

1 Pneumatic-hydraulic elements

1.1 Pneumatic-hydraulic forward stroke units

1.1.1 Forward stroke units \varnothing 40 mm

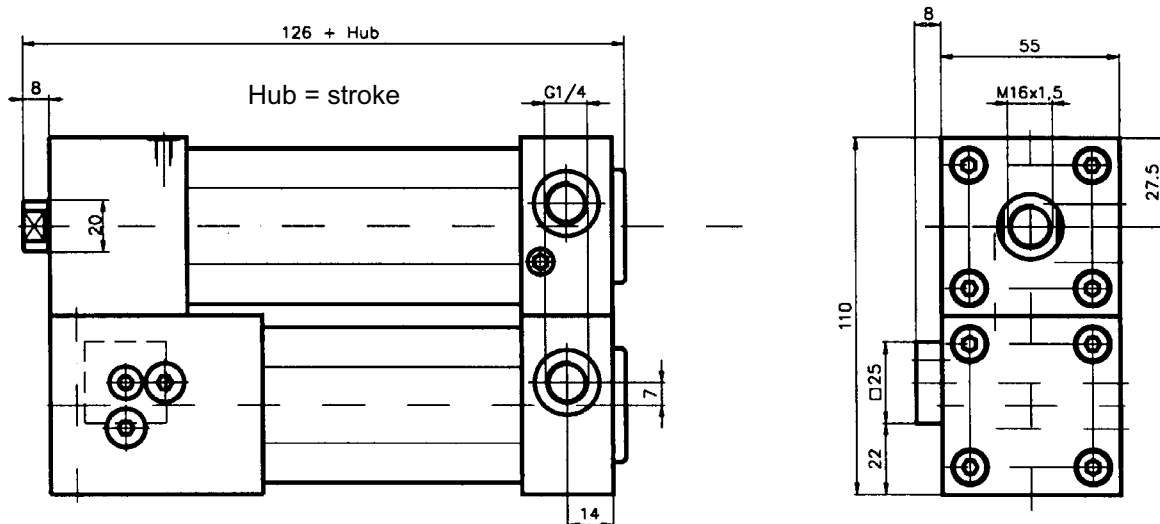
Technical description:

Piston diameter	40 mm
Function	Double-acting, with integrated velocity control and safety valve
Stroke lengths	up to 1000 mm
Temperature range	-20°C to +80°C
Medium	Filtered compressed air, oil-bearing, or not oil-bearing
Operating pressure	1 bar to 10 bar

Functional description:

The benefits of hydraulic equipment are combined with those of pneumatic equipment by adding an oil head to the pneumatic forward stroke unit.

The speeds of the forward and reverse strokes are adjustable separately by velocity control valves. In the event of a pressure drop, the forward stroke can be stopped at any position by an integrated safety valve that is blocked in its pressureless state.



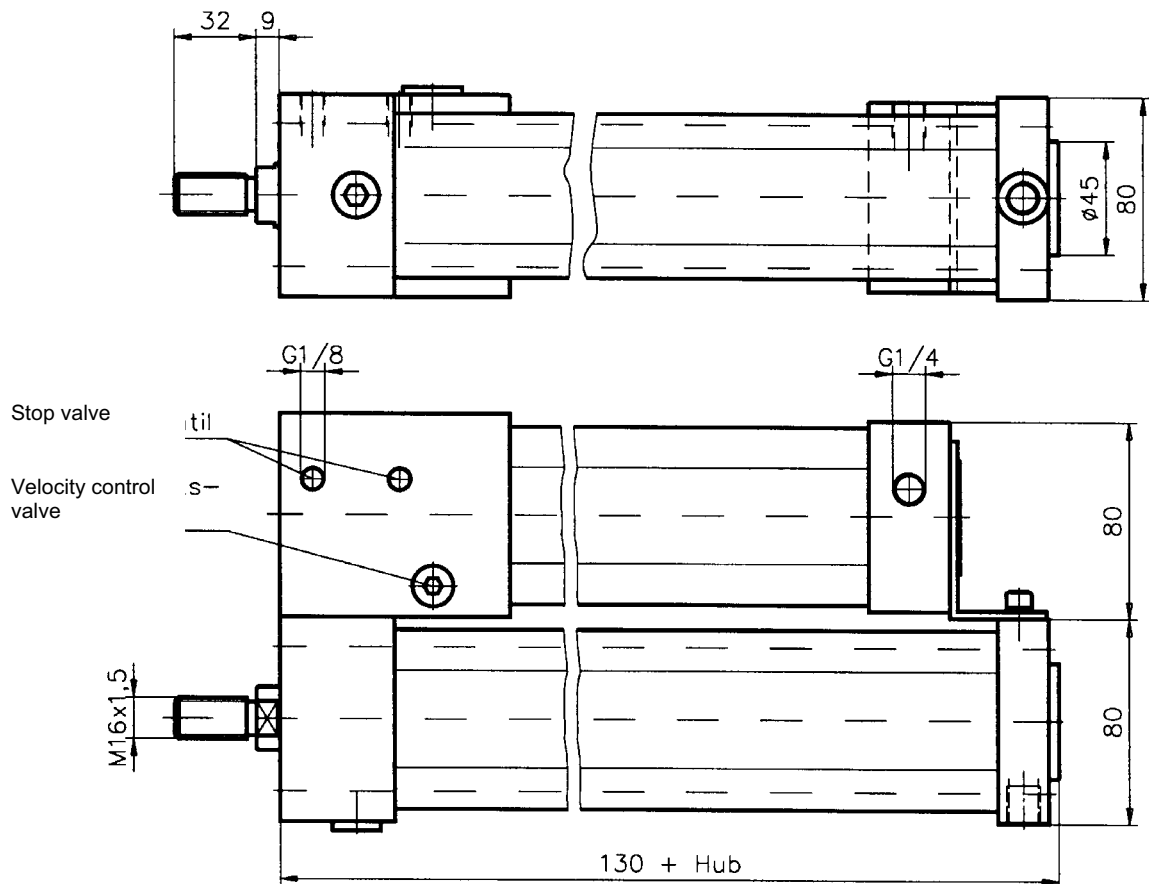
1.1.2 Forward stroke units \varnothing 63 mm

Technical description:

Piston diameter	63 mm
Function	Double-acting, with integrated velocity control and stop valve
Stroke lengths	up to 1000 mm
Temperature range	-20°C to +80°C
Medium	Filtered compressed air, oil-bearing, or not oil-bearing
Operating pressure	1 bar to 10 bar

Functional description:

The benefits of hydraulic equipment are combined with those of pneumatic equipment by adding an oil head to the air-operated forward stroke unit. An integrated velocity control valve allows precise adjustment of the forward stroke. The reverse stroke is unrestricted and in rapid motion. An integrated stop valve allows precise stopping of the piston at any position. The stop valve pulses can be triggered by the magnetic piston via a proximity switch, or if a safety valve is fitted, by external pulses.



1.1.3 Forward stroke units \varnothing 100 mm

Technical description:

Piston diameter	100 mm
Function	Double-acting, with integrated velocity control and
Stroke lengths	Safety valve
Temperature range	-20°C to +80°C
Medium	Filtered compressed air, oil-bearing, or not oil-bearing
Operating pressure	1 bar to 10 bar

Functional description:

The benefits of hydraulic equipment are combined with those of pneumatic equipment by adding an oil head to the air-operated forward stroke unit.

The speeds of the forward and reverse strokes are adjustable separately by velocity control valves. In the event of a pressure drop, the forward stroke can be stopped at any position by an integrated safety valve that is blocked in its pressureless state.

