Accessories

Accessories

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 commonly used 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 46 & 50–51.
- All sensors environmentally sealed – IP67.

Does your sensor require a module?

Analogue Sensors require an I/O Module (found on page 46) or a PDM (found on page 50–51) in order to transmit sensor data onto the Controller Area Network (CAN).

Analogue Sensor   I/O Module or PDM

Pressure/Temperature Sensor
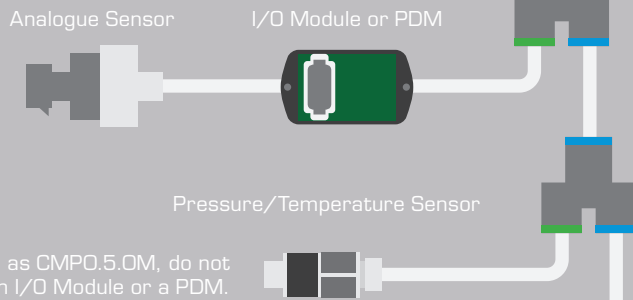
CAN Sensors, such as CMP0.5.0M, do not require an I/O Module or a PDM.

Controller Area Network

★ Featured

Made in Europe

Sensors – CAN – Pressure & Temperature ★

Range (Bar)	0 – 0.5	0 – 4	0 – 16	0 – 25	0 – 100	0 – 400
Part No.	**CMP**0.5.0M	**CMP**4.0M	**CMP**16.0M	**CMP**25.0M	**CMP**100.0M	**CMP**400.0M

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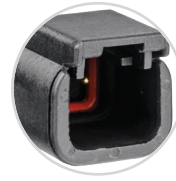Mounting Thread: G 1/4"
Voltage: 9–32V

IONNIC

3 pin
TE DEUTSCH DT
Series connector.
Includes mount

115722

740114

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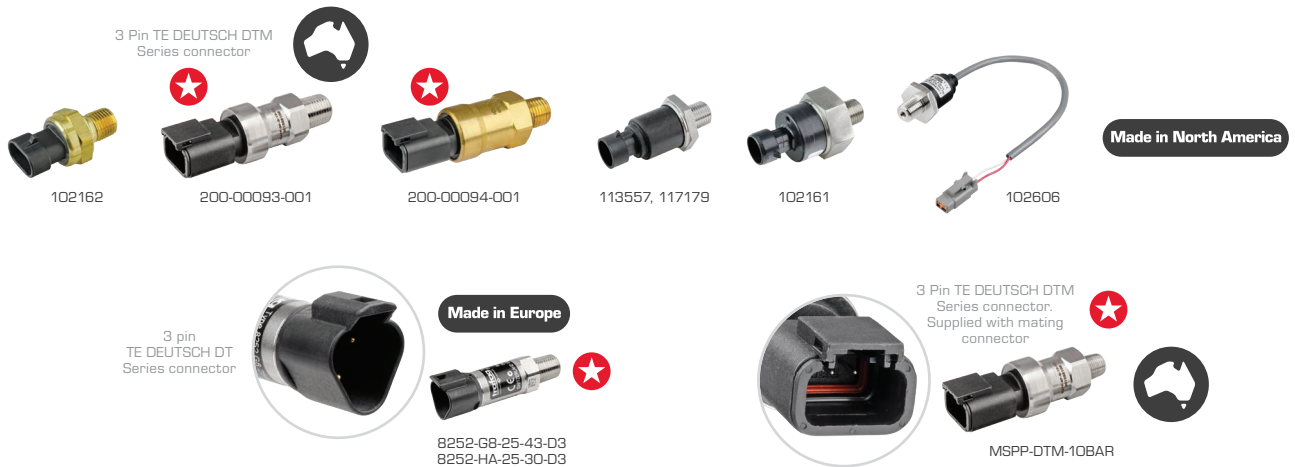Supplied with mating connector

Featured

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	
200-000**93**-001 ⭐	5	0V to 5V	0 – 5	1/4" NPT	Stainless steel
200-000**94**-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	
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

Accessories
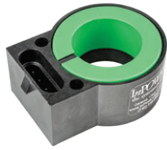
DCS35-300-2

Made in North America
102714A

Sensors – Analogue – Current & Flow

Part No.	Voltage	Sensor Type	Output Signal	Range
DCS35-**300**-2	9–32	Current	0V to 5V	-300A – 300A
102714A	9–32	Flow	±5V	Frequency

Ingress Protection: IP67

RKT5-228-2M

2m female to tail
M12 network cable – 5 pin

CONNKIT-CURRENT

CONNKIT-TEMPSENSOR

CONNKIT-THERMISTOR

CONNKIT-ITL-DTM

CONNKIT-TRANSITL

CONNKIT-TRANSHIPSI

CONNKIT-TRANSPSI

Sensors – Connection Kits

Part No.	Suits	
RKT5-228-**2M**	CAN – Pressure & Temperature	All
CONNKIT-**CURRENT**	Analogue – Current	DCS35-300-2, DCS36-300-2
CONNKIT-**TEMP**SENSOR	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-**TRANS**ITL	Analogue – Pressure	102162
CONNKIT-**TRANS**HIPSI	Analogue – Pressure	102606
CONNKIT-**TRANS**PSI	Analogue – Pressure, Flow	102714A, 113557, 117179, 102161

Crimping tools can be found on page 96.

DTO4-4P-5V

Recommended to also install a 1A (maximum) fuse to the 9–32VDC input. Reverse polarity protected.

Do not remove ground supply while device is powered or damage to the device can occur.

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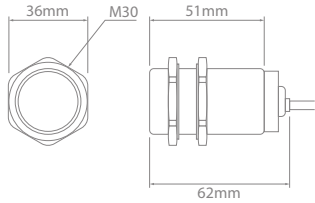**Pin 4** – Input (9–32VDC), fused to 1A (maximum)

Optional accessory
Flow Sensor Boss.
Used to facilitate mounting
of Flow Sensor

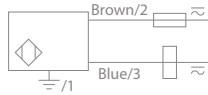DTO4-4P-5V

SFM

Sensors – Analogue – Accessories

Part No.	Description	Suits
DT04-4P-**5V**	5V Regulator	Pressure (all)
SFM	Mounting Boss	Flow (102714A)

IONNIC

36mm   M30   51mm

62mm

Brown/2
Blue/3
/1

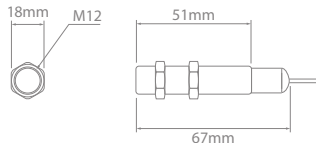**Featured**

Made in Europe   CE   CSA   RU   RoHS COMPLIANT   IP68   IP69K

12-0001

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

18mm   M12   51mm

67mm

12-0120

24mm   M18   51mm

67mm

12-0180

Featured

36mm   M30   51mm

69mm
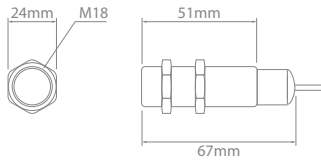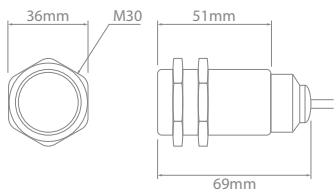
12-0300

Made in North America   RoHS COMPLIANT   IP67   CE   RU

Brown   +
Black   Load
Blue   −
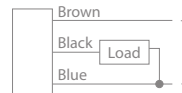
Switches – Inductive Proximity ⭐

Part No.	Voltage Type	Voltage	Output Type	Output Function	Sensing Range (mm)	IP Rating	Switching Capacity (mA) AC	DC
12-0001	AC/DC	24–240	—	N/O	10	68, 6K9K	5–300	5–200
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

Accessories

IP65 · **RoHS COMPLIANT** · **10V 48V**
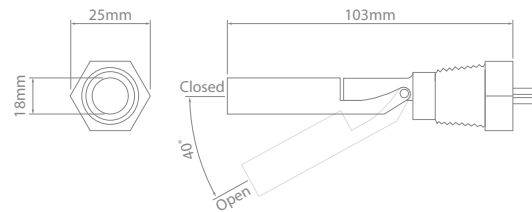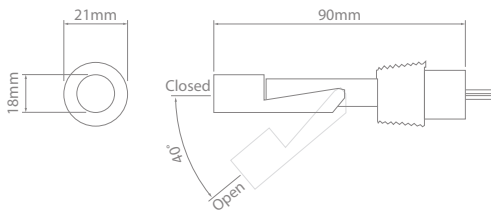
Featured

12mm · 28mm · M8 · 11mm · 25mm
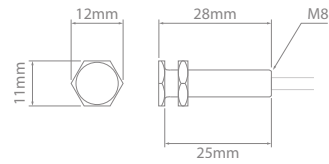
Switches – Proximity Reed ⭐

Part No.	Contact Type	Switching Distance (mm)	Voltage AC/DC	Current Rating (A)	Contact Resistance (Ohms)	Cable Length (mm)	Material
12-0050	N/O	10	10–48	0.5	0.2	280	Brass

Operating temperature: -20°C to 85°C

21mm · 90mm · 18mm · Closed · 40° · Open

25mm · 103mm · 18mm · Closed · 40° · Open

Made in Europe · **RoHS COMPLIANT**

12-0030

Featured

Weather-Pack
2 pin connector

Made in North America · UL

200-2110-02-0

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
200-2110-**02-0**	N/O & N/C	40°	1/2" NPT	250	200	1.0	500	Nylon

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

Operating temperature:
12-0030: -20°C to 75°C
200-210-02-0: -30°C to 130°C

IONNIC

- Transparent housing with integrated LED on wedgelock for quick circuit diagnosis.
- Colour coded wedgelocks for operating voltages, 12V (yellow) and 24V (red).
- Joint retention fingers allow both contacts to be removed at the same time.
- Compatible with Pulse Width Modulated control.
- Sold as kit including nickel-plated or green band contacts.
- Environmentally sealed – IP68, IP6K9K, when installed to manufacturer's specifications.
- Industry proven TE DEUTSCH DT Series.
- Latched mating.
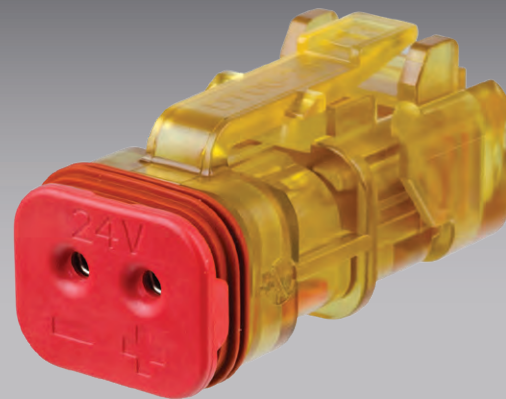
Housing :	Ultem
Seal :	Silicone Rubber
Wedgelock :	Thermoplastic
Contact Size :	16
Contact Rating :	13A @ 125°C
Shock :	50G
Vibration :	20G rms 10 – 2000Hz
Approvals :	20mm Flame Test per Standard UL-94
Ingress Protection :	IP68, IP6K9K
Operating Temperature :	-55°C to 125°C

Half Kits

Half Kits contain all components to make one half of a connection.

Each kit contains 2 x contacts and a DT Detector receptacle with a DT Detector Wedgelock.

W2S-SDT-24V   W2S-SDT-12V   DTO6-2S-SDT-CE27

★ Featured

DTLED-24V-1   DTLED-12V-4

DT Detector Half Kits ★

Part No.	Voltage	Wedgelock Colour	Socket Type	Wire Size	
				AWG	mm²
DTLED-12V-**1**	12	Yellow	0462-209-16141 – Green Band, Nickel-plating	14	1.0 – 2.0
DTLED-24V-**1**	24	Red	0462-209-16141 – Green Band, Nickel-plating	14	1.0 – 2.0
DTLED-12V-**3**	12	Yellow	0462-201-16141 – Nickel-plating	20 – 16	0.5 – 1.0
DTLED-24V-**3**	24	Red	0462-201-16141 – Nickel-plating	20 – 16	0.5 – 1.0
DTLED-12V-**4**	12	Yellow	0462-209-1631 – Green Band, Gold-plating	14	1.0 – 2.0
DTLED-24V-**4**	24	Red	0462-209-1631 – Green Band, Gold-plating	14	1.0 – 2.0

Kit Contents:
1 x DT Detector Receptacle (DTO6-2S-SDT-CE27)
1 x DT Detector Wedgelock (W2S-SDT-12V or W2S-SDT-24V)
2 x Solid Socket

Accessories

Monitor not included with kit

- Overlay detection data for up to 2 radar sensors on a single monitor.
- Compiles with CAN 2.0A Base Frame Format.
- Detects multiple moving and stationary objects.
- High frequency continuous wave provides increased reliability & low false alarm rates.
- Adjustable detection range up to 30m.
- 3 trigger inputs used for activating components such as alarms and beacons.
- Environmentally sealed sensor – IP69K
- Sensor can be steam & pressure cleaned.
- Multi-voltage.
- 3 year warranty.

Voltage :		12–24V
Current Draw :		0.4A
Radar Frequency :		24.05GHz to 24.25GHz
Weight :	Radar Sensor	0.7kg
Vibration :		8.3G
Shock :		100G
EMC :		CE & 'e' marked
Operating Temperature :		-40°C to 85°C
Ingress Protection :		IP69K

CE   IP69K   12V 24V   3Yrs

Backsense Network Radar

Brigade's Backsense® Network Radar is the next generation of radar-based obstacle detection.
Due to the number of complex blind spots on a vehicle, a single radar cannot always provide the detection required. Additionally, multiple in-cab displays for multiple radars can be more of a distraction than a benefit.
Aimed at OEM and specialist applications, Brigade's Network Radar OSD kit allows you to connect and link 2 sensors to cover large, sometimes complex blind spot zones around a vehicle or machine.

Traditional

CAN Network

ECU
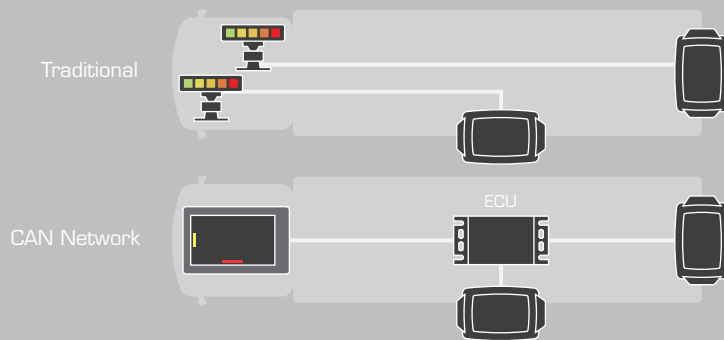
On-Screen Display

Multiple radars with individual in-cab displays can cause confusion and also be a challenge to install. Brigade's latest innovation, the Backsense® OSD (On-screen Display) ECU allows for the use of 2 Backsense® Network Radar units to be combined with any Brigade Backeye® camera system.

Radar detection data is overlaid transparently* along the edge of the monitor so as not to obscure the camera image with the audible warning via the monitor speakers.

* Transparency level can be adjusted via software.

When an object is detected in the YELLOW zone, the associated on-screen indicator will turn yellow and a pulsed audible alert is played through the monitor's speaker.)))))))))
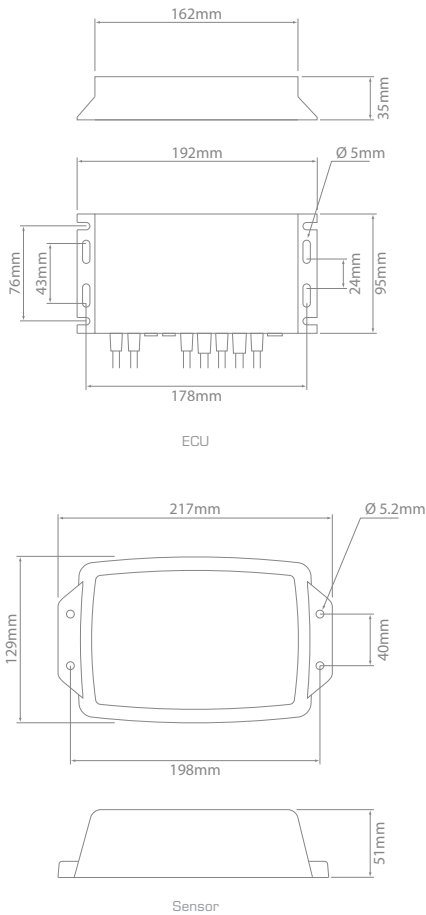
When object is detected in RED zone, the associated on-screen indicator will turn red and a constant audible alert is played through the monitor's speaker.)))))))))))))

Each radar sensors detection notification can be assigned to one of eight predefined positions overlaid around the edge of a monitor.

BRIGADE®

Watch video ▶

⭐ **Featured**

162mm
35mm

192mm
Ø 5mm
76mm
43mm
24mm
95mm
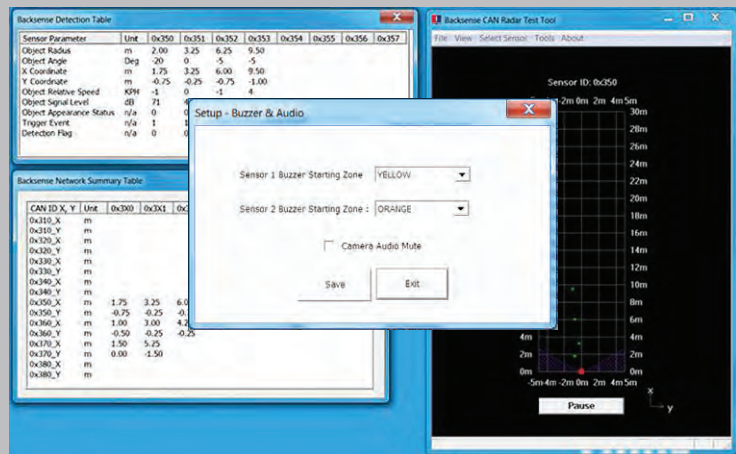178mm

ECU

217mm
Ø 5.2mm
129mm
40mm
198mm
51mm

Sensor

Configurable

Backsense® Network Radar with OSD Kit is supplied with easy to use PC software used to adjust the following parameters:

- Detection zone length & width
- Blind area mapping
- Buzzer starting zone
- Trigger output length

Download the latest software and manual from ionnic.com

Backsense Network Radar – OSD Kit ⭐

Part No.	Detection Distance (m)	Detection Width (m)	Camera Inputs	Triggers	
				Input	Output*
BS-9001-**OSD**	3 – 30	2 – 10	2	3	3 x 0.5A

Supports up to 2 Backsense® Network Radars.

Compatible with Brigade Backeye systems, including Backeye 360 and Brigade Digital Mobile Recorder.
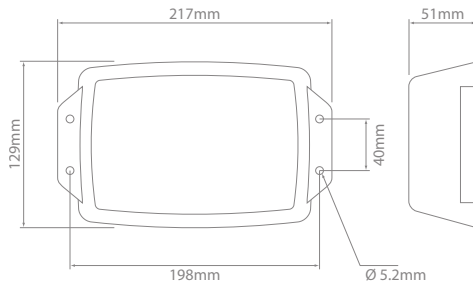
* 1 x output for alarm use only.

Kit contents:
1 x Sensor Unit (BS-9000)
1 x OSD ECU
3 x Network Y Cable (BS-00NYC)
2 x CAN Bus Terminator (BS-00NT)
1 x 9m Extension Cable (BS-09DCX)
1 x Network Power Input Cable (BS-02PIC)
Sensor Mounting Hardware

Manual & software available on IONNIC website

Accessories

217mm

129mm

198mm

51mm

40mm

Ø 5.2mm

Featured

Backsense Network Radar – Sensor ★

Part No.	Description	CAN	Baud Rate	Detection Distance (m)	Detection Width (m)
BS-9000	Single network radar sensor unit	SAE J1939	500K	3 – 30	2 – 10

Extensive Brigade Range Available

For the entire range of compatible Brigade systems, including the Backeye® 360 camera and the Brigade Mobile Digital Recorder, see the Safety Systems 2022 catalogue.

Download the complete catalogue from ionnic.com or free call from within Australia 1800 724 690

BS-05B

Extension Cable

BS-00NYC

BS-00NT

BS-02PIC

Backsense Network Radar – Accessories

Part No.	Description
BS-05B	Adjustable sensor bracket
	Supplied with bolts, washers and nylock nuts.
BS-05DCX	Extension cable – 5m
BS-09DCX	Extension cable – 9m
BS-00NYC	Network 'Y' cable
BS-00NT	120 Ohm CAN bus terminator
BS-02PIC	Network power input cable – 2m

BRIGADE®

Custom Engraved Panels

- Front or rear engraving.
- Large range of colour combinations including metallic finishes.
- Materials available for use with backlighting.
- UV Stabilised.
- Ideal for:
    – Safety signage
    – Control panels
    – Product tags
    – Name plates
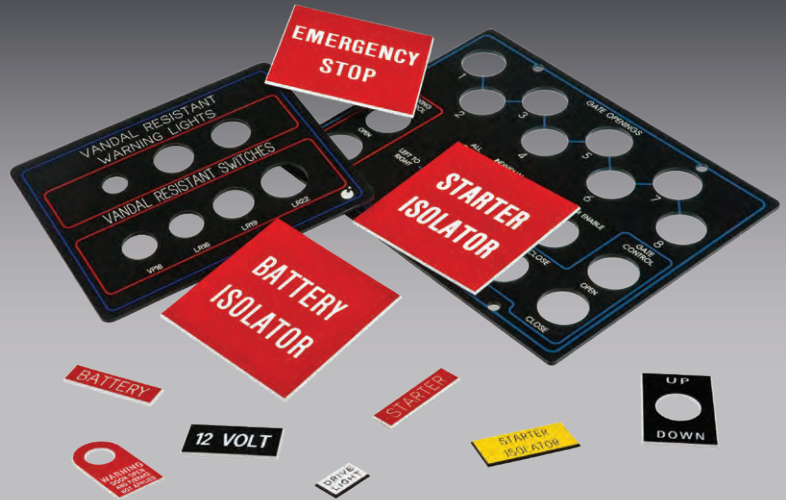
Engraver Type : Rotary Flat Bed
Maximum Size : 500mm x 380mm
Materials : Laminated Impact Acrylic
UV Stabilised

Custom Engraving

Custom engraving is available for the creation of control panels and name plates up to a maximum size of 500mm x 380mm.

Choose from a large range of colours with some materials suitable for use with backlighting.

For further information ask your local reseller or enquire online at ionnic.com.
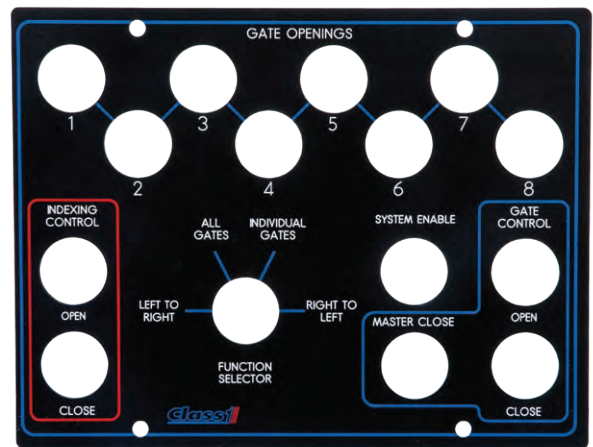
Waste
Manage

Smart Touch

HD PDM

PDM

Backsense Radar

USM2

CAN Pressure & Temp Sensors

I/O Module

UV450

ement Refuse Trucks

Class 1's vehicle multiplex systems are well known throughout the heavy vehicle industry for improving reliability, efficiency and safety operations.

With reduced wiring and robust components readily integrated, Class 1 are able to reduce the complexity of the electrical system and offer the user a comprehensive control solution.

- Switch operation
- Safety interlocking
- Blade Automation
- Diagnostics
- Lighting control

Accessories
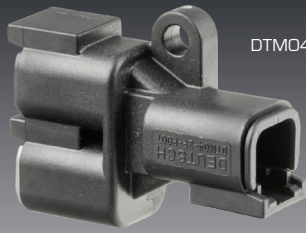
DTM04-2P-P007

DT04-3P-P006

- Genuine TE DEUTSCH connectors.
- Environmentally sealed – IP68, IP6K9K, when installed to manufacturer's specifications.
- Multiple housing options available.
- Latched mating.
- Wedgelocks ensure contact alignment and retention.

DT04-3P-P007

HD10-9-1939PE

Housing : Thermoplastic
Seal : Silicone Rubber
Wedgelock : Thermoplastic
Vibration : 20G rms 10 – 2000Hz
**Approvals :** 20mm Flame Test per Standard UL-94
Ingress Protection : IP68, IP6K9K
Operating Temperature : -55°C to 125°C

Controller Area Networks (CAN)

Controller Area Networks, or CAN are multiplexed control systems. Multiplexing allows multiple data signals to travel on the same wires, integrating separate electronic systems and applications to a single point of control and monitoring system.

High Discharge Power Distribution Module (HD PDM)

Ultraview Touch

Analogue Sensor

I/O Module

Supernode II

W3S-P012   DT06-3S-C015

W3S-1939-P012

0462-201-1631

103349

103349

0462-201-1631

DT06-3S-C015

DT04-3P-P007

DT06-3S-P006
120 Ohm Resistor

The blue wedgelock (W3S-1939-P012) is used in place of the standard green wedgelock to indicate the main CAN line backbone.

A 120 Ohm resistor is used at both ends of a J1939 CAN network to reduce any reflections in the network.

DEUTSCH

J1939/11

J1939/11 is a 3-wire system that uses the TE DEUTSCH DT series connectors primarily for truck and bus. The DT series accepts size 16 contacts. Connector options include in-line, bulkhead, "Y" splitter, and terminating resistors.

DTO6-3S-EOO8

DTO6-3S-EP11

DTO6-3S-POO6

W3S-PO12

W3S-1939

DTO4-3P-EOO8

DTO4-3P-POO6

W3P

W3P-1939

DTO4-3P-POO7

0460-202-1631

0462-201-1631

1062-16-0144

CONNKIT-BBJUNCTION

CONNKIT-RESISTOR

CAN Connectors – J1939/11 – Common Components

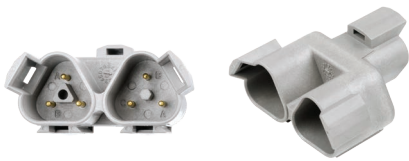| Part No.	Description	Cavities/Circuits
DTO6-3S-EOO8	DT Series – Plug – Heat shrink adaptor	3
DTO6-3S-EP11	DT Series – Plug – Heat shrink adaptor – Black. Requires W3S-PO12	3
DTO6-3S-POO6	DT Series – Plug – 120 Ohm Resistor. Includes wedgelock & contacts	3
W3S-PO12	DT Series – Wedgelock – Plug – Green	3
W3S-1939	DT Series – Wedgelock – Plug – Blue	3
DTO4-3P-EOO8	DT Series – Receptacle – Heat shrink adaptor	3
DTO4-3P-POO6	DT Series – Receptacle – 120 Ohm Resistor. Includes wedgelock & contacts	3
W3P	DT Series – Wedgelock – Receptacle – Green	3
W3P-1939	DT Series – Wedgelock – Receptacle – Blue	3
DTO4-3P-POO7	DT Series – Receptacle "Y" Piece. Includes wedgelocks & contacts	3
0460-202-1631	Contact – Pin – Solid – Gold-plated – Size 16	
0462-201-1631	Contact – Socket – Solid – Gold-plated – Size 16	
1062-16-0144	Contact – Socket – F-Crimp – Gold-plated – Size 16	

CONNKIT-BBJUNCTION Connection Kit – CAN Splice. Used for splitting CAN Backbone
Kit contents:
1 x Receptacle – DT Series "Y" Piece (DTO4-3P-POO7)   1 x DT Series 120 Ohm Resistor (DTO6-3S-POO6)   2 x Wedgelock – Blue (W3S-1939-PO12)
3 x Plug – DT Series – 3 Circuit (DTO6-3S-CO15)   9 x Contact – Socket – Gold-Plated (0462-201-1631)   1 x Wedgelock – Green (W3S-PO12)

CONNKIT-RESISTOR Connection Kit – CAN Splice with Resistor. Used for terminated CAN Backbone
Kit contents:
1 x Receptacle – DT Series "Y" Piece (DTO4-3P-POO7)   1 x DT Series 120 Ohm Resistor (DTO6-3S-POO6)   1 x Wedgelock – Blue (W3S-1939-PO12)
2 x Plug – DT Series – 3 Circuit (DTO6-3S-CO15)   6 x Contact – Socket – Gold-Plated (0462-201-1631)   1 x Wedgelock – Green (W3S-PO12)

Accessories

DTM06-2S-EP10   DTM06-2S-P006   DTM04-2P-P006   DTM06-2S-E005   WM-2S   WM-2SB

DTM04-2P-P007

0460-202-2031   0460-010-2031   1060-20-0144   0462-201-2031   0462-005-2031   1062-20-0144

DTM2-J1939-KIT

CAN Connectors – J1939/15 – Common Components

Part No.	Description	Cavities/Circuits
DTM06-2S-EP10	DTM Series – Plug – 120 Ohm Resistor – Black. Includes wedgelock & contacts	2
DTM06-2S-P006	DTM Series – Plug – 120 Ohm Resistor. Includes wedgelock & contacts	2
DTM04-2P-P006	DTM Series – Receptacle – 120 Ohm Resistor. Includes wedgelock & contacts	2
DTM06-2S-E005	DTM Series – Plug – End cap – Black	2
WM-2S	DTM Series – Wedgelock – Plug – Orange	2
WM-2SB	DTM Series – Wedgelock – Plug – Black	2
DTM04-2P-P007	DTM Series – Receptacle "Y" Piece – Black. Includes wedgelock & contacts	2
0460-202-2031	Contact – Pin – Solid – Gold-plated – Size 20	
0460-010-2031	Contact – Pin – Solid – Gold-plated – Size 20 – Purple Band	
1060-20-0144	Contact – Pin – F-Crimp – Gold-plated – Size 20	
0462-201-2031	Contact – Socket – Solid – Gold-plated – Size 20	
0462-005-2031	Contact – Socket – Solid – Gold-plated – Size 20 – Purple Band	
1062-20-0144	Contact – Socket – F-Crimp – Gold-plated – Size 20	
DTM2-J1939-KIT	DTM Series – 120 Ohm Resistor Kit	

Kit contents:
1 x Receptacle – DTM Series – 2 Circuit (DTM04-2P)
1 x Wedgelock – Orange (WM-2P)
1 x DTM Series 120 Ohm Resistor (DTM06-2S-P006)
2 x Contact – Pin – Gold-Plated (0460-202-2031)
1 x Mounting Clip (1011-026-0205)

=TE connectivity DEUTSCH

J1939/13

J1939/13 is a system that uses the TE DEUTSCH HD10 series connectors for on-board diagnostics. The HD10 series accepts size 16 contacts.
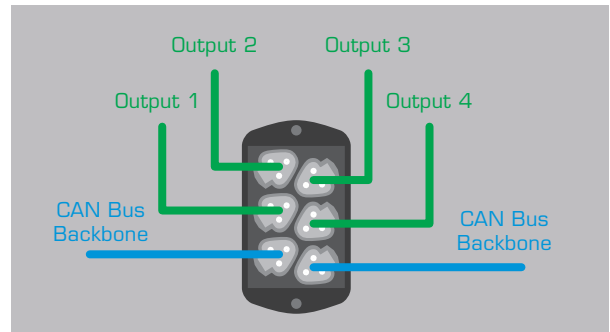
HD10-9-1939PE

HD16-9-1939SE

0460-202-1631

0462-201-1631

1062-16-0144

CAN Connectors – J1939/13 – Common Components

Part No.	Description	Cavities
HD10-9-1939PE	HD10 Series – Receptacle. Threaded rear – Black	9
HD16-9-1939SE	HD10 Series – Plug. Threaded rear – Black	9
0460-202-1631	Contact – Pin – Solid – Gold-plated – Size 16	
0462-201-1631	Contact – Socket – Solid – Gold-plated – Size 16	
1062-16-0144	Contact – Socket – F-Crimp – Gold-plated – Size 16	

Output 1   Output 2

CAN Bus Backbone   CAN Bus Backbone

Output 1   Output 2   Output 3   Output 4

CAN Bus Backbone   CAN Bus Backbone

Supplied with TE DEUTSCH 120 Ohm Resistor Plug (DTO6-3S-P006

x 4   x 1

CONNKIT-4JUNCTION   x 2   x 2   x 12

★ Featured

Supplied with TE DEUTSCH 120 Ohm Resistor Plug (DTO6-3S-P006

x 6   x 1

CONNKIT-6JUNCTION   x 4   x 2   x 18
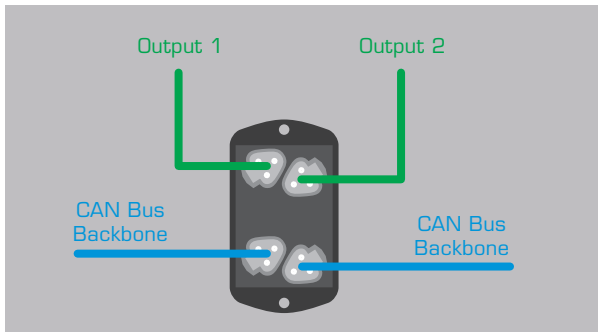
CAN Connectors – J1939 Bus Splitter Kits ★

Part No.	Description
CONNKIT-4JUNCTION	CAN bus 2 branch hub with mating connectors + 120 Ohm resistor plug

Kit Contents:
1 x CAN Bus 2 Branch Hub (CONNKIT-4)
4 x Plug – DT Series – 3 Circuit (DTO6-3S-C015)
1 x DT Series 120 Ohm Resistor (DTO6-3S-P006)
2 x Wedgelock – Green (W3S-P012)
2 x Wedgelock – Blue (W3S-1939–P012)
12 x Contact – Socket – Gold-Plated (0462-201-1631)

Part No.	Description
CONNKIT-6JUNCTION	CAN bus 4 branch hub with mating connectors + 120 Ohm resistor plug

Kit Contents:
1 x CAN Bus 4 Branch Hub (CONNKIT-6)
6 x Plug – DT Series – 3 Circuit (DTO6-3S-C015)
1 x DT Series 120 Ohm Resistor (DTO6-3S-P006)
4 x Wedgelock – Green (W3S-P012)
2 x Wedgelock – Blue (W3S-1939–P012)
18 x Contact – Socket – Gold-Plated (0462-201-1631)

Accessories

HD34-24-91PN

5004-001-2405

HDB36-24-91SN

- Breakaway coupling specifically designed to prevent damage to vehicle wiring and/or the attached implement by safely disconnecting and separating from vehicle in the event of an operator driving away without disconnecting beforehand.
- Dust cap suits all shell size 24 HD30 and HDP20 series connectors.
- Ideal for use in agricultural equipment as well as the truck, bus, mining and construction industry.
- Environmentally sealed – IP68, IP6K9K, when installed to manufacturer's specifications.
- Resistant to most fluids in industrial applications.

Housing :	HD30 Series	Aluminium
	DT Series	Thermoplastic
Seal :		Silicone Rubber
Shock :		50G
Vibration :		20G rms 10 – 2000Hz
Approvals :	20mm Flame Test per Standard UL-94
Ingress Protection :		IP68, IP6K9K
Operating Temperature :		-55°C to 125°C

IP68   IP 6K9K   Made in North America

HDBOX-24-91PN – Breakaway CAN Termination Assembly

Originally designed for agricultural applications, the TE DEUTSCH HDBOX-24-91PN Breakaway CAN Termination Assembly creates a communication pathway between an on-board CAN system and the electronic components on an attached implement.

The HDBox, which holds two DT13 connectors and an HD30 Series receptacle, mounts on the vehicle and mates with an HD30 Series plug connector featuring a breakaway coupling ring.

TE DEUTSCH breakaway couplings are designed to prevent damage to the CAN wiring of the vehicle and/or the attached implement by disconnecting and separating from the vehicle in the event of an operator driving away without disconnecting beforehand.
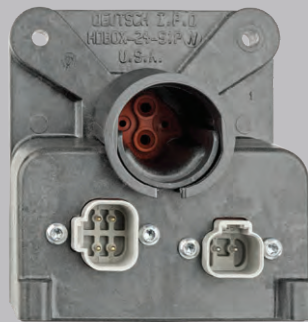
Houses
1 x DT13-2P, 1 x DT13-4P

Mates with
DT06-2S-EP06
DT06-4S-EP06

Houses
1 x HD34-24-91PN

Mates with
HDB36-24-91SN

TE connectivity   DEUTSCH

Featured

HDB0X-24-91PN

2 x size **8**, 2 x size **12**,
5 x size **16**

HD34-24-91PN

HD34-24-91PN-059

Circuits 4 & 5 are bridged.
Circuit 5 is occupied with a size 16
contact and sealed with a cavity plug

HDB36-24-91SN

HDB36-24-91SN-059

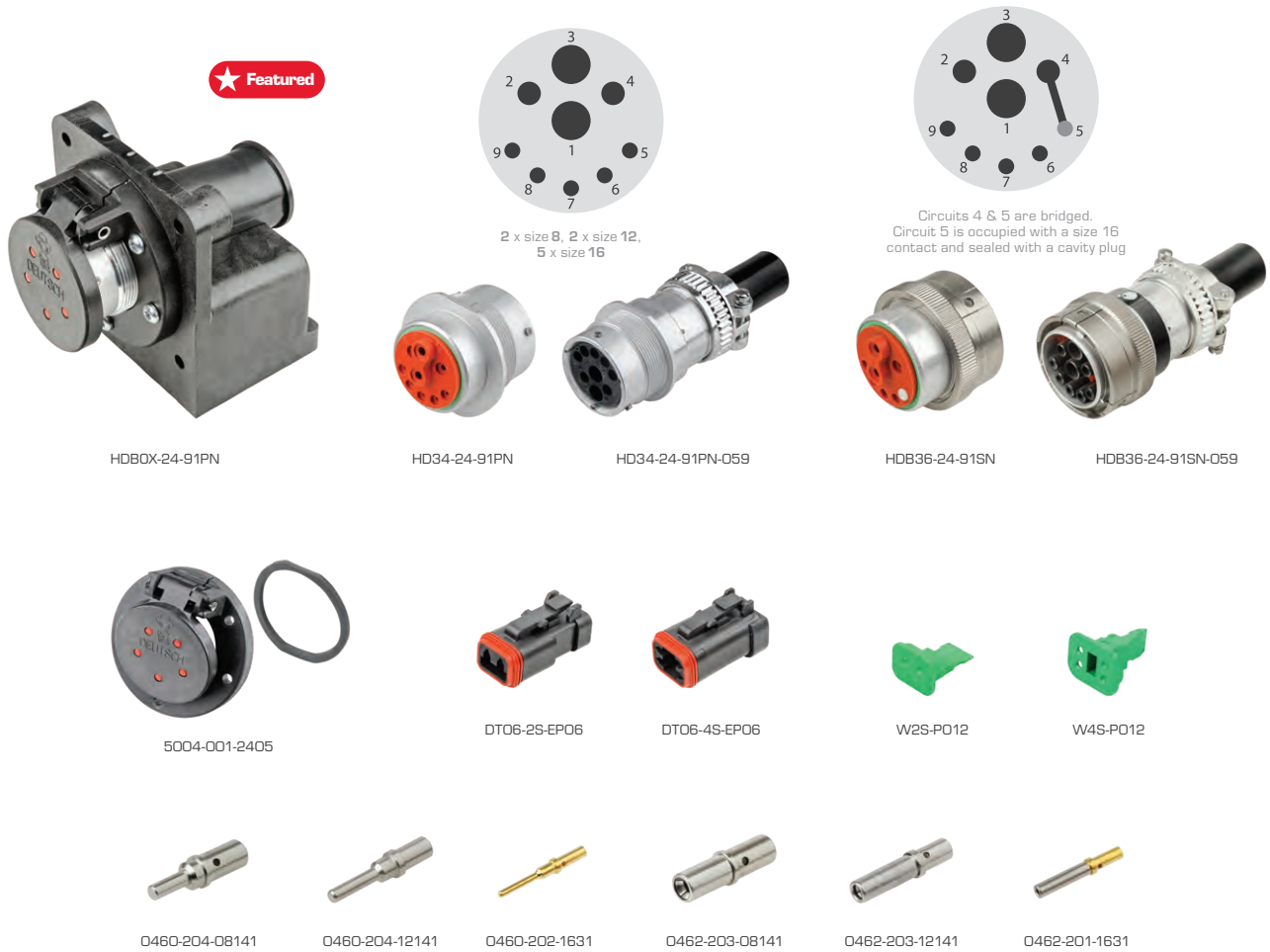5004-001-2405

DT06-2S-EP06

DT06-4S-EP06

W2S-P012

W4S-P012

0460-204-08141

0460-204-12141

0460-202-1631

0462-203-08141

0462-203-12141

0462-201-1631

HD30 Breakaway ⭐

Part No.	Description	Cavities
HDB0X-**24**-91**PN**	Breakaway CAN Termination Assembly	15
HD34-**24**-91**PN**	HD30 Series – Receptacle. Breakaway coupling	9
HD34-**24**-91**PN**-059	HD30 Series – Receptacle. Breakaway coupling incorporating strain relief	9
HDB36-**24**-91**SN**	HD30 Series – Plug. Breakaway coupling. Circuits 4 & 5 are bridged	9*
HDB36-**24**-91**SN**-059	HD30 Series – Plug. Breakaway coupling incorporating strain relief. Circuits 4 & 5 are bridged	9*
	* Circuit 5 is occupied with a non-removable size 16 contact and sealed with a cavity plug	
5004-001-**2405**	Dust cap suits shell size 24 HD34/HDP24 receptacles. Includes gasket	
DT06-**4S**-EP06	DT Series – Plug – Enhanced Seal Retention and End Cap – Black	4
DT06-**2S**-EP06	DT Series – Plug – Enhanced Seal Retention and End Cap – Black	2
W2S-**P012**	DT Series – Wedgelock – Plug – Green	2
W4S-**P012**	DT Series – Wedgelock – Plug – Green	4
0460-204-**08141**	Contact – Pin – Solid – Size 8	
0460-204-**12141**	Contact – Pin – Solid – Size 12	
0460-202-**1631**	Contact – Pin – Solid – Gold-plated – Size 16	
0462-203-**08141**	Contact – Socket – Solid – Size 8	
0462-203-**12141**	Contact – Socket – Solid – Size 12	
0462-201-**1631**	Contact – Socket – Solid – Gold-plated – Size 16	

DET12

7427155

PH375BK

- Range of data cable available – Standard, Medium, Heavy Duty and Shielded.
- Noise suppressing ferrites available – Ø 19.3mm & Ø 27mm.
- Wide range of crimping tools available.
- HDT-48-00 crimps a wide range of contact sizes with no need to change out dies or locators.
- Ratcheting tools will not release contact until a full crimp is completed.

103349, 103349-302

Made in North America

103349B, 103349R

Wiring, Accessories & Tools – CAN Data Cable

Part No	Description	Core Colours	Roll Length (m)	Nom. Area (mm²)	Nom. O.D. (mm)	Conductor	Max. Operating Temperature (°C)
103349	2 Core. Standard Duty	Yel/Grn	*	0.5	6.14	7 / 0.30	125
103349-**302**	2 Core. Standard Duty	Yel/Grn	302	0.5	6.14	7 / 0.30	125
103349**B**	2 Core. Medium Duty	Yel/Grn	*	0.5	7.46	19 / 0.20	125
103349**R**	2 Core. Heavy Duty	Yel/Grn	*	0.6	7.75	19 / 0.20	125

* This product is modified/cut to customer specifications and is not returnable for credit.

Made in North America

Wiring, Accessories & Tools – Serial Data Cable

Part No	Description	Core Colours	Roll Length (m)	Nom. Area (mm²)	Nom. O.D. (mm)	Conductor	Max. Operating Temperature (°C)
0L20-1600-**22**	2 Core. Standard Duty	Wht/Blk	60	0.72	5.45	16 / 0.30	60

IONNIC

PH275BK, PH275BK-100

PH375BK, PH375BK-100

Wiring, Accessories & Tools – Shielded Drain Wire

Part No	No. of Cores	Colour	Roll Length (m)	Nom. Area (mm²)	Nom. O.D. (mm)	Conductor	Max. Operating Temperature (°C)
PH275BK	2	Red/Blk	*	0.75	7.2	24 / 0.20	90
PH275BK-100	2	Red/Blk	100	0.75	7.2	24 / 0.20	90
PH375BK	3	Red/Blk/Wht	*	0.75	6.8	24 / 0.20	90
PH375BK-100	3	Red/Blk/Wht	100	0.75	6.8	24 / 0.20	90

* This product is modified/cut to customer specifications and is not returnable for credit.

Noise Suppression

Electromagnetic interference (EMI), also referred to as noise, is disturbance that affects an electrical circuit due to either electromagnetic induction or electromagnetic radiation emitted from an external source.

The disturbance may interrupt, obstruct, or otherwise degrade or limit the effective performance of the circuit. These effects can range from a simple degradation of data to a total loss of data.

A simple solution to electrical interference from noise is the utilisation of suppression ferrites. Ferrites are moulded metal powders, (ceramic), cast into various shapes and sizes.

Ferrite with Key (7427155)

A typical style of ferrite are clip-on chokes/suppressors. Simply open and snap around the wires or cables emitting the noise.

You can stack as many as you want over a single pair or bundle of wires. In situations with severe noise problems multiple ferrites can be stacked.

Ferrites are non-conductive so can be used almost anywhere, including on higher voltage power lines and battery/inverter cables.

28A5776-0A2

7427155

Wiring, Accessories & Tools – Ferrites

Part No.	Description
28A5776-0A2	Ferrite core. Inside Ø 19.3mm. Impedance – 210 Ohm @100MHz
7427155	Ferrite core split with locking key. Inside Ø 27mm. Impedance – 327 Ohm @ 100MHz

Accessories

114009

D08

114008

0411-353-0805

D12

114010

0411-337-1205

D14

0411-291-1405

D16


0411-310-1605

0411-336-1605

0411-204-1605

D20

0411-240-2005

Wiring, Accessories & Tools – TE DEUTSCH Contact Removal Tools

Part No.	Contact Size (TE DEUTSCH)	Wire Gauge Size (AWG)	Colour	Notes
114009	4	6	White	
D08	8	8	Magenta	Stainless steel shaft. Anodized aluminium handle
114008	8	10, 8	Green	
0411-353-**0805**	8	10, 8	Green	Extended
D12	12	12	Magenta	Stainless steel shaft. Anodized aluminium handle
114010	12	12	Yellow	
0411-337-**1205**	12	14, 12	Orange	Extra Thin Wall (E-Seal)
D14	14	14	Magenta	Stainless steel shaft. Anodized aluminium handle
0411-291-**1405**	14	16, 14	Green	
D16	16	16	Magenta	Stainless steel shaft. Anodized aluminium handle
0411-310-**1605**	16	18, 16	Light Blue	
0411-336-**1605**	16	18, 16	Blue	Extra Thin Wall (E-Seal)
0411-204-**1605**	16	18, 16	Dark Blue	
D20	20	20	Magenta	Stainless steel shaft. Anodized aluminium handle
0411-240-**2005**	20	24, 20	Red	

IONNIC
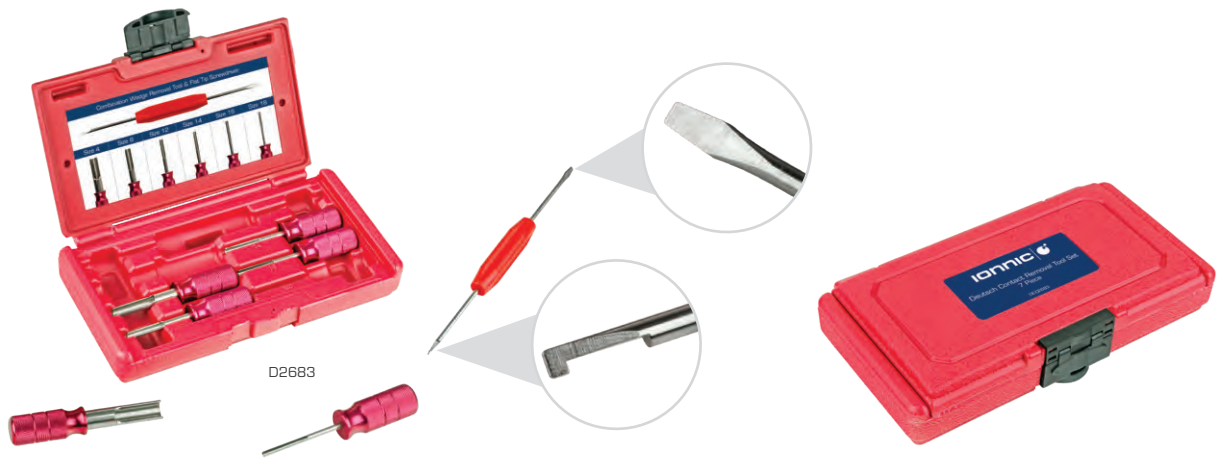
D2683

Wiring, Accessories & Tools – TE DEUTSCH Removal Tool Set

Part No.	Description	Contact Size (TE DEUTSCH)
D2683	7 piece contact removal tool set. Includes multi-use hook tool / flat-head screw driver	4, 8, 12, 14, 16, 20

P-12094429

P-12094430

P-12014012

7704489

7704496

HT-7200

DET-RT

DET-RT1

Wiring, Accessories & Tools – Removal Tools

Part No.	Suits
P-12094429	Metri-Pack GT150, GT280, 150, 280, 630 Pull-to-Seat
P-12094430	Metri-Pack 280, 480, 630, 800 Series Pin Tangless
P-12014012	Weather-Pack
7704489	Generic removal tool. Contact cavity Ø 5.2mm
7704496	Generic removal tool. Contact cavity Ø 3.3mm
HT-7200	Generic removal tool. Contact cavity Ø 2.9mm
DET-RT	Multi-use hook tool
DET-RT1	Multi-use hook tool & flat-head screw driver

Accessories

Made in North America

DET48

HDT-04-08

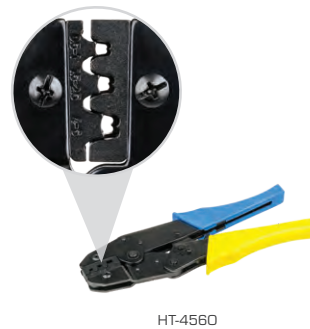| 1 Indent "U" Crimp | 2 Indent Crimp | 4 Indent Crimp |

DET12, DET16, DET20

D2681

D2682

HDT-50-00

HDT-48-00

Wiring, Accessories & Tools – Crimpers – TE DEUTSCH – Solid Contacts

Part No.	Description	Contact Size (TE DEUTSCH)	Crimp Style
DET48	Two handed	8, 4	2 indent
HDT-04-**08**	Two handed	8, 4	2 indent
DET12	Ratcheting	12	4 indent
DET16	Ratcheting	16	4 indent
DET20	Ratcheting	20	4 indent
D2681	Ratcheting	20, 16, 12	2 indent
D2682	Ratcheting	20, 16, 12	2 indent
HDT-50-**00**	Ratcheting	20, 16, 12	1 indent
HDT-48-**00**	Ratcheting	20, 16, 12	4 indent

IONNIC

Attaches seal & cable in one action

Made in North America

P-12014254

Made in North America

P-12071687

Made in North America

P-12085270

Double hinged for parallel crimping

HT-4300

HT-4301

Double hinged for parallel crimping

HT-4220

HT-4560

Wiring, Accessories & Tools – Crimpers

Part No.	Description	Suits	Crimp Range (mm²)
P-12014254	Ratcheting. Attaches seal & cable in one action	Weather-Pack	0.5–0.8, 1.0–2.0
P-12071687	480 & 630 Series	Weather-Pack & Metri-Pack	3.0–5.0
P-12085270	Ratcheting	Weather-Pack & Metri-Pack	0.5–0.8, 1.0–2.0
HT-4300	Parallel jaws	Weather-Pack & Metri-Pack 150 & 280 Series	0.35, 0.5–0.8, 1.0–2.0, 3.0
HT-4301	Parallel jaws	TE Superseal	0.35–0.5, 0.75, 1.0, 1.5
HT-4220	Parallel jaws	Non-insulated contacts	0.2–0.3, 0.3–0.5, 0.5–0.8, 0.8–1.3, 1.3–2.0
HT-4560	Ratcheting	Non-insulated contacts	0.5–1, 1.5–2.5, 4–6

Accessories

Made in North America

DTT-16-00

D7000

D7000
6 Removable Dies

Die 1 14, 12AWG	**Die 2** 12, 10AWG
Die 3 18, 16, 14AWG	**Die 4** 20, 18, 16AWG
Die 5 20, 18-16AWG	**Die 6** 16, 14, 12AWG

Wiring, Accessories & Tools – Crimpers – TE DEUTSCH – Stamped & Formed

Part No.	Description	Crimp Range (AWG)
DTT-16-**00**	Ratcheting. 1 indent crimper "U" crimp	16 & 14
D7000	Ratcheting crimp tool set with 6 removable dies. 1 indent crimper "U" crimp	

5 Piece Crimp Tool Set for Packard™ Contacts

Tool Set contains tools suitable for:

• AMP Superseals
• Weather-Pack
• Metri-Pack 150, 280, 480 & 630 series
• Micro-Pack 064, 100 & 100W series.
• GT 150, 280, 630 series
• And other brands including Molex, Yazaki, Sumitomo etc

All housed in a handy storage tray.

Also included in the kit is a 32 page instruction manual detailing tool specifications as well as an OEM contact number/tool number matrix.

All tools in kit are premium quality – made in the USA.

Made in North America

Wiring, Accessories & Tools – IONNIC Crimping Tool Set – Packard Contacts

Part No.	Description
HT-K26**80**	5 piece crimping tool set for wide range of contacts, includes instruction manual
	Suits AMP Superseals, Weather-Pack and Metri-Pack contacts among others. For full list see above

IONNIC