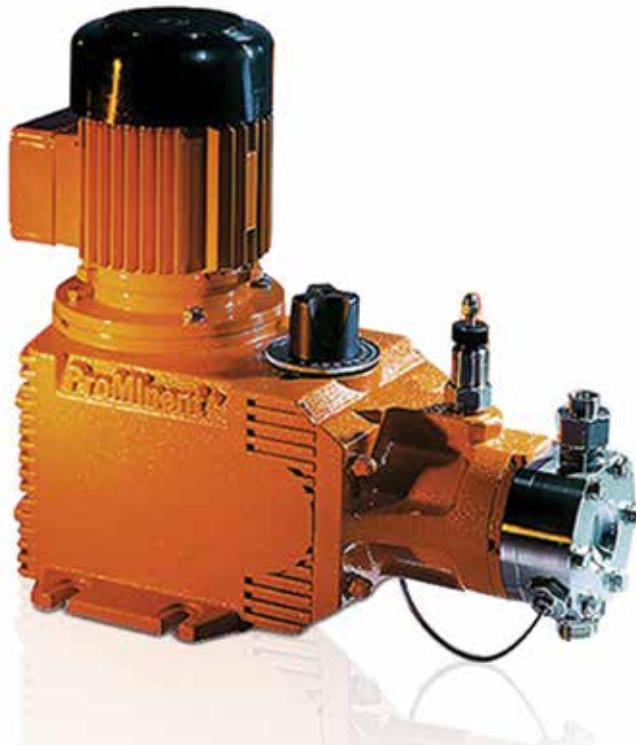


# Hydro/ 2 & 3 API 675

## Hydraulic diaphragm metering pump



**ProMinent®** introduces a new addition to its diverse pump line – the **Hydro API 675**. This newly designed hydraulic diaphragm metering pump, now meets the requirements of **API 675**. The **Hydro /2** and **Hydro/3** offer a full-motion drive along with automatic bleeding, integral rupture warning system, and single or dual-head designs. The **Hydro/2** with a single head is capable of **24 gph** max flow rate and max pressure of **1,450 psi** while the **Hydro/3** can meet max flows of **53.1 gph** with pressures of **928 psi**. Pump drives can also be constructed for use in hazardous areas.

### Features & Benefits

- Multi-layer diaphragm (PTFE) with rupture warning system
- Integrated hydraulic relief valve with ventilation
- Metering reproducibility is better than  $\pm 1\%$  in the 10-100% stroke volume range under defined conditions and with proper installation.
- The modular construction with single and double head versions permits a wide range of applications, with the double head designs (boxer principle) being operated in push-pull mode
- It is possible to combine up to 5 metering units, even with different pump capacities, in multiple pump systems
- 5 different gear ratios are available
- API 675 requirement full-motion drive and automatic bleeding

### Applications

- Oil and gas industry
- Volume-proportional metering of chemicals/additives in the treatment of boiler feed water
- Metering of reactants and catalysts in the chemical industry
- Level-dependent metering of auxiliary agents in industrial production engineering, for instance hot wax metering in the production of adhesive strips

# Hydro/ 2 & 3 API 675

## Capacity data<sup>1</sup>: Hydro/ 2 API 675

(HA2a)											
Plunger Max. Ø	Back pressure	Flow rate (gph)				Volume per stroke	Suction lift	Connection suction/discharge		Shipping Weight	
		72	149	180	224			PVDF*	SST	lbs	(kg)
mm	psig					ml/stroke	ft				
16	1,450	-	-	2.6 - 2.6	3.2 - 3.4	3.0	9.8	1/2" MNPT	SS flange 1/2" / ANSI - DN 10	68.3	(31)
16	928	-	2.6 - 3.0	3.2 - 4.1	3.8 - 5.1	3.0	9.8	1/2" MNPT	SS flange 1/2" / ANSI - DN 10	68.3	(31)
16	580	-	3.2 - 4.1	3.8 - 4.9	4.3 - 6.1	3.0	9.8	1/2" MNPT	SS flange 1/2" / ANSI - DN 10	68.3	(31)
16	363	-	3.8 - 4.5	4.4 - 5.5	5.4 - 7.1	3.0	9.8	1/2" MNPT	SS flange 1/2" / ANSI - DN 10	68.3	(31)
16	145	2.2 - 2.4	4.1 - 5.1	4.7 - 6.1	5.7 - 7.7	3.0	9.8	1/2" MNPT	SS flange 1/2" / ANSI - DN 10	68.3	(31)
18	928	-	3.8 - 4.9	5.8 - 5.8	7.7 - 7.7	3.8	9.8	1/2" MNPT	SS flange 1/2" / ANSI - DN 10	68.3	(31)
18	580	2.2 - 2.5	4.1 - 5.8	6.7 - 6.7	8.2 - 9.0	3.8	9.8	1/2" MNPT	SS flange 1/2" / ANSI - DN 10	68.3	(31)
18	363	2.5 - 2.8	5.1 - 6.1	7.3 - 7.7	8.2 - 9.6	3.8	9.8	1/2" MNPT	SS flange 1/2" / ANSI - DN 10	68.3	(31)
18	145	2.4 - 3.2	5.1 - 6.7	7.3 - 8.3	9.1 - 10.6	3.8	9.8	1/2" MNPT	SS flange 1/2" / ANSI - DN 10	68.3	(31)
22	580	2.2 - 2.4	6.3 - 7.9	8.6 - 9.0	11.6 - 13.3	5.7	9.8	1/2" MNPT	SS flange 1/2" / ANSI - DN 10	68.3	(31)
22	362	2.2 - 2.6	6.3 - 7.9	7.9 - 10.6	11.1 - 13.7	5.7	9.8	1/2" MNPT	SS flange 1/2" / ANSI - DN 10	68.3	(31)
22	145	2.5 - 3.2	5.3 - 9.0	9.5 - 14.8	11.6 - 13.3	5.7	9.8	1/2" MNPT	SS flange 1/2" / ANSI - DN 10	68.3	(31)
26	363	6.3 - 6.9	11.1 - 15.3	12.7 - 18.6	20.6 - 22.7	7.9	9.8	1/2" MNPT	SS flange 1/2" / ANSI - DN 10	68.3	(31)
26	145	6.3 - 7.4	9.5 - 16.0	11.1 - 19.3	12.7 - 24.0	7.9	9.8	1/2" MNPT	SS flange 1/2" / ANSI - DN 10	68.3	(31)

### 1- SPECIFIC FLOW RATE AND PRESSURE MUST BE PROVIDED UPON ORDER

\* Liquid end PVDF version Max. 363 psi (25 bar)

The permitted design of the rate flow is possible in the stated range with pump selection in accordance with API 675 (adjustment range 1:10).

Example: Considering plunger 16 mm, pressure 25 bar (363 psi) and stroke rate 180 stroke/min gives (4.4) – 5.5 gph; the adjustment range of 1:10 is met for a flow rate between 4.4 and 5.5 gph.

## Capacity data<sup>1</sup>: Hydro/ 3 API 675

(HA3a)											
Plunger Max. Ø	Back pressure	Flow rate (gph)				Volume per stroke	Suction lift	Connection suction/discharge		Shipping Weight	
		72	149	180	224			PVDF*	SST	lbs	(kg)
mm	psig					ml/stroke	ft				
26	928	5.7 - 5.9	11.1 - 13.6	12.7 - 16.2	17.4 - 19.8	7.90	9.8	1/2" MNPT	SS flange 1/2" / ANSI - DN 15	90.4	(41)
26	580	5.7 - 6.6	11.6 - 14.3	12.7 - 17.4	15.8 - 22.4	7.90	9.8	1/2" MNPT	SS flange 1/2" / ANSI - DN 15	90.4	(41)
26	363	4.7 - 6.6	9.5 - 15.6	12.7 - 18.6	17.4 - 23.4	7.90	9.8	1/2" MNPT	SS flange 1/2" / ANSI - DN 15	90.4	(41)
26	145	4.7 - 6.9	9.5 - 15.6	11.1 - 19.3	15.8 - 24.3	7.90	9.8	1/2" MNPT	SS flange 1/2" / ANSI - DN 15	90.4	(41)
32	580	7.9 - 8.0	15.9 - 20.7	22.2 - 25.4	20.6 - 32.0	12.0	9.8	3/4" MNPT	SS flange 1/2" / ANSI - DN 15	90.4	(41)
32	363	7.9 - 8.3	15.9 - 21.7	20.6 - 26.3	20.6 - 33.3	12.0	9.8	3/4" MNPT	SS flange 1/2" / ANSI - DN 15	90.4	(41)
32	145	7.0 - 9.9	15.9 - 23.2	22.3 - 28.5	19.0 - 35.5	12.0	9.8	3/4" MNPT	SS flange 1/2" / ANSI - DN 15	90.4	(41)
38	174	7.9 - 16.0	22.2 - 34.6	25.4 - 39.9	47.5 - 52.3	17.0	9.8	3/4" MNPT	SS flange 1/2" / ANSI - DN 15	90.4	(41)
38	145	9.5 - 16.2	25.4 - 34.9	28.5 - 42.8	47.5 - 53.1	17.0	9.8	3/4" MNPT	SS flange 1/2" / ANSI - DN 15	90.4	(41)

### 1- SPECIFIC FLOW RATE AND PRESSURE MUST BE PROVIDED UPON ORDER

\* Liquid end PVDF version Max. 363 psi (25 bar)

The permitted design of the rate flow is possible in the stated range with pump selection in accordance with API 675 (adjustment range 1:10).

Example: Considering plunger 26 mm, pressure 25 bar (363 psi) and stroke rate 180 stroke/min gives (17.4) – 23.4 gph; the adjustment range of 1:10 is met for a flow rate between 17.4 and 23.4 gph.

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