

# ProMinent® ProMus Series

## Hydraulically Actuated Chemical Process Pumps

### High Pressure Process Metering

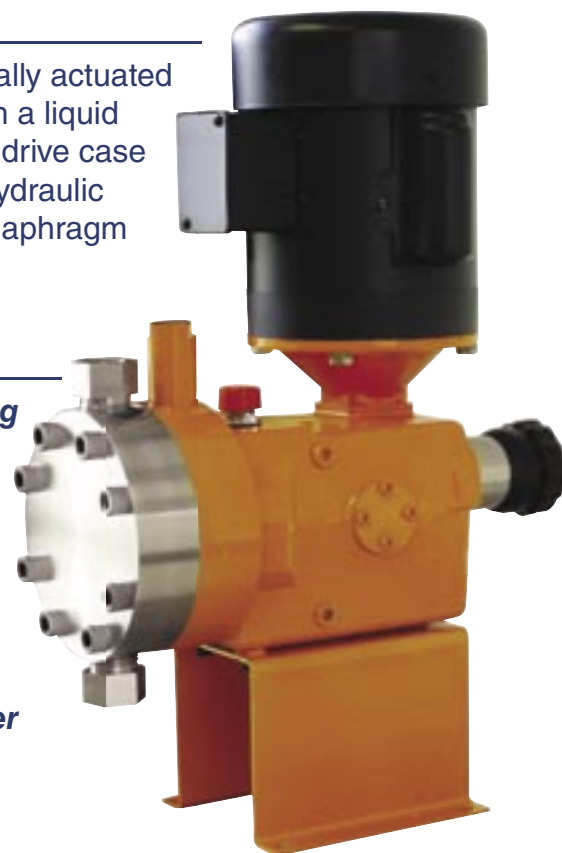
Flow rates up to 101 gph (382 L/h) and Pressures up to 3500 psi (241 bar)

### Technical Description

The ProMus is a motor driven metering pump with a hydraulically actuated diaphragm. The drive case and the hydraulic unit are filled with a liquid that functions as a hydraulic coupling. A plunger connects the drive case with the hydraulic unit. The dosing diaphragm separates the hydraulic part of the pump from the dosing unit. The movement of the diaphragm depends on the amount of liquid displaced by the plunger.

### Benefits

- Hydraulically actuated diaphragm **ensuring a sealed pumping system for corrosive or toxic chemicals with superior leak protection**
- Built in accordance to API 675 standards **suitable for heavy industrial applications and specifications**
- Robust cast iron drive construction **ideal for applications such as boiler feeds, catalyst feed, dye injection and petrochemicals**
- Flexible design for a wide range of applications including **water treatment and high pressure chemical refining**
- **Fast and Easy field maintenance with minimal downtime**



### Design Specifications

The ProMinent ProMus is a motor driven metering pump incorporating a hydraulically balanced Teflon diaphragm. The drive case is cast iron incorporating a worm gear set (5 Ratios available) driving a rotating eccentric. The locking stroke adjuster varies the flow from 100% to 0% in 1% increments. The pump is built in accordance to API 675 standards. The hydraulic system transfers the rotating eccentric motion to diaphragm movement by way of a reciprocating plunger (8 plunger diameters available). The plunger and diaphragm are hydraulically coupled (no mechanical connection). Coupling compliance is precisely controlled by a mechanically actuated replenishment valve, which senses diaphragm position to admit coupling fluid as required. The coupling fluid is automatically degassed to maintain accuracy and drive case is protected from overload by a simple acting relief valve. The hydraulic system is separated from the fluid end by a Teflon diaphragm completely isolating the pumped fluid from the surroundings. The fluid end is currently available in Stainless Steel, alloy 20 and Hastelloy C.

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**ProMinent®**

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Hydraulically Actuated Chemical Process Pumps

## Technical Data

ProMus Series		At 60 Hz (1750 rpm) Capacity at Max. Backpressure			Gear Ratio	Max. Stroke Rate	Suct./ Discharge Connector*
	Plunger (in.)	psig	U.S. GPH	(L/h)		Stroke/ min.	FNPT
V« ÕÛ†¹ ¢My« ¢ÿ	3/8" Plunger	3500	0.61	(2.3)	50	35	1/4
	3/8" Plunger	3500	0.76	(2.8)	40	43	1/4
	3/8" Plunger	3500	1.02	(3.8)	30	58	1/4
	3/8" Plunger	3500	2.03	(7.6)	15	115	1/4
	3/8" Plunger	3500	2.44	(9.2)	12.5	138	1/4
	7/16" Plunger	3500	0.83	(3.1)	50	35	1/4
	7/16" Plunger	3500	1.04	(3.9)	40	43	1/4
	7/16" Plunger	3500	1.38	(5.2)	30	58	1/4
	7/16" Plunger	3500	2.77	(10.4)	15	115	1/4
	7/16" Plunger	3500	3.32	(12.5)	12.5	138	1/4
V« ÕÛ†¹ ¢My« ãž	5/8" Plunger	2080	1.80	(6.8)	50	35	1/4
	5/8" Plunger	2080	2.25	(8.5)	40	43	1/4
	5/8" Plunger	2080	3.00	(11.3)	30	58	1/4
	5/8" Plunger	2080	6.00	(22.7)	15	115	1/4
	5/8" Plunger	2080	7.20	(27.2)	12.5	138	1/4
	13/16" Plunger	1230	3.04	(11.5)	50	35	3/8
	13/16" Plunger	1230	3.80	(14.3)	40	43	3/8
	13/16" Plunger	1230	5.07	(19.1)	30	58	3/8
	13/16" Plunger	1230	10.1	(38.2)	15	115	3/8
	13/16" Plunger	1230	12.2	(46.1)	12.5	138	3/8
	1-1/8" Plunger	640	6.34	(24.0)	50	35	3/8
	1-1/8" Plunger	640	7.93	(30.0)	40	43	3/8
	1-1/8" Plunger	640	10.6	(40.1)	30	58	3/8
	1-1/8" Plunger	640	21.1	(79.8)	15	115	3/8
	1-1/8" Plunger	640	25.4	(96.1)	12.5	138	3/8
	V« ÕÛ†¹ ¢My« â ž	1-3/4" Plunger	265	15.4	(58.2)	50	35
1-3/4" Plunger		265	19.2	(72.6)	40	43	3/4
1-3/4" Plunger		265	25.6	(96.9)	30	58	3/4
1-3/4" Plunger		265	51.2	(193.8)	15	115	3/4
1-3/4" Plunger		265	61.4	(232.4)	12.5	138	3/4
2" Plunger		200	20.1	(76.0)	50	35	3/4
2" Plunger		200	25.1	(95.0)	40	43	3/4
2" Plunger		200	33.4	(126.4)	30	58	3/4
2" Plunger		200	66.8	(252.8)	15	115	3/4
2" Plunger		200	80.2	(303.5)	12.5	138	3/4
2-1/4" Plunger		160	25.4	(96.1)	50	35	3/4
2-1/4" Plunger		160	31.7	(119.9)	40	43	3/4
2-1/4" Plunger		160	42.3	(160.1)	30	58	3/4
2-1/4" Plunger		160	84.6	(327.8)	15	115	3/4
2-1/4" Plunger		160	101.5	(384.2)	12.5	138	3/4
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