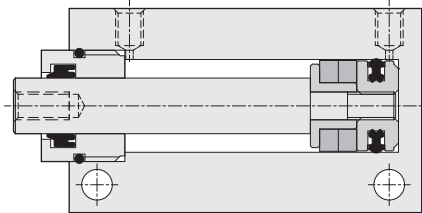
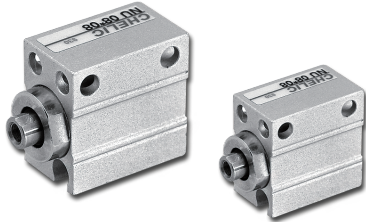


# NU series Mini Free Mount Cylinder

## Product features

CHELIC

### Internal structure



### Specification

Item	Bore size (mm)	Ø6	Ø8	Ø10
Action		Double acting		
Fluid		Air		
Pressure range	Kgf/cm <sup>2</sup> (kPa)	1.5 ~ 6 (150 ~ 600)		
Max. service pressure	Kgf/cm <sup>2</sup> (kPa)	7 (700)		
Ambient and fluid temperature	°C	0 ~ 60		
Operated speed	mm/s	50 ~ 500		
Sensing device		Standard: Without magnet/ S: With magnet		

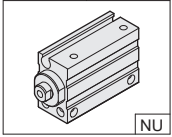
### Bore size and stroke

Bore size	Stroke					
	4	6	8	10	15	20
6	●	●	●	●	●	●
8	●	●	●	●	●	●
10	●	●	●	●	●	●

### Code of order

**NU** × **10** – **10** – **B** – **SG** **2**

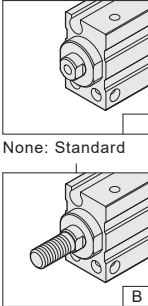
Model      Bore size      Stroke      Thread type      Sensor switch



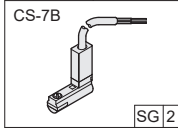
**NU:**  
Mini free mount cylinder

6 – Ø6 mm  
8 – Ø8 mm  
10 – Ø10 mm

4 – 4 mm  
6 – 6 mm  
8 – 8 mm  
10 – 10 mm  
15 – 15 mm  
20 – 20 mm



None: Standard  
**B**: Male thread



**SG**: Sensor switch (CS-7B)  
**2**: Number of sensor switch  
1 = 1 PCS  
2 = 2 PCS

NA

NA2

NB

NU

ND

NQ

MSI

JQ

JD

JG

JTD

JTF

JCB

JCF

JE

JM

# NU series Mini Free Mount Cylinder

## Product features

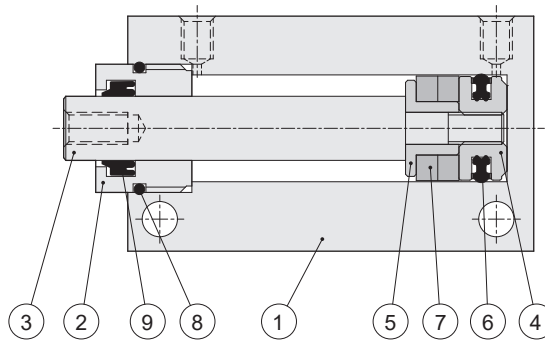
CHELIC

### ④ Theoretical output

Bore size (mm)	Rod size (mm)	Acting	Piston area (cm <sup>2</sup> )	Air pressure						
				1	2	3	4	5	6	7
6	4	Push	0.28	—	0.56	0.84	1.12	1.4	1.68	1.96
		Pull	0.15	—	0.3	0.45	0.6	0.75	0.9	1.05
8	5	Push	0.5	—	1	1.5	2	2.5	3	3.5
		Pull	0.3	—	0.6	0.9	1.2	1.5	1.8	2.1
10	6	Push	0.79	—	1.58	2.37	3.16	3.95	4.74	5.53
		Pull	0.51	—	1.02	1.53	2.04	2.55	3.06	3.57

🔍 Note: All of above are theoretical data. Before actual adoption, the frictional resistance and mechanical efficiency shall be taken into consideration (about 70% ~ 80%).

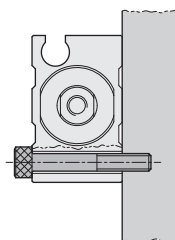
### ④ Internal structure



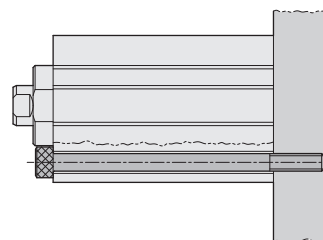
### ④ Components and material list

No.	Item	Material	No.	Item	Material
01	Body	Aluminum alloy	06	Piston packing	Rubber
02	Front cover	Copper alloy	07	Magnet	Rare earth material
03	Shaft	Stainless steel	08	Rear cover O-ring	NBR
04	Piston	Copper alloy	09	Shaft packing	NBR
05	Magnet cover	Aluminum alloy			

### ④ Mounting type



● Slide mounting type



● Front mounting type

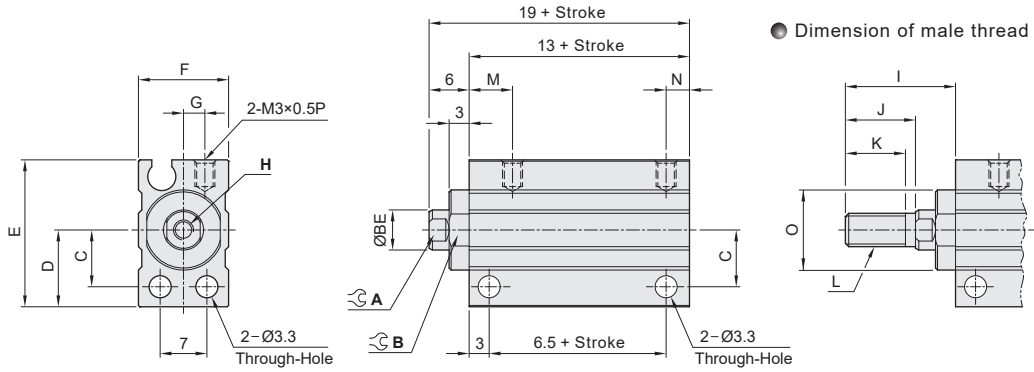
# NU series Mini Free Mount Cylinder

## Dimensions

CHELIC

### Standard type

NU Ø6 ~ Ø10

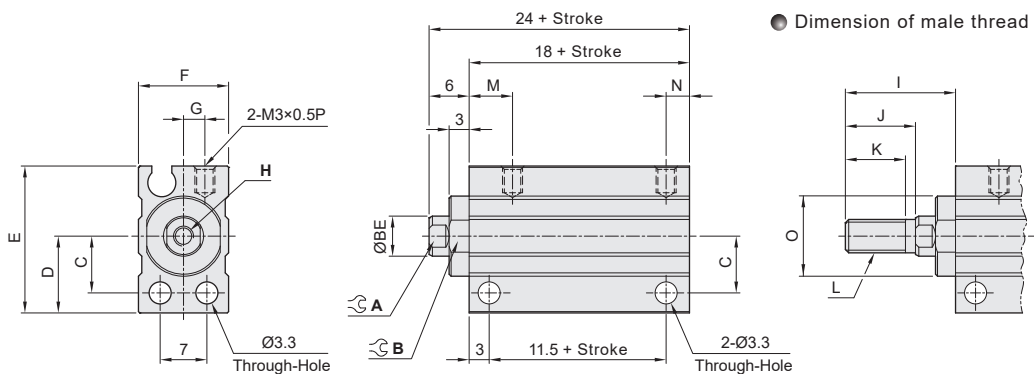


Unit: mm

Bore size	A	B	BE	C	D	E	F	G	H	I	J	K	L	N	M	O
6	3.5	8	4	7	10	19	13	3	M2.5×0.45P×5 dp	12.5	6.5	5.5	M3×0.5P	3.5	6.5	9
8	4.5	10	5	8	11	21	13	3.2	M3×0.5P×6 dp	14.5	8.5	7	M4×0.7P	3	6.7	11
10	5	11	6	8.5	11.5	22	13.5	3.2	M3×0.5P×6 dp	16.5	10.5	9	M5×0.8P	3.5	6.5	12

### With magnet

NU Ø6 ~ Ø10 - S



Unit: mm

Bore size	A	B	BE	C	D	E	F	G	H	I	J	K	L	N	M	O
6	3.5	8	4	7	10	19	13	3	M2.5×0.45P×5 dp	12.5	6.5	5.5	M3×0.5P	3.5	6.5	9
8	4.5	10	5	8	11	21	13	3.2	M3×0.5P×6 dp	14.5	8.5	7	M4×0.7P	3	6.7	11
10	5	11	6	8.5	11.5	22	13.5	3.2	M3×0.5P×6 dp	16.5	10.5	9	M5×0.8P	3.5	6.5	12

NA

NA2

NB

NU

ND

NQ

MSI

JQ

JD

JG

JTD

JTF

JCB

JCF

JE

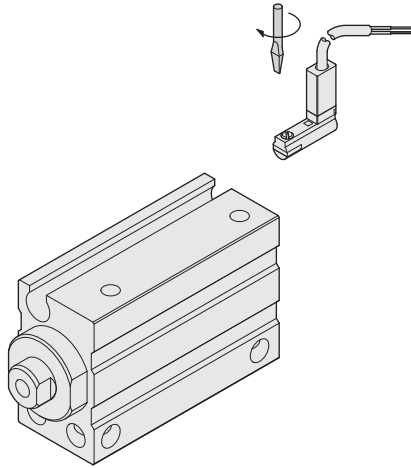
JM

# NU series Mini Free Mount Cylinder

## Sensor switch operating range and the setting

CHELIC

### ▶ Sensor switch installation



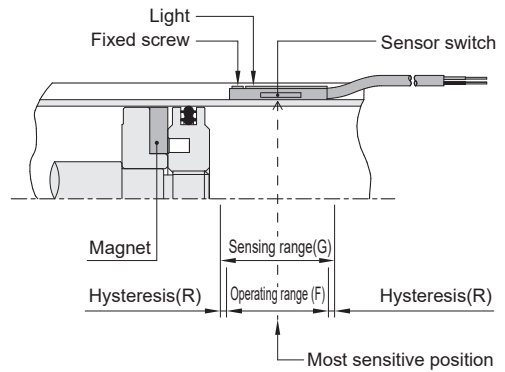
### ▶ Sensing range

Sensor switch is fixed on the cylinder body. The magnetic piston head will activate the Sensor switch when it enters the operating range. It has 0.5mm differential.

### ▶ Operating range

When piston head moves the switch setting and adjustment will be based on the responding range generated by the magnetic field and the switch. (Please refer to the below table)

### ▶ Sensor switch setting and operating range

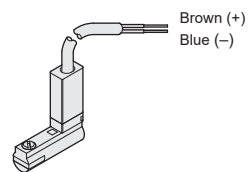


### ▶ Sensor switch introduction

Unit: mm

Model	CS-7B	
Bore size	Operating range(F)	Hysteresis(R)
Ø6	2.5	1
Ø8	2.5	1
Ø10	4	1

#### CS-7B



Voltage: DC 5 ~ 30 V