

Explosion-Proof Enclosure For Two-Wire Units

July 1991 Data Sheet 13.12

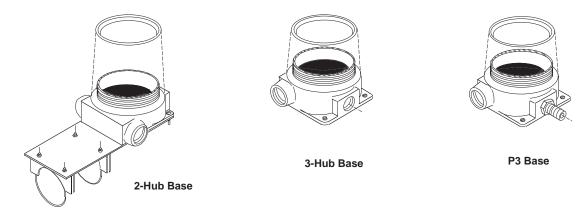


Figure 1. Types of Explosion-Proof Enclosures for Two-Wire Units

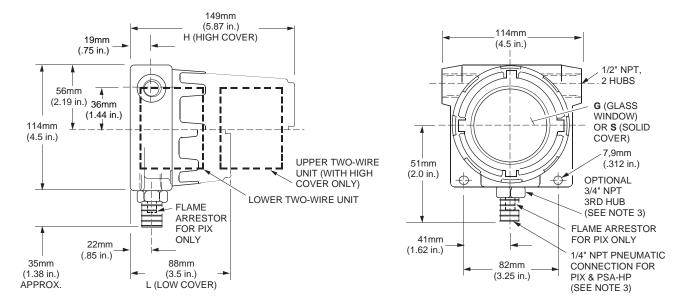


Figure 2. Outline Dimensions of Explosion-Proof Enclosures for Two-Wire Units

NOTES

- 1. This group of enclosures for two-wire transmitters and display units is available with a low cover for single units and a high cover for two units. Either cover is available with a glass window for reading displays. The bases may have 2 or 3 conduit hubs, as well as a 2 inch pipe mounting assembly.
- These enclosures are CSA certified for Class I, Division I, Groups B, C, and D; Class II, Division I, Groups E, F, and G; and Class III, Division I environments; and FM approved, Class I, Division I, Groups B, C, and D. Enclosure material is copper-free cast aluminum (except for glass window). For PIX Pressure-to-Current Transmitter: CSA certified for Class I, Groups C and D; Class II, Groups E, F, G; and Class III environments (FM rates the max. operating ambient temperature to +60°C (+140°F) due to housing environmental considerations).
- 3. The 2-hub base in Figure 1 is shown with 2" pipe mounting hardware which can also be used with the 3-hub base (for as-
- sembly refer to Figures 4 and 5 on inside pages). The U-bolts or enclosure may be rotated 90° on the plate. The 3-hub base, also shown in Figure 1, normally has two 1/2" NPT hubs and a 3/4" NPT third hub. However, when used with a PIX and/or a PSA-HP unit, the third hub has a special self-sealing pneumatic valve assembly with a 1/4" NPT pneumatic input connection (see Figure 1, P3 Base, and Figure 2). A Group C and D flame arrestor is mounted in this connector fitting for the PIX only (also shown in Figure 1, P3 Base, and Figure 2).
- 4. To install the lower unit (or only unit in low cover enclosures), squeeze spring clips together and push in place. With PIX and PSA-HP units the retaining clip is pulled up, then pushed into lock, once the pneumatic connection has been made. To in stall the upper unit, squeeze the clips together and gently push unit into place until mounting brackets rest against base housing lip.

Explosion-Proof Enclosure For Two-Wire Units

Table 1. Available Enclosures

Model Number	Conduit Hub Qty.	Cover Height	Cover Style
2LS / 2LSP*†	2	Low	Solid
2LG / 2LGP*†	2	Low	Glass
2HS / 2HSP*†	2	High	Solid
2HG / 2HGP*†	2	High	Glass
3LS / 3LSP*†	3	Low	Solid
3LG / 3LGP*†	3	Low	Glass
3HS / 3HSP*†	3	High	Solid
3HG / 3HGP*†	3	High	Glass
P3LS / P3LSP*††	2**	Low	Solid
P3HS / P3HSP*††	2**	High	Solid
P3HG / P3HGP*††	2**	High	Glass

^{*}Add P suffix to model number to include 2" pipe mounting hardware assembly.

^{††}For use only with PIX or PSA-HP.

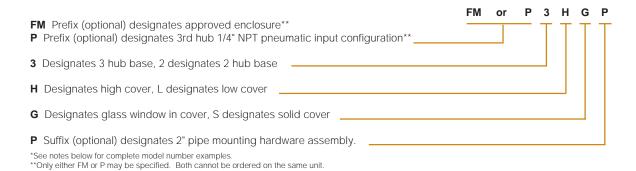


Figure 3. Enclosure Model Number Description*

NOTES

- 1. Choose model number for enclosure from Table 1.
- 2. Model Number Examples:
 - a. When a High Cover enclosure is ordered it is usually in conjunction with two (2) two-wire units. Specify the explosion-proof enclosure with the lower unit and the HPD housing with the upper.
 - Example No. 1: A TCX is the lower unit in a 2HG explosion-proof enclosure and a DVX is placed above it for direct temperature readout through the window. The TCX model number is:

TCX / J20-50MVFS / 4-20MA / 12-42DC [2HG]

The DVX model number is:

- DVX / 4-20MA / 0-1000°F / 2.5VLP [HPD]
- To order a High Glass Cover enclosure along with a twowire display unit only, specify the enclosure as the housing for the display unit.
 - Example No. 2: A DVX is being ordered in a 3HGP explosion-proof enclosure for viewing through the window. The lower two-wire transmitter is not being ordered at this time.

- The DVX model number is:
- DVX / 4-20MA / 0-1000°F / 2.5VLP [3HGP]
- The lower unit may be ordered at a later time with an HP housing.
- C. To order a High Cover enclosure along with a two-wire transmitter (not a display unit) specify the explosionproof enclosure as the housing to place it in the lower position (base).
 - Example No. 3: A TCX is being ordered as the lower unit in a 2HS enclosure. The upper unit is not being ordered at this time.

The TCX model number is:

- TCX / J20-50MVFS / 4-20MA / 12-42DC [2HS]
- The upper unit may be ordered at a later time with an HPD housing.
- 3. Enclosures with optional 2" pipe mounting may be installed in a variety of positions as shown on the next page. The illustrations in Figure 5 show the four basic 2" pipe-mounting positions. Plates may also be rotated 180°. In addition, the enclosure has four different possible positions on the plate itself.

[†]Not for use with PIX P/I Transmitters or IPT I/P Transmitters or PSA.

^{**3}rd hub is 1/4" NPT female connection to pneumatic input flame arrestor.

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Table 2. Terminal Block Designations

MODEL						
ACX	+PS	CT/PT	-PS	CT/PT		
ALX	+IN	-IN	RS	RS	+ 니 닏 -	
DVX					+IN	-IN
DSX-HP	+IN	-IN				
FDX	+PS	-IN	-PS	+SS		+IN
EP-FDX	+IN	-IN			+PS	-PS
FFX	+PS	+IN	-PS	–IN		
ITX	+IN	-IN		CAL	RS	RS
MVX	+PS	+IN	-PS	-IN		
PIX**	+1		-1			
PSA-HP	+IN	-IN	NO	СОМ	NC	
PTX	+PS	А	-PS	В		С
RBX	+PS	А	-PS	В		С
EP-RBX	+PS	А	-PS	В		С
RIX-HP	С	В	А	D	+PS	-PS
RIX-DT	AL	BL	АН	ВН	+PS	-PS
scx	+IN	+OUT*	-IN	-OUT*		
SRX	+OUT	+IN	-OUT	-IN		
тсх	+PS	+IN	-PS	-IN		
EP-TCX	+PS	+IN	-PS	-IN		
TIX-HP	+PS	-PS			+IN	-IN

^{*}See explanation for these items below in Table 2, key to Abbreviations.

Table 3. Key to Abbreviations

Key	Definition
A, B, C, D	RTD or potentiometer inputs
AH, BH	High RTD input
AL, BL	Low RTD input
CAL	Calibration
COM	Common
CT/PT	Current transformer/potential transformer
DT	Differential temperature signal input
DT	Thermocouple connection
Н	High end probe for sensing unit
I	Power supply and current input (PIX only)
IN	Signal output
IN*	Signal input & power supply (SCX only)
L	Low end probe for sensing unit
OUT	Power supply and current output
OUT*	Signal output (SCX only)
PS	Power supply and current output
RS	Reset
SS	Sensitivity select resistor

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^{**}FM approval pending