

VFD120 Series

Variable Priority Flow Dividers

Aimed at mobile and industrial applications the VFD120 can be used for controlling hydraulic motor and cylinder speeds by manually adjusting the flow rate.

Variable priority flow dividers split a single input (P) flow into a priority (REG) flow and an excess or by-pass (BP) flow which can be returned directly to the oil reservoir or used to power a second system. This is possible due to the valve's adaptive pressure compensation characteristics meaning both the priority and by-pass flows can be used to drive separate circuits, even under varying loads. In many instances this dispenses with the need for another pump to operate a second system.

The VFD120 design has also been optimised to reduce energy wastage by minimising the pressure losses across the valve, resulting in a significant reduction in running costs.

Specifications

Maximum Pressure: Up to 420 bar, 6000 psi

Total flow capacity: 120 lpm, 32 gpm

Regulated flow capacity: See Table 2, ordering codes

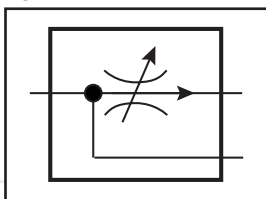
Porting: See Table 3, ordering codes

Material: Steel components in cast Ductile Iron body painted black; aluminium knob

Weight: 2.0 Kg, 4.4 lbs

Mounting: Two bolt - M8 or 5/16"

Symbol



Features

- Clearly marked single-turn hand dial permits fast visual adjustments to pre-determined 'Priority' flow.
- Pressure compensated permitting both 'Priority' and 'By-Pass' to be used simultaneously at varying pressures without affecting the 'Priority' flow rate.
- Anti-tamper locknut option available. Contact Sales Office for more information.
- Reverse flow capable (Depending upon control knob position) Contact Sales office for more information.

Ordering Codes

Typical Code

VFD120 RD 120 J

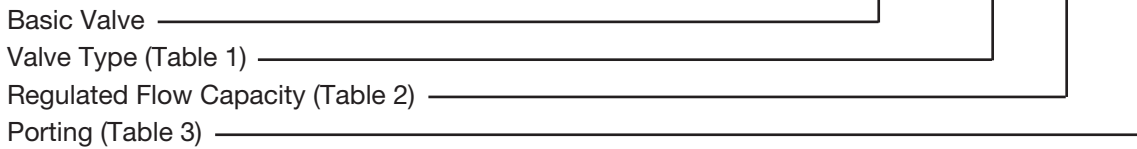


Table 1: Valve Type

| Code | Description |
|------|------------------|
| RD | Standard |
| LN* | Lock Nut Version |

Table 2: Regulated Flow (gpm refers to US gpm)

| Code | Regulated Flow |
|------------------------------|-----------------------|
| 030 | 0 - 11 lpm (3.0 gpm) |
| 050 | 0 - 19 lpm (5.0 gpm) |
| 080 | 0 - 30 lpm (8.0 gpm) |
| 120 | 0 - 45 lpm (12.0 gpm) |
| 160 | 0 - 60 lpm (16.0 gpm) |
| 200 | 0 - 76 lpm (20.0 gpm) |
| 250 | 0 - 95 lpm (25.0 gpm) |
| Use for Locknut version only | |
| X??* | ?? lpm |

* Set to 47 lpm unless otherwise stated.

For flows above 95 lpm, see VFD190 bulletin and contact sales for more information.

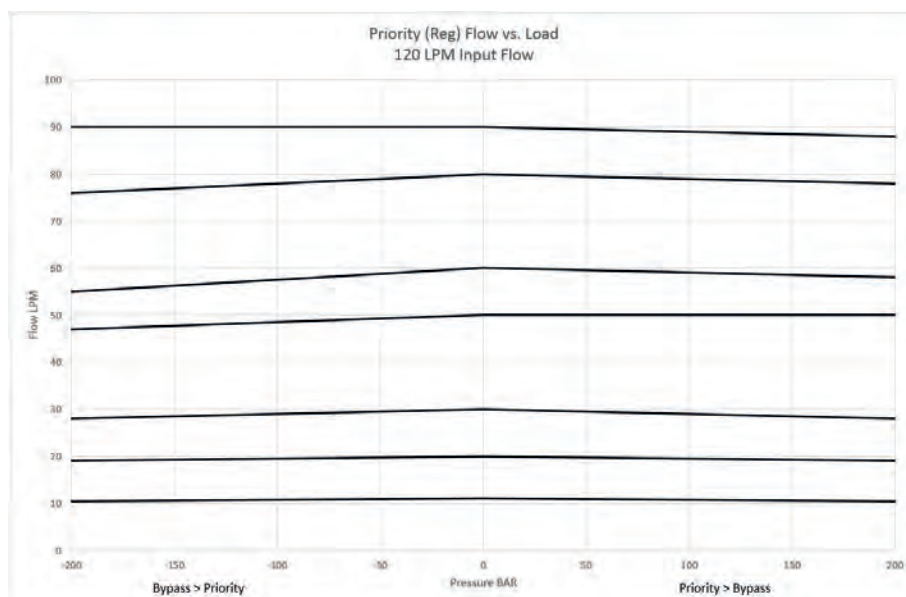
Table 3: Porting*

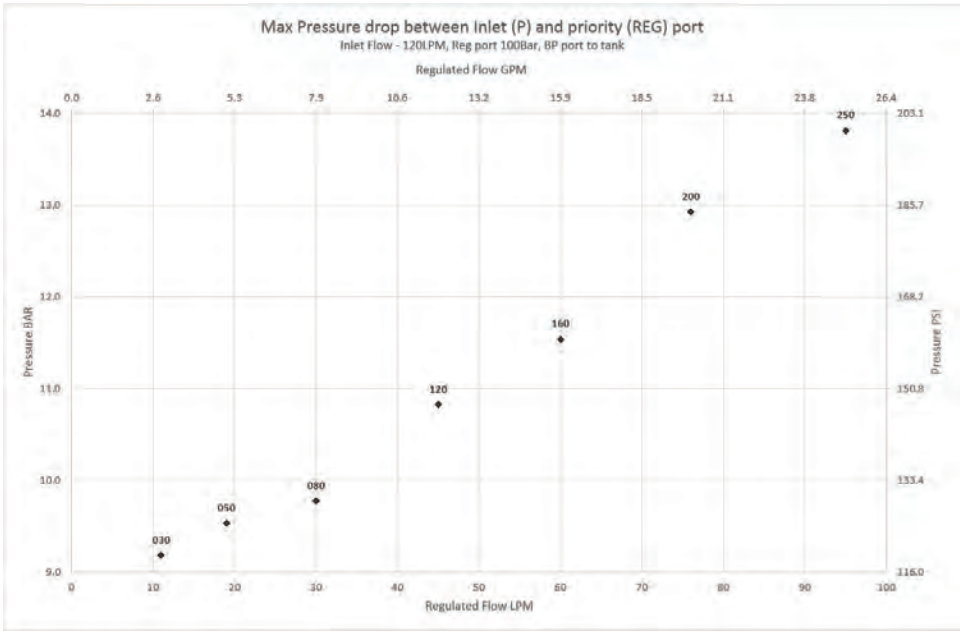
| Code | Port Threads |
|------|---------------------------|
| H | 1/2" BSPP |
| J | 3/4" BSPP |
| G | 1-1/16" -12UN #12 SAE ORB |
| A | 3/4" NPTF *1 |
| M | M22 x 1.5 |

Note: M22 and 1/2" BSPP threads only available in flow codes 030 to 120

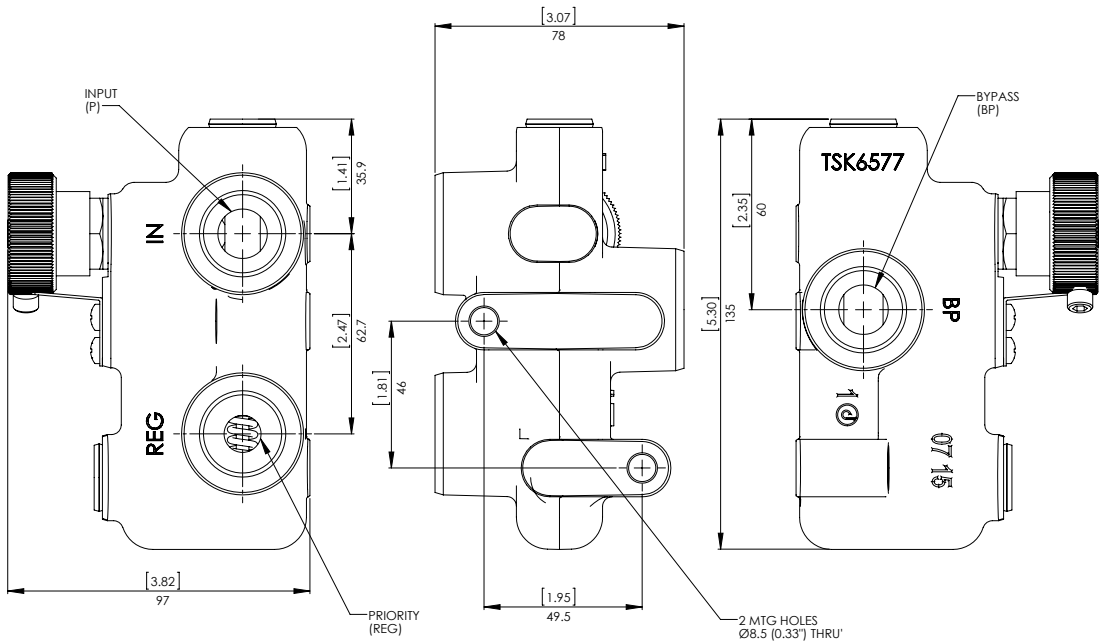
* Other threads available to special order.

*1 All NPTF threads are to ANSI B1.20.3 -1976 Class 1. As stated in the standard it is recommended that "sealing is accomplished by the means of a sealant applied to the thread". NPT fittings may also be used to connect to NPTF ports (also with a sealant applied to the thread)

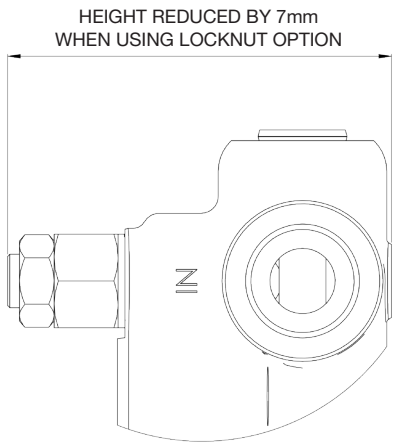




Installation Details
 Dimensions in millimetres



LN (Anti-Tamper Locknut Option)



Change RD to LN when ordering
 State flow setting required otherwise
 factory setting used.