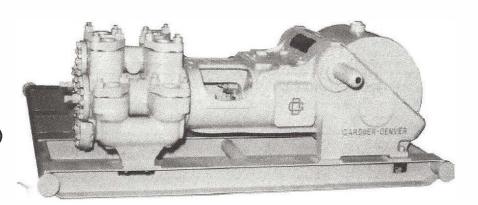
# **NDS Home Page**

Bulletin 07-04-202 Version 2



## FXX (FD-FXX) DUPLEX POWER PUMP

SPECIFICATIONS: Maximum BHP Mud Service: 52 (39 kw) Ind'I. Service: 73 (54 kw) Maximum Jackshaft RPM Mud Service: 330 Ind'I. Service: 471 No. of Pistons: 2 Stroke Length: 8 in. (203 mm) Piston Rod Load: 8,036 lbs. (3,645 kg) Oil Capacity: 12 gal. (46 liters) Pump Weight: 4,760 lbs. (2,159 kg)



#### PERFORMANCE RATINGS

				Normal Operation					** Maximum Recommended Operation							
Model	Stroke	Liner Size Diameter		Displacement		Max Pump RPM	Jack- shaft RPM	Input HP at Max. Speed	Displacement		Max Pump RPM	Jack- shaft RPM	Input HP at Max. Speed	*** Maximum Working Pressure		Maximum Piston Load
		in.	mm	gpm	Ipm				gpm	Ipm				psi	kg/cm2	
FXX(*)		5 1/2	139.7	200	757				317	1200				338	24	
FXX(*) FXX DL	8" (203 mm)	5 4 1/2 4 3 1/2 3 <b>MUD P</b>	127.0 114.3 101.6 88.9 76.2	164 131 102 76 54 or Mud	621 496 386 288 204	63 It and (	297 Cemer	46 nt Servic	260 208 162 121 86	984 787 613 458 326	100	471	73	409 505 640 836 1136	29 36 45 59 80	8,036 lbs. (3645 kg)
						Nor	mal / Ma	aximum Re	commen	ded Ope	ration					
Model	Stroke		Liner Size Diameter Displa			cement		Ma Pur RP	imp s		ck- laft PM	Input HP at Max. Speed		*** Maximum Working Pressure		Maximum Piston Load
		in.	mm	gp	m	lp	m							psi	kg/cm2	
FXX(*)		5 1/2	139.7	22	22	84	40							338	24	
	8"	5 4 1/2	127.0 114.3	18 14			39 53		)		30		52	409 505	29 36	8,036 lbs.

Based on 90% mechanical efficiency and 100% volumetric efficiency.

88.9

76.2

85

60

3 1/2

3

Specifications subject to change without notice.

59

80

836

1136

\*\* These speeds are recommended for favorable suction conditions and consideration must be given to viscosity and character of fluids.

322

227

\*\*\* Maximum working pressure shown applies to the fluid ends. Power ends are designed for certain maximum piston rod loads, and in service the power end determines the maximum pressure on a given size piston. Tabulated maximum pressure for any given size piston for maximum piston rod load must not be exceeded even at reduced RPM. Fluid cylinder liners and pistons are interchangeable in all sizes except for the FXF cylinders fitted with 4 ½" parts and FXX and FXX or FXX or FXX and FXX.

Distributor Contact NDS Drilling Supply, Inc. 26041 Newton Circle Elko New Market, MN 55020 1-800-637-1940 952-461-3400 Distributor Contact NDS Drilling Supply, Inc. 26041 Newton Circle Elko New Market, MN 55020 1-800-637-1940 952-461-3400



FXX (FD-FXX) DUPLEX POWER PUMP

#### STANDARD EQUIPMENT

- Rods and pistons.
- Liners and valves.
- Double-extended jackshaft with extension for one side.
- Piston rods have Gardner Denver No. 1 or API No. 1
- taper (optional).
- Wood skid.
- Non-adjustable packing standard. Kevlar or double stack packing optional.

Suction Connection: 4" NPT 250# Discharge Connection: 3" NPT 600# Jackshaft Extension Diameter: 3" Length: 9" Keyway: 9" L x 3/4" W x 3/4" H Dimensions: Length 96.9", Width 49.8", Height 31.0"

**Note:** All installations must contain a pressure relief valve in the discharge line near the pump to help prevent breakage.

#### **OPTIONAL EQUIPMENT**

- Surge chamber.
- Steel skid.
- Stainless steel valves.
- Metal packed pistons.
- Special jackshafts.
- Top motor mount.

*MOD	EL DESIGNATION	S			
MODEL	FD-FXX	FD-FXX			
Mud Service	FXXC	FXXB			
Grout & Cement Service	FXXG	FXXF			
Oil Service	FXXL	FXXK			
General Service	FXXT	FXXS			
Bronze Fitted (Water Svc)	FXXP	N/A			
Stroke	8"	8"			
Liner Size					
Maximum	5"	5.5"			
Minimum	3"	3.5"			
Fluid End Type	Cast Iron One Piece	Cast Iron One Piece			

#### MATERIAL SPECIFICATIONS

COMPONENT	GENERAL SERVICE	MUD, GROUT and CEMENT	OIL SERVICE	WATER SERVICE	POWER END: COMPONENT MATERIAL				
Cylinder	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Eccentric	Cast Iron			
Liners	Hardened Steel	Hardened Steel	Hardened Steel	Bronze	Connecting Rods	Nodular Iron			
Suction Manifold	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Crossheads	Cast Iron			
Discharge Manifold	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Main Bearing	Tapered Roller			
Packing	Braided Polymer	Molded Convex	Braided Polymer	Braided Polymer	Connecting Rod Bearing	Bronze			
Piston	Iron with Pacing Rings	Steel Body with Nitrile Rubber	Iron with Pacing Rings	Bronze with Pacing Rings	Crosshead Pin Bearing	Bronze			
Piston Rod	Hardened Steel	Hardened Steel	Hardened Steel	Bronze					
Stuffing Box	Cast Iron	Cast Iron	Cast Iron	Cast Iron					
Valve	Iron Wing Guided	Steel Wing Guided	Steel Wing Guided	Bronze Wing Guided					
Valve Seats	Iron	Steel	Steel	Bronze					

\*Materials listed are furnished as standard equipment. Alternate materials available upon request.





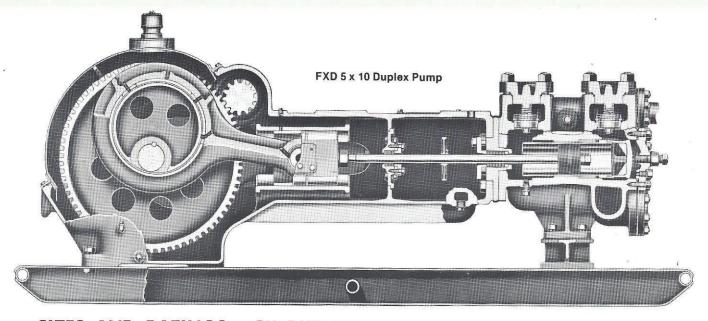
For additional information contact your local representative or

Gardner Denver Compressor and Pump Division, 1800 Gardner Expressway, Quincy, Illinois 62301 Customer Service Department Telephone: (800) 682-9868 FAX: (217) 224-7814

Sales and Service in all major cities.

# GARDNER-DENVER FX DUPLEX PUMPS

52 to 487 Gallons Per Minute Displacement

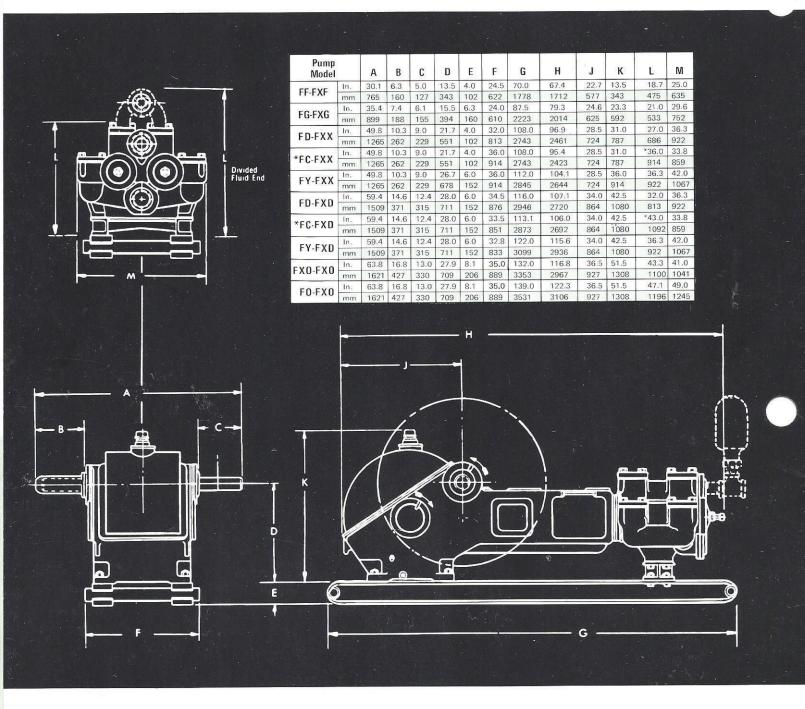


### SIZES AND RATINGS - FX DUPLEX PUMPS FOR MUD AND CEMENT SERVICE

Size	t	Liner Size	Displa	cement	Maximum		Maximum Piston		Max	Jack.	Input HP at Maximum		Pipe	Sizes		Appr	oximate
Number and Stroke	Die	meter	1		Pressure			oad	Pump	shaft RPM		Suction		Discharge		Weight Without Skid	
FF-FXF 5" (127 mm)	In 4½ 4 3½ 3 2%	mm 114.3 101.6 88.9 76.2 63.5	GPM 121 94.4 72.3 52.4 35.6	BPH 173 135 103 75 50.9	PSI 197 250 326 444 639	Kg/cm 2 13.85 17.58 22.92 31.22 44.93	Lb 3140	Kg 1424	90	439	Speed 16.2 16.2 16.2 15.9	In 2½	mm 64	2 2	mm 51	Lb 1475	Kg 669
FG-FXG 6'' (152mm)	5 4½ 4 3½ 3	127.0 114.3 101.6 88.9 76.2	150 121 94.9 71.9 52.0	214 173 136 103 74.3	310 385 492 646 895	21.80 27.07 34.59 45.42 62.93	6122	.2777	75	354	15.6 32 32 32 32 32 32 32	4	102	2	51	2330	1057
FD-FXX 8'' (203mm)	5½ 5 4½ 4 3½ 3	139.7 127.0 114.3 101.6 88.9 76.2	222 182 146 113 84.7 59.9	317 260 209 161 121 85.6	338 409 505 640 836 1136	23.76 28.76 35.51 45.00 58.78 79.87	8036	3645	70	330	51.5 51.1 50.6 49.6 48.6 46.7	4	102	3	76	4775	2166
*FC-FXX 8'' (203mm) Divided Fluid End	5 4½ 4 3½ 3	127.0 114.3 101.6 88.9 76.2	182 146 113 84.7 59.9	260 209 161 121 85.6	409 505 640 836 1136	28.76 35.50 45.00 58.78 79.87	8036	3645	70	330	51.1 50.6 49.6 48.6 46.7	4	102	3	76	5065	2297
FY-FXX 8'' (203mm) Divided Fluid End	7½ 7¼ 7 6¾ 6½ 6 5½ 5	190.5 184.2 177.8 171.5 165.1 152.4 139.7 127.0	420 391 365 322 313 266 222 182	600 559 521 460 447 380 317 260	182 195 209 217 242 284 338 409	12.80 13.71 14.69 15.26 17.02 19.97 23.76 28.76	8036	3645	70	330	52.4 52.3 52.3 52.2 52.0 51.8 51.5 51.1	6	152	4	102	5925	2688
FD-FXD 10'' (254mm)	5½. 5 4½ 4 3½ 3	139.7 127.0 114.3 101.6 88.9 76.2	257 211 169 131 98.3 69.6	367 301 241 187 140 99.4	475 574 709 897 1171 1500	33.40 40.36 49.85 63.07 82.33 105.47	11,270	5112	65	390	83.8 83.1 82.2 80.6 79.0 71.6	4	102	3	76	6065	2751
*FC-FXD 10'' (254mm) Divided Fluid End	5 4½ 4 3½ 3	127.0 114.3 101.6 88.9 76.2	211 169 131 98.3 69.6	301 241 187 140 99.4	574 709 897 1171 1594	40.36 49.85 63.07 82.32 112.07	11,270	5112	65	390	83.1 82.2 80.6 79.0 76.1	4	102	3	76	6235	2828
FY-FXD 10'' (254mm) Divided Fluid End	7½ 7¼ 7 6¾ 6½ 6 5½ 5	190.5 184.2 177.8 171.5 165.1 152.4 139.7 127.0	487 454 423 392 364 308 257 211	696 649 604 560 520 440 367 301	255 273 292 315 339 398 475 574	17.93 19.19 20.53 22.15 23.84 27.98 33.40 40.36	11,270	5112	65	390	85.2 85.0 84.8 84.7 84.7 84.1 83.8 83.1	6	152	4	102	7075	3209
FXO-FXO 10" (254mm) Divided Fluid End	5 4½ 4 3½	127.0 114.3 101.6 88.9	223 179 138 102	319 256 197 146	772 951 1206 1500	54.28 66.86 .84.79 105.47	15,150	6872	70	329	118.2 116.8 114.2 105.0	4	102	3	76	8300	3765
FO-FXO 10'' (254mm) Divided Fluid End	7% 7 6% 6% 6 5% 5	184.2 177.8 171.5 165.1 152.4 139.7 127.0	486 452 419 388 328 273 223	694 646 599 554 469 390 319	367 393 423 457 536 638 772	25.80 27.63 29.74 32.13 37.69 44.86 54.28	15,150	6872	70	329	122.4 121.9 121.6 121.7 120.7 119.5 118.2	6	152	3	76	10500	4763

\*Cast steel fluid cylinders tested to 7000 pounds available as extra equipment. †Fluid cylinder liners and pistons are interchangeable in all sizes in the tables except for FF cylinders fitted with 41/2" parts and FD cylinders fitted with 51/2" parts.

## GARDNER-DENVER FX PUMP DIMENSIONAL DATA



Specifications subject to change without notice. Sales and Service Offices in all principal cities.

For additional information, contact your local representative or Cooper Petroleum Equipment Div./Gardner-Denver, 1800 Gardner Expressway, Quincy, Illinois 62301. (217) 222-5400, Telex 40-4332



4M-9-84