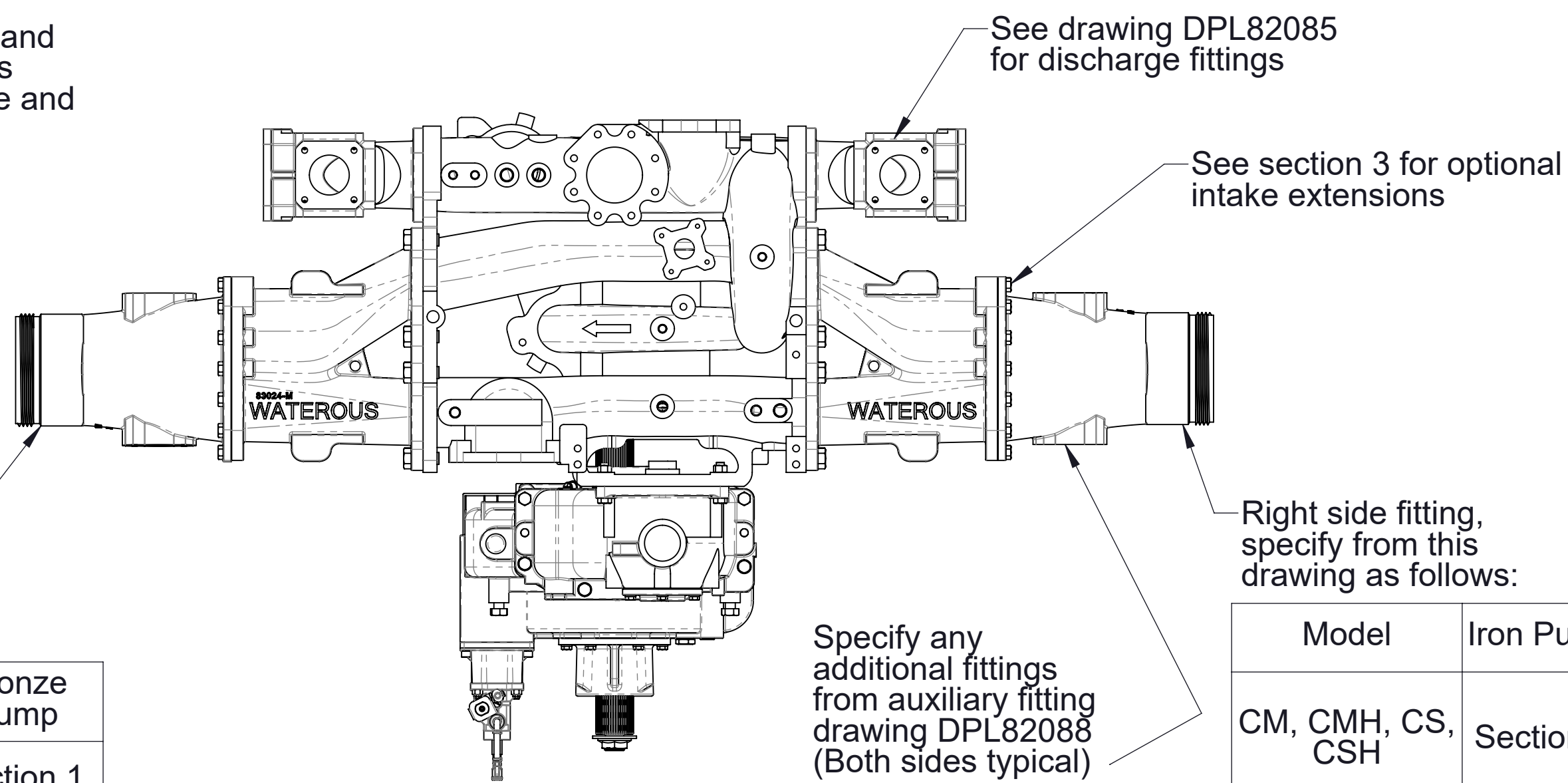


Intake Fitting Dimensional Drawings

Section	Description	Mounting Flange Size on Pump	Used On Pump Models		See Page
			Iron Pumps	Bronze Pumps	
1	Standard Flange Intake Fittings	9.375 in. X 6.750 in. Rectangular (12) Bolts	CGVG	CM, CMH, CS, CSH, CGVG	3-7
2	Large Flange Intake Fittings	11.500 in. X 8.125 in. Rectangular (16) Bolts	CM, CMU, CMH, CMUH, CS, CSU, CSH, CSUH, S101	CMU, CMUH, CSU, CSUH	8-15
3	Intake Extensions	Used With Section 1 Fittings	CGVG	CM, CMH, CS, CSH, CGVG	16
		Used With Section 2 Fittings	CM, CMU, CMH, CMUH, CS, CSU, CSH, CSUH	CMU, CMUH, CSU, CSUH	
4	Round Flange Intake Fittings	(6) Bolt on 5.750 in. B.C.	CLS		17
5	6 in. ANSI Flange Intake Fittings	6 in. ANSI Flange	CXN		18-21
6	Intake Screens	N/A	All Models		22

Note:
See drawings DPL82084-1 and DPL82084-2 for relief valves mounted between discharge and intake fittings.



Left side fitting, specify from this drawing as follows:

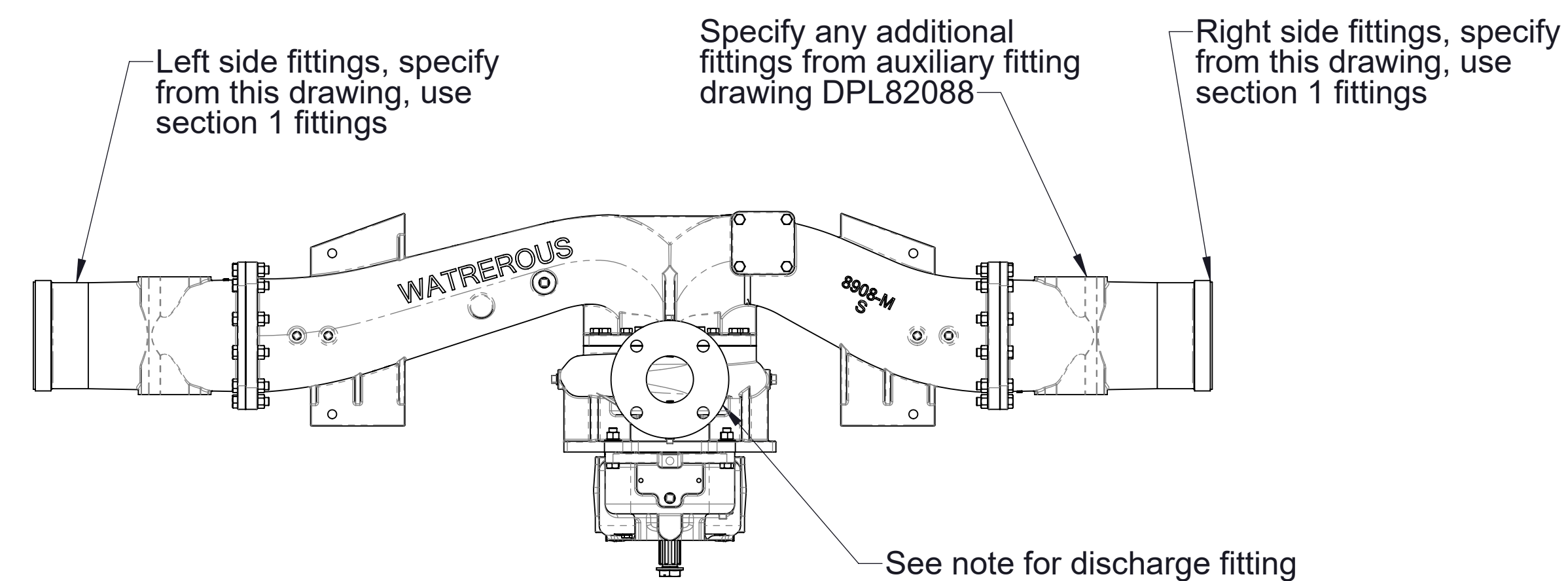
Model	Iron Pump	Bronze Pump
CM, CMH, CS, CSH	Section 2	Section 1
CMU, CMUH, CSU, CSUH	Section 2	Section 2

Specify any additional fittings from auxiliary fitting drawing DPL82088 (Both sides typical)

Right side fitting, specify from this drawing as follows:

Model	Iron Pump	Bronze Pump
CM, CMH, CS, CSH	Section 2	Section 1
CMU, CMUH, CSU, CSUH	Section 2	Section 2

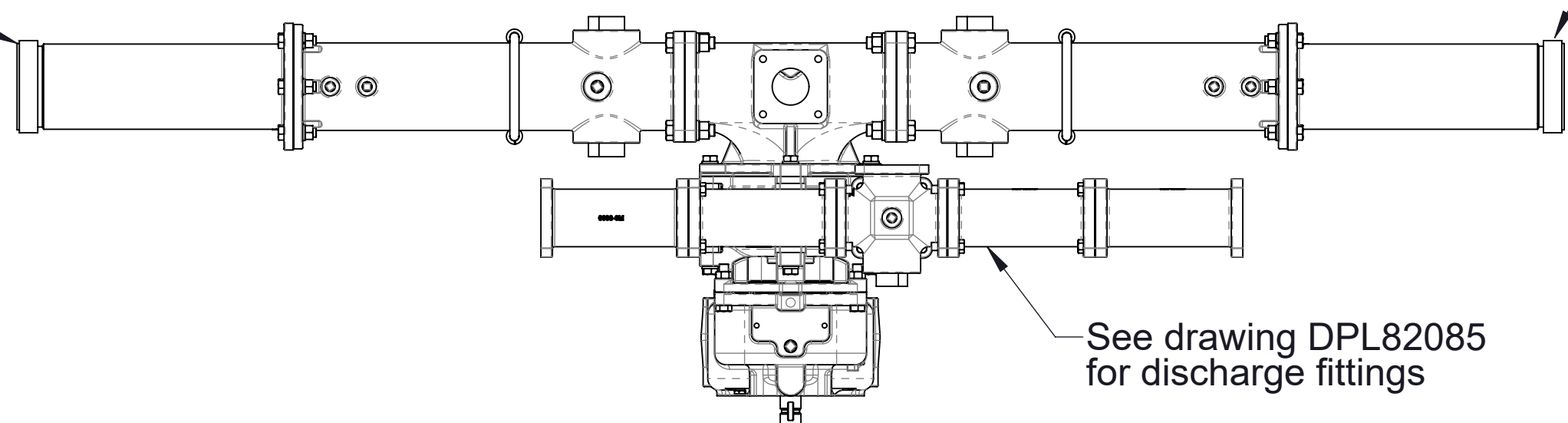
Models: CM, CMH, CMU, CMUH, CS, CSH, CSU, CSUH



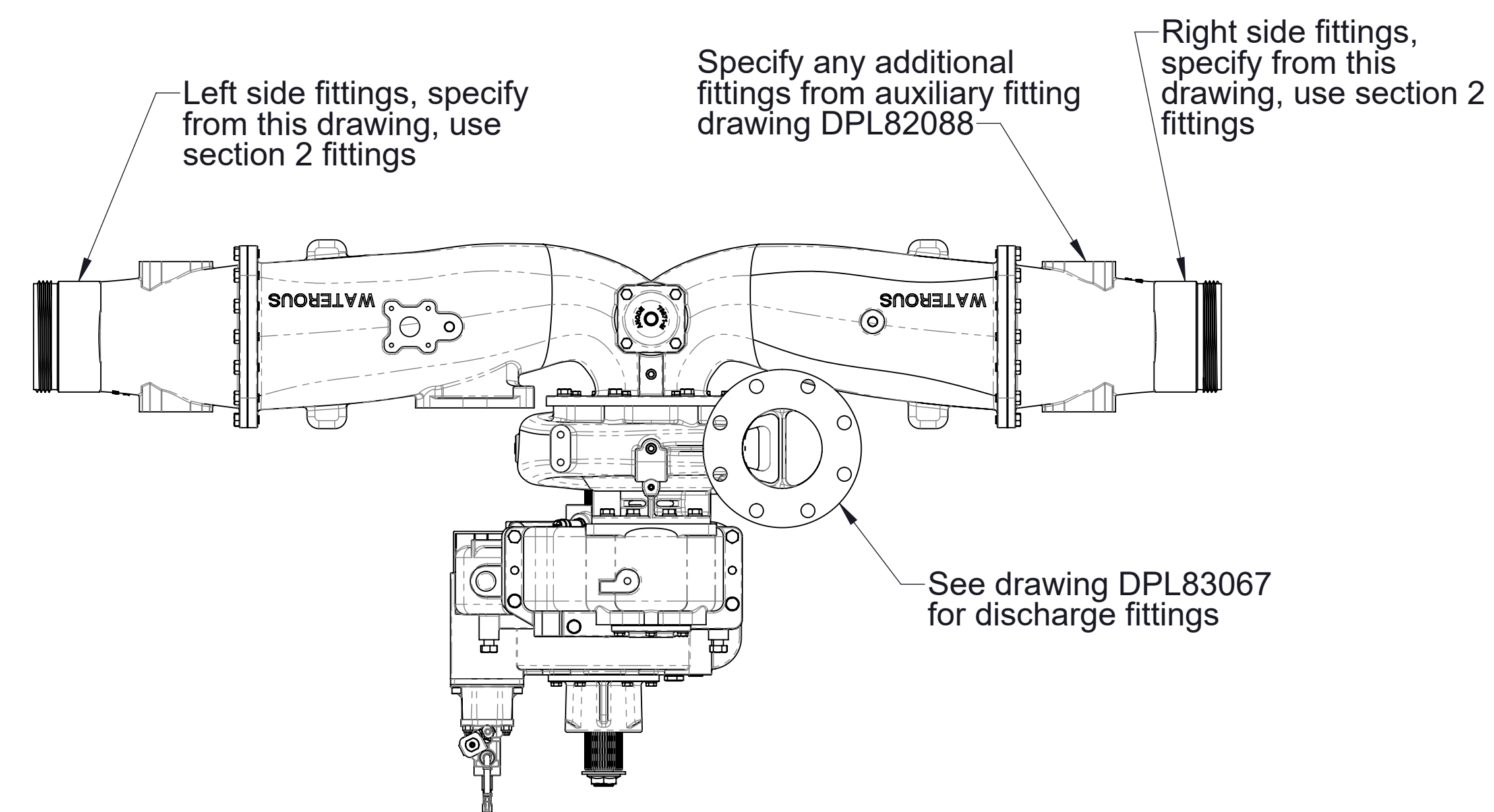
Note:
CGVG pumps have a flanged discharge. Customer must fabricate piping or a 4 in. victaulic adapter which is ordered with pump body.

Model: CGVG

Left side fittings, specify from this drawing, use section 4 fittings if required choice is optional

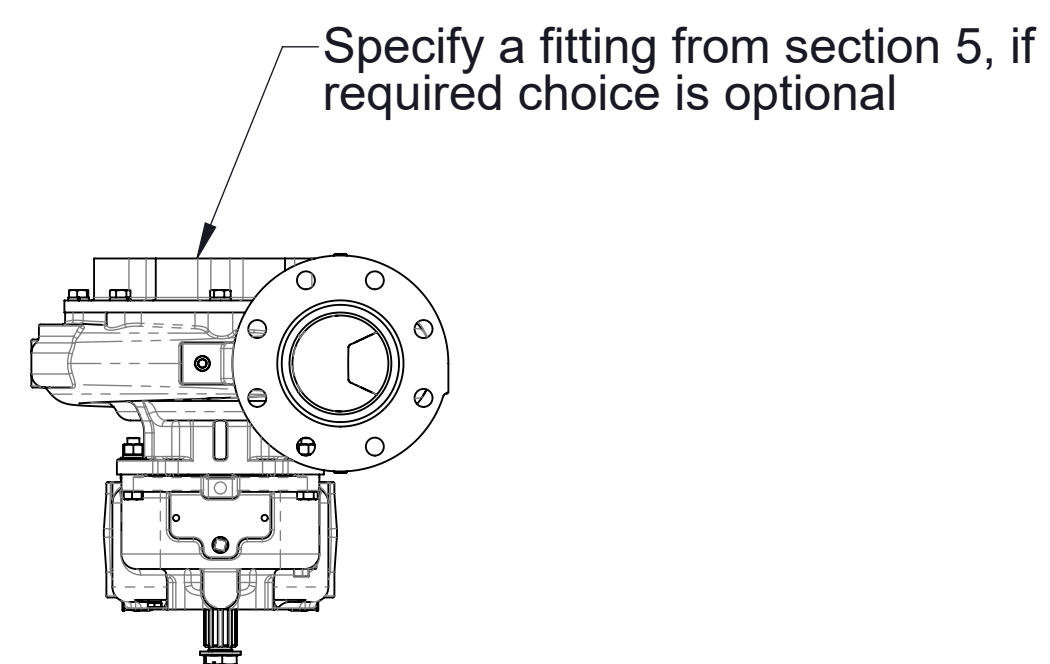


Model: CLS



See drawing DPL83067 for discharge fittings

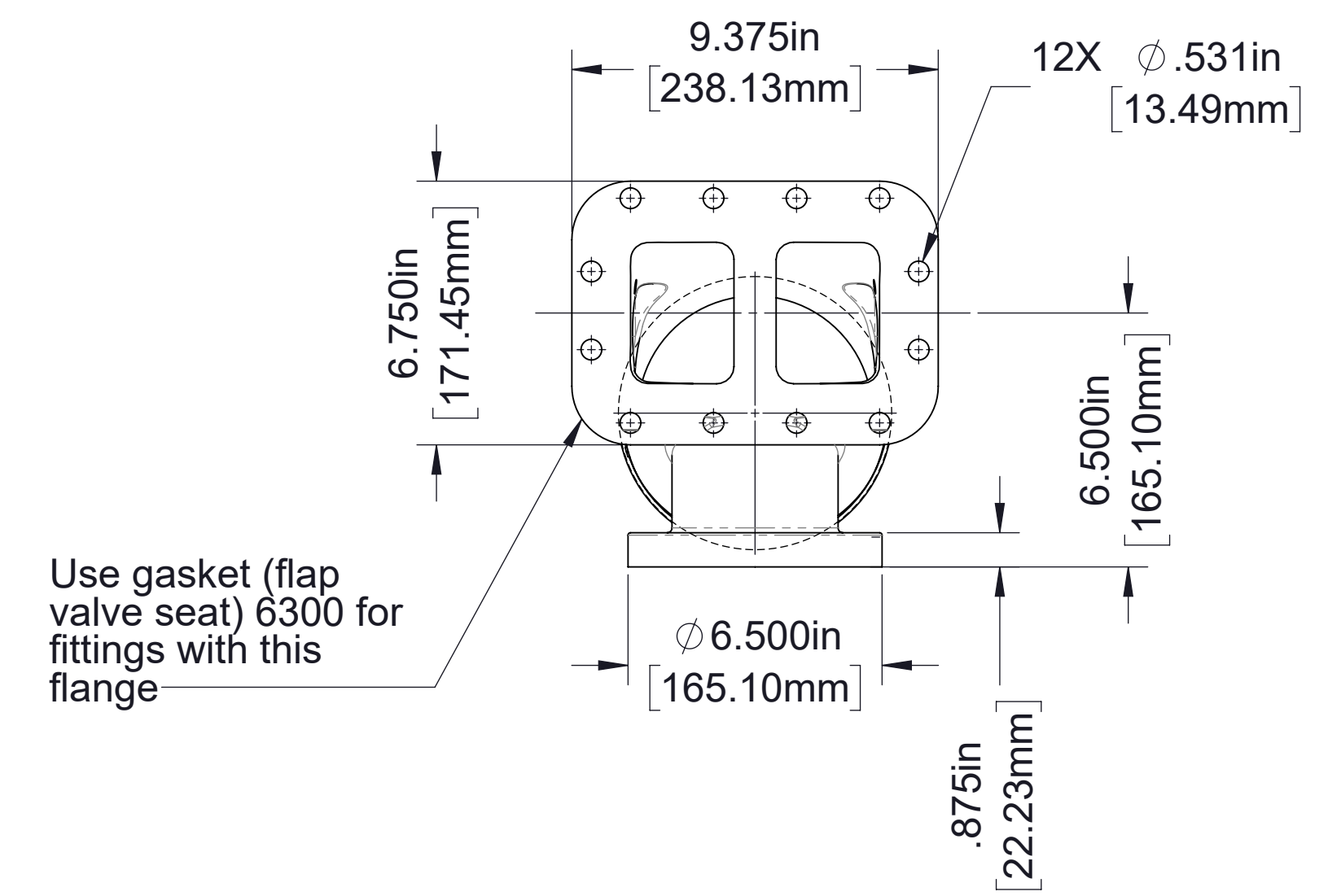
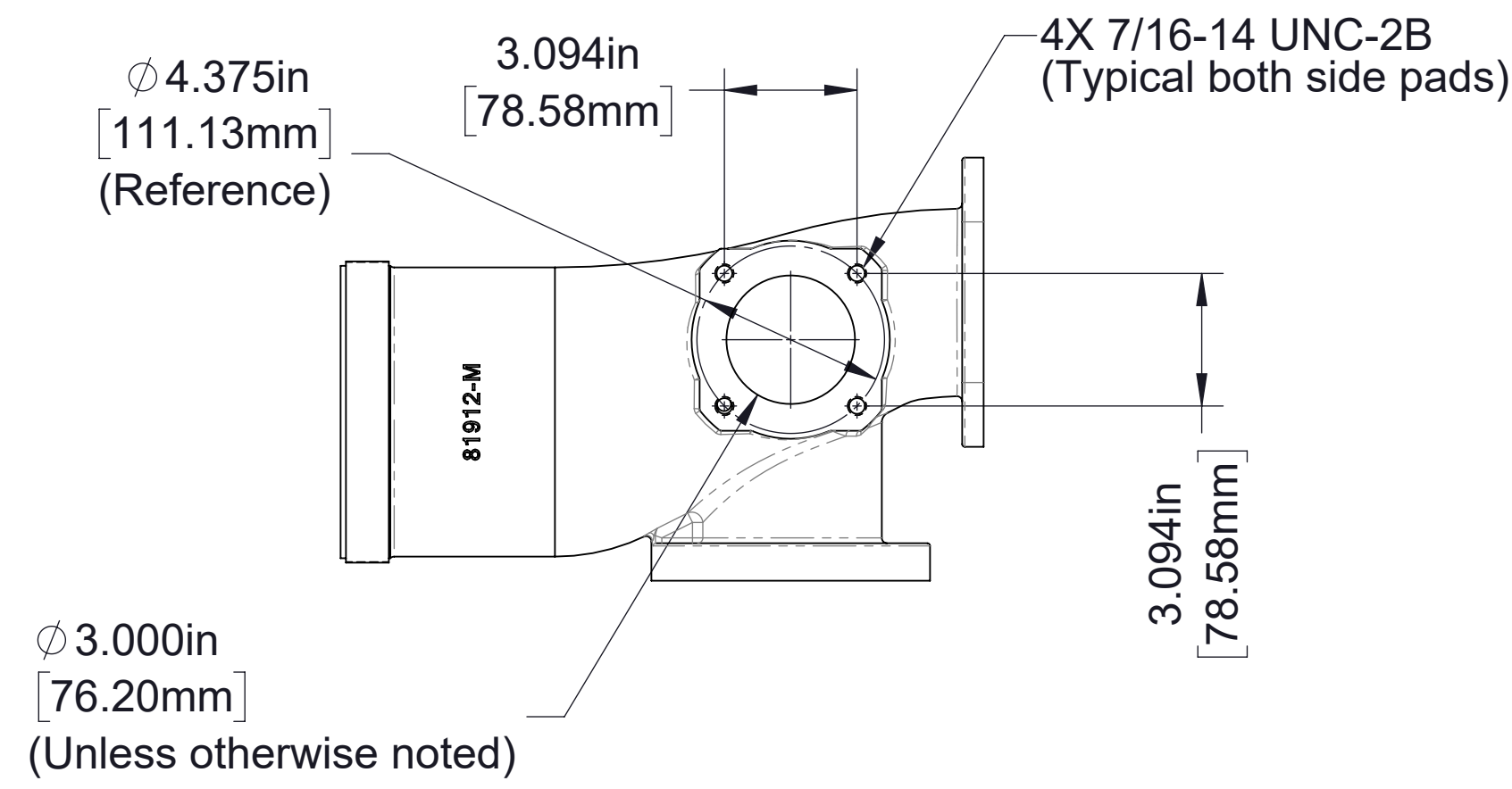
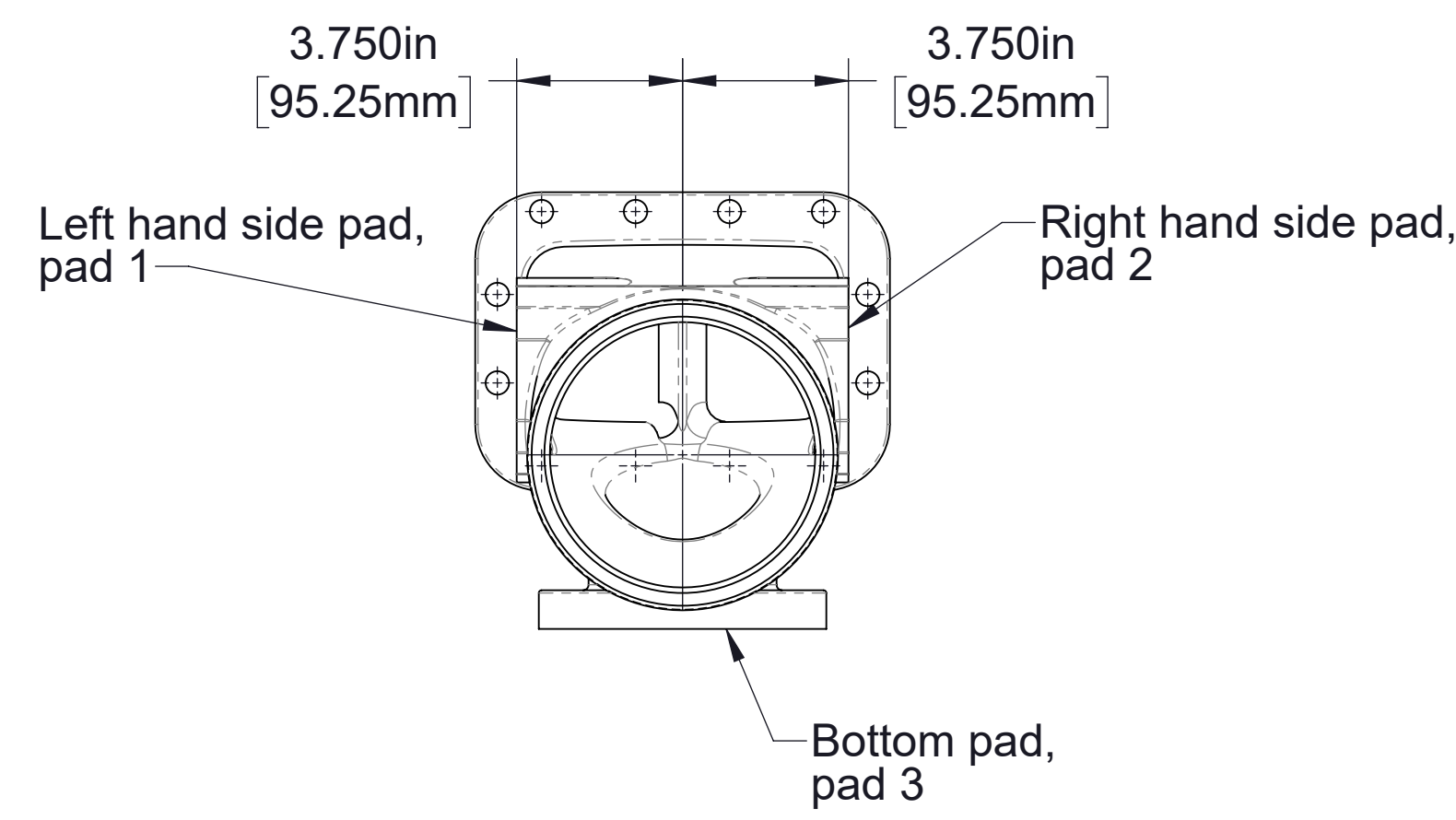
Model: S101



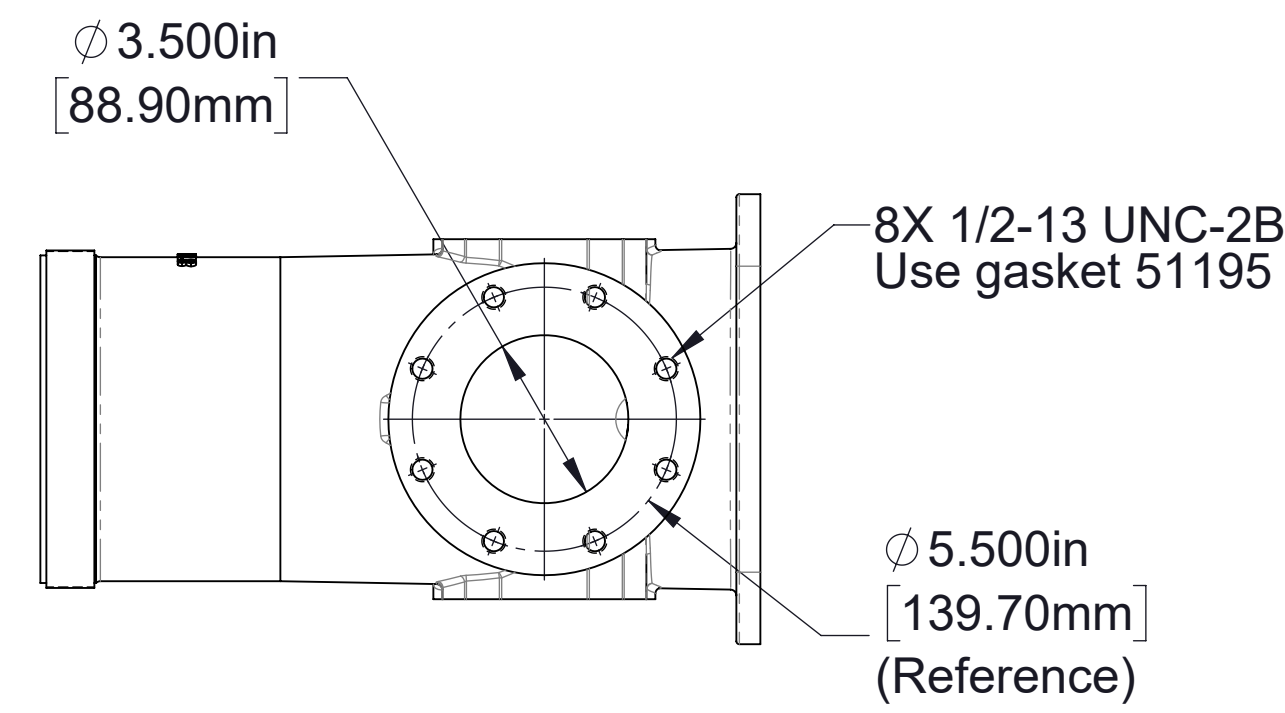
Model: CXN

Note:
1. The following pumps do not require fittings from this drawing:
CLR, CLV,
CGV, CGVN, CGVR,
CP-1, CP-2, CP-3, CP-4,
CH-4,
CZ, CZU,
CR,
S100

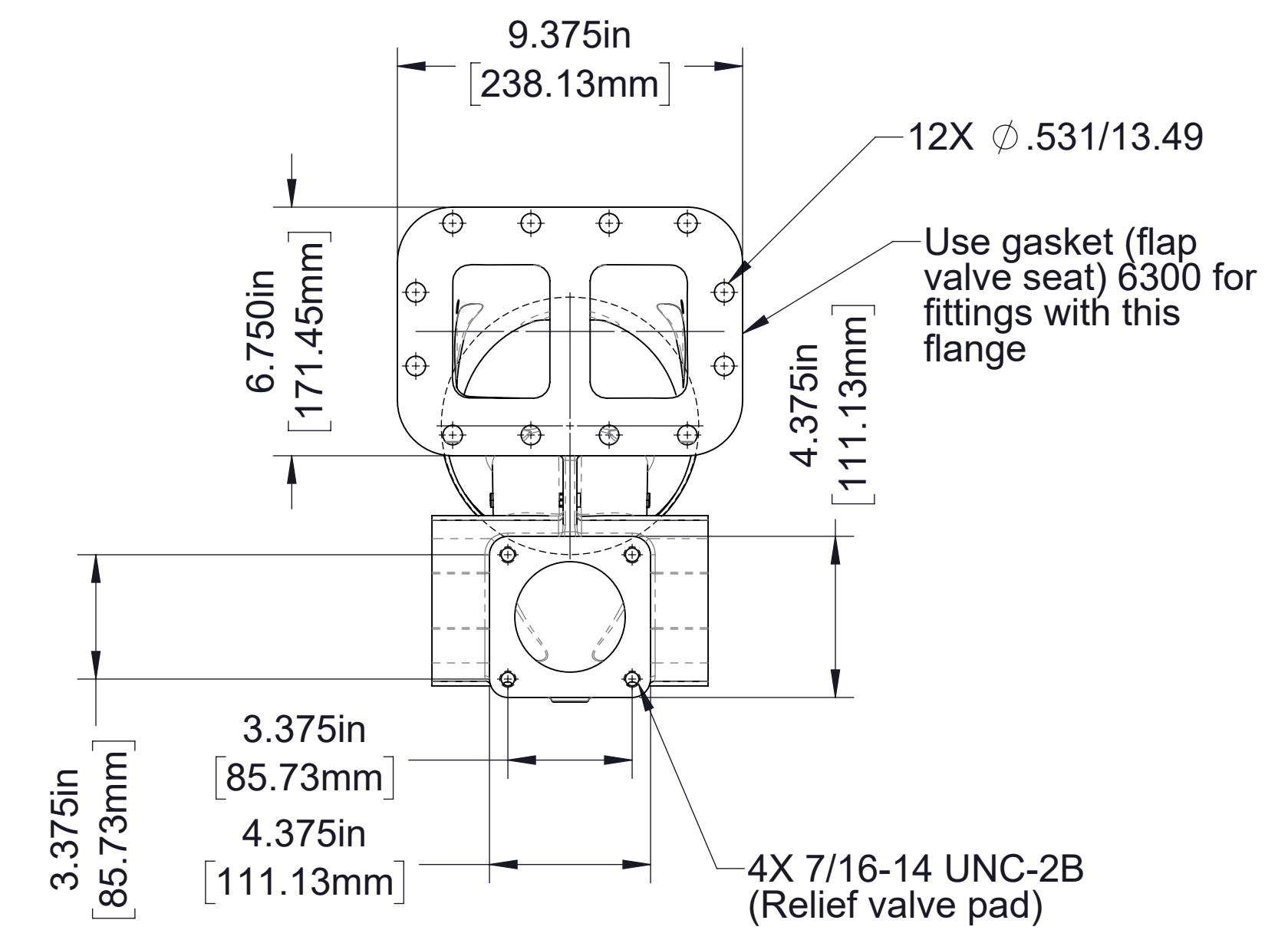
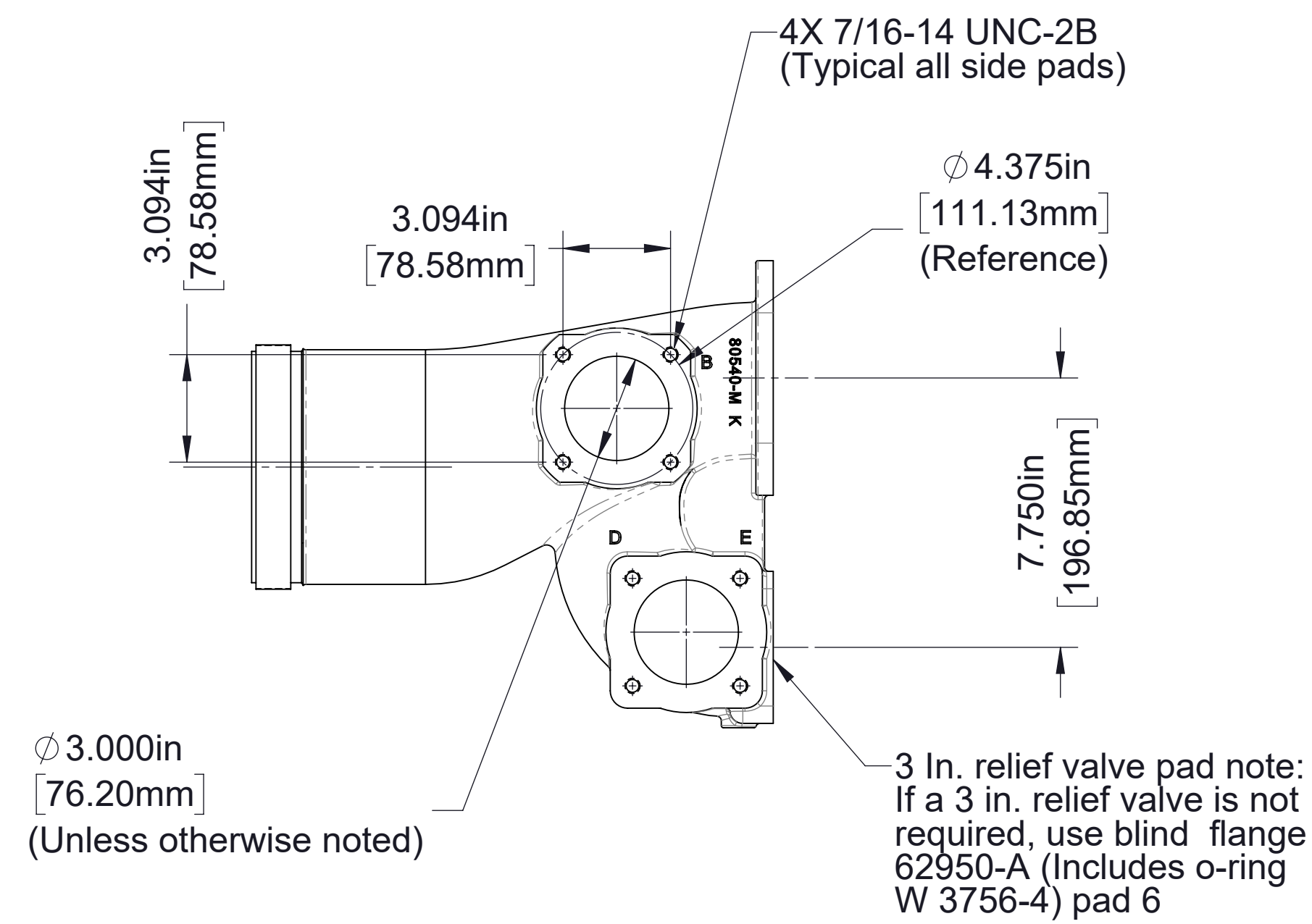
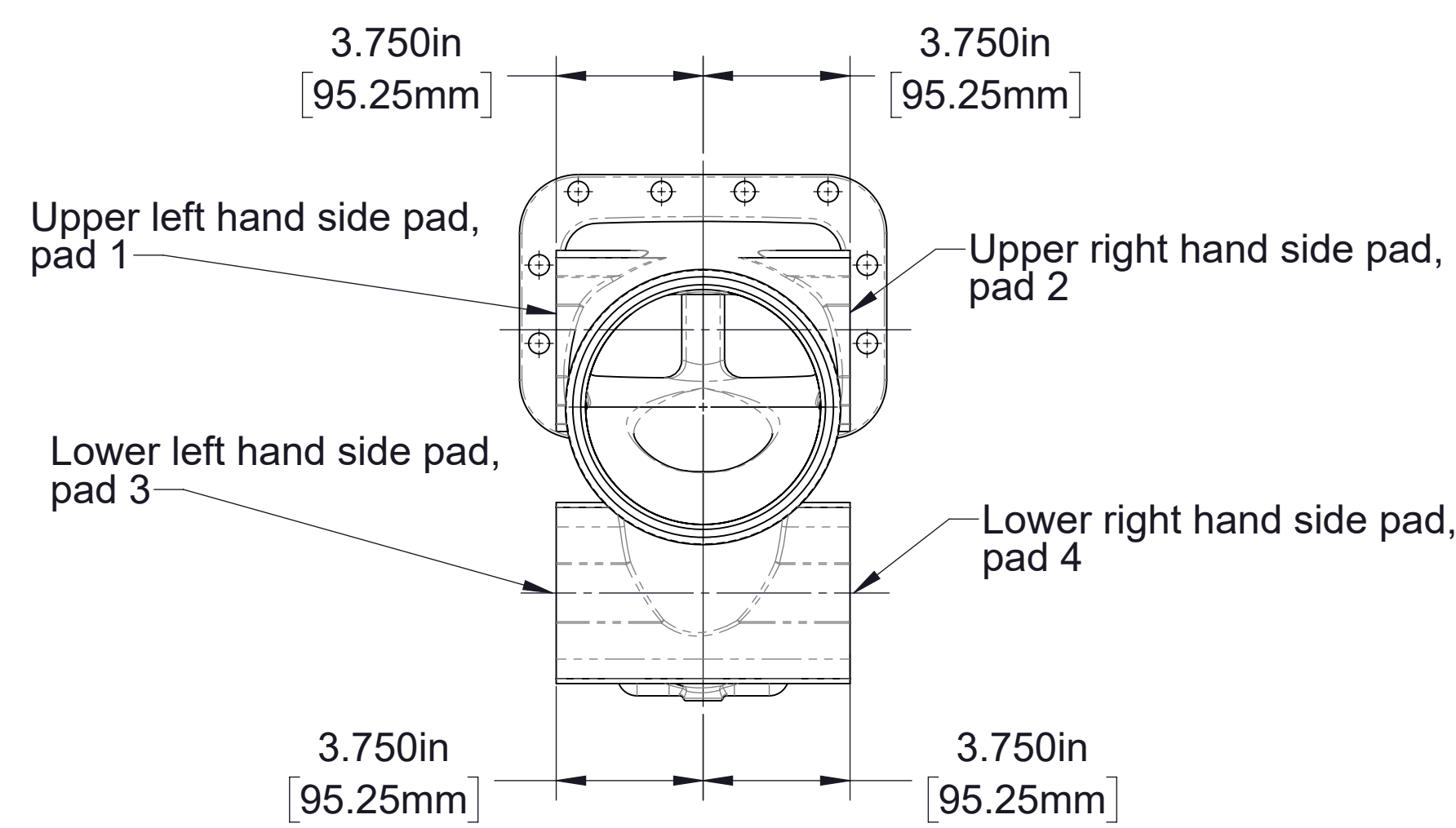
Specify Fittings From This Drawing To Be Mounted Directly on the Pump Intake Flanges as Follows:



Note:
1. Specify flanges, fittings or manifolds from drawing DPL82088 to be attached to pads.



Flange Dimensions and Side Pad Details for Fittings Without Relief Valve Pad

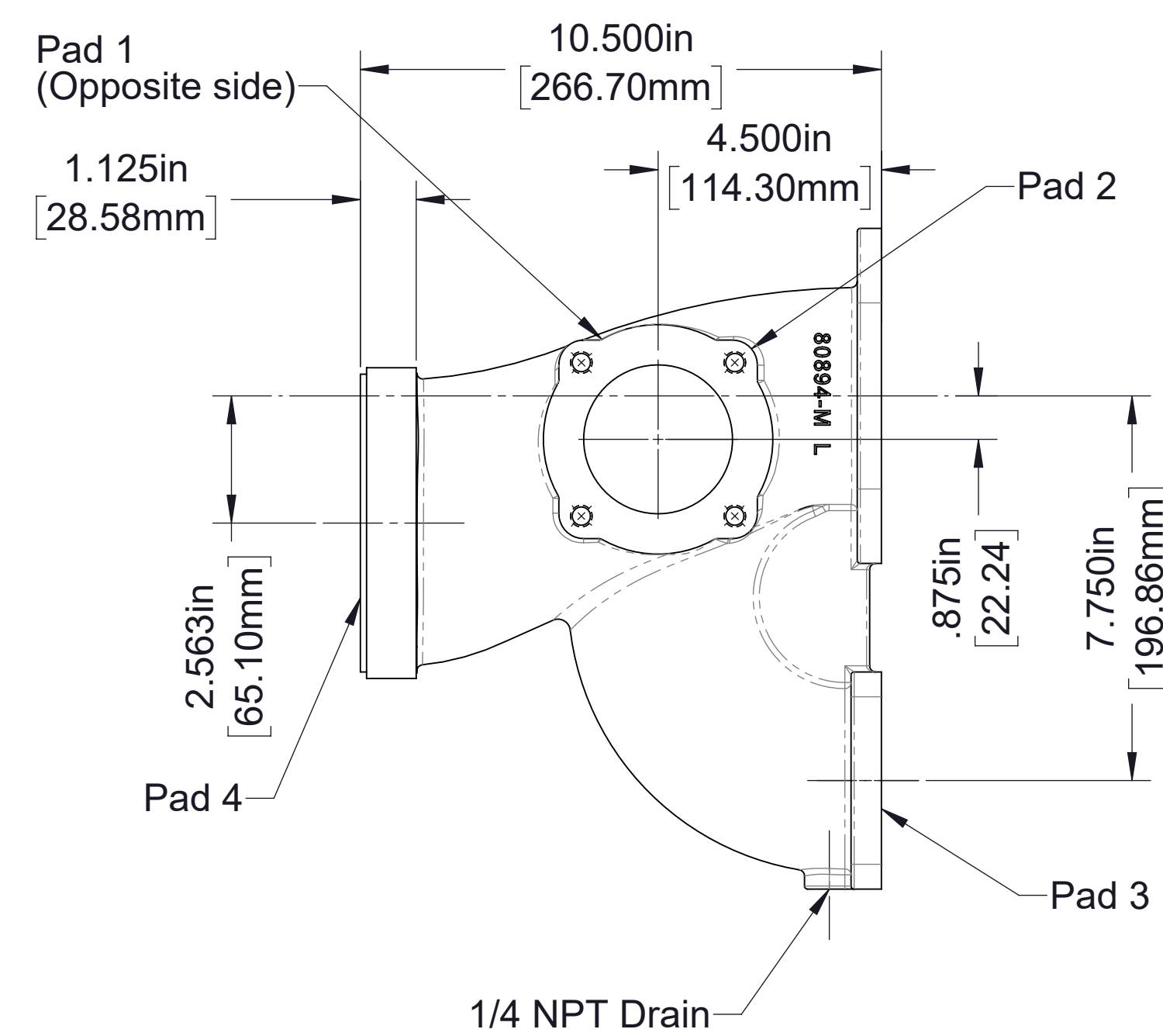


Notes:
1. Specify flange or fittings from drawing DPL82088 to be attached to pads.

Flange Dimensions and Side Pad Details for Fittings With 3 In. Relief Valve Pad

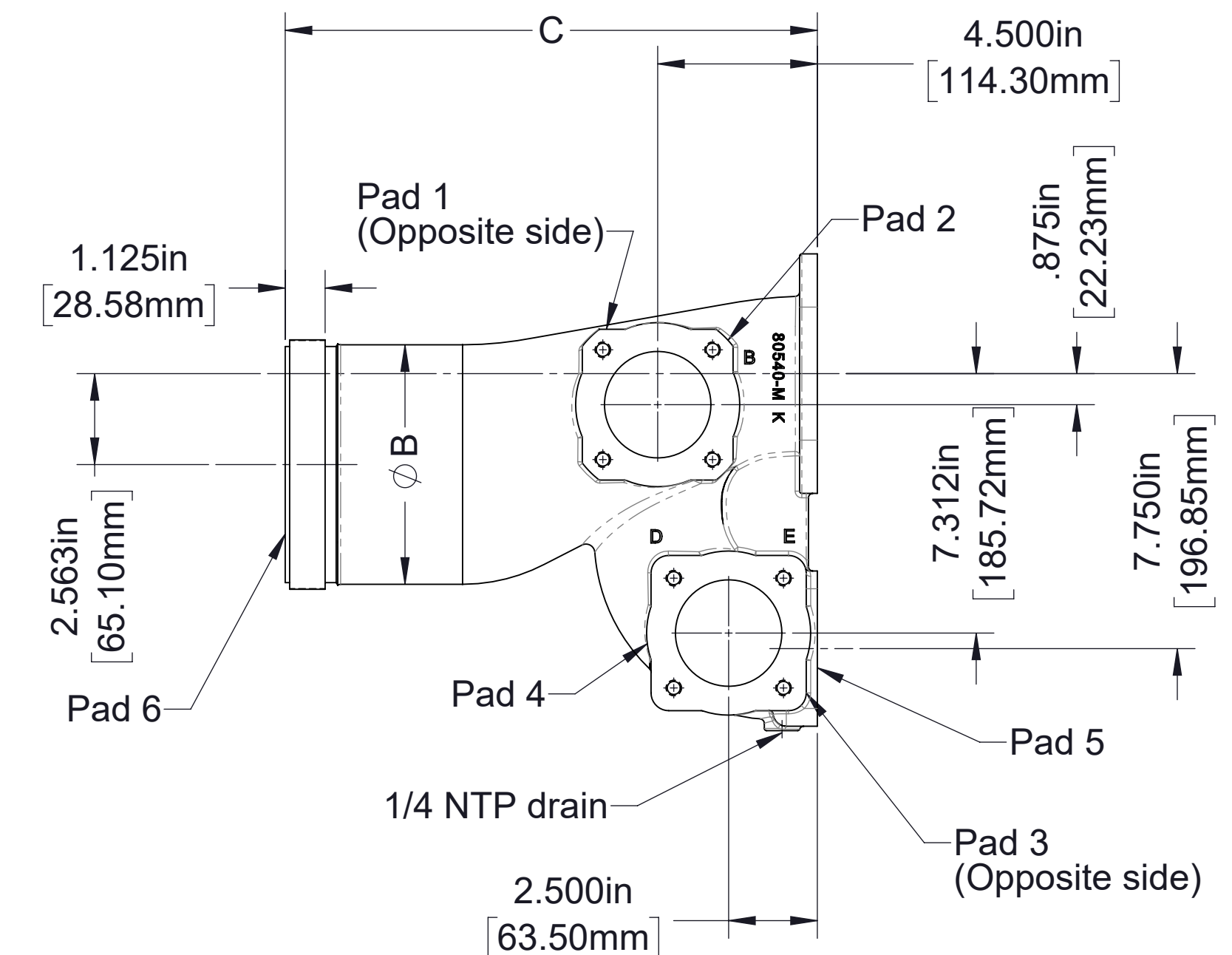
Section 1 - Intake Fittings

Fitting 1



Part No.	Thread Size
81833	5 in

Fitting 2



Part No.	Thread Size
81835	4.5 in
81836	5 in
81837	6 in
81838	6 in

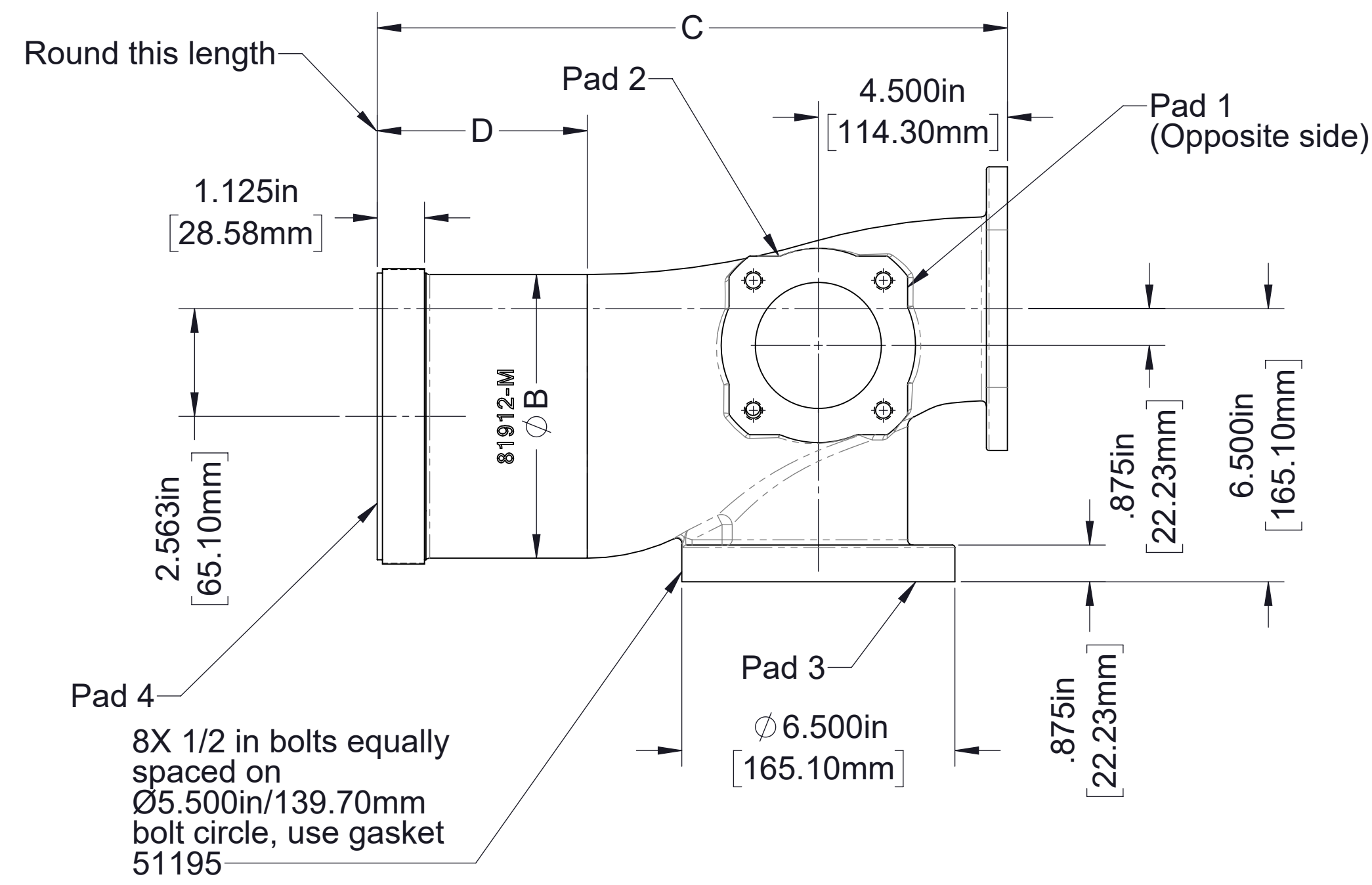
Part Number	Pad 1		Pad 2		Pad 3		Pad 4		Pad 5		Pad 6		Thread Size	B	C
	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings			
81833	4-Bolt	Type 1	4-Bolt	Type 1	3.0 RV	Type 14	5.0 THD	Type 23	N/A		N/A		5 in	5.750/146.05	N/A
81835	4-Bolt	Type 1	4-Bolt	Type 1	4-Bolt	Type 1	4-Bolt	Type 1	3.0 RV	Type 14	4.5 THD	N/A	4.5 in	5.750/146.05	15.000/381.00
81836	4-Bolt	Type 1	4-Bolt	Type 1	4-Bolt	Type 1	4-Bolt	Type 1	3.0 RV	Type 14	5.0 THD	Type 23	5 in	5.750/146.05	15.000/381.00
81837	4-Bolt	Type 1	4-Bolt	Type 1	4-Bolt	Type 1	4-Bolt	Type 1	3.0 RV	Type 14	6.0 THD	Type 13	6 in	6.750/171.45	15.000/381.00
81838	4-Bolt	Type 1	4-Bolt	Type 1	4-Bolt	Type 1	4-Bolt	Type 1	3.0 RV	Type 14	6.0 THD	Type 13	6 in	6.750/171.45	13.500/342.90

Notes:

- Threads are furnished as follows:
 (4.5 in NH (5.75 in. O.D. X 4 T.P.I))
 (5 in NH (6.25 in. O.D. X 4 T.P.I))
 (6 in NH (7.031 in. O.D. X 4 T.P.I))
- Other threads are available by special order with different part numbers applying.
- All fittings are available in iron or bronze unless otherwise specified, add "-BZ" suffix to part number for bronze fittings.
- See page 3 for flange dimensions and side pad details.
- See drawing DPL82088 for auxiliary fittings which may be installed on fitting pads.

Section 1 - Threaded Intake Fitting

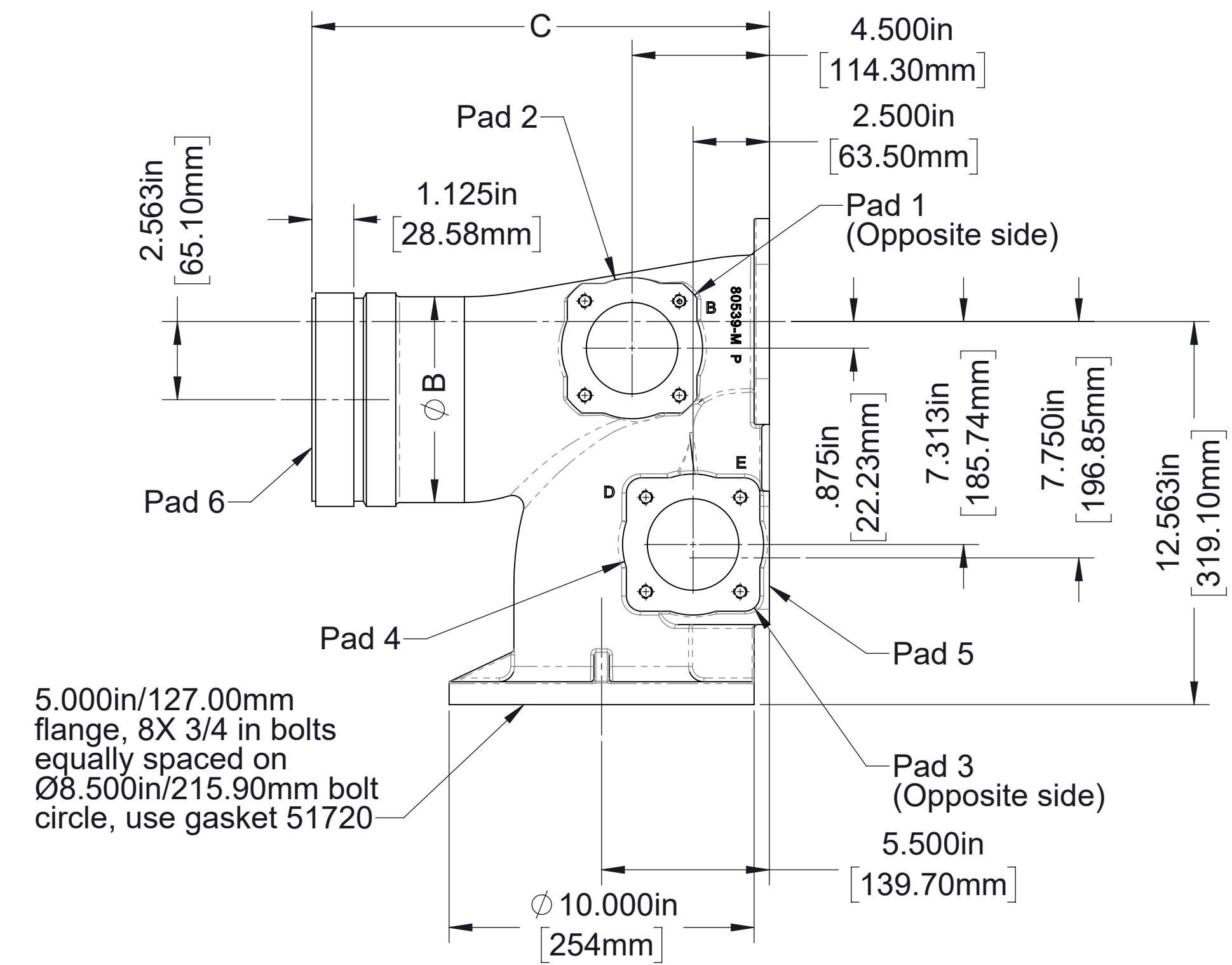
Fitting 3



Part Number	Thread Size
81912	6 in
81913	5 in
*81914	6 in

*Available in iron only

Fitting 4



Part Number	Thread Size
*81841	6 in
81844	6 in

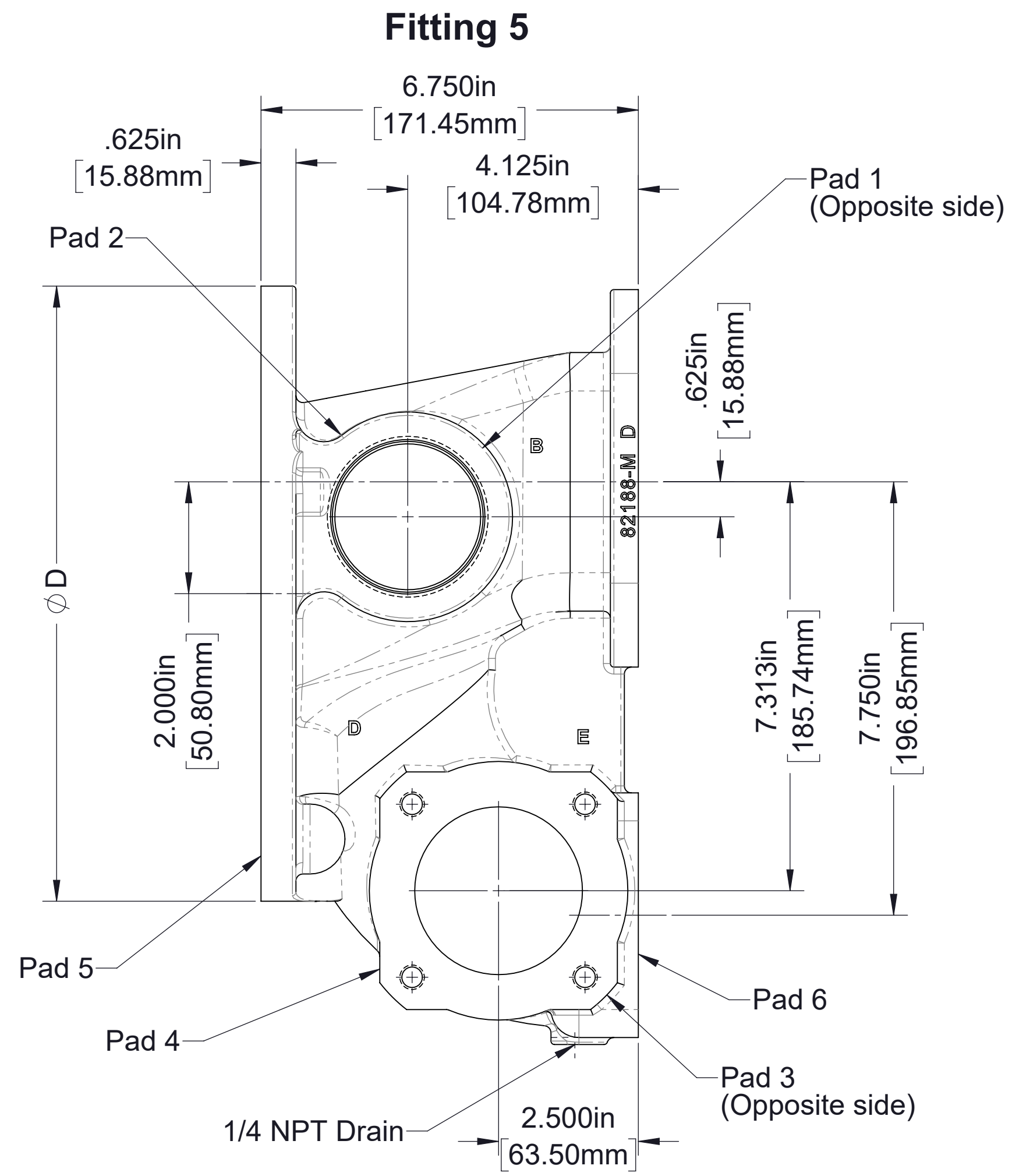
*Available in iron only

Part Number	Pad 1		Pad 2		Pad 3		Pad 4		Pad 5		Pad 6		Thread Size	B	C	D
	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings				
81912	4-Bolt	Type 1	4-Bolt	Type 1	8-Bolt	Type 8	6.0 THD	Type 13	N/A		N/A		6 in	6.750/171.45	15.000/381.00	5.000/127.00
81913	4-Bolt	Type 1	4-Bolt	Type 1	8-Bolt	Type 8	5.0 THD	Type 23	N/A		N/A		5 in	5.750/146.05	13.500/342.90	3.500/88.90
81914	4-Bolt	Type 1	4-Bolt	Type 1	8-Bolt	Type 8	6.0 THD	Type 13	N/A		N/A		6 in	6.750/171.45	13.500/342.90	3.500/88.90
81841	4-Bolt	Type 1	4-Bolt	Type 1	4-Bolt	Type 1	4-Bolt	Type 1	3.0 RV	Type 14	6.0 THD	Type 13	6 in	6.750/171.45	13.500/342.90	N/A
81844	4-Bolt	Type 1	4-Bolt	Type 1	4-Bolt	Type 1	4-Bolt	Type 1	3.0 RV	Type 14	6.0 THD	Type 13	6 in	6.750/171.45	15.000/381.00	N/A

Notes:

- Threads are furnished as follows:
(5 in NH (6.25 in O.D. X 4 T.P.I.)
(6 in NH (7.031 in. O.D. X 4 T.P.I.)
- Other threads are available by special order with different part numbers applying.
- All fittings are available in iron or bronze unless otherwise specified, add "-BZ" suffix to part number for bronze fittings.
- See page 3 for flange dimensions and side pad details.
- See drawing DPL82088 for auxiliary fittings which may be installed on fitting pads.

Section1 - Threaded Intake Fittings



Part Number	Flange Size
82188	6 in

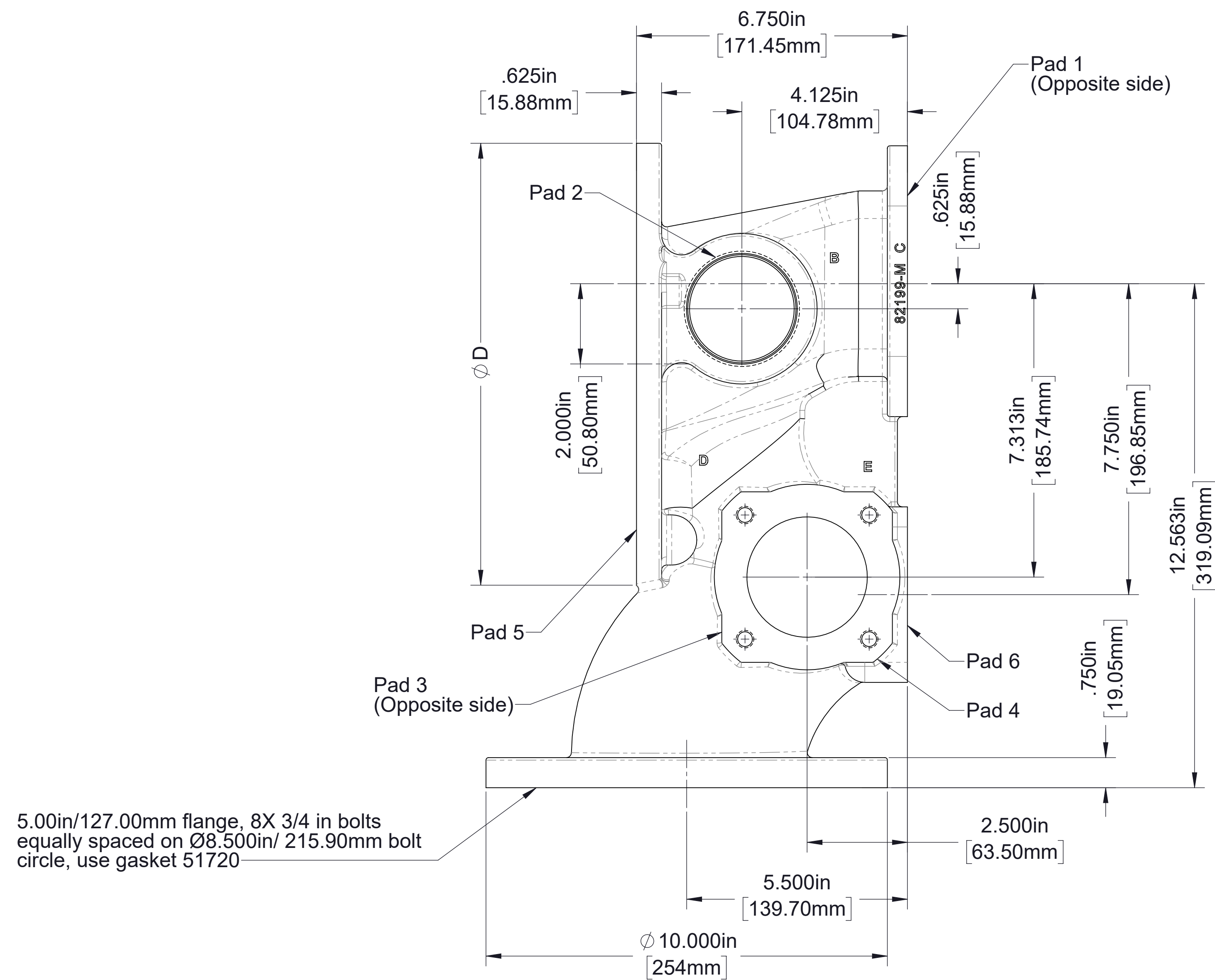
Part Number	Pad 1		Pad 2		Pad 3		Pad 4		Pad 5		Pad 6		Flange Size	D	BC	Bolts	Gasket
	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings					
82188	2-1/2 NPT	Type 2	2-1/2 NPT	Type 2	4-Bolt	Type 1	4-Bolt	Type 1	6.0 FLNG	Type 17	3.0 RV	Type 14	6 in	$\varnothing 11.000/279.40$	9.500/241.30	8X 3/4 in	51719

Notes:

1. All fittings are available in iron or bronze unless otherwise specified, add "-BZ" suffix to part number for bronze fittings.
2. See page 3 for flange dimensions and side pad details.
3. See drawing DPL82088 for auxiliary which may be installed on fitting pads.

Section 1 - Flanged Intake Fittings

Fitting 6



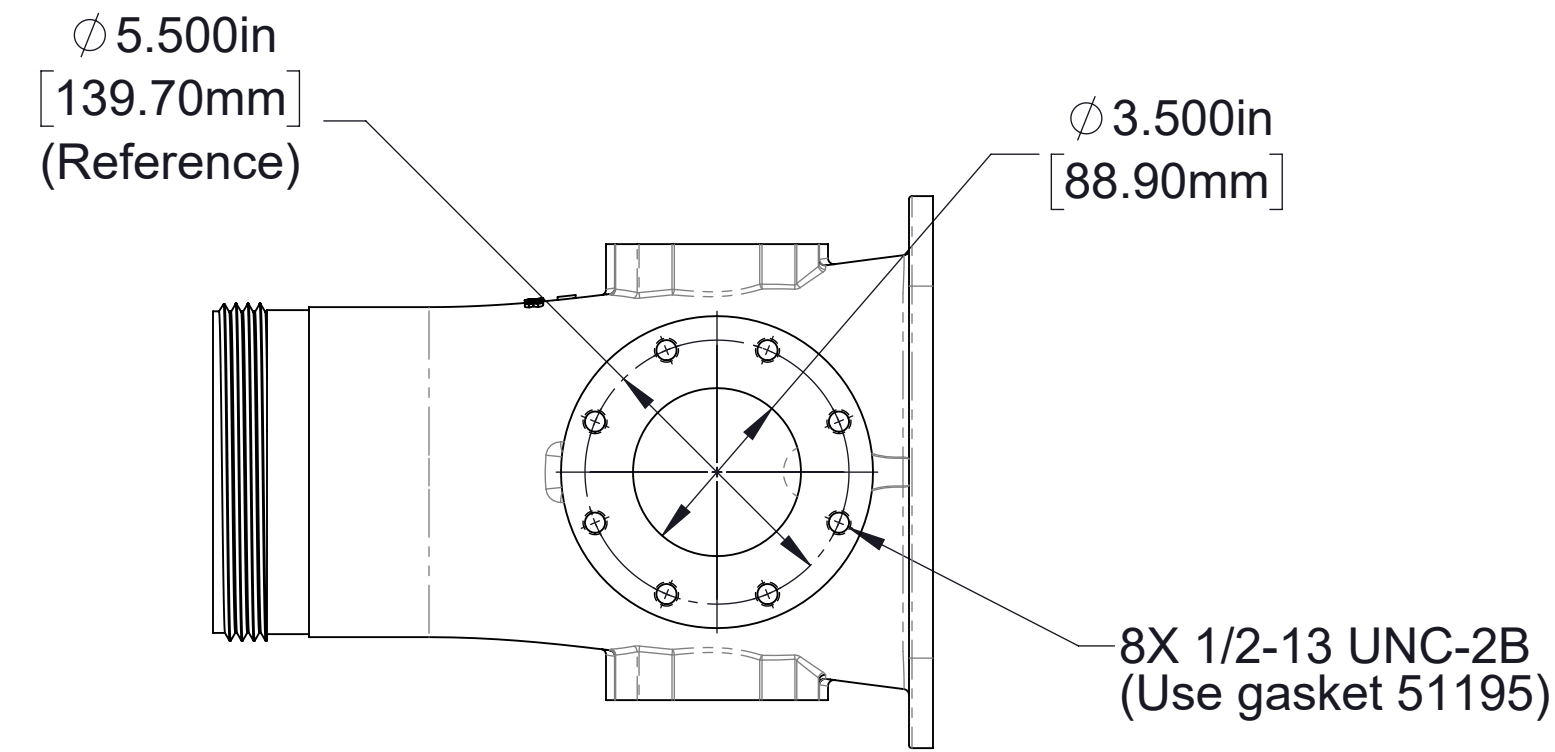
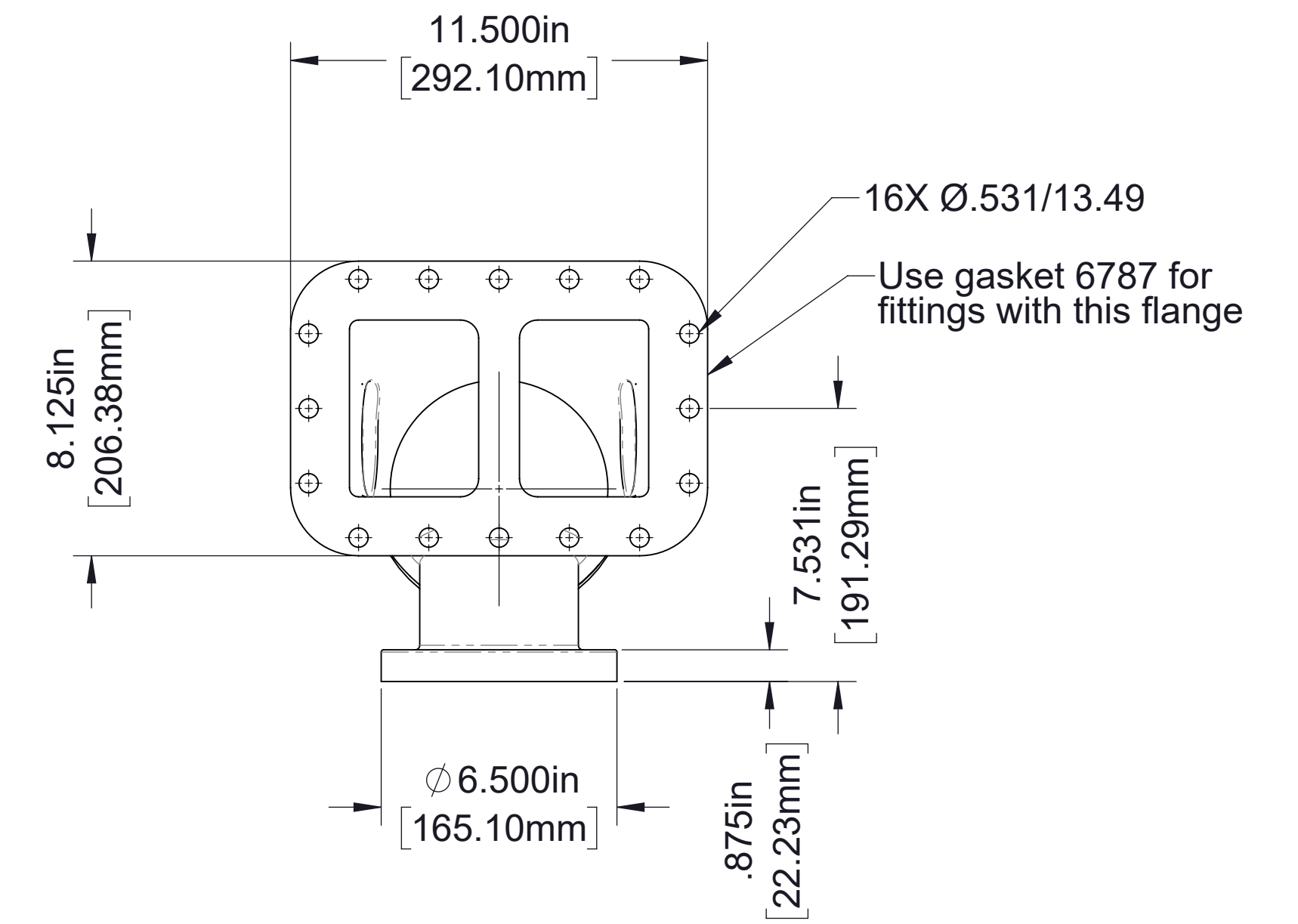
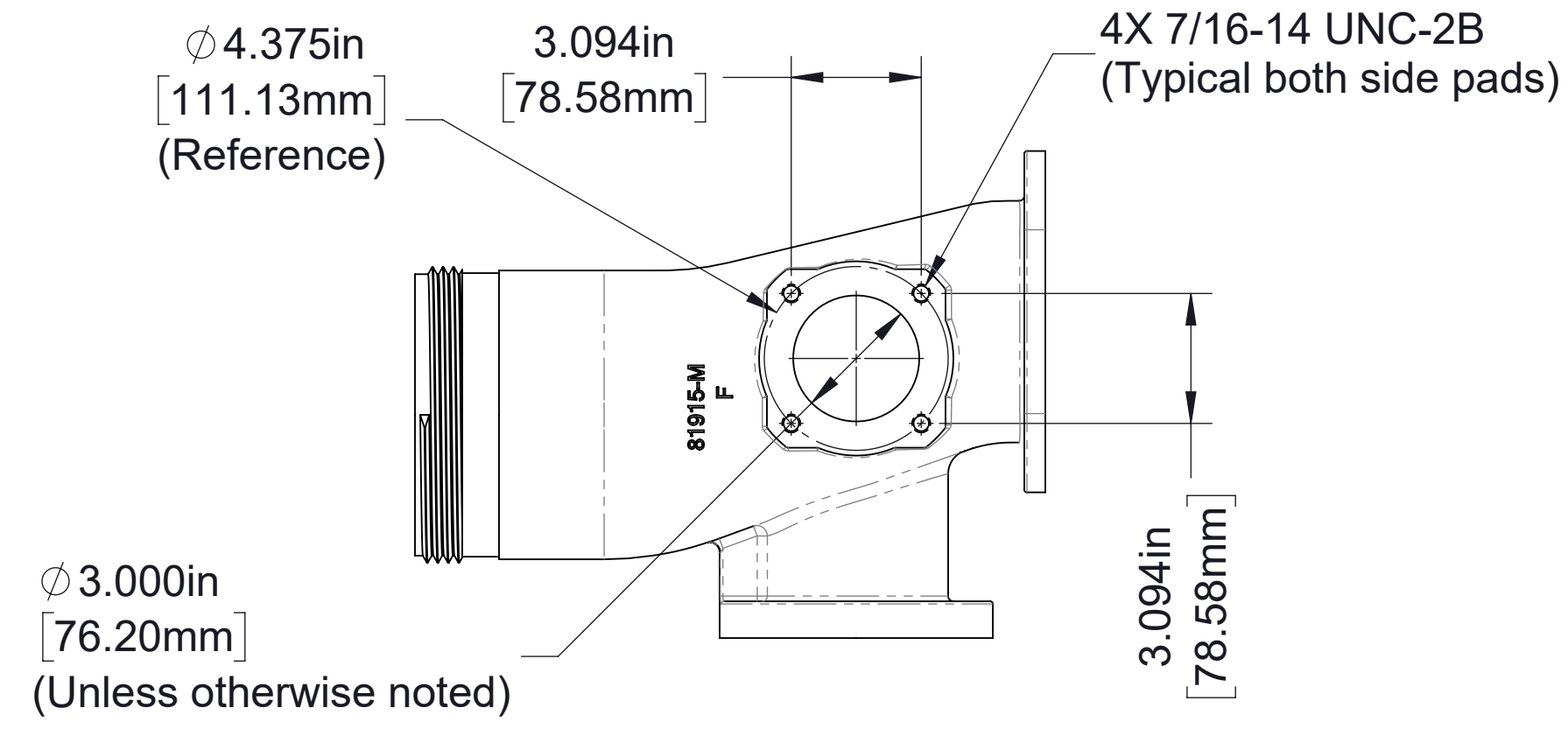
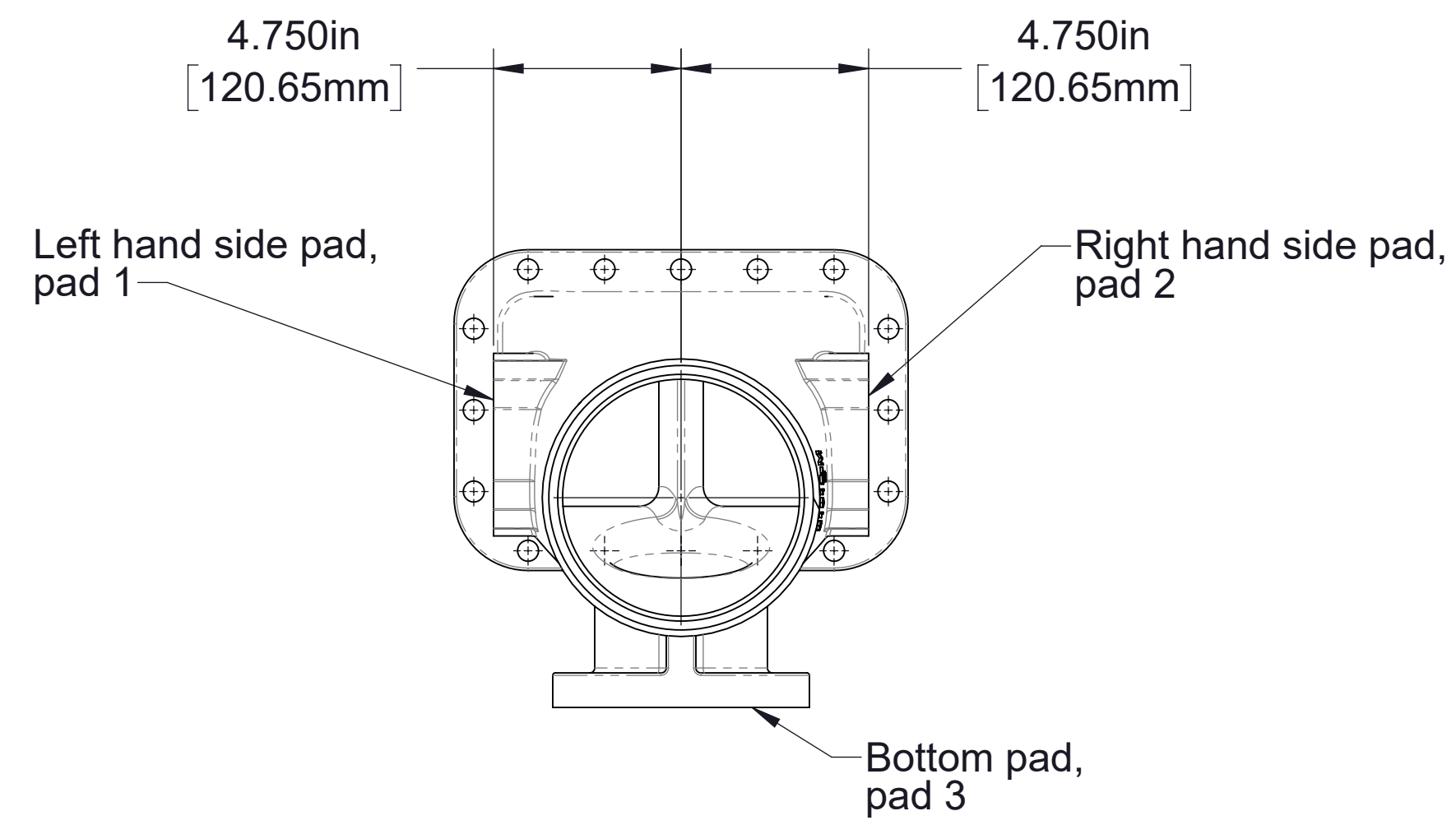
Part Number	Flange Size
82199	6 in

Part Number	Pad 1		Pad 2		Pad 3		Pad 4		Pad 5		Pad 6		Flange Size	D	BC	Bolts	Gasket
	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings					
82199	2-1/2 NPT	Type 2	2-1/2 NPT	Type 2	4-Bolt	Type 1	4-Bolt	Type 1	6.0 FLNG	Type 17	3.0 RV	Type 14	6 in	Ø11.000/279.40	9.500/241.30	8X 3/4 in	51719

Notes:

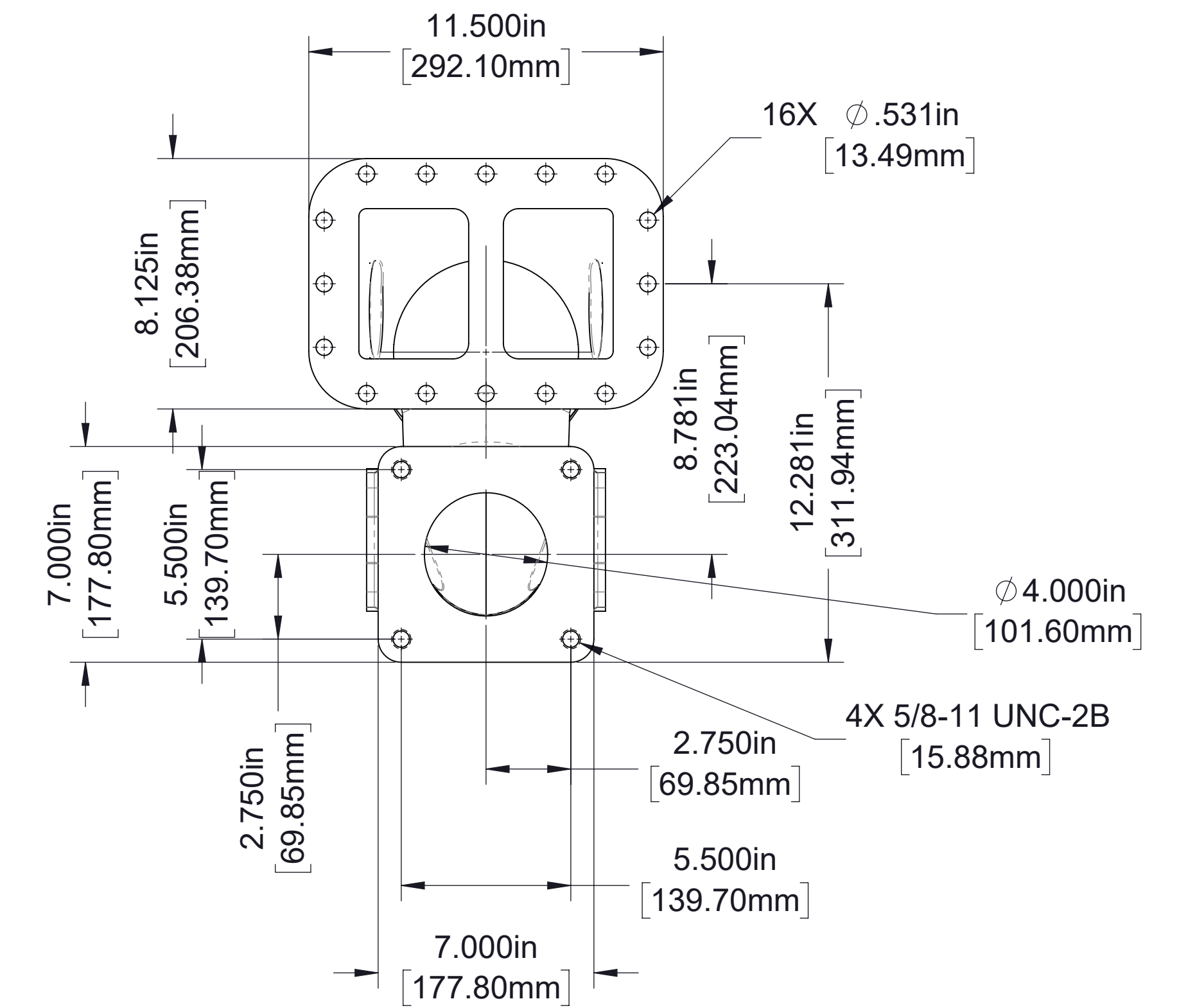
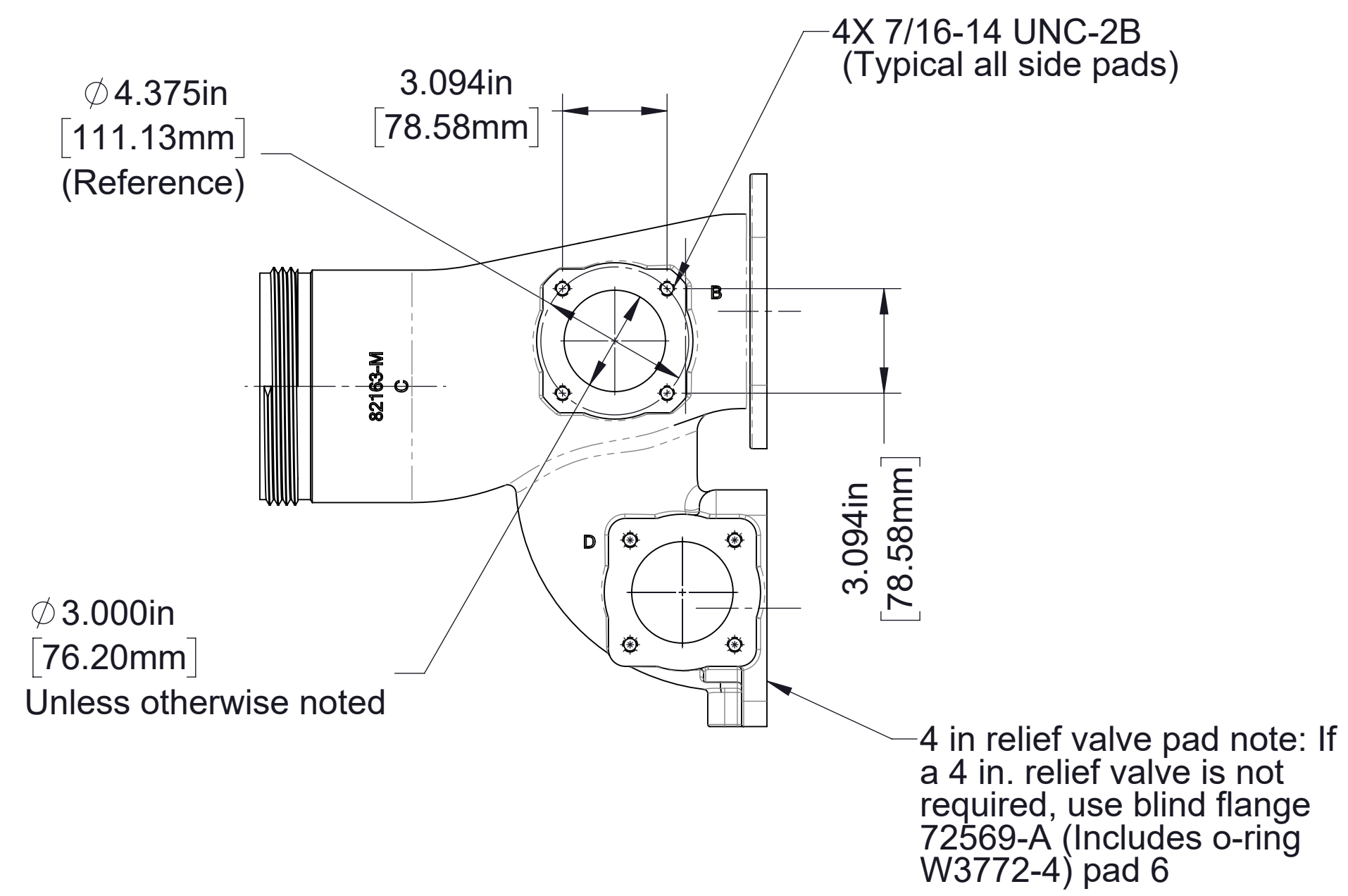
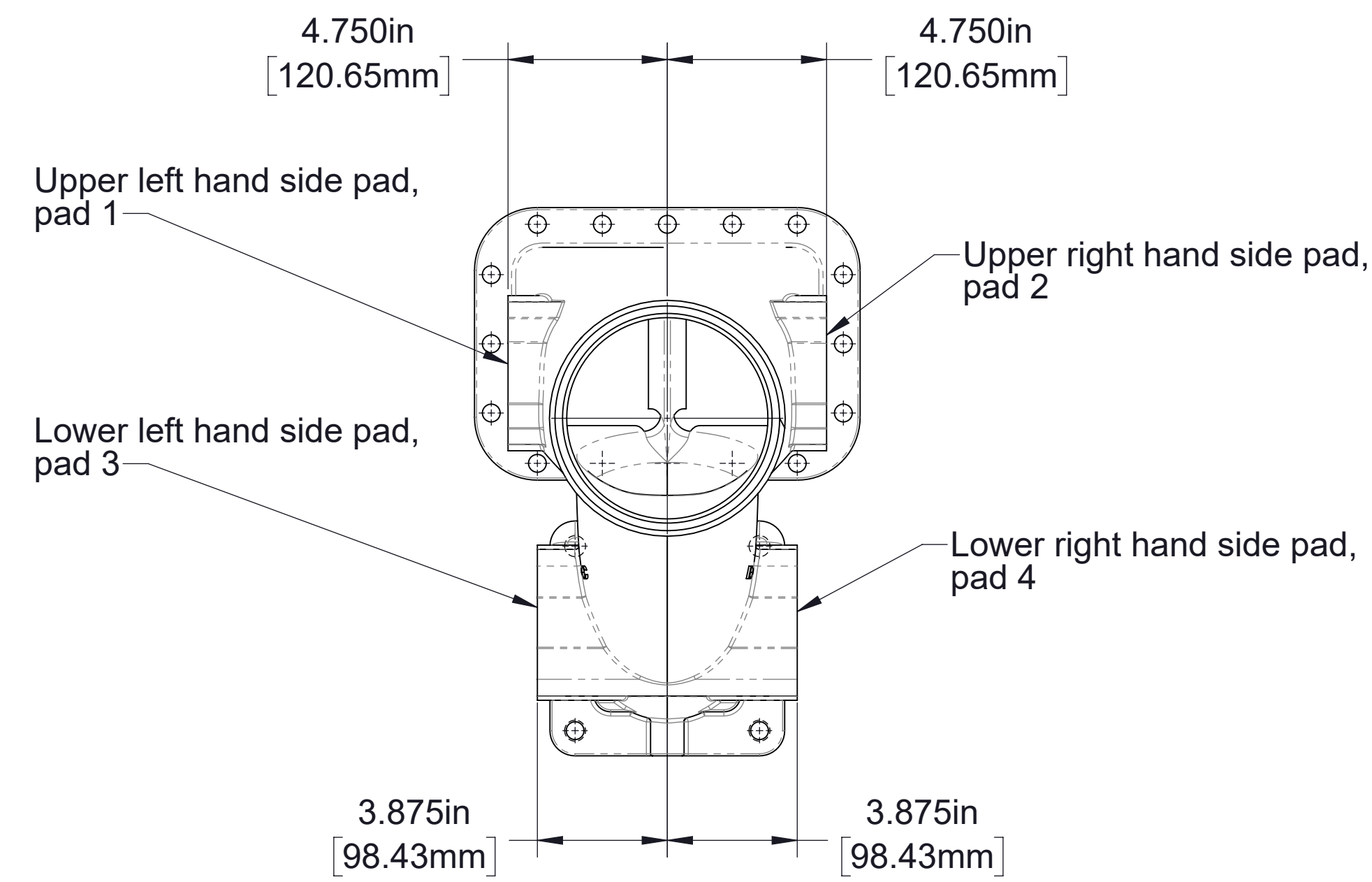
1. All fittings are available in iron or bronze unless otherwise specified, add "-BZ" suffix to part number for bronze fittings.
2. See page 3 for flange dimensions and side pad details.
3. See drawing DPL82088 for auxiliary fittings which may be installed on fitting pads.

Section 1 - Flanged Intake Fittings



Note:
1. Specify flanges, fittings or manifolds from drawing DPL82088 to be attached to pads 1, 2 and 3.

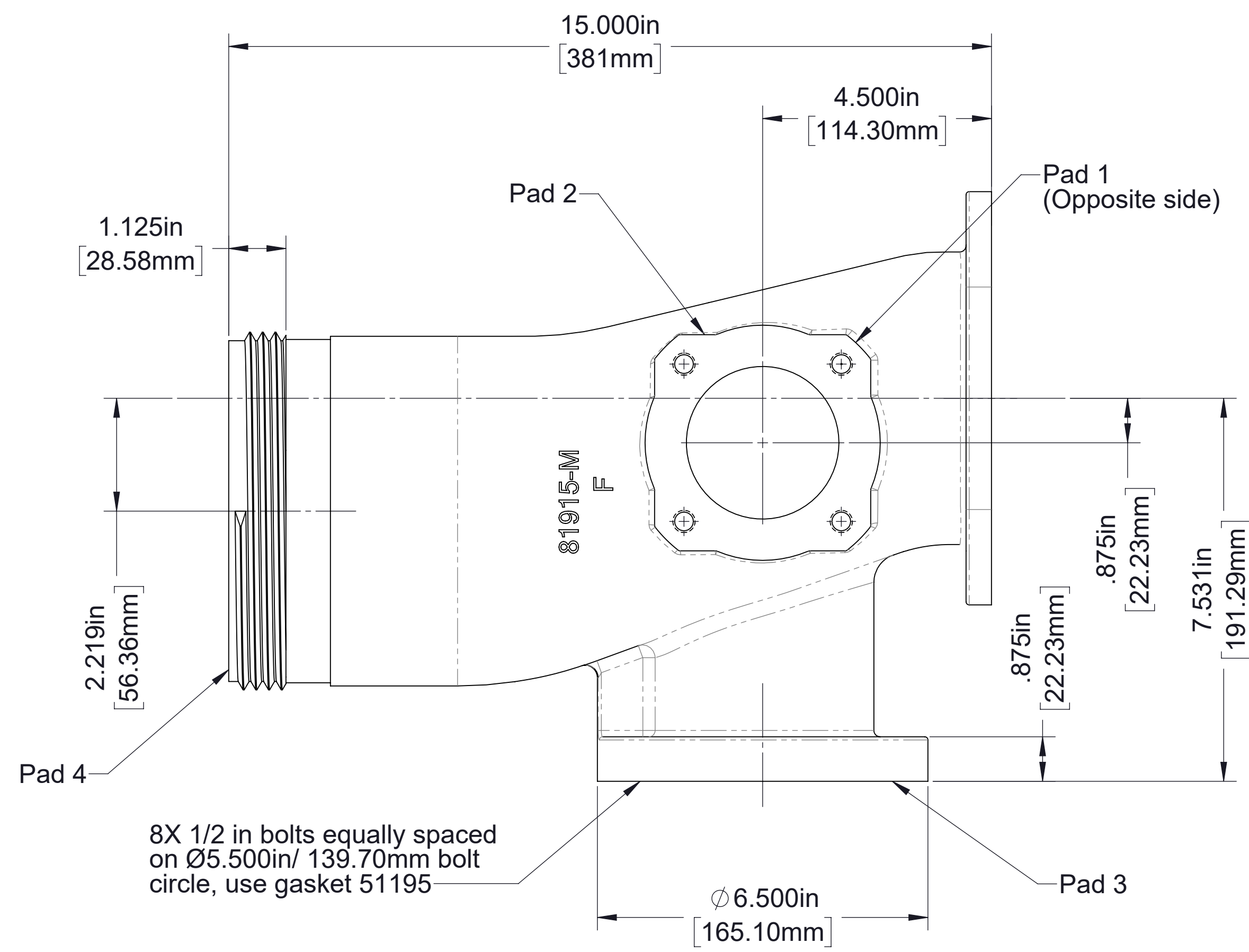
Flange Dimensions and Side Pad Details for Fittings without Relief Valve Pad



Flange Dimensions and Side Pad Details for Fittings with 4 in Relief Valve Pad

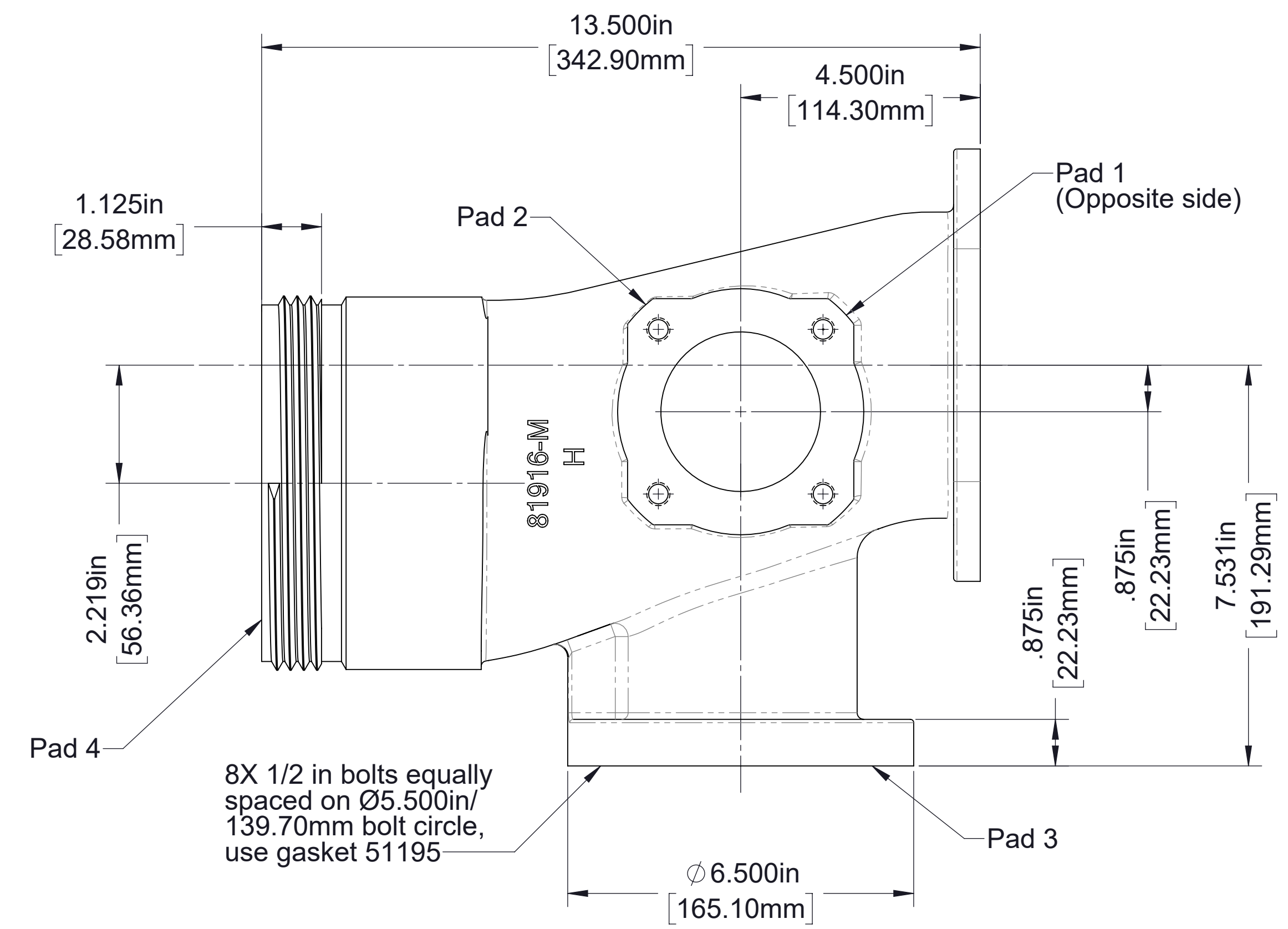
Note:
1. Specify flanges, fittings or manifolds from drawing DPL82088 to be attached to pads 1, 2 and 3.

Fitting 1



Part Number	Thread Size
81915	6 in
82767	5 in

Fitting 2



Part Number	Thread Size
*81916	6 in
82768	5 in

*Available in iron only

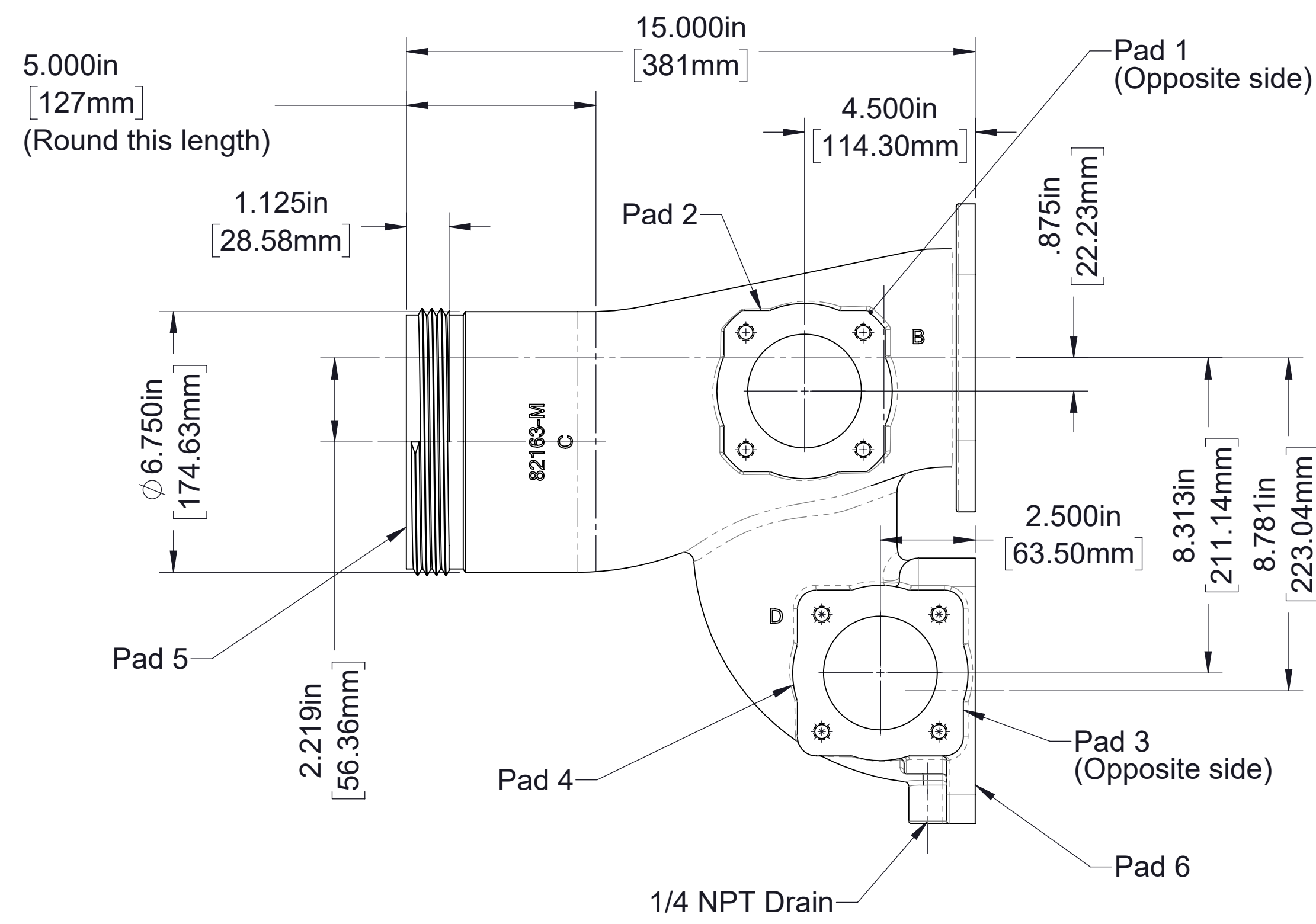
Part Number	Pad 1		Pad 2		Pad 3		Pad 4		Thread Size
	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings	
81915	4-Bolt	Type 1	4-Bolt	Type 1	8-Bolt	Type 8	6.0 THD	Type 13	6 in
81916	4-Bolt	Type 1	4-Bolt	Type 1	8-Bolt	Type 8	6.0 THD	Type 13	6 in
82767	4-Bolt	Type 1	4-Bolt	Type 1	8-Bolt	Type 8	5.0 THD	Type 23	5 in
82768	4-Bolt	Type 1	4-Bolt	Type 1	8-Bolt	Type 8	5.0 THD	Type 23	5 in

Notes:

- Threads are furnished as follows:
(5 in NH (6.25 in. O.D. X 4 T.P.I))
(6 in NH (7.031 in. O.D. X 4 T.P.I))
- Other threads are available by special order with different part numbers applying.
- All fittings are available in iron or bronze unless otherwise specified, add "-BZ" suffix to part number for bronze fittings.
- See page 8 for flange dimensions and side pad details.
- See drawing DPL82088 for auxiliary fittings which may be installed on fitting pads.

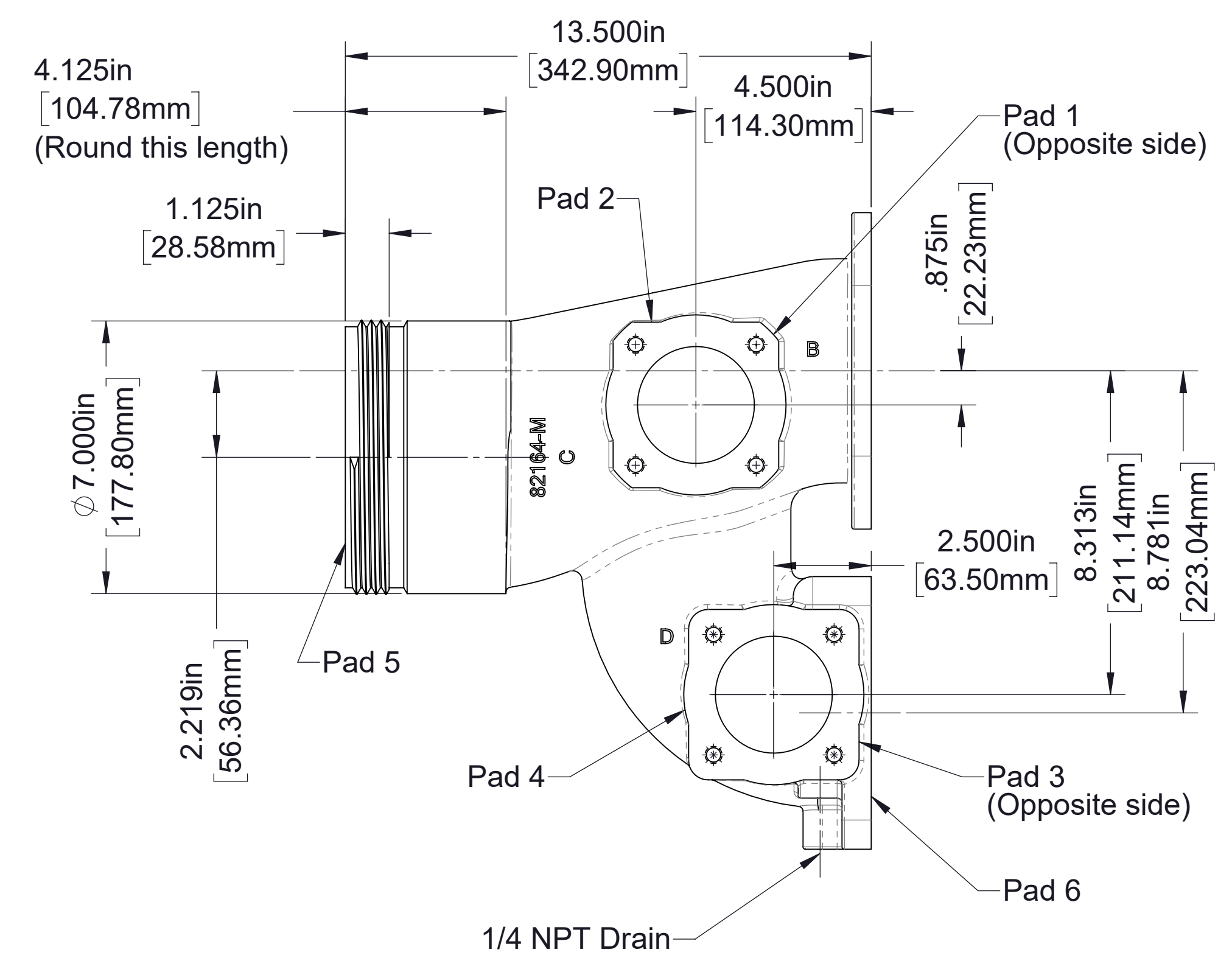
Section 2 - Threaded Intake Fitting

Fitting 3



Part Number	Thread Size
82163	6 in

Fitting 4



Part Number	Thread Size
82173	6 in

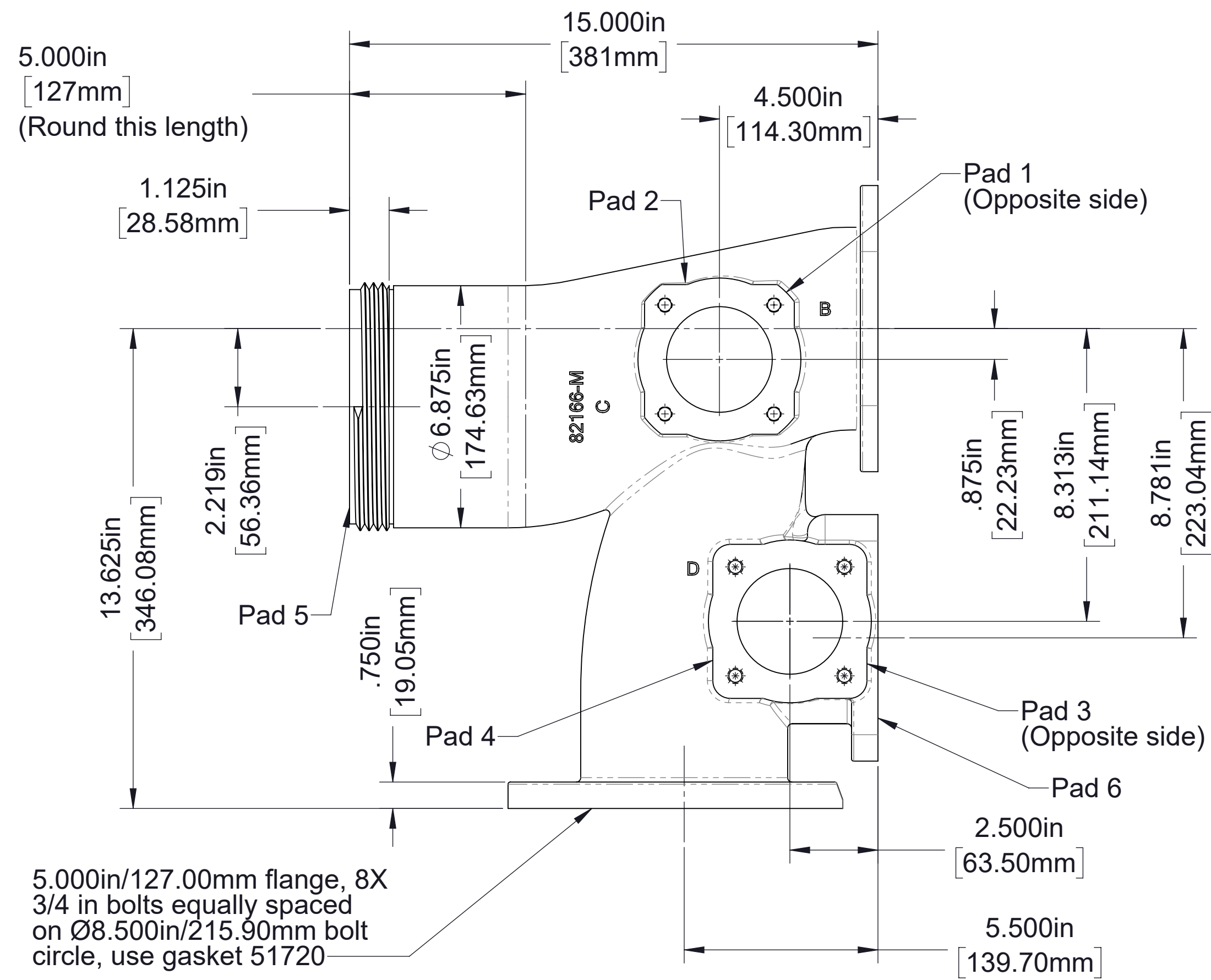
Part Number	Pad 1		Pad 2		Pad 3		Pad 4		Pad 5		Pad 6		Thread Size
	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings	
82163	4-Bolt	Type 1	4-Bolt	Type 1	4-Bolt	Type 1	4-Bolt	Type 1	6.0 THD	Type 13	4.0 RV	Type 15	6 in
82173	4-Bolt	Type 1	4-Bolt	Type 1	4-Bolt	Type 1	4-Bolt	Type 1	6.0 THD	Type 13	4.0 RV	Type 15	6 in

Notes:

- Threads are furnished as follows:
(6 in NH (7.031 in. O.D. X 4 T.P.I.))
- Other threads are available by special order with different part numbers applying.
- All fittings are available in iron or bronze unless otherwise specified, add "-BZ" suffix to part number for bronze fittings.
- See page 8 for flange dimensions and side pad details.
- See drawing DPL82088 for auxiliary fittings which may be installed on fitting pads.

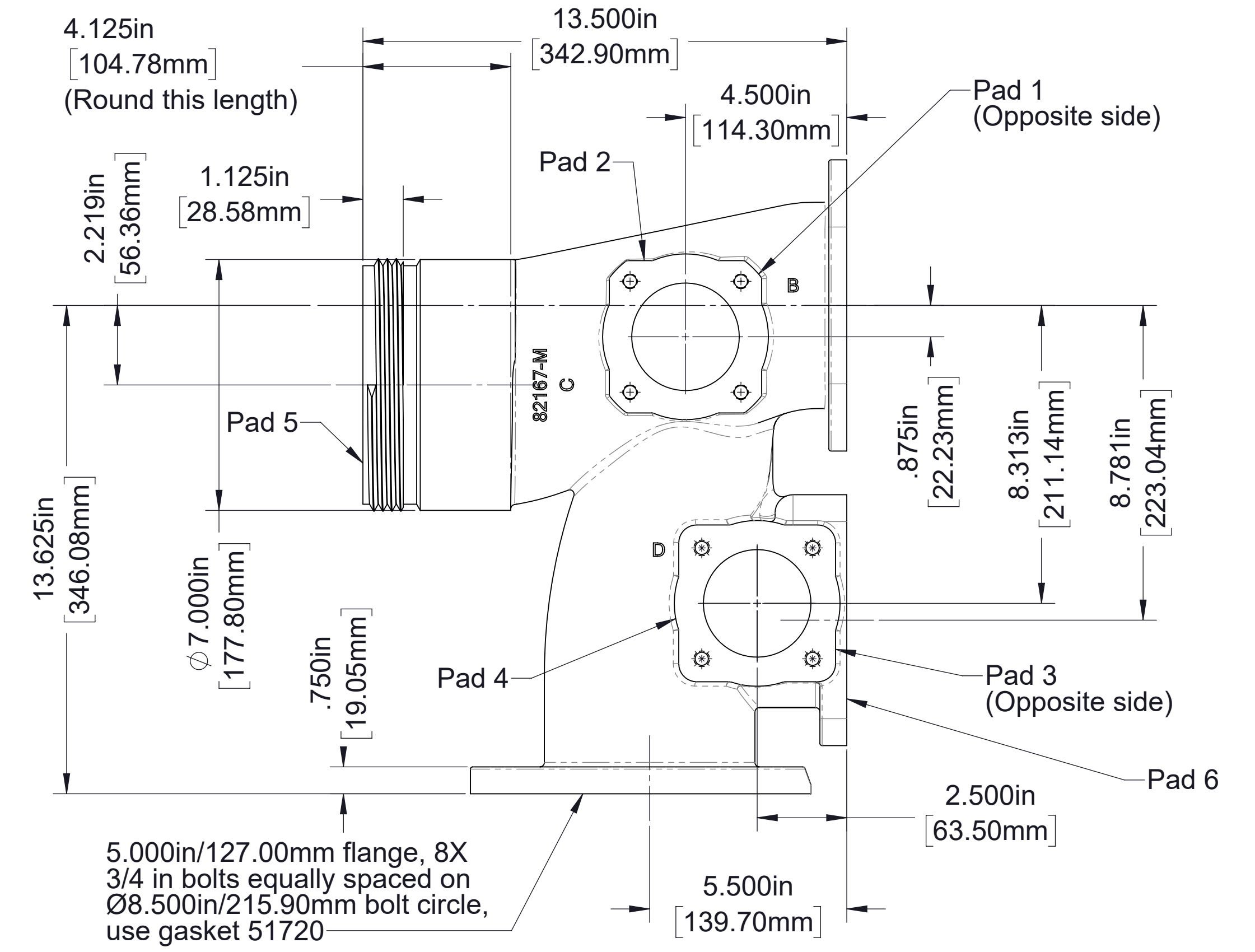
Section 2 - Threaded Intake Fitting

Fitting 5



Part Number	Thread Size
82166	6 in

Fitting 6



Part Number	Thread Size
82174	6 in

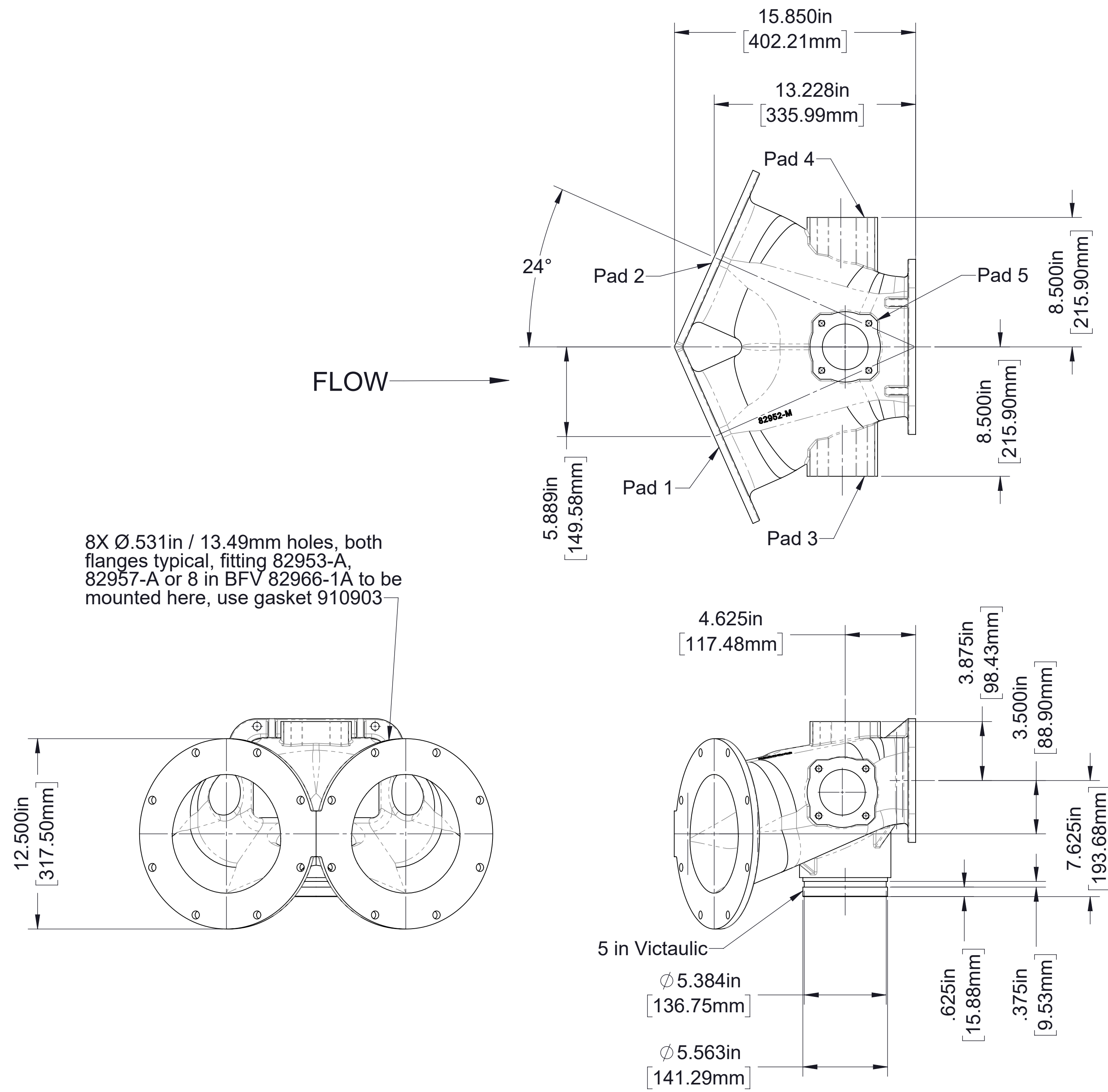
Part Number	Pad 1		Pad 2		Pad 3		Pad 4		Pad 5		Pad 6		Thread Size
	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings	
82166	4-Bolt	Type 1	4-Bolt	Type 1	4-Bolt	Type 1	4-Bolt	Type 1	6.0 THD	Type 13	4.0 RV	Type 15	6 in
82174	4-Bolt	Type 1	4-Bolt	Type 1	4-Bolt	Type 1	4-Bolt	Type 1	6.0 THD	Type 13	4.0 RV	Type 15	6 in

Notes:

- Threads are furnished as follows:
(6 in NH (7.031 In. O.D. X 4 T.P.I))
- Other threads are available by special order with different part numbers applying.
- All fittings are available in iron or bronze unless otherwise specified, add "-BZ" suffix to part number for bronze fittings.
- See page 8 for flange dimensions and side pad details.
- See drawing DPL82088 for auxiliary fittings which may be installed on fitting pads.

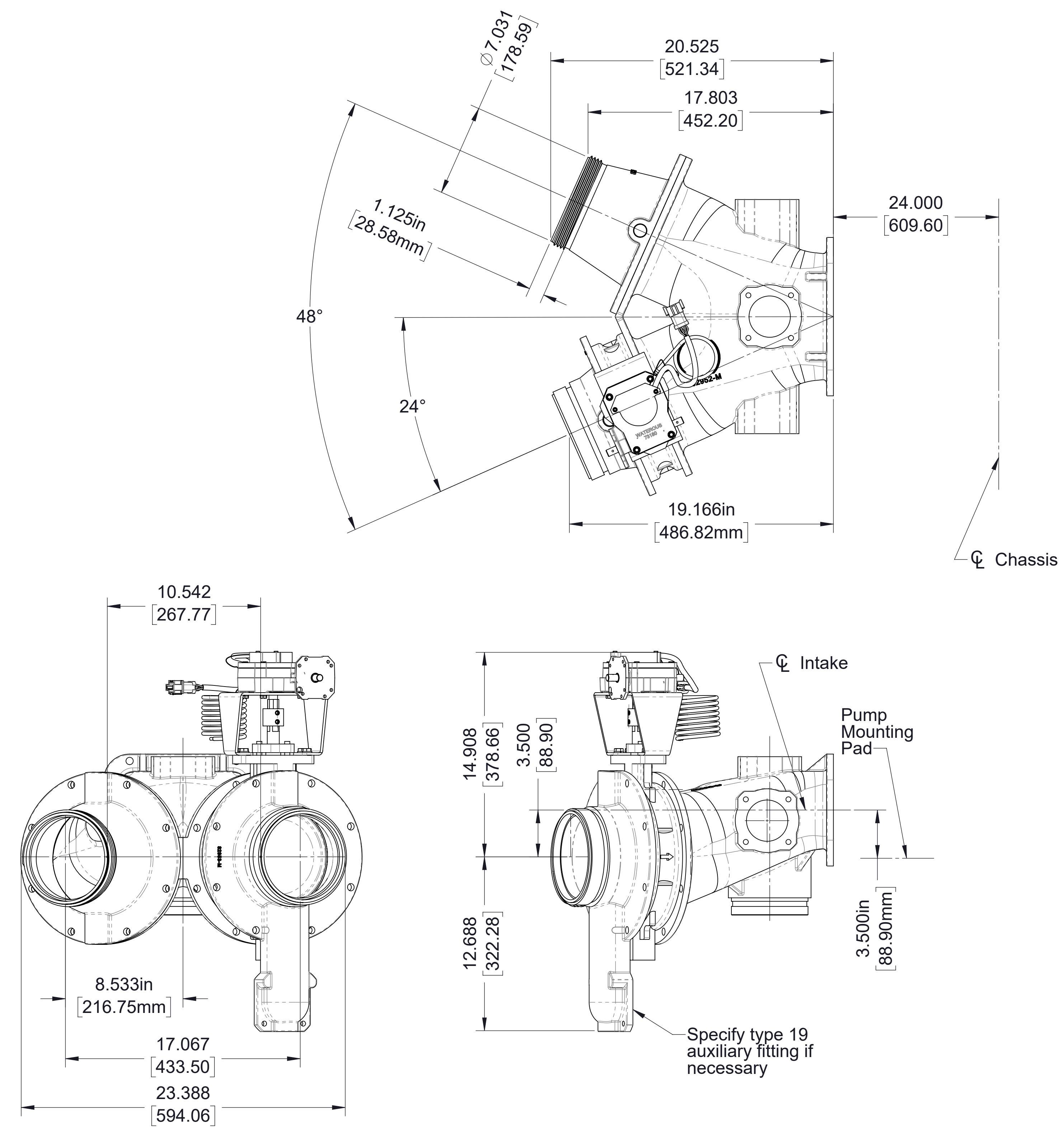
Section 2 - Threaded Intake Fitting

Fitting 7



Part Number	Pad 1		Pad 2		Pad 3		Pad 4		Pad 5	
	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings
82952	8 in ANSI	Type 30	8 in ANSI	Type 30	4-Bolt	Type 1	4-Bolt	Type 1	4-Bolt	Type 1

Fitting 7



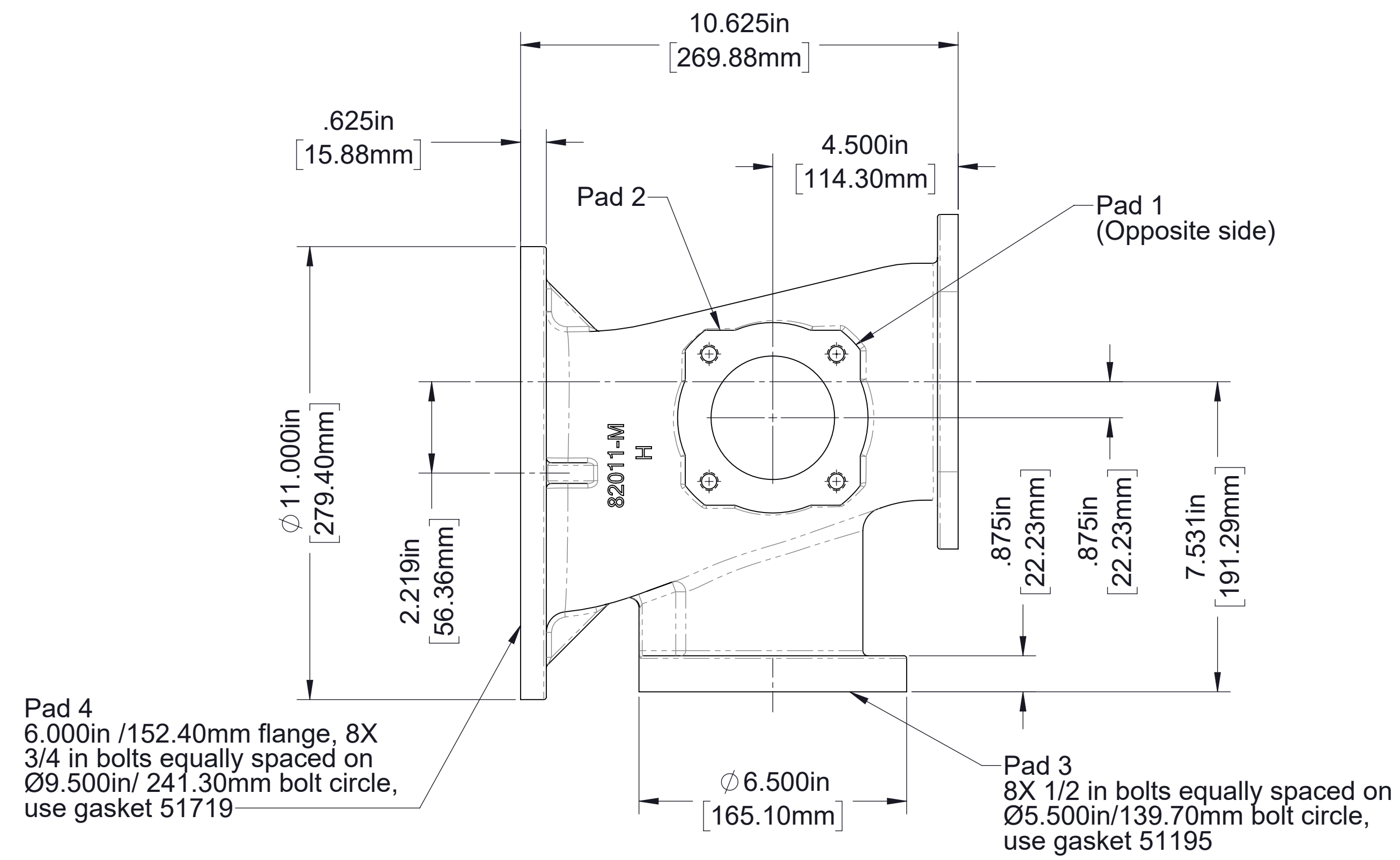
82952 with Type 30 Nipple and BFV Assembled Together

Notes:

1. See page 8 for flange dimensions and side pad details.
2. See drawing DPL82088 for auxiliary fittings which may be installed on fitting pads.
3. See pages 19, 20 & 21 for butterfly valve handle kit, control panel and panel hole layout.

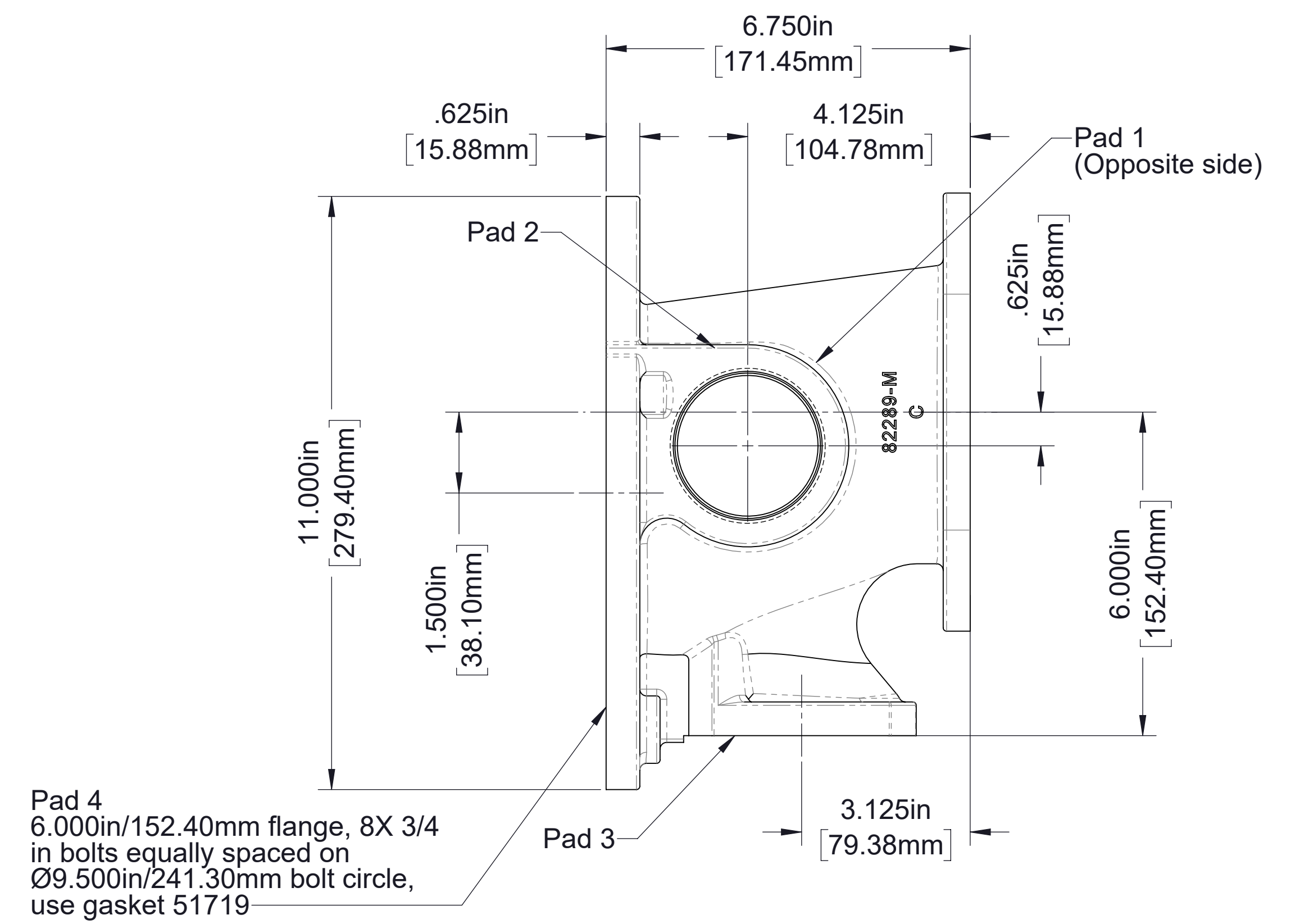
Section 2 - Pant Leg Intake Fitting

Fitting 8



Part Number	Flange Size
82011	6 in

Fitting 9



Part Number	Flange Size
82289	6 in

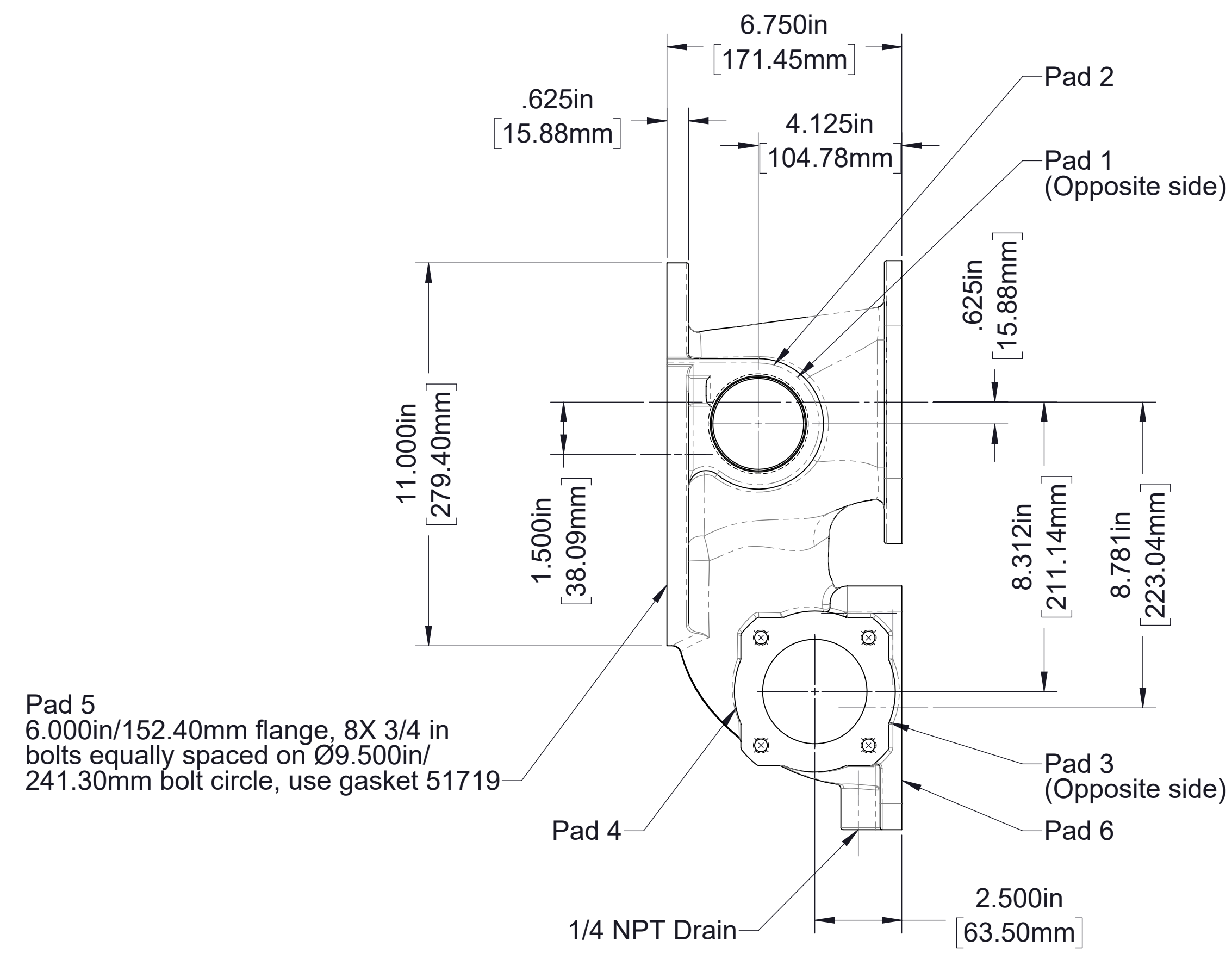
Part Number	Pad 1		Pad 2		Pad 3		Pad 4	
	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings
82011	4-Bolt	Type 1	4-Bolt	Type 1	8-Bolt	Type 8	6.0 FLNG	Type 12
82289	2-1/2 NPT	Type 2	2-1/2 NPT	Type 2	4-Bolt	Type 1	6.0 FLNG	Type 17

Notes:

1. All fittings are available in iron or bronze unless otherwise specified, add "-BZ" suffix to part number for bronze fittings.
2. See page 8 for flange dimensions and side pad details.
3. See drawing DPL82088 for auxiliary fittings which may be installed on fitting pads.

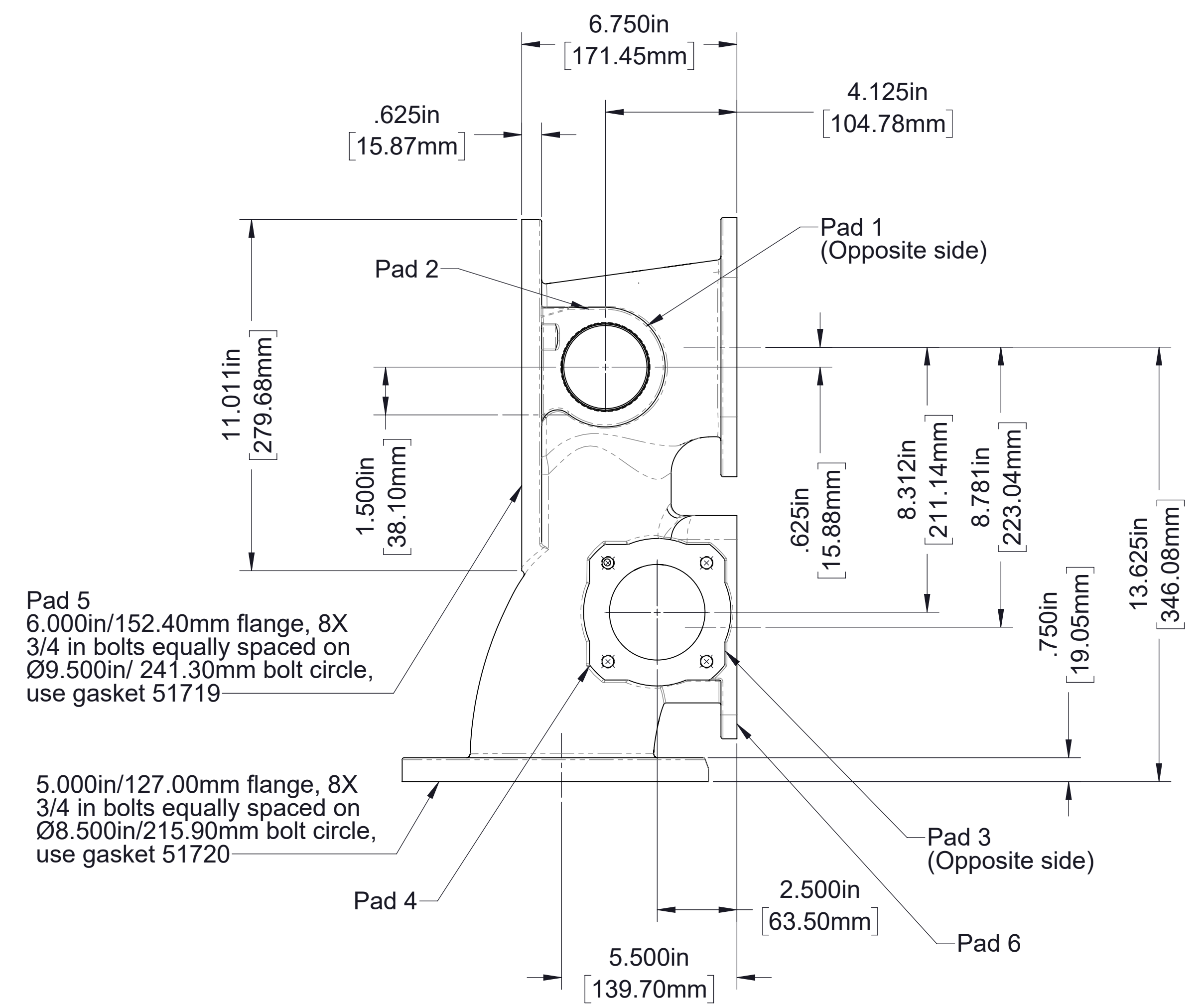
Section 2 - Flanged Intake Fitting

Fitting 10



Part Number	Flange Size
82301	6 in

Fitting 11



Part Number	Flange Size
82302	6 in

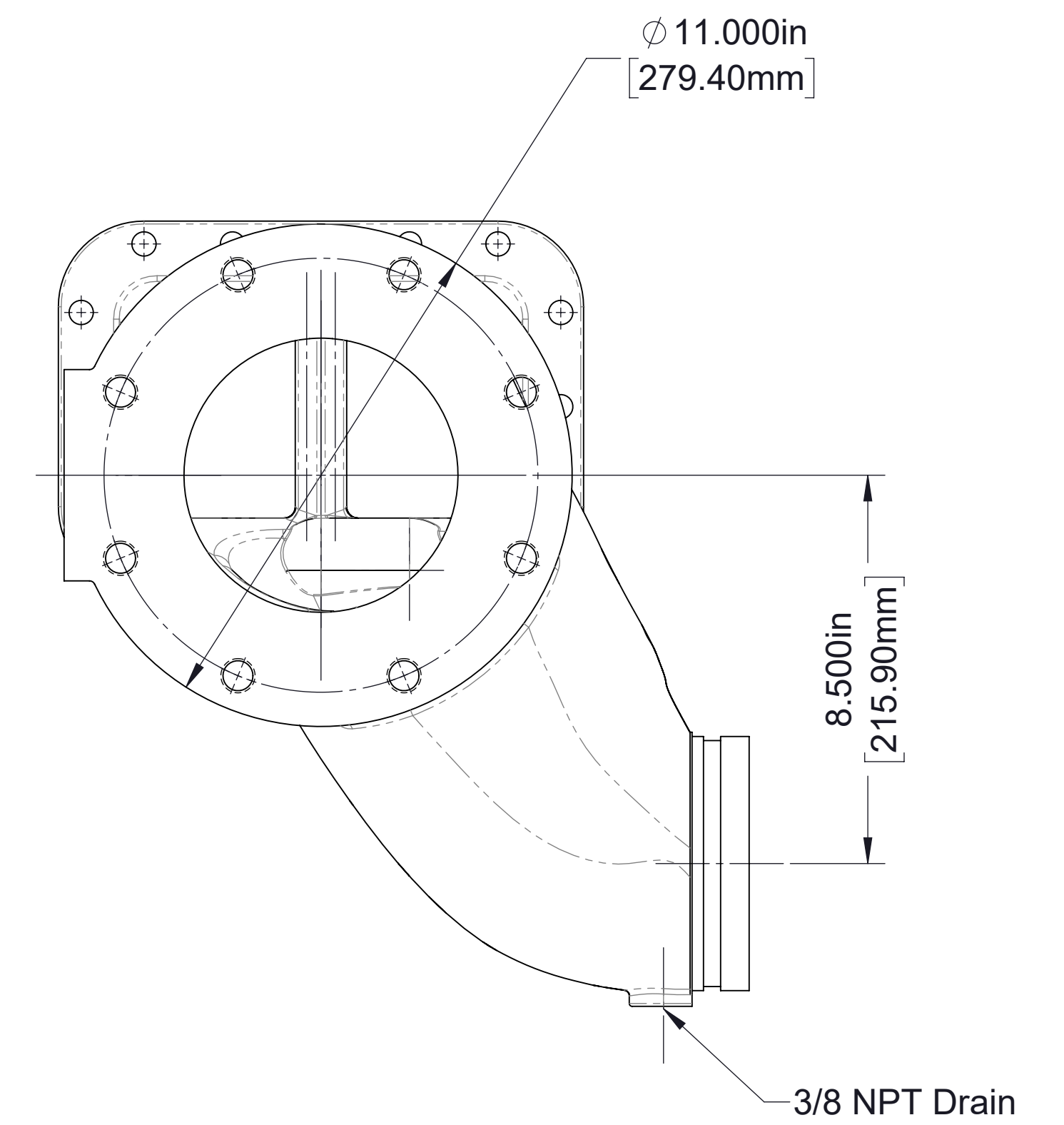
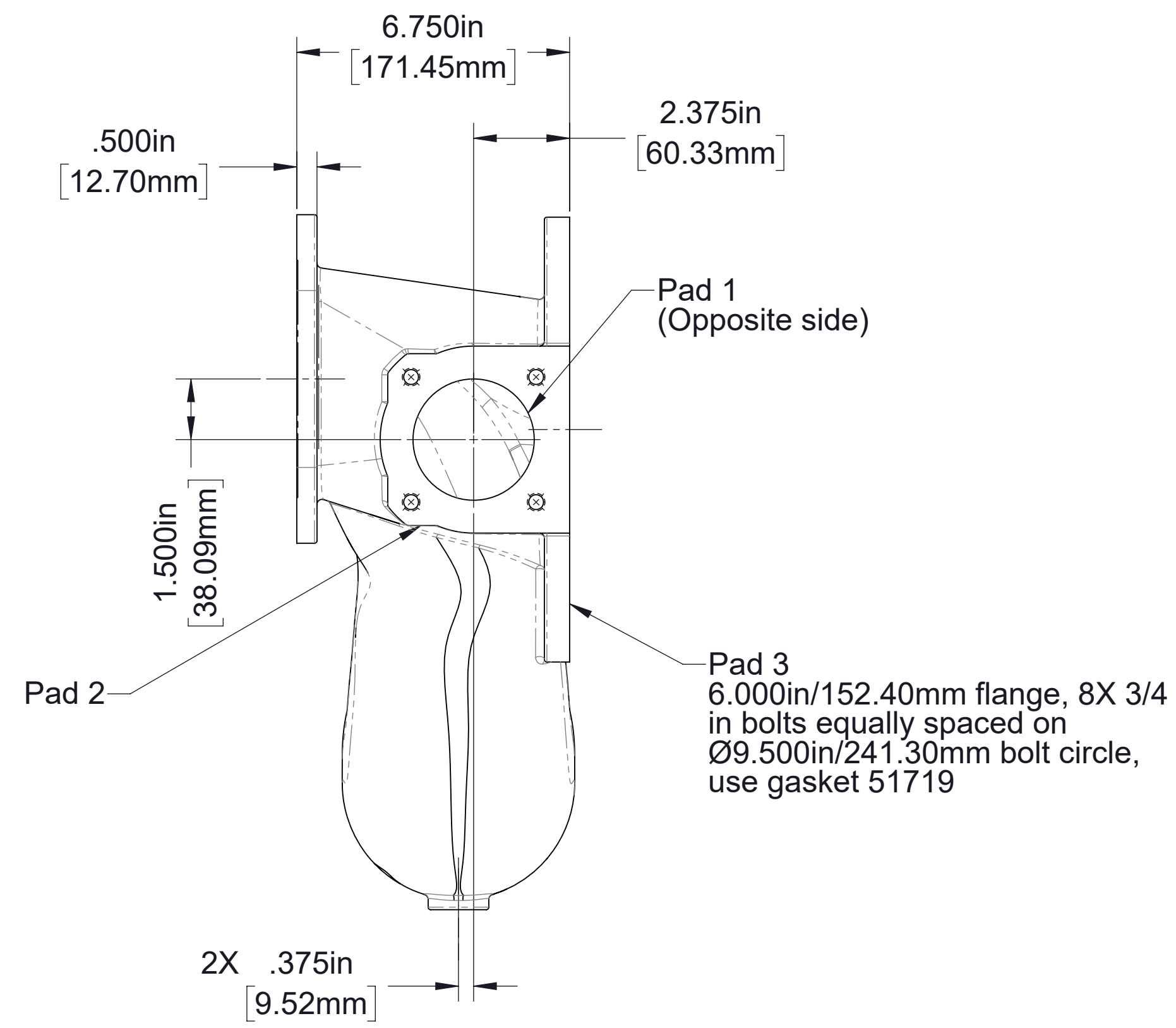
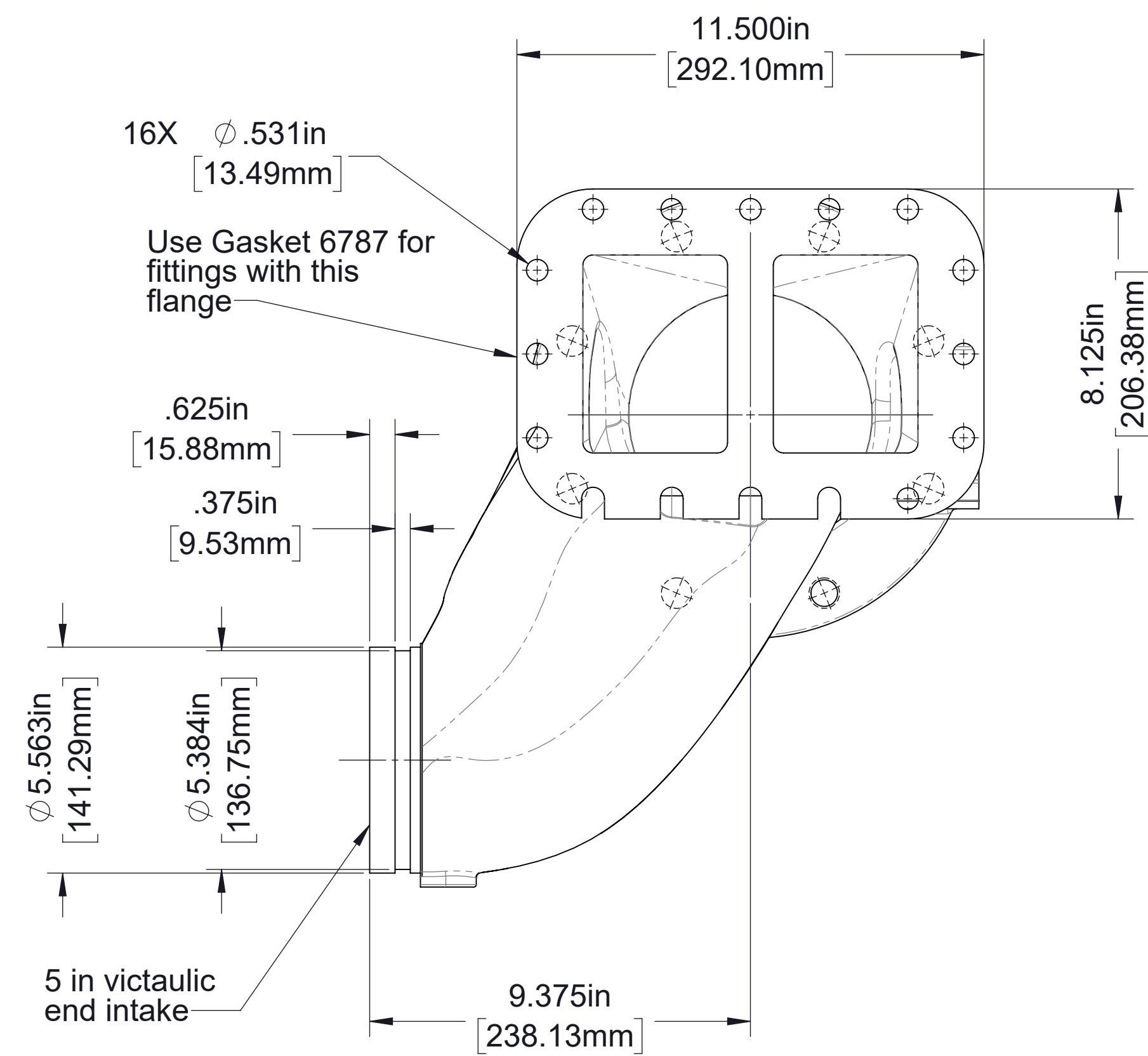
Part Number	Pad 1		Pad 2		Pad 3		Pad 4		Pad 5		Pad 6		Flange Size	Material
	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings		
82301	2-1/2 NPT	Type 2	2-1/2 NPT	Type 2	4-Bolt	Type 1	4-Bolt	Type 1	6.0 FLNG	Type 17	4.0 RV	Type 15	6 in	Iron Only
82302	2-1/2 NPT	Type 2	2-1/2 NPT	Type 2	4-Bolt	Type 1	4-Bolt	Type 1	6.0 FLNG	Type 17	4.0 RV	Type 15	6 in	Iron Only

Notes:

1. All fittings are available in iron or bronze unless otherwise specified, add "-BZ" suffix to part number for bronze fittings.
2. See page 8 for flange dimensions and side pad details.
3. See drawing DPL82088 for auxiliary fittings which may be installed on fitting pads.

Section 2 - Flanged Intake Fitting

Fitting 12



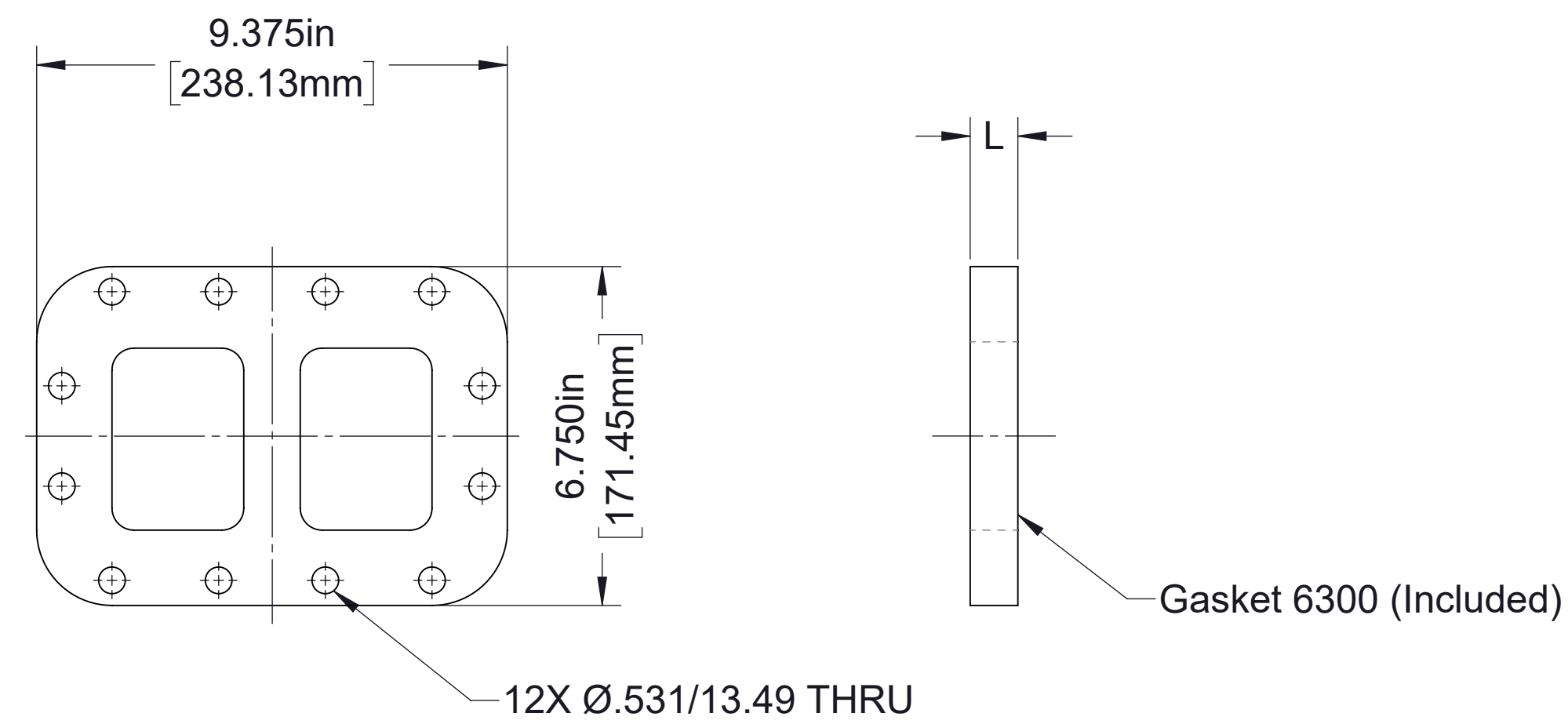
Part Number	Flange Size
83041	6 in

Part Number	Pad 1		Pad 2		Pad 3	
	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings	Machined	Install Auxiliary Fittings
83041	4-Bolt	Type 1	4-Bolt	Type 1	6.0 FLNG	Type 17

Notes:

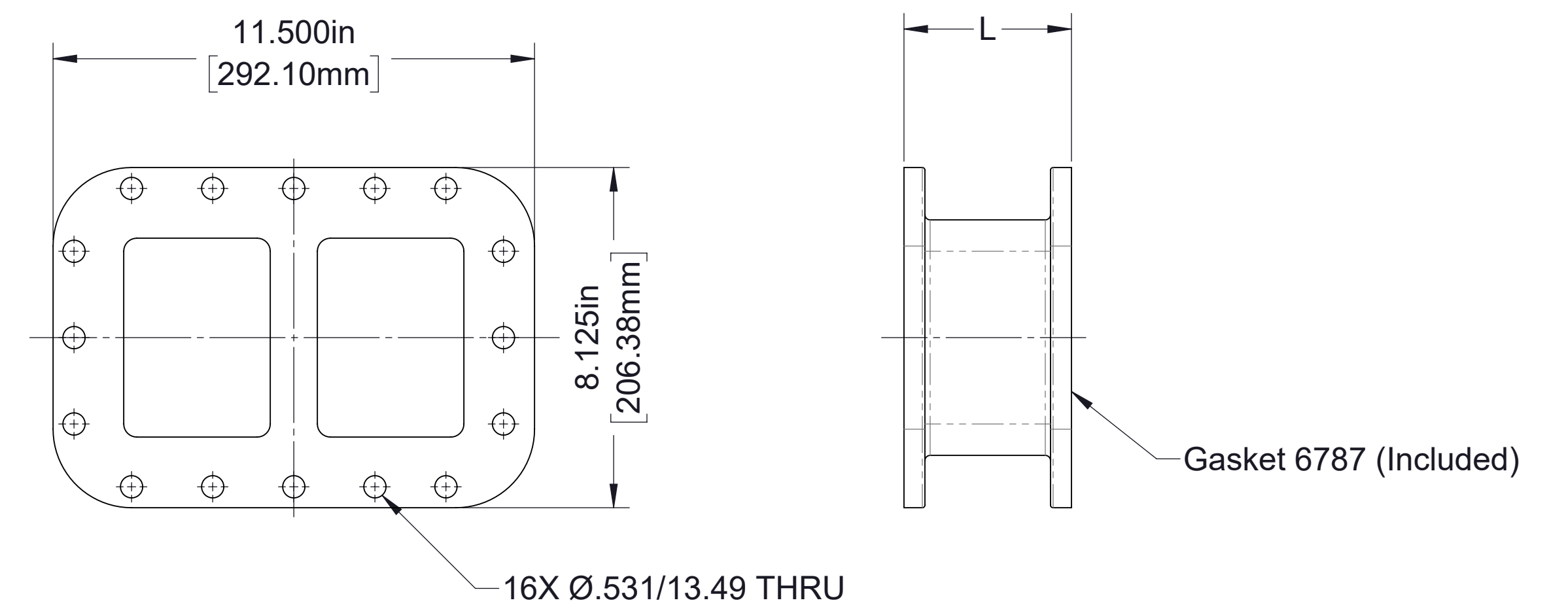
1. All fittings are available in iron or bronze unless otherwise specified, add "-BZ" suffix to part number for bronze fittings.
2. See page 8 for flange dimensions and side pad details.
3. See drawing DPL82088 for auxiliary fittings which may be installed on fitting pads.

Section 2 - Flanged Intake Fitting



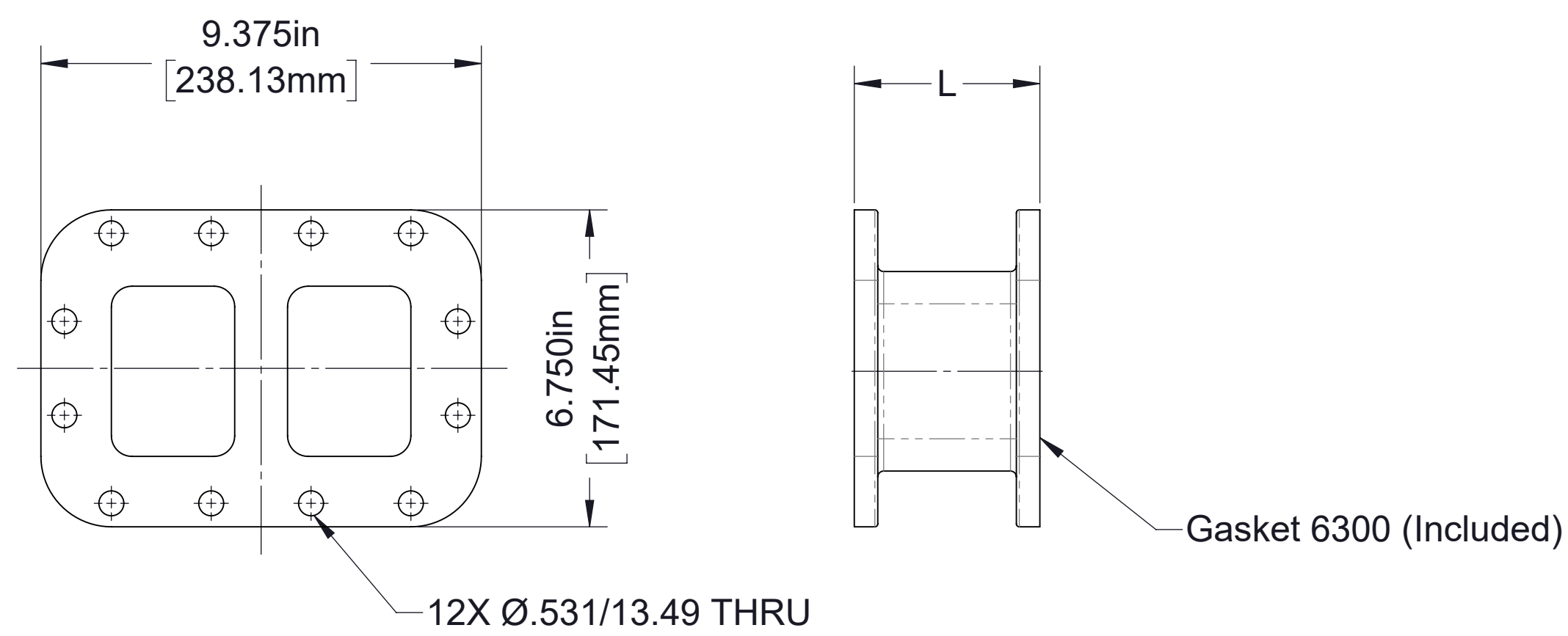
Part Number	L	Studs Required	Use With Relief Valve Extension
5002-A	1.000/25.40	(4) 51268	61647-A

(Use with section 1 intake fittings on DPL81867)



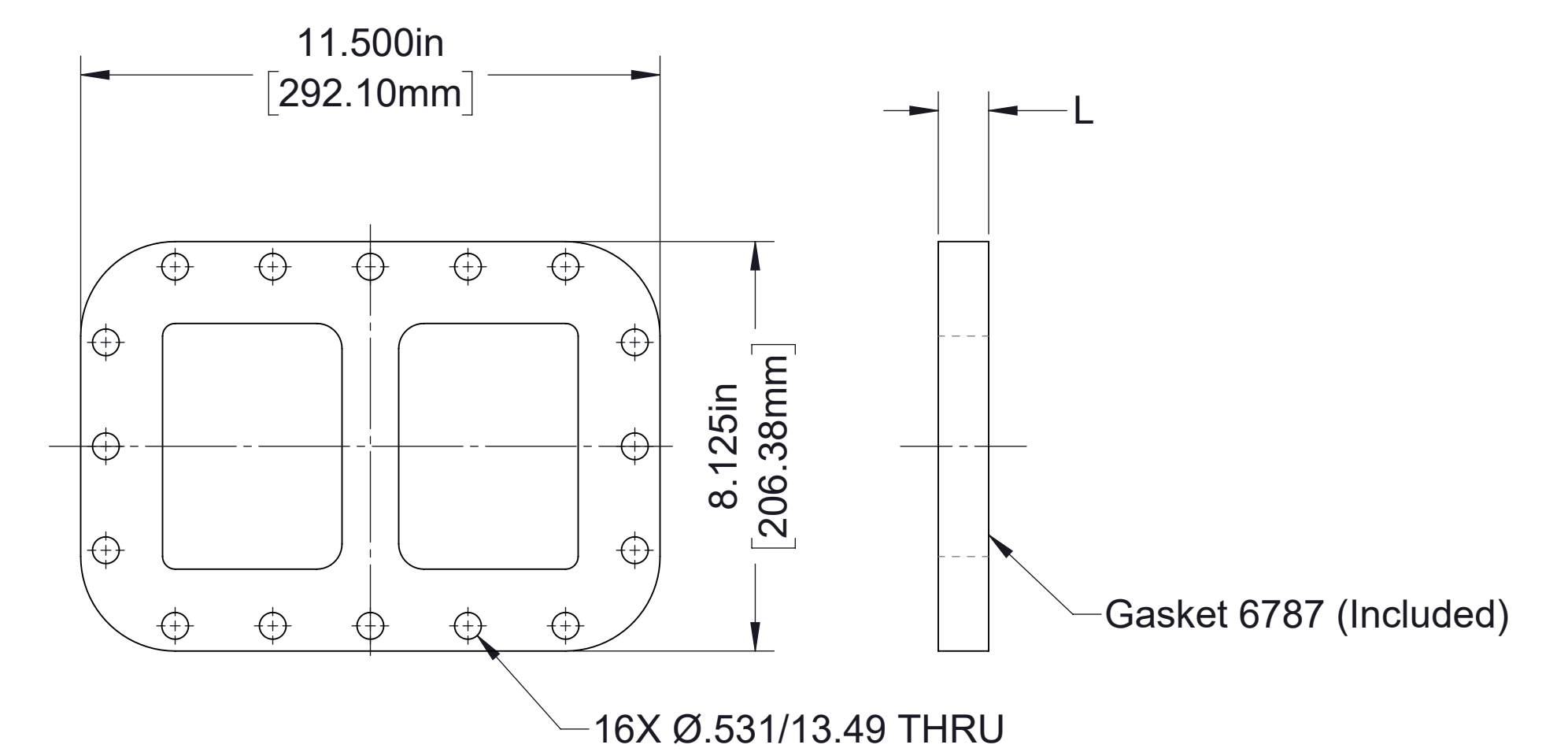
Part Number	L
7251-A	4.000/101.60

(Use with section 2 intake fittings on DPL81867)



Part Number	L	Use With Relief Valve Extension
5005-A	4.000/101.60	61646-A

(Use with section 1 intake fittings on DPL81867)



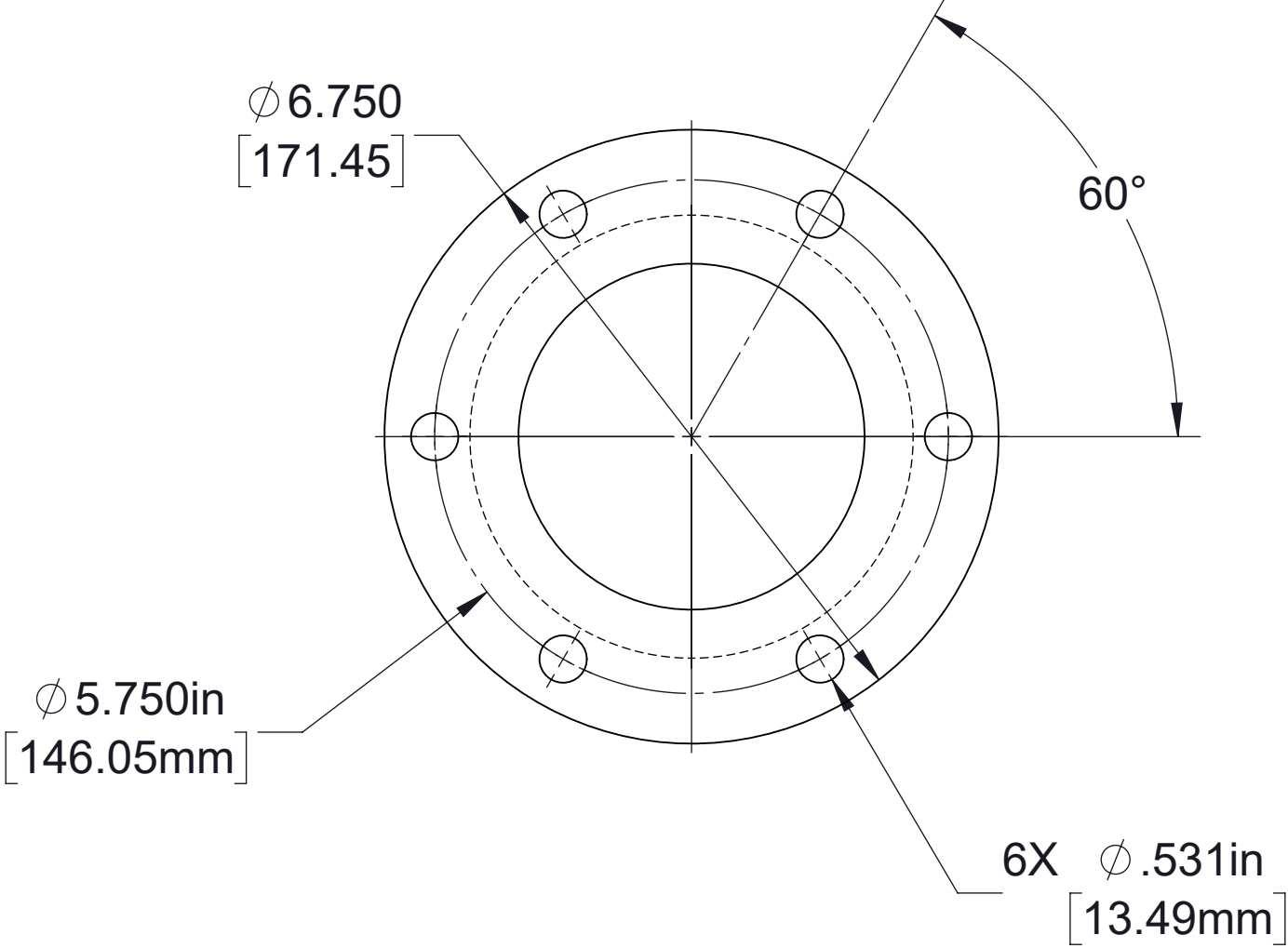
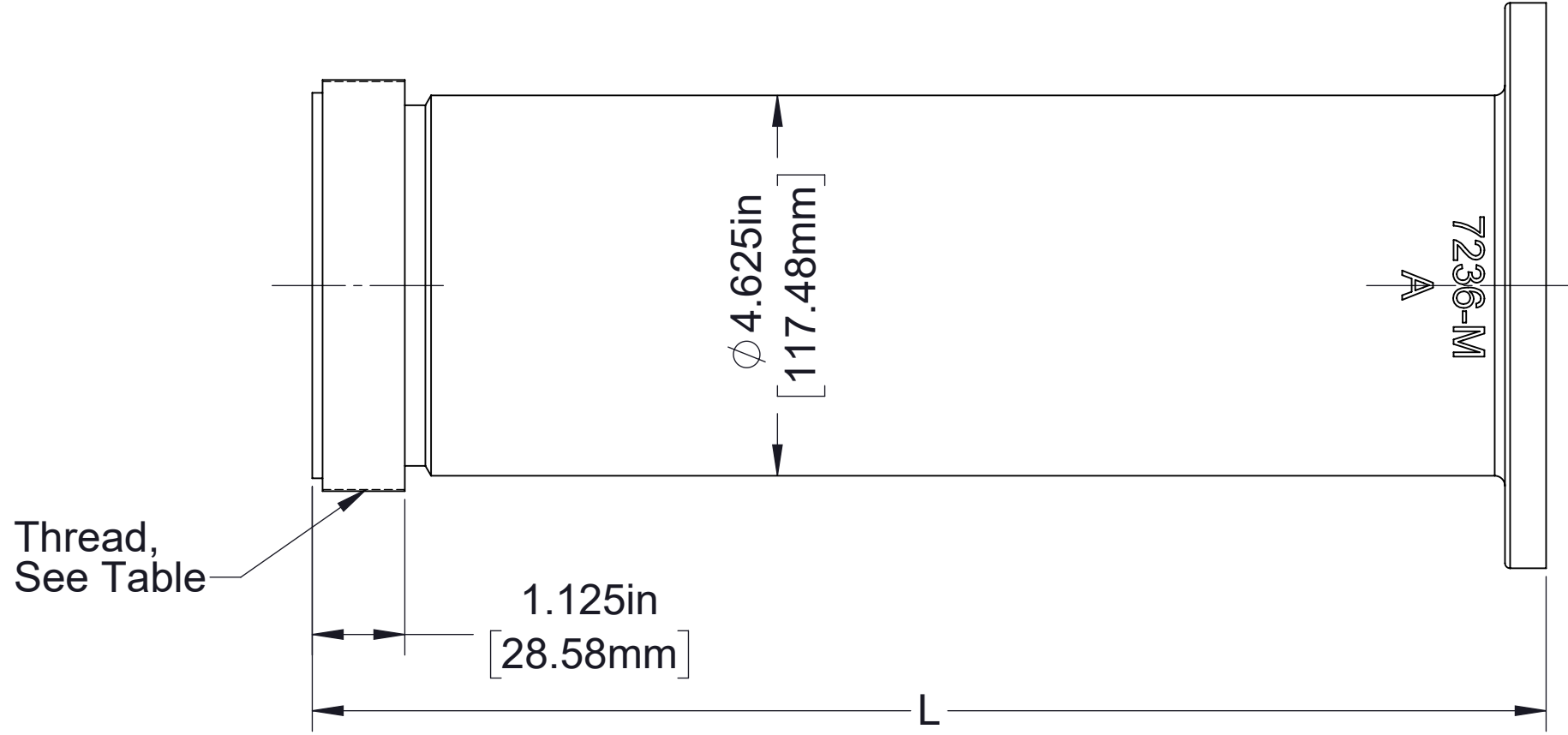
Part Number	L
73616-A	1.000/25.40

Spacer required when relief valve is mounted on pump, see Type 15 - fittings for 4 in relief valve pads DPL82088

Section 3 - CM and CS Pump Intake Extensions

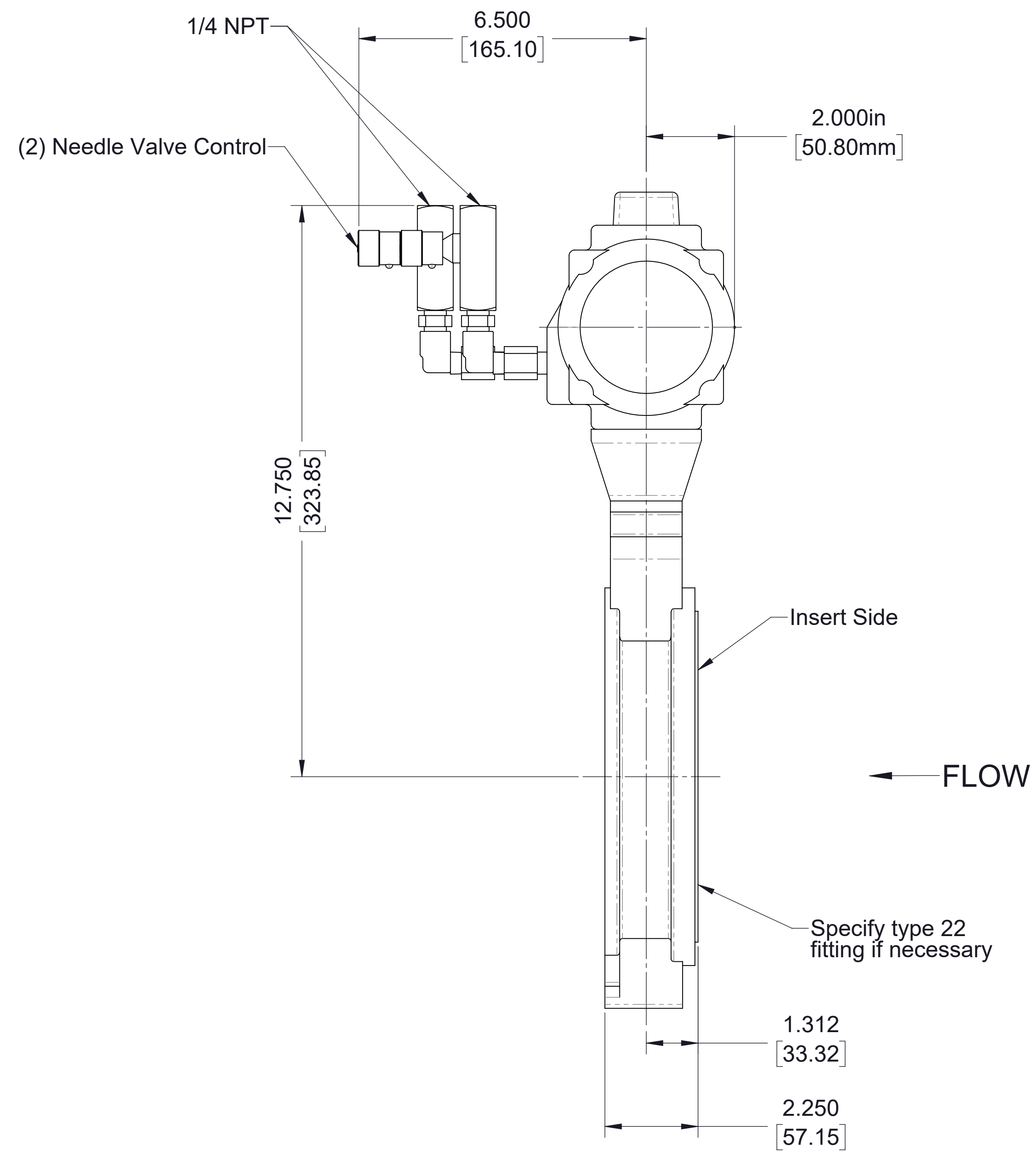
Note: These fittings are used on CM, CMH, CMU, CMUH, CS, CSU, CSUH pumps models only

Fitting 1

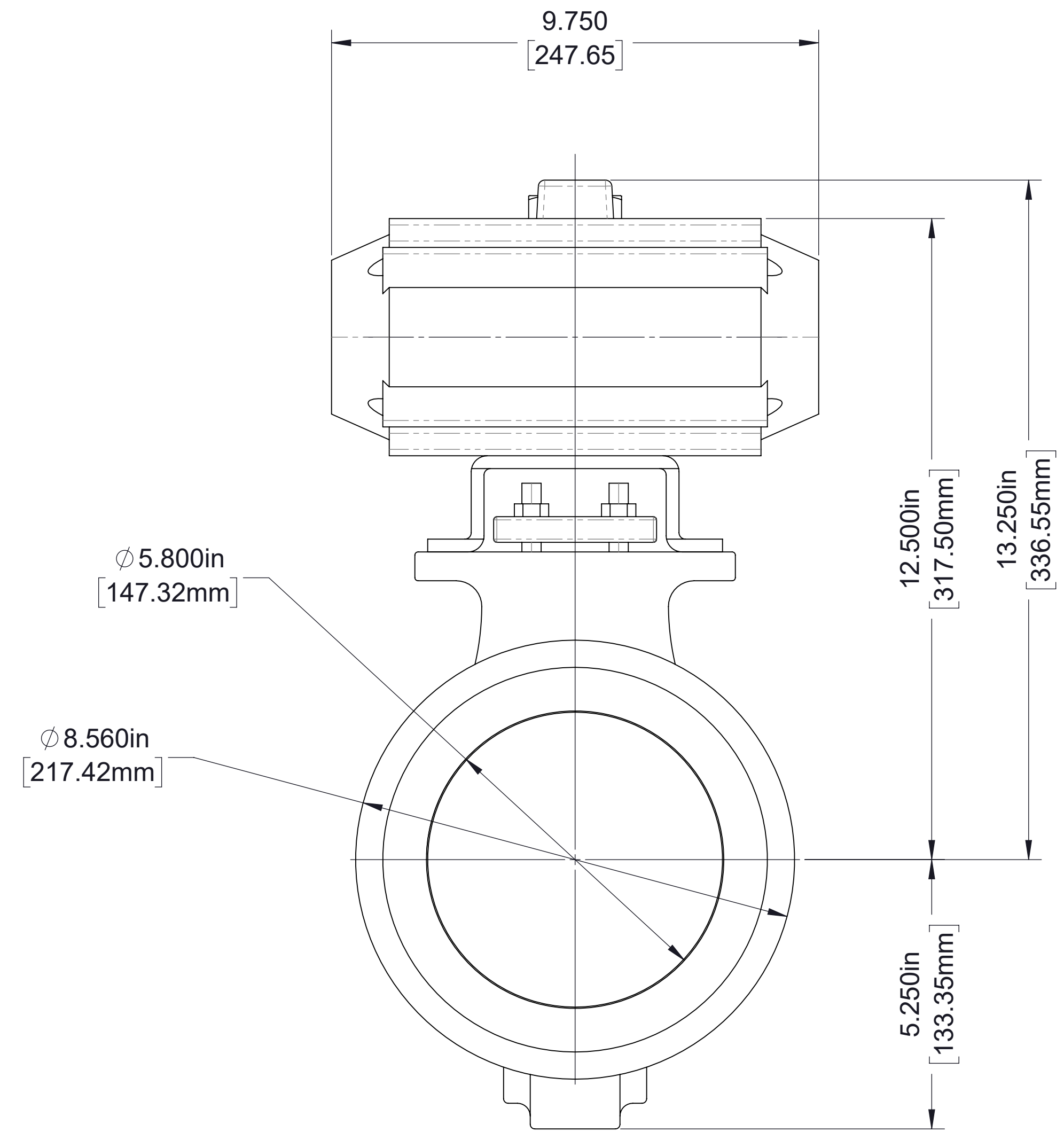


Thread Size	Part Number	L	Includes Gasket
	Iron		
4 in NH	7235-15A	15.000/381.00	5766
4-1/2 in NH	7236-15A	15.000/381.00	

**Section 4 - Intake Fitting
(Model CLS Intake Fitting)**

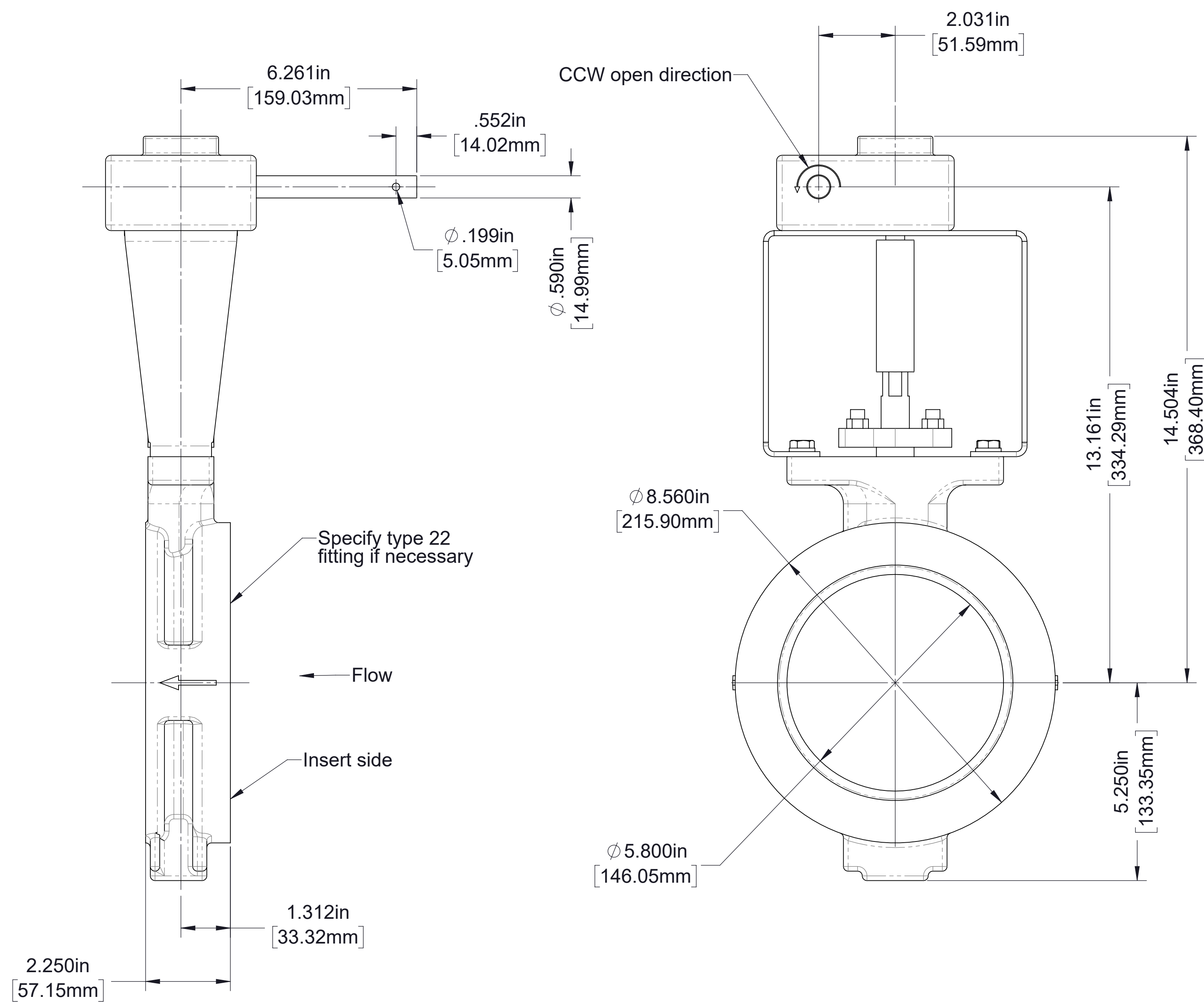


Pneumatic Actuator

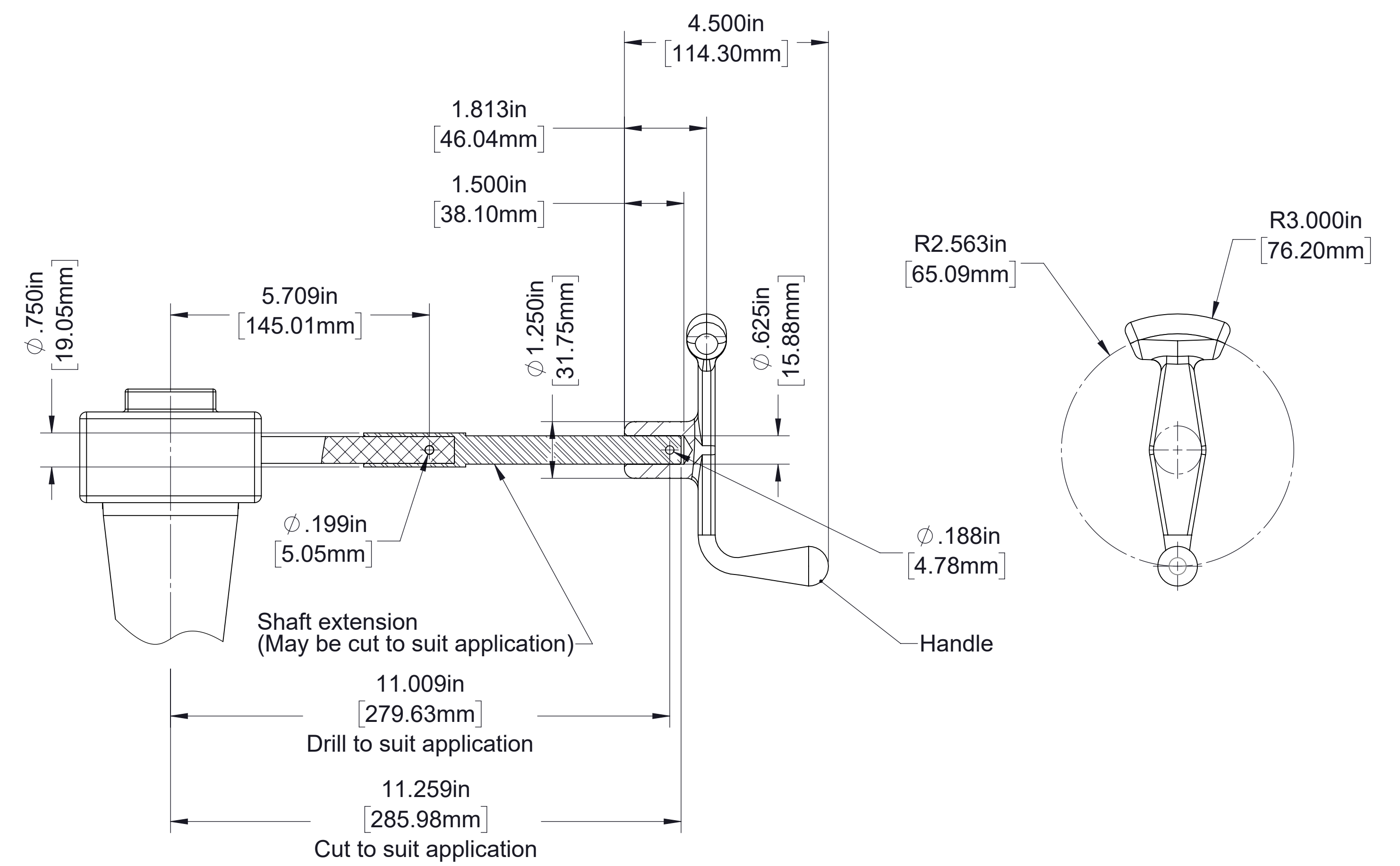


Part Number	
Valve Mounted On Pump	Valve Shipped Loose
82743-2A	82743-2B (Includes Two 73760 Gaskets)

Section 5 - Intake Fitting for CXN Pumps Jamesbury 6 in Pneumatic Butterfly Valve



**Manual Actuator
Non-Indicating**

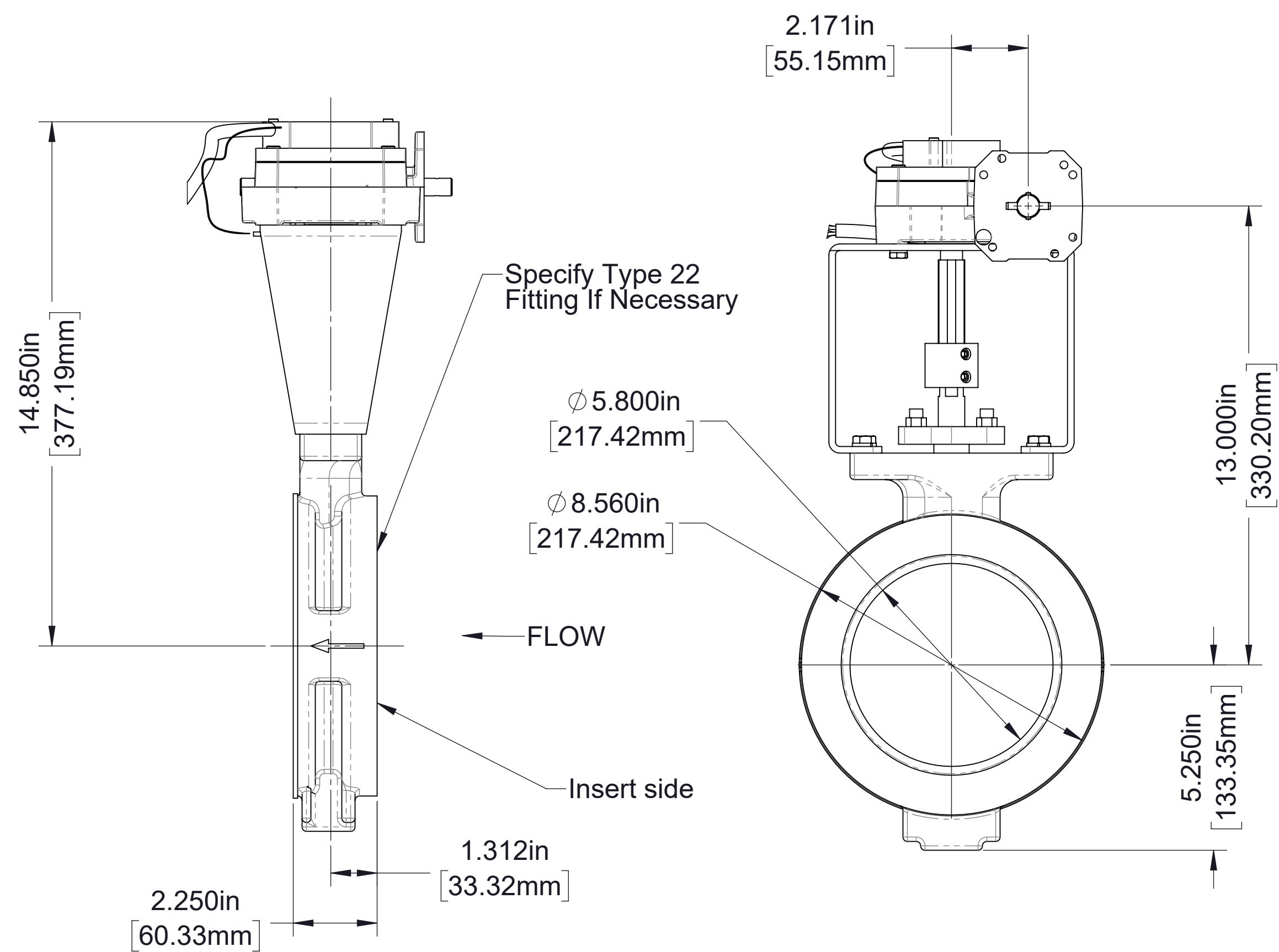


**Manual Butterfly Valve Handle Kit (Furnished
with each Non-Indicating Manual Valve)**

Part Number	
Valve Mounted On Pump	Valve Shipped Loose
K 1269	K 1269-1 (Includes Two 73760 Gaskets)

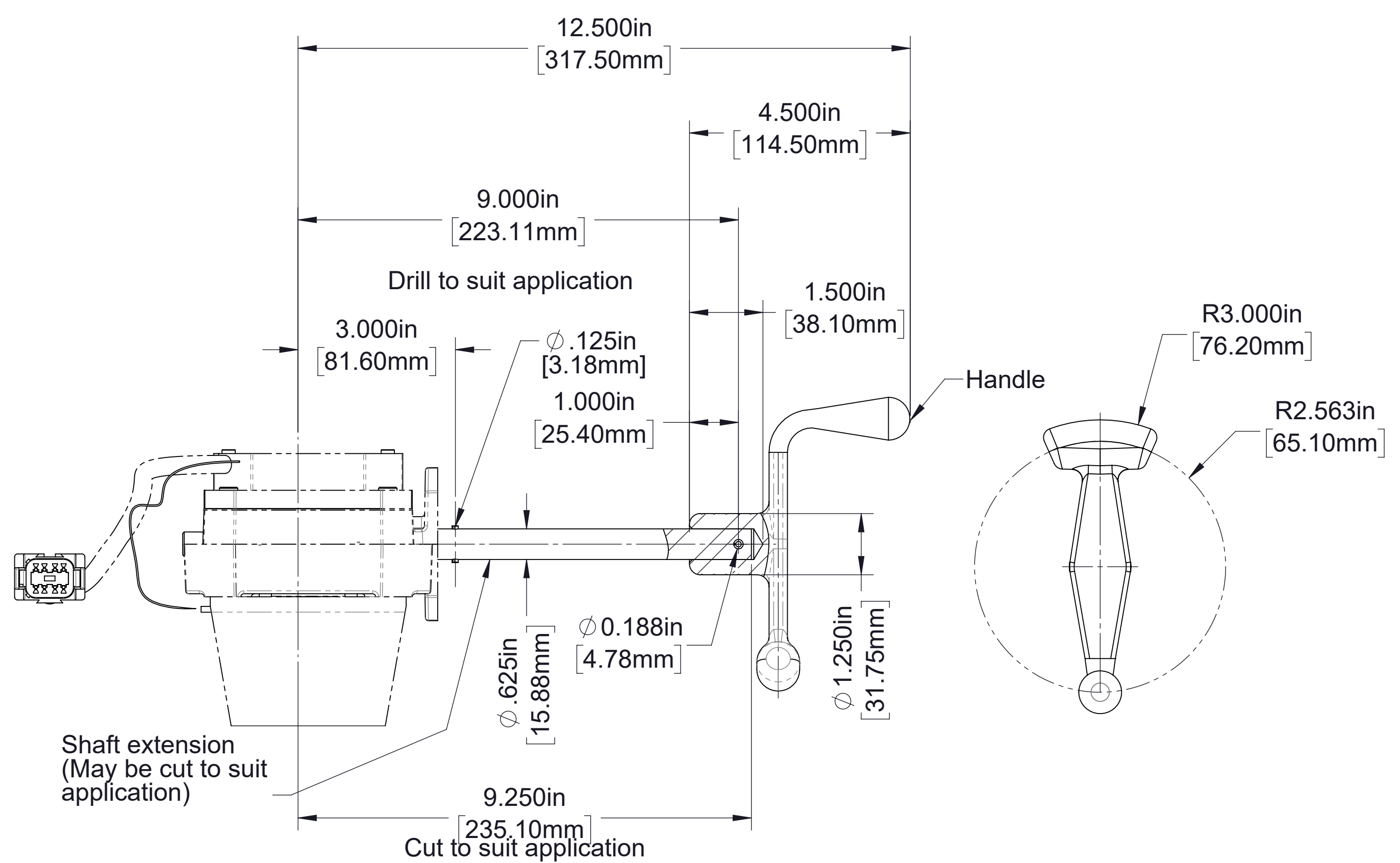
Order Part Number as Required	
Part Number	
Valve Mounted On Pump by Waterous	Valve Shipped Loose
82743-3P (Includes handle kit K1269)	82743-3R (Includes handle and gasket kit K1269-1)

**Section 5 - Intake Fittings for CXN Pumps
Jamesbury 6 In. Manual Non-Indicating Butterfly Valve**



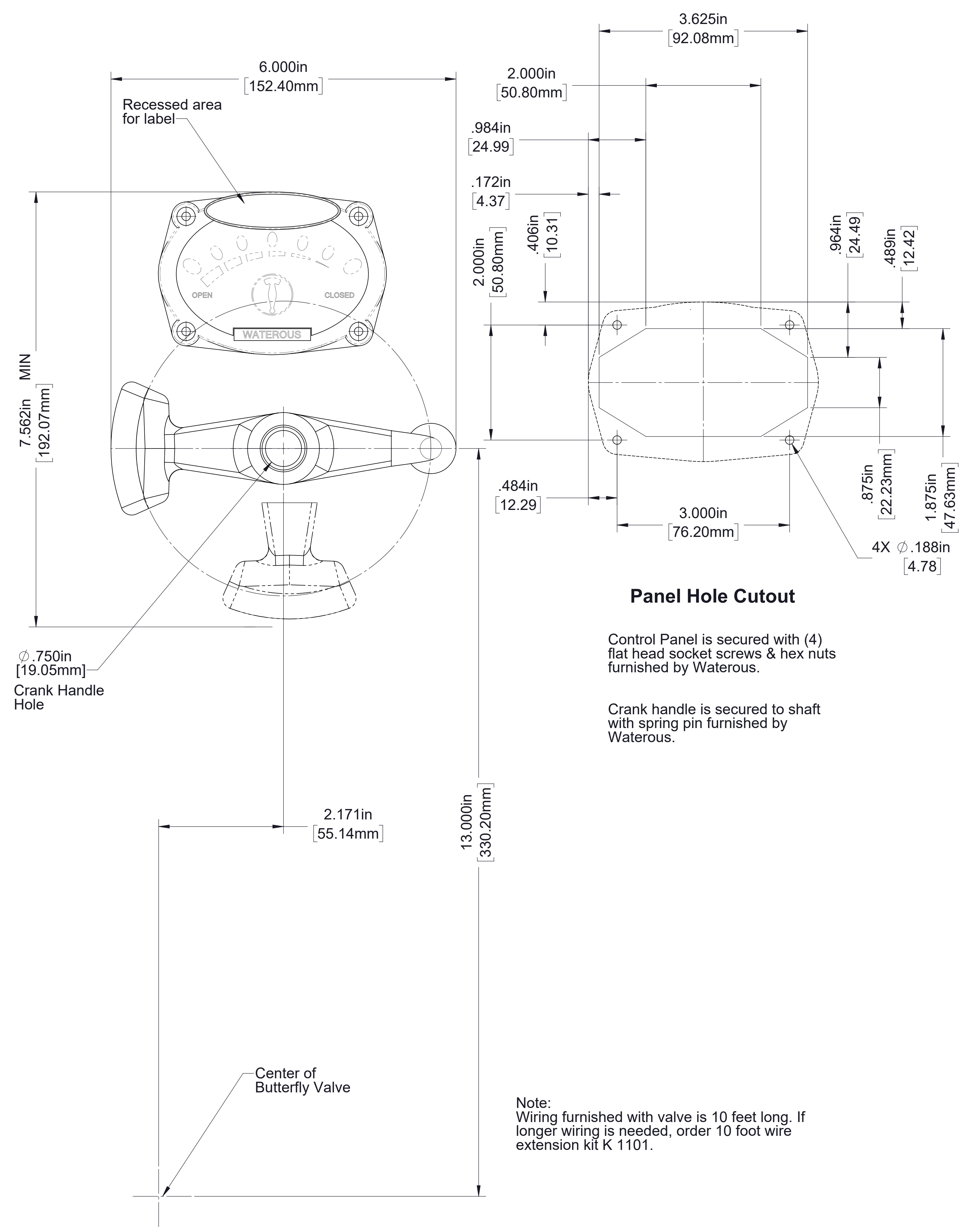
Manual Actuator Indicating

Part Number	
Valve Mounted On Pump	Valve Shipped Loose
82743-3C, -3E (Includes Loose Parts L 1150-12)	82743-3D, -3F (Includes Loose Parts L 1150-24)



Part Number	
12 Volt	24 Volt
L 1150-12 (Includes Panel 73038-12)	L 1150-24 (Includes Panel 73038-24)

**Manual Butterfly Valve Handle
Kit furnished with each
Indicating Manual Valve**

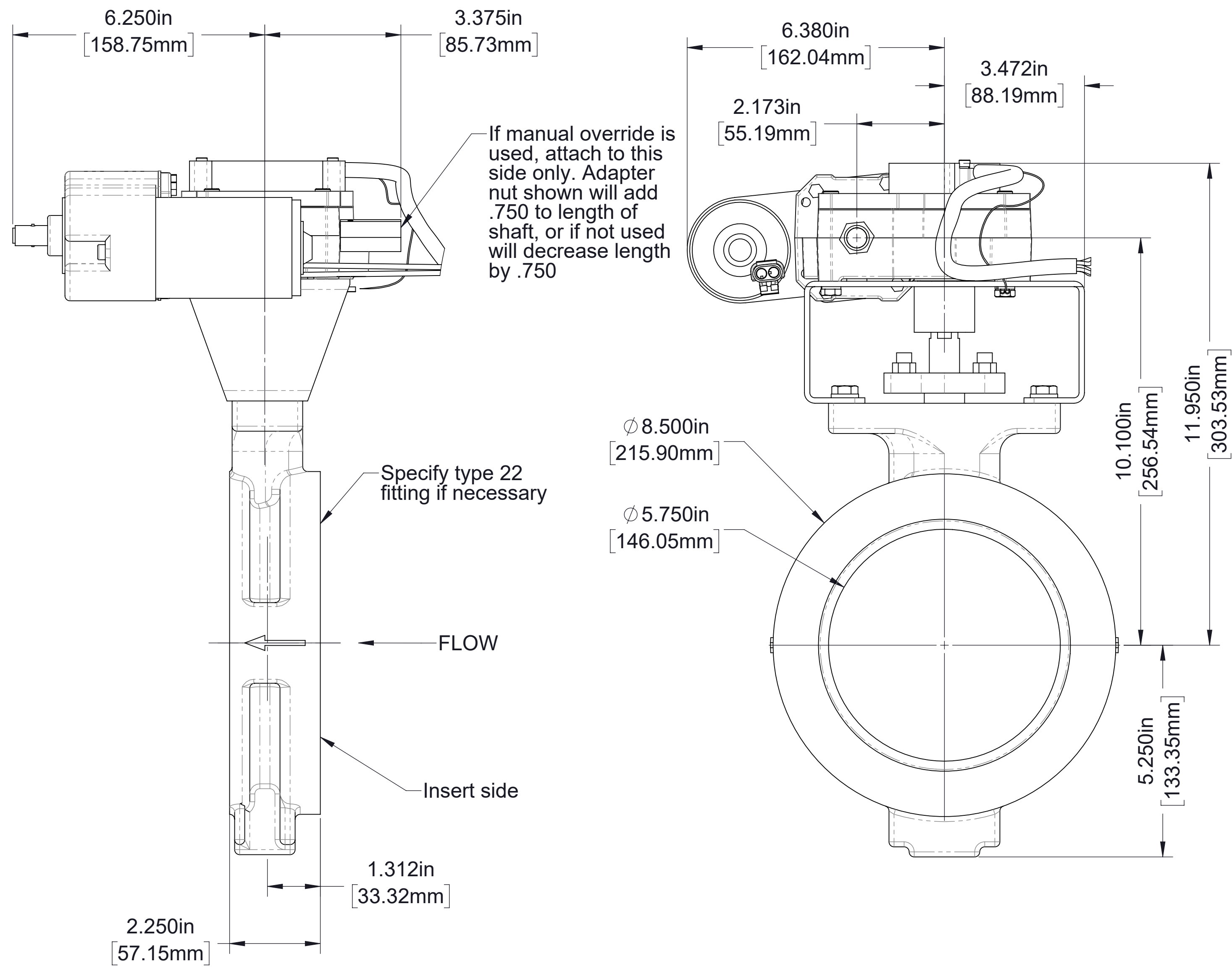


Panel Hole Cutout

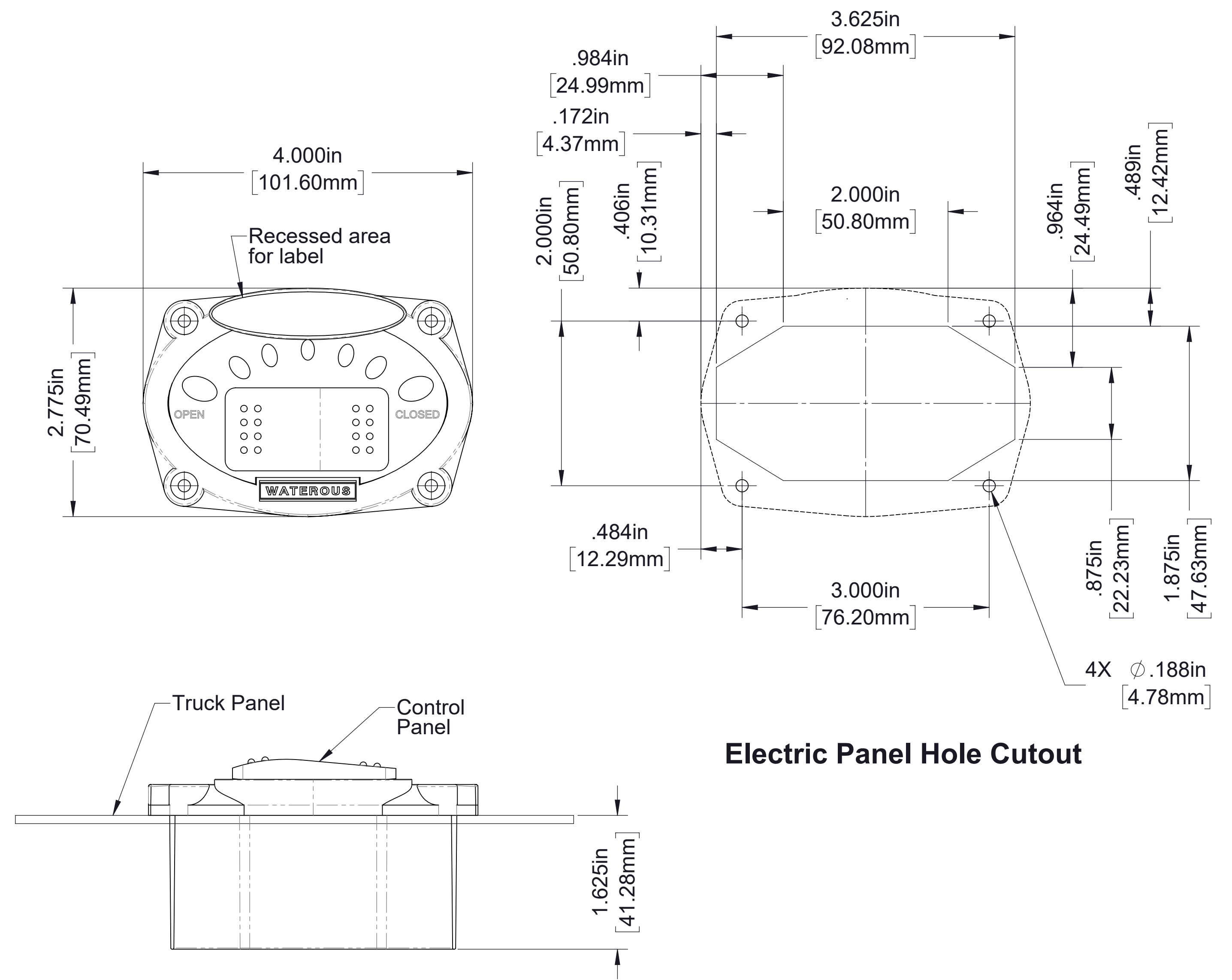
Control Panel is secured with (4) flat head socket screws & hex nuts furnished by Waterous.

Crank handle is secured to shaft with spring pin furnished by Waterous.

Note:
Wiring furnished with valve is 10 feet long. If longer wiring is needed, order 10 foot wire extension kit K 1101.



Electric Rotary Actuator



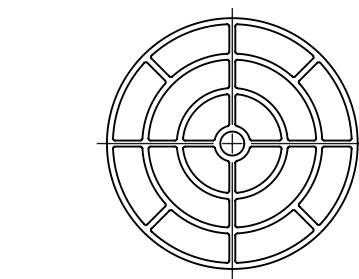
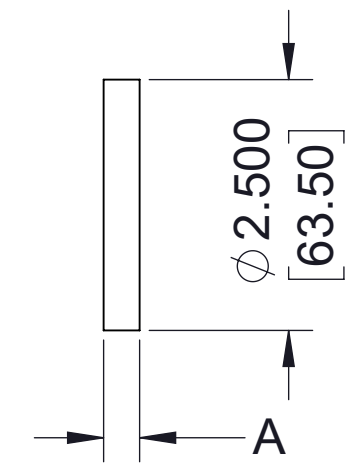
Electric Panel Hole Cutout

Control panel is secured with (4) flat head socket screws & hex nuts.

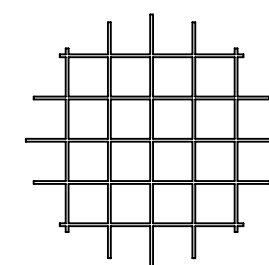
Note: Wiring furnished with valve is 10 feet long. If longer wiring is needed. Order 10 foot wire extension kit K1100.

Mounting	Voltage	Part Number	Note
On The Pump By Waterous	12	82743-1E	N/A
	24	82743-1F	
Shipped Loose By Waterous	12	82743-1G	Included Two 73760 Gaskets
	24	82743-1H	

**Section 5 - Intake Fittings For CXN Pumps
Jamesbury 6 in Electric Butterfly Valve**

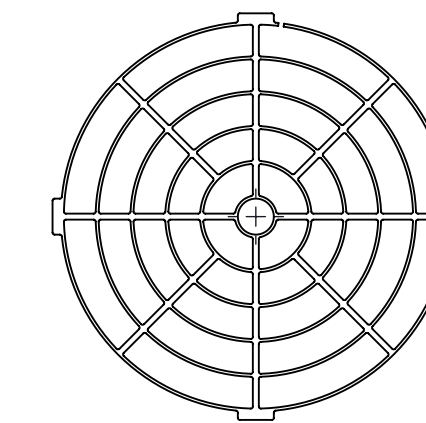
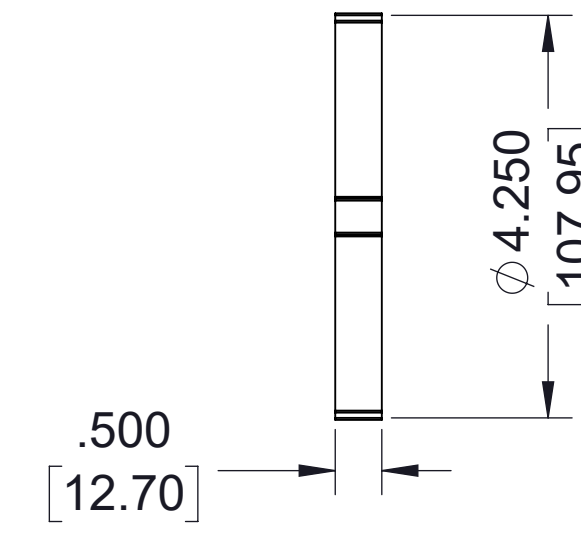


Zinc Configuration

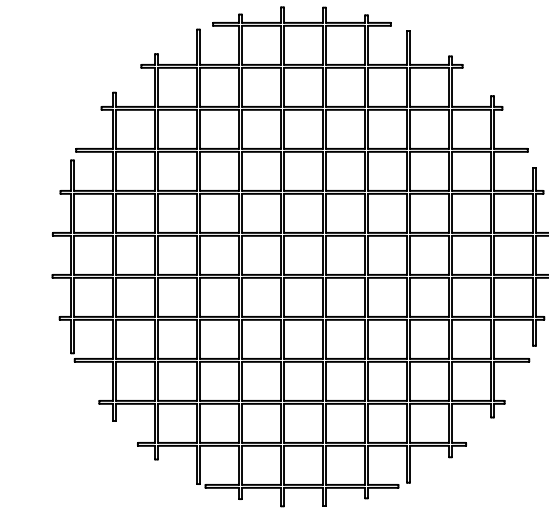


Brass Configuration

Size	Part Number	Material	Dimension A
2-1/2 in	51104	Zinc	.375/9.53
	63591	Brass	.500/12.70

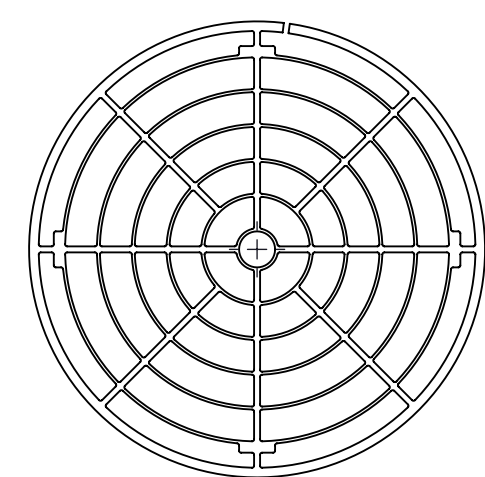
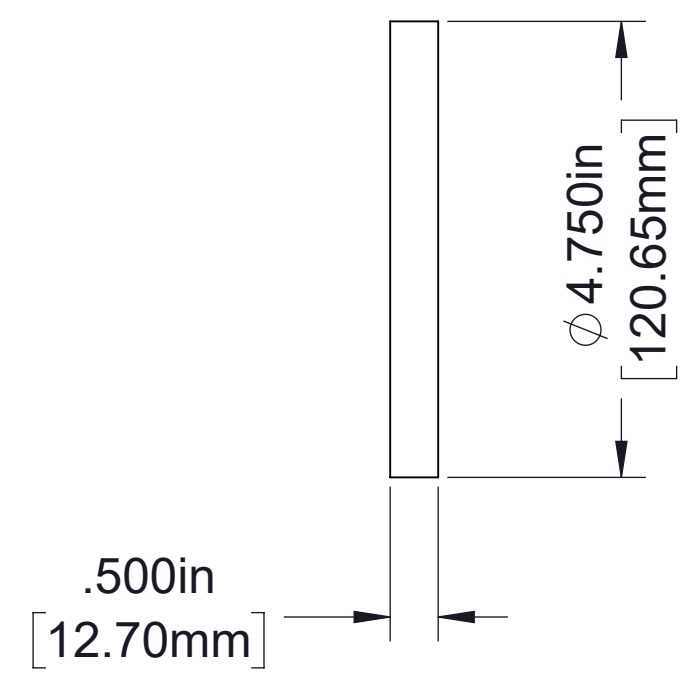


Zinc Configuration

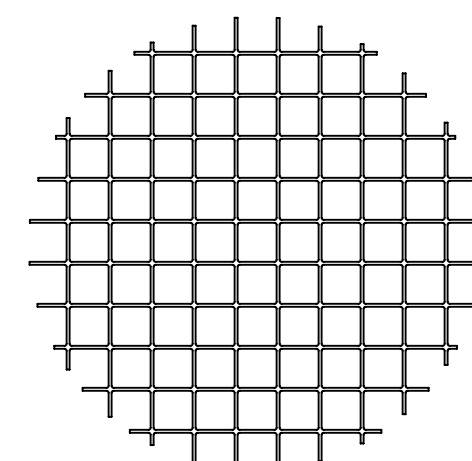


Brass Configuration

Size	Part Number	Material
4 in	60740	Zinc
	61930	Brass

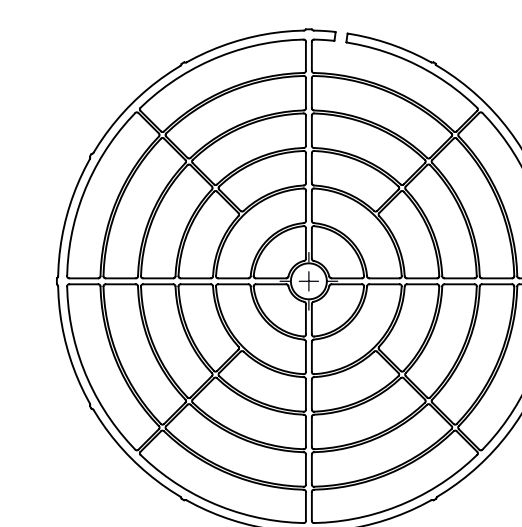
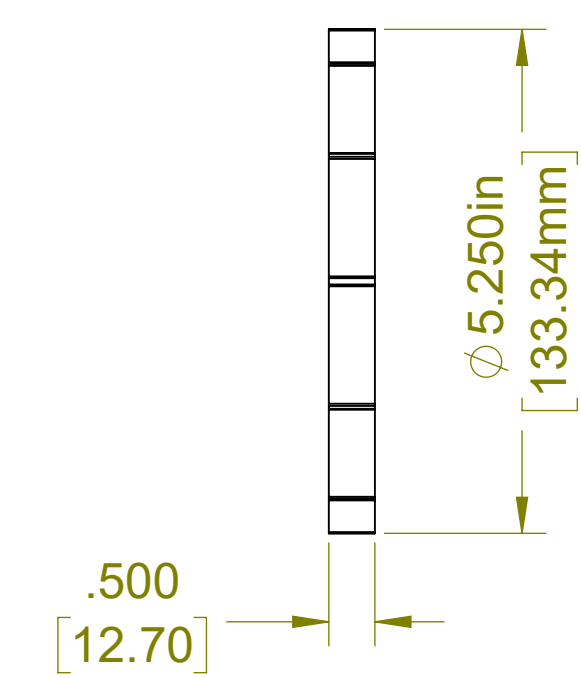


Zinc Configuration

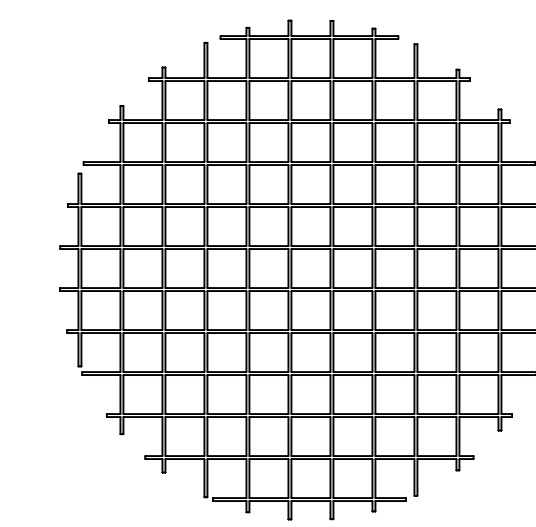


Brass Configuration

Size	Part Number	Material
4-1/2 in.	60739	Zinc
	61931	Brass

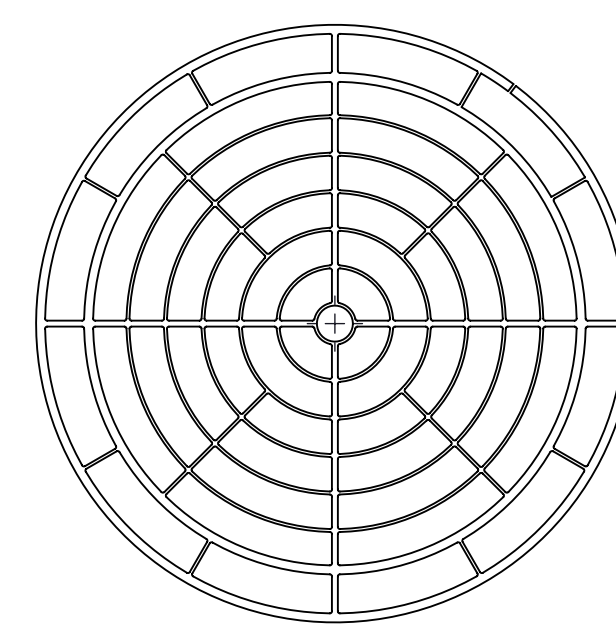
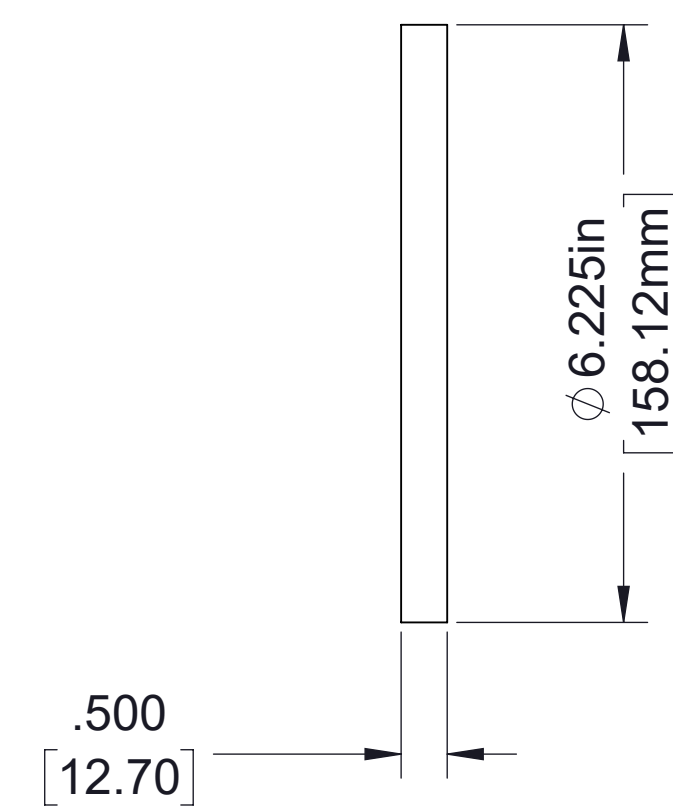


Zinc Configuration

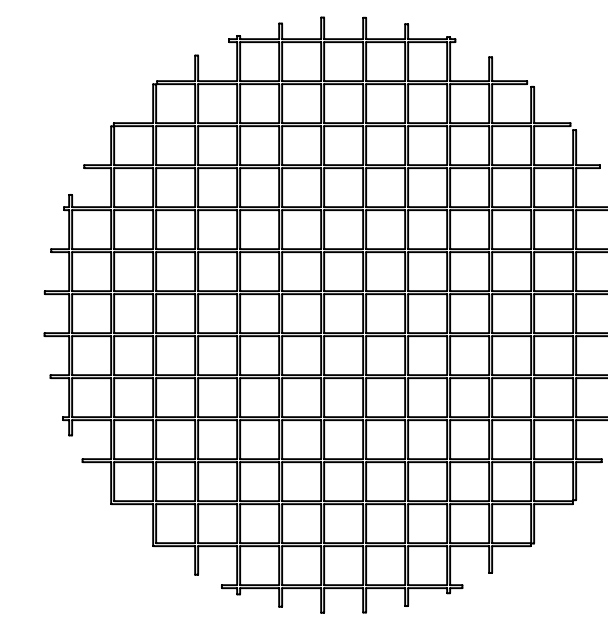


Brass Configuration

Size	Part Number	Material
5 in.	61402	Zinc
	61932	Brass



Zinc Configuration



Brass Configuration

Size	Part Number	Material
6 in.	61403	Zinc
	61933	Brass

Section 6 - Intake Screens