



Single Pair Ethernet – The future standard

Technical data

Rated voltage	60Vdc
Current load per pin (at 60°C)	4A
Insulation resistance	≥ 5x108Ω
Resistance	≤ 20 mΩ
Ambient temperature product	-40°C...90°C (IP65) -30°C...90°C (IP67)
Contact material	Metal, CuZn, gold-plated
Contact-carrier material	Plastic, PA, BK
Material Grip body/Receptacle housing	Plastic, TPU, BK
Coupling nut material	Metal, CuZn, nickel-plated
Standards	IEC 63171-6
Degree of protection (mounted)	IP65, IP67, IP68
Mechanical life-cycle	>100 mating cycles
Degree of pollution	3

Single Pair Ethernet (SPE) is the future technology in industrial automation. Using compact cables and connectors, high data transmission rates can be brought to the most distant sensor in the field. SPE is a vital component on the way to a fully networked production as envisaged in Industry 4.0 or IIoT. Based on the T1 industrial interface according to IEC 63171-6, which was defined in 2018, ESCHA has developed over molded M8- and M12-connectors, which meet the market-based tightness requirements and therefore are particularly suitable for use in harsh industrial environments. They will be available as single-ended- and double-ended cord sets and facilitate the power transmission typical for SPE (Power over Data Line).

ESCHA – specialist in connectivity.

ESCHA develops, manufactures and markets high-grade connectivity- and housing technology. Coming from automation engineering, we master the technology of dust- and waterproof connectivity. We regularly transfer the advantages of this technology to new applications and develop product portfolios for different industries.

Through our global sales network and production sites in Europe, Asia and America we are close to our customers and guarantee consistent standards worldwide.

- ESCHA production-/sales locations
- ESCHA production locations
- ESCHA sales locations
- Sales partners

