

I/A Series[®]
Multivariable Transmitters
—
Model IMV30
with
FoxCom[™] and HART[®] Communication Protocols
for
AP, DP, and T Measurements
—
Style A

*Parts preceded by an asterisk are recommended spare parts.
Give Instrument Model Number and Style when ordering.
See Recommended Spare Parts Summary section for quantities.

TO ORDER PARTS, CALL INVENSYS SYSTEMS INC. AT 1-866-746-6477.

NOTE

1. For Transmitter Assembly - Electronics Housing, see Figure 1.
 2. For Replacement Sensor Assembly used with traditional structure, see Figure 2.
 3. For Replacement Sensor Assembly used with low profile structures LP1 and LP2, see Figure 3.
 4. For Bottomworks parts used with traditional structure, see Figure 4.
 5. For optional LCD Indicator Assembly (Option -L1), see Figure 5.
 6. For optional Custody Transfer lock and seal (Option -Z2), see Figure 6.
 7. For optional Standard Style Mounting Bracket Sets (Options -M1 and -M2), see Figure 7.
 8. For optional Universal Style Mounting Bracket Set (Option -M3), see Figure 8.
 9. For optional Conduit Connectors (Options -A1 and -A3), see Figure 9.
 10. For optional Tubing Connectors (Options -E3 and -E4), see Figure 10.
 11. For recommended spare parts summary, see table at end of this document.
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MODEL CODE

<u>Description</u>	<u>Model</u>			
Multivariable Transmitter	IMV30			
<u>Electronics Versions and Output Signal</u>				
Intelligent; Digital, FoxCom and 4 to 20 mA dc, Configurable (Version -D)	-D			
Intelligent; Digital HART and 4 to 20 mA dc (Version -T)	-T			
<u>Structure Code - Process Covers, Sensor Material, and Sensor Fill Fluid</u>				
<u>With Traditional Structure</u>				
Covers	Sensor	Fill Fluid		
316 ss	316L ss	Silicone	22	
316 ss	316L ss	Fluorinert	23	
316 ss	Hastelloy C	Silicone	26	
316 ss	Hastelloy C	Fluorinert	27	
Hastelloy C	Hastelloy C	Silicone	46	
Hastelloy C	Hastelloy C	Fluorinert	47	
<u>Span Limits - Differential Pressure (DP) Measurement</u>				
kPa	inH₂O	mbar	Available with (a)	
0.12 and 2.5	0.5 and 10	1.2 and 25	AP Code G only	L
0.75 and 7.5	3 and 30	7.5 and 75	AP Code G only	A
0.5 and 50	2 and 200	5 and 500	AP Codes D, E, H, and F only	B
2.5 and 210	10 and 840	25 and 2100	AP Codes D, E, H, and F only	C
<u>Span Limits - Absolute Pressure (AP) Measurement (Absolute Measured; Gauge Calculated)</u>				
MPa	psi	bar or kg/cm	Available with (a)	
0.02 and 2.1	3 and 300	0.21 and 21	DP Codes B and C only	D
0.07 and 3.5	10 and 500	0.7 and 35	DP Codes L and A only	G
0.21 and 10	30 and 1500	2.1 and 100	DP Codes B and C only	E
0.42 and 20	60 and 3000	4.2 and 200	DP Codes B and C only	H
3.4 and 36.5	500 and 5300	34 and 365	DP Codes B and C only	F
<u>Process Connector Type (Material Same as Process Cover Material)</u>				
None, Covers tapped for 1/4 NPT				0
1/4 NPT (Not Available with Structure Codes 46 and 47 - Hastelloy C Process Covers)				1
1/2 NPT				2
Rc 1/4 (Not Available with Structure Codes 46 and 47) - Hastelloy C Process Covers				3
Rc 1/2				4
1/2 Schedule 80 Welding Neck (Not Available with Structure Codes 46 and 47 - Hastelloy C Process Covers)				6
<u>Conduit Connection and Housing Material</u>				
1/2 NPT Connection, Aluminum Housing				1
PG 13.5 Connection, Aluminum Housing (Available with Electrical Safety Codes E, D, M, and N only)				2
1/2 NPT Connection, 316 ss Housing				3
PG 13.5 Connection, 316 ss Housing (Available with Electrical Safety Codes E, D, M, and N only)				4
M20 Connection, Aluminum Housing (Available with Electrical Safety Codes E, D, M, and N only)				5
M20 Connection, 316 ss Housing (Available with Electrical Safety Codes E, D, M, and N only)				6
<u>Electrical Safety</u>				
ATEX II 1 GD, EEx ia IIC, Zone 0; or II 1/2 GD, EEx ib IIC, Zone 0/Zone 1; with Version -T only				E
ATEX II 2 GD, EEx d IIC, Zone 1 (b)				D
ATEX II 3 GD, EEx nL IIC, Zone 2; with Version -T only				N
ATEX Multiple Certifications; with Electronics Version -T only (includes ATEX Codes E, D, and N) (b) (See Electrical Safety Specifications section for <u>user marking</u>)				M
CSA Certifications:				
Version -T: Division 1 intrinsically safe and explosionproof; also zone certified Ex ia IIC				C
Version -D: Division 1 explosionproof				
CSA Certifications: (b)				
Version -T: Zone certified Ex d IIC; also zone certified Ex ia IIC; also Division 1 explosionproof and intrinsically safe				B
Version -D: Zone certified Ex d IIC; also Division 1 explosionproof.				

Model Code continued on next page

MODEL CODE (Cont.)

Electrical Safety (Cont.)				
FM Approvals:				F
Version -T: Division 1 intrinsically safe and explosionproof; also zone certified AEx ia IIC				
Version -D: Division 1 explosionproof				
FM Approvals: (b)				G
Version -T: Zone approved AEx d IIC; also zone approved AEx ia IIC;				
also Division 1 explosionproof and intrinsically safe				B
Version -D: Zone approved AEx d IIC; also Division 1 explosionproof.				
SAA Certified Flameproof; Ex d IIC, Gas Groups IIC, Zone 1				A
Optional Selections (See PSS 2A-1Z9 E for Options/Accessories not listed in Model Code)				
Refer to descriptions that follow.				
Mounting Bracket Set				
Painted Steel Bracket with Plated Steel Bolts				-M1
Stainless Steel Bracket with Stainless Steel Bolts				-M2
Digital Indicator with Pushbuttons				
Digital Indicator, Pushbuttons, and Window Cover				-L1
DIN 19213 Construction used with Process Connector Code "0" and 316 ss Process Covers Only				
Process	Cover	Cover Screw	Connector Screw	
Cover	Screw	Material	Size	Material
Type	Material	Size	Material	
Single Ended	Steel	M10 (by User)	-	-D1
Double Ended (d)	Steel	M10	Steel	-D2
(Blind Kidney Flange on back)				
Single Ended	Steel	7/16 (by User)	-	-D3
Double Ended (d)	Steel	7/16	Steel	-D4
(Blind Kidney Flange on back)				
Single Ended	316 ss	7/16 (by User)	-	-D5
Double Ended (d)	316 ss	7/16	316 ss	-D6
(Blind Kidney Flange on back)				
Single Ended	17-4 ss	7/16 (by User)	-	-D7
Double Ended (d)	17-4 ss	7/16	17-4 ss	-D8
(Blind Kidney Flange on back)				
Cleaning and Preparation				
Unit Degreased - for Silicone Filled Sensors Only				-X1
(Not for Oxygen/Chlorine/Other Fluids that may react with Silicone)				
Cleaned and Prepared for Oxygen Service - for Fluorinert Filled Sensors Only				-X2
Cleaned and Prepared for Chlorine Service - for Fluorinert Filled Sensors Only				-X3
(includes 17-4 ss bolting; therefore do not also specify Option -B2)				
Bolting for Process Covers/Connectors - Not Available with DIN 19213 Construction				
316 ss Bolts and Nuts (e)				-B1
17-4 ss Bolts and Nuts (e)				-B2
B7M Bolts and Nuts (e)(f)				-B3
Conduit Connectors				
Hawke-Type 1/2 NPT Cable Gland for use with Conduit Connection Codes 1 and 3				-A1
Not available with Electrical Safety Code F				
M20 Conduit Thread Adapter for use with Conduit Connection Codes 1 and 3				-A3
Only available with Electrical Safety Code D				
Electronics Housing Features				
Custody Transfer Lock and Seal				-Z2
Tubing Connectors				
316 ss, Connecting 6 mm Tubing to 1/4 NPT Process Connector (g)				-E3
316 ss, Connecting 12 mm Tubing to 1/2 NPT Process Connector (h)				-E4

Model Code continued on next page

MODEL CODE (Continued)

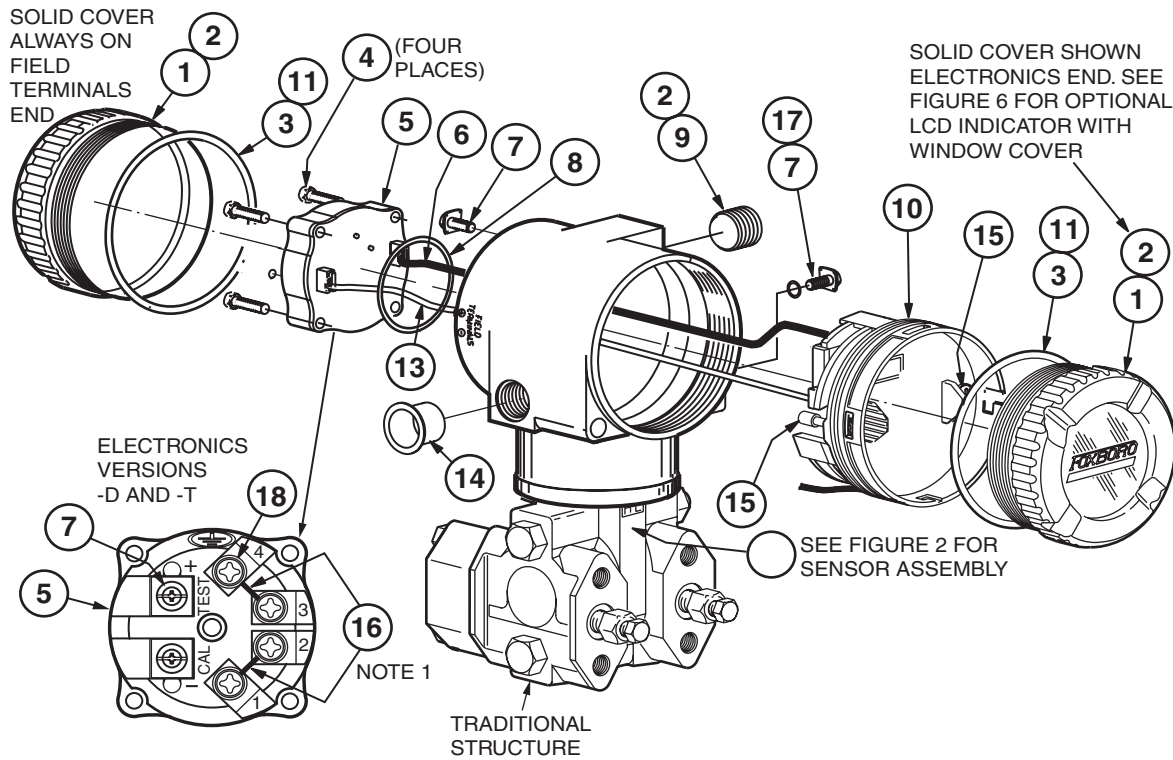
	Optional Suffix
Optional Selections (Cont.)	
Custom Factory Configuration	
Digital Output (4 to 20 mA Default if not selected) - Available with FoxCom, Version D, Only	-C1
Full Factory Configuration (Requires Configuration Form to be Filled Out)	-C2
Instruction Books (Common MI, Brochure, and Full Documentation Set on CD-ROM is Standard)	
Without Instruction Book and CD; only "Getting Started" brochure is supplied	-K1
Miscellaneous Optional Selections	
Low Temperature Operative Limits of Electronics Housing Extended down to -50°C (-58°F) (j)	-J
Supplemental Customer Tag (Stainless Steel Tag wired onto Transmitter)	-T
Supply Vent Screw in Side of Each Process Cover (Not available with DIN 19213 Construction Options -D1 to -D8.)	-V
Example: IMV30-T22D21F-M1L1W	

- (a) See table below for allowable DP and AP Span Limit Code combinations.
- (b) A cover lock is provided as standard construction with Electrical Safety Codes D, B, G, and M.
- (c) Footnote (c) intentionally not used.
- (d) Temperature limits are 0 and 60°C (32 and 140°F) with Options -D2, -D4, -D6, and -D8. Also not available with Mounting Bracket Sets -M1 and -M2.
- (e) Not available with DIN 19213 Construction Options -D1 to -D8. Select Option Codes -D5 to -D8 to get stainless bolting on DIN 19213 Transmitters.
- (f) Selection of Option -B3 normally requires selection of Auxiliary Specification (AS) MR-01 (NACE Standard MR 01-75).
- (g) Only available with Structure Codes 22 and 23; and only with Process Connector Codes 0 and 1.
- (h) Only available with Structure Codes 22 and 23; and only with Process Connector Code 2.
- (j) Option -J not available with:
 - Structures with Fluorinert Fill (Codes 23, 27, 47, LM, and LD)
 - DIN Construction Options D2, D4, D6, and D8.

Sensor URL, Maximum Static and Working Pressure (MWP), and Maximum Overrange Pressure

Allowable Span Code Combinations DP and AP	Sensor URL (DP and AP)				Maximum Static and Maximum Working Pressure		Maximum Overrange Pressure	
	DP	AP	DP	AP	MPaa	psia	MPaa	psia
L and G	10 inH ₂ O	500 psia	2.5 kPa	3.4 MPaa	3.5	500	5.2	750
A and G	30 inH ₂ O	500 psia	7.5 kPa	3.4 MPaa	3.5	500	5.2	750
B and D	200 inH ₂ O	300 psia	50 kPa	2.1 MPaa	2.1	300	3.1	450
B and E	200 inH ₂ O	1500 psia	50 kPa	10 MPaa	10	1500	15	2250
B and H	200 inH ₂ O	3000 psia	50 kPa	20 MPaa	20	3000	30	4500
B and F	200 inH ₂ O	5300 psi	50 kPa	36.5 MPaa	36.5	5300	51.2	7420
C and D	840 inH ₂ O	300 psia	210 kPa	2.1 MPaa	2.1	300	3.1	450
C and E	840 inH ₂ O	1500 psia	210 kPa	10 MPaa	10	1500	15	2250
C and H	840 inH ₂ O	3000 psia	210 kPa	20 MPaa	20	3000	30	4500
C and F	840 inH ₂ O	5300 psia	210 kPa	36.5MPaa	36.5	5300	51.2	7420

**TRANSMITTER ASSEMBLY – TOPWORKS (Figure 1)
(Shown with Traditional Structure)**



Item	Part No.	Qty.	Part Name
1	Below D0162AP D0162VD	2	Cover, Solid (see Figure 6 for Window Cover with Indicator Option) Aluminum Cover Stainless Steel Cover
2	X0118CC	1	Grease, Lubriplate® (1-3/4 ounce tube)
*3	X0201FC	2	O-Ring, Cover
4	Below X0133UW X0133VP	4	Screw, Socket Head, 0.138-32 x 0.750 Steel Screw - used with Aluminum Housing Stainless Steel Screw - used with 316 ss Housing
5	D0149FL	1	Terminal Block Assembly
6	P0177JE	1	Cable Assembly, Power
7	D0162VJ	4	Screw Assembly, Earth (Ground), 0.164-32 x 0.375
8	X0144KR	1	O-Ring, Terminal Block Assembly
9	Below B0139CA B0139SK X0178GT D0179FJ D0179FK	1	Pipe Plug for Unused Conduit Connection – see WARNING Pipe Plug, Aluminum, 1/2 NPT; with Housing Code 1 Pipe Plug, 316 ss, 1/2 NPT; with Housing Code 3 Pipe Plug, 316 ss, PG 13.5; with Housing Codes 2 and 4 Pipe Plug, Aluminum, M20; with Housing Code 5 Pipe Plug, 316 ss, M20; with Housing Code 6

Item	Part No.	Qty.	Part Name
*10	Below D0174DB D0162UQ	1	Electronics Module Digital FoxCom and/or 4 to 20 mA (Version -D) Digital HART and 4 to 20 mA (Version -T)
11	0048130	A/R	Grease, Silicone (150 gram Tube)
*12	Figure 2	1	Replacement Sensor Assembly (See Note 2 below)
13	P0178BQ	1	Cable Assembly, RTD
14	S0102BT	1	Plug, Poly (Remove Prior to Transmitter installation)
15	Below D0162VM D0166CY	2	Screw, Captive, Pan Head, 0.138-32 x 0.615 Steel Screw - used with Aluminum Housing 316 ss Screw - used with 316 ss Housing
16	B0300CL	2	Jumper Assembly, Terminal Block (Shown for 2-wire RTD)
17	X0173YA	1	Washer for External Ground, 0.196 ID, 0.383 OD
18	X0100CC	4	Screw Assembly, Terminal, 0.138-32 x 0.310

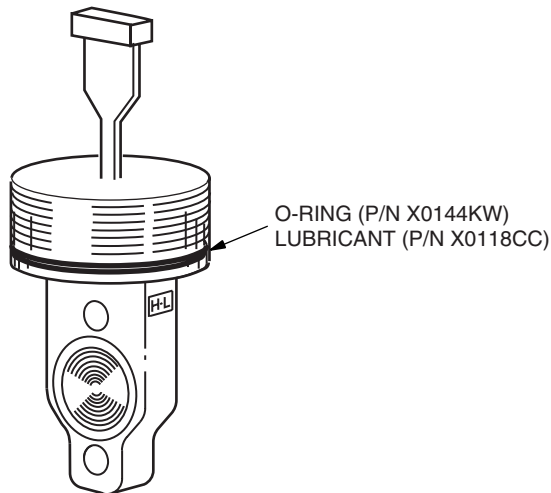
⚠ WARNING

To maintain IP66 (IEC 529) and NEMA® 4X protection, unused conduit opening must be plugged. In addition, the threaded housing covers must be installed.

NOTE

1. Terminal block assembly, Item 5, is shipped with two jumpers for 2-wire RTD. Only one jumper is required for 3-wire RTD, and no jumpers are required for 4-wire RTD. See installation MI.
 2. The sensor assembly configuration varies with fill fluid, wetted part material, maximum span, and structure. Refer to Figure 2 for sensor assembly part numbers with these various configurations.
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REPLACEMENT SENSOR ASSEMBLY (Figure 2)
(For use with Traditional Structure)



Traditional Structure; 316L Sensor; Silicone Oil Fill; 316 ss Process Cover

Part Number	Reference Model Code	Maximum Span	
		Differential Pressure	Absolute Pressure
D0179JA	IMV30-.22LG	2.5 kPa (10 inH ₂ O)	3.5 MPaa (500 psia)
D0174BG	IMV30-.22AG	7.5 kPa (30 inH ₂ O)	3.5 MPaa (500 psia)
D0174CB	IMV30-.22BD	50 kPa (200 inH ₂ O)	2.1 MPaa (300 psia)
D0174CH	IMV30-.22BE	50 kPa (200 inH ₂ O)	10 MPaa (1500 psia)
D0186XJ	IMV30-.22BH	50 kPa (200 inH ₂ O)	20 MPaa (3000 psia)
D0186ZG	IMV30-.22BF	50 kPa (200 inH ₂ O)	36.5 MPaa (5300 psia)
D0174CP	IMV30-.22CD	210 kPa (840 inH ₂ O)	2.1 MPaa (300 psia)
D0174CV	IMV30-.22CE	210 kPa (840 inH ₂ O)	10 MPaa (1500 psia)
D0186XP	IMV30-.22CH	210 kPa (840 inH ₂ O)	20 MPaa (3000 psia)
D0186ZN	IMV30-.22CF	210 kPa (840 inH ₂ O)	36.5 MPaa (5300 psia)

Traditional Structure; 316L Sensor; Fluorinert Oil Fill; 316 ss Process Cover

Part Number	Reference Model Code	Maximum Span	
		Differential Pressure	Absolute Pressure
D0179JC	IMV30-.23LG	2.5 kPa (10 inH ₂ O)	3.5 MPaa (500 psia)
D0174BN	IMV30-.23AG	7.5 kPa (30 inH ₂ O)	3.5 MPaa (500 psia)
D0174EB	IMV30-.23BD	50 kPa (200 inH ₂ O)	2.1 MPaa (300 psia)
D0174EH	IMV30-.23BE	50 kPa (200 inH ₂ O)	10 MPaa (1500 psia)
D0186XU	IMV30-.23BH	50 kPa (200 inH ₂ O)	20 MPaa (3000 psia)
D0186ZU	IMV30-.23BF	50 kPa (200 inH ₂ O)	36.5 MPaa (5300 psia)
D0174EP	IMV30-.23CD	210 kPa (840 inH ₂ O)	2.1 MPaa (300 psia)
D0174EV	IMV30-.23CE	210 kPa (840 inH ₂ O)	10 MPaa (1500 psia)
D0186XZ	IMV30-.23CH	210 kPa (840 inH ₂ O)	20 MPaa (3000 psia)
D0186ZZ	IMV30-.23CF	210 kPa (840 inH ₂ O)	36.5 MPaa (5300 psia)

**REPLACEMENT SENSOR ASSEMBLY (Figure 2)(Cont.)
(For use with Traditional Structure)**

Traditional Structure; Hastelloy C Sensor; Silicone Oil Fill; 316 ss or Hastelloy C Process Cover

Part Number	Reference Model Code	Maximum Span		Reference Model Code
		Differential Pressure	Absolute Pressure	
D0179JB	IMV30-.26LG	2.5 kPa (10 inH ₂ O)	3.5 MPaa (500 psia)	IMV30-.46LG
D0174BJ	IMV30-.26AG	7.5 kPa (30 inH ₂ O)	3.5 MPaa (500 psia)	IMV30-.46AG
D0174CD	IMV30-.26BD	50 kPa (200 inH ₂ O)	2.1 MPaa (300 psia)	IMV30-.46BD
D0174CK	IMV30-.26BE	50 kPa (200 inH ₂ O)	10 MPaa (1500 psia)	IMV30-.46BE
D0186XL	IMV30-.26BH	50 kPa (200 inH ₂ O)	20 MPaa (3000 psia)	IMV30-.46BH
D0186ZJ	IMV30-.26BF	50 kPa (200 inH ₂ O)	36.5 MPaa (5300 psia)	IMV30-.46BF
D0174CR	IMV30-.26CD	210 kPa (840 inH ₂ O)	2.1 MPaa (300 psia)	IMV30-.46CD
D0174CX	IMV30-.26CE	210 kPa (840 inH ₂ O)	10 MPaa (1500 psia)	IMV30-.46CE
D0186XR	IMV30-.26CH	210 kPa (840 inH ₂ O)	20 MPaa (3000 psia)	IMV30-.46CH
D0186XQ	IMV30-.26CF	210 kPa (840 inH ₂ O)	36.5 MPaa (5300 psia)	IMV30-.46CF

Traditional Structure; Hastelloy C Sensor; Fluorinert Oil Fill; 316 ss or Hastelloy C Process Cover

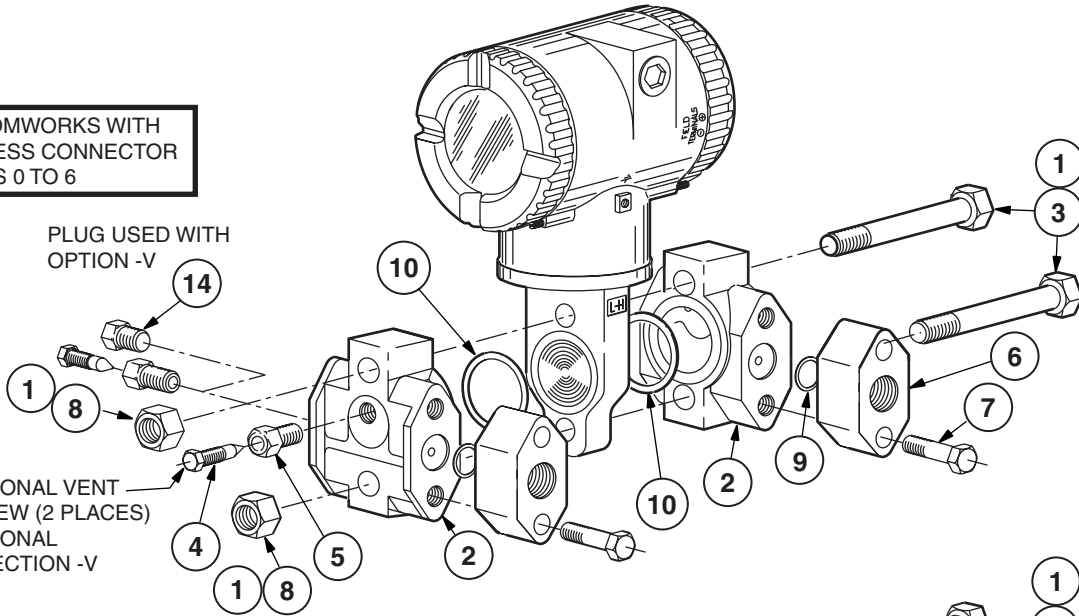
Part Number	Reference Model Code	Maximum Span		Reference Model Code
		Differential Pressure	Absolute Pressure	
D0179JD	IMV30-.27LG	2.5 kPa (10 inH ₂ O)	3.5 MPaa (500 psia)	IMV30-.47LG
D0174BQ	IMV30-.27AG	7.5 kPa (30 inH ₂ O)	3.5 MPaa (500 psia)	IMV30-.47AG
D0174ED	IMV30-.27BD	50 kPa (200 inH ₂ O)	2.1 MPaa (300 psia)	IMV30-.47BD
D0174EK	IMV30-.27BE	50 kPa (200 inH ₂ O)	10 MPaa (1500 psia)	IMV30-.47BE
D0186XW	MV30-.27BH	50 kPa (200 inH ₂ O)	20 MPaa (3000 psia)	IMV30-.47BH
D0186ZW	MV30-.27BF	50 kPa (200 inH ₂ O)	36.5 MPaa (5300 psia)	IMV30-.47BF
D0174ER	IMV30-.27CD	210 kPa (840 inH ₂ O)	2.1 MPaa (300 psia)	IMV30-.47CD
D0174EX	IMV30-.27CE	210 kPa (840 inH ₂ O)	10 MPaa (1500 psia)	IMV30-.47CE
D0179YQ	IMV30-.27CH	210 kPa (840 inH ₂ O)	20 MPaa (3000 psia)	IMV30-.47CH
D0179YB	IMV30-.27CF	210 kPa (840 inH ₂ O)	36.5 MPaa (5300 psia)	IMV30-.47CF

(TRANSMITTER ASSEMBLY – BOTTOMWORKS (Figure 4))

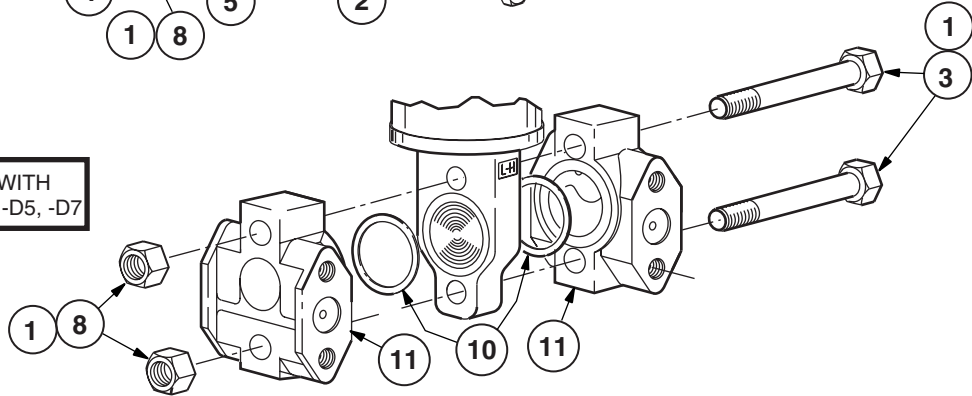
BOTTOMWORKS WITH
PROCESS CONNECTOR
CODES 0 TO 6

PLUG USED WITH
OPTION -V

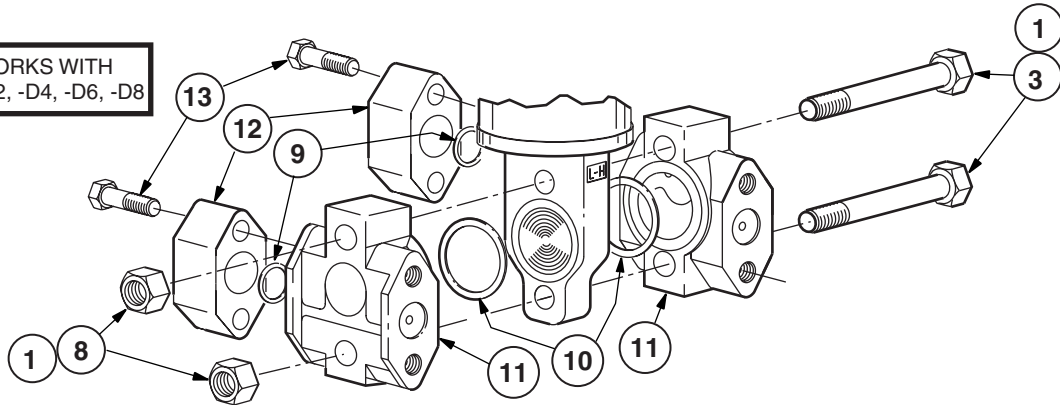
OPTIONAL VENT
SCREW (2 PLACES)
OPTIONAL
SELECTION -V



BOTTOMWORKS WITH
OPTION -D1, -D3, -D5, -D7



BOTTOMWORKS WITH
OPTION -D2, -D4, -D6, -D8



**TRANSMITTER ASSEMBLY – BOTTOMWORKS (Figure 4) (Cont.)
(For use with Traditional Structure)**

Item	Part No.	Qty.	Part Name
1	X0118CC	A/R	Grease, Lubriplate (1-3/4 ounce tube)
2	Below D0161NA D0161NC	2	Process Cover for use with Process Connection Codes 0-6 (see Note 1) 316 ss Hastelloy C
2	Below D0161NE D0161NG	2	Side Vent Cover for use with Process Connection Codes 0-6 (Note 1) Traditional Structure; 316 ss Traditional Structure; Hastelloy C
3	Below X0173RP X0173UK X0173TQ X0173TD	2	Screw, Hex Head, 0.500-13 x 3.5 2H (ASTM [®] A193, Gr. B7 [std]) ASTM A193, Gr. B7M (Option –B3) 316 ss (ASTM F593, Group 2) (Options –B1, –D5, –D6) 17-4 ss (ASTM A564, Type 630) (Options –B2, –D7, –D8)
*4	Below B0138MJ D0175PQ	2	Vent Screw 316 ss Hastelloy C (see Note 1)
*5	Below D0161QT D0175PP	2	Vent Plug (see Note 2) 316 ss Hastelloy C (see Note 1)
6	Table 1	2	Process Connectors (see Table 1 below)
7	Below X0100MN X0171VP N1205RQ X0118AX	4	Screw, Hex Head, 0.438-20 x 1.5 (for threaded connectors, Codes 1-4) ASTM A193 Gr. B7 (std) ASTM A193, Gr. B7M (Option –B3) 316 ss (Options –B1, –D5, –D6) 17-4 Stainless Steel (Options –B2, –D7, –D8)
7	Below X0100NT X0171VN X0173TP X0118AY	4	Screw, Hex Head, 0.438-20 x 1.0 (for weld neck connectors, Code 6) ASTM A193, Gr. B7 (std) ASTM A193, Gr. B7M (Option –B3) 316 ss (Option –B1) 17-4 Stainless Steel (Option –B2)

Table 1. Item 6, Process Connector Part Numbers

Process Connector Code	Process Connector Description	Used with Following Process Connector and Cover Material	
		Stainless Steel	Hastelloy C
1 (a)	Tapped for 1/4 NPT	N0141XT	Note (a)
2	Tapped for 1/2 NPT	N0141XN	B0139JW
3 (a)	Tapped for Rc 1/4	B0139BD	Note (a)
4	Tapped for Rc 1/2	B0139BG	B0139JV
6 (a)	1/2 Schedule 80 Weld Neck	N0141XR	Note (a)

(a) Process Connector Codes 1, 3, and 6 are not available with Hastelloy C material.

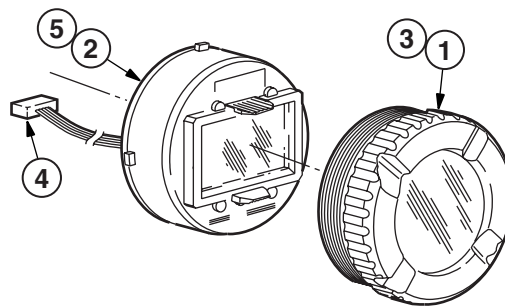
TRANSMITTER ASSEMBLY - BOTTOMWORKS (Figure 4) (Cont.)
(For use with Traditional Structure)

Item	Part No.	Qty.	Part Name		
8	Below	2	Nut, 0.500-13		
	X0173RN			2H, (ASTM A193, Gr. B7 [std])	
	X0173UL			ASTM A194, Gr. 2HM (Option -B3)	
	X0173TR			316 ss (ASTM F594, Group 2) (Option -B1, -D5, -D6)	
	X0173UJ			17-4 ss (ASTM F594, Group 2) (Option -B2, -D7, -D8)	
*9	D0114RB	2	Gasket, ptfe		
*10	D0161QQ	2	Gasket, Process Cover, Glass-filled ptfe		
11	Below		Cover, 316 ss		
	D0161NK			1	Single-ended process connection M10 (Option -D1, High Side)
	D0161NJ			1	Single-ended process connection M10 (Option -D1, Low Side)
	D0161NM			1	Single-ended process connection 7/16 (Options -D3, -D5, -D7, High Side)
	D0161NL			1	Single-ended process connection 7/16 (Options -D3, -D5, -D7, Low Side)
	D0161NN			2	Double-ended process connection M10 (Option -D2)
	D0161NA			2	Double-ended process connection 7/16 (Options -D4, -D6, -D8)
12	D0153RK	2	Kidney Flange, Blind, 316 ss, (for double-ended process cover) (Options -D2, -D4, -D6, -D8)		
13	Below	4	Screw, Hex Head, steel, for blind kidney flange		
	X0173MJ			M10 x 1.5 x 40 mm, for Option -D2	
	X0100MN			0.437-20 x 1.5 in, for Options -D4, -D6, and -D8	
14	Below	2	Pipe Plug, Hex Head, 1/4 NPT		
	D0161LU			316 ss	
	D0161LW			Hastelloy C	

NOTE

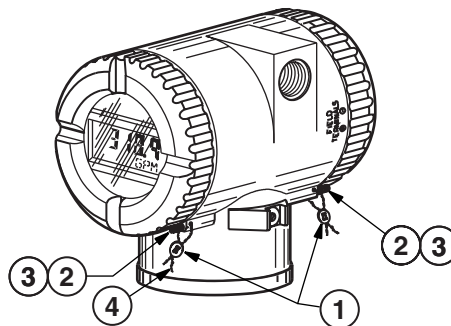
1. Metallic process wetted material conforming to NACE Standard MR-01-75.
2. For simplified calibration, install F0101ES screw for up to 0.7 MPa (100 psi).

OPTIONAL LIQUID CRYSTAL DISPLAY (LCD) INDICATOR ASSEMBLY (Figure 5)
Optional Selection -L1



Item	Part No.	Qty.	Part Name
1	Below D0162LH D0162VH	1	Cover Assembly with Window – used with LCD Indicator Aluminum Cover Assembly Stainless Steel Cover Assembly
2	D0162LQ	1	Module Assembly, LCD Indicator
3	X0118CC	A/R	Grease, Lubriplate (1-3/4 ounce tube)
4	P0177HB	1	Cable Assembly, LCD Indicator
5	0048130	A/R	Grease, Silicone

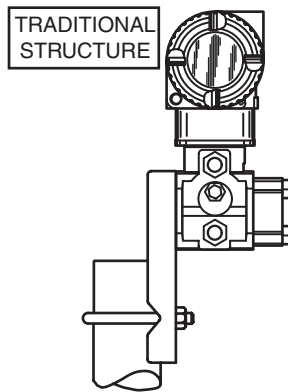
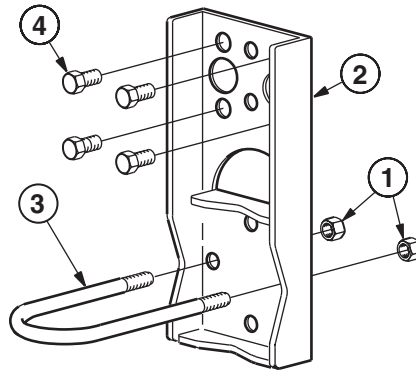
OPTIONAL CUSTODY TRANSFER LOCK AND SEAL (Figure 6)
Optional Selection -Z2



Item	Part No.	Qty.	Part Name
1	S001806	2	Lead Seal
2	D0162WM	2	Screw, Lock, 0.164-32
3	X0118CC	A/R	Grease, Lubriplate (1-3/4 ounce tube)
4	S001807	A/R	Sealing Wire

OPTIONAL STANDARD STYLE MOUNTING BRACKET SETS (Figure 7)

**Optional Selection -M1 or -M2
and
OPTIONAL STANDOFF KITS**



Optional Selection -M1 (Painted Steel)

Item	Part No.	Qty.	Part Name
—	N0141ZT	—	Mounting Set, steel (Items 1, 2, 3, and 4)
1	0011962	2	Nut, steel, 0.312-18
2	N0141ZW	1	Bracket, steel
3	D0114SM	1	U-Bolt, steel
4	X0100NW	4	Screw, hex head, steel, 0.437-20 x 0.625
5	D0170ME	1	Optional Standoff Kit with Four Steel Standoffs (Not part of -M1 Option)

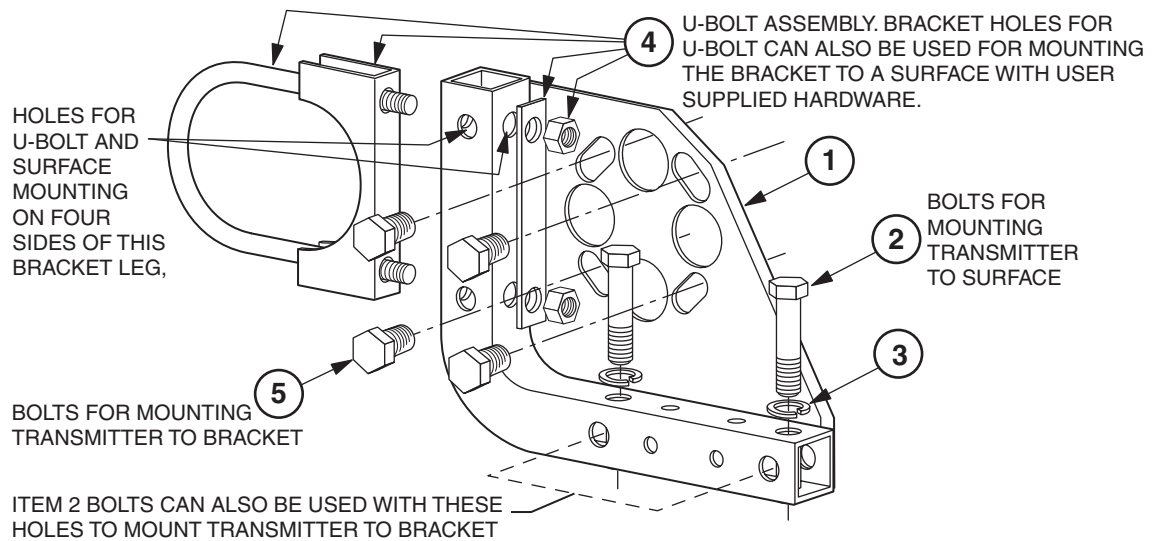
Optional Selection -M2 (Stainless Steel)

—	N1205YD	—	Mounting Set, ss (Items 1, 2, 3, and 4)
1	Z1217HV	2	Nut, ss, 0.312-18
2	N1205MF	1	Bracket, ss
3	N1205MX	1	U-Bolt, ss
4	P0120RN	4	Screw, hex head, ss, 0.437-20 x 0.625
5	D0170MJ	1	Optional Standoff Kit with Four 316 ss Standoffs (Not part of -M2 Option)

— NOTE

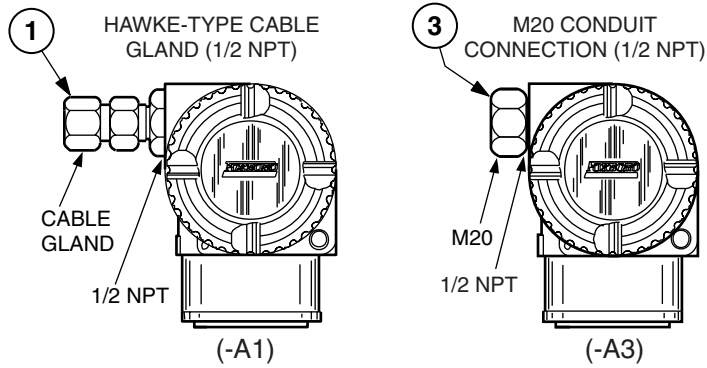
For universal style mounting bracket, see Figure 9.

OPTIONAL UNIVERSAL STYLE PIPE MOUNTING SET (Figure 8)
Optional Selection -M3



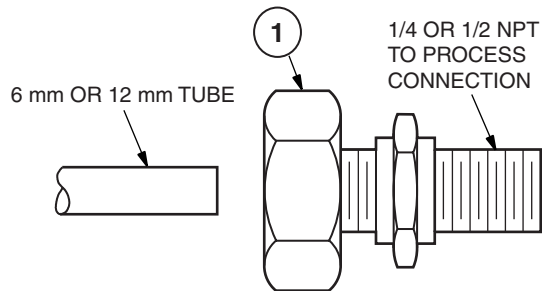
Item	Part No.	Qty.	Part Name
—	D0170XH	1	Universal Pipe Mounting Set (Items 1 to 4)
1	D0170VJ	1	Bracket, Universal Mounting; ss
2	X0173UR	2	Screw, hex head; 0.375-16 x 1.5; ss
3	A2012TZ	2	Washer, lock; 0.382 I.D.; ss
4	D0170VM	1	U-Bolt Kit; 0.375-16 x 4.5; ss U-Bolt; 0.375-16; ss Clamp, saddle; ss Plate, washer; ss Nut, hex; ss; 0.375-16; ss
5	P0120RN	4	Screw, hex head; 0.437-20 x 0.625; ss

OPTIONAL CONDUIT CONNECTORS (Figure 9)
Optional Selection -A1 or -A3



Item	Part No.	Qty.	Part Name
1	N7141HX	1	Hawke-Type Cable Gland (for 1/2 NPT)
3	N7141DX	1	Metric Conduit Thread Connection, M20/20 mm (for 1/2 NPT)

OPTIONAL TUBING CONNECTOR (Figure 10)
Optional Selection -E3 or -E4



Item	Part No.	Qty.	Part Name
1	Below U7002AS U7002AP	-	Tubing Connector 316 ss, 640 bar (1/4 NPT x 6 mm) Optional Selection -E3 316 ss, 640 bar (1/2 NPT x 12 mm) Optional Selection -E4

RECOMMENDED SPARE PARTS SUMMARY

Figure Number	Item Number	Part Number	Part Name	Number of Parts Recommended for		
				1 Inst.	5 Inst.	20 Inst.
1	3	X0201FC	O-Ring, Cover	2	4	10
	10	Below D0174DB D0162UQ	Electronics Module Digital FoxCom and 4 to 20 mA (Version -D) Digital HART and 4 to 20 mA (Version -T)	0	1	2
	12 (a) (Also see Figure 2)	Below D0179JA D0174BG D0174CB D0174CH D0186XJ D0186ZG D0174CP D0174CV D0186XP D0186ZN	Sensor Assembly (Reference Model Code) (for use with Traditional Structure) IMV30-.22LG IMV30-.22AG IMV30-.22BD IMV30-.22BE IMV30-.22BH IMV30-.22BF IMV30-.22CD IMV30-.22CE IMV30-.22CH IMV30-.22CF	0	1	1
		D0179JC D0174BN D0174EB D0174EH D0186XU D0186ZU D0174EP D0174EV D0186XZ D0186ZZ	IMV30-.23LG IMV30-.23AG IMV30-.23BD IMV30-.23BE IMV30-.23BH IMV30-.23BF IMV30-.23CD IMV30-.23CE IMV30-.23CH IMV30-.23CF			
		D0179JB D0174BJ D0174CD D0174CK D0186XL D0186ZJ D0174CR D0174CX D0186XR D0186XQ	IMV30-.26LG and IMV30-.46LG IMV30-.26AG and IMV30-.46AG IMV30-.26BD and IMV30-.46BD IMV30-.26BE and IMV30-.46BE IMV30-.26BH and IMV30-.46BH IMV30-.26BF and IMV30-.46BF IMV30-.26CD and IMV30-.46CD IMV30-.26CE and IMV30-.46CE IMV30-.26CH and IMV30-.46CH IMV30-.26CF and IMV30-.46CF			
		D0179JD D0174BQ D0174ED D0174EK D0186XW D0186ZW D0174ER D0174EX D0179YQ D0186YB	IMV30-.27LG and IMV30-.47LG IMV30-.27AG and IMV30-.47AG IMV30-.27BD and IMV30-.47BD IMV30-.27BE and IMV30-.47BE IMV30-.27BH and IMV30-.47BH IMV30-.27BF and IMV30-.47BF IMV30-.27CD and IMV30-.47CD IMV30-.27CE and IMV30-.47CE IMV30-.27CH and IMV30-.47CH IMV30-.27CF and IMV30-.47CF			

RECOMMENDED SPARE PARTS SUMMARY (Cont.)

Figure Number	Item Number	Part Number	Part Name	Number of Parts Recommended for		
				1 Inst.	5 Inst.	20 Inst.
4	4	Below B0138MJ D0175PQ	Vent Screw 316 ss Hastelloy C	0	2	4
	5	Below D0161QT D0175PP	Vent Plug 316 ss Hastelloy C	0	2	4
	9	D0114RB	Gasket, ptfe	1	2	4
	10	D0161QQ	Gasket, Glass-filled ptfe	2	4	8
5	4	Below B0138MJ D0175PQ	Vent Screw 316 ss Hastelloy C	0	2	4
	5	Below D0161QT D0175PP	Vent Plug 316 ss Hastelloy C	0	2	4
	9	D0114RB	Gasket, ptfe	1	2	4
	10	D0161QQ	Gasket, Glass-filled ptfe	2	4	8
6	2	D0162LQ	Module Assembly, LCD Indicator	0	1	1

(a) Also see Figure 2 and associated tables for material specifications and maximum DP and AP spans for the sensor assemblies listed.

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