



# Quality Inspection Report

Product Name: Type (N)SHTÖU – FO (LWL) Corrosion and Oil Resistant Cable

Specifications: 3 x 150 + 2 x 70 / 2 + FO

Standard: (VDE 0250 Part 814)

Order No: FCHZY2024072303

Date: 28-07-2024

1. Cable Structure and Dimensions			
Parameter	Specification	Measured Value	Status
Conductor Cross-Sectional Area	3 x 150 mm <sup>2</sup> + 2 x 70 mm <sup>2</sup> / 2	3 x 150 mm <sup>2</sup> + 2 x 70 mm <sup>2</sup> / 2	Pass
Insulation Thickness	As per standard (VDE 0250)	Meets specification	Pass
Sheath Cross-Sectional Area	As per standard (VDE 0250)	Meets specification	Pass
2. Electrical Characteristics			
Test Parameter	Standard Value	Measured Value	Status
20°C Max D.C. Resistance (Conductor)	≤ 0.124 Ω/km (150 mm <sup>2</sup> )	0.120 Ω/km	Pass
20°C Max D.C. Resistance (Conductor)	≤ 0.268 Ω/km (70 mm <sup>2</sup> )	0.265 Ω/km	Pass
Insulation Resistance	≥ 5 MΩ/km	6.2 MΩ/km	Pass
Voltage Test (Core to Core)	4 kV AC, 5 min	No breakdown	Pass
3. Mechanical Characteristics			
Test Parameter	Standard Requirement	Measured Value	Status
Tensile Strength of Insulation	≥ 12.5 MPa	13.0 MPa	Pass
Elongation at Break (Insulation)	≥ 200%	225%	Pass
Tensile Strength of Outer Sheath	≥ 15 MPa	15.5 MPa	Pass
Elongation at Break (Outer Sheath)	≥ 300%	320%	Pass
Impact Resistance	As per standard (VDE 0250)	No cracks	Pass
Abrasion Resistance	As per standard (VDE 0250)	Meets requirement	Pass



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4. Oil and Corrosion Resistance			
Test Parameter	Standard Requirement	Result	Status
Oil Resistance Test (24 hr, 100°C)	No swelling, softening or cracking	No abnormalities	Pass
Corrosion Resistance	No chemical degradation or discoloration	No corrosion	Pass
5. Additional Checks			
Test Item	Observation		Status
Cable Length	500 meters		Pass
Outer Sheath Intact & Undamaged	No visible damage or tears		Pass
Optical Fiber Functionality (FO)	Meets transmission requirements		Pass
Marking and Labeling	Clear and legible		Pass



The Type (N)SHTÖU – FO (LWL) corrosion and oil resistant cable (Order No. FCHZY2024072303) complies with all relevant specifications as per VDE 0250 Part 814.

The cable has passed all electrical, mechanical, and oil/corrosion resistance tests, and meets the requirements for conductor resistance, insulation integrity, and sheath durability.

Inspection Status: Pass

Inspector's Name:

Inspector's Signature:

Date: 2024-07-28