

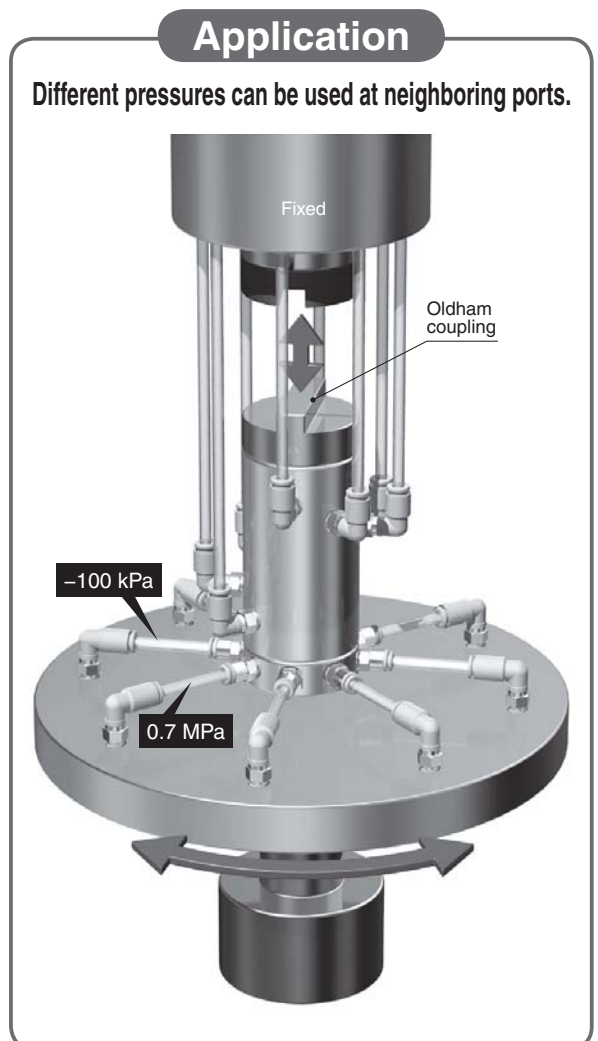
Rubber Seal

Rotary Joint



- Oldham coupling
- Operating pressure range: **-100 kPa to 0.7 MPa**
- Allowable rpm: **200 min⁻¹**^{*1}
- Max. start-up rotation torque: **0.50 N·m**^{*2} or less
- Service life: **10 million rotations**^{*3}
- Number of circuits: **8 circuits**

*1 Reference value
 *2 When no pressure applied.
 *3 Under SMC's life test conditions.



Related Equipment

Low Torque Rotary Joint MQR Series

- Metal seal type
- Long service life*

Series	Service life	Series	Service life
MQR1	1 billion rotations	MQR8	0.2 billion rotations
MQR2	0.5 billion rotations	MQR12	0.1 billion rotations
MQR4	0.3 billion rotations	MQR16	0.1 billion rotations

* Under SMC's life test conditions.

- Max. start-up rotation torque: 0.003 to 0.50 N·m or less



MQR-X229



15-E647

15-E647 2017-1

Rubber Seal

Rotary Joint

MQR-X229

RoHS



How to Order

MQR **F** 8 - M5 - X229

Option	
Nil	Standard
F	Flange

- Rubber seal
- Connection diameter: M5 x 0.8
- Number of circuits

Option/Mounting Bracket

Number of circuits	Flange part number
8 circuits	MQR8-F-X229

Specifications

Number of circuits (Number of ports)	8 circuits	
Fluid	Air	
Seal structure	Rubber seal	
Guide structure	Bearing supported at both ends	
Flow-rate characteristics	C	0.50 [dm ³ /(s·bar)]
	b	0.40
	Cv	0.17
Lubrication	Not required	
Minimum operating pressure	-100 kPa (10 Torr)	
Maximum operating pressure	0.7 MPa	
Ambient temperature	5 to +40°C Note 1) Note 2)	
Fluid temperature		
Start-up torque (Reference value) Note 3)	When no pressure applied	0.5 N·m or less
	When 0.7 MPa pressure applied	0.8 N·m or less
Allowable rpm (Reference value)	200 min ⁻¹	
Weight	0.53 kg	

Note 1) Temperature rise: 50°C

<Conditions>

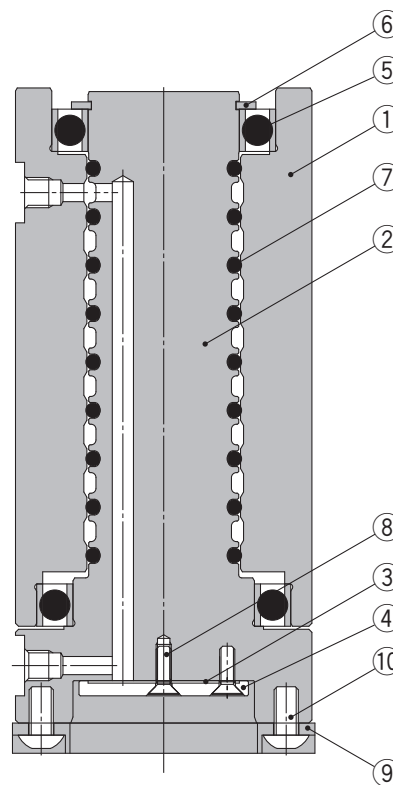
- Supply pressure: 0.7 MPa
- Rotation number: 200 min⁻¹(rpm)

Example) When the ambient temperature is 20°C, the surface temperature of the rotary joint is 70°C.

Note 2) The surface temperature of the rotary joint should not be more than 80°C. (Including the heat generated by adiabatic compression, etc.)

Note 3) The start-up torque may increase temporarily depending on the period of non-operation. For rotational torque with rotation number, refer to "Change in Rotational Torque with Rotation Number".

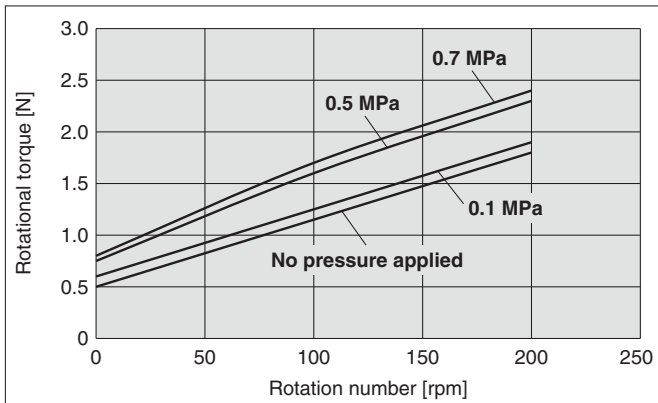
Construction



Component Parts

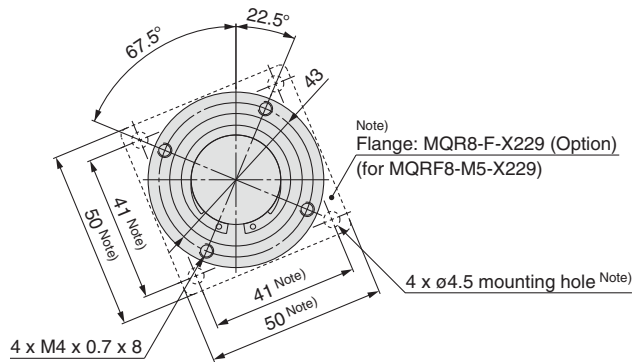
No.	Description	Material	Note
1	Body	Aluminum	
2	Spool	Aluminum	
3	Gasket	H-NBR	
4	Plate	Stainless steel	
5	Radial bearing	—	
6	Retaining ring	Carbon steel	
7	O-ring	Special NBR	* Fluorine grease applied
8	Bolt	Carbon steel	
9	Flange	Aluminum	
10	Bolt	Carbon steel	* Only for the MQR8

Change in Rotational Torque with Rotation Number



Note) These values show reference values and are not guaranteed.

Dimensions



Note) Indicates flange dimensions.

