Metal Seal Type

Low Torque Rotary Joint

MQR Series

RoHS

1 circuit, 2 circuits, 4 circuits, 8 circuits, 12 circuits, 16 circuits

How to Order

MQR **F** **4** – **M5**

Low torque rotary joint (Metal seal type)

Options

Nil	Standard
F Note)	Flange

Note: No flange type in 1 circuit system

Number of circuits

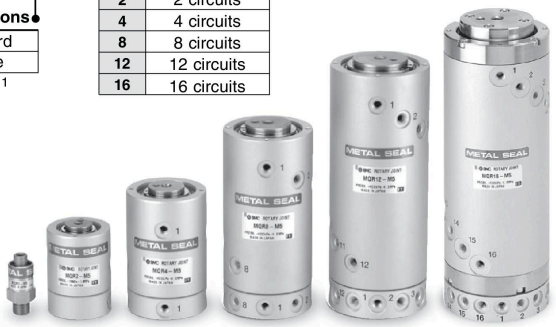
1	1 circuit
2	2 circuits
4	4 circuits
8	8 circuits
12	12 circuits
16	16 circuits

Connection diameter

M5	M5 x 0.8

Options/Mounting Bracket

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



Specifications

Model		MQR1-M5	MQR2-M5	MQR4-M5	MQR8-M5	MQR12-M5	MQR16-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 R 1/8	M5 x 0.8				
		Female M5 x 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					
Ambient temperature and operating fluid temperature Note 1)		–10 to 80°C					
Maximum start-up rotation torque Note 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 Note 5)		3000 min⁻¹ (rpm) or less Note 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 (allowable coupling axis reaction) Note 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							
Weight		0.025 kg	0.16 kg	0.39 kg	0.76 kg	1.26 kg	2.80 kg

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⁻¹ (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.
Note 5) min⁻¹: Number of rotations per 1 minute