

# Danfoss Adapter Card

## Part# DFA-01/02

### Description

The DFA-01/02 provides **direct from handle to valve proportional control**™ for the operation of industry-standard ratio metric proportional valves. You can now use Sure Grip Controls' non-contact proportional modules or JSP joysticks to directly control proportional valves such as the Sauer Danfoss™ PVG 120 and PVG 32 series proportional valves.

The DFA-01/02 is installed as an in-line module on a Sure Grip control handle or joystick wiring harness. The operator will have bi-directional proportional control of Danfoss™ proportional valves using a proportional rocker, two proportional flex pushbuttons or a JSP series joystick. (the DFA-01 version mates with our VV-01 modules, the DFA-02 version mates with the JSP joystick.)

The DFA-01/02 provides the drive signal required by the valve, as well as a high-power valve enable signal whenever the drive signal is off neutral.

The heart of the DFA-01/02 is a microcomputer which constantly monitors the machine's operating voltage, generates the proportional valve drive signals and reads the input devices. Built-in software safety features will cause a safe shut-down of the valve should there be a failure in the proportional input devices, or in the wiring between the handle and the module, or if there is a computer malfunction. The hardware is designed to withstand potentially damaging electrical surges (common on mobile hydraulic machinery) and to survive wiring faults and installation errors.

The DFA-01/02 also includes factory programmed ramping to help reduce pressure spikes in the hydraulic system.

\* Danfoss is a registered trademark of Danfoss A/S. There is no endorsement of this product by Sauer Danfoss.

### Features

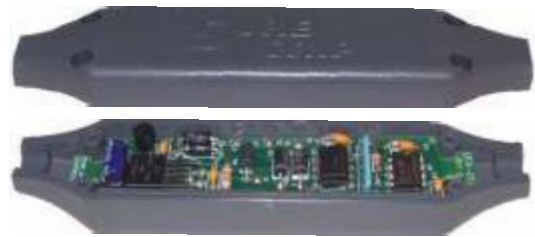
Convert signal from two PC-V V modules or our JSP joystick to: PVG Danfoss Valves

- + Installed in-line with the handle wire harness
- + No extra wiring
- + Electrical protection built in
- + Self calibration for center voltage
- + Switched enable output when off neutral
- + On-board 5 VDC power supply for PC-V V modules or JSP joystick
- + Operates on 12 or 24 VDC machines

### Specifications

Operating voltage	10-28 VDC
Wire terminals	solder post
Ramp rate (factory)	300 ms
Enable output	3 amps max.
Signal output (neutral)	50% machine voltage +/- 2%
(max)	80% machine voltage
(min)	20% machine voltage
Case size	4" x 1" x 1"
Operating temperature	- 40 to 70 Celsius

### Adapter installed on harness



**DFA-01/02 adapter card and housing**