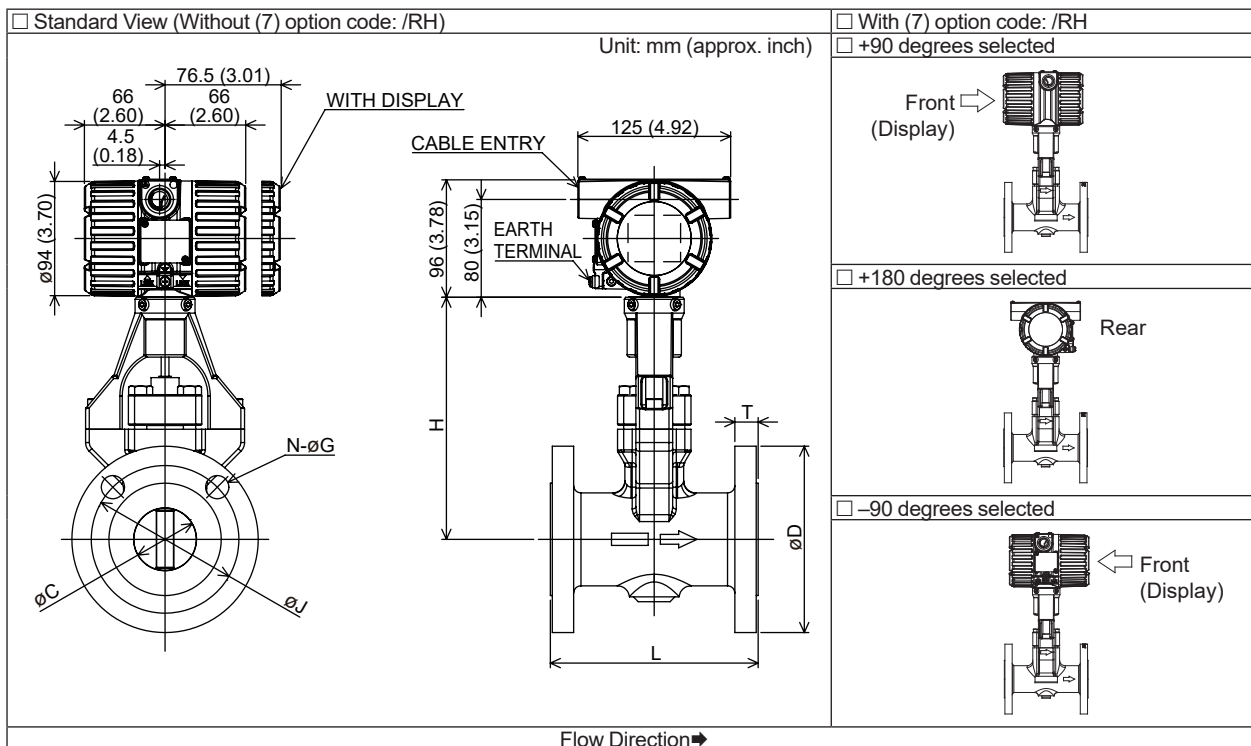


Drawings

Vortex Flowmeter VY Series
VY015, VY025, VY040
General Type
Process Connection: JIS Flange

SD 01F07D03-01EN

- **General Type: JIS Flange (Size 15 mm(1/2 inch), 25 mm(1 inch), 40 mm(1-1/2 inch))**


$$\begin{array}{ccccccc} \text{VY}\square\square\square & -\square\square\square & \underline{\text{-0}} & \square & \square\square & \square\square\square\square & -\square & \square & \square\square & \square & \text{00} & / \square \\ (1) & (2) & (3) & & (4) & (5) & (6) & (7) \end{array}$$

- **Code details for SD**

(1) Model	VY015: Size 15 mm(1/2 inch) , VY025: Size 25 mm(1 inch), VY040: Size 40 mm(1-1/2 inch)
(2) Type of Body	-0: General Type
(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 40K HBJ□: CW-12MW, Raised Face(RF), 10K to 40K □: Pressure Rating, 1= 10K, 2= 20K, 4= 40K
(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 structural demension)

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

	(4) Process Connection Code: Body Material, Face, Pressure Rating	External Dimensions mm (approx. inch)					Weight kg(lb)*2
		Lay Length L*1	Outer Diameter øD	Flange Thickness T	Bolt Circle Diameter øJ	No. of Bolt Holes N	
☐	BBJ1: CF8M, RF, 10K	130(5.12)	95(3.74)	12(0.47)	70(2.76)	4	4.7(10.4) [5.1(11.2)]
☐	HBJ1: CW-12MW, RF, 10K						5.1(11.2) [5.6(12.3)]
☐	BBJ2: CF8M, RF, 20K	130(5.12)	95(3.74)	14(0.55)	70(2.76)	4	4.8(10.6) [5.2(11.5)]
☐	HBJ2: CW-12MW, RF, 20K						5.2(11.5) [5.7(12.6)]
☐	BBJ4: CF8M, RF, 40K	130(5.12)	115(4.53)	20(0.79)	80(3.15)	4	6.4(14.1) [6.8(15)]

	(4) Process Connection Code: Body Material, Face, Pressure Rating	External Dimensions mm (approx. inch)					Weight kg(lb)*2
		Lay Length L*1	Outer Diameter øD	Flange Thickness T	Bolt Circle Diameter øJ	No. of Bolt Holes N	
☐	BBJ1: CF8M, RF, 10K	150(5.91)	125(4.92)	14(0.55)	90(3.54)	4	7.4(16.3) [7.8(17.2)]
☐	HBJ1: CW-12MW, RF, 10K						8.3(18.3) [8.7(19.2)]
☐	BBJ2: CF8M, RF, 20K	150(5.91)	125(4.92)	16(0.63)	90(3.54)	4	7.6(16.8) [8(17.6)]
☐	HBJ2: CW-12MW, RF, 20K						8.5(18.7) [9(19.8)]
☐	BBJ4: CF8M, RF, 40K	150(5.91)	130(5.12)	22(0.87)	95(3.74)	4	9.1(20.1) [9.5(20.9)]

	(4) Process Connection Code: Body Material, Face, Pressure Rating	External Dimensions mm (approx. inch)					Weight kg(lb)*2
		Lay Length L*1	Outer Diameter øD	Flange Thickness T	Bolt Circle Diameter øJ	No. of Bolt Holes N	
☐	BBJ1: CF8M, RF, 10K	150(5.91)	140(5.51)	16(0.63)	105(4.13)	4	8.7(19.2) [9.1(20.1)]
☐	HBJ1: CW-12MW, RF, 10K						9.8(21.6) [10.3(22.7)]
☐	BBJ2: CF8M, RF, 20K	150(5.91)	140(5.51)	18(0.71)	105(4.13)	4	8.9(19.6) [9.3(20.5)]
☐	HBJ2: CW-12MW, RF, 20K						10(22) [10.5(23.1)]
☐	BBJ4: CF8M, RF, 40K	150(5.91)	160(6.3)	24(0.94)	120(4.72)	4	12.4(27.3) [12.8(28.2)]

*1: Lay Length (L) tolerances are as follows:

- VY015 to VY300: ± 3.0 mm
- VY400: ± 5.0 mm

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

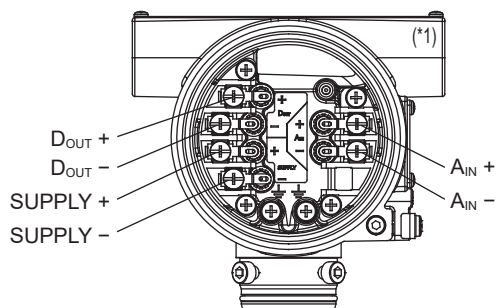
• Dimensions (height and diameters) for each Model

	(1) Model	(3) Type of Shedder Bar	Height H mm (inch)	Inner Diameter øC mm (inch)
☐	VY015	A: General Type	136.5(5.37)	14.6(0.57)
☐		E: Cryogenic type, G: Long Neck type	218(8.58)	14.6(0.57)
☐	VY025	A, B: General Type	164(6.46)	25.7(1.01)
☐		C, D: High Temperature type, E: Cryogenic type, G, H: Long Neck type	224(8.82)	25.7(1.01)
☐		A, B: General Type	171(6.73)	39.7(1.56)
☐	VY040	C, D: High Temperature type, E: Cryogenic type, G, H: Long Neck type	231(9.09)	39.7(1.56)

• Terminal Layout Diagram

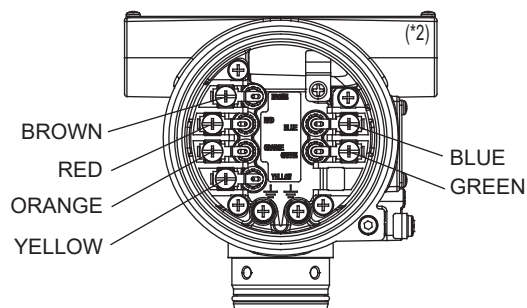
□ Integral Transmitter Case

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