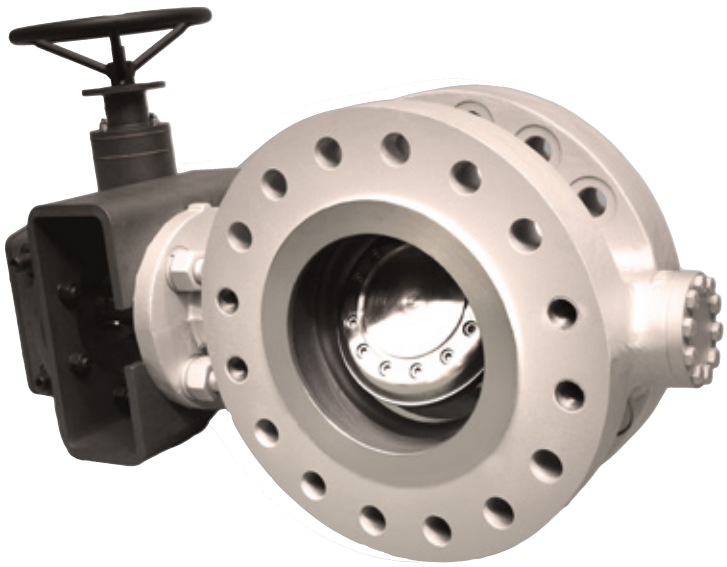
VANESSA TRIPLE OFFSET VALVES, SERIES 30,000

Vanessa triple offset design and unique sealing elements provide zero leakage* through non-rubbing 90-degree rotation across a wide range of pressure and temperature conditions.



FEATURES

- A metal seal ring in Duplex (as a minimum) and a highly wear-resistant Stellite® grade 21 seat ensure prolonged superior tightness
- Asymmetric design and disparate torque demands ensure tightness in both directions
- Integral position indicators on the shaft and the top mounting flange provide positive disc position indication
- Single piece cast body, with face-to-face dimensions to ISO 5752, ASME B16.10 and API 609, guarantees interchangeability with other valve types
- All-metal construction produces an inherently fire safe valve
- Extensively hardened bearings, incorporating a standard reinforced, braided, flexible graphite bearing protector, ensure increased reliability
- Blowout-proof shaft is safe to operate and provides complete compliance with API 609 thanks to its four different internal and external retaining devices
- Double flanged body style also available in jacketed configuration to prevent fluid crystallization

GENERAL APPLICATIONS

Industries: Oil & Gas upstream, downstream, pipeline & storage, supply & service; chemical & coal, petrochemical, desalination plants, waterworks, food & beverage; renewables (solar, geothermal and hydro), fossils, district heating, nuclear; iron & steel; other mining; automotive; shipyards; aerospace.
Fluids: Hydrocarbons (crude oil, naphtha, diesel, jet fuel, kerosene, gasoline, acid gas), sour gas, natural gas, syngas, carbon dioxide, flare gas, industrial gases, chemical solvents (ethylene, ethylene glycol, ethylbenzene, butadiene, styrene), sulphur (tail gas), hydrogen, oxygen, chemical acids (nitric, acrylic, sulphuric, hydrochloric, hydrofluoric, acetic, hydrogen peroxide), alcohols, ammonia, amines, chlorinated solvents (chlorine, vinyl chloride), steam (saturated and superheated), geothermal steam, heat transfer fluids, flue gas, coke oven gas, potable water, sea water, waste water.

TECHNICAL DATA

Design standards:	API 609 & EN 593; ASME B16.34 & EN 12516
Flange drilling:	ASME B16.5; ASME B16.47; EN 1092-1; ISO 7005
Sizes:	from 80 to 2800 mm (3" to 112")
Face to face:	ISO 5752; EN 558; ASME B16.10; API 609
Pressure ratings:	ASME from class 150 to 1500; EN from PN 10 to PN 160
Temperature range:	from -60°C to +450°C (-76°F to +842°F)

* Unless specified otherwise, no visible leakage is allowed throughout the entire duration of seat tests: this is in accordance with 'Leakage Rate A' of ISO 5208 and EN 12266-1 standards, and the 'Resilient Seat Valves' requirement of API 598.

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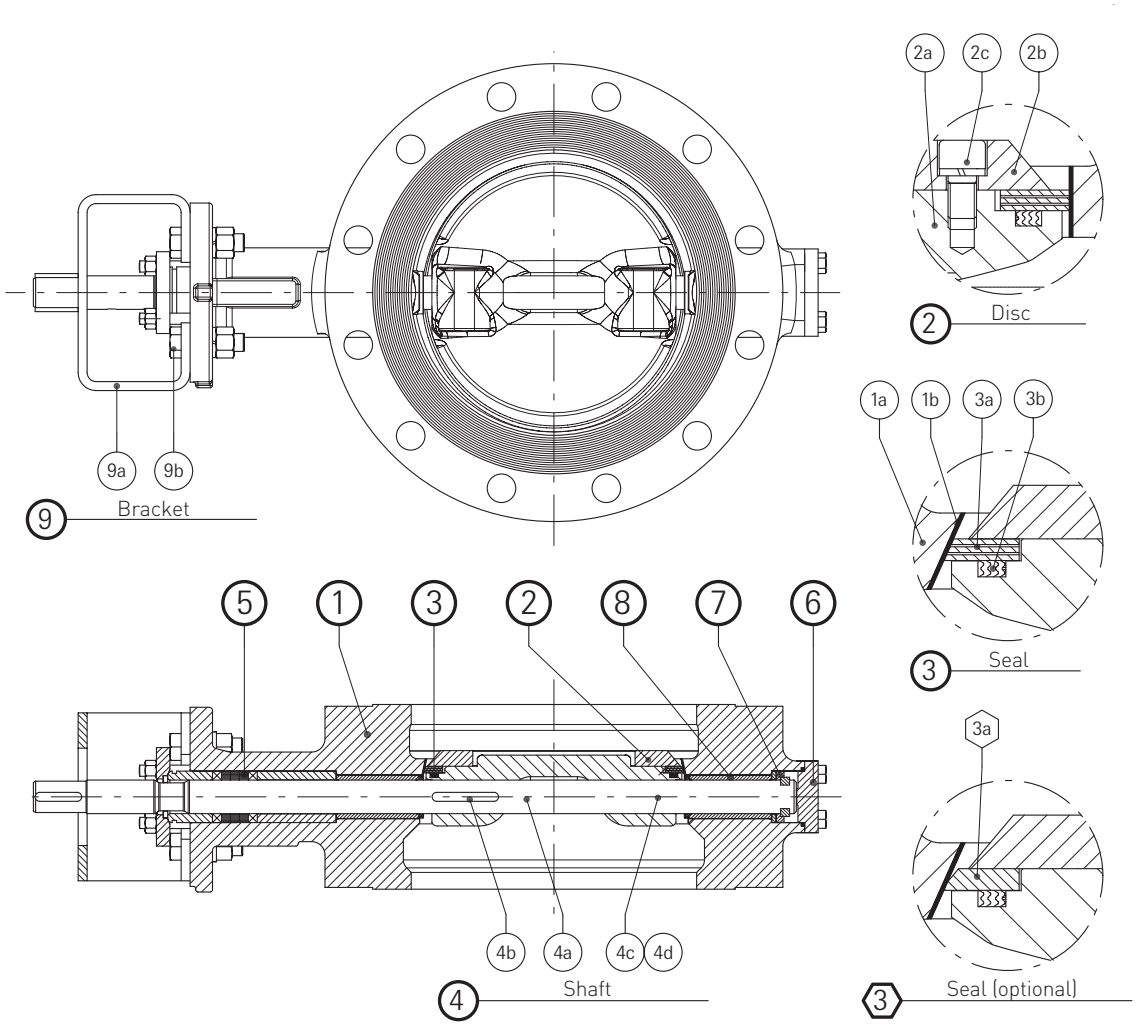
TYPICAL MATERIAL SELECTION - PLEASE REFER TO BASIC CONFIGURATION SECTIONAL DRAWING ON PAGE 3

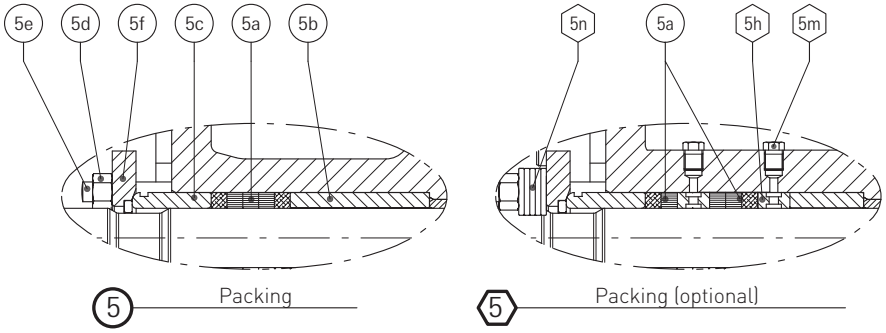
Item	Note	Description	Body in carbon steel	Body in stainless steel
1a		Body	ASTM A216 WCB / EN 10213 1.0619	ASTM A351 CF8M / EN 10213 1.4408
1b		Weld surfacing on seat	Stellite® gr.21	Stellite® gr.21
2a	□	Cast disc or forge disc	ASTM A216 WCB / EN 10213 1.061 or ASTM A105 / EN 10222-2 1.0426	ASTM A351 CF8M / EN 10213 1.4408 or ASTM A182 Type F316 / EN 10222-5 1.4401
2b		Retainer flange	ASTM A516	UNS S31600
2c		Retainer flange screw	ISO 3506 A4 (AISI 316)	ISO 3506 A4 (AISI 316)
3a	○ ○◆	Seal ring Solid seal ring (Solid seal ring option)	UNS S31803 (duplex) + graphite UNS S17400 (17-4 PH) hard faced	UNS S31803 (duplex) + graphite UNS S20910 (Nitronic 50 ®) hard faced
3b	○	Disc spiral wound gasket	UNS S31600 + graphite	UNS S31600 + graphite
4a		Shaft	ASTM A479 UNS S41000	ASTM A479 Type XM19 (Nitronic 50 ®)
4b		Disc key	UNS S41000	UNS S20910
4c		Locating nut	UNS S36100	UNS S36100
4d		Locating bolt	ISO 3506 A4 (AISI 316)	ISO 3506 A4 (AISI 316)
5a	○	Packing	Graphite	Graphite
5b		Spacer	UNS S31600	UNS S31600
5c		Packing bushing	UNS S31600	UNS S31600
5d		Stud nut	ISO 3506 A4 (AISI 316)	ISO 3506 A4 (AISI 316)
5e		Stud bolts	ISO 3506 A4 (AISI 316)	ISO 3506 A4 (AISI 316)
5f		Packing flange	ASTM A240 Type 316	ASTM A240 Type 316
5h	◆	Lantern ring (Bearing & packing flushing option)	UNS S31600	UNS S31600
5m	◆	Plug (Bearing & packing flushing option)	UNS S31600	UNS S31600
5n	◆	Belleville spring (Live loaded packing option)	Stainless steel or spring steel nickel plated	Stainless steel or spring steel nickel plated
6a		Bottom flange	ASTM A516	ASTM A240 Type 316
6b		Screw	ISO 3506 A4 (AISI 316)	ISO 3506 A4 (AISI 316)
6c	○	Bottom spiral wound gasket	UNS S31600 + graphite	UNS S31600 + graphite
7a		Thrust bearing	UNS S31600 hard faced	UNS S31600 hard faced
7b		Thrust bearing washer	UNS S31600 hard faced	UNS S31600 hard faced
7c		Key or ring	UNS S31600	UNS S31600
8a		Bearing	UNS S31600 hard faced	UNS S31600 hard faced
8b		Bearing protector	Reinforced graphite	Reinforced graphite
9a		Bracket	Carbon steel	Carbon steel
9b		Screw	Carbon steel PTFE coated	Alloy steel PTFE coated

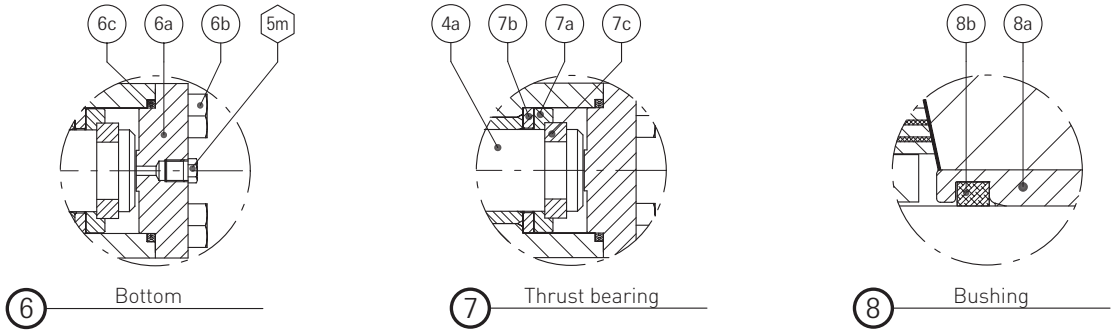
NOTES

□ Material selection depends on valve size
○ Suggested spare parts
◆ Options available upon request

Vanessa Series 30,000 triple offset valves can be manufactured in numerous valve body materials, including: carbon steel and low temperature carbon steel e.g. WCB, 1.0619, LCB, LCC; high temperature alloy steel e.g. WC6, WC9, C5, C12; austenitic stainless steel e.g. CF8M, 1.4408, CF8, CF3M, CF3, CF8C; Duplex and Superduplex stainless steel e.g. CD3MN, CD3MWCuN; high alloy austenitic stainless steel e.g. 6Mo (CN3MN) and Alloy 20 (CN7M), many different nickel alloys including Monel, Incoloy, Hastelloy, Inconel; nickel aluminum bronze and titanium.
Valve bodies fabricated from forged steel are also available.


9a
9b
9 Bracket
2a
2c
2b
2 Disc
1a
1b
3a
3b
3 Seal
5
1
3
2
8
7
6
4b
4a
4c
4d
4 Shaft
3a
3 Seal (optional)

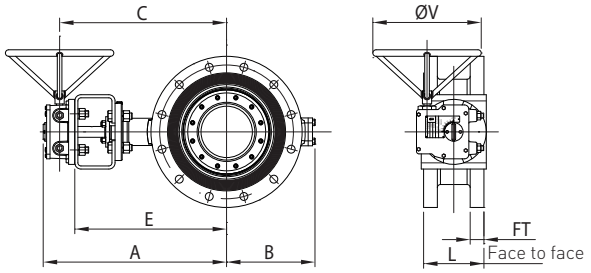

5e
5d
5f
5c
5a
5b
5 Packing
5n
5a
5h
5m
5 Packing (optional)


6c
6a
6b
5m
6 Bottom
4a
7b
7a
7c
7 Thrust bearing
8b
8a
8 Bushing

DOUBLE FLANGED SHORT - FACE TO FACE ISO 5752 BASIC SERIES 13

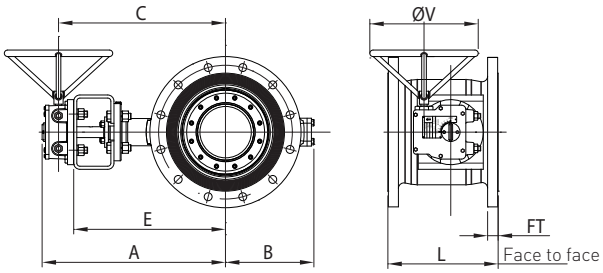
Design Code ASME B16.5 / ASME B16.34 Class 150 - Trim B

mm	inch	A	B	C	E	FT	L	ØV	Valve kg	Total kg
80	3	340	125	298	260	22.3	114	125	30	37
100	4	370	141	328	290	22.3	127	125	45	52
150	6	410	165	368	330	23.9	140	125	55	62
200	8	475	214	424	385	27.0	152	300	90	101
250	10	515	243	464	425	28.6	165	300	125	136
300	12	592	286	539	490	30.2	178	500	165	178
350	14	627	312	574	525	33.4	190	500	200	213
400	16	670	350	600	545	35.0	216	600	260	290
450	18	705	383	635	580	38.1	222	600	315	345
500	20	765	407	695	640	41.3	229	700	395	425
600	24	845	484	750	690	46.1	267	300	570	616



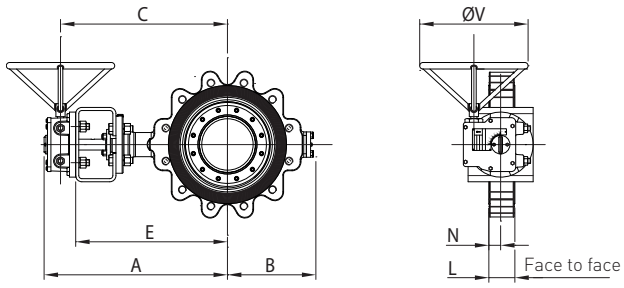
DOUBLE FLANGED LONG - FACE TO FACE API 609 LONG PATTERN - ASME B16.10

mm	inch	A	B	C	E	FT	L	ØV	Valve kg	Total kg
80	3	340	125	298	260	22.3	203	125	32	39
100	4	370	141	328	290	22.3	229	125	48	55
150	6	410	165	368	330	23.9	267	125	66	73
200	8	475	214	424	385	27.0	292	300	98	109
250	10	515	243	464	425	28.6	330	300	135	146
300	12	592	286	539	490	30.2	356	500	179	192
350	14	627	312	574	525	33.4	381	500	230	243
400	16	670	350	600	545	35.0	406	600	303	333
450	18	705	383	635	580	38.1	432	600	366	396
500	20	765	407	695	640	41.3	457	700	448	478
600	24	845	484	750	690	46.1	508	300	647	693



LUG - FACE TO FACE API 609 CLASS 150

mm	inch	A	B	C	E	L	N	ØV	Valve kg	Total kg
80	3	340	125	298	260	48	20	125	13	20
100	4	370	141	328	290	54	24	125	17	24
150	6	410	165	368	330	57	26	125	23	30
200	8	475	214	424	385	64	28	300	36	47
250	10	515	243	464	425	71	32	300	49	60
300	12	592	286	539	490	81	38	500	83	96
350	14	627	312	574	525	92	44	500	117	130
400	16	670	350	600	545	102	49	600	160	190
450	18	705	383	635	580	114	55	600	194	224
500	20	765	407	695	640	127	63	700	270	300
600	24	845	484	750	690	154	78	300	387	433

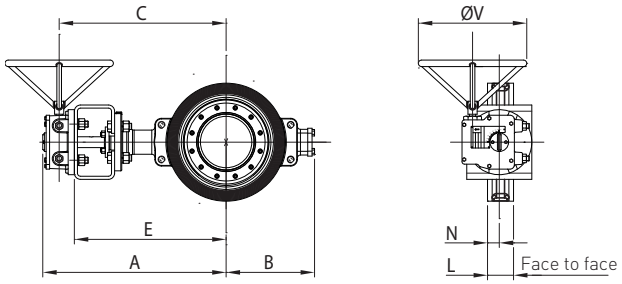


Please see notes on page 12

WAFER - FACE TO FACE API 609 CLASS 150

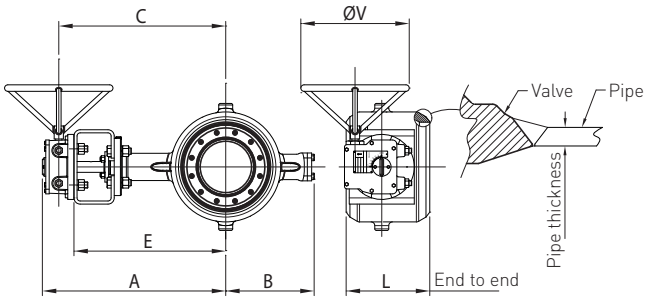
									Valve	Total
mm	inch	A	B	C	E	L	N	ØV	kg	kg
80	3	340	125	298	260	48	20	125	14	21
100	4	370	141	328	290	54	24	125	15	22
150	6	410	165	368	330	57	26	125	20	27
200	8	475	214	424	385	64	28	300	34	45
250	10	515	243	464	425	71	32	300	45	56
300	12	592	286	539	490	81	38	500	73	86
350	14	627	312	574	525	92	44	500	97	110
400	16	670	350	600	545	102	49	600	123	153
450	18	705	383	635	580	114	55	600	164	194
500	20	765	407	695	640	127	63	700	220	250
600	24	845	484	750	690	154	78	300	324	370

Design Code ASME B16.5 / ASME B16.34 Class 150 - Trim B



BUTTWELD - END TO END ISO 5752 BASIC SERIES 14

							Applicable		Valve	Total
mm	inch	A	B	C	E	L	SCH	ØV	kg	kg
80	3	340	125	298	260	180	⩽ 80	125	19	26
100	4	370	141	328	290	190	⩽ 80	125	27	34
150	6	410	165	368	330	210	⩽ 80	125	32	39
200	8	475	214	424	385	230	⩽ 60	300	42	53
250	10	515	243	464	425	250	⩽ 40	300	56	67
300	12	592	286	539	490	270	⩽ 40	500	82	95
350	14	627	312	574	525	290	⩽ 40	500	108	121
400	16	670	350	600	545	310	⩽ 40	600	127	157
450	18	705	383	635	580	330	⩽ 40	600	144	174
500	20	765	407	695	640	350	⩽ 40	700	196	226
600	24	845	484	750	690	390	⩽ 40	300	283	329

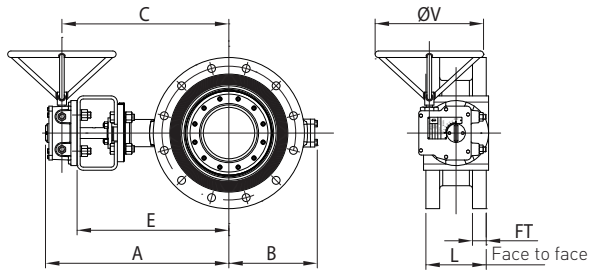


Please see notes on page 12

DOUBLE FLANGED SHORT - FACE TO FACE EN 558 BASIC SERIES 13

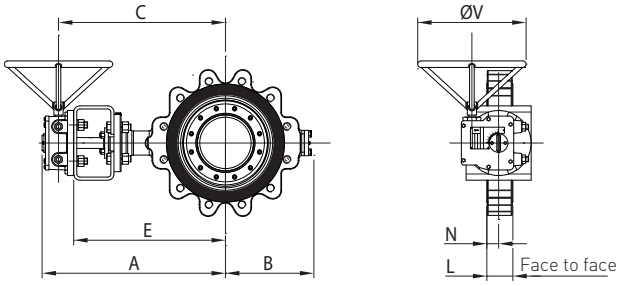
Design Code EN 1092-1 / EN 12516-1 PN 10 - 16 - 25 - Trim B

mm	inch	A	B	C	E	FT	L	ØV	Valve kg	Total kg
80	3	340	125	298	260	22.3	114	125	30	37
100	4	370	141	328	290	22.3	127	125	45	52
150	6	410	165	368	330	23.9	140	125	55	62
200	8	475	214	424	385	27.0	152	300	90	101
250	10	515	243	464	425	28.6	165	300	125	136
300	12	592	286	539	490	30.2	178	500	165	178
350	14	627	312	574	525	33.4	190	500	228	241
400	16	670	350	600	545	35.0	216	600	283	313
450	18	705	383	635	580	38.1	222	600	338	368
500	20	765	407	695	640	41.3	229	700	420	450
600	24	845	484	750	690	46.1	267	300	600	646



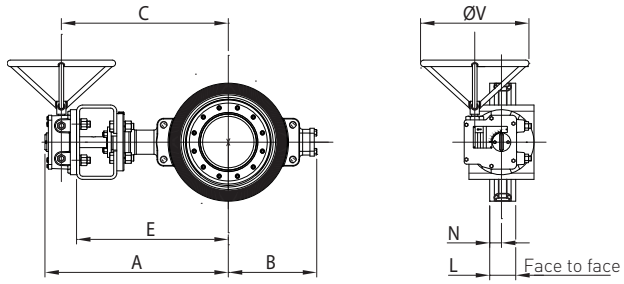
LUG - FACE TO FACE EN 558 BASIC SERIES 16

mm	inch	A	B	C	E	L	N	ØV	Valve kg	Total kg
80	3	340	125	298	260	64	34	125	19	26
100	4	370	141	328	290	64	30	125	21	28
150	6	410	165	368	330	76	41	125	40	51
200	8	475	214	424	385	89	49	300	52	63
250	10	515	243	464	425	114	70	300	66	77
300	12	592	286	539	490	114	65	500	108	121
350	14	627	312	574	525	127	72	500	175	188
400	16	670	350	600	545	140	80	600	223	253
450	18	705	383	635	580	152	85	600	303	333
500	20	765	407	695	640	152	80	700	348	378
600	24	845	484	750	690	178	94	300	456	502



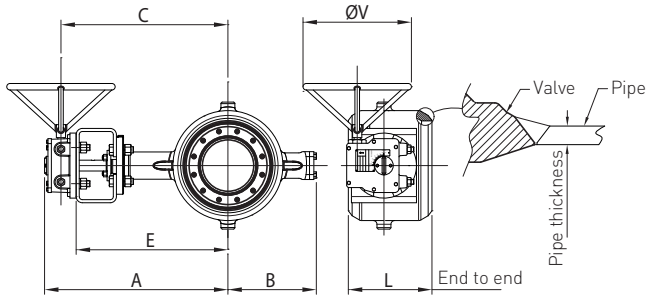
WAFER - FACE TO FACE EN 558 BASIC SERIES 16

mm	inch	A	B	C	E	L	N	ØV	Valve kg	Total kg
80	3	340	125	298	260	64	34	125	16	23
100	4	370	141	328	290	64	30	125	17	24
150	6	410	165	368	330	76	41	125	21	28
200	8	475	214	424	385	89	49	300	40	51
250	10	515	243	464	425	114	70	300	53	64
300	12	592	286	539	490	114	65	500	77	90
350	14	627	312	574	525	127	72	500	119	132
400	16	670	350	600	545	140	80	600	139	169
450	18	705	383	635	580	152	85	600	181	211
500	20	765	407	695	640	152	80	700	256	286
600	24	845	484	750	690	178	94	300	364	410



BUTTWELD - END TO END EN 12982 BASIC SERIES 14

mm	inch	A	B	C	E	L	Max. Th.	ØV	Valve kg	Total kg
80	3	340	125	298	260	180	8.0	125	19	26
100	4	370	141	328	290	190	9.0	125	27	34
150	6	410	165	368	330	210	11.0	125	32	39
200	8	475	214	424	385	230	10.5	300	42	53
250	10	515	243	464	425	250	9.5	300	56	67
300	12	592	286	539	490	270	10.5	500	82	95
350	14	627	312	574	525	290	11.5	500	108	121
400	16	670	350	600	545	310	12.7	600	127	157
450	18	705	383	635	580	330	14.5	600	144	174
500	20	765	407	695	640	350	15.5	700	196	226
600	24	845	484	750	690	390	17.5	300	283	329

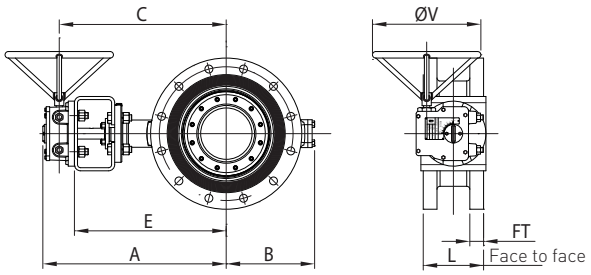


Please see notes on page 12

DOUBLE FLANGED SHORT - FACE TO FACE ISO 5752 BASIC SERIES 13

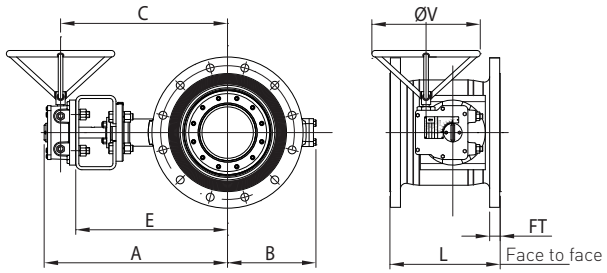
Design Code ASME B16.5 / ASME B16.34 Class 300 - Trim C

mm	inch	A	B	C	E	FT	L	ØV	Valve kg	Total kg
80	3	340	125	298	260	27.0	114	125	35	42
100	4	370	141	328	290	30.2	127	125	45	52
150	6	440	189	389	350	35.0	140	300	80	91
200	8	517	236	464	415	39.7	152	500	120	133
250	10	557	272	504	455	46.1	165	500	175	188
300	12	615	310	545	490	49.3	178	600	235	265
350	14	670	335	600	545	52.4	190	700	320	350
400	16	730	389	635	575	55.6	216	300	420	466
450	18	815	422	720	660	58.8	222	500	495	542
500	20	855	461	760	700	62.0	229	500	605	652
600	24	990	531	883	785	68.3	267	820	905	1070



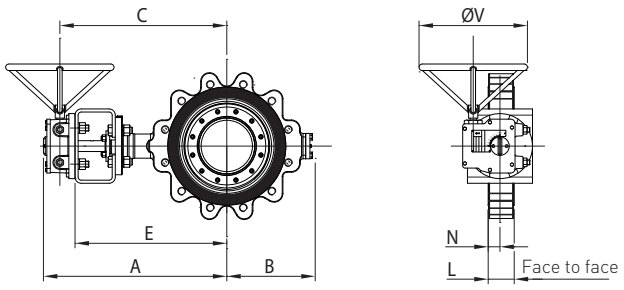
DOUBLE FLANGED LONG - FACE TO FACE API 609 LONG PATTERN - ASME B16.10

mm	inch	A	B	C	E	FT	L	ØV	Valve kg	Total kg
80	3	340	125	298	260	27.0	283	125	40	47
100	4	370	141	328	290	30.2	305	125	57	64
150	6	440	189	389	350	35.0	404	300	102	113
200	8	517	236	464	415	39.7	419	500	145	158
250	10	557	272	504	455	46.1	457	500	223	236
300	12	615	310	545	490	49.3	502	600	301	331
350	14	670	335	600	545	52.4	762	700	414	444
400	16	730	389	635	575	55.6	838	300	585	631
450	18	815	422	720	660	58.8	914	500	767	814
500	20	855	461	760	700	62.0	991	500	897	944
600	24	990	531	883	785	68.3	1143	820	1355	1520



LUG - FACE TO FACE API 609 CLASS 300

mm	inch	A	B	C	E	L	N	ØV	Valve kg	Total kg
80	3	340	125	298	260	48	20	125	18	25
100	4	370	141	328	290	54	24	125	22	29
150	6	440	189	389	350	59	26	300	41	52
200	8	517	236	464	415	73	32	500	56	69
250	10	557	272	504	455	83	37	500	77	90
300	12	615	310	545	490	92	39	600	119	149
350	14	670	335	600	545	117	60	700	254	284
400	16	730	389	635	575	133	65	300	300	346
450	18	815	422	720	660	149	73	500	455	502
500	20	855	461	760	700	159	72	500	499	546
600	24	990	531	883	785	181	82	820	788	953

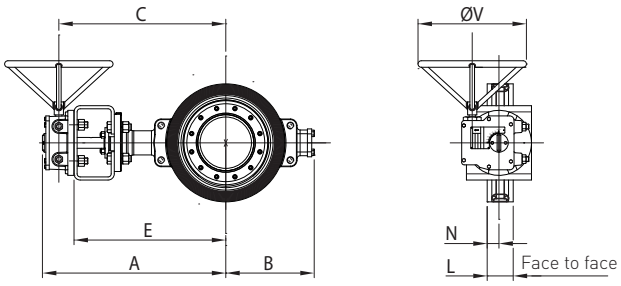


Please see notes on page 12

WAFER - FACE TO FACE API 609 CLASS 300

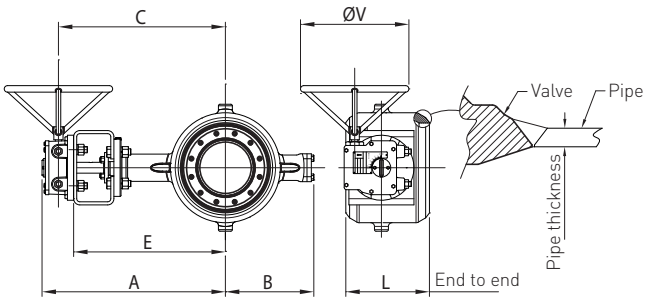
									Valve	Total
mm	inch	A	B	C	E	L	N	ØV	kg	kg
80	3	340	125	298	260	48	20	125	14	21
100	4	370	141	328	290	54	24	125	15	22
150	6	440	189	389	350	59	26	300	29	40
200	8	517	236	464	415	73	32	500	50	63
250	10	557	272	504	455	83	37	500	75	88
300	12	615	310	545	490	92	39	600	109	139
350	14	670	335	600	545	117	60	700	164	194
400	16	730	389	635	575	133	65	300	228	274
450	18	815	422	720	660	149	73	500	285	332
500	20	855	461	760	700	159	72	500	343	390
600	24	990	531	883	785	181	82	820	513	678

Design Code ASME B16.5 / ASME B16.34 Class 300 - Trim C



BUTTWELD - END TO END ISO 5752 BASIC SERIES 14

							Applicable		Valve	Total
mm	inch	A	B	C	E	L	SCH	ØV	kg	kg
80	3	340	125	298	260	180	⩽ 80	125	21	28
100	4	370	141	328	290	190	⩽ 80	125	30	37
150	6	440	189	389	350	210	⩽ 80	300	34	45
200	8	517	236	464	415	230	⩽ 80	500	56	69
250	10	557	272	504	455	250	⩽ 80	500	74	87
300	12	615	310	545	490	270	⩽ 80	600	109	139
350	14	670	335	600	545	290	⩽ 60	700	168	198
400	16	730	389	635	575	310	⩽ 40	300	196	242
450	18	815	422	720	660	330	⩽ 40	500	313	360
500	20	855	461	760	700	350	⩽ 40	500	355	402
600	24	990	531	883	785	390	⩽ 40	820	503	668

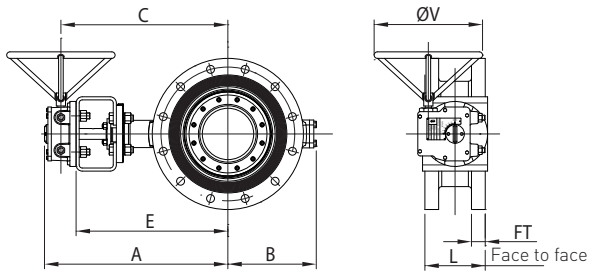


Please see notes on page 12

DOUBLE FLANGED SHORT - FACE TO FACE EN 558 BASIC SERIES 13

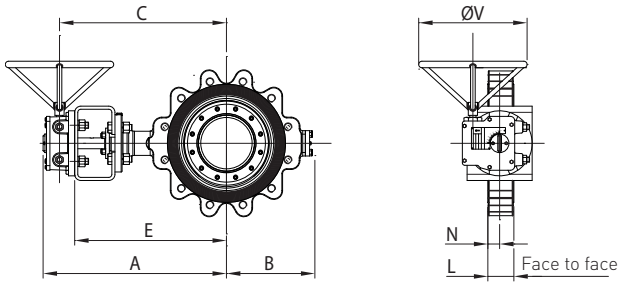
Design Code EN 1092-1 / EN 12516-1 PN 40 - Trim C

mm	inch	A	B	C	E	FT	L	ØV	Valve kg	Total kg
80	3	340	125	298	260	27.0	114	125	35	42
100	4	370	141	328	290	30.2	127	125	45	52
150	6	440	189	389	350	35.0	140	300	80	91
200	8	517	236	464	415	39.7	152	500	120	133
250	10	557	272	504	455	46.1	165	500	175	188
300	12	615	310	545	490	49.3	178	600	235	265
350	14	670	335	600	545	54.0	190	700	320	350
400	16	730	389	635	575	57.0	216	300	420	466
450	18	815	422	720	660	60.0	222	500	495	542
500	20	855	461	760	700	63.5	229	500	605	652
600	24	990	531	883	785	70.0	267	820	905	1070



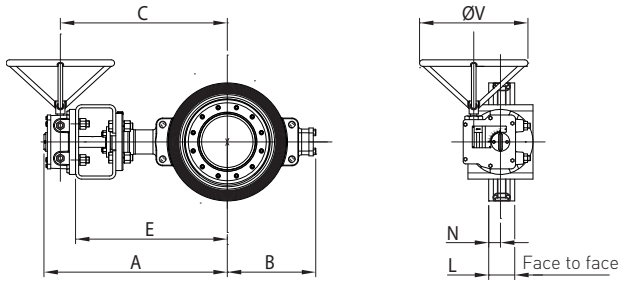
LUG - FACE TO FACE EN 558 BASIC SERIES 16

mm	inch	A	B	C	E	L	N	ØV	Valve kg	Total kg
80	3	340	125	298	260	64	34	125	19	26
100	4	370	141	328	290	64	30	125	21	28
150	6	440	189	389	350	76	36	300	40	51
200	8	517	236	464	415	89	44	500	60	73
250	10	557	272	504	455	114	63	500	91	104
300	12	615	310	545	490	114	55	600	132	162
350	14	670	335	600	545	127	63	700	251	281
400	16	730	389	635	575	140	69	300	310	356
450	18	815	422	720	660	152	73	500	420	467
500	20	855	461	760	700	152	63	500	441	488
600	24	990	531	883	785	178	77	820	675	745



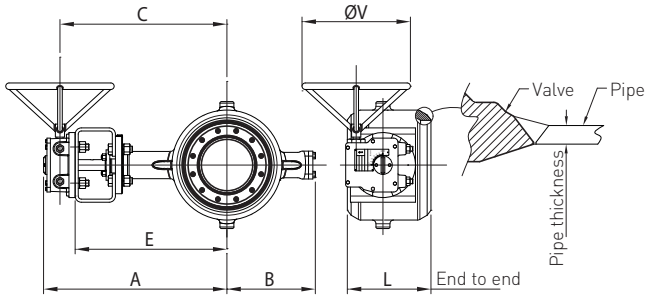
WAFER - FACE TO FACE EN 558 BASIC SERIES 16

mm	inch	A	B	C	E	L	N	ØV	Valve kg	Total kg
80	3	340	125	298	260	64	34	125	16	23
100	4	370	141	328	290	64	30	125	17	24
150	6	440	189	389	350	76	36	300	32	43
200	8	517	236	464	415	89	44	500	53	66
250	10	557	272	504	455	114	63	500	86	99
300	12	615	310	545	490	114	55	600	111	141
350	14	670	335	600	545	127	63	700	165	195
400	16	730	389	635	575	140	69	300	227	273
450	18	815	422	720	660	152	73	500	285	332
500	20	855	461	760	700	152	63	500	325	372
600	24	990	531	883	785	178	77	820	496	566



BUTTWELD - END TO END EN 12982 BASIC SERIES 14

mm	inch	A	B	C	E	L	Max. Th.	ØV	Valve kg	Total kg
80	3	340	125	298	260	180	8.0	125	21	28
100	4	370	141	328	290	190	9.0	125	30	37
150	6	440	189	389	350	210	11.0	300	34	45
200	8	517	236	464	415	230	13.0	500	56	69
250	10	557	272	504	455	250	16.0	500	74	87
300	12	615	310	545	490	270	18.0	600	109	139
350	14	670	335	600	545	290	16.0	700	168	198
400	16	730	389	635	575	310	12.7	300	196	242
450	18	815	422	720	660	330	14.5	500	313	360
500	20	855	461	760	700	350	15.5	500	355	402
600	24	990	531	883	785	390	17.5	820	503	668

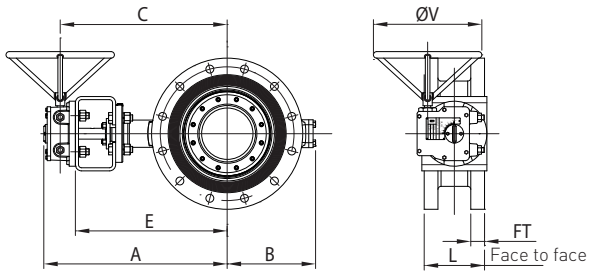


Please see notes on page 12

DOUBLE FLANGED SHORT - FACE TO FACE ISO 5752 BASIC SERIES 14

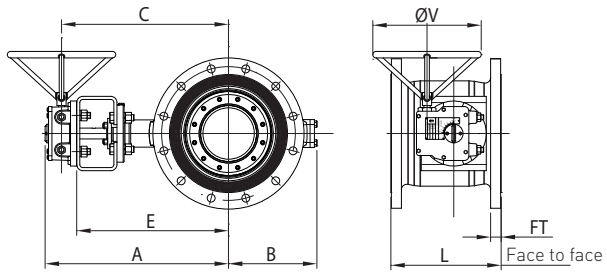
Design Code ASME B16.5 / ASME B16.34 Class 600 - Trim D

mm	inch	A	B	C	E	FT	L	ØV	Valve kg	Total kg
100	4	388	185	337	298	38.1	190	300	75	86
150	6	522	216	469	420	47.7	210	500	130	143
200	8	570	265	500	445	55.6	230	600	205	235
250	10	660	315	565	505	63.5	250	300	320	366
300	12	755	362	660	600	66.7	270	500	440	487
350	14	815	390	708	610	69.9	290	820	490	655
400	16	885	440	778	680	76.2	310	820	690	855
450	18	888	460	795	683	82.5	330	680	820	992
500	20	1000	526	901	795	88.9	350	680	1100	1390
600	24	1090	623	991	885	101.6	390	680	1620	1910



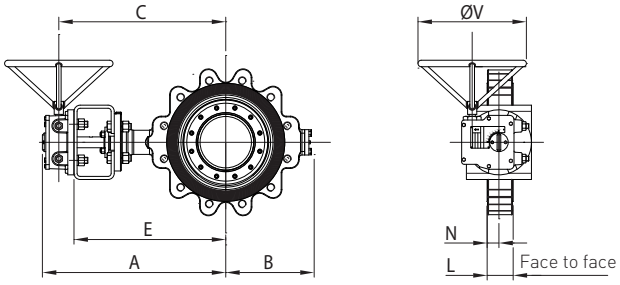
DOUBLE FLANGED LONG - FACE TO FACE API 609 LONG PATTERN - ASME B16.10

mm	inch	A	B	C	E	FT	L	ØV	Valve kg	Total kg
150	6	522	216	469	420	47.7	559	500	165	178
200	8	570	265	500	445	55.6	660	600	265	295
250	10	660	315	565	505	63.5	787	300	456	502
300	12	755	362	660	600	66.7	838	500	596	643
350	14	815	390	708	610	69.9	889	820	706	871
400	16	885	440	778	680	76.2	991	820	982	1147
450	18	888	460	795	683	82.5	1092	680	1231	1403
500	20	1000	526	901	795	88.9	1194	680	1669	1959
600	24	1090	623	991	885	101.6	1397	680	2514	2804



LUG - FACE TO FACE API 609 CLASS 600

mm	inch	A	B	C	E	L	N	ØV	Valve kg	Total kg
100	4	388	185	337	298	64	29.0	300	31	42
150	6	522	216	469	420	78	38.0	500	80	93
200	8	570	265	500	445	102	52.5	600	135	165
250	10	660	315	565	505	117	60.0	300	198	244
300	12	755	362	660	600	140	71.5	500	347	394
350	14	815	390	708	610	155	68.0	820	343	508
400	16	885	440	778	680	178	84.0	820	434	599
450	18	888	460	795	683	200	92.0	680	684	856
500	20	1000	526	901	795	216	101.0	680	824	1114
600	24	1090	623	991	885	232	102.0	680	1414	1704

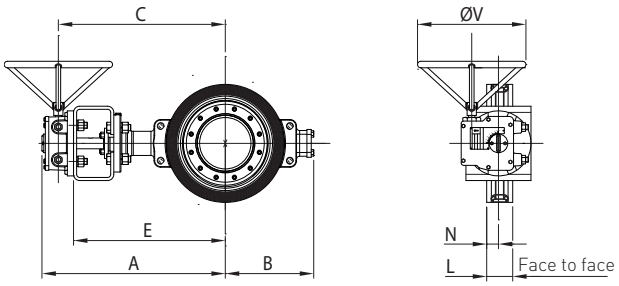


Please see notes on page 12

WAFER - FACE TO FACE API 609 CLASS 600

									Valve	Total
mm	inch	A	B	C	E	L	N	ØV	kg	kg
100	4	388	185	337	298	64	29.0	300	28	39
150	6	522	216	469	420	78	38.0	500	59	72
200	8	570	265	500	445	102	52.5	600	105	135
250	10	660	315	565	505	117	60.0	300	196	242
300	12	755	362	660	600	140	71.5	500	220	267
350	14	815	390	708	610	155	68.0	820	283	448
400	16	885	440	778	680	178	84.0	820	340	505
450	18	888	460	795	683	200	92.0	680	470	642
500	20	1000	526	901	795	216	101.0	680	510	800
600	24	1090	623	991	885	232	102.0	680	1015	1305

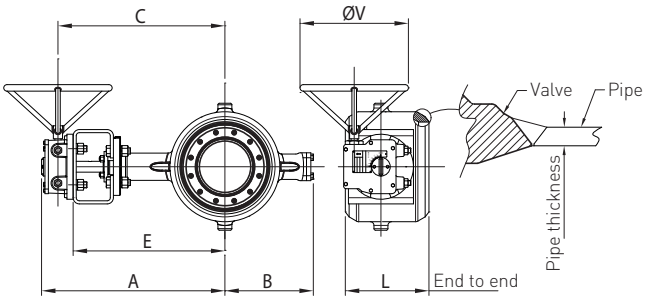
Design Code ASME B16.5 / ASME B16.34 Class 600 - Trim D



BUTTWELD - END TO END ISO 5752 BASIC SERIES 14

							Applicable		Valve	Total
mm	inch	A	B	C	E	L	SCH	ØV	kg	kg
150	6	522	216	469	420	210	⩽ 80	500	71	84
200	8	570	265	500	445	230	⩽ 100	600	110	140
250	10	660	315	565	505	250	⩽ 100	300	162	208
300	12	755	362	660	600	270	⩽ 100	500	215	262
350	14	815	390	708	610	290	⩽ 100	820	243	408
400	16	885	440	778	680	310	⩽ 80	820	425	590
450	18	888	460	795	683	330	⩽ 80	680	512	684
500	20	1000	526	901	795	350	⩽ 80	680	600	890
600	24	1090	623	991	885	390	⩽ 80	680	848	1138

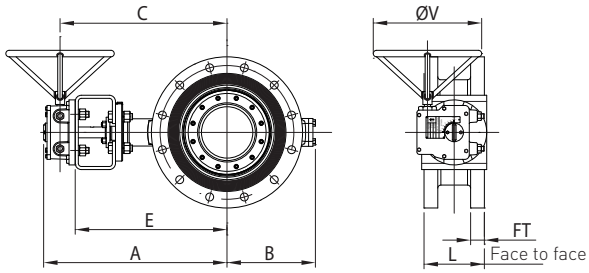
Please see notes on page 12



DOUBLE FLANGED SHORT - FACE TO FACE ISO 5752 BASIC SERIES 8

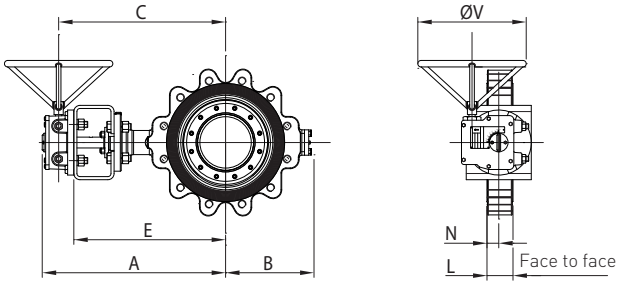
									Valve	Total
mm	inch	A	B	C	E	FT	L	ØV	kg	kg
150	6	507	226	454	405	55.6	225	500	180	193
200	8	610	277	540	485	63.5	275	700	295	325
250	10	730	337	635	575	69.9	325	500	460	507
300	12	860	401	753	655	79.4	375	820	630	795
350	14	878	456	785	673	85.8	425	680	810	982
400	16	935	492	842	730	88.9	475	680	1025	1197
450	18	975	510	876	770	101.6	500	680	1290	1580
500	20	1137	590	1010	870	108.0	575	680	1795	2230
600	24	1297	673	1170	1030	139.7	675	680	2995	3430

Design Code ASME B16.5 Class 900 - Trim E



LUG - FACE TO FACE VANESSA STANDARD

									Valve	Total
mm	inch	A	B	C	E	L	N	ØV	kg	kg
150	6	507	226	454	405	105	52.5	500	115	128
200	8	610	277	540	485	140	70.0	700	260	290
250	10	730	337	635	575	155	77.5	500	327	374
300	12	860	401	753	655	178	89.0	820	490	655
350	14	878	456	785	673	229	114.0	680	670	842
400	16	935	492	842	730	241	117.0	680	888	1060
450	18	975	510	876	770	244	122.0	680	1053	1343
500	20	1137	590	1010	870	300	150.0	680	1441	1876
600	24	1297	673	1170	1030	350	175.0	680	2238	2673



NOTES (relevant from page 4 to 14)

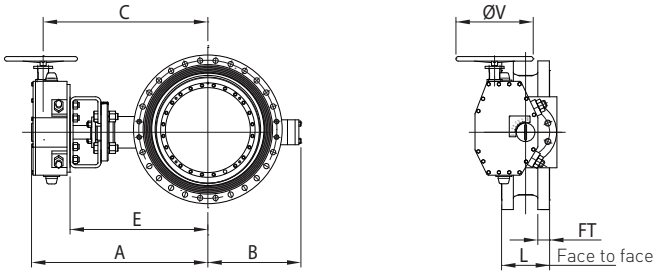
- All dimensions are in millimeters and weights are in kilograms.
- Total kg indicates the sum of valve and manual gear weights.
- Trim A: Δp max. 10 bar
  Trim B: Δp max. 25 bar
  Trim C: Δp max. 52 bar
  Trim D: Δp max. 110 bar
  Trim E: Δp max. 160 bar at ambient temperature

- Drawings and dimensional tables illustrated on this datasheet represent just a selection from Vanessa's much wider product range. Please contact Vanessa for further options.
- Sectional drawings and dimensional tables on this datasheet refer to valves with manual gear but all Vanessa valves are suitable for operation with all kinds of quarter turn actuators (pneumatic, hydraulic, electric, etc.).
- Suggested orientation is with the valve shaft horizontal or inclined from vertical.
- For operating temperatures above 200°C thermal insulation of the valve body is recommended.

DOUBLE FLANGED SHORT - FACE TO FACE ISO 5752 BASIC SERIES 13

Design Code ASME B16.47 Class 150 Series A

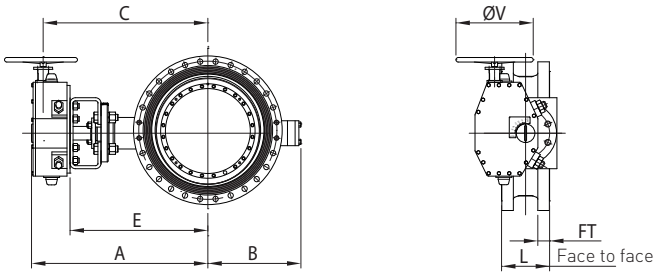
mm	inch	A	B	C	E	FT	L	ØV	Valve kg	Total kg
700	28	1000	556	893	795	69.9	292	820	702	867
750	30	1070	611	963	865	73.1	318	820	990	1155
800	32	1070	611	963	865	79.4	318	820	1015	1180
900	36	1205	736	1112	1000	88.9	330	680	1585	1757
1000	40	1335	801	1236	1130	88.9	410	680	1995	2285
1050	42	1335	801	1236	1130	95.3	410	680	2385	2675
1200	48	1557	941	1430	1290	106.4	470	680	3240	3675
1350	54	1627	1060	1500	1360	119.1	530	680	4050	4485
1400	56	1745	1060	1553	1360	122.3	530	820	4450	5095
1500	60	1820	1078	1628	1435	130.2	600	820	5652	6297



DOUBLE FLANGED SHORT - FACE TO FACE ISO 5752 BASIC SERIES 13

Design Code ASME B16.47 Class 300 Series A

mm	inch	A	B	C	E	FT	L	ØV	Valve kg	Total kg
700	28	1085	617	992	880	84.2	292	680	1382	1554
750	30	1205	671	1106	1000	90.5	318	680	1735	2025
800	32	1205	671	1106	1000	96.9	318	680	1805	2095
900	36	1417	801	1290	1150	103.0	330	680	2460	2895
1000	40	1417	801	1290	1150	113.0	410	680	2270	2705
1050	42	1482	900	1355	1215	117.0	410	680	2940	3375
1200	48	1692	991	1493	1300	132.0	470	820	3875	4670
1350	54	2119	1190	1887	1655	151.0	530	1400	5650	6595
1400	56	2119	1190	1887	1655	152.0	530	1400	5950	6895

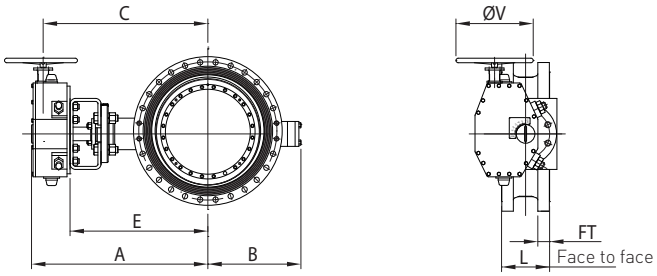


DOUBLE FLANGED SHORT - FACE TO FACE ISO 5752 BASIC SERIES 14

Design Code ASME B16.47 Class 600 Series A

mm	inch	A	B	C	E	FT	L	ØV	Valve kg	Total kg
700	28	1450	760	1258	1065	111	430	820	2230	2875
750	30	1485	785	1293	1100	114	430	820	2730	3375
800	32	1485	785	1293	1100	114	430	820	2730	3375
900	36	1547	865	1348	1155	124	510	820	3725	4520
1000	40	1944	1021	1712	1480	159	550	1400	4820	5765
1200	48	2201	1236	1873	1640	189	630	1400	9500	10665

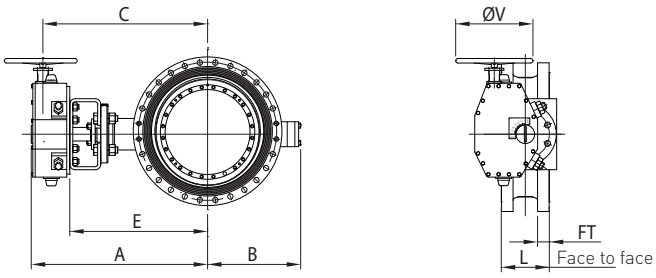
Please see notes on page 12



DOUBLE FLANGED - FACE TO FACE VANESSA STANDARD

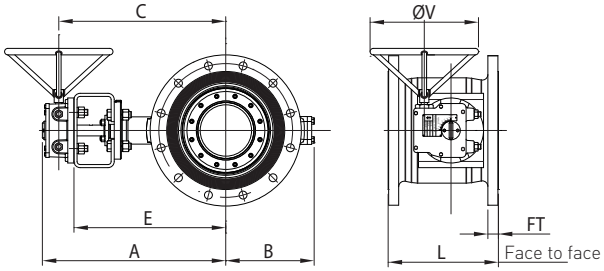
mm	inch	A	B	C	E	FT	L	ØV	Valve kg	Total kg
700	28	1522	800	1323	1130	111.0	775	820	4200	4995
750	30	1722	871	1523	1330	149.0	875	820	5240	6035
800	32	1722	871	1523	1330	158.0	875	820	5590	6385
900	36	1884	991	1652	1420	172.0	850	1400	6050	6995
1000	40	2131	1166	1803	1570	196.9	950	1400	10250	11380
1050	42	2131	1166	1803	1570	206.4	950	1400	10700	11830

Design Code ASME B16.47 Class 900 Series A



DOUBLE FLANGED LONG - FACE TO FACE API 609 LONG PATTERN - ASME B16.10

mm	inch	A	B	C	E	FT	L	ØV	Valve kg	Total kg
700	28	1000	556	893	795	69.9	610	820	830	995
750	30	1070	611	963	865	73.1	610	820	1103	1268
800	32	1070	611	963	865	79.4	660	820	1135	1300
900	36	1205	736	1112	1000	88.9	711	680	1905	2077

Please see notes on page 12

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