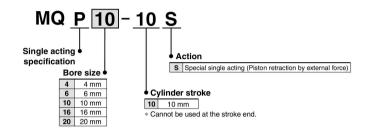
# Metal Seal

# **Low Friction Cylinder (Single Acting)** MQP Series Ø4, Ø6, Ø10, Ø16, Ø20

RoHS

#### **How to Order**



\* The MQP series is not auto switch capable.



#### Symbol Single acting (Pressing force)



# **Specifications**

Bore size (mm)		4	6	10	16	20	
Seal cons	truction	Metal seal					
Action		Special single acting (Piston retraction by external force)					
Proof pres	ssure	1.05 MPa					
Maximum	operating pressure	0.7 MPa					
Minimum o	perating pressure Note 1)	0.001 MPa					
Ambient and fluid temperature		+5 to +80°C					
Lubrication Note 2)		Not required (Non-lube)					
Stroke length tolerance		+1.0 0					
Total Note 3) leakage	Supply pressure 0.1 MPa	100 cm <sup>3</sup> /min					
	Supply pressure 0.3 MPa	500 cm <sup>3</sup> /min					
	Supply pressure 0.5 MPa	1000 cm <sup>3</sup> /min					

Note 1) Excluding the mass of moving parts.

Note 2) Refer to precautions on page 344 regarding lubrication. This product uses turbine oil as an initial lubricant. Lubricant may seep out of the rod or the piping port.

Note 3) The values are only for reference and are not guaranteed.

## **Moving Parts and Total Mass**

Uni						
Bore size (mm)	Moving parts mass	Total mass				
4	4	43				
6	8	55				
10	24	96				
16	62	161				
20	103	239				

## Theoretical Output (Guide)

								Unit: N
Bore size (mm)	Piston area (mm²)	Operating pressure (MPa)						
		0.1	0.2	0.3	0.4	0.5	0.6	0.7
4	12.6	1.3	2.6	3.9	5.2	6.5	7.8	9.1
6	28.3	2.8	5.6	8.4	11.2	14.0	16.8	19.6
10	78.5	7.9	15.7	23.6	31.4	39.3	47.1	55.0
16	201.1	20.1	40.2	60.3	80.4	100.6	120.7	140.8
20	314.2	31.4	62.8	94.3	125.7	157.1	188.5	219.9