PRODUCT DESCRIPTION

DESCRIPTION The WM305D1 is a floor-mounted single treadle/dual valve that is engineered for split system brake applications. The treadle features an adjustment which permits proportional delivery between split braking systems. The WM305D1 is equipped with a debris displacer to prevent foreign material from entering the treadle mechanism and interfering with pedal movement.

OPERATION The WM305D1 valve incorporates two compensating pressure regulators that are mounted to a common plate. To assure split system protection, each regulator has independent supply and delivery ports. By adjusting the radius link on the treadle’s walking beam, the delivery ratio between the two regulators can be modified for a specific application. The WM305D1 is shipped from the factory with this delivery ratio preset at 1 to 1.

APPLICATION Used in both on and off-highway applications, the WM305D1 valve is installed in split air brake systems that require proportional delivery. This single treadle/dual valve is recognized for its modulation characteristics and may be used in FMVSS-121 applications.

TYPICAL INSTALLATION

EXTERNAL CONFIGURATION

SINGLE TREADLE/DUAL VALVE

FUNCTIONAL DIAGRAM

PEDAL FORCE

SUPPLY

PEDAL APPLIED

EXHAUST

PEDAL RELEASED

I.S.O. SYMBOL
PORT SIZE .................. 1/2-14 NPTF
MAXIMUM OPERATING PRESSURE ........ 150 PSI (1034,2 kPa)
OPERATING TEMPERATURE* ........ -20°F to 200°F (-28,9°C to 93,3°C)
FLOW RATING (per valve) ........ 90 SCFM @ 100 PSI (2,6 m³/min @ 690 kPa)
ADJUSTMENT RANGE ................ From 2:1 to 1:1 to 1:2
MOUNTING ................ Through 5.00 in. (127 mm) Diameter Hole in Floorboards
MOUNTING ATTITUDE ................. Optional
MATERIALS: Treadle & Bracket ........ Cast Aluminum Alloy
Valve Castings ................ Die Cast Aluminum & Zinc Alloys
Radius Link .................. Ductile Iron (Hardened)
Walking Beam .................. Investment Cast Steel Alloy
Diaphragm .................... Fabric-Reinforced Buna N
Dust Seals .................... Chloroprene Rubber
Debris Displacer ................ Polyurethane Rubber
O-Ring & U-Cup Seals ............ Buna N

NET WEIGHT: ..................... 6.50 lb. (3.0 kg)

*For continuous operation beyond this range, contact factory.

TO ORDER, SPECIFY
WM305D1
Model Number
PART NUMBER 118266