

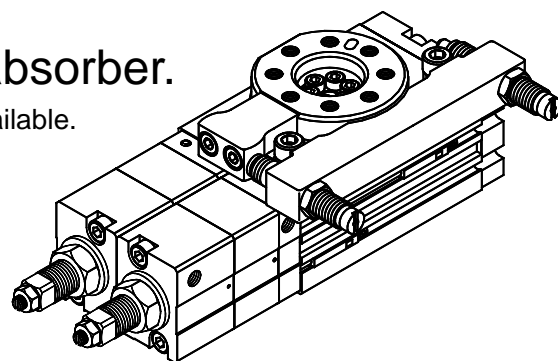
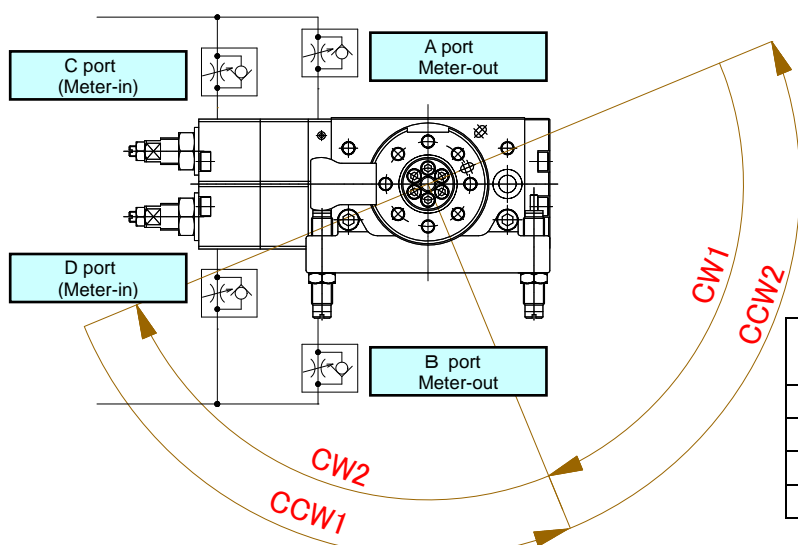
3-Position Rotary Table MSZB-X1 /-X2 /-X3 /-X4

SMC CORPORATION
4-14-1, SOTO-KANDA, CHIYODA-KU,
TOKYO 101-0021, JAPAN
URL: <http://www.smcworld.com>

Feature1: 3-stop positions (Rotation angle: 0°, 90° and 180°)

Feature2: Equipped with external absorber.

* Two types (high-energy type and low energy-type) are available.



Supply port and speed controller

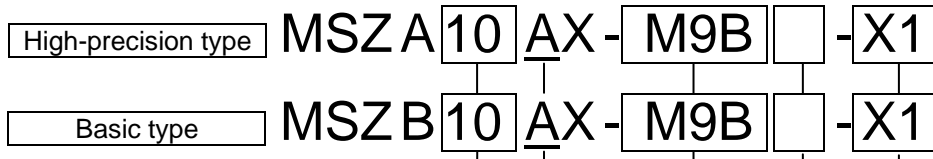
Rotation	Supply port: ●		Speed controller
	A, C port	B, D port	
CW1	●	●	C Port
CW2	●	—	B Port
CCW1	●	●	D Port
CCW2	—	●	A Port

Specifications

Size		10	20	30	50
Operating fluid		Air (Non-lube)			
Max. operating pressure		1MPa			
Min. operating pressure		0.2MPa			
Ambient and fluid temperature		0 to 60°C (No freezing)			
Max. rotation angle / Min. rotation angle		186° / 174°			
End position adjustable range		±3°			
Intermediate position adjustable range ^{*1)}		±10°			
Rotation time adjustable range		0.2 to 1s/90°			
Absorber type	Low-energy type	RB0805	RB1006		RB1411
	High-energy type	RB0806	RB1007		RB1412
Max. allowable kinetic energy	Low-energy type	0.161J	0.574J	0.805J	1.31J
	High-energy type	0.231J	1.06J	1.21J	1.82J
Port size		M5 × 0.8			

*1) The table may have a bound phenomenon stopping at the intermediate-stop position (operating with the max. allowable kinetic energy, the degree of bound is ± 10° to ± 35° from the stop position and it takes from 0.2 to 4 sec. until the table stops completely).

How to Order



Size

10
20
30
50

A With adjustment bolt

Auto Switch

Nil	Without auto switch (built-in magnet)
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*2) Please choose desired auto switch code from the table below.

Number of auto switches

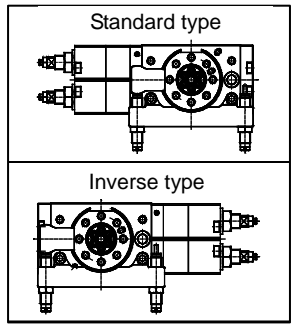
Nil	2
S	1
n	n

*3) The auto switch will be included in the box (unassembled).

Special-order suffix

Suffix	Shock absorber type	Shape
X1	Low-energy type	Standard type
X2	High-energy type	
X3	Low-energy type	Inverse type
X4	High-energy type	

Product shape



Applicable auto switch *4) Please refer to our Best Pneumatics (SMC general catalogue) for the detailed specifications of auto switches.

Code	Auto switch type	Code	Auto switch type	Code	Auto switch type	
A90	Reed switch	D-A90	Solid state switch	M9NW	2-color display solid state switch	
A93		D-A93		M9N		D-M9N
A96		D-A96		M9P		D-M9P
A90V		D-A90V		M9B		D-M9B
A93V		D-A93V		M9NV		D-M9NV
A96V		D-A96V		M9PV		D-M9PV
		M9BV	D-M9BV	M9PW	D-M9PW	
				M9BW	D-M9BW	
				M9NWV	D-M9NWV	
				M9PWV	D-M9PWV	
				M9BWV	D-M9BWV	
F9BA *5)	Water-proof type (2-color display)				D-F9BA	

5) Though the water-proof auto switch is applicable, this actuator (MSZA/MSZB-X*) is not water resistant.

*6) Lead-length suffix (Please add a lead-length suffix after the auto-switch code.)

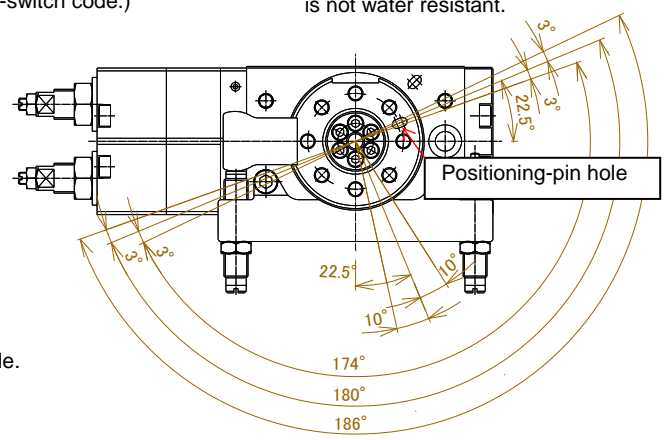
Lead-length suffix

Code	Lead wire length	Example
Nil	0.5 m	M9N
L	3 m	M9NL
Z	5 m	M9NZ

Adjustable range of rotation angle

- * Max. rotation range: 186°
- * Min. rotation range: 174°

*7) The right figure is the rotation range of the positioning-pin hole.

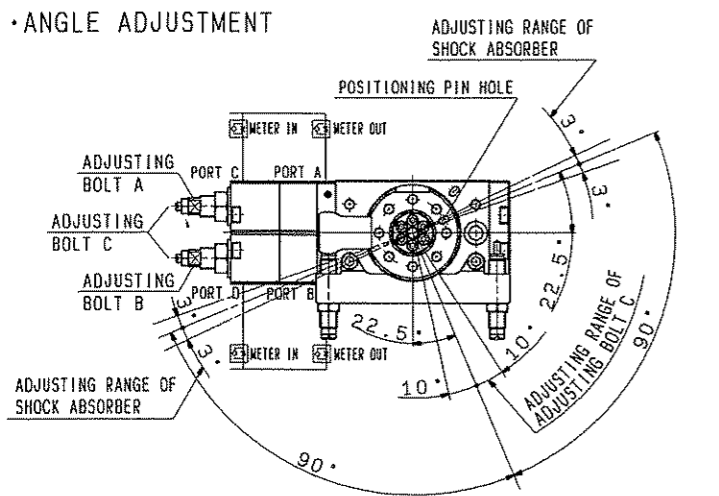


Dimensions: mm (Refer to the drawing attached to the last page)

Caution To ensure the safest possible operation of this product, please be sure to read thoroughly the "Safety Instructions" in our "Best Pneumatics" catalog before use.

(mm)

• ANGLE ADJUSTMENT



• SUPPLY PORT AND SPEED CONTROLLER

Table with columns: OPERATION, SUPPLY PORT (PORT A, PORT B, PORT C, PORT D), SPEED CONTROLLER (PORT C, PORT B, PORT D, PORT A). Includes a small diagram of the controller.

- THE FIGURE SHOWS THE ROTATION RANGE OF THE POSITIONING PIN HOLE.
• ADJUSTING METHOD OF MIDDLE POSITION COMPLIES WITH MSZ STANDARD.
• ADJUSTING BOLT A AND B DO NOT NEED ADJUSTMENT.

HIGH PRECISION TYPE

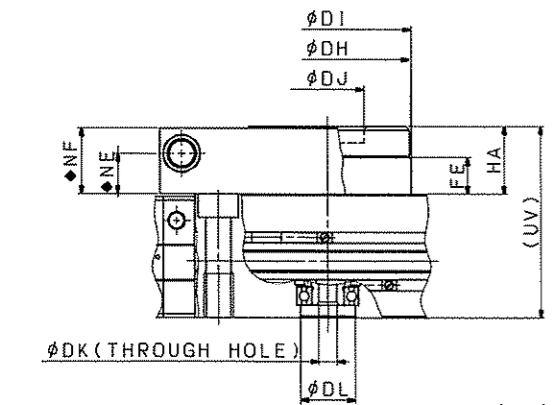


Table with columns: サイズ (Size), DH, DI, DJ (HB), DK, DL (HB), FE, HA, NE, NF, UV. Rows for sizes 10, 20, 30, 50.

HOW TO ORDER

MSZ***AX-**-X2

A: HIGH PRECISION TYPE B: BASIC TYPE
KINDS OF SHOCK ABSORBER: FOR HIGH ENERGY POSITION OF CONNECTING PORT: STANDARD TYPE

SIZE
10
20
30
50

NUMBER OF AUTO SWITCHES
NIL: 2PCS
S: 1PCS
n: nPCS

KINDS OF AUTO SWITCH

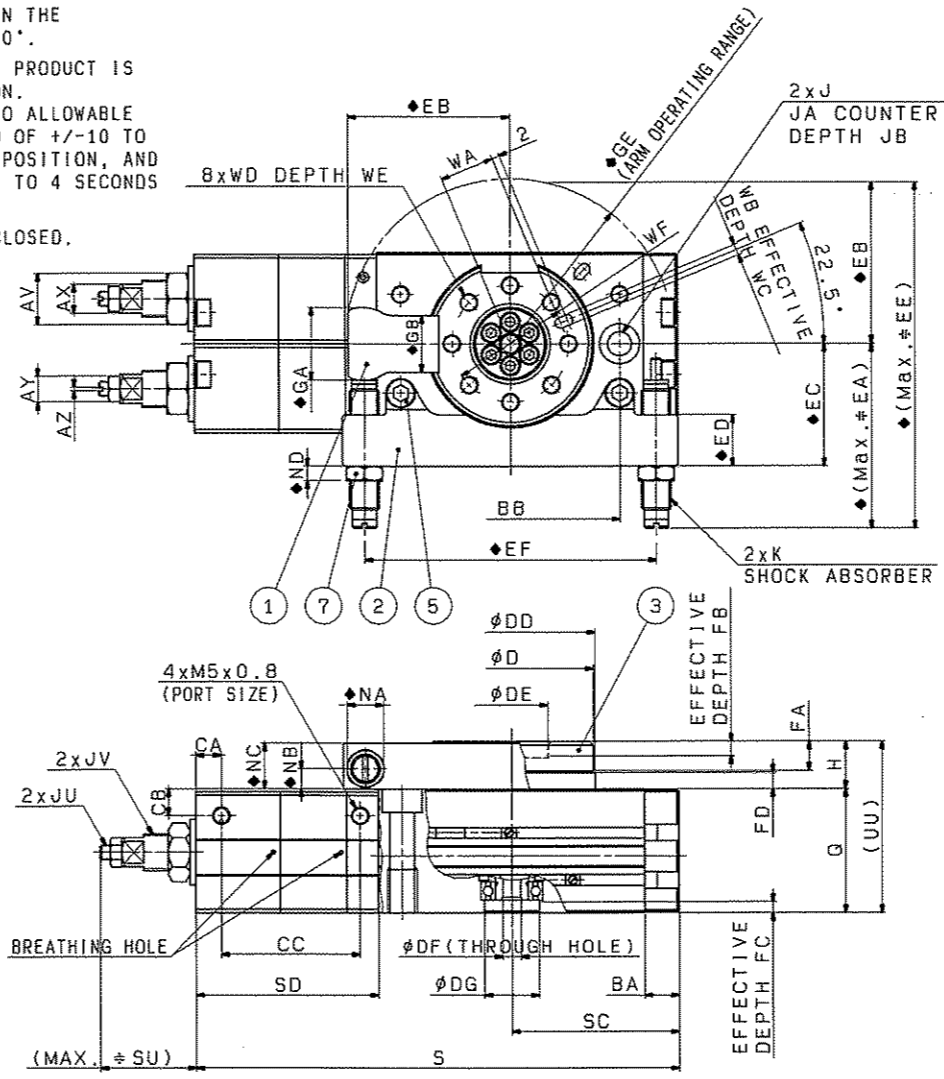
Table with columns: SYMBOL, TYPE. Lists various auto switch models like A90, A93, A96, A90V, A93V, A96V.

Table with columns: SYMBOL, TYPE. Lists various shock absorber models like M9N, M9P, M9B, M9NV, M9PV, M9BV, F9NW, F9NV, F9BW, F9NWV, F9PV, F9BV.

Table with columns: SIZE, AA, A, AV, AW, AX, AY, AZ, BA, BB, CA, CB, CC, D, DD, DE (H9), DF, DG (H9), EA, EB, EC, ED, EE, EF, FA, FB, FC, FD, GA, GB, GC, GD, GE, H, J. Rows for sizes 10, 20, 30, 50.

Table with columns: SIZE, JA, JB, JC, JD, JU, JV, K, NA, NB, NC, ND, Q, S, SC, SD, SU, UA, WB (H9), WC, WD, WE, WF, XB (H9), XC, YA, YB (H9), YC. Rows for sizes 10, 20, 30, 50.

- TABLE POSITION SHOWS THE COUNTERCLOCKWISE (CCW) END WHEN THE END-TO-END ANGLE IS SET AT 180°.
• THERE CAN BE A BOUND WHEN THE PRODUCT IS STOPPED AT ITS MIDDLE POSITION.
• SHIPPING WITH AUTO-SWITCH ENCLOSED. (NOT MOUNTED)



CONTENTS OF SPECIAL WITH EXTERNAL SHOCK ABSORBER. (FOR HIGH ENERGY, STANDARD TYPE)
♦ MARKS INDICATE THE DIMENSIONS AND SECTIONS WHICH ARE DIFFERENT FROM STANDARD.

SPECIFICATIONS

Table with columns: SIZE (10, 20, 30, 50) and various specifications like FLUID, MAX. OPERATING PRESSURE, MIN. OPERATING PRESSURE, AMBIENT AND FLUID TEMP, MAX. OPERATING ANGLE, RANGE OF THE END POSITIONING, RANGE OF THE MIDDLE POSITIONING, OPERATING TIME ADJUSTMENT RANGE, CUSHION, ALLOWABLE KINETIC ENERGY, ALLOWABLE LOAD.

Table with columns: REED SWITCH TYPE (MODEL, VOLTAGE, CURRENT RANGE, RESPONSE TIME, SHOCK RESISTANCE, INTERNAL VOLTAGE DROP) and SOLID STATE SWITCH TYPE (MODEL, POWER SOURCE, CURRENT CONSUMPTION, LOAD VOLTAGE, RESPONSE TIME, SHOCK RESISTANCE, INTERNAL VOLTAGE DROP).

THE PARTS WHICH DO NOT EXIST ON THE PARTS LIST ARE COMMON TO MSZ***A.

Parts list table with columns: ITEM, PART NO, PART NAME, MATERIAL, QTY, REMARKS. Lists various components like nuts, screws, shock absorbers, table, absorber holder, and arm.

Revision table with columns: REVISION, DESCRIPTION, DATE (PREPARED), REV NO, MODEL, QTY. Includes a title block for '3 POSITION ROTARY TABLE' and 'MSZ***AX-**-X2'.

