



Data Sheet

Form No.	Issue Date	Rev. Date
DS-4003	04/19/96	10/5/18

INTAKE FITTINGS FOR WATEROUS FIRE PUMPS

DESCRIPTION: ORDER AN INTAKE FITTING TO MOUNTED ON EACH SIDE (LEFT AND RIGHT) OF THE FOLLOWING PUMPS:

- CM, CMH, CMU, CMUH
- CS, CSH, CSU, CSUH
- CGVG
- CLS
- S101

All other pumps either do not require intake fittings, or they are ordered along with the pump body. Also specify any auxiliary fittings which are to be mounted on the main fitting pads and intake screen if required.

Refer to the following tables for part numbers:

Item	See Table	Refer To Drawing
Intake Fittings	1	DPL81867
Auxiliary Fittings	2	DPL82088
Intake Screens	3	DPL81867

Notes:

- 1) If you are ordering a pump mounted discharge relief valve, be sure to order an intake fitting with a relief valve pad on the side (right or left) that the valve is mounted.
- 2) If an intake extension is also ordered, a relief valve spacer must also be ordered on the intake fitting relief valve pad. See Table 1 for intake extensions and Table 2 for relief valve spacers.

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INTAKE FITTINGS FOR WATEROUS FIRE PUMPS

INTAKE FITTING LIST:

Table 1. Intake Fittings

Fitting Type	Pump		End Connection		Length	Bottom Facing Flange	Relief Valve Provision	Part Number			
	Model	Material	Type	Size				Iron	Bronze		
Standard Intake Adapter Flanges (Section 1)	CGVG	Iron or Bronze	Threaded	4-1/2 in. NH	15.00 in.	No	Yes	81835	81835-BZ		
				5 in. NH	10.50 in.	No	Yes	81833	81833-BZ		
							13.50 in.	3-1/2 in. 8-Bolt	No	81913	81913-BZ
							15.00 in.	No	Yes	81836	81836-BZ
	CM, CS	Bronze	Threaded	6 in. NH	13.50 in.	No	Yes	81838	81838-BZ		
						3-1/2 in. 8-Bolt	No	81914	N/A		
					5 in. ANSI	Yes	81841	N/A			
			15.00 in.	No	Yes	81837	81837-BZ				
				3-1/2 in. 8-Bolt	No	81912	81912-BZ				
				5 in. ANSI	Yes	81844	81844-BZ				
	Flanged			6 in. ANSI	6.75 in.	No	Yes	82188	N/A		
						Yes	Yes	82199	N/A		
			Intake Extensions		Installed between Pump Intake Adapter and Intake Fitting		1.00 in.	5002-A	N/A		
							2.00 in.	5005-A	N/A		
Large Intake Adapter Flanges (Section 2)	CM, CS	Iron	Threaded	5 in. NH	15.00 in.	3-1/2 in. 8-Bolt	No	82767	N/A		
					13.50 in.	3-1/2 in. 8-Bolt	No	82768	N/A		
				6 in. NH	13.50 in.	3-1/2 in. 8-Bolt	No	81916	N/A		
					13.50 in.	No	Yes	82173	82173-BZ		
					13.50 in.	5 in. ANSI	Yes	82174	N/A		
					15.00 in.	3-1/2 in. 8-Bolt	No	81915	81915-BZ		
					15.00 in.	No	Yes	82163	82163-BZ		
	15.00 in.	5 in. ANSI	Yes	82166	82166-BZ						
	CMU, CSU	Iron or Bronze	Flanged	6 in. ANSI	6.75 in.	2-1/2 in. 4-Bolt	No	82289	N/A		
					6.75 in.	No	Yes	82301	N/A		
					6.75 in.	5 in. ANSI	Yes	82302	N/A		
					10.62 in.	3-1/2 in. 8-Bolt	No	82011	82011-BZ		
					10.62 in.	No (5 in. Victaulic to Side)	No	83041	N/A		
	Dual Flanged (Pant Leg)	Oversize (8 in.)	15.85 in.	5 in. Victaulic	No	82952	N/A				
		Intake Extensions		Installed between Pump Intake Adapter and Intake Fitting		1.00 in.	73616-A	N/A			
						4.00 in.	7251-A	N/A			
Round 6-Bolt Flange	CLS	Iron	Threaded	4 in. NH	9.00 in.	No	No	7235-9A	N/A		
					15.00 in.	No	No	7235-15A	N/A		
				4-1/2 in. NH	9.00 in.	No	No	7236-9A	N/A		
					15.00 in.	No	No	7236-15A	N/A		

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INTAKE FITTINGS FOR WATEROUS FIRE PUMPS

Table 1. Intake Fittings (Continued)

Fitting Type	Pump		End Connection		Length	Bottom Facing Flange	Relief Valve Provision	Part Number	
	Model	Material	Type	Size				Iron	Bronze
Large Intake Adapter Flanges (Section 2)	S101	Iron	Threaded	6 in. NH	13.50 in.	3-1/2 in. 8-Bolt	No	81916	N/A
					13.50 in.	No	Yes	82173	82173-BZ
					13.50 in.	5 in. ANSI	Yes	82174	N/A
					15.00 in.	3-1/2 in. 8-Bolt	No	81915	81915-BZ
					15.00 in.	No	Yes	82163	82163-BZ
					15.00 in.	5 in. ANSI	Yes	82166	82166-BZ
			Flanged	6 in. ANSI	6.75 in.	2-1/2 in. 4-Bolt	No	82289	N/A
					6.75 in.	No	Yes	82301	N/A
					6.75 in.	5 in. ANSI	Yes	82302	N/A
					10.62 in.	3-1/2 in. 8-Bolt	No	82011	82011-BZ
					10.62 in.	No (5 in. Victaulic to Side)	No	83041	N/A
			Dual Flanged (Pant Leg)	Oversize (8 in.)	15.85 in.	5 in. Victaulic	No	82952	N/A

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INTAKE FITTINGS FOR WATEROUS FIRE PUMPS

AUXILIARY FITTING LIST:

Table 2. Auxiliary Fittings

Pad Fitting Is To Be Mounted On	Auxiliary Fittings			Part Number	
	Type	Length	Description	Iron	Bronze
2-1/2 in. 4-Bolt Flanges (Type 1 Fittings)	Extensions	4 in.	Extension, 4 in.	6038-4A	6038-4ABZ
		6 in.	Extension, 6 in.	6038-6A	6038-6ABZ
			Extension, 6 in. With 2-1/2 NPT Tap	60346-A	60346-ABZ
			Extension, 6 in. With Flowmeter Pad	71916-A	71916-ABZ
		8 in.	Extension, 8 in.	6038-8A	6038-8ABZ
			Extension, 8 in. With 2 in. Offset	71037-A	71037-ABZ
	Elbows	4.25 in. x 3.50 in.	Elbow, Short, 90 Deg.	61424-A	61424-ABZ
		N/A	Elbow, 45 Deg.	70436-A	70436-ABZ
		10.25 in. x 5.563 in.	Elbow, Long Sweep, 90 Deg.	71017-A	71017-ABZ
		7.00 in. x 4.125 in.	Elbow, Medium, 90 Deg.	71443-A	71443-ABZ
		7.00 in. x 4.125 in.	Elbow, Medium, 90 Deg. With 1 in. NPT Tap	71443-1A	71443-1ABZ
	Tapped Flanges	N/A	1-1/2 in. NPT	63048-A	63048-ABZ
		N/A	2 in. NPT	62897-A	N/A
		N/A	2-1/2 in. NPT	61473-A	61473-ABZ
		N/A	2-1/2 in. NPT, Angle Compensated	62605-A	62605-ABZ
		N/A	2-1/2 in. BSP (Tapered BS21)	63205-A	N/A
		N/A	3 in. NPT	61636-A	61636-ABZ
	Blind Flanges	N/A	3 in. NPT, Angle Compensated	62605-1A	62605-1ABZ
		N/A	Blind Flange	62939-A	62939-ABZ
		N/A	Zinc Anode, Bolt-On	82904-1A	N/A
		N/A	Spacer, 1-1/8 in. (For Mounting Valve on Intake Pad)	63049-A	N/A
N/A		Pump Mounted Intake Relief Valve	See DS-4004	See DS-4004	
N/A		Zinc Anode, 2-1/2 in. NPT	52315	52315	
N/A		Pipe Plug, Square Head, 2-1/2 in. NPT	W 6540	W 6540-B	
2-1/2 in. NPT Taps (Type 2 Fittings)	Pipe Plugs	N/A	Pipe Plug, Headless, 2-1/2 in. NPT	W 6640	N/A

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Table 2. Auxiliary Fittings (Continued)

Pad Fitting Is To Be Mounted On	Auxiliary Fittings			Part Number	
	Type	Length	Description	Iron	Bronze
2 in. NPT Taps (Type 3 Fittings)	Pipe Plugs	N/A	Pipe Plug, Square Head, 2 in. NPT	W 6532	W 6532-B
		N/A	Pipe Plug, Headless, 2 in. NPT	W 6632	W 6632-B
1-1/2 in. NPT Taps (Type 4 Fittings)	Pipe Plugs	N/A	Pipe Plug, Square Head, 1-1/2 in. NPT	W 6524	W 6524-B
3-1/2 in. 8-Bolt Flanges (Type 7 Fittings)	Extensions	4 in.	Extension, 4 in.	62408-A	62408-ABZ
		5.50 in.	Extension, 5-1/2 in. Without Tap	72540-A	N/A
			Extension, 5-1/2 in. With 1-1/4 in. NPSM Tap	72067-A	72067-ABZ
			Extension, 5-1/2 in. With 1-1/4 in. NPT Tap	72067-1A	72067-1ABZ
		6 in.	Extension, 6 in.	62407-A	62407-ABZ
		8 in.	Extension, 8 in. With 2-1/2 in. NPT Tap	62052-1A	N/A
			Extension, 8 in. With Flowmeter Pad	62551-A	N/A
			Extension, 8 in. With 2 in. Offset	71599-A	71599-ABZ
			Extension, 8 in., 4 NH Thread	72071-A	72071-ABZ
		9.50 in.	Extension, 8 in., 3-1/2 NH Thread	72072-A	72072-ABZ
	9.50 in.	Extension, 9-1/2 in. With 5-7/16 in. Offset	70828-A	N/A	
	Elbows	5.062 in. x 4.00 in.	Elbow, 90 Deg.	71597-A	71597-ABZ
	Tees	8.00 in. x 4.00 in.	Tee, 8 in. Long With 2-1/2 in. NPT Tap	80827-1A	N/A
	Tapped Flanges	N/A	2-1/2 in. NPT	52556-A	N/A
		N/A	3 in. NPT	51744-A	N/A
		N/A	3 in. NPT, Angle Compensated	72257-A	72257-ABZ
		N/A	3 in. BSP (Tapered BS21), Angle Compensated	72844-A	N/A
		N/A	3-1/2 in. NPT	51744-1A	N/A
		N/A	3-1/2 in. NPT, Angle Compensated	72098-A	72098-ABZ
		N/A	4 in. NPT	72478-A	N/A
	Blind Flange	N/A	Blind Flange With 3/8 in. NPT Drain	52042-1A	52042-1ABZ
	Spacers	.75 in.	Spacer, 3/4 in.	52703-A	52703-ABZ
		1.062 in.	Spacer, 1-1/16 in.	51754-A	51754-ABZ
		2.125 in.	Spacer, 2-1/8 in.	51754-AA	N/A
	Adapters	N/A	Adapter, 4 in. ANSI To 3-1/2 in. Waterous	72402-A	72402-ABZ
				72402-1A	72402-1ABZ
			Adapter, 4 in. ANSI To 3-1/2 in. Waterous, Angle Compensated	72797-A	72797-ABZ
72797-1A				72797-1ABZ	

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INTAKE FITTINGS FOR WATEROUS FIRE PUMPS

Table 2. Auxiliary Fittings (Continued)

Pad Fitting Is To Be Mounted On	Auxiliary Fittings			Part Number	
	Type	Length	Description	Iron	Bronze
3-1/2 in. 8-Bolt Flanges (Type 7 Fittings)	Intake Manifolds	N/A	Single Manifold, 2-1/2 in. Angle Comp., L.H.	81990-1A	N/A
		N/A	Single Manifold, 3 in. Angle Comp., L.H.	81990-1B	N/A
		N/A	Single Manifold, 2-1/2 in. Angle Comp., R.H.	81990-1C	N/A
		N/A	Single Manifold, 3 in. Angle Comp., R.H.	81990-1D	N/A
		N/A	Single Manifold, 2-1/2 in. Non-Angle Comp., L.H. or R.H.	81990-1E	N/A
		N/A	Single Manifold, 3 in. Non-Angle Comp., L.H. or R.H.	81990-1F	N/A
		N/A	Dual Manifold, 2-1/2 in. Angle Comp., L.H.	81990-1G	N/A
		N/A	Dual Manifold, 3 in. Angle Comp., L.H.	81990-1H	N/A
		N/A	Dual Manifold, 2-1/2 in. Angle Comp., R.H.	81990-1J	N/A
		N/A	Dual Manifold, 3 in. Angle Comp., R.H.	81990-1K	N/A
		N/A	Dual Manifold, 2-1/2 in. Non-Angle Comp., L.H. or R.H.	81990-1L	N/A
		N/A	Dual Manifold, 3 in. Non-Angle Comp., L.H. or R.H.	81990-1M	N/A
		N/A	Single Manifold, With 5-1/2 in. Extension, 2-1/2 in. Angle Comp., L.H.	81990-2A	N/A
		N/A	Single Manifold, With 5-1/2 in. Extension, 3 in. Angle Comp., L.H.	81990-2B	N/A
		N/A	Single Manifold, With 5-1/2 in. Extension, 2-1/2 in. Angle Comp., R.H.	81990-2C	N/A
		N/A	Single Manifold, With 5-1/2 in. Extension, 3 in. Angle Comp., R.H.	81990-2D	N/A
		N/A	Single Manifold, With 5-1/2 in. Extension, 2-1/2 in. Non-Angle Comp., L.H. or R.H.	81990-2E	N/A
		N/A	Single Manifold, With 5-1/2 in. Extension, 3 in. Non-Angle Comp., L.H. or R.H.	81990-2F	N/A
		N/A	Dual Manifold, With 5-1/2 in. Extension, 2-1/2 in. Angle Comp., L.H.	81990-2G	N/A
		N/A	Dual Manifold, With 5-1/2 in. Extension, 3 in. Angle Comp., L.H.	81990-2H	N/A
		N/A	Dual Manifold, With 5-1/2 in. Extension, 2-1/2 in. Angle Comp., R.H.	81990-2J	N/A
		N/A	Dual Manifold, With 5-1/2 in. Extension, 3 in. Angle Comp., R.H.	81990-2K	N/A
		N/A	Dual Manifold, With 5-1/2 in. Extension, 2-1/2 in. Non-Angle Comp., L.H. or R.H.	81990-2L	N/A
		N/A	Dual Manifold, With 5-1/2 in. Extension, 3 in. Non-Angle Comp., L.H. or R.H.	81990-2M	N/A
		N/A	Single Manifold, 3-1/2 in., L.H. or R.H., 11.311 in. Drop from Mounting Pad	82605-1A	N/A
		N/A	Single Manifold, 3-1/2 in., L.H. or R.H., 13.187 in. Drop from Mounting Pad	82605-1B	N/A

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INTAKE FITTINGS FOR WATEROUS FIRE PUMPS

Table 2. Auxiliary Fittings (Continued)

Pad Fitting Is To Be Mounted On	Auxiliary Fittings			Part Number	
	Type	Length	Description	Iron	Bronze
3 in. NPT Taps (Type 9 Fittings)	Anodes	N/A	Zinc Anode, 3 in. NPT	52315-1	52315-1
	Pipe Plugs	N/A	Pipe Plug, Square Head, 3 in. NPT	W 6548	W 6548-B
5 in. ANSI Flanges (Type 11 Fittings)	Nipples	4.50 in.	Nipple, 5 NH, 4-1/2 in. Long	72454-A	72454-ABZ
6 in. ANSI Flanges (Type 12 Fittings)	Nipple Extensions	1.00 in.	Nipple Extension, 1 in.	61984-A	N/A
		2.00 in.	Nipple Extension, 2 in.	61984-AA	N/A
	Nipples	3.375 in.	Nipple, 6 NH, 3-3/8 in. Long	72453-A	72453-ABZ
		5.25 in.	Nipple, 6 NH, 5-1/4 in. Long	72572-A	72572-ABZ
		6.25 in.	Nipple, 6 NH, 6-1/4 in. Long	72578-A	72578-ABZ
		7.25 in.	Nipple, 6 NH, 7-1/4 in. Long	72579-A	72579-ABZ
		5.25 in.	Nipple, 5 NH, 5-1/4 in. Long With Dump Flange	72818-A	72818-ABZ
		6.25 in.	Nipple, 5 NH, 6-1/4 in. Long With Dump Flange	72819-A	72819-ABZ
		7.25 in.	Nipple, 5 NH, 7-1/4 in. Long With Dump Flange	72820-A	72820-ABZ
		5.25 in.	Nipple, 6 NH, 5-1/4 in. Long With Dump Flange	72716-A	72716-ABZ
		6.25 in.	Nipple, 6 NH, 6-1/4 in. Long With Dump Flange	72717-A	72717-ABZ
7.25 in.	Nipple, 6 NH, 7-1/4 in. Long With Dump Flange	72718-A	72718-ABZ		
6 in. NH Threaded Ends (Type 13 Fittings)	Extensions	3.75 in.	Extension, 6 NH, 3-3/4 in. Long	72534-A	N/A
		6.50 in.	Extension, 6 NH, 6-1/2 in. Long	72564-A	N/A
3 in. Relief Valve Pads (Type 14 Fittings)	Spacers	1.00 in.	Spacer, Relief Valve, 1 in.	61647-A	61647-ABZ
		2.00 in.	Spacer, Relief Valve, 2 in.	61647-AA	61647-ABZ
		4.00 in.	Spacer, Relief Valve, 4 in.	61646-A	61646-ABZ
	Tapped Flanges	N/A	Flange, 3 in. NPT	62206-2A	N/A
Blind Flanges	N/A	Blind Flange	62950-A	62950-ABZ	
4 in. Relief Valve Pads (Type 15 Fittings)	Spacers	1.00 in.	Spacer, Relief Valve, 1 in.	63842-A	N/A
	Blind Flanges	N/A	Blind Flange	72569-A	72569-ABZ
6 in. Flanges on Dual (Pant-Leg) Intake Fittings (Type 16 Fittings)	Extensions	9.50 in.	Threaded Extension, 6 NH Thread	81864-A	N/A
8 in. ANSI Flange on Oversize Pant Leg Fitting 82952 (Type 30 Fittings)	Nipples	6.50 in.	Nipple, 6 NH, 6-1/2 Long Without Dump Flange	82957-A	N/A
		4.00 in.	Nipple, 6 NH 4 in. Long With Dump Flange	82953-A	N/A
	8 in. Monarch Butterfly Valve	2.50 in.	Manual Actuator With 12 Volt Indicating Lights	82996-1A	N/A
Nipples for 8 in. Monarch Butterfly Valve (Type 31 Fittings)	Nipples	6.50 in.	Nipple, 6 NH, 6-1/2 in. Long Without Dump Flange	82957-1A	N/A
		4.00 in.	Nipple, 6 NH 4 in. Long With Dump Flange	82953-1A	N/A

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INTAKE FITTINGS FOR WATEROUS FIRE PUMPS

Table 2. Auxiliary Fittings (Continued)

Pad Fitting Is To Be Mounted On	Auxiliary Fittings			Part Number		
	Type	Length	Description	Iron	Bronze	
6 in. ANSI Flanges on 6-3/4 in. Long Intake Fittings (Type 12 Fittings)	Nipples	5.25 in.	Nipple, 5 NH, 5-1/4 in. Long With Dump Valve Flange	72818-A	72818-ABZ	
		6.25 in.	Nipple, 5 NH, 6-1/4 in. Long With Dump Valve Flange	72819-A	72819-ABZ	
		7.25 in.	Nipple, 5 NH, 7-1/4 in. Long With Dump Valve Flange	72820-A	72820-ABZ	
		5.25 in.	Nipple, 6 NH, 5-1/4 in. Long With Dump Valve Flange	72716-A	72716-ABZ	
		6.25 in.	Nipple, 6 NH, 6-1/4 in. Long With Dump Valve Flange	72717-A	72717-ABZ	
		7.25 in.	Nipple, 6 NH, 7-1/4 in. Long With Dump Valve Flange	72718-A	72718-ABZ	
		3.375 in.	Nipple, 6 NH, 3-3/8 in. Long Without Dump Valve Flange	72453-1A	72453-1ABZ	
		5.25 in.	Nipple, 6 NH, 5-1/4 in. Long Without Dump Valve Flange	72572-1A	72572-1ABZ	
		6.25 in.	Nipple, 6 NH, 6-1/4 in. Long Without Dump Valve Flange	72578-1A	72578-1ABZ	
	7.25 in.	Nipple, 6 NH, 7-1/4 in. Long Without Dump Valve Flange	72579-1A	72579-1ABZ		
	6 in. Monarch Butterfly Valves	N/A		12 Volt Electric Actuator	82743-1A	N/A
				24 Volt Electric Actuator	82743-1B	
				Pneumatic Actuator	82743-2A	
			Manual Actuator (Includes Control Handle Kit K 968)	82743-3A		
Nipples For Monarch Butterfly Valves on CM and CS Models (Type 18 Fitting)	Nipples (CM and CS Models)	5.25 in.	Nipple, 5 NH, 5-1/4 in. Long With Dump Valve Flange	72818-1A	72818-1ABZ	
		6.25 in.	Nipple, 5 NH, 6-1/4 in. Long With Dump Valve Flange	72819-1A	72819-1ABZ	
		7.25 in.	Nipple, 5 NH, 7-1/4 in. Long With Dump Valve Flange	72820-1A	72820-1ABZ	
		5.25 in.	Nipple, 6 NH, 5-1/4 in. Long With Dump Valve Flange	72716-1A	72716-1ABZ	
		6.25 in.	Nipple, 6 NH, 6-1/4 in. Long With Dump Valve Flange	72717-1A	72717-1ABZ	
		7.25 in.	Nipple, 6 NH, 7-1/4 in. Long With Dump Valve Flange	72718-1A	72718-1ABZ	
		3.375 in.	Nipple, 6 NH, 3-3/8 in. Long Without Dump Valve Flange	72453-2A	72453-2ABZ	
		5.25 in.	Nipple, 6 NH, 5-1/4 in. Long Without Dump Valve Flange	72572-2A	72572-2ABZ	
		6.25 in.	Nipple, 6 NH, 6-1/4 in. Long Without Dump Valve Flange	72578-2A	72578-2ABZ	
7.25 in.	Nipple, 6 NH, 7-1/4 in. Long Without Dump Valve Flange	72579-2A	72579-2ABZ			
6 in. ANSI Flange on CXN Model (Type 21 Fittings)	6 in. Monarch Butterfly Valves	N/A		12 Volt Electric Actuator	82743-1A	
				24 Volt Electric Actuator	82743-1B	
				Pneumatic Actuator	82743-2A	
				Manual Actuator (Includes Control Handle Kit K 968)	82743-3A	
Nipples For Monarch Butterfly Valves on CXN Model (Type 22 Fittings)	Nipples (CXN Model)	5.25 in.	Nipple, 6 NH, 5-1/4 in. Long With Dump Valve Flange	72716-2A	72716-2ABZ	
5 in. NH Threaded Ends (Type 23 Fittings)	Extensions	6.50 in.	Extension, 5 NH, 6-1/2 in. Long	72798-A	N/A	

DATA
INTAKE FITTINGS FOR WATEROUS FIRE PUMPS

INTAKE SCREEN LIST:

Table 3. Intake Screens

Intake Screen		Part Number
Size	Material	
2-1/2 in.	Zinc	51104
	Brass	63591
3-1/2 in.	Brass	62875
4 in.	Zinc	60740
	Brass	61930
4-1/2 in.	Zinc	60739
	Brass	61931
5 in.	Zinc	61402
	Brass	61932
6 in.	Zinc	61403
	Brass	61933