# ABB motion control products MicroFlex e150 Resolver Adapter

The MicroFlex e150 resolver adapter provides an in-cable solution for resolver feedback support for MicroFlex e150 servo drives.

The resolver adapter can be used with any standard MicroFlex e150 in combination with our servo motor ranges to address applications where the benefits of resolvers are favoured.

Resolvers typically offer higher temperature tolerance and resilience in high vibration and shock application conditions.



# **Highlights**

- In-line connector housing
- Compact size
- Easy connect with screw terminals
- Compatible with MicroFlex e150

# **Applications**

- Cutting and forming
- Packaging (form-fill-seal, labelling etc.)
- Laser-jet, water-jet, textile cutting machines

# Simple in-cable solution

The MicroFlex e150 resolver adapter provides a simple and convenient solution for support of resolver feedback within the D-Shell housing itself.

# Robust feedback choice

Resolver feedback offers a proven resilient solution in applications where temperature, vibration and shock are concerns for more traditional feedback devices. It is also one of the most cost optimal solutions for a drive and motor package.

# Flexible choice of feedback options with MicroFlex e150

The resolver adapter connects directly to the MicroFlex e150 universal interface, converting resolver information into a 12 bit digital encoder, complete with marker pulse for functions such as homing an axis.

MicroFlex e150 features a universal encoder interface, supporting many types of serial encoders, both single-turn and mutli-turn absolute, as well as traditional incremental encoders with Halls and 1 V sine cosine encoders.







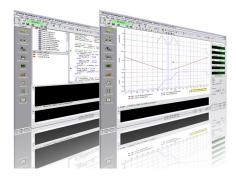






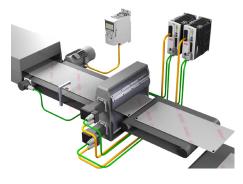
# Real-time control of multi-axis system with EtherCAT<sup>®</sup>

EtherCAT<sup>®</sup> connectivity offers a realtime drive control interface for advanced multi-axis systems. The drive is an ideal partner to the ABB AC500 PLC product line, providing an industry standard solution with IEC 61131 programming and PLCopen motion functions.



# Advanced motion with simple and easy commissioning

Mint WorkBench PC tool offers fast and simple setup, commissioning and monitoring in a single software tool. In addition to a step by step configuration wizard, oscilloscope view and parameter handling, it also includes motion programming. For fast help and support the tool can package all data as a single file, which can be sent by email.



# Motion technology fully integrated

The drive can be used as a stand alone single axis machine controller. Mint programming and Ethernet connectivity combined with on board I/O and HMI connectivity is offering a cost competitive solution in typical motion applications.

### Resolver adapter

- In-line cable solution
- Compatible with MicroFlex e150
- Converts resolver to encoder
- Marker pulse generated once per revolution

### **Resolver nominal specification**

- 2:1 Transformation ratio
- Single speed
- Excitation frequency 10 kHz
- Speed range 0 10,000 rpm

## Encoder output emulation

- Increment encoder ABZ with compliments
- 12 bit per turn of a single speed resolver
- 1 Marker pulse per revolution



# MicroFlex e150 - EtherCAT<sup>®</sup> real-time technology

- EtherCAT<sup>®</sup> interface 2 port with LED network activity
- EtherNet/IP™ and Modbus TCP
- TCP/IP mode of operation (non real-time) with ActiveX support or RAW Ethernet

#### AC servo - 1- or 3-phase

- 105 to 250 V AC 50/60Hz
- AC servo motors, rotary and linear
- 3, 6 and 9 A rms with 200% for 3 s
- 2.5, 5.25 and 7.5 A rms with 300% for 3 s
- One IP20 frame size: 180 x 80 x 157 mm (H x W x D)/1.5 kg
- Footprint EMC filter to IEC 61800-3 category 2

# Universal encoder

- Support for incremental + Halls, 1 V SinCos, SSI, BiSS, EnDat 2.1/2.2
- Dual encoder function supports one incremental (no Halls) and one serial encoder simultaneously for 'Dual loop' or line shaft encoder functions
- Standard 15-pin connection, software selected operation

