



## GREEN LINE

INDUSTRIAL SPEED SENSORS

## Industrial speed sensors and tachometers

### TABLE OF CONTENTS

- [VR - ELECTROMAGNETIC SPEED SENSORS](#)
- [DIGITAL ELECTROMAGNETIC SPEED SENSORS](#)
- [VR SENSORS FOR EXPLOSIVE ATMOSPHERES](#)
  - [- EX ATEX ZONE 1 / CSA CLASS 1 DIV 1](#)
  - [- EX ATEX ZONE 2 / CSA CLASS 1 DIV 2](#)
- [DIFFERENTIAL HALL EFFECT SPEED SENSORS](#)
- [DUAL HALL EFFECT SPEED SENSORS](#)
- [ZERO SPEED HALL EFFECT SPEED SENSORS](#)
- [TACHOMETER T400 SERIES](#)
- [HANDHELD TACHOMETER SERIES](#)
- [JAQUET CORPORATE OVERVIEW](#)

The GreenLine family is the newest line of industrial speed sensors and control modules from JAUQUET TECHNOLOGY GROUP. These sensors and tachometers provide solutions for speed sensing and control applications both for end users and small OEM's. Our offering of 50 plus sensors and 4 tachometer modules allows straight forward signal detection, monitoring and conditioning.










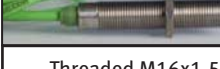
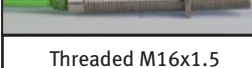
Sensors are available with VR or Hall technologies with cable or connector interfaces. Sizes range from 3/8-24 and M10X1 to 3/4-16 and M16X1.5. Sensor capability ranges from zero speed to high frequency detection and all units have sealed sensing areas to prevent liquid intrusion. Also available are direction sensing units and hazardous location versions for both North America (NEC, CEC) and Europe (ATEX) (Q4 2007).

The JAUQUET T400 series F-DC tachometers are available with current or voltage analog output and they also provide a sine to square wave converter/re-transmit signal, sensor health monitoring and a high/low limit relay. All inputs and outputs are galvanically isolated and set up is with supplied software via a PC using the PC-T400 cable. Available packages include DIN-rail mount and panel mount with display.

The new GreenLine sensors and tachometers can be used to provide either a complete measurement chain solution, or individual speed sensing products as needed. Technical product overviews follow in this brochure, while complete data sheets are available on [www.jaquet.com](http://www.jaquet.com) under the GreenLine sensors link.












## VR ELECTROMAGNETIC SPEED SENSORS

- **Temperature rating:** -40...125°C • **Signal output:** Frequency and amplitude proportional to speed
- **Frequency range:** up to 20 kHz.

HOUSING	CONNECTION	MECHANICAL	ELECTRICAL	MODULE / DP RANGE
	<b>E12A</b>			
Threaded M12x1 stainless steel IP67	Connector, M12X1, 4 pin, sealed	Overall length: 60 mm Thread length: 40 mm	Sine wave output 850 Ohm, 135 mH	M: .5 or larger DP: 50 or coarser
	<b>E12S</b>			
Threaded M12x1 stainless steel IP67	Cable, silicone, 1 m 0.34 mm <sup>2</sup> , AWG 22	Overall length: 69 mm Thread length: 50 mm	Sine wave output 850 Ohm, 135 mH	M: .5 or larger DP: 50 or coarser
	<b>E16A</b>			
Threaded M16x1.5 stainless steel IP67	Connector, M12X1, 4 pin, sealed	Overall length: 60 mm Thread length: 40 mm	Sine wave output 850 Ohm, 135 mH	M: .5 or larger DP: 50 or coarser
	<b>E16A25</b>			
Threaded M16x1.5 stainless steel IP67	Connector, M12X1, 4 pin, sealed	Overall length: 84 mm Thread length: 64 mm	Sine wave output 850 Ohm, 135 mH	M: .5 or larger DP: 50 or coarser
	<b>E16A40</b>			
Threaded M16x1.5 stainless steel IP67	Connector, M12X1, 4 pin, sealed	Overall length: 122 mm Thread length: 102 mm	Sine wave output 850 Ohm, 135 mH	M: .5 or larger DP: 50 or coarser
	<b>E16AM</b>			
Threaded M16x1.5 stainless steel IP67	Connector, MS 3102A-10SL-4P, 2 pin	Overall length: 61 mm Thread length: 33 mm	Sine wave output 850 Ohm, 135 mH	M: .5 or larger DP: 50 or coarser
	<b>E16AM25</b>			
Threaded M16x1.5 stainless steel IP67	Connector, MS 3102A-10SL-4P, 2 pin	Overall length: 92 mm Thread length: 64 mm	Sine wave output 850 Ohm, 135 mH	M: .5 or larger DP: 50 or coarser
	<b>E16AM40</b>			
Threaded M16x1.5 stainless steel IP67	Connector, MS 3102A-10SL-4P, 2 pin	Overall length: 130 mm Thread length: 102 mm	Sine wave output 850 Ohm, 135 mH	M: .5 or larger DP: 50 or coarser
	<b>E16S</b>			
Threaded M16x1.5 stainless steel IP67	Cable, silicone, 1 m 0.34 mm <sup>2</sup> , AWG 22	Overall length: 69 mm Thread length: 50 mm	Sine wave output 850 Ohm, 135 mH	M: .5 or larger DP: 50 or coarser
	<b>E16S25</b>			
Threaded M16x1.5 stainless steel IP67	Cable, silicone, 1 m 0.34 mm <sup>2</sup> , AWG 22	Overall length: 83 mm Thread length: 64 mm	Sine wave output 850 Ohm, 135 mH	M: .5 or larger DP: 50 or coarser
	<b>E16S40</b>			
Threaded M16x1.5 stainless steel IP67	Cable, silicone, 1 m 0.34 mm <sup>2</sup> , AWG 22	Overall length: 121 mm Thread length: 102 mm	Sine wave output 850 Ohm, 135 mH	M: .5 or larger DP: 50 or coarser







## VR ELECTROMAGNETIC SPEED SENSORS - continued

- **Temperature rating:** -40...125°C • **Signal output:** Frequency and amplitude proportional to speed
- **Frequency range:** up to 20 kHz.

HOUSING	CONNECTION	MECHANICAL	ELECTRICAL	MODULE / DP RANGE
	<b>E38A</b>			
Threaded 3/8"- 24 UNF stainless steel IP67	Connector, M12X1, 4 pin, sealed	Overall length: 48 mm Thread length: 34 mm	Sine wave output 850 Ohm, 135 mH	M: .5 or larger DP: 50 or coarser
	<b>E38S</b>			
Threaded 3/8"- 24 UNF stainless steel IP67	Cable, silicone, 1m 0.34 mm <sup>2</sup> , AWG 22	Overall length: 54 mm Thread length: 34 mm	Sine wave output 850 Ohm, 135 mH	M: .5 or larger DP: 50 or coarser
	<b>E58A</b>			
Threaded 5/8"- 18 UNF stainless steel IP67	Connector, M12X1, 4 pin, sealed	Overall length: 60 mm Thread length: 40 mm	Sine wave output 850 Ohm, 135 mH	M: .5 or larger DP: 50 or coarser
	<b>E58A25</b>			
Threaded 5/8"- 18 UNF stainless steel IP67	Connector, M12X1, 4 pin, sealed	Overall length: 84 mm Thread length: 64 mm	Sine wave output 850 Ohm, 135 mH	M: .5 or larger DP: 50 or coarser
	<b>E58A40</b>			
Threaded 5/8"- 18 UNF stainless steel IP67	Connector, M12X1, 4 pin, sealed	Overall length: 121 mm Thread length: 102 mm	Sine wave output 850 Ohm, 135 mH	M: .5 or larger DP: 50 or coarser
	<b>E58AM</b>			
Threaded 5/8"- 18 UNF stainless steel IP67	Connector, MS 3102A-10SL-4P, 2 pin	Overall length: 61 mm Thread length: 33 mm	Sine wave output 850 Ohm, 135 mH	M: .5 or larger DP: 50 or coarser
	<b>E58AM25</b>			
Threaded 5/8"- 18 UNF stainless steel IP67	Connector, MS 3102A-10SL-4P, 2 pin	Overall length: 92 mm Thread length: 64 mm	Sine wave output 850 Ohm, 135 mH	M: .5 or larger DP: 50 or coarser
	<b>E58AM40</b>			
Threaded 5/8"- 18 UNF stainless steel IP67	Connector, MS 3102A-10SL-4P, 2 pin	Overall length: 130 mm Thread length: 102 mm	Sine wave output 850 Ohm, 135 mH	M: .5 or larger DP: 50 or coarser
	<b>E58S</b>			
Threaded 5/8"- 18 UNF stainless steel IP67	Cable, silicone, 1m 0.34 mm <sup>2</sup> , AWG 22	Overall length: 69 mm Thread length: 50 mm	Sine wave output 850 Ohm, 135 mH	M: .5 or larger DP: 50 or coarser
	<b>E58S25</b>			
Threaded 5/8"- 18 UNF stainless steel IP67	Cable, silicone, 1 m 0.34 mm <sup>2</sup> , AWG 22	Overall length: 83 mm Thread length: 64 mm	Sine wave output 850 Ohm, 135 mH	M: .5 or larger DP: 50 or coarser
	<b>E58S40</b>			
Threaded 5/8"- 18 UNF stainless steel IP67	Cable, silicone, 1 m 0.34 mm <sup>2</sup> , AWG 22	Overall length: 121 mm Thread length: 102 mm	Sine wave output 850 Ohm, 135 mH	M: .5 or larger DP: 50 or coarser





## DIGITAL ELECTROMAGNETIC SPEED SENSORS

- **Temperature rating:** -40...125°C • **Signal output:** Frequency proportional to speed • **Frequency range:** up to 20 kHz
- **Supply voltage:** 5...32 VDC

HOUSING	CONNECTION	MECHANICAL	ELECTRICAL	MODULE / DP RANGE
	<b>EV58AM</b>			
Threaded 5/8"- 18 UNF stainless steel IP67	Connector, MS 3102A-10SL-4P, 2 pin	Overall length: 61 mm Thread length: 33 mm	Square wave, NPN with 2.2 kOhm pull up	M: .5 or larger DP: 50 or coarser
	<b>EV58AM25</b>			
Threaded 5/8"- 18 UNF stainless steel IP67	Connector, MS 3102A-10SL-4P, 2 pin	Overall length: 92 mm Thread length: 64 mm	Square wave, NPN with 2.2 kOhm pull up	M: .5 or larger DP: 50 or coarser
	<b>EV58AM40</b>			
Threaded 5/8"- 18 UNF stainless steel IP67	Connector, MS 3102A-10SL-4P, 2 pin	Overall length: 130 mm Thread length: 102 mm	Square wave, NPN with 2.2 kOhm pull up	M: .5 or larger DP: 50 or coarser
	<b>EV58S</b>			
Threaded 5/8"- 18 UNF stainless steel IP67	Cable, silicone, 1 m 0.34 mm <sup>2</sup> , AWG 22	Overall length: 69 mm Thread length: 50 mm	Square wave, NPN with 2.2 kOhm pull up	M: .5 or larger DP: 50 or coarser
	<b>EV58S25</b>			
Threaded 5/8"- 18 UNF stainless steel IP67	Cable, silicone, 1 m 0.34 mm <sup>2</sup> , AWG 22	Overall length: 83 mm Thread length: 64 mm	Square wave, NPN with 2.2 kOhm pull up	M: .5 or larger DP: 50 or coarser
	<b>EV58S40</b>			
Threaded 5/8"- 18 UNF stainless steel IP67	Cable, silicone, 1 m 0.34 mm <sup>2</sup> , AWG 22	Overall length: 121 mm Thread length: 102 mm	Square wave, NPN with 2.2 kOhm pull up	M: .5 or larger DP: 50 or coarser









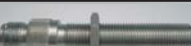

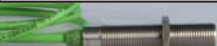

## VR - ELECTROMAGNETIC SPEED SENSORS - EX ATEX Zone 1 / CSA Class 1 Div 1

- **Temperature rating:** -40...125°C • **Signal output:** Frequency and amplitude proportional to speed
- **Frequency range:** up to 20 kHz. **CERTIFIED FOR USE IN EXPLOSIVE ATMOSPHERES.**

HOUSING	CONNECTION	MECHANICAL	ELECTRICAL	MODULE / DP RANGE
	<b>EX58H</b>			
Threaded 5/8"- 18 UNF stainless steel IP67	½ - 14 NPT Cable PTFE, 3 m	Overall length: 88 mm Thread length: 48 mm	Sine wave output 250 Ohm / 70 mH coil	M: 1.0 or larger DP: 25 or coarser
	<b>EX58H35</b>			
Threaded 5/8"- 18 UNF stainless steel IP67	½ - 14 NPT Cable PTFE, 3 m	Overall length: 120 mm Thread length: 89mm	Sine wave output 250 Ohm / 70 mH coil	M: 1.0 or larger DP: 25 or coarser
	<b>EX34H</b>			
Threaded 3/4"- 16 UNF stainless steel IP67	½ - 14 NPT Cable PTFE, 3 m	Overall length: 88 mm Thread length: 48 mm	Sine wave output 250 Ohm / 70 mH coil	M: 1.0 or larger DP: 25 or coarser
	<b>EX34H35</b>			
Threaded 3/4"- 16 UNF stainless steel IP67	½ - 14 NPT Cable PTFE, 3 m	Overall length: 120 mm Thread length: 89 mm	Sine wave output 250 Ohm / 70 mH coil	M: 1.0 or larger DP: 25 or coarser

## VR ELECTROMAGNETIC SPEED SENSORS - EX ATEX Zone 2/ CSA Class 1 Div 2



- **Temperature rating:** -40...125°C • **Signal output:** Frequency and amplitude proportional to speed
- **Frequency range:** up to 20 kHz. **CERTIFIED FOR USE IN EXPLOSIVE ATMOSPHERES.**

HOUSING	CONNECTION	MECHANICAL	ELECTRICAL	MODULE / DP RANGE
	<b>EX10A</b>			
Threaded M10x1 stainless steel IP67	Connector, M12X1, 4 pin, sealed	Overall length: 48 mm Thread length: 34 mm	Sine wave output 850 Ohm, 135 mH	M: .5 or larger DP: 50 or coarser
	<b>EX10S</b>			
Threaded M10x1 stainless steel IP67	Cable, PTFE, 3m 0.21 mm <sup>2</sup> , AWG 24	Overall length: 54 mm Thread length: 34 mm	Sine wave output 850 Ohm, 135 mH	M: .5 or larger DP: 50 or coarser
	<b>EX12A</b>			
Threaded M12x1 stainless steel IP67	Connector, M12X1, 4 pin, sealed	Overall length: 60 mm Thread length: 40 mm	Sine wave output 850 Ohm, 135 mH	M: .5 or larger DP: 50 or coarser
	<b>EX12A35</b>			
Threaded M12x1 stainless steel IP67	Connector, M12X1, 4 pin, sealed	Overall length: 109 mm Thread length: 89 mm	Sine wave output 850 Ohm, 135 mH	M: .5 or larger DP: 50 or coarser
	<b>EX38A</b>			
Threaded 3/8"- 24 UNF stainless steel IP67	Connector, M12X1, 4 pin, sealed	Overall length: 48 mm Thread length: 34 mm	Sine wave output 850 Ohm, 135 mH	M: .5 or larger DP: 50 or coarser
	<b>EX38S</b>			
Threaded 3/8"- 24 UNF stainless steel IP67	Cable, PTFE, 3m 0.21 mm <sup>2</sup> , AWG 24	Overall length: 54 mm Thread length: 34 mm	Sine wave output 850 Ohm, 135 mH	M: .5 or larger DP: 50 or coarser
	<b>EX58AM</b>			
Threaded 5/8"- 18 UNF stainless steel IP67	Connector, MS 3102A-10SL-4P, 2 pin	Overall length: 61 mm Thread length: 33 mm	Sine wave output 850 Ohm, 135 mH	M: .5 or larger DP: 50 or coarser
	<b>EX58AM25</b>			
Threaded 5/8"- 24 UNF stainless steel IP67	Connector, MS 3102A-10SL-4P, 2 pin	Overall length: 92 mm Thread length: 64 mm	Sine wave output 850 Ohm, 135 mH	M: .5 or larger DP: 50 or coarser
	<b>EX58AM40</b>			
Threaded 5/8"- 24 UNF stainless steel IP67	Connector, MS 3102A-10SL-4P, 2 pin	Overall length: 130 mm Thread length: 102 mm	Sine wave output 850 Ohm, 135 mH	M: .5 or larger DP: 50 or coarser
	<b>EX58S</b>			
Threaded 5/8"- 24 UNF stainless steel IP67	Cable, PTFE, 3 m, 0.21 mm <sup>2</sup> , AWG 24	Overall length: 69 mm Thread length: 50 mm	Sine wave output 850 Ohm, 135 mH	M: .5 or larger DP: 50 or coarser
	<b>EX58S25</b>			
Threaded 5/8"- 24 UNF stainless steel IP67	Cable, PTFE, 3 m, 0.21 mm <sup>2</sup> , AWG 24	Overall length: 83 mm Thread length: 64 mm	Sine wave output 850 Ohm, 135 mH	M: .5 or larger DP: 50 or coarser
	<b>EX58S40</b>			
Threaded 5/8"- 24 UNF stainless steel IP67	Cable, PTFE, 3 m, 0.21 mm <sup>2</sup> , AWG 24	Overall length: 121 mm Thread length: 102 mm	Sine wave output 850 Ohm, 135 mH	M: .5 or larger DP: 50 or coarser




## DIFFERENTIAL HALL EFFECT SPEED SENSORS

- **Temperature rating:** -40...125°C • **Signal output:** Frequency proportional to speed • **Frequency range:** 5 Hz to 20 kHz
- **Supply voltage:** 8...32 VDC

HOUSING	CONNECTION	MECHANICAL	ELECTRICAL	MODULE / DP RANGE
	<b>D12A</b>			
Smooth 10.8 mm OD flange mount IP67	Connector, M12X1, 4 pin, sealed	Overall length: 60 mm Shaft length: 25.7 mm	Square wave Push-pull output	M: .5 or larger DP: 50 or coarser
	<b>D12P</b>			
Threaded M12x1 stainless steel IP67	Cu cable insulation PTFE, 0.35 m, 0.21 mm <sup>2</sup> , AWG 24 with connector 3 pin AMP	Overall length: 69 mm Thread length: 50 mm	Square wave Push-pull output	M: .5 or larger DP: 50 or coarser






## DUAL CHANNEL HALL EFFECT SPEED AND DIRECTION SENSORS

- **Temperature rating:** -40...125°C • **Signal output:** Frequency proportional to speed (channel 1) and direction (channel 2)
- **Frequency range:** 0 Hz to 15 kHz • **Supply voltage:** 11...32 VDC

HOUSING	CONNECTION	MECHANICAL	ELECTRICAL	MODULE / DP RANGE
	<b>Y12AD</b>			
Threaded M12x1 with O-ring and locator key	Connector, M12X1, 4 pin, sealed	Overall length: 75 mm Shaft length: 36 mm	Square wave output NPN plus direction line	M: 1.0 or h larger DP: 25 or coarser










## ZERO SPEED HALL EFFECT SPEED SENSORS

- **Temperature rating:** -40...125°C • **Signal output:** Frequency proportional to speed • **Frequency range:** 0 Hz to 15 kHz
- **Supply voltage:** 8...25 VDC

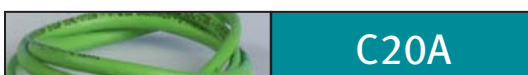
HOUSING	CONNECTION	MECHANICAL	ELECTRICAL	MODULE / DP RANGE
	<b>F12A</b>			
Threaded M12x1 stainless steel IP67	Connector, M12X1, 4 pin, sealed	Overall length: 60 mm Thread length: 40 mm	Square wave, NPN with 2.7 kOhm pull up	M: 1.0 or larger DP: 25 or coarser
	<b>F12S</b>			
Threaded M12x1 stainless steel IP67	Cable, silicone, 1 m 0.34 mm <sup>2</sup> , AWG 22	Overall length: 69 mm Thread length: 50 mm	Square wave, NPN with 2.7 kOhm pull up	M: 1.0 or larger DP: 25 or coarser
	<b>F16A</b>			
Threaded M16x1.5 stainless steel IP67	Connector, M12X1, 4 pin, sealed	Overall length: 60mm Thread length: 40mm	Square wave, NPN with 2.7 kOhm pull up	M: 1.0 or larger DP: 25 or coarser
	<b>F16A25</b>			
Threaded M16x1.5 stainless steel IP67	Connector, M12X1, 4 pin, sealed	Overall length: 84 mm Thread length: 64 mm	Square wave, NPN with 2.7 kOhm pull up	M: 1.0 or larger DP: 25 or coarser
	<b>F16A40</b>			
Threaded M16x1.5 stainless steel IP67	Connector, M12X1, 4 pin, sealed	Overall length: 121 mm Thread length: 102 mm	Square wave, NPN with 2.7 kOhm pull up	M: 1.0 or larger DP: 25 or coarser

## ZERO SPEED HALL EFFECT SPEED SENSORS continued

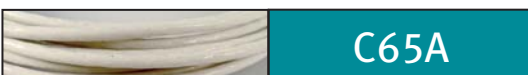
- **Temperature rating:** -40...125°C • **Signal output:** Frequency proportional to speed • **Frequency range:** 0 Hz to 15 kHz
- **Supply voltage:** 8...25 VDC

HOUSING	CONNECTION	MECHANICAL	ELECTRICAL	MODULE / DP RANGE
	<b>F16S</b>			
Threaded M16x1.5 stainless steel IP67	Cable, Silicone, 1m 0.34 mm <sup>2</sup> , AWG 22	Overall length: 69 mm Thread length: 50 mm	Square wave, NPN with 2.7 kOhm pull up	M: 1.0 or larger DP: 25 or coarser
	<b>F16S25</b>			
Threaded M16x1.5 stainless steel IP67	Cable, Silicone, 1m 0.34 mm <sup>2</sup> , AWG 22	Overall length: 83 mm Thread length: 64 mm	Square wave, NPN with 2.7 kOhm pull up	M: 1.0 or larger DP: 25 or coarser
	<b>F16S40</b>			
Threaded M16x1.5 stainless steel IP67	Cable, Silicone, 1m 0.34 mm <sup>2</sup> , AWG 22	Overall length: 121 mm Thread length: 102 mm	Square wave, NPN with 2.7 kOhm pull up	M: 1.0 or larger DP: 25 or coarser
	<b>F58A</b>			
Threaded 5/8"- 18 UNF stainless steel IP67	Connector, M12X1, 4 pin, sealed	Overall length: 60 mm Thread length: 40 mm	Square wave, NPN with 2.7 kOhm pull up	M: 1.0 or larger DP: 25 or coarser
	<b>F58A25</b>			
Threaded 5/8"- 18 UNF stainless steel IP67	Connector, M12X1, 4 pin, sealed	Overall length: 84 mm Thread length: 64 mm	Square wave, NPN with 2.7 kOhm pull up	M: 1.0 or larger DP: 25 or coarser
	<b>F58A40</b>			
Threaded 5/8"- 18 UNF stainless steel IP67	Connector, M12X1, 4 pin, sealed	Overall length: 121 mm Thread length: 102 mm	Square wave, NPN with 2.7 kOhm pull up	M: 1.0 or larger DP: 25 or coarser
	<b>F58S</b>			
Threaded 5/8"- 18 UNF stainless steel IP67	Cable, silicone, 1m 0.34 mm <sup>2</sup> , AWG 22	Overall length: 69 mm Thread length: 50 mm	Square wave, NPN with 2.7 kOhm pull up	M: 1.0 or larger DP: 25 or coarser
	<b>F58S25</b>			
Threaded 5/8"- 18 UNF stainless steel IP67	Cable, silicone, 1 m 0.34 mm <sup>2</sup> , AWG 22	Overall length: 83 mm Thread length: 60 mm	Square wave, NPN with 2.7 kOhm pull up	M: 1.0 or larger DP: 25 or coarser
	<b>F58S40</b>			
Threaded 5/8"- 18 UNF stainless steel IP67	Cable, silicone, 1 m 0.34 mm <sup>2</sup> , AWG 22	Overall length: 121 mm Thread length: 102 mm	Square wave, NPN with 2.7 kOhm pull up	M: 1.0 or larger DP: 25 or coarser

## MATING CABLE ASSEMBLY for all sensors with M12x1 connector



- **Material:** PU (poly-urethane) • **Length:** 2 m • **Color:** Green • **Temperature rating:** -20...85°C
- **Connector:** M12 standard, overmoulded. Pin 1 = brown, Pin 2 = white, Pin 3 = blue, Pin 4 = black



- **Material:** PTFE • **Length:** 6.5 m • **Color:** White • **Temperature rating:** Cable -40...260°C / Connector -30...90°C
- **Connector:** M12 standard, overmoulded. Pin 1 = red, Pin 2 = black, Pin 3 = brown, Pin 4 = yellow