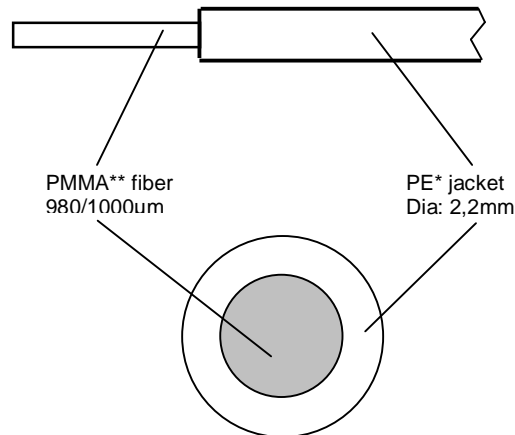




Plastic optical fiber(POF)-cable 980/1000µm simplex, PE* jacket



Technical Data

Dimensions	core diameter cladding diameter cable diameter	980µm 1000+/-60µm 2,2+/-0,07mm
Outer jacket	Material/colour	PE*, black
Delivery	per reel	500m altern. 2100m
Weight	nominal value	3,8kg/km
Tensile strength acc. DIN VDE 0888 Part 100 Method 501	operating	max. 10N
	temporary during installation	max. 60N
Bending radius	operating	min. 30mm
	temporary during installation	min. 10mm
Transverse compressive stress strength	operating	max. 6N/cm
	temporary during installation	max. 40N/cm
Temperatures	operating	-40° c bis +85° c
Attenuation	at 650nm	max. 160db/km
Numerical aperture	nominal value	0,485

Further characteristics: - step index profile
- simple and quick connectorizing

Field of application: - laying within buildings

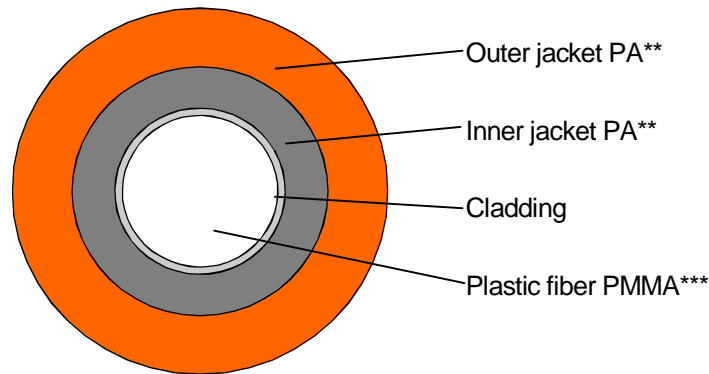
Part-no: **903 IP 001 01 001**

* Polyethylen

** Polymethylmethacrylat



Plastic optical fiber(POF)-cable 980/1000µm, simplex, acc. to MOST*-specification, PA** jacket



Technical Data

Dimensions	core diameter cladding diameter inner jacket diameter cable diameter	980+/-45µm 1000+/-45µm 1,51+/-0,04mm 2,3+/-0,07mm
Material	Core Cladding Inner jacket Outer jacket	PMMA*** Fluor Polymer PA** black (attached on cladding) PA** yellow RAL1016 (non flammable)
Delivery	per reel	2.000m
Weight	nominal value	4,4kg/km
Tensile strength acc. DIN VDE 0888 Part 100 method 501	operating	max. 60N
Bending radius	operating	min. 25mm
	temporary during installation	min. 10mm
Transverse compressive stress strength	operating	max. 70N/cm
Temperatures	operating	-40° C bis +85° Cat 95% humidity
Attenuation	at 650nm (monocromatic)	< 230db/km
Numerical aperture	nominal value	0,485

Further characteristics: - robust plastic optical fiber
- simple and quick connectorizing

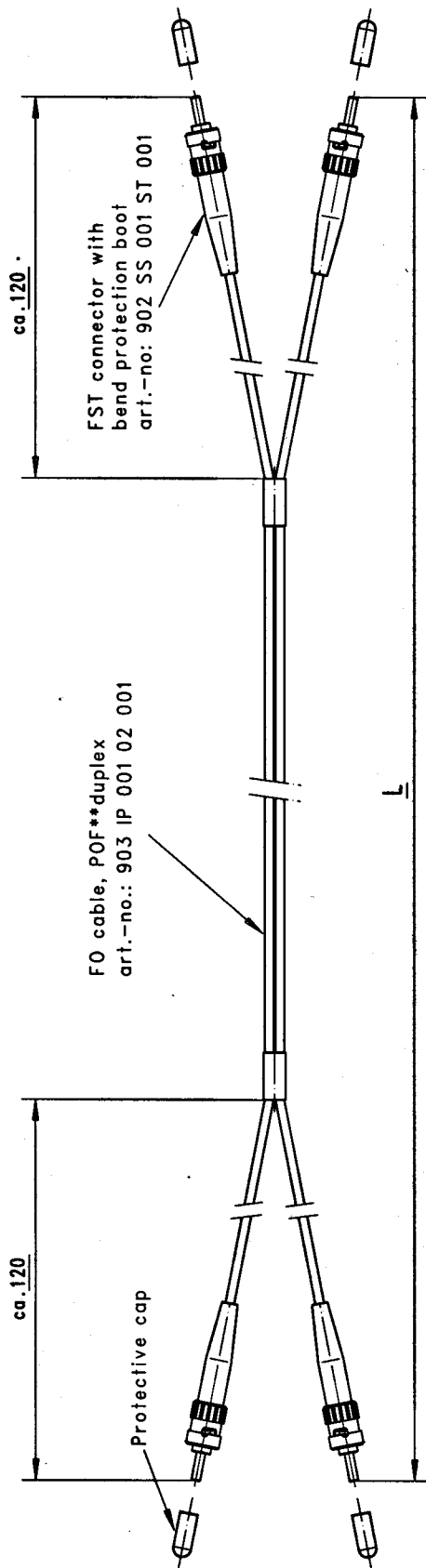
Field of application: - applications acc. to MOST* specification
- automotive, industrial area for rugged requirements

Part-no: **903 IP 001 01 008**

* Media Oriented Systems Transport

** Polyamid

*** Polymethylmethacrylat



Connector:

Material : Nickel silver
 Hole for fiber : $\varnothing 1,05\text{mm}$

Cable:

Fiber : 0,98/1,0mm PMMA
 Jacket : 2,2mm PE, black

Numerical aperture : 0,47

Max. tensile load : 10N

Min. bending radius : 30mm

Fiber attenuation : <160dB/km at 660nm

Temperatures : -40°C to +85°C

Connectorizing:

Insertion loss : <2,0dB per connector

Retaining force : >50N

Lengths tolerances:

0 to 1,0m : L \pm 10mm
 1,0 to 2,0m : L \pm 15mm
 2,0 to 5,0m : L \pm 50mm
 5,0 to 10,0m : L \pm 100mm
 10,0 to 20,0m : L \pm 200mm
 > 20,0m : L \pm 500mm

*** Determination of art.-no.:**

To determine the individual art.-no. for different cable lengths, complete the last 5 digits (-----) of the below mentioned drawing-no. by adding the selected cable length in cm as shown in the following examples:
 e.g. for cable length 1,5m(150cm) = Art.-Nr.: 922 TT 002 00150
 for cable length 12,5m(1250cm) = Art.-Nr.: 922 TT 002 01250

Verwendungsbereich	Zul. Abweichung		Oberfläche	Maßstab	Gewicht
	Bearb.	Datum			
	8.02.03	K. Korte		1 : 2	
	Gepr.			Werkstoff, Halbzeug	
	Norm			Rohteil-Nr.	
				Modell- oder Gesenk-Nr.	
				Benennung	
				FST Patch cable duplex, POF1/2,2mm,	
				PE-Jacket, Dim: 2,2 x 4,4mm,	
				Bend protection boot	
				Zeichnungsnummer	Blatt
				922 TT 002 (-----)*	1
Zust.	Anderung	Datum	Name	Ers. f.	Ers. d.
			Ratioplast- Optoelectronics GmbH Tichelbrink 68 - 32584 Löhne		
			Urspr.		

** Plastic Optical Fiber



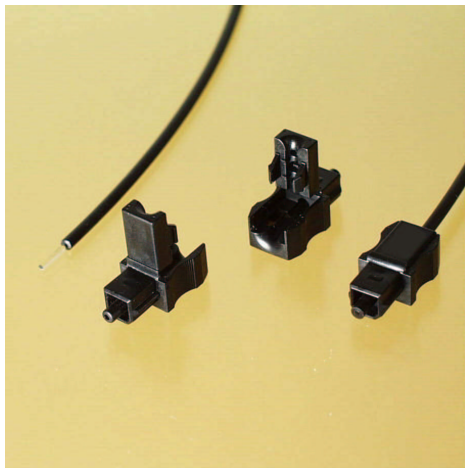
Product Information

Product: Easy to assemble optical fiber connector RP F-05 Series

The **RP F-05** connector is designed for fast and easy termination with the 2.2 mm polymer optical fiber within the F 05 standard.

The **RP F-05** connector is applicable for manual and machined assembly. It can be supplied as a single component as well as ready assembled components for various polymer optical fibers or in customer specified lengths.

The **RP F-05** is compatible to Toslink connectors.



RP F-05 Connector

Areas of application

- Optical Networks
- Industrial Electronics
- Power Electronics
- Consumer Electronics (Audio/Video Applications)

RP F-05 Connector

Articel # 902 SS 001 DL 001

RP F-05 Patchcable

POF 1 / 2.2 mm, PE - Coating, length
1.00 m

Articel # 912 55 002 00100

Connector for Polymer Optical Fiber (POF*)

1 General

The FO-Connector style F-05 is optimized in particular for applications using standard 1mm polymer optical fiber demanding a fast and easy cable assembly with high reliability, very good optical and mechanical characteristics.

2 Application

Due to the good optical features and the easy cable assembly, the RP F-05 connector is useable in several applications:

- optical networking
- Industrial electronics
- Power electronics
- Consumer electronics



Pic. 1

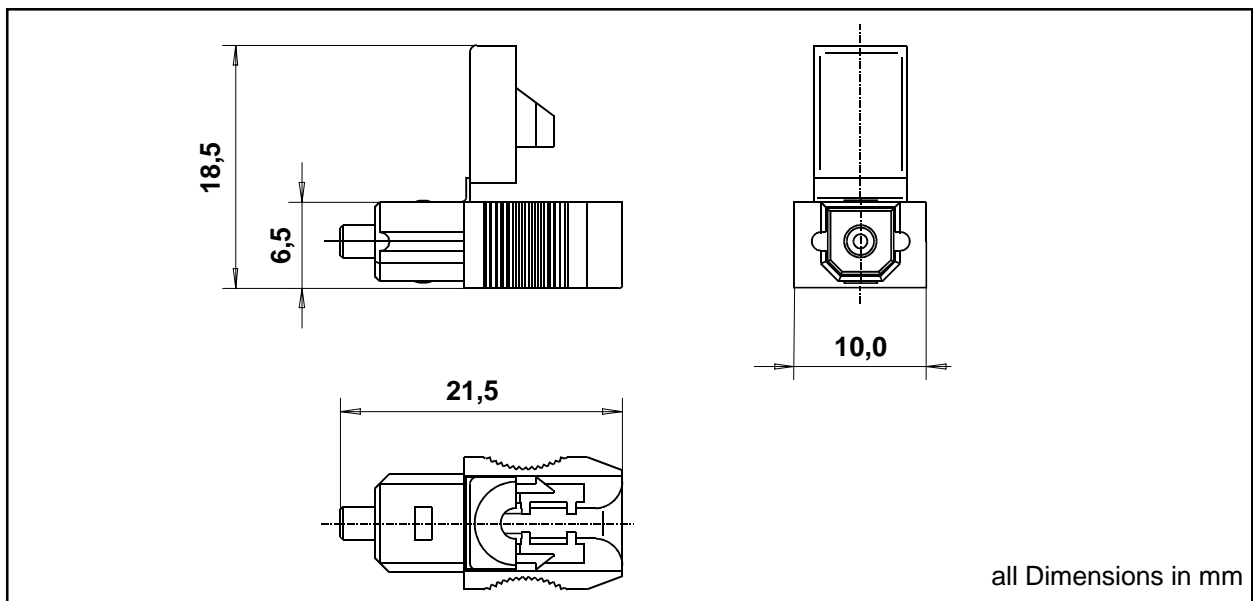
3 Ordering Information

Model	Part Number
RP F-05	902 SS 001 DL 001

4 Features

- single part full plastic connector
- compatible to `Japan`-standard
- useable with PA, PE, PVC jacketed POF-cable with 2,2mm outer diameter
- low insertion loss
- easy assembly

5 Technical Drawing



all Dimensions in mm

Pic. 2

*Polymer-Optical-Fiber

Connector for Polymer Optical Fiber (POF)

6 Technical Data _____

Parameter	Condition	Value	Unit
Insertion loss	PA-jacket	0,6	dB
	PE-jacket	0,5	
	PVC-jacket	0,7	
Retention force of FO-cable	PA-jacket	110	N
	PE-jacket	60	
	PVC-jacket	35	
Insertion force into receptacle	TOTX /-RX module	14	N
Tensile force out of Receptacle	TOTX /-RX module	13	N
Press force for connector assembly	PA-jacket	195	N
	PE-jacket	175	
	PVC-jacket	155	
Temperature range	-	-40 to +85	°C

7 Cable Assembly _____

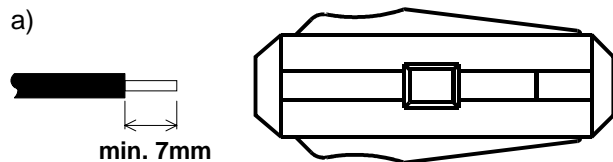
Used tools:

Fiber stripper _____ 910 AB 001 00 001

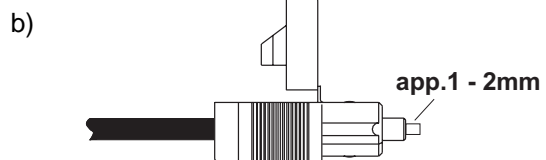
Polishing disc _____ 910 PS TOC 00 001

Polish film, grain size 1000 ____ 910 PB 001 00 001

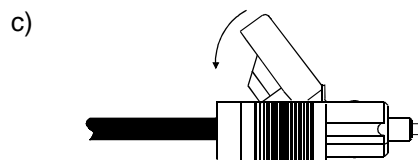
- a) Strip off app. 7mm of the outer jacket from the 2,2mm POF-cable with fiber stripper.



- b) Insert stripped POF-cable from backside into F-05 connector until mechanical stop reached. 1mm Polymer fiber should protrude the connector top by app.1 - 2mm.



- c) Turn down the latch cover and snap it into the connector body. When the latch cover snaps into the body with a hearable sound, proper connector-to-cable attachment is achieved.



- d) Insert the F-05 connector fully into the polishing disc with the fiber protruding from the bottom of the disc. Press the polishing disc down on the polish film and polish the fiber until the connector is flush with the bottom of the disc. Wipe the connector with a clean tissue. Best insertion loss results are achieved by wet grinding.

