

**Clamping Cylinders  
Single Acting  
Ø 8 to 63 mm**

- **Designed for very compact installations**
- **Enable high thrusts to be achieved in restricted space**
- **Neat, clean appearance**
- **One-piece body construction**


**Technical Data**
**Medium:**

Compressed air, filtered and lubricated

**Operation:**

Single acting

**Operating Pressure:**

2 to 10 bar

**Operating Temperature:**

-5°C\* to +80°C

\*Consult our Technical Service for use below +2°C

**Cylinder Diameters:**

8, 12, 20, 32, 50, 63 mm

**Standard Strokes:**

4 mm	Ø 8, 12 and 20 mm
5 mm	Ø 32 mm
10 mm	Ø 12 to 63 mm
25 mm	Ø 32 to 63 mm

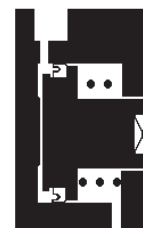
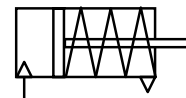
**Materials:**

Stainless steel (Austenitic) piston rod, anodised aluminium body, nitrile rubber seals.

**Ordering Information**

To order a 32 mm bore cylinder with a 5 mm stroke quote: M/50132/5

To order a 63 mm bore cylinder with a 25 mm stroke quote: M/50163/25





## Theoretical Forces • Air Consumption

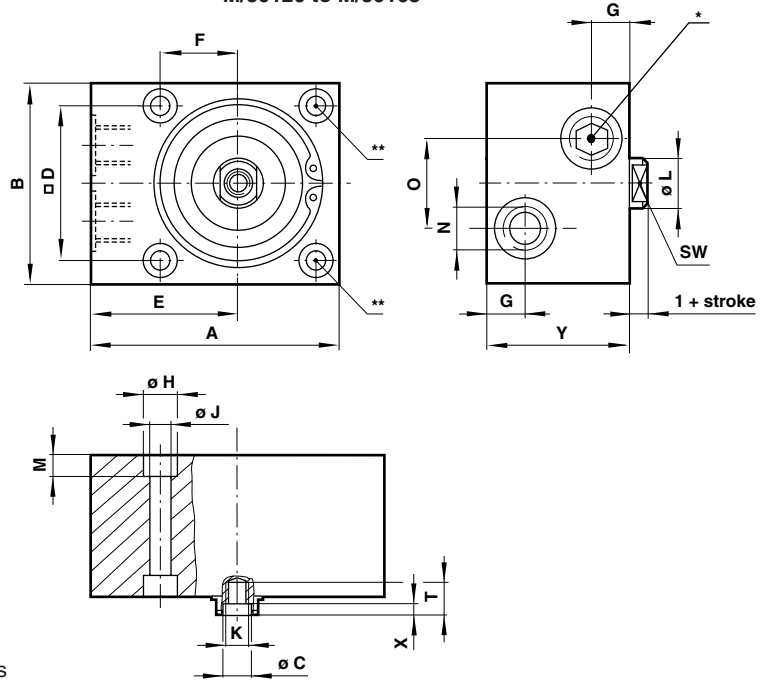
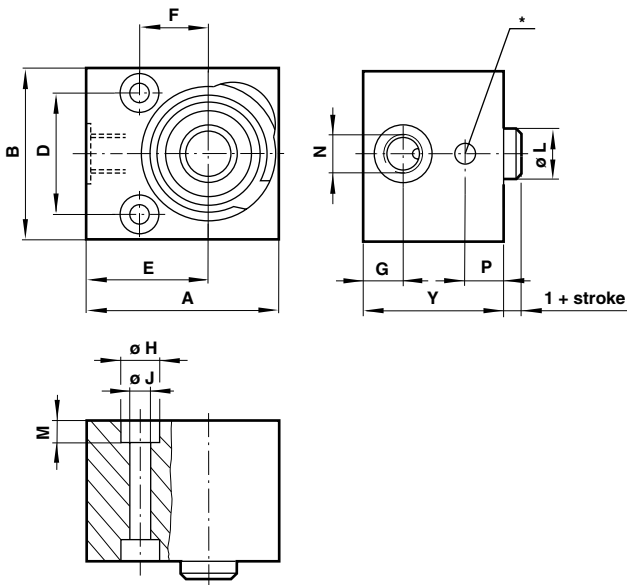
Model	Theoretical forces (N) at 6 bar		Air consumption (l/cm stroke) at 6 bar	Model	Theoretical forces (N) at 6 bar		Air consumption (l/cm stroke) at 6 bar
	Outstroke	F 1			Outstroke/Instroke	Outstroke	
50108/4	25	3,4	0,002	50132/10	445	22,3	0,056
50112/4	55	5,6	0,003	50132/25	445	13,7	0,141
50112/10	55	5,4	0,008	50150/10	1100	36,3	0,138
50120/4	165	13,2	0,009	50150/25	1100	25,5	0,344
50120/10	165	9,6	0,022	50163/10	1760	52,5	0,218
50132/5	445	25,2	0,028	50163/25	1760	41,1	0,546

F 1= Return forces of spring (N)

### Basic Dimensions

M/50108 to M/50112

M/50120 to M/50163



\* = Exhaust position, do not obstruct, \*\* = Ø 20 and 32 without bores

Model	50108	50112	50120	50132	50150	50163						
∅	8	12	20	32	50	63						
A	20	25	40	55	80	90						
B	18	20	32	45	65	80						
∅ C	-	-	5,3	6,4	8,4	8,4						
D	11	13	20	32	50	62						
E	13,5	16	24	32	47,5	50						
F	8	9	15	18	25	31						
G	5	5	5	10	12	12						
∅ H	6	6	10	10	11	15						
∅ J	3,4	3,4	5,5	5,5	6,6	9						
K	-	-	M 5	M 6	M 8	M 8						
∅ L	4	5	10	12	16	16						
M	3,2	3,4	5,5	5,5	6,8	9						
N	M 5	M 5	M 5	G 1/8	G 1/4	G 1/4						
O	-	-	-	20	30	30						
P	5	4,5	4,5	-	-	-						
SW (A/F)	-	-	8	10	13	13						
T	-	-	8	14,5	15	15						
X	-	-	2	2,5	3	3						
Standard strokes	4	4	10	4	10	5	10	25	10	25	10	25
Y	15	15	23	20	26	26	31	46	30	45	35	50
Weight (kg)	0,02	0,03	0,04	0,10	0,10	0,22	0,25	0,31	0,50	0,60	0,80	1,05

### Warning

These products are intended for use in industrial compressed air systems only. Do not use these products where pressures and temperatures can exceed those listed under 'Technical Data'.

Before using these products with fluids other than those specified, for non-industrial applications, life-support systems, or other applications not within published specifications, consult NORGREN.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes.

The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.

**System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.**

System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.