

Features

- High resistance to wear.
- Tolerances adjustable.
- High resistance to corrosion.
- Quiet running.
- Ability to take high loads & moments in all directions.
- High resistance to shocks and vibrations.
- High resistance to dirt & moisture.
- Interchangeable gliding elements.

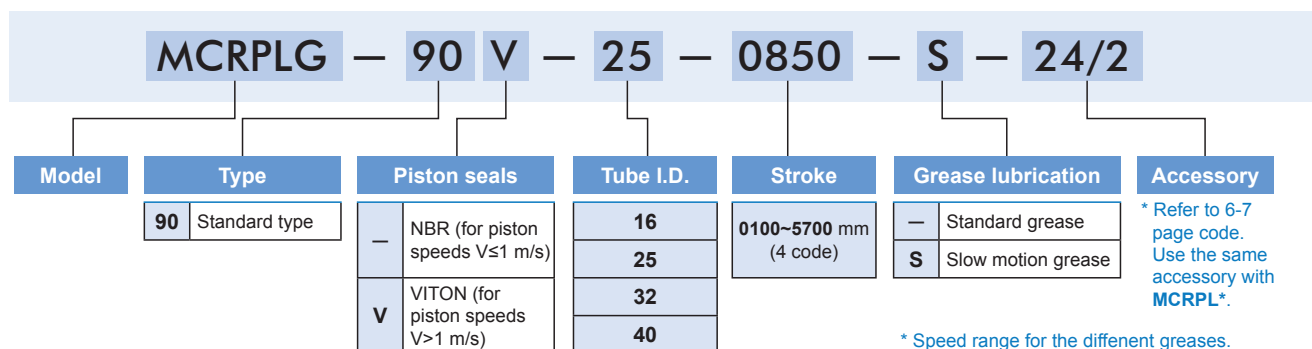
Specification

Model	MCRPLG			
Acting type	Double acting			
Tube I.D. (mm)	16	25	32	40
Port size	M5	G1/8	G1/4	G3/8
No. of port	3			
Medium	Air			
Operating pressure range	0.1~0.78 MPa			
Stroke range	ø16	100~3300mm		
	ø25~40	100~5700mm (*1)		
Ambient temperature	-10~+80°C (No freezing)			
Lubrication	With or without lubrication			
Cushion	With adjustable cushion at both ends			
Sensor switch	RCAL (Please refer to page 6-9)			
Sensor switch holder	HPL			

*1. In increments of 1mm, long strokes on request.

*2. The tube isn't airtight, so the cylinder is allowed the leakage.
Before the cylinder is sale, it has passed the standard of leakage test.

Order example



* Speed range for the different greases.

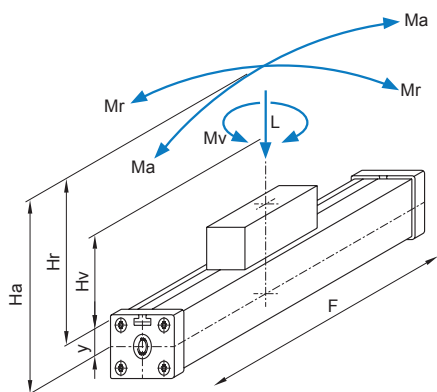
• Standard grease

NBR piston seals: $0.2 \text{ m/s} \leq V \leq 1 \text{ m/s}$
VITON piston seals: $1 \text{ m/s} < V$

• Slow motion grease

NBR piston seals: $V < 0.2 \text{ m/s}$
VITON piston seals: $V < 0.2 \text{ m/s}$

Forces and moments

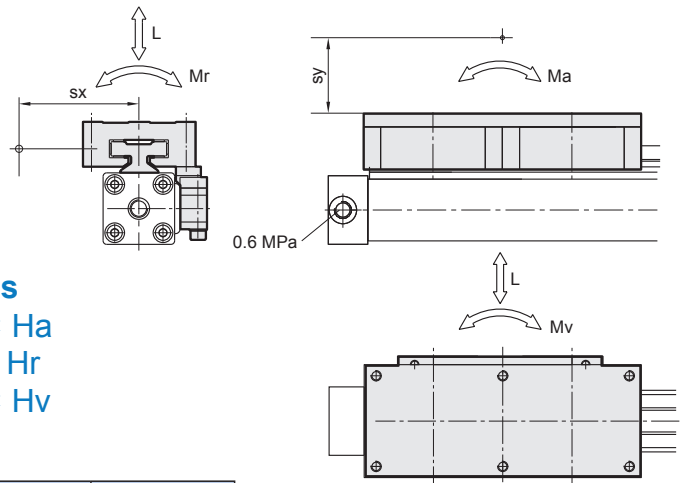


Formulas

$$Ma = F \times Ha$$

$$Mr = F \times Hr$$

$$Mv = F \times Hv$$

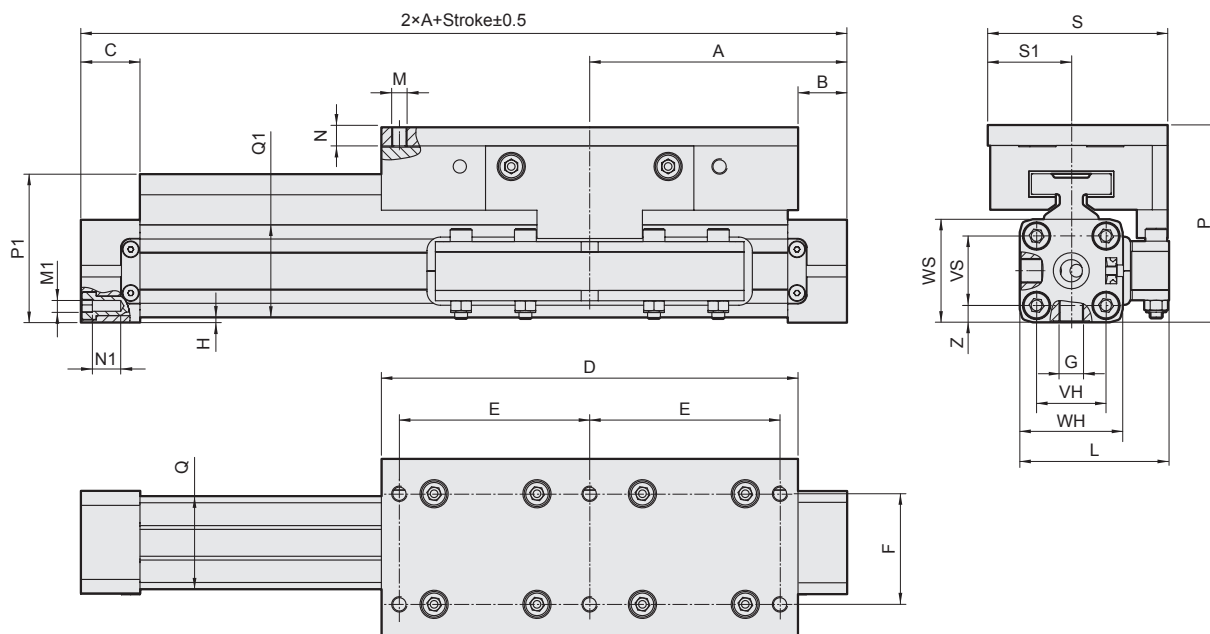


Cylinder \varnothing	F (N) 0.6 MPa	L max (N)	Mr max.(Nm)	Mv max.(Nm)	Mv max.(Nm)
16	110	350	4	6	6
25	250	1000	14	40	40
32	420	2000	24	68	68
40	640	2800	37	103	103

- All values have been calculated at speeds of 0.2 m/s.
- Combined loads.
- The life of the linear guiding system can be calculated using the following formula.

$$\frac{Ma}{Ma \max} + \frac{Mr}{Mr \max} + \frac{Mv}{Mv \max} + \frac{L}{L \max} \leq 1$$

Dimensions



Code Tube I.D.	A	C	D	E	F	G	H	L	M	N	M1	N1	P	QxQ1	S	S1	VH	VS	WH	WS	Z
16	65	15	90	20	36	M5	1.5	42.3	M4	10	M3	7	48.5	24.5x25	53	31.5	18	18	27	27	4.5
25	100	23	162	74	53	G1/8	2.0	59.5	M6	8	M5	10	76.0	36x36	70	32.5	27	27	40	40	6.5
32	125	27	162	74	53	G1/4	2.0	82.0	M6	8	M6	14	88.5	52x48	70	32.5	40	36	52	52	8.0
40	150	30	162	74	53	G1/4	7.0	93.0	M6	8	M6	17	103.0	58x58	70	32.5	54	54	69	72	9.0