

KF Industries

SERIES F BALL VALVE - 1½"FP through 6"RP

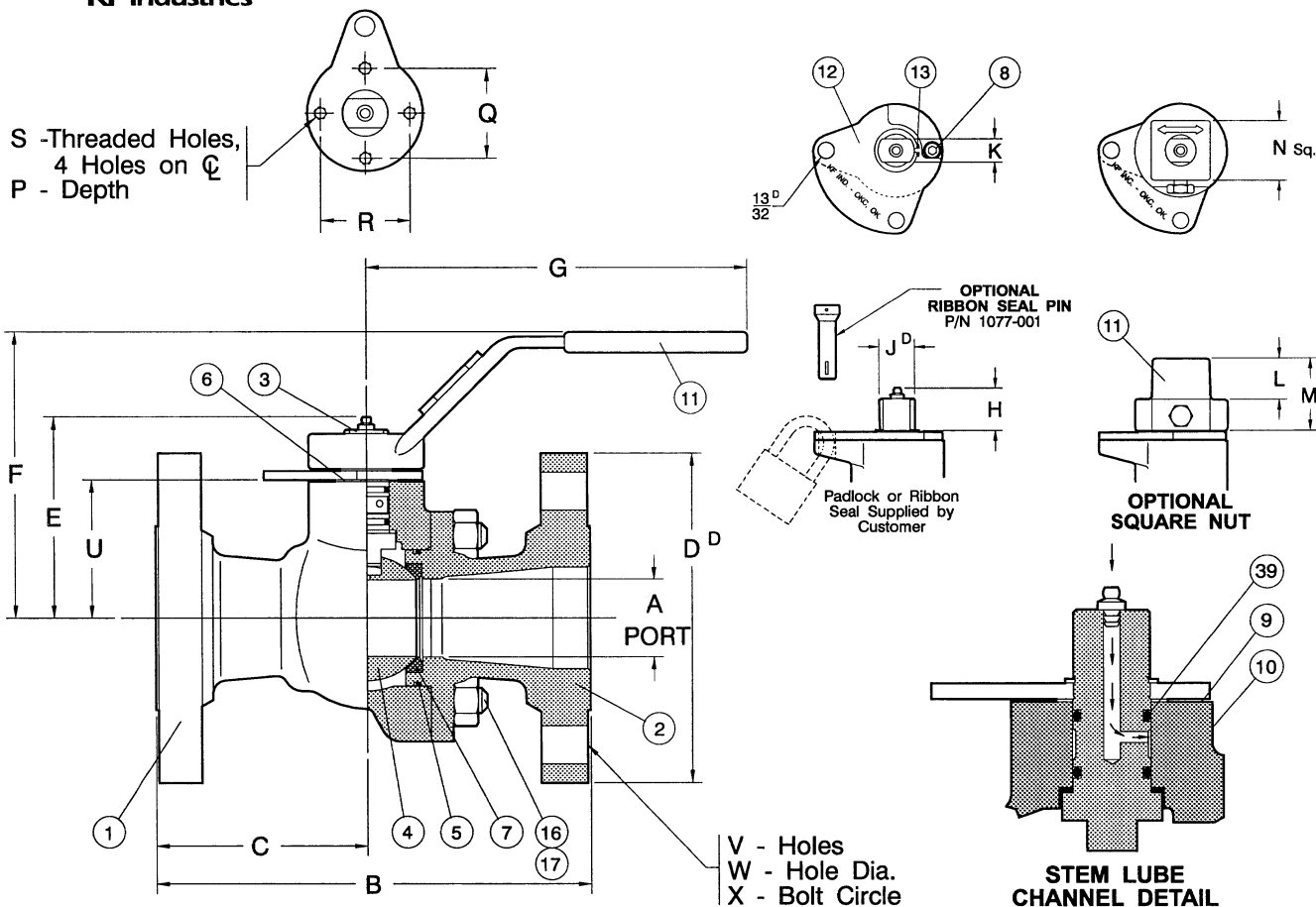
ANSI B16.34 and API 6D

CLASS 150 - 275 WP at 100° F, SHELL TEST 425 PSI

CLASS 300 - 720 WP at 100° F, SHELL TEST 1100 PSI

CLASS 600 - 1440 WP at 100° F, SHELL TEST 2175 PSI

DB-15B
Sheet 1 of 2
6-9-2000



DIMENSIONAL DATA

DIMENSION	SIZE	1½"FP	2"RP	2"FP	2½"RP	3"RP	3"FP	4"RP	4"FP	6"RP
Weight - Lb.s with Handle	-150	20.7	23.9	30.1	37.5	41.4	56.5	85.8	97.5	114.5
	-300	25.8	28.3	34.8	43.7	52.5	78.8	104.8	129.5	162.5
	-600	30.4	35.0	41.5	52.9	61.6	89.1	133.8	---	---
A		1-1/2	1-1/2	2	2	2	3	3	4	4
B	-RF 150	6-1/2	7	7	7-1/2	8	8	9	9	10-1/2
	-RF 300	7-1/2	8-1/2	8-1/2	9-1/2	11-1/8	11-1/8	12	12	15-7/8
	-RF 600	9-1/2	11-1/2	11-1/2	13	14	14	17	---	---
	-RTJ 600	9-1/2	11-5/8	11-5/8	13-1/8	14-1/8	14-1/8	17-1/8	---	---
C	-RF 150	2-11/16	2-3/4	2-3/4	2-15/16	3-1/8	3-5/8	3-1/16	3-15/16	4-5/8
	-RF 300	3-9/16	4-1/8	4-1/8	4-11/16	5-13/16	5-7/16	5-7/8	6	6
	-RF 600	3-7/8	4-7/16	4-7/16	4-15/16	6	5-3/4	7-3/4	---	---
	-RTJ 600	3-7/8	4-1/2	4-1/2	5	6-1/16	5-13/16	7-13/16	---	---
D	150	5	6	6	7	7-1/2	7-1/2	9	9	11
	300	6-1/8	6-1/2	6-1/2	7-1/2	8-1/4	8-1/4	10	10	12-1/2
	600	6-1/8	6-1/2	6-1/2	7-1/2	8-1/4	8-1/4	10-3/4	---	---
E		3-15/16	3-15/16	4-3/8	4-3/8	4-3/8	5-21/32	5-21/32	6-21/32	6-21/32
F		5-5/8	5-5/8	6-1/16	6-1/16	6-1/16	7-1/4	7-1/4	8-1/4	8-1/4
G		8-1/2	8-1/2	8-1/2	8-1/2	8-1/2	15	15	18	18
H		1	1	1	1	1	1-1/4	1-1/4	1-1/4	1-1/4
J		873/871	873/871	873/871	873/871	873/871	1,248/1,246	1,248/1,246	1,373/1,371	1,373/1,371
K		560/556	560/556	560/556	560/556	560/556	622/618	622/618	747/743	747/743
L		1	1	1	1	1	1-1/8	1-1/8	1-1/8	1-1/8
M		1-15/16	1-15/16	1-15/16	1-15/16	1-15/16	2-3/16	2-3/16	2-3/16	2-3/16
N		1-7/16	1-7/16	1-7/16	1-7/16	1-7/16	1-13/16	1-13/16	1-13/16	1-13/16
P		3/8	3/8	3/8	3/8	3/8	5/8	5/8	5/8	5/8
Q		1-3/4	1-3/4	1-3/4	1-3/4	1-3/4	3-1/8	3-1/8	3-1/8	3-1/8
R		1-3/4	1-3/4	1-3/4	1-3/4	1-3/4	2-1/4	2-1/4	2-1/4	2-1/4
S		1/4-20	1/4-20	1/4-20	1/4-20	1/4-20	5/16-18	5/16-18	5/16-18	5/16-18
U		2-5/8	2-5/8	3-1/16	3-1/16	3-1/16	4	4	5	5
	150	4	4	4	4	4	4	4	8	8
	300	4	4	4	4	4	4	4	8	12
V	600	4	4	4	4	4	4	4	---	---
	150	5/8	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
	300	7/8	3/4	3/4	7/8	7/8	7/8	7/8	7/8	7/8
W	600	7/8	3/4	3/4	7/8	7/8	7/8	1	---	---
	150	3-7/8	4-3/4	4-3/4	5-1/2	6	6	7-1/2	7-1/2	9-1/2
	300	4-1/2	5	5	5-7/8	6-5/8	6-5/8	7-7/8	7-7/8	10-7/8
X	600	4-1/2	5	5	5-7/8	6-5/8	6-5/8	8-1/2	---	---
	150	4-1/2	5	5	5-7/8	6-5/8	6-5/8	8-1/2	---	---
RING GROOVE (RTJ ONLY)		R-20	R-23	R-23	R-26	R-31	R-31	R-37	---	---

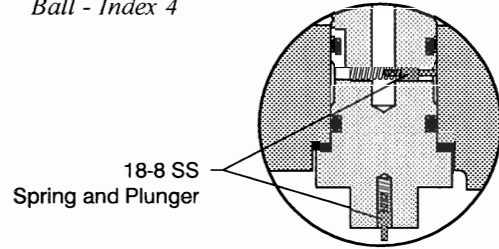
Reference **MSB-15B** for Material Specifications

ASSEMBLY NUMBER CODE

Trim Components include:

Stem - Index 3

Ball - Index 4



ANTI-STATIC DETAIL

NOTE:

Assemblies with Stainless Steel trim (Ball and Stem) conform to NACE MR-01-75.

BODY / TRIM MATERIAL

- 1 - CS (WCB) / CS
- 2 - CS (WCB) / SS
- 7 - SS (CF8M) / SS
- 8 - LOTEMP CS (LCC) / SS

SEAT / SEAL MATERIAL

- 1 - NYLON / BUNA N
- 2 - TEFLON / VITON
- 3 - NYLON / VITON
- 4 - TEFLON / BUNA N
- 5 - HT4 (PEEK) / VITON
- 6 - HT4 (PEEK) / EPDM
- 7 - HT4 (PEEK) / AFLAS
- 8 - NYLON / PC BUNA N
- 9 - TEFLON / PC BUNA N
- 0 - TEFLON / LT BUNA N

SPECIFICATIONS

- 2 - NACE II (SS Trim ONLY, CI. II Bolting)
- 3 - STD. ENDUROBOND (SS Trim - NACE III Bolting)
- 4 - NACE II ENDUROBOND (SS Trim - NACE II Bolting)
- 5 - STD., XYLAN Coated Bolting (SS Trim - NACE III Bolting)
- 6 - NACE II, XYLAN Coated Bolting (SS Trim - NACE II Bolting)
- 9 - STANDARD (CS Trim - Non-NACE, SS Trim - NACE CI.III Bolting)

ACTUATION

- 1 - HANDLE
- 2 - SQUARE NUT
- 3 - GEAR OPERATOR
- 9 - BARE STEM
- A - FOR ACTUATION

ANTI-STATIC DEVICE

- 1 - STANDARD (without Anti-Static Device)
- 2 - with ANTI-STATIC DEVICE

PROCESS CODES
(Last two digits used ONLY when Process Codes are required.)

ASSEMBLY
BASE No.

0XXXX - X X X X X XX

PARTS LIST

(Reference **MSB-15B** for Material Specifications)

INDEX	REQ'D	DESCRIPTION
1	1	BODY
2	1	ADAPTER
3*	1	STEM ASSEMBLY
4*	1	BALL
5*	1	BODY SEAL, O-Ring
6*	1	STEM BEARING - Nylon
7*	2	SEAT
8	1	STOP SCREW - Carbon Steel
9*	1	STEM SEAL, O-Ring
10*	1	THRUST BEARING - Teflon
11	1	HANDLE - Ductile Iron
	1	SQUARE NUT - Ductile Iron
	1	GEAR OPER. - Cast Iron Case
12	1	STOP PLATE - Carbon Steel
13*	1	RETAINER - Spring Steel
16	(**)	HEX NUT - See Bolting Chart
17	(**)	STUD - See Bolting Chart
39	1	WEATHER SEAL - Buna N

* Recommended spare parts for 1 year service.

** Cap screw quantities:

CI.150	4 - 1 1/2"FP through 3"RP
	6 - 3"FP through 4"RP
	8 - 4"FP through 6"RP
CI.300	6 - 1 1/2"FP through 4"RP
	8 - 4"FP through 6"RP
CI.600	6 - 1 1/2"FP through 3"RP
	8 - 3"FP through 4"RP

BOLTING MATERIAL CHART				
INDEX	CARBON STEEL		LT CARBON STEEL	
	Non-NACE NACE CI.III	NACE CI.II	Non-NACE NACE CI.III	NACE CI.II
16	2H	2HM	L7	L7M
17	B7	B7M	L7	L7M

Note: Valves with SS Body and Adapter includes Xylan coated carbon steel bolting

ASSEMBLY BASE NUMBERS

ANSI CLASS \ SIZE	1-1/2"FP	2"RP	2"FP	2-1/2"RP	3"RP	3"FP	4"RP	4"FP	6"RP
-RF CI.150	2149-	2150-	2151-	2152-	2153-	2154-	2155-	2156-	2157-
-RF CI.300	2299-	2300-	2301-	2302-	2303-	2304-	2305-	2306-	2307-
-RF CI.600	2599-	2600-	2601-	2602-	2603-	2604-	2605-	---	---
-RTJ CI.600	2609-	2610-	2611-	2612-	2613-	2614-	2615-	---	---

DESIGN TORQUES FOR ACTUATOR SIZING (In-Lbs.)

PRESSURE \ SIZE	1-1/2"FP	2"RP	2"FP	2-1/2"RP	3"RP	3"FP	4"RP	4"FP	6"RP
275 psi	540		600			1320		2160	
720 psi	720		960			2160		3600	
1440 psi	900		1200			2700		---	

FLOW COEFFICIENT (C_v)

ANSI CLASS \ SIZE	1-1/2"FP	2"RP	2-1/2"RP	2"FP	3"RP	3"FP	4"RP	4"FP	6"RP
CI.150	308	140	220	500	220	1390	630	2550	925
CI.300	308	140	220	420	210	1050	600	2000	910
CI.600	308	140	220	365	185	1000	570	1800	---