

COBRA-TDC

Tilting disc check valve with lever and counterweight/ hydraulic damper

**PN 10 / 16 / 25
DN 100 - 2200**



Benefits at a glance

- Coating WRAS approved fusion bonded epoxy, 300 microns dft as standard

Applications

- For water supply systems

Operating data

- Maximum permissible pressure: 10/16 bar, 25 bar
- Maximum permissible temperature: 70 °C

Materials

- Body: ductile iron EN-GJS-500-7, JS 1050
- Disc: ductile iron EN-GJS-500-7, JS 1050
- Body seat: stainless steel
- lever: ductile iron EN-GJS-500-7, JS 1050
- O-Ring: NBR

Design

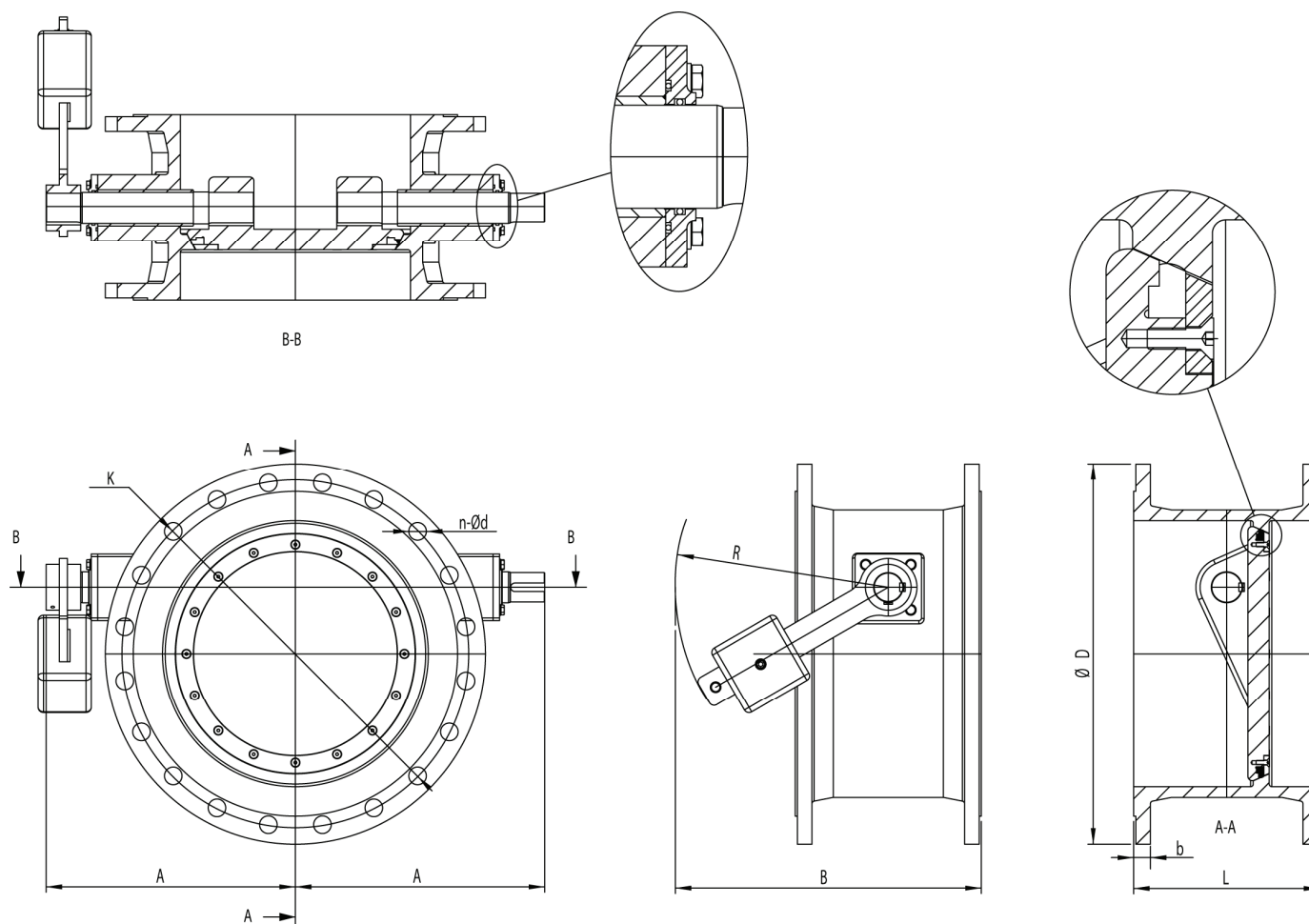
- Flange connection to EN 1092-2
- Face to face length to BS 5155, EN-558-1 series 14
- Epoxy coated

Standard variants

- Maximum permissible pressure 40 bar
- Flange connection EN 1092-2 PN 40

Other DN's, materials, variants,? Please contact us for your personal quotation

Overall dimensions



Standard Model, PN 10

		Dimensions (mm)								Weight (kg)	
		A	B	D	R	b	n-Ød	K	DIN 3202 F4, BS 5155 long		DIN 3202 F16, BS 5155 short
DN	PN										
100	10	167	255	220	160	19.0	8-19	180	190	127	24
125		183	260	250				210	200	140	33
150		203	265	285				240	210	140	38
200		233	335	340	220	20.0	8-23	295	230	152	48
250		264	345	395				350	250	165	67
300		293	415	445				400	270	178	93
350		326	425	505	280	24.5	16-23	460	290	190	128
400		359	490	565				515	310	216	152
450		388	500	615				565	330	222	224
500		418	575	670	400	26.5	20-28	620	350	229	247
600		480	695	780				725	390	267	299
700		544	715	895				840	430	292	523
800		611	835	1015	600	35.0	24-34	950	470	318	618
900		668	855	1115				1050	510	330	636
1000		732	1075	1230				1160	550	410	1074
1200		858	1115	1455	800	40.0	28-37	1380	630	470	1542
1400		981	1355	1675				1590	710	530	2280
1500		1043	1375	1785				1700	750	580	2898
1600		1114	1595	1915	1000	47.5	40-50	1820	790	600	3610
1800		1228	1635	2115				2020	870	670	4600
2000		1346	1675	2325				2230	950	760	5800
2200		1472	1715	2550				2440	1030	840	6500

Standard Model, PN 16

		Dimensions (mm)								Weight (kg)	
		A	B	D	R	b	n-Ød	K	DIN 3202 F4, BS 5155 long		DIN 3202 F16, BS 5155 short
DN	PN										
100	16	167	255	220	160	19.0	8-19	180	190	127	24
125		183	260	250				210	200	140	33
150		203	265	285				240	210		38
200		233	335	340	220	20.0	12-23	295	230	152	48
250		269	345	405			22.0	12-28	355	250	165
300		300	415	460	280	24.5		410	270	178	94
350		333	425	520			26.5	16-28	470	290	190
400		367	490	580	335	28.0	16-31	525	310	216	157
450		400	500	640			30.0	20-31	585	330	222
500		441	575	715	400	31.5	20-34	650	350	229	270
600		510	695	840	500	36.0	20-37	725	390	267	333
700		552	715	910			39.5	24-37	840	430	292
800		616	835	1025	600	43.0	24-47	950	470	318	713
900		673	855	1125			46.5	28-41	1050	510	330
1000		744	1075	1255	800	50.0	28-44	1160	550	410	1184
1200		873	1115	1485			57.0	32-50	1380	630	470
1400		986	1355	1685	1000	60.0	36-50	1590	710	530	2850
1500		1060	1375	1820			62.5	36-57	1710	750	580
1600	1122	1595	1930	1200	65.0	40-57	1820	790	600	4513	
1800	1235	1635	2130			70.0	44-57	2020	870	670	5800
2000	1356	1675	2345			75.0	48-62	2230	950	760	6900
2200	1474	1715	2555		90.0	52-62	2440	1030	840	7500	

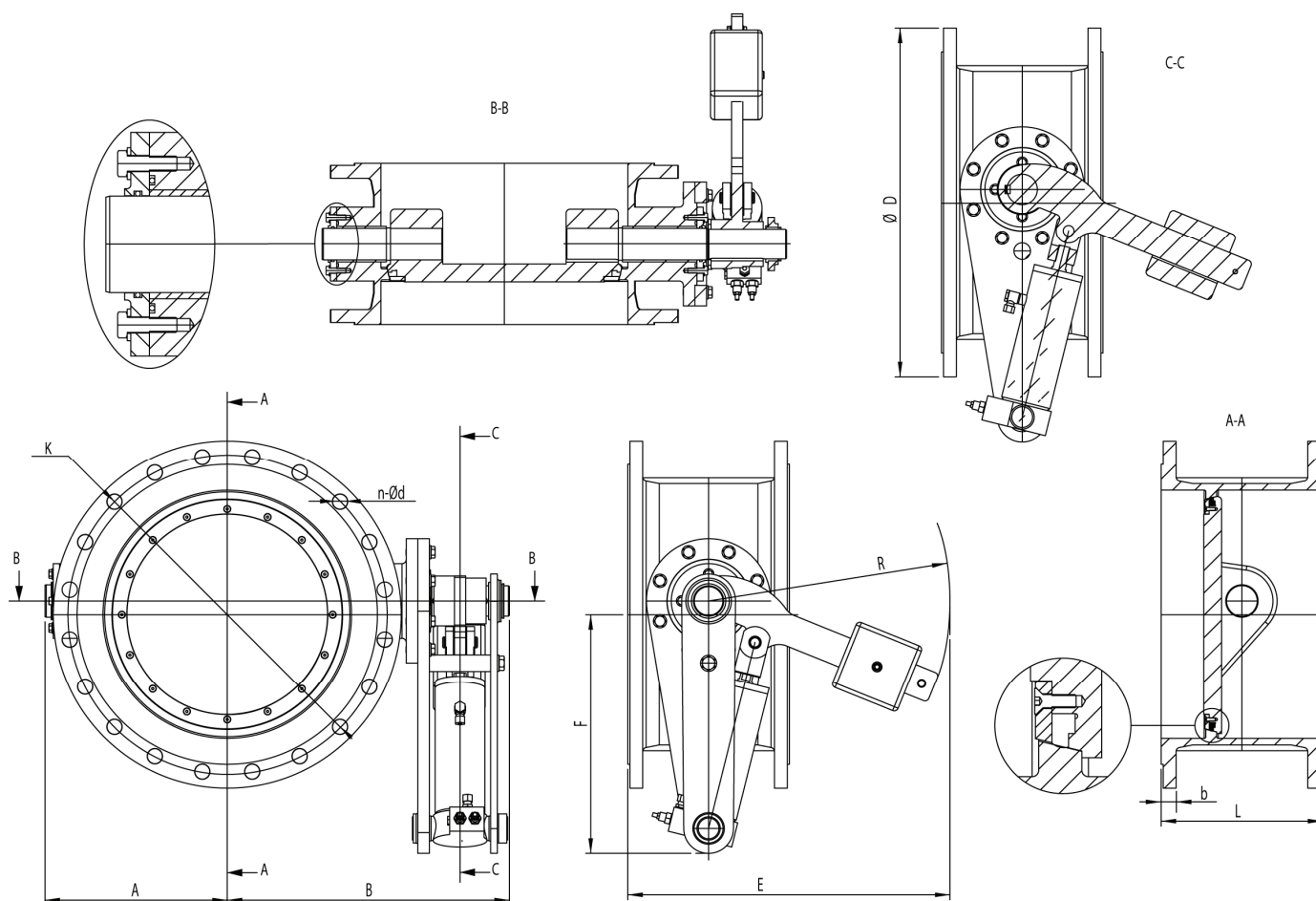
Standard Model, PN 25

DN	PN	Dimensions (mm)								Weight (kg)
		A	B	D	R	b	n-Ød	K	DIN 3202 F4, BS 5155 long L	
100	25	174	255	235	160	19.0	8-23	190	190	29
125		193	260	270			8-28	220	200	40
150		210	265	300				250	210	46
200		243	335	360	220	22.0	12-28	310	230	57
250		279	345	425		24.5	12-31	370	250	80
300		313	415	485	280	27.5	16-31	430	270	113
350		351	425	555		30.0	16-34	490	290	160
400		387	490	620	335	32.0	16-37	550	310	188
450		415	500	670		34.5	20-37	600	330	279
500		448	575	730	400	36.5		660	350	324
600		513	695	845		42.0	20-41	770	390	399
700		577	715	960	500	46.5	24-44	875	430	661
800		646	835	1085		51.0	24-50	990	470	855
900		703	855	1185	600	55.5	28-50	1090	510	1091
1000		777	1075	1320		60.0	28-57	1210	550	1420
1200		840	1115	1420		64.5	32-57	1310	630	1800

PN40 on request

Hydraulic characteristics

DN	NPS	Flow coefficient valve in fully open position		Zeta
		Kvo	Cvo	
100	4	125	145.00	10.22
125	5	196	227.36	10.15
150	6	282	327.12	10.16
200	8	501	581.16	10.18
250	10	783	908.28	10.17
300	12	1127	1307.32	10.18
350	14	1534	1779.44	10.18
400	16	2004	2324.64	10.18
450	18	2536	2941.76	10.18
500	20	3131	3631.96	10.18
600	24	4508	5229.28	10.18
700	28	6136	7117.76	10.18
800	32	8014	9296.24	10.18
900	36	10143	11765.88	10.18
1000	40	12523	14526.68	10.18
1200	48	18033	20918.28	10.18
1400	56	24544	28471.04	10.18
1500	60	28176	32684.16	10.18
1600	64	32058	37187.28	10.18
1800	72	40573	47064.68	10.18
2000	80	50090	58104.40	10.18
2200	88	60609	70306.44	10.18

Overall dimensions

Standard Model, PN 10/16

		Dimensions (mm)										Weight (kg)												
		A	B	D	E	F	b	n-Ød	K	R	DIN 3202 F4, BS 5155 long L		DIN 3202 F16, BS 5155 short L											
DN	PN	10/16																						
100													113	176	220	333	205	19.0	8-19	180	238	190	127	25
125													128	200	250	356	221			210	256	200	140	35
150													146	228	285	383	240	20.0	8-23	240	278	210	140	40
200													174	272	340	428	269			295	313	230	152	50
250													208	324	405	478	304	22.0	12-23	350	353	250	165	70
300													236	368	460	523	334			400	388	270	178	99
350													267	416	520	570	366	24.5	16-23	460	425	290	190	140
400													297	464	580	618	399			515	463	310	216	165
450													328	512	640	665	431	25.5	20-28	565	500	330	222	245
500													367	572	715	722	471			620	547	350	229	284
600													431	672	840	820	539	30.0	20-31	725	625	390	267	350
700													467	728	910	884	577	32.5	24-31	840	669	430	292	580
800													526	820	1025	976	638	35.0	24-34	950	741	470	318	750
900													577	900	1125	1058	692	37.5	28-34	1050	803	510	330	957
1000													644	1004	1255	1159	762	40.0	28-37	1160	884	550	410	1246
1200													762	1188	1485	1343	886	45.0	32-41	1380	1028	630	470	2070
1400													864	1348	1685	1508	994	46.0	36-44	1590	1153	710	530	3000
1500													933	1456	1820	1613	1067	47.5		1700	1238	750	580	3813
1600													990	1544	1930	1701	1126	49.0	40-50	1820	1306	790	600	4750
1800													1092	1704	2130	1866	1234	52.0	44-50	2020	1431	870	670	6100
2000													1203	1876	2345	2041	1350	55.0	48-50	2230	1566	950	760	7300
2200		1310	2044	2555	2212	1463	60.0	52-55	2440	1697	1030	840	8200											

Standard Model, PN 25

DN	PN	Dimensions (mm)										Weight (kg)
		A	B	D	E	F	b	n-Ød	K	R	DIN 3202 F4, BS 5155 long L	
100	25	121	232	235	342	213	19.0	8-23	190	247	190	25
125		138	250	270	369	232		8-28	220	269	200	35
150		154	270	300	393	248	20.0		250	288	210	40
200		185	335	360	440	280	22.0	12-28	310	325	230	50
250		218	370	425	491	315	24.5	12-31	370	366	250	70
300		249	400	485	538	348	27.5	16-31	430	403	270	99
350		285	440	555	592	385	30.0	16-34	490	447	290	140
400		318	505	620	643	420	32.0	16-37	550	488	310	165
450		344	530	670	684	447	34.5		600	519	330	245
500		374	565	730	731	480	36.5	20-37	660	556	350	284
600		433	660	845	823	541	42.0	20-41	770	628	390	350
700		492	740	960	915	603	46.5	24-44	875	700	430	580
800		556	806	1085	1013	671	51.0	24-50	990	778	470	750
900		608	900	1185	1096	725	55.5	28-50	1090	841	510	957
1000		677	974	1320	1200	797	60.0	28-57	1210	925	550	1246
1200		785	1030	1530	1371	911	64.5	32-57	1310	1056	630	2070

PN 40 on request

Hydraulic characteristics

DN	NPS	Flow coefficient valve in fully open position		Zeta
		Kvo	Cvo	
100	4	125	145.00	10.22
125	5	196	227.36	10.15
150	6	282	327.12	10.16
200	8	501	581.16	10.18
250	10	783	908.28	10.17
300	12	1127	1307.32	10.18
350	14	1534	1779.44	10.18
400	16	2004	2324.64	10.18
450	18	2536	2941.76	10.18
500	20	3131	3631.96	10.18
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1000	40	12523	14526.68	10.18
1200	48	18033	20918.28	10.18
1400	56	24544	28471.04	10.18
1500	60	28176	32684.16	10.18
1600	64	32058	37187.28	10.18
1800	72	40573	47064.68	10.18
2000	80	50090	58104.40	10.18
2200	88	60609	70306.44	10.18