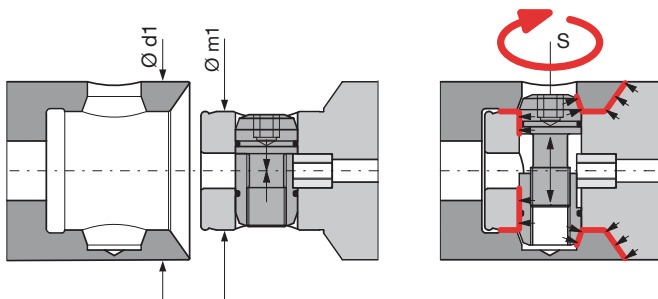


modulhard'andrea MHD'

It is a line of high precision modular tool-holders used to perform with extreme flexibility and rigidity operations of boring, milling, drilling and tapping.

The **MHD coupling** is the strength of the Modulhard'andrea: it is available in eleven sizes; it guarantees the interchangeability of all system elements, which includes arbors, extensions, reductions and tool-holder adapters.





MHD'	Ø d1	Ø m1	S	⊞ N·m
MHD' 14	14	10	2,5	2 - 2,5
MHD' 16	16	10	2,5	2 - 2,5
MHD' 20	20	13	3	4 - 4,5
MHD' 25	25	16	3	6,5 - 7,5
MHD' 32	32	20	4	7 - 8
MHD' 40	40	25	5	16 - 18
MHD' 50	50	32	6	30 - 35
MHD' 63	63	42	8	70 - 80
MHD' 80	80	42	8	70 - 80
MHD' 110	110	76	14	200 - 220
MHD' 140	140	76	14	200 - 220



The broad **boring program** completes the MHD line with a wide range of double-bit roughing heads and digital, micrometric and centesimal finishing heads.

BASE CONNECTIONS Made according to the DIN 69871, MAS 403 BT, DIN 2080, ANSI-CAT, DIN 69893 and ISO 26623-1 standards and built in carburized, hardened and ground steel 8000 RPM **BALANCING**.

PR For each MHD size there are extensions of different lengths that can be used to achieve the desired machining depths.

RD The reductions allow the use of MHD components of a smaller size thereby optimising the composition of the tool according to the overall dimensions.

RAV RAV Anti-vibration reductions for deep or heavy-duty machining.

TS Simple and extremely rigid roughing heads thanks to the serrated surfaces between the head body and the bit holders. The constant distance between the bit holder clamping screw and the cutting edge guarantees the stability of the system.

TRD Double-bit heads that allow the combined high precision machining of roughing and finishing thanks to the centesimal adjustment, readable on the vernier scale and which can also be performed on the machine.

TRM Micrometric heads for high precision machining with **IT6** tolerance grade. The adjustment is easily readable on the vernier scale and can also be performed on the machine.

TRC Centesimal heads for high precision machining with **IT7** tolerance grade. The adjustment is easily readable on the vernier and can also be performed on the machine.

TRC HS e TRM HSB Centesimal (HS) and micrometric (HSB) heads for high-speed machining.

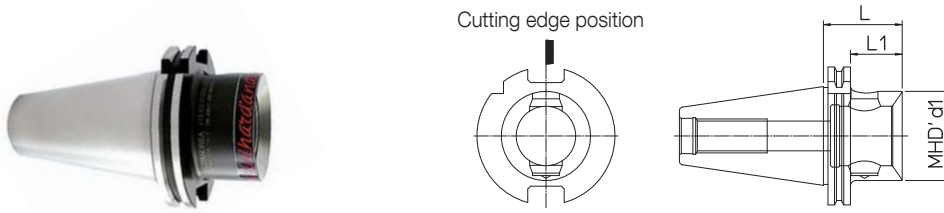
TRE Digital micrometric finishing heads for high precision machining with **IT6** tolerance grade. Showing of the adjustment on the integrated display is fast and accurate and the TR-ELETTRA are protected from the liquids contamination according to the **IP69K** grade of protection.

BPS Aluminium bars for large diameter machining. Usable for both roughing and finishing, they cover a working range from 200 to 1200 mm.

CHUCKING TOOLS The complete program of D'Andrea modular adapters with MHD coupling, which satisfies a variety of machining needs for milling, drilling and tapping.

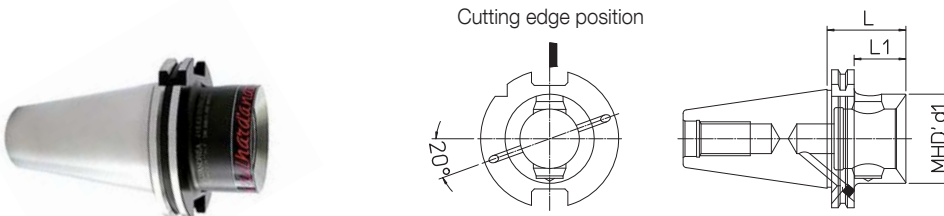


DIN 69871 AD



DIN	REF.	CODE	MHD' d1	L	L1	kg	• Subject to stock availability
30	DIN69871-A30 MHD'32.30	416320103020 •	32	30	11	0.4	
30	DIN69871-A30 MHD'40.45.5	416400103020 •	40	45.5	26.5	0.5	
30	DIN69871-A30 MHD'50.60	416500103020	50	60		0.6	
40	DIN69871-A40 MHD'40.45	416400104020	40	45	26	0.5	
40	DIN69871-A40 MHD'50.48	416500104020	50	48	29	0.9	
40	DIN69871-A40 MHD'50.56	416500104070	50	56	37	1.1	
40	DIN69871-A40 MHD'63.80	416630104020	63	80		1.5	
45	DIN69871-A45 MHD'50.48	416500104520	50	48	29	1.7	
50	DIN69871-A50 MHD'50.48	416500105020	50	48	29	2.5	
50	DIN69871-A50 MHD'63.48	416630105029	63	48	29	2.6	
50	DIN69871-A50 MHD'63.56	416630105020	63	56	37	2.8	
50	DIN69871-A50 MHD'80.48	416800105029	80	48	29	3	
50	DIN69871-A50 MHD'80.62	416800105020	80	62	43	3.4	
50	DIN69871-A50 MHD'110.150	416910105020	110	150		7.6	
50	DIN69871-A50 MHD'140.160	416940105020 •	140	160		10	
60	DIN69871-A60 MHD'50.50	416500106020 •	50	50	31	8.3	
60	DIN69871-A60 MHD'63.60	416630106020 •	63	60	41	9.3	
60	DIN69871-A60 MHD'80.65	416800106020 •	80	65	46	10.3	
60	DIN69871-A60 MHD'110.100	416910106020 •	110	100	81	10.5	
60	DIN69871-A60 MHD'110.200	416910106028 •	110	200	181	18	
60	DIN69871-A60 MHD'140.100	416940106020 •	140	100	81	12.8	
60	DIN69871-A60 MHD'140.250	416940106028 •	140	250	231	30	

DIN 69871 B

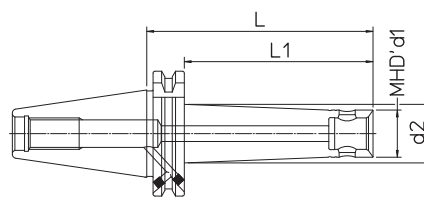
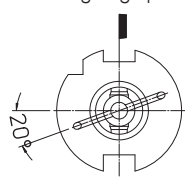


DIN	REF.	CODE	MHD' d1	L	L1	kg	• Subject to stock availability
40	DIN69871-B40 MHD'50.48	416500104021	50	48	29	0.9	
40	DIN69871-B40 MHD'63.80	416630104021 •	63	80		1.5	
45	DIN69871-B45 MHD'50.48	416500104521 •	50	48	29	1.7	
50	DIN69871-B50 MHD'50.48	416500105021	50	48	29	2.7	
50	DIN69871-B50 MHD'63.56	416630105021	63	56	37	2.8	
50	DIN69871-B50 MHD'80.62	416800105021	80	62	43	3.4	

DIN 69871 AD+B



Cutting edge position

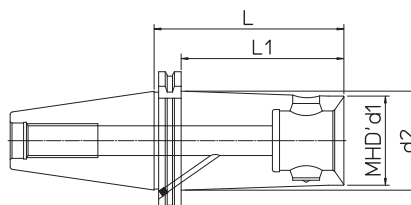
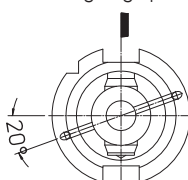


DIN	REF.	CODE	MHD' d1	d2	L	L1	kg	• Subject to stock availability
40	DIN69871-AD+B40 MHD'16.40	416160414021 •	16		40	21	0.7	
40	DIN69871-AD+B40 MHD'16.63	416160614021	16	17.5	63	44	0.8	
40	DIN69871-AD+B40 MHD'16.100	416161014021	16	20	100	81	0.9	
40	DIN69871-AD+B40 MHD'20.50	416200514021	20		50	31	0.8	
40	DIN69871-AD+B40 MHD'20.80	416200814021	20	22.5	80	61	0.9	
40	DIN69871-AD+B40 MHD'20.125	416201214021	20	25.5	125	106	1	
40	DIN69871-AD+B40 MHD'25.50	416250514021	25		50	31	0.9	
40	DIN69871-AD+B40 MHD'25.80	416250814021	25	27	80	61	1	
40	DIN69871-AD+B40 MHD'25.125	416251214021	25	30	125	106	1.1	
40	DIN69871-AD+B40 MHD'32.50	416320514021	32		50	31	1	
40	DIN69871-AD+B40 MHD'32.80	416320814021	32	33.5	80	61	1.1	
40	DIN69871-AD+B40 MHD'32.125	416321214021	32	36.5	125	106	1.2	

DIN 69871 AD+B

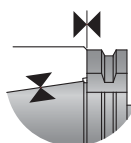


Cutting edge position

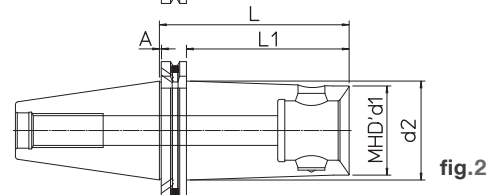
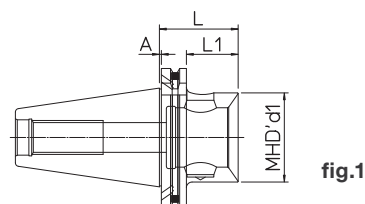
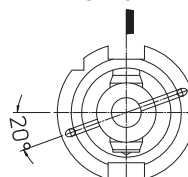


DIN	REF.	CODE	MHD' d1	d2	L	L1	kg
40	DIN69871-AD+B40 MHD'40.120	416400104028	40	44.5	120	101	1.4
40	DIN69871-AD+B40 MHD'50.120	416500104028	50		120	101	1.7
50	DIN69871-AD+B50 MHD'50.120	416500105028	50	60	120	101	3.5
50	DIN69871-AD+B50 MHD'63.150	416630105028	63	70	150	131	5
50	DIN69871-AD+B50 MHD'80.180	416800105028	80		180	161	7.6

DIN 69871 FC AD+B FACE CONTACT

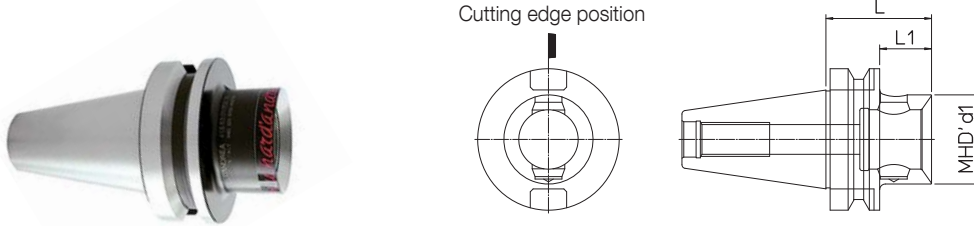


Cutting edge position



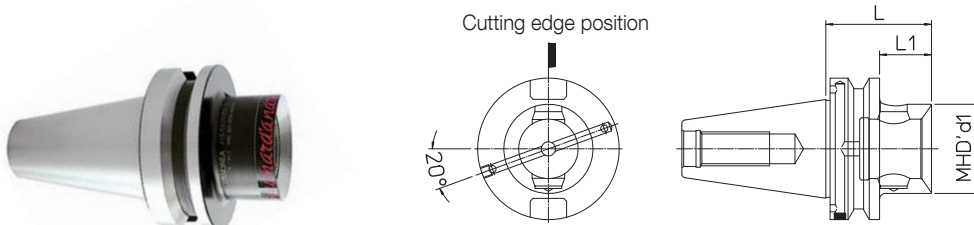
DIN	REF.	CODE	MHD' d1	d2	A	L	L1	kg	fig.	• Subject to stock availability
40	DIN69871-AD+B40 FC MHD'50.48	416500104021F	50	1	48	29	0.9	1		
40	DIN69871-AD+B40 FC MHD'50.120	416500104028F •	50	1	120	101	1.7	1		
40	DIN69871-AD+B40 FC MHD'63.80	416630104021F	63	1	80		1.5	1		
50	DIN69871-AD+B50 FC MHD'50.48	416500105021F	50	1.5	48	29	2.5	1		
50	DIN69871-AD+B50 FC MHD'50.120	416500105028F	50	59	1.5	120	101	3.5	2	
50	DIN69871-AD+B50 FC MHD'50.200	416500105027F	50	68	1.5	200	181	6.1	2	
50	DIN69871-AD+B50 FC MHD'63.56	416630105021F	63	1.5	56	37	2.8	1		
50	DIN69871-AD+B50 FC MHD'63.150	416630105028F	63	75.5	1.5	150	131	5.2	2	
50	DIN69871-AD+B50 FC MHD'63.250	416630105027F	63	80	1.5	250	231	7.1	2	
50	DIN69871-AD+B50 FC MHD'80.62	416800105021F	80	1.5	62	43	3.4	1		
50	DIN69871-AD+B50 FC MHD'80.180	416800105028F	80	1.5	180	161	6.9	1		
50	DIN69871-AD+B50 FC MHD'80.300	416800105027F	80	1.5	300	281	9.2	1		
50	DIN69871-AD+B50 FC MHD'110.150	416910105021F •	110	1.5	150		8	1		
50	DIN69871-AD+B50 FC MHD'110.250	416910105028F •	110	1.5	250		15	1		

MAS 403 BT AD



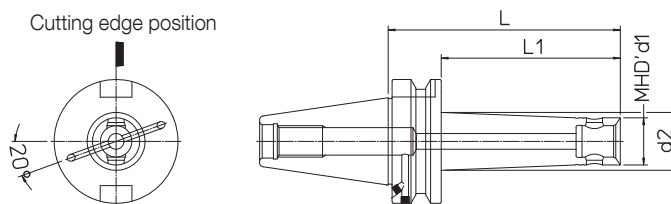
BT	REF.	CODE	MHD' d ₁	L	L ₁	kg	• Subject to stock availability
30	MAS403 BT30 MHD'32.32	416320103030	32	32	10.5	0.5	
30	MAS403 BT30 MHD'40.35.5	416400103030 •	40	35.5	14	0.6	
30	MAS403 BT30 MHD'50.60	416500103030	50	60		0.7	
40	MAS403 BT40 MHD'40.45	416400104030	40	45	18	0.6	
40	MAS403 BT40 MHD'50.38.5	416500104039	50	38.5	11.5	0.8	
40	MAS403 BT40 MHD'50.48	416500104030	50	48	21	0.9	
40	MAS403 BT40 MHD'50.56	416500104080	50	56	29	1.1	
40	MAS403 BT40 MHD'63.66	416630104030	63	66		1.2	
45	MAS403 BT45 MHD'50.62	416500104530 •	50	62	29	1.7	
50	MAS403 BT50 MHD'50.66	416500105030	50	66	28	3.3	
50	MAS403 BT50 MHD'63.50	416630105039	63	50	12	3.4	
50	MAS403 BT50 MHD'63.75	416630105030	63	75	37	3.7	
50	MAS403 BT50 MHD'80.50	416800105039	80	50	12	3.8	
50	MAS403 BT50 MHD'80.75	416800105030	80	75	37	4	
50	MAS403 BT50 MHD'110.140	416910105030 •	110	140		6.8	
50	MAS403 BT50 MHD'140.150	416940105030 •	140	150		9.2	
60	MAS403 BT60 MHD'110.110	416910106030 •	110	110	63	11.5	
60	MAS403 BT60 MHD'110.200	416910106038 •	110	200	152	18.1	
60	MAS403 BT60 MHD'140.100	416940106030 •	140	100	52	12.9	
60	MAS403 BT60 MHD'140.250	416940106038 •	140	250	202	30.1	

MAS 403 BT B



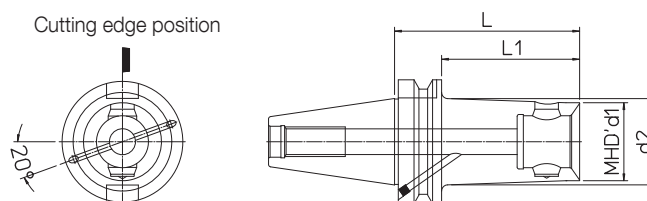
DIN	REF.	CODE	MHD' d ₁	L	L ₁	kg	• Subject to stock availability
40	MAS403 BT40B MHD'50.48	416500104031	50	48	21	0.9	
40	MAS403 BT40B MHD'63.66	416630104031	63	66		1.2	
50	MAS403 BT50B MHD'50.66	416500105031	50	66	28	3.5	
50	MAS403 BT50B MHD'63.75	416630105031 •	63	75	37	3.7	
50	MAS403 BT50B MHD'80.75	416800105031 •	80	75	37	4	

MAS 403 BT AD+B



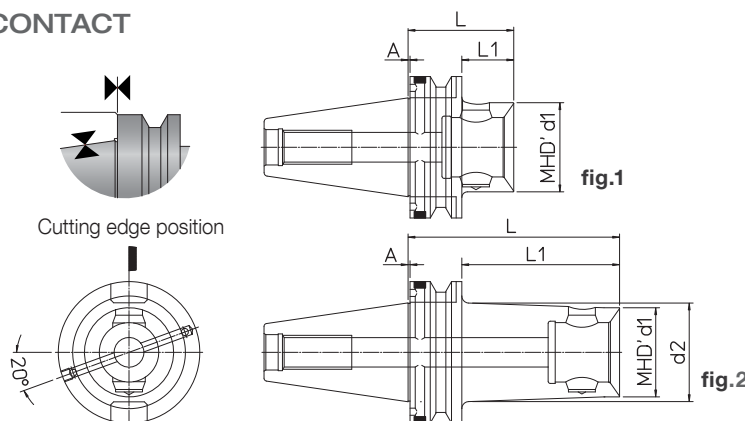
BT	REF.	CODE	MHD' d1	d2	L	L1	kg
40	MAS403 BT40-AD+B MHD'16.45	416160414031	16		45	18	0.8
40	MAS403 BT40-AD+B MHD'16.63	416160614031	16	17	63	36	0.9
40	MAS403 BT40-AD+B MHD'16.100	416161014031	16	19.5	100	73	1
40	MAS403 BT40-AD+B MHD'20.50	416200514031	20		50	23	0.9
40	MAS403 BT40-AD+B MHD'20.80	416200814031	20	22	80	53	1
40	MAS403 BT40-AD+B MHD'20.125	416201214031	20	25	125	98	1.1
40	MAS403 BT40-AD+B MHD'25.50	416250514031	25		50	23	1
40	MAS403 BT40-AD+B MHD'25.80	416250814031	25	26.5	80	53	1.1
40	MAS403 BT40-AD+B MHD'25.125	416251214031	25	29.5	125	98	1.2
40	MAS403 BT40-AD+B MHD'32.50	416320514031	32			23	1.1
40	MAS403 BT40-AD+B MHD'32.80	416320814031	32	33	80	53	1.2
40	MAS403 BT40-AD+B MHD'32.125	416321214031	32	36	125	98	1.4

MAS 403 BT AD+B



BT	REF.	CODE	MHD' d1	d2	L	L1	kg
40	MAS403 BT40-AD+B MHD'40.120	416400104038	40	44.5	120	93	0.9
40	MAS403 BT40-AD+B MHD'50.120	416500104038	50		120	93	1.9
50	MAS403 BT50-AD+B MHD'50.120	416500105038	50	60	120	82	4.2
50	MAS403 BT50-AD+B MHD'63.150	416630105038	63	70	150	112	5.8
50	MAS403 BT50-AD+B MHD'80.180	416800105038	80		180	142	7.5

MAS 403 BT FC AD+B FACE CONTACT

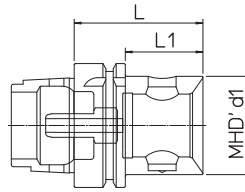
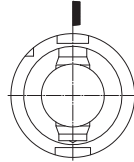


BT	REF.	CODE	MHD' d1	d2	A	L	L1	kg	fig.	• Subject to stock availability
40	MAS403 BT40 FC AD+B MHD'50.48	416500104031F	50	1	48	21	0.9	1		
40	MAS403 BT40 FC AD+B MHD'50.120	416500104038F •	50	1	120	93	1.9	1		
40	MAS403 BT40 FC AD+B MHD'63.66	416630104031F	63	1	66		1.2	1		
50	MAS403 BT50 FC AD+B MHD'50.66	416500105031F	50	1.5	66	28	3.2	1		
50	MAS403 BT50 FC AD+B MHD'63.75	416630105031F	63	1.5	75	37	3.7	1		
50	MAS403 BT50 FC AD+B MHD'50.120	416500105038F	50	57.5	1.5	120	82	4.2	2	
50	MAS403 BT50 FC AD+B MHD'50.200	416500105037F	50	66	1.5	200	162	4.5	2	
50	MAS403 BT50 FC AD+B MHD'63.150	416630105038F	63	73.5	1.5	150	112	5.8	2	
50	MAS403 BT50 FC AD+B MHD'63.250	416630105037F	63	84	1.5	250	212	6.1	2	
50	MAS403 BT50 FC AD+B MHD'80.75	416800105031F	80	1.5	75	37	4	1		
50	MAS403 BT50 FC AD+B MHD'80.180	416800105038F	80	1.5	180	142	7.5	1		
50	MAS403 BT50 FC AD+B MHD'80.300	416800105037F	80	1.5	300	262	9.2	1		
50	MAS403 BT50 FC AD+B MHD'110.150	416910105031F •	110	1.5	150		8.1	1		
50	MAS403 BT50 FC AD+B MHD'110.250	416910105038F •	110	1.5	250		15.3	1		

DIN 69893 HSK-A



Cutting edge position



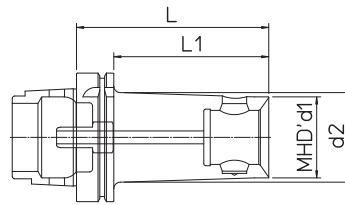
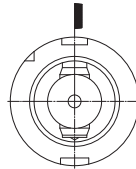
Supplied with coolant tube
 ♦ Version available on request HSK-T
 • Subject to stock availability

HSK-A	REF.	CODE	MHD' d1	L	L1	kg	
40	HSK-A40 MHD'32.48	416321504020 •	32	48	28	0.4	Supplied without hole
50	HSK-A50 MHD'50.66	416501505020	50	66		0.6	
63	HSK-A63 MHD'40.60	416401506320 ♦	40	60	34	0.7	
63	HSK-A63 MHD'50.66	416501506320 ♦	50	66	40	0.9	
63	HSK-A63 MHD'63.75	416631506320 ♦	63	75		1.1	
80	HSK-A80 MHD'50.70	416501508020	50	70	44	1.5	
80	HSK-A80 MHD'63.80	416631508020	63	80	54	1.8	
80	HSK-A80 MHD'80.86	416801508020 •	80	86		2.1	
100	HSK-A100 MHD'50.72	416501510020 ♦	50	72	43	2.4	
100	HSK-A100 MHD'63.82	416631510020 ♦	63	82	53	2.7	
100	HSK-A100 MHD'80.88	416801510020	80	88	59	3	

DIN 69893 HSK-A



Cutting edge position



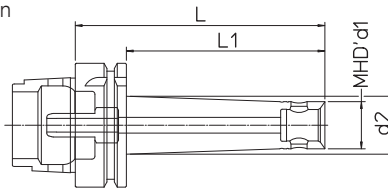
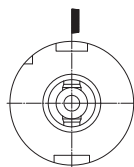
Supplied with coolant tube

HSK-A	REF.	CODE	MHD' d1	d2	L	L1	kg	
63	HSK-A63 MHD'40.120	416401506328	40	46	120	94	1.4	
63	HSK-A63 MHD'50.120	416501506328	50		120	94	1.7	
100	HSK-A100 MHD'50.120	416501510028	50	60	120	91	3.2	
100	HSK-A100 MHD'63.150	416631510028	63	70	150	121	4.5	
100	HSK-A100 MHD'80.180	416801510028	80		180	151	6.5	

DIN 69893 HSK-A



Cutting edge position



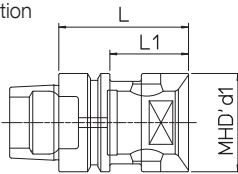
Supplied with coolant tube
 • Subject to stock availability

HSK-A	REF.	CODE	MHD' d1	d2	L	L1	kg	
63	HSK-A63 MHD'16.63	416160656320	16	17	63	37	0.7	
63	HSK-A63 MHD'16.100	416161056320	16	19.5	100	74	0.8	
63	HSK-A63 MHD'20.63	416200656320 •	20		63	37	0.6	
63	HSK-A63 MHD'20.90	416200956320	20	22.5	90	64	0.8	
63	HSK-A63 MHD'20.125	416201256320 •	20	25	125	99	0.9	
63	HSK-A63 MHD'25.63	416250656320	25		63	37	0.7	
63	HSK-A63 MHD'25.90	416250956320	25	27	90	64	0.9	
63	HSK-A63 MHD'25.125	416251256320	25	29.5	125	99	1	
63	HSK-A63 MHD'32.90	416320956320	32	33.5	90	64	1	
63	HSK-A63 MHD'32.125	416321256320	32	36	125	99	1.2	

DIN 69893 HSK-E



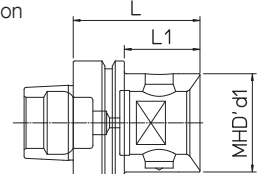
Cutting edge position



DIN 69893 HSK-F



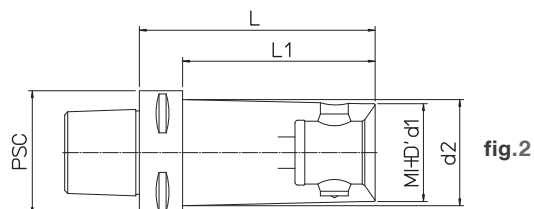
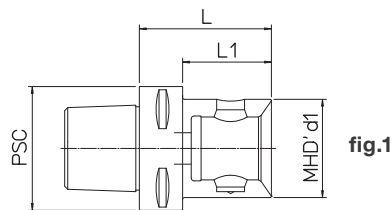
Cutting edge position



• Subject to stock availability

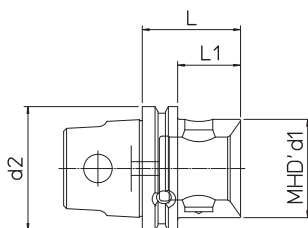
HSK	REF.	CODE	MHD' d1	L	L1	kg	
40	HSK-E40 MHD'32.42	416321504025	32	42	22	0.5	
50	HSK-E50 MHD'50.66	416501505025 •	50	66		0.6	
63	HSK-E63 MHD'50.66	416501506325	50	66	40	0.9	
63	HSK-F63 MHD'50.65	416501506326	50	65	39	0.8	

PSC-MHD' ISO 26623-1



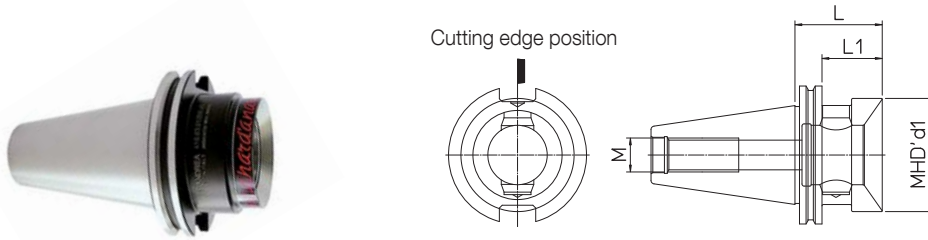
PSC	REF.	CODE	MHD' d1	d2	L	L1	kg	fig.
40	PSC 40 - MHD' 32.42	416322604004	32	42	22	0.3	1	
40	PSC 40 - MHD' 40.45	416402604004	40	45		0.4	1	
50	PSC 50 - MHD' 50.55	416502605005	50	55		0.8	1	
63	PSC 63 - MHD' 40.50	416402606305	40	50	28	0.9	1	
63	PSC 63 - MHD' 40.120	416402606312	40	44	120	98	1.5	2
63	PSC 63 - MHD' 50.55	416502606305	50	55	33	0.8	1	
63	PSC 63 - MHD' 50.67	416502606306	50	67	45	1.1	1	
63	PSC 63 - MHD' 50.120	416502606312	50	54	120	98	1.9	2
63	PSC 63 - MHD' 63.77	416632606307	63	77		1.8	1	
80	PSC 80 - MHD' 50.60	416502608006	50	60	30	2	1	
80	PSC 80 - MHD' 50.120	416502608012	50	54	120	90	2.8	2
80	PSC 80 - MHD' 63.70	416632608007	63	70	40	2.3	1	
80	PSC 80 - MHD' 63.150	416632608015	63	67	150	120	4	2
80	PSC 80 - MHD' 80.75	416802608007	80	75		2.6	1	
80	PSC 80 - MHD' 80.120	416802608012	80	120		4.3	1	
100	PSC 100 - MHD' 80.80	416802610008	110	80	44	3.5	1	
100	PSC 100 - MHD' 110.120	416912610012	110	120	84	5	1	

KM XMZ ISO 26622-1



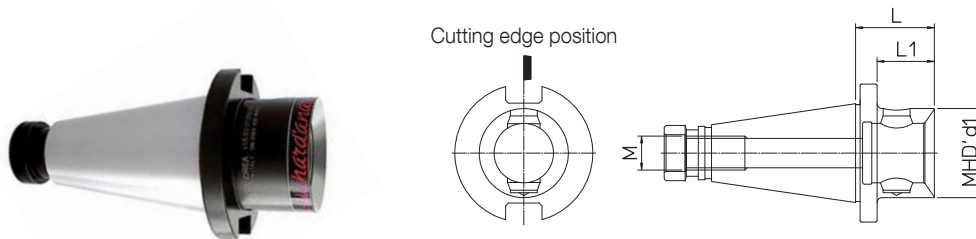
KM XMZ	REF.	CODE	MHD' d1	d2	L	L1	kg	
63	RD KM - MHD' 50.50	657095005063	50	63	50	32	0.8	• Subject to stock availability
63	RD KM - MHD' 63.70	657096305063 •	63	63	70		1.2	

ANSI/CAT AD



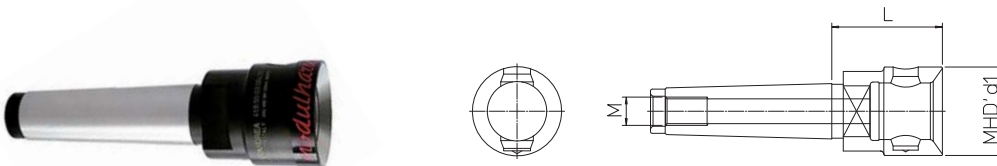
ANSI/CAT	REF.	CODE	MHD' d1	L	L1	M	kg	• Subject to stock availability
40	ANSI/CAT40 MHD'50.66	416500104040	50	66	47	M16	1.1	
40	ANSI/CAT40 MHD'63.100	416630104040 •	63	100		M16	1.9	
45	ANSI/CAT45 MHD'50.48	416500104540 •	50	48	29	M20	1.7	
50	ANSI/CAT50 MHD'50.48	416500105040	50	48	29	M24	2.4	
50	ANSI/CAT50 MHD'63.56	416630105040 •	63	56	37	M24	2.9	
50	ANSI/CAT50 MHD'80.62	416800105040	80	62	43	M24	3.2	

DIN 2080-A 'OTT'



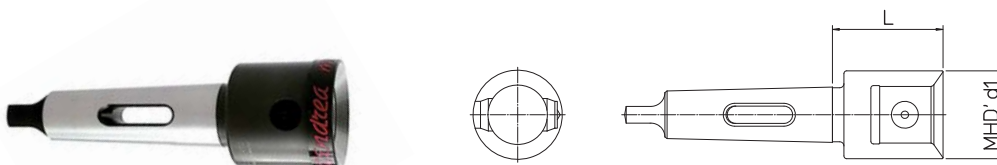
DIN	REF.	CODE	MHD' d1	L	L1	M	kg	• Subject to stock availability
30	DIN2080-A30 MHD'50.58	416500103000	50	58		M12	0.6	
40	DIN2080-A40 MHD'50.48	416500104000	50	48	36.5	M16	0.9	
40	DIN2080-A40 MHD'63.60	416630104000	63	60		M16	1.2	
45	DIN2080-A45 MHD'50.48	416500104500 •	50	48	33	M20	1.6	
50	DIN2080-A50 MHD'50.48	416500105000	50	48	33	M24	2.6	
50	DIN2080-A50 MHD'63.56	416630105000	63	56	41	M24	2.7	
50	DIN2080-A50 MHD'80.60	416800105000	80	60	45	M24	3.2	

DIN 228/A 2207



MORSE	REF.	CODE	MHD' d1	L	M	kg
4	MORSE4-A MHD'50.63	416500300400	50	63	M16	0.9
4 SIP	MORSE4-A SIP MHD'50.63	416500300401	50	63	M14	0.9

DIN 228/B 1806



MORSE	REF.	CODE	MHD' d1	L	kg
4	MORSE4-B MHD'50.56	416500200400	50	56	0.9
5	MORSE5-B MHD'63.65	416630200500	63	65	1.5

BR STEEL BAR



fig.1

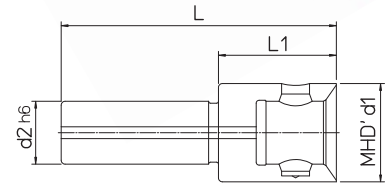
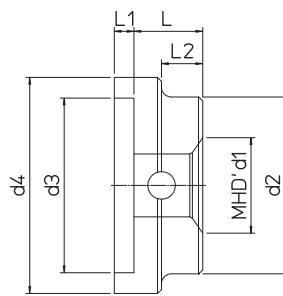
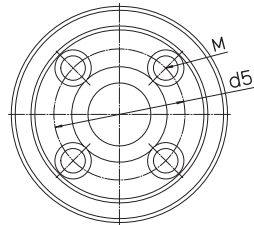


fig.2

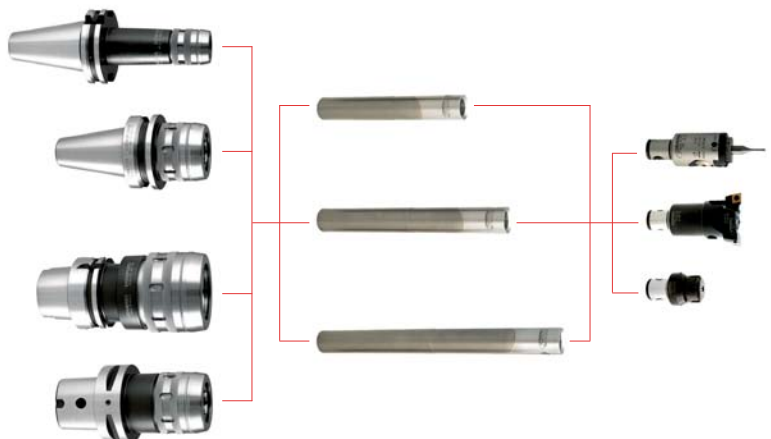
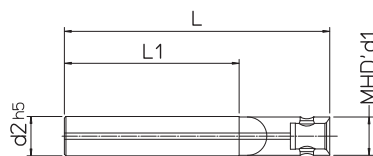
REF.	CODE	MHD' d1	L	L1	d2	kg	fig.
BR 16/16.100	657081601001	16	100		16	0.15	1
BR 20/20.125	657082001251	20	125		20	0.3	1
BR 25/32.35	416320802500	32	100	35	25	0.7	2
BR 32/50.60	416500803200	50	140	60	32	1	2

DIN 2079



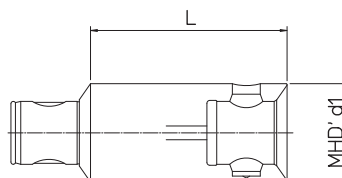
REF.	CODE	MHD' d1	d2	d3	d4	d5	L	L1	L2	M	kg	
DIN 2079-40.50	416502004000 •	50	90	88.89	110	66.7	35	10	21	M12	1.8	• Subject to stock availability
DIN 2079-40.63	416632004000 •	63	90	88.89	110	66.7	47	10	31	M12	2	
DIN 2079-50.63	416632005000 •	63	135	128.57	150	101.6	45	12	31	M16	5.4	
DIN 2079-50.80	416802005000 •	80	135	128.57	150	101.6	50	12	36	M16	5.3	
DIN 2079-50.110	416912005000 •	110	135	128.57	150	101.6	112	12	98	M16	8.4	
DIN 2079-50.140	416942005000 •	140	140	128.57	150	101.6	122	12	108	M16	9.5	

BMD CARBIDE BARS



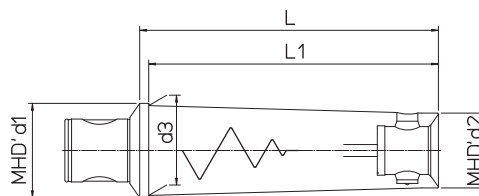
REF.	CODE	MHD' d1	d2	L	L1	kg
BMD 16/16.110	657081601105	16	16	110	70	0.3
BMD 16/16.140	657081601405	16	16	140	100	0.4
BMD 16/16.170	657081601705	16	16	170	130	0.5
BMD 20/20.135	657082001355	20	20	135	89	0.6
BMD 20/20.170	657082001705	20	20	170	124	0.75
BMD 20/20.210	657082002105	20	20	210	164	0.9
BMD 25/25.160	657082501605	25	25	160	107	1
BMD 25/25.205	657082502055	25	25	205	152	1.3
BMD 25/25.255	657082502555	25	25	255	202	1.6
BMD 32/32.195	657083201955	32	32	195	130	2.1
BMD 32/32.250	657083202505	32	32	250	185	2.8
BMD 32/32.315	657083203155	32	32	315	250	3.5

PR



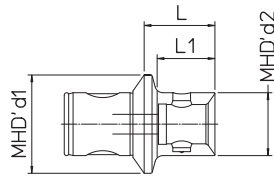
REF.	CODE	MHD' d1	L	kg	
PR 14.25	656901400250	14	25	0.02	• Subject to stock availability
PR 16.25	656901600250	16	25	0.04	
PR 20.32	656902000320	20	32	0.07	
PR 25.25	656902500250	25	25	0.09	
PR 25.40	656902500400	25	40	0.15	
PR 32.32	656903200320	32	32	0.2	
PR 32.50	656903200500	32	50	0.3	
PR 40.40	656904000400	40	40	0.4	
PR 40.63	656904000630	40	63	0.6	
PR 50.50	656905000500	50	50	0.7	
PR 50.80	656905000800	50	80	1.1	
PR 50.100	656905001000	50	100	1.5	
PR 63.63	656906300630	63	63	1.4	
PR 63.100	656906301000	63	100	2.2	
PR 63.125	656906301250	63	125	2.9	
PR 80.80	656908000800	80	80	3	
PR 80.125	656908001250	80	125	4.6	
PR 80.160	656908001600	80	160	6.1	
PR 110.140	656911001400	110	140	13.5	
PR 110.200	656911002000	110	200	14.3	
PR 140.140	656914001400 •	140	140	24	
PR 140.250	656914002500 •	140	250	28.5	

RAV VIBRATION-DAMPING



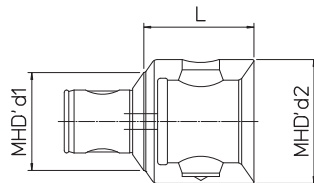
REF.	CODE	MHD' d1	MHD' d2	d3	L	L1	kg
RAV 50/16.74	657005000165	50	16	17.5	74	65	0.4
RAV 50/20.93	657005000205	50	20	21.5	93	85	0.5
RAV 50/25.117	657005000255	50	25	27	117	110	0.8
RAV 50/32.144	657005000325	50	32	35	144	138	1.4
RAV 50/40.176	657005000405	50	40	47	176	170	2.5
RAV 63/50.220	657006300505	63	50	60	220	214	5.6
RAV 80/63.280	657008000635	80	63	77	280	272	10.6

RD



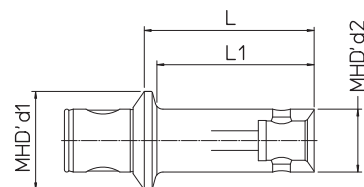
REF.	CODE	MHD' d1	MHD' d2	L	L1	kg	
RD 16/14.25	657001600140	16	14	25	19.5	0.02	• Subject to stock availability
RD 20/14.20	657002000140 •	20	14	20	14.5	0.03	
RD 20/16.20	657002000160	20	16	20	16	0.05	
RD 25/14.20	657002500140 •	25	14	20	13.5	0.06	
RD 25/16.20	657002500160	25	16	20	15	0.07	
RD 25/20.25	657002500200	25	20	25	20	0.08	
RD 32/14.25	657003200140 •	32	14	25	17.5	0.08	
RD 32/16.24	657003200160	32	16	24	18	0.10	
RD 32/20.25	657003200200	32	20	25	20	0.12	
RD 32/25.28	657003200250	32	25	28	23	0.14	
RD 40/14.25	657004000140 •	40	14	25	16.5	0.10	
RD 40/16.24	657004000160	40	16	24	17	0.18	
RD 40/20.26	657004000200	40	20	26	20	0.2	
RD 40/25.28	657004000250	40	25	28	22	0.25	
RD 40/32.32	657004000320	40	32	32	27	0.3	
RD 50/14.25	657005000140 •	50	14	25	14.5	0.25	
RD 50/14.40	657005000142	50	14	40	29.5	0.1	
RD 50/16.24	657005000160	50	16	24	15	0.34	
RD 50/20.26	657005000200	50	20	26	18	0.37	
RD 50/25.28	657005000250	50	25	28	21	0.4	
RD 50/32.32	657005000320	50	32	32	25	0.45	
RD 50/40.36	657005000400	50	40	36	30	0.5	
RD 63/50.40	657006300500	63	50	40	34	0.9	
RD 80/50.45	657008000500	80	50	45	36	1.2	
RD 80/63.60	657008000630	80	63	60	52	1.7	
RD 110/80.70	657011000800	110	80	70	52	6	
RD 140/80.70	657014000800 •	140	80	70	49	7.8	

RD



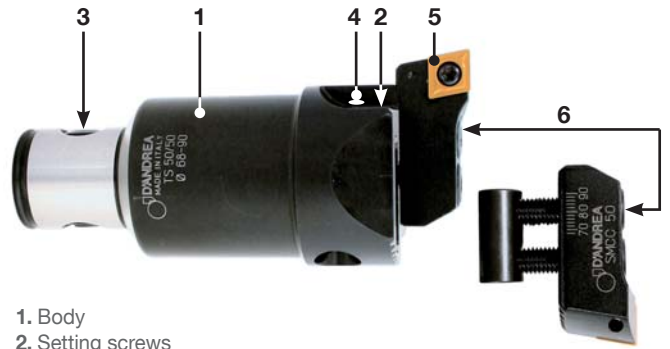
REF.	CODE	MHD' d1	MHD' d2	L	L1	kg
RD 50/63.56	657005000630	50	63	56	1.1	

RD



REF.	CODE	MHD' d1	MHD' d2	L	L1	kg
RD 50/16.40	657005000162	50	16	40	32	0.2
RD 50/16.74	657005000163	50	16	74	65	0.25
RD 50/20.70	657005000202	50	20	70	62	0.3
RD 50/20.93	657005000203	50	20	93	85	0.35
RD 50/25.87	657005000252	50	25	87	80	0.6
RD 50/25.117	657005000253	50	25	117	110	0.65
RD 50/32.87	657005000322	50	32	87	80	0.75
RD 50/32.144	657005000323	50	32	144	137	1
RD 50/40.87	657005000402	50	40	87	80	0.9
RD 50/40.176	657005000403	50	40	176	170	1.8

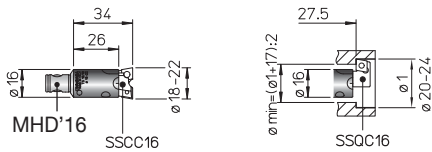
TS 16 ~ 80 Ø 18 ~ 200



1. Body
2. Setting screws
3. Expanding pin
4. Coolant outlets **Max BAR 40**
5. Bit holders
6. Tools clamp screws

TS Simple and extremely rigid roughing heads thanks to the serrated surfaces between the head body and the bit holders. The constant distance between the bit holder clamping screw and the cutting edge guarantees the stability of the system.

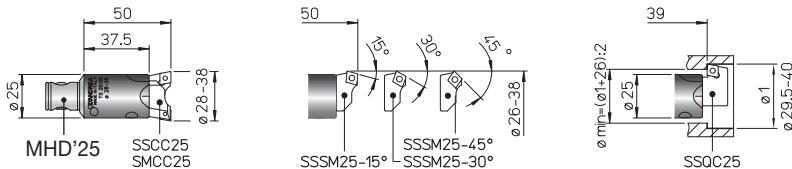
TS 16/16 Ø 18 ~ 22



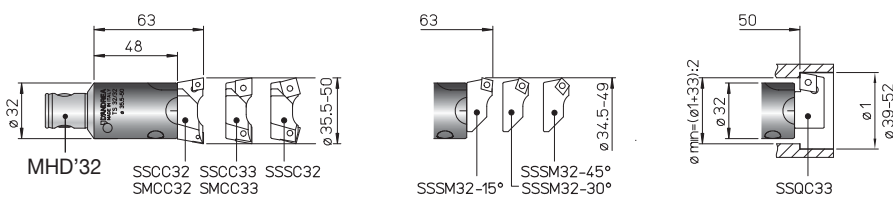
TS 20/20 Ø 22 ~ 28



TS 25/25 Ø 28 ~ 38



TS 32/32 Ø 35.5 ~ 50



REF.	CODE	Ø	kg
TS 16/16	455501600340	18 ~ 22	0.05
TS 20/20	455502000400	22 ~ 28	0.09
TS 25/25	455502500500	28 ~ 38	0.2
TS 32/32	455503200630	35.5 ~ 50	0.35
TS 40/40	455504000800	50 ~ 68	0.7
TS 50/50	455305001000	68 ~ 90	1.5
TS 50/63	455306300800	90 ~ 120	2
TS 63/63	455406301250	90 ~ 120	3
TS 80/80	455408001400	120 ~ 160	5.3

USE

Roughing and semi-finishing operations. Cutting edges might be adjusted on a pre-setting bench and TS heads can be used in three different configurations.

ATTENTION

To work with a single cutting edge or with different cutting diameters, halve the feed indicated in the table, see page 92.

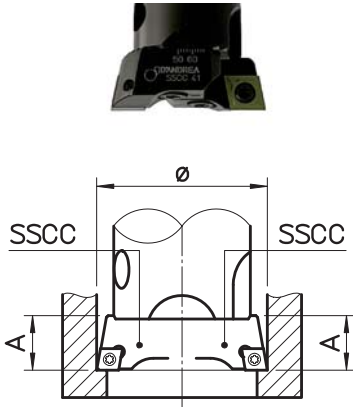


fig.1

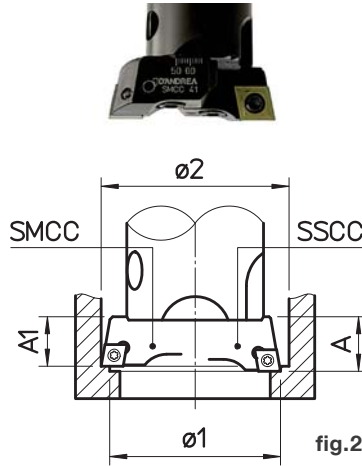


fig.2

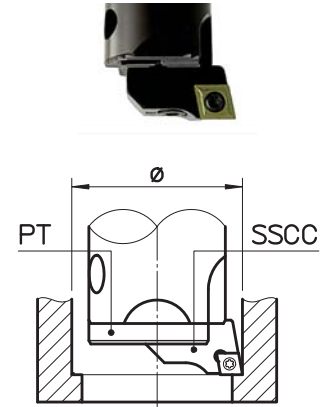
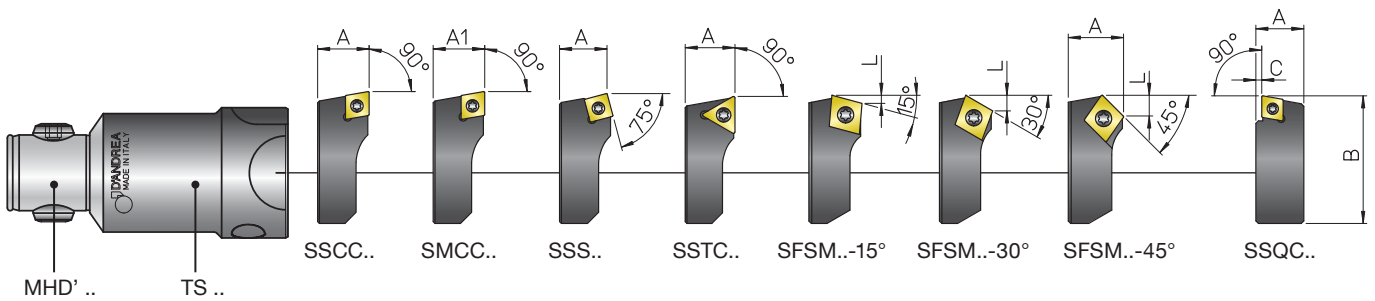


fig.3

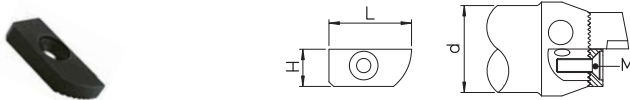
fig.1 with two SSCC bit holders aligned and on the same diameter for roughing operations with high feedrate.

fig. 2 with one SSCC bit holder and one SMCC bit holder staggered and on a different diameter for roughing operations with high depth of cut.

fig.3 with only one bit holder for light roughing or semi-finishing operations. PT plate assembly required to protect the coupling surface.



PT COVER PLATES



REF.	CODE	d	H	L	M
PT 16	384765000160	16	7	14	M 3x12
PT 20	384765000200	20	8.5	17	M 4x14
PT 25	384765000250	25	10.2	21	M 4x16
PT 32	384765000320	32	13.9	28	M 5x20
PT 40	384765000400	40	17.4	35	M 6x25
PT 50	384765000500	50	21.4	47.5	M 8x25
PT 63	384765000630	63	26.4	62	M 10x30
PT 80	384765000800	80	33.9	82.5	M 12x35

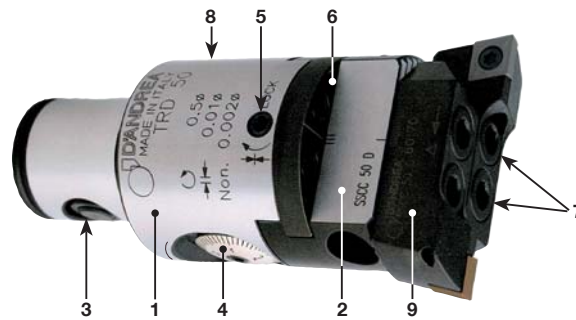
BIT-HOLDERS SSCC.. - SSCN.. - SMCC.. - SSSC.. - SSSN.. - SSTC.. - SSSM.. - SSQC..



REF.	CODE	A	A1	B	C	L						kg
SSCC 16	470500516201	8		15				CCMT 0602..		TS 25	TORX T08	0.003
SSCC 20	470500520201	9.5		19				CCMT 0602..		TS 25	TORX T08	0.006
SSCC 25	470500525201	12.5		23				CCMT 0602..		TS 25	TORX T08	0.01
SSCC 32	470500532201	15		32				CCMT 0602..		TS 25	TORX T08	0.02
SSCC 33	470500532204	15		32				CCMT 09T3..		TS 4	TORX T15	0.025
SSCC 40	470500540201	19		40				CCMT 09T3..		TS 4	TORX T15	0.06
SSCC 41	470500540204	19		40				CCMT 1204..		TS5	TORX T25	0.06
SSCC 50	470500550204	22		54				CCMT 1204..		TS5	TORX T25	0.1
SSCC 63	470500563201	27		70.5				CCMT 1204..		TS5	TORX T25	0.2
SSCC 80	470500580201	32		94.5				CCMT 1204..		TS5	TORX T25	0.5
SSCC 90	470500590201	32		130				CCMT 1204..		TS5	TORX T25	0.7
SSCN 95	470500595201	40		130				CNM. 1906..		p. 89	p. 89	0.9
SMCC 25	470500525203	12.3		23				CCMT 0602..		TS 25	TORX T08	0.01
SMCC 32	470500532203	14.8		32				CCMT 0602..		TS 25	TORX T08	0.02
SMCC 33	470500532205	14.8		32				CCMT 09T3..		TS 4	TORX T15	0.025
SMCC 40	470500540203	18.7		40				CCMT 09T3..		TS 4	TORX T15	0.06
SMCC 41	470500540205	18.7		40				CCMT 1204..		TS 5	TORX T25	0.06
SMCC 50	470500550205	21.7		54				CCMT 1204..		TS 5	TORX T25	0.1
SMCC 63	470500563203	26.7		70.5				CCMT 1204..		TS 5	TORX T25	0.2
SMCC 80	470500580203	31.7		94.5				CCMT 1204..		TS 5	TORX T25	0.5
SMCC 90	470500590203	31.7		130				CCMT 0602..		TS 25	TORX T08	0.7
SSSC 32	470500532202	15		32					SCMT 09T3..	TS 4	TORX T15	0.02
SSSC 40	470500540202	19		40					SCMT 09T3..	TS 4	TORX T15	0.06
SSSC 50	470500550202	20.5		54					SCMT 1204..	TS 5	TORX T25	0.1
SSSC 63	470500563202	27		70.5					SCMT 1204..	TS 5	TORX T25	0.2
SSSC 80	470500580202	32		94.5					SCMT 1204..	TS 5	TORX T25	0.5
SSSC 90	470500590202	32		130					SCMT 1204..	TS 5	TORX T25	0.7
SSSN 95	470500595202	40		130					SNM. 1906..	p. 89	p. 89	0.9
SSTC 63	470500563206	27		70.5			TCMT 2204..			TS 5	TORX T25	0.2
SSTC 80	470500580206	32		94.5			TCMT 2204..			TS 5	TORX T25	0.5
SSTC 90	470500590206	32		130			TCMT 2204..			TS 5	TORX T25	0.7
SSSM 25-15°	470500525211	12.5		23	1.6			CCMT 0602..		TS 25	TORX T08	0.01
SSSM 25-30°	470500525213	12.5		23	3			CCMT 0602..		TS 25	TORX T08	0.01
SSSM 25-45°	470500525215	12.5		23	4.3			CCMT 0602..		TS 25	TORX T08	0.01
SSSM 32-15°	470500532211	15		31	1.6			CCMT 0602..		TS 25	TORX T08	0.025
SSSM 32-30°	470500532213	15		31	3			CCMT 0602..		TS 25	TORX T08	0.025
SSSM 32-45°	470500532215	15		31	4.3			CCMT 0602..		TS 25	TORX T08	0.025
SSSM 40-15°	470500540211	19		39	2.4			CCMT 09T3..		TS 4	TORX T15	0.06
SSSM 40-30°	470500540213	19		39	4.6			CCMT 09T3..		TS 4	TORX T15	0.06
SSSM 40-45°	470500540215	19		39	6.5			CCMT 09T3..		TS 4	TORX T15	0.06
SSSM 50-15°	470500550211	22		53	3.2			CCMT 1204..		TS 5	TORX T25	0.1
SSSM 50-30°	470500550213	22		53	6.2			CCMT 1204..		TS 5	TORX T25	0.1
SSSM 50-45°	470500550215	22		53	8.8			CCMT 1204..		TS 5	TORX T25	0.1
SSQC 16	470500516261	10		16	2			CCMT 0602..		TS 25	TORX T08	0.005
SSQC 20	470500520261	11		19.5	1.5			CCMT 0602..		TS 25	TORX T08	0.008
SSQC 25	470500525261	14.5		24	2.5			CCMT 0602..		TS 25	TORX T08	0.02
SSQC 33	470500533261	17		32	3			CCMT 09T3..		TS 4	TORX T15	0.03
SSQC 41	470500541261	21		42	3.5			CCMT 1204..		TS 5	TORX T25	0.08
SSQC 50	470500550261	24.5		57	3.5			CCMT 1204..		TS 5	TORX T25	0.15
SSQC 63	470500563261	28.5		76	3.5			CCMT 1204..		TS 5	TORX T25	0.3
SSQC 80	470500580261	31.5		101	3.5			CCMT 1204..		TS 5	TORX T25	0.6
SSQC 90	470500590261	31.5		122	3.5			CCMT 1204..		TS 5	TORX T25	0.8

TRD 25-80 \varnothing 28 ~ 160

TRD 25 - 32	RPM 10.000
TRD 40 - 50	RPM 8.000
TRD 63	RPM 6.000
TRD 80	RPM 5.000



CENTESIMAL

10 μ m

1. Body
2. Slide toolholder
3. Expanding radial pin
4. Vernier scale
5. Slide clamp screw
6. Coolant outlet **Max BAR 40**
7. Tools clamp screws
8. Oiler
9. Bit holder

The **TRD** double-bit heads allow combined roughing and finishing machining with **IT7** precision.

The serrated surfaces between the bit holders and the tool holder slide guarantee rigidity and the adjustment sensitivity of 5 microns on the radius is easily readable on the vernier scale and can also be performed on the machine.

TRM 16-125 \varnothing 2.5 ~ 500

TRM 16 - 20	RPM 12.000	TRM 63	RPM 6.000
TRM 25 - 32	RPM 10.000	TRM 80	RPM 5.000
TRM 40 - 50	RPM 8.000	TRM 125	RPM 4.000



MICROMETRIC

2 μ m

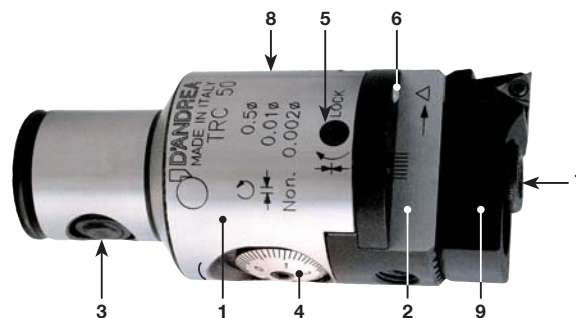
1. Body
2. Slide toolholder
3. Expanding radial pin
4. Micrometric vernier scale
5. Slide clamp screw
6. Coolant outlet **Max BAR 40**
7. Tools clamp screws
8. Oiler
9. Bit holder
10. Tool holder

The **TRM** heads allow high precision machining and excellent surface finish in **IT6** grade of tolerance.

The adjustment sensitivity of 1 micron on the radius is easily readable on the vernier scale and can also be performed in the machine. The **TRM** are coated with an anticorrosive surface protection.

TRC 14-80 \varnothing 2.5 ~ 200

TRC 14 - 20	RPM 12.000
TRC 25 - 32	RPM 10.000
TRC 40 - 50	RPM 8.000
TRC 80	RPM 6.000
TRC 80	RPM 5.000



CENTESIMAL

10 μ m

1. Body
2. Slide toolholder
3. Expanding radial pin
4. Vernier scale
5. Slide clamp screw
6. Coolant outlet **Max BAR 40**
7. Tools clamp screws
8. Oiler
9. Bit holder

The **TRC** heads allow high precision machining and excellent surface finish in **IT7** grade of tolerance.

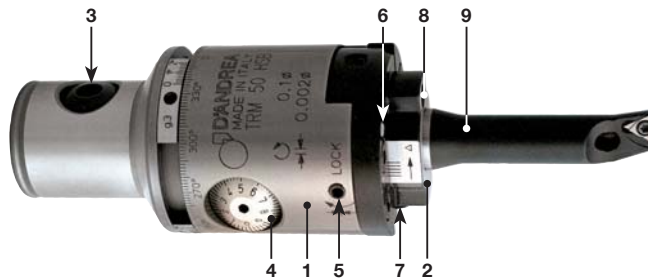
The adjustment sensitivity of 5 micron on the radius is easily readable on the vernier scale and can also be performed on the machine.

TRM HSB Ø 2.5 ~ 22

TRM 32 HSB RPM 20.000
TRM 50 HSB RPM 20.000

MICROMETRIC

2 μm



1. Body
2. Slide toolholder
3. Expanding radial pin
4. Micrometric vernier scale
5. Slide clamp screw
6. Coolant outlet **Max BAR 40**
7. Tools clamp screws
8. Oiler
9. Tool

The **TRM HSB** heads can be balanced and are suited to high-speed machining. They allow high precision machining and excellent surface finish in **IT6** grade of tolerance.

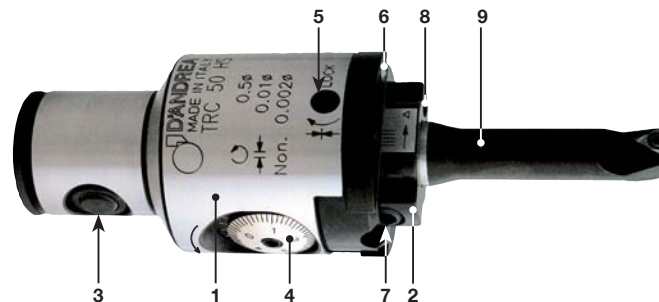
The adjustment sensitivity of 1 micron on the radius is easily readable on the vernier scale and can also be performed on the machine. The **TRM HSB** are coated with an anticorrosive surface protection.

TRC HS Ø 2.5 ~ 22

TRC 32 HS RPM 12.000
TRC 50 HS RPM 12.000

CENTESIMAL

10 μm



1. Body
2. Slide toolholder
3. Expanding radial pin
4. Vernier scale
5. Slide clamp screw
6. Coolant outlet **Max BAR 40**
7. Tools clamp screws
8. Oiler
9. Tool

The **TRC HS** heads are balanced and are suited to high-speed machining. They allow high precision machining and excellent surface finish in **IT7** grade of tolerance.

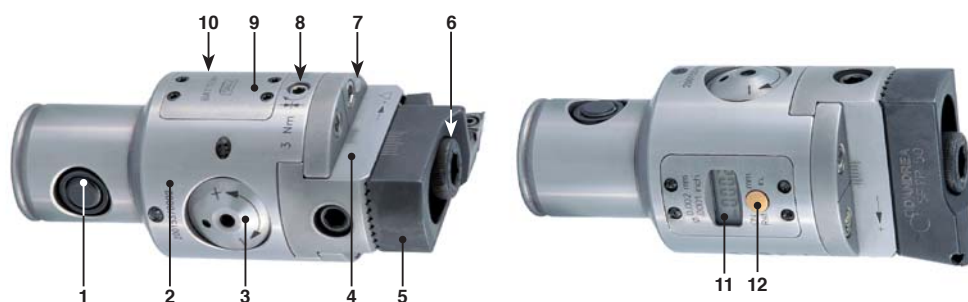
The adjustment sensitivity of 5 micron on the radius is easily readable on the vernier scale and can also be performed on the machine.

TRE 32-80 69K Ø 2.5 ~ 200

TRE 32 - 50 RPM 20.000
TRE 63 - 80 RPM 12.000

MICROMETRIC

2 μm



1. Expanding radial pin
2. Body
3. Set screw
4. Slide toolholder
5. Bit holder
6. Tools clamp screws
7. Coolant outlet **Max BAR 40**
8. Slide clamp screw
9. Battery compartment cover
10. Oiler
11. Digital display
12. Selection button

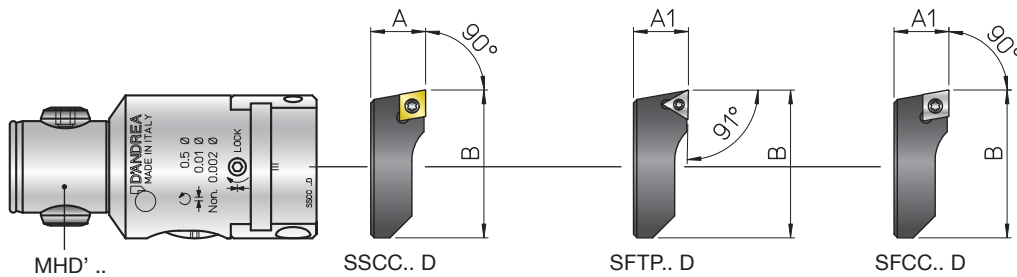
The **TRE** heads allow high precision machining and excellent surface finish in **IT6** grade of tolerance. The adjustment sensitivity of 1 micron on the radius is fast, accurate and is easily readable on the integrated display.

The **TRE** are coated with an anticorrosive surface protection and are resistant to liquid contamination according to the **IP69K** grade of protection.

TRD 25 ~ 80 Ø 28 ~ 160



REF.	CODE	Ø	kg
TRD 25	455022500571	28 ~ 36	0.2
TRD 32	455023200711	36 ~ 46	0.35
TRD 40	455024000901	46 ~ 60	0.7
TRD 50	455025000861	60 ~ 75	1.5
TRD 63	455026301081	75 ~ 95	2.7
TRD 80	455028001291	95 ~ 160	4.8

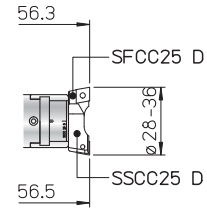
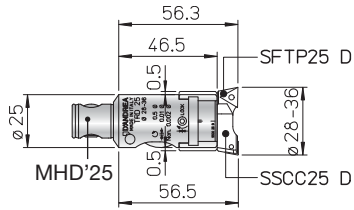


SEGGI SSCC .. D - SFTP .. D - SFCC .. D

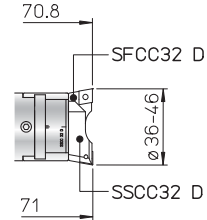
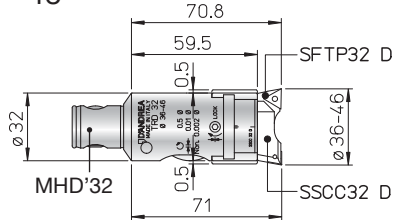


REF.	CODE	A	A1	B					kg
SSCC 25 D	470500525220	10		24			CCMT 0602..	TS 25 TORX T08	0.008
SSCC 32 D	470500532220	11.5		30			CCMT 0602..	TS 25 TORX T08	0.015
SSCC 40 D	470500540220	14		40			CCMT 09T3..	TS 4 TORX T15	0.03
SSCC 50 D	470500550220	19		54			CCMT 09T3..	TS 4 TORX T15	0.06
SSCC 63 D	470500563220	24.5		68			CCMT 09T3..	TS 4 TORX T15	0.15
SSCC 80 D	470500580220	29.5		87			CCMT 09T3..	TS 4 TORX T15	0.3
SSCC 85 D	470500585221	29.5		107.4			CCMT 09T3..	TS 4 TORX T15	0.4
SFTP 25 D	470500525030		9.8	24			TPGX 0902..	CS 250T TORX T08	0.008
SFTP 32 D	470500532030		11.3	30			TPGX 0902..	CS 250T TORX T08	0.015
SFTP 40 D	470500540030		13.8	40			TPGX 1103..	CS 300890T TORX T08	0.03
SFTP 50 D	470500550030		18.8	54			TPGX 1103..	CS 300890T TORX T08	0.06
SFTP 63 D	470500563030		24.3	68			TPGX 1103..	CS 300890T TORX T08	0.15
SFTP 80 D	470500580030		29.3	87			TPGX 1103..	CS 300890T TORX T08	0.3
SFTP 85 D	470500585031		29.3	107.4			TPGX 1103..	CS 300890T TORX T08	0.4
SFCC 25 D	470500525020		9.8	24			CCGT 0602..	TS 25 TORX T08	0.008
SFCC 32 D	470500532020		11.3	30			CCGT 0602..	TS 25 TORX T08	0.015
SFCC 40 D	470500540020		13.8	40			CCGT 09T3..	TS 4 TORX T15	0.03
SFCC 50 D	470500550020		18.8	54			CCGT 09T3..	TS 4 TORX T15	0.06
SFCC 63 D	470500563020		24.3	68			CCGT 09T3..	TS 4 TORX T15	0.15
SFCC 80 D	470500580020		29.3	87			CCGT 09T3..	TS 4 TORX T15	0.3
SFCC 85 D	470500585021		29.3	107.4			CCGT 09T3..	TS 4 TORX T15	0.4

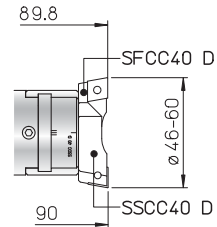
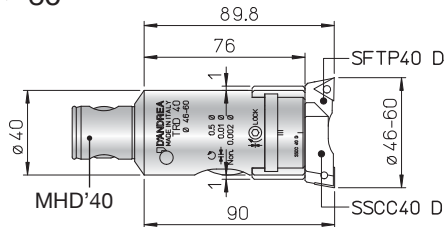
TRD 25 $\varnothing 28 \sim 36$



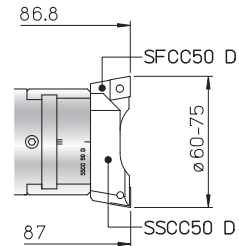
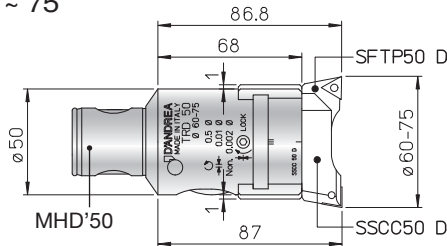
TRD 32 $\varnothing 36 \sim 46$



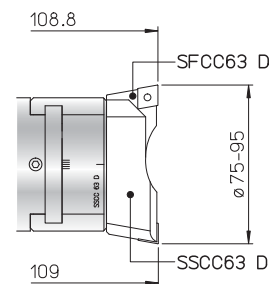
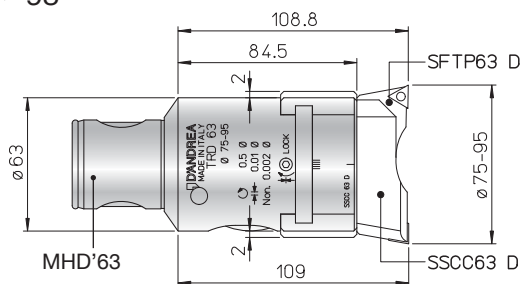
TRD 40 $\varnothing 46 \sim 60$



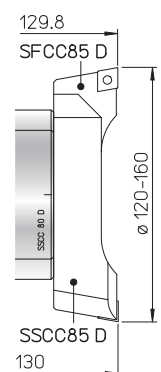
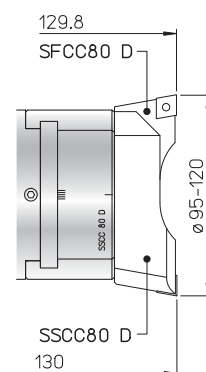
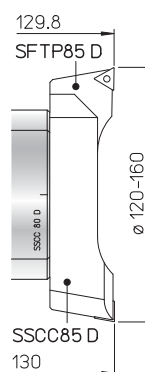
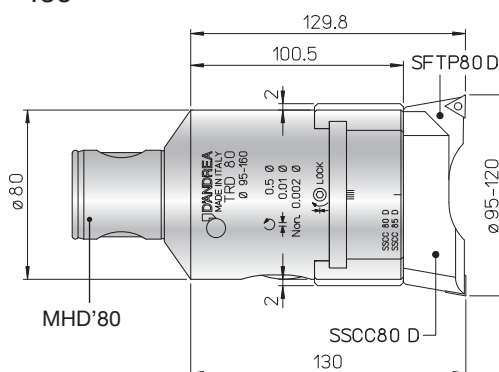
TRD 50 $\varnothing 60 \sim 75$



TRD 63 $\varnothing 75 \sim 95$



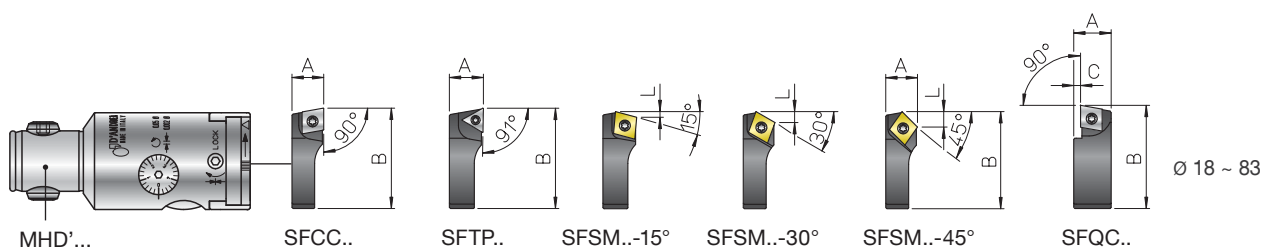
TRD 80 $\varnothing 95 \sim 160$



TRM 16 ~ 40 Ø 18 ~ 63



REF.	CODE	Ø	kg
TRM 16	455001600341	18 ~ 23	0.05
TRM 20	455002000401	22 ~ 29	0.1
TRM 25	455002500500	28 ~ 38	0.2
TRM 32	455003200630	35.5 ~ 51.5	0.35
TRM 40	455004000800	48 ~ 63	0.7

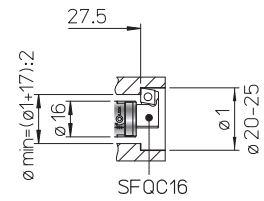
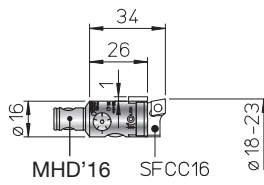


BIT-HOLDERS SFCC .. - SFTP .. - SFSM .. - SFQC ..

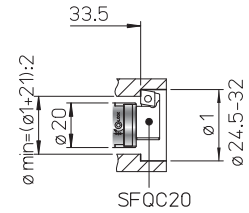
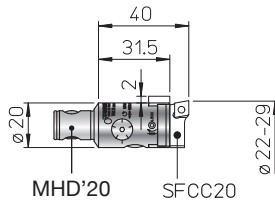


REF.	CODE	A	B	C	L					kg
SFCC 16	470500516002	8	17			CCGT 0602..		TS 25	TORX T08	0.003
SFCC 20	470500520002	8.5	21			CCGT 0602..		TS 25	TORX T08	0.005
SFCC 25	470500525002	10	26.5			CCGT 0602..		TS 25	TORX T08	0.01
SFCC 32	470500532002	11.5	34.5			CCGT 0602..		TS 25	TORX T08	0.02
SFCC 40	470500540002	14	44			CCGT 09T3..		TS 4	TORX T15	0.04
SFTP 25	470500525001	10	26.5				TPGX 0902..	CS 250T	TORX T08	0.01
SFTP 32	470500532001	11.5	34.5				TPGX 0902..	CS 250T	TORX T08	0.02
SFTP 40	470500540001	14	44				TPGX 1103..	CS 300890T	TORX T08	0.04
SFQC 16	470500516062	10	18	2		CCMT 0602..		TS 25	TORX T08	0.005
SFQC 20	470500520062	10.5	22.5	2		CCMT 0602..		TS 25	TORX T08	0.008
SFQC 25	470500525062	12	28.5	2.5		CCMT 0602..		TS 25	TORX T08	0.01
SFQC 32	470500532062	13.5	35.5	2.5		CCMT 0602..		TS 25	TORX T08	0.03
SFQC 40	470500540062	16.5	46	3		CCMT 09T3..		TS 4	TORXT15	0.06
SFSM 25-15°	470500525011	10	25.5	1.6		CCMT 0602..		TS 25	TORX T08	0.01
SFSM 25-30°	470500525013	10	25.5	3		CCMT 0602..		TS 25	TORX T08	0.01
SFSM 25-45°	470500525015	10	25.5	4.3		CCMT 0602..		TS 25	TORX T08	0.01
SFSM 32-15°	470500532011	11.5	33.5	1.6		CCMT 0602..		TS 25	TORX T08	0.02
SFSM 32-30°	470500532013	11.5	33.5	3		CCMT 0602..		TS 25	TORX T08	0.02
SFSM 32-45°	470500532015	11.5	33.5	4.3		CCMT 0602..		TS 25	TORX T08	0.02
SFSM 40-15°	470500540011	14	42.5	2.4		CCMT 09T3..		TS 4	TORXT15	0.03
SFSM 40-30°	470500540013	14	42.5	4.6		CCMT 09T3..		TS 4	TORXT15	0.03
SFSM 40-45°	470500540015	14	42.5	6.6		CCMT 09T3..		TS 4	TORXT15	0.03

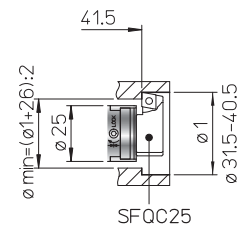
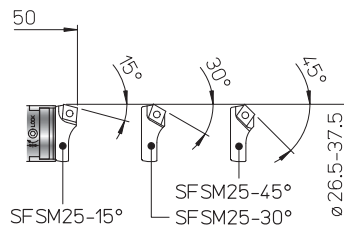
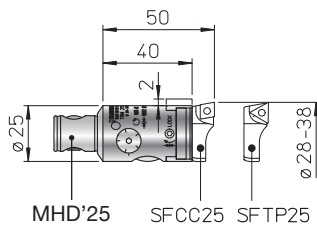
TRM 16 Ø 18 ~ 23



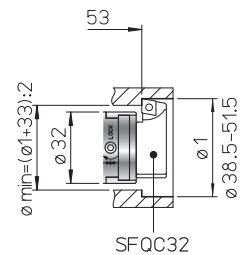
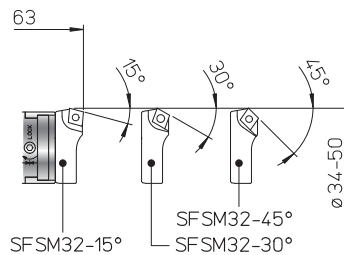
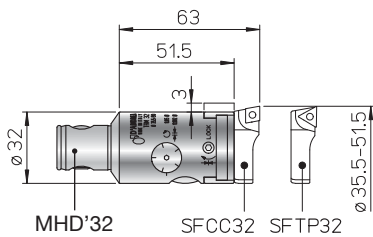
TRM 20 Ø 22 ~ 29



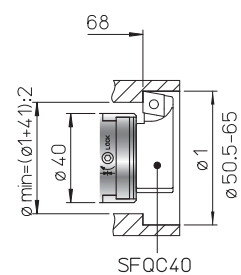
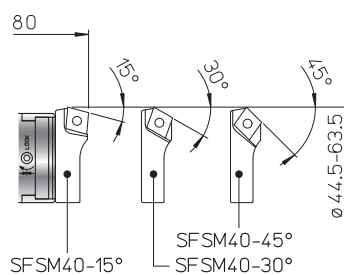
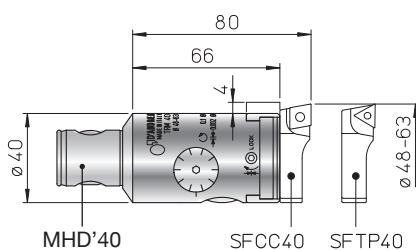
TRM 25 Ø 28 ~ 38



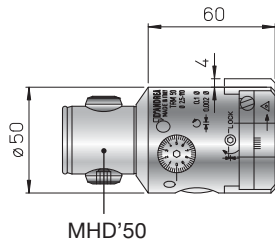
TRM 32 Ø 35.5 ~ 51.5



TRM 40 Ø 48 ~ 63

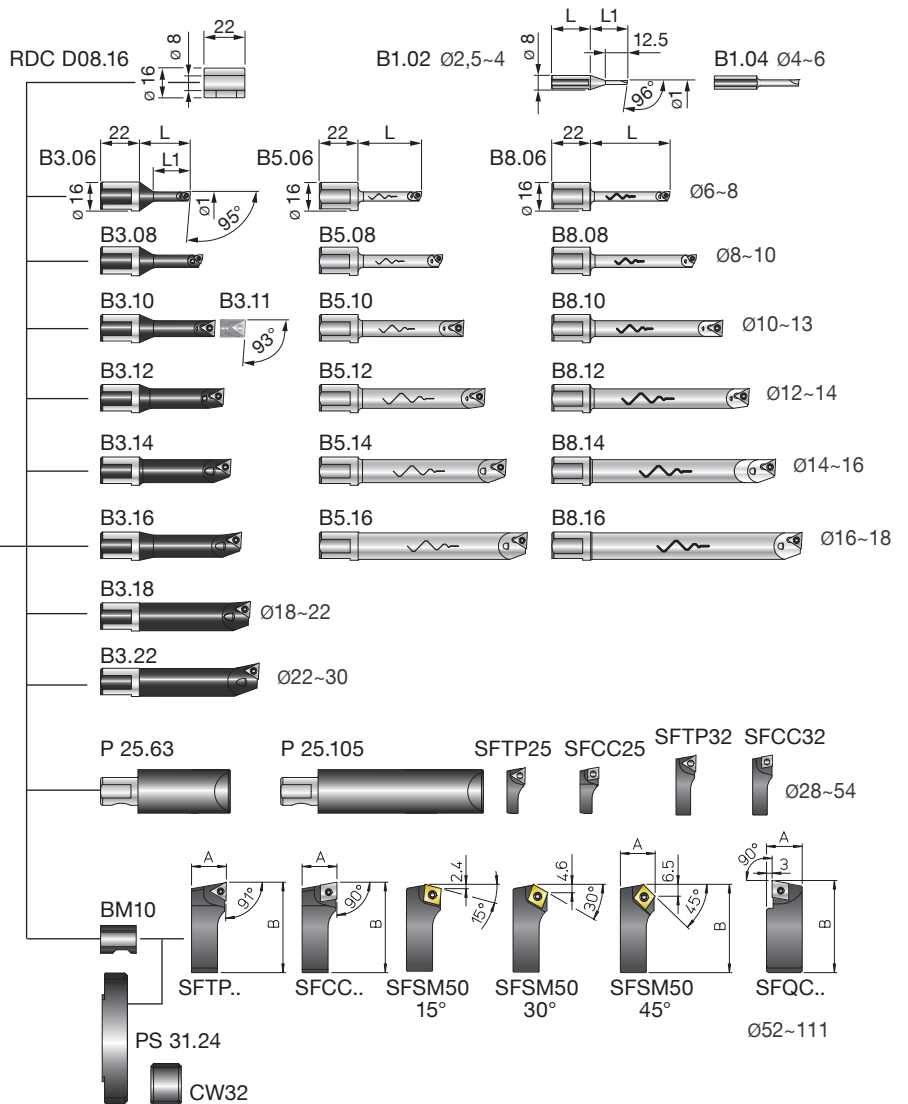


TRM 50 Ø 2.5 ~ 108

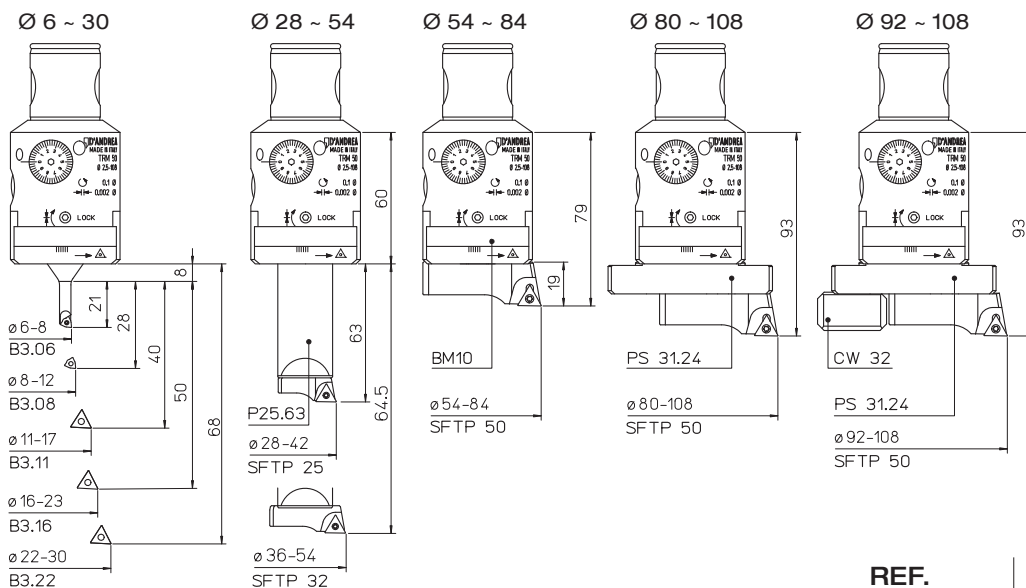


REF.	CODE	kg
TRM 50	455005000500	1
RDC D08.16	200560116082	0.02
P25.63 TR..	435116250631	0.5
P25.105 TR..	435116251051	0.8
PS 31.24 TR..50	433024140751	0.19
CW 32	392011003201	0.07

Tools Vibration-damping tools Carbide tools



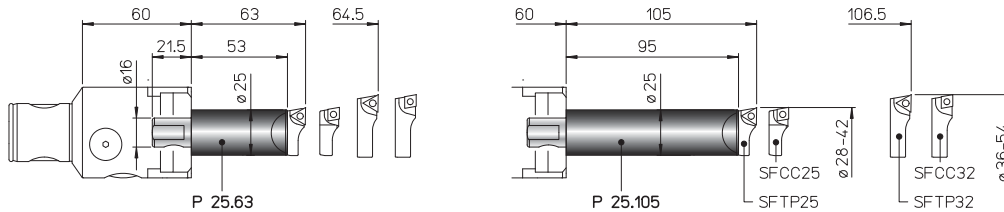
KIT K01 Ø 6 ~ 108



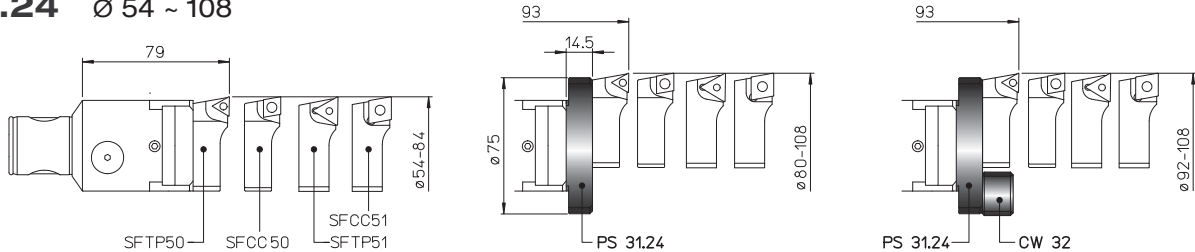
- 1 TRM 50
- 1 BM10
- 1 P25.63
- 1 PS 31.24
- 1 CW 32
- 1 B3.06
- 1 B3.08
- 1 B3.11
- 1 B3.16
- 1 B3.22
- 1 SFTP25
- 1 SFTP32
- 1 SFTP50
- 5 TPGX 090202L DC100
- 1 TPGX 110302L DC100
- 2 WCGT 020102L DC100

REF.	CODE	Ø	kg
KIT K01 TRM50	655005010501	6 ~ 108	3.1

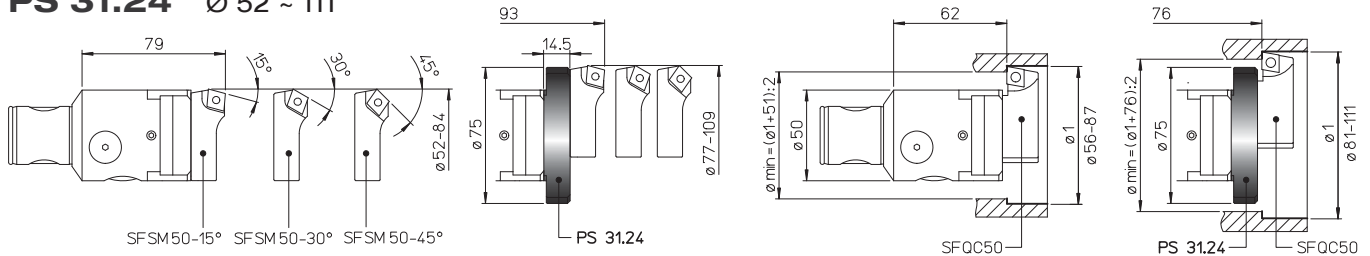
P 25 Ø 28 ~ 54



PS 31.24 Ø 54 ~ 108

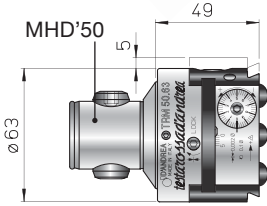


PS 31.24 Ø 52 ~ 111

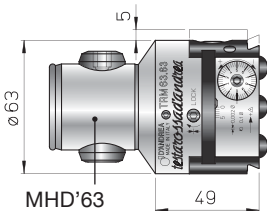


REF.	CODE	Ø1	L	L1	A	B	⊖	⊖	⊖	⊖	⊖	kg
SFTP 25	470500525001				10	26.5		TPGX 0902..		CS 250T	TORX T08	0.01
SFTP 32	470500532001				11.5	34.5		TPGX 0902..		CS 250T	TORX T08	0.02
SFTP 50	470500550001				19	52		TPGX 1103..		CS 300890T	TORX T08	0.08
SFTP 51	470500550003				21	52		TCMT 16T3..		TS 4	TORX T15	0.09
SFCC 25	470500525002				10	26.5		CCGT 0602..		TS 25	TORX T08	0.01
SFCC 32	470500532002				11.5	34.5		CCGT 0602..		TS 25	TORX T08	0.02
SFCC 50	470500550002				19	52		CCGT 09T3..		TS 4	TORX T15	0.08
SFCC 51	470500550004				21	52		CCMT 1204..		TS 5	TORX T25	0.09
SFQC 50	470500550062				20.5	53		CCMT 09T3..		TS 4	TORX T15	0.1
SFSM 50-15°	470500550011				19	50.5		CCMT 09T3..		TS 4	TORX T15	0.07
SFSM 50-30°	470500550013				19	50.5		CCMT 09T3..		TS 4	TORX T15	0.07
SFSM 50-45°	470500550015				19	50.5		CCMT 09T3..		TS 4	TORX T15	0.07
B1.02	572010502001	2.5 ~ 4	22	21								0.02
B1.04	572010504001	4 ~ 6	24	24								0.02
B3.06	572010506001	6 ~ 8	29	21		WCGT 0201..				TS 21	TORX T06	0.035
B3.08	572010508001	8 ~ 10	36	28		WCGT 0201..				TS 211	TORX T06	0.04
B3.10	572010510001	10 ~ 12	43	35			TPGX 0902..			CS 250 T	TORX T08	0.05
B3.11	572010511001	11 ~ 13	48	40			TPGX 0902..			CS 250 T	TORX T08	0.055
B3.12	572010512001	12 ~ 14	48	42			TPGX 0902..			CS 250 T	TORX T08	0.06
B3.14	572010514001	14 ~ 16	52	50			TPGX 0902..			CS 250 T	TORX T08	0.07
B3.16	572010516001	16 ~ 18	58	50			TPGX 0902..			CS 250 T	TORX T08	0.07
B3.18	572010518001	18 ~ 22	63				TPGX 0902..			CS 250 T	TORX T08	0.1
B3.22	572010522001	22 ~ 30	68				TPGX 0902..			CS 250 T	TORX T08	0.1
B5.06	572010506105	6 ~ 8	36			WCGT 0201..				TS 21	TORX T06	0.075
B5.08	572010508105	8 ~ 10	48			WCGT 0201..				TS 211	TORX T06	0.09
B5.10	572010510105	10 ~ 12	60				TPGX 0902..			CS 250 T	TORX T08	0.1
B5.12	572010512105	12 ~ 14	72				TPGX 0902..			CS 250 T	TORX T08	0.1
B5.14	572010514105	14 ~ 16	84				TPGX 0902..			CS 250 T	TORX T08	0.2
B5.16	572010516105	16 ~ 18	96				TPGX 0902..			CS 250 T	TORX T08	0.3
B8.06	572010506108	6 ~ 8	45			WCGT 0201..				TS 21	TORX T06	0.065
B8.08	572010508108	8 ~ 10	60			WCGT 0201..				TS 211	TORX T06	0.08
B8.10	572010510108	10 ~ 12	75				TPGX 0902..			CS 250 T	TORX T08	0.1
B8.12	572010512108	12 ~ 14	90				TPGX 0902..			CS 250 T	TORX T08	0.2
B8.14	572010514108	14 ~ 16	105				TPGX 0902..			CS 250 T	TORX T08	0.2
B8.16	572010516108	16 ~ 18	120				TPGX 0902..			CS 250 T	TORX T08	0.3

TRM 50/63 - TRM 63/63 Ø 2.5 ~ 125



TRM 50/63
Ø 2.5 ~ 125



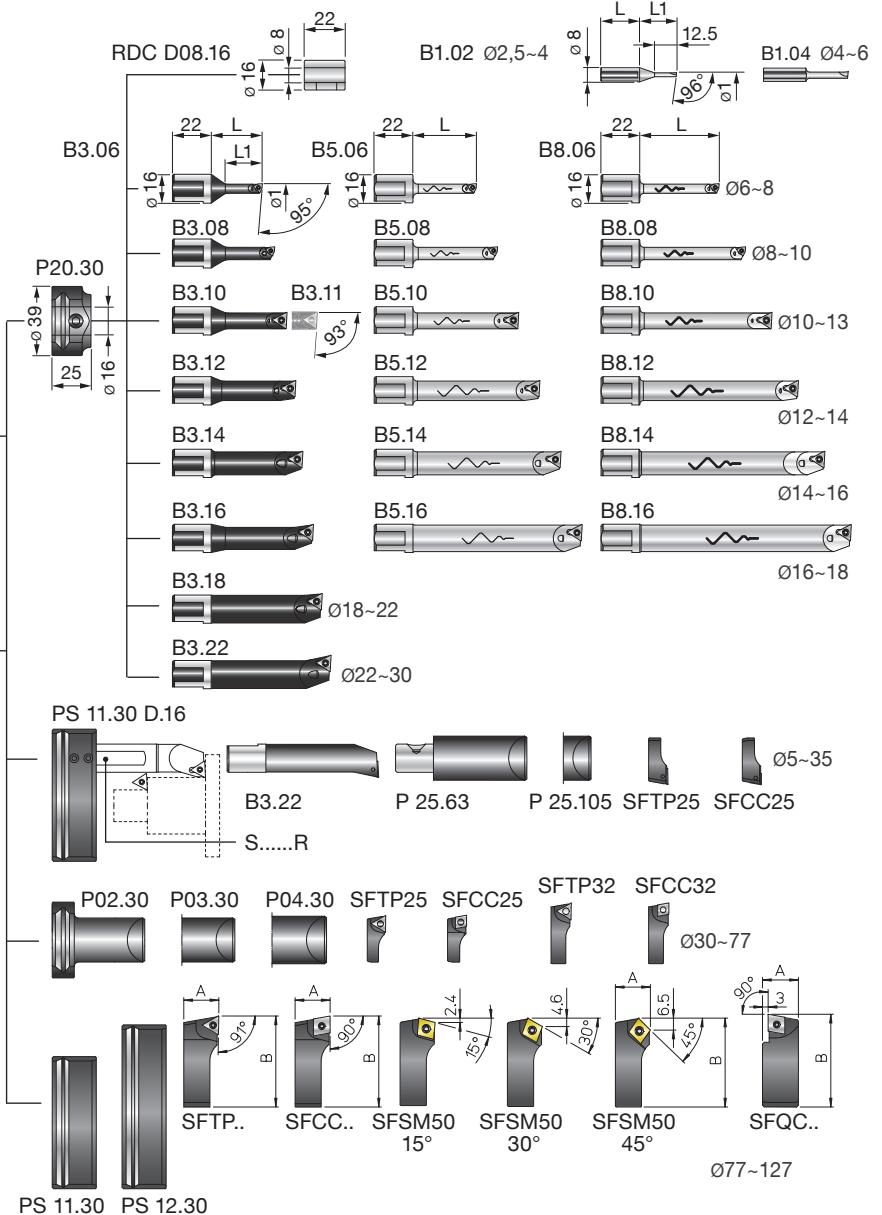
TRM 63/63
Ø 2.5 ~ 125

REF.	CODE	kg
TRM 50/63	455005000631	1.1
TRM 63/63	455006300631	1.5
RDC D08.16	200560116082	0.02
P20.30	431030160300	0.2
PS 11.30 D.16	433030260755	0.4
P25.63 TR..	435116250631	0.5
P25.105 TR..	435116251051	0.8
P02.30	431030250400	0.3
P03.30	431030250700	0.4
P04.30	431030251150	0.7
PS 11.30	433030260750	0.4
PS 12.30	433030260950	0.5

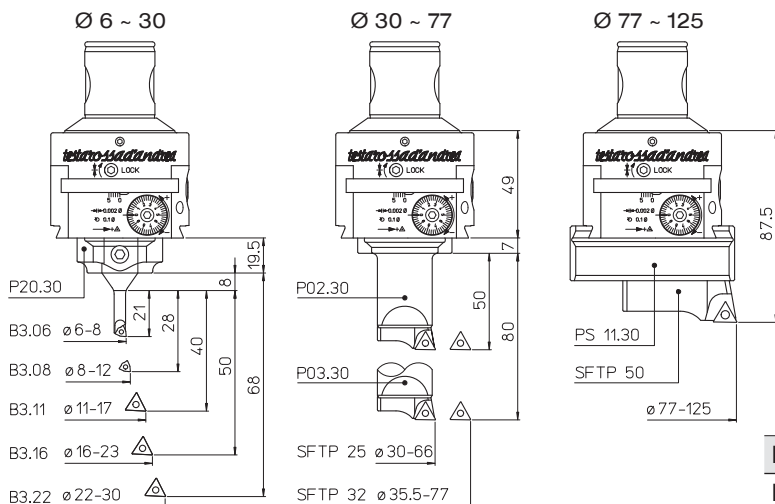
Tools

Vibration-damping tools

Carbide tools



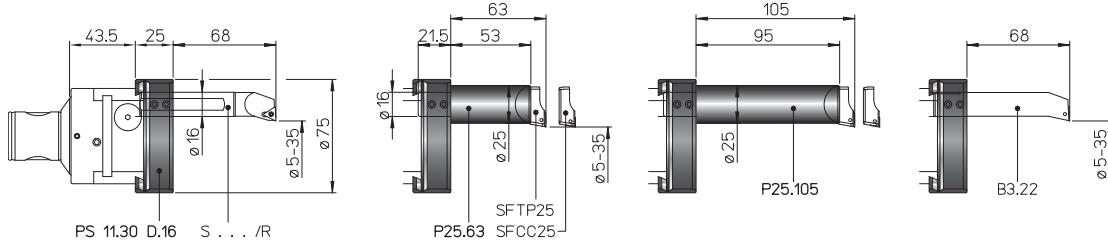
KIT K01 Ø 6 ~ 125



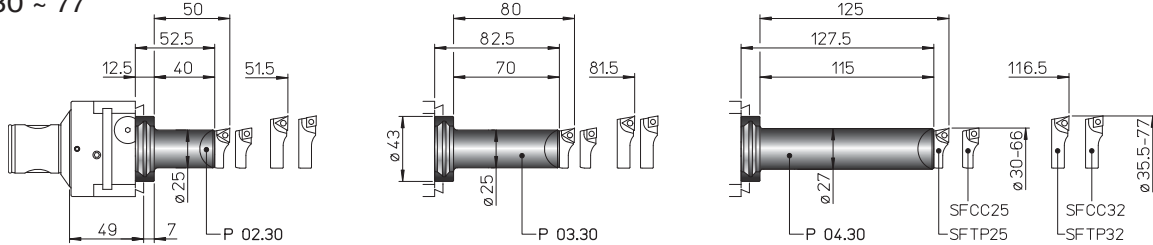
- 1 TRM../63
- 1 P20.30
- 1 PS11.30
- 1 P02.30
- 1 P03.30
- 1 B3.06
- 1 B3.08
- 1 B3.11
- 1 B3.16
- 1 B3.22
- 1 SFTP25
- 1 SFTP32
- 1 SFTP50
- 5 TPGX 090202L DC100
- 1 TPGX 110302L DC100
- 2 WCGT 020102L DC100

REF.	CODE	Ø	kg
KIT K01 TRM50/63	655005010632	6 ~ 125	3.9
KIT K01 TRM63/63	655006310632	6 ~ 125	4.2

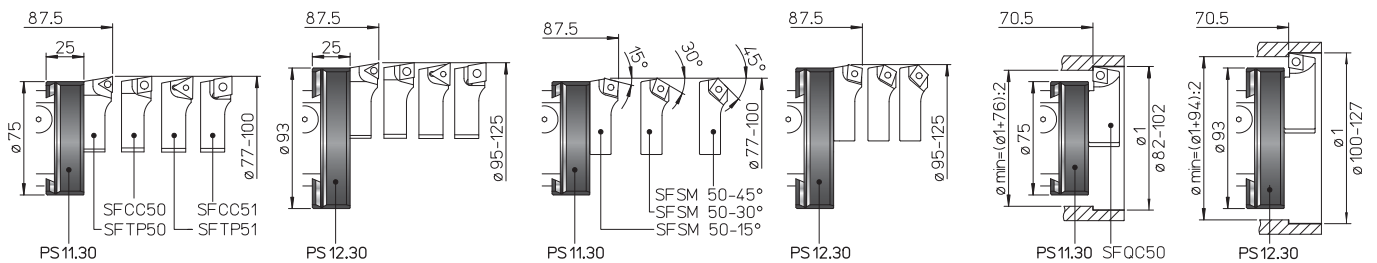
PS + P25 Ø 5 ~ 35



P Ø 30 ~ 77



PS Ø 77 ~ 127

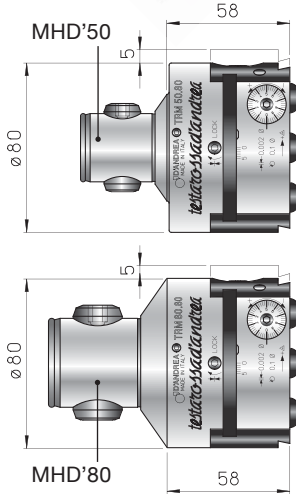


REF.	CODE	Ø1	L	L1	A	B	⊖	⊕	⊖	⊕	kg
SFTP 25	470500525001				10	26.5	TPGX 0902..		CS 250T	TORX T08	0.01
SFTP 32	470500532001				11.5	34.5	TPGX 0902..		CS 250T	TORX T08	0.02
SFTP 50	470500550001				19	52	TPGX 1103..		CS 300890T	TORX T08	0.08
SFTP 51	470500550003				21	52	TCMT 16T3..		TS 4	TORX T15	0.09
SFCC 25	470500525002				10	26.5		CCGT 0602..	TS 25	TORX T08	0.01
SFCC 32	470500532002				11.5	34.5		CCGT 0602..	TS 25	TORX T08	0.02
SFCC 50	470500550002				19	52		CCGT 09T3..	TS 4	TORX T15	0.08
SFCC 51	470500550004				21	52		CCMT 1204..	TS 5	TORX T25	0.09
SFQC 50	470500550062				20.5	53		CCMT 09T3..	TS 4	TORX T15	0.1
SFSM 50-15°	470500550011				19	50.5		CCMT 09T3..	TS 4	TORX T15	0.07
SFSM 50-30°	470500550013				19	50.5		CCMT 09T3..	TS 4	TORX T15	0.07
SFSM 50-45°	470500550015				19	50.5		CCMT 09T3..	TS 4	TORX T15	0.07
B1.02	572010502001	2.5 ~ 4	22	21							0.02
B1.04	572010504001	4 ~ 6	24	24							0.02
B3.06	572010506001	6 ~ 8	29	21		WCGT 0201..			TS 21	TORX T06	0.035
B3.08	572010508001	8 ~ 10	36	28		WCGT 0201..			TS 211	TORX T06	0.04
B3.10	572010510001	10 ~ 12	43	35			TPGX 0902..		CS 250 T	TORX T08	0.05
B3.11	572010511001	11 ~ 13	48	40			TPGX 0902..		CS 250 T	TORX T08	0.055
B3.12	572010512001	12 ~ 14	48	42			TPGX 0902..		CS 250 T	TORX T08	0.06
B3.14	572010514001	14 ~ 16	52	50			TPGX 0902..		CS 250 T	TORX T08	0.07
B3.16	572010516001	16 ~ 18	58	50			TPGX 0902..		CS 250 T	TORX T08	0.07
B3.18	572010518001	18 ~ 22	63				TPGX 0902..		CS 250 T	TORX T08	0.1
B3.22	572010522001	22 ~ 30	68				TPGX 0902..		CS 250 T	TORX T08	0.1
B5.06	572010506105	6 ~ 8	36			WCGT 0201..			TS 21	TORX T06	0.075
B5.08	572010508105	8 ~ 10	48			WCGT 0201..			TS 211	TORX T06	0.09
B5.10	572010510105	10 ~ 12	60				TPGX 0902..		CS 250 T	TORX T08	0.1
B5.12	572010512105	12 ~ 14	72				TPGX 0902..		CS 250 T	TORX T08	0.1
B5.14	572010514105	14 ~ 16	84				TPGX 0902..		CS 250 T	TORX T08	0.2
B5.16	572010516105	16 ~ 18	96				TPGX 0902..		CS 250 T	TORX T08	0.3
B8.06	572010506108	6 ~ 8	45			WCGT 0201..			TS 21	TORX T06	0.065
B8.08	572010508108	8 ~ 10	60			WCGT 0201..			TS 211	TORX T06	0.08
B8.10	572010510108	10 ~ 12	75				TPGX 0902..		CS 250 T	TORX T08	0.1
B8.12	572010512108	12 ~ 14	90				TPGX 0902..		CS 250 T	TORX T08	0.2
B8.14	572010514108	14 ~ 16	105				TPGX 0902..		CS 250 T	TORX T08	0.2
B8.16	572010516108	16 ~ 18	120				TPGX 0902..		CS 250 T	TORX T08	0.3

TRM 50/80 - TRM 80/80 Ø 2.5 ~ 160



2 µm

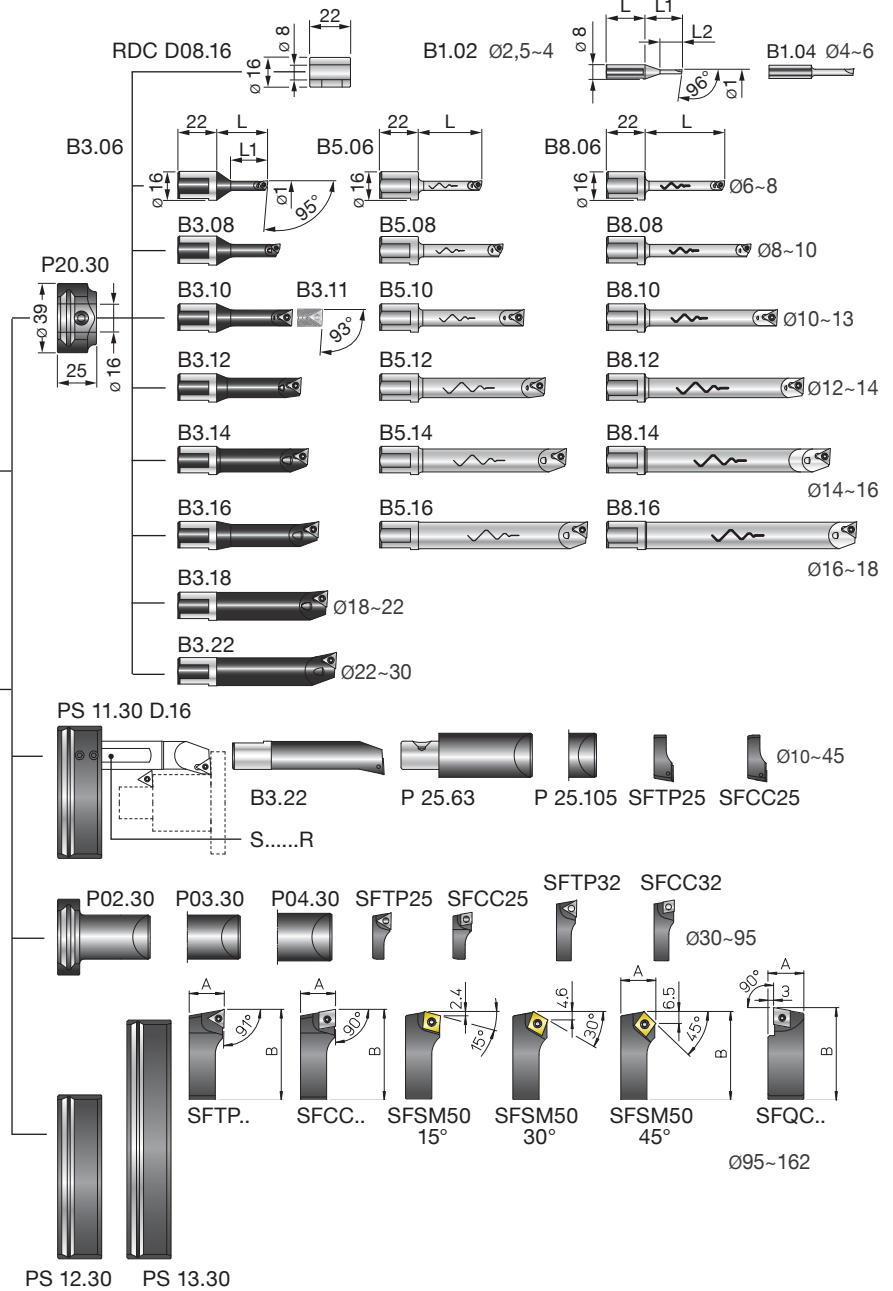


TRM 50/80
Ø 2.5 ~ 160

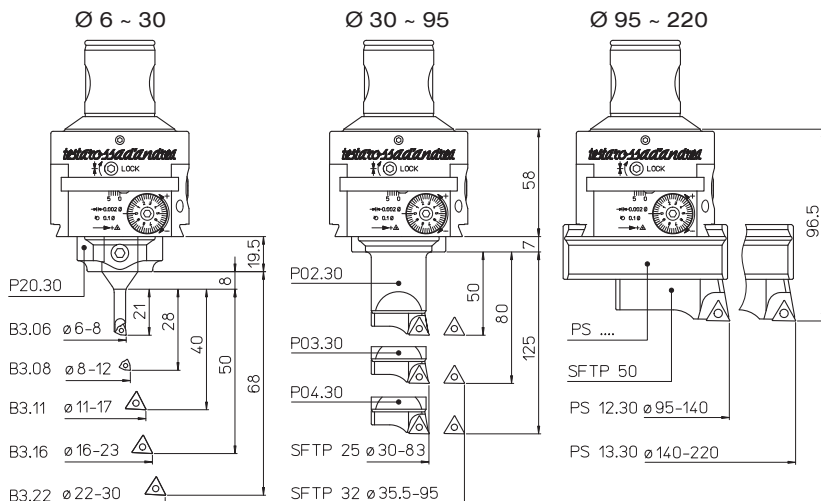
TRM 80/80
Ø 2.5 ~ 160

REF.	CODE	kg
TRM 50/80	455005000801	2
TRM 80/80	455008000801	2.5
RDC D08.16	200560116082	0.02
P20.30	431030160300	0.2
PS 11.30 D.16	433030260755	0.4
P25.63 TR..	435116250631	0.5
P25.105 TR..	435116251051	0.8
P02.30	431030250400	0.3
P03.30	431030250700	0.4
P04.30	431030251150	0.7
PS 11.30	433030260750	0.4
PS 12.30	433030260950	0.5

Tools Vibration-damping tools Carbide tools



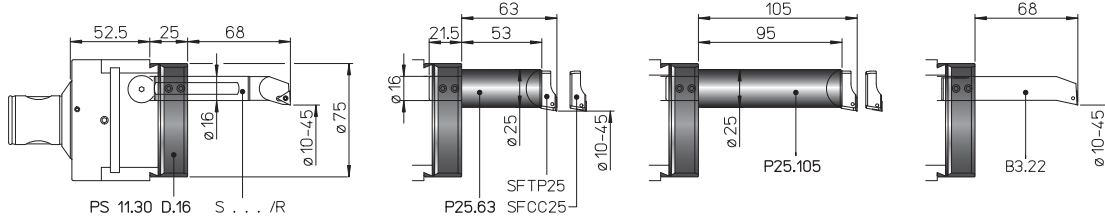
KIT K01 Ø 6 ~ 220



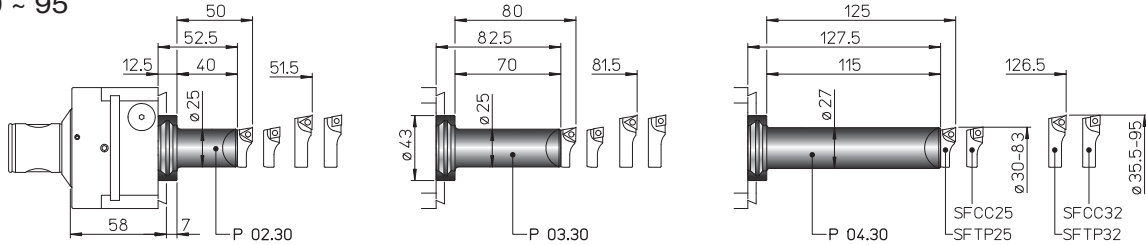
- 1 TRM../80
- 1 P20.30
- 1 PS12.30
- 1 PS13.30
- 1 P03.30
- 1 P04.30
- 1 B3.06
- 1 B3.08
- 1 B3.11
- 1 B3.16
- 1 B3.22
- 1 SFTP25
- 1 SFTP32
- 1 SFTP50
- 5 TPGX 090202L DC100
- 1 TPGX 110302L DC100
- 2 WCGT 020102L DC100

REF.	CODE	Ø	kg
KIT K01 TRM50/80	655005010802	6 ~ 220	6.2
KIT K01 TRM80/80	655008010802	6 ~ 220	6.6

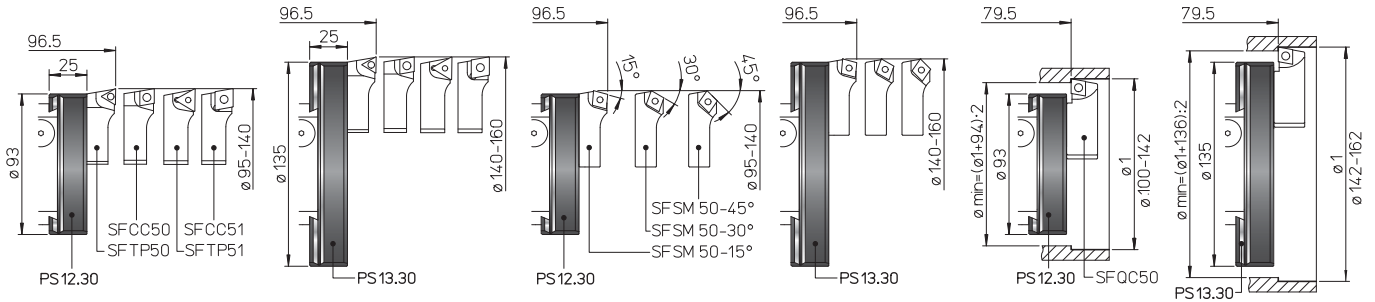
PS + P25 Ø 10 ~ 45



P Ø 30 ~ 95



PS Ø 95 ~ 162



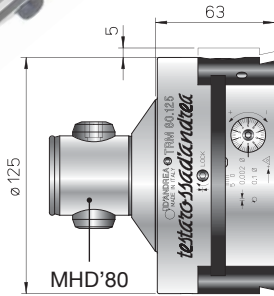
REF.	CODE	Ø1	L	L1	A	B	⊖	⊕	⊖	⊕	kg
SFTP 25	470500525001		10	26.5			TPGX 0902..		CS 250T	TORX T08	0.01
SFTP 32	470500532001		11.5	34.5			TPGX 0902..		CS 250T	TORX T08	0.02
SFTP 50	470500550001		19	52			TPGX 1103..		CS 300890T	TORX T08	0.08
SFTP 51	470500550003		21	52			TCMT 16T3..		TS 4	TORX T15	0.09
SFCC 25	470500525002		10	26.5			CCGT 0602..		TS 25	TORX T08	0.01
SFCC 32	470500532002		11.5	34.5			CCGT 0602..		TS 25	TORX T08	0.02
SFCC 50	470500550002		19	52			CCGT 09T3..		TS 4	TORX T15	0.08
SFCC 51	470500550004		21	52			CCMT 1204..		TS 5	TORX T25	0.09
SFQC 50	470500550062		20.5	53			CCMT 09T3..		TS 4	TORX T15	0.1
SFSM 50-15°	470500550011		19	50.5			CCMT 09T3..		TS 4	TORX T15	0.07
SFSM 50-30°	470500550013		19	50.5			CCMT 09T3..		TS 4	TORX T15	0.07
SFSM 50-45°	470500550015		19	50.5			CCMT 09T3..		TS 4	TORX T15	0.07

B1.02	572010502001	2.5 ~ 4	22	21							0.02
B1.04	572010504001	4 ~ 6	24	24							0.02
B3.06	572010506001	6 ~ 8	29	21		WCGT 0201..			TS 21	TORX T06	0.035
B3.08	572010508001	8 ~ 10	36	28		WCGT 0201..			TS 211	TORX T06	0.04
B3.10	572010510001	10 ~ 12	43	35			TPGX 0902..		CS 250 T	TORX T08	0.05
B3.11	572010511001	11 ~ 13	48	40			TPGX 0902..		CS 250 T	TORX T08	0.055
B3.12	572010512001	12 ~ 14	48	42			TPGX 0902..		CS 250 T	TORX T08	0.06
B3.14	572010514001	14 ~ 16	52	50			TPGX 0902..		CS 250 T	TORX T08	0.07
B3.16	572010516001	16 ~ 18	58	50			TPGX 0902..		CS 250 T	TORX T08	0.07
B3.18	572010518001	18 ~ 22	63				TPGX 0902..		CS 250 T	TORX T08	0.1
B3.22	572010522001	22 ~ 30	68				TPGX 0902..		CS 250 T	TORX T08	0.1
B5.06	572010506105	6 ~ 8	36			WCGT 0201..			TS 21	TORX T06	0.075
B5.08	572010508105	8 ~ 10	48			WCGT 0201..			TS 211	TORX T06	0.09
B5.10	572010510105	10 ~ 12	60				TPGX 0902..		CS 250 T	TORX T08	0.1
B5.12	572010512105	12 ~ 14	72				TPGX 0902..		CS 250 T	TORX T08	0.1
B5.14	572010514105	14 ~ 16	84				TPGX 0902..		CS 250 T	TORX T08	0.2
B5.16	572010516105	16 ~ 18	96				TPGX 0902..		CS 250 T	TORX T08	0.3
B8.06	572010506108	6 ~ 8	45			WCGT 0201..			TS 21	TORX T06	0.065
B8.08	572010508108	8 ~ 10	60			WCGT 0201..			TS 211	TORX T06	0.08
B8.10	572010510108	10 ~ 12	75				TPGX 0902..		CS 250 T	TORX T08	0.1
B8.12	572010512108	12 ~ 14	90				TPGX 0902..		CS 250 T	TORX T08	0.2
B8.14	572010514108	14 ~ 16	105				TPGX 0902..		CS 250 T	TORX T08	0.2
B8.16	572010516108	16 ~ 18	120				TPGX 0902..		CS 250 T	TORX T08	0.3

TRM 80/125 Ø 36 ~ 500



2 μm



REF.	CODE	kg
TRM 80/125	455008001251	5.5
P02.40	431040320700	0.7
P03.40	431040321150	1
P04.40	431040321900	2
PS 11.40	433040351500	1.5
PS 12.40	433040352300	2.4
PS 13.40	433040353300	3.5
PS 14.40	433040354000	4.6

KIT K03 Ø 36 ~ 410

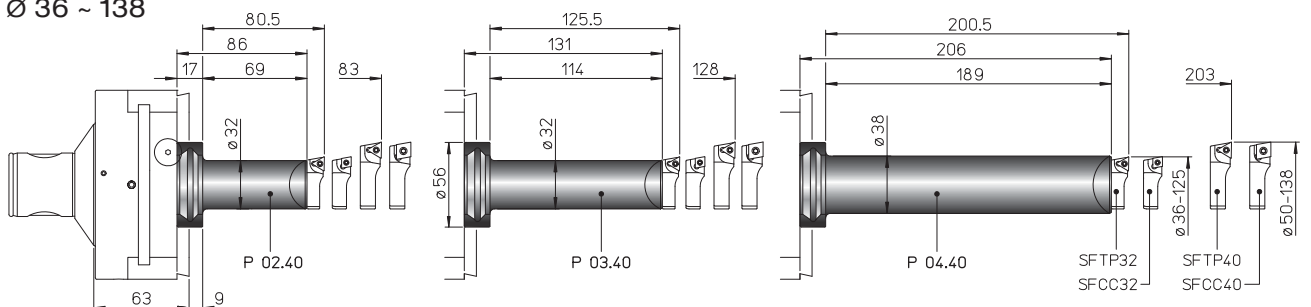
1 P02.40 1 PS11.40 1 SFTP32
 1 P03.40 1 PS12.40 1 SFTP40
 1 P04.40 1 PS13.40 1 SFTP50



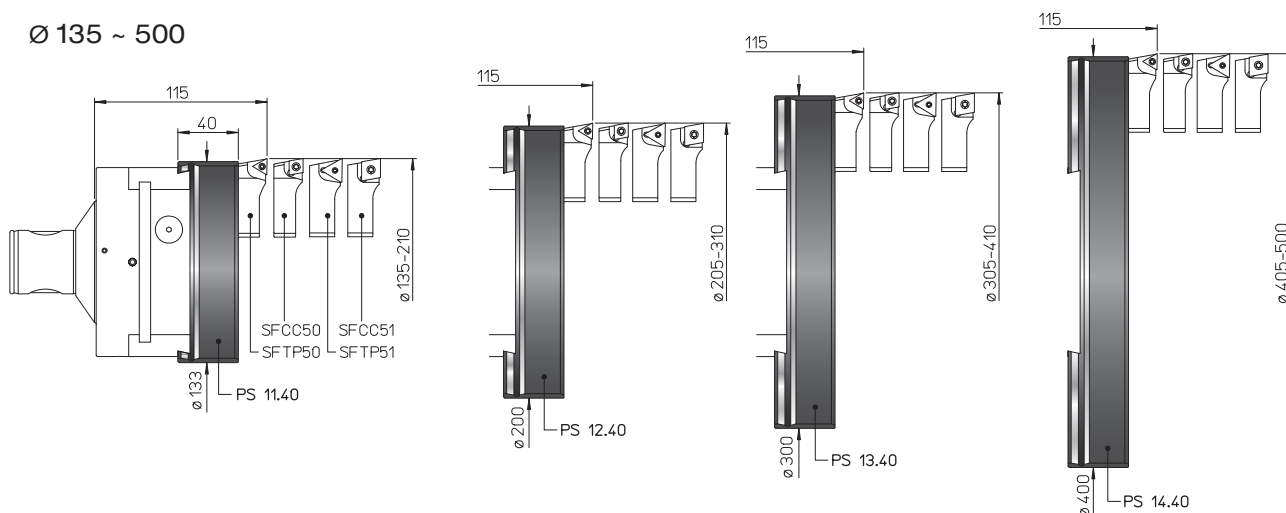
TRM 80/125 NOT INCLUDED

REF.	CODE	Ø	kg
KIT K03 TRM 80/125	655012500030	36 ~ 410	11.2

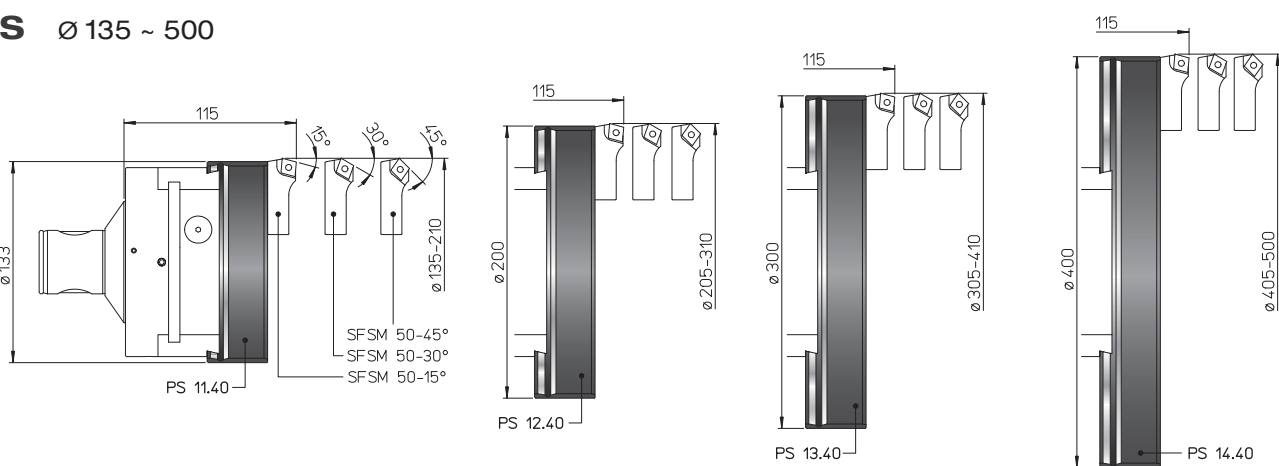
P Ø 36 ~ 138



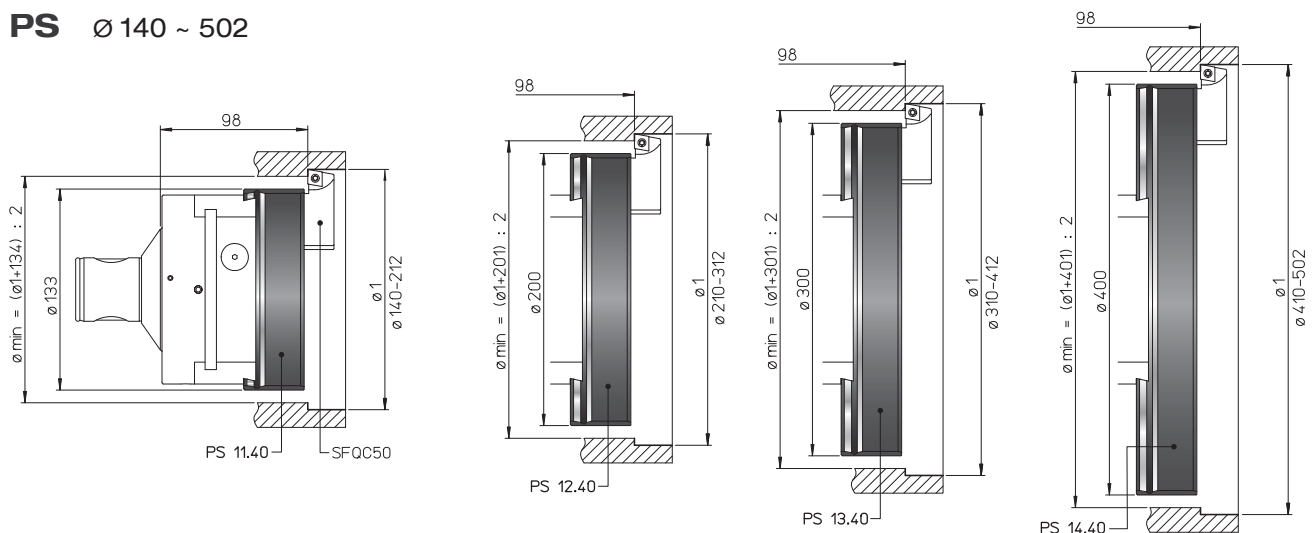
PS Ø 135 ~ 500



PS Ø 135 ~ 500



PS Ø 140 ~ 502



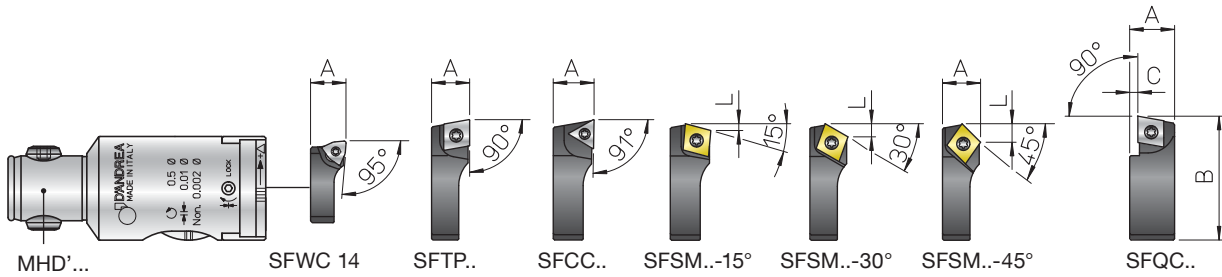
REF.	CODE	A	B					kg
SFTP 32	470500532001	11.5	34.5	TPGX 0902..		CS 250T	TORX T08	0.02
SFTP 40	470500540001	14	44	TPGX 1103..		CS 300890T	TORX T08	0.04
SFTP 50	470500550001	19	52	TPGX 1103..		CS 300890T	TORX T08	0.08
SFTP 51	470500550003	21	52	TCMT 16T3..		TS 4	TORX T15	0.09
SFCC 32	470500532002	11.5	34.5		CCGT 0602..	TS 25	TORX T08	0.02
SFCC 40	470500540002	14	44		CCGT 09T3..	TS 4	TORX T15	0.04
SFCC 50	470500550002	19	52		CCGT 09T3..	TS 4	TORX T15	0.08
SFCC 51	470500550004	21	52		CCMT 1204..	TS 5	TORX T25	0.09
SFQC 50	470500550062	20.5	53		CCMT 09T3..	TS 4	TORXT15	0.1
SFSM 50-15°	470500550011	19	50.5		CCMT 09T3..	TS 4	TORXT15	0.07
SFSM 50-30°	470500550013	19	50.5		CCMT 09T3..	TS 4	TORXT15	0.07
SFSM 50-45°	470500550015	19	50.5		CCMT 09T3..	TS 4	TORXT15	0.07

TRC 14 ~ 40 Ø 14.5 ~ 66



10 µm
nonio
vernier **2 µm**

REF.	CODE	Ø	kg
TRC 14	455011400301	14.5 ~ 18	0.02
TRC 16	455011600341	18 ~ 24	0.05
TRC 20	455012000401	22 ~ 30	0.1
TRC 25	455012500501	28 ~ 40	0.2
TRC 32	455013200631	35.5 ~ 53.5	0.35
TRC 40	455014000801	48 ~ 66	0.7

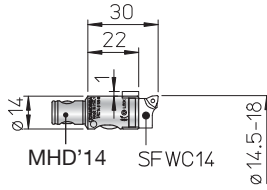


BIT-HOLDERS SFWC.. - SFCC .. - SFTP .. - SFSM .. - SFQC ..

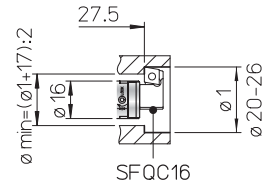
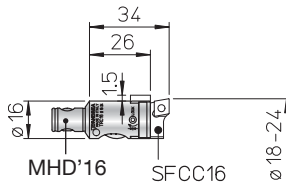


REF.	CODE	A	B	C	L	⊖	⊖	⊖	⊖	⊖	kg
SFWC 14	470500514002	8	14			WCGT 0201..			TS 211	TORX T06	0.003
SFCC 16	470500516002	8	17			CCGT 0602..			TS 25	TORX T08	0.003
SFCC 20	470500520002	8.5	21			CCGT 0602..			TS 25	TORX T08	0.005
SFCC 25	470500525002	10	26.5			CCGT 0602..			TS 25	TORX T08	0.01
SFCC 32	470500532002	11.5	34.5			CCGT 0602..			TS 25	TORX T08	0.02
SFCC 40	470500540002	14	44			CCGT 09T3..			TS 4	TORX T15	0.04
SFTP 25	470500525001	10	26.5				TPGX 0902..	CS 250T		TORX T08	0.01
SFTP 32	470500532001	11.5	34.5				TPGX 0902..	CS 250T		TORX T08	0.02
SFTP 40	470500540001	14	44				TPGX 1103..	CS 300890T		TORX T08	0.04
SFQC 16	470500516062	10	18	2		CCMT 0602..			TS 25	TORX T08	0.005
SFQC 20	470500520062	10.5	22.5	2		CCMT 0602..			TS 25	TORX T08	0.008
SFQC 25	470500525062	12	28.5	2.5		CCMT 0602..			TS 25	TORX T08	0.01
SFQC 32	470500532062	13.5	35.5	2.5		CCMT 0602..			TS 25	TORX T08	0.03
SFQC 40	470500540062	16.5	46	3		CCMT 09T3..			TS 4	TORX T15	0.06
SFSM 25-15°	470500525011	10	25.5		1.6	CCMT 0602..			TS 25	TORX T08	0.01
SFSM 25-30°	470500525013	10	25.5		3	CCMT 0602..			TS 25	TORX T08	0.01
SFSM 25-45°	470500525015	10	25.5		4.3	CCMT 0602..			TS 25	TORX T08	0.01
SFSM 32-15°	470500532011	11.5	33.5		1.6	CCMT 0602..			TS 25	TORX T08	0.02
SFSM 32-30°	470500532013	11.5	33.5		3	CCMT 0602..			TS 25	TORX T08	0.02
SFSM 32-45°	470500532015	11.5	33.5		4.3	CCMT 0602..			TS 25	TORX T08	0.02
SFSM 40-15°	470500540011	14	42.5		2.4	CCMT 09T3..			TS 4	TORX T15	0.03
SFSM 40-30°	470500540013	14	42.5		4.6	CCMT 09T3..			TS 4	TORX T15	0.03
SFSM 40-45°	470500540015	14	42.5		6.5	CCMT 09T3..			TS 4	TORX T15	0.03

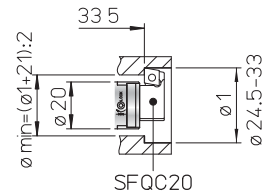
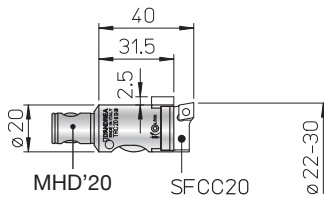
TRC 14 $\varnothing 14.5 \sim 18$



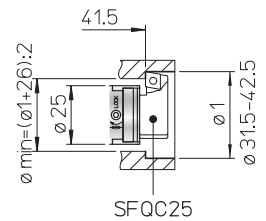
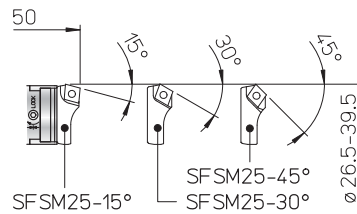
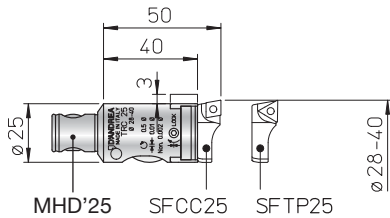
TRC 16 $\varnothing 18 \sim 24$



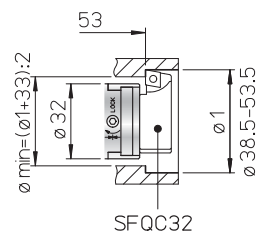
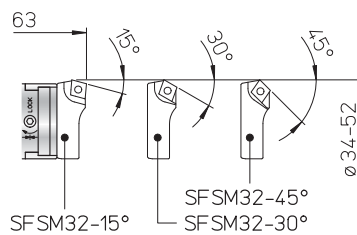
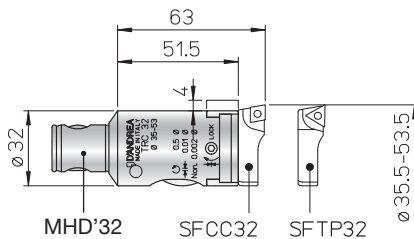
TRC 20 $\varnothing 22 \sim 30$



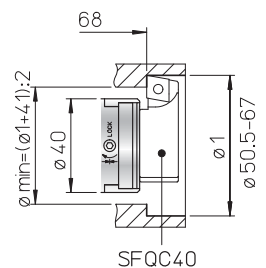
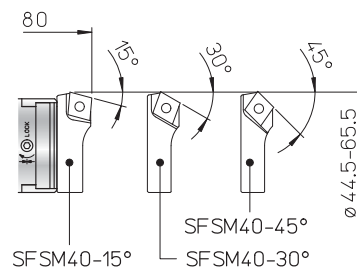
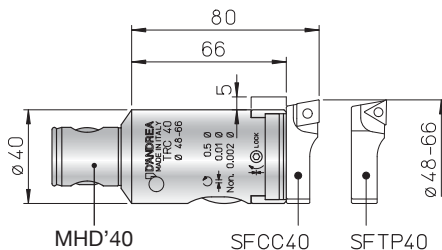
TRC 25 $\varnothing 28 \sim 40$



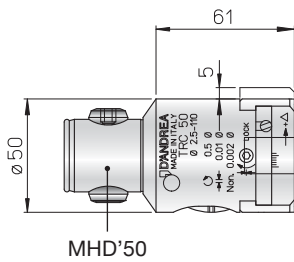
TRC 32 $\varnothing 35.5 \sim 53.5$



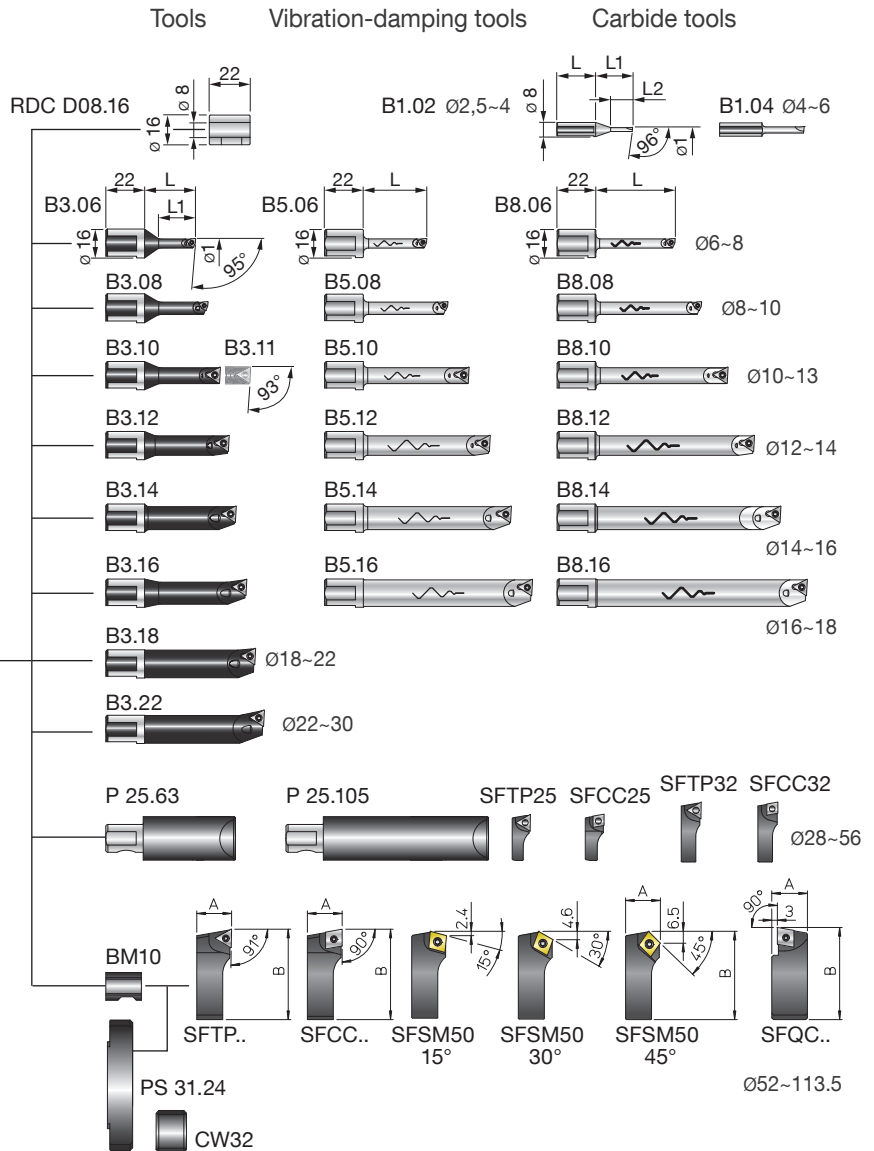
TRC 40 $\varnothing 48 \sim 66$



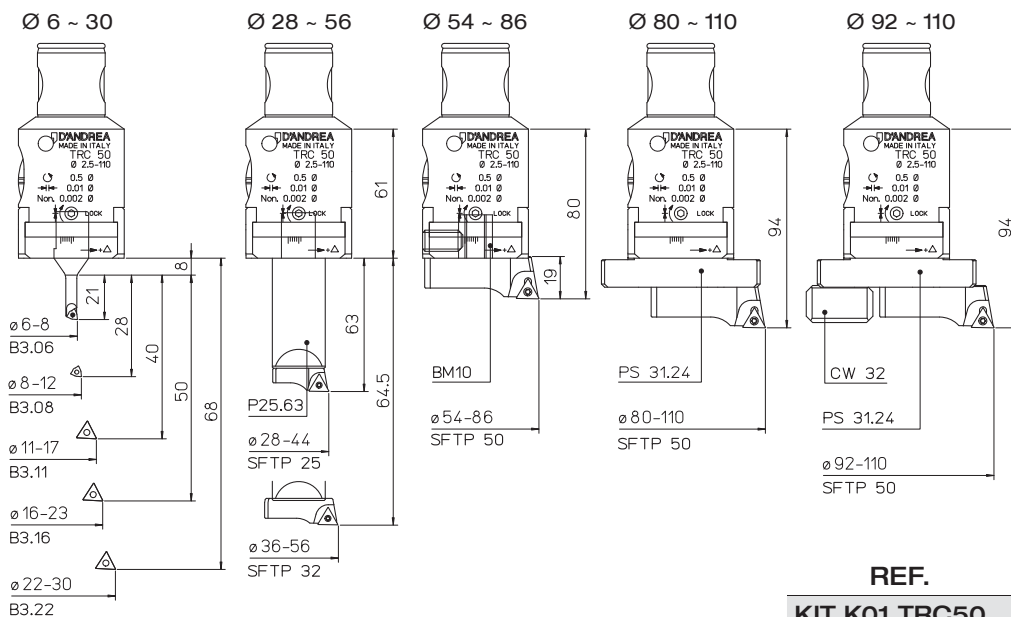
TRC 50 Ø 2.5 ~ 110



REF.	CODE	kg
TRC 50	455015000801	1
RDC D08.16	200560116082	0.02
P25.63 TR..	435116250631	0.5
P25.105 TR..	435116251051	0.8
PS 31.24 TR..	433024140751	0.19
CW 32	392011003201	0.07



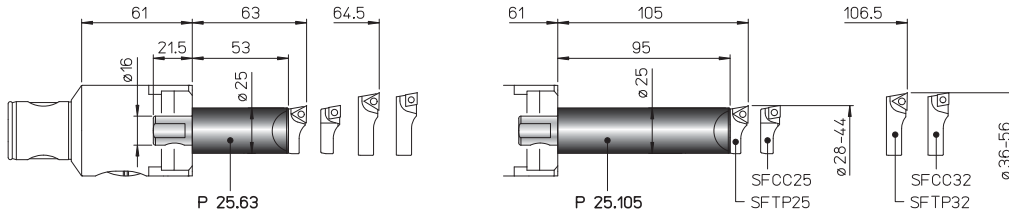
KIT K01 Ø 6 ~ 110



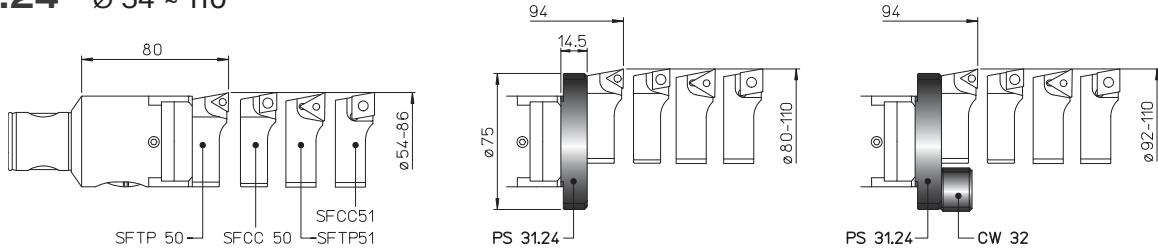
- 1 TRC 50
- 1 BM10
- 1 P25.63
- 1 PS 31.24
- 1 CW 32
- 1 B3.06
- 1 B3.08
- 1 B3.11
- 1 B3.16
- 1 B3.22
- 1 SFTP25
- 1 SFTP32
- 1 SFTP50
- 5 TPGX 090202L DC100
- 1 TPGX 110302L DC100
- 2 WCGT 020102L DC100

REF.	CODE	Ø	kg
KIT K01 TRC50	655015010502	6 ~ 110	3.1

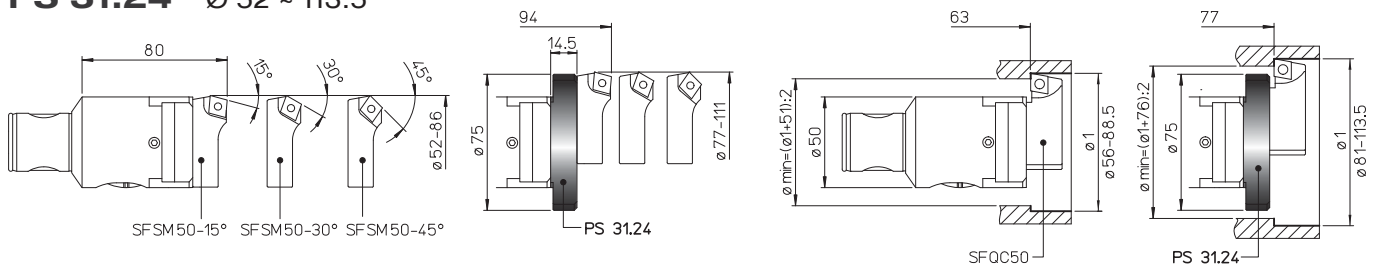
P 25 Ø 28 ~ 56



PS 31.24 Ø 54 ~ 110



PS 31.24 Ø 52 ~ 113.5

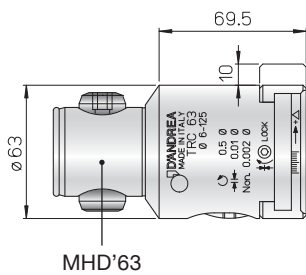


REF.	CODE	Ø1	L	L1	A	B	⊖	⊖	⊖	⊖	⊖	kg
SFTP 25	470500525001				10	26.5		TPGX 0902..		CS 250T	TORX T08	0.01
SFTP 32	470500532001				11.5	34.5		TPGX 0902..		CS 250T	TORX T08	0.02
SFTP 50	470500550001				19	52		TPGX 1103..		CS 300890T	TORX T08	0.08
SFTP 51	470500550003				21	52		TCMT 16T3..		TS 4	TORX T15	0.09
SFCC 25	470500525002				10	26.5		CCGT 0602..		TS 25	TORX T08	0.01
SFCC 32	470500532002				11.5	34.5		CCGT 0602..		TS 25	TORX T08	0.02
SFCC 50	470500550002				19	52		CCGT 09T3..		TS 4	TORX T15	0.08
SFCC 51	470500550004				21	52		CCMT 1204..		TS 5	TORX T25	0.09
SFQC 50	470500550062				20.5	53		CCMT 09T3..		TS 4	TORX T15	0.1
SFSM 50-15°	470500550011				19	50.5		CCMT 09T3..		TS 4	TORX T15	0.07
SFSM 50-30°	470500550013				19	50.5		CCMT 09T3..		TS 4	TORX T15	0.07
SFSM 50-45°	470500550015				19	50.5		CCMT 09T3..		TS 4	TORX T15	0.07
B1.02	572010502001	2.5 ~ 4	22	21								0.02
B1.04	572010504001	4 ~ 6	24	24								0.02
B3.06	572010506001	6 ~ 8	29	21		WCGT 0201..				TS 21	TORX T06	0.035
B3.08	572010508001	8 ~ 10	36	28		WCGT 0201..				TS 211	TORX T06	0.04
B3.10	572010510001	10 ~ 12	43	35			TPGX 0902..			CS 250 T	TORX T08	0.05
B3.11	572010511001	11 ~ 13	48	40			TPGX 0902..			CS 250 T	TORX T08	0.055
B3.12	572010512001	12 ~ 14	48	42			TPGX 0902..			CS 250 T	TORX T08	0.06
B3.14	572010514001	14 ~ 16	52	50			TPGX 0902..			CS 250 T	TORX T08	0.07
B3.16	572010516001	16 ~ 18	58	50			TPGX 0902..			CS 250 T	TORX T08	0.07
B3.18	572010518001	18 ~ 22	63				TPGX 0902..			CS 250 T	TORX T08	0.1
B3.22	572010522001	22 ~ 30	68				TPGX 0902..			CS 250 T	TORX T08	0.1
B5.06	572010506105	6 ~ 8	36			WCGT 0201..				TS 21	TORX T06	0.075
B5.08	572010508105	8 ~ 10	48			WCGT 0201..				TS 211	TORX T06	0.09
B5.10	572010510105	10 ~ 12	60				TPGX 0902..			CS 250 T	TORX T08	0.1
B5.12	572010512105	12 ~ 14	72				TPGX 0902..			CS 250 T	TORX T08	0.1
B5.14	572010514105	14 ~ 16	84				TPGX 0902..			CS 250 T	TORX T08	0.2
B5.16	572010516105	16 ~ 18	96				TPGX 0902..			CS 250 T	TORX T08	0.3
B8.06	572010506108	6 ~ 8	45			WCGT 0201..				TS 21	TORX T06	0.065
B8.08	572010508108	8 ~ 10	60			WCGT 0201..				TS 211	TORX T06	0.08
B8.10	572010510108	10 ~ 12	75				TPGX 0902..			CS 250 T	TORX T08	0.1
B8.12	572010512108	12 ~ 14	90				TPGX 0902..			CS 250 T	TORX T08	0.2
B8.14	572010514108	14 ~ 16	105				TPGX 0902..			CS 250 T	TORX T08	0.2
B8.16	572010516108	16 ~ 18	120				TPGX 0902..			CS 250 T	TORX T08	0.3

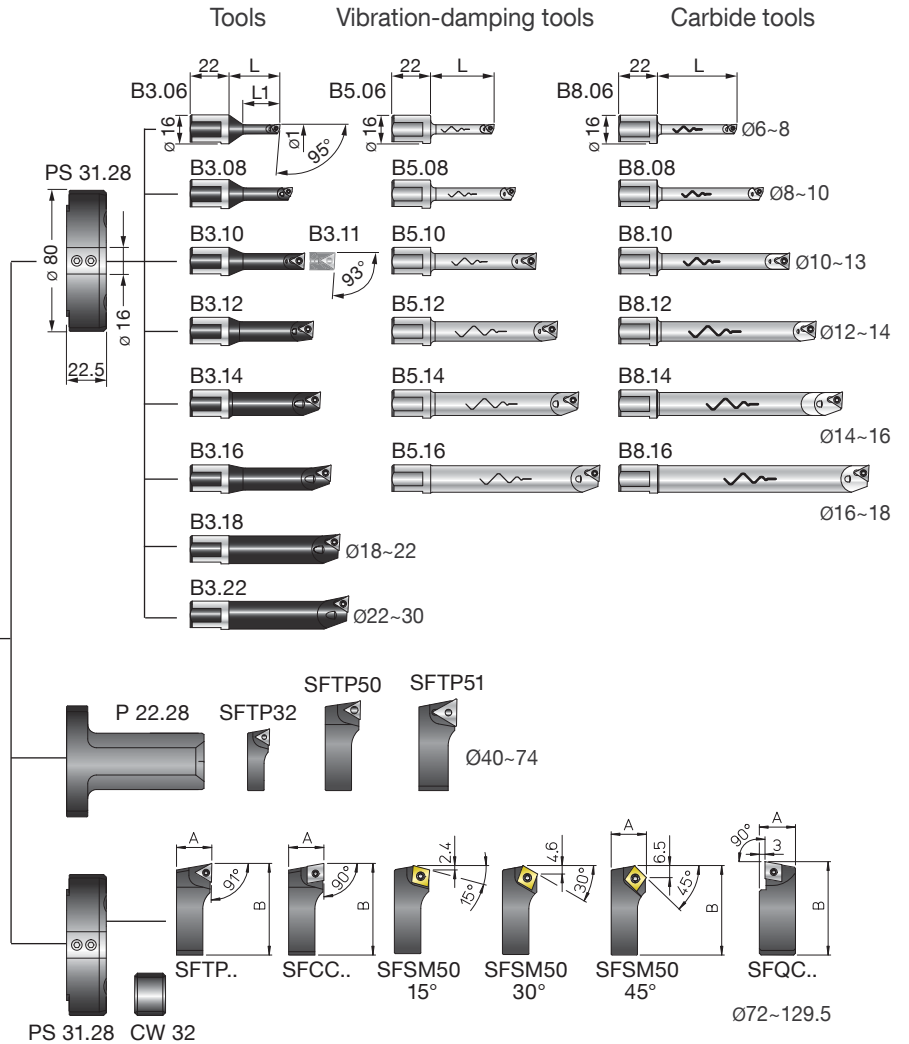
TRC 63 Ø 6 ~ 125



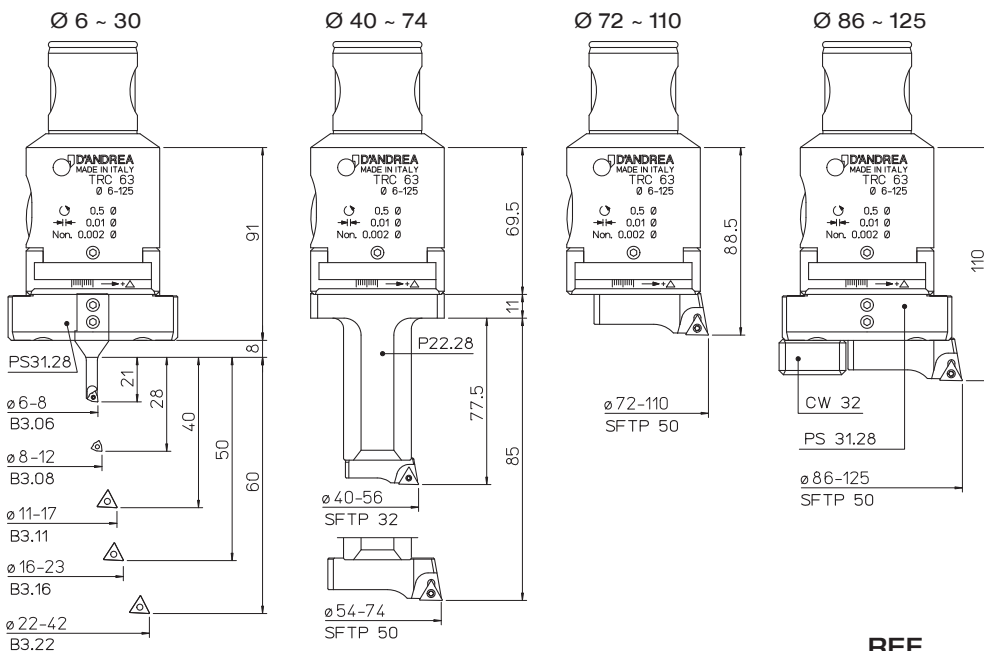
10 µm
nonio vernier
2 µm



REF.	CODE	kg
TRC 63	455016301001	2
P 22.28	433028220631	0.45
PS 31.28 TRC 63	433028220801	0.3
CW 32	392011003201	0.07



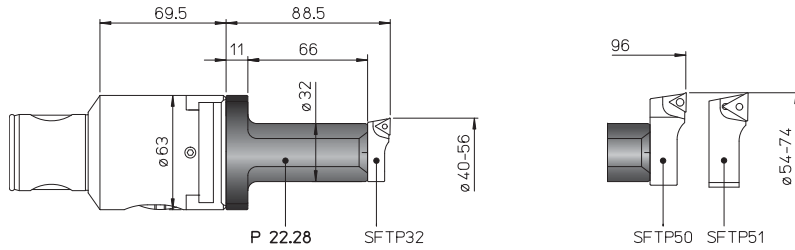
KIT K01 Ø 6 ~ 125



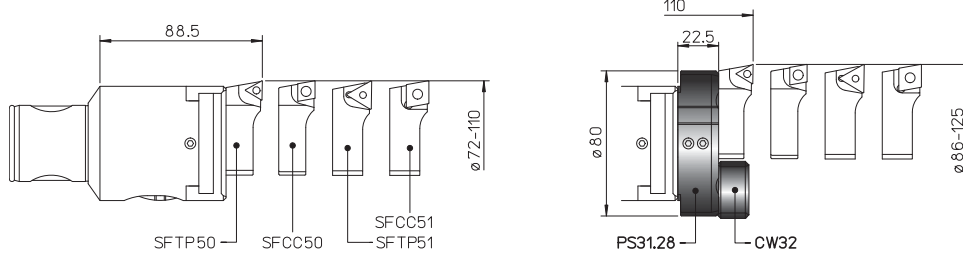
- 1 TRC 63
- 1 PS31.28
- 1 CW 32
- 1 P22.28
- 1 B3.06
- 1 B3.08
- 1 B3.11
- 1 B3.16
- 1 B3.22
- 1 SFTP32
- 1 SFTP50
- 5 TPGX 090202L DC100
- 1 TPGX 110302L DC100
- 2 WCGT 020102L DC100

REF.	CODE	Ø	kg
KIT K01 TRC 63	655016310632	6 ~ 125	4.5

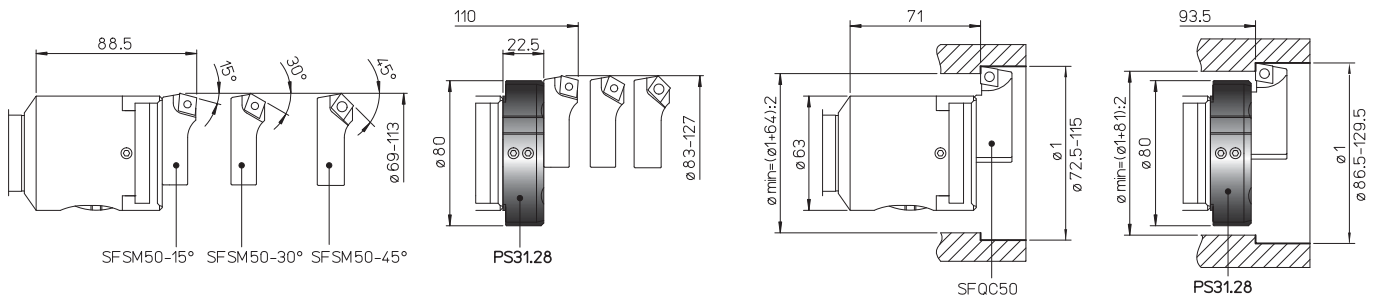
P 22 Ø 40 ~ 74



PS 31.28 Ø 72 ~ 125



PS 31.28 Ø 69 ~ 129.5

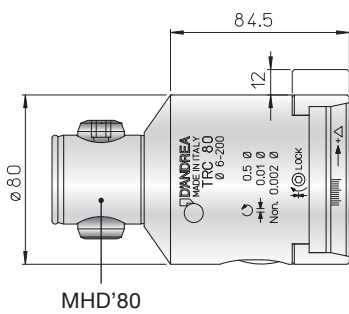


REF.	CODE	Ø1	L	L1	A	B	⚠	⚠	⚠	⚠	⚠	kg
SFTP 32	470500532001				11.5	34.5			TPGX 0902..	CS 250T	TORX T08	0.02
SFTP 50	470500550001				19	52			TPGX 1103..	CS 300890T	TORX T08	0.08
SFTP 51	470500550003				21	52			TCMT 16T3..	TS 4	TORX T15	0.09
SFCC 50	470500550002				19	52			CCGT 09T3..	TS 4	TORX T15	0.08
SFCC 51	470500550004				21	52			CCMT 1204..	TS 5	TORX T25	0.09
SFQC 50	470500550062				20.5	53			CCMT 09T3..	TS 4	TORXT15	0.1
SFSM 50-15°	470500550011				19	50.5			CCMT 09T3..	TS 4	TORXT15	0.07
SFSM 50-30°	470500550013				19	50.5			CCMT 09T3..	TS 4	TORXT15	0.07
SFSM 50-45°	470500550015				19	50.5			CCMT 09T3..	TS 4	TORXT15	0.07
B3.06	572010506001	6 ~ 8	29	21			WCGT 0201..			TS 21	TORX T06	0.035
B3.08	572010508001	8 ~ 10	36	28			WCGT 0201..			TS 211	TORX T06	0.04
B3.10	572010510001	10 ~ 12	43	35				TPGX 0902..	CS 250 T	TORX T08	0.05	
B3.11	572010511001	11 ~ 13	48	40				TPGX 0902..	CS 250 T	TORX T08	0.055	
B3.12	572010512001	12 ~ 14	48	42				TPGX 0902..	CS 250 T	TORX T08	0.06	
B3.14	572010514001	14 ~ 16	52	50				TPGX 0902..	CS 250 T	TORX T08	0.07	
B3.16	572010516001	16 ~ 18	58	50				TPGX 0902..	CS 250 T	TORX T08	0.07	
B3.18	572010518001	18 ~ 22	63					TPGX 0902..	CS 250 T	TORX T08	0.1	
B3.22	572010522001	22 ~ 30	68					TPGX 0902..	CS 250 T	TORX T08	0.1	
B5.06	572010506105	6 ~ 8	36				WCGT 0201..			TS 21	TORX T06	0.075
B5.08	572010508105	8 ~ 10	48				WCGT 0201..			TS 211	TORX T06	0.09
B5.10	572010510105	10 ~ 12	60					TPGX 0902..	CS 250 T	TORX T08	0.1	
B5.12	572010512105	12 ~ 14	72					TPGX 0902..	CS 250 T	TORX T08	0.1	
B5.14	572010514105	14 ~ 16	84					TPGX 0902..	CS 250 T	TORX T08	0.2	
B5.16	572010516105	16 ~ 18	96					TPGX 0902..	CS 250 T	TORX T08	0.3	
B8.06	572010506108	6 ~ 8	45				WCGT 0201..			TS 21	TORX T06	0.065
B8.08	572010508108	8 ~ 10	60				WCGT 0201..			TS 211	TORX T06	0.08
B8.10	572010510108	10 ~ 12	75					TPGX 0902..	CS 250 T	TORX T08	0.1	
B8.12	572010512108	12 ~ 14	90					TPGX 0902..	CS 250 T	TORX T08	0.2	
B8.14	572010514108	14 ~ 16	105					TPGX 0902..	CS 250 T	TORX T08	0.2	
B8.16	572010516108	16 ~ 18	120					TPGX 0902..	CS 250 T	TORX T08	0.3	

TRC 80 Ø 6 ~ 200

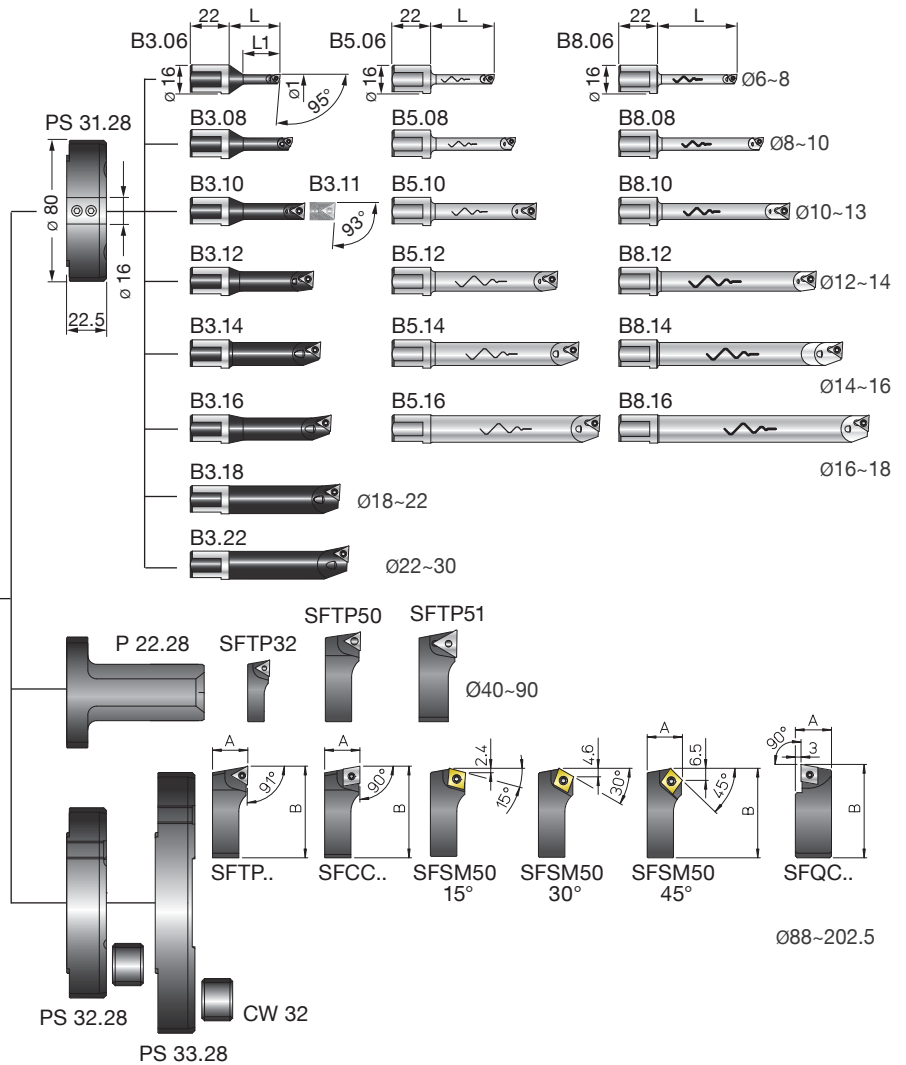


10 µm
nonio
vernier **2 µm**

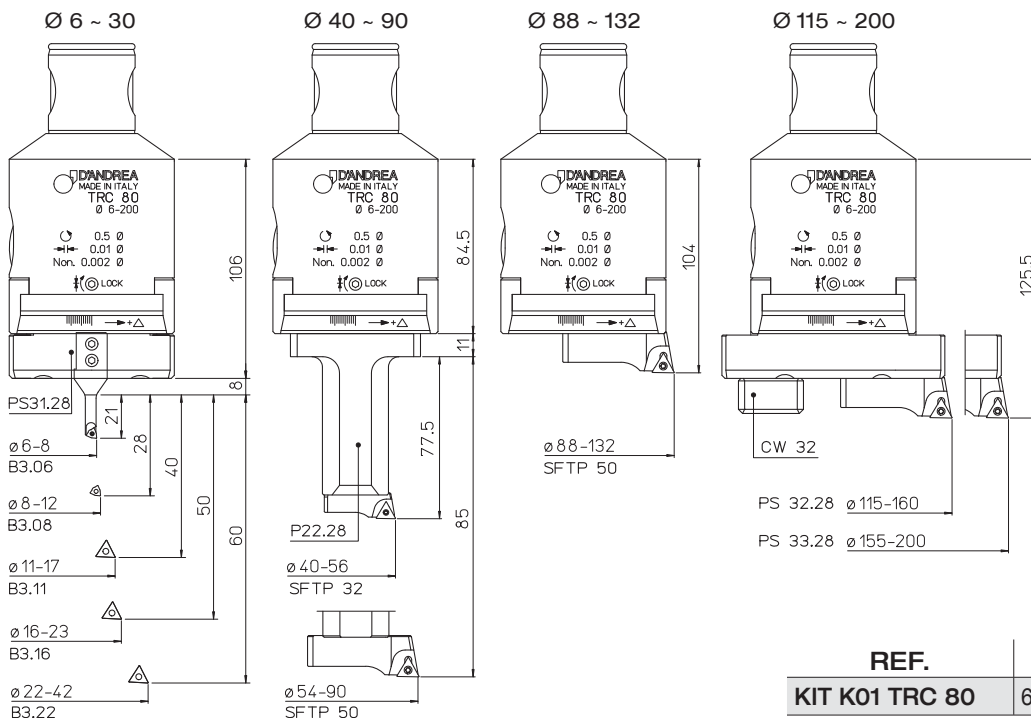


REF.	CODE	kg
TRC 80	455018001201	3.8
P 22.28	433028220631	0.45
PS 31.28 TRC 80	433028220801	0.3
PS 32.28 TRC 80	433028221081	0.5
PS 33.28 TRC 80	433028221481	0.6
CW 32	392011003201	0.07

Tools Vibration-damping tools Carbide tools



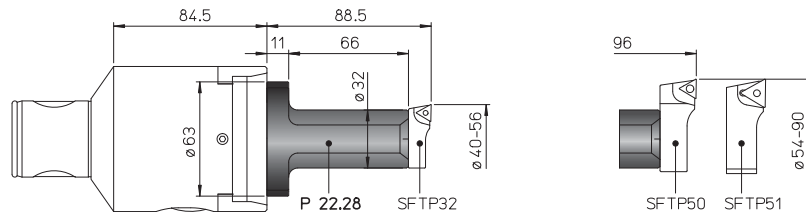
KIT K01 Ø 6 ~ 200



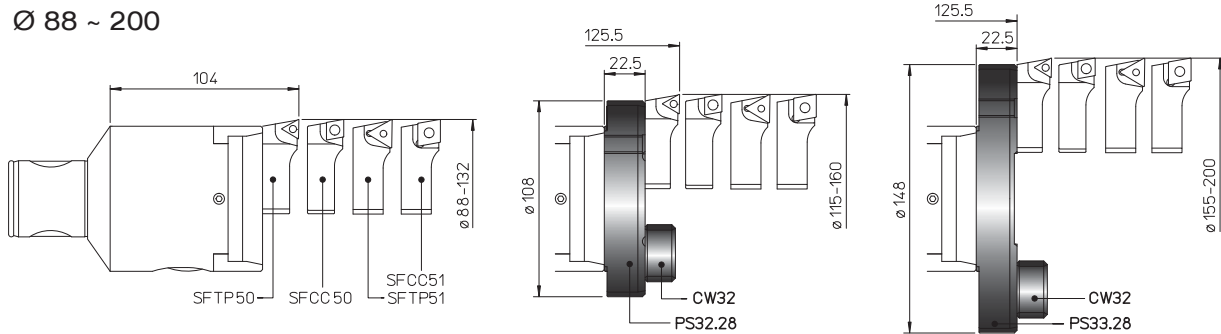
- 1 TRC 80
- 1 PS31.28
- 1 PS32.28
- 1 PS33.28
- 1 CW 32
- 1 P22.28
- 1 B3.06
- 1 B3.08
- 1 B3.11
- 1 B3.16
- 1 B3.22
- 1 SFTP32
- 1 SFTP50
- 5 TPGX 090202L DC100
- 1 TPGX 110302L DC100
- 2 WCGT 020102L DC100

REF.	CODE	Ø	kg
KIT K01 TRC 80	655018010802	6 ~ 200	7.3

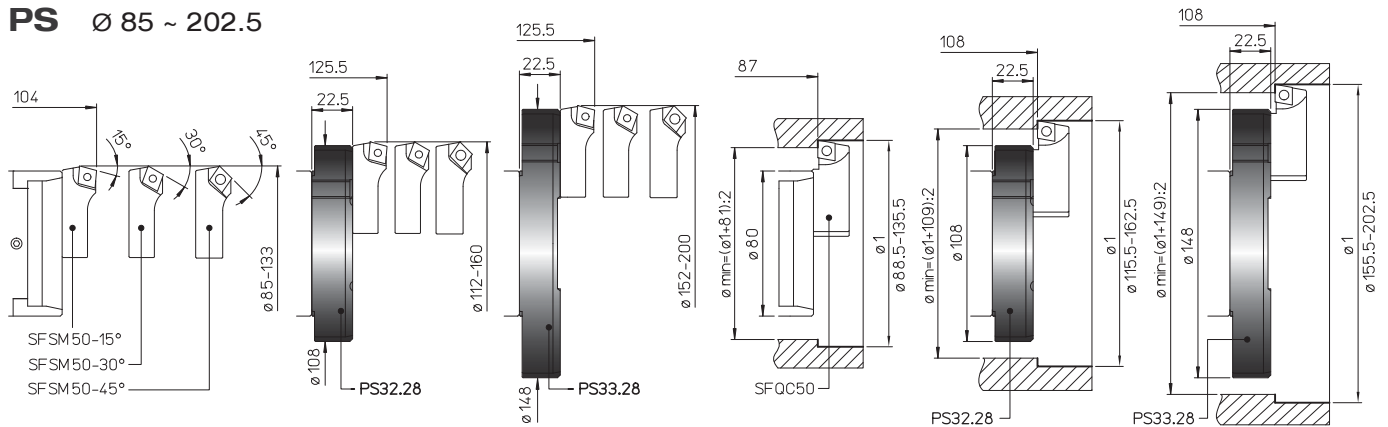
P 22 Ø 40 ~ 90



PS Ø 88 ~ 200



PS Ø 85 ~ 202.5



REF.	CODE	Ø1	L	L1	A	B						kg
SFTP 32	470500532001				11.5	34.5		TPGX 0902..		CS 250T	TORX T08	0.02
SFTP 50	470500550001				19	52		TPGX 1103..		CS 300890T	TORX T08	0.08
SFTP 51	470500550003				21	52		TCMT 16T3..		TS 4	TORX T15	0.09
SFCC 50	470500550002				19	52		CCGT 09T3..		TS 4	TORX T15	0.08
SFCC 51	470500550004				21	52		CCMT 1204..		TS 5	TORX T25	0.09
SFQC 50	470500550062				20.5	53		CCMT 09T3..		TS 4	TORXT15	0.1
SFSM 50-15°	470500550011				19	50.5		CCMT 09T3..		TS 4	TORXT15	0.07
SFSM 50-30°	470500550013				19	50.5		CCMT 09T3..		TS 4	TORXT15	0.07
SFSM 50-45°	470500550015				19	50.5		CCMT 09T3..		TS 4	TORXT15	0.07
B3.06	572010506001	6 ~ 8	29	21			WCGT 0201..			TS 21	TORX T06	0.035
B3.08	572010508001	8 ~ 10	36	28			WCGT 0201..			TS 211	TORX T06	0.04
B3.10	572010510001	10 ~ 12	43	35			TPGX 0902..		CS 250 T	TORX T08	0.05	
B3.11	572010511001	11 ~ 13	48	40			TPGX 0902..		CS 250 T	TORX T08	0.055	
B3.12	572010512001	12 ~ 14	48	42			TPGX 0902..		CS 250 T	TORX T08	0.06	
B3.14	572010514001	14 ~ 16	52	50			TPGX 0902..		CS 250 T	TORX T08	0.07	
B3.16	572010516001	16 ~ 18	58	50			TPGX 0902..		CS 250 T	TORX T08	0.07	
B3.18	572010518001	18 ~ 22	63				TPGX 0902..		CS 250 T	TORX T08	0.1	
B3.22	572010522001	22 ~ 30	68				TPGX 0902..		CS 250 T	TORX T08	0.1	
B5.06	572010506105	6 ~ 8	36				WCGT 0201..			TS 21	TORX T06	0.075
B5.08	572010508105	8 ~ 10	48				WCGT 0201..			TS 211	TORX T06	0.09
B5.10	572010510105	10 ~ 12	60				TPGX 0902..		CS 250 T	TORX T08	0.1	
B5.12	572010512105	12 ~ 14	72				TPGX 0902..		CS 250 T	TORX T08	0.1	
B5.14	572010514105	14 ~ 16	84				TPGX 0902..		CS 250 T	TORX T08	0.2	
B5.16	572010516105	16 ~ 18	96				TPGX 0902..		CS 250 T	TORX T08	0.3	
B8.06	572010506108	6 ~ 8	45				WCGT 0201..			TS 21	TORX T06	0.065
B8.08	572010508108	8 ~ 10	60				WCGT 0201..			TS 211	TORX T06	0.08
B8.10	572010510108	10 ~ 12	75				TPGX 0902..		CS 250 T	TORX T08	0.1	
B8.12	572010512108	12 ~ 14	90				TPGX 0902..		CS 250 T	TORX T08	0.2	
B8.14	572010514108	14 ~ 16	105				TPGX 0902..		CS 250 T	TORX T08	0.2	
B8.16	572010516108	16 ~ 18	120				TPGX 0902..		CS 250 T	TORX T08	0.3	

TRC 32 HS

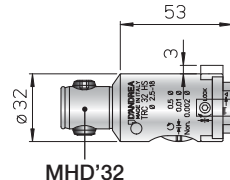
TRM 32 HSB Ø 2.5 ~ 18



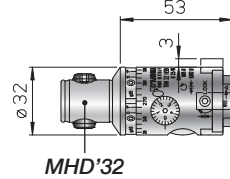
10 µm
nonio
vernier **2 µm**



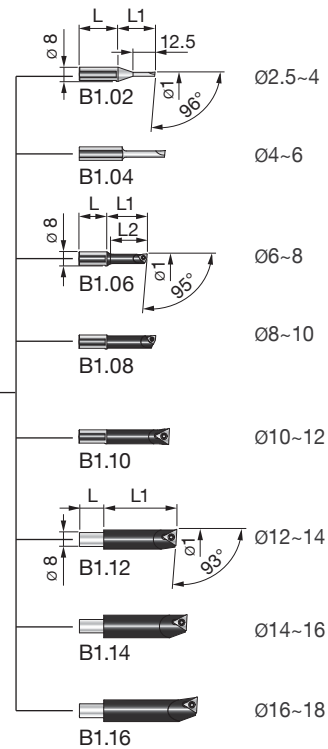
2 µm



MHD'32



MHD'32



REF.	CODE	Ø	kg
TRC 32 HS	455033200531	2.5 ~ 18	0.35
TRM 32 HSB	455103200531	2.5 ~ 18	0.35

KIT K01 TRC 32 HS Ø 2.5 ~ 12

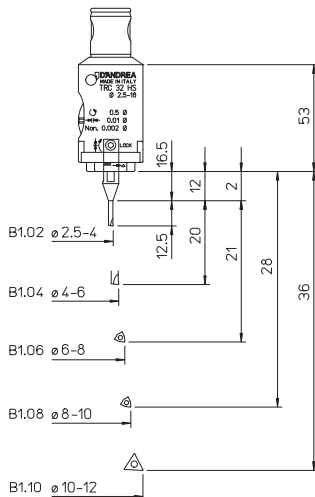
REF.	CODE	Ø	kg
KIT K01 TRC 32 HS	655033230322	2.5 ~ 12	1

KIT K01 TRM 32 HSB Ø 2.5 ~ 12

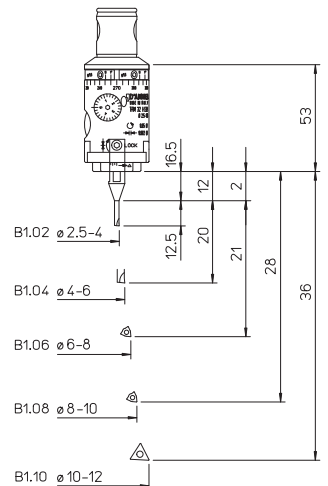
REF.	CODE	Ø	kg
KIT K01 TRM 32 HSB	655003230321	2.5 ~ 12	1



- 1 TRC 32 HS
- 1 B1.02
- 1 B1.04
- 1 B1.06
- 1 B1.08
- 1 B1.10
- 5 TPGX 090202L DC100
- 2 WCGT 020102L DC100



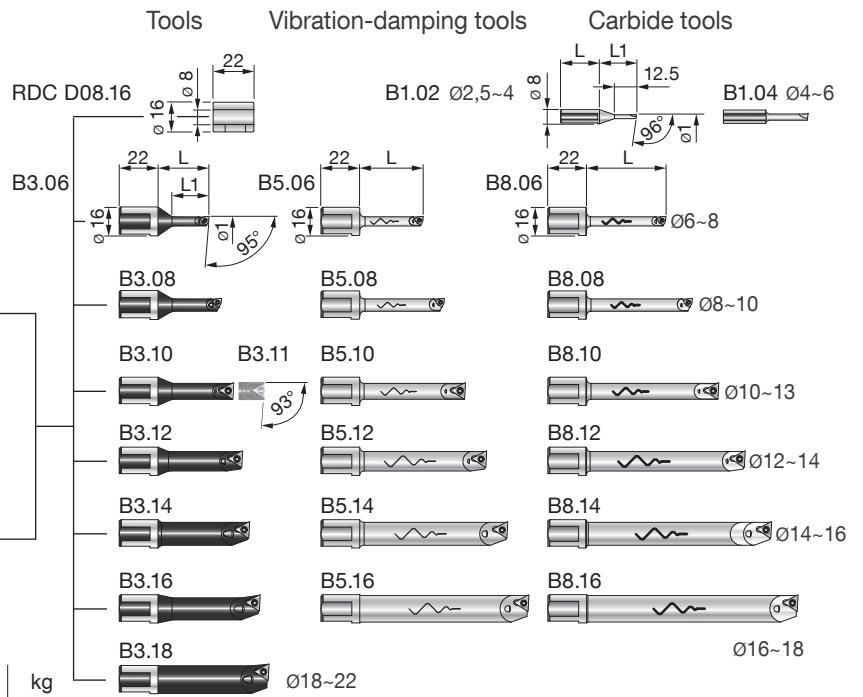
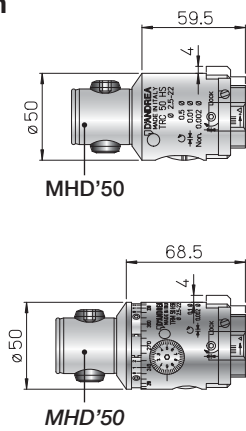
- 1 TRM 32 HSB
- 1 B1.02
- 1 B1.04
- 1 B1.06
- 1 B1.08
- 1 B1.10
- 5 TPGX 090202L DC100
- 2 WCGT 020102L DC100



REF.	CODE	Ø1	L	L1	⊕	⊖	⊓	⊔	kg
B1.02	572010502001	2.5 ~ 4	22	21					0.02
B1.04	572010504001	4 ~ 6	24	24					0.02
B1.06	572010506000	6 ~ 8	16	23	WCGT 0201..		TS 21	TORX T06	0.01
B1.08	572010508000	8 ~ 10	16	28	WCGT 0201..		TS 211	TORX T06	0.015
B1.10	572010510000	10 ~ 12	16	36		TPGX 0902..	CS 250 T	TORX T08	0.02
B1.12	572010512000	12 ~ 14	14	42		TPGX 0902..	CS 250 T	TORX T08	0.03
B1.14	572010514000	14 ~ 16	14	48		TPGX 0902..	CS 250 T	TORX T08	0.04
B1.16	572010516000	16 ~ 18	14	54		TPGX 0902..	CS 250 T	TORX T08	0.05

TRC HS HIGH SPEED - TRM HSB BALANCEABLE *testarossa*

TRC 50 HS TRM 50 HSB Ø 2.5 ~ 22



REF.	CODE	Ø	kg
TRC 50 HS	455035000601	2.5 ~ 22	1
TRM 50 HSB	455105000701	2.5 ~ 22	1.4

REF.	CODE	kg
RDC D08.16	200560116082	0.02

KIT K01 TRC 50 HS Ø 6 ~ 22

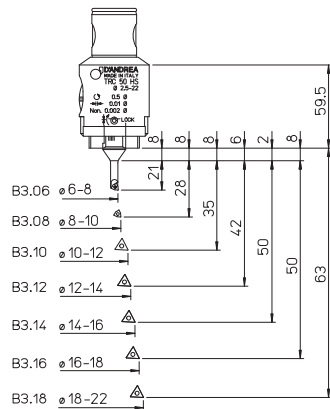
REF.	CODE	Ø	kg
KIT K01 TRC 50 HS	655035030502	6 ~ 22	1.8

KIT K01 TRM 50 HSB Ø 6 ~ 22

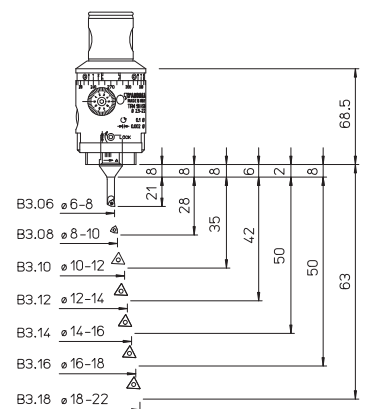
REF.	CODE	Ø	kg
KIT K01 TRM 50 HSB	655005030501	6 ~ 22	2.1



- 1 TRM 50 HSB
- 1 B3.06
- 1 B3.08
- 1 B3.10
- 1 B3.12
- 1 B3.14
- 1 B3.16
- 1 B3.18
- 5 TPGX 090202L DC100
- 2 WCGT 020102L DC100



- 1 TRM 50 HSB
- 1 B3.06
- 1 B3.08
- 1 B3.10
- 1 B3.12
- 1 B3.14
- 1 B3.16
- 1 B3.18
- 5 TPGX 090202L DC100
- 2 WCGT 020102L DC100



REF.	CODE	Ø1	L	L1	⚠	⚠	🔧	🔧	kg
B1.02	572010502001	2.5 - 4	22	21					0.02
B1.04	572010504001	4 - 6	24	24					0.02
B3.06	572010506001	6 - 8	29	21	WCGT 0201..		TS 21	TORX T06	0.035
B3.08	572010508001	8 - 10	36	28	WCGT 0201..		TS 211	TORX T06	0.04
B3.10	572010510001	10 - 12	43	35		TPGX 0902..	CS 250 T	TORX T08	0.05
B3.11	572010511001	11 - 13	48	40		TPGX 0902..	CS 250 T	TORX T08	0.055
B3.12	572010512001	12 - 14	48	42		TPGX 0902..	CS 250 T	TORX T08	0.06
B3.14	572010514001	14 - 16	52	50		TPGX 0902..	CS 250 T	TORX T08	0.07
B3.16	572010516001	16 - 18	58	50		TPGX 0902..	CS 250 T	TORX T08	0.07
B3.18	572010518001	18 - 22	63			TPGX 0902..	CS 250 T	TORX T08	0.1
B5.06	572010506105	6 - 8	36		WCGT 0201..		TS 21	TORX T06	0.075
B5.08	572010508105	8 - 10	48		WCGT 0201..		TS 211	TORX T06	0.09
B5.10	572010510105	10 - 12	60			TPGX 0902..	CS 250 T	TORX T08	0.1
B5.12	572010512105	12 - 14	72			TPGX 0902..	CS 250 T	TORX T08	0.1
B5.14	572010514105	14 - 16	84			TPGX 0902..	CS 250 T	TORX T08	0.2
B5.16	572010516105	16 - 18	96			TPGX 0902..	CS 250 T	TORX T08	0.3
B8.06	572010506108	6 - 8	45		WCGT 0201..		TS 21	TORX T06	0.065
B8.08	572010508108	8 - 10	60		WCGT 0201..		TS 211	TORX T06	0.08
B8.10	572010510108	10 - 12	75			TPGX 0902..	CS 250 T	TORX T08	0.1
B8.12	572010512108	12 - 14	90			TPGX 0902..	CS 250 T	TORX T08	0.2
B8.14	572010514108	14 - 16	105			TPGX 0902..	CS 250 T	TORX T08	0.2
B8.16	572010516108	16 - 18	120			TPGX 0902..	CS 250 T	TORX T08	0.3

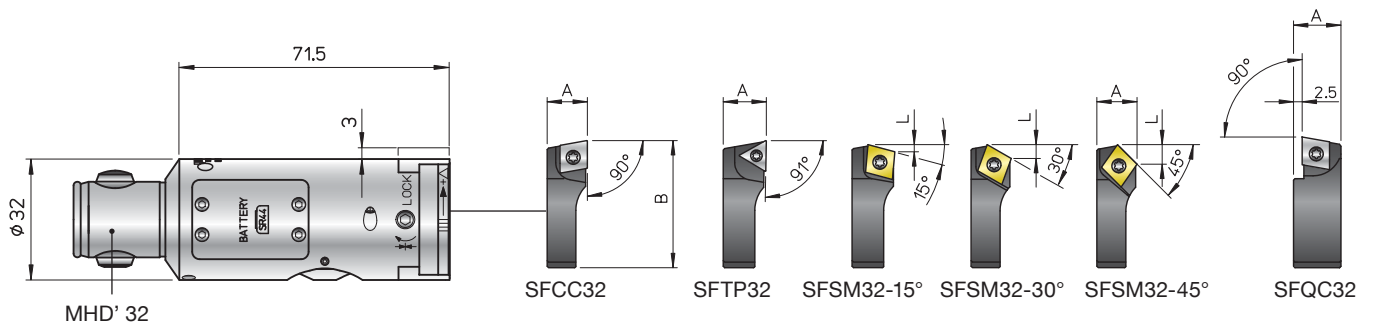
TRE 32 MHD' Ø 35.5 ~ 51.5



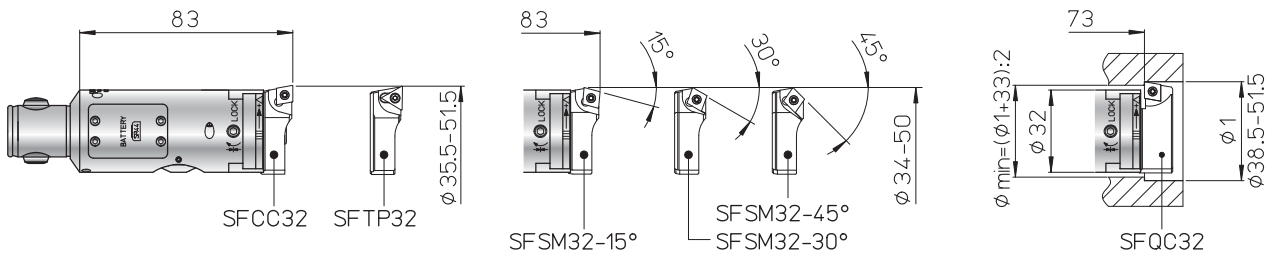
2 µm

REF.	CODE	Ø	kg
TRE 32 MHD'32 69K	455200320321 •	35.5 ~ 51.5	0.4

• Subject to stock availability



REF.	CODE	A	B	L					kg
SFCC 32	470500532002	11.5	34.5		CCGT 0602..		TS 25	TORX T08	0.02
SFTP 32	470500532001	11.5	34.5			TPGX 0902..	CS 250T	TORX T08	0.02
SFQC 32	470500532062	13.5	35.5		CCMT 0602..		TS 25	TORX T08	0.03
SFSM 32-15°	470500532011	11.5	33.5	1.6	CCMT 0602..		TS 25	TORX T08	0.02
SFSM 32-30°	470500532013	11.5	33.5	3	CCMT 0602..		TS 25	TORX T08	0.02
SFSM 32-45°	470500532015	11.5	33.5	4.3	CCMT 0602..		TS 25	TORX T08	0.02



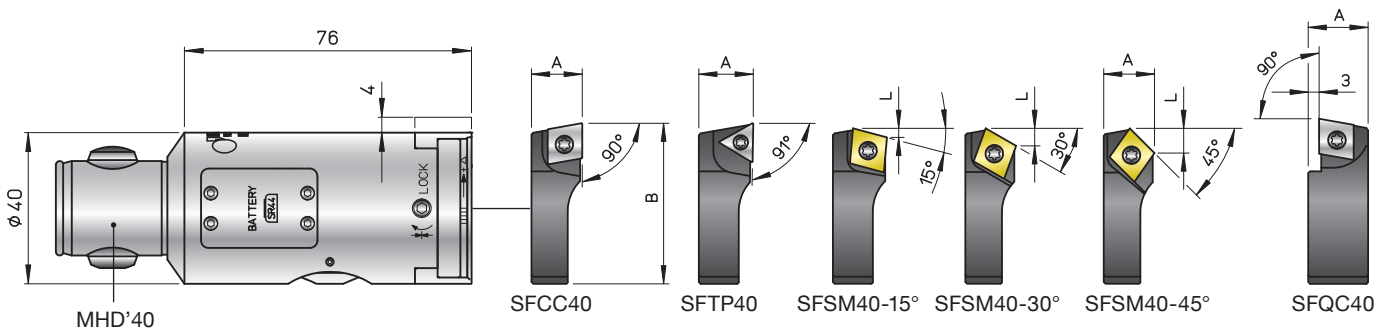
TRE 40 MHD' Ø 48 ~ 64



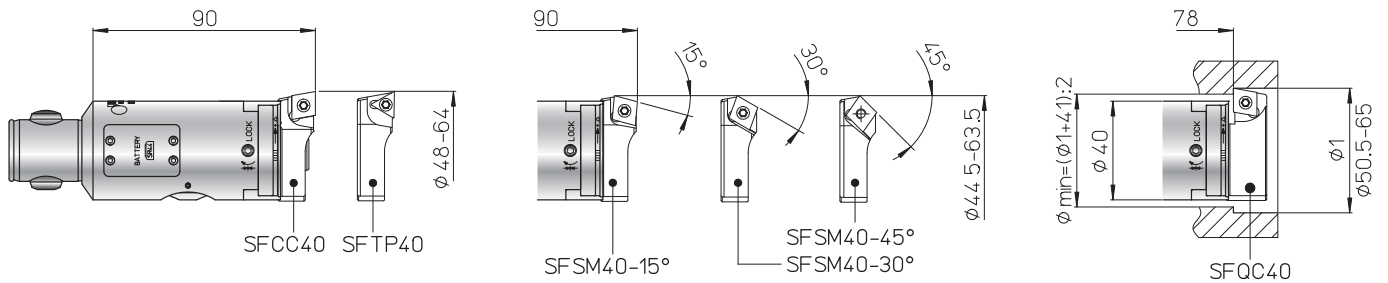
2 μm

REF.	CODE	Ø	kg
TRE 40 MHD'40 69K	455200400401 •	48 ~ 64	0.7

• Subject to stock availability



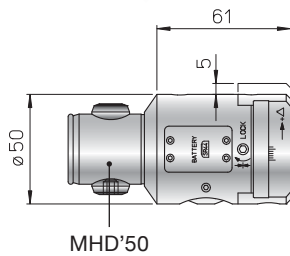
REF.	CODE	A	B	L	□	△	▭	⌘	kg
SFCC 40	470500540002	14	44		CCGT 09T3..		TS 4	TORX T15	0.04
SFTP 40	470500540001	14	44			TPGX 1103..	CS 300890T	TORX T08	0.04
SFQC 40	470500540062	16.5	46		CCMT 09T3..		TS 4	TORXT15	0.06
SFSM 40-15°	470500540011	14	42.5	2.4	CCMT 09T3..		TS 4	TORXT15	0.03
SFSM 40-30°	470500540013	14	42.5	4.6	CCMT 09T3..		TS 4	TORXT15	0.03
SFSM 40-45°	470500540015	14	42.5	6.6	CCMT 09T3..		TS 4	TORXT15	0.03



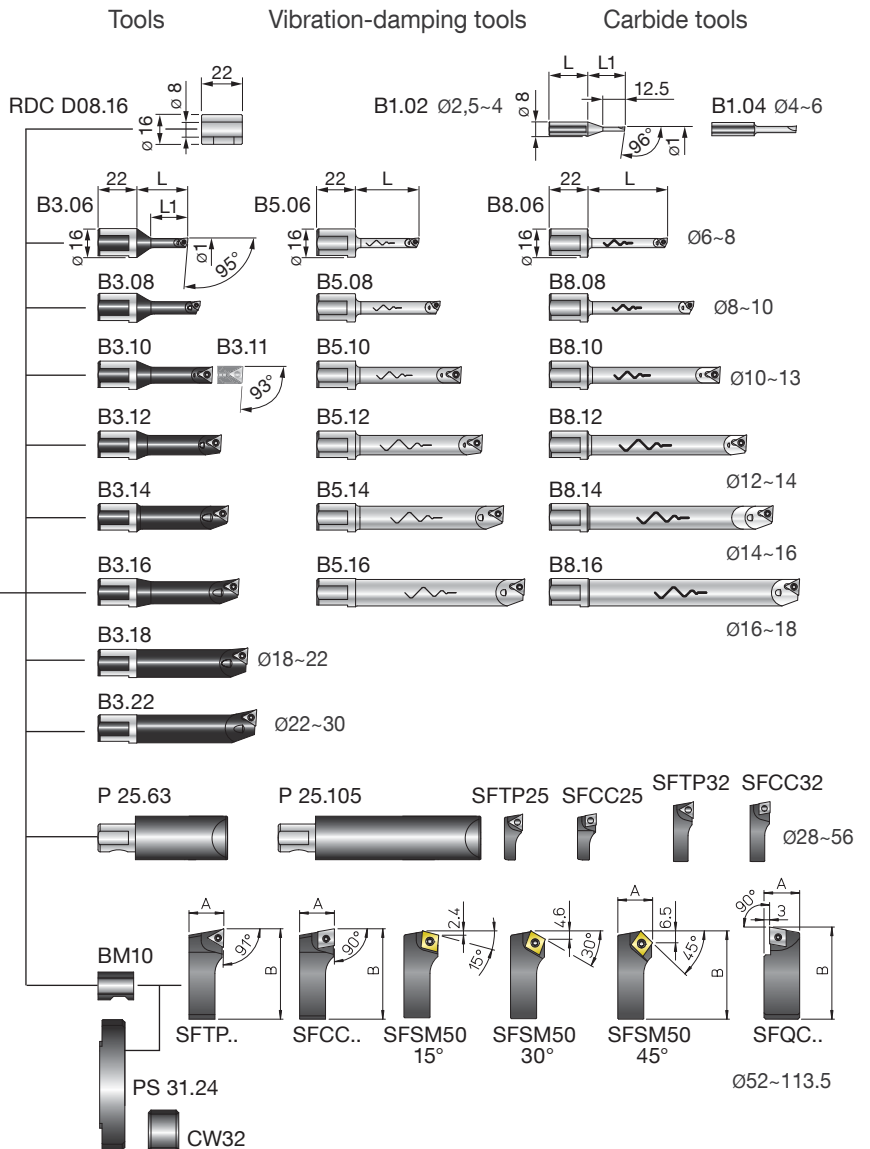
TRE 50 MHD' Ø 2.5 ~ 110



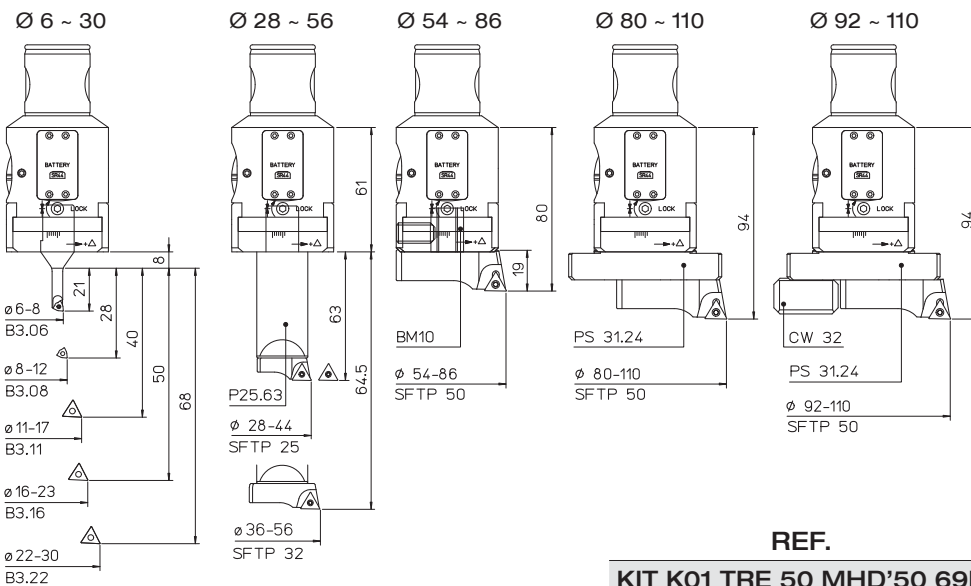
2 µm



REF.	CODE	kg
TRE 50 MHD'50 69K	455200500501	1.1
RDC D08.16	200560116082	0.02
P25.63 TR..	435116250631	0.5
P25.105 TR..	435116251051	0.8
PS 31.24 TR..50	433024140751	0.19
CW 32	392011003201	0.07



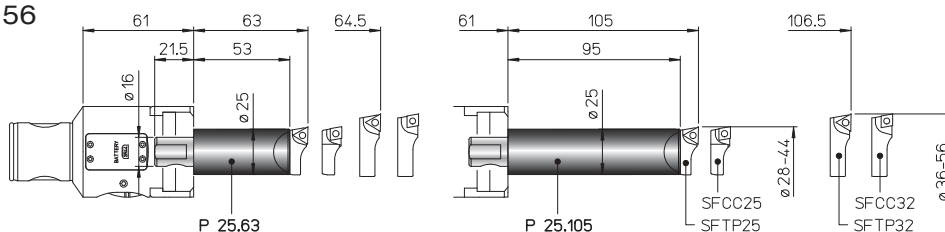
KIT K01 Ø 6 ~ 110



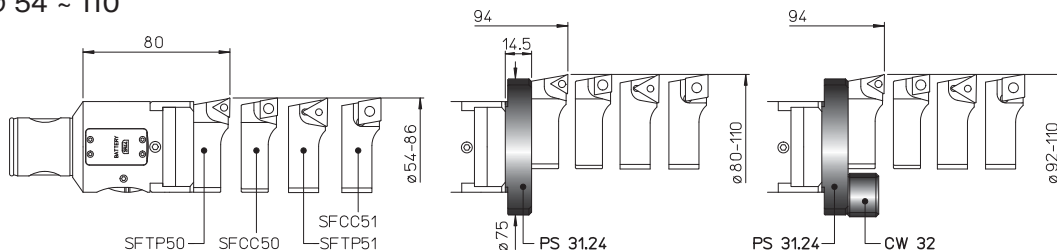
- 1 TRE 50 MHD'50
- 1 BM10
- 1 P25.63
- 1 PS 31.24
- 1 CW 32
- 1 B3.06
- 1 B3.08
- 1 B3.11
- 1 B3.16
- 1 B3.22
- 1 SFTP25
- 1 SFTP32
- 1 SFTP50
- 5 TPGX 090202L DC100
- 1 TPGX 110302L DC100
- 2 WCGT 020102L DC100

REF.	CODE	Ø	kg
KIT K01 TRE 50 MHD'50 69K	655200500502	6 ~ 110	3.1

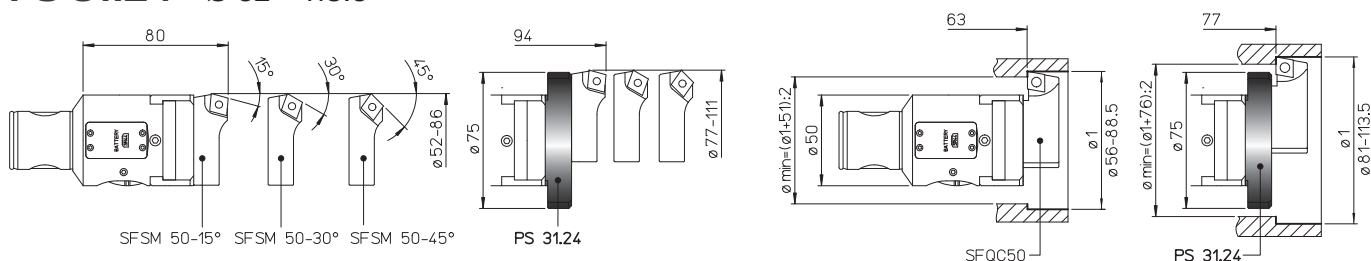
P 25 Ø 28 ~ 56



PS 31.24 Ø 54 ~ 110



PS 31.24 Ø 52 ~ 113.5

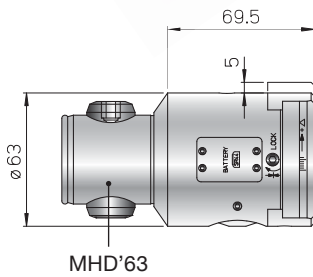


REF.	CODE	Ø1	L	L1	A	B						kg
SFTP 25	470500525001				10	26.5		TPGX 0902..		CS 250T	TORX T08	0.01
SFTP 32	470500532001				11.5	34.5		TPGX 0902..		CS 250T	TORX T08	0.02
SFTP 50	470500550001				19	52		TPGX 1103..		CS 300890T	TORX T08	0.08
SFTP 51	470500550003				21	52		TCMT 16T3..		TS 4	TORX T15	0.09
SFCC 25	470500525002				10	26.5		CCGT 0602..		TS 25	TORX T08	0.01
SFCC 32	470500532002				11.5	34.5		CCGT 0602..		TS 25	TORX T08	0.02
SFCC 50	470500550002				19	52		CCGT 09T3..		TS 4	TORX T15	0.08
SFCC 51	470500550004				21	52		CCMT 1204..		TS 5	TORX T25	0.09
SFQC 50	470500550062				20.5	53		CCMT 09T3..		TS 4	TORXT15	0.1
SFSM 50-15°	470500550011				19	50.5		CCMT 09T3..		TS 4	TORXT15	0.07
SFSM 50-30°	470500550013				19	50.5		CCMT 09T3..		TS 4	TORXT15	0.07
SFSM 50-45°	470500550015				19	50.5		CCMT 09T3..		TS 4	TORXT15	0.07
B1.02	572010502001	2.5 ~ 4	22	21								0.02
B1.04	572010504001	4 ~ 6	24	24								0.02
B3.06	572010506001	6 ~ 8	29	21		WCGT 0201..				TS 21	TORX T06	0.035
B3.08	572010508001	8 ~ 10	36	28		WCGT 0201..				TS 211	TORX T06	0.04
B3.10	572010510001	10 ~ 12	43	35			TPGX 0902..			CS 250 T	TORX T08	0.05
B3.11	572010511001	11 ~ 13	48	40			TPGX 0902..			CS 250 T	TORX T08	0.055
B3.12	572010512001	12 ~ 14	48	42			TPGX 0902..			CS 250 T	TORX T08	0.06
B3.14	572010514001	14 ~ 16	52	50			TPGX 0902..			CS 250 T	TORX T08	0.07
B3.16	572010516001	16 ~ 18	58	50			TPGX 0902..			CS 250 T	TORX T08	0.07
B3.18	572010518001	18 ~ 22	63				TPGX 0902..			CS 250 T	TORX T08	0.1
B3.22	572010522001	22 ~ 30	68				TPGX 0902..			CS 250 T	TORX T08	0.1
B5.06	572010506105	6 ~ 8	36			WCGT 0201..				TS 21	TORX T06	0.075
B5.08	572010508105	8 ~ 10	48			WCGT 0201..				TS 211	TORX T06	0.09
B5.10	572010510105	10 ~ 12	60				TPGX 0902..			CS 250 T	TORX T08	0.1
B5.12	572010512105	12 ~ 14	72				TPGX 0902..			CS 250 T	TORX T08	0.1
B5.14	572010514105	14 ~ 16	84				TPGX 0902..			CS 250 T	TORX T08	0.2
B5.16	572010516105	16 ~ 18	96				TPGX 0902..			CS 250 T	TORX T08	0.3
B8.06	572010506108	6 ~ 8	45			WCGT 0201..				TS 21	TORX T06	0.065
B8.08	572010508108	8 ~ 10	60			WCGT 0201..				TS 211	TORX T06	0.08
B8.10	572010510108	10 ~ 12	75				TPGX 0902..			CS 250 T	TORX T08	0.1
B8.12	572010512108	12 ~ 14	90				TPGX 0902..			CS 250 T	TORX T08	0.2
B8.14	572010514108	14 ~ 16	105				TPGX 0902..			CS 250 T	TORX T08	0.2
B8.16	572010516108	16 ~ 18	120				TPGX 0902..			CS 250 T	TORX T08	0.3

TRE 63 MHD' Ø 6 ~ 125

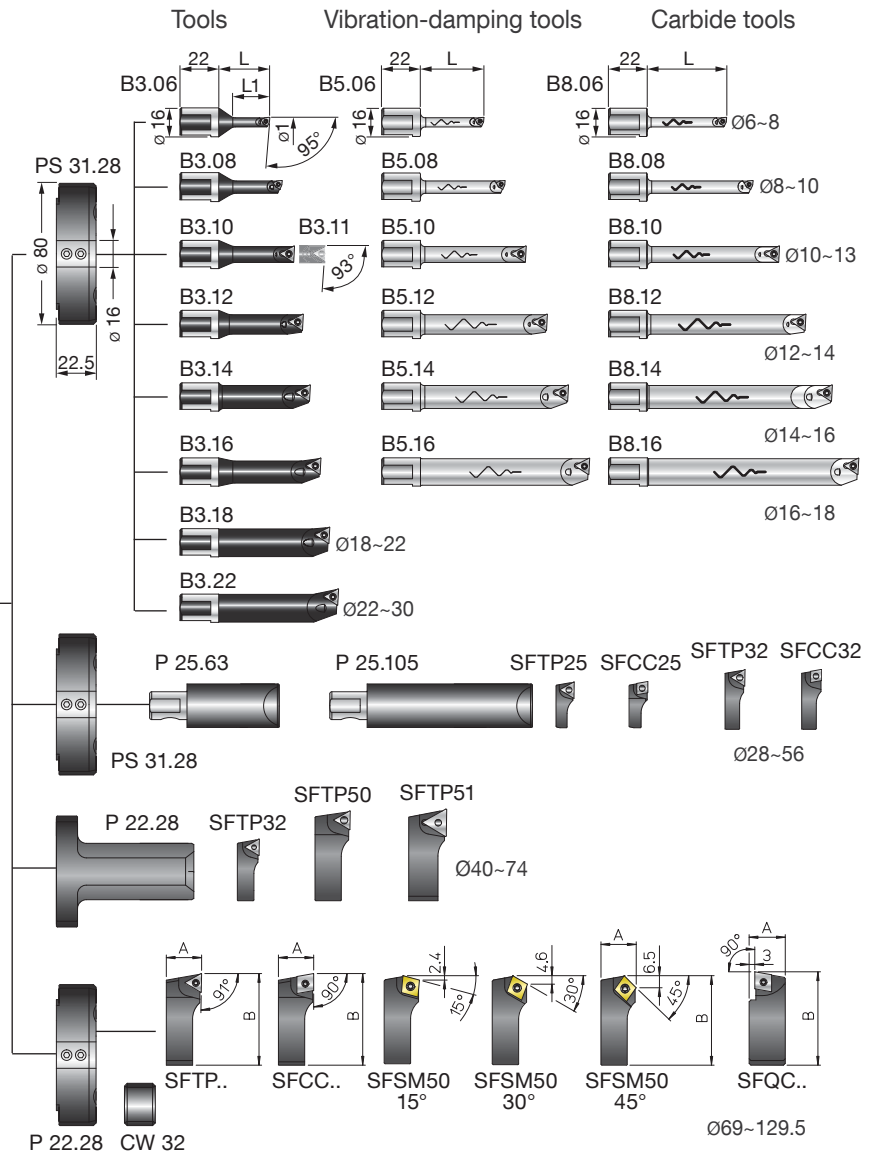


2 µm

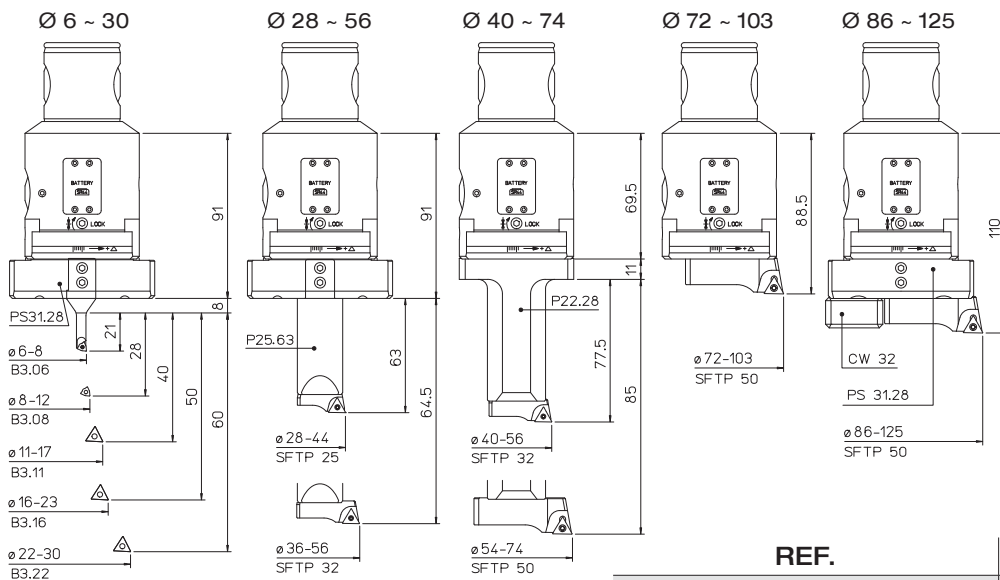


MHD'63

REF.	CODE	kg
TRE 63 MHD'63 69K	455200630631	2.2
P 22.28	433028220631	0.45
P25.63 TR..	435116250631	0.5
P25.105 TR..	435116251051	0.8
PS 31.28 TRE 63	433028220802	0.3
CW 32	392011003201	0.07



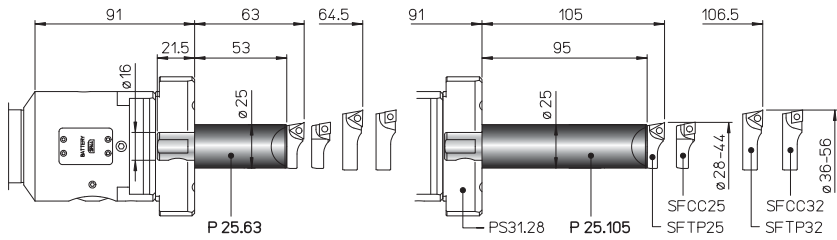
KIT K01 Ø 6 ~ 125



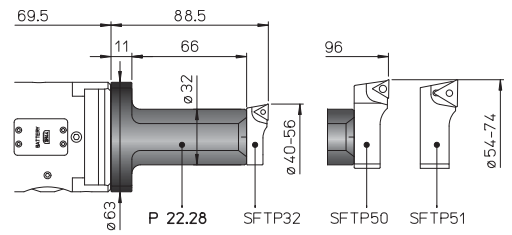
- 1 TRE 63 MHD'63
- 1 P25.63
- 1 P22.28
- 1 PS31.28
- 1 CW 32
- 1 B3.06
- 1 B3.08
- 1 B3.11
- 1 B3.16
- 1 B3.22
- 1 SFTP32
- 1 SFTP50
- 5 TPGX 090202L DC100
- 1 TPGX 110302L DC100
- 2 WCGT 020102L DC100

REF.	CODE	Ø	kg
KIT K01 TRE 63 MHD'63 69K	655200500631	6 ~ 125	4.7

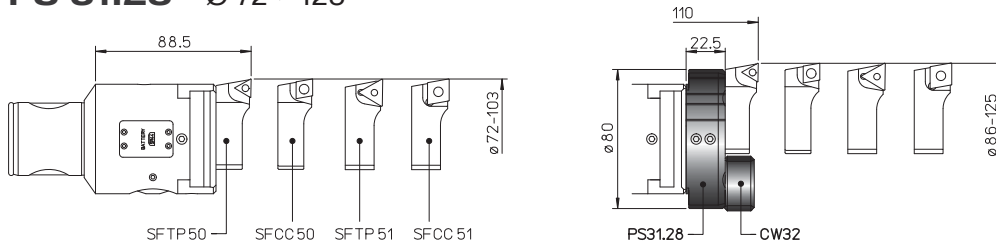
P 25 Ø 28 ~ 56



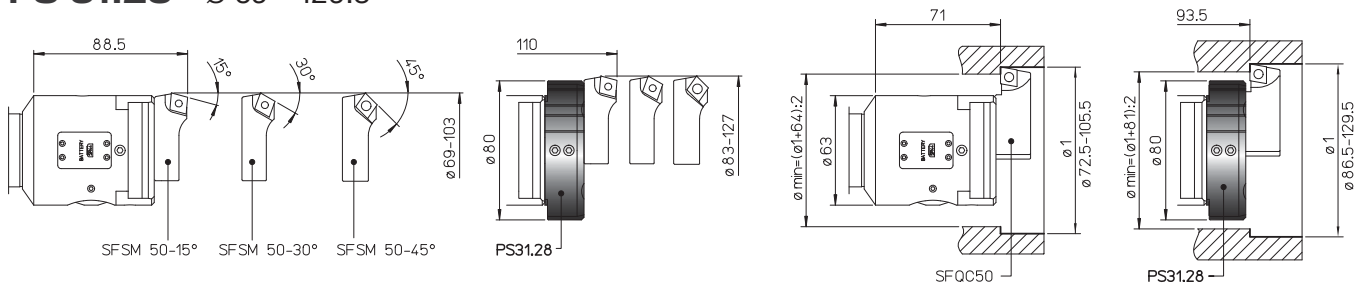
P 22.28 Ø 40 ~ 74



PS 31.28 Ø 72 ~ 125

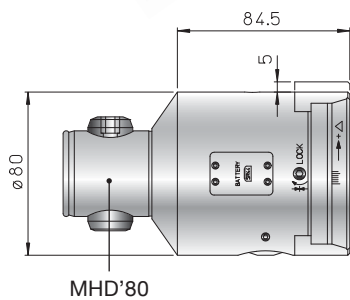


PS 31.28 Ø 69 ~ 129.5



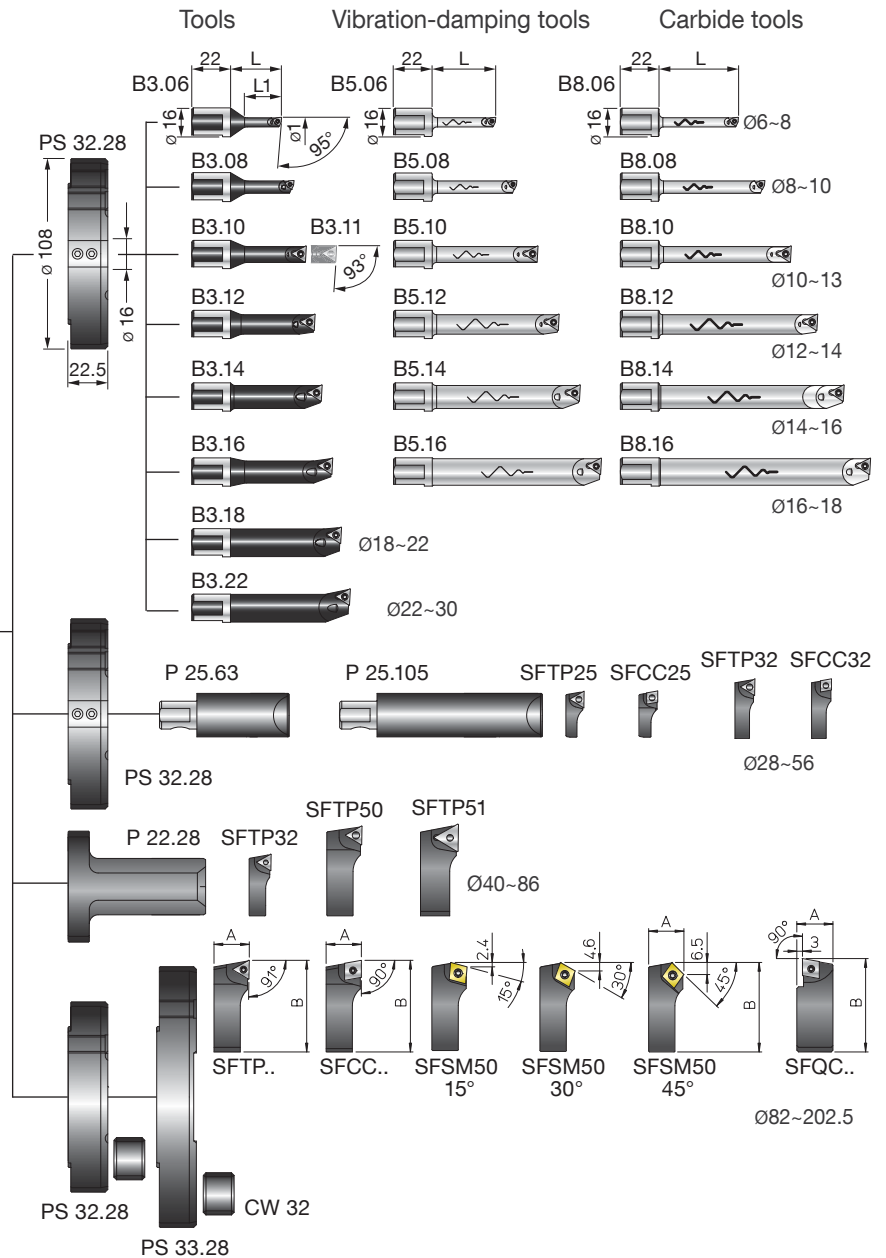
REF.	CODE	Ø1	L	L1	A	B						kg
SFTP 25	470500525001				10	26.5		TPGX 0902..		CS 250T	TORX T08	0.01
SFTP 32	470500532001				11.5	34.5		TPGX 0902..		CS 250T	TORX T08	0.02
SFTP 50	470500550001				19	52		TPGX 1103..		CS 300890T	TORX T08	0.08
SFTP 51	470500550003				21	52		TCMT 16T3..		TS 4	TORX T15	0.09
SFCC 25	470500525002				10	26.5		CCGT 0602..		TS 25	TORX T08	0.01
SFCC 32	470500532002				11.5	34.5		CCGT 0602..		TS 25	TORX T08	0.02
SFCC 50	470500550002				19	52		CCGT 09T3..		TS 4	TORX T15	0.08
SFCC 51	470500550004				21	52		CCMT 1204..		TS 5	TORX T25	0.09
SFQC 50	470500550062				20.5	53		CCMT 09T3..		TS 4	TORXT15	0.1
SFSM 50-15°	470500550011				19	50.5		CCMT 09T3..		TS 4	TORXT15	0.07
SFSM 50-30°	470500550013				19	50.5		CCMT 09T3..		TS 4	TORXT15	0.07
SFSM 50-45°	470500550015				19	50.5		CCMT 09T3..		TS 4	TORXT15	0.07
B3.06	572010506001	6 ~ 8	29	21				WCGT 0201..		TS 21	TORX T06	0.035
B3.08	572010508001	8 ~ 10	36	28				WCGT 0201..		TS 211	TORX T06	0.04
B3.10	572010510001	10 ~ 12	43	35				TPGX 0902..		CS 250 T	TORX T08	0.05
B3.11	572010511001	11 ~ 13	48	40				TPGX 0902..		CS 250 T	TORX T08	0.055
B3.12	572010512001	12 ~ 14	48	42				TPGX 0902..		CS 250 T	TORX T08	0.06
B3.14	572010514001	14 ~ 16	52	50				TPGX 0902..		CS 250 T	TORX T08	0.07
B3.16	572010516001	16 ~ 18	58	50				TPGX 0902..		CS 250 T	TORX T08	0.07
B3.18	572010518001	18 ~ 22	63					TPGX 0902..		CS 250 T	TORX T08	0.1
B3.22	572010522001	22 ~ 30	68					TPGX 0902..		CS 250 T	TORX T08	0.1
B5.06	572010506105	6 ~ 8	36					WCGT 0201..		TS 21	TORX T06	0.075
B5.08	572010508105	8 ~ 10	48					WCGT 0201..		TS 211	TORX T06	0.09
B5.10	572010510105	10 ~ 12	60					TPGX 0902..		CS 250 T	TORX T08	0.1
B5.12	572010512105	12 ~ 14	72					TPGX 0902..		CS 250 T	TORX T08	0.1
B5.14	572010514105	14 ~ 16	84					TPGX 0902..		CS 250 T	TORX T08	0.2
B5.16	572010516105	16 ~ 18	96					TPGX 0902..		CS 250 T	TORX T08	0.3
B8.06	572010506108	6 ~ 8	45					WCGT 0201..		TS 21	TORX T06	0.065
B8.08	572010508108	8 ~ 10	60					WCGT 0201..		TS 211	TORX T06	0.08
B8.10	572010510108	10 ~ 12	75					TPGX 0902..		CS 250 T	TORX T08	0.1
B8.12	572010512108	12 ~ 14	90					TPGX 0902..		CS 250 T	TORX T08	0.2
B8.14	572010514108	14 ~ 16	105					TPGX 0902..		CS 250 T	TORX T08	0.2
B8.16	572010516108	16 ~ 18	120					TPGX 0902..		CS 250 T	TORX T08	0.3

TRE 80 MHD' Ø 6 ~ 200

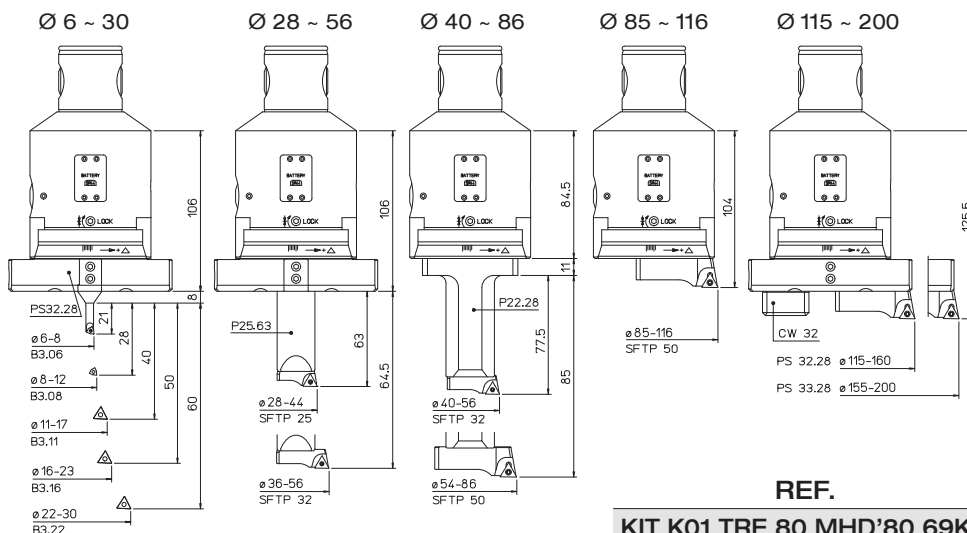


MHD'80

REF.	CODE	kg
TRE80 MHD'80 69K	455200800801	3.9
P 22.28	433028220631	0.45
P25.63 TR..	435116250631	0.5
P25.105 TR..	435116251051	0.8
PS 32.28 TRE 80	433028221082	0.5
PS 33.28 TRE 80	433028221482	0.6
CW 32	392011003201	0.07



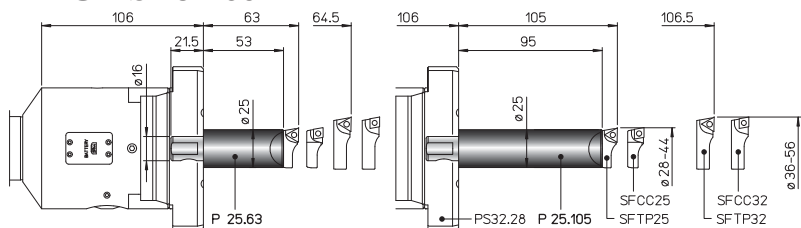
KIT K01 Ø 6 ~ 200



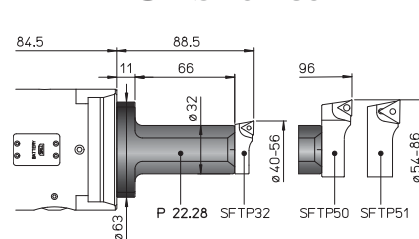
- 1 TRE 80 MHD'80
- 1 PS25.63
- 1 PS32.28
- 1 PS33.28
- 1 CW 32
- 1 P22.28
- 1 B3.06
- 1 B3.08
- 1 B3.11
- 1 B3.16
- 1 B3.22
- 1 SFTP32
- 1 SFTP50
- 5 TPGX 090202L DC100
- 1 TPGX 110302L DC100
- 2 WCGT 020102L DC100

REF.	CODE	Ø	kg
KIT K01 TRE 80 MHD'80 69K	655200500801	6 ~ 200	7.1

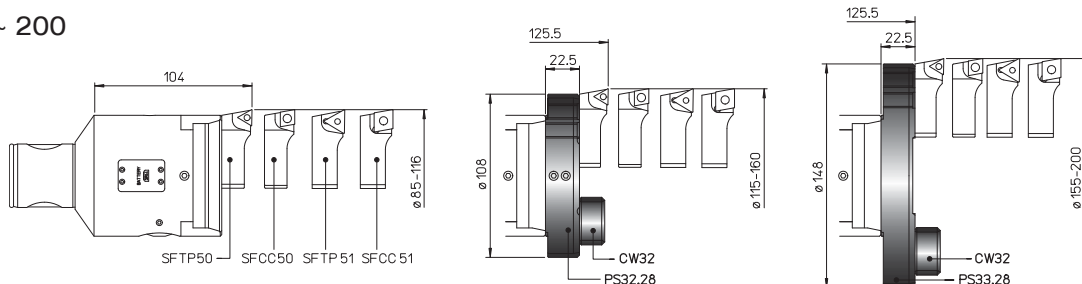
P 25 Ø 28 ~ 56



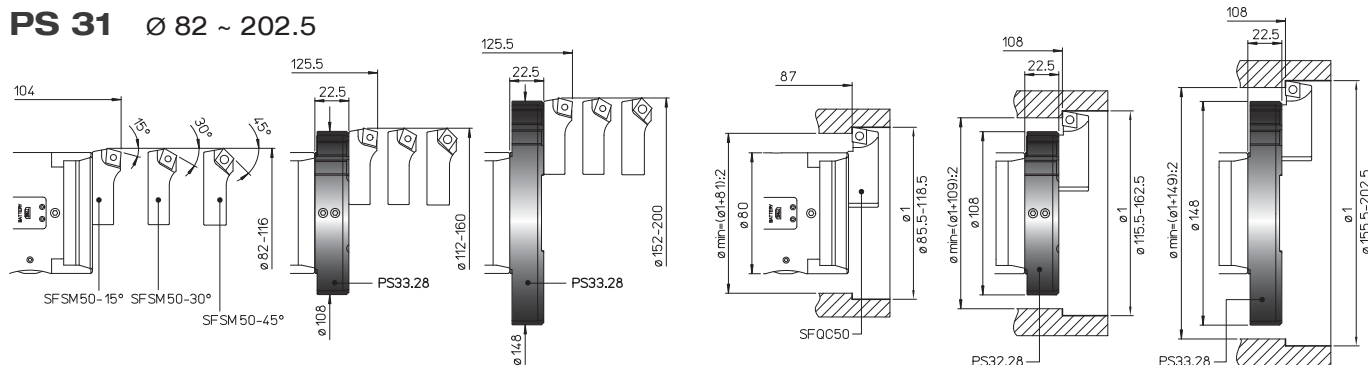
P 22.28 Ø 40 ~ 86



PS 31 Ø 85 ~ 200

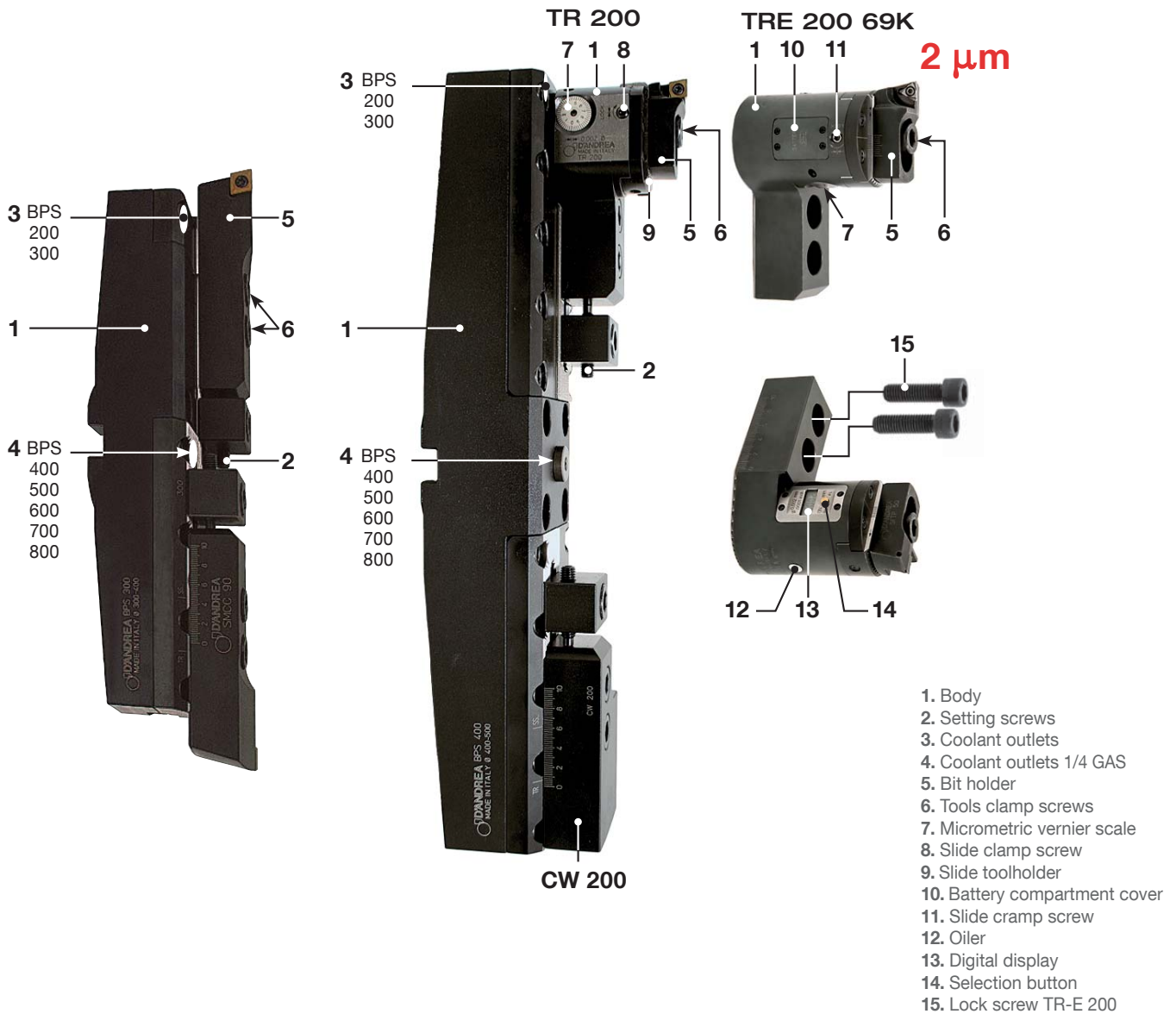


PS 31 Ø 82 ~ 202.5



REF.	CODE	Ø1	L	L1	A	B					kg	
SFTP 25	470500525001				10	26.5			TPGX 0902..	CS 250T	TORX T08	0.01
SFTP 32	470500532001				11.5	34.5			TPGX 0902..	CS 250T	TORX T08	0.02
SFTP 50	470500550001				19	52			TPGX 1103..	CS 300890T	TORX T08	0.08
SFTP 51	470500550003				21	52			TCMT 16T3..	TS 4	TORX T15	0.09
SFCC 25	470500525002				10	26.5			CCGT 0602..	TS 25	TORX T08	0.01
SFCC 32	470500532002				11.5	34.5			CCGT 0602..	TS 25	TORX T08	0.02
SFCC 50	470500550002				19	52			CCGT 09T3..	TS 4	TORX T15	0.08
SFCC 51	470500550004				21	52			CCMT 1204..	TS 5	TORX T25	0.09
SFQC 50	470500550062				20.5	53			CCMT 09T3..	TS 4	TORXT15	0.1
SFSM 50-15°	470500550011				19	50.5			CCMT 09T3..	TS 4	TORXT15	0.07
SFSM 50-30°	470500550013				19	50.5			CCMT 09T3..	TS 4	TORXT15	0.07
SFSM 50-45°	470500550015				19	50.5			CCMT 09T3..	TS 4	TORXT15	0.07
B3.06	572010506001	6 ~ 8	29	21					WCGT 0201..	TS 21	TORX T06	0.035
B3.08	572010508001	8 ~ 10	36	28					WCGT 0201..	TS 211	TORX T06	0.04
B3.10	572010510001	10 ~ 12	43	35					TPGX 0902..	CS 250 T	TORX T08	0.05
B3.11	572010511001	11 ~ 13	48	40					TPGX 0902..	CS 250 T	TORX T08	0.055
B3.12	572010512001	12 ~ 14	48	42					TPGX 0902..	CS 250 T	TORX T08	0.06
B3.14	572010514001	14 ~ 16	52	50					TPGX 0902..	CS 250 T	TORX T08	0.07
B3.16	572010516001	16 ~ 18	58	50					TPGX 0902..	CS 250 T	TORX T08	0.07
B3.18	572010518001	18 ~ 22	63						TPGX 0902..	CS 250 T	TORX T08	0.1
B3.22	572010522001	22 ~ 30	68						TPGX 0902..	CS 250 T	TORX T08	0.1
B5.06	572010506105	6 ~ 8	36						WCGT 0201..	TS 21	TORX T06	0.075
B5.08	572010508105	8 ~ 10	48						WCGT 0201..	TS 211	TORX T06	0.09
B5.10	572010510105	10 ~ 12	60						TPGX 0902..	CS 250 T	TORX T08	0.1
B5.12	572010512105	12 ~ 14	72						TPGX 0902..	CS 250 T	TORX T08	0.1
B5.14	572010514105	14 ~ 16	84						TPGX 0902..	CS 250 T	TORX T08	0.2
B5.16	572010516105	16 ~ 18	96						TPGX 0902..	CS 250 T	TORX T08	0.3
B8.06	572010506108	6 ~ 8	45						WCGT 0201..	TS 21	TORX T06	0.065
B8.08	572010508108	8 ~ 10	60						WCGT 0201..	TS 211	TORX T06	0.08
B8.10	572010510108	10 ~ 12	75						TPGX 0902..	CS 250 T	TORX T08	0.1
B8.12	572010512108	12 ~ 14	90						TPGX 0902..	CS 250 T	TORX T08	0.2
B8.14	572010514108	14 ~ 16	105						TPGX 0902..	CS 250 T	TORX T08	0.2
B8.16	572010516108	16 ~ 18	120						TPGX 0902..	CS 250 T	TORX T08	0.3

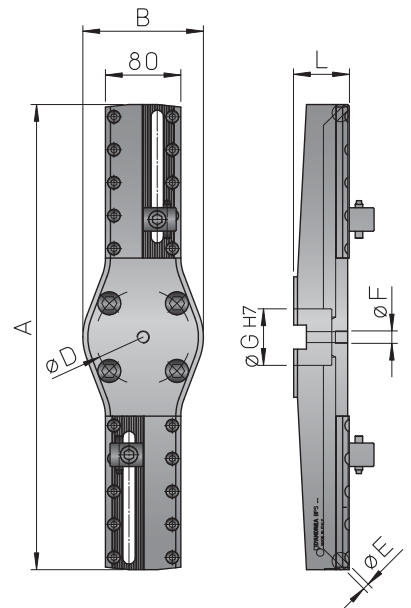
BPS Ø 200 ~ 1200



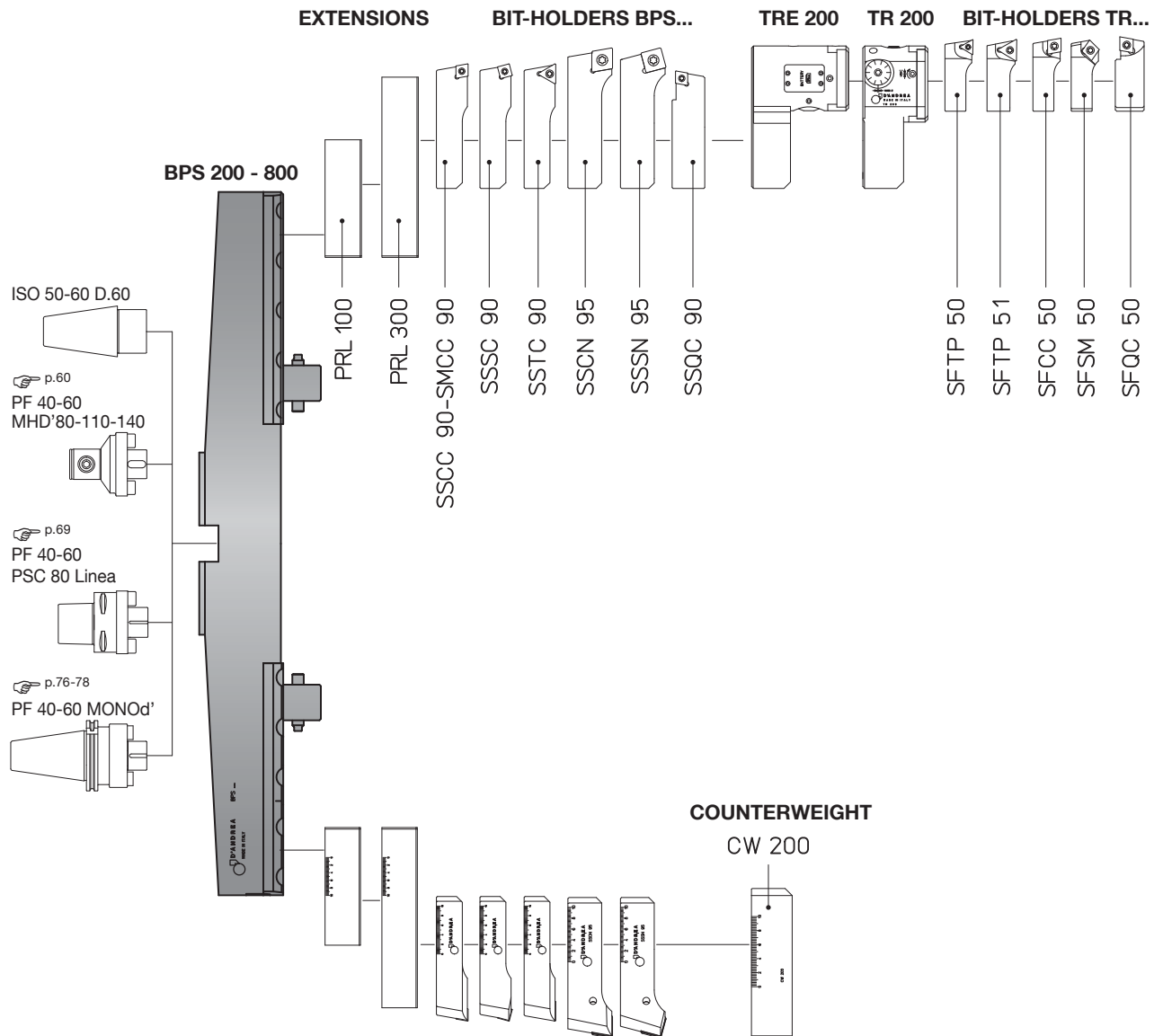
The **BPS** bars cover a working range from Ø 200 to Ø 1200 mm, both in roughing and in finishing.
 The wide range of accessories includes both roughing bit holders and micrometric finishing heads capable of performing boring, chamfering and back-facing operations.
 The main body of the **BPS** bars is made of aluminium on which the bit holder plates are fixed.

REF.	CODE	Ø	A	B	Ø D	Ø E	Ø F	Ø G	L	kg
BPS 200	435540881980	200 ~ 600	194	(4xM12)	66.7	2.5		40	54	3.2
BPS 300	435540882980	300 ~ 700	288	(4xM12)	66.7	2.5		40	54	3.9
BPS 400	435540883980	400 ~ 800	394	(4xM12)	66.7	1/4 GAS		40	61	6.9
BPS 500	435560884940	500 ~ 900	494	128 (4xM16)	101.6	1/4 GAS		60	69	9.4
BPS 600	435560885940	600 ~ 1000	594	128 (4xM16)	101.6	1/4 GAS		60	71	9.9
BPS 700	435560886940 •	700 ~ 1100	694	128 (4xM16)	101.6	1/4 GAS		60	74	11.2
BPS 800	435560887940 •	800 ~ 1200	794	128 (4xM16)	101.6	1/4 GAS		60	80	15.2

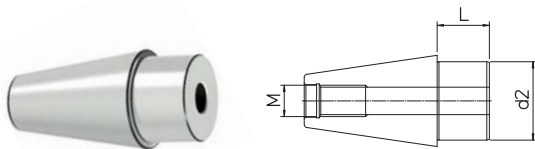
• Subject to stock availability



BPS Ø 200 ~ 1200



ISO 50-60 D.60

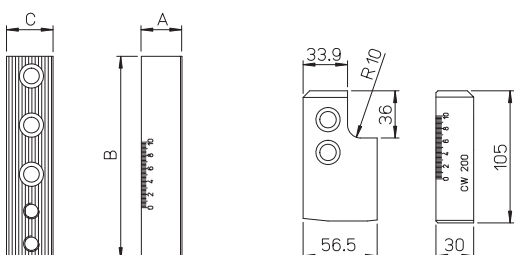


REF.	CODE	d2	L	M	kg
ISO 50 D.60	71ISO-50-DC6040 •	60	40	24	4.8
ISO 60 D.60	71ISO-60-DC6040 •	60	40	30	9.7

• Subject to stock availability

PRL EXTENSIONS

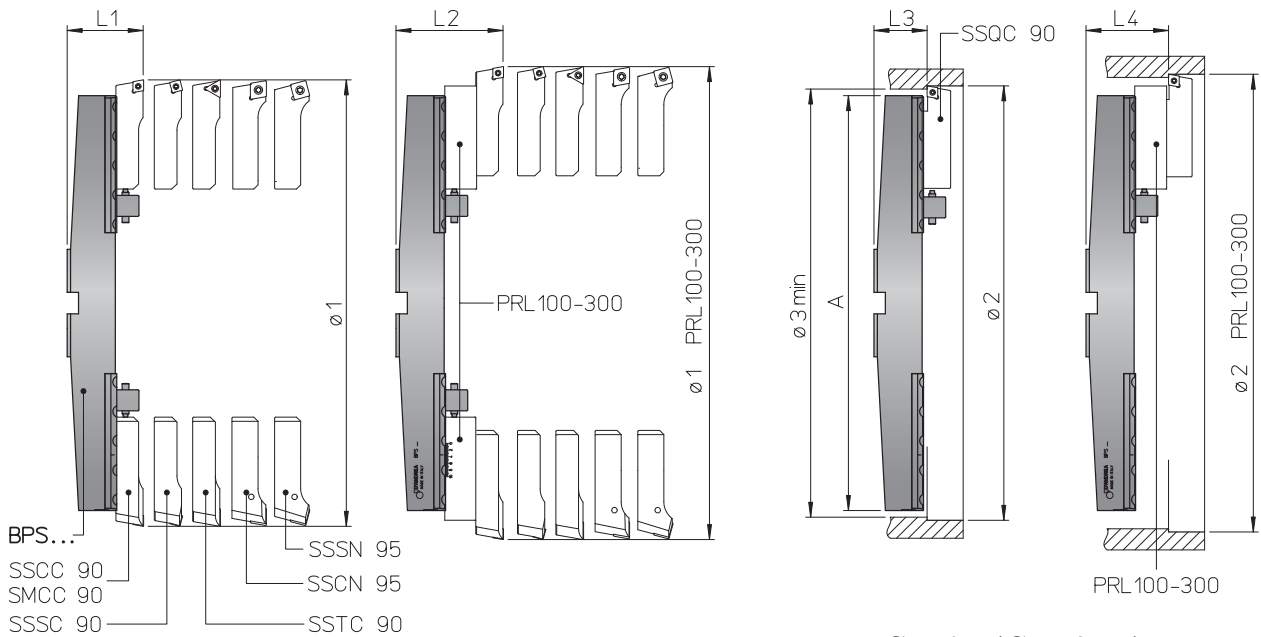
CW COUNTERWEIGHT



REF.	CODE	A	B	C	kg
PRL 100	392011015501	31	155	33.5	1.1
PRL 300	392011030001	41	255	35.5	2.8
CW 200	392011010501				1.3

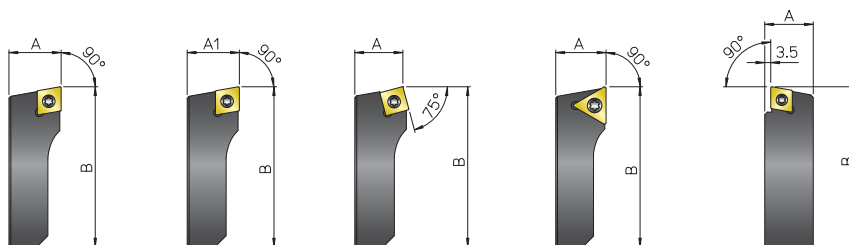
BPS Ø 200 ~ 1200

ROUGHING



	BPS 200	BPS 300	BPS 400	BPS 500	BPS 600	BPS 700	BPS 800
A	194	298	394	494	594	694	794
Ø 1	200 ~ 300	300 ~ 400	400 ~ 500	500 ~ 600	600 ~ 700	700 ~ 800	800 ~ 900
Ø 1 PRL 100	300 ~ 400	400 ~ 500	500 ~ 600	600 ~ 700	700 ~ 800	800 ~ 900	900 ~ 1000
Ø 1 PRL 300	400 ~ 600	500 ~ 700	600 ~ 800	700 ~ 900	800 ~ 1000	900 ~ 1100	1000 ~ 1200
Ø 2	202 ~ 302	302 ~ 402	402 ~ 502	502 ~ 602	602 ~ 702	702 ~ 802	802 ~ 902
Ø 2 PRL 100	302 ~ 402	402 ~ 502	502 ~ 602	602 ~ 702	702 ~ 802	802 ~ 902	902 ~ 1002
Ø 2 PRL 300	402 ~ 602	502 ~ 702	602 ~ 802	702 ~ 902	802 ~ 1002	902 ~ 1102	1002 ~ 1202
L1 S... 90	86	86	93	101	103	106	112
L1 S... 95	94	94	101	109	111	114	120
L2 PRL 100 S... 90	116	116	123	131	133	136	142
L2 PRL 300 S... 90	126	126	133	141	143	146	152
L2 PRL 100 S... 95	124	124	131	139	141	144	150
L2 PRL 300 S... 95	134	134	141	149	151	154	160
L3 SSQC 90	56.5	56.5	63.5	71.5	73.5	76.5	82.5
L4 PRL 100 SSQC 90	86.5	86.5	93.5	101.5	103.5	106.5	112.5
L4 PRL 300 SSQC 90	96.5	96.5	103.5	111.5	113.5	116.5	122.5

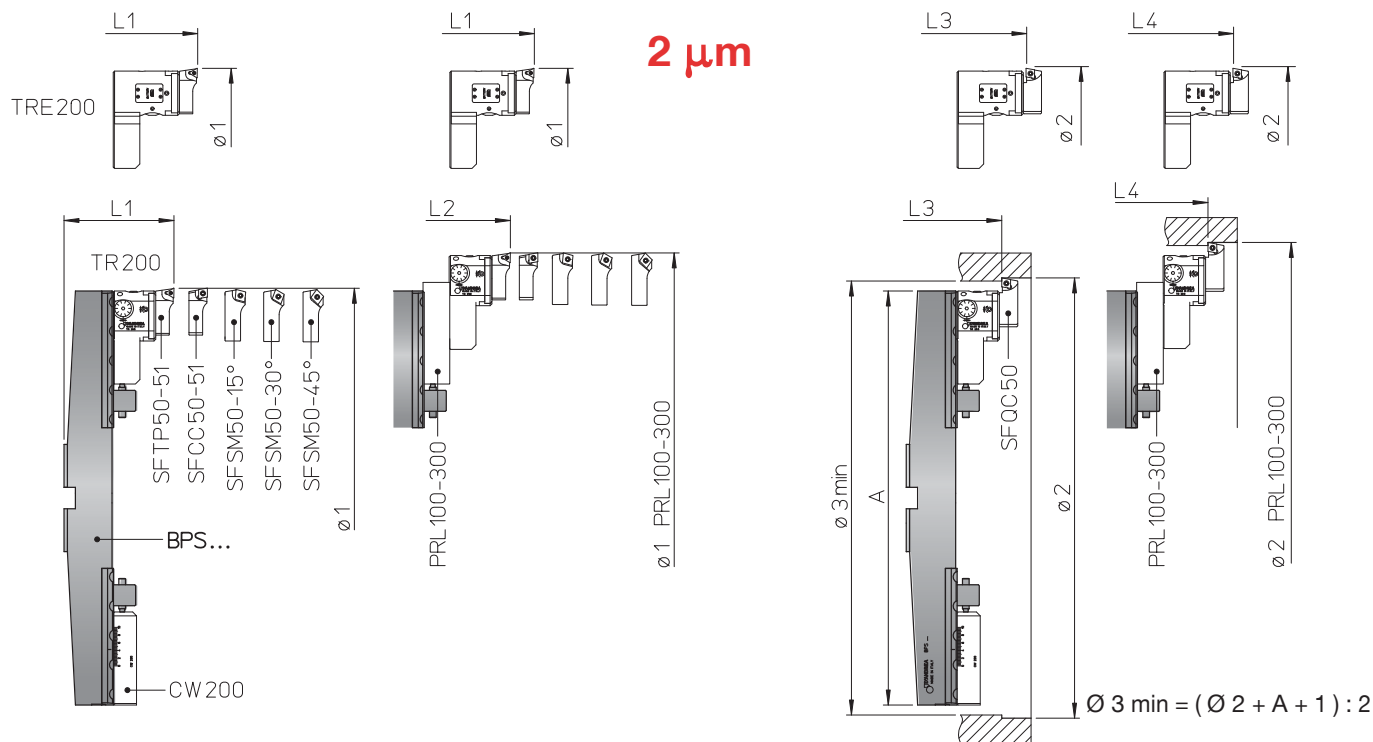
BIT-HOLDERS SSC.. - SMCC .. - SSS .. - SSTC .. - SSQC ..



REF.	CODE	A	A1	B						kg
SSCC 90	470500590201	32	130	CCMT 1204..				TS 5	TORX T25	0.7
SSCN 95	470500595201	40	130	CNM. 1906..					p. 89	0.9
SMCC 90	470500590203		31.7	130	CCMT 1204..			TS 5	TORX T25	0.7
SSSC 90	470500590202	32	130		SCMT 1204..			TS 5	TORX T25	0.7
SSSN 95	470500595202	40	130		SNM . 1906..				p. 89	0.9
SSTC 90	470500590206	32	130			TCMT 2204..		TS 5	TORX T25	0.7

BPS Ø 200 ~ 1200

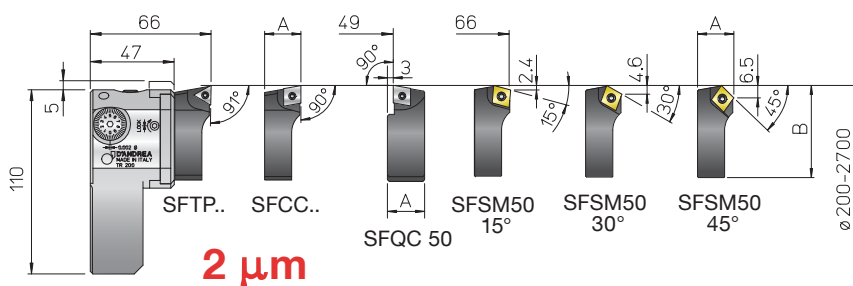
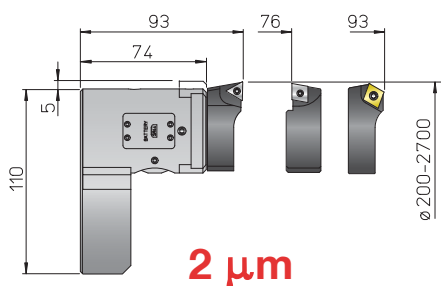
FINISHING



	BPS 200		BPS 300		BPS 400		BPS 500		BPS 600		BPS 700		BPS 800	
A	194		298		394		494		594		694		794	
Ø 1	200 ~ 300		300 ~ 400		400 ~ 500		500 ~ 600		600 ~ 700		700 ~ 800		800 ~ 900	
Ø 1 PRL 100	300 ~ 400		400 ~ 500		500 ~ 600		600 ~ 700		700 ~ 800		800 ~ 900		900 ~ 1000	
Ø 1 PRL 300	400 ~ 600		500 ~ 700		600 ~ 800		700 ~ 900		800 ~ 1000		900 ~ 1100		1000 ~ 1200	
Ø 2	202 ~ 302		302 ~ 402		402 ~ 502		502 ~ 602		602 ~ 702		702 ~ 802		802 ~ 902	
Ø 2 PRL 100	302 ~ 402		402 ~ 502		502 ~ 602		602 ~ 702		702 ~ 802		802 ~ 902		902 ~ 1002	
Ø 2 PRL 300	402 ~ 602		502 ~ 702		602 ~ 802		702 ~ 902		802 ~ 1002		902 ~ 1102		1002 ~ 1202	
L	TR200	TRE200	TR200	TRE200	TR200	TRE200	TR200	TRE200	TR200	TRE200	TR200	TRE200	TR200	TRE200
L1	120	147	120	147	127	154	135	162	137	164	140	167	146	173
L2 PRL 100	150	177	150	177	157	184	165	192	167	194	170	197	176	203
L2 PRL 300	160	187	160	187	167	194	175	202	177	204	180	207	186	213
L3	103	130	103	130	110	137	118	145	120	147	123	150	129	156
L4 PRL 100	133	160	133	160	140	167	148	175	150	177	153	180	159	186
L4 PRL 300	143	170	143	170	150	177	158	185	160	187	163	190	169	196

TRE 200

TR 200

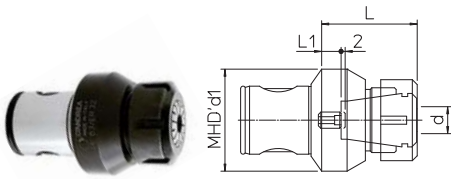


REF.	CODE	Ø	kg
TRE 200	455220002001	200 ~ 2700	1.7

REF.	CODE	Ø	kg
TR 200	455020002000	200 ~ 2700	1.3

REF.	CODE	A	B	△	□	⊥	⊞	kg
SFTP 50	470500550001	19	52	TPGX 1103..		CS 300890T	TORX T08	0.08
SFTP 51	470500550003	21	52	TCMT 16T3..			TS 4 TORX T15	0.09
SFCC 50	470500550002	19	52	CCGT 09T3..			TS 4 TORX T15	0.08
SFCC 51	470500550004	21	52	CCMT 1204..			TS 5 TORX T25	0.09
SFQC 50	470500550062	20.5	53	CCMT 09T3..			TS 4 TORXT15	0.1
SFSM 50-15°	470500550011	19	50.5	CCMT 09T3..			TS 4 TORX T15	0.07
SFSM 50-30°	470500550013	19	50.5	CCMT 09T3..			TS 4 TORX T15	0.07
SFSM 50-45°	470500550015	19	50.5	CCMT 09T3..			TS 4 TORX T15	0.07

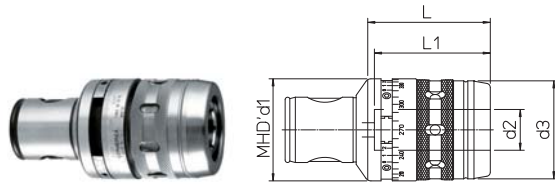
PE COLLETS CHUCKING TOOLS



Supplied without collets and clamping wrenches

REF.	CODE	MHD' d1	d	L	L1	kg			N-m
PE 16 / ER11M	655701600110	16	0.5 ~ 7	25	2.5	0.03	ER-11M	E11M	30
PE 20 / ER16M	655702000160	20	0.5 ~ 10	32	1	0.06	ER-16M	E16M	40
PE 25 / ER20M	655702500200	25	1 ~ 13	40	2.5	0.15	ER-20M	E20M	80
PE 32 / ER25M	655703200250	32	1 ~ 16	42	1.5	0.25	ER-25M	E25M	160
PE 40 / ER25	655704000250	40	1 ~ 16	45	5	0.4	UM/ER25	E25	200
PE 50 / ER25	655705000250	50	1 ~ 16	48	7	0.7	UM/ER25	E25	200
PE 50 / ER32	655705000320	50	2 ~ 20	55	8	1	UM/ER32	E32	220
PE 63 / ER32	655706300320	63	2 ~ 20	59	12	1.3	UM/ER32	E32	220
PE 63 / ER40	655706300400	63	3 ~ 26	64	12	1.5	UM/ER40	E40	250

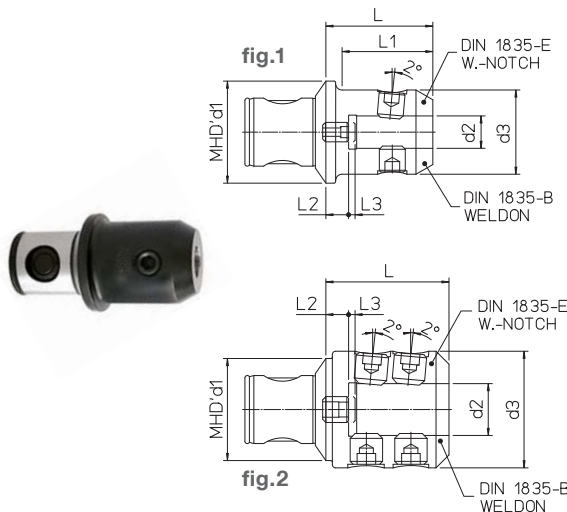
MHD' FORCE ULTRA-TIGHT TOOLHOLDER FORCE



Supplied without collets and clamping wrenches

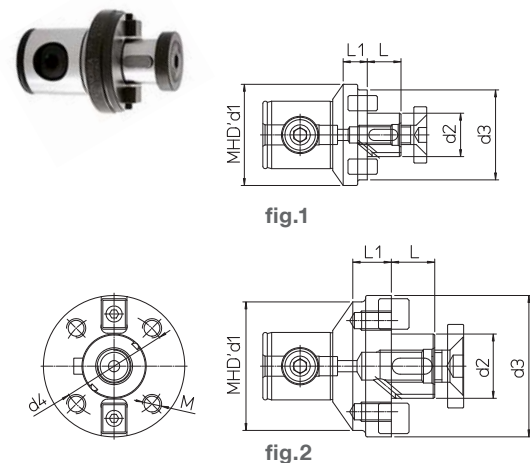
REF.	CODE	MHD' d1	d2	d3	L	L1	kg
FORCE 50/20 HS	656305000205	50	20	48	60	60	1
FORCE 63/32 HS	656306300325	63	32	66	80	80	2

AW WELDON WHISTLE NOTCH CHUCKING TOOLS



REF.	CODE	MHD' d1	d2 ^{H5}	d3	L	L1	L2	L3	kg	fig.
AW 50/6	655805000060	50	6	25	44	32.5	7	2	0.5	1
AW 50/8	655805000080	50	8	28	44	33	7	2	0.5	1
AW 50/10	655805000100	50	10	35	52	42	11	3	0.7	1
AW 50/12	655805000120	50	12	42	57	48	11	3	0.8	1
AW 50/14	655805000140	50	14	42	57	48	11	3	0.8	1
AW 50/16	655805000160	50	16	48	67	61	17	4	1.1	1
AW 50/20	655805000200	50	20	51	67		16	4	1.2	1
AW 50/25	655805000250	50	25	63	80		22	4	1.8	2
AW 63/16	655806300160	63	16	48	64	53	14	4	1.4	1
AW 63/20	655806300200	63	20	52	66	56	14	4	1.5	1
AW 63/25	655806300250	63	25	64	74		16	4	2.1	2
AW 63/32	655806300320	63	32	72	76		14	4	2.5	2
AW 80/40	655808000400	80	40	80	83		12	4	3.2	2

PF DISC AND FACING CUTTER HOLDERS



REF.	CODE	MHD' d1	d2	d3	d4	M	L	L1	kg	fig.
PF 40/16	655904020165	40	16	32			17	15	0.3	1
PF 40/22	655904020225	40	22	40			19	13	0.4	1
PF 50/16	655905000160	50	16	32			17	15	0.5	1
PF 50/22	655905000220	50	22	40			19	15	0.5	1
PF 50/27	655905000270	50	27	50			21	15	0.6	1
PF 50/32	655905000320	50	32	60			24	15	0.7	1
PF 63/22	655906300220	63	22	60			19	15	0.9	1
PF 63/27	655906300270	63	27	60			21	15	1.1	1
PF 63/32	655906300320	63	32	63			24	15	1.2	1
PF 80/32	655908000320	80	32	80			24	24	1.7	1
PF 80/40	655908000400	80	40	84	66.7	M12	27	24	1.9	2
PF 80/50	655908000500	80	50	90			30	24	2.0	2
PF 80/60	655908000600	80	60	128.5	101.6	M16	40	31.5	3.5	2
PF 110/40	655911000400	110	40	88	66.7	M12	27	20	4.2	2
PF 110/60	655911000600	110	60	128.5	101.6	M16	40	36	6	2
PF 140/40	655914000400	140	40	88	66.7	M12	27	26	6.2	2
PF 140/60	655914000600	140	60	140	101.6	M16	40	26	7.8	2

PF.. /40-60 BPS p.57

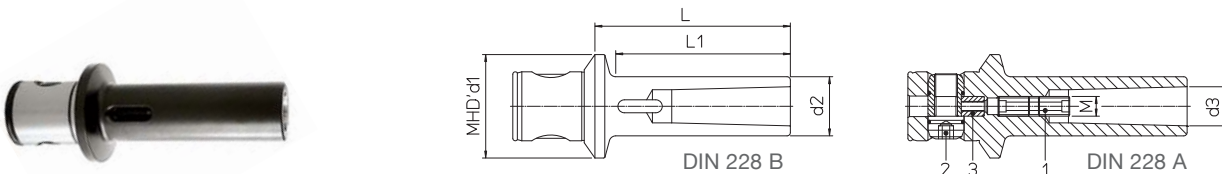
• Subject to stock availability

B16 DRILLING CHUCK HOLDERS B16 D238



REF.	CODE	MHD' d1	L	kg	Drilling chuck holders with B16 DIN 238 thread
B 50/16	656105000160	50	10	0.4	
B 63/16	656106300160	63	13.5	0.8	

CM MORSE TAPER CHUCKING TOOLS

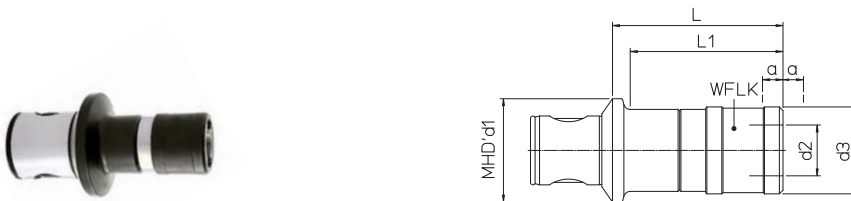


REF.	CODE	MHD' d1	MORSE	d2	d3	L	L1	M	kg
CM 50/1	656005000010	50	1	20	12.065	80	68	M6	0.6
CM 50/2	656005000020	50	2	30	17.780	100	86	M10	0.7
CM 50/3	656005000030	50	3	36	23.825	120	110	M12	1
CM 63/3	656006300030	63	3	36	23.825	120	108	M12	1.3
CM 63/4	656006300040	63	4	48	31.267	150	133	M16	2

MT DIN 228-A. To chuck a morse taper tool with thread proceed as follows: a. Drive in screw 1; b. Remove expanding pin 2 and sleeve 3 to allow the Allen wrench to be introduced from the rear; c. Fit the tool and tighten screw 1 clockwise; d. Reassemble expanding pin 2 and sleeve 3.

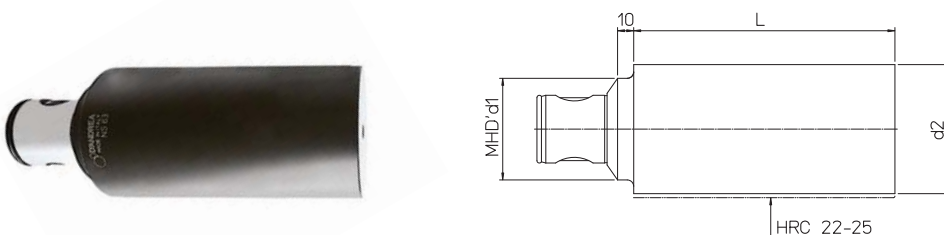
MT DIN 228-B. To chuck a morse taper tool with tang remove screw. 1. Combi-chucking tools for morse taper with DIN 228-A thread bore and with DIN 228-B tooth.

AM TAPPING ADAPTERS WITH DOUBLE COMPENSATION



REF.	CODE	MHD' d1	WFLK	Capacity	L	L1	d2	d3	a	kg
AM 50/M3-12	656505000100	50	WFLK 115B/A 308	M 3 ~ 12	72	60	19	36	7.5	0.9
AM 50/M8-20	656505000200	50	WFLK 225B/A 308	M 8 ~ 20	106		31	53	12.5	1.2
AM 63/M3-12	656506300100	63	WFLK 115B/A 308	M 3 ~ 12	70	58	19	36	7.5	1
AM 63/M8-20	656506300200	63	WFLK 225B/A 308	M 8 ~ 20	104	93	31	53	12.5	1.3

NS SEMIFINISHED CHUCK HOLDERS

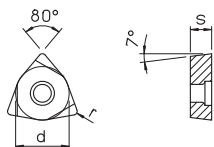


REF.	CODE	MHD' d1	d2	L	kg	ON REQUEST
NS 50	657205001600	50	63	160	4.2	
NS 63	657206302000	63	80	200	8.7	
NS 80	657208002500	80	100	250	16	
NS 110	657211002500	110	130	250	18	
NS 140	657214002500	140	150	250	30	



INSERTS

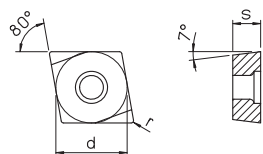
WCGT ○○○○○○L



REF.	d	s	r	T	S	CARBIDE		CERMET	COATED CERMET
						DP300	DK100	DC100	DC100T
WCGT 020102 L	3.97	1.59	0.2	TS 21*-TS 211*	TORX T06	•	•	•	•
WCGT 020104 L	3.97	1.59	0.4	TS 21*-TS 211*	TORX T06	•	•	•	•

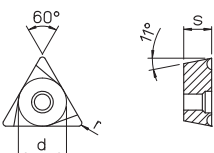
* TS21 : B...06 / * TS211 : B...08

CCGT ○○○○○○L



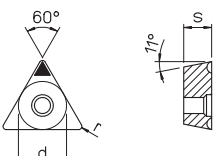
REF.	d	s	r	T	S	CARBIDE		CERMET	COATED CERMET
						DP300	DK100	DC100	DC100T
CCGT 060200 L10°	6.35	2.38	0	TS 25	TORX T08	•	•	•	•
CCGT 060202 L	6.35	2.38	0.2	TS 25	TORX T08	•	•	•	•
CCGT 060204 L	6.35	2.38	0.4	TS 25	TORX T08	•	•	•	•
CCGT 09T302 L	9.525	3.97	0.2	TS 4	TORX T15	•	•	•	•
CCGT 09T304 L	9.525	3.97	0.4	TS 4	TORX T15	•	•	•	•

TPGX ○○○○○○L



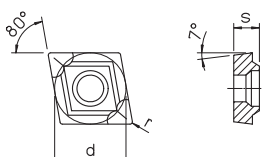
REF.	d	s	r	T	S	CARBIDE		CERMET	COATED CERMET
						DP300	DK100	DC100	DC100T
TPGX 090200 L10°	5.56	2.38	0	CS250T	TORX T08	•	•	•	•
TPGX 090202 L	5.56	2.38	0.2	CS250T	TORX T08	•	•	•	•
TPGX 090204 L	5.56	2.38	0.4	CS250T	TORX T08	•	•	•	•
TPGX 110300 L10°	6.35	3.18	0	CS300890T	TORX T08	•	•	•	•
TPGX 110302 L	6.35	3.18	0.2	CS300890T	TORX T08	•	•	•	•
TPGX 110304 L	6.35	3.18	0.4	CS300890T	TORX T08	•	•	•	•

TPGX ○○○○○○



REF.	d	s	r	T	S	SINTERED DIAMOND	CUBIC BORON NITRIDE	
						D20 MDC	D20 CBN	D25 CBN
TPGX 090202	5.56	2.38	0.2	CS250T	TORX T08	•	•	•
TPGX 090204	5.56	2.38	0.4	CS250T	TORX T08	•	•	•
TPGX 110302	6.35	3.18	0.2	CS300890T	TORX T08	•	•	•
TPGX 110304	6.35	3.18	0.4	CS300890T	TORX T08	•	•	•

CCMT ○○○○○○



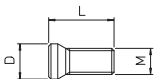
REF.	d	s	r	T	S	CARBIDE	CVD COATED CARBIDE
						DP300	DP100 R
CCMT 060202	6.35	2.38	0.2	TS 25	TORX T08	•	•
CCMT 060204	6.35	2.38	0.4	TS 25	TORX T08	•	•
CCMT 09T304	9.525	3.97	0.4	TS 4	TORX T15	•	•
CCMT 09T308	9.525	3.97	0.8	TS 4	TORX T15	•	•
CCMT 120404	12.7	4.76	0.4	TS 5	TORX T25	•	•
CCMT 120408	12.7	4.76	0.8	TS 5	TORX T25	•	•

BORING GRADE

ISO	CARBIDE	CERMET	COATED CERMET	CVD COATED CARBIDE
P01				
P10		DC100	DC100T	DP100R
P20				
P30	DP300			
P40				
K01				
K10	DK100	DC100	DC100T	DP100R
K20	DP300			
K30				

DP300	Roughing and finishing. Low carbon steel - stainless steels
DK100	Roughing and finishing. Aluminium alloy Cast iron
DP100R	Roughing. Steels, alloy steels and cast iron
DC100	Finishing. Alloy steels and cast iron
DC100T	Finishing. Alloy steels, stainless steels and cast iron
D20MDC	Finishing. Aluminium alloys, non-ferrous materials and non-metals
D20CBN	Finishing. High hardness steels (over 50 HRC) (it may replace the grinding)
D25CBN	Finishing. High hardness steel (over 50 HRC) and interrupted cutting (it may replace the grinding)

TORX



REF.		CODE	M	L	D	N-m	REF.		CODE
TS 21		494010002034	M 2x0.4	3.7	2.7	0,5	TORX TO6		10 150 09 0 0600
TS 211		494010002040	M 2x0.4	4	2.7	0,5	TORX TO6		10 150 09 0 0600
CS 250 T		494010002565	M 2.5x0.45	6	3.7	1,0	TORX TO8		10 150 09 0 0800
CS 300890 T		494010003008	M 3x0.5	8	4.1	1,0	TORX TO8		10 150 09 0 0800
TS 25		494010002555	M 2.5x0.45	5.7	3.45	1,0	TORX TO8		10 150 09 0 0800
TS 4		494010004008	M 4x0.7	10	5.5	3,0	TORX T15		10 150 09 0 1500
TS 5		494010005009	M 5x0.8	11.5	7	7,5	TORX T25		10 150 09 0 2500