V14 Large Frame Variable Displacement Bent-Axis Motors

Series V14 is a new generation of variable displacement, bent-axis motors, a further development of our well known V12 motor. It is designed for both open and closed circuit transmissions with focus on high performance machines.

Motor Performance Data

Model Series	Displacement in³/rev (cc/rev)	Outlet Pressure PSI (BAR)	Drive Speed RPM	Flow GPM (LPM)
V14-110	6.71 (110)	6000 (420)	5700	99 (374.8)
V14-160	9.76 (160)	6000 (420)	5000	127 (480.8)

Markets	Applications
Forestry	Feller Bunchers, Skidder, Forwarder, Cranes
Marine	Deck Cranes, Constant Tension Winches
Construction	Wheel Loader, Cranes, Excavator
Mining	Drill Rigs, Top Drives, Loaders, Subsurface Loaders, Tunneling Equipment
Power Gen	Turbine Start
Material handling	Conveyor Drives, Truck Mounted Cranes, Mixers
Recycling	Shredders
Military	Fan Drives

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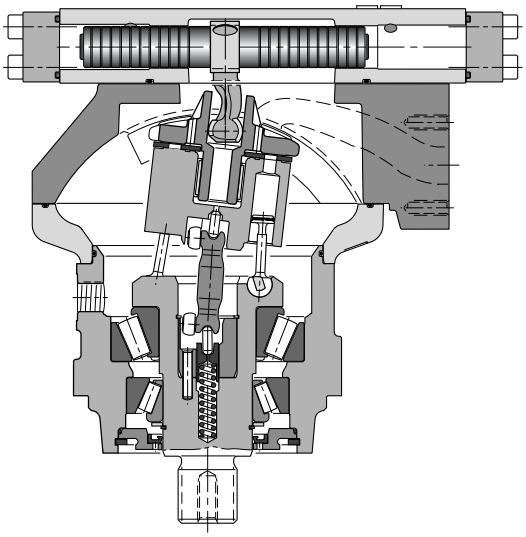
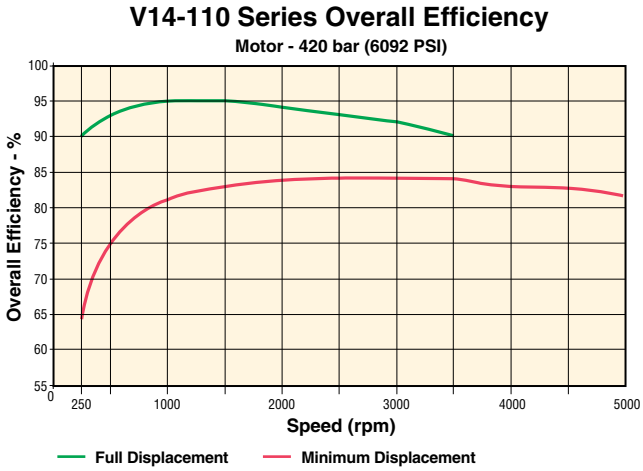
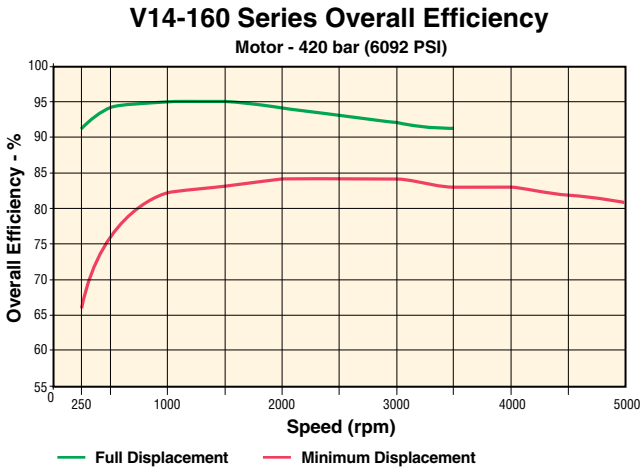
Performance Characteristics







Applications

- Excavators
- Forestry machines
- Mining and drilling machines
- Wheel loaders
- Winch drives

Optional equipment

- Integrated sensors for speed and displacement
- Integrated flushing and pressure relief valves

Additional benefits

- Improved speed capability
- Improved control performance
- Reduced number of parts
- Stronger shaft bearing support.

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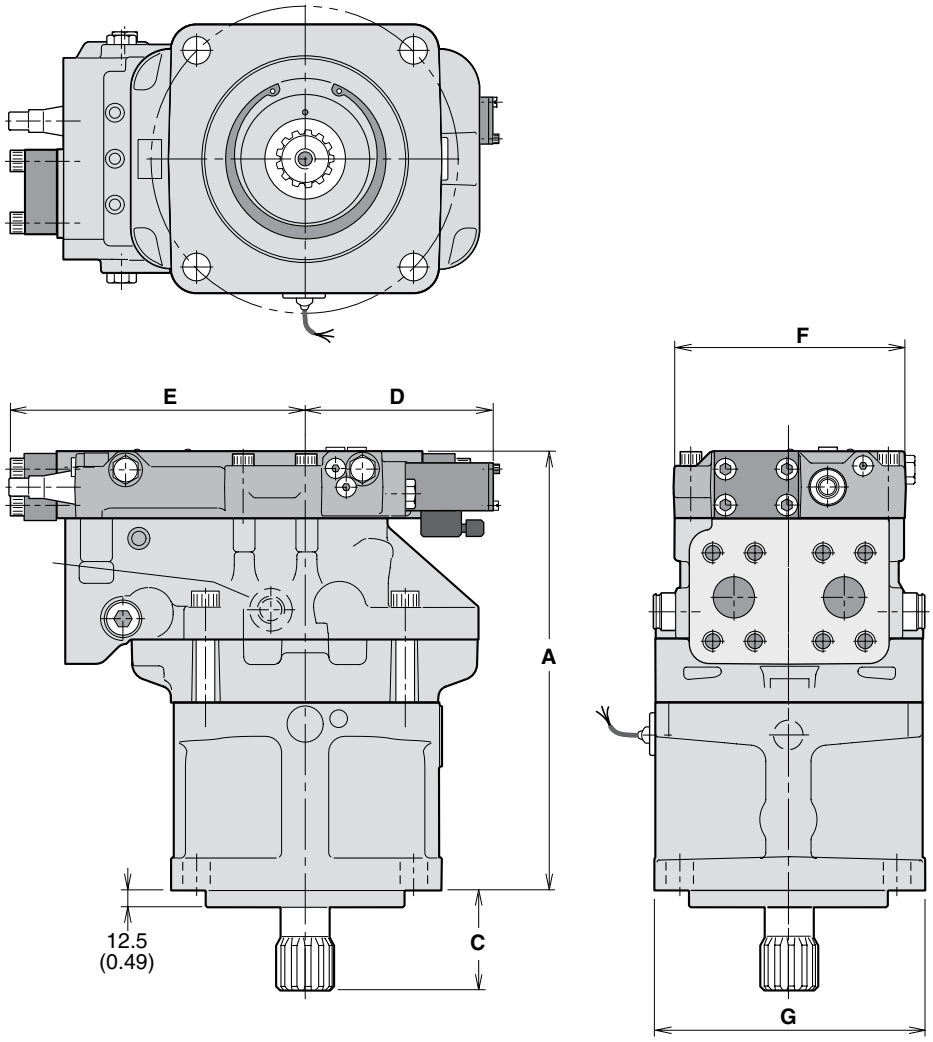
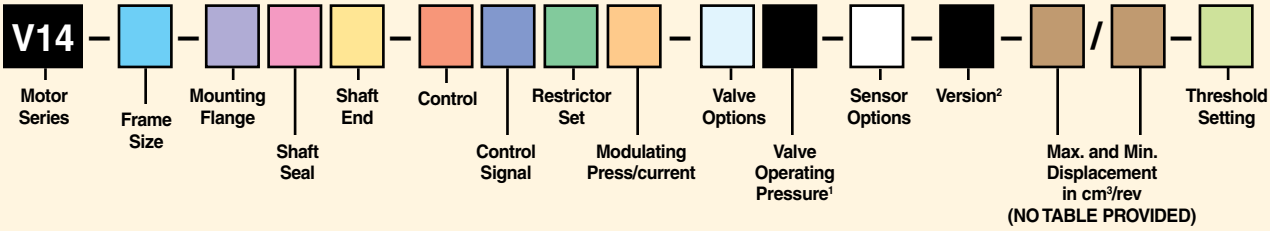


Dimensions, inch (mm)

Series	A	C	D	E	F	G
V14-110	11.54 (293)	2.93 (74.5)	5.91 (150)	8.19 (208)	6.85 (174)	8.03 (204)
V14-160	12.91 (328)	2.95 (75)	5.47 (139)	8.62 (219)	6.85 (174)	7.87 (200)



Code	Frame Size
110	6.71 in³/rev (110 cm³/rev)
160	9.76 in³/rev (160 cm³/rev)

Code	Mounting Flange
S	SAE version
I	ISO version
C*	Cartridge version

* 110 only

Code	Shaft Seal
H	NBR (Nitrile)
V	FPM (High Temperature Fluorocarbon)

Code	Shaft End
S	SAE (SAE Version)
C	DIN (ISO Version)
D	DIN (ISO Version)

Code	Control
AC	Presure Compensator
AD	Press. Compensator with electrohydraulic override and brake defeat valve
AH	Pressure Compensator with hydraulic override
EO	Electrohydraulic, two-position
EP	Electrohydraulic, proportional
HO	Hydraulic, two-position
HP	Hydraulic, proportional

Code	Control Signal
E	External Pressure (HO, HP)
I	Internal Pressure (AC, AD, AH)
H	24 VDC (EO, EP)
L	12 VDC (EO, EP)

[1] Pressure Relief Valve opening pressure (bar)
Alternately: Flushing Valve restrictor
[2] Factory issued for special versions

Code	Control Restrictor Set (orifice dia. in mm)
1	0.7
2	0.8
3	1.0 (standard)
4	1.2

Code	Control Modulating Pressure/Current
N	AC: 0 bar EP: Non-selectable current
A	217.56 PSI (15 bar) (AC, HP)
B	362.59 PSI (25 bar) (AC, HP)
C	725.19 PSI (50 bar) (AC)

Code	Valve Options
N	None
L	Flushing Valve
P	Pressure Relief Valve

Code	Sensor Options
N	None
C	Prepared for Setting Piston Position and Shaft Speed Sensors (EP, HP)
D	Setting Piston Position and Shaft Speed Sensors (EP, HP)
L	Setting Piston Position Sensor (EP, HP)
P	Prepared for Speed Sensor
S	Speed Sensor
T	Prepared for Setting Piston Position Sensor

Code	Threshold Setting
***	Select pressure between 1450.38-5076.32 PSI (100-350 bar) (AC, AD, AH only)
400	400 mA - 12 VDC (EO, EP only)
200	200 mA - 24 VDC (EO, EP only)
10	145.14 PSI (10 bar) (HO, HP only)