



Features

- Investment cast 2-piece bolted body construction
- Blow-out proof stem
- Adjustable, live-loaded graphite packing
- API 598 inspection and testing
- API 607 5th Edition fire tested
- Locking handle

6801F-xxx-CS/FF Series Full Port Valve

6801F-xxx-S6/FF Series Full Port Valve

Quick Spec

Product Scope	
Size Range	CL 300: 1/2" – 8" Full Port
Body Type	2-pc, Split Body
Port Rating	ASME Class 300, Flanged Ends
Temperature Range / WSP	-20°F thru 400°F / 150 psi Steam -29°C thru 204°C / 10,3 bar Steam
Body	Stainless or Carbon Steel
Ball & Stem	Stainless Steel, Anti-Static Design
Ball Seats	RPTFE standard
Stem Packing	Adjustable, Live Loaded Graphite
Body Seal / Thrust Washer	Graphite / PTFE
Operator / Mounting Pad	Manual Locking Lever / ISO 5211
Design Standards	
Design	ASME B16.34
Face to Face	ASME B16.10
Flange Dimensions	ASME B16.5
NACE MR0175	Standard
API SPEC 6D	API Monogram Optional
Testing Standards	
Pressure Testing	API 598
Approvals	
Fire Testing API 607 5th Edition	
CRN: 0C5539.5	

Technical Specifications

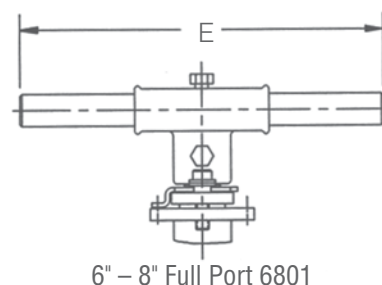
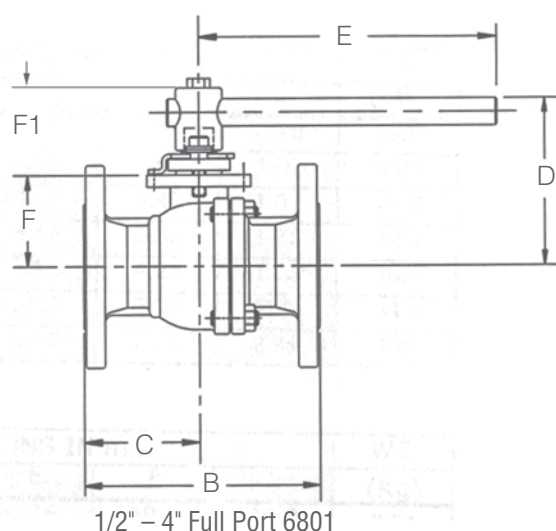
Valve Size Inches	Operating Torque, in-lb, 285 psi	Operating Torque, in-lb, 740 psi	Flow Coefficient, Cv
1/2"	63	115	34
3/4"	92	136	56
1"	127	201	90
1-1/2"	219	403	230
2"	311	598	425
3"	776	1380	1150
4"	1409	2300	2000
6"	4600	6440	5000
8"	12650	14375	9300

Technical Specifications

Valve Size NPS	Operating Torque, n-M, 19,6 bar	Operating Torque, n-M, 51bar	Flow Coefficient, Kv
DN15	7,1	13	29
DN20	10,4	15,4	48
DN25	14,3	22,7	77
DN40	24,7	45,5	200
DN50	35,1	67,6	365
DN80	87,7	156	990
DN100	159,2	260	1720
DN150	519,7	727,6	4300
DN200	1429	1624	8000

Materials of Construction

Part	Stainless Steel	Carbon Steel
Body	CF8M	WCB
End Cap	CF8M	WCB
Seat	RPTFE	RPTFE
Ball	CF8M	CF8M
Stem	316 SST	316 SST
Seal, Body	Graphite	Graphite
Thrust Washer	PTFE	PTFE
Packing	Grafoil	Grafoil
Gland Bushing	PTFE	PTFE
Gland Flange	CF8	CF8
Gland Bolt	304 SST	304 SST
Stop Plate	304 SST	304 SST
Handle (1/2" - 4")	Ductile Iron	Ductile Iron
Pipe, T-Handle (6" - 8")	Steel	Steel
Coupler, T-Handle (6"-8")	Ductile Iron	Ductile Iron
Snap Ring	STL	STL
Bolt, Body (1/2" - 4")	A193-B7M	A193-B8
Stud, Body (6" - 8")	A193-B7M	A193-B8M
Gland Bolt	304 SST	304 SST
Flat Washer	STL	STL
Bolt, Handle	STL	STL
Static Pin	304 SST	304 SST
Static Spring	304 SST	304 SST
Nut, Body (6" - 8")	A194-2HM	194-8M
Tag	304 SST	304 SST
Screw, Handle	STL	STL



MD06046

Dimensions, Inches

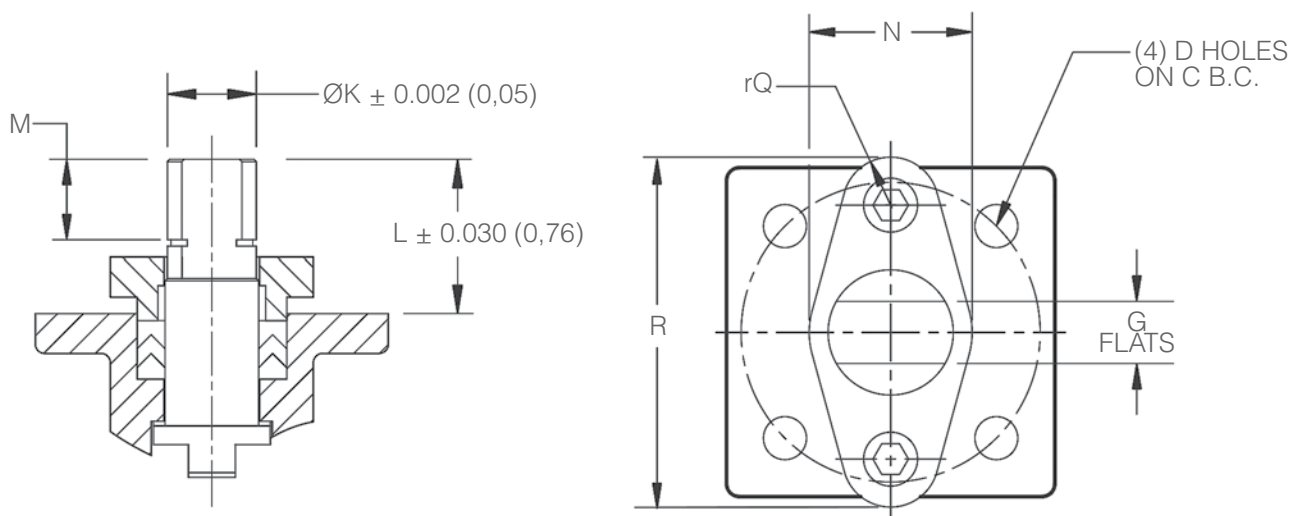
Valve Size Inches	6801 - 300 Series							Weight, lbs
	Port	B	C	D	E	F	F1	
1/2"	0.63	5.50	2.54	3.6	5.3	1.52	2.1	4.80
3/4"	0.79	6.00	2.92	3.5	5.3	1.52	2.0	7.50
1"	0.98	6.50	3.05	3.9	6.3	1.80	2.1	9.90
1-1/2"	1.50	7.50	3.70	5.0	9.1	2.40	2.7	19.6
2"	1.97	8.50	4.05	5.7	9.1	2.92	2.6	26.1
3"	3.15	11.12	5.04	7.5	13.8	4.06	3.4	58.5
4"	3.94	12.00	5.72	8.5	15.8	5.00	3.5	95.0
6"	5.91	15.88	7.66	10.5	31.5	7.17	4.4	172*
8"	7.87	19.75	9.55	14.3	43.3	9.19	5.6	390*

* Add 24 lbs for Gear Weight for 6" size and 38 lbs for 8" size

Dimensions, mm

Valve Size NPS	6801 - 300 Series							Weight, kgs
	Port	B	C	D	E	F	F1	
DN15	14	139,7	64,5	92	135	38,5	52	2,18
DN20	19	152,4	74,2	89	135	38,5	51	3,41
DN25	25	165,1	77,5	100	160	45,6	53	4,49
DN40	38	190,5	94,0	127	230	60,9	67	8,90
DN50	50	215,9	102,9	145	230	74,2	70	11,9
DN80	76	282,4	128,0	191	350	103,2	87	26,6
DN100	102	304,8	145,3	216	400	127,0	89	43,2
DN150	152	403,4	194,6	267	800	182,0	118	78,0*
DN200	203	501,7	242,6	364	1100	233,5	142	177*

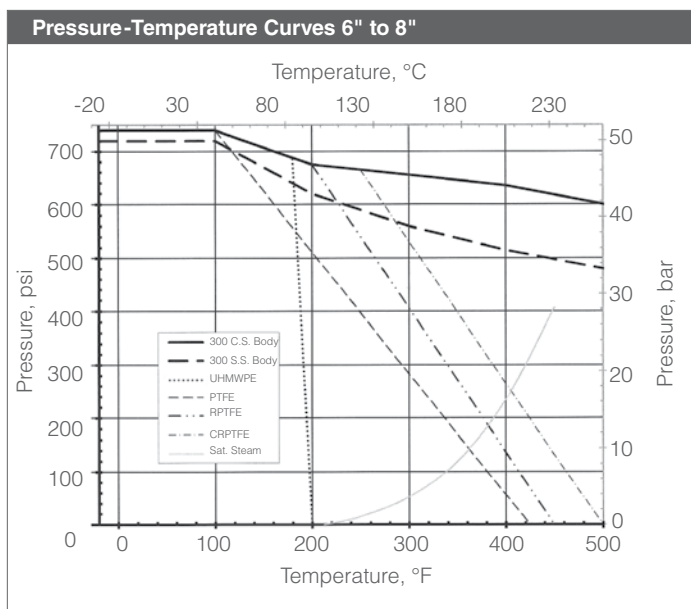
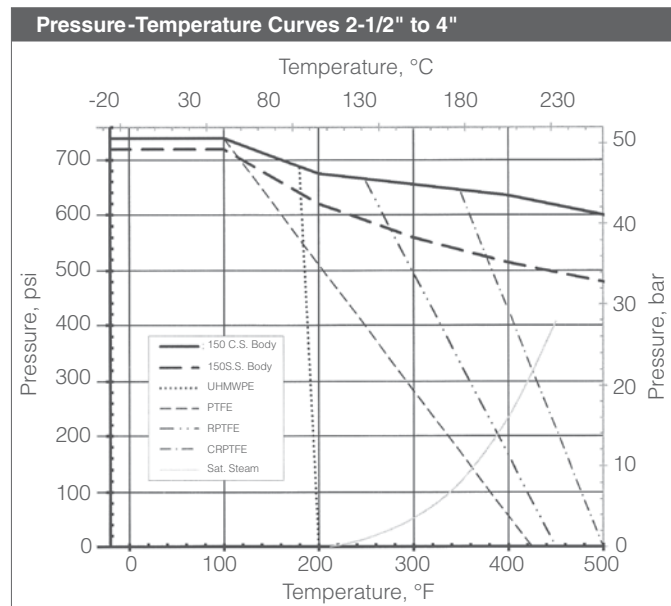
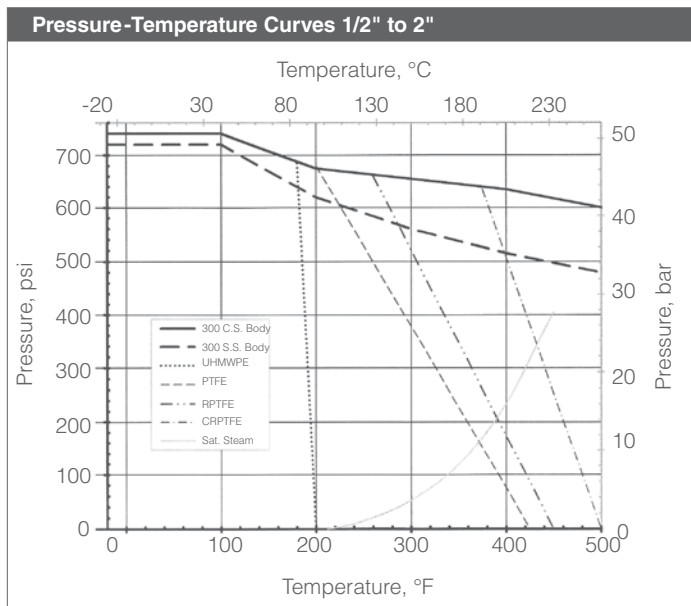
* Add 10,9 kgs for Gear Weight for DN150 size and 17,3 kgs for DN200 size



ART1262

Top Mounting Dimensions, Inches										
Inches	C (B.C.)	D (THRD)	MTG	G FLATS	ØK	L	M	N	R	rQ
1/2"	Ø1.97	M6X1	F05	0.315/0.313	0.47	0.76	0.19	1.10	2.00	0.39
3/4"	Ø1.97	M6X1	F05	0.315/0.313	0.47	0.76	0.30	1.10	2.00	0.39
1"	Ø2.76	M8X1.25	F07	0.394/0.392	0.59	1.07	0.52	1.35	2.44	0.47
1-1/2"	Ø2.76	M8X1.25	F07	0.551/0.549	0.75	1.31	0.68	1.71	2.97	0.55
2"	Ø2.76	M8X1.25	F07	0.551/0.549	0.75	1.31	0.68	1.71	2.97	0.55
2-1/2"	Ø2.76	M8X1.25	F07	0.551/0.549	0.75	1.31	0.68	1.71	3.14	0.55
3"	Ø4.02	M10X1.5	F10	0.630/0.628	0.95	1.75	0.96	2.09	3.75	0.71
4"	Ø4.02	M10X1.5	F10	0.787/0.785	1.18	1.81	0.96	2.31	4.33	0.95
6"	Ø4.92	M12X1.75	F12	1.024/1.022	1.50	2.48	1.28	2.82	5.08	0.95
8"	Ø5.51	M16X2	F14	1.260/1.258	1.89	3.01	1.66	3.35	5.95	0.95

Top Mounting Dimensions, mm										
NPS	C (B.C.)	D (THRD)	MTG	G FLATS	ØK	L	M	N	R	rQ
DN15	Ø50,0	M6X1	F05	8,0/7,95	11,9	19,3	4,8	27,9	50,8	9,9
DN20	Ø50,0	M6X1	F05	8,0/7,95	11,9	19,3	7,6	27,9	50,8	9,9
DN25	Ø70,1	M8X1.25	F07	10,0/9,96	15,0	27,1	13,2	34,3	62,0	11,9
DN40	Ø70,1	M8X1.25	F07	14,0/13,94	19,1	33,4	17,3	43,4	75,4	14,0
DN50	Ø70,1	M8X1.25	F07	14,0/13,94	19,1	33,4	17,3	43,4	75,4	14,0
DN65	Ø70,1	M8X1.25	F07	14,0/13,94	19,1	33,4	17,3	43,4	79,8	14,0
DN80	Ø102,1	M10X1.5	F10	16,0/15,95	24,1	44,5	24,4	53,1	95,3	18,0
DN100	Ø102,1	M10X1.5	F10	20,0/19,94	30,0	46,1	24,4	58,7	110,0	24,1
DN150	Ø125,0	M12X1.75	F12	26,0/25,96	38,1	63,0	32,5	71,6	129,0	24,1
DN200	Ø140,0	M16X2	F14	32,0/31,95	48,0	76,5	42,2	85,1	151,1	24,1



Model	Size	Body Mat'l	1	2	3	4	5	6	7	8	9	10	11	12

Model Number
6801F 2 Piece Ball Valve

Size
050 1/2" 250 2-1/2"
075 3/4" 300 3"
100 1" 400 4"
150 1-1/2" 600 6"
200 2" 800 8"

Body Material
CS Carbon Steel
S6 Stainless Steel

Packing/Seat
F Grafoil/RPTFE (STANDARD)
S Grafoil / 50% SS PTFE
B PTFE/RPTFE
C PTFE/C-RPTFE
D PTFE/UHMWPE
G Grafoil/CRPTFE
H Grafoil/UHMWPE
J UHMWPE/UHMWPE

Ends
G Class 300 FE

Operation
HL Lever
NN None
P1 UT-0A-DA STD S7 UT-4-SR STD
P2 UT-0-DA STD SF UT-4.5-SR STD
P3 UT-1-DA STD S8 UT-5-SR STD
P4 UT-2-DA STD S9 UT-6-SR STD
P5 UT-2.5-DA STD SA UT-7-SR STD
P6 UT-3-DA STD SJ UT-7.5-SR STD
P7 UT-3.5-DA STD M1 ER-1-2.5-4 110 VAC
P8 UT-4-DA STD M2 ER-2-5-4 110 VAC
PF UT-4.5-DA STD M3 ER-3-5-4 110 VAC
P9 UT-5-DA STD M8 ER-4-10-4 110 VAC
PA UT-6-DA STD M4 ER-6-15-4 110 VAC
PB UT-7-DA STD M5 ER-10-15-4 110 VAC
S1 UT-0-SR STD M9 ER-15-30-4 110 VAC
S2 UT-1-SR STD MA ER-20-12-4 110 VAC
S3 UT-2-SR STD M7 ER-38-14-4 110 VAC
S4 UT-2.5-SR STD MC ER-50-68-4 110 VAC
S5 UT-3-SR STD MD ER-70-68-4 110 VAC
S6 UT-3.5-SR STD
ZZ Non-Standard

Actuator Pressure
5&6 60 60 psi
80 80 psi
NN N/A (no pneumatic actuator)
ZZ Non-Standard

Solenoid Feature	Act. Type
7&8 00 None	
3A 3W 8551-120VAC N4 UT-0/5	SR
3C 3W EF8551-120VAC N7 UT-0/5	SR
3J 3W 8317G35-120VAC N4 UT-0/2.5	SR
3M 3W 8321G1-120VAC N4 UT-3/5	SR
3Q 3W EF8317G35-120VAC N7 UT-0/2.5	SR
3R 3W EF8321G1-120VAC N7 UT-3/5	SR
4A 4W 8551-120VAC N4 UT-0A	DA
4B 4W 8551-120VAC N4 UT-0/5	DA
4D 4W EF8551-120VAC N7 UT-0A	DA
4E 4W EF8551-120VAC N7 UT0/5	DA
ZZ Non-Standard	

Limit Switch*
9&10 00 None
AA Rotork SF01200-10UA7A3 (NEMA 4) to UT-0/3
AB Rotork SF01200-10UA7A3 (NEMA 4) to UT-3.5/7
AC Rotork SX01200-10UA7E3 (NEMA 7) to UT-0/3
AD Rotork SX01200-10UA7E3 (NEMA 4) to UT-3.5/7
ZZ Non-Standard

*with (2) SPDT Mech. Switches

Fail Position
11&12 NN Fail Position N/A (No "SR" Actuator)
01 Fail Closed
02 Fail Open