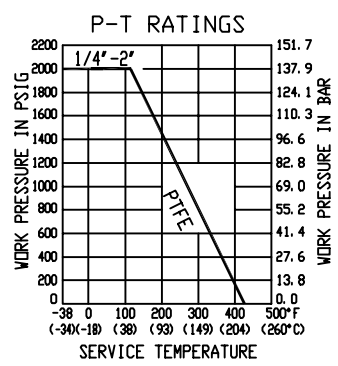


AF-35 SIZE: 1/4"-2" FIRE-SAFE API 607

3-PIECE FULL PORT and STANDARD PORT BALL VALVE  
 SCREWED ENDS, BUTT WELDED END, SOCKET WELDED END  
 ISO 5211 MOUNTING PAD  
 DIN 3202-M3 (SCREWED ENDS/SOCKET WELDED ENDS)  
 -S13 (BUTT WELDED ENDS)  
 PRESSURE: 2000 PSI ( CLASS 800 ) W. D. G.  
 STAINLESS STEEL: 316 BODY, with 316 SS TRIM  
 CARBON STEEL: WCB BODY, with 316 SS TRIM

STANDARDS APPLICABLE  
 ASME B16.34-STEEL VALVES FLANGED, THREADED, AND WELDING END  
 ASME B1.20.1-PIPE THREADS, GENERAL PURPOSE  
 ASME B16.10-FACE TO FACE & END TO END DIMENSIONS OF VALVES  
 API 598-VALVE INSPECTION AND TESTING  
 MSS SP72-BALL VALVES WITH FLANGED OR BUTT WELDING ENDS FOR GENERAL SERVICES  
 MSS SP25-STANDARD MARKING SYSTEM FOR VALVES FITTINGS, FLANGES AND UNIONS



ITEM	DESCRIPTION	STAINLESS STEEL	CARBON STEEL	Q' TY
1	BODY	ASTM A351 CF8M	ASTM A216 WCB	1
2	END CAP	ASTM A351 CF8M	ASTM A216 WCB	2
3	BALL	ASTM A351 CF8M/316	ASTM A351 CF8M/316/304	1
4	SEAT	PTFE		2
5-1	GASKET	GRAPHITE		2
5-2		PTFE		2
6-1	THRUST WASHER	GRAPHITE		1
6-2		PTFE		1
7	STEM PACKING	GRAPHITE		1
8	GLAND	AISI 304		1
9	BELLEVILLE WASHER	AISI 301		2
10	STEM	ASTM A276 316		1
11	PACKING NUT	AISI 304		1
12	SPRING WASHER	AISI 304		1
13	HANDLE NUT	AISI 304		1
14	BOLT	ASTM A193 B8	ASTM A193 B7	8-12
15	HANDLE	AISI 304	ZINC PLATED STEEL	1
16	HANDLE GRIP	VINYL PLASTISOL		1
17	LOCK SADDLE	AISI 304		1
18	O-RING	VITON		1
19	STOPPER NUT	AISI 304	CARBON STEEL	1
20	ANTI-STATIC DEVICE	AISI 304		1-2

SIZE	øD		L		L1		E	F	G	H	W	øA		øB		C	ISO 5211 (F)	I	Weights							
	IN	MM	IN	MM	IN	MM						IN	MM	IN	MM					IN	MM	IN	MM	IN	MM	IN
1/4"	0.375	9.525	1.375	34.925	0.750	19.050	0.291	7.411	0.315	8.013	1.476	37.500	2.750	70.000	5.512	140.000	0.543	13.827	0.562	14.222	0.391	10.000	F04	0.47	12	1.1
3/8"	0.375	9.525	1.375	34.925	0.750	19.050	0.291	7.411	0.315	8.013	1.476	37.500	2.750	70.000	5.512	140.000	0.683	17.322	0.691	17.602	0.511	13.000	F04	0.47	12	1.1
1/2"	0.500	12.700	1.750	44.275	1.000	25.400	0.341	8.711	0.433	11.013	1.961	50.000	3.540	90.000	7.081	180.000	0.853	21.722	0.861	21.802	0.511	13.000	F04-F05	0.55	14	1.6
3/4"	0.750	19.050	2.125	54.025	1.250	31.750	0.341	8.711	0.433	11.013	2.361	60.000	3.930	100.000	7.081	180.000	1.073	27.222	1.071	27.202	0.591	15.000	F04-F05	0.55	14	2.2
1"	1.000	25.400	2.500	63.500	1.500	38.100	0.551	14.111	0.673	17.013	2.831	72.000	4.400	112.000	8.461	215.000	1.243	31.522	1.231	31.302	0.631	16.000	F07	0.79	20	3.3
1 1/4"	1.375	34.925	3.000	76.200	1.750	44.275	0.551	14.111	0.673	17.013	2.991	76.000	4.520	115.000	8.461	215.000	1.453	37.022	1.421	36.302	0.631	16.000	F07	0.79	20	4.6
1 1/2"	1.625	41.275	3.375	85.675	2.000	50.800	0.551	14.111	0.673	17.013	3.661	93.000	5.230	133.000	8.461	215.000	1.913	48.622	1.921	48.802	0.631	16.000	F07	0.79	20	7.3
2"	2.000	50.800	4.000	101.600	2.500	63.500	0.551	14.111	0.673	17.013	3.661	93.000	5.230	133.000	8.461	215.000	2.383	60.522	2.411	61.202	0.671	17.000	F07	0.79	20	7.3

REV	DATE	DESCRIPTION	CODE	REVISER	REMARKS
		Double-D Stem			

1/4"~2"	MATERIAL	APPROVE	CHECK		DRAWN BY
	SCALE	FREE	UNIT	mm	Peggy
	PART NO	AF-35			DATE
2000 PSI FIRE-SAFE API 607	OTHER	DWG NO	AF-35-KA	TITLE	3-PC THREAD END BALL VALVE



## BALL VALVE TORQUES, WEIGHTS & CV/KV VALUES

<b>AF35 Torque Data</b>		Torque Figures are net without safety factors	
<b>Valve bore size</b>	Breakaway Torque	Operation Torque	
<b>(inch)</b>	<b>NM</b>	<b>NM</b>	
1/2"	7.80	6.24	
3/4"	19.5	15.6	
1"	41.6	33.3	
1-1/2"	46.8	37.5	
2"	52.0	41.6	

<b>AF35 Weights</b>		
<b>Valve bore size</b>	Reduce Bore	Full Bore
<b>(inch)</b>	<b>Kgs</b>	<b>Kgs</b>
1/2"	N/A	1.06
3/4"	1.11	1.56
1"	1.75	2.14
1-1/2"	3.62	4.57
2"	5.05	7.34

<b>CV/KV Values</b>		
<b>Valve bore size</b>	CV	KV
<b>(inch)</b>		
1/2"	17	15
3/4"	38	33
1"	56	48
1-1/2"	120	103
2"	240	206



## BALL VALVE DATA SHEET (CARBON STEEL)

<b>VALVE DESIGN</b>		
NOMINAL SIZE	½" – 2"	
BALL/SEAT STYLE	Floating Ball	
CLASS	CL800 (2000 WOG)	
MAXIMUM WORKING PRESSURE	138 Bar (2000 psi) W.O.G	
BORE TYPE	Reduced or Full	
END CONNECTIONS	Screwed NPT or Socket Weld to ASME B16.11	
SEAT TYPE	Self Relieving	
BODY CONSTRUCTION	3 Piece Bolted, Side entry, Anti-static, Blow-out	
DESIGN STANDARD	BS 5351 / API 607	
MOUNTING PAD DESIGN	ISO 5211	
DESIGN TEMPERATURE RATING	-29°C To +200°C	
<b>MATERIALS OF CONSTRUCTION (NACE STD MR.01.75 LATEST REV.)</b>		
BODY AND CAP	A216 WCB (Investment Cast)	
BALL	AISI 316 or ASTM A351 CF8M	
STEM	A276-316	
SEATS INSERTS	PTFE	
STEM SEAL	VITON	
BODY & STEM GASKET (FIRE SEAL)	Graphite	
BOLTING	AISI 1045	
<b>TESTING</b>		
PRESSURE TESTS: Body and seat	API 598 / BS 6755 Part 1	
FIRE SAFE TEST	API 607 / BS 6755 Part 2	
DOCUMENTATION	EN 10.204.3.1.B	
CE/PED & ATEX CERTIFIED	YES / YES	
<b>ACCESSORIES</b>		
OPERATOR	LEVER C/W LOCKING FACILITY	
<b>DRAWING NUMBER</b>		
	AF-35Ka	

Compiled by:	A.PARRACK
Approved at FCC by:	
Date of issue:	27 <sup>th</sup> JANUARY 2005
Revision number:	REV 0

Exclusive Distributor:



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E-mail: [sales@flowcontrol.co.uk](mailto:sales@flowcontrol.co.uk)  
Web site: [www.flowcontrol.co.uk](http://www.flowcontrol.co.uk)



## BALL VALVE DATA SHEET (STAINLESS STEEL)

<b>VALVE DESIGN</b>		
NOMINAL SIZE	1/2" – 2"	
BALL/SEAT STYLE	Floating Ball	
CLASS	CL800 (2000 WOG)	
MAXIMUM WORKING PRESSURE	138 Bar (2000 psi) W.O.G	
BORE TYPE	Reduced or Full	
END CONNECTIONS	Screwed NPT or Socket Weld to ASME B16.11	
SEAT TYPE	Self Relieving	
BODY CONSTRUCTION	3 Piece Bolted, Side entry, Anti-static, Blow-out	
DESIGN STANDARD	BS 5351 / API 607	
MOUNTING PAD DESIGN	ISO 5211	
DESIGN TEMPERATURE RATING	-50°C To +160°C	
<b>MATERIALS OF CONSTRUCTION (NACE STD MR.01.75 LATEST REV.)</b>		
BODY AND CAP	A351-CF8M (Investment Cast)	
BALL	AISI 316 or ASTM A351 CF8M	
STEM	A276-316	
SEATS INSERTS	PTFE	
STEM SEAL	VITON	
BODY & STEM GASKET (FIRE SEAL)	Graphite	
BOLTING	A193 B8	
<b>TESTING</b>		
PRESSURE TESTS: Body and seat	API 598 / BS 6755 Part 1	
FIRE SAFE TEST	API 607 / BS 6755 Part 2	
<b>ACCESSORIES</b>		
OPERATOR	LEVER C/W LOCKING FACILITY	
<b><u>DRAWING NUMBER</u></b>	AF-35Ka	

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