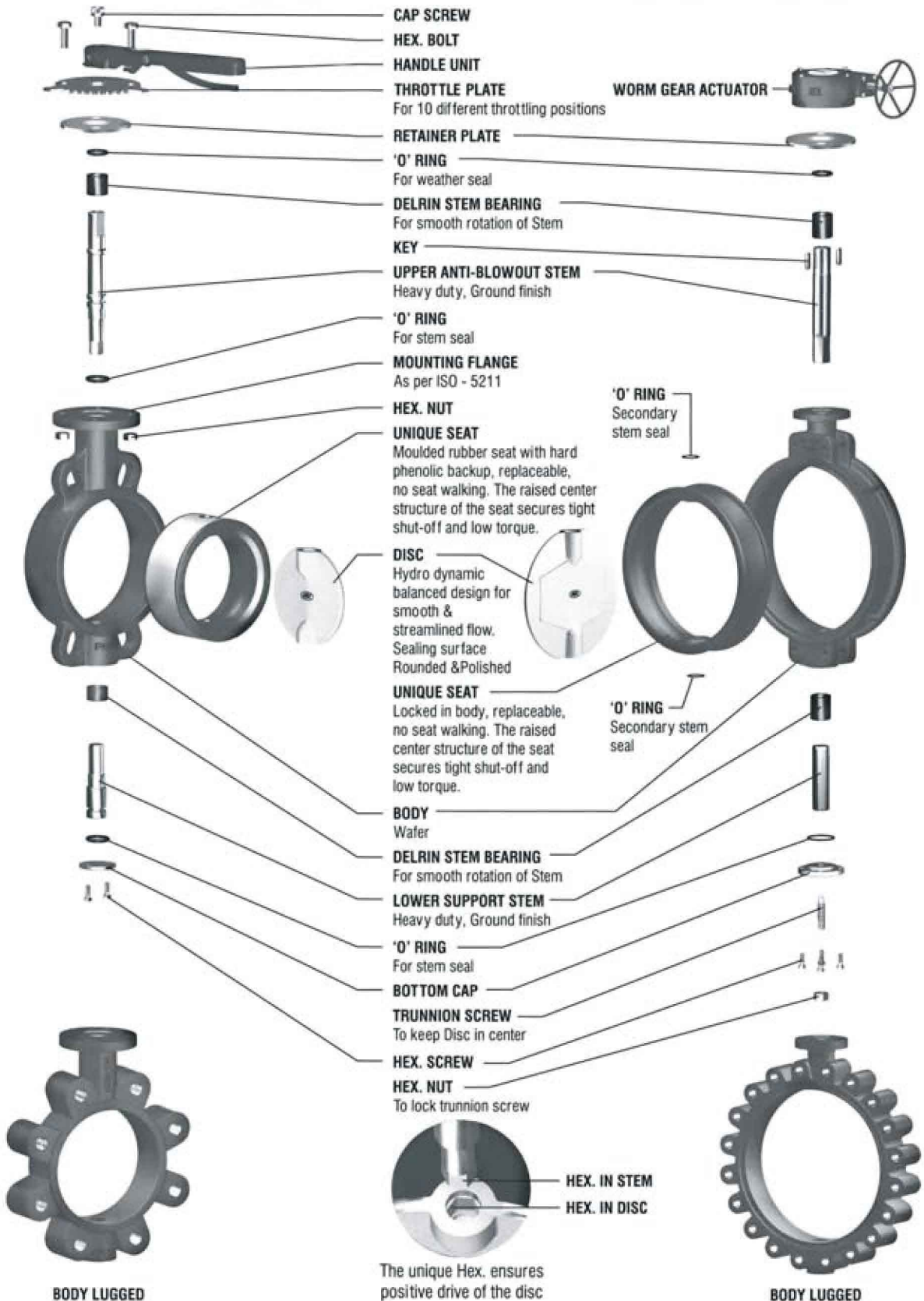


BUTTERFLY VALVES PARTS

MODEL 12 & 12L

MODEL 44 & 44L



BUTTERFLY VALVES

MODEL 12, 12L, 44 & 44L



FULLY COMPLIANT TO DESIGN STD : EN 593 & API 609 TESTING STD : EN 12266-1 & API 598

Test Pressure in bar (psi)				
Pressure rating	PN16	PN10	PN6	PN4
Hyd. Shell	24 (348)	15(218)	9 (131)	6 (87)
Seat	17.6(255)	11 (160)	6.6 (96)	4.4 (64)
Air Seat	6.9 (100)		6.6 (96)	

APPLICATION :		
a) WATER	b) SEA WATER & BRINE	c) AIR
d) EFFLUENTS	e) WEAK ACID & ALKALI	f) OILS

Dimensions are in mm (inch) MODEL - 12 & 12L - PN16 RATING

SIZE mm (inch)	A	B	C	d	E	F	← Wt 1) →	
							12	12L
32/40 (1¼ / 1½)	33 (1.3)	95 (3.7)	65 (2.6)	13 (0.5)	30 (1.2)	300 (11.8)	4.0 (9)	5.5 (12)
50 (2)	43 (1.7)	115 (4.5)	75 (2.9)	33.5 (1.3)	30 (1.2)	300 (11.8)	4.5 (10)	6.5 (14)
65 (21/2)	46 (1.8)	117 (4.6)	85 (3.3)	47 (1.9)	30 (1.2)	300 (11.8)	5 (11)	8.5 (19)
80 (3)	46 (1.8)	135 (5.3)	90 (3.5)	66 (2.6)	30 (1.2)	300 (11.8)	5.5 (12)	9 (20)
100 (4)	52 (2.0)	153 (6.)	118 (4.6)	91.5 (3.6)	30 (1.2)	300 (11.8)	7 (15)	13 (29)
125 (5)	56 (2.2)	172 (6.8)	135 (5.3)	118 (4.6)	30 (1.2)	300 (11.8)	8 (17)	17 (37)
150 (6)	56 (2.2)	185 (7.3)	148 (5.8)	146 (5.7)	30 (1.2)	300 (11.8)	9 (20)	19 (42)
200 (8)	60 (2.4)	221 (8.7)	175 (6.9)	199 (7.8)	170 (6.7)	180 (7.1)	28 (62)	43 (95)
250 (10)	68 (2.7)	250 (9.8)	210 (8.3)	247 (9.7)	170 (6.7)	180 (7.1)	34 (75)	56 (123)
300 (12)	78 (3.1)	277 (10.9)	250 (9.8)	297 (11.7)	200 (7.9)	240 (9.4)	51 (112)	92 (209)

Dimensions are in mm (inch) MODEL - 44 & 44L - PN10 RATING

SIZE mm (inch)	A	B	C	d	E	F	← Wt 1) →	
							44	44L
200 (8)	60 (2.4)	221 (8.7)	175 (6.9)	199 (7.8)	170 (6.7)	180 (7.1)	28 (62)	43 (95)
250 (10)	68 (2.7)	250 (9.8)	210 (8.3)	247 (9.7)	170 (6.7)	180 (7.1)	34 (75)	56 (123)
300 (12)	78 (3.1)	277 (10.9)	250 (9.8)	297 (11.7)	200 (7.9)	240 (9.4)	51 (112)	92 (209)
350 (14)	92 (3.6)	320 (12.6)	297 (11.7)	325 (12.8)	290 (11.4)	295 (11.6)	65 (143)	100 (220)
400 (16)	102 (4.0)	360 (14.2)	327 (12.9)	370 (14.6)	290 (11.4)	295 (11.6)	86 (190)	140 (309)
450 (18)	114 (4.5)	390 (15.4)	355 (14.0)	420(16.5)	335 (13.2)	370 (14.6)	110 (242)	190 (419)
500 (20)	127 (5.0)	420 (16.5)	385 (15.2)	465 (18.3)	335 (13.2)	370 (14.6)	140 (309)	230 (507)
600 (24)	154 (6.1)	490 (19.3)	475 (18.7)	560 (22.0)	445 (17.5)	410 (16.1)	220 (485)	310 (683)

Materials

Body	Cast iron ASTM A126 Class B/EN 1561No EN-JL 1030 / Ductile Iron ASTM A536 Gr. 60-40-18 / EN 1536 No.EN-JS 1024 / Carbon Steel ASTM A216 Gr. WCB
Disc	Ductile Iron ASTM A536 Gr. 60-40-18 / EN 1563 No. EN-JS 1024 / Stainless Steel ASTM A217 CA15 / ASTM A351 Gr. CFB / CF8M, Even Rubber Lined.
Seat	Nitrile / Neoprene / EPDM / Butyl / Viton / Silicon
Stem	Stainless Steel ASTM A276 Type 410 / 304 / 316
Stem Bearing	Delrin
Handle Unit	Carbon Steel
Gear Unit	Housing In Cast Iron, Gear in S.G. Iron & Worm in EN8
Surface Protection for Ductile Iron and Cast Carbon Steel Valves	Prime Coat : Chlorine free with modified alkyd resin unobjectionable in physiological and toxicological respects. Additional external coating : Black Stoving Enamel.

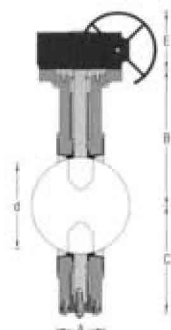
1) Nett in Kg.(lbs) approx. (without obligation) ■ PN6 Pressure Rating for Valves with Silicon & Viton Seat & PN10 & PN6 Ratig Rubber Lined Disc for Model 12, 12L & 44. 44L respectively. ■ Concentric disc, Bi-directional, resilient seated, tight shut-off. ■ Worm Gear Actuators mandatory for Sizes 200m (8") to 600mm (24") ■ Valves can be supplied to suit ASME / BS / DIN Flanges ■ Please Specify Working Pressure, Temperature & Service conditions. ■ Valves can be supplied with Locking, Extended Stem / Electrical / Pneumatic Actuators and accessories like Limit Switch, Solenoid Valve, Air Filter Regulator, Positioner etc. ■ Other materials not mentioned above available on request.

BUTTERFLY VALVES

MODEL 46, 46L, 48, 48L & 48F



MODEL - 46 & 48



MODEL - 46L & 48L



MODEL - 48F

RUBBER LINED BODY

FULLY COMPLAINT TO DESIGN STD : EN 593 & API 609 TESTING STD : EN 12266-1 & API 598

Test Pressure in bar (psi)			
Pressure rating		PN16	PN6
Hyd.	Shell	24 (348)	9 (131)
	Seat	17.6 (255)	6.6 (96)
Air	Seat	6.9 (100)	6.6 (96)

APPLICATION :		
a) WATER	b) SEA WATER & BRINE	c) AIR
d) EFFLUENTS	e) WEAK ACID & ALKALI	f) OILS

Dimensions are in mm (inch) MODEL - 46 & 46L - PN16 RATING							
SIZE	A	B	C	d	E	Wt(1)	
mm (inch)						46	46L
200 (8)	60 (2.4)	221 (8.7)	175 (6.9)	199 (7.8)	170 (6.7)	31 (68)	46 (102)
250 (10)	68 (2.7)	250 (9.8)	210 (8.3)	247 (9.7)	170 (6.7)	40 (88)	62 (137)
300 (12)	78 (3.1)	277 (10.9)	250 (9.8)	297 (11.7)	200 (7.9)	58 (128)	102 (225)
350 (14)	92 (3.6)	320 (12.6)	297 (11.7)	325 (12.8)	290 (11.4)	76 (168)	112 (247)
400 (16)	102 (4.0)	360 (14.2)	327 (12.9)	370 (14.6)	290 (11.4)	92 (203)	146 (322)
450 (18)	114 (4.5)	390 (15.4)	355 (14.0)	420 (16.5)	335 (13.2)	120 (265)	200 (441)
500 (20)	127 (5.0)	420 (16.5)	385 (15.2)	465 (18.3)	335 (13.2)	160 (353)	240 (529)
600 (24)	154 (6.1)	490 (19.3)	475 (18.7)	560 (22.0)	445 (17.5)	245 (540)	335 (738)

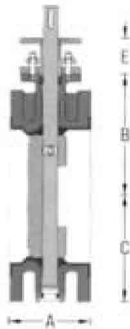
Dimensions are in mm (inch) MODEL - 46, 48L & 48L - PN6 RATING							
SIZE	A	B	C	d	E	Wt(1)	
mm (inch)						48	48L
650 (26)	165 (6.5)	490 (19.3)	450 (17.7)	616 (24.3)	275 (10.8)	175 (386)	230 (507)
700 (28)	165 (6.5)	550 (21.7)	500 (19.7)	670 (26.4)	352 (13.9)	230 (507)	365 (805)
750 (30)	190 (7.5)	610 (24.0)	540 (21.3)	715 (28.1)	303 (11.9)	275 (606)	403 (889)
800 (32)	190 (7.5)	635 (25.0)	560 (22.0)	764 (30.1)	303 (11.9)	310 (683)	490 (1080)
900 (36)	203 (8.0)	680 (26.8)	640 (25.2)	870 (34.3)	318 (12.5)	450 (992)	700 (1543)
1000 (40)	216 (8.5)	740 (29.1)	705 (27.8)	970 (38.2)	318 (12.5)	570 (1257)	840 (1852)

Materials	
Body	Cast iron ASTM A126 Clas B / EN 1561 No. EN-JL 1030 / Ductile Iron ASTM A395 Gr. 60-40-18 / EN 1563 No. EN-JS 1024 / Carbon Steel ASTM A216 Gr. WCB
Disc	Ductile Iron ASTM A395 Gr. 60-40-18 / EN 1563 No. EN-JS 1024 / Stainless Steel ASTM A217 CA15 / ASRM A351 Gr. CFB / CF8M / Aluminium Bronze
Seat 2)	EPDM / Nitrile / Neoprene / Butyl
Stem	Stainelss Steel ASTM A276 Type 410 / 340 / 316 Monel
Stem Bearing	Poly Acetal (Delrin)
Gear Unit	Housing in Cast Iron, Gear in S.G. Iron & Worm in EN8
Surface Protection for Ductile Iron and Cast Carbon Steel Valves	Prime Coat : Chlorine free with modified alkyd resin unobjectionable in physiological and toxicological respects. Additional external coating : Black Stoving Enamel.

1) Nett in Kg, (lbs) approx. (without obligation) 2) Bonded to body ■ PN4 Pressure Rating for Rubber Lined Disc for Model 48, 48L & 48F. ■ Concentric disc, Bi-directional, resilient seated, tight shut-off. ■ Valves can be supplied to suit ASME / BS / DIN Flanges. ■ Please Specify working Pressure, Temperature & Service conditions. ■ Valves can be supplied with Locking, Extended Stem / Electrical / Pneumatic Actuators, and accessories like Limit Switch , Solenoid Valve, Air Filter Regulator, Positioner etc. ■ Other materials not mentioned above & higher size available on request.

BUTTERFLY VALVES

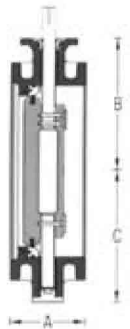
MODEL 85F, AWWA C504



SIZE 80 (3") TO 500 (20")
RUBBER LINED BODY



SIZE 600 (24") TO 1800 (72")
SEAL ON BODY



SIZE 80 (3") TO 1800 (72")
SEAL ON DISC

FULLY COMPLAINT TO DESIGN STD : AWWA C504 TESTING STD : AWWA C504

Test Pressure in bar (psi)				
Pressure rating	Class - 250	Class - 150	Class - 75	Class - 25
Hyd. Shell	34 (500)	21 (300)	10.5 (150)	3.5 (50)
Seat	17.2 (254)	10.5 (152)	5.25 (76)	1.75 (25)
Air Seat	← 6.9 (100) →		5.25 (76)	1.75 (25)

APPLICATION :

- a) WATER
- b) SEA WATER & BRINE
- c) EFFLUENTS

Dimensions are in mm (inch)

AWWA C504

SIZE mm (inch)	A	B	C	E	Wt 1) CLASS		
					150	75	25
80 (3)	127 (5.)	135 (5.3)	125 (4.9)	100 (4)	-	-	-
100 (4)	127 (5.0)	153 (6.0)	135 (5.3)	100 (4)	35 (77)	-	-
150 (6)	127 (5.0)	185 (7.3)	180 (7.1)	100 (4)	75 (165)	-	-
200 (8)	152 (6.0)	221 (8.7)	225 (8.9)	100 (4)	95 (209)	-	-
250 (10)	203 (8.0)	275 (10.8)	250 (9.8)	100 (4)	101 (223)	-	-
300 (12)	203 (8.0)	290 (11.4)	277 (10.9)	100 (4)	108 (238)	-	-
350 (14)	203 (8.0)	320 (12.6)	315 (12.4)	150 (6)	130 (287)	-	-
400 (16)	203 (8.0)	360 (14.2)	350 (13.8)	150 (6)	180 (397)	-	-
450 (18)	203 (8.0)	390 (15.4)	385 (15.2)	150 (6)	200 (441)	-	-
500 (20)	203 (8.0)	420 (16.5)	420 (16.5)	150 (6)	220 (485)	-	-
600 (24)	203 (8.0)	500 (19.7)	508 (20.0)	150 (6)	630 (1389)	-	-
750 (30)	305 (12.0)	590 (23.2)	565 (22.2)	225 (9)	920 (2028)	-	-
900 (36)	305 (12.0)	695 (27.4)	735 (28.9)	225 (9)	1425 (3142)	-	-
1050 (42)	305 (12.0)	775 (30.5)	800 (31.5)	225 (9)	1850 (4079)	-	-
1200 (48)	381 (15.0)	860 (33.9)	890 (35.0)	300 (12)	2260 (4982)	2000 (4409)	1900 (4189)
1350 (54)	381 (15.0)	950 (37.4)	975 (38.4)	300 (12)	3000 (6614)	2260 (4982)	2000 (4409)
1500 (60)	381 (18.0)	1035 (40.7)	1065 (41.9)	350 (14)	4850 (10692)	3000 (6614)	2500 (5512)
1650 (66)	457 (18.0)	1156 (45.5)	1130 (44.5)	350 (14)	5848 (12892)	4250 (9370)	3850 (8488)
1800 (72)	457 (18.0)	1245 (49.0)	1219 (48.0)	350 (14)	7740 (17064)	5848 (12892)	4850 (10692)

Materials

Body	Cast iron ASTM A126 Clas B / Ductile Iron ASTM A536 Gr. 60-40-18 / ASTM A395 Gr. 65-45-15 / Carbon Steel ASTM A216 Gr. WCB / Stainless Steel ASTM A351 Gr. CFB / CF8M
Disc#	Cast iron ASTM A126 Class B / Ductile Iron ASTM A536 Gr. 60-40-18 / ASTM A395 Gr. 65-45-15 / Carbon Steel ASTM A216 Gr. WCB / Stainless Steel ASTM A351 Gr. CFB / CF8M
Body Lining / Body Seal* / Disc Seal	EPDM / Nitrile / Neoprene / Viton / Silicon
Body Seat**	Stainless Steel ASTM A351 Gr. CFB / CF8M
Stem	Stainless Steel ASTM A276 Type 410 / 304 / 316 / ASTM A564 TYPE 630 (17-4PH) Heat Treated
Stem Bearing	Carbon Steel backed PTFE / Stainless Steel backed PTFE / Leaded Bronze
Surface Protection for Ductile Iron and Cast Carbon Steel Valves	Prime Coat : Chlorine free with modified alkyl resin unobjectionable in physiological and toxicological respects. Additional external coating : Black Enamel.

1) Nett in Kg.(lbs) approx. (without obligation) #With SS316 Seating edge over WCB for Lined Body & Seal on Body design. * Bonded to the Body by Epoxy for size 600mm (24") & above. ** Application for Seal on Disc design only. ■ Eccentric disc, Bi-directional, resilient seated, tight shut-off. ■ Values can be supplied to suit ASME / MSS / SP / AWWA Flanges. ■ Please Specify working Pressure, Temperature & Service conditions. ■ Valves can be supplied with Locking, Extended Stem / Electrical / Pneumatic Actuators, and accessories like Limit Switch , Solenoid Valve, Air Filter Regulator, Positioner etc. ■ Fabricated construction available on request. ■ Other materials not mentioned above & higher size available on request.

BUTTERFLY VALVES

MODEL 85F, EN 593



FULLY COMPLAINT TO DESIGN STD : EN 593 TESTING STD : EN 12266-1

Test Pressure in bar (psi)				
Pressure rating	PN16	PN10	PN6	PN2.5
Hyd. Shell	24 (348)	15(218)	9 (131)	3.75(54)
Seat	17.6(255)	11 (160)	6.6 (96)	2.75(40)
Air Seat	6.9 (100)	6.6 (96)	2.75(40)	

APPLICATION :	
a) WATER	b) SEA WATER & BRINE
c) EFFLUENTS	

Dimensions are in mm (inch)

EN 593

SIZE mm (inch)	A	B	C	F				Wt 1)			
				PN		PN		PN		PN	
				16	10	6	2.5	16	10	6	2.5
65 (2½)	112 (4.4)	135 (5.3)	118 (4.6)	300 (11.8)	300 (11.8)	-	-	12 (27)	12 (27)	-	-
80 (3)	114 (4.5)	135 (5.3)	115 (4.5)	300 (11.8)	300 (11.8)	-	-	32 (71)	32 (71)	-	-
100 (4)	127 (5.0)	153 (6.0)	135 (5.3)	300 (11.8)	300 (11.8)	-	-	35 (77)	35 (77)	-	-
150 (6)	140 (5.5)	185 (7.3)	180 (7.1)	300 (11.8)	300 (11.8)	-	-	65 (143)	65 (143)	-	-
200 (8)	152 (6.0)	221 (8.7)	215 (8.5)	210 (8.3)	210 (8.3)	-	-	75 (165)	75 (165)	-	-
250 (10)	165 (6.5)	250 (9.8)	245 (9.6)	210 (8.3)	210 (8.3)	-	-	100 (221)	80 (176)	-	-
300 (12)	178 (7.0)	277 (10.9)	277 (10.9)	225 (8.9)	225 (8.9)	-	-	120 (265)	90 (198)	-	-
350 (14)	190 (7.5)	320 (12.6)	315 (12.4)	265 (10.4)	225 (8.9)	-	-	150 (331)	120 (265)	-	-
400 (16)	216 (8.5)	360 (14.2)	350 (13.8)	315 (12.4)	265 (10.4)	-	-	200 (441)	175 (386)	-	-
450 (18)	222 (8.7)	390 (15.4)	385 (15.2)	325 (12.8)	315 (12.4)	-	-	280 (617)	190 (419)	-	-
500 (20)	229 (9.0)	420 (16.5)	420 (16.5)	375 (14.8)	325 (12.8)	-	-	350 (772)	295 (650)	-	-
600 (24)	267 (10.5)	500 (19.7)	508 (20.0)	410 (16.1)	375 (14.8)	-	-	580 (1279)	550 (1212)	-	-
700 (28)	292 (11.5)	565 (22.2)	540 (21.3)	615 (24.2)	620 (24.4)	-	-	820 (1808)	780 (1720)	-	-
800 (32)	318 (12.5)	630 (24.8)	650 (25.6)	930 (36.6)	615 (24.2)	-	-	890 (1962)	840 (1852)	-	-
900 (36)	330 (12.0)	695 (27.4)	735 (28.9)	735 (28.9)	930 (36.6)	-	-	1310 (2888)	900 (1984)	-	-
1000 (40)	410 (16.1)	745 (29.3)	756 (30.1)	735 (28.9)	930 (36.6)	-	-	1680 (3704)	1200 (2646)	-	-
1200 (48)	470 (18.5)	855 (33.7)	880 (34.6)	-	-	930 (36.6)	645 (25.4)	-	-	1020 (2249)	1020 (2249)
1400 (56)	530 (20.9)	990 (39.0)	1015 (40.0)	-	-	735 (28.9)	930 (36.6)	-	-	2000 (4409)	2000 (4409)
1600 (64)	600 (23.6)	1070 (42.1)	1190 (46.9)	-	-	765 (30.1)	735 (28.9)	-	-	3000 (6614)	3000 (6614)

Materials

Body	Cast iron ASTM A126 Class B/EN 1561No EN-JL 1040 / Ductile Iron ASTM A536 Gr. 60-40-18 / EN 1536 No.-JS 1024 / Carbon Steel ASTM A216 Gr. WCB / Stainless Steel ASTM A351 Gr. CFB / CFBM
Disc	Cast iron ASTM A126 Class B/EN 1561No EN-JL 1040 / Ductile Iron ASTM A536 Gr. 60-40-18 / EN 1536 No.-JS 1024 / Carbon Steel ASTM A216 Gr. WCB / Stainless Steel ASTM A351 Gr. CFB / CFBM
Disc Seat	Nitrile / Neoprene / EPDM / Viton / Silicon
Body Seat	Stainless Steel ASTM A351 Gr. CFB / CFBM
Stem	Stainless Steel ASTM A276 Type 410 / 304 / 316
Stem Bearing	Carbon Steel backed PTFE / Leaded Bronze EN 1982 Gr. CC495K
Gear Unit	Housing In Cast Iron, Gear in S.G. Iron & Worm IN EN8 / EN19
Surface Protection for Ductile Iron and Cast Carbon Steel Valves	Prime Coat : Chlorine free with modified alkyd resin unobjectionable in physiological and toxicological respects. Additional external coating : Black Stoving Enamel.

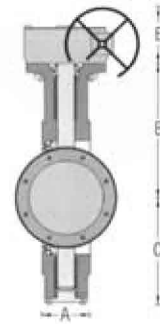
1) Nett in Kg.(lbs) approx. (without obligation) ■ Eccentric disc, Bi-directional, resilient seated, tight shut-off ■ Valves can be supplied to suit BS / DIN / ISO and ASME Flanges.
 ■ Please Specify working Pressure, Temperature & Service conditions. ■ Valves can be supplied with Locking, Extended Stem / Electrical / Pneumatic Actuators, and accessories like Limit Switch , Solenoid Valve, Air Filter Regulator, Positioner etc. ■ Fabricated & cast construction with face to face dimension of customers preference available on request.
 ■ Hard Rubber lined Body & Disc are also available. ■ Other materials not mentioned above and higher size available on request.

BUTTERFLY VALVES

MODEL 81



SIZE 80 (3") TO 300 (12")
WAFER STYLE



SIZE 350 (14") TO 1000 (40")
WAFER STYLE

FULLY COMPLAINT TO DESIGN STD : EN 593 TESTING STD : EN 12266-1

Pressure rating	Test Pressure in bar (psi)		
	PN16	PN10	PN6
Hyd. Shell	24 (348)	15 (218)	9 (131)
Seat	17.6 (255)	11 (160)	6.6 (96)
Air Seat	6.9 (100)	6.6 (96)	

APPLICATION :

a) WATER	b) AIR
c) GASES	d) WEAK ACID & ALKALI

Dimensions are in mm (inch)

SIZE mm (inch)	A		B	C	d	E		F		Wt (1)
	SHORT	LONG				PN16	PN10	PN16	PN10	
80 (3)	-	64 (2.5)	135 (5.3)	95 (3.7)	48 (1.9)	30 (1.2)	-	300 (11.8)	-	10 (22)
100 (4)	-	64 (2.5)	153 (6.0)	105 (4.1)	78 (3.1)	30 (1.2)	-	300 (11.8)	-	12 (26)
125 (5)	-	70 (2.8)	172 (6.8)	125 (4.9)	103 (4.1)	30 (1.2)	-	300 (11.8)	-	14 (31)
150 (6)	-	76 (3.0)	185 (7.3)	135 (5.3)	128 (5.0)	30 (1.2)	-	300 (11.8)	-	15 (33)
200 (8)	-	89 (3.5)	221 (8.7)	175 (6.9)	160 (6.3)	74 (2.9)	-	450 (17.7)	-	29 (64)
250 (10)	-	114 (4.5)	250 (9.8)	210 (8.3)	210 (8.3)	74 (2.9)	-	600 (23.6)	-	36 (79)
300 (12)	-	114 (4.5)	277 (10.9)	240 (9.4)	260 (10.2)	74 (2.9)	-	600 (23.6)	-	52 (115)
350 (14)	78 (3.1)	127 (5.0)	320 (12.6)	315 (12.4)	-	236 (9.3)	236 (9.3)	240 (9.4)	138 (5.4)	125 (276)
400 (16)	102 (4.0)	140 (5.5)	360 (14.2)	350 (13.8)	-	270 (10.6)	270 (10.6)	320 (12.6)	170 (6.7)	155 (342)
450 (18)	114 (4.5)	152 (6.0)	390 (15.4)	385 (15.2)	-	280 (11.0)	280 (11.0)	320 (12.6)	205 (8.1)	185 (408)
500 (20)	127 (5.0)	152 (6.0)	420 (16.5)	420 (16.5)	-	360 (14.2)	360 (14.2)	365 (14.4)	275 (10.8)	250 (551)
600 (24)	154 (6.1)	178 (7.0)	500 (19.7)	508 (20.0)	-	403 (15.9)	403 (15.9)	385 (15.2)	365 (14.4)	350 (772)
700 (28)	165 (6.5)	229 (9.0)	565 (22.2)	540 (21.3)	-	-	615 (24.2)	650 (25.6)	620 (24.4)	550 (1213)
800 (32)	190 (7.5)	241 (9.5)	630 (24.8)	650 (25.6)	-	-	930 (36.6)	970 (38.2)	715 (28.1)	800 (1764)
900 (36)	203 (8.0)	241 (9.5)	695 (27.4)	735 (28.9)	-	-	735 (28.9)	1270 (48.4)	930 (36.6)	950 (2094)
1000 (40)	216 (8.5)	300 (11.8)	745 (29.3)	765 (30.1)	-	-	735 (28.9)	1350 (53.1)	1050 (41.3)	1100 (2425)

Materials

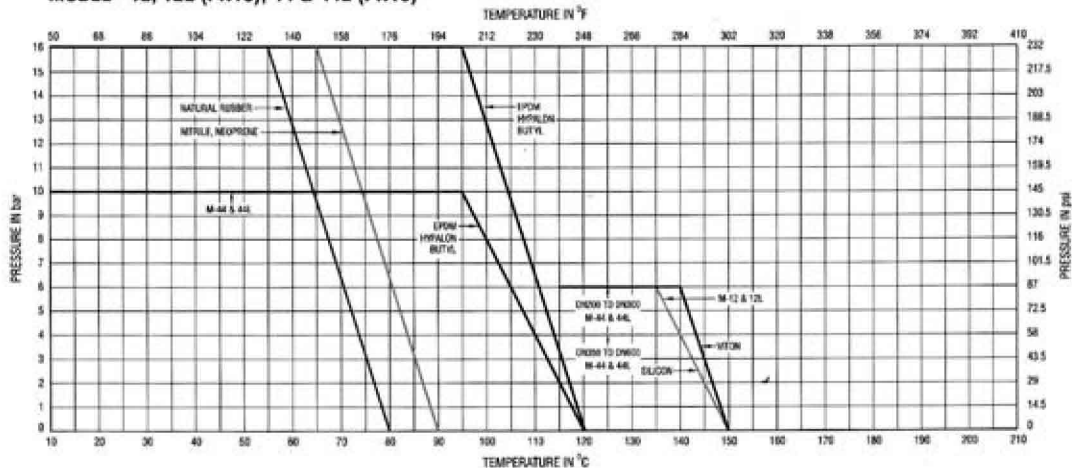
Body	Cast Iron ASTM A126 Class B/EN 1561No EN-JL 1040 / Ductile Iron ASTM A536 Gr. 60-40-18 / EN 1536 No.-JS 1024 Carbon Steel ASTM A216 Gr. WCB / Stainless Steel ASTM A351 Gr. CFB / CF8M / CN7M
Disc	Cast Iron ASTM A126 Class B/EN 1561No EN-JL 1040 / Ductile Iron ASTM A536 Gr. 60-40-18 / EN 1536 No.-JS 1024 Carbon Steel ASTM A216 Gr. WCB / Stainless Steel ASTM A217 CA15 / ASTM A351 Gr. CF8 / CF8M / CN7M
Body Seat	Stainless Steel ASTM A351 Gr. CFB / CF8M / CN7M
Disc Seal	Nitrile / Neoprene / EPDM / Viton / Silicon / PTFE *
Stem	Stainless Steel ASTM A276 Type 410 / 304 / 316 / A-20
Stem Bearing	Carbon Steel backed PTFE / Leaded Bronze EN 1982 Gr. CC495K
Handle Unit	Carbon Steel / Malleable Iron
Gear Unit	Housing in Cast Iron, Gear in S.G. Iron & Worm in EN8
Surface Protection for Valves	Prime Coat : Chlorine free with modified alkyl resin unobjectionable in physiological and toxicological respects. Additional external coating : Black Enamel.

1) Nett in Kg.(lbs) approx. (without obligation) for Long Series * PNG Rating for PTFE Seal ■ Eccentric disc, Bi-directional, resilient seated, tight shut-off. ■ Body and Disc in Cast Iron . Ductile Iron available for Sized 350mm (14") to 1000mm (40") ■ Worm Gear Actuators mandatory for Sizes 350mm (14") to 1000 (40") ■ Valves can be supplied to suit ASME / BS / DIN Flanges ■ Please Specify working Pressure, Temperature & Service conditions. ■ Valves can be supplied with Locking, Extended Stem / Electrical / Pneumatic Actuators, and accessories like Limit Switch , Solenoid Valve, Air Filter Regulator, Positioner etc. ■ Fabricated & cast construction with face to face dimension of customers preference available on request. ■ Other materials not mentioned above & higher size available on request.

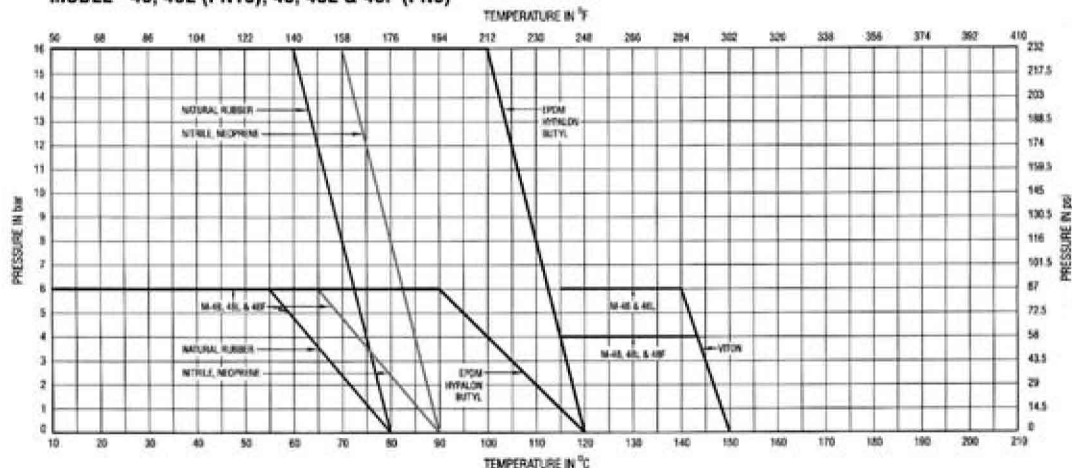
BUTTERFLY VALVES TECHNICAL DATA

PRESSURE TEMPERATURE RATING

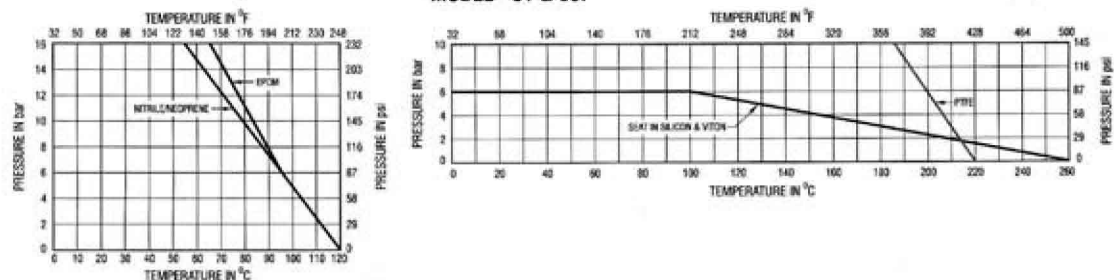
MODEL - 12, 12L (PN16), 44 & 44L (PN10)



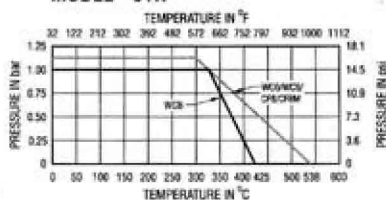
MODEL - 46, 46L (PN16), 48, 48L & 48F (PN6)



MODEL - 81 & 85F



MODEL - 81H



MODEL - 20

