



# NDPD Series

## Cylinder Filling Pump

### Applications

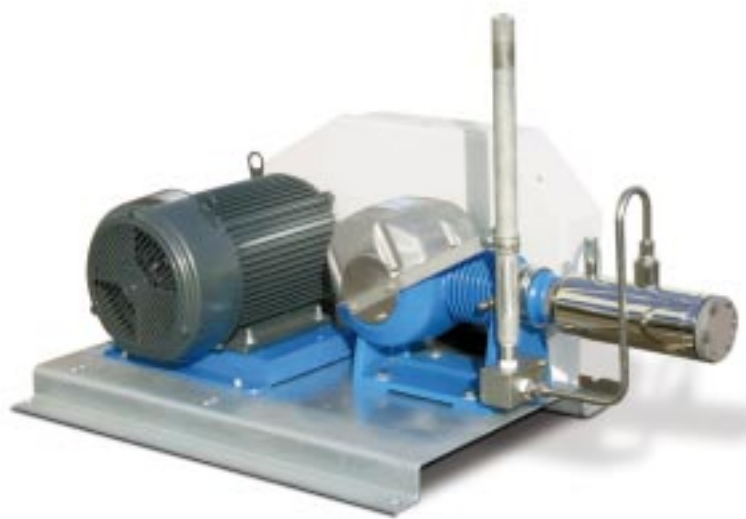
- ▶ Cylinder filling

### Features & Benefits

- ▶ Vacuum jacketed cold end helps minimize heat leak and reduce product loss
- ▶ Monel suction strainer for oxygen compatibility
- ▶ “Dry” lubricated grease packed bearings with re-greasable fittings for extended operation
- ▶ Split drive end housing for easy maintenance access
- ▶ Extended stem vacuum port with positive seal for improved vacuum integrity
- ▶ Intermediate purge connection allows for extended packing life
- ▶ Positive locking drive coupling for improved safety operation

### Liquids Pumped

- ▶ N<sub>2</sub>, O<sub>2</sub>, Ar

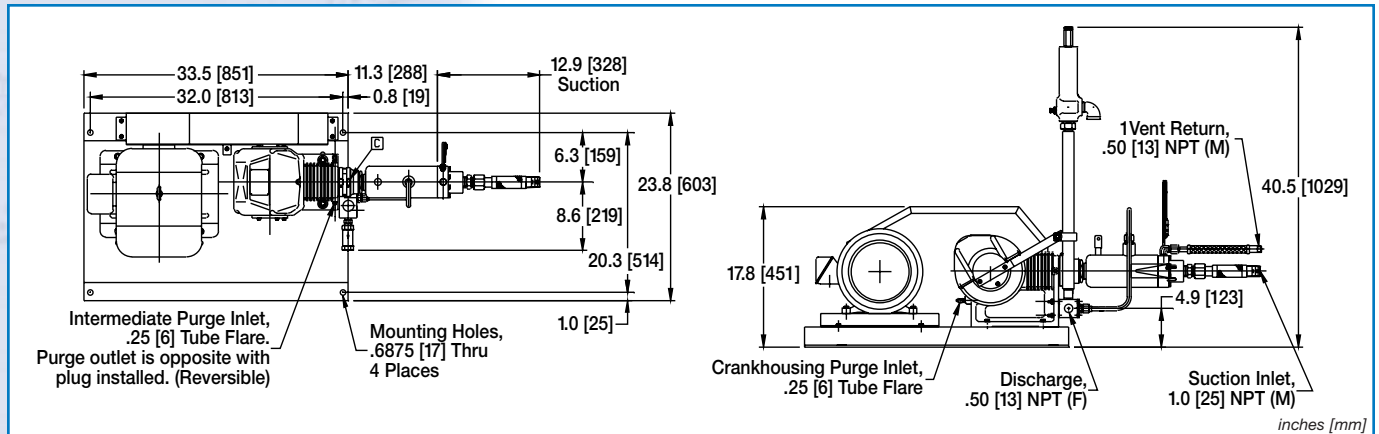


### Specifications

#### STANDARD NDPD MODELS

	1.2 bore x 1.26 stroke (30 mm x 32 mm)	1.2 bore x 0.79 stroke (30 mm x 20 mm)
<b>Flow Rate</b>		
gpm	1.98 – 2.74	1.24 – 1.72
lpm	7.48 – 10.4	4.5 – 6.4
<b>Pump Design Rating</b>		
hp	7.5/10/15	7.5/10
kw	6.6/7.5/11	5.6/7.5
<b>Working Pressure</b>		
psi	3500	3500
bar	241	241
<b>NPSPR</b>		
psi	2	2
bar	0.14	0.14
<b>Maximum Suction Pressure</b>		
psi	300	300
bar	20.7	20.7
<b>Maximum Working Pressure</b>		
psi	up to 4000	up to 4000
bar	up to 267	up to 267

## Dimensions



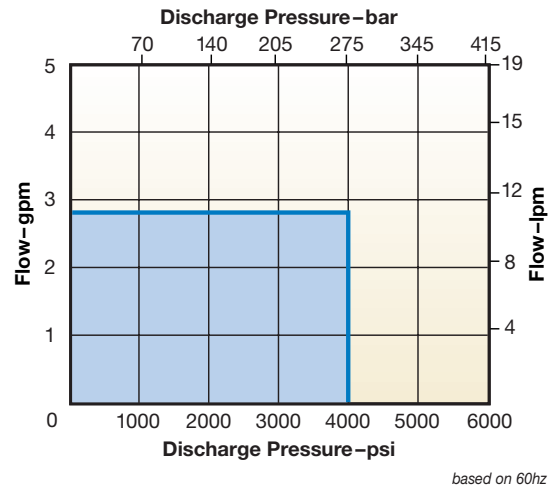
### Scope of Supply

- ▶ Vacuum jacketed cold end and drive assembly
- ▶ Electric motor with belt drive and guard
- ▶ Hot dipped galvanized steel skid
- ▶ High pressure switch gauge (shipped loose)
- ▶ Control panel (NEMA 3R) w/combination motor starter and running time meter (shipped loose)
- ▶ ASME high pressure relief valve w/discharge line and surge chamber
- ▶ Vent line w/manual valve and low pressure relief valve
- ▶ Suction and tank return flex sections and Monel suction strainer

### Optional Accessories

- ▶ Automatic control panel
- ▶ Loss of prime detector (cavitation protection)
- ▶ Over pressure switch
- ▶ Shaft seal leak detection
- ▶ Installation kits (based on supply tank)
- ▶ Bypass valve
- ▶ Auto cooldown temperature controller
- ▶ Vacuum jacketed suction adapter
- ▶ Foot mounted (vacuum jacketed cold end and assembly drive only) configurations
- ▶ Sub Zero® retrofit kit
- ▶ Liquid hydrogen configuration

### Pump Performance Map



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