www.koolance.com

Specifications Sheet

Generated: 2026-11-03

P/N: PMP-450S

PMP-450S Pump, ID 13mm (1/2in)

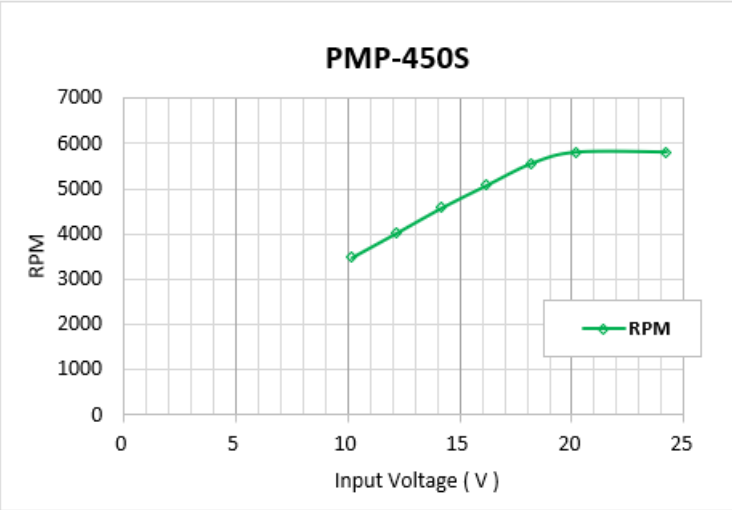


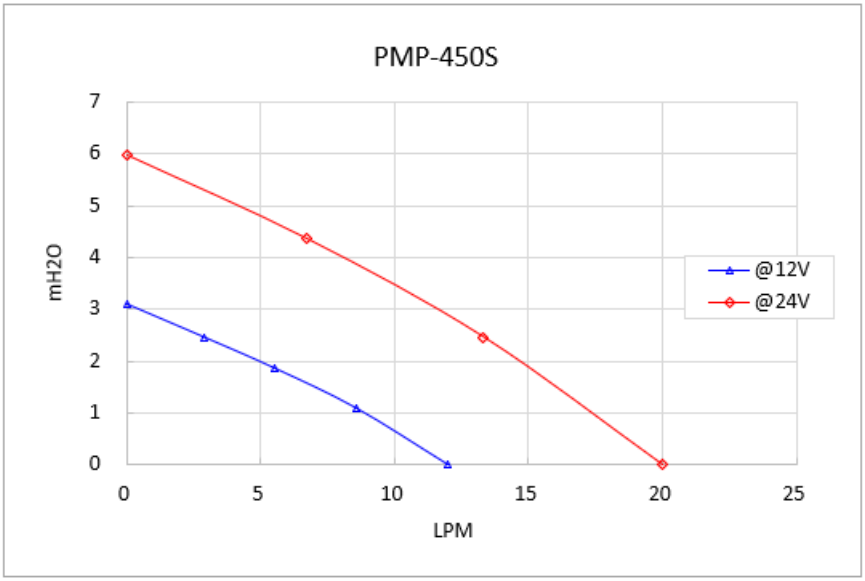
PMP-450S has a higher 24V output spec than PMP-450, but does not respond to external voltage throttling as smoothly.

- 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 barb fittings
- Wetted Materials: PPO, Carbon/Allumina Ceramic, EPDM or Viton, 316 SS
- Noise: Less than 40dBA
- Weight: 862g (1.9lbs)
- MTBF 50k hours
- Mounting Bracket Included

General	
Weight	1.20 lb (0.54 kg)
Max Pressure Tolerance @ 25°C	3.5kgf/cm2 (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

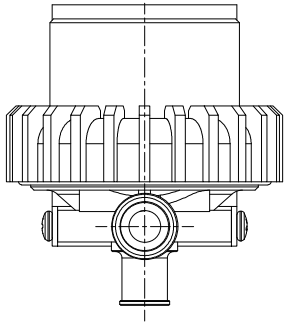
General	
Type	Magnetic Centrifugal
Voltage	10-24 VDC

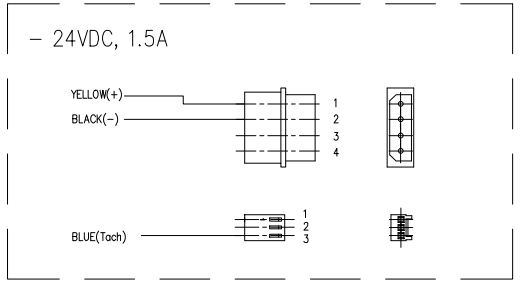


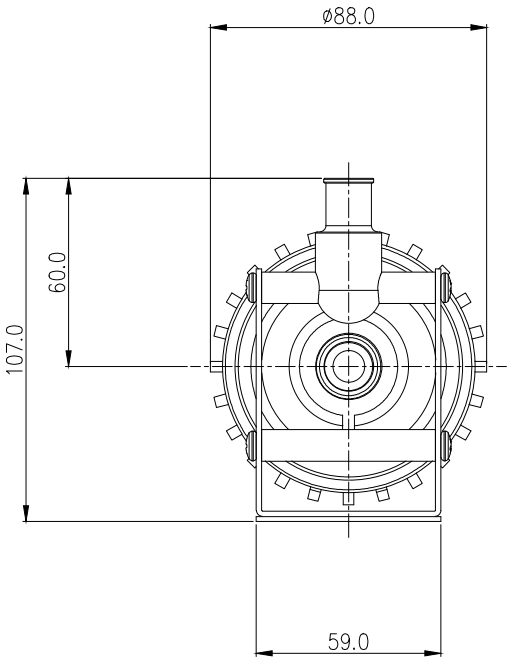


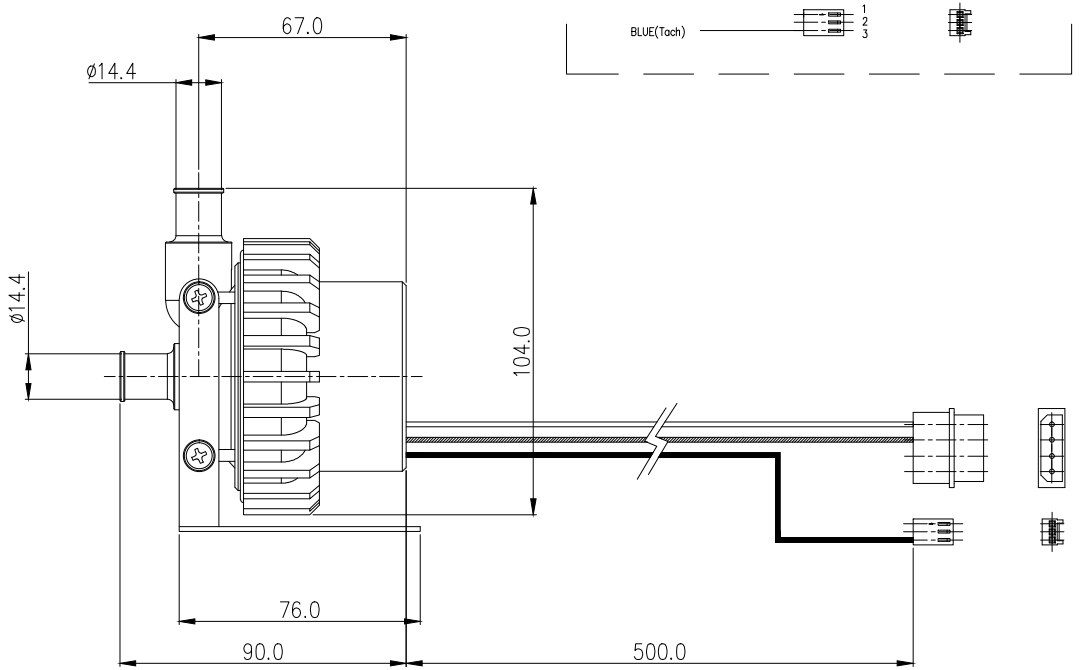
< 4 pin CONNECTOR >
- Housing : ALEX 6060-04 (or Equivalent)
- Terminal : ALEX 62T (or Equivalent)

< 3pin CONNECTOR >
- Housing : Molex 5051-03 (or Equivalent)
- Terminal : Molex 5159 (or Equivalent)









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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 -