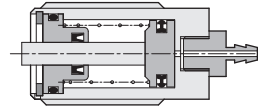
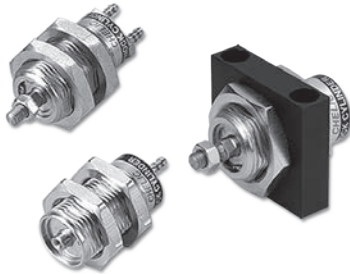


NA series - Cartridge cylinder

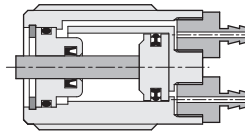
Operating specification and Ordering expression

CHELIC PNEUMATIC

NA Internal structure



NAD Internal structure



Specification

Item	NA	NAD
Operation	Single acting	Double acting
Fluid	Air	
Pressure range <small>Kgf/cm² (kpa)</small>	1 ~ 7 (100 - 700)	
Max. service pressure <small>Kgf/cm² (kpa)</small>	9.5 (950)	
Range of service temperature <small>°C</small>	0 ~ 60	
Operated speed <small>mm / s</small>	50 ~ 500	
Mounting type	Panel mount · Flange mount	
Port size	M5X0.8	

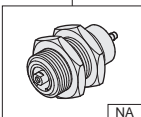
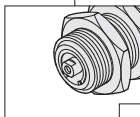
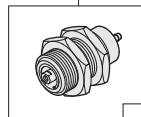
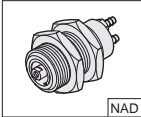
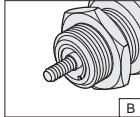
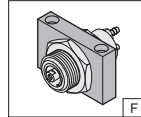
Bore size and Stroke

Item	Bore size	Stroke
NA	12	5, 10, 15
	16	
NAD	12	5, 10, 15
	16	

Theoretical force

Model	Bore size	Piston area cm ²	Acting	Air pressure kgf/cm ²						
				1	2	3	4	5	6	7
NA	12	1.1	Single acting (Normal in)	—	2.26	3.39	4.52	5.65	6.78	7.91
	16	2.0		—	4.02	6.03	8.04	10.05	12.06	14.07
NAD	12	1.1	Push	—	2.26	3.39	4.52	5.65	6.78	7.91
		0.9	Pull	—	1.69	2.54	3.39	4.24	5.08	5.93
	16	2.0	Push	—	4.02	6.03	8.04	10.05	12.06	14.07
		1.7	Pull	—	3.45	5.18	6.91	8.63	10.36	12.09

How to order

<div style="border: 1px solid black; border-radius: 10px; padding: 2px 10px; background-color: #cccccc;">NA</div>	<div style="border: 1px solid black; border-radius: 10px; padding: 2px 10px; background-color: #cccccc;">16</div>	×	<div style="border: 1px solid black; border-radius: 10px; padding: 2px 10px; background-color: #cccccc;">10</div>	-	<div style="border: 1px solid black; border-radius: 10px; padding: 2px 10px; background-color: #cccccc;">B</div>	-	<div style="border: 1px solid black; border-radius: 10px; padding: 2px 10px; background-color: #cccccc;">F</div>
Model	Bore size		Stroke		Thread type		Mounting type
	12 - Ø12 mm 16 - Ø16 mm		5 - 5 mm 10 - 10 mm 15 - 15 mm				
NA : Single acting type					None : Female thread		None : Standard
							
NAD : Double acting type					B : Male thread		F : Flange mount

Fittings (SPA4-M5 or SPA6-M5) are not included and must be ordered separately.

NA
Cartridge
Cylinder

NA2
Cartridge
Cylinder

NB
Cartridge
Cylinder

NU
Free Mount
Cylinder

ND
Free Mount
Cylinder

NQ
Free Mount
Cylinder

MSI
Mini
Compact
Cylinder

JD
Compact
Cylinder

JG
Compact
Cylinder

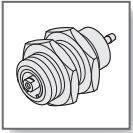
JTD
Twin-Guide
Cylinder

JTF
Twin-Guide
Cylinder

JCB
Twin-Guide
Cylinder

JCF
Twin-Guide
Cylinder

JE
Compact
Cylinder

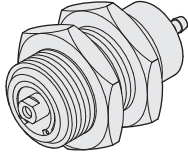


NA series - Cartridge cylinder

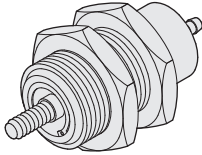
Rod end types and Mounting types

CHELIC PNEUMATIC

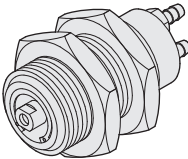
◀ Rod end type



- **NA** Rod end female thread NA -

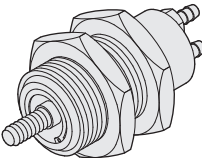


- **NA** Rod end male thread NA - B



- **NAD** Rod end female thread NAD -

- Without fitting

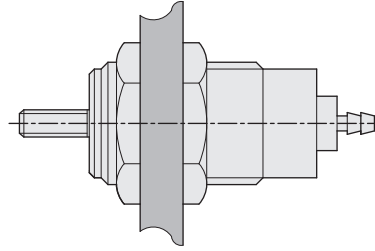


- **NAD** Rod end male thread NAD - B

- Fittings are not included and must be ordered separately.
(Optional parts)

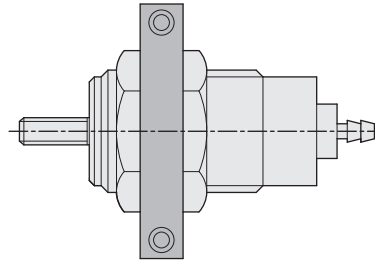
▶ Mounting type

- Panel mount

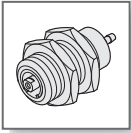


- Fittings are not included
(Fittings (SPA4-M5 or SPA6-M5) are not included and must be ordered separately.)

- Flange mounting - F



- Mounting bracket included



NA series - Cartridge cylinder-single acting type

External dimensions

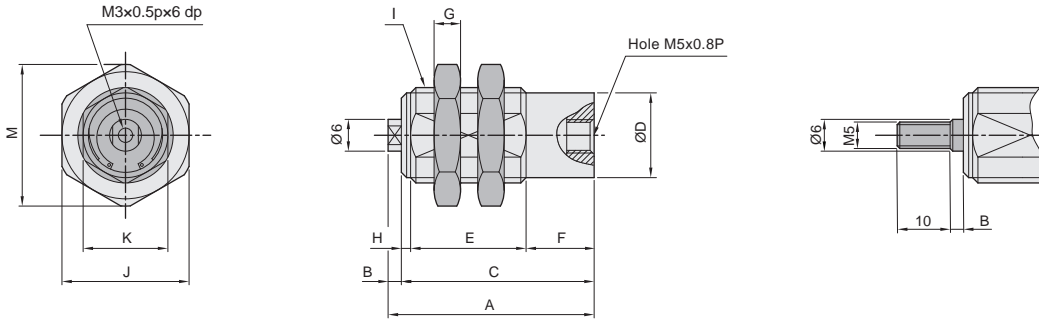
CHELIC PNEUMATIC

Standard (Panel mount)

NA Ø12 , Ø16



Male thread dimension - **B**

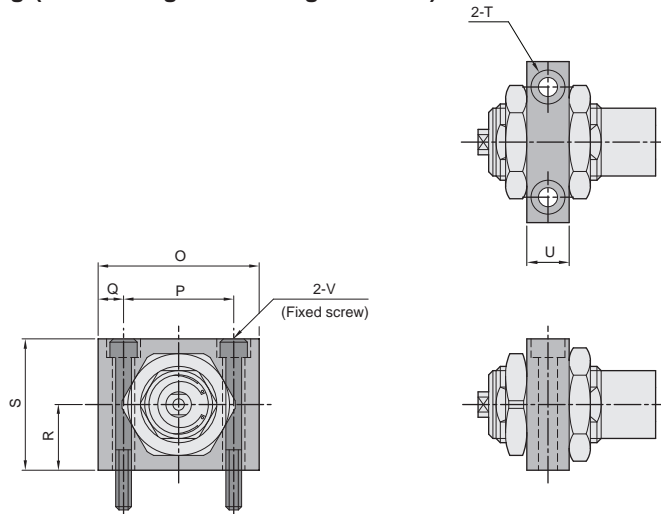


Unit : mm

Bore size	A			B	C			D	E			F			G	H	I	J	K	M
	5	10	15		5	10	15		5	10	15	5	10	15						
12	29.1	34.1	39.1	2.65	26.4	31.4	36.4	16	16.8	21.8	26.8	7.85	7.85	7.85	5	1.75	M18x1.5P	24	16	26
16	29.1	34.1	39.1	1.6	27.5	32.5	37.5	20	18	23	28	7.7	7.7	7.7	5	1.8	M22x1.5P	29	20	33

Flange mounting (With flange mounting bracket)

NA [] - **F**



Unit : mm

Bore size	O	P	Q	R	S	T	U	V
12	35	26	4.5	15	30	Ø4.5 Thru-hole , Hole Ø8 x 4.4 dp	10	2-Ø4.5 Through-Hole , hole Ø8x4.4 dp
16	40	30	5	17.5	35	Ø4.5 Thru-hole , Hole Ø8 x 4.4 dp	10	2-Ø4.5 Through-Hole , hole Ø8x4.4 dp

Note : Fixed screws are not included.

- NA**
Cartridge
Cylinder
- NA2**
Cartridge
Cylinder
- NB**
Cartridge
Cylinder
- NU**
Free Mount
Cylinder
- ND**
Free Mount
Cylinder
- NQ**
Free Mount
Cylinder
- MSI**
Mini
Compact
Cylinder

- JD**
Compact
Cylinder
- JG**
Compact
Cylinder

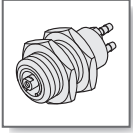
- JTD**
Twin-Guide
Cylinder

- JTF**
Twin-Guide
Cylinder

- JCB**
Twin-Guide
Cylinder

- JCF**
Twin-Guide
Cylinder

- JE**
Compact
Cylinder



NAD series - Cartridge cylinder-double acting type

External dimensions

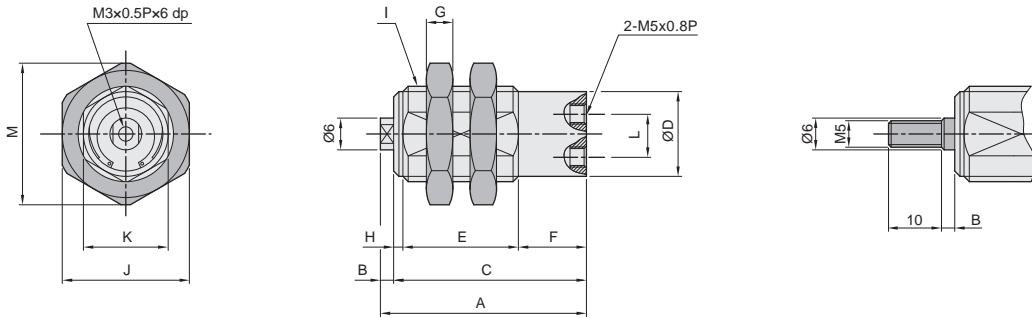
CHELIC PNEUMATIC

Standard (Panel mount)

NAD Ø12 , Ø16



Male thread dimension - **[B]**

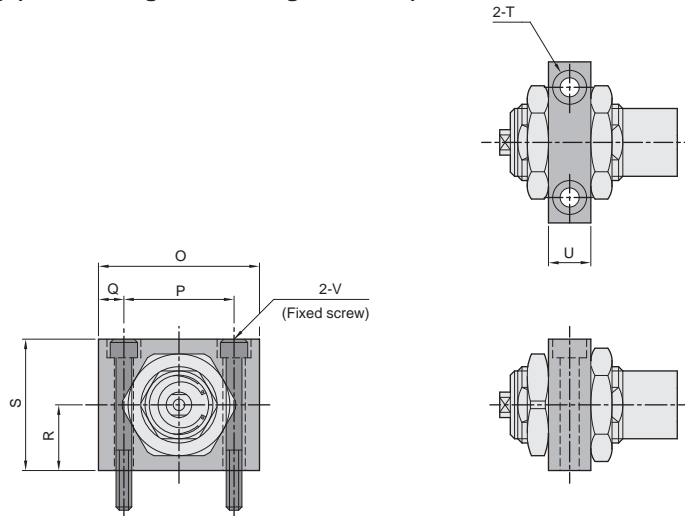


Unit : mm

Bore size	A			B	C			D	E			F			G	H	I	J	K	L	M
	5	10	15		5	10	15		5	10	15	5	10	15							
12	28.5	33.5	38.5	2	26.5	31.5	36.5	19.5	16.7	21.7	26.7	8.1	8.1	8.1	5	1.7	M22x1.5P	29	19.5	11.4	33
16	29.1	37.1	39.1	1.6	27.5	32.5	37.5	23	18.6	23.6	28.6	7.2	7.2	7.2	5	1.7	M26x1.5P	32	23	15	36

Flange mounting (With flange mounting bracket)

NAD [] - **[F]**



Unit : mm

Bore size	O	P	Q	R	S	T	U	V
12	40	30	5	17.5	35	Ø4.5 Thru-hole , Hole Ø8 x 4.4 dp	10	2-Ø4.5 Through-Hole , hole Ø8x4.4 dp
16	44	34	5	19.5	39	Ø4.5 Thru-hole , Hole Ø8 x 4.4 dp	10	2-Ø4.5 Through-Hole , hole Ø8x4.4 dp

Note : Fixed screws are not included.