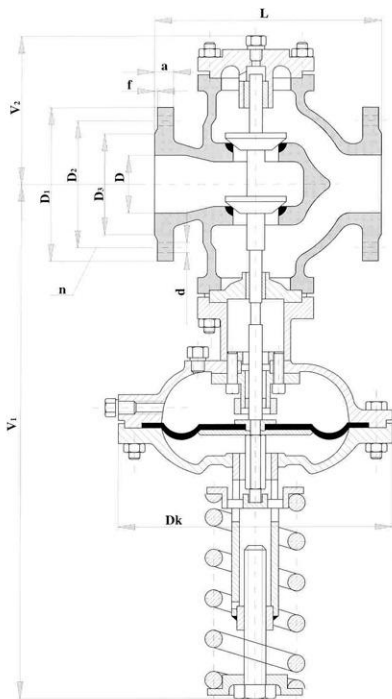


Output pressure controller

2310

PN 40



Application

Controller is intended for regulation of input (unsteady) pressure to a constant output pressure. This type is for water and air, for maximum pressures up to PN 40 and temperatures up to 130°C. Controller cannot be used for flammable and toxic fluids. Reduced (output) pressure is adjusted and controlled by a spring (each spring is for fixed expanse pressure). Kv number is volume rate of service fluid (in m³/h - water volume flow rate with water density 100kg/m³, when valve pressure drop is 1 bar).

Minimum differential pressure

$$\frac{p_1(\text{abs.})}{p_2(\text{abs.})} > 1,2$$

Set values of output pressure (p_2) and maximum allowable pressure load of a diaphragm (bar) are given in the table below.

Connecting and face-to-face dimensions

Face-to-face dimensions are given in the table below.

Material

Body	GG 25
Seat, conical disk	chrome steel
Valve bushing	brass (CuZn40)
Membrane	EPDM

Installation

Pressure controller is installed in horizontal piping with spring in vertical position under the axis of pipeline. The correct flow direction is indicated by an arrow on the body. The stop valve must be set upstream the strainer, which is set upstream the controller. The stop valve must have the same nominal inside diameter as the controller. Safety valve must be set in specified distance downstream the controller and stop valve must not be set between these elements.

DN	D	L	V ₁	V ₂	D ₁	D ₂	D ₃	a	f	d	n	kg	kg	kg	kg	kg
25	25	160	568	96	115	85	68	18	2	14	4	21	24	27	-	-
32	32	180	568	96	140	100	78	18	2	18	4	23	26	29	-	-
40	40	200	650	146	150	110	88	18	3	18	4	31	34	40	51	-
50	50	230	650	146	165	125	102	20	3	18	4	33	36	42	53	-
65	65	290	650	146	185	145	122	22	3	18	8	38	41	47	58	-
80	80	310	650	146	200	160	138	24	3	18	8	41	44	50	61	-
100	100	350	775	204	235	190	162	24	3	22	8	64	67	73	87	102
125	125	400	775	204	270	220	188	26	3	26	8	78	81	87	101	116
150	150	480	865	294	300	250	218	28	3	26	8	133	136	142	156	171
200	200	600	865	294	375	320	285	34	3	30	12	189	192	198	215	227
Size of diaphragm												120	160	225	330	430
Dk												175	220	285	395	495

Technical data

Leakage of a closed valve: 0,5% Kvs

Permeability: 5 - 100% of Kvs

DN	25	32	40	50	65	80	100	125	150	200
Kvs	5	8	12,5	20	31,5	50	80	125	200	280
	8	12,5	20	31,5	50	80	125	200	280	450

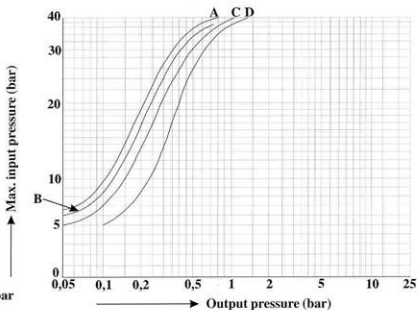
Set values of output pressure (p_2) and maximum diaphragm pressure load (bar):

DN	25 - 32			40 - 80				100 - 200				
Scope of output pressure	12-20	2,2-1,3	0,05-1,3	12-20	5-9	1,3-2	0,05-0,4	12-20	5-8	1,4-2	0,1-0,4	
p_2 (bar)	20-25	6-9	1,3-2,2	20-25	9-12	2-3,5	0,4-0,7	20-25	8-10	2-3,5	0,4-0,9	
		9-12				3,5-5	0,7-1,3		10-12	3,5-5	0,9-1,4	
Max. load on membrane (bar)	35	16	7	35	16	7	3	35	16	7	3	$p_2 + 1$ bar
Membrane size Kvs	120	160	225	120	160	225	330	120	160	225	330	430

GRAPH:

Dependence of max. allowable pressure on inlet (p_1) and outlet (p_2) for liquids.

Differential pressure $p_1 - p_2 = 15$ bar must not be exceeded independently of graph data.



- A - for DN 25 - 32
- B - for DN 32 - 80
- C - for DN 80 - 125
- D - for DN 125 - 200

Note:

Max. input pressure for DN 15 is 34 bar