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PRESURE REGULATOR **RCW-2**

FUNCTION:

Pressure regulators are designed to maintain set up, constant pressure in process installation, which are connected to regulator's valve outlet, regardless of fluctuation of supply pressure. Regulators are used in water pipe networks in order to prevent the installation against excess pressure increase. Other application need to be consulted with the manufacturer.

CONSTRUCTION:

Regulator comprises three main units:
- a single seated valve (1), which is differential
- pressure balanced
- actuator (2)
- and adjuster set (3)

Regulator features 0% leakage owing to 100% tightness of trim shut-off (metal/EPDM or PTFE sealing). Safe operation of regular, as well as the manufacturer's warranty, are conditioned upon installation of a strainer on the supply side.

PRICIPLE OF OPERATION:

Fluid flowing through the valve constitutes the driving force of the regulator. The impulse of regulated pressure, as measured downstream the valve, is applied to the actuator pressure chamber (2). The resulting pressure on the actuator diaphragm (RCW-2) or piston (RCW-2T) is counterbalanced by the spring tension in the adjuster set (3). Thus, a change in the regulated pressure causes valve (1) opening or closing, and allows for keeping the reduced pressure constant at the valve outlet.

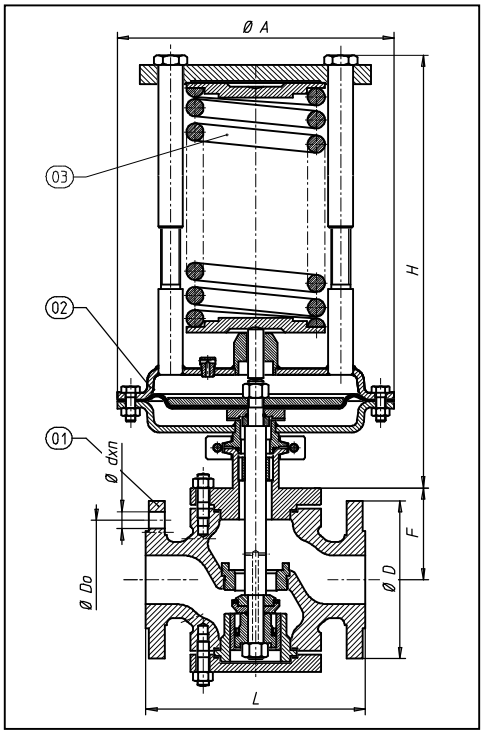
NOTE:
- In order to avoid excess noise, it is recommended to maintain pr (abs) > ½ p supply (abs)
- Kvs values of regulators are selected by manufacturer according to individual customer needs

TECHNICAL DATA:

Technical data	
Body nominal pressure	PN16
Max. pressure	16 bar
Max. temp.	0/100^{0}C
Tighteness	VI kl. wg. PN-EN 60534-4
Proportional range	Xp=16%

MATERIALS:

	Materials		Norm
Body	EN-GJL-250		PN-EN 1561
Body DN20-50	GP240GH	1.0619	PN-EN 10213-2
	GX5CrNiMo19-11-2	1.4408	PN-EN 10213-4
Bonnet	C15E	1.1141	EN 10084
Plug, case	X17CrNi16-2	1.4057	PN EN 10088
Stem	C17CrNi16-2	1.4057	
Plug gasket	PTFE+ brąz		
	EPDM		
	NBR		
Diaphragm	EPDM with poliester texture		



DIMENSIONS:

Diameter DN	20	22	32	40	50	65	80	100	150	200
Kvs coefficient [1)]	5	8	12,5	20	34	50	80	115	175	250
D [mm]	105	115	140	150	165	185	200	220	285	340
L[mm]	184	184	200	222,5	254	290	310	350	451	543
D_0 [mm]	75	85	100	110	125	145	160	180	240	295
d [mm]	14	14	18	18	18	18	18	18	22	22
n	4	4	4	4	4	4	8	8	8	12
F [mm]	98,5	98,5	98,5	101,5	116	132	165	180	241	283
Weight [kg]	18	22	28	34	42	55	73	106	154	215

1) Other Kvs coefficient can be prepared for the order

Acutator		Springs [kPa]	
Surface [cm²]	Ø A		
80	190	200-950 200-1100	
100	190	150-750	
160	230	30-160 50-240 60-300 80-400 100-480 100-560	
320	290	10-40 15-80 30-160 50-280	80-375 100-550
Wysokość max.	H	400	625

2) Other springs can be prepared for the order

MONTAGE

It is recommended to install valve at the horizontal pipe with flow direction showed at the valve body
Before valve should be installed strainer Fs1