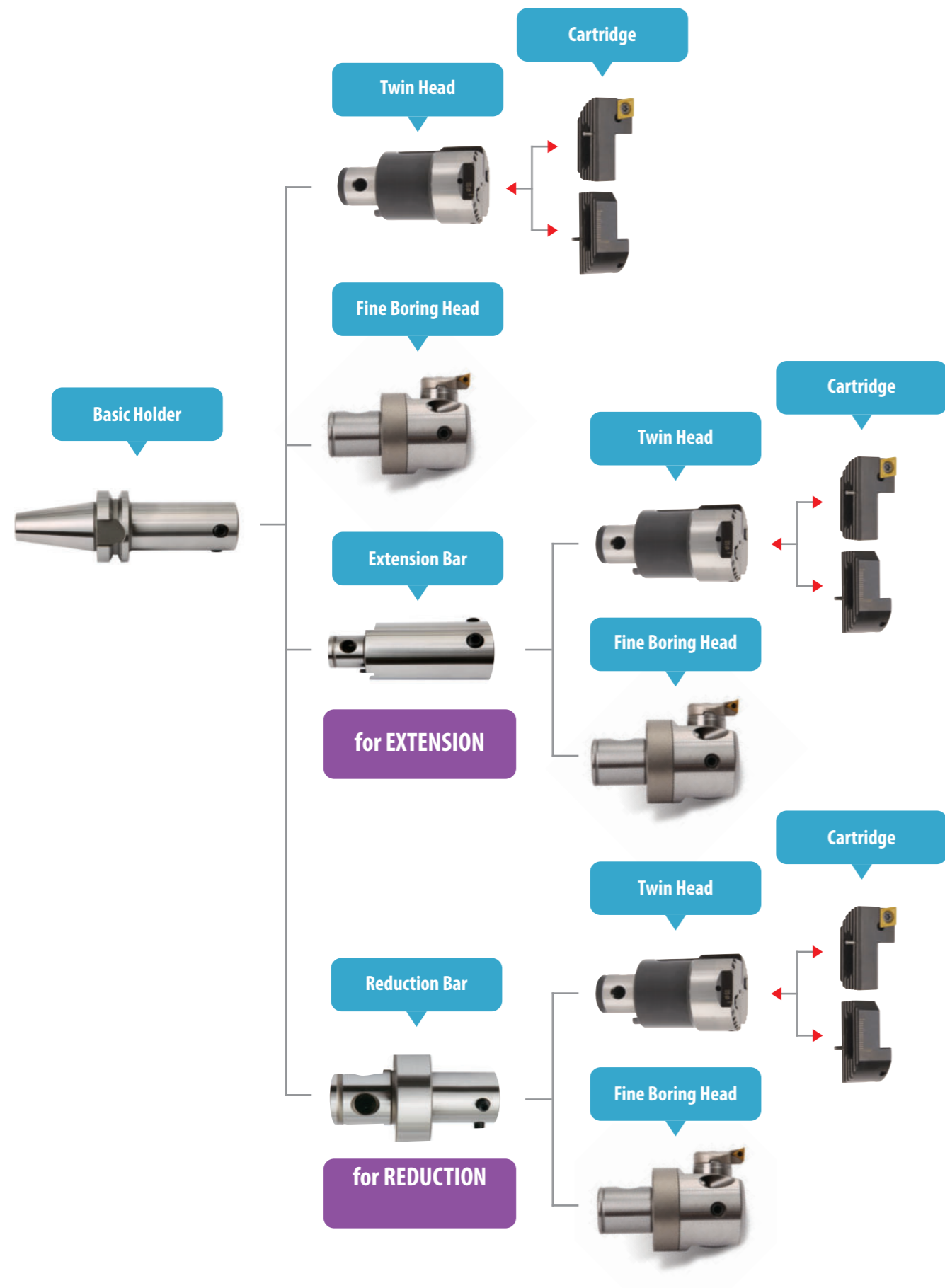


FINE & TWIN Boring Bar (Small Bore)



FINE & TWIN Boring Bar (Small Bore)

Fine Boring Range : 20mm~153mm



FEATURE

- Excellent roughness of boring surface by precise boring
- Precise boring range adjustment by adjustment Dial with 1/100mm unit
- Ease to adjust length by employing modular system to use extension bar with various size
- Double rigid fixing of extension bar with
 - Side locking
 - Fixing pin inside
- Design to use insert conforming to ISO standard
- **Basic Holder, Extension Bar and Reduction Bar interchangeable between Fine Boring Bar and Twin Edge Boring Bar**

Twin Boring Range : 25mm~156mm

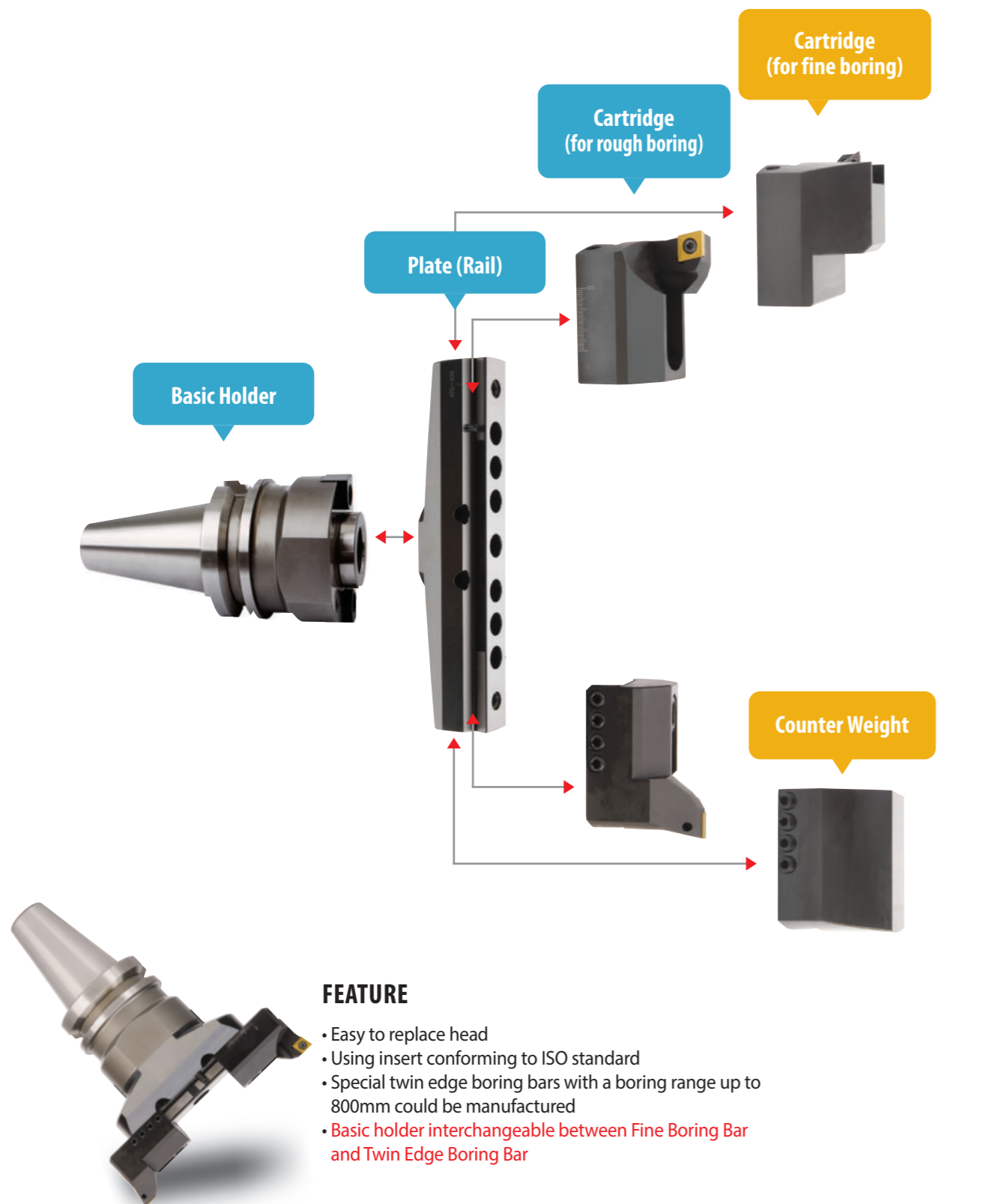


FEATURE

- Easy to replace head
- Extension Bar : Adjusting length according to machining conditions
- Reduction Bar : Adjusting boring range according to machining conditions
- Precision of extension, reduction, and repeatability of assembling and disassembling of Boring Head ; $\leq 0.002\text{mm}$
- Using insert conforming to ISO standard
- **Basic Holder, Extension Bar and Reduction Bar interchangeable between Fine Boring Bar and Twin Edge Boring Bar**

FINE and TWIN EDGE BORING (Big Bore)

Boring Range : 153mm~576mm (FINE BORING BAR)
156mm~576mm (TWIN EDGE BORING BAR)



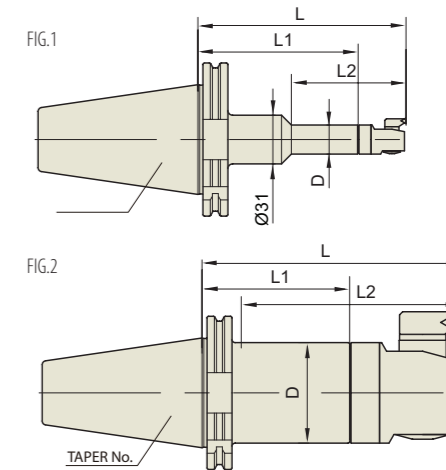
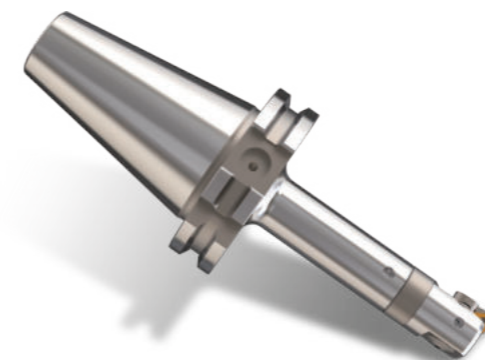
FEATURE

- Easy to replace head
- Using insert conforming to ISO standard
- Special twin edge boring bars with a boring range up to 800mm could be manufactured
- **Basic holder interchangeable between Fine Boring Bar and Twin Edge Boring Bar**

FINE BORING BAR (SMALL BORE)

DIN 69871-SK

FEINBOHRHALTER
ALÉSAGE PROFOND
BARRA DI ALESATURA FINE
BARRA DE MANDRINADO FINO



Unit : mm

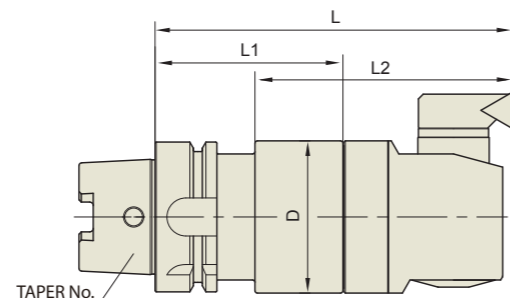
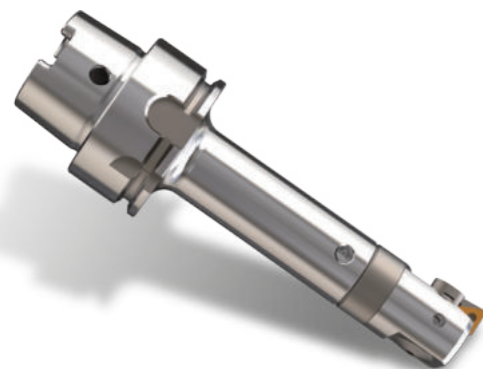
TAPER No.	MODEL No.	EDP No.	BORE RANGE (FRONT)	D	L	L1	L2	FIG.	WEIGHT (Kg)
40	SK40-BAH1-105	P2777767	20 - 26	19	104.5	72	73	2	
	SK40-BAH2-80	P2777768	25 - 33	24	78	42.5	48	2	
	SK40-BAH2-120	P2777769	25 - 33	24	118	82.5	88	2	
	SK40-BAH3-85	P2777770	32 - 42	31	84	44	53	2	
	SK40-BAH3-135	P2777771	32 - 42	31	134	94	103	2	
	SK40-BAH4-90	P2777772	41 - 54	39	90	43	58	2	
	SK40-BAH4-135	P2777773	41 - 54	39	135	88	103	2	
	SK40-BAH5-105	P2777774	53 - 70	50	105	48	73	2	
	SK40-BAH5-135	P2777775	53 - 70	50	135	79	103	2	
50	SK40-BAH6-135	P2777776	68 - 100	64	135	64	103	2	
	SK50-BAH1-135	P2777777	20 - 26	19	134.5	102	73	1	
	SK50-BAH2-90	P2777778	25 - 33	24	88	52.5	66	2	
	SK50-BAH2-150	P2777779	25 - 33	24	148	112.5	126	2	
	SK50-BAH3-95	P2777780	32 - 42	31	94	54	71	2	
	SK50-BAH3-165	P2777781	32 - 42	31	164	124	141	2	
	SK50-BAH4-105	P2777782	41 - 54	39	105	58	81	2	
	SK50-BAH4-165	P2777783	41 - 54	39	165	118	141	2	
	SK50-BAH4-225	P2777784	41 - 54	39	225	178	201	2	
	SK50-BAH5-120	P2777785	53 - 70	50	120	63	96	2	
	SK50-BAH5-165	P2777786	53 - 70	50	165	105	141	2	
	SK50-BAH5-240	P2777787	53 - 70	50	240	183	216	2	
	SK50-BAH5-285	P2777788	53 - 70	50	285	228	261	2	
	SK50-BAH6-165	P2777789	68 - 100	64	165	94	141	2	
	SK50-BAH6-240	P2777790	68 - 100	64	240	169	216	2	
SK50-BAH6-300	P2777791	68 - 100	64	300	229	276	2		
SK50-BAH7-210	P2777792	100 - 153	90	210	93	191	2		
SK50-BAH7-360	P2777793	100 - 153	90	360	243	341	2		

► Basic Holder, Extension Bar and Reduction Bar interchangeable between Fine Boring Bar and Twin Edge Boring Bar.

FINE BORING BAR (SMALL BORE)

FEINBOHRHALTER
ALÉSAGE PROFOND
BARRE DI ALESATURA FINE
BARRA DE MANDRINADO FINO

DIN 69893/
ISO 12164-1-HSK FORM A



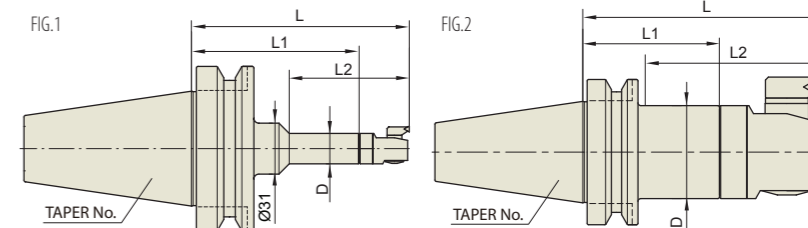
Unit : mm								
TAPER No.	MODEL No.	EDP No.	BORE RANGE (FRONT)	D	L	L1	L2	WEIGHT (Kg)
40A	HSK40A-BAH1-72.5	P2777736	20 - 26	19	105	72.5	73	
	HSK40A-BAH2-39.5	P2777737	25 - 33	24	75	39.5	44	
	HSK40A-BAH2-84.5	P2777738	25 - 33	24	120	84.5	89	
	HSK40A-BAH3-45	P2777739	32 - 42	31	85	45	57	
	HSK40A-BAH3-80	P2777740	32 - 42	31	120	80	92	
	HSK40A-BAH4-53	P2777741	41 - 54	39	100	53	-	
	HSK40A-BAH4-73	P2777742	41 - 54	39	120	73	-	
50A	HSK50A-BAH1-72.5	P2777743	20 - 26	19	105	72.5	65	
	HSK50A-BAH2-84.5	P2777744	25 - 33	24	117	84.5	80	
	HSK50A-BAH3-80	P2777745	32 - 42	31	120	80	82	
	HSK50A-BAH4-73	P2777746	41 - 54	39	120	73	76	
	HSK50A-BAH5-83	P2777747	53 - 70	50	140	83	-	
63A	HSK63A-BAH1-77.5	P2777748	20 - 26	19	110	77.5	73	
	HSK63A-BAH2-89.5	P2777749	25 - 33	24	125	89.5	88	
	HSK63A-BAH3-100	P2777750	32 - 42	31	140	100	103	
	HSK63A-BAH4-93	P2777751	41 - 54	39	140	93	103	
	HSK63A-BAH5-83	P2777752	53 - 70	50	140	83	105	
	HSK63A-BAH6-79	P2777753	68 - 100	64	150	79	-	
100A	HSK100A-BAH1-102.5	P2777754	20 - 26	19	135	102.5	73	
	HSK100A-BAH2-114.5	P2777755	25 - 33	24	150	114.5	107	
	HSK100A-BAH3-125	P2777756	32 - 42	31	165	125	122	
	HSK100A-BAH4-118	P2777757	41 - 54	39	165	118	122	
	HSK100A-BAH4-178	P2777758	41 - 54	39	225	178	182	
	HSK100A-BAH5-108	P2777759	53 - 70	50	165	108	122	
	HSK100A-BAH5-183	P2777760	53 - 70	50	240	183	197	
	HSK100A-BAH5-228	P2777761	53 - 70	50	285	228	242	
	HSK100A-BAH6-94	P2777762	68 - 100	64	165	94	122	
	HSK100A-BAH6-169	P2777763	68 - 100	64	240	169	197	
	HSK100A-BAH6-229	P2777764	68 - 100	64	300	229	257	
	HSK100A-BAH7-123	P2777765	100 - 153	90	210	123	181	
	HSK100A-BAH7-273	P2777766	100 - 153	90	360	273	331	

► Basic Holder, Extension Bar and Reduction Bar interchangeable between Fine Boring Bar and Twin Edge Boring Bar.

FINE BORING BAR (SMALL BORE)

FEINBOHRHALTER
ALÉSAGE PROFOND
BARRE DI ALESATURA FINE
BARRA DE MANDRINADO FINO

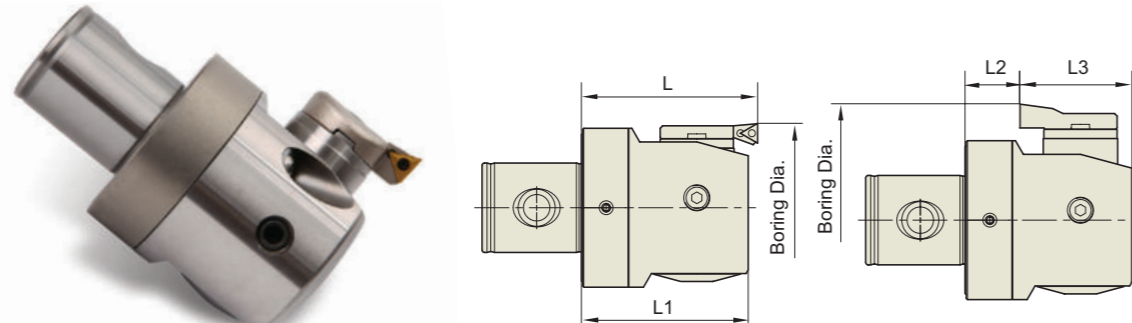
JIS B6339/
MAS 403-BT



Unit : mm										
TAPER No.	MODEL No.	EDP No.	BORE RANGE (FRONT)	D	L	L1	L2	FIG.	WEIGHT (Kg)	
30	BT30-BAH1-105	P2777701	20 - 26	19	104.5	72	73	1		
	BT30-BAH2-75	P2777702	25 - 33	24	73	37.5	48	2		
	BT30-BAH2-120	P2777703	25 - 33	24	118	82.5	93	2		
	BT30-BAH3-80	P2777704	32 - 42	31	79	39	53	2		
	BT30-BAH3-120	P2777705	32 - 42	31	119	79	93	2		
	BT30-BAH4-85	P2777706	41 - 54	39	85	38	58	2		
	BT30-BAH4-120	P2777707	41 - 54	39	120	73	93	2		
	BT30-BAH5-120	P2777708	53 - 70	50	120	63	93	2		
	BT40-BAH1-105	P2777709	20 - 26	19	104.5	72	73	2		
	BT40-BAH2-80	P2777710	25 - 33	24	78	42.5	48	2		
40	BT40-BAH2-120	P2777711	25 - 33	24	118	82.5	88	2		
	BT40-BAH3-85	P2777712	32 - 42	31	84	44	53	2		
	BT40-BAH3-135	P2777713	32 - 42	31	134	94	103	2		
	BT40-BAH4-90	P2777714	41 - 54	39	90	43	58	2		
	BT40-BAH4-135	P2777715	41 - 54	39	135	88	103	2		
	BT40-BAH5-105	P2777716	53 - 70	50	105	48	73	2		
	BT40-BAH5-135	P2777717	53 - 70	50	135	79	103	2		
	BT40-BAH6-135	P2777718	68 - 100	64	135	64	103	2		
	BT50-BAH1-135	P2777719	20 - 26	19	134.5	102	73	1		
	BT50-BAH2-90	P2777720	25 - 33	24	88	52.5	47	2		
50	BT50-BAH2-150	P2777721	25 - 33	24	148	112.5	107	2		
	BT50-BAH3-95	P2777722	32 - 42	31	94	54	52	2		
	BT50-BAH3-165	P2777723	32 - 42	31	164	124	122	2		
	BT50-BAH4-105	P2777724	41 - 54	39	105	58	62	2		
	BT50-BAH4-165	P2777725	41 - 54	39	165	118	122	2		
	BT50-BAH4-225	P2777726	41 - 54	39	225	178	182	2		
	BT50-BAH5-120	P2777727	53 - 70	50	120	63	77	2		
	BT50-BAH5-165	P2777728	53 - 70	50	165	108	122	2		
	BT50-BAH5-240	P2777729	53 - 70	50	240	183	197	2		
	BT50-BAH5-285	P2777730	53 - 70	50	285	228	242	2		
	BT50-BAH6-165	P2777731	68 - 100	64	165	94	122	2		
	BT50-BAH6-240	P2777732	68 - 100	64	240	169	197	2		
	BT50-BAH6-300	P2777733	68 - 100	64	300	229	257	2		
	BT50-BAH7-180	P2777734	100 - 153	90	180	93	142	2		
BT50-BAH7-330	P2777735	100 - 153	90	330	243	292	2			

► Basic Holder, Extension Bar and Reduction Bar interchangeable between Fine Boring Bar and Twin Edge Boring Bar.

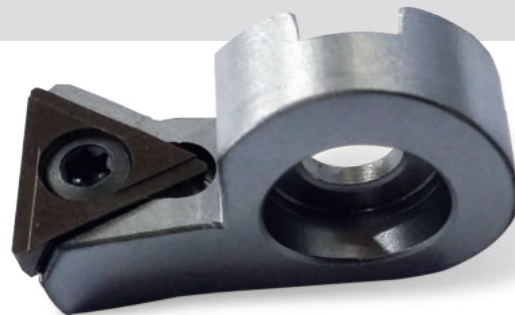
BORING HEAD
(For FINE BORING BAR-SMALL BORE)



Unit : mm

MODEL No.	EDP No.	CARTRIDGE	FRONT BORE			BACK BORE			INSERT	WEIGHT (Kg)
			BORE RANGE	L	L1	BORE RANGE	L2	L3		
FBH20	P2777869	FBH1-1	20 - 26	32.5	29.5	-	10.5	19	TP08	
FBH25	P2777870	FBH2-1	25 - 33	35.5	32.5	-	10.5	19	TP08	
FBH32	P2777871	FBH3-1	32 - 42	40	35	-	10	25	TP08	
FBH41	P2777872	FBH4-1	41 - 54	47	43	-	14	29	TP11	
FBH53	P2777873	FBH5-1	53 - 70	57	53	52 - 70	19	34	TP11	
FBH68	P2777874	FBH6-1	68 - 100	71	67.2	80 - 100	22	45.2	TP11	
FBH100	P2777875	FBH6-1	100 - 153	71	67.2	112 - 153	22	45.2	TP11	
FBH100-2	P2777876	FBH6-1	100 - 153	87	83.2	112 - 153	38	45.2	TP11	

FBH BITE

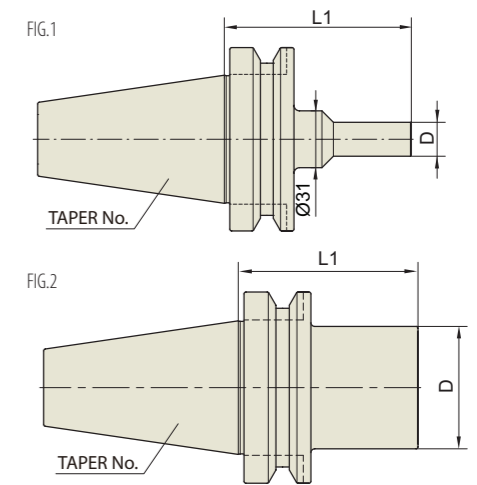


Unit : mm

MODEL No.	EDP No.	INSERT	BORE RANGE	CAMP BOLT	BORING HEAD
FBH20-B	P2802701	TPGT08	20 - 26	FTNA 0204	FBH20
FBH25-B	P2802702	TPGT08	25 - 33	FTNA 0204	FBH25
FBH32-B	P2802703	TPGT08	32 - 42	FTNA 0204	FBH32
FBH41-B	P2802704	TPGT1103	41 - 54	FTNA 0307	FBH41
FBH53-B	P2802705	TPGT1103	53 - 70	FTNA 0307	FBH53
FBH68-B	P2802706	TPGT1103	68 - 100	FTNA 0307	FBH68
FBH100-B	P2802707	TPGT1103	100 - 153	FTNA 0307	FBH100
FBH100-2B	P2802708	TPGT1103	100 - 560	FTNA 0307	FBH100

BASIC HOLDER
(For FINE and TWIN EDGE BORING BAR - SMALL BORE)

JIS B6339/
MAS 403-BT

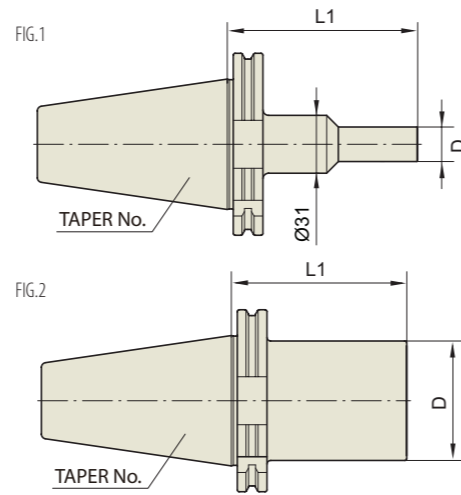
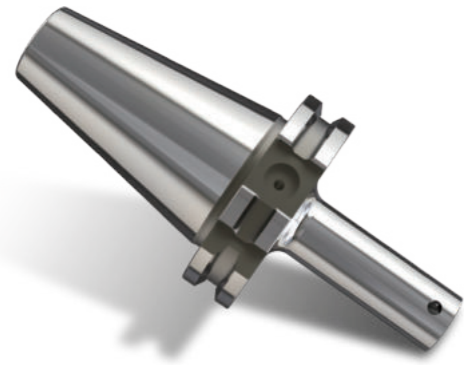


Unit : mm

TAPER No.	MODEL No.	EDP No.	D	L1	FIG.	WEIGHT (Kg)
30	BT30-SAS19-72	P2777794	19	72	1	
	BT30-SAS24-37.5	P2777795	24	37.5	2	
	BT30-SAS24-82.5	P2777796	24	82.5	2	
	BT30-SAS31-39	P2777797	31	39	2	
	BT30-SAS31-79	P2777798	31	79	2	
	BT30-SAS39-38	P2777799	39	38	2	
	BT30-SAS39-73	P2777800	39	73	2	
40	BT30-SAS50-63	P2777801	50	63	2	
	BT40-SAS19-72	P2777802	19	72	2	
	BT40-SAS24-42.5	P2777803	24	42.5	2	
	BT40-SAS24-82.5	P2777804	24	82.5	2	
	BT40-SAS31-44	P2777805	31	44	2	
	BT40-SAS31-94	P2777806	31	94	2	
	BT40-SAS39-43	P2777807	39	43	2	
	BT40-SAS39-88	P2777808	39	88	2	
	BT40-SAS50-48	P2777809	50	48	2	
	BT40-SAS50-79	P2777810	50	79	2	
50	BT40-SAS64-64	P2777811	64	64	2	
	BT50-SAS19-102	P2777812	19	102	1	
	BT50-SAS24-52.5	P2777813	24	52.5	2	
	BT50-SAS24-112.5	P2777814	24	112.5	2	
	BT50-SAS31-54	P2777815	31	54	2	
	BT50-SAS31-124	P2777816	31	124	2	
	BT50-SAS39-58	P2777817	39	58	2	
	BT50-SAS39-118	P2777818	39	118	2	
	BT50-SAS39-178	P2777819	39	178	2	
	BT50-SAS50-63	P2777820	50	63	2	
	BT50-SAS50-108	P2777821	50	108	2	
	BT50-SAS50-183	P2777822	50	183	2	
	BT50-SAS50-228	P2777823	50	228	2	
BT50-SAS64-94	P2777824	64	94	2		
BT50-SAS64-169	P2777825	64	169	2		
BT50-SAS64-229	P2777826	64	229	2		
BT50-SAS90-93	P2777827	90	93	2		
BT50-SAS90-243	P2777828	90	243	2		

BASIC HOLDER

(For FINE and TWIN EDGE BORING BAR - SMALL BORE)

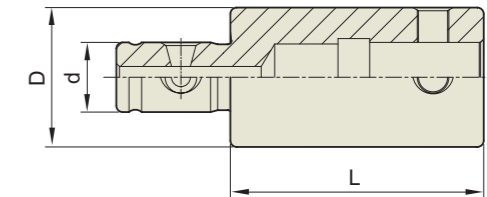
DIN 69871-SK


Unit : mm

TAPER No.	MODEL No.	EDP No.	D	L1	FIG.	WEIGHT (Kg)
40	SK40-SAS19-72	P2777829	19	72	2	
	SK40-SAS24-42.5	P2777830	24	42.5	2	
	SK40-SAS24-82.5	P2777831	24	82.5	2	
	SK40-SAS31-44	P2777832	31	44	2	
	SK40-SAS31-94	P2777833	31	94	2	
	SK40-SAS39-43	P2777834	39	43	2	
	SK40-SAS39-88	P2777835	39	88	2	
	SK40-SAS50-48	P2777836	50	48	2	
	SK40-SAS50-79	P2777837	50	79	2	
	SK40-SAS64-64	P2777838	64	64	2	
50	SK50-SAS19-102	P2777839	19	102	1	
	SK50-SAS24-52.5	P2777840	24	52.5	2	
	SK50-SAS24-112.5	P2777841	24	112.5	2	
	SK50-SAS31-54	P2777842	31	54	2	
	SK50-SAS31-124	P2777843	31	124	2	
	SK50-SAS39-58	P2777844	39	58	2	
	SK50-SAS39-118	P2777845	39	118	2	
	SK50-SAS39-178	P2777846	39	178	2	
	SK50-SAS50-63	P2777847	50	63	2	
	SK50-SAS50-105	P2777848	50	105	2	
	SK50-SAS50-183	P2777849	50	183	2	
	SK50-SAS50-228	P2777850	50	228	2	
	SK50-SAS64-94	P2777851	64	94	2	
	SK50-SAS64-169	P2777852	64	169	2	
	SK50-SAS64-229	P2777853	64	229	2	
	SK50-SAS90-93	P2777854	90	93	2	
	SK50-SAS90-243	P2777855	90	243	2	

EXTENSION BAR

(For FINE and TWIN EDGE BORING BAR - SMALL BORE)

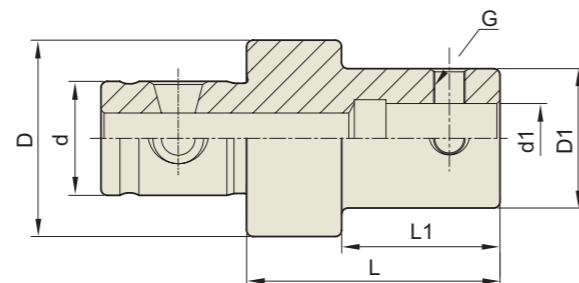


Unit : mm

MODEL No.	EDP No.	d	D	L	WEIGHT (Kg)
E-BAH1-20	P2777856	11	19	20	
E-BAH1-30	P2777857	11	19	30	
E-BAH2-30	P2777858	14	24	30	
E-BAH2-45	P2777859	14	24	45	
E-BAH3-30	P2777860	18	31	30	
E-BAH3-45	P2777861	18	31	45	
E-BAH4-45	P2777862	22	39	45	
E-BAH4-60	P2777863	22	39	60	
E-BAH5-60	P2777864	28	50	60	
E-BAH5-90	P2777865	28	50	90	
E-BAH6-60	P2777866	36	64	60	
E-BAH6-100	P2777867	36	64	100	
E-BAH7-105	P2777868	46	90	105	

REDUCTION BAR

(For FINE and TWIN EDGE BORING BAR-SMALL BORE)

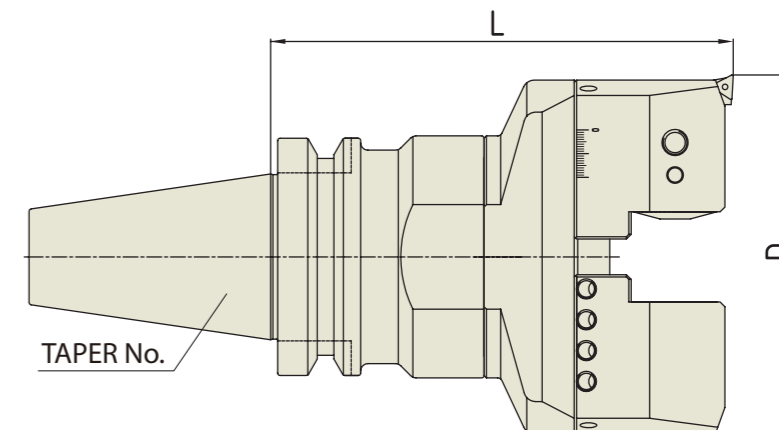


Unit : mm

MODEL No.	EDP No.	d	d1	D	D1	L	L1	G	WEIGHT (Kg)
R-SAS24-19-30	P2777912	14	11	24	19	30	20	M5	
R-SAS31-19-30	P2777913	18	11	31	19	30	20	M5	
R-SAS31-24-30	P2777914	18	14	31	24	30	20	M5	
R-SAS39-19-45	P2777915	22	11	39	19	45	25	M5	
R-SAS39-24-45	P2777916	22	14	39	24	45	25	M5	
R-SAS39-31-45	P2777917	22	18	39	31	45	25	M8	
R-SAS50-19-60	P2777918	28	11	50	19	60	35	M5	
R-SAS50-24-60	P2777919	28	14	50	24	60	35	M5	
R-SAS50-31-60	P2777920	28	18	50	31	60	35	M8	
R-SAS50-39-60	P2777921	28	22	50	39	60	35	M8	
R-SAS64-19-60	P2777922	36	11	64	19	60	35	M5	
R-SAS64-24-60	P2777923	36	14	64	24	60	35	M5	
R-SAS64-31-60	P2777924	36	18	64	31	60	35	M8	
R-SAS64-39-60	P2777925	36	22	64	39	60	35	M8	
R-SAS64-50-60	P2777926	36	28	64	50	60	35	M10	
R-SAS90-19-105	P2777927	46	11	90	19	105	75	M5	
R-SAS90-24-105	P2777928	46	14	90	24	105	75	M5	
R-SAS90-31-105	P2777929	46	18	90	31	105	75	M8	
R-SAS90-39-105	P2777930	46	22	90	39	105	75	M8	
R-SAS90-50-105	P2777931	46	28	90	50	105	75	M10	
R-SAS90-64-105	P2777932	46	36	90	64	105	75	M16	

FINE BORING BAR (BIG BORE)

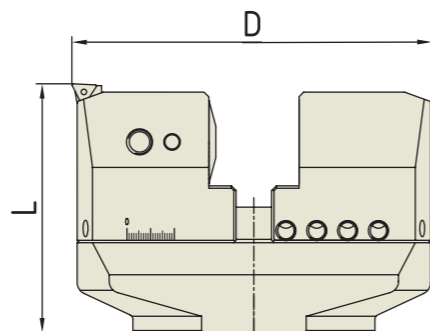
 FEINBOHRHALTER
 ALÉSAGE PROFOND
 BARRA DI ALESATURA FINE
 BARRA DE MANDRINADO FINO

 JIS B6339/
 MAS 403-BT


Unit : mm

MODEL No.	EDP No.	D (BORE RANGE)		BODY (BASIC HOLDER)	BORING HEAD	WEIGHT (Kg)
		Min.	Max.			
BT50-FBH153-195	P2777877	153	216	BT50-SAS102-90	FBH153S	
BT50-FBH153-265	P2777878			BT50-SAS102-160		
BT50-FBH153-315	P2777879			BT50-SAS102-210		
BT50-FBH153-365	P2777880			BT50-SAS102-260		
BT50-FBH216-195	P2777881	216	276	BT50-SAS102-90	FBH216S	
BT50-FBH216-265	P2777882			BT50-SAS102-160		
BT50-FBH216-315	P2777883			BT50-SAS102-210		
BT50-FBH216-365	P2777884			BT50-SAS102-260		
BT50-FBH276-195	P2777885	276	336	BT50-SAS102-90	FBH276S	
BT50-FBH276-265	P2777886			BT50-SAS102-160		
BT50-FBH276-315	P2777887			BT50-SAS102-210		
BT50-FBH276-365	P2777888			BT50-SAS102-260		
BT50-FBH336-195	P2777889	336	396	BT50-SAS102-90	FBH336S	
BT50-FBH336-265	P2777890			BT50-SAS102-160		
BT50-FBH336-315	P2777891			BT50-SAS102-210		
BT50-FBH336-365	P2777892			BT50-SAS102-260		
BT50-FBH396-195	P2777893	396	456	BT50-SAS102-90	FBH396S	
BT50-FBH396-265	P2777894			BT50-SAS102-160		
BT50-FBH396-315	P2777895			BT50-SAS102-210		
BT50-FBH396-365	P2777896			BT50-SAS102-260		
BT50-FBH456-195	P2777897	456	516	BT50-SAS102-90	FBH456S	
BT50-FBH456-265	P2777898			BT50-SAS102-160		
BT50-FBH456-315	P2777899			BT50-SAS102-210		
BT50-FBH456-365	P2777900			BT50-SAS102-260		
BT50-FBH516-195	P2777901	516	576	BT50-SAS102-90	FBH516S	
BT50-FBH516-265	P2777902			BT50-SAS102-160		
BT50-FBH516-315	P2777903			BT50-SAS102-210		
BT50-FBH516-365	P2777904			BT50-SAS102-260		

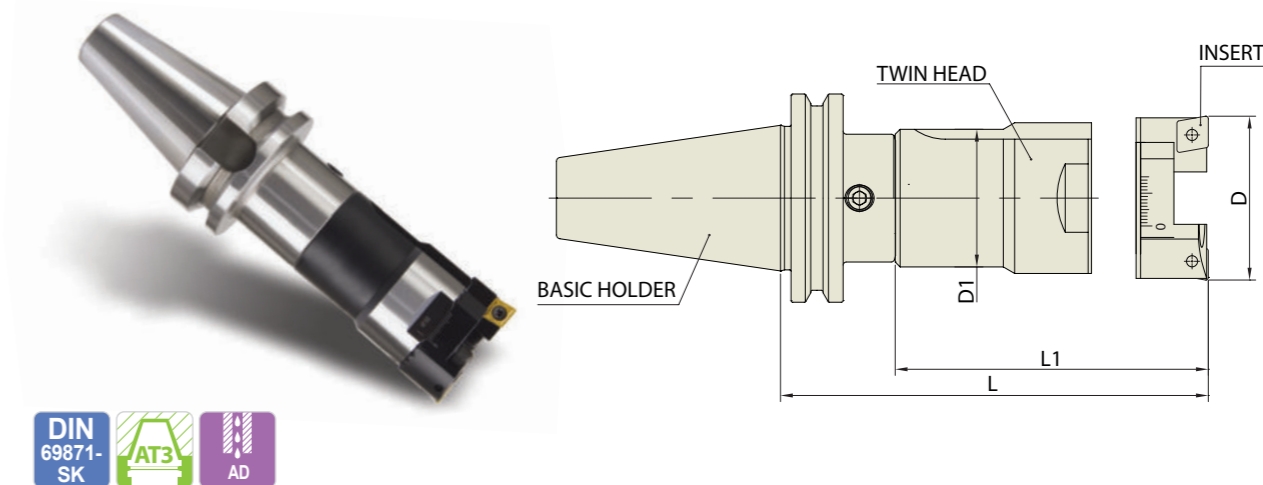
▶ Basic holder interchangeable between Fine Boring Bar and Twing Edge Boring Bar.

BORING HEAD
 (For FINE BORING BAR-BIG BORE)


MODEL No.	EDP No.	D (BORE RANGE)		L (HEIGHT)	WEIGHT (Kg)
		Min.	Max.		
FBH153S	P2777905	153	216	105	
FBH216S	P2777906	216	276	105	
FBH276S	P2777907	276	336	105	
FBH336S	P2777908	336	396	105	
FBH396S	P2777909	396	456	105	
FBH456S	P2777910	456	516	105	
FBH516S	P2777911	516	576	105	

SPARE PART							
BORING HEAD	PLATE	CARTRIDGE	CLAMPBOLT	COUNTER WEIGHT	WRENCH	CLAMP SCREW	T-WRENCH
FBH153S	PLA153	FTP11	M10*30L	FBB153	L-W 5	FTNA0307	T7
FBH216S	PLA216						
FBH276S	PLA276						
FBH336S	PLA336						
FBH396S	PLA396						
FBH456S	PLA456						
FBH516S	PLA516						

TWIN EDGE BORING BAR (SMALL BORE)
DIN 69871-SK

 DOPPELSCHNEIDER - BOHRSTANGE
 BARRE D'ALÉSAGE À 2 ARÊTES DE COUPE
 PORTA TESTINE BILAMA
 BARRAS DE MANDRINAR DE DOS PLACAS


MODEL No.	EDP No.	D (BORE RANGE)	L	BASIC HOLDER	TWIN HEAD	D1	L1	INSERT	WEIGHT (Kg)
		Min. - Max.							
SK40-TBH25-122	P2779663	25 - 34	122	SK40-SAS19-72	TBH25-50	22	50	CCMT060204	
SK40-TBH34-104	P2779664	34 - 50	104	SK40-SAS31-44	TBH34-60	31	60	CCMT060204	
SK40-TBH34-154	P2779665	34 - 50	154	SK40-SAS31-94	TBH34-60	31	60	CCMT060204	
SK40-TBH50-123	P2779666	50 - 76	123	SK40-SAS39-43	TBH50-80	42	80	CCMT09T308	
SK40-TBH50-168	P2779667	50 - 76	168	SK40-SAS39-88	TBH50-80	42	80	CCMT09T308	
SK40-TBH76-174	P2779668	76 - 116	174	SK40-SAS64-64	TBH76-110	65	110	CCMT120408	
SK50-TBH25-152	P2779669	25 - 34	152	SK50-SAS19-102	TBH25-50	22	50	CCMT060204	
SK50-TBH34-114	P2779670	34 - 50	114	SK50-SAS31-54	TBH34-60	31	60	CCMT060204	
SK50-TBH34-184	P2779671	34 - 50	184	SK50-SAS31-124	TBH34-60	31	60	CCMT060204	
SK50-TBH50-138	P2779672	50 - 76	138	SK50-SAS39-58	TBH50-80	42	80	CCMT09T308	
SK50-TBH50-198	P2779673	50 - 76	198	BT50-SAS39-118	TBH50-80	42	80	CCMT09T308	
SK50-TBH50-258	P2779674	50 - 76	258	BT50-SAS39-178	TBH50-80	42	80	CCMT09T308	
SK50-TBH76-204	P2779675	76 - 116	204	BT50-SAS64-94	TBH76-110	65	110	CCMT120408	
SK50-TBH76-279	P2779676	76 - 116	279	BT50-SAS64-169	TBH76-110	65	110	CCMT120408	
SK50-TBH76-339	P2779677	76 - 116	339	BT50-SAS64-229	TBH76-110	65	110	CCMT120408	
SK50-TBH116-198	P2779678	116 - 156	198	BT50-SAS90-93	TBH116-105	90	105	CCMT120408	
SK50-TBH116-348	P2779679	116 - 156	348	BT50-SAS90-243	TBH116-105	90	105	CCMT120408	

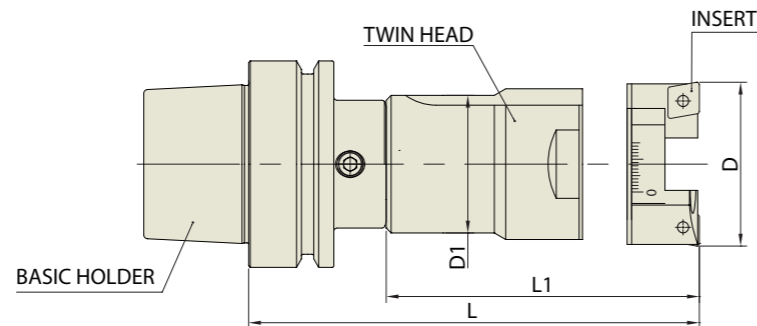
Unit : mm

▶ Basic holder interchangeable between Fine Boring Bar and Twing Edge Boring Bar.

TWIN EDGE BORING BAR (SMALL BORE)

DOPPELSCHNEIDER - BOHRSTANGE
 BARRE D'ALÉSAGE À 2 ARÊTES DE COUPE
 PORTA TESTINE BILAMA
 BARRAS DE MANDRINAR DE DOS PLACAS

**DIN 69893/
 ISO 12164-1-HSK FORM A**



Unit : mm

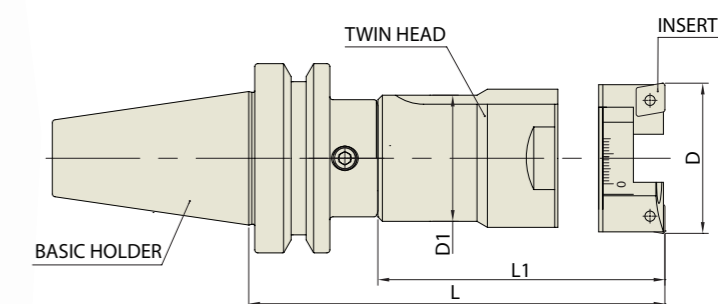
MODEL No.	EDP No.	D (BORERANGE)		L	BASIC HOLDER	TWIN HEAD	D1	L1	INSERT	WEIGHT (Kg)
		Min.	Max.							
HSK40A-TBH25-122.5	P2779642	25	34	122.5	HSK40A-SAS19-72.5	TBH25-50	22	50	CCMT060204	
HSK40A-TBH34-105	P2779643	34	50	105	HSK40A-SAS31-45	TBH34-60	31	60	CCMT060204	
HSK40A-TBH34-140	P2779644	34	50	140	HSK40A-SAS31-80	TBH34-60	31	60	CCMT060204	
HSK40A-TBH50-133	P2779645	50	76	133	HSK40A-SAS39-53	TBH50-80	42	80	CCMT09T308	
HSK40A-TBH50-153	P2779646	50	76	153	HSK40A-SAS39-73	TBH50-80	42	80	CCMT09T308	
HSK50A-TBH25-122.5	P2779647	25	34	122.5	HSK50A-SAS19-72.5	TBH25-50	22	50	CCMT060204	
HSK50A-TBH34-140	P2779648	34	50	140	HSK50A-SAS31-80	TBH34-60	31	60	CCMT060204	
HSK50A-TBH50-153	P2779649	50	76	153	HSK50A-SAS39-73	TBH50-80	42	80	CCMT09T308	
HSK63A-TBH25-127.5	P2779650	25	34	127.5	HSK63A-SAS19-77.5	TBH25-50	22	50	CCMT060204	
HSK63A-TBH34-160	P2779651	34	50	160	HSK63A-SAS31-100	TBH34-60	31	60	CCMT060204	
HSK63A-TBH50-173	P2779652	50	76	173	HSK63A-SAS39-93	TBH50-80	42	80	CCMT09T308	
HSK63A-TBH76-189	P2779653	76	116	189	HSK63A-SAS64-79	TBH76-110	65	110	CCMT120408	
HSK100A-TBH19-152.5	P2779654	25	34	152.5	HSK100A-SAS19-102.5	TBH25-50	22	50	CCMT060204	
HSK100A-TBH34-185	P2779655	34	50	185	HSK100A-SAS31-125	TBH34-60	31	60	CCMT060204	
HSK100A-TBH50-198	P2779656	50	76	198	HSK100A-SAS39-118	TBH50-80	42	80	CCMT09T308	
HSK100A-TBH50-258	P2779657	50	76	258	HSK100A-SAS39-178	TBH50-80	42	80	CCMT09T308	
HSK100A-TBH76-204	P2779658	76	116	204	HSK100A-SAS64-94	TBH76-110	65	110	CCMT120408	
HSK100A-TBH76-279	P2779659	76	116	279	HSK100A-SAS64-169	TBH76-110	65	110	CCMT120408	
HSK100A-TBH76-339	P2779660	76	116	339	HSK100A-SAS64-229	TBH76-110	65	110	CCMT120408	
HSK100A-TBH116-228	P2779661	116	156	228	HSK100A-SAS90-123	TBH116-105	90	105	CCMT120408	
HSK100A-TBH116-378	P2779662	116	156	378	HSK100A-SAS90-273	TBH116-105	90	105	CCMT120408	

► Basic holder interchangeable between Fine Boring Bar and Twing Edge Boring Bar.

TWIN EDGE BORING BAR (SMALL BORE)

DOPPELSCHNEIDER - BOHRSTANGE
 BARRE D'ALÉSAGE À 2 ARÊTES DE COUPE
 PORTA TESTINE BILAMA
 BARRAS DE MANDRINAR DE DOS PLACAS

**JIS B6339/
 MAS 403-BT**



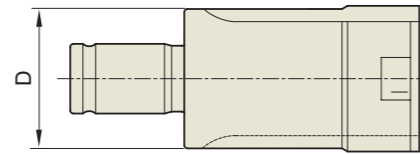
Unit : mm

MODEL No.	EDP No.	D (BORERANGE)		L	BASIC HOLDER	TWIN HEAD	D1	L1	INSERT	WEIGHT (Kg)
		Min.	Max.							
BT30-TBH25-122	P2779620	25	34	122	BT30-SAS19-72	TBH25-50	22	50	CCMT060204	
BT30-TBH34-99	P2779621	34	50	99	BT30-SAS31-39	TBH34-60	31	60	CCMT060204	
BT30-TBH34-139	P2779622	34	50	139	BT30-SAS31-79	TBH34-60	31	60	CCMT060204	
BT30-TBH50-118	P2779623	50	76	118	BT30-SAS39-38	TBH50-80	42	80	CCMT09T308	
BT30-TBH50-153	P2779624	50	76	153	BT30-SAS39-73	TBH50-80	42	80	CCMT09T308	
BT40-TBH25-122	P2779625	25	34	122	BT40-SAS19-72	TBH25-50	22	50	CCMT060204	
BT40-TBH34-104	P2779626	34	50	104	BT40-SAS31-44	TBH34-60	31	60	CCMT060204	
BT40-TBH34-154	P2779627	34	50	154	BT40-SAS31-94	TBH34-60	31	60	CCMT060204	
BT40-TBH50-123	P2779628	50	76	123	BT40-SAS39-43	TBH50-80	42	80	CCMT09T308	
BT40-TBH50-168	P2779629	50	76	168	BT40-SAS39-88	TBH50-80	42	80	CCMT09T308	
BT40-TBH76-174	P2779630	76	116	174	BT40-SAS64-64	TBH76-110	65	110	CCMT120408	
BT50-TBH25-152	P2779631	25	34	152	BT50-SAS19-102	TBH25-50	22	50	CCMT060204	
BT50-TBH34-114	P2779632	34	50	114	BT50-SAS31-54	TBH34-60	31	60	CCMT060204	
BT50-TBH34-184	P2779633	34	50	184	BT50-SAS31-124	TBH34-60	31	60	CCMT060204	
BT50-TBH50-138	P2779634	50	76	138	BT50-SAS39-58	TBH50-80	42	80	CCMT09T308	
BT50-TBH50-198	P2779635	50	76	198	BT50-SAS39-118	TBH50-80	42	80	CCMT09T308	
BT50-TBH50-258	P2779636	50	76	258	BT50-SAS39-178	TBH50-80	42	80	CCMT09T308	
BT50-TBH76-204	P2779637	76	116	204	BT50-SAS64-94	TBH76-110	65	110	CCMT120408	
BT50-TBH76-279	P2779638	76	116	279	BT50-SAS64-169	TBH76-110	65	110	CCMT120408	
BT50-TBH76-339	P2779639	76	116	339	BT50-SAS64-229	TBH76-110	65	110	CCMT120408	
BT50-TBH116-198	P2779640	116	156	198	BT50-SAS90-93	TBH116-105	90	105	CCMT120408	
BT50-TBH116-348	P2779641	116	156	348	BT50-SAS90-243	TBH116-105	90	105	CCMT120408	

► Basic holder interchangeable between Fine Boring Bar and Twing Edge Boring Bar.

BORING HEAD

(For TWIN EDGE BORING BAR-SMALL BORE)

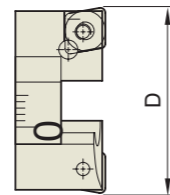


Unit : mm

MODEL No.	EDP No.	D	WEIGHT (Kg)
SAS22-TBH25-50	P2779529	22	
SAS31-TBH34-60	P2779530	31	
SAS42-TBH50-80	P2779531	42	
SAS65-TBH76-110	P2779532	65	
SAS84-TBH116-145	P2779533	84	

INSERT HOLDER

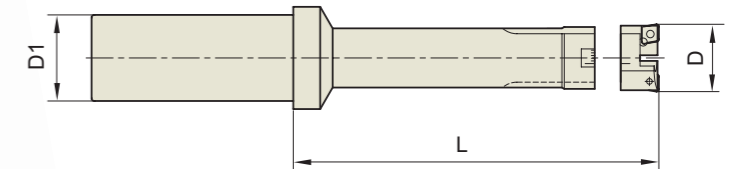
(CARTRIDGE For TWIN EDGE BORING BAR-SMALL BORE)



Unit : mm

MODEL No.	EDP No.	D (BORE RANGE)	WEIGHT (Kg)
		Min. - Max.	
TBH25-CC06	P2779534	25 - 34	
TBH34-CC06	P2779535	34 - 50	
TBH50-CC09	P2779536	50 - 76	
TBH76-CC12	P2779537	76 - 116	
TBH116-CC12	P2779538	116 - 156	

TWIN EDGE BORING BAR
STRAIGHT-ST

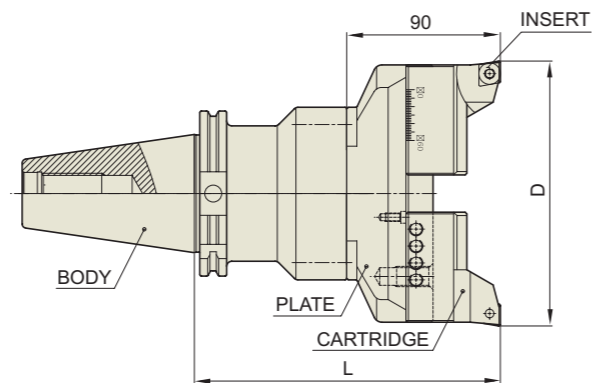
 DOPPELSCHNEIDER - BOHRSTANGE - GERADEAUS SCHAFT
 BARRE D'ALÉSAGE À 2 ARÊTES DE COUPE - TOUT DROIT TIGE
 PORTA TESTINE BILAMA - TIBIA DIRITTA
 BARRA S DE MANDRINAR DE DOS PLACAS - CANA RECTA


Unit : mm

TYPE	MODEL No.	EDP No.	D (BORE RANGE)	L	D1	INSERT	WEIGHT (Kg)
			Min. - Max.				
32	ST32-TBH25-125	P2779559	25 - 34	125	32	CCMT060200	
	ST32-TBH34-130	P2779560	34 - 50	130	32	CCMT060200	
	ST32-TBH50-155	P2779561	50 - 76	155	32	CCMT09T300	
40	ST40-TBH76-185	P2779562	76 - 116	185	40	CCMT120400	
42	ST42-TBH76-185	P2779563	76 - 116	185	42	CCMT120400	

TWIN EDGE BORING BAR (BIG BORE)
DIN 69871-SK

DOPPELSCHNEIDER - BOHRSTANGE
 BARRE D'ALÉSAGE À 2 ARÊTES DE COUPE
 PORTA TESTINE BILAMA
 BARRAS DE MANDRINAR DE DOS PLACAS



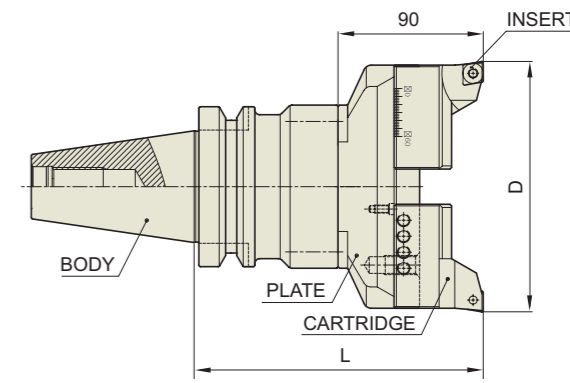
Unit : mm

MODEL No.	EDP No.	D (BORE RANGE)		L	BODY	PLATE	INSERT	WEIGHT (Kg)
		Min. - Max.						
SK50-TBH156-180	P2779585	156 - 216		180	SK50-SAS102-90	PLA156	CCMT120400	
SK50-TBH156-230	P2779586	156 - 216		230	SK50-SAS102-140	PLA156	CCMT120400	
SK50-TBH156-280	P2779587	156 - 216		280	SK50-SAS102-190	PLA156	CCMT120400	
SK50-TBH216-180	P2779588	216 - 276		180	SK50-SAS102-90	PLA216	CCMT120400	
SK50-TBH216-230	P2779589	216 - 276		230	SK50-SAS102-140	PLA216	CCMT120400	
SK50-TBH216-280	P2779590	216 - 276		280	SK50-SAS102-190	PLA216	CCMT120400	
SK50-TBH276-180	P2779591	276 - 336		180	SK50-SAS102-90	PLA276	CCMT120400	
SK50-TBH276-230	P2779592	276 - 336		230	SK50-SAS102-140	PLA276	CCMT120400	
SK50-TBH276-280	P2779593	276 - 336		280	SK50-SAS102-190	PLA276	CCMT120400	
SK50-TBH336-180	P2779594	336 - 396		180	SK50-SAS102-90	PLA336	CCMT120400	
SK50-TBH336-230	P2779595	336 - 396		230	SK50-SAS102-140	PLA336	CCMT120400	
SK50-TBH336-280	P2779596	336 - 396		280	SK50-SAS102-190	PLA336	CCMT120400	
SK50-TBH396-180	P2779597	396 - 456		180	SK50-SAS102-90	PLA396	CCMT120400	
SK50-TBH396-230	P2779598	396 - 456		230	SK50-SAS102-140	PLA396	CCMT120400	
SK50-TBH396-280	P2779599	396 - 456		280	SK50-SAS102-190	PLA396	CCMT120400	
SK50-TBH456-180	P2779600	456 - 516		180	SK50-SAS102-90	PLA456	CCMT120400	
SK50-TBH456-230	P2779601	456 - 516		230	SK50-SAS102-140	PLA456	CCMT120400	
SK50-TBH456-280	P2779602	456 - 516		280	SK50-SAS102-190	PLA456	CCMT120400	
SK50-TBH516-180	P2779603	516 - 576		180	SK50-SAS102-90	PLA516	CCMT120400	
SK50-TBH516-230	P2779604	516 - 576		230	SK50-SAS102-140	PLA516	CCMT120400	
SK50-TBH516-280	P2779605	516 - 576		280	SK50-SAS102-190	PLA516	CCMT120400	

- ▶ Upon request, special twin edge boring bars with a boring range up to 800mm could be manufactured and supplied.
- ▶ Basic holder interchangeable between Fine Boring Bar and Twing Edge Boring Bar.

TWIN EDGE BORING BAR (BIG BORE)
**JIS B6339/
 MAS 403-BT**

DOPPELSCHNEIDER - BOHRSTANGE
 BARRE D'ALÉSAGE À 2 ARÊTES DE COUPE
 PORTA TESTINE BILAMA
 BARRAS DE MANDRINAR DE DOS PLACAS



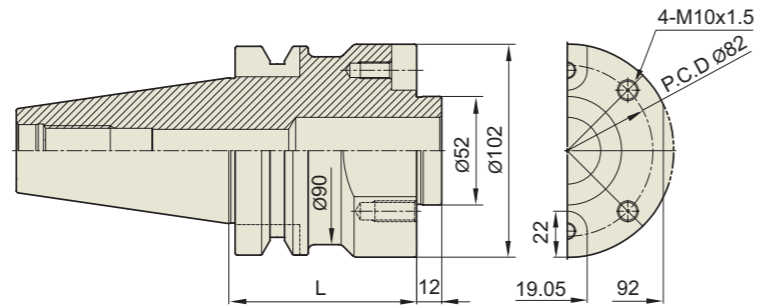
Unit : mm

MODEL No.	EDP No.	D (BORE RANGE)		L	BODY	PLATE	INSERT	WEIGHT (Kg)
		Min. - Max.						
BT50-TBH156-180	P2779564	156 - 216		180	BT50-SAS102-90	PLA156	CCMT120400	
BT50-TBH156-230	P2779565	156 - 216		230	BT50-SAS102-140	PLA156	CCMT120400	
BT50-TBH156-280	P2779566	156 - 216		280	BT50-SAS102-190	PLA156	CCMT120400	
BT50-TBH216-180	P2779567	216 - 276		180	BT50-SAS102-90	PLA216	CCMT120400	
BT50-TBH216-230	P2779568	216 - 276		230	BT50-SAS102-140	PLA216	CCMT120400	
BT50-TBH216-280	P2779569	216 - 276		280	BT50-SAS102-190	PLA216	CCMT120400	
BT50-TBH276-180	P2779570	276 - 336		180	BT50-SAS102-90	PLA276	CCMT120400	
BT50-TBH276-230	P2779571	276 - 336		230	BT50-SAS102-140	PLA276	CCMT120400	
BT50-TBH276-280	P2779572	276 - 336		280	BT50-SAS102-190	PLA276	CCMT120400	
BT50-TBH336-180	P2779573	336 - 396		180	BT50-SAS102-90	PLA336	CCMT120400	
BT50-TBH336-230	P2779574	336 - 396		230	BT50-SAS102-140	PLA336	CCMT120400	
BT50-TBH336-280	P2779575	336 - 396		280	BT50-SAS102-190	PLA336	CCMT120400	
BT50-TBH396-180	P2779576	396 - 456		180	BT50-SAS102-90	PLA396	CCMT120400	
BT50-TBH396-230	P2779577	396 - 456		230	BT50-SAS102-140	PLA396	CCMT120400	
BT50-TBH396-280	P2779578	396 - 456		280	BT50-SAS102-190	PLA396	CCMT120400	
BT50-TBH456-180	P2779579	456 - 516		180	BT50-SAS102-90	PLA456	CCMT120400	
BT50-TBH456-230	P2779580	456 - 516		230	BT50-SAS102-140	PLA456	CCMT120400	
BT50-TBH456-280	P2779581	456 - 516		280	BT50-SAS102-190	PLA456	CCMT120400	
BT50-TBH516-180	P2779582	516 - 576		180	BT50-SAS102-90	PLA516	CCMT120400	
BT50-TBH516-230	P2779583	516 - 576		230	BT50-SAS102-140	PLA516	CCMT120400	
BT50-TBH516-280	P2779584	516 - 576		280	BT50-SAS102-190	PLA516	CCMT120400	

- ▶ Upon request, special twin edge boring bars with a boring range up to 800mm could be manufactured and supplied.
- ▶ Basic holder interchangeable between Fine Boring Bar and Twing Edge Boring Bar.

BORING HEAD
(For FINE and TWIN EDGE BORING BAR-BIG BORE)

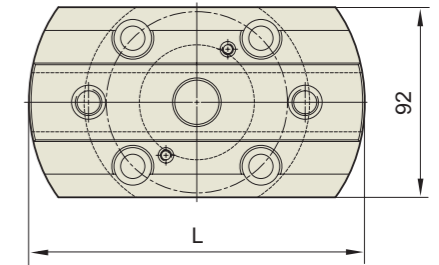
JIS B6339/
MAS 403-BT



Unit : mm

MODEL No.	EDP No.	L	WEIGHT (Kg)
BT50-SAS102-90	P2779606	90	
BT50-SAS102-140	P2779607	140	
BT50-SAS102-190	P2779608	190	

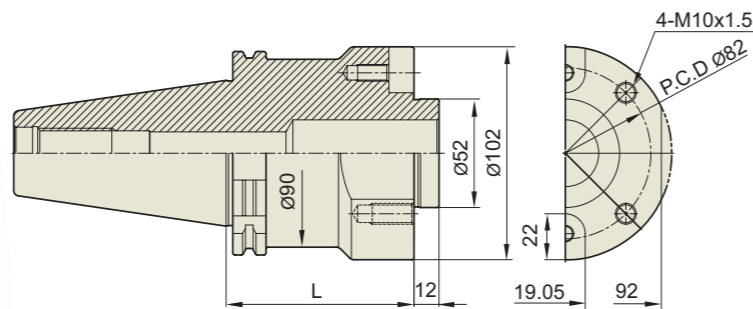
PLATE
(For TWIN EDGE BORING BAR-BIG BORE)



Unit : mm

PLATE	EDP No.	D	WEIGHT (Kg)
PLA156	P2779612	152	
PLA216	P2779613	212	
PLA276	P2779614	272	
PLA336	P2779615	332	
PLA396	P2779616	392	
PLA456	P2779617	452	
PLA516	P2779618	512	

DIN 69871-SK

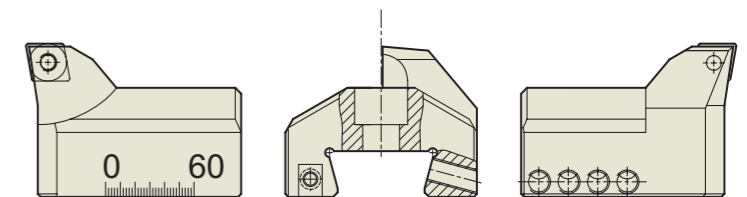
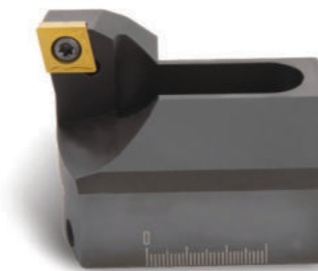


Unit : mm

MODEL No.	EDP No.	L	WEIGHT (Kg)
SK50-SAS102-90	P2779609	90	
SK50-SAS102-140	P2779610	140	
SK50-SAS102-190	P2779611	190	

► Basic holder interchangeable between Fine Boring Bar and Twing Edge Boring Bar.

INSERT HOLDER
(CARTRIDGE For TWIN EDGE BORING BAR-BIG BORE)



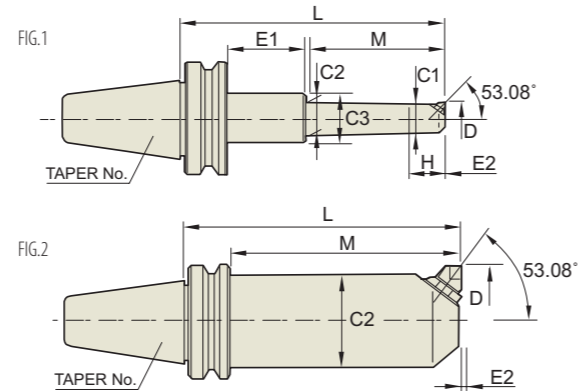
Unit : mm

CARTRIDGE (For Rough Cutting)	EDP No.	WEIGHT (Kg)
CN120	P2779619	

MICRO BORING BAR

MIKRO - BOHRSTANGE
 BARRE D'ALÉSAGE MICRO
 PORTA TESTINE MICROREGISTRABILI
 BARRAS DE MANDRINAR MICRO

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 MAS 403-BT



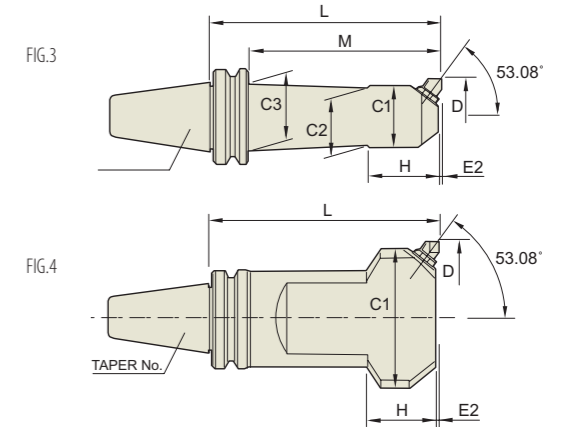
Unit : mm

TAPER No.	MODEL No.	EDP No.	D (BORE RANGE)		L	M	C1	C2	C3	H	E1	E2	UNIT	INSERT	FIG.	WEIGHT (Kg)
			Min.	Max.												
30	BT30-BCA13.5-105	P2779701	13.5	16	105	68	12	13.0	44	15	5	0.2	M1B2E/F	BRAZED TYPE	1	
	BT30-BCA14.5-105	P2779702	14.5	17	105	68	13	14.0	44	15	5	0.2	M1B2E/F	BRAZED TYPE	1	
	BT30-BCA16-105	P2779703	16	22.5	105	73	14	15	-	18	-	0.2	M1A2E/F	BRAZED TYPE	3	
	BT30-BCA19-120	P2779704	19	23	120	85	16	18	44	23	3	0.2	M2B2CC	CCGT0401	1	0.70
	BT30-BCA23-135	P2779705	23	29	135	105	19	22	-	24	-	0.2	M3B2TC	TBGT0601	3	0.70
	BT30-BCA29-150	P2779706	29	41	150	115	25	28	44	30	8	0.2	M3A2TC	TBGT0601	1	0.90
	BT30-BCA29-195	P2779707	29	41	195	115	25	28	44	30	53	0.2	M3A2TC	TBGT0601	1	
	BT30-BCA38-150	P2779708	38	49	150	115	33	35	55	41	8	0.2	M5B2TC	TCGT1102	1	1.40
	BT30-BCA38-210	P2779709	38	49	210	175	33	37	55	41	8	0.2	M5B2TC	TCGT1102	1	
	BT30-BCA46-150	P2779710	46	66	150	115	38	41	55	45	8	0.2	M5A2TC	TCGT1102	1	2.10
	BT30-BCA46-210	P2779711	46	66	210	175	38	45	55	45	8	0.2	M5A2TC	TCGT1102	1	
	BT30-BCA62-165	P2779712	62	87	165	135	51	-	-	-	-	0.2	M7A2TC	TCGT16T3	2	
40	BT40-BCA13.5-105	P2779713	13.5	16	105	68	12	13.0	44	15	5	0.2	M1B2E/F	BRAZED TYPE	1	
	BT40-BCA14.5-105	P2779714	14.5	17	105	68	13	14.0	44	15	5	0.2	M1B2E/F	BRAZED TYPE	1	
	BT40-BCA16-105	P2779715	16	22.5	105	73	14	15	-	18	-	0.2	M1A2E/F	BRAZED TYPE	3	
	BT40-BCA19-120	P2779716	19	23	120	85	16	18	44	23	3	0.2	M2B2CC	CCGT0401	1	1.50
	BT40-BCA23-135	P2779717	23	29	135	105	19	22	-	24	-	0.2	M3B2TC	TBGT0601	3	1.50
	BT40-BCA29-150	P2779718	29	41	150	115	25	28	44	30	8	0.2	M3A2TC	TBGT0601	1	1.50
	BT40-BCA29-195	P2779719	29	41	195	115	25	28	44	30	53	0.2	M3A2TC	TBGT0601	1	2.00
	BT40-BCA38-150	P2779720	38	49	150	115	33	35	55	41	8	0.2	M5B2TC	TCGT1102	1	1.80
	BT40-BCA38-210	P2779721	38	49	210	175	33	37	55	41	8	0.2	M5B2TC	TCGT1102	1	2.20
	BT40-BCA46-150	P2779722	46	66	150	115	38	41	55	45	8	0.2	M5A2TC	TCGT1102	1	2.10
	BT40-BCA46-210	P2779723	46	66	210	175	38	45	55	45	8	0.2	M5A2TC	TCGT1102	1	2.30
	BT40-BCA62-165	P2779724	62	87	165	135	51	-	-	-	-	0.2	M7A2TC	TCGT16T3	2	2.90
	BT40-BCA62-210	P2779725	62	87	210	180	51	-	-	-	-	0.2	M7A2TC	TCGT16T3	2	3.60
	BT40-BCA83-150	P2779726	83	108	150	120	63	-	-	-	-	0.2	M7A2TC	TCGT16T3	2	
	BT40-BCA83-210	P2779727	83	108	210	180	63	-	-	-	-	0.2	M7A2TC	TCGT16T3	2	
	BT40-BCA98-150	P2779728	98	142	150	120	83	-	-	85	-	0.2	M10A2TC	TCGT16T3	4	

MICRO BORING BAR

MIKRO - BOHRSTANGE
 BARRE D'ALÉSAGE MICRO
 PORTA TESTINE MICROREGISTRABILI
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 MAS 403-BT

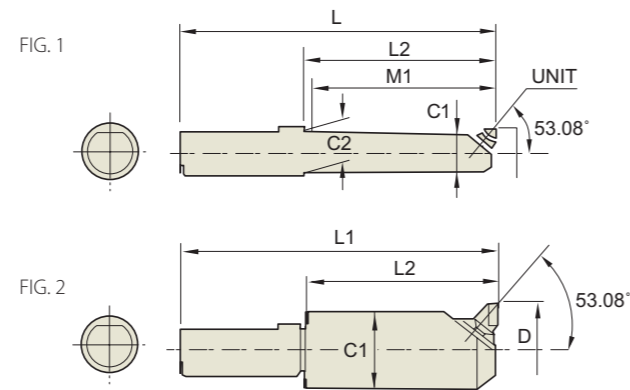


Unit : mm

TAPER No.	MODEL No.	EDP No.	D (BORE RANGE)		L	M	C1	C2	C3	H	E1	E2	UNIT	INSERT	FIG.	WEIGHT (Kg)
			Min.	Max.												
50	BT50-BCA13.5-120	P2779729	13.5	16	120	67	12	13	44	15	10	0.2	M1B2E/F	-	1	
	BT50-BCA13.5-195	P2779730	13.5	16	195	67	12	13	44	15	85	0.2	M1B2E/F	-	1	
	BT50-BCA14.5-120	P2779731	14.5	17	120	67	13	14	44	15	10	0.2	M1B2E/F	-	1	
	BT50-BCA14.5-195	P2779732	14.5	17	195	67	13	14	44	15	85	0.2	M1B2E/F	-	1	
	BT50-BCA16-120	P2779733	16	22.5	120	73	14	15	44	18	4	0.2	M1A2E/F	-	1	
	BT50-BCA16-195	P2779734	16	22.5	195	73	14	15	44	18	79	0.2	M1A2E/F	-	1	
	BT50-BCA19-135	P2779735	19	23	135	86	16	18	44	23	6	0.2	M2B2CC	CCGT0401	1	3.80
	BT50-BCA19-210	P2779736	19	23	210	86	16	18	44	23	81	0.2	M2B2CC	CCGT0401	1	
	BT50-BCA23-150	P2779737	23	29	150	105	19	22	44	24	2	0.2	M3B2TC	TBGT0601	1	3.90
	BT50-BCA23-225	P2779738	23	29	225	105	19	22	44	24	77	0.2	M3B2TC	TBGT0601	1	
	BT50-BCA29-165	P2779739	29	41	165	115	25	28	44	30	7	0.2	M3A2TC	TBGT0601	1	4.50
	BT50-BCA29-225	P2779740	29	41	225	165	25	28	44	30	67	0.2	M3A2TC	TBGT0601	1	
	BT50-BCA38-165	P2779741	38	49	165	115	33	35	55	41	7	0.2	M5B2TC	TCGT1102	1	
	BT50-BCA38-225	P2779742	38	49	225	172	33	37	55	41	10	0.2	M5B2TC	TCGT1102	1	5.00
	BT50-BCA46-165	P2779743	46	66	165	115	38	41	55	45	7	0.2	M5A2TC	TCGT1102	1	5.20
	BT50-BCA46-225	P2779744	46	66	225	182	38	-	-	45	-	0.2	M5A2TC	TCGT1102	3	
	BT50-BCA46-255	P2779745	46	66	255	206	38	-	55	45	6	0.2	M5A2TC	TCGT1102	1	5.70
	BT50-BCA62-180	P2779746	62	87	180	137	51	-	-	-	-	0.2	M7A2TC	TCGT16T3	2	7.00
	BT50-BCA62-240	P2779747	62	87	240	184	51	57	70	60	13	0.2	M7A2TC	TCGT16T3	1	7.60
	BT50-BCA62-330	P2779748	62	87	330	280	51	60	70	60	7	0.2	M7A2TC	TCGT16T3	1	9.50
	BT50-BCA83-165	P2779749	83	108	165	122	63	-	-	-	-	0.2	M7A2TC	TCGT16T3	2	
	BT50-BCA83-240	P2779750	83	108	240	190	63	62	90	95	7	0.2	M7A2TC	TCGT16T3	1	
	BT50-BCA83-345	P2779751	83	108	345	295	63	62	90	95	7	0.2	M7A2TC	TCGT16T3	1	
	BT50-BCA98-165	P2779752	98	142	165	122	83	-	-	-	-	0.2	M10A2TC	TCGT16T3	2	
	BT50-BCA98-240	P2779753	98	142	240	197	83	-	-	-	-	0.2	M10A2TC	TCGT16T3	2	
	BT50-BCA98-345	P2779754	98	142	345	302	83	92	-	85	-	0.2	M10A2TC	TCGT16T3	3	
	BT50-BCA132-210	P2779755	132	176	210	-	108	-	-	65	-	0.2	M10A2TC	TCGT16T3	4	
	BT50-BCA132-315	P2779756	132	176	315	-	108	-	-	65	-	0.2	M10A2TC	TCGT16T3	4	
	BT50-BCA166-225	P2779757	166	210	225	-	142	-	-	70	-	0.2	M10A2TC	TCGT16T3	4	
	BT50-BCA166-315	P2779758	166	210	315	-	142	-	-	70	-	0.2	M10A2TC	TCGT16T3	4	
BT50-BCA200-210	P2779759	200	244	210	-	176	-	-	75	-	0.2	M10A2TC	TCGT16T3	4		

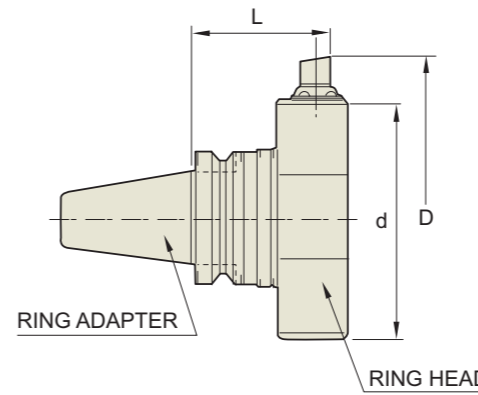
MICRO BORING BAR

MIKRO - BOHRSTANGE
 BARRE D'ALÉSAGE MICRO
 PORTA TESTINE MICROREGISTRABILI
 BARRAS DE MANDRINAR MICRO

STRAIGHT-ST


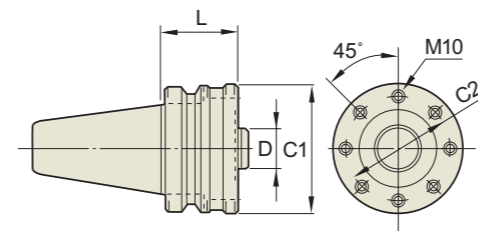
TYPE	MODEL No.	EDP No.	D (BORE RANGE)		L1	L2	M1	C1	C2	UNIT	FIG.	WEIGHT (Kg)
			Min.	Max.								
32	ST32-BCA13.5-75	P2779760	13.5	16	135	75	67	12	13	M1B2E/F	1	0.50
	ST32-BCA14.5-75	P2779761	14.5	17	145	75	67	12	14	M1B2E/F	1	0.50
	ST32-BCA16-90	P2779762	16	22.5	160	90	82	14	15	M1A2E/F	1	0.50
	ST32-BCA19-90	P2779763	19	23.0	160	90	82	16	18	M2B-2CC	1	0.50
	ST32-BCA23-120	P2779764	23	29.0	190	120	110	19	22	M3B-2TC	1	1.00
	ST32-BCA29-120	P2779765	29	41.0	190	120	110	25	28	M3A-2TC	1	1.00
	ST32-BCA38-120	P2779766	38	49.0	190	120	115	33	35	M5B-2TC	2	1.50
	ST32-BCA46-120	P2779767	46	66	190	120	115	38	-	M5A-2TC	2	1.50
	ST32-BCA62-120	P2779768	62	87.0	190	120	115	51	-	M7A-2TC	2	2.50
42	ST42-BCA13.5-85	P2779769	13.5	16	165	85	67	12	13	M1B2E/F	1	1.00
	ST42-BCA14.5-85	P2779770	14.5	17	165	85	67	12	14	M1B2E/F	1	1.00
	ST42-BCA16-100	P2779771	16	22.5	180	100	82	14	15	M1A2E/F	1	1.00
	ST42-BCA19-100	P2779772	19	23.0	180	100	82	16	18	M2B2E/F	1	1.00
	ST42-BCA23-120	P2779773	23	29.0	200	120	110	19	22	M3B-2TC	1	1.50
	ST42-BCA29-120	P2779774	29	41.0	200	120	110	25	28	M3A-2TC	1	1.50
	ST42-BCA38-130	P2779775	38	49.0	210	130	125	33	35	M5B-2TC	1	1.50
	ST42-BCA46-135	P2779776	46	66.0	215	135	130	38	44	M5A-2TC	1	1.50
	ST42-BCA62-135	P2779777	62	87.0	215	135	130	51	-	M7A-2TC	2	2.50
ST42-BCA83-150	P2779778	83	108	230	150	145	63	-	M7A-2TC	2	3.00	

Unit : mm

BIG SIZE MICRO CUT BORING BAR
**JIS B6339/
 MAS 403-BT**

BORING RING HOLDER

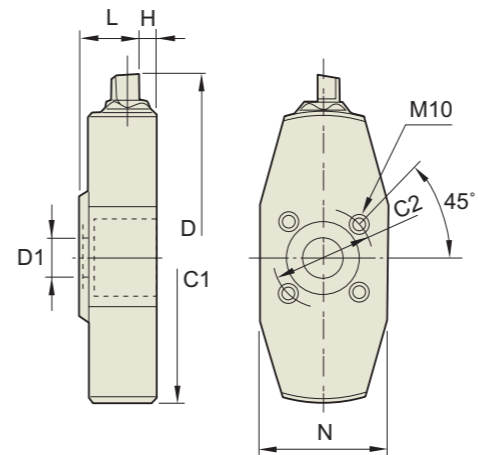
Unit : mm

MODEL No.	EDP No.	d	D	L
BT50-BRA140-105	P2779779	140	197	105
BT50-BRA140-165	P2779780	140	197	165
BT50-BRA191-105	P2779781	191	248	105
BT50-BRA191-165	P2779782	191	248	165
BT50-BRA242-105	P2779783	242	299	105
BT50-BRA242-165	P2779784	242	299	165
BT50-BRA293-105	P2779785	293	350	105
BT50-BRA293-165	P2779786	293	350	165
BT50-BRA344-105	P2779787	344	401	105
BT50-BRA344-165	P2779788	344	401	165
BT50-BRA395-105	P2779789	395	452	105
BT50-BRA395-165	P2779790	395	452	165


RING ADAPTER

Unit : mm

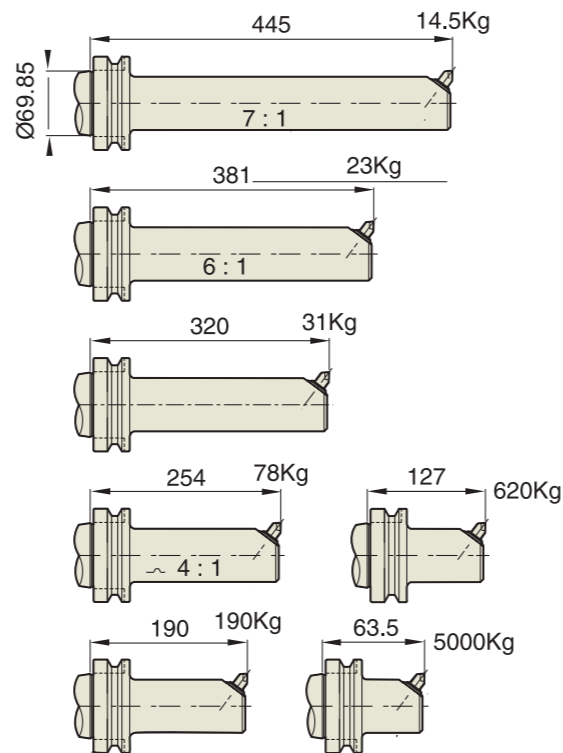
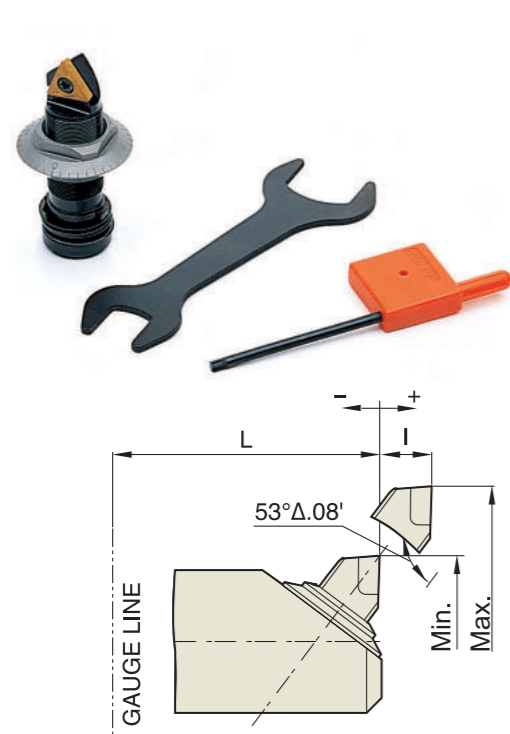
MODEL No.	EDP No.	D (h6)	L	C1	C2
BT50-RAA32-60	P2779791	32	60	102	82
BT50-RAA32-120	P2779792	32	120	102	82


RING HEAD

Unit : mm

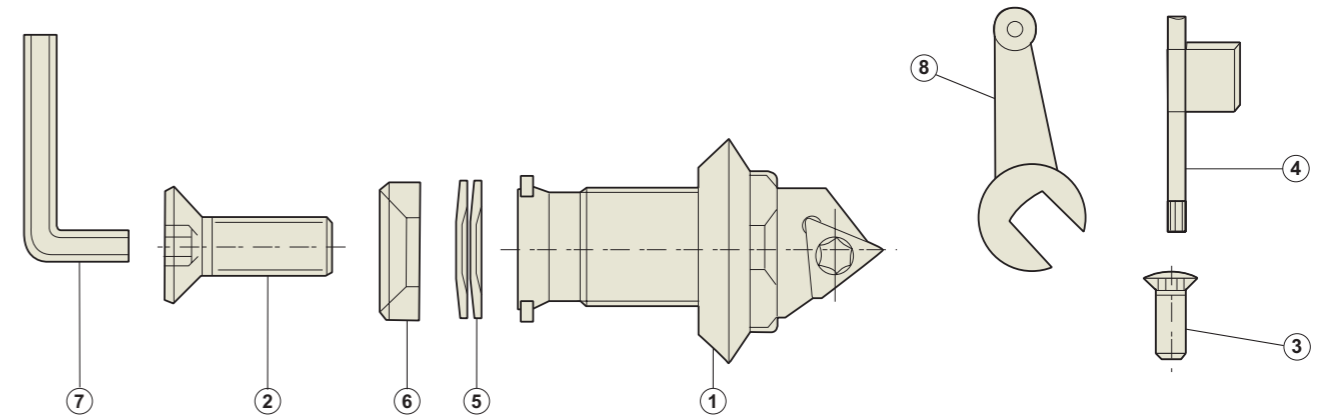
MODEL No.	EDP No.	D1 (h7)	D (BORE RANGE)		L	C1	C2	H	N	UNIT
			Min.	Max.						
RH32-BCA140	P2779793	32	140	197	45	102	82	14	-	M10A2TC
RH32-BCA191	P2779794	32	191	248	45	136	82	14	-	M10A2TC
RH32-BCA242	P2779795	32	242	299	45	184	82	14	103	M10A2TC
RH32-BCA293	P2779796	32	293	350	45	234	82	14	103	M10A2TC
RH32-BCA344	P2779797	32	344	401	45	284	82	14	103	M10A2TC
RH32-BCA395	P2779798	32	395	452	45	36	82	14	103	M10A2TC

Strength of BORING BAR and Comparison Table of MICRO UNITS

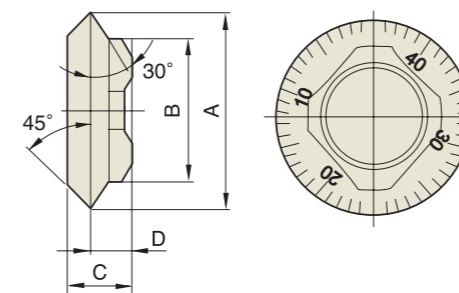


BORING BAR MODEL No.	BRAZED TYPE B EF		SCREW ON TYPE			INSERT SPEC.
	Min.	Max.	Min.	Max.	ΔL	
BCA19	M2B2	M2B2	-	-	-	CCGT0401
	19	23	-	-	-1.9	CCGT0401
BCA23	M3B2	M3B2	M3B2TC	M3B2TC	M3B2TC	TBGT060102
	23	29	24.9	30.9	-1.9	TBGT060102
BCA29	M3A2	M3A2	M3A2TC	M3A2TC	M3A2TC	TBGT060102
	29	41.8	30.9	43.8	-1.9	TBGT060102
BCA38	M5B2	M5B2	M5B2TC	M5B2TC	M5B2TC	TCGT110204
	38	49.2	40.9	52.1	-1.9	TCGT110204
BCA46	M5A2	M5A2	M5A2TC	M5A2TC	M5A2TC	TCGT110204
	46	66.6	48.9	69.5	-1.9	TCGT110204
BCA62	M7A2	M7A2	M7A2TC	M7A2TC	M7A2TC	TCGT16T304
	62	87.4	62	87.4	0	TCGT16T304
BCA83	M7A2	M7A2	M7A2TC	M7A2TC	M7A2TC	TCGT16T304
	83	108.4	83	108.4	0	TCGT16T304
BCA98	M10A2	M10A2	M10A2TC	M10A2TC	M10A2TC	TCGT16T304
	98	142.4	98	142.4	0	TCGT16T304
BCA132	M10A2	M10A2	M10A2TC	M10A2TC	M10A2TC	TCGT16T304
	132	176.4	132	176.4	0	TCGT16T304
BCA166	M10A2	M10A2	M10A2TC	M10A2TC	M10A2TC	TCGT16T304
	166	210.4	166	210.4	0	TCGT16T304
BCA200	M10A2	M10A2	M10A2TC	M10A2TC	M10A2TC	TCGT16T304
	200	244.4	200	244.4	0	TCGT16T304

MICRO UNIT SPARE PART



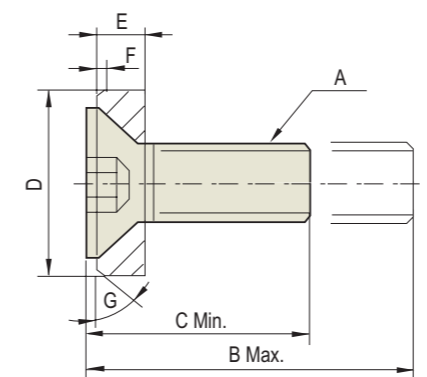
PART NAME	ORDER No. No.	M1A-B	M2A-B	M3A-B	M5A-B	M5A-B	M7A-B	M10A-B
1 DIAL NUT	Slant Angle	1-40	2-40	3-40	5-40	5-40	7-80	10-80
	Right Angle	1-50	2-50	3-50	5-50	5-50	7-100	10-100
2 CARTRIDGE BOLT	M-A	F-M3-0.5-8	F-M3-0.5-12	F-M4-0.7-15	F-M6-1.0-25	F-M6-1.0-25	F-M10-1.5-30	M12-1.75-50
	M-B	M-M3-0.5-6	M-M3-0.5-10	M-M4-0.7-12	M-M6-1.0-20	M-M6-1.0-20	M-M10-1.5-25	M12-1.75-35
3 INSERT SCREW		S1845L5	S1845L5	S2045L6	S2555L6	S2555L6	S4095L6	S4095L6
4 T-WRENCH		T6	T6	T6	T8	T8	T15	T15
5 SPRING WASHER			CB-2	CB-3	CB-5	CB-5	CB-7	CB-10
6 MOUNTING WASHER			2306	3306	5306	5306	7306	10306
7 L-WRENCH		WR-2	WR-2	WR-2.5	WR-4	WR-4	WR-6	WR-8
8 SPANNER		GS12	GS12	GS35	GS35	GS35	GS710	GS710



GRADUATED DIAL UNIT

Unit : mm

SIZE	A	B	C	D
M1	9.53	6.99	4.45	2.54
M2	12.7	9.53	5.08	3.30
M3	15.88	11.3	5.59	3.56
M5	25.4	19.05	8.76	4.83
M7	34.93	25.40	11.68	7.11
M10	44.45	34.93	13.84	7.49



LOCK SCREW AND WASHER

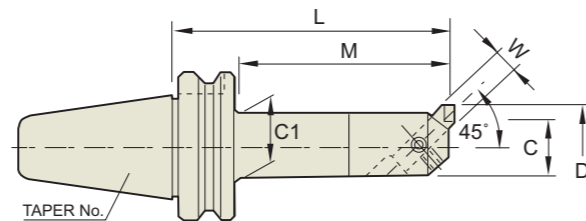
Unit : mm

SIZE	A	B	C	D	E	F	G
M1	M3	8	6	-	-	-	-
M2	M3	12	10	7.82	1.83	0.5	45°
M3	M4	15	12	10.9	2.46	1.0	45°
M5	M6	25	20	15.7	4.32	0.8	37°
M7	M10	30	25	23.7	6.35	1.30	37°
M10	M12	50	35	31.6	7.92	2.5	37°

SQUARE BORING BAR (45°)

VIERKANT - BOHRSTANGE
 BARRE D'ALÉSAGE CARRÉ
 BARRA PORTA TESTINE
 BARRAS DE MANDRINAR CUADRADAS

JIS B6339/
 MAS 403-BT



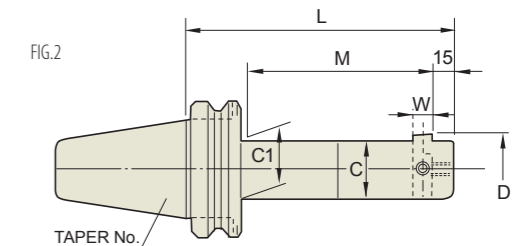
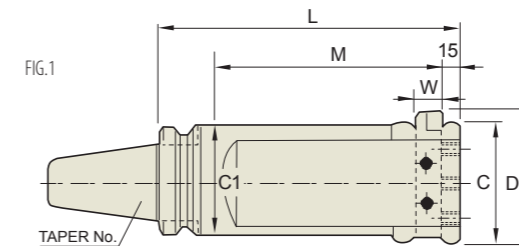
Unit : mm

TAPER No.	MODEL No.	EDP No.	D (BORE RANGE)		L	C	C1	W	M	WEIGHT (Kg)
			Min.	Max.						
30	BT30-BSA25-120	P2775401	25	38	120	20	22	8	90	1.00
	BT30-BSA30-135	P2775402	30	42	135	24	26	8	105	1.10
	BT30-BSA38-150	P2775403	38	52	150	30	33	10	120	1.40
	BT30-BSA42-150	P2775404	42	56	150	34	37	10	125	1.60
	BT30-BSA50-150	P2775405	50	65	150	40	44	13	125	1.80
40	BT40-BSA25-135	P2775406	25	38	135	20	22	8	108	1.30
	BT40-BSA30-165	P2775407	30	42	165	24	26	8	138	1.50
	BT40-BSA38-180	P2775408	38	52	180	30	33	10	153	1.80
	BT40-BSA42-210	P2775409	42	56	210	34	37	10	183	2.30
	BT40-BSA50-180	P2775410	50	65	180	40	44	13	153	2.40
	BT40-BSA50-225	P2775411	50	65	225	40	44	13	198	2.90
	BT40-BSA62-180	P2775412	62	90	180	50	54	16	153	3.20
	BT40-BSA62-240	P2775413	62	90	240	50	54	16	213	4.20
	BT40-BSA72-180	P2775414	72	110	180	60	63	19	153	4.40
	BT40-BSA72-240	P2775415	72	110	240	60	63	19	213	5.70
	BT40-BSA90-180	P2775416	90	125	180	75	63	19	153	5.40
	50	BT50-BSA25-135	P2775417	25	38	135	20	22	8	95
BT50-BSA30-165		P2775418	30	42	165	24	26	8	125	4.60
BT50-BSA38-180		P2775419	38	52	180	30	33	10	140	4.80
BT50-BSA42-210		P2775420	42	56	210	34	37	10	170	5.00
BT50-BSA50-180		P2775421	50	65	180	40	44	13	140	5.40
BT50-BSA50-240		P2775422	50	65	240	40	44	13	200	5.70
BT50-BSA62-195		P2775423	62	90	195	50	54	16	155	6.10
BT50-BSA62-270		P2775424	62	90	270	50	54	16	230	7.50
BT50-BSA72-195		P2775425	72	110	195	60	66	19	155	6.90
BT50-BSA72-285		P2775426	72	110	285	60	66	19	245	9.30
BT50-BSA90-210		P2775427	90	125	210	75	80	19	170	9.20
BT50-BSA90-300		P2775428	90	125	300	75	80	19	260	12.30
BT50-BSA105-195		P2775429	105	160	195	90	90	25	157	10.50
BT50-BSA105-285		P2775430	105	160	285	90	90	25	247	14.80

SQUARE BORING BAR (90°)

VIERKANT - BOHRSTANGE
 BARRE D'ALÉSAGE CARRÉ
 BARRA PORTA TESTINE
 BARRAS DE MANDRINAR CUADRADAS

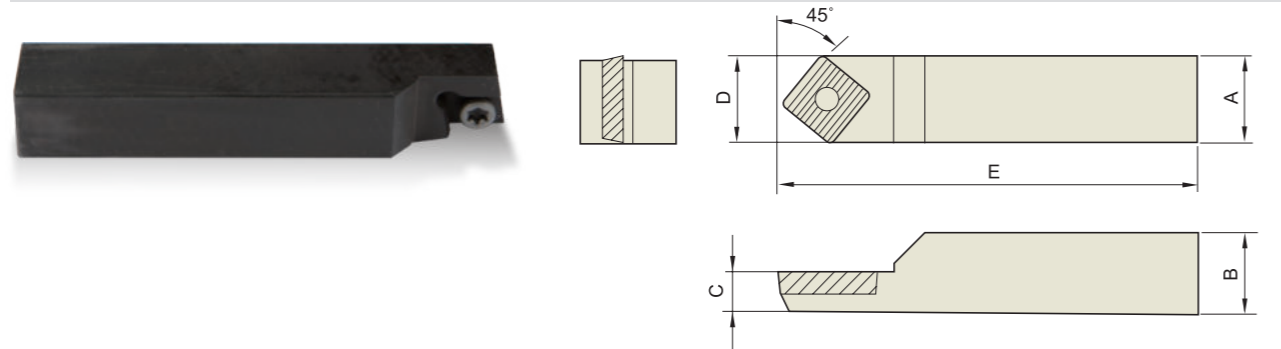
JIS B6339/
 MAS 403-BT



Unit : mm

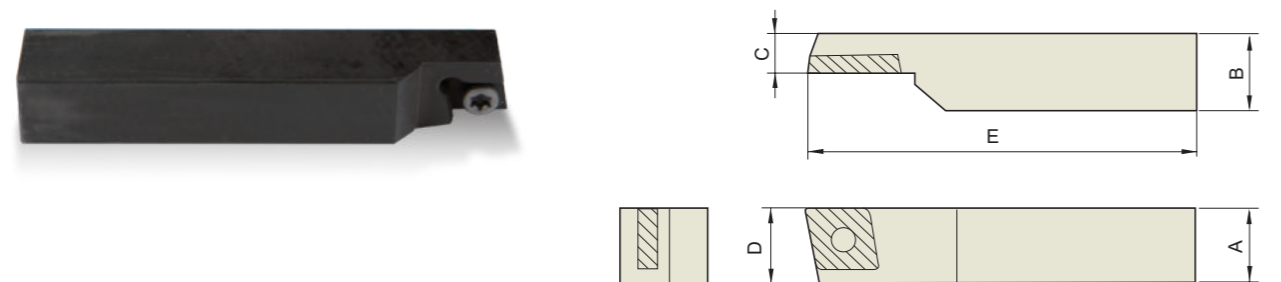
TAPER No.	MODEL No.	EDP No.	D (BORE RANGE)		L	C	C1	W	M	WEIGHT (Kg)	FIG.
			Min.	Max.							
30	BT30-BSB25-120	P2775431	25	50	120	20	22	8	90	1.10	1
	BT30-BSB38-150	P2775432	38	70	150	30	33	10	120	1.50	1
	BT30-BSB50-150	P2775433	50	90	150	40	44	13	125	2.20	1
40	BT40-BSB25-135	P2775434	25	50	135	20	22	8	108	1.30	1
	BT40-BSB38-180	P2775435	38	70	180	30	33	10	153	1.90	1
	BT40-BSB50-180	P2775436	50	90	180	40	44	13	153	2.60	1
	BT40-BSB50-225	P2775437	50	90	225	40	44	13	198	3.10	1
	BT40-BSB62-180	P2775438	62	115	180	50	56	16	153	3.40	1
	BT40-BSB62-225	P2775439	62	115	225	50	56	16	198	4.10	1
	BT40-BSB72-180	P2775440	72	135	180	60	66	19	153	4.70	1
	BT40-BSB72-225	P2775441	72	135	225	60	66	19	198	5.60	1
	BT40-BSB90-180	P2775442	90	150	180	75	80	19	153	5.70	1
	BT40-BSB90-225	P2775443	90	150	225	75	80	19	198	6.60	1
50	BT50-BSB25-135	P2775444	25	50	135	20	22	8	95	4.10	1
	BT50-BSB38-180	P2775445	38	70	180	30	33	10	140	4.80	1
	BT50-BSB50-180	P2775446	50	90	180	40	44	13	140	5.50	1
	BT50-BSB50-240	P2775447	50	90	240	40	44	13	200	5.70	1
	BT50-BSB62-195	P2775448	62	115	195	50	56	16	155	6.40	1
	BT50-BSB62-270	P2775449	62	115	270	50	56	16	230	7.90	1
	BT50-BSB72-195	P2775450	72	135	195	60	66	19	155	7.30	1
	BT50-BSB72-285	P2775451	72	135	285	60	66	19	245	9.60	1
	BT50-BSB90-210	P2775452	90	150	210	75	80	19	170	9.60	1
	BT50-BSB90-300	P2775453	90	150	300	75	80	19	260	12.60	1
	BT50-BSB105-195	P2775454	105	190	195	90	-	25	155	11.10	2
BT50-BSB105-285	P2775455	105	190	285	90	94	25	245	15.40	2	

SQUARE BITE



Unit : mm

SIZE	CLASSIFICATION	EDP No.	A	B	C	D	E	SCREW	WRENCH	INSERT
SBC08-45		P2775456	08	08	6.3	8.39	70	SSB-2506	T7	CCMT0602
SBC10-45		P2775457	10	10	7	10.39	70	SSB-2506	T7	CCMT0602
SBC13-45		P2775458	13	13	10	13.6	80	SSB-4009	T15	CCMT09T3
SBC16-45		P2775459	16	16	11	16.68	100	SSB-5012	T15	CCMT1204
SBC19-45		P2775460	19	19	11	19.68	100	SSB-5012	T15	CCMT1204
SBC25-45		P2775461	25	25	12.5	25.68	120	SSB-5012	T15	CCMT1204



Unit : mm

SIZE	CLASSIFICATION	EDP No.	A	B	C	D	E	SCREW	WRENCH	INSERT
SBC08-90		P2775462	08	08	6.3	8.4	70	SSB-2506	T7	CCMT0602
SBC10-90		P2775463	10	10	7	10.4	70	SSB-2506	T7	CCMT0602
SBC13-90		P2775464	13	13	10	13.6	80	SSB-4009	T15	CCMT09T3
SBC16-90		P2775465	16	16	11	16.7	100	SSB-5012	T15	CCMT1204
SBC19-90		P2775466	19	19	11	19.7	100	SSB-5012	T15	CCMT1204
SBC25-90		P2775467	25	25	12.5	25.7	120	SSB-5012	T15	CCMT1204