

# ROTARY VANE

## Cylinders



Find out our key products



Solution for most applications



Easy and intuitive choice



Excellent value for money



Wide availability



Fast delivery



# Rotary Vane Cylinders

1 - CYLINDERS

## 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°



# Rotary Vane Cylinders

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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°



# Rotary Vane Cylinders

1 - CYLINDERS

## Code key

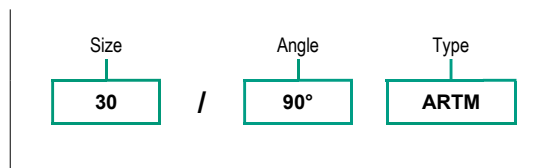
Size	/	Angle of rotation	Type
<b>30</b>	/	<b>90°</b>	<b>ARTM</b>

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°
-----------------

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

## How to order



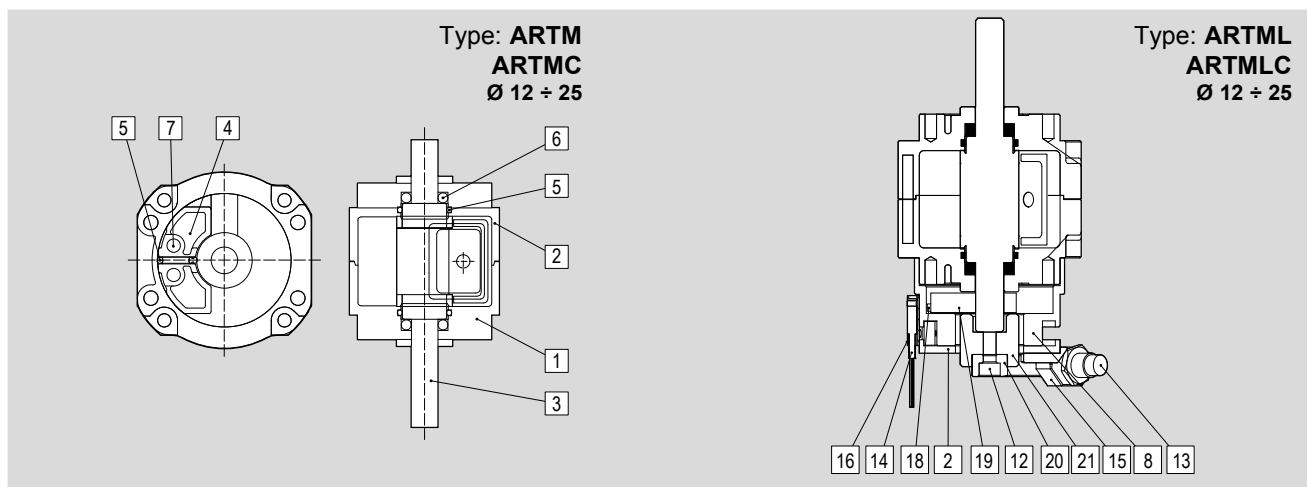
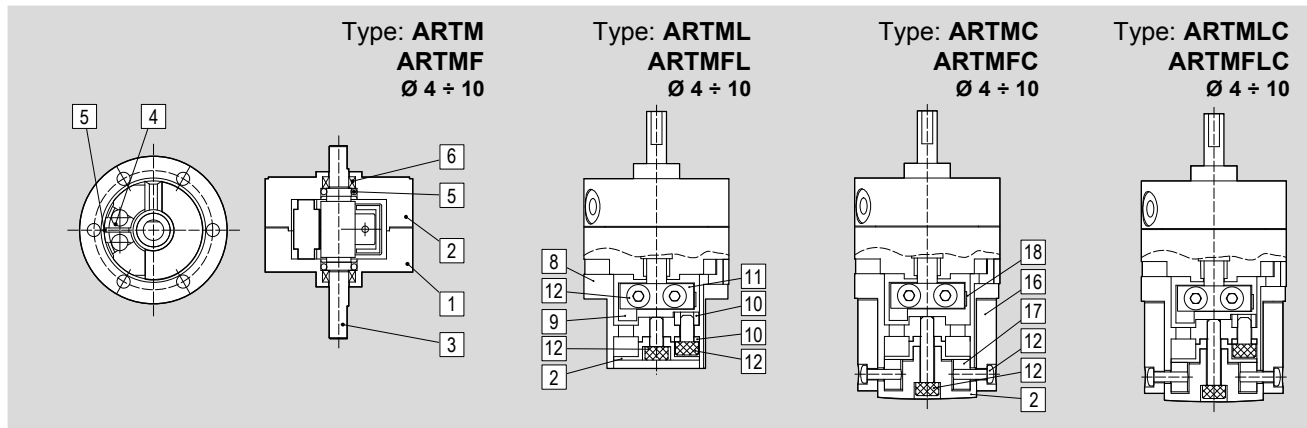
## Note

For standard materials see page 1.50.5

(1) Only for bores from Ø 4 to 10

Materiali standard

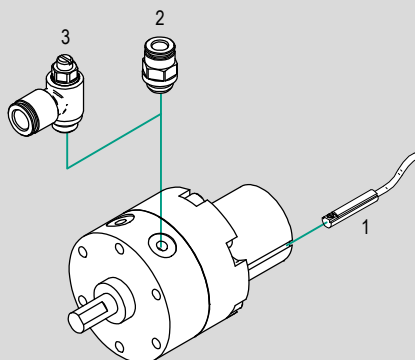
1 - CYLINDERS



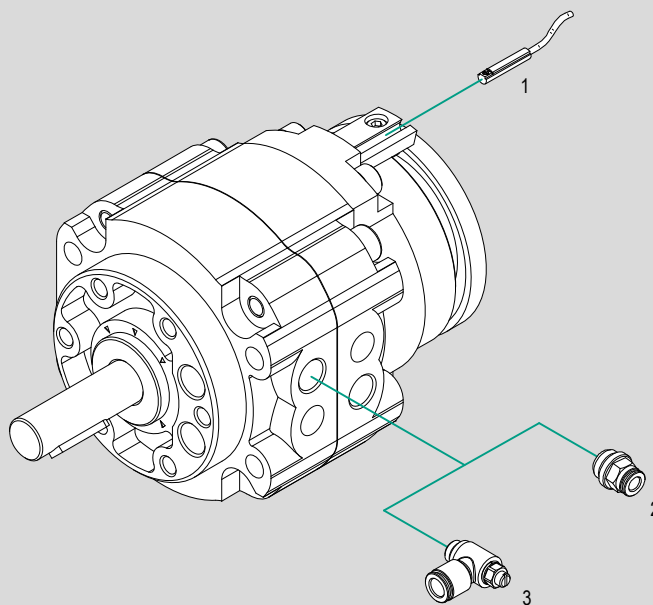
Posizione	Descrizione	Materiale	
		Ø 4 ÷ 10	Ø 20 ÷ 25
1	Front cover	Aluminium alloy	
2	End cover	Aluminium alloy	
3	Rod	Steel alloy	
4	Dampers	Plastic - Steel	
5	O-ring	NBR	
6	Bearing	Steel	
7	Position pin	-	Zinc alloy
8	Base	Zinc alloy	Stainless Steel
9	Stopper	Stainless Steel	-
10	Stopper base	Steel	-
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

1.50.6



# Rotary Vane Cylinders

Series ARTM, ARTMC, ARTML, ARTMLC

## 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

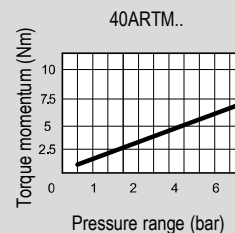
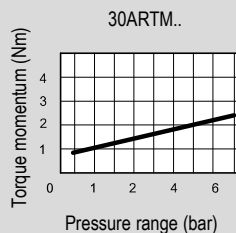
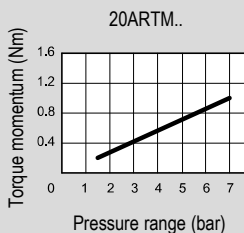
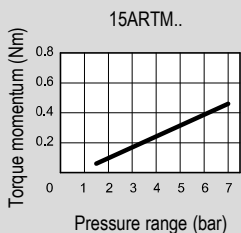
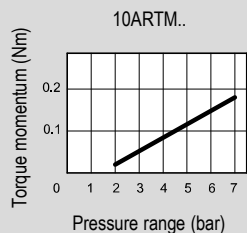
## Technical data

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					

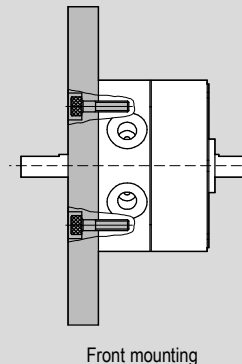
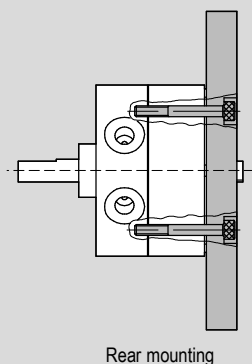
Rotary Vane Cylinders  
Series ARTM, ARTMC, ARTML, ARTMLC

1 - CYLINDERS

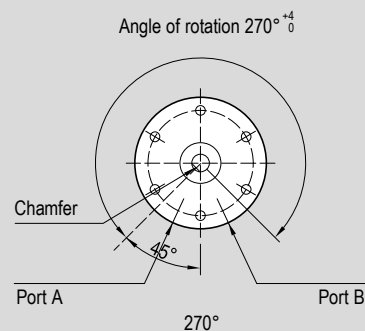
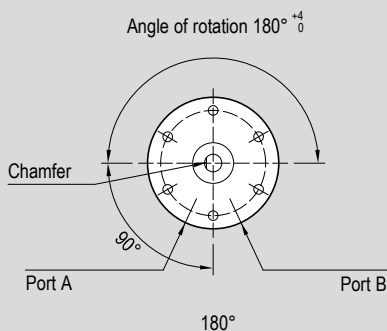
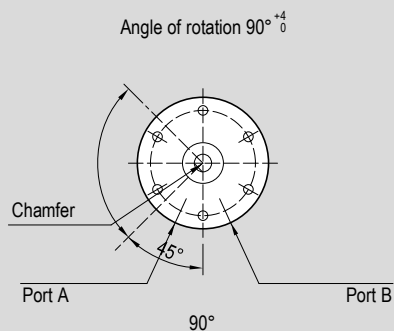
Output torque table



Assembly type



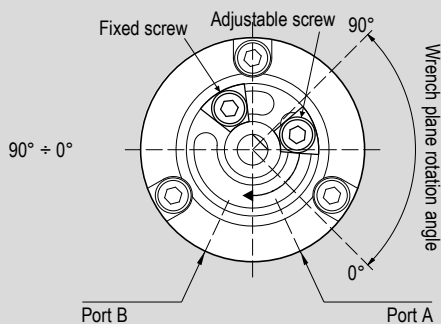
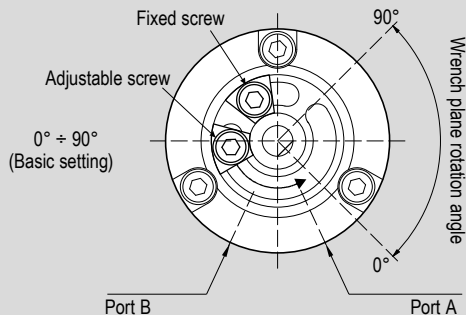
Angle of rotation



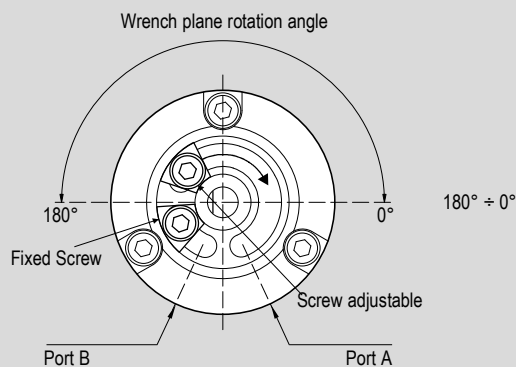
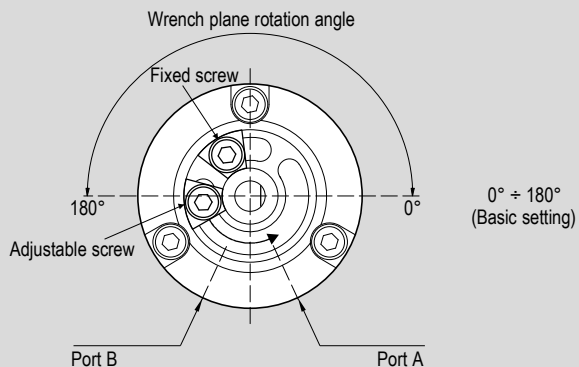
Rotation angle settings

1 - CYLINDERS

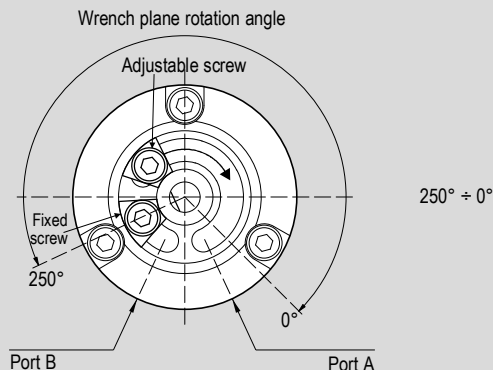
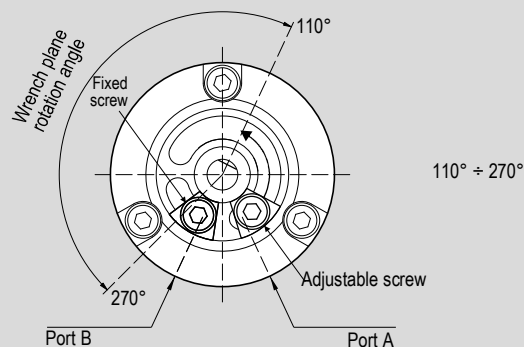
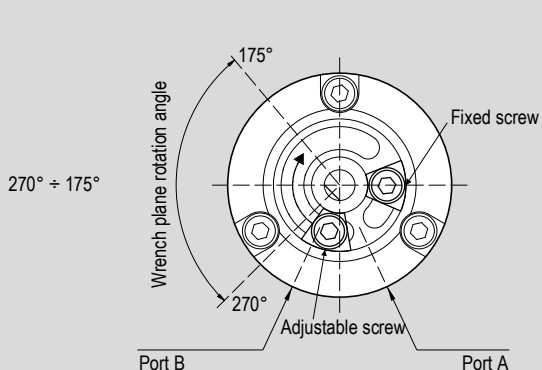
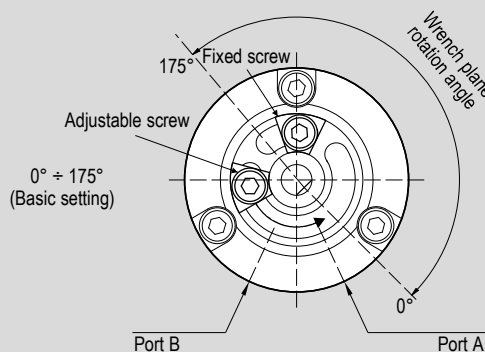
90° rotation setting



180° rotation setting



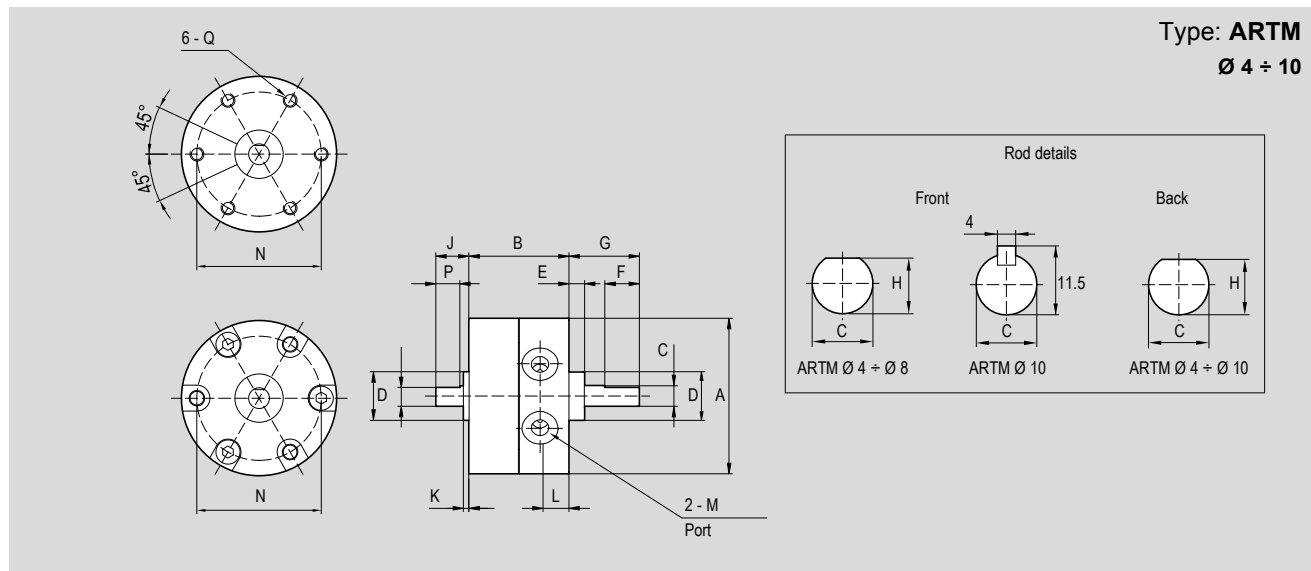
270° rotation setting



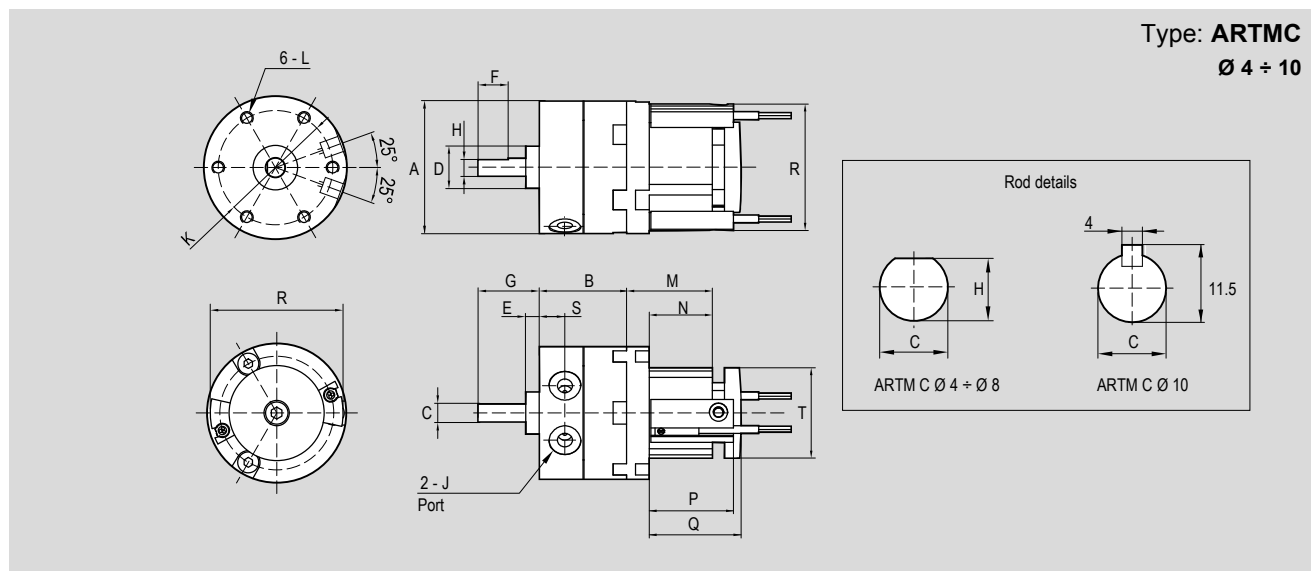
Rotary Vane Cylinders  
Series ARTM, ARTMC

1 - CYLINDERS

Dimensions

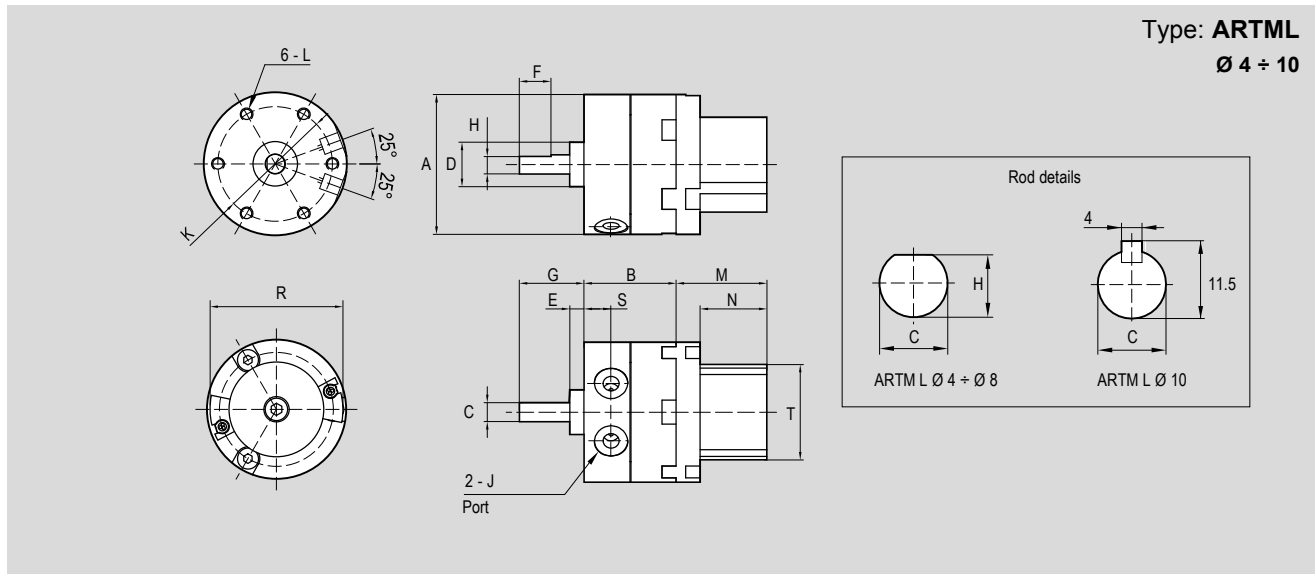


Ø (mm)	size	ØA	B	ØC	ØD	E	F	G	H	P	J	K	L	M	ØN	Q
4	10	30	17	4	9	3	9	14	3,5	5	8	1	4,2	M5x0,8	24	M3x0,5
5	15	3	20,1	5	12	4	10	18	4,5	6	9	1,5	5	M5x0,8	29	M3x0,5
6	20	44	29,1	6	14	4,5	10	20,3	5,5	7	9,6	1,6	8,5	M5x0,8	36	M4x0,7
8	30	51	40	8	16	5	12	22	7,5	8	13	2	11	M5x0,8	43	M5x0,8
10	40	64	45	10	25	6,5	22	30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

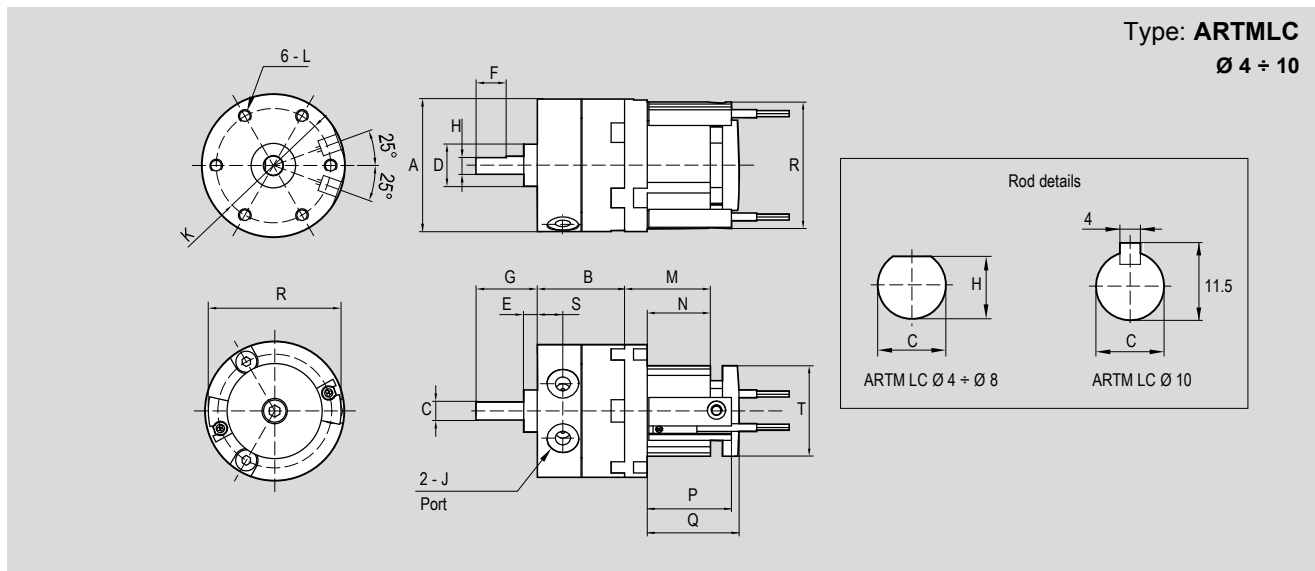


Ø (mm)	size	ØA	B	ØC	ØD	E	F	G	H	S	J	ØK	L	M	N	ØT	P	Q	ØR
4	10	30	17	4	9	3	9	14	3,5	4,2	M5x0,8	24	M3x0,5	24	18	18	23,3	24	29
5	15	35	20,1	5	12	4	10	18	4,5	5	M5x0,8	29	M3x0,5	28	22	24	27,3	29,5	34
6	20	44	29,1	6	14	4,5	10	20,3	5,5	8,5	M5x0,8	36	M4x0,7	28,5	21	30	28	30,5	42
8	30	51	40	8	16	5	12	22	7,5	11	M5x0,8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



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





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

# Rotary Vane Cylinders



Series ARTMF, ARTMFC, ARTMFL, ARTMFLC

1 - CYLINDERS

## 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

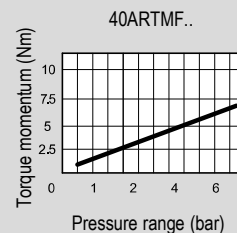
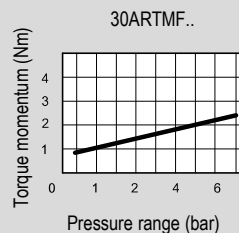
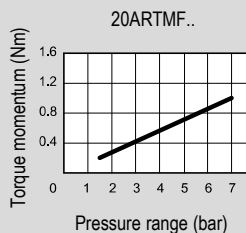
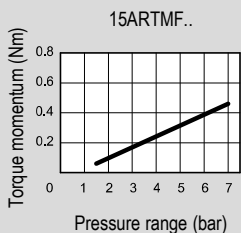
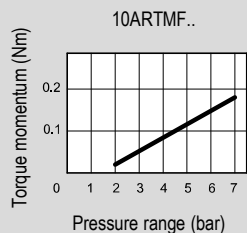
4 ÷ 10  **ARTMFLC** 

Bores Ø Double acting Magnetic Adjustable angle Type

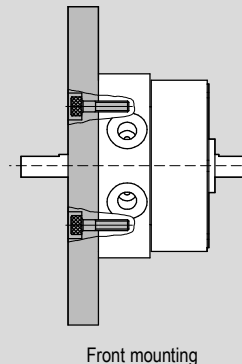
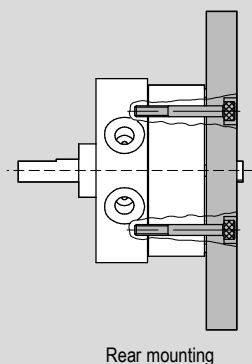
## Technical data

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	91	138	266	468	700
	ARTMFL ARTMFLC					

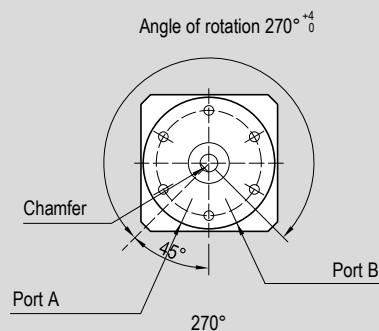
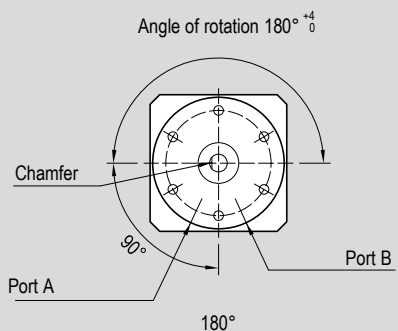
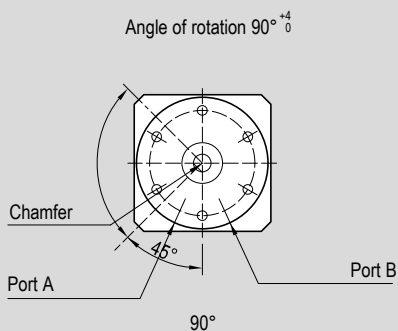
Output torque table



Assembly type

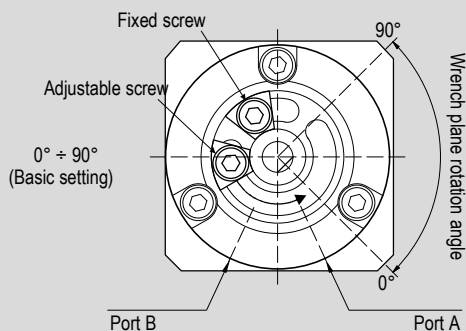


Angle of rotation

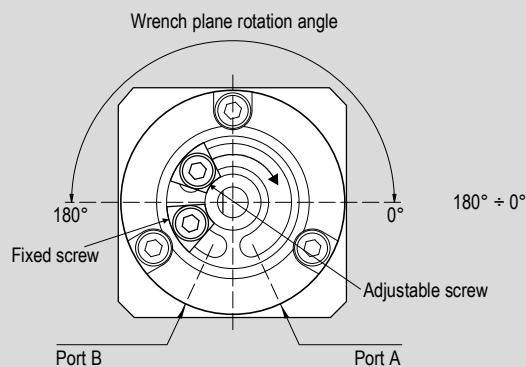
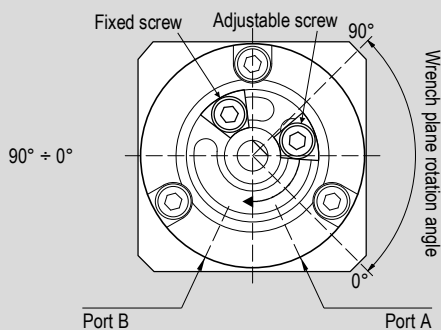
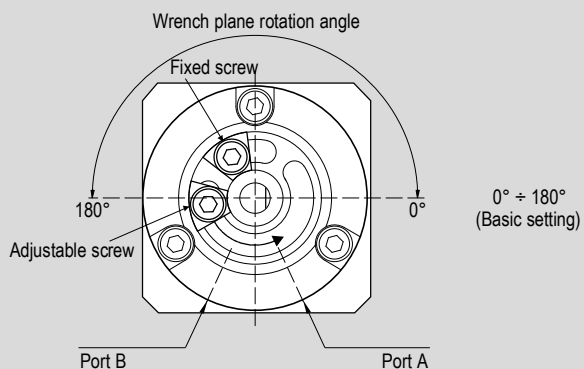


Rotation angle settings

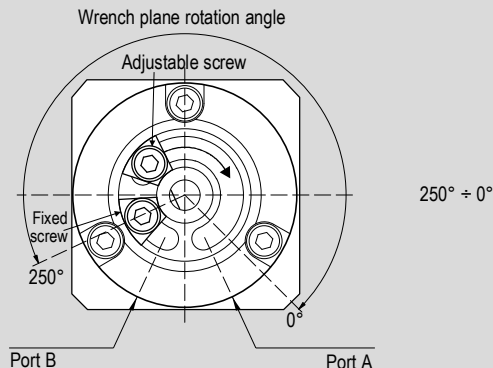
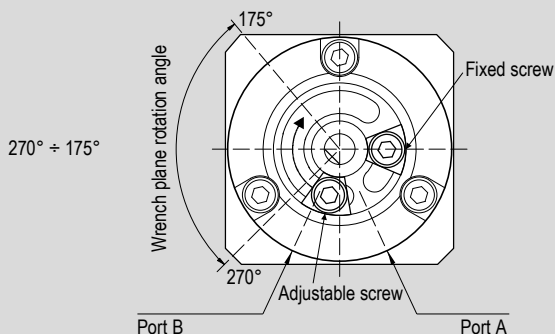
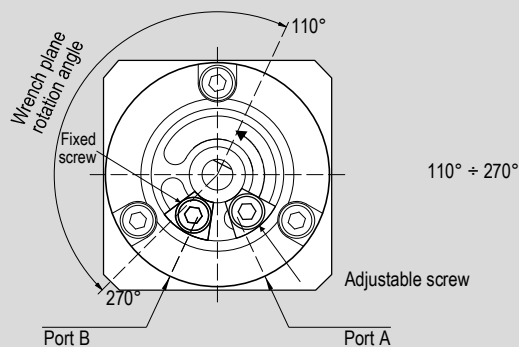
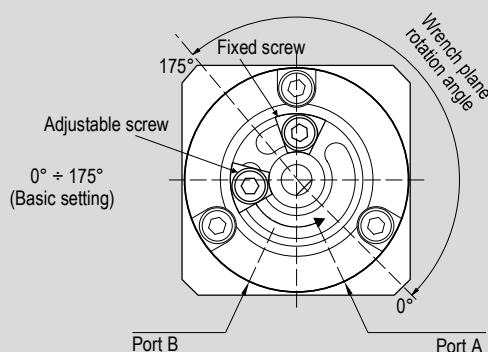
90° rotation setting



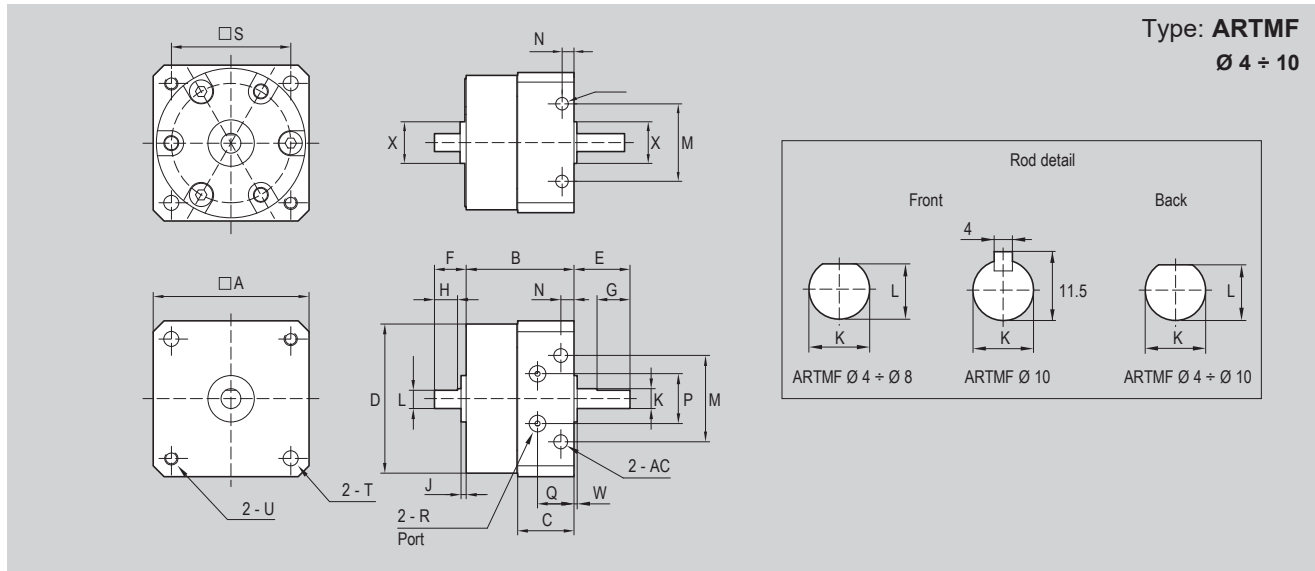
180° rotation setting



270° rotation setting

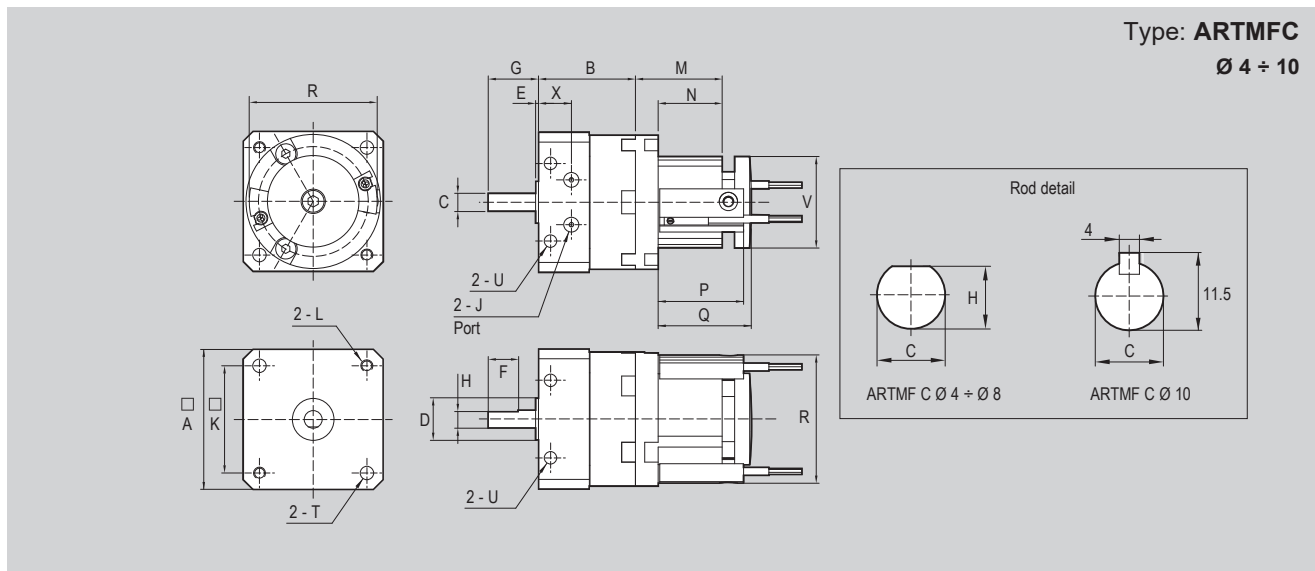


Dimensions



1 - CYLINDERS

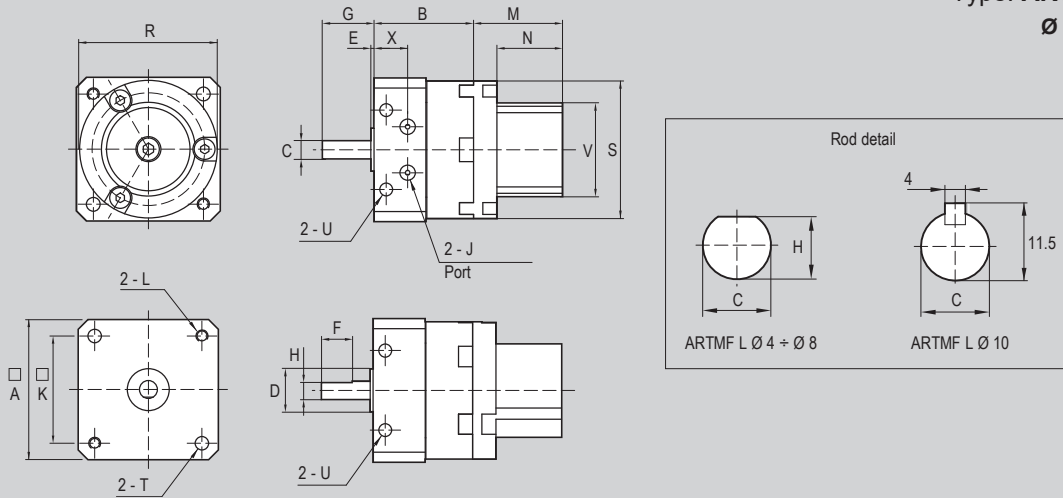
Ø (mm)	size	□A	B	C	ØD	E	F	G	H	ØX	J	ØK	L	M	N	AC	P	Q	R	□S	T	U	V	W
4	10	31	22	13,3	30	14	8	9	5	9	1	4	3,5	17	3	3,5	10,5	9,2	M5x0,8	25	3,5	M3x0,5	24	1
5	15	36	25,7	15,5	35	18	9	10	6	12	1,5	5	4,5	21	3	3,5	10,5	10,5	M5x0,8	29	3,5	M3x0,5	29	1,5
6	20	44	33,6	19	44	20	10	10	7	14	1,6	6	5,5	26	4	4,2	15	13	M5x0,8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



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

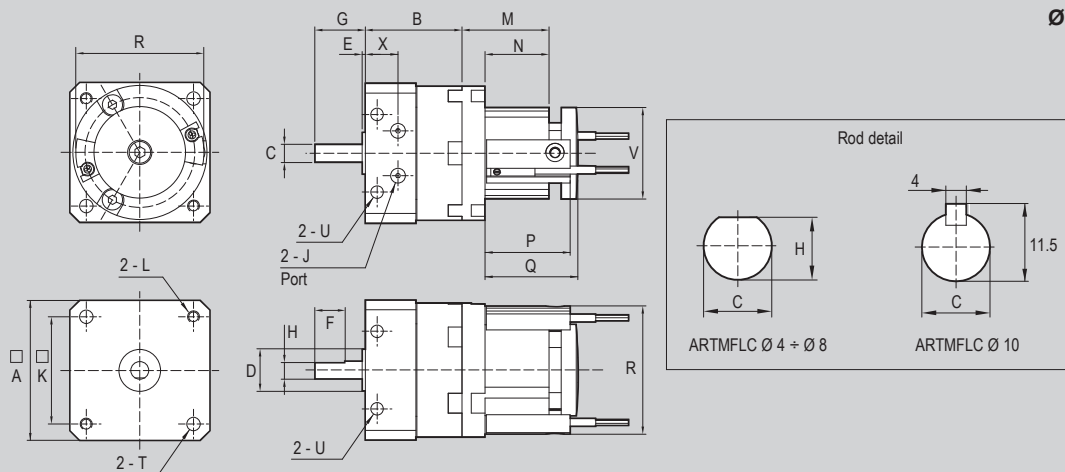
Dimensions

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



# Rotary Vane Cylinders

Series ARTM, ARTMC, ARTML, ARTMLC

## 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

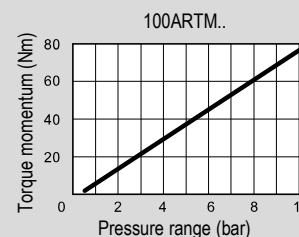
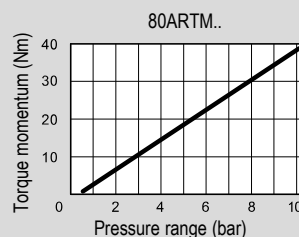
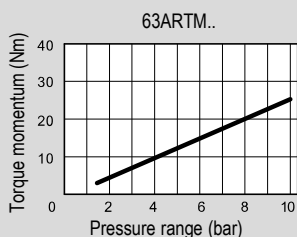
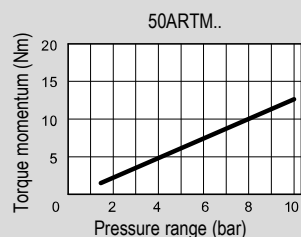
Size	50	63	80	100	
Bore	Ø 12	Ø 15	Ø 17	Ø 25	
Fluid	Filtered compressed air with or without lubrication. Lubrication, if started, must be continued.				
Angle of rotation	90° - 180° - 270°				
Pressure range	1,5 ÷ 7 bar				
Temperature range	0°C ÷ +50°C				
Ports	1/8"		1/4"		
Torque momentum (Nm) at 6 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

# Rotary Vane Cylinders

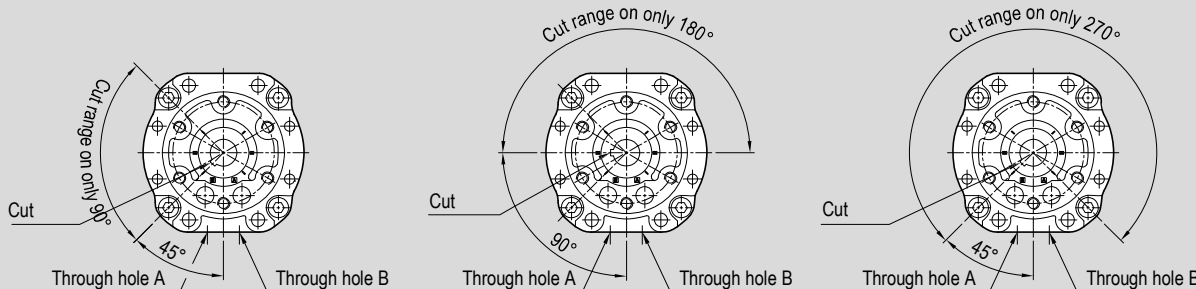
Series ARTM, ARTMC, ARTML, ARTMLC

1 - CYLINDERS

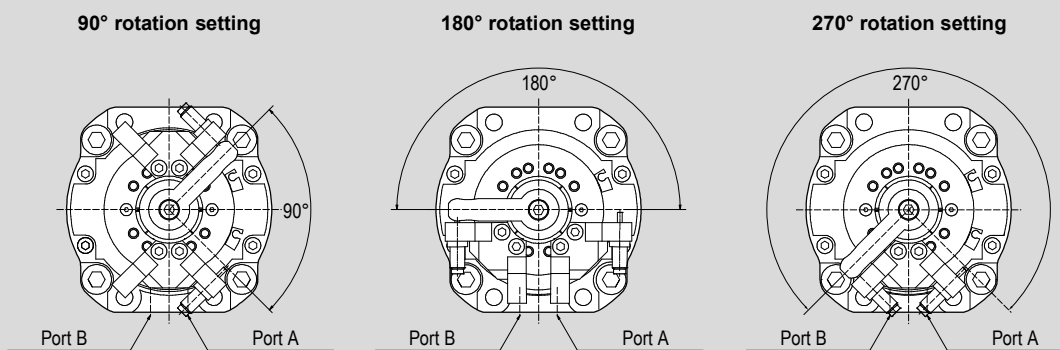
## Output torque table



## Angle of rotation

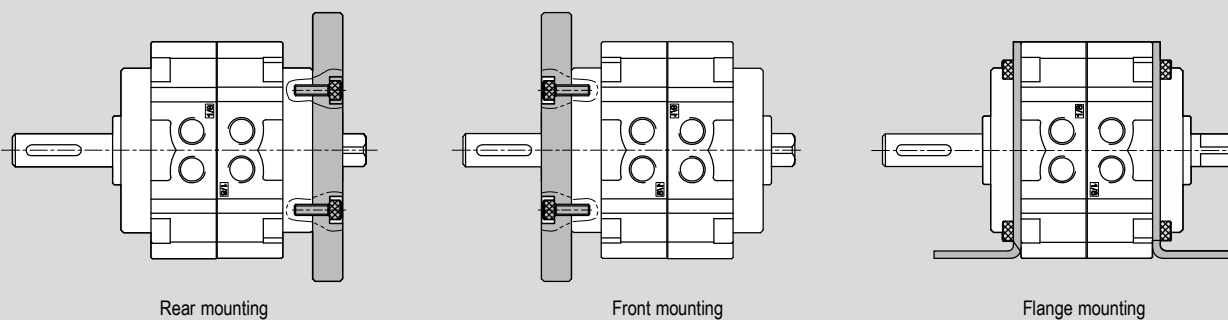


## Angle of rotation\*

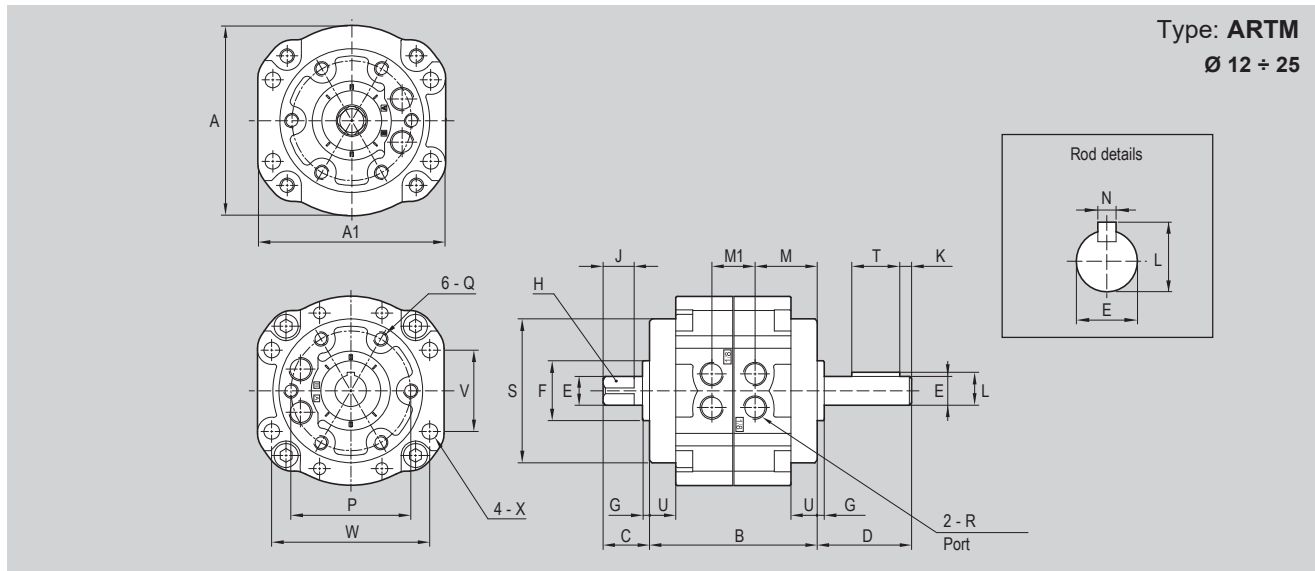


\*With shock absorbers for 10° rotation adjustment

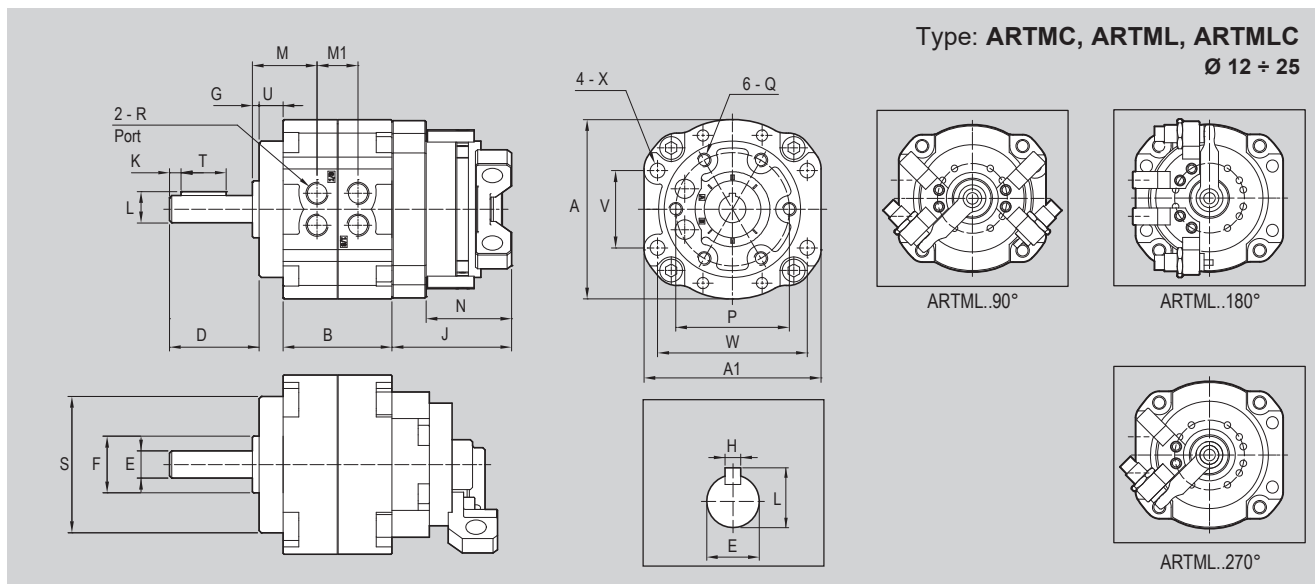
## Assembly type



Dimensions



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





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

Accessories for rotary vane cylinders

1 - CYLINDERS

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