

**HIDROSIB**  
S.A.



193<sup>rd</sup> Stefan Cel Mare str., 2400 Sibiu -Romania

120...360l/min

# Throttle valves and one-way restrictors - NB10 20 32

FC- 17

Max 315 bar

## GENERALITIES

Throttle valves and one-way restrictors for cartridge mounting.  
With / without integrated by-pass valve  
Manual regulation.

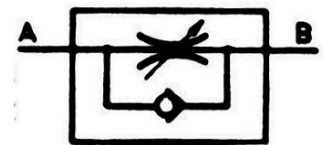
## PERFORMANCE DATA

### GENERAL

Connecting: By cartridge mounting on manifold

Mounting position: unrestricted

Symbol:



Temperature range of ambient medium:  $-20^{\circ}\text{C} \dots +50^{\circ}\text{C}$

### HYDRAULIC

Nominal pressure : 315 bar

Maximal flow:

NB	10	20	32
	120 l/min ,	240 l/min ,	360 l/min ,

Temperature range:  $-20 \dots +80^{\circ}\text{C}$

Fluid :

Fluid type: additive mineral oil.

Viscosity range: 10 ...500mm<sup>2</sup>/s

Filtration: < 25 μm

## CHARACTERISTIC CURVES

Flow rate vs. regulating stroke,

$Q=f(s)$

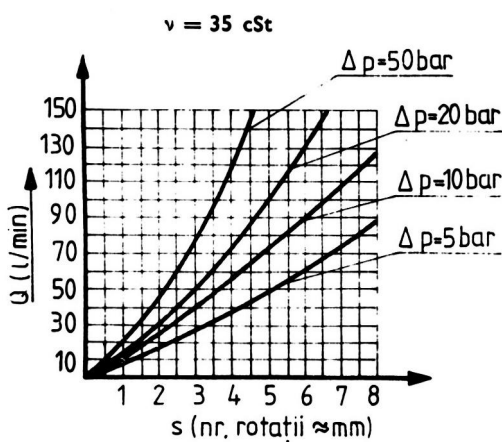


Fig. 1

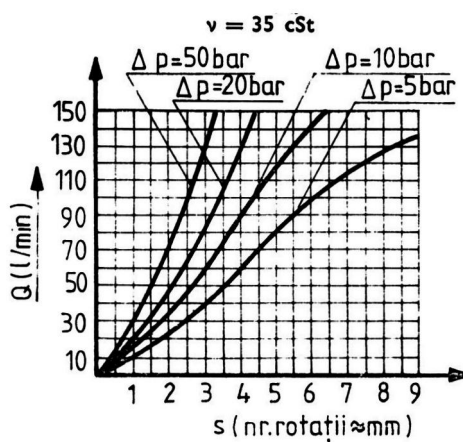


Fig. 2

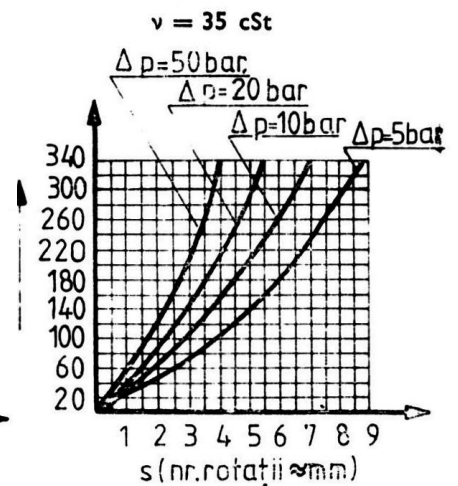


Fig. 3

Pressure drop across by-pass valve (curve 1) vs flow rate, PB-A = f(Q).

$PB-A = f(Q)$

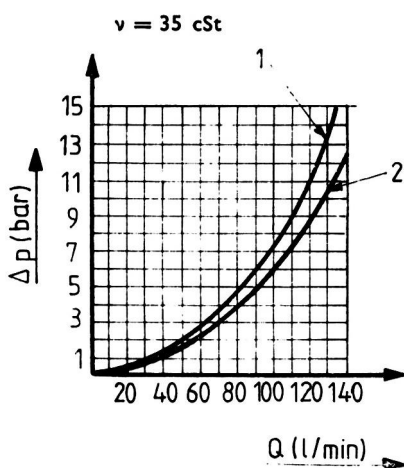


Fig. 4

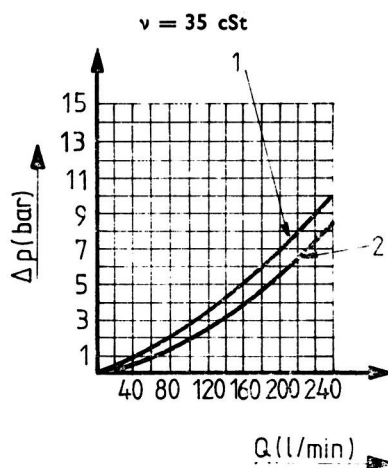


Fig. 5

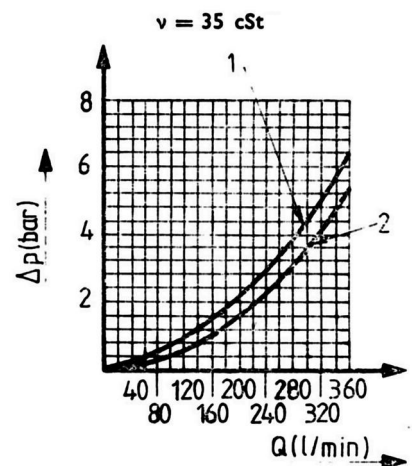


Fig. 6

## DIMENSIONS

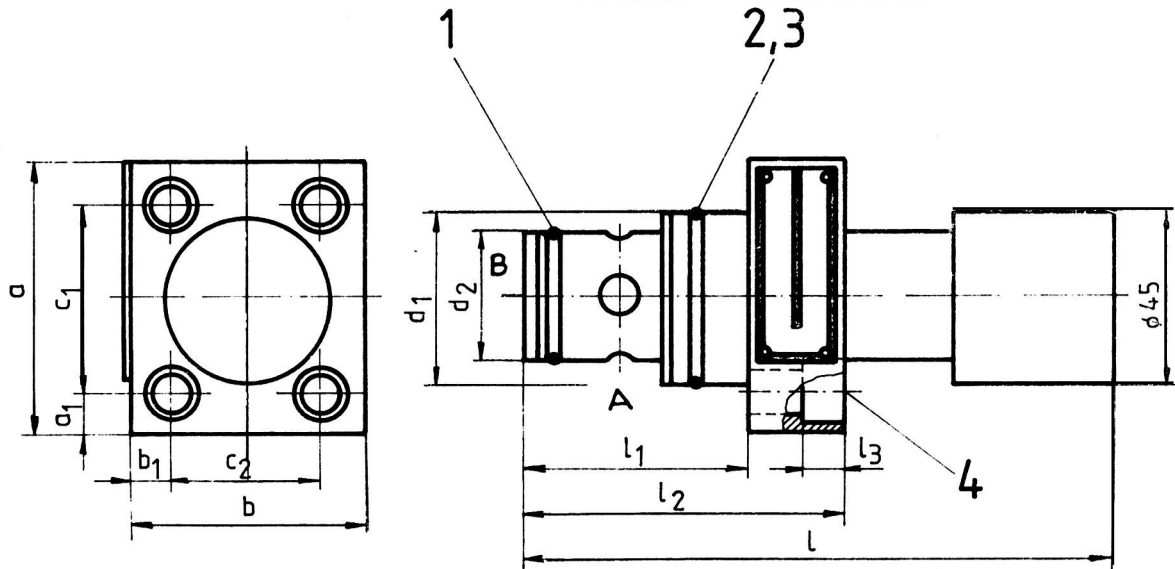


Fig. 7

TABLE 1.

Pos.	Designation	Units	Size		
			10	20	32
1	O - ring	1	28 × 3	39,5 × 3	49,5 × 3
2	O - ring	1	39,5 × 3	49,5 × 3	62,2 × 3
3	Bearing ring	1	45 × 2,3/1	55 × 2,3/1	68 × 2,3/1
4	Screw STAS 5144-80 gr. 10.9	4	M 12 × 30	M 14 × 30	M 14 × 35
	Tightening torque (daNm)		9 +3	16 +2	16 +2

NB	Figures (mm)												Weight (kg)
	a	a <sub>1</sub>	b	b <sub>1</sub>	c <sub>1</sub> <sup>±0,1</sup>	c <sub>2</sub> <sup>±0,1</sup>	d <sub>1</sub>	d <sub>2</sub>	l	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	
10	72	11	62	11	50	40	45	34	156,5	58,5	85	12	1,5
20	85	13,5	75	13,5	58	48	55	45	169,5	71,5	98	14	2,1
32	100	15	90	15	70	60	68	55	175,5	71,5	102	14	3,4

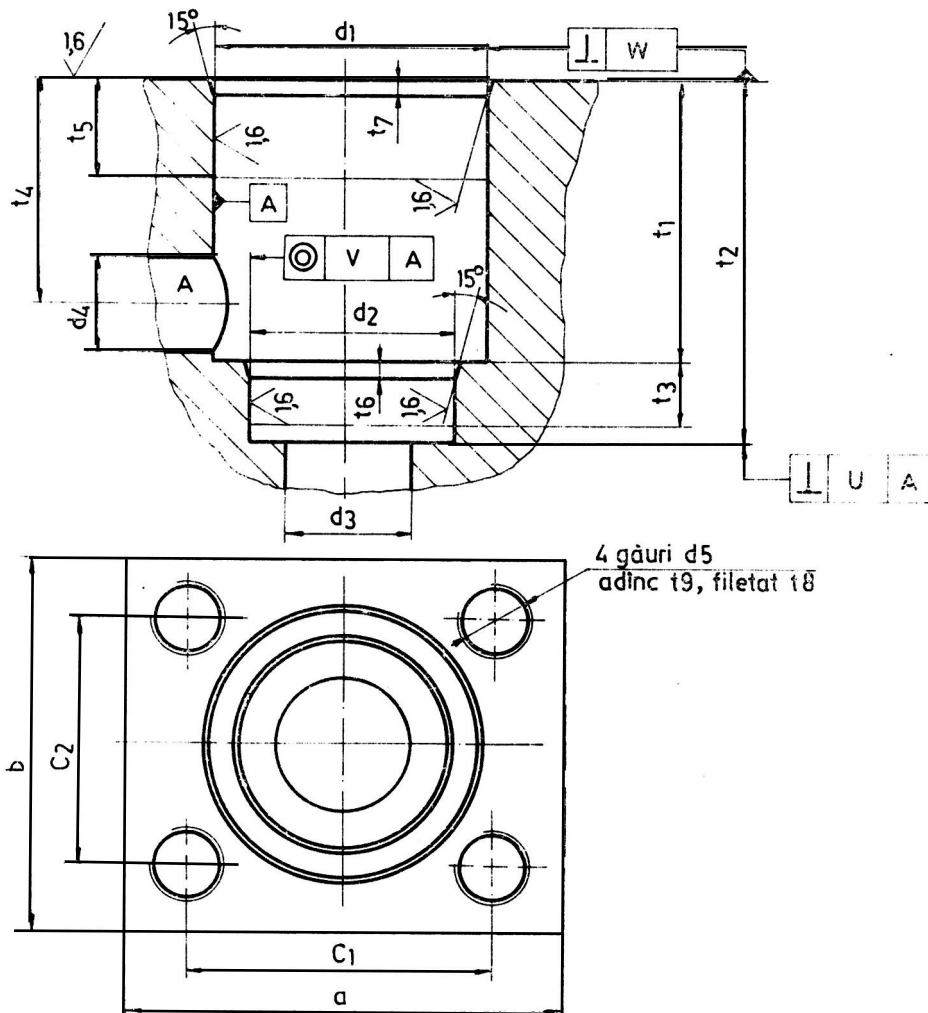


Fig. 8

Nominal bore (NB)	Figures (mm)																				
	a	b	$c_1 \pm 0,1$	$c_2 \pm 0,1$	$d_1$ (H 7)	$d_2$ (H 7)	$d_3$ max	$d_4$ max	$d_5$	$t_1^{+0,5}$	$t_2$ min	$t_3$	$t_4$	$t_5$	$t_6$	$t_7$	$t_8$	$t_9$	u	v	w
10	72	62	50	40	45	34	20	16	M 12	46	59	10	37	16	2,5	2,5	19	23	0,03	∅ 0,06	0,05
20	85	75	58	48	55	45	25	30	M 14	56	72	13	38	23	2	2	22	26	0,03	∅ 0,06	0,05
32	100	90	70	60	68	55	32	32	M 14	54	72	15	37	20	2	2	20	24	0,03	∅ 0,06	0,05

## MODEL CODE

1 2 3 4-5-6

\*For climatic protected model, add at the end of model code "T2"

1. Hydraulic restrictors - DR
2. Throttling:
  - 1 - single way (one-way restrictors)
  - 2 - both ways (throttle valves)
3. Cartridge mounting - K
4. Nominal bore: 10/20/32
5. Adjusting: M -Hand wheel, G-micrometer scaled rotary knob
6. O - Series