

APPLICATION

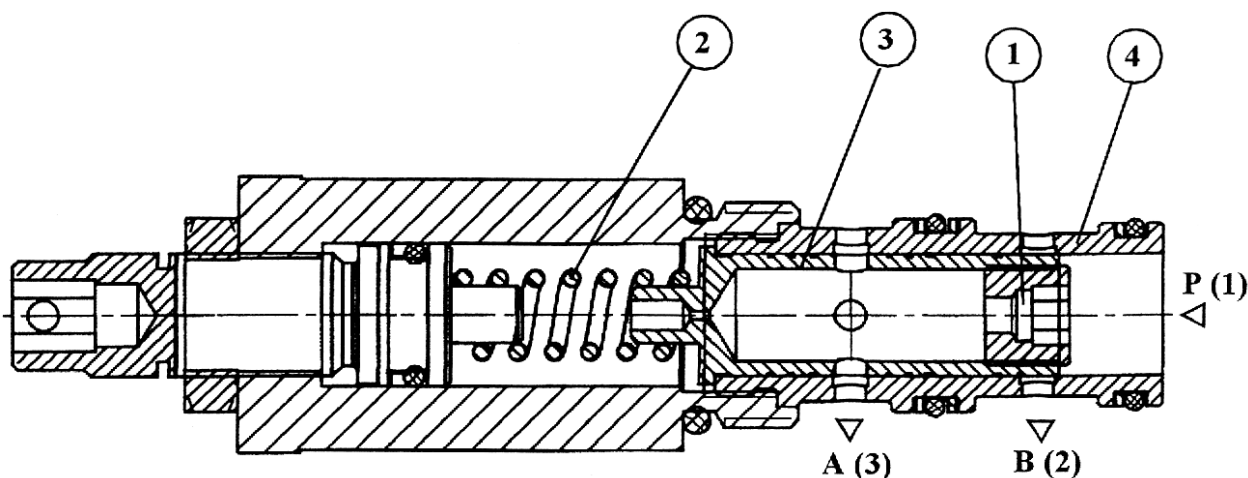
Three-way controllers are used when constant flow rate must be maintained, irrespective of supply flow rate variations (at the pump).



DESCRIPTION OF OPERATION

Three-way controllers consist of two main valves: throttle valve and differential valve. Unlike two-way controllers, three-way controllers are arranged in a parallel connection. The stream flowing in is divided into an acting stream and a residual stream, the latter being discharged to tank through slit in the differential valve.

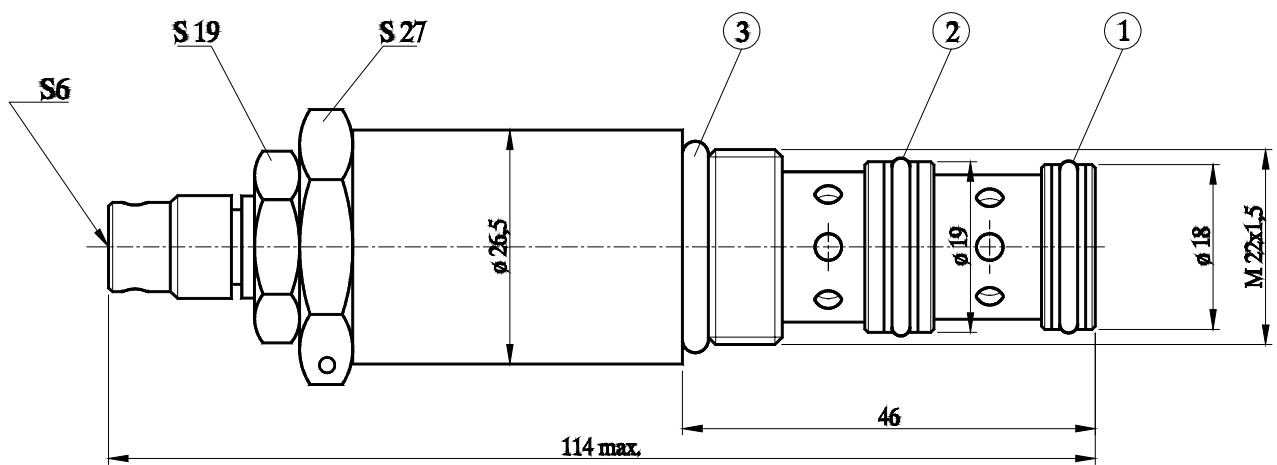
The stream flows into duct P (1). The flow of acting stream through nozzle 1 is caused by pressure difference set with spring 2. Pressure (flow rate) drop across the supply side (duct P(1)) or downstream side (duct A(3)) shifts plunger 3 in sleeve 4 to a new equilibrium position. In this position plunger 3 of differential valve diverts excess oil to tank through duct B(2) while maintaining constant flow A(3).



TECHNICAL DATA

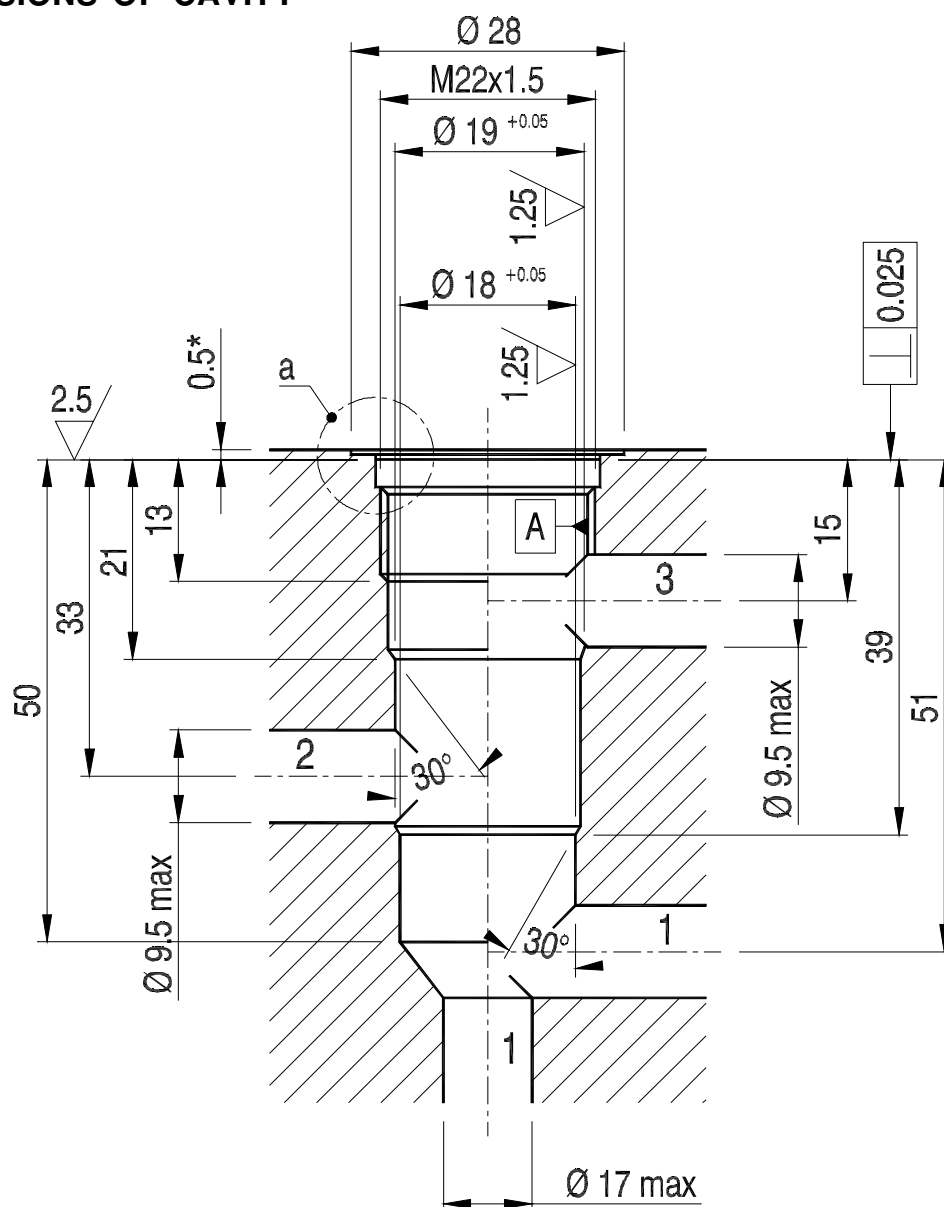
Working fluid	Mineral oil
Nominal fluid viscosity	37 mm ² / s at temperature 328 K
Viscosity range	2,8 up to 380 mm ² / s
Optimum working temperature range	313 up to 328 K
Fluid temperature range	243 up to 343 K
Max pressure	29 MPa
Nominal pressure	29 MPa
Max regulatet fluid flow	32 dm ³ /min
Min regulatet fluid flow	5,5 dm ³ /min
Required fluid filtration	16 µm
Recommended fluid filtration	10 µm
Weight	0,25 kg

OVERALL DIMENSIONS

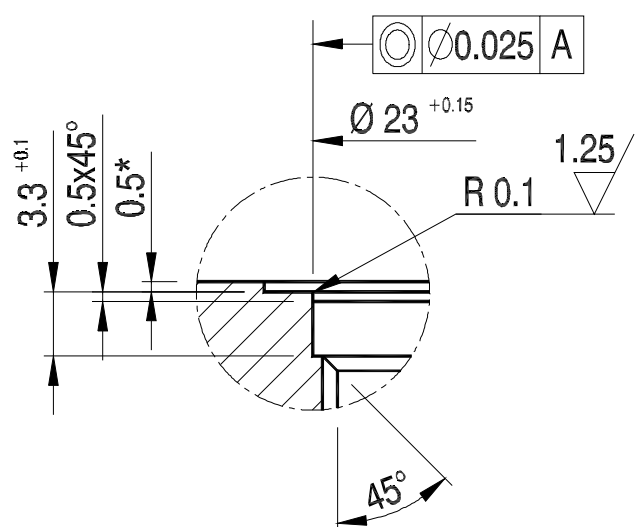


- pos.1 O-ring 15,6 x 1,8
- pos.2 O-ring 18 x 2,65
- pos.3 O-ring 15 x 1,8

DIMENSIONS OF CAVITY

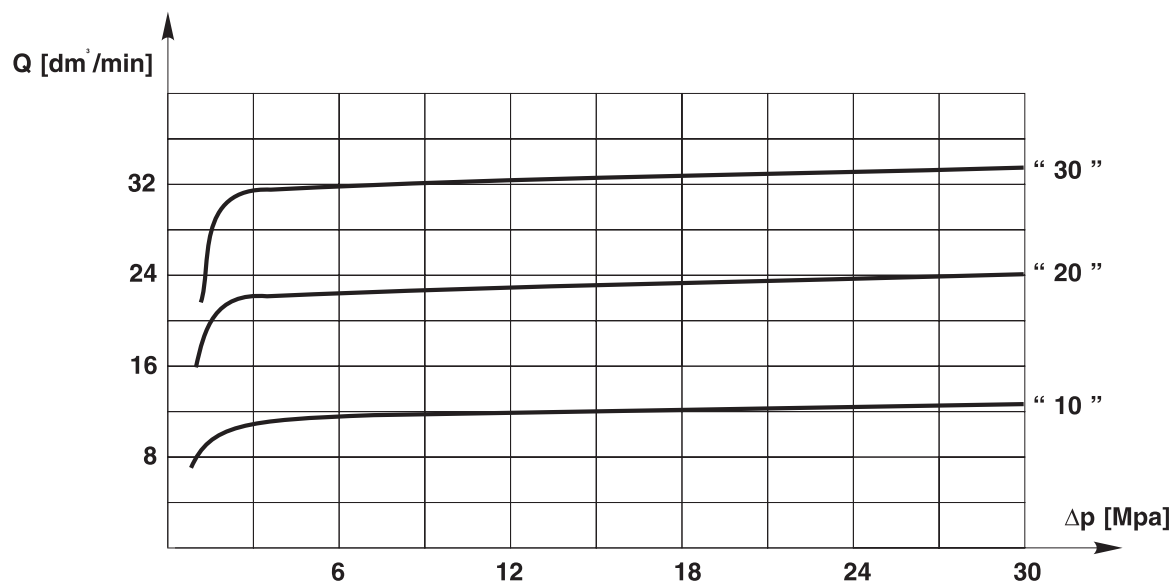


detail "a"



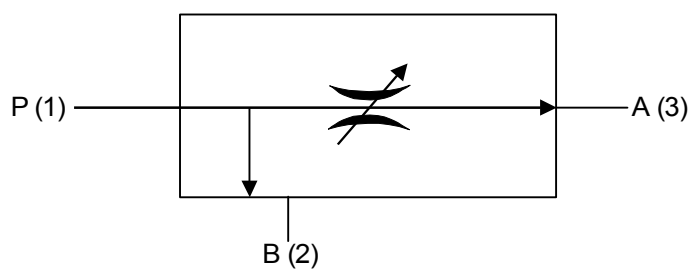
* max. 4.9

PERFORMANCE CURVES at $\nu = 41 \text{ mm}^2/\text{s}$ and temp. 323 K



Regulated flow performec curves

GRAPHICAL SYMBOL



HOW TO ORDER

Orders coded in the way showed below should be forwarded to the manufacturer

UDUN 6	02	M1	2	*
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Valve sign

Series number

02 = 02

(02 - 09) = installation and connection dimension unchanged

Kind of cavity

Cavity M22x1,5

= M1

Regulation range

5,5 - 12 dm³ / min

= 10

11 - 22 dm³ / min

= 20

15 - 32 dm³ / min

= 30

Setting type

- set screw

= 2

Sealing

oilproof

= no designation

viton

= V

Further requirements to be added in text (to agree with the manufacturer)

CODING EXAMPLE:
UDUN6-02/M1-20-2

PONAR WADOWICE S.A.
ul. Wojska Polskiego 29
34-100 Wadowice
tel. 033/ 823 39 43, 823 30 41
fax 033/ 873 48 80
e-mail: ponar@ponar-wadowice.pl

