

SP01144

Single Axis Acceleration Sensor



Features

- Active acceleration sensor with integrated signal conditioning
- Very compact
- Low weight
- Absolute measurement, can be used as position sensor
- Integrated low pass filter with 400Hz cut-off frequency to suppress unwanted harmonics
- Shielded cable
- Connection with M12 connector or open cable end

Specifications

Parameter	Unit	Value
Supply voltage Vcc	V _{DC}	18 ... 30
Current consumption	mA	8
Measurement range	g ⁽¹⁾	±22
Sensitivity	mV/g ⁽¹⁾	300 ±5%
Output voltage at 0g ⁽¹⁾	V _{DC}	7 ... 9
Max. output current	mA	3
Output impedance	Ω	50
Frequency range	Hz	0 ... 400
Operating temperature	°C	-20 ... +80
Weight without cable	g	10
Min. bending radius of cable	mm	60
Protection level (sensor without connector)	-	IP65

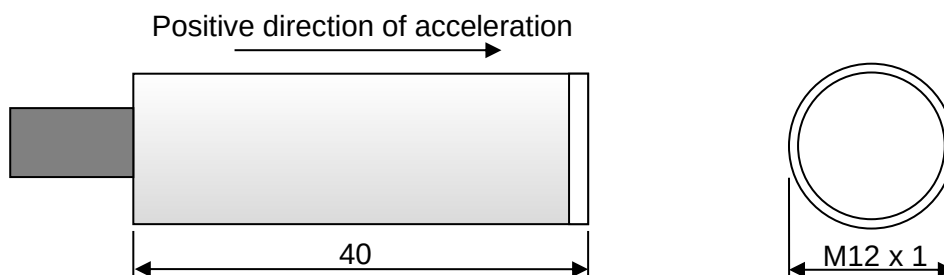
(1) 1g = 9.81 m/s²

Pin Assignment

Pin	Contact M12-plug A-coded	Wire color M12-plug A-coded (4 pol. cable)	Open cable end (3 pol. cable)
Vcc	1	BN / brown	BN / brown
Output	2	WH / white	BK / black
GND	3	BU / blue	BU / blue
NC	4	BK / black	
Shield ⁽²⁾	Thread	Shield	Shield

(2) The shield is not connected to the sensor housing.

Dimensions in mm



New: From the end of 2025,
the length will be 45mm