It can take a beating! Robust position sensor for welding applications

Non-stick coating to prevent sticking of weld slag
Object detection through a cover to protect the sensor
Reliable switching signal even in cases of heavy soiling of the sensor
Robust and impact resistant thanks to active face made of metal
Space-saving design for limited space

Made for demanding environments
The new compact power pack from ifm is predestined for the rough environments in welding applications. Its non-stick coating prevents the sticking of weld slag, which simply rolls off the robust metal housing. Even in cases of heavy soiling and impact the sensor functions reliably and always guarantees safe operation.

Non-contact sensing through covers
The sensor can detect objects through non-ferromagnetic covers, an additional protection. The low-cost cover can be exchanged easily without any technical staff.
**Operating principle:** magnetically biased, detects steel

<table>
<thead>
<tr>
<th>Type</th>
<th>Connection</th>
<th>Output</th>
<th>Protective coating</th>
<th>Weld field resistant</th>
<th>IO-Link</th>
<th>Order no.</th>
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<td>MQ2000</td>
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<tr>
<td></td>
<td>2 m, PUR cable</td>
<td>PNP, NO</td>
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<td>–</td>
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<td>0.3 m, PUR cable, M8 connector</td>
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<td>–</td>
<td>MQ2003</td>
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<td></td>
<td>2 m, PUR cable</td>
<td>PNP/ NPN programmable, NO / NC programmable</td>
<td>• adjustable</td>
<td>•</td>
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<td>MQ2004</td>
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<td>0.3 m, PUR cable, M12 connector</td>
<td>PNP/ NPN programmable, NO / NC programmable</td>
<td>• adjustable</td>
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<td>MQ2005</td>
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</table>

**Dimensions**

Example MQ 2000

1) LED green
2) LED yellow

**Wiring diagram**

MQ2000

MQ2001

MQ2003

MQ2004, MQ2005

**Common technical data**

- Operating voltage [V DC] 10...30
- Switching frequency [Hz] 400
- Sensing range [mm] 5 flush
- Reverse polarity protection / short-circuit protection • / •
- Protection rating IP 65 / IP 67
- Ambient temperature [°C] -25...80
- Indication switching status LED yellow
- Correction factor mild steel (St37) = 1
- Housing material full metal

**Accessories**

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Order no.</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Angle bracket, stainless steel</td>
<td>E12605</td>
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</tbody>
</table>

**IO-Link**

- USB IO-Link master for parameter setting and analysis of units
- Supported communication protocols: IO-Link (4.8, 38.4 and 230 Kbits/s)
- LR DEVICE (supplied on USB flash drive)
- Software for online and offline parameter setting of IO-Link sensors and actuators
- QA0011

**Connection technology**

- Socket, M12, 2 m grey, PUR cable, weld-field immune
- Socket, M12, 5 m grey, PUR cable, weld-field immune
- EVV001
- EVV002

For further technical details please visit: ifm.com