

1.3 Pneumatic telescoping multi-position cylinders

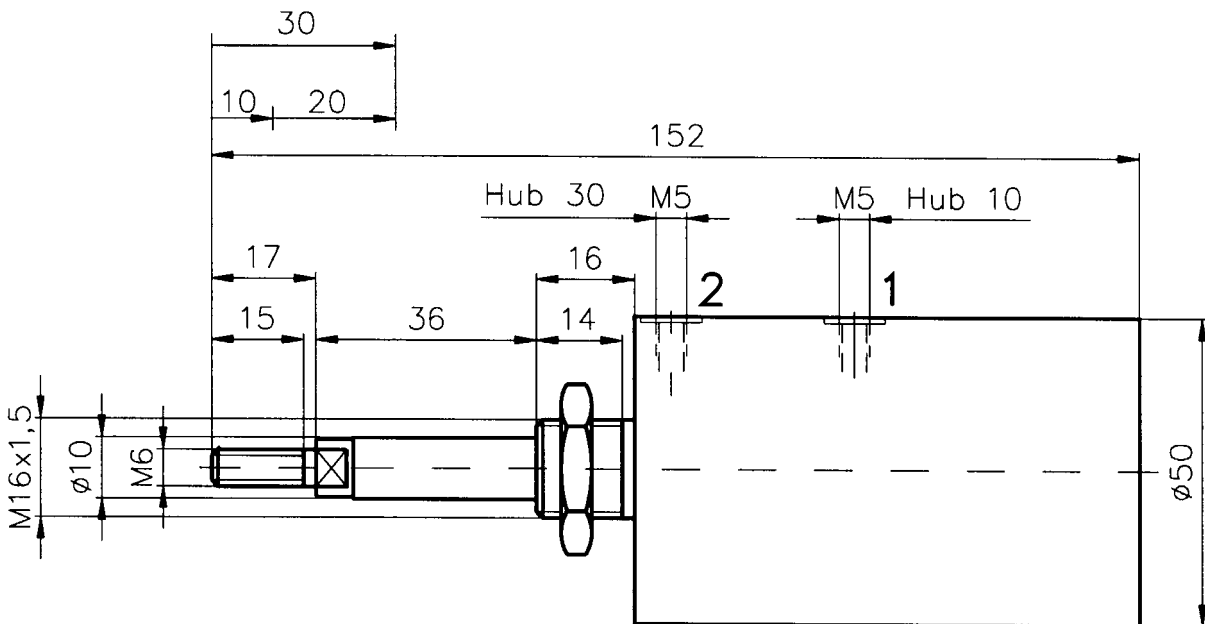
1.3.1 Telescoping multi-position cylinder 2-stage \varnothing 25/40 mm

Technical description:

Design	2-stage, short version
Piston diameter	25/40 mm
Function	Single-acting with spring return extended in zero position
Stroke lengths	Stroke 1: 10 mm; stroke 2: 30 mm
Temperature range	-20°C to +80°C
Materials	Piston rod: stainless steel; telescoping tube: steel, chemically nickel-plated; Cylinder housing, front and end pieces: aluminium Seals: Perbunan
Medium	Filtered compressed air, oil-bearing, or not oil-bearing
Operating pressure	1 bar to 10 bar

Functional description:

When air is applied to connection 1, the cylinder retracts at stroke 1 = 10 mm.
When air is applied to connection 2 or 1 and 2, the cylinder retracts at stroke 2 = 30 mm.
In pressureless state, the cylinder is extended (basic position).



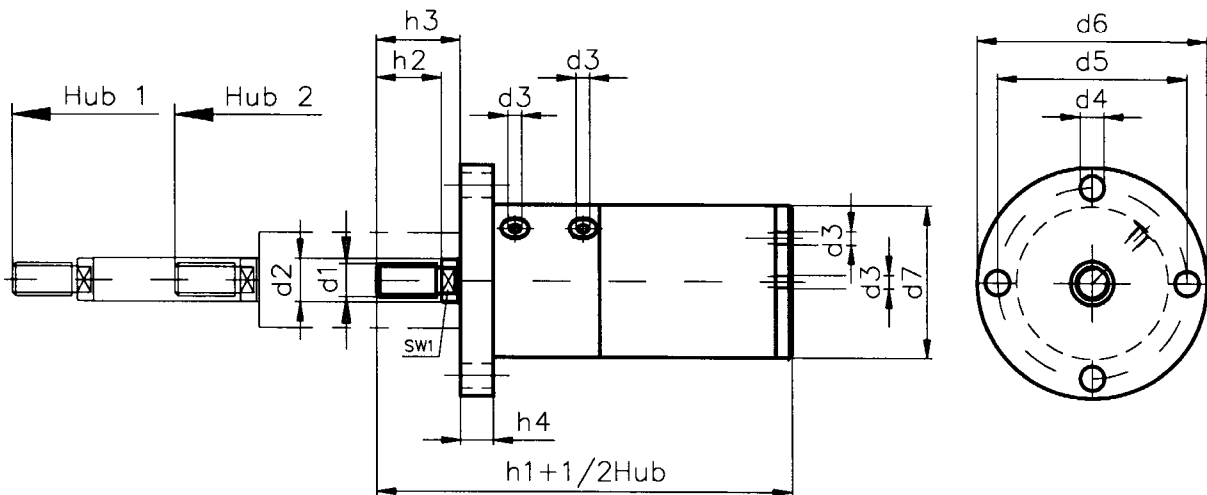
1.3.2 Telescoping multi-position cylinder 2-stage \varnothing 30/50 mm, \varnothing 50/80 mm

Technical description:

Design	2-stage, short version
Piston diameter	30/50 mm, 50/80 mm
Function	Double-acting
Stroke lengths	up to 1000 mm (dependent on application)
Temperature range	-20°C to +80°C
Materials	Piston rod: stainless steel; telescoping tube: steel, chemically nickel-plated; cylinder: aluminium, hard anodized; front and end pieces: aluminium; seals: Perbunan
Medium	Filtered compressed air, oil-bearing, or not oil-bearing
Operating pressure	1 bar to 10 bar

Functional description:

The outer telescoping stage is held in rear end position by compressed air so that the inner stage can extend by the half stroke. By removing the counterpressure, the outer telescoping stage can extend the complete stroke. The reverse stroke is then a complete stroke.



Piston \varnothing	d_1	d_2 \varnothing	d_3	d_4 \varnothing	d_5 \varnothing	d_6 \varnothing	d_7 \varnothing	h_1	h_2	h_3	h_4
50/80	M16x1.5	20	G1/4	11	110	130	86	195	32	42	20
30//50	M12	16	M5	9	70	85	55	131	24	31	12

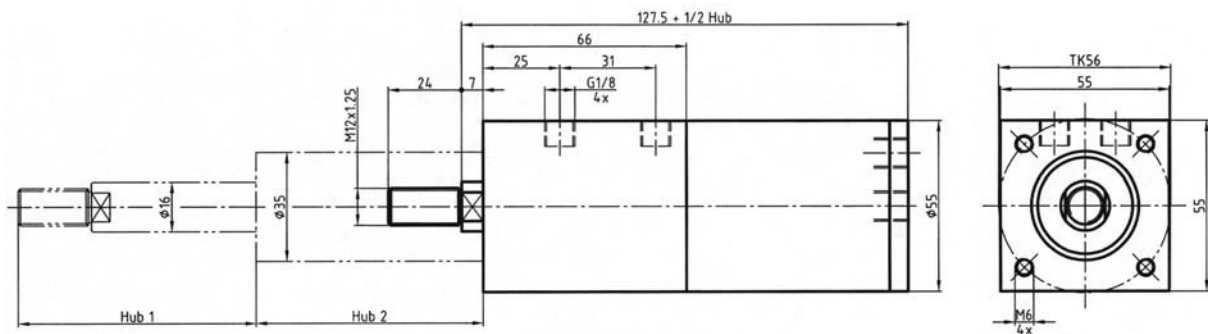
1.3.3 Telescoping multi-position cylinder 2-stage \varnothing 30/50 mm

Technical description:

Design	2-stage, short version
Piston diameter	30/50 mm
Function	Double-acting, with damper
Stroke lengths	up to 1000 mm (dependent on application)
Temperature range	-20°C to +80°C
Materials	Piston rod: stainless steel; telescoping tube: steel, chemically nickel-plated; cylinder: aluminium, hard anodized; front and end pieces: aluminium; seals: Perbunan
Medium	Filtered compressed air, oil-bearing, or not oil-bearing
Operating pressure	1 bar to 10 bar

Functional description:

The forward stroke can travel in two stroke stages with the appropriate control.
The reverse stroke is then a complete stroke.



1.3.4 Telescoping multi-position cylinder 2-stage \varnothing 40/63 mm

Technical description:

Design	2-stage, short version
Piston diameter	40/63 mm
Function	Double-acting
Stroke lengths	up to 1000 mm (dependent on application)
Temperature range	-20°C to +80°C
Materials	Piston rod: stainless steel; telescoping tube: steel, chemically nickel-plated; cylinder: aluminium, hard anodized; front and end pieces: aluminium; seals: Perbunan
Medium	Filtered compressed air, oil-bearing, or not oil-bearing
Operating pressure	1 bar to 10 bar

Functional description:

The forward stroke can travel in two stroke stages with the appropriate control.
The reverse stroke is then a complete stroke.

