



## AVK CONTROL VALVE, CONSTANT FLOW, PN10/16

859/002X-001

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

AVK diaphragm operated control valves for constant flow control automatically maintain flow demand, regardless of changes in inlet or outlet pressure. The main control valve is pilot operated, capable of precise setting and easy adjustment of wanted flow, independent of system pressure.

### Product description:

Constant flow control valve, 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.
- 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)

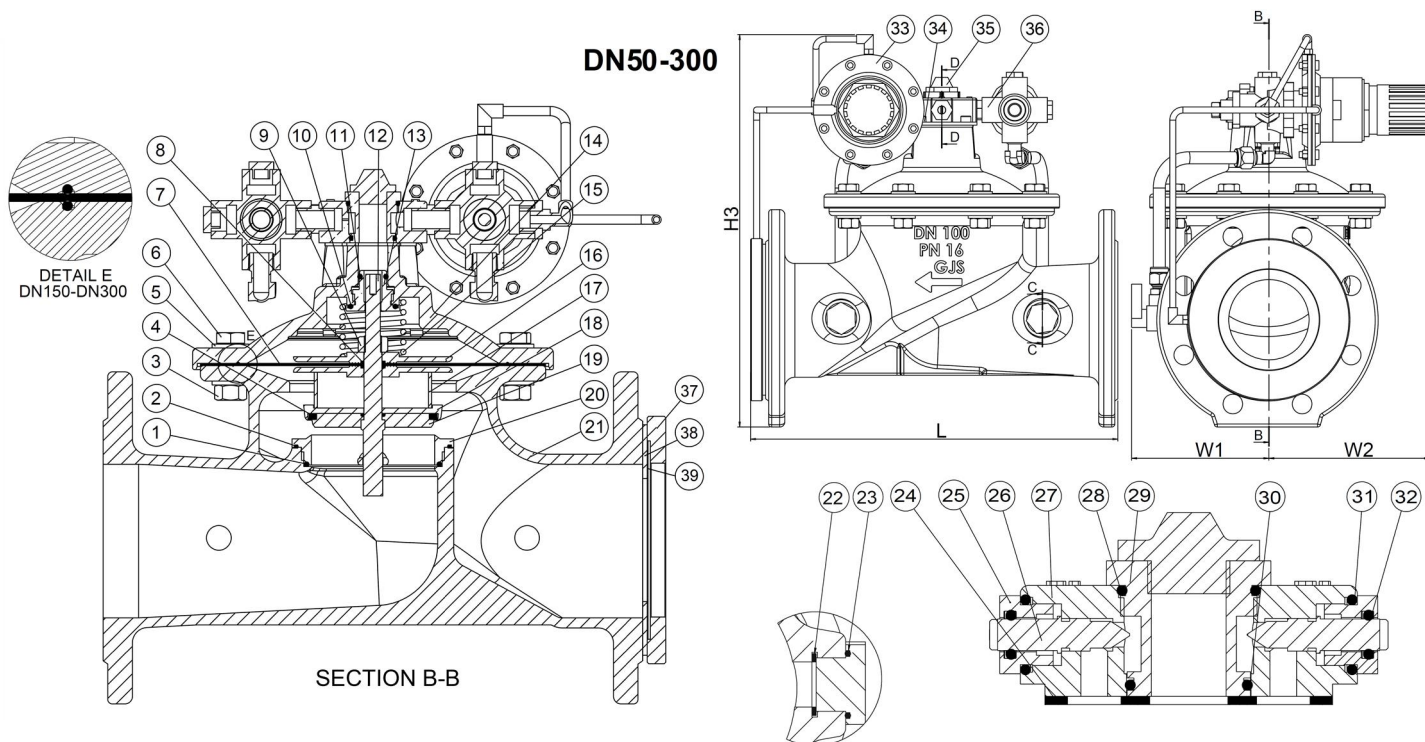
#### Pilot system (EP patent No. 2855989)

- 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



Expect ... **AVR**

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**Component list:**

1. O-ring	EPDM rubber	21. Body	Ductile iron GJS-500-7 (GGG-50)
2. O-ring	EPDM rubber	22. Flat seal	EPDM rubber
3. Hex nut	Stainless steel A4 anti friction	23. O-ring	NBR rubber
4. Plug sealing	EPDM rubber	24. Gasket	EPDM rubber
5. Washer	Stainless steel A4	25. Bushing	Stainless steel 316
6. Bolt	Stainless steel A4	26. Needle valve	Stainless steel 316
7. Diaphragm	EPDM rubber	27. Body	Stainless steel 316
8. O-ring	EPDM rubber	28. O-ring	EPDM rubber
9. Hex nut	Stainless steel A4 anti friction	29. Insert	Stainless steel 316
10. Flat seal	EPDM rubber	30. O-ring	EPDM rubber
11. Flat seal	EPDM rubber	31. O-ring	EPDM rubber
12. Stem	Stainless steel 316	32. O-ring	EPDM rubber
13. Stem guide	Stainless steel 316	33. Pilot valve	Stainless steel 316
14. Bonnet	Ductile iron GJS-500-7 (GGG-50)	34. Bolt	Stainless steel A4
15. Spring	Stainless steel 316	35. Mechanical air-vent	Stainless steel 316
16. Diaphragm support	Stainless steel 316	36. Filter	Stainless steel 316
17. Distance pipe	Stainless steel 316	37. Orifice plate flange	Stainless steel 316
18. Plug retainer	Stainless steel 316	38. Gasket	EPDM rubber
19. Regulating plug	Stainless steel 316	39. Orifice plate	Stainless steel 316
20. Seat	Stainless steel 316		

Components may be substituted with equivalent or higher class materials without prior notification.

**AVK CONTROL VALVE, CONSTANT FLOW, PN10/16****859/002X-001****Reduced bore, AISI 316 pipes and fittings, DN65-600****Reference nos. and dimensions:**

AVK ref. no.	DN mm	Flange drilling	Flow range m3/h	L mm	W1 mm	W2 mm	H3 mm	Theoretical weight/kg
859-0065-00-1140020	65	PN10/16	5 - 15	305	131	161	356	17
859-0065-00-1140021	65	PN10/16	8 - 20	305	131	161	356	17
859-0065-00-1140022	65	PN10/16	17 - 42	305	131	161	356	17
859-0080-00-1140020	80	PN10/16	7 - 18	325	131	161	375	21
859-0080-00-1140021	80	PN10/16	14 - 36	325	131	161	375	21
859-0080-00-1140022	80	PN10/16	27 - 65	325	131	161	375	21
859-0100-00-1140020	100	PN10/16	7 - 18	365	131	161	394	26
859-0100-00-1140021	100	PN10/16	14 - 34	365	131	161	394	26
859-0100-00-1140022	100	PN10/16	23 - 57	365	131	161	394	26
859-0100-00-1140023	100	PN10/16	47 - 113	365	131	161	394	26
859-0125-00-1140020	125	PN10/16	13 - 32	415	131	161	413	31
859-0125-00-1140021	125	PN10/16	21 - 52	415	131	161	413	31
859-0125-00-1140022	125	PN10/16	32 - 80	415	131	161	413	31
859-0125-00-1140023	125	PN10/16	48 - 118	415	131	161	413	31
859-0150-00-1140020	150	PN10/16	30 - 75	495	139	161	451	73
859-0150-00-1140021	150	PN10/16	50 - 150	495	139	161	451	73
859-0150-00-1140022	150	PN10/16	80 - 200	495	139	161	451	73
859-0150-00-1140023	150	PN10/16	115 - 254	495	139	161	451	73
859-0200-00-0140020	200	PN10	50 - 130	615	202	202	542	87
859-0200-00-0140021	200	PN10	115 - 290	615	202	202	542	87
859-0200-00-0140022	200	PN10	150 - 339	615	202	202	542	87
859-0200-00-0140023	200	PN10	190 - 339	615	202	202	542	87
859-0200-00-1140020	200	PN16	50 - 130	615	202	202	542	87
859-0200-00-1140021	200	PN16	115 - 290	615	202	202	542	87
859-0200-00-1140022	200	PN16	150 - 365	615	202	202	542	87
859-0200-00-1140023	200	PN16	190 - 452	615	202	202	542	87
859-0250-00-0140020	250	PN10	85 - 200	745	252	252	659	144
859-0250-00-0140021	250	PN10	140 - 350	745	252	252	659	144
859-0250-00-0140022	250	PN10	230 - 530	745	252	252	659	144
859-0250-00-0140023	250	PN10	280 - 530	745	252	252	659	144
859-0250-00-1140020	250	PN16	85 - 200	745	252	252	659	144
859-0250-00-1140021	250	PN16	140 - 350	745	252	252	659	144
859-0250-00-1140022	250	PN16	230 - 570	745	252	252	659	144
859-0250-00-1140023	250	PN16	280 - 690	745	252	252	659	144
859-0300-00-0140020	300	PN10	120 - 300	865	275	275	736	203
859-0300-00-0140021	300	PN10	175 - 430	865	275	275	736	203
859-0300-00-0140022	300	PN10	340 - 762	865	275	275	736	203
859-0300-00-0140023	300	PN10	460 - 762	865	275	275	736	203
859-0300-00-1140020	300	PN16	120 - 300	865	275	275	736	203
859-0300-00-1140021	300	PN16	175 - 430	865	275	275	736	203
859-0300-00-1140022	300	PN16	340 - 825	865	275	275	736	203
859-0300-00-1140023	300	PN16	460 - 1017	865	275	275	736	203
859-0350-00-0140020	350	PN10	170 - 420	995	302	302	796	325
859-0350-00-0140021	350	PN10	225 - 555	995	302	302	796	325
859-0350-00-0140022	350	PN10	510 - 1250	995	302	302	796	325
859-0350-00-0140023	350	PN10	650 - 1595	995	302	302	796	325
859-0350-00-1140020	350	PN16	170 - 420	995	302	302	796	325
859-0350-00-1140021	350	PN16	225 - 555	995	302	302	796	325
859-0350-00-1140022	350	PN16	510 - 1250	995	302	302	796	325
859-0350-00-1140023	350	PN16	650 - 1595	995	302	302	796	325
859-0400-00-0140020	400	PN10	225 - 545	1115	355	355	920	505
859-0400-00-0140021	400	PN10	370 - 905	1115	355	355	920	505
859-0400-00-0140022	400	PN10	525 - 1285	1115	355	355	920	505
859-0400-00-0140023	400	PN10	740 - 1815	1115	355	355	920	505
859-0400-00-1140020	400	PN16	225 - 545	1115	355	355	920	505
859-0400-00-1140021	400	PN16	370 - 905	1115	355	355	920	505
859-0400-00-1140022	400	PN16	525 - 1285	1115	355	355	920	505
859-0400-00-1140023	400	PN16	740 - 1815	1115	355	355	920	505
859-0450-00-0140020	450	PN10	280 - 690	1215	398	398	986	645
859-0450-00-0140021	450	PN10	445 - 1090	1215	398	398	986	645

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AVK ref. no.	DN mm	Flange drilling	Flow range m3/h	L mm	W1 mm	W2 mm	H3 mm	Theoretical weight/kg
859-0450-00-0140022	450	PN10	675 - 1640	1215	398	398	986	645
859-0450-00-0140023	450	PN10	1020 - 2495	1215	398	398	986	645
859-0450-00-1140020	450	PN16	280 - 690	1215	398	398	986	645
859-0450-00-1140021	450	PN16	445 - 1090	1215	398	398	986	645
859-0450-00-1140022	450	PN16	675 - 1640	1215	398	398	986	645
859-0450-00-1140023	450	PN16	1020 - 2495	1215	398	398	986	645
859-0500-00-0140020	500	PN10	350 - 835	1265	465	465	1163	947
859-0500-00-0140021	500	PN10	530 - 1290	1265	465	465	1163	947
859-0500-00-0140022	500	PN10	765 - 1860	1265	465	465	1163	947
859-0500-00-0140023	500	PN10	1115 - 2715	1265	465	465	1163	947
859-0500-00-1140020	500	PN16	350 - 835	1265	465	465	1163	947
859-0500-00-1140021	500	PN16	530 - 1290	1265	465	465	1163	947
859-0500-00-1140022	500	PN16	765 - 1860	1265	465	465	1163	947
859-0500-00-1140023	500	PN16	1115 - 2715	1265	465	465	1163	947
859-0600-00-0140020	600	PN10	500 - 1225	1465	509	509	1272	1292
859-0600-00-0140021	600	PN10	710 - 1735	1465	509	509	1272	1292
859-0600-00-0140022	600	PN10	970 - 2360	1465	509	509	1272	1292
859-0600-00-0140023	600	PN10	1780 - 4350	1465	509	509	1272	1292
859-0600-00-1140020	600	PN16	500 - 1225	1465	509	509	1272	1292
859-0600-00-1140021	600	PN16	710 - 1735	1465	509	509	1272	1292
859-0600-00-1140022	600	PN16	970 - 2360	1465	509	509	1272	1292
859-0600-00-1140023	600	PN16	1780 - 4350	1465	509	509	1272	1292

**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

