

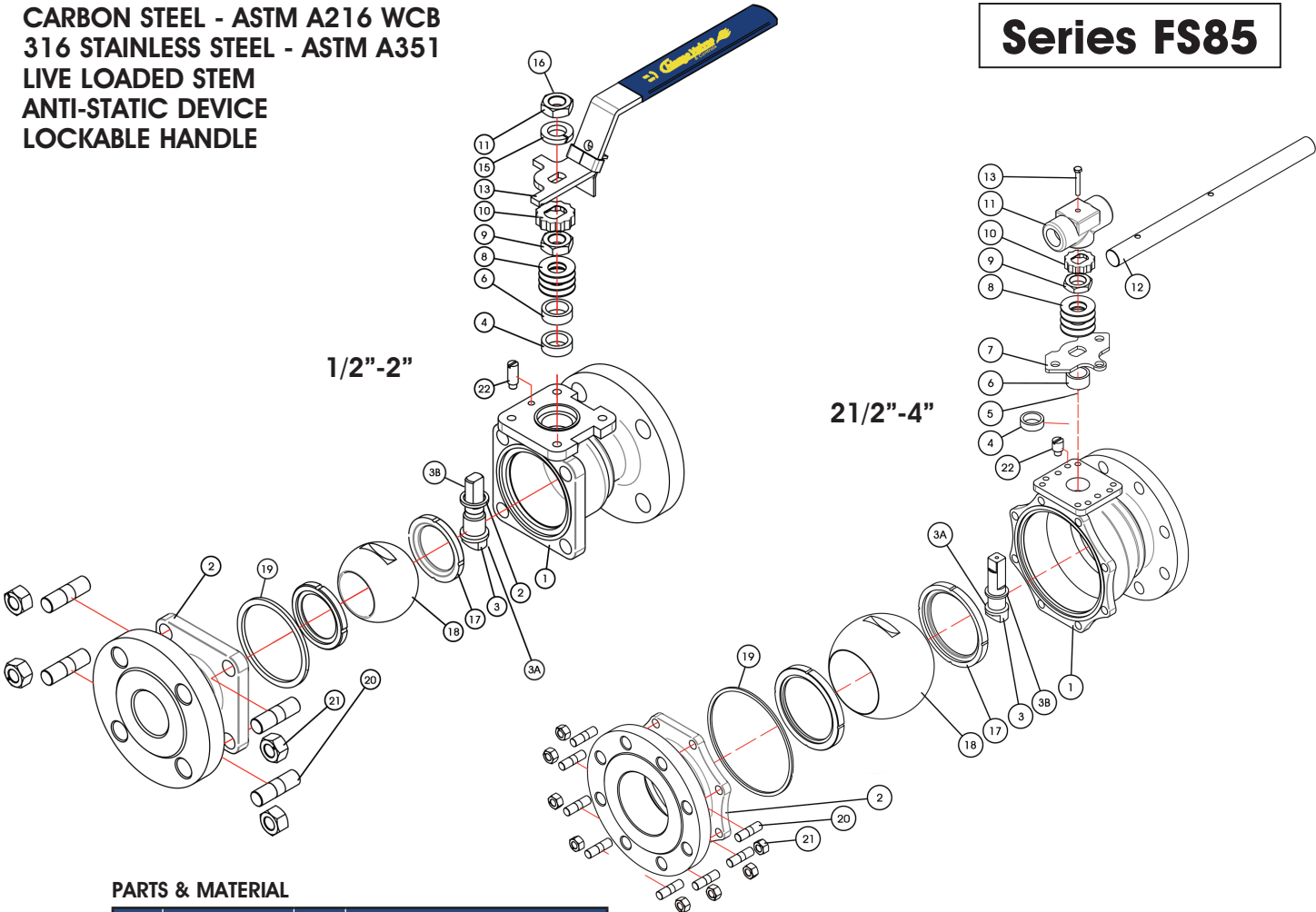
Chicago Valves & Controls



SERIES FS85
FLANGED FULL PORT BALL VALVE
CLASS 150/300

CARBON STEEL - ASTM A216 WCB
316 STAINLESS STEEL - ASTM A351
LIVE LOADED STEM
ANTI-STATIC DEVICE
LOCKABLE HANDLE

Series FS85



PARTS & MATERIAL

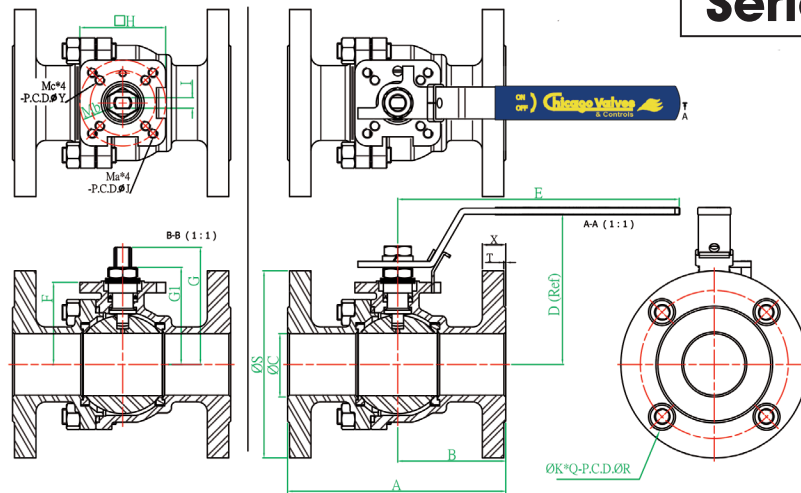
PART NO.	PART NAME	QTY	MATERIAL
1	Body	1	Carbon Steel ASTM A216 WCB 316 Stainless Steel ASTM A351
2	End Piece	1	Carbon Steel ASTM A216 WCB 316 Stainless Steel ASTM A351
3	Stem	1	316 Stainless Steel
3A	Anti-Static Device	2	300 Series Stainless Steel Hard Drawn Stainless Steel
3B	Thrust Washer	1	PTFE
4	Stem Packing	1	Graphite
5	Packing Washer (3\"-4\")	1	300 Series Stainless Steel
6	Gland	1	300 Series Stainless Steel
7	Travel Stop (3\"-4\")	1	300 Series Stainless Steel
8	Belleville Washer	4	300 Series Stainless Steel
9	Gland Nut	1	300 Series Stainless Steel
10	Lock Tab	1	300 Series Stainless Steel
11	Wrench Block (3\"-4\")	1	304 Stainless Steel
12	Handle Pipe (3\"-4\")	1	304 Stainless Steel / Galvanized Pipe
13	Handle	1	300 Series Stainless Steel
14	Handle Bolt (3\"-4\")	1	300 Series Stainless Steel
15	Handle Washer	1	300 Series Stainless Steel
16	Handle Nut	1	300 Series Stainless Steel
17	Seat	2	TFM
18	Ball	1	316 Stainless Steel
19	Body Seal	1	Graphite
20	Body Stud	6/6/8	ASTM A193 GR B8MA
21	Body Nut	6/6/8	ASTM A194 GR 8A
22	Stop Pin	1	300 Series Stainless Steel

APPLICABLE STANDARDS

BASIC DESIGN	ASME B16.34
FACE TO FACE DIMENSION	ASME B16.10
FLANGE DIMENSIONS	ASME B16.5
TEST	API 598
MOUNTED PADS DIEM	ISO 5211
FIRE SAFE	API 607 4TH EDITION
NACE	MR-0175

Series FS85

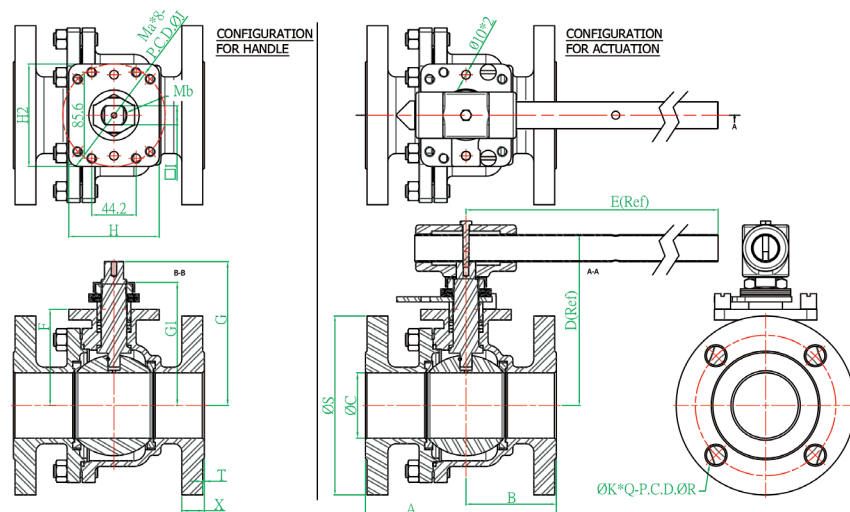
1/2"-2"



DIMENSIONS (INCHES)

/	CLASS 150																			
	A	B	C	D	E	F	G	G1	H	I	J	K	Q	R	S	Ma	Mc	Y	X	Mb
1/2"	4.25	1.97	0.59	3.54	4.75	1.36	2.07	1.67	1.97	0.22	1.97	0.63	4	2.38	3.5	M6	M5	1.42	0.44	3/8"-24UNEF
3/4"	4.62	2.24	0.79	3.7	4.75	1.5	2.2	1.83	1.97	0.22	1.97	0.63	4	2.78	3.88	M6			0.5	3/8"-24UNEF
1"	5.0	2.2	0.98	3.66	6.22	1.78	2.63	1.94	1.97	0.3	1.65	0.63	4	3.12	4.25	M5			0.56	7/16"-20UNEF
1 1/2"	6.50	3.01	1.5	4.45	9	2.24	3.41	2.74	2.76	0.34	2.76	0.63	4	3.88	5	M8			0.69	9/16"-18UNEF
2"	7.00	3.47	1.97	4.17	9	2.61	3.76	3.12	2.76	0.34	2.76	0.75	4	4.75	6	M8	M6	1.97	0.75	9/16"-18UNEF
/	CLASS 300																			
	A	B	C	D	E	F	G	G1	H	I	J	K	Q	R	S	Ma	Mc	Y	X	Mb
1/2"	5.50	2.64	0.49	3.41	4.75	1.36	2.07	1.67	1.97	0.22	1.97	0.63	4	2.62	3.74	M6	M5	1.42	0.56	3/8"-24UNEF
3/4"	6.0	2.94	0.79	3.57	4.75	1.5	2.2	1.81	1.97	0.22	1.97	0.75	4	3.25	4.61	M6			0.63	3/8"-24UNEF
1"	6.50	3.19	0.98	3.76	6.22	1.78	2.64	1.94	1.97	0.3	1.97	0.75	4	3.5	4.88	M5			0.69	7/16"-20UNEF
1 1/2"	7.50	3.7	1.5	4.43	9	2.24	3.41	2.74	2.76	0.34	2.76	0.87	4	4.51	6.14	M8			0.81	9/16"-18UNEF
2"	8.50	4.28	2	4.82	9	2.61	3.76	3.12	2.76	0.34	2.76	0.75	8	5	6.5	M8	M6	1.97	0.88	9/16"-18UNEF

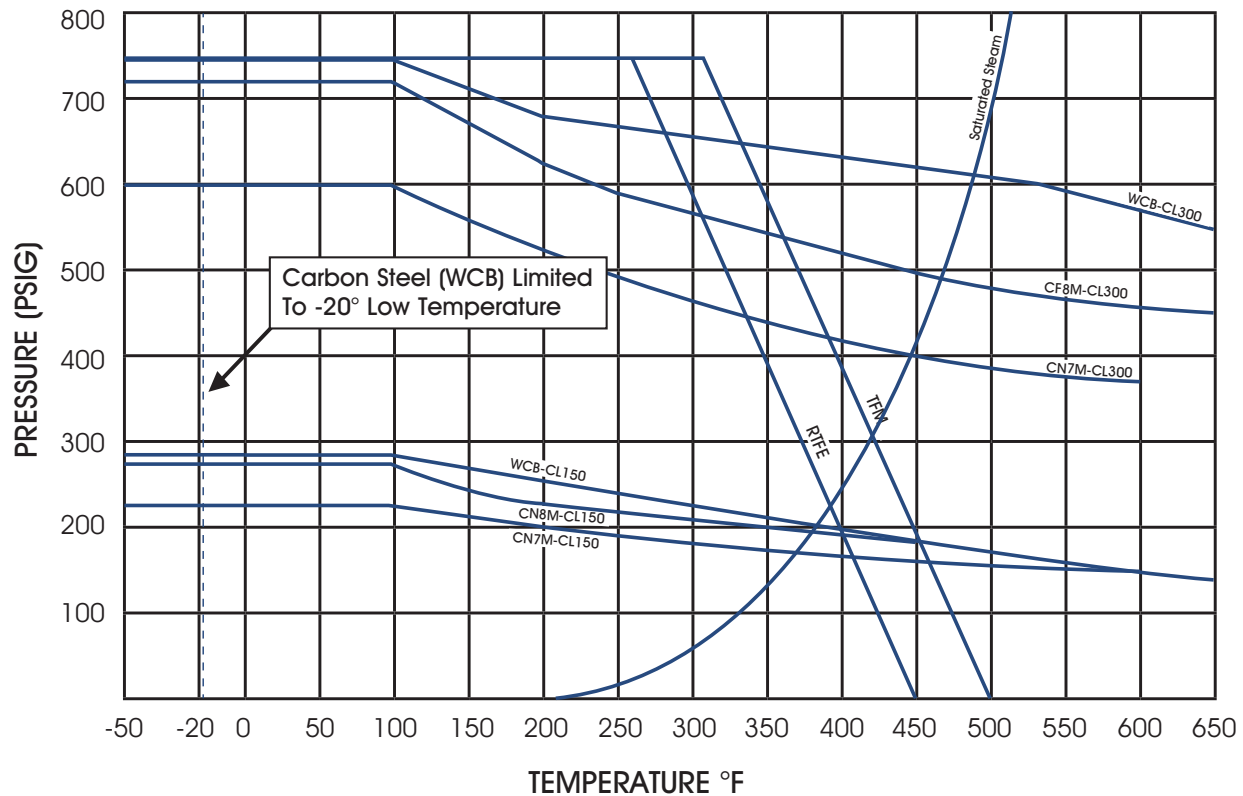
2 1/2"-4"



DIMENSIONS (INCHES)

/	CLASS 150																		
	A	B	C	D	E	F	G	G1	H	H2	I	J	K	Q	R	S	X	Mα	Mb
21/2"	7.50	3.54	2.56	6.69	13.74	3.76	5.63	5.07	3.54	4.02	0.75	4.02	0.75	4	5.5	7.01	0.88	M10	1"-14UNF
3"	8.0	3.64	2.99	7.09	13.74	4.15	6.02	5.46	3.54	4.02	0.75	4.02	0.75	4	6	7.48	0.94		
4"	9.0	4.42	3.94	7.72	13.74	4.74	6.65	6.06	3.54	4.02	0.75	4.02	0.75	8	7.5	9.02			
/	CLASS 300																		
	A	B	C	D	E	F	G	G1	H	H2	I	J	K	Q	R	S	X	Mα	Mb
21/2"	9.50	4.04	2.56	6.69	13.74	3.76	5.63	5.07	3.54	4.02	0.75	4.02	0.87	8	5.89	7.52	1	M10	1"-14UNF
3"	11.12	5.4	2.99	7.09	21.61	4.15	6.02	5.46	3.54	4.02	0.75	4.02	0.87	8	6.61	8.27	1.12		
4"	12.00	5.93	3.94	7.72	21.61	4.74	6.65	6.06	3.54	4.02	0.75	4.02	0.87	8	7.87	10	1.25		

PRESSURE-TEMPERATURE RATINGS SERIES FS85



Note:

The maximum pressure/temperature ratings of the valve assemblies are limited to lowest of the body or seat material fitted. The body ratings are based on ASME B16.34 rating for materials. The graphs are based on laboratory testing and our experience in field. The seat ratings depend on the material, design, application and function.

		150	300
SIZE	CV (GPM)	WEIGHT (LBS)	
1/2"	26	4	5
3/4"	50	6	7
1"	94	8	10
1 1/2"	260	15	19
2"	480	20	33
2 1/2"	750	36	50
3"	1150	45	68
4"	2110	75	96

Chicago Valves & Controls® Seat Materials

M-TFM® PTFE

Dyneon TFME® PTFE is a second generation PTFE with improved chemical and heat resistant properties and stress recovery. Its temperature range is -100°F to 500°F (-73°C to 260°C) Color - white.

R-Reinforced Polytetrafluoroethylene (RTFE).

PTFE's mechanical properties are enhanced by adding 15% filler material to provide improved strength, stability and wear resistance. Its temperature range is from -320°F to 450°F (-196°C to 232°C). Color-off-white.

HOW TO ORDER

1"	FS85	6	6	R	G	G	1	X	OH
Size	Series	Body & Ends	Ball & Stem	Seats	Body Seal	Stem Packing	Class	Service	Options
SIZE	SERIES	BODY & ENDS	BODY-SEAL	SERVICE					
1/2"	FS85 - Fire Safe	6 316 Stainless Steel	G Graphite	X Oxygen Service (CVAC Standards)					
3/4"		4 Carbon Steel		SF Silicone FREE					
1"			STEM PACKING						
1 1/2"			G Graphite						
2"		BALL & STEM							
2 1/2"		6 316 Stainless Steel							
3"			CLASS						
4"		SEATS	1 150RF						
		M TFM	3 300RF						
		R RTFE							
				OPTIONS					
				OH Oval Handle (Up to 2")					
				VB Vented Ball					
				SH Spring Loaded Handle (Up to 2")					

Chicago Valves
& Controls

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