

Flush-mount cylinder sensors for weld-field detection



Only T-slot sensors with stable signal, independent of the welding duration time

- Flush in the T-slot, no protruding structures
- With non-stick coating on the M8 or M12 connectors
- PTFE conduit on the cable
- Convenient: Easy fit "drop from the top" into a slot
- A short, 25 mm sensor for different cylinder profiles



Intelligent cylinder sensor

The sensor detects the alternating field of the weld current and holds the output signal during this time, independently of the welding duration time. Then the sensor resumes normal switching operation (piston or no piston).

GMR cell

The GMR cell used works as a semiconductor element according to the magnetoresistive principle and reacts to magnetic fields of the permanent magnet in the pneumatic cylinder.

Adapters for almost any cylinder profile

Thanks to the wide selection of optional adapters the T-slot sensor can be fixed to almost any clean-line, tie rod, integrated profile or trapezoidal slot cylinder.




Online configuration for ifm cylinder sensors:
www.ifm.com/gb/cylinder-sensors

Type / Dimensions [mm]	Electrical design	f [Hz]	Protection rating/ protection class	Ambient temperature [°C]	I _{load} [mA]	Order no.
Connection cable 0.3 m with M8 connector rotatable · 3-wire · PUR						
25 x 5 x 5.1	DC PNP	> 3000	IP 67, III	-25...85	100	MK5215
Connection cable 0.3 m with M12 connector rotatable · 3-wire · PUR						
25 x 5 x 5.1	DC PNP	> 3000	IP 67, III	-25...85	100	MK5214


Accessories


Type	Description	Order no.
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Trapezoidal slot cylinder


	Adapters, aluminium alloy, stainless steel	E11988
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T-slot cylinder

	Memorisation block, PA, stainless steel	E11798
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	Protective adapter against weld spatter Coated diecast zinc, stainless steel	E12259
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Adapter for tie rod / integrated profile cylinders

	Ø clamping range 5...11 mm, aluminium / stainless steel	E12231
	Ø clamping range 9...13.5 mm, aluminium / stainless steel	E12232

	Ø clamping range 9...17 mm, aluminium / stainless steel	E12233
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Clean line cylinder

	Fixing strap, Ø piston 10...16 mm	E11975
	Fixing strap, Ø piston 20...25 mm	E11976
	Fixing strap, Ø piston 32 mm	E11977
	Fixing strap, Ø piston 40 mm	E11978
	Fixing strap, Ø piston 50 mm	E11979
	Fixing strap, Ø piston 63 mm	E11980
	Fixing strap, Ø piston 80 mm	E11981
	Fixing strap, Ø piston 100 mm	E11982



Common technical data

Operating voltage [V]	10...30 DC
Short-circuit protection, pulsed	•
Protected against reverse polarity / overload protected	• / •
LED display	yellow
Repeatability [mm]	< 0.2
Hysteresis [mm]	typ. 1
Travel speed [m/s]	< 10
Response sensitivity [mT]	2
Power-on delay time [ms]	< 30
Housing material	PA, stainless steel

Connection technology

Type	Description	Order no.
	Socket, M8, 3-pole 5 m, PUR cable	EVW069
	Socket, M8, 3-pole 10 m, PUR cable	EVW070
	Socket, M12, 4-pole, 2 m, PUR cable	EVW001
	Socket, M12, 4-pole, 5 m, PUR cable	EVW002

Power supplies

Type	Description	Order no.
	Plastic housing, 24 V DC, 2.5 A	DN1031
	Metal housing, 24 V DC, 3.3 A	DN4011