

## HITRONIC<sup>®</sup> POF DUPLEX HEAVY PE-PUR

DB28030002EN valid from: 23.12.2016

## 1. Product Description

Cable designation: J-V2Y(ZN)11Y 2P980/1000

### 2. Application

HITRONIC<sup>®</sup> POF DUPLEX HEAVY PE-PUR are POF duplex core cables with heavy reinforced PUR outer sheath. They are designed for optical signal transmission in dry rooms under heavy mechanical stress in industrial environments and under increased tensile load. The cables are suitable for direct connector assembly.

## 3. Cable Design



Fibre type	Polymer optical fibre (POF)
Cable core	Polymethyl methacrylate cores with fluoropolymer cladding
Buffer coating	Polyethylene (PE)
Strain relief	Aramid yarns, longitudinal
Outer sheath	Polyurethane (PUR), increased sheath wall thickness
Colours of buffer coating	Black/Orange
Colour of outer sheath	Orange, similar RAL 2003

### 4. Optical and Physical Properties of Fibre

Attenuation coefficient	@ 650 nm dB/km @ 660 nm dB/km	≤ 160 ≤ 230
Bandwidth	@ 650 nm MHz · 100m	≥ 10
Numerical aperture		$0.5 \pm 0.05$
Core diameter	μm	980 ± 2
Cladding diameter	μm	1000 ± 2

## 5. Thermal Properties

Operating temperature	-40°C to +70°C
Installation temperature	-10°C to +50°C
Storage temperature	-40°C to +70°C

Originator: CHIL / PDC	Document:	DB28030002EN	page 1 of 2
approved: HAPF / PDC	Document.	DD20030002EN	page 1 of 2



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### 6. Mechanical Properties

Number of fibres		2
Fibre diameter		2.2 mm
Outer diameter		8.0 mm
Cable weight		57 kg/m
Min. bending radius	fixed installation	10 x cable ø
Max. tensile strength	long term short term	130 N 400 N
Max. crush resistance	long term short term	200 N/dm 2000 N/dm

## 7. Chemical Properties

PE buffer	Non-aging, halogen free, good stability against acids and alkalis
PUR outer sheath	Flame retardant, halogen free

## 8. Approvals

This cable is conform to the EU-Directive 2011/65/EU: RoHS (Restriction of the use of hazardous substances)

## 9. Product Range Overview

Part number	Article designation	No. of Fibres	Outer ∅ (mm)
28030002	HITRONIC® POF DUPLEX HEAVY PE-PUR	2	8.0

Originator: CHIL / PDC approved: HAPF / PDC	Document:	DB28030002EN	page 2 of 2