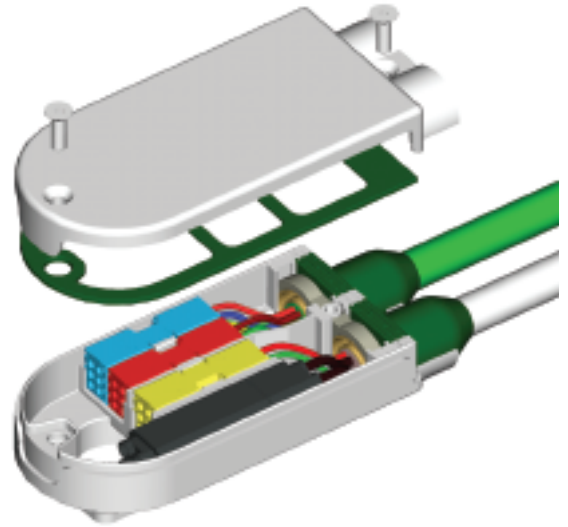


Features/Benefits

- Maximum power / minimum size
- Low profile design for space sensitive applications
- Replaces conventional circular connectors (50% less weight)
- Simple harnessing and fast installation
- Easy contact assembly without tool
- Only one housing for signal and power connectors
- Excellent vibration resistance
- 2 sealed entries for power and signal cable

Typical Applications

- Small servo motors
- Factory automation
- Material handling
- Industrial motion control
- Robotics



Materials

HOUSING: Zinc die cast, plating optional
INSULATORS: PBT glass filled
SEALING: FKM or alternative
CRIMP SLEEVE: Brass
CONTACT MATERIAL: Brass / beryllium copper gold plated

Mechanical

MATING CYCLES: min 50
MECHANICAL CODING: 3 coding for signal
WEIGHT: approximate 170 g (without cable)

Operating Environment

OPERATING TEMPERATURE: -40°C - 125°C
STORAGE TEMPERATURE: -40°C -/+ 85°C
CLIMATIC CATEGORY: -40°C / 125°C/56
WATER TIGHTNESS: IP65 or IP67

NOTE: Specifications and materials subject to change.

Specifications

POWER

CURRENT RATING AT 80°C (176°F) ambient temp: 12 A max
MAXIMUM VOLTAGE: 630 VAC
OVER VOLTAGE CATEGORY II: Test voltage 4.8 KV
DIELECTRIC STRENGTH: 2.2 KV
CONTACT RESISTANCE: <5 m Ohm
INSULATION RESISTANCE: ≥5000 M Ohm
POLLUTION DEGREE: 2
CABLE DIAMETER MAX: 11 mm
CRIMP TERMINATION (CABLE SIDE):
1,5 mm² / AWG 16 (0.002325 in² / AWG 16)
CRIMP TERMINATION (INSIDE MOTOR):
0,38 mm² - 0,78 mm² / AWG 22 - 18 (0.000589 in² - 0.001209 in² / AWG 22 - 18)

SIGNAL

CURRENT RATING AT 80°C (176°F) ambient temp: 3 A max
MAXIMUM VOLTAGE: 48 VAC
DIELECTRIC STRENGTH: 500 VDC
CONTACT RESISTANCE: <10 m Ohm
INSULATION RESISTANCE: ≥5000 M Ohm
CABLE DIAMETER MAX: 11 mm
CRIMP TERMINATION (CABLE SIDE):
1,0 mm² / AWG 17 (0.00155 in² / AWG 17)
CRIMP TERMINATION (INSIDE MOTOR):
0,14 mm² - 0,38 mm² / AWG 26 - 22 (0.000217 in² - 0.000589 in² / AWG 26 - 22)

Order code on next page

Cm3™ Connector Series

To order, simply select desired option from each category and place in the appropriate box.

HOUSING ORDER CODE

Housing

Insulator

M3 - B L W C 1 - 1 0 - 1 0 0 0 - 0

Designation
M3

Housing/ Shielding Barrier

- L Shielding left
- R Shielding right
- N No shielding
- 0 Without basepart

Fixing Screws

- W With 4 screws
- 0 Without screws

Cover

- 1 With cover
- 0 Without cover

Sealing Class

- 1 IP65 (standard)
- 2 IP67 *

Plating

- 0 Unplated
- 1 Light chromated

Modification / VS Code

- 0 no code
- 1 TBD

Signal Coding 2 (yellow)

- 0 Without insulator
- 1 With insulator

Signal Coding 1 (blue)

- 0 Without insulator
- 1 With insulator

Signal Coding 0 (red)

- 0 Without insulator
- 1 With insulator

Power

- 0 Without insulator
- 1 With insulator

Contact Housing Side

D-sub signal pin / 0,25-0,5 mm²
(S-sub signal pin / 0,08-0,2 mm²)
Trident power pin 0,6-1,5 mm²

Required

18 x
(18 x)
4 x

Packaging Unit

5,000 per reel
5,000 per reel
100

Order Number

980-2000-945
980-2000-946
192991-0084

* Please contact customer service for more information.

CABLE SIDE ORDER CODE

Cable Power

Cable Signal

Insulator

M3 - P 1 - S 1 - 1 - 1 1 1 0 - 0

Designation
M3

POWER CRIMP

Cable Diameter

- 0 Without power line
- 1 Cable diameter from 7-8 mm
- 2 Cable diameter from 8-9 mm
- 3 Cable diameter from 9-10 mm
- 4 Cable diameter from 10-11 mm

SIGNAL CRIMP

Cable Diameter

- 0 Without power line
- 1 Cable diameter from 7-8 mm
- 2 Cable diameter from 8-9 mm
- 3 Cable diameter from 9-10 mm
- 4 Cable diameter from 10-11 mm

Sealing Class

- 1 IP65 (standard)
- 2 IP67 *

Modification / VS Code

- 0 no code
- 1 TBD

Signal Coding 2 (yellow)

- 0 Without insulator
- 1 With insulator

Signal Coding 1 (blue)

- 0 Without insulator
- 1 With insulator

Signal Coding 0 (red)

- 0 Without insulator
- 1 With insulator

Power

- 0 Without insulator
- 1 With insulator

Contact Cable Side

Signal 1 mm Skt. / 0,14-1,0 mm²
Signal 1 mm spring wire (opt.)
Trident Power Skt. 0,6-1,5 mm²
Trident Power Skt. GND

Required

max 18 x
max 18 x
3
1

Packaging Unit

100
100
100
100

Order Number

980-8681-150
980-8681-023
192991-0047
031-8565-000

* Please contact customer service for more information.