

ABB MEASUREMENT AND ANALYTICS | DATA SHEET

### **KM26**

# Magnetic level gauge



# Measurement made easy Innovative level measurement solutions

### **Features**

- highly visible level indication with no process fluid in contact with the glass
- all construction in-house by code certified welders
- float designed and weighted for maximum accuracy with 75 grams minimum upward buoyant force
- transmitter and switch options which can be installed, adjusted and maintained with no process interruption
- safe for corrosive, flammable, toxic, high-temperature and high-pressure applications
- rugged design low or no maintenance

#### **Available materials**

- stainless steel—304/304L, 316/316L, 317/317L, 321, 347, 904
- alloy 20
- Hastelloy®—B, C-276
- Alloy 600, 625, 800, 825
- Titanium
- Teflon® (registered trademark of DuPont) coated stainless steel
- · fiberglass—epoxy or vinyl ester resin
- PVC, CPVC, Kynar®
- · polypropylene
- zirconium
- monel
- · for other materials consult factory

### **Process capabilities**

- full vacuum to 5000 PSI / 345 BAR
- –320 to 1000 °F/ –196 to 538 °C
- · 0.25 specific gravity
- · all liquid viscosities
- interfaces as low as .03 ΔSG

## Testing and documentation available upon request

- · radiographic examination
- · liquid dye penetrant examination
- · hydrostatic examination
- PMI (positive material identification) material certification
- · ASME "U," "UM," or "S" stamp
- · third party inspection
- · material certificates
- ANSI/ASME B31.1, B31.3
- · PED certification
- NACE MR0103, NACE MR0175
- · Canadian registration number (CRN)
- marine and industrial type approval for high-pressure boilers
- · mechanical function test
- float curves (total level only)
- ATEX C- constructional safety with non-exotic materials construction
- EAC TR CU approvals
- · IP68 visual indicator (scale assembly)

### Selecting the KM26

Selecting the appropriate KM26 configuration for a specific application is important. Use these questions to determine your requirements.

#### What is the process fluid?

- · specific gravity
- · operating / design temperature
- · operating / design pressure
- · total, interface or dual-level detection

#### What are the gauge body details?

- material of construction
- · maximum pressure & temperature requirement
- necessary level range (liquid level fluctuation; often the vessel height)
- vent and drain connections (will I be piping into the MLG or adding valves?)

#### What are the process connection details?

- size
- type
- rating
- · orientation/position

#### What style of indicator is preferred?

- flag (orange/black, yellow/black, red/white, custom colors)
- shuttle (also known as follower or birdie) high visibility

### What measuring scale is required?

- · level (inches, feet, meters)
- · volume (gallons, liters, custom)
- percent

### What accessories are necessary?

- switch (point-level)
- · level transmitter; what communication protocol?
- frost extension (prevents ice build-up from blocking a direct view to the indicator)
- · heat tracing (electric or steam)
- insulation: high-temp (fiberglass) or low-temp (cryogenic foam)
- magnetic particle traps
- gauge glass

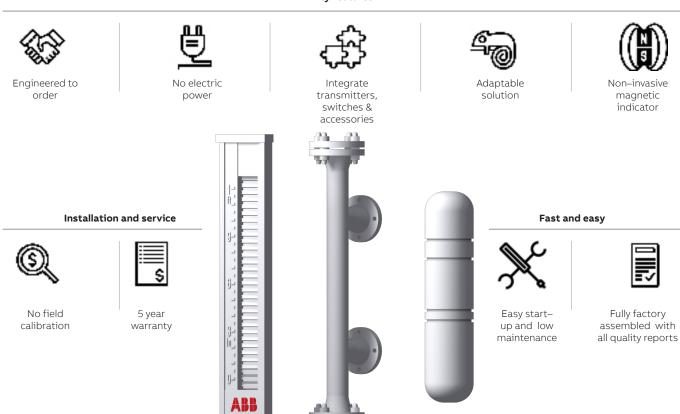
#### Installation considerations

- lengths over 12 feet: support brackets to minimize pipe flex
- lengths over 20 feet: sectionalize (flanged) or one continuous section (welded)
- structural support types: Gussets or welded support brackets

### **Overview**

#### Helping to keep worldwide infrastructure at a safe level, day-in and day-out

#### **Key features**



#### Industrial design and world class manufacturing



NDE, PMI, NACE tests



ASME U, UM, S stamping









Wide range of applications: oil and gas, petrochem, chemical, power and more

### Wide environmental and process conditions



RoHS 2.0



ATEX

PED

EAC Ex



IP 68



–196°C to 537°C

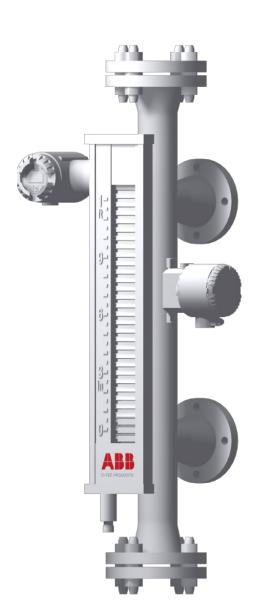


Upto 345 bar / 5000 psi

### ...Overview

### KM26 magnetic level gauge

#### Advantages for you



Full fabrication, assembly and accessories installed, tested and calibrated and shipped from factory results in lower cost of ownership



No piping modifications or process interruptions to add transmitters and switches to a KM26 results in lower cost of ownership



Superior float design results in increased accuracy of level measurement increasing the energy efficiency and throughput.



Easy blow down or flush of chamber, no disassembly required; minimum spare parts requirements resulting in increase in productivity

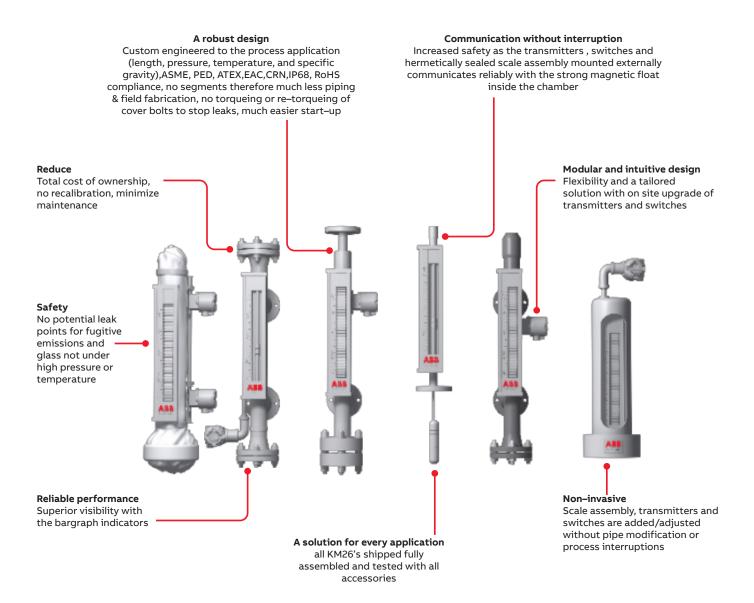


Fewer potential leak points, no hazardous liquids in the indicator; no glass under high pressure or temperature



### ...Overview

#### Industry leader for safe and reliable level measurement- your benefits at a glance



Chamber material	KM26S XXX	XXX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XXXX
Select from table 1												
Connection material												
Select from table 1												
Note: When the chamber material soption, the connection materials wooding type applied.												
Top connection code option												
Select from table 2												
Side connection 1 code option												
Select from table 2¹												
Side connection 2 code option												
Select from table 21												
Side connection 3 code option												
Select from table 21												
Bottom connection code option						1						
Select from table 2												
Top connection size and rating							1					
Select from table 3 <sup>2,3,4</sup>												
Side connection 1 size and rating								J				
Select from table 3 1,2,4												
Side connection 2 size and rating									J			
Select from table 3 1,2,4												
Side connection 3 size and rating										J		
Select from table 3 1,2,4												
Bottom connection size and rating												
Select from table 3 <sup>2, 3, 4</sup>												
Indicator type												
High Visibility Shuttle with Perman	ently Sealed Lexan	Tube (25	0 ºF/121	.ºC ma:	x) <sup>7, 8</sup>							S3P
High Visibility Shuttle with Hermeti	ically Sealed Glass	Tube (100	0 ºF/538	ºC ma	x) <sup>7, 8</sup>							S3G
Yellow/Black MBG with Permanentl	y Sealed Lexan® Tu	be (250 ºF	-/121 ºC	max) <sup>5, 1</sup>	7, 8							M1P
Red/White MBG with Permanently S	Sealed Lexan® Tube	250 ºF/1	121 ºC m	ax) <sup>5, 7, 8</sup>								M2P
Pad /Green MRG with Dormananth	Sealed Lexan® Tube	250 ºF/1	121 ºC m	ax) <sup>5, 7, 8</sup>								МЗР
Red/Green MBG with Permanently :												MSP
Red/Green MBG with Permanently S Red/Black MBG with Permanently S	Sealed Lexan® Tube	(250 ºF/1	21 ºC ma	ax) <sup>5, 7, 8</sup>								M4P
-					В							
Red/Black MBG with Permanently S Yellow/Black MBG with Hermeticall	y Sealed Glass Tub	e (650 ºF/	343 ºC n	nax) <sup>6, 7, 8</sup>	3							M4P
Red/Black MBG with Permanently S Yellow/Black MBG with Hermeticall Red/White MBG with Hermetically S	y Sealed Glass Tub Sealed Glass Tube	e (650 ºF/	343 ºC n 13 ºC ma	nax) <sup>6, 7, 8</sup>	В							M4P M1G
Red/Black MBG with Permanently S Yellow/Black MBG with Hermeticall Red/White MBG with Hermetically S Red/Green MBG with Hermetically S Red/Black MBG with Hermetically S	y Sealed Glass Tub Sealed Glass Tube Sealed Glass Tube ( Sealed Glass Tube (	e (650 °F/ 650 °F/34 650 °F/34 650 °F/34	343 °C m 13 °C ma 13 °C ma 3 °C ma:	nax) <sup>6,7,8</sup> x) <sup>6,7,8</sup> x) <sup>6,7,8</sup> x) <sup>6,7,8</sup>								M4P M1G M2G
Red/Black MBG with Permanently S Yellow/Black MBG with Hermetically Red/White MBG with Hermetically S Red/Green MBG with Hermetically S Red/Black MBG with Hermetically S Yellow/Black MBG with Acrylic Fros	y Sealed Glass Tub Sealed Glass Tube Sealed Glass Tube Sealed Glass Tube ( t Extension for –10	e (650 °F/ (650 °F/34 (650 °F/34 650 °F/34 0 °F/-73 °	343 °C ma 13 °C ma 13 °C ma 3 °C ma C min; (a	nax) <sup>6,7,8</sup> x) <sup>6,7,8</sup> x) <sup>6,7,8</sup> k) <sup>6,7,8</sup>	121 ºC m							M4P M1G M2G M3G M4G CM1A
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Mandatory characteristics	KM26S	XXX	XXX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XXXX	XX	XX
Refer to previous page															
Indicator scale / ruler															
No indicator channel (must sele	ct 'X' for indica	tor typ	e)											Χ	
SS channel; no scale 12														Α	
SS channel; SS scale marked in f	t / inches with	¹⁄₂ in. d	ivisions	(from 0	to 50 ft	t. standa	ard <sup>11, 12</sup> )							В	
SS channel; SS scale marked in n	neters/centim	eters w	ith 1 cm	divisior	1S <sup>9, 11, 12</sup>									С	
SS channel; SS scale marked in r	unning inches	with ½	in. divisi	ions <sup>10, 11</sup>	, 12									D	
SS channel; SS scale marked in r	unning inches	with 1/8	in. divis	ions 10, 1	1, 12									Ε	
SS channel; custom SS scale (%,	gallons, liters	etc.); p	rovide d	etails o	f custon	n scale s	separate	from m	nodel #.					F	
SS indicator channel; one "B" typ	e (feet / inche	s) stan	dard sca	le (fron	n 0 to 50	) ft, star	ndard)12	and one	custon	n SS sca	le			BS	
SS indicator channel; one "C" typ	oe (meters / ce	entimet	ers) star	ndard so	cale <sup>9,12</sup> ar	nd one c	ustom 9	S scale						CS	
SS indicator channel; one "D" typ	oe (running ind	hes wit	h ⅓ in d	ivisions	) standa	ard scale	e <sup>10,12</sup> and	one cus	tom SS	scale				DS	
SS indicator channel; one "B" typ	e (running inc	hes wit	h ⅓ in d	ivisions	) standa	ard scale	e <sup>10,12</sup> and	one cus	tom SS	scale				ES	
SS indicator channel; Two custo	m SS scales													FS	
Custom														<b>Z</b> 9	
Approvals															
No approvals															Х
ATEX, construction safety															U4
EAC, Ex approvals															G2

#### Notes:

- 1 If no side connection is required, put an 'X' in the model # as a placeholder
- 2 'Z9' shall be specified for sizes and ratings not listed in table 3.
- 3 'X' shall be specified for B0, D0, S0, SW0, T0 and W0 code options.
- 4 Only a size designation (no rating) shall be specified for B1,B1H, B10, B10H, D1, D1H, D10, D10H, L1, L1H, SW1, SW1H, SW10, SW10H, W1, W10, W1E, and W1S code options.

#### Notes:

- 5 Add 'IH' as an "additional ordering code" to include insulation pad behind the indicator to increase the temperature rating to 350 °F / 177 °C.
- 6 Add 'IHT' as an "additional ordering code" to include insulation pad and TEMP-COAT® behind the indicator and transmitter / switch if (applicable) to increase the MBG temperature rating to 1000 °F / 538 °C. (The 'IHT' option is not used when chamber insulation with TEMP-COAT® ordering codes IH2T, IH2DT, IH3T and IH3DT are selected.)
- 7 Add 'D' as a suffix to the indicator type when dual level indication (total and interface) is required.
- 8 Add 'F' as a suffix to the indicator type when "float failure" indication is required.

#### Notes:

- 9 Standard rulers begin with 0 cm but can be specified from –100 cm to 10 meters.
- $\textbf{10} \quad \textbf{Standard rulers begin with 0 inches but can be specified from: } 1/2 \text{ in. divisions: } -48 \text{ in. to 216 in. OR } 1/6 \text{ in. divisions: } -48 \text{ in. to 144 in.}$
- 11 Custom rulers available (consult factory choose F)
- 12 Scale / ruler is positioned to the left of the indicator tube (when facing the indicator.)

Additional ordering codes	
Special	
Anything not included in the below additional ordering codes will be considered a special and designated as such with a "Z99". This includes any side process connections over the standard quantity of 3.	<b>Z</b> 99
Heat / electric tracing	
Steam trace tubing	TT1
Steam / water jacket	SJ
Electric tracing; Class I, Div. 2, Gp BCD; (221 °F/(105 °C) max; fixed setpoint control <sup>3, 6</sup>	ET1xx
Electric tracing; Class I, Div. 2, Gp BCD; (400 °F/(204 °C) max; adjustable setpoint control <sup>3, 6</sup>	ET2x
Electric tracing; Class I, Div. 1, Gp CD; 800 °F /(427 °C) max; adjustable setpoint control <sup>3, 6</sup>	ET3
Valves	
Vent valve (specify valve manufacturer and model)	VV
Isolation valve (specify valve manufacturer and model)	IV
Drain valve (specify valve manufacturer and model)	DV
Other	
Switch mount rod (high temperature option for KM26 switches)	RD
Gussets on process connections (SCH 40 minimum chamber recommended)	G
Oversized chamber with guide rods for flashing	GR
Adjustable support bracket	ASB
Insulation	
High temperature insulation pad⁵	IH
High temperature insulation pad with Temp-Coat (See note 6 under "indicator type")4,5	IHT
High temperature insulation; float chamber only; (250 °F/121 °C) max <sup>2</sup>	IH1
High temperature insulation; float chamber and vent / drain flanges; (250 °F/121 °C) max²	IH1D
High temperature insulation; float chamber only; (500 °F/260 °C) max <sup>2</sup>	IH2
High temperature insulation; float chamber and vent / drain Flanges; (500 °F/260 °C) max <sup>2</sup>	IH2D
High temperature insulation; float chamber only; (1000 °F/538 °C) max <sup>2,4</sup>	IH2T
High temperature insulation; float chamber and vent / drain flanges; (1000 °F/538 °C) max <sup>2,4</sup>	IH2DT
High temperature insulation; float chamber only; (1000 °F/538 °C) max1, <sup>2,7</sup>	IH3
High temperature insulation; float chamber and vent / drain flanges; (1000 °F/538 °C) max <sup>1,2,7</sup>	IH3D
High temperature insulation; float chamber only; (1000 °F/538 °C) max <sup>1,2,4,7</sup>	IH3T
High temperature insulation; float chamber and vent / drain flanges; (1000 °F/538 °C) max <sup>1,2,4,7</sup>	IH3DT
Cryogenic insulation; 2 in. Thick; single layer; (350 °F/177 °C) max; (–100 °F/–73 °C) minimum <sup>5</sup>	IL1
Cryogenic insulation; 3" thick; double layer; (350 °F/177 °C) max; (–200 °F/–129 °C) minimum <sup>5</sup>	IL2
Cryogenic insulation; 4" thick; double layer; (350 °F/177 °C) max; (-320 °F/-196 °C) minimum <sup>5</sup>	IL3

#### Notes:

- 1 ABB recommends chamber insulation for personnel safety.
- 2 Specify power supply 1) 110, 2) 220, or 3) 440 VAC; (ex. ET21 with 110 VAC power supply). For ET1xx series only, specify setpoint A) 35°, B) 45°, C) 60°, D) 90° or E) 185 °F (1.7°, 7.2°, 15.6°, 32.2°, or 85 °C) (ex. ET11A = ET1 with 110 VAC power supply and a setpoint of 35 °F).
- 3 This option is only used when a MBG indicator type is selected AND the maximum temperature exceeds 650 °F/343 °C.
- 4 This insulation option is not allowed with shuttle indicators (S3P, S3G).
- 5 This option is not allowed with V4 approval code for ATEX constructional safety.
- 6 This option can not be used with transmitters or switches as this insulation is thicker than IH1 and IH2 options.

Note: The following accesories/services selected will not appear in the model # on engineering drawings or nameplates.  Engineering documents	
Drawings for approval	GD
Drawings for record	GD
Certified as built drawings	GD:
	GD.
Weld map (per tag)	GD GD
Inspection and test plan	
Float curve	GD
Special	
Radiographic Examination on all Pressure containing Butt Welds / and all other pressure containing welds are Liquid Dye Penetrant tested (Final Pass Only)	CRA
Radiographic Examination on all Pressure containing Butt Welds / and all other pressure containing welds are Liquid Dye Penetrant tested (Root and Final Pass)	CRI
10% Radiographic Examination on Pressure containing Butt Welds / 10% of other pressure containing welds are Liquid Dye Penetrant tested (Final Pass Only)	CRO
10% Radiographic Examination on Pressure containing Butt Welds / 10% of other pressure containing welds are Liquid Dye Penetrant tested (Root and Final Pass)	CRI
Radiographic examination on all pressure containing butt welds (final pass only)	CRI
Radiographic examination on all pressure containing welds (root and final pass)	CRI
Liquid dye penetrant – per tag	
Liquid dye penetrant examination on all pressure containing welds (final pass only)	CNA
Liguid dye penetrant examination on all pressure containing welds (root and final pass)	CNI
Liquid dye penetrant examination on 10% of all pressure containing welds (final pass only)	CNO
Liquid dye penetrant examination on 10% of all pressure containing welds (root and final pass)	CNI
Liquid dye penetrant examination on all welds (final pass only)	CN
Positive material identification	
Positive material identification with carbon content	CHO
Positive material identification without carbon content	CHI
Pressure equipement directive (PD)*†	
Pressure equipment directive certificate of compliance (SEP), RoHS compliance**	K
Pressure equipment directive declaration of conformity (category I – IV), RoHS compliance**	K
Hydrostatic examination	
Hydrostatic examination – (10 minutes)	СР
Hydrostatic examination with chart recording – (30 minutes)	CP
Hydrostatic examination with chart recording – (60 minutes)	CP
Hydrostatic examination with chart recording – (120 minutes)	CP
Hydrostatic examination of float	CP:
Custom hydrostatic examination	CP:
Additional Services	Ci i
RoHS compliance, no PED**	K!
Ultrasonic testing – thickness testing	CH
Ultrasonic testing – shearwave	CH
Magnetic particle inspection / testing	CH
Painting with standard ABB K–TEK paint (carbon steel non–wetted surfaces only)	ST
Special painting or surface treatment per customer specification	ST
Post weld heat treatment	CH
	GW
Equipment weight documention Hardness testing (per customer specification)	CH'
Helium leak test on pressure bearing parts	СП (
Intergranular corrosion destructive test	CH
Corrosive test	CH
Charpy test	CH
Certificate of surface finish	CH

<sup>\*</sup> Requires C2 or C3 in material monitoring
\*\* RoHS compliance–restricted materials like cadmium plated items not allowed
† Requires CP1, CP2, CP3, CP4 or CPZ in hydrostatic examination (10 minute minimum).

ASME code stamp*†	
ASME code stamp U	CSU
ASME code stamp UM	CSM
ASME code stamp S	CSS
Material monitoring	
Material monitoring with inspection certificate 3.1 acc. EN 10204 (MTR)	C
Material monitoring with inspection certificate 3.2 acc. EN 10204 (MTR)	C
Manufacturer's Data Records	
ABB standard manufacturer's data records indexed (all requested testing, drawings, certificates, etc) as a single document and	CD:
electronically transferred with no customer approvals required	
Special manufacturer's data records, indexed	CDZ
Origin documents	-
Certificate of origin	GS1
Certificate of origin notarized by local chamber of commerce	GS2
Certificate of origin legalized by specific country chamber of commerce – lead time may be extended depending on country	GS3
Korean foreign trade certificate	GS4
NAFTA certificate	GS5
EX-IM BANK certificate (one per tag)	GS6
Approved material list*	
Country of origin – material source limitations apply	MS1
Approved material list	GS7
Welding options	
Full penetration welds only	FWP
TIG welding only	FWT
Certifications	
Certificate of compliance for ANSI / ASME*†	CK
General certificate of compliance	CL
Certificate of functionality (mechanical function test)	CU3
Canadian registration number*†	CRN
Calibration certificate of hydrotest equipment†	СРЕ
NACE	
NACE (MR 0103) hardness certificate*	CN
NACE (MR 0175 / ISO 15156) hardness certificate*	CN3

<sup>\*</sup>Requires C2 or C3 in material monitoring †Requires CP1, CP2, CP3, CP4 or CPZ in hydrostatic examination

#### Table 1

Chamber / connection material	
321 SS	SS1
304 / 304L SS	SS4
316 / 316L SS	SS6
317 / 317L SS	SS7
347 SS	S47
904 SS (700 °F / 371 °C Max)	SSS
Hastelloy® C-276	HSC
Hastelloy® B	HSB
Titanium (Grade 2) (600 °F / 316 °C Max) <sup>10</sup>	Т
Polypropylene (35 to 200 °F / 2 to 93 °C) <sup>8, 10</sup>	PF
Kynar® (PVDF) (-40 to 280 °F / -40 to 138 °C) <sup>3, 10</sup>	PVD
PVC (140 °F / 60 °C Max) <sup>3,10</sup>	PVC
CPVC (210 °F / 99 °C Max) <sup>3, 10</sup>	CPV
Epoxy Resin Fiberglass (225 °F / 107 °C Max) <sup>3,10</sup>	EPF
Vinyl Ester Fiberglass (175 °F / 79 °C Max) <sup>3, 10</sup>	VEF
Teflon® "S" One Coat Coated 304 / 304L SS <sup>1,5,11</sup>	TN4
Teflon® "S" One Coat Coated 316 / 316L SS <sup>1,5,11</sup>	TN6
Halar® Coated 304 / 304L SS <sup>2, 4, 6, 11</sup>	HL4
Halar® Coated 316 / 316L SS <sup>2, 4, 6, 11</sup>	HL6
Tefzel® Coated 304 / 304L SS (-150 °F / -101 °C Min) <sup>2,4,6,7,11</sup>	TF4
Tefzel® Coated 316 / 316L SS(–150 °F / –101 °C Min) <sup>2, 4, 6, 7, 11</sup>	TF
Alloy 20 (800 °F / 427 °C Max)	A20
Alloy 600	160
Alloy 625	162
Alloy 800	180
Alloy 825	182
Zirconium 702 (700 °F / 371 °C Max) <sup>10</sup>	ZIZ
Monel® 400 (900 °F / 482 °C Max)	MC
Carbon Steel (-20 °F / -29 °C Min)9	CST
Low Temperature Carbon Steel (-50 °F / -46 °C min.) <sup>9</sup>	LCS
Duplex® Stainless Steel (600 °F / 316 °C max.)9	DUP
Other material type (specify separately)	Z9

- 1 To minimize friction for optimal float travel maximum temperature = 425 °F (218 °C).
- 2 For increased corrosion resistance maximum temperature = 300 °F (149 °C).
- 3 Maximum measuring length is 18 ft. (5.48 m).
- 4 Tefzel® or Halar® coated units must not have any FNPT options and must have chamber sized flanged access on top and bottom of chamber. This option should not be used on connections that require welding in the field.
- 5 Maximum measuring length 22 ft. (6.7 m).
- 6 Maximum measuring length 16 ft. (4.88 m).
- 7 Schedule 40 minimum chamber required.
- 8 Maximum measuring length = 15 ft. (4.57 m).
- 9 Not available as a chamber option. When CST, LCS and DUP materials are chosen, all parts which are not welded directly to the side of the chamber can be of those same material types.
- 10 This is not available as a chamber, connection, or float material with U4 approval code for ATEX constructional safety.
- 11 When the chamber material selected is a coated option, the connection materials will also have that same coating type applied.
- \* TEFLON®, Tefzel®, Alloy® (registered trademark of Dupont)
- \* Hastelloy® (registered trade mark of Haynes International, Inc.)
- $^{\ast}$  Halar® (registered trademark of Solvay Solexis)
- \* Monel® (registered trademark of the INCO)
- \* Duplex® (registered trademark of Leupold and Stevens, Inc.)

#### Required dimensional information (specify in inches or mm):

ML, CF, FF, CC and FC dimensions.

**Note:** When 3 or more side connections are required, specify the distance between each connection.

#### Important note:

The information above is provided for the customer to indicate specific requirements. Other sizing and ratings not specified will be selected by the factory based on standard design and manufacturing practices using temperature, pressure and specific gravity data.

### Table 2

Definitions	Code options
Blind Flange with Float Stop Spring and Mating Slip–On Flange	ВО
B0 with FNPT <sup>3</sup>	B1
B0 with Plug <sup>3</sup>	B2
B0 with Socket Weld Half Coupling <sup>3</sup>	B3
B0 with FNPT Half Coupling <sup>3</sup>	B4
B0 with Pipe Nipple, for Socket Welding (Flat) <sup>3</sup>	B5
B0 with Pipe Nipple, for Butt Welding (37.5° bevel) <sup>3</sup>	В6
B0 with Pipe Nipple, MNPT <sup>3</sup>	В7
B0 with Pipe Nipple and Slip–On Flange³	B9S
B0 with Pipe Nipple and Weld Neck Flange <sup>3</sup>	B9W
B0 with Socket Weld Bore <sup>3</sup>	B10
B0 with Flat Sock-o-let <sup>3</sup>	B3L
B0 with Flat Thread-o-let <sup>3</sup>	B4L
B0 with Flat Sock-o-let, Pipe Nipple for Socket Welding (Flat) <sup>3</sup>	B5L
B0 with Flat Sock-o-let, Pipe Nipple for Butt Welding (37.5° Bevel) <sup>3</sup>	B6L
B0 with Flat Sock-o-let and Pipe Nipple, MNPT <sup>3</sup>	B7L
B0 with Flat Sock-o-let, Pipe Nipple and Slip-On Flange <sup>3</sup>	B9SL
B0 with Flat Sock-o-let, Pipe Nipple and Weld Neck Flange <sup>3</sup>	B9WL
B0 with Pipe Nipple and Socket Weld Coupling <sup>3</sup>	B3C
B0 with Pipe Nipple and SW x FNPT Coupling <sup>3</sup>	B4C
B0 with Flat Sock-o-let, Pipe Nipple and Socket Weld Coupling <sup>3</sup>	B3LC
B0 with Flat Sock-o-let, Pipe Nipple and SW x FNPT Coupling <sup>3</sup>	B4LC
B0 with FNPT Half Coupling and Plug <sup>3</sup>	B4P
B0 with Flat Thread–o–let and Plug <sup>3</sup>	B4LP
B0 with Pipe Nipple, SW x FNPT Coupling and Plug <sup>3</sup>	B4CP
B0 with Flat Sock-o-let, Pipe Nipple, SW x FNPT Coupling and Plug <sup>3</sup>	B4LCP
FNPT Half Coupling	CO
CO with Plug	COP
Thread-o-let (Min. SCH 40 Chamber)	COL
SW x FNPT Coupling with Pipe Nipple	COC
SW x FNPT Coupling with Pipe Nipple connected via Extruded Outlet <sup>2</sup>	COCE
Socket Weld Half Coupling	C1
Socket Weld Coupling with Pipe Nipple	C1C
Socket Weld Coupling with Pipe Nipple connected via Extruded Outlet <sup>2</sup>	C1CE
SW x FNPT Coupling with Pipe Nipple and Sock-o-let (Min. SCH 40 Chamber)	COLC
Sock-o-let (Min. SCH 40 Chamber)	C1L
Socket Weld Coupling with Pipe Nipple and Sock-o-let (Min. SCH 40 Chamber)	C1LC

Definitions	Code options
Blind Flange with Float Stop Spring and a Mating Weld Neck Flange	DO
D0 with FNPT <sup>3</sup>	D1
D0 with Plug <sup>3</sup>	D2
D0 with Socket Weld Half Coupling <sup>3</sup>	D3
D0 with FNPT Half Coupling <sup>3</sup>	D4
D0 with Pipe Nipple, for Socket Welding (Flat) <sup>3</sup>	D5
D0 with Pipe Nipple, for Butt Welding (37.5° Bevel) <sup>3</sup>	D6
D0 with Pipe Nipple, MNPT <sup>3</sup>	D7
D0 with Pipe Nipple and Slip–On Flange <sup>3</sup>	D9S
D0 with Pipe Nipple and Weld Neck Flange <sup>3</sup>	D9W
D0 with Socket Weld Bore <sup>3</sup>	D10
D0 with Flat Sock-o-let <sup>3</sup>	D3L
D0 with Flat Thread–o–let <sup>3</sup>	D4L
D0 with Flat Sock-o-let and Nipple, for Socket Welding (Flat) <sup>3</sup>	D5L
D0 with Flat Weld-o-let and Nipple, for Butt Welding (37.5° Bevel) <sup>3</sup>	D6L
D0 with Flat Weld-o-let and Nipple, MNPT <sup>3</sup>	D7L
D0 with Flat Weld-o-let, Pipe Nipple and Weld Neck Flange <sup>3</sup>	D9L
D0 with Pipe Nipple and Socket Weld Coupling <sup>3</sup>	D3C
D0 with Pipe Nipple and SW x FNPT Coupling <sup>3</sup>	D4C
D0 with Flat Weld-o-let, Pipe Nipple and Socket Weld Coupling <sup>3</sup>	D3LC
D0 with Flat Weld-o-let, Pipe Nipple and SW x FNPT Coupling <sup>3</sup>	D4LC
D0 with FNPT Half Coupling and Plug <sup>3</sup>	D4P
D0 with Flat Thread–o–let and Plug³	D4LP
D0 with Pipe Nipple, SW x FNPT Coupling and Plug <sup>3</sup>	D4CP
D0 with Flat Weld-o-let, Pipe Nipple, SW x FNPT Coupling and Plug <sup>3</sup>	D4LCP
Weld Neck Flange with Float Stop Spring (Top/Bottom Code Option) <sup>1</sup>	F
Weld Neck Flange connected to chamber via Extruded Outlet <sup>2</sup>	FE
Weld Neck Flange with Pipe Nipple (Side Code Option)	FO
FE with Pipe Nipple Between Chamber and Weld Neck Flange <sup>2</sup>	FOE
Weld Neck Flange with Weld-o-let (Min. SCH 40 Chamber)	F1
Weld Neck Flange with Weld-o-let and Pipe Nipple (Min. SCH 40 Chamber)	F1C
Weld Neck Flange with Weld-o-let and Concentric Reducer (Min. SCH 40 Chamber)	F2
Weld Neck Flange with Weld-o-let and Concentric Reducer and Pipe Nipple (Min. SCH 40 Chamber)	F2C
Weld Neck Flange with Concentric Reducer	F3
Weld Neck Flange with Concentric Reducer connected to chamber via Extruded Outlet <sup>2</sup>	F3E
Weld Neck Flange with Concentric Reducer and Pipe Nipple	F3C
Weld Neck Flange with Concentric Reducer and Pipe Nipple connected via Extruded Outlet <sup>2</sup>	F3CE
Weld Neck Flange with Butt Weld Tee	F4
Weld Neck Flange with Butt Weld Tee and Pipe Nipple	F4C
Weld Neck Flange with Butt Weld Tee and Concentric Reducer	F43
Weld Neck Flange with Butt Weld Tee and Concentric Reducer and Pipe Nipple	F43C
Weld Neck Flange with Concentric Reducer (Top/Bottom Code Option)	F9

Definitions	Code options
Slip–On Flange with Float Stop Spring (Top/Bottom Code Option)¹	G
Slip–On Flange with Pipe Nipple connected to chamber via Extruded Outlet <sup>2</sup>	GE
Slip-On Flange with Pipe Nipple (Side Code Option)	G0
Slip-On Flange with Weld-o-let and Pipe Nipple (Min. SCH 40 Chamber)	G1
Slip–On Flange with Weld–o–let, Concentric Reducer and Pipe Nipple	G2
Slip–On Flange with Concentric Reducer and Pipe Nipple	G3
Slip–On Flange with Concentric Reducer and Pipe Nipple Connected via Extruded Outlet <sup>2</sup>	G3E
Slip-On Flange with Butt Weld Tee and Pipe Nipple	G4
Slip-On Flange with Butt Weld-tee, Concentric Reducer and Pipe Nipple	G43
Stub End with Lap Joint Flange with Float Stop Spring (Top/Bottom Code Option) <sup>1</sup>	L
Stub End with Lap Joint Flange (Side Code Option)	LO
Stub End with Lap Joint Flange connected to chamber via Extruded Outlet <sup>2</sup>	LE
Stub end with Lap Joint Flange and Pipe Nipple connected via Extruded Outlet <sup>2</sup>	LCE
L with Mating Blind Flange with FNPT <sup>3</sup>	L1
L with Mating Blind Flange with Plug <sup>3</sup>	L2
Stub end with Lap Joint Flange and Pipe Nipple	LC
Stub end with Lap Joint Flange and Concentric Reducer	L3
Stub end with Lap Joint Flange, Concentric Reducer connected via Extruded Outlet <sup>2</sup>	L3E
Stub end with Lap Joint Flange, Concentric Reducer and Pipe Nipple	L3C
Stub end with Lap Joint Flange, Concentric Reducer and Pipe Nipple connected via Extruded Outlet <sup>2</sup>	L3CE
L with Mating Stub End and Lap Joint Flange, Concentric Reducer, Stub End and Lap Joint Flange	L39
Stub End with Lap Joint Flange and Butt Weld Tee	L4
Stub End with Lap Joint Flange, Butt Weld Tee and Concentric Reducer	L43
L with Mating Blind Flange, Pipe Nipple, Stub End and Lap Joint Flange <sup>3</sup>	L9
Branch Nipple, for Socket Weld (Flat)	NO
Branch Nipple, for Socket Weld (Flat) connected to chamber via Extruded Outlet <sup>2</sup>	NOE
Branch Nipple, for Butt Welding (37.5° Bevel)	N2
Branch Nipple, for Butt Welding (37.5° Bevel) connected to chamber via Extruded Outlet <sup>2</sup>	N2E
MNPT Branch Nipple	N3
MNPT Branch Nipple connected to chamber via Extruded Outlet <sup>2</sup>	N3E
Weld-o-let, for Butt Welding (Min. SCH 40 Chamber)	N6
Weld-o-let with Pipe Nipple, for Socket Weld (Flat) (Min. SCH 40 Chamber)	NOL
Weld-o-let with Pipe Nipple, for Butt Welding (37.5° Bevel) (Min. SCH 40 Chamber)	N2L
Weld-o-let with Pipe Nipple, MNPT, (Min. SCH 40 Chamber)	N3L
Weld Neck Flange with Mating Weld Neck Flange, Float Stop Spring, Concentric Reducer and Weld Neck Flange	R9

Definitions	Code options
Screwed Pipe Cap with Float Stop Spring (Min. SCH 40 Chamber)	SO
S0 with FNPT Half Coupling (Min. SCH 40 Chamber)	S4
S0 with FNPT Half Coupling and Plug (Min. SCH 40 Chamber)	S4P
SO with Pipe Nipple, MNPT	S7
Socket Weld Flange with Float Stop Spring (Top/Bottom Code Option) <sup>1</sup>	SW
Blind Flange with Float Stop Spring and Mating Socket Weld Flange	SW0
SW0 with FNPT <sup>3</sup>	SW1
SW0 with Plug <sup>3</sup>	SW2
SW0 with Socket Weld Half Coupling <sup>3</sup>	SW3
SW0 with FNPT Half Coupling <sup>3</sup>	SW4
SW0 with Nipple, for Socket Welding (Flat) <sup>3</sup>	SW5
SW0 with Nipple, for Butt Welding (37.5° bevel) <sup>3</sup>	SW6
SW0 with Pipe Nipple, MNPT <sup>3</sup>	SW7
SW0 with Pipe Nipple and Socket Weld Flange <sup>3</sup>	SW9
SW0 with Socket Weld Bore <sup>3</sup>	SW10
SW0 with Flat Sock-o-let <sup>3</sup>	SW3L
SW0 with Flat Thread–o–let <sup>3</sup>	SW4L
SW0 with Flat Sock-o-let, Pipe Nipple for Socket Welding (Flat) <sup>3</sup>	SW5L
SW0 with Flat Sock-o-let, Pipe Nipple for Butt Welding (37.5° bevel) <sup>3</sup>	SW6L
SW0 with Flat Sock-o-let and Pipe Nipple, MNPT <sup>3</sup>	SW7L
SW0 with Flat Sock-o-let, Pipe Nipple and Socket Weld Flange <sup>3</sup>	SW9L
SW0 with Pipe Nipple and Socket Weld Coupling <sup>3</sup>	SW3C
SW0 with Pipe Nipple and SW x FNPT Coupling <sup>3</sup>	SW4C
SW0 with Flat Sock-o-let, Pipe Nipple and Socket Weld Coupling <sup>3</sup>	SW3LC
SW0 with Flat Sock-o-let, Pipe Nipple and SW x FNPT Coupling <sup>3</sup>	SW4LC
SW0 with FNPT Half Coupling and Plug <sup>3</sup>	SW4P
SW0 with Flat Thread–o–let and Plug³	SW4LP
SW0 with Pipe Nipple, SW x FNPT Coupling and Plug <sup>3</sup>	SW4CP
SW0 with Flat Sock-o-let, Pipe Nipple, SW x FNPT Coupling and Plug <sup>3</sup>	SW4LCP
Socket Weld Flange with Pipe Nipple	SWS
Socket Weld Flange with Pipe Nipple connected to chamber via Extruded Outlet <sup>2</sup>	SWSE
Socket Weld Flange with Weld-o-let and Pipe Nipple	SWS1
Socket Weld Flange with Weld-o-let, Concentric Reducer and Pipe Nipple	SWS2
Socket Weld Flange with Concentric Reducer and Pipe Nipple	SWS3
Socket Weld Flange with Concentric Reducer and Pipe Nipple connected via Extruded Outlet	SWS3E
Socket Weld Flange with Butt Weld Tee and Pipe Nipple	SWS4
Socket Weld Flange with Butt Weld Tee, Concentric Reducer and Pipe Nipple	SWS43

Definitions	Code options
Butt Welded Pipe Cap with Float Stop Spring	ТО
T0 with Socket Weld Half Coupling	T3
T0 with FNPT Half Coupling	T4
TO with Pipe Nipple, for Socket Welding (Flat)	T5
T0 with Pipe Nipple, for Butt Welding (37.5° Bevel)	Т6
TO with Pipe Nipple, MNPT	T7
T0 with Pipe Nipple and Slip-On Flange	T9S
T0 with Pipe Nipple and Socket Weld Flange	T9SW
T0 with Pipe Nipple and Weld Neck Flange	T9W
T0 with Flat Sock-o-let	T3L
T0 with Flat Thread-o-let	T4L
TO with FNPT Half Coupling and Plug	T4P
T0 with Flat Thread-o-let and Plug	T4LP
TO with Flat Weld-o-let and Pipe Nipple, for Socket Welding (Flat)	T5L
TO with Flat Weld-o-let and Pipe Nipple, for Butt Welding (37.5° Bevel)	T6L
T0 with Flat Weld–o–let and Pipe Nipple, MNPT	T7L
T0 with Flat Weld-o-let, Pipe Nipple and Slip-On Flange	T9SL
T0 with Flat Weld-o-let, Pipe Nipple and Weld Neck Flange	T9WL
T0 with Flat Weld-o-let, Pipe Nipple and Socket Weld Flange	T9SWL
TO with Pipe Nipple and Socket Weld Coupling	T3C
TO with Pipe Nipple and SW x FNPT Coupling	T4C
TO with Flat Weld-o-let, Pipe Nipple and Socket Weld Coupling	T3LC
TO with Flat Weld-o-let, Pipe Nipple and SW x FNPT Coupling	T4LC
TO with Pipe Nipple, SW x FNPT Coupling and Plug	T4CP
TO with Flat Weld-o-let, Pipe Nipple, SW x FNPT Coupling and Plug	T4LCP

### Table 2 (continued)

Definitions	Code options
Welded Flat End Cap with Float Stop Spring	WO
W0 with FNPT	W1
W0 with Plug	W2
W0 with Socket Weld Half Coupling	W3
W0 with FNPT Half Coupling	W4
W0 with Pipe Nipple, for Socket Welding (Flat)	W5
W0 with Pipe Nipple, for Butt Welding (37.5° Bevel)	W6
W0 with Pipe Nipple, MNPT	W7
W0 with Pipe Nipple and Slip-On Flange	W9S
W0 with Pipe Nipple and Socket Weld Flange	W9SW
W0 with Pipe Nipple and Weld Neck Flange	W9W
W0 with Socket Weld Bore	W10
W0 with Flat Weld-o-let	W3L
W0 with Flat Thread-o-let	W4L
W0 with Flat Weld-o-let and Pipe Nipple for Socket Welding (Flat)	W5L
W0 with Flat Weld-o-let and Pipe Nipple for Butt Welding (37.5° Bevel)	W6L
W0 with Flat Weld-o-let and Pipe Nipple, MNPT	W7L
W0 with Flat Weld-o-let, Pipe Nipple and Slip-On Flange	W9SL
W0 with Flat Weld-o-let, Pipe Nipple and Weld Neck Flange	W9WL
W0 with Flat Weld-o-let, Pipe Nipple and Socket Weld Flange	W9SWL
W0 with Pipe Nipple and Socket Weld Coupling	W3C
W0 with Pipe Nipple and SW x FNPT Coupling	W4C
W0 with flat weld-o-let, pipe nipple and socket weld coupling	W3LC
W0 with Flat Weld-o-let, Pipe Nipple and SW x FNPT Coupling	W4LC
W0 with Flat Thread–o–let and Plug	W4LP
W0 with Pipe Nipple, SW x FNPT coupling and plug	W4CP
W0 with Flat Weld-o-let, Pipe Nipple, SW x FNPT Coupling and Plug	W4LCP
Branch Nipple with Flat End Cap with FNPT, connected via Extruded Outlet <sup>2</sup>	W1E
Branch Nipple with Flat End Cap with FNPT, connected via Saddle Weld	W1S
No connection	X
Custom	Z9

### Notes:

- 1 When a flanged option (F, G, L, SW) is a process connection on either end of the chamber as shown in the configuration tables these will be provided with a float stop bar (or disk) and spring to keep the float confined in the chamber.
- 2 Extruded outlet connections can be utilized as follows:

	Chamber schedule	Flange/pipe sizes
*Stainless steel:	10	1 in., 1–½ in. and 2 in.
*Stainless steel:	40	1–½ in. and 2 in.
Alloy 20:	10	1–⅓ in. and 2 in.
Hastelloy® C-276:	10	1–½ in. and 2 in.

\*Includes SS1, SS4, SS6, SS7, S47, TN4, TN6, HL4, HL6, TF4 and TF6 material types. TF4 and TF6 types require SCH 40 minimum chambers. Welded or seamless chambers can be extruded. Extruded outlets are full bore up to a maximum of 2 in. NPS.

3 Add an 'H' behind the code option if a high hub blind flange is required. In those same cases where a 'P' is added in the model code for plugged options, the 'H' shall be placed in front of the 'P'.

### Chamber configuration - top

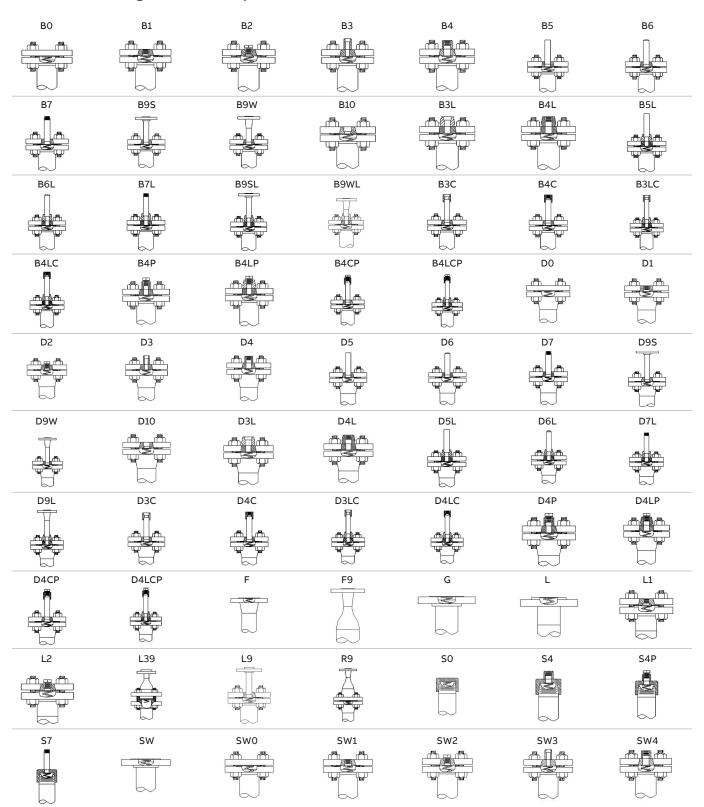


Figure1 Chamber configuration - top

### ...Chamber configuration – top

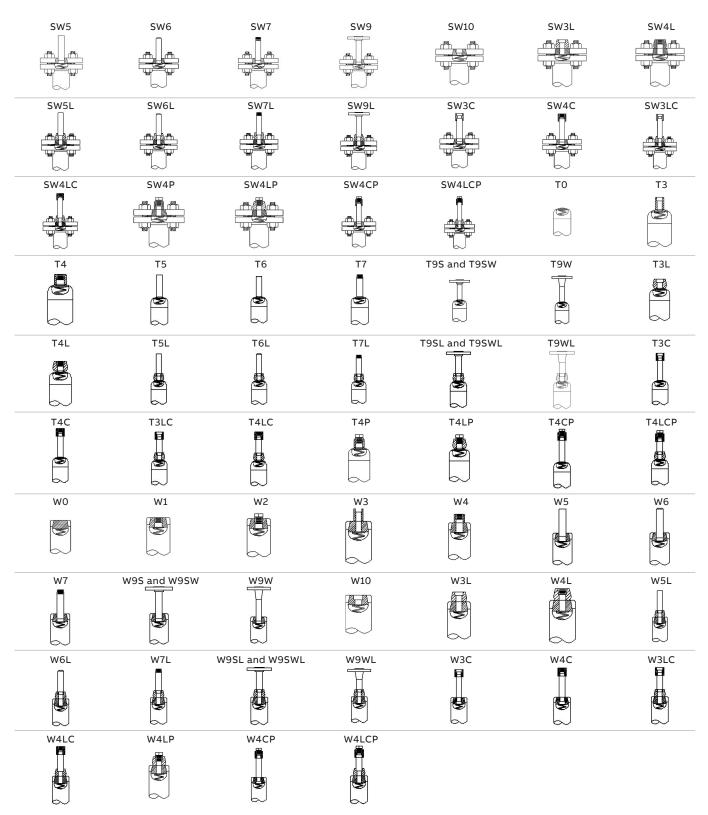


Figure1 Chamber configuration - top (continued)

### Chamber configuration - side

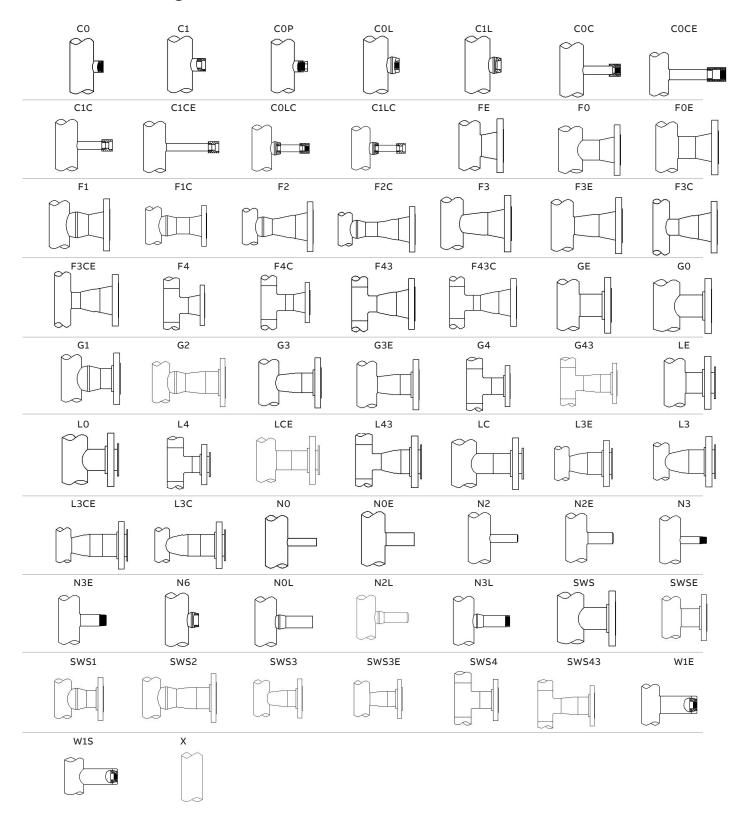


Figure 2 Chamber configuration - side

### Chamber configuration - bottom

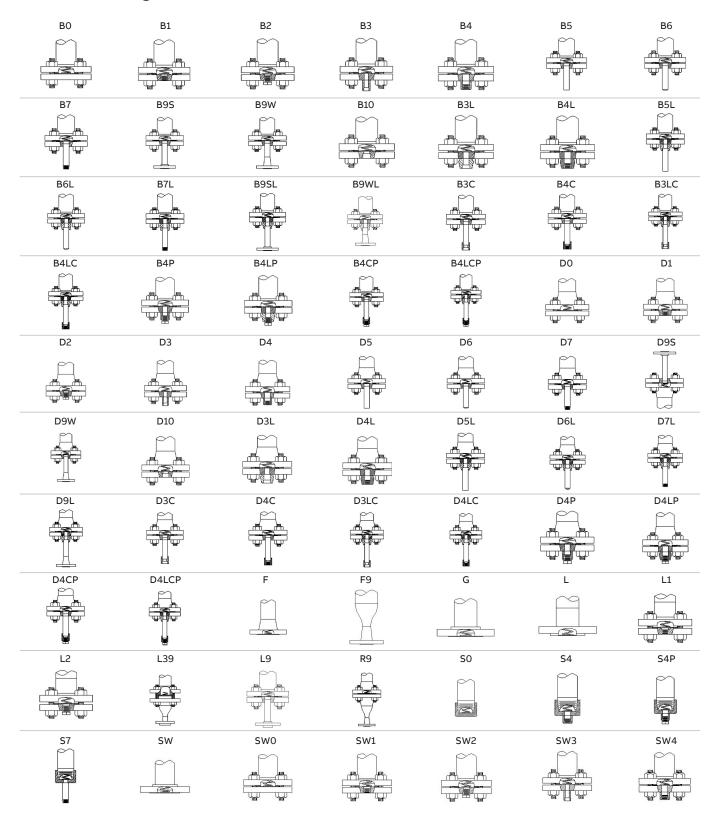
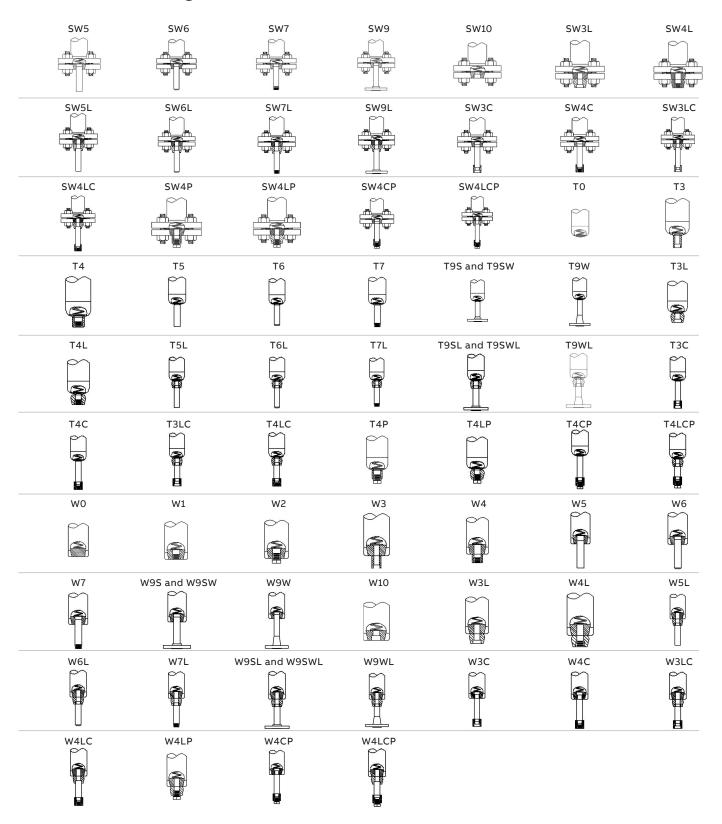


Figure 3 >>> Chamber configuration-bottom

### ...Chamber configuration - bottom



 ${\bf Figure 3} \ \ {\bf Chamber \, configuration \, - \, bottom \, (continued)}$ 

### **Chamber configuration**

Table 3
Size and rating designations for ASME B16.5 flanges

Size	Rating	Raised face	Flat face	Ring type joint	Male	Tongue
- -	150	R51	F51	N / A	M51	TG51
	300	R53	F53	<b>J</b> 53	M53	TG53
	600	R56	F56	J56	M56	TG56
½ in. −	900	R59	F59	J59	M59	TG59
	1500	R515	F515	J515	M515	TG515
	2500	R525	F525	J525	M525	TG525
	150	R71	F71	N/A	M71	TG71
_	300	R73	F73	J73	M73	TG73
2/ :	600	R76	F76	J76	M76	TG76
³⁄₄ in. −	900	R79	F79	J79	M79	TG79
_	1500	R715	F715	J715	M715	TG715
_	2500	R725	F725	J725	M725	TG725
	150	R11	F11	J11	M11	TG11
_	300	R13	F13	J13	M13	TG13
_	600	R16	F16	J16	M16	TG16
1 in. —	900	R19	F19	J19	M19	TG19
_	1500	R115	F115	J115	M115	TG115
_	2500	R125	F125	J125	M125	TG125
	150	R151	F151	J151	M151	TG151
_	300	R153	F153	J153	M153	TG153
_	600	R156	F156	J156	M156	TG156
1½ in. −	900	R159	F159	J159	M159	TG159
_	1500	R1515	F1515	J1515	M1515	TG1515
_	2500	R1525	F1525	J1525	M1525	TG1525
	150	R21	F21	J21	M21	TG21
_	300	R23	F23	J23	M23	TG23
_	600	R26	F26	J26	M26	TG26
2 in. –	900	R29	F29	J29	M29	TG29
_	1500	R215	F215	J215	M215	TG215
_						
	2500	R225	F225	J225	M225	TG225
_	150	R251	F251	J251	M251	TG251
_	300	R253	F253	J253	M253	TG253
2½ in. −	600	R256	F256	J256	M256	TG256
_	900	R259	F259	J259	M259	TG259
_	1500	R2515	F2515	J2515	M2515	TG2515
	2500	R2525	F2525	J2525	M2525	TG2525
_	150	R31	F31	J31	M31	TG31
_	300	R33	F33	J33	M33	TG33
3 in. –	600	R36	F36	J36	M36	TG36
_	900	R39	F39	J39	M39	TG39
_	1500	R315	F315	J315	M315	TG315
	2500	R325	F325	J325	M325	TG325
_	150	R41	F41	J41	M41	TG41
_	300	R43	F43	J43	M43	TG43
4 in. –	600	R46	F46	J46	M46	TG46
<del>+</del> III.	900	R49	F49	J49	M49	TG49
_	1500	R415	F415	J415	M415	TG415
_	2500	R425	F425	J425	M425	TG425
	150	R61	F61	J61	M61	TG61
_	300	R63	F63	J63	M63	TG63
_	600	R66	F66	J66	M66	TG66
6 in. –	900	R69	F69	J69		TG69
_					M69	
	1500	R615	F615	J615	M615	TG615

### ...Chamber configuration

Table 3 (continued)
Size and rating designations for EN 1092 flanges <sup>1</sup>

Size	Rating	Raised face (type B1)	Flat face (type A)
	PN16	RAC	FAC
	PN25	RAD	FAD
	PN40	RAE	FAE
DN15	PN63	RAF	FAF
DIVID	PN100	RAG	FAG
	PN160	RAH	FAH
	PN250	RAJ	FAJ
	PN320	RAK	FAK
	PN16	RBC	FBC
	PN25	RBD	FBD
	PN40	RBE	FBE
DN20	PN63	RBF	FBF
DINZU	PN100	RBG	FBG
	PN160	RBH	FBH
	PN250	RBJ	FBJ
	PN320	RBK	FBK
	PN16	RCC	FCC
	PN25	RCD	FCD
	PN40	RCE	FCE
DN25	PN63	RCF	FCF
DINZS	PN100	RCG	FCG
	PN160	RCH	FCH
	PN250	RCJ	FCJ
	PN320	RCK	FCK
	PN16	REC	FEC
	PN25	RED	FED
	PN40	REE	FEE
DN40	PN63	REF	FEF
DN40	PN100	REG	FEG
	PN160	REH	FEH
	PN250	REJ	FEJ
	PN320	REK	FEK
	PN16	RFC	FFC
	PN25	RFD	FFD
	PN40	RFE	FFE
DN50	PN63	RFF	FFF
DIVIDU	PN100	RFG	FFG
	PN160	RFH	FFH
	PN250	RFJ	FFJ
	PN320	RFK	FFK

#### Note:

- 1 EN1092 Weld Neck flanges are type 11, EN1092 Slip On flanges are type 12.
- ${\bf 2} \quad \mbox{ Z9 shall be specified for any sizes / ratings not listed in table 3.}$

### Size and rating designations for EN 1092 flanges

Size	Rating	Raised face (type B2)	Flat face (type A)
	PN16	RGC	FGC
_	PN25	RGD	FGD
-	PN40	RGE	FGE
DNCE	PN63	RGF	FGF
DN65	PN100	RGG	FGG
-	PN160	RGH	FGH
-	PN250	RGJ	FGJ
-	PN320	RGK	FGK

### Connection sizes and ratings

Table 3 (continued)
Size and rating designations for EN 1092 flanges (continued)

Size	Rating	Raised face (type B2)	Flat face (type A)
	PN16	RHC	FHC
	PN25	RHD	FHD
	PN40	RHE	FHE
DNIGO	PN63	RHF	FHF
DN80	PN100	RHG	FHG
	PN160	RHH	FHH
	PN250	RHJ	FHJ
	PN320	RHK	FHK
	PN16	RJC	FJC
	PN25	RJD	FJD
	PN40	RJE	FJE
DN100	PN63	RJF	FJF
DN100	PN100	RJG	FJG
	PN160	RJH	FJH
	PN250	RJJ	FJJ
	PN320	RJK	FJK
	PN16	RMC	FMC
	PN25	RMD	FMD
	PN40	RME	FME
DNIEG	PN63	RMF	FMF
DN150	PN100	RMG	FMG
	PN160	RMH	FMH
	PN250	RMJ	FMJ
	PN320	RMK	FMK

### Size and rating designations

Size	Rating	Sock-o-lets	Thread-o-lets	Plugs	Couplings
1/ :	3000#	<b>S</b> 053	T053	P053	C053
½ in.	6000#	S056	T056	P056	C056
³⁄4 in.	3000#	S073	T073	P073	C073
74 111.	6000#	S076	T076	P076	C076
4 :	3000#	S103	T103	P103	C103
1 in.	6000#	S106	T106	P106	C106
447.	3000#	S153	T153	P153	C153
1⅓ in.	6000#	S156	T156	P156	C156
2:-	3000#	S203	T203	P203	C203
2 in.	6000#	S206	T206	P206	C206

Size	Rating	Weld-o-lets	Pipe nipples
⅓ in.	SCH 40	W054	N054
	SCH 80	W058	N058
	SCH 160	W051	N051
	SCH 40	W074	N074
³⁄₄ in.	SCH 80	W078	N078
	SCH 160	W071	N071
1 in.	SCH 40	W104	N104
	SCH 80	W108	N108
	SCH 160	W101	N101
	SCH 40	W154	N154
1⅓ in.	SCH 80	W158	N158
	SCH 160	W151	N151
2 in.	SCH 40	W204	N204
	SCH 80	W208	N208
	SCH 160	W201	N201

### ...Connection sizes and ratings

### Table 3 (continued) Female threaded and socket weld connection designations

Size	FNPT Designation	FSW Designation
½ in.	FN05	SW05
³¼ in.	FN07	SW07
1 in.	FN10	SW10
1½ in.	FN15	SW15
2 in.	FN20	SW20

### Transmitter and switch accessories

#### Magnetostrictive level transmitters

LMT200: refer to DS\_LMT20-EN data sheet for ordering information

#### Magnetic level gauge switches

LMS100: refer to DS/LMS100–EN data sheet for ordering information

LMS200: refer to DS/LMS200–EN data sheet for ordering information

MS41: refer to DS/MS41–EN data sheet for ordering information

PS45: refer to DS/PS45–EN 2014 data sheet for ordering information

### Vibration level switch

RS85: refer to DS/RS85-EN data sheet for ordering information

#### Thermal dispersion switch

TX: refer to DS/TX-EN data sheet for ordering information

All data sheets are available on the ABB website at www.abb.com/level.

### ...Transmitter and switch accessories

#### Sample accessories

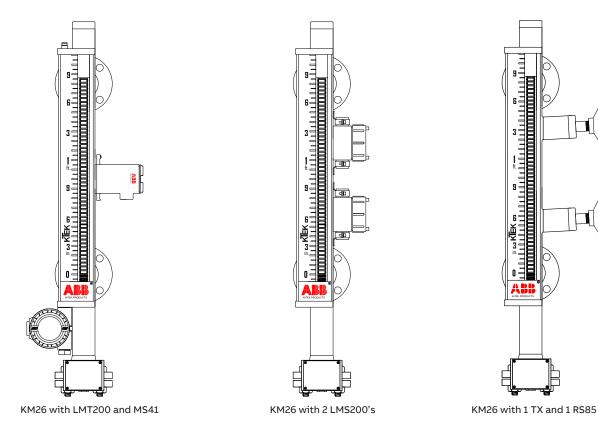
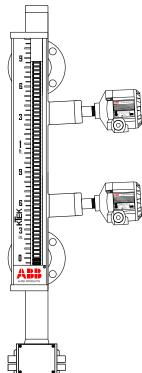


Figure 4 Sample accessories

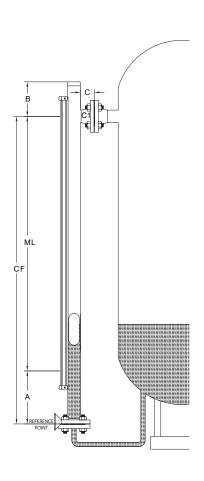


### **Example applications**

Top process (from side) and bottom process (from bottom) of KM26 (center to face)

Top process and bottom process (from top and bottom) of KM26 (face to face)

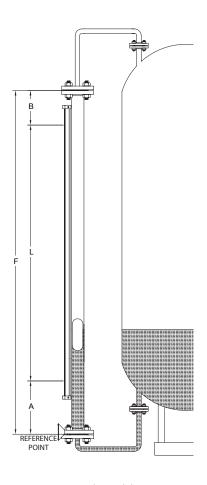
Top and bottom process connection (from side) of KM26 (center to center)



Sample model #:
KM26S.SS6.SS6.W0.FE.X.X.G.X.R21.X.X.R21.
S3G.BX-TT1

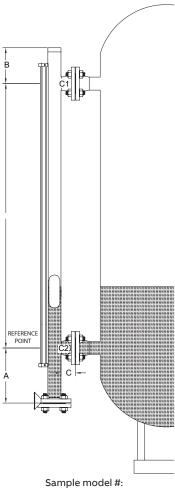
Note: The required CF and/or ML dimensions shall be specified by the customer.

Figure 5 Example applications



Sample model #:
KM26S.SS6.CST.G.X.X.X.G.R21.X.X.X.R21.S3P.

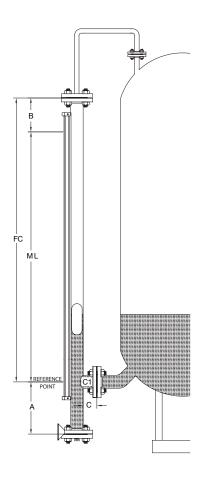
Note: The required FF and/or ML dimensions (in addition to the desired A and B dimensions) shall be specified by the customer.



KM26S.SS4.SS4.W0.FE.FE.X.B0.X.R23. R23.X.X.S3G.DX

### ...Example applications

Top process (from top) and bottom process (from bottom side) of KM26 (face to center)

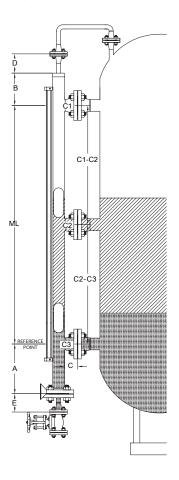


Sample model #: KM26S.SS6.CST.G.GO.X.X.B2.R21.R21.X.X.P073.S3G.BX

Note: The required FC and/or ML dimensions shall be specified by the customer.

Figure5 Example applications (continued)

Dual level application (center to center)



Sample model #: KM26S.SS6.SS6.W9W.FE.FE.FE.B9W.R51.R21.R21.R21.R51. M1GD.B, X-DV.Z99

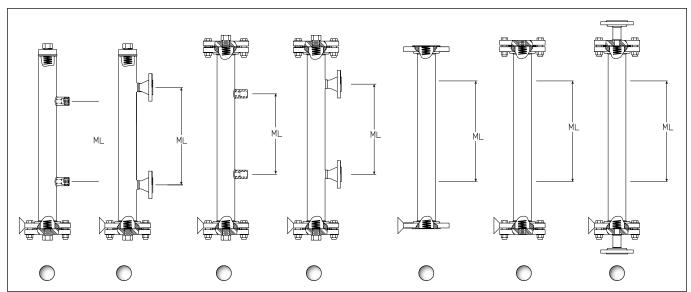
Note: The distance between each side connection shall be specified by the customer.

Quotation request – KM26S – side mount

Factory contact:					
Seller information Name:		End user information			
		Name:	Name:		
		Email:			
Company or LBU:		Company or LBU:			
Main phone:		Main phone:			
Fax:			ill be required before accepting an order.		
		*All fields required			
Tag ID#:					
Process conditions					
Application for (select one)	: total level - inte	erface level – total and interface			
Minimum specific gravity:					
Lower fluid second sp. grav	vity:				
Fluid(s):					
Operating temp:			Min. temp:		
Operating pressure:					
High vibration environment	t (such as compress	sor)? 🛮 Yes 🖟 No			
Chamber and float details Chamber material:		Cino			
Float material:		Size:			
Connection material:		Rating:			
Center to center/ measuring	ıg length:				
Vent / drain type and size:					
Indicator details					
Select:Shuttle or					
	se color combinatio	n) yellow/black – red/white			
		div.) – running in. (1/8 in.) – meter / cm – cus	stom		
Accessories Required (choo	ose all that apply)				
		_Magnetic particle traps			
		_Specialty process connection (specify type:	-		
		_Switches (specify type:			
Steam tracing	_	_Transmitter – LMT200 (select: Hart or FF)			
Approval or Documentation	n required:				
CRN	PED	NACE	EAC, EX		
ASME		STRUCTIONAL SAFETY	Other		

### ...Quotation request - KM26S - side mount

Choose the appropriate configuration below or attach a sketch



Select orientation (only 1 accessory allowed per position)

Indicator: \_\_90° \_\_180° \_\_270°

Transmitter: \_\_90° \_\_180° \_\_270°

Switches: \_\_90° \_\_180° \_\_270°

Note: Overall length will always be greater than measuring length (ML). Please specify if a max overall length is required.

### Notes

### Notes





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