



Model X9

Applications

- ▶ Storage filling
- ▶ Medium to heavy duty cylinder filling
- ▶ LH₂ process
- ▶ L/CNG fueling systems

Features & Benefits

- ▶ Modular design (1,2,3 cylinders) provides wide range of flow rates
- ▶ Splash oil lubrication allows for extended drive end life
- ▶ Multiple cold end capability (SGV, GA) allows for interchangeability and flexibility re: flows and pressures.
- ▶ Drive end design uses existing SGV parts providing proven technology, reliability, and standardization
- ▶ Modern accumulator (surge chamber) coil design meets global design requirements and minimizes pulsation factors

Liquids Pumped

- ▶ N₂, O₂, Ar, H₂, LNG

Modular Storage Filling Pump



Specifications

	1.25 bore x 1.38 stroke (32 mm x 35 mm)	1.625 bore x 1.38 stroke (41 mm x 35 mm)	1.97 bore x 1.38 stroke (50 mm x 35 mm)
Flow Rate			
gpm	0.94 – 14.95	1.6 – 25.28	2.35 – 37.1
lpm	3.57 – 56.6	6.08 – 95.7	8.90 – 140.4
LH ₂ (gpm)	0.90 – 14.40	1.52 – 24.38	2.25 – 35.8
Pump Design Rating			
hp	15 – 200	15 – 200	15 – 200
kw	11 – 150	11 – 150	11 – 150
Maximum Discharge Pressure			
psi	10000	6000	6000
bar	690	414	414
NPSPR			
psi	10	5	5
bar	0.70	0.35	0.35

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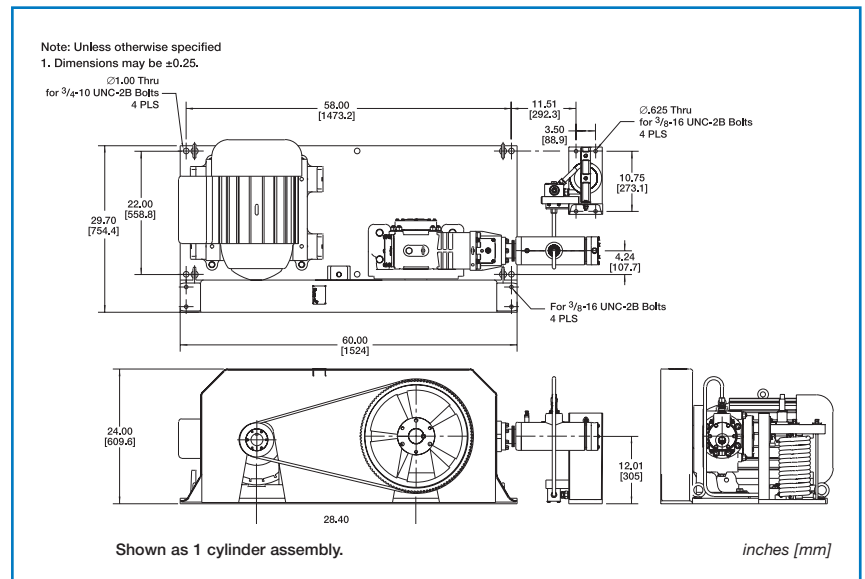
Scope of Supply

- ▶ Foot-mount pump with vacuum jacketed cold end
- ▶ Standard suction adapter with monel strainer
- ▶ Distance piece for purge ports
- ▶ Base mounting plate
- ▶ TEFC motor with shipped loose belt guard (to be affixed to concrete separately, on-site)
- ▶ High pressure relief valve and coiled tubing accumulator (shipped loose to be affixed to concrete separately, on-site)
- ▶ LH₂ applications:
 - Drip pan
 - Vacuum jacketed suction adapter
- ▶ Suction/Discharge manifold for modular (2 or 3 cylinders) pumps

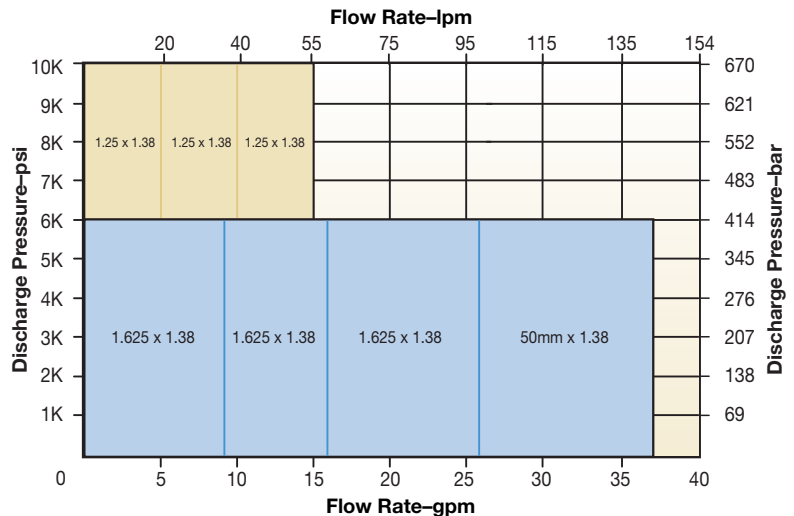
Optional Accessories

- ▶ Vacuum jacketed suction adapter, non-LH₂ applications
- ▶ Control panel – manual or automatic, relay or PLC
- ▶ Loss of prime detection (cavitation protection)
- ▶ Cooldown lock-up control
- ▶ Purge kit for drive end & intermediate
- ▶ ASME relief valve

Dimensions



Pump Performance Map



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