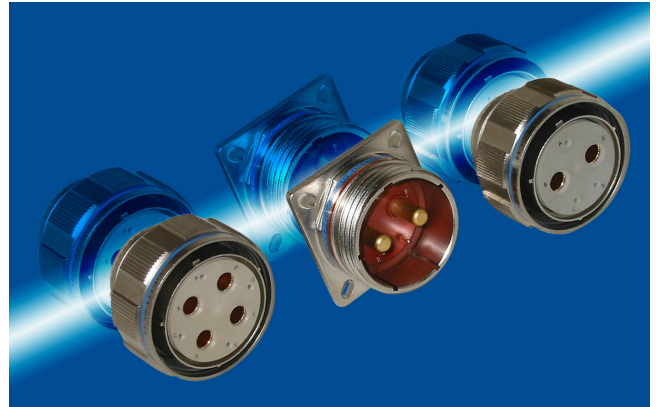


# High Current Circular Connectors (DTS-HC)

The Deutsch DTS-HC series connector is ideally suited for power control systems for military vehicles using a 8mm<sup>2</sup>, 16mm<sup>2</sup> or 25mm<sup>2</sup> cable. With both high electrical power and signal contacts within the same body. The power contacts are rated to 150 amps and are suitable for power ring main supplies.



## FEATURES

- Dual contact design
- High current contacts
- 100% scoop proof design
- Grounding fingers
- Elastomer interface
- RFI fingers at mating interface
- Removable rear crimp contacts
- Dedicated back fitting and grommet

## BENEFITS

- Space saving with integral power and signal wires
- Provides superior contact retention under severe vibration
- Standard Mil-C-39029 contacts as used in Mil-DTL-38999 connectors
- Threaded coupling with self locking mechanism for anti-vibration
- Enhanced cable support and sealing

## COMPANY QUALITY APPROVALS

- Civil Aviation Authority A8-1
- BS EN ISO 9001
- Military Spec Approvals 38999
- BS9000 and CECC
- Underwriters Laboratories

**With 30 years experience in designing and manufacturing at its own facilities, Deutsch UK can provide interconnection solutions for the most demanding of environments**

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## GENERAL SPECIFICATION

### Material:

Shell/coupling ring: High Strength Aluminium Alloy  
Plating: Nickel (RoSH compliant) (standard)  
Olive Drab Cadmium (optional)  
Zinc Cobalt (optional)

### Contacts:

Material: Gold plated Copper Alloy  
Current Rating: Size 4 service rating 150 Amp  
Size 20 service rating in accordance with MIL-C-38999  
Type: Crimp

### Cable Size:

Size 4: 8mm<sup>2</sup>, 16mm<sup>2</sup> & 25mm<sup>2</sup> cable  
CENELEC Specification HD516  
Size 20: 20-04 AWG cable

### Crimp Tool:

Dubius Tool D51

### Dieset:

16mm<sup>2</sup> cable 31040  
25mm<sup>2</sup> cable 31041

### Insulators:

Thermoplastic

### Interface Seal:

Fluorinated Silicone

### Temperature:

-65°C to +175°C

### Backshell:

It is highly recommended for the correct installation that the dedicated back fitting and rear grommet is used with this connector

### Protective Caps:

Plug & receptacle caps are available

### Durability:

No electrical or mechanical defects after 500 cycles

### Vibration:

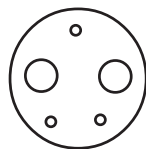
As per Mil-DTL-38999

### Thermal Shock:

As per Mil-DTL-38999

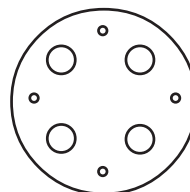
## INSERT ARRANGEMENTS

Shell Size 23



**23-24320**  
2 x Size 4 contacts  
3 x Size 20 contacts

Shell Size 25



**25-44420**  
4 x Size 4 contacts  
4 x Size 20 contacts

## DIMENSIONAL INFORMATION

Please refer to the Deutsch UK D38999 Series 3 & DTS Dimensional Information datasheet

## ORDERING INFORMATION

### CONNECTOR

	<b>DTS</b>	<b>26</b>	<b>F</b>	<b>23</b>	<b>-</b>	<b>24320</b>	<b>S</b>	<b>N</b>	<b>-</b>	<b>025</b>	
<b>Range ref</b>											<b>Cable Size:</b>
<b>Shell Style:</b>											025 = 25mm <sup>2</sup> cable
20 = Square flange receptacle											016 = 16mm <sup>2</sup> cable
24 = Round flange receptacle											008 = 8mm <sup>2</sup> cable
26 = Free plug											<b>Keyway:</b>
<b>Finish:</b>											N = Normal, A, B
F = Nickel											<b>Contact Type:</b>
W = Olive Drab Cadmium											P = Pin
Z = Zinc Colbalt											S = Socket
<b>Shell Size:</b>											<b>Insert Arrangement:</b>
23, 25											24320, 44420 (see above)

### ACCESSORIES

	<b>610312</b>	<b>-</b>	<b>25</b>	<b>-</b>	<b>58</b>	<b>-</b>	<b>025</b>	
<b>Basic Part Number:</b>								<b>Cable Size:</b> (only required for backshell)
610312 - Backshell & grommet								025 = 25mm <sup>2</sup> cable
610317 - Plug protective cap								016 = 16mm <sup>2</sup> cable
610316 - Receptacle protective cap								008 = 8mm <sup>2</sup> cable
<b>Shell Size:</b>								<b>Finish:</b>
23, 25								58 = Nickel
								12 = Olive Drab Cadmium
								93 = Zinc Colbalt

## CONTACTS AND TOOLING

Contacts & Tooling	Part Number
Contact pin size 4 for 25mm <sup>2</sup> cable	605660
Contact socket size 4 for 25mm <sup>2</sup> cable	605654
Contact pin size 4 for 16mm <sup>2</sup> cable	605734
Contact socket size 4 for 16mm <sup>2</sup> cable	605739
Contact pin size 4 for 8mm <sup>2</sup> cable	610151
Contact socket size 4 for 8mm <sup>2</sup> cable	610152
Contact pin size 20	38941-20
Contact socket size 20	38943-20
Contact removal tool size 4 contacts	610136-TOOL
Insertion/Extraction tool size 20 contact	M81969/29-03

## REAR GROMMETS

Rear Grommet	Part Number
Shell size 23 for 25mm <sup>2</sup> cable	605845
Shell size 25 for 25mm <sup>2</sup> cable	605846
Shell size 23 for 16mm <sup>2</sup> cable	610314
Shell size 25 for 16mm <sup>2</sup> cable	610315
Shell size 23 for 8mm <sup>2</sup> cable	to be assigned
Shell size 25 for 8mm <sup>2</sup> cable	to be assigned