

REPLACING ACC7B WITH CAT2



Overview

Model ACC7B is a preamplifier that allows interfacing between low level turbine flow meter signal and digital electronics. The output signal is a square wave logic level signal at frequency proportional to flow rate.

ACC7B has been manufactured by Hoffer since 80's. Recently, due to electronic components obsolescence and improvements in technology ACC7B has been replaced by model CAT2. All essential specifications of ACC7B have been matched by CAT2.

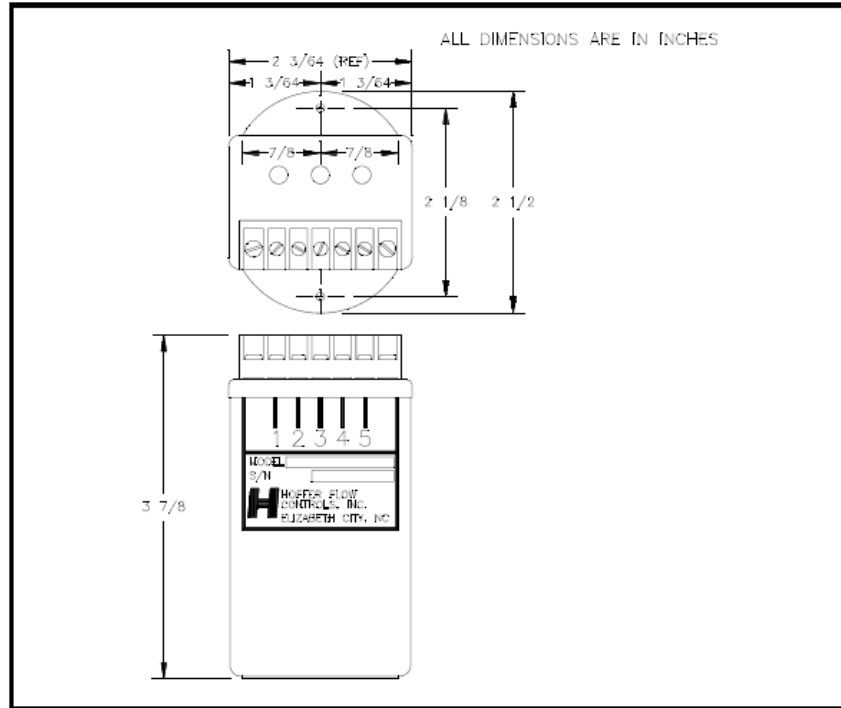
This note compares key specifications of the two models and assists with the replacing of ACC7B with CAT2 in existing applications.

Electrical Specifications

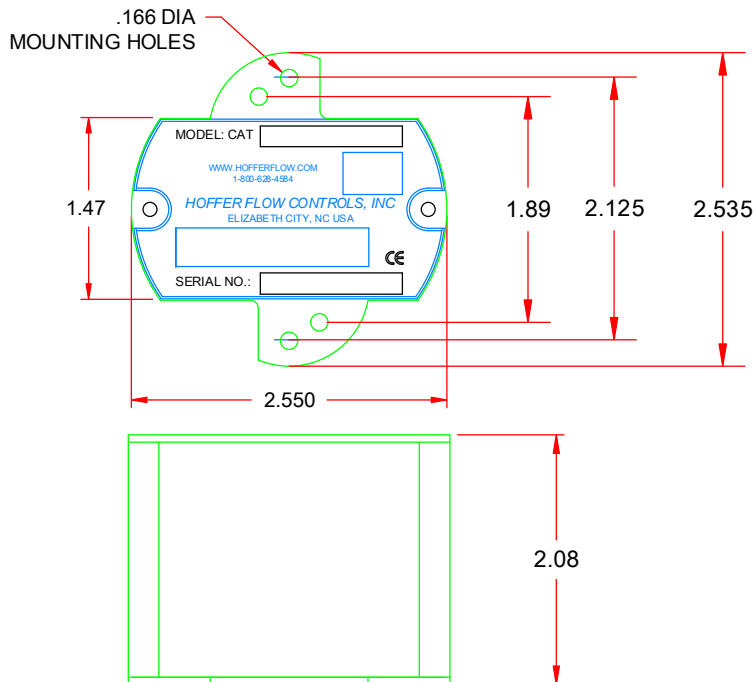
	ACC7B	CAT2
Input Signal	Magnetic Pickup 10mV to 30V RMS	Magnetic Pickup 10mV to 30V RMS
Pulse Output	Open Collector: 60V 1.0 A TTL/CMOS: 0-5V Pull up to V+ 0-10V	Open Collector: 60V 0.4 A TTL/CMOS: 0-5V Pull up to V+ 0-10V
Power Supply	12-35Vdc	12-30Vdc
Operating Temperature	0 to 70 deg C	-40 to 85 C
Sensitivity Adjustment	Manual Potentiometer	No manual adjustment is required

Outline Dimensions

General Purpose Enclosure ACC7B

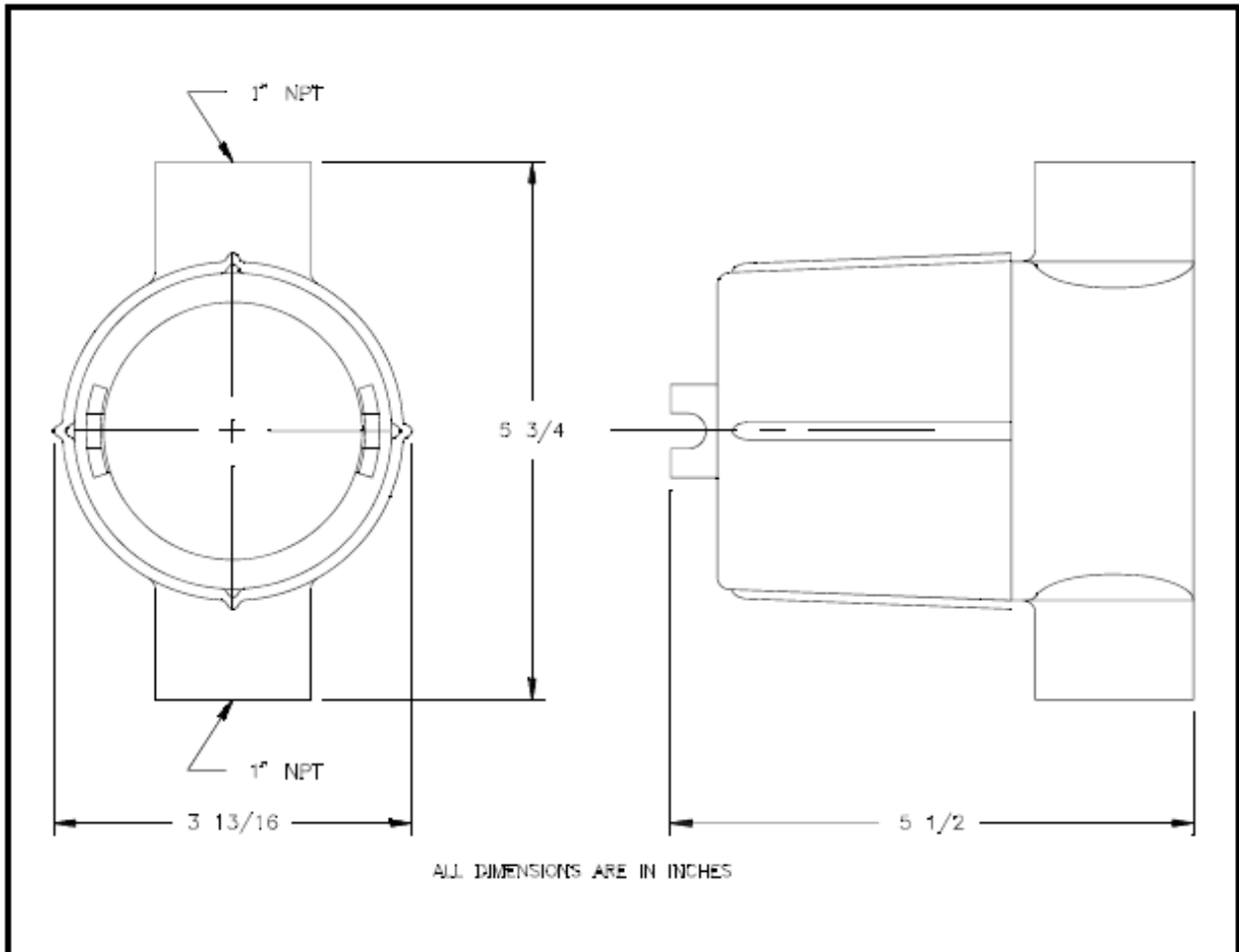


General Purpose Enclosure CAT2



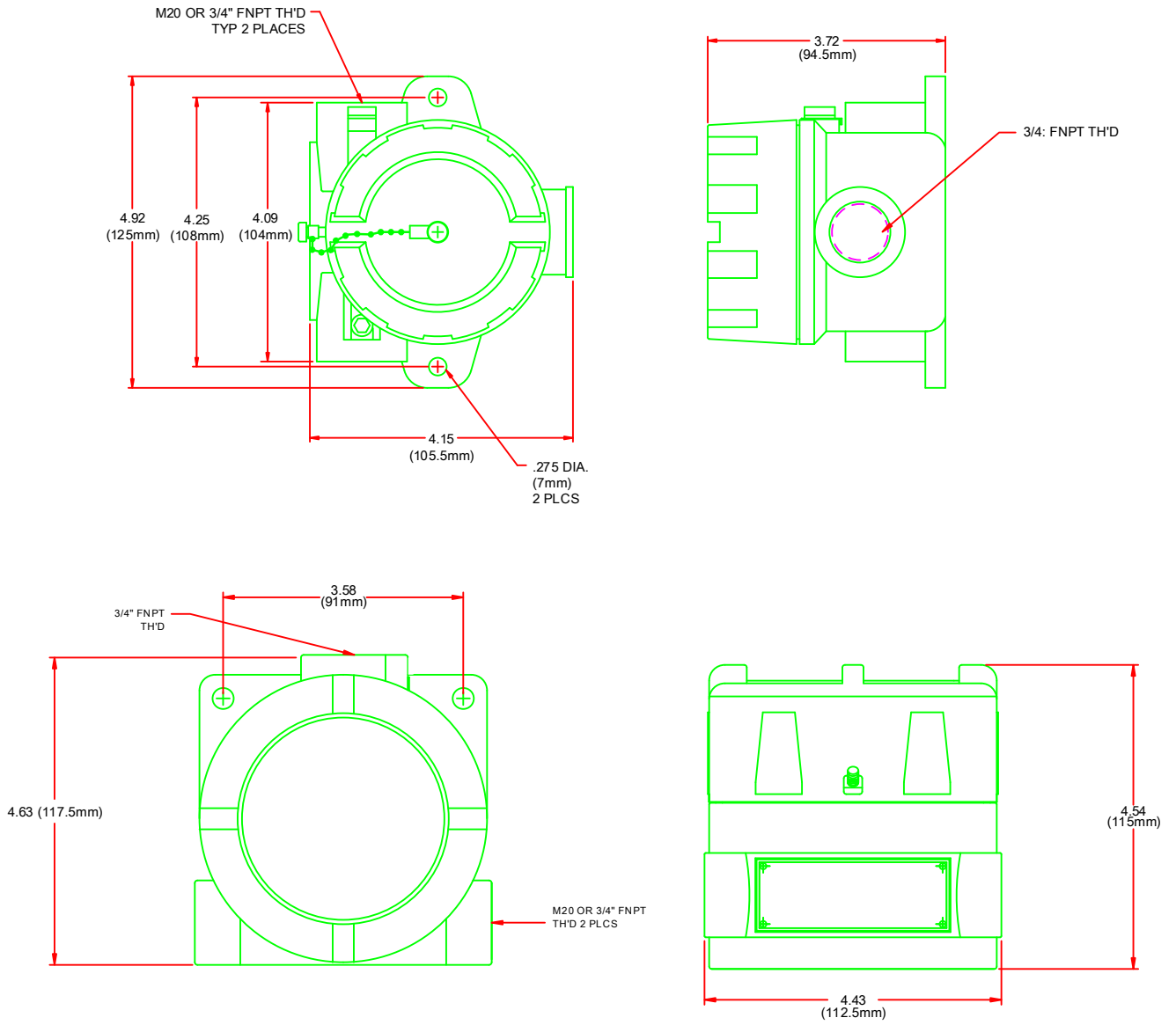
Explosion-Proof Enclosure

ACC7B



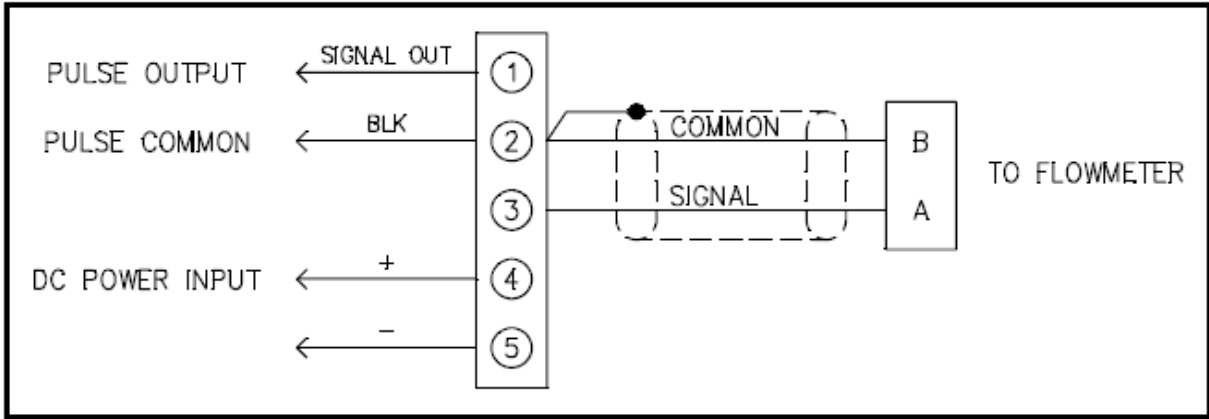
Explosion-Proof Enclosure

CAT2

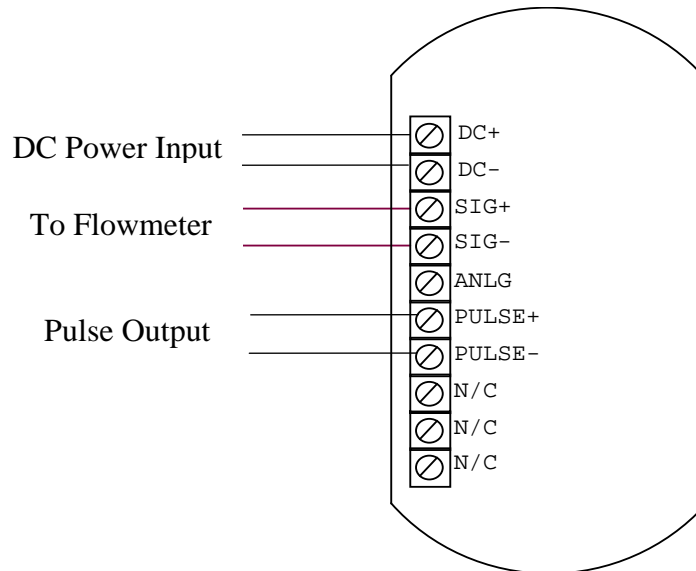


Installation Wiring

ACC7B



CAT2

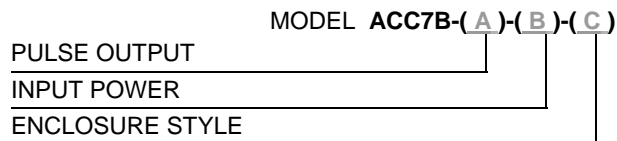


Note: Terminals (DC-), (SIG-) and (Pulse-) are connected internally.

Model Number Cross Reference

ACC7B	CAT2
ACC7B-1-1-X	CAT2-1-1-X-DC-X-X
ACC7B-2-1-X	CAT2-1-2-X-DC-X-X
ACC7B-3-1-X	CAT2-1-3-X-DC-X-X
ACC7B-5-1-X	CAT2-1-5-X-DC-X-X

ACC7B Model Number Designation



PULSE OUTPUT

MODEL ACC7B-(A)-()-()

OPTION (A)

- (1) TTL/CMOS
- (2) OPEN COLLECTOR
- (3) OPEN COLLECTOR WITH PULL UP TO V+
- (5) 0-10 V SQUARE WAVE (REQUIRED 12-35 VDC POWER)

INPUT POWER

MODEL ACC7B-()-(B)-()

OPTION (B)

- (1) UNREGULATED 8-35 VDC
- (2) REGULATED 5 VDC

ENCLOSURE STYLE

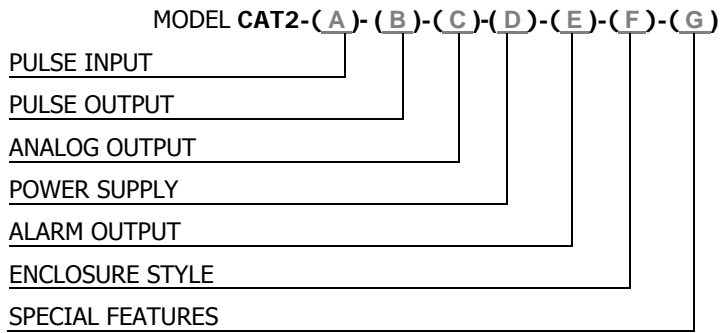
MODEL ACC7B-()-()-(C)

OPTION (C)

- (1) STYLE 1 CASE, GENERAL PURPOSE
- (3H/O) MEETS CLASS 1, DIV. 1 AND 2, GROUP D ONLY
CLASS II, GROUPS E, F, G
CLASS III
NEMA 4X WITH 'O' RING
CERTIFIED CSA, UL
BODY KILARK #GECCT-3, STOCK #200-0945
FLAT COVER, STOCK #200-0533, KILARK #GECBC.
- (3BH/O) MEETS CLASS I, DIV. 1 AND 2, GROUPS A, B, C, D
CLASS 1, ZONES 1 AND 2, GROUPS IIB + H2, IIA
CLASS II, DIV. 1 AND 2, GROUPS E, F, G
CLASS III
NEMA 3, 4, 7 (B, C, D), 9 (E, F, G)
CERTIFIED CENELEC, CSA, UL, FM
BODY KILARK #HKB, STOCK #200-0406
DOME COVER, STOCK #200-0405, KILARK #HK2D.

NOTE: INSERT (X) IN MODEL NUMBER FOR EVERY OPTION NOT SPECIFIED.

CAT2 Model Number Designation



PULSE INPUT

MODEL CAT2-(A)-()-()-()-()-()-()

OPTION (A)

- (1) MAG COIL, PULSE, DRY CONTACT
- (2) MC3P
- (3) ISOLATED PULSE, RPM, RPR COILS

PULSE OUTPUT

MODEL CAT2-()-(B)-()-()-()-()-()

OPTION (B)

- (1) 0-5V TTL / CMOS
- (2) OPEN COLLECTOR
- (3) OPEN COLLECTOR WITH PULL UP TO V+
- (4) AC SQUARE WAVE
- (5) 0-10V SQUARE WAVE

ANALOG OUTPUT

MODEL CAT2-()-()-(C)-()-()-()-()

OPTION (C)

- (1) 4-20 MA
- (3) 0-5 VDC
- (4) 0-10 VDC
- (5) 1-5 VDC

POWER SUPPLY

MODEL CAT2-()-()-()-(D)-()-()-()

OPTION (D)

- (DC) 3-30 VDC
(AC) 100-240 VAC

NOTE: WHEN (AC) IS SELECTED, THE ALARM OPTION IS NOT AVAILABLE. USE REMOTE ACC39B POWER SUPPLY.

ALARM OUTPUT

MODEL CAT2-()-()-()-()-(E)-()-()

OPTION (E)

- (1) HIGH / LOW OPEN COLLECTOR
- (2) HIGH / LOW TTL / CMOS
- (3) HIGH / LOW RELAY TWO SPDT, CONTACT RATED @ 2A 30V
- (4) HIGH OPEN COLLECTOR
- (5) HIGH TTL / CMOS
- (6) HIGH RELAY ONE SPDT, CONTACT RATED @ 2A 30V
- (7) LOW OPEN COLLECTOR
- (8) LOW TTL / CMOS
- (9) LOW RELAY ONE SPDT, CONTACT RATED @ 2A 30V

NOTE: WHEN ALARM OPTION IS SELECTED, (AC) POWER IS NOT AVAILABLE. USE REMOTE ACC39B POWER SUPPLY.

ENCLOSURE STYLE

MODEL CAT2-()-()-()-()-()-(F)-()

OPTIONS (F)

- (1) GENERAL PURPOSE. 2.6"L X 2.6"H X 2.6"W MINIMUM MOUNTING SPACE.
- (D) 2" LONG DIN RAIL MOUNT SINGLE UNIT. UP TO 20 CAT2 UNITS CAN BE MOUNTED ON A SINGLE RAIL. ADD 2" PER UNIT.
- (E3) EXPLOSION-PROOF (ALL CONDUIT PORTS ARE ¾" FNPT)
- (E3M) EXPLOSION-PROOF (CONDUIT PORTS D2 & D3 = M20 THR'D; CONDUIT PORTS D1- ¾" FNPT)
- (E4)* EXPLOSION-PROOF - FOR USE WITH AC POWERED CAT ONLY (NOT Ex d SYSTEM CERTIFIED)
***FOR Ex d CERTIFIED SYSTEM USE E6 OR E6M ENCLOSURE**
- (E6) EXPLOSION-PROOF STAINLESS STEEL (ALL CONDUIT PORTS ARE ¾"FNPT)
- (E6M) EXPLOSION-PROOF STAINLESS STEEL (M20 NOT AVAILABLE FOR CANADA)
(CONDUIT PORTS T2 = M20 THR'D; CONDUIT PORTS T1- ¾"FNPT)

NOTE: FOR UL EXPLOSION-PROOF APPLICATIONS CONTACT FACTORY.

STYLE E3, E3M, E6 AND E6M SYSTEM CERTIFIED RATINGS

- CSA/FM: CLASS I, DIV. 1, GR. BCD; CLASS II, DIV. 1, GR. EFG;
CLASS III, TYPE 4X,
CLASS 1 ZONE 1 AEx db IIB + H2 T6/T5 Gb,
Ex d IIB+H2 T6/T5; Gb; Ex tb T80°C/T86°C IIIC Db; IP66
CLASS I, ZONE 21 AEx tb T80°C/T86°C IIIC Db; IP 66
- ATEX/IECEx: II 2 G Ex db IIB + H2, T6/T5 Gb
II 2 D Ex tb IIIC T80°C/T86°C Db; IP66
T6: -40°C ≤ Ta ≤ 79°C; T5: -40°C ≤ Ta ≤ 85°C

SPECIAL FEATURES

MODEL CAT2-()-()-()-()-()-()-(G)

OPTIONS (G)

- (CE) MARK REQUIRED FOR EUROPE
 - (CFX) 6.75" LONG RISER AND UNION FOR EXPLOSION-PROOF **SYSTEM CERTIFIED ENCLOSURES** MOUNTED ON TURBINE. USED WITH "X" RISER TURBINE OPTION.
- NOTE: IF PROCESS TEMP IS < -40°C AND > 85°C, EX-PROOF ENCLOSURE MUST BE MOUNTED REMOTELY.**
- (C) REMOTE MOUNTED FOR EXPLOSION-PROOF SYSTEM CERTIFIED ENCLOSURE.
- NOTE: "X" RISER, CERTIFIED UNION, REDUCER AND ENCLOSURE (TO BE SPECIFIED), MOUNTED ON FLOWMETER.**
- (SP) SPECIAL FEATURES THAT ARE NOT COVERED IN THE MODEL NUMBER, USE A WRITTEN DESCRIPTION OF THE -SP.
 - (X) NO SPECIAL FEATURES

- NOTES:**
1. IF ENCLOSURE IS MOUNTED ON TURBINE FLOWMETER, RISER MUST BE SPECIFIED ON METER.
 2. PULSE SCALING IS SUPPLIED AS A STANDARD IN THE BASE PRICE. THE PULSE OUTPUT IS SCALED SO THAT THE MAX FLOW IS BETWEEN 75-150 HZ WHEN THE ANALOG OPTION IS SELECTED.