

Drawings

Vortex Flowmeter VY Series
VY015, VY025, VY040
General Type
Process Connection: EN Wafer

SD 01F07C02-01EN

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

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

- **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 EN Wafer	[Body Material, Pressure Rating] BAE□: CF8M, PN10 to 40 HAE□: CW-12MW, PN10 to 40 □: Pressure Rating, 1= PN10, 2= PN16, 3= PN25, 4= PN40
(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, Pressure Rating	External Dimensions mm (approx. inch)					Weight kg(lb)*2
		Lay Length L*1	Outer Diameter øD	Hole Distance E	Hole Height F	Hole Diameter øG	
☐ VY015							
☐ BAE1: CF8M, PN10		-	-	-	-	-	-
☐ BAE1: CW-12MW, PN10		-	-	-	-	-	-
☐ BAE2: CF8M, PN16		-	-	-	-	-	-
☐ BAE2: CW-12MW, PN16		-	-	-	-	-	-
☐ BAE3: CF8M, PN25		-	-	-	-	-	-
☐ BAE3: CW-12MW, PN25		-	-	-	-	-	-
☐ BAE4: CF8M, PN40		70(2.76)	35.1(1.38)	46(1.81)	23(0.91)	13(0.51)	3.3(7.3) [3.7(8.2)]
☐ BAE4: CW-12MW, PN40							3.5(7.7) [3.9(8.6)]

	(4) Process Connection Code: Body Material, Pressure Rating	External Dimensions mm (approx. inch)					Weight kg(lb)*2
		Lay Length L*1	Outer Diameter øD	Hole Distance E	Hole Height F	Hole Diameter øG	
☐ VY025							
☐ BAE1: CF8M, PN10		-	-	-	-	-	-
☐ BAE1: CW-12MW, PN10		-	-	-	-	-	-
☐ BAE2: CF8M, PN16		-	-	-	-	-	-
☐ BAE2: CW-12MW, PN16		-	-	-	-	-	-
☐ BAE3: CF8M, PN25		-	-	-	-	-	-
☐ BAE3: CW-12MW, PN25		-	-	-	-	-	-
☐ BAE4: CF8M, PN40		70(2.76)	50.8(2)	60.1(2.37)	30.1(1.19)	13(0.51)	4.2(9.3) [4.6(10.1)]
☐ BAE4: CW-12MW, PN40							4.5(9.9) [4.9(10.8)]

	(4) Process Connection Code: Body Material, Pressure Rating	External Dimensions mm (approx. inch)					Weight kg(lb)*2
		Lay Length L*1	Outer Diameter øD	Hole Distance E	Hole Height F	Hole Diameter øG	
☐ VY040							
☐ BAE1: CF8M, PN10		-	-	-	-	-	-
☐ BAE1: CW-12MW, PN10		-	-	-	-	-	-
☐ BAE2: CF8M, PN16		-	-	-	-	-	-
☐ BAE2: CW-12MW, PN16		-	-	-	-	-	-
☐ BAE3: CF8M, PN25		-	-	-	-	-	-
☐ BAE3: CW-12MW, PN25		-	-	-	-	-	-
☐ BAE4: CF8M, PN40		70(2.76)	73(2.87)	77.8(3.06)	38.9(1.53)	17(0.67)	4.8(10.6) [5.2(11.5)]
☐ BAE4: CW-12MW, PN40							5.2(11.5) [5.6(12.3)]

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

- VY015 to VY050: ± 2.3 mm
- VY080 to VY100: ± 2.7 mm

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

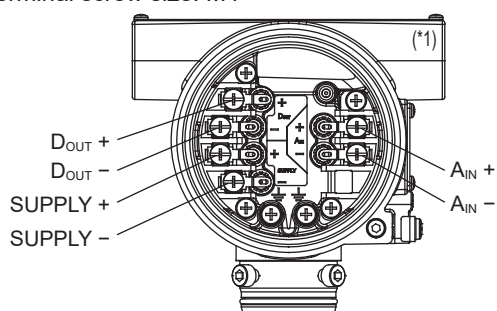
• Dimensions (height and diameters) for each Model

	(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

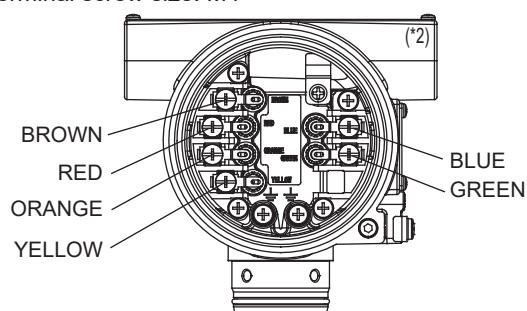
□ Integral Transmitter Case

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