

FC SERIES™ High-Pressure Pumps

HYDRO-PAC

FC SERIES™ Fixed Capacity High-Pressure Pumps were developed by Hydro-Pac early on for applications requiring constant flow of a noncorrosive fluid. These pumps have proven to be exceptionally reliable, and many of the original units are still in operation.

The FC Series™ pumps are available for pressures from 10,000 to 200,000 psi, and 10 to 200 hp.

As with all Hydro-Pac equipment, these FC Series™ pumps are based on our hydraulically driven intensifier design. The same design has proven to be reliable and easy to maintain in installations worldwide.

Features

Hydro-Pac FC SERIES™ High-Pressure Pumps feature:

- Long slow stroke results in longer packing and check valve life.
- Pumps can be started under full load without unloading valves.
- Pressure compensated hydraulic drive allows control of the maximum discharge pressure.
- Pressure energized seals compensate automatically for wear.
- Reversible valve seats allow use of both sides prior to replacement of the seat.
- Open L-shaped reservoir serves as a mounting platform for the intensifier and allows easy access.

Applications

FC SERIES™ High-Pressure Pumps are ideally suited for:

- Cold isostatic pressing
- Pressure sterilization of foods
- Hydrostatic pressure testing
- Fatigue testing
- Pressure forming
- Hose and tube burst testing
- Autofrettaging
- Impulse testing
- Catalyst injection
- Blow out preventer (BOP) testing
- Tube and tube joint testing
- Calibration of pressure transducers
- Hydrostatic extrusion
- High-pressure injection

Fluids

- Oil
- Soluble oil and water
- Glycol
- Other noncorrosive fluids
- Optional flammable fluids

Utilities

- Electrical:
230/460 v, 3 ph, 60 Hz
(Other voltages available)
- Cooling water is required on some machines. The amount depends on the machine.

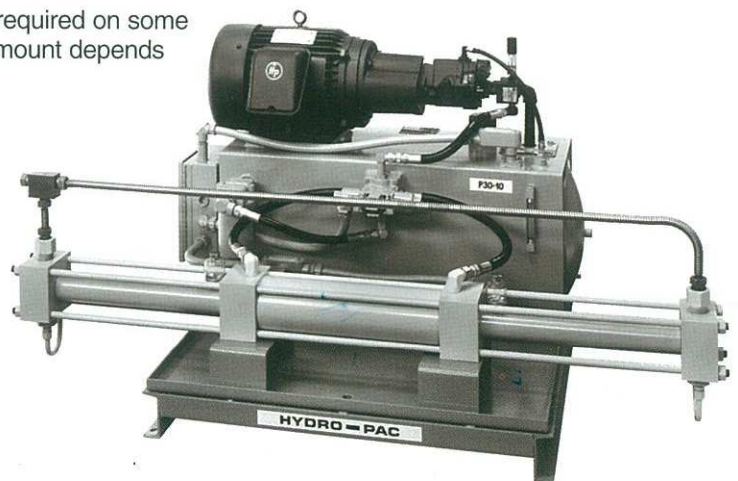
Standard Equipment

FC SERIES™ High-Pressure Pumps are furnished as complete units ready for connection to utilities and process fluid supply.

- High-pressure intensifier with inlet and discharge check valves
- Hydraulic power unit with pump, directional control valve and filters
- Electric motor 230/460 v, 3 ph, 60 Hz, TEFC
- Local manual pressure control
- Gauges for oil pressure, level and temperature
- Instruction manual with parts list

Optional Equipment

- Remote manual pressure control
- 0 to 10 VDC proportional pressure
- Manual flow control
- 0 to 10 VDC proportional flow control
- All stainless steel wet ends for use with water or comparable process fluids
- Process fluid reservoir
- Spare parts kit
- Motor starter
- Pressure gauge
- Coolant flow sensor
- Oil reservoir heater
- Explosion-proof motor and controls
- Installation assistance





Specifications

Model	Pressure		Capacity		Inlet Connection	Discharge Connection
	psi	MPa	gpm	lpm		
P10-10FC	10,000	70	1.2	4.5	1/4 FNPT	FC562-20
P10-20FC	10,000	70	2.4	9.1	3/8 FNPT	FC562-20
P10-40FC	10,000	70	4.8	18.2	1 FNPT	FC562-20
P10-100FC	10,000	70	12.0	45.6	1 FNPT	SFC750-10
P10-150FC	10,000	70	18.0	68.4	1-1/4 FNPT	SFC1000-10
P10-200FC	10,000	70	24.0	91.2	1-1/2 FNPT	SFC1000-10
P15-10FC	15,000	105	0.8	3.0	3/8 FNPT	FC562-20
P15-20FC	15,000	105	1.6	6.0	3/8 FNPT	FC562-20
P15-40FC	15,000	105	3.2	12.1	1 FNPT	FC562-20
P15-100FC	15,000	105	8.0	30.4	1 FNPT	SFC750-20
P15-150FC	15,000	105	12.0	45.6	1-1/4 FNPT	SFC1000-20
P15-200FC	15,000	105	16.0	60.8	1-1/4 FNPT	SFC1000-20
P20-10FC	20,000	140	0.6	2.2	3/8 FNPT	FC562-20
P20-20FC	20,000	140	1.2	4.5	3/8 FNPT	FC562-20
P20-40FC	20,000	140	2.4	9.1	3/8 FNPT	FC562-20
P20-100FC	20,000	140	6.0	22.8	3/4 FNPT	SFC750-20
P20-150FC	20,000	140	9.0	34.2	1 FNPT	SFC750-20
P20-200FC	20,000	140	12.0	45.6	1-1/4 FNPT	SFC1000-20
P30-10FC	30,000	210	0.4	1.5	3/8 FNPT	FC562-40
P30-20FC	30,000	210	0.8	3.0	3/8 FNPT	FC562-40
P30-40FC	30,000	210	1.6	6.0	3/8 FNPT	FC562-40
P30-100FC	30,000	210	4.0	15.2	3/4 FNPT	FC562-40
P30-150FC	30,000	210	6.0	22.8	1 FNPT	FC1000-40
P30-200FC	30,000	210	8.0	30.4	1 FNPT	FC1000-40

Model	Pressure		Capacity		Inlet Connection	Discharge Connection
	psi	MPa	gpm	lpm		
P40-10FC	40,000	275	0.3	1.1	3/8 FNPT	FC562-40
P40-20FC	40,000	275	0.6	2.2	3/8 FNPT	FC562-40
P40-40FC	40,000	275	1.2	4.5	3/8 FNPT	FC562-40
P40-100FC	40,000	275	3.0	11.4	3/4 FNPT	FC562-40
P40-150FC	40,000	275	4.5	17.1	3/4 FNPT	FC1000-40
P40-200FC	40,000	275	6.0	22.8	3/4 FNPT	FC1000-40
P60-10FC	60,000	415	0.2	0.7	3/8 FNPT	FC562-60
P60-20FC	60,000	415	0.4	1.5	3/8 FNPT	FC562-60
P60-40FC	60,000	415	0.8	3.0	3/8 FNPT	FC562-60
P60-100FC	60,000	415	2.0	7.6	1/2 FNPT	FC562-60
P60-150FC	60,000	415	3.0	11.4	1/2 FNPT	FC1000-60
P60-200FC	60,000	415	4.0	15.2	3/4 FNPT	FC1000-60
P100-10FC	100,000	690	0.12	0.4	3/8 FNPT	FC312-150
P100-20FC	100,000	690	0.24	0.9	3/8 FNPT	FC312-150
P100-40FC	100,000	690	0.48	1.8	3/8 FNPT	FC312-150
P150-10FC	150,000	1035	0.08	0.3	3/8 FNPT	FC312-150
P150-20FC	150,000	1035	0.16	0.6	3/8 FNPT	FC312-150
P150-40FC	150,000	1035	0.32	1.2	3/8 FNPT	FC312-150
P200-10FC	200,000	1380	0.06	0.2	3/8 FNPT	12H-1
P200-20FC	200,000	1380	0.12	0.4	3/8 FNPT	12H-1
P200-40FC	200,000	1380	0.24	0.9	3/8 FNPT	12H-1

* Capacities are based on operation with 60 Hz power. When operated with 50 Hz, capacities can be estimated by multiplying values shown in the chart by 0.83.

Dimensions (Common)

Model	A		B		C		D		Weight		Reservoir		Power	
	in	mm	in	mm	in	mm	in	mm	lb	kg	gal	liter	hp	kW
P**-10FC	30	760	36	915	35	890	62	1575	1000	455	30	100	10	7.5
P**-20FC	33	845	39	990	42	1065	62	1575	1200	545	47	175	20	15
P**-40FC	39	990	51	1295	52	1320	88	2235	2100	950	72	270	40	30
P**-100FC	30	760	48	1220	78	1980	101	2565	4250	1930	13	50	100	75
P**-150FC	33	845	48	1220	78	1980	101	2565	4500	2040	13	50	150	110
P**-200FC	36	915	48	1220	78	1980	101	2565	4750	2155	13	50	200	150

