

## DCM-2 (DIGITAL CONTROL MODULE) P/N 22-5012-59

The DCM-2 is Beck's second generation Digital Control Module. As with the original DCM, it provides on-board, precision, modulating control of Beck drives. It is completely interchangeable with the original, but is based on a faster, more powerful microprocessor. As such, the DCM-2 maintains all the original's features while adding a variety of new features and functions.

As with the original DCM, the new DCM-2 ...

- Directly accepts 4-20 mA or 1-5 V Demand signals.
- Operates at temperatures -40°F to 185°F.
- Provides repeatable positioning control to 0.1% of span.

The DCM-2 also retains the many features that microprocessor-based technology introduced in the original DCM. These features include:

- Fast, easy setup and calibration without mechanical adjustments.
- Simplified troubleshooting with comprehensive diagnostics available.
- Compatibility with asset management systems.
- HART communications capability.
- Drive diagnostics and operating statistics via HART or serial interface.
- Local pushbutton/LED interface for quick setup and error checking without the need for external interfaces or devices.
- Drive configuration and calibration are restorable to as-built factory setting.
- Drive position feedback, temperature and optional torque/thrust output are available digitally via HART protocol.
- Configurable drive stall protection.
- Optional live torque/thrust measurement.

In addition, the DCM-2 adds the following new features not found in the original:

- **Advanced positioning algorithm** for even more precise drive control.
- **Configurable 20-segment Demand signal characterizer** allows the user to fit their own curve profile.
- **Feedback inverse characterization** to match the position feedback to characterized Demand, if desired.
- **10-segment peak torque profile** for drive output trending and final control element diagnostics.



- **Alarm masking for terminal "E"** allows the user to pick and choose what status condition or conditions provide an external alarm.
- **Configurable alarm power mode at Terminal "E"** allows the user to select normally energized or de-energized alarming.
- **Calibration/configuration in engineering units** makes it possible to clone and save calibration information.

The DCM-2 is a direct replacement for the original DCM. All control option 9 drives (Groups 11, 14, 29 & 42) built after December 1, 2006 are equipped with the DCM-2. It has identical overall dimensions and utilizes the same mounting points and connections as the original DCM; therefore, it requires no mechanical or electrical drive modifications. In addition to being the standard board in all new factory-built Beck drives, the DCM-2 is a direct, plug-in replacement for the original DCM in older drives.

To utilize the new features and functions of the DCM-2 via a HART interface, a new Beck Device Description (DD) is required. Although the DCM-2 can be set to interface with older DD versions, please remember to obtain the new DD for the best results. Contact Beck for more information.

Original DCM P/N	Replace w/ DCM-2 P/N
22-5009-05	22-5012-59
22-5009-09	
22-5009-35	
22-5009-39	
22-5009-55	
22-5009-59	

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For complete information regarding the DCM-2 features and capabilities, obtaining the new Device Description and for ordering information, please contact a Beck Sales Engineer at 215-968-4600 (Newtown, PA), 303-713-9302 (Denver, CO) or 360-253-5315 (Vancouver, WA).



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