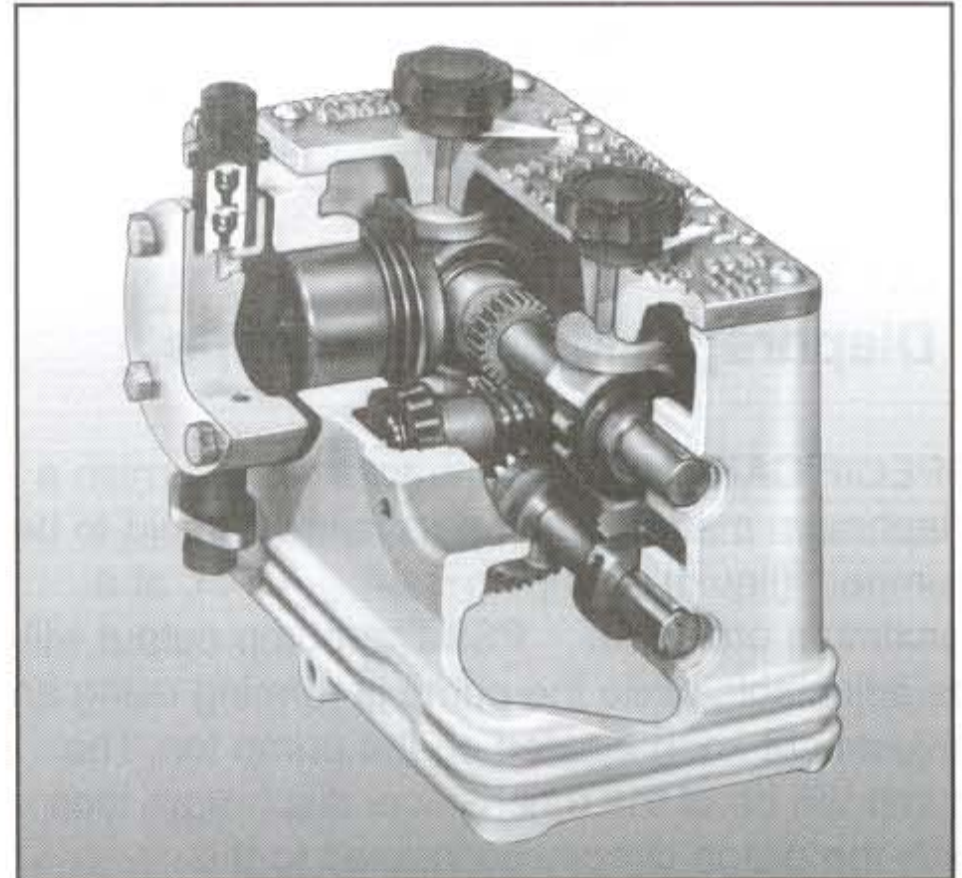


# MADDEN

## JR Series Diaphragm Metering Pumps

Accurate, Dependable Metering Pumps



These simple, rugged, accurate pumps are used in many industrial plants for injecting a controlled flow of highly reactive liquids. Heavy duty industrial grade construction means these tough little pumps will deliver many years of trouble free 24-7-365 pumping.

- JR Series pumps are designed for especially low flow rates. Double ball checks with Teflon valve seats assure  $\pm 1\%$  steady state repeatable accuracy over a 10:1 turndown range.
- Manual output control knob is located on top of the pump for easy access.
- Automatic pump output control is available for pumps equipped with a variable speed motor.
- Precision steel and bronze gears, tapered roller bearings and bronze oil grooved bushings running in an oil bath results in extended drive train service life.
- Double diaphragm option is available for superior protection from dangerous liquids.
- When equipped with the proper materials the JR Series pumps are excellent for pumping dangerous liquids such as acids, caustics and solvents.
- Standard motors are rugged 1/4 HP 48 frame industrial grade TEFC. Motors are available for explosion proof, washdown, and mill & chem plant duty, and for 1 or 3 phase, 50 or 60 Hz power.
- Tough fabric reinforced rubber diaphragms protect the drive train from the pumped liquid. The short .090" stroke with 2" diameter piston increases diaphragm life by reducing fatigue.

Model Number	Max GPH (L) per head**	Max PSI*	Strokes per minute	HP	Piping NPT
JR101A	1 (3.8)	250	22	1/4	1/4"
JR102A	2 (7.6)	250	44	1/4	1/4"
JR104A	4 (15.1)	250	88	1/4	1/4"
JR107A	7 (26.5)	250	155	1/4	1/4"

Model Number	Max GPH (L) per head**	Max PSI*	Strokes per minute	HP	Piping NPT
JR201A	1 (3.8)	250	22	1/4	1/4"
JR202A	2 (7.6)	250	44	1/4	1/4"
JR204A	4 (15.1)	250	88	1/4	1/4"
JR207A	7 (26.5)	250	155	1/4	1/4"

\*Note: Standard pressure rating is 150 psi. For 250 psi a high pressure kit with a metal wetted end is required.

\*\*Standard motor speed is 1725 rpm. For 1425 rpm 50 Hz motors multiply the figure given by .833. For duplex pumps with the output of both pumping heads combined multiply the figure given by 2.

## Wetted end materials to resist corrosion and abrasion

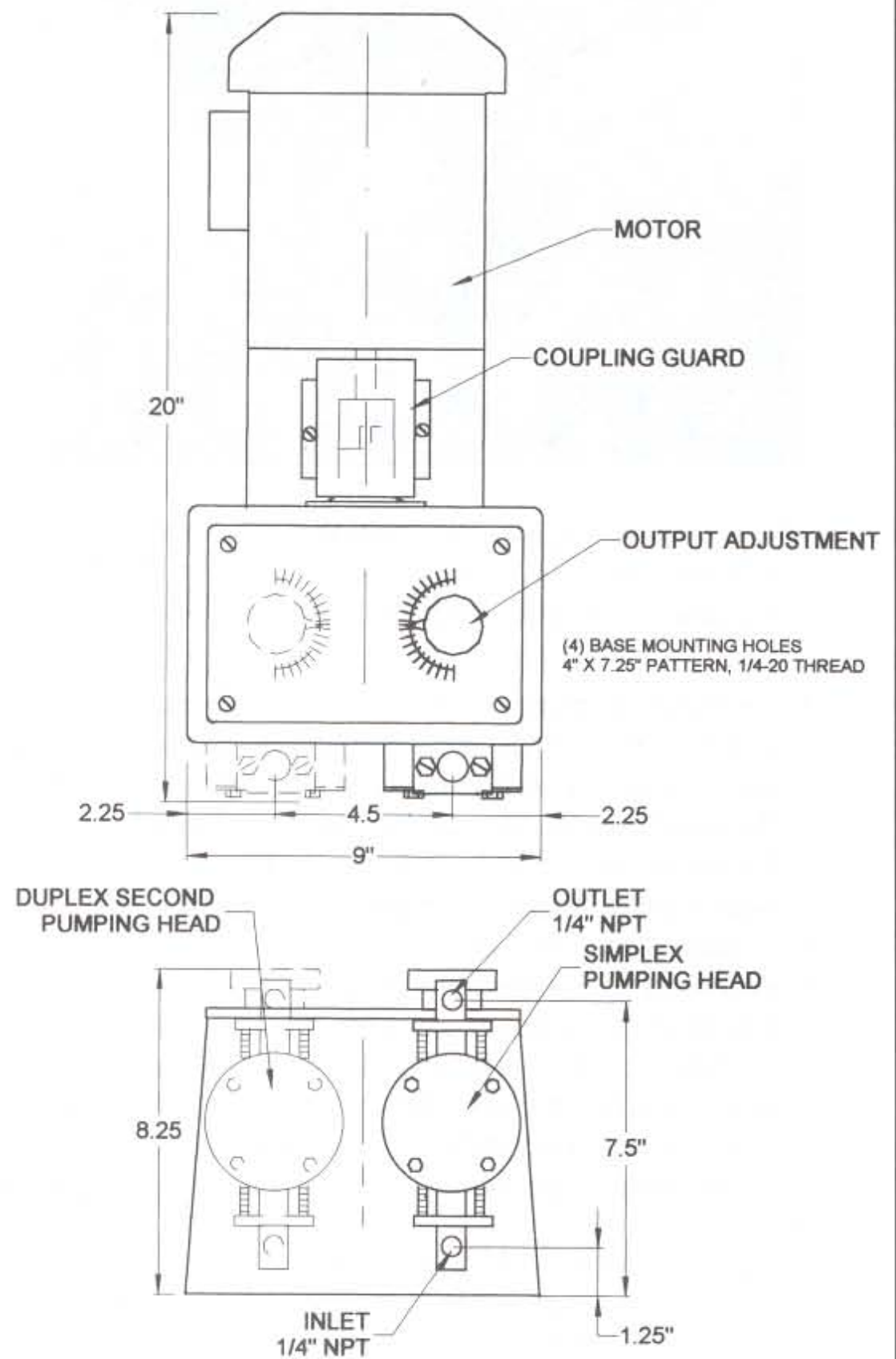
Solution head and valve bodies	Diaphragm	Backup Diaphragm	Valve balls	Valve seats
PVC	Neoprene	Neoprene	316 SS	Teflon
Teflon	Buna N	Buna N	Ceramic	
316 SS	Hypalon	Hypalon	Hastelloy C	
Carpenter 20	Viton	Viton		
	Teflon faced			

### JR Series Diaphragm Metering Pumps

**SPECIFICATION:** The Contractor shall furnish a diaphragm metering pump as follows: liquid to be pumped: (liquid), pumping rate: \_\_\_GPH, at a maximum pressure: \_\_\_PSI. The pump output will be adjustable while the pump is running using an adjustment knob located on the pump top. The pump will be of the mechanical diaphragm type with the piston directly connected to the diaphragm. Double check ball valves for both the suction and discharge connections will be included. The industrial grade gear reducer will have a bronze wheel and steel worm, with high speed shaft running in tapered roller bearings. The entire mechanism will be enclosed and running in an oil bath, and no external lubrication will be required. There will be a metal coupling guard. The motor will be 1/4 HP, 1/60/115, 1725 rpm, split phase, TEFC. Paint finish: manufacture's standard. Pump materials of construction: wetted end: \_\_\_; diaphragm: \_\_, valve seats: Teflon, double valve balls: \_\_\_\_. Type DDB double diaphragm will be provided for extra protection from the pumped liquid, backup diaphragm material: \_\_\_\_.

Preferred manufacturer: Madden Manufacturing, Inc., Model no. JR10 \_A (simplex or duplex) diaphragm metering pump, rated for (1,2,4, or 7) gallons per hour.

### DIMENSIONS



### MADDEN Manufacturing, Inc.

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**Sold By:**