

Made to Order Common Specifications: -XC83: Built-in Cylinder with Lock (MDNB)



58 Built-in Cylinder with Lock (MDNB)

Symbol
-XC83

This type has a built-in cylinder with lock, which accommodates intermediate stops, emergency stops and drop prevention, etc.

Applicable Series

Series	Description	Model	Action	Note	Vol. no. (for std model)
MGG	Guide cylinder	MGG	Double acting		Web Catalog

How to Order

MGG **Bearing type** **Mounting type** **Bore size** — **Stroke** — **Auto switch** — **XC83**

Specifications

Applicable series		MGG			
Bore size (mm)		50	63	80	100
Basic cylinder		MDNBB	Bore size	Stroke	D Auto switch X1189
Minimum operating pressure		0.2 MPa (Horizontal with no load)			
Piston speed <small>Note</small>		50 to 1000 mm/s		50 to 700 mm/s	
Stroke adjustment range (One side) [Built-in adjusting bolts (2 pcs.)]		0 to -15 mm			
Non-rotating accuracy *	Slide bearing	±0.04°		±0.03°	
	Ball bushing bearing	±0.03°		±0.02°	
Shock absorber model		RB2015		RB2725	
Specifications other than above		Same as standard type			

● Built-in cylinder with lock

Note) When the piston is locked, the load mass is limited by the mounting orientation and the operating pressure. For details about the lock specifications, etc., refer to the cylinders with lock (**Web Catalog**).

* Non-rotating rod accuracy must be below the values shown in the table at the retraction of the cylinder (initial value), and without loads or the conditions excluding the deflection of the guide rods.

Applicable Auto Switches Refer to pages 1289 to 1383 for the detailed specifications of auto switches.

Type	Special function	Electrical entry	Indicator light	Wiring (output)	Load voltage		Auto switch part no.	Band mounting	Lead wire length (m)				Pre-wired connector	Applicable load				
					DC	AC			0.5 (Nil)	1 (M)	3 (L)	5 (Z)						
Solid state auto switch	—	Grommet	No	3-wire (NPN)	5 V, 12 V	—	M9N	—	●	●	●	○	○	IC circuit	Relay, PLC			
				3-wire (PNP)			M9P	—	●	●	●	○	○					
		Terminal conduit		2-wire	12 V	M9B	—	●	●	●	○	○	—					
				3-wire (NPN)		—	G39	—	—	—	—	—						
	Diagnostic indication (2-color)	Grommet	Yes	3-wire (NPN)	5 V, 12 V	—	M9NW	—	●	●	●	○	○	IC circuit				
				3-wire (PNP)			M9PW	—	●	●	●	○	○					
				2-wire	12 V	M9BW	—	●	●	●	○	○	—					
				3-wire (NPN)		M9NA	—	○	○	●	○	○						
				Water resistant (2-color indicator)	Grommet	No	3-wire (PNP)	5 V, 12 V	—	M9PA	—	○	○	●		○	○	IC circuit
							2-wire			M9BA	—	○	○	○		○	○	
Reed auto switch	—	Grommet	Yes	3-wire (NPN equivalent)	—	5 V	A96	—	●	—	●	—	—	IC circuit	—			
				2-wire			24 V	12 V	100 V	A93	—	●	●			●	●	—
		100 V or less		A90	—	●			—	●	—	—	IC circuit					
		—		A33	—	—			—	—	—	—		—				
		Terminal conduit		Yes	100 V, 200 V	A34	—	—	—	—	—	—						
Din terminal	A44	—	—		—	—	—	—										

* Lead wire length symbols: 0.5 m Nil (Example) M9NW 1 m M (Example) M9NWM 3 m L (Example) M9NWL 5 m Z (Example) M9NWX

* Solid state auto switch with ○: Manufactured upon receipt of order.

* Refer to page 1566 since there are applicable auto switches other than listed above.
* Refer to pages 1358 and 1359 for the details of auto switches with a pre-wired connector.
* D-A9□/M9□/M9□W/M9□A/M9□AV auto switches are shipped together (not assembled).
(Auto switch mounting brackets for the models above are mounted when shipped.)

Auto Switch Mounting Bracket: Part No.

Auto switch model	Bore size (mm)			
	ø50	ø63	ø80	ø100
D-A9□/A9□V D-M9□/M9□V D-M9□W/M9□WV D-M9□A/M9□AV	BA7-040	BA7-040	BA7-063	BA7-063
D-A3□/A44 D-G39/K39	BMB1-050	BMB1-063	BMB1-080	BMB1-100
D-Z7□/Z80 D-Y59□/Y69□ D-Y7P/Y7PV D-Y7□W/Y7□WV D-Y7BA	BMB4-050	BMB4-050	BA4-063	BA4-063

[Mounting screw set made of stainless steel]

The following set of mounting screws made of stainless steel (including nuts) is available. Use it in accordance with the operating environment. (Please order the auto switch mounting bracket separately, since it is not included.)

BBA1: Stainless steel screw set for D-A5/A6/F5/J5 types

Note) Refer to page 1395 for the details of BBA1.

When shipping cylinders with D-M9□A/M9□AV/Y7BA auto switches, the stainless steel screws above are used to secure auto switch mounting brackets.

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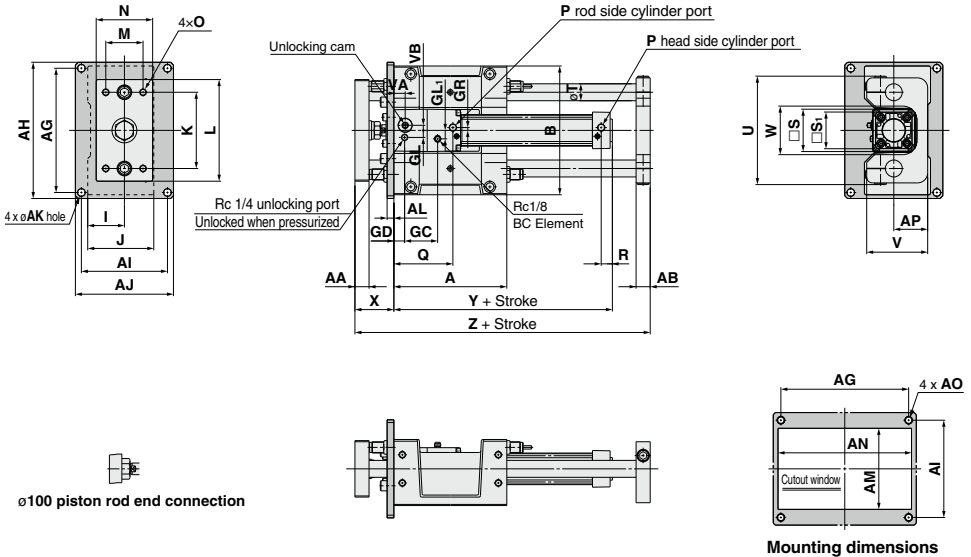


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Dimensions

Front mounting flange type
ø50 to ø100



ø100 piston rod end connection

Mounting dimensions

Standard Stroke

Bore size (mm)	Stroke range (mm)	A	AA	AB	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	B	GC	GD	GL	GL1	GR	I	J	K	L	M	N
50	75, 100, 125	200	25	25	228	250	158	180	14	12	135	234	M12	60	228	58.5	19	12.5	15	5	65	117	135	180	66	100
	150, 200	230	25	27	262	284	178	200	14	12	155	268	M12	70	262	68	23	17.5	12	9	75	138	160	214	76	115
63	250, 300	280	30	30	300	326	200	226	16	16	175	310	M14	80	304	81	33	22	18	11.5	85	153	190	245	80	125
		280	32	30	300	326	200	226	16	16	175	310	M14	80	304	96	37.5	25	20	17	85	153	190	245	80	125

Long Stroke

Bore size (mm)	O	P	Q	R	S	S ₁	T	U	V	VA	VB	W	X	Y	Z
50	M12 x 1.75 depth 23	Rc 1/4	104.5	19.5	75	65	30	192	108	20	9	86	69	187	323
63	M12 x 1.75 depth 23	Rc 3/8	119.5	20.5	90	75	35	224	128	23	8.5	104	69	201	358
80	M14 x 2 depth 28	Rc 3/8	150	23	102	95	40	262	143	33	10.5	128	87	249	431
100	M14 x 2 depth 30	Rc 1/2	170	23	116	114	40	262	143	37.5	10.5	128	87	269	431

Bore size (mm)	Stroke range (mm)
50	350 to 1000
63	350 to 1000
80	350 to 1000
100	350 to 1000