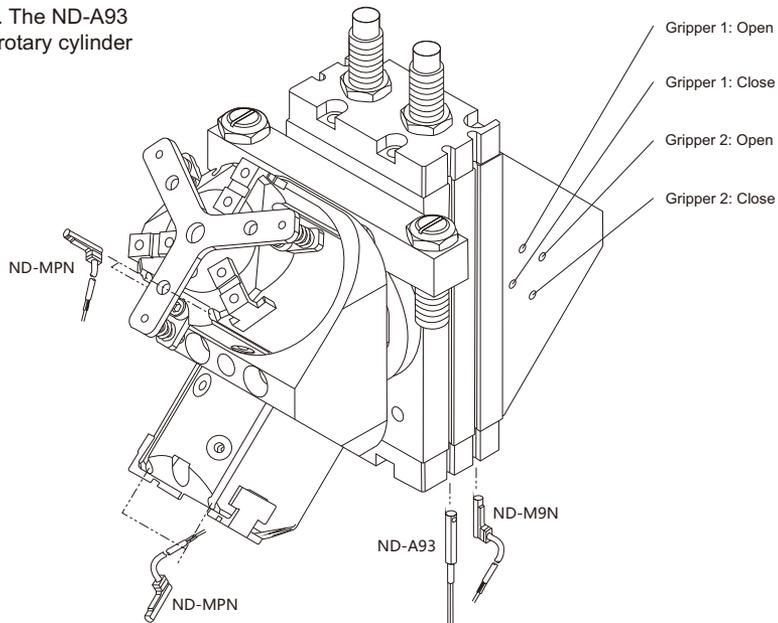


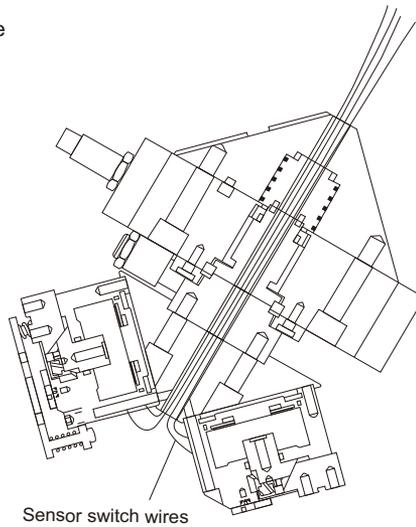
Piping and wiring configuration

※There are supply holes on two sides of base for pinpings and multiple configuration ways of sensor switches.

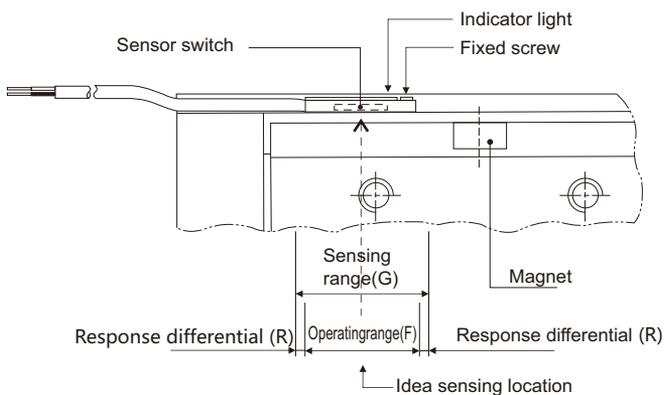
Below image is reference only. The ND-A93 sensor switches applicable to rotary cylinder and grippers.



The sensor switch wires can be throughout the entire RMT as shown in the following image.

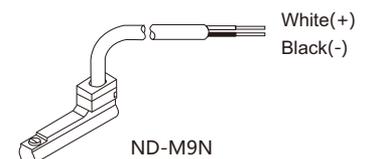
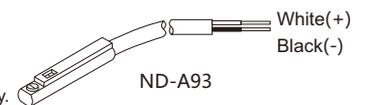


Sensing setting and Installation  
ND-A93



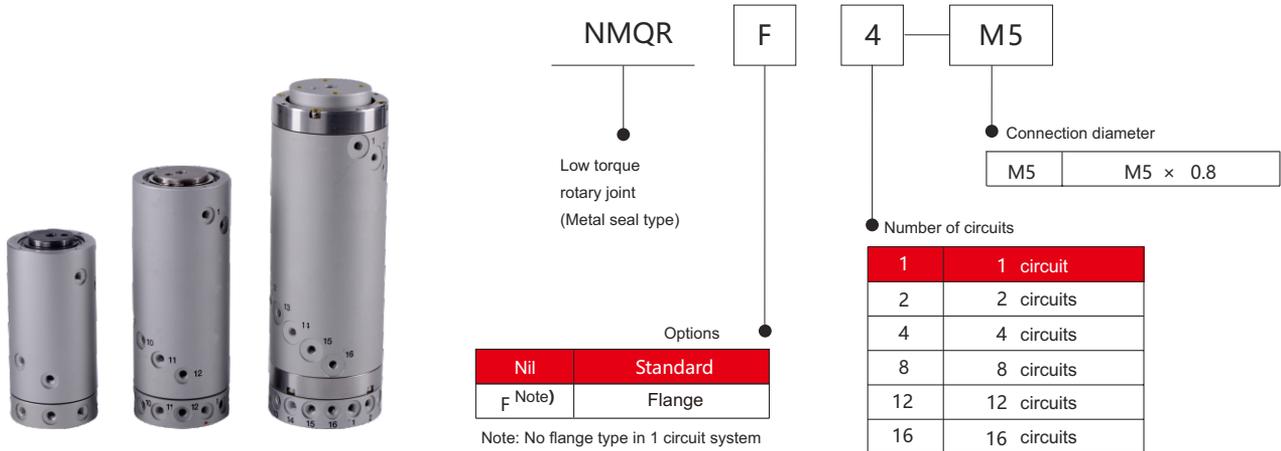
**Sensing range**  
Sensor switch is fixed on the cylinder body. The magnetic piston head will activate the sensor switch when it enters the operating range. It has 0.5mm differential.

Sensor setting and operating range



Voltage: DC4-120V  
AC4-120V

**Standard Specifications**



Number of circuits	Flange part number
2 circuits	NMQR2-F
4 circuits	NMQR4-F
8 circuits	NMQR8-F
12 circuits	NMQR12-F
16 circuits	NMQR16-F

**Standard Specifications**

Model	NMQR1-M5	NMQR2-M5	NMQR4-M5	NMQR8-M5	NMQR12-M5	NMQR16-M5
Number of circuits (Number of ports)	1	2	4	8	12	16
Fluid	Air					
Seal structure	Metal seal					
Guide structure	Bearing supported	Bearing supported at both ends				
Port size	Male R1/8	M5 × 0.8				
	Female M5 x 0.8					
Flow rate characteristics	C[dm <sup>3</sup> /(s·bar)]		b		Cv	
	0.50		0.40		0.17	
Lubrication	Not required					
Min. operating pressure	-100kPa					
Max. operating pressure	1.0MPa					
Ambient temperature and operating fluid temperature <sup>Note 1)</sup>	-10 ~ 80 °C					
Maximum start-up rotation torque <sup>Note 2)</sup>	0.003 N.m or less	0.003 N.m or less	0.005 N.m or less	0.10 N.m or less	0.20 N.m or less	0.50 N.m or less
Allowable rotation number <sup>Note 3)</sup>	3000 min <sup>-1</sup> (r.p.m.) or less <sup>Note 3)</sup>	2000 min <sup>-1</sup> (r.p.m.) or less	1500 min <sup>-1</sup> (r.p.m.) or less	900 min <sup>-1</sup> (r.p.m.) or less	600 min <sup>-1</sup> (r.p.m.) or less	200 min <sup>-1</sup> (r.p.m.) or less
Allowable radial load (allowable coupling axis reaction) <sup>Note 4)</sup>	1N or less	15N or less	30N or less	40N or less	50N or less	50N or less
Weight	0.025kg	0.16kg	0.39kg	0.76kg	1.26kg	2.80kg

Note 1) The temperature 80°C includes temperature rise during rotation.

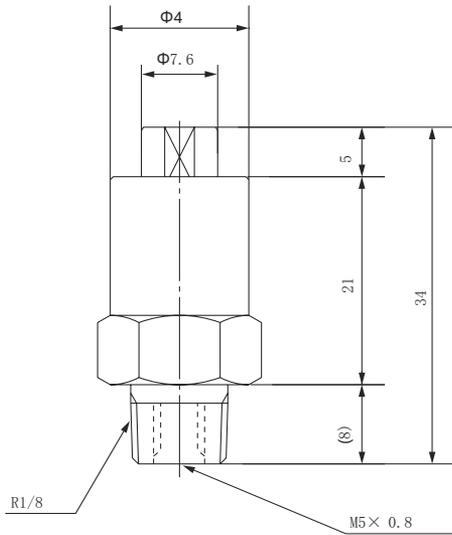
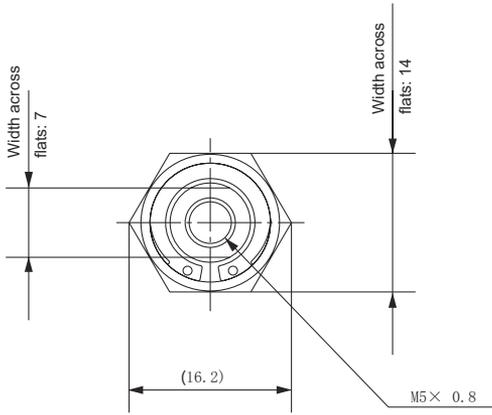
Note 2) The start-up torque does not change with the supply pressure or with non-use (remains within the maximum start-up rotation torque), but it does change with the rotation number. (Refer to page 450).

Note 3) If using at a speed above 600 min<sup>-1</sup> (r.p.m.), ensure rotation is in the direction in which the joint is fastened.

Note 4) Rubber / resin couplings are recommended due to their excellent absorption of off center, shocks, and vibrations.

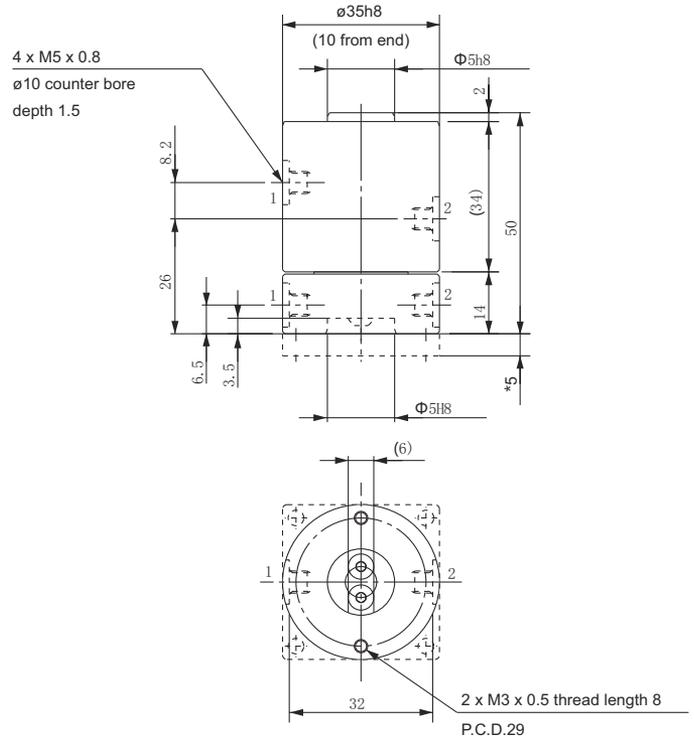
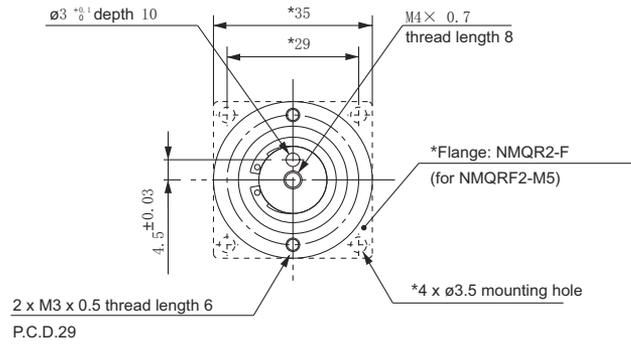
**Dimensions**

**NMQR1-M5 Standard Type/Flange Type**

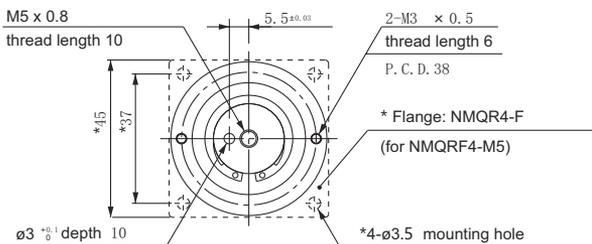


**NMQR2-M5**

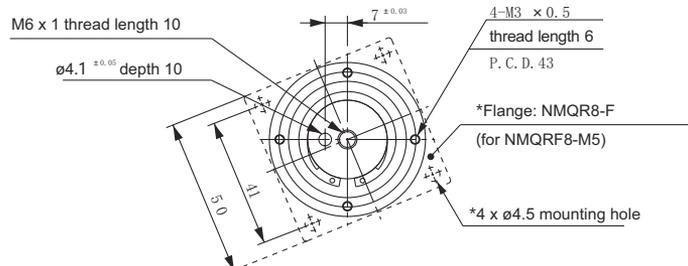
\*Symbol indicates flange dimensions



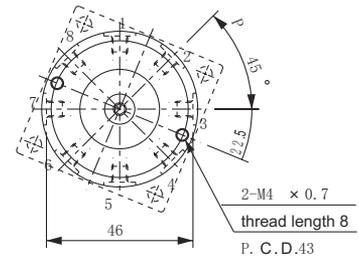
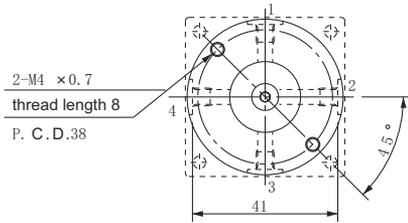
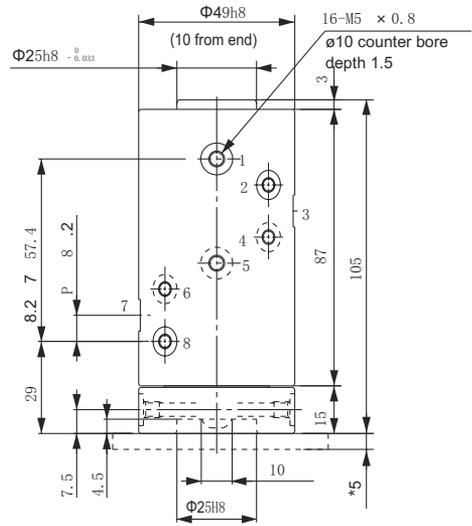
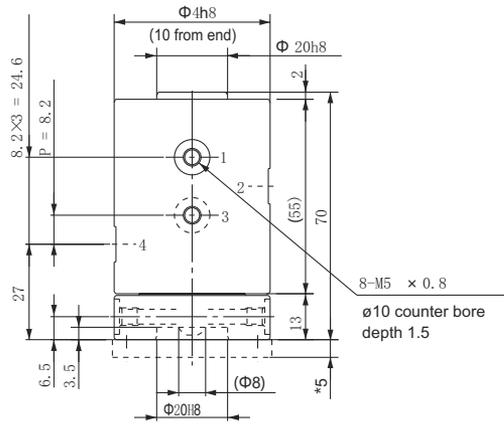
**NMQR4-M5**



**NMQR8-M5**

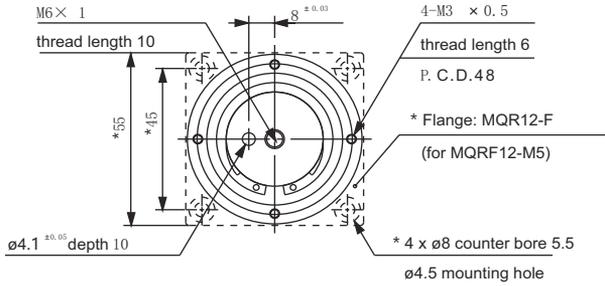


**Dimensions**



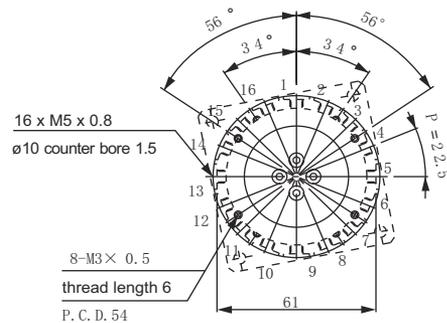
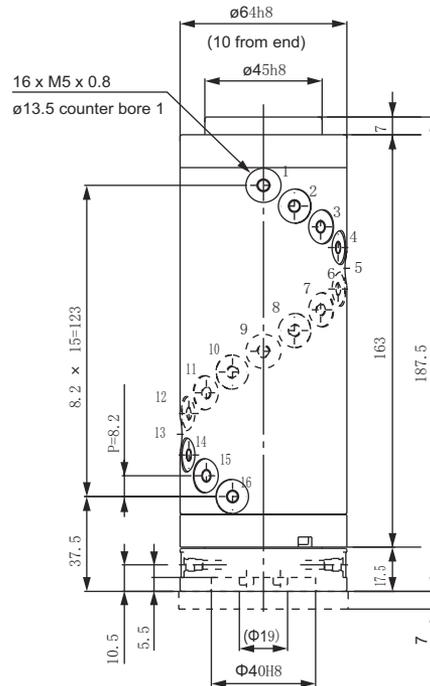
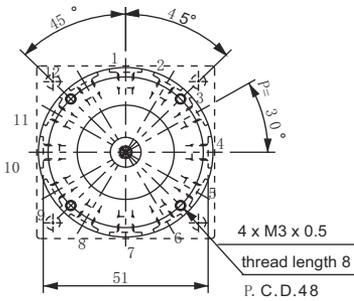
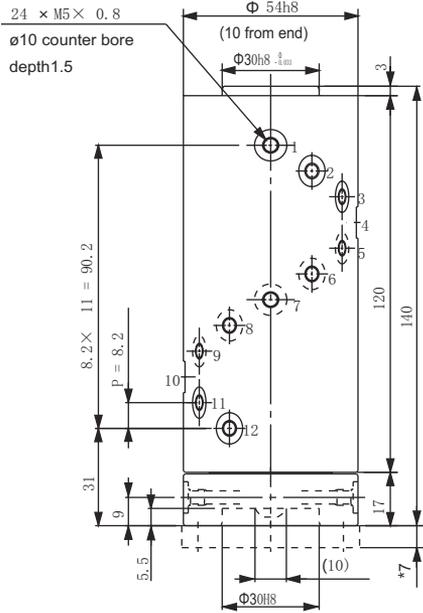
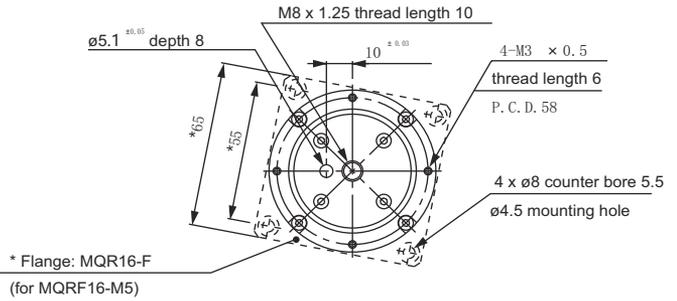
### Dimensions: Standard Type/Flange Type

**NMQR12-M5 Standard Type/Flange Type**



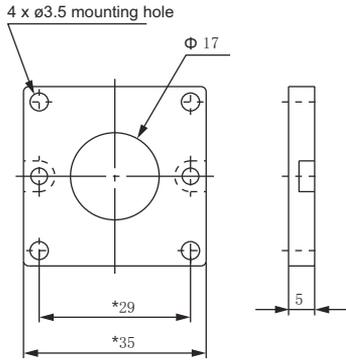
**NMQR16-M5**

\*Symbol indicates flange dimensions

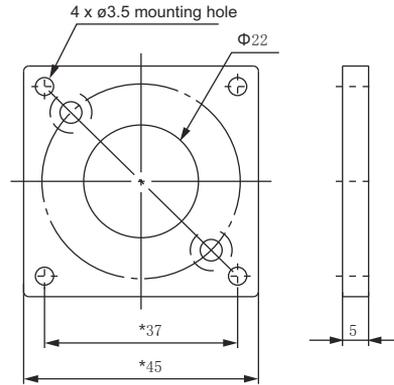


**Dimensions: Standard Type/Flange Type**

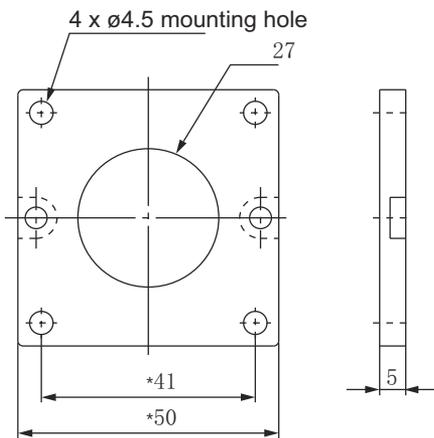
NMQR2-F



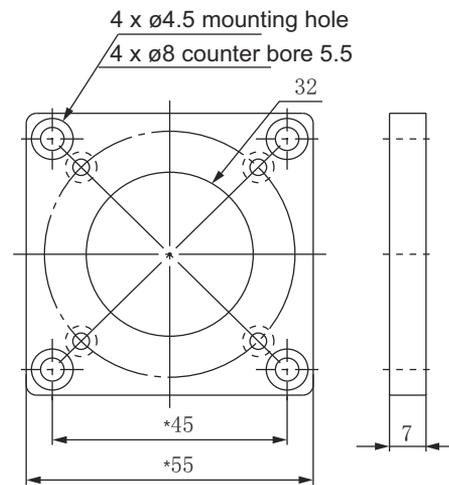
NMQR4-F



NMQR8-F



NMQR12-F



NMQR16-F

