SubConn® Circular
12, 16 and 25 contacts

Connector specifications
- Voltage rating: 600 V DC/AC rms
- 12 and 16 contacts current rating: 10 A per contact (max 60 A per connector)
- 25 contacts current rating: 3 power contacts 10 A per contact, 22 signal contacts 5 A per contact (max 60 A per connector)
- Insulation resistance: > 200 Mohm
- Contact resistance: < 0.01 ohm
- Wet matings: > 500 (open face rated)
- Temperature rating (water): - 4 to 60˚C, 25 to 140˚F
- Temperature rating (air): - 40 to 60˚C, - 40 to 140˚F
- Storage temperature rating: - 40 to 60˚C, - 40 to 140˚F
- 12 and 16 contacts connector design depth rating: 1,400 bar, 20,000 psi
- 12, 16 and 25 contacts conn. qualified pressure tested: 800 bar, 11,600 psi
- Depth rating PEEK: 300 bar, 4,350 psi

Material specifications
- Connector body: Chloroprene rubber
- Bulkhead body: Brass, stainless steel, titanium, anodised aluminium or PEEK
- 12 and 16 contacts: Gold plated brass UNS - C36000
- Contact 2, 4 and 6: gold plated brass UNS - C36000
- Contact 1, 3, 5, 7 - 25: gold plated beryllium copper
- O-rings: Nitrile
- Locking sleeves: POM or stainless steel
- Snap rings: Stainless steel AISI 302
- 12 and 16 conductor inline cable (2 ft, 60 cm): 18 AWG, 0.82 mm, 2 chloroprene rubber
- 25 conductor inline cable (2 ft, 60 cm): 3 x 18 AWG, 0.82 mm², 22 x 20 AWG, 0.52 mm² polyurethane
- 12 and 16 contact bulkhead and PBOF leads (1 ft, 30 cm): 18 AWG, 0.82 mm² coloured PTFE
- 25 contact bulkhead and PBOF leads (1 ft, 30 cm): 3 x 18 AWG, 0.82 mm², 22 x 22 AWG, 0.33 mm² white tagged PTFE
- 12 and 16 contact OM leads (3", 7 cm): 18 AWG, 0.82 mm² coloured PTFE

Face view (male)

Inline cable colour code for 12 and 16 conductor
- 1 Black
- 2 White
- 3 Red
- 4 Green
- 5 Orange
- 6 Blue
- 7 White/black
- 8 Red/black
- 9 Green/black
- 10 Orange/black
- 11 Blue/black
- 12 Black/white
- 13 Red/white
- 14 Green/white
- 15 Blue/white
- 16 Black/red

Inline cable colour code for 25 conductor
- 1 Orange
- 2 Black-18 AWG
- 3 Grey
- 4 Red-18 AWG
- 5 Green
- 6 Brown-18 AWG
- 7 Yellow
- 8 White/black
- 9 White
- 10 Purple
- 11 Blue
- 12 White/yellow
- 13 White/green
- 14 White/blue
- 15 White/purple
- 16 White/grey
- 17 White/brown/black
- 18 White/red/black
- 19 White/orange/black
- 20 White/yellow/black
- 21 White/green/black
- 22 White/blue/black
- 23 White/brown
- 24 White/red
- 25 White/orange

Nominal cable outside diameter (OD)
- 12 conductor cable 0.605", 15.4 mm
- 16 conductor cable 0.704", 17.9 mm
- 25 conductor cable 0.589", 15.0 mm
Introduction

Circular

Low Profile

Micro Low

Metal Shell

Power

Ethernet

Cox

Specials

Penetrator

Polyurethane

Accessories

Technical information

This drawing is the property of MacArtney A/S, and must not be copied or shown to a third person without permission.

Sheets:

Reference:

Rev.:

Checked:

Drawing no.:

Surf.:

Tol.:

Scale:

Mat.:

Size:

Surface:

Dimension in mm (1 mm = 0.03937 inch)

Threads in inches (1 inch = 25.4 mm)

Drawing information

Dimensions in mm (1 mm = 0.03937 inch)

 Threads in inches (1 inch = 25.4 mm)

4th edition