Frame size F11	**-005**	**-006**	**-010**	**-012**	**-014**	**-019**
Displacement [cm^3/rev]	4.9	6.0	9.8	12.5	14.3	19.0
Operating pressure						
max intermittent[1)] [bar]	420	420	420	420	420	420
max continuous [bar]	350	350	350	350	350	350
Motor operating speed [rpm]						
max intermittent [1)]	14 000	11 200	11 200	10 300	9 900	8 900
max continuous [3)]	12 800	10 200	10 200	9 400	9 000	8 100
min continuous	50	50	50	50	50	50
Max pump selfpriming speed [2)]						
L or R function; max [rpm]	4 600	–	4 200	3 900	3 900	3 500
Motor input flow						
max intermittent[1)] [l/min]	69	67	110	129	142	169
max continuous [l/min]	63	61	100	118	129	154
Drain temperature[3)], max [°C]	115	115	115	115	115	115
min [°C]	-40	-40	-40	-40	-40	-40
Theoretical torque at 100 bar [Nm]	7.8	9.5	15.6	19.8	22.7	30.2
Mass moment of inertia						
($x10^{-3}$) [kg m^2]	0.16	0.39	0.39	0.40	0.42	1.1
Weight [kg]	4.7	6.5	6.5	7.5	7.5	11

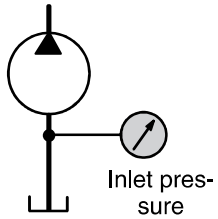
1) Intermittent: max 6 seconds in any one minute.
2) Selfpriming speed valid at sea level. Find more info on page 11
3) See also installation information. Page 69

Selfpriming speed and required inlet pressure

Series F11

In pump applications, the F11 with function **L** (counter clockwise rotation) or **R** (clockwise rotation) is normally used. The L and R (pump) provide the highest self priming speeds (see table) as well as the lowest noise level. The **M** and **H** (motor) function can also be used as a pump, in either direction, but at a lower self priming speed.

Function	L or R	M	H
F11-5	4600	3800	3200
F11-6		3100	
F11-10	4200	3100	2700
F11-12	3900	-	3000*
F11-14	3900	-	3000*
F11-19	3500	2400	2100



* Valve plate S

Operating above the self priming speed (refer to Diagram 1) requires increased inlet pressure. As an example, at least 1.0 bar is needed when operating the F11-19-M as a pump at 3500 rpm. An F11 used as a motor (e.g. in a hydrostatic transmission), may sometimes operate as a pump at speeds above the selfpriming speed; this requires additional inlet pressure. Insufficient inlet pressure can cause pump cavitation resulting in greatly increased pump noise and deteriorating performance.

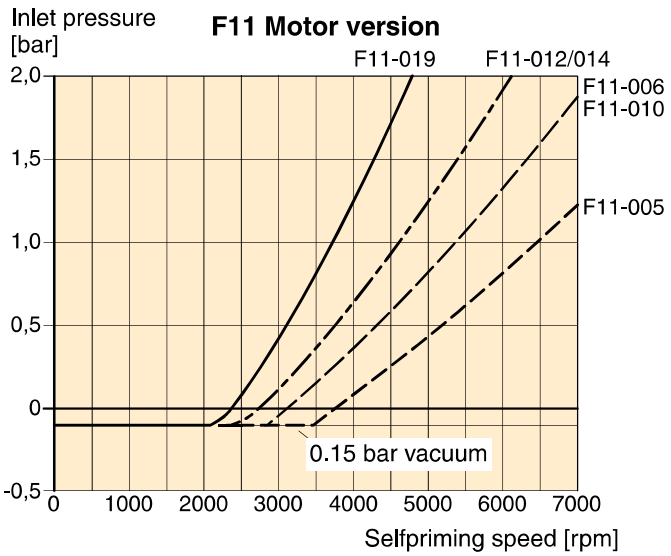


Diagram 1. Min required inlet pressure for Motor.

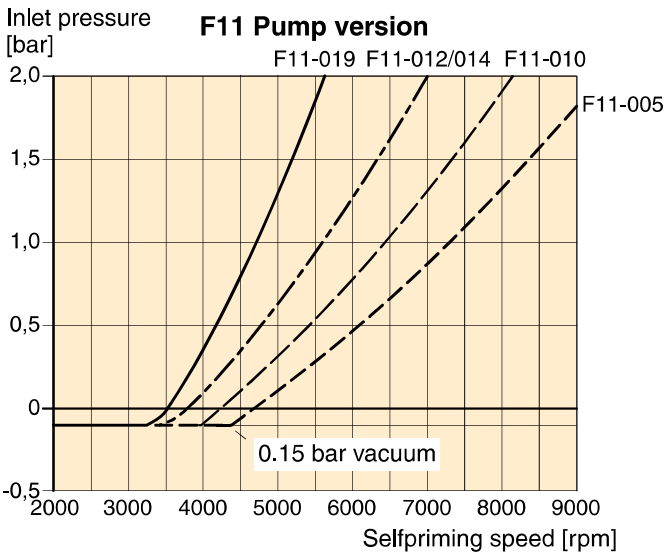


Diagram 2. Min required inlet pressure for Pump.

The inlet pressure can be charged by external pump, pressurized reservoir or using BLA Boost unit

Find more info about the BLA unit at page 68.

F11	–	019	–	L	U	–	S	V	–	S	–	000	–	0000	–	00

F11-SAE

Frame size | Function | Main ports | Mounting flange | Shaft seal | Shaft | Version number | Option page 6 | Option page 7, 67

Frame size	
Code	Displacem. (cm^3/rev)
006	6.0
010	9.8
012	12.5
014	14.3
019	19.0

Version number
(assigned for special versions)

Frame size		6	10	12	14	19
Code	Function					
M	Motor	x	x	-	-	x
Q	Motor, low noise	-	x	x	x	x
S	Motor, high speed	-	(x)	(x)	(x)	(x)
H	Motor, high pressure	-	(x)	-	-	(x)
R	Pump, clockwise rot'n	-	(x)	(x)	(x)	(x)
L	Pump, counter clockw.	-	(x)	(x)	(x)	(x)

For other versions, contact Parker Hannifin

Frame size		6	10	12	14	19
Code	Option					
0000	Standard	x	x	x	x	x
MUVR	Make up/Anti cavitation valve clockwise rotation	(x)	(x)	(x)	(x)	(x)
MUVL	Make up/Anti cavitation valve counter clockwise rotation	(x)	(x)	(x)	(x)	(x)

Frame size		6	10	12	14	19
Code	Shaft*					
T	SAE key	-	-	-	x	x
S	SAE spline	x	x	x	x	x
K	Metric key	x	x	x	-	-
J	Metric key	(x)	(x)	(x)	-	-
V	Tapered shaft	(x)	(x)	(x)	(x)	-

*See also dimensional drawings on pages 31-37.

Frame size		6	10	12	14	19
Code	Main ports					
U	SAE, UN threads	x	x	x	x	x
B	BSP threads	(x)	(x)	(x)	(x)	(x)

Frame size		6	10	12	14	19
Code	Shaft seal					
V	FPM, high pressure, high temperature	x	x	x	x	x

For other versions, contact Parker Hannifin

Frame size		6	10	12	14	19
Code	Mounting flange					
S	SAE flange	x	x	x	x	x

x: Available (x): Optional – : Not available

Frame size		6	10	12	14	19
Code	Option					
00	Standard	x	x	x	x	x
P_	Prepared for speed sensor	(x)	(x)	(x)	(x)	(x)
B_	Power Boost and Prepared for speed sensor	(x)	(x)	(x)	(x)	(x)
_T	Painted Black	(x)	(x)	(x)	(x)	(x)

NOTE: All combinations are not valid, please contact Parker Hannifin