



F101829

Data Sheet

Motor Mount HICs (Hydraulic Integrated Circuits)

As Comatrol, a member of the Sauer-Danfoss Group, we engineer, manufacture and supply screw-in Cartridge Valves and Hydraulic Integrated Circuits (HIC) to market-leading quality levels. We work closely with our customers around the world to deliver optimal machine control solutions based on their specific needs.

Off-highway mobile machinery OEMs and distributors can choose from four types of ready-to-mount hydraulic integrated circuits (HICs), designed to fit seven popular Sauer-Danfoss low speed, high torque (LSHT) motors.

The new HICs work in combination with DH, DS, OMP, OMR, OMH, OMS and OMT motors.

Motor mount HICs are appropriate for a number of applications, including swing drives, winch drives, slew drives (mini-excavators), vehicle propulsion, auger drives, conveyor drives and on/off fan applications.

For more information on Comatrol cartridge valves and HICs, refer to *Cartridge Valves Technical Information 520L0588*. See the motor mount valves section for detailed information on motor mount HICs.

Features:

- Direct mount to motor provides optimum control at the load. Pre-work is done to ensure proper assembly and mounting to motor.
- Mounting bolts and O-rings are included.
- Improve system plumbing, packaging, and installed cost on your machine.
- Pre-testing to NFPA test standards ensures robustness on your application.
- Designed to match the technical capabilities of the motor

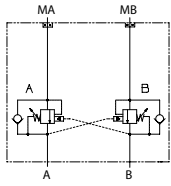
Functions:

- Counterbalance (overcenter)
 - Prevents excessive motor drift, holds the load, limits overrun of load.
 - Provides a smooth cushioned stop when the control valve suddenly closes.
 - Single or dual valves are available on A or B port.
 - Optional shuttle valve is available for load-sensing feedback, operating an unloading valve, or releasing a brake.
- Cross-port relief
 - Provides the work ports with full-flow, by-pass relief protection controlling the maximum motor torque.
 - Single or dual valves are available on A or B port.
 - Optional shuttle valve is available for load-sensing feedback, operating an unloading valve, or releasing a brake.
- Bypass solenoid
 - Uses electric signal to enable/disable motor rotation independent of system hydraulics. A normally closed solenoid valve bypasses flow from B to A when energized.
 - Drain port connects to port A to simplify circuit plumbing.
 - PLUS+1™ compliant and optional robust coil are available.
- Dual shock valve with anti-cavitation checks
 - Trims the maximum motor torque by absorbing pressure spikes (shock effects) at the work ports.
 - Anti-cavitation feature allows additional flow to the motor through the drain port when the motor overruns the pump.
 - PVL (shock valves from PVG) and ductile iron manifolds allow for a compact design.

Local Address:

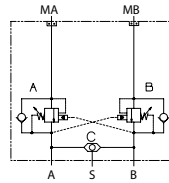
Schematics

Counterbalance valve (hydraulic vent)*



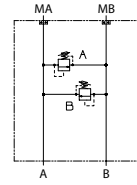
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Counterbalance valve (hydraulic vent) with shuttle*



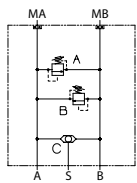
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Cross port relief*



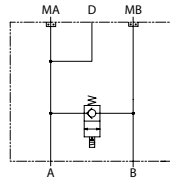
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Cross-port relief with shuttle*



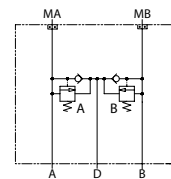
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Bypass solenoid with drain



P104 750

Dual shock valve with anti-cavitation (PVLV)



P104 763

* Also available in single valve on A or B port

Technical Data

| Motor | DH | DS | OMP/OMR | OMH | OMS | OMT |
|--|-------------------------|--|------------------------------|--------------------------|--------------------------|------------------------|
| Maximum continuous flow l/min [US gal/min] | 60 [16] | 60 [16] | 60 [16] | 75 [20] | 75 [20] | 125 [33] |
| Port locations | | Same as DH, but requires adapter plate | | | | |
| Counterbalance valve (hydraulic vent) | MM-DH-00-DCB10-HV-... | MM-DS-00-DCB10-HV-... | MM-OMP/OMR-00-DCB10-HV-... | MM-OMH-00-DCP441-1-... | MM-OMS-00-DCP441-1-... | MM-OMT-00-DCP441-1-... |
| Counterbalance valve (hydraulic vent) w/shuttle | MM-DH-LS-DCB10-HV-... | MM-DS-LS-DCB10-HV-... | MM-OMP/OMR-LS-DCB10-HV-... | MM-OMH-LS-DCP441-1-... | MM-OMS-LS-DCP441-1-... | MM-OMT-LS-DCP441-1-... |
| Cross-port relief | MM-DH-00-DVME06-... | MM-DS-00-DVME06-... | MM-OMP/OMR-00-DVME06-... | MM-OMH-00-DCP211-2-... | MM-OMS-00-DCP211-2-... | MM-OMT-00-DCP211-2-... |
| Cross-port relief w/shuttle | MM-DH-LS-DVME06-... | MM-DS-LS-DVME06-... | MM-OMP/OMR-LS-DVME06-... | MM-OMH-LS-DCP211-2-... | MM-OMS-LS-DCP211-2-... | MM-OMT-LS-DCP211-2-... |
| Bypass solenoid w/drain | MM-DH-00-BSVP10-NCR-... | MM-DS-00-BSVP10-NCR-... | MM-OMP/OMR-00-BSVP10-NCR-... | MM-OMH-00-BSVP10-NCR-... | MM-OMS-00-BSVP10-NCR-... | MM-OMT-00-BCP502-3-... |
| Dual shock valve w/anti-cavitation (PVLV) | MM-DH-00-DPVLP-... | MM-DS-00-DPVLP-... | MM-OMP/OMR-00-DPVLP-... | MM-OMH-00-DPVLP-... | MM-OMS-00-DPVLP-... | MM-OMT-00-DPVLP-... |