

Check valve type S

NS 6 - 40 | p_{max} 40 MPa | Q_{max} 450 dm³/min | WK 433 250



DATA SHEET - OPERATION MANUAL

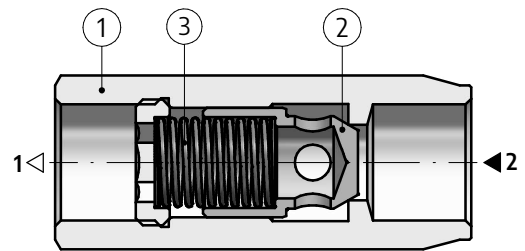
DEVICE CHARACTERISTICS

The S... type check valve is designed for closing hydraulic fluid flow in one direction and opening a free-flow in the opposite direction. The valve is suitable for in-line mounting on pipelines in any working position.



OPERATION DESCRIPTION

After overcoming the spring **3** force (version with a spring), the pressure of the fluid at the inlet of the valve lifts the poppet **2** that blocks the flow and directs the fluid flow to the outlet. In the opposite direction, the spring and working fluid pushes the poppet **2** to the seat in the housing **1** and closes the flow.

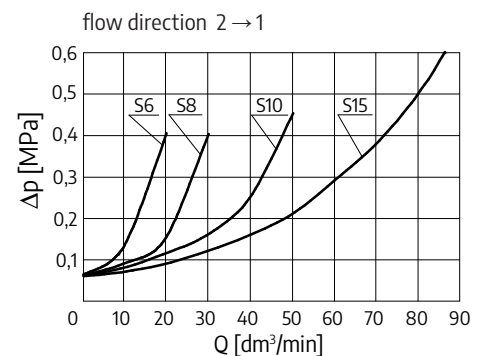


TECHNICAL PARAMETERS

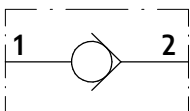
hydraulic fluid	mineral oil
required cleanliness class of oil	ISO 4406 class 19/17/14
nominal fluid viscosity	37 mm ² /s at temperature 55 °C
viscosity range	15 ÷ 250 mm ² /s
fluid temperature range (in tank)	-20 ÷ 80 °C
ambient temperature range	-20 ÷ 50 °C
maximum working pressure	40 MPa (NS 6÷15); 35 MPa (NS20÷30); 25 MPa (NS40)
opening pressure range	0,0 ÷ 0,6 MPa (details on page 2)
maximum flow rate	15 ÷ 450 dm ³ /min
maximum leakage	0,25 cm ³ /min (5 drops/min)
weight	0,10 ÷ 2,7 kg (details on page 2)
filtration	recommended using a 15 µm filter
corrosion protection	zinc coating (electrogalvanizing)
assembly and operation requirements at www.operating-conditions.ponar.pl	

PERFORMANCE CURVES

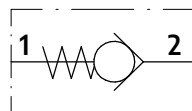
measured at viscosity $\nu = 41 \text{ mm}^2/\text{s}$
and temperature $t = 50 \text{ }^\circ\text{C}$



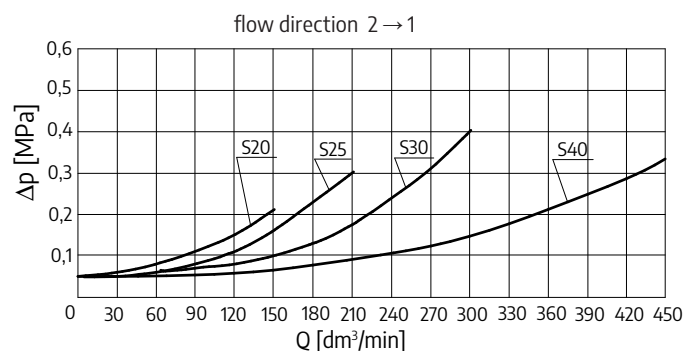
HYDRAULIC DIAGRAM



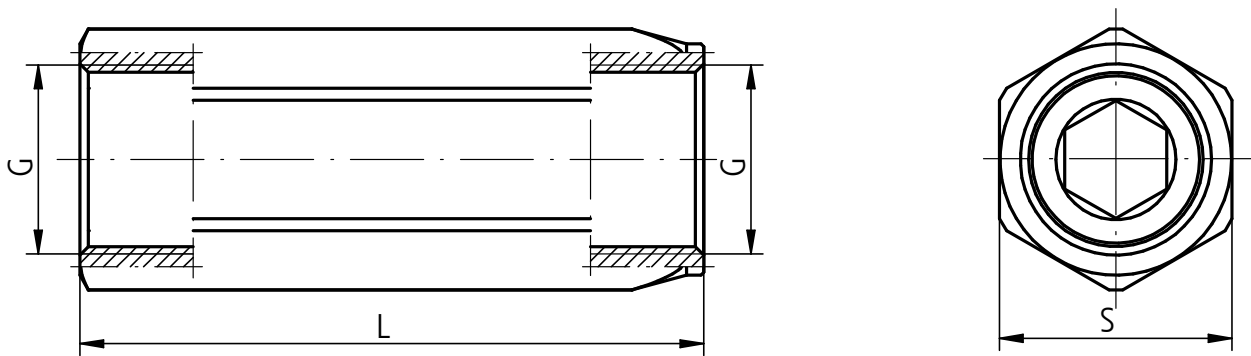
without a spring



with a spring

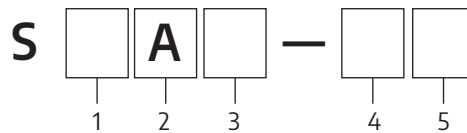


OVERALL AND CONNECTION DIMENSIONS



valve	G	L	S	p_{max} [MPa]	Q_{max} [dm ³ /min]	weight [kg]
S6...	G ¹ / ₄	55	19	40	15	0,10
S8...	G ³ / ₈	65	24		30	0,18
S10...	G ¹ / ₂	75	27		50	0,23
S15...	G ³ / ₄	86,5	35		90	0,45
S20...	G1	110	41	35	150	0,73
S25...	G1 ¹ / ₄	123	55		200	1,5
S30...	G1 ¹ / ₂	138	60		300	1,85
S40...	G2	145	70		450	2,7

HOW TO ORDER



1 nominal size

NS6 =	6
NS8 =	8
NS10 =	10
NS15 =	15
NS20 =	20
NS25 =	25
NS30 =	30
NS40 =	40

2 type of hydraulic connection

threaded connection = A

3 opening pressure

0,0 MPa (without a spring) =	0.0
0,1 MPa =	1.0
0,3 MPa =	3.0
0,45 MPa =	4.5
0,6 MPa =	6.0

4 series number

(20÷29) - connection and installation dimensions unchanged = 2X
series 22 = 22

5 further requirements = *

(to be agreed upon with the manufacturer)

Coding example: S6 A 1.0 - 22

CONTACT

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