

This accessory offers enhanced capabilities provided by the inclusion of a variable-speed pump with inverter drive rather than a fixed-speed pump.



F1-27 Centrifugal pump attached to F1-10 bench

Experimental content

- Determining the relationship between head, discharge, speed, power and efficiency for a centrifugal pump at various speeds
- Determining the head/flow rate characteristics of two similar pumps operating in either parallel or series configuration at the same speed

Description

This accessory comprises a variable speed pump assembly and independent discharge manifold interconnected by flexible tubing with quick release connectors. This auxiliary pump is intended to be used in conjunction with the basic Hydraulics Bench F1-10/F1-10-2.

The pump speed is varied by an inverter drive. The motor speed, output voltage and motor current can be monitored on the inverter display. A compound pressure gauge is mounted on the pump inlet and a pressure gauge is mounted on the pump outlet.

An independent discharge manifold incorporates a pressure gauge and flow control valve prior to a discharge pipe with diffuser.

The auxiliary pump is mounted on a support plinth designed to be positioned on the floor besides the hydraulics bench, adjustable feet allowing levelling.

Overall dimensions

Length	0.36m
Width	0.16m
Height	0.325m

Technical specifications

Pump	Centrifugal type
Max head	21m H ₂ O
Max flow	1.35 l/s
Motor rating	0.36kW
Speed controller	Frequency inverter
Speed range	0-1500 rpm
Pressure gauge range	0-60m H ₂ O
Compound gauge range	-10 to +32m H ₂ O
See Hydraulics Bench F1-10 technical details for primary pump characteristics.	

Requirements



Scale



Electrical supply:

F1-27-A: 220-240V / 1ph / 50Hz @ 10 amp
F1-27-G: 220V / 1ph / 60Hz @ 10 amp

*G version has optional 1.5kVA transformer available to accommodate 120V / 1ph / 60Hz.
Requires Hydraulics Bench Service unit F1-10/F1-10-2*

Ordering codes

► F1-27

UK office - email: sales@armfield.co.uk tel: +44 (0) 1425 478781 (for ROW)

USA office - email: info@armfield.inc tel: +1 (609) 208-2800 (USA only)

Service and maintenance support: armfieldassist.com

Issue: 2

URL: <http://www.armfield.co.uk/f1>

Applications

ChE ME CE IP

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