

F11 Small Frame Fixed Displacement Bent-Axis Motors



F11 is the well-proven, bent-axis, fixed displacement heavy-duty motor Series. They can be used in numerous applications on both open and closed loop circuits where high speed and extreme shaft loads are required.

Motor Performance Data

Model Series	Displacement in ³ /rev (cc/rev)	Outlet Pressure PSI (BAR)	Continuous Drive Speed RPM	Flow @ Rated RPM GPM (LPM)
F11005	0.30 (4.9)	5000 (350)	12800	14 (53.0)
F11006	0.37 (6.0)	5000 (350)	10200	16 (60.6)
F11010	0.60 (9.8)	5000 (350)	10200	26 (98.4)
F11012	0.76 (12.5)	5000 (350)	9400	31 (117.3)
F11014	0.87 (14.3)	5000 (350)	9000	34 (128.7)
F11019	1.16 (19.0)	5000 (350)	8100	40 (151.4)

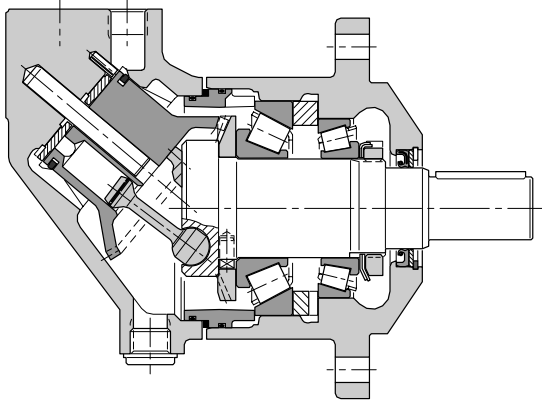
Markets

Applications

Forestry	Saw Drives, Feller Bunchers, Skidder, Forwarder, Cranes, Mowers / Cutters
Industrial	Aircraft Test Stands
Marine	Deck Cranes, Constant Tension Winches, Hatch Covers
Oil & Gas	Nitrogen Pumpers, Frac Trucks, Coil Tubing
Construction	Skid Steer, Off-Highway Trucks, Fan Drives, Cranes, Dust Collector, Excavator
Mining	Drill Rigs, Top Drives, Loaders, Subsurface Loaders, Tunneling Equipment
Material Handling	Conveyor Drives, Truck Mounted Cranes, Mixers
Recycling	Shredders, Vacuum Truck Systems
Military	Fan Drives

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Performance Characteristics

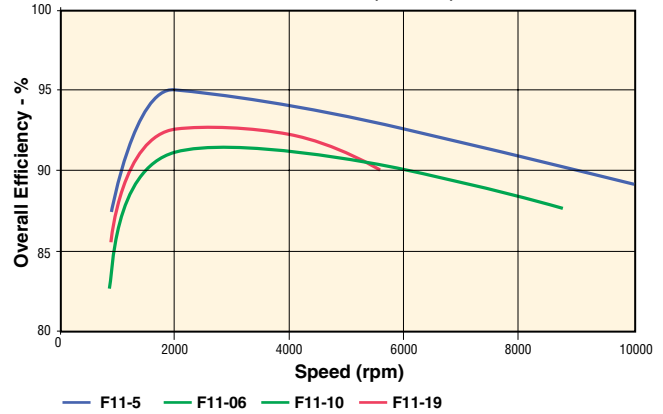


Benefits/Features

- F11 motors can be used at unusually high shaft speeds
- Operating pressures to 6091.59 PSI (420 BAR)
- Compact, lightweight motor and pump
- Laminated piston ring provides low internal leakage and thermal shock resistance
- F11 Series have very few moving parts
- Heavy duty roller bearings

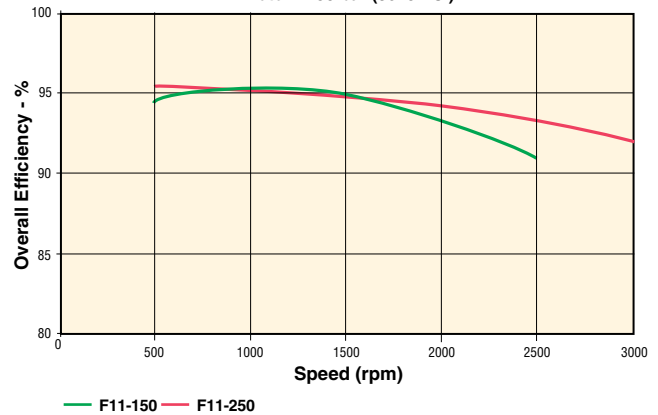
F11 Series Overall Efficiency

Motor - 250 bar (3625 PSI)



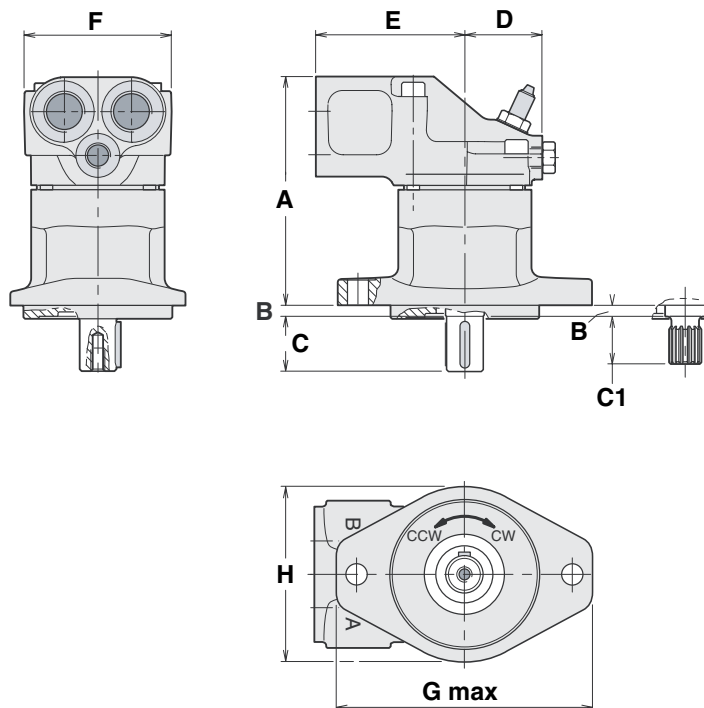
F11 Series Overall Efficiency

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F11 Small Frame Fixed Displacement Bent-Axis Motors

F11-14
(SAE versions)



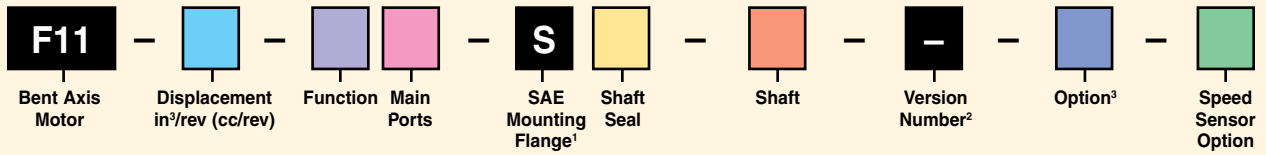
Dimensions, inch (mm)

Series	A max	B	C	C1	D	E	F	G max	H
F11-10 F11-14	6.21 (175.7)	0.31 (7.9)	1.50 (38.1)	1.30 (33.0)	2.09 (53.1)	4.02 (102.1)	3.98 (101.1)	6.85 (174.0)	4.72 (119.9)
F11-19	7.13 (181.1)	0.31 (7.9)	1.50 (38.1)	1.30 (33.0)	2.48 (63.0)	3.46 (87.9)	4.49 (114.0)	6.93 (176.0)	4.84 (122.9)



Motors

F11 Model Ordering Code



Code	Displacement in ³ /rev (cc/rev)
005*	0.30 in ³ /rev (4.9 cc/rev)
006*	0.37 in ³ /rev (6.0 cc/rev)
010*	0.60 in ³ /rev (9.8 cc/rev)
012*	0.76 in ³ /rev (12.5 cc/rev)
014	0.87 in ³ /rev (14.3 cc/rev)
019	1.16 in ³ /rev (19.0 cc/rev)

* ISO or CETOP mounting options, see catalog on CD

Code	Function	005	006	010	012	014	019
M	Motor	x	x	x	—	—	x
H	Motor, High Pressure	x	—	x	x	x	x
S	Motor, High Speed	—	—	x	—	—	x

* Internal drain

Code	Main Ports	005	006	010	012	014	019
U	SAE, UN Threads	x	x	x	x	x	x
B	BSP Threads	x	x	x	x	x	x
F	SAE 6000 psi (413.7 bar) Flange*	—	—	x	x	x	—

* Metric female threads
** UNF threads

x: Available —: Not Available

¹NOTE: CETOP and ISO mounting also available. See catalog on CD.

²Assigned by factory for special versions

³None (see catalog on CD)

Code	Shaft Seal	005	006	010	012	014	019
N	NBR*, Low Pressure	x	x	x	—	—	x
V	FPM**, High Pressure, High Temperature	—	x	x	x	x	x
S	FPM**, Saw Motor	—	x	x	—	—	x

* NBR - Nitrile rubber

** FPM - Fluorocarbon rubber

Code	Shaft	005	006	010	012	014	019
T	SAE Key	—	—	—	—	x	x
S	SAE Spline	x	x	x	x	x	x
K	Metric Key	x	x	x	x	x	x
D	DIN 5480 Spline	x	x	x	x	x	x

For metric options, see catalog on CD.

Code	Option	005	006	010	012	014	019
MVR	Make-up valve clockwise	—	—	x	x	x	x
MVL	Make-up valve counter clockwise	—	—	x	x	x	x

Code	Speed Sensor	005	006	010	012	014	019
P	Prepared for Speed Sensor	—	—	—	x	x	x

Order speed sensor kit# 3785190 separately