

For use in China, Europe, Middle East, North America and South East Asia only.

# KTM Series EB1

## Split Body Floating Ball Valves

Model / Series	Size	End Connection	Drilling / Schedule	Face-to-Face	Pressure Rating	Body Material	Ball Material	Stem Material	Seat Material	Sealing Material	Sealing Options	Mounting Type	Actuation Type	Optional Feature 1	Optional Feature ...	Actuation Option
EB1SF	0015	F1	A1	AB	A1	CA	S10	S1	TC	P0	SG8	I	B	NP1	TPZ	GS-000



### Model / Series

Code	Description
EB1SF	Series EB1, Standard, Full
EB1SR	Series EB1, Standard, Reduced
EB1HF	Series EB1, High Temp, Full
EB1HR	Series EB1, High Temp, Reduced
EB1CF	Series EB1, Cryogenic, Full
EB1CR	Series EB1, Cryogenic, Reduced
EB1LF	Series EB1, Low Temp, Full
EB1LR	Series EB1, Low Temp, Reduced
EB1PF	Series EB1, Pocketless, Full
EB1PR	Series EB1, Pocketless, Reduced
EB1XF	Series EB1, X-High Temp, Full
EB1XR	Series EB1, X-High Temp, Reduced

### Size

Code	Description
0015	DN 15 / NPS ½
0020	DN 20 / NPS ¾
0025	DN 25 / NPS 1
0040	DN 40 / NPS 1½
0050	DN 50 / NPS 2
0065	DN 65 / NPS 2½
0080	DN 80 / NPS 3
0100	DN 100 / NPS 4
0125	DN 125 / NPS 5
0150	DN 150 / NPS 6
0200	DN 200 / NPS 8
0250	DN 250 / NPS 10
ZZZZ	Special

### End Connection

Code	Description
F1	Flange - ASME Flat Face (FF) - 32 to 63 AARH (Smooth)
F2	Flange - ASME Flat Face (FF) - 63 to 125 AARH
F3	Flange - ASME Flat Face (FF) - 125 to 250 AARH
F4	Flange - ASME Flat Face (FF) - 250 to 500 AARH
J1	JIS Flat Face (FF) - 32 to 63 AARH (Smooth)
J2	JIS Flat Face (FF) - 63 to 125 AARH
J3	JIS Flat Face (FF) - 125 to 250 AARH
J4	JIS Flat Face (FF) - 250 to 500 AARH
J5	JIS Raised Face (RF) - 32 to 63 AARH (Smooth)
J6	JIS Raised Face (RF) - 63 to 125 AARH
J7	JIS Raised Face (RF) - 125 to 250 AARH
J8	JIS Raised Face (RF) - 250 to 500 AARH
R1	Flange - ASME Raised Face (RF) - 32 to 63 AARH (Smooth)
R2	Flange - ASME Raised Face (RF) - 63 to 125 AARH
R3*	Flange - ASME Raised Face (RF) - 125 to 250 AARH
R4	Flange - ASME Raised Face (RF) - 250 to 500 AARH
RJ	Flange - Ring Type Joint (RTJ)
ZZ	Special

### NOTE

\* Indicates standard configuration.

### Drilling / Schedule

Code	Description
A1	ASME 150
A2	ASME 300
A3	ASME 600
A4	ASME 900
A5	ASME 1500
J1	JIS 5K
J3	JIS 10K
J5	JIS 20K
J7	JIS 40K
J8	JIS 63K
ZZ	Special

### Face-to-Face

Code	Description
AB*	ASME B16.10 Long
AC	ASME B16.10 Short
ZZ	Special

### Pressure Rating

Code	Description
A1	ASME 150
A2	ASME 300
A3	ASME 600
A4	ASME 900
A5	ASME 1500
J1	JIS B2220 - 5K
J3	JIS B2220 - 10K
J5	JIS B2220 - 20K
J7	JIS B2220 - 40K
J8	JIS B2220 - 63K
ZZ	Special

<b>Model / Series</b>		<b>Size</b>	<b>End Connection</b>	<b>Drilling / Schedule</b>	<b>Face-to-Face</b>	<b>Pressure Rating</b>	<b>Body Material</b>	<b>Ball Material</b>	<b>Stem Material</b>	<b>Seat Material</b>	<b>Sealing Material</b>	<b>Sealing Options</b>	<b>Mounting Type</b>	<b>Actuation Type</b>	<b>Optional Feature 1</b>	<b>Optional Feature ...</b>	<b>Actuation Option</b>	
EB1SF	-	0015	F1	A1	AB	A1	CA	S10	S1	TC	P0	SG8	I	B	-	NP1	TPZ	+ GS-000

**Body Material**

Code	Description
CA*	Carbon Steel A216 WCB
CB	Carbon Steel A352 LCB
CC	Carbon Steel A352 LCC
CD	Carbon Steel A216 WCC
SB	Stainless Steel A351 CF8
SE*	Stainless Steel A351 CF8M
SS	Stainless Steel A351 CF3
SJ	Stainless Steel A351 CF3M
SN	Stainless Steel A351 CG8M (317)
J1	Stainless Steel JIS G5121 Grade SCS16A
J2	Stainless Steel JIS G5121 Grade SCS19A
J4	Stainless Steel JIS G5121 Grade SCS13A
J5	Stainless Steel JIS G5121 Grade SCS14A
M0	Monel A494-M35-1 (UNS N24135)
EC	Inconel 600 A494 CY40
QC	Alloy 20 A351 CN7M
U5	Duplex A995 4A (CD3MN)
HA	Hastelloy C-276 A494 CW-12MW
ZZ	Special

**Ball Material**

Code	Description
S10	Stainless Steel 304
S11	Stainless Steel 304 - ENP / ENC
S15	Stainless Steel 304 - Hard Chrome Plated
S16	Stainless Steel 304 - SFNi
S18	Stainless Steel 304 - Tungsten Carbide
S19	Stainless Steel 304 - Chrome Carbide
S30	Stainless Steel 304L
S40	Stainless Steel 316L
S00*	Stainless Steel 316
S01	Stainless Steel 316 - ENP / ENC
S05	Stainless Steel 316 - Hard Chrome Plated
S06	Stainless Steel 316 - SFNi
S08	Stainless Steel 316 - Tungsten Carbide
S09	Stainless Steel 316 - Chrome Carbide
SN0	Stainless Steel 317
U00	Duplex 2205
U01	Duplex - ENP / ENC
U05	Duplex - Hard Chrome Plated
U06	Duplex 2205 - SFNi
U08	Duplex 2205 - Tungsten Carbide
U09	Duplex 2205 - Chrome Carbide
U80	Duplex
QC0	Alloy 20 A351 CN7M
H00	Hastelloy C-276
M00	Monel A494 M35-1 (UNS N24135)
E00	Inconel 600
ZZZ	Special

**Stem Material**

Code	Description
S1	Stainless Steel 304
S3	Stainless Steel 304L
S0*	Stainless Steel 316
S4	Stainless Steel 316L
U8*	Duplex 329
U0	Duplex
E0	Inconel 600
E1	Inconel 625
H0	Hastelloy C-276
M1	Monel K500
QC	Alloy 20 A351 CN7M
SH	Stainless Steel 17-4 PH / Type 630 H1150 D (NACE Compliant)
ZZ	Special

**Seat Material**

Code	Description
TC*	PTFE / PFA Co-Polymer
RG	RPTFE (Carbon Filled)
RJ	Special Reinforced PTFE
YM	Special Reinforced PTFE
A0	PEEK (Arlon 1330 or equivalent)
TO	PTFE
CO	Gratite® (Carbon Metal Alloy)
MC*	Stainless Steel 316 + Stellite Overlay
MT	Stainless Steel 316 + Tungsten Carbide Coated
MA	Stainless Steel 316 + Chromium Carbide Coated
RH	RPTFE (Glass Filled with MoS2)
ZZ	Special

**NOTE**

\* Indicates standard configuration.

<b>Model / Series</b>		<b>Size</b>	<b>End Connection</b>	<b>Drilling / Schedule</b>	<b>Face-to-Face</b>	<b>Pressure Rating</b>		<b>Body Material</b>	<b>Ball Material</b>	<b>Stem Material</b>	<b>Seat Material</b>	<b>Sealing Material</b>	<b>Sealing Options</b>	<b>Mounting Type</b>	<b>Actuation Type</b>	<b>Optional Feature 1</b>	<b>Optional Feature ...</b>	<b>Actuation Option</b>	
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**Sealing Material**

Code	Description (Packing / Body Gasket / Retainer Seal)
P0*	PTFE
P1	PTFE / RTFE
R0	RPTFE
R1	RPTFE / RPTFE
G0*	Graphite
AG	Graphite / Graphite / FEPM (Aflas®)
KG	Graphite / Graphite / FFKM (Kalrez®)
PT	Twin Seal (PTFE + O-ring)
ST	Twin Seal (RPTFE + O-ring)
GT	Twin Seal (Graphite + O-ring)
ZZ	Special

**Sealing Options**

Code	Description
SG8	Inconel (X750) Live loaded washers

**Operator Mounting Type**

Code	Description
I	ISO 5211

**Actuation Type**

Code	Description
B	Bare Stem
D	Lever with Locking Device
L	Default Handle / Lever
O	Oval Handle

**NOTES**

For more details on the optional features, consult your local Emerson representative.

\* Indicates standard configuration.

\*\* Choose lantern ring gauge port option (Rc, NPT, G/BSPP)

**Optional Features**

Code	Description
<b>Ball Options</b>	
BVE	Vented Ball (Upstream Hole)
BVZ	Vented Ball as per User Dim
BVG	Degassing Ball (Body Cavity)
<b>Bolting Options</b>	
B07	Alloy Steel A193 B7 / A194 2H
B08	Stainless Steel A193 B8M / A194 B8M (NACE)
B09	Alloy Steel A193 B7M / A194 2HM (NACE)
B10	Stainless Steel A193 B8 / A194 B8
B17	Alloy Steel ASTM A320 L7M / A194 7M (NACE)
B19	Alloy Steel ASTM A320 L7 / A194 7
B0Z	Special Bolting
B1Z	Special Bolting for Gland Packing
<b>Valve Extension Options</b>	
ES0	Shaft Extension (Non-Pressure Containing) (Manufacturer Standard)
EH1	E1 Extended Bonnet (Short Length)
EH2	E2 Extended Bonnet (Long Length)
EL1	E1 Low Temperature Extended Bonnet (Short Length)
EC2	E2 -70°C/-94°F Cryogenic Extended Bonnet (Long Length)
EC3	E3 -104°C/-156°F Cryogenic Extended Bonnet (Long Length)
EC5	E5 -196°C/-385°F Cryogenic Extended Bonnet (Long Length)
ED1**	Extension Bonnet with Double Packing with Lantern Ring (Short Length)
ED2**	Extension Bonnet with Double Packing with Lantern Ring (Long Length)
ET1**	Extension Bonnet with Double Packing + O-ring with Lantern Ring (Short Length)
ET2**	Extension Bonnet with Double Packing + O-ring with Lantern Ring (Long Length)
EZZ	Special Extension

Code	Description
<b>Coating / Painting</b>	
PZZ	Special Painting / Coating (per Purchase order)
<b>Nameplate / Tagging</b>	
NP1	Additional 316 Stainless Steel Tag (Customer Tag Text)
NP2	Additional Paper Tag (Customer Tag Text)
NP3	Additional 316 Stainless Steel Tag & Paper Tag (Customer Tag Text)
NPZ	Special Tag / Nameplate (per Customer PO)
<b>Certificates / Approvals</b>	
NA7	NACE - MR 0175 / ISO 15156 - Corrosive Exterior Only Service (Bolting)
NA5	NACE - MR 0175 / ISO 15156 & MR 0103 - Corrosive Service (Body / Shell, Ball, Bolting)
PED	PED
API	API 608 Compliance - Manual Valve
<b>Cleaning Procedure</b>	
CHH	HCL, HF and Oxygen Service (KTM Class A)
CWD	Water & Dust Free (Clean Room) Assembly
CL2	Chlorine Service, Oil and Water Free (KTM Class B)
CLZ	Special Cleaning (per Purchase Order)
<b>Witness Inspection</b>	
WT1	Witness Inspection - Assembly, Test, Final Visuals (Standard Test Only)
WTZ	Witness Inspection (per Purchase Order incl: Packing, Painting, NDT, etc...)

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**Optional Features (continued)**

Code	Description
<b>Material Certificates / Traceability</b>	
MCZ	Special CMTRs (per Purchase Order)
<b>Positive Material Identification</b>	
ME6	PMI (Body / Shell, Ball, Stem)
MEZ	PMI (per Purchase Order)
<b>Magnetic Particle Examination</b>	
MP2	MP (On Body Machined Surfaces per ASME B16.34 Appendix II)
MPZ	Magnetic Particle Examination (per Purchase Order)
<b>Liquid Penetrant Examination</b>	
LP3	LPE (On Body Machined Surfaces per ASTM B16.34 Appendix III)
LPZ	Liquid Penetrant Examination (per Purchase Order)
<b>Radiographic Examination</b>	
RG4	RT (On Body / Bonnet Critical Areas, per ASME B16.34 Appendix I)
RGZ	Radiographic Examination (per Purchase Order)

Code	Description
<b>Pressure Testing</b>	
TP6	Pressure Test - to API 6D
TPN	Pressure Test - Nitrogen (per Purchase Order)
TPH	Pressure Test - Helium (per Purchase Order)
TPZ	Hydrostatic Test Report (per Purchase Order)
<b>Functional Test</b>	
TF2	Functional Test Report (Automated, per Customer Operating Conditions, Manufacturer Standard)
TFZ	Special Functional Testing (per Purchase Order)
<b>Other Testing</b>	
SAP	Seat Leak Test - API 598
FET	Fugitive Emission Test (per Customer Purchase Order)
SVI	Seat Leak Test - ANSI FCI 70 -2 Class VI
SIB	Seat Leak Test - ISO 5208 Rate B
TPC	Test - Cryogenic (-196 °C) (Manufacturer Standard)
CZZ	Special Testing

**Additional Actuation Options**

Code	Description
GS-000	Factory Standard Gear Operator <sup>[1]</sup>
HZ-45	Oval Handle <sup>[2]</sup>

**ACTUATION NOTES**

1. Additional characters identify specific handle or gear.
2. Required operator, mounting and accessory part number(s) are specified per order acknowledgement.

**GENERAL NOTES**

1. This document is intended for product model code decodification, not product configuration. Option availability and compatibility may be dependent on the selection of another option. For product configuration support, consult your local Emerson representative.
2. This list of options is not exhaustive. Consult your local Emerson representative for additional options.

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