



FXX (FY-FXX) Two-Piece Fluid End DUPLEX POWER PUMP

SPECIFICATIONS:

Maximum BHP

Mud Service: 52 (39 kw)

Ind'l. Service: 75 (56 kw)

Maximum Jackshaft RPM

Mud Service: 330

Ind'l. Service: 471

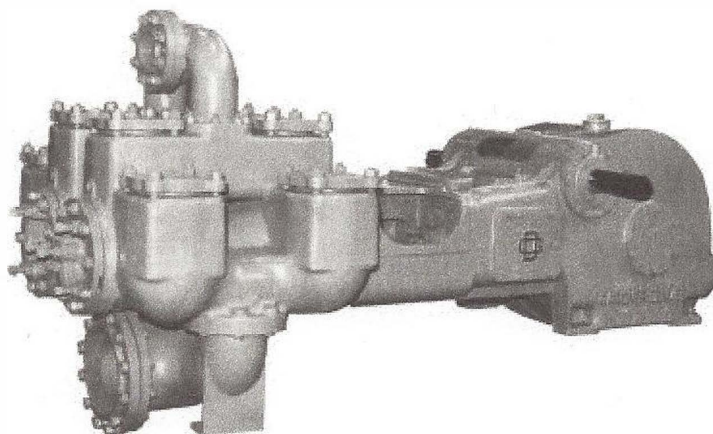
No. of Pistons: 2

Stroke Length: 8 in. (203 mm)

Piston Rod Load: 8,036 lbs. (3,645 kg)

Oil Capacity: 12 gal. (46 liters)

Pump Weight: 5,800 lbs. (2,631 kg)



PERFORMANCE RATINGS

FXX DUPLEX INDUSTRIAL PUMP for Oil Line, Mining and Industrial Service																
Model	Stroke	Liner Size Diameter		Normal Operation					** Maximum Recommended Operation					*** Maximum Working Pressure		Maximum Piston Load
				Displacement		Max Pump RPM	Jack-shaft RPM	Input HP at Max. Speed	Displacement		Max Pump RPM	Jack-shaft RPM	Input HP at Max. Speed			
				in.	mm	gpm	lpm				gpm	lpm				
FXX(*)	8" (203 mm)	7 1/2	191	378	1590	63	297	47.2	600	2271	100	471	75	182	13	8,036 lbs. (3,645 kg)
		7 1/4	184	352	1480				559	2116				195	14	
		7	178	328	1382				521	1972				209	15	
		6 1/2	165	282	1219				447	1692				242	17	
		6	152	239	1185				379	1435				284	20	
		5 1/2	140	200	1007				317	1200				338	24	
		5	127	164	840				260	984				409	29	

FXX DUPLEX MUD PUMP for Mud, Grout and Cement Service															
Model	Stroke	Liner Size Diameter		Normal / Maximum Recommended Operation					*** Maximum Working Pressure		Maximum Piston Load				
				Displacement		Max Pump RPM	Jack-shaft RPM	Input HP at Max. Speed							
				in.	mm	gpm	lpm							psi	kg/cm ²
FXX(*)	8" (203 mm)	7 1/2	191	420	1590	70	330	52	182	13	8,036 lbs. (3,645 kg)				
		7 1/4	184	391	1480				195	14					
		7	178	365	1382				209	15					
		6 3/4	172	322	1219				217	15					
		6 1/2	165	313	1185				242	17					
		6	152	266	1007				284	20					
		5 1/2	140	222	840				338	24					
5	127	182	689	409	29										

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

Specifications subject to change without notice.

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

*** 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 1/2" parts and FXX and FXD cylinders with 5 1/2" parts.

Distributor Contact
NDS Drilling Supply, Inc.
 26041 Newton Circle
 Elkton 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 (FY-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: 10" NPT 150#
Discharge Connection: 4" NPT 300#
Jackshaft Extension

Diameter: 3"
 Length: 9"
 Keyway: 9" L x 3/4" W x 3/4" H

Dimensions: Length 104.1", Width 49.8", Height 36.0"

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.

*MODEL DESIGNATIONS	
MODEL	FY-FXX
Mud Service	FXXA
Grout & Cement Service	FXXE
Oil Service	FXXJ
General Service	FXXR
Bronze Fitted (Water Service)	FXXN
Stroke	8"
Liner Size	
Maximum	7.5"
Minimum	5"
Fluid End Type	Cast Iron Two Piece

MATERIAL SPECIFICATIONS

COMPONENT	GENERAL SERVICE	MUD, GROUT and CEMENT	OIL SERVICE	WATER SERVICE
Cylinder	Cast Iron	Cast Iron	Cast Iron	Cast Iron
Liners	Hardened Steel	Hardened Steel	Hardened Steel	Bronze
Suction Manifold	Cast Iron	Cast Iron	Cast Iron	Cast Iron
Discharge Manifold	Cast Iron	Cast Iron	Cast Iron	Cast Iron
Packing	Braided Polymer	Molded Convex	Braided Polymer	Braided Polymer
Piston	Iron with Pacing Rings	Steel Body with Nitrile Rubber	Iron with Pacing Rings	Bronze with Pacing Rings
Piston Rod	Hardened Steel	Hardened Steel	Hardened Steel	Bronze
Stuffing Box	Cast Iron	Cast Iron	Cast Iron	Cast Iron
Valve	Steel Center Guided	Steel Wing Guided	Steel Center Guided	Bronze Wing Guided
Valve Seats	Steel	Steel	Steel	Bronze

POWER END:	
COMPONENT	MATERIAL
Eccentric	Cast Iron
Connecting Rods	Nodular Iron
Crossheads	Cast Iron
Main Bearing	Tapered Roller
Connecting Rod Bearing	Bronze
Crosshead Pin Bearing	Bronze

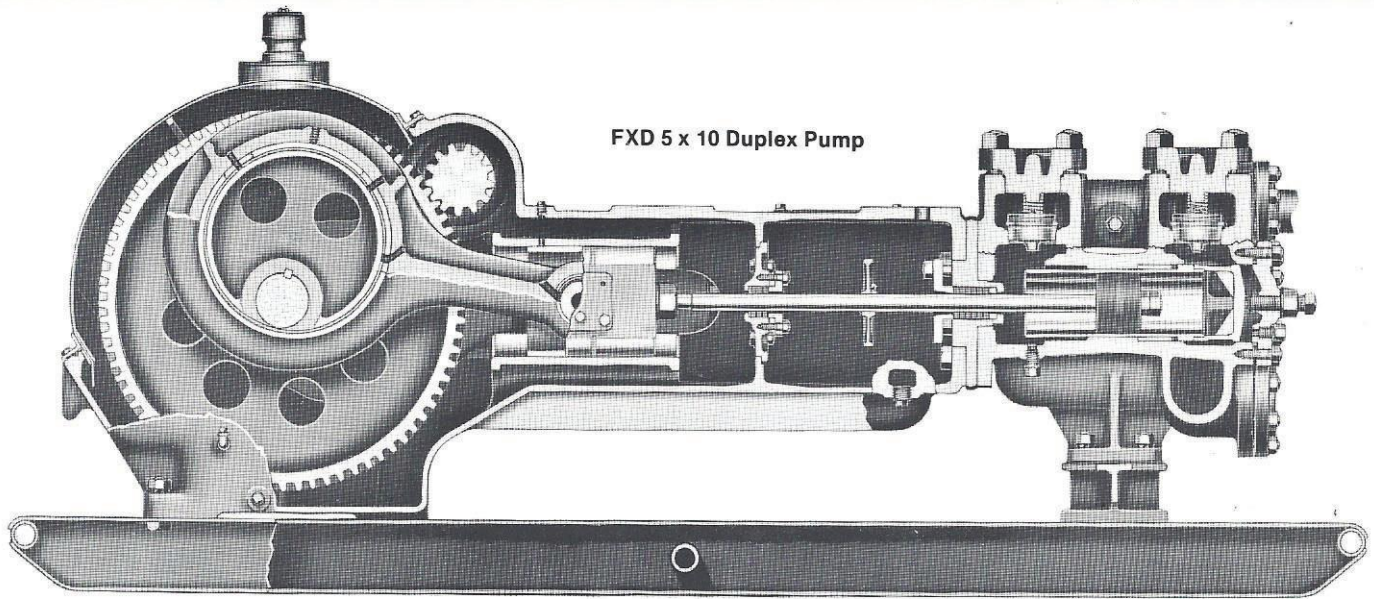
*Materials listed are furnished as standard equipment. Alternate materials available upon request.



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



FXD 5 x 10 Duplex Pump

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

Size Number and Stroke	† Liner Size Diameter		Displacement		Maximum Pressure		Maximum Piston Load		Max Pump RPM	Jack-shaft RPM	Input HP at Maximum Speed	Pipe Sizes				Approximate Weight Without Skid		
	In	mm	GPM	BPH	PSI	Kg/cm ²	Lb	Kg				Suction		Discharge		Lb	Kg	
												In	mm	In	mm			
FF-FXF 5" (127 mm)	4½	114.3	121	173	197	13.85	3140	1424	90	439	16.2	2½	64	2	51	1475	669	
	4	101.6	94.4	135	250	17.58												16.2
	3½	88.9	72.3	103	326	22.92												16.2
	3	76.2	52.4	75	444	31.22												15.9
	2½	63.5	35.6	50.9	639	44.93												15.6
FG-FXG 6" (152mm)	5	127.0	150	214	310	21.80	6122	2777	75	354	32	4	102	2	51	2330	1057	
	4½	114.3	121	173	385	27.07												32
	4	101.6	94.9	136	492	34.59												32
	3½	88.9	71.9	103	646	45.42												32
	3	76.2	52.0	74.3	895	62.93												32
FD-FXX 8" (203mm)	5½	139.7	222	317	338	23.76	8036	3645	70	330	51.5	4	102	3	76	4775	2166	
	5	127.0	182	260	409	28.76												51.1
	4½	114.3	146	209	505	35.51												50.6
	4	101.6	113	161	640	45.00												49.6
	3½	88.9	84.7	121	836	58.78												48.6
*FC-FXX 8" (203mm) Divided Fluid End	5	127.0	182	260	409	28.76	8036	3645	70	330	51.1	4	102	3	76	5065	2297	
	4½	114.3	146	209	505	35.50												50.6
	4	101.6	113	161	640	45.00												49.6
	3½	88.9	84.7	121	836	58.78												48.6
	3	76.2	59.9	85.6	1136	79.87												46.7
FY-FXX 8" (203mm) Divided Fluid End	7½	190.5	420	600	182	12.80	8036	3645	70	330	52.4	6	152	4	102	5925	2688	
	7¼	184.2	391	559	195	13.71												52.3
	7	177.8	365	521	209	14.69												52.3
	6¾	171.5	322	460	217	15.26												52.2
	6½	165.1	313	447	242	17.02												52.0
FD-FXD 10" (254mm)	5½	139.7	257	367	475	33.40	11,270	5112	65	390	83.8	4	102	3	76	6065	2751	
	5	127.0	211	301	574	40.36												83.1
	4½	114.3	169	241	709	49.85												82.2
	4	101.6	131	187	897	63.07												80.6
	3½	88.9	98.3	140	1171	82.33												79.0
*FC-FXD 10" (254mm) Divided Fluid End	5	127.0	211	301	574	40.36	11,270	5112	65	390	83.1	4	102	3	76	6235	2828	
	4½	114.3	169	241	709	49.85												82.2
	4	101.6	131	187	897	63.07												80.6
	3½	88.9	98.3	140	1171	82.32												79.0
	3	76.2	69.6	99.4	1594	112.07												76.1
FY-FXD 10" (254mm) Divided Fluid End	7½	190.5	487	696	255	17.93	11,270	5112	65	390	85.2	6	152	4	102	7075	3209	
	7¼	184.2	454	649	273	19.19												85.0
	7	177.8	423	604	292	20.53												84.8
	6¾	171.5	392	560	315	22.15												84.7
	6½	165.1	364	520	339	23.84												84.7
FXO-FXO 10" (254mm) Divided Fluid End	5	127.0	223	319	772	54.28	15,150	6872	70	329	118.2	4	102	3	76	8300	3765	
	4½	114.3	179	256	951	66.86												116.8
	4	101.6	138	197	1206	84.79												114.2
	3½	88.9	102	146	1500	105.47												105.0
	3	76.2	74.3	103	1994	141.13												102.0
FO-FXO 10" (254mm) Divided Fluid End	7¼	184.2	486	694	367	25.80	15,150	6872	70	329	122.4	6	152	3	76	10500	4763	
	7	177.8	452	646	393	27.63												121.9
	6¾	171.5	419	599	423	29.74												121.6
	6½	165.1	388	554	457	32.13												121.7
	6	152.4	328	469	536	37.69												120.7
5½	139.7	273	390	638	44.86	119.5												
	5	127.0	223	319	772	54.28	118.2											

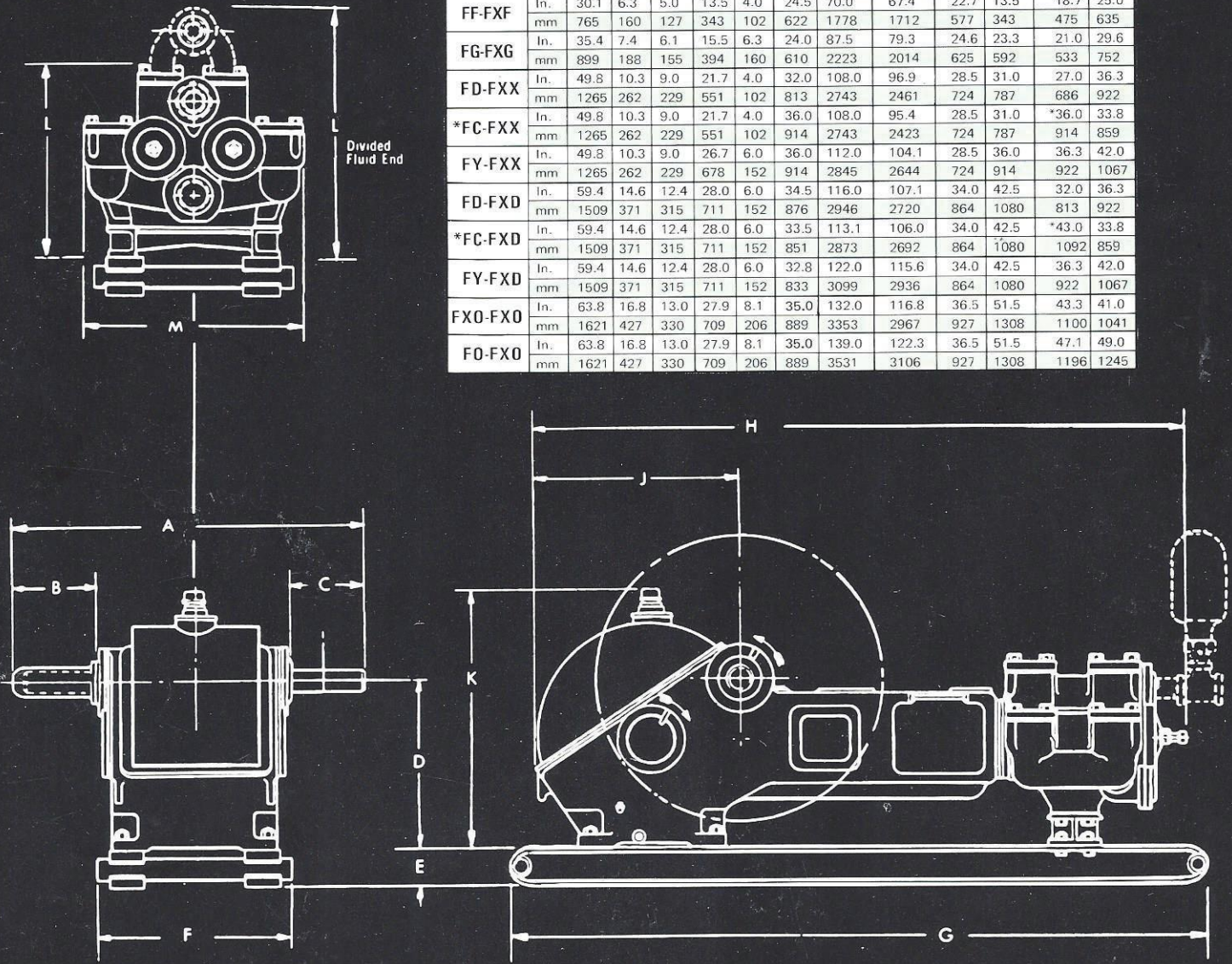
*Cast steel fluid cylinders tested to 7000 pounds available as extra equipment.

†Fluid cylinder liners and pistons are interchangeable in all sizes in the tables except for FF cylinders fitted with 4½" parts and FD cylinders fitted with 5½" parts.

GARDNER-DENVER

FX PUMP DIMENSIONAL DATA

Pump Model	A	B	C	D	E	F	G	H	J	K	L	M	
FF-FXF	In.	30.1	6.3	5.0	13.5	4.0	24.5	70.0	67.4	22.7	13.5	18.7	25.0
	mm	765	160	127	343	102	622	1778	1712	577	343	475	635
FG-FXG	In.	35.4	7.4	6.1	15.5	6.3	24.0	87.5	79.3	24.6	23.3	21.0	29.6
	mm	899	188	155	394	160	610	2223	2014	625	592	533	752
FD-FXX	In.	49.8	10.3	9.0	21.7	4.0	32.0	108.0	96.9	28.5	31.0	27.0	36.3
	mm	1265	262	229	551	102	813	2743	2461	724	787	686	922
*FC-FXX	In.	49.8	10.3	9.0	21.7	4.0	36.0	108.0	95.4	28.5	31.0	*36.0	33.8
	mm	1265	262	229	551	102	914	2743	2423	724	787	914	859
FY-FXX	In.	49.8	10.3	9.0	26.7	6.0	36.0	112.0	104.1	28.5	36.0	36.3	42.0
	mm	1265	262	229	678	152	914	2845	2644	724	914	922	1067
FD-FXD	In.	59.4	14.6	12.4	28.0	6.0	34.5	116.0	107.1	34.0	42.5	32.0	36.3
	mm	1509	371	315	711	152	876	2946	2720	864	1080	813	922
*FC-FXD	In.	59.4	14.6	12.4	28.0	6.0	33.5	113.1	106.0	34.0	42.5	*43.0	33.8
	mm	1509	371	315	711	152	851	2873	2692	864	1080	1092	859
FY-FXD	In.	59.4	14.6	12.4	28.0	6.0	32.8	122.0	115.6	34.0	42.5	36.3	42.0
	mm	1509	371	315	711	152	833	3099	2936	864	1080	922	1067
FXO-FXO	In.	63.8	16.8	13.0	27.9	8.1	35.0	132.0	116.8	36.5	51.5	43.3	41.0
	mm	1621	427	330	709	206	889	3353	2967	927	1308	1100	1041
FO-FXO	In.	63.8	16.8	13.0	27.9	8.1	35.0	139.0	122.3	36.5	51.5	47.1	49.0
	mm	1621	427	330	709	206	889	3531	3106	927	1308	1196	1245



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



**GARDNER-DENVER
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