



ADCA Pressure reducing valve Type 1905 series RP45G ductile cast iron direct-acting flange EN1092-2



The ADCA series RP45G is a self-acting pressure reducing valve with high durability stainless steel bellows providing a pressure balancing and frictionless plug stem which makes it very accurate and gives it a fast response. This construction in combination with a large array of actuators and springs makes achieving a high reducing ratio from 25 : 1 and rangeability from 10 : 1 possible.

Characteristics

Series: RP45G
Type: 1905
Model: Direct-acting
Process connection: Flange
Standard connection: EN 1092-1
Maximum inlet pressure: 13 bar
Min. outlet pressure [bar]: 0.15 bar
PMA - maximum allowable pressure: 16 bar
PMO - maximum operating pressure: 13 bar
TMO - maximum operating temperature: 200 °C
Max. pressure ratio: 25:1
Control ratio: 10:1
Suitable for gases: Yes
Housing material: Ductile cast iron
Material quality: EN-GJS-400-15
Material disc: 1.4021
Seat material: 1.4401
O-ring material: EPDM
Actuator material: ASTM A216 WCB/1.0619
Membrane material: CR reinforced with PA
Spring material: Spring steel
Mounting direction: Horizontal
Flow direction: through arrow marking on housing
Approvals: PED 2014/68/EU fluid group 2

Application

- Compressed air.
- Steam.
- Gases that do not affect the structure.

Technical Information

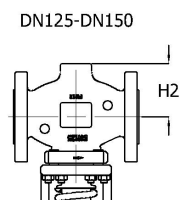
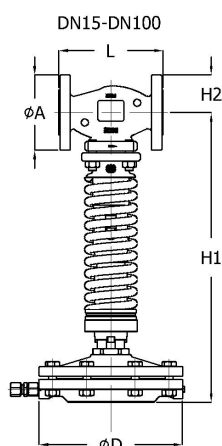
- Installation in a horizontal position with the actuator pointing vertically downwards. Installation with the actuator pointing upwards, i.e. position above the pipeline, is only possible if the medium temperature is below 90 °C.

Options

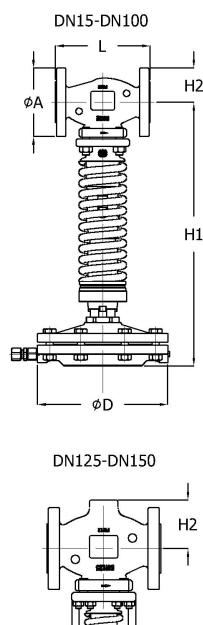
- NBR soft sealing for air and gas applications when tight shut-off is required.
- Low noise divider.
- Complete stainless steel versions.
- Copper tubing from actuator to seal pot and from housing to adaptor point on the pipe line.
- ANSI RF flanges.

Size table:

Dimension	Actuator	A mm	ØD mm	H1 mm	H2 mm	L mm	Weight kg
DN15	A4	95	340	447	47.5	130	25.8
DN15	A3	95	282	437	47.5	130	20.8
DN15	A2/A21	95	220	440	47.5	130	16.8
DN15	A1/A10/ A11	95	172	433	47.5	130	13.8
DN20	A4	105	340	447	52.5	150	26.5
DN20	A3	105	282	437	52.5	150	21.5
DN20	A1/A10/ A11	105	172	433	52.5	150	14.5
DN20	A2/A21	105	220	440	52.5	150	17.5
DN25	A4	115	340	452	57.5	160	27.5
DN25	A3	115	282	442	57.5	160	22.5
DN25	A1/A10/ A11	115	172	543	57.5	160	15.5
DN25	A2/A21	115	220	445	57.5	160	18.5
DN32	A1/A10/ A11	140	172	444	70	180	18.3
DN32	A4	140	340	458	70	180	30.3
DN32	A2/A21	140	220	451	70	180	21.3
DN32	A3	140	282	448	70	180	25.3
DN40	A3	150	282	455	75	200	26.8
DN40	A1/A10/ A11	150	172	451	75	200	19.8
DN40	A4	150	340	465	75	200	31.8
DN40	A2/A21	150	220	458	75	200	22.8
DN50	A1/A10/ A11	165	172	537	82.5	230	26
DN50	A4	165	340	551	82.5	230	38
DN50	A2/A21	165	220	544	82.5	230	29
DN50	A3	165	282	541	82.5	230	33
DN65	A3	185	282	566	92.5	290	43.5
DN65	A1/A10/ A11	185	172	562	92.5	290	36.5
DN65	A4	185	340	576	92.5	290	48.5
DN65	A2/A21	185	220	569	92.5	290	39.5
DN80	A1/A10/ A11	200	172	623	100	310	49.7
DN80	A2/A21	200	220	630	100	310	52.7
DN80	A4	200	340	637	100	310	61.7
DN80	A3	200	282	627	100	310	56.7
DN100	A2/A21	220	220	671	110	350	60.6
DN100	A3	220	282	668	110	350	64.6



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Size table:

Dimension	Actuator	A	ØD	H1	H2	L	Weight
DN100	A4	220	340	678	110	350	69.6
DN125	B2/B21	250	220	780	160	400	98.7
DN125	B1	250	172	774	160	400	95.7
DN125	B 4	250	340	792	160	400	109.9
DN125	B3	250	283	782	160	400	102.9
DN150	B3	285	283	798	180	480	124.6
DN150	B2/B21	285	220	796	180	480	120.4
DN150	B 4	285	340	808	180	480	131.6
DN150	B1	285	172	790	180	480	117.4

Size process connection	Kvs value m³/h	Reduced pressure range bar	Type coding actuator	Spring type	PED classification	Article
DN15	4.8	0.15 / 0.49	A4	66	PED-SEP	14098158
DN15	4.8	0.5 / 0.99	A4	60	PED-SEP	14098159
DN15	4.8	1 / 1.6	A3	60	PED-SEP	14098160
DN15	4.8	3.9 / 5.5	A21	60	PED-SEP	14098162
DN15	4.8	1.7 / 3.8	A2	60	PED-SEP	14098161
DN15	4.8	5.6 / 8.2	A1	60	PED-SEP	14098163
DN15	4.8	8.3 / 13	A11	60	PED-SEP	14098164
DN20	6.9	0.15 / 0.49	A4	66	PED-SEP	14098165
DN20	6.9	0.5 / 0.99	A4	60	PED-SEP	14098166
DN20	6.9	1 / 1.6	A3	60	PED-SEP	14098167
DN20	6.9	8.3 / 13	A11	60	PED-SEP	14098171
DN20	6.9	5.6 / 8.2	A1	60	PED-SEP	14098170
DN20	6.9	1.7 / 3.8	A2	60	PED-SEP	14098168
DN20	6.9	3.9 / 5.5	A21	60	PED-SEP	14098169
DN25	9.1	0.5 / 0.99	A4	60	PED-SEP	14098173
DN25	9.1	0.15 / 0.49	A4	66	PED-SEP	14098172
DN25	9.1	1 / 1.6	A3	60	PED-SEP	14098174
DN25	9.1	5.6 / 8.2	A1	60	PED-SEP	14098177
DN25	9.1	8.3 / 13	A11	60	PED-SEP	14098178
DN25	9.1	3.9 / 5.5	A21	60	PED-SEP	14098176
DN25	9.1	1.7 / 3.8	A2	60	PED-SEP	14098175
DN32	11.8	8.3 / 13	A11	60	PED-SEP	14098185
DN32	11.8	0.15 / 0.49	A4	66	PED-SEP	14098179
DN32	11.8	1.7 / 3.8	A2	60	PED-SEP	14098182
DN32	11.8	5.6 / 8.2	A1	60	PED-SEP	14098184
DN32	11.8	3.9 / 5.5	A21	60	PED-SEP	14098183
DN32	11.8	1 / 1.6	A3	60	PED-SEP	14098181
DN32	11.8	0.5 / 0.99	A4	60	PED-SEP	14098180
DN40	14.4	1 / 1.6	A3	60	PED-SEP	14098188
DN40	14.4	8.3 / 13	A11	60	PED-SEP	14098192

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Size process connection	Kvs value m³/h	Reduced pressure range bar	Type coding actuator	Spring type	PED classification	Article
DN40	14.4	0.5 / 0.99	A4	60	PED-SEP	14098187
DN40	14.4	1.7 / 3.8	A2	60	PED-SEP	14098189
DN40	14.4	0.15 / 0.49	A4	66	PED-SEP	14098186
DN40	14.4	3.9 / 5.5	A21	60	PED-SEP	14098190
DN40	14.4	5.6 / 8.2	A1	60	PED-SEP	14098191
DN50	26.5	8.9 / 13	A11	64	PED-SEP	14098199
DN50	26.5	7 / 8.5	A1	64	PED-SEP	14098198
DN50	26.5	0.15 / 0.49	A4	67	PED-SEP	14098193
DN50	26.5	0.5 / 0.99	A4	61	PED-SEP	14098194
DN50	26.5	4.3 / 6.9	A21	61	PED-SEP	14098197
DN50	26.5	1.3 / 1.9	A3	61	PED-SEP	14098195
DN50	26.5	2 / 4.2	A2	61	PED-SEP	14098196
DN65	51.5	1.3 / 1.9	A3	61	PED cat. I	14098202
DN65	51.5	7 / 8.5	A1	64	PED cat. I	14098205
DN65	51.5	0.5 / 0.99	A4	61	PED cat. I	14098201
DN65	51.5	8.9 / 13	A11	64	PED cat. I	14098206
DN65	51.5	4.3 / 6.9	A21	61	PED cat. I	14098204
DN65	51.5	0.15 / 0.49	A4	67	PED cat. I	14098200
DN65	51.5	2 / 4.2	A2	61	PED cat. I	14098203
DN80	79.5	9 / 13	A1	65	PED cat. I	14098212
DN80	79.5	5.1 / 8.9	A21	62	PED cat. I	14098211
DN80	79.5	0.15 / 0.45	A4	68	PED cat. I	14098207
DN80	79.5	0.46 / 0.99	A4	62	PED cat. I	14098208
DN80	79.5	1 / 1.9	A3	62	PED cat. I	14098209
DN80	79.5	2 / 5	A2	62	PED cat. I	14098210
DN100	129.5	6.1 / 13	A21	63	PED cat. I	14098217
DN100	129.5	2 / 6	A2	63	PED cat. I	14098216
DN100	129.5	1 / 1.9	A3	63	PED cat. I	14098215
DN100	129.5	0.15 / 0.45	A4	69	PED cat. I	14098213
DN100	129.5	0.46 / 0.99	A4	63	PED cat. I	14098214
DN125	150	1.5 / 5	B2	70	PED cat. I	14098220
DN125	150	6 / 12	B1	70	PED cat. I	14098222
DN125	150	4 / 8.5	B21	70	PED cat. I	14098221
DN125	150	0.5 / 1.5	B 4	70	PED cat. I	14098218
DN125	150	1.1 / 2.5	B3	70	PED cat. I	14098219
DN150	204	1.1 / 2.5	B3	70	PED cat. I	14098224
DN150	204	1.5 / 5	B2	70	PED cat. I	14098225
DN150	204	0.5 / 1.5	B 4	70	PED cat. I	14098223
DN150	204	6 / 12	B1	70	PED cat. I	14098228
DN150	204	4 / 8.5	B21	70	PED cat. I	14098226

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