

KTM SERIES NB1 THREE WAY FLOATING BALL VALVES

MODEL CODE OPTIONS AND DESCRIPTIONS - NORTH AMERICA AND EUROPE ONLY

Model / Series		Size	End Connection	Drilling / Schedule	Face to Face	Pressure Rating		Body Material	Ball Material	Stem Material	Seat Material	Sealing Material	Sealing Options	Flow Path	Mounting Type	Actuation Type		Optional Feature 1	Optional Feature ...		Actuation Option
NB1SF	-	0020	R3	A1	00	A1	-	CA	S00	S0	TC	P1	SG8	A	I	L	-	NP1	TPZ	+	GS-000



MODEL / SERIES

Code	Description
NB1SF	Series NB1, Standard, Full Bore
NB1SR	Series NB1, Standard, Reduced Bore
NB1HF	Series NB1, High Temperature, Full Bore
NB1HR	Series NB1, High Temperature, Reduced Bore
NB1LF	Series NB1, Low Temperature, Full Bore
NB1LR	Series NB1, Low Temperature, Reduced Bore

END CONNECTION

Code	Description
R3*	Flange - ASME Raised Face (RF) - 125 to 250 AARH
F3	Flange - ASME Flat Face (FF) - 125 to 250 AARH
J7	Flange - JIS Raised Face (RF) - 125 to 250 AARH
J3	Flange - JIS Flat Face (FF) - 125 to 250 AARH
ZZ	Special

PRESSURE RATING

Code	Description
A1	ASME 150
A2	ASME 300
A3	ASME 600
J3	JIS B2220 - 10K
J5	JIS B2220 - 20K
J7	JIS B2220 - 40K
ZZ	Special

SIZE

Code	Description
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
0300	DN 300 / NPS 12
0350	DN 350 / NPS 14
ZZZZ	Special

DRILLING / SCHEDULE

Code	Description
A1	ASME 150
A2	ASME 300
A3	ASME 600
J3	JIS 10K
J5	JIS 20K
J7	JIS 40K
ZZ	Special

FACE TO FACE

Code	Description
00*	Standard (refer to product literature)
ZZ	Special

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]
J4	Stainless Steel JIS G5121 Grade SCS13A
J5	Stainless Steel JIS G5121 Grade SCS14A
J1	Stainless Steel JIS G5121 Grade SCS16A
J2	Stainless Steel JIS G5121 Grade SCS19A
EC	Inconel 600 A494 CY40
HA	Hastelloy C-276 A494 CW-12MW
M0	Monel A494-M35-1 [UNS N24135]
QC	Alloy 20 A351 CN7M
U5	Duplex A995 4A (CD3MN)
ZZ	Special

NOTE

* Indicates standard configuration

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BALL MATERIAL

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

STEM MATERIAL

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

SEAT MATERIAL

Code	Description
TC*	PTFE / PFA Co-Polymer
T0	PTFE
RG	RPTFE (Carbon filled)
RH	RPTFE (Glass filled with MoS2)
RJ	Special Reinforced PTFE
C0	Gratite® (Carbon Metal Alloy)
MA	Stainless Steel 316 + Chromium Carbide Coated
MC	Stainless Steel 316 + Stellite Overlay
MT	Stainless Steel 316 + Tungsten Carbide Coated
A0	PEEK (Arlon 1330 or equivalent)
ZZ	Special

SEALING MATERIAL

Code	Description (Packing / Body Gasket / Retainer Seal)
P0*	PTFE
P4	PTFE / RPTFE / FKM
G0	Graphite
G2	Graphite / Graphite / FKM
ZZ	Special

SEALING OPTIONS

Code	Description
SG8	Inconel (X750) Live loaded washers

FLOW PATH

Code	Description
A	L - Port 90° Turn, Flow Plan A (Pattern 1 & 2)

OPERATOR MOUNTING TYPE

Code	Description
I	ISO 5211

ACTUATION TYPE

Code	Description
B	Bare Stem
G	Gear
L	Default Handle / Lever

NOTE

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OPTIONAL FEATURES

Code	Description
Bolting Options	
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
B1Z	Special Gland Packing Bolting
B0Z	Special Bolting
Valve Extension Options	
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)
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
Coating / Painting	
PZZ	Special Painting / Coating (per Purchase Order)

Code	Description
Nameplate / Tagging	
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)
Certificates / Approvals	
NA7	NACE - MR0175 / ISO 15156 - Corrosive exterior only service (Bolting)
NA5	NACE - MR0175 / ISO 15156 & MR0103 - Corrosive service (Body / Shell, Ball, Stem, Bolting)
PED	PED
API	API 608 Compliance - Manual Valve
Cleaning Procedure	
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)
Witness Inspection	
WT1	Witness Inspection - Assembly, Test, Final Visuals (Standard Test Only)
WTZ	Witness Inspection (per Purchase Order incl: Packing, painting, NDT, etc...)
WT3	Dimensional Examination
Material Certificates / Traceability	
MCZ	Special CMTRs (per Purchase Order)

Code	Description
Positive Material Identification	
ME6	PMI (Body / Shell, Ball, Stem)
MEZ	PMI (per Purchase Order)
Magnetic Particle Examination	
MP2	MP (On body machined surfaces per ASME B16.34 Appendix II)
MPZ	Magnetic Particle Examination (per Purchase Order)
Liquid Penetrant Examination	
LP3	LPE (On body machined surfaces per ASTM B16.34 Appendix III)
LPZ	Liquid Penetrant Examination (per Purchase Order)
Radiographic Examination	
RG4	RT (On body / bonnet critical areas, per ASME B16.34 Appendix I)
RGZ	Radiographic Examination (per Purchase Order)
Pressure Testing	
TPN	Pressure Test - Nitrogen (per Purchase Order)
TPZ	Hydrostatic Test Report (per Purchase Order)
Functional Test	
TF2	Functional Test Report (Automated, per Customer Operating Conditions, Manufacturer Standard)
TFZ	Special Functional Testing (per Purchase Order)
Other Testing	
SAP	Seat Leak Test - API 598
FET	Fugitive Emission Test (per Customer Purchase Order)
SIB	Seat Leak Test - ISO 5208 Rate B

NOTES

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

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

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ADDITIONAL ACTUATION OPTIONS

Code	Description
GS-000	Factory Standard Gear Operator ⁽¹⁾

NOTES

1. Additional characters identify specific handle or gear.

NOTE

Consult your local Emerson representative for additional options.

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