

Single Channel Hall Effect Speed Sensor

D12A-H2



Product ID

Sensor Type	Part Nr. (order code)	Drawing Nr.
D12A-H2	90165	90165-01

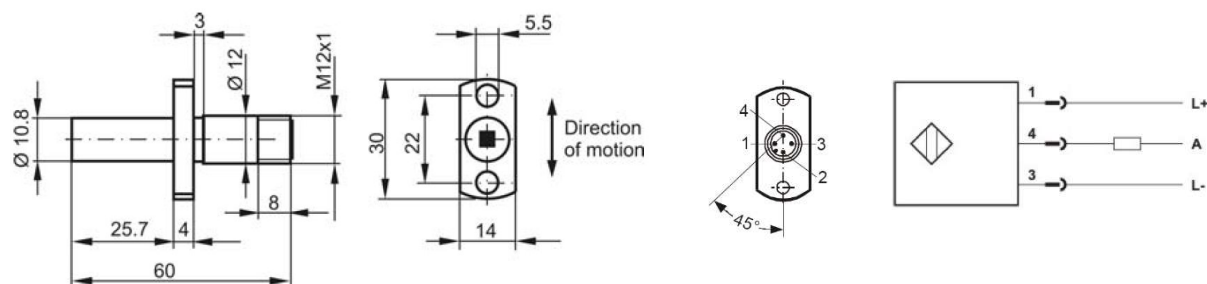
General

Function The D12A-H2 Hall speed sensor (PN.:90165) is designed according to Hall Effect principle. It is used to detect the rotary speed of machinery especially for winding head of the textile machinery. The sensor output two differential pulse frequency signals which is proportional to rotary speed, Max. detectable frequency up to 20kHz. The sensor housing is designed with 100% sealing one part structure. The flange designed housing is used for the orientation mounting.

Technical data

Supply voltage	10...24...30V DC (with reverse polarity proof and transient over voltage proof)
Current consumption	≤10mA (without load), ≤50mA (with load)
Signal output	Push pull output, with short circuit proof $U_{high} > 18V$, @24V U_{supply} , $R_L = 1k\Omega$, $U_{low} < 2.5V$
Frequency range	5Hz ~ 20kHz
Housing	Brass
Operating temp. range	-40°C...+125°C
Air gap	0.3...1.3mm for module 1 target 0.3...1.8mm for module 2 target 0.3...2.4mm for module 3 target 0.3...2.5mm for module 4 target
IP class	IP68(sensor head), IP67(connector)
Insulation	Housing and channel galvanically separated, 500V/AC/1min
Vibration immunity	5g, 5...2000Hz
Shock immunity	50g, 20ms, half sine wave
Connector	M12x1, 4 pins, black
Storage	In dry environment, temp. range same as operating temp range.

Product Drawing and connection definition:



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				Page 1 / 1