

# DATA SHEET

## DIRECT-DRIVE PLUNGER PUMPS



**Brass Electric Models:**

**2SFX20ES, 2SFX22ES, 2SFX30ES, 2SFX30GES**

**Brass Gas Models: 2SFX30GS, 2SFX30GZ**



Model 2SFX20ES Shown  
(Unloader and by-pass hose included with pump)

### FEATURES

- Your choice of motorized unit or hollow shaft pump only for direct mounting to gas engine or electric motor.
- Includes Regulating Unloader, By-pass Hose and Crankcase Oil
- Standard NBR seals with alternative options for temperature and chemical compatibility
  - FPM – .0110
  - EPDM – .0220
  - High Temp, 190°F – .3000

### COMMON SPECIFICATIONS

	U.S.	Metric
Inlet Pressure Range	Flooded to 75 psi	Flooded to 5.25 bar
Max. RPM	3450 rpm	3450 rpm
Bore	0.708"	18 mm
Max. Liquid Temperature	160°F	71°C
Above 130°F call Cat Pumps for inlet conditions and elastomer recommendations.		
Crankcase Capacity	11.83 oz.	0.35 l
Inlet Ports (1)	3/8" NPT(F)	3/8" NPT(F)
Discharge Ports (2)	3/8" NPT(F)	3/8" NPT(F)
By-pass Port	1/4" NPT(F)	1/4" NPT(F)
Weight (Pump Only)	11.83 lbs.	4.8 kg
Dimensions (Pump Only)	9.13 x 6.65 x 6.50"	232 x 169 x 165 mm

### SPECIFICATIONS

	U.S. Measure	Metric Measure
<b>2SFX20ES</b>		
Flow	2.0 gpm	7.6 lpm
Max. Discharge Pressure	2000 psi	138 bar
Stroke	0.122"	3.1 mm
<b>2SFX22ES</b>		
Flow	2.2 gpm	8.3 lpm
Max. Discharge Pressure	2000 psi	138 bar
Stroke	0.132"	3.35 mm
<b>2SFX30ES</b>		
Flow	3.0 gpm	11.4 lpm
Max. Discharge Pressure	1500 psi	103 bar
Stroke	0.177"	4.5 mm
<b>2SFX30GES</b>		
Flow	3.0 gpm	11.4 lpm
Max. Discharge Pressure	2000 psi	138 bar
Stroke	0.189"	4.8 mm
<b>2SFX30GS</b>		
Flow	3.0 gpm	11.4 lpm
Max. Discharge Pressure	2000 psi	138 bar
Stroke	0.189" rpm	4.8 mm
<b>2SFX30GZ</b>		
Flow	3.0 gpm	11.4 lpm
Max. Discharge Pressure	2500 psi	172 bar
Stroke	0.189" rpm	4.8 mm

ES = **Electric 5/8"** hollow shaft with bolt mount, NEMA 56C

GES = **Electric 3/4"** hollow shaft with bolt mount.

GS, GZ = **Gas 3/4"** hollow shaft with bolt mount and adapter.

Gas Mounting Flange: SAE J609, Flange A, Extension 3 (3/4" Ø),

Shaft Length = 2.296, Pilot Ø = 1 5/8", B.C. Ø = 3 5/8", Thread = 5/16"-24 UNC Tap

Refer to pump **Service Manual** for repair procedures and additional technical information.

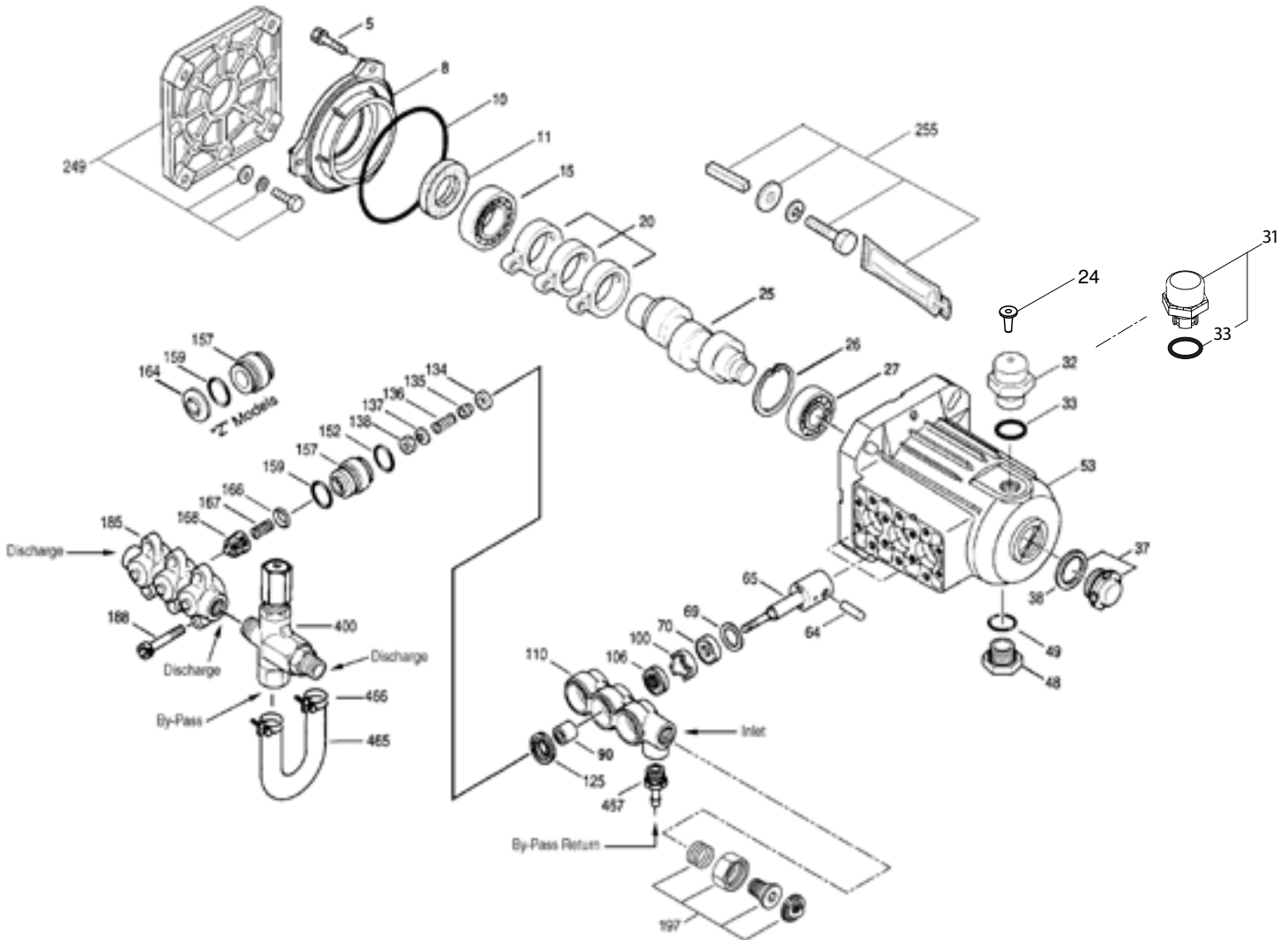
### ELECTRIC HORSEPOWER REQUIREMENTS

ES, GES FLOW		PRESSURE				PUMP RPM
		psi 1000	psi 1200	psi 1500	psi 2000	
gpm	lpm	bar 70	bar 85	bar 105	bar 138	
2.2	8.3	1.5	1.8	2.3	3.0	3450
3.0	11.4	2.1	2.5	3.1	4.2	3450
3.5	13.2	2.4	2.9	3.6	4.8	3450
GS, GZ FLOW		psi 1200	psi 1500	psi 2000	psi 2500	PUMP RPM
3.0	11.4	2.5	3.1	4.2	5.2	3450

# PARTS LIST

ITEM	PART NUMBER	MATL	DESCRIPTION	MODEL USED	QTY
5	549360	STCP R	Screw, HH (M6x14) (See Tech Bulletin 092)	All Models	3
8	547153	AL	Cover, Bearing, Inner (See Tech Bulletin 092)	All Models	1
10	14041	NBR	O-Ring, Bearing Cover-70D (See Tech Bulletin 092)	All Models	1
11	55337	NBR	Seal, Oil - 70D (See Tech Bulletin 092)	All Models	1
15	14488	STL	Bearing, Ball, Inner	All Models	1
20	547046	TNM	Rod, Connecting	All Models	3
24	549608	LPDE	Plug, Oil Cap (Remove before Start-Up)	All Models	1
25	<b>46109</b>	FCM	Crankshaft, 3450 RPM, 5/8", 3.1mm	2SFX20ES	1
	<b>44929</b>	FCM	Crankshaft, 3450 RPM, 5/8", 3.35mm	2SFX22ES	1
	<b>44931</b>	FCM	Crankshaft, 3450 RPM, 5/8", 4.5mm	2SFX30ES	1
	<b>546334</b>	FCM	Crankshaft, 3450 RPM, 3/4", 4.8mm	2SFX30GS,GZ	1
26	12385	STL	Ring, Retaining	All Models	1
27	15710	STL	Bearing, Ball, Outer	All Models	1
31	549726	—	Cap, Vented w/ O-Rings (Rain Cap)	All Models	1
32	547961	RTP	Cap, Oil Filler w/O-Ring	All Models	1
33	14179	NBR	O-Ring, Oil Filler Cap - 70D	All Models	1
37	92241	—	Gauge, Oil, Bubble w/Gasket	All Models	1
38	44428	NBR	Gasket, Oil Gauge - 80D	All Models	1
48	44842	NY	Plug, Drain [1/2" NPT(F)]	All Models	1
49	14179	NBR	O-Ring, Drain Plug - 70D	All Models	1
53	547285	AL	Crankcase (See Tech Bulletin 092)	All Models	1
64	16948	CM	Pin, Crosshead	All Models	3
65	<b>540073</b>	SZZ	Rod, Plunger, Unchromed	2SFX20,22,25,30,35	3
	<b>542958</b>	SHS	Rod, Plunger	2SFX30GZ	3
69	126259	STCP R	Washer (M24)	All Models	3
70	25461	NBR	Seal, Oil	All Models	3
90	45847	CC	Plunger (M18x14)	All Models	3
100	44869	PVDF	Retainer, Seal	All Models	3
106	† 44876	NBR	Seal, LPS w/S-Spg	All Models	3
	545192	FPM	Seal, LPS w/SS-Spg	All Models	3
	◆ 546507	EPDM	Seal, LPS w/ SS-Spg	All Models	3
110	44874	BB	Manifold, Inlet	All Models	1
125	43245	SNG	Seal, HPS w/S	All Models	3
	46652	HT	Seal, HPS, "Hi-Temp", 2-Pc w/S-Support	All Models except GZ	3
	76052	ST4	Seal, HPS w/S	All Models	3
134	45854	S	Valve, Inlet	All Models	3
	33873	NY	Valve, Inlet, Hi-Temp	All Models	3
135	549520	S	Spacer	All Models	3
136	44872	S	Spring, Inlet	All Models	3
137	88575	S	Washer, Conical (M6)	All Models	3
138	81240	SS	Nut, Hex (M6)	All Models	3
152	† 26089	NBR	O-Ring, Adapter - 80D	All Models	3
	11377	FPM	O-Ring, Adapter - 80D	All Models	3
	◆ 46647	EPDM	O-Ring, Adapter - 80D	All Models	3
157	<b>45859</b>	BB	Adapter, Discharge, Seat	All Models	3
	<b>44878</b>	BB	Spacer, Discharge, Valve	2SFX30GZ	3
159	† 26089	NBR	O-Ring, Adapter - 80D	All Models	3
	11377	FPM	O-Ring, Adapter - 80D	All Models	3
	◆ 46647	EPDM	O-Ring, Adapter - 80D	All Models	3
164	<b>44881</b>	S	Seat	2SFX30GZ	3
166	43723	S	Valve	All Models	3
167	541062	S	Spring	All Models	3
168	44565	PVDF	Retainer, Spring	All Models	3
185	44879	BB	Manifold, Discharge	All Models	1
188	126762	STCP R	Screw, HSH (M8x75)	All Models	6
197	941516	BB	GH Assembly, 3/8" NPT(F)	All Models	6
249	30520	—	Assy, Adapter Mount, Gas	All Gas Models	1
255	30517	STZP	Assy, Bolt Mount	All Models	1
285	80228	STL	Screw (M8-1.25x80) (Not Shown)	All Models	2
300	34053	NBR	Kit, Seal (Incls: 106,125,152,159) <b>Standard</b>	All Models	1
	33953	HT	Kit, Seal, Hi-Temp (Incls: 106,125,134,152,159) <b>.3000</b>	All Models	1
	33453	FPM	Kit, Seal (Incls: 106,125,152,159) <b>.0110</b>	All Models	1
	◆ 30536	EPDM	Kit, Seal (Incls: 106, 125, 152, 159) <b>.0220</b>	All Models	1

# EXPLODED VIEW



2SFX PLUNGER PUMP MODELS

ITEM	PART NUMBER	MATL	DESCRIPTION	MODEL USED	QTY
310	<b>34056</b>	NBR	Kit, Valve (Incls: 152,157,159,166,167,168) <b>Standard, .3000</b>	All except GZ	1
	<b>34052</b>	NBR	Kit, Valve (Incls: 152,159,164,166,167,168)	2SFX30GZ	1
311	<b>34668</b>	NBR	Kit, Inlet Valve (Incls: 134-137,152,159)	All Models	1
400	<b>7500XS</b>	BB	Unloader, Regulating	Std. 2SFX Models	1
—	<b>7625</b>	BB	Unloader, Regulating	2SFX30GZ	1
467	<b>45868</b>	BB	Barb, Pump Inlet [1/4" Hose x 1/4" NPT(M)]	All Models	1
—	<b>6107</b>	—	Oil, Bottle (21 oz) ISO 68 Hydraulic (Fill to specified crankcase capacity prior to start-up)	All Models	1

**Bold Part Numbers are unique to a particular pump model. Italics are optional items.** [ ] Date of latest production change. † Production parts are different than service parts.

R Components comply with RoHS Directive. See Tech Bulletins 002, 024, 036, 043, 055, 064, 065, 070, 073, 074, 083, 091 and 092 for additional information.

Effective with 1/90 Mfg. date 45853, 14036, 44861, 92519 have been replaced with new one piece crankcase.

Note: Discard Key which may come standard with most motors and engines and **use only the key included in this kit.**

MATERIAL CODES (Not Part of Part Number): AL=Aluminum BB=Brass CC=Ceramic CM=Chrome-moly EPDM=Ethylene Propylene Diene Monomer FCM=Forged Chrome-moly FPM=Fluorocarbon HT=Hi-Temp (EPDM Alternative) NBR=Medium Nitrile (Buna-N) NY=Nylon PVDF=Polyvinylidene Fluoride RTP=Reinforced Composite S=304SS SHS=304SS/High Strength SNG=Special Blend (Buna) SS=316SS ST4=Special PTFE 4 STL=Steel STCP=Steel/Chrome-Plated STZP=Steel/Zinc Plated SZZ=304SS/Zamak TNM=Special High Strength

Center raised pilot guide on the **Adapter Plate** assures proper alignment of pump and engine. Before mounting pump onto engine inspect engine for **recessed seal and bearing guide** to permit adapter to completely seat into recess and four bosses to be flush with engine face.

## 7500XS UNLOADER for "ES, GS" Pump Models

### SPECIFICATIONS

	U.S.	Metric
Flow	0.5 - 6.0 gpm	2 - 23 lpm
PSI Range	100 - 2000 psi	7 - 138 bar
Max. Temperature	190° F	88° C
Inlet Port - Rear	3/8" NPT(M)	3/8" NPT(M)
Discharge Port - Front	3/8" NPT(M)	3/8" NPT(M)
By-Pass Port - Barb	1/4" NPT(F)	1/4" NPT(F)
Weight	14 oz.	0.40 kg
Dimensions	3.0 x 1.0 x 4.25"	76 x 25 x 108 mm

### PARTS LIST

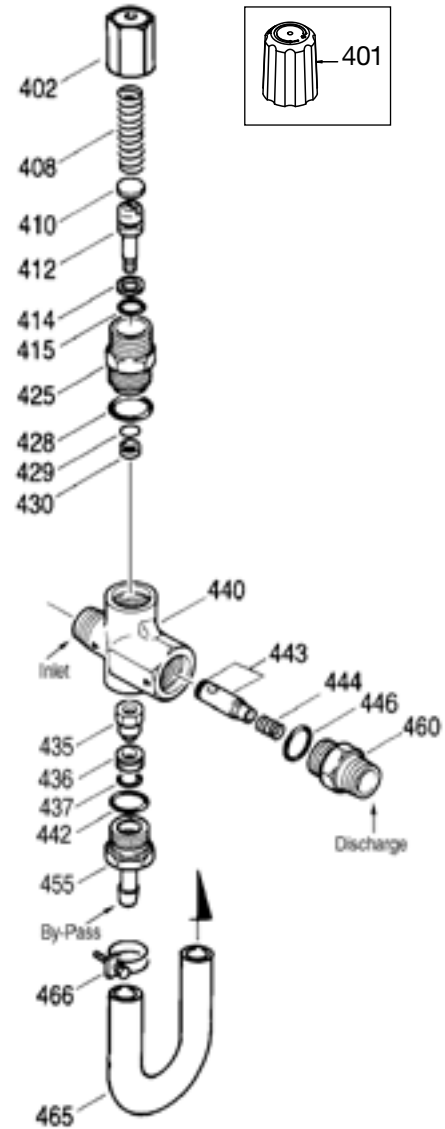
ITEM	P/N	MATL	DESCRIPTION	QTY
401	32088	NY	Handle, Black	1
402	540081	BB	Cap, Adjusting	1
404	31047	BB	Nut, Lock (Not Shown)	1
408	32094	STZP R	Spring, Pressure	1
410	107672	BB	Retainer, Spring	1
412	45694	S	Stem, Piston (M5)	1
414	—	PTFE	Back-up-Ring, Piston Stem	1
415	—	NBR	O-Ring, Piston Stem - 70D	1
425	107673	BB	Retainer, Piston	1
428	—	NBR	O-Ring, Retainer- 70D	1
429	—	NBR	O-Ring, Body	1
430	—	PTFE	Back-up-Ring, Body	1
435	45696	BB	Valve and Ball Assembly (M5)	1
436	107680	S	Seat	1
437	—	NBR	O-Ring, Seat - 70D	1
440	—	BB	Body	1
442	—	NBR	O-Ring, By-pass Fitting- 70D	1
443	541060	BB	Valve, Check w/O-Ring	1
444	45924	S	Spring	1
446	—	NBR	O-Ring, Discharge Fitting - 70D	1
455	45865	BB	Barb, By-pass Fitting	1
460	107681	BB	Fitting, Discharge [3/8" NPT(M)]	1
465	46140	—	By-pass Hose (5-1/2"x1/4")	1
	45983	—	By-pass Hose (8-1/2"x1/4") (UMS)	1
466	45929	STZP	Clamp, Hose	2
468	32097	NBR	<i>Kit, O-Ring <b>.3000</b></i> <i>(Incls: 414, 415, 428, 429, 430, 437, 442, 446)</i>	1
	31627	FPM	<i>Kit, O-Ring <b>.0110</b></i> <i>(Incls: 414, 415, 428, 429, 430, 437, 442, 446)</i>	1
	31959	EPDM	<i>Kit, O-Ring <b>.0220</b></i> <i>(Incls: 414, 415, 428, 429, 430, 437, 442, 446)</i>	1
469	7192	BB	Injector Chemical (1.8 mm) Adjustable	1
	7193	BB	Injector Chemical (2.1 mm) Adjustable	1
	7194	BB	Injector Chemical (2.3 mm) Adjustable	1

*Italics are optional items.* R Components comply with RoHS Directive.

MATERIAL CODES (Not Part of Part Number): BB=Brass EPDM=Ethylene Propylene Diene

Monomer FPM=Fluorocarbon NBR=Medium Nitrile (Buna-N)

PTFE=Pure Polytetrafluoroethylene S=304SS STZP=Steel/Zinc Plated



## 7625 UNLOADER for "GZ" Pump Models

### SPECIFICATIONS

	U.S.	Metric
Flow	0.5 - 7.8 gpm	2 - 30 lpm
PSI Range	100 - 2500 psi	7 - 172 bar
Max. Temperature	194° F	90° C
Inlet Port	3/8" BSP(M)	3/8" BSP(M)
Discharge Port	3/8" BSP(F)	3/8" BSP(F)
By-Pass Port	3/8" BSP(F)	3/8" BSP(F)
Auxiliary Port	1/4" BSP(F)	1/4" BSP(F)
Weight	19.5 oz.	0.55 kg
Dimensions	3.2 x 1.5 x 4.7"	81 x 38 x 119.4 mm

### PARTS LIST

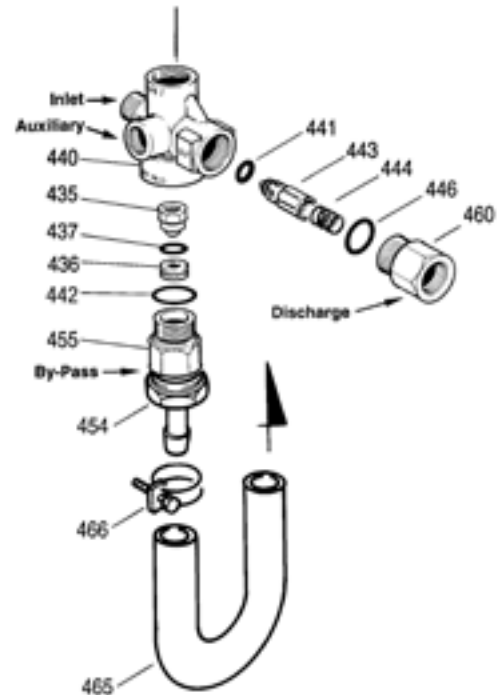
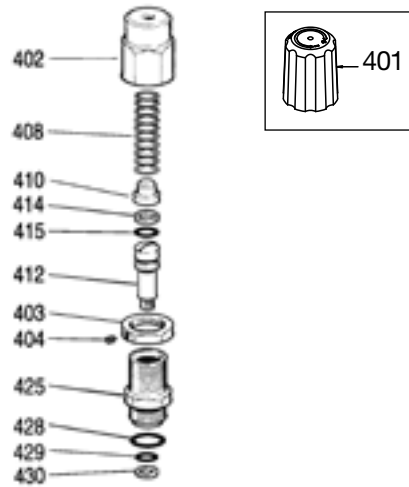
ITEM	P/N	MATL	DESCRIPTION	QTY
401	32088	NY	Handle, Black	1
402	33859	BB	Cap, Adjusting	1
403	33857	BB	Nut, Lock (M18x1)	1
404	33061	STZP	Screw, Set (M4x4)	1
408	32094	STZP R	Spring, Pressure	1
410	32819	STZP	Retainer, Spring	1
412	33860	S	Stem, Valve	1
414	—	PTFE	Back-up-Ring, Stem	1
415	—	NBR	O-Ring, Stem	1
425	33861	BB	Retainer, Piston	1
428	—	NBR	O-Ring, Retainer	1
429	—	NBR	O-Ring, Body	1
430	—	PTFE	Back-up-Ring, Body	1
435	33853	SSS	Valve and Ball Assembly (M6)	1
436	33806	NBR	Seat, w/O-Ring	1
437	—	NBR	O-Ring, Seat	1
440	—	BB	Valve Body	1
441	—	NBR	O-Ring, Flow Balancer	1
442	—	NBR	O-Ring, By-pass Fitting - 85D	1
443	33852	BB	Valve, Check	1
444	33843	S	Spring	1
446	—	NBR	O-Ring, Discharge Fitting	1
454	33865	BB	Barb, By-pass (3/8" NPTx1/4)	1
455	33846	BB	Fitting, By-pass (3/8" BSP)	1
460	33847	BB	Fitting, Discharge (3/8" BSP)	1
465	46140	—	By-pass Hose (5-1/2"x1/4")	1
466	—	STZP	Clamp, Hose	2
468	33098	NBR	Kit, O-Ring (Incls: 414,415,428,429,430, 437,441, 442)	1
469	7224	BB	Injector Chemical (2.3 mm) Adjustable	1

*Italics are optional items.* R Components comply with RoHS Directive.

MATERIAL CODES (Not Part of Part Number): BB=Brass

NBR=Medium Nitrile (Buna-N) NY=Nylon PTFE=Pure Polytetrafluoroethylene

S=304SS SSS=416SS STZP=Steel/Zinc Plated



### OPERATION

A Regulating Unloader comes with each 25FX pump to provide system pressure regulation and pump protection.

**For MAXIMUM SUCTION capability, Regulating Unloader should be remounted on discharge manifold, OPPOSITE from pump inlet port.**

Standard Units with return of by-pass back to the inlet of the pump should have a Thermo Valve in the by-pass line.

**By-pass HOSE ASSEMBLY is designed for cold water or ambient temperature operation. DO NOT EXCEED 6 MINUTES in by-pass operation. Excessive temperatures will cause premature wear or damage to the pump and VOID THE WARRANTY.**

**Hi-Temp Units** with special Hi-Temp seals do not use the Thermo Valve. Use optional Dual Pressure Switches and Mechanical Relay in Auto Shut Off Kits 34870 and 34871.

If unit is INFREQUENTLY USED OR PERIODICALLY STORED, seals may become dry. UNDER SUCTION FEED, system must be PURGED BEFORE OPERATION (system liquid must flow through the pump without discharge restriction) to assure full system pressure is reached.

## 7192, 7193, 7194, 7224 ADJUSTABLE CHEMICAL INJECTORS SPECIFICATIONS

		U.S.	Metric
Flow	7192	3 - 4 gpm	11.4 - 15 lpm
	7193	4 - 5 gpm	15 - 19 lpm
	7194	5 - 6 gpm	19 - 23 lpm
	7224	5 - 6 gpm	19 - 23 lpm
Orifice Size	7192	1.8 mm	1.8 mm
	7193	2.1 mm	2.1 mm
	7194	2.3 mm	2.3 mm
	7224	2.3 mm	2.3 mm
Max. Pressure		3500 psi	245 bar
Max. Temperature		195° F	90° C
Inlet Port (7192, 7193, 7194)		M18 x 1.0	M18 x 1.0
Inlet Port (7224)		M22 x 1.5	M22 x 1.5
Discharge Port		3/8" NPT(M)	3/8" NPT(M)
Hose Barb		1/4"	1/4"
Weight		6.3 oz.	0.18 kg
Dimensions		2.0 x 1.0 x 3.0"	51 x 25 x 76 mm

### PARTS LIST

ITEM	P/N	MATL	DESCRIPTION	MODEL USED	QTY
471	33949	NY	Handle, Adjustable	All	1
472	32941	BB	Barb, Adjustable	All	1
473	—	NBR	O-Ring, Hose Barb	All	1
474	33500	S	Spring, Retainer	All	1
475	33946	BB	Retainer, Bal/Seat	All	1
476	33504	FPM	O-Ring, Retainer	All	1
477	34620	SS	Ball, Seat 1/4"	All	1
478	33501	SS	Spring, Ball	All	1
479	32372	S	Injector Orifice (1.8 mm)	7192	1
	32373	S	Injector Orifice (2.1 mm)	7193	1
	32374	S	Injector Orifice (2.3 mm)	7194	1
	32074	SSS	Injector Orifice (2.3 mm)	7224	1
480	—	BB	Body	All	1
481	33481	BBNY	Barb Assy, Adjustable (Incls: 471,472,473,474,475,476,477,478)	All	1
482	13969	NBR	O-Ring, Body - 70D	All	1

*Italics are optional items.*

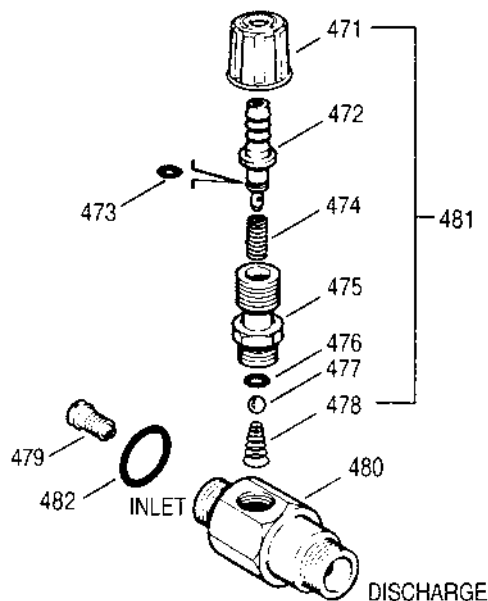
Material Codes (Not Part of Part No.): BB=Brass FPM=Fluorocarbon  
NBR=Medium Nitrile (Buna-N) NY=Nylon S=304SS SS=316SS SSS=416SS

### PERFORMANCE CHART

Model	Desired Flow	Orifice Size (mm)	Low PSI Nozzle (max. injecting pressure less hose friction loss)	Max. Chemical Draw (oz/min)	Pressure Drop across orifice (deduct from Hi-Pressure)
7192	2 gpm	1.8	225 psi	60	150
7192	3 gpm	1.8	275 psi	60	300
7192	4 gpm	1.8	450 psi	60	500
7193	3 gpm	2.1	225 psi	54	150
7193	4 gpm	2.1	375 psi	54	250
7193	5 gpm	2.1	600 psi	54	400
7194	3 gpm	2.3	150 psi	50	125
7194	4 gpm	2.3	225 psi	50	220
7224	3 gpm	2.3	150 psi	50	125
7224	4 gpm	2.3	225 psi	50	220

Optimum performance of chemical injector occurs with a 35 ft. high pressure hose and a minimum 3/8 I.D. The type of hose, extended lengths, reduced I.D. and fittings may create back pressure in excess of the low pressure nozzle rating and prevent the injector from drawing chemical. Deduct hose friction loss from the above PSI nozzle. Contact Cat Pumps for assistance with other options.

### EXPLODED VIEW



### CAUTION

Deduct the pressure drop shown in the performance chart from your desired system pressure to arrive at the maximum high pressure nozzle rating. This is essential to avoid over-pressurizing the pump.

### EXAMPLE

$$\left[ \begin{array}{l} \text{System - 4 GPM, 2000 PSI} \\ \text{Injector - 7193} \\ \text{Pressure Drop - 250 PSI} \end{array} \right] = \left[ \begin{array}{l} \text{Low Pressure Nozzle - 375 PSI} \\ \text{Max. High Pressure Nozzle - 1750 PSI} \end{array} \right]$$

Flush system after chemical application to prevent clogging and to prolong life.

### TROUBLESHOOTING

No Chemical Draw:

- Low pressure nozzle sized for too high pressure.
- Air leak in suction line.
- Worn injector orifice.

Leaking Around Adjusting Collar:

- O-ring worn.
- Foreign material in injector.

## ELECTRIC MOTOR SPECIFICATIONS

### Model 8050

Horsepower	1.5
Shaft Diameter	5/8"
Maximum Volts	115/230
Full Load Amps	12.1
RPM	3450
Weight	32.1 lbs.
Phase	Single
Frame Size	56-C TEFC
Service Factor	1.15

### Model 8052\*

Horsepower	2.0
Shaft Diameter	5/8"
Maximum Volts	115/230
Full Load Amps	17.0/9.2-8.5
RPM	3450
Weight	32.5 lbs.
Phase	Single
Frame Size	56-C TEFC
Service Factor	1.15

\* Use to reduce flow by 50% on standard electric models

### Model 8055

Horsepower	3.0
Shaft Diameter	3/4" **
Maximum Volts	230
Full Load Amps	15.2/13.6
RPM	3450
Weight	46.3 lbs.
Phase	Single
Frame Size	56-C TEFC
Service Factor	1.15

\*\* Use 3/4" shaft size motor with GES Models.

### Model 8057

Horsepower	5.0
Shaft Diameter	3/4" **
Maximum Volts	230
Full Load Amps	22.0
RPM	3450
Weight	40 lbs.
Phase	Single
Frame Size	56-C OPEN DRIP
Service Factor	1.15

\*\* Use 3/4" shaft size motor with GES Models.

### Model 8060\*

Horsepower	1.5
Shaft Diameter	5/8"
Maximum Volts	115/230
Full Load Amps	14.0/7.0
RPM	1725
Weight	40 lbs.
Phase	Single
Frame Size	56-C TEFC
Service Factor	1.2

\* Use to reduce flow by 50% on standard electric models

### Model 8062\*

Horsepower	2.0
Shaft Diameter	5/8"
Maximum Volts	115/230
Full Load Amps	17.0/8.5
RPM	1725
Weight	43.7 lbs.
Phase	Single
Frame Size	56-C TEFC
Service Factor	1.15

\* Use to reduce flow by 50% on standard electric models

### Model 8125

Horsepower	2.5
Shaft Diameter	5/8"
Maximum Volts	110/220, 115/230
Full Load Amps	23.6/11.8, 21/11.5
RPM	1450, 1750
Weight	52.9 lbs.
Phase	Single
Hertz	50/60
Frame Size	56-C TEFC
Service Factor	1.0, 1.2

### Common Motor Specifications

Max. Ambient Temperature	104° F
Hertz	60 Hz
Capacitor Start	Yes
Thermal Overload-Manual Rest	Yes

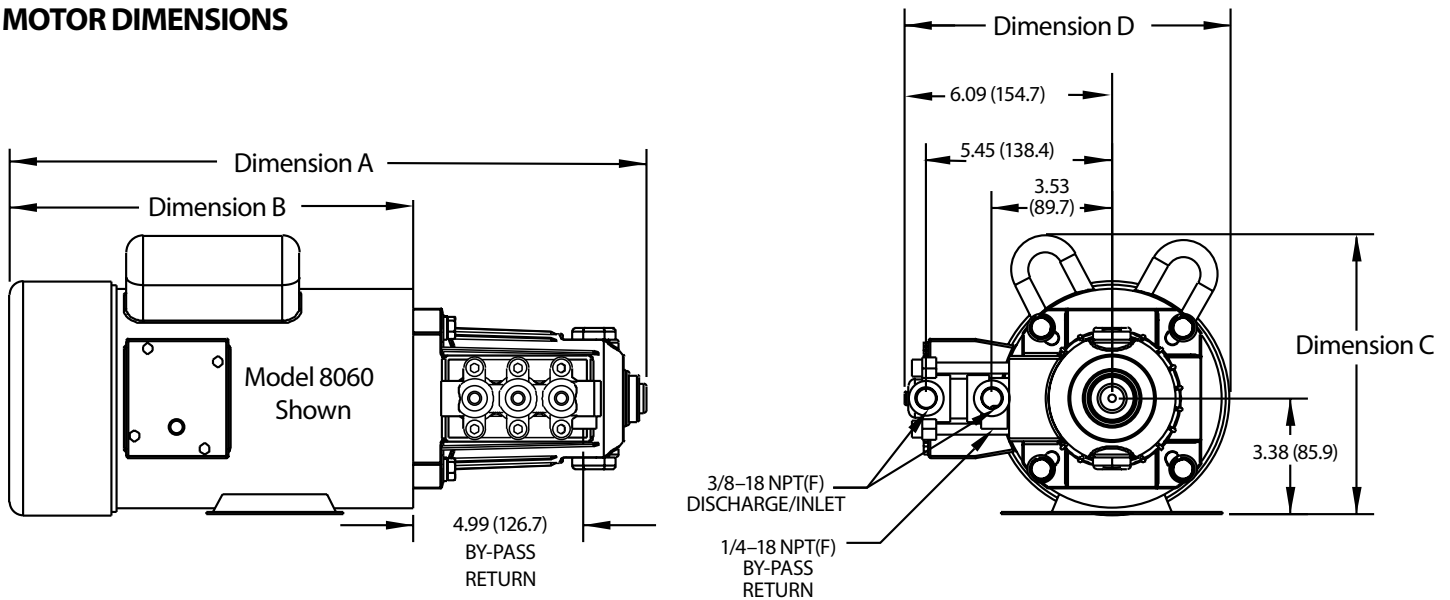
Note: Motor Start-Up AMPS may vary, then settle within FULL LOAD AMPS rating after initial run in time.

Before mounting pump on motor, apply P.N. 6106 Antiseize Lubricant to pump shaft.

Refer to Tech Bulletin 055 for instructions on removing pump from gas engine or electric motor.

For warranty consideration contact Cat Pumps for the local **Authorized Service Center**. If you are uncertain as to the cause of failure (Pump or Motor), secure **Returned Goods Authorization number** and return complete assembly **PREPAID** to Cat Pumps for evaluation.

## MOTOR DIMENSIONS



**DETERMINING THE REQUIRED H.P.**  $\frac{\text{gpm} \times \text{psi}}{1460} = \text{Electric Brake H. P. Required}$

Consult your engine supplier for proper gas or diesel engine selection.

MODEL	8050	8052	8055	8057	8060	8062	8125
Dimension A	18.2	18.2	20.0	18.7	18.7	19.2	19.1
Dimension B	11.3	11.3	13.1	11.8	11.8	12.3	12.2
Dimension C	8.4	8.4	8.3	9.0	8.1	8.1	9.6
Dimension D	9.5	9.5	9.5	9.5	9.5	9.5	9.7

### ⚠ CAUTIONS AND WARNINGS

All High Pressure Systems require a primary pressure regulating device (i.e. regulator, unloader) and a secondary pressure relief device (i.e. pop-off valve, relief valve). Failure to install such relief devices could result in personal injury or damage to pump or property. Cat Pumps does not assume any liability or responsibility for the operation of a customer's high pressure system.

Read all CAUTIONS and WARNINGS before commencing service or operation of any high pressure system. The CAUTIONS and WARNINGS are included in each service manual and with each Accessory Data sheet. CAUTIONS and WARNINGS can also be viewed online at [www.catpumps.com/cautions-warnings](http://www.catpumps.com/cautions-warnings) or can be requested directly from Cat Pumps.

### WARRANTY

View the Limited Warranty on-line at [www.catpumps.com/warranty](http://www.catpumps.com/warranty).



#### CAT PUMPS

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