

# Polycon Polymer Connector

Edition 2008/2009



Connect with Competence





### **Your Partner for System Solutions**

HUBER+SUHNER is a leading international producer and supplier of electrical and optical interconnectivity components and systems. Core capabilities in radio frequency, fiber optic and low frequency technology are united under a single roof. The success of the company's high-grade standard products and customised applications based on its cutting edge-know how in radio frequency and microwave technology, supported by advanced simulation processes.

### **RF connector technology**

HUBER+SUHNER radio frequency connectors and lightning protection components often set the standards in RF applications. One result of this competence is the optimisation of existing applications by the use of new materials in combination with proven components as in the case of the POLYCON.

## Lightweight connector by HUBER+SUHNER



This POLYCON family is based on the well established connector series DIN 7/16 and designed for flange connectors, used as indoor and outdoor applications.

Proven characteristics such as

- durability
- high transmission capacity
- low intermodulation values

are complemented with features such as

- high corrosion resistance
- light weight
- cost effective solution for high and low volume.



Open-air tests at 2500 m (8200 ft) altitude



After having been installed over three years in an extremely harsh environment, the POLYCON connectors were still in perfect condition and have showed

- no stress corrosion cracking
- good UV radiation resistance
- low stable intermodulation
- excellent electrical values (RL/IL)



The POLYCON connector body is of 100% recyclable polymer and marked according to DIN EN ISO 11469 and ISO 18064

## Concept and Design

The distinctive feature of this design is the separation of the connector body as an electrical part, using well known materials and surface plating, as well as the mechanical part, using injection moulded high-strength polymer.



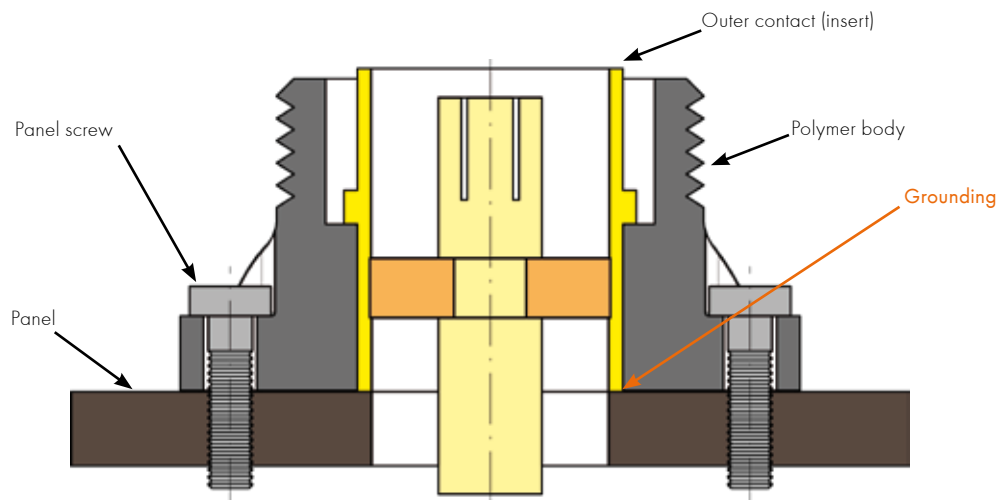
### Electrical Part of Connector

Inserts according to customer needs  
(incl. centre contact and insulator)

### Mechanical Part of Connector

Available polymer bodies: standard and  
long neck version

## Interface DIN 7/16

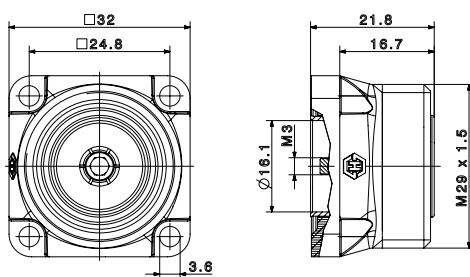


## Technical Data

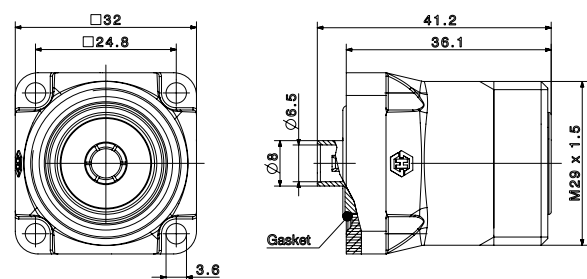
|                      |                       |                    |  |
|----------------------|-----------------------|--------------------|--|
| <b>General</b>       | Interface standard    |                    | DIN 7/16, acc. to IEC 61169-4  |
|                      | Temperature           | operating          | -40 °C to +85 °C   |
| <b>Environmental</b> |                       | installation       | -25 °C to +60 °C   |
|                      | Flammability          | connector on panel | tested acc. UL 94V-0   |
|                      | 2002/95/EC (RoHS)     |                    | compliant  |
|                      | Waterproof            | (if needed)        | IP 68 (20°C / 24 h / 0.1 m, in mated condition)  |
|                      | UV radiation          |                    | resistance acc. ISO 4892-2   |
| <b>Electrical</b>    | Impedance             |                    | 50 Ω   |
|                      | Interface frequency   |                    | 7.5 GHz  |
|                      | Intermodulation (PIM) |                    | better -165 dBc  |
|                      | Power handling        |                    | 0.4 GHz: 2'000 Watt<br>0.8 GHz: 1'500 Watt<br>1.8 GHz: 1'000 Watt<br>2.2 GHz: 800 Watt |
| <b>Mechanical</b>    | Coupling nut torque   | on panel           | 20 Nm to 30 Nm   |
|                      | Number of matings     | on panel           | 500  |

Standard colour of polymer body is black, other colours on request.

## Available standard products



Panel connector with M3:  
23\_716-150-0-123/00-\_Y



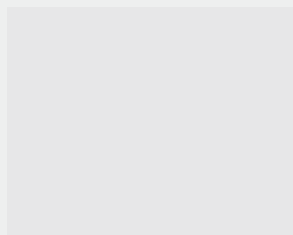
Panel connector for cable:  
25\_716-150-5-28/00-\_Y

Further products on request.

HUBER+SUHNER certified according to  
ISO 9001 and ISO 14001.

**WAIVER**

It is exclusively in written agreements that we provide our customers with warrants and representations as to the technical specifications and/or the fitness for any particular purpose. The facts and figures contained herein are carefully compiled to the best of our knowledge, but they are intended for general informational purposes only.



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