Drawings

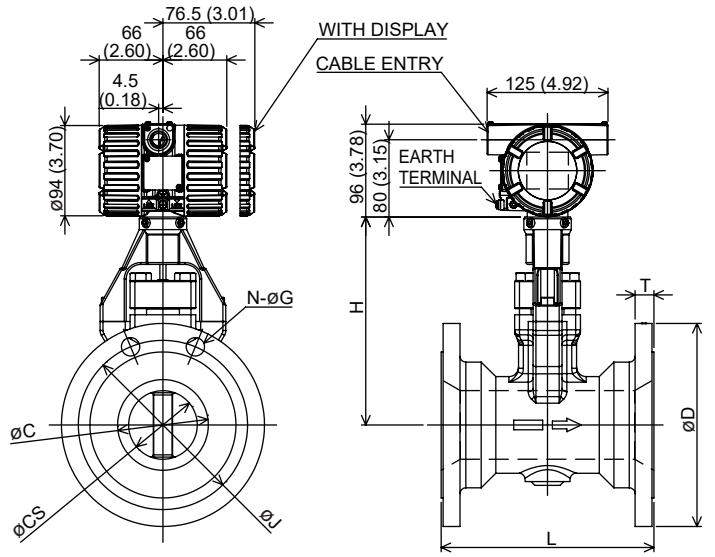
Vortex Flowmeter VY Series
VY080, VY100, VY150
Reduced Bore Type (1 Size Reduction)
Process Connection: JIS Flange

SD 01F07E03-02EN

● Reduced Bore Type (1 Size Reduction): JIS Flange (Size 80 mm(3 inch), 100 mm(4 inch), 150 mm(6 inch))

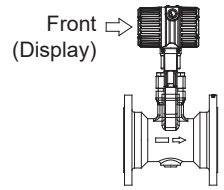
☐ Standard View (Without (7) option code: /RH)

Unit: mm (approx. inch)

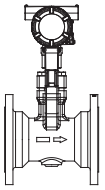


☐ With (7) option code: /RH

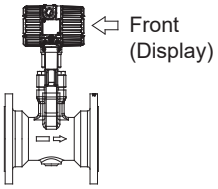
☐ +90 degrees selected



☐ +180 degrees selected



☐ –90 degrees selected



Flow Direction➡

VY□□□ **-**□□□ **-1** □ □□ □□□□ **-**□ □ □□ □ **0 0** **/**□
(1) (2) (3) (4) (5) (6) (7)

• Code details for SD

(1) Model	VY080: Size 80 mm(3 inch), VY100: Size 100 mm(4 inch), VY150: Size 150 mm(6 inch)
(2) Type of Body	-1: Reduced Bore Type (1 Size Reduction)
(3) Type of Shedder Bar	A: General Type, B: General Type with Temperature Sensor, C: High Temperature Type, D: High Temperature Type with Temperature Sensor, E: Cryogenic Type, G: Long Neck Type, H: Long Neck Type with Temperature Sensor
(4) Process Connection JIS Flange	[Body Material, Face, Pressure Rating] BBJ□: CF8M, Raised Face(RF), 10K to 20K □: Pressure Rating, 1= 10K, 2= 20K
(5) Cable Entry : One : Two	0: JIS G1/2 Female, 2: ASME 1/2 NPT Female, 4: ISO M20x1.5 Female A: JIS G1/2 Female, C: ASME 1/2 NPT Female, E: ISO M20x1.5 Female
(6) Communication and Input/Output	JA: HART 7 communication, 4 to 20 mA DC, Pulse/Status output JB: HART 7 communication, 4 to 20 mA DC, Pulse/Status output, Analog input NN: None (Remote Sensor)
(7) Options	/RH: Cable Entry Direction Change /□: Other Options (No effect for structual demension)

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• Dimensions (Lay Length, Outer Diameter etc) and Weight for each Model

☐VY080		External Dimensions mm (approx. inch)						Weight kg(lb)*2
	(4) Process Connection Code: Body Material, Face, Pressure Rating	Lay Length L*1	Outer Diameter øD	Flange Thickness T	Bolt Circle Diameter øJ	No. of Bolt Holes N	Hole Diameter øG	
☐	BBJ1: CF8M, RF, 10K	200(7.87)	185(7.28)	18(0.71)	150(5.91)	8	19(0.75)	19.1(42.1) [19.5(43)]
☐	BBJ2: CF8M, RF, 20K	200(7.87)	200(7.87)	22(0.87)	160(6.3)	8	23(0.91)	22.2(48.9) [22.6(49.8)]

☐VY100		External Dimensions mm (approx. inch)						Weight kg(lb)*2
	(4) Process Connection Code: Body Material, Face, Pressure Rating	Lay Length L*1	Outer Diameter øD	Flange Thickness T	Bolt Circle Diameter øJ	No. of Bolt Holes N	Hole Diameter øG	
☐	BBJ1: CF8M, RF, 10K	220(8.66)	210(8.27)	18(0.71)	175(6.89)	8	19(0.75)	25.5(56.2) [25.9(57.1)]
☐	BBJ2: CF8M, RF, 20K	220(8.66)	225(8.86)	24(0.94)	185(7.28)	8	23(0.91)	30.5(67.2) [30.9(68.1)]

☐VY150		External Dimensions mm (approx. inch)						Weight kg(lb)*2
	(4) Process Connection Code: Body Material, Face, Pressure Rating	Lay Length L*1	Outer Diameter øD	Flange Thickness T	Bolt Circle Diameter øJ	No. of Bolt Holes N	Hole Diameter øG	
☐	BBJ1: CF8M, RF, 10K	270(10.63)	280(11.02)	22(0.87)	240(9.45)	8	23(0.91)	46.4(102.3) [46.4(102.3)]
☐	BBJ2: CF8M, RF, 20K	270(10.63)	305(12.01)	28(1.1)	260(10.24)	12	25(0.98)	56.8(125.2) [56.8(125.2)]

*1: Lay Length (L) tolerances are as follows:
• VY025 to VY200: ± 3.0 mm

*2: In case of Type of Shedder Bar: C, D, E, G or H, refer to the value in square brackets

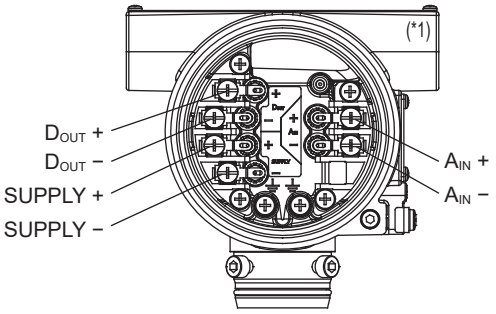
• Dimensions (height and diameters) for each Model

	(1) Model	(3) Type of Shedder Bar	Height H mm (inch)	Inner Diameter øC mm (inch)	Sensor Diameter øCS mm (inch)
☐	VY080	A, B: General Type	198(7.8)	71(2.8)	51.1(2.01)
☐		C, D: High Temperature type, E: Cryogenic type, G, H: Long Neck type	258(10.16)	71(2.8)	51.1(2.01)
☐	VY100	A, B: General Type	215(8.46)	93.8(3.69)	71(2.8)
☐		C, D: High Temperature type, E: Cryogenic type, G, H: Long Neck type	275(10.83)	93.8(3.69)	71(2.8)
☐	VY150	A, B: General Type	236(9.29)	138.8(5.46)	93.8(3.69)
☐		C, D: High Temperature type, E: Cryogenic type, G, H: Long Neck type	296(11.65)	138.8(5.46)	93.8(3.69)

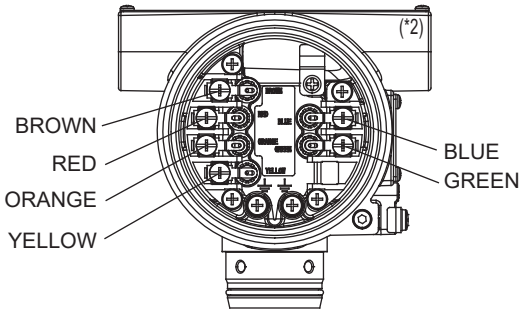
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● Terminal Layout Diagram

☐ Integral Transmitter Case
Terminal screw size: M4



☐ Remote Sensor Terminal Box
Terminal screw size: M4



	Terminal	Note
Integral Transmitter Case	SUPPLY + SUPPLY –	HART communication and analog output
	D_{OUT} + D_{OUT} –	Pulse/status output
	A_{IN} + A_{IN} –*3	Analog input
Remote Sensor Terminal Box	BROWN, RED, ORANGE, YELLOW, GREEN, BLUE*4	Connect the vortex flowmeter signal cable (VY1C)

*1: When (5) Cable Entry: 0, 2, or 4 is selected, The cable entry is only located on the right side in this view.
*2: The cable entry is located on the right side in this view
*3: When (6) Communication and Input/Output: JB is selected, the A_{IN} terminal is located
*4: Match the colors of the vortex flowmeter signal cable (VY1C) with the corresponding terminals

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