

Butterfly Valve

BOAX-CBV13

Type Series Booklet



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Type Series Booklet BOAX-CBV13

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Butterfly Valves

Centred-disc Butterfly Valves

BOAX-CBV13



Main applications

- General irrigation systems
- Pressure boosting
- Domestic water supply
- Air-conditioning systems
- Water treatment
- Water supply systems

Fluids handled

- Service water
- Cooling water
- Fluids containing mineral oils
- Oil
- Drinking water
- Vacuum

Operating data

Operating properties

Characteristic	Value	
Nominal pressure	PN 10/16	
Nominal size	DN 50 - 1200	
Max. permissible pressure [bar]	≤ DN 600	16
	≤ DN 1200	10
Min. permissible temperature [°C]	≥ -10	
Max. permissible temperature [°C]	NBR	≤ +70
	EPDM	≤ +110

Selection as per pressure/temperature ratings (⇒ Page 5)

Valve body materials

Overview of available materials

Material	Material number	Temperature limit
EN-GJS-400-15	5.3106	≤ 70 °C (NBR) ≤ 110 °C (EPDM)

Design details

Design

- Design to BS 5155
- Epoxy-coated body
- Valve disc made of stainless steel
- Perfectly tight shut-off in either direction of flow (no leakage visible to the naked eye)
- Vulcanised rubber lining
- Top flange to ISO 5211
- Valve certified for drinking water applications to WRAS (elastomer and coating)

Variants

- Pneumatic actuators
- Electric actuators
- Limit switches

Product benefits

- Long-term reliable shut-off and sealing to atmosphere
- Body with flanged ends, suitable for downstream dismantling and dead-end service
- Actuation via manual gearbox

Product information

Product information as per Regulation No. 1907/2006 (REACH)

For information as per chemicals Regulation (EC) No. 1907/2006 (REACH), see <http://www.ksb.com/reach>.

Related documents

Information/documents

Document	Reference number
Operating manual	V999011/1.10

Purchase order specifications

Please specify the following information in all enquiries or purchase orders:

1. Type
2. Nominal pressure
3. Nominal size
4. Operating pressure
5. Operating temperature
6. Materials
7. Fluid handled
8. Pipe connection
9. Variants
10. Number of type series booklet

Always indicate the original serial number and the year of construction when ordering spare parts.

Pressure/temperature ratings

Permissible operating pressures [bar]

PN	DN	Permissible operating pressures
		Up to +70 °C (NBR) / +110 °C (EPDM)
10	50 - 1200	10,0
16	50 - 600	16,0

Materials

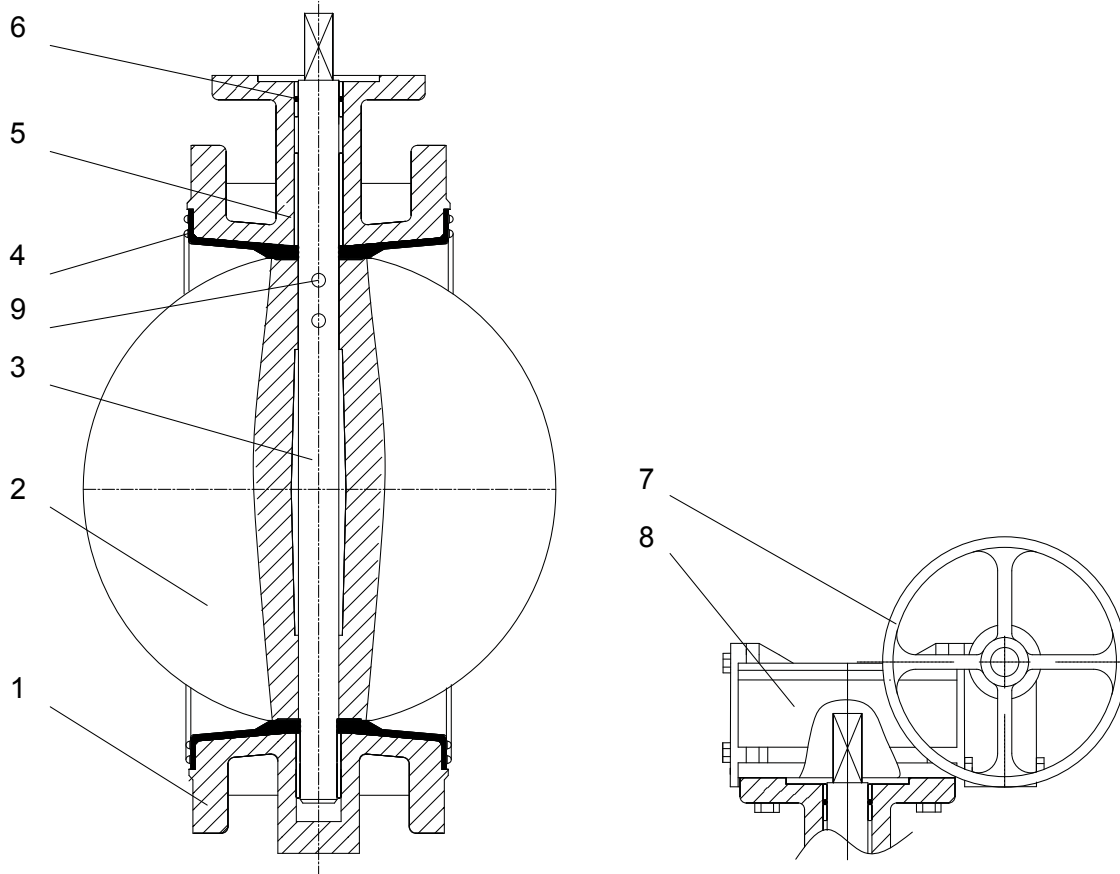


Fig. 1: Sectional drawing

Parts list

Part No.	Description	Material	Material number	Note
1	Body	EN-GJS-400-15	5.3106	-
2	Valve disc	CF8M/bronze C594	-	-
3	Shaft	SS410	-	-
4	Seat	EPDM/NBR	-	Vulcanised
5	Bush	Bronze	-	Lubricated
6	O-ring	EPDM/NBR	-	-
7	Handwheel	Cast iron	-	-
8	Gearbox	Cast iron	-	-
9	Pin	SS316	-	-

8408.1/03-EN

Dimensions and weights

Dimensions and weights DN 50 - 350

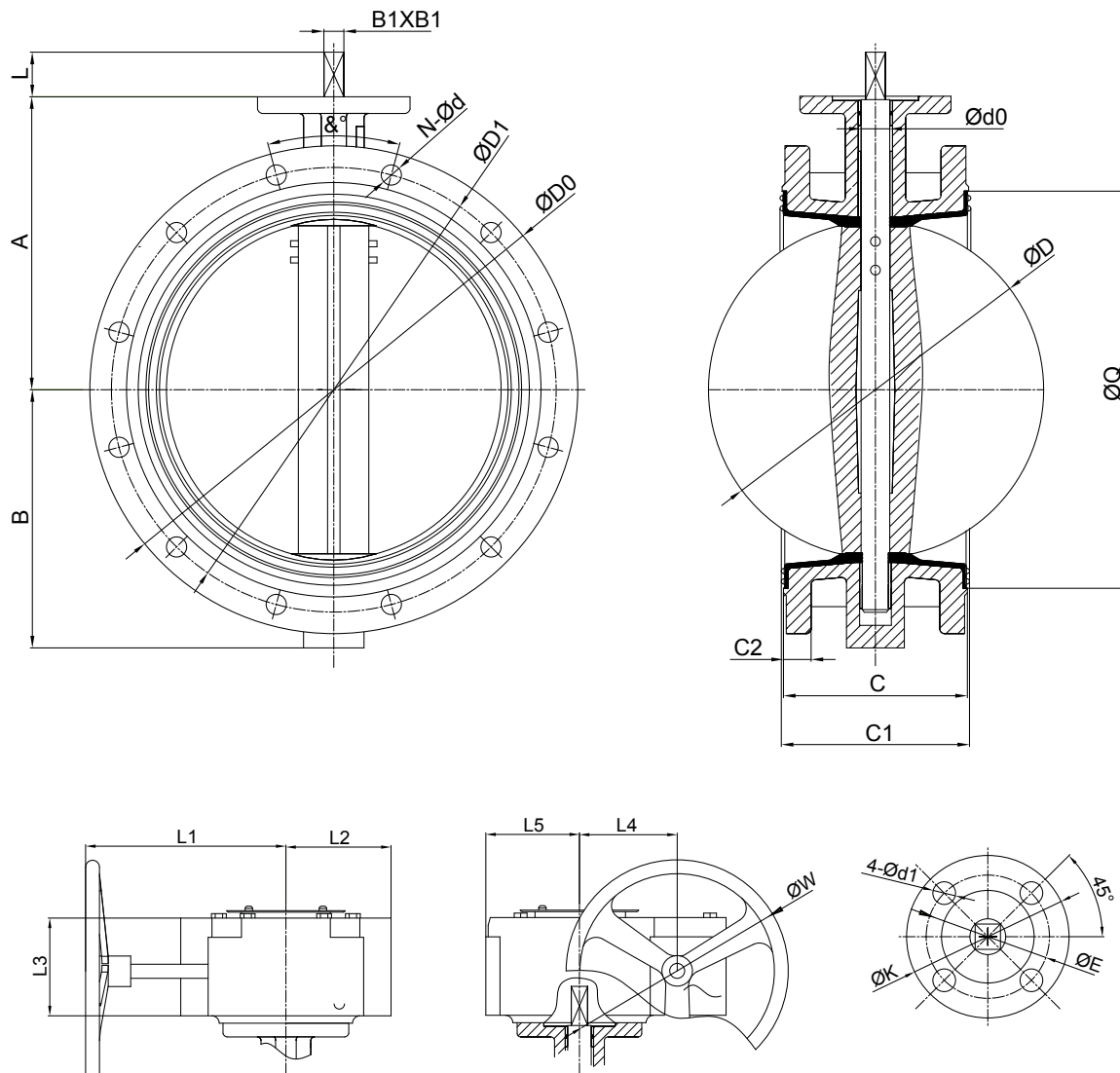


Fig. 2: Sectional drawings DN 50 - 350

Valve dimensions and weights

PN	DN	A	B	C	C1	ØD	Ød0	B1	L	ØQ	ØD0	ØD1	N-Ød	C2	[kg]
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	
10/16	50	120	80	108	113	52,09	12,6	11	28	89	165	125	4-19	19	9,7
	65	130	89	112	117	64,5	12,6	11	28	106	185	145	4-19	19	12,5
	80	145	95	114	119	78,8	12,6	11	28	120	200	160	8-19	19	13,0
	100	155	114	127	132	104	15,8	11	28	144	220	180	8-19	19	15,2
	125	170	125	140	145	123,33	18,9	14	28	170	250	210	8-19	19	20,0
10	150	190	143	140	145	155,5	18,9	14	28	197	285	240	8-23	19	22,3
	200	205	170	152	157	202,5	22,1	17	38	252	340	295	8-23	20	36,0
	250	235	198	165	170	250,5	28,5	22	38	305	395	350	12-23	22	49,0
	300	280	223	178	183	301,5	31,6	22	40	350	445	400	12-23	24,5	65,6
16	350	310	254	190	195	333,3	31,6	22	42	416	505	460	16-23	24,5	93,0
	200	205	170	152	157	202,5	22,1	17	38	252	340	295	12-23	20	36,0
	250	235	198	165	170	250,5	28,5	22	38	305	400	355	12-28	22	51,4
	300	280	223	178	183	301,5	31,6	22	40	350	455	410	12-28	24,5	68,8
	350	310	254	190	195	333,3	31,6	22	42	416	520	470	16-28	26,5	97,5

8408.1/03-EN

Dimensions and weights of gearbox and top flange

PN	DN	ØW	L1	L2	L3	L4	L5	ISO 5211	ØK	ØE	N-Ød1
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
10/16	50	145	152	52	75	45	52	F07	90	70	4-10
	65	145	152	52	75	45	52	F07	90	70	4-10
	80	145	152	52	75	45	52	F07	90	70	4-10
	100	145	152	52	75	45	52	F07	90	70	4-10
	125	145	152	52	75	45	52	F07	90	70	4-10
	150	145	152	52	75	45	52	F07	90	70	4-10
10	200	290	250	75	86	63	75	F10	125	102	4-12
	250	290	250	75	86	63	75	F10	125	102	4-12
	300	290	227	81	83	81	81	F10	125	102	4-12
	350	290	227	81	83	81	81	F10	125	102	4-12
16	200	290	250	75	86	63	75	F10	125	102	4-12
	250	290	250	75	86	63	75	F10	125	102	4-12
	300	290	227	81	83	81	81	F10	125	102	4-12
	350	290	227	81	83	81	81	F10	125	102	4-12

Mating dimensions as per standard

Face-to-face lengths: EN 558-1/13

Flanges: DIN EN 1092-2

Dimensions and weights DN 400 - 600

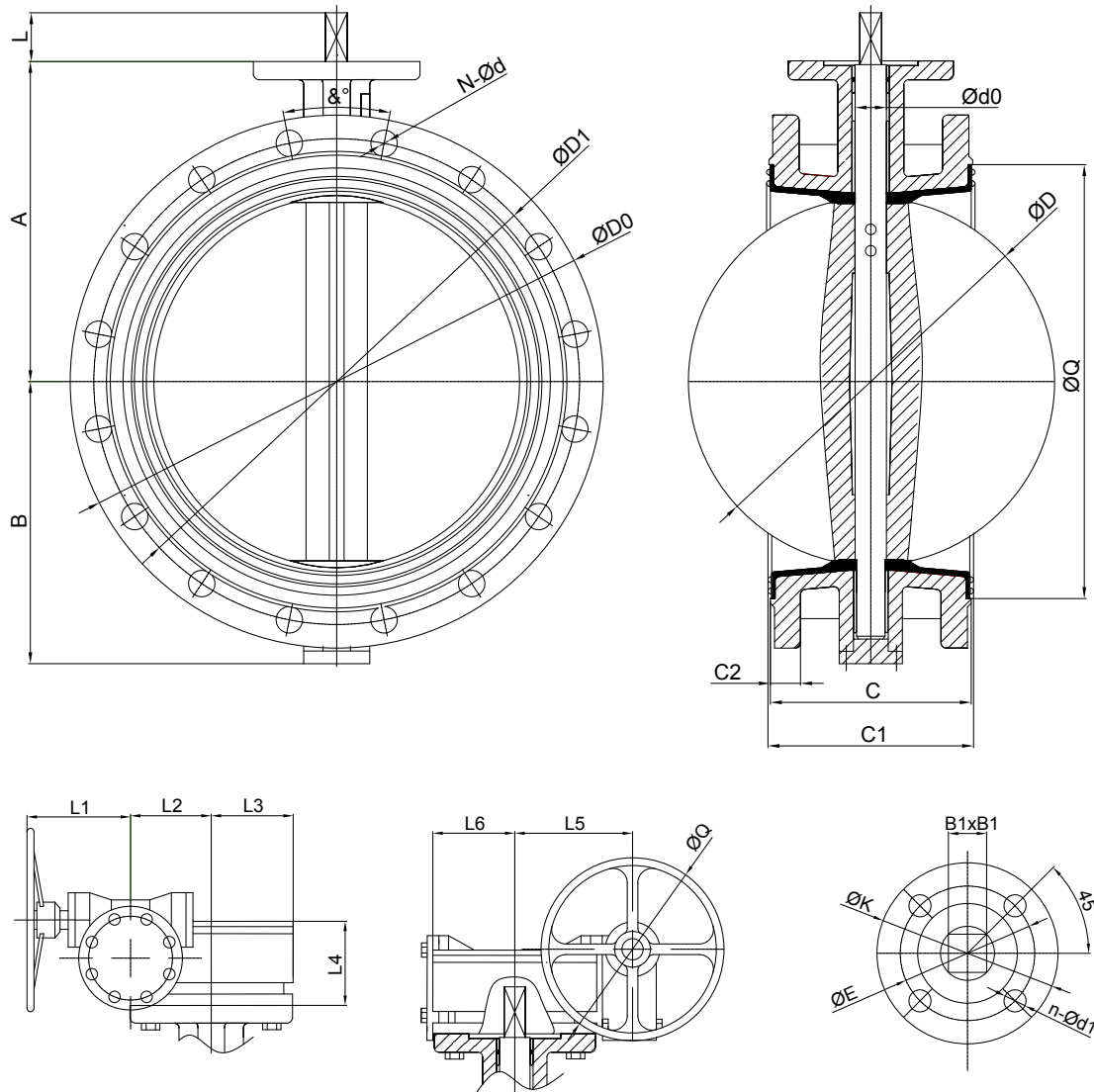


Fig. 3: Sectional drawings DN 400 - 600

Valve dimensions and weights

PN	DN	A	B	C	C1	ØD	Ød0	B1	L	ØQ	ØD0	ØD1	N-Ød	C2	[kg]
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	
10	400	340	310	216	220	389,6	33,15	27	50	460	565	515	16-28	24,5	127
	450	375	350	222	226	440,5	37,95	27	50	510	615	565	20-28	25,5	160
	500	430	380	229	234	491,6	41,12	36	60	560	670	620	20-28	26,5	182
	600	500	425	267	272	592,5	50,62	36	60	660	780	725	20-31	30	252
16	400	340	310	216	220	389,6	37,95	27	50	460	580	525	16-31	28	127
	450	375	350	222	226	440,5	42,86	27	50	510	640	585	20-31	30	160
	500	430	380	229	234	491,6	45,72	36	60	560	715	650	20-34	32	186
	600	500	425	267	272	592,5	53,98	36	60	660	840	770	20-37	36	286

Dimensions and weights of gearbox and top flange

PN	DN	ØW	L1	L2	L3	L4	L5	l6	ISO 5211	ØK	ØE	N-Ød
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
10	400	290	160	94	103,5	110	181	103,5	F14	175	140	4-18
	450	290	160	94	103,5	110	181	103,5	F14	175	140	4-18
	500	290	160	94	103,5	110	181	103,5	F14	175	140	4-18
	600	385	176	125	131	128	199,5	131	F16	210	165	4-23
16	400	290	160	94	103,5	110	181	103,5	F14	175	140	4-18

PN	DN	ØW	L1	L2	L3	L4	L5	I6	ISO 5211	ØK	ØE	N-Ød
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
16	450	290	160	94	103,5	110	181	103,5	F14	175	140	4-18
	500	290	160	94	103,5	110	181	103,5	F14	175	140	4-18
	600	385	176	125	131	128	199,5	131	F16	210	165	4-23

Mating dimensions as per standard

Face-to-face lengths: EN 558-1/13
 Flanges: DIN EN 1092-2

Dimensions and weights DN 700 - 1200

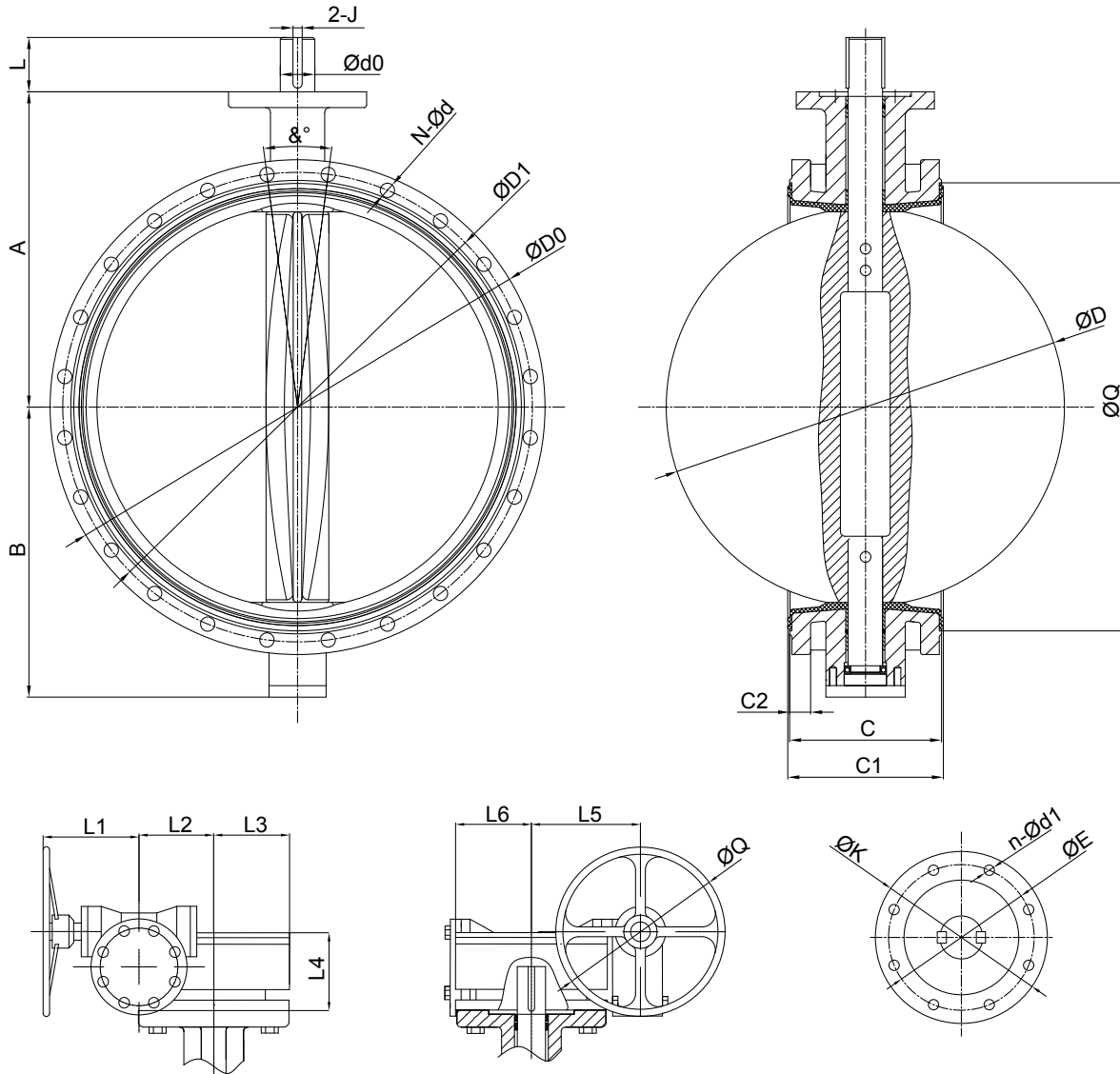


Fig. 4: Sectional drawings DN 700 - 1200

Valve dimensions and weights

PN	DN	A	B	C	C1	ØD	Ød0	J	L	ØQ	ØD0	ØD1	N-Ød	C2	[kg]
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	
10	700	560	500	292	298	695	63,35	2-18	80	770	895	840	24-31	32,5	359
	800	620	550	318	326	795,4	63,35	2-18	80	871	1015	950	24-34	35	477
	900	685	622	330	338	864,7	75	2-20	118	972	1115	1050	28-34	37,5	647
	1000	735	690	410	418	965	85	2-22	142	1080	1230	1160	28-37	40	790
	1200	917	805	470	478	1160,6	105	2-28	154	1270	1455	1380	32-40	45	1406

Dimensions and weights of gearbox and top flange

PN	DN	ØW	L1	L2	L3	L4	L5	L6	ISO 5211	ØK	ØE	N-Ød1
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
10	700	385	215	140	146	157	228	146	F25	300	254	8-18
	800	385	215	140	146	157	228	146	F25	300	254	8-18
	900	400	215	162,5	170	170	243	170	F25	300	254	8-18
	1000	400	215	162,5	170	170	243	170	F25	300	254	8-18
	1200	450	240	236	180	209	302	250	F30	350	298	8-22

Mating dimensions as per standard

Face-to-face lengths: EN 558-1/13
Flanges: DIN EN 1092-2



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