

Variable displacement axial piston pump type V40M

Thanks to its sturdy construction, the variable displacement axial piston pump is designed for a standard connection using an SAE flange. The benchmark figures for this product are 45 cm³/rev and 400 bar end pressure, allowing for a wide range of applications. These are supported by a high self-suction speed rating and low noise level.

Variations with thru-shaft for flange mounting additional variable displacement axial piston pumps and auxiliary pumps are also available. Several different controllers offer the user a wide range of application possibilities. Particular advantages with regard to the mutual coordination arise from a combined application of variable displacement axial piston pumps with proportional directional spool valves type PSV and possibly required load-holding valves type LHT and LHDV.

Features and benefits:

- Good performance/weight ratio
- High self-suction speed
- Different shaft and flange versions

Intended applications:

- Machines for forestry and agricultural purposes
- Cranes and lifting equipment
- Truck-mounted concrete pumps
- Municipal trucks



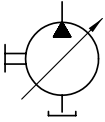
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|---------------------------|---|
| Nomenclature: | Variable displacement axial piston pump |
| Version: | Individual pump Pump combination |
| p_{max}: | 380 bar (continuous), 400 bar (peak) |
| V_{g max}: | 45 cm ³ /rev |

Design and order coding example

V40M - 045 R T X V - 2 - 0 - 00 /LS-DA - C 01

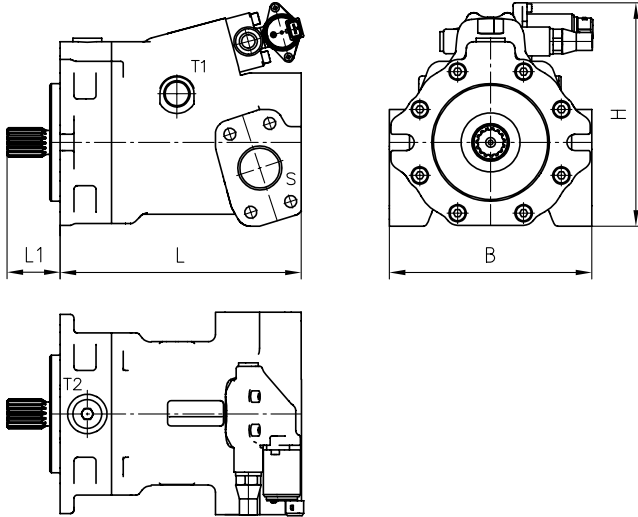
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|---|---|---|--|---|--|--|---|---|
| <p>Basic type</p> <p>Individual pumps Tandem pumps</p> | <p>Nominal size</p> <p>- 045: Medium pressure version (250 bar) - 045 (H): High pressure version (380 bar)</p> | <p>Rotation direction</p> <p>Anti-clockwise (L), clockwise (R)</p> | <p>Shaft journal</p> <p>Spline shaft SAE-B J 744 (H) Spline shaft SAE-B-B J 744 (T)</p> | <p>Flange</p> <p>Flange version (input side) SAE-B-2-Hole J744 (X)</p> | <p>Seal material</p> <p>FKM (V)</p> | <p>Shaft version</p> <p>With/without thru-shaft, radial ports</p> | <p>Additional function</p> <p>Release</p> | <p>Controllers</p> <p>Thru-shaft version</p> <p>Load-sensing controller:</p> <ul style="list-style-type: none"> ■ for proportional directional spool valve with pressure limitation (LS-DA) <p>Pressure controller:</p> <ul style="list-style-type: none"> ■ can be controlled electrically, with falling characteristic curve (P1R1) |
|---|---|---|--|---|--|--|---|---|

Function



General parameters and dimensions

V40M



| | Geom. displacement V_g [cm ³ /rev] | Nom. pressure p_{nom} (p_{max}) [bar] | Self-suction speed n [rpm] | Dimensions [mm] | | | | m [kg] |
|------------|---|---|------------------------------------|-----------------|------|-----|-----|--------|
| | | | | L | L1 | H | B | |
| V40M - 045 | 46,5 | 250 (320) | 2900 | 208,5 | 45,9 | 186 | 175 | 20,9 |

Connections:

| | Drain port T | LS-signal port | Suction port | Pressure port P |
|------------|---------------|----------------|--------------------|-----------------|
| V40M - 045 | 7/8-14 UNF-2B | M12 x 1.5 | SAE 1 1/2" 500 psi | SAE 1" 6000 psi |

Associated technical data sheets:

- Variable displacement axial piston pump type V40M: [D 7961](#)

Similar products:

- Variable displacement axial piston pumps type V60N: [D 7960 N](#)
- Variable displacement axial piston pumps type V30: [D 7960](#), [D 7960 E](#)
- Fixed displacement axial piston pump type K60N: [D 7960 K](#)
- Axial piston motors type M60N: [D 7960 M](#)

Prop. directional spool valve:

- Type PSL/PSV sizes 2, 3 and 5: [D 7700-2](#), [D 7700-3](#), [D 7700-5](#)
- Type PSLF/PSVF size 3, 5 and 7: [D 7700-F](#), [D 7700-7F](#)

Load holding valves:

- Type LHK, LHDV, LHT: [D 7100](#), [D 7770](#), [D 7918](#)