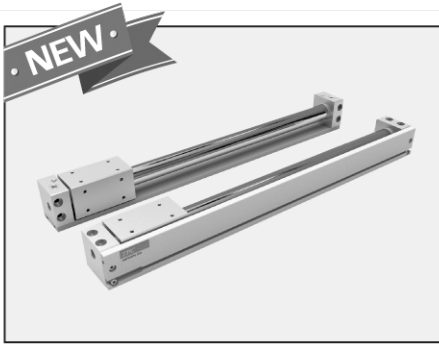


AMRBR Series

Magnetic rodless cylinder / Direct mount type / Bore size : Ø6, Ø10, Ø16, Ø20, Ø25, Ø32, Ø40, Ø50

Actuator
Cylinder

AMRBR Series



- Rubber cushion (AMRBR Ø6, Ø10, Ø16) and air cushion (AMRBR Ø20, Ø25, Ø32, Ø40, Ø50) options for shock absorption
- Auto switch rail installed by default
- Space-saving

How to order

AMR **B** **R** **G** **10** — **50** **N** **A** — **W8H** **L** — **N**

1 2 3 4 5 6 7 8 9 10 11

1 Magnetically coupled rodless cylinder

2 Basic type

3 Direct mount type

4 Piping type

Blank : Standard type (Both sides)

G : Centralized piping type

※ Centralized piping type is not available for Ø6.

5 Bore size

Bore size		6 Standard stroke(mm)
No.	Size	
6	Ø6	50, 100, 150, 200, 250, 300
10	Ø10	50, 100, 150, 200, 250, 300, 350, 400, 450, 500
16	Ø16	100, 150, 200, 250, 300, 350, 400, 450, 500, 600, 700, 750
20	Ø20	100, 150, 200, 250, 300, 350, 400, 450, 500, 600, 700, 750, 800, 900, 950
25	Ø25	100, 150, 200, 250, 300, 350, 400, 450, 500, 600, 700, 750, 800, 900, 950
32	Ø32	100, 150, 200, 250, 300, 350, 400, 450, 500, 600, 700, 750, 800, 900
40	Ø40	100, 150, 200, 250, 300, 350, 400, 450, 500, 600, 700, 750, 800, 900
50	Ø50	100, 100, 150, 200, 250, 300, 350, 400, 450, 500, 600, 700, 750, 800, 900, 1000, 1100, 1200, 1300, 1400, 1500

※ Please contact us for items not listed above.

7 Switch rail

Blank : Mounted

N : Not mounted (Only piping on both sides)

8 Cushion

Blank : Rubber cushion

A : Air cushion

※ Air cushion only applies to items bigger than Ø20.

(Does not apply to Ø6, Ø10, Ø16.)

9 Auto switch

Blank : No switch

W8H(V) : Reed switch (Horizontal/vertical, 2 wires)

W9H(V) : Solid state switch

(Horizontal/vertical, 2 wires)

W10V : Solid state switch

(Vertical, 2 wires /3 wires)

10 Lead wire

Blank : 1m

L : 3m

11 Number of switches

Blank : 2 pcs

S : 1 pc

N : N pcs

● DIRECT MOUNT Cylinder

The AMRBR series is a cylinder that can be directly attached by a square rod cover.

● Achieve reduction of mounting space
Because it is directly attached without a bracket, the space for attaching is greatly reduced.

Specifications

Fluid	Air							
Proof Pressure	1.05MPa(10.5kgf/cm ²)							
Max. operating pressure	0.7MPa(7kgf/cm ²)							
Min. operating pressure	0.2MPa(2kgf/cm ²)							
Ambient & fluid temperature	5~60°C							
Lubrication	No lubrication							
Piston Speed	150~400mm/s							
Cushion	Ø 6, Ø 10, Ø 16				Rubber Cushion			
	Ø 20, Ø 25, Ø 32, Ø 40, Ø 50				Rubber/Air Cushion			
Mounting	Direct Mounting Type							
Installation Position	Horizontal / Tilt / Vertical							
Piping Method	Standard type (Both sides piping) / concentrated piping type							
Magnetic Holding Force (kgf)	Ø 6	Ø 10	Ø 16	Ø 20	Ø 25	Ø 32	Ø 40	Ø 50
	2	5.5	12	24	37	60	94	150

Weight Table

Form		Bore Size (mm)							
		6	10	16	20	25	32	40	50
With Switch Rail	AMRBR(G) : 0mm stroke	0.073	0.155	0.31	0.538	0.765	1.359	2.166	4.11
	Weight added per 50 strokes	0.015	0.023	0.038	0.049	0.059	0.081	0.103	0.159
Without Switch Rail	AMRBR : 0mm stroke	0.059	0.13	0.267	0.476	0.686	1.247	2.01	3.8
	Weight added per 50 strokes	0.003	0.006	0.015	0.02	0.025	0.037	0.05	0.08

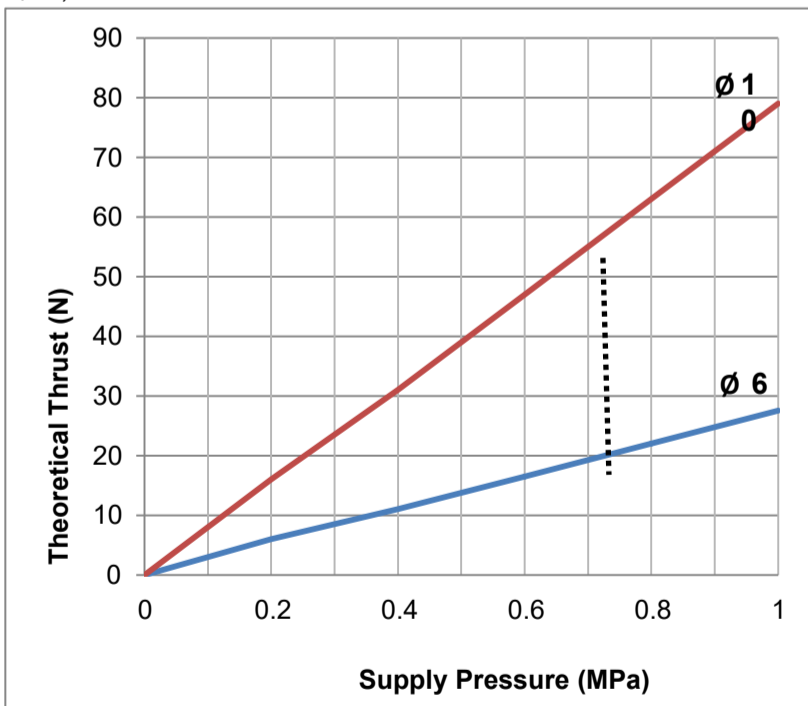
Note) Calculation method: Product weight = Standard weight + extra weight x product stroke ÷ 50

EX : AMRBR20-500

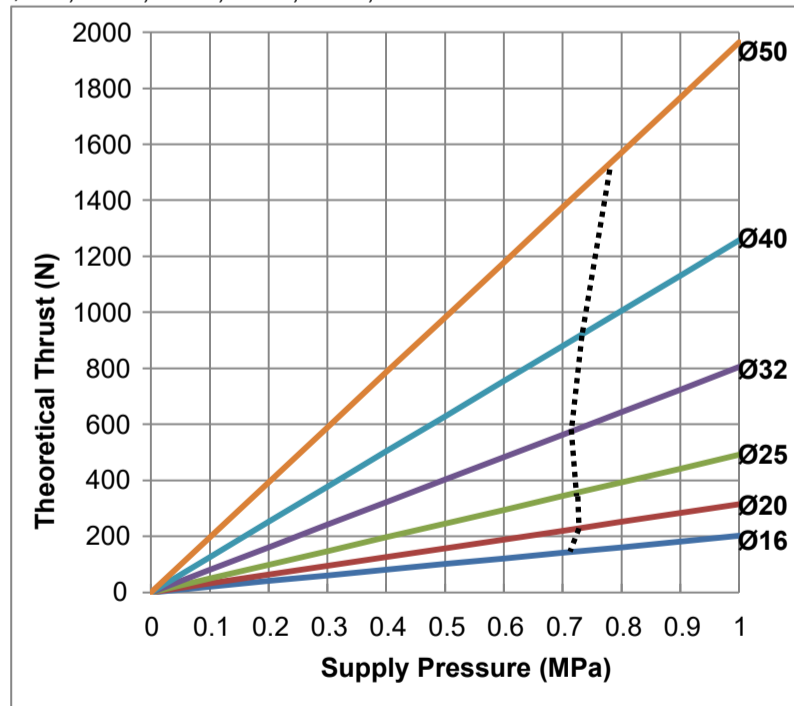
Standard weight : 0.538, Extra weight : 0.049, Stroke : 500mm (0.538+0.049x500÷50=1.028kg)

Theoretical Output Table

Ø 6, Ø 10

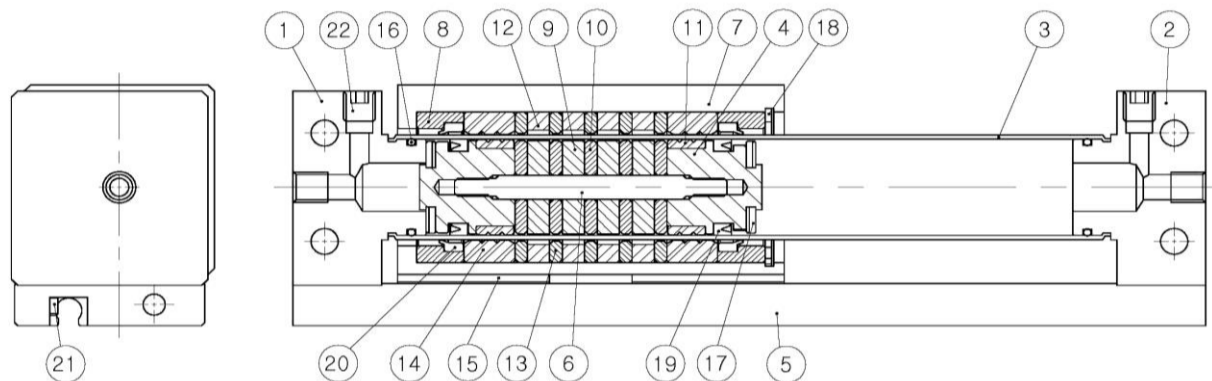


Ø 16, Ø 20, Ø 25, Ø 32, Ø 40, Ø 50

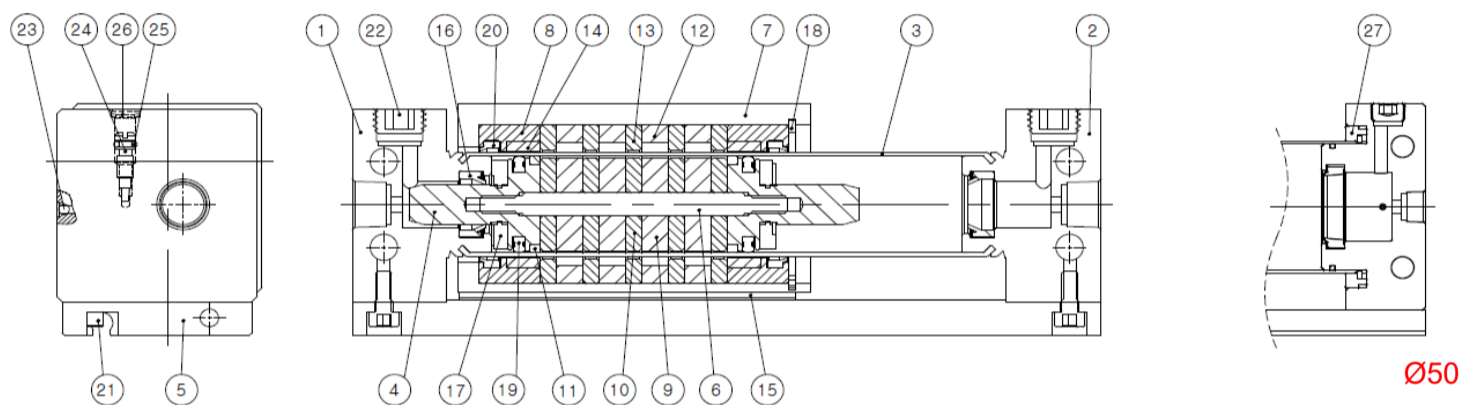


Internal structure (Standard piping type)

AMRBR Ø 6, Ø 10, Ø 16



AMRBR Ø 20, Ø 25, Ø 32, Ø 40, Ø 50

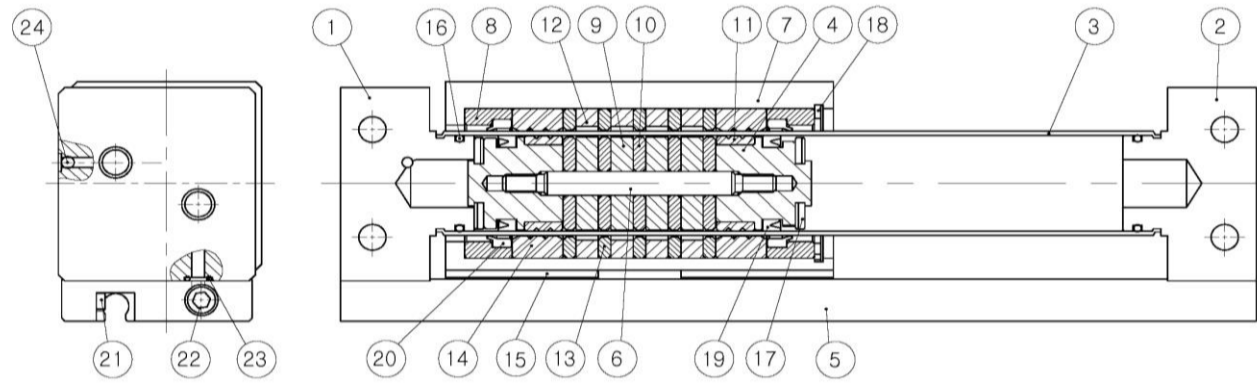


#	Part Name	Material	Note
1	END COVER-A	Aluminum Alloy	White alumite
2	END COVER-B	Aluminum Alloy	White alumite
3	CYLINDER TUBE	Stainless Steel	
4	PISTON	Brass	Ø 6
		Aluminum Alloy	Ø 10 ~ Ø 40
5	SWITCH RAIL	Aluminum Alloy	
6	SHAFT	Stainless Steel	
7	SLIDER	Aluminum Alloy	White alumite
8	HOLDER	Aluminum Alloy	
9	INNER MAGNET	Circuitry magnet	Nickel plating
10	INNER YOKE	Rolled steel	Zinc plating
11	INNER WEARING	Synthetic resin	
12	OUTER MAGNET	Circuitry magnet	Nickel plating
13	OUTER YOKE	Rolled steel	Zinc plating
14	OUTER WEARING	Synthetic resin	
15	SLIDER WEARING	Synthetic resin	
16	GASKET	NBR	Ø 6~Ø 16
	CUSHION PACKING	NBR	Ø 20~Ø 40
17	BUMPER	Urethane	White alumite
18	SNAP RING	Carbon tool steel	Nickel plating
19	PISTON PACKING	NBR	

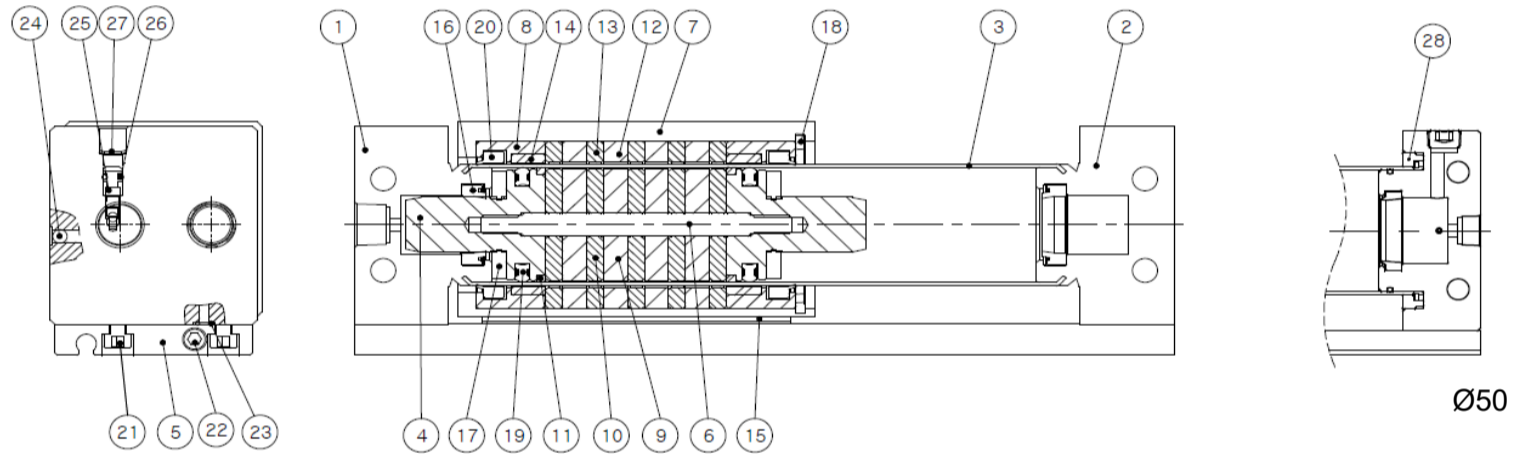
#	Part Name	Material	Note
20	WIPER RING	NBR	
21	Fastening bolt	Carbon steel	Nickel plating
22	PORT PLUG	Carbon tool steel	Nickel plating
23	STEEL BALL	Stainless steel	
24	CUSHION V/V	Free cutting steel	Nickel plating
25	CUSHION V/V PACKING	NBR	
26	STOP RING	Carbon tool steel	Black dyeing
27	RING PLATE	Aluminum Alloy	White alumite

Internal structure (concentrated piping type)

AMRBRG Ø 10, Ø 16



AMRBRG Ø 20, Ø 25, Ø 32, Ø 40, Ø 50

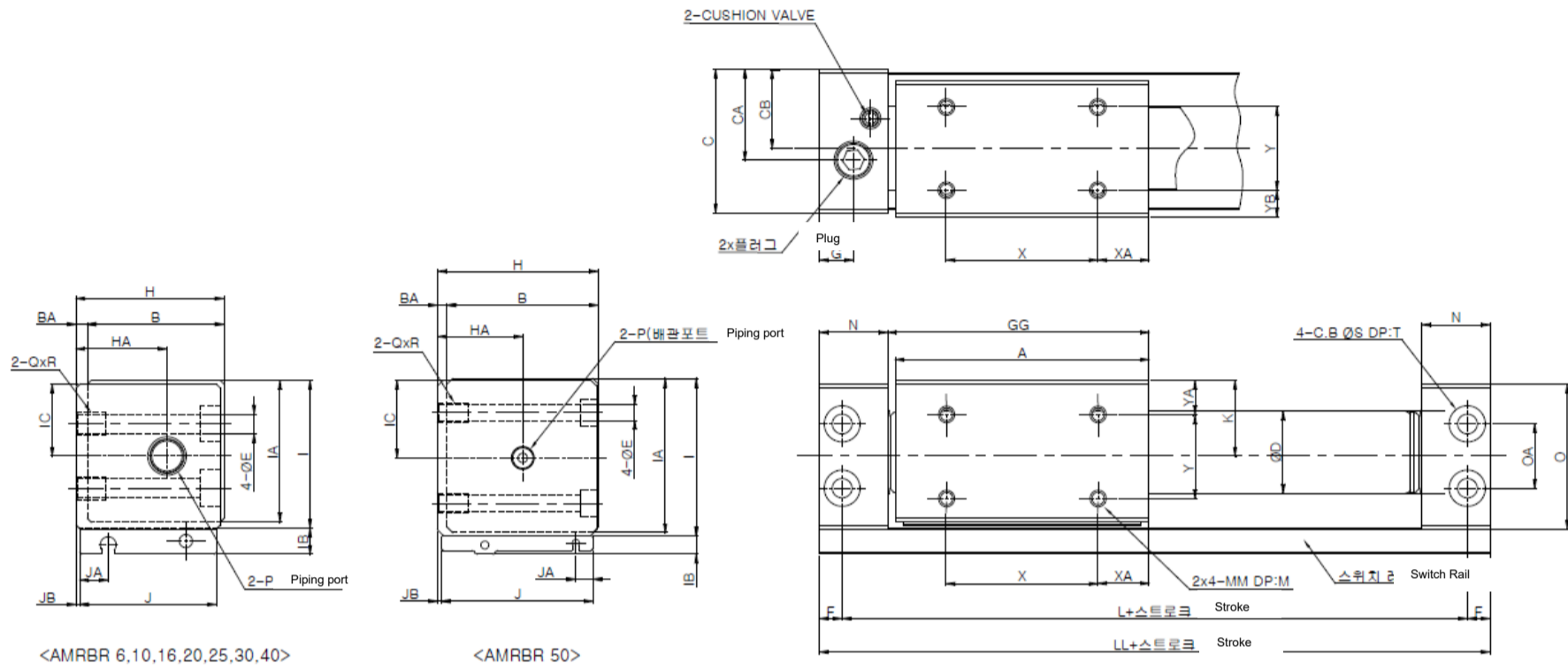


#	Part Name	Material	Note
1	END COVER-A	Alluminum Alloy	White aluminite
2	END COVER-B	Alluminum Alloy	White alumite
3	CYLINDER TUBE	Stainless Steel	
4	PISTON	Alluminum Alloy	Ø 10 ~ Ø40
5	SWITCH RAIL	Alluminum Alloy	White alumite
6	SHAFT	Stainless Steel	
7	SLIDER	Alluminum Alloy	White alumite
8	HOLDER	Alluminum Alloy	
9	INNER MAGNET	Circuitry magnet	Nickel plating
10	INNER YOKE	Rolled steel	Zinc plating
11	INNER WEARING	Synthetic resin	
12	OUTER MAGNET	Circuitry magnet	Nickel plating
13	OUTER YOKE	Rolled steel	Zinc plating
14	OUTER WEARING	Synthetic resin	
15	SLIDER WEARING	Synthetic resin	
16	GASKET	NBR	Ø 6~Ø 16
	CUSHION PACKING	NBR	Ø 20~Ø40
17	BUMPER	Urethane	
18	SNAP RING	Carbon tool steel	Nickel plating
19	PISTON PACKING	NBR	
20	WIPER RING	NBR	

#	Part Name	Material	Note
21	Fastening bolt	Carbon steel	Nickel plating
22	PORT PLUG	Carbon tool steel	Nickel plating
23	GASKET	NBR	
24	STEEL BALL	Stainless Steel	
25	CUSHION V/V	Free cutting steel	Nickel plating
26	CUSHION V/V PACKING	NBR	
27	STOP RING	Carbon tool steel	Black dyeing
28	RING PLATE	Alluminum Alloy	White aluminite

Dimensional drawing

Standard piping type (both sides piping) : $\varnothing 6 \sim \varnothing 50$



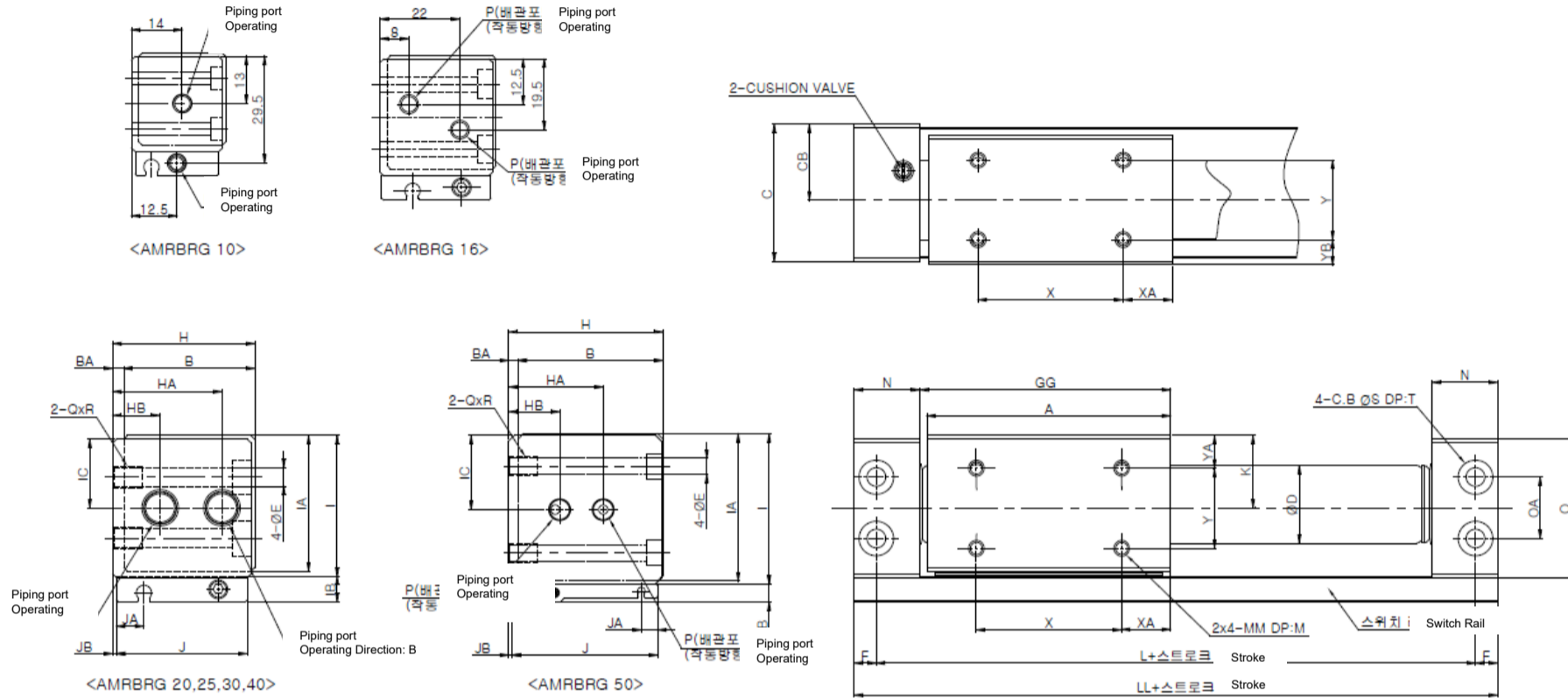
Form	A	B	BA	C	CA	CB	D	E	F	G	GG	H	HA	I	IA	IB	IC	J	JA	JB	K
AMRBR6	39	17	2	18	10.5	10.5	7	3.5	3	7	41.5	19	10.5	20	18.5	6	9.5	17	4.5	0.5	10.5
AMRBR10	42	24	2	25	14	14	11	3.5	4	9	44.5	26	14	27	25.5	7	13	23	4.5	1	14
AMRBR16	61	30	2	31	17	17	17.4	4.3	5	10.5	63.5	32	17	33	31.5	7	16	30	8.5	0.5	17
AMRBR20	67	36	3	38	24	21	21.6	5.2	6	9	69	39	24	39	37.5	7	19	36	7.5	1	20
AMRBR25	74	41	3	43	23.5	23.5	26.6	5.2	6	8.5	76	44	23.5	44	42.5	7	21.5	41	6.5	1	22.5
AMRBR32	87	52	3	54	29	29	33.8	7	7	10.5	88.5	55	29	55	53.5	7	27	51	7	1.5	28
AMRBR40	91	62	5	66	36	36	42	7	7	10	93.5	67	36	65	63.8	7	32	62	8	2	33
AMRBR50	110	80	5	84	45	45	52.4	8.6	8.5	14	113	85	45	83	81.5	10	41	80	9	2	42

Standard	M	MM	N	O	OA	QxR	S	T	X	XA	Y	YA	YB	L	LL
AMRBR6	3.5	M3x0.5	11	19	10	M4x0.7x6	6.5	3.2	20	9.5	10	5.5	3.5	60	66
AMRBR10	4	M3x0.5	14.5	26	14	M4x0.7x6	6.5	3.2	20	11	15	6.5	4.5	68	76
AMRBR16	5	M4x0.7	14	32	18	M5x0.8x7	8	4.2	25	18	18	8	6	84	94
AMRBR20	5	M4x0.7	18	38	17	M6x1x8	9.5	5.2	40	13.5	22	9	7	95	107
AMRBR25	6	M5x0.8	19.5	43	20	M6x1x8	9	5.2	40	17	28	8.5	6.5	105	117
AMRBR32	7	M6x1	20	54	26	M8x1.25x10	11	6.5	50	18.5	35	10.5	8.5	116	130
AMRBR40	8	M6x1	26	64	34	M8x1.25x10	11	6.5	60	20.5	40	13	11	134	148
AMRBR50	10	M8x1.25	30	82	48	M10x1.5x15	14	8.2	60	25	50	17	15	159	176

Standard	P(Piping port)
AMRBR6	M3x0.5
AMRBR10	M5x0.8
AMRBR16	M5x0.8
AMRBR20	Rc 1/8
AMRBR25	Rc 1/8
AMRBR32	Rc 1/8
AMRBR40	Rc 1/4
AMRBR50	Rc 1/4

Dimensional drawing

Concentrated piping type : $\varnothing 10 \sim \varnothing 50$

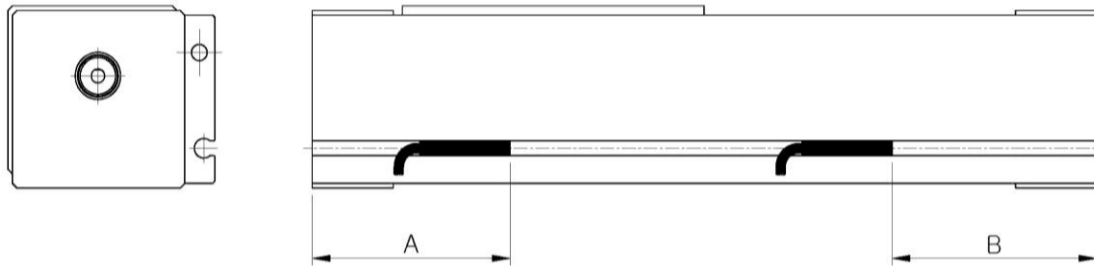


Form	A	B	BA	C	CB	D	E	F	GG	H	HA	HB	I	IA	IB	IC	J	JA	JB	K	M
AMRBRG10	42	24	2	25	14	11	3.5	4	44.5	26	-	-	27	25.5	7	13	23	4.5	1	14	4
AMRBRG16	61	30	2	31	17	17.4	4.3	5	63.5	32	-	-	33	31.5	7	16	30	8.5	0.5	17	5
AMRBRG20	67	36	3	38	21	21.6	5.2	6	69	39	30	13	39	37.5	7	19	36	7.5	1	20	5
AMRBRG25	74	41	3	43	23.5	26.6	5.2	6	76	44	33.5	14.5	44	42.5	7	21.5	41	6.5	1	22.5	6
AMRBRG32	87	52	3	54	29	33.8	7	7	88.5	55	41	20	55	53.5	7	27	51	7	1.5	28	7
AMRBRG40	91	62	5	66	36	42	7	7	93.5	67	50	25	65	63.8	7	32	62	8	2	33	8
AMRBR50	110	80	5	84	45	52.4	8.6	8.5	113	85	52	28	83	81.5	10	41	80	9	2	42	10

Standard	MM	N	O	OA	QxR	S	T	X	XA	Y	YA	YB	L	LL
AMRBRG10	M3x0.5	14.5	26	14	M4x0.7x6	6.5	3.2	20	11	15	6.5	4.5	68	76
AMRBRG16	M4x0.7	14	32	18	M5x0.8x7	8	4.2	25	18	18	8	6	84	94
AMRBRG20	M4x0.7	18	38	17	M6x1x8	9.5	5.2	40	13.5	22	9	7	95	107
AMRBRG25	M5x0.8	19.5	43	20	M6x1x8	9	5.2	40	17	28	8.5	6.5	105	117
AMRBRG32	M6x1	20	54	26	M8x1.25x10	11	6.5	50	18.5	35	10.5	8.5	116	130
AMRBRG40	M6x1	26	64	34	M8x1.25x10	11	6.5	60	20.5	40	13	11	134	148
AMRBR50	M8x1.25	30	82	48	M10x1.5x15	14	8.2	60	25	50	17	15	159	176

Standard	P(Piping port)
AMRBRG10	M5x0.8
AMRBRG16	M5x0.8
AMRBRG20	Rc 1/8
AMRBRG25	Rc 1/8
AMRBRG32	Rc 1/8
AMRBRG40	Rc 1/4
AMRBR50	Rc 1/4

With auto switch (detection at stroke end)



Proper auto switch mounting position

∅ 6 ~ ∅50

Bore Size \ Auto Switch Form	A		B	
	W8H W8V	W9H W9V W10V	W8H W8V	W9H W9V W10V
6	33	28	7	16
10	62	48	8	15
16	48	42	21	27
20	46	45	22	30
25	52	49	26	35
32	56	52	27	37
40	63	61	35	45
50	69	64	40	32

Note) The above auto switch proper mounting position table is applicable only to products without an air cushion option.
Please attach the air cushion after detection measurement.