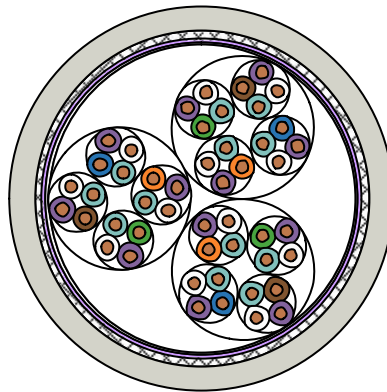


# Switchboard Cable FRNC

09YS(ST)CH 24X2X0.4/0.8 BD FRNC



## Design

### Wire:

Bare copper wire (26AWG)  
 Insulation of foamed Polypropylen (PP) with Skin

ø 0.4 mm (0.016 in)  
 ø 0.8 mm (0.031 in)

### Quad:

4 wires twisted to form a star-quad

### Unit:

4 quads twisted to a unit  
 Binder tape

Quad	a-wire	b-wire	c-wire	d-wire
1	WH	BU	TQ	VT
2	WH	OG	TQ	VT
3	WH	GN	TQ	VT
4	WH	BN	TQ	VT

### Core:

3 units twisted to a core  
 Sequence of binder tape: RD, WH, BN  
 Plastic tape, overlapped  
 Tinned copper drain wire ø 0.4 mm (26AWG)  
 Alulaminat foil overlapped  
 Shield braiding of tinned copper wires 0.13 mm dia  
 Coverage about 75%

ø 8.3 mm (0.327 in)

**LEONI Special Cables GmbH**

Technisches Datenblatt – Technical Data Sheet – Technisches Datenblatt – Technical Data Sheet – Technisches Datenblatt – Technical Data Sheet

**Jacket:**

High flexible Thermoplastic copolymer (FRNC) GY  
Wall thickness about 0,8 mm

 $\varnothing$  (9.9 ± 0.3) mm (0.390 ± 0.012 in)
**Electrical data at 20°C**

Conductor resistance	≤	150	Ohm/km
Insulation resistance	≥	1	GOhm*km
Propagation time	≈	4.6	ns/m
Characteristic Impedance (1 MHz)		(135 ± 15)	Ohm
Capacitance (1 kHz)	≈	40	pF/m
Voltage rating	≤	300	V
Test voltage (wire/wire/screen rms 50Hz 1min)		800	V
Near end crosstalk			
Side to side within quad / Side to side different quad ( 1 MHz)	≥	50	dB
( 20 MHz)	≥	30	dB
Far end crosstalk (1 MHz)			
Side to side within quad / different quad	≥	60	dB
Screening attenuation (30 - 1000 MHz)	≥	80	dB

Frequency (MHz)	1	2	5	10	20	50	100
Attenuation typ. (dB/100m) (dB/100ft)	2,3 (0,7)	3,1 (0,9)	5 (1,5)	6,5 (2,0)	10 (3,0)	16 (4,9)	24 (7,3)

**Mechanical and thermal characteristics**

Conductor material acc. to DIN EN 13602 Cu-ETP-A...  
Screen material acc. to DIN EN 13602 Cu-ETP-A...-B  
Insulating material acc. to DIN EN 50290-2-25 (09YS)  
Strip force of insulation ≤ 4,5 N, Stripped length 50 mm  
Jacket material acc. to UL 444 (FRPE) table 8 and 9 (75°C)  
Flame retardant acc. to IEC 60332-1-2

**Other characteristics:**

Permissible temperature range : -25 °C (-13 °F) up to 70 °C (158 °F)  
Min. bending radius allowed : repeated 7,5X  $\varnothing$ , single 5X  $\varnothing$   
Weight about : 135 Kg/km (90,5 lb/1000ft)

**Designation of order:**

L45467-F2414-C6  
205756  
09YS(ST)CH 24X2X0.4/0,8 BD GR FRNC  
1500 m (4921 ft) on non-returnable reel