

Description

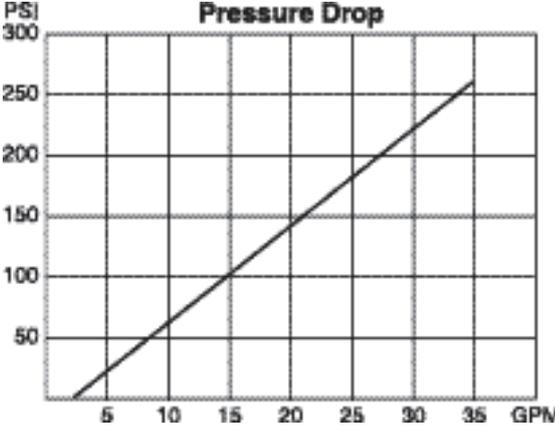
The White Hydraulics flow dividers represent an ingenious use of the patented Roller Stator® gerotor assembly. These highly effective devices use a common housing to supply the input flow to two gerotor assemblies linked by a common drive link. By linking the two gerotor assemblies together, accurate splitting of the flow is assured. These flow dividers use no bearings or rotating seals, eliminating the typical failures in other designs. By using the highly efficient Roller Stator® gerotor elements, high efficiencies are maintained, even at low flows. Because White Hydraulics' flow dividers work at much lower RPMs than most gear dividers, they are also noticeably quieter. These flow dividers are an excellent way to synchronize cylinders or motors. Because these flow dividers tolerate higher output pressure differentials than other designs, they may also be used for pressure intensification by connecting one output to tank.

- o 3,000 psi maximum pressure
- o 2,500 psi maximum pressure differential between outputs

Caution: The flow dividers are not available with internal relief protection. Inline relief protection for the output lines should be provided due to the possibility of encountering pressure intensification if pressure in one outlet line drops dramatically.

Model	Flow Range GPM (lpm)	Dim X in (mm)	Dim Y in. (mm)	Weight lbs. (kg)
FD00101000	2-10 (7.6-38.0)	2.32 (59)	8.69 (221)	34.0 (15,4)
FD00181800	10-30 (38.0-113.7)	2.78 (71)	9.61 (244)	37.4 (17,0)
FD00242400	30-40 (113.7-151.6)	3.03 (77)	10.11 (257)	39.6 (18,0)

Flow divider weights may vary by - 1 lb. (45 kg.)



Port A (Inlet)- 1-1/16-12 O-ring
Ports B & C (outlets)- 1-1/16-12 O-ring

internal Drain

The internal drain option is available on all HB, DR, and DT Series motors. Typically, a separate drain line must be installed to direct case leakage of the motor back to the reservoir when using a HB, DR, or DT Series motor. However, the internal drain option eliminates the need for a separate drain line through the installation of two check valves in the motor endcover, thereby simplifying the plumbing requirements for the motor.

These two check valves connect the case area of the motor to each inlet port of the endcover. During normal motor operation, pressure in the input and return lines of the motor close the check valves. However, when the pressure in the case of the motor is greater than that of the return line, the check valve between the case and low pressure line opens allowing the case leakage to flow into the return line. Since the operation of the check valves is dependent upon a pressure differential, the internal drain option operates in either direction of motor rotation.

Although this option can simplify many motor installations, precautions must be taken to insure that return line pressure remains below allowable levels (see table at right) to insure proper motor operation and life. If return line pressure is higher than allowable, or experiences pressure spikes, this pressure may feed back into the motor, possibly causing catastrophic seal failure. Installing motors with internal drains in series is not recommended unless overall pressure drop over all motors is below the maximum allowable backpressure as listed in the charts above. If in doubt, contact your authorized White Hydraulics representative.

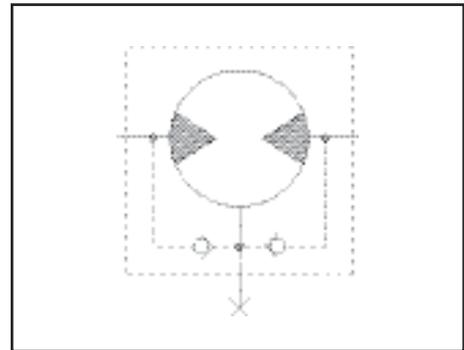
Valve Cavity

The valve cavity option is available in every motor series and provides a cost effective way to incorporate a variety of valve cartridges into both simple and complex circuits. The valve cavity is a standard 10 series 2-way cavity that accepts numerous cartridge valves, including overrunning check valve cartridges, relief cartridges, flow control valves, and high pressure shuttle valves.

Installation of a relief cartridge into the cavity provides an extra margin of safety for applications encountering frequent pressure spikes. Relief cartridges in 1,000, 2,000, and 3,000 psi settings may also be factory installed by specifying R1, R2, or R3 as the option code.

For basic systems with fixed displacement pumps, either manual or motorized flow control valves may be installed into the valve cavity to provide a simple method for controlling motor speed. It is also possible to incorporate the speed sensor option and a programmable logic controller with a motorized flow control valve to create a closed loop, fully automated speed control system.

For motors with internal brakes, a shuttle valve cartridge may be installed into the cavity to provide a simple, fully integrated method for supplying release pressure to the motor. To discuss other alternatives for the valve cavity option, contact an authorized White Hydraulics distributor.



MAXIMUM ALLOWABLE BACK PRESSURE

Series	Continuous PSI (Bar)	Intermittent PSI (Bar)
HB	1,000 (69)	1,500 (103)
DR	1,000 (69)	1,500 (103)
DT	300 (21)	500 (34)
Motor/Brakes	500 (34)	500 (34)

