xtremeDB

DATA PANEL
A Murrelektronik Company

| xtremeDB® PVG Valve Driver

Put PVG valves on the CANBUS with xtremeDB®, driving them with the ratiometric signal they were designed for while using NO controller I/O pins and eliminating the need for expensive or complicated CAN coils.

This xtremeDB® block has the same robust form factor as the rest of the blocks in the family; the 10 ports consist of 2 CAN ports and 8 ports available for PVEs. The connections are made simple by using a standard DEUTSCH 4-pin connector.

xtremeDB® Advantages:

Networking: Easily integrate one of the best proportional valves on the market into a CAN-controlled machine with less effort, fewer connections, and better reliability.

Will work with any J1939 controller, even if it doesn't have ratiometric outputs. Now PVG can be integrated with any control system.

Greatly reduces the I/O load on controllers since a CAN line is all that is required to connect the controller to the xtremeDB. The xtremeDB then goees on to control up to 8 valve sections, which can be all ratiometric or a combination of proportional and bang-bang to include up to 6 PVEO's. Common strategies to reduce the I/O count on the controller include not connecting the error pin and splicing the power and ground connections. These prove problematic, as important fault messages go undetected and splicing harnesses adds points of failure, as well as cost and complexity. A typical 8 section valve installation would need 32 connection points, but with the xtremeDB, that same valve bank could be connected instead with just 8 cordsets in a matter of seconds, without *any* I/O used from the controller.

Troubleshooting: The 20 on-board LED's make it much easier for non-controls service people to "see" the circuit and quickly identify the potential source of system faults.

Connectivity problems are even more prevalent on low power signals like the PVE control signals. By eliminating splices and terminal strips with the use of quality cordsets like the Murrelektronik MDC cables, system downtime due to poor connections is greatly reduced.

Installation: Wiring the valve is as fast as plugging one end of a cable into a PVE and the other end into a port on the xtremeDB.

Safety: A mis-wired or poor connection can create unintended movement on a machine. Using components made in a controlled environment reduces the risk of improper assembly.

| FEATURES

- Drives PVE's with their native ratiometric signal; no need to create an artificial ratiometric signal with PWM
- Will drive up to 8 proportional coils (PVEA, PVEH, PVES) or 6 on/off (PVEO)
- Allows for CAN control of any performance level of PVE
- Compatible with ALL J1939 controllers
- Preserves PVE error monitoring via broadcasting on the CANBUS
- Reduces points of failure with pluggable connections
- Increases the speed of installation

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| SPECIFICATIONS

Description	PVG Valve Driver
Article Number	DP-34044-7-000
Housing	Molded Plastic
Dimensions (l x W x h)	3.8” x 10.4” x 1.3”
Installation	0.2” x 0.75” through hole, M3 or #10
Connections Operating Voltage and CAN Bus Inputs/Outputs CAN In/Out	 18-pole DT16-18SA Socket 8 x DT06-4S 2 x DT06-4S
Weight	1.5 lb
Operating Voltage	8-32V DC
Switching Current	(8) 3A, (8) 100mA
Communication Interface and Baud Rate	2 non-isolated J1939 ports (250kb and 500kb)
Node ID	0-15
Total Outputs	16
Output Type	14 digital positive, 8 ratiometric
Input	8 Digital Positive/Negative (>8.0 V DC / <0.3V DC)
Output Protection	Short Circuit and Overcurrent, Integrated fly-back diode
Operating Temperature	-40 - 80°C
Storage Temperature	-45 - 85°C
Protection	IP67

If you need PWM outputs to drive PVHC operators or other proportional valves, please refer to our other xtremeDB (DP-34044-1-000, DP-34044-3-000, or DP-34044-4-000). We also have solutions for digital outputs as well as analog and digital inputs. See www.datapanel.com/xtremeDB for more informaiton.

MURRELEKTRONIK MDC

| PLUG to PLUG

Poles	Connector	Cable Type	Art. Number
4	MDC06-4S to MDC06-4S	Black PUR	7072-77091-569xxxx
	MDC06-4S to MDC06-4S CAN Connection Cable	Violet PUR	7072-77095-804xxxx

xxxx = Length in Meters (m)

0150 = 1.5m 0300 = 3m 0500 = 5m 1000 = 10m