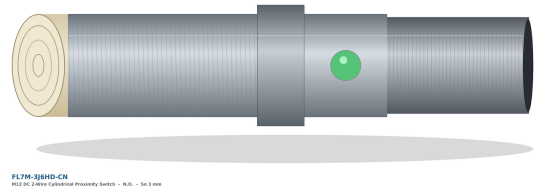


# FL7M-3J6HD-CN

M12 DC 2-Wire Cylindrical Inductive Proximity Switch | Azbil  
(Yamatake)



The FL7M-3J6HD-CN is a rigid, highly water-proof M12 cylindrical inductive proximity switch that detects the presence of metal targets without contact. It uses a DC 2-wire circuit (wired in series with the load) to reduce wiring cost, and a setting indicator that shows the stable sensing zone. The “-CN” connector-terminal version mates with a separate M12 connector cable (sold separately). Typical uses: machine-tool position sensing, end-of-travel detection, conveyor and part-presence checking, automation and robotics.

General / Identification	
Brand	Azbil (formerly Yamatake)
Model	FL7M-3J6HD-CN
Type	DC 2-wire cylindrical inductive proximity switch, shielded
Output mode	N.O. (normally open)
Termination	M12 connector terminal — cable not included (use Azbil PA5 connector cable)
Setting indicator	Yes (shows stable sensing zone)
Performance / Functional	
Rated sensing distance (Sn)	3 mm
Usable sensing distance	0 to 2.1 mm
Standard target object	12 × 12 × 1 mm iron
Differential travel	≤ 15% of sensing distance
Operating frequency	1.5 kHz (typical — confirm against unit)
Indication	Operation: orange/green on output; Setting: green in stable zone
Electrical	
Rated supply voltage	12 / 24 Vdc
Operating voltage range	10 to 30 Vdc
Switching (load) current	3 to 100 mA
Leakage current	≤ 0.55 mA
Voltage drop	≤ 3 V (at 100 mA, 2 m cable)
Circuit protection	Surge absorption, load short-circuit, reverse-connection
Wiring	2-wire, series with load (brown +, blue -)
Mechanical & Environmental	
Body / thread	M12 × 1 cylindrical
Housing material	Ni-plated brass case; PBT sensing face
Net weight	approx. 20 g (main unit, connector type) (estimate — confirm against unit)
Operating temperature	-25 to +70 °C
Protection degree	IP67 (IEC) for the connector type
Vibration resistance	10 to 55 Hz, 1.5 mm p-p, 2 h each axis
Shock resistance	980 m/s <sup>2</sup> , 10 times each axis

<b>Insulation resistance</b>	≥ 50 MΩ (500 Vdc megger)
<b>Compliance / Standards</b>	
<b>Certifications</b>	UL, CE (excluding some models)
<b>Protection standard</b>	IP67 (IEC)
<b>RoHS</b>	Series compliant (estimate — confirm per lot/cert)

**Typical applications:** machine-tool position sensing, end-of-travel and limit detection, conveyor / part-presence checking, automation, robotics, metal target detection.

Disclaimer: Figures marked "typical" or "estimate" are series-representative and must be confirmed against the manufacturer's manual and the actual unit before rated or safety-critical use. Specifications subject to change by the manufacturer without notice.