

VFD120 Motor-Driven Series

Variable Priority Flow Divider with Remote Proportional Control.

The VFD120MD remote control flow divider is ideally suited for the agricultural and industrial user seeking a cost-effective method of controlling hydraulic motor speed. The priority flow port gives an output independent of load pressure while the By-Pass port can be used to power a secondary circuit.

Maximum (working) Pressure:

Up to 420 bar, 6000 psi

Total Flow capacity:

120 lpm, 32 gpm

Porting:

See table 2

Material:

Steel components in cast Ductile Iron body.
Electronics mounted on aluminium supports

Weight:

2.75 kg

Power Supply and External Electrical Protection:

11 – 28 Vdc external protection 2 Amp fuse

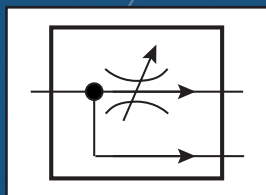
Peak current:

1.5 A

Current when in standby:

< 100 mA

Symbol:



Milwaukee, WI 53235, USA

Tel: +1 (414) 769-6400

sales-us@webtec.com

St. Ives, Cambs. PE27 3LZ, UK

Tel: +44 (0) 1480 397 400

sales-uk@webtec.com

www.webtec.com

Features

- Minimum to maximum priority flow in less than 10 seconds (at full pressure)
- 11 – 28 Vdc supply enables unit to be powered from a vehicle supply
- Choice of remote control options:
 - Potentiometer
 - 0.5 - 5 Vdc
 - 4 - 20 mA loop
- Set and Forget
- No external control box needed. All electronics are self-contained inside the canister.
- Easy setup on-field. All connections made via M12 connector
- Pressure compensated permitting both 'priority' and 'By-Pass' flow to be used simultaneously at varying pressures without affecting the 'priority' flow rate
- Automatic current limiting to prevent overheating and motor overload
- Valve settings immune to power failure
- Certified to IP66 (with cable connected)



Certificate No.8242

VFD120MD-BU-ENG-3497.pdf 01/18
(Issue 2)

Hydraulic measurement and control

Ordering Codes

Typical Code VFD120MD 120 J P

Valve Type (Motor Driven)

Regulated Flow Capacity (Table 1)

Porting (Table 2)

Control (Table 3)

Table 1: Regulated Flow (gpm refers to US gpm)

Code	Regulated Flow
050	0* - 19 lpm (5.0 gpm)
080	0* - 30 lpm (8.0 gpm)
120	0* - 45 lpm (12.0 gpm)
160	0.5* - 60 lpm (16.0 gpm)
200	0.5* - 76 lpm (20.0 gpm)
250	1* - 95 lpm (25.0 gpm)
300	1.5* - 110 lpm (30.0 gpm)

* ± 0.5 lpm

Table 2: Porting¹

Code	Port Threads Inlet Regulated Flow and Excess Flow
H	1/2" BSPP
J	3/4" BSPP
G	1-1/16" -12UN #12 SAE ORB
A	3/4" NPTF ²
M	M22 x 1.5

Note: M22 and 1/2" BSPP threads only available in flow codes 050 to 120

¹ Other threads available to special order

² All NPTF threads are to ANSI B1.20.3 -1976 Class 1.

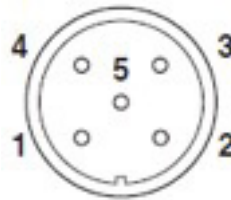
As stated in the standard it is recommended that "sealing is accomplished by the means of a sealant applied to the thread". NPT fittings may also be used to connect to NPTF ports (also with a sealant applied to the thread)

Table 3: Control

Code	Control
P	Potentiometer
5V	0.5 - 5 VDC
mA	4 - 20 mA

Connection Details

Valve Connector Pin out (Plug viewed from top)



Pins

Potentiometer

- 1 = +In
- 2 = Pot +
- 3 = 0 Vdc
- 4 = Pot Wiper
- 5 = Pot -

4 - 20 mA

- 1 = +In
- 2 = N/C
- 3 = 0 Vdc/4-20mA -
- 4 = N/C
- 5 = 4-20mA +

0.5 - 5 VDC

- 1 = +In
- 2 = N/C
- 3 = 0 Vdc
- 4 = 0.5-5 Vdc IN
- 5 = 0.5-5 Vdc GND

N.B. N/C = Do not connect

Connecting cable (5m) with Pot

TSK6638-05

Connecting cable (5m) (4-20mA and 0.5-5 V versions)

TSK6635-05

Consult sales for other lengths

Installation Details

Dimensions in millimetres [inch]

