

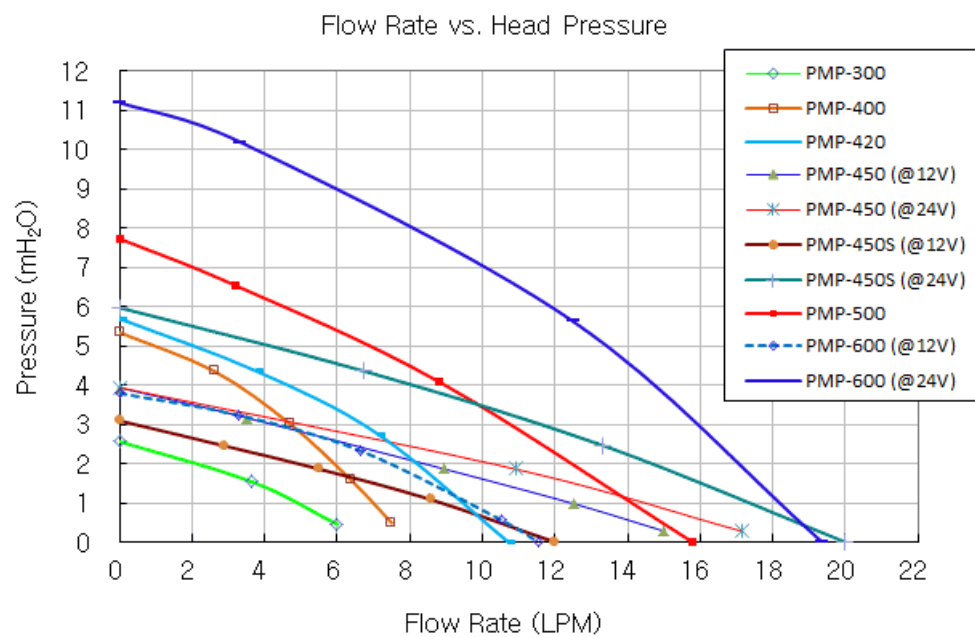


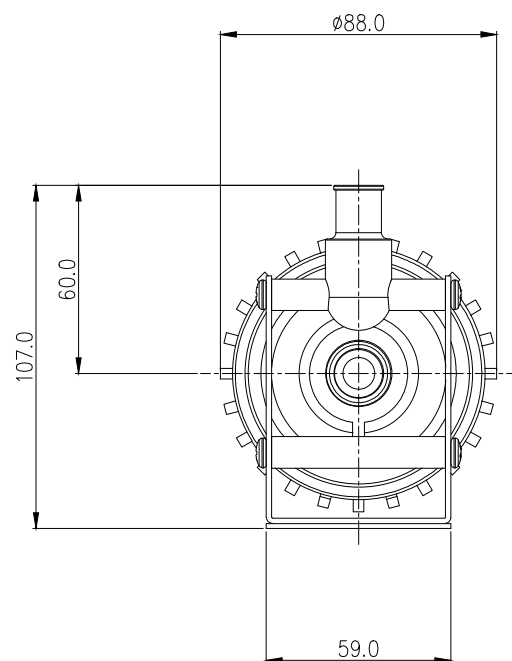
The reliable PMP-450S pump is intended to operate primarily at 12V or 24V DC. For more response between this voltage range, model [PMP-450](#) is recommended.

- Maximum Flow Rate: 12L/min (3.2 gal/min) @ 12V, 20L/min (5.3 gal/min) @ 24V
- Maximum Head Pressure: 3.2m (10.5ft) @ 12V, 6m (19.7ft) @ 24V
- Motor: Brushless DC, electronically commutated, spherical motor
- Power: 10-24VDC, 3-50W, 0.13-2.1A
- Startup Voltage: 9 to 13.2 VDC
- Maximum System Pressure: 3.5 kgf/cm² (50 PSI)
- Maximum Temperature: 60 °C (140 °F)
- Electrical Connector: 4-pin Molex power supply connection + 3-pin (single lead) tach
- Hose Connections: 13mm (1/2in) ID hose barbs
- Wetted Materials: PPO, Carbon/Allumina Ceramic, EPDM or Viton, 316 SS
- Noise: Less than 40dBA
- Weight: 862g (1.9lbs)
- MTBF 50k hours

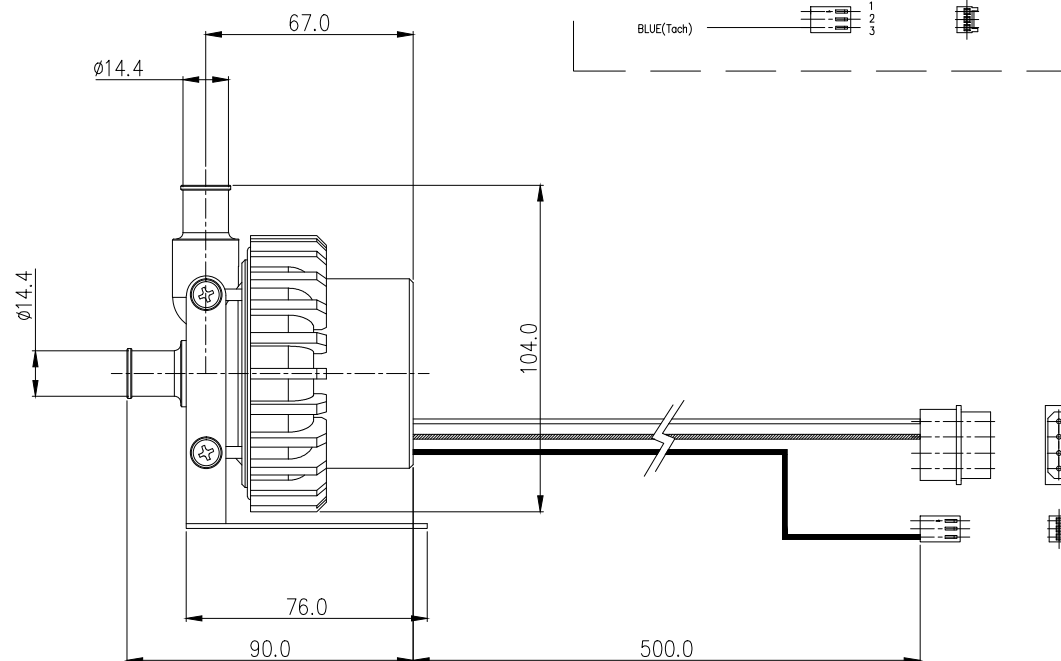
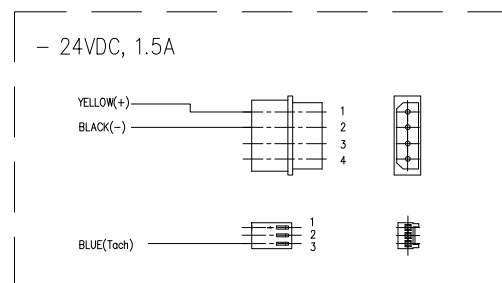
General	
Weight	1.20 lb (0.54 kg)
Max Pressure Tolerance @ 25 °C	3.5kgf/cm ² (50 psi)
Max Temperature Tolerance	60 °C (140 °F)
Wetted Materials	PPO, Carbon/Allumina Ceramic, EPDM or Viton, 316 SS
Pumps	
Expected Lifetime	50,000 hrs. MTBF
Max Flow Rate	12L/min (3.2GPM) @ 12V, 20L/min (5.3GPM) @ 24V
Max Power	26W @ 12V, 55W @ 24V
Max Static Head	3.2m (10.5ft) @ 12V, 6m (19.7ft) @ 24V
Native Hose Connection	Barbs for ID 13mm (1/2in)
Speed Knob	no
Tachometer	yes


General	
Type	Magnetic Centrifugal
Voltage	10-24 VDC






- < 4 pin CONNECTOR >
 – Housing : ALEX 6060-04 (or Equivalent)
 – Terminal : ALEX 62T (or Equivalent)
- < 3pin CONNECTOR >
 – Housing : Molex 5051-03 (or Equivalent)
 – Terminal : Molex 5159 (or Equivalent)



					
REV	DATE	CONTENTS	REVD BY	CHKD BY	APPD BY
REVISION					

NO.		DESCRIPTION			PART NO.		QTY.		REMARKS	
 KOOLANCE®					UNIT	MM	ITEM Pump			
		DRAWN BY	BY	BY	APPRO BY	SCALE	N/S	TITLE Assy		
DATE						3RD ANGLE				
MAR.25.2021		S.J.LEE			J.S.PARK	KK CODE NO. PMP-450		DRAWING NO. —		REV —