





MPE Series Threaded Cylinder

Product series

Series		Mounting type	Acting type	Bore size
		Basic		
			Single acting	6 8 10 12 16
				
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MPE

Installation and application

1. When load changes in the work, the cylinder with abundant output capacity shall be selected.
2. Relative cylinder with high temperature resistance or corrosion resistance shall be chosen under the condition of high temperature or corrosion.
3. Necessary protection measure shall be taken in the environment with higher humidity, much dust or water drops, oil dust and welding dregs.
4. Dirty substances in the pipe must be eliminated before cylinder is connected with pipeline to prevent the entrance of particles into the cylinder.
5. The medium used by cylinder shall be filtered to 40 μ m or below.
6. As both of the front cover and piston of the cylinder are short, typically too large stroke can not be selected.
7. Anti-freezing measure shall be adopted under low temperature environment to prevent moisture freezing.
8. The cylinder shall avoid the influence of side load in operation to maintain the normal work of cylinder and extend the service life.
9. If the cylinder is dismantled and stored for a long time, please conduct anti-rust treatment to the surface. Anti-dust caps shall be added in air inlet and outlet ports. The front and back cover can not be dismantled, which shall be especially noticed.

Criteria for selection: Cylinder thrust

Unit: Newton(N)

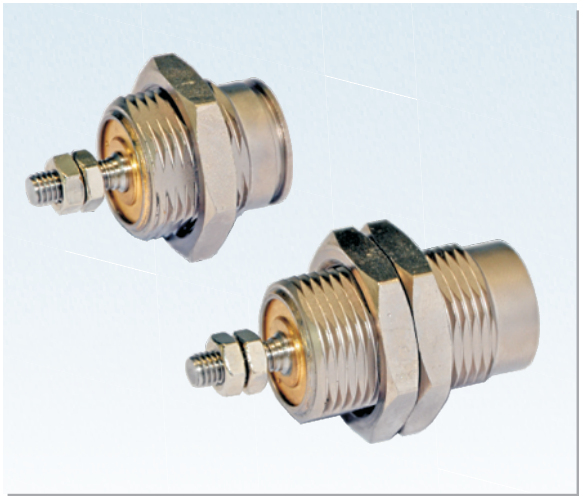
Model	Bore size	Rod size (mm)	Acting type		Pressure area (mm²)	Operating pressure(MPa)						
						0.1	0.2	0.3	0.4	0.5	0.6	0.7
MPE MPEF	6	3	Single acting	Push side	28.3	-	1.8	4.6	7.4	10.3	13.1	15.9
				Pull side	21.2			1.45				
	8	4	Single acting	Push side	50.3	-	4.8	9.8	14.8	19.9	24.9	29.9
				Pull side	37.7			3.01				
	10	5	Single acting	Push side	78.5	-	9.4	17.3	25.1	33.0	40.8	48.7
				Pull side	58.9			2.55				
	12	6	Single acting	Push side	113.0	-	13.3	24.6	35.9	47.2	58.5	69.8
				Pull side	84.7			3.45				
	16	6	Single acting	Push side	201.0	-	29.4	49.5	69.6	89.7	109.8	129.9
				Pull side	172.7			4.78				



Threaded Cylinder



MPE Series



Symbol



Product feature

- 1. It is compact, small size and light weight. It is easy to install and dismantle.
- 2. Multi cylinders can be integrated to save room.
- 3. Mounting accessories are not necessary.
- 4. Cylinders of various specifications are optional.

Specification

Bore size(mm)	6	8	10	12	16
Acting type	Single acting				
Fluid	Air(to be filtered by 40 μ m filter element)				
Operating pressure	0.2~0.7MPa(28~100psi)		0.15~0.7MPa(22~100psi)		
Proof pressure	1.05MPa(150psi)				
Mounting type	Embedded mounting type, End inlet type				
Temperature °C	-20~80				
Speed range mm/s	50~500				
Stroke tolerance	+1.0 0				
Cushion type	No				
Port size	M5 × 0.8				

Stroke

Bore size (mm)	Standard stroke (mm)	Max. std stroke
6	5 10 15	15
8	5 10 15	15
10	5 10 15	15
12	5 10 15	15
16	5 10 15	15

Note) Consult us for non-standard stroke.

Ordering code

MPE 16 × 15 N	
MPEF 16 × 15 N	
Model	Rod type
MPE: Embedded mounting type (single acting) MPEF: End inlet type (single acting)	Blank: Male thread N: No thread
Bore size	Stroke
6 8 10 12 16	Refer to stroke table for details

Inner structure and material of major parts

MPE

MPEF

NO.	Item	Material
1	Rod nut	Carbon steel
2	Piston rod	Stainless steel
3	Front cover	Brass
4	Nut	Carbon steel
5	Body	Brass
6	Spring	Spring steel
7	Piston	Stainless steel
8	Piston seal	NBR
9	O-ring	NBR

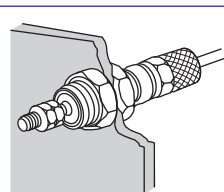


Threaded Cylinder

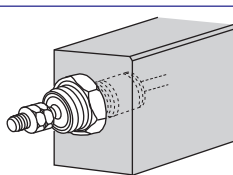
MPE Series

Installation and application

1. Select applicable cylinder model and mounting method according to actual situation:

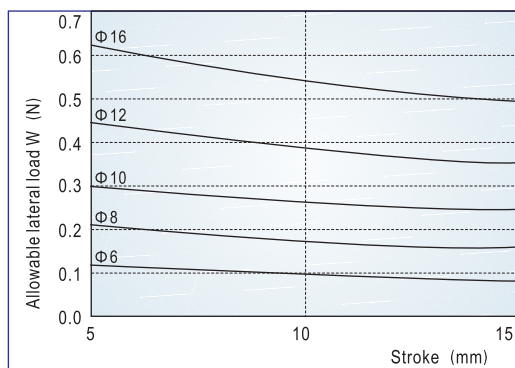


With mounting bracket
(applicable to MPEF type)



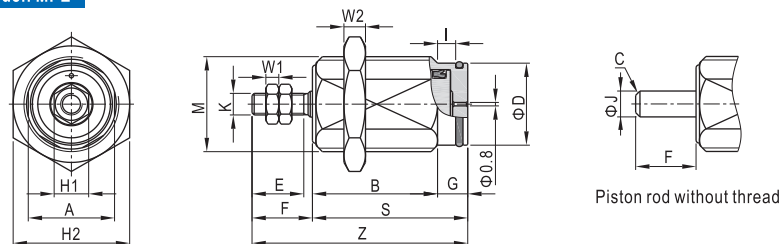
Embedded mounting method
(applicable to MPE type)

2. MPE series are single acting cylinders. No load is allowed at the piston rod when it is in the retraction state.
3. The spring force of the spring in the cylinder is for retraction of the piston rod only. The piston rod may not retract to the bottom end if there's any load.
4. Make sure the rod end lateral load is allowable. Otherwise may cause damage to the cylinder or reduce the service life.



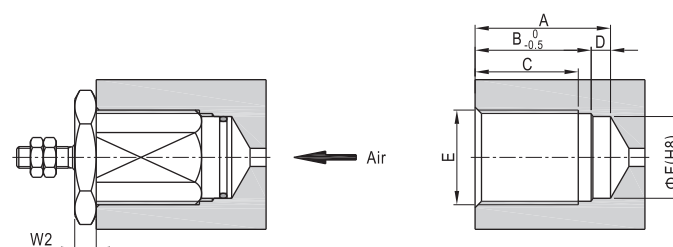
Dimensions

Model: MPE



Bore size\Item	A	B			S			Z			C	D	E	F	G
Stroke	5St	10St	15St	5St	10St	15St	5St	10St	15St	5St	10St	15St	5St	10St	15St
6	9	12.5	19.5	26.5	18.5	25.5	32.5	27.5	34.5	41.5	0.5	8.5	7	9	6
8	11	13.5	20	27	19.5	26	33	31.5	38	45	1	10	10	12	6
10	14	14.5	21	28	20.5	27	34	32.5	39	46	1	12	10	12	6
12	16	15	20	25	22	27	32	34	39	44	1	16	10	12	7
16	20	16.5	22.5	29	23.5	29.5	36	37.5	43.5	50	1	19	12	14	7

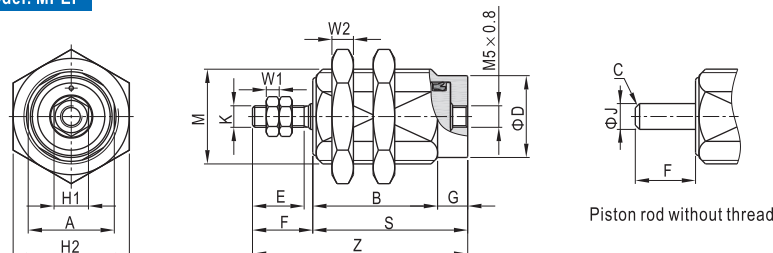
Bore size\Item	H1	H2	I	J	K	M	W1	W2
6	5.5	13	3.7	3	M3 × 0.5	M10 × 1.0	1.8	3
8	7	17	3.7	4	M4 × 0.7	M12 × 1.0	2.2	3
10	7	19	3.5	5	M4 × 0.7	M16 × 1.5	2.2	4
12	8	24	4.2	6	M5 × 0.8	M18 × 1.5	3	5
16	8	27	4.2	6	M5 × 0.8	M22 × 1.5	3	5



Bore size\Item	A			B			C			D	E	F	W2
Stroke	5St	10St	15St	5St	10St	15St	5St	10St	15St	5St	10St	15St	5St
6	16	23	30	12.5	19.5	26.5	10	17	24	3.5	M10 × 1.0	8.5	3
8	17	23.5	30.5	13.5	20	27	11	17.5	24.5	3.5	M12 × 1.0	10	3
10	17	23.5	30.5	13.5	20	27	10.5	17	24	3.5	M16 × 1.5	12	4
12	17.5	22.5	27.5	13.5	18.5	23.5	10.5	15.5	20.5	4	M18 × 1.5	16	5
16	19	25	31.5	14.5	20.5	27	11.5	17.5	24	4.5	M22 × 1.5	19	5

Note: Size E and F must be concentric.

Model: MPEF



Bore size\Item	A	B			S			Z			C	D	E	F
Stroke	5St	10St	15St	5St	10St	15St	5St	10St	15St	5St	10St	15St	5St	10St
6	9	12.5	19.5	26.5	18.5	25.5	32.5	27.5	34.5	41.5	0.5	8.5	7	9
8	11	13.5	20	27	19.5	26	33	31.5	38	45	1	10	10	12
10	14	14.5	21	28	20.5	27	34	32.5	39	46	1	12	10	12
12	16	15	20	25	22	27	32	34	39	44	1	16	10	12
16	20	16.5	22.5	29	23.5	29.5	36	37.5	43.5	50	1	19	12	14

Bore size\Item	G	H1	H2	J	K	M	W1	W2
6	6	5.5	13	3	M3 × 0.5	M10 × 1.0	1.8	3
8	6	7	17	4	M4 × 0.7	M12 × 1.0	2.2	3
10	6	7	19	5	M4 × 0.7	M16 × 1.5	2.2	4
12	7	8	24	6	M5 × 0.8	M18 × 1.5	3	5
16	7	8	27	6	M5 × 0.8	M22 × 1.5	3	5



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