



AVK CONTROL VALVE, PRESSURE REDUCING, PN10/16

859/000X-001

Reduced bore, AISI 316 pipes and fittings, DN65-600

AVK diaphragm operated control valves for pressure reducing applications (PRV) automatically reduce a higher inlet pressure to a lower outlet pressure. The outlet pressure is kept constant, regardless of changes in flow rate or inlet pressure. The main control valve is pilot operated, capable of precise setting and easy adjustment of outlet pressure.

Product description:

Pressure reducing control valve (PRV), reduced bore, for water and neutral liquids to max. 70° C

Standards:

- Designed according to EN 1074 - 5
- Face-to-face dimension according to EN 558 Table 2 Basic Series 1
- Standard flange drilling to EN1092-2 (ISO 7005-2), PN10/16

Test/Approvals:

- Seat: 1.1 x PN. Body: 1.5 x PN.
- Belgaqua approved
- WRAS approved materials

Features:

Main control valve

- Lifted seat to avoid damage due to cavitation
- Geometry of regulating plug provides high ratio of travel Kv, resulting in optimal control performance
- Non-symmetric axial position of rubber diaphragm results in less stretch/stress near closed position
- All non-coated internals made of stainless steel AISI 316
- Body and bonnet of ductile iron with fusion bonded epoxy, 300micron, GSK approved, RAL 5017, according to DIN 3476 and WRAS-DVGW/W270/UBA.
- All rubber components with multiple approvals (EN 681-1, KTW, W270, ACS, WRAS)

Pilot system (EP patent No. 2855989)

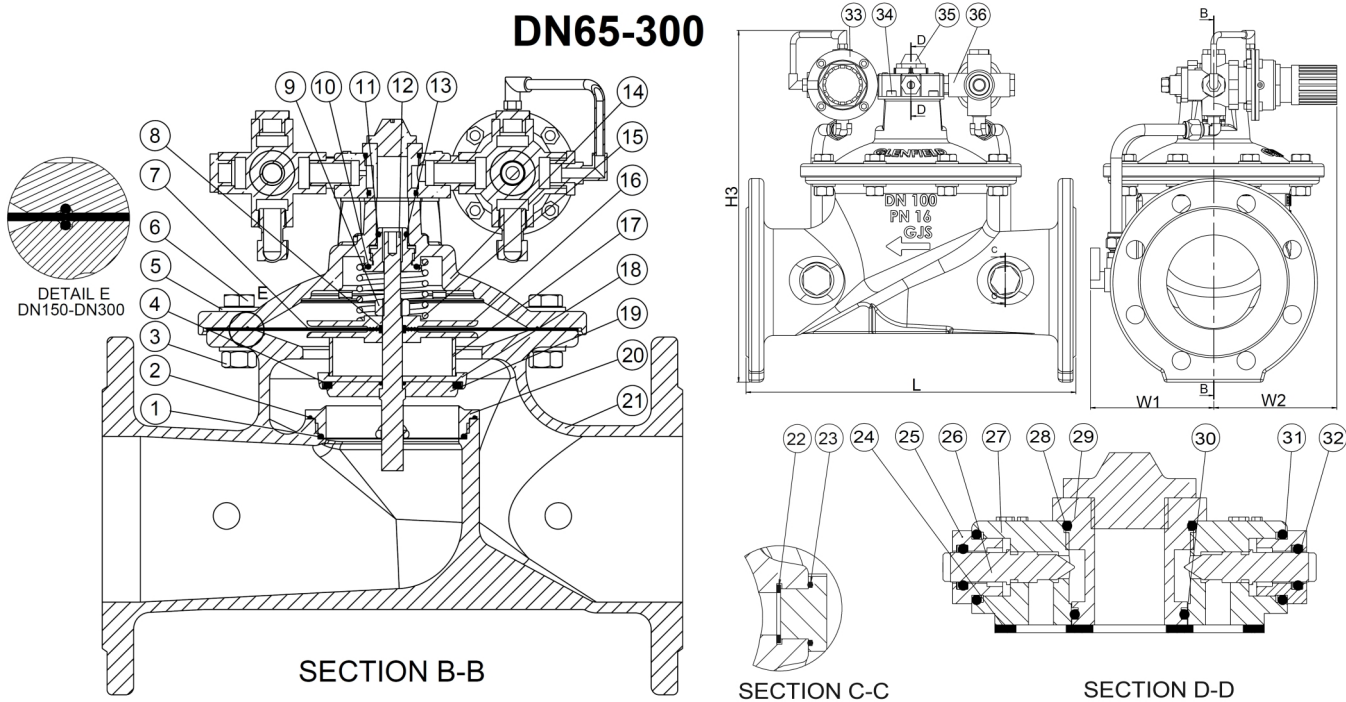
- Modular and compact design for easy application change
- Main components made of stainless steel AISI 316:
 - Distribution block:
 - Connecting main control valve to pilot system
 - Easy adjustment of regulating speed
 - Control orifice
 - Filter:
 - High capacity, easy to flush with possibility of back flushing
 - Mesh 100, high performance wire screen type
 - Hydraulic control block:
 - Includes balanced pilot valve providing more stable pressure set
 - Can be set up for different applications using single-function or multi-function modules



BELGAQUA

Expect... **AVK**

The designs, materials and specifications shown are subject to change without notice. This is due to the continuous development of our product programme.



Component list:

1. O-ring	EPDM rubber	19. Regulating plug	Stainless steel 316
2. O-ring	EPDM rubber	20. Seat	Stainless steel 316
3. Hex nut	Stainless steel A4 anti friction	21. Body	Ductile iron GJS-500-7 (GGG-50)
4. Plug sealing	EPDM rubber	22. Flat seal	EPDM rubber
5. Washer	Stainless steel A4	23. O-ring	NBR rubber
6. Bolt	Stainless steel A4	24. Gasket ⁽¹⁾	EPDM rubber
7. Diaphragm	EPDM rubber	25. Bushing	Stainless steel 316
8. O-ring	EPDM rubber	26. Needle valve	Stainless steel 316
9. Hex nut	Stainless steel A4 anti friction	27. Body	Stainless steel 316
10. Flat seal	EPDM rubber	28. O-ring	EPDM rubber
11. Flat seal	EPDM rubber	29. Insert	Stainless steel 316
12. Stem	Stainless steel 316	30. O-ring	EPDM rubber
13. Stem guide	Stainless steel 316	31. O-ring	EPDM rubber
14. Bonnet	Ductile iron GJS-500-7 (GGG-50)	32. O-ring	EPDM rubber
15. Spring	Stainless steel 316	33. Pilot valve	Stainless steel 316
16. Diaphragm support	Stainless steel 316	34. Bolt	Stainless steel A4
17. Distance pipe	Stainless steel 316	35. Mechanical air-vent	Stainless steel 316
18. Plug retainer	Stainless steel 316	36. Filter	Stainless steel 316

Components may be substituted with equivalent or higher class materials without prior notification.
(1) Flat gasket on DN65-300 , O-ring on DN350-600

AVK CONTROL VALVE, PRESSURE REDUCING, PN10/16**859/000X-001****Reduced bore, AISI 316 pipes and fittings, DN65-600****Reference nos. and dimensions:**

AVK ref. no.	DN	Flange	Pilot range	L	W1	W2	H3	Theoretical
	mm	drilling	bar	mm	mm	mm	mm	weight/kg
859-0065-00-1140000	65	PN10/16	0.6 - 6	290	104	131	335	17
859-0065-00-1140001	65	PN10/16	5 - 11	290	104	131	335	17
859-0065-00-1140002	65	PN10/16	10 - 16	290	104	131	335	17
859-0065-00-1140003	65	PN10/16	0.1 - 1	290	104	131	335	17
859-0080-00-1140000	80	PN10/16	0.6 - 6	310	117	131	354	21
859-0080-00-1140001	80	PN10/16	5 - 11	310	117	131	354	21
859-0080-00-1140002	80	PN10/16	10 - 16	310	117	131	354	21
859-0080-00-1140003	80	PN10/16	0.1 - 1	310	117	131	354	21
859-0100-00-1140000	100	PN10/16	0.6 - 6	350	127	131	373	26
859-0100-00-1140001	100	PN10/16	5 - 11	350	127	131	373	26
859-0100-00-1140002	100	PN10/16	10 - 16	350	127	131	373	26
859-0100-00-1140003	100	PN10/16	0.1 - 1	350	127	131	373	26
859-0125-00-1140000	125	PN10/16	0.6 - 6	400	127	131	392	31
859-0125-00-1140001	125	PN10/16	5 - 11	400	127	131	392	31
859-0125-00-1140002	125	PN10/16	10 - 16	400	127	131	392	31
859-0125-00-1140003	125	PN10/16	0.1 - 1	400	127	131	392	31
859-0150-00-1140000	150	PN10/16	0.6 - 6	480	157	139	430	73
859-0150-00-1140001	150	PN10/16	5 - 11	480	157	139	430	73
859-0150-00-1140002	150	PN10/16	10 - 16	480	157	139	430	73
859-0150-00-1140003	150	PN10/16	0.1 - 1	480	157	139	430	73
859-0200-00-0140000	200	PN10	0.6 - 6	600	202	202	521	87
859-0200-00-0140001	200	PN10	5 - 10	600	202	202	521	87
859-0200-00-0140003	200	PN10	0.1 - 1	600	202	202	521	87
859-0200-00-1140000	200	PN16	0.6 - 6	600	202	202	521	87
859-0200-00-1140001	200	PN16	5 - 11	600	202	202	521	87
859-0200-00-1140002	200	PN16	10 - 16	600	202	202	521	87
859-0200-00-1140003	200	PN16	0.1 - 1	600	202	202	521	87
859-0250-00-0140000	250	PN10	0.6 - 6	730	252	252	638	144
859-0250-00-0140001	250	PN10	5 - 10	730	252	252	638	144
859-0250-00-0140003	250	PN10	0.1 - 1	730	252	252	638	144
859-0250-00-1140000	250	PN16	0.6 - 6	730	252	252	638	144
859-0250-00-1140001	250	PN16	5 - 11	730	252	252	638	144
859-0250-00-1140002	250	PN16	10 - 16	730	252	252	638	144
859-0250-00-1140003	250	PN16	0.1 - 1	730	252	252	638	144
859-0300-00-0140000	300	PN10	0.6 - 6	850	275	275	715	203
859-0300-00-0140001	300	PN10	5 - 10	850	275	275	715	203
859-0300-00-0140003	300	PN10	0.1 - 1	850	275	275	715	203
859-0300-00-1140000	300	PN16	0.6 - 6	850	275	275	715	203
859-0300-00-1140001	300	PN16	5 - 11	850	275	275	715	203
859-0300-00-1140002	300	PN16	10 - 16	850	275	275	715	203
859-0300-00-1140003	300	PN16	0.1 - 1	850	275	275	715	203
859-0350-00-0140000	350	PN10	0.6 - 6	980	302	302	790	320
859-0350-00-0140001	350	PN10	5 - 10	980	302	302	790	320
859-0350-00-0140003	350	PN10	0.1 - 1	980	302	302	790	320
859-0350-00-1140000	350	PN16	0.6 - 6	980	302	302	790	320
859-0350-00-1140001	350	PN16	5 - 10	980	302	302	790	320
859-0350-00-1140002	350	PN16	10 - 16	980	302	302	790	320
859-0350-00-1140003	350	PN16	0.1 - 1	980	302	302	790	320
859-0400-00-0140000	400	PN10	0.6 - 6	1100	355	355	914	498
859-0400-00-0140001	400	PN10	5 - 10	1100	355	355	914	498
859-0400-00-0140003	400	PN10	0.1 - 1	1100	355	355	914	498
859-0400-00-1140000	400	PN16	0.6 - 6	1100	355	355	914	498
859-0400-00-1140001	400	PN16	5 - 10	1100	355	355	914	498
859-0400-00-1140002	400	PN16	10 - 16	1100	355	355	914	498
859-0400-00-1140003	400	PN16	0.1 - 1	1100	355	355	914	498
859-0450-00-0140000	450	PN10	0.6 - 6	1200	398	398	980	636
859-0450-00-0140001	450	PN10	5 - 10	1200	398	398	980	636
859-0450-00-0140003	450	PN10	0.1 - 1	1200	398	398	980	636
859-0450-00-1140001	450	PN16	5 - 10	1200	398	398	980	636
859-0450-00-1140002	450	PN16	10 - 16	1200	398	398	980	636

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Reference nos. and dimensions:

AVK ref. no.	DN mm	Flange drilling	Pilot range bar	L mm	W1 mm	W2 mm	H3 mm	Theoretical weight/kg
859-0450-00-1140003	450	PN16	0.1 - 1	1200	398	398	980	636
859-0500-00-0140000	500	PN10	0.6 - 6	1250	465	465	1163	938
859-0500-00-0140001	500	PN10	5 - 10	1250	465	465	1163	938
859-0500-00-0140003	500	PN10	0.1 - 1	1250	465	465	1163	938
859-0500-00-1140000	500	PN16	0.6 - 6	1250	465	465	1163	938
859-0500-00-1140001	500	PN16	5 - 10	1250	465	465	1163	938
859-0500-00-1140002	500	PN16	10 - 16	1250	465	465	1163	938
859-0500-00-1140003	500	PN16	0.1 - 1	1250	465	465	1163	938
859-0600-00-0140000	600	PN10	0.6 - 6	1450	509	509	1272	1282
859-0600-00-0140001	600	PN10	5 - 10	1450	509	509	1272	1282
859-0600-00-0140003	600	PN10	0.1 - 1	1450	509	509	1272	1282
859-0600-00-1140000	600	PN16	0.6 - 6	1450	509	509	1272	1282
859-0600-00-1140001	600	PN16	5 - 10	1450	509	509	1272	1282
859-0600-00-1140002	600	PN16	10 - 16	1450	509	509	1272	1282
859-0600-00-1140003	600	PN16	0.1 - 1	1450	509	509	1272	1282

Comments:

Please contact AVK for other configurations such as:

- Pressure gauge
- Anti-cavitation trim
- Position indicator, visual
- Position indicator for communication system
- Flush valve on filter
- Lockable version for flush and isolating valves
- Lifting lugs

