



## AVK CONSTANT FLOW CONTROL VALVE, PN10/16

879/102X99-001

Full bore, AISI304/DI trim, AISI304 pilot, brass fittings/accs., EPDM/WRAS rubber, protected pos. ind.

AVK series 879 diaphragm actuated flow control valves (CFV) automatically maintain a constant flow regardless of changes in inlet or outlet pressure.

Feed back to the regulating system is by means of the pressure drop across an orifice at the outlet.

The replaceable orifice makes it possible to regulate within a large range of flows and still keep the precision. Setting and adjustment on a control knob on the pilot.

Both full bore and reduced bore versions are available with the full bore having full capacity and the reduced bore having increased precision and smooth regulation at low flow rates.

### Product description:

Control valve, constant flow, for drinking water or other neutral liquids to max. 70°C

### Design standards:

- EN 1074-5
- Face-to-face dimension according to EN 558 Table 2 Basic Series 1
- Flange drilling to EN1092, PN10/16

### Test/Approvals:

- Hydraulic test: 1.5 x PN
- Tested according to EN 12266-1
- Approved according to WRAS Certificate 2010005, series 879
- Approved according to ACS-FRANCE, certificate 20ACCLY795, ser.879

### Features:

- The lifted seat design controls the flow around the plug so that in case of cavitation this happens with minimal damage away from plug and seat
- The parabolic shape of the plug creates a smooth regulating characteristic with low gain around the near-closed positions improving control performance at low flow
- Non-symmetric axial position of rubber diaphragm results in low stretch stress when closed
- Body and bonnet of ductile iron coated with fusion bonded epoxy, 300µm, GSK approved, RAL 5017, according to DIN 3476 and WRAS-DVGW/W270/UBA
- All rubber parts approved for drinking water
- All non-coated internals made of stainless steel or bronze
- Seat and pilot in stainless steel AISI 304
- A needle valve fitted between the upstream side and the control chamber allows for adjustment of the regulation reaction time
- Closing the needle valve isolates the control chamber and fixes the position of the main valve allowing for service of the pilot valve
- Fittings, pipes and accessories in Ni-plated brass

### Accessories:

V-port or anti-cavitation cage, pressure gauge, circuit by-pass, visual position indicator, inductive position switch, position transmitter 4-20 mA



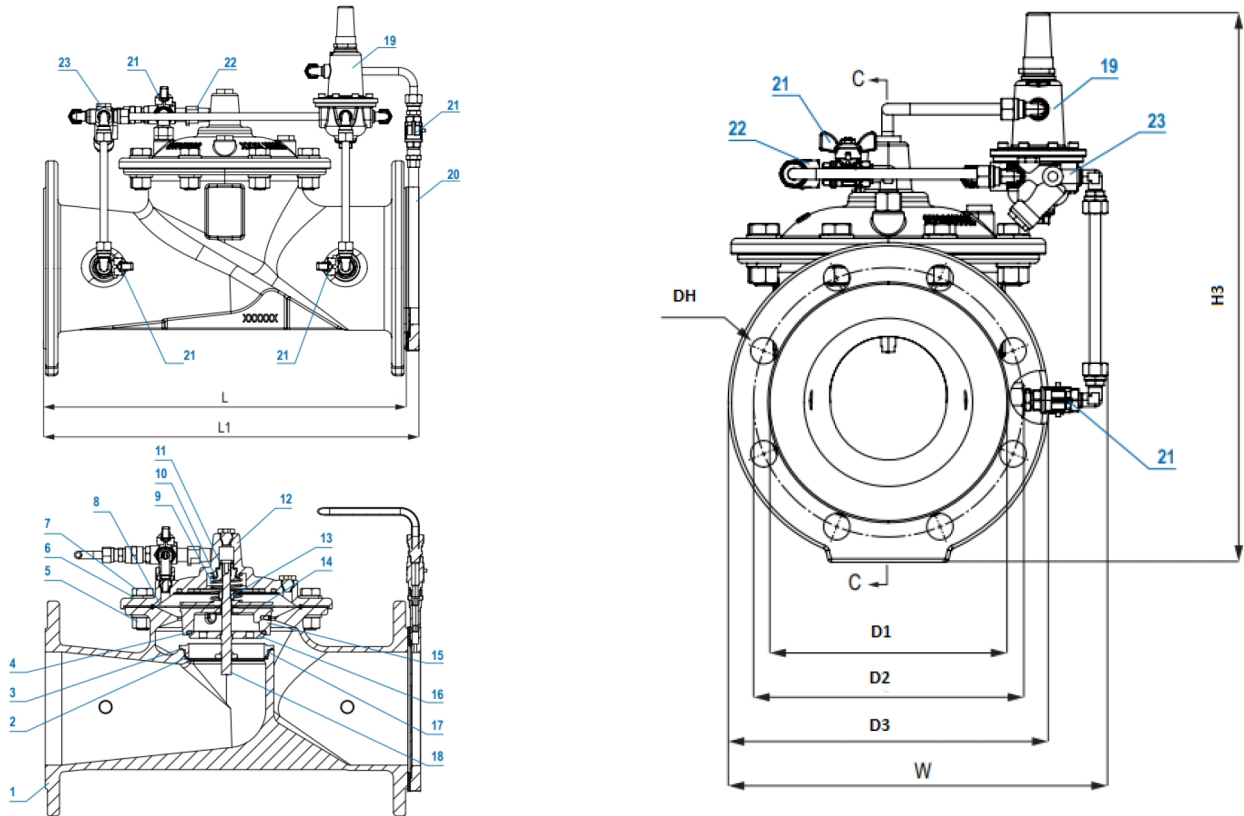
Expect... **AVK**

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

AVK CONSTANT FLOW CONTROL VALVE, PN10/16

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Full bore, AISI304/DI trim, AISI304 pilot, brass fittings/accs., EPDM/WRAS rubber, protected pos. ind.



Component list:

1. Body	Ductile iron GJS-500-7	13. Hex nut	Stainless steel A2
2. O-ring	EPDM rubber	14. Diaphragm support	Ductile iron GJS-500-7
3. O-ring	EPDM rubber	15. Obturator	Ductile iron GJS-500-7
4. Plug sealing	EPDM rubber	16. Regulating plug	Stainless steel AISI 304
5. Hex nut	Stainless steel A2	17. Seat	Stainless steel AISI 304
6. Washer	Stainless steel AISI 304	18. Stem	Stainless steel AISI 304
7. Bolts	Stainless steel A2	19. Pilot valve	Stainless steel
8. Diaphragm	EPDM rubber	20. Calibrated Orifice	Stainless steel AISI 304
9. Spring	Stainless steel AISI 304	21. Ball valve	Nickel Brass
10. Flat seal	EPDM rubber	22. Needle valve	Stainless steel
11. Flat seal	EPDM rubber	23. Y-strainer / Orifice	Brass + SS 316
12. Cover	Ductile iron GJS-500-7		

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

Reference nos. and dimensions:

AVK ref. no.	DN	Flange	Flow range	D1	D2	D3	Dh	W	H3	L	L1	Theoretical weight/kg
	mm	drilling	m3/h	mm	mm	mm	mm	mm	mm	mm	mm	
879-0050-10-14400209999	50	PN16	3-11	99	125	165	19	245	400	230	247	17
879-0050-10-144002099A0 (1)	50	PN16	3-11	99	125	165	19	245	407	230	247	17
879-0050-10-14400219999	50	PN16	7-25	99	125	165	19	245	400	230	247	17
879-0050-10-144002199A0 (1)	50	PN16	7-25	99	125	165	19	245	407	230	247	17
879-0050-10-14400229999	50	PN16	10-35	99	125	165	19	245	400	230	247	17
879-0050-10-144002299A0 (1)	50	PN16	10-35	99	125	165	19	245	407	230	247	17
879-0065-10-14400209999	65	PN16	5-17	118	145	185	19	255	425	290	307	22
879-0065-10-144002099A0 (1)	65	PN16	5-17	118	145	185	19	255	436	290	307	22
879-0065-10-14400219999	65	PN16	8-30	118	145	185	19	255	425	290	307	22
879-0065-10-144002199A0 (1)	65	PN16	8-30	118	145	185	19	255	436	290	307	22
879-0065-10-14400229999	65	PN16	15-58	118	145	185	19	255	425	290	307	22

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AVK CONSTANT FLOW CONTROL VALVE, PN10/16879/102X99-001

Full bore, AISI304/DI trim, AISI304 pilot, brass fittings/accs., EPDM/WRAS rubber, protected pos. ind.

Reference nos. and dimensions:

AVK ref. no.	DN	Flange	Flow range	D1	D2	D3	Dh	W	H3	L	L1	Theoretical
	mm	drilling	m3/h	mm	mm	mm	mm	mm	mm	mm	mm	weight/kg
879-0065-10-144002299A0 <sup>(1)</sup>	65	PN16	15-58	118	145	185	19	255	436	290	307	22
879-0080-10-14400209999	80	PN16	9-33	132	160	200	19	270	440	310	327	26
879-0080-10-144002099A0 <sup>(1)</sup>	80	PN16	9-33	132	160	200	19	270	451	310	327	26
879-0080-10-14400219999	80	PN16	15-57	132	160	200	19	270	440	310	327	26
879-0080-10-144002199A0 <sup>(1)</sup>	80	PN16	15-57	132	160	200	19	270	451	310	327	26
879-0080-10-14400229999	80	PN16	26-90	132	160	200	19	270	440	310	327	26
879-0080-10-144002299A0 <sup>(1)</sup>	80	PN16	26-90	132	160	200	19	270	451	310	327	26
879-0100-10-14400209999	100	PN16	14-51	156	180	220	19	290	460	350	367	35
879-0100-10-144002099A0 <sup>(1)</sup>	100	PN16	14-51	156	180	220	19	290	474	350	367	35
879-0100-10-14400219999	100	PN16	25-90	156	180	220	19	290	460	350	367	35
879-0100-10-144002399A0 <sup>(1)</sup>	100	PN16	25-90	156	180	220	19	290	474	350	367	35
879-0100-10-14400229999	100	PN16	42-130	156	180	220	19	290	460	350	367	35
879-0100-10-144002299A0 <sup>(1)</sup>	100	PN16	42-130	156	180	220	19	290	474	350	367	35
879-0150-10-14400209999	150	PN16	30-105	211	240	285	23	410	590	480	497	81
879-0150-10-144002099A0 <sup>(1)</sup>	150	PN16	30-105	211	240	285	23	410	607	480	497	81
879-0150-10-14400219999	150	PN16	50-190	211	240	285	23	410	590	480	497	81
879-0150-10-144002199A0 <sup>(1)</sup>	150	PN16	50-190	211	240	285	23	410	607	480	497	81
879-0150-10-14400229999	150	PN16	80-220	211	240	285	23	410	590	480	497	81
879-0150-10-144002299A0 <sup>(1)</sup>	150	PN16	80-220	211	240	285	23	410	607	480	497	81
879-0150-10-14400239999	150	PN16	100-300	211	240	285	23	410	590	480	497	81
879-0150-10-144002399A0 <sup>(1)</sup>	150	PN16	100-300	211	240	285	23	410	607	480	497	81
879-0200-10-04400209999	200	PN10	50-190	266	295	340	23	510	670	600	617	137
879-0200-10-044002099A0 <sup>(1)</sup>	200	PN10	50-190	266	295	340	23	510	774	600	617	137
879-0200-10-04400219999	200	PN10	88-300	266	295	340	23	510	670	600	617	137
879-0200-10-044002199A0 <sup>(1)</sup>	200	PN10	88-300	266	295	340	23	510	774	600	617	137
879-0200-10-04400229999	200	PN10	120-370	266	295	340	23	510	670	600	617	137
879-0200-10-044002299A0 <sup>(1)</sup>	200	PN10	120-370	266	295	340	23	510	774	600	617	137
879-0200-10-04400239999	200	PN10	160-480	266	295	340	23	510	670	600	617	137
879-0200-10-044002399A0 <sup>(1)</sup>	200	PN10	160-480	266	295	340	23	510	774	600	617	137
879-0200-10-14400209999	200	PN16	50-190	266	295	340	23	510	670	600	617	137
879-0200-10-144002099A0 <sup>(1)</sup>	200	PN16	50-190	266	295	340	23	510	774	600	617	137
879-0200-10-14400219999	200	PN16	88-300	266	295	340	23	510	670	600	617	137
879-0200-10-144002199A0 <sup>(1)</sup>	200	PN16	88-300	266	295	340	23	510	774	600	617	137
879-0200-10-14400229999	200	PN16	120-370	266	295	340	23	510	670	600	617	137
879-0200-10-144002299A0 <sup>(1)</sup>	200	PN16	120-370	266	295	340	23	510	774	600	617	137
879-0200-10-14400239999	200	PN16	160-480	266	295	340	23	510	670	600	617	137
879-0200-10-144002399A0 <sup>(1)</sup>	200	PN16	160-480	266	295	340	23	510	774	600	617	137
879-0250-10-04400209999	250	PN10	80-250	319	350	395	23	555	740	730	747	198
879-0250-10-044002099A0 <sup>(1)</sup>	250	PN10	80-250	319	350	395	23	555	854	730	747	198
879-0250-10-04400219999	250	PN10	120-400	319	350	395	23	555	740	730	747	198
879-0250-10-044002199A0 <sup>(1)</sup>	250	PN10	120-400	319	350	395	23	555	854	730	747	198
879-0250-10-04400229999	250	PN10	200-600	319	350	395	23	555	740	730	747	198
879-0250-10-044002299A0 <sup>(1)</sup>	250	PN10	200-600	319	350	395	23	555	854	730	747	198
879-0250-10-04400239999	250	PN10	250-840	319	350	395	23	555	740	730	747	198
879-0250-10-044002399A0 <sup>(1)</sup>	250	PN10	250-840	319	350	395	23	555	854	730	747	198
879-0250-10-14400209999	250	PN16	80-250	319	355	405	28	555	740	730	747	198
879-0250-10-144002099A0 <sup>(1)</sup>	250	PN16	80-250	319	355	405	28	555	854	730	747	198
879-0250-10-14400219999	250	PN16	120-400	319	355	405	28	555	740	730	747	198
879-0250-10-144002199A0 <sup>(1)</sup>	250	PN16	120-400	319	355	405	28	555	854	730	747	198
879-0250-10-14400229999	250	PN16	200-600	319	355	405	28	555	740	730	747	198
879-0250-10-144002299A0 <sup>(1)</sup>	250	PN16	200-600	319	355	405	28	555	854	730	747	198
879-0250-10-14400239999	250	PN16	250-840	319	355	405	28	555	740	730	747	198
879-0250-10-144002399A0 <sup>(1)</sup>	250	PN16	250-840	319	355	405	28	555	854	730	747	198
879-0300-10-04400209999	300	PN10	120-420	370	400	445	23	605	810	850	867	255
879-0300-10-044002099A0 <sup>(1)</sup>	300	PN10	120-420	370	400	445	23	605	923	850	867	255
879-0300-10-04400219999	300	PN10	170-550	370	400	445	23	605	810	850	867	255
879-0300-10-044002199A0 <sup>(1)</sup>	300	PN10	170-550	370	400	445	23	605	923	850	867	255
879-0300-10-04400229999	300	PN10	250-870	370	400	445	23	605	810	850	867	255
879-0300-10-044002299A0 <sup>(1)</sup>	300	PN10	250-870	370	400	445	23	605	923	850	867	255
879-0300-10-04400239999	300	PN10	400-1100	370	400	445	23	605	810	850	867	255

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	mm	drilling	m3/h	mm	mm	mm	mm	mm	mm	mm	mm	weight/kg
879-0300-10-044002399A0 (1)	300	PN10	400-1100	370	400	445	23	605	923	850	867	255
879-0300-10-14400209999	300	PN16	120-420	370	410	460	28	605	810	850	867	255
879-0300-10-144002099A0 (1)	300	PN16	120-420	370	410	460	28	605	923	850	867	255
879-0300-10-14400219999	300	PN16	170-550	370	410	460	28	605	810	850	867	255
879-0300-10-144002199A0 (1)	300	PN16	170-550	370	410	460	28	605	923	850	867	255
879-0300-10-14400229999	300	PN16	250-870	370	410	460	28	605	810	850	867	255
879-0300-10-144002299A0 (1)	300	PN16	250-870	370	410	460	28	605	923	850	867	255
879-0300-10-14400239999	300	PN16	400-1100	370	410	460	28	605	810	850	867	255
879-0300-10-144002399A0 (1)	300	PN16	400-1100	370	410	460	28	605	923	850	867	255
879-0350-10-04400209999	350	PN10	160-500	429	460	505	23	710	930	980	997	456
879-0350-10-044002099A0 (1)	350	PN10	160-500	429	460	505	23	710	1045	980	997	456
879-0350-10-04400219999	350	PN10	220-700	429	460	505	23	710	930	980	997	456
879-0350-10-044002199A0 (1)	350	PN10	220-700	429	460	505	23	710	1045	980	997	456
879-0350-10-04400229999	350	PN10	350-1250	429	460	505	23	710	930	980	997	456
879-0350-10-044002299A0 (1)	350	PN10	350-1250	429	460	505	23	710	1045	980	997	456
879-0350-10-04400239999	350	PN10	600-1600	429	460	505	23	710	930	980	997	456
879-0350-10-044002399A0 (1)	350	PN10	600-1600	429	460	505	23	710	1045	980	997	456
879-0350-10-14400209999	350	PN16	160-500	429	470	520	28	710	930	980	997	456
879-0350-10-144002099A0 (1)	350	PN16	160-500	429	470	520	28	710	1045	980	997	456
879-0350-10-14400219999	350	PN16	220-700	429	470	520	28	710	930	980	997	456
879-0350-10-144002199A0 (1)	350	PN16	220-700	429	470	520	28	710	1045	980	997	456
879-0350-10-14400229999	350	PN16	350-1250	429	470	520	28	710	930	980	997	456
879-0350-10-144002299A0 (1)	350	PN16	350-1250	429	470	520	28	710	1045	980	997	456
879-0350-10-14400239999	350	PN16	600-1600	429	470	520	28	710	930	980	997	456
879-0350-10-144002399A0 (1)	350	PN16	600-1600	429	470	520	28	710	1045	980	997	456
879-0400-10-04400209999	400	PN10	220-620	480	515	565	28	780	990	1100	1117	542
879-0400-10-044002099A0 (1)	400	PN10	220-620	480	515	565	28	780	1183	1100	1117	542
879-0400-10-04400219999	400	PN10	300-1000	480	515	565	28	780	990	1100	1117	542
879-0400-10-044002199A0 (1)	400	PN10	300-1000	480	515	565	28	780	1183	1100	1117	542
879-0400-10-04400229999	400	PN10	450-1500	480	515	565	28	780	990	1100	1117	542
879-0400-10-044002299A0 (1)	400	PN10	450-1500	480	515	565	28	780	1183	1100	1117	542
879-0400-10-04400239999	400	PN10	660-1950	480	515	565	28	780	990	1100	1117	542
879-0400-10-044002399A0 (1)	400	PN10	660-1950	480	515	565	28	780	1183	1100	1117	542
879-0400-10-14400209999	400	PN16	220-620	480	525	580	31	780	990	1100	1117	542
879-0400-10-144002099A0 (1)	400	PN16	220-620	480	525	580	31	780	1183	1100	1117	542
879-0400-10-14400219999	400	PN16	300-1000	480	525	580	31	780	990	1100	1117	542
879-0400-10-144002199A0 (1)	400	PN16	300-1000	480	525	580	31	780	1183	1100	1117	542
879-0400-10-14400229999	400	PN16	450-1500	480	525	580	31	780	990	1100	1117	542
879-0400-10-144002299A0 (1)	400	PN16	450-1500	480	525	580	31	780	1183	1100	1117	542
879-0400-10-14400239999	400	PN16	660-1950	480	525	580	31	780	990	1100	1117	542
879-0400-10-144002399A0 (1)	400	PN16	660-1950	480	525	580	31	780	1183	1100	1117	542
879-0450-10-04400209999	450	PN10	270-800	530	565	615	28	930	1170	1200	1217	868
879-0450-10-044002099A0 (1)	450	PN10	270-800	530	565	615	28	930	1361	1200	1217	868
879-0450-10-04400219999	450	PN10	400-1200	530	565	615	28	930	1170	1200	1217	868
879-0450-10-044002199A0 (1)	450	PN10	400-1200	530	565	615	28	930	1361	1200	1217	868
879-0450-10-04400229999	450	PN10	570-1900	530	565	615	28	930	1170	1200	1217	868
879-0450-10-044002299A0 (1)	450	PN10	570-1900	530	565	615	28	930	1361	1200	1217	868
879-0450-10-04400239999	450	PN10	900-2650	530	565	615	28	930	1170	1200	1217	868
879-0450-10-044002399A0 (1)	450	PN10	900-2650	530	565	615	28	930	1361	1200	1217	868
879-0450-10-14400209999	450	PN16	270-800	548	585	640	31	930	1170	1200	1217	868
879-0450-10-144002099A0 (1)	450	PN16	270-800	548	585	640	31	930	1361	1200	1217	868
879-0450-10-14400219999	450	PN16	400-1200	548	585	640	31	930	1170	1200	1217	868
879-0450-10-144002199A0 (1)	450	PN16	400-1200	548	585	640	31	930	1361	1200	1217	868
879-0450-10-14400229999	450	PN16	570-1900	548	585	640	31	930	1170	1200	1217	868
879-0450-10-144002299A0 (1)	450	PN16	570-1900	548	585	640	31	930	1361	1200	1217	868
879-0450-10-14400239999	450	PN16	900-2650	548	585	640	31	930	1170	1200	1217	868
879-0450-10-144002399A0 (1)	450	PN16	900-2650	548	585	640	31	930	1361	1200	1217	868
879-0500-10-04400209999	500	PN10	330-950	582	620	670	28	1020	1245	1250	1267	1113
879-0500-10-044002099A0 (1)	500	PN10	330-950	582	620	670	28	1020	1435	1250	1267	1113
879-0500-10-04400219999	500	PN10	450-1600	582	620	670	28	1020	1245	1250	1267	1113

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AVK ref. no.	DN	Flange	Flow range	D1	D2	D3	Dh	W	H3	L	L1	Theoretical
	mm	drilling	m3/h	mm	mm	mm	mm	mm	mm	mm	mm	weight/kg
879-0500-10-044002199A0 <sup>(1)</sup>	500	PN10	450-1600	582	620	670	28	1020	1435	1250	1267	1113
879-0500-10-04400229999	500	PN10	700-2400	582	620	670	28	1020	1245	1250	1267	1113
879-0500-10-044002299A0 <sup>(1)</sup>	500	PN10	700-2400	582	620	670	28	1020	1435	1250	1267	1113
879-0500-10-04400239999	500	PN10	1050-3000	582	620	670	28	1020	1245	1250	1267	1113
879-0500-10-044002399A0 <sup>(1)</sup>	500	PN10	1050-3000	582	620	670	28	1020	1435	1250	1267	1113
879-0500-10-14400209999	500	PN16	330-950	609	650	715	34	1020	1245	1250	1267	1113
879-0500-10-144002099A0 <sup>(1)</sup>	500	PN16	330-950	609	650	715	34	1020	1435	1250	1267	1113
879-0500-10-14400219999	500	PN16	450-1600	609	650	715	34	1020	1245	1250	1267	1113
879-0500-10-144002199A0 <sup>(1)</sup>	500	PN16	450-1600	609	650	715	34	1020	1435	1250	1267	1113
879-0500-10-14400229999	500	PN16	700-2400	609	650	715	34	1020	1245	1250	1267	1113
879-0500-10-144002299A0 <sup>(1)</sup>	500	PN16	700-2400	609	650	715	34	1020	1435	1250	1267	1113
879-0500-10-14400239999	500	PN16	1050-3000	609	650	715	34	1020	1245	1250	1267	1113
879-0500-10-144002399A0 <sup>(1)</sup>	500	PN16	1050-3000	609	650	715	34	1020	1435	1250	1267	1113
879-0600-10-04400209999	600	PN10	500-1400	682	725	780	31	1090	1395	1450	1467	1672
879-0600-10-044002099A0 <sup>(1)</sup>	600	PN10	500-1400	682	725	780	31	1090	1584	1450	1467	1672
879-0600-10-04400219999	600	PN10	700-2200	682	725	780	31	1090	1395	1450	1467	1672
879-0600-10-044002199A0 <sup>(1)</sup>	600	PN10	700-2200	682	725	780	31	1090	1584	1450	1467	1672
879-0600-10-04400229999	600	PN10	950-3300	682	725	780	31	1090	1395	1450	1467	1672
879-0600-10-044002299A0 <sup>(1)</sup>	600	PN10	950-3300	682	725	780	31	1090	1584	1450	1467	1672
879-0600-10-04400239999	600	PN10	1600-4450	682	725	780	31	1090	1395	1450	1467	1672
879-0600-10-044002399A0 <sup>(1)</sup>	600	PN10	1600-4450	682	725	780	31	1090	1584	1450	1467	1672
879-0600-10-14400209999	600	PN16	500-1400	720	770	840	37	1090	1395	1450	1467	1672
879-0600-10-144002099A0 <sup>(1)</sup>	600	PN16	500-1400	720	770	840	37	1090	1584	1450	1467	1672
879-0600-10-14400219999	600	PN16	700-2200	720	770	840	37	1090	1395	1450	1467	1672
879-0600-10-144002199A0 <sup>(1)</sup>	600	PN16	700-2200	720	770	840	37	1090	1584	1450	1467	1672
879-0600-10-14400229999	600	PN16	950-3300	720	770	840	37	1090	1395	1450	1467	1672
879-0600-10-144002299A0 <sup>(1)</sup>	600	PN16	950-3300	720	770	840	37	1090	1584	1450	1467	1672
879-0600-10-14400239999	600	PN16	1600-4450	720	770	840	37	1090	1395	1450	1467	1672
879-0600-10-144002399A0 <sup>(1)</sup>	600	PN16	1600-4450	720	770	840	37	1090	1584	1450	1467	1672
<sup>(1)</sup> Incl. position indicator												