SCIENTICO INDIA

Manufacturer & Exporter · Ambala, Haryana, India

PRODUCT DATA SHEET

Catalogue reference for product evaluation

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Universal Pumping Unit | PolarX - 528

Category: Refrigeration and Air Conditioning · **Country of Origin:** India

Product Overview

The Universal Pumping Unit PolarX - 528 is engineered for versatile and efficient fluid handling in industrial and laboratory applications. This Universal Pumping Unit uses a high-efficiency centrifugal pump (60W, 2m³/h max flow, 4.8m head) with real-time monitoring via two K type thermocouples and a digital flow sensor. A rotameter with acrylic body and metal float provides additional flow measurement calibration (range 1.8 to 18 lpm). The aluminum frame and Bakelite panel components ensure durability, electrical insulation, and heat resistance.

View this product online: https://scienticoindia.com/product/universal-pumping-unit-polarx-528/



Request a model-specific quotation

Include quantity and delivery country.

Technical Specifications

Universal Pumping Unit PolarX - 528, Technical Specifications

Component	Type / Detail
Frame	High-strength aluminum profiles
Panel Components	Bakelite, electrically insulating and heat resistant
Front Panel	Process flow diagram describing components and fluid path
Pump Type	High-efficiency centrifugal pump, low power requirements
Installation	Adjustable feet, individually adjustable for leveling
Connections	Suction and discharge nozzles connect to fluid inlets and outlets

Technical Data

Pump

Parameter	Value
Power Consumption	60W
Max. Flow Rate	2m³/h
Head	4.8m
Operating Temperature	max. 110°C

Temperature Monitoring

Parameter	Value
Type	Two K type thermocouples
Display	Digital display for accurate temperature readings
Temperature Range	-100~400°C

Flow Monitoring

Parameter	Value
Flowmeter	Digital flow sensor
Display	Digital display for real-time flow measurement
Measurement Range	1.8~18lpm

Flow Measurement

Parameter	Value
Flowmeter	Rotameter
Type	Variable area flow meter
Range	1.8 to 18 lpm
Material	Acrylic with a metal float

Key Features

Key Features

- **Application:** Universal Pumping Unit for versatile, efficient fluid handling
- **Pump Type:** High-efficiency centrifugal pump, low power requirements
- **Power Consumption:** 60W
- **Max Flow Rate:** 2m³/h
- **Head:** 4.8m
- **Operating Temperature:** max. 110°C
- **Temperature Monitoring:** Two K type thermocouples, range -100~400°C, digital display
- **Flow Monitoring:** Digital flow sensor, range 1.8~18lpm, digital display
- **Rotameter:** Variable area flow meter, acrylic with metal float, range 1.8 to 18 lpm
- **Frame Construction:** High-strength aluminum profiles
- **Panel Material:** Bakelite for electrical insulation and heat resistance
- **Installation:** Individually adjustable feet for leveling on uneven surfaces

Experiments

- Analyze the behavior of fluids under various conditions, leveraging the pump's adjustable flow rate and head
- Use the integrated thermocouples to monitor and analyze temperature variations in fluid systems
- Energy balances
- Assess the efficiency and performance of the pumping unit under different operational conditions
- Utilize the digital flow sensor and rotameter for calibration of other flow measurement devices

Construction and Design

The Universal Pumping Unit PolarX - 528 features a frame constructed from high-strength aluminum profiles, ensuring a lightweight yet robust structure. Bakelite is used for various panel components, providing electrical insulation and heat resistance. A process flow diagram is displayed on the front of the panel, describing the components and the process path followed by fluid. The pump is a high-efficiency centrifugal pump with low power requirements. Suction and discharge nozzles connect to the respective fluid inlets and outlets, with all connections required to be secure. Adjustable feet, individually adjustable, stabilize the unit on uneven surfaces and maintain proper alignment.

Scope of Delivery

- 1 experimental unit
- 1 set of hoses
- 1 instructional manual

Optional Accessories

- Steam jet refrigeration system, PolarX - 528
- Domestic water heating with flat collector

Ordering & Delivery

- Send the product name, quantity, delivery country and destination with your enquiry.
- Production schedule, freight, payment terms and export documents are confirmed in the written quotation.

Frequently Asked Questions

Q: What type of pump does the Universal Pumping Unit PolarX - 528 use?
A: A high-efficiency centrifugal pump with low power requirements, consuming 60W.

Q: What is the maximum flow rate and head of the pump?
A: Max. flow rate is 2m³/h with a head of 4.8m.

Q: How is temperature monitored?
A: Two K type thermocouples with a digital display, covering a range of -100~400°C.

Q: What flow measurement instruments are included?
A: A digital flow sensor (range 1.8~18lpm) and a rotameter, a variable area flow meter made of acrylic with a metal float (range 1.8 to 18 lpm).

Q: How is the unit stabilized during installation?
A: Individually adjustable feet stabilize the unit on uneven surfaces and maintain proper alignment.

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