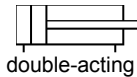
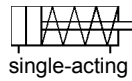
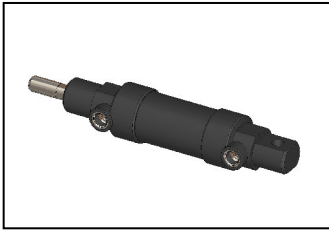


# Plastic Cylinder - with Food Approval (PA12)

TYPE 1101 / 1122

Pneumatic Plastic Cylinders based on ISO 6432:  $\phi 12 - 25$  mm



Cylinder according to ISO 6432 with piston diameter 12 mm to 25 mm without end position damping, without magnetic piston. Cylinder end pieces are rotatable.  
Standard cylinder made of PA6 plastic or cylinder with food approval made of PA12 plastic is available.

## TECHNICAL DATA

<b>Cylinder pipes and heads</b>	Plastic PA6 or PA12 glass fiber reinforced
<b>Piston rod</b>	Stainless steel A4 (1.4401)
<b>Sealing materials</b>	NBR; VITON
with PA6	P5600
with PA12	
<b>Control medium</b>	Filtered, oiled or non-oiled compressed air
<b>Temperature range</b>	-20 to 70°C
<b>Pressure range</b>	1 to 10 bar
<b>Food approvals PA12</b>	FDA; EU Directive 2002/72/EC
<b>Optional on request</b>	- Water as the control medium - Magnetic pistons - Full plastic version - Antibacterial version - electr. end position damping - Drinking water approval for cylinder interior: KTW; DVGW; ACS; NSF61; WRAS

## ACTUATING POWER

### Single-acting cylinder

Piston $\phi$ [mm]	Impact force [N] at operating pressure (bar)					min. Retracting force [N]■	
	2	4	6	8	10	Stroke 25 mm	Stroke 50 mm
12	7	24.5	46.5	69.5	92.5	8.5	6.5
16	13	53	93	133	173	10	7
20	24	87	150	213	276	13.5	10
25	43	141	239	337	435	18	15

■ Retracting force with retracted piston rod

### of double-acting cylinders

Piston $\phi$ [mm]	Impact force [N] at operating pressure (bar)					Retracting force [N] in % of the impact force
	2	4	6	8	10	
12	16	39	61	84	107	75
16	30	70	110	150	190	85
20	46	109	172	235	298	84
25	73	171	269	367	465	84

## FEATURES

- Food approvals for PA12 material
- Plastic version is corrosion-resistant
- Strokes 25 - 300 mm and piston  $\phi$  12 - 25 mm
- Low weight
- Accessories for cylinders in plastic

## CYLINDER ORDERING CHART

### Type 1101 - single-acting cylinder

- without end position damping
- without magnetic pistons
- without piston rod nut

Piston $\phi$ [mm]	Stroke [mm]	Mass [g]	Order no. Standard PA6	Order no. Food PA12*
12	25	55	P1000175	P1003130
	50	63	P1000176	P1003131
16	25	64	P1000177	P1003132
	50	76	P1000178	P1003133
20	25	114	P1000179	P1003134
	50	131	P1000180	P1003135
25	25	152	P1000181	P1003136
	50	177	P1000182	P1003137

(Further versions of the stroke length on request)

### Type 1101 - double-acting cylinder

- without end position damping
- without magnetic pistons
- without piston rod nut

Piston $\phi$ [mm]	Stroke [mm]	Mass [g]	Order no. PA6	Order no. PA12*
12	25	55	P1000183	P1003138
	50	63	P1000184	P1003139
	100	85	P1002391	P1003140
	150	123	P1002393	P1003141
16	200	150	P1002395	P1003142
	25	64	P1000186	P1003143
	50	76	P1000187	P1003144
	100	101	P1000189	P1003145
	150	122	P1002396	P1003146
20	200	158	P1002398	P1003147
	25	114	P1000190	P1003148
	50	131	P1000191	P1003149
	100	166	P1000193	P1003150
	150	198	P1002400	P1003151
	200	234	P1002402	P1003152
25	250	278	P1002404	P1003153
	300	312	P1002406	P1003154
	25	152	P1000194	P1003155
	50	177	P1000195	P1003156
	100	227	P1000197	P1003157
	150	278	P1001611	P1003158
25	200	334	P1001612	P1003159
	250	402	P1001613	P1003160
	300	464	P1001614	P1003161

## DIMENSIONS [mm]

Piston $\phi$ [mm]	D1	D2	D3	D4	D6	L1	L2	L3	L4	L5	B1	B2
12	M16x1.5	M6	6	18	M5	75	38	9	17	15	12	17
16	M16x1.5	M6	6	22	M5	82	38	9	17	15	12	17
20	M22x1.5	M8	8	26	G 1/8	95	44	12	20	18	16	22
25	M22x1.5	M10x 1.25	8	31	G 1/8	104	50	12	22	20	16	24

