

TDXU/TDXY



GROOVING INSERTS

FLAT INSERTS: PRESSED INSERTS FOR EXTERNAL, INTERNAL FACE TURNING, GROOVING AND PARTING

INSERT MODEL	DIMENSION					TURNING MILL		GROOVING	GRADE
	$W \pm 0.05$	M	l	h	r	FEED (mm/rev)	CUT DEP. (mm)	FEED (mm/rev)	HW0632
TDXU 200	2.0	1.7	20.0	4.7	0.3	0.12-0.18	0.4-1.2	0.03-0.18	●
TDXU 250	2.5	2.2	20.0	4.7	0.3	0.15-0.19	0.4-1.8	0.04-0.11	
TDXU 300	3.0	2.2	20.0	4.7	0.3	0.15-0.19	0.4-1.8	0.04-0.11	
TDXU 400	4.0	3.0	20.0	4.7	0.4	0.18-0.24	0.5-2.4	0.09-0.15	
TDXU 500	5.0	4.0	25.0	5.2	0.4	0.20-0.30	0.5-3.0	0.11-0.20	
TDXU 600	6.0	5.0	25.0	5.2	0.8	0.22-0.36	0.1-0.4	0.13-0.23	

FLAT INSERTS: PRESSED INSERTS FOR EXTERNAL, INTERNAL FACE TURNING, GROOVING AND PARTING

INSERT MODEL	DIMENSION				TURNING MILL		GROOVING	GRADE	
	$W \pm 0.05$	M	L	R	FEED (mm/rev)	CUT DEP. (mm)	FEED (mm/rev)	HW0632	HW1804
TDXY 3E-0.4	3.0	2.2	20.0	0.4	0.17-0.20	0.5-1.8	0.06-0.18	●	●
TDXY 4E-0.4	4.0	3.0	20.0	0.4	0.20-0.27	0.5-2.4	0.07-0.20		
TDXY 4E-0.8	4.0	3.0	20.0	0.8	0.22-0.27	1.0-2.4	0.07-0.20		
TDXY 5E-0.4	5.0	4.0	25.0	0.4	0.22-0.32	0.5-3.0	0.08-0.23		
TDXY 5E-0.8	5.0	4.0	25.0	0.8	0.25-0.37	1.0-3.0	0.08-0.23		
TDXY 6E-0.4	6.0	5.0	25.0	0.4	0.25-0.38	0.5-3.6	0.12-0.35		
TDXY 6E-0.8	6.0	5.0	25.0	0.8	0.26-0.42	1.0-3.6	0.12-0.35		

TDC/TDXU-R



GROOVING INSERTS

FLAT INSERTS: FOR GROOVING, PARTING & TURNING MILL PROCESS

INSERT MODEL	DIMENSION				TURNING MILL		GROOVING	GRADE	
	W ±0.05	M	L	R	FEED (mm/rev)	CUT DEP. (mm)	FEED (mm/rev)	HW0632	HW1804
TDC 2E-02	2.0	1.7	20.0	0.2	0.17-0.20	0.5-1.8	0.05-0.18	●	●
TDC 3E-02	3.0	2.4	20.0	0.2	0.20-0.27	0.5-2.4	0.07-0.25		
TDC 4E-03	4.0	3.0	20.0	0.3	0.22-0.27	1.0-2.4	0.08-0.30		
TDC 5E-03	5.0	4.0	25.0	0.3	0.20-0.27	0.5-2.4	0.09-0.35		
TDC 6E-03	6.0	5.0	25.0	0.3	0.22-0.27	1.0-2.4	0.12-0.40		

ROUND INSERTS: FOR EXTERNAL, INNER HOLETURNING MILL, GROOVING AND PROFILING

INSERT MODEL	DIMENSION					TURNING MILL		GROOVING	GRADE
	W± 0.05	M	l	h	r	FEED (mm/rev)	CUT DEP. (mm)	FEED (mm/rev)	HW0632
TDXU 200-1.0R	2.0	1.7	20.0	4.7	1.0	0.10-0.25	0.0-1.0	0.05-0.15	●
TDXU 300-1.5R	3.0	2.2	20.0	4.7	1.5	0.15-0.28	0.0-1.5	0.08-0.18	
TDXU 400-2.0R	4.0	3.0	20.0	4.7	2.0	0.18-0.35	0.0-2.0	0.10-0.20	
TDXU 500-2.5R	5.0	4.0	25.0	5.2	2.5	0.20-0.42	0.0-2.5	0.12-0.23	
TDXU 600-3.0R	6.0	5.0	25.0	5.2	3.0	0.25-0.54	0.0-3.0	0.15-0.27	
TDXU 800-4.0R	8.0	6.0	30.0	6.4	4.0	0.30-0.67	0.0-4.0	0.18-0.35	

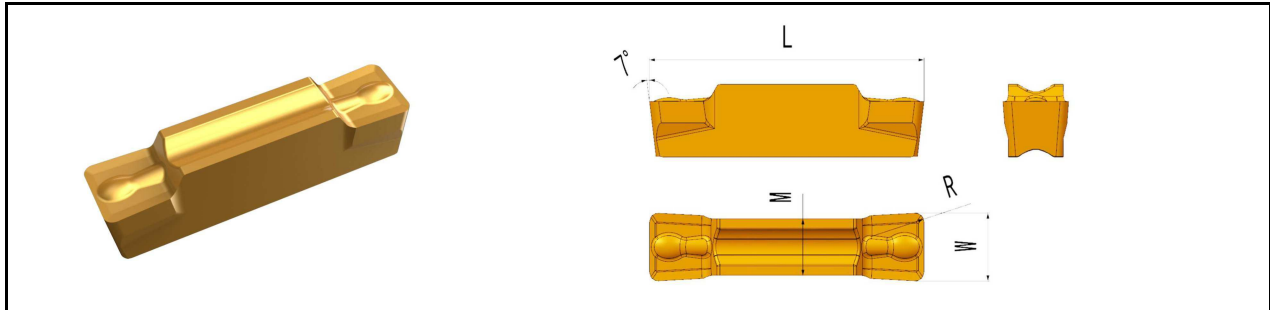
©Grooved inserts with insert width of 8MM have no standard shank, but can be customized

TDXT



GROOVING INSERTS

FLAT INSERT: FOR EXTERNAL, INNER HOLE, FACETURNING MILL, GROOVING& PARTING

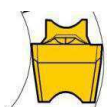


INSERT MODEL	DIMENSION				TURNING MILL		GROOVING	GRADE	
	W± 0.05	M	l	r	FEED (mm/rev)	CUT DEP. (mm)	FEED (mm/rev)	HW0632	HW A7
TDXT 3.00E-0.40	3.0	2.2	20.0	0.4	0.15-0.22	0.5-2.0	0.07-0.15	●	●
TDXT 4.00E-0.40	4.0	3.0	20.0	0.4	0.18-0.30	0.5-2.4	0.09-0.18		
TDXT 4.00E-0.80	4.0	3.0	20.0	0.8	0.18-0.30	1.0-2.4	0.09-0.18		
TDXT 5.00E-0.40	5.0	4.0	25.0	0.4	0.20-0.35	0.5-2.3	0.11-0.20		
TDXT 5.00E-0.80	5.0	4.0	25.0	0.8	0.23-0.35	1.0-3.0	0.11-0.20		
TDXT 6.00E-0.80	6.0	5.0	25.0	0.8	0.24-0.42	1.0-3.6	0.13-0.30		
TDXT 6.00E-1.20	6.0	5.0	25.0	1.2	0.24-0.42	1.3-3.6	0.13-0.30		
TDXT 8.00E-0.80	8.0	6.0	30.0	0.8	0.30-0.56	1.0-4.8	0.15-0.40		
TDXT 8.00E-1.20	8.0	6.0	30.0	1.2	0.30-0.56	1.3-4.8	0.15-0.40		


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• Grooving Knife Selection Considerations

• FACE GROOVING INSERT MIN DIA (mm)

FACE MACHINING	INSERT (FLAT)	WIDTH	MIN DIA	INS. (FLA.)	WIDTH	MIN DIA	INS. F LAT	WIDTH	MIN. DIA	INS. (ROUN)	INS. WIDTH	MIN. DIA
	TDXU TDXY	3	18	TDC	3	54	TDXT	3	44	TDXU -R	3	41
		4	18		4	34		4	42		4	36
		5	20		/	/		5	50		5	54
		6	18		/	/		6	48		6	48

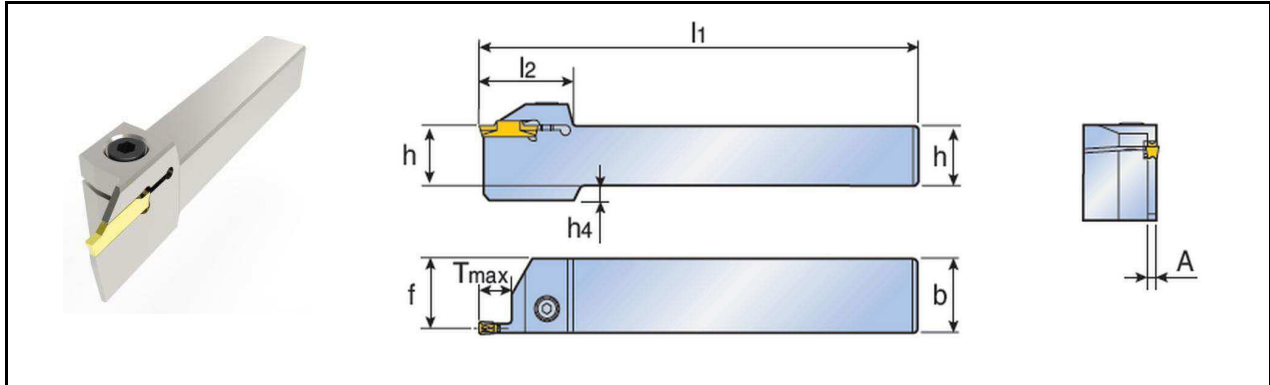
• INNER HOLE GROOVING INSERT MIN DIA

INNER HOLE	INS. FLAT	WIDTH	MIN DIA	INS. (FLA.)	WIDTH	MIN DIA	INS. F LAT	WIDTH	MIN. DIA	INS. (ROUN)	WIDTH	MIN. DIA
	TDXU TDXY	2	24	TDC	2	40	TDXT	/	/	TDXU -R	2	41
		2.5	24		/	/		/	/		/	
		3	24		3	50		3	40		3	38
		4	21		4	50		4	40		4	38
		5	30		5	60		5	50		5	43
		6	31		6	60		6	50		6	46
		/	/		/	/		8	62		8	56

TTER/L



Grooving tool holder series: EXTERNAL TURNING MILL & GROOVING



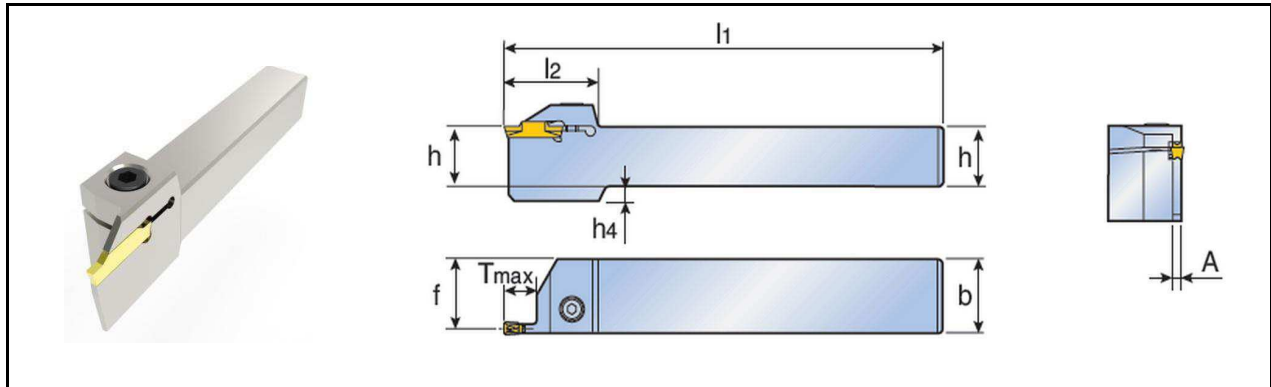
PRODUCT MODEL	HOLDER SIZE	DIMENSION								COMPATIBLE INSERT
		h	b	l1	f	l2	A	h4	Tmax	
TTER/L 1616-2T08	2	16	16	110	15.1	33	1.8	4	8.0	TDXU TDXY TDC TDXT
TTER/L 2020-2T08	2	20	20	125	19.1	33	1.8	—	8.0	
TTER/L 2525-2T08	2	25	25	150	24.1	33	1.8	—	8.0	
TTER/L 1616-2	2	16	16	110	15.1	32	1.8	4	12.0	
TTER/L 2020-2	2	20	20	125	19.1	32	1.8	—	12.0	
TTER/L 2525-2	2	25	25	150	24.1	32	1.8	—	12.0	
TTER/L 1616-2T17	2	16	16	110	15.1	37	1.8	4	17.0	
TTER/L 2020-2T17	2	20	20	125	19.1	37	1.8	—	17.0	
TTER/L 2525-2T17	2	25	25	150	24.1	37	1.8	—	17.0	
TTER/L 1616-2.5	2.5	16	16	110	15.1	32	2.0	4	12.0	
TTER/L 2020-2.5	2.5	20	20	125	19.1	32	2.0	—	12.0	
TTER/L 2525-2.5	2.5	25	25	150	24.1	32	2.0	—	12.0	
TTER/L 1616-3T09	3	16	16	110	14.8	32	2.4	4	9.0	
TTER/L 2020-3T09	3	20	20	125	18.8	32	2.4	—	9.0	
TTER/L 2525-3T09	3	25	25	150	23.8	32	2.4	—	9.0	
TTER/L 1616-3	3	16	16	110	14.8	32	2.4	4	12.0	
TTER/L 2020-3	3	20	20	125	18.8	32	2.4	—	12.0	
TTER/L 2525-3	3	25	25	150	23.8	32	2.4	—	12.0	
TTER/L 1616-3T20	3	16	16	110	14.8	38.5	2.4	—	20.0	
TTER/L 2020-3T20	3	20	20	125	18.8	38.5	2.4	—	20.0	
TTER/L 2525-3T20	3	25	25	150	23.8	38.5	2.4	—	20.0	
TTER/L 2525-3T25	3	25	25	150	23.8	44.5	2.4	—	25.0	
TTER/L 1616-4T10	4	16	16	110	14.5	32	3.0	4	10.0	
TTER/L 2020-4T10	4	20	20	125	18.5	32	3.0	—	10.0	
TTER/L 2525-4T10	4	25	25	150	23.5	32	3.0	—	10.0	

© Inserts are ordered separately, this shank has no internal coolant.

TTER/L



Grooving tool holder series: EXTERNAL TURNING MILL & GROOVING



PRODUCT MODEL	HOLDER SIZE	DIMENSION								COMPATIBLE INSERT
		h	b	l1	f	l2	A	h4	Tmax	
TTER/L 1616-4	4	16	16	110	14.5	33	3.0	4	15.0	TDXU TDXY TDC TDXT
TTER/L 2020-4	4	20	20	125	18.5	33	3.0	—	15.0	
TTER/L 2525-4	4	25	25	150	23.5	33	3.0	—	15.0	
TTER/L 1616-4T25	4	16	16	110	14.5	45	3.0	—	25.0	
TTER/L 2020-4T25	4	20	20	125	18.5	45	3.0	—	25.0	
TTER/L 2525-4T25	4	25	25	150	23.5	45	3.0	—	25.0	
TTER/L 2020-5T12	5	20	20	125	18.1	37	4.0	—	12.0	
TTER/L 2525-5T12	5	25	25	150	23.1	37	4.0	—	12.0	
TTER/L 2020-5	5	20	20	125	18.1	37	4.0	—	20.0	
TTER/L 2525-5	5	25	25	150	23.1	37	4.0	—	20.0	
TTER/L 2525-5T25	5	25	25	150	23.1	37	4.0	—	25.0	
TTER/L 2525-5T32	5	25	25	150	23.0	56	4.0	—	32.0	
TTER/L 2020-6T12	6	20	20	125	17.6	37	5.0	—	12.0	
TTER/L 2525-6T12	6	25	25	150	22.6	37	5.0	7	12.0	
TTER/L 2020-6	6	20	20	125	17.6	41	5.0	—	20.0	
TTER/L 2525-6	6	25	25	150	22.6	41	5.0	7	20.0	
TTER/L 2525-6T32	6	25	25	150	22.5	56	5.0	7	32.0	

©Inserts are ordered separately, this shank has no

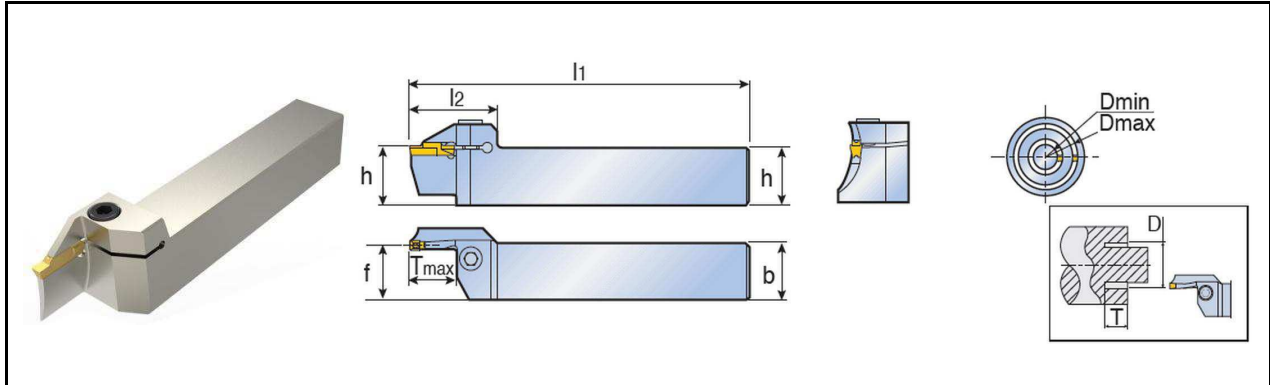
ACCESSORY

PRODUCT MODEL	SCREW	WRENCH	PRODUCT MODEL	SCREW	WRENCH
TTER/L 1616-2/2.5/3	CLA0501608	CBL40	TTER/L 2020-4/5	CLA0602010	CBL50
TTER/L 2020-2/2.5/3	CLA0502008	CBL40	TTER/L 2525-4/5	CLA08020125	CBL60
TTER/L 2525-2/2.5/3	CLA0601610	CBL50	TTER/L 2020-6	CLA08020125	CBL60
TTER/L 1616-4/5	CLA0601610	CBL50	TTER/L 2525-6	CLA08020125	CBL60

TTFR/L-RN



FACE DEEP GROOVING AND TURNING MILL



PRODUCT MODEL	HOLDER SIZE	DIMENSION								COMPATIBLE INSERT
		h	b	l1	f	l2	Tmax	Dmin	Dmax	
TTFR/L 20-21-30-3T10RN	3	20	20	125	19	31	10	21	30	TDXU TDXY TDC TDXT
TTFR/L 20-24-35-3T10RN	3	20	20	125	19	31	10	24	35	
TTFR/L 20-29-40-3T10RN	3	20	20	125	19	31	10	29	40	
TTFR/L 20-34-50-3T10RN	3	20	20	125	19	31	10	34	50	
TTFR/L 20-44-70-3T15RN	3	20	20	125	19	35	15	44	70	
TTFR/L 20-64-100-3T15RN	3	20	20	125	19	35	15	64	100	
TTFR/L 20-19-30-4T10RN	4	20	20	125	18.6	31	10	19	30	
TTFR/L 20-22-36-4T10RN	4	20	20	125	18.6	31	10	22	36	
TTFR/L 20-28-42-4T16RN	4	20	20	125	18.6	36	16	28	42	
TTFR/L 20-34-50-4T16RN	4	20	20	125	18.6	36	16	34	50	
TTFR/L 20-42-70-4T16RN	4	20	20	125	18.6	36	16	42	70	
TTFR/L 20-62-120-4T16RN	4	20	20	125	18.6	36	16	62	120	
TTFR/L 20-112-200-4T16RN	4	20	20	125	18.6	36	16	112	200	
TTFR/L 25-30-3RN	3	25	25	150	24.0	38	10.0	24	35	
TTFR/L 25-35-3RN	3	25	25	150	24.0	38	10.0	29	40	
TTFR/L 25-40-3RN	3	25	25	150	24.0	38	10.0	34	50	
TTFR/L 25-50-3RN	3	25	25	150	24.0	38	15.0	44	70	
TTFR/L 25-70-3RN	3	25	25	150	24.0	38	15.0	64	100	
TTFR/L 25-30-4RN	4	25	25	150	23.6	39	10.0	22	36	
TTFR/L 25-36-4RN	4	25	25	150	23.6	39	20.0	28	42	
TTFR/L 25-42-4RN	4	25	25	150	23.6	39	20.0	34	50	
TTFR/L 25-50-4RN	4	25	25	150	23.6	39	20.0	42	70	
TTFR/L 25-70-4RN	4	25	25	150	23.6	39	20.0	62	120	

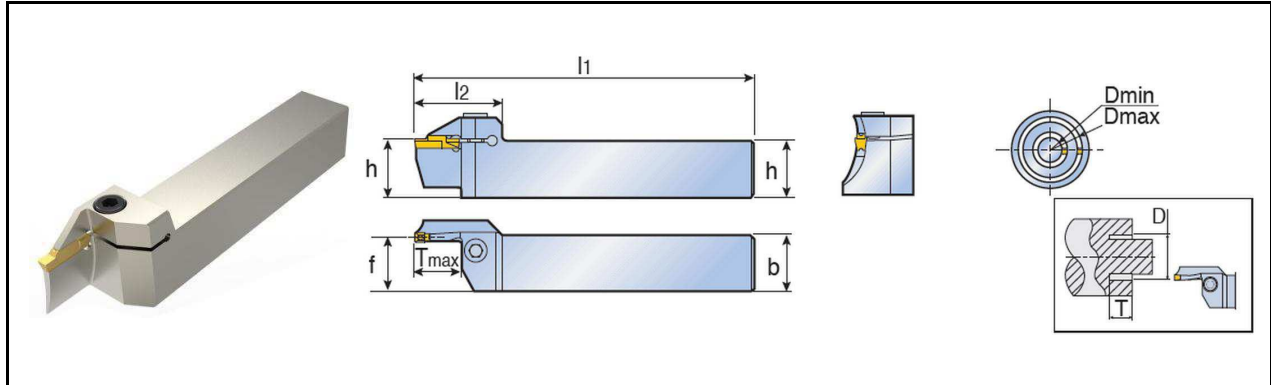
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©This SHANK has no internal coolant

TTFR/L-RN



FACE DEEP GROOVING AND TURNING MILL



PRODUCT MODEL	HOLDER SIZE	DIMENSION								COMPATIBLE INSERT
		h	b	l1	f	l2	Tmax	Dmin	Dmax	
TTFR/L 25-120-4RN	4	25	25	150	23.6	39	20.0	112	200	TDXU TDXY TDC TDXT
TTFR/L 25-200-4RN	4	25	25	150	23.6	39	20.0	200	∞	
TTFR/L 25-60-5RN	5	25	25	150	23.1	49	25.0	50	80	
TTFR/L 25-60-5T15RN	5	25	25	150	23.1	41	15.0	50	80	
TTFR/L 25-80-5RN	5	25	25	150	23.1	49	25.0	70	110	
TTFR/L 25-80-5T15RN	5	25	25	150	23.1	41	15.0	70	110	
TTFR/L 25-110-5RN	5	25	25	150	23.1	49	25.0	100	150	
TTFR/L 25-150-5RN	5	25	25	150	23.1	49	25.0	140	200	
TTFR/L 25-200-5RN	5	25	25	150	23.1	49	25.0	200	∞	
TTFR/L 25-60-6RN	6	25	25	150	22.6	49	25.0	48	70	
TTFR/L 25-70-6RN	6	25	25	150	22.6	49	25.0	58	100	
TTFR/L 25-100-6RN	6	25	25	150	22.6	49	25.0	88	180	
TTFR/L 25-180-6RN	6	25	25	150	22.6	49	25.0	168	400	
TTFR/L 25-400-6RN	6	25	25	150	22.6	49	25.0	400	∞	

© INSERTS to be ordered

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ACCESSORY

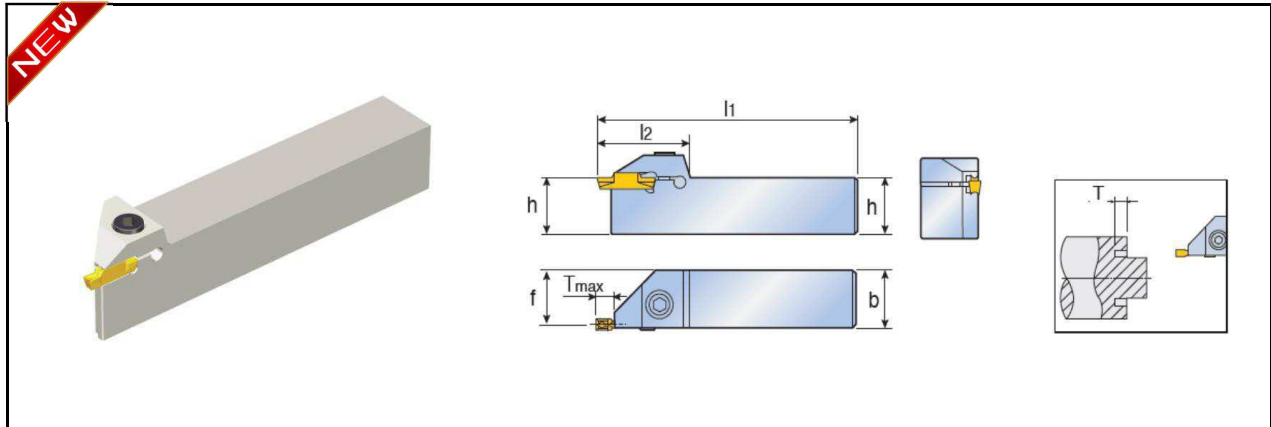
PRODUCT MODEL	SCREW	WRENCH
	TTFR/L 20...RN	CLA0602010
TTFR/L 25...3/4RN	CLA0602510	CBL50
TTFR/L 25...5/6RN	CLA08020125	CBL60

face machining	Note on insert selection
	First, confirm the minimum machining diameter of end face GROOVING on page E04.

TGFR/L



EXTERNAL FACE GROOVING & TURNING MILL



PRODUCT MODEL	HOLDER SIZE	DIMENSION						COMPATIBLE INSERT
		h	b	l1	f	L2	Tmax	
TGFR/L 1616-4	2/3/4	16	16	110	14.6	33	4.8	TDXU TDXY TDC TDXT
TGFR/L 2020-4	2/3/4	20	20	125	18.6	33	4.8	
TGFR/L 2525-4	2/3/4	25	25	150	23.6	33	4.8	
TGFR/L 2020-6	5/6	20	20	125	17.6	37	4.8	
TGFR/L 2525-6	5/6	25	25	150	22.6	37	4.8	

©INSERTS to be ordere

©This SHANK has no internal coolant

ACCESSORY

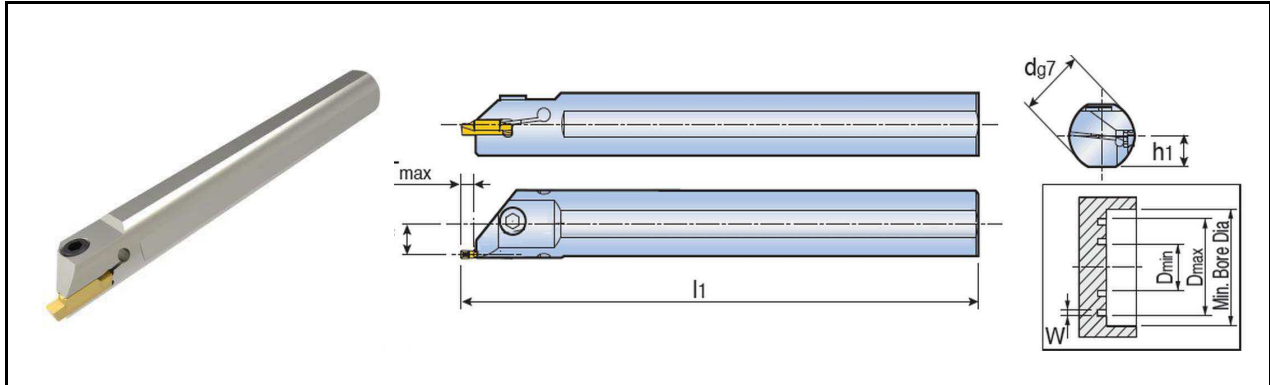
PRODUCT MODEL	SCREW	WRENCH
	TGFR/L 1616	CLA0601610
TGFR/L 2020	CLA0602010	CBL50
TGFR/L 2525	CLA0602510	CBL50

face machining	Note on insert selection
	First, confirm the minimum machining diameter of end face GROOVING on page E04.

TGIFR/L



End face inner hole shallow groove and end face TURNING MILL SHANK



PRODUCT MODEL	HOLDER SIZE	DIMENSION					COMPATIBLE INSERT
		d	l1	f	h1	Tmax	
TGIFR/L 25-4C-T5.5	3, 4	25	200	11.3	11.5	5.5	TDXU TDXY TDC TDXT
TGIFR/L 32-4C-T5.5	3, 4	32	250	14.8	15	5.5	
TGIFR/L 25-6C-T5.5	5, 6	25	200	10.3	11.5	5.5	
TGIFR/L 32-6C-T5.5	5, 6	32	250	13.8	15	5.5	

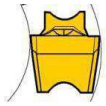
© INSERTS to be ordered

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W	Min bore diameter		Dmin		Dmax
	d=25	d=32	TDGU	TDGU ROUND INSERT	
3	26.3	33.3	20	44	∞
4	26.8	33.8	18	42	
5	26.3	33.3	20		
6	26.8	33.8	18		

ACCESSORY

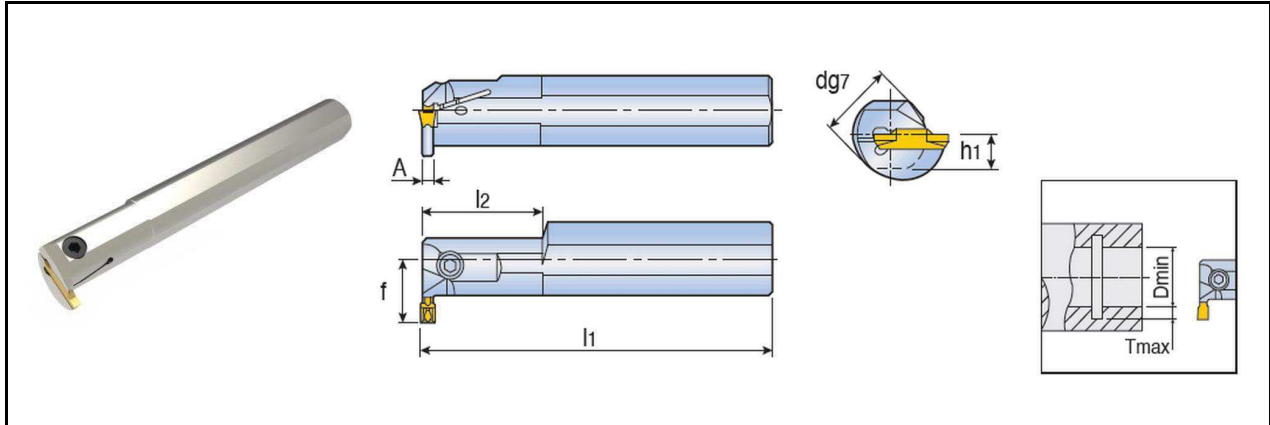
PRODUCT MODEL	SCREW	WRENCH
	TGIFR/L 25	CLA0602010
TGIFR/L 32	CLA0602510	CBL50

face machining	Note on insert selection
	First, confirm the minimum machining diameter of end face GROOVING on page E04.

TTIR/L



INNER HOLE TURNING MILL, GROOVING & PROFILING



PRODUCT MODEL	HOLDER SIZE	DIMENSION								COMPATIBLE INSERT
		d	l1	l2	f	h1	A	Tmax	Dmin	
TTIR/L 16-2	2	16	125	—	16.5	7.5	1.8	8.5	25	TDXU TDXY TDC TDXT
TTIR/L 20-2	2	20	160	40	15.8	9.0	1.6	6.0	25	
TTIR/L 25-2	2	25	200	40	17.5	11.5	1.6	5.0	25	
TTIR/L 20-2.5	2.5	20	160	40	15.8	9.0	2.0	6.0	25	
TTIR/L 25-2.5	2.5	25	200	40	17.5	11.5	2.0	5.0	25	
TTIR/L 32-2.5	2.5	32	250	60	19.8	14.0	2.0	4.7	31	
TTIR/L 20-3	3	20	160	40	15.8	9.0	2.1	6.0	25	
TTIR/L 25-3	3	25	200	40	17.5	11.5	2.1	5.1	25	
TTIR/L 32-3	3	32	250	60	19.8	14.0	2.1	4.7	31	
TTIR/L 20-4	4	20	160	40	15.8	9.0	2.9	6.0	25	
TTIR/L 25-4	4	25	200	40	17.5	11.5	2.9	5.2	25	
TTIR/L 32-4	4	32	250	60	20.8	14.0	2.9	4.7	31	

©INSERTS to be ordere

©This SHANK has no internal coolant

ACCESSORY

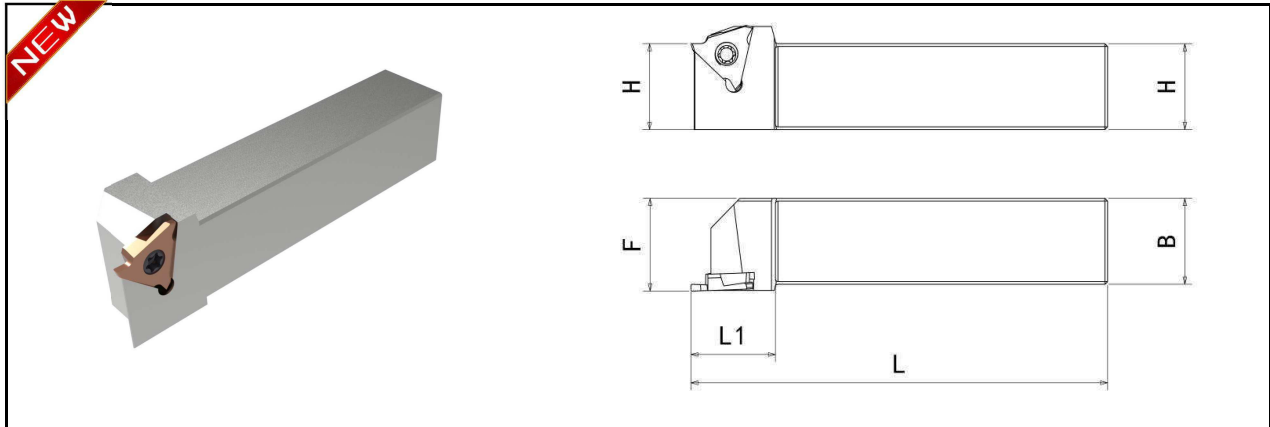
PRODUCT MODEL	SCREW	WRENCH
TTIR/L 16/20-2	CLA0501208	CBL40
TTIR/L 20-2.5/3/4	CLA0501608	CBL40
TTIR/L 25-2/2.5/3/4	CLA0502008	CBL40
TTIR/L 32-2.5/3/4	CLA0502508	CBL40

face machining	Note on insert selection
	First, confirm the minimum machining diameter of end face GROOVING on page E04.

HWBR/L



External Shallow Grooving SHANK



©RIGHT HAND

PRODUCT MODEL	DIMENSION						COMPATIBLE INSERT
	H	B	L	F	L1	CUT. WIDTH	
HWBR/L 1616K16-15	16	16	125	21	25.5	1.1-1.8	3HGF 16R/L 110-180
HWBR/L 2020K16-15	20	20	125	25			
HWBR/L 2525M16-15	25	25	150	30			
HWBR/L 1616K16-25	16	16	125	21			
HWBR/L 2020K16-25	20	20	125	25			
HWBR/L 2525M16-25	25	25	150	30			
HWBR/L 2020K22-15	20	20	125	25		1.0-2.3	3HGF 22R/L 100-230
HWBR/L 2525M22-15	25	25	150	30			
HWBR/L 2020K22-25	20	20	125	25		2.3-3.3	3HGF 22R/L 230-330
HWBR/L 2525M22-25	25	25	150	30			
HWBR/L 2020K22-35	20	20	125	25		3.3-4.8	3HGF 22R/L 330-480
HWBR/L 2525M22-35	25	25	150	30			

©INSERTS to be ordere

©RIGHT SHANK FOR RIGHT INSERT, . LEFT SHANK FOR LEFT INSERTS

©This SHANK has no internal coolant

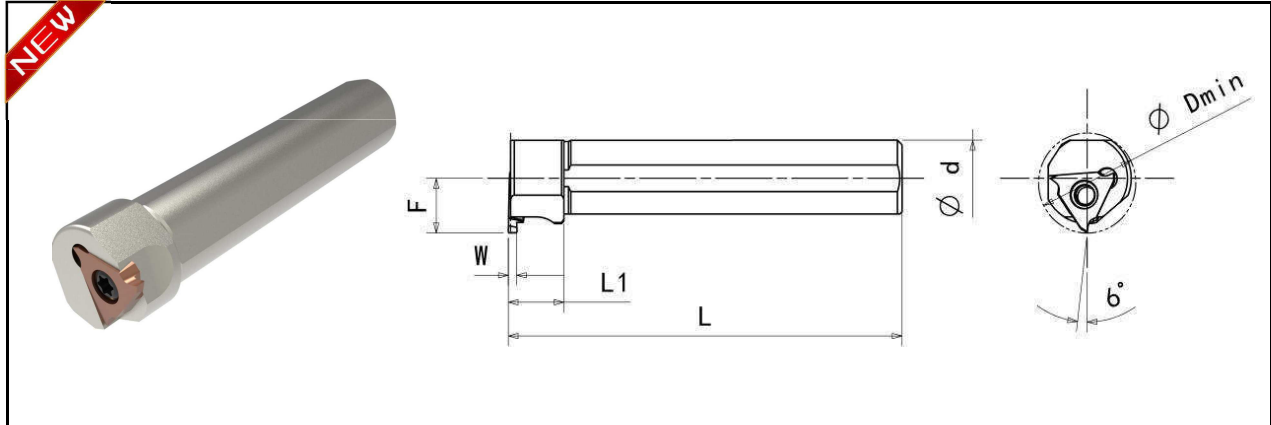
ACCESSORY

PRODUCT MODEL	SCREW	WRENCH
HWBR/L**16	CSG4011-P	CTS15W-P
HWBR/L**22	CSG5012-P	CTS20W-P

SWBR/L



Inner hole shallow groove turning tool holder



©RIGHT HAND SHANK

PRODUCT MODEL	DIMENSION						COMPATIBLE INSERT
	φ Dmin	φ d	L	F	L1	CUT. WIDTH	
S20M-WB1615R/L 25	26	20	150	12.5	15	1.1-1.8	3HGF 16R/L 110-180
S20M-WB1625R/L 25	26	20	150	12.5	15	1.8-3.0	3HGF 16R/L 180-300
S25M-WB2215R/L 35	35	25	150	18.2	15	1.0-2.3	3HGF 22R/L 100-230
S25M-WB2225R/L 35	35	25	150	18.2	20	2.3-3.3	3HGF 22R/L 230-330
S25M-WB2235R/L 35	35	25	150	18.2	20	3.3-4.8	3HGF 22R/L 330-480

©INSERTS to be ordere

©RIGHT SHANK FOR RIGHT INSERT, LEFT SHANK FOR LEFT INSERTS

©This SHANK has no internal coolant

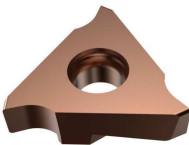
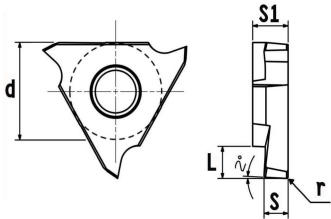
ACCESSORY

PRODUCT MODEL	SCREW	WRENCH
S**WBR/L**16	CSG4011-P	CTS15W-P
S**WBR/L**22	CSG5012-P	CTS20W-P

3HGF**16L/22L



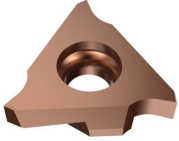
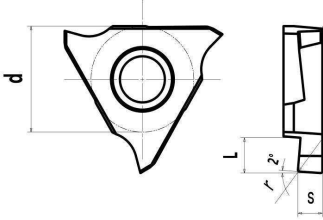
INSERT

INSERT	SHAPE					INTRODUCTION
						vertical blade Shallow Grooved Inserts This is the left blade
PRODUCT MODEL	DIMENSION					GRADE
	S	L	ød	S1	r	HW0620
3HGF 16L110-R01	1.10	2.0	9.525	3.18	0.1	●
3HGF 16L125-R02	1.25	2.0	9.525	3.18	0.2	●
3HGF 16L145-R02	1.45	2.0	9.525	3.18	0.2	●
3HGF 16L150-R02	1.50	2.0	9.525	3.18	0.2	●
3HGF 16L175-R02	1.75	2.0	9.525	3.18	0.2	●
3HGF 16L185-R02	1.85	2.5	9.525	3.18	0.2	●
3HGF 16L200-R02	2.00	2.5	9.525	3.18	0.2	●
3HGF 16L250-R02	2.50	2.5	9.525	3.18	0.2	●
3HGF 16L300-R02	3.00	3.0	9.525	3.18	0.2	●
3HGF 22L125-R02	1.25	2.0	12.7	3.18	0.2	●
3HGF 22L145-R02	1.45	2.0	12.7	3.18	0.2	●
3HGF 22L150-R02	1.50	3.5	12.7	4.76	0.2	●
3HGF 22L175-R02	1.75	3.5	12.7	4.76	0.2	●
3HGF 22L185-R02	1.85	3.5	12.7	4.76	0.2	●
3HGF 22L200-R02	2.00	3.5	12.7	4.76	0.2	●
3HGF 22L230-R02	2.30	3.5	12.7	4.76	0.2	●
3HGF 22L250-R03	2.50	4.0	12.7	4.76	0.3	●
3HGF 22L265-R03	2.65	4.0	12.7	4.76	0.3	●
3HGF 22L280-R03	2.80	4.0	12.7	4.76	0.3	●
3HGF 22L300-R03	3.00	4.0	12.7	4.76	0.3	●
3HGF 22L320-R03	3.20	4.0	12.7	4.76	0.3	●
3HGF 22L330-R03	3.30	4.0	12.7	4.76	0.3	●
3HGF 22L350-R03	3.50	5.0	12.7	4.76	0.3	●
3HGF 22L400-R04	4.0	5.0	12.7	4.76	0.4	●
3HGF 22L430-R04	4.3	5.0	12.7	4.76	0.4	●
3HGF 22L450-R04	4.5	5.0	12.7	4.76	0.4	●
3HGF 22L480-R04	4.8	5.0	12.7	5.06	0.4	●

MILLING INSERT



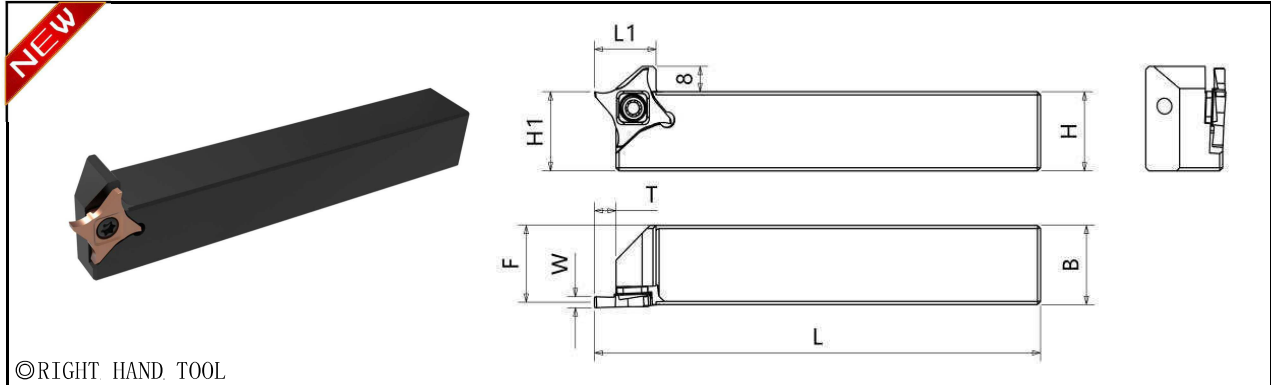
3CGF**16R/22R

INSERT	SHAPE				INTRODUCTION	
					<p>vertical blade Shallow Grooved Inserts This is the RIGHT blade</p>	
INSERT MODEL	DIMENSION					GRADE
	S	L	ød	S1	r	HW0620
3HGF 16R110-R01	1.10	2.0	9.525	3.18	0.1	●
3HGF 16R125-R02	1.25	2.0	9.525	3.18	0.2	●
3HGF 16R145-R02	1.45	2.0	9.525	3.18	0.2	●
3HGF 16R150-R02	1.50	2.0	9.525	3.18	0.2	●
3HGF 16R175-R02	1.75	2.0	9.525	3.18	0.2	●
3HGF 16R185-R02	1.85	2.5	9.525	3.18	0.2	●
3HGF 16R200-R02	2.00	2.5	9.525	3.18	0.2	●
3HGF 16R250-R02	2.50	2.5	9.525	3.18	0.2	●
3HGF 16R300-R02	3.00	3.0	9.525	3.18	0.2	●
3HGF 22R125-R02	1.25	2.0	12.7	3.18	0.2	●
3HGF 22R145-R02	1.45	2.0	12.7	3.18	0.2	●
3HGF 22R150-R02	1.50	3.5	12.7	4.76	0.2	●
3HGF 22R175-R02	1.75	3.5	12.7	4.76	0.2	●
3HGF 22R185-R02	1.85	3.5	12.7	4.76	0.2	●
3HGF 22R200-R02	2.00	3.5	12.7	4.76	0.2	●
3HGF 22R230-R02	2.30	3.5	12.7	4.76	0.2	●
3HGF 22R250-R03	2.50	4.0	12.7	4.76	0.3	●
3HGF 22R265-R03	2.65	4.0	12.7	4.76	0.3	●
3HGF 22R280-R03	2.80	4.0	12.7	4.76	0.3	●
3HGF 22R300-R03	3.00	4.0	12.7	4.76	0.3	●
3HGF 22R320-R03	3.20	4.0	12.7	4.76	0.3	●
3HGF 22R330-R03	3.30	4.0	12.7	4.76	0.3	●
3HGF 22R350-R03	3.50	5.0	12.7	4.76	0.3	●
3HGF 22R400-R04	4.0	5.0	12.7	4.76	0.4	●
3HGF 22R430-R04	4.3	5.0	12.7	4.76	0.4	●
3HGF 22R450-R04	4.5	5.0	12.7	4.76	0.4	●
3HGF 22R480-R04	4.8	5.0	12.7	5.06	0.4	●

4HW/4HWP



External Shallow Grooving Toolholder

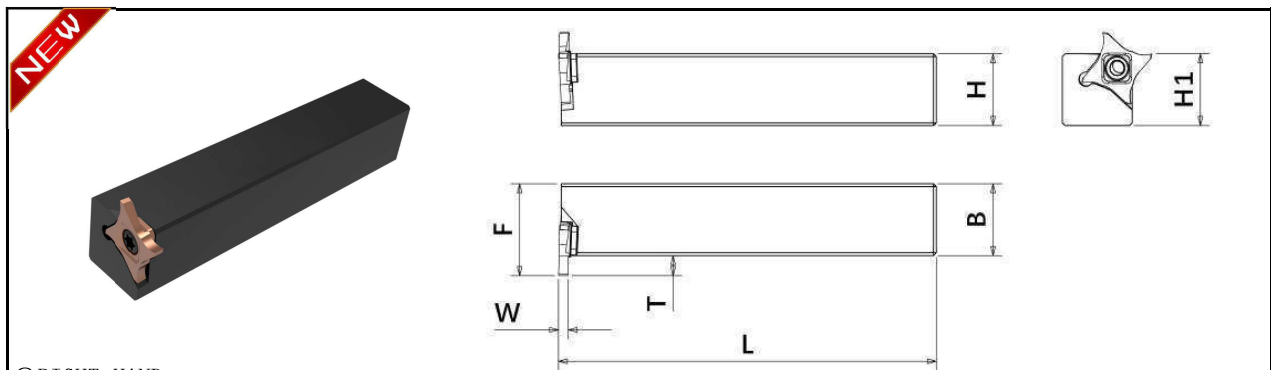


©RIGHT HAND TOOL

PRODUCT MODEL	DIMENSION							COMPATIBLE INSERT
	H	B	L	F	L1	T	CUT WIDTH	
4HWR/L 10-27	10	10	120	21	—	4.5-6.5	2.0-3.5	4HGF 27
4HWR/L 12-27	12	12	120	25	—			
4HWR/L 16-27	16	16	120	30	—			
4HWR/L 20-27	20	20	120	25	—			
4HWR/L 25-27	25	25	135	30	—			

©Inserts are ordered separately, this shank has no internal coolant.

©RIGHT SHANK FOR RIGHT INSERT, LEFT SHANK FOR LEFT INSERTS



©RIGHT HAND

PRODUCT MODEL	DIMENSION							COMPATIBLE INSERT
	H	B	L	F		T	W	
4HWPR/L 16-27	16	16	120	24		4.5-6.5	2.0-3.5	4HGF 27
4HWPR/L 20-27	20	20	120	28				
4HWPR/L 25-27	25	25	135	33				

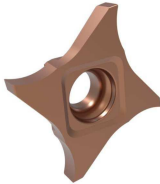
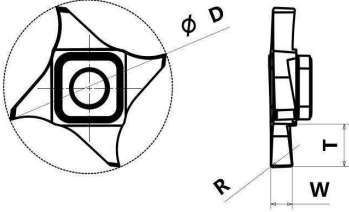
©Inserts are ordered separately, this shank has no internal coolant.

©RIGHT SHANK FOR LEFT INSERTS, LEFT SHANK (L) FOR RIGHT INSERTS (R) .

4HGF



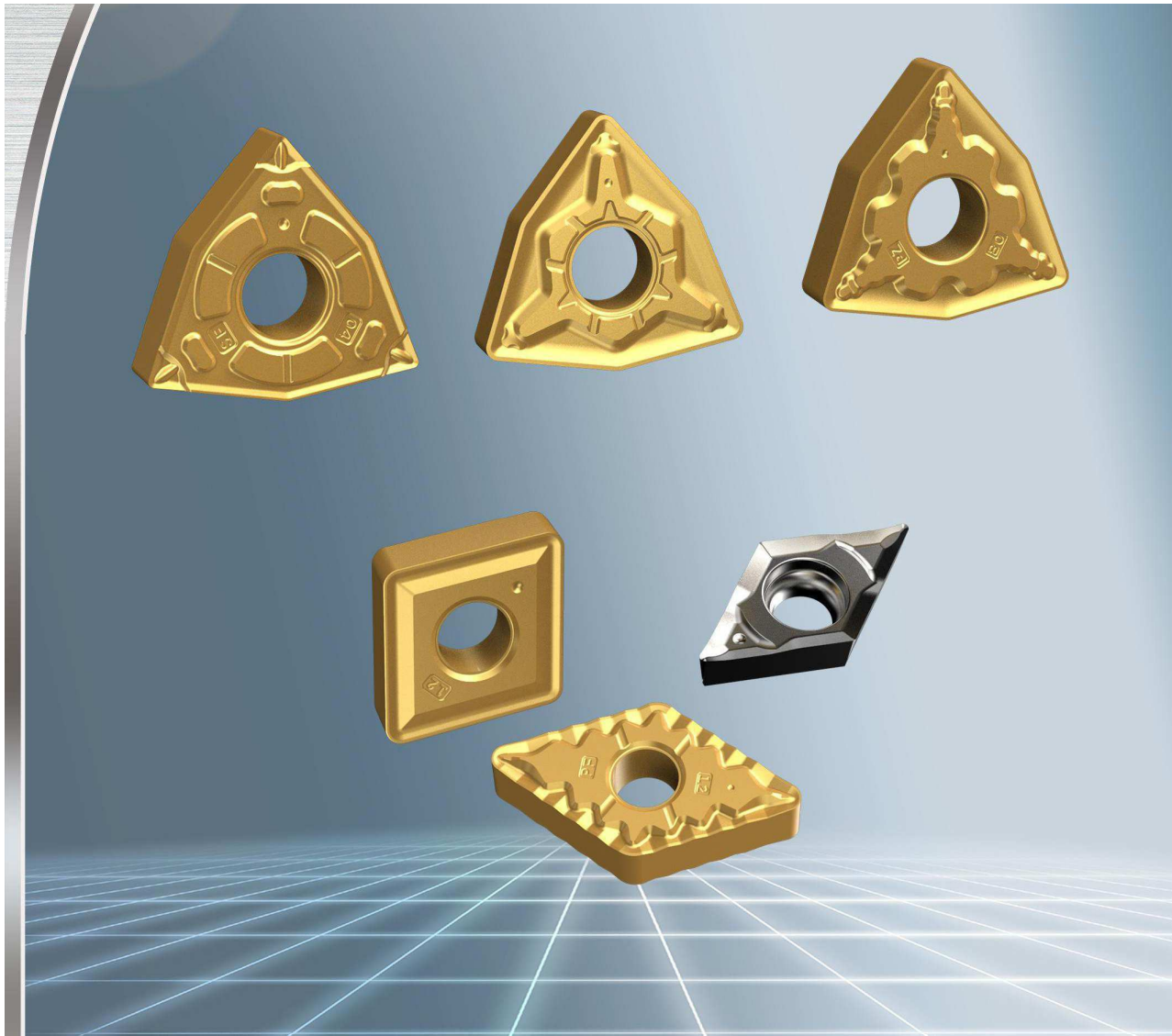
GROOVING INSERT

INSERT	SHAPE	INTRODUCTION				
		vertical blade Shallow Grooved Inserts There are left and right hand blades, the picture shows the right hand blade				
INSERT MODEL	DIMENSION				LEFT/RIGHT	GRADE
	øD	W	T	R		CT5520
4HGF 27L200-R02	27.0	2.0	4.5	0.2	L	●
4HGF 27L230-R02	27.0	2.3	5.5	0.2		●
4HGF 27L250-R03	27.0	2.5	5.5	0.3		●
4HGF 27L270-R03	27.0	2.7	5.5	0.3		●
4HGF 27L300-R03	27.0	3.0	6.5	0.3		●
4HGF 27L320-R03	27.0	3.2	6.5	0.3		●
4HGF 27L350-R03	27.0	3.5	6.5	0.3		●
4HGF 27R200-R02	27.0	2.0	4.5	0.2	R	●
4HGF 27R230-R02	27.0	2.3	5.5	0.2		●
4HGF 27R250-R03	27.0	2.5	5.5	0.3		●
4HGF 27R270-R03	27.0	2.7	5.5	0.3		●
4HGF 27R300-R03	27.0	3.0	6.5	0.3		●
4HGF 27R320-R03	27.0	3.2	6.5	0.3		●
4HGF 27R350-R03	27.0	3.5	6.5	0.3		●



ACCESSORY

PRODUCT MODEL	SCREW	WRENCH
		
4HW/4HWP-27	CSC5012	CTS20W



GRADE




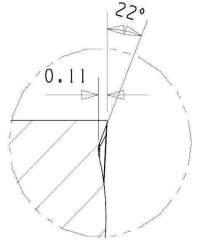

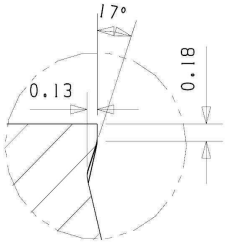
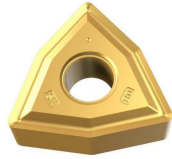
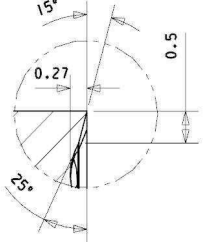

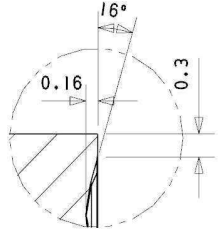
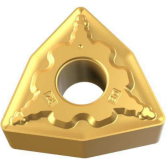
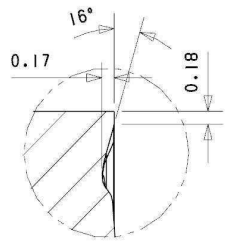
CHART

PROCESSED MATERIAL		P: STEEL	M : S.S	K: CAST IRON
		N: Non-ferrous metal	S: heat resi. alloy	H: hard material
GRADE	ISO	DIRECTIONS		
HW0635	P10 — P20	◇CVD strong textured coating ◇Strong textured coating sizing technology, inhibits the crack development of the coating, has impact toughness and Perfect combination of wear resistance, suitable for high-speed cutting of steel parts from finishing to semi-finishing; ◇Suitable for continuous and slightly intermittent processing of steel.		
HW0645	P20 — P30	◇CVD strong textured coating ◇Strong textured coating sizing technology, inhibits the crack development of the coating, has excellent toughness and ... abrasion resistance; ◇Suitable for general processing of steel parts.		
HW0655	P10 — P20	◇CVD coating ◇After special surface post-treatment process, excellent fusion resistance, impact resistance and wear resistance are obtained; ◇Suitable for continuous and slightly intermittent high-speed machining of steel materials.		
HW0665	P20 — P30	◇CVD coating ◇After special surface post-treatment process, excellent fusion resistance, impact resistance and wear resistance are obtained; ◇Suitable for general processing of steel materials.		
HW1815	K10 — K20	◇CVD coating ◇Suitable for continuous high-speed machining of cast iron materials.		
HW1825	K20 — K30	◇CVD c ◇Suitable for general machining of cast iron materials under continuous and intermittent conditions.		
HW8215	M10 — M30	◇PVD coating ◇Has good impact resistance and excellent edge safety; ◇For continuous and slightly interrupted processing of stainless steel materials.		
HW8225	M15 — M40	◇PVD coating ◇Has good edge strength and impact resistance and excellent wear resistance; ◇It is preferably used for semi-finishing and finishing of stainless steel materials under stable working conditions.		
HW A7	K05 — K15 N05 — N15 S05 — S15	◇Uncoated carbide ◇Good wear resistance; ◇General turning of cast iron, special alloys and non-ferrous metals, including aluminum alloys and copper alloys.		

Groove Description



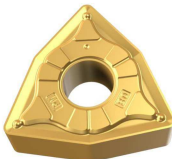
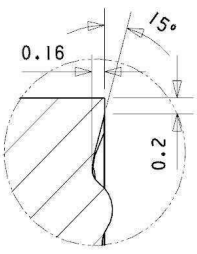

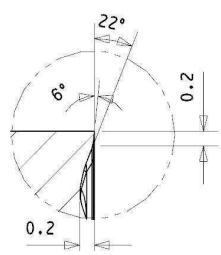

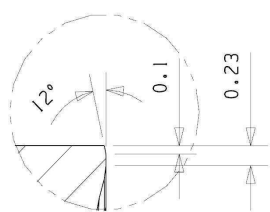
chip breaker

Negative Inserts: Chipbreaker Name and Geometry			Applications and Features
SF			<ul style="list-style-type: none"> • Fine to semi-finishing of steel and stainless steel; • Good chip evacuation at low feed and shallow depth of cut; • Excellent chip control.
PF			<ul style="list-style-type: none"> • Excellent overall performance of edge strength and sharpness; • For semi-finish to medium processing of steel and alloy steels work; • Good chip control.
MS			<ul style="list-style-type: none"> • Fine to semi-finishing of stainless steel, mild steel, hard-to-cut materials • Finishing geometry; • High edge sharpness; • Universal chipbreaker shape.
TM			<ul style="list-style-type: none"> • Moderate finishing geometries for steels • Positive rake design for sharpness and low cutting resistance force • Universal chipbreaker with wide chip evacuation area
PZ			<ul style="list-style-type: none"> • Medium machining geometry for steel; • Rounding treatment, both cutting effect of cutting edge and cutting edge • Mouth strength, good overall performance; • Good chip breaking in moderate machining.

Groove Description




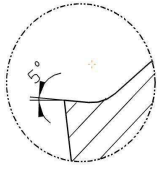

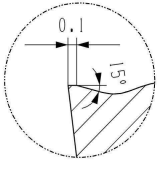

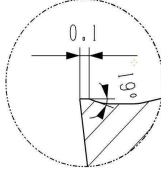
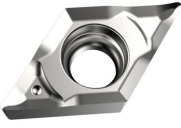
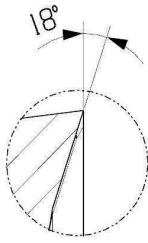
chip breaker

Negative Inserts: Chipbreaker Name and Geometry			Applications and Features
PM			<ul style="list-style-type: none"> • Medium roughing geometry for steel; • Negative chamfer design for enhanced blade edge strength and resistance to impact performance; • Double chip breaker design to expand the chip breaking range.
MA			<ul style="list-style-type: none"> • Moderate loading of stainless steel, mild steel, hard-to-cut materials to slot type; • The cutting edge is sharp and takes into account a certain strength, with • Good impact resistance; • Long cutting life.
General groove			<ul style="list-style-type: none"> • Universal geometry for cast iron machining; • Good edge strength and versatility.

Groove Description



chip breaker

Positive Inserts: Chipbreaker Designation and Geometry			Applications and Features
PS			<ul style="list-style-type: none"> • Finishing to semi-finishing geometries for steel; • Compact chipbreaker combines sharpness with low cutting resistance force • Good chip control.
PA			<ul style="list-style-type: none"> • Medium machining geometry for steel; • Both the cutting effect of the cutting edge and the strength of the cutting edge; • Preferred geometry for medium machining.
GM			<ul style="list-style-type: none"> • Medium machining geometry for steel and stainless steel; • It has both sharpness and edge strength, and is comprehensive; • Geometry with low cutting resistance.
AL			<ul style="list-style-type: none"> • Special geometry for aluminum alloy machining • Sharp cutting edge with good chip breaking.

CNMG



Negative 80° diamond insert

	cutting edge length	dimension		
		d	t	r
	09	9.52	4.76	0.8-1.2
	12	12.7	4.76	0.1-1.6
	16	15.88	6.35	1.2-1.6
	19	19.05	6.35	0.4-1.6
25	25.4	9.52	2.4	

insert	model	feed (mm/rev)	cut depth (mm)	P				M/S		K		N
				HW0635	HW0645	HW0655	HW0665	HW8215	HW8225	HW1815	HW1825	HW A7
 fine finishing	CNMG	120404 SF	0.05-0.30	0.2-2.5			●	○				
		120408 SF	0.08-0.35	0.3-2.5			●	○				
 fine finishing	CNMG	120404 PF	0.10-0.40	0.5-4.0	○	●	○	●				
		120408 PF	0.10-0.40	0.5-4.0	○	●	○	●				
 fine finishing	CNMG	120404 MS	0.10-0.40	0.5-4.0					●	●		
		120408 MS	0.10-0.40	0.5-4.0					●	●		
 medium finishing	CNMG	120404 TM	0.17-0.55	1.2-5.0	○	●	○	●				
		120408 TM	0.17-0.55	1.2-5.0	○	●	○	●				
		120412 TM	0.20-0.55	1.5-5.0	○	●	○	●				
 medium finishing	CNMG	120408 PZ	0.17-0.55	1.2-5.0	○	●	○	●				
		120412 PZ	0.20-0.55	1.5-5.0	○	●	○	●				

- HOT GRADE
- OPTIONAL GRADE

CNMG



Negative 80° Rhombus insert

	cutting edge length	dimension		
		d	t	r
	09	9.52	4.76	0.8-1.2
	12	12.7	4.76	0.1-1.6
	16	15.88	6.35	1.2-1.6
	19	19.05	6.35	0.4-1.6
25	25.4	9.52	2.4	

insert	model	feed (mm/rev)	cut depth (mm)	P				M/S		K		N
				HW0635	HW0645	HW0655	HW0665	HW8215	HW8225	HW1815	HW1825	HW A7
 medium finishing	CNMG	120404 MA	0.10-0.50	0.5-5.0					●	●		
		120408 MA	0.13-0.50	0.5-5.0					●	●		
		120412 MA	0.15-0.55	0.5-5.0					●	●		
 Rough finishing	CNMG	120408	0.23-0.60	1.2-5.0							○	●
		120412	0.25-0.60	2.0-5.0							○	●
		120416	0.27-0.60	2.5-5.0							○	●
		160608	0.25-0.60	2.0-6.5							○	●
		160612	0.27-0.60	2.0-6.5							○	●
		160616	0.29-0.60	2.0-6.5							○	●
		190612	0.30-0.60	3.0-8.0							○	●
190616	0.35-0.70	3.0-8.0							○	●		

DNMG



Negative 55° Rhombus insert

	cutting edge length	dimension		
		d	t	r
	11	9.52	4.76	0.8-1.2
	13	11.11	5.56	0.4-1.2
	15	12.7	4.76-6.35	0.1-1.2

insert	model	feed (mm/rev)	cut depth (mm)	P				M/S		K		N	
				HW0635	HW0645	HW0655	HW0665	HW8215	HW8225	HW1815	HW1825	HW A7	
 fine finishing	DNMG	150404 SF	0.10-0.40	0.5-4.0			●	○					
		150408 SF	0.10-0.40	0.5-4.0			●	○					
 fine finishing	DNMG	150404 PF	0.10-0.40	0.5-4.0	○	●	○	●					
		150408 PF	0.10-0.40	0.5-4.0	○	●	○	●					
		150412 PF	0.10-0.40	0.5-4.0	○	●	○	●					
 fine finishing	DNMG	150404 MS	0.10-0.40	0.5-4.0					●	●			
		150408 MS	0.10-0.40	0.5-4.0					●	●			
 medium finishing	DNMG	150404 TM	0.17-0.50	1.0-4.0		●		●					
		150408 TM	0.17-0.50	1.0-4.0		●		●					
 medium finishing	DNMG	150412 PM	0.17-0.50	1.0-4.0		●		●					
 Rough finishing	DNMG	150408	0.17-0.55	1.5-4.0						○	●		
		150412	0.25-0.55	1.5-4.0							○	●	
		150612	0.25-0.55	1.0-4.0							○	●	

- HOT GRADE
- OPTIONAL GRADE

SNMG



negative square insert

	cutting edge length	dimension		
		d	t	r
	12	12.7	4.76	0.4-1.6
	19	19.05	6.35	1.2-1.6
	25	25.4	7.94-9.52	1.6-2.4
	31	31.75	9.52	2.4

insert	model	feed (mm/rev)	cut depth (mm)	P				M/S		K		N
				HW0635	HW0645	HW0655	HW0665	HW8215	HW8225	HW1815	HW1825	HW A7
 medium finishing	SNMG	120404 TM	0.12-0.40	1.0-5.0		●	○	●				
		120408 TM	0.17-0.55	1.2-5.0		●	○	●				
 medium finishing	SNMG	120404 MA	0.10-0.30	1.2-5.0					●	●		
		120408 MA	0.17-0.55	1.2-5.0					●	●		
		120412 MA	0.20-0.55	1.5-5.0					●	●		
 Rough finishing	SNMG	120404	0.17-0.45	1.0-5.0							○	●
		120408	0.23-0.60	1.5-5.0							○	●
		120412	0.25-0.60	2.0-5.0							○	●
		150608	0.25-0.60	1.5-6.0							○	●
		150612	0.25-0.60	2.0-6.0							○	●
		150616	0.35-0.70	2.0-6.0							○	●
		190612	0.30-0.60	3.0-8.0							○	●
		190616	0.35-0.70	3.0-8.0							○	●

TNMG



negative triangle insert

	cutting edge length	dimension		
		d	t	r
	11	6.35	3.18	0.4
	13	7.94	4.76	0.2-1.2
	16	9.52	4.76	0.4-1.6
22	12.7	4.76	0.4-4.6	

insert	model	feed (mm/rev)	cut depth (mm)	P				M/S		K		N
				HW0635	HW0645	HW0655	HW0665	HW8215	HW8225	HW1815	HW1825	HW A7
<p>fine finishing</p>	TNMG	160404 SF	0.10-0.40	0.5-4.0			●	○				
		160408 SF	0.10-0.40	0.5-4.0			●	○				
<p>fine finishing</p>	TNMG	160404 PF	0.10-0.40	0.5-4.0	●	●	○	●				
		160408 PF	0.10-0.40	0.5-4.0	●	●	○	●				
<p>fine finishing</p>	TNMG	160404 MS	0.10-0.40	0.5-4.0					●	●		
		160408 MS	0.10-0.40	0.5-4.0					●	●		
<p>medium finishing</p>	TNMG	160404 PM	0.15-0.40	0.5-4.0		●		●				
		160408 PM	0.15-0.40	0.5-4.0		●		●				
		160412 PM	0.15-0.40	0.5-4.0		●		●				
<p>medium finishing</p>	TNMG	160404 TM	0.17-0.40	1.0-3.5		●		●				
		160408 TM	0.17-0.50	1.2-3.5		●		●				
		160412 TM	0.20-0.50	1.5-3.5		●		●				

- HOT GRADE
- OPTIONAL GRADE

TNMG



negative triangle insert

	cutting edge length	dimension		
		d	t	r
	11	6.35	3.18	0.4
	13	7.94	4.76	0.2-1.2
	16	9.52	4.76	0.4-1.6
	22	12.7	4.76	0.4-4.6

insert	model	feed (mm/rev)	cut depth (mm)	P				M/S		K		N	
				HW0635	HW0645	HW0655	HW0665	HW8215	HW8225	HW1815	HW1825	HW A7	
 medium finishing	TNMG	160408 PZ	0.17-0.50	1.2-3.5		●		●					
 medium finishing	TNMG	160404 MA	0.13-0.50	0.8-4.5					●	●			
		160408 MA	0.15-0.55	0.8-4.5					●	●			
 Rough finishing	TNMG	160404	0.17-0.45	1.5-3.5							○	●	
		160408	0.17-0.55	2.0-3.5							○	●	
		160412	0.25-0.55	2.0-3.5							○	●	
		220408	0.17-0.55	2.0-5.0							○	●	
		220412	0.25-0.55	2.0-5.0							○	●	

VNMG



Negative 35° DIAMOND insert

	cutting edge length	dimension		
		d	t	r
	13	7.94	4.76	0.4-0.8
	16	9.52	4.76	0.1-1.2

insert	model	feed (mm/rev)	cut depth (mm)	P				M/S		K		N
				HW0635	HW0645	HW0655	HW0665	HW8215	HW8225	HW1815	HW1825	HW A7
 fine finishing	VNMG	160404 SF	0.05-0.30	0.5-2.0			●	○				
		160408 SF	0.07-0.30	0.5-2.0			●	○				
 fine finishing	VNMG	160404 MS	0.05-0.30	0.5-2.0					●	●		
		160408 MS	0.07-0.30	0.5-2.0					●	●		
 medium finishing	VNMG	160404 TM	0.15-0.36	0.8-3.0		●		●				
		160408 TM	0.17-0.36	1.0-2.5		●		●				
 medium finishing	VNMG	160408 PZ	0.17-0.36	1.0-2.5		●		●				
 medium finishing	VNMG	160404 MA	0.10-0.30	0.5-3.5					●	●		
		160408 MA	0.13-0.50	0.8-3.5					●	●		
 Rough finishing	VNMG	160404	0.17-0.40	1.0-3.0						○	●	
		160408	0.17-0.50	1.5-3.0						○	●	

- HOT GRADE
- OPTIONAL GRADE

WNMG



NEGATIVE 80° TRIANGLE insert

	cutting edge length	dimension		
		d	t	r
	06	9.52	4.76	0.4-1.2
	08	12.7	4.76	0.4-1.2

insert	model	feed (mm/rev)	cut depth (mm)	P				M/S		K		N
				HW0635	HW0645	HW0655	HW0665	HW8215	HW8225	HW1815	HW1825	HW A7
 fine finishing	WNMG	080404 SF	0.10-0.40	0.5-4.0			●	○	○	○		
		080408 SF	0.10-0.40	0.5-4.0			●	○	○	○		
 fine finishing	WNMG	080404 MS	0.10-0.40	0.5-4.0					●	●		
		080408 MS	0.10-0.40	0.5-4.0					●	●		
 medium finishing	WNMG	080404 PF	0.10-0.40	0.5-4.0	○	●	○	●				
		080408 PF	0.10-0.40	0.5-4.0	○	●	○	●				
 medium finishing	WNMG	080404 PM	0.15-0.40	0.5-4.0	○	●	○	●				
		080408 PM	0.15-0.40	0.5-4.0	○	●	○	●				
		080412 PM	0.15-0.40	0.5-4.0	○	●	○	●				
 medium finishing	WNMG	080408 TM	0.17-0.55	1.2-4.0	○	●	○	●				
		080412 TM	0.25-0.55	1.5-4.0	○	●	○	●				

WNMA



NEGATIVE 80° TRIANGLE insert

	cutting edge length	dimension		
		d	t	r
	06	9.52	4.76	0.4-1.2
	08	12.7	4.76	0.4-1.6

insert	model	feed (mm/rev)	cut depth (mm)	P				M/S		K		N
				HW0635	HW0645	HW0655	HW0665	HW8215	HW8225	HW1815	HW1825	HW A7
 medium finishing	WNMG	080408 PZ	0.17-0.55	1.2-4.0	○	●	○	●				
		080412 PZ	0.25-0.55	1.5-4.0	○	●	○	●				
 medium finishing	WNMG	060408 MA	0.13-0.50	0.5-5.0					●	●		
		060412 MA	0.15-0.55	0.5-5.0					●	●		
		080404 MA	0.10-0.45	0.8-4.0					●	●		
		080408 MA	0.12-0.45	0.8-4.0					●	●		
		080412 MA	0.12-0.45	0.8-4.0					●	●		
		080416 MA	0.12-0.45	0.8-4.0					●	●		
 Rough finishing	WNMG	080404	0.15-0.70	1.0-5.0							○	●
		080408	0.15-0.70	1.0-5.0							○	●
		080412	0.20-0.80	1.5-5.0							○	●
		080416	0.20-0.80	1.5-5.0							○	●

- HOT GRADE
- OPTIONAL GRADE

CCMT



POSITIVE 7° REAR ANGLE RHOMBIC insert

	cutting edge length	dimension		
		d	t	r
	06	6.35	2.38	0.1-0.8
	09	9.52	3.97	0.1-0.8
	12	12.7	4.76	0.4-1.2

insert	model	feed (mm/rev)	cut depth (mm)	P				M/S		K		N
				HW0635	HW0645	HW0655	HW0665	HW8215	HW8225	HW1815	HW1825	HW A7
 fine finishing	CCMT	09T304 PS	0.05-0.15	0.5-2.5	o	o		●	o	o		
		09T308 PS	0.07-0.15	0.5-2.5	o	o		●	o	o		
 medium finishing	CCMT	060204 PA	0.07-0.20	0.5-2.0	o	o		●	o	o		
		060208 PA	0.13-0.30	0.7-2.0	o	o		●	o	o		
		09T304 PA	0.10-0.25	0.7-3.5	o	o		●	o	o		
		09T308 PA	0.13-0.30	1.0-3.5	o	o		●	o	o		
		120404 PA	0.10-0.25	1.0-5.0	o	o		●	o	o		
		120408 PA	0.13-0.30	1.3-5.0	o	o		●	o	o		
		120412 PA	0.17-0.35	1.5-5.0	o	o		●	o	o		
 medium finishing	CCMT	060204 GM	0.07-0.20	0.5-2.0	o	●		●	●	●		
		09T304 GM	0.10-0.25	0.7-3.5	o	●		●	●	●		
		09T308 GM	0.13-0.30	1.0-3.5	o	●		●	●	●		
		120404 GM	0.10-0.25	1.0-5.0	o	●		●	●	●		
		120408 GM	0.13-0.30	1.3-5.0	o	●		●	●	●		

DCMT



POSITIVE 7° REAR ANGLE 55° RHOMBIC insert

	cutting edge length	dimension		
		d	t	r
	07	6.35	2.38	0.03-0.8
	11	9.52	3.97	0.03-0.8

insert	model	feed (mm/rev)	cut depth (mm)	P				M/S		K		N
				HW0635	HW0645	HW0655	HW0665	HW8215	HW8225	HW1815	HW1825	HW A7
 fine finishing	DCMT	11T304 PS	0.05-0.15	0.5-2.5	●	●		●	○	○		
		11T308 PS	0.07-0.15	0.5-2.5	●	●		●	○	○		
 medium finishing	DCMT	070204 PA	0.06-0.18	0.3-2.0	●	●		●	○	○		
		070208 PA	0.08-0.25	0.4-2.0	●	●		●	○	○		
		11T304 PA	0.08-0.25	0.35-3.0	●	●		●	○	○		
		11T308 PA	0.10-0.28	0.5-3.0	●	●		●	○	○		
		11T312 PA	0.12-0.32	0.5-3.0	●	●		●	○	○		
 medium finishing	DCMT	070204 GM	0.06-0.18	0.3-2.0	●	●		●	●	●		
		070208 GM	0.08-0.25	0.4-2.0	●	●		●	●	●		
		11T304 GM	0.08-0.25	0.35-3.0	●	●		●	●	●		
		11T308 GM	0.10-0.28	0.5-3.0	●	●		●	●	●		
 medium finishing	DCMT	11T308	0.10-0.28	0.5-3.0	●	●		●	○	○	○	●
 fine finishing	DCGX	11T304 AL	0.10-0.28	0.5-3.0								●

- HOT GRADE
- OPTIONAL GRADE

SCMT



POSITIVE 7° REAR ANGLE 55° RHOMBIC insert

	cutting edge length	dimension		
		d	t	r
	09	9.52	3.97	0.4-0.8
	12	12.7	4.76	0.4-1.2

insert	model	feed (mm/rev)	cut depth (mm)	P				M/S		K		N
				HW0635	HW0645	HW0655	HW0665	HW8215	HW8225	HW1815	HW1825	HW A7
 fine finishing	SCMT	09T304 PS	0.05-0.15	0.5-2.5		o		●	o	o		
		09T308 PS	0.07-0.15	0.5-2.5		o		●	o	o		
 medium finishing	SCMT	09T304 PA	0.25-0.50	1.5-4.0		o		●		o		
		09T308 PA	0.30-0.60	2.5-5.0		o		●		o		
		120404 PA	0.40-0.75	3.0-7.0		o		●		o		
		120408 PA	0.48-0.90	3.5-9.0		o		●		o		
		120412 PA	0.55-1.20	4.0-12.0		o		●		o		
 medium finishing	SCMT	09T304 GM	0.25-0.50	1.5-4.0		o		●		o		
		09T308 GM	0.30-0.60	2.5-5.0		o		●		o		
		120404 GM	0.40-0.75	3.0-7.0		o		●		o		
		120408 GM	0.48-0.90	3.5-9.0		o		●		o		

TCMT



POSITIVE7° REAR ANGLE TRIANGLE insert

	cutting edge length	dimension		
		d	t	r
	06	3.97	1.98	0.2
	09	5.56	2.38	0.4-0.8
	11	6.35	2.38-3.18	0.1-0.8
	16	9.52	3.97	0.4-1.2
22	12.7	4.76	0.8	

insert	model	feed (mm/rev)	cut depth (mm)	P				M/S		K		N
				HW0635	HW0645	HW0655	HW0665	HW8215	HW8225	HW1815	HW1825	HW A7
 fine finishing	TCMT	16T304 PS	0.05-0.15	0.5-2.5		o		●		o		
		16T308 PS	0.07-0.15	0.5-2.5		o		●		o		
 medium finishing	TCMT	090204 PA	0.10-0.25	0.6-2.0		●		●		o		
		090208 PA	0.13-0.30	0.8-2.0		●		●		o		
		110204 PA	0.10-0.25	0.6-3.0		●		●		o		
		110208 PA	0.13-0.30	0.8-3.0		●		●		o		
		16T304 PA	0.10-0.25	0.8-5.0		●		●		o		
		16T308 PA	0.10-0.30	1.0-5.0		●		●		o		
		16T312 PA	0.10-0.30	1.5-5.0		●		●		o		
 medium finishing	TCMT	110204 GM	0.10-0.25	0.6-3.0	●	●		●	●	●		
		110208 GM	0.13-0.30	0.8-3.0	●	●		●	●	●		
		16T304 GM	0.10-0.25	0.8-5.0	●	●		●	●	●		
		16T308 GM	0.10-0.30	1.0-5.0	●	●		●	●	●		
		16T312 GM	0.10-0.30	1.5-5.0	●	●		●	●	●		

- HOT GRADE
- OPTIONAL GRADE

VBMT



POSITIVE 5° REAR ANGLE 35° RHOMBIC insert

	cutting edge length	dimension		
		d	t	r
	16	9.52	4.76	0.4-1.2

insert	model	feed (mm/rev)	cut depth (mm)	P				M/S		K		N
				HW0635	HW0645	HW0655	HW0665	HW8215	HW8225	HW1815	HW1825	HW A7
 fine finishing	VBMT	160404 PS	0.05-0.15	0.5-2.5	o	o		●	o	o		
		160408 PS	0.07-0.15	0.5-2.5	o	o		●	o	o		
 medium finishing	VBMT	160404 PA	0.10-0.25	0.6-3.0	o	o		●	o	o		
		160408 PA	0.13-0.30	0.9-3.0	o	o		●	o	o		
		160412 PA	0.15-0.30	1.2-3.0	o	o		●	o	o		
 medium finishing	VBMT	160404 GM	0.10-0.25	0.6-3.0	●	o		●	o	o		
		160408 GM	0.13-0.30	0.9-3.0	●	o		●	o	o		
		160412 GM	0.15-0.30	1.2-3.0	●	o		●	o	o		

VCMT



POSITIVE 7° REAR ANGLE 35° RHOMBIC insert

	cutting edge length	dimension		
		d	t	r
	08	4.76	2.38	0.2-0.4
	11	6.35	3.18	0.1-0.4
	16	9.52	4.76	0.4-0.8

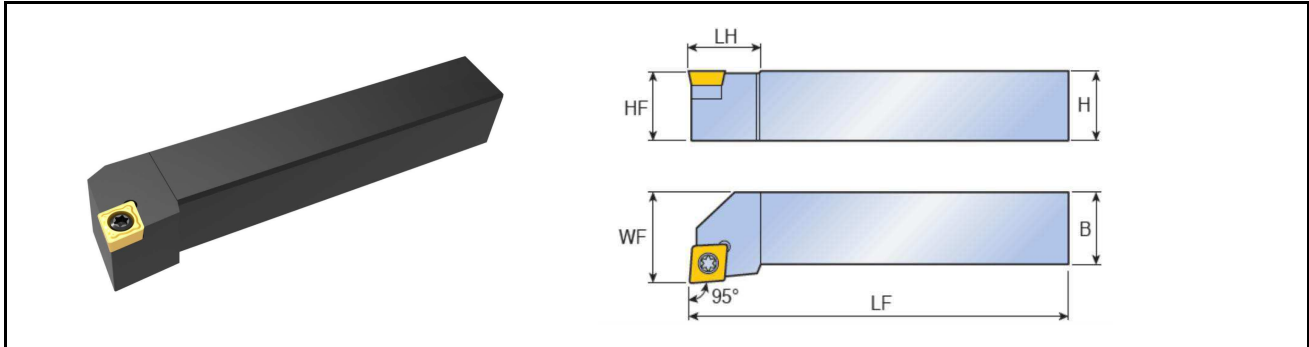
insert	model	feed (mm/rev)	cut depth (mm)	P				M/S		K		N
				HW0635	HW0645	HW0655	HW0665	HW8215	HW8225	HW1815	HW1825	HW A7
 medium finishing	VCMT	160404 PA	0.08-0.20	0.5-2.0	o	o		●	o	o		
		160408 PA	0.10-0.20	0.8-2.0	o	o		●	o	o		
 medium finishing	VCMT	160404 GM	0.08-0.20	0.5-2.0	o	o		●	o	o		
		160408 GM	0.10-0.20	0.8-2.0	o	o		●	o	o		

- HOT GRADE
- OPTIONAL GRADE

SCLCR/L



Positive CC insert, S-screw compression, External turning chamfer



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		H	B	HF	WF	LF	LH	
SCLCR/L 0808 F06	95°	8	8	8	10	80	10	CC. . 0602
SCLCR/L 1010 F06		10	10	10	12	80	10	
SCLCR/L 1212 F09	95°	12	12	12	16	80	16	CC. . 09T3
SCLCR/L 1616 H09		16	16	16	20	100	16	
SCLCR/L 2020 K09		20	20	20	25	125	20	
SCLCR/L 2525 M09		25	25	25	32	150	20	
SCLCR/L 2020 K12	95°	20	20	20	25	125	25	CC. . 1204
SCLCR/L 2525 M12		25	25	25	32	150	26	

© INSERTS TO BE ORDERED SEPARATELY


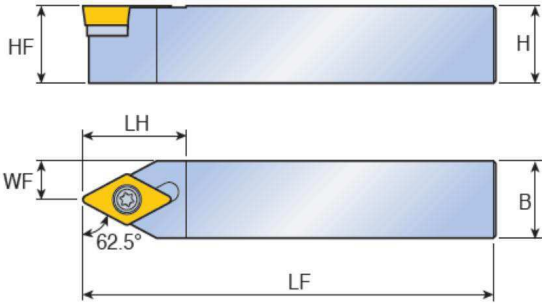
© For INSERT selection, see INSERT details page E32

ACCESSORY	INSERT MODEL	SCREW	WASHER	WASHER SCREW	WRENCH
	CC. . 0602	CSC2560	—	—	CTS08W
	CC. . 09T3 (12)	CSC4090	—	—	CTS15W
	CC. . 09T3	CSC3581	CDSC0903	CSD5035	CTS15W
	CC. . 1204	CSC4511	CDSC1204	CSD6045	CTS20W

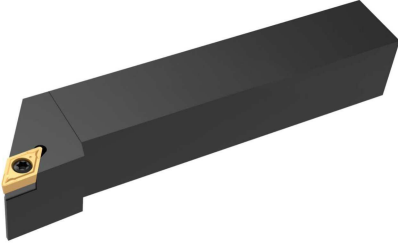
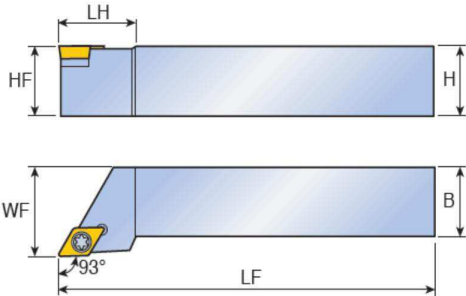
SDNCN, SDJCR/L







Positive DC insert, S-type SCREW compression, EXTERNAL turning shank

		DIMENSION						COMPATIBLE INSERT
		H	B	HF	WF	LF	LH	
SDNCN 0808 F07	62.5°	8	8	8	4	80	15	DC. . 0702
SDNCN 1010 F07		10	10	10	5	80	15	
SDNCN 1616 H11		16	16	16	8	100	22	DC. . 11T3
SDNCN 2525 M11		25	25	25	12.5	150	22	

© INSERTS TO BE ORDERED SEPARATELY; For blade selection, see blade details page E33

		DIMENSION						COMPATIBLE INSERT
		H	B	HF	WF	LF	LH	
SDJCR/L 1212 F07	93°	12	12	12	16	80	15	DC. . 0702
SDJCR/L 1616 H07		16	16	16	20	100	15	
SDJCR/L 2020 K07		20	20	20	25	125	20	
SDJCR/L 1616 H11	93°	16	16	16	20	100	24	DC. . 11T3
SDJCR/L 2020 K11		20	20	20	25	125	24	
SDJCR/L 2525 M11		25	25	25	32	150	28	


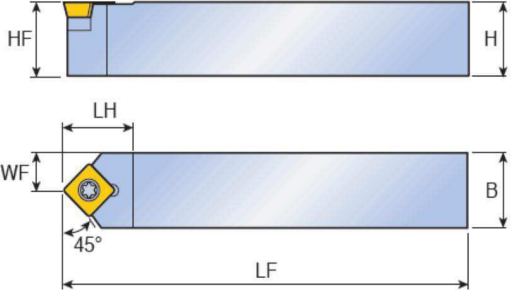
© INSERTS TO BE ORDERED SEPARATELY; For blade selection, see blade details page E33

ACCESSORY	INSERT MODEL	SCREW	WASHER	WASHERSCREW	WRENCH
					
	DC. . 0702	CSC2560	—	—	CTS08W
	DC. . 11T3	CSC3581	CSDS1103	CSD5035	CTS15W


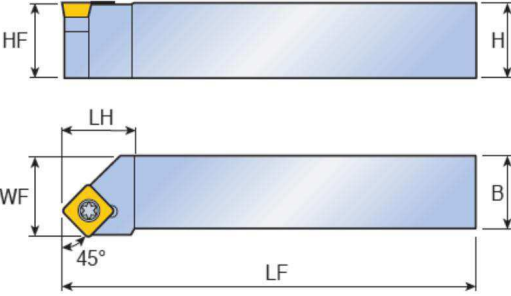
SSDCN, SSSCR/L







Positive SC inserts, S-type SCREW compaction, cylindrical turning shank

																															
	<table border="1"> <thead> <tr> <th rowspan="2">MODEL</th> <th rowspan="2">KR</th> <th colspan="6">DIMENSION</th> <th rowspan="2">COMPATIBLE INSERT</th> </tr> <tr> <th>H</th> <th>B</th> <th>HF</th> <th>WF</th> <th>LF</th> <th>LH</th> </tr> </thead> <tbody> <tr> <td>SSDCN 1212 F09</td> <td rowspan="2">45°</td> <td>12</td> <td>12</td> <td>12</td> <td>8</td> <td>80</td> <td>15.5</td> <td rowspan="2">SC. .09T3</td> </tr> <tr> <td>SSDCN 1616 H09</td> <td>16</td> <td>16</td> <td>16</td> <td>8</td> <td>100</td> <td>15.5</td> </tr> </tbody> </table>	MODEL	KR	DIMENSION						COMPATIBLE INSERT	H	B	HF	WF	LF	LH	SSDCN 1212 F09	45°	12	12	12	8	80	15.5	SC. .09T3	SSDCN 1616 H09	16	16	16	8	100
MODEL	KR			DIMENSION							COMPATIBLE INSERT																				
		H	B	HF	WF	LF	LH																								
SSDCN 1212 F09	45°	12	12	12	8	80	15.5	SC. .09T3																							
SSDCN 1616 H09		16	16	16	8	100	15.5																								

© INSERTS TO BE ORDERED SEPARATELY; For blade selection, see blade details page E34

																																														
	<table border="1"> <thead> <tr> <th rowspan="2">MODEL</th> <th rowspan="2">KR</th> <th colspan="6">DIMENSION</th> <th rowspan="2">COMPATIBLE INSERT</th> </tr> <tr> <th>H</th> <th>B</th> <th>HF</th> <th>WF</th> <th>LF</th> <th>LH</th> </tr> </thead> <tbody> <tr> <td>SSSCR/L 1212 F09</td> <td rowspan="4">45°</td> <td>12</td> <td>12</td> <td>12</td> <td>14</td> <td>80</td> <td>15.5</td> <td rowspan="2">SC. .09T3</td> </tr> <tr> <td>SSSCR/L 1616 H09</td> <td>16</td> <td>16</td> <td>16</td> <td>17</td> <td>80</td> <td>15.5</td> </tr> <tr> <td>SSSCR/L 2020 K12</td> <td>20</td> <td>20</td> <td>20</td> <td>22</td> <td>100</td> <td>24</td> <td rowspan="2">SC. .1204</td> </tr> <tr> <td>SSSCR/L 2525 M12</td> <td>25</td> <td>25</td> <td>25</td> <td>27</td> <td>150</td> <td>24</td> </tr> </tbody> </table>	MODEL	KR	DIMENSION						COMPATIBLE INSERT	H	B	HF	WF	LF	LH	SSSCR/L 1212 F09	45°	12	12	12	14	80	15.5	SC. .09T3	SSSCR/L 1616 H09	16	16	16	17	80	15.5	SSSCR/L 2020 K12	20	20	20	22	100	24	SC. .1204	SSSCR/L 2525 M12	25	25	25	27	150
MODEL	KR			DIMENSION							COMPATIBLE INSERT																																			
		H	B	HF	WF	LF	LH																																							
SSSCR/L 1212 F09	45°	12	12	12	14	80	15.5	SC. .09T3																																						
SSSCR/L 1616 H09		16	16	16	17	80	15.5																																							
SSSCR/L 2020 K12		20	20	20	22	100	24	SC. .1204																																						
SSSCR/L 2525 M12		25	25	25	27	150	24																																							

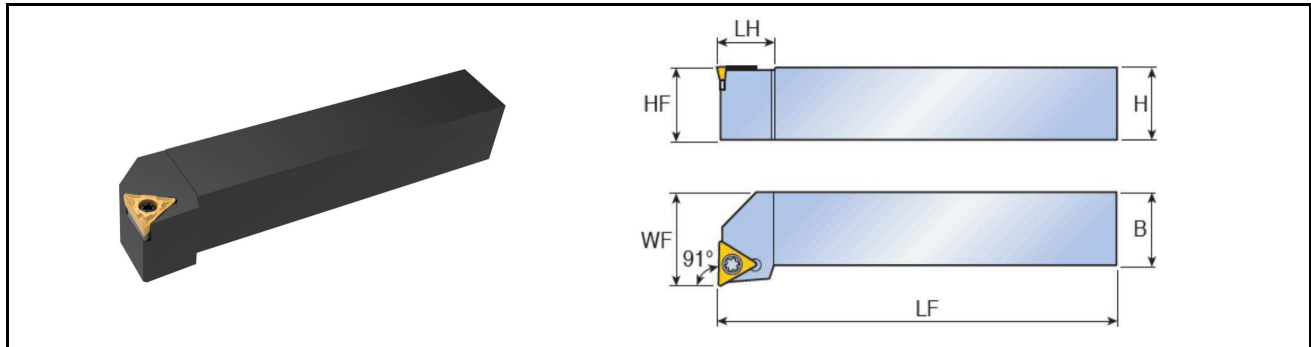
© INSERTS TO BE ORDERED SEPARATELY; For blade selection, see blade details page E34

ACCESSORY	INSERT MODEL	SCREW	WASHER	WASHERSCREW	WRENCH
					
	SC. .09T3 (12刀方)	CSC4090	—	—	CTS15W
	SC. .09T3	CSC3581	CDSS0903	CSD5035	CTS15W
	SC. .1204	CSC4511	CDSS1204	CSD6045	CTS20W

STFCR/L, STGCR/L

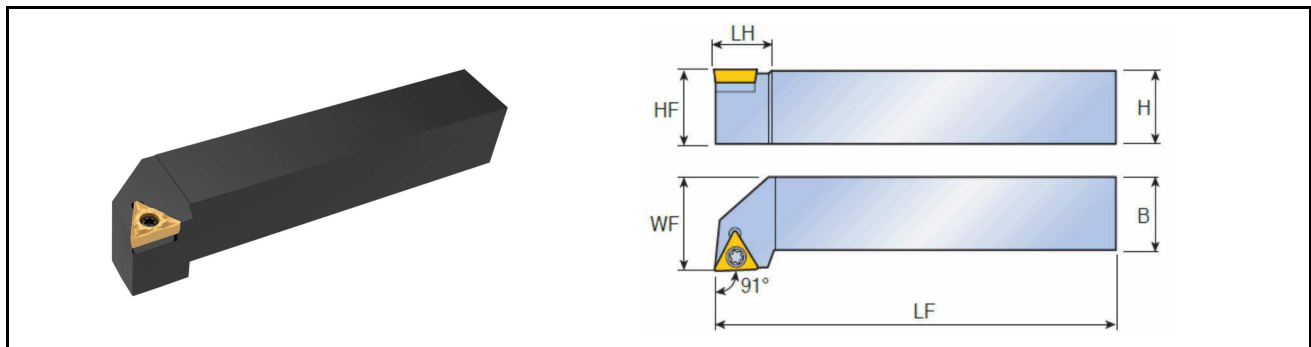


Positive TC insert, S-type SCREW compaction, cylindrical turning shank



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		H	B	HF	WF	LF	LH	
STFCR/L 1212 F11	91°	12	12	12	16	80	14	TC. . 1102
STFCR/L 1616 H11		16	16	16	20	100	14	
STFCR/L 1616 H16	91°	16	16	16	20	100	19	TC. . 16T3
STFCR/L 2020 K16		20	20	20	25	125	19	
STFCR/L 2525 M16		25	25	25	32	150	20	

© INSERTS TO BE ORDERED SEPARATELY; For blade selection, see blade details page E35



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		H	B	HF	WF	LF	LH	
STGCR/L 1010 E09	91°	10	10	10	12	70	11	TC. . 0902
STGCR/L 1212 F11	91°	12	12	12	16	80	14.3	TC. . 1102
STGCR/L 1616 H11		16	16	16	20	100	14.3	
STGCR/L 1616 H16	91°	16	16	16	20	100	21	TC. . 16T3
STGCR/L 2020 K16		20	20	20	25	125	21	
STGCR/L 2525 M16		25	25	25	32	150	21	

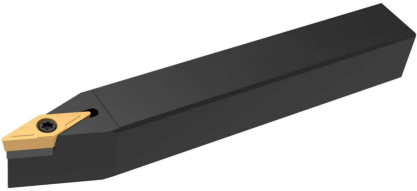
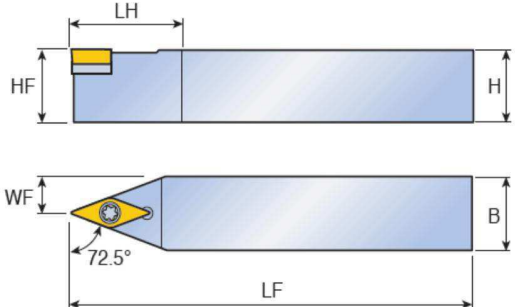
© INSERTS TO BE ORDERED SEPARATELY; For blade selection, see blade details page E35

ACCESSORY	INSERT MODEL	SCREW	WASHER	WASHERSCREW	WRENCH
	TC. . 0902	CSC2250	—	—	CTS07W
	TC. . 1102	CSC2560	—	—	CTS08W
	TC. . 16T3	CSC3581	CDST1603	CSD5035	CTS15W

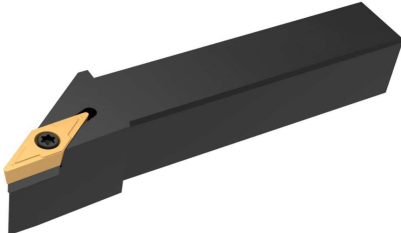
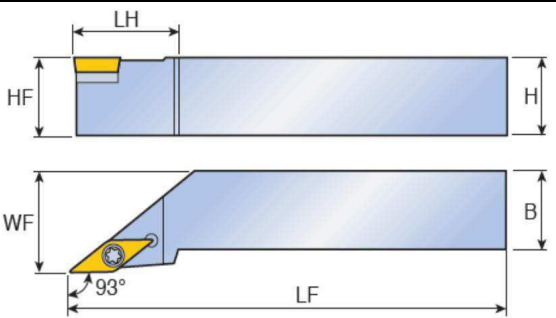
SVVBN、SVJBR/L






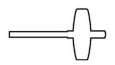
Positive VB insert, S-type SCREW press, cylindrical turning shank

		DIMENSION						COMPATIBLE INSERT
		MODEL	KR	H	B	HF	WF	
SVVBN 2020 K16	72.5°	20	20	20	10.0	125	31.5	VB..1604
SVVBN 2525 M16		25	25	25	12.5	150	31.5	
SVVBN 3232 P16		32	32	32	12.5	170	31.5	

© INSERTS TO BE ORDERED SEPARATELY; For blade selection, see blade details page E36

		DIMENSION						COMPATIBLE INSERT
		MODEL	KR	H	B	HF	WF	
SVJBR/L 2020 K16	93°	20	20	20	25	125	35	VB..1604
SVJBR/L 2525 M16		25	25	25	32	150	35	
SVJBR/L 3225 P16		32	25	32	32	170	35	
SVJBR/L 3232 P16		32	32	32	40	170	35	

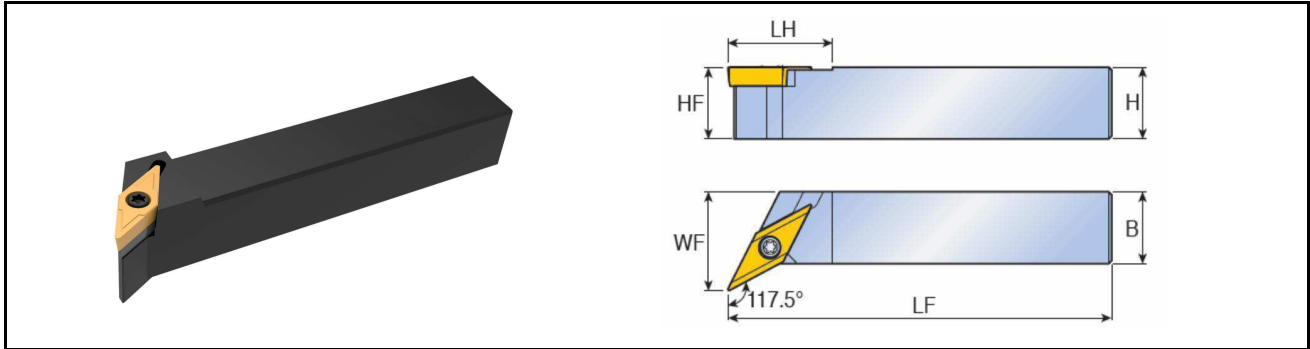
© INSERTS TO BE ORDERED SEPARATELY; For blade selection, see blade details page E36

配件	INSERT MODEL	SCREW	WASHER	WASHERSCREW	WRENCH
					
	VB..1604	CSC3581	CDSV1603	CSD5035	CTS15W

SVPBR/L



Positive VB insert, S-type SCREW press, cylindrical turning shank



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		H	B	HF	WF	LF	LH	
SVPBR/L 2020 K16	117.5°	20	20	20	25	125	25	VB. . 1604
SVPBR/L 2525 M16		25	25	25	32	150	25	

© INSERTS TO BE ORDERED SEPARATELY

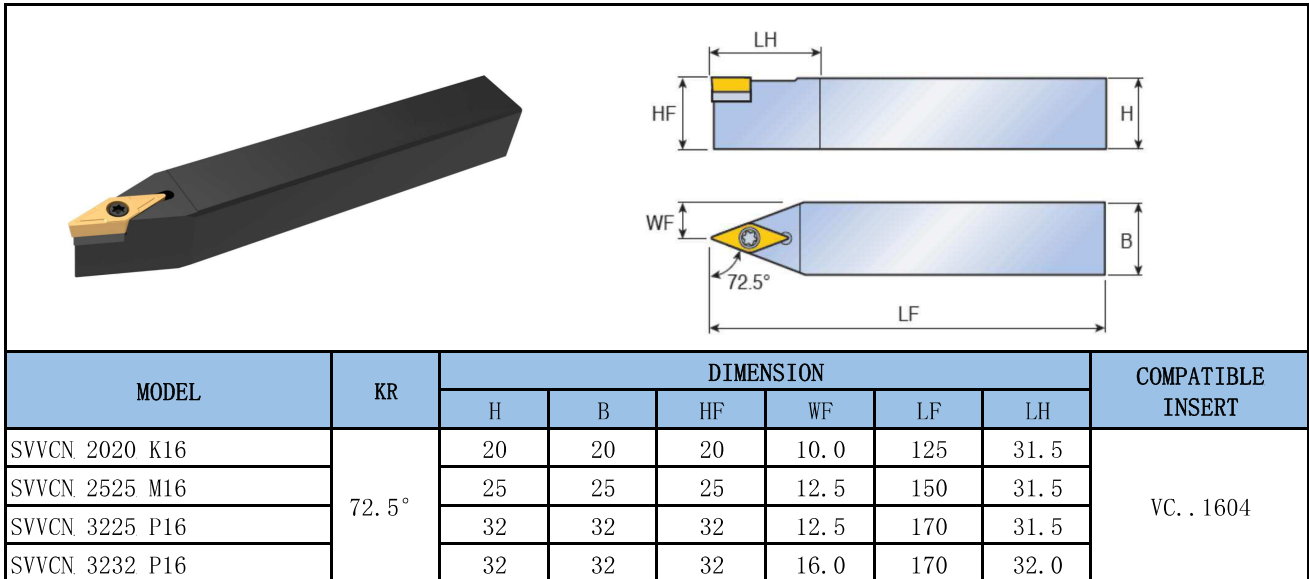
© For blade selection, see blade details page E36

ACCESSORY	INSERT MODEL	SCREW	WASHER	WASHERSCREW	WRENCH
	VB. . 1604	CSC3581	CDSV1603	CSD5035	CTS15W

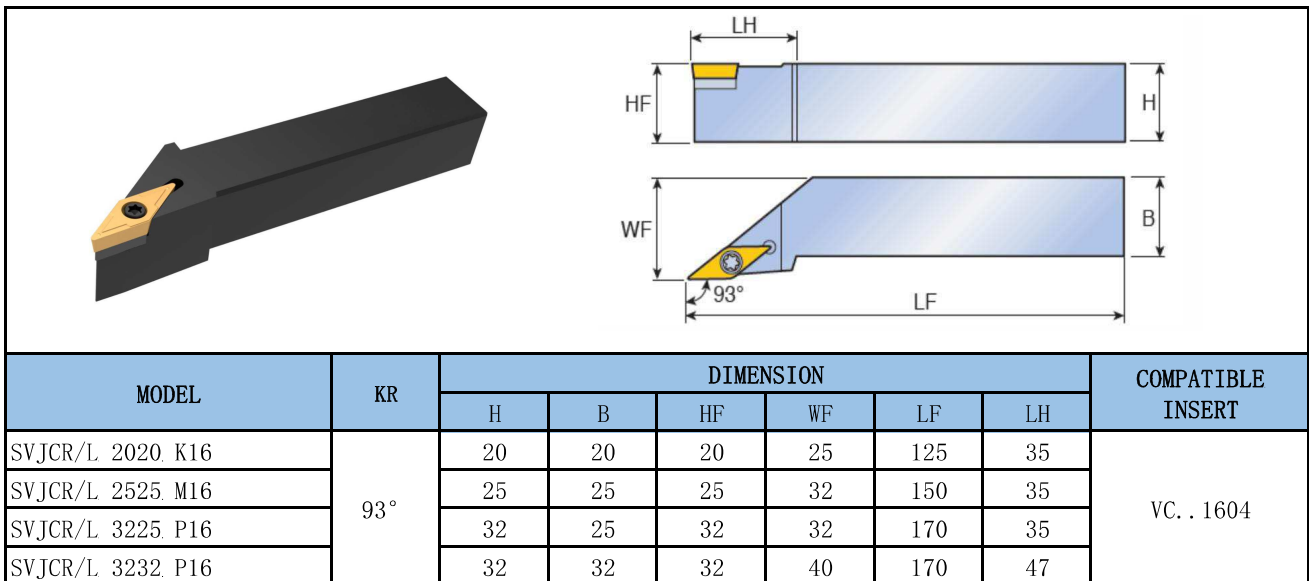
SVVCN, SVJCR/L



Positive VC insert, S-type SCREW compression, cylindrical turning toolholder



© INSERTS TO BE ORDERED SEPARATELY; For blade selection, see blade details page E37



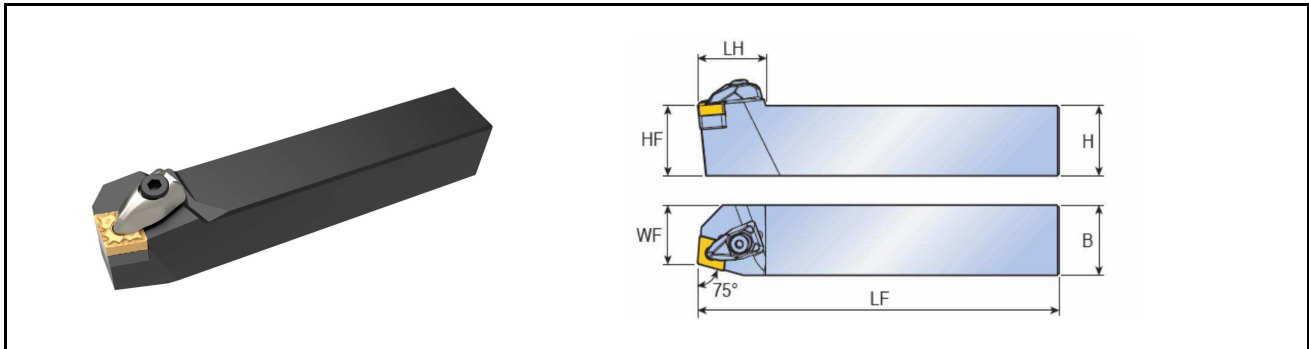
© INSERTS TO BE ORDERED SEPARATELY; For blade selection, see blade details page E37

ACCESSORY	INSERT MODEL	SCREW	WASHER	WASHERSCREW	WRENCH
	VC..1604	CSC3581	CDSV1603	CSD5035	CTS15W

TCBNR/L, TCKNR/L

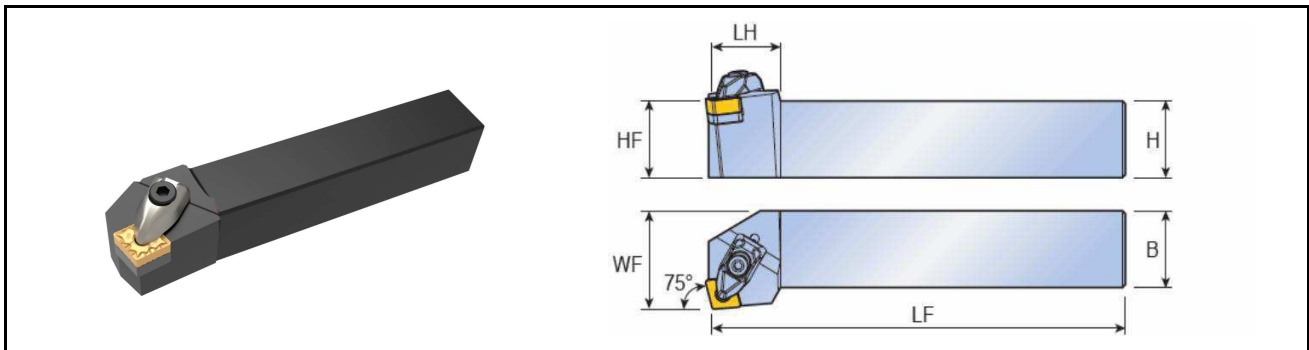


Negative CN insert, T-type pressure plate pressing,
cylindrical turning tool holder



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		H	B	HF	WF	LF	LH	
TCBNR/L 2525 M12	75°	25	25	25	22.5	150	32	CN. . 1204
TCBNR/L 3232 P19		32	32	32	27	170	42	CN. . 1906

© INSERTS TO BE ORDERED SEPARATELY; For blade selection, see blade details page E23



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		H	B	HF	WF	LF	LH	
TCKNR/L 2525 M12	75°	25	25	25	32	150	25	CN. . 1204

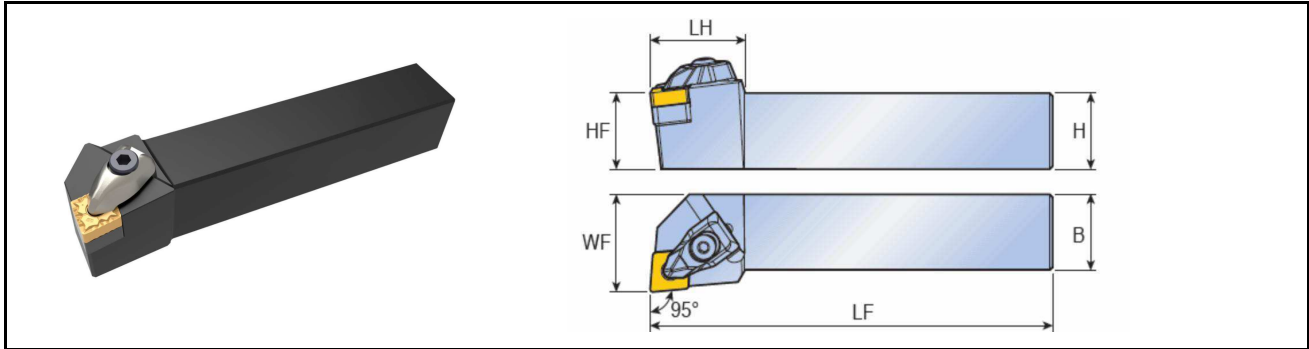
© INSERTS TO BE ORDERED SEPARATELY; For blade selection, see blade details page E23

ACCESSORY	INSERT MODEL	presse plate	SCREW	spring	WASHER	WASHERSCREW	WRENCH
	CN. . 1204	CYT4	CLT5023	CPT4	CDTC1206	CSC4090	CBL40
CN. . 1906	CYT6	CLT6026	CPT5	CDTC1904	CSC8018	CBL40	

TCLNR/L



Negative CN insert, T-type pressure plate pressing,
cylindrical turning tool holder



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		H	B	HF	WF	LF	LH	
TCLNR/L 2020 K12	95°	20	20	20	25	125	32	CN. . 1204
TCLNR/L 2525 M12		25	25	25	32	150		
TCLNR/L 3225 P12		32	25	32	32	170		
TCLNR/L 3232 P12		32	32	32	40	170		
TCLNR/L 2525 M16	95°	25	25	25	32	150	36	CN. . 1606
TCLNR/L 3232 P16		32	32	32	40	170		
TCLNR/L 3232 P16	95°	32	32	32	40	170	42	CN. . 1906
TCLNR/L 4040 S16		40	40	40	50	250		

© INSERTS TO BE ORDERED SEPARATELY

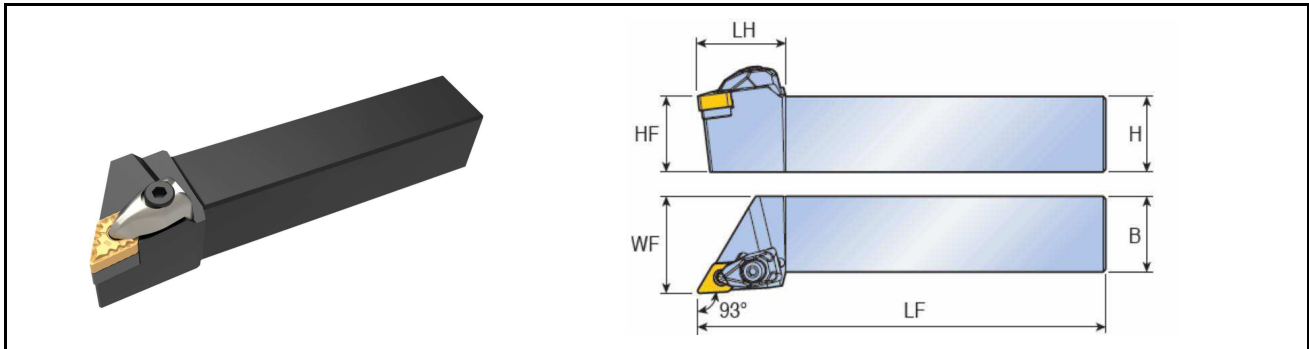
© For blade selection, see blade details page E23

ACCESSORY	INSERT MODEL	presse plate	SCREW	spring	WASHER	WASHERSCREW	WRENCH
	CN. . 1204	CYT4	CLT5023	CPT4	CDTC1206	CSC4090	CBL40
	CN. . 1606	CYT5	CLT6026	CPT5	CDTC1606	CSC5012	CBL40
	CN. . 1906	CYT6	CLT6026	CPT5	CDTC1904	CSC8018	CBL40

TDJNR/L



Negative DN insert, T-type pressure plate pressing, cylindrical turning tool holder



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		H	B	HF	WF	LF	LH	
TDJNR/L 2020 K15	93°	20	20	20	25	125	39	DN . 1504 DN . 1506
TDJNR/L 2525 M15		25	25	25	32	150		
TDJNR/L 3232 P15		32	32	32	40	170		

© INSERTS TO BE ORDERED SEPARATELY

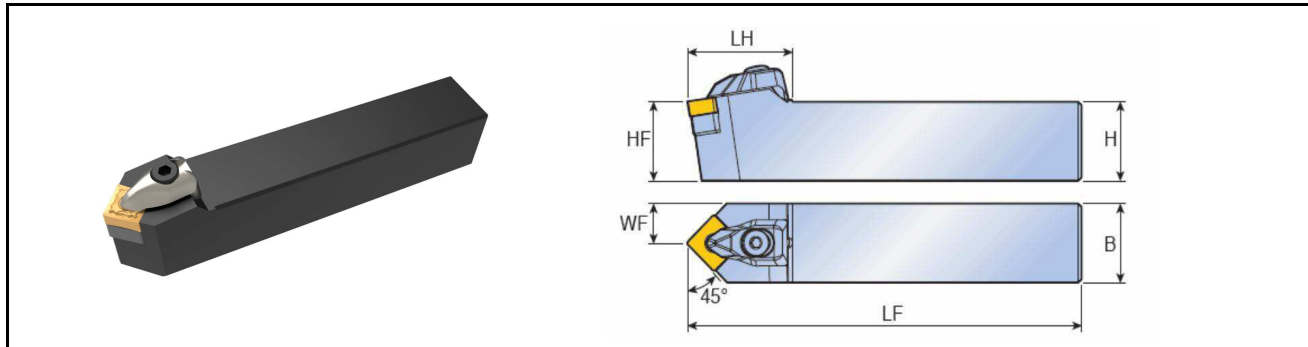
© For blade selection, see blade details page E25

ACCESSORY	INSERT MODEL	press plate	SCREW	spring	WASHER	WASHERSCREW	WRENCH
	DN . 1504	CYT4	CLT5023	CPT4	CDTD1506	CSC4090	CBL40
	DN . 1506	CYT4	CLT5023	CPT4	CDTD1504	CSC4090	CBL40

TSDNN, TSSNR/L

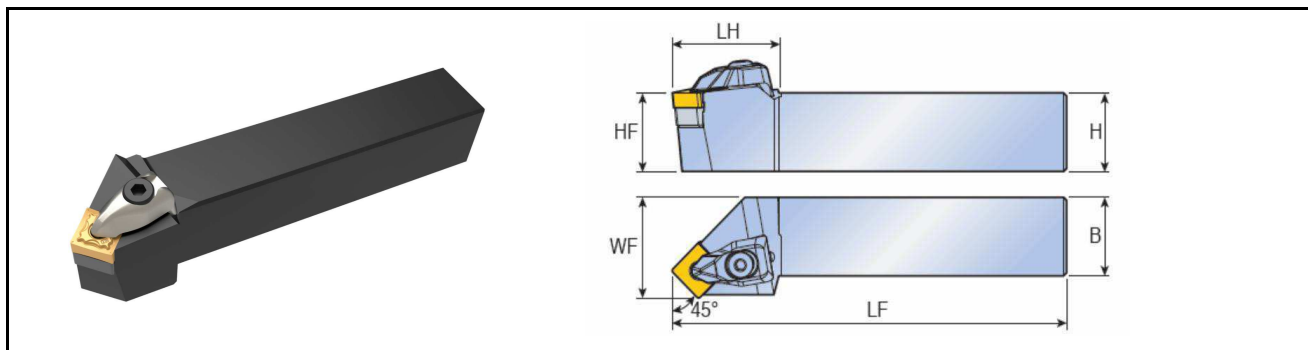


Negative SN insert, T-type press plate, cylindrical turning shank



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		H	B	HF	WF	LF	LH	
TSDNN 2525 M12	45°	25	25	25	32	150	27	SN. . 1204
TSDNN 3232 P19		32	32	32	16	170	44	SN. . 1906

© INSERTS TO BE ORDERED SEPARATELY; For insert selection, see insert details page E26



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		H	B	HF	WF	LF	LH	
TSSNR/L 2525 M12	45°	25	25	25	32	150	35	SN. . 1204

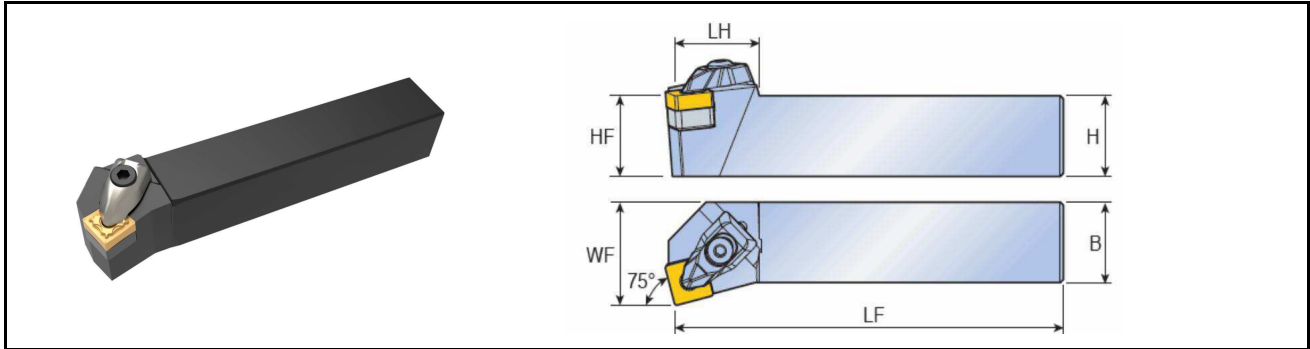
© INSERTS TO BE ORDERED SEPARATELY; For insert selection, see insert details page E26

ACCESSORY	INSERT MODEL	press plate	SCREW	spring	WASHER	WASHERSCREW	WRENCH
	SN. . 1204	CYT4	CLT5023	CPT4	CDTS1206	CSC4090	CBL40
SN. . 1906	CYT6	CLT6026	CPT5	CDTS1904	CSC8018	CBL40	

TSKNR/L



Negative SN insert, T-type press plate, cylindrical turning shank



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		H	B	HF	WF	LF	LH	
TSKNR/L 2525 M12	75°	25	25	25	32	150	27	SN. . 1204

© INSERTS TO BE ORDERED SEPARATELY

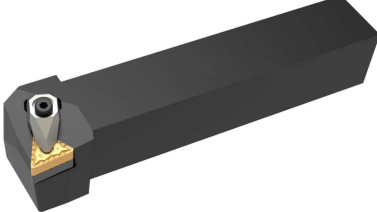
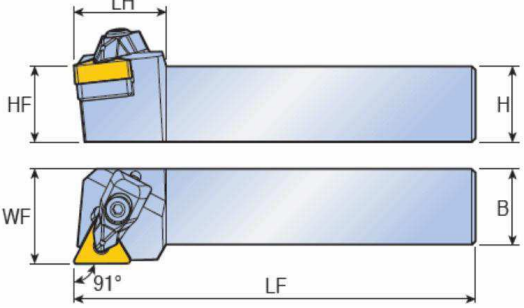
© For insert selection, see insert details page E26

ACCESSORY	INSERT MODEL	press plate	SCREW	spring	WASHER	WASHERSCREW	WRENCH
	SN. . 1204	CYT4	CLT5023	CPT4	CDTS1206	CSC4090	CBL40

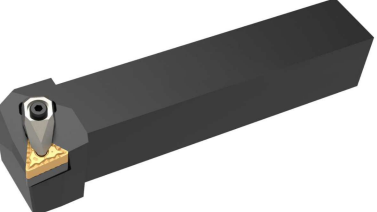
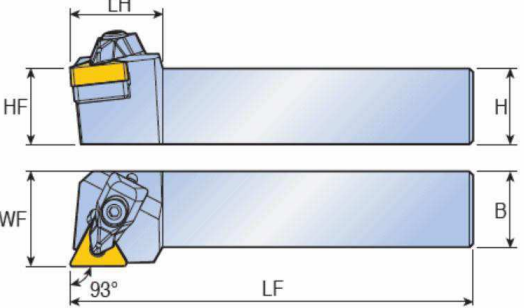
TTGNR/L, TTJNR/L









Negative TN insert, T-type press plate, cylindrical turning toolholder

		DIMENSION						COMPATIBLE INSERT
		MODEL	KR	H	B	HF	WF	
TTGNR/L 2525 M16	91°	25	25	25	32	150	25	TN..1604

© INSERTS TO BE ORDERED SEPARATELY; For insert selection, see insert details page E28

		DIMENSION						COMPATIBLE INSERT
		MODEL	KR	H	B	HF	WF	
TTJNR/L 2020 K16	93°	20	20	20	25	125	25	TN..1604
TTJNR/L 2525 M16	93°	25	25	25	32	150	25	

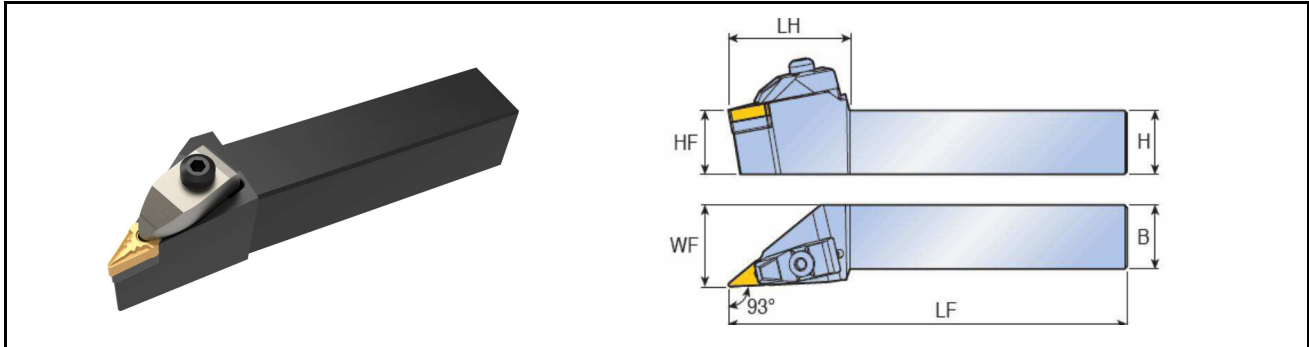
© INSERTS TO BE ORDERED SEPARATELY; For insert selection, see insert details page E28

ACCESSORY	INSERT MODEL	press plate	SCREW	spring	WASHER	WASHERSCREW	WRENCH					
								TN..1604	CYT-3V	CLT6026	CPT4	CDTT1604

TVJNR/L, TVQNR/L

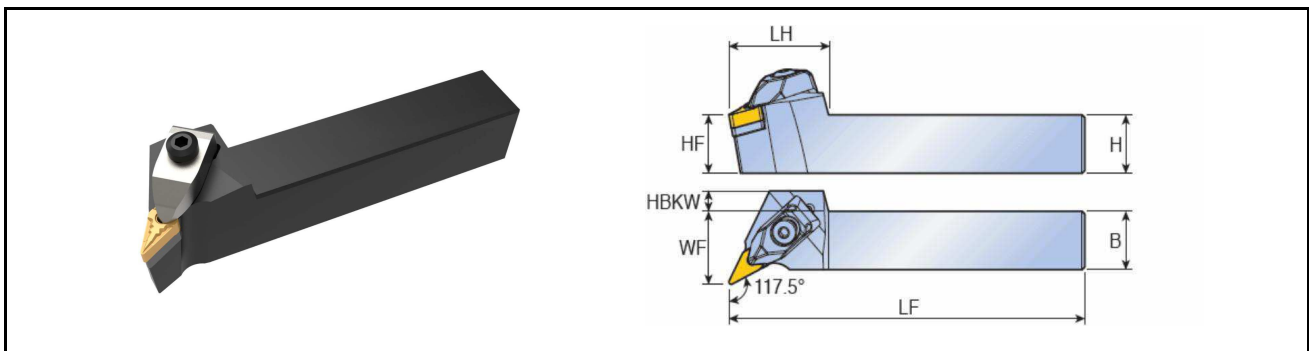


Negative VN insert, T-type press plate, cylindrical turning toolholder



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		H	B	HF	WF	LF	LH	
TVJNR/L 2020 K16	93°	20	20	20	25	125	49	VN. . 1604
TVJNR/L 2525 M16		25	25	25	32	150	49	

© INSERTS TO BE ORDERED SEPARATELY; For insert selection, see insert details page E29



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		H=B	HF	WF	LF	LH	HBKW	
TVQNR/L 2020 K16	117.5°	20	20	25	125	42	8	VN. . 1604
TVQNR/L 2525 M16		25	25	32	150	42	2	

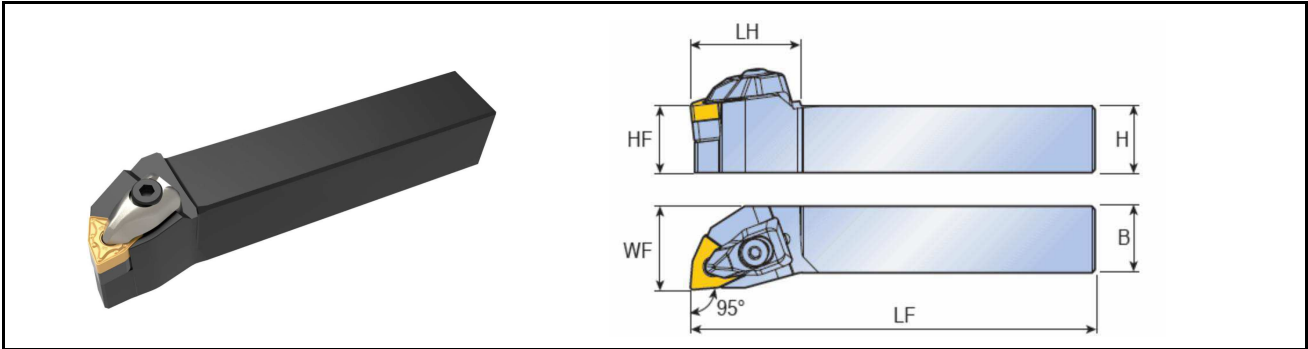
© INSERTS TO BE ORDERED SEPARATELY; For insert selection, see insert details page E28

ACCESSORY	INSERT MODEL	press plate	press plateSCR	spring	WASHER	WASHERSCREW	WRENCH
	VN. . 1604	CYT3	CLT4017	CPT3	CDTT1604	CSC3581	CBL25

TWLNR/L



Negative VN insert, T-type press plate, cylindrical turning toolholder



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		H	B	HF	WF	LF	LH	
TWLNR/L 2020 K08	95°	20	20	20	25	125	34.2	WN. . 0804
TWLNR/L 2525 M08		25	25	25	32	150		
TWLNR/L 3232 P08		32	32	32	40	170		

© INSERTS TO BE ORDERED SEPARATELY

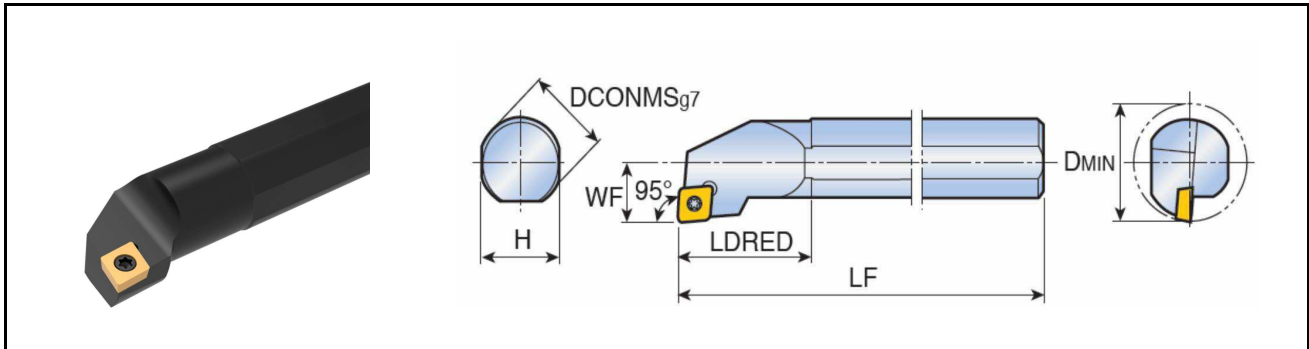
© For insert selection, see insert details page E30

ACCESSORY	INSERT MODEL	press plate	press plateSCR	spring	WASHER	WASHERSCREW	WRENCH
	WN. . 0804	CYT4	CLT5023	CPT4	CDTW0806	CSC4090	CBL40

S-SCLCR/L



Positive CC insert, S-type SCREW press, inner hole turning toolholder



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		DCONMS	H	LF	LDRED	WF	Dmin	
S08K SCLCR/L 06	95°	8	7	125	18	6	11	CC. .0602
S10K SCLCR/L 06		10	9	125	20	7	13	
S12N SCLCR/L 06		12	11	160	25	9	16	
S16R SCLCR/L 06		16	15	200	30	11	20	
S12M SCLCR/L 09	95°	12	11	150	23	9	16	CC. .09T3
S16N SCLCR/L 09		16	15	160	30	11	20	
S20Q SCLCR/L 09		20	18	180	32	13	25	
S25R SCLCR/L 12	95°	25	23	200	42	17	32	CC. .1204
S32S SCLCR/L 12		32	30	250	45	22	40	
S40T SCLCR/L 12		40	37	300	55	27	50	

© INSERTS TO BE ORDERED SEPARATELY

© For INSERT selection, see INSERT details page E32

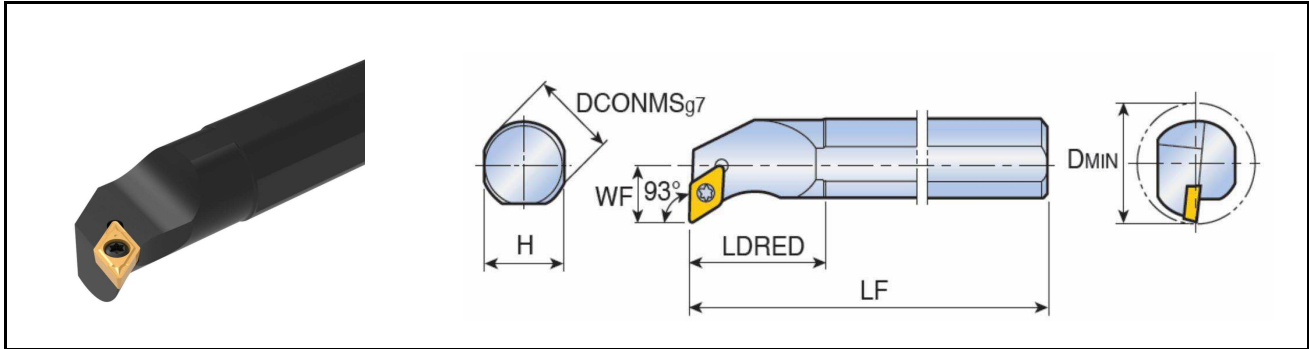
© Standard shank without internal coolant

ACCESSORY	INSERT MODEL	SCREW	WASHER	WASHERSCREW	WRENCH
	CC. .0602	CSC2560	—	—	CTS08W
	CC. .09T3	CSC4090	—	—	CTS15W
	CC. .1204(25 dia)	CSC5012	—	—	CTS20W
	CC. .1204	CSC4511	CDSC1204	CSD6045	CTS20W

S-SDUCR/L



Positive DC insert, S-type SCREW compression, inner hole turning tool holder



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		DCONMS	H	LF	LDRED	WF	Dmin	
S10K SDUCR/L 07	93°	10	9	125	20	7	13	DC. . 0702
S12M SDUCR/L 07		12	11	150	23	9	16	
S16N SDUCR/L 07		16	15	160	30	11	20	
S16N SDUCR/L 11	93°	16	15	160	27	11	20	DC. . 11T3
S20Q SDUCR/L 11		20	18	180	32	13	25	
S25R SDUCR/L 11		25	23	200	42	17	32	
S32S SDUCR/L 11		32	30	250	55	22	40	

© INSERTS TO BE ORDERED SEPARATELY

© For blade selection, see blade details page E33

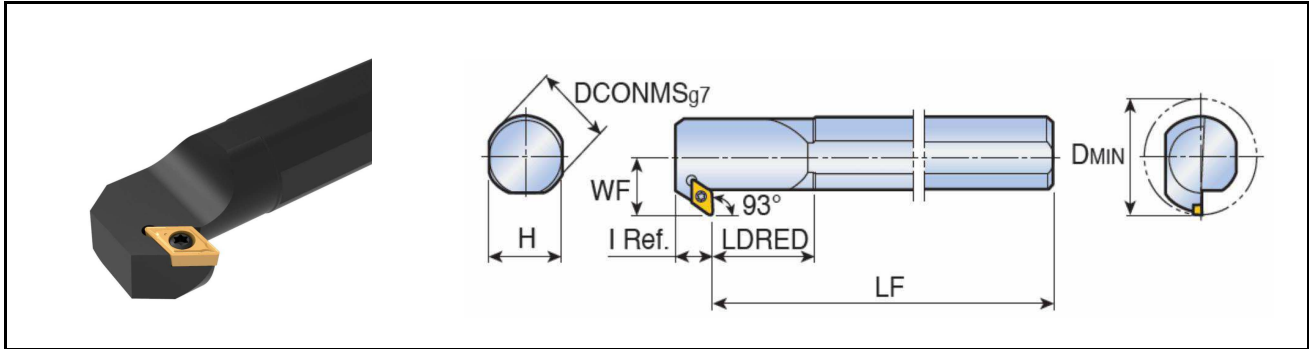
© Standard shank without internal coolant

ACCESSORY	INSERT MODEL	SCREW	WASHER	WASHERSCREW	WRENCH
	DC. . 0702	CSC2560	—	—	CTS08W
	DC. . 11T3	CSC4090	—	—	CTS15W
	DC. . 11T3	CSC4090	—	—	CTS15W

S-SDZCR/L



Positive DC insert, S-type SCREW compression, inner hole
back turning tool holder



MODEL	KR	DIMENSION							COMPATIBLE INSERT
		DCONMS	H	LF	LDRED	WF	Dmin	l. Ref	
S16N SDZCR/L 07	93°	16	15	160	23	13	22	12	DC. . 0702
S20Q SDZCR/L 07		20	18	180	28	15	30	12	
S25R SDZCR/L 07		25	23	200	33	18	33	12	
S20Q SDZCR/L 11		20	18	180	24	15	27	16	DC. . 11T3
S32S SDZCR/L 11		32	30	250	34	22	40	16	

© INSERTS TO BE ORDERED SEPARATELY

© For blade selection, see blade details page E33

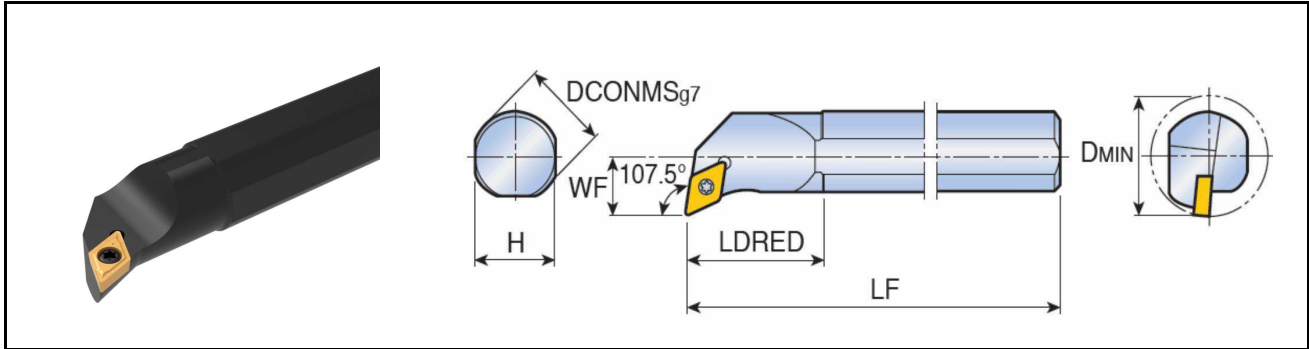
© Standard shank without internal coolant

ACCESSORY	INSERT MODEL	SCREW	WASHER	WASHERSCREW	WRENCH
	DC. . 0702	CSC2560	—	—	CTS08W
	DC. . 11T3 (32柄径)	CSC3581	CSD1103	CSD5035	CTS15W
DC. . 11T3	CSC4090	—	—	CTS15W	

S-SDQCR/L



Positive DC insert, S-type SCREW compression, inner hole turning tool holder



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		DCONMS	H	LF	LDRED	WF	Dmin	
S10K SDQCR/L 07	107.5°	10	9	125	20	7	13	DC. . 0702
S12M SDQCR/L 07		12	11	150	22	9	16	
S16N SDQCR/L 07		16	15	160	27	11	20	
S20Q SDQCR/L 11	107.5°	20	18	180	40	13	25	DC. . 11T3
S25S SDQCR/L 11		25	23	250	50	17	32	

© INSERTS TO BE ORDERED SEPARATELY

© For blade selection, see blade details page E33

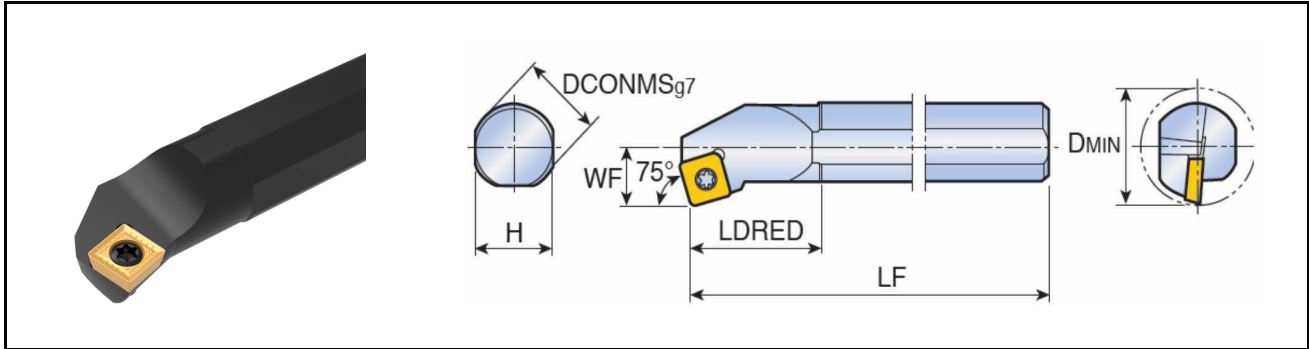
© Standard shank without internal coolant

ACCESSORY	INSERT MODEL	SCREW	WASHER	WASHERSCREW	WRENCH
	DC. . 0702	CSC2560	—	—	CTS08W
	DC. . 11T3	CSC4090	—	—	CTS15W

S-SSKCR/L



Positive SC insert, S-type SCREW compression, inner hole turning toolholder



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		DCONMS	H	LF	LDRED	WF	Dmin	
S16N SSKCR/L 09	75°	16	15	160	28	11	20	SC. . 09T3
S20Q SSKCR/L 09		20	18	180	30	13	25	
S25R SSKCR/L 12		25	23	200	39	17	32	SC. . 1204

© INSERTS TO BE ORDERED SEPARATELY

© For blade selection, see blade details page E34

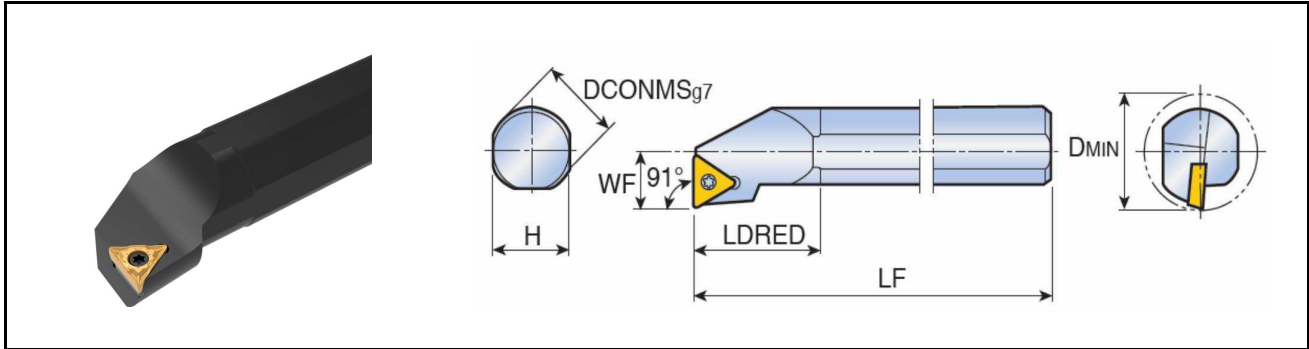
© Standard shank without internal coolant

ACCESSORY	INSERT MODEL	SCREW	WASHER	WASHERSCREW	WRENCH
	SC. . 09T3	CSC4090	—	—	CTS15W
	SC. . 1204	CSC5012	—	—	CTS20W

S-STFCR/L



Positive TC insert, S-type SCREW compression, inner hole turning tool holder



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		DCONMS	H	LF	LDRED	WF	Dmin	
S08K STFCR/L 09	91°	8	7	125	20	6	11	TC. . 0902
S10K STFCR/L 09		10	9	125	22.5	7	13	
S12M STFCR/L 09		12	11	150	30	9	16	
S16N STFCR/L 09		16	15	160	35	11	20	
S12M STFCR/L 11	91°	12	11	150	25	9	16	TC. . 1102
S16N STFCR/L 11		16	15	160	35	11	20	
S20Q STFCR/L 11		20	18	180	36	13	25	
S20Q STFCR/L 16	91°	20	18	180	36	13	25	TC. . 16T3
S25R STFCR/L 16		25	23	200	49	17	32	
S32S STFCR/L 16		32	30	250	45	22	40	
S40T STFCR/L 16		40	37	300	60	27	50	

© INSERTS TO BE ORDERED SEPARATELY

© For blade selection, see blade details page E35

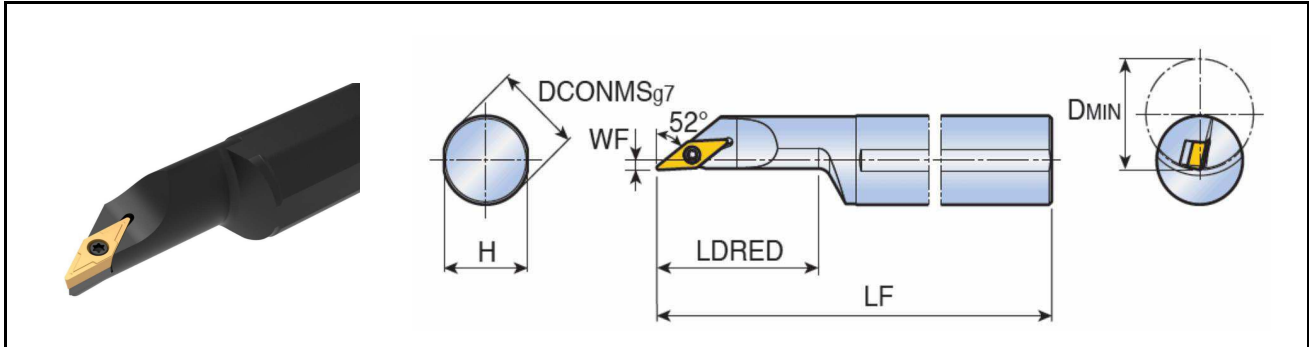
© Standard shank without internal coolant

acc ESS ORY	INSERT MODEL	SCREW	WASHER	WASHERSCREW	WRENCH
	TC. . 0902	CSC2250	—	—	CTS07W
	TC. . 1102	CSC2560	—	—	CTS08W
	TC. . 16T3 (32dia)	CSC3581	CDST1603	CSD5035	CTS15W
	TC. . 16T3 (40dia)	CSC3581	CDST1603	CSD5035	CTS15W
	TC. . 16T3	CSC4090	—	—	CTS15W

S-SVJBR/L, S-SVUBR/L



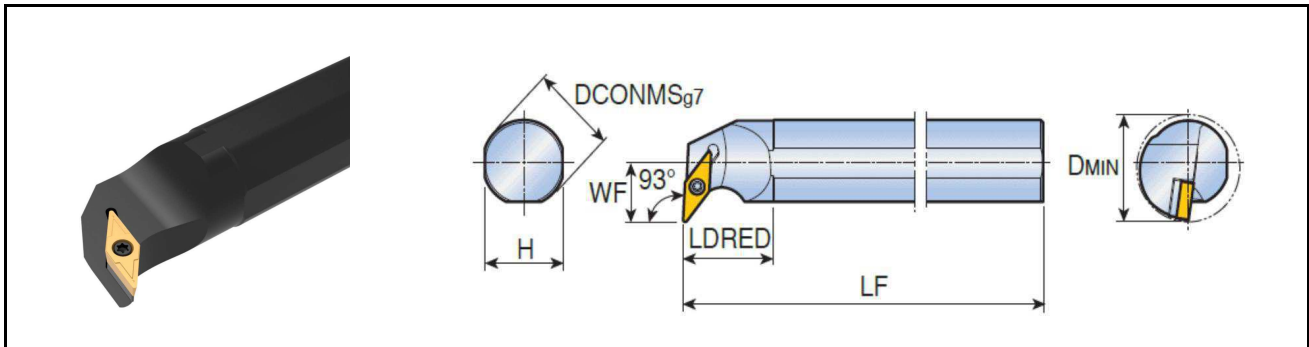
Positive type VB insert, S type SCREW press, inner hole turning tool holder



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		DCONMS	H	LF	LDRED	WF	Dmin	
S32S. SVJBR/L 16	52°	32	30	250	60	3.5	40	VB. . 1604
S40T. SVJBR/L 16		40	37	300	75	4.5	50	

© INSERTS TO BE ORDERED SEPARATELY; For blade selection, see blade details page E36

© Standard shank without internal coolant



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		DCONMS	H	LF	LDRED	WF	Dmin	
S32S. SVUBR/L 16	93°	32	30	250	45	22	40	VB. . 1604
S40T. SVUBR/L 16		40	37	300	55	27	50	

© INSERTS TO BE ORDERED SEPARATELY; For blade selection, see blade details page E36

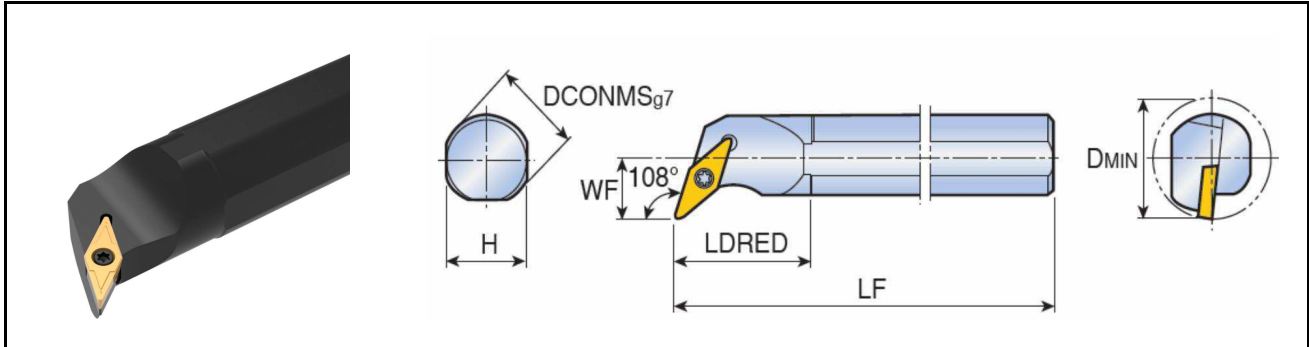
© Standard shank without internal coolant

ACCESSORY	INSERT MODEL	SCREW	WASHER	WASHERSCREW	WRENCH
	VB. . 1604 (25dia)	CSC4090	—	—	CTS15W
	VB. . 1604	CSC3581	CDSV1603	CSD5035	CTS15W

S-SVQBR/L, S-SVPBR/L



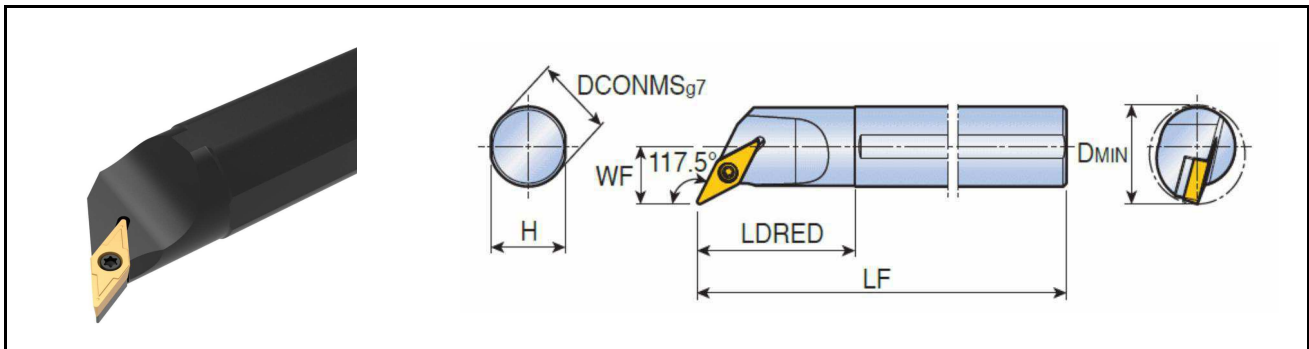
Positive type VB insert, S type SCREW press, inner hole turning tool holder



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		DCONMS	H	LF	LDRED	WF	Dmin	
S25R SVQBR/L 16	108°	25	23	200	40	17	32	VB..1604
S32S SVQBR/L 16		32	30	250	45	22	40	
S40T SVQBR/L 16		40	37	300	55	27	50	

© INSERTS TO BE ORDERED SEPARATELY; For blade selection, see blade details page E36

© Standard shank without internal coolant



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		DCONMS	H	LF	LDRED	WF	Dmin	
S25R SVPBR/L 16	117.5°	25	23	200	51	18	31	VB..1604
S32S SVPBR/L 16		32	30	250	54	23	40	

© INSERTS TO BE ORDERED SEPARATELY; For blade selection, see blade details page E36

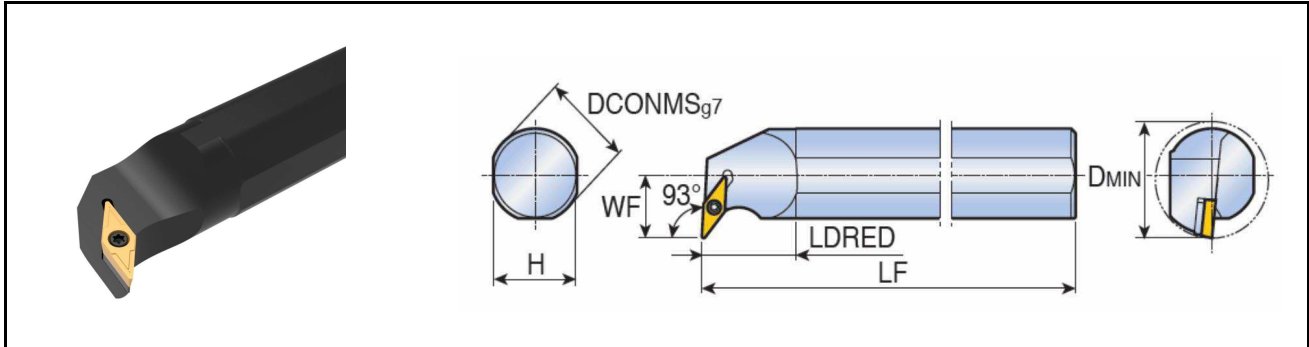
© Standard shank without internal coolant

ACCESSORY	INSERT MODEL	SCREW	WASHER	WASHERSCREW	WRENCH
	VB..1604 (SVQBR/L, 25dia)	CSC4090	—	—	CTS15W
	VB..1604	CSC3581	CDSV1603	CSD5035	CTS15W

S-SVUCR/L, S-SVQCR/L



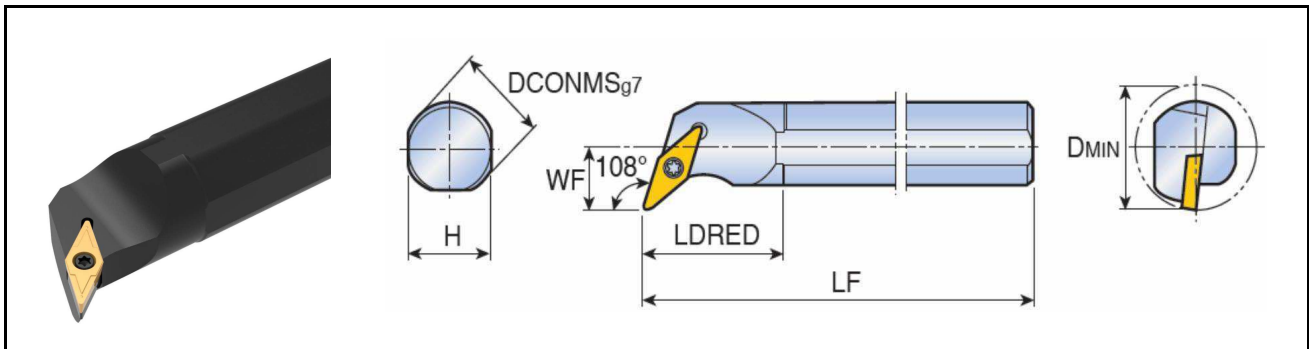
Positive type VC insert, S type SCREW press, inner hole turning tool holder



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		DCONMS	H	LF	LDRED	WF	Dmin	
S32S SVUCR/L 16	93°	32	30	250	35	22	40	VC..1604
S40T SVUCR/L 16		40	37	300	41	27	50	

© INSERTS TO BE ORDERED SEPARATELY; For blade selection, see blade details page E37

© Standard shank without internal coolant



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		DCONMS	H	LF	LDRED	WF	Dmin	
S32S SVQCR/L 16	108°	32	30	250	45	22	40	VC..1604
S40T SVQCR/L 16		40	37	300	55	27	50	

© INSERTS TO BE ORDERED SEPARATELY; For blade selection, see blade details page E37

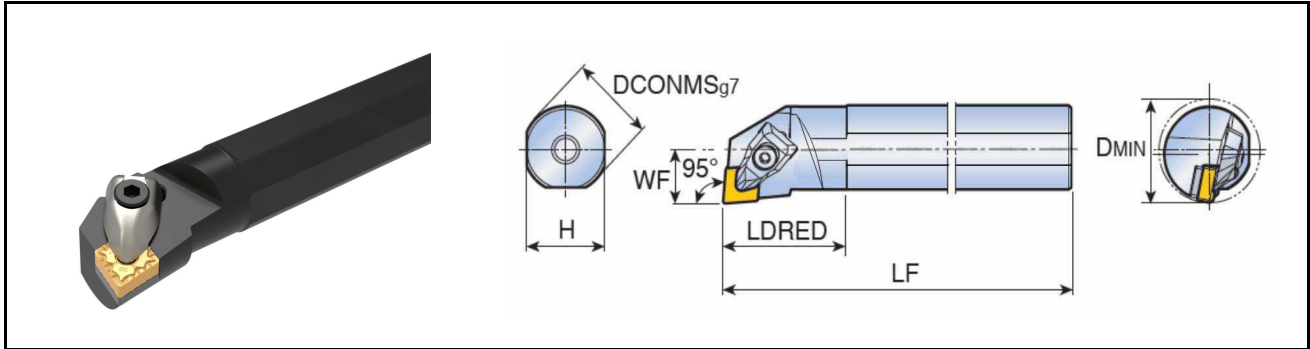
© Standard shank without internal coolant

ACCESSORY	INSERT MODEL	SCREW	WASHER	WASHERSCREW	WRENCH
	VC..1604	CSC3581	CDSV1603	CSD5035	CTS15W

S-TCLNR/L



Negative CN insert, T-type press plate, inner hole turning tool holder



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		DCONMS	H	LF	LDRED	WF	Dmin	
S25R TCLNR/L 12	95°	25	23	200	45	17	32	CN. . 1204
S32S TCLNR/L 12		32	30	250	45	22	40	
S40T TCLNR/L 12		40	37	300	45	27	50	
S50T TCLNR/L 12		50	47	350	45	35	63	

© INSERTS TO BE ORDERED SEPARATELY

© For blade selection, see blade details page E23

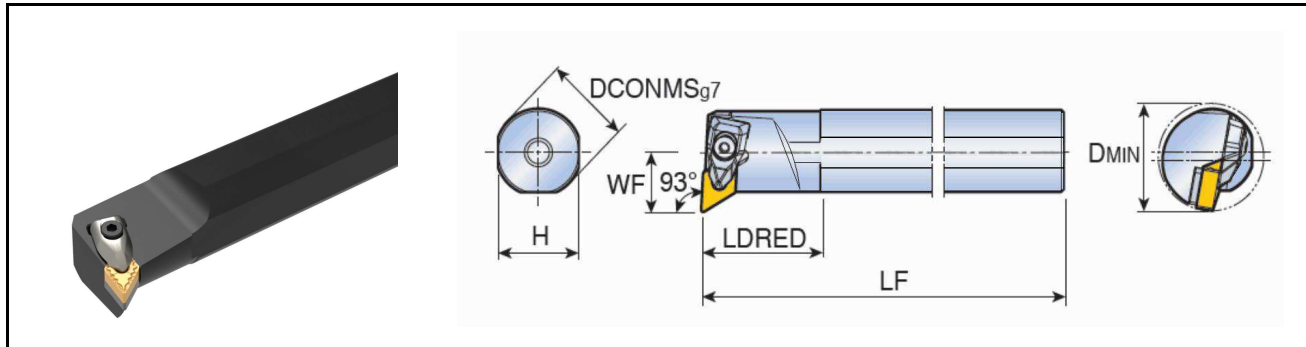
© Standard shank without internal coolant

ACC ESS ORY	INSERT MODEL	press plate	press plateSCR	spring	WASHER	WASHERSCREW	WRENCH
	CN. . 1204 (25)	CYT4	CLT5023	CPT4	CDTC1203	CSC5012	CBL40
	CN. . 1204 (32)	CYT4	CLT5023	CPT4	CDTC1203	CSC5012	CBL40
	CN. . 1204 (40)	CYT4	CLT5023	CPT4	CDTC1206	CSC4090	CBL40
	CN. . 1204 (50)	CYT4	CLT5023	CPT4	CDTC1206	CSC4090	CBL40

S-TDUNR/L, S-TDLNR/L



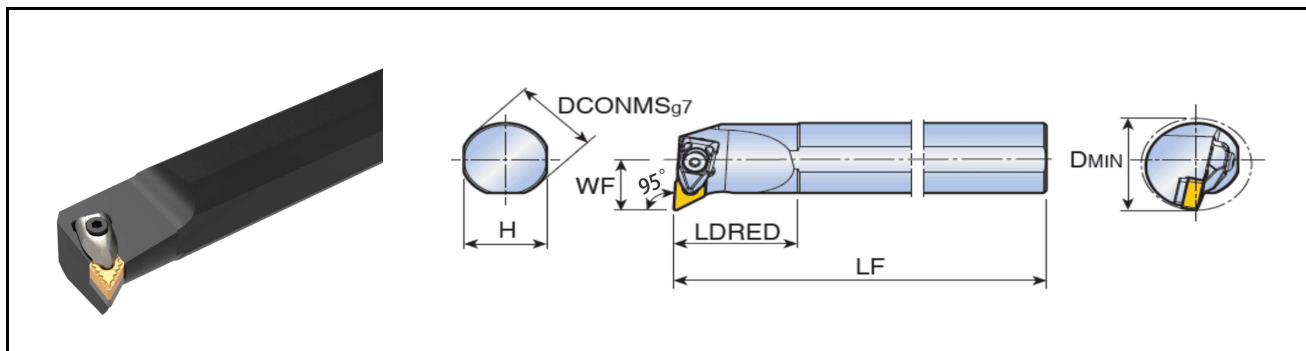
Negative DN insert, T-type press plate, inner hole turning tool holder



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		DCONMS	H	LF	LDRED	WF	Dmin	
S32S TDUNR/L 15	93°	32	30	250	45	22	40	DN. . 1506
S40T TDUNR/L 15		40	37	300	45	27	50	
S50U TDUNR/L 15		50	47	350	45	35	63	

© INSERTS TO BE ORDERED SEPARATELY; For blade selection, see blade details page E25

© Standard shank without internal coolant



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		DCONMS	H	LF	LDRED	WF	Dmin	
S25R TDLNR/L 15	95°	25	30	200	45	17	32	DN. . 1504
S32S TDLNR/L 15		32	30	250	45	22	40	DN. . 1506
S40T TDLNR/L 15		40	37	300	45	27	50	
S50U TDLNR/L 15		50	47	350	45	35	63	

© INSERTS TO BE ORDERED SEPARATELY; For blade selection, see blade details page E25

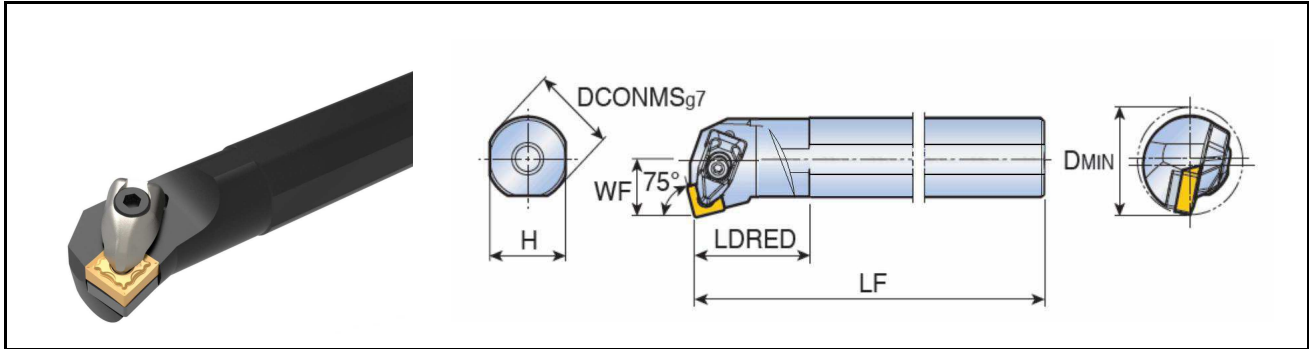
© Standard shank without internal coolant

ACCESSORY	INSERT MODEL	press plate	press plateSCR	spring	WASHER	WASHERSCREW	WRENCH
	DN. . 1504 (25)	CYT4	CLT5023	CPT4	—	—	CBL40
	DN. . 1506 (32)	CYT4	CLT5023	CPT4	CDTD1503	CSC4090	CBL40
	DN. . 1506	CYT4	CLT5023	CPT4	CDTD1504	CSC4090	CBL40

S-TSKNR/L



Negative SN insert, T-type press plate, inner hole turning tool holder



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		DCONMS	H	LF	LDRED	WF	Dmin	
S25R TSKNR/L 12	75°	25	23	200	45	17	32	SN. . 1204

© INSERTS TO BE ORDERED SEPARATELY

© For insert selection, see insert details page E26

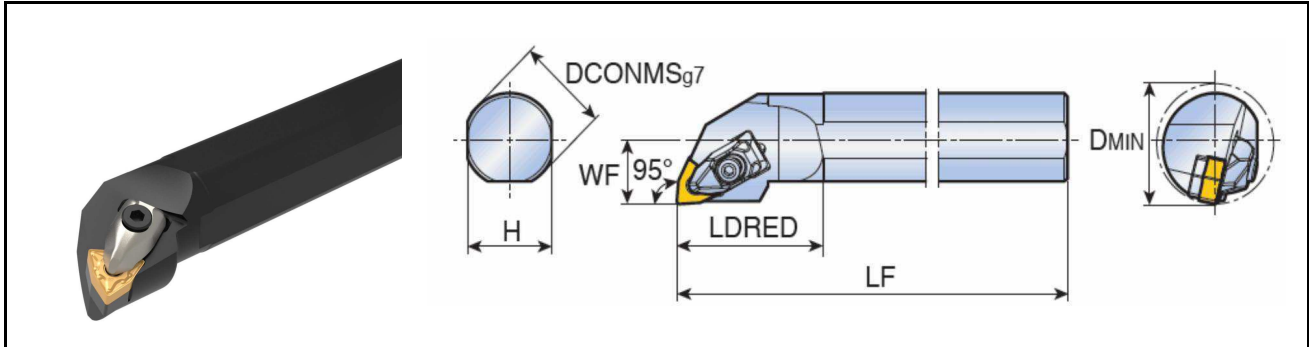
© Standard shank without internal coolant

ACCESSORY	INSERT MODEL	press plate	press plateSCR	spring	WASHER	WASHERSCREW	WRENCH
	SN. . 1204	CYT4	CLT5023	CPT4	CDTS1204	CSC5012	CBL40

S-TWLNRL



Negative WN insert, T-type press plate, inner hole turning tool holder



MODEL	KR	DIMENSION						COMPATIBLE INSERT
		DCONMS	H	LF	LDRED	WF	Dmin	
S25R.TWLNRL.08	95°	25	23	200	40	17	32	WN..0804
S32S.TWLNRL.08		32	30	250	45	22	40	
S40T.TWLNRL.08		40	37	300	45	27	50	

© INSERTS TO BE ORDERED SEPARATELY

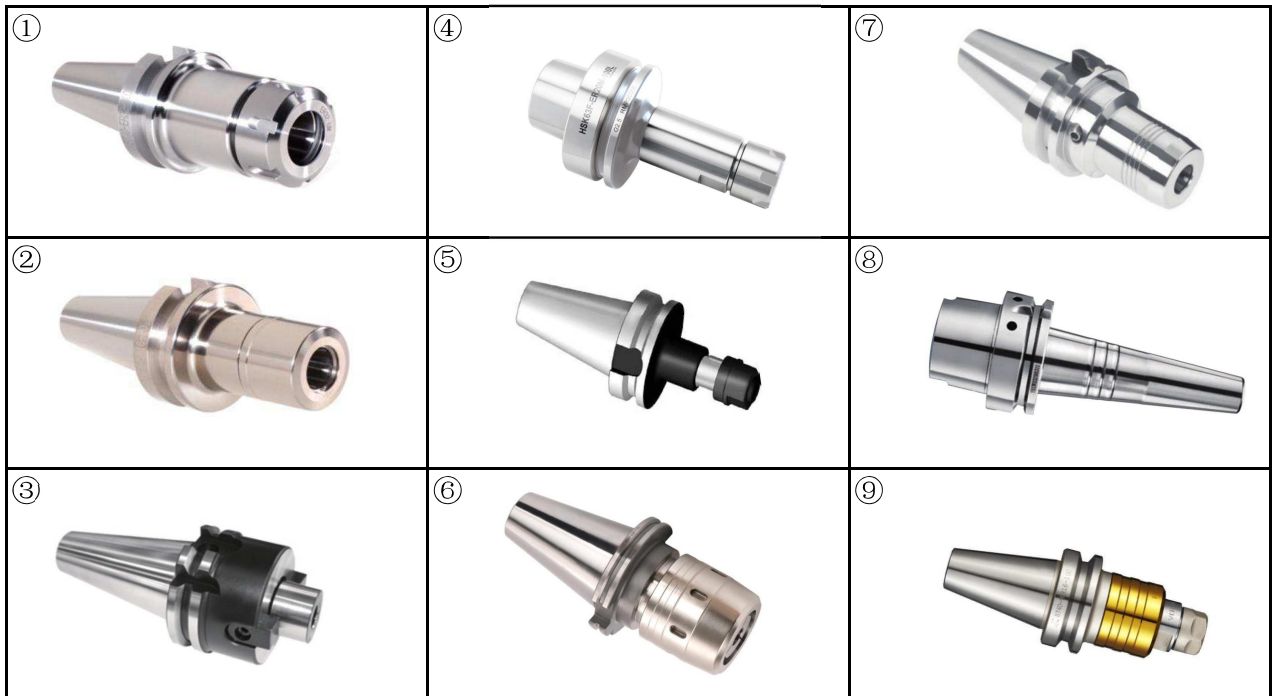
© For blade selection, see blade details page E31

© Standard shank without internal coolant

ACCESSORY	INSERT MODEL	press plate	press plateSCR	spring	WASHER	WASHERSCREW	WRENCH
	WN..0804	CYT4	CLT5023	CPT4	CDTW0804	CSC5012	CBL40
	WN..0804(40柄径)	CYT4	CLT5023	CPT4	CDTW0806	CSC4090	CBL40



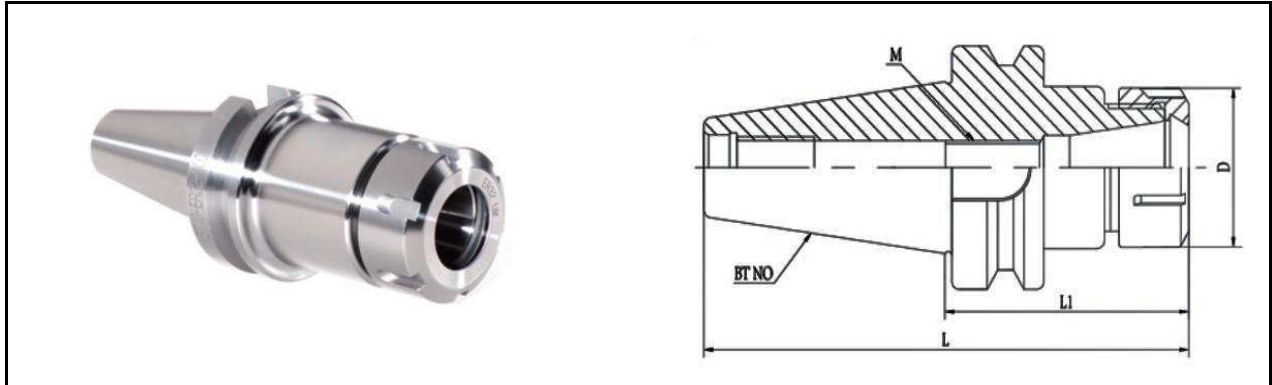
HANWOO



BT-ER

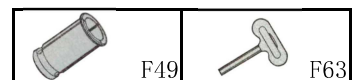


Tool system tool holder series: elastic collet tool holder



MODEL	DIMENSION			Clamping range	collet	SCREW	WRENCH
	L1	L	D				
BT30-ER11-60	60	108.4	19	0.5-7	ER11	ER11-A	OW/ER11
BT30-ER11-100	100	148.4					
BT30-ER16-60	60	108.4	28	1-10	ER16	ER16-A	OW/ER16
BT30-ER16-100	100	148.4					
BT30-ER20-60	60	108.4	34	2-13	ER20	ER20-A	OW/ER20
BT30-ER20-100	100	148.4					
BT30-ER25-60	60	108.4	42	2-16	ER25	ER25-UM	UW/ER25
BT30-ER25-100	100	148.4					
BT30-ER32-60	60	108.4	50	3-20	ER32	ER32-UM	UW/ER32
BT30-ER32-100	100	148.4					

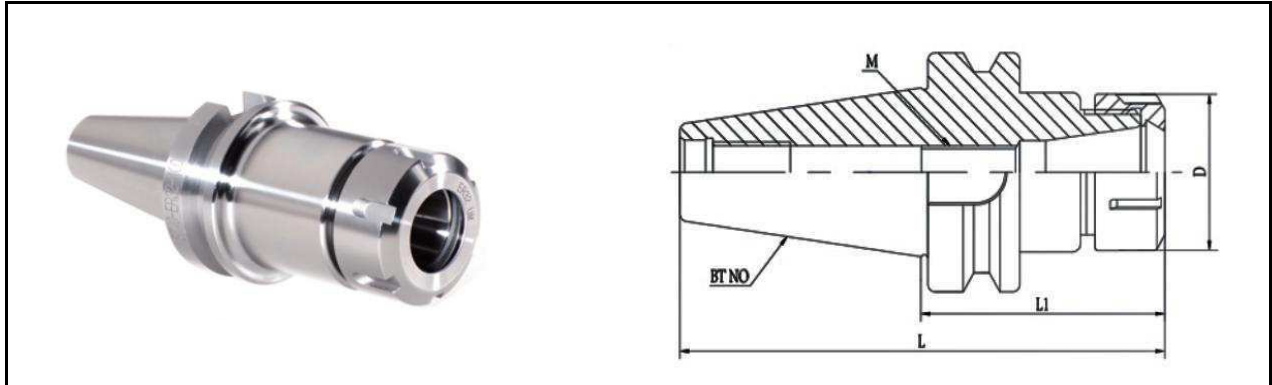
BT40-ER11-70	70	135.4	19	0.5-7	ER11	ER11-A	OW/ER11
BT40-ER11-100	100	165.4					
BT40-ER16-70	70	135.4	28	1-10	ER16	ER16-A	OW/ER16
BT40-ER16-100	100	165.4					
BT40-ER16-150	150	215.4					
BT40-ER20-70	70	135.4	34	2-13	ER20	ER20-A	OW/ER20
BT40-ER20-100	100	165.4					
BT40-ER20-150	150	215.4					
BT40-ER25-70	70	135.4	42	2-16	ER25	ER25-UM	UW/ER25
BT40-ER25-100	100	165.4					
BT40-ER25-150	150	215.4					
BT40-ER32-70	70	135.4	50	3-20	ER32	ER32-UM	UW/ER32
BT40-ER32-100	100	165.4					
BT40-ER32-150	150	215.4					



BT-ER



elastic collet tool holder



MODEL	DIMENSION			Clamping range	collet	SCREW	WRENCH
	L1	L	D				
BT40-ER40-80	80	145.4	63	3-26	ER40	ER40-UM	UW/ER40
BT40-ER40-100	100	165.4					
BT40-ER40-150	150	215.4					

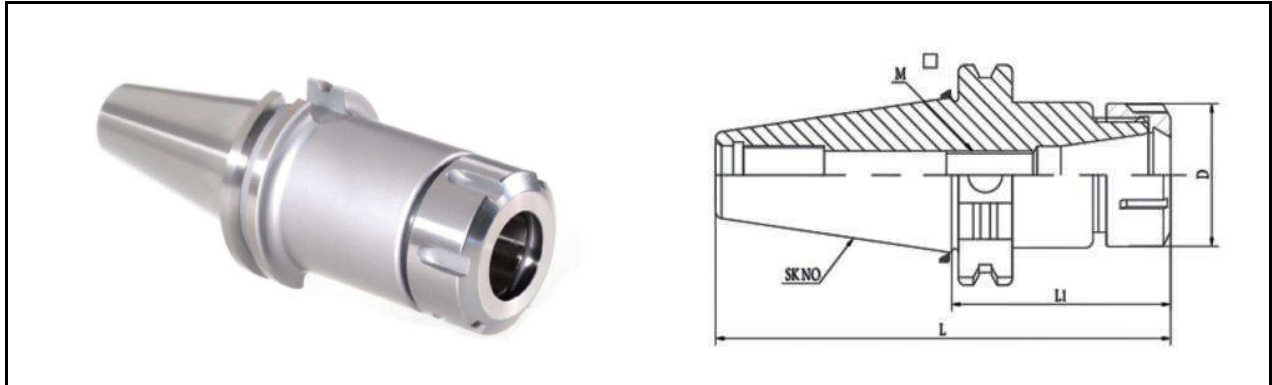
BT50-ER16-70	70	171.8	28	1-10	ER16	ER16-A	OW/ER16
BT50-ER16-100	100	201.8					
BT50-ER16-150	150	251.8					
BT50-ER20-70	70	171.8	34	2-13	ER20	ER20-A	OW/ER20
BT50-ER20-100	100	201.8					
BT50-ER20-150	150	251.8					
BT50-ER25-70	70	171.8	42	2-16	ER25	ER25-UM	UW/ER25
BT50-ER25-100	100	201.8					
BT50-ER25-150	150	251.8					
BT50-ER32-70	70	171.8	50	3-20	ER32	ER32-UM	UW/ER32
BT50-ER32-100	100	201.8					
BT50-ER32-150	150	251.8					
BT50-ER40-80	80	181.8	63	3-26	ER40	ER40-UM	UW/ER40
BT50-ER40-100	100	201.8					
BT50-ER40-150	150	251.8					
BT50-ER40-200	200	301.8					



SK-ER

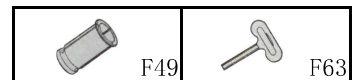


elastic collet tool holder



MODEL	DIMENSION			Clamping range	collet	SCREW	WRENCH
	L1	L	D				
SK30-ER11-60	60	107.8	19	0.5-7	ER11	ER11-A	OW/ER11
SK30-ER11-100	100	147.8					
SK30-ER16-60	60	107.8	28	1-10	ER16	ER16-A	OW/ER16
SK30-ER16-100	100	147.8					
SK30-ER20-60	60	107.8	34	2-13	ER20	ER20-A	OW/ER20
SK30-ER20-100	100	147.8					
SK30-ER25-60	60	107.8	42	2-16	ER25	ER25-A	UW/ER25
SK30-ER25-100	100	147.8					
SK30-ER32-60	60	107.8	50	3-20	ER32	ER32-A	UW/ER32
SK30-ER32-100	100	147.8					

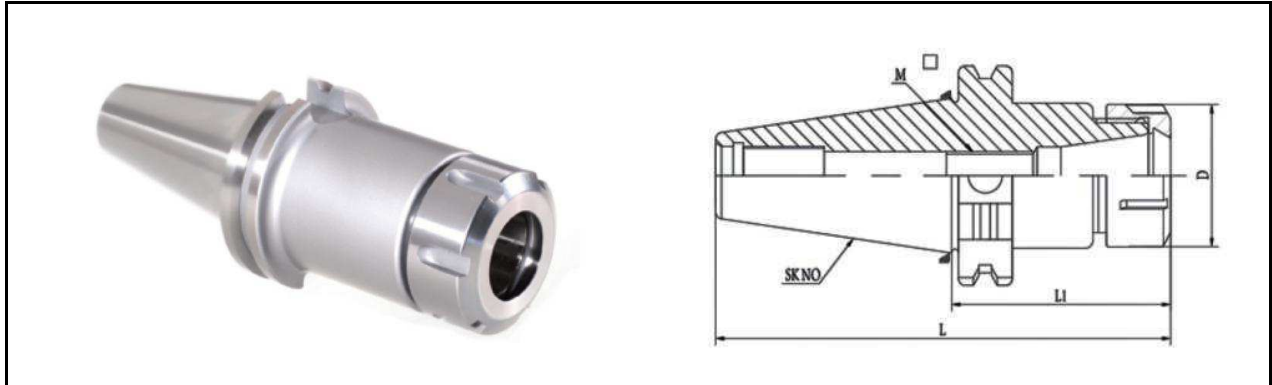
SK40-ER11-70	70	138.4	19	0.5-7	ER11	ER11-A	OW/ER11
SK40-ER11-100	100	168.4					
SK40-ER16-70	70	138.4	28	1-10	ER16	ER16-A	OW/ER16
SK40-ER16-100	100	168.4					
SK40-ER16-150	150	218.4	34	2-13	ER20	ER20-A	OW/ER20
SK40-ER20-70	70	138.4					
SK40-ER20-100	100	168.4					
SK40-ER20-150	150	218.4	42	2-16	ER25	ER25-UM	UW/ER25
SK40-ER25-70	70	138.4					
SK40-ER25-100	100	168.4					
SK40-ER25-150	150	218.4					



SK-ER



elastic collet tool holder



MODEL	DIMENSION			Clamping range	collet	SCREW	WRENCH
	L1	L	D				
SK40-ER32-70	70	138.4	50	3-20	ER32	ER32-UM	UW/ER32
SK40-ER32-100	100	168.4					
SK40-ER32-150	150	218.4					
SK40-ER40-80	80	148.4	63	3-26	ER40	ER40-UM	UW/ER40
SK40-ER40-100	100	168.4					
SK40-ER40-150	150	218.4					

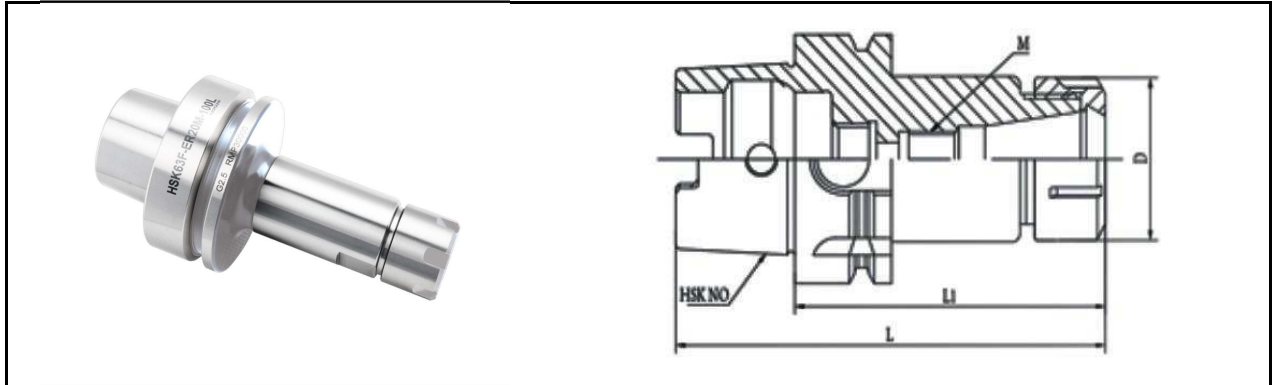
SK50-ER16-70	70	171.8	28	1-10	ER16	ER16-A	OW/ER16
SK50-ER16-100	100	201.8					
SK50-ER16-150	150	251.8					
SK50-ER20-70	70	171.8	34	2-13	ER20	ER20-A	OW/ER20
SK50-ER20-100	100	201.8					
SK50-ER20-150	150	251.8					
SK50-ER25-70	70	171.8	42	2-16	ER25	ER25-UM	UW/ER25
SK50-ER25-100	100	201.8					
SK50-ER25-150	150	251.8					
SK50-ER32-70	70	171.8	50	3-20	ER32	ER32-UM	UW/ER32
SK50-ER32-100	100	201.8					
SK50-ER32-150	150	251.8					
SK50-ER40-80	80	171.8	63	3-26	ER40	ER40-UM	UW/ER40
SK50-ER40-100	100	201.8					
SK50-ER40-150	150	251.8					
SK50-ER40-200	200	301.8					



HSK-ER

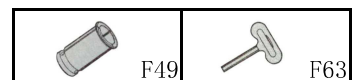


elastic collet tool holder



MODEL	DIMENSION		Clamping range	collet	SCREW
	L1	D			
HSK40A-ER11-80	80	19	0.5-7	ER11	ER11-A
HSK40A-ER11-100	100				
HSK40A-ER16-80	80	28	0.5-10	ER16	ER16-A
HSK40A-ER16-100	100				
HSK40A-ER20-80	80	34	1.0-12	ER20	ER20-A
HSK40A-ER20-100	100				
HSK40A-ER25-80	80	42	1.0-16	ER25	ER25-UM
HSK40A-ER25-100	100				
HSK40A-ER32-80	80	50	2.0-20	ER32	ER32-UM
HSK40A-ER32-100	100				

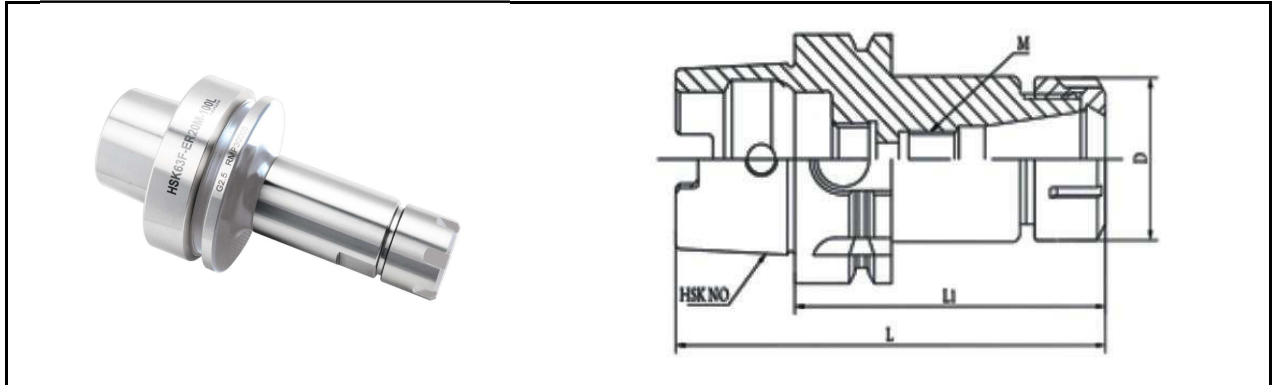
HSK50A-ER11-80	80	19	0.5-7	ER11	ER11-A
HSK50A-ER11-100	100				
HSK50A-ER11-120	120				
HSK50A-ER16-80	80	28	0.5-10	ER16	ER16-A
HSK50A-ER16-100	100				
HSK50A-ER16-120	120				
HSK50A-ER20-80	80	34	1.0-12	ER20	ER20-A
HSK50A-ER20-100	100				
HSK50A-ER20-120	120				
HSK50A-ER25-80	80	42	1.0-16	ER25	ER25-UM
HSK50A-ER25-100	100				
HSK50A-ER25-120	120				
HSK50A-ER32-80	80	50	2.0-20	ER32	ER32-UM
HSK50A-ER32-100	100				
HSK50A-ER32-120	120				



HSK-ER



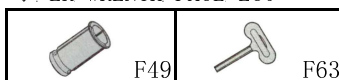
elastic collet tool holder



MODEL	DIMENSION		Clamping range	collet	SCREW
	L1	D			
HSK63A-ER11-75	75	19	0.5-7	ER11	ER11-A
HSK63A-ER16-80	80	28	0.5-10	ER16	ER16-A
HSK63A-ER16-100	100				
HSK63A-ER16-120	120				
HSK63A-ER16-160	160				
HSK63A-ER20-80	80	34	1.0-12	ER20	ER20-A
HSK63A-ER20-100	100				
HSK63A-ER20-120	120				
HSK63A-ER20-160	160				
HSK63A-ER25-80	80	42	1.0-16	ER25	ER25-UM
HSK63A-ER25-100	100				
HSK63A-ER25-120	120				
HSK63A-ER25-160	160				
HSK63A-ER32-80	80	50	2.0-20	ER32	ER32-UM
HSK63A-ER32-100	100				
HSK63A-ER32-120	120				
HSK63A-ER32-160	160				
HSK63A-ER40-80	80	63	3.0-26	ER40	ER40-UM
HSK63A-ER40-100	100				
HSK63A-ER40-120	120				
HSK63A-ER40-160	160				
HSK80A-ER16-100	100	28	0.5-10	ER16	ER16-A
HSK80A-ER20-100	100	34	1.0-12	ER20	ER20-A
HSK80A-ER25-100	100	42	1.0-16	ER25	ER25-UM
HSK80A-ER32-100	100	50	2.0-20	ER32	ER32-UM

◇ ERcollet PAGE E46

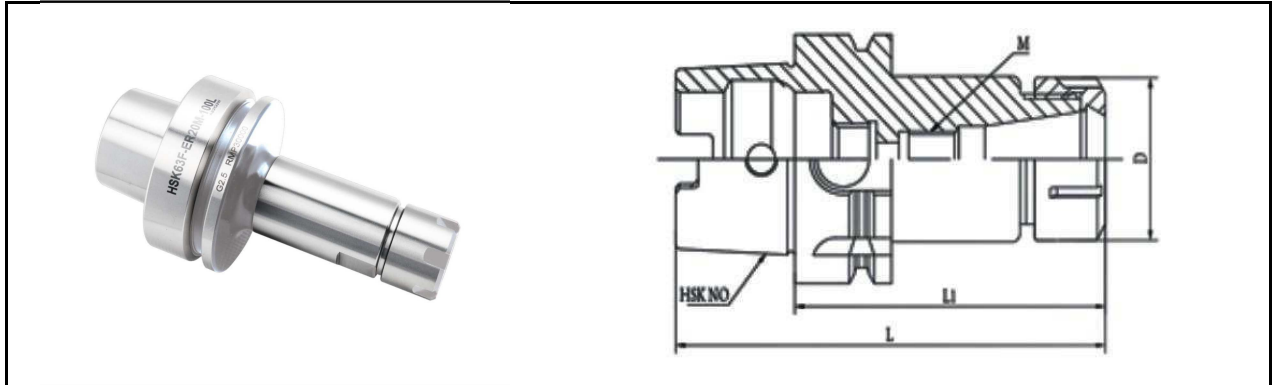
◇ ER WRENCH PAGE E60



HSK-ER

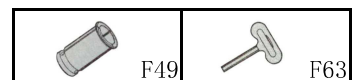


elastic collet tool holder



MODEL	DIMENSION		Clamping range	collet	SCREW
	L1	D			
HSK100A-ER16-100	100	28	0.5-10	ER16	ER16-A
HSK100A-ER16-120	120				
HSK100A-ER16-160	160				
HSK100A-ER20-100	100	34	1.0-12	ER20	ER20-A
HSK100A-ER20-120	120				
HSK100A-ER20-160	160				
HSK100A-ER25-100	100	42	1.0-16	ER25	ER25-UM
HSK100A-ER25-120	120				
HSK100A-ER25-160	160				
HSK100A-ER32-100	100	50	2.0-20	ER32	ER32-UM
HSK100A-ER32-120	120				
HSK100A-ER32-160	160				
HSK100A-ER40-100	100	63	3.0-26	ER40	ER40-UM
HSK100A-ER40-120	120				
HSK100A-ER40-160	160				

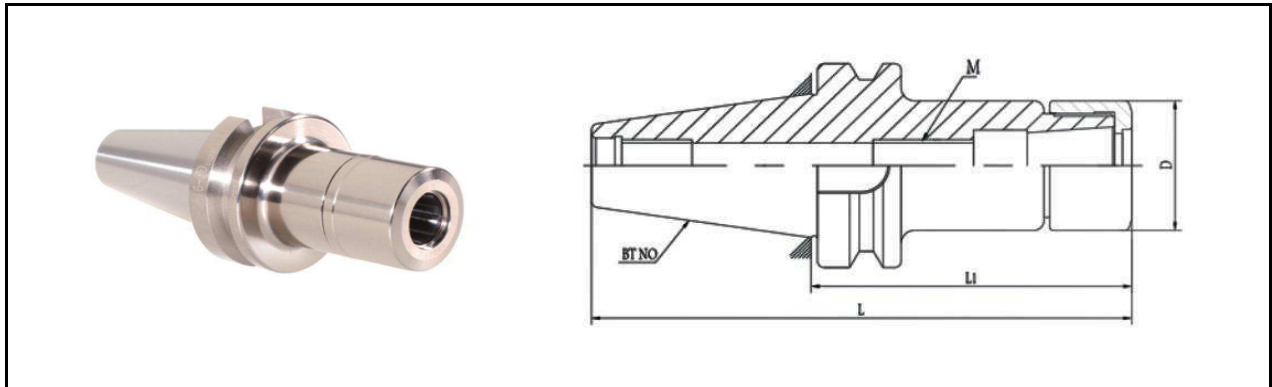
- ◇ ERcollet PAGE E46
- ◇ ER WRENCH PAGE E60



BT-GSK

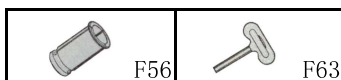


High-speed precision collet holder



MODEL	DIMENSION			Clamping range	collet	SCREW	WRENCH
	L1	L	D				
BT30-GSK06-60	60	108.4	20	2-6	GSK06	GSK06	OB/SK06
BT30-GSK06-80	80	128.4					
BT30-GSK10-70	70	118.4	27	2-10	GSK10	GSK10	OB/SK10
BT30-GSK10-95	95	143.4					
BT30-GSK16-60	60	108.4	40	3-16	GSK16	GSK16	OB/SK16
BT30-GSK16-80	80	128.4					
BT30-GSK16-100	100	148.4					
BT30-GSK25-80	80	128.4	54	6-25.4	GSK25	GSK25	OB/SK25

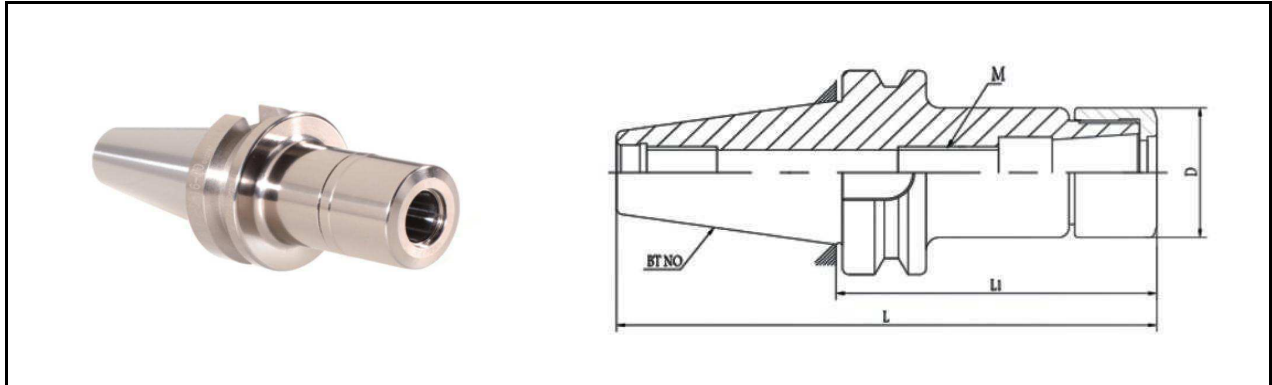
BT40-GSK06-65	65	130.4	20	2-6	GSK06	GSK06	OB/SK06
BT40-GSK06-85	85	150.4					
BT40-GSK10-55	55	120.4	27	2-10	GSK10	GSK10	OB/SK10
BT40-GSK10-80	80	145.4					
BT40-GSK10-100	100	165.4					
BT40-GSK10-150	150	215.4					
BT40-GSK16-55	55	120.4	40	3-16	GSK16	GSK16	OB/SK16
BT40-GSK16-80	80	145.4					
BT40-GSK16-100	100	165.4					
BT40-GSK16-150	150	215.4					
BT40-GSK25-70	70	135.4	54	6-25.4	GSK25	GSK25	OB/SK25
BT40-GSK25-95	95	160.4					
BT40-GSK25-110	110	175.4					



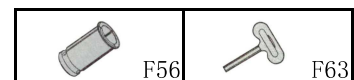
BT-GSK



High-speed precision collet holder



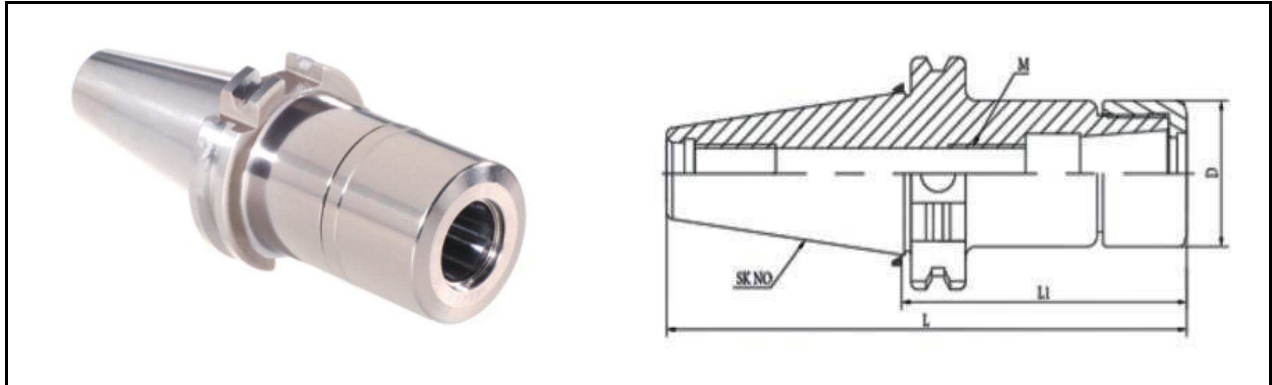
MODEL	DIMENSION			Clamping range	collet	SCREW	WRENCH
	L1	L	D				
BT50-GSK06-70	70	171.8	20	2-6	GSK06	GSK06	OB/SK06
BT50-GSK06-100	100	201.8					
BT50-GSK10-100	100	201.8	27	2-10	GSK10	GSK10	OB/SK10
BT50-GSK10-130	130	231.8					
BT50-GSK10-150	150	251.8					
BT50-GSK16-100	100	201.8	40	3-16	GSK16	GSK16	OB/SK16
BT50-GSK16-130	130	231.8					
BT50-GSK16-150	150	251.8					
BT50-GSK25-100	100	201.8	54	6-25.4	GSK25	GSK25	OB/SK25
BT50-GSK25-130	130	231.8					
BT50-GSK25-150	150	251.8					



SK-GSK



High-speed precision collet holder



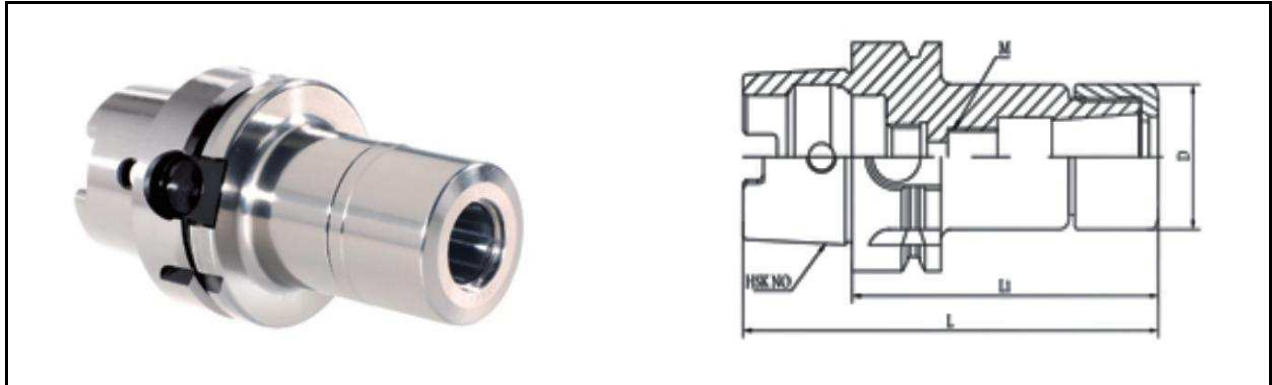
MODEL	DIMENSION			Clamping range	collet	SCREW	WRENCH
	L1	L	D				
SK30-GSK06-55	60	102.8	20	2-6	GSK06	GSK06	OB/SK06
SK30-GSK10-70	80	117.8	27	2-10	GSK10	GSK10	OB/SK10
SK30-GSK10-95	70	142.8					
SK30-GSK16-85	95	132.8	40	3-16	GSK16	GSK16	OB/SK16
SK30-GSK16-100	60	147.8					
SK30-GSK25-85	80	132.8	54	6-25.4	GSK25	GSK25	OB/SK25
SK40-GSK06-70	70	138.4	20	2-6	GSK06	GSK06	OB/SK06
SK40-GSK06-100	100	168.4					
SK40-GSK10-80	80	148.4	27	2-10	GSK10	GSK10	OB/SK10
SK40-GSK10-100	100	168.4					
SK40-GSK16-80	80	148.4	40	3-16	GSK16	GSK16	OB/SK16
SK40-GSK16-100	100	168.4					
SK40-GSK25-95	95	163.4	54	6-25.4	GSK25	GSK25	OB/SK25
SK40-GSK25-100	110	178.4					
SK50-GSK06-80	80	181.75	20	2-6	GSK06	GSK06	OB/SK06
SK50-GSK10-100	100	201.75	27	2-10	GSK10	GSK10	OB/SK10
SK50-GSK10-130	130	231.75					
SK50-GSK16-100	100	201.75	40	3-16	GSK16	GSK16	OB/SK16
SK50-GSK16-130	130	231.75					
SK50-GSK16-150	150	251.75					
SK50-GSK25-100	100	201.75	54	6-25.4	GSK25	GSK25	OB/SK25
SK50-GSK25-130	130	231.75					
SK50-GSK25-150	150	251.75					



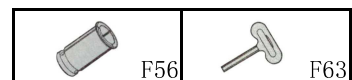
HSK-GSK



High-speed precision collet holder



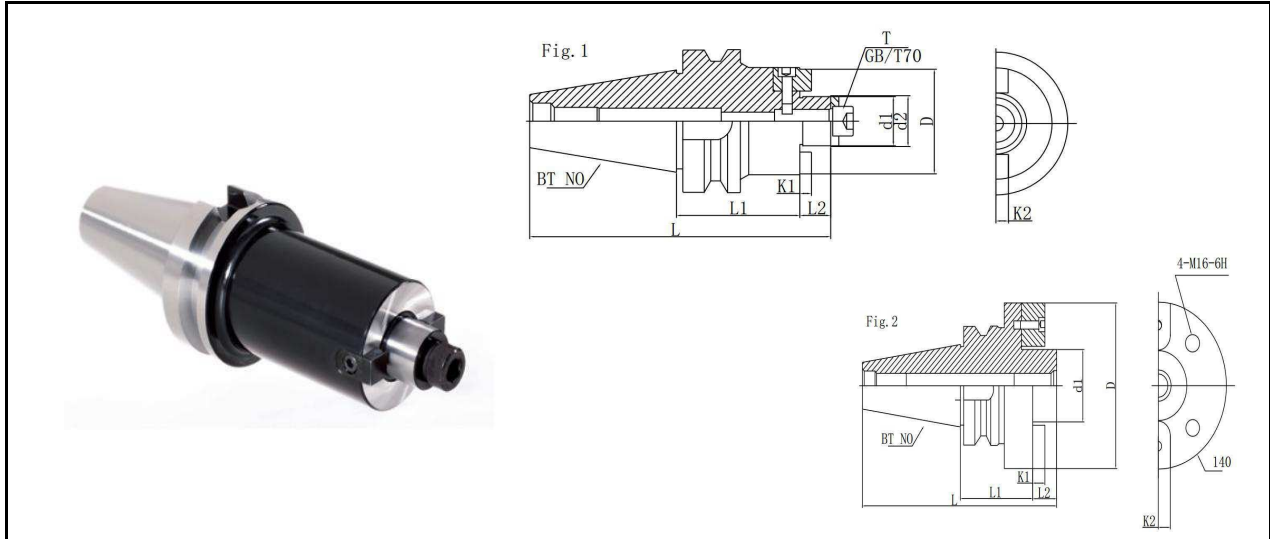
MODEL	DIMENSION			Clamping range	collet	SCREW	WRENCH
	L1	L	D				
HSK63A-GSK06-80	80	112	20	2-6	GSK06	GSK06	OB/SK06
HSK63A-GSK10-60	60	92	27	2-10	GSK10	GSK10	OB/SK10
HSK63A-GSK10-80	80	112					
HSK63A-GSK10-100	100	132					
HSK63A-GSK16-80	80	112	40	3-16	GSK16	GSK16	OB/SK16
HSK63A-GSK25-90	90	122	54	6-25.4	GSK25	GSK25	OB/SK25



BT-FMB



face mill cutter holder



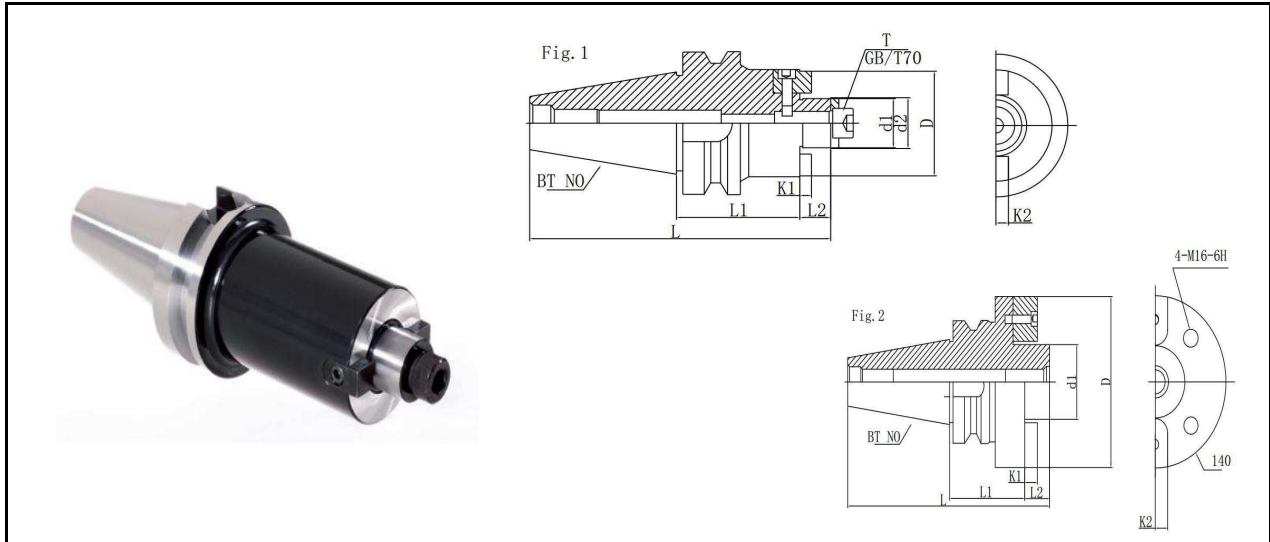
MODEL	DIMENSION								type	T
	L1	L	L2	d1	d2	D	K	K2		
BT30-FMB22-45	45	109.9	16.5	22	26	45	4.8	10	Fig. 1	M10x30
BT30-FMB22-60	60	124.9								
BT30-FMB27-45	45	111.9	18.5	27	33	54	5.8	12		M12x30
BT30-FMB27-60	60	126.9								
BT30-FMB32-60	60	130.4	22	32	41	58	6.8	14		M16x35

BT40-FMB22-45	45	126.9	16.5	22	26	48	4.8	10	Fig. 1	M10x30
BT40-FMB22-60	60	141.9								
BT40-FMB22-100	100	181.9								
BT40-FMB22-150	150	231.9								
BT40-FMB27-45	45	128.9	18.5	27	33	60	5.8	12	Fig. 1	M12x30
BT40-FMB27-60	60	143.9								
BT40-FMB27-100	100	183.9								
BT40-FMB27-150	150	233.9								
BT40-FMB27-200	200	283.9	20	32	41	62	6.8	14	Fig. 1	M16x35
BT40-FMB32-60	60	147.4								
BT40-FMB32-100	100	187.4								
BT40-FMB32-150	150	237.4								
BT40-FMB32-200	200	287.4								

BT-FMB



face mill cutter holder

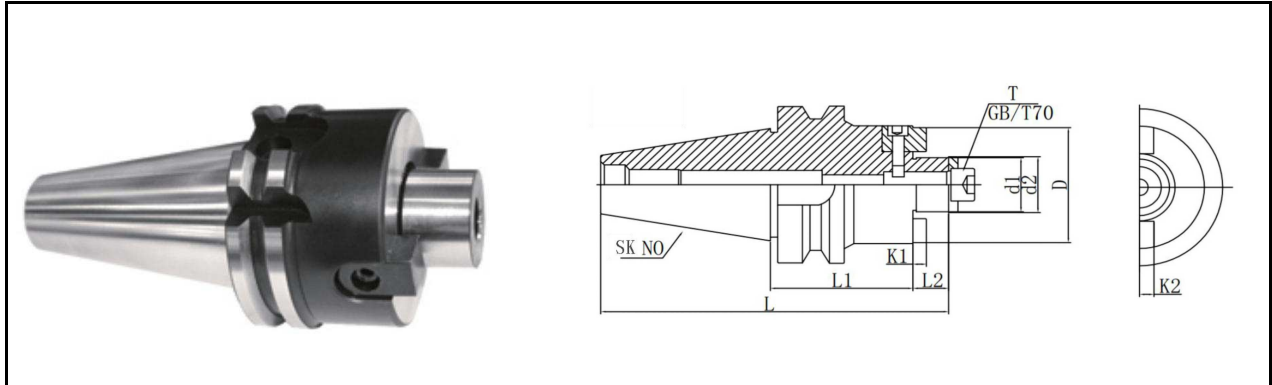


MODEL	DIMENSION								type	T
	L1	L2	d1	d2	D	K	K2	D3		
BT40-FMB40-60	60	23	40	48	80	8	16	\	Fig. 1	M16x35
BT40-FMB40-100	100									
BT40-FMB40-150	150									
BT40-FMB40-200	200									
BT40-FMC40-60	60	16.5	22	\	98	4.8	10	66.7	Fig. 2	
BT50-FMB22-60	60									
BT50-FMB22-100	100									
BT50-FMB22-150	150									
BT50-FMB22-200	200	18.5	27	33	60	5.8	12	\	Fig. 1	
BT50-FMB27-60	60									
BT50-FMB27-100	100									
BT50-FMB27-150	150									
BT50-FMB27-200	200	20	32	41	73	6.8	14	\	Fig. 1	
BT50-FMB32-60	60									
BT50-FMB32-100	100									
BT50-FMB32-150	150									
BT50-FMB32-200	200	23	40	48	80	8	16	\	Fig. 1	
BT50-FMB40-60	60									
BT50-FMB40-100	100									
BT50-FMB40-150	150									
BT50-FMB40-200	200	25	60	\	129	12.5	25.4	101.6	Fig. 2	
BT50-FMC40-60	60									
BT50-FMC60. 129-75	75	25	60	\	129	12.5	25.4	101.6	Fig. 2	
BT50-FMC60. 129-100	100									

SK-FMB



face mill cutter holder



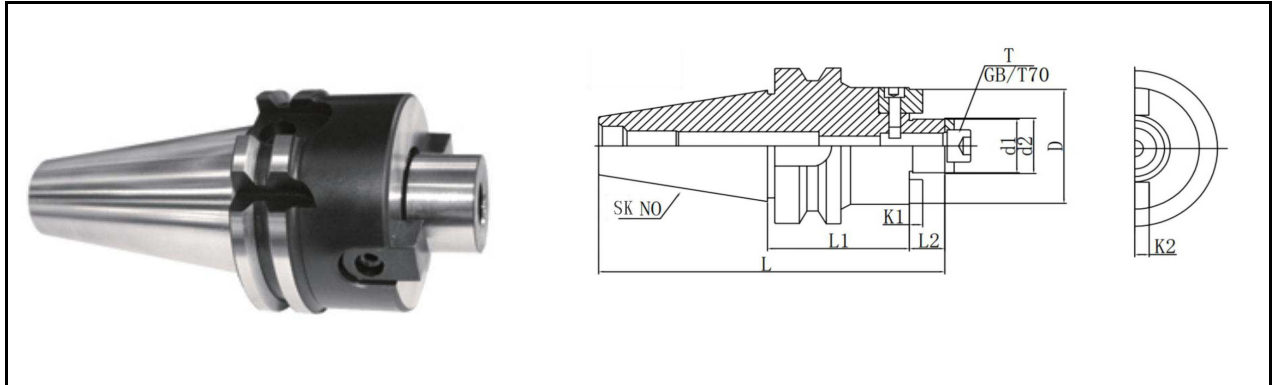
MODEL	DIMENSION								T
	L1	L	L2	d1	d2	D	K1	K2	
SK30-FMB22-45	45	109.3	16.5	22	26	45	4.8	10	M10x30
SK30-FMB22-60	60	124.3							
SK30-FMB27-45	45	111.3	18.5	27	33	54	5.8	12	M12x30
SK30-FMB27-60	60	126.3							
SK30-FMB32-60	60	130.3	22	32	41	58	6.8	14	M16x35

SK40-FMB22-45	45	129.9	16.5	22	26	48	4.8	10	M10x30
SK40-FMB22-60	60	144.9							
SK40-FMB22-100	100	184.9							
SK40-FMB22-150	150	234.9							
SK40-FMB27-45	45	131.9	18.5	27	33	60	5.8	12	M12x30
SK40-FMB27-60	60	146.9							
SK40-FMB27-100	100	186.9							
SK40-FMB27-150	150	236.9							
SK40-FMB27-200	200	286.9	20	32	41	62	6.8	14	M16x35
SK40-FMB32-60	60	150.4							
SK40-FMB32-100	100	190.4							
SK40-FMB32-150	150	240.4							
SK40-FMB32-200	200	290.4	23	40	48	80	8	16	M16x35
SK40-FMB40-60	60	153.4							
SK40-FMB40-100	100	193.4							
SK40-FMB40-150	150	243.4							
SK40-FMB40-200	200	293.4							

SK-FMB



face mill cutter holder

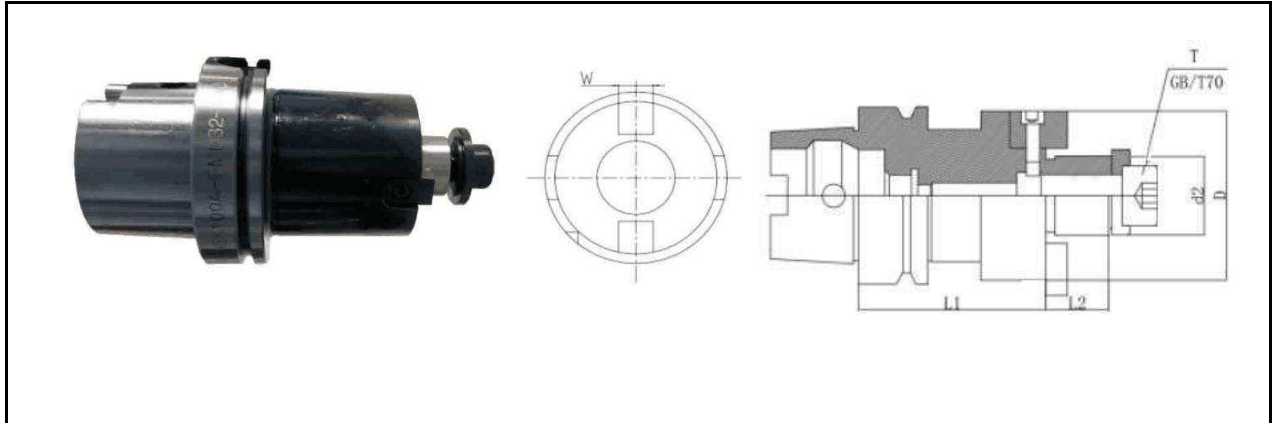


MODEL	DIMENSION								T
	L1	L	d1	d2	D	L2	K1	K2	
SK50-FMB22-60	60	178.25	22	26	48	16.5	4.8	10	M10x30
SK50-FMB22-100	100	218.25							
SK50-FMB22-150	150	268.25							
SK50-FMB22-200	200	318.25							
SK50-FMB27-60	60	180.25	27	33	60	18.5	5.8	12	M12x30
SK50-FMB27-100	100	220.25							
SK50-FMB27-150	150	270.25							
SK50-FMB27-200	200	320.25							
SK50-FMB32-60	60	183.75	32	41	73	20	6.8	14	M16x35
SK50-FMB32-100	100	223.75							
SK50-FMB32-150	150	273.75							
SK50-FMB32-200	200	333.75							
SK50-FMB40-60	60	186.75	40	48	80	23	8	16	M16x35
SK50-FMB40-100	100	226.75							
SK50-FMB40-150	150	276.75							
SK50-FMB40-200	200	326.75							

HSK-FMB



face mill cutter holder



MODEL	DIMENSION					T
	L1	d2	D	L2	W	
HSK40A-FMB16-60	50	16	40	16.5	8	M8x25
HSK40A-FMB22-50	50	22	48	16.5	10	M10x30
HSK40A-FMB27-60	60	27	60	18.5	12	M12x30

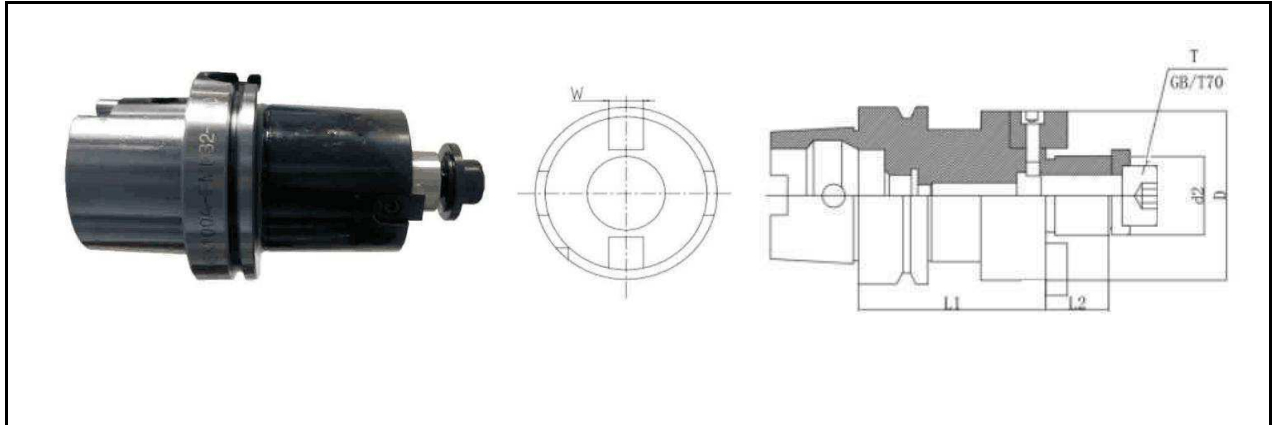
HSK50A-FMB16-60	50	16	40	16.5	8	M8x25
HSK50A-FMB22-50	50	22	48	16.5	10	M10x30
HSK50A-FMB27-60	60	27	60	18.5	12	M12x30

HSK63A-FMB16-50	50	16	40	16.5	8	M8x25
HSK63A-FMB16-100	100					
HSK63A-FMB16-145	145					
HSK63A-FMB22-50	50	22	48	16.5	10	M10x30
HSK63A-FMB22-100	100					
HSK63A-FMB22-160	160					
HSK63A-FMB27-60	60	27	60	18.5	12	M12x30
HSK63A-FMB27-100	100					
HSK63A-FMB27-160	160					
HSK63A-FMB32-60	60	32	62	20	14	M16x35
HSK63A-FMB32-100	100					
HSK63A-FMB32-160	160					
HSK63A-FMB40-60	60	40	80	23	16	M16x35

HSK-FMB



face mill cutter holder

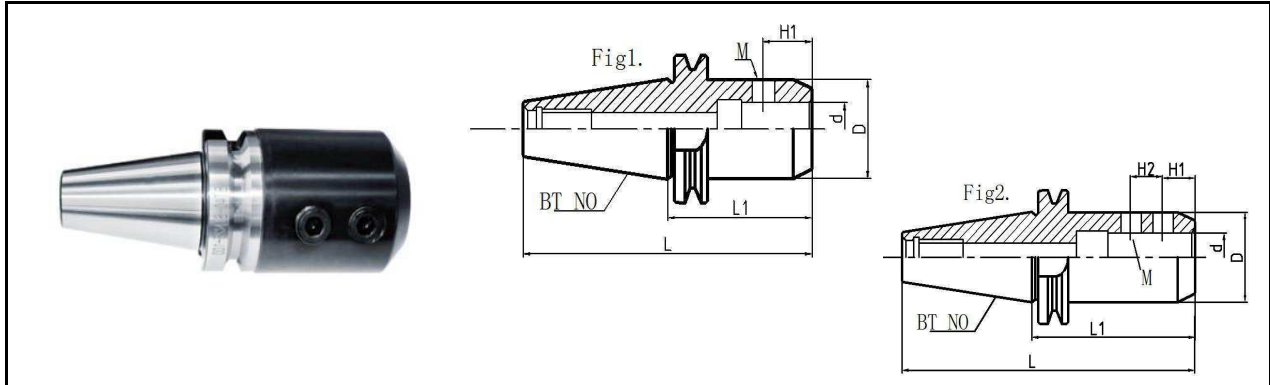


MODEL	DIMENSION					T
	L1	d2	D	L2	W	
HSK100A-FMB22-50	50	22	48	16.5	10	M10x30
HSK100A-FMB22-100	100					
HSK100A-FMB27-50	50	27	60	18.5	12	M12x30
HSK100A-FMB27-100	100					
HSK100A-FMB27-160	160					
HSK100A-FMB32-50	50	32	73	20	14	M16x35
HSK100A-FMB32-100	100					
HSK100A-FMB32-160	160					
HSK100A-FMB40-60	60	40	80	23	16	M16x35
HSK100A-FMB40-100	100					
HSK100A-FMB40-160	160					

BT-SLN



SLN Side mount handle holder



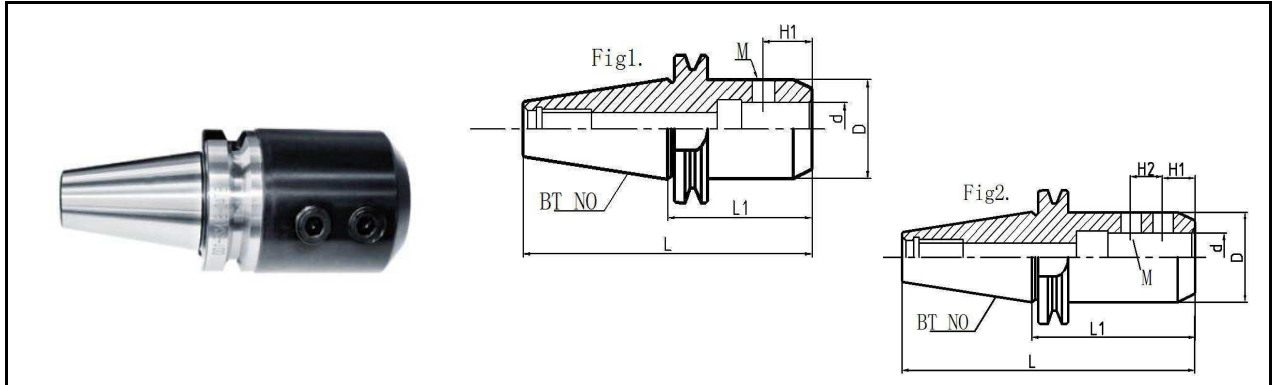
MODEL	DIMENSION						handle	type
	D	M	L	L1	H1	H2	d	
BT30-SLN06-60	25	M6	108.4	60	18	—	6	Fig. 1
BT30-SLN08-60	28	M8			18		8	
BT30-SLN10-60	35	M10			20		10	
BT30-SLN12-60	42	M12			22.5		12	
BT30-SLN16-75	48	M12	123.4	75	24		16	
BT30-SLN20-63	52	M16	111.4	63	25		20	
BT30-SLN20-75	52	M16	123.4	75	25	25	Fig. 2	
BT30-SLN25-80	65	M16	128.4	80	24			
BT30-SLN25-90	65	M16	138.4	90	24			
BT30-SLN25-100	65	M16	148.4	100	24			

BT40-SLN06-50	25	M6	115.4	50	18	—	6	Fig. 1
BT40-SLN08-50	28	M8			18		8	
BT40-SLN10-63	35	M10	128.4	63	20		10	
BT40-SLN12-63	42	M12			22.5		12	
BT40-SLN16-63	48	M12			24		16	
BT40-SLN20-63	52	M16			25		20	
BT40-SLN25-90	65	M16	155.4	90	24	25	25	
BT40-SLN25-100	65	M16	165.4	100	24			
BT40-SLN32-100	72	M20			24	28	32	32
BT40-SLN40-105	80	M20	170.4	105	30	40		
BT40-SLN42-105	82	M20			30	42		

BT-SLN



SLN Side mount handle holder

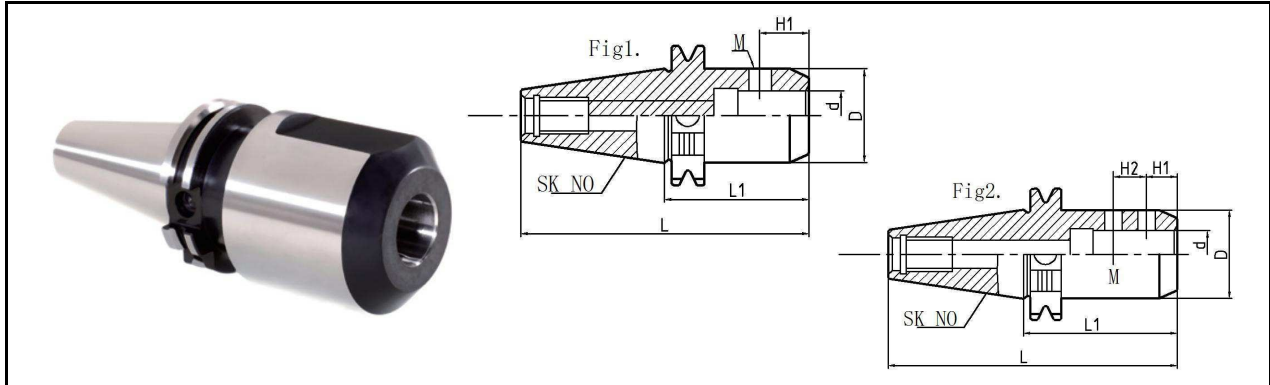


MODEL	DIMENSION						handle d	type	
	D	M	L	L1	H1	H2			
BT50-SLN06-63	25	M6	164.8	63	18	25	6	Fig. 1	
BT50-SLN08-63	28	M8			18		8		
BT50-SLN10-63	35	M10			20		10		
BT50-SLN12-80	42	M12	181.8	80	22.5		12		
BT50-SLN16-80	48	M12			24		16		
BT50-SLN20-80	52	M16			25		20		
BT50-SLN25-100	65	M16	201.8	100	24	32	25	Fig. 2	
BT50-SLN32-105	72	M20	206.8	105	24		28		32
BT50-SLN40-115	80	M20	216.8	115	30		40		
BT50-SLN42-120	82	M20	221.8	120	30		42		

SK-SLN



Side mount handle holder

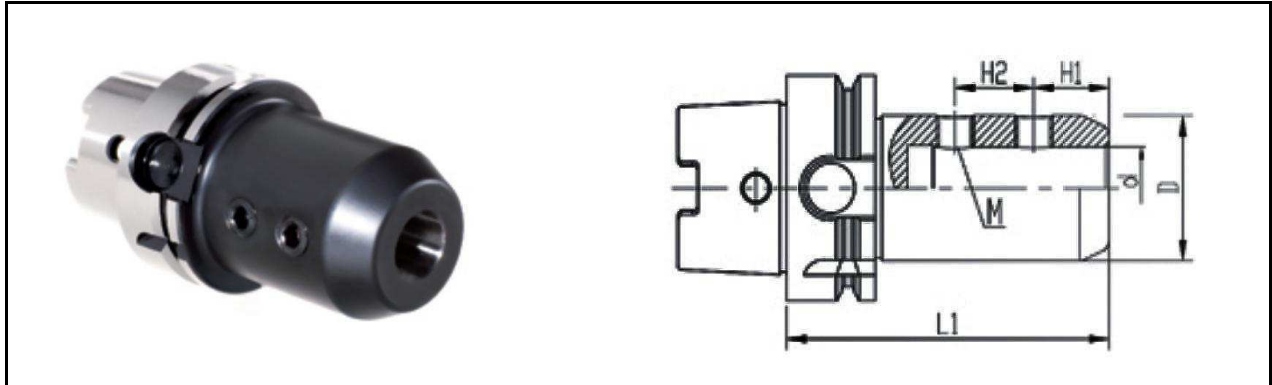


MODEL	DIMENSION							type
	D	M	d	L	L1	H1	H2	
SK30-SLN06-50	25	M6	6	97.8	50	18	—	Fig. 1
SK30-SLN08-50	28	M8	8			18		Fig. 1
SK30-SLN10-50	35	M10	10			20		Fig. 1
SK30-SLN12-50	42	M12	12			22.5		Fig. 1
SK30-SLN16-63	48	M12	16	110.8	63	24	—	Fig. 1
SK30-SLN20-63	52	M16	20			25		Fig. 1
SK40-SLN06-50	25	M6	6	118.4	50	18	—	Fig. 1
SK40-SLN08-50	28	M8	8			18		Fig. 1
SK40-SLN10-50	35	M10	10			20		Fig. 1
SK40-SLN12-50	42	M12	12			22.5		Fig. 1
SK40-SLN16-63	48	M12	16	131.4	63	24	—	Fig. 1
SK40-SLN20-63	52	M16	20			25		Fig. 1
SK40-SLN25-100	65	M16	25	168.4	100	24	25	Fig. 2
SK40-SLN32-100	72	M20	32			24	28	Fig. 2
SK50-SLN06-63	25	M6	6	164.75	63	18	—	Fig. 1
SK50-SLN08-63	28	M8	8			18		Fig. 1
SK50-SLN10-63	35	M10	10			20		Fig. 1
SK50-SLN12-63	42	M12	12			22.5		Fig. 1
SK50-SLN16-63	48	M12	16			24		Fig. 1
SK50-SLN20-63	52	M16	20			25		Fig. 1
SK50-SLN25-80	65	M16	25	181.75	80	24	25	Fig. 2
SK50-SLN32-100	72	M20	32			24	28	Fig. 2
SK50-SLN40-100	90	M20	40	201.75	100	30	32	Fig. 2
SK50-SLN42-100	100	M20	42			30	32	Fig. 2

HSK-SLN



Side mount handle

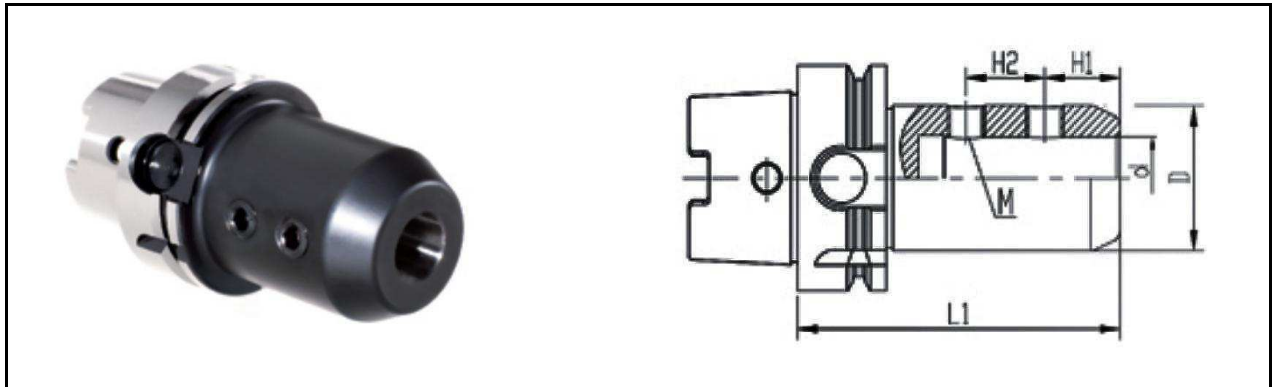


MODEL	DIMENSION					
	L1	d	D	H1	H2	M
HSK63A-SLN06-65	65	6	25	12	10	M6
HSK63A-SLN06-100	100					
HSK63A-SLN06-120	120					
HSK63A-SLN08-65	65	8	28	14	12	M8
HSK63A-SLN08-120	120					
HSK63A-SLN08-160	160					
HSK63A-SLN10-65	65	10	35	15	14	M10
HSK63A-SLN10-120	120					
HSK63A-SLN10-160	160					
HSK63A-SLN12-80	80	12	42	20	16	M12
HSK63A-SLN12-120	120					
HSK63A-SLN12-160	160					
HSK63A-SLN16-80	80	16	48	22	18	M12
HSK63A-SLN16-120	120					
HSK63A-SLN16-160	160					
HSK63A-SLN20-80	80	20	52	25	20	M16
HSK63A-SLN20-120	120					
HSK63A-SLN20-160	160					
HSK63A-SLN25-110	110	25	65	24	25	M16
HSK63A-SLN25-160	160					
HSK63A-SLN32-110	110	32	72	24	28	M20
HSK63A-SLN32-160	160					

HSK-SLN



Side mount handle

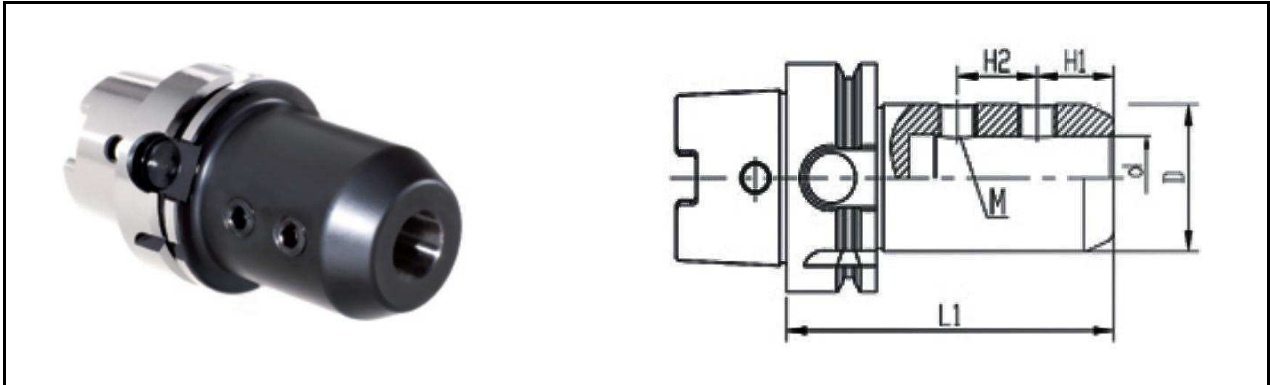


MODEL	DIMENSION					
	L1	d	D	H1	H2	M
HSK80A-SLN06-80	80	6	25	12	10	M6
HSK80A-SLN06-120	120					
HSK80A-SLN06-160	160					
HSK80A-SLN08-80	80	8	28	14	12	M8
HSK80A-SLN08-120	120					
HSK80A-SLN08-160	160					
HSK80A-SLN10-80	80	10	35	15	14	M10
HSK80A-SLN10-120	120					
HSK80A-SLN10-160	160					
HSK80A-SLN12-80	80	12	42	20	16	M12
HSK80A-SLN12-120	120					
HSK80A-SLN12-160	160					
HSK80A-SLN16-100	100	16	48	22	18	M12
HSK80A-SLN16-160	160					
HSK80A-SLN20-100	100	20	52	25	20	M16
HSK80A-SLN20-160	160					
HSK80A-SLN25-100	100	25	65	24	25	M16
HSK80A-SLN25-160	160					
HSK80A-SLN32-100	100	32	72	24	28	M20
HSK80A-SLN32-160	160					
HSK80A-SLN40-120	120	40	84	30	32	M20
HSK80A-SLN40-160	160					

HSK-SLN



Side mount handle

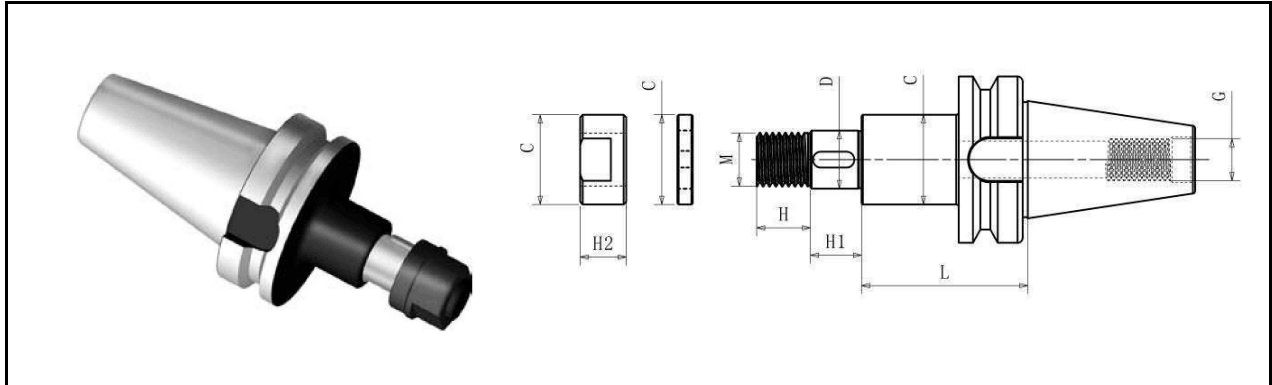


MODEL	DIMENSION					
	L1	d	D	H1	H2	M
HSK100A-SLN06-80	80	6	25	12	10	M6
HSK100A-SLN06-120	120					
HSK100A-SLN06-160	160					
HSK100A-SLN08-80	80	8	28	14	12	M8
HSK100A-SLN08-120	120					
HSK100A-SLN08-160	160					
HSK100A-SLN10-80	80	10	35	15	14	M10
HSK100A-SLN10-120	120					
HSK100A-SLN10-160	160					
HSK100A-SLN12-80	80	12	42	20	16	M12
HSK100A-SLN12-120	120					
HSK100A-SLN12-160	160					
HSK100A-SLN16-100	100	16	48	22	18	M12
HSK100A-SLN16-160	160					
HSK100A-SLN20-100	100	20	52	25	20	M16
HSK100A-SLN20-160	160					
HSK100A-SLN25-100	100	25	65	24	25	M16
HSK100A-SLN25-160	160					
HSK100A-SLN32-100	100	32	72	24	28	M20
HSK100A-SLN32-160	160					
HSK100A-SLN40-120	120	40	84	30	32	M20
HSK100A-SLN40-160	160					

BT-XS



Side milling three-sided blade HOLDER



MODEL	DIMENSION						TYPE	M	G	Kg
	D	L	H	C	H1	H2				
BT30-XS13-75	13	75	15	20	30	12	BT30	M12×1.75	M12	0.6
BT30-XS16-75	16	75	16	26	30	13	BT30	M14×1.5	M12	0.7
BT30-XS22-75	22	75	21	34	30	18	BT30	M20×1.5	M12	0.8

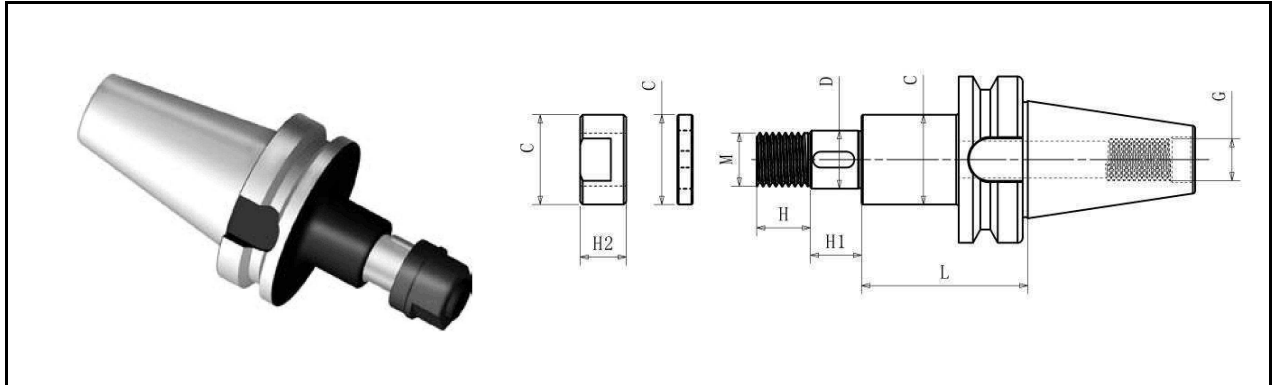
BT40-XS13-75	13	75	15	20	30	12	BT40	M12×1.75	M16	1.3
BT40-XS13-105	13	105	15	20	30	12	BT40	M12×1.75	M16	1.4
BT40-XS16-75	16	75	16	26	30	13	BT40	M14×1.5	M16	1.4
BT40-XS16-105	16	105	16	26	30	13	BT40	M14×1.5	M16	1.5
BT40-XS22-75	22	75	21	34	30	18	BT40	M20×1.5	M16	1.6
BT40-XS22-105	22	105	21	34	30	18	BT40	M20×1.5	M16	1.9
BT40-XS27-75	27	75	25	40	30	21	BT40	M24×2.0	M16	2.1
BT40-XS27-120	27	120	25	40	30	21	BT40	M24×2.0	M16	2.5
BT40-XS32-90	32	90	30	45	30	26	BT40	M30×2.0	M16	2.6

BT50-XS13-75	13	75	15	20	30	12	BT50	M12×1.75	M24	3.7
BT50-XS13-105	13	105	15	20	30	12	BT50	M12×1.75	M24	3.8
BT50-XS16-90	16	90	16	26	30	13	BT50	M14×1.5	M24	4.0
BT50-XS16-120	16	120	16	26	30	13	BT50	M14×1.5	M24	4.1
BT50-XS22-90	22	90	21	34	30	18	BT50	M20×1.5	M24	4.3
BT50-XS22-135	22	135	21	34	30	18	BT50	M20×1.5	M24	4.6
BT50-XS27-90	27	90	25	40	30	21	BT50	M24×2.0	M24	4.7
BT50-XS27-135	27	135	25	40	30	21	BT50	M24×2.0	M24	5.1
BT50-XS32-90	32	90	30	46	30	26	BT50	M30×2.0	M24	5.1
BT50-XS32-135	32	135	30	46	30	26	BT50	M30×2.0	M24	5.7

BT-XS



Side milling three-sided blade shank



MODEL	DIMENSION						TYPE	M	G	Kg
	D	L	H	C	H1	H2				
BT50-XS40-90	40	90	36	55	30	31	BT50	M36×2.0	M24	5.8
BT50-XS40-135	40	135	36	55	30	31	BT50	M36×2.0	M24	6.8
BT50-XS50-100	50	100	40	70	40	36	BT50	M48×2.0	M24	7.0
BT50-XS50-150	50	150	40	70	40	36	BT50	M48×2.0	M24	8.5

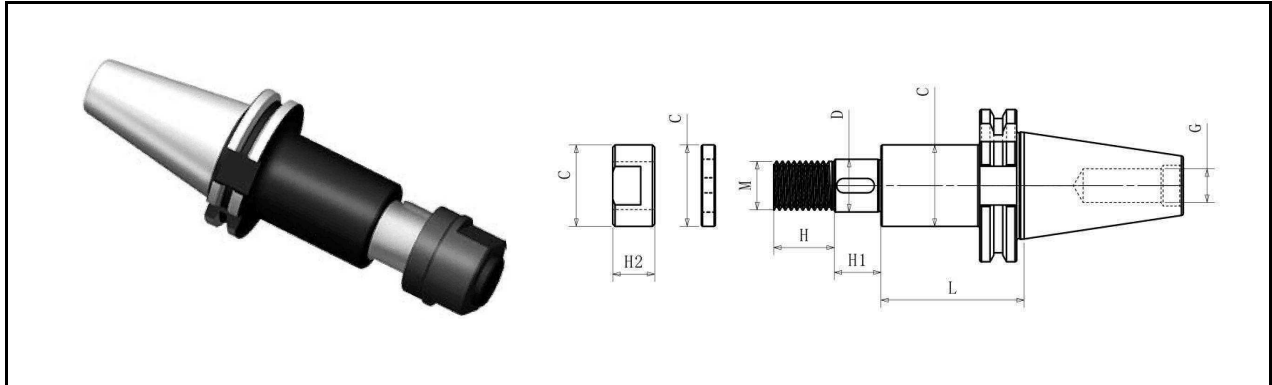
ACCESSORY

MODEL	FLAT KEY	LOCK SCREW	spacer
XS13	-	LM M12×1.75	FJ. XS13×5/10/20
XS16	PL08. 4×4×25	LM M14×1.5	FJ. XS16×5/10/20
XS22	PL08. 6×6×25	LM M20×1.5	FJ. XS22×5/10/20
XS27	PL08. 7×7×25	LM M24×2.0	FJ. XS27×5/10/20
XS32	PL08. 8×7×25	LM M30×2.0	FJ. XS32×5/10/20
XS40	PL08. 10×8×25	LM M36×2.0	FJ. XS40×5/10/20
XS50	PL08. 12×8×25	LM M48×2.0	FJ. XS50×5/10/20

SK-XS



Side milling three-sided blade HOLDER



MODEL	DIMENSION						M	G	Kg
	D	L	H	C	H1	H2			
SK30-XS13-75	13	75	15	20	30	12	M12×1.75	M12	0.6
SK30-XS16-75	16	75	16	26	30	13	M14×1.5	M12	0.7
SK30-XS22-75	22	75	21	34	30	18	M20×1.5	M12	0.8

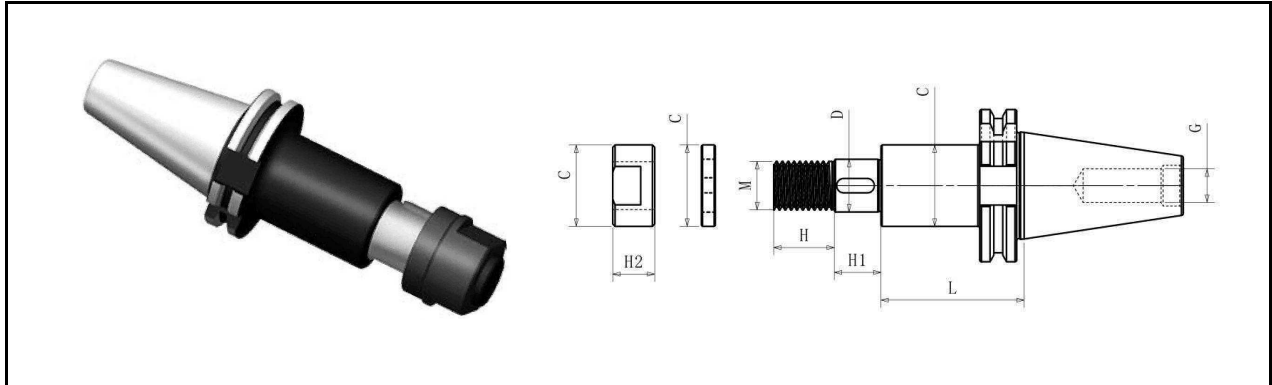
SK40-XS13-75	13	75	15	20	30	12	M12×1.75	M16	1.3
SK40-XS13-105	13	105	15	20	30	12	M12×1.75	M16	1.4
SK40-XS16-75	16	75	16	26	30	13	M14×1.5	M16	1.4
SK40-XS16-105	16	105	16	26	30	13	M14×1.5	M16	1.5
SK40-XS22-75	22	75	21	34	30	18	M20×1.5	M16	1.6
SK40-XS22-105	22	105	21	34	30	18	M20×1.5	M16	1.9
SK40-XS27-75	27	75	25	40	30	21	M24×2.0	M16	2.1
SK40-XS27-120	27	120	25	40	30	21	M24×2.0	M16	2.5
SK40-XS32-90	32	90	30	46	30	26	M30×2.0	M16	2.6

SK50-XS13-75	13	75	15	20	30	12	M12×1.75	M24	3.7
SK50-XS13-105	13	105	15	20	30	12	M12×1.75	M24	3.8
SK50-XS16-90	16	90	16	26	30	13	M14×1.5	M24	4.0
SK50-XS16-120	16	120	16	26	30	13	M14×1.5	M24	4.1
SK50-XS22-90	22	90	21	34	30	18	M20×1.5	M24	4.3
SK50-XS22-135	22	135	21	34	30	18	M20×1.5	M24	4.6
SK50-XS27-90	27	90	25	40	30	21	M24×2.0	M24	4.7
SK50-XS27-135	27	135	25	40	30	21	M24×2.0	M24	5.1
SK50-XS32-90	32	90	30	46	30	26	M30×2.0	M24	5.1
SK50-XS32-135	32	135	30	46	30	26	M30×2.0	M24	5.7

SK-XS



Side milling three-sided blade HOLDER



MODEL	DIMENSION						M	G	Kg
	D	L	H	C	H1	H2			
SK50-XS40-90	40	90	36	55	30	31	M36×2.0	M24	5.8
SK50-XS40-135	40	135	36	55	30	31	M36×2.0	M24	6.8
SK50-XS50-150	50	150	40	70	40	36	M48×2.0	M24	8.5

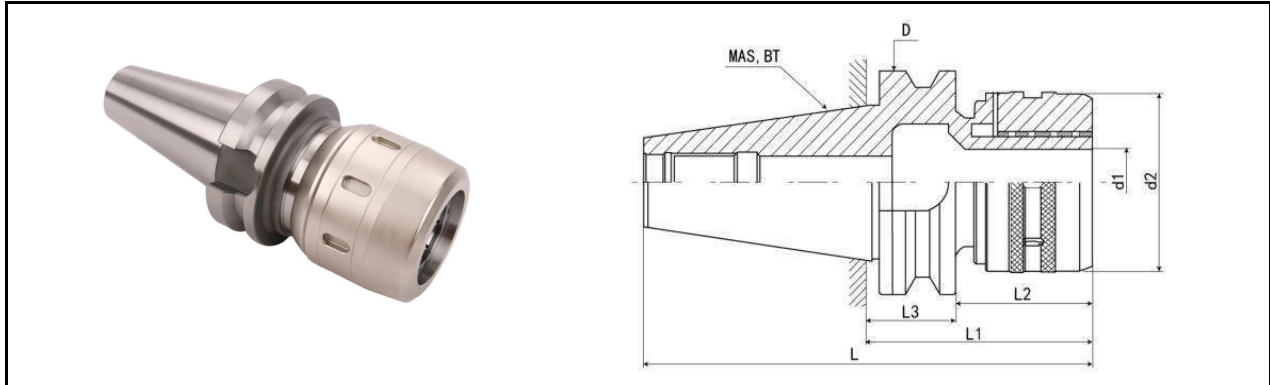
ACCESSORY

MODEL	FLAT KEY	LOCK SCREW	spacer
XS13	-	LM M12×1.75	FJ XS13×5/10/20
XS16	PL08 4×4×25	LM M14×1.5	FJ XS16×5/10/20
XS22	PL08 6×6×25	LM M20×1.5	FJ XS22×5/10/20
XS27	PL08 7×7×25	LM M24×2.0	FJ XS27×5/10/20
XS32	PL08 8×7×25	LM M30×2.0	FJ XS32×5/10/20
XS40	PL08 10×8×25	LM M36×2.0	FJ XS40×5/10/20
XS50	PL08 12×8×25	LM M48×2.0	FJ XS50×5/10/20

BT-C



High-precision powerful tool holder



MODEL	handl e	DIMENSION							collet	Kg	
		L	L1	L2	L3	D	d1	d2			
BT30-C20-80L	BT30	128.4	80	58	22	46	20	56	SC20	1.3	
BT30-C25-100L		148.4	100	78	22	46	25	61	SC25	1.6	
BT30-C32-105L		153.4	105	83	22	46	32	68	SC32	2.3	
BT40-C20-100L	BT40	165.4	100	73	27	63	20	56	SC20	2.0	
BT40-C25-100L		165.4	100	73	27	63	25	61		SC25	2.2
BT40-C25-135L		200.4	135	108	27	63	25	61			3.1
BT40-C32-105L		170.4	105	78	27	63	32	68	SC32	2.5	
BT40-C32-135L		200.4	135	108	27	63	32	68		3.1	
BT40-C32-165L		230.4	165	138	27	63	32	68		3.9	
BT40-C32-200L		265.4	200	173	27	63	32	68		4.6	
BT40-C32-250L		315.4	250	223	27	63	32	68		5.7	
BT40-C42-130L		195.4	130	103	27	63	42	87	SC42	—	
BT50-C25-110L		BT50	211.8	110	72	38	100	25	61	SC25	—
BT50-C25-165L	236.8		165	127	38	100	25	61	6.1		
BT50-C32-110L	211.8		110	72	38	100	32	68	SC32	—	
BT50-C32-135L	236.8		135	97	38	100	32	68		6.1	
BT50-C32-165L	266.8		165	127	38	100	32	68		6.9	
BT50-C32-200L	301.8		200	162	38	100	32	68		7.8	
BT50-C32-250L	351.8		250	212	38	100	32	68		9.45	
BT50-C32-300L	401.8		300	262	38	100	32	68		11.75	
BT50-C32-350L	451.8		350	312	38	100	32	68		12.3	
BT50-C32-400L	501.8		400	362	38	100	32	68		—	
BT50-C32-450L	551.8		450	412	38	100	32	68	—		
BT50-C42-135L	236.8		135	97	38	100	42	87	SC42	6.2	
BT50-C42-165L	266.8		165	127	38	100	42	87		7.6	
BT50-C42-200L	301.8		200	162	38	100	42	87		9.0	



F57

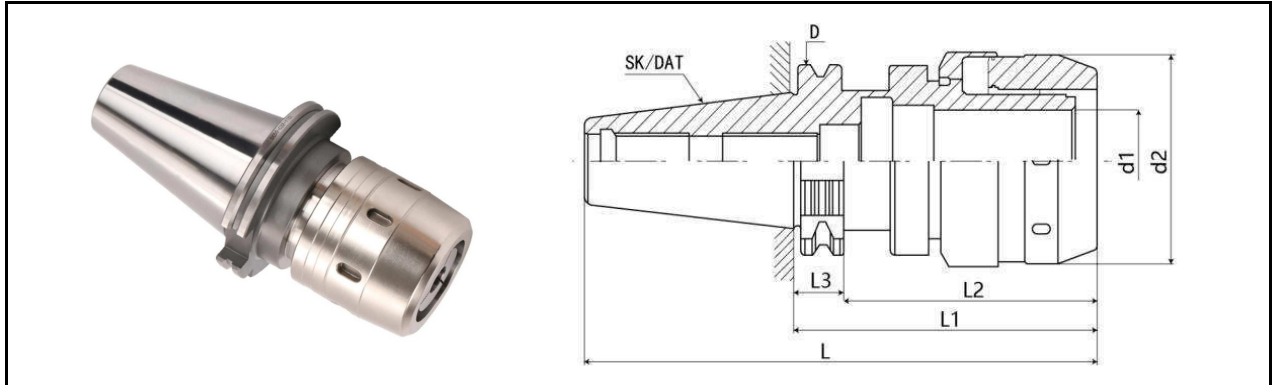


F63

SK-C



High-precision powerful tool holder



MODEL	handl e	DIMENSION							collet
		L	L1	L2	L3	d1	d2	D	
SK30-C20-85L	SK30	132.8	85	69	19.1	20	56	50	SC20
SK30-C20-100L		147.8	100	84	19.1	20	56	50	
SK30-C32-105L		152.8	105	89	19.1	32	68	63.55	SC32

SK40-C20-85L	SK40	132.8	85	69	19.1	20	56	63.55	SC20
SK40-C20-100L		147.8	100	84	19.1	20	56	63.55	
SK40-C20-135L		182.8	135	119	19.1	20	56	63.55	
SK40-C25-100L		147.8	100	84	19.1	25	61	63.55	SC25
SK40-C25-135L		182.8	135	119	19.1	25	61	63.55	
SK40-C32-105L		152.8	105	89	19.1	32	68	63.55	SC32
SK40-C32-135L		182.8	135	119	19.1	32	68	63.55	

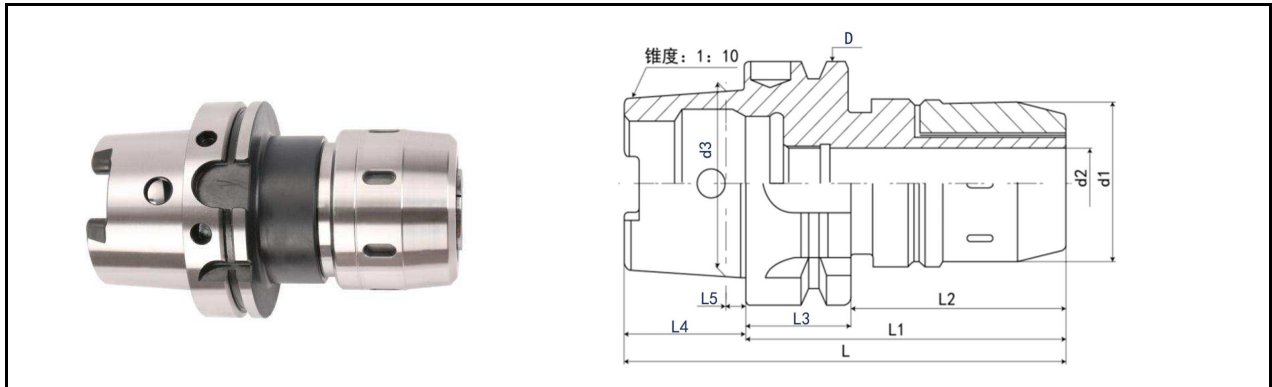
SK50-C20-105L	SK50	206.75	105	89	19.1	20	56	97.5	SC20
SK50-C20-150L		251.75	150	134	19.1	20	56	97.5	
SK50-C25-105L		206.75	105	89	19.1	25	61	97.5	SC25
SK50-C25-165L		266.75	165	149	19.1	25	61	97.5	
SK50-C32-110L		211.75	110	94	19.1	32	68	97.5	SC32
SK50-C32-165L		266.75	165	149	19.1	32	68	97.5	
SK50-C32-200L		301.75	200	184	19.1	32	68	97.5	
SK50-C42-110L		211.75	110	94	19.1	42	87	97.5	SC42
SK50-C42-150L		251.75	150	134	19.1	42	87	97.5	



HSK-C



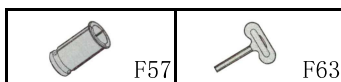
High-precision powerful tool holder



MODEL	handl e	DIMENSION										colle t
		D	L	L1	L2	L3	L4	L5	d1	d2	d3	
HSK50A-C20-120L	HSK50A	38	145	120	94	26	25	5	55	20	38	SC20
HSK50A-C25-120L		38	145	120	94	26	25	5	60	25	38	SC25

HSK63A-C20-95L	HSK63A	63	127	95	69	26	32	6.3	55	20	48	SC20
HSK63A-C20-110L		63	142	110	84	26	32	6.3	55	20	48	
HSK63A-C25-100L		63	132	100	74	26	32	6.3	60	25	48	SC25
HSK63A-C25-130L		63	162	130	104	26	32	6.3	60	25	48	
HSK63A-C32-110L		63	142	110	108	26	32	6.3	73	32	48	SC32
HSK63A-C32-130L		63	162	130	104	26	32	6.3	73	32	48	
HSK63A-C32-150L		63	182	150	124	26	32	6.3	73	32	48	

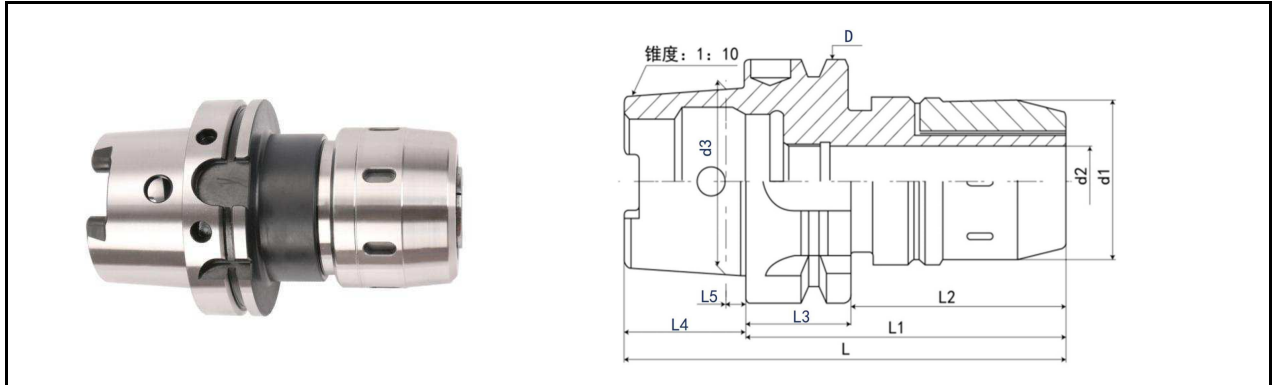
HSK80A-C20-105L	HSK80A	80	145	105	79	26	40	8	55	20	60	SC20
HSK80A-C25-105L		80	145	105	79	26	40	8	60	25	60	SC25
HSK80A-C32-120L		80	160	120	94	26	40	8	73	32	60	SC32
HSK80A-C42-130L		80	170	130	104	26	40	8	95	42	60	SC42



HSK-C



High-precision powerful tool holder

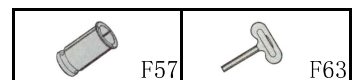


MODEL	handl e	DIMENSION										colle t
		D	L	L1	L2	L3	L4	L5	d1	d2	d3	
HSK100A-C20-100L	HSK 100A	100	150	100	71	29	50	10	55	20	75	SC20
HSK100A-C20-110L		100	160	110	81	29	50	10	55	20	75	
HSK100A-C20-130L		100	180	130	101	29	50	10	55	20	75	

HSK100A-C25-100L	HSK 100A	100	150	100	71	29	50	10	60	25	75	SC25
HSK100A-C25-110L		100	160	110	81	29	50	10	60	25	75	
HSK100A-C25-130L		100	180	130	101	29	50	10	60	25	75	
HSK100A-C25-160L		100	210	160	130	29	50	10	60	25	75	

HSK100A-C32-100L	HSK 100A	100	150	100	71	29	50	10	73	32	75	SC32
HSK100A-C32-110L		100	160	110	81	29	50	10	73	32	75	
HSK100A-C32-130L		100	180	130	101	29	50	10	73	32	75	
HSK100A-C32-160L		100	210	160	131	29	50	10	73	32	75	
HSK100A-C32-200L		100	250	200	171	29	50	10	73	32	75	
HSK100A-C32-250L		100	300	250	221	29	50	10	73	32	75	
HSK100A-C32-300L		100	350	300	271	29	50	10	73	32	75	

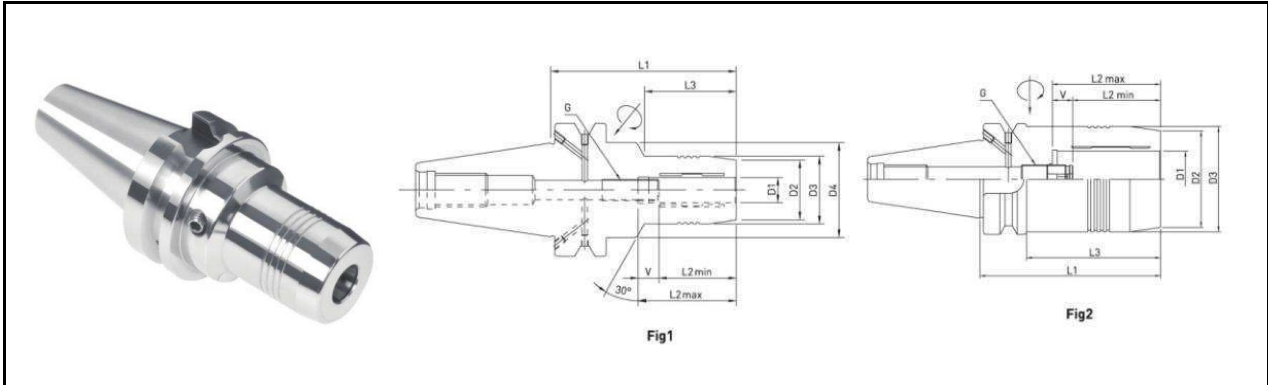
HSK100A-C42-110L	HSK 100A	100	160	110	81	29	50	10	95	42	75	SC42
HSK100A-C42-130L		100	180	130	101	29	50	10	95	42	75	
HSK100A-C42-160L		100	210	160	131	29	50	10	95	42	75	
HSK100A-C42-200L		100	250	200	171	29	50	10	95	42	75	
HSK100A-C42-250L		100	300	250	221	29	50	10	95	42	75	
HSK100A-C42-300L		100	350	300	271	29	50	10	95	42	75	



BT-CY



hydraulic tool holder



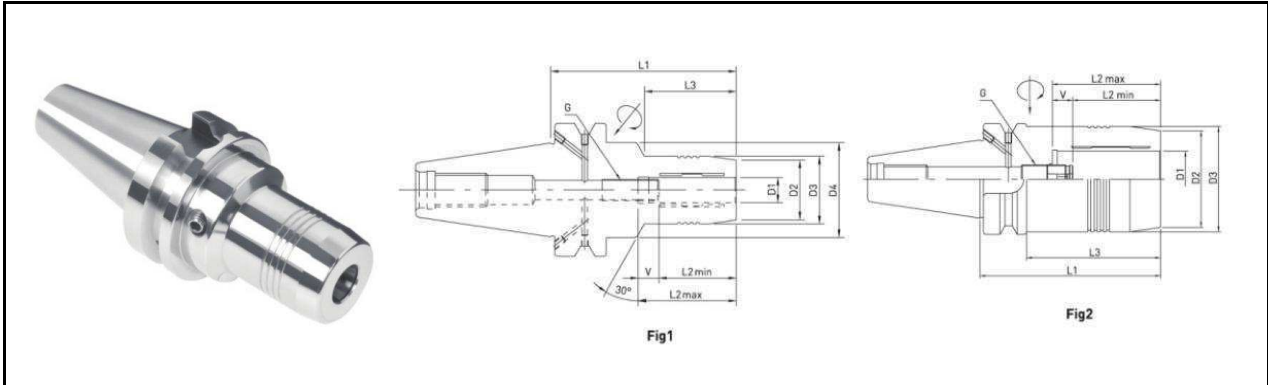
MODEL	DIMENSION										TYPE
	D1	D2	D3	D4	L1	L2max	L2min	V	L3	G	
BT40-CY06-65	6	25	28	50	65	37.5	27.5	10	23	M5X0.8	Fig1
BT40-CY06-90					90				44		
BT40-CY06-140					140				44		
BT40-CY08-65	8	27	30		65	42.5	32.5		23	M6X1.0	
BT40-CY08-90					90				39		
BT40-CY08-140					140				44		
BT40-CY10-65	10	29	32		65	47.5	37.5		23	M6X1.0	
BT40-CY10-90					90				44		
BT40-CY10-140					140				44		
BT40-CY12-65	12	31	34		65	52.5	42.5		23		
BT40-CY12-90					90				44		
BT40-CY12-140					140				44		
BT40-CY14-65	14	33	36		65	61	51		23	M8X1.0	
BT40-CY14-90					90				44		
BT40-CY14-140					140				44		
BT40-CY16-65	16	35	38		65	75	42.5		23		
BT40-CY16-90					90				48		
BT40-CY16-140					140				48		
BT40-CY18-75	18	38	41	75	100	61	30	M16X1.0			
BT40-CY18-90				90			48				
BT40-CY18-140				140			48				
BT40-CY20-75	20	40	43	75	105	55	30				
BT40-CY20-90				90			48				
BT40-CY20-140				140			48				
BT40-CY25-100	25	53	57	100	135	51	73	M16X1.0			
BT40-CY25-135				135			108				
BT40-CY32-105	32	58	63	105	135	55	—	Fig2			
BT40-CY32-135				135			—				



BT-CY



hydraulic tool holder



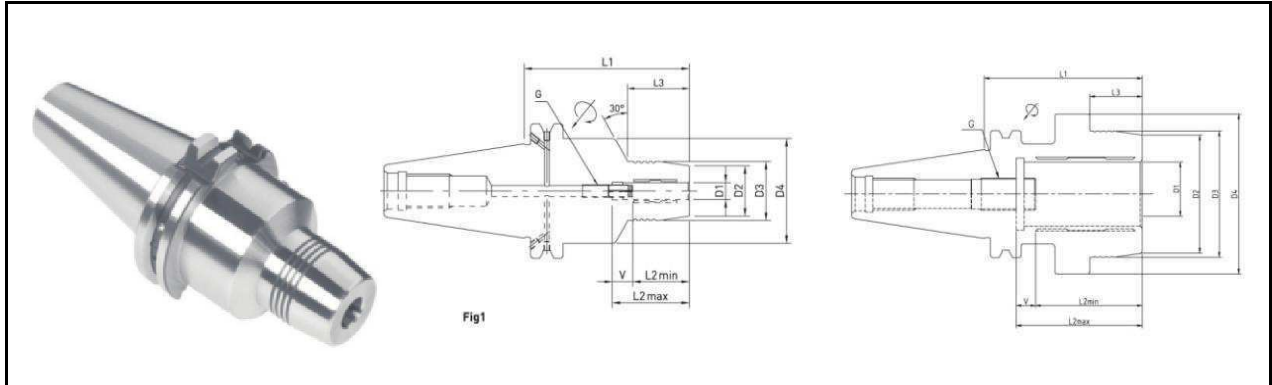
MODEL	DIMENSION										TYPE	
	D1	D2	D3	D4	L1	L2max	L2min	V	L3	G		
BT50-CY06-90	6	25	28	50	90	37.5	27.5	10	32	M5X0.8	Fig1	
BT50-CY06-120					120				44			
BT50-CY06-140					140				44			
BT50-CY08-90	8	27	30		90	42.5	32.5		32	M6X1.0		
BT50-CY08-120					120				40			
BT50-CY08-140					140				44			
BT50-CY10-90	10	29	32		90	47.5	37.5		32	M6X1.0		
BT50-CY10-120					120				44			
BT50-CY10-140					140				44			
BT50-CY12-90	12	31	34		90	52.5	42.5		32			M8X1.0
BT50-CY12-120					120				44			
BT50-CY12-140					140				44			
BT50-CY14-90	14	33	36		90	61	51		32	M16X1.0		
BT50-CY14-120					120				44			
BT50-CY14-140					140				44			
BT50-CY16-90	16	35	38		90	65	55		32			Fig2
BT50-CY16-120					120				48			
BT50-CY16-140					140				48			
BT50-CY18-90	18	38	41	90	105	61	32	Fig2				
BT50-CY18-120				120			48					
BT50-CY18-140				140			48					
BT50-CY20-90	20	40	43	90	115	65	32		Fig2			
BT50-CY20-120				120			48					
BT50-CY20-140				140			48					
BT50-CY25-105	25	53	57	105	150	61	67	Fig2				
BT50-CY25-150				150			112					
BT50-CY32-115	32	58	63	115	150	65	77	Fig2				
BT50-CY32-150				150			112					



SK-CY



hydraulic tool holder



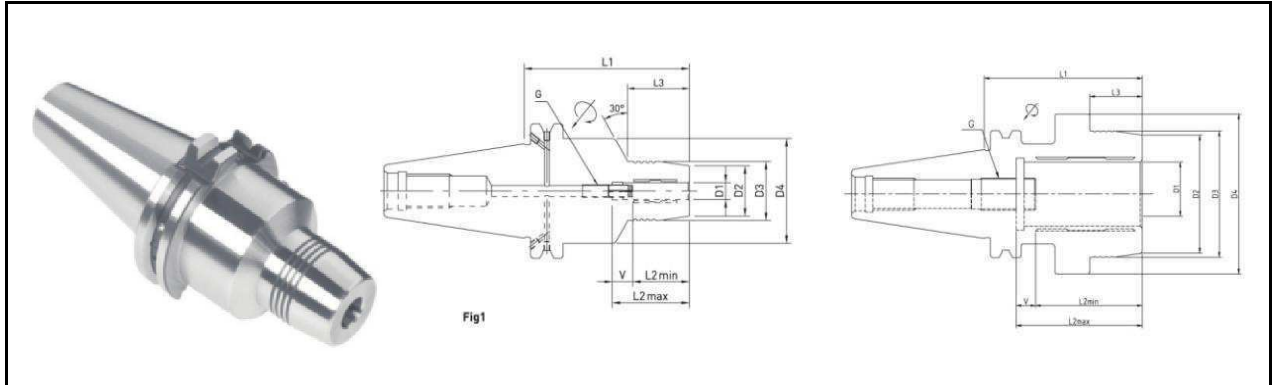
MODEL	DIMENSION										TYPE	
	D1	D2	D3	D4	L1	L2max	L2min	V	L3	G		
SK40-CY06-65	6	25	28	50	65	37.5	27.5	10	23	M5X0.8	Fig1	
SK40-CY06-80.5					80.5				44			
SK40-CY06-110					110				44			
SK40-CY08-65	8	27	30		65	42.5	32.5		23	M6X1.0		
SK40-CY08-80.5					80.5				44			
SK40-CY08-110					110				44			
SK40-CY10-65	10	29	32		65	47.5	37.5		23	M6X1.0		
SK40-CY10-80.5					80.5				44			
SK40-CY10-110					110				44			
SK40-CY12-65	12	31	34		65	52.5	42.5		23			M8X1.0
SK40-CY12-80.5					80.5				44			
SK40-CY12-110					110				44			
SK40-CY14-75	14	33	36		75	61.0	51		30	M16X1.0		
SK40-CY14-80.5					80.5				44			
SK40-CY14-110					110				44			
SK40-CY16-75	16	35	38	75	65.0	55	30	M16X1.0				
SK40-CY16-80.5				80.5			48					
SK40-CY16-110				110			48					
SK40-CY18-75	18	38	41	75	75	30	30		Fig2			
SK40-CY18-80.5				80.5			30					
SK40-CY18-135				135			48					
SK40-CY20-75	20	40	43	75	80.5	61.0	30	Fig2				
SK40-CY20-80.5				80.5			48					
SK40-CY20-110				110			48					
SK40-CY25-80.5	25	53	57	66	80.5	61.0	51		26	M16X1.0	Fig2	
SK40-CY32-80.5	32	60	63	80	80.5	65.0	55		26			



SK-CY



hydraulic tool holder



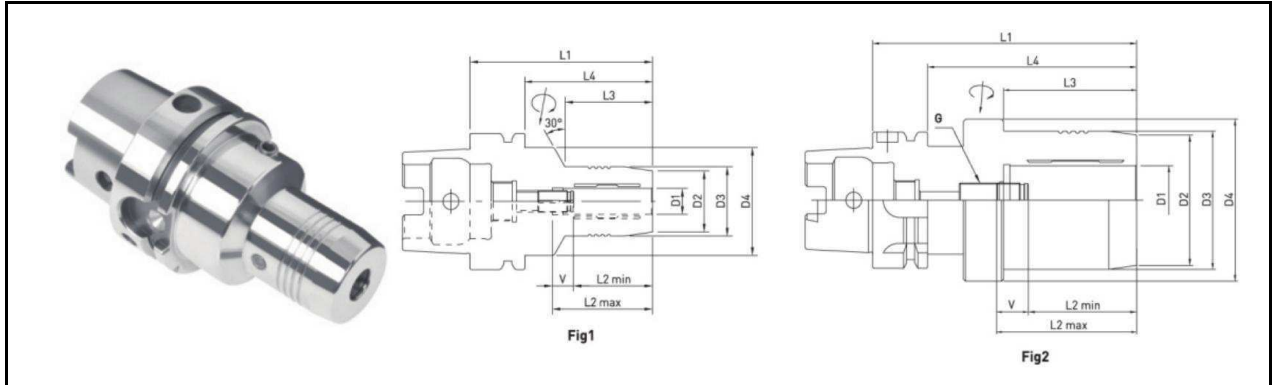
MODEL	DIMENSION										TYPE	
	D1	D2	D3	D4	L1	L2max	L2min	V	L3	G		
SK50-CY06-90	6	25	28	50	90	37.5	27.5	10	44	M5X0.8	Fig1	
SK50-CY06-140					140				44			
SK50-CY08-90	8	27	30		90	42.5	32.5		44	M6X1.0		
SK50-CY08-140					140				44			
SK50-CY10-90	10	29	32		90	47.5	37.5		44	M6X1.0		
SK50-CY10-140					140				44			
SK50-CY12-90	12	31	34		90	52.5	42.5		44			M8X1.0
SK50-CY12-140					140				44			
SK50-CY14-90	14	33	36		90	61.0	51.0		47	M16X1.0		
SK50-CY14-140					140				47			
SK50-CY16-90	16	35	38		90	65.0	55.0		48			M16X1.0
SK50-CY16-140					140				48			
SK50-CY18-90	18	38	41		90	95.9	85.9		48	M16X1.0		
SK50-CY18-140					140				48			
SK50-CY20-80.5	20	40	43		80.5	120.9	120.9		44			M16X1.0
SK50-CY20-90					90				48			
SK50-CY20-110				110	48							
SK50-CY20-140				140	48							
SK50-CY25-105	25	53	57	105	95.9	95.9	85.9	M16X1.0				
SK50-CY25-140				140			120.9					
SK50-CY32-115	32	58	63	115	120.9	120.9	95.9	M16X1.0				
SK50-CY32-140				140			120.9					



HSK-CY



hydraulic tool holder



MODEL	DIMENSION											TYPE
	D1	D2	D3	D4	L1	L2max	L2min	V	L3	L4	G	
HSK40A-CY06-70	6	25	28	34	70	37.5	27.5	10	28	50	M5X0.8	Fig1
HSK40A-CY08-70	8	27	30									
HSK40A-CY10-75	10	29	32									
HSK40A-CY12-85	12	31	34									

HSK50A-CY06-70	6	25	28	40	70	37.5	27.5	10	28	44	M5X0.8	Fig1
HSK50A-CY08-70	8	27	30									
HSK50A-CY10-80	10	29	32									
HSK50A-CY12-85	12	31	34									
HSK50A-CY14-85	14	33	36	60	90	52.5	42.5	10	30	64	M6X1.0	Fig2
HSK50A-CY16-90	16	35	38									
HSK50A-CY18-90	18	38	41	—	90	52.5	42.5	10	—	64	M6X1.0	Fig1
HSK50A-CY20-90	20	40	42	—								

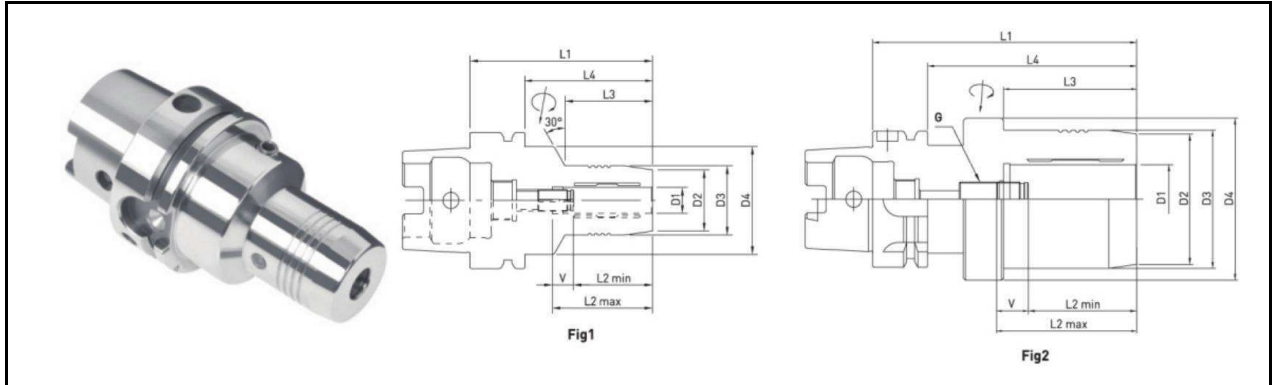
HSK63A-CY06-70	6	25	28	50	70	37.5	27.5	10	24	44	M5X0.8	Fig1
HSK63A-CY08-70	8	27	30									
HSK63A-CY10-80	10	29	32								M6X1.0	
HSK63A-CY12-85	12	31	34									
HSK63A-CY14-85	14	33	36									
HSK63A-CY16-90	16	35	38								M8X1.0	
HSK63A-CY18-90	18	38	41									
HSK63A-CY20-90	20	40	43	M16X1.0								
HSK63A-CY25-120	25	53	57		63	120	61	51	10	59	94	
HSK63A-CY32-125	32	58	63									75



HSK-CY



hydraulic tool holder



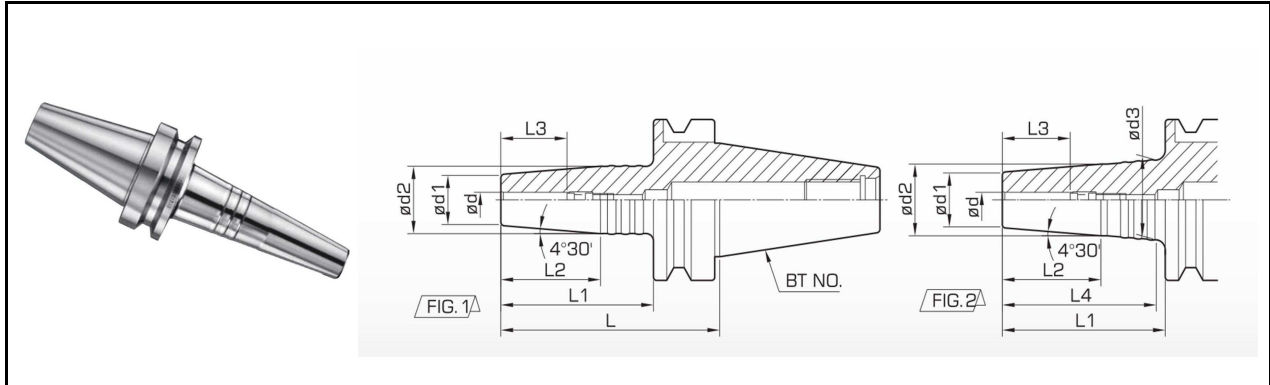
MODEL	DIMENSION											TYPE
	D1	D2	D3	D4	L1	L2max	L2min	V	L3	L4	G	
HSK100A-CY06-75	6	25	28	54	75	37.5	27.5	10	26	46	M5X0.8	Fig1
HSK100A-CY08-75	8	27	30								M6X1.0	
HSK100A-CY10-90	10	29	32	90	42.5	32.5	42		61	M6X1.0		
HSK100A-CY12-95	12	31	34	95	47.5	37.5	47		66	M6X1.0		
HSK100A-CY14-95	14	33	36	100	52.5	42.5	53		71	M8X1.0		
HSK100A-CY16-100	16	35	38				59		76	M8X1.0		
HSK100A-CY18-100	18	38	41				62		81	M8X1.0		
HSK100A-CY20-105	20	40	43	M8X1.0								
HSK100A-CY25-110	25	53	57	63	110	61	51		62	81	M8X1.0	
HSK100A-CY32-110	32	58	63	75	110	65	55	62	81	M8X1.0		



BT-RS



heat shrink tool holder



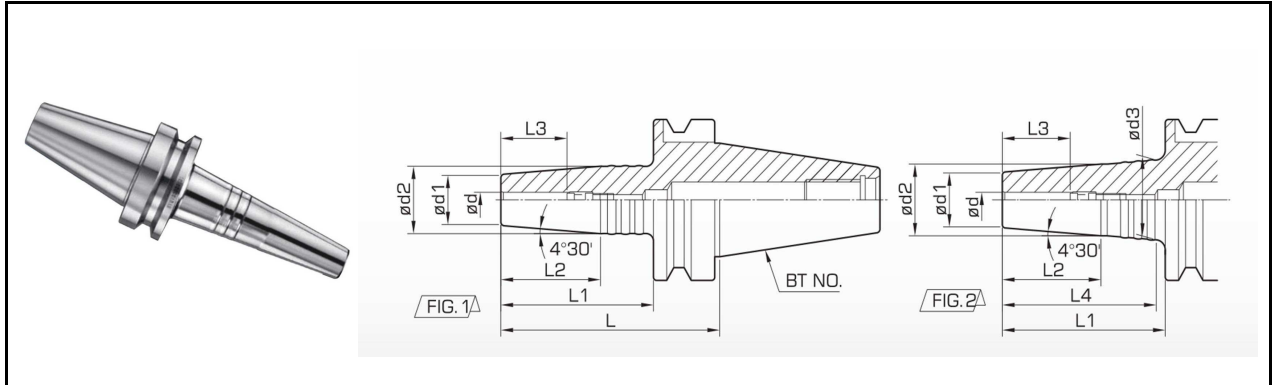
MODEL	FIG	DIMENSION								Clamping depth	SCREW
		d	d1	d2	d3	L	L1	L2	L4		
BT30-RS04-080	1	4	16	23	—	80	58	40.7	—	min18	—
BT30-RS06-080	1	6	20	27		80	58	40.7		25.5-35.5	HY06
BT30-RS08-080	1	8	20	27		80	58	40.7		25.5-35.5	HY08
BT30-RS10-080	1	10	24	32		80	58	50.8		31.5-41.5	HY08
BT30-RS12-080	1	12	24	32		80	58	50.8		36.5-46.5	HY14
BT30-RS16-080	1	16	27	34		80	58	40.7		39.5-49.5	HY18

BT40-RS04-090	1	4	16	23	—	90	63	40.7	—	min18	—
BT40-RS04-130	2				27.1	130	103	44.5	100.2		
BT40-RS04-160	2				30.3	160	133	44.5	130.2		
BT40-RS06-090	1	6	21	27	—	90	63	40.7	—	25.5-35.5	HY06
BT40-RS06-130	2				33.3	130	103	44.5	100.2		
BT40-RS06-160	2				38.1	160	133	44.5	130.2		
BT40-RS08-090	1	8	21	27	—	90	63	40.7	—	31.5-41.5	HY08
BT40-RS08-130	2				33.3	130	103	44.5	100.2		
BT40-RS08-160	2				38.1	160	133	44.5	130.2		
BT40-RS10-090	1	10	24	32	—	90	63	47.0	—	36.5-46.5	HY14
BT40-RS10-130	2				37.5	130	103	50.8	100.2		
BT40-RS10-160	2				42.6	160	133	50.8	132.1		
BT40-RS12-090	1	12	24	32	—	90	63	—	—	36.5-46.5	HY18
BT40-RS12-130	2				40.3	130	103	50.8	100.2		
BT40-RS12-160	2				45.3	160	133	50.8	132.1		
BT40-RS16-090	1	16	27	34	—	90	63	40.7	—	36.5-46.5	HY18
BT40-RS16-130	2				47	130	103	44.5	100.2		
BT40-RS16-160	2				48.6	160	133	44.5	132.1		

BT-RS



heat shrink tool holder

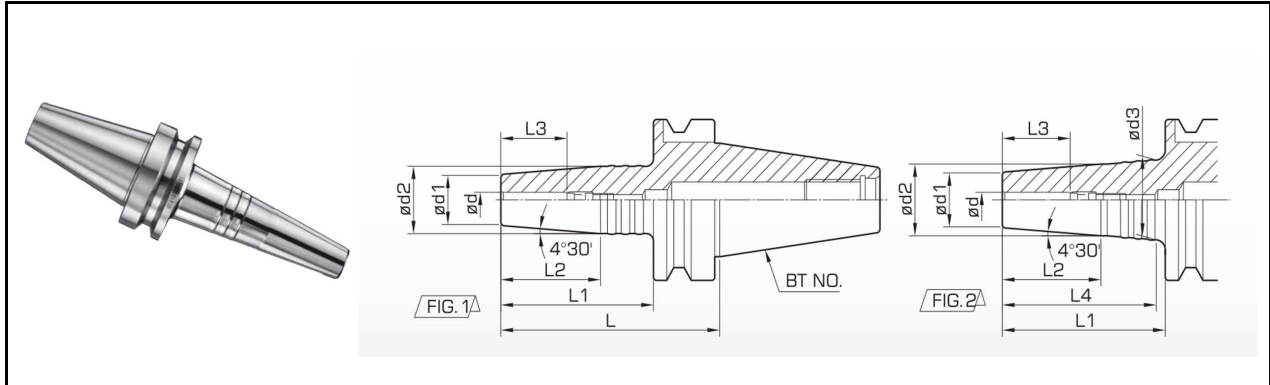


MODEL	FIG	DIMENSION								Clamping depth	SCREW
		d	d1	d2	d3	L	L1	L2	L4		
BT40-RS20-090	1	20	33	42	—	90	63	57.2	—	41.5-51.5	HY18
BT40-RS20-130	2				47	130	103	57.2	102.1		
BT40-RS20-160	2				48.6	160	133	57.2	132.1		
BT40-RS25-100	1	25	44	53	—	100	73	51.5	—	47.5-57.5	HY25
BT40-RS25-130	1				—	130	103	51.5	—		
BT40-RS25-160	1				—	160	133	51.5	—		
BT40-RS32-100	1	32	44	53	—	100	73	51.5	—	50.5-60.5	
BT40-RS32-130	1				—	130	103	51.5	—		
BT40-RS32-160	1				—	160	133	51.5	—		

BT-RS



heat shrink tool holder

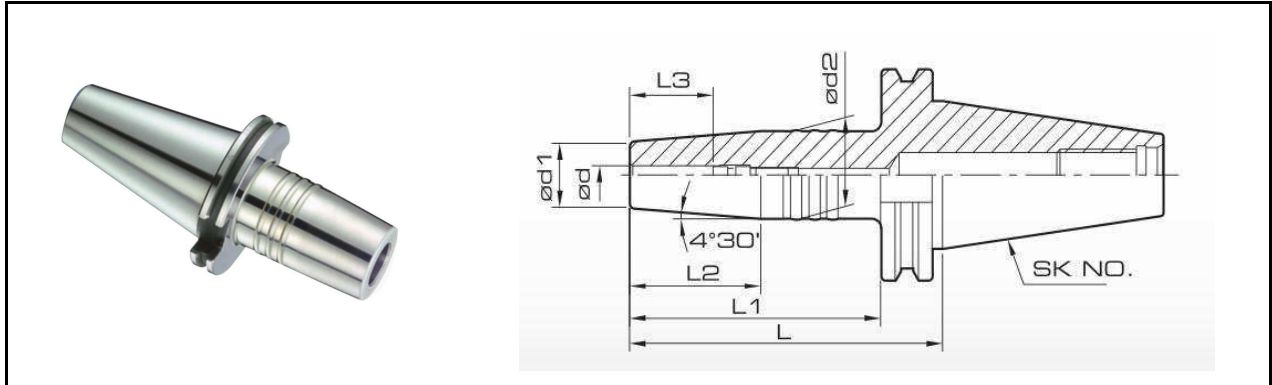


MODEL	FIG	DIMENSION								Clamping depth	SCREW		
		d	d1	d2	d3	L	L1	L2	L4				
BT50-RS06-100	1	6	21	27	—	100	62	34.3	—	25.5-35.5	HY06		
BT50-RS06-130	2				30.6	130	92	38.1	82.8				
BT50-RS06-160	2				35.3	160	122	38.1	112.8				
BT50-RS08-100	1	8	21	27	—	100	62	34.3	—			31.5-41.5	HY08
BT50-RS08-130	2				30.6	130	92	38.1	82.8				
BT50-RS08-160	2				35.3	160	122	38.1	112.8				
BT50-RS10-100	1	10	24	32	—	100	62	47.0	—	36.5-46.5	HY14		
BT50-RS10-130	2				35.6	130	92	50.8	82.8				
BT50-RS10-160	2				39.5	160	122	50.8	112.8				
BT50-RS12-100	1	12	24	32	—	100	62	47.0	—			39.5-49.5	HY18
BT50-RS12-130	2				35.6	130	92	50.8	82.8				
BT50-RS12-160	2				39.5	160	122	50.8	112.8				
BT50-RS16-100	1	16	27	34	—	100	62	40.7	—	41.5-57.5	HY25		
BT50-RS16-130	2				37.6	130	92	44.5	82.8				
BT50-RS16-160	2				42.3	160	122	44.5	112.8				
BT50-RS20-100	1	20	33	42	—	100	62	57.2	—			47.5-57.5	HY25
BT50-RS20-130	2				44.8	130	92	57.2	82.8				
BT50-RS20-160	2				47.2	160	122	57.2	112.8				
BT50-RS25-100	1	25	44	53	—	100	62	55.9	—	50.5-60.5	HY25		
BT50-RS25-130	1				—	130	92	52.1	—				
BT50-RS25-160	2				58.7	160	122	55.9	117.4				
BT50-RS32-100	1	32	44	53	—	100	62	55.9	—			50.5-60.5	HY25
BT50-RS32-130	1				—	130	92	52.1	—				
BT50-RS32-160	2				58.7	160	122	55.9	117.4				

SK-RS



heat shrink tool holder



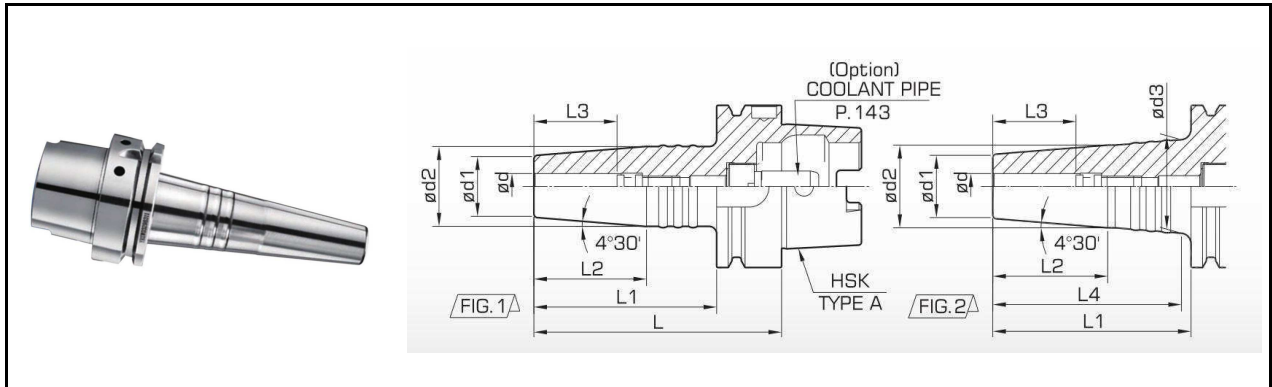
MODEL	DIMENSION							Clamping depth	SCREW
	d	d1	d2	L	L1	L2			
SK40-RS04-080	4	16	23	80	57	40		min18	—
SK40-RS06-080	6	20	27	80	57			25.5-35.5	HY06
SK40-RS06-130				130	107			25.5-35.5	
SK40-RS08-080	8	20	27	80	57			25.5-35.5	HY08
SK40-RS08-130				130	107		25.5-35.5		
SK40-RS10-080	10	24	32	80	57	47		31.5-41.5	
SK40-RS10-130				130	107				
SK40-RS10-160				160	137				
SK40-RS12-080	12	24	32	80	57	47		36.5-46.5	HY14
SK40-RS12-130				130	107				
SK40-RS12-160				160	137				

SK50-RS06-100	6	20	27	80	57	40		25.5-35.5	HY06
SK50-RS06-130				130	107				
SK50-RS06-160				160	137				
SK50-RS08-100	8	20	27	80	57	40		25.5-35.5	HY08
SK50-RS08-130				130	107				
SK50-RS08-160				160	137				
SK50-RS10-100	10	24	32	80	57	47		31.5-41.5	HY08
SK50-RS10-130				130	107				
SK50-RS10-160				160	137				
SK50-RS12-100	12	24	32	80	57	47		36.5-46.5	HY14
SK50-RS12-130				130	107				
SK50-RS12-160				160	137				

HSK-RS



heat shrink tool holder

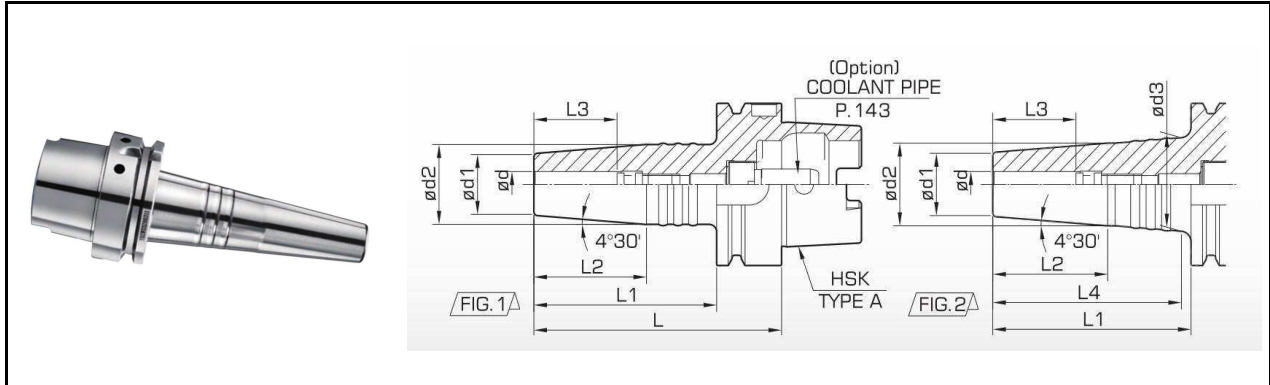


MODEL	FIG	DIMENSION								Clamping depth	SCREW
		d	d1	d2	d3	L	L1	L2	L4		
HSK50A-RS04-080	1	4	16	21.2	—	60	34	—	—	min18	—
HSK50A-RS06-080		4	16	23	—	80	54	40	—		—
HSK50A-RS06-130		6	21	27	—	80	54	34.3	—	25.5-35.5	HY06
HSK50A-RS08-080		8	21	27	—	80	54	34.3	—		HY08
HSK50A-RS08-130		10	24	32	—	85	59	47	—	31.5-41.5	
HSK50A-RS10-080		12	24	32	—	90	64	47	—	36.5-46.5	HY14
HSK50A-RS10-130		16	27	34	—	95	69	40.7	—	39.5-49.5	HY18

HSK-RS



heat shrink tool holder

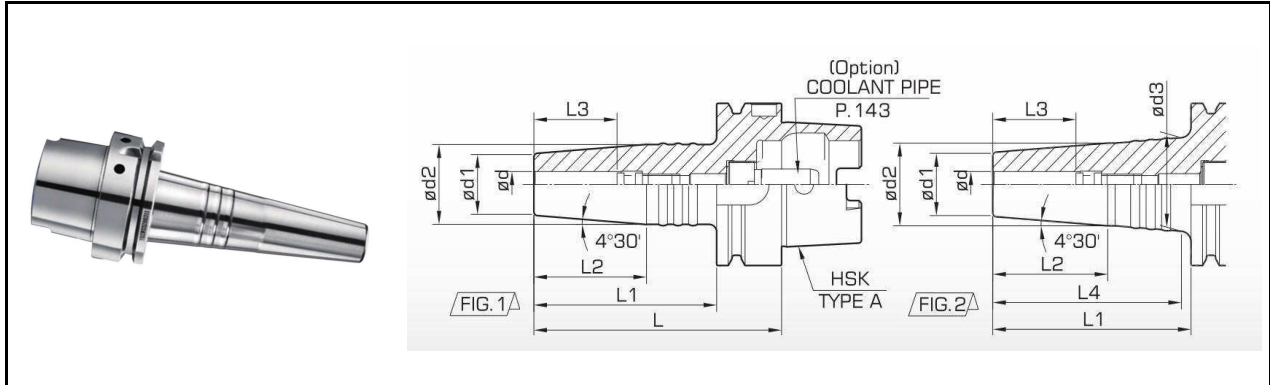


MODEL	FIG	DIMENSION								Clamping depth	SCREW
		d	d1	d2	d3	L	L1	L2	L4		
HSK63A-RS04-080	1	4	16	23	—	80	54	40	—	min18	—
HSK63A-RS06-100	1	6	21	27	—	80	54	34.3	—	25.5-35.5	HY06
HSK63A-RS06-130	2				33.5	130	104	38.1	101.2		
HSK63A-RS06-160	2				38.2	160	134	38.1	131.2		
HSK63A-RS08-080	1	8	21	27	—	80	54	34.3	—	25.5-35.5	HY08
HSK63A-RS08-130	2				33.5	130	104	38.1	101.2		
HSK63A-RS08-160	2				38.2	160	134	38.1	131.2		
HSK63A-RS10-085	1	10	24	32	—	85	59	50.8	—	31.5-41.5	HY08
HSK63A-RS10-130	2				37.7	130	104	50.8	101.2		
HSK63A-RS10-160	2				42.4	160	134	50.8	131.2		
HSK63A-RS12-090	1	12	24	32	—	90	64	50.8	—	36.5-46.5	HY14
HSK63A-RS12-130	2				37.7	130	104	50.8	101.2		
HSK63A-RS12-160	2				42.4	160	134	50.8	131.2		
HSK63A-RS16-095	1	16	27	34	—	95	69	40.6	—	39.5-49.5	HY18
HSK63A-RS16-130	2				40.5	130	104	44.5	101.2		
HSK63A-RS16-160	2				45.2	160	134	44.5	131.2		
HSK63A-RS20-085	1	20	33	42	—	100	74	53.4	—	41.5-51.5	HY18
HSK63A-RS20-130	2				47.2	130	104	57.2	103.1		
HSK63A-RS20-160	2				48.8	160	134	57.2	133.1		
HSK63A-RS25-115	1	25	44	53	—	115	89	51.5	—	47.5-57.5	HY25
HSK63A-RS25-130	1				—	130	104	51.5	—		
HSK63A-RS25-160	1				—	160	134	51.5	—		
HSK63A-RS32-120	1	32	44	53	—	120	94	51.5	—	50.5-60.5	HY25
HSK63A-RS32-160	1				—	160	134	51.5	—		

HSK-RS



heat shrink tool holder

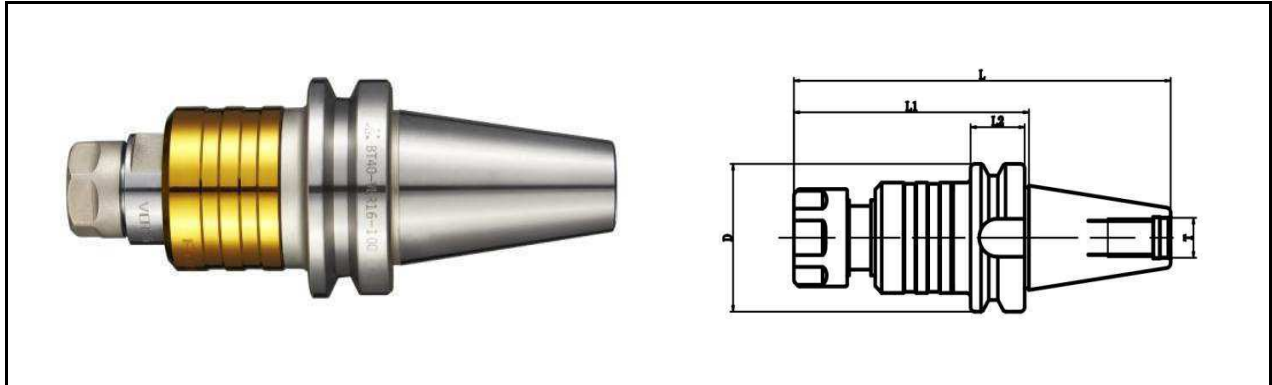


MODEL	FIG	DIMENSION								Clamping depth	SCREW
		d	d1	d2	d3	L	L1	L2	L4		
HSK100A-RS06-085	1	6	21	27	—	85	56	34.3	—	25.5-35.5	HY06
HSK100A-RS06-130	2				32	130	101	38.1	91.8		
HSK100A-RS06-160	2				36.7	160	131	38.1	121.8		
HSK100A-RS08-085	1	8	21	27	—	85	56	34.3	—		
HSK100A-RS08-130	2				32	130	101	38.1	91.8		
HSK100A-RS08-160	2				36.7	160	131	38.1	121.8		
HSK100A-RS10-090	1	10	24	32	—	90	61	47	—	31.5-41.5	HY08
HSK100A-RS10-130	2				36.2	130	101	50.8	91.8		
HSK100A-RS10-160	2				40.9	160	130	50.8	121.8		
HSK100A-RS12-095	1	12	24	32	—	95	66	47	—	36.5-46.5	HY14
HSK100A-RS12-130	2				36.2	130	101	50.8	91.8		
HSK100A-RS21-160	2				40.9	160	131	50.8	121.8		
HSK100A-RS16-100	1	16	27	34	—	100	71	40.7	—	39.5-49.5	HY18
HSK100A-RS16-130	2				39	130	101	45.5	91.8		
HSK100A-RS16-160	2				43.7	160	131	45.5	121.8		
HSK100A-RS20-105	1	20	33	42	—	105	76	53.4	—	41.5-51.5	HY18
HSK100A-RS20-130	2				45.4	130	101	57.2	91.8		
HSK100A-RS20-160	2				47	160	131	57.5	121.8		
HSK100A-RS25-115	1	25	44	53	—	115	86	52.1	—	47.5-57.5	HY25
HSK100A-RS25-160	2				60.1	160	131	55.9	126.4		
HSK100A-RS32-120	1				32	44	53	—	120		
HSK100A-RS32-160	2	60.1	160	161				55.9	126.4		

BT-VER



Micro telescopic rigid tapping body



MODEL	Tapping range	DIMENSION					handle	collet model
		D	L2	L	L1	T		
BT30-VER16-100	M2-M12	46	20	150	100	M10	BT30	ETP-ER16
BT30-VER20-102	M2-M16				102			ETP-ER20
BT30-VER25-103	M2-M22				103			ETP-ER25
BT30-VER32-105	M2-M30			154	105	M12		ETP-ER32
BT40-VER16-105	M2-M12	63	25	170	105	M16	BT40	ETP-ER16
BT40-VER20-106	M2-M16				106			ETP-ER20
BT40-VER25-108	M2-M22				108			ETP-ER25
BT40-VER32-110	M2-M30			174	110	M12		ETP-ER32
BT50-VER16-110	M2-M22	100	35	215	110	M24	BT50	ETP-ER16
BT50-VER20-112	M2-M30				112			ETP-ER20
BT50-VER25-113	M2-M22				113			ETP-ER25
BT50-VER32-115	M2-M30			219	115	M12		ETP-ER32

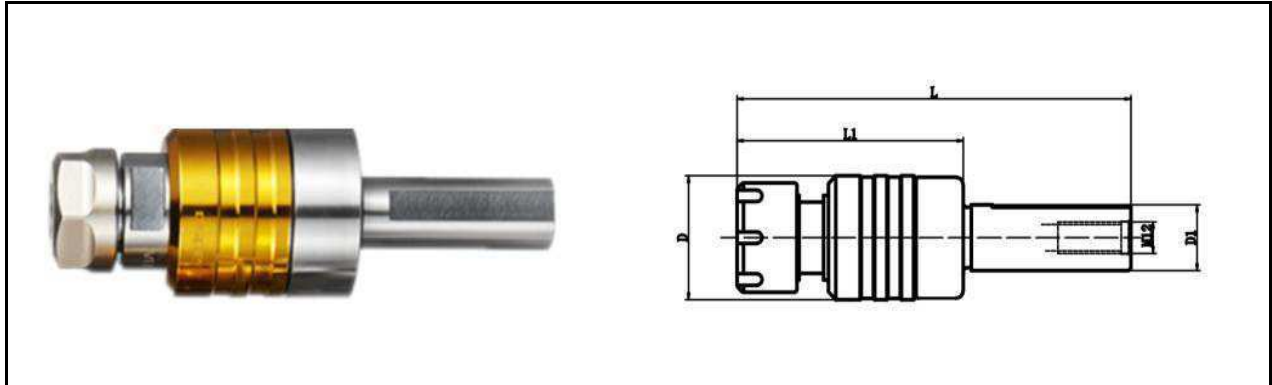
- ◎Small synchronous telescopic compensation during tapping
- ◎can be corrected to avoid the synchronization error caused by the mechanical stop and reverse rotation.
- ◎The telescopic system adopts imported accessories, its stability and longer service life
- ◎Adopt internal water-through structure design
- ◎Greatly increases the tap usage time and work efficiency



C-VER



straight handle Micro telescopic rigid tapping body



MODEL	Tapping range	DIMENSION				handle	collet model	
		D	D1	L	L1			
C20-60-VER16-86	M2-M12	47	20	146	86	C20	ETP-ER16	
C20-60-VER20-87	M2-M16			147	87		ETP-ER20	
C20-60-VER25-88	M2-M22			148	88		ETP-ER25	
C20-60-VER32-90	M2-M30			150	90		ETP-ER32	
C25-60-VER16-86	M2-M12		25	25	146	86	C25	ETP-ER16
C25-60-VER20-87	M2-M16				148	87		ETP-ER20
C25-60-VER25-88	M2-M22				148	88		ETP-ER25
C25-60-VER32-90	M2-M30				150	90		ETP-ER32
C32-60-VER16-86	M2-M12		32	32	146	86	C32	ETP-ER16
C32-60-VER20-87	M2-M16				147	87		ETP-ER20
C32-60-VER25-88	M2-M22				148	88		ETP-ER25
C32-60-VER32-90	M2-M30				150	90		ETP-ER32

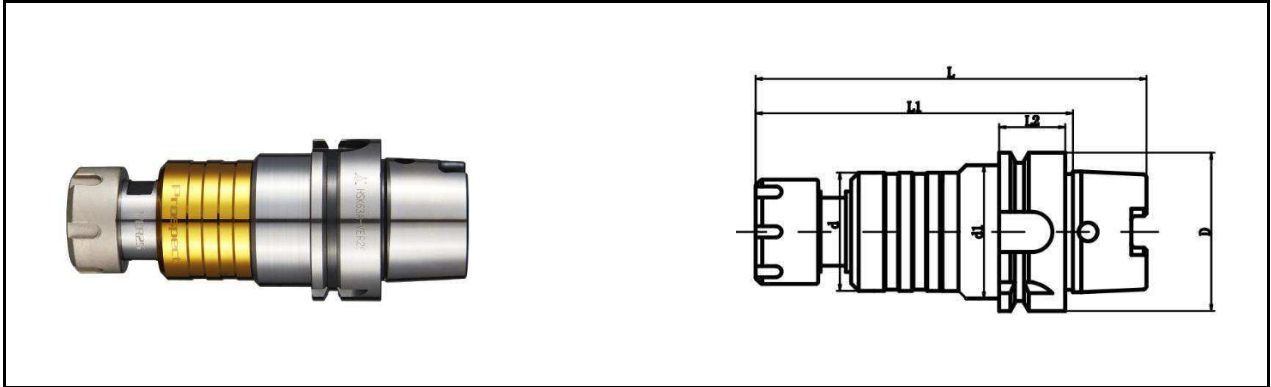
- ◎Small synchronous telescopic compensation during tapping
- ◎ corrected instantly to avoid the synchronization error caused by the mechanical stop and reverse rotation.
- ◎The telescopic system adopts imported accessories, its stability and longer service life
- ◎Adopt internal water-through structure design
- ◎Greatly increases the tap usage time and work efficiency



HSK-VER



Micro telescopic rigid tapping body



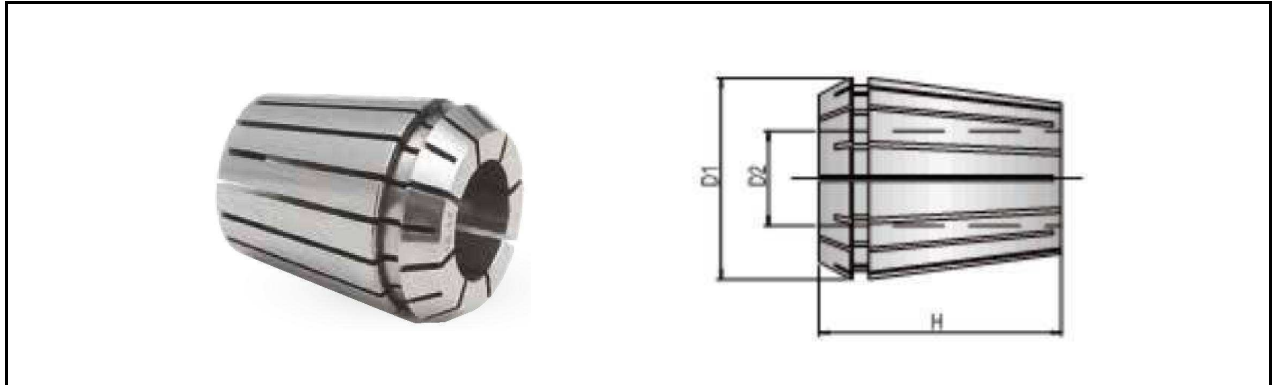
MODEL	Tapping range	DIMENSION					handle	collet model
		D	L	L1	L2	d		
HSK63A-VER16-116	M2-M12	63	149	116	26	47	HSK63	TER16
HSK63A-VER20-117	M2-M16		150	117				TER20
HSK63A-VER25-118	M2-M22		151	118				TER25
HSK63A-VER32-119	M2-M30		153	120				TER32



E R collet



collet



ER11		ER16		ER20	
MODEL	CLAMP. RANGE	MODEL	CLAMP. RANGE	MODEL	CLAMP. RANGE
ER11-1	1-0.5	ER16-1	1-0.5	ER20-1	1-0.5
ER11-1.5	1.5-1	ER16-1.5	1.5-1	ER20-1.5	1.5-1
ER11-2	2-1.5	ER16-2	2-1.5	ER20-2	2-1.5
ER11-2.5	2.5-2	ER16-2.5	2.5-2	ER20-2.5	2.5-2
ER11-3	3-2.5	ER16-3	3-2	ER20-3	3-2
ER11-3.5	3.5-3	ER16-4	4-3	ER20-4	4-3
ER11-4	4-3.5	ER16-5	5-4	ER20-5	5-4
ER11-4.5	4.5-4	ER16-6	6-5	ER20-6	6-5
ER11-5	5-4.5	ER16-7	7-6	ER20-7	7-6
ER11-5.5	5.5-5	ER16-8	8-7	ER20-8	8-7
ER11-6	6-5.5	ER16-9	9-8	ER20-9	9-8
ER11-6.5	6.5-6	ER16-10	10-9	ER20-10	10-9
ER11-7	7-6.5			ER20-11	11-10
				ER20-12	12-11
				ER20-13	13-12

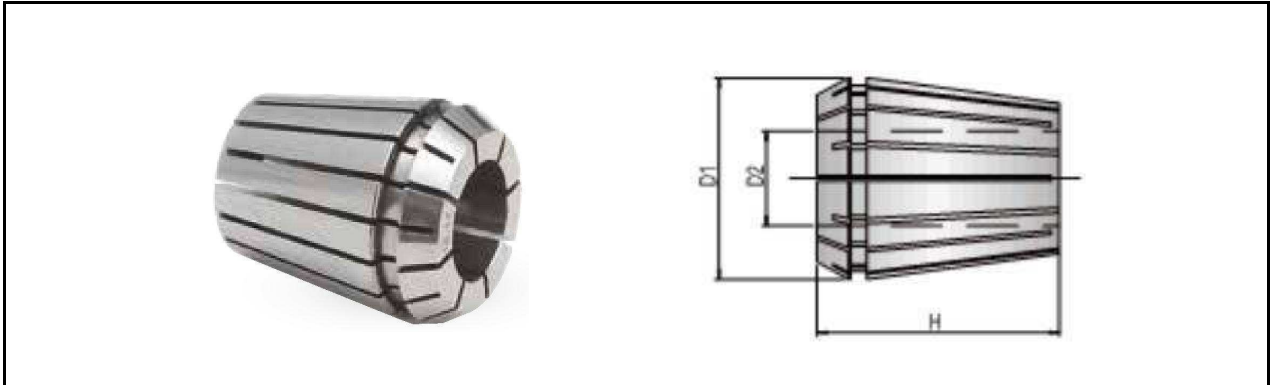
◇ For high-precision collets, please add AA after the model number, such as ER16-10AA

◇ In the range of 4 times the diameter, the accuracy of ordinary collets is less than 0.01mm, and the accuracy of high-precision collets is less than 0.005mm

E R collet



collet



ER25		ER32		ER40	
MODEL	CLAMP. RANGE	MODEL	CLAMP. RANGE	MODEL	CLAMP. RANGE
ER25-1	1-0.5	ER32-1	1-0.5	ER40-3	3-2
ER25-1.5	1.5-1	ER32-1.5	1.5-1	ER40-4	4-3
ER25-2	2-1.5	ER32-2	2-1.5	ER40-5	5-4
ER25-2.5	2.5-2	ER32-2.5	2.5-2	ER40-6	6-5
ER25-3	3-2	ER32-3	3-2	ER40-7	7-6
ER25-4	4-3	ER32-4	4-3	ER40-8	8-7
ER25-5	5-4	ER32-5	5-4	ER40-9	9-8
ER25-6	6-5	ER32-6	6-5	ER40-10	10-9
ER25-7	7-6	ER32-7	7-6	ER40-11	11-10
ER25-8	8-7	ER32-8	8-7	ER40-12	12-11
ER25-9	9-8	ER32-9	9-8	ER40-13	13-12
ER25-10	10-9	ER32-10	10-9	ER40-14	14-13
ER25-11	11-10	ER32-11	11-10	ER40-15	15-14
ER25-12	12-11	ER32-12	12-11	ER40-16	16-15
ER25-13	13-12	ER32-13	13-12	ER40-17	17-16
ER25-14	14-13	ER32-14	14-13	ER40-18	18-17
ER25-15	15-14	ER32-15	15-14	ER40-19	19-18
ER25-16	16-15	ER32-16	16-15	ER40-20	20-19
		ER32-17	17-16	ER40-21	21-20
		ER32-18	18-17	ER40-22	22-21
		ER32-19	19-18	ER40-23	23-22
		ER32-20	20-19	ER40-24	24-23
				ER40-25	25-24
				ER40-26	26-25

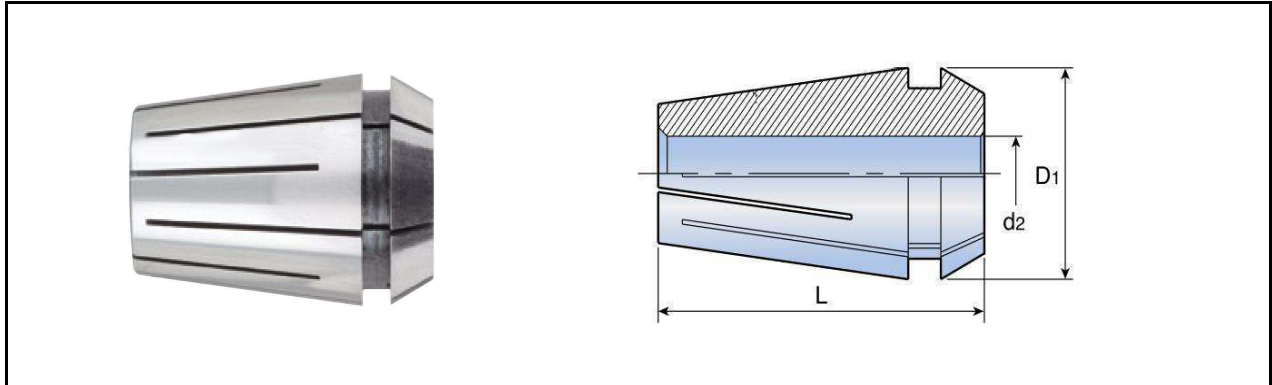
◇ For high-precision collets, please add AA after the model number, such as ER16-10AA

◇ 4 times the diameter, less 0.01mm high-precision collets less than 0.005mm

E R Water stop collet



Water stop collet

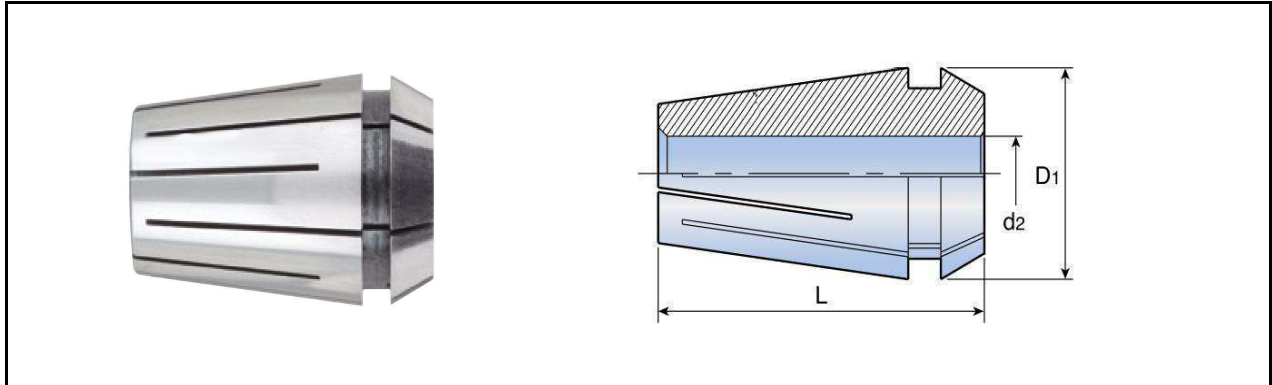


ER11C		ER16C		ER20C	
MODEL	CLAMP. RANGE	MODEL	CLAMP. RANGE	MODEL	CLAMP. RANGE
ER11-3C	3-2.9	ER16-3C	3-2.9	ER20-3C	3-2.9
ER11-4C	4-3.9	ER16-4C	4-3.9	ER20-4C	4-3.9
ER11-4.5C	4.5-4.4	ER16-4.5C	4.5-4.4	ER20-5C	5-4.9
ER11-5C	5-4.9	ER16-5C	5-4.9	ER20-5.5C	5.5-5.4
ER11-5.5C	5.5-5.4	ER16-5.5C	5.5-5.4	ER20-6C	6-5.5
ER11-6C	6-5.9	ER16-6C	6-5.5	ER20-6.5C	6.5-6
ER11-6.5C	6.5-6.4	ER16-6.5C	6.5-6	ER20-7C	7-6.5
ER11-7C	7-6.9	ER16-7C	7-6.5	ER20-7.5C	7.5-7
		ER16-7.5C	7.5-7	ER20-8C	8-7.5
		ER16-8C	8-7.5	ER20-8.5C	8.5-8
		ER16-8.5C	8.5-8	ER20-9C	9-8.5
		ER16-9C	9-8.5	ER20-9.5C	9.5-9
		ER16-9.5C	9.5-9	ER20-10C	10-9.5
		ER16-10C	10-9.5	ER20-10.5C	10.5-10
				ER20-11C	11-10.5
				ER20-11.5C	11.5-11
				ER20-12C	12-11.5
				ER20-12.5C	12.5-12
				ER20-13C	13-12.5

E R Water stop collet



Water stop collet

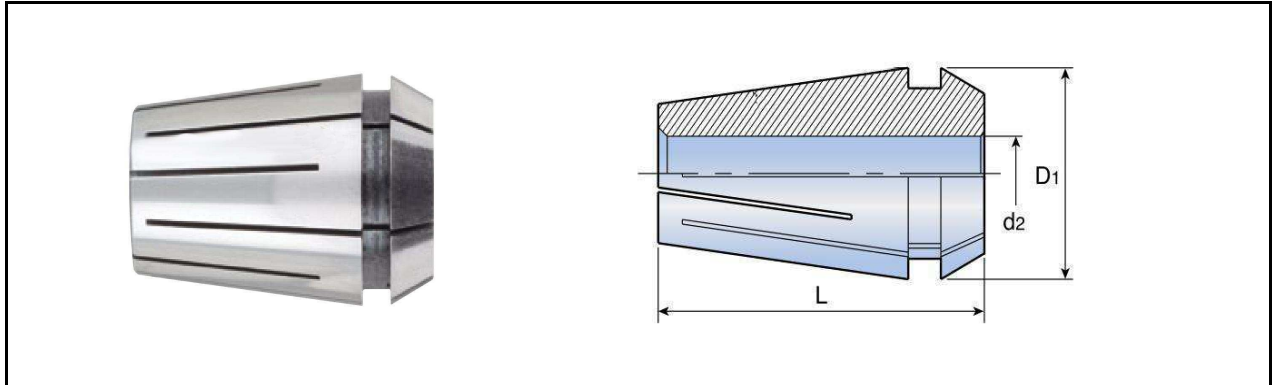


ER25C		ER32C		ER40C	
MODEL	CLAMP. RANGE	MODEL	CLAMP. RANGE	MODEL	CLAMP. RANGE
ER25-3C	3-2.9	ER32-3C	3-2.9	ER40-4C	4-3.9
ER25-4C	4-3.9	ER32-4C	4-3.9	ER40-5C	5-4.9
ER25-5C	5-4.9	ER32-5C	5-4.9	ER40-6C	6-5.9
ER25-6C	6-5.5	ER32-6C	6-5.9	ER40-7C	7-6.9
ER25-6.5C	6.5-6	ER32-7C	7-6.9	ER40-8C	8-7.9
ER25-7C	7-6.5	ER32-8C	8-7.5	ER40-9C	9-8.9
ER25-7.5C	7.5-7	ER32-8.5C	8.5-8	ER40-10C	10-9.5
ER25-8C	8-7.5	ER32-9C	9-8.5	ER40-10.5C	10.5-10
ER25-8.5C	8.5-8	ER32-9.5C	9.5-9	ER40-11C	11-10.5
ER25-9C	9-8.5	ER32-10C	10-9.5	ER40-11.5C	11.5-11
ER25-9.5C	9.5-9	ER32-10.5C	10.5-10	ER40-12C	12-11.5
ER25-10C	10-9.5	ER32-11C	11-10.5	ER40-12.5C	12.5-12
ER25-10.5C	10.5-10	ER32-11.5C	11.5-11	ER40-13C	13-12.5
ER25-11C	11-10.5	ER32-12C	12-11.5	ER40-13.5C	13.5-13
ER25-11.5C	11.5-11	ER32-12.5C	12.5-12	ER40-14C	14-13.5
ER25-12C	12-11.5	ER32-13C	13-12.5	ER40-14.5C	14.5-14
ER25-12.5C	12.5-12	ER32-13.5C	13.5-13	ER40-15C	15-14.5
ER25-13C	13-12.5	ER32-14C	14-13.5	ER40-15.5C	15.5-15
ER25-13.5C	13.5-13	ER32-14.5C	14.5-14	ER40-16C	16-15.5
ER25-14C	14-13.5	ER32-15C	15-14.5	ER40-16.5C	16.5-16
ER25-14.5C	14.5-14	ER32-15.5C	15.5-15	ER40-17C	17-16.5
ER25-15C	15-14.5	ER32-16C	16-15.5	ER40-17.5C	17.5-17
ER25-15.5C	15.5-15	ER32-16.5C	16.5-16	ER40-18C	18-17.5
ER25-16C	16-15.5	ER32-17C	17-16.5	ER40-18.5C	18.5-18
		ER32-17.5C	17.5-17	ER40-19C	19-18.5

E R Water stop collet



Water stop collet

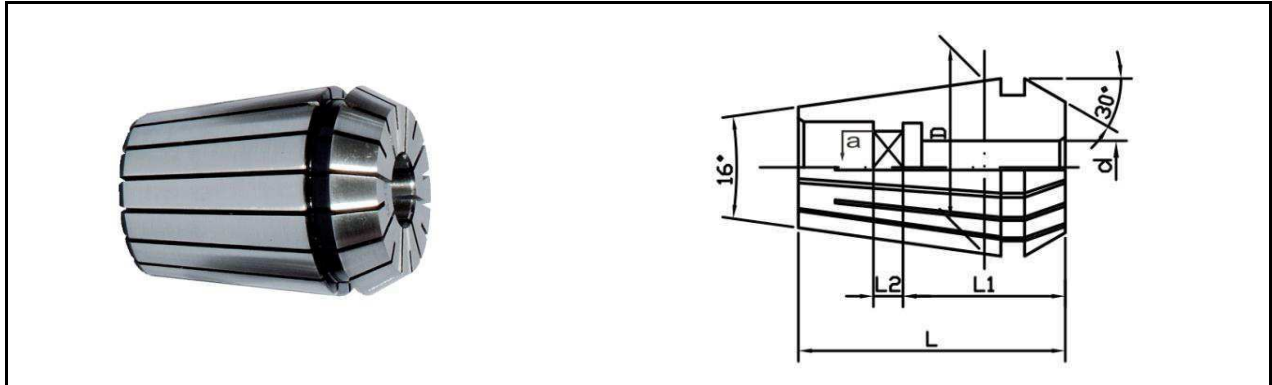


ER25C		ER32C		ER40C	
MODEL	CLAMP. RANGE	MODEL	CLAMP. RANGE	MODEL	CLAMP. RANGE
		ER32-18C	18-17.5	ER40-19.5C	19.5-19
		ER32-18.5C	18.5-18	ER40-20C	20-19.5
		ER32-19C	19-18.5	ER40-20.5C	20.5-20
		ER32-19.5C	19.5-19	ER40-21C	21-20.5
		ER32-20C	20-19.5	ER40-21.5C	21.5-21
				ER40-22C	22-21.5
				ER40-22.5C	22.5-22
				ER40-23C	23-22.5
				ER40-23.5C	23.5-23
				ER40-24C	24-23.5
				ER40-24.5C	24.5-24
				ER40-25C	25-24.5
				ER40-25.5C	25.5-25
				ER40-26C	26-25.5

ETP-ER



ETP Rigid Tapping Collet



PRODUCT MODEL	DIMENSIONS					
	d	a	L1	L2	D	L
ETP-ER16-M2	2.5	2.0	15	3	16	27.5
ETP-ER16-M3	3.15	2.5	15	3	16	27.5
ETP-ER16-M4	4.0	3.15	15	3	16	27.5
ETP-ER16-M5	5.0	4.0	18	3	16	27.5
ETP-ER16-M6-8	6.3	5.0	18	4	16	27.5
ETP-ER16-M10	8.0	6.3	18	5	16	27.5
ETP-ER16-M12	9.0	7.1	18	5	16	27.5

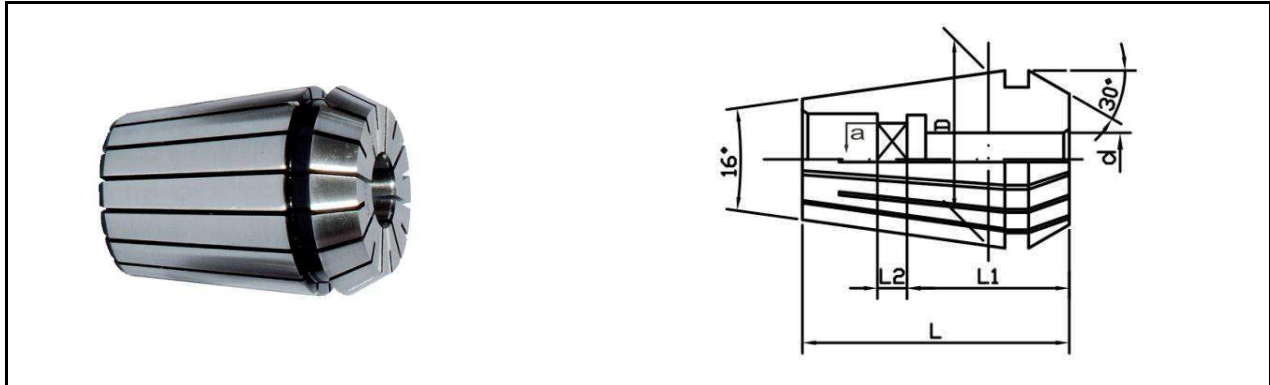
ETP-ER20-M2	2.5	2.0	15	3	20	31.5
ETP-ER20-M3	3.15	2.5	15	3	20	31.5
ETP-ER20-M4	4.0	3.15	15	3	20	31.5
ETP-ER20-M5	5.0	4.0	18	4	20	31.5
ETP-ER20-M6-8	6.3	5.0	18	4	20	31.5
ETP-ER20-M10	8.0	6.3	18	5	20	31.5
ETP-ER20-M12	9.0	7.1	22	6	20	31.5
ETP-ER20-M14	11.2	9.0	22	6	20	31.5
ETP-ER20-M16	12.5	10.0	23	7	20	31.5

ETP-ER25-M2	2.5	2.0	15	3	25	34.0
ETP-ER25-M2.5	2.8	2.24	15	3	25	34.0
ETP-ER25-M3	3.15	2.5	15	3	25	34.0
ETP-ER25-M4	4.0	3.15	18	4	25	34.0
ETP-ER25-M5	5.0	4.0	18	4	25	34.0
ETP-ER25-M6-8	6.3	5.0	18	5	25	34.0
ETP-ER25-M10	8.0	6.3	22	6	25	34.0
ETP-ER25-M12	9.0	7.1	22	6	25	34.0

ETP-ER



ETPRigid Tapping Collet

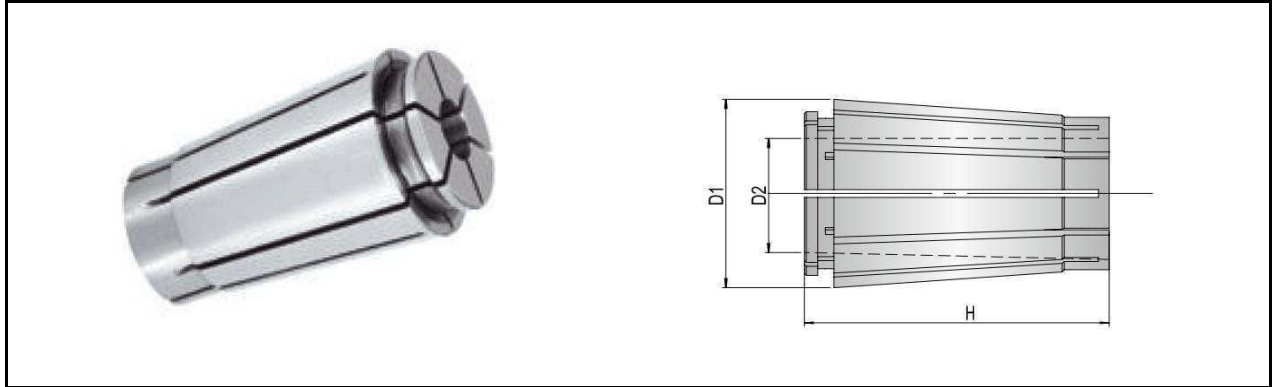


PRODUCT MODEL	DIMENSIONS					
	d	a	L1	L2	D	L
ETP-ER25-M14	11.2	9.0	23	7	25	34
ETP-ER25-M16	12.5	10.0	23	8	25	34
ETP-ER25-M18-20	14.0	11.2	23	8	25	34
ETP-ER25-M22	16.0	12.5	25	9	25	34
ETP-ER32-M1	2.5	2.0	18	3	32	40
ETP-ER32-M2	2.5	2.0	18	3	32	40
ETP-ER32-M2.5	2.8	2.24	18	3	32	40
ETP-ER32-M3	3.15	2.5	18	4	32	40
ETP-ER32-M4	4.0	3.15	18	4	32	40
ETP-ER32-M5	5.0	4.0	18	5	32	40
ETP-ER32-M6-8	6.3	5.0	22	6	32	40
ETP-ER32-M10	8.0	6.3	22	6	32	40
ETP-ER32-M12	9.0	7.1	25	7	32	40
ETP-ER32-M14	11.2	9.0	25	8	32	40
ETP-ER32-M16	12.5	10.0	25	8	32	40
ETP-ER32-M18-20	14.0	11.2	25	10	32	40
ETP-ER32-M22	16.0	12.5	25	10	32	40
ETP-ER32-M24	18.0	14.0	25	10	32	40
ETP-ER32-M27-30	20.0	16.0	28	12	32	40

GSK Precision collet



collet

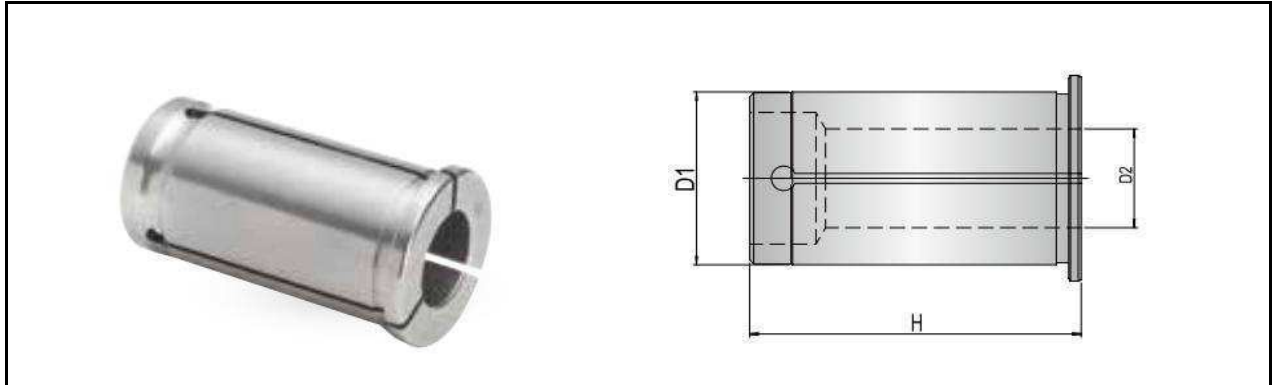


GSK 06		GSK 10		GSK 16		GSK 25	
MODEL	夹持 RANGE	MODEL	CLAMP. RANGE	MODEL	CLAMP. RANGE	MODEL	CLAMP. RANGE
GSK06-2	2-1.75	GSK10-2	2-1.75	GSK16-3	3-2.75	GSK25-6	6-5.5
GSK06-2.5	2-2.25	GSK10-2.5	2-2.25	GSK16-3.175	3.175-2.7	GSK25-8	8-7.5
GSK06-3	3-2.75	GSK10-3	3-2.75	GSK16-3.5	3.5-3	GSK25-10	10-9.5
GSK06-3.5	3.5-3	GSK10-3.175	3.175-2.7	GSK16-4	4-3.5	GSK25-12	12-11.5
GSK06-4	4-3.5	GSK10-3.5	3.5-3	GSK16-4.5	4.5-4	GSK25-14	14-13.5
GSK06-4.5	4.5-4	GSK10-4	4-3.5	GSK16-5	5-4.5	GSK25-16	16-15.5
GSK06-5	5-4.5	GSK10-4.5	4.5-4.4	GSK16-5.5	5.5-5	GSK25-16.5	16.5-16
GSK06-5.5	5.5-5	GSK10-5	5-4.5	GSK16-6	6-5.5	GSK25-17	17-16.5
GSK06-6	6-5.5	GSK10-5.5	5.5-5	GSK16-6.5	6.5-6	GSK25-17.5	17.5-17
		GSK10-6	6-5.5	GSK16-7	7-6.5	GSK25-18	18-17.5
		GSK10-6.5	6.5-6	GSK16-7.5	7.5-7	GSK25-18.5	18.5-18
		GSK10-7	7-6.5	GSK16-8	8-7.5	GSK25-19	19-18.5
		GSK10-7.5	7.5-7	GSK16-8.5	8.5-8	GSK25-19.5	19.5-19
		GSK10-8	8-7.5	GSK16-9	9-8.5	GSK25-20	20-19.5
		GSK10-8.5	8.5-8	GSK16-9.5	9.5-9	GSK25-20.5	20.5-20
		GSK10-9	9-8.5	GSK16-10	10-9.5	GSK25-21	21-20.5
		GSK10-9.5	9.5-9	GSK16-10.5	10.5-10	GSK25-21.5	21.5-21
		GSK10-10	10-9.5	GSK16-11	11-10.5	GSK25-22	22-21.5
				GSK16-11.5	11.5-11	GSK25-22.5	22.5-22
				GSK16-12	12-11.5	GSK25-23	23-22.5
				GSK16-12.5	12.5-12	GSK25-23.5	23.5-23
				GSK16-13	13-12.5	GSK25-24	24-23.5
				GSK16-13.5	13.5-13	GSK25-24.5	24.5-24
				GSK16-14	14-13.5	GSK25-25	25-24.5
				GSK16-14.5	14.5-14		
				GSK16-15	15-14.5		
				GSK16-15.5	15.5-15		
				GSK16-16	16-15.5		

S C Strong collet



collet

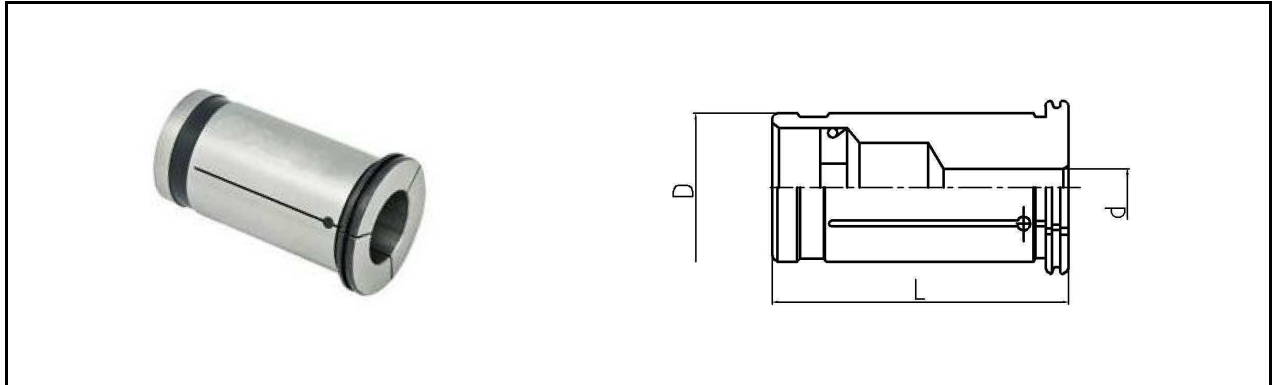


PRODUCT MODEL	DIMENSIONS		
	D1	D2	H
SC12	12	3, 4, 5, 6, 7, 8, 9, 10	40
SC16	16	4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14	
SC20	20	6, 8, 10, 12, 14, 16	64
SC25	25	6, 8, 10, 12, 16, 20	
SC32	32	6, 8, 10, 12, 16, 20, 25	71
SC42	42	6, 8, 10, 12, 16, 20, 25, 32	

DHC



D type end face water hydraulic tool shank conversion collet



PRODUCT MODEL	DIMENSIONS			
	d	D	L	
DHC12-3	3	12	45	
DHC12-4	4	12	45	
DHC12-5	5	12	45	
DHC12-6	6	12	45	
DHC12-8	8	12	45	

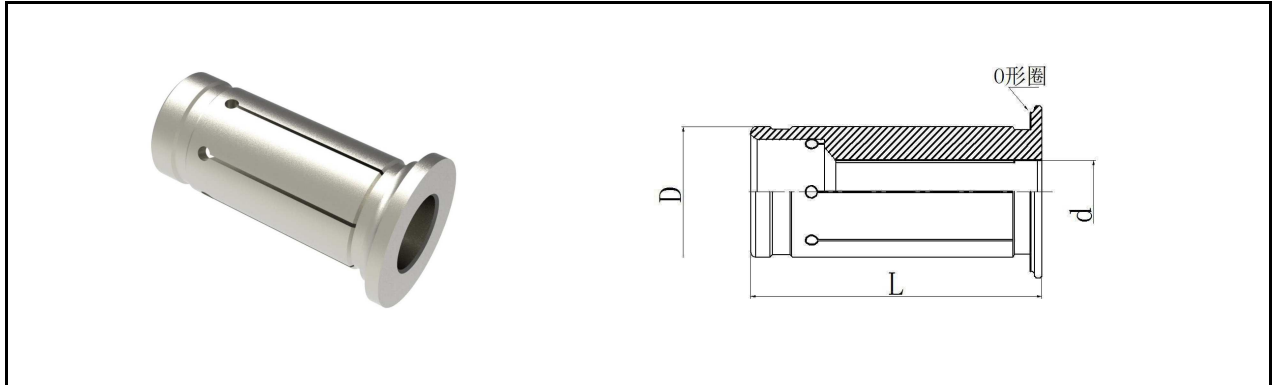
DHC20-3	3	20	50.5	
DHC20-4	4	20	50.5	
DHC20-5	5	20	50.5	
DHC20-6	6	20	50.5	
DHC20-8	8	20	50.5	
DHC20-10	10	20	50.5	
DHC20-12	12	20	50.5	
DHC20-14	14	20	50.5	
DHC20-16	16	20	50.5	

DHC32-6	6	32	60.5	
DHC32-8	8	32	60.5	
DHC32-10	10	32	60.5	
DHC32-12	12	32	60.5	
DHC32-14	14	32	60.5	
DHC32-16	16	32	60.5	
DHC32-18	18	32	60.5	
DHC32-20	20	32	60.5	
DHC32-25	25	32	60.5	

ODHC



OD type center outlet hydraulic tool holder conversion
collet



PRODUCT MODEL	DIMENSIONS			
	d	D	L	
ODHC12-3	3	12	45	
ODHC12-4	4	12	45	
ODHC12-5	5	12	45	
ODHC12-6	6	12	45	
ODHC12-8	8	12	45	

ODHC20-3	3	20	50.5	
ODHC20-4	4	20	50.5	
ODHC20-5	5	20	50.5	
ODHC20-6	6	20	50.5	
ODHC20-8	8	20	50.5	
ODHC20-10	10	20	50.5	
ODHC20-12	12	20	50.5	
ODHC20-14	14	20	50.5	
ODHC20-16	16	20	50.5	

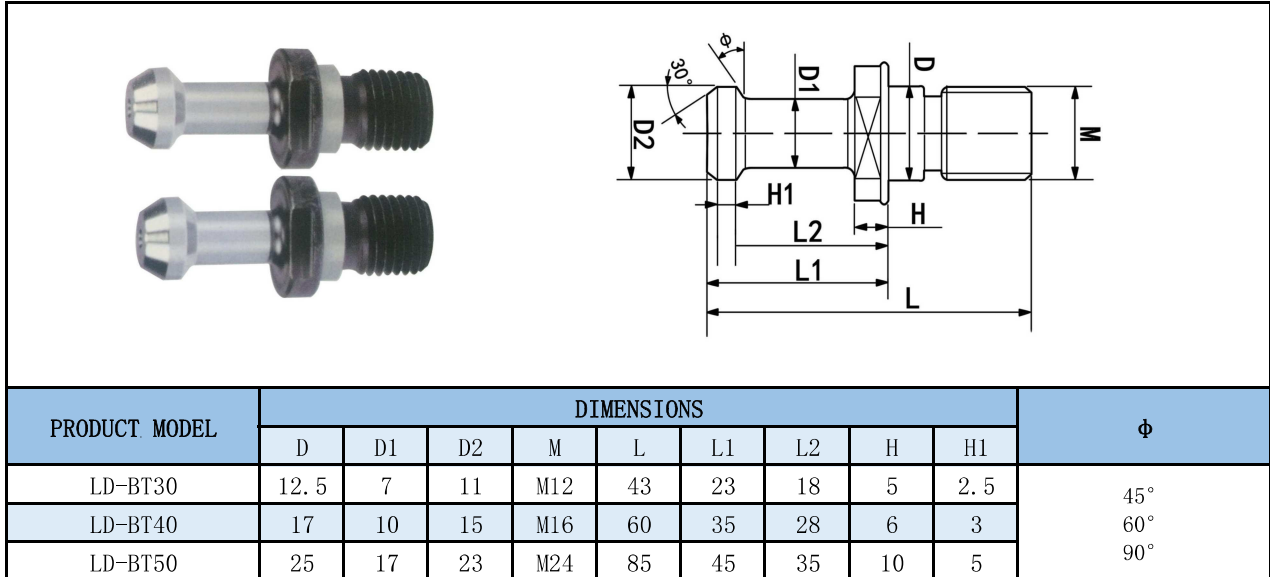
ODHC32-6	6	32	60.5	
ODHC32-8	8	32	60.5	
ODHC32-10	10	32	60.5	
ODHC32-12	12	32	60.5	
ODHC32-14	14	32	60.5	
ODHC32-16	16	32	60.5	
ODHC32-18	18	32	60.5	
ODHC32-20	20	32	60.5	
ODHC32-25	25	32	60.5	

BT-1982 / DIN 69872 SK



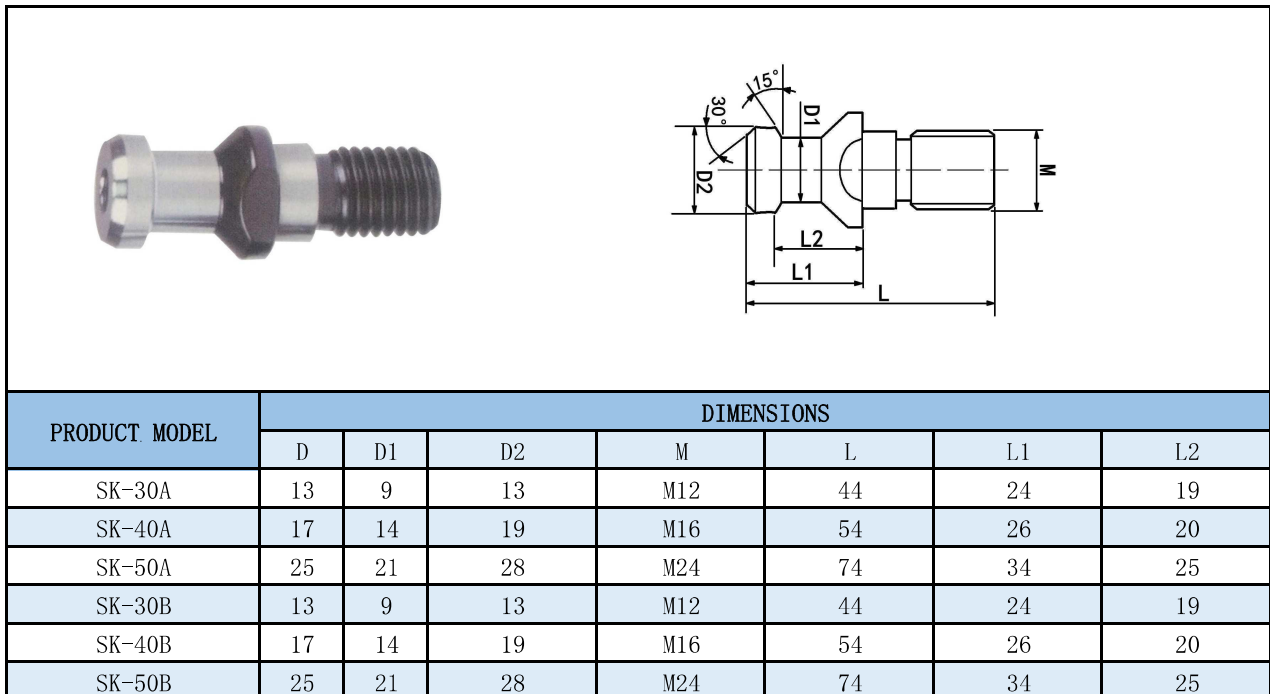
Rivet

BT-1982 BT Rivet



©For intercooler Rivet with .C, example: BT50-45° .C

DIN69872 SK Rivet



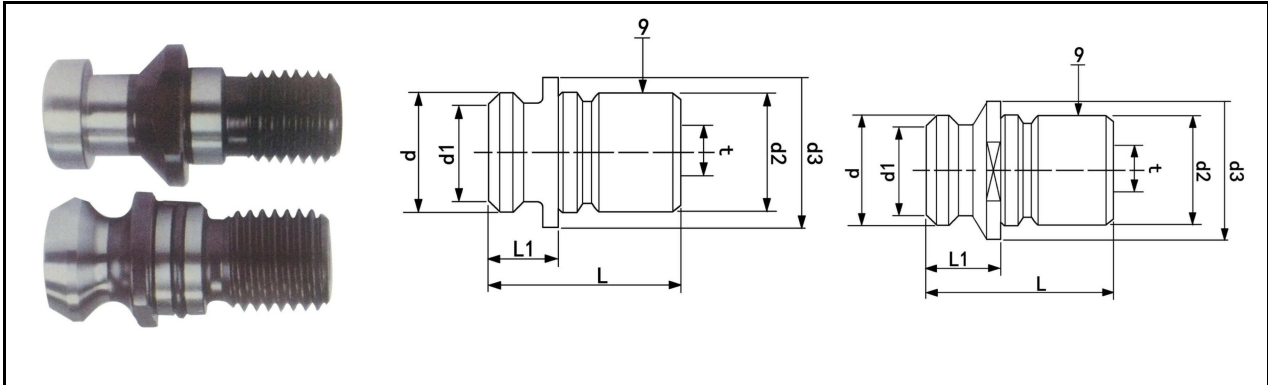
©For intercooler Rivet with .C, example: SK-50B.C; A MODEL WITH INNER COOL.

ISO 7388 / ISO



Rivet

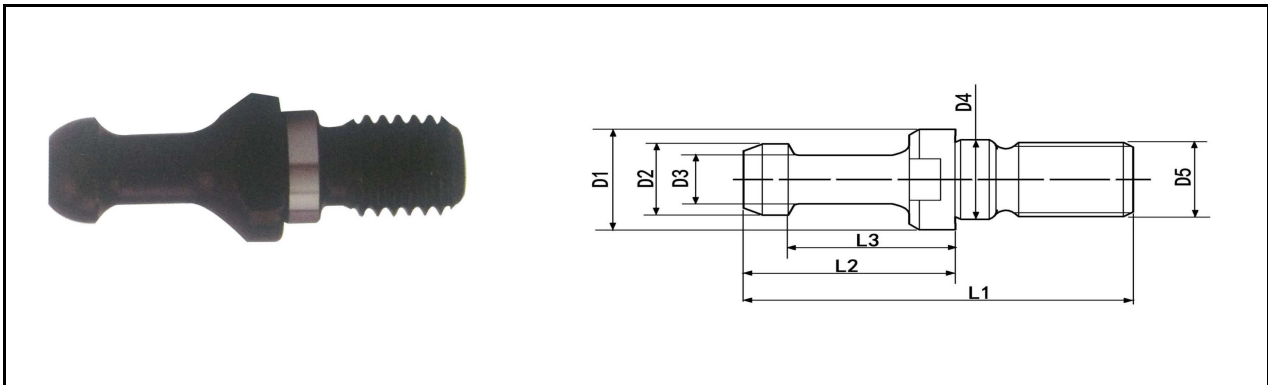
ISO7388 Rivet



PRODUCT MODEL	DIMENSIONS						
	d1	d2	d3	d	g	I	t
DIN7388-40A	14	17	23	19	M16	54	7.5
DIN7388-50A	21	25	36	28	M24	74	11.5
DIN7388-40B	12.95	17	22.5	18.95	M16	44.5	7.5
DIN7388-50B	19.6	25	36	29.1	M24	65.5	11.5

©IF YOU NEED INNER COOL Rivet, WITH .C, EXAMPLE : DIN7388-50B.C

ISO Rivet



PRODUCT MODEL	DIMENSIONS							
	L1	L2	L3	D1	D2	D3	D4	D5
ISO20	26	12	9	12	9	6	8.5	M8
ISO25	28	12	9	13	11	7	8.5	M8
ISO30	44	24	19	17	13	9	13.0	M12

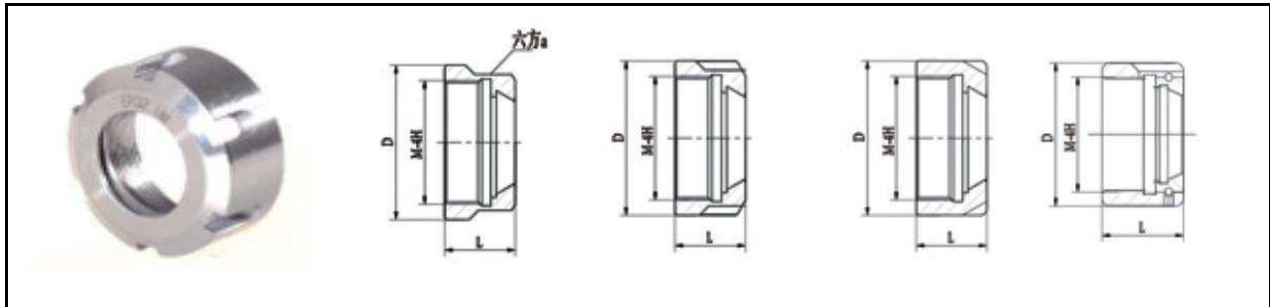
©For intercooler Rivet with .C, example: ISO20.C

ER / GSK Nut



Nut

ER Nut



PRODUCT MODEL	DIMENSIONS			形式
	M	D	L	
ER11-A	M14x0.75	19	13	Fig.1
ER16-A	M22x1.52	28	17.5	Fig.1
ER20-A	M25x1.5	34	19	Fig.1
ER25-UM	M32x1.5	42	20	Fig.2
ER32-UM	M40x1.5	50	22.5	Fig.2
ER40-UM	M50x1.5	63	29	Fig.2
ER8-M	M10x0.75	12	12	Fig.3
ER11-M	M13x0.75	16	12	Fig.3
ER16-M	M19x1	22	18	Fig.3
ER20-M	M24x1	28	19	Fig.3
ER25-M	M30x1	35	20	Fig.3
ER25-KM	M32x1.5	42	20	Fig.4
ER32-KM	M40x1.5	50	22.5	Fig.4
ER40-KM	M50x1.5	63	29	Fig.4

©The coaxiality between the thread and the clamping cone is 0.003

GSK Nut



PRODUCT MODEL	DIMENSIONS			形式
	M	D	L	
GSK06	M15x1	20	15	Fig.1
GSK10	M21.5x1	27	18	Fig.1
GSK16	M32x1.5	40	25	Fig.1
GSK25	M45x1.5	54	32	Fig.1

The coaxiality between the thread and the clamping cone is 0.003

E R wrench



wrench

PRODUCT MODEL	K	L	SUITABLE Nut	PRODUCT MODEL	D	L	SUITABLE Nut
OW/ER11	17	100	ER11-A	UM/ER25	42	206	ER25-UM
OW/ER16	25	128	ER16-A	UM/ER32	50	253	ER32-UM
OW/ER20	30	138	ER20-A	UM/ER40	63	289	ER40-UM

PRODUCT MODEL	L	SUITABLE RANGE	Nut
A/38-42	168	38-42	SK16
A/45-52	190	45-32	SK25

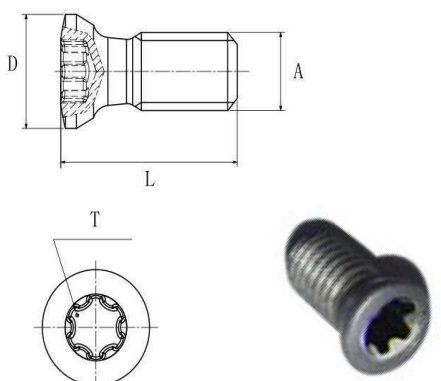
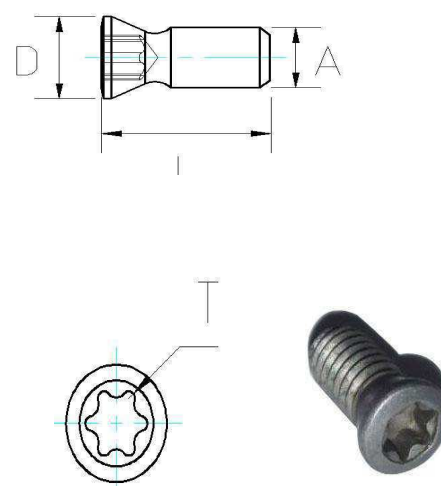
<p>GSK wrench</p>		
PRODUCT MODEL	D	SUITABLE Nut
OB/SK06	20	GSK06
OB/SK10	27	GSK10
OB/SK16	40	GSK16
OB/SK25	54	GSK25

<p>MLC Strong collet wrench</p>		
PRODUCT MODEL	SUITABLE BODY	W.
SP-MLC. 20	MLC20/HPC20	0.20
SP-MLC. 32	MLC32/HPC32	0.30
SP-MLC. 42	MLC42/HPC42	0.45

screw



Chart

	SFS Strau Reinforced Star Screws				Wyhan Reinforced Star Spoon Handle Wrench (T)	
	MODEL	D	L	A		
	CSG2049-P	2.55	4.9	M2*0.4	CTS06W-P	
	CSG2252-P	3.14	5.2	M2.2*0.45	CTS07W-P	
	CSG2565-P	3.46	6.5	M2.5*0.45	CTS08W-P	
	CSG3085-P	5.3	10.8	M3*0.5	CTS10W-P	
	CSX3011-P	5.3	10.8	M3*0.35	CTS15W-P	
	CSG3585-P	5.1	8.5	M3.5*0.6	CTS10W-P	
	CSG4011-P	5.45	11.0	M4*0.7	CTS15W-P	
	CSG4013-P	5.45	13.0	M4*0.7	CTS15W-P	
	CSG5012-P	7.0	11.45	M5*0.8	CTS20W-P	
◇SCREW-P. ONLY FOR CTS*W-P, OTHER WRENCH NOT SUITABLE.						
	other screws			WRENCH (T)		
	MODEL	D	L	A	Wyhan	other WREN.
	CSS2005	1.9	5	M2*0.4	CTS06W	CTQ06
	CSC2250	3.0	5	M2.2*0.45	CTS07W	CTQ07
	CSX2553	3.6	5.3	M2.5*0.35	CTS08W	CTQ08
	CSC2560	3.6	6	M2.5*0.45	CTS08W	CTQ08
	CSD3070	3.6	7.0	M3*0.5	CTS08W	CTQ08
	CSC3080	4.2	8	M3*0.5	CTS10W	CTQ10
	CSC3580	5.0	8	M3.5*0.6	CTS15W	CTQ15
	CSX4080	5.6	8	M4*0.5		
	CSC4090	5.4	9	M4*0.7		
	CSD4010	5.7	10	M4*0.7		
	CST4010	6.0	10	M4*0.7	CTS20W	CTQ20
	CSC4511	6.6	11	M4.5*0.75		
	CSC5012	7.2	12	M5*0.8		
	CST5010	6.27	10.6	M5*0.8		
	CSD5012	7.0	12	M5*0.8		
	CSY5012	7.0	12	M5*0.8		
	CSG5016	7.1	16	M5*0.8	—	CTQ25
	CSS6016	8.35	15.6	M6*0.75		
◇SCREW CAN USE BOTH CTS*W WRENCH OR CTQ WRENCH.						



Strau Reinforced Star Screws

◇This series of screws has high hardness, strong impact resistance, strong locking ability and longer life

The biggest difference between this series of screws and other star-shaped screws is the widened structure design of the star angle on the head. This structure uses a specific wrench to obtain a more precise and firm fit, and its wrench torque is 25% higher



Flag and key handle wrenches

◇ The handle is ergonomically shaped and provides support areas for the thumb and index finger. From now on, the transmission of large torque becomes very simple

◇ for quick screw turning

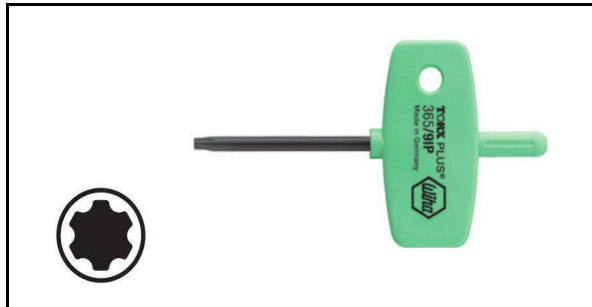
The innovative torque driver comes in a variety of sizes, T6-T20 without damaging expensive set screws or handle patterns. The screwdriver lever can react elastically if the torque applied exceeds the torque

◇ Low profile shank for easy twisting of the cover screw on the screw shaft

WRENCH

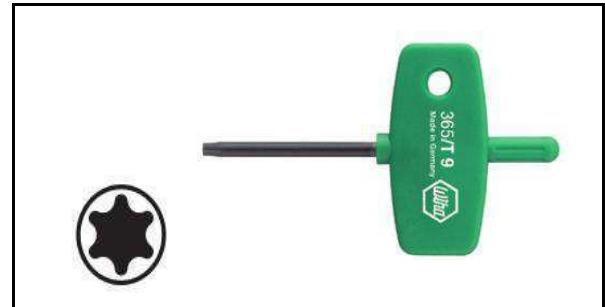


Chart



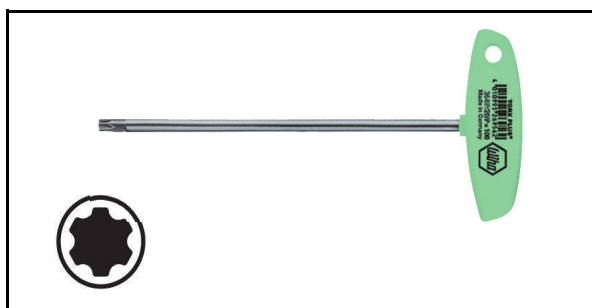
Wyham

MODEL					
CTS06W-P	6IP	35	2.0	70	40
CTS07W-P	7IP	35	2.5	70	40
CTS08W-P	8IP	40	2.5	75	40
CTS10W-P	10IP	40	3.0	75	40
CTS15W-P	15IP	45	3.5	80	40
CTS20W-P	20IP	45	4.0	80	40



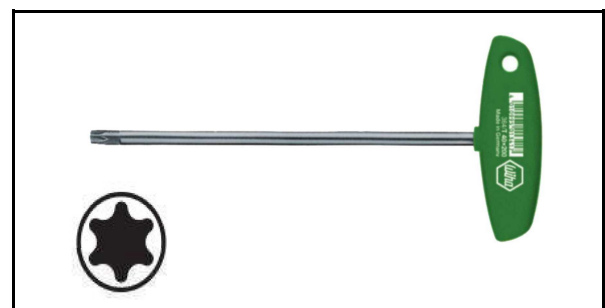
Wyham

MODEL					
CTS06W	T6	35	2.0	70	40
CTS07W	T7	35	2.5	70	40
CTS08W	T8	40	2.5	75	40
CTS10W	T10	40	3.0	75	40
CTS15W	T15	45	3.5	80	40
CTS20W	T20	45	4.0	80	40



Wyham-

MODEL					
CTT15W-P	15IP	100	4.0	126	80
CTT20W-P	20IP	100	4.0	132	100



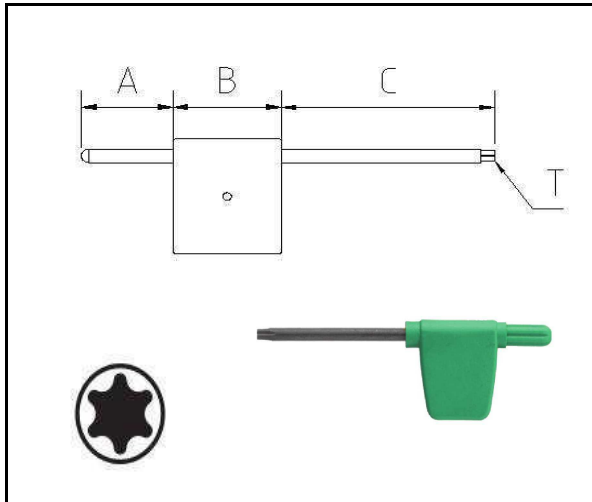
Wyham-

MODEL					
CTT15W	T15	100	4.0	126	80
CTT20W	T20	100	4.0	132	100

WRENCH

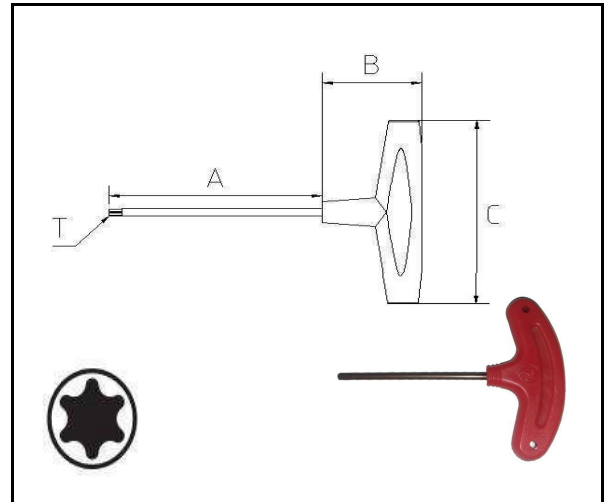


Chart



other

MODEL	A	B	C	T
CTQ06	13	15	34	T6
CTQ07	13	15	34	T7
CTQ08	13	19	39	T8
CTQ10	14	42	42	T10
CTQ15	15	45	45	T15
CTQ20	15	49	49	T20



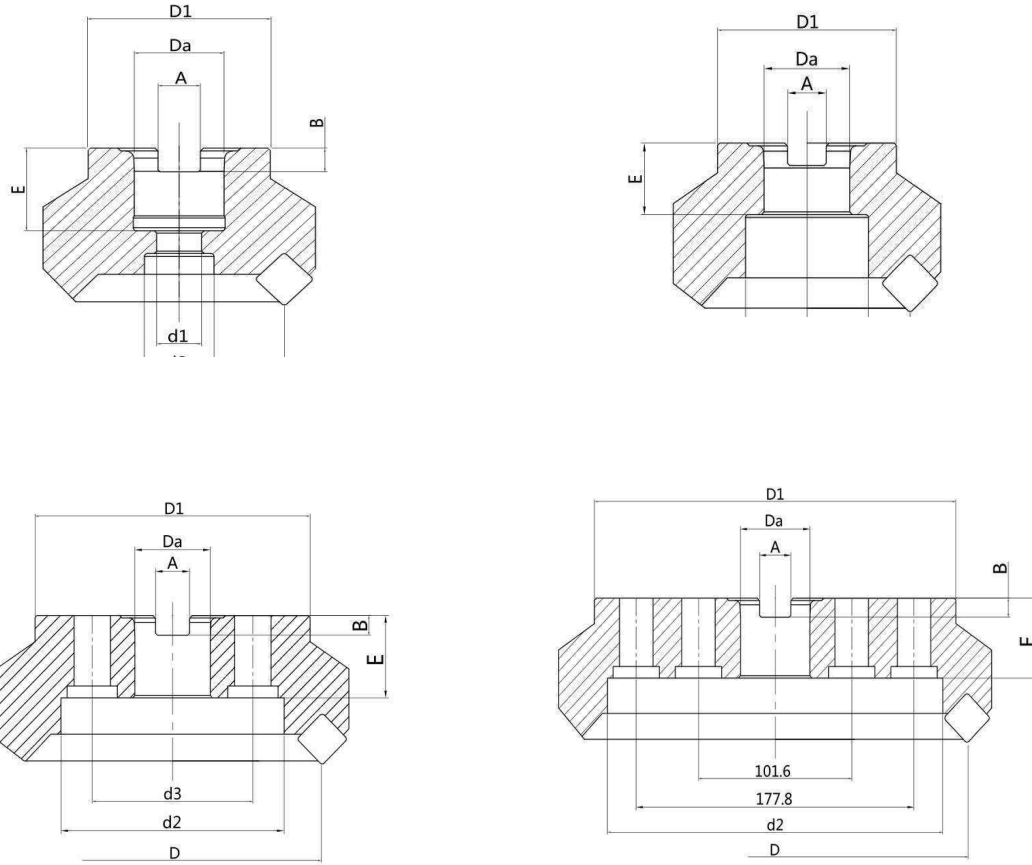
other

MODEL	A	B	C	T
CTT15	95	45	80	T15
CTT20	100	45	80	T20

Interface Type /CONNECT



Metric CUTTER HOLDER

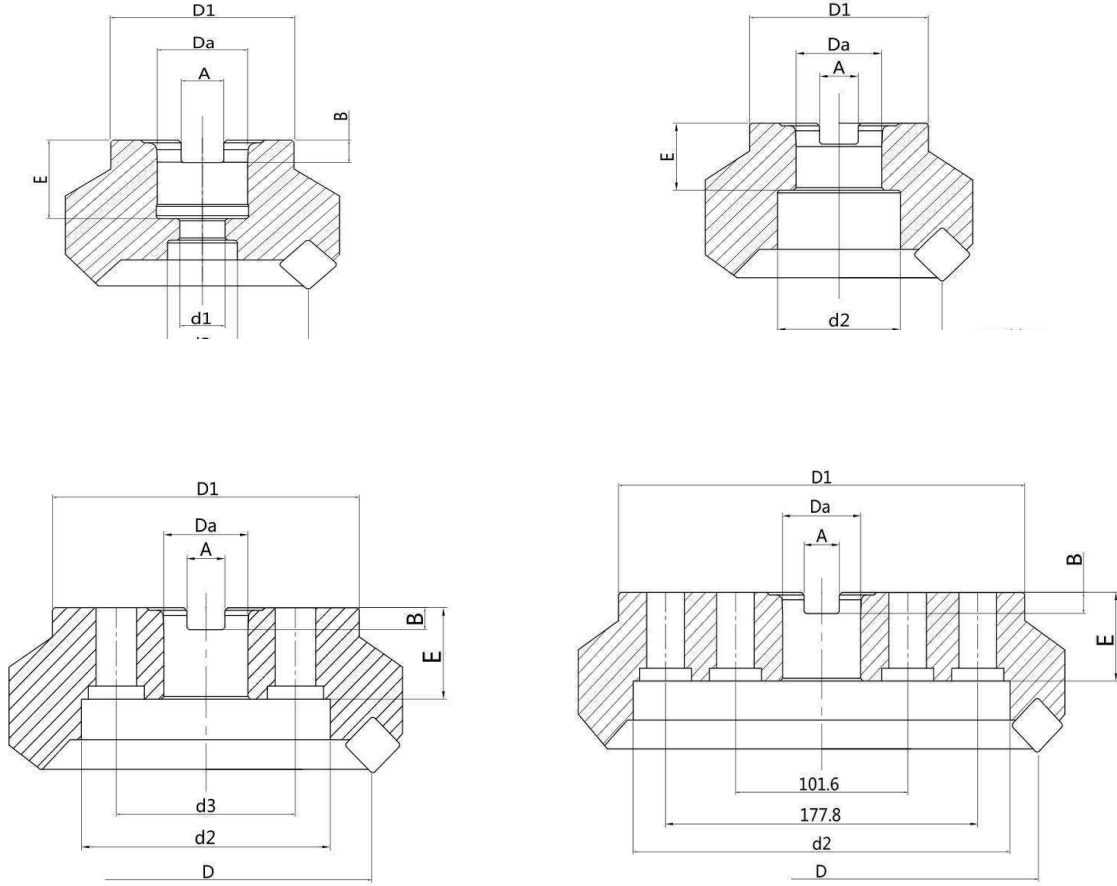


DIMENSION										CONNECTOR
D	Da	A	B	E	D1		d1	d2	d3	
					MOULD MILL	Ordinar				
32	16	8.4	5.6	20	30	—	9	13.5	—	
40	16	8.4	5.6	20	38	—	9	13.5	—	A
40	22	10.4	6.3	22	38	—	11	17	—	A
50	22	10.4	6.3	22	40	45	11	17	—	A
63	22	10.4	6.3	22	47	—	11	17	—	A
80	27	12.4	7	28	58	70	13	22	—	A
100	32	14.4	8	26	66	85	18	26	—	A
100	32	14.4	8	26	66	85	—	46	—	B
125	40	16.4	9	32	85	—	22	32	—	A
125	40	16.4	9	32	85	—	—	56	—	B
160	40	16.4	9	32	110	—	—	90	66.7	C
200	60	25.7	14	40	130	—	—	132	101.6	C
250	60	25.7	14	40	160	—	—	150	101.6	C
315	60	25.7	14	40	220	—	—	220	—	D

Interface Type /CONNECT



Inch CUTTER HOLDER

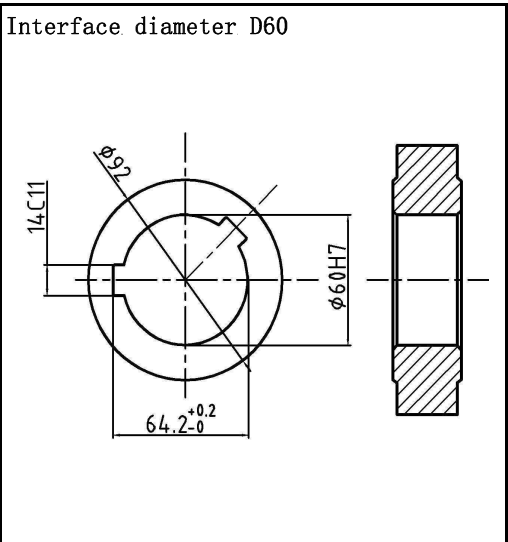
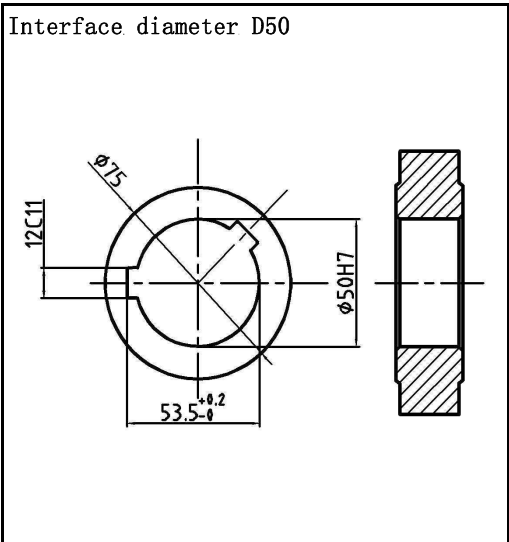
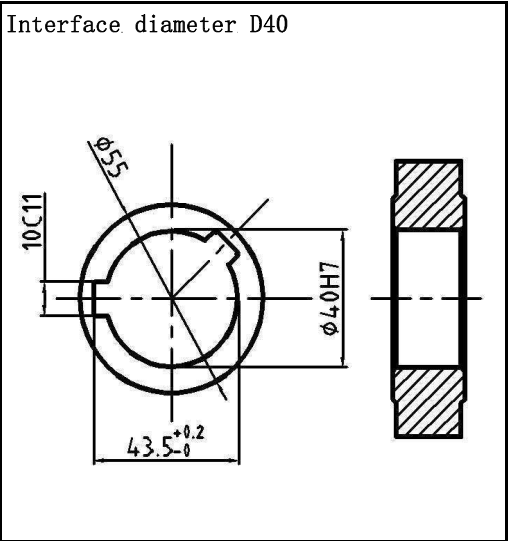
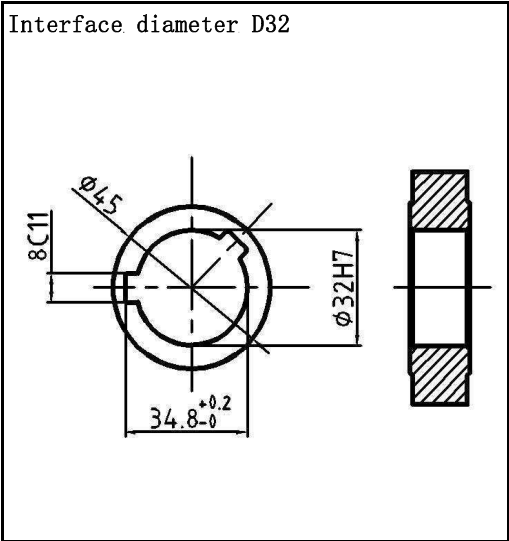
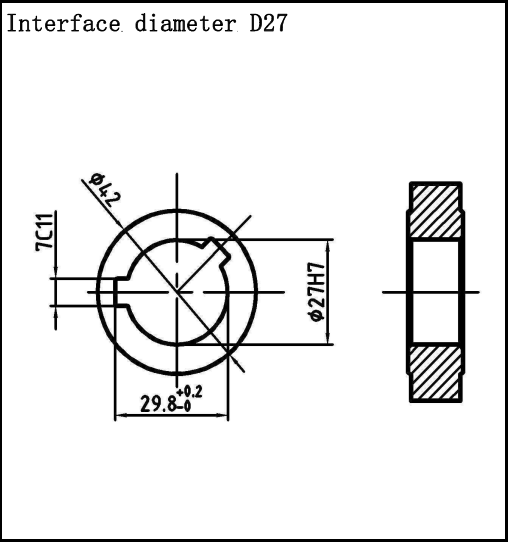
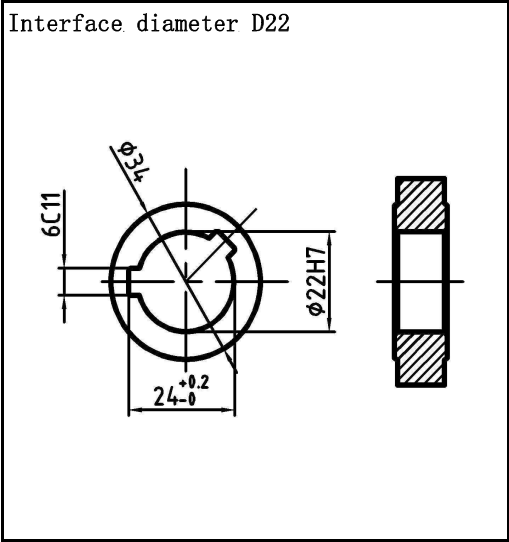


DIMENSION									CONNECTOR
D	Da	A	B	E	D1	d1	d2	d3	
32	16	8.4	5.6	20	30	9	13.5	—	
40	16	8.4	5.6	20	38	9	13.5	—	A
40	22	10.4	6.3	22	38	11	17	—	A
50	22	10.4	6.3	22	45	11	17	—	A
63	22	10.4	6.3	22	47	11	17	—	A
80	25.4	9.526	6	26	70	13	22	—	A
100	31.75	12.7	8	32	80	18	26	—	A
100	31.75	12.7	8	32	80	—	46	—	B
125	38.1	15.876	10	38	80	—	56	—	B
160	50.8	19.05	11	38	100	—	72	—	B
200	47.625	25.4	14	38	130	—	132	101.6	C
250	47.625	25.4	14	38	160	—	150	101.6	C
315	47.625	25.4	14	38	220	—	224	—	D

HUB Monolithic interface standards



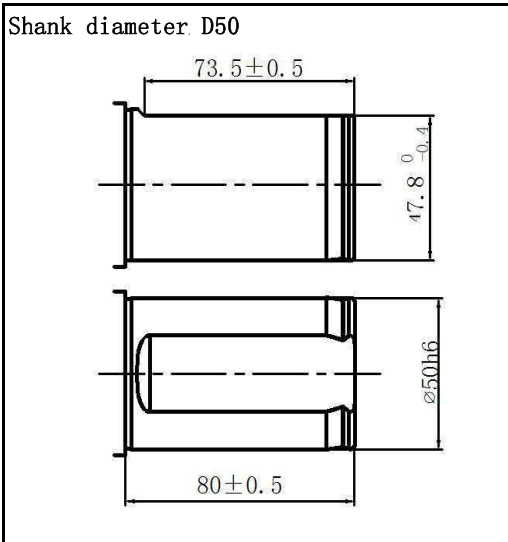
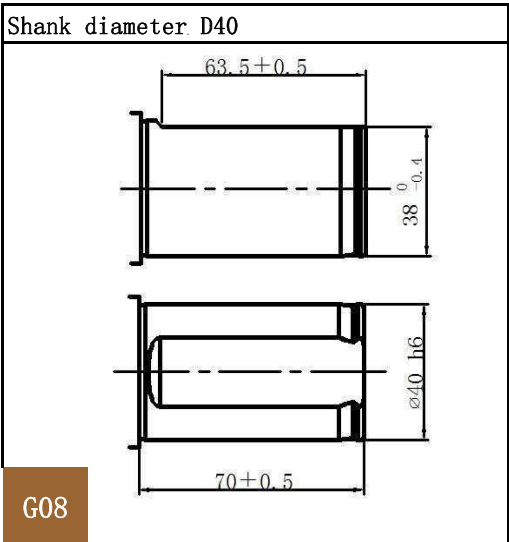
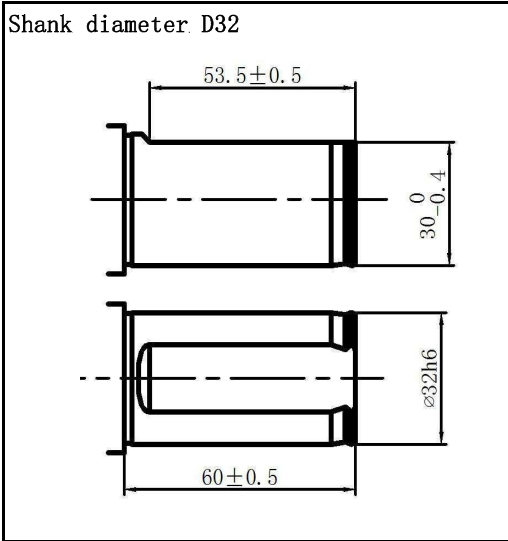
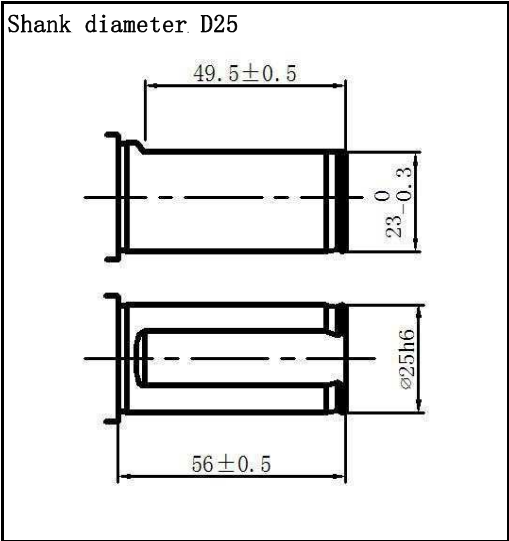
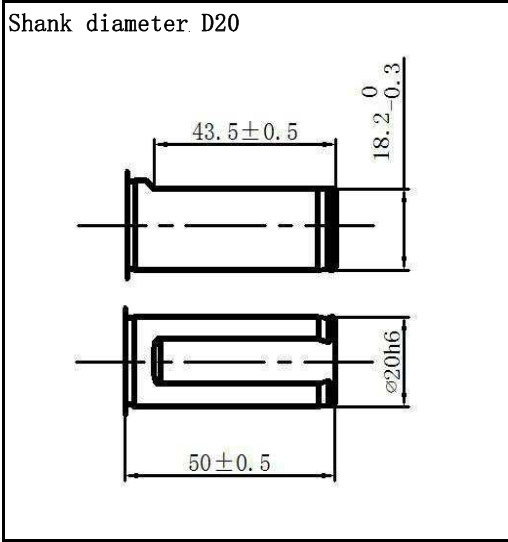
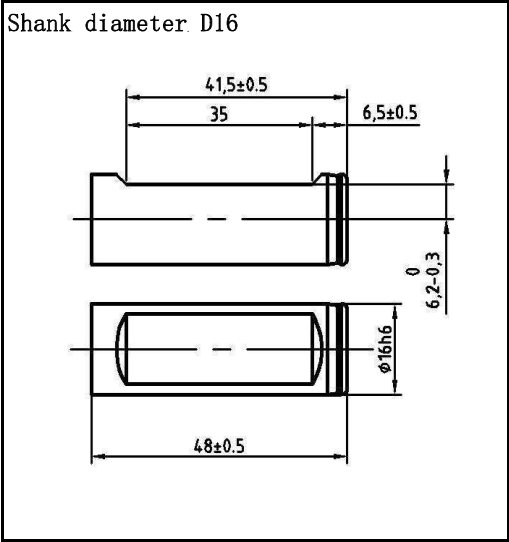
CHART



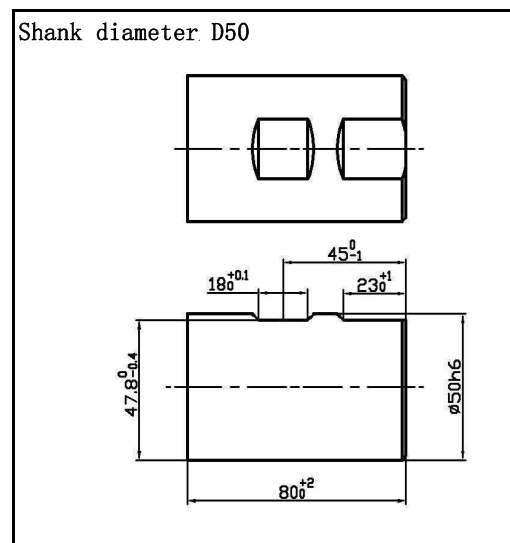
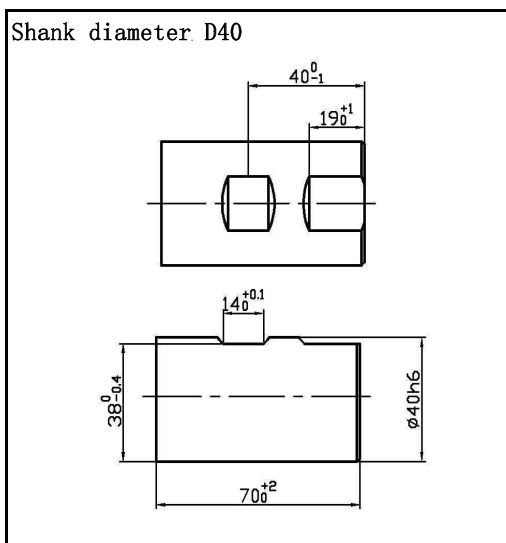
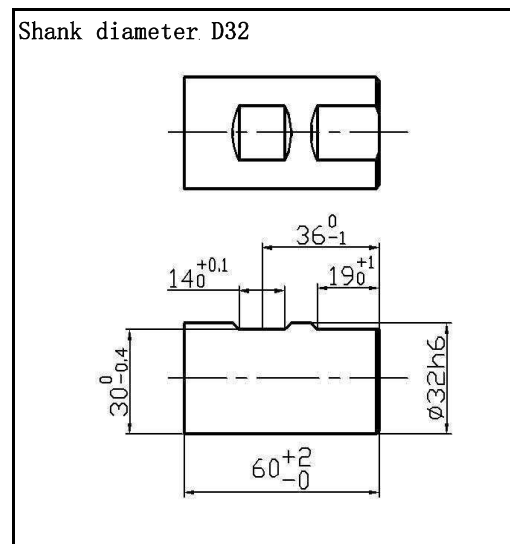
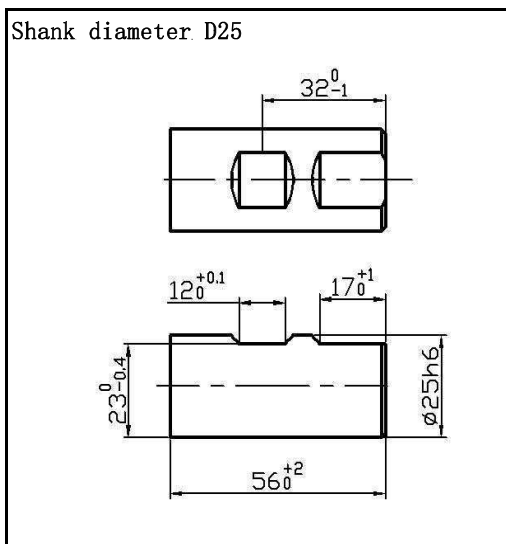
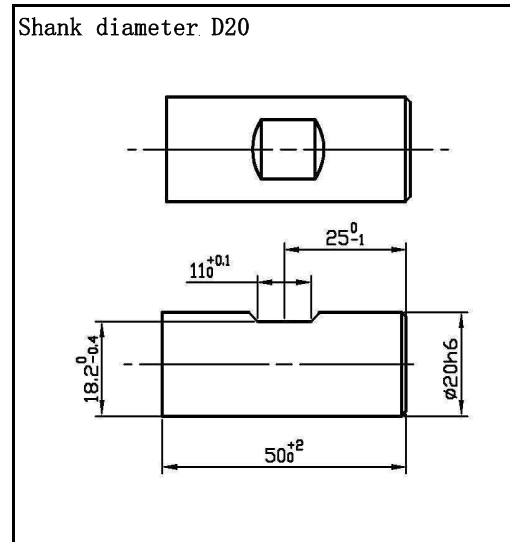
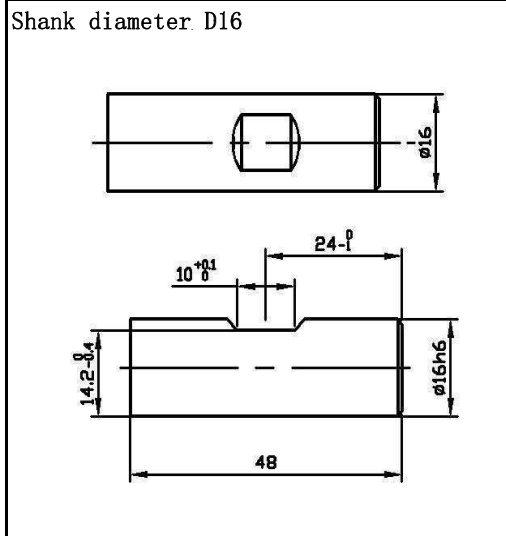
ISO 9766 Side shank flattening standard



CHART



CHART



Internal hole turning tool shank flattening standard



CHART

Shank diameter D12	
Shank diameter D16	
Shank diameter D20	
Shank diameter D25	
Shank diameter D32	
Shank diameter D40	

Common thread head specifications



CHART

<p>M8</p>	
<p>M10</p>	
<p>M12</p>	
<p>M16</p>	

Standard Shank Details



Commonly used BT40-SLN standard handle

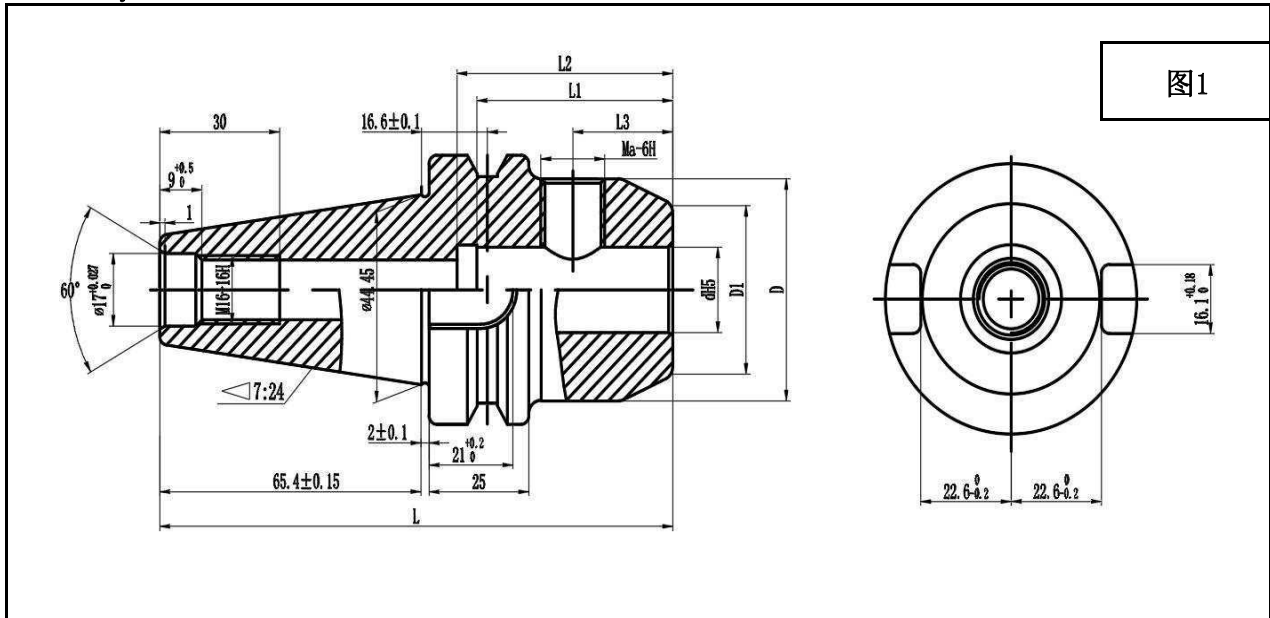


图1

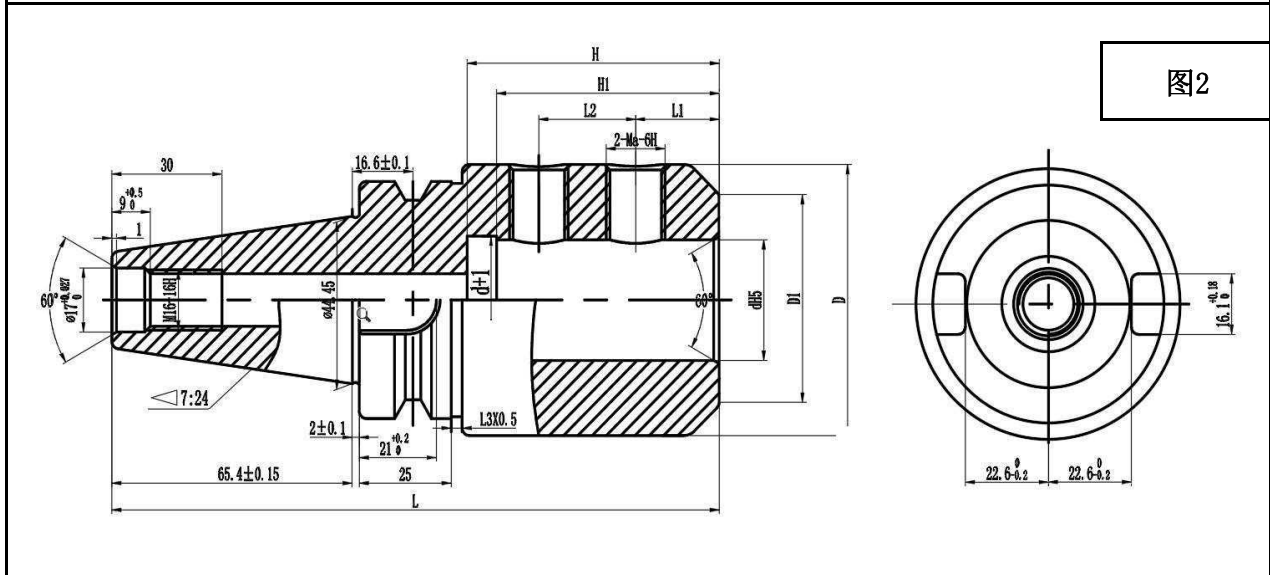


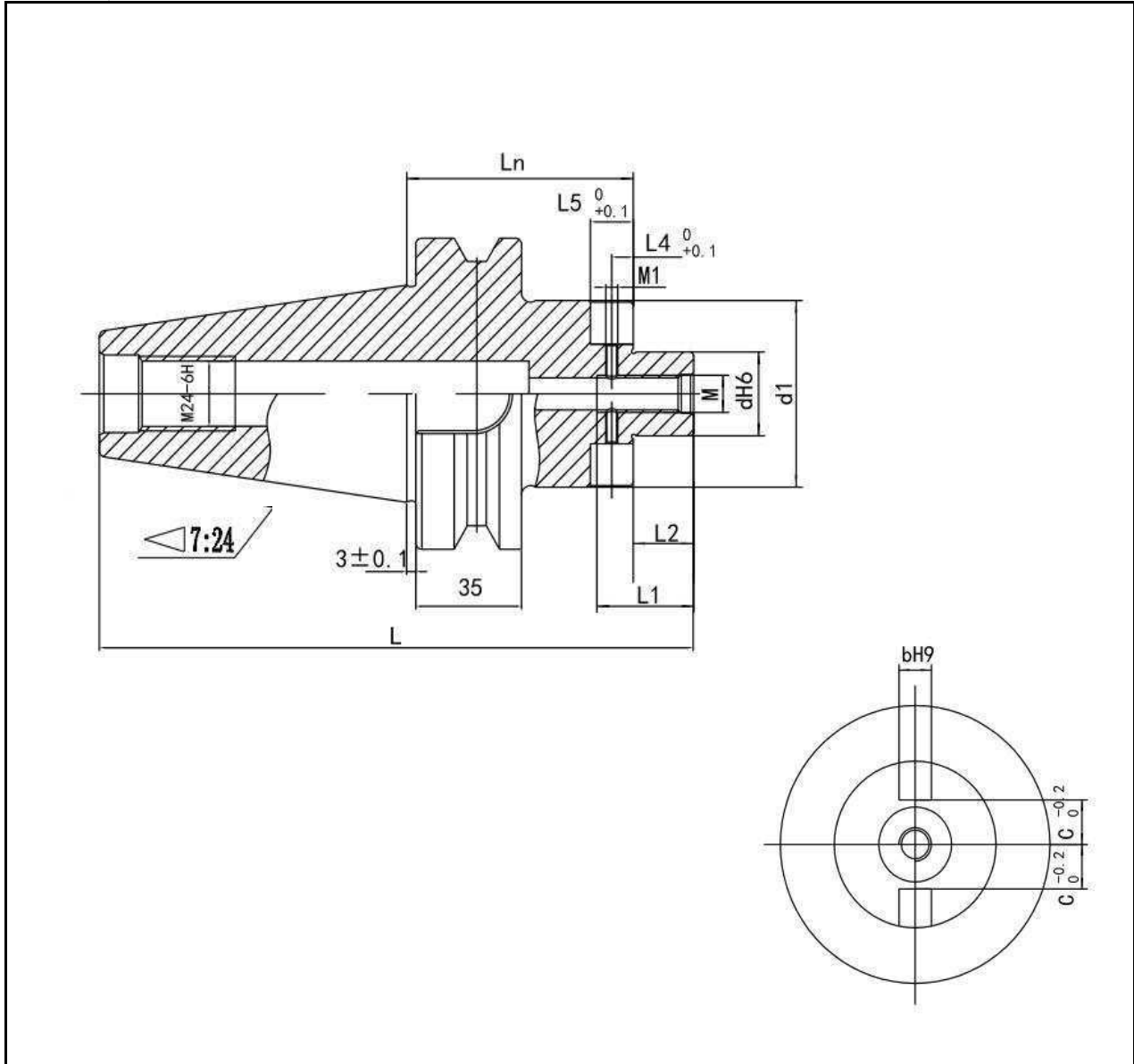
图2

MODEL	DIMENSION									图示
	dH5	D	Ma	D1	L1	L2	L3	H1	H	
BT40-SLN16	16 (0/+0.008)	48	M14	36	47	52	24	—	—	1
BT40-SLN20	20 (0/+0.009)	52	M16	40	49	54	25	—	—	1
BT40-SLN25	25 (0/+0.009)	65	M18	45	24	25	—	54	62	2
BT40-SLN32	32 (0/+0.011)	72	M20	56	24	28	—	58	66	2
BT40-SLN40	40 (0/+0.011)	80	M20	60	30	32	—	68	76	2

Standard TOOL HOLDER Details



Commonly used BT50-FMB standard handle

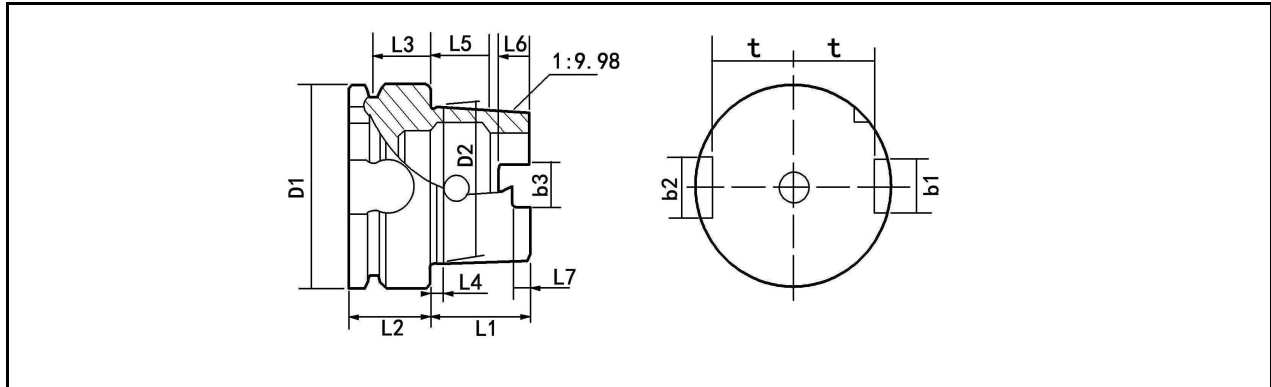


MODEL	DIMENSION										
	dH6	D	Ma	D1	L2	L3XD	bH9	L4	L5	L1	M1
BT50-FMB22	22	48	M10	48/60	16.5	2.5X11	16.5	6.2	12.4	28	M4
BT50-FMB27	27	52	M12	60	18.5	4X12.5	18.5	7.1	14.2	32	M4
BT50-FMB32	32	65	M16	63	20.0	4X16.5	20.0	9	18	42	M5
BT50-FMB40	40	72	M16	80	23.0	4X16.5	23.0	10	20	45	M6

Standard TOOL HOLDER Details

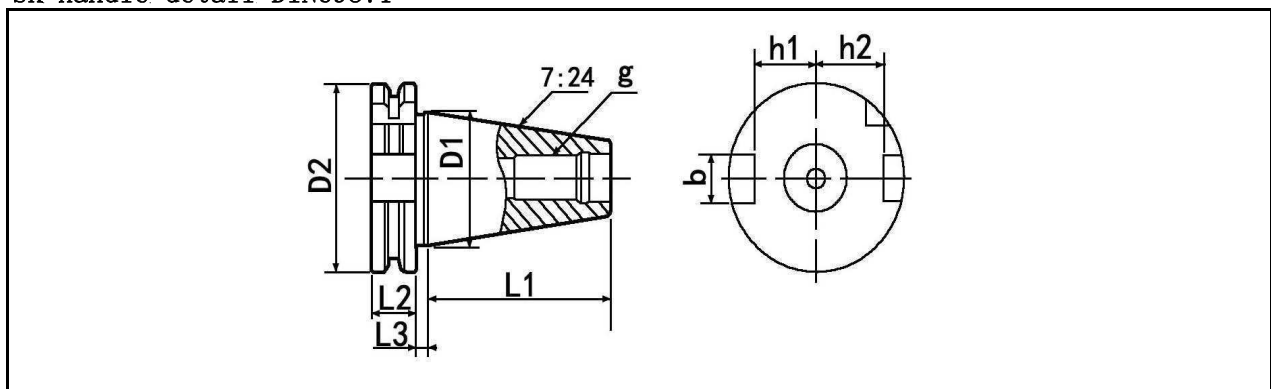


HSK handle detail DIN69893



MODEL	DIMENSION												
	D1	D2	L1	L2	L3	L4	L5	L6	L7	b1	b2	b3	t
HSK40A	40	30.007	20	20	16	4	11.42	6	3.5	11	9	8.05	17
HSK50A	50	38.009	25	26	18	5	14.13	7.5	4.5	14	12	10.54	21
HSK63A	63	48.010	32	26	18	6.3	18.13	10	6	18	16	12.5	26.5
HSK100A	100	75.013	50	29	20	10	28.56	15	10	22	20	20	44

SK handle detail DIN69871



MODEL	DIMENSION								
	D1	D2	L1	L2	L3	b	h1	h2	g
SK30	31.75	50	47.8	15.9	3.2	16.1	16.4	19	M12
SK40	44.45	63.55	68.4	15.9	3.2	16.4	22.8	25	M16
SK50	69.85	97.50	101.75	15.9	3.2	25.7	35.5	32.7	M24



NONSTANDARD



