

## Fine setting valves



AVENTICS™

AVENTICS Fine setting valves

  
EMERSON™

**Fine setting valves**

Fine-Setting-Valve: Manually operated pressure regulators with multiple manual actuating element choice.

- Qn max. 900 l/min
- Width: 60 mm ... 100 mm
- Poppet valve for dynamic pressure control

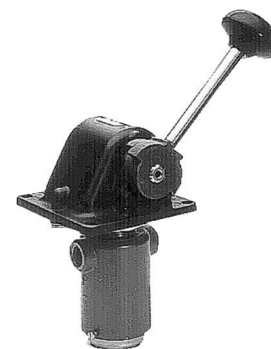


## Product overview

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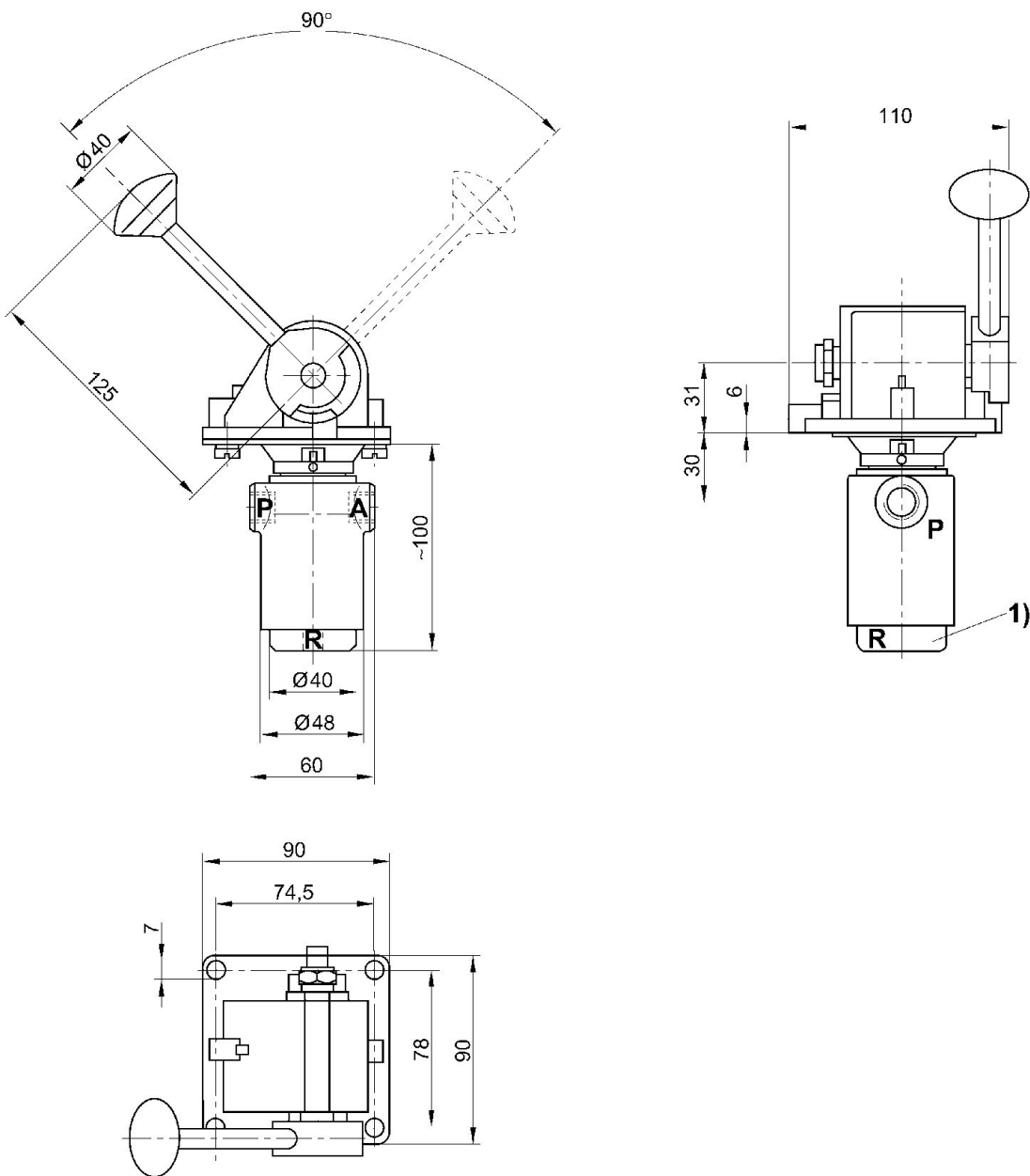
**Fine setting valve**

Ambient temperature min./max.: -25 °C ... 70 °C  
 Medium temperature min./max.: -25 °C ... 70 °C  
 Min. working pressure: 0.1 bar



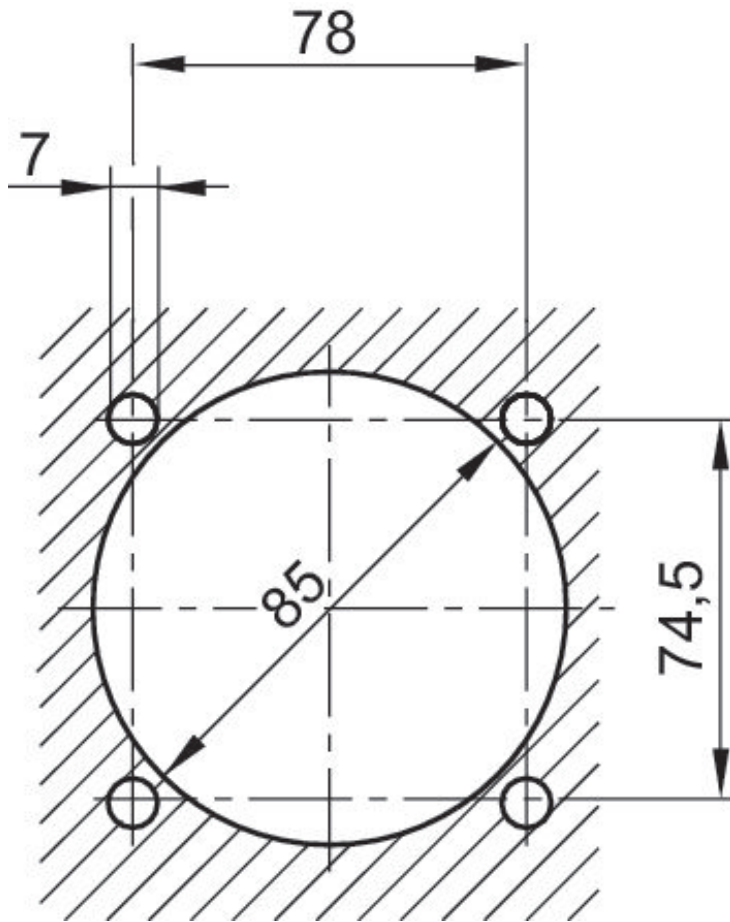
	Compressed air connection output	Nominal flow [l/min]	Min. regulation range [bar]	Max. regulation range [bar]	Actuating element	Part No.
	G 1/4	900	0.1	4.1	Hand lever	3610628300
	G 1/4	900	0.1	4.6	Hand lever	3610628400
	G 1/4	900	0.1	5.1	Hand lever	3610628500
	G 1/4	900	0.1	7.1	Hand lever	3610628600
	G 1/4	900	0.1	10.1	Hand lever	3610628700
	G 1/4	900	0.1	4.1	Hand lever, with spring return	3610628330
	G 1/4	900	0.1	7.1	Hand lever, with spring return	3610628630

Dimensions



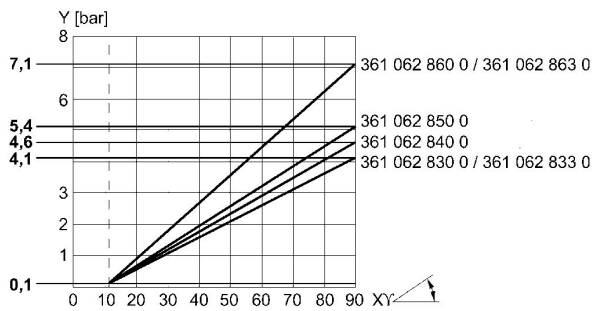
- 1) Screw cap
- A = connection output
- P = connection input
- R = Port exhaust

Cut-out in the mounting plate



Mounting plate max. 10 mm thick

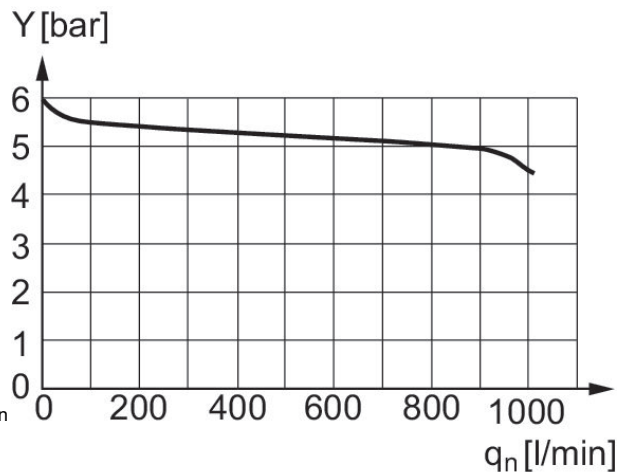
**Pressure characteristics curve**



x = lever path

The characteristic curve can be moved parallel to the illustrated characteristic curve (in the y direction) using the screw cap.

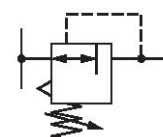
**Flow rate characteristic, p<sub>2</sub> = 0,05 - 7 bar**



input pressure: 8 bar, supply pressure: 6 bar y: pressure in line "A" [bar]

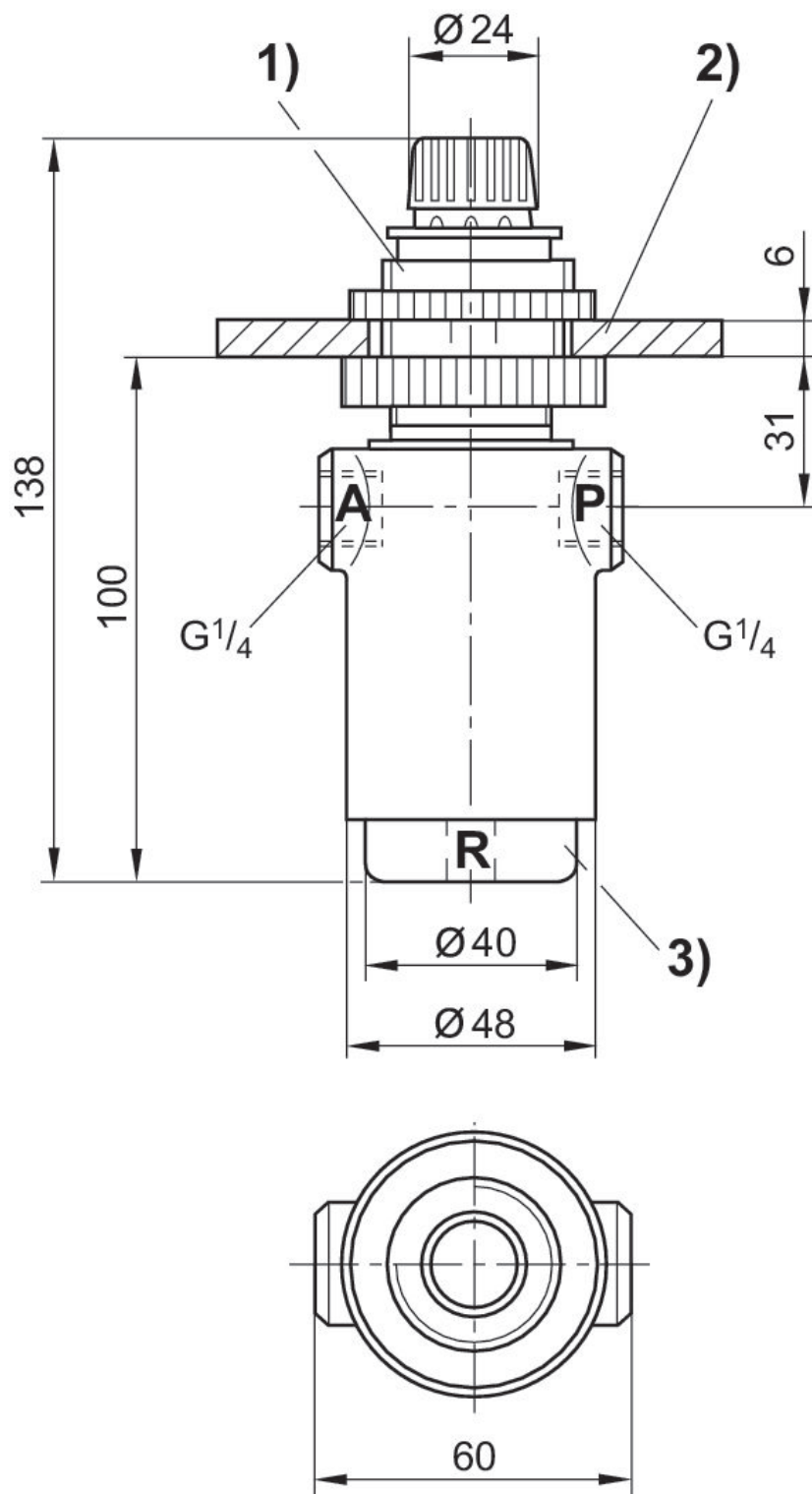
**Fine setting valve**

Ambient temperature min./max.: -25 °C ... 70 °C  
 Medium temperature min./max.: -25 °C ... 70 °C  
 Min. working pressure: 0.1 bar



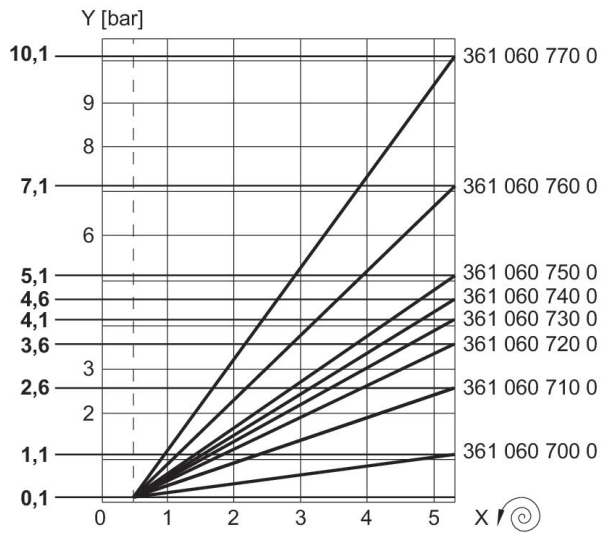
Compressed air connection output	Nominal flow [l/min]	Min. regulation range [bar]	Max. regulation range [bar]	Actuating element	Part No.
G 1/4	900	0.1	1.1	handwheel	3610607000
G 1/4	900	0.1	2.6	handwheel	3610607100
G 1/4	900	0.1	3.6	handwheel	3610607200
G 1/4	900	0.1	4.1	handwheel	3610607300
G 1/4	900	0.1	4.6	handwheel	3610607400
G 1/4	900	0.1	5.1	handwheel	3610607500
G 1/4	900	0.1	7.1	handwheel	3610607600
G 1/4	900	0.1	10.1	handwheel	3610607700

Dimensions



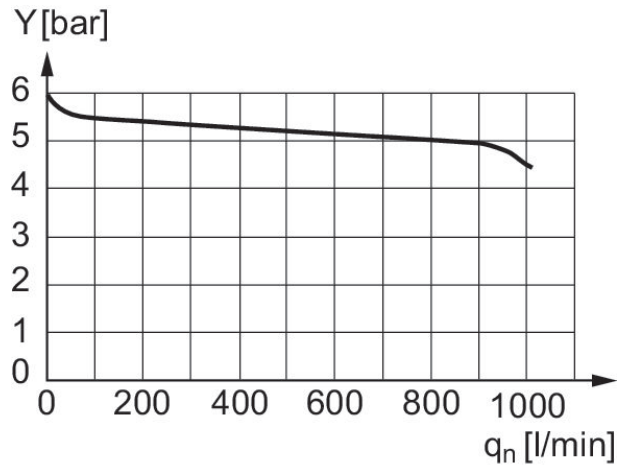
1) The handwheel can be adjusted once the locking ring has been pulled up. 2) hole for mounting plate  $\text{Ø}31$  mm 3) screw cap  
 A = connection output  
 P = connection input  
 R = Port exhaust

Pressure characteristics curve



x = rotations of the handwheel  
The characteristic curve can be moved parallel to the illustrated characteristic curve (in the y direction) using the screw cap.

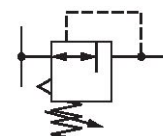
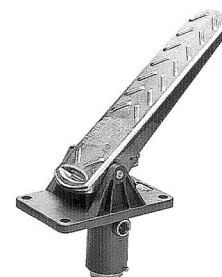
Flow rate characteristic, p2 = 0,05 - 7 bar



input pressure: 8 bar, supply pressure: 6 bar y: pressure in line "A" [bar]

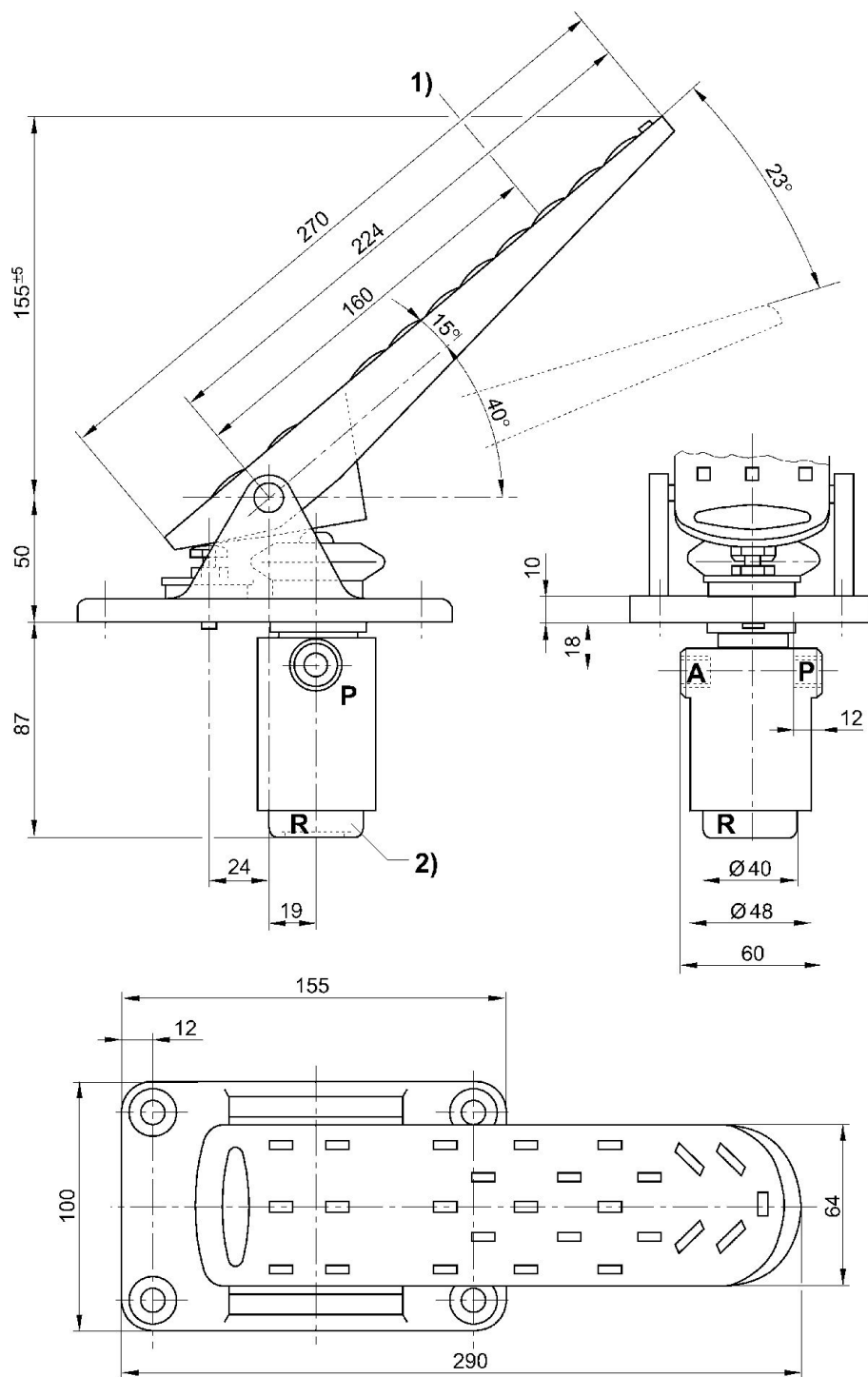
**Fine setting valve**

Ambient temperature min./max.: -25 °C ... 70 °C  
 Medium temperature min./max.: -25 °C ... 70 °C  
 Min. working pressure: 0.1 bar ... 10 bar

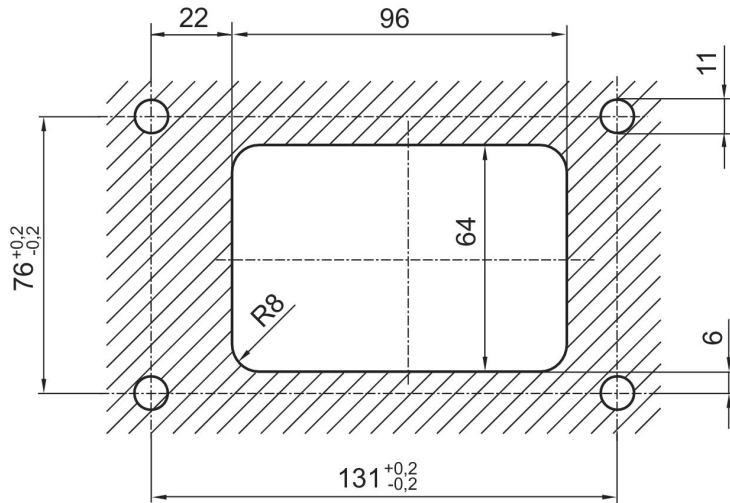


Compressed air connection output	Nominal flow [l/min]	Min. regulation range [bar]	Max. regulation range [bar]	Actuating element	Min. actuating force [N]	Part No.
G 1/4	900	0.1	2.6	Pedal	67	3610647100
G 1/4	900	0.1	4.6	Pedal	77	3610647400
G 1/4	900	0.1	5.1	Pedal	80	3610647500
G 1/4	900	0.1	7.1	Pedal	90	3610647600

Dimensions

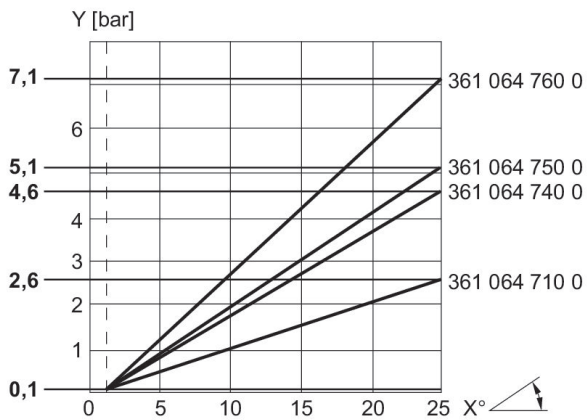


Cut-out in the mounting plate

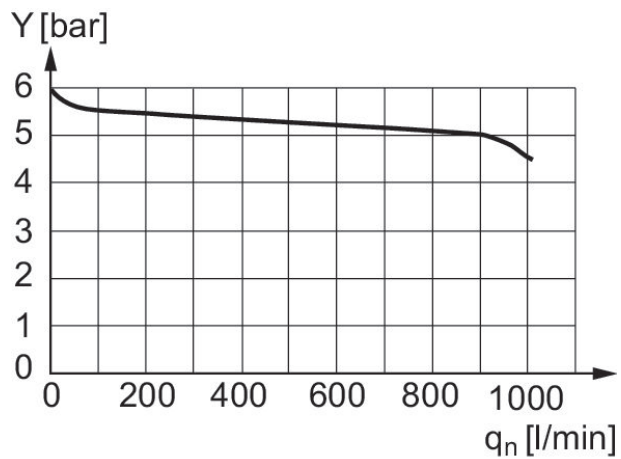


Mounting plate max. 7 mm thick

Pressure characteristics curve



Flow rate characteristic, p2 = 0,05 - 7 bar



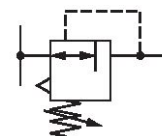
x = pedal path

The characteristic curve can be moved parallel to the illustrated characteristic curve (in the y direction) using the screw cap.

y: pressure in operating line "A" [bar]

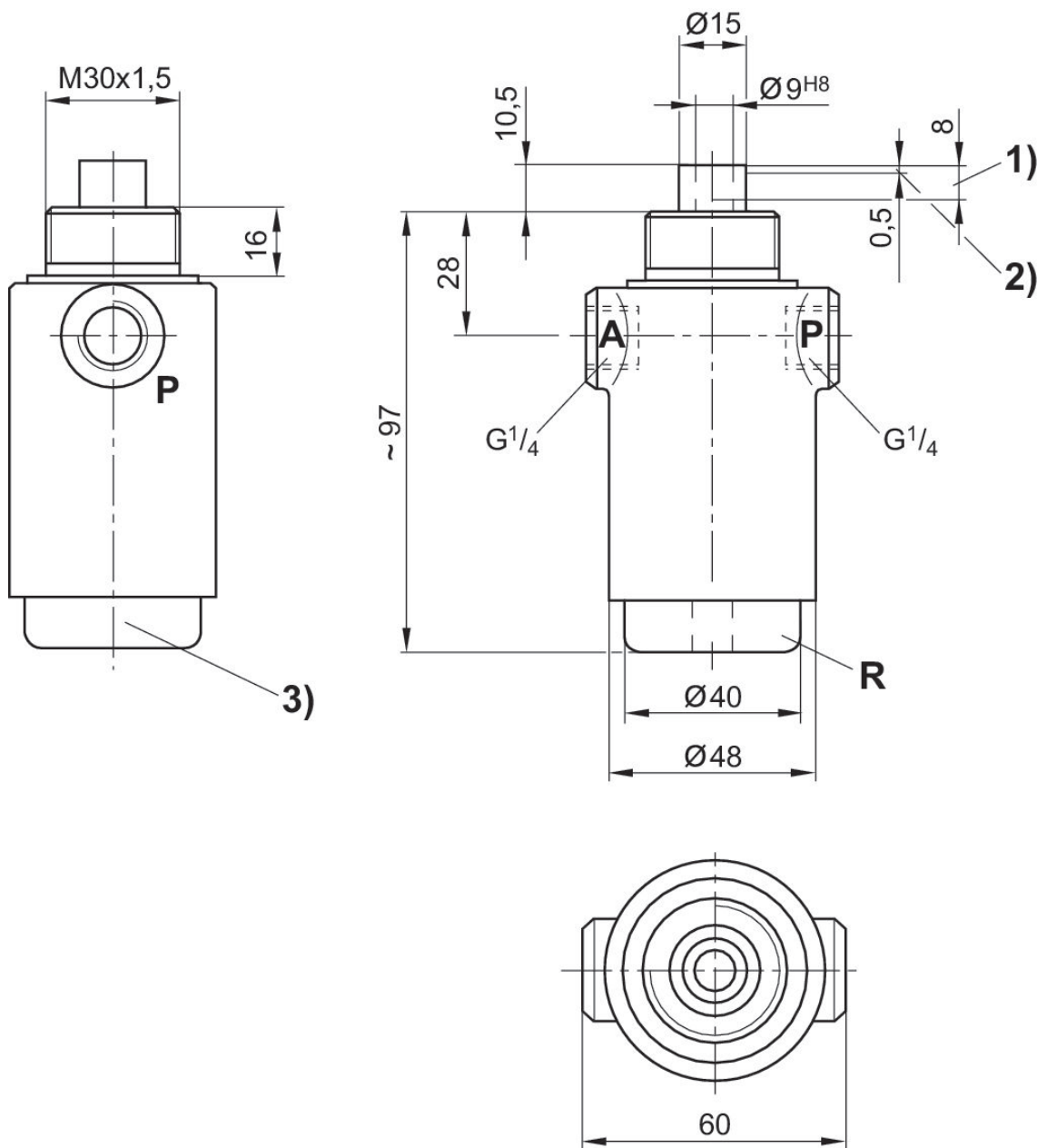
**Fine setting valve**

Ambient temperature min./max.: -25 °C ... 70 °C  
 Medium temperature min./max.: -25 °C ... 70 °C  
 Min. working pressure: 0.1 bar



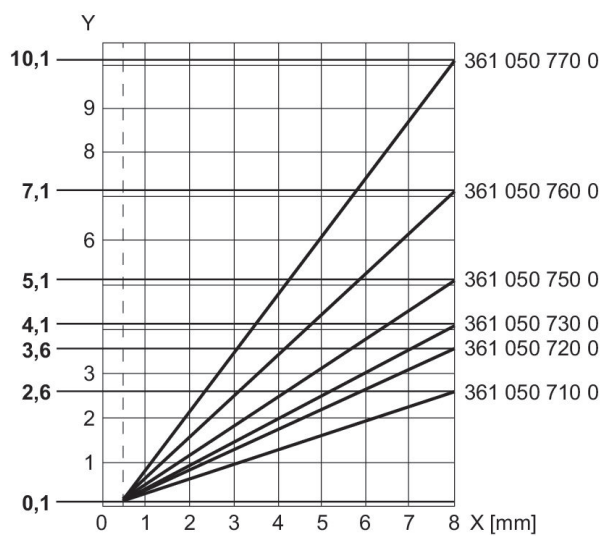
Compressed air connection output	Nominal flow [l/min]	Min. regulation range [bar]	Max. regulation range [bar]	Actuating element	Min. actuating force [N]	Part No.
G 1/4	900	0.1	2.6	Push button	110	3610507100
G 1/4	900	0.1	3.6	Push button	140	3610507200
G 1/4	900	0.1	4.1	Push button	160	3610507300
G 1/4	900	0.1	5.1	Push button	190	3610507500
G 1/4	900	0.1	7.1	Push button	250	3610507600
G 1/4	900	0.1	10.1	Push button	350	3610507700

Dimensions



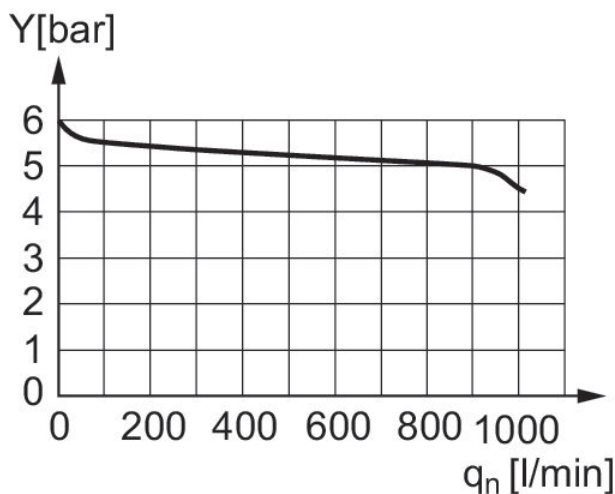
1) Stroke 2) Closing or exhaust stroke 3) Screw cap  
 A = connection output  
 P = connection input  
 R = Port exhaust

Pressure characteristics curve



x = stroke  
The characteristic curve can be moved parallel to the illustrated characteristic curve (in the y direction) using the screw cap.

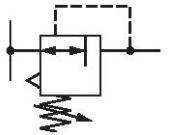
Flow rate characteristic, p2 = 0,05 - 7 bar



input pressure: 8 bar, supply pressure: 6 bar y: pressure in line "A" [bar]

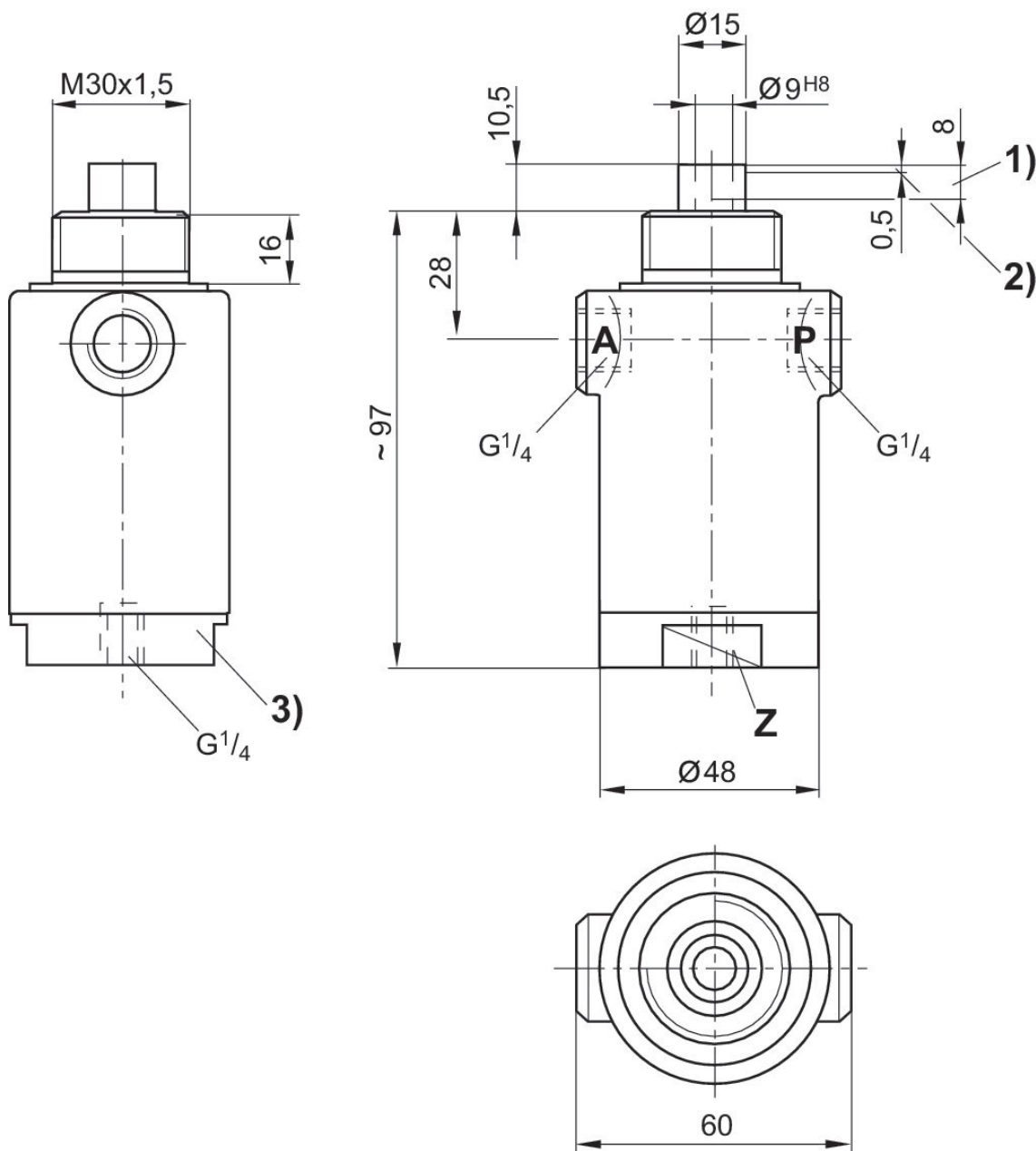
**Fine setting valve, additional pilot connection**

Ambient temperature min./max.: -25 °C ... 70 °C  
 Medium temperature min./max.: -25 °C ... 70 °C  
 Min. working pressure: 0.1 bar ... 10 bar



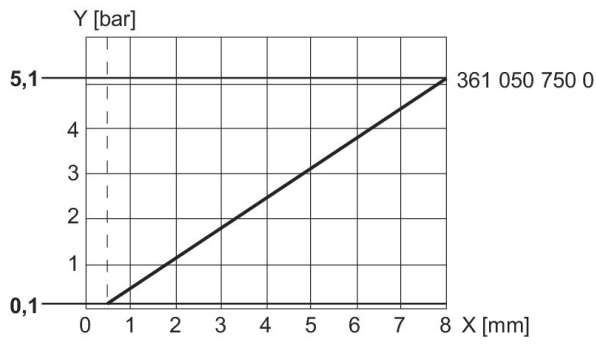
Compressed air connection output	Nominal flow [l/min]	Min. regulation range [bar]	Max. regulation range [bar]	Actuating element	Min. actuating force [N]	Part No.
G 1/4	900	0.1	5.1	Push button	100	3610547500

Dimensions



- 1) Stroke 2) Closing or exhaust stroke 3) Screw cap
- A = connection output
- P = connection input
- Z = control line connection

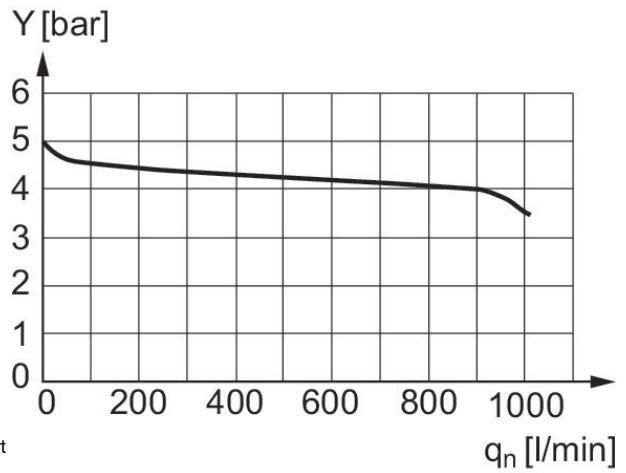
Pressure characteristics curve



x = stroke

When pressurizing port Z, pressure in the operating line (port A) increases by the pressure applied at port Z. The pressure at port A may not exceed the pressure at port P.

Flow rate characteristic, p2 = 0,05 - 7 bar



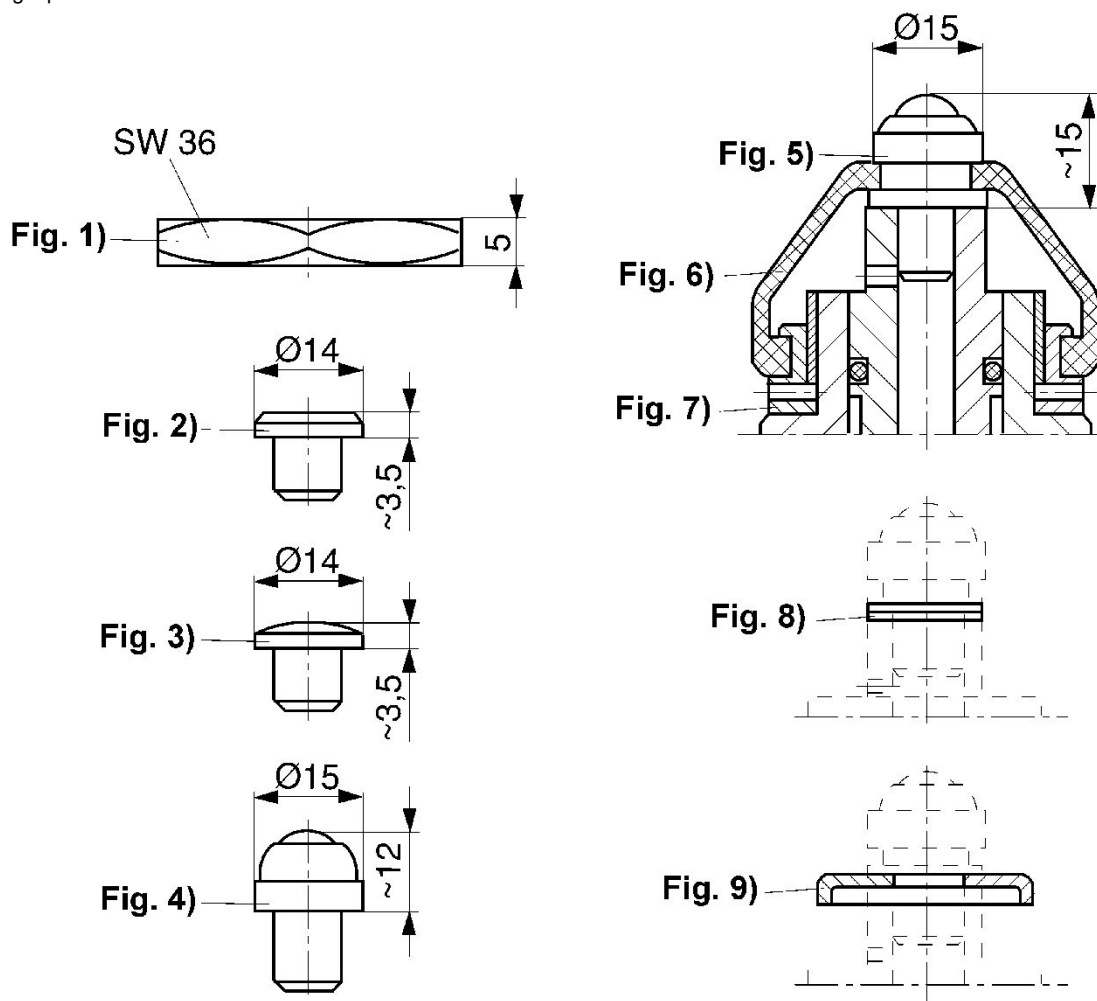
input pressure: 8 bar, supply pressure: 6 bar y: pressure in line "A" [bar]

**Accessories, Series Fine setting valves**

**AVENTICS™**

Type	Fig.	Part No.
Lock nut	Fig. 1	8919902914
Pressure piece (flat)	Fig. 2	8920306514
Pressure piece (spherical)	Fig. 3	8920306504
Pressure piece (with ball)	Fig. 4	8920306702
Pressure piece	Fig. 5	8920306602
Bellows	Fig. 6	8977502904
Threaded rings	Fig. 7	3610504304
Shim 0.2 mm thick	Fig. 8	8951044204
Shim 0.5 mm thick (for pressure pieces Fig. 2-5)	Fig. 8	8951004104
Cover for stroke limitation (for pressure pieces Fig. 2-5)	Fig. 9	8950703004





Dimensions  
Single parts



Efficient pneumatic solutions, our program:  
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air supply management, proportional pressure  
control valves



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