

Integral Flow Orifice Assembly Model IFOA 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.

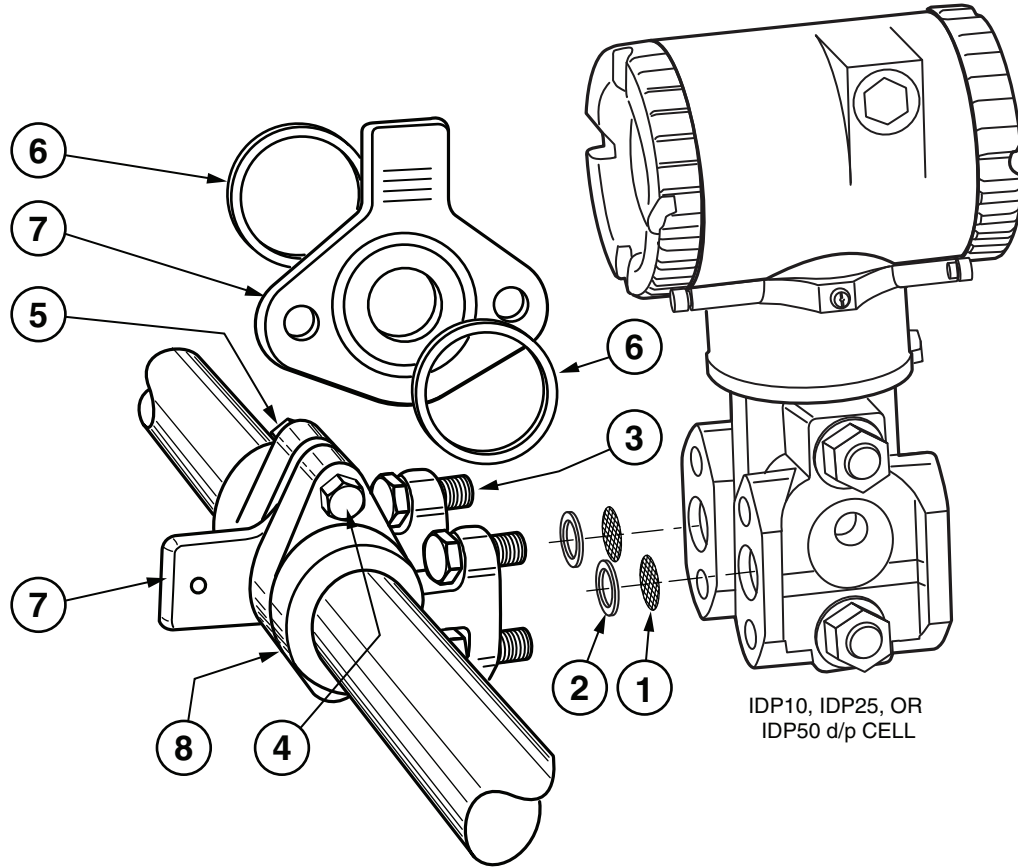
TO ORDER PARTS, CALL 1-866-746-6477.

MODEL CODE

Description	Model
Integral Flow Orifice Assembly	IFOA
Line Size (Manifolds)	
15 mm (1/2 in)	0H
25 mm (1 in)	01
40 mm (1-1/2 in)	1H
Material	
AISI Type 316 Stainless Steel (316 ss)	S
Hastelloy C	H
Process Connections	
Welded (w/o meter runs)	1
Threaded (w/o meter runs)	2
Meter Run w/Weld Connections (316 ss only)	3
Meter Run w/Threaded Connections (316 ss only)	4
Meter Run w/Class 150 Flanges (316 ss only)	5
Meter Run w/Class 300 Flanges (316 ss only)	6
Meter Run w/Class 600 Flanges (316 ss only) (not available w/-1H)	7
Threaded Rc (w/o meter runs)	8
Meter Run w/R Threaded Connection (316 ss only)	9
Orifice Plate Material	
Hastelloy C	H
Monel	M
316 ss	S
Orifice Plate Bore	
0.50 mm (0.020 in), for 15 mm (1/2 in) line size only	A
0.89 mm (0.035 in), for 15 mm (1/2 in) line size only	B
1.52 mm (0.060 in), for 15 mm (1/2 in) line size only	C
2.54 mm (0.100 in), for 15 mm (1/2 in) line size only	D
4.06 mm (0.160 in), for 15 mm (1/2 in) line size only	E
6.35 mm (0.250 in), for 15 mm (1/2 in) line size only	F
8.89 mm (0.350 in), for 15 mm (1/2 in) line size only	G
6.15 mm (0.242 in), for 25 mm (1 in) line size only	H
8.66 mm (0.341 in), for 25 mm (1 in) line size only	J
12.14 mm (0.478 in), for 25 mm (1 in) line size only	K
16.64 mm (0.655 in), for 25 mm (1 in) line size only	L
21.13 mm (0.832 in), for 25 mm (1 in) line size only	M
9.70 mm (0.382 in), for 40 mm (1-1/2 in) line size only	N
13.66 mm (0.538 in), for 40 mm (1-1/2 in) line size only	P
19.07 mm (0.751 in), for 40 mm (1-1/2 in) line size only	R
25.86 mm (1.018 in), for 40 mm (1-1/2 in) line size only	S
29.97 mm (1.180 in), for 40 mm (1-1/2 in) line size only	T
Jewel Orifice (size per s.o.), 1/2 in (316 ss) line size only	U
Blank, (drill per s.o.), any line size	V
Optional Connections for Remote-Mounted Transmitter	
1/2 NPT	-1
R 1/2	-2
Material (Remote Connectors)	
Hastelloy C	H
316 ss	S

PARTS

Figure 1. Integral Flow Orifice Assembly



Item	Part No.	Qty.	Part Name
1	–		Screen (refer to Transmitter Parts List)
*2	D0120AC	2	Gasket
3	Below	4	Screw, hexh, 0.438-20 x 1.125
	X0171YW		ASTM A193 Grade B7, cadmium plated steel (standard)
	X0172VA		ASTM A193 Grade B7M, cad. plated steel (NACE Std. MR-01-75 Cl 2)
	X0172UP		ASTM A564, Type 630 age-hardened stainless steel
4	Below	2	Screw, hexh, 0.438-20 x 2.000
	X0172UL		ASTM A193 Grade B7, cadmium plated steel (standard)
	X0172VB		ASTM A193 Grade B7M, cad. plated steel (NACE Std. MR-01-75 Cl 2)
	X0172UQ		ASTM A564, Type 630 age-hardened stainless steel
5	Below	2	Nut, 0.438-20
	X0104FK		ASTM A194 Grade 2H, cadmium plated steel (standard)
	X0171RA		ASTM A194 Grade 2HM, cad. plated steel (NACE Std. MR-01-75 Cl 2)
	X0172UR		ASTM A564, Type 630 age-hardened stainless steel
*6	Below	2	Gasket
	L0117NG		For 15 mm (1/2 in) line size (Code –0H)
	L0117NH		For 25 mm (1 in) line size (Code –01)
	L0117NJ		For 40 mm (1-1/2 in) line size (Code –1H)

Item	Part No.	Qty.	Part Name
7	—	1	Orifice Plate (see page 4)
8	—	—	Manifold Block Assembly (see page 5)

ORIFICE PLATES (Item 7, Figure 1)

Line Size	Orifice Diameter mm (in)	Hastelloy C	Monel	316 ss	Remarks
15 mm (1/2 in)	0.50 (0.020)	L0117KZ	L0117KX	L0117KY	Hole per s.o. (or blank) Hole per s.o. (0.002-0.015 in)
	0.89 (0.035)	L0117LC	L0117LA	L0117LB	
	1.52 (0.060)	L0117LF	L0117LD	L0117LE	
	2.54 (0.100)	L0117KM	L0117KK	L0117KL	
	4.06 (0.160)	L0117KQ	L0117KN	L0117KP	
	6.35 (0.250)	L0117KT	L0117KR	L0117KS	
	8.89 (0.350)	L0117KW	L0117KU	L0117KV	
	Non-standard	Y0001YC	Y0001YA	Y0001YB	
	Jewel	—	—	Y0001TQ	
	25 mm (1 in)	6.15 (0.242)	L0117LJ	L0117LG	
8.66 (0.341)		L0117LM	L0117LK	L0117LL	
12.14 (0.478)		L0117LQ	L0117LN	L0117LP	
16.53 (0.655)		L0117LT	L0117LR	L0117LS	
21.13 (0.832)		L0117LW	L0117LU	L0117LV	
Non-standard		Y0001YF	Y0001YD	Y0001YE	
40 mm (1-1/2 in)		9.70 (0.382)	L0117LZ	L0117LX	L0117LY
13.66 (0.538)	L0117MC	L0117MA	L0117MB		
19.07 (0.751)	L0117MF	L0117MD	L0117ME		
25.86 (1.018)	L0117MJ	L0117MG	L0117MH		
29.97 (1.180)	L0117MM	L0117MK	L0117ML		
Non-standard	Y0001YJ	Y0001YG	Y0001YH		

ORIFICE PLATE KITS

15 mm (1/2 in) Line Size (Code -0H)

(set of 7 orifices with gaskets)

Part L0117UT — Monel

Part L0117UU — 316 ss

25 mm (1 in) Line Size (Code -01)

(set of 5 orifices with gaskets)

Part L0117UV — 316 ss

40 mm (1-1/2 in) Line Size (Code -1H)

(set of 5 orifices with gaskets)

Part L0117UW — 316 ss

REMOTE PROCESS CONNECTORS

Part No.	Qty.	Part Name
X0100MN	4	Screw, hexh, 0.437-20 x 1.500
*D0120AC	4	Gasket
Below		Remote Process Connector (2 each required)
L0117RT	2	1/2 NPT, Hastelloy C (Code -1H mounted to IFOA)
B0139JW	2	1/2 NPT, Hastelloy C (Code -1H mounted to Transmitter)
L0117RU	2	R 1/2, Hastelloy C (Code -2H mounted to IFOA)
B0139JV	2	R 1/2, Hastelloy C (Code -2H mounted to Transmitter)
L0117RR	2	1/2 NPT, 316 ss (Code -1S mounted to IFOA)
N0141XN	2	1/2 NPT, 316 ss (Code -1S mounted to Transmitter)
L0117RS	2	R 1/2, 316 ss (Code -2S mounted to IFOA)
B0139BG	2	R 1/2, 316 ss (Code -2S mounted to Transmitter)

MANIFOLD BLOCK ASSEMBLIES, Item 8, Figure 1)

15 mm (1/2 in) Line Size, Manifold Block (without meter run)

Code	Qty.	Part No.	Material
IFOA-0HH1..	2	L0117WX	Hastelloy C
IFOA-0HH2..	2	L0117XA	Hastelloy C
IFOA-0HH8..	2	L0117KG	Hastelloy C
IFOA-0HS1..	2	L0117WR	316 ss
IFOA-0HS2..	2	L0117WN	316 ss
IFOA-0HS8..	2	L0117KF	316 ss
15 mm (1/2 in) Line Size, Manifold Block (with meter run)			
Code	Qty.	Part No.	With
IFOA-0HS3..	1 ea.	L0117RG, L0117RH	Weld Connection (316 ss)
IFOA-0HS4..	1 ea.	L0117QU, L0117QV	Threaded Connection (316 ss)
IFOA-0HS5..	1 ea.	L0117RN, L0117RP	Class 150 Flange (316 ss)
IFOA-0HS6..	1 ea.	L0117RY, L0117RZ	Class 300 Flange (316 ss)
IFOA-0HS7..	1 ea.	L0117SE, L0117SF	Class 600 Flange (316 ss)
IFOA-0HS9..	1 ea.	L0117MW, L0117MX	R Threaded Connection (316 ss)
25 mm (1 in) Line Size, Manifold Block (without meter run)			
Code	Qty.	Part No.	Material
IFOA-01H1..	2	L0117WY	Hastelloy C
IFOA-01H2..	2	L0117XB	Hastelloy C
IFOA-01H8..	2	L0117KJ	Hastelloy C
IFOA-01S1..	2	L0117WS	316 ss
IFOA-01S2..	2	L0117WP	316 ss
IFOA-01S8..	2	L0117KH	316 ss
25 mm (1 in) Line Size, Manifold Block (with meter run)			
Code	Qty.	Part No.	With
IFOA-01S3..	1 ea.	L0117RJ, L0117RK	Weld Connection (316 ss)
IFOA-01S4..	1 ea.	L0117QW, L0117QX	Threaded Connection (316 ss)
IFOA-01S5..	1 ea.	L0117RQ, L0117RV	Class 150 Flange (316 ss)
IFOA-01S6..	1 ea.	L0117SA, L0117SB	Class 300 Flange (316 ss)
IFOA-01S7..	1 ea.	L0117SG, L0117SH	Class 600 Flange (316 ss)
IFOA-01S9..	1 ea.	L0117MY, L0117MZ	R Threaded Connection (316 ss)
40 mm (1-1/2 in) Line Size, Manifold Block (without meter run)			
Code	Qty.	Part No.	Material
IFOA-1HH1..	2	L0117WZ	Hastelloy C
IFOA-1HH2..	2	L0117XC	Hastelloy C
IFOA-1HH8..	2	L0117MP	Hastelloy C
IFOA-1HS1..	2	L0117WT	316 ss
IFOA-1HS2..	2	L0117WQ	316 ss
IFOA-1HS8..	2	L0117MN	316 ss
40 mm (1-1/2 in) Line Size, Manifold Block (with meter run)			
Code	Qty.	Part No.	With
IFOA-1HS3..	1 ea.	L0117RL, L0117RM	Weld Connection (316 ss)
IFOA-1HS4..	1 ea.	L0117QY, L0117QZ	Threaded Connection (316 ss)
IFOA-1HS5..	1 ea.	L0117RW, L0117RX	Class 150 Flange (316 ss)
IFOA-1HS6..	1 ea.	L0117SC, L0117SD	Class 300 Flange (316 ss)
IFOA-1HS9..	1 ea.	L0117NA, L0117NB	R Threaded Connection (316 ss)

OTHER PARTS

For other parts, see Parts Lists indicated below.

Instrument	Parts List	Instrument	Parts List
IDP10	PL 009-005	13A	PL 006-175
IDP25	PL 009-013	15A	PL 006-176
IDP50	PL 009-014	13H	PL 006-177

GASKETS (Cleaned for Oxygen Service)

Item	Part No.	Qty.	Part Name
–	Below	1	Pair of Gaskets (cleaned for oxygen service) Substitutes for gaskets on page 3
*2	U0102XL		Substitute for D0120AC (process connection)
*6	L0117NC		Substitute for L0117NG (1/2 in orifice plate)
*6	L0117ND		Substitute for L0117NH (1 in orifice plate)
*6	L0117NE		Substitute for L0117NJ (1-1/2 in orifice plate)

— NOTE —

If Orifice Plate Kits, listed on page 4, are intended for use on oxygen applications, the above "cleaned" gaskets should be substituted for those furnished in the kits..3

RECOMMENDED SPARE PARTS SUMMARY

Figure Number	Item Number	Part Number	Part Name	Number of Parts Recommended for		
				1 Inst.	5 Inst.	20 Inst.
1	2	D0120AC	Gasket	2	2	4
	6	Below L0117NG L0117NH L0117NJ	Gasket for Orifice Plate	2	2	4
(See Page 4)	–	D0120AC	Gasket for use with Remote Process Connectors	4	4	8
The following gaskets are substituted for Items 2 and 6 of Figure 1 when used on Oxygen Service						
(See Above)	2	U0102XL	Pair of Gaskets (Cleaned for Oxygen Service)	1	1	2
	6	Below L0117NC L0117ND L0117NE	Pair of Gaskets (Cleaned for Oxygen Service) Substitute for L0117NG Substitute for L0117NH Substitute for L0117NJ	1	1	2

