

| 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] | | | | | | |
| 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

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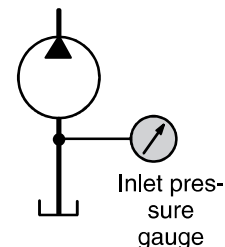
Selfpriming speed and required inlet pressure

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.

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 self priming speed; this requires additional inlet pressure. Insufficient inlet pressure can cause pump cavitation resulting in greatly increased pump noise and deteriorating performance.

| 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 |



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* Valve plate S

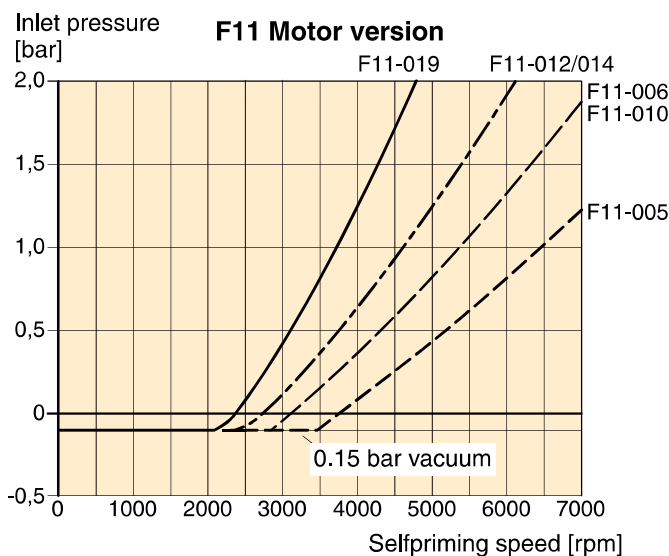


Diagram 1. Min required inlet pressure for Motor.

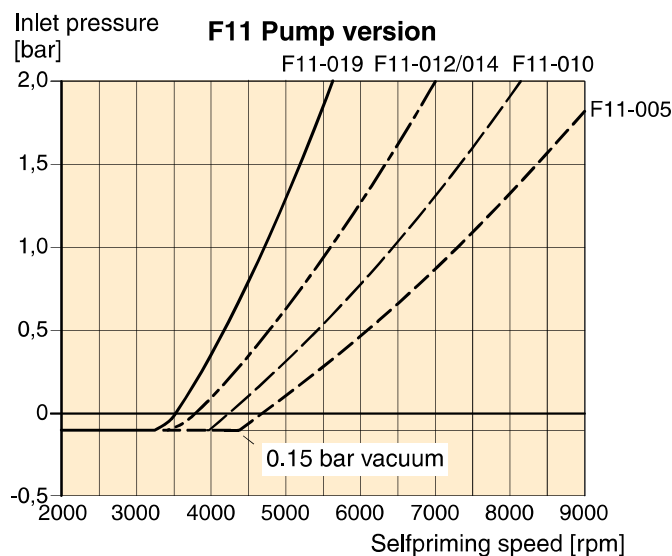
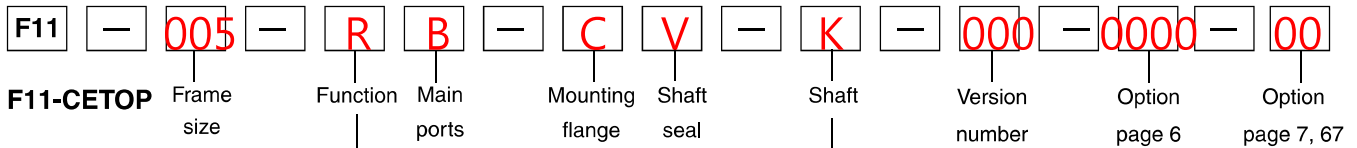


Diagram 2. Min required inlet pressure for Pump.

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.



| Frame size | |
|------------|-----------------------------------|
| Code | Displacem. (cm ³ /rev) |
| 005 | 4.9 |
| 006 | 6.0 |
| 010 | 9.8 |
| 012 | 12.5 |
| 014 | 14.3 |
| 019 | 19.0 |

Version number
 (assigned for special versions)

| Frame size | | 5 | 6 | 10 | 12 | 14 | 19 |
|------------|--|---|-----|-----|-----|-----|-----|
| Code | Option | | | | | | |
| 0000 | Standard | x | 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 | | 5 | 6 | 10 | 12 | 14 | 19 |
|------------|-----------------------|-----|---|-----|-----|-----|-----|
| Code | Function | | | | | | |
| M | Motor | x | x | x | - | - | x |
| Q | Motor, low noise | x | - | x | x | x | x |
| S | Motor, high speed | - | - | (x) | (x) | (x) | (x) |
| H | Motor, high pressure | (x) | - | (x) | - | - | (x) |
| R | Pump, clockwise rot'n | (x) | - | (x) | (x) | (x) | (x) |
| L | Pump, counter clockw. | (x) | - | (x) | (x) | (x) | (x) |

For other versions, contact Parker Hannifin

| Frame size | | 5 | 6 | 10 | 12 | 14 | 19 |
|------------|-----------------|-----|-----|-----|-----|-----|-----|
| Code | Main ports | | | | | | |
| B | BSP threads | x | x | x | x | x | x |
| U | SAE, UN threads | (x) | (x) | (x) | (x) | (x) | (x) |

| Frame size | | 5 | 6 | 10 | 12 | 14 | 19 |
|------------|------------------|-----|-----|-----|-----|-----|----|
| Code | Shaft* | | | | | | |
| K | Metric key | x | x | x | x | x | x |
| J | Metric key | (x) | (x) | (x) | (x) | - | - |
| P | Metric key | - | - | - | - | (x) | - |
| A | Spline, DIN 5480 | - | (x) | (x) | (x) | - | - |
| D | Spline, DIN 5480 | x | x | x | x | x | x |
| S | Spline, SAE | (x) | - | - | - | - | - |
| V | Tapered shaft | - | (x) | (x) | (x) | (x) | - |

*See also dimensional drawings on pages 15-23.

| Frame size | | 5 | 6 | 10 | 12 | 14 | 19 |
|------------|-----------------|---|---|----|----|----|----|
| Code | Mounting flange | | | | | | |
| C | CETOP flange | x | x | x | x | x | x |

| Frame size | | 5 | 6 | 10 | 12 | 14 | 19 |
|------------|--------------------------------------|---|---|----|----|----|----|
| Code | Shaft seal | | | | | | |
| V | FPM, high pressure, high temperature | x | x | x | x | x | x |

For other versions, contact Parker Hannifin

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

| Frame size | | 5 | 6 | 10 | 12 | 14 | 19 |
|------------|---|-----|-----|-----|-----|-----|-----|
| Code | Option | | | | | | |
| 00 | Standard | x | 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) | (x) |

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