

Parker Product Datasheet



Parker's proven direct operated proportional DC valves series D1FB (NG06) / D3FB (NG10) are universally applicable, provide high repeatability and low hysteresis. The D1FB*EE with explosion proof solenoids allows the usage in hazardous environments.

PART NUMBER: D1FBE02HC0NMW0
FLOW RATE: 20 L/MIN
PORT CONNECTION: NG06 / CETOP 03
SPOOL POSITION: Operated in position a or b
SOLENOID CONNECTION: Connector as per EN 175301-803
SPOOL TYPE: Overlap
SPOOL DESIGN: Spool/sleeve
SOLENOID OPTION: 9 V / 2.7 A
SPOOL CODE: E02H

PRODUCT OVERVIEW

The direct operated valves D1FB (NG06) and D3FB (NG10) are universally applicable, provide high repeatability and low hysteresis for an improved process accuracy.

D1FB and D3FB represent Parker's experience in proportional DC valve technology. They are suitable for use in applications which require a speed control. Both can be ordered with spool/sleeve design (D*FB*0) for maximum precision as well as spool/body design (D*FB*3) for high nominal flow. The parameters can be saved, changed and duplicated in combination with the digital power amplifier PWD00A-400.

The D1FB*EE series with explosion proof solenoids is based on the standard D1FB series. The

specific solenoid design allows the usage in hazardous environments. The explosion proof class is Ex e mb II T4 Gb for use in zone 1 and 2 (conform to ATEX). Additionally the solenoids have IECEx conformity.

Markets:

- Industrial
- Machine tools
- Rubber & tire processing

Features/Benefits:

- Spool/sleeve and spool/body design - provides versatile applications, for maximum precision or high nominal flow
- Manual override - allows to actuate the valve without current
- Low hysteresis - ensures high repeatability and thus improved process and product accuracy
- High level of dynamics and flows - optimized process speed
- Short delivery time - no storage necessary
- D1FB*EE only: optional coil to permit ambient temperature up to +60 °C, modification XG371

Applications:

- Suitable for various hydraulic applications
- Machine tool
- Tire presses

TECH SPECIFICATIONS

MAXIMUM OPERATING TEMPERATURE	60 °C
DIVISION	Hydraulic Valve Systems Division Europe
MAXIMUM OPERATING PRESSURE	350 bar
MINIMUM OPERATING TEMPERATURE	-20 °C
FOR FLUID TYPE	Hydraulic Oil According to DIN 51524 ... 535
BODY MATERIAL	Cast Iron
PRODUCT SERIES	Proportional DC Valve
SEAL MATERIAL	NBR

WEIGHT	2.2 kg
MAXIMUM FLOW RATE	n/a
MOUNTING TYPE	Subplate
FUNCTION	3-way
ACTUATION TYPE	Proportional
ACTUATION TYPE	Solenoid
OPERATION TYPE	Direct
LEAK RATE	< 50 ml/min
MOUNTING POSITION	Unrestricted
ELECTRONICS TYPE	External
MAXIMUM AMBIENT TEMPERATURE	60 °C
MINIMUM AMBIENT TEMPERATURE	-20 °C
MAXIMUM FLUID TEMPERATURE	60 °C
MINIMUM FLUID TEMPERATURE	-25 °C
MAXIMUM KINEMATIC VISCOSITY	400 cSt
MINIMUM KINEMATIC VISCOSITY	20 cSt
INGRESS PROTECTION RATING	IP65 in accordance with EN 60529
FILTER EFFICIENCY RATING	ISO 4406; 18/16/13
HYSTERESIS	< 4 %
PRESSURE DIFFERENTIAL	5 bar