

# Profibus DP2513 HYBRID

# Primatec

sensorer - kabler

**ITEM DESCRIPTION:****PROFIBUS DP 2513 ((1X2X0,64)+3G1) FRHF MUD RESISTANT NEK 606 DNV/GL SHIPAPPROVED****(PROFIBUS™ DP CABLE) for drag chain installation****USE:**indoor  
outdoor**INSTALLATION:**fixed  
flexible limited  
dynamic (drag chain)**INFORMATION:**2002/95/EC RoHS compliant  
2002/95/EC LVD compliant  
CE marking**Construction****PROFIBUS CABLE****Inner conductor**stranded bare copper wire - 19x0,13mm (24/19AWG) - nom. cross section 0,25mm<sup>2</sup>**Insulation**

foam-skin polyethylene - 2,5mm Ø

**Insulation colour**

green (RAL6018), red (RAL3000)

**Core assembly**

the red and green conductors will be twisted together with two solid polyethylene fillers

**Separation**

helicoïdal non-woven (PET/PA) tape

**Shield**

- aluminium/polyester tape (outside aluminium surface) with 20% min overlap

- braid of tinned copper wires with 85% (- 5%) coverage - braid angle 38°

Inner jacket polyethylene nom Ø 6,3mm

**Separation****POWER SUPPLY CONDUCTORS****Inner conductor**stranded bare copper wire 56x0,15mm - nom. cross section 1,00mm<sup>2</sup> (IEC60288 class 6)**Insulation**

solid PP compound - 2,0mm Ø

**Insulation colour**

yellow/green, blue and brown

**Global assembly**

the three power conductors will be stranded together around a central PROFIBUS cable - solid halogen free fillers where necessary

**Separation**

helicoïdally non-woven (PET-PA) tape

**Shield**

of tinned copper wires with 85% (- 5%) coverage - braid angle 38°

**Separation**

helicoïdally non-woven (PET-PA) tape

**Outer jacket (pressure extrusion)**

flame retardant, halogen free and UV resistant PUR compound - violet RAL4001 colour

outer Ø 11,8mm (- 0,4mm) - nom. thickness 1,0mm

approx. 170 kg/km

**Total weight****Marking (ink jet - colour black)**

According to customer specification

**Electrical and transmission properties @ 20°C****PROFIBUS UNIT****Max DC cond. resistance**

93,0 W/km

**Max capacitance @ 800 Hz**

30 nF/km

**Impedance @ 1-20 MHz**

150 W (- 10%)

**Max attenuation @ 9,6 kHz**

4,5 dB/km

**Max attenuation @ 38,4 kHz**

5,5 dB/km

**Max attenuation @ 4 MHz**

2,6 dB/km

**Max attenuation @ 16 MHz**

48,0 dB/km

**Dielectric strength (cond./cond./shield)**

1,5 kVac / 1 min

**Min insulation resistance**

5,0 GW · km

**Transfer impedance @ 20 MHz**

10 mW/m

**POWER CONDUCTORS****Max DC conductor resistance**

19,5 W/km

**Dielectric strength (cond./cond.)**

2,5 kVac / 10 min

**Min insulation resistance**

2,0 GW · km

**Fire performance****Flame retardancy**

in compliance with IEC 60332.1 Standard requirement

**Halogen-acid gas**

in compliance with EN 50267-2-1 and IEC 60754-1 Standards - max 0,5% of HCl

**Degree of acidity of gases**

in compliance with EN 50267-2-2 and IEC 60754-2 Standards - PH &gt;4,3 / nom. conductivity 23 mS/mm

**Other properties****Max rating voltage:**

300 V

**Oil resistance**

in compliance with IEC 60811-2-1, ICEA S-82-552 and ASTM-oil 1 Standard requirements

**Mud resistance**

in compliance with NEK 606 Standard requirements

**Seawater resistance**

good

**Ozone resistance**

in compliance with VDE 0472 par.1 Standard requirements

**Microbe resistance**

in compliance with VDE 0282/10 Standard requirements

**UV resistance**

in compliance with UL1581 §1200 Standard requirement

**Rating temperature (fixed installation)**

-40 / +70 °C

**Min bend radius (fixed)**

10 x outer Ø [mm]

**Min bend radius (movement)**

15 x outer Ø [mm]

**Max speed (drag chain)**

3,0 m/sec (subject to correct installation)

**Max acceleration (drag chain)**5,0 m/sec<sup>2</sup> (subject to correct installation)**Use in torsion apparatus (robot)**

not admitted

