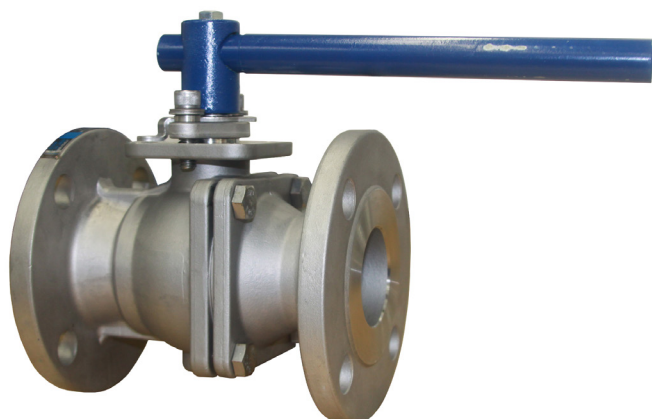




Features

- 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

5801F-xxx-CS/FF Series Full Port Valve

5801F-xxx-S6/FF Series Full Port Valve

Quick Spec

Product Scope	
Size Range	CL 150: 1/2" – 8" Full Port
Body Type	2-pc, Split Body
Port Rating	ASME Class 150, Flanged Ends
Temperature Range / WSP	-20°F thru 400°F / 150 psi Steam -29C 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

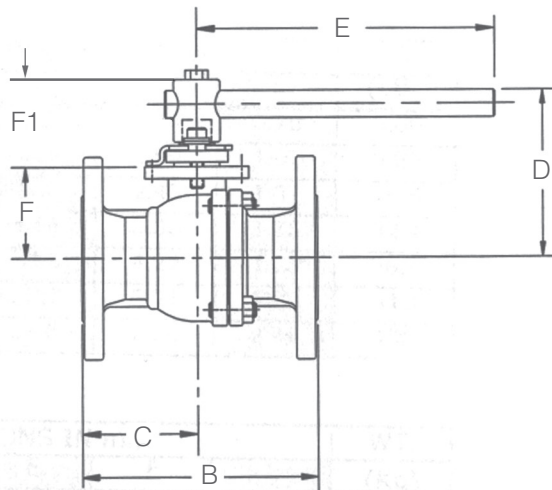
Valve Size Inches	Operating Torque, in-lb, 285 PSI	Flow Coefficient, Cv
1/2"	63	34
3/4"	92	56
1"	127	94
1-1/2"	219	230
2"	311	425
2-1/2"	475	760
3"	776	1150
4"	1409	2000
6"	4600	5000
8"	12650	9300

Technical Specifications, metric

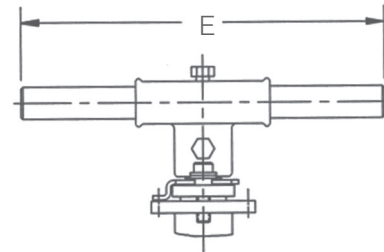
Valve Size NPS	Operating Torque, N.m, 19,6 bar	Flow Coefficient, Kv
DN15	7,1	29
DN20	10,4	48
DN25	14,3	81
DN40	24,7	200
DN50	35,1	365
DN65	53,7	650
DN80	87,7	990
DN100	159,2	1720
DN150	519,7	4300
DN200	1429	8000

Materials of Construction

Part	Carbon Steel	Stainless Steel
Body	WCB	CF8M
End Cap	WCB	CF8M
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	A194-8M
Tag	304 SST	304 SST
Screw, Handle	STL	STL



1/2" – 4" Full Port 5801



6" – 8" Full Port 5801

MD05063

Dimensions, Inches

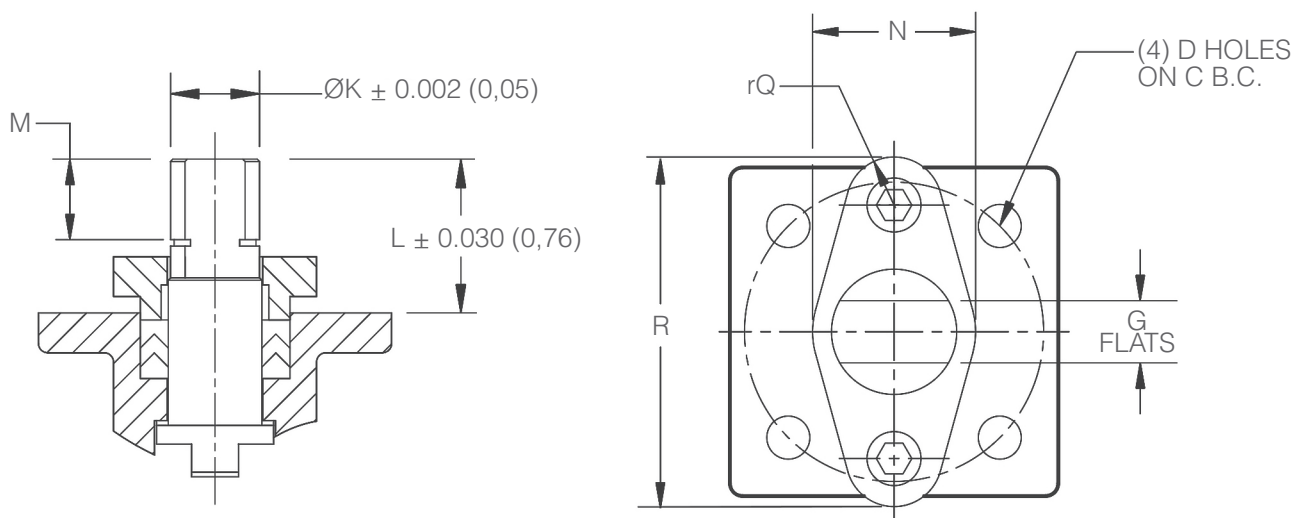
Valve Size Inches	5801 - 150 Series							Weight, lbs
	Port	B	C	D	E	F	F1	
1/2"	0.63	4.25	1.90	3.2	5.3	1.34	2.0	3.40
3/4"	0.79	4.60	2.18	3.4	5.3	1.52	2.0	4.70
1"	0.98	5.00	2.60	3.7	6.3	1.80	2.1	6.50
1-1/2"	1.50	6.50	3.20	4.4	9.1	2.40	2.7	12.7
2"	1.97	7.00	3.26	5.1	9.1	2.72	2.7	18.6
2-1/2"	2.56	7.50	3.67	5.6	9.1	3.15	2.7	26.8
3"	3.15	8.00	3.36	6.9	13.8	3.79	3.5	41.4
4"	3.94	9.00	3.87	7.9	15.7	4.72	3.5	68.6
6"	5.98	15.5	7.76	11.3	31.5	7.24	4.5	170
8"	7.99	18.0	9.00	14.5	43.3	9.35	5.6	331*

* Add 38 lbs for Gear Weight for 8" size

Dimensions, mm

Valve Size NPS	5801 - 150 Series							Weight, kgs
	Port	B	C	D	E	F	F1	
DN15	14	108,0	48,3	82	135	34,2	50	1,54
DN20	19	116,8	55,4	87	135	38,5	51	2,13
DN25	25	127,0	66,0	94	160	45,6	53	2,95
DN40	38	165,1	81,3	112	230	60,9	66	5,77
DN50	50	177,8	82,8	130	230	69,2	66	8,44
DN65	65	190,5	93,2	143	230	80,0	66	12,2
DN80	78	203,2	85,3	176	350	96,2	87	18,8
DN100	102	228,6	98,3	201	400	120,0	89	30,2
DN150	152	393,7	197,1	288	800	184,0	113	77,2
DN200	203	457,2	228,6	369	1100	237,5	142	150

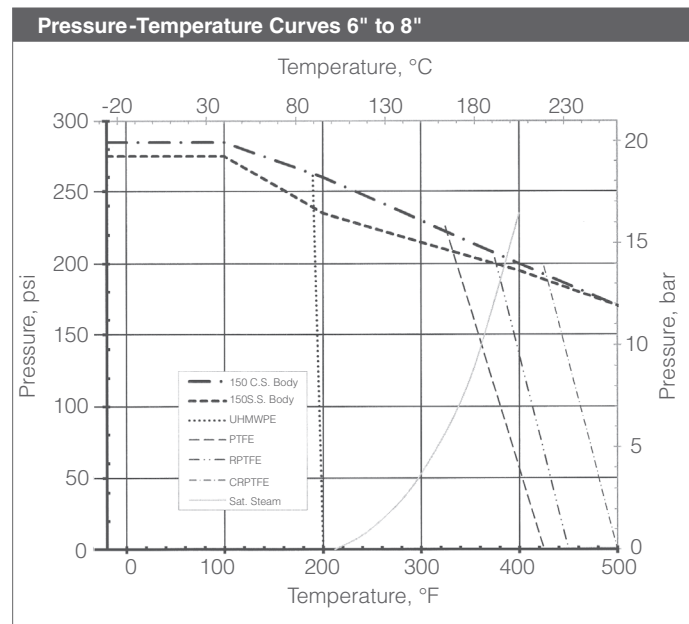
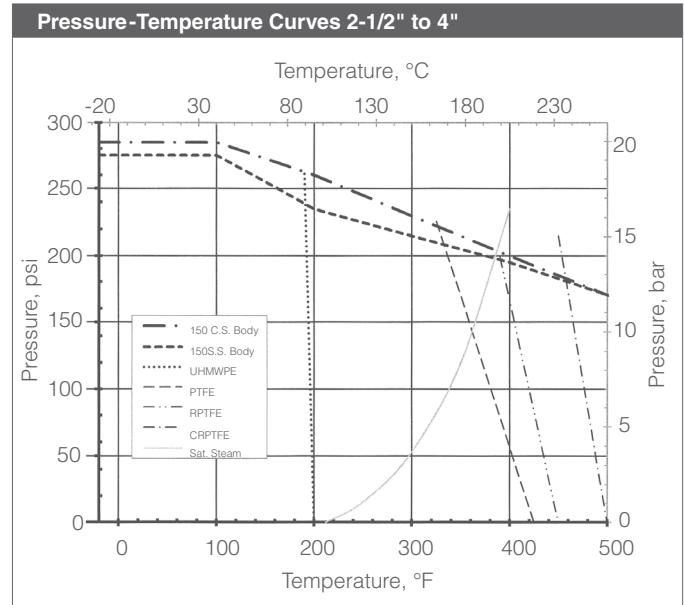
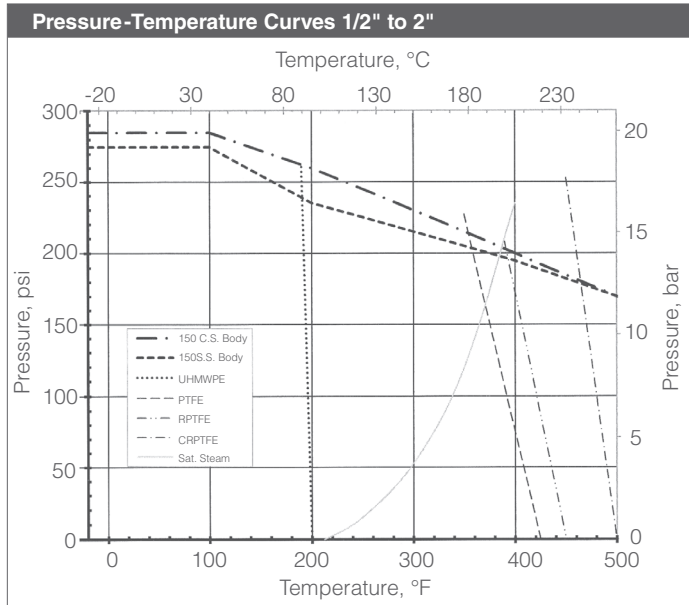
* Add 17 kgs for Gear Weight for DN200 size



ART1260

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	0.64	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	1.29	0.68	1.35	2.82	0.47
2"	Ø2.76	M8X1.25	F07	0.551/0.549	0.75	1.29	0.68	1.71	2.97	0.55
2-1/2"	Ø2.76	M8X1.25	F07	0.551/0.549	0.75	1.29	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	16,3	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	27,2	13,2	34,3	62,0	11,9
DN40	Ø70,1	M8X1.25	F07	14,0/13,94	19,1	32,8	17,3	34,3	71,6	11,9
DN50	Ø70,1	M8X1.25	F07	14,0/13,94	19,1	32,8	17,3	43,4	75,4	14,0
DN65	Ø70,1	M8X1.25	F07	14,0/13,94	19,1	32,8	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	46,0	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	
5801F	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

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

2	Ends
F	Class 150 FE

3&4	Operation		
HL	Lever		
NN	None		
P1	UT-0A-DA STD	S1	UT-0-SR STD
P2	UT-0-DA STD	S2	UT-1-SR STD
P3	UT-1-DA STD	S3	UT-2-SR STD
P4	UT-2-DA STD	S4	UT-2.5-SR STD
P5	UT-2.5-DA STD	S5	UT-3-SR STD
P6	UT-3-DA STD	S6	UT-3.5SR STD
P7	UT-3.5-DA STD	S7	UT-4-SR STD
P8	UT-4-DA STD	SF	UT-4.5-SR STD
PF	UT-4.5-DA STD	S8	UT-5-SR STD
P9	UT-5-DA STD	S9	UT-6-SR STD
PA	UT-6-DA STD	SA	UT-7-SR STD
PB	UT-7-DA STD	SJ	UT-7.5-SR STD
PJ	UT-7.5-DA STD		
ZZ	Non-Standard		

3&4	Operation (Con't)
M1	ER-1-2.5-4 110 VAC
M2	ER-2-5-4 110 VAC
M3	ER-3-5-4 110 VAC
M8	ER-4-10-4 110 VAC
M4	ER-6-15-4 110 VAC
M5	ER-10-15-4 110 VAC
M9	ER-15-30-4 110 VAC
MA	ER-20-12-4 110 VAC
M7	ER-38-14-4 110 VAC
MC	ER-50-68-4 110 VAC
MD	ER-70-68-4 110 VAC
ZZ	Non-standard

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

7&8	Solenoid Feature	Act. Type
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	

9&10	Limit Switch
00	None
AA	LS FMYB-5120-N4 to UT-0/3
AB	LS FMYB-5120-N4 to UT-3.5/7
AC	LS AMYB-5120-N7 to UT-0/3
AD	LS AMYB-5120-N7 to UT-3.5/7
ZZ	Non-Standard

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