# **Individual pumps**





# Variable displacement axial piston pump type V80M

Variable displacement axial piston pumps operate according to the bent axis principle. They adjust the geometric delivery volume from maximum to zero. As a result they vary the volumetric flow that is provided to the loads.

The axial piston pump type V80M is designed for open circuits in mobile hydraulics and works according to the swash plate principle. It is available with the option of a thru-shaft for operating additional hydraulic pumps in series.

The sturdy pump is particularly suitable for continuous operation in challenging applications. The range of pump controllers allows the axial piston pump to be used in a variety of applications.

#### Features and benefits:

- High speed
- High nominal pressure
- Less installation space
- Full torque available at the second pump in tandem pump applications

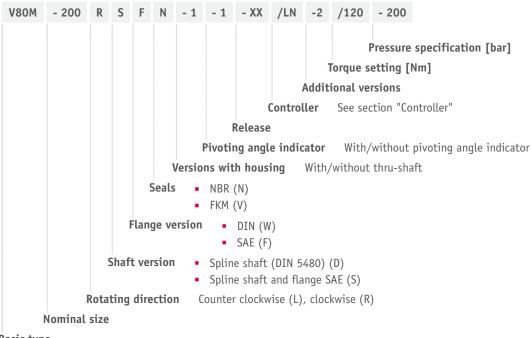
#### **Intended applications:**

- Machines for forestry and agricultural purposes
- Cranes and lifting equipment
- Construction machines



Nomenclature:	Variable displacement axial piston pump
Version:	Single pump Multiple pump
p <sub>max</sub> :	Nominal pressure 400 bar, peak pressure 450 bar
V <sub>g max</sub> :	202 cm <sup>3</sup> /rev

#### Design and order coding example



#### Basic type

#### **Function**

Single pump



Multiple pump

#### Controller

#### Pressure controller:

#### Pressure controller (N)

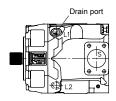
#### **Delivery flow controller:**

Load-sensing controller (LSN)

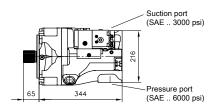
#### **Power controller:**

Power controller (L)

#### General parameters and dimensions





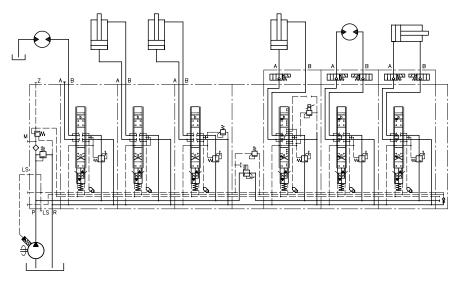


(connection locations for clockwise operation)

#### **Parameters**

	Geom. output	Nominal pressure p <sub>nom</sub> (p <sub>max</sub> ) [bar]	Self-suction speed n [min <sup>-1</sup> ]	Ports			m [kg]
	volume V <sub>g</sub> [cm³/rev]			Drain port	Suction port	Pressure port	(with controller)
V80M - 200	200	400 (450)	1800	G 1	3"	1 1/2"	130 (136)

#### Circuit example:



### Associated technical data sheets:

• Variable displacement axial piston pump V80M: D 7962 M

#### Similar products:

- Variable displacement axial piston pump type V40M: D 7961
- Variable displacement axial piston pump type V60N: D 7960 N
- Fixed displacement axial piston pump type K60N: D 7960 K
- Axial piston motors type M60N: D 7960 M

#### Suitable prop. directional spool valve:

- Types PSL/PSV sizes 2, 3 and 5: <u>D 7700-2</u>, <u>D 7700-3</u>, <u>D 7700-5</u>
- Type PSLF/PSVF sizes 3, 5 and 7: <u>D 7700-3F</u>, <u>D 7700-5F</u>, D 7700-7F

## Suitable accessories:

- Proportional amplifier type EV1M3: D 7831/2
- Programmable logic valve control type PLVC: <u>D 7845-21</u>, <u>D 7845-41</u>, <u>D 7845 M</u>