

"DGP" Series

DIGITAL GLYCOL FEED PACKAGE

Specification WRTNDGP

Written: February 2020



1.0 DESCRIPTION

1.1 AUTOMATIC INDUSTRIAL GLYCOL FEED PACKAGE: Shall be manufactured by General Treatment Products, or approved equal and consist of a polyethylene tank, hinged polyethylene cover, carbon steel frame, digital NEMA 4X backlit digital control panel, 0-50mV pressure transducer, low level float switch, 1/3HP open motor bronze gear pump with internal pressure relief, pressure relief valve, check valve, Y strainer, PVC plumbing and reinforced butyl rubber hose assemblies.

2.0 MATERIALS

2.1 TANK AND FRAME: Polyethylene tank shall be industrial grade with a minimum wall thickness of .125". Tank shall have permanent molded in gallon increments. Shoebox type lid shall be 1/3 hinged with aluminum hinge and rivets. Tank frame shall be painted and primed with Alkyd enamel paint, fixed bracing for control panel, plumbing and gear pump. Standard sizes include:

- | | |
|---|--|
| <input type="checkbox"/> 15 gallon tank and frame | <input type="checkbox"/> 55 gallon tank and frame |
| <input type="checkbox"/> 30 gallon tank and frame | <input type="checkbox"/> 100 gallon tank and frame |

2.2 GEAR PUMP: Gear pump shall be close coupled with internal pressure relief valve. Gear pump shall be capable of a minimum 1.3 gallons per minute against 100 PSI. Motor shall be 115 VAC, 1 Phase, 60 Hertz, open drip proof type and be hard wired to pressure control circuit.

"-E4" Pump: **2.2GPM free flow, 1/3HP 5.6AMP**

Pump Curve: 2.1GPM @ 20PSI, 1.9GPM @ 40PSI, 1.7GPM @ 60PSI, 1.5GPM @ 80PSI, 1.3GPM @ 100PSI

Optional Pump Outputs Include:

☐ "-E5" Pump: **4.4GPM free flow, 1/2HP 7.2AMP**

Pump Curve: 4.3GPM @ 20PSI, 3.8GPM @ 40PSI, 3.5GPM @ 60PSI, 3.2GPM @ 80PSI, 3.0GPM @ 100PSI

☐ "-LP" Pump: **10.8GPM free flow, 3/4HP 11.5AMP**

Pump Curve: 10.7GPM @ 20PSI, 10.6GPM @ 40PSI, 10.3GPM @ 60PSI, 10.0GPM @ 80PSI, 9.7GPM @ 100PSI

2.3 PRESSURE TRANSDUCER: Pressure transducer and control circuit shall be designed for pressures 0-100PSI. Pressure transducer shall transmit continuous pressure signal to the control panel. Pressure circuit is 9VDC, 0-50mV, 0-100PSI.

2.4 CONTROL PANEL: Polycarbonate digital NEMA 4X lockable control panel shall be of ample size needed for equipment and servicing of electrical components. Wiring diagram shall be color coded for easy trouble shooting. All internal wiring shall be of ample gauge for supply voltage and amp draw. Controls shall be, but not limited to, pump electronic hand-off-auto switch, pressure set point, pressure differential, pump lock out timer, low level alarm, motor starter/contacter, panel indicator light and 115V alarm on low level. All indicator lights shall be LED and designed for continuous use. Control panel and contactor comes complete with 8FT 16GA 115VAC power cord.

2.5 DISCHARGE MANIFOLD: Discharge manifold is made from Sch80 PVC and will be mounted securely to the system. Manifold is to include brass tubing pump connection, pressure switch port, pressure gauge port, pressure relief port and brass isolation valve. System connection is 1/2" NPT.

☐ Code "HM" Carbon Steel High Temp Manifold

2.6 PRESSURE RELIEF VALVE: Brass pressure relief valve shall have adjustment handle and have brass seat and elastomeric seal. Valve shall be of ample size to handle full pump.

2.7 CHECK VALVE: Back flow check valve shall be tapered body design with an enlarged valve chamber to reduce valve chatter and clogging. Valve shall be constructed of bronze and stainless steel and have a raised radius valve seat for positive seal.

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2.8 LOW LEVEL SWITCH: Stainless steel low level switch with carbon steel tank fitting shall be interlocked with 5 AMP relay and stop glycol feed pump when liquid reaches factory set level. Low level circuit will then turn on RED indicator light and initiate 115 VAC 10 amp circuit.

2.9 PRESSURE AND TEMPERATURE LIMITATIONS: Shall have maximum operating perimeters of 150PSI @ 85F.

2.10 OPTIONAL FEATURES: Select options from below.

- ☐ Code "D" Dual Pumps with dual manifolds, control switches and indicators
- ☐ Code "H" High Temp tank and manifolds
- ☐ Code "AL" 95 decibel audible alarm and silence switch
- ☐ Code "DC" Remote dry contact on low level
- ☐ Code "ET" 2.1-gallon expansion tank
- ☐ Code "MX" Batch mixer, mount bracket and control switch
- ☐ Code "HL" High level sensor wired to level circuit
- ☐ Code "UV" Ultraviolet prohibitive black polyethylene tank and hinged cover
- ☐ Code "TEFC" Totally enclosed Fan Cooled pump motor
- ☐ Code "DTS" Digital touch screen controller with Datalogging
- ☐ Code "NET" Ethernet connectivity
- ☐ Code "420" 4-20mA output on pressure

3.0 WARRANTY

General Treatment Products Feed Systems are guaranteed for two years from date of shipment against manufacturing defects in material and workmanship which develop in the service for which they are designed. We will repair or replace a defective part of this system when returned to our factory with freight prepaid; providing that the part is found to be defective upon inspection. We assume no liability for labor and/or other expenses in making repairs or adjustments.