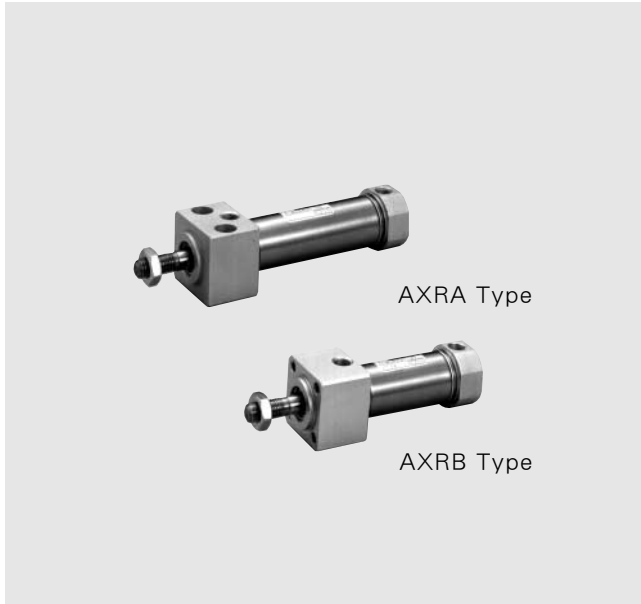


Series **AXR**

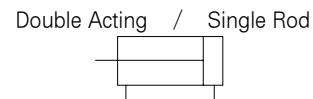
Direct Mounting Cylinder/Double Acting Single Rod

Bore size(mm) : $\phi 20$, $\phi 25$, $\phi 32$, $\phi 40$

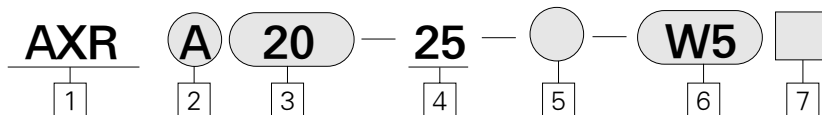


- STAINLESS STEEL BODY
- HIGH CYCLE LIFE
- LOW BREAKAWAY
- MAGNET STANDARD FOR AUTO SWITCH
- BUMPERS STANDARD
- DESIGNED FOR NON-LUBRICATED SERVICE
- COMPACT LIGHT DESIGN
- ADJUSTABLE STROKE AVAILABLE
- REPLACEABLE ROD GLAND
- MANUFACTURING CERTIFIED TO ISO 9001 / 9002

Symbol



How to Order



1 Direct Mount

2 Mounting

A : Rear Pivot Mounting
B : Front Face Mounting

3 Bore Size(mm)

20 : $\phi 20$
25 : $\phi 25$
32 : $\phi 32$
40 : $\phi 40$

4 Stroke/mm

※ For Stroke Refer to Page A-99.

5 Series

Blank : Standard type
XC16 : Copper-free

6 Applicable Auto Switch Reed Switch (Band Mounted Type)

<Grommet>

Blank : Without Auto Switch
W5 : W5

※Standard Lead Length 0.5m
(Up to 3m Optional)
(Example) W5 → W5L

7 Number of Switches

Blank : 2 pcs.
S : 1 pc.
n : (n) pcs.

PART No. of Auto Switch Mounting Band

Auto Switch Model	Bore size (mm)			
	$\phi 20$	$\phi 25$	$\phi 32$	$\phi 40$
W5	TBM2-020	TBM2-025	TBM2-032	TBM2-040

Specifications

Action	Double Acting Single Rod
Fluid	Air
Proof Pressure	15kgf/cm ² (1.5MPa)
Max. Operating Pressure	9.9kgf/cm ² (1.0MPa)
Min. Operating Pressure	0.5kgf/cm ² (0.05MPa)
Ambient and Fluid Temperature	40~140°F (5~60°C)
Lubricant	None (Non-Lube)
Stroke Tolerance	+1.4 0 mm
Mounting	Flush Mounting, Front Nose Mounting

Piston Speed

Bore Size(mm)	φ 20	φ 25	φ 32	φ 40
Piston Speed(mm/sec)	50~750			
Allowable Kinetic Energy(kgf-cm)	2.7	4	6.5	12

Standard Stroke

Bore Size(mm)	Standard Stroke(mm)
φ 20	25, 50, 75, 100, 125, 150
φ 25	25, 50, 75, 100, 125, 150, 200
φ 32	25, 50, 75, 100, 125, 150, 200
φ 40	25, 50, 75, 100, 125, 150, 200, 250, 300

Auto Switch Specifications

Mounting	Lead Wire Entry	Reed Switch
Band Mounting Type	Grommet	W5

Mounting and Accessories

Accessories	Standard	Option	
	Rod End Nut	Single Knuckle Joint	Double Knuckle Joint
Rear Pivot Mounting	●	●	●
Front Nose Mounting	●	●	●

Weight Table

kgf

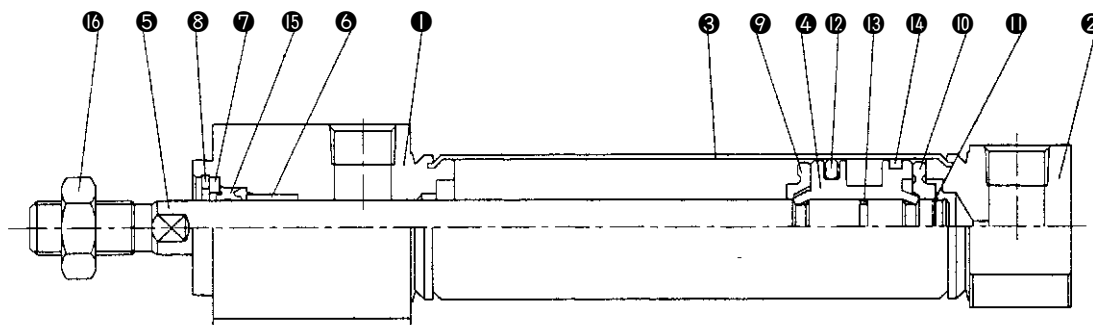
Bore size(mm)		φ 20	φ 25	φ 32	φ 40
Basic Weight	Rear Pivot Mounting	0.14	0.23	0.32	0.62
	Front Nose Mounting	0.14	0.22	0.32	0.61
Additional Weight For Each 50 mm of Stroke		0.04	0.06	0.08	0.13

Calculation Example : AXRA 32-100

• Basic weight ... 0.32 • Additional weight ... 0.08/50 stroke • Cylinder stroke ... 100 stroke
 $0.32 + 0.08 \times 100/50 = 0.48$ kgf

Series AXR

Construction/Parts List



Parts List

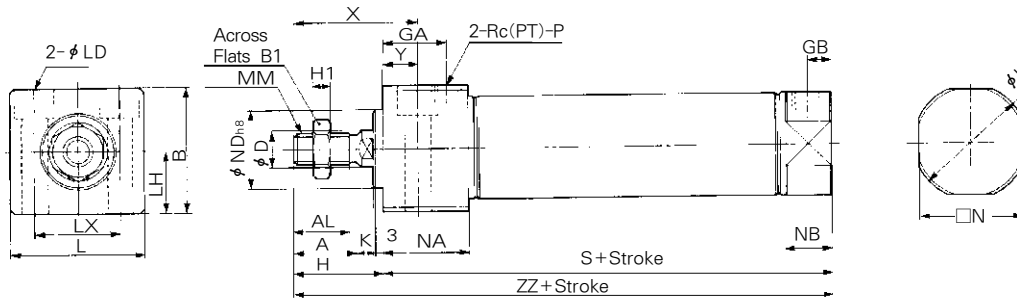
No.	Description	Material	Remarks
①	Rod Cover	Aluminum Alloy	White Alumite
②	Head Cover	Aluminum Alloy	White Alumite
③	Cylinder Tube	Stainless Steel	
④	Piston	Aluminum Alloy	Chromate
⑤	Piston Rod	Carbon Steel	Hard Chrome Plated
⑥	Bushing	Sintered BR	
⑦	Packing	NBR	Nickel Plated
⑧	Retaining Ring	Carbon Steel	Nickel Plated
⑨	Bumper A	Urethane	
⑩	Bumper B	Urethane	
⑪	Retaining Ring	Carbon Tool Steel	
⑫	Piston Packing	NBR	
⑬	Rod Packing	NBR	
⑭	Rod End Nut	Carbon Steel	Nickel Plated

Packing List

No.	Description	Material	Bore Size (mm)			
			φ 20	φ 25	φ 32	φ 40
⑬	Piston Packing	NBR	PSD20	PSD25	PSD30	PSD40
⑭	Wear Ring	Resin				
⑮	Rod Packing	NBR	PDU-10	PDU-12LZ	PDU-24LZ	PDU-16Z

Rear Pilot Mounting

AXRA Bore Size Stroke



(Unit:mm)

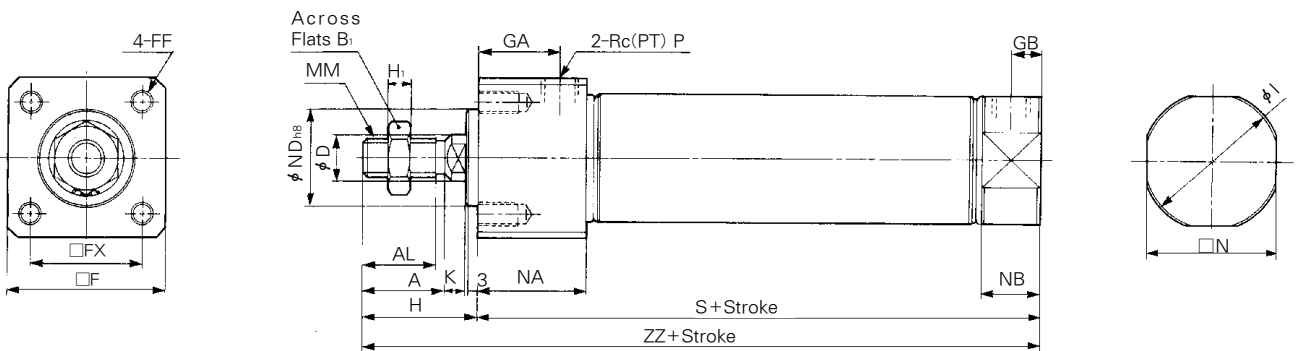
Bore size	Stroke range
φ 20	~150
φ 25	~200
φ 32	~200
φ 40	~300

(Unit:mm)

Bore Size	A	AL	B	B ₁	D	GA	GB	H	H ₁	I	K	L	LD	LH	LX	MM	N	NA	NB	ND	P	S	X	Y	ZZ
φ 20	18	15.5	30.3	13	8	22	8	27	5	27	5	33.5	φ5.5, φ9.5C-BORE Dp6.5	15	21	M8×1.25	24	29	15	20 ⁰ _{-0.033}	1/8	76	39	12	103
φ 25	22	19.5	36.3	17	10	22	8	31	6	33	5.5	39	φ6.6, φ11C-BORE Dp7.5	18	25	M10×1.25	30	29	15	26 ⁰ _{-0.033}	1/8	76	43	12	107
φ 32	22	19.5	42.3	17	12	22	8	31	6	37.5	5.5	47	φ9, φ14C-BORE Dp10	21	30	M10×1.25	34.5	29	15	26 ⁰ _{-0.033}	1/8	78	43	12	109
φ 40	24	21	52.3	22	14	27	11	34	8	46.5	7	58.5	φ11, φ17.5C-BORE Dp12.5	26	38	M14×1.5	42.5	37.5	21.5	32 ⁰ _{-0.039}	1/4	104	49	15	138

Front Face Mounting

AXRB Bore Size Stroke



(Unit : mm)

Bore Size	A	AL	B ₁	D	F	FF	FX	GA	GB	H	H ₁	I	K	MM	N	NA	NB	ND	P	S	ZZ	Stroke
φ 20	18	15.5	13	8	30.4	M5×0.8Depth9	22	22	8	27	5	27	5	M8×1.25	24	29	15	20 ⁰ _{-0.033}	1/8	76	103	~150
φ 25	22	19.5	17	10	36.4	M6×1Depth11	26	22	8	31	6	33	5.5	M10×1.25	30	29	15	26 ⁰ _{-0.033}	1/8	76	107	~200
φ 32	22	19.5	17	12	42.4	M6×1Depth11	30	22	8	31	6	37.5	5.5	M10×1.25	34.5	29	15	26 ⁰ _{-0.033}	1/8	78	109	~200
φ 40	24	21	22	14	52.4	M8×1.25Depth14	36	27	11	34	8	46.5	7	M14×1.5	42.5	37.5	21.5	32 ⁰ _{-0.039}	1/4	104	138	~300

- ACP
- UACP
- AX**
- AS
- AM
- AL
- ALX
- UARD
- UAQ
- AJ
- AG
- UAG
- ADM
- ADR
- AMR
- UAMR
- AST
- W~

Series AXR

① Adjustable Stroke Cylinder/Extension Adjustable Type

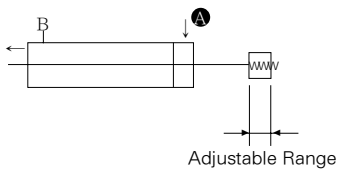
AXR Mounting Bore Size Stroke Stroke Adjusting Symbol XC8



- Stroke adjusting symbol
 A-Stroke Adjusting Range 0~25 mm
 B-Stroke Adjusting Range 0~50 mm

The extended stroke of the cylinder can be adjusted by the stopper on the head side from full stroke (0~25) mm or (0~50) mm.

Symbol

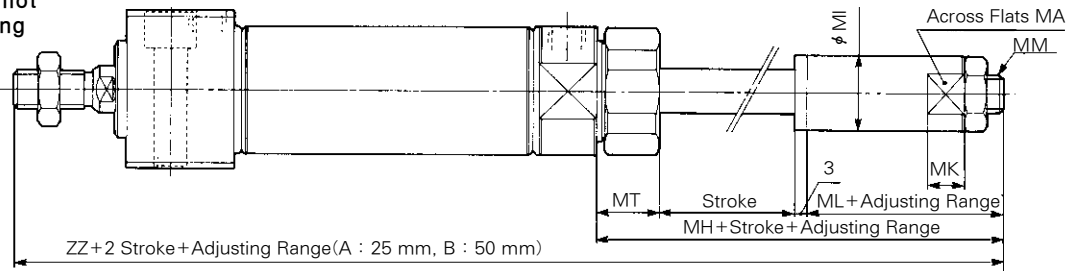


Specifications

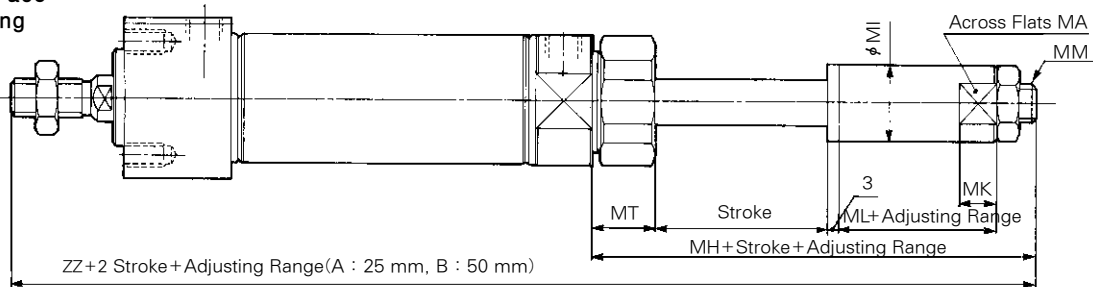
Type	Air Cylinder
Applicable Bore Size	φ 20, φ 25, φ 32, φ 40
Action	Double Acting Single Rod
Piston Speed(mm/sec)	50~750
Cushion	Rubber Cushion(Standard)
Stroke Adjusting System	Stopper Adjustment
Stroke Adjusting Range	A:0~25 mm, B : 0~50 mm
Mounting	Rear Pivot Mounting, Front Nose Mounting

Dimensions

Rear Pilot Mounting



Front Face Mounting



(mm)

Bore Size	MA	MH	MI	MK	ML	MM	MT	ZZ
φ 20	12	47	15	8	18	M8×1.25	16.5	150
φ 25	17	49	20	10	18	M10×1.25	17.5	156
φ 32	17	49	20	10	18	M10×1.25	17.5	158
φ 40	22	60	25	12	22	M14×1.5	21.5	198

※ Other dimensions are the same as for standard type.

② Adjustable Stroke Cylinder/Retraction Adjustable Type

TCM2R Mounting Bore Size Stroke Stroke Adjusting Symbol — XC9



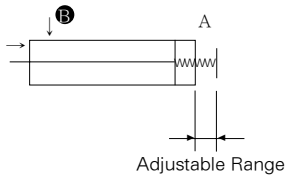
- Stroke Adjusting Symbol
 A-Stroke Adjusting Range 0~25 mm
 B-Stroke Adjusting Range 0~50 mm

The retracted stroke of the cylinder can be adjusted from (0~25) mm or (0~50) mm by the adjusting bolt.

Specifications

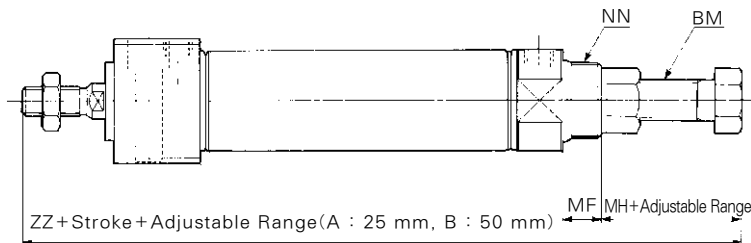
Type	Air Cylinder
Applicable Bore Size	φ 20, φ 25, φ 32, φ 40
Action	Double Acting Single Rod
Piston Speed(mm/sec)	50~750
Cushion	Rubber Cushion(Standard)
Stroke Adjusting System	Stopper Adjustment
Stroke Adjusting Range	A:0~25 mm, B : 0~50 mm
Mounting	Rear Pivot Mounting, Front Nose Mounting

Symbol

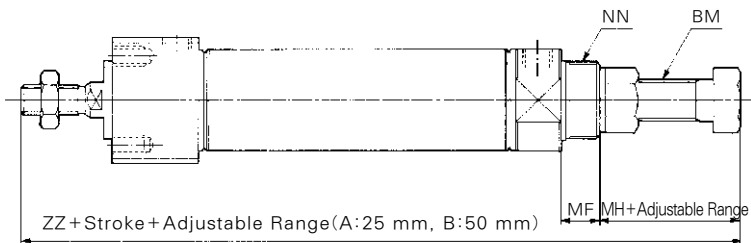


Dimensions

Rear Pilot Mounting



Front Face Mounting



(Unit : mm)

Bore Size	BM	MF	MH	NN	ZZ
φ 20	M8×1.25	13	20	M20×1.5	136
φ 25	M8×1.25	13	20	M26×1.5	140
φ 32	M8×1.25	13	20	M26×1.5	142
φ 40	M12×1.75	16	24	M30×2	178

* Other dimensions are the same as for standard type.

- ACP
- UACP
- AX
- AS
- AM
- AL
- ALX
- UARD
- UAQ
- AJ
- AG
- UAG
- ADM
- ADR
- AMR
- UAMR
- AST
- W~