

ETHERLINE® ROBUST FR

Chemical-resistant industrial Ethernet cable for flexible applications



ETHERLINE® ROBUST FR flexible cables are suitable for CAT.5e and CAT.7 applications that require a flame-retardant jacket as well as chemical, UV, and weather resistance. They are designed with a foil and braid shield to protect against EMI and ensure reliable data transmission.

Recommended applications

Machine tool building; medical technology; laundries; car washing equipment; chemical industry; composting plants; sewage works; food & beverage industry, especially for production and processing of dairy and meat products

Approvals



EtherNet/IP



Construction

- Conductors:** stranded bare copper
- Pairs:** CAT.5e: 2 pair • CAT.7: 4 pair
- Insulation:** polyolefin
- Shielding:** foil and tinned copper braid
- Jacket:** TPE; black

Application advantage

- Flame-retardant jacket
- Suitable for indoor and outdoor applications
- Suitable for EtherCAT® and EtherNet/IP applications
- Suitable for PoE per IEEE 802.3at (see table below)

Cable attributes		page 648	
OIL	OR-01	FLAME	FR-02
MOTION	FL-02	MECH.	MP-01

Complete the installation	
SKINTOP® MS-SC page 522	RJ45 connectors page 258

ÖLFLEX® CONNECT solution	
ÖLFLEX® CONNECT CABLES page 605	

Technical data

Minimum bend radius:	- for stationary use:	4 x cable diameter	Color code:	- 2 pair:	white & yellow, blue & orange
	- for flexible use:	10 x cable diameter		- 4 pair:	white/blue & blue, white/orange & orange, white/green & green, white/brown & brown
Temperature range:	- for stationary use:	-50°C to +80°C			
	- for flexible use:	-40°C to +80°C			
Characteristic impedance:	100Ω ± 15Ω (1 - 100 MHz)				

Part number	Construction	Stranding	Jacket material	Jacket color	Approvals	PoE	Nominal outer diameter		Approx. weight	SKINTOP® MS-SC
							in	mm	lbs/mft	PG thread
CAT.5e										
2170454	22 AWG/2pr	7 wire	TPE	black	PROFINET®	yes	0.268	6.8	37	53112220
CAT.7										
2170455	24 AWG/4pr	7 wire	TPE	black	PROFINET®	yes	0.355	9.0	54	53112230
2170456	26 AWG/4pr	7 wire	TPE	black	—	no	0.256	6.5	27	53112220

PROFINET® is a registered trademark of the PNO (PROFIBUS User Organization). EtherCAT® is a registered trademark of Beckhoff Automation GmbH. Recommended SKINTOP® assumes minimal OD variance. Additional configurations are available; please see our SKINTOP® section. If not otherwise specified, all values relating to the product are nominal values. Photographs are not to scale and are not true representations of the products in question.