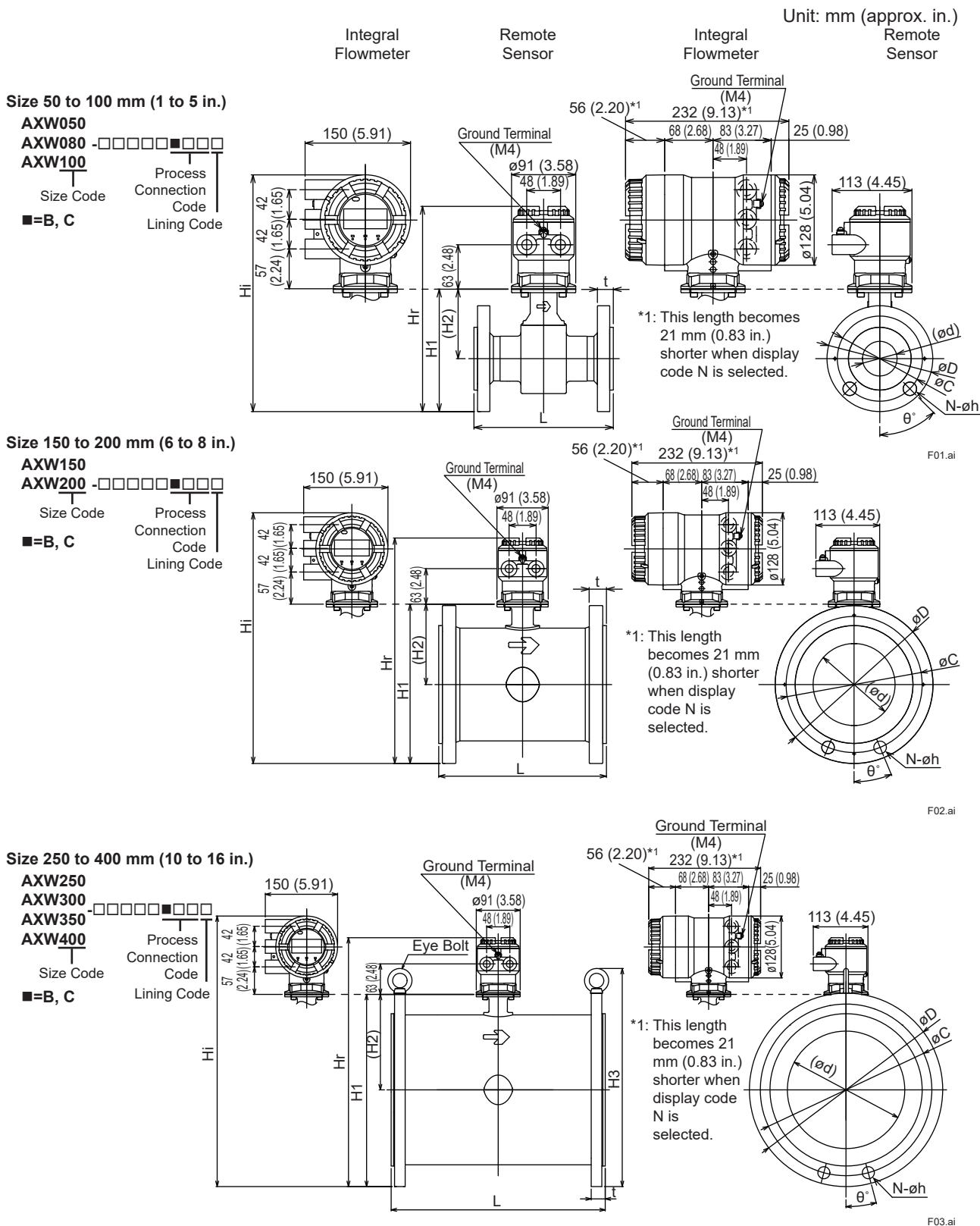


Drawings

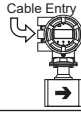
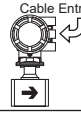
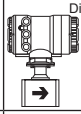
ADMAG TI Series
AXW Magnetic Flowmeter
[Size: 25 to 400 mm (1 to 16 in.)]
Flange AS2129 Table D
(Process Connection Code CS1)



SD 01E24D02-09EN



Unless otherwise specified, limit deviations on the drawing are specified as : General limit deviation = $\pm$ (Criteria of standard tolerance grade IT18 in JIS B0401-1) / 2

	Direction of Cable Entry			
	Standard (0°)	+90° rotation	+180° rotation	-90° rotation
Integral Flowmeter				
Remote Sensor				

* When optional code RH is selected with its rotational specification, the direction of cable entry is as shown on the left.

Unit: mm (approx. in.)

Model	Process Connection Code		CS1							
	Size Code		050	050	050	080	080	100	100	100
	Size		50	50	50	80	80	100	100	100
			(2)	(2)	(2)	(3)	(3)	(4)	(4)	(4)
	Lining Code		F	U	H,D	F	U,H,D	F	U	H
Remote Sensor	Lay Length (*1) (*5)	L	198 (7.78)	198 (7.78)	198 (7.78)	198 (7.78)	198 (7.78)	248 (9.74)	248 (9.74)	248 (9.74)
	Flange Outer Diameter	øD	150 (5.91)	150 (5.91)	150 (5.91)	185 (7.28)	185 (7.28)	215 (8.46)	215 (8.46)	215 (8.46)
	Flange Thickness (incl. lining flare)	t	14.5 (0.57)	13.0 (0.51)	13.0 (0.51)	16.5 (0.65)	15.0 (0.59)	16.5 (0.65)	15.0 (0.59)	15.0 (0.59)
	Lining Inner Diameter	ød	52 (2.03)	49 (1.94)	50 (1.95)	75 (2.96)	73 (2.87)	100 (3.95)	97 (3.82)	98 (3.87)
	Bolt		114	114	114	146	146	178	178	178
	Circle Diameter	øC	(4.49)	(4.49)	(4.49)	(5.75)	(5.75)	(7.01)	(7.01)	(7.01)
	Bolt Hole Interval	θ°	45	45	45	45	45	45	45	45
	Bolt Hole Diameter	øh	18 (0.71)	18 (0.71)	18 (0.71)	18 (0.71)	18 (0.71)	18 (0.71)	18 (0.71)	18 (0.71)
	Number of Bolt Holes	N	4	4	4	4	4	4	4	4
	Height	H1	174 (6.85)	174 (6.85)	174 (6.85)	207 (8.15)	207 (8.15)	232 (9.13)	232 (9.13)	232 (9.13)
Integral Flowmeter	Height	H2	99 (3.90)	99 (3.90)	99 (3.90)	114 (4.49)	114 (4.49)	124 (4.88)	124 (4.88)	124 (4.88)
	Maximum Height	Hr	291 (11.46)	291 (11.46)	291 (11.46)	324 (12.76)	324 (12.76)	349 (13.74)	349 (13.74)	349 (13.74)
	Approx. Weight, Unit: kg (lb) (*2)		5.5 (12.1)	5.5 (12.1)	5.5 (12.1)	8.7 (19.2)	8.7 (19.2)	11.8 (26.0)	11.8 (26.0)	11.8 (26.0)
Remote Sensor	Maximum Height	Hi	336 (13.23)	336 (13.23)	336 (13.23)	369 (14.53)	369 (14.53)	394 (15.51)	394 (15.51)	394 (15.51)
	Approx. Weight, Unit: kg (lb)		7.9 (17.4)	7.9 (17.4)	7.9 (17.4)	11.1 (24.5)	11.1 (24.5)	14.2 (31.3)	14.2 (31.3)	14.2 (31.3)
	Grounding rings thin type (GRL, GRH, GRV) (*1) (*3)		-	+2 (+0.08)	+2 (+0.08)	-	+2 (+0.08)	-	+2 (+0.08)	-
Integral Flowmeter	Grounding rings thick type (GRN, GRJ, GRW) (*1) (*3) (*4)		+6 (+0.24)	+6 (+0.24)	+6 (+0.24)	+6 (+0.24)	+6 (+0.24)	+6 (+0.24)	+6 (+0.24)	+6 (+0.24)
	Grounding rings thick type (GRN, GRJ) with gaskets (GA, GC, GD) (*1)		+10 (+0.39)	-	-	+10 (+0.39)	-	+10 (+0.39)	-	-

- *1: Add the value above (which is the total of both ends) to the lay length "L" when selecting optional grounding rings with/without gaskets. Also, the thickness of customer supplied gaskets should be added for getting the total lay length.
- *2: When submersible use or optional code DHC is selected, waterproof glands with union joints and cables are attached. When the cable length is 30-meters, add 9.5 kg (20.9 lb) to the weight in the table.
- *3: These grounding rings (GRL, GRH, GRV, GRW) are not applied to lining code F nor H but for U and D.
- *4: When applying these grounding rings (GRN, GRJ) to lining code H, gaskets supplied by customer are necessary. For the sizes in this table, recommended thickness of the gasket is 2 mm (0.08 in.) per one, bringing 4 mm (0.16 in.) per two to be additionally added for getting the total lay length.
- *5: The limit deviation of the lay length "L" is as follows.
- Size 25 to 200 mm (1 to 8 in.): 0/-3 mm

Unit: mm (approx. in.)

Model	Process Connection Code		CS1																	
	Size Code		150	150	150	200	200	200	250	250	250	300	300	300	350	350	350	400	400	400
	Size		150 (6)	150 (6)	150 (6)	200 (8)	200 (8)	200 (8)	250 (10)	250 (10)	250 (10)	300 (12)	300 (12)	300 (12)	350 (14)	350 (14)	350 (14)	400 (16)	400 (16)	400 (16)
	Lining Code		F	U	H, D	F	U	H, D	F	U	H, D	F	U	H, D	F	U	H, D	F	U	H, D
	Lay Length (*1) (*5)	L	299 (11.75)	299 (11.75)	299 (11.75)	349 (13.72)	349 (13.72)	349 (13.72)	448 (17.62)	448 (17.62)	448 (17.62)	498 (19.59)	498 (19.59)	498 (19.59)	548 (21.56)	548 (21.56)	548 (21.56)	598 (23.52)	598 (23.52)	598 (23.52)
	Flange Outer Diameter	øD	280 (11.02)	280 (11.02)	280 (11.02)	335 (13.19)	335 (13.19)	335 (13.19)	405 (15.94)	405 (15.94)	405 (15.94)	455 (17.91)	455 (17.91)	455 (17.91)	525 (20.67)	525 (20.67)	525 (20.67)	580 (22.83)	580 (22.83)	580 (22.83)
Remote Sensor	Flange Thickness (incl. lining flare)	t	18.4 (0.72)	18.4 (0.72)	18.4 (0.72)	18.4 (0.72)	18.4 (0.72)	18.4 (0.72)	22.4 (0.88)	22.4 (0.88)	22.4 (0.88)	25.4 (1.00)	25.4 (1.00)	25.4 (1.00)	28.9 (1.14)	28.9 (1.14)	28.9 (1.14)	28.9 (1.14)	28.9 (1.14)	28.9 (1.14)
	Lining Inner Diameter	ød	149 (5.87)	145 (5.71)	147 (5.80)	200 (7.89)	194 (7.63)	198 (7.81)	248 (9.78)	242 (9.53)	247 (9.74)	300 (11.79)	292 (11.48)	299 (11.75)	330 (12.97)	323 (12.70)	330 (12.97)	381 (14.98)	373 (14.67)	381 (14.98)
	Bolt		235 (9.25)	235 (9.25)	235 (9.25)	292 (11.50)	292 (11.50)	292 (11.50)	356 (14.02)	356 (14.02)	356 (14.02)	406 (15.98)	406 (15.98)	406 (15.98)	470 (18.50)	470 (18.50)	470 (18.50)	521 (20.51)	521 (20.51)	521 (20.51)
Integral Flowmeter	Circle Diameter	øC	149 (5.87)	145 (5.71)	147 (5.80)	200 (7.89)	194 (7.63)	198 (7.81)	248 (9.78)	242 (9.53)	247 (9.74)	300 (11.79)	292 (11.48)	299 (11.75)	330 (12.97)	323 (12.70)	330 (12.97)	381 (14.98)	373 (14.67)	381 (14.98)
	Bolt Hole Interval	θ°	22.5 (0.71)	22.5 (0.71)	22.5 (0.71)	22.5 (0.71)	22.5 (0.71)	22.5 (0.71)	22.5 (0.87)	22.5 (0.87)	22.5 (0.87)	15 (0.87)	15 (0.87)	15 (0.87)	15 (1.02)	15 (1.02)	15 (1.02)	15 (1.02)	15 (1.02)	15 (1.02)
	Bolt Hole Diameter	øh	18 (0.71)	18 (0.71)	18 (0.71)	18 (0.71)	18 (0.71)	18 (0.71)	22 (0.87)	22 (0.87)	22 (0.87)	22 (0.87)	22 (0.87)	22 (0.87)	26 (1.02)	26 (1.02)	26 (1.02)	26 (1.02)	26 (1.02)	26 (1.02)
Remote Sensor	Number of Bolt Holes	N	8	8	8	8	8	8	8	8	8	12	12	12	12	12	12	12	12	12
	Height	H1	283 (11.12)	283 (11.12)	283 (11.12)	335 (13.19)	335 (13.19)	335 (13.19)	401 (15.78)	401 (15.78)	401 (15.78)	450 (17.73)	450 (17.73)	450 (17.73)	507 (19.94)	507 (19.94)	507 (19.94)	562 (22.12)	562 (22.12)	562 (22.12)
	Height	H2	143 (5.61)	143 (5.61)	143 (5.61)	168 (6.60)	168 (6.60)	168 (6.60)	198 (7.81)	198 (7.81)	198 (7.81)	223 (8.77)	223 (8.77)	223 (8.77)	244 (9.61)	244 (9.61)	244 (9.61)	272 (10.70)	272 (10.70)	272 (10.70)
Integral Flowmeter	Height	H3	-	-	-	-	-	-	438 (17.26)	438 (17.26)	438 (17.26)	497 (19.55)	497 (19.55)	497 (19.55)	576 (22.68)	576 (22.68)	576 (22.68)	631 (24.84)	631 (24.84)	631 (24.84)
	Maximum Height	Hr	400 (15.74)	400 (15.74)	400 (15.74)	452 (17.81)	452 (17.81)	452 (17.81)	518 (20.40)	518 (20.40)	518 (20.40)	568 (22.34)	568 (22.34)	568 (22.34)	624 (24.56)	624 (24.56)	624 (24.56)	679 (26.74)	679 (26.74)	679 (26.74)
	Approx. Weight, Unit: kg (lb) (*2)		24 (53.0)	23 (50.8)	24 (53.0)	34 (75.0)	33 (72.8)	33 (72.8)	59 (130.1)	59 (130.1)	58 (127.9)	73 (161.0)	72 (158.8)	71 (156.6)	97 (213.9)	95 (209.5)	94 (207.3)	120 (264.6)	119 (262.4)	117 (258.0)
Integral Flowmeter	Maximum Height	Hi	445 (17.50)	445 (17.50)	445 (17.50)	497 (19.57)	497 (19.57)	497 (19.57)	563 (22.16)	563 (22.16)	563 (22.16)	612 (24.10)	612 (24.10)	612 (24.10)	669 (26.32)	669 (26.32)	669 (26.32)	724 (28.50)	724 (28.50)	724 (28.50)
	Approx. Weight, Unit: kg (lb)		25 (55.2)	25 (55.2)	25 (55.2)	36 (79.4)	36 (79.4)	36 (79.4)	62 (136.8)	61 (134.6)	61 (134.6)	75 (165.4)	75 (165.4)	74 (163.2)	99 (218.3)	98 (216.1)	96 (211.7)	121 (266.9)	120 (264.6)	118 (260.2)
	Grounding rings thin type (GRL, GRH, GRV) (*1) (*3)		-	+2 (+0.08)	+2 (+0.08)	-	+2 (+0.08)	+2 (+0.08)	-	+4 (+0.16)	+4 (+0.16)	-	+4 (+0.16)	+4 (+0.16)	-	+4 (+0.16)	+4 (+0.16)	-	+4 (+0.16)	+4 (+0.16)
Integral Flowmeter	Grounding rings thick type (GRN, GRJ, GRW) (*1) (*3) (*4)		+6 (+0.24)	+6 (+0.24)	+6 (+0.24)	+6 (+0.24)	+6 (+0.24)	+6 (+0.24)	+6 (+0.24)	+6 (+0.24)	+6 (+0.24)	+6 (+0.24)	+6 (+0.24)	+6 (+0.24)	+6 (+0.24)	+6 (+0.24)	+6 (+0.24)	+6 (+0.24)	+6 (+0.24)	+6 (+0.24)

- *1: Add the value above (which is the total of both ends) to the lay length "L" when selecting optional grounding rings with/without gaskets. Also, the thickness of customer supplied gaskets should be added for getting the total lay length.
- *2: When submersible use or optional code DHC is selected, waterproof glands with union joints and cables are attached. When the cable length is 30-meters, add 9.5 kg (20.9 lb) to the weight in the table.
- *3: These grounding rings (GRL, GRH, GRV, GRW) are not applied to lining code F nor H but for U and D.
- *4: When applying these grounding rings (GRN, GRJ) to lining code F or H, gaskets supplied by customer are necessary. For the sizes in this table, recommended thickness of the gasket is 3 to 5 mm (0.12 to 0.20 in.) per one, bringing 6 to 10 mm (0.24 to 0.39 in.) per two to be additionally added for getting the total lay length.
- *5: The limit deviation of the lay length "L" is as follows.
- Size 25 to 200 mm (1 to 8 in.): 0/-3 mm
 - Size 250 to 400 mm (10 to 16 in.): 0/-5 mm

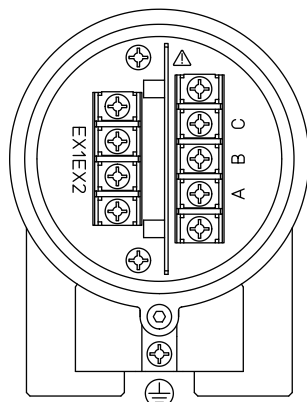
Terminal Configuration and Wiring

For Communication and I/O Suffix Code P0(EtherNet/IP), read SD 01E21C02-01EN.

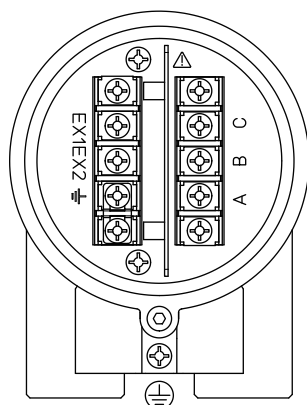
Remote Sensor:

<To be wired to Remote Transmitter>

Non Explosion Protection Use



Explosion Protection Use



Terminal Symbol	Description
A B C	Flow Signal Output
EX1 EX2	Excitation Current Input
	Protective Grounding (Outside of the terminal box)
	Functional Grounding

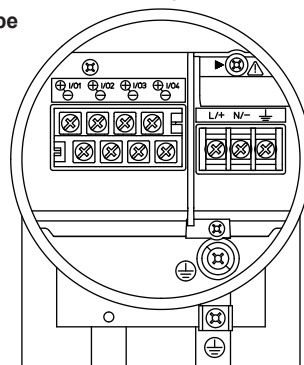
F04.ai

Note: When submersible use or optional code DHC is selected, waterproof glands with union joints and cables are attached.

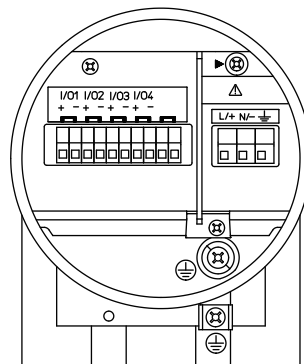
Integral Flowmeter:

<To be wired to Power Supply and I/Os>

M4 Screw Type



Clamp Type



Terminal Symbol	Description
	Shorting Screw (Need to be fixed for normal operation)
	Functional Grounding
N/- L/+	Power Supply
I/O4 - I/O4 + I/O3 - I/O3 + I/O2 - I/O2 + I/O1 - I/O1 +	Selected Input/Output
	Protective Grounding (Inside and outside of the terminal box)

F05.ai