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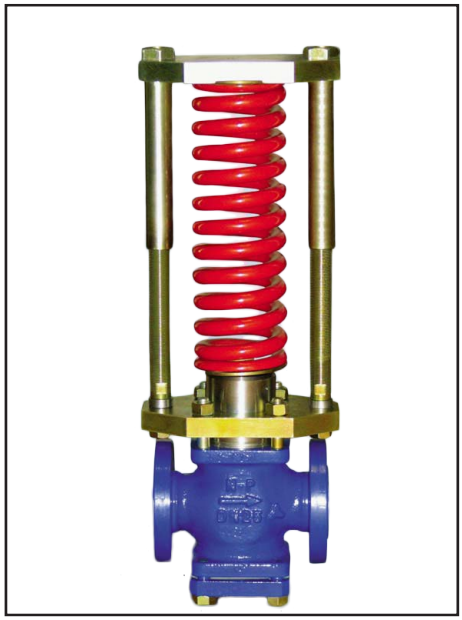
PRESURE REGULATOR **RCW-2T**

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.

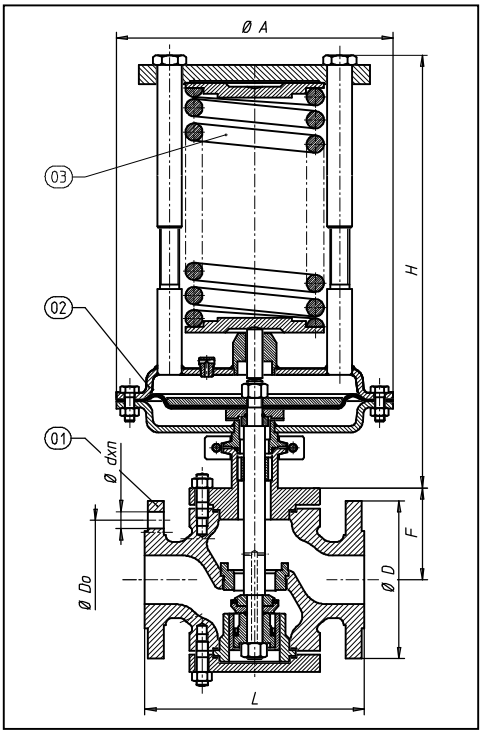
NOTE:
- In order to avoid excess noise, it is recommended to maintain pr (abs) > ½ p supply (abs)
- Kvs values of regulators are selected by manufacturer according to individual customer needs

TECHNICAL DATA:

Technical data	
Body nominal pressure	PN16/40
Max. pressure	40 bar
Max. temp.	0/240^{0}C
Tighteness	VI kl. wg. PN-EN 60534-4
Proportional range	Xp=16%

MATERIALS:

	Materials		Norm
Body	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	X17CrNi16-2	1.4057	
Cylinder, piston	X17CrNi16-2	1.4057	
Plug gasket	PTFE+ bronze		
	EPDM		
	NBR		



DIMENSIONS:

Diameter DN	20	22	32	40	50
Kvs coefficient [1]	5	8	12,5	20	34
D [mm]	105	115	140	150	165
L[mm]	184	184	200	222,5	254
D_0 [mm]	75	85	100	110	125
d [mm]	14	14	18	18	18
n	4	4	4	4	4
F [mm]	98,5	98,5	98,5	101,5	116
Weight [kg]	18	22	28	34	42

1) Other Kvs coefficient can be prepared for the order

Acutator		Springs [kPa]	
Surface [cm^2]	Ø A		
22	53	1000-3500	1000-3600
37	69	400-2000 500-2200	500-3200
65	91	200-1100 500-1300	500-2600
106	116	100-700 200-800	500-1800
Max. height	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