

# MicroFlex e190 servo drive

One drive. Many possibilities.



MicroFlex e190 is a compact high-performance servo drive, reimagined for future machine designs.

MicroFlex e190 embraces all major motor feedback types, together with soft selectable Ethernet technologies. Its versatility provides a migration path for existing designs and future network-centric automation solutions.

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01 MicroFlex e190  
servo drive

MicroFlex e190 is designed to carry today's control designs into the future. By supporting PTO and analog control, it provides flexible options for existing or legacy applications as well as a migration platform to Ethernet based control and 'IoTSP ready' machine designs.

MicroFlex e190 breaks the mould of similar products by rethinking usability throughout the product life cycle. MicroFlex e190 introduces a simpler approach to selection, installation, and operation.

When matched with e-Series servo motors MicroFlex e190 provides highly dynamic acceleration through 300% peak torque, with high resolution feedback as standard for absolute performance and productivity.

### Small improvements that all add up

MicroFlex e190 adds numerous improvements to the MicroFlex series, such as side by side flush mounting and a removable memory unit to prepare drive settings off-site or move settings from one drive to another. MicroFlex e190 supports all major Ethernet protocols (software selectable).

With features such as a second encoder input, an encoder output, and optional motion programming, applications such as electronic gearing, CAM, flying shear, labelling and registration control can easily be implemented without the use of an external controller, making it far more versatile than other drives in its class.



2 x keyhole mount for ease of installation

Memory unit for "personality" storage including any optional motion programming

AC power 1 ph or 3 ph  
105 - 264 V AC 50/60 Hz

2 x Ethernet connections with LED indicators for EtherCAT® or POWERLINK

DC bus connection

2 x LED Network status/Error  
7 segment status display

Braking resistor connection

2 x hex switches for node ID/protocol selection

Separate motor power for ease of wiring and isolation during startup/service

2 x switches for default IP and recovery mode

PE connection and shield bonding area

TCP/IP configuration port and connection for EtherNet/IP™, Modbus TCP, or PROFINET I/O

24 V input (backup)

Digital and analog I/O including 2 x latch inputs for position registration (1 μs latency or better depending on feedback type)  
- 4 x DI, 3 x DO, 1 x AI, 1 x AO

Separate STO PLe SIL 3 with daisy chain and pulse tolerance allows easy removal of STO leaving main I/O in place for system testing

Universal encoder interface supports: Incremental + Halls, 1 V SinCos, SSI, BiSS, EnDat 2.1/2.2, Smart Inc/Smart Abs and Hiperface. 5 V/8 V selectable encoder supply. Resolver support via adapter OPT-MF-201

Simulated encoder output/2nd encoder input for electronic gearing or dual loop feedback operation

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