Harnessflex

SPECIALIST CONDUIT SYSTEMS

## **TempGuard Interfaces**

**BOSCH Compact Connector Interface** 

#### **Technical Characteristics**

Conforms to

CE Mark to the low voltage directive RoHS Compliant to 2011/65/EU Conforms with end of life vehicle directive (ELV) EU200/53/EC

| Approvals and Standards            | LE ROHS  |                              |   |  |  |  |
|------------------------------------|--|------------------------------|---|--|--|--|
| Degree of mechanical protection    | High   |                              |   |  |  |  |
| Degree of protection               | IP40 - Hinged Connector Interface fittings   |                              |   |  |  |  |
| UV protection                      | Medium   |                              |   |  |  |  |
| Finish                             | Dark Orange  |                              |   |  |  |  |
| Application                        | Single junction straight and 90° elbow fittings providing high integrity connections between BOSCH Compact connectors and Harnessflex conduit systems. In addition, 90° elbow versions allow the conduit to swivel 360° around the connector housing, sufficient to avoid the problems associated with one-piece interfaces of overflexing due to movement or vibration. |                              |   |  |  |  |
| Normal operating temperature range | Minimum<br>Temperature   | Permanent Max<br>Temperature | Long Term Max<br>Temperature<br>( <b>30,000 Hrs</b> ) | Short Term Max<br>Temperature<br>( <b>3000 Hrs</b> ) |  |  |
|                                    | -40°C  | +160°C                       | +185°C  | +200°C   |  |  |
| For use with - Conduit range       | Full TempGuard system protection is achieved using these fittings with HTC conduit. Compatible with all <u>Harnessflex</u> conduits.   |                              |   |  |  |  |
| Fire Performance                   | Test Standard  | Performanc                   | e Rating  |  |  |  |
|                                    | UL94   | V2                           |   |  |  |  |
|                                    | UL94 RTI   | 150 (El                      | lec)  |  |  |  |
| Chemical resistance & Storage data | Click or See page 4  |                              |   |  |  |  |
| Type of material                   | High Temperature P   | olyamide (Nylon) - I         | Low Smoke and Hal                                     | ogen Free  |  |  |

Image







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# **TempGuard Interfaces**

**BOSCH Compact Connector Interface** 



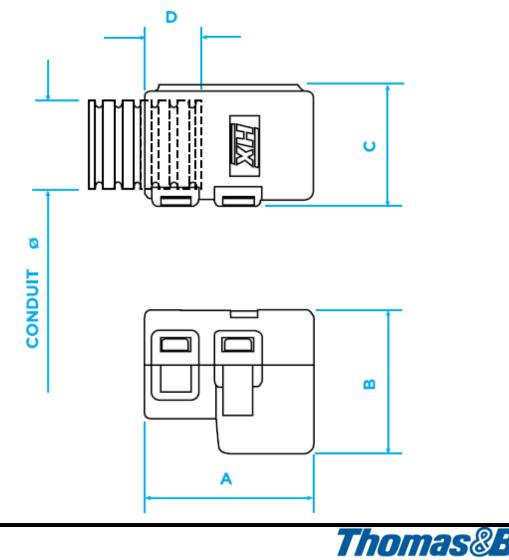
### **Dimensional Data & Part Number Configuration**

| Straight<br>Interface<br>* Stocked Items | Α    | В    | с  | D  | Conduit<br>Size<br>(NC) | Conduit<br>Size<br>(NW) | BOSCH - Reference |
|--|------|------|----|----|-------------------------|-------------------------|-------------------|
| CIH08-BC2                                | 25.0 | 21.3 | 18 | 10 | 08                      | 7.5                     | Compact 2-way     |
| CIH08-BC3                                | 25.0 | 26.7 | 18 | 10 | 08                      | 7.5                     | Compact 3-way     |
| CIH12-BC2                                | 25.0 | 21.3 | 18 | 10 | 12                      | 10                      | Compact 2-way     |
| CIH12-BC3                                | 25.0 | 26.7 | 18 | 10 | 12                      | 10                      | Compact 3-way     |
| Straight Interface<br>** Made to Order   | Α    | В    | С  | D  | Conduit<br>Size         | Conduit<br>Size         | BOSCH - Reference |
|  |      |      |    |    | (NC)                    | (NW)                    |                   |
| CIH08-BC4                                | 25.0 | 29.0 | 18 | 10 | 08                      | 7.5                     | Compact 4-way     |
| CIH12-BC4                                | 25.0 | 29.0 | 18 | 10 | 12                      | 10                      | Compact 4-way     |

Note : Nominal Dimensions are in mm

\* Part numbers listed are stocked items available for immediate order

\*\* Parts numbers listed are available to order but not stocked items, and would therefore be subject to manufacturing leadtime.



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**BOSCH Compact Connector Interface** 



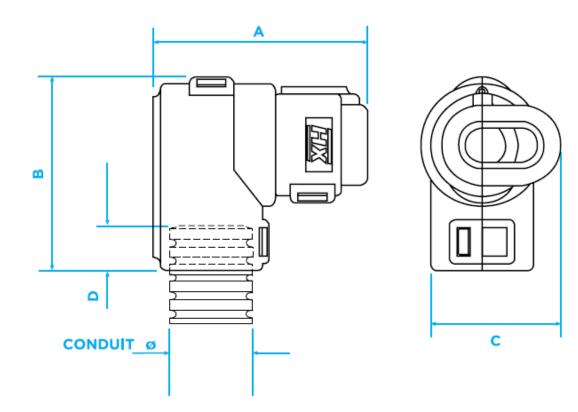
### **Dimensional Data & Part Number Configuration**

| 90° Elbow<br>Interface<br>* Stocked Items | A    | В    | С    | D  | Conduit<br>Size<br>(NC) | Conduit<br>Size<br>(NW) | BOSCH - Reference |
|---|------|------|------|----|-------------------------|-------------------------|-------------------|
| CIH08-90-BC2                              | 33.3 | 30.3 | 20.5 | 10 | 08                      | 7.5                     | Compact 2-way     |
| CIH08-90-BC3                              | 33.3 | 30.3 | 26.7 | 10 | 08                      | 7.5                     | Compact 3-way     |
| CIH12-90-BC2                              | 33.3 | 30.3 | 20.5 | 10 | 12                      | 10                      | Compact 2-way     |
| CIH12-90-BC3                              | 33.3 | 30.3 | 26.7 | 10 | 12                      | 10                      | Compact 3-way     |
| 90° Elbow<br>** Made to Order             | A    | В    | С    | D  | Conduit<br>Size         | Conduit<br>Size         | BOSCH - Reference |
| CIH08-90-BC4                              | 37.0 | 30.3 | 33.3 | 10 | 08                      | 7.5                     | Compact 4-way     |
| CIH12-90-BC4                              | 37.0 | 30.3 | 33.3 | 10 | 12                      | 10                      | Compact 4-way     |

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### **TempGuard Interfaces** BOSCH Compact Connector Interface

### **Chemical Resistance Chart**

|                       | Astm No.1            | Diesel oil           | Methyl Bromide         | Sulphur Dioxide (Gas) |
|-----------------------|----------------------|----------------------|------------------------|-----------------------|
|                       | Astm No.2            | Diethylamine         | MEK                    | Sulphuric Acid (10%)  |
| Key:                  | Astm No.3            | Ethanol              | Nitric Acid (10%)      | Sulphuric Acid (70%)  |
|                       | Acetic Acid (10%)    | Ether                | Nitric Acid (70%)      | Toluene               |
| Suitable :            | Acetone              | Ethylamine           | Oxalic Acid            | Transformer Oil       |
|                       | Aluminium Chloride   | Ethylene Glycol      | Ozone (Gas)            | 1,1,1-Trichloroethane |
| Limited Suitability : | Aniline              | Ethyl Ethanoate      | Paraffin oil           | Trichloroethylene     |
|                       | Benzaldehyde         | Freon 32             | Petrol                 | Turpentine            |
| Unsuitable :          | Benzene              | Hydrochloric Acid (  | 10%) OPhenol           | Urea                  |
|                       | Carbon tetrachloride | Hydrochloric Acid (  | 36%) 🔵 Sea Water       | Uric Acid             |
| Not Tested :          | Chlorine water       | le Hydrogen Peroxide | (35%) 🔵 Silver Nitrate | Vegetable Oil         |
|                       | OChloroform          | Hydrogen Peroxide    | (87%) Skydrol          | Vinyl Acetate         |
|                       | Citric Acid          | Lactic Acid          | Sodium Chloride        | Water                 |
|                       | Copper Sulphate      | Lubricating oil      | Sodium Hydroxide (1    | I0%) 🔵 White Spirit   |
|                       | Cresol               | Methanol             | Sodium Hydroxide (6    | 50%) 🔵 Zinc Chloride  |

The information above is given as a guide only and is based on published technical data and experience. The chemical resistance of the above products is dependant on factors such as chemical exposure, concentration of the chemical and temperature. The above chemicals are valid for a temperature of 23°C. Use of the above table is at the users own discretion and risk. Those using it must satisfy themselves that their application presents no health and safety risks. The end user should assess compatibility with their application and contact Thomas & Betts for further information.

ADHERENCE TO THE CURRENT WIRING REGULATIONS BS7671 OR NEC WIRING REGULATIONS (FOR USA) IS STRONGLY ADVISED.

MINIMUM BEND RADIUS FOR FLEXING IS DEPENDANT UPON MINIMUM TEMPERATURE, BENDING FREQUENCY AND CHEMICAL ENVIRONMENT.

#### **Storage Guidelines**

To maintain balanced moisture content, Harnessflex recommends storing products under the following conditions:

| Storage temp. | Installation temp. | Rel. humidity |
|---------------|--------------------|---------------|
| 18°C to 30°C  | >18°C              | >30%          |

If products from an outside environment are brought into a heated processing area, the change in climate may suddenly cause temporary de-moisturisation around the edges. After 24 hours in the processing area a natural balance will be restored.

Observing this storage recommendation ensures optimum process-ability and material properties.



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