25 1÷ 20	58	35	M 12	1231	5721	0996

ACCESSORIES



MORSE TAPER SHANK ER COLLET CHUCKS WITH TENON - MINI NUT



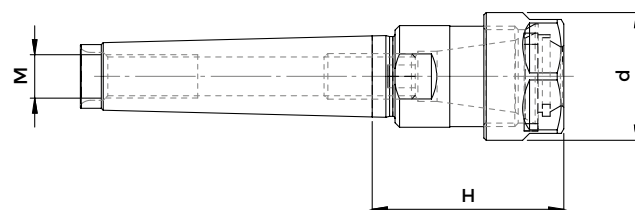
DIN 228-B

COD.	DESCRIPTION	CM	ER	H	d	NUT	WRENCH	COLLET
								
8613	CM 1 - ER 11 GM	1	ER 11 1÷ 8	25	16	0432	5718	5573
8614	CM 1 - ER 16 GM	1	ER 16 1÷12	40	22	1229	5719	0364
8615	CM 2 - ER 16 GM	2	ER 16 1÷12	42	22	1229	5719	0364
8616	CM 2 - ER 20 GM	2	ER 20 1÷15	50	28	1230	5720	0787
8617	CM 2 - ER 25 GM	2	ER 25 1÷20	54	35	1231	5721	0996
8618	CM 3 - ER 16 GM	3	ER 16 1÷12	43	22	1229	5719	0364
8619	CM 3 - ER 20 GM	3	ER 20 1÷15	47	28	1230	5720	0787
8620	CM 3 - ER 25 GM	3	ER 25 1÷20	58	35	1231	5721	0996

ACCESSORIES



MORSE TAPER SHANK ER COLLET CHUCKS WITH THREAD - HEXAGONAL NUT



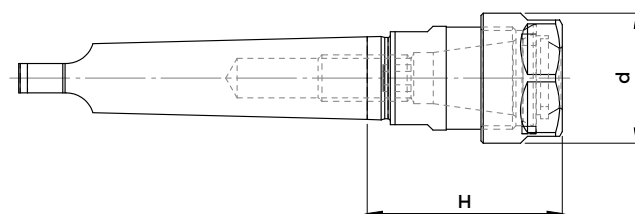
DIN 228-A

COD.	DESCRIPTION	CM	ER	H	d	M	NUT	WRENCH	COLLET
8621	CM 1 A - ER 16 GE	1	ER 16 1÷ 12	40	28	M 6			
8622	CM 2 A - ER 16 GE	2	ER 16 1÷ 12	42	28	M 10	1214	2906	0364
8623	CM 2 A - ER 20 GE	2	ER 20 1÷ 15	50	34	M 10	1215	2907	0787

ACCESSORIES



MORSE TAPER SHANK ER COLLET CHUCKS WITH TENON - HEXAGONAL NUT



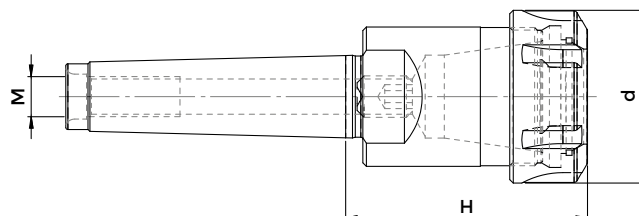
DIN 228-B

COD.	DESCRIPTION	CM	ER	H	d	NUT	WRENCH	COLLET
8624	CM 1 - ER 16 GE	1	ER 16 1÷12	40	28			
8625	CM 2 - ER 16 GE	2	ER 16 1÷12	42	28	1214	2906	0364
8626	CM 2 - ER 20 GE	2	ER 20 1÷15	50	34	1215	2907	0787

ACCESSORIES



MORSE TAPER SHANK ER COLLET CHUCKS WITH THREAD - STANDARD NUT



DIN 238-A

COD.	DESCRIPTION	CM	ER	H	d	M	NUT	WRENCH	COLLET
									
2915	CM 1 A - ER 16	1	ER 16 1÷12	40	32	M 6	4993	3698	0364
2916	CM 2 A - ER 16	2	ER 16 1÷12	42	32	M 10	4993	3698	0364
2917	CM 2 A - ER 20	2	ER 20 1÷15	50	35	M 10	4994	3699	0787
2918	CM 2 A - ER 25	2	ER 25 1÷20	54	42	M 10	4995	3669	0996
3310	CM 2 A - ER 32	2	ER 32 2÷25	59	50	M 10	4996	3670	0988
2919	CM 3 A - ER 25	3	ER 25 1÷20	53	42	M 12	4995	3669	0996
2920	CM 3 A - ER 32	3	ER 32 2÷25	70	50	M 12	4996	3670	0988
2921	CM 3 A - ER 40	3	ER 40 3÷32	80	63	M 12	4997	3671	0821
2922	CM 4 A - ER 32	4	ER 32 2÷25	60	50	M 16	4996	3670	0988
2923	CM 4 A - ER 40	4	ER 40 3÷32	81	63	M 16	4997	3671	0821
2924	CM 4 A - ER 50	4	ER 50 6÷36	96	78	M 16	4998	3668	4055
2902	CM 5 A - ER 32	5	ER 32 2÷25	50	50	M 20	4996	3670	0988
2925	CM 5 A - ER 40	5	ER 40 3÷32	81	63	M 20	4997	3671	0821
2926	CM 5 A - ER 50	5	ER 50 6÷36	91	78	M 20	4998	3668	4055

ACCESSORIES



p. 633



p. 615



p. 636



EQUIPMENT CASES WITH REDUCED SET OF ER COLLETS



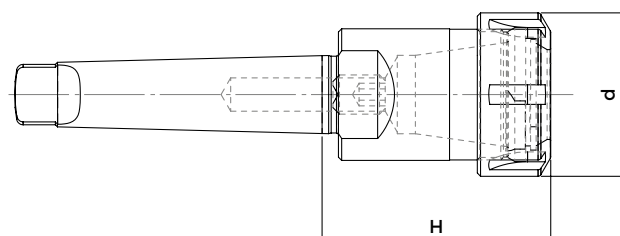
COD.	DESCRIPTION	CM	CHUCK	CASE	WRENCH	COLLET
						
7524	KIT Rid CM 2 A - ER 25	2	2918	7022	3669	0996: Ø 4 - 6 - 8 -10 -12 -16
7525	KIT Rid CM 2 A - ER 32	2	3310	7023	3670	0988: Ø 4 - 6 - 8 -10 -12 -16 - 20
7526	KIT Rid CM 3 A - ER 25	3	2919	7022	3669	0996: Ø 4 - 6 - 8 -10 -12 -16
7527	KIT Rid CM 3 A - ER 32	3	2920	7023	3670	0988: Ø 4 - 6 - 8 -10 -12 -16 - 20
7528	KIT Rid CM 3 A - ER 40	3	2921	7024	3671	0821: Ø 4 - 6 - 8 -10 -12 -16 - 20 -25
7529	KIT Rid CM 4 A - ER 32	4	2922	7023	3670	0988: Ø 4 - 6 - 8 -10 -12 -16 - 20
7530	KIT Rid CM 4 A - ER 40	4	2923	7024	3671	0821: Ø 4 - 6 - 8 -10 -12 -16 - 20 -25

EQUIPMENT CASES WITH COMPLETE SET OF ER COLLETS



COD.	DESCRIPTION	CM	CHUCK	CASE	WRENCH	COLLET
						
7508	KIT CM 2 A - ER 25	2	2918	7022	3669	0996: Ø 2 ÷ 16 (15 Pinze)
7509	KIT CM 2 A - ER 32	2	3310	7023	3670	0988: Ø 3 ÷ 20 (18 Pinze)
7510	KIT CM 3 A - ER 25	3	2919	7022	3669	0996: Ø 2 ÷ 16 (15 Pinze)
7511	KIT CM 3 A - ER 32	3	2920	7023	3670	0988: Ø 3 ÷ 20 (18 Pinze)
7512	KIT CM 3 A - ER 40	3	2921	7024	3671	0821: Ø 4 ÷ 26 (23 Pinze)
7513	KIT CM 4 A - ER 32	4	2922	7023	3670	0988: Ø 3 ÷ 20 (18 Pinze)
7514	KIT CM 4 A - ER 40	4	2923	7024	3671	0821: Ø 4 ÷ 26 (23 Pinze)

MORSE TAPER SHANK ER COLLET CHUCKS WITH TENON - STANDARD NUT



DIN 228-B

COD.	DESCRIPTION	CM	ER	H	d	NUT	SCREW	WRENCH	COLLET
									
8627	CM 1 - ER 16	1	ER 16 1÷12	40	32	4993	0181	3698	0364
8628	CM 2 - ER 16	2	ER 16 1÷12	42	32	4993	0186	3698	0364
8629	CM 2 - ER 20	2	ER 20 1÷15	50	35	4994	0186	3699	0787
8630	CM 2 - ER 25	2	ER 25 1÷20	54	42	4995	0186	3669	0996
8631	CM 2 - ER 32	2	ER 32 2÷25	59	50	4996	0186	3670	0988
8632	CM 3 - ER 25	3	ER 25 1÷20	53	42	4995	4973	3669	0996
8633	CM 3 - ER 32	3	ER 32 2÷25	70	50	4996	4973	3670	0988
8634	CM 3 - ER 40	3	ER 40 3÷32	80	63	4997	4973	3671	0821
8635	CM 4 - ER 32	4	ER 32 2÷25	60	50	4996	0190	3670	0988
8636	CM 4 - ER 40	4	ER 40 3÷32	81	63	4997	0190	3671	0821
8637	CM 4 - ER 50	4	ER 50 6÷36	96	78	4998	0190	3668	4055
8638	CM 5 - ER 32	5	ER 32 2÷25	50	50	4996	0191	3670	0988
8639	CM 5 - ER 40	5	ER 40 3÷32	81	63	4997	0195	3671	0821
8640	CM 5 - ER 50	5	ER 50 6÷36	91	78	4998	0195	3668	4055

ACCESSORIES

p. 633



p. 615



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EQUIPMENT CASES WITH REDUCED SET OF ER COLLETS



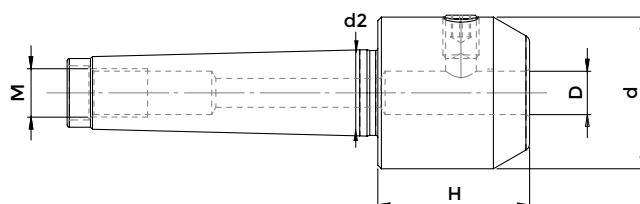
COD.	DESCRIPTION	CM	CHUCK	CASE	WRENCH	COLLET
						
7727	KIT Rid CM 2 - ER 25	2	8630	7022	3669	0996: Ø 4 - 6 - 8 -10 -12 -16
7728	KIT Rid CM 2 - ER 32	2	8631	7023	3670	0988: Ø 4 - 6 - 8 -10 -12 -16 - 20
7729	KIT Rid CM 3 - ER 25	3	8632	7022	3669	0996: Ø 4 - 6 - 8 -10 -12 -16
7730	KIT Rid CM 3 - ER 32	3	8633	7023	3670	0988: Ø 4 - 6 - 8 -10 -12 -16 - 20
7731	KIT Rid CM 3 - ER 40	3	8634	7024	3671	0821: Ø 4 - 6 - 8 -10 -12 -16 - 20 -25
7732	KIT Rid CM 4 - ER 32	4	8635	7023	3670	0988: Ø 4 - 6 - 8 -10 -12 -16 - 20
7733	KIT Rid CM 4 - ER 40	4	8636	7024	3671	0821: Ø 4 - 6 - 8 -10 -12 -16 - 20 -25

EQUIPMENT CASES WITH COMPLETE SET OF ER COLLETS



COD.	DESCRIPTION	CM	CHUCK	CASE	WRENCH	COLLET
						
7734	KIT CM 2 - ER 25	2	8630	7022	3669	0996: Ø 2 ÷ 16 (15 Pinze)
7735	KIT CM 2 - ER 32	2	8631	7023	3670	0988: Ø 3 ÷ 20 (18 Pinze)
7736	KIT CM 3 - ER 25	3	8632	7022	3669	0996: Ø 2 ÷ 16 (15 Pinze)
7737	KIT CM 3 - ER 32	3	8633	7023	3670	0988: Ø 3 ÷ 20 (18 Pinze)
7738	KIT CM 3 - ER 40	3	8634	7024	3671	0821: Ø 4 ÷ 26 (23 Pinze)
7739	KIT CM 4 - ER 32	4	8635	7023	3670	0988: Ø 3 ÷ 20 (18 Pinze)
7740	KIT CM 4 - ER 40	4	8636	7024	3671	0821: Ø 4 ÷ 26 (23 Pinze)

MORSE TAPER END MILL HOLDERS FOR DIN 1835-B SHANKS



DIN 228-A

COD.	DESCRIPTION	D	H	d	d2	M
9535	CM 2 A - d 16	16	58	48	18,0	M 10
9545	CM 3 A - d 20	20	60	52	24,1	M 12
9546	CM 3 A - d 25	25	70	65	24,1	M 12
9552	CM 4 A - d 16	16	58	48	31,6	M 16
9554	CM 4 A - d 20	20	60	52	31,6	M 16
9555	CM 4 A - d 25	25	70	65	31,6	M 16
9556	CM 4 A - d 32	32	75	72	31,6	M 16
9557	CM 4 A - d 40	40	85	90	31,6	M 16

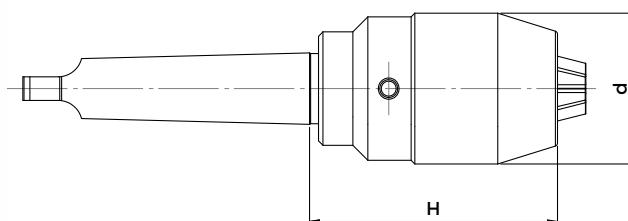
TENON FOR MORSE TAPER



DIN 228-A-B

COD.	DESCRIPTION	M
4079	T . CM 1 - M 6	M 6
4080	T . CM 2 - M 10	M 10
4081	T . CM 3 - M 12	M 12
4082	T . CM 4 - M 16	M 16
4083	T . CM 5 - M 20	M 20

MORSE TAPER SHANK DRILL CHUCKS - RIGHT SPIN



DIN 228-B

COD.	DESCRIPTION	CM	RANGE	d	H	WRENCH
						
8646	CM 2 - DC 13	2	0,5 ÷ 13	50	86	2370
8647	CM 3 - DC 13	3	0,5 ÷ 13	50	86	2370
8648	CM 3 - DC 16	3	3 ÷ 16	57	90	2371
8649	CM 4 - DC 13	4	0,5 ÷ 13	50	87	2370
8650	CM 4 - DC 16	4	3 ÷ 16	57	91	2371

Supplied complete with suitable wrench

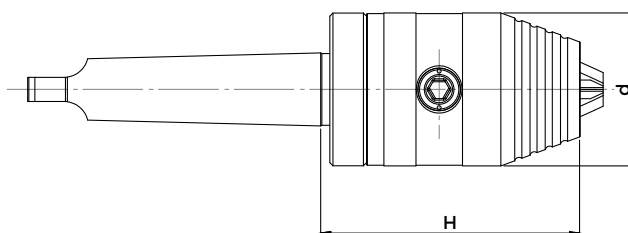
MORSE TAPER SHANK DRILL CHUCKS - RIGHT & LEFT SPIN



DIN 238 shank keyless drill chucks you can find at p. 599



Morse taper shank adapters to DIN 238 you can find at p. 600

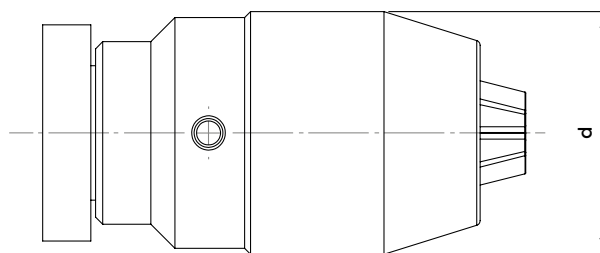


DIN 228-B

COD.	DESCRIPTION	CM	RANGE	d	H	WRENCH
						
8651	CM 2 - DCU 13	2	0,5 ÷ 13	50	87	2372
8652	CM 3 - DCU 13	3	0,5 ÷ 13	50	87	2372
8653	CM 3 - DCU 16	3	3 ÷ 16	50	92	2372
8654	CM 4 - DCU 13	4	0,5 ÷ 13	50	88	2372
8655	CM 4 - DCU 16	4	3 ÷ 16	50	94	2372

Supplied complete with suitable wrench

KEYLESS DRILL CHUCKS

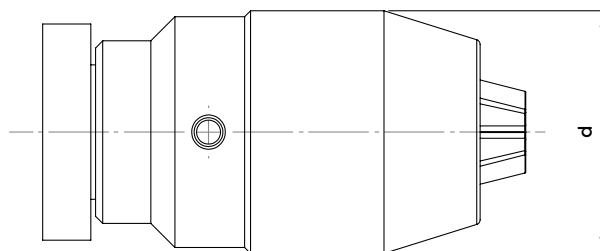


DIN 238

COD.	DESCRIPTION	d	RANGE	CLAMPS	SCREW	WRENCH
						
2800	B 10 - DC 6	33	0,5 ÷ 6,5	9010	9018	-
2801	B 10 - DC 8	38	0,5 ÷ 8	9011	9019	2368
2834	B 10 - DC 10	43	0,5 ÷ 10	9012	9020	2369
2802	B 12 - DC 8	38	0,5 ÷ 8	9011	9019	2368
2803	B 12 - DC 10	43	0,5 ÷ 10	9012	9020	2369
2804	B 12 - DC 13	50	0,5 ÷ 13	9013	9021	2370
2805	B 16 - DC 10	43	0,5 ÷ 10	9014	9022	2369
2806	B 16 - DC 13	50	0,5 ÷ 13	9013	9021	2370
2807	B 16 - DC 16	57	3 ÷ 16	9015	9023	2371
2808	B 18 - DC 16	57	3 ÷ 16	9015	9023	2371

Supplied complete with suitable wrench

HIGH PRECISION KEYLESS DRILL CHUCKS

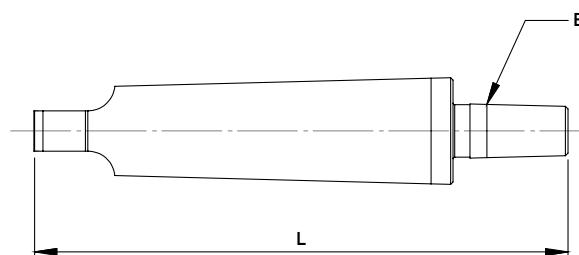


DIN 238

COD.	DESCRIPTION	d	RANGE	CLAMPS	SCREW	WRENCH
						
2853	B 10 - DC 8 Precision	38	0,5 ÷ 8	9011	9019	2368
2854	B 10 - DC 10 Precision	43	0,5 ÷ 10	9012	9020	2369
2810	B 12 - DC 8 Precision	38	0,5 ÷ 8	9011	9019	2368
2856	B 12 - DC 10 Precision	43	0,5 ÷ 10	9012	9020	2369
2858	B 12 - DC 13 Precision	50	0,5 ÷ 13	9016	9021	2370
2811	B 16 - DC 10 Precision	43	0,5 ÷ 10	9014	9022	2369
2812	B 16 - DC 13 Precision	50	0,5 ÷ 13	9016	9021	2370
2813	B 16 - DC 16 Precision	57	3 ÷ 16	9017	9023	2371
2818	B 18 - DC 16 Precision	57	3 ÷ 16	9017	9023	2371

Supplied complete with suitable wrench

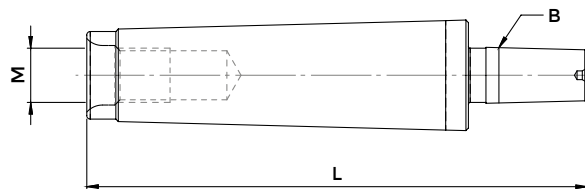
MORSE TAPER ADAPTERS TO DIN 238 (ISO 239)



DIN 238-B

COD.	DESCRIPTION	CM	B	L
409601B10	CM 1 - B 10	1	10	83
409601B12	CM 1 - B 12	1	12	89
409601B16	CM 1 - B 16	1	16	99
409601B18	CM 1 - B 18	1	18	99
409602B10	CM 2 - B 10	2	10	105
409602B12	CM 2 - B 12	2	12	106
409602B16	CM 2 - B 16	2	16	112
409602B18	CM 2 - B 18	2	18	119
409602B22	CM 2 - B 22	2	22	130
409603B12	CM 3 - B 12	3	12	125
409603B16	CM 3 - B 16	3	16	134
409603B18	CM 3 - B 18	3	18	140
409603B22	CM 3 - B 22	3	22	147
409604B12	CM 4 - B 12	4	12	152
409604B16	CM 4 - B 16	4	16	156
409604B18	CM 4 - B 18	4	18	164
409604B22	CM 4 - B 22	4	22	176
409604B24	CM 4 - B 24	4	24	186
409605B16	CM 5 - B 16	5	16	190
409605B18	CM 5 - B 18	5	18	204
409605B22	CM 5 - B 22	5	22	213
409605B24	CM 5 - B 24	5	24	221

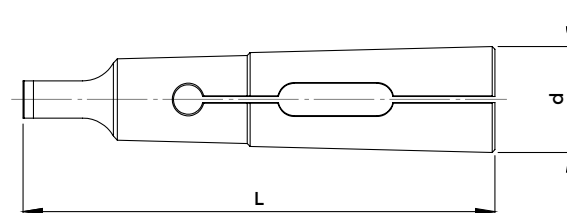
MORSE TAPER ADAPTERS WITH THREAD TO DIN 238 (ISO 239)



DIN 238-A

COD.	DESCRIPTION	CM	M	B	L
402402B10	CM 2 A - B 10	2	M 10	10	90
402402B12	CM 2 A - B 12	2	M 10	12	95
402402B16	CM 2 A - B 16	2	M 10	16	101
402403B16	CM 3 A - B 16	3	M 12	16	118
402404B16	CM 4 A - B 16	4	M 16	16	141

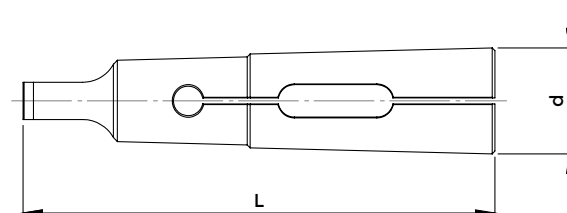
MORSE TAPER COLLETS FOR TWIST DRILLS



DIN 6329

COD.	DESCRIPTION	CM	RANGE	d	L	EINHEITS
5570 P	CM 0 - PUNTE	0	1 ÷ 5,5	9,2	59,5	510E
0640 P	CM 1 - PUNTE	1	1 ÷ 10,0	12,2	65,5	511E
0641 P	CM 2 - PUNTE	2	2,0 ÷ 15,0	18	80	514E
0642 P	CM 3 - PUNTE	3	8,0 ÷ 20,0	24,1	99	545E
0643 P	CM 4 - PUNTE	4	12,0 ÷ 25,0	31,6	124	548E
5571 P	CM 5 - PUNTE	5	32	44,7	156,2	599E

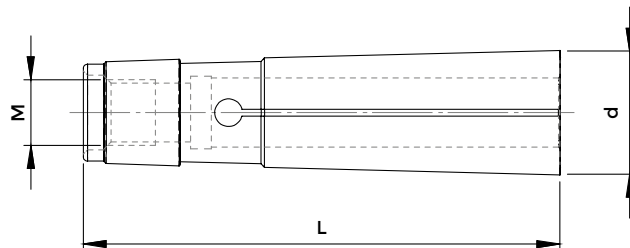
MORSE TAPER COLLETS FOR MILLING CUTTERS



DIN 6328

COD.	DESCRIPTION	CM	RANGE	d	L	EINHEITS
5570 M	CM 0 - MASCHI	0	2,5 ÷ 4,5	9,2	59,5	500E
0640 M	CM 1 - MASCHI	1	2,5 ÷ 10,0	12,2	65,5	501E
0641 M	CM 2 - MASCHI	2	3,15 ÷ 14,0	18	80	504E
0642 M	CM 3 - MASCHI	3	6,0 ÷ 18,0	24,1	99	535E
0643 M	CM 4 - MASCHI	4	11,0 ÷ 25,0	31,6	124	538E
5571 M	CM 5 - MASCHI	5	20,0 ÷ 36,0	44,7	156,2	589E

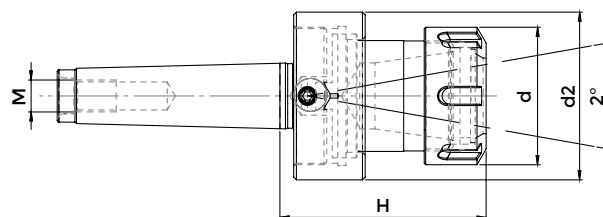
THREADED MORSE TAPER COLLETS



UNI 4702

COD.	DESCRIPTION	CM	RANGE	M	d	L	EINHEITS
0752	CM 2	2	1 ÷ 14	M 10	18	69	503E
0712	CM 3	3	2 ÷ 18	M 12	24,1	85,5	536E
0865	CM 4	4	4 ÷ 25	M 16	31,6	108,5	539E

MORSE TAPER FLOATING REAMER HOLDERS WITH ER COLLET



DIN 228-A

COD.	DESCRIPTION	CM	ER	d	d2	H	M	NUT	WRENCH	COLLET
3532	CM2 RM - ER 16	2	ER 161÷12	32	40	55	M 10			
3533	CM2 RM - ER 20	2	ER 20 1÷15	35	40	60	M 10	4993	3698	0364
3534	CM3 RM - ER 25	3	ER 25 1÷20	42	61	63	M 12	4994	3698	0787
3535	CM3 RM - ER 32	3	ER 32 2÷25	50	61	75	M 12	4995	3699	0996
								4996	3670	0988

ACCESSORIES



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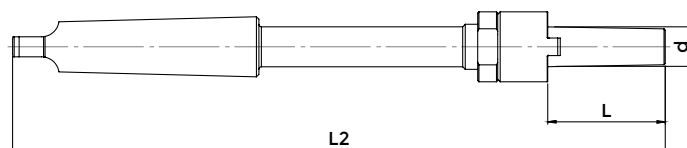
p. 615



p. 636



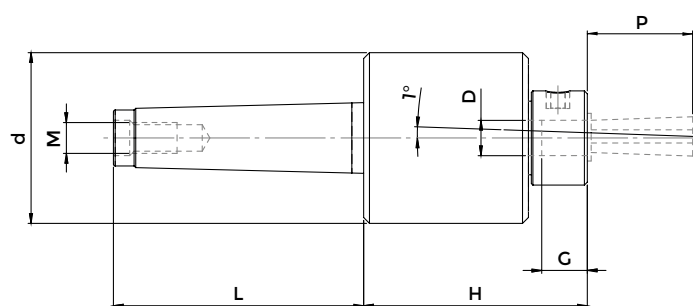
MORSE TAPER SHELL REAMER HOLDERS WITH EJECTOR



DIN 228-B

COD.	DESCRIPTION	CM	d	L	L2
1906	PA . CM 2 - D. 10	2	10	40	220
1907	PA . CM 3 - D. 13	3	13	45	250
1913	PA . CM 3 - D. 16	3	16	50	261
1914	PA . CM 3 - D. 19	3	19	56	270
1922	PA . CM 3 - D. 22	3	22	63	278
1925	PA . CM 4 - D. 19	4	19	56	298
1939	PA . CM 4 - D. 22	4	22	63	312
1944	PA . CM 4 - D. 27	4	27	71	325
1945	PA . CM 4 - D. 32	4	32	80	345
1946	PA . CM 5 - D. 27	5	27	71	359
1964	PA . CM 5 - D. 32	5	32	80	376
1966	PA . CM 5 - D. 40	5	40	90	396

MORSE TAPER BROACHING TOOLHOLDERS



DIN 228-A

COD.	DESCRIPTION	CM	D	P	L	H	G	d	M
1668	P/UTENSILE a BROCCIARE - CM.2 / F. 8	2	8	18	69	38	10	32	M 10
1669	P/UTENSILE a BROCCIARE - CM.2 / F.12	2	12	25	69	46	16	44	M 10
1670	P/UTENSILE a BROCCIARE - CM.3 / F.16	3	16	40	85	76	21	58	M 12
1671	P/UTENSILE a BROCCIARE - CM.4 / F.16	4	16	40	109	76	21	58	M 16

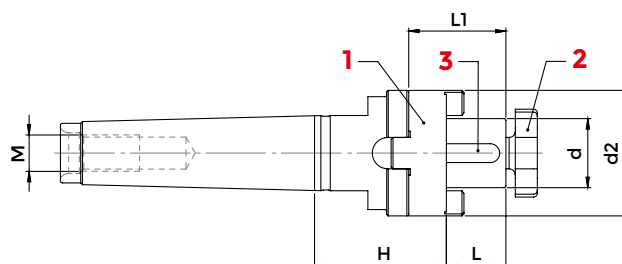
For the right broaching toolholder working is important to respect broach **P** dimension. Informations from p. 553

BROACHES



p. 558

MORSE TAPER SHANK WITH THREAD DIN 6358 COMBI SHELL MILL HOLDERS



DIN 228-A

COD.	DESCRIPTION	CM	d	H	L1	L	d2	M	1	2	3
									COUPLING	CROSS SCREW	KEY WRENCH
											 
4420	CM 2 A - D. 16 C	2	16	37	27	17	32	M 10	4090	4985	0115 4562
4421	CM 2 A - D. 22 C	2	22	42	31	19	40	M 10	4091	4986	0116 4563
4292	CM 3 A - D. 16 C	3	16	37	27	17	32	M 12	4090	4985	0115 4562
4293	CM 3 A - D. 22 C	3	22	42	31	19	40	M 12	4091	4986	0116 4563
4294	CM 3 A - D. 27 C	3	27	42	33	21	48	M 12	4092	4987	0122 4564
4295	CM 3 A - D. 32 C	3	32	63	38	24	58	M 12	4093	4988	0125 4565
4296	CM 4 A - D. 16 C	4	16	55	27	17	32	M 16	4090	4985	0115 4562
4297	CM 4 A - D. 22 C	4	22	55	31	19	40	M 16	4091	4986	0116 4563
4298	CM 4 A - D. 27 C	4	27	55	33	21	48	M 16	4092	4987	0122 4564
4299	CM 4 A - D. 32 C	4	32	55	38	24	58	M 16	4093	4988	0125 4565

ACCESSORIES



p. 675



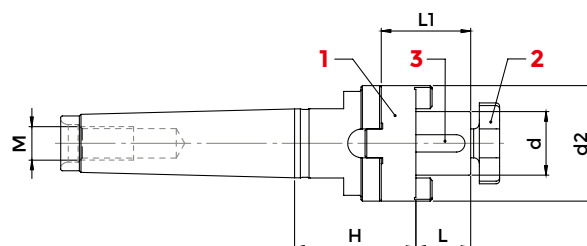
p. 674



p. 675



MORSE TAPER SHANK WITH THREAD DIN 6358 COMBI SHELL MILL HOLDERS



DIN 228-B

COD.	DESCRIPTION	CM	d	H	L1	L	d2	1 JOINT OF TRANSMISSION	2 CROSS SCREW	3 KEY	WRENCH
8656	CM 2 - D. 16 C	2	16	37	27	17	32				
8657	CM 2 - D. 22 C	2	22	42	31	19	40	4090	4985	0115	4562
8659	CM 3 - D. 22 C	3	22	42	31	19	40	4091	4986	0116	4563
8660	CM 3 - D. 27 C	3	27	42	33	21	48	4091	4986	0116	4563
8661	CM 3 - D. 32 C	3	32	63	38	24	58	4092	4987	0122	4564
8662	CM 4 - D. 16 C	4	16	55	27	17	32	4093	4988	0125	4565
8662	CM 4 - D. 16 C	4	16	55	27	17	32	4090	4985	0115	4562
8663	CM 4 - D. 22 C	4	22	55	31	19	40	4091	4986	0116	4563
8664	CM 4 - D. 27 C	4	27	55	33	21	48	4092	4987	0122	4564
8665	CM 4 - D. 32 C	4	32	55	38	24	58	4093	4988	0125	4565

ACCESSORIES



p. 675



p. 674



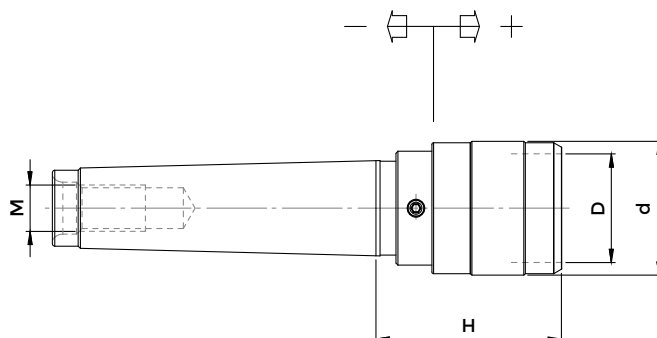
p. 675



TENSION/COMPRESSION MORSE TAPER TAPPING HEADS WITH THREAD



Tapping adapters from p. 654



DIN 228-A

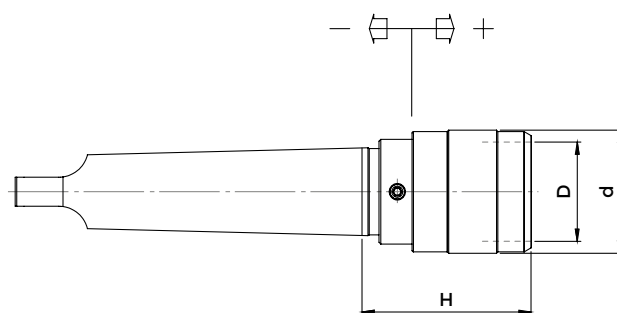
COD.	DESCRIPTION	CM	H	d	D	M	RANGE	TAP SIZE RANGE
4287	CM 2 A - B. 0	2	44	26	13	M 10	- 6,5 + 6,5	M 1 ÷ M 10
4286	CM 2 A - B. 1	2	46	38	19	M 10	-7,5 + 7,5	M 3 ÷ M 12 (* M 18)
4288	CM 3 A - B. 1	3	46	38	19	M 12	-7,5 + 7,5	M 3 ÷ M 12 (* M 18)
4289	CM 3 A - B. 2	3	70	55	31	M 12	-12,5 + 12,5	M 6 ÷ M 20 (* M 30)
4290	CM 4 A - B. 2	4	71	55	31	M 16	-12,5 + 12,5	M 6 ÷ M 20 (* M 30)
4291	CM 4 A - B. 3	4	104	79	48	M 16	-20,0 + 20,0	M 14 ÷ M 33 (* M 48)
4426	CM 5 A - B. 3	5	104	79	48	M 20	-20,0 + 20,0	M 14 ÷ M 33 (* M 48)

*Adapters with screw

TENSION/COMPRESSION MORSE TAPER TAPPING HEADS WITH TENON



Tapping adapters from p. 654



DIN 228-B

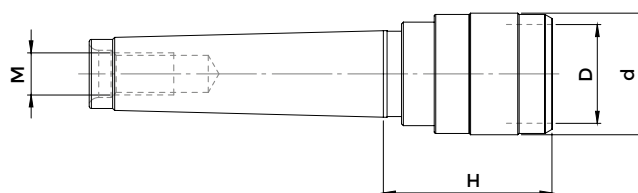
COD.	DESCRIPTION	CM	H	d	D	RANGE	TAP SIZE RANGE
4278	CM 2 - B. 0	2	44	26	13	- 6,5 + 6,5	M 1 ÷ M 10
3846	CM 2 - B. 1	2	46	38	19	-7,5 + 7,5	M 3 ÷ M 12 (* M 18)
3847	CM 3 - B. 1	3	46	38	19	-7,5 + 7,5	M 3 ÷ M 12 (* M 18)
3848	CM 3 - B. 2	3	69	55	31	-12,5 + 12,5	M 6 ÷ M 20 (* M 30)
3849	CM 4 - B. 2	4	70	55	31	-12,5 + 12,5	M 6 ÷ M 20 (* M 30)
3850	CM 4 - B. 3	4	104	79	48	-20,0 + 20,0	M 14 ÷ M 33 (* M 48)
4427	CM 5 - B. 3	5	104	79	48	-20,0 + 20,0	M 14 ÷ M 33 (* M 48)

*Adapters with screw

MORSE TAPER SOLID TAPPING HEADS WITH THREAD

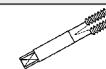


Tapping adapters
from p. 654



DIN 228-A

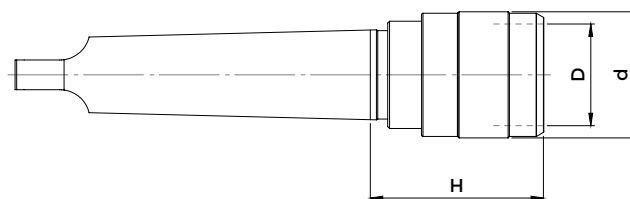
COD.	DESCRIPTION	CM	H	d	D	M	TAP SIZE RANGE
4696	CM 2 A FISSO - B. 1	2	44	33	19	M 10	M 3 ÷ M 12 (* M 18)
4697	CM 2 A FISSO - B. 2	2	61	50	31	M 10	M 6 ÷ M 20 (* M 30)
4698	CM 3 A FISSO - B. 1	3	44	33	19	M 12	M 3 ÷ M 12 (* M 18)
4699	CM 3 A FISSO - B. 2	3	61	50	31	M 12	M 6 ÷ M 20 (* M 30)



MORSE TAPER SOLID TAPPING HEADS WITH TENON

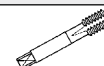


Tapping adapters
from p. 654

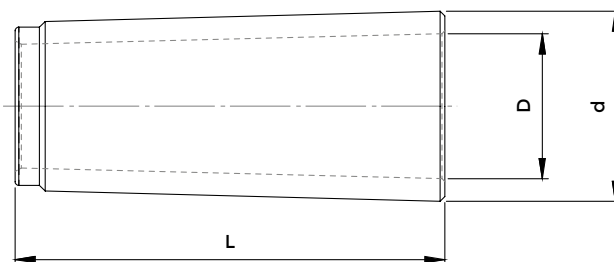


DIN 228-B

COD.	DESCRIPTION	CM	H	d	D	TAP SIZE RANGE
4279	CM 1 FISSO - B. 0	1	39	23	13	M 1 ÷ M 10
4282	CM 2 FISSO - B. 0	2	40	23	13	M 1 ÷ M 10
4283	CM 2 FISSO - B. 1	2	45	33	19	M 3 ÷ M 12 (* M 18)
4027	CM 2 FISSO - B. 2	2	61	50	31	M 6 ÷ M 20 (* M 30)
4284	CM 3 FISSO - B. 1	3	45	33	19	M 3 ÷ M 12 (* M 18)
4285	CM 3 FISSO - B. 2	3	61	50	31	M 6 ÷ M 20 (* M 30)
4340	CM 4 FISSO - B. 2	4	61	50	31	M 6 ÷ M 20 (* M 30)



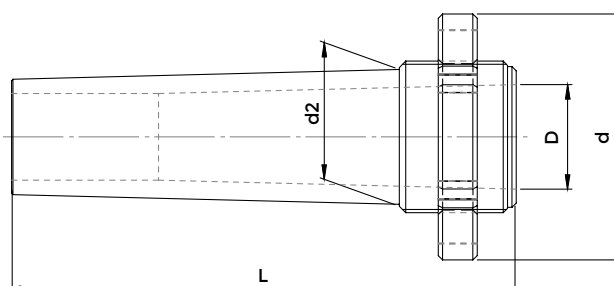
MORSE TAPER OPEN-ENDED SLEEVES



RCM.P

COD.	DESCRIPTION	EXTERNAL MT	INTERNAL MT	L	d	D
409700021	RCM. P/2 - 1	2	1	60	18	12
409700031	RCM. P/3 - 1	3	1	70	24,1	12
409700032	RCM. P/3 - 2	3	2	70	24,1	17,7
409700042	RCM. P/4 - 2	4	2	70	31,6	17,7
409700043	RCM. P/4 - 3	4	3	70	31,6	23,8
409700052	RCM. P/5 - 2	5	2	77	44,7	17,7
409700053	RCM. P/5 - 3	5	3	77	44,7	23,8
409700054	RCM. P/5 - 4	5	4	77	44,7	31,2
409700063	RCM. P/6 - 3	6	3	110	63,8	23,8
409700064	RCM. P/6 - 4	6	4	110	63,8	31,2
409700065	RCM. P/6 - 5	6	5	110	63,8	44,3

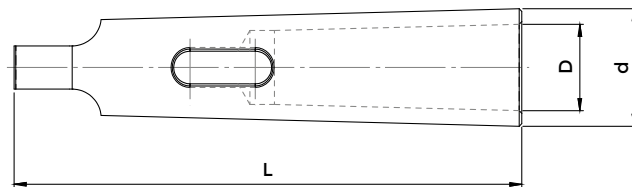
MORSE TAPER SLEEVES WITH RELEASE NUT



RCM.E

COD.	DESCRIPTION	EXTERNAL MT	INTERNAL MT	L	d	D	d2
404200021	RCM.E / 2 - 1	2	1	84	38	12,0	17,7
404200031	RCM.E / 3 - 1	3	1	102	48	12,0	23,8
404200032	RCM.E / 3 - 2	3	2	102	48	17,7	23,8
404200041	RCM.E / 4 - 1	4	1	122	57	12,00	31,2
404200042	RCM.E / 4 - 2	4	2	122	57	17,7	31,2
404200043	RCM.E / 4 - 3	4	3	122	57	23,8	31,2
404200052	RCM.E / 5 - 2	5	2	153	73	17,7	44,3
404200053	RCM.E / 5 - 3	5	3	153	73	23,8	44,3
404200054	RCM.E / 5 - 4	5	4	153	73	31,2	44,3
404200063	RCM.E / 6 - 3	6	3	212	98	23,8	63,3
404200064	RCM.E / 6 - 4	6	4	212	98	31,2	63,3
404200065	RCM.E / 6 - 5	6	5	212	98	44,3	63,3

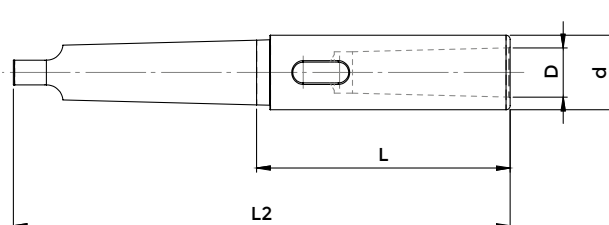
MORSE TAPER ADAPTERS



RCM.C - DIN 2185

COD.	DESCRIPTION	EXTERNAL MT	INTERNAL MT	L	d	D
409800010	RCM.C/ 1 - 0	1	0	80	12,2	9,045
409800021	RCM.C/ 2 - 1	2	1	92	18	12,065
409800031	RCM.C/ 3 - 1	3	1	99	24,1	12,065
409800032	RCM.C/ 3 - 2	3	2	112	24,1	17,78
409800041	RCM.C/ 4 - 1	4	1	124	31,6	12,065
409800042	RCM.C/ 4 - 2	4	2	124	31,6	17,78
409800043	RCM.C/ 4 - 3	4	3	140	31,6	23,825
409800051	RCM.C/ 5 - 1	5	1	156	44,7	12,065
409800052	RCM.C/ 5 - 2	5	2	156	44,7	17,78
409800053	RCM.C/ 5 - 3	5	3	156	44,7	23,825
409800054	RCM.C/ 5 - 4	5	4	171	44,7	31,267
409800062	RCM.C/ 6 - 2	6	2	218	63,8	17,78
409800063	RCM.C/ 6 - 3	6	3	218	63,8	23,825
409800064	RCM.C/ 6 - 4	6	4	218	63,8	31,267
409800065	RCM.C/ 6 - 5	6	5	218	63,8	44,399

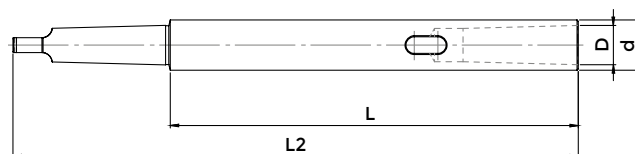
EXTENDED MORSE TAPER ADAPTERS



RCM.L - DIN 2187

COD.	DESCRIPTION	EXTERNAL MT	INTERNAL MT	L	L2	d	D
409900011	RCM.L / 1 - 1	1	1	83	145	20	12,065
409900012	RCM.L / 1 - 2	1	2	98	160	30	17,78
409900021	RCM.L / 2 - 1	2	1	85	160	20	12,065
409900022	RCM.L / 2 - 2	2	2	100	175	30	17,78
409900023	RCM.L / 2 - 3	2	3	121	196	36	23,825
409900024	RCM.L / 2 - 4	2	4	145	220	48	31,267
409900031	RCM.L / 3 - 1	3	1	81	175	20	12,065
409900032	RCM.L / 3 - 2	3	2	100	194	30	17,78
409900033	RCM.L / 3 - 3	3	3	112	215	36	23,825
409900034	RCM.L / 3 - 4	3	4	146	240	48	31,267
409900041	RCM.L / 4 - 1	4	1	82,5	200	20	12,065
409900042	RCM.L / 4 - 2	4	2	97,5	215	30	17,78
409900043	RCM.L / 4 - 3	4	3	122,5	240	36	23,825
409900044	RCM.L / 4 - 4	4	4	147,5	265	48	31,267
409900045	RCM.L / 4 - 5	4	5	182,5	300	63	44,399
409900051	RCM.L / 5 - 1	5	1	82,5	232	20	12,065
409900052	RCM.L / 5 - 2	5	2	97,5	247	30	17,78
409900053	RCM.L / 5 - 3	5	3	118,5	268	36	23,825
409900054	RCM.L / 5 - 4	5	4	150,5	300	48	31,267
409900055	RCM.L / 5 - 5	5	5	185,5	335	63	44,399
409900056	RCM.L / 5 - 6	5	6	247	396	82	63,348
409900063	RCM.L / 6 - 3	6	3	120	330	36	23,825
409900064	RCM.L / 6 - 4	6	4	180	355	48	31,267
409900065	RCM.L / 6 - 5	6	5	180	390	63	44,399
409900066	RCM.L / 6 - 6	6	6	241	451	82	63,348

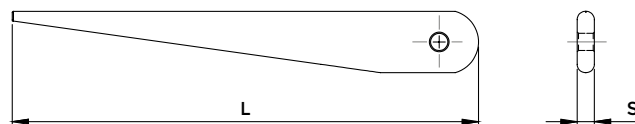
EXTRA-LONG MORSE TAPER EXTENSIONS



RXL

COD.	DESCRIPTION	EXTERNAL MT	INTERNAL MT	L	L2	d	D
8800	RXL 1 - 1 / 200	1	1	138	200	20	12,065
8801	RXL 1 - 1 / 250	1	1	188	250	20	12,065
8802	RXL 1 - 1 / 300	1	1	238	300	20	12,065
8803	RXL 1 - 1 / 350	1	1	288	350	20	12,065
8804	RXL 1 - 1 / 400	1	1	338	400	20	12,065
8805	RXL 1 - 1 / 450	1	1	388	450	20	12,065
8806	RXL 1 - 1 / 500	1	1	438	500	20	12,065
8807	RXL 2 - 2 / 200	2	2	125	200	25	17,78
8808	RXL 2 - 2 / 250	2	2	175	250	25	17,78
8809	RXL 2 - 2 / 300	2	2	225	300	25	17,78
8810	RXL 2 - 2 / 350	2	2	275	350	25	17,78
8811	RXL 2 - 2 / 400	2	2	325	400	25	17,78
8812	RXL 2 - 2 / 450	2	2	375	450	25	17,78
8813	RXL 2 - 2 / 500	2	2	425	500	25	17,78
8814	RXL 2 - 2 / 600	2	2	525	600	25	17,78
8815	RXL 3 - 3 / 250	3	3	156	250	32	23,825
8816	RXL 3 - 3 / 300	3	3	206	300	32	23,825
8817	RXL 3 - 3 / 350	3	3	256	350	32	23,825
8818	RXL 3 - 3 / 400	3	3	306	400	32	23,825
8819	RXL 3 - 3 / 450	3	3	356	450	32	23,825
8820	RXL 3 - 3 / 500	3	3	405	500	32	23,825
8821	RXL 3 - 3 / 600	3	3	506	600	32	23,825
8822	RXL 4 - 4 / 300	4	4	182,5	300	40	31,267
8823	RXL 4 - 4 / 350	4	4	232,5	350	40	31,267
8824	RXL 4 - 4 / 400	4	4	282,5	400	40	31,267
8825	RXL 4 - 4 / 450	4	4	332,5	450	40	31,267
8826	RXL 4 - 4 / 500	4	4	382,5	500	40	31,267
8827	RXL 4 - 4 / 600	4	4	482,5	600	40	31,267

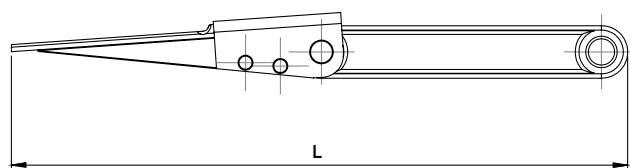
CONE EJECTORS



DIN 317

COD.	DESCRIPTION	CM	L	S
5235	BC.CM 0	0	90	4
5236	BC.CM 1	1	140	5
5236	BC.CM 2	2	140	5
5237	BC.CM 3	3	190	7
5238	BC.CM 4	4	225	10
5239	BC.CM 5	5	265	15
5239	BC.CM 6	6	265	15

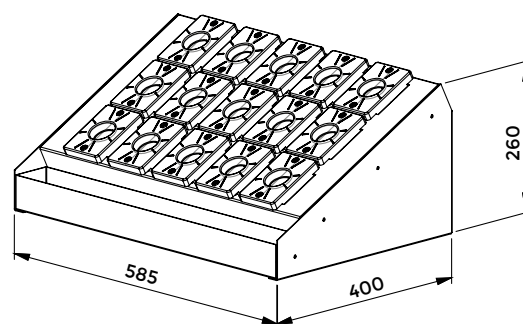
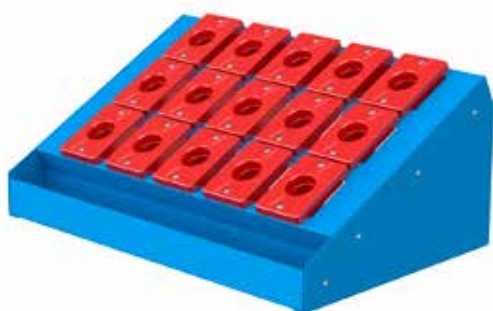
CONE EJECTORS UNIVERSAL VERSION



DIN 317

COD.	DESCRIPTION	CM	L
5288	BU . CM 1 - 2 - 3	1-2-3	317
5289	BU . CM 4 - 5 - 6	4-5-6	380

MORSE TAPER SHANK STORAGE

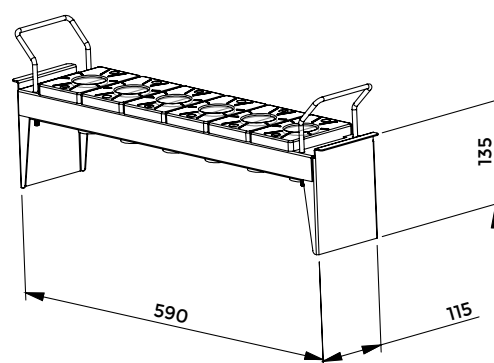


DIN 807

COD.	DESCRIPTION	MT	N° OF SEATS	MORSE TAPER BUSH	SCREW
					
9468	MAG. CM 2	2	15	9448	0033
9469	MAG. CM 3	3	15	9449	0033
3696	MAG. CM 4	4	15	4400	0033
3702G	MAG. CM 5	5	15	4418G	0033

Supplied complete of red tool holder bushings

BENCH SUPPORTS FOR MORSE TAPER SHANK

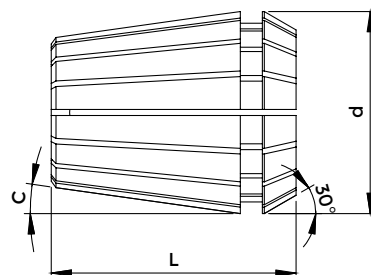
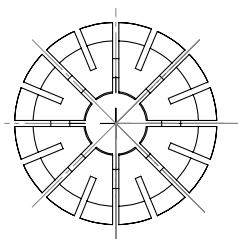


DIN 317

COD.	DESCRIPTION	MT	N° OF SEATS	MORSE TAPER BUSH
				
9458	UNITÀ CM 2	2	6	9448
9459	UNITÀ CM 3	3	6	9449
4329	UNITÀ CM 4	4	6	4400
4330	UNITÀ CM 5	5	6	4418

Supplied complete of red tool holder bushings

ER COLLETS



DIN 6499/B

COD.	TYPE	RANGE	CLAMPING	STEP	d	L	C	EINHEITS
0554	ER 8	1 ÷ 5	mm 0,5	0,5	8,5	13,5	8 °	4004E
5573	ER 11	1 ÷ 7 OVERSIZE 7,5 ÷ 8	mm 0,5 mm 0,5	0,5	11,5	18,0 OVERSIZE → 15,0	8 °	4008E
5601	ER 12	1 ÷ 3 3 ÷ 8	mm 0,5 mm 1,0	0,5	12	19,5	8 °	424E
0364	ER 16	1 ÷ 3 3 ÷ 10 OVERSIZE 10,5 ÷ 12	mm 0,5 mm 1,0 mm 0,5	0,5	17	27,5 OVERSIZE → 21,5	8 °	426E
0787	ER 20	1 ÷ 3 3 ÷ 13 OVERSIZE 14 ÷ 15	mm 0,5 mm 1,0 mm 0,5	0,5	21	31,5 OVERSIZE → 26,5	8 °	428E
0996	ER 25	1 ÷ 3 3 ÷ 16 OVERSIZE 16,5 ÷ 20	mm 0,5 mm 1,0 mm 0,5	0,5	26	34,0 OVERSIZE → 28,0	8 °	430E
0988	ER 32	2 ÷ 20 OVERSIZE 21 ÷ 25	mm 1,0 mm 0,5	0,5	33	40,0 OVERSIZE → 34,0	8 °	470E
0821	ER 40	3 ÷ 30 OVERSIZE 31 ÷ 32	mm 1,0 mm 0,5	0,5	41	46,0 OVERSIZE → 39,5	8 °	472E
4055	ER 50	6 ÷ 34 OVERSIZE 35 ÷ 36	mm 1,0 mm 1,0	1,0	52	60,0 OVERSIZE 60,0	8 °	477E
4056	ER 60	10 ÷ 40	mm 2,0	2,0	61	60	10°	494E

PLASTIC EMPTY TRAY



WOODEN EMPTY CASE



EMPTY CASE WITH SPINDLE SEAT



COD.	COLLETS	N°OF LOCATIONS
3672	ER 8	16
3673	ER 11	16
3673	ER 12	16
3674	ER 16	16
3675	ER 20	16
3676	ER 25	20
3677	ER 32	20
3678	ER 40	28

COD.	N°OF LOCATIONS
3974	10
3975	15
3975	15
3976	12
3977	12
3978	15
3979	18
3980	24

COD.	N°OF LOCATIONS
3690	16
3691	16
3691	16
3692	16
3693	16
7022	28
7023	28
7024	28

ER COLLETS - REDUCED SET



	COD.	DESCRIPTION	DIAMETERS	NUMBER OF COLLETS
IN SINGLE PACKS	7463	ER 8 Reduced	Ø 1 - 2 - 3 - 4 - 5	5
	7464	ER 11 Reduced	Ø 1 - 2 - 3 - 4 - 5 - 6 - 7	7
	7465	ER 16 Reduced	Ø 2 - 4 - 6 - 8 - 10	5
	7466	ER 20 Reduced	Ø 2 - 4 - 6 - 8 - 10 - 12	6
	7467	ER 25 Reduced	Ø 4 - 6 - 8 - 10 - 12 - 16	6
	7468	ER 32 Reduced	Ø 4 - 6 - 8 - 10 - 12 - 16 - 20	7
	7469	ER 40 Reduced	Ø 4 - 6 - 8 - 10 - 12 - 16 - 20 - 25	8
IN PLASTIC TRAY	4048	ER 8 Reduced	Ø 1 - 2 - 3 - 4 - 5	5
	4049	ER 11 Reduced	Ø 1 - 2 - 3 - 4 - 5 - 6 - 7	7
	4050	ER 16 Reduced	Ø 2 - 4 - 6 - 8 - 10	5
	4051	ER 20 Reduced	Ø 2 - 4 - 6 - 8 - 10 - 12	6
	4052	ER 25 Reduced	Ø 4 - 6 - 8 - 10 - 12 - 16	6
	4053	ER 32 Reduced	Ø 4 - 6 - 8 - 10 - 12 - 16 - 20	7
	4054	ER 40 Reduced	Ø 4 - 6 - 8 - 10 - 12 - 16 - 20 - 25	8
IN WOODEN CASE	7337	ER 8 Reduced	Ø 1 - 2 - 3 - 4 - 5	5
	7338	ER 11 Reduced	Ø 1 - 2 - 3 - 4 - 5 - 6 - 7	7
	7339	ER 16 Reduced	Ø 2 - 4 - 6 - 8 - 10	5
	7340	ER 20 Reduced	Ø 2 - 4 - 6 - 8 - 10 - 12	6
	7341	ER 25 Reduced	Ø 4 - 6 - 8 - 10 - 12 - 16	6
	7342	ER 32 Reduced	Ø 4 - 6 - 8 - 10 - 12 - 16 - 20	7
	7343	ER 40 Reduced	Ø 4 - 6 - 8 - 10 - 12 - 16 - 20 - 25	8

ER COLLETS - COMPLETE SET



	COD.	DESCRIPTION	DIAMETERS	NUMBER OF COLLETS
IN SINGLE PACKS	7470	ER 8 Complete	from Ø 1 to Ø 5 - progression 0,5	9
	7471	ER 11 Complete	from Ø 1 to Ø 7 - progression 0,5	13
	7472	ER 12 Complete	from Ø 1 to Ø 7 - progression 0,5 - 1	9
	7473	ER 16 Complete	from Ø 1 to Ø 10 - progression 1	10
	7474	ER 20 Complete	from Ø 2 to Ø 13 - progression 1	12
	7475	ER 25 Complete	from Ø 2 to Ø 16 - progression 1	15
	7476	ER 32 Complete	from Ø 3 to Ø 20 - progression 1	18
	7477	ER 40 Complete	from Ø 4 to Ø 26 - progression 1	9
IN PLASTIC TRAY	4058	ER 8 Complete	from Ø 1 to Ø 5 - progression 0,5	9
	4060	ER 11 Complete	from Ø 1 to Ø 7 - progression 0,5	13
	4061	ER 12 Complete	from Ø 1 to Ø 7 - progression 0,5 - 1	9
	4062	ER 16 Complete	from Ø 1 to Ø 10 - progression 1	10
	4063	ER 20 Complete	from Ø 2 to Ø 13 - progression 1	12
	4064	ER 25 Complete	from Ø 2 to Ø 16 - progression 1	15
	4065	ER 32 Complete	from Ø 3 to Ø 20 - progression 1	18
	4066	ER 40 Complete	from Ø 4 to Ø 26 - progression 1	9
IN WOODEN CASE	7344	ER 8 Complete	from Ø 1 to Ø 5 - progression 0,5	9
	7345	ER 11 Complete	from Ø 1 to Ø 7 - progression 0,5	13
	7346	ER 12 Complete	from Ø 1 to Ø 7 - progression 0,5 - 1	9
	7347	ER 16 Complete	from Ø 1 to Ø 10 - progression 1	10
	7348	ER 20 Complete	from Ø 2 to Ø 13 - progression 1	12
	7349	ER 25 Complete	from Ø 2 to Ø 16 - progression 1	15
	7350	ER 32 Complete	from Ø 3 to Ø 20 - progression 1	18
	7351	ER 40 Complete	from Ø 4 to Ø 26 - progression 1	23

ER COLLETS - SET WITH OVERSIZE DIAMETERS



	COD.	DESCRIPTION	DIAMETERS	STEP	N°OF COLLETS
IN PLASTIC TRAY	7352	ER 11 Oversize	from Ø 1 to Ø 8	0,5	15
	7353	ER 16 Oversize	from Ø 1 to Ø 12	1	12
	7354	ER 20 Oversize	from Ø 2 to Ø 15	1	14
	7355	ER 25 Oversize	from Ø 2 to Ø 20	1	19
	7356	ER 32 Oversize	from Ø 6 to Ø 25	1	20
	7357	ER 40 Oversize	from Ø 6 to Ø 32	1	27

ER COLLETS - COMPLETE SET



	COD.	DESCRIPTION	DIAMETERS	N°OF COLLETS
IN PLASTIC TRAY	7746	ER 16 Integrale	da Ø 1 a Ø 10 + half measures da Ø 1,5 a Ø 9,5	19
	7747	ER 20 Integrale	da Ø 1 a Ø 13 + half measures da Ø 1,5 a Ø 12,5	25
	7748	ER 25 Integrale	da Ø 1 a Ø 16 + half measures da Ø 1,5 a Ø 15,5	31
	7749	ER 32 Integrale	da Ø 2 a Ø 20 + half measures da Ø 2,5 a Ø 19,5	37
	7750	ER 40 Integrale	da Ø 3 a Ø 30	28

ER COLLETS - REDUCED SET IN CASE WITH SPINDLE SEAT



COD.	DESCRIPTION	DIAMETERS	N°OF COLLETS
7487	ER 8 Set Reduced	Ø 1 - 2 - 3 - 4 - 5	5
7488	ER 11 Set Reduced	Ø 1 - 2 - 3 - 4 - 5 - 6 - 7	7
7489	ER 16 Set Reduced	Ø 2 - 4 - 6 - 8 - 10	5
7490	ER 20 Set Reduced	Ø 2 - 4 - 6 - 8 - 10 - 12	6
7491	ER 25 Set Reduced	Ø 4 - 6 - 8 - 10 - 12 - 16	6
7492	ER 32 Set Reduced	Ø 4 - 6 - 8 - 10 - 12 - 16 - 20	7
7493	ER 40 Set Reduced	Ø 4 - 6 - 8 - 10 - 12 - 16 - 20 - 25	8

It is possible to complete all the sets in case with collet chuck and wrench you need

ER COLLETS - COMPLETE SET IN CASE WITH SPINDLE SEAT



COD.	DESCRIPTION	DIAMETERS	N°OF COLLETS
7551	ER 8 Set Complete	from Ø 1 to Ø 5 - progression 0,5	9
7552	ER 11 Set Complete	from Ø 1 to Ø 7 - progression 0,5	13
7599	ER 12 Set Complete	from Ø 1 to Ø 7 - progression 0,5 - 1	9
7553	ER 16 Set Complete	from Ø 1 to Ø 10 - progression 1	10
7554	ER 20 Set Complete	from Ø 2 to Ø 13 - progression 1	12
7555	ER 25 Set Complete	from Ø 2 to Ø 16 - progression 1	15
7556	ER 32 Set Complete	from Ø 3 to Ø 20 - progression 1	18
7557	ER 40 Set Complete	from Ø 4 to Ø 26 - progression 1	23

It is possible to complete all the sets in case with collet chuck and wrench you need

ER COLLETS - REDUCED SET AND MINI WRENCH IN CASE WITH SPINDLE SEAT



COD.	DESCRIPTION	DIAMETERS	N°OF COLLETS WRENCH	
7751	ER 8 Reduced + Mini Wrench	Ø 1 - 2 - 3 - 4 - 5	5	5717
7752	ER 11 Reduced + Mini Wrench	Ø 1 - 2 - 3 - 4 - 5 - 6 - 7	7	5718
7753	ER 16 Reduced + Mini Wrench	Ø 2 - 4 - 6 - 8 - 10	5	5719
7754	ER 20 Reduced + Mini Wrench	Ø 2 - 4 - 6 - 8 - 10 - 12	6	5720
7755	ER 25 Reduced + Mini Wrench	Ø 4 - 6 - 8 - 10 - 12 - 16	6	5721

It is possible to complete all the sets in case with collet chuck and wrench you need

ER COLLETS - COMPLETE SET AND MINI WRENCH IN CASE WITH SPINDLE SEAT



COD.	DESCRIPTION	DIAMETERS	N°OF COLLETS WRENCH	
7001	ER 8 Complete + WRENCH Mini	da Ø 1 a Ø 5	9	5717
7002	ER 11 Complete + WRENCH Mini	da Ø 1 a Ø 7	13	5718
7003	ER 16 Complete + WRENCH Mini	da Ø 1 a Ø 10	10	5719
7004	ER 20 Complete + WRENCH Mini	da Ø 2 a Ø 13	12	5720
7005	ER 25 Complete + WRENCH Mini	da Ø 2 a Ø 16	15	5721

It is possible to complete all the sets in case with collet chuck and wrench you need

ER COLLETS - REDUCED SET AND STANDARD WRENCH IN CASE WITH SPINDLE SEAT



COD.	DESCRIPTION	DIAMETERS	N°OF COLLETS	WRENCH
7495	ER 16 Reduced + Standard Wrench	Ø 2 - 4 - 6 - 8 - 10	5	3698
7496	ER 20 Reduced + Standard Wrench	Ø 2 - 4 - 6 - 8 - 10 - 12	6	3699
7497	ER 25 Reduced + Standard Wrench	Ø 4 - 6 - 8 - 10 - 12 - 16	6	3669
7498	ER 32 Reduced + Standard Wrench	Ø 4 - 6 - 8 - 10 - 12 - 16 - 20	7	3670
7499	ER 40 Reduced + Standard Wrench	Ø 4 - 6 - 8 - 10 - 12 - 16 - 20 - 25	8	3671

It is possible to complete all the sets in case with collet chuck and wrench you need

ER COLLETS - COMPLETE SET AND STANDARD WRENCH IN CASE WITH SPINDLE SEAT



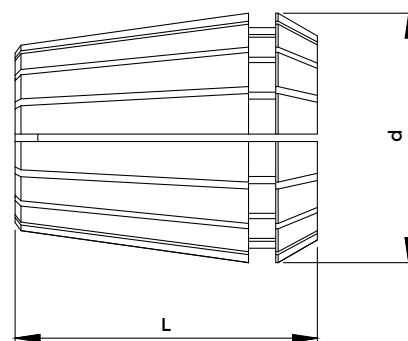
COD.	DESCRIPTION	DIAMETERS	N°OF COLLETS	WRENCH
7536	ER 16 Complete + Standard Wrench	from Ø 1 to Ø 10	10	3698
7537	ER 20 Complete + Standard Wrench	from Ø 2 to Ø 13	12	3699
7538	ER 25 Complete + Standard Wrench	from Ø 2 to Ø 16	15	3669
7539	ER 32 Complete + Standard Wrench	from Ø 3 to Ø 20	18	3670
7540	ER 40 Complete + Standard Wrench	from Ø 4 to Ø 26	23	3671

It is possible to complete all the sets in case with collet chuck and wrench you need

HIGH PRECISION ER COLLETS

ER-HP collets are different from ER standard collets on p. pagina 615 because of the high precision: < 0,005 runout accuracy

≤ 0,005



DIN 6499/B

COD.	DESCRIPTION	RANGE	d	L
0554 HP	ER 8 HP	1 ÷ 5	8,5	13,5
5573 HP	ER 11 HP	1 ÷ 7 - OVERSIZE 7,5 ÷ 8	11,5	18,0 - OVERSIZE → 15,0
0364 HP	ER 16 HP	1 ÷ 10 - OVERSIZE 10,5 ÷ 12	17	27,5 - OVERSIZE → 21,5
0787 HP	ER 20 HP	1 ÷ 13 - OVERSIZE 14 ÷ 15	21	31,5 - OVERSIZE → 26,5
0996 HP	ER 25 HP	1 ÷ 16 - OVERSIZE 17 ÷ 20	26	34,0 - OVERSIZE → 28,0
0988 HP	ER 32 HP	2 ÷ 20 - OVERSIZE 21 ÷ 25	33	40,0 - OVERSIZE → 34,0
0821 HP	ER 40 HP	3 ÷ 30 - OVERSIZE 31 ÷ 32	41	46,0 - OVERSIZE → 39,5
4055 HP	ER 50 HP	6 ÷ 34 - OVERSIZE 35 ÷ 36	52	60,0 - OVERSIZE 60,0

REDUCED SET OF COLLETS ER-HP TYPE

COMPLETE SET OF COLLETS ER-HP TYPE



IN PLASTIC TRAY

COD.	DESCRIPTION	DIAMETERS	N° OF COLLETS
7558	ER 8 HP Reduced	Ø1-2-3-4-5	5
7559	ER 11 HP Reduced	Ø1-2-3-4-5-6-7	7
7560	ER 16 HP Reduced	Ø2-4-6-8-10	5
7561	ER 20 HP Reduced	Ø2-4-6-8-10-12	6
7562	ER 25 HP Reduced	Ø4-6-8-10-12-16	6
7563	ER 32 HP Reduced	Ø4-6-8-10-12-16-20	7
7564	ER 40 HP Reduced	Ø4-6-8-10-12-16-20-25	8
7572	ER 8 HP Reduced	Ø1-2-3-4-5	5
7573	ER 11 HP Reduced	Ø1-2-3-4-5-6-7	7
7574	ER 16 HP Reduced	Ø2-4-6-8-10	5
7575	ER 20 HP Reduced	Ø2-4-6-8-10-12	6
7576	ER 25 HP Reduced	Ø4-6-8-10-12-16	6
7577	ER 32 HP Reduced	Ø4-6-8-10-12-16-20	7
7578	ER 40 HP Reduced	Ø4-6-8-10-12-16-20-25	8

IN WOODEN CASE



IN PLASTIC TRAY

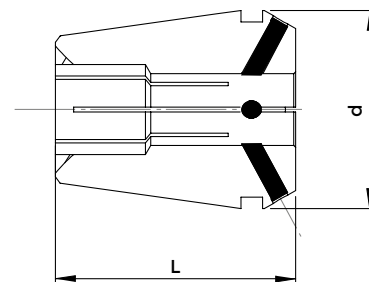
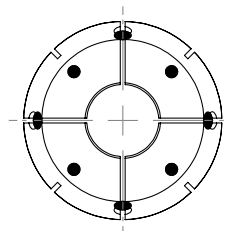
COD.	DESCRIPTION	DIAMETERS	N° OF COLLETS
7565	ER 8 HP Complete	from Ø1 to Ø5	9
7566	ER 11 HP Complete	from Ø1 to Ø7	13
7567	ER 16 HP Complete	from Ø1 to Ø10	10
7568	ER 20 HP Complete	from Ø2 to Ø13	12
7569	ER 25 HP Complete	from Ø2 to Ø16	15
7570	ER 32 HP Complete	from Ø3 to Ø20	18
7571	ER 40 HP Complete	from Ø4 to Ø26	23
7579	ER 8 HP Complete	from Ø1 to Ø5	9
7580	ER 11 HP Complete	from Ø1 to Ø7	13
7581	ER 16 HP Complete	from Ø1 to Ø10	10
7582	ER 20 HP Complete	from Ø2 to Ø13	12
7583	ER 25 HP Complete	from Ø2 to Ø16	15
7584	ER 32 HP Complete	from Ø3 to Ø20	18
7585	ER 40 HP Complete	from Ø4 to Ø26	23

IN WOODEN CASE

ER COLLETS WITH COOLANT HOLES



Coolant flows towards the edges of the tool through oriented holes.
Working pressure: up to 40 Bar / 600 PSI



DIN 6499/A

COD.	DESCRIPTION	RANGE	d	L	STEP
0364 JE	ER 16 JET	3 ÷ 7	17	27,5	0,5
0787 JE	ER 20 JET	3 ÷ 9	21	31,5	0,5
0996 JE	ER 25 JET	3 ÷ 14	26	34	0,5
0988 JE	ER 32 JET	3 ÷ 20	33	40	0,5
0821 JE	ER 40 JET	4 ÷ 26	41	46	1
4055 JE	ER 50 JET	6 ÷ 34	52	60	1

REDUCED SET OF COLLETS ER-JET TYPE



IN PLASTIC TRAY

COD.	DESCRIPTION	DIAMETERS	N° OF COLLETS
7637	ER 25 JET Reduced	Ø 4 - 6 - 8 - 10 - 12	5
7638	ER 32 JET Reduced	Ø 4 - 6 - 8 - 10 - 12 - 16 - 20	7
7639	ER 40 JET Reduced	Ø 4 - 6 - 8 - 10 - 12 - 16 - 20 - 25	8
7647	ER 25 JET Reduced	Ø 4 - 6 - 8 - 10 - 12	5
7648	ER 32 JET Reduced	Ø 4 - 6 - 8 - 10 - 12 - 16 - 20	7
7649	ER 40 JET Reduced	Ø 4 - 6 - 8 - 10 - 12 - 16 - 20 - 25	8



IN WOODEN CASE

COMPLETE SET OF COLLETS ER-JET TYPE



IN PLASTIC TRAY

COD.	DESCRIPTION	DIAMETERS	N° OF COLLETS
7640	ER 16 JET Complete	from Ø 3 to Ø 7	5
7641	ER 20 JET Complete	from Ø 3 to Ø 9	7
7642	ER 25 JET Complete	from Ø 3 to Ø 14	12
7643	ER 32 JET Complete	from Ø 3 to Ø 20	18
7644	ER 40 JET Complete	from Ø 4 to Ø 26	23
7650	ER 16 JET Complete	from Ø 3 to Ø 7	5
7651	ER 20 JET Complete	from Ø 3 to Ø 9	7
7652	ER 25 JET Complete	from Ø 3 to Ø 14	12
7653	ER 32 JET Complete	from Ø 3 to Ø 20	18
7654	ER 40 JET Complete	from Ø 4 to Ø 26	23

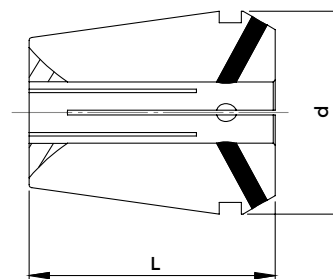


IN WOODEN CASE

SEALED ER COLLETS



Coolant flows exclusively through central hole, collet cuts are sealed with neoprene inserts (above $\varnothing 3$). Working pressure: up to 40 Bar / 600 PSI



DIN 6499/A

COD.	DESCRIPTION	RANGE	d	L	STEP
5573 RF	ER 11 RF	1 ÷ 7	11,5	18	0,5
0364 RF	ER 16 RF	1 ÷ 10	17	27,5	0,5
0787 RF	ER 20 RF	2 ÷ 13	21	31,5	0,5
0996 RF	ER 25 RF	2 ÷ 16	26	34	0,5
0988 RF	ER 32 RF	3 ÷ 20	33	40	0,5
0821 RF	ER 40 RF	4 ÷ 26	41	46	1
4055 RF	ER 50 RF	6 ÷ 34	52	60	1

REDUCED SET OF COLLETS RF TYPE

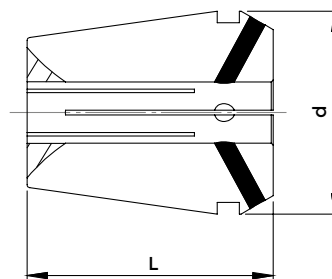
COMPLETE SET OF COLLETS RF TYPE

	COD.	DESCRIPTION	DIAMETERS	N° OF COLLETS
IN PLASTIC TRAY	7587	ER 16 RF Reduced	$\varnothing 4 - 6 - 8 - 10$	4
	7588	ER 20 RF Reduced	$\varnothing 4 - 6 - 8 - 10 - 12$	5
	7589	ER 25 RF Reduced	$\varnothing 4 - 6 - 8 - 10 - 12 - 16$	6
	7590	ER 32 RF Reduced	$\varnothing 4 - 6 - 8 - 10 - 12 - 16 - 20$	7
	7591	ER 40 RF Reduced	$\varnothing 4 - 6 - 8 - 10 - 12 - 16 - 20 - 25$	8
IN WOODEN CASE	7600	ER 16 RF Reduced	$\varnothing 4 - 6 - 8 - 10$	4
	7601	ER 20 RF Reduced	$\varnothing 4 - 6 - 8 - 10 - 12$	5
	7602	ER 25 RF Reduced	$\varnothing 4 - 6 - 8 - 10 - 12 - 16$	6
	7603	ER 32 RF Reduced	$\varnothing 4 - 6 - 8 - 10 - 12 - 16 - 20$	7
	7604	ER 40 RF Reduced	$\varnothing 4 - 6 - 8 - 10 - 12 - 16 - 20 - 25$	8

	COD.	DESCRIPTION	DIAMETERS	N° OF COLLETS
IN PLASTIC TRAY	7593	ER 16 RF Complete	from $\varnothing 3$ to $\varnothing 10$	8
	7594	ER 20 RF Complete	from $\varnothing 3$ to $\varnothing 13$	11
	7595	ER 25 RF Complete	from $\varnothing 3$ to $\varnothing 16$	14
	7596	ER 32 RF Complete	from $\varnothing 3$ to $\varnothing 20$	18
	7597	ER 40 RF Complete	from $\varnothing 4$ to $\varnothing 26$	23
IN WOODEN CASE	7606	ER 16 RF Complete	from $\varnothing 3$ to $\varnothing 10$	8
	7607	ER 20 RF Complete	from $\varnothing 3$ to $\varnothing 13$	11
	7608	ER 25 RF Complete	from $\varnothing 3$ to $\varnothing 16$	14
	7609	ER 32 RF Complete	from $\varnothing 3$ to $\varnothing 20$	18
	7610	ER 40 RF Complete	from $\varnothing 4$ to $\varnothing 26$	23

ULTRA PRECISION SEALED ER COLLETS

Collets with the same features of RF type but with an ultra precision: $\leq 0,005$ runout accuracy. Working pressure: up to 40 Bar / 600 PSI



DIN 6499/A

COD.	DESCRIPTION	RANGE	d	L	STEP
5573 UP	ER 11 RF - UP	1 ÷ 7	11,5	18	0,5
0364 UP	ER 16 RF - UP	1 ÷ 10	17	27,5	0,5
0787 UP	ER 20 RF - UP	2 ÷ 13	21	31,5	0,5
0996 UP	ER 25 RF - UP	2 ÷ 16	26	34	0,5
0988 UP	ER 32 RF - UP	3 ÷ 20	33	40	0,5
0821 UP	ER 40 RF - UP	4 ÷ 26	41	46	1
4055 UP	ER 50 RF - UP	6 ÷ 34	52	60	1

REDUCED SET OF COLLETS RF-UP TYPE

	COD.	DESCRIPTION	DIAMETERS	N° OF COLLETS
IN PLASTIC TRAY	7612	ER 16 UP Reduced	Ø 4 - 6 - 8 - 10	4
	7613	ER 20 UP Reduced	Ø 4 - 6 - 8 - 10 - 12	5
	7614	ER 25 UP Reduced	Ø 4 - 6 - 8 - 10 - 12 - 16	6
	7615	ER 32 UP Reduced	Ø 4 - 6 - 8 - 10 - 12 - 16 - 20	7
	7616	ER 40 UP Reduced	Ø 4 - 6 - 8 - 10 - 12 - 16 - 20 - 25	8
IN WOODEN CASE	7624	ER 16 UP Reduced	Ø 4 - 6 - 8 - 10	4
	7625	ER 20 UP Reduced	Ø 4 - 6 - 8 - 10 - 12	5
	7626	ER 25 UP Reduced	Ø 4 - 6 - 8 - 10 - 12 - 16	6
	7627	ER 32 UP Reduced	Ø 4 - 6 - 8 - 10 - 12 - 16 - 20	7
	7628	ER 40 UP Reduced	Ø 4 - 6 - 8 - 10 - 12 - 16 - 20 - 25	8

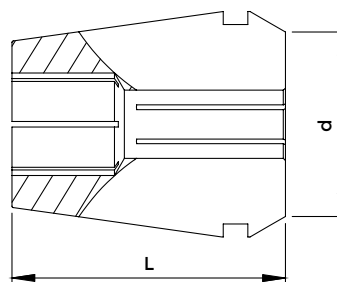
COMPLETE SET OF COLLETS RF-UP TYPE

	COD.	DESCRIPTION	DIAMETERS	N° OF COLLETS
IN PLASTIC TRAY	7618	ER 16 UP Complete	from Ø 3 to Ø 10	8
	7619	ER 20 UP Complete	from Ø 3 to Ø 13	11
	7620	ER 25 UP Complete	from Ø 3 to Ø 16	14
	7621	ER 32 UP Complete	from Ø 3 to Ø 20	18
	7622	ER 40 UP Complete	from Ø 4 to Ø 26	23
IN WOODEN CASE	7630	ER 16 UP Complete	from Ø 3 to Ø 10	8
	7631	ER 20 UP Complete	from Ø 3 to Ø 13	11
	7632	ER 25 UP Complete	from Ø 3 to Ø 16	14
	7633	ER 32 UP Complete	from Ø 3 to Ø 20	18
	7634	ER 40 UP Complete	from Ø 4 to Ø 26	23

STEEL SEALED ER COLLETS FOR HIGH PRESSURES



Coolant flows exclusively through central hole, due to cuts shape.
Working pressure: up to 130 BAR / 1900 PSI



DIN 6499/A

COD.	DESCRIPTION	RANGE	d	L	STEP
5573 SC	ER 11 SSC	3 ÷ 7 OVERSIZE 7,5 ÷ 8	11,5	18,0 OVERSIZE → 15,0	0,5
0364 SC	ER 16 SSC	3 ÷ 10 OVERSIZE 10,5 ÷ 12	17	27,5 OVERSIZE → 21,5	0,5
0787 SC	ER 20 SSC	3 ÷ 13 OVERSIZE 13,5 ÷ 15	21	31,5 OVERSIZE → 26,5	0,5
0996 SC	ER 25 SSC	3 ÷ 16 OVERSIZE 16,5 ÷ 20	26	34,0 OVERSIZE → 28,0	0,5
0988 SC	ER 32 SSC	3 ÷ 20 OVERSIZE 20,5 ÷ 25	33	40,0 OVERSIZE → 34,0	0,5
0821 SC	ER 40 SSC	3 ÷ 30 OVERSIZE 31 ÷ 32	41	46,0 OVERSIZE → 39,5	1

REDUCED SET OF COLLETS ER-SSC TYPE



	COD.	DESCRIPTION	DIAMETERS	N° OF COLLETS
IN PLASTIC TRAY	7670	ER 16 SSC Reduced	Ø 4 - 6 - 8 - 10	4
	7671	ER 20 SSC Reduced	Ø 4 - 6 - 8 - 10 - 12	5
	7672	ER 25 SSC Reduced	Ø 4 - 6 - 8 - 10 - 12 - 16	6
	7673	ER 32 SSC Reduced	Ø 4 - 6 - 8 - 10 - 12 - 16 - 20	7
	7674	ER 40 SSC Reduced	Ø 4 - 6 - 8 - 10 - 12 - 16 - 20 - 25	8
IN WOODEN CASE	7690	ER 16 SSC Reduced	Ø 4 - 6 - 8 - 10	4
	7691	ER 20 SSC Reduced	Ø 4 - 6 - 8 - 10 - 12	5
	7692	ER 25 SSC Reduced	Ø 4 - 6 - 8 - 10 - 12 - 16	6
	7693	ER 32 SSC Reduced	Ø 4 - 6 - 8 - 10 - 12 - 16 - 20	7
	7694	ER 40 SSC Reduced	Ø 4 - 6 - 8 - 10 - 12 - 16 - 20 - 25	8

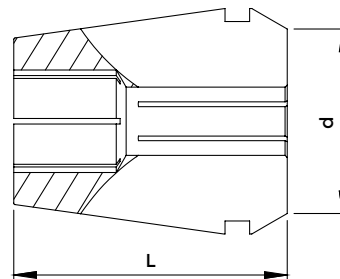
COMPLETE SET OF COLLETS ER-SSC TYPE



	COD.	DESCRIPTION	DIAMETERS	N° OF COLLETS
IN PLASTIC TRAY	7675	ER 16 SSC Complete	from Ø 3 to Ø 10	8
	7676	ER 20 SSC Complete	from Ø 3 to Ø 13	11
	7677	ER 25 SSC Complete	from Ø 3 to Ø 16	14
	7678	ER 32 SSC Complete	from Ø 3 to Ø 20	18
	7679	ER 40 SSC Complete	from Ø 4 to Ø 26	23
IN WOODEN CASE	7695	ER 16 SSC Complete	from Ø 3 to Ø 10	8
	7696	ER 20 SSC Complete	from Ø 3 to Ø 13	11
	7697	ER 25 SSC Complete	from Ø 3 to Ø 16	14
	7698	ER 32 SSC Complete	from Ø 3 to Ø 20	18
	7699	ER 40 SSC Complete	from Ø 4 to Ø 26	23

HIGH PRECISION STEEL SEALED ER COLLETS FOR HIGH PRESSURES

Collets with the same cooling mechanical seal features of SSC type, but with an high precision: $\leq 0,005$ mm runout accuracy. Working pressure: up to 130 Bar / 1900 PSI.



DIN 6499/A

COD.	DESCRIPTION	RANGE	d	L
5573 SH	ER 11 SSC - HP	3 ÷ 7 OVERSIZE 7,5 ÷ 8	11,5	18,0 OVERSIZE → 15,0
0364 SH	ER 16 SSC - HP	3 ÷ 10 OVERSIZE 10,5 ÷ 12	17	27,5 OVERSIZE → 21,5
0787 SH	ER 20 SSC - HP	3 ÷ 13 OVERSIZE 13,5 ÷ 15	21	31,5 OVERSIZE → 26,5
0996 SH	ER 25 SSC - HP	3 ÷ 16 OVERSIZE 16,5 ÷ 20	26	34,0 OVERSIZE → 28,0
0988 SH	ER 32 SSC - HP	3 ÷ 20 OVERSIZE 20,5 ÷ 25	33	40,0 OVERSIZE → 34,0
0821 SH	ER 40 SSC - HP	3 ÷ 30 OVERSIZE 31 ÷ 32	41	46,0 OVERSIZE → 39,5

REDUCED SET OF COLLETS SSC - HP TYPE

COMPLETE SET OF COLLETS SSC - HP TYPE

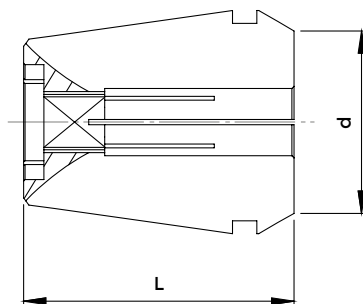
	COD.	DESCRIPTION	DIAMETERS	N° OF COLLETS
IN PLASTIC TRAY	7360	ER 16 SH Reduced	Ø 4 - 6 - 8 - 10	4
	7361	ER 20 SH Reduced	Ø 4 - 6 - 8 - 10 - 12	5
	7362	ER 25 SH Reduced	Ø 4 - 6 - 8 - 10 - 12 - 16	6
	7363	ER 32 SH Reduced	Ø 4 - 6 - 8 - 10 - 12 - 16 - 20	7
	7364	ER 40 SH Reduced	Ø 4 - 6 - 8 - 10 - 12 - 16 - 20 - 25	8
IN WOODEN CASE	7370	ER 16 SH Reduced	Ø 4 - 6 - 8 - 10	4
	7371	ER 20 SH Reduced	Ø 4 - 6 - 8 - 10 - 12	5
	7372	ER 25 SH Reduced	Ø 4 - 6 - 8 - 10 - 12 - 16	6
	7373	ER 32 SH Reduced	Ø 4 - 6 - 8 - 10 - 12 - 16 - 20	7
	7374	ER 40 SH Reduced	Ø 4 - 6 - 8 - 10 - 12 - 16 - 20 - 25	8

	COD.	DESCRIPTION	DIAMETERS	N° OF COLLETS
IN PLASTIC TRAY	7365	ER 16 SH Complete	from Ø 3 to Ø 10	8
	7366	ER 20 SH Complete	from Ø 3 to Ø 13	11
	7367	ER 25 SH Complete	from Ø 3 to Ø 16	14
	7368	ER 32 SH Complete	from Ø 3 to Ø 20	18
	7369	ER 40 SH Complete	from Ø 4 to Ø 26	23
IN WOODEN CASE	7375	ER 16 SH Complete	from Ø 3 to Ø 10	8
	7376	ER 20 SH Complete	from Ø 3 to Ø 13	11
	7377	ER 25 SH Complete	from Ø 3 to Ø 16	14
	7378	ER 32 SH Complete	from Ø 3 to Ø 20	18
	7379	ER 40 SH Complete	from Ø 4 to Ø 26	23

ER COLLETS WITH SQUARE FOR TAPPING



The drag square for the tapping tool is made on the bottom of the collet.



DIN 6499/A

COD.	DESCRIPTION	RANGE	d	L
5573 MF	ER 11 MF - con Quadro	Ø 3,5 ÷ Ø 6,0	11,5	18
0364 MF	ER 16 MF - con Quadro	Ø 3,5 ÷ Ø 8,0	17	27,5
0787 MF	ER 20 MF - con Quadro	Ø 3,5 ÷ Ø 10,0	21	31,5
0996 MF	ER 25 MF - con Quadro	Ø 3,5 ÷ Ø 12,0	26	34
0988 MF	ER 32 MF - con Quadro	Ø 3,5 ÷ Ø 16,0	33	40
0821 MF	ER 40 MF - con Quadro	Ø 4,5 ÷ Ø 20,0	41	46
4055 MF	ER 50 MF - con Quadro	Ø 8,0 ÷ Ø 32,0	52	60

REDUCED SET OF COLLETS ER-MF TYPE



IN PLASTIC TRAY

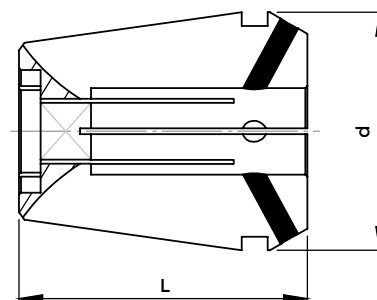
COD.	DESCRIPTION	DIAMETERS	Nº OF COLLETS
7655	ER 16 MF Reduced	Ø 3,5 - 4,5 - 6 - 7	4
7656	ER 20 MF Reduced	Ø 3,5 - 4,5 - 6 - 7 - 8 - 9 - 10	7
7657	ER 25 MF Reduced	Ø 3,5 - 4,5 - 6 - 7 - 8 - 9 - 10 - 11 - 12	9
7658	ER 32 MF Reduced	Ø 4,5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 14 - 16	10
7659	ER 40 MF Reduced	Ø 6 - 7 - 8 - 9 - 10 - 11 - 12 - 14 - 16 - 18 - 20	11
7660	ER 16 MF Reduced	Ø 3,5 - 4,5 - 6 - 7	4
7661	ER 20 MF Reduced	Ø 3,5 - 4,5 - 6 - 7 - 8 - 9 - 10	7
7662	ER 25 MF Reduced	Ø 3,5 - 4,5 - 6 - 7 - 8 - 9 - 10 - 11 - 12	9
7663	ER 32 MF Reduced	Ø 4,5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 14 - 16	10
7664	ER 40 MF Reduced	Ø 6 - 7 - 8 - 9 - 10 - 11 - 12 - 14 - 16 - 18 - 20	11



IN WOODEN CASE

ER COLLETS WITH SQUARE FOR TAPPING

The drag square for the tapping tool is made on the bottom of the collet. Coolant flows exclusively through central hole, collet cuts are sealed with neoprene inserts. Working pressure: up to 40 Bar / 600 PSI



DIN 6499/A

COD.	DESCRIPTION	RANGE	d	L
5573 ML	ER 11 ML - con Quadro	Ø 3,5 ÷ Ø 6,0	11,5	18
0364 ML	ER 16 ML - con Quadro	Ø 3,5 ÷ Ø 8,0	17	27,5
0787 ML	ER 20 ML - con Quadro	Ø 3,5 ÷ Ø 10,0	21	31,5
0996 ML	ER 25 ML - con Quadro	Ø 3,5 ÷ Ø 12,0	26	34
0988 ML	ER 32 ML - con Quadro	Ø 3,5 ÷ Ø 16,0	33	40
0821 ML	ER 40 ML - con Quadro	Ø 4,5 ÷ Ø 20,0	41	46
4055 ML	ER 50 ML - con Quadro	Ø 8,0 ÷ Ø 32,0	52	60

REDUCED SET OF COLLETS ER-ML TYPE

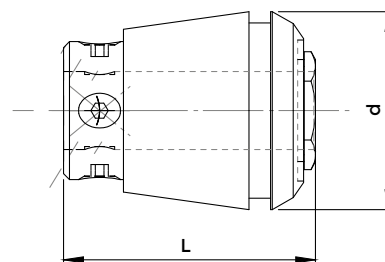


	COD.	DESCRIPTION	DIAMETERS	Nº OF COLLETS
IN PLASTIC TRAY	7756	ER 16 ML Reduced	Ø 3,5 - 4,5 - 6 - 7	4
	7757	ER 20 ML Reduced	Ø 3,5 - 4,5 - 6 - 7 - 8 - 9 - 10	7
	7758	ER 25 ML Reduced	Ø 3,5 - 4,5 - 6 - 7 - 8 - 9 - 10 - 11 - 12	9
	7759	ER 32 ML Reduced	Ø 4,5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 14 - 16	10
	7760	ER 40 ML Reduced	Ø 6 - 7 - 8 - 9 - 10 - 11 - 12 - 14 - 16 - 18 - 20	11
IN WOODEN CASE	7761	ER 16 ML Reduced	Ø 3,5 - 4,5 - 6 - 7	4
	7762	ER 20 ML Reduced	Ø 3,5 - 4,5 - 6 - 7 - 8 - 9 - 10	7
	7763	ER 25 ML Reduced	Ø 3,5 - 4,5 - 6 - 7 - 8 - 9 - 10 - 11 - 12	9
	7764	ER 32 ML Reduced	Ø 4,5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 14 - 16	10
	7765	ER 40 ML Reduced	Ø 6 - 7 - 8 - 9 - 10 - 11 - 12 - 14 - 16 - 18 - 20	11



ER COLLETS - TENSION ADJUSTMENT

Tapping tool is clamped by the screws placed on the mobile part.



DIN 6499

COD.	DESCRIPTION	RANGE	d	L	T	STOP RING
						C
0364 AM	ER 16 - Compensate	Ø 2,0 ÷ Ø 6,0	17	27	7	9395
0787 AM	ER 20 - Compensate	Ø 2,5 ÷ Ø 7,0	21	31	7	9396
0996 AM	ER 25 - Compensate	Ø 2,5 ÷ Ø 10,0	26	34	8	9397
0988 AM	ER 32 - Compensate	Ø 4,5 ÷ Ø 12,5	33	43	10	9398
0821 AM	ER 40 - Compensate	Ø 6,0 ÷ Ø 16,0	41	54	13	9399

REDUCED SET OF ER-AM COLLETS



COD.	DESCRIPTION	DIAMETERS	Nº OF COLLETS
7741	ER 16 AM Reduced	Ø 2,5 - 2,8 - 3,5 - 4,5 - 6	5
7742	ER 20 AM Reduced	Ø 2,5 - 2,8 - 3,5 - 4,5 - 6 - 7	6
7743	ER 25 AM Reduced	Ø 3,5 - 4,5 - 6 - 7 - 8 - 9 - 10	7
7744	ER 32 AM Reduced	Ø 4,5 - 6 - 7 - 8 - 9 - 10 - 11 - 12	8
7745*	ER 40 AM Reduced	Ø 6 - 7 - 8 - 9 - 10 - 11 - 12 - 14 - 16	9

*Supplied into plastic case code 7024

SHANKS DIMENSIONS FOR METRIC TAPPING TOOLS

SHANK Ø x	STANDARD DIN 352	REINFORCED DIN 371	STANDARD DIN 376	STANDARD ISO	REINFORCED ISO
2,50 x 2,10	M 1,0 ÷ M 1,8	M 1,0 ÷ M 1,8	M 3,5	-	-
2,80 x 2,10	M 2,0 ÷ M 2,5	M 2,0 ÷ M 2,5	M 4,0	-	-
3,15 x 2,50	-	-	-	M 4,0	M 3,0
3,50 x 2,70	M 3,0	M 3,0	M 5,0	-	-
3,55 x 2,80	-	-	-	M 4,5	M 3,5
4,00 x 3,15	M 3,5	M 3,5	-	M 5,0	M 4,0
4,50 x 3,40	M 4,0	M 4,0	M 6,0	-	-
5,00 x 4,00	-	-	-	-	M 5,0
5,50 x 4,30	-	-	M 7,0	-	-
5,60 x 4,50	-	-	-	M 7,0	-
6,00 x 4,90	M 5,0 - M 6,0 - M 8,0	M 5,0 - M 6,0	M 8,0	-	-
6,30 x 5,00	-	-	-	M 8,0	M 6,0
7,00 x 5,50	M 10,0	-	M 10,0	-	-
7,10 x 5,60	-	-	-	M 9,0	-
8,00 x 6,20	-	M 8,0	-	M 10,0	M 8,0
9,00 x 7,00	M 12,0	-	M 12,0	M 12,0	-
10,00 x 8,00	-	M 10,0	-	-	M 10,0
11,00 x 9,00	M 14,0	-	M 14,0	-	-
11,20 x 9,00	-	-	-	M 14,0	-
12,00 x 9,00	M 16,0	-	M 16,0	-	-
12,50 x 10,00	-	-	-	M 16,0	-
14,00 x 11,00	M 18,0	-	M 18,0	-	-
16,00 x 12,00	M 20,0	-	M 20,0	-	-
18,00 x 14,50	M 22,0 - M 24,0	-	M 22,0 - M 24,0	-	-
20,00 x 16,00	M 27,0	-	M 27,0	M 27,0 - M 30,0	-
22,00 x 18,00	M 30,0	-	M 30,0	-	-
25,00 x 20,00	M 33,0	-	M 33,0	M 36,0	-
28,00 x 22,00	M 36,0	-	M 36,0	-	-
32,00 x 24,00	M 39,0 - M 42,0	-	M 39,0 - M 42,0	-	-

ER NUTS INNER THREADS

NUT	ER 8	ER 11	ER 16	ER 20	ER 25	ER 32	ER 40	ER 50	ER 60	ER 90
	10 x 0,75	13 x 0,75	19 x 1,0	24 x 1,0	30 x 1,0	-	-	-	-	-
MINI										
	-	14 x 0,75	22 x 1,5	25 x 1,5	-	-	-	-	-	-
HEXAGONAL										
	-	-	22 x 1,5	25 x 1,5	32 x 1,5	40 x 1,5	50 x 1,5	64 x 2,0	70 x 1,5	110 x 1,5
STANDARD										

ASSEMBLING OF COLLETS IN ER NUTS

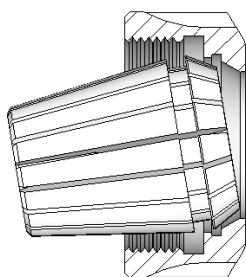


Fig. 1

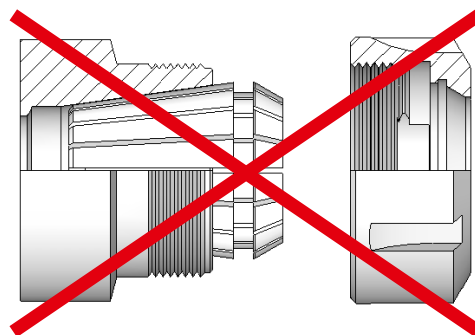


Fig. 2

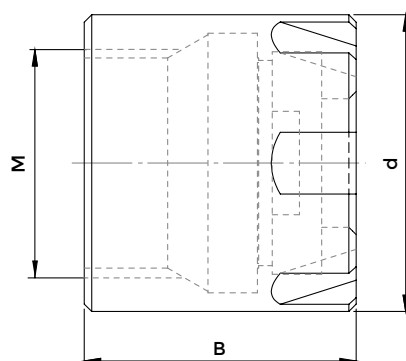
RIGHT PROCEDURE TO ASSEMBLE THE COLLET IN THE NUT

- Insert the collet into the nut inclining it until the collet groove matches with nut excentric seat (picture 1).
- Once the collet has been mounted in the nut (point A), screw the assembly on the spindle.
- After insert the tool into the collet, is suggested to use the suitable wrench to complete the tightening.

WRONG PROCEDURE TO ASSEMBLE THE COLLET IN THE NUT

- Inserting the collet into the spindle seat without first assembling it with the nut (picture 2) irremediably compromises the whole integrity :
 - excentric in the nut breaks because of the pressure made by the collet. Such a breakage will not permit anymore the extraction of the collet that then will stay locked in its seat.
 - during the nut screwing, broken excentric residuals cause scrapeson conic grindedpart of the collet compromising the exact matching.

ER CLAMPING NUTS MINI TYPE



DIN 6499

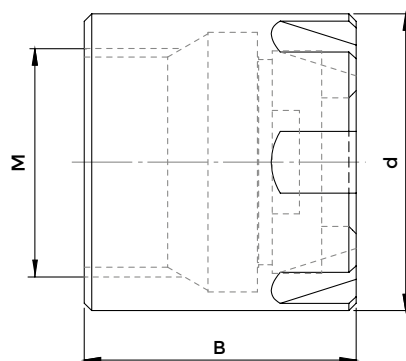
RIGHT THREAD

COD.	DESCRIPTION	d	B	M	COLLET	WRENCH
						
0373	GM 8	12	11	10 x 0,75	0554	5717
0432	GM 11	16	12	13 x 0,75	5573	5718
1229	GM 16	22	18	19 x 1,00	0364	5719
1230	GM 20	28	19	24 x 1,00	0787	5720
1231	GM 25	35	20	30 x 1,00	0996	5721

LEFT THREAD

COD.	DESCRIPTION	d	B	M	COLLET	WRENCH
						
1188	GM 8 L	12	10	10 x 0,75 SX	0554	5717
1189	GM 11 L	16	12	13 x 0,75 SX	5573	5718
1233	GM 16 L	22	18	19 x 1,00 SX	0364	5719
1234	GM 20 L	28	19	24 x 1,00 SX	0787	5720
1235	GM 25 L	35	20	30 x 1,00 SX	0996	5721

ER CLAMPING NUTS MINI TYPE

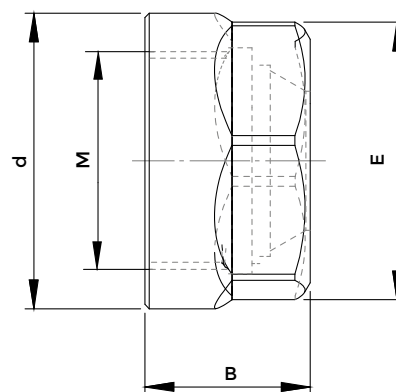


DIN 6499

GROUND OUTSIDE - RIGHT THREAD

COD.	DESCRIPTION	d	B	M	COLLET	WRENCH
						
5690	GM 8 W	12	10	10 x 0,75	0554	5717
5691	GM 11 W	16	12	13 x 0,75	5573	5718
5694	GM 16 W	22	18	19 x 1,00	0364	5719
5695	GM 20 W	28	19	24 x 1,00	0787	5720
5696	GM 25 W	35	20	30 x 1,00	0996	5721

ER CLAMPING NUTS HEXAGONAL TYPE

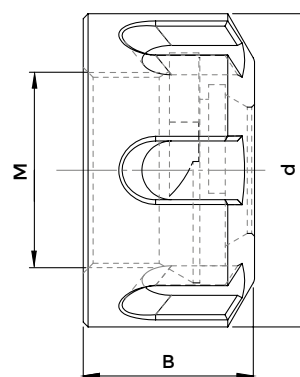


DIN 6499

RIGHT THREAD

COD.	DESCRIPTION	d	E	B	M	COLLET	WRENCH
							
1157	GE 11	19	17	11,3	14 x 0,75	5573	2905
0342	GE 12	19	17	14	14 x 0,75	5601	2905
1214	GE 16	28	25	17,5	22 x 1,50	0364	2906
1215	GE 20	34	30	19	25 x 1,50	0787	2907

ER CLAMPING NUTS STANDARD TYPE



DIN 6499

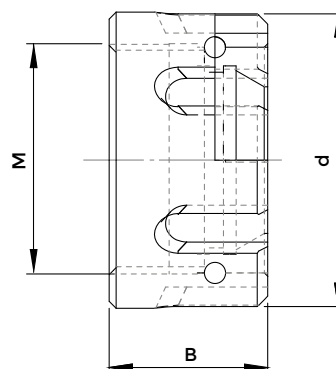
RIGHT THREAD

COD.	DESCRIPTION	d	B	M	COLLET	WRENCH
						
4993	GS 16	32	17,5	22 x 1,5	0364	3698
4994	GS 20	35	19	25 x 1,5	0787	3699
4995	GS 25	42	20	32 x 1,5	0996	3669
4996	GS 32	50	22,5	40 x 1,5	0988	3670
4997	GS 40	63	25,5	50 x 1,5	0821	3671
4998	GS 50	78	35,5	64 x 2,0	4055	3668

LEFT THREAD

COD.	DESCRIPTION	d	B	M	COLLET	WRENCH
						
3071	GS 16 L	32	17,5	22 x 1,5 SX	0364	3698
3072	GS 20 L	35	19	25 x 1,5 SX	0787	3699
3073	GS 25 L	42	20	32 x 1,5 SX	0996	3669
3074	GS 32 L	50	22,5	40 x 1,5 SX	0988	3670
3075	GS 40 L	63	25,5	50 x 1,5 SX	0821	3671

ER CLAMPING NUTS STANDARD TYPE - BALL BEARING EXECUTION



DIN 6499

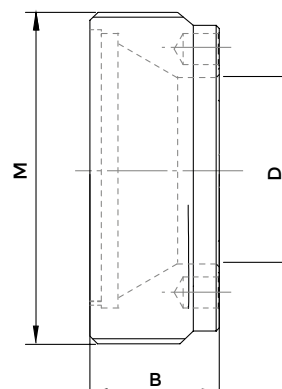
RIGHT THREAD

COD.	DESCRIPTION	d	B	M	COLLET	WRENCH
						
2713	GS 16 B	32	20	22 x 1,5	0364	3698
2714	GS 20 B	35	22	25 x 1,5	0787	3699
2715	GS 25 B	42	22,5	32 x 1,5	0996	3669
2716	GS 32 B	50	25	40 x 1,5	0988	3670
2717	GS 40 B	63	28	50 x 1,5	0821	3671
2913	GS 50 B	78	40	64 x 2,0	4055	3668
5714	GS 60 B	83	36	70 x 1,5	4056	-

CHARACTERISTICS AND ADVANTAGES

- Collet clamping force is increased.
- Avoids collet torsion reducing friction with its seat and consequently preserves its accuracy.
- Interchangeable with standard and hexagonal nuts.

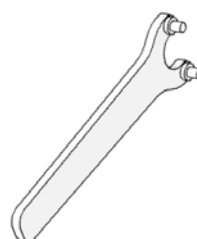
ER CLAMPING NUTS WITH OUTSIDE THREAD - "GA" TYPE



DIN 6499

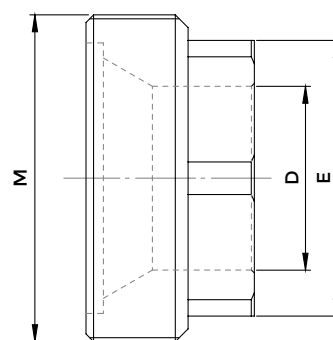
COD.	DESCRIPTION	B	M	D	COLLET	WRENCH
						
2867	GA 11	6,0	18 x 1,0	9	5573	3169
2868	GA 16	8,0	24 x 1,0	12,8	364	3170
2869	GA 20	11,0	28 x 1,5	16	787	3171
2870	GA 25	12,5	32 x 1,5	18	996	3172
2871	GA 32	14,00	40 x 1,5	25,5	988	3173

WRENCHES FOR "GA" TYPE CLAMPING NUTS



COD.	DESCRIPTION	NUT
		
3169	CH ER 11 GA	2867
3170	CH ER 16 GA	2868
3171	CH ER 20 GA	2869
3172	CH ER 25 GA	2870
3173	CH ER 32 GA	2871

ER CLAMPING NUTS "GA-E" TYPE WITH OUTSIDE THREAD - HEXAGONAL HOLD



DIN 6499

COD.	DESCRIPTION	E	B	M	D	COLLET	WRENCH
							
2601	GA 11 E	13	10	18 x 1,0	9	5573	5491
2606	GA 16 E	19	11	24 x 1,0	12,8	0364	5492
2610	GA 20 E	22	14	28 x 1,5	16	0787	5493
2611	GA 25 E	27	14	32 x 1,5	20,5	0996	5494
2612	GA 32 E	32	17,5	40 x 1,5	25,5	0988	5495
2613	GA 40 E	42	17,1	50 x 1,5	34	0821	5496

WRENCHES FOR "GA-E" TYPE CLAMPING NUTS



COD.	DESCRIPTION	NUT
		
5491	CH ER 11 GA-E	2601
5492	CH ER 16 GA-E	2606
5493	CH ER 20 GA-E	2610
5494	CH ER 25 GA-E	2611
5495	CH ER 32 GA-E	2612
5496	CH ER 40 GA-E	2613

ER WRENCHES FOR MINI CLAMPING NUTS



DIN 6499

COD.	DESCRIPTION	Ø	NUT
			
5717	CH 8 Mini	12	0373
5718	CH 11 Mini	16	0432
5719	CH 16 Mini	22	1229
5720	CH 20 Mini	28	1230
5721	CH 25 Mini	35	1231

ER WRENCHES FOR EXAGONAL CLAMPING NUTS



DIN 6499

COD.	DESCRIPTION	E	NUT
			
2905	CH 11 CE	17	1157
2905	CH 12 CE	17	0342
2906	CH 16 CE	25	1214
2907	CH 20 CE	30	1215

ER WRENCHES FOR STANDARD CLAMPING NUTS



DIN 6499

COD.	DESCRIPTION	Ø	NUT
			
3698	CH 16 ST	32	4993
3699	CH 20 ST	35	4994
3669	CH 25 ST	42	4995
3670	CH 32 ST	50	4996
3671	CH 40 ST	63	4997
3668	CH 50 ST	78	4998

ER WRENCHES FOR SIDE GRIP CLAMPING NUTS



DIN 6499

COD.	DESCRIPTION	Ø	NUT
			
2880	CH ER 11 GT - CH 6 GOC	20	5090
2820	CH 8 GOC	26	8642
2881	CH ER 16 GT - CH 10 GOC	32	5091
2882	CH ER 20 GT- CH 12 GOC	35	5092
2883	CH ER 25 GT- CH 16 GOC	42	5093
2908	CH ER 32 GT- CH 20 GOC	50	5094
2909	CH ER 40 GT- CH 25 GOC	63	5095
2910	CH EOC 32 PC CH 32 GOC	72	4069
2836	CH 40 GOC	85	8645

ER TORQUE WRENCHES FOR MINI CLAMPING NUTS



DIN 6499

COD.	DESCRIPTION	TORQUE	Ø	NUT
				
9786	CD 8 Mini	8 Nm	12	0373
9787	CD 11 Mini	18 Nm	16	0432
9788	CD 16 Mini	28 Nm	22	1229
9789	CD 20 Mini	35 Nm	28	1230
9790	CD 25 Mini	40 Nm	35	1231

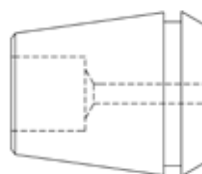
ER TORQUE WRENCHES FOR HEXAGONAL CLAMPING NUTS



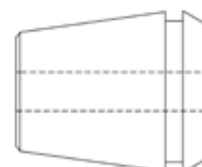
DIN 6499

COD.	DESCRIPTION	TORQUE		E	NUT
					
9791	CD 11 CE	20 Nm		17	1157
9791	CD 12 CE	20 Nm		17	0342
9792	CD 16 CE	30 Nm	50 Nm	25	1214
9793	CD 20 CE	40 Nm	70 Nm	30	1215

ER TORQUE WRENCHES FOR STANDARD CLAMPING NUTS



For wrought collets,
select MINIMUM Torque

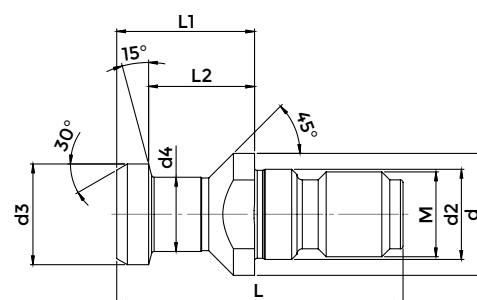


For normal collets, select
MAXIMUM Torque

DIN 6499

COD.	DESCRIPTION	TORQUE		Ø	NUT
					
9794	CD 16 ST	30 Nm	50 Nm	32	4993
9795	CD 20 ST	40 Nm	70 Nm	35	4994
9796	CD 25 ST	55 Nm	90 Nm	42	4995
9797	CD 32 ST	70 Nm	130 Nm	50	4996
9798	CD 40 ST	120 Nm	200 Nm	63	4997

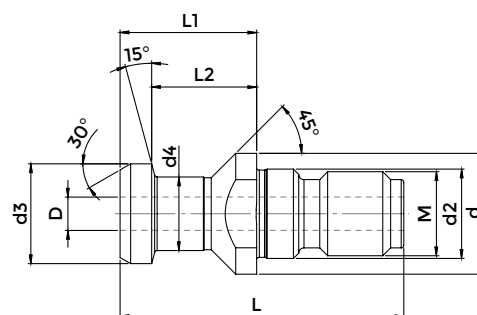
DIN 69872 PULL STUDS WITHOUT COOLANT BORE (ISO 7388-3 form AD - AF)



DIN 69872

COD. (WITHOUT OR)	COD. (WITH OR)	DESCRIPTION	M	d	d2	d3	d4	L	L1	L2
3489	-	69872 ISO 30 - NON FORATO	M 12	17	13	13	9	44	24	19
4573	3268	69872 ISO 40 - NON FORATO	M 16	23	17	19	14	54	26	20
4574	-	69872 ISO 45 - NON FORATO	M 20	30	21	23	17	65	30	23
4575	3270	69872 ISO 50 - NON FORATO	M 24	36	25	28	21	74	34	25

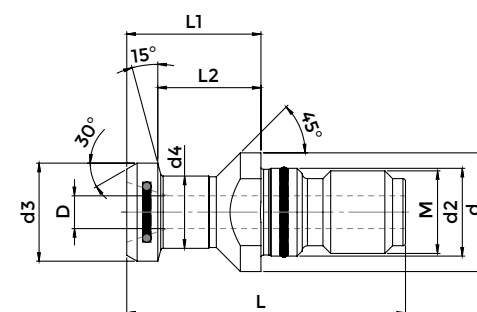
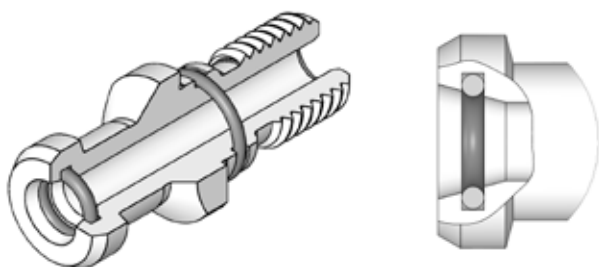
DIN 69872 PULL STUDS WITH COOLANT BORE (ISO 7388-3 form AD - AF)



DIN 69872

COD. (WITHOUT OR)	COD. (WITH OR)	DESCRIPTION	M	d	d2	d3	d4	L	L1	L2	D
3423	-	69872 ISO 30 - FORATO	M 12	17	13	13	9	44	24	19	3
3476	3040	69872 ISO 40 - FORATO	M16	23	17	19	14	54	26	20	7
-	4548	69872 ISO 40 - OKUMA	M 16	23	17	19	14	54	26	20	4
3477	-	69872 ISO 45 - FORATO	M 20	30	21	23	17	65	30	23	9,5
3478	3042	69872 ISO 50 - FORATO	M 24	36	25	28	21	74	34	25	11,5

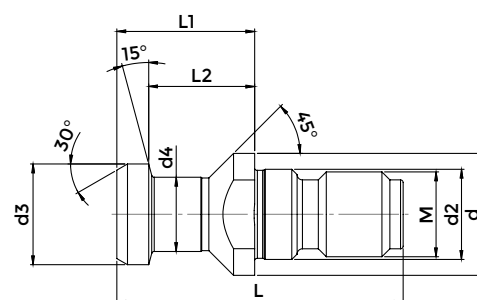
DIN 69872 PULL STUDS WITH COOLANT BORE AND DOUBLE O-RING (ISO 7388-3 form AD - AF)



DIN 69872

COD.	DESCRIPTION	M	d	d2	d3	d4	L	L1	L2	D
3222	69872 ISO 40 - FORATO con DOPPIO OR	M 16	23	17	19	14	54	26	20	7
3223	69872 ISO 50 - FORATO con DOPPIO OR	M 24	36	25	28	21	74	34	25	11,5

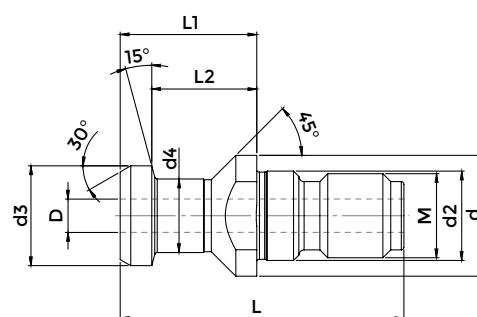
DIN 69872 TYPE PULL STUDS SUITABLE FOR BT SHANKS WITHOUT COOLANT BORE



DIN 69872

COD. (WITHOUT OR)	COD. (WITH OR)	DESCRIPTION	M	d	d2	d3	d4	L	L1	L2
3157	3158	69872 / BT 40 - NON FORATO	M16	23	17	19	14	54	29	23

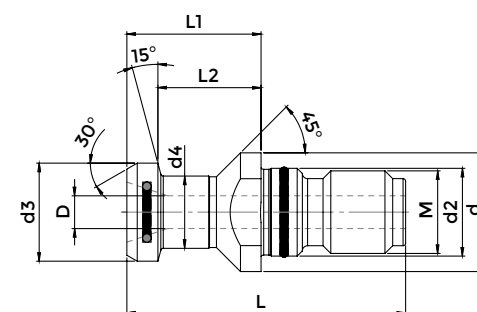
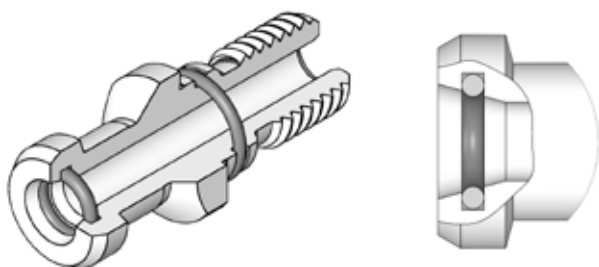
DIN 69872 TYPE PULL STUDS SUITABLE FOR BT SHANKS WITH COOLANT BORE



DIN 69872

COD. (WITHOUT OR)	COD. (WITH OR)	DESCRIPTION	M	d	d2	d3	d4	L	L1	L2	D
3191	3192	69872 / BT 40 - FORATO	M16	23	17	19	14	54	29	23	7

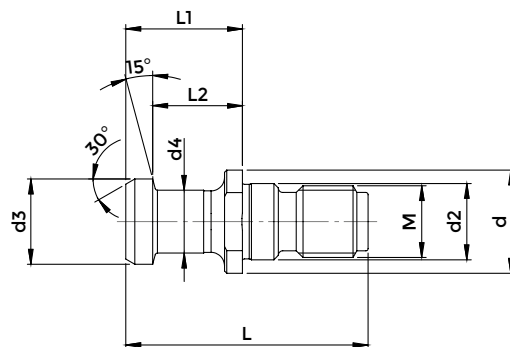
DIN 69872 TYPE PULL STUDS SUITABLE FOR BT SHANKS WITH COOLANT BORE AND DOUBLE O-RING



DIN 69872

COD.	DESCRIPTION	M	d	d2	d3	d4	L	L1	L2	D
3403	69872 / BT 40 - FORATO con DOPPIO OR	M16	23	17	19	14	54	29	23	7

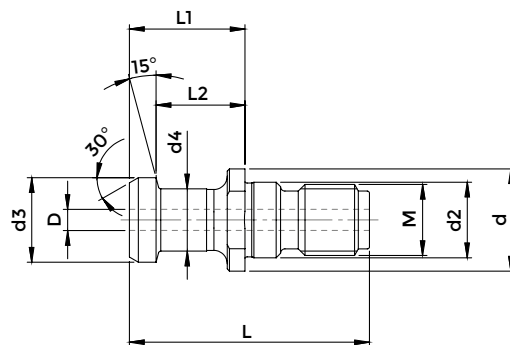
ISO 7388/2 A PULL STUDS WITHOUT COOLANT BORE



ISO 7388/A

COD. (WITHOUT OR)	COD. (WITH OR)	DESCRIPTION	M	d	d2	d3	d4	L	L1	L2
3479	-	7388/2A ISO30 - NON FORATO	M 12	16	13	12	8	44	24	19
4576	4582	7388/2A ISO40 - NON FORATO	M 16	23	17	19	14	54	26	20
4577	-	7388/2A ISO45 - NON FORATO	M 20	30	21	23	17	65	30	23
4578	4584	7388/2A ISO50 - NON FORATO	M 24	36	25	28	21	74	34	25

ISO 7388/2 A PULL STUDS WITH COOLANT BORE



ISO 7388/A

COD. (WITHOUT OR)	COD. (WITH OR)	DESCRIPTION	M	d	d2	d3	d4	L	L1	L2	D
3480	3047	7388/2A ISO40 - FORATO	M 16	23	17	19	14	54	26	20	7
3481	-	7388/2A ISO45 - FORATO	M 20	30	21	23	17	65	30	23	9,5
3482	3049	7388/2A ISO50 - FORATO	M 24	36	25	28	21	74	34	25	11,5

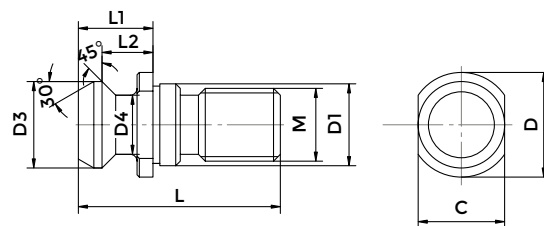
ISO 7388/2 A PULL STUDS WITH ID COUNTERBORE



ISO 7388/A

ID counterbore is carried out upon customer specification

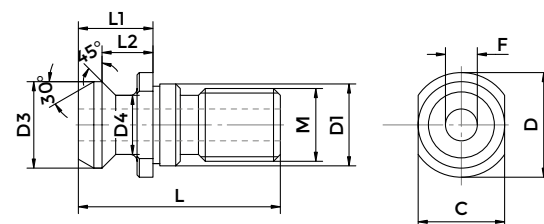
ISO 7388/2 B PULL STUDS (ISO 7388-3 form UD - UF) WITHOUT COOLANT BORE



ISO 7388/B

COD. (WITHOUT OR)	COD. (WITH OR)	DESCRIPTION	M	d	d2	d3	d4	L	L1	L2
3483	-	7388/2B ISO30 - NON FORATO	M 12	17	12,5	13,3	9,3	34	11,8	8,1
4579	4585	7388/2B ISO40 - NON FORATO	M 16	22,5	17	18,9	12,9	44,5	16,4	11,1
4580	-	7388/2B ISO45 - NON FORATO	M 20	30	21	24	16,3	56	20,9	14,8
4581	4587	7388/2B ISO50 - NON FORATO	M 24	37	25	29,1	19,6	65,5	25,5	17,9

ISO 7388/2 B PULL STUDS (ISO 7388-3 form UD - UF) WITH COOLANT BORE



ISO 7388/B

COD. (WITHOUT OR)	COD. (WITH OR)	DESCRIPTION	M	d	d2	d3	d4	L	L1	L2	D
3484	3050	7388/2B ISO40 - FORATO	M 16	22,5	17	18,9	12,9	44,5	16,4	11,1	7,3
3485	-	7388/2B ISO45 - FORATO	M 20	30	21	24	16,3	56	20,9	14,8	9,2
3486	3052	7388/2B ISO50 - FORATO	M 24	37	25	29,1	19,6	65,5	25,5	17,9	11,5

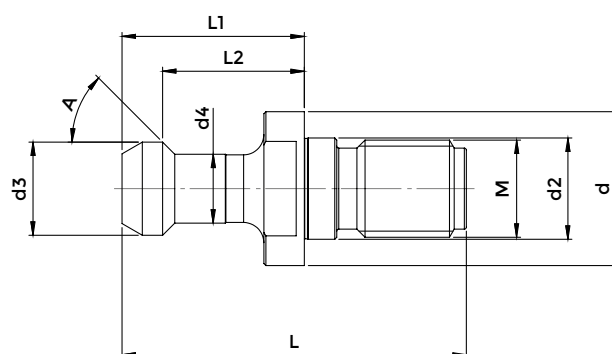
ISO 7388/2 B PULL STUDS (ISO 7388-3 form UD - UF) WITH ID COUNTERBORE



ISO 7388/B

ID counterbore is carried out upon customer specification

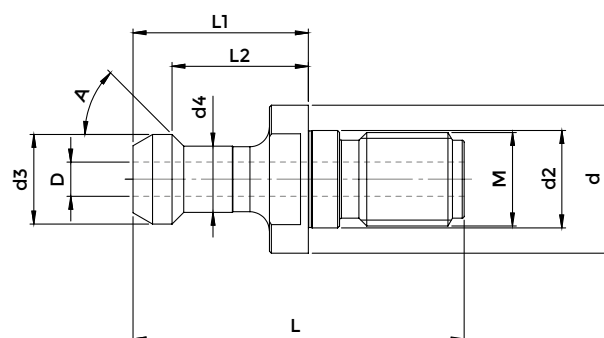
BT PULL STUDS (ISO 7388-3 form JD - JF) WITHOUT COOLANT BORE



MAS BT

COD. (WITHOUT OR)	COD. (WITH OR)	DESCRIPTION	A	M	d	d2	d3	d4	L	L1	L2
3288	-	BT 30 - 45° NON FORATO	45°	M 12	16,5	12,5	11	7	43	23	18
3287	-	BT 30 - 60° NON FORATO	60°	M 12	16,5	12,5	11	7	43	23	18
3290	-	BT 35 - 45° NON FORATO	45°	M 12	20	13	13	8,5	48	28	22,5
3292	3316	BT 40 - 45° NON FORATO	45°	M 16	23	17	15	10	60	35	28
3293	3315	BT 40 - 60° NON FORATO	60°	M 16	23	17	15	10	60	35	28
3294	3318	BT 40 - 90° NON FORATO	90°	M 16	23	17	15	10	60	35	28
3297	-	BT 45 - 45° NON FORATO	45°	M 20	31	21	19	14	70	40	31
3298	-	BT 45 - 60° NON FORATO	60°	M 20	31	21	19	14	70	40	31
3300	3325	BT 50 - 45° NON FORATO	45°	M 24	38	25	23	17	85	45	35
3301	3322	BT 50 - 60° NON FORATO	60°	M 24	38	25	23	17	85	45	35
3302	3326	BT 50 - 90° NON FORATO	90°	M 24	38	25	23	17	85	45	35

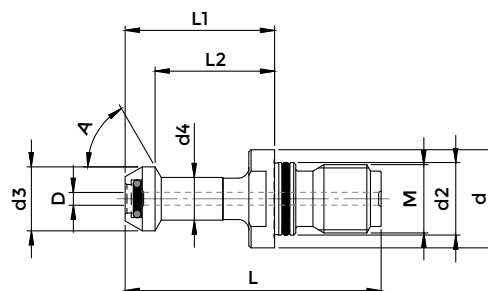
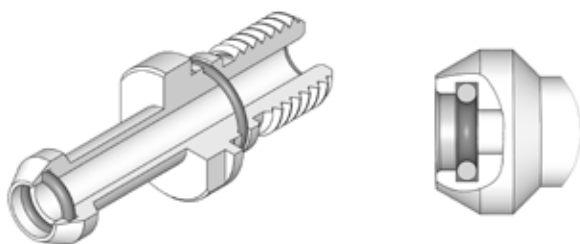
BT PULL STUDS (ISO 7388-3 form JD - JF) WITH COOLANT BORE



MAS BT

COD. (WITHOUT OR)	COD. (WITH OR)	DESCRIPTION	A	M	d	d2	d3	d4	L	L1	L2	D
3225	-	BT 30 - 45° FORATO	45°	M 12	16,5	12,5	11	7	43	23	18	2,5
3224	-	BT 30 - 60° FORATO	60°	M 12	16,5	12,5	11	7	43	23	18	2,5
3328	3430	BT 40 - 45° FORATO	45°	M 16	23	17	15	10	60	35	28	4
3327	3429	BT 40 - 60° FORATO	60°	M 16	23	17	15	10	60	35	28	4
3330	3431	BT 40 - 90° FORATO	90°	M 16	23	17	15	10	60	35	28	4
3332	3501	BT 50 - 45° FORATO	45°	M 24	38	25	23	17	85	45	35	6
3331	3500	BT 50 - 60° FORATO	60°	M 24	38	25	23	17	85	45	35	6
3333	3502	BT 50 - 90° FORATO	90°	M 24	38	25	23	17	85	45	35	6

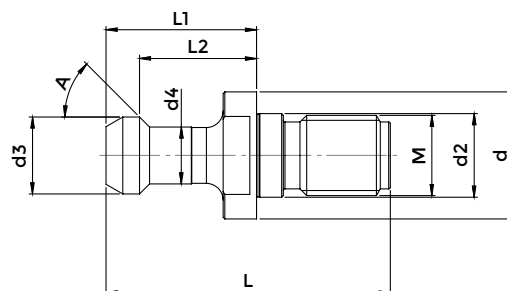
BT PULL STUDS WITH COOLANT BORE AND DOUBLE O-RING



MAS BT

COD.	DESCRIPTION	A	M	d	d2	d3	d4	L	L1	L2	D
3131	BT 40 - 45° FORATO con DOPPIO OR	45°	M 16	23	17	15	10	60	35	28	3
3132	BT 40 - 60° FORATO con DOPPIO OR	60°	M 16	23	17	15	10	60	35	28	3
3133	BT 50 - 45° FORATO con DOPPIO OR	45°	M 24	38	25	23	17	85	45	35	6
3134	BT 50 - 60° FORATO con DOPPIO OR	60°	M 24	38	25	23	17	85	45	35	6
3135	BT 50 - 90° FORATO con DOPPIO OR	90°	M 24	38	25	23	17	85	45	35	6

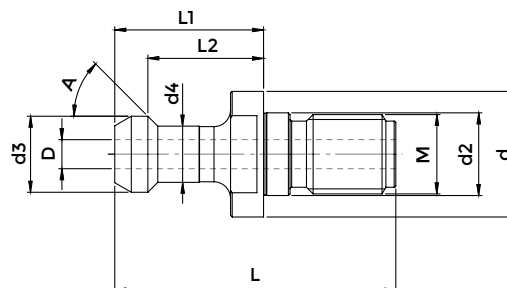
BT TYPE PULL STUDS SUITABLE FOR DIN 69871 SHANKS WITHOUT COOLANT BORE



DIN 69871

COD. (WITHOUT OR)	COD. (WITH OR)	DESCRIPTION	A	M	d	d2	d3	d4	L	L1	L2
3291	4632	SK 40 - 45° NON FORATO	45°	M 16	23	17	15	10	57	32	25
-	4631	SK 40 - 60° NON FORATO	60°	M 16	23	17	15	10	57	32	25
3296	4633	SK 40 - 90° NON FORATO	90°	M 16	23	17	15	10	57	32	25

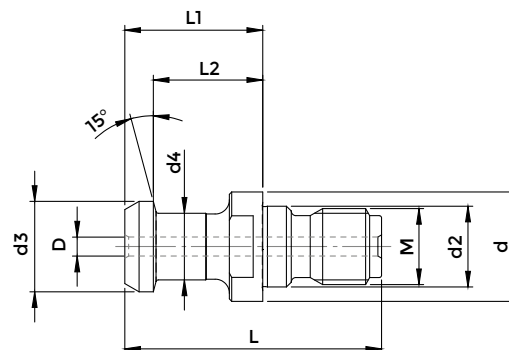
BT TYPE PULL STUDS SUITABLE FOR DIN 69871 SHANKS WITH COOLANT BORE



DIN 69871

COD. (WITHOUT OR)	COD. (WITH OR)	DESCRIPTION	A	M	d	d2	d3	d4	L	L1	L2	D
4635	4638	SK 40 - 45° FORATO	45°	M 16	23	17	15	10	57	32	25	4
-	4637	SK 40 - 60° FORATO	60°	M 16	23	17	15	10	57	32	25	4
-	4639	SK 40 - 90° FORATO	90°	M 16	23	17	15	10	57	32	25	4

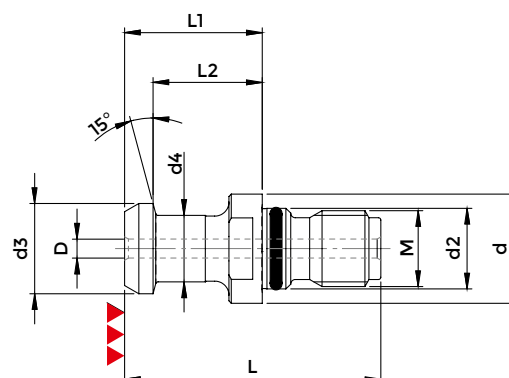
JIS B 6339 PULL STUDS WITH COOLANT BORE



JIS B 6339

COD. (WITHOUT OR)	COD. (WITH OR)	DESCRIPTION	M	d	d2	d3	d4	L	L1	L2	D
3334	-	6339 ISO 30 - FORATO	M 12	16,5	12,5	12	8	43	23,4	18,4	4
3084	3097	6339 ISO 40 - FORATO	M 16	23	17	19	14	54	29	23	4
4588	3317	6339 ISO 40 - FORATO	M 16	23	17	19	14	54	29	23	7
-	3335	6339 ISO 50 - FORATO	M 24	38	25	28	21	74	34	25	10

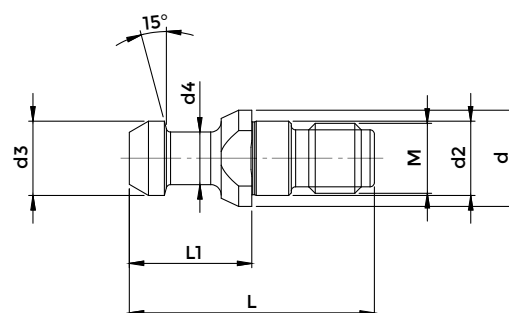
JIS B 6339 PULL STUDS WITH COOLANT BORE AND GRINDED HEAD



JIS B 6339

COD.	DESCRIPTION	M	d	d2	d3	d4	L	L1	L2	D
4549	6339 ISO 40 FORATO con RASAMENTO RETTIFICATO	M 16	23	17	19	14	54	29	23	4

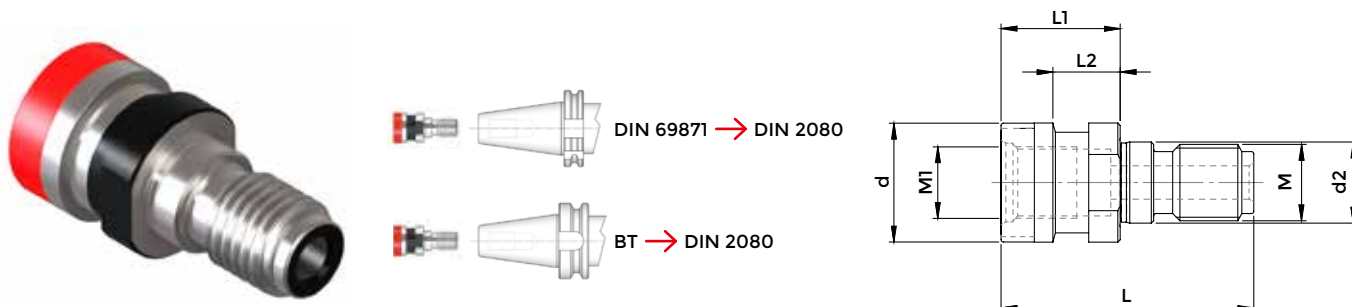
PULL STUDS FOR ISO 20 SHANK



ISO 20

COD.	DESCRIPTION	M	d	d2	d3	d4	L	L1
3491	ISO 20 - M 8 / L 28	M 8	11	8,5	8,5	6	28	14

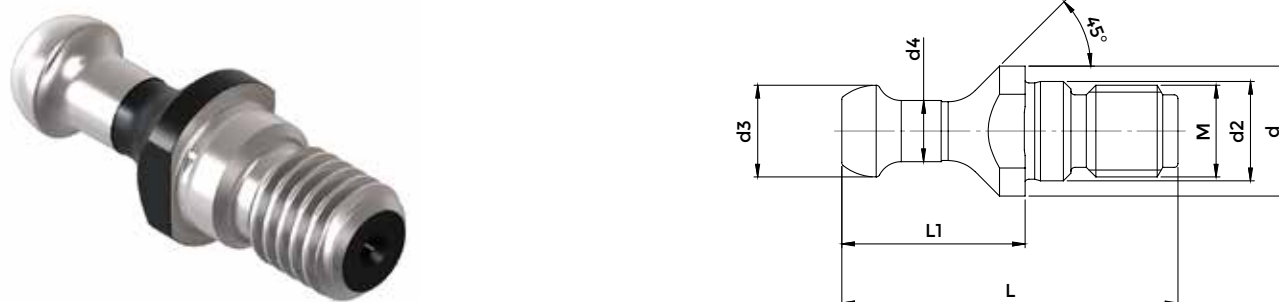
OTT PULL STUDS ADAPTERS TO DIN 2080



OTT

COD.	DESCRIPTION	M	M1	d	d2	L	L1	L2
3487	OTT M 16 - TC 40	M 16	M 16	25,3	17	53	25	13,6
3466	OTT M 16 - BT 40	M 16	M 16	25,3	17	56	28	16,6
0087	OTT M 24 - CONO 50	M 24	M 24	39,6	25	65	25	13

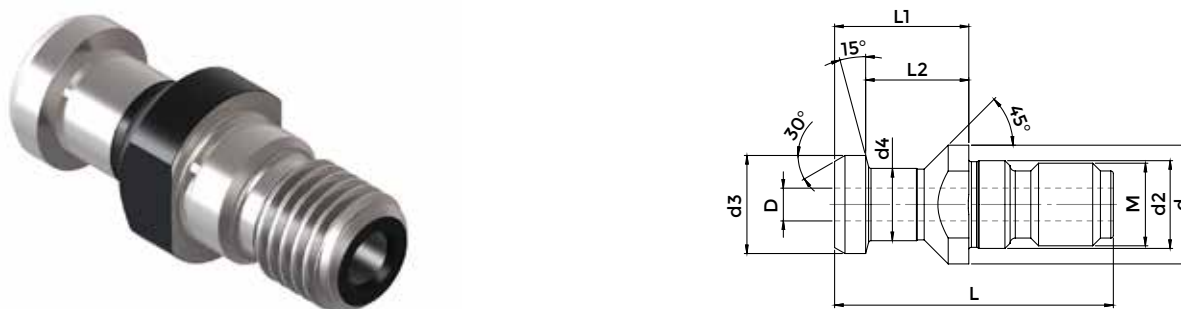
BIESSE PULL STUDS



BIESSE

COD.	DESCRIPTION	M	d	d2	d3	d4	L	L1
3492	BIESSE ISO 30 - M 12	M 12	17	13	12	8	44	24

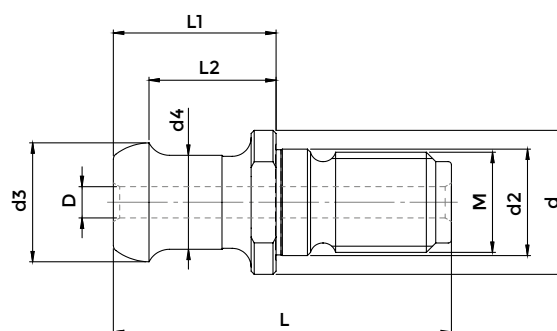
BRIDGEPORT PULL STUDS



BRIDGEPORT

COD.	DESCRIPTION	M	d	d2	d3	d4	L	L1	L2	D
3359	BRIDGEPORT ISO 40 - M 16	M 16	23	17	19	14	54	29	23	7

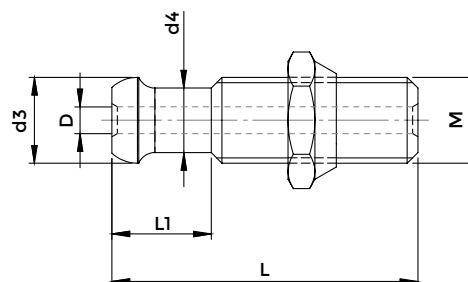
C.B. FERRARI PULL STUDS



C.B. FERRARI

COD.	DESCRIPTION	M	d	d2	d3	d4	L	L1	L2	D
4597	C.B. FERRARI ISO40 - M16	M 16	23	17	19	15	54	26	20,31	5

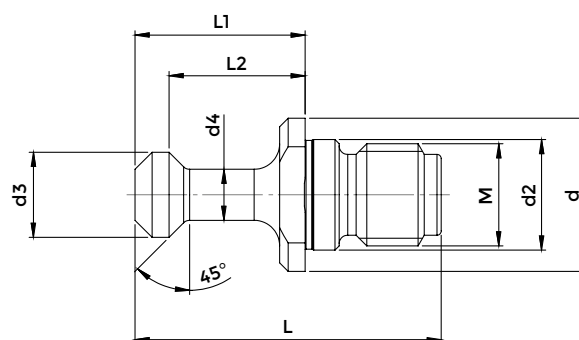
C.B. FERRARI PULL STUDS WITH NUT



C.B. FERRARI

COD.	DESCRIPTION	M	d3	d4	L	L1	D
3493	C.B. FERRARI ISO40 - M16/DADO	M 16	16	12	57	18,5	5

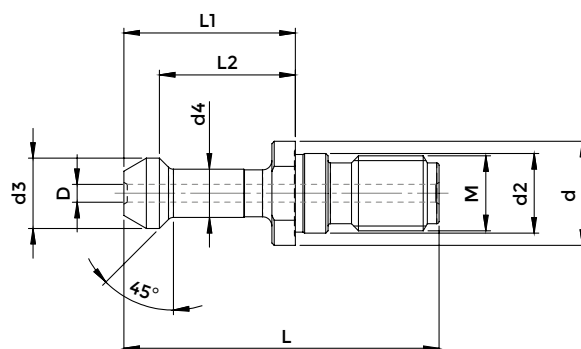
CHIRON PULL STUDS



CHIRON

COD.	DESCRIPTION	M	d	d2	d3	d4	L	L1	L2
4593	CHIRON ISO 30 - M 12	M 12	18	13	10	6	36	20	16

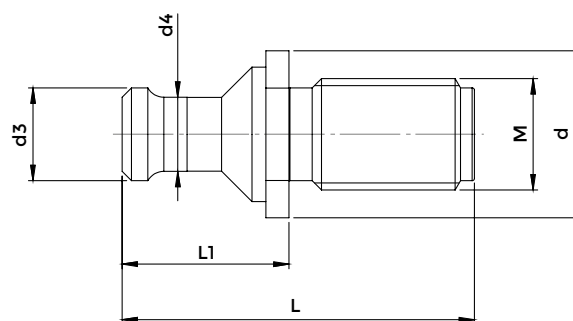
CINCINNATI PULL STUDS



CINCINNATI

COD.	DESCRIPTION	M	L	L1	L2	d	d2	d3	d4	D
4583	CINCINNATI ISO 40 - M16 / L1=36,6	M 16	67,3	36,6	29	22,2	17	15	10,3	3,8
4586	CINCINNATI ISO 40 - M16 / L1=39,4	M 16	67,3	39,4	31,75	22,2	17	15	10,3	3,8

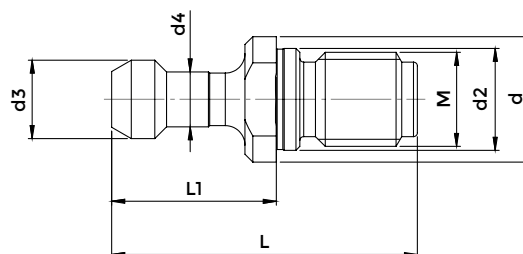
CORREA PULL STUD BOLTS



CORREA

COD.	DESCRIPTION	M	d	d3	d4	L	L1
4594	CORREA ISO 50 - M 24	M 24	36	20	16	76	36

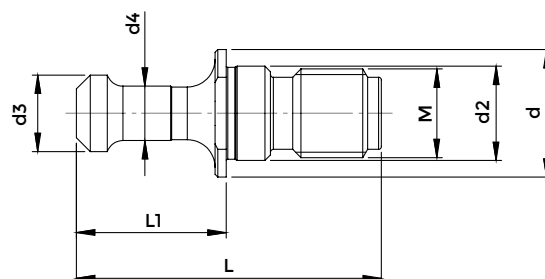
MECCANICA CORTINI PULL STUDS



CORTINI

COD.	DESCRIPTION	M	d	d2	d3	d4	L	L1
0064	CORTINI ISO 30 - M 12	M 12	16	13	10	7	39	21

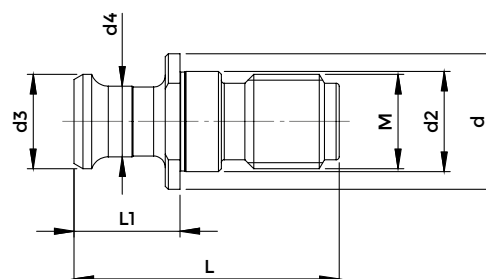
FAMUP PULL STUDS



FAMUP

COD.	DESCRIPTION	M	d	d2	d3	d4	L	L1
2756	FAMUP ISO 30 - M12	M 12	16	13	9,8	5,8	40	20
3527	FAMUP ISO 40 - M16 / L=55	M 16	23	17	13,8	9,8	55	27
4590	FAMUP ISO 40 - M16 / L=58	M 16	23	17	13,8	9,8	58	30

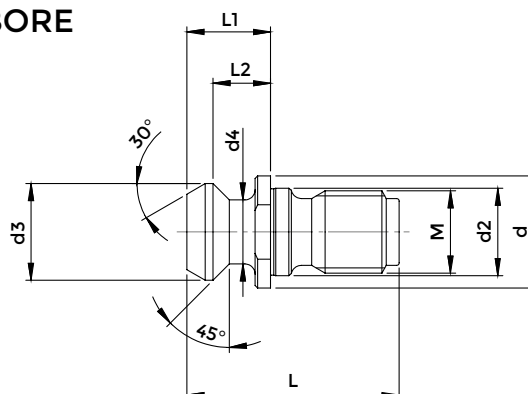
GLORIA PULL STUDS



GLORIA

COD.	DESCRIPTION	M	d	d2	d3	d4	L	L1
3471	GLORIA ISO 40 - M 16	M 16	23	17	16	12	45	18

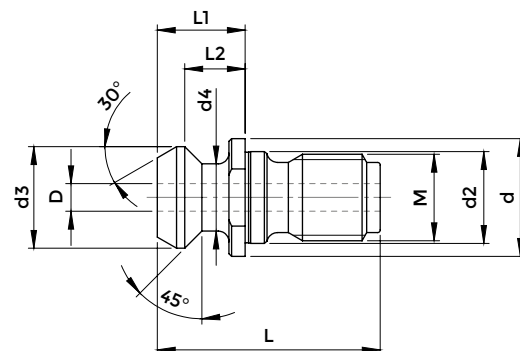
MAZAK PULL STUDS WITHOUT COOLANT BORE



MAZAK

COD. (WITHOUT OR)	COD. (WITH OR)	DESCRIPTION	M	d	d2	d3	d4	L	L1	L2	
4541	4542	MAZAK SK 40 - NON FORATO	M 16	21,8	17	18,79	12,44	41,25	16,25	11,17	DIN 69871/ CAT
4543	4544	MAZAK BT 40 - NON FORATO	M 16	22	17	18,79	12,44	44,1	19,1	14,02	BT

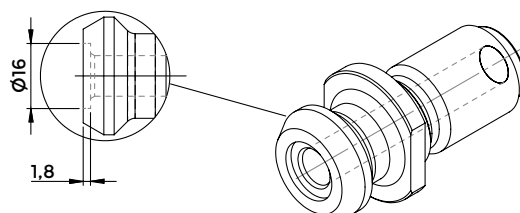
MAZAK PULL STUDS WITH COOLANT BORE



MAZAK

COD. (WITHOUT OR)	COD. (WITH OR)	DESCRIPTION	M	d	d2	d3	d4	L	L1	L2	D	
4589	4772	MAZAK SK 40 - FORATO	M16	21,8	17	18,79	12,44	41,25	16,25	11,17	7	DIN 69871/ CAT
4592	4773	MAZAK BT 40 - FORATO	M16	22	17	18,79	12,44	44,1	19,1	14,02	7	BT
4776	4777	MAZAK SK 50 - FORATO	M24	35,5	25	28,95	20,82	65,4	25,4	17,78	10	DIN 69871/ CAT
4778	4779	MAZAK BT 50 - FORATO	M24	37	25	28,95	20,82	65,2	25,2	17,58	10	BT

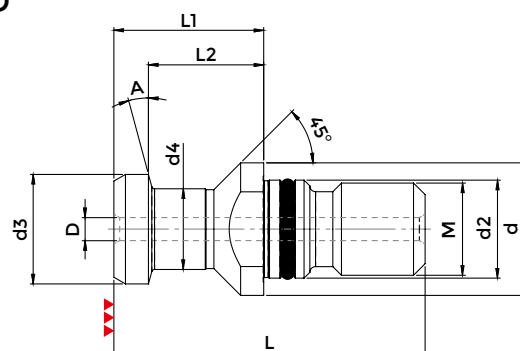
MAZAK PULL STUDS WITH COOLANT BORE AND COUNTERBORE



MAZAK

COD. (WITHOUT OR)	COD. (WITH OR)	DESCRIPTION	M	d	d2	d3	d4	L	L1	L2	D	
3269	4774	MAZAK SK 50 con LAMATURA	M24	35,5	25	28,95	20,82	65,4	25,4	17,78	10	DIN 69871 / CAT
3352	4775	MAZAK BT 50 con LAMATURA	M24	37	25	28,95	20,82	65,2	25,2	17,58	10	BT

OKUMA PULL STUDS (FOR DIN) WITH COOLANT BORE AND GRINDED HEAD



OKUMA

COD.	DESCRIPTION	M	d	d2	d3	d4	L	L1	L2	D	A
4548	OKUMA SK 40 - FORATO	M 16	23	17	19	14	54	26	20	4	15°

OKUMA PULL STUDS (FOR BT) WITH COOLANT BORE AND GRINDED HEAD



FIG. 1

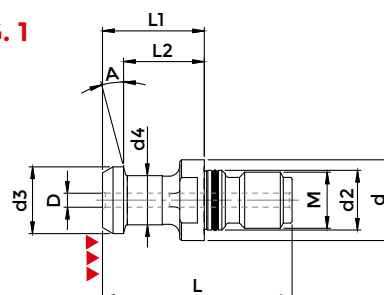
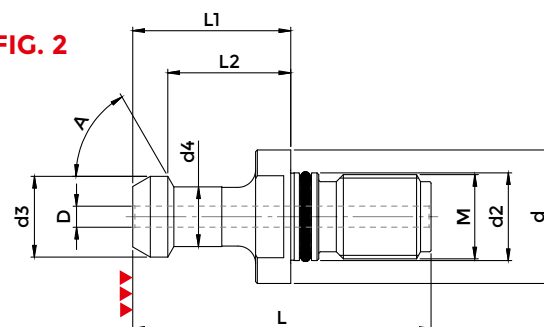


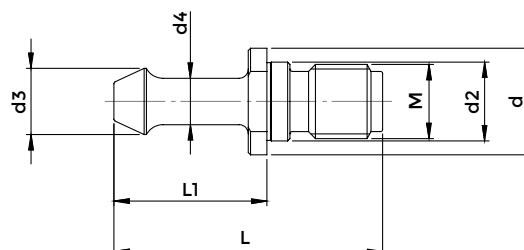
FIG. 2



OKUMA

COD.	DESCRIPTION	M	d	d2	d3	d4	L	L1	L2	D	A	FIG.
4549	OKUMA BT 40 - FORATO	M 16	23	17	19	14	54	29	23	4	15°	1
4550	OKUMA BT 50 - FORATO	M 24	38	25	23	17	85	45	35	6	60°	2

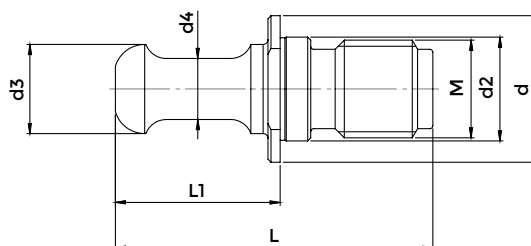
OLIVETTI OCN PULL STUDS



OLIVETTI OCN

COD.	DESCRIPTION	M	d	d2	d3	d4	L	L1
4591	OLIVETTI ISO 40 - M 16	M 16	23	17	14,3	10	58	33

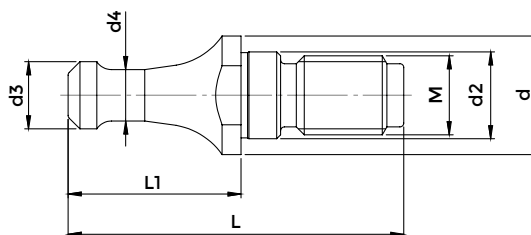
RAMBAUDI PULL STUDS



RAMBAUDI

COD.	DESCRIPTION	M	d	d2	d3	d4	L	L1
4595	RAMBAUDI ISO 40 - M 16	M 16	24	17	14,6	10	52	27
4596	RAMBAUDI ISO 50 - M 24	M 24	35,8	25	20	16	79,5	39,5

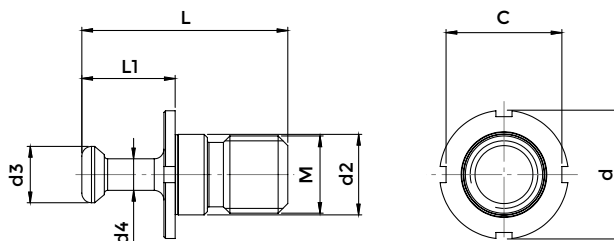
SCM / MORBIDELLI PULL STUDS



SCM MORBIDELLI

COD.	DESCRIPTION	M	d	d2	d3	d4	L	L1
3358	SCM/MORBIDELLI ISO 30 - M 10	M 10	15	11	8,5	6,5	42,5	21,9

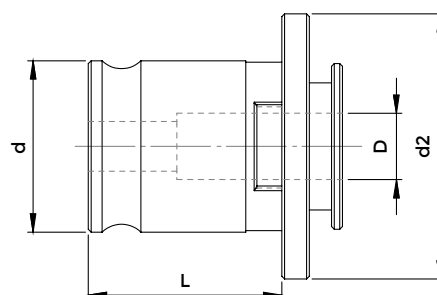
SECMU PULL STUDS



SECMU

COD.	DESCRIPTION	M	d	d2	d3	d4	L	L1	C
3496	SECMU ISO 50 - M 24	M 24	40	25	17,5	9,8	64	29	36

TAPPING ADAPTERS WITHOUT CLUTCH



B

COD.	DESCRIPTION	THREAD	D	d	d2	L
4077	B.0	M 2 ÷ M 10	Ø 2,5 ÷ Ø 8	13	22	19,5
3390	B.1	M 2 ÷ M 12 (* M 18)	Ø 2,5 ÷ Ø 11 (* Ø 14)	19	30	21,5
3391	B.2	M 5 ÷ M 20 (* M 30)	Ø 6,0 ÷ Ø 18 (* Ø 22)	31	46	35
3392	B.3	M 14 ÷ M 36 (* M 48)	Ø 11,0 ÷ Ø 28 (* Ø 36)	48	68	55,5

*Adapters with SCREWS

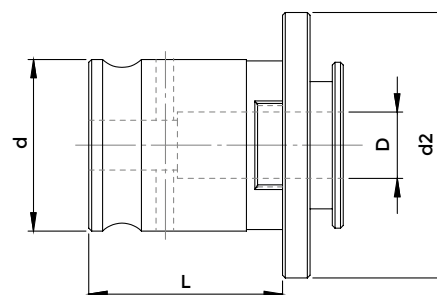
EQUIPMENT CASES FOR TAPPING CHUCKS OF TAPPING ADAPTERS WITHOUT CLUTCH



COD.	DESCRIPTION	CASE	SLEEVE
7532	Corredo B.1	3695	6 Bussole Art.3390: Ø 3,5 (M 3) - Ø 4,5 (M 4) - Ø 6 (M 6) - Ø 8 (M 8) - Ø 9 (M 12) - Ø 10 (M 10)
7533	Corredo B.2	3695	7 Bussole Art.3391: Ø 8 (M 8) - Ø 9 (M 12) - Ø 10 (M 10) - Ø 11 (M 14) - Ø 12 (M 16) - Ø 14 (M 18) - Ø 16 (M 20)

Is possible to complete the equipment adding the Tapping Chuck you are interested on.

TAPPING ADAPTERS WITHOUT CLUTCH WITH SCREWS

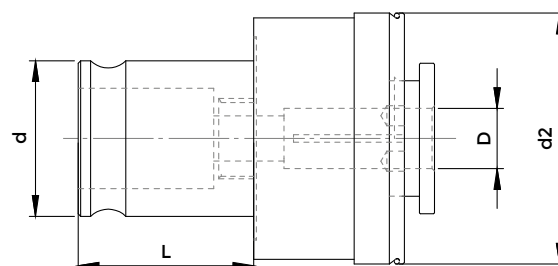


B-GR

COD.	DESCRIPTION	THREAD	D	d	d2	L
3390 GR	B.1 - GR	M 16 ÷ M 18	Ø 12 - Ø 14	19	30	21,5
3391 GR	B.2 - GR	M 27 ÷ M 30	Ø 20 - Ø 22	31	46	35
3392 GR	B.3 - GR	M 39 ÷ M 48	Ø 32 - Ø 36	48	68	55,5

On GR tapping adapters, the tapping tool is locked by screws on guide diameter, this makes possible bigger sizes clamping.

TAPPING ADAPTERS WITH CLUTCH



BF

COD.	DESCRIPTION	THREAD	D	d	d2	L
4078	BF.0	M 2 ÷ M 10	Ø 2,5 ÷ Ø 8	13	23	19,5
3387	BF.1	M 2 ÷ M 12 (* M 18)	Ø 2,5 ÷ Ø 12 (* Ø 14)	19	32	21,5
3388	BF.2	M 5 ÷ M 20 (* M 30)	Ø 6,0 ÷ Ø 18 (* Ø 22)	31	50	35
3389	BF.3	M 14 ÷ M 36 (* M 48)	Ø 11,0 ÷ Ø 28 (* Ø 36)	48	72	55,5

*Adapters with SCREWS

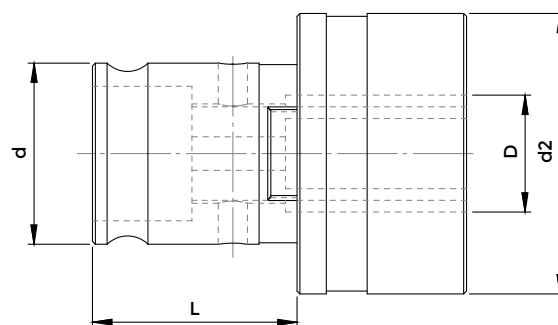
EQUIPMENT CASES FOR TAPPING CHUCKS OF TAPPING ADAPTERS WITH CLUTCH



COD.	DESCRIPTION	CASE	SLEEVE
7534	Corredo B.1	3695	6 Bussole Art.3387: Ø 3,5 (M 3) - Ø 4,5 (M 4) - Ø 6 (M 6) - Ø 8 (M 8) - Ø 9 (M 12) - Ø 10 (M 10)
7535	Corredo B.2	3695	7 Bussole Art.3388: Ø 8 (M 8) - Ø 9 (M 12) - Ø 10 (M 10) - Ø 11 (M 14) - Ø 12 (M 16) - Ø 14 (M 18) - Ø 16 (M 20)

Is possible to complete the equipment adding the Tapping Chuck you are interested on.

TAPPING ADAPTERS WITH CLUTCH WITH SCREWS

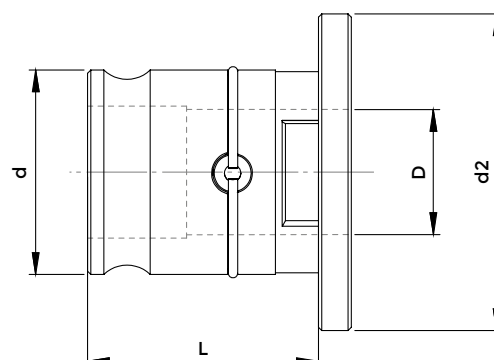


BF-GR

COD.	DESCRIPTION	THREAD	D	d	d2	L
3387 GR	BF.1 - GR	M 16 ÷ M 18	Ø 14	19	32	21,5
3388 GR	BF.2 - GR	M 27 ÷ M 30	Ø 20 - Ø 22	31	50	35
3389 GR	BF.3 - GR	M 39 ÷ M 48	Ø 32 - Ø 36	48	72	55,5

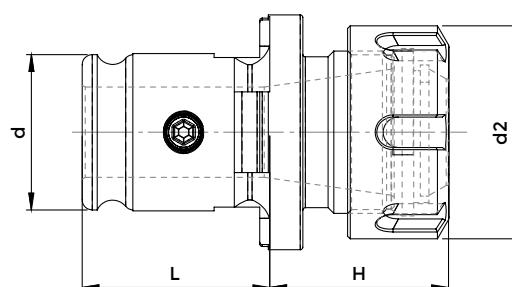
On GR tapping adapters, the tapping tool is locked by screws on guide diameter, this makes possible bigger sizes clamping.

REDUCTIONS FROM ADAPTER TO ADAPTER



COD.	DESCRIPTION	d	D	d2	L
0202	B.1/B.0	19	13	30	21,5
0246	B.2/B.1	31	19	48	35
0397	B.3/B.1	48	19	70	55,5
0399	B.3/B.2	48	31	70	55,5

TAPPING ADAPTERS WITH ER COLLET



COD.	DESCRIPTION	ER	d	d2	H	L	NUT	WRENCH	COLLET
3385	B.1 - ER 16	ER 161÷12	19	32	29	21,5			
3386	B.2 - ER 25	ER 25 1÷20	31	42	38	35	4993	3698	0364
3160	B.2 - ER 32	ER 32 2÷25	31	50	62	35	4995	3669	0996
							4996	3670	0988

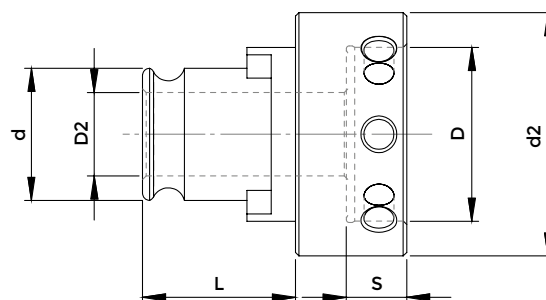
Tapping tool square is locked by the screws on guide diameter

ACCESSORIES

p. 615



THREADING DIE ADAPTERS



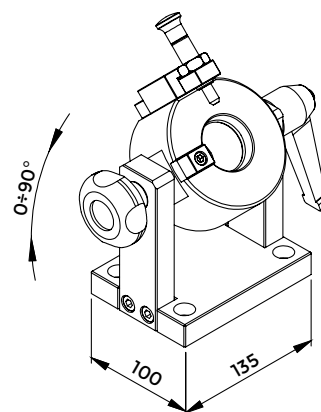
THREADING DIE ADAPTERS

COD.	DESCRIPTION	d	L	D	S	d2	D2
025100165	B.1 - F / 16 x 5	19	21,5	16	4,8	25	12,5
025100205	B.1 - F / 20 x 5	19	21,5	20	4,8	30	12,5
025100207	B.1 - F / 20 x 7	19	21,5	20	6,5	30	12,5
025100259	B.1 - F / 25 x 9	19	21,5	25	8,5	35	12,5
025103011	B.1 - F / 30 x 11	19	21,5	30	10	40	12,5
025103810	B.1 - F / 38 x 10	19	21,5	38	9	48	14,2
025103814	B.1 - F / 38 x 14	19	21,5	38	13	48	14,2
025200205	B.2 - F / 20 x 5	31	35	20	4,8	30	15
025200207	B.2 - F / 20 x 7	31	35	20	6,5	30	15
025200259	B.2 - F / 25 x 9	31	35	25	8,5	35	15
025203011	B.2 - F / 30 x 11	31	35	30	10	40	22
025203810	B.2 - F / 38 x 10	31	35	38	9	48	22
025203814	B.2 - F / 38 x 14	31	35	38	13	48	22
025204514	B.2 - F / 45 x 14	31	35	45	13	57	22
025204518	B.2 - F / 45 x 18	31	35	45	17	57	22

SHANKS DIMENSIONS FOR METRIC TAPPING TOOLS

SHANK Ø x □	STANDARD DIN 352	REINFORCED DIN 371	STANDARD DIN 376	STANDARD ISO	REINFORCED ISO	TYPE OF SLEEVE
2,50 x 2,10	M 1,0	M 1,0	M 3,5	-	-	0-1
2,50 x 2,10	M 1,4	M 1,4	-	-	-	0-1
2,50 x 2,10	M 1,6	M 1,6	-	-	-	0-1
2,50 x 2,10	M 1,8	M 1,8	-	-	-	0-1
2,80 x 2,10	M 2,0	M 2,0	M 4,0	-	-	0-1
2,80 x 2,10	M 2,2	M 2,2	-	-	-	0-1
2,80 x 2,10	M 2,5	M 2,5	-	-	-	0-1
3,15x2,50	-	-	-	M 4,0	M 3,0	0-1
3,50x2,70	M 3,0	M 3,0	M 5,0	-	-	0-1
3,55x2,80	-	-	-	M 4,5	M 3,5	0-1
4,00x3,15	M 3,5	M 3,5	-	M 5,0	M 4,0	0-1
4,50x3,40	M 4,0	M 4,0	M 6,0	-	-	0-1
5,00x4,00	-	-	-	-	M 5,0	0-1
5,50x4,30	-	-	M7,0	-	-	0-1
5,60x4,50	-	-	-	M 7,0	-	0-1
6,00x4,90	M 5,0	M 5,0	-	-	-	0-1-2
6,00x4,90	M 6,0	M 6,0	-	-	-	0-1-2
6,00x4,90	M 8,0	-	M 8,0	-	-	0-1-2
6,30x5,00	-	-	-	M 8,0	M 6,0	0-1-2
7,00x5,50	M 10,0	-	M 10,0	-	-	0-1-2
7,10x5,60	-	-	-	M 9,0	-	0-1-2
8,00x6,20	-	M 8,0	-	M 10,0	M 8,0	0-1-2
9,00x7,00	M 12,0	-	M 12,0	M 12,0	-	1-2
10,00x8,00	-	M 10,0	-	-	M 10,0	1-2
11,00x9,00	M 14,0	-	M 14,0	-	-	1-2-3
11,20x9,00	-	-	-	M 14,0	-	1-2-3
12,00x9,00	M 16,0	-	M 16,0	-	-	1-2-3
12,50x10,00	-	-	-	M 16,0	-	2-3
14,00x11,00	M 18,0	-	M 18,0	-	-	2-3
14,00x11,20	-	-	-	M 18,0	-	2-3
14,00x11,20	-	-	-	M 20,0	-	2-3
16,00x12,00	M 20,0	-	M 20,0	-	-	2-3
16,00x12,50	-	-	-	M 22,0	-	2-3
18,00x14,00	-	-	-	M 24,0	-	2-3
18,00x14,50	M 22,0	-	M 22,0	-	-	2-3
18,00x14,50	M 24,0	-	M 24,0	-	-	2-3
20,00x16,00	M 27,0	-	M 27,0	M 27,0	-	2-3
20,00x16,00	-	-	-	M 30,0	-	2-3
22,00x18,00	M 30,0	-	M 30,0	-	-	2-3
25,00x20,00	M 33,0	-	M 33,0	M 36,0	-	3
28,00x22,00	M 36,0	-	M 36,0	-	-	3
32,00x24,00	M 39,0	-	M 39,0	-	-	3
32,00x24,00	M 42,0	-	M 42,0	-	-	3
36,00x29,00	M 45,0	-	M 45,0	-	-	3
36,00x29,00	M 48,0	-	M 48,0	-	-	3

ORIENTABLE ASSEMBLY STANDS NT - SK - BT - DOUBLE CONTACT SHANKS

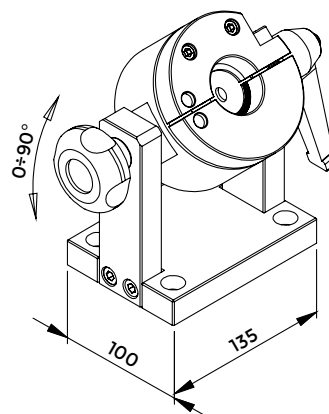


ISO DIN 2080 - DIN 69871 - BT - DOUBLE CONTACT SHANKS

COD.	DESCRIPTION	SCREW	HANDLE	KNOB
				
4438	SMU - CONO 30	1031	1032	1033
4439	SMU - CONO 40	1031	1032	1033
4440	SMU - CONO 45	1031	1032	1033
4441	SMU - CONO 50	1031	1032	1033

Flange locking is guaranteed by the spring system

ORIENTABLE ASSEMBLY STANDS HSK AND POLYGONAL SHANKS



DIN 69893 (A+C - B+D - E - F) - ISO 26623-1

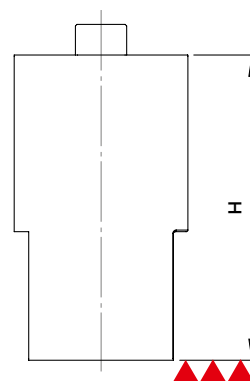
HSK DIN 69893 SHANKS

COD.	DESCRIPTION	HANDLE	KNOB
			
4598	SMU - HSK 25	1032	1033
4599	SMU - HSK 32	1032	1033
4600	SMU - HSK 40	1032	1033
4601	SMU - HSK 50	1032	1033
4602	SMU - HSK 63	1032	1033
4603	SMU - HSK 80	1032	1033
4604	SMU - HSK 100	1032	1033

POLYGONAL SHANKS

COD.	DESCRIPTION	HANDLE	KNOB
			
4599	SMU - POLIGONALE C 32	1032	1033
4600	SMU - POLIGONALE C 40	1032	1033
4601	SMU - POLIGONALE C 50	1032	1033
4602	SMU - POLIGONALE C 63	1032	1033
4603	SMU - POLIGONALE C 80	1032	1033
4604	SMU - POLIGONALE C100	1032	1033

STEEL TOOLING CLAMPERS



BMU TOOLS

COD.	DESCRIPTION	H
2190	BMU - CONO 30	70
2191	BMU - CONO 40	95
2193	BMU - CONO 50	130

Made with hardened steel, burnished and grinded.

DOUBLE POSITION ASSEMBLY STANDS



FIG. 1



FIG. 2



FIG. 3



FIG. 4

SMD TOOLS

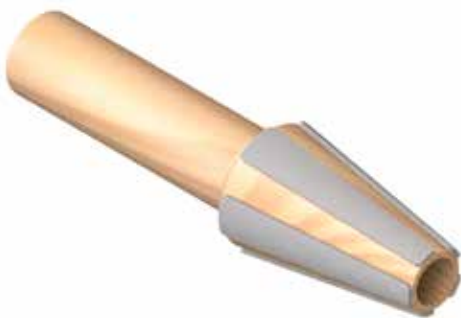
COD.	DESCRIPTION	FIGURE	L x P x H
237-32310	SMD - ISO 40 / DIN 2080	1	350 x 135 x 155
237-32510	SMD - ISO 50 / DIN 2080	1	350 x 135 x 155
237-32320	SMD - TC 40 / DIN 69871	1	350 x 135 x 155
237-32520	SMD - TC 50 / DIN 69871	1	350 x 135 x 155
237-33320	SMD - TC 40 DOPPIO CONTATTO	1	350 x 135 x 155
237-33520	SMD - TC 50 DOPPIO CONTATTO	1	350 x 135 x 155
237-32130	SMD - BT 30 / MAS 403	1	350 x 135 x 155
237-32330	SMD - BT 40 / MAS 403	1	350 x 135 x 155
237-32530	SMD - BT 50 / MAS 403	1	350 x 135 x 155
237-33120	SMD - BT 30 DOPPIO CONTATTO	1	350 x 135 x 155
237-33330	SMD - BT 40 DOPPIO CONTATTO	1	350 x 135 x 155
237-33530	SMD - BT 50 DOPPIO CONTATTO	1	350 x 135 x 155

COD.	DESCRIPTION	FIGURE	L x P x H
237-32450	SMD - HSK 63A+C	2	350 x 135 x 155
237-32650	SMD - HSK 100 A+C	2	350 x 135 x 155
237-32470	SMD - HSK 63 E	2	350 x 135 x 155
237-32470	SMD - HSK 63 F	2	350 x 135 x 155

COD.	DESCRIPTION	FIGURE	L x P x H
237-33210	SMD - POLIGONALE C 40	3	350 x 135 x 155
237-33310	SMD - POLIGONALE C 50	3	350 x 135 x 155
237-33410	SMD - POLIGONALE C 63	3	350 x 135 x 155
237-33510	SMD - POLIGONALE C 80	3	350 x 135 x 155

COD.	DESCRIPTION	FIGURE	L x P x H
237-32490	SMD - VDI 30 / DIN 69880	4	350 x 135 x 155
237-32590	SMD - VDI 40 / DIN 69880	4	350 x 135 x 155
237-32690	SMD - VDI 50 / DIN 69880	4	350 x 135 x 155

SPINDLE SEAT TAPER CLEANERS



ISO SPINDLE SEAT

COD.	DESCRIPTION	ISO
4407	TP - ISO 30	30
4408	TP - ISO 40	40
4409	TP - ISO 45	45
4410	TP - ISO 50	50



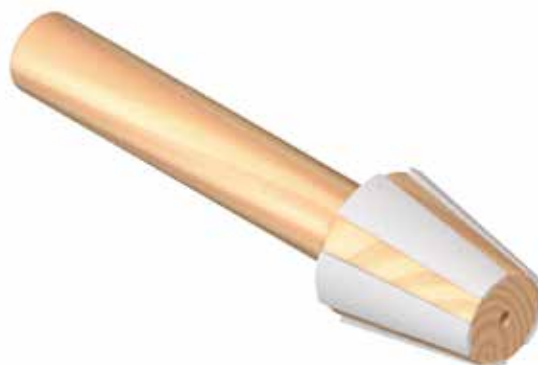
MORSE TAPER SPINDLE SEAT

COD.	DESCRIPTION	CM
4411	TP - CM. 1	1
4412	TP - CM. 2	2
4413	TP - CM. 3	3
4414	TP - CM. 4	4
4415	TP - CM. 5	5
5065	TP - CM. 6	6



HSK SPINDLE SEAT

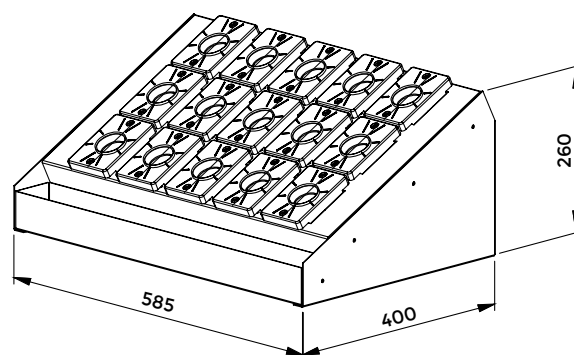
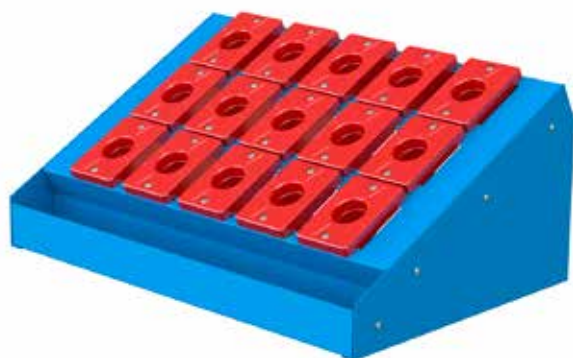
COD.	DESCRIPTION	HSK
5205	TP - HSK 32	32
5206	TP - HSK 40	40
5207	TP - HSK 50	50
5208	TP - HSK 63	63
5209	TP - HSK 80	80
5210	TP - HSK 100	100



ER COLLET SEAT TAPER CLEANERS

COD.	DESCRIPTION	ER
5375	TP - ER 16	16
5376	TP - ER 20	20
5377	TP - ER 25	25
5378	TP - ER 32	32
5379	TP - ER 40	40

TOOL STORES



Supplied complete of red tool holder bushings.

COD.	DESCRIPTION	CHUCKS	NUMBER OF SEATS	TAPER BUSH	SCREW
					

ISO CHUCKS

3700	MAG. ISO 30	30	15	4416	0033
3701	MAG. ISO 40	40	15	4417	0033
3702	MAG. ISO 45	45	15	4418	0033
3703	MAG. ISO 50	50	12	4419	0033

HSK CHUCKS

9460	MAG. HSK 32 A - C - E	32	15	9440	0033
9461	MAG. HSK 40 A - C - E	40	15	9441	0033
3750	MAG. HSK 50 A - C - E	50	15	4430	0033
3751	MAG. HSK 63 A - C - E	63	15	4431	0033
9462	MAG. HSK 80 A - C	80	15	9442	0033
3875	MAG. HSK100 A - C	100	15	5543	0033
9461	MAG. HSK 50 F	50	15	9441	0033
3750	MAG. HSK 63 F	63	15	4430	0033
3751	MAG. HSK 80 F	80	15	4431	0033

POLYGONAL CHUCKS

9463	MAG. POLIGONALE C 32	32	15	9443	0033
9464	MAG. POLIGONALE C 40	40	15	9444	0033
9465	MAG. POLIGONALE C 50	50	15	9445	0033
9466	MAG. POLIGONALE C 63	63	15	9446	0033
9467	MAG. POLIGONALE C 80	80	12	9447	0033

MT CHUCKS

9468	MAG. CM 2	2	15	9448	0033
9469	MAG. CM 3	3	15	9449	0033
3696	MAG. CM 4	4	15	4400	0033
3702	MAG. CM 5	5	15	4418	0033

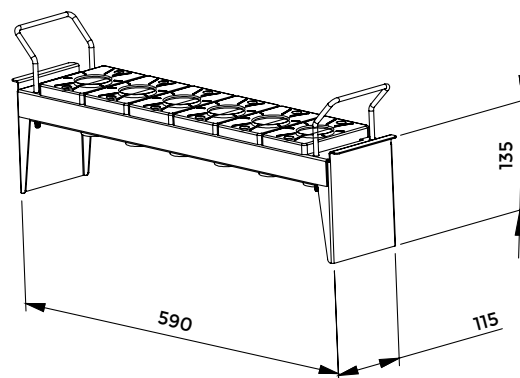
VDI CHUCKS

3705	MAG. Ø 32 - VDI 30	30	15	5531	0033
3706	MAG. Ø 40 - VDI 40	40	15	5532	0033
5557	MAG. Ø 50 - VDI 50	50	12	5533	0033



upon request
with yellow
tool holder
bushing

BENCH SUPPORTS



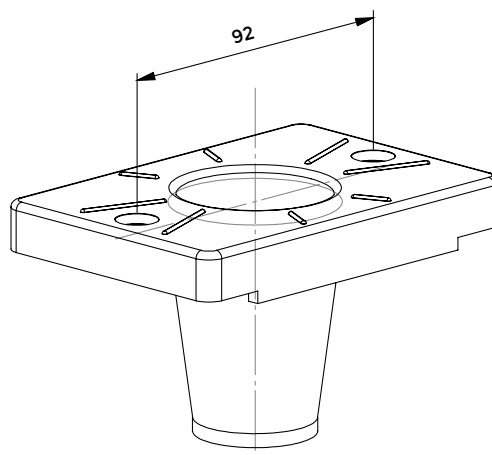
Supplied complete of red tool holder bushings.

COD.	DESCRIPTION	CHUCKS	NUMBER OF SEATS	TAPER BUSH
				
ISO CHUCKS				
4404	UNITÀ ISO 30	30	6	4416
4405	UNITÀ ISO 40	40	6	4417
4330	UNITÀ ISO 45	45	6	4418
4406	UNITÀ ISO 50	50	5	4419
HSK CHUCKS				
9450	UNITÀ HSK 32 A - C - E	32	6	9440
9451	UNITÀ HSK 40 A - C - E	40	6	9441
4428	UNITÀ HSK 50 A - C - E	50	6	4430
4429	UNITÀ HSK 63 A - C - E	63	6	4431
9452	UNITÀ HSK 80 A - C	80	5	9442
4794	UNITÀ HSK100 A - C	100	5	5543
9451	UNITÀ HSK 50 F	50	6	9441
4428	UNITÀ HSK 63 F	63	6	4430
4429	UNITÀ HSK 80 F	80	6	4431
POLYGONAL CHUCKS				
9453	UNITÀ POLIGONALE C 32	32	6	9443
9454	UNITÀ POLIGONALE C 40	40	6	9444
9455	UNITÀ POLIGONALE C 50	50	6	9445
9456	UNITÀ POLIGONALE C 63	63	6	9446
9457	UNITÀ POLIGONALE C 80	80	5	9447
MT CHUCKS				
9458	UNITÀ CM 2	2	6	9448
9459	UNITÀ CM 3	3	6	9449
4329	UNITÀ CM 4	4	6	4400
4330	UNITÀ CM 5	5	6	4418
VDI CHUCKS				
5369	UNITÀ Ø 32 - VDI 30	30	5	5531
5370	UNITÀ Ø 40 - VDI 40	40	5	5532
5371	UNITÀ Ø 50 - VDI 50	50	4	5533



upon request
with yellow
tool holder
bushing

TOOL HOLDER BUSHINGS



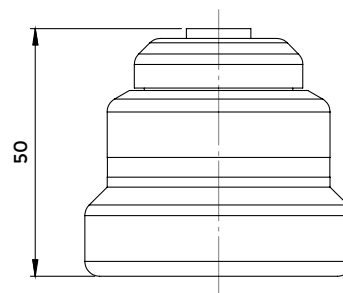
Supplied complete of red tool holder bushings.

COD.	DESCRIPTION	CHUCKS	SCREW
			
ISO CHUCKS			
4416	BOCCOLA ISO 30	30	0033
4417	BOCCOLA ISO 40	40	0033
4418G	BOCCOLA ISO 45	45	0033
4419	BOCCOLA ISO 50	50	0033
HSK CHUCKS			
9440	BOCCOLA HSK 32 A - C - E	32	0033
9441	BOCCOLA HSK 40 A - C - E	40	0033
4430	BOCCOLA HSK 50 A - C - E	50	0033
4431	BOCCOLA HSK 63 A - C - E	63	0033
9442	BOCCOLA HSK 80 A - C	80	0033
5543	BOCCOLA HSK 100 A - C	100	0033
9441	BOCCOLA HSK 50 F	50	0033
4430	BOCCOLA HSK 63 F	63	0033
4431	BOCCOLA HSK 80 F	80	0033
POLYGONAL CHUCKS			
9443	BOCCOLA POLIGONALE C 32	32	0033
9444	BOCCOLA POLIGONALE C 40	40	0033
9445	BOCCOLA POLIGONALE C 50	50	0033
9446	BOCCOLA POLIGONALE C 63	63	0033
9447	BOCCOLA POLIGONALE C 80	80	0033
CM CHUCKS			
9448	BOCCOLA CM 2	2	0033
9449	BOCCOLA CM 3	3	0033
4400	BOCCOLA CM 4	4	0033
4418	BOCCOLA CM 5	5	0033
VDI CHUCKS			
5531	BOCCOLA Ø 32 - VDI 30	30	0033
5532	BOCCOLA Ø 40 - VDI 40	40	0033
5533	BOCCOLA Ø 50 - VDI 50	50	0033



upon request
with yellow
tool holder
bushing

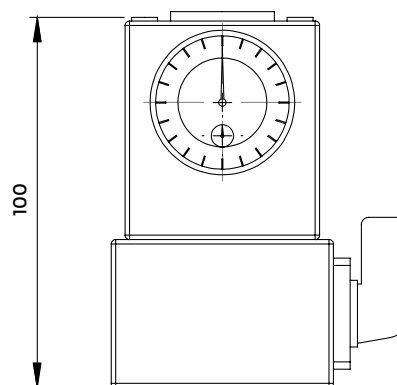
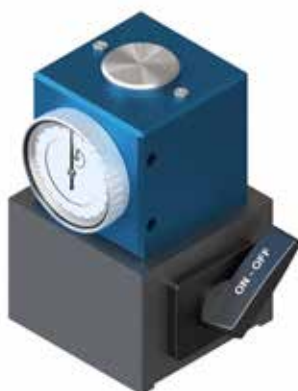
BRIGHT MAGNETIC RESETTER



COD.	DESCRIPTION	BATTERY
0351	ZOP 50	0266

Permanent magnetic base

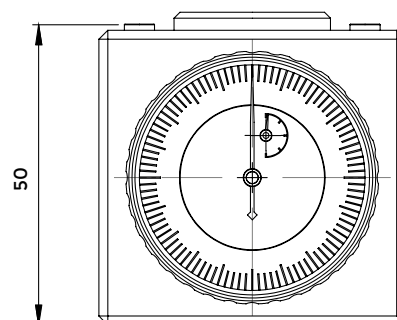
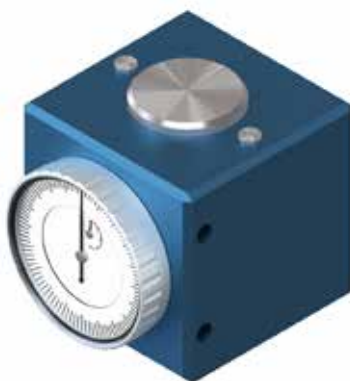
BUILD-IN MAGNETIC RESETTERS WITH DIAL GAUGE



COD.	DESCRIPTION
0354	ZDI 100

- switch ON/OFF magnetic base
- dial gauge ø40 reading 0,01

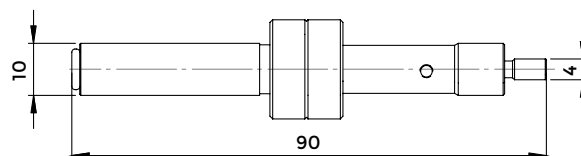
BUILD-IN MAGNETIC RESETTERS WITH DIAL GAUGE



COD.	DESCRIPTION
0349	ZDI 50

- Permanent magnetic base
- dial gauge ø40 reading 0,01

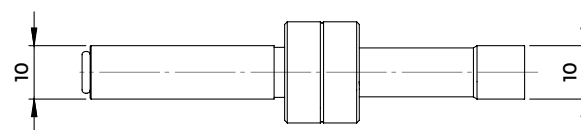
FLOATING CENTERING DEVICE - GROUND



COD.	DESCRIPTION	REPLACEMENT SPRING
0356	CMP 10 - 4	 0333

In CMP wrapping is included one spare spring

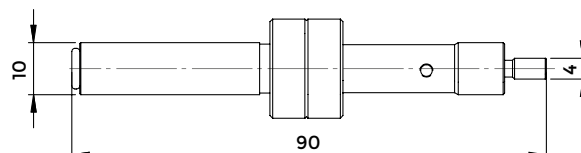
FLOATING CENTERING DEVICE - GROUND



MAX 600 rpm

COD.	DESCRIPTION	REPLACEMENT SPRING
0357	CMP 10 - 10	 0333

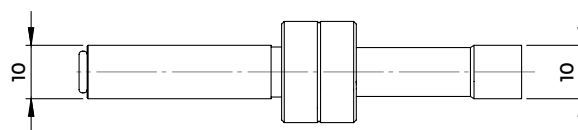
FLOATING CENTERING DEVICE - BURNISHED



COD.	DESCRIPTION	REPLACEMENT SPRING
0242	CMB 10 - 4	 0333

In CMP wrapping is included one spare spring

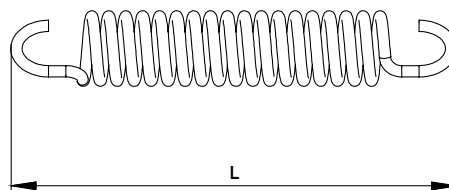
FLOATING CENTERING DEVICE - BURNISHED



MAX 600 rpm

COD.	DESCRIPTION	REPLACEMENT SPRING
0243	CMB 10 - 10	 0333

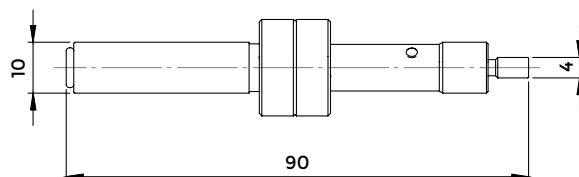
REPLACEMENT SPRINGS FOR CENTERING DEVICES



COD.	L
0333	50
0363	*55

* Recommended for edge finders without spring locking pin

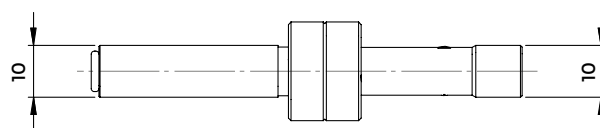
NON MAGNETIC CENTERING DEVICE



COD.	DESCRIPTION	REPLACEMENT SPRING
0445	CMA 10 - 4	 0333

In CMA wrapping is included one spare spring

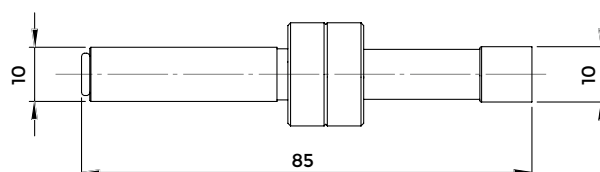
NON MAGNETIC CENTERING DEVICE - CERAMIC HEAD



MAX 600 rpm

COD.	DESCRIPTION	REPLACEMENT SPRING
0447	CMA 10 - 10	0333

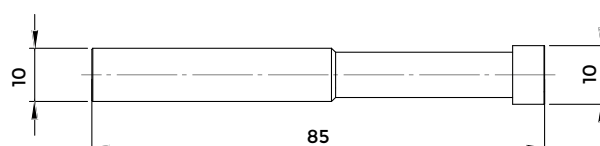
NON MAGNETIC CENTERING DEVICE - CERAMIC HEAD



MAX 600 rpm

COD.	DESCRIPTION	REPLACEMENT SPRING
0455	CMD 10 - 10	0333

NON MAGNETIC SLIM CENTERING DEVICE - CERAMIC HEAD



MAX 600 rpm

COD.	DESCRIPTION	REPLACEMENT SPRING
0457	CMC 10 - 10	0458

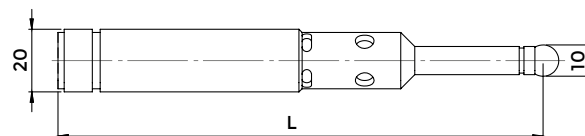
ELECTRONIC CENTERING DEVICE - WITH LIGHT



COD.	DESCRIPTION	L	BATTERY
			
0335	CSL 100	100	0266
0355	CSL 120	120	0562

with light signal

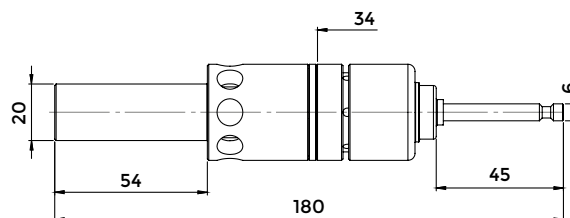
ELECTRONIC CENTERING DEVICE - WITH LIGHT AND SOUND



COD.	DESCRIPTION	L	BATTERY
			
0359	CSS 160	160	0562

with light and sound signal

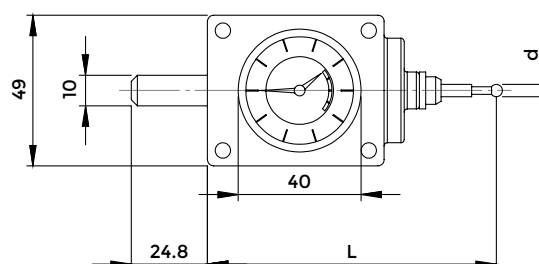
ELECTRONIC 3D CENTERING DEVICE - WITH LIGHT AND SOUND



COD.	DESCRIPTION	TASTER	LED	BATTERY
				
0350	CTL 20 - 6	0322	0328	0595

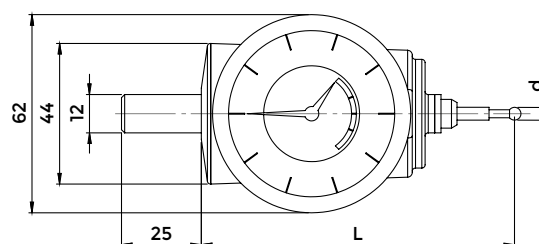
3D with light and sound signal

TRIDIMENSIONAL POSITION DETECTORS WITH DIAL GAUGE



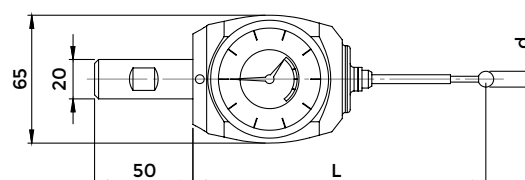
COD.	DESCRIPTION	d	L	TASTER
				
0541	CTZ 10 - 04	4	96	0619
0542	CTZ 10 - 08	8	136	0629

TRIDIMENSIONAL POSITION DETECTORS WITH DIAL GAUGE



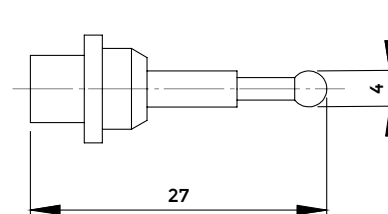
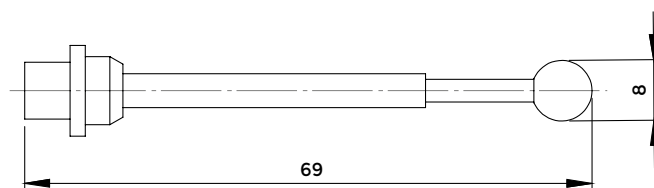
COD.	DESCRIPTION	d	L	TASTER
				
0543	CTN 12 - 04	4	100	0619
0544	CTN 12 - 08	8	140	0629

TRIDIMENSIONAL POSITION DETECTORS WITH DIAL GAUGE



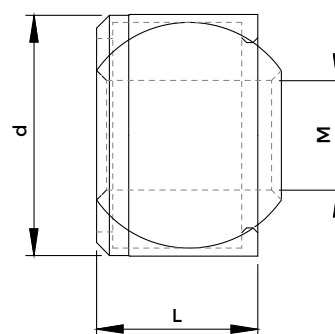
COD.	DESCRIPTION	d	L	TASTER
				
0584	CTA 20 - 04	4	113	0619
0585	CTA 20 - 08	8	153	0629

CERAMIC PROBE



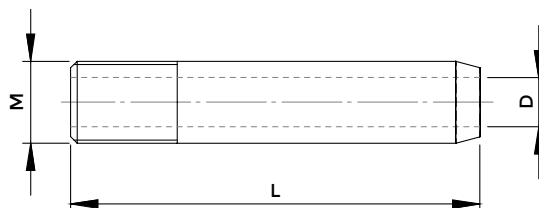
COD.	DESCRIPTION
0619	ASTINA CORTA d. 4
0629	ASTINA LUNGA d. 8

SPHERE COOLANT NOZZLES



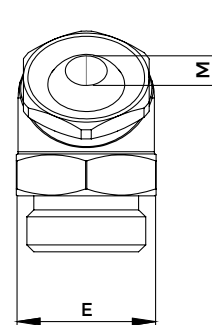
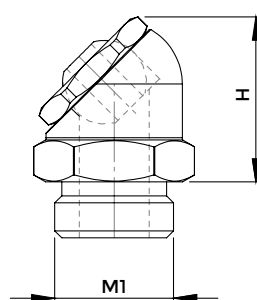
COD. G	COD. K	d	L	M
9200	833-001280	6	5	M 2,5
9201	833-001060	8	6	M 4
9202	833-001070	10	7	M 5
9203	833-001820	12	8	M 5
9204	833-001080	12	8	M 6
9205	833-001090	14	9	M 8
9206	833-001810	16	10	M 10x1

EXTENSIONS FOR COOLANT NOZZLES



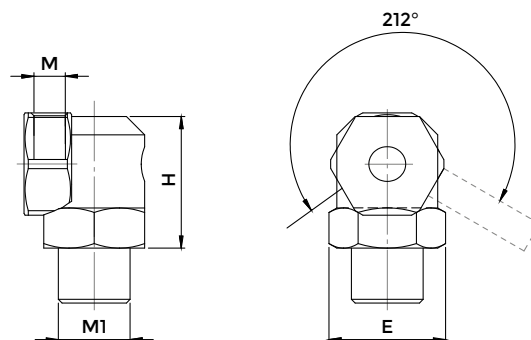
COD. G	COD. K	M	D	L
9210	-	M 3	1,5	25
9211	833-00151	M 4	1	30
9212	833-00152	M 4	2	30
9213	833-00153	M 5	2	30
9214	833-00154	M 5	3	40
9215	833-00155	M 6	2	35
9216	833-00156	M 6	3	35
9217	833-00157	M 6	4	50
9218	833-00158	M 8	2	40
9219	833-00159	M 8	3	40
9220	833-00160	M 8	4	40
9221	833-00161	M 8	5	50
9222	833-00162	M10x1	2	40
9223	-	M10x1	4	40
9224	833-00164	M10x1	6	50
9225	-	M10x1	8	50

SPHERE COOLANT NOZZLES FOR HIGH PRESSURE



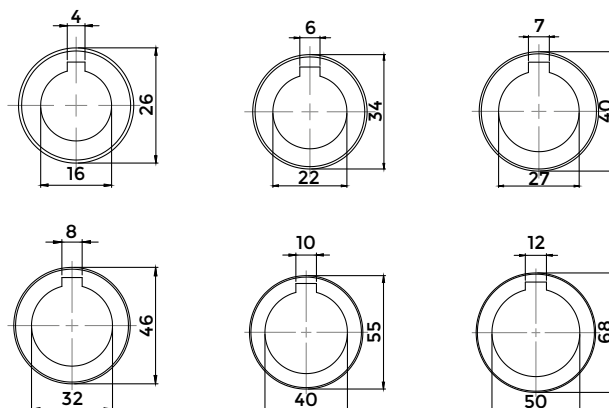
COD. G	M	E	M1	H
9235	M 3	16	1/8	19
9236	M 5	18	1/4	21
9237	M 6	20	3/8	23
9238	M 8	23	3/8	27

ORIENTABLE COOLANT NOZZLES FOR HIGH PRESSURE



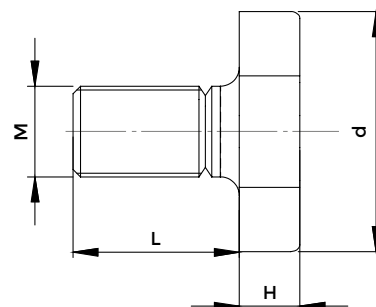
COD. G	M	E	M1	H
9240	M 4	12	1/8	17
9241	M 5	14	1/8	18
9242	M 6	17	1/4	21

SPACERS



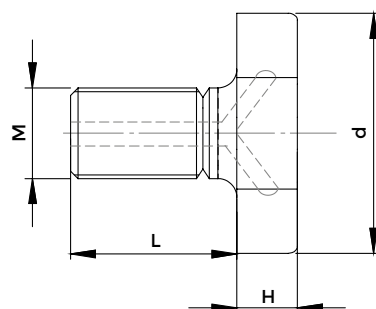
COD.	DESCRIPTION	THICKNESS
4084	AD - D.16	0,03 - 0,04 - 0,05 - 0,06 - 0,1 - 0,2 - 0,3 - 0,4 - 0,5 - 0,6 - 1,0 - 1,10 - 1,30 - 1,40 - 1,50 - 2,0 - 3,0 - 4,0 - 5,0 - 6,0 - 10,0 - 20,0 - 25,0 - 30,0 - 40,0
4085	AD - D.22	0,03 - 0,04 - 0,05 - 0,06 - 0,1 - 0,2 - 0,3 - 0,4 - 0,5 - 0,6 - 0,9 - 1,0 - 2,0 - 3,0 - 4,0 - 5,0 - 6,0 - 10,0 - 20,0 - 30,0 - 60,0 - 100,0
4086	AD - D.27	0,03 - 0,04 - 0,05 - 0,06 - 0,1 - 0,2 - 0,3 - 0,4 - 0,5 - 0,6 - 0,7 - 0,8 - 1,0 - 2,0 - 3,0 - 4,0 - 5,0 - 6,0 - 10,0 - 20,0 - 30,0 - 60,0 - 100,0
4087	AD - D.32	0,03 - 0,04 - 0,05 - 0,06 - 0,1 - 0,2 - 0,3 - 0,4 - 0,5 - 0,6 - 1,0 - 1,5 - 2,0 - 3,0 - 4,0 - 5,0 - 6,0 - 10,0 - 20,0 - 30,0 - 60,0 - 100,0
4088	AD - D.40	0,03 - 0,04 - 0,05 - 0,06 - 0,1 - 0,15 - 0,2 - 0,3 - 0,4 - 0,5 - 0,6 - 0,7 - 0,8 - 1,0 - 1,5 - 2,0 - 3,0 - 4,0 - 5,0 - 6,0 - 7,0 - 10,0 - 20,0 - 30,0 - 60,0 - 100,0
4089	AD - D.50	0,05 - 0,06 - 0,1 - 0,2 - 0,3 - 0,4 - 0,5 - 0,6 - 0,7 - 0,8 - 1,0 - 2,0 - 3,0 - 4,0 - 5,0 - 6,0 - 10,0 - 20,0 - 25,0 - 40,0 - 30,0 - 60,0 - 100,0

MILL LOCKING CROSS HEAD SCREWS



COD.	DESCRIPTION	M	d	L	H	WRENCH
						
4985	VTC 16	M 8	20	16	6	1032
4986	VTC 22	M 10	28	18	7	1032
4987	VTC 27	M 12	35	22	8	1032
4988	VTC 32	M 16	42	26	9	1032
4989	VTC 40	M 20	52	30	10	1032
4990	VTC 50	M 24	63	36	12	1032

MILL LOCKING CROSS HEAD SCREWS WITH COOLANT CHANNELS



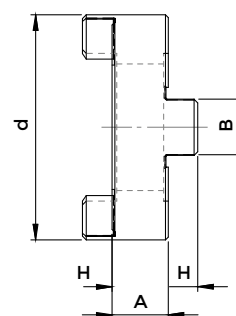
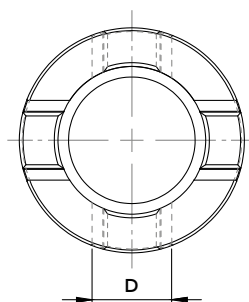
COD.	DESCRIPTION	M	d	L	H	WRENCH
						
2739	VPR 16	M 8	20	16	6	4562
2740	VPR 22	M 10	28	18	7	4563
2741	VPR 27	M 12	35	22	8	4564
2742	VPR 32	M 16	42	26	9	4565
2743	VPR 40	M 20	52	30	10	4566

WRENCHES FOR CROSS HEAD SCREWS



COD.	DESCRIPTION	CROSS HEAD SCREW
		
4562	CH 16 VTC	4985
4563	CH 22 VTC	4986
4564	CH 27 VTC	4987
4565	CH 32 VTC	4988
4566	CH 40 VTC	4989
4567	CH 50 VTC	4990

CLUTCH DRIVE RINGS FOR DIN 6358 COMBI SHELL MILL HOLDERS



COD.	DESCRIPTION	D	d	H	B	A
4090	AT 16	16	32	5,0	10	8
4091	AT 22	22	40	5,6	12	10
4092	AT 27	27	48	6,3	12	12
4093	AT 32	32	58	7,0	14	14
4094	AT 40	40	70	8,0	14	16
4095	AT 50	50	90	9,0	16	18

DOWELS FOR FACE MILL HOLDERS



FIG. 1

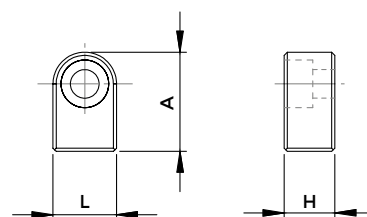
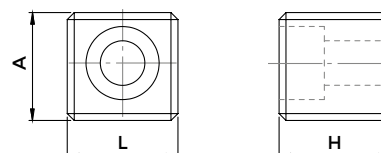


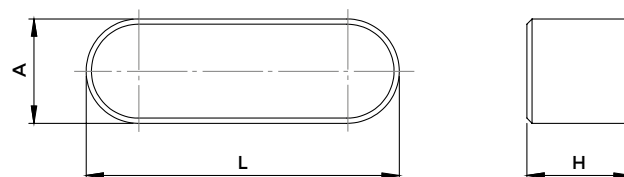
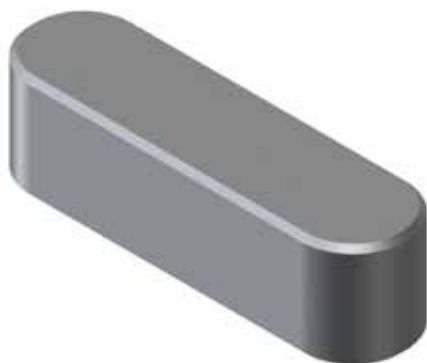
FIG. 2



COD.	DESCRIPTION	H	L	A	FIG.	SCREW
						
7434	TPF - D. 16	7	8	13	1	0201
7421	TPF - D. 16	10,5	8	13	1	0255
7435	TPF - D. 22	8	10	15,6	1	0203
7070*	TPF - D. 22	10	10	18	1	0256
7427	TPF - D. 22	11,6	10	15,6	1	0256
7436	TPF - D. 27	9	12	18,3	1	0205
7071*	TPF - D. 27	12	12	18	1	7414
7428	TPF - D. 27	13,3	12	18,3	1	7414
7437	TPF - D. 32	11	14	21	1	0482
7072*	TPF - D. 32	14	14	22	1	0099
7439	TPF - D. 32	15	14	21	1	0099
7429	TPF - D. 32	20,5	14	21	1	0099
7438	TPF - D. 40	13	16	24	1	0207
0210	TPF - D. 40	16	15,9	15,5	2	0207
7073*	TPF - D. 40	16	15,9	19,5	2	0207
7430	TPF - D. 40	22,5	16	24	1	0099
0211	TPF - D. 60	25	25,4	28	2	0407

*Dowels for special executions

KEYS

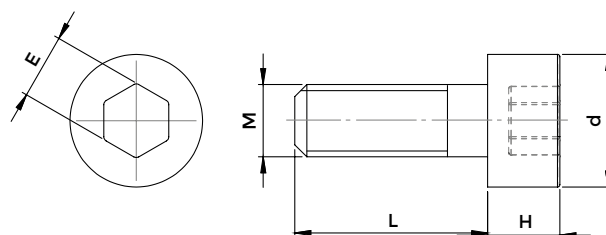


COD.	A	H	L
0103	3	3	10
0041	4	4	12
0115	4	4	20
0147	4	4	22
0258	5	4	18
0107	5	4	20
0044	6	6	15
0108	6	6	20
0116	6	6	25
0148	6	6	32

follows >>

COD.	A	H	L
0045	7	7	16
0122	7	7	25
0149	7	7	50
0047	8	7	16
0111	8	7	25
0125	8	7	28
0150	8	7	50
0133	10	8	32
0151	10	8	50
0137	12	8	36
0152	12	8	50

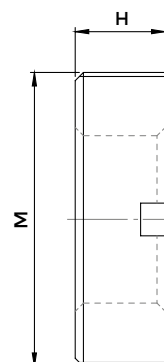
SPARES FOR MT ADAPTERS FOR MILLING CUTTERS DIN 228 FORM A SHANK TIE RODS FOR MILL



COD.	CM	M	L	d	H	E	STEP
7056*	CM 2	M 10	30	12,9	6,5	7	1,5
7448	CM2	M 10	30	13	10	8	1,5
7057*	CM 3	M 12	30	18	7	8	1,75
7402	CM 3	M 12	35	17	12	8	1,75
7403	CM 3	M 12	35	18	12	10	1,75
7058*	CM 3	M 12	40	18	7	8	1,75
7404	CM 4	M 16	40	20	16	10	2
7407	CM 4	M 16	40	21,5	16	14	2
7411	CM 4	M 16	45	21,5	9	12	2
7067*	CM 4	M 16	45	23	9	12	2
7069*	CM5	M 20	50	30	11	14	2,5
7408*	CM5	M 20	55	30	20	17	2,5

*Tie rods for special executions

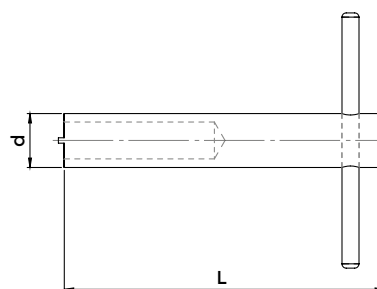
SPARES FOR MT ADAPTERS FOR MILLING CUTTERS DIN 228 FORM A SHANK LEFT NUTS FOR TIE RODS



COD.	CM	M	H	WRENCH
7422	CM 2	M 15 x 1,5 SX	6	4569
7423	CM 3	M 20 x 1,5 SX	6	4570
7424	CM 4	M 24 x 1,5 SX	8,5	4571
7425	CM 5	M 36 x 2 SX	11	4572



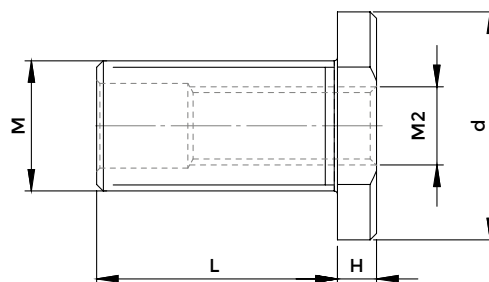
SPARES FOR MT ADAPTERS FOR MILLING CUTTERS DIN 228 FORM A SHANK WRENCHES FOR LEFT NUTS



COD.	CM	d	L	NUT
4569	CM 2	14,8	110	7422
4570	CM 3	19,2	115	7423
4571	CM 4	23	140	7424
4572	CM 5	37	172	7425



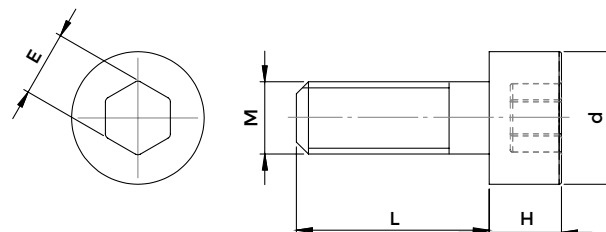
SPARES FOR COMBI MT ADAPTERS: TWIST DRILLS + MILLING CUTTERS REDUCERS FOR TIE RODS



COD	CM	M	M2	L	H	d
0276	CM 2	M 10	M 6	19	3	14
0130	CM 3	M 12	M 6	25	3	19
0129	CM 4	M 16	M10	27	3	25
0131	CM 5	M 20	M12	37	6	35

*Tie rods for special executions

ROUND HEAD SCREWS

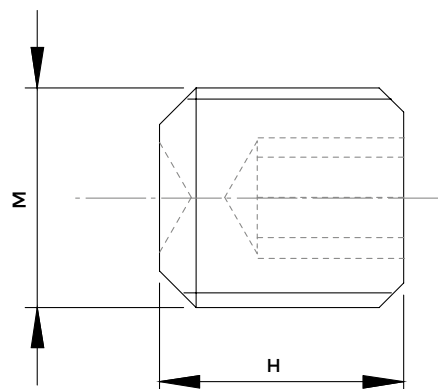


COD.	M	L	d	H	E	STEP
0201	M 3	8	5,5	3	2,5	0,5
0255	M 3	10	5,5	3	2,5	0,5
0203	M 4	10	7	4	3	0,7
0256	M 4	12	7	4	3	0,7
0205	M 5	12	8,5	5	4	0,8
7414	M 5	18	8,5	5	4	0,8
0484	M 6	10	10	6	5	1
0482	M 6	12	10	6	5	1
0206	M 6	14	10	6	5	1
0207	M 6	18	10	6	5	1
7447	M 6	20	8,5	4	4	1
0099	M 6	20	10	6	5	1
7415	M 6	25	10	6	5	1
0031	M 6	30	10	6	5	1
7400	M 6	35	10	6	5	1
7046	M 6	45	10	6	5	1
0035	M 6	55	10	6	5	1
7054	M 6	60	10	6	5	1
7047	M 6	75	10	6	5	1
0297	M 8	12	13	8	6	1,25
0491	M 8	16	13	8	6	1,25
0023	M 8	20	13	8	6	1,25
0586	M 8	30	10	8	6	1,25
0533	M 8	30	13	8	6	1,25
7056	M 10	30	12,9	6,5	7	1,5
7448	M 10	30	13	10	8	1,5
0120	M 10	30	16	10	8	1,5
7413	M 10	35	16	10	8	1,5
7048	M 10	40	12,9	6,5	8	1,5
7049	M 10	40	16	10	8	1,5
7401	M 10	45	13,5	10	8	1,5

follows >>

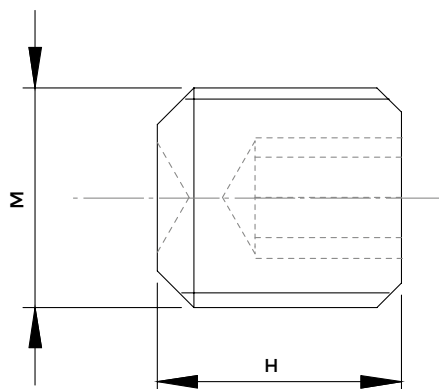
COD.	M	L	d	H	E	STEP
7050	M 10	45	16	6,5	7	1,5
7405	M 10	45	16	10	8	1,5
0056	M 10	50	16	10	8	1,5
7051	M 10	60	13,5	10	8	1,5
7052	M 10	60	16	10	8	1,5
0038	M 10	70	16	10	8	1,5
7053	M 10	90	16	10	8	1,5
0407	M 12	25	18	12	10	1,75
7057	M 12	30	18	7	8	1,75
7410	M 12	30	18	12	10	1,75
7402	M 12	35	17	12	8	1,75
7403	M 12	35	18	12	10	1,75
7058	M 12	40	18	7	8	1,75
7416	M 12	45	18	12	10	1,75
0177	M 12	50	18	12	10	1,75
7455	M 12	55	17	12	10	1,75
7406	M 12	55	18	12	10	1,75
0040	M 12	70	18	12	10	1,75
0055	M 12	85	18	12	10	1,75
7404	M 16	40	20	16	10	2
7407	M 16	40	21,5	16	14	2
7450	M 16	40	24	16	14	2
7411	M 16	45	21,5	9	12	2
7067	M 16	45	23	9	12	2
7409	M 16	60	20,5	16	14	2
0179	M 16	60	21,5	9	12	2
7451	M 16	60	24	16	14	2
0042	M 16	80	20,5	16	14	2
7069	M 20	50	30	11	14	2,5
7408	M 20	55	30	20	17	2,5
7417	M 24	60	36	13	17	3
0254	M 24	90	36	13	17	3

LOCKING SCREWS FOR END MILL HOLDERS



COD.	DESCRIPTION	F x H	STEP
4970	G - WE 6	M 6 x 10	1
4971	G - WE 8	M 8 x 10	1,25
4972	G - WE 10	M 10 x 12	1,5
4973	G - WE 12	M 12 x 16	1,75
4973	G - WE 14	M 12 x 16	1,75
4974	G - WE 16	M 14 x 16	2
4974	G - WE 18	M 14 x 16	2
4975	G - WE 20	M 16 x 16	2
4976	G - WE 25	M 18 x 2 x 20	2
4977	G - WE 32	M 20 x 2 x 20	2
4977	G - WE 40	M 20 x 2 x 20	2
4978	G - WE 50	M 24 x 2 x 20	2

SETTING AND LOCKING SCREWS

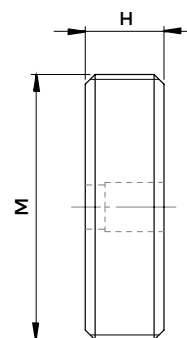


COD.	DESCRIPTION	STEP
0011	M 4 x 4	0,7
0380	M 4 x 8	0,7
0173	M 4 x 14	0,7
0017	M 5 x 4	0,8
0019	M 5 x 5	0,8
0365	M 5 x 6	0,8
0366	M 5 x 10	0,8
0285	M 5 x 30	0,8
0388	M 5 x 40	0,8
0367	M 6 x 4	1
0368	M 6 x 5	1
0020	M 6 x 6	1
0370	M 6 x 8	1
4970	M 6 x 10	1
0371	M 6 x 12	1
0181	M 6 x 14	1
0208	M 6 x 16	1
0253	M 6 x 40	1
0372	M 8 x 6	1,25
0021	M 8 x 8	1,25
4971	M 8 x 10	1,25
0375	M 8 x 12	1,25
0382	M 8 x 16	1,25
0183	M 8 x 20	1,25
0284	M 8 x 40	1,25
0409	M 10 x 1 x10	1
0403	M 10 x 1 x12	1
0385	M 10 x 8	1,5

follows >>

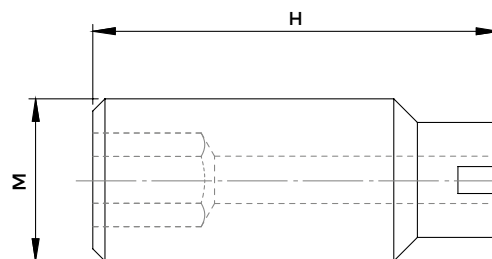
COD.	DESCRIPTION	STEP
0060	M 10 x 10	1,5
4972	M 10 x 12	1,5
0377	M 10 x 16	1,5
0186	M 10 x 20	1,5
0417	M 12 x 1 x12	1
0200	M 12 x 10	1,75
0260	M 12 x 12	1,75
0390	M 12 x 14	1,75
4973	M 12 x 16	1,75
0188	M 12 x 30	1,75
0074	M 14 x 1 x 6	1
0401	M 14 x1,5 x 16	1,5
0082	M 14 x 10	2
0261	M 14 x 12	2
0068	M 14 x 14	2
4974	M 14 x 16	2
0493	M 16 x 1 x12	1
0420	M 16 x 1 x16	1
0404	M 16 x1,5 x 12	1,5
0073	M 16 x 10	2
0070	M 16 x 12	2
0400	M 16 x 14	2
4975	M 16 x 16	2
0076	M 18 x 2 x12	2
0075	M 18 x 2 x17	2
4976	M 18 x 2 x 20	2
0259	M 20 x 2 x 17	2
4977	M 20 x 2 x 20	2
4978	M 24 x 2 x 20	2

SETTING AND LOCKING SCREWS WITH TROUGH HOLE



COD.	DESCRIPTION	STEP
0190	M 18 x1,5 x 8	1,5
0191	M 22 x1,5 x 8	1,5
0195	M 27 x1,5 x 8	1,5

LOCKING SCREWS WITH TROUGH HOLE WITH TROUGH HOLE

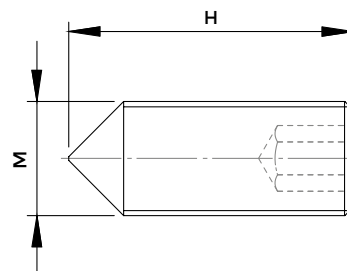


COD.	DESCRIPTION	STEP
0233	M 5 x 16	0,8
0235	M 6 x 16	1
0238	M 8 x 20	1,25
0240	M 10 x 25	1,5

follows >>

COD.	DESCRIPTION	STEP
0245	M 12 x 30	1,75
1226	M 16 x 20	2
0212	M 20 x 20	2,5
0247	M 20 x 30	2,5

LOCKING SCREWS WITH TAPER TIP

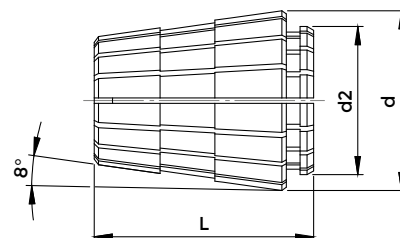
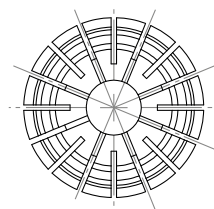


COD.	DESCRIPTION	STEP
0510	M 4 x 4	0,7
0015	M 4 x 14	0,7
0513	M 5 x 5	0,8
0529	M 5 x 6	0,8

follows >>

COD.	DESCRIPTION	STEP
0016	M 5 x 10	0,8
0036	M 5 x 16	0,8
0531	M 6 x 6	1
0557	M 6 x 10	1
0037	M 8 x 8	1,25

ETS COLLETS



ETS

COD.	DESCRIPTION	RANGE	CLAMPING	STEP	d	d2	L	EINHEITS
5200	ETS 16	1 ÷ 3 3 ÷ 10	mm 0,5 mm 1,0	0,5	17	13,6	24	4018E
5201	ETS 20	2 ÷ 3 3 ÷ 13	mm 0,5 mm 1,0	0,5	21	17	30,5	4272E
5202	ETS 25	2 ÷ 3 3 ÷ 16	mm 0,5 mm 1,0	0,5	26	21	34	4280E
5203	ETS 32	3 ÷ 20	mm 1,0	0,5	33	27,2	40	4534E
5204	ETS 40	3 ÷ 26	mm 1,0	0,5	41	32	46	4768E

ETS collets are interchangeable with ER collets (DIN 6499 - ISO 15488) thanks to the same 8° rear taper.
To fit them in a standard ER collet chuck, a nut replacement is needed because of the difference in fore part of the collet.

CHARACTERISTICS:

- System with high precision
- An excellent yield in high speed



	COD.	N° OF SEATS	COLLET
PLASTIC EMPTY TRAY	3674	16	ETS 16
	3675	16	ETS 20
	3676	20	ETS 25
	3677	20	ETS 32
	3678	28	ETS 40

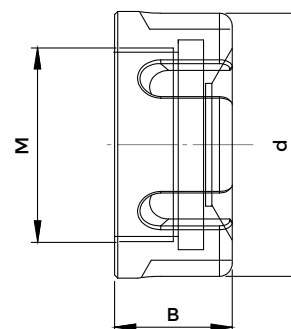


	COD.	N° OF SEATS	COLLET
WOODEN EMPTY BOX	3976	12	ETS 16
	3977	12	ETS 20
	3978	15	ETS 25
	3979	18	ETS 32
	3980	24	ETS 40

STANDARD CLAMPING NUTS FOR ETS COLLETS



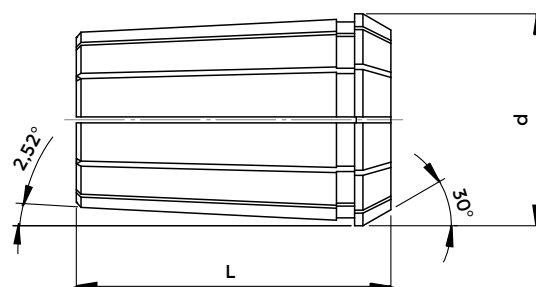
STANDARD CLAMPING NUTS FOR ETS COLLETS
Standard nuts for ETS collets have the same thread than ER Standard nuts; this makes interchangeable those two systems



ETS

COD.	DESCRIPTION	A	B	C	COLLET	WRENCH
						
5294	GS 16 ETS	32	15	22 x 1,5	5200	3698
5295	GS 20 ETS	35	16,5	25 x 1,5	5201	3699
5296	GS 25 ETS	42	18,5	32 x 1,5	5202	3669
5297	GS 32 ETS	50	22	40 x 1,5	5203	3670
5298	GS 40 ETS	63	25	50 x 1,5	5204	3671

EOC COLLETS



DIN 6388

COD.	DESCRIPTION	RANGE	STEP	d	L	EINHEITS
0578	EOC 6	1 ÷ 6	0,5	11,5	21	400E
0624	EOC 8	1 ÷ 8	0,5	14,5	26	401E
0633	EOC 10	1 ÷ 10	0,5	17,2	30	404E
0645	EOC 12	1 ÷ 12	0,5	19,8	34	407E
0768	EOC 16	2 ÷ 16	0,5	25,5	40	415E
0783	EOC 20	2 ÷ 20	0,5	29,8	45	4541E
0769	EOC 25	2 ÷ 25	0,5	35,05	52	462E
0770	EOC 32	3 ÷ 32	0,5	43,7	60	467E
0802	EOC 40	8 ÷ 40	1	52,2	68	468E

REDUCED SET OF EOC COLLETS

	COD.	DESCRIPTION	DIAMETERS	N° OF COLLETS
IN SINGLE PACKS	7010	EOC 16 Reduced	Ø 4 - 6 - 8 - 10 - 12 - 16	6
	7011	EOC 25 Reduced	Ø 6 - 8 - 10 - 12 - 16 - 20 - 25	7
	7012	EOC 32 Reduced	Ø 6 - 8 - 10 - 12 - 16 - 20 - 25 - 32	8
IN CASE	7016	EOC 16 Reduced	Ø 4 - 6 - 8 - 10 - 12 - 16	6
	7017	EOC 25 Reduced	Ø 6 - 8 - 10 - 12 - 16 - 20 - 25	7
	7018	EOC 32 Reduced	Ø 6 - 8 - 10 - 12 - 16 - 20 - 25 - 32	8

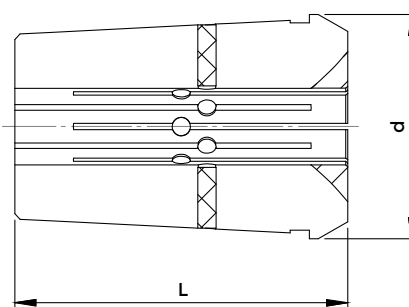
COMPLETE SET OF EOC COLLETS

	COD.	DESCRIPTION	DIAMETERS	N° OF COLLETS
IN SINGLE PACKS	7013	EOC 16 Completa	da Ø 2 a Ø 16	15
	7014	EOC 25 Completa	da Ø 2 a Ø 25	24
	7015	EOC 32 Completa	da Ø 4 a Ø 32	29
IN CASE	7019	EOC 16 Completa	da Ø 2 a Ø 16	15
	7020	EOC 25 Completa	da Ø 2 a Ø 25	24
	7021	EOC 32 Completa	da Ø 4 a Ø 32	29

SEALED EOC COLLETS



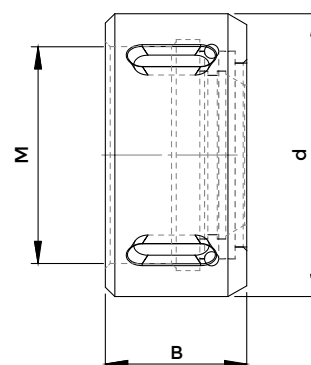
Coolant flows exclusively through central hole, collet cuts are sealed with neoprene inserts (above $\varnothing 3$). Working pressure: up to 40 Bar / 600 PSI



DIN 6388

COD.	DESCRIPTION	RANGE	STEP	d	L
0768 RF	EOC 16 RF	3 ÷ 16	0,5	25,5	40
0769 RF	EOC 25 RF	3 ÷ 25	0,5	35,05	52
0770 RF	EOC 32 RF	4 ÷ 32	1	44	60

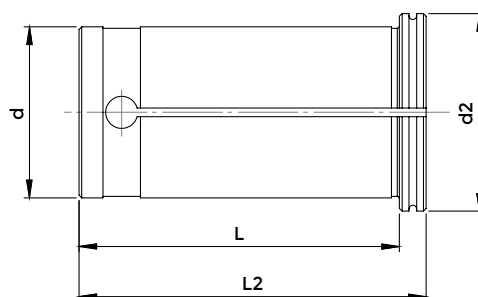
CLAMPING NUTS FOR EOC COLLETS



DIN 6388

COD.	DESCRIPTION	d	B	M	COLLET	WRENCH
						
8641	GOC 6	18	14	14 x 1,0	0578	2880
8642	GOC 8	26	19	20 x 1,5	0624	2820
8643	GOC 10	30	19	22 x 1,5	0633	2881
8644	GOC 12	35	20	27 x 1,5	0645	2882
4067	GOC 16	43	24	33 x 1,5	0768	2883
4008	GOC 20	50	28	42 x 2,0	0783	2908
4068	GOC 25	60	30	48 x 2,0	0769	2909
4069	GOC 32	72	33,5	60 x 2,5	0770	2910
8645	GOC 40	85	37	68 x 2,5	0802	2836

COLLETS FOR HIGH GRIP DEVICES



PC

COD.	DESCRIPTION	RANGE	STEP	d	d2	L	L2
0804	PC 12	3 ÷ 8 OVERSIZE 9 ÷ 10	1,0	12	19	45,5	44,5
0805	PC 16	2,5 ÷ 12	1,0	16	19	46	50
0809	PC 20	3 ÷ 16 OVERSIZE 17 ÷ 18	1,0	20	25	49	52,5
0820	PC 25	3 ÷ 20 OVERSIZE 21 ÷ 22	1,0	25	31	55	60
0810	PC 32	3 ÷ 25 OVERSIZE 26 ÷ 30	1,0	32	37,5	59,5	64,5

REDUCED SET OF PC COLLETS



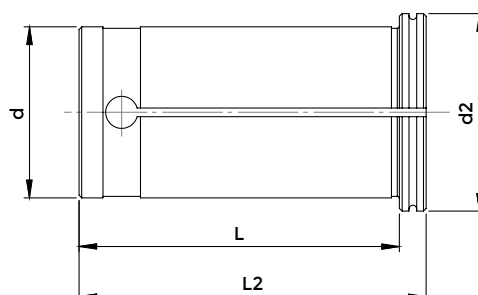
	COD.	DESCRIPTION	DIAMETERS	N° OF COLLETS
IN SINGLE PACKS	7680	PC 20 Reduced	Ø 6 - 8 - 10 - 12 - 16	5
	7681	PC 25 Reduced	Ø 6 - 8 - 10 - 12 - 16 - 20	6
	7682	PC 32 Reduced	Ø 6 - 8 - 10 - 12 - 16 - 20 - 25	7
IN CASE	7683	PC 20 Reduced	Ø 6 - 8 - 10 - 12 - 16	5
	7684	PC 25 Reduced	Ø 6 - 8 - 10 - 12 - 16 - 20	6
	7685	PC 32 Reduced	Ø 6 - 8 - 10 - 12 - 16 - 20 - 25	7

ULTRA PRECISION COLLETS FOR HIGH GRIP DEVICES



Collets with the same features of PC type but with an high precision: $\leq 0,005$ runout accuracy.

$\leq 0,005$



PC-UP

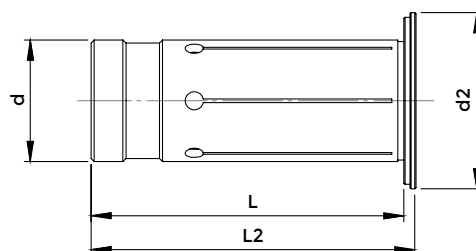
COD.	DESCRIPTION	RANGE	STEP	d	d2	L	L2
0809 UP	PC 20 UP	3 ÷ 16	1	20	25	49	52,5
0820 UP	PC 25 UP	3 ÷ 20	1	25	31	55	60
0810 UP	PC 32 UP	3 ÷ 25	1	32	37,5	59,5	64,5

REDUCED SET OF PC-UP COLLETS



	COD.	DESCRIPTION	DIAMETERS	N° OF COLLETS
IN SINGLE PACKS	7036	PC 20 UP Reduced	Ø 6 - 8 - 10 - 12 - 16	5
	7037	PC 25 UP Reduced	Ø 6 - 8 - 10 - 12 - 16 - 20	6
	7038	PC 32 UP Reduced	Ø 6 - 8 - 10 - 12 - 16 - 20 - 25	7
IN CASE	7039	PC 20 UP Reduced	Ø 6 - 8 - 10 - 12 - 16	5
	7040	PC 25 UP Reduced	Ø 6 - 8 - 10 - 12 - 16 - 20	6
	7041	PC 32 UP Reduced	Ø 6 - 8 - 10 - 12 - 16 - 20 - 25	7

SEALED COLLETS FOR HYDRAULIC CHUCKS



OVERSIZE diameters, for the construction characteristics, do not allow the use at high pressures. Working pressure: up to 70 Bar / 1020 PSI

PH

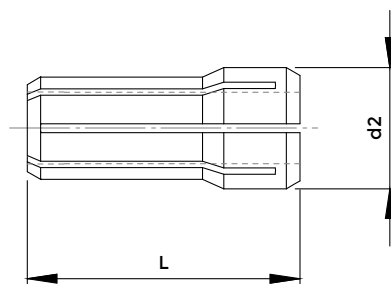
COD.	DESCRIPTION	RANGE	STEP	d	d2	L	L2
0520	PH 12	2,5 ÷ 8 OVERSIZE 9 ÷ 10	1	12	16,5	45	47
0521	PH 20	3 ÷ 16 OVERSIZE 17 ÷ 18	1	20	24	50,5	52,5
0676	PH 25	6 ÷ 20 OVERSIZE 21 ÷ 22	1	25	29	54,5	56,5
0522	PH 32	6 ÷ 25 OVERSIZE 26 ÷ 28	1	32	35,5	60,5	62,5

REDUCED SET OF PH COLLETS



	COD.	DESCRIPTION	DIAMETERS	N° OF COLLETS
IN SINGLE PACKS	7700	PH 20 Reduced	Ø 6 - 8 - 10 - 12 - 16	5
	7701	PH 25 Reduced	Ø 6 - 8 - 10 - 12 - 16 - 20	6
	7702	PH 32 Reduced	Ø 6 - 8 - 10 - 12 - 16 - 20 - 25	7
IN CASE	7703	PH 20 Reduced	Ø 6 - 8 - 10 - 12 - 16	5
	7705	PH 25 Reduced	Ø 6 - 8 - 10 - 12 - 16 - 20	6
	7706	PH 32 Reduced	Ø 6 - 8 - 10 - 12 - 16 - 20 - 25	7

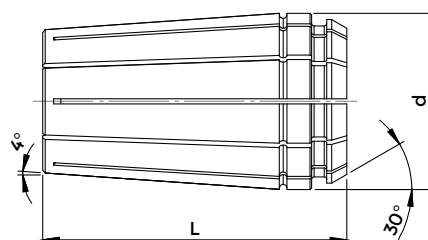
DA COLLETS



DA

COD.	DESCRIPTION	d	L	RANGE	CLAMPING	EINHEITS
5118	DA 300	9,5	25,4	1 ÷ 6,5	mm 0,5	416E
5119	DA 200	13,6	30,3	1 ÷ 10,0	mm 0,5	417E
5120	DA 100	19,4	36,7	1 ÷ 15,0	mm 0,5	418E
5121	DA 180	26,2	41,6	2 ÷ 20,0	mm 0,5	419E

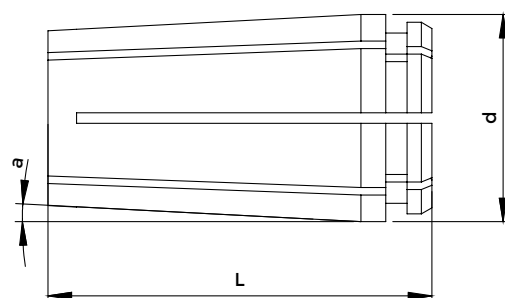
TG COLLETS



TG

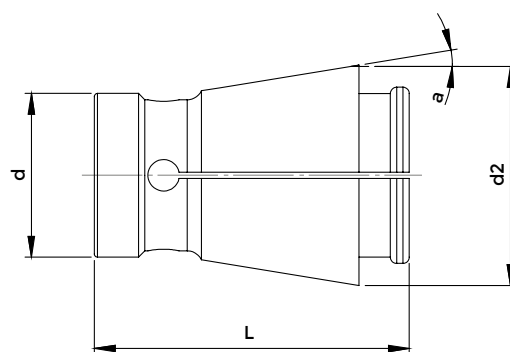
COD.	DESCRIPTION	d	L	RANGE	CLAMPING	EINHEITS
1250	TG 75	27,0	46,9	2 ÷ 16	mm 0,5	420E
1251	TG 100	35,0	60,4	3 ÷ 25	mm 0,5	464E
1252	TG 150	50,8	76,2	10 ÷ 38	mm 0,5	466E

BAKUER COLLETS



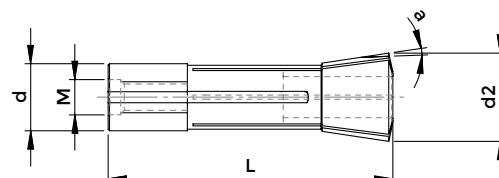
COD.	RANGE	d	L	a
0736	4,0 ÷ 16,0	25,6	48	3°
0737	6,0 ÷ 20,0	29,6	54	3°
0738	8,0 ÷ 25,0	35,7	60	3°

443E COLLETS



COD.	RANGE	d	d2	L	a	EINHEITS
0772	3,0 ÷ 20	26	35	50	9° 15'	443E

BRIDGEPORT R8 COLLETS



COD.	RANGE	d	d2	L	a	M	EINHEITS
0716	2,0 ÷ 22	24,12	32	106	8° 35'	7/16 - 20"	369E

DIN 6343 COLLETS - ROUND BORE EXECUTIONS

GROOVED INSIDE ROUND COLLET starting from $\varnothing$ 8 mm



COLLET
NORMAL

GROOVED INSIDE

CHARACTERISTIC:

- Drilling Axial seal

Example for Order: 173E Grooved = Art. 0709

SERRATED INSIDE ROUND COLLET starting from $\varnothing$ 8 mm



COLLET
TYPE S

SERRATED INSIDE

CHARACTERISTIC:

- Drilling Axial seal + rotatory seal as twisting moment

Example for Order: 173E Serrated = Art. 0709 **S**

SMOOTH INSIDE ROUND COLLET all the diameters



COLLET
TYPE L

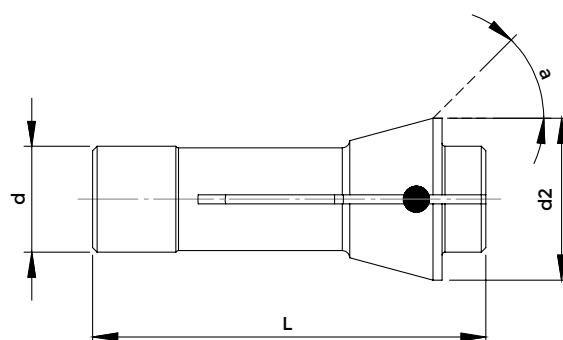
SMOOTH INSIDE

CHARACTERISTIC:

- Suitable to lock finished diameter, doesn't engrave material surface

Example for Order: 173E Smooth = Art. 0709 **L**

SINGLE CONE CLAMPING COLLETS



DIN 6343

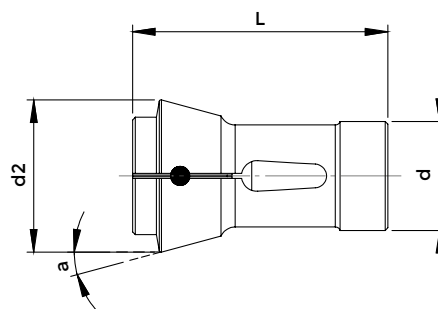
COD.	COD.	COD.	d	d2	L	a	MAX	MAX	MAX	EINHEITS
										
0721	-	-	8	12	42	16°	6,5	-	-	101E
0725	0949	5000	10	15,5	47,5	20°	8,0	6,0	5,0	109E
0940	0941	0943	13	19	64	16°	10,0	8,0	7,0	116E
0740	0741	0742	14	18	46	13°	10,0	9,0	8,0	117E
0722	0723	0724	15	21	64	16°	12,0	10,0	9,0	120E
0954	0955	0956	20	26	54	15°	16,0	12,0	10,0	136E
5299	5300	5301	20	27,5	60	15°	17,0	15,0	12,0	1299E
0937	0938	0939	20	28	67	16°	16,0	14,0	11,0	138E
0705	0707	0706	22	30	55	15°	18,0	14,0	12,0	140E
0717	0719	0718	25	35	77	16°	20,0	17,0	15,0	145E
0901	0902	0903	27	38	72,7	15°	22,0	20,0	16,0	147E
0713	0715	0714	28	38	70	15°	23,0	20,0	17,0	148E
0931	0932	0933	30	38	65	15°	26,0	22,0	18,0	1446E
0727	0728	0729	30	42	80	16°	25,0	23,0	19,0	157E
0701	0703	0702	32	45	75	15°	26,0	24,0	20,0	161E
0615	0616	0617	35	43	70	15°	25,0	24,0	20,0	162E
0764	0766	0765	35	48	80	15°	30,0	27,0	22,0	163E
0970	0972	0973	37	47	92	16°	32,0	27,0	22,0	1536E
0837	0839	0838	38	50,3	86	15°	32,0	28,0	25,0	-
0919	0920	0921	38,1	49	107,5	15°	32,0	27,0	22,0	164E
0861	0862	0863	42	55	94	15°	37,0	32,0	26,0	171E
0709	0711	0710	48	60	94	15°	42,0	38,0	30,0	173E
2424	2425	2426	58	70	94	15°	52,0	45,0	36,0	177E
0759	0760	0761	66	84	110	15°	60,0	52,0	42,0	185E

For round collets, the article refers to the execution with grooved inside. For the smooth inside add the letter L, for the serrated inside add the letter S. See previous page

ACCESSORIES



EMERGENCY COLLETS

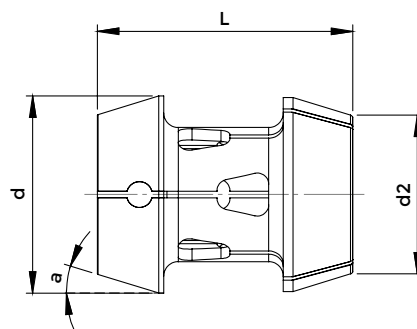


DIN 6343

COD.	d	d2	L	a	EINHEITS
0717EC	25	35	77	16°	145E
0701EC	32	45	75	15°	161E
0970EC	37	47	92	16°	1536E
0709EC	48	60	94	15°	173E
2424EC	58	70	94	15°	177E
0759EC	66	84	110	15°	185E

Emergency collets can be finished by the customer with the diameter or the desired shape thanks to the workable front. The supply includes the register pins useful for positioning in the spindle.

DOUBLE CONE CLAMPING COLLETS



DIN 6343

COD.	COD.	COD.	d	L	d2	a	MAX	MAX	MAX
									
0739	0757	0758	60,0	80	49,0	17°	45	38	30
0756	0762	0763	71,6	100	60,0	17°	55	46	38
0927	0928	5053	91,0	100	80,0	17°	70	60	50
0892	0894	0899	108,0	105	95,0	17°	80	68	56

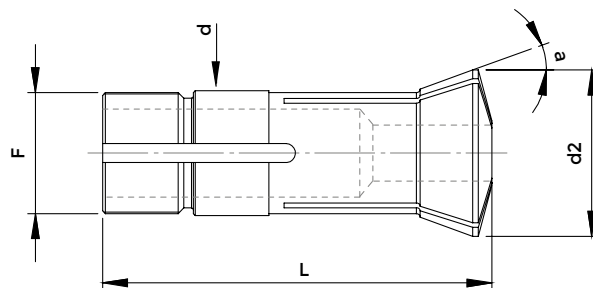
ACCESSORIES

Art. 0018



Woodruff key
mm 5x6,5

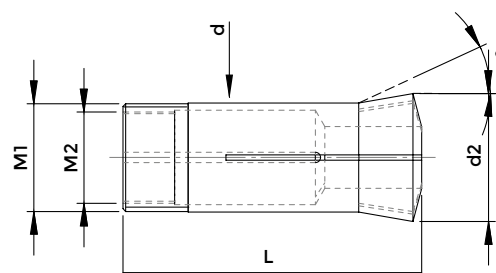
DRAWN BACK COLLETS WITH EXTERNAL THREAD



DIN 6343

COD.	COD.	COD.	d	d2	L	a	F	MAX	W	EINHEITS
●	■	■						●		
0948	-	-	12,0	16,0	46	15°	11,75 x 1,25 45/5°	10	W 12	318E
0750	-	-	15,0	21,5	55,00	20°	M 13 x 1,00	13	-	324E
0800	-	-	20,0	26,3	73,00	15°	19,70 x 1,66 45/5°	20	W 20	349E
0966	-	-	20,0	28,00	122,00	17° 30'	19,70 x 2,00 45/5°	20	-	355E
0751	-	-	25,0	33,5	88,00	16°	M 23 x 1,00	22	-	363E
0674	-	-	25,0	33,7	97,6	15°	24,70 x 15 f " 45/5°	25	W 25	364E
5522	5530	5580	31,75	37,3	87	10° 03'	31,40 x 20 f " 60°	26	W 31,75	385E

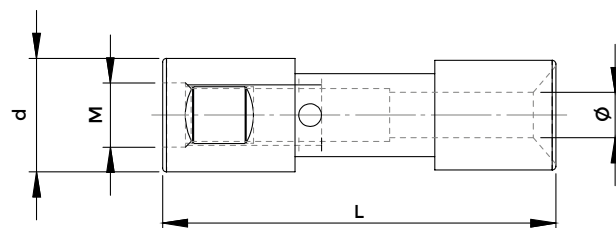
DRAWBACK COLLETS WITH EXTERNAL AND INTERNAL THREAD



5C

COD.	DESCRIPTION	d	d2	L	a	M1	M2	MAX
●								●
5523	5C	31,75	37,3	87	10°03'	31,4 x 20 f " 60°	26,59 x 24 f "	26

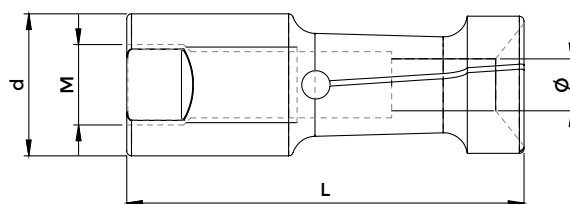
CLAMPING SLEEVES FOR CUCCHI BAR-FEEDERS



COD.	d	L	MIN	MAX	M DX
0591	20,0	59	3	18,0	M 10 x 1 DX
0591	22,0	59	19	20,0	M 10 x 1 DX
0904	40,0	70	6	37,0	M 25 x 1,5 DX
0904	42,0	70	38	39,0	M 25 x 1,5 DX
0935	46,0	72	37	42,0	M 25 x 1,5 DX
0945	60,0	80	30	55,0	M 25 x 1,5 DX
0708	65,0	80	55	60,0	M 25 x 1,5 DX
0708	69,5	80	61	65,0	M 25 x 1,5 DX
0708	75,0	80	66	70,0	M 25 x 1,5 DX

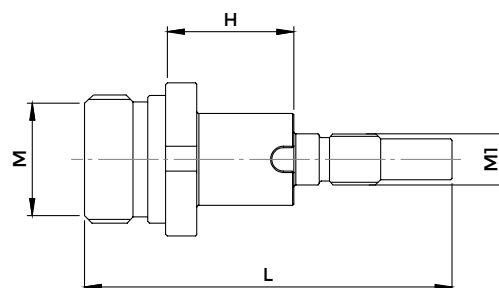
COD.	d	L	MIN	MAX	M SX
0607	19,0	60	4	16,0	M 10 x 1 SX
0607	20,0	60	17	18,0	M 10 x 1 SX
0653	37,0	70	10	34,0	M 25 x 1,5 SX
0653	39,0	70	35	36,0	M 25 x 1,5 SX
0653	41,0	70	37	39,0	M 25 x 1,5 SX
0654	47,0	70	14	43,0	M 30 x 1,5 SX
0654	49,0	70	44	45,0	M 30 x 1,5 SX

CLAMPING SLEEVES FOR IEMCA BAR-FEEDERS



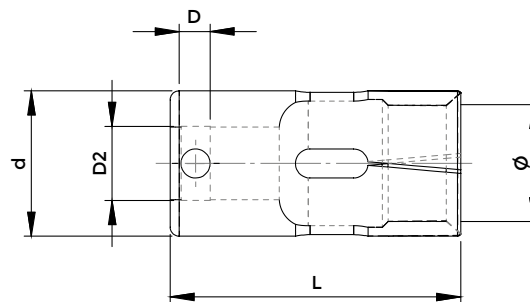
COD.	d	L	MIN	MAX	M DX
0594	7,5	40	2	6,5	M 5 x 0,5 DX
0897	10,0	40	2	8,5	M 6 x 0,75 DX
0593	12,0	42	2	10,5	M 7 x 0,75 DX
0592	15,0	42	2	13,5	M 8 x 1 DX
0591	20,0	59	3	18,0	M 10 x 1 DX
0591	22,0	59	19	20,0	M 10 x 1 DX
0891	25,0	59	4	23,0	M 10 x 1 DX
0823	30,0	65	8	28,0	M 10 x 1 DX
0823	32,0	65	29	30,0	M 10 x 1 DX
0904	40,0	70	6	37,0	M 25 x 1,5 DX
0904	42,0	70	38	39,0	M 25 x 1,5 DX
0935	46,0	72	37	42,0	M 25 x 1,5 DX
0945	60,0	80	30	55,0	M 25 x 1,5 DX
0708	65,0	80	55	60,0	M 25 x 1,5 DX
0708	69,5	80	61	65,0	M 25 x 1,5 DX
0708	75,0	80	66	70,0	M 25 x 1,5 DX

NIPLEX REDUCTIONS FOR IEMCA BAR-FEEDERS



COD.	L	H	M DX	M1 DX
1260	72	26	M 25 x 1,5 DX	M 10 x 1 DX

CLAMPING SLEEVES FOR TOP AUTOMAZIONI BAR-FEEDERS

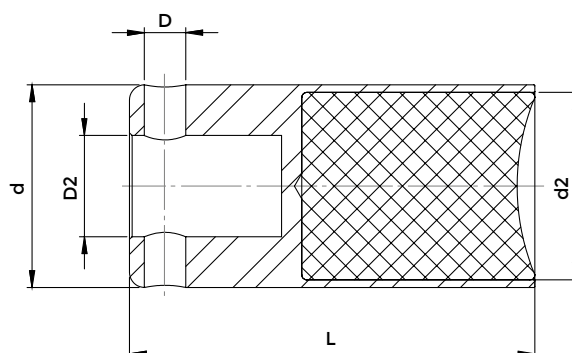


COD. ●	d	L	MIN ●	MAX ●	D	D2
9700	18	80	4	13	5	14
9701	20	80	5	17	5	14
9702	25	80	15	22	5	14
9703	30	80	20	28	8	20
9704	35	80	26	30	8	20
9705	40	80	30	38	8	20
9706	45	80	35	42	8	20
9707	50	80	40	47	8	20
9708	55	80	45	52	8	20
9709	60	80	30	55	8	20
9710	65	80	55	60	8	20
9711	70	80	61	65	8	20
9712	75	80	66	70	8	20
9713	75	80	66	70	8	30
9714	80	80	71	75	8	30
9715	85	95	76	80	8	35
9716	90	95	81	85	8	35
9717	95	95	86	90	8	35
9718	100	95	91	95	8	35

VULKOLLAN WORKABLE EMERGENCY CLAMPING SLEEVES FOR TOP AUTOMAZIONI BAR-FEEDERS

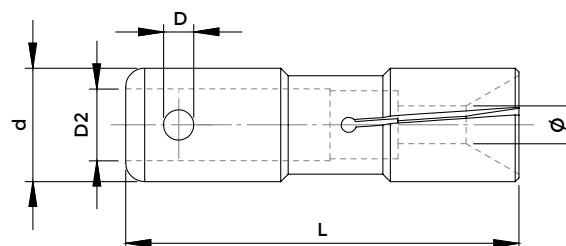


Workable emergency collets can be finished by the customer with the desired diameter thanks to the VULKOLLAN inner part.



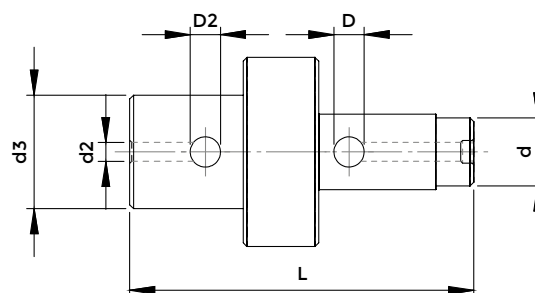
COD.	d	d2	L	D	D2
9502	14,9	12,9	80	5	10
9503	19	17	80	5	14
9504	24	22	80	5	20
9504	29	27	80	8	20
9504	31	29	80	8	20
9504	34	32	80	8	20
9504	35	33	80	8	20
9504	37	35	80	8	20
9504	39	37	80	8	20
9504	41	39	80	8	20
9504	44	42	80	8	20
9504	49	47	80	8	20
9504	51	49	80	8	20
9504	54	52	80	8	20
9504	59	57	80	8	20
9504	61	59	80	8	20
9504	64	62	80	8	20
9504	69	67	80	8	20
9505	71	69	80	8	30
9505	74	72	80	8	30
9505	79	77	80	8	30
9505	81	79	80	8	30
9505	84	82	80	8	30
9505	89	87	80	8	30
9505	94	92	80	8	30
9505	99	97	80	8	30
9505	109	107	80	8	30

CLAMPING SLEEVES TOP AUTOMAZIONI BAR-FEEDERS FOR SLIDING HEADSTOCK LATHES



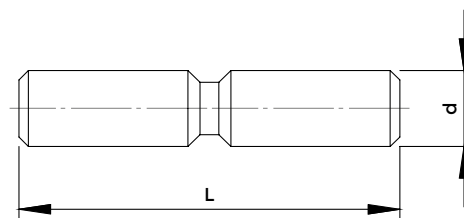
COD.	d	L	MAX	D	D2
9522	15	52	3 ÷ 13	5	10
9522	18	52	14 ÷ 16	5	10
9523	20	52	17 ÷ 18	5	14
9523	22	52	19	5	14
9523	23	52	20	5	14
9523	25	52	21 ÷ 22	5	14
9523	27	52	23	5	14
9523	28	52	24	5	14
9523	29	52	25	5	14
9523	30	52	26	5	14

NIPLEX FOR TOP AUTOMAZIONI BAR-FEEDERS



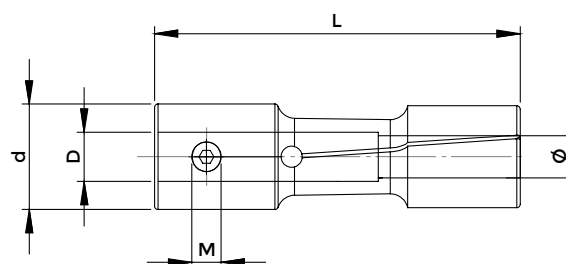
COD.	d	d2	d3	D	D2	L
9506	10	14	18	5	5	79
9507	14	14	19	5	5	79
9508	14	20	30	5	8	91
9509	14	25	35	5	8	91
9510	14	30	50	5	8	91
9511	20	20	30	8	8	91
9512	20	25	35	8	8	91
9513	20	30	50	8	8	91
9514	30	30	50	8	8	91
9524	35	30	70	8	8	81

COLLET LOCKING PINS



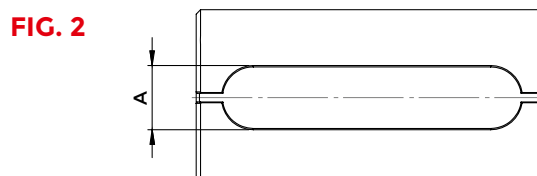
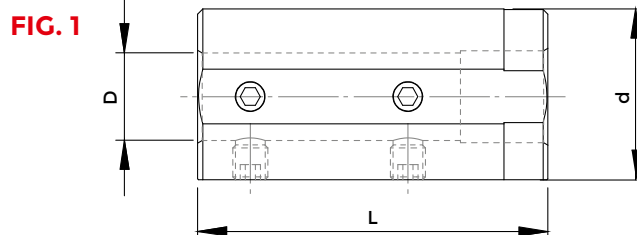
COD.	d	d2
9515	5	15
9516	5	19
9517	5	24
9525	5	27
9526	5	35
9518	8	30
9519	8	40
9520	8	45
9521	8	60

CLAMPING SLEEVES FOR OTHER BAR-FEEDERS



COD.	d	L	D	MIN	MAX	M	EINHEITS
1644	42	90	20 - H7	6,00	39,0	M 8	-

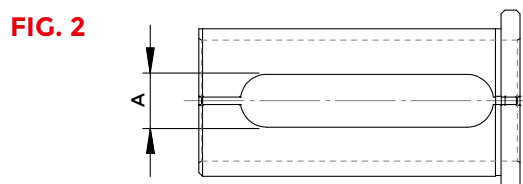
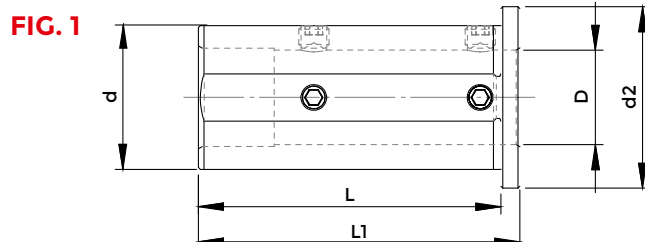
UNIVERSAL REDUCTION SLEEVES WITHOUT STOP



E 2.1 - E 2.2

COD.	DESCRIPTION	d	D	L	A	FIG.	SCREW
							
2770	E 2.1 - 20 x 6	20	6	60	-	1	0365
2778	E 2.1 - 20 x 8	20	8	60	-	1	0368
2779	E 2.1 - 20 x 10	20	10	60	-	1	0367
2780	E 2.1 - 20 x 12	20	12	60	-	1	0367
2837	E 2.1 - 25 x 6	25	6	60	-	1	0365
4300	E 2.1 - 25 x 8	25	8	60	-	1	0020
4301	E 2.1 - 25 x 10	25	10	60	-	1	0020
4302	E 2.1 - 25 x 12	25	12	60	-	1	0368
2771	E 2.1 - 25 x 14	25	14	60	-	1	0367
4318	E 2.2 - 25 x 16	25	16	60	9	2	-
2838	E 2.1 - 32 x 6	32	6	70	-	1	0366
4303	E 2.1 - 32 x 8	32	8	70	-	1	4970
4304	E 2.1 - 32 x 10	32	10	70	-	1	4970
4305	E 2.1 - 32 x 12	32	12	70	-	1	0370
2839	E 2.1 - 32 x 14	32	14	70	-	1	0020
4306	E 2.1 - 32 x 16	32	16	70	-	1	0020
2841	E 2.1 - 32 x 18	32	18	70	-	1	0020
4307	E 2.1 - 32 x 20	32	20	70	-	1	0372
4319	E 2.2 - 32 x 25	32	25	70	14	2	-
7059	E 2.1 - 40 x 6	40	6	80	-	1	0366
4308	E 2.1 - 40 x 8	40	8	80	-	1	0181
4309	E 2.1 - 40 x 10	40	10	80	-	1	0371
4310	E 2.1 - 40 x 12	40	12	80	-	1	0371
2845	E 2.1 - 40 x 14	40	14	80	-	1	0371
4311	E 2.1 - 40 x 16	40	16	80	-	1	4970
2847	E 2.1 - 40 x 18	40	18	80	-	1	4970
4312	E 2.1 - 40 x 20	40	20	80	-	1	0021
4313	E 2.1 - 40 x 25	40	25	80	-	1	0372
4320	E 2.2 - 40 x 32	40	32	80	14	2	-
7061	E 2.1 - 50 x 12	50	12	90	-	1	0181
7062	E 2.1 - 50 x 14	50	14	90	-	1	0181
4314	E 2.1 - 50 x 16	50	16	90	-	1	0375
2792	E 2.1 - 50 x 18	50	18	90	-	1	0375
4315	E 2.1 - 50 x 20	50	20	90	-	1	0375
4316	E 2.1 - 50 x 25	50	25	90	-	1	4971
4317	E 2.1 - 50 x 32	50	32	90	-	1	0021
4321	E 2.2 - 50 x 40	50	40	90	14	2	-
8886	E 2.1 - 60 x 16	60	16	160	-	1	0183
8887	E 2.1 - 60 x 20	60	20	160	-	1	0183
8888	E 2.1 - 60 x 25	60	25	160	-	1	0377
8889	E 2.1 - 60 x 32	60	32	160	-	1	4972
8890	E 2.1 - 60 x 40	60	40	160	-	1	0385

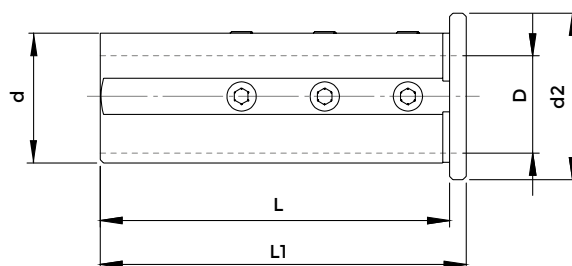
UNIVERSAL REDUCTION SLEEVES WITH STOP



EG.1 - EG.2

COD.	DESCRIPTION	d	D	L	L1	d2	A	FIG.	SCREW
									
5964	EG.1 - 20 x 6	20	6	50	55	28	-	1	0365
5965	EG.1 - 20 x 8	20	8	50	55	28	-	1	0368
5966	EG.1 - 20 x 10	20	10	50	55	28	-	1	0367
5967	EG.1 - 20 x 12	20	12	50	55	28	-	1	0367
5994	EG.2 - 20 x 14	20	14	50	55	28	9	2	-
5968	EG.1 - 25 x 6	25	6	60	65	33	-	1	0365
5969	EG.1 - 25 x 8	25	8	60	65	33	-	1	0020
5970	EG.1 - 25 x 10	25	10	60	65	33	-	1	0020
5971	EG.1 - 25 x 12	25	12	60	65	33	-	1	0368
5972	EG.1 - 25 x 14	25	14	60	65	33	-	1	0367
5995	EG.2 - 25 x 16	25	16	60	65	33	9	2	-
5996	EG.2 - 25 x 18	25	18	60	65	33	9	2	-
5973	EG.1 - 32 x 6	32	6	70	75	40	-	1	0366
5974	EG.1 - 32 x 8	32	8	70	75	40	-	1	4970
5975	EG.1 - 32 x 10	32	10	70	75	40	-	1	4970
5976	EG.1 - 32 x 12	32	12	70	75	40	-	1	0370
5977	EG.1 - 32 x 14	32	14	70	75	40	-	1	0020
5978	EG.1 - 32 x 16	32	16	70	75	40	-	1	0020
5979	EG.1 - 32 x 18	32	18	70	75	40	-	1	0020
5980	EG.1 - 32 x 20	32	20	70	75	40	-	1	0372
5997	EG.2 - 32 x 25	32	25	70	75	40	14	2	-
5960	EG.1 - 40 x 6	40	6	80	85	48	-	1	0366
5981	EG.1 - 40 x 8	40	8	80	85	48	-	1	0181
5982	EG.1 - 40 x 10	40	10	80	85	48	-	1	0371
5983	EG.1 - 40 x 12	40	12	80	85	48	-	1	0371
5984	EG.1 - 40 x 14	40	14	80	85	48	-	1	0371
5985	EG.1 - 40 x 16	40	16	80	85	48	-	1	4970
5986	EG.1 - 40 x 18	40	18	80	85	48	-	1	4970
5987	EG.1 - 40 x 20	40	20	80	85	48	-	1	0021
5988	EG.1 - 40 x 25	40	25	80	85	48	-	1	0372
5998	EG.2 - 40 x 32	40	32	80	85	48	14	2	-
7063	EG.1 - 50 x 8	50	8	90	95	58	-	1	0181
7064	EG.1 - 50 x 10	50	10	90	95	58	-	1	0371
7065	EG.1 - 50 x 12	50	12	90	95	58	-	1	0371
7066	EG.1 - 50 x 14	50	14	90	95	58	-	1	0371
5989	EG.1 - 50 x 16	50	16	90	95	58	-	1	0375
5990	EG.1 - 50 x 18	50	18	90	95	58	-	1	0375
5991	EG.1 - 50 x 20	50	20	90	95	58	-	1	0375
5992	EG.1 - 50 x 25	50	25	90	95	58	-	1	4971
5993	EG.1 - 50 x 32	50	32	90	95	58	-	1	0021
5999	EG.2 - 50 x 40	50	40	90	95	58	14	2	-

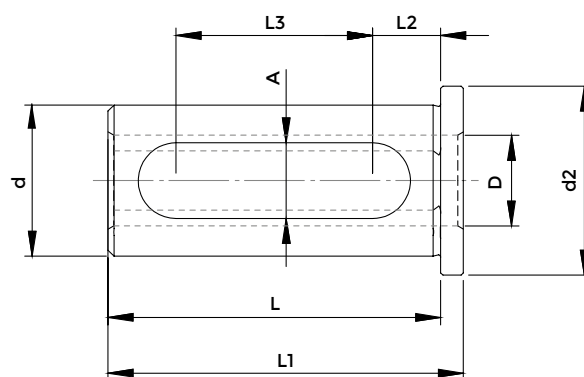
EXTENDED UNIVERSAL REDUCTION SLEEVES WITH STOP



EG.3

COD.	DESCRIPTION	d	D	L	L1	d2	SCREW
							
5315	EG. 3 - 32 x 6	32	6	85	90	40	0366
5316	EG. 3 - 32 x 8	32	8	85	90	40	4970
5317	EG. 3 - 32 x 10	32	10	85	90	40	0370
5318	EG. 3 - 32 x 12	32	12	85	90	40	0370
7042	EG. 3 - 32 x 14	32	14	85	90	40	0370
5319	EG. 3 - 32 x 16	32	16	85	90	40	0020
7043	EG. 3 - 32 x 18	32	18	85	90	40	0020
5320	EG. 3 - 32 x 20	32	20	85	90	40	0367
5321	EG. 3 - 40 x 6	40	6	105	110	50	0366
5322	EG. 3 - 40 x 8	40	8	105	110	50	0181
5323	EG. 3 - 40 x 10	40	10	105	110	50	0371
5324	EG. 3 - 40 x 12	40	12	105	110	50	0371
5918	EG. 3 - 40 x 14	40	14	105	110	50	0371
5325	EG. 3 - 40 x 16	40	16	105	110	50	4971
5919	EG. 3 - 40 x 18	40	18	105	110	50	4971
5326	EG. 3 - 40 x 20	40	20	105	110	50	0021
5327	EG. 3 - 40 x 25	40	25	105	110	50	0372
5328	EG. 3 - 50 x 12	50	12	125	130	60	0382
7044	EG. 3 - 50 x 14	50	14	125	130	60	0382
5329	EG. 3 - 50 x 16	50	16	125	130	60	0375
7045	EG. 3 - 50 x 18	50	18	125	130	60	0375
5330	EG. 3 - 50 x 20	50	20	125	130	60	0375
5331	EG. 3 - 50 x 25	50	25	125	130	60	4971
5332	EG. 3 - 50 x 32	50	32	125	130	60	0021
8840	EG. 3 - 60 x 20	60	20	135	140	70	0186
8841	EG. 3 - 60 x 25	60	25	135	140	70	0377
8842	EG. 3 - 60 x 32	60	32	135	140	70	4972
8843	EG. 3 - 60 x 40	60	40	135	140	70	0385
8845	EG. 3 - 80 x 25	80	25	145	150	90	4973
8846	EG. 3 - 80 x 32	80	32	145	150	90	4973
8847	EG. 3 - 80 x 40	80	40	145	150	90	4973
8848	EG. 3 - 80 x 50	80	50	145	150	90	4973

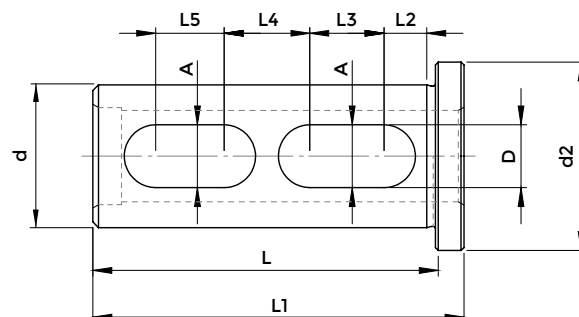
SLOTTED REDUCTION SLEEVES WITH STOP



EG.5

COD.	DESCRIPTION	d	D	L	L1	L2	L3	A	d2
8796	EG. 5 - 20 x 8	20	8	44	47	9,5	25	11	25
8797	EG. 5 - 20 x 10	20	10	44	47	9,5	25	11	25
8798	EG. 5 - 20 x 12	20	12	44	47	9,5	25	11	25
8880	EG. 5 - 20 x 14	20	14	44	47	9,5	25	11	25
8799	EG. 5 - 20 x 16	20	16	44	47	9,5	25	11	25
8557	EG. 5 - 25 x 8	25	8	54	57	8,5	33	13	30
8558	EG. 5 - 25 x 10	25	10	54	57	8,5	33	13	30
8559	EG. 5 - 25 x 12	25	12	54	57	8,5	33	13	30
8560	EG. 5 - 25 x 14	25	14	54	57	8,5	33	13	30
8561	EG. 5 - 25 x 16	25	16	54	57	8,5	33	13	30
8562	EG. 5 - 25 x 18	25	18	54	57	8,5	33	13	30
8563	EG. 5 - 25 x 20	25	20	54	57	8,5	33	13	30
8564	EG. 5 - 32 x 8	32	8	64	68	8,5	42	13	37
8565	EG. 5 - 32 x 10	32	10	64	68	8,5	42	13	37
8566	EG. 5 - 32 x 12	32	12	64	68	8,5	42	13	37
8567	EG. 5 - 32 x 14	32	14	64	68	8,5	42	13	37
8568	EG. 5 - 32 x 16	32	16	64	68	8,5	42	13	37
8569	EG. 5 - 32 x 18	32	18	64	68	8,5	42	13	37
8570	EG. 5 - 32 x 20	32	20	64	68	8,5	42	13	37
8571	EG. 5 - 32 x 25	32	25	64	68	8,5	42	13	37
8835	EG. 5 - 40 x 12	40	12	74	79	9	51	14	45
8836	EG. 5 - 40 x 14	40	14	74	79	9	51	14	45
8837	EG. 5 - 40 x 16	40	16	74	79	9	51	14	45
8838	EG. 5 - 40 x 18	40	18	74	79	9	51	14	45
8897	EG. 5 - 40 x 20	40	20	74	79	9	51	14	45
8898	EG. 5 - 40 x 25	40	25	74	79	9	51	14	45
8899	EG. 5 - 40 x 32	40	32	74	79	9	51	14	45

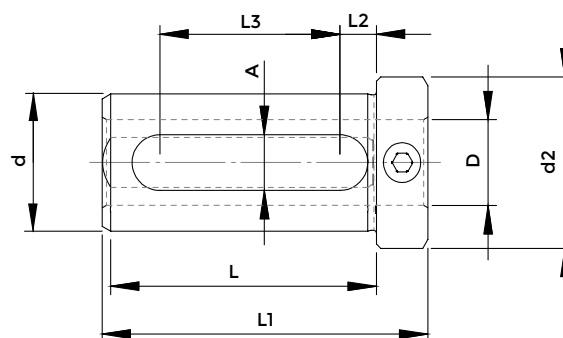
LONG TYPE WITH DOUBLE SLOT



EG.4

COD.	DESCRIPTION	d	D	L	L1	L2	L3	L4	L5	A	d2
8839	EG. 4 - 25 x 16	25	16	60	65	9	13	15	12	11	33
5333	EG. 4 - 32 x 25	32	25	85	90	9	25	18	22	11	40
5334	EG. 4 - 40 x 32	40	32	105	110	10	35	20	28	13	50
5335	EG. 4 - 50 x 40	50	40	125	130	10	45	20	37	13	60
8844	EG. 4 - 60 x 50	60	50	135	140	15	40	28	28	13	70
8849	EG. 4 - 80 x 60	80	60	145	150	25	30	25	15	14	90

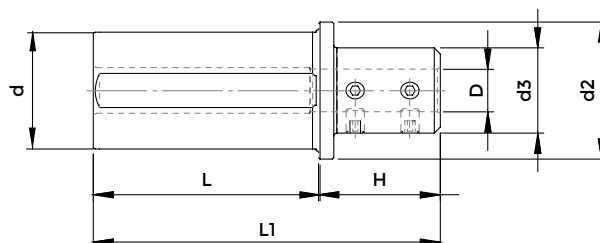
SLOTTED REDUCTION SLEEVES WITH GRAIN ON THE STOP



EG.6

COD.	DESCRIPTION	d	D	L	L1	L2	L3	A	d2	SCREW
										
8754	EG. 6 - 20 x 8	20	8	49	59	7,5	29	11	27	0370
8755	EG. 6 - 20 x 10	20	10	49	59	7,5	29	11	27	0370
8756	EG. 6 - 20 x 12	20	12	49	59	7,5	29	11	27	0370
8757	EG. 6 - 20 x 14	20	14	49	59	7,5	29	11	27	0370
8758	EG. 6 - 20 x 16	20	16	49	59	7,5	29	11	27	0368
8759	EG. 6 - 25 x 12	25	12	54	66	8,5	32	13	32	0375
8760	EG. 6 - 25 x 14	25	14	54	66	8,5	32	13	32	0372
8761	EG. 6 - 25 x 16	25	16	54	66	8,5	32	13	32	0372
8762	EG. 6 - 25 x 18	25	18	54	66	8,5	32	13	32	0372
8763	EG. 6 - 25 x 20	25	20	54	66	8,5	32	13	32	0372
8764	EG. 6 - 32 x 16	32	16	64	76	8,5	42	13	39	0375
8765	EG. 6 - 32 x 18	32	18	64	76	8,5	42	13	39	0375
8766	EG. 6 - 32 x 20	32	20	64	76	8,5	42	13	39	0372
8767	EG. 6 - 32 x 25	32	25	64	76	8,5	42	13	39	0372
8768	EG. 6 - 40 x 16	40	16	74	88	9	51	14	48	0377
8769	EG. 6 - 40 x 18	40	18	74	88	9	51	14	48	0377
8770	EG. 6 - 40 x 20	40	20	74	88	9	51	14	48	0377
8771	EG. 6 - 40 x 25	40	25	74	88	9	51	14	48	0060
8772	EG. 6 - 40 x 32	40	32	74	88	9	51	14	48	0060
8773	EG. 6 - 50 x 25	50	25	84	98	9	61	14	59	0377
8774	EG. 6 - 50 x 32	50	32	84	98	9	61	14	59	0377
8775	EG. 6 - 50 x 40	50	40	84	98	9	61	14	59	0060
8881	EG. 6 - 60 x 25	60	25	94	108	9	71	14	69	0377
8882	EG. 6 - 60 x 32	60	32	94	108	9	71	14	69	0377
8883	EG. 6 - 60 x 40	60	40	94	108	9	71	14	69	0377
8884	EG. 6 - 60 x 50	60	50	94	108	9	71	14	69	0060

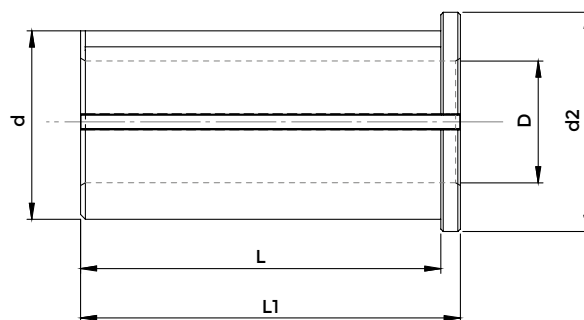
REDUCTION SLEEVES WITH EXTENSION



EG.7

COD.	DESCRIPTION	d	D	L	H	L2	d2	d3	SCREW
									
9567	EG. 7 - 25 x 6	25	6	54	30	84	30	20	0365
9568	EG. 7 - 25 x 8	25	8	54	30	84	30	22	0370
9569	EG. 7 - 25 x 10	25	10	54	30	84	30	24	0370
9570	EG. 7 - 25 x 12	25	12	54	30	84	30	26	0370
9571	EG. 7 - 25 x 14	25	14	54	30	84	30	28	0370
9572	EG. 7 - 25 x 16	25	16	54	30	84	30	30	0370
9573	EG. 7 - 32 x 6	32	6	64	30	94	37	20	0365
9574	EG. 7 - 32 x 8	32	8	64	30	94	37	22	0370
9575	EG. 7 - 32 x 10	32	10	64	30	94	37	24	0370
9576	EG. 7 - 32 x 12	32	12	64	30	94	37	26	0370
9577	EG. 7 - 32 x 14	32	14	64	30	94	37	28	0370
9578	EG. 7 - 32 x 16	32	16	64	30	94	37	30	0370
9579	EG. 7 - 32 x 18	32	18	64	30	94	37	32	0370
9580	EG. 7 - 32 x 20	32	20	64	30	94	37	34	0370
9581	EG. 7 - 40 x 6	40	6	74	40	114	45	20	0365
9582	EG. 7 - 40 x 8	40	8	74	40	114	45	22	0370
9583	EG. 7 - 40 x 10	40	10	74	40	114	45	24	0370
9584	EG. 7 - 40 x 12	40	12	74	40	114	45	26	0370
9585	EG. 7 - 40 x 14	40	14	74	40	114	45	28	0370
9586	EG. 7 - 40 x 16	40	16	74	40	114	45	30	0370
9587	EG. 7 - 40 x 18	40	18	74	40	114	45	32	0370
9588	EG. 7 - 40 x 20	40	20	74	40	114	45	34	0372
9589	EG. 7 - 40 x 25	40	25	74	40	114	45	39	0372
9590	EG. 7 - 50 x 12	50	12	84	40	124	55	26	0370
9591	EG. 7 - 50 x 14	50	14	84	40	124	55	28	0370
9592	EG. 7 - 50 x 16	50	16	84	40	124	55	30	0370
9593	EG. 7 - 50 x 18	50	18	84	40	124	55	32	0370
9594	EG. 7 - 50 x 20	50	20	84	40	124	55	34	0372
9595	EG. 7 - 50 x 25	50	25	84	40	124	55	39	0372

SPLITTED REDUCTION SLEEVES WITH STOP - RZ TYPE

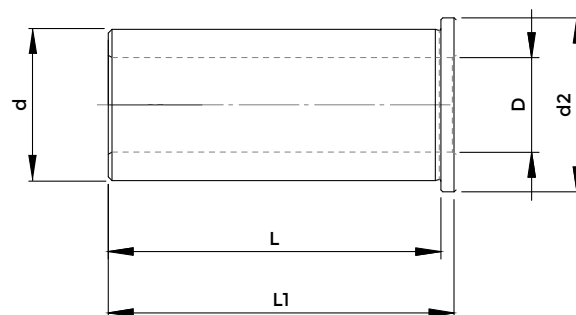


RZ

COD.	DESCRIPTION	d	D	L	L1	d2
5920	RZ - 20 x 8	20	8	36	40	25
5921	RZ - 20 x 10	20	10	36	40	25
5922	RZ - 20 x 12	20	12	36	40	25
5923	RZ - 20 x 14	20	14	36	40	25
5924	RZ - 20 x 16	20	16	36	40	25
5925	RZ - 25 x 8	25	8	46	50	30
5926	RZ - 25 x 10	25	10	46	50	30
5927	RZ - 25 x 12	25	12	46	50	30
5928	RZ - 25 x 14	25	14	46	50	30
5929	RZ - 25 x 16	25	16	46	50	30
5930	RZ - 25 x 18	25	18	46	50	30
5931	RZ - 25 x 20	25	20	46	50	30
5932	RZ - 32 x 8	32	8	56	60	37
5933	RZ - 32 x 10	32	10	56	60	37
5934	RZ - 32 x 12	32	12	56	60	37
5935	RZ - 32 x 14	32	14	56	60	37
5936	RZ - 32 x 16	32	16	56	60	37
5937	RZ - 32 x 18	32	18	56	60	37
5938	RZ - 32 x 20	32	20	56	60	37
5939	RZ - 32 x 25	32	25	56	60	37
5941	RZ - 40 x 10	40	10	74	78	45
5942	RZ - 40 x 12	40	12	74	78	45
5943	RZ - 40 x 14	40	14	74	78	45
5944	RZ - 40 x 16	40	16	74	78	45
5945	RZ - 40 x 18	40	18	74	78	45
5946	RZ - 40 x 20	40	20	74	78	45
5947	RZ - 40 x 25	40	25	74	78	45
5948	RZ - 40 x 32	40	32	74	78	45
5951	RZ - 50 x 20	50	20	84	88	55
5952	RZ - 50 x 25	50	25	84	88	55
5953	RZ - 50 x 32	50	32	84	88	55
5954	RZ - 50 x 40	50	40	84	88	55
5956	RZ - 60 x 25	60	25	88	92	65
5957	RZ - 60 x 32	60	32	88	92	65
5958	RZ - 60 x 40	60	40	88	92	65
5959	RZ - 60 x 50	60	50	88	92	65

The double cut increases the bush elastic capacity reducing thus tool vibrations

GRINDED NOT HARDENED REDUCTION SLEEVES WITH STOP



E2.LAV

COD.	DESCRIPTION	d	D	L	L1	d2
1509	E2 .LAV - 25 x 8	25	8	70	74	32
1511	E2 .LAV - 25 x 10	25	10	70	74	32
1513	E2 .LAV - 25 x 12	25	12	70	74	32
1517	E2 .LAV - 25 x 16	25	16	70	74	32
1519	E2 .LAV - 25 x 20	25	20	70	74	32
2284	E2 .LAV - 32 x 10	32	10	88	92	36
2286	E2 .LAV - 32 x 12	32	12	88	92	36
2289	E2 .LAV - 32 x 16	32	16	88	92	36
2291	E2 .LAV - 32 x 20	32	20	88	92	36
2293	E2 .LAV - 32 x 25	32	25	88	92	36
2440	E2 .LAV - 40 x 12	40	12	88	92	46
2442	E2 .LAV - 40 x 16	40	16	88	92	46
2446	E2 .LAV - 40 x 20	40	20	88	92	46
2460	E2 .LAV - 40 x 25	40	25	88	92	46
2466	E2 .LAV - 40 x 32	40	32	88	92	46

REDUCTION SLEEVES FOR BORING BAR HOLDERS



FIG. 1

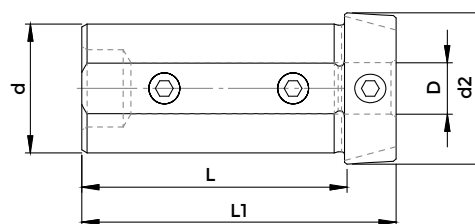
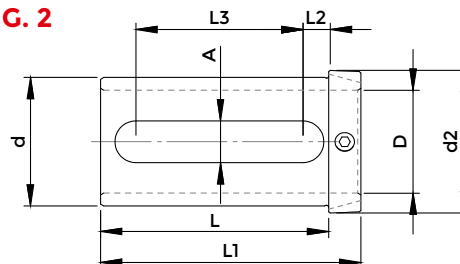


FIG. 2



EG.R

COD.	DESCRIPTION	d	D	L	L1	L2	L3	A	d2	FIG.
9600	EG . R - 25 x 8	25	8	51	61	-	-	-	-	1
9601	EG . R - 25 x 10	25	10	51	61	-	-	-	-	1
9602	EG . R - 25 x 12	25	12	51	61	-	-	-	-	1
9603	EG . R - 25 x 14	25	14	51	61	-	-	-	-	1
9604	EG . R - 25 x 16	25	16	51	61	8	34	13	30	2
9605	EG . R - 25 x 18	25	18	51	61	8	34	13	30	2
9606	EG . R - 25 x 20	25	20	51	61	8	34	13	30	2
9607	EG . R - 32 x 8	32	8	57,5	67,5	-	-	-	-	1
9608	EG . R - 32 x 10	32	10	57,5	67,5	-	-	-	-	1
9609	EG . R - 32 x 12	32	12	57,5	67,5	-	-	-	-	1
9610	EG . R - 32 x 14	32	14	57,5	67,5	-	-	-	-	1
9611	EG . R - 32 x 16	32	16	57,5	67,5	8	40	13	37	2
9612	EG . R - 32 x 18	32	18	57,5	67,5	8	40	13	37	2
9613	EG . R - 32 x 20	32	20	57,5	67,5	8	40	13	37	2
9614	EG . R - 32 x 25	32	25	57,5	67,5	8	40	13	37	2
9615	EG . R - 40 x 8	40	8	71	81	-	-	-	-	1
9616	EG . R - 40 x 10	40	10	71	81	-	-	-	-	1
9617	EG . R - 40 x 12	40	12	71	81	-	-	-	-	1
9618	EG . R - 40 x 14	40	14	71	81	-	-	-	-	1
9619	EG . R - 40 x 16	40	16	71	81	8	52	13	45	2
9620	EG . R - 40 x 18	40	18	71	81	8	52	13	45	2
9621	EG . R - 40 x 20	40	20	71	81	8	52	13	45	2
9622	EG . R - 40 x 25	40	25	71	81	8	52	13	45	2
9623	EG . R - 40 x 32	40	32	71	81	8	52	13	45	2

Suitable for any boring bar (VDI, HSK, Polygonal, etc).
Stop shape avoids interference with coolant nozzles

MORSE TAPER REDUCTION SLEEVES WITHOUT STOP



FIG. 1

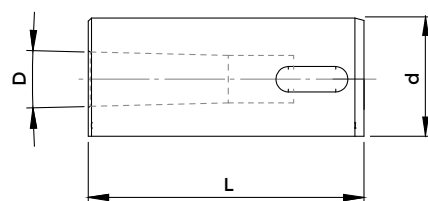
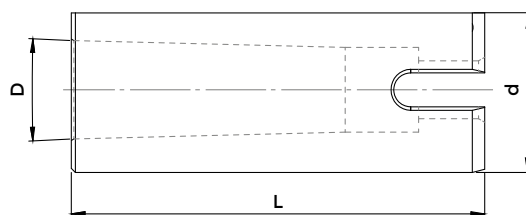


FIG. 2



E 2.3

COD.	DESCRIPTION	d	CM	D	L	FIG.
5217	E 2.3 - 20 x 1	20	1	12,065	60	2
5218	E 2.3 - 20 x 2	20	2	17,78	90	1
5219	E 2.3 - 25 x 1	25	1	12,065	60	2
5220	E 2.3 - 25 x 2	25	2	17,78	90	1
5221	E 2.3 - 32 x 1	32	1	12,065	60	2
4322	E 2.3 - 32 x 2	32	2	17,78	90	1
4323	E 2.3 - 32 x 3	32	3	23,825	100	2
4324	E 2.3 - 40 x 2	40	2	17,78	90	1
4325	E 2.3 - 40 x 3	40	3	23,825	100	2
2857	E 2.3 - 40 x 4	40	4	31,267	120	2
4326	E 2.3 - 50 x 2	50	2	17,78	90	1
4327	E 2.3 - 50 x 3	50	3	23,825	100	2
4328	E 2.3 - 50 x 4	50	4	31,267	120	2
8891	E 2.3 - 60 x 3	60	3	23,825	160	1
8892	E 2.3 - 60 x 4	60	4	31,267	160	1
8893	E 2.3 - 60 x 5	60	5	44,399	160	2

MORSE TAPER REDUCTION SLEEVES WITH STOP



FIG. 1

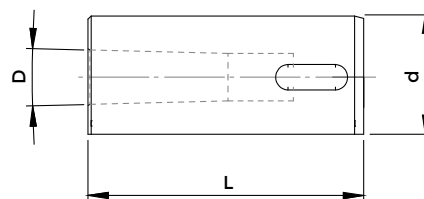
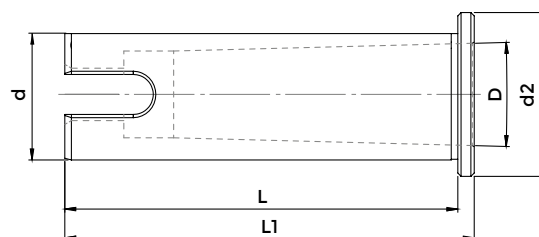


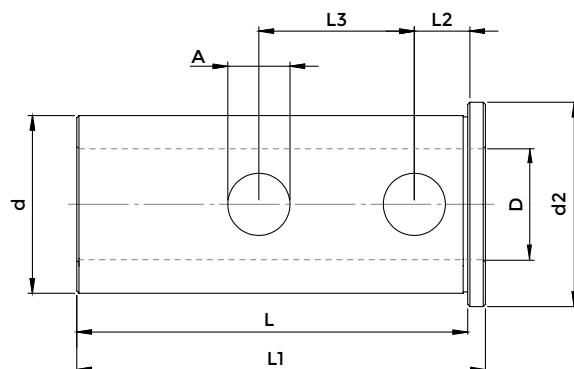
FIG. 2



E 2.G6

COD.	DESCRIPTION	d	CM	D	L	L1	d2	FIG.
1722	E2.G6 - 20 x 1	20	1	12,065	65	70	28	2
1723	E2.G6 - 20 x 2	20	2	17,78	70	75	28	2
1786	E2.G6 - 25 x 1	25	1	12,065	70	75	33	2
1787	E2.G6 - 25 x 2	25	2	17,78	70	75	33	2
1788	E2.G6 - 25 x 3	25	3	23,825	79	98	33	2
1376	E2.G6 - 32 x 1	32	1	12,065	85	90	40	1
1377	E2.G6 - 32 x 2	32	2	17,78	85	90	40	1
1378	E2.G6 - 32 x 3	32	3	23,825	95	100	40	2
3245	E2.G6 - 40 x 2	40	2	17,78	105	110	50	1
1232	E2.G6 - 40 x 3	40	3	23,825	105	110	50	1
5603	E2.G6 - 40 x 4	40	4	31,267	120	125	50	2
5961	E2.G6 - 50 x 2	50	2	17,78	125	130	63	1
5962	E2.G6 - 50 x 3	50	3	23,825	125	130	63	1
5963	E2.G6 - 50 x 4	50	4	31,267	125	130	63	1
8894	E2.G6 - 60 x 3	60	3	23,825	130	140	70	1
8895	E2.G6 - 60 x 4	60	4	31,267	130	140	70	1
8896	E2.G6 - 60 x 5	60	5	44,399	145	155	70	2

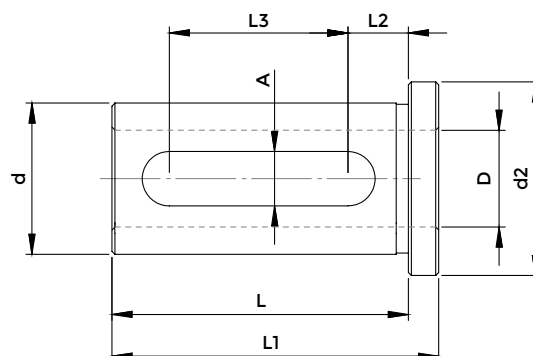
REDUCTION SLEEVES FOR BIGLIA ETC.



BC.1

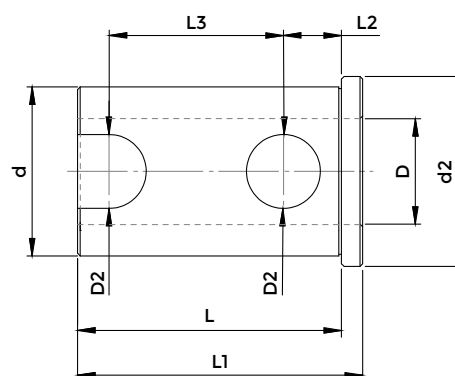
COD.	DESCRIPTION	d	D	L	L1	L2	L3	A	d2
2823	BC.1 - 25 x 8	25	8	70	74	7	28	9	32
2824	BC.1 - 25 x 10	25	10	70	74	7	28	9	32
1064	BC.1 - 25 x 12	25	12	70	74	7	28	9	32
2198	BC.1 - 25 x 16	25	16	70	74	7	28	9	32
1212	BC.1 - 25 x 20	25	20	70	74	7	28	9	32
3229	BC.1 - 32 x 8	32	8	88	92	9	35	14	36
3230	BC.1 - 32 x 10	32	10	88	92	9	35	14	36
3231	BC.1 - 32 x 12	32	12	88	92	9	35	14	36
3232	BC.1 - 32 x 16	32	16	88	92	9	35	14	36
3233	BC.1 - 32 x 20	32	20	88	92	9	35	14	36
3234	BC.1 - 32 x 25	32	25	88	92	9	35	14	36
3240	BC.1 - 40 x 10	40	10	88	92	9	35	14	46
3239	BC.1 - 40 x 12	40	12	88	92	9	35	14	46
3238	BC.1 - 40 x 16	40	16	88	92	9	35	14	46
3235	BC.1 - 40 x 20	40	20	88	92	9	35	14	46
3236	BC.1 - 40 x 25	40	25	88	92	9	35	14	46
3237	BC.1 - 40 x 32	40	32	88	92	9	35	14	46

SHORT REDUCTION SLEEVES FOR BIGLIA ETC.



BC.2

COD.	DESCRIPTION	d	D	L	L1	L2	L3	A	d2
0022	BC.2 - 25 x 8	25	8	49	54	10	29,5	9	32
0024	BC.2 - 25 x 10	25	10	49	54	10	29,5	9	32
0025	BC.2 - 25 x 12	25	12	49	54	10	29,5	9	32
0091	BC.2 - 25 x 14	25	14	49	54	10	29,5	9	32
0026	BC.2 - 25 x 16	25	16	49	54	10	29,5	9	32
0092	BC.2 - 25 x 18	25	18	49	54	10	29,5	9	32
0034	BC.2 - 25 x 20	25	20	49	54	10	29,5	9	32



BC.2

COD.	DESCRIPTION	d	D	L	L1	L2	L3	A	d2
1083	BC.2 - 32 x 8	32	8	50	54	9	35	14	36
1236	BC.2 - 32 x 10	32	10	50	54	9	35	14	36
3246	BC.2 - 32 x 12	32	12	50	54	9	35	14	36
2604	BC.2 - 32 x 14	32	14	50	54	9	35	14	36
3247	BC.2 - 32 x 16	32	16	50	54	9	35	14	36
2605	BC.2 - 32 x 18	32	18	50	54	9	35	14	36
3248	BC.2 - 32 x 20	32	20	50	54	9	35	14	36
3249	BC.2 - 32 x 25	32	25	50	54	9	35	14	36
9558	BC.2 - 40 x 8	40	8	50	54	9	35	14	44
9559	BC.2 - 40 x 10	40	10	50	54	9	35	14	44
9560	BC.2 - 40 x 12	40	12	50	54	9	35	14	44
9561	BC.2 - 40 x 14	40	14	50	54	9	35	14	44
9562	BC.2 - 40 x 16	40	16	50	54	9	35	14	44
9563	BC.2 - 40 x 18	40	18	50	54	9	35	14	44
9564	BC.2 - 40 x 20	40	20	50	54	9	35	14	44
9565	BC.2 - 40 x 25	40	25	50	54	9	35	14	44
9566	BC.2 - 40 x 32	40	32	50	54	9	35	14	44

REDUCTION SLEEVES WITH GRAIN ON STOP FOR DOOSAN DAEWOO ETC.



FIG. 1

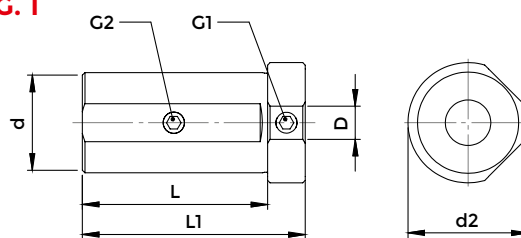
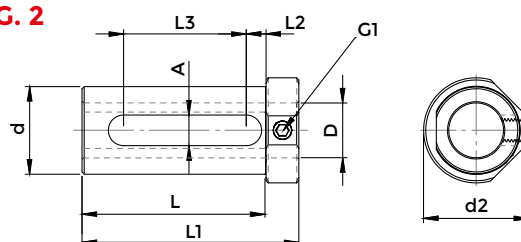


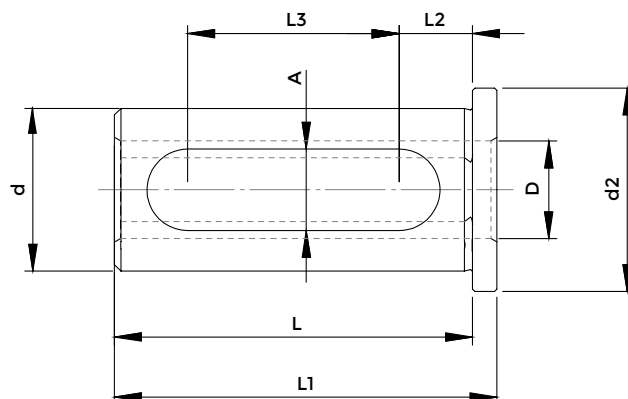
FIG. 2



DW.1

COD.	DESCRIPTION	d	D	L	L1	L2	L3	A	d2	FIG.	SCREW 1	SCREW 2
												
8672	DW.1 - 32 x 10	32	10	79	94	-	-	-	40	1	4972	0385
8673	DW.1 - 32 x 12	32	12	79	94	-	-	-	40	1	4972	0385
8674	DW.1 - 32 x 16	32	16	79	94	-	-	-	40	1	4972	0385
8675	DW.1 - 32 x 20	32	20	79	94	9,5	60	11	40	2	0385	-
8676	DW.1 - 32 x 25	32	25	79	94	9,5	60	11	40	2	0385	-
8916	DW.1 - 40 x 10	40	10	74	89	-	-	-	48	1	0377	4972
8917	DW.1 - 40 x 12	40	12	74	89	-	-	-	48	1	0377	4972
8918	DW.1 - 40 x 16	40	16	74	89	-	-	-	48	1	0377	0060
8919	DW.1 - 40 x 20	40	20	84	99	9	56	14	48	2	4972	-
8920	DW.1 - 40 x 25	40	25	84	99	9	56	14	48	2	4972	-
8921	DW.1 - 40 x 32	40	32	84	99	9	56	14	48	2	0385	-

SLOTTED REDUCTION SLEEVES WITH STOP FOR DOOSAN DAEWOO ETC.



DW.2

COD.	DESCRIPTION	d	D	L	L1	L2	L3	A	d2
8796	DW.2 - 20 x 8	20	8	44	47	9,5	25	11	25
8797	DW.2 - 20 x 10	20	10	44	47	9,5	25	11	25
8798	DW.2 - 20 x 12	20	12	44	47	9,5	25	11	25
8880	DW.2 - 20 x 14	20	14	44	47	9,5	25	11	25
8799	DW.2 - 20 x 16	20	16	44	47	9,5	25	11	25
8557	DW.2 - 25 x 8	25	8	54	57	8,5	33	13	30
8558	DW.2 - 25 x 10	25	10	54	57	8,5	33	13	30
8559	DW.2 - 25 x 12	25	12	54	57	8,5	33	13	30
8560	DW.2 - 25 x 14	25	14	54	57	8,5	33	13	30
8561	DW.2 - 25 x 16	25	16	54	57	8,5	33	13	30
8562	DW.2 - 25 x 18	25	18	54	57	8,5	33	13	30
8563	DW.2 - 25 x 20	25	20	54	57	8,5	33	13	30
8564	DW.2 - 32 x 8	32	8	64	68	8,5	42	13	37
8565	DW.2 - 32 x 10	32	10	64	68	8,5	42	13	37
8566	DW.2 - 32 x 12	32	12	64	68	8,5	42	13	37
8567	DW.2 - 32 x 14	32	14	64	68	8,5	42	13	37
8568	DW.2 - 32 x 16	32	16	64	68	8,5	42	13	37
8569	DW.2 - 32 x 18	32	18	64	68	8,5	42	13	37
8570	DW.2 - 32 x 20	32	20	64	68	8,5	42	13	37
8571	DW.2 - 32 x 25	32	25	64	68	8,5	42	13	37
8835	DW.2 - 40 x 12	40	12	74	79	9	51	14	45
8836	DW.2 - 40 x 14	40	14	74	79	9	51	14	45
8837	DW.2 - 40 x 16	40	16	74	79	9	51	14	45
8838	DW.2 - 40 x 18	40	18	74	79	9	51	14	45
8897	DW.2 - 40 x 20	40	20	74	79	9	51	14	45
8898	DW.2 - 40 x 25	40	25	74	79	9	51	14	45
8899	DW.2 - 40 x 32	40	32	74	79	9	51	14	45

REDUCTION SLEEVES FOR MAZAK ETC.



FIG. 1

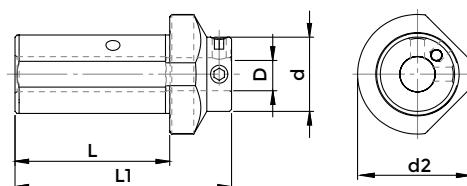
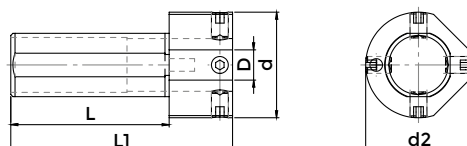


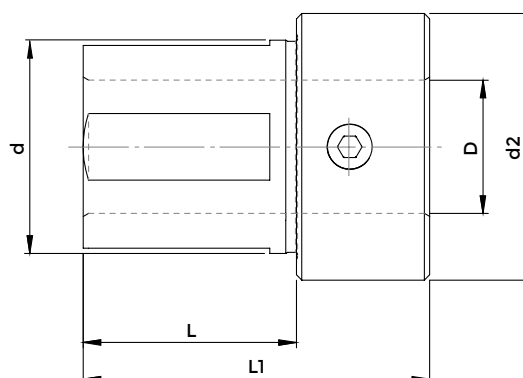
FIG. 2



MZ.1

COD.	DESCRIPTION	d	D	L	L1	d2	FIG.	SCREW
								
8926	MZ.1 - 32 x 8	32	8	60	85	50	1	0371
8927	MZ.1 - 32 x 10	32	10	60	85	50	1	0371
8928	MZ.1 - 32 x 12	32	12	60	85	50	1	0375
8929	MZ.1 - 32 x 16	32	16	60	85	50	1	4971
8930	MZ.1 - 32 x 20	32	20	60	85	50	2	0375
8931	MZ.1 - 32 x 25	32	25	60	85	50	2	0375
5581	MZ.1 - 40 x 8	40	8	75	105	58	1	0371
5582	MZ.1 - 40 x 10	40	10	75	105	58	1	0371
5583	MZ.1 - 40 x 12	40	12	75	105	58	1	0375
5585	MZ.1 - 40 x 16	40	16	75	105	58	1	4971
5587	MZ.1 - 40 x 20	40	20	75	105	58	1	0183
5594	MZ.1 - 40 x 25	40	25	75	105	58	2	0021
5595	MZ.1 - 40 x 32	40	32	75	105	58	2	0021

SHORT REDUCTION SLEEVES FOR MAZAK ETC.



MZ.2

COD.	DESCRIPTION	d	D	L	L1	d2	SCREW
							
8932	MZ.2 - 32 x 20	32	20	40	65	42	4971
8933	MZ.2 - 32 x 25	32	25	40	65	42	0021
5596	MZ.2 - 40 x 20	40	20	40	65	50	0382
5597	MZ.2 - 40 x 25	40	25	40	65	50	0375
5598	MZ.2 - 40 x 32	40	32	40	65	50	4971

MORSE TAPER REDUCTION SLEEVES FOR MAZAK ETC.

FIG. 1

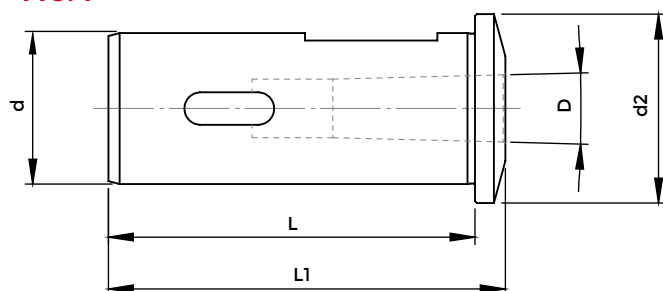
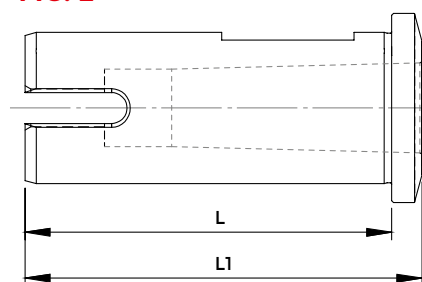


FIG. 2



MZ.3

COD.	DESCRIPTION	d	CM	D	L	L1	d2	FIG.
8983	MZ.3 - 32 x 1	32	1	12,065	54	66	42	2
8984	MZ.3 - 32 x 2	32	2	17,78	58	70	42	2
8985	MZ.3 - 40 x 1	40	1	12,065	97	105	50	1
8986	MZ.3 - 40 x 2	40	2	17,78	97	105	50	1
8987	MZ.3 - 40 x 3	40	3	23,825	97	105	50	2

REDUCTION SLEEVES FOR DMG MORI SEIKI ETC.



MS.1

FIG. 1

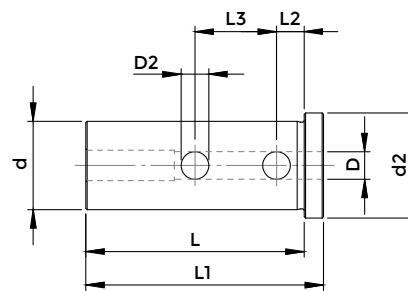
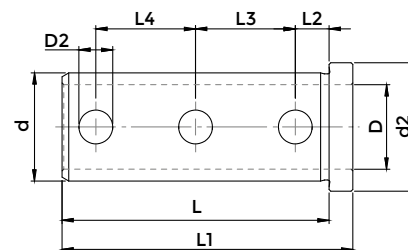
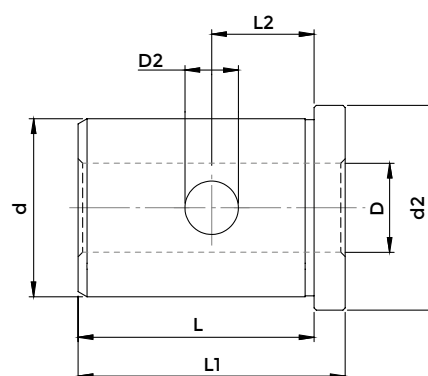


FIG. 2



COD.	DESCRIPTION	d	D	L	L1	L2	L3	L4	D2	d2	FIG.
7035	MS.1 - 32 x 6	32	6	79	86	10	29,5	-	10	38	1
8941	MS.1 - 32 x 8	32	8	79	86	10	29,5	-	10	38	1
8942	MS.1 - 32 x 10	32	10	79	86	10	29,5	-	10	38	1
8943	MS.1 - 32 x 12	32	12	79	86	10	29,5	29,5	10	38	2
8944	MS.1 - 32 x 16	32	16	79	86	10	29,5	29,5	10	38	2
8945	MS.1 - 32 x 20	32	20	79	86	10	29,5	29,5	10	38	2
8946	MS.1 - 32 x 25	32	25	79	86	10	29,5	29,5	10	38	2
5900	MS.1 - 40 x 8	40	8	89	96	10	33	-	12	46	1
5901	MS.1 - 40 x 10	40	10	89	96	10	33	-	12	46	1
5902	MS.1 - 40 x 12	40	12	89	96	10	33	-	12	46	1
5903	MS.1 - 40 x 16	40	16	89	96	10	33	33	12	46	2
5904	MS.1 - 40 x 20	40	20	89	96	10	33	33	12	46	2
5905	MS.1 - 40 x 25	40	25	89	96	10	33	33	12	46	2
5906	MS.1 - 40 x 32	40	32	89	96	10	33	33	12	46	2

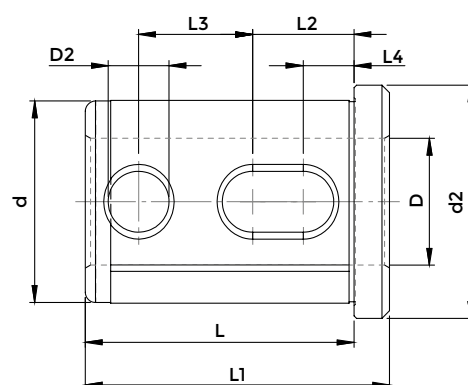
SHORT REDUCTION SLEEVES FOR DMG MORI SEIKI ETC.



MS.2

COD.	DESCRIPTION	d	D	L	L1	L2	D2	d2
8947	MS.2 - 32 x 16	32	16	53	60	20	12	38
8948	MS.2 - 32 x 20	32	20	53	60	20	12	38
8949	MS.2 - 32 x 25	32	25	53	60	20	12	38
8950	MS.2 - 40 x 16	40	16	53	60	23	12	46
8951	MS.2 - 40 x 20	40	20	53	60	23	12	46
8952	MS.2 - 40 x 25	40	25	53	60	23	12	46
8953	MS.2 - 40 x 32	40	32	53	60	23	12	46

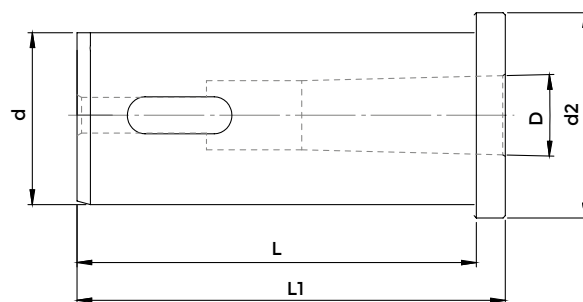
SHORT REDUCTION SLEEVES FOR DMG MORI SEIKI ETC.



MS.2A

COD.	DESCRIPTION	d	D	L	L1	L2	L3	L4	D2	d2
8922	MS.2A - 40 x 16	40	16	53	60	20	22,5	-	12	46
8923	MS.2A - 40 x 20	40	20	53	60	20	22,5	-	12	46
8924	MS.2A - 40 x 25	40	25	53	60	20	22,5	10	12	46
8925	MS.2A - 40 x 32	40	32	53	60	20	22,5	10	12	46

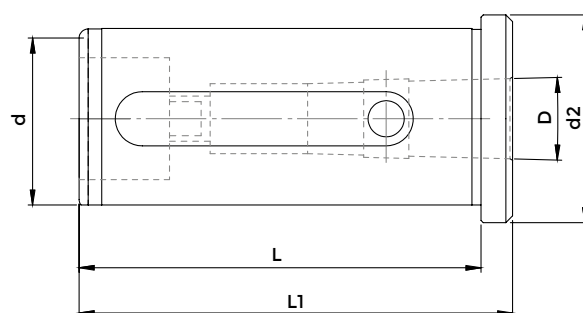
MORSE TAPER REDUCTION SLEEVES FOR DMG MORI SEIKI ETC.



MS.4

COD.	DESCRIPTION	d	CM	D	L	L1	d2
8958	MS.4 - 40 x 1	40	1	12,065	89	96	46
8959	MS.4 - 40 x 2	40	2	17,78	89	96	46
8960	MS.4 - 40 x 3	40	3	23,825	89	108	46
8961	MS.4 - 50 x 4	50	4	31,267	89	135	56

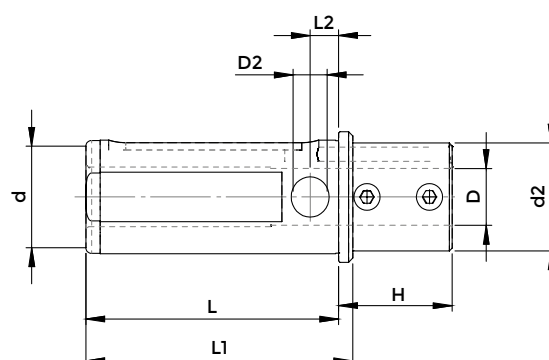
THROUGH COOLANT MORSE TAPER REDUCTION SLEEVES FOR DMG MORI SEIKI ETC



MS.4A

COD.	DESCRIPTION	d	CM	D	L	L1	d2
8868	MS.4A - 32 x 1	32	1	12,065	78	85	40
8869	MS.4A - 32 x 2	32	2	17,78	78	85	40
8870	MS.4A - 40 x 1	40	1	12,065	89	96	46
8871	MS.4A - 40 x 2	40	2	17,78	89	96	46
8872	MS.4A - 40 x 3	40	3	23,825	89	96	46
8873	MS.4A - 40 x 4	40	4	31,267	109	116	46

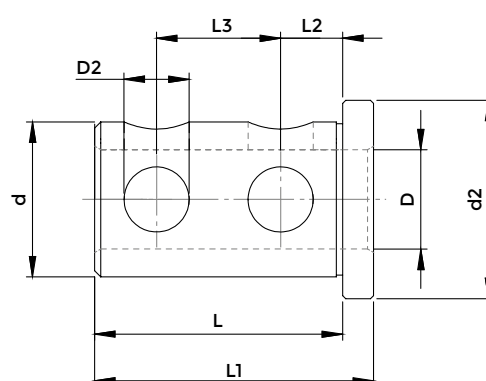
THROUGH COOLANT EXTENDED REDUCTION SLEEVES FOR DMG MORI SEIKI ETC.



MS.3A

COD.	DESCRIPTION	d	D	L	H	L1	L2	D2	d2	d3	SCREW
											
8863	MS.3A - 40 x 8	40	8	89	40	129	10	12	46	38	0375
8864	MS.3A - 40 x 10	40	10	89	40	129	10	12	46	38	0375
8865	MS.3A - 40 x 12	40	12	89	40	129	10	12	46	38	0375
8866	MS.3A - 40 x 16	40	16	89	40	129	10	12	46	38	4971
8867	MS.3A - 40 x 20	40	20	89	40	129	10	12	46	38	0021

REDUCTION SLEEVES FOR NAKAMURA TOME ETC.



NT.1

COD.	DESCRIPTION	d	D	L	L1	L2	L3	D2	d2
8876	NT.1 - 25 x 10	25	10	40	45	10	20	10,5	32
8877	NT.1 - 25 x 12	25	12	40	45	10	20	10,5	32
8878	NT.1 - 25 x 16	25	16	40	45	10	20	10,5	32
8879	NT.1 - 25 x 20	25	20	40	45	10	20	10,5	32

REDUCTION SLEEVES FOR OKUMA LT 10M / LT 200M ETC.



OK.1

COD.	DESCRIPTION	d	D	L	L1	L2	L3	L4	D2	d2	FIG.	SCREW 1	SCREW 2
													
8900	OK.1 - 32 x 8	32	8	57	69	-	-	-	-	40	1	0382	4971
8901	OK.1 - 32 x 10	32	10	57	69	-	-	-	-	40	1	0382	4971
8902	OK.1 - 32 x 12	32	12	57	69	-	-	-	-	40	1	0375	0021
8904	OK.1 - 32 x 16	32	16	59	71	11,5	35	4	13	40	2	0375	-
8906	OK.1 - 32 x 20	32	20	59	71	11,5	35	4	13	40	2	4971	-
8907	OK.1 - 32 x 25	32	25	59	71	11,5	35	4	13	40	2	0021	-

FIG. 1

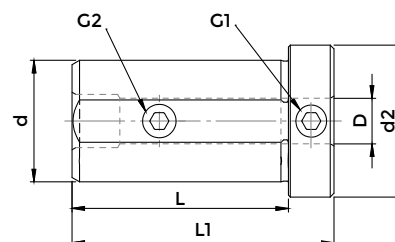
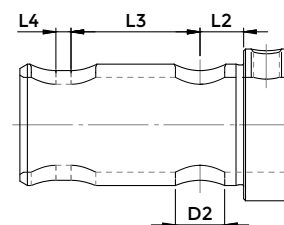


FIG. 2



REDUCTION SLEEVES FOR OKUMA LT 15M / LT 300M ETC.



OK.2

COD.	DESCRIPTION	d	D	L	L1	L2	L3	L4	D2	d2	FIG.	SCREW 1	SCREW 2
													
8963	OK.2 - 40 x 12	40	12	82	94	-	-	-	-	48	1	0382	0375
8964	OK.2 - 40 x 16	40	16	82	94	-	-	-	-	48	1	0382	4971
8965	OK.2 - 40 x 20	40	20	82	94	-	-	-	-	48	1	0375	0021
8966	OK.2 - 40 x 25	40	25	82	94	10	40	25	13	48	2	0375	-
8967	OK.2 - 40 x 32	40	32	82	94	10	40	25	13	48	2	0021	-

FIG. 1

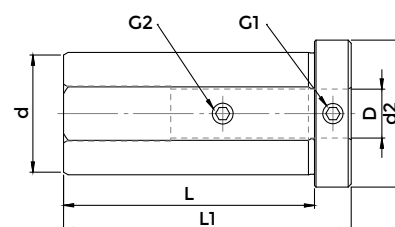
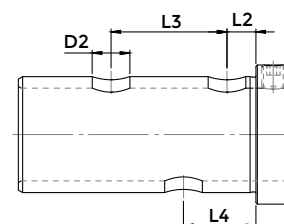


FIG. 2



REDUCTION SLEEVES FOR OKUMA LB 15 II ETC.



FIG. 1

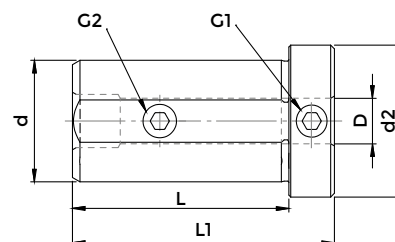
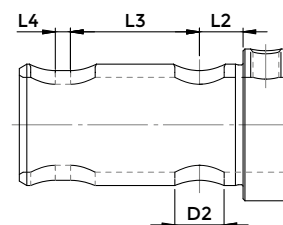


FIG. 2



OK.4

COD.	DESCRIPTION	d	D	L	L1	L2	L3	L4	D2	D3	d2	FIG.	SCREW 1	SCREW 2
														
8971	OK.4 - 40 x 10	40	10	80	95	-	-	-	-	-	48	1	0183	0375
8972	OK.4 - 40 x 12	40	12	80	95	-	-	-	-	-	48	1	0377	4972
8973	OK.4 - 40 x 16	40	16	80	95	-	-	-	-	-	48	1	0377	0060
8974	OK.4 - 40 x 20	40	20	80	95	-	-	-	-	-	48	1	4972	0385
8975	OK.4 - 40 x 25	40	25	68	80	11,5	42	15	16	13	48	2	4971	-
8976	OK.4 - 40 x 32	40	32	68	80	11,5	42	15	16	13	48	2	0021	-

REDUCTION SLEEVES FOR OKUMA MACTURN 250 / MULTUS ETC.



FIG. 1

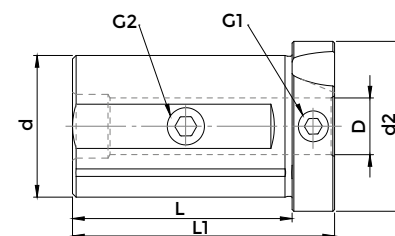
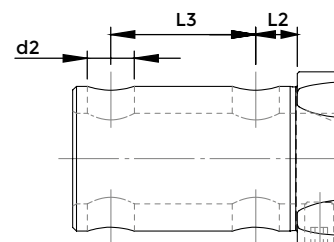


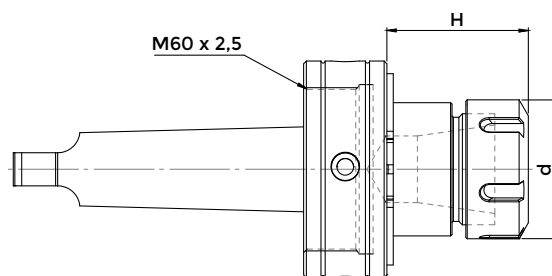
FIG. 2



OK.7

COD.	DESCRIPTION	d	D	L	L1	L2	L3	D2	d2	FIG.	SCREW 1	SCREW 2
												
8910	OK.7 - 40 x 10	40	10	62	74	-	-	-	48	1	0382	0375
8911	OK.7 - 40 x 12	40	12	62	74	-	-	-	48	1	0382	0375
8912	OK.7 - 40 x 16	40	16	62	74	-	-	-	48	1	0382	0060
8913	OK.7 - 40 x 20	40	20	62	74	-	-	-	48	1	0375	0060
8914	OK.7 - 40 x 25	40	25	62	74	11,5	40	13	48	2	0375	-
8915	OK.7 - 40 x 32	40	32	62	74	11,5	40	13	48	2	0021	-

FAMUP RAG TYPE SHANK ER COLLET CHUCKS



RAG

COD.	DESCRIPTION	ER	H	d	NUT 1	NUT 2	WRENCH	COLLET
								
4277	CM4 FAMUP RAG - ER 32	ER 32 2÷25	52	50	2420	4996	3670	0988
4280	CM4 FAMUP RAG - ER 40	ER 40 3÷32	55	63	2420	4997	3671	0821

EQUIPMENT CASES WITH REDUCED SET OF ER COLLETS



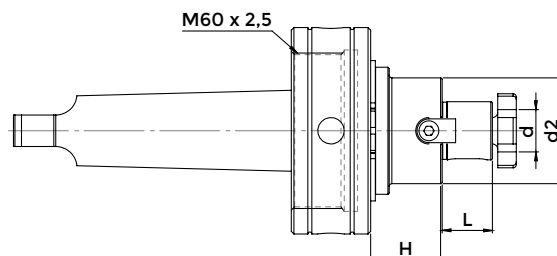
COD.	DESCRIPTION	CHUCK	CASE	WRENCH	COLLET
					
7531	KIT Rid CM 4 RAG - ER 32	4277	7023	3670	0988: Ø 4 - 6 - 8 10 - 12 - 16 - 20
7721	KIT Rid CM 4 RAG - ER 40	4280	7024	3671	0821: Ø 4 - 6 - 8 10 - 12 - 16 - 20 - 25

EQUIPMENT CASES WITH COMPLETE SET OF ER COLLETS



COD.	DESCRIPTION	CHUCK	CASE	WRENCH	COLLET
					
7515	KIT CM 4 RAG - ER 32	4277	7023	3670	0988: Ø 3 ÷ 20 (18 Pinze)
7722	KIT CM 4 RAG - ER 40	4280	7024	3671	0821: Ø 4 ÷ 26 (23 Pinze)

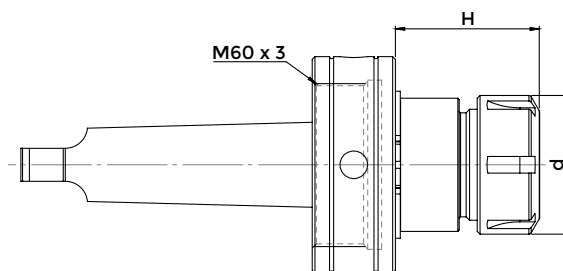
FAMUP RAG TYPE SHANK SHELL MILL HOLDERS



RAG

COD.	DESCRIPTION	d	H	L	d2	NUT	CROSS SCREW	KEY	WRENCH
									
2414	CM 4 RAG - D. 16 FISSO	16	27	17	32	2420	4985	0041	4562
2415	CM 4 RAG - D. 22 FISSO	22	27	19	40	2420	4986	0044	4563
2416	CM 4 RAG - D. 27 FISSO	27	27	21	48	2420	4987	0045	4564
2417	CM 4 RAG - D. 32 FISSO	32	27	24	58	2420	4988	0047	4565

BIMAK TYPE SHANK ER COLLET CHUCKS



BIMAK

COD.	DESCRIPTION	ER	H	d	NUT 1	NUT 2	WRENCH	COLLET
								
4281	CM 4 BIMAK - ER 32	ER 32 2÷25	52	50	2423	4996	3670	0988
4354	CM 4 BIMAK - ER 40	ER 40 3÷32	55	63	2423	4997	3671	0821

EQUIPMENT CASES WITH REDUCED SET OF ER COLLETS



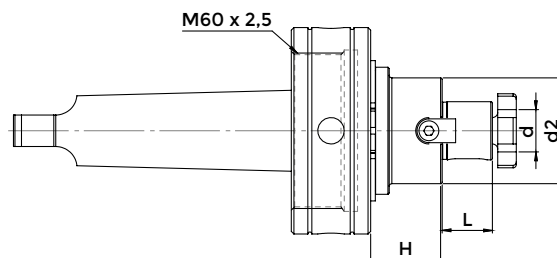
COD.	DESCRIPTION	CHUCK	CASE	WRENCH	COLLET
					
7723	KIT Rid CM 4 BIMAK-ER 32	4281	7023	3670	0988: Ø 4 - 6 - 8 10 - 12 - 16 - 20
7724	KIT Rid CM 4 BIMAK-ER 40	4354	7024	3671	0821: Ø 4 - 6 - 8 10 - 12 - 16 - 20 - 25

EQUIPMENT CASES WITH COMPLETE SET OF ER COLLETS



COD.	DESCRIPTION	CHUCK	CASE	WRENCH	COLLET
					
7725	KIT CM 4 BIMAK-ER 32	4281	7023	3670	0988: Ø 3 ÷ 20 (18 Pinze)
7726	KIT CM 4 BIMAK-ER 40	4354	7024	3671	0821: Ø 4 ÷ 26 (23 Pinze)

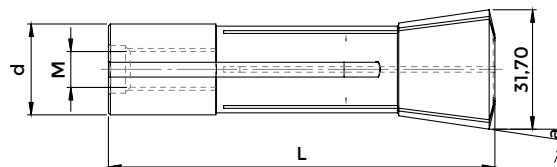
BIMAK TYPE SHANK SHELL MILL HOLDERS



BIMAK

COD.	DESCRIPTION	d	H	L	d2	NUT	CROSS SCREW	KEY	WRENCH
									
2260	CM 4 BIMAK - D. 16 FISSO	16	27	17	32	2423	4985	0041	4562
2261	CM 4 BIMAK - D. 22 FISSO	22	27	19	40	2423	4986	0044	4563
2262	CM 4 BIMAK - D. 27 FISSO	27	27	21	48	2423	4987	0045	4564
2263	CM 4 BIMAK - D. 32 FISSO	32	27	24	58	2423	4988	0047	4565

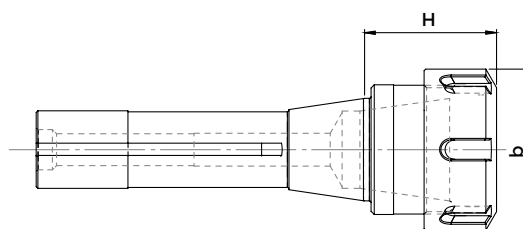
BRIDGEPORT R8 COLLET



BRIDGEPORT - R8

COD.	DESCRIPTION	ER	d	d2	L	a	M	EINHEITS
0716	PINZA R8	2,0 ÷ 22	24,12	32	106	8° 35'	7/16 - 20"	369E

ER COLLET CHUCKS



BRIDGEPORT - R8

COD.	DESCRIPTION	ER	H	d	NUT	WRENCH	COLLET
2973	PORTAPINZA R8 - ER 32	ER 32 2÷25	40	50	4996	3670	0988
2974	PORTAPINZA R8 - ER 40	ER 40 3÷32	73	63	4997	3671	0821

EQUIPMENT CASES WITH REDUCED SET OF ER COLLETS



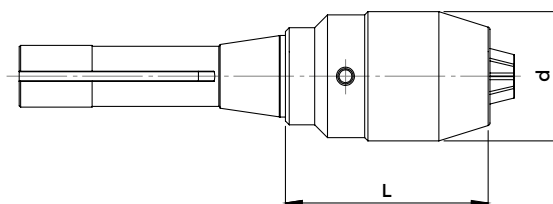
COD.	DESCRIPTION	CHUCK	CASE	WRENCH	COLLET
7668	KIT Rid R 8 ER 32	2973	7023	3670	0988: Ø 4 - 6 - 8 10 - 12 - 16 - 20

EQUIPMENT CASES WITH COMPLETE SET OF ER COLLETS



COD.	DESCRIPTION	CHUCK	CASE	WRENCH	COLLET
7669	KIT R 8 ER 32	2973	7023	3670	0988: Ø 3 ÷ 20 (18 Pinze)

DRILL CHUCKS - RIGHT SPIN

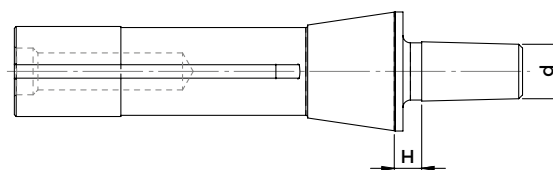


BRIDGEPORT - R8

COD.	DESCRIPTION	Ø PUNTA	d	H	WRENCH
3000	R 8 - DC 13	0,5 ÷ 13	50	81	2370

Suitable wrench included in delivery

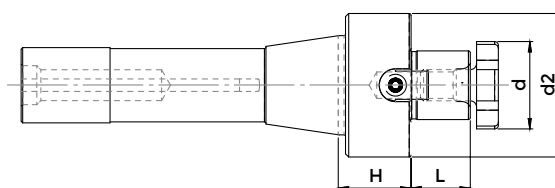
SHANKS FOR DRILL CHUCKS DIN 238 / ISO 239 TYPE



BRIDGEPORT - R8

COD.	DESCRIPTION	d	H	DIN 238
1089	R 8 - B 16	15,733	10	B 16

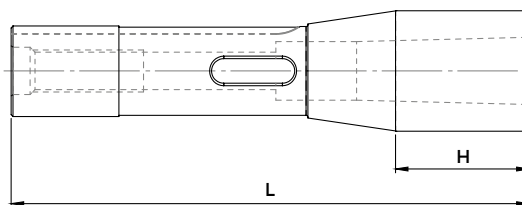
FACE MILL HOLDERS



BRIDGEPORT - R8

COD.	DESCRIPTION	d	H	L	d2	CROSS SCREW 	WRENCH 
2978	PORTAFRESA R8 - D. 16	16	19	17	38	4985	4562
2979	PORTAFRESA R8 - D. 22	22	23	19	46	4986	4563
2980	PORTAFRESA R8 - D. 27	27	23	21	48	4987	4564
2981	PORTAFRESA R8 - D. 32	32	24	24	58	4988	4565

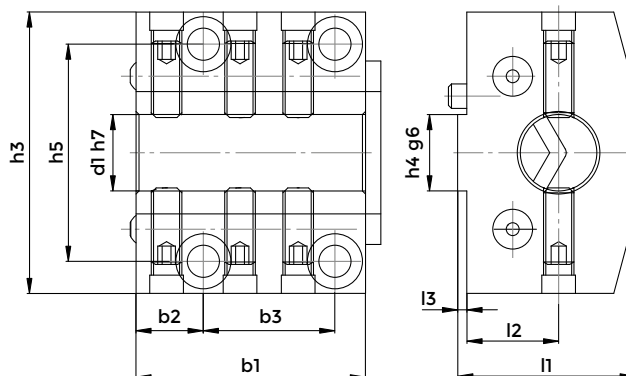
ADAPTERS TO MORSE TAPER



BRIDGEPORT - R8

COD.	DESCRIPTION	CM	L	H
2975	RIDUZIONE R8 - CM 1 PUNTE	1	114	22
2976	RIDUZIONE R8 - CM 2 PUNTE	2	127	35
2977	RIDUZIONE R8 - CM 3 PUNTE	3	153	48
2993	RIDUZIONE R8 - CM 4 PUNTE	4	240	61

LONGITUDINAL MOUNTING TOOLHOLDERS BORING BAR FOR TURRETS



DIN 69880 - PU1

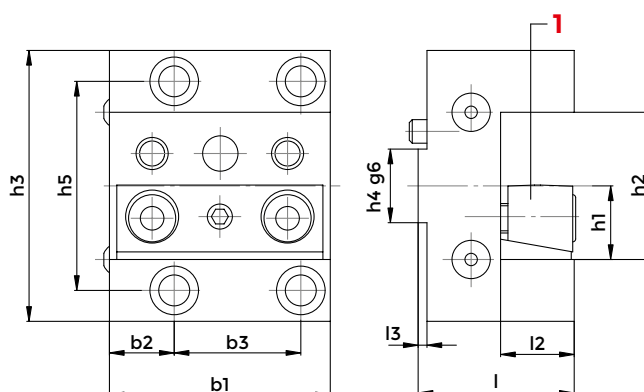
COD.	D	h3	h4	h5	b1	b2	b3	l1	l2	l3
PU1-20-25	25	74	20	57	60	17.5	34	48	25	3
PU1-20-32	32	74	20	57	60	17.5	34	48	25	3
PU1-20-40	40	74	20	57	60	17.5	34	60	32	3
PU1-25-20	20	92	25	71	75	22	43	58	30	3
PU1-25-25	25	92	25	71	75	22	43	58	30	3
PU1-25-32	32	92	25	71	75	22	43	58	30	3
PU1-25-40	40	92	25	71	75	22	43	58	30	3
PU1-25-50	50	92	25	71	75	22	43	73	38	3
PU1-32-25	25	115	32	90	95	26	57	73	35	3
PU1-32-32	32	115	32	90	95	26	57	73	35	3
PU1-32-40	40	115	32	90	95	26	57	73	35	3
PU1-32-50	50	115	32	90	95	26	57	73	35	3
PU1-32-60	60	115	32	90	95	26	57	83	40	3

ACCESSORIES



p. 703

LONGITUDINAL MOUNTING SQUARE TOOL HOLDERS FOR TURRETS

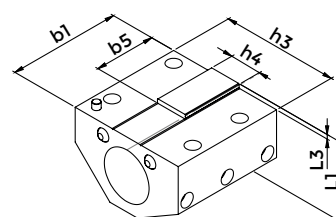
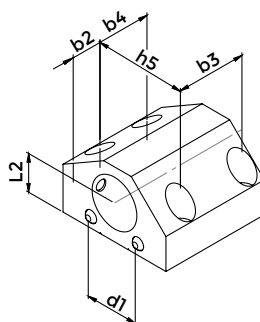


DIN 69880 - PU2

COD.	h1	h2	h3	h4	h5	b1	b2	b3	l1	L2	l3	1 LOCKING WEDGE
PU2-20-20	20	40	74	20	57	60	17.5	34	43	20	3	832-007160
PU2-25-25	25	50	92	25	71	75	22	43	53	25	3	832-007010
PU2-32-32	32	64	115	32	90	95	26	57	63	32	3	832-007170

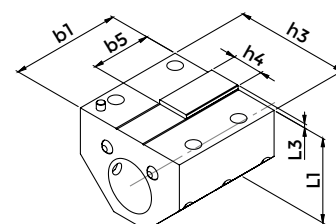
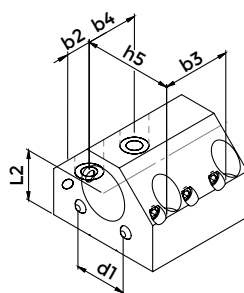


TOOLHOLDERS FOR BIGLIA B 1000 LATHES



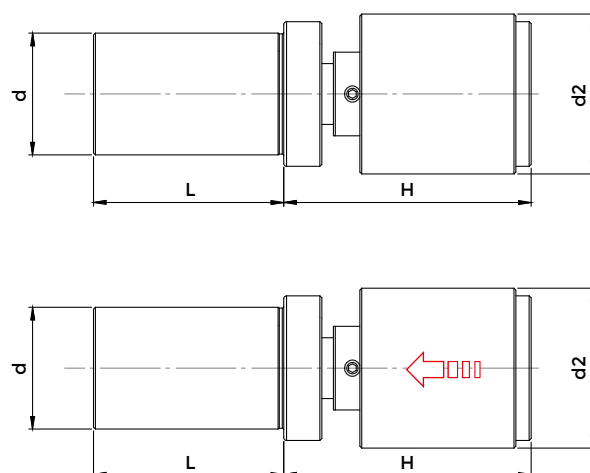
COD.	DESCRIPTION	d	h3	h4	h5	b1	b2	b3	b4	b5	L1	L2	L3
5799	BIGLIA 10.57.20.01	32	92	25	72	88	23	55	42	48	61,5	30	3,5
5800	BIGLIA 10.57.20.02	40	92	25	72	88	23	55	42	48	61,5	30	3,5

TOOLHOLDERS FOR BIGLIA B 56 AND B500 LATHES



COD.	DESCRIPTION	d	h3	h4	h5	b1	b2	b3	b4	b5	L1	L2	L3
5830	BIGLIA 10.57.20.14	32	92	25	72	88	23	55	42	48	71,5	40	3,5
5831	BIGLIA 10.57.20.16	40	92	25	72	88	23	55	42	48	71,5	40	3,5

STRAIGHT SHANK ROTARY BAR-STOP



ADJUSTABLE

COD.	d	L	H	d2
1520	16	32	36 - 62	20
1447	20	50	62 -100	34
1448	22	50	62 -100	34
1449	25	50	62 -100	34
1459	25	50	62 -100	42
1460	25	50	62 -100	56
1450	25,4	50	62 -100	34
1730	30	50	62 -100	42
1735	30	50	62 -100	56
1732	32	50	62 -100	42
1773	32	50	62 -100	56
1736	40	70	62 -100	42
1797	40	70	62 -100	56

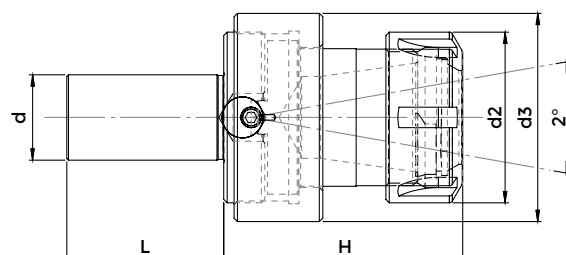
DAMPED

COD.	d	L	H	d2
2629	20	35	62 - 90	34
2630	20	50	62 -100	34
2635	25	50	62 -100	34
2421	25	50	62 -100	42
2447	25	50	62 -100	56
1537	30	50	62 -100	42
1552	30	50	62 -100	56
1560	31,75	50	62 -100	42
1025	32	50	62 -100	42
1063	32	50	62 -100	56
1061	40	70	62 -100	42
1073	40	70	62 -100	56

CHARACTERISTICS:

unlike normal rotary bar stop, inside damped model, besides radial bearing and thrust bearing, there is a set of spring wa-shers in order to absorb well any bar shoves.

STRAIGHT SHANK FLOATING REAMER HOLDERS WITH ER COLLET



DIN 1835 A

COD.	DESCRIPTION	ER	d	d2	d3	H	L	NUT	WRENCH	COLLET
										
1152	d 16 RM - ER 16	ER 16 1÷12	16	32	40	50	46	4993	3698	0364
1173	d 16 RM - ER 20	ER 20 1÷15	16	35	40	55	46	4994	3699	0787
1176	d 19,05 RM - ER 16	ER 16 1÷12	19,05	32	40	50	46	4993	3698	0364
1340	d 19,05 RM - ER 20	ER 20 1÷15	19,05	35	40	55	46	4994	3699	0787
1227	d 20 RM - ER 16	ER 16 1÷12	20	32	40	50	46	4993	3698	0364
1573	d 20 RM - ER 20	ER 20 1÷15	20	35	40	55	46	4994	3699	0787
1237	d 20 RM - ER 25	ER 25 1÷20	20	42	61	58	46	4995	3669	0996
1241	d 25 RM - ER 20	ER 20 1÷15	25	35	40	55	46	4994	3699	0787
1242	d 25 RM - ER 25	ER 25 1÷20	25	42	61	58	46	4995	3669	0996
1341	d 25 RM - ER 32	ER 32 2÷25	25	50	61	70	46	4996	3670	0988
1342	d 25,4 RM - ER 32	ER 32 2÷25	25,4	50	61	70	46	4996	3670	0988
1895	d 32 RM - ER 32	ER 32 2÷25	32	50	61	70	50	4996	3670	0988

ACCESSORIES



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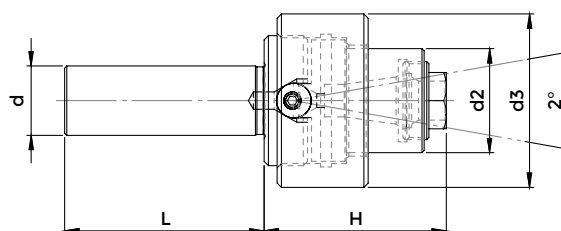
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STRAIGHT SHANK FLOATING REAMER HOLDERS WITH ER COLLET



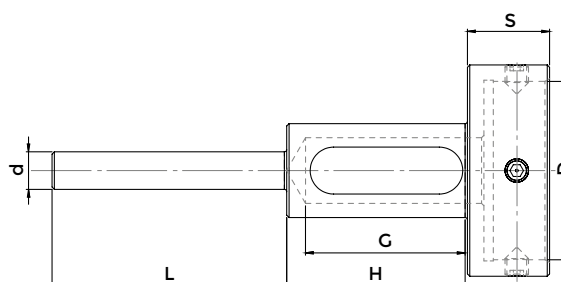
DIN 1835 A

COD.	DESCRIPTION	ER	d	d2	d3	H	L	NUT	WRENCH	COLLET
1141	d 16 RM - ER 11	ER 11 1÷ 8	16	24	40	42	46			
1213	d 20 RM - ER 11	ER 11 1÷ 8	20	24	40	42	46	2601	3169	5573

ACCESSORIES



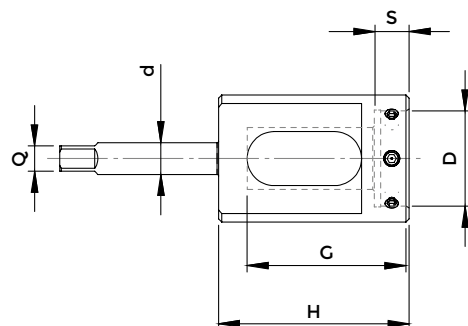
FIXED THREADING DIE HOLDERS



FRONT FIXING - LATERAL FIXING

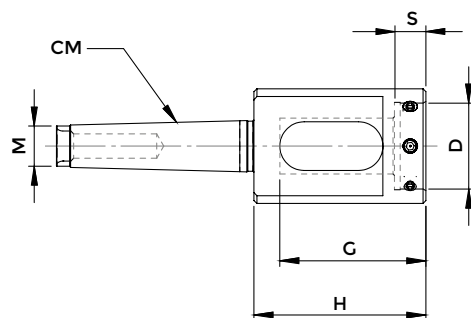
COD.	DESCRIPTION	D	S	d	H	L	G
1093	P/FILIERA FISSO con bloccaggio universale - D.16x5	16	5	8	40	40	34
1075	P/FILIERA FISSO con bloccaggio universale - D.20x5	20	5	8	43	45	40
1095	P/FILIERA FISSO con bloccaggio universale - D.20x7	20	7	8	43	45	38
1103	P/FILIERA FISSO con bloccaggio universale - D.25x9	25	9	8	50	45	45
1105	P/FILIERA FISSO con bloccaggio universale - D.30x11	30	11	8	50	45	45
1125	P/FILIERA FISSO con bloccaggio universale - D.38x10	38	10	8	56	50	51
1107	P/FILIERA FISSO con bloccaggio universale - D.38x14	38	14	8	56	50	52

FIXED THREADING DIE HOLDERS



OVERSIZE

COD.	DESCRIPTION	D	S	d	Q	H	G
2540	P/FILIERA MAGGIORATO - D.20x7	20	7	9	7	60	49
2536	P/FILIERA MAGGIORATO - D.25x9	25	9	9	7	60	51
2537	P/FILIERA MAGGIORATO - D.30x11	30	11	10	8	60	51
2538	P/FILIERA MAGGIORATO - D.38x10	38	10	10	8	60	54
2544	P/FILIERA MAGGIORATO - D.38x14	38	14	12	9	60	54
2539	P/FILIERA MAGGIORATO - D.45x14	45	14	12	9	66	59
2558	P/FILIERA MAGGIORATO - D.45x18	45	18	14	11	66	59



MORSE TAPER SHANK

COD.	DESCRIPTION	D	S	CM	M	H	G
2727	P/FILIERA con attacco CM.2 A - D.16x5	16	5	2	M 10	60	51
2728	P/FILIERA con attacco CM.2 A - D.20x7	20	7	2	M 10	60	49
2729	P/FILIERA con attacco CM.2 A - D.20x7	25	9	2	M 10	60	51
2731	P/FILIERA con attacco CM.2 A - D.30x11	30	11	2	M 10	60	51
2735	P/FILIERA con attacco CM.2 A - D.38x10	38	10	2	M 10	60	54
2767	P/FILIERA con attacco CM.2 A - D.38x14	38	14	2	M 10	60	54
2776	P/FILIERA con attacco CM.2 A - D.45x14	45	14	2	M 10	66	59
2786	P/FILIERA con attacco CM.2 A - D.45x18	45	18	2	M 10	66	59



READY, ALWAYS.