Hydro Bard

OPERATING AND MAINTENANCE MANUAL

MANIFOLDS, NEEDLE VALVES AND GAUGES

HMF · VLV · MNM



Read this manual and the safety instructions before use.

Hydro Bard Mühendislik · hydrobard.com

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01 GENERAL SAFETY RULES

- Read this entire manual before using the product. The product must only be used by trained and authorised persons.
- Never exceed the maximum working pressure shown on the rating plate or label. Always monitor the system with a pressure gauge.
- All components in the system (pump, hose, coupler, valve, tool) must be rated for the same or higher pressure.
- Never disconnect, tighten or loosen fittings, couplers or hoses while they are under pressure.
- Pressurised hydraulic oil can penetrate the skin and cause serious injury. Never check for leaks by hand; seek medical help immediately after any oil injection.
- Wear safety glasses, work gloves and safety shoes. Do not stand in the line of movement of pressurised equipment.
- Do not use equipment that is damaged, leaking, deformed or has illegible labels; send it for service.
- Do not use the equipment for any other purpose or modify it. Use genuine spare parts only.

⚠ PRODUCT-SPECIFIC WARNINGS

- Select the gauge so the working pressure does not exceed about 75% of its scale.
- Open and close needle valves by hand only; overtightening with a wrench damages the stem and seat.
- All tools connected to the manifold must have the same pressure rating as the manifold.

Warning signs

DANGER	A situation that will result in death or serious injury if not avoided.
WARNING	A situation that could result in injury if not avoided.
CAUTION	A situation that could damage the product or give a wrong result.

02 PRODUCT DESCRIPTION

HMF manifolds distribute oil from the pump to several tools; VLV needle valves open, close and meter flow; MNM gauges show system pressure.

03 TECHNICAL DATA

HMF manifold	700 bar (special: 1500 bar); Al / steel; modular
VLV needle valve	Max. 700 bar; 3/8″ NPT; −20…+200 °C
MNM gauge	Max. 700 bar; ±1% full scale; 63 / 100 / 150 mm dial
Thread sealing	Suitable sealing tape or paste on NPT threads

04 PREPARATION AND CONNECTION

1. Clean the threads; wrap sealing tape on NPT threads in the thread direction, leaving the first thread free.
2. Tighten with a suitable spanner while holding the body; never tighten a gauge by its dial.
3. Place the manifold on a solid surface or fix it in place.
4. Turn the gauge so it is easy to read.

05 OPERATION

1. Before pressurising close or plug the valves of unused manifold outlets.
2. Open the needle valve slowly to pressurise the tools; watch the gauge.
3. Open valves slowly when releasing pressure; avoid sudden release.

06 MAINTENANCE AND PERIODIC CHECKS

Check	Interval
Leak check at connections	Before each use
Gauge returns to zero	Before each use
Gauge calibration	Yearly
Valve stem and seals	Yearly

07 TROUBLESHOOTING

Symptom	Possible cause	Remedy
Gauge does not return to zero	Mechanism damaged; over-pressurised	Replace the gauge; have it calibrated
Flow with valve closed	Worn stem or seat	Send the valve for service or replace
Leak at the thread	Insufficient sealing	Release pressure; clean and re-seal the thread

08 STORAGE, TRANSPORT AND DISPOSAL

- Store the equipment clean, dry and depressurised, with dust caps fitted to the couplers.
- Do not lift or carry the equipment by its hoses or couplers; use suitable lifting gear for heavy parts.
- Dispose of used hydraulic oil and oily materials in line with local environmental regulations.

09 SERVICE AND CONTACT

Contact Hydro Bard for maintenance, repair, pressure testing and spare parts. Quote the model code and serial number of any product sent for service.

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PRODUCT PAGE
hydrobard.com/en/hydraulic-manifold.html

Keep this manual with the product and accessible to the user. For technical values see the product datasheet and the rating plate. · Rev. 1.0 · October 2026