

**I/A Series<sup>®</sup> IMT25 Magnetic Flow Transmitter  
with  
FoxCom<sup>™</sup> Communication Protocol  
HART<sup>®</sup> Communication Protocol  
FOUNDATION<sup>®</sup> Fieldbus Communication Protocol  
Style A**

Give instrument Model Code when ordering.  
\*Parts preceded by an asterisk are recommended spare parts.  
See Recommended Spare Parts Summary section for quantities.

TO ORDER PARTS, CALL 1-866-746-6477.

MODEL CODE

**IMT25 with FoxCom or HART Communication Protocol**

<u>Description</u>	<u>Model</u>
I/A Series Magnetic Flow Transmitter	IMT25
<b><u>Transmitter Mounting</u></b>	
Pipe Mounting	-P
Surface or Wall Mounting	-S
Flowtube Mounting (a,b)	-I
<b><u>Language</u></b>	
English/German (Available only with FoxCom Protocol Selection D)	D
English Only (Available only with HART Protocol Selection T)	E
<b><u>Nominal Supply Voltage and Frequency</u></b>	
120 and 240 V ac, 50 and 60 Hz	A
24 V dc (c)	B
<b><u>Communication Protocols</u></b>	
FoxCom Communication Protocol	D
HART Communication Protocol	T
<b><u>Integral LCD Indicator/Keypad</u></b>	
Blind; No Indicator or Keypad	A
LCD Indicator with Keypad (e)	B
<b><u>Transmission Output Signal (f)</u></b>	
Internally Powered, 4 to 20 mA and Superimposed Digital (600 Baud FoxCom or 1200 Baud HART)	1
Externally Powered, 4 to 20 mA and Superimposed Digital (600 Baud FoxCom or 1200 Baud HART)	2
Internally Powered, 4800 Baud (FoxCom Protocol Code D only)	3
Externally Powered, 4800 Baud (FoxCom Protocol Code D only)	4
<b><u>Pulse Output Signal (f,g)</u></b>	
Off (Can be Reconfigured in the Field from OFF to ON)	0
On, Internally Powered	1
On, Externally Powered	2
<b><u>Electrical Safety (Also see "Electrical Safety Specifications" section)</u></b>	
CSA, Ordinary Locations	K
CSA, Class I, Division 2	L
FM, Ordinary Locations	M
FM, Nonincendive, n	N
No Testing Laboratory Approval or Certification Required	Z
<b><u>Optional Selections</u></b>	
I/O Access Port and Cover	-A
LCD Indicator/Keypad with a Clear Plastic Protective Guard (Cover)	-B
Dual Compartment Enclosure w/Top Insertion Type Terminal Block (h)	-C
Dual Compartment Enclosure w/Lug Type Terminal Block (h)	-D
Cable Glands for Nonconduit Applications (Cannot be used with Electrical Safety Code L and N)	-G
Example: IMT25-PEADA31K-AG	

(a) Flowtube mounted transmitter may only be used with process temperatures not exceeding 120°C (250°F).

(b) IMT25 can only be integrally mounted to 8000A and 9300A Series Flowtubes.

(c) The 24 V dc selection requires a start-up current of at least 1.5 amperes.

(d) For flowmeters with FOUNDATION Fieldbus Communication Protocol, see PSS 1-6F5 B.

(e) The LCD Indicator has ambient temperature limits of -20 and +70°C (-4 and 158°F).

(f) Internal versus external power can be changed in field by a switch setting.

(g) Pulse output can be configured as either scaled pulse output mode or frequency output mode.

(h) The electronics are in the main enclosure, and the customer terminations are in the secondary enclosure (terminations box).

MODEL CODE

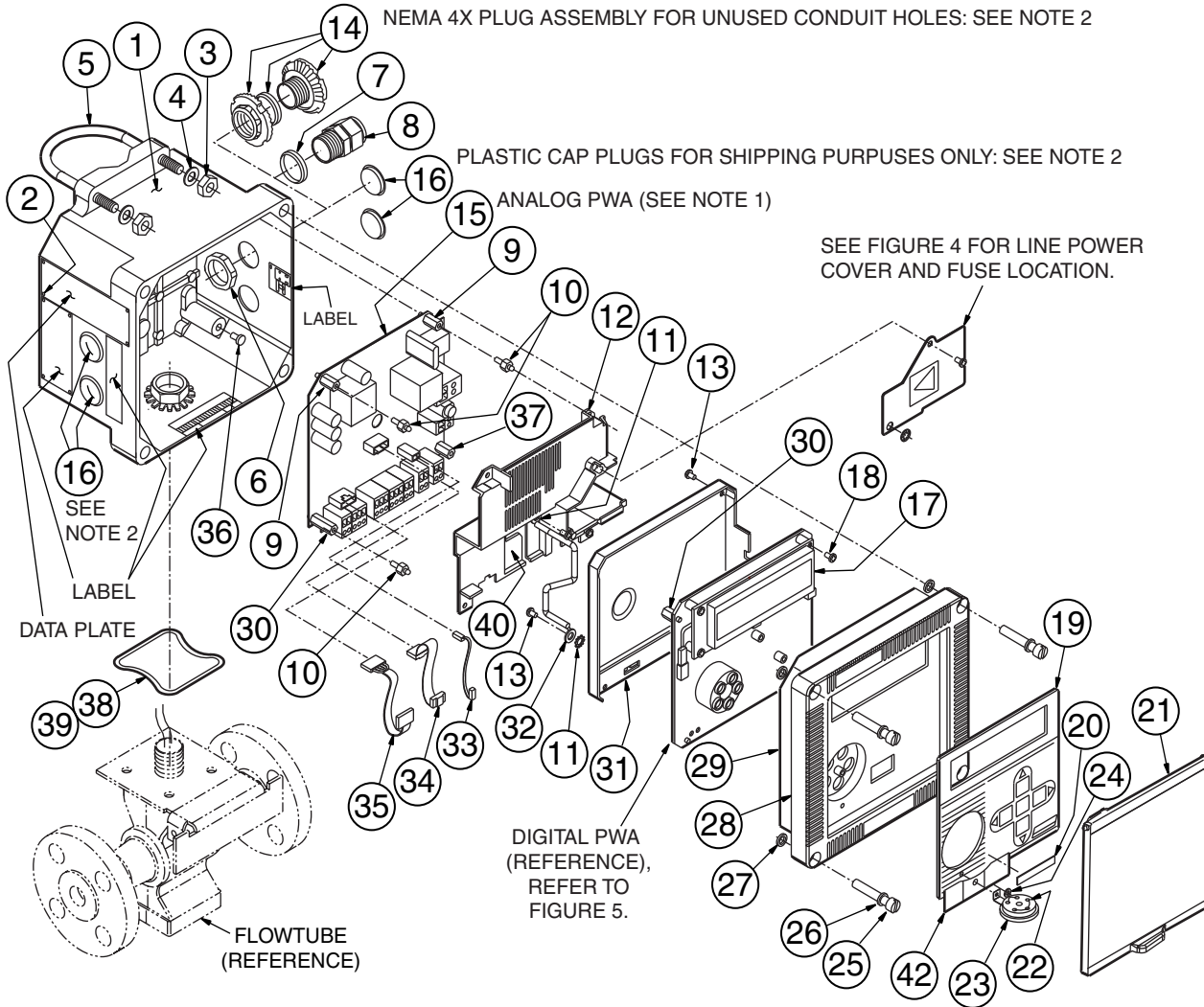
**IMT25 with FOUNDATION Fieldbus Communication Protocol**

<u>Description</u>	<u>Model</u>
I/A Series Magnetic Flow Transmitter	IMT25
<b><u>Transmitter Mounting</u></b>	
Pipe Mounting	-P
Surface or Wall Mounting	-S
Flowtube Mounting (a,b)	-I
<b><u>Language</u></b>	
English	E
<b><u>Nominal Supply Voltage and Frequency</u></b>	
120 and 240 V ac, 50 and 60 Hz	A
<b><u>Communications Protocol (c)</u></b>	
FOUNDATION Fieldbus 31.25 kbits/s, Voltage Mode MAU	F
<b><u>Integral LCD Indicator/Keypad</u></b>	
Blind; No Indicator or Keypad	A
LCD Indicator with Keypad (d)	B
<b><u>Transmission Output Signal</u></b>	
FOUNDATION Fieldbus, 31.25 kbits/s, Voltage Mode MAU, Externally Powered (e)	5
<b><u>Pulse Output Signal (f,g)</u></b>	
Off (Can be Reconfigured in the Field from OFF to ON)	0
On, Internally Powered	1
On, Externally Powered	2
<b><u>Electrical Safety (Also see "Electrical Safety Specifications" section)</u></b>	
CSA, Ordinary Locations	K
CSA, Class I, Division 2	L
FM, Ordinary Locations	M
FM, Nonincendive, n	N
No Testing Laboratory Approval or Certification Required	Z
<b><u>Optional Selections</u></b>	
I/O Access Port	-A
LCD Indicator/Keypad with a Clear Plastic Protective Guard (Cover)	-B
Dual Compartment Enclosure w/Top Insertion Type Terminal Block (h)	-C
Dual Compartment Enclosure w/Lug Type Terminal Block (h)	-D
Cable Glands for Nonconduit Applications (Cannot be used with Electrical Safety Code L and N)	-G
Example: IMT25-PEAFA70K-A	

- (a) Flowtube mounted transmitter may only be used with process temperatures not exceeding 120°C (250°F).
- (b) IMT25 can only be integrally mounted to 8000A and 9300A Series Flowtubes.
- (c) For flowmeters with FoxCom or HART Communication Protocol, see PSS 1-6F5 A.
- (d) The LCD Indicator has ambient temperature limits of -20 and +70°C (-4 and 158°F).
- (e) Powered by a Fieldbus power supply.
- (f) Internal versus external power can be changed in field by a switch setting.
- (g) Pulse output can be configured as either scaled pulse output mode or frequency output mode.
- (h) The electronics are in the main enclosure, and the customer terminations are in the secondary enclosure (terminations box).

PARTS

Figure 1. I/A Series IMT25 MAGNETIC FLOW TRANSMITTER Single Compartment Enclosure.  
See Figure 2 for Dual Compartment Enclosure.



Item	Part No.	Qty.	Part Name
1	Ref.	1	Housing (not replaceable)
2	B1276ZU	8	Screw, Tapping, Hex Head; ss; 0.086-56 x 0.187
3	X0142BW	4	Nut, Hex Head; ss; 0.312-18
4	A2015AB	4	Washer, Plain; ss; 0.312
5	L0123BV	2	U-Bolt, ss; 0.312
6	X0173UP	7	Locknut, Nylon; Black; 1/2 NPT (Option -G)
7	X0201ED	7	Sealing Ring (Option -G)
8	X0172WG	7	Gland Fitting, 1/2 NPT (Option -G)

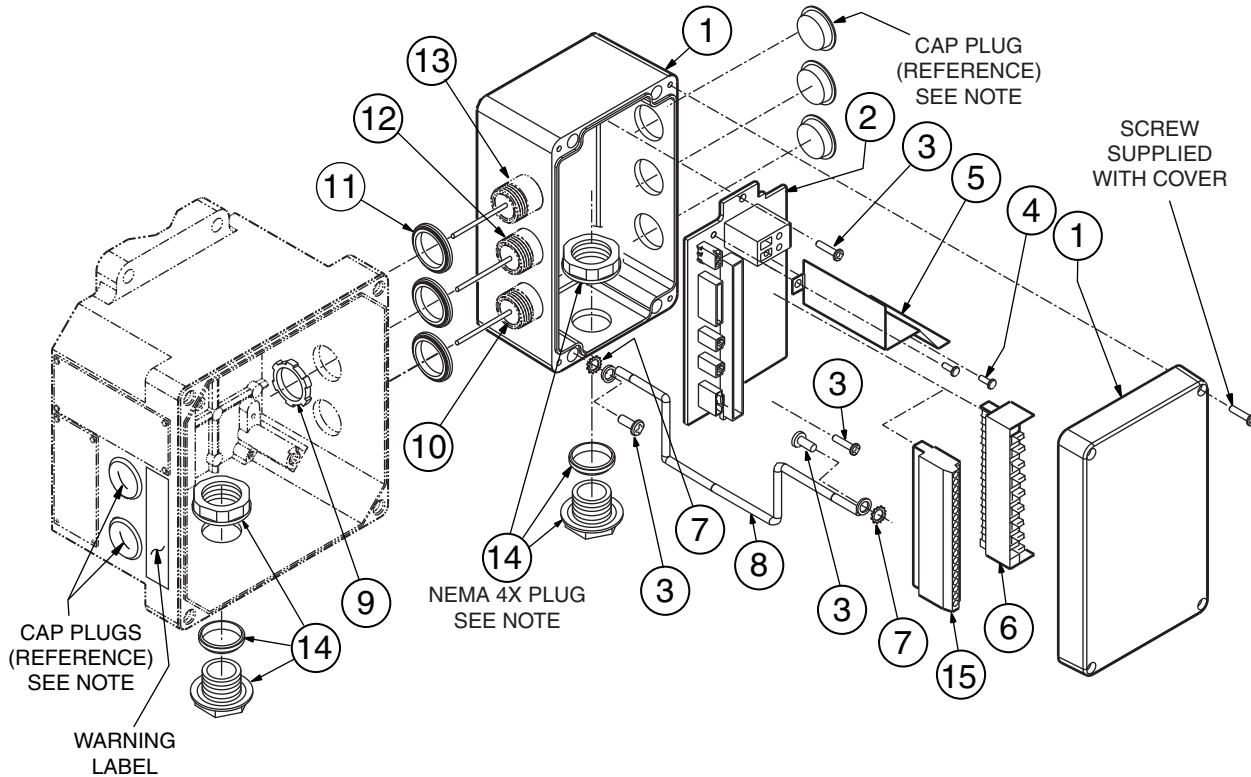
PARTS

Item	Part No.	Qty.	Part Name
9	X0201EB	2	Standoff, Tapped, Hex Head; ss; 0.138-32
10	X0201EL	3	Standoff, Nylon; 0.138
11	X0143RK	2	Washer, Lock, External Tooth; ss; 0.138
12	L0123AH	1	Cover, Analog
13	X0166HV	7	Screw, panhead, cross-recessed; ss; 0.138-32 x 0.250
14	L0400BD	A/R	Plug, NEMA® 4X (Includes Nut and Seal); 1/2 NPT; Use to plug unused conduit holes; see Note 2.
15	Below L0122DF L0122DK L0123FG	1	Analog PWA; See Note 1 For 85 to 264 V ac Operation; FoxCom and HART Protocol For 24 V dc Operation; FoxCom and HART Protocol For 85 to 264 V ac Operation; FOUNDATION Fieldbus Protocol
16	S0102CF	4	Cap Plug, Plastic; Not for use during installation. See Note 2.
17	L0123BC	1	Display Assembly (LCD Indicator/Keypad Selection B)
18	A2003ZW	4	Screw, panhead, cross-recessed; ss; 0.112-40 x 0.250
19	Ref.	1	Keyboard (replaceable only with Item 28)
20	L0123BY	1	Magnetic Strip (Option -B) (included with Item 28)
*21	L0123AY	1	Cover Assembly (Option -B)
*22	A2003ZY	1	Screw, panhead, cross-recessed; ss; 0.112-40 x 0.375 (Option -A)
*23	L0123BK	1	Plug Assembly, I/O Access Port (Option -A)
*24	X0173TV	1	Washer, plain, special; ss; 0.125 x 0.375 x 0.020 thick (Option -A)
25	X0173RY	4	Screw, fillister head, slotted; ss; 0.250-20 x 1.00
26	X0173XD	4	Washer, Nylon, flat; 0.250
27	C0100CK	4	O-Ring, Buna-N; 0.203 to 0.213
28	Below	1	Bezel (select one as applicable)
	L0123CK		Bezel with Keyboard, Display and I/O Port
	L0123CL		Bezel with I/O Port only
	L0123CM		Bezel with Keyboard and Display
	L0123CY		Bezel with Blank Keyboard
*29	L0123AQ	1	Gasket, Bezel, Silicone
30	A2033FS	5	Standoff, Hexagonal; Internal and External Thread; ss; 0.138-32
31	L0123AG	1	Shield, Digital
*32	L0123BZ	1	Cable Assembly, Earth (Ground)
*33	L0123BP	1	Cable Assembly, 2-Pin. Connects Analog PWA to Digital PWA.
*34	L0123AL	1	Cable Assembly, 20-pin. Connects Analog PWA to Digital PWA.
*35	L0123BL	1	Cable Assembly, 5-Pin. Connects Analog PWA to Digital PWA.
*36	X0169SB	2	Screw, Earth (Ground); panhead, cross-recessed; steel; 0.164-32 x 0.312
37	X0201DN	1	Standoff, Hexagonal; Internal and External Thread; 0.138-32
*38	L0123AZ	1	Gasket, Silicone (for flowtube mounting only)
39	X0170BA	A/R	Adhesive, RTV (for flowtube mounting only)
40	B0189GJ	1	Label, Contact
42	B0189GH	1	Label, Warning (included with Item 28)

— NOTES —

- 1 The analog PWA, Item 15, can be separately replaced (not recommended), but will not constitute a calibrated pair with the digital PWA shown as Item 1, 2, or 3 in Figure 5. To maintain specified transmitter performance, the analog and digital PWAs must be replaced as a calibrated set. Contact the Global Customer Support if you have questions in this regard.
- 2 Plastic cap plugs, Item 16, are used for transmitter shipment only. They are not to be used when transmitter is installed since they do not provide NEMA 4X protection. Unused conduit openings may be properly closed using NEMA 4X plugs, Item 14.

Figure 2. OPTIONAL CUSTOMER TERMINATION BOX OPTIONS -C or -D  
Dual Compartment Enclosure using Options -C or -D

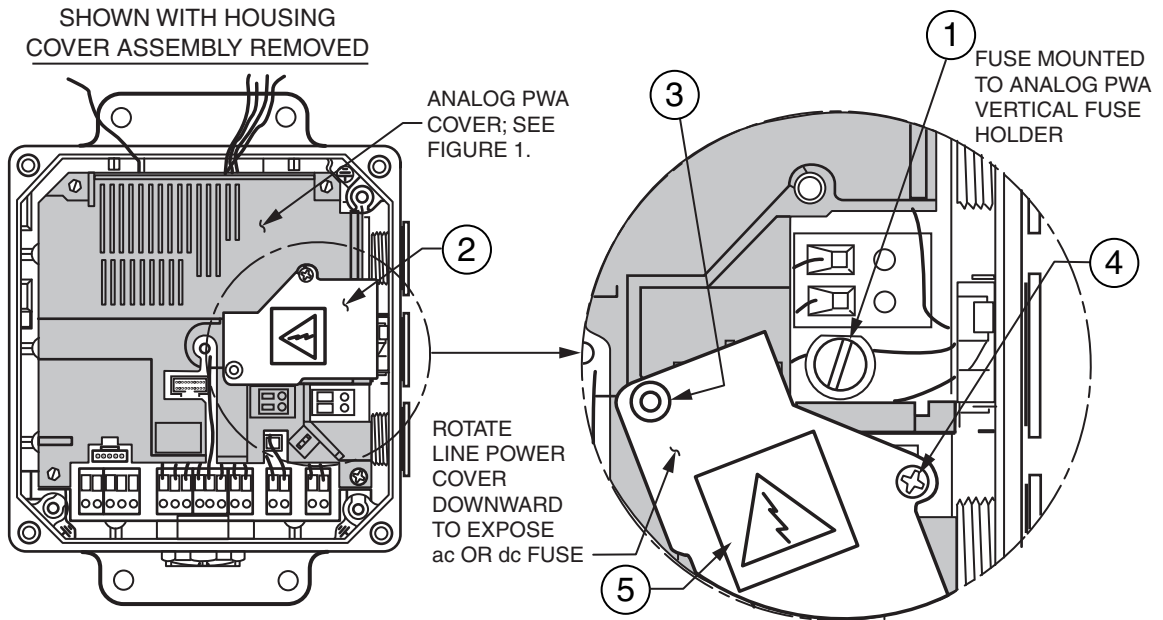


Item	Part No.	Qty.	Part Name
1	L0123BE	1	Box Assy, Customer Termination
2	L0123BX	1	PWA, Customer Termination
*3	X0173UN	5	Screw, panhead, cross-recessed; ss; metric M4-0.7 x 8
*4	X0173XV	2	Rivet, Snap
*5	L0123CP	1	Guard, Power (order Item 4 with Guard)
*6	X0175PH	1	Terminal Block, Lug Type (Option -D)
7	X0143RK	3	Washer, Lock, External Tooth; ss; 0.138
8	L0123BZ	1	Cable Assembly, Earth (Ground)
9	X0173VD	3	Lock Nut, Conduit; Diecast Zinc; 1/2 NPT
10	Below L0123BN L0123CF	1	Feed-Thru, Signal For Transmitter Mounting Codes -P, -S (Pipe, Surface, or Wall Mounting) For Transmitter Mounting Code -I (Flowtube Mounting)
11	X0201ED	3	Gasket, Sealing; Buna-N; for 1/2 NPT
12	L0123BB	1	Feed-Thru, Power
13	L0123BM	1	Feed-Thru, Contact
14	L0400BD	A/R	Plug, NEMA 4X (Includes Nut and Seal); 1/2 NPT; Use to plug unused conduit holes; see Note below.
*15	X0175PG	1	Terminal Block, Top Insertion Type (Option -C)

— NOTE —

Plastic cap plugs are used for transmitter shipment only. They are not to be used when transmitter is installed since they do not provide NEMA 4X protection. Unused conduit openings may be properly closed using NEMA 4X plugs, Item 14.

Figure 3. FUSE LOCATION ON ANALOG PWA



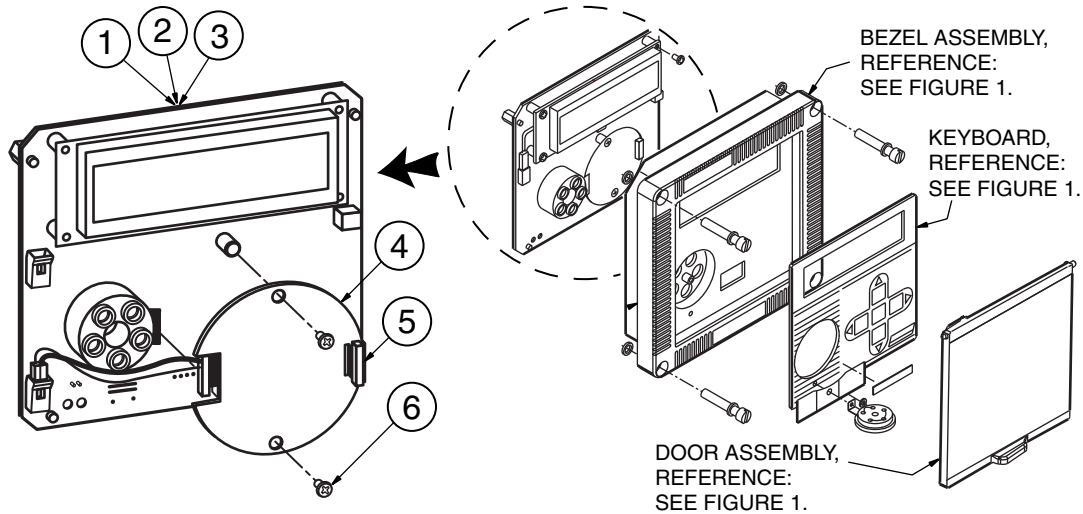
Item	Part No.	Qty.	Part Name
*1	Below P0156FX P0156FY	1	Fuse, Cartridge; Slo-Blo; Metric; see Note below 1 A, 250 V ac 2 A, 250 V dc
2	L0123AJ	1	Line Power Cover Order Item 5 with Cover for Appropriate Warning Label
3	X0171FJ	1	Retaining Ring for Line Power Cover
4	X0173TL	1	Screw, Captive; panhead, cross-recessed; ss; 0.138-32 x 0.375
5	Below B0171BX B0189GU	1	Label, Warning; Included with Item 2 for 85 to 264 V ac for 24 V dc

— NOTE —

The cartridge fuses shown are mounted on vertical fuse holders. Older versions of the analog PWA may have fuses that are mounted to horizontal fuse clips. In this case, the fuses are identified as follows:

- P0156DE Fuse, 1 A, 250 V ac
- P0156DG Fuse, 2 A, 250 V dc

Figure 4. DIGITAL PRINTED WIRING ASSEMBLIES (PWAs)  
for FoxCom, HART, and FOUNDATION Fieldbus



Item	Part No.	Qty.	Part Name
1	L0122DD	1	Digital PWA for FoxCom Protocol; Communication Selection D
2	L0130AN	1	Digital PWA for HART Protocol; Communication Selection T
3	L0123FA	1	Digital PWA for Fieldbus Protocol Communication Selection F Must be used with Fieldbus Module Item 4.
*4	D0164XR	1	FOUNDATION Fieldbus Module Must be used with Fieldbus PWA Item 3.
5	P0178CK	1	Cable Assembly, 20-pin Connector
6	A2003ZW	2	Screw, Panhead; cross-recessed; ss; 0.112-40 x 0.250

— NOTE —

Digital PWAs, Items 1, 2, and 3, can be separately replaced (not recommended), but will not constitute a calibrated pair with the analog PWA shown as Item 15 in Figure 1. To maintain specified transmitter performance, the analog and digital PWAs must be replaced as a calibrated set. The Fieldbus Module, Item 4, may, however, be separately replaced without sacrificing the system calibration. Contact the Global Customer Support if you have questions in this regard.



## RECOMMENDED SPARE PARTS SUMMARY

## RECOMMENDED SPARE PARTS SUMMARY

Figure Number	Item Number	Part Number	Part Name	Number of Parts Recommended for		
				1 Inst.	5 Inst.	20 Inst.
1	21	L0123AY	Cover Assembly (Option -B)	1	3	5
	22	A2003ZY	Screw, panhead, cross-recessed; ss; 0.112-40 x 0.250 (Option -A)	1(a)	3(a)	5(a)
	23	L0123BK	I/O Plug Assembly (Model Code Option -A)	1	3	5
	24	X0173TV	Washer (Option -A)	1(a)	3(a)	5(a)
	29	L0123AQ	Gasket, Bezel, Silicone	1	2	5
	32	L0123BZ	Cable Assembly, Earth (Ground)	1	2	5
	33	L0123BP	Cable Assembly, 2-Pin	1	2	5
	34	L0123AL	Cable Assembly, 20-Pin	1	2	5
	35	L0123BL	Cable Assembly, 5-Pin	1	2	5
	36	X0169SB	Screw, Earth (Ground); pnhd, cross-recessed; st.;; 0.164-32 x 0.312	2(a)	6(a)	10(a)
	38	L0123AZ	Gasket, Silicone; for flowtube mounting only	1	2	5
2	3	X0173UN	Screw, panhead, cross-recessed; ss; metric M4-07 x 8	2(a)	4(a)	8(a)
	4	X0173XV	Rivet, Snap	1(a)	2(a)	4(a)
	5	L0123CP	Guard, Power	1	2	4
	6	X0175PH	Terminal Block, Lug Type	1	2	4
	15	X0175PG	Terminal Block, Top Insert	1	2	4
3	1	Below	Fuse, Cartridge; Slo-Blo; Metric(b)			
		P0156FX	1 A, 250 V ac	1	2	5
		P0156FY	2 A, 250 V dc	1	2	5
4	4	D0164XR	Module, FOUNDATION Fieldbus	1	1	2

(a) The hardware quantities listed are estimated needs for immediate availability should a screw, etc., be misplaced or lost during the various assembly procedures. Contact the Global Customer Support for minimum ordering quantities.

(b) Select ac or dc fuse as applicable.

