

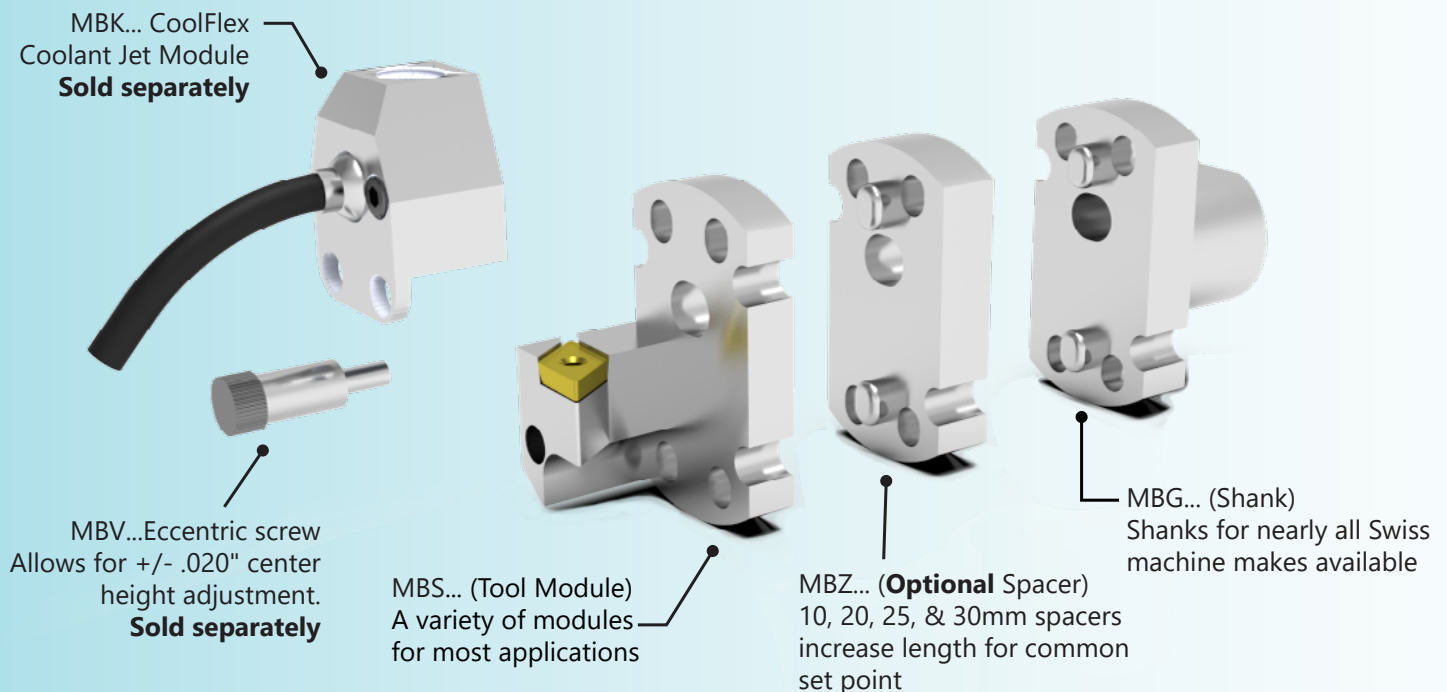


multidec[®] BACKTOOLS

Enable Turning Operations from ID Tool Positions & Sub Spindles

**Modular System Built For
ISO, TOP & CUT Series**

- Center Height Adjustment Ensures a Precise Setup
- Rigid Design Ensures Good Finish Results & Extended Tool Life
- Modular to Fit Variety of Inserts
- Complete Machining in a Single Operation



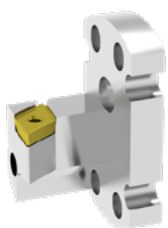
multidec® BACKTOOLS

multidec® BACKTOOL holders enable turning operations to be performed from an ID tool position and are ideal for performing turning operations on the sub-spindle of your machine. Each holder is center height adjustable and is modular to allow usage of a variety of 35, 55 & 80 degree ISO turning inserts; as well as multidec® TOP inserts and ALL multidec® CUT inserts.

Compatibility

The Backtool System consists of three components. Cross compatability is listed below as part of the nomenclature. For example: if it ends with02 match modules (Holder, Spacer and Shank) with02 and the same goes for ...05,06, ...90.

MBS Insert Holder



Insert Holder, Collet Holders and Tool Holders

MBS...02
MBS...05
MBS...06
MBS...90

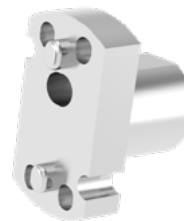
MBZ Spacer



Spacer (optional)

MBZ ST 02-...
MBZ ST 05-...
MBZ ST 06-...
MBZ ST 90-...

MBG Shank



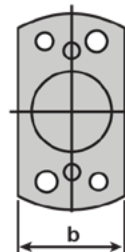
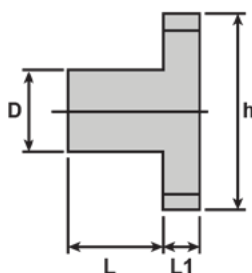
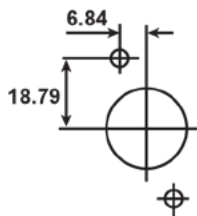
Basic Tool Holder

MBG...B02
MBG...B05
MBG...B06
MBG...B90*

*NOTE: there is no Y Axis adjustment on the B90. Use B90 Backtool modules with Y axis built into the tool position control or existing Y axis on the sub-spindle of the machine.

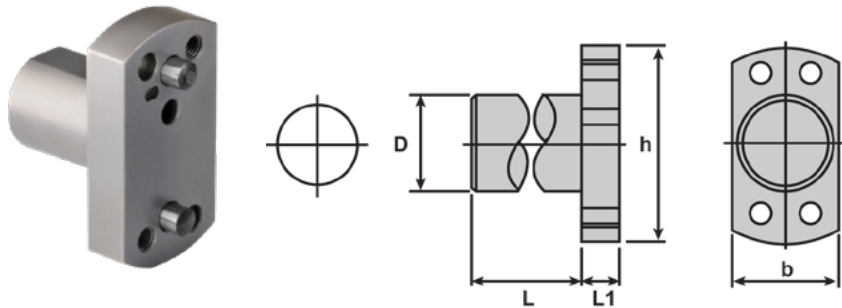
MBG 01...B02 Basic Tool Holder

Part No.	D	L	b	h	L ₁	Machine Type	Spacer	Insert Holder
MBG 01 2200 025 B02	22	25	28	52	10	Star SR10/SR20R ECAS 12/20, SR32J	MBZ ST 02...	MBS...02
MBG 01 2300 019 B02	23	19	28	49	16	Hanwha XD 12H	MBZ ST 02...	MBS...02



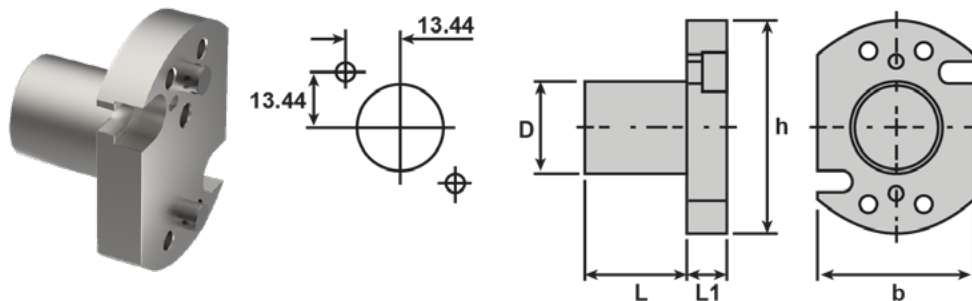
MBG 02...B02 Basic Tool Holder

Part No.	D	L	b	h	L ₁	Machine Type	Spacer	Insert Holder
MBG 02 1587 040 B02	5/8"	40	28	52	10	Citizen R07, Tsugami BS20B	MBZ ST 02...	MBS...02
MBG 02 1600 019 B02	16	19	28	52	10	Manurhim KMX 4/13	MBZ ST 02...	MBS...02
MBG 02 1600 020 B02	16	20	28	52	10	STAR RNC 16B	MBZ ST 02...	MBS...02
MBG 02 1905 060 B02	3/4"	60	28	52	10	CITIZEN C16, L20, M16	MBZ ST 02...	MBS...02
MBG 02 2000 030 B02	20	30	28	52	10	Tsugami S205	MBZ ST 02...	MBS...02
MBG 02 2000 040 B02	20	40	28	52	10	Gildemeister Sprint20, Hanwha SL 12H, Tsugami B012, B020, S205	MBZ ST 02...	MBS...02
MBG 02 2000 060 B02	20	60	28	52	10	Tsugami BS12, BS20	MBZ ST 02...	MBS...02
MBG 02 2000 070 B02	20	70	28	52	10	Tornos Gamma 20	MBZ ST 02...	MBS...02
MBG 02 2000 100 B02	20	100	28	52	10	Manhurin Swing 7-13, Tornos Deco (7/10, 13, 20), Citizen K16	MBZ ST 02...	MBS...02
MBG 02 2200 015 B02	22	15	28	52	10	Star SR10J	MBZ ST 02...	MBS...02
MBG 02 2200 070 B02	22	70	28	52	10	Star SA16, SB16, Tornos Delta 20, Gamma 20	MBZ ST 02...	MBS...02
MBG 02 2500 035 B02	25	35	28	52	10	Tsugami Piastra	MBZ ST 02...	MBS...02
MBG 02 2500 050 B02	25	50	28	52	10	Manhurin Swing 10-20, 10-16, 10-32	MBZ ST 02...	MBS...02
MBG 02 2500 060 B02	25	60	28	52	10	Citizen L20, Hanwha STL32/35H, STL33/35J	MBZ ST 02...	MBS...02
MBG 02 2500 100 B02	25	100	28	52	10	Manhurin KMX5/20, 5/26, 5/32, Swing 7-20, 7-26, Tornos Deco (7/10, 13, 20)	MBZ ST 02...	MBS...02
MBG 02 2540 070 B02	1"	70	28	52	10	Citizen C32, L32, M32	MBZ ST 02...	MBS...02
MBG 02 2800 006 B02	28	6	28	52	10	Hanwha SL26/35HPD	MBZ ST 02...	MBS...02
MBG 02 2800 040 B02	28	40	28	52	10	Traub TNL12	MBZ ST 02...	MBS...02
MBG 02 2800 078 B02	28	78	28	52	10	Traub TNL/C 12, TNL/C 12K	MBZ ST 02...	MBS...02
MBG 02 3200 025 B02	32	25	28	52	10	Hanwha XD32	MBZ ST 02...	MBS...02
MBG 02 3200 070 B02	32	70	32	52	10	Tornos Delta 38-5a	MBZ ST 02...	MBS...02
MBG 02 3300 040 B02	33	40	33	52	10	Hanwha XD20/32 H, -J	MBZ ST 02...	MBS...02
MBG 02 3400 044 B02	34	44	34	52	10	Hanwha SL20/26/35HPH	MBZ ST 02...	MBS...02



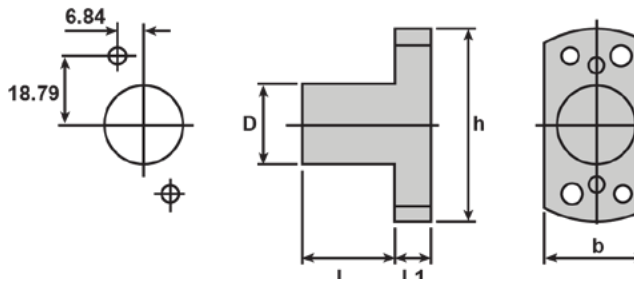
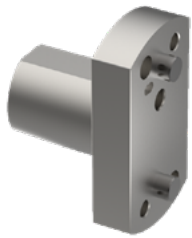
MBG 03...B02 Basic Tool Holder

Part No.	D	L	b	h	L ₁	Machine Type	Spacer	Insert Holder
MBG 03 2200 025 B02	22	25	38	52	10	Star SR32, SR32J	MBZ ST 02...	MBS...02
MBG 03 3100 015 B02	31	15	38	52	10	Citizen A32-VII	MBZ ST 02...	MBS...02



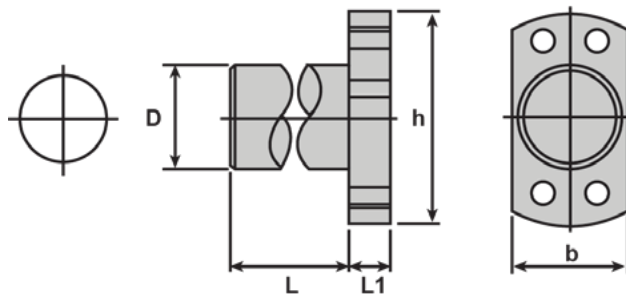
MBG 01...B02 Basic Tool Holder

Part No.	D	L	b	h	L ₁	Machine Type	Spacer	Insert Holder
MBG 01 2200 025 B02	22	25	28	52	10	Star SR10/SR20R ECAS 12/20, SR32J	MBZ ST 02...	MBS...02
MBG 01 2300 019 B02	23	19	28	49	16	Hanwha XD 12H	MBZ ST 02...	MBS...02



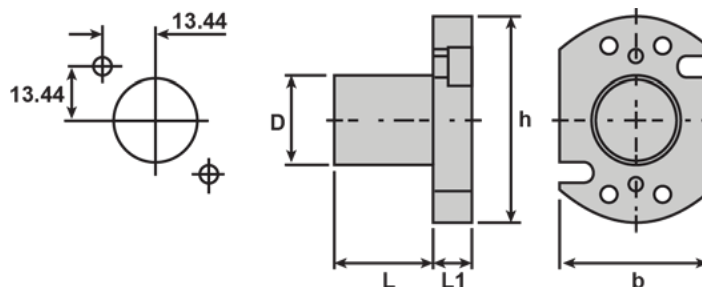
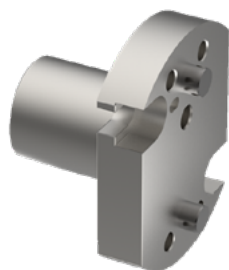
MBG 02...B02 Basic Tool Holder

Part No.	D	L	b	h	L ₁	Machine Type	Spacer	Insert Holder
MBG 02 1587 040 B02	5/8"	40	28	52	10	Citizen R07, Tsugami BS20B	MBZ ST 02...	MBS...02
MBG 02 1600 019 B02	16	19	28	52	10	Manurhim KMX 4/13	MBZ ST 02...	MBS...02
MBG 02 1600 020 B02	16	20	28	52	10	STAR RNC 16B	MBZ ST 02...	MBS...02
MBG 02 1905 060 B02	3/4"	60	28	52	10	CITIZEN C16, L20, M16	MBZ ST 02...	MBS...02
MBG 02 2000 030 B02	20	30	28	52	10	Tsugami S205	MBZ ST 02...	MBS...02
MBG 02 2000 040 B02	20	40	28	52	10	Gildemeister Sprint20, Hanwha SL 12H, Tsugami B012, B020, S205	MBZ ST 02...	MBS...02
MBG 02 2000 060 B02	20	60	28	52	10	Tsugami BS12, BS20	MBZ ST 02...	MBS...02
MBG 02 2000 070 B02	20	70	28	52	10	Tornos Gamma 20	MBZ ST 02...	MBS...02
MBG 02 2000 100 B02	20	100	28	52	10	Manhurin Swing 7-13, Tornos Deco (7/10, 13, 20), Citizen K16	MBZ ST 02...	MBS...02
MBG 02 2200 015 B02	22	15	28	52	10	Star SR10J	MBZ ST 02...	MBS...02
MBG 02 2200 070 B02	22	70	28	52	10	Star SA16, SB16, Tornos Delta 20, Gamma 20	MBZ ST 02...	MBS...02
MBG 02 2500 035 B02	25	35	28	52	10	Tsugami Piastra	MBZ ST 02...	MBS...02
MBG 02 2500 050 B02	25	50	28	52	10	Manhurin Swing 10-20, 10-16, 10-32	MBZ ST 02...	MBS...02
MBG 02 2500 060 B02	25	60	28	52	10	Citizen L20, Hanwha STL32/35H, STL33/35J	MBZ ST 02...	MBS...02
MBG 02 2500 100 B02	25	100	28	52	10	Manhurin KMX5/20, 5/26, 5/32, Swing 7-20, 7-26, Tornos Deco (7/10, 13, 20)	MBZ ST 02...	MBS...02
MBG 02 2540 070 B02	1"	70	28	52	10	Citizen C32, L32, M32	MBZ ST 02...	MBS...02
MBG 02 2800 006 B02	28	6	28	52	10	Hanwha SL26/35HPD	MBZ ST 02...	MBS...02
MBG 02 2800 040 B02	28	40	28	52	10	Traub TNL12	MBZ ST 02...	MBS...02
MBG 02 2800 078 B02	28	78	28	52	10	Traub TNL/C 12, TNL/C 12K	MBZ ST 02...	MBS...02
MBG 02 3200 025 B02	32	25	28	52	10	Hanwha XD32	MBZ ST 02...	MBS...02
MBG 02 3200 070 B02	32	70	32	52	10	Tornos Delta 38-5a	MBZ ST 02...	MBS...02
MBG 02 3300 040 B02	33	40	33	52	10	Hanwha XD20/32 H, -J	MBZ ST 02...	MBS...02
MBG 02 3400 044 B02	34	44	34	52	10	Hanwha SL20/26/35HPH	MBZ ST 02...	MBS...02



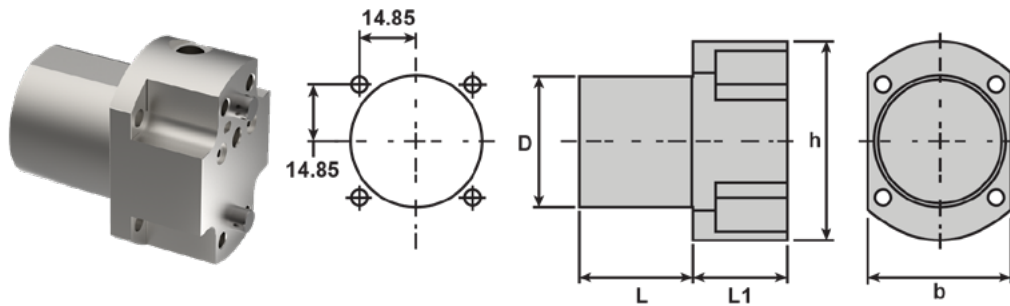
MBG 03...B02 Basic Tool Holder

Part No.	D	L	b	h	L ₁	Machine Type	Spacer	Insert Holder
MBG 03 2200 025 B02	22	25	38	52	10	Star SR32, SR32J	MBZ ST 02...	MBS...02
MBG 03 3100 015 B02	31	15	38	52	10	Citizen A32-VII	MBZ ST 02...	MBS...02



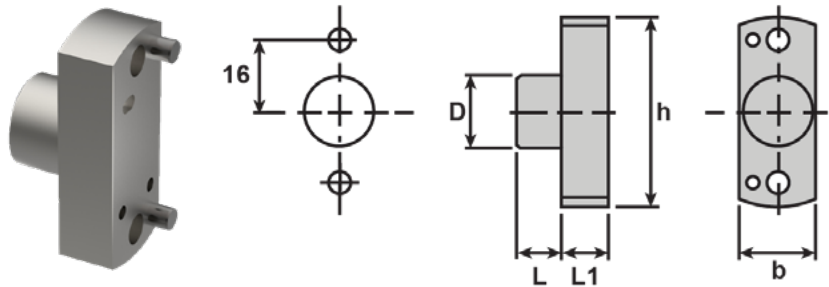
MBG 04...B02 Coolant Thru Tool Holder

Part No.	D	L	b	h	L ₁	Machine Type	Spacer	Insert Holder
MBG 04 3400 018 B02 IC	34	18	38	52	25	Maier MLK DY36	MBZ ST 02...IC	MBS...02
MBG 04 3400 030 B02 IC	34	30	38	52	25	Maier ML12C, ML16C, ML16D, ML20/26/32	MBZ ST 02...IC	MBS...02
MBG 04 3400 025 B90	34	25	37.5	37.5	8	STAR SV-38R	MBZ ST 90-	MBS...90



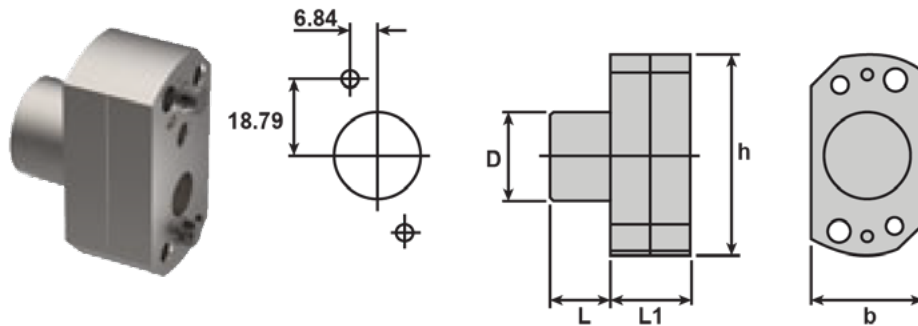
MBG 05...B05 Basic Tool Holder

Part No.	D	L	b	h	L ₁	Machine Type	Spacer	Insert Holder
MBG 05 1500 010 B05	15	10	17	51	10	Hanwha XD12H	MBZ ST 05...	MBS...05
MBG 05 1600 010 B05	16	10	17	51	10	Star SR10J	MBZ ST 05...	MBS...05



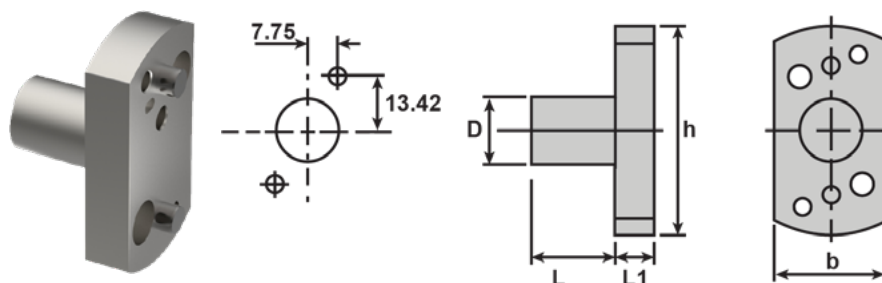
MBG 06...B06 Basic Tool Holder

Part No.	D	L	b	h	L ₁	Machine Type	Spacer	Insert Holder
MBG 06 2200 015 B06	22	15	28	50	00	Star SR10J	MBZ ST 02...	MBS...02



MBG 07...B02 Basic Tool Holder

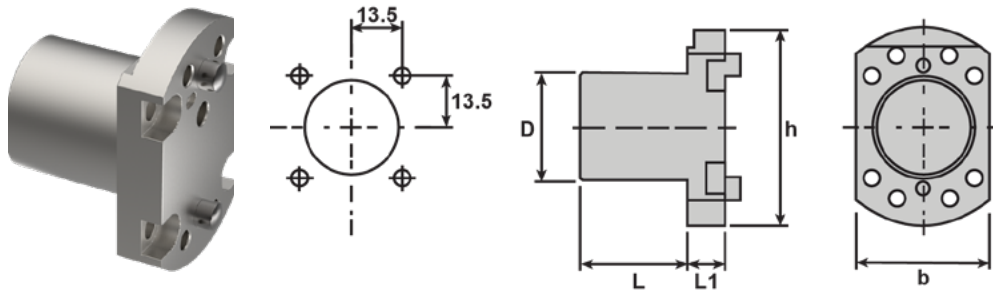
Part No.	D	L	b	h	L ₁	Machine Type	Spacer	Insert Holder
MBG 07 1600 021 B02	16	21	28	25	10	Star SR16, SR20	MBZ ST 02...	MBS...02



MBG 08...B02 Basic Tool Holder

Part No.	D	L	b	h	L ₁	Machine Type	Spacer	Insert Holder
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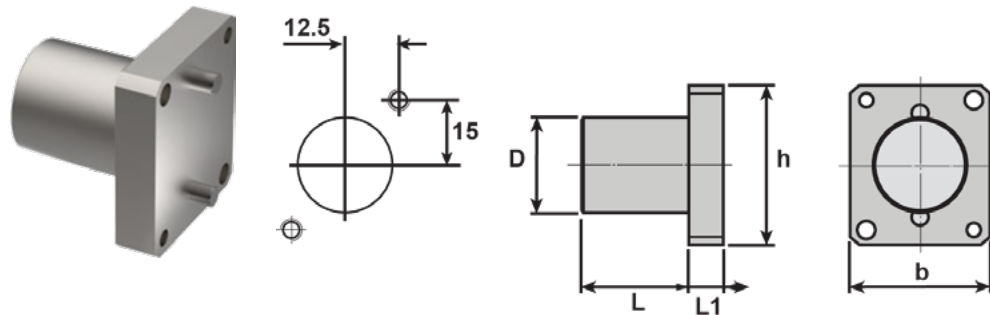
MBG 08 2800 028 B02	28	28	35	25	10	Tornos CT20	MBZ ST 02...	MBS...02
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MBG 09...B90 Basic Tool Holder

Part No.	D	L	b	h	L ₁	Machine Type	Spacer	Insert Holder
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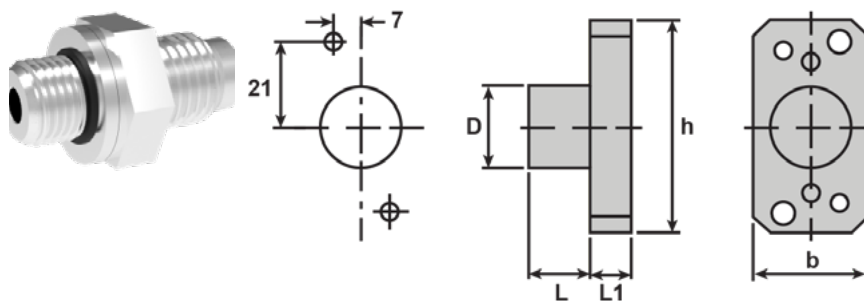
MBG 09 2200 025 B90	22	25	32.5	37	8	Star SW-20, SR-20W	MBZ ST 90-	MBS...90
MBG 09 2500 015 B90	25	15	32.5	37	8	Tugami BO 326 EII	MBZ ST 90-	MBS...90
MBG 09 2500 050 B90	25	50	32.5	37	8	Hanwha XDI 20	MBZ ST 90-	MBS...90



MBG 10...B02 Basic Tool Holder

Part No.	D	L	b	h	L ₁	Machine Type	Spacer	Insert Holder
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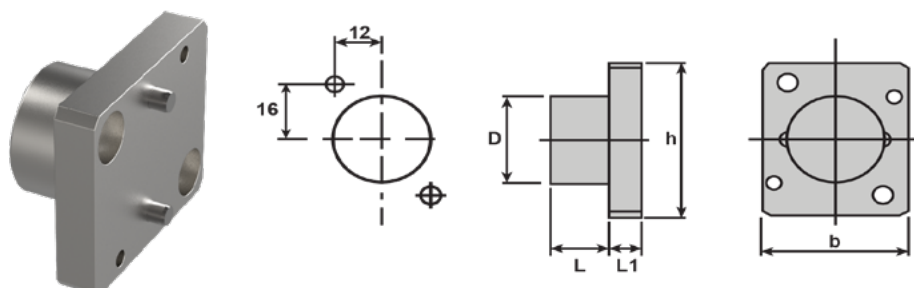
MBG 10 2000 015 B02	20	15	28	25	10	Various	MBZ ST 02...	MBS...02
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MBG 12...B90 Basic Tool Holder

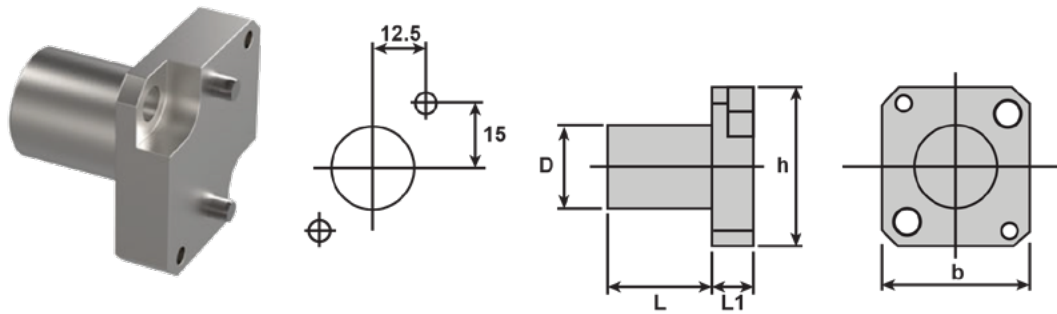
Part No.	D	L	b	h	L ₁	Machine Type	Spacer	Insert Holder
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MBG 12 2500 015 B90	25	15	44	36.9	8	TSUGAMI BO 266, BO 326	MBZ ST 90...	MBS...90
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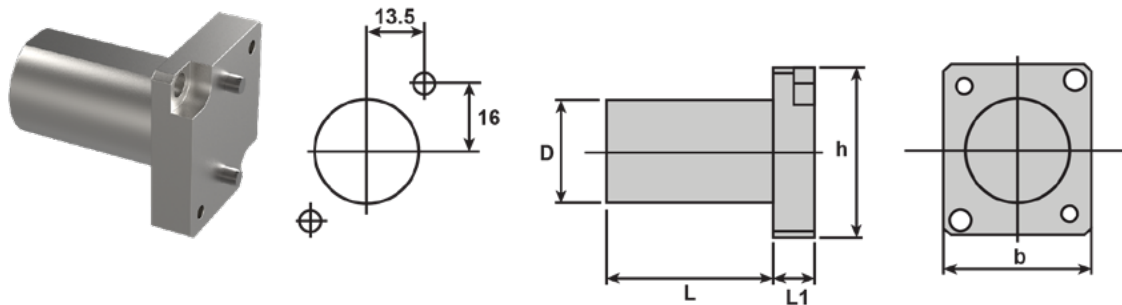
MBG 13...B90 Basic Tool Holder

Part No.	D	L	b	h	L ₁	Machine Type	Spacer	Insert Holder
MBG 13 2000 025 B90	20	25	36.9	36.9	10	TORNOS GT13, GT26	MBZ ST 90...	MBS..ST 90



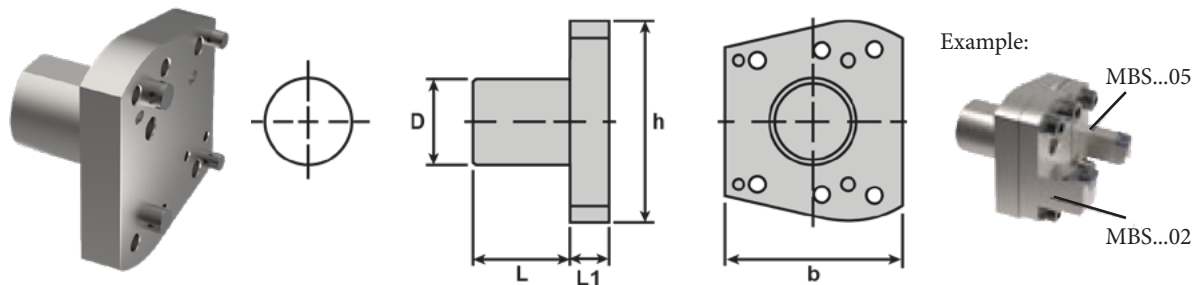
MBG 14...B90 Basic Tool Holder

Part No.	D	L	b	h	L ₁	Machine Type	Spacer	Insert Holder
MBG 14 2500 040 B90	25	40	35	40	10	NEXTURN SR20XII	MBZ ST 90...	MBS..ST 90



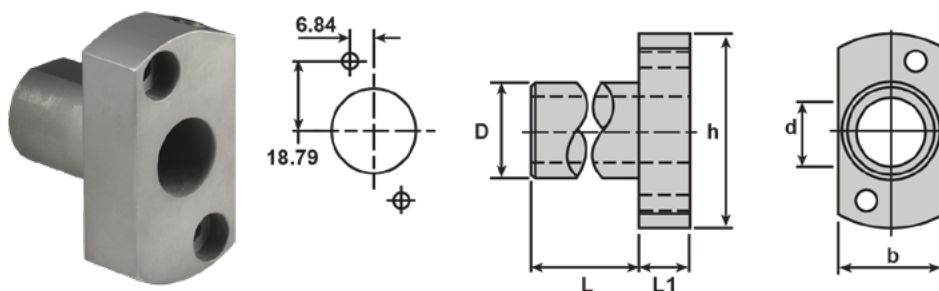
MBG 02...B02 05 Basic Tool Holder

Part No.	D	L	b	h	L ₁	Machine Type	Spacer	Insert Holder
MBG 02 1905 040 B02 05	3/4" (19.05)	40	46	52	10	Various	MBZ ST 02/05...	MBS...02/05
MBG 02 2200 025 B02 05	22	25	46	52	10	Star SR20R SR32J	MBZ ST 02/05...	MBS...02/05



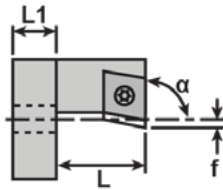
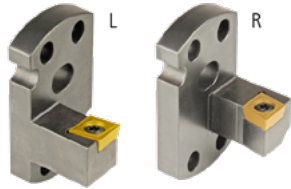
MBG T... Basic Tool Holder

Part No.	D	L	d	b	h	L ₁	Machine Type
MBG-T 02 10 2200 025	22	25	10	28	52	15	Star SR10J, SA16, SB16, SB20E, SB20G, SB20N
MBG-T 02 16 2200 025	22	25	16	28	52	15	Star SA 16, SB 16, SR10J



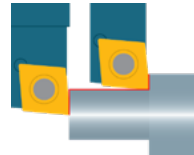
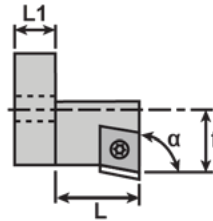
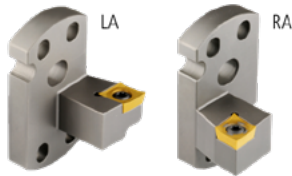
MBS...CC 80° ISO-Insert Modules

Left Hand	Right Hand	α	f	L	L ₁	Tool Holder	Spacer	Insert
MBS 090-CC L 06 I02	MBS 090-CC R 06 I02	90°		20	8	MBG...B02	MBZ ST 02...	CC.. 0602...
MBS 093-CC L 06 I02	MBS 093-CC R 06 I02	93°		20	8	MBG...B02	MBZ ST 02...	CC.. 0602...
MBS 090-CC L 09 I02	MBS 090-CC R 09 I02	90°		20	8	MBG...B02	MBZ ST 02...	CC.. 09T3...
	MBS 090-CC R 09 I02 IC	90°		20	8	MBG...B02 IC	MBZ ST 02...IC	CC.. 09T3...
MBS 093-CC L 09 I02	MBS 093-CC R 09 I02	93°		20	8	MBG...B02	MBZ ST 02...	CC.. 09T3...
MBS 093-CC L 09 I02-30	MBS 093-CC R 09 I02-30	93°		30	8	MBG...B02	MBZ ST 02...	CC.. 09T3...
MBS 095-CC L 09 I02	MBS 095-CC R 09 I02	95°		20	8	MBG...B02	MBZ ST 02...	CC.. 09T3...
MBS 093-CC L 06 I05	MBS 093-CC R 06 I05	93°		20	8	MBG...B05	MBZ ST 05...	CC.. 0602...
MBS 095-CC L 09 I05	MBS 095-CC R 09 I05	95°		20	8	MBG...B05	MBZ ST 05...	CC.. 09T3...
	MBS 090-CC R 06 I90	90°	-5	20	7	MBG...B02	MBZ ST 02...	CC.. 0602...
	MBS 090-CC R 09 I90	90°		20	7	MBG...B02	MBZ ST 02...	CC.. 09T3...



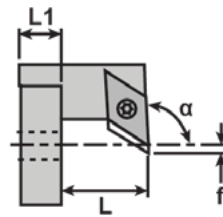
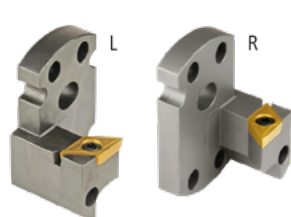
MBS...CC A 80° ISO-Insert Modules

Left Hand	Right Hand	α	f	L	L ₁	Tool Holder	Spacer	Insert
MBS 090-CC LA 06 I02	MBS 090-CC RA 06 I02	90°	18	20	8	MBG...B02	MBZ ST 02...	CC.. 0602...
MBS 090-CC LA 09 I02	MBS 090-CC RA 09 I02	90°	18	20	8	MBG...B02	MBZ ST 02...	CC.. 09T3...
MBS 093-CC LA 06 I02	MBS 093-CC RA 06 I02	93°	18	20	8	MBG...B02	MBZ ST 02...	CC.. 0602...
MBS 093-CC LA 09 I02	MBS 093-CC RA 09 I02	93°	18	20	8	MBG...B02	MBZ ST 02...	CC.. 09T3...
MBS 093-CC LA 09 I02-30	MBS 093-CC RA 09 I02-30	93°	18	30	8	MBG...B02	MBZ ST 02...	CC.. 09T3...
MBS 095-CC LA 09 I02	MBS 095-CC RA 09 I02	95°	18	20	8	MBG...B02	MBZ ST 02...	CC.. 09T3...
MBS 093-CC LA 06 I05	MBS 093-CC RA 06 I05	93°	12.5	20	8	MBG...B05	MBZ ST 05...	CC.. 0602...
MBS 095-CC LA 09 I05	MBS 095-CC RA 09 I05	95°	12.5	20	8	MBG...B05	MBZ ST 05...	CC.. 09T3...
MBS 095-CC LA 09 I90		95°	16.25	20	7	MBG...B90	MBZ ST 90...	CC.. 09T3...



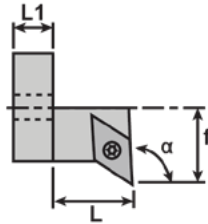
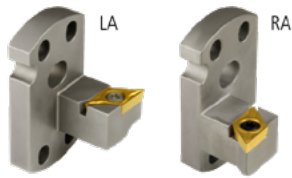
MBS...DC 55° ISO-Insert Modules

Left Hand	Right Hand	α	f	L	L ₁	Tool Holder	Spacer	Insert
MBS 093-DC L 07 I02	MBS 093-DC R 07 I02	93°		20	8	MBG...B02	MBZ ST 02...	DC.. 0702...
MBS 093-DC L 11 I02	MBS 093-DC R 11 I02	93°		20	8	MBG...B02	MBZ ST 02...	DC.. 11T3...
	MBS 093-DC R 11 I02 IC	93°		20	8	MBG...B02 IC	MBZ ST 02...IC	DC.. 11T3...
MBS 093-DC L 11 I02 30	MBS 093-DC R 11 I02 30	93°		30	8	MBG...B02	MBZ ST 02...	DC.. 11T3...
MBS 093-DC L 11 I02 40	MBS 093-DC R 11 I02 40	93°		40	8	MBG...B02	MBZ ST 02...	DC.. 11T3...
MBS 093-DC L 07 I05	MBS 093-DC R 07 I05	93°		20	8	MBG...B05	MBZ ST 05...	DC.. 0702...
MBS 093-DC L 07 I90	MBS 093-DC R 07 I90	93°	-2.25	20	7	MBG...B90	MBZ ST 90...	DC.. 0702...
MBS 093-DC L 11 I90	MBS 093-DC R 11 I90	93°		20	7	MBG...B90	MBZ ST 90...	DC.. 11T3...
MBS 093-DC L 11 I90 30	MBS 093-DC R 11 I90 30	93°		20	7	MBG...B90	MBZ ST 90...	DC.. 0702...



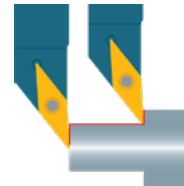
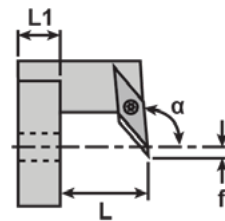
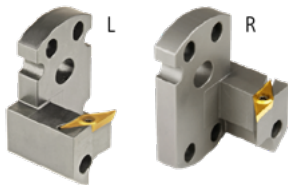
MBS...DC A 55° ISO-Insert Modules

Left Hand	Right Hand	α	f	L	L ₁	Tool Holder	Spacer	Insert
MBS 093-DC LA 07 I02	MBS 093-DC RA 07 I02	93°	18	20	8	MBG...B02	MBZ ST 02...	DC.. 0702...
MBS 093-DC LA 11 I02	MBS 093-DC RA 11 I02	93°	18	20	8	MBG...B02	MBZ ST 02...	DC.. 11T3...
MBS 093-DC LA 11 I02-30	MBS 093-DC RA 11 I02-30	93°	18	30	8	MBG...B02	MBZ ST 02...	DC.. 11T3...
MBS 093-DC LA 11 I02-40	MBS 093-DC RA 11 I02-40	93°	18	40	8	MBG...B02	MBZ ST 02...	DC.. 11T3...
MBS 093-DC LA 07 I05	MBS 093-DC RA 07 I05	93°	8.5	20	8	MBG...B05	MBZ ST 05...	DC.. 0702...
MBS 093-DC LA 07 I90	MBS 093-DC RA 07 I90	93°	17	20	7	MBG...B90	MBZ ST 90...	DC.. 0702...
MBS 093-DC LA 11 I90	MBS 093-DC RA 11 I90	93°	17	20	7	MBG...B90	MBZ ST 90...	DC.. 11T3...
MBS 093-DC LA 11 I90-30		93°	17	30	7	MBG...B90	MBZ ST 90...	DC.. 11T3...



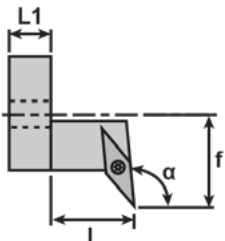
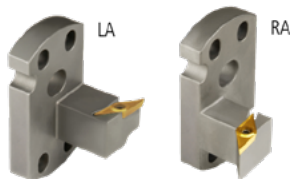
MBS...VC 35° ISO-Insert Modules

Left Hand	Right Hand	α	f	L	L ₁	Tool Holder	Spacer	Insert
MBS 0725-VC L 11 I02	MBS 0725-VC R 11 I02	72.5°		20	8	MBG...B02	MBZ ST 02...	VC.. 1103...
MBS 093-VC L 07 I02	MBS 093-VC R 07 I02	93°		20	8	MBG...B02	MBZ ST 02...	VC.. 0702...
MBS 093-VC L 11 I02	MBS 093-VC R 11 I02	93°		20	8	MBG...B02	MBZ ST 02...	VC.. 1103...
MBS 095-VC L 11 I02	MBS 095-VC R 11 I02	95°		20	8	MBG...B02	MBZ ST 02...	VC.. 1103...
MBS 093-VC L 11 I02-30	MBS 093-VC R 11 I02-30	93°		30	8	MBG...B02	MBZ ST 02...	VC.. 1103...
MBS 095-VC L 11 I02-40	MBS 095-VC R 11 I02-40	95°		40	8	MBG...B02	MBZ ST 02...	VC.. 1103...
MBS 110-VC L 11 I02	MBS 110-VC R 11 I02	110°		20	8	MBG...B02	MBZ ST 02...	VC.. 1103...
MBS 1175-VC L 11 I02	MBS 1175-VC R 11 I02	117.5°		20	8	MBG...B02	MBZ ST 02...	VC.. 1103...
MBS 140-VC L 11 I02	MBS 140-VC R 11 I02	140°		23	8	MBG...B02	MBZ ST 02...	VC.. 1103...
	MBS 1625-VC N 11 I02	162.5°		25	8	MBG...B02	MBZ ST 02...	VC.. 1103...
MBS 093-VC L 07 I05	MBS 093-VC R 07 I05	93°		20	8	MBG...B02	MBZ ST 02...	VC.. 0702...
MBS 093-VC L 07 I90	MBS 093-VC R 07 I90	93°		20	7	MBG...B02	MBZ ST 02...	VC.. 0702...
MBS 093-VC L 11 I90	MBS 093-VC R 11 I90	93°	2.25	20	8	MBG...B90	MBZ ST 90...	VC.. 1103...
MBS 095-VC L 11 I90	MBS 095-VC R 11 I90	95°	2.25	20	7	MBG...B90	MBZ ST 90...	VC.. 1103...
MBS 095-VC L 11 I90 IC	MBS 095-VC R 11 I90 IC	95°	2.25	20	7	MBG...B90	MBZ ST 90...IC	VC.. 1103...
	MBS 095-VC R 11 I90-30	95°		30	7	MBG...B90	MBZ ST 02...	VC.. 1103...
	MBS 110-VC R 11 I90	110°		20	7	MBG...B90	MBZ ST 02...	VC.. 1103...
	MBS 1625-VC N 11 I90	162.5°		25	7	MBG...B90	MBZ ST 90...	VC.. 1103...



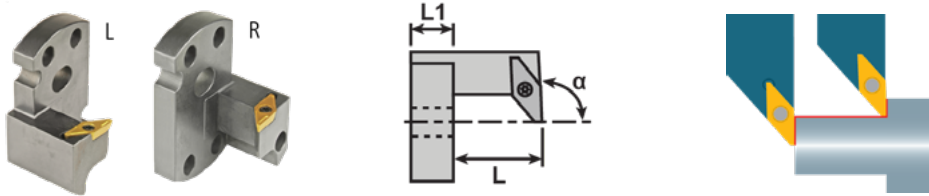
MBS...VC A 35° ISO-Insert Modules

Left Hand	Right Hand	α	f	L	L ₁	Tool Holder	Spacer	Insert
MBS 725-VC LA 11 I02	MBS 725-VC RA 11 I02	72.5°	18	25	8	MBG...B02	MBZ ST 02...	VC.. 1103...
MBS 093-VC LA 11 I02	MBS 093-VC RA 11 I02	93°	18	20	8	MBG...B02	MBZ ST 02...	VC.. 1103...
MBS 093-VC LA 11 I02-30	MBS 093-VC RA 11 I02-30	93°	18	30	8	MBG...B02	MBZ ST 02...	VC.. 1103...
MBS 095-VC LA 11 I02	MBS 095-VC RA 11 I02	95°	18	20	8	MBG...B02	MBZ ST 02...	VC.. 1103...
MBS 095-VC LA 11 I02-40	MBS 095-VC RA 11 I02-40	95°	18	40	8	MBG...B02	MBZ ST 02...	VC.. 1103...
MBS 110-VC LA 11 I02	MBS 110-VC RA 11 I02	110°	18	20	8	MBG...B02	MBZ ST 02...	VC.. 1103...
MBS 1175-VC LA 11 I02	MBS 1175-VC RA 11 I02	117.5°	18	20	8	MBG...B02	MBZ ST 02...	VC.. 1103...
MBS 140-VC LA 11 I02	MBS 140-VC RA 11 I02	140°	18	23	8	MBG...B02	MBZ ST 02...	VC.. 1103...
MBS 093-VC LA 11 I90	MBS 093-VC RA 11 I90	93°	17	20	7	MBG...B90	MBZ ST 02...	VC.. 1103...



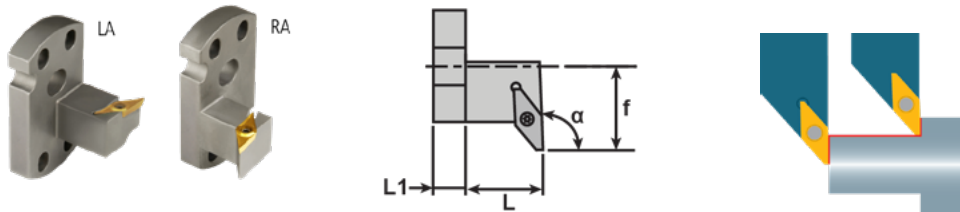
MBS...VP 35° TOP-Insert Modules

Left Hand	Right Hand	α	L	L ₁	Tool Holder	Spacer	Insert
MBS 093-VP L 10 I02	MBS 093-VP R 10 I02	93°	20	8	MBG...B02	MBZ ST 02...	VP.. 1003...
MBS 093-VP L 10 I90	MBS 093-VP R 10 I90	93°	20	7	MBG...B90	MBZ ST 90...	VP.. 1003...



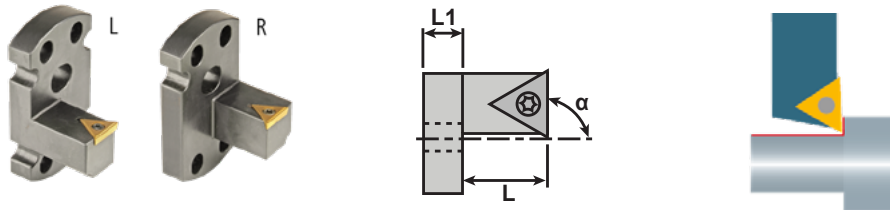
MBS...VP A 35° TOP-Insert Modules

Left Hand	Right Hand	α	f	L	L ₁	Tool Holder	Spacer	Insert
MBS 093-VP LA 10 I02	MBS 093-VP RA 10 I02	93°	28	20	8	MBG...B02	MBZ ST 02...	VP.. 1003...
MBS 093-VP LA 10 I90	MBS 093-VP RA 10 I90	93°	17	20	8	MBG...B90	MBZ ST 90...	VP.. 1003...



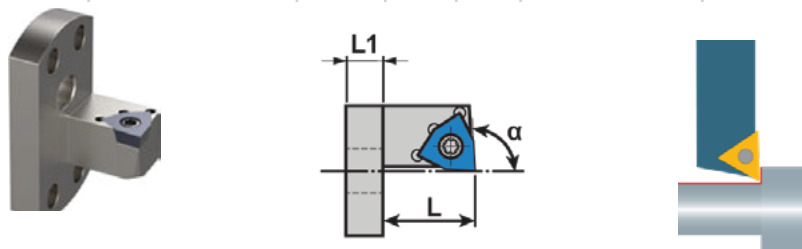
MBS...TC -Insert Modules

Left Hand	Right Hand	α	L	L ₁	Tool Holder	Spacer	Insert
MBS 090-TC L 11 I02	MBS 090-TC R 11 I02	90°	20	8	MBG...B02	MBZ ST 02...	TC.. 1102...



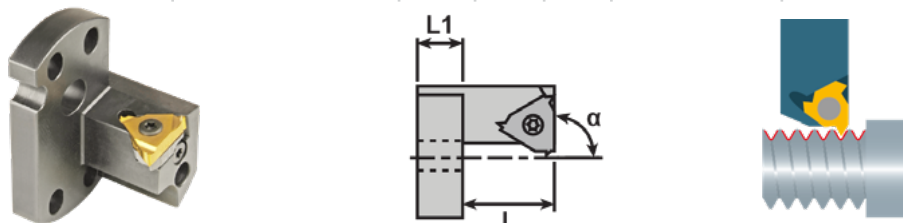
MBS...W0134 -Insert Modules

Left Hand	Right Hand	α	L	L ₁	Tool Holder	Spacer	Insert
MBS 093-W0134 L I02	MBS 093-W0134 R I02	93°	20	8	MBG...B02	MBZ ST 02...	W0134



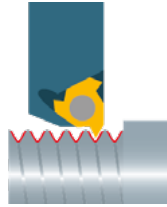
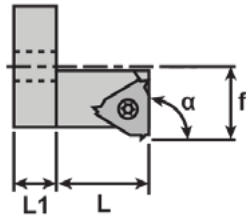
MBS...16 ER -Thread Insert Modules

Left Hand	Right Hand	α	L	L ₁	Tool Holder	Spacer	Insert
MBS 090-16 ER L I02	MBS 090-16 ER R I02	90°	20	8	MBG...B02	MBZ ST 02...	16ER
MBS 090-16 ER L I02-30	MBS 090-16 ER R I02-30	90°	30	8	MBG...B02	MBZ ST 02...	16ER
MBS 090-16 ER L I02-40	MBS 090-16 ER R I02-40	90°	40	8	MBG...B02	MBZ ST 02...	16ER
	MBS 090-16 ER R I90	90°	20	7	MBG...B90	MBZ ST 90...	16ER
	MBS 090-16 ER R I90-31	90°	31	7	MBG...B90	MBZ ST 90...	16ER



MBS...16 ER A -Thread Insert Modules

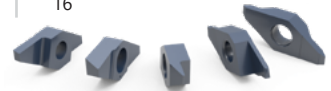
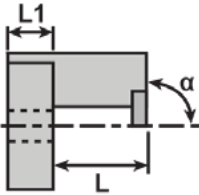
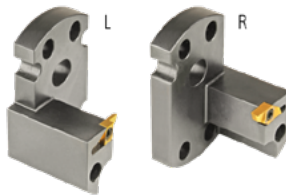
Left Hand	Right Hand	α	f	L	L_1	Tool Holder	Spacer	Insert
MBS 090-16 ER LA I02	MBS 090-16 ER RA I02	90°	17.66	20	8	MBG...B02	MBZ ST 02...	16ER
MBS 090-16 ER LA I02-30	MBS 090-16 ER RA I02-30	90°	17.66	30	8	MBG...B02	MBZ ST 02...	16ER
MBS 090-16 ER LA I02-40	MBS 090-16 ER RA I02-40	90°	17.66	40	8	MBG...B02	MBZ ST 02...	16ER



MBS...CUT 90 - 1600 Series Insert Modules

Left Hand	Right Hand	α	L	L_1	Tool Holder	Spacer	Insert
MBS 090-CUT L 16 I02	MBS 090-CUT R 16 I02	90°	23	8	MBG...B02	MBZ ST 02...	16
MBS 135-CUT L 16 I02	MBS 135-CUT R 16 I02	135°	23	8	MBG...B02	MBZ ST 02...	16
MBS 090-CUT L 16 I05	MBS 090-CUT R 16 I05	90°	23	8	MBG...B05	MBZ ST 05...	16
MBS 090-CUT L 16 I90	MBS 090-CUT R 16 I90	90°	23	7	MBG...B90	MBZ ST 90...	16

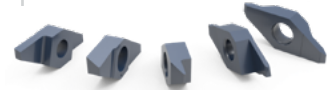
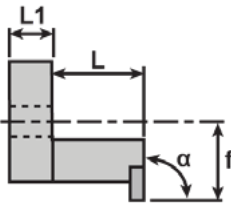
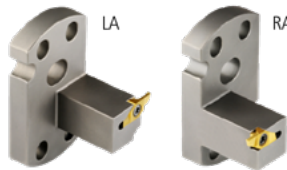
Use One Module For All multidec® 1600 Series Insert Geometries!



MBS...CUT A - 1600 Series Insert Modules

Left Hand	Right Hand	α	f	L	L_1	Tool Holder	Spacer	Insert
MBS 090-CUT LA 16 I02	MBS 090-CUT RA 16 I02	90°	18.6	23	8	MBG...B02	MBZ ST 02...	16
MBS 135-CUT LA 16 I02	MBS 135-CUT RA 16 I02	135°	18.5	23	8	MBG...B02	MBZ ST 02...	16
MBS 090-CUT LA 16 I05	MBS 090-CUT RA 16 I05	90°	13	23	8	MBG...B05	MBZ ST 05...	16
MBS 090-CUT LA 16 I90	MBS 090-CUT RA 16 I90	90°	20.75	23	7	MBG...B90	MBZ ST 90...	16

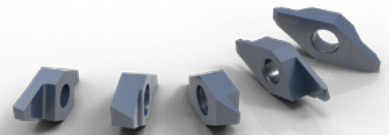
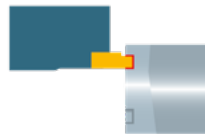
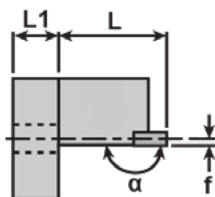
Use One Module For All multidec® 1600 Series Insert Geometries!



MBS...CUT 180 - 1600 Insert Modules

Left Hand	Right Hand	α	f	L	L_1	Tool Holder	Spacer	Insert
	MBS 180-CUT 16 I02	180°		20	8	MBG...B02	MBZ ST 02...	16
	MBS 180-CUT 16 I05	180°		20	8	MBG...B05	MBZ ST 05...	16
	MBS 180-CUT 16 I90	180°	-6.25	20	7	MBG...B90	MBZ ST 90...	16

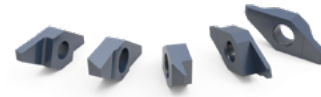
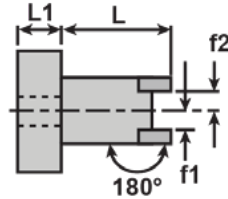
Use One Module For All multidec® 1600 Series Insert Geometries!



MBS...TWIN CUT 180 - 1600 Insert Modules

Neutral	f_1	f_2	L	L_1	Tool Holder	Spacer	Insert
MBS 180-CUT 16 I02 twin N	-4.5	4.5	20	8	MBG...B02	MBZ ST 02...	16
MBS 180-CUT 16 I02 twin R	3	11	20	8	MBG...B02	MBZ ST 02...	16

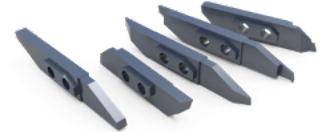
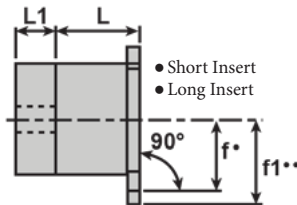
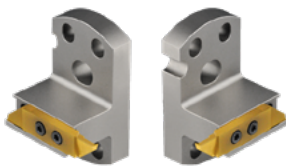
Use One Module For All multidec® 1600 Series Insert Geometries!



MBS...CUT N - 3000 Series Insert Modules

Neutral	f	f_1	L	L_1	Tool Holder	Spacer	Insert
MBS 090-CUT N 30 I02	27	33	20	8	MBG...B02	MBZ ST 02...	30
MBS 090-CUT N 30 I90	29	35	20	7	MBG...B90	MBZ ST 90...	30

Use One Module For All multidec® 3000 Series Insert Geometries!



MBS...E - Collet Holders

Part No.	L	L_1	Shank	Spacer	ER Collet
MBS E08 20 C02	20	8	MBG...B02	MBZ ST 02...	ER08
MBS E08 30 C02	30	8	MBG...B02	MBZ ST 02...	ER08
MBS E11 25 C02	25	8	MBG...B02	MBZ ST 02...	ER11
MBS E11 35 C02	35	8	MBG...B02	MBZ ST 02...	ER11
MBS E16 25 C02	25	8	MBG...B02	MBZ ST 02...	ER16
MBS E16 35 C02	35	8	MBG...B02	MBZ ST 02...	ER16
MBS E20 35 C02	35	8	MBG...B02	MBZ ST 02...	ER20
MBS E20 45 C02	45	8	MBG...B02	MBZ ST 02...	ER20
MBS E08 20 C05	20	8	MBG...B05	MBZ ST 05...	ER08
MBS E08 30 C05	30	8	MBG...B05	MBZ ST 05...	ER08
MBS E11 25 C05	25	8	MBG...B05	MBZ ST 05...	ER11
MBS E11 35 C05	35	8	MBG...B05	MBZ ST 05...	ER11
MBS E08 20 C90	20	7	MBG...B90	MBZ ST 90...	ER08
MBS E08 30 C90	30	7	MBG...B90	MBZ ST 90...	ER08
MBS E11 25 C90	25	7	MBG...B90	MBZ ST 90...	ER11
MBS E11 35 C90	35	7	MBG...B90	MBZ ST 90...	ER11
MBS E16 25 C90	25	7	MBG...B90	MBZ ST 90...	ER16
MBS E16 35 C90	35	7	MBG...B90	MBZ ST 90...	ER16
MBS E20 25 C90	25	7	MBG...B90	MBZ ST 90...	ER20
MBS E20 35 C90	35	7	MBG...B90	MBZ ST 90...	ER20

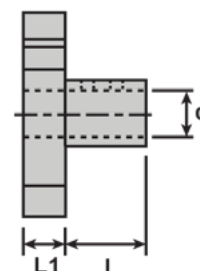
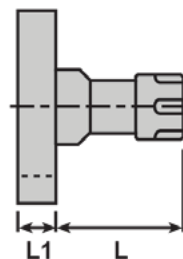
MBS... - OD Turning Tool Holders

Part No.	L	Tool Holder	Spacer	Type
MBS 090 1212 T02	35	MBG...B02	MBZ ST 02...	12x12
MBS 090 1212 T90	35	MBG...B90	MBZ ST 90...	12x12



MBS...IT - ID Turning Tool Holders

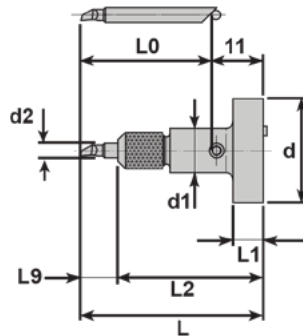
Part No.	d	L	L_1	Tool Holder	Spacer
MBS 10 IT02	10	13	8	MBG...B02	MBZ ST 02...
MBS 12 IT02	12	13	8	MBG...B02	MBZ ST 02...
MBS 14 IT02	14	13	8	MBG...B02	MBZ ST 02...
MBS 10 IT05	10	13	8	MBG...B05	MBZ ST 05...
MBS 10 IT90	10	14	7	MBG...B90	MBZ ST 90...
MBS 12 IT90	12	13	7	MBG...B90	MBZ ST 90...



**Perfectly center tools on machines
without Y-axis adjustability**

MBS...IT - ID Turning Tool Holders

Part No.	d ₁	d ₂	L ₁	L ₂	Tool Holder	Spacer	Inserts
MBS SDA4 IT02 IC	12	4	35	8	MBG...B02	MBZ ST 02...	SD. 4... / SX. 4...
MBS SDA6 IT02 IC	15	6	38	8	MBG...B02	MBZ ST 02...	SD. 6... / SX. 6...
MBS SDA8 IT02 IC	18	8	40	8	MBG...B02	MBZ ST 02...	SD. 8... / SX. 8...
MBS SDA4 IT05 IC	12	4	35	8	MBG...B05	MBZ ST 05...	SD. 4... / SX. 4...

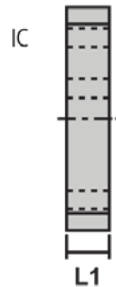


$$L = L_0 + 11$$

$$L_9 = L - L_2$$

MBZ... - Spacer Module

Part No.	L ₁	Tool Holder	Insert Module
MBZ ST 02-10	10	MBG...B02	MBS...02
MBZ ST 02-20	20	MBG...B02	MBS...02
MBZ ST 02-20 IC	20	MBG...B02	MBS...02 IC
MBZ ST 02-25	25	MBG...B02	MBS...02
MBZ ST 02-25 IC	25	MBG...B02	MBS...02 IC
MBZ ST 02-30	30	MBG...B02	MBS...02
MBZ ST 02-30 IC	30	MBG...B02	MBS...02 IC
MBZ ST 05-10	10	MBG...B05	MBS...05
MBZ ST 05-20	20	MBG...B05	MBS...05
MBZ ST 90-10	10	MBG...B90	MBS...90
MBZ ST 90-20	20	MBG...B90	MBS...90
MBZ ST 90-20 IC	20	MBG...B90	MBS...90 IC
MBZ ST 90-25 IC	25	MBG...B90	MBS...90 IC
MBZ ST 90-30	30	MBG...B90	MBS...90



MBA... - Adjuster Sheet

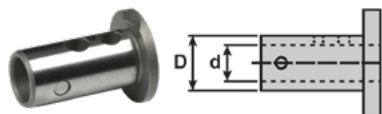
Part No.	L ₁	Tool Holder	Insert Module
MBA 02-05	10	MBG...B02	MBS...05
MBA 06-02 *	20	MBG...B06	MBS...02

* Included with basic holders MBG...B06



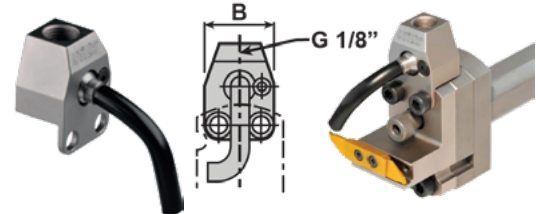
MBR...Reduction Sleeve

Part No.	D	d
MBR D10-02	10	2
MBR D10-03	10	3
MBR D10-04	10	4
MBR D10-05	10	5
MBR D10-06	10	6
MBR D10-07	10	7
MBR D10-08	10	8
MBR D12-04	12	4
MBR D12-05	12	5
MBR D12-06	12	6
MBR D12-07	12	7
MBR D12-08	12	8
MBR D12-09	12	9
MBR D12-10	12	10



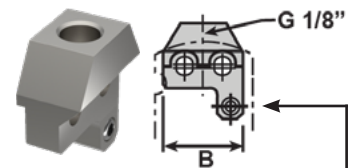
MBK... - CoolFlex Coolant Jet

Part No.	B	Tool Holder	Spacer	Insert Module	Coolant Fittings
MBK Cool Flex	22.3	MBG...B02	MBZ ST 02...	MBS...02	0°: P/N 4005-000104 45°: P/N 4005-000105 90°: P/N 4005-000106



MBK... - CoolFix

Left Hand	Right Hand	B	Tool Holder	Spacer	Insert Module	Coolant Fittings
MBK Cool Fix L	MBK Cool Fix R	28	MBG...B02	MBZ ST 02...	MBS...02	0°: P/N 4005-000104 45°: P/N 4005-000105 90°: P/N 4005-000106



Fixed Coolant Jet
Pair with appropriate L
or R tool holder

Torx Screws



Part No.	Fits Holders...	Description	Dimension
MSP 25060 T08	CC06, DC07, TC11, VC11, VP10, 1600	Torx T8 Screw	M2x6 T08
MSP 25070 T08	1600...4	Torx T8 Screw	M2.5x7 T08
MSP 25090 T08	1600...6, 1600...8	Torx T8 Screw	M2.5x9 T08
MSP 30073 T08	3000-08..., 3000...A	Torx T8 Screw	M3x7.3 T08
MSP 30090 T08	3000	Torx T8 Screw	M3x9 T08
MSP 35110T15	CC09, DC11	Torx T15 Screw	M3.5x11 T15
MSP UNC 540070T10	16ER	Torx T10 Screw	M3x12 T10



L-Bracket

Part No.	Dimension	Description
MSP A0808 T02	8x8	L-Piece for MBS 090 1212 T02
MSP A1010 T02	10x10	L-Piece for MBS 090 1212 T02



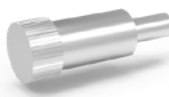
Clamping Screw

Part No.	Dimension	Description
MSP 60100 IB3	M6x10 DIN913	Clamping Screw For MBS 090 1212 T02



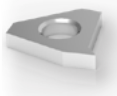
Shim Screw

Part No.	Inserts
MSP UNC 540070T10	16ER



Eccentric Height Adjustment Bolt

Part No.	Description
MBV E04	Eccentric Adjustment Bolt



Anvil

Part No.	Inserts
YE3	16ER



Mini Height Adjustment Bolt

Part No.	Description
MBV E05	Mini Adjustment Bolt



Flat-Head Socket Cap Screw

Part No.	Dimension
MSP M306	M3x6 DIN7991
MSP M308	M3x8 DIN7991



Socket Head Screw

Part No.	Dimension
MSP M412	M4x12 DIN912
MSP M420	M4x20 DIN912
MSP M435	M4x35 DIN912
MSP M440	M4x40 DIN912
MSP M445	M4x45 DIN912
MSP M450	M4x50 DIN912
MSP M516	M5x16 DIN912
MSP M525	M5x25 DIN912
MSP M535	M5x35 DIN912
MSP M545	M5x45 DIN912



Elastic Washer

Part No.	Dimension
MSP US-4	M4/4.3/10/0.6
MSP US-5	M5/5.3/9.2/0.45

Cylindrical Pin



Part No.	Dimension	Description
MSP ZS612	Ø6 _{h6} x12 DIN6325	
MSP ZS625	Ø6 _{h6} x25 DIN6325	For Spacer MBZ ST 02-10
MSP ZS635	Ø6 _{h6} x35 DIN6325	For Spacer MBZ ST 02-20
MSP ZS645	Ø6 _{h6} x45 DIN6325	For Spacer MBZ ST 02-30



Coolant Fittings - MBK Coolflex Adaptor

Part No.	Description
4005-000104	Staight 0° 1/4" JIC to 1/8 BSPP
4005-000105	Staight 45° 1/4" JIC to 1/8 BSPP
4005-000106	Staight 90° 1/4" JIC to 1/8 BSPP