

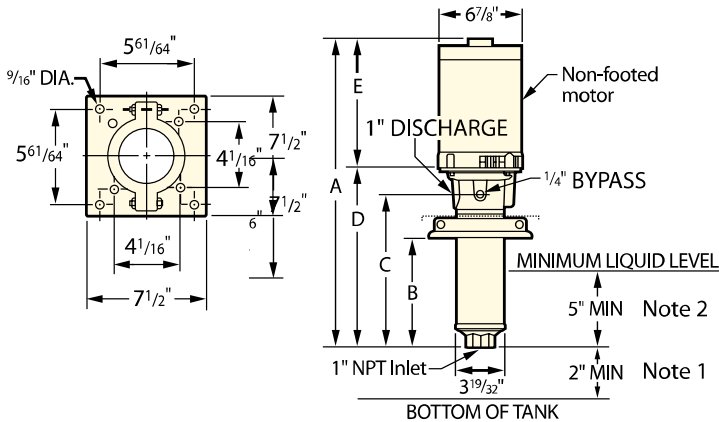


# MSPR Multi-stage Series

MSPR Multi-stage, high pressure pumps, available in 5, 7, 9 or 13 stages, are designed to meet coolant delivery requirements where high pressure is needed to accomplish chip removal in addition to dissipating heat.



## MSPR/MSPRSS



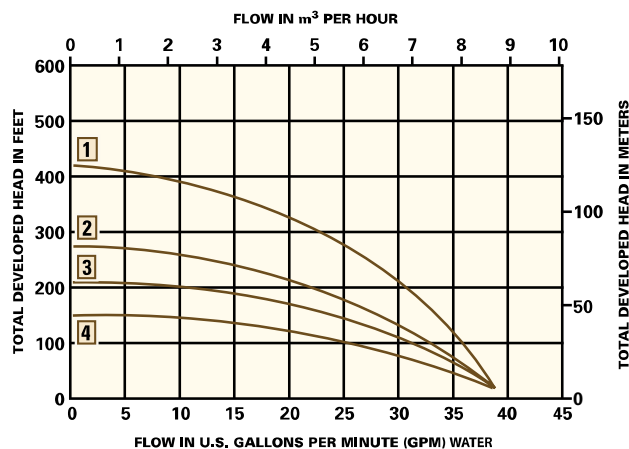
### MSPR/MSPRSS ORDER INFORMATION

MODEL	STAGES	HP	A	B	C	D	E
MSPR5	5	1	21 1/4"	6 1/4"	9 1/4"	11 1/4"	10"
MSPR7	7	1.5	24"	8"	11 1/2"	13 1/4"	10 3/4"
MSPR9	9	2	26"	9 5/8"	13"	15"	11"
MSPR13	13	3	30 1/2"	13 1/2"	16 3/4"	18 3/4"	11 3/4"

Note: Graymills uses B length to define the measurement from the bottom of the volute to the bottom of mounting flange.

Note 1: Intake of pump must be a minimum of 2" above bottom of tank.

Note 2: Liquid level must always cover at least 5" of pump at all times.



- 1. MSPR13
- 2. MSPR9
- 3. MSPR7
- 4. MSPR5

## MSPR/MSPRSS SERIES SPECIFICATIONS

The MSPR Pump offers steady, pulsation-free coolant delivery while preventing thermal shock to cutting tools and greatly increasing feed rates. Perfect for "through the tool" machining applications and substantially lengthens tool life.

For variable capacity, centrifugal pump design allows flow adjustment by installing a valve in the pump discharge line (use of the included by-pass kit may be required). Integral discharge simplifies plumbing. No extra holes in tank lid.

Designed for long service life, pumps have rugged cast iron or stainless steel discharge head and frame while the corrosion resistant 300 series stainless steel and thermoplastic internal components are encased in a stainless steel shell. Mechanical seal has carbon/ceramic faces, Viton elastomers and stainless steel parts. May be mounted vertically or horizontally without loss of performance. Most pumps available as a Pump/Tank combination. See pages 24 thru 28 or consult factory.

- All Models:** 1" NPT horizontal discharge, 230/460V.
- MSPR5:** 1 HP, 3500 RPM. Inlet pressure 75 PSI Maximum. Maximum Viscosity: 300 SSU.
- MSPR7:** 1.5 HP, 3500 RPM. Inlet pressure 75 PSI Maximum. Maximum Viscosity: 300 SSU.
- MSPR9:** 2 HP, 3500 RPM. Inlet pressure 75 PSI Maximum. Maximum Viscosity: 300 SSU.
- MSPR13:** 3 HP, 3500 RPM. Inlet pressure 75 PSI Maximum. Maximum Viscosity: 300 SSU.

### MATERIALS:

- Discharge Head and Frame:**
  - MSPR, Cast iron
  - MSPRSS, Stainless steel
- Shaft:** Stainless steel
- Bowl:** Stainless steel
- Impeller/Diffuser:** Polycarbonate
- Special Materials:** Consult Factory for Pricing