



SINCE 1908
wessels
company



GLYCOL MAKE-UP PACKAGES

Model GMP

GMP Systems

The Wessels GMP Glycol/Water Make-up Package is a complete, fully automated, and autonomous system. Its function is to automatically supply pressurized water or water-glycol mixture to a closed-loop hydronic heating, chilled water, snowmelt, or process control system, to insure that critical minimum system pressure levels are maintained.

The basic GMP consists of a solution reservoir and a pump pressurization control station. The premixed fluid stored in the reservoir is manually maintained and isolated from the building's plumbing, ensuring that there is no potential for cross-contamination into the building's potable supply. The pump pressurization control station stores a portion of the fluid under pressure and meters it to the heating or process control system at the precise pressures required. In addition, a low fluid level sensor is included that shuts down pump operation and sounds an alarm to alert the operator when fluid levels are low.



GMP FEATURES

FULLY AUTOMATIC FILL PACKAGE

Maintains water/glycol solution or water solution levels in closed loop heating or cooling systems at optimum design pressures. Pressure is adjustable. Pump only operates to re-pressurize solution contained in the Pressurization Control Station.

PRE-WIRED, PRE-PIPED PACKAGE

Tank, pump, and all controls packaged for easy connection to closed loop systems that require filling, mixing, and storage of make-up solutions.

PREVENTS MAJOR FLOODS

In the event of a system rupture, only the contents of the storage tank will be pumped into the system.

NO DIRECT CONNECTION TO POTABLE WATER SUPPLY

Eliminates the need for backflow prevention devices.

PROVIDES LEAK DETECTION

Dropping solution level in storage tank warns of developing system leak.

FREEZE LEVEL PROTECTION

Maintains predetermined glycol/water solution mixture to closed loop systems.

TREATMENT CHEMICALS

Allows mixing of treatment chemicals in make-up water.

EPA PROTECTION AND EXCESSIVE PRESSURE CONTROL

Piping relief valve to the solution reservoir eliminates EPA concerns of solution disposal.

SOLUTION RESERVOIR

- Visible solution level with graduated scale
- Hypoallergenic
- Easy access for re-filling

LOW FLUID ALARM

- Safety shut-off shuts system down if solution level gets low
- Notifies operator with audible and visual alarms

PRESSURIZATION CONTROL STATION

- Cut-off switch protects against excessive pressure
- Low liquid level audible alarm (can be silenced)
- Low liquid level visible alarm
- Pump protection alarm

PRESSURE REGULATING VALVE

- Maintains optimum system design pressure

STURDY BASE

- Steel construction
- Easy access to components

Single System GMP Units

The single GMP unit is designed to automatically supply a pressurized solution, such as glycol and water, to a closed loop heating, chilled water, snowmelt, sprinkler, or other process control system to ensure minimum system pressure requirements are met. These systems are equipped with HOA controls, an adjustable pressure reducing valve (PRV), pressure gauge, and a low level alarm that cuts power to the pump and actuates an audible and visual alarm when solution levels are too low.

MODELS

GMP-13050: 1/3 HP Pump with 50-gallon reservoir

GMP-13100: 1/3 HP Pump with 100 gallon reservoir

GMP-15050: 1/2 HP Pump 50 gallon reservoir

GMP-15100: 1/2 HP Pump 100 gallon reservoir



Duplex GMP Units

The Duplex GMPD unit is designed to automatically supply a pressurized solution, such as glycol and water, to two separate closed loop heating, chilled water, snowmelt, sprinkler, or other process control systems to ensure minimum system pressure requirements are met. These systems are equipped with two automatic pumping assemblies each fitted with HOA controls, an adjustable pressure reducing valve (PRV), pressure gauge, and a low level alarm that cuts power to the pumps and actuates an audible and visual alarm when solution levels are too low.

MODELS

GMP-23050: (2) 1/3 HP Pump with (1) 50-gallon reservoir

GMP-23100: (2) 1/3 HP Pump with (1) 100 gallon reservoir

GMP-25050: (2) 1/2 HP Pump with (1) 50 gallon reservoir

GMP-25100: (2) 1/2 HP Pump with (1) 100 gallon reservoir



Twin GMP Units

The Twin GMPT unit is designed to automatically supply a pressurized solution, such as glycol and water, to a closed loop heating, chilled water, snowmelt, sprinkler, or other process control system to ensure minimum system pressure requirements are met. These systems are equipped with two redundant and alternating fail-safe motors, pumps, and HOA controls that allow one pump to operate if the other pump malfunctions. These units are also equipped with an adjustable pressure reducing valve (PRV), pressure gauge, and low level alarm that cuts power to the pumps and actuates an audible and visual alarm when solution levels are too low.

MODELS

GMP-33050: (2) Alternating 1/3 HP Pump with (1) 50-gallon reservoir

GMP-33100: (2) Alternating 1/3 HP Pump with (1) 100 gallon reservoir

GMP-35050: (2) Alternating 1/2 HP Pump with (1) 50 gallon reservoir

GMP-35100: (2) Alternating 1/2 HP Pump with (1) 100 gallon reservoir



**Regardless of the application, there is a
Wessels make-up package to do the job.**



DIMENSIONAL DATA

Model Number	DIMENSIONS		Pump HP	Pressure Range (psi)	Make-up Capacity (gpm@psi)	Approx. Weight (lbs.)
	Width (in.)	Height (in.)				
GMP GLYCOL/WATER MAKE-UP SYSTEMS						
GMP-13050	34	45	1/3	10-70	1.8@70	134
GMP-13100	34	68	1/3	10-70	1.8@70	140
GMP-15050	34	45	1/2	10-70	1.8@70	138
GMP-15100	34	68	1/2	10-70	1.8@70	144
DUPLEX GMP GLYCOL/WATER MAKE-UP SYSTEMS						
GMPD-23050	34	56	1/3	10-70	1.8@70	214
GMPD-23100	34	80	1/3	10-70	1.8@70	255
GMPD-25050	34	56	1/2	10-70	1.8@70	218
GMPD-25100	34	80	1/2	10-70	1.8@70	259
TWIN GMP GLYCOL/WATER MAKE-UP SYSTEMS						
GMPT-33050	34	40	1/3	10-70	1.8@70	236
GMPT-33100	34	40	1/3	10-70	1.8@70	226
GMPT-35050	34	40	1/2	10-70	1.8@70	240
GMPT-35100	34	40	1/2	10-70	1.8@70	230

TYPICAL SPECIFICATION

- The contractor shall supply and install, as indicated on the plans and in the specifications, a prefabricated, automatic and autonomous make-up package for each glycol system.
- The package shall be designed to occupy a minimum amount of floor space to operate on a 110V motor, 60 Hz electrical circuit, and to maintain a fill pressure in the glycol system of _____psi. The pumping assembly shall be mounted on a sturdy steel frame with legs to keep it off the floor.
- It shall include a _____(US GMP) at _____(psi) pump a 1/2 or 1/3 HP motor, a magnetic starter, a pressure tank with pressure control, a priming valve, a shut-off valve and a pressure gauge. It shall be connected to the system with a 1/2" NPT connection. It shall feature a cut-off and alarm arrangement which will stop the pump in case of excessive pressure or low suction level and activate an audible (which can be silenced) and a visual alarm. A 110V dry contact shall also be available for a remote alarm.
- A translucent polyethylene (50) or (100) gallon solution reservoir complete with lid shall be mounted on the pumping assembly and shall include a strainer and a shut-off valve. A _____ in. NPT glycol solution recovery line shall be piped in from the system relief valve outlet to the solution container through its lid in such a way that the lid can be removed for filling and mixing.
- The make-up package shall be Wessels model GMP-_____ with discharge pressure factory preset at 12 psi and field adjustable as sold by _____.

For Duplex GMP Systems replace paragraph 3 with:

- The system shall consist of two independent pressurization modules for two glycol/water applications. Each module shall include a _____(US GMP) at _____(psi) pump a 1/2 or 1/3 HP motor, a magnetic starter, a pressure tank with pressure control, a priming valve, a shut-off valve and a pressure gauge. It shall be connected to the system with a 1.2" NPT connection. It shall feature a cut-off and alarm arrangement which will stop the pump in case of excessive pressure or low suction level and activate an audible (which can be silenced) and a visual alarm. A 110V dry contact shall also be available for a remote alarm.

For TwinGMP Systems replace paragraph 3 with:

- It shall include two _____(US GMP) at _____(psi) pump a 1/2 or 1/3 HP motor, a magnetic starter, a pressure tank with pressure control, a priming valve, a shut-off valve and a pressure gauge. It shall be connected to the system with a 1/2" NPT connection. It shall feature a control panel equipped with H-O-A switches for each pump starter and a fail safe alternator that allows one pump to operate if the other pump malfunctions. It shall feature a cut-off and alarm arrangement which will stop the pump in case of excessive pressure or low suction level and activate an audible (which can be silenced) and a visual alarm. A 110V dry contact shall also be available for a remote alarm.



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