

ROTARY

Cylinders



Find out our
key products



Solution for most applications



Easy and intuitive choice



Excellent value for money



Wide availability



Fast delivery



Features and certifications

Series of rotary cylinders with rack and pinion, available in bores \varnothing 40, 63 and 80, double acting, magnetic, with 90° or 180° rotation angle. Equipped with adjustable cushionings, and with possibility to apply magnetic reed switches. Available in three configurations: male pinion, double male pinion or female pinion. Supplied as standard in compliance with Reach and RoHS directives.

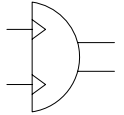


Type CRTH \varnothing 40 - 63 - 80

from page 1.40.20



Rotary cylinders with male pinion, available in bores \varnothing 40, 63 and 80, double acting, magnetic, with 90° or 180° rotation angle. Equipped with adjustable cushionings, and with possibility to apply magnetic reed switches.

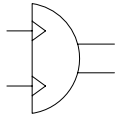


Type CRTHD \varnothing 40 - 63 - 80

from page 1.40.20



Rotary cylinders with double male pinion, available in bores \varnothing 40, 63 and 80, double acting, magnetic, with 90° or 180° rotation angle. Equipped with adjustable cushionings, and with possibility to apply magnetic reed switches.

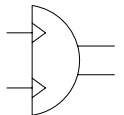


Type CRTF \varnothing 40 - 63 - 80

from page 1.40.20



Rotary cylinders with female pinion, available in bores \varnothing 40, 63 and 80, double acting, magnetic, with 90° or 180° rotation angle. Equipped with adjustable cushionings, and with possibility to apply magnetic reed switches.



Options

Description	Symbol	Suffix
Special versions on request		/S

Code key

Bore	/	Angle of rotation	Type	/	Special version
63	/	90°	CRTH	/	

Ø 40, 63, 80

90° - 180°

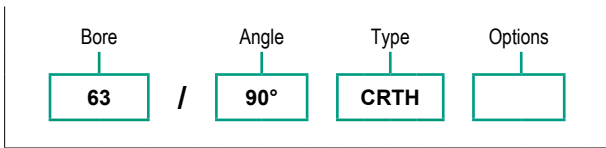
CRTH
Double acting, magnetic
Male pinion

CRTHD
Double acting, magnetic
Double male pinion

CRTF
Double acting, magnetic
Female pinion

S

How to order



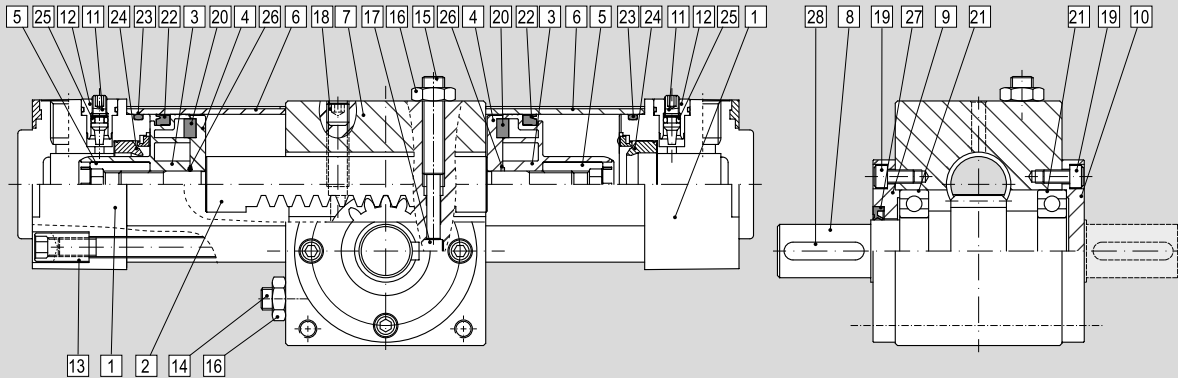
Notes

For further information on options see the table above.

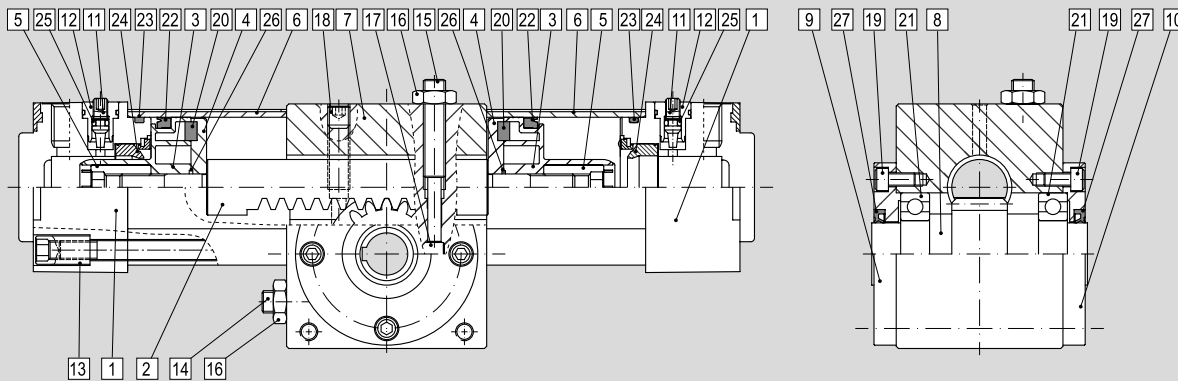
Standard materials

1 - CYLINDERS

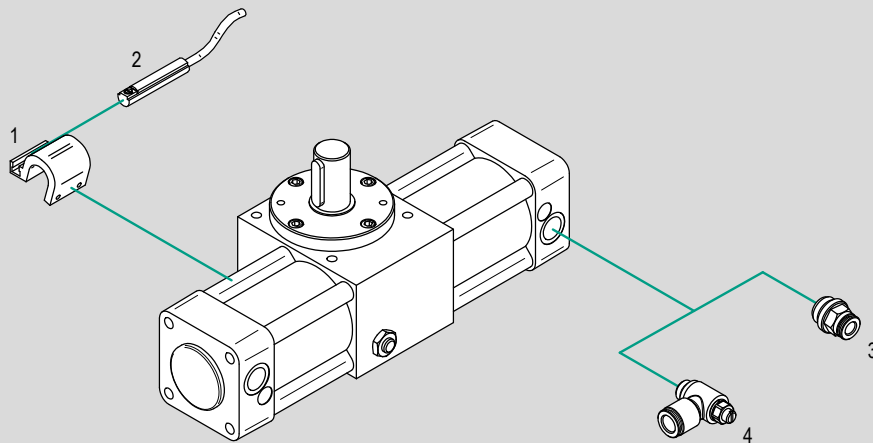
Type: CRTH, CRTHD



Type: CRTF



Position	Description	Materials
1	End cover	Anodised aluminium
2	Rack	Carbon steel
3	Piston	Acetalic resin (POM)
4	Magnet holder	Anodised aluminium
5	Piston nut	Carbon steel
6	Cylinder barrel	Anodised aluminium
7	Body	Anodised aluminium
8	Pinion	Carbon steel
9	End cover	Anodised aluminium
10	End cover	Anodised aluminium
11	Cushion needle	Stainless Steel
12	Cushion screw guide	Nickel-plated brass
13	Tie bolt	Galvanized carbon steel
14	Adjusting screw	Carbon steel blackening
15	Adjusting screw	Carbon steel blackening
16	Lock nut	Carbon steel
17	Stopper pin	Carbon steel
18	Adjusting screw	Carbon steel blackening
19	Screw	Nickel-plated carbon steel
20	Magnet	Magnetic material
21	Ball bearing	Carbon steel
22	Piston packing	NBR
23	Tube-head gasket	NBR
24	Cushioning seal	NBR
25	O-ring	NBR
26	Piston o-ring	NBR
27	Rod packing	NBR
28	Key	Carbon steel



N.	Cylinder bore	Item	Description	Compliance	Matching			Code page	Data sheet page
					CRTH	CRTHD	CRTF		
1	Ø 40 - 63 - 80	AS..	Bracket for T type magnetic reed switches	-	●	●	●	1.40.90	1.120.3
			Bracket for hi-temp. magnetic reed switches		●	●	●		1.120.4
2		ASV..	Magnetic reed switch T groove		●	●	●		1.110.10
		ASH..	Hi-temperatures magnetic reed switch		●	●	●		1.111.1
3	Ø 40 - 63 - 80	R..	Push-in fittings		●	●	●	4.2.1	
4	Ø 40 - 63 - 80	V..C	Flow controls, for cylinders		●	●	●	4.94.1	

Key

● allowed matching; - not allowed matching

Rotary Cylinders

Series CRTH - CRTHD - CRTF



1 - CYLINDERS

Main features

40 - 63 - 80

90°-180°



CRTH

Bores Ø

Angle of rotation

Double acting
Magnetic
Male pinion

Type



40 - 63 - 80

90°-180°



CRTHD

Bores Ø

Angle of rotation

Double acting
Magnetic
Double Male
Pinion

Type



40 - 63 - 80

90°-180°



CRTF

Bores Ø

Angle of rotation

Double acting
Magnetic
Female Pinion

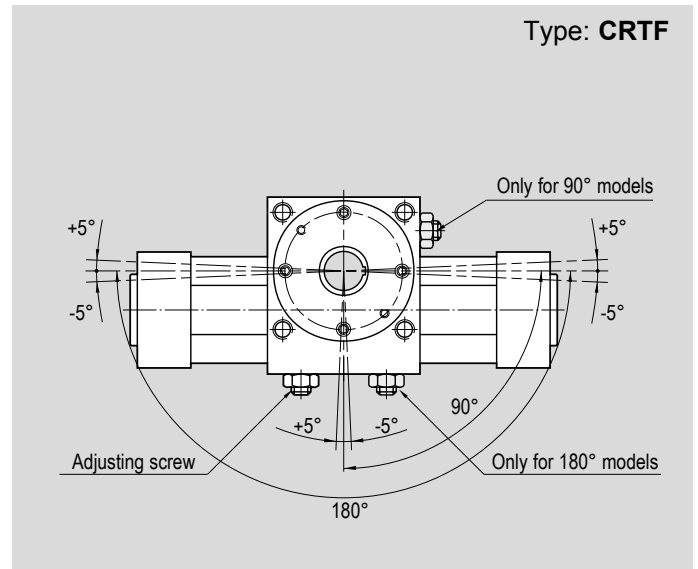
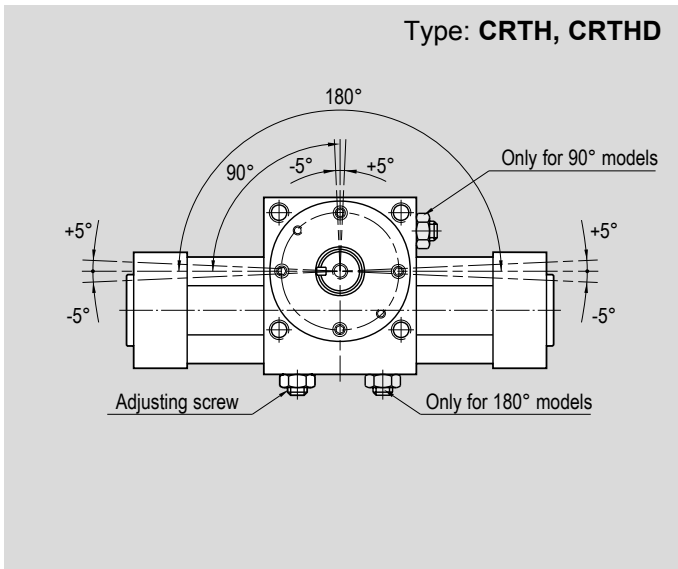
Type



Technical data

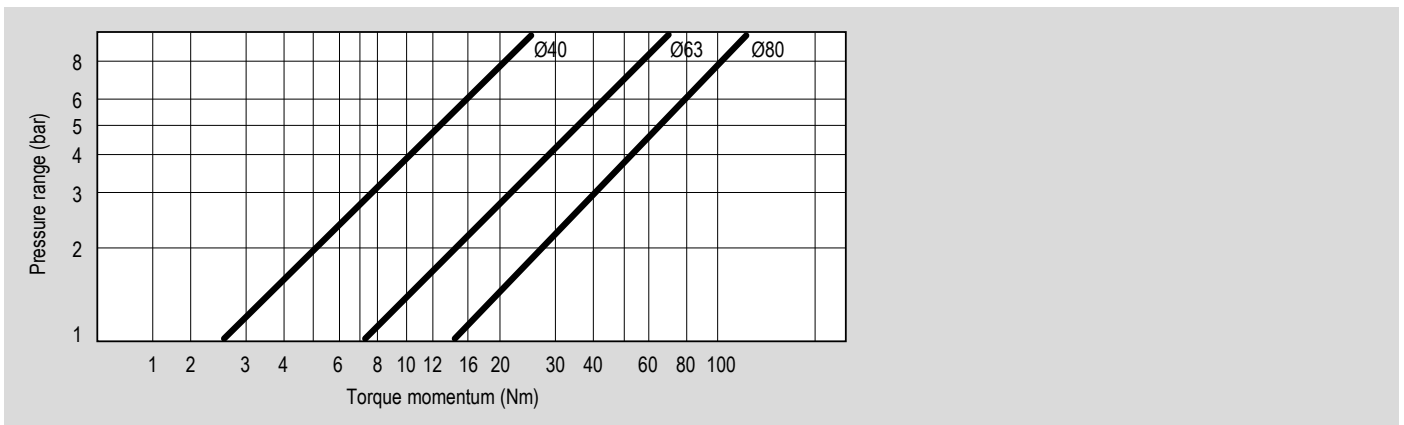
Bore Ø mm	40		63		80		
Fluid	Filtered compressed air with or without lubrication. Lubrication, if started, must be continued.						
Angle of rotation	90°	180°	90°	180°	90°	180°	
Adjustable angle	±5°						
Pinion diameter	16		24		28		
Pressure range	1,3 ÷ 7 bar						
Allowable axial thrust (max)	10		12		20		
Cushion angle	74°		75°		80°		
Temperature range	-10°C ÷ +60°C						
Weight (g)	CRTH	3000	3100	5400	5800	9750	10300
	CRTHD	3050	3150	5550	5950	9990	10540
	CRTF	2840	2940	5070	5470	9990	9740

Rotating direction and adjustable angle



1 - CYLINDERS

Output torque table



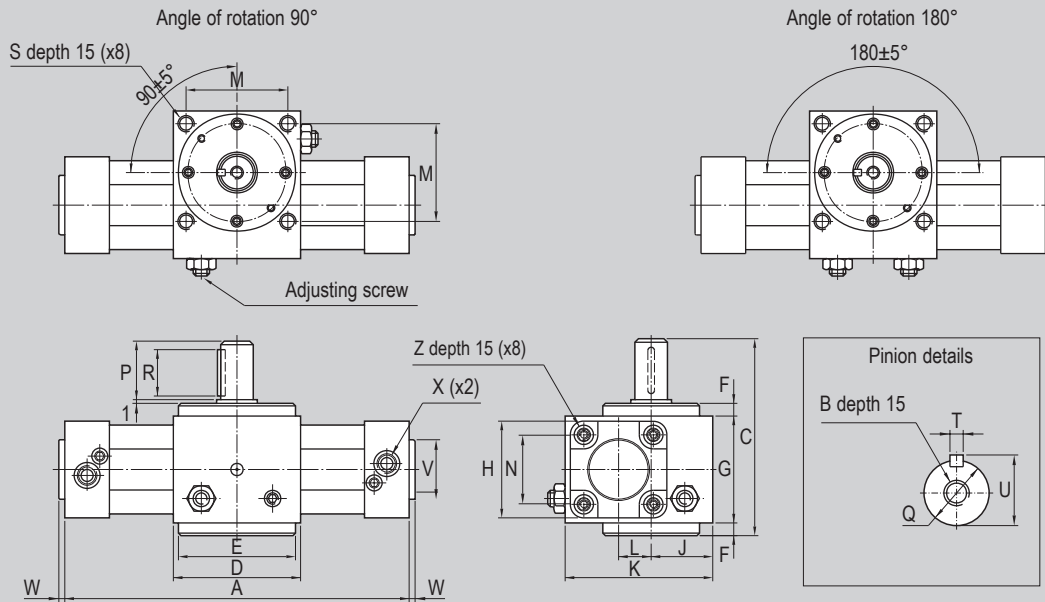
Air consumption for a complete circle

unit: litres/cycle

Ø (mm)	Rotation	Pressure range									
		1 bar	2 bar	3 bar	4 bar	5 bar	6 bar	7 bar	8 bar	9 bar	10 bar
40	90°	0,1571	0,2352	0,3133	0,3915	0,4696	0,5477	0,6259	0,7040	0,7821	0,8603
	180°	0,3141	0,4704	0,6267	0,7829	0,9392	1,0955	1,2517	1,4080	1,5643	1,7205
63	90°	0,4383	0,6564	0,8744	1,0925	1,3105	1,5286	1,7466	1,9647	2,1828	2,4008
	180°	0,8766	1,3127	1,7488	2,1850	2,6211	3,0572	3,4933	3,9294	4,3655	4,8016
80	90°	0,8480	1,2698	1,6917	2,1135	2,5354	2,9572	3,3791	3,8009	4,2228	4,6447
	180°	1,6959	2,5396	3,3834	4,2271	5,0708	5,9145	6,7582	7,6019	8,4456	9,2893

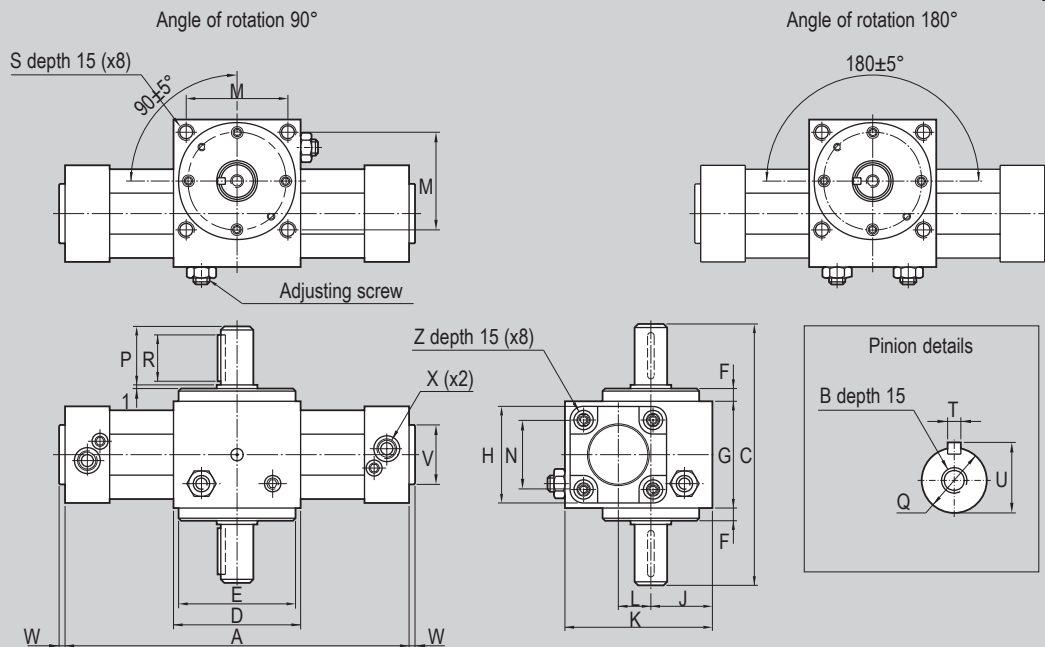
Dimensions

Type: **CRTH**



Ø (mm)	A		C	D	ØE	F	G	□H	J	K	L	M	□N	B	P	ØQ _{h6}	R	S	T	U	ØV	W	X	Z
	90°	180°																						
40	263	326	112	75	72	8	65	53	37,5	93	27,5	60	38	M5	30	16	25	M6	5	18	35	4	1/4"	M6
63	306	377	138	90	82	10	75	75	42,5	110	30	70	56,5	M8	42	24	36	M8	8	27	45	5	3/8"	M8
80	343	428	170	105	96	12	95	95	51,5	135	36	82	72	M8	50	28	45	M10	8	31	45	6	3/8"	M10

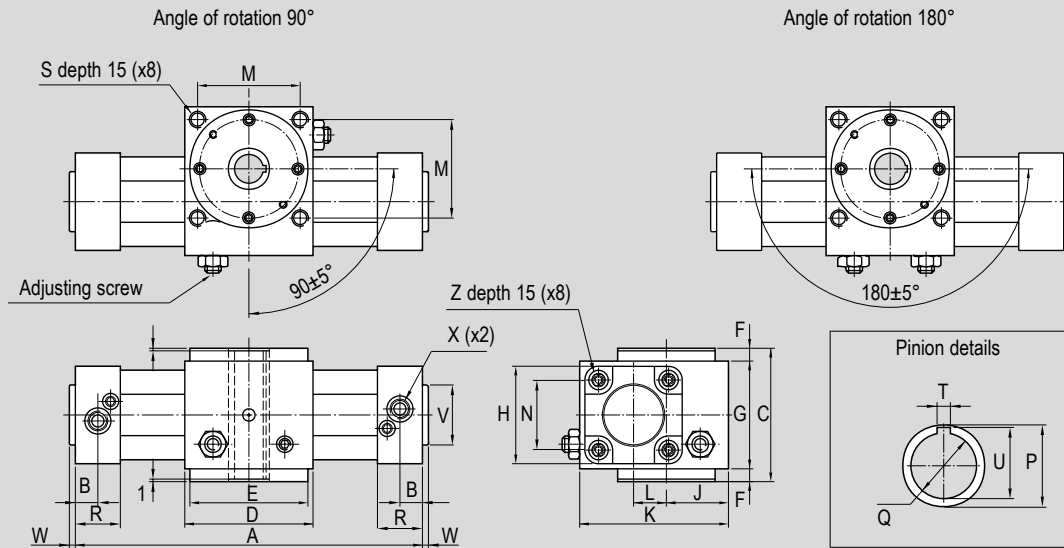
Type: **CRTHD**



Ø (mm)	A		C	D	ØE	F	G	□H	J	K	L	M	□N	B	P	ØQ _{h6}	R	S	T	U	ØV	W	X	Z
	90°	180°																						
40	263	326	143	75	72	8	65	53	37,5	93	27,5	60	38	M5	30	16	25	M6	5	18	35	4	1/4"	M6
63	306	377	181	90	82	10	75	75	42,5	110	30	70	56,5	M8	42	24	36	M8	8	27	45	5	3/8"	M8
80	343	428	221	105	96	12	95	95	51,5	135	36	82	72	M8	50	28	45	M10	8	31	45	6	3/8"	M10


Dimensions

Type: CRTF




Ø (mm)	A		C	D	ØE	F	G	∠H	J	K	L	M	∠N	B	ØP	ØQ _{h7}	R	S	T	U	ØV	W	X	Z
	90°	180°																						
40	263	326	81	75	72	8	65	53	37,5	93	27,5	60	38	15	25	14	30	M6	5	16,5	35	4	1/4"	M6
63	306	377	95	90	82	10	75	75	42,5	110	30	70	56,5	16	30	19	32	M8	6	22	45	5	3/8"	M8
80	343	428	119	105	96	12	95	95	51,5	135	36	82	72	19	35	24	38	M10	6	27,5	45	6	3/8"	M10




Bracket AS.. (for magnetic reed switches T groove)

	For cylinder Ø mm	Code	Item	Cylinder matching
	40	072908	AS101	CRT..
	63	072909	AS102	
	80	072910	AS103	

Bracket AS.. (for high-temperatures magnetic reed switches)


	For cylinder Ø mm	Code	Item	Cylinder matching
	32 ÷ 40	077838	AS114	CRT..
	50 ÷ 63	077651	AS113	
	80	074055	AS112	

Magnetic reed switch T groove ASV..

	For cylinder Ø mm	Code	Item	Cylinder matching*
	40 ÷ 80	070946 	ASV1C525	CRT..
		071863	ASV1C550	
		071864	ASV1C51K	
		071189	ASV1C5M8	
		073639	ASV4D225	
		070246 	ASV4D2M8	
		070247	ASV7N2M8	
		070372	ASV7M2M8	
		072918	ASV1H525	

*With bracket type AS.. for magnetic reed switches T groove

High-temperatures magnetic reed switches ASH..

	For cylinder Ø mm	Code	Item	Cylinder matching*
	32 ÷ 320	074047	ASH6C550	CRT..

*With bracket type AS.. for high-temperatures magnetic reed switches

ROTARY VANE

Cylinders



Find out our
key products



Solution for most applications



Easy and intuitive choice



Excellent value for money



Wide availability



Fast delivery



Features and certifications

Series of rotary vane cylinders, available in bores from Ø 4 to 25, double acting, with reduced overall dimensions. With fixed and adjustable rotation angles and equipped with elastic dampers (hydraulic shock absorbers in adjustable versions for bores from Ø 12 to 25) to relieve the impacts of vanes. Supplied as standard in compliance with Reach and RoHS directives.



Type ARTM Ø 4 ÷ 10

from page 1.50.20



Rotary vane cylinders available in bores from Ø 4 to 10, double acting non-magnetic, with elastic dampers.
Rotation angle: 90°, 180° or 270°.



Type ARTMC Ø 4 ÷ 10

from page 1.50.20



Rotary vane cylinders available in bores from Ø 4 to 10, double acting magnetic, with elastic dampers.
Rotation angle: 90°, 180° or 270°



Type ARTML Ø 4 ÷ 10

from page 1.50.20



Rotary vane cylinders available in bores from Ø 4 to 10, double acting non-magnetic, with adjustable rotation angles and elastic dampers.
Rotation angle: 90°, 180° or 270°



Type ARTMLC Ø 4 ÷ 10

from page 1.50.20



Rotary vane cylinders available in bores from Ø 4 to 10, double acting magnetic, with adjustable rotation angles and elastic dampers.
Rotation angle: 90°, 180° or 270°



Type ARTMF Ø 4 ÷ 10

from page 1.50.40



Flanged rotary vane cylinders available in bores from Ø 4 to 10, double acting non-magnetic, with elastic dampers.
Rotation angle: 90°, 180° or 270°.



Type ARTMFC Ø 4 ÷ 10

from page 1.50.40



Flanged rotary vane cylinders available in bores from Ø 4 to 10, double acting magnetic, with elastic dampers.
Rotation angle: 90°, 180° or 270°

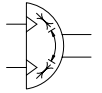


Type ARTMFL Ø 4 ÷ 10

from page 1.50.40



Flanged rotary vane cylinders available in bores from Ø 4 to 10, double acting non-magnetic, with adjustable rotation angles and elastic dampers.
Rotation angle: 90°, 180° or 270°

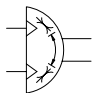


Type ARTMFLC Ø 4 ÷ 10

from page 1.50.40



Flanged rotary vane cylinders available in bores from Ø 4 to 10, double acting magnetic, with adjustable rotation angles and elastic dampers.
Rotation angle: 90°, 180° or 270°

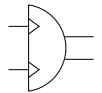


Type ARTM Ø 12 ÷ 25

from page 1.50.60



Rotary vane cylinders available in bores from Ø 12 to 25, double acting non-magnetic, with elastic dampers.
Rotation angle: 90°, 180° or 270°.

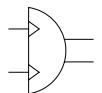


Type ARTMC Ø 12 ÷ 25

from page 1.50.60



Rotary vane cylinders available in bores from Ø 12 to 25, double acting magnetic, with elastic dampers.
Rotation angle: 90°, 180° or 270°

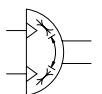


Type ARTML Ø 12 ÷ 25

from page 1.50.60



Rotary vane cylinders available in bores from Ø 12 to 25, double acting non-magnetic, with adjustable rotation angles and hydraulic shock absorbers.
Rotation angle: 90°, 180° or 270°

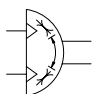


Type ARTMLC Ø 12 ÷ 25

from page 1.50.60



Rotary vane cylinders available in bores from Ø 12 to 25, double acting magnetic, with adjustable rotation angles and hydraulic shock absorbers.
Rotation angle: 90°, 180° or 270°



Code key

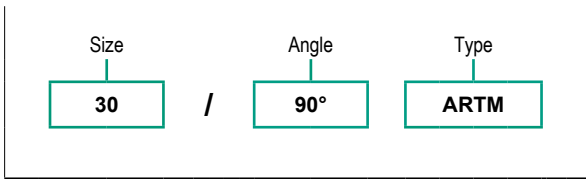
Size	/	Angle of rotation	Type
30	/	90°	ARTM

10	= Ø 4
15	= Ø 5
20	= Ø 6
30	= Ø 8
40	= Ø 10
50	= Ø 12
63	= Ø 15
80	= Ø 17
100	= Ø 25

90°, 180°, 270°

ARTM Double acting Non-magnetic With fixed rotation angle
ARTMC Double acting Magnetic With fixed rotation angle
ARTML Double acting Non-magnetic With adjustable rotation angle
ARTMLC Double acting Magnetic With adjustable rotation angle
ARTMF⁽¹⁾ Flanged Double acting Non-magnetic With fixed rotation angle
ARTMFC⁽¹⁾ Flanged Double acting Magnetic With fixed rotation angle
ARTMFL⁽¹⁾ Flanged Double acting Non-magnetic With adjustable rotation angle
ARTMFLC⁽¹⁾ Flanged Double acting Magnetic With adjustable rotation angle

How to order

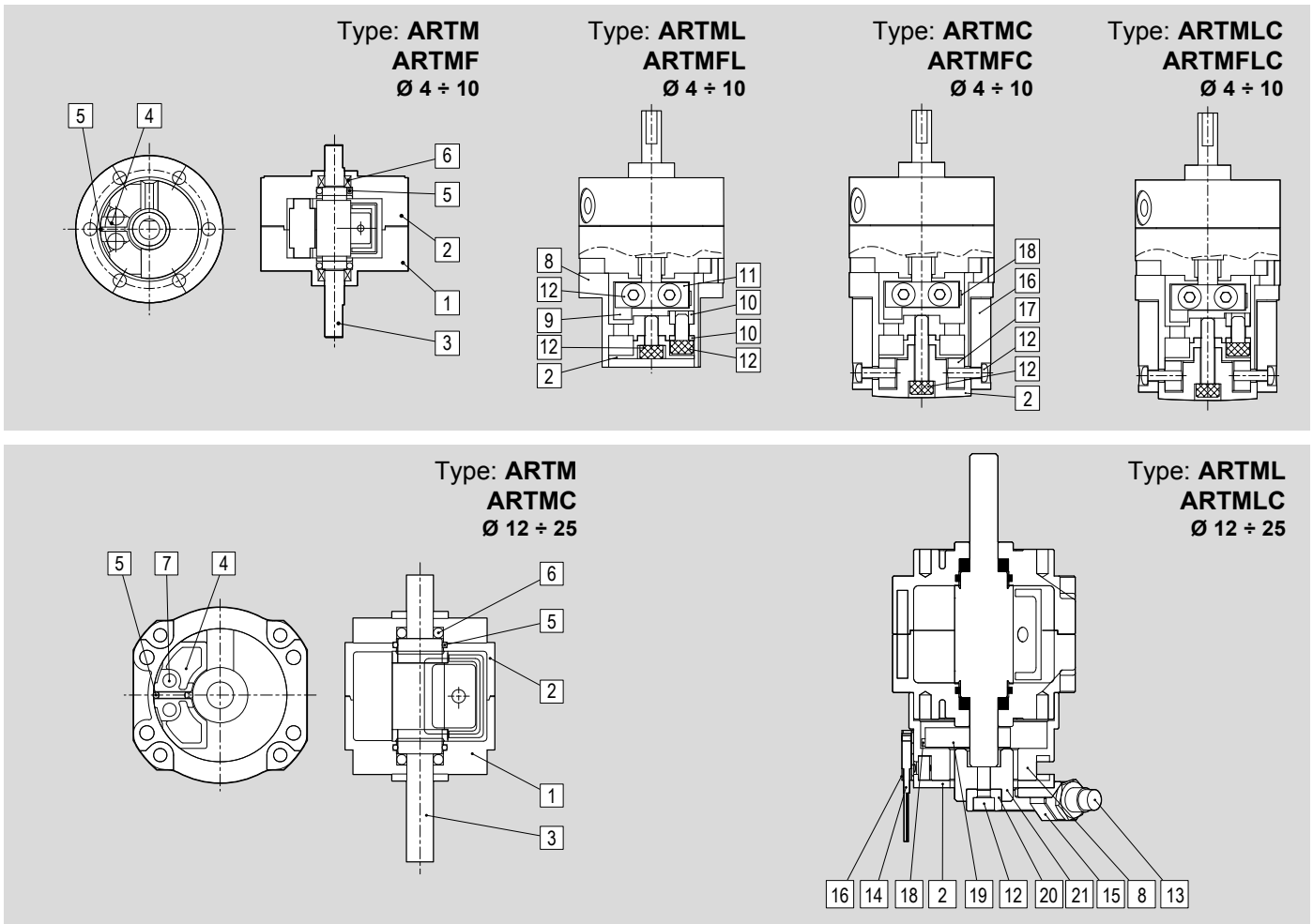


Note

For standard materials see page 1.50.5
 (1) Only for bores from Ø 4 to 10

Materiali standard

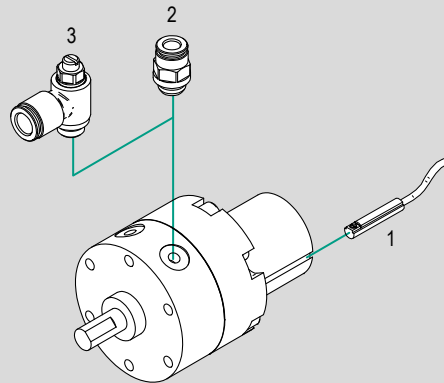
1 - CYLINDERS



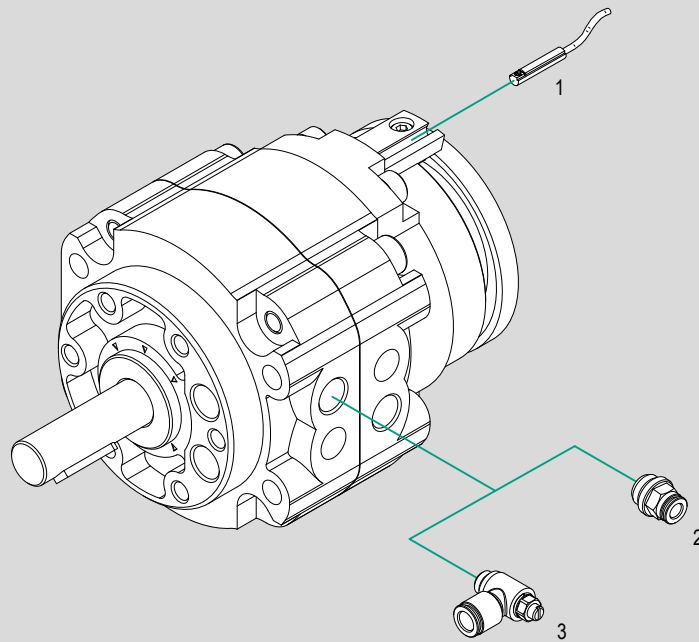
Posizione	Descrizione	Materiale	
		Ø 4 ÷ 10	Ø 20 ÷ 25
1	Front cover	Aluminium alloy	
2	End cover	Aluminium alloy	
3	Rod	Steel alloy	
4	Dampers	Plastic - Steel	
5	O-ring	NBR	
6	Bearing	Steel	
7	Position pin	-	Zinc alloy
8	Base	Zinc alloy	Stainless Steel
9	Stopper	Stainless Steel	-
10	Stopper base	Steel	-
11	Blocco	Stainless Steel	-
12	Screw	Steel alloy	Stainless Steel
13	Shoche absorber (x2)	-	Steel alloy
14	Magnetic reed switch	-	Steel alloy
15	Angle adjustment	-	Aluminium
16	Mounting base	Aluminium alloy	
17	Base and lump	Aluminium alloy	-
18	Magnet	TME	Steel alloy
19	Magnet seat	-	Steel alloy
20	Rocker arm	-	Steel
21	Rocker arm seat	-	Steel

Accessories

Type: **ARTM..**
Ø 4 ÷ 10



Type: **ARTM..**
Ø 12 ÷ 25





N.	Cylinder bore	Item	Description	Compliance	Matching				Code page	Data sheet page
					ARTM ARTMF	ARTMC ARTMFC	ARTML ARTMFL	ARTMLC ARTMFLC		
1	Ø 4 ÷ 25	ASC..	Magnetic reed switch C groove	-	-	●	-	●	1.50.90	1.110.30
2	Ø 4 ÷ 25	R..	Push-in fittings		●	●	●	●	4.2.1	
3	Ø 4 ÷ 25	V..C	Flow controls, for cylinders		●	●	●	●	4.94.1	



Key

● allowed matching; - not allowed matching

Main features



4 ÷ 10  **ARTM** 

Bores Ø Double acting Non magnetic Type



4 ÷ 10  **ARTMC** 

Bores Ø Double acting Magnetic Type

Main features

4 ÷ 10  **ARTML** 

Bores Ø Double acting Non magnetic Adjustable angle Type

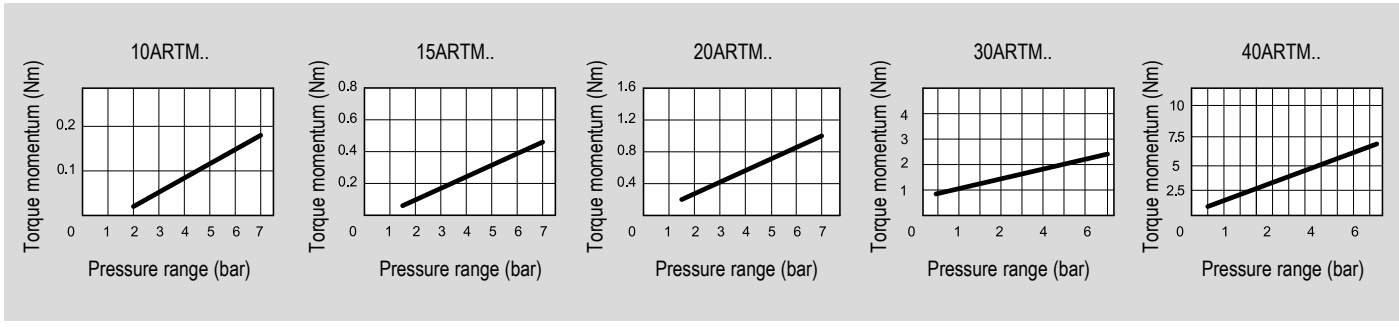
4 ÷ 10  **ARTMLC** 

Bores Ø Double acting Magnetic Adjustable angle Type

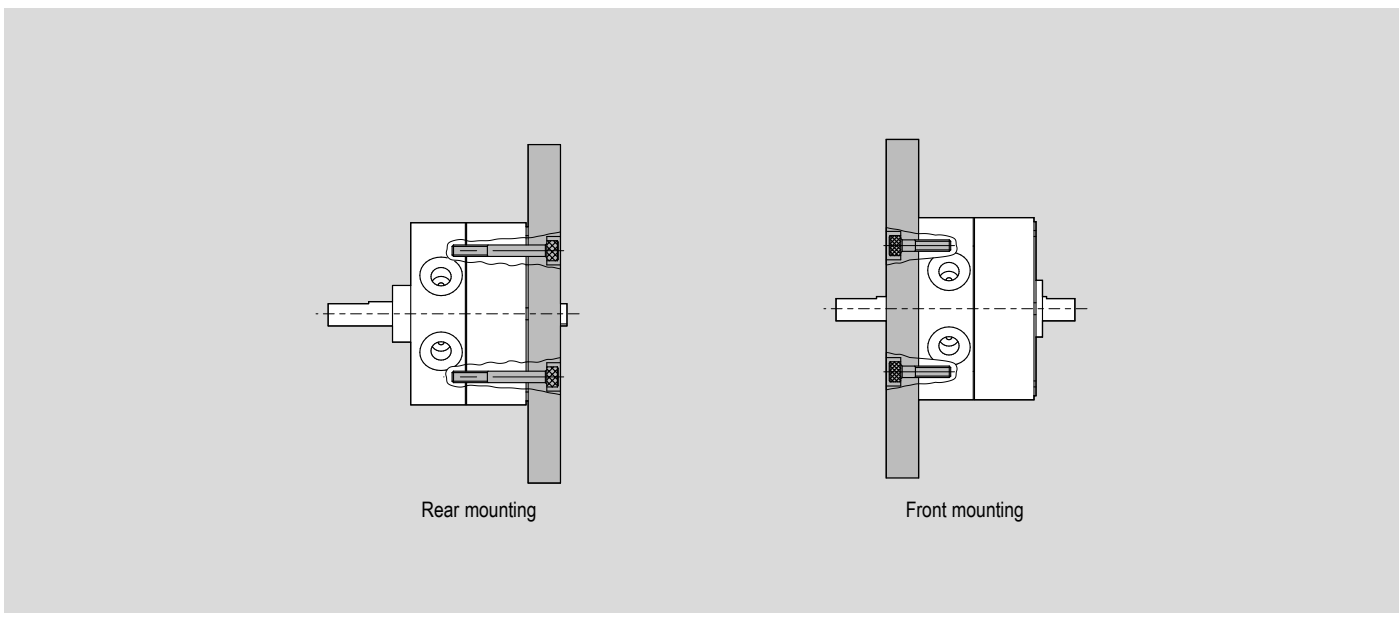
Technical data

Size	10	15	20	30	40	
Bore	Ø 4	Ø 5	Ø 6	Ø 8	Ø 10	
Fluid	Filtered compressed air with or without lubrication. Lubrication, if started, must be continued.					
Angle of rotation	90° - 180° - 270°					
Pressure range	1,5 ÷ 7 bar					
Temperature range	0°C ÷ +50°C					
Ports	M5					
Torque momentum (Nm) at 6 bar	0,14	0,38	0,81	1,8	3,8	
Admissible kinetic energy (J)	0,0015	0,001	0,003	0,02	0,04	
Weight (g)	ARTM	28	48	112	200	342
	ARTMC	78	116	240	390	604
	ARTML ARTMLC					

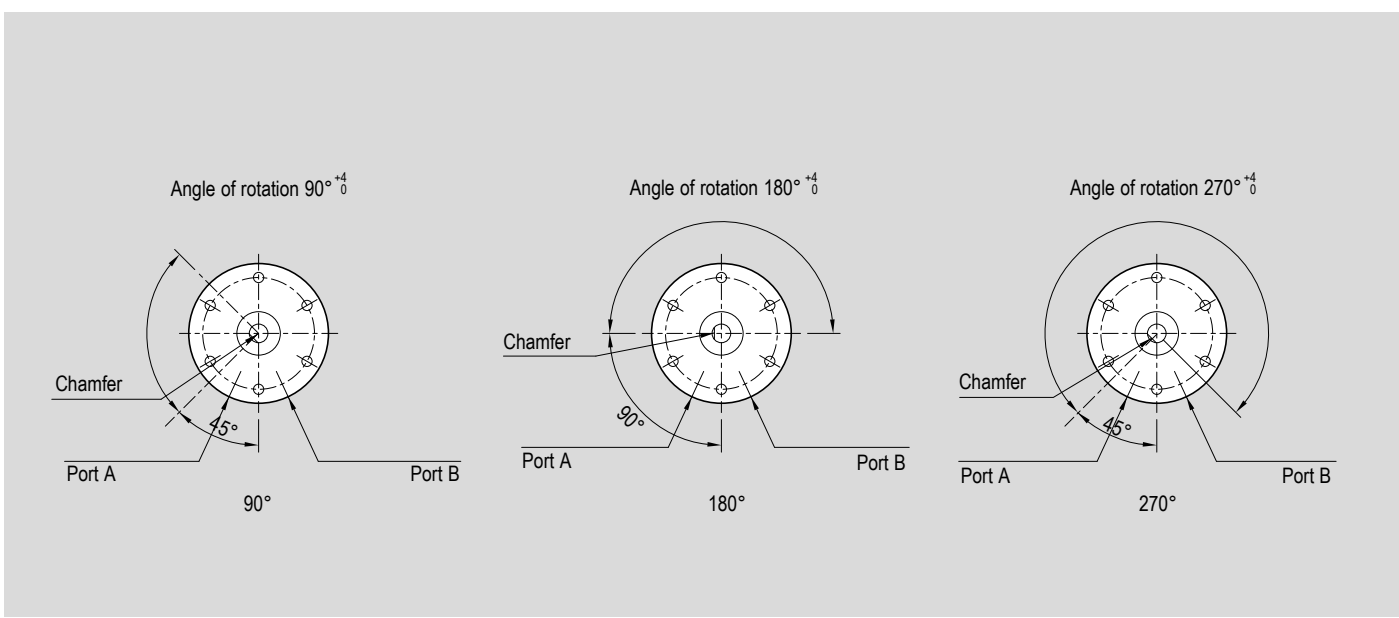
Output torque table



Assembly type



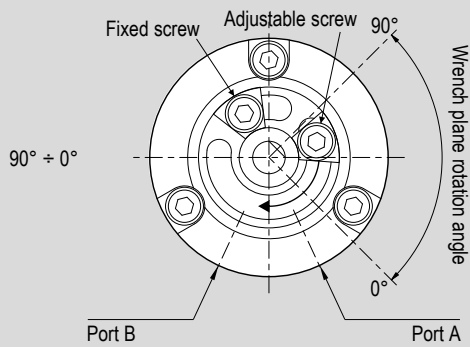
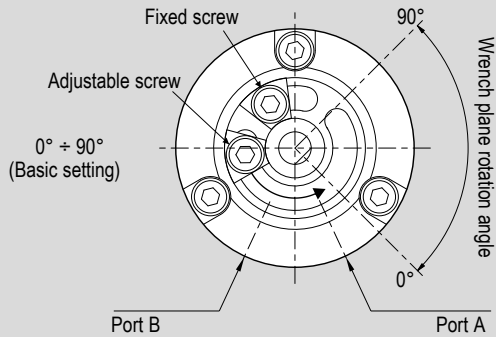
Angle of rotation



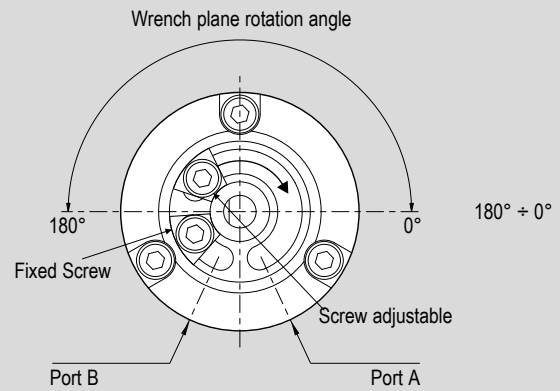
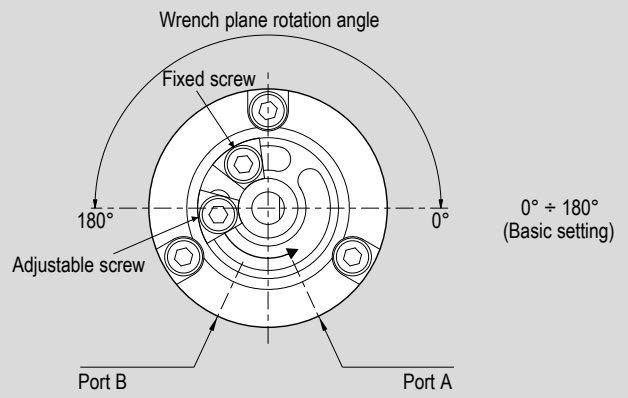
Rotation angle settings

1 - CYLINDERS

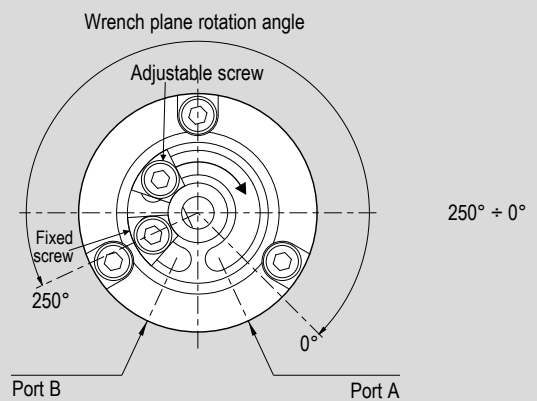
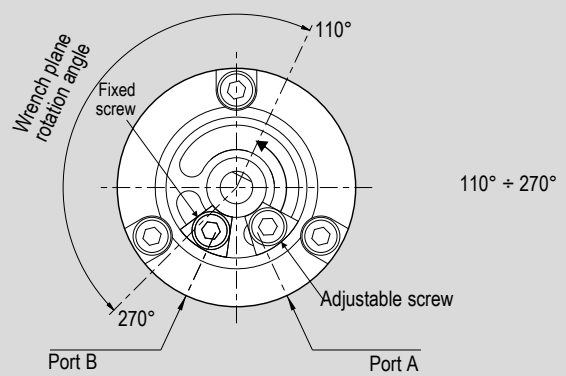
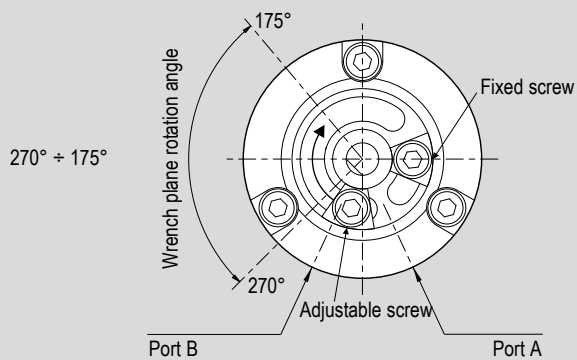
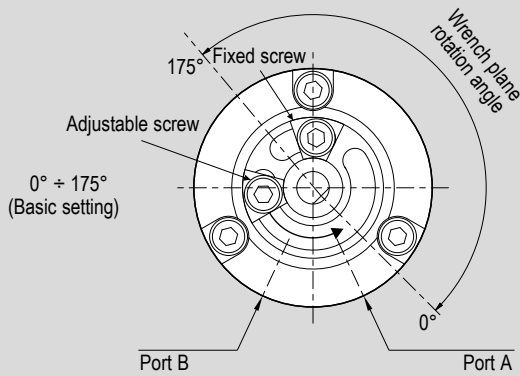
90° rotation setting



180° rotation setting

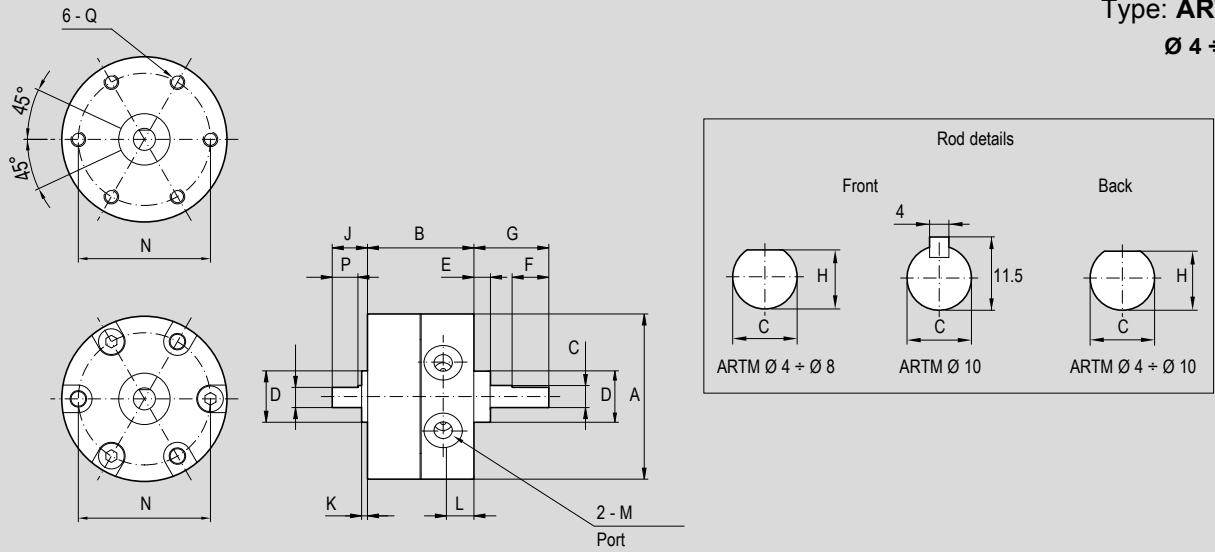


270° rotation setting



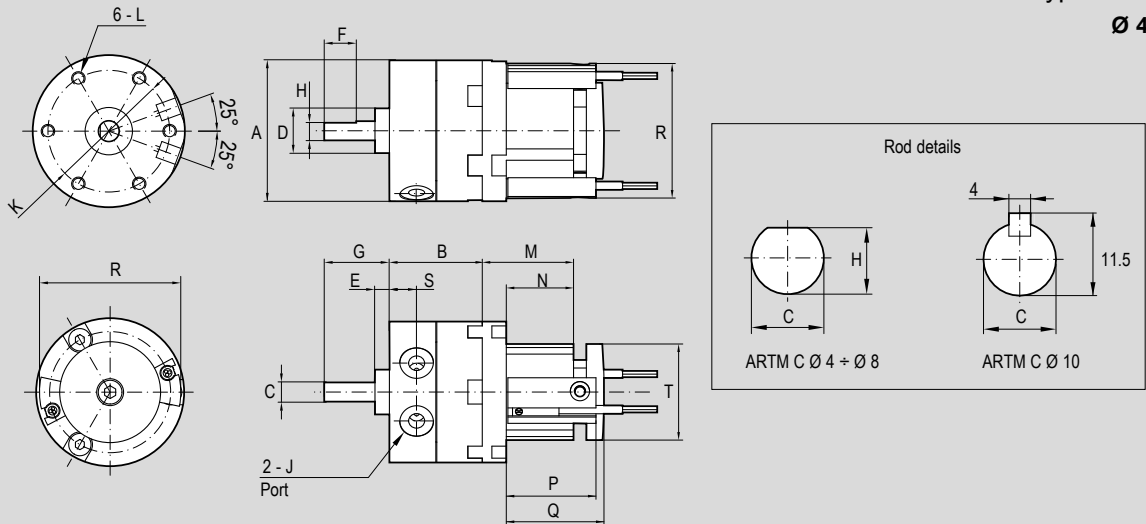
Dimensions

Type: **ARTM**
Ø 4 ÷ 10



Ø (mm)	size	ØA	B	ØC	ØD	E	F	G	H	P	J	K	L	M	ØN	Q
4	10	30	17	4	9	3	9	14	3,5	5	8	1	4,2	M5x0,8	24	M3x0,5
5	15	3	20,1	5	12	4	10	18	4,5	6	9	1,5	5	M5x0,8	29	M3x0,5
6	20	44	29,1	6	14	4,5	10	20,3	5,5	7	9,6	1,6	8,5	M5x0,8	36	M4x0,7
8	30	51	40	8	16	5	12	22	7,5	8	13	2	11	M5x0,8	43	M5x0,8
10	40	64	45	10	25	6,5	22	30	9	9	15	4,5	9,5	M5x0,8	56	M5x0,8

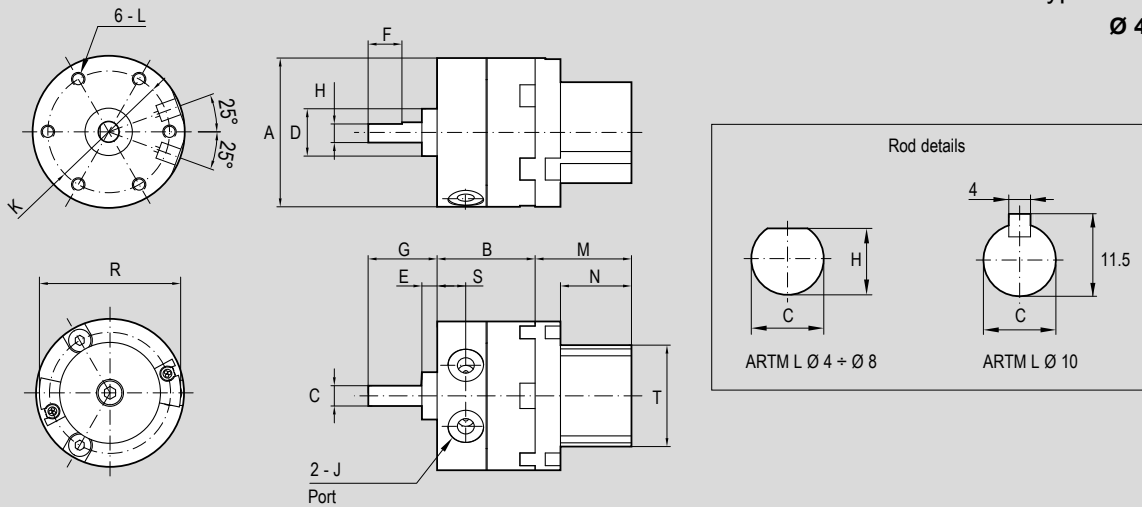
Type: **ARTMC**
Ø 4 ÷ 10



Ø (mm)	size	ØA	B	ØC	ØD	E	F	G	H	S	J	ØK	L	M	N	ØT	P	Q	ØR
4	10	30	17	4	9	3	9	14	3,5	4,2	M5x0,8	24	M3x0,5	24	18	18	23,3	24	29
5	15	35	20,1	5	12	4	10	18	4,5	5	M5x0,8	29	M3x0,5	28	22	24	27,3	29,5	34
6	20	44	29,1	6	14	4,5	10	20,3	5,5	8,5	M5x0,8	36	M4x0,7	28,5	21	30	28	30,5	42
8	30	51	40	8	16	5	12	22	7,5	11	M5x0,8	43	M5x0,8	32,5	24	34	30,8	34	47
10	40	64	45	10	25	6,5	22	30	-	9,5	M5x0,8	56	M5x0,8	34,5	26	34	33	36	47

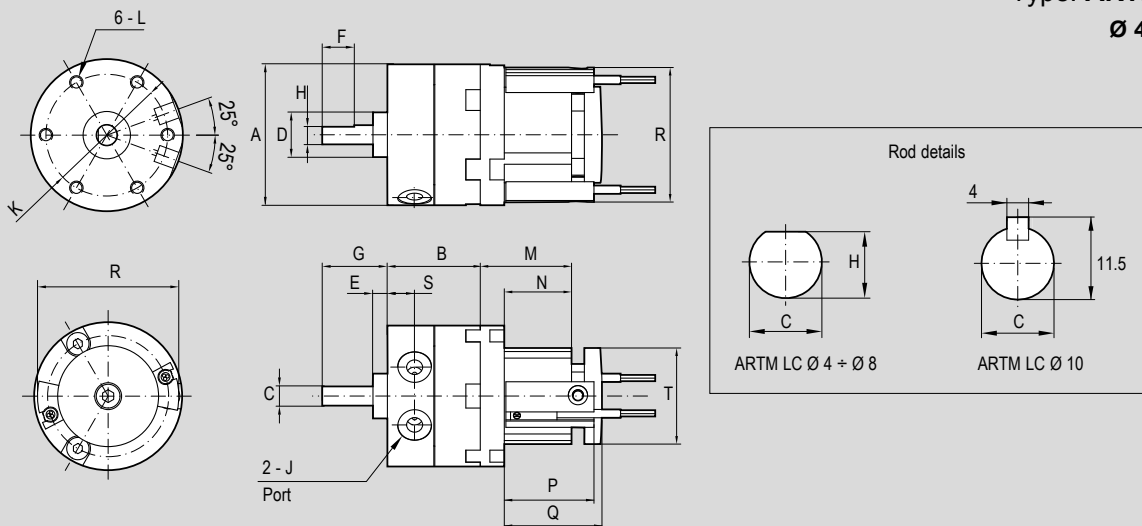
Dimensions

Type: **ARTML**
Ø 4 ÷ 10





Ø (mm)	size	ØA	B	ØC	ØD	E	F	G	H	S	J	K	L	M	N	ØT	ØR
4	10	30	17	4	9	3	9	14	3,5	4,2	M5x0,8	24	M3x0,5	24	18	18	29
5	15	35	20,1	5	12	4	10	18	4,5	5	M5x0,8	29	M3x0,5	28	22	24	34
6	20	44	29,1	6	14	4,5	10	20,3	5,5	8,5	M5x0,8	36	M4x0,7	28,5	21	30	42
8	30	51	40	8	16	5	12	22	7,5	11	M5x0,8	43	M5x0,8	32,5	24	34	47
10	40	64	45	10	25	6,5	22	30	-	9,5	M5x0,8	56	M5x0,8	34,5	26	34	47



Type: **ARTMLC**
Ø 4 ÷ 10





Ø (mm)	size	ØA	B	ØC	ØD	E	F	G	H	S	J	ØK	L	M	N	ØT	P	Q	ØR
4	10	30	17	4	9	3	9	14	3,5	4,2	M5x0,8	24	M3x0,5	24	18	18	23,3	24	29
5	15	35	20,1	5	12	4	10	18	4,5	5	M5x0,8	29	M3x0,5	28	22	24	27,3	29,5	34
6	20	44	29,1	6	14	4,5	10	20,3	5,5	8,5	M5x0,8	36	M4x0,7	28,5	21	30	28	30,5	42
8	30	51	40	8	16	5	12	22	7,5	11	M5x0,8	43	M5x0,8	32,5	24	34	30,8	34	47
10	40	64	45	10	25	6,5	22	30	-	9,5	M5x0,8	56	M5x0,8	34,5	26	34	33	36	47



Main features

4 ÷ 10  **ARTMF** 
Bores Ø Double acting Non magnetic Type

4 ÷ 10  **ARTMFC** 
Bores Ø Double acting Magnetic Type

Main features

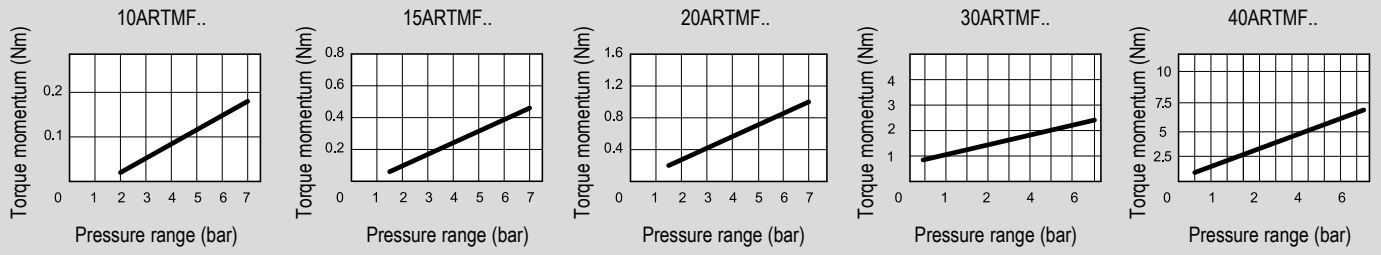
4 ÷ 10  **ARTMFL** 
Bores Ø Double acting Non magnetic Adjustable angle Type

4 ÷ 10  **ARTMFLC** 
Bores Ø Double acting Magnetic Adjustable angle Type

Technical data

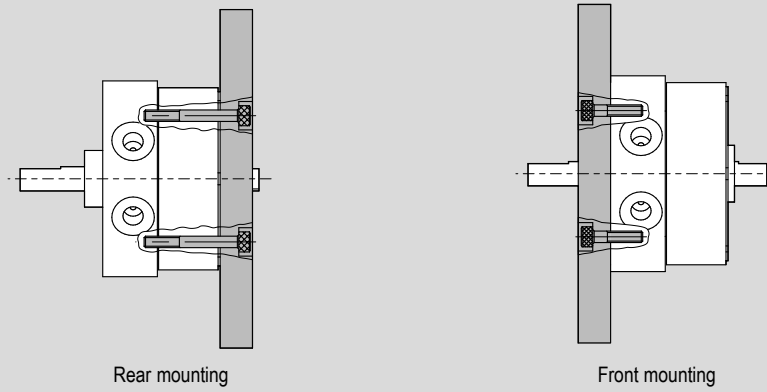
Size	10	15	20	30	40	
Bore	Ø 4	Ø 5	Ø 6	Ø 8	Ø 10	
Fluid	Filtered compressed air with or without lubrication. Lubrication, if started, must be continued.					
Angle of rotation	90° - 180° - 270°					
Pressure range	1,5 ÷ 7 bar					
Temperature range	0°C ÷ +50°C					
Ports	M5					
Torque momentum (Nm) at 6 bar	0,14	0,38	0,81	1,8	3,8	
Admissible kinetic energy (J)	0,0015	0,001	0,003	0,02	0,04	
Weight (g)	ARTMF	41	70	138	268	438
	ARTMFC ARTMFL ARTMFLC	91	138	266	468	700

Output torque table

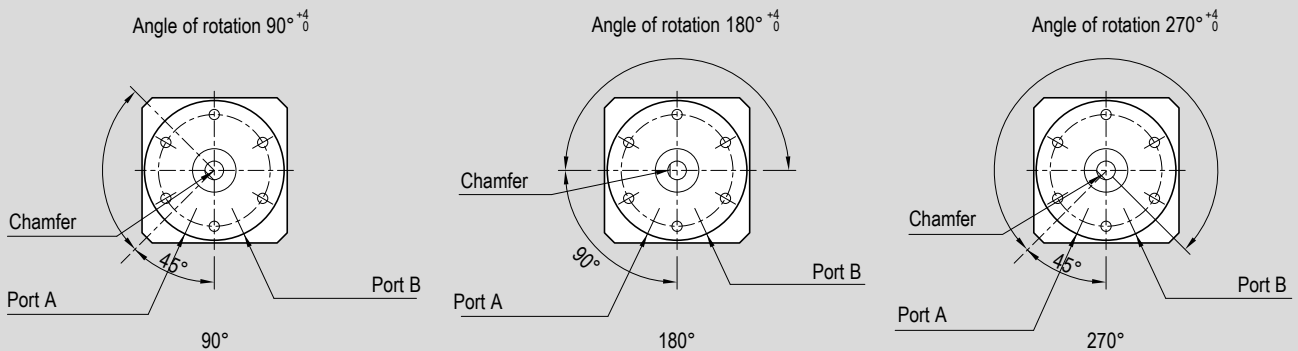


1 - CYLINDERS

Assembly type



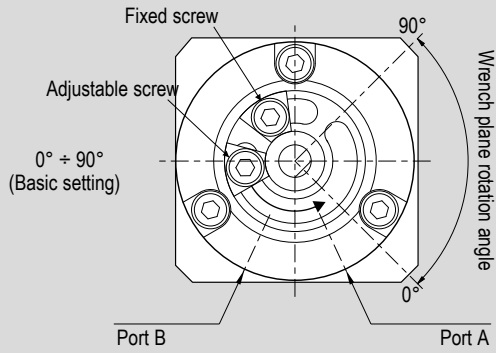
Angle of rotation



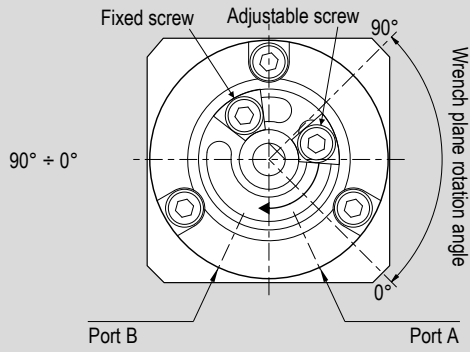
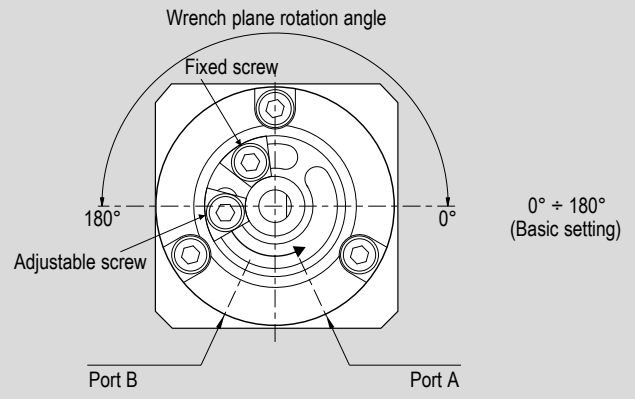
Rotation angle settings

1 - CYLINDERS

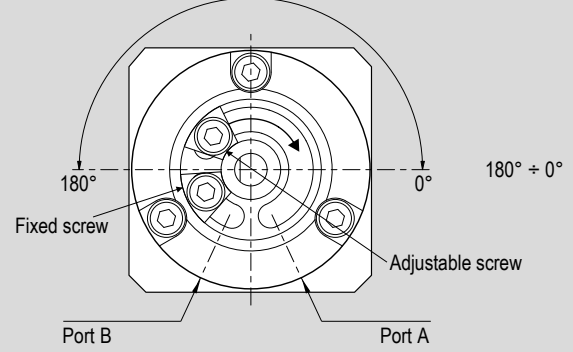
90° rotation setting



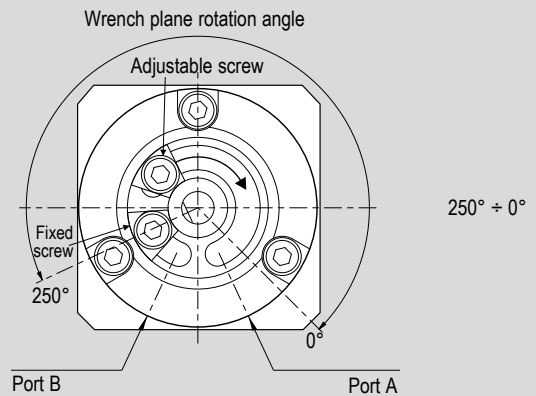
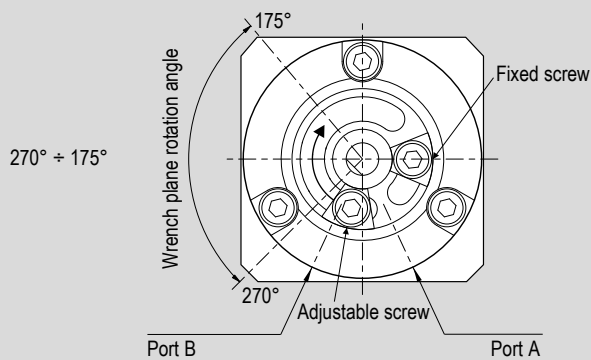
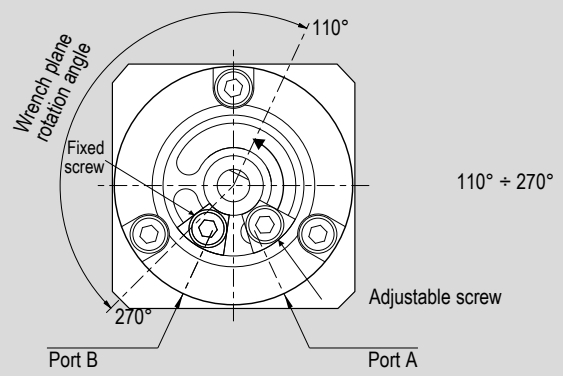
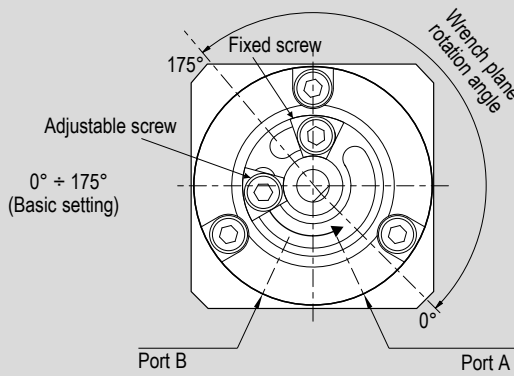
180° rotation setting



180° rotation setting

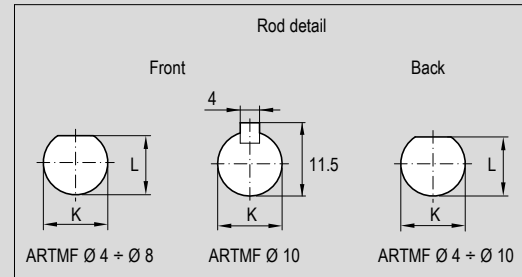
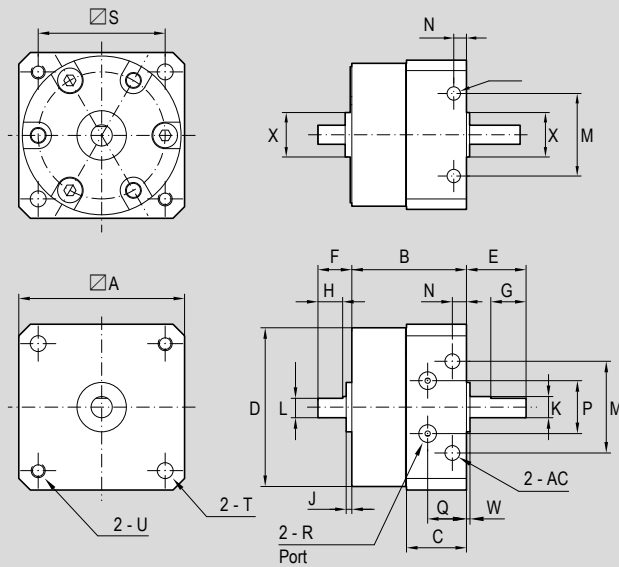


270° rotation setting



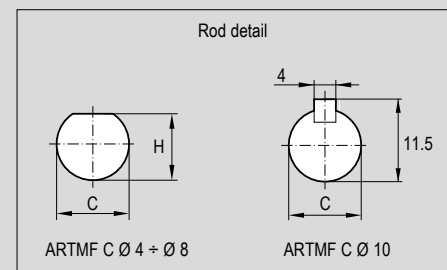
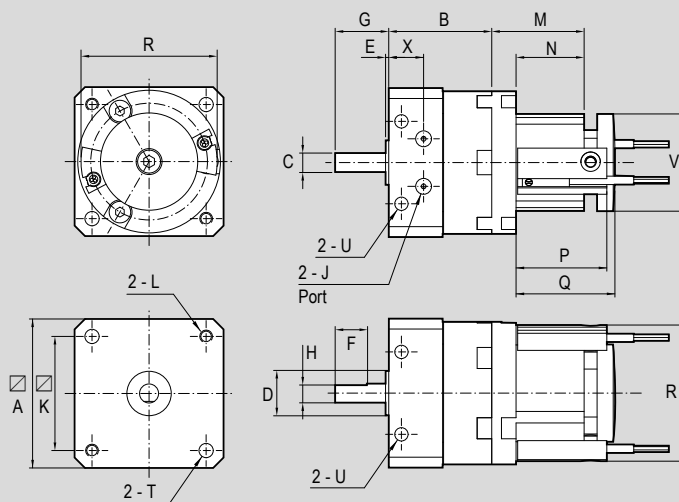
Dimensions

Type: **ARTMF**
Ø 4 ÷ 10



Ø (mm)	size	∇A	B	C	ØD	E	F	G	H	ØX	J	ØK	L	M	N	AC	P	Q	R	∇S	T	U	V	W
4	10	31	22	13,3	30	14	8	9	5	9	1	4	3,5	17	3	3,5	10,5	9,2	M5x0,8	25	3,5	M3x0,5	24	1
5	15	36	25,7	15,5	35	18	9	10	6	12	1,5	5	4,5	21	3	3,5	10,5	10,5	M5x0,8	29	3,5	M3x0,5	29	1,5
6	20	44	33,6	19	44	20	10	10	7	14	1,6	6	5,5	26	4	4,2	15	13	M5x0,8	36	4,5	M4x0,7	36	1
8	30	52	47,5	27,2	51	22	13	12	8	16	2	8	7,5	29	4,5	5,5	13,5	18,5	M5x0,8	42	5,5	M5x0,8	43	2
10	40	64	53	30,4	64	30	15	22	9	25	4,5	10	9	38	5	5,5	19	14	M5x0,8	52	5,5	M5x0,8	56	3

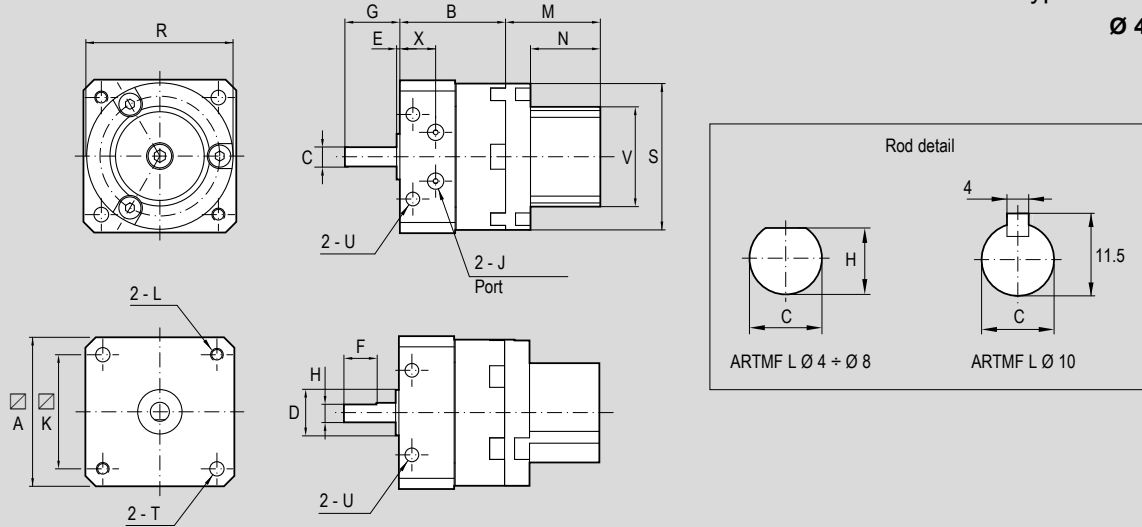
Type: **ARTMFC**
Ø 4 ÷ 10



Ø (mm)	size	∇A	B	ØC	ØD	E	F	G	H	X	J	∇K	L	M	N	ØV	P	Q	ØR	S	T	U
4	10	31	22	4	9	1	9	14	3,5	9,2	M5x0,8	25	M3x0,5	24	18	18	23,3	24	29	30	3,5	3,5
5	15	36	25,7	5	12	1,5	10	18	4,5	10,5	M5x0,8	29	M3x0,5	28	22	24	27,3	29,5	34	35	3,5	3,5
6	20	44	33,6	6	14	1	10	20	5,5	13	M5x0,8	36	M4x0,7	28,5	21	30	28	30,5	42	44	4,5	4,2
8	30	52	47,5	8	16	2	12	22	7,5	18,5	M5x0,8	42	M5x0,8	32,5	24	34	30,8	34	47	51	5,5	5,5
10	40	64	53	10	25	3	22	30	-	14	M5x0,8	52	M5x0,8	34,5	26	34	33	36	47	64	5,5	5,5

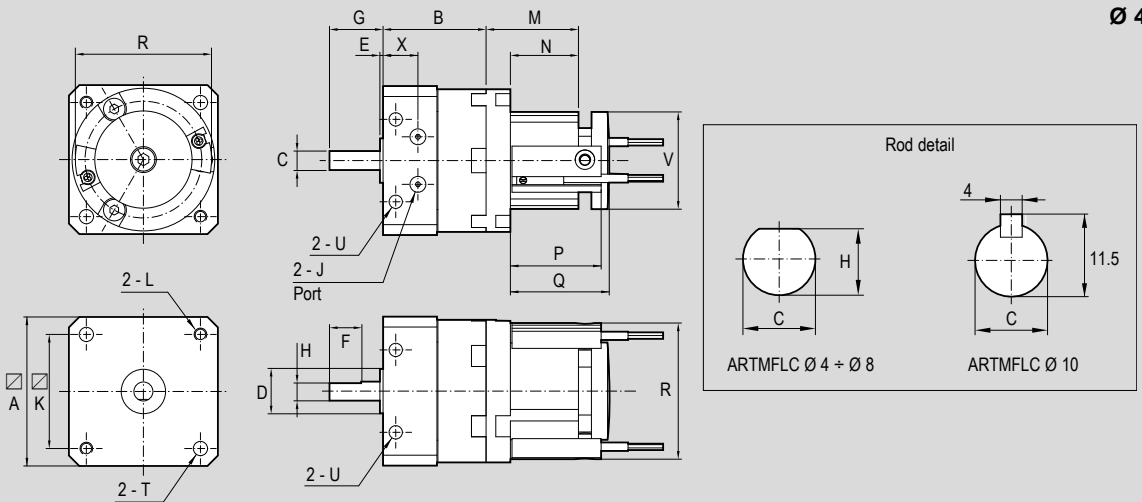
Dimensions

Type: **ARTMFL**
Ø 4 ÷ 10





Ø (mm)	size	∇A	B	ØC	ØD	E	F	G	H	X	J	∇K	L	M	N	ØV	P	Q	ØR	ØS	T	U
4	10	31	22	4	9	1	9	14	3,5	9,2	M5x0,8	25	M3x0,5	24	18	18	23,3	24	29	30	3,5	3,5
5	15	36	25,7	5	12	1,5	10	18	4,5	10,5	M5x0,8	29	M3x0,5	28	22	24	27,3	29,5	34	35	3,5	3,5
6	20	44	33,6	6	14	1	10	20	5,5	13	M5x0,8	36	M4x0,7	28,5	21	30	28	30,5	42	44	4,5	4,2
8	30	52	47,5	8	16	2	12	22	7,5	18,5	M5x0,8	42	M5x0,8	32,5	24	34	30,8	34	47	51	5,5	5,5
10	40	64	53	10	25	3	22	30	-	14	M5x0,8	52	M5x0,8	34,5	26	34	33	36	47	64	5,5	5,5

Type: **ARTMFLC**
Ø 4 ÷ 10





Ø (mm)	size	∇A	B	ØC	ØD	E	F	G	H	X	J	∇K	L	M	N	ØV	P	Q	ØR	ØS	T	U
4	10	31	22	4	9	1	9	14	3,5	9,2	M5x0,8	25	M3x0,5	24	18	18	23,3	24	29	30	3,5	3,5
5	15	36	25,7	5	12	1,5	10	18	4,5	10,5	M5x0,8	29	M3x0,5	28	22	24	27,3	29,5	34	35	3,5	3,5
6	20	44	33,6	6	14	1	10	20	5,5	13	M5x0,8	36	M4x0,7	28,5	21	30	28	30,5	42	44	4,5	4,2
8	30	52	47,5	8	16	2	12	22	7,5	18,5	M5x0,8	42	M5x0,8	32,5	24	34	30,8	34	47	51	5,5	5,5
10	40	64	53	10	25	3	22	30	-	14	M5x0,8	52	M5x0,8	34,5	26	34	33	36	47	64	5,5	5,5

Main features



12 ÷ 25  **ARTM** 

Bores Ø Double acting Non magnetic Type



12 ÷ 25  **ARTMC** 

Bores Ø Double acting Magnetic Type

Main features

12 ÷ 25  **ARTML** 

Bores Ø Double acting Non magnetic Adjustable angle Type

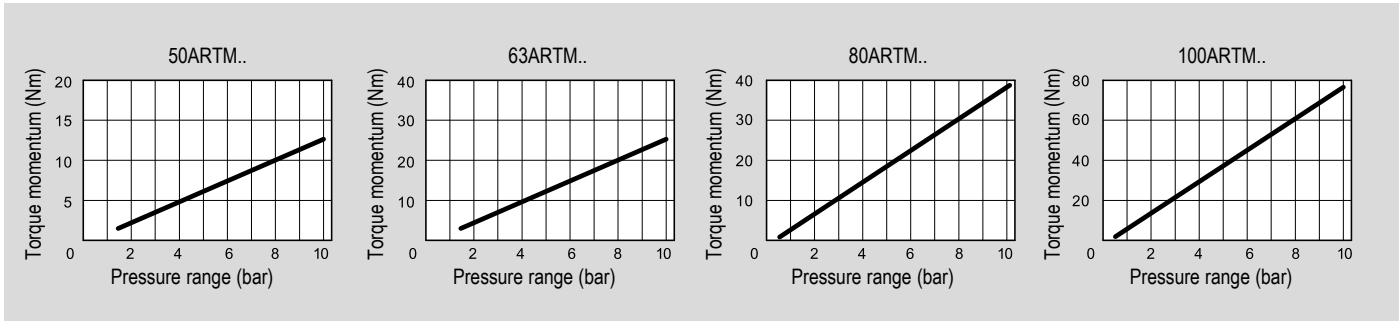
12 ÷ 25  **ARTMLC** 

Bores Ø Double acting Magnetic Adjustable angle Type

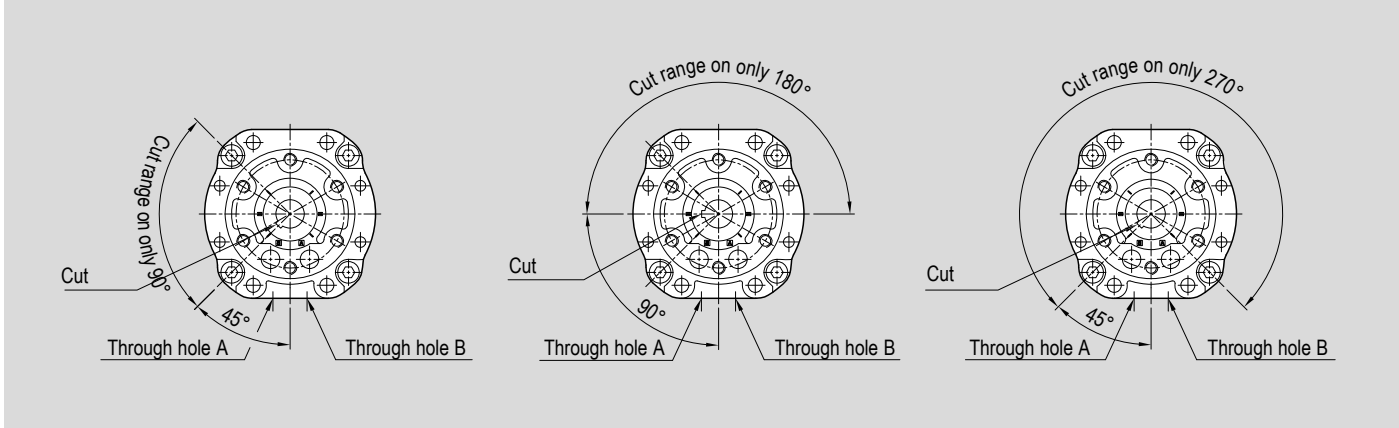
Technical data

Size	50	63	80	100	
Bore	Ø 12	Ø 15	Ø 17	Ø 25	
Fluid	Filtered compressed air with or without lubrication. Lubrication, if started, must be continued.				
Angle of rotation	90° - 180° - 270°				
Pressure range	1,5 ÷ 7 bar				
Temperature range	0°C ÷ +50°C				
Ports	1/8"		1/4"		
Torque momentum (Nm) at 6 bar	5	10	18	35	
Admissible kinetic energy (J)	0,082	0,12	0,39	0,6	
Weight (g)	ARTM ARTMC	760	1290	1920	3560
	ARTML ARTMLC	1100	1500	2300	3900

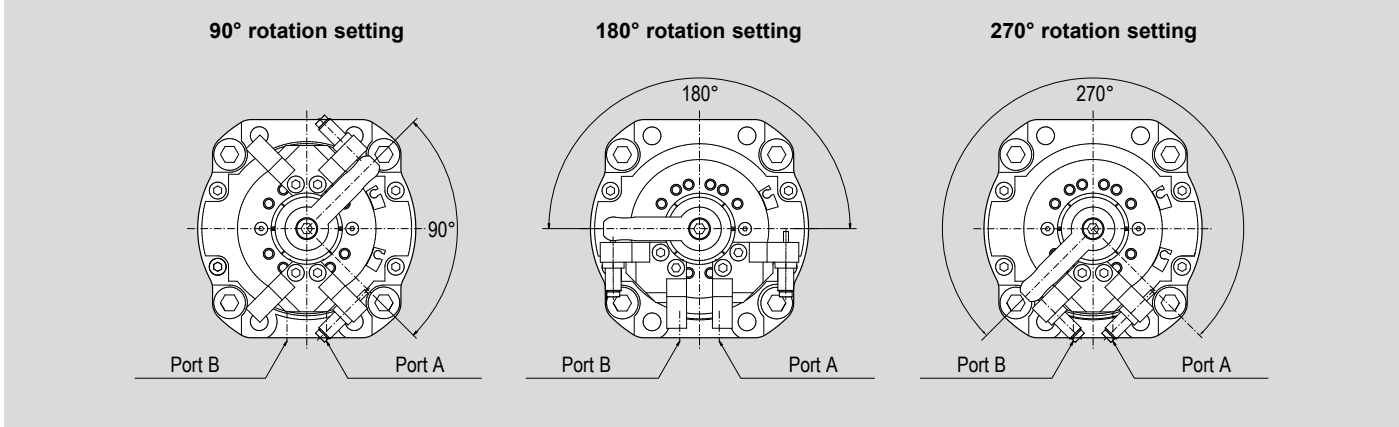
Output torque table



Angle of rotation

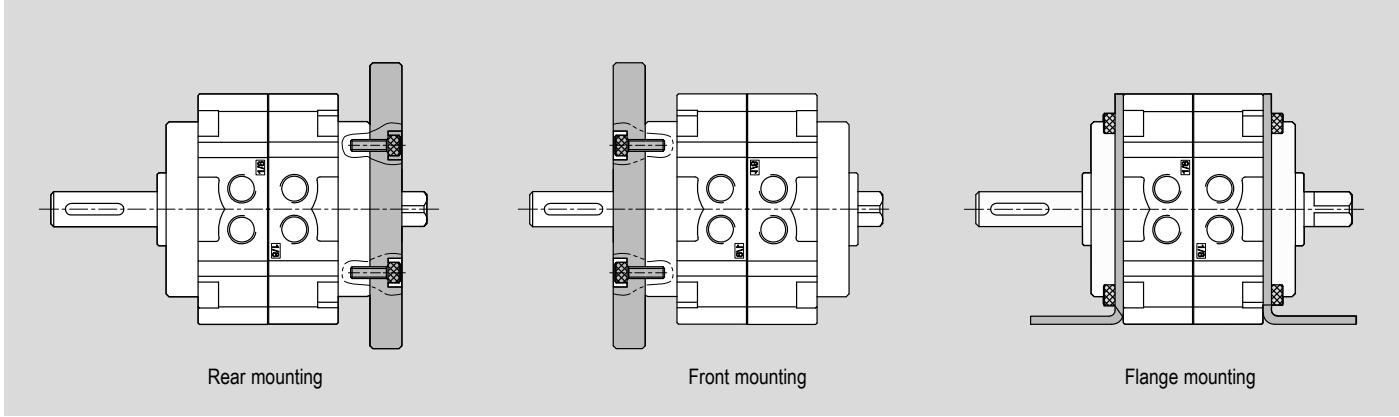


Angle of rotation*



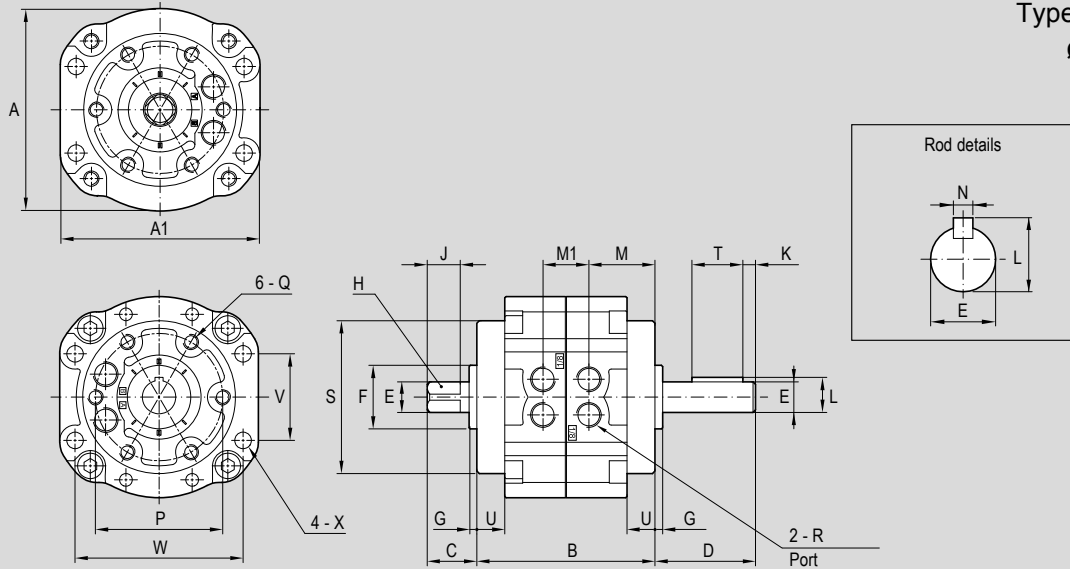
*With shock absorbers for 10° rotation adjustment

Assembly type



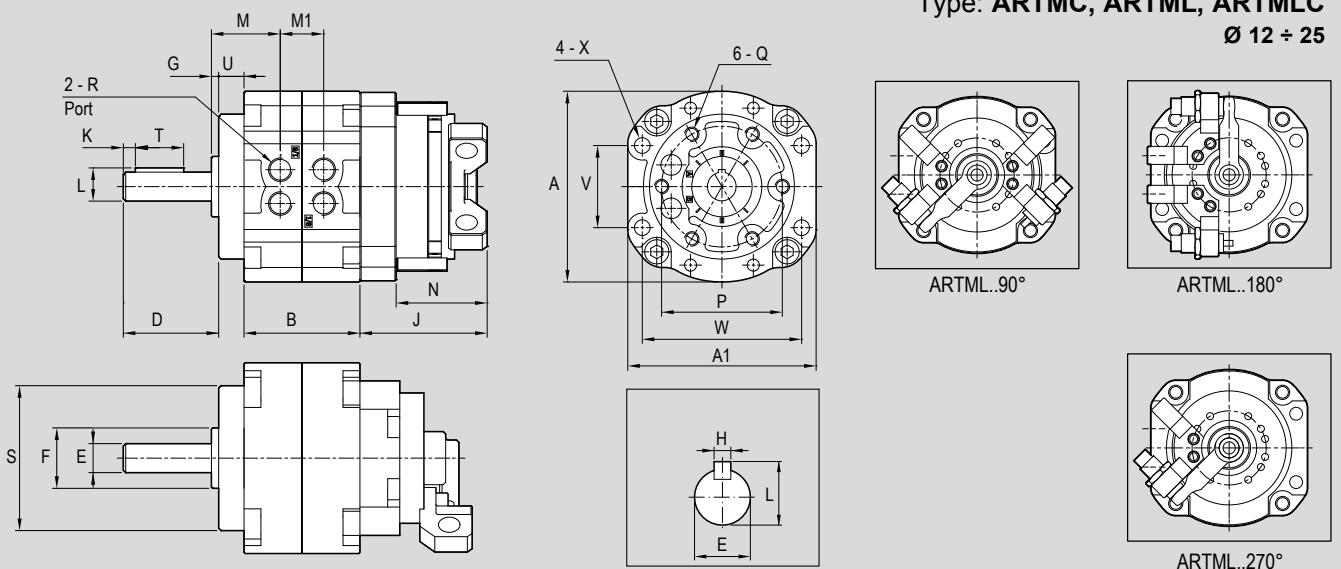
Dimensions

Type: **ARTM**
Ø 12 ÷ 25





Ø (mm)	size	ØA	A1	B	C	D	ØE	ØF	G	H	N	J	K	L	M	M1	ØP	Q	R	ØS	T	U	V	W	ØX
12	50	79	78	70	19,5	39,5	12	25	3	10	4	13	5	13,5	26	18,2	50	M6x1,0	RC1/8"	60	20	11	34	66	6,5
15	63	98	98	80	21	45	15	28	3	12	5	14	5	17	28,9	22,2	60	M8x1,25	RC1/8"	75	25	14	39	83	9
17	80	110	110	90	23,5	53,5	17	30	3	13	5	16	5	19	30	30,2	70	M8x1,25	RC1/4"	88	41	15	48	94	9
25	100	140	140	103	30	65	25	45	4	19	7	22	5	28	35,4	32,2	80	M10x1,5	RC1/4"	108	40	11,5	60	120	11

Type: **ARTMC, ARTML, ARTMLC**
Ø 12 ÷ 25



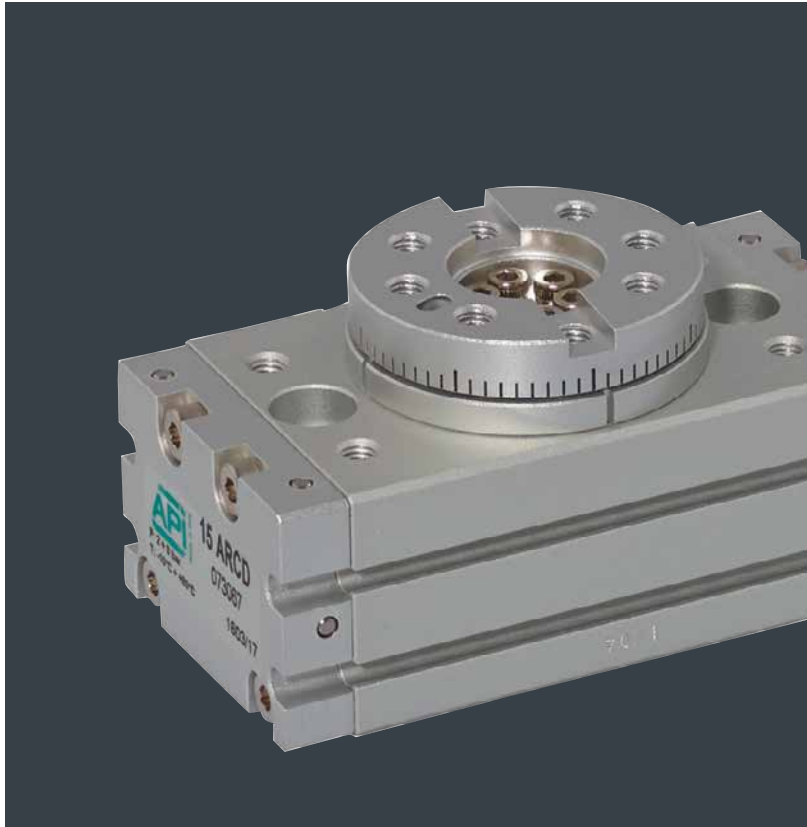
Ø (mm)	size	ØA	A1	B	D	ØE	ØF	G	H	J	K	L	M	M1	N	ØP	Q	R	ØS	T	U	V	W	ØX
12	50	79	78	48	50,5	12	25	3	4	52,7	5	13,5	29	18	37,7	50	M6x1,0	RC1/8"	60	20	11	34	66	6,5
15	63	98	98	52	59	15	28	3	5	56,4	5	17	31,9	22,2	37,7	60	M8x1,25	RC1/8"	75	25	14	39	83	9
17	80	110	110	60	68,5	17	30	3	5	58,9	5	19	33	30	39,2	70	M8x1,25	RC1/4"	88	36	15	48	94	9
25	100	140	140	80	76,5	25	45	4	7	62,9	5	28	39,4	32,2	39,2	90	M10x1,5	RC1/4"	108	40	11,5	60	120	11

Magnetic reed switch C groove ASC..

	For cylinder Ø mm	Code	Item	Cylinder matching
	4 ÷25	070248 	ASC1C525	ARTMC
		070249	ASC7N2M8	ARTMLC
		070382	ASC7M2M8	ARTMFC ARTMFLC

ROTARY

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Fast delivery



Features and certifications

Series of rotary actuators, available in bores from $\varnothing 10$ to 63, double acting, magnetic. Supplied as standard in compliance with Reach and RoHS directives.

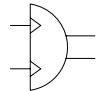


Type ARC $\varnothing 10 \div 63$

from page 1.52.20



Rotary actuators with double rack, with rotation angles $90^\circ \div 180^\circ$ and adjustment $0^\circ \div 190^\circ$. Double acting, magnetic, with grooves on the body allowing the direct mounting of magnetic reed switches. Equipped as standard with mechanical stoppers, on request these can be supplied with hydraulic shock absorbers.

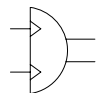


Type ARP $\varnothing 15 \div 32$

from page 1.52.50



Rotary actuators with piston and external mechanical stoppers. Rotation angles 90° and 180° . Double acting, magnetic, with grooves on the body allowing the direct mounting of magnetic reed switches. Equipped as standard with mechanical stoppers, on request these can be supplied with hydraulic shock absorbers.



Options

Description	Symbol	Suffix
Shock absorbers (from Ø 15)		D

The options, when this is possible, can be combined with each other. For options matching and code key, see the tables below.

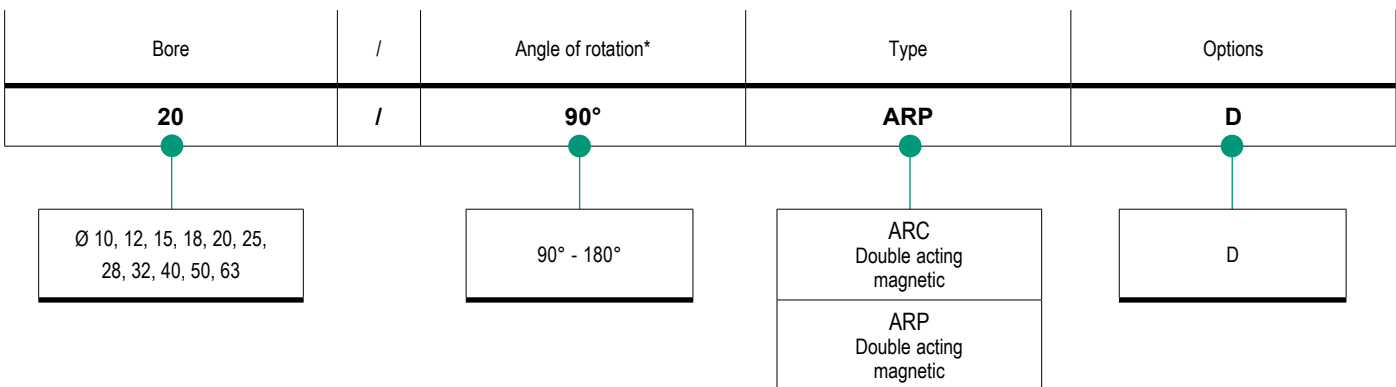
Options matching

Series	Bore	Model	Standard options matching
			D (Ø15+63)
ARC	Ø 10 ÷ 63	Standard	●
ARP	Ø 15 ÷ 32	Standard	●

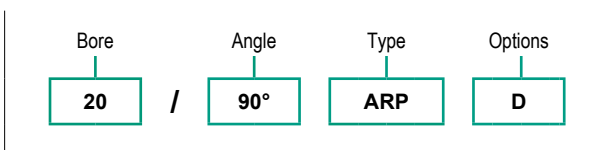
Key

● allowed matching; - not allowed matching

Code key



How to order

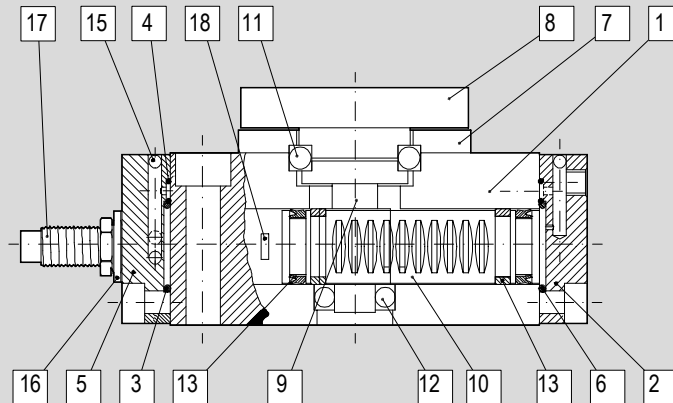


Notes

*Only for type ARP
For further information on options and their matching, see tables above.

Standard materials

Type: **ARC**

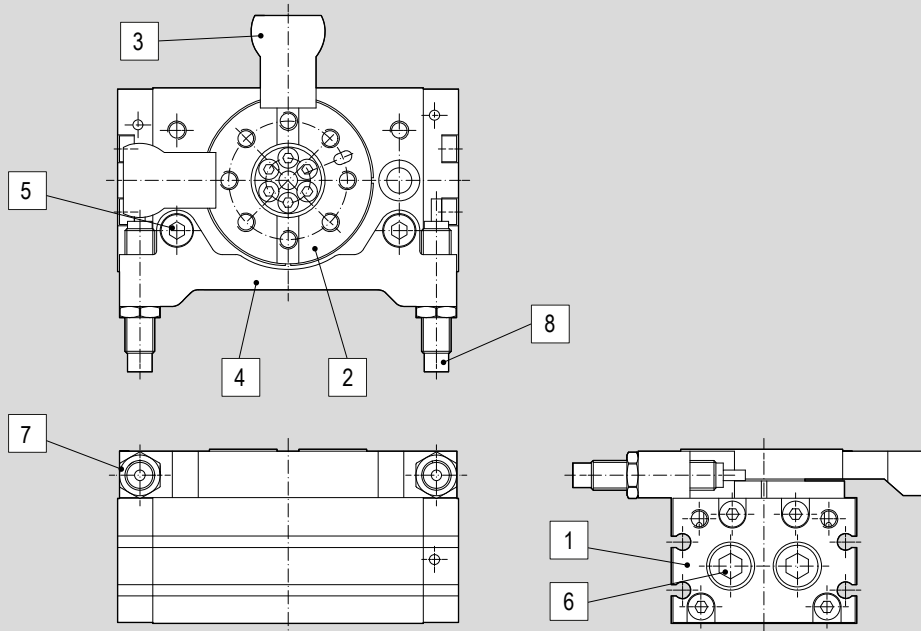


1 - CYLINDERS

Position	Description	Materials
1	Body	Anodised aluminium
2	Front head	Anodised aluminium
3	O-ring	NBR
4	O-ring	NBR
5	Rear head	Anodised aluminium
6	O-ring	NBR
7	Bearing covers	Anodised aluminium
8	Rotating plate	Anodised aluminium
9	Rod	Hardened steel
10	Rack	Stainless Steel
11	Spherical bearing	Steel
12	Spherical bearing	Steel
13	Piston seal	NBR
14	Guide ring	Plastic material
15	Ball	Steel alloy
16	Stopper seal	NBR
17	Mechanical stopper	Steel alloy
18	Magnet	Magnetic metal

Standard materials

Type: **ARP**

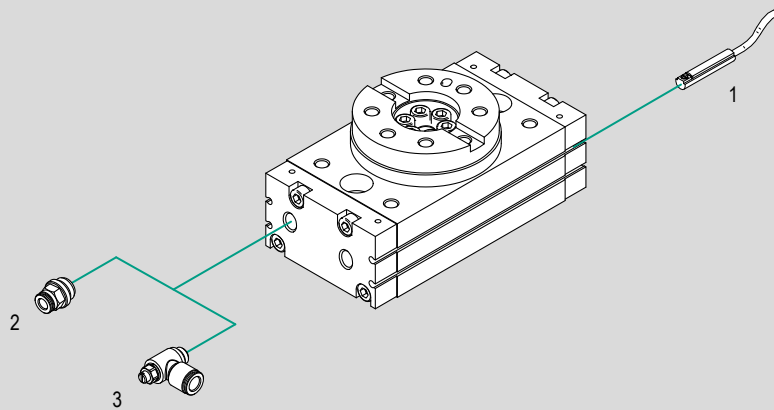


1 - CYLINDERS

Position	Description	Materials
1	Heads	Anodised aluminium
2	Rotary plate	Anodised aluminium
3	Spacer	Steel
4	Base	Anodised aluminium
5	Hexagonal nut	Anodised aluminium
6	Head nut	Steel
7	Hexagonal nut	Steel
8	Shock absorber	See page 1.105.4

Accessories

1 - CYLINDERS



N.	Cylinder bore	Item	Description	Compliance	Matching		Code page	Data sheet page
					ARC	ARP		
1	Ø 10 ÷ 63	ASC..	Magnetic reed switch C groove	-	●	●	1.52.90	1.110.30
2	Ø 10 ÷ 63	R..	Push-in fittings	-	●	●	4.2.1	
3	Ø 10 ÷ 63	V..C	Flow controls, for cylinders	-	●	●	4.94.1	

Key

● allowed matching; - not allowed matching

Main features

10 ÷ 63

Bores Ø



Double acting
Magnetic

ARC

Type



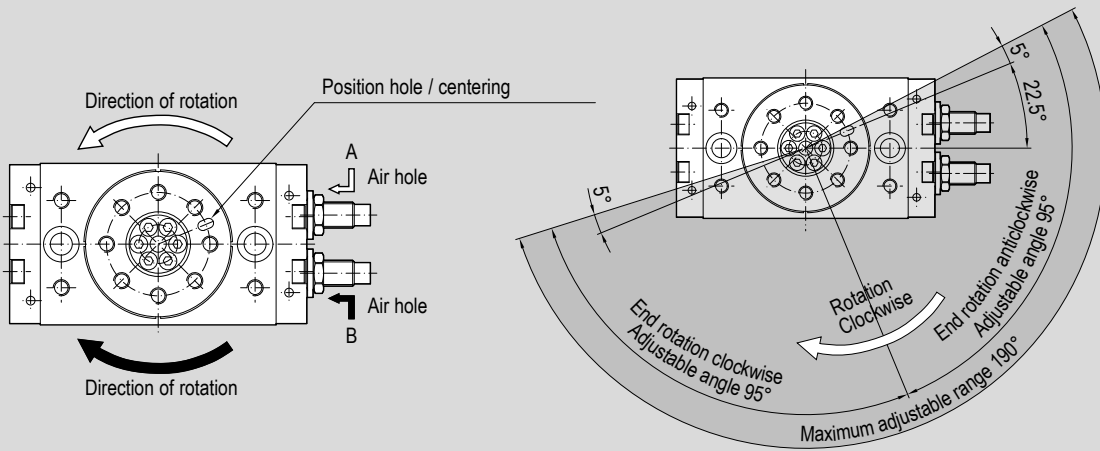
Technical data

Bore Ø mm	10	12	15	18	20	25	28	32	40	50	63
Code	075581	075582	073063	073064	073065	073066	075583	075584	075585	075586	075587
Fluid	Filtered compressed air with or without lubrication. Lubrication, if started, must be continued.										
Pressure range	1,5 ÷ 7 bar										
Temperature range	0°C ÷ +50°C										
Angle of rotation	180°										
Adjustable angle	0° ÷ 190°										
Rotary momentum (Nm) at 6 bar	0,3	0,6	1,5	2,2	3,2	5,5	7,5	9,8	19	31	45
Maximum Absorbing Capacity* (Nm)	-		3	6		20	59		147		
Ports	M3	M5			1/8"						
Weight (g)	150	250	530	990	1.290	2.100	2.890	4.100	7.650	8.960	11.170

*Of shock absorber

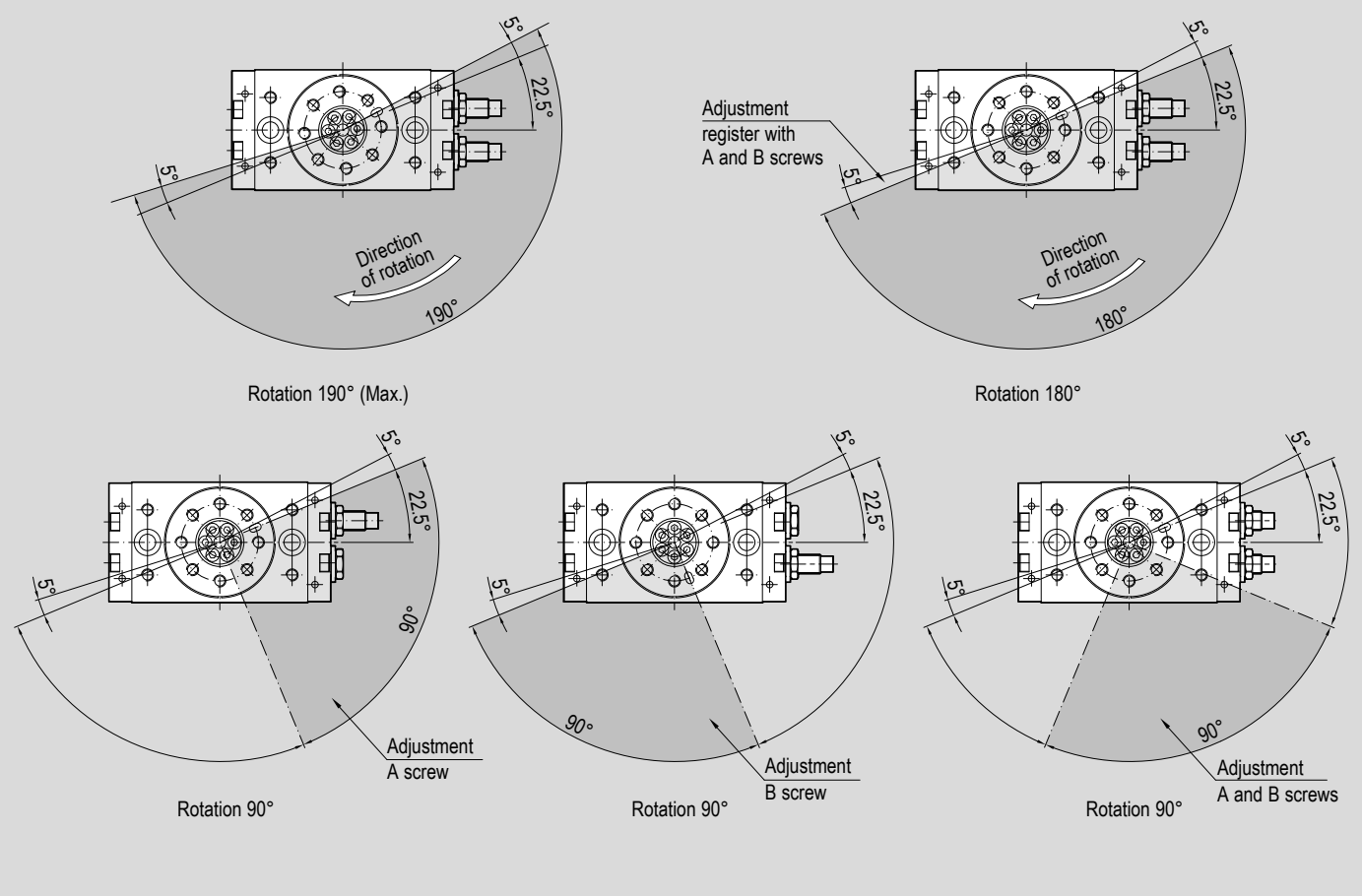
Direction and rotation angle

Type: ARC

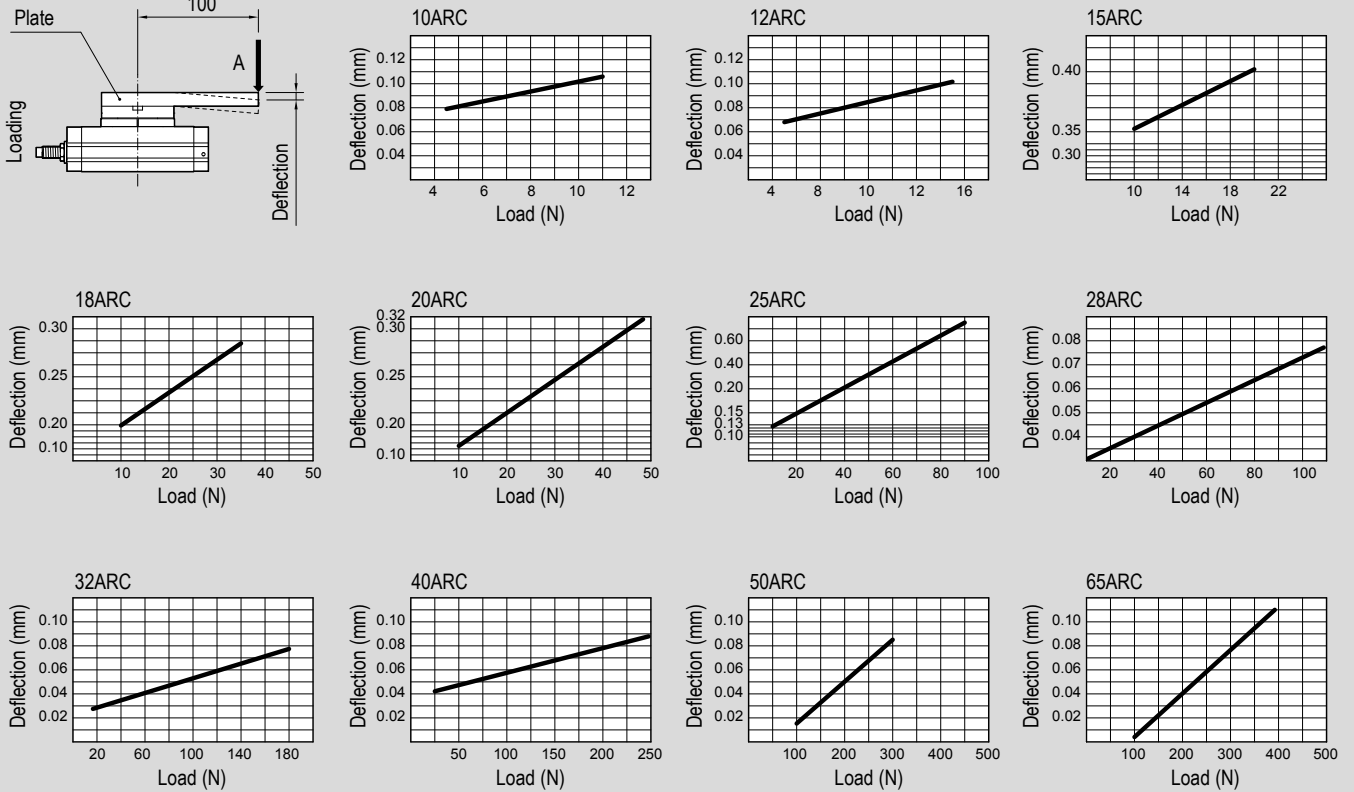
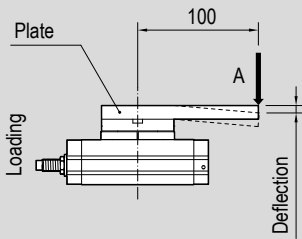


Rotation angles

Type: ARC

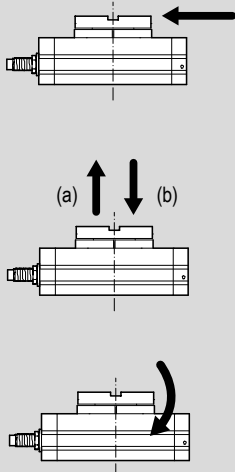


Output torque table



1 - CYLINDERS

Possible loads

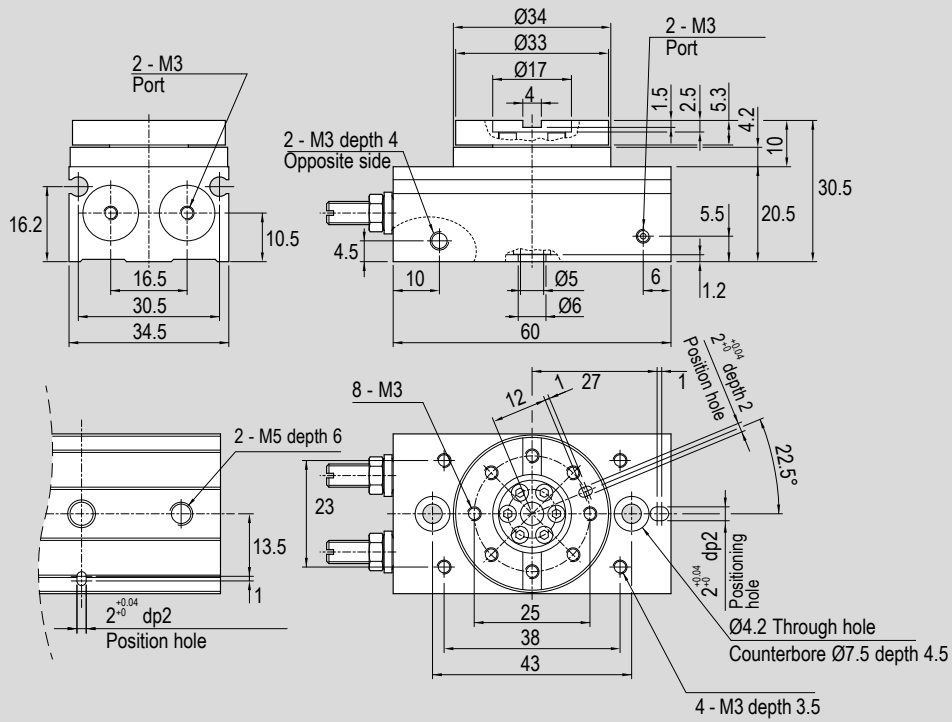


Type of loads	Actuator bore Ø											
	10	12	15	18	20	25	28	32	40	50	63	
Side (N)	33	54	70	140	185	300	333	390	543	850	1200	
Top (N)	(a)	48	71	78	130	188	285	296	493	740	950	1400
	(b)	48	71	74	130	358	442	476	706	1009	1500	2100
Torque momentum (Nm)	1,1	1,5	2	3,5	4,8	9	12	18	25	30	38	

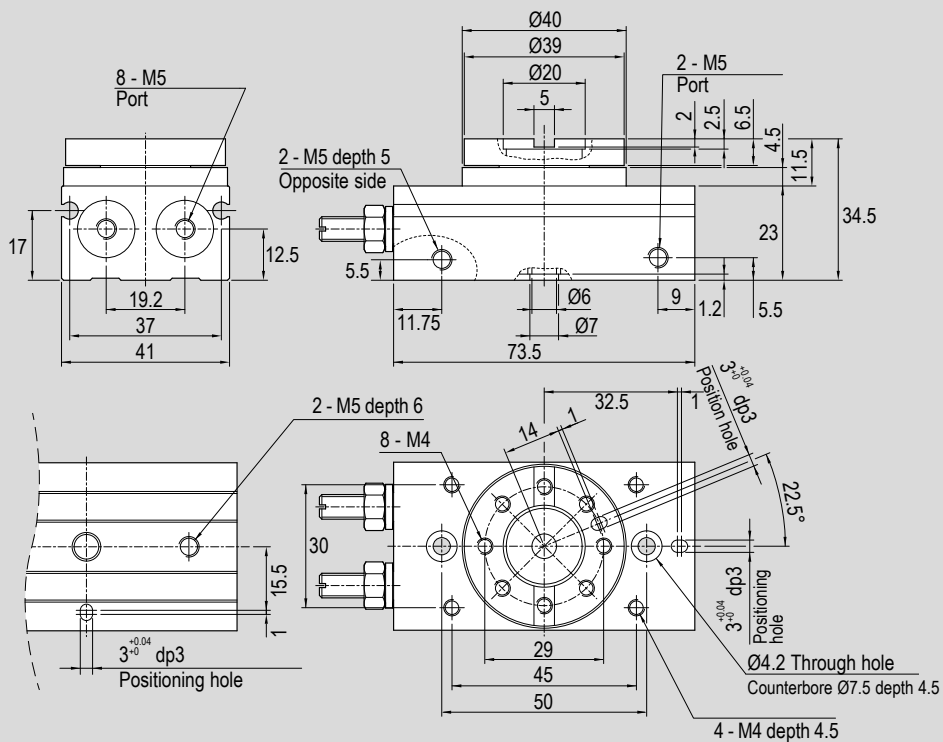
Standard dimensions

1 - CYLINDERS

Type: ARC
Ø 10

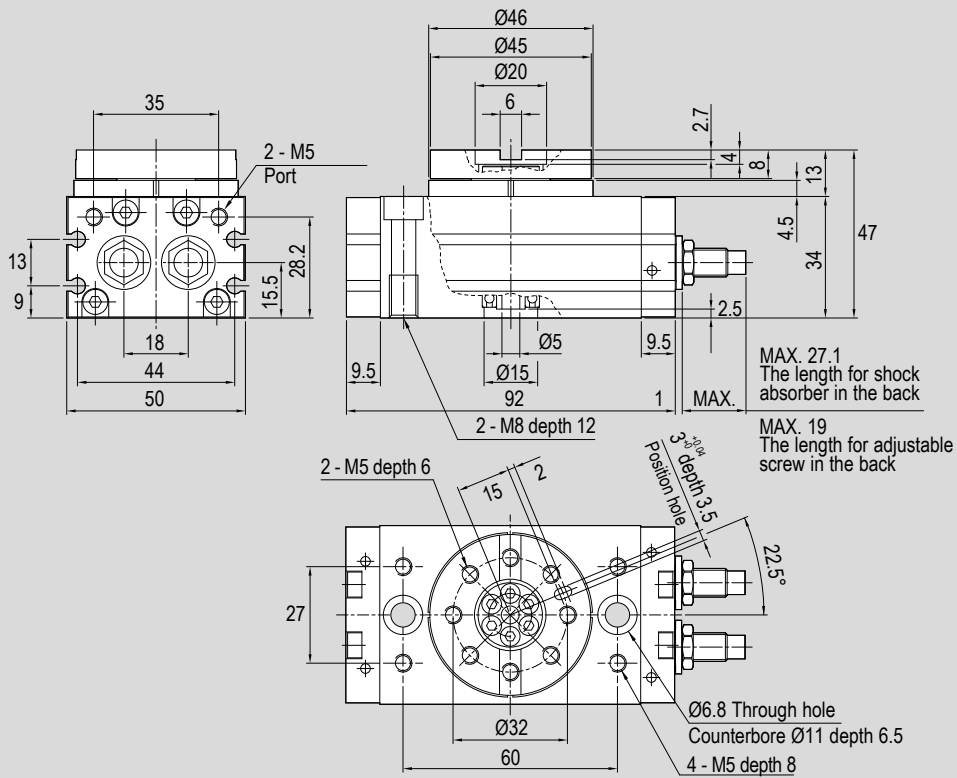


Type: ARC
Ø 12



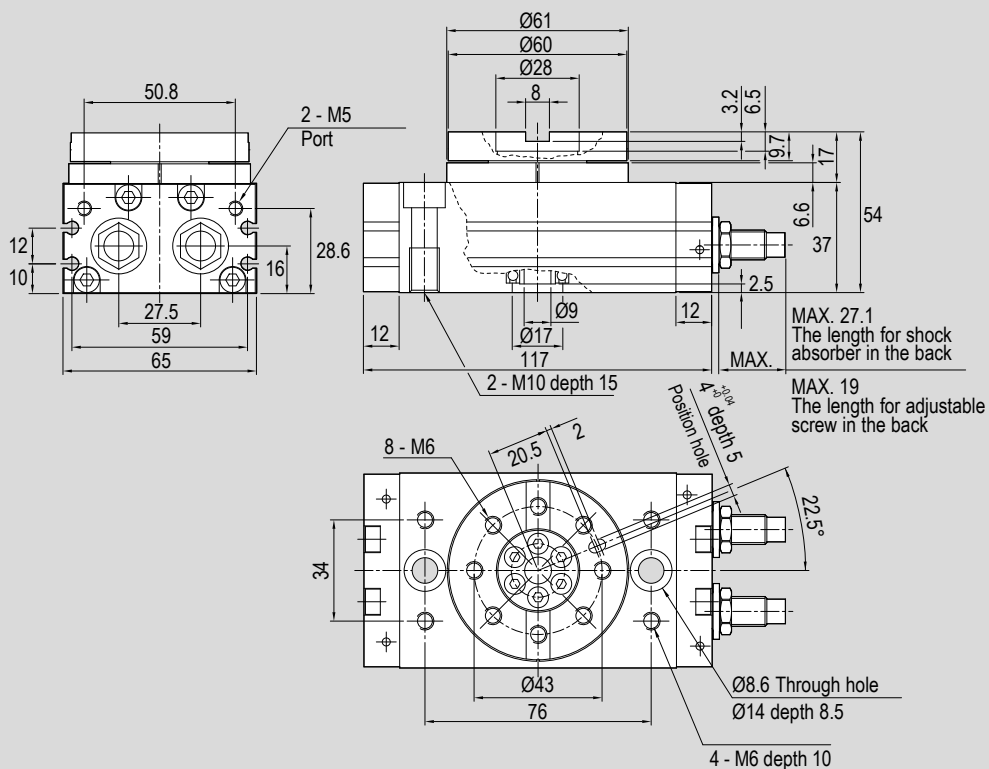
Standard dimensions

Type: **ARC**
Ø 15



1 - CYLINDERS

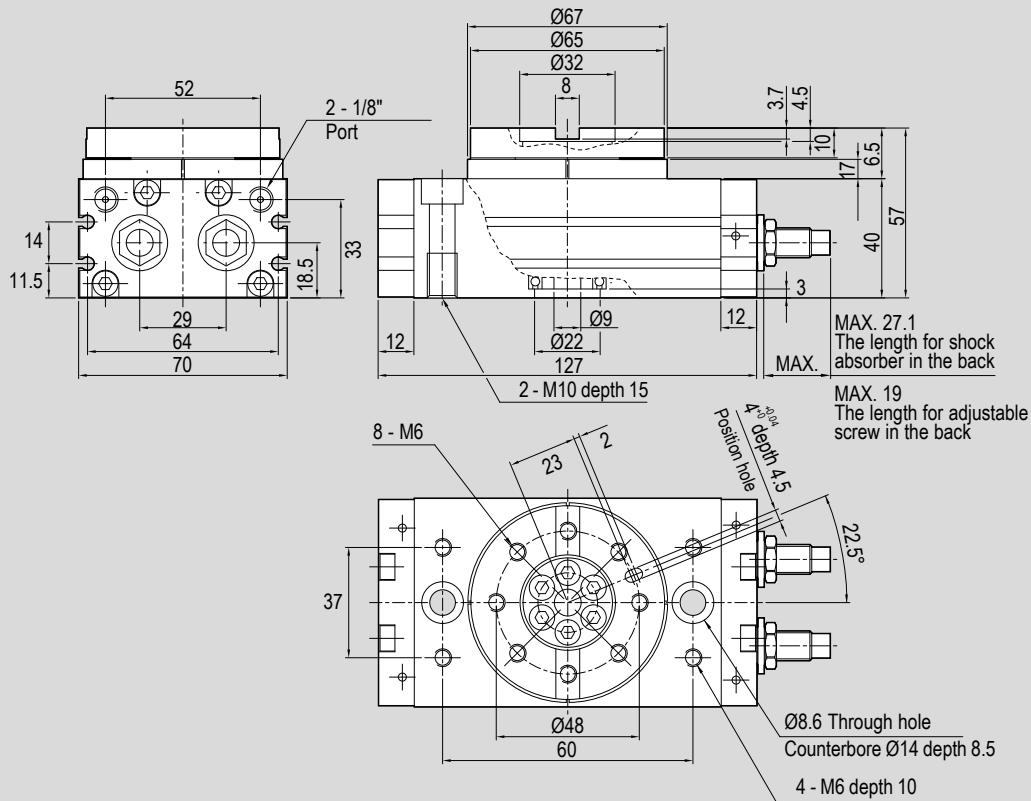
Type: **ARC**
Ø 18



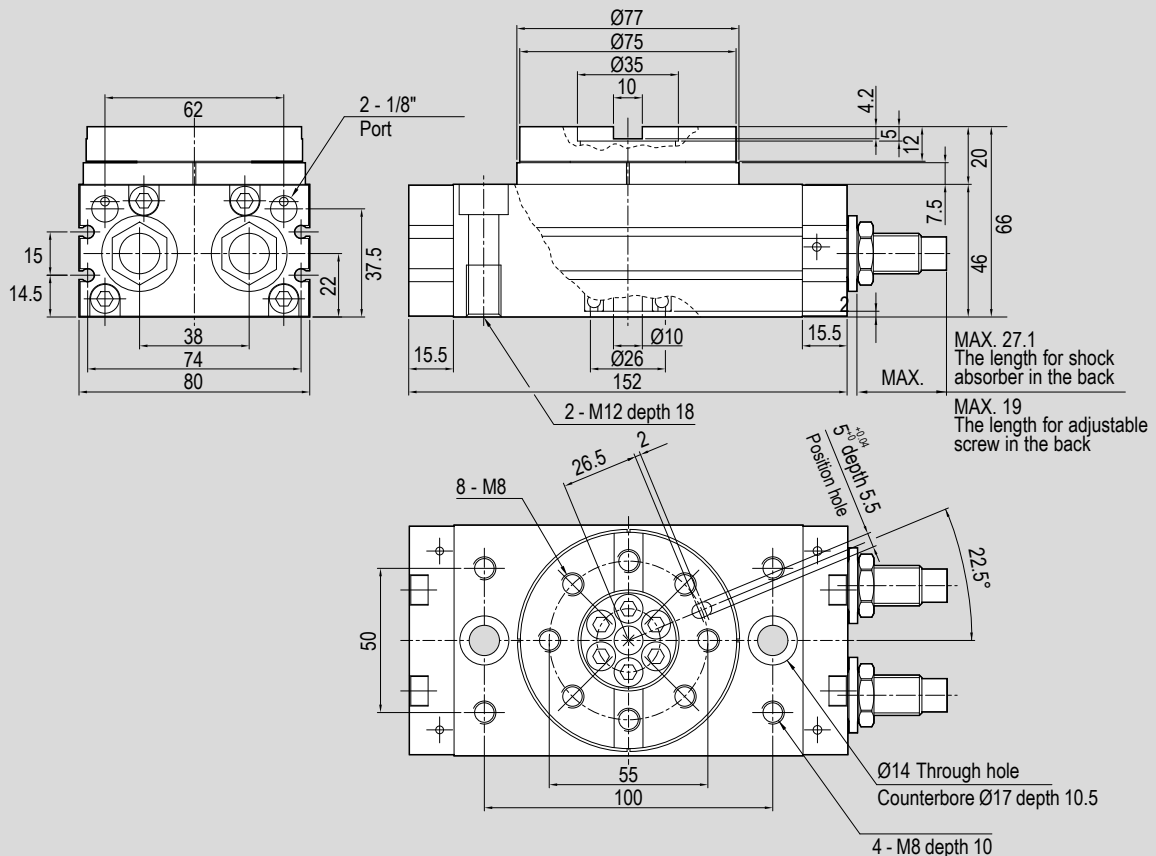
Standard dimensions

1 - CYLINDERS

Type: **ARC**
Ø 20

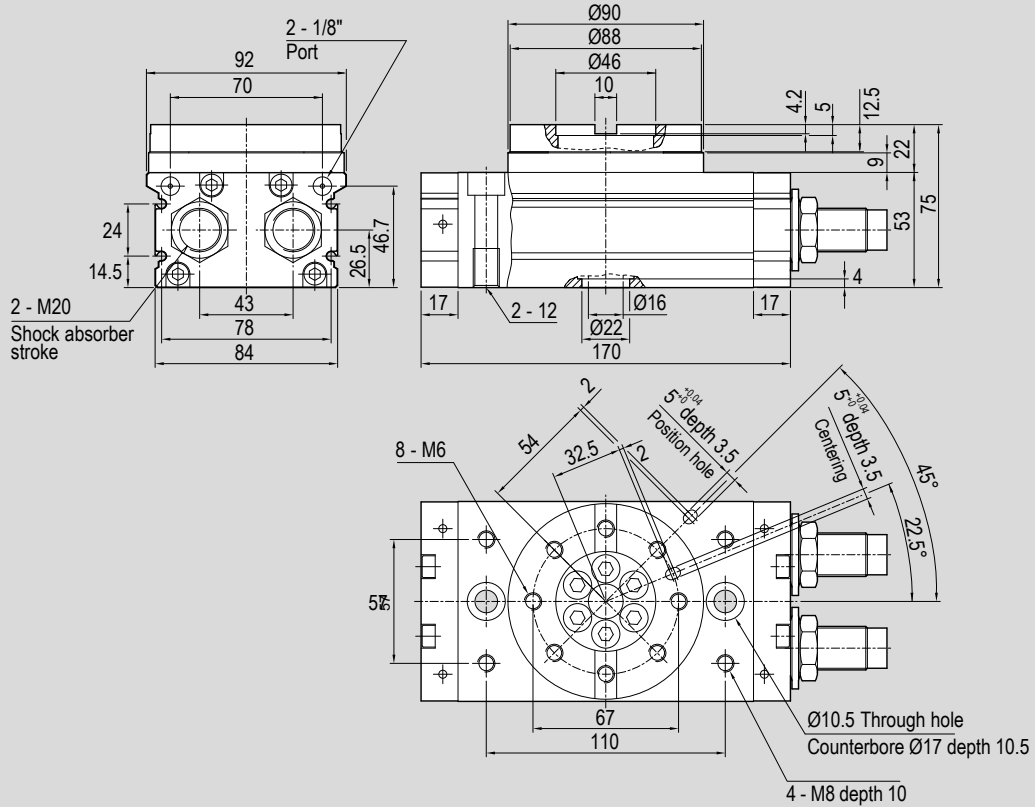


Type: **ARC**
Ø 25



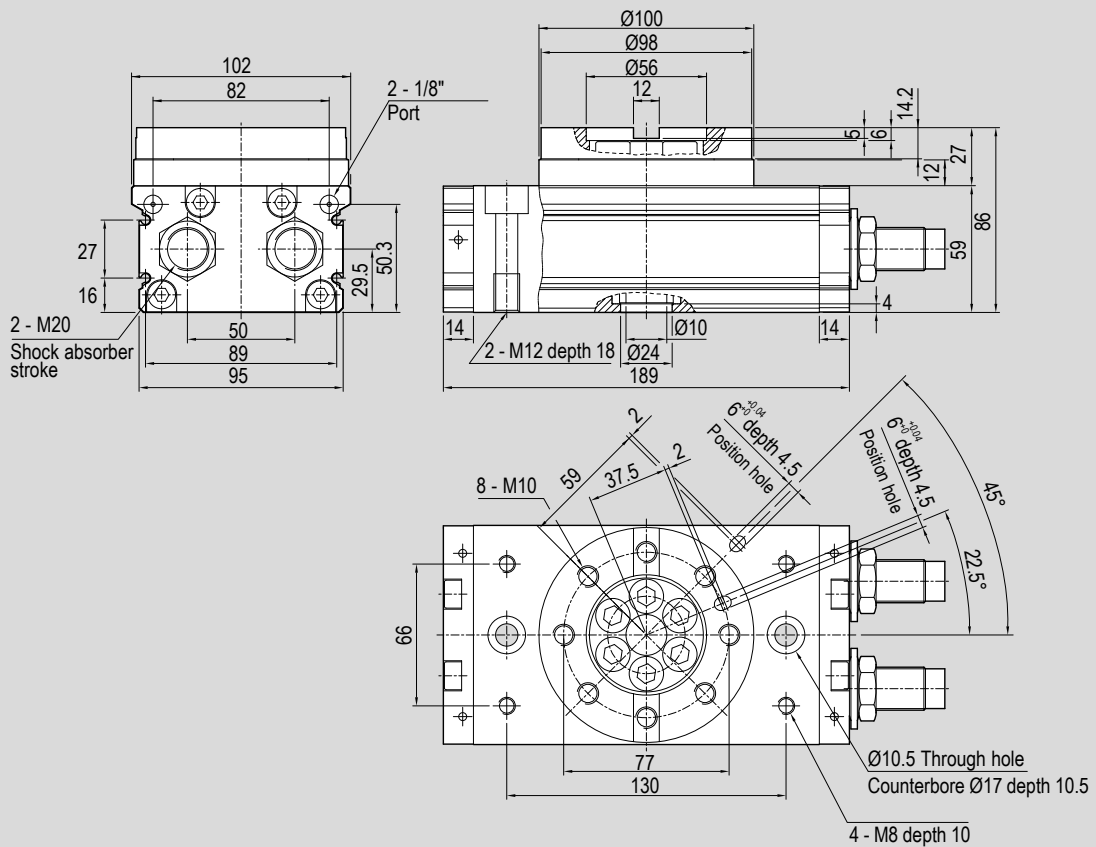
Standard dimensions

Type: ARC
Ø 28



1 - CYLINDERS

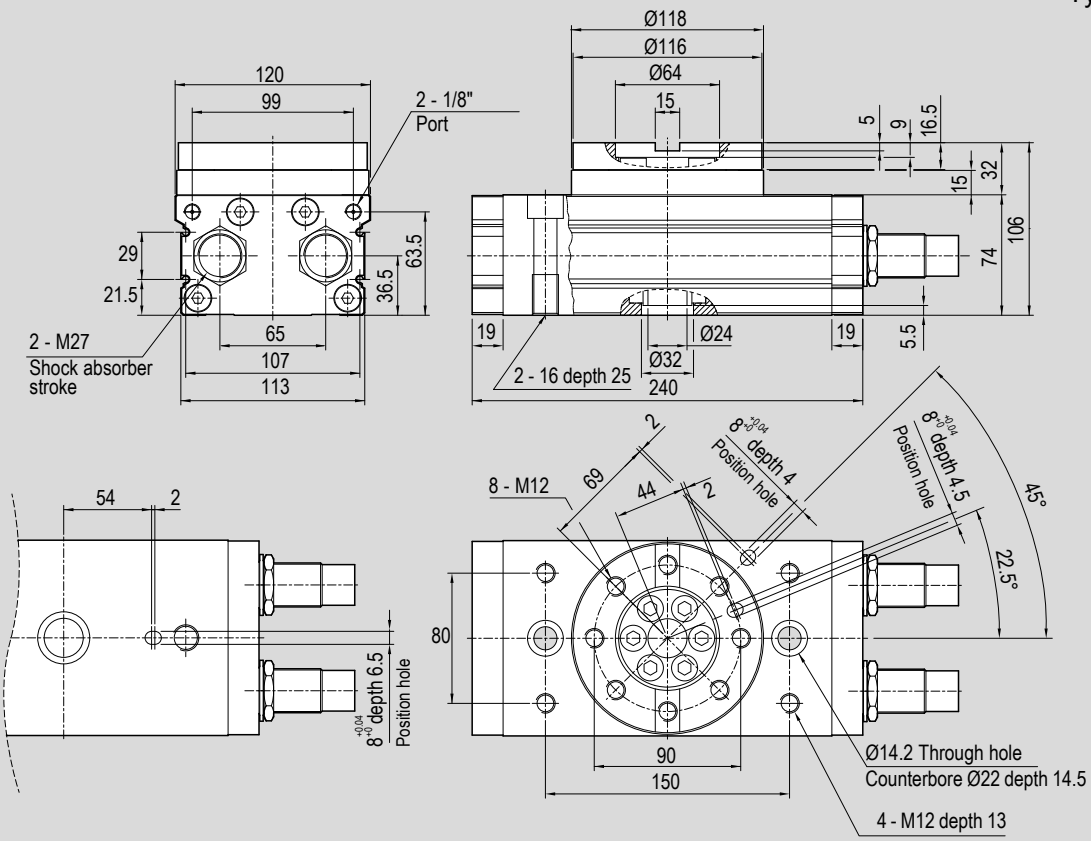
Type: ARC
Ø 32



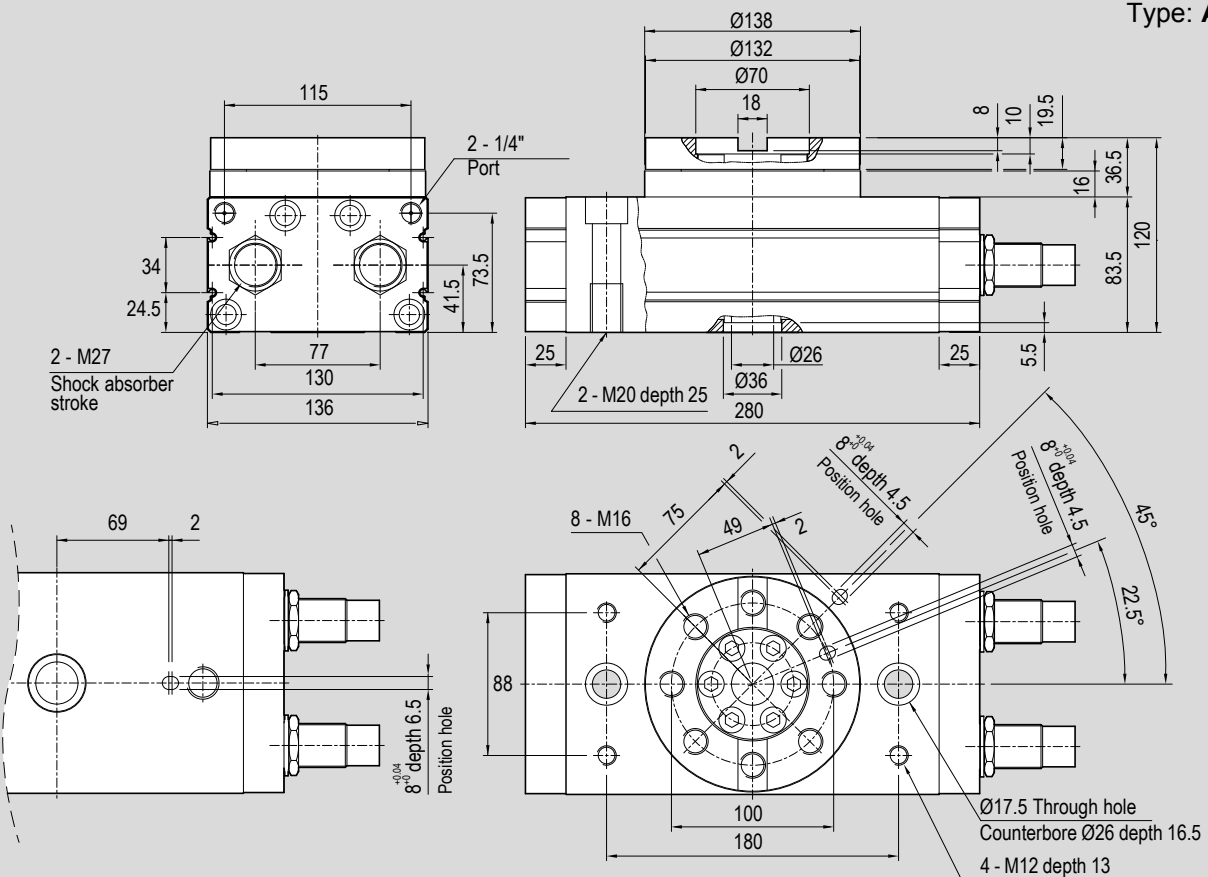
Standard dimensions

1 - CYLINDERS

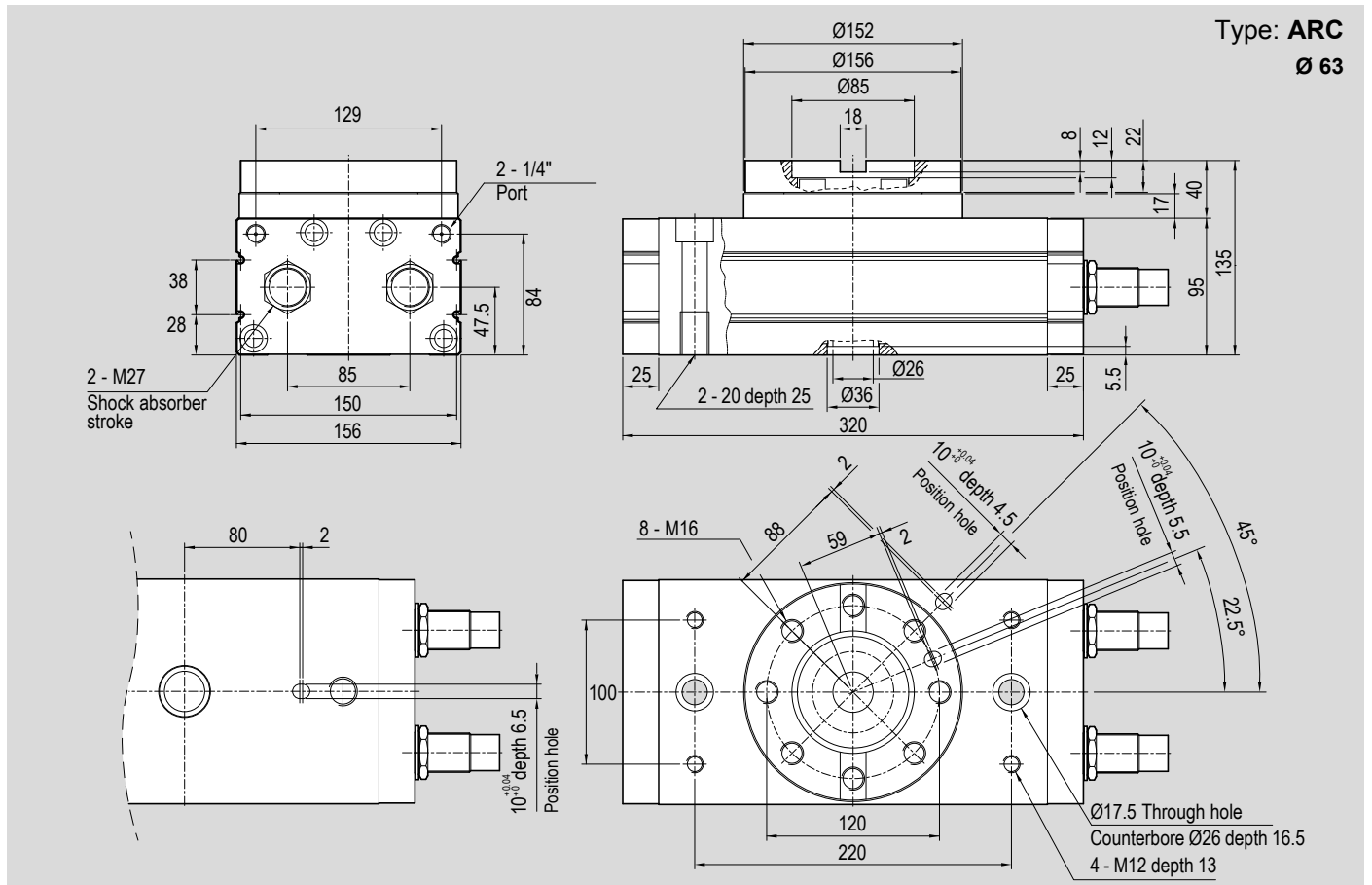
Type: ARC
Ø 40



Type: ARC
Ø 50



Standard dimensions



1 - CYLINDERS

Main features

15 ÷ 32

Bores Ø



Double acting
Magnetic

ARP

Type



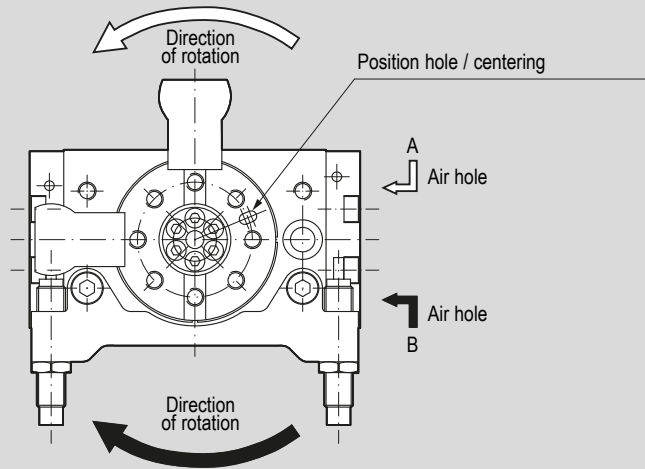
Technical data

Bore Ø mm	15		18		20		25		28		32	
Code	073071	073079	073072	073080	073073	073081	073074	073082	075588	075590	075589	075591
Fluid	Filtered compressed air with or without lubrication. Lubrication, if started, must be continued.											
Pressure range	1,5 ÷ 7 bar											
Temperature range	0°C ÷ +50°C											
Angle of rotation	90°	180°	90°	180°	90°	180°	90°	180°	90°	180°	90°	180°
Adjustable angle	10°											
Rotary momentum (Nm) at 6 bar	1,5		2,2		3,2		5,5		7,5		9,8	
Maximum Absorbing Capacity* (Nm)	3		6				20				59	
Ports	M5				1/8"							
Weight (g)	630	600	1200	1140	1520	1450	2480	2370	3390	3210	4700	4500

*Of hydraulic shock absorber

Direction and rotation angle

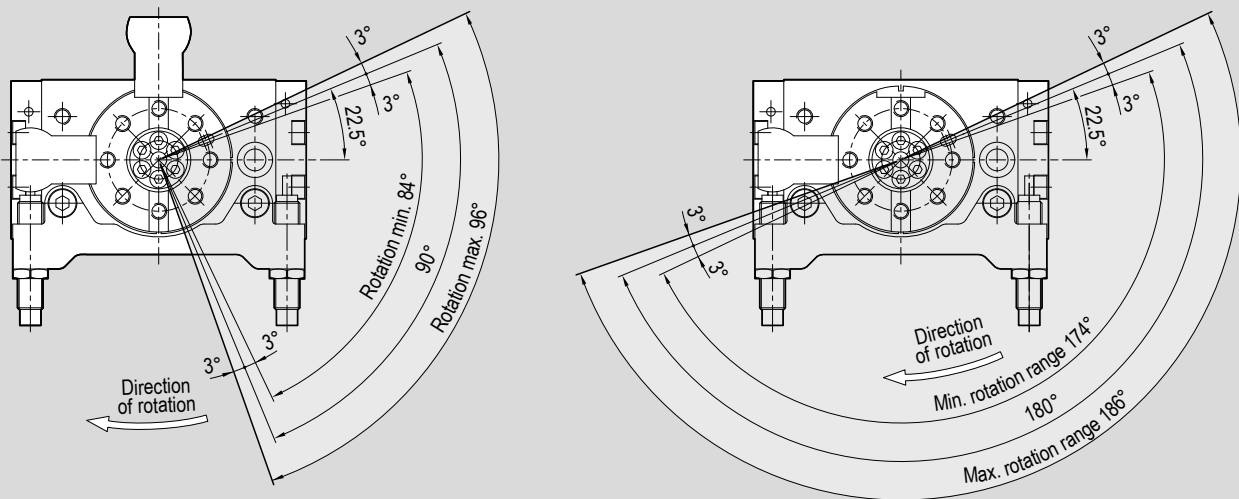
Type: ARP



1 - CYLINDERS

Rotation angles

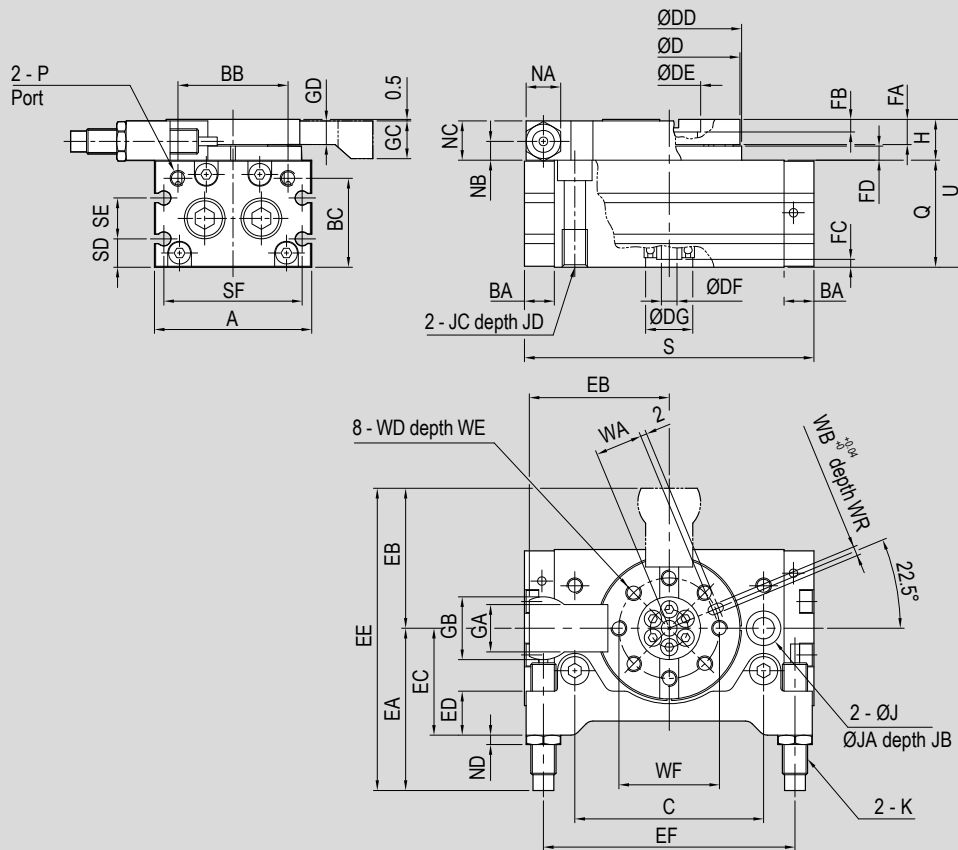
Type: ARP



Standard dimensions

1 - CYLINDERS



Type: ARP



Ø (mm)	A	BA	BB	BC	C	D	DD	DE	DF	DG	EA	EB	EC	ED	EE	EF	FA	FB	FC	FD	GA	GB	GC	GD	H
15	50	9,5	35	28,2	60	45	46	20	5	15	51,6	44,5	34	14	96,1	80	8	4	2,5	4,5	15	20	12	7,5	13
18	65	12	50,8	28,6	76	60	61	28	9	17	56	57	43	18	113	101	9,7	6,5	2,5	6,6	19	25	15	9,2	17
20	70	12	52	33	84	65	67	32	9	22	59	62	46	18	121	110	10	4,5	3	6,5	20	28	16	9,5	17
25	80	15,5	62	37,5	100	75	77	35	10	26	85	73	55	20	158	131	12	5	2	7,5	25	35	18	11,5	20
28	92	17	70	46,7	110	88	90	46	16	22	86	81	55,5	35	167	141	12,5	5	4	9	28	38	19,5	11,5	22
32	102	14	82	50,3	130	98	100	56	19	24	94	92,5	60	35	186,5	163	14,5	6	4	12	33	42	24,5	13,5	27

Ø (mm)	J	JA	JB	JC	JD	K	NA	NB	NC	ND	P	Q	S	SD	SE	SF	U	WA	WB	WR	WD	WE	WF
15	6,8	11	6,5	M8x1,25	12	M8x1	11	6	12,5	3	M5x0,8	34	92	9	13	44	47	15	3	3,5	M5x0,8	8	32
18	8,6	14	8,5	M10x1,5	15	M10x1	12,7	7,5	16,5	3	M5x0,8	37	117	10	12	59	54	20,5	4	5	M6x1	10	43
20	8,6	14	8,5	M10x1,5	15	M10x1	12,7	8,5	16,5	3	RC 1/8	40	127	11,5	14	64	57	23	4	4,5	M6x1	10	48
25	10,5	17	10,5	M12x1,75	18	M14x1,5	19	8,5	19,5	5	RC 1/8	46	152	14,5	15	74	66	26,5	5	5,5	M8x1,25	12	55
28	10,5	17	10,5	M12x1,75	18	M14x1,5	19	10	21,5	5	RC 1/8	53	170	14,5	24	78	75	32,5	5	5,5	M8x1,25	12,5	67
32	10,5	17	10,5	M12x1,75	18	M20x1,5	26	11,5	26	7	RC 1/8	59	189	16	27	89	86	37,5	6	6,5	M10x1,5	14,5	77

Magnetic reed switch C groove ASC..

	For cylinder Ø mm	Code	Item	Cylinder matching
	10 ÷ 63	070248 	ASC1C525	ARC ARP
		070249	ASC7N2M8	
		070382	ASC7M2M8	