

# Series 4380 Vertical in-line

Equal suction & Dis-  
charge 'S' designation

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## Parts list

**7/8" Impeller bore**

**1<sup>1</sup>/<sub>4</sub>" Mechanical seal**

**File No:** 6043.129

**Date:** AUGUST 8, 2014

**Supersedes:** 6043.129

**Date:** JULY 25, 2014

**4380 POWER FRAMES: ALL SPEEDS**

SPEED	MOTOR HORSEPOWER																
	1/2	3/4	1	1 1/2	2	3	5	7 1/2	10	15	20	25	30				
1150 RPM																	
1750 RPM																	
3500 RPM																	
<b>FRAME</b>	56C	143JM	145JM	182JM	184JM	213JM	215JM	213P	215P	254JM	256JM	284JM	286JM	324JM	326JM	324JP	326JP
<b>PUMP SIZE</b>																	
1 1/2 x 1 1/2 x 6	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
2 x 2 x 6	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
3 x 3 x 6	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
4 x 4 x 6W	—	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
1 1/2 x 1 1/2 x 8	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
2 x 2 x 8	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
3 x 3 x 8	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
4 x 4 x 8	—	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
5 x 5 x 8	—	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
6 x 6 x 8	—	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
8 x 8 x 8	—	—	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
1.5 x 1.5 x 10	—	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
2 x 2 x 10	—	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
3 x 3 x 10	—	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
4 x 4 x 10	—	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
6 x 6 x 10	—	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
8 x 8 x 10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4 x 4 x 11 1/2	—	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
5 x 5 x 11 1/2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
6 x 6 x 11 1/2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8 x 8 x 11 1/2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3 x 3 x 13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4 x 4 x 13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5 x 5 x 13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5 x 5 x 13H	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
6 x 6 x 13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
6 x 6 x 13H	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8 x 8 x 13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

"S" DESIGNATION - 7/8" IMPELLER BORE, 1 1/4" MECHANICAL SEAL

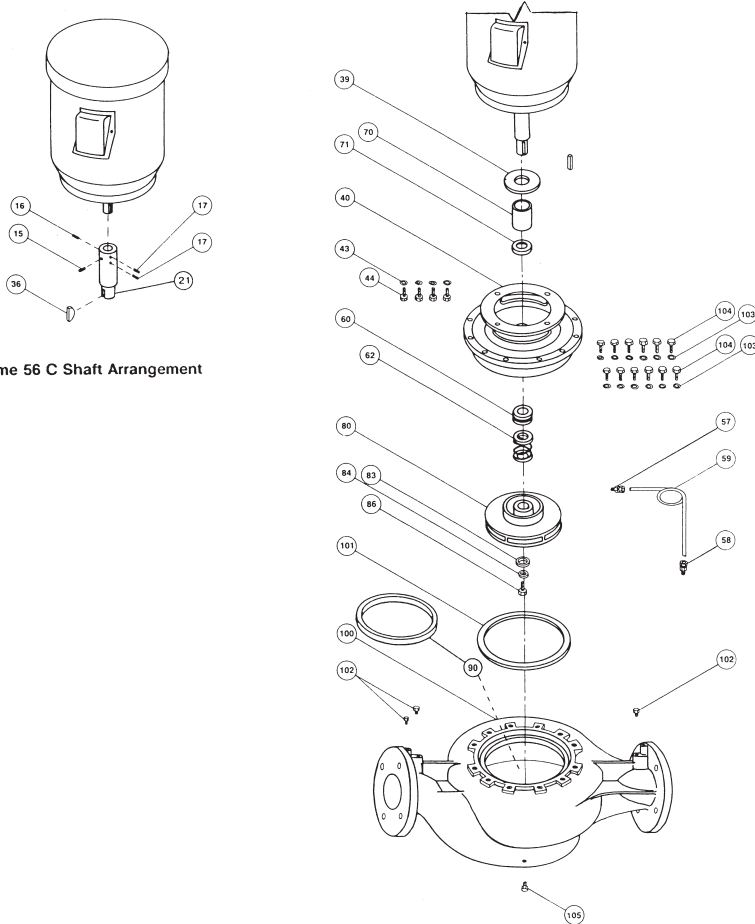
"M" DESIGNATION - 1 1/4" IMPELLER BORE, 1 5/8" MECHANICAL SEAL

# 4380 New Style Vertical Pump

## Equal Suction and Discharge 'S' designation

### 7/8" IMPELLER BORE - 1-1/4" MECHANICAL SEAL

#### Exploded View



Frame 56 C Shaft Arrangement

#### INDEX

ITEM	DESCRIPTION	PAGE	ITEM	DESCRIPTION	PAGE	ITEM	DESCRIPTION	PAGE
15	Set screw	11	57	Male connector	12	90	Case wear ring	7
16	Set screw	11	58	Male connector	12	100	Casing	4
17	Set screw	11	59	Tubing	12	101	Casing gasket	5
21	Shaft extension	11	62	Mechanical seal kit	11	102	Casing gauge plug	6
36	Shaft Key	11	70	Shaft sleeve	11	103	Casing capscrew washer	7
39	Water slinger	11	71	Shaft sleeve spacer	11	104	Casing capscrew	5
40	Stuff. box/adaptor	9	80	Impeller	8	105	Casing drain plug	6
43	Washer (motor)	10	83	Washer (impeller)	11	90	Case wear ring	7
44	Capscrew (motor)	10	86	Capscrew (impeller)	11			

**ITEM 100 CASING\*\***

PUMP SIZE	CONSTRUCTION	PART NUMBER	BAR CODE
1½×1½×6	125# C.I.*	427135-011	
	250# D.I.*	427036-031	
2×2×6	125# C.I.	427037-011	
	250# D.I.	427038-031	
3×3×6	125# C.I.	427041-011	
	250# D.I.	427042-031	
4×4×6	125# C.I.	427043-011	
	250# D.I.	427044-031	
1½×1½×8	125# C.I.	427045-011	
	250# D.I.	427046-031	
2×2×8	125# C.I.	427047-011	
	250# D.I.	427048-031	
3×3×8	125# C.I.	427051-011	
	250# D.I.	427052-031	
4×4×8	125# C.I.	426241-011†	
	250# D.I.	426242-031†	
5×5×8	125# C.I.	427024-011	
	250# D.I.	427025-031	
6×6×8	125# C.I.	427055-011	
	250# D.I.	427056-031	
8×8×8	125# C.I.	427915-011	
	250# D.I.	427916-031	
1.5×1.5×10	125# C.I.*	426257-011	
	250# D.I.*	426258-031	
2×2×10	125# C.I.*	427059-011	
	250# D.I.*	427060-031	
3×3×10	125# C.I.	427061-011	
	250# D.I.	427062-031	
4×4×10	125# C.I.	427063-011	
	250# D.I.	427064-031	
6×6×10	125# C.I.	427065-011	
	250# D.I.	427066-031	
4×4×11½	125# C.I.	426119-011	
	250# D.I.	426120-031	

**NOTES:** c.i.\* Denotes cast iron and d.i.\* Denotes ductile iron

For other constructions change the suffix to the following:

All bronze construction -041

Stainless steel construction -071

\*\* Casing part numbers are for casing only, casing wear ring is sold separately.

† For 4x4x8 units pre-July 2010, replacing the casing also requires changing the impeller to a post-July 2010 impeller. See impeller part numbers for more details or consult factory

**ITEM 101 CASING GASKET**

PUMP SIZE	PART NUMBER	BAR CODE
1½×1½×6	426401-002	
2×2×6		
3×3×6		
4×4×6W		
1½×1½×8	426401-003	
2×2×8		
4×4×8		
5×5×8		
6×6×8W		
8×8×8		
1.5×1.5×10	426401-004	
2×2×10		
3×3×10		
4×4×10		
4×4×11½	426401-006	

**ITEM 104 CASING CAPSCREW & WASHER**

PUMP SIZE	NO. REQ'D	SIZE	PART NUMBER	BAR CODE
1½×1½×6	12	Capscrew ½" - 13NC × 1¼" LG.	911125-110	
2×2×6	12	Washer ½" - SAE flat	927117-100	
3×3×6				
4×4×6W				
1½×1½×8	8	HX. HD. Capscrew ⅝" - 11NC × 1½" LG.	911129-112	
2×2×8	8	Washer ⅝" - SAE flat	927121-100	
4×4×8				
5×5×8				
6×6×8W				
8×8×8				
1.5×1.5×10	12	Capscrew ⅝" - 11NC × 1½" LG.	911129-112	
2×2×10	12	Washer ⅝" - SAE flat	927121-100	
3×3×10				
4×4×10				
4×4×11½	16	Capscrew ½" - 13NC × 1½" LG.	911125-112	
	16	Washer ½" - SAE flat	927117-100	

**ITEM 105 CASING DRAIN PLUG**

PUMP SIZE	NO. REQ'D	SIZE	MATERIAL	PART NUMBER	BAR CODE
1½×1½×6	1	¼" NPT	CAD Plated	937105-201	
2×2×6					
3×3×6					
3×3×6					
4×4×6					
1½×1½×8					
2×2×8					
3×3×8					
4×4×8					
6×6×8					
8×8×8					
1.5×1.5×10					
2×2×10					
3×3×10					
4×4×10					
4×4×11½					
5×5×8	1	½" NPT	CAD Plated	937105-203	

**ITEM 102 CASING GAUGE PLUG**

PUMP SIZE	NO. REQ'D	SIZE	MATERIAL	PART NUMBER	BAR CODE
ALL	4	¼" NPT	CAD Plated	937105-201	

**ITEM 90 CASE WEAR RING**

PUMP SIZE	CONST.	MATERIAL	PART NUMBER	BAR CODE
1½×1½×6	AB-BF	SAE 660 Bronze	426413-401	
	AI-DI	Class 30 c.i.	426413-101	
2×2×6	AB-BF	SAE 660 Bronze	426413-403	
	AI-DI	Class 30 c.i.	426413-103	
3×3×6	AB-BF	SAE 660 Bronze	426413-406	
	AI-DI	Class 30 c.i.	426413-106	
4×4×6	AB-BF	SAE 660 Bronze	426413-404	
	AI-DI	class 30 c.i.	426413-104	
1½×1½×8	AB-BF	SAE 660 Bronze	426413-402	
	AI-DI	Class 30 c.i.	426413-102	
2×2×8	AB-BF	SAE 660 Bronze	426413-404	
	AI-DI	Class 30 c.i.	426413-104	
3×3×8	AB-BF	SAE 660 Bronze	426413-407	
	AI-DI	Class 30 c.i.	426413-107	
4×4×8	AB-BF	SAE 660 Bronze	426413-410	
	AI-DI	class 30 c.i.	426413-110	
5×5×8	AB-BF	SAE 660 Bronze	426413-413	
	AI-DI	Class 30 c.i.	426413-113	
8×8×8	AI-DI	Class 30 c.i.	—	
	AI-DI	Class 30 c.i.	—	
1.5×1.5×10	AB-BF	SAE 660 Bronze	426416-402	
	AI-DI	Class 30 c.i.	426416-102	
2×2×10	AB-BF	SAE 660 Bronze	426413-404	
	AI-DI	Class 30 c.i.	426413-104	
3×3×10	AB-BF	SAE 660 Bronze	426413-404	
	AI-DI	Class 30 c.i.	426413-104	
4×4×10	AB-BF	SAE 660 Bronze	426413-408	
	AI-DI	Class 30 c.i.	426413-108	
4×4×11½	AB-BF	SAE 660 Bronze	426412-405	
	AI-DI	Class 30 c.i.	426412-105	

**ITEM 80 IMPELLER\*\* 7/8" BORE**

PUMP SIZE	IMP. BORE	MAX.DIA.	MATERIAL	PART NUMBER	BAR CODE
1½×1½×6	7/8"	6"	Bronze	427099-041	
			Cast iron	427099-011	
2×2×6	7/8"	6"	Bronze	427109-041	
			Cast iron	427109-011	
3×3×6	7/8"	6"	Bronze	427103-041	
			Cast iron	427103-011	
4×4×6	7/8"	6"	Bronze	427115-041	
			Cast iron	427115-011	
1½×1½×8	7/8"	8"	Bronze	427119-041	
			Cast iron	427119-011	
2×2×8	7/8"	8"	Bronze	427121-041	
			Cast iron	427121-011	
3×3×8	7/8"	8"	Bronze	427129-041	
			Cast iron	427129-011	
4×4×8	7/8"	8"	Bronze	427137-041 <sup>†</sup>	
			Cast iron	427137-011 <sup>†</sup>	
4×4×8	7/8"	8"	Bronze	426239-041 <sup>††</sup>	
			Cast iron	426239-011 <sup>††</sup>	
5×5×8	7/8"	8"	Bronze	427131-041	
			Cast iron	427131-011	
6×6×8	7/8"	8"	Bronze	427139-041	
			Cast iron	427139-011	
8×8×8	7/8"	8"	Bronze	427917-041	
			Cast iron	427917-011	
1.5×1.5×10	7/8"	10"	Bronze	426255-041	
			Cast iron	426255-011	
2×2×10	7/8"	10"	Bronze	427151-041	
			Cast iron	427151-011	
3×3×10	7/8"	10"	Bronze	427163-041	
			Cast iron	427163-011	
4×4×10	7/8"	10"	Bronze	427149-041	
			Cast iron	427149-011	
6×6×10	7/8"	10"	Bronze	427153-041	
			Cast iron	427153-011	
4×4×11½	7/8"	11½"	Bronze	426281-041	
			Cast iron	426281-011	

**NOTES:**

\*\* Impeller Part Numbers are for full or maximum diameter Impellers. Always specify Pump serial number and where possible, measure and advise the diameter of the Impeller being replaced on these Pumps.

<sup>†</sup> For pre-July 2010 pumps"

<sup>††</sup> For post-July 2010 pumps (do **Not** use for Twin or DualArm 6x6x8)



**ITEM 40 & 50 CAST IRON COMB. STUFFING BOX & ADAPTER**

PUMP SIZE	MOTOR FRAME		BAR CODE
	56TC & 143 TO 184JM	213 TO 215JM	
1½×1½×6	426746-011	—	
	—	426747-011	
2×2×6	426746-011	—	
	—	426747-011	
3×3×6	426746-011	—	
	—	426747-011	
4×4×6W	426746-011	—	
	—	426747-011	
1½×1½×8	426749-011	—	
2×2×8	426749-011	—	
4×4×8	426749-011	—	
5×5×8	426749-011	—	
6×6×8W	426749-011	—	
8×8×8	426749-011	—	
1.5×1.5×10	426753-011	—	
2×2×10	426753-011	—	
3×3×10	426753-011	—	
4×4×10	426753-011	—	
4×4×11½	426741-011	—	

**NOTE:**

The above Part numbers are for B.F. and A.I. Construction, the suffix will change for other constructions as follows:

- Ductile iron construction - 031
- All bronze construction - 041
- Stainless steel construction - 071

**ITEM 44 MOTOR CAPSCREW & WASHER**

PUMP SIZE	MOTOR FRAME	
	56TC & 143 TO 184JM	213 TO 215JM
	<b>4 REQUIRED</b>	<b>4 REQUIRED</b>
1 1/2 x 1 1/2 x 6	Capscrew 3/8" NC x 1" Part number 911121-108	Capscrew
2 x 2 x 6		1/2" - 13NC x 1" Part number 911125-108
3 x 3 x 6		Washer
4 x 4 x 6W		1/2" flat Part number 927117-100
1 1/2 x 1 1/2 x 8	Washer 3/8" flat Part number 927113-100	
2 x 2 x 8		
4 x 4 x 8		
5 x 5 x 8		
6 x 6 x 8W		
8 x 8 x 8		
1.5 x 1.5 x 10		
2 x 2 x 10		
3 x 3 x 10		
4 x 4 x 10		
4 x 4 x 11 1/2		

**BAR CODE**

PART NUMBER	
927113-100	
927117-100	
911121-108	
911125-108	

**PARTS FOR FRAME 56TC ONLY**

ITEM NO.	DESCRIPTION	CONST.	PART NUMBER	BAR CODE
15	Allen set screw (1 req'd) Cone point 1/4 - 20 x 5/16" Long		916517-005	
16	Allen set screw (1 req'd) Cup point 5/16 - 18 x 1/4" long		916519-104	
17	Allen set screw (2 Req'd) Dog point 1/4 - 20x5/16" Long		916517-205	
21	Shaft extension		426992-071	
36	Shaft key		974515-400	

**PARTS FOR FRAMES 143 TO 215JM**

ITEM NO.	DESCRIPTION	CONST.	PART NUMBER	BAR CODE
70	Shaft sleeve	BF	425869-001	
70	Shaft sleeve	AI	425869-002	
71	Sleeve spacer	ALL	425868-005	

**ITEMS 70 & 71 SHAFT SLEEVE & SPACER KITS**

ITEM NO.	DESCRIPTION	CONST.	PART NUMBER	BAR CODE
70 & 71	SH. SLV. & Spacer kit	BF	810150-150	
70 & 71	SH. SLV. & Spacer kit	AI	810150-151	

**COMMON PARTS**

ITEM NO.	DESCRIPTION	CONST.	PART NUMBER	BAR CODE
62K	Mechanical seal kit	ALL	975000-982**	
39	Water slinger	ALL	406622-000	
83	Impeller washer	ALL	425742-001	
86	Impeller capscrew	ALL	911900-114	

**NOTE:**

\*\* For liquids above 200°F/93°C use 9975001-813 (-613 if potable drinking water above 200°F/93°C) For glycols above 30% by weight use 9975001-817 (-818 if above 200°F/93°C)

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**ITEM 57& 58 MALE CONNECTOR\*\***

PUMP SIZE	NO.REQ'D.	SIZE	CONST.	MAT.	PART NUMBER	BAR CODE
ALL	1	3/8" tube x 1/4"NPT	BF/AB	Brass	939001-114	
ALL	1	3/8" tube x 1/4"NPT	AI	Steel	939001-214	

**ITEM 59 FLUSH LINE TUBING\*\***

PUMP SIZE	NO.REQ'D.	SIZE	CONST.	MAT.	PART NUMBER	BAR CODE
1 1/2 x 1 1/2 x 6 to 8 x 8 x 11 1/2	1	3/8" OD x 12" LG	BF/AB	Copper	997531-004	
			AI	Steel	997153-004	

**ITEM 102 GAUGE PLUG**

PUMP SIZE	NO.REQ'D.	SIZE	CONST.	MAT.	PART NUMBER	BAR CODE
ALL	4	1/4"NPT	ALL	CAD. PLTD. Steel	937105-201	

TORONTO  
 +1 416 755 2291

BUFFALO  
 +1 716 693 8813

BIRMINGHAM  
 +44 (0) 8444 145 145

MANCHESTER  
 +44 (0) 8444 145 145

BANGALORE  
 +91 (0) 80 4906 3555

SHANGHAI  
 +86 21 3756 6696