Sensors & Switches

Sensors & Switches

Sensors & Switches

CMP25.0M

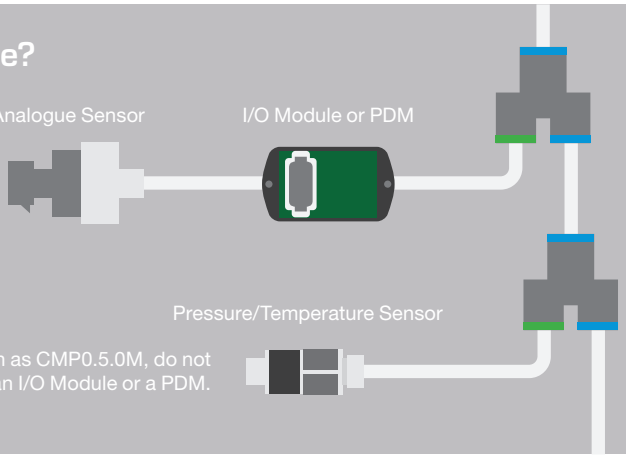
102714A

12-0001

- Wide range of sensors used to introduce input variables into the Controller Area Network (CAN).
- Side Mount Level switches are ideal for tank level applications with most liquids.
- Multi-voltage on most sensors & switches.
- An I/O Module or PDM provides a pathway for analogue signals into the network, these can be found on page 22 & 26–27.
- All sensors environmentally sealed – IP67.

Does your sensor require a module?

Analogue Sensors require an I/O Module (found on page 22) or a PDM (found on page 26–27) in order to transmit sensor data onto the Controller Area Network.



IP67

Made in Europe

Sensors – CAN – Pressure & Temperature

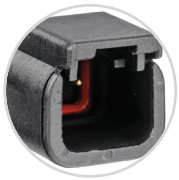
Range (Bar)	0 – 0.5	0 – 4	0 – 16	0 – 25	0 – 100	0 – 400
Part No.	**CMP0.5.0M**	**CMP4.0M**	**CMP16.0M**	**CMP25.0M**	**CMP100.0M**	**CMP400.0M**

Ingress Protection: IP67
Detection range: -30°C to 150°C
Mounting Thread: G 1/4"
Voltage: 9–32V

3 pin
TE DEUTSCH
DT Series
connector.
Includes mount

115722

740114



2 Pin TE DEUTSCH
DTM Series connector.
Supplied with mating connector

MSTS-DTM-CLOSED

MSTS-DTM-OPEN

Sensors – Analogue – Temperature

Part No.	Voltage	Output Signal	Range	Mounting Thread	Notes
115722	9–32	0V to 2V	-40°C – 120°C	—	Includes mount
740114	9–32	0.05Ω to 100Ω	-40°C – 150°C	1/4" NPT	
MSTS-DTM-CLOSED	5	0V to 5V	-30°C – 150°C	1/8" NPT	Includes mating connector
MSTS-DTM-OPEN	5	0V to 5V	-30°C – 150°C	1/8" NPT	Includes mating connector

Ingress Protection: IP67

3 Pin TE DEUTSCH DTM
Series connector

102162

200-00093-001

200-00094-001

113557, 117179

102161

102606

Made in North America

3 pin
TE DEUTSCH DT
Series connector

Made in Europe

8252-G8-25-43-D3
8252-HA-25-30-D3

3 Pin TE DEUTSCH
DTM Series connector.
Supplied with mating
connector

MSPP-DTM-10BAR

Sensors – Analogue – Pressure

Part No.	Voltage	Output Signal	Range (PSI)	Mounting Thread	Notes
102162	4–8	0V to 5V	0 – 5	1/4" NPT	
200-00093-001	5	0V to 5V	0 – 5	1/4" NPT	Stainless steel
200-00094-001	5	0V to 5V	0 – 5	1/4" NPT	Brass
113557	9–32	0V to 5V	0 – 300	1/4" NPT	
102161	9–32	0V to 5V	0 – 500	1/4" NPT	
117179	9–32	0V to 5V	0 – 600	1/4" NPT	
102606	9–32	4mA to 20mA	0 – 7500	1/4" NPT	Class D compliant
8252-G8-25-43-D3	9–32	0V to 5V	0 – 150	1/8" NPT	
8252-HA-25-30-D3	9–32	0V to 5V	0 – 300	1/4" NPT	
MSPP-DTM-10BAR	5	0V to 5V	0 – 145	1/8" NPT	Includes mating connector

Ingress Protection: IP67

Sensors & Switches

IP67

Made in North America

102714A

Optional accessory
Flow Sensor Boss.
Used to facilitate mounting

SFM

Sensors – Analogue – Flow

Part No.	Voltage	Sensor Type	Output Signal	Range	Ingress Protection
102714A	9–32	Flow	±5V	Frequency	IP67

SFM Mounting Boss. Stainless steel

2m female to tail
M12 network
cable – 5 pin

RKT5-228-2M

CONNKIT-TEMPSENSOR

CONNKIT-THERMISTOR

CONNKIT-ITL-DTM

CONNKIT-TRANSITL

CONNKIT-TRANSHIPSI

CONNKIT-TRANSPSI

Sensors – Connector Kits

Part No.	Suits	
RKT5-228-2M	CAN – Pressure & Temperature	All
CONNKIT-TEMPSENSOR	Analogue – Temperature, Pressure	115722, 8252-G8-25-43-D3, 8252-HA-25-30-D3
CONNKIT-THERMISTOR	Analogue – Thermistor	740114
CONNKIT-ITL-DTM	Analogue – Pressure	200-00093-001
CONNKIT-TRANSITL	Analogue – Pressure	102162
CONNKIT-TRANSHIPSI	Analogue – Pressure	102606
CONNKIT-TRANSPSI	Analogue – Pressure, Flow	102714A, 113557, 117179, 102161

Crimping tools can be found on page 116–117.

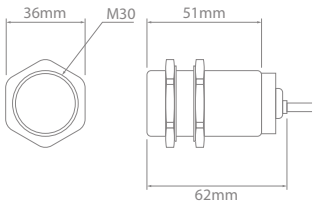
5V Regulator

9–32VDC in.
2 x 5VDC out.
Reverse polarity protected.

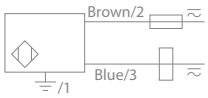
Pin 1 – Ground
Pin 2 – Output 1 (5VDC)
Pin 3 – Output 2 (5VDC)
Pin 4 – Input (9–32VDC), fused to 1A (maximum)

Sensors – Accessories – 5V Regulator

Part No.	Voltage	Max. Current Rating (mA)	Suits
DT04-4P-5V	9–32	500 per circuit	Sensors requiring a 5V supply

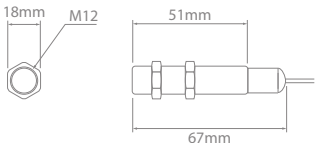


12-0001

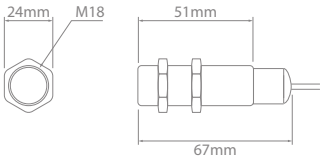


Made in Europe

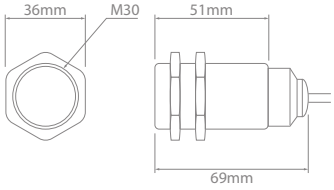
Ensure maximum current load is not exceeded. Compatible with automotive relays & electronic modules.



12-0120

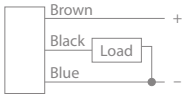


12-0180



12-0300

Made in North America



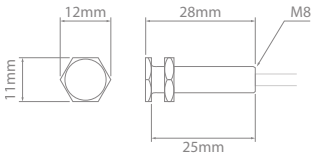
Switches – Inductive Proximity

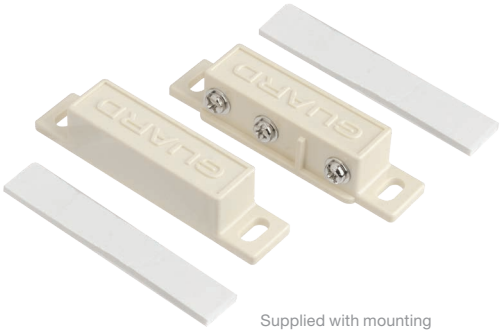
Part No.	Voltage Type	Voltage	Output Type	Output Function	Sensing Range (mm)	Ingress Protection	Output Current Rating (mA)
12-0001	AC/DC	24–240	—	N/O	10	68, 69K	200
12-0120	DC	10–30	PNP	N/O	2	67	100
12-0180	DC	10–30	PNP	N/O	5	67	100
12-0300	DC	10–30	PNP	N/O	10	67	100

Cable Length: 2m

Sensors & Switches

12-0050

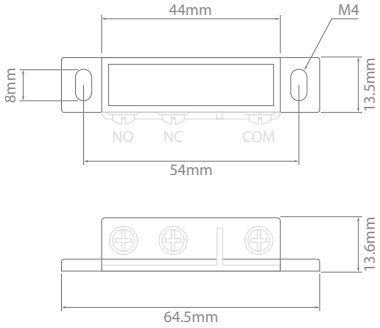




Supplied with mounting double sided tapes

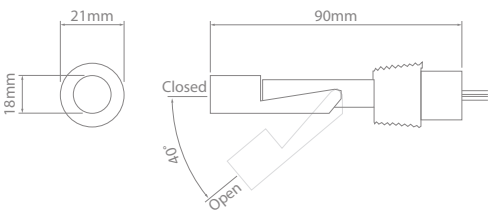
12-0070

NEW



Switches – Reed

Part No.	Contact Type	Style	Switching Distance (mm)	Contact Resistance (Ohms)	Current Rating (A)	Cable Length (mm)
12-0050	N/O	Panel	10	0.2	0.5	280
12-0070 NEW	SPDT	Surface	15	0.15	0.25	–



Switches – Side Mount Level

Part No.	Contact Type	Switching Angle	Mounting Size	Switching Voltage AC	Switching Voltage DC	Current Rating (A)	Cable Length (mm)	Housing
12-0030	N/O & N/C	40°	1/2" NPT	300	300	1.0	1000	Nylon

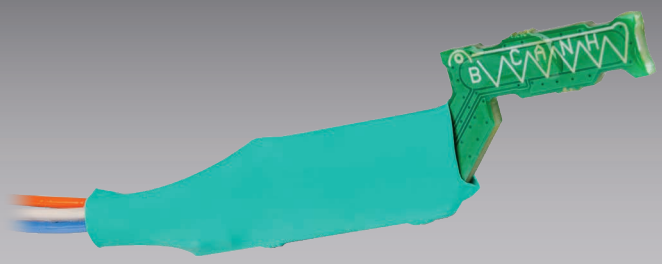
Functions as N/C or N/O dependent on fitting orientation.

Operating temperature:
-20°C to 75°C

Contactless CAN Adaptor

- Non-intrusive data retrieval through wire insulation without compromising its integrity.
- Compact open-frame design enables convenient connection to the CAN bus, even in the most inaccessible areas of a vehicle.
- Ensuring dependable protection for a vehicle's electronic circuits against potential vulnerabilities through the CAN interface.
- Safe data integration from one CAN bus to another CAN bus network.
- Reverse polarity protected.
- 2-year warranty.

NEW



Voltage :	9–36V
CAN :	SAE J1939, CAN Open, DeviceNet, NMEA 2000
Current Draw :	12.5mA @ 24V
Connector :	450mm fly lead
Operating Temperature :	-40°C to 85°C

9V 36V

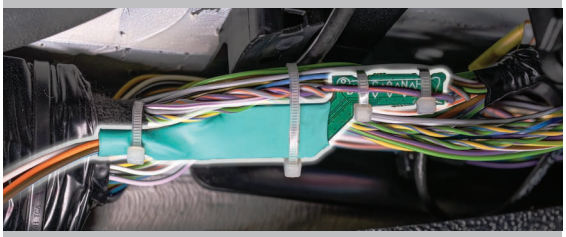
2Yrs

Seamless CAN Data Retrieval

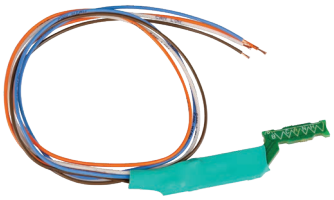
The Contactless CAN Adaptor reads the electromagnetic field when the CAN signal passes through the original insulated wires.

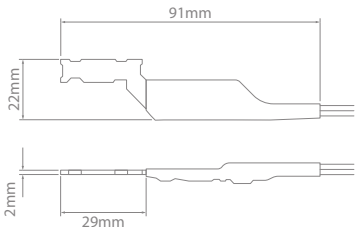
It generates digital output signals that mirror the data packets transmitted on the connected CAN bus.

These signals may include information about engine operating modes, fuel consumption, sensor status, and vehicle malfunctions.



See page 72 to see how the Contactless CAN Adaptor is used in the Minebar Integration Kits.





Contactless CAN Adaptor NEW

Part No.

ESW-00050

TireCheck

NEW

ESW-T30878

ESW-T30839

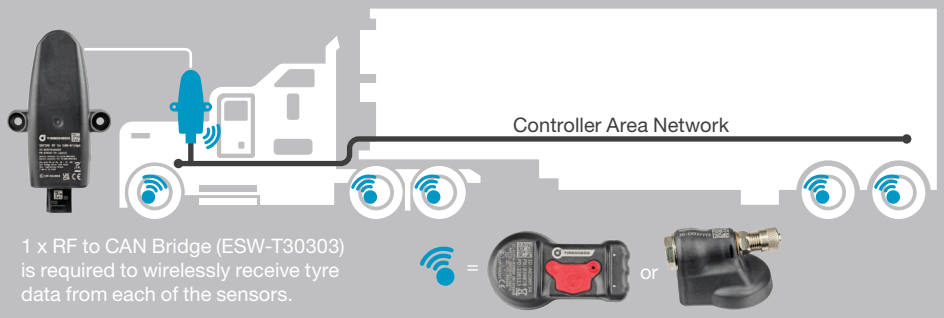
ESW-T30303

Made in Europe

- Wireless tyre monitoring system with CAN-integrated receiver.
- Sensors measure tyre pressure and temperature.
- Data transmitted continuously every 40 seconds (internal model) or two minutes (external model) to the receiver.
- The external model securely attaches to the tyre valve for quick and easy installation.
- The internal sensor straps to the wheel's rim, making it more secure and reliable, ideal for OEM assembly lines or larger retrofit projects.
- Complies with European TPMS legislation ECE-R141 while integrating with existing CAN bus architecture.
- The RF to CAN Bridge can be configured using Bluetooth to monitor the correct sensor IDs, pressure and temperature thresholds.
- Once integrated into a CAN, the tyre data can be viewed on any display connected to the application's network.
- RF to CAN Bridge is environmentally sealed – IP69K.
- Suits trucks, trailers and tractor units.
- Made in Europe.

This is an example of a TireCheck system utilising the wireless sensors together with the RF to CAN Bridge to provide tyre data to a CAN.

The setup can operate with either internal (ESW-T30878) or externally mounted sensors (ESW-T30878), which transmit tyre information wirelessly to the receiver for real-time monitoring.



1 x RF to CAN Bridge (ESW-T30303) is required to wirelessly receive tyre data from each of the sensors.

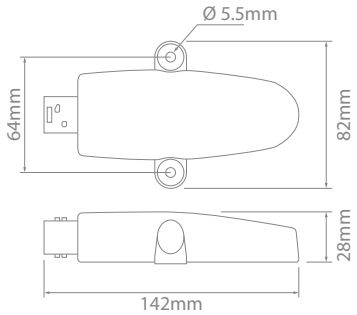
Supplied with a TE MCP Series connector and contacts & seals to suit

IP69K

12V 24V

ESW-T30303

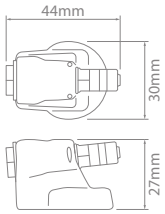
Voltage :	12–24V
CAN :	SAE J1939, 11992
Communication :	Radio Frequency, Bluetooth, CAN
Operating Temperature :	-40°C to 85°C



TireCheck – RF to CAN Bridge NEW

Part No.	Description
ESW-T30303	Wireless receiver kit for TireCheck sensors. Transmits tyre data from sensors to vehicle CAN

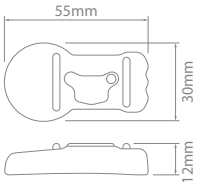
ESW-T30839



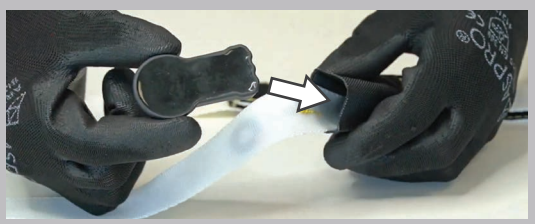
Mounts directly to tyre valve. Inbuilt valve opening allows standard tyre inflation (does not interfere with typical process)

Power Supply :	3V Battery
Typical Battery Life :	5 Years
Communication :	Radio Frequency
Speed Limit :	Up to 130 km/h
Operating Temperature :	-40°C to 115°C

ESW-T30878



Internal sensors strap to the inside of tyre (to the rim) making it more secure and reliable, best suited for OEM assembly lines or larger retrofit projects.



TireCheck – Sensors NEW

Part No.	Description	Tyre Mounting Position	Pressure Range (Bar)	Data Transmission Interval	Weight (g)
ESW-T30839	Valve/sensor mounts directly to tyre valve. 8V1 thread	External	0 – 9	2 minutes	36
ESW-T30878	Tyre pressure sensor kit, includes strap – 19.5". Mounts inside the tyre directly to the rim	Internal	0 – 12	40 seconds	18