Application Spotlight

Reduce Installation Time and Cost for End-of-Stroke Sensors

Balluff's V-Twin® Magnetic Field Sensors use magneto-resistive technology to provide reliable, accurate, wear-free, and non-contact end-of-stroke position detection for pneumatic cylinders.

- Two Sensors One Connector, use one four-conductor cable with either M8 or M12 connector
- Available in multiple mounting configurations
- Save installation time, installation material, and sensor costs
- Overvoltage, overload, and reverse polarity protected
- High noise immunity and no double switch points
- Lifetime warranty

Before



One V-Twin Sensor Used in Place of Two Inductive Sensors







Balluff's V-Twin magnetic field sensors provide two sensors with a single connector. Realize substantial savings on installation cost with only one four conductor cable, less installation hardware, and fewer terminations. The new BMF V-Twin is available in several sizes and form factors to cover applications from grippers and short stroke cylinders to C-Slot, T-Slot, round, and tie rod cylinders—in some cases without requiring additional mounting brackets.

For pneumatic cylinder applications there are several solutions to detecting end of stroke. One common practice is to use two proximity switches to verify when a cylinder is extended or retracted. Balluff's V-Twin solution offers an alternative to this standard practice which can cut installation and material costs in half. In some applications where two separate magnetic field sensors are already used for end of stroke detection, the V-Twin can decrease installation and material costs up to 30% or more.

When a large number of cylinder switches are installed in close proximity, multiple interface blocks (MIBs) are used to reduce the number of wires that run back to the control panel. With Balluff's V-Twin, you can double the number of cylinders switches connected to an MIB or reduce the size of the MIB, thus saving additional costs per input point.

Ordering Code	Part Number	Features
BMF001R	BMF 103K-PS-C-2A-SA95-S75-00,3	Optimized for short stroke cylinders, compact size, perpendicular mounting, interchangeable brackets
BMF0005	BMF 204K-PS-C-2A-SA95-S4-00,3	Bracketless, slide-in design for C-Slot i.e. Festo Slot 10
BMF0006	BMF 204K-PS-C-2A-SA95-S75-00,3	
BMF00A4	BMF 214K-PS-C-2A-SA95-S4-00,3	Bracketless, slide-in design for C-Slot i.e. 4 mm SMC
BMF00A5	BMF 214K-PS-C-2A-SA95-S75-00,3	
BMF004E	BMF 303K-PS-C-2A-SA95-S4-00,3	Miniature type for flush mounting, interchangeable brackets
BMF004F	BMF 303K-PS-C-2A-SA95-S75-00,3	
BMF005Z	BMF 305K-PS-C-2-SA95-S4-00,3	Universal sensor designed for most applications with a wide variety of mounting options
BMF0060	BMF 305K-PS-C-2-SA95-S75-00,3	
BMF0076	BMF 307K-PS-C-2-SA95-S4-00,3	Bracketless, slide-in design for flush mounting in T-Slots
BMF0077	BMF 307K-PS-C-2-SA95-S75-00,3	
BMF0084	BMF 315M-PS-W-2-SA95-S4-00,3	Bracketless, drop-in design for mounting in T-Slots - Weld Field Immune

S4 = M12 connector, S75 = M8 connector