

KTM VIRGO SERIES S FLOATING BALL VALVES

MODEL CODE OPTIONS AND DESCRIPTIONS - NORTH AMERICA ONLY

Model / Series		Size	End Connection	Drilling / Schedule	Face to Face	Pressure Rating		Body Material	Ball Material	Stem Material	Seat Material	Sealing Material	Mounting Type	Actuation Type		Optional Feature 1	Optional Feature ...		Actuation Option
SGSF	-	0015	F1	A1	A1	A1	-	CE	E10	S0	BB	NH	I	L	-	NP1	TPZ	+	GS-001



MODEL / SERIES

Code	Description
SGSF	Series S, Standard - With gland arrangement, ASME B 16.34 + ASME B 16.34, Full bore
SGSR	Series S, Standard - With gland arrangement, ASME B 16.34 + ASME B 16.34, Reduced bore
SLSF	Series S, Standard - Without gland arrangement, ASME B 16.34 + ASME B 16.34, Full bore
SLSR	Series S, Standard - Without gland arrangement, ASME B 16.34 + ASME B 16.34, Full bore
SGHF	Series S, High Temperature, ASME B 16.34 + ASME B 16.34, Full bore
SGHR	Series S, High Temperature, ASME B 16.34 + ASME B 16.34, Reduced bore
SGCF	Series S, Cryogenic, ASME B 16.34 + ASME B 16.34, Full bore
SGCR	Series S, Cryogenic, ASME B 16.34 + ASME B 16.34, Reduced bore
SLLF	Series S, Low Temperature - Without gland arrangement, ASME B 16.34 + ASME B 16.34, Full bore
SLLR	Series S, Low Temperature - Without gland arrangement, ASME B 16.34 + ASME B 16.34, Full bore
SGLF	Series S, Low Temperature - With gland arrangement, ASME B 16.34 + ASME B 16.34, Full bore
SGLR	Series S, Low Temperature - With gland arrangement, ASME B 16.34 + ASME B 16.34, Full bore

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
0080	DN 80 / NPS 3
0100	DN 100 / NPS 4
0150	DN 150 / NPS 6
0200	DN 200 / NPS 8
0250	DN 250 / NPS 10
ZZZZ	Special

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END CONNECTION

Code	Description	Code	Description
F1	Flange - ASME Flat Face (FF) - 32 to 63 AARH (Smooth)	K3	Flange - ASME Female (Large) - 125 to 250 AARH
F2	Flange - ASME Flat Face (FF) - 63 to 125 AARH	K4	Flange - ASME Female (Large) - 250 to 500 AARH
F3	Flange - ASME Flat Face (FF) - 125 to 250 AARH	K5	Flange - ASME Male (Large) - 32 to 63 AARH (Smooth)
F4	Flange - ASME Flat Face (FF) - 250 to 500 AARH	K6	Flange - ASME Male (Large) - 63 to 125 AARH
R1	Flange - ASME Raised Face (RF) - 32 to 63 AARH (Smooth)	K7	Flange - ASME Male (Large) - 125 to 250 AARH
R2	Flange - ASME Raised Face (RF) - 63 to 125 AARH	K8	Flange - ASME Male (Large) - 250 to 500 AARH
R3	Flange - ASME Raised Face (RF) - 125 to 250 AARH	D1	Flange - ASME Female (Small) - 32 to 63 AARH (Smooth)
R4	Flange - ASME Raised Face (RF) - 250 to 500 AARH	D2	Flange - ASME Female (Small) - 63 to 125 AARH
RJ	Flange - Ring Type Joint (RTJ)	D3	Flange - ASME Female (Small) - 125 to 250 AARH
B1	Butt Weld - ASME B 16.25 - Fig. 2a / 3a (w/o backup ring)	D4	Flange - ASME Female (Small) - 250 to 500 AARH
B2	Butt Weld - ASME B 16.25 - Fig. 2b / 3b	D5	Flange - ASME Male (Small) - 32 to 63 AARH (Smooth)
B3	Butt Weld - ASME B 16.25 - Fig. 2c / 3c	D6	Flange - ASME Male (Small) - 63 to 125 AARH
B4	Butt Weld - ASME B 16.25 - Fig. 2d / 3d	D7	Flange - ASME Male (Small) - 125 to 250 AARH
B5	Butt Weld - ASME B 16.25 - Fig. 5 Type A	D8	Flange - ASME Male (Small) - 250 to 500 AARH
B6	Butt Weld - ASME B 16.25 - Fig. 5 Type B	TL	Flange - ASME Tongue (Large)
BZ	Butt Weld - welded Pipe or Extended Pups	TS	Flange - ASME Tongue (Small)
H1	Hub/Clamp - Groove (Type D)	GL	Flange - ASME Groove (Large)
H2	Hub/Clamp - Techlok Hub	GS	Flange - ASME Groove (Small)
H3	Hub/Clamp - Tri-Clamp	ZZ	Special
H4	Hub/Clamp - I-Line (Waukesha Cherry-Burrell)		
K1	Flange - ASME Female (Large) - 32 to 63 AARH (Smooth)		
K2	Flange - ASME Female (Large) - 63 to 125 AARH		

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DRILLING / SCHEDULE

Code	Description
A1	ASME 150
A2	ASME 300
A3	ASME 600
A4	ASME 900
A5	ASME 1500
A6	ASME 2500
W1	Schedule 10
W2	Schedule 20
W3	Schedule 30
W4	Schedule 40
W5	Schedule 5
W6	Schedule 60
W8	Schedule 80
WA	Schedule 100
WB	Schedule 120
WC	Schedule 140
WD	Schedule 160
WE	Schedule XS
WF	Schedule XXS
WS	Schedule STD
ZZ	Special

FACE TO FACE

Code	Description
A1	ASME B 16.10
AB	ASME B16.10 Long
A6	API-6D
ZZ	Special

PRESSURE RATING

Code	Description
A1	ASME 150
A2	ASME 300
A3	ASME 600
A4	ASME 900
A5	ASME 1500
A6	ASME 2500

BODY MATERIAL

Code	Description
CE	Carbon Steel A105
CA	Carbon Steel A216 WCB
CD	Carbon Steel A216 WCC
CG	Carbon Steel A350 LF2
CB	Carbon Steel A352 LCB
CC	Carbon Steel A352 LCC
G4	Alloy Steel A217 WC6
G5	Alloy Steel A217 WC9
L3	Low Alloy Steel A694 F60
SU	Stainless Steel A182 F316L
SP	Stainless Steel A182 F316
S7	Stainless Steel A182 F304
SA	Stainless Steel A182 F304L
SS	Stainless Steel A351 CF3
SG	Stainless Steel A351 CF3M / CF8M
SB	Stainless Steel A351 CF8
SE	Stainless Steel A351 CF8M
U6	Duplex A182 F51
U7	Duplex A182 F60
U5	Duplex A995 4A (CD3MN)
V7	Super Duplex A182 F53
V6	Super Duplex A182 F55
V5	Super Duplex A995 5A (CE3MN)
V2	Super Duplex A995 6A (CD3MWCuN)
EB	Inconel 625 A494 CW6MC
EA	Inconel 825 A494 CU5MCuC
ZZ	Special

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BALL MATERIAL

Code	Description
E10	Inconel 625
E17	Inconel 625 - Stellite
E18	Inconel 625 - Tungsten Carbide
E19	Inconel 625 - Chrome Carbide
E80	Inconel 825
E87	Inconel 825 - Stellite
E88	Inconel 825 - Tungsten Carbide
E89	Inconel 825 - Chrome Carbide
Q50	Nitronic 50
Q57	Nitronic 50 - Stellite
Q58	Nitronic 50 - Tungsten Carbide
Q59	Nitronic 50 - Chrome Carbide
S37	Stainless Steel 304L - Stellite
S40	Stainless Steel 316L
S48	Stainless Steel 316L - Tungsten Carbide
S49	Stainless Steel 316L - Chrome Carbide
S00	Stainless Steel 316
S07	Stainless Steel 316 - Stellite
S08	Stainless Steel 316 - Tungsten Carbide
S09	Stainless Steel 316 - Chrome Carbide
U00	Duplex 2205
U07	Duplex 2205 - Stellite
U08	Duplex 2205 - Tungsten Carbide
U09	Duplex 2205 - Chrome Carbide
U90	Duplex UNS S31803
U97	Duplex UNS S31803 - Stellite
U98	Duplex UNS S31803 - Tungsten Carbide
U99	Duplex UNS S31803 - Chrome Carbide
V00	Super Duplex 2507 (S32750)
V07	Super Duplex 2507 (S32750) - Stellite
V08	Super Duplex 2507 (S32750) - Tungsten Carbide
V09	Super Duplex 2507 (S32750) - Chrome Carbide
V30	Super Duplex UNS S32760
V37	Super Duplex UNS S32760 - Stellite
V38	Super Duplex UNS S32760 - Tungsten Carbide
V39	Super Duplex UNS S32760 - Chrome Carbide
ZZZ	Special

STEM MATERIAL

Code	Description
S0	Stainless Steel 316
S4	Stainless Steel 316L
SW	Stainless Steel 410 Class 2
SK	Stainless Steel 17-4 PH (H1150M)
Q5	Nitronic 50
U9•	Duplex UNS S31803
V0	Super Duplex 2507 (S32750)
V3	Super Duplex UNS S32760
U0	Stainless Steel Duplex
E8	Inconel 825
E1	Inconel 625
E7	Inconel 718 API 6A
ZZ	Special

NOTE

- U9 option code discontinued. U0 is the code now used for all grades of Duplex.

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SEAT MATERIAL

Code	Description	Code	Description
BB	Duplex 2205 + RPTFE	BK	Stainless Steel 316 + RPTFE
DB	Duplex 2205 + Devlon	DK	Stainless Steel 316 + Devlon
GB	Duplex 2205 + PEEK	GK	Stainless Steel 316 + PEEK
CB	Duplex 2205 + PCTFE (Kel F)	CK	Stainless Steel 316 + PCTFE (Kel F)
JB	Duplex 2205 + Chromium Carbide Coating	MA	Stainless Steel 316 + Chromium Carbide Coated
KB	Duplex 2205 + Tungstun Carbide Coating	MT	Stainless Steel 316 + Tungsten Carbide Coated
YB	Duplex 2205 + Stellite Coating	MC	Stainless Steel 316 + Stellite Overlay
BC	Duplex UNS S31803 + RPTFE	BL	Stainless Steel 316L + RPTFE
DC	Duplex UNS S31803 + Devlon	DL	Stainless Steel 316L + Devlon
GC	Duplex UNS S31803 + PEEK	GL	Stainless Steel 316L + PEEK
CC	Duplex UNS S31803 + PCTFE (Kel F)	CL	Stainless Steel 316L + PCTFE (Kel F)
JC	Duplex UNS S31803 + Chromium Carbide Coating	JL	Stainless Steel 316L + Chromium Carbide Coating
KC	Duplex UNS S31803 + Tungstun Carbide Coating	KL	Stainless Steel 316L + Tungstun Carbide Coating
YC	Duplex UNS S31803 + Stellite Coating	YL	Stainless Steel 316L + Stellite Coating
BD	Super Duplex UNS S32750 + RPTFE		
DD	Super Duplex UNS S32750 + Devlon		
GD	Super Duplex UNS S32750 + PEEK		
CD	Super Duplex UNS S32750 + PCTFE (Kel F)		
JD	Super Duplex UNS S32750 + Chromium Carbide Coating		
KD	Super Duplex UNS S32750 + Tungstun Carbide Coating		
YD	Super Duplex UNS S32750 + Stellite Coating		
BE	Inconel 718 API 6A + RPTFE		
DE	Inconel 718 API 6A + Devlon		
GE	Inconel 718 API 6A + PEEK		
CE	Inconel 718 API 6A + PCTFE (Kel F)		
JE	Inconel 718 API 6A + Chromium Carbide Coating		
KE	Inconel 718 API 6A + Tungstun Carbide Coating		
YE	Inconel 718 API 6A + Stellite Coating		

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SEALING MATERIAL

Code	Description
NH	HNBR
ND	HNBR AED (90D)
NL	HNBR Low Temp
FV	FKM / Viton
FA	FKM AED / Viton AED
FL	FKM Low Temp
FE	FEPM
FF	FFKM AED
EP	EPDM
EA	EPDM AED
G0	Graphite
PE	PTFE + Elgiloy
ZZ	Special

OPERATOR MOUNTING TYPE

Code	Description
I	ISO 5211

ACTUATION TYPE

Code	Description
B	Bare Stem
L	Default Handle / Lever

OPTIONAL FEATURES

Code	Description
NP1	Additional 316 stainless steel tag
TPZ	Special hydrostatic test report

NOTE

For the full list of optional features, consult your local Emerson representative.

ADDITIONAL ACTUATION OPTIONS

Code	Description
GS-###	Standard gear operator ^[1]
PS-#####	Standard pneumatic actuator ^[2]
HZ	Other handle ^[3]
GZ	Other gear operators ^[3]
PZ	Other pneumatic actuators ^[3]
EZ	Other electric actuators ^[3]

NOTES

1. Additional characters identify specific handle or gear. For the full list, consult the Handles and Gear Operators Addendum [\[VCREP-14325\]](#).
2. Additional characters identify actuator configuration.
3. Required operator, mounting and accessory part number(s) are specified per order acknowledgment.

NOTE

Consult your local Emerson representative for additional options.

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