MQR Series Low Torque Rotary Joint (Metal Seal Type)

Ordering Code

MQR Series Low Torque Rotary Joint (Metal Seal Type)

MQR — F — 4 — M5

- MQR: Low torque rotary joint (Metal seal type)
- F — Options: Nil: Standard; F*: Flange
- 4 — Number of circuits: 1: 1 circuit; 2: 2 circuits; 4: 4 circuits; 8: 8 circuits; 12: 12 circuits; 16: 16 circuits
- M5 — Connection diameter: M5: M5×0.8

* No flange type in 1 circuit system.



Options/Mounting Bracket

Number of circuits	2 circuits	4 circuits	8 circuits	12 circuits	16 circuits
Flange part number	MQR2-F	MQR4-F	MQR8-F	MQR12-F	MQR16-F

Specifications

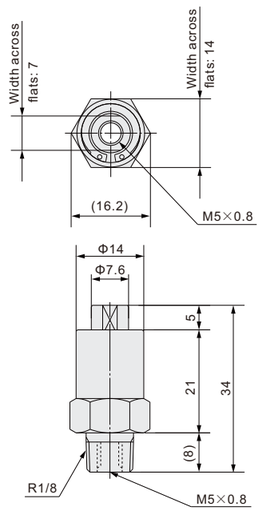
Model		MQR1-M5	MQR2-M5	MQR4-M5	MQR8-M5	MQR12-M5	MQR16-M5
Number of circuits		1	2	4	8	12	16
Working medium		Air					
Seal structure		Metal seal					
Guide structure		Bearing supported	Bearing supported at both ends				
Port size		Male R1/8	M5×0.8				
		Female M5×0.8					
Flow rate characteristics	C	0.50 [dm³/(s.bar)]					
	b	0.40					
	Cv	0.17					
Lubrication		Not required					
Min. operating pressure		-100 kPa					
Max. operating pressure		1.0 MPa					
Working temperature*1)		-10 to 80°C					
Max. start-up rotation torque*2)		0.003 N·m or less	0.03 N·m or less	0.05 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*5)		3000 min⁻¹(rpm) or less*3)	2000 min⁻¹(rpm) or less	1500 min⁻¹(rpm) or less	900 min⁻¹(rpm) or less	600 min⁻¹(rpm) or less	200 min⁻¹(rpm) or less
Allowable radial load*4)		1 N or less	15 N or less	30 N or less	40 N or less	50 N or less	50 N or less
Allowable axial load							

*1) The temperature 80°C includes temperature rise during rotation.
*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.
*3) If using at a speed above 600 min⁻¹ (r.p.m.), ensure rotation is in the direction in which the joint is fastened.
*4) Rubber / resin couplings are recommended due to their excellent absorption of off center, shocks, and vibrations.
*5) min⁻¹ : Number of rotations per 1 minute.

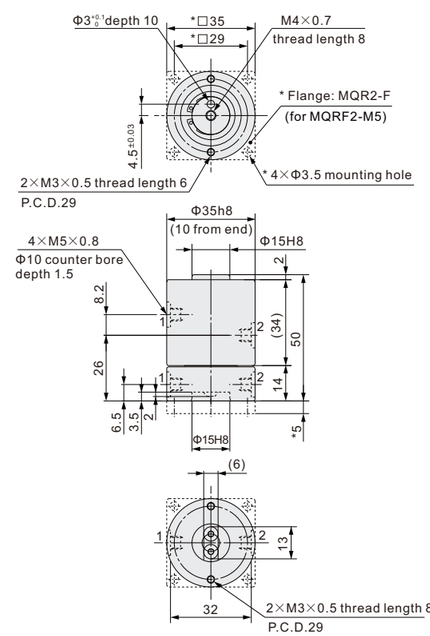
MQR Series Low Torque Rotary Joint (Metal Seal Type)

Main Dimensions Standard Type/Flange Type

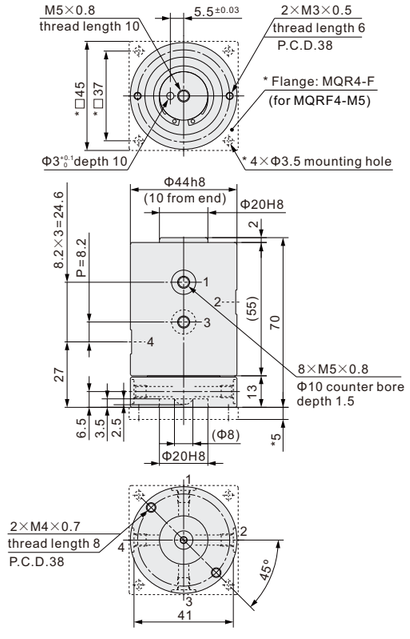
MQR1-M5



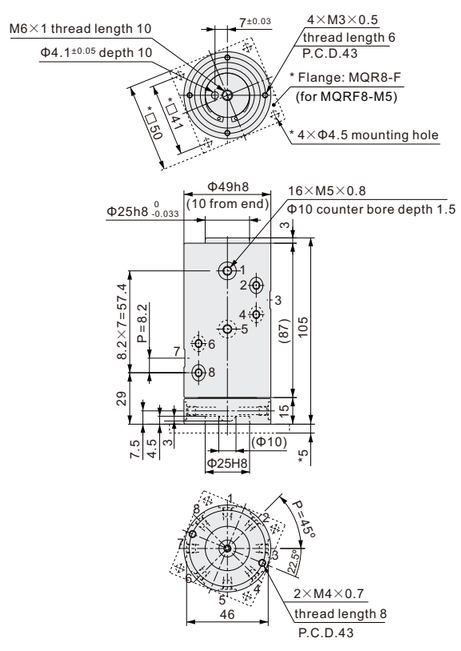
MQR2-M5



MQR4-M5



MQR8-M5

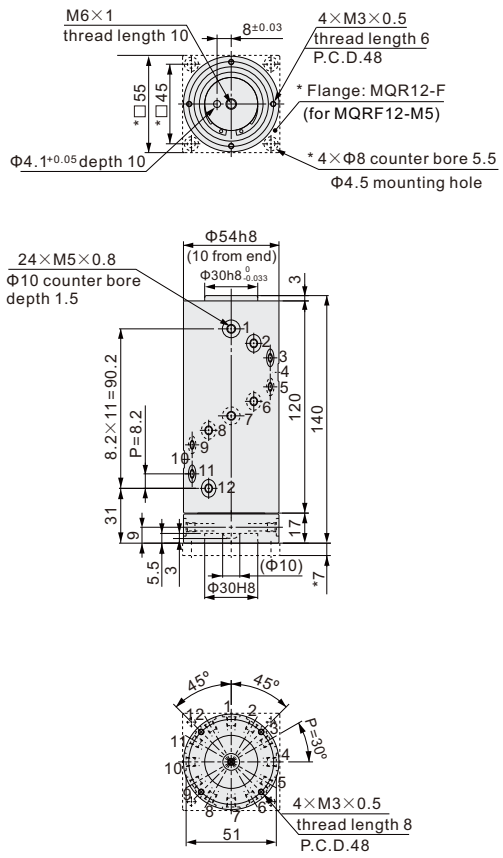


* Symbol indicates flange dimensions.

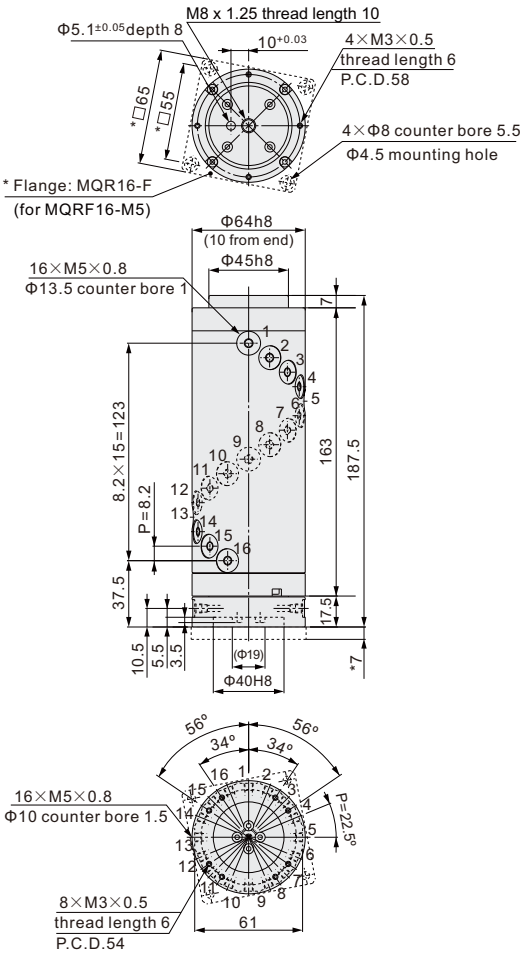
MQR Series Low Torque Rotary Joint (Metal Seal Type)

Main Dimensions Standard Type/Flange Type

MQR12-M5



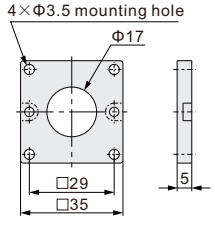
MQR16-M5



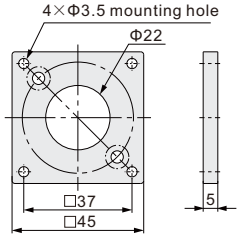
* Symbol indicates flange dimensions.

Mounting Bracket/Flange

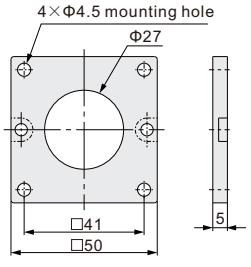
MQR2-F



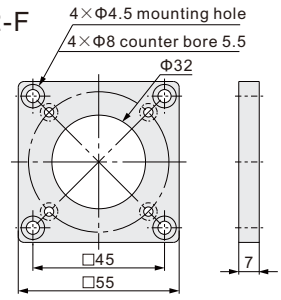
MQR4-F



MQR8-F



MQR12-F



MQR16-F

