



Product: [6281MD](#)

1Pr 22AWG Shielded Data + 16/2 Power OSDP CMP

Product Description

OSDP Reader Cable, 1 Pair 22 AWG stranded (7x30) tinned copper (data) with foam FEP insulation, Beldfoil® shield w/ drain, 2 Conductor 16 AWG stranded (19x29) Bare copper conductor (power) with Flamarrest® insulation, Plenum, Flamarrest®

Technical Specifications

Product Overview

|                        |                                                   |
|------------------------|---------------------------------------------------|
| Suitable Applications: | OSDP Readers, RS-485, Serial Data, Access Control |
|------------------------|---------------------------------------------------|

Construction Details

Conductor

| Element       | No. of Conductors | No. of Pairs | Size   | Stranding | Material           | Notes                      |
|---------------|-------------------|--------------|--------|-----------|--------------------|----------------------------|
| Data Pair(s)  |                   | 1            | 22 AWG | 7x30      | TC - Tinned Copper | Twisted Pair Configuration |
| Power Pair(s) | 2                 |              | 16 AWG | 19x29     | BC - Bare Copper   |                            |

Insulation

| Element       | Material                                    | Nom. Thickness     | Nom. Insulation Diameter | Color Code                            |
|---------------|---------------------------------------------|--------------------|--------------------------|---------------------------------------|
| Data Pair(s)  | FEP - Fluorinated Ethylene Propylene (Foam) | 0.031 in (0.79 mm) | 0.090 in (2.3 mm)        | White/Blue Stripe & Blue/White Stripe |
| Power Pair(s) | PVC - Polyvinyl Chloride                    | 0.012 in (0.30 mm) | 0.081 in (2.1 mm)        | Black & Red                           |

Inner Shield

| Element       | Shield Type | Material                | Coverage | Drainwire Type   |
|---------------|-------------|-------------------------|----------|------------------|
| Data Pair(s)  | Tape        | Bi-Laminate (Alum+Poly) | 100%     | 24 AWG (7x32) TC |
| Power Pair(s) |             | Unshielded              |          |                  |

Outer Jacket

| Material    | Nom. Thickness     | Nom. Diameter      |
|-------------|--------------------|--------------------|
| Flamarrest® | 0.020 in (0.51 mm) | 0.246 in (6.25 mm) |

|                                   |                    |
|-----------------------------------|--------------------|
| Overall Cable Diameter (Nominal): | 0.246 in (6.25 mm) |
|-----------------------------------|--------------------|

Electrical Characteristics

Electricals

| Element       | Nom. Conductor DCR            | Nom. Capacitance Cond-to-Cond | Nom. Capacitance Cond-to-Shield | Nom. Characteristic Impedence | Nom. Velocity of Prop. |
|---------------|-------------------------------|-------------------------------|---------------------------------|-------------------------------|------------------------|
| Data Pair(s)  | 14.8 Ohm/1000ft (48.6 Ohm/km) | 13 pF/ft (43 pF/m)            | 24 pF/ft (79 pF/m)              | 120 Ohm                       | 78%                    |
| Power Pair(s) | 4.2 Ohm/1000ft (14 Ohm/km)    |                               |                                 |                               |                        |

Voltage

| UL Voltage Rating |
|-------------------|
| (300V (CMP))      |

Mechanical Characteristics

Temperature

| UL Temperature | Operating |
|----------------|-----------|
|----------------|-----------|

|      |                |
|------|----------------|
| 60°C | -20°C to +60°C |
|------|----------------|

Bend Radius

|                   |
|-------------------|
| Stationary Min.   |
| 2.44 in (62.0 mm) |

|                    |                |
|--------------------|----------------|
| Max. Pull Tension: | 31 lbs (14 kg) |
| Bulk Cable Weight: | 21 lbs/1000ft  |

Standards and Compliance

|                                  |                                                                                                                           |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| Environmental Suitability:       | Indoor - Plenum, Indoor                                                                                                   |
| Flammability / Reaction to Fire: | NFPA 262, FT6, IEC 60332-1-2                                                                                              |
| CPR Compliance:                  | CPR Euroclass: Eca                                                                                                        |
| NEC / UL Compliance:             | Article 800, CMP                                                                                                          |
| CEC / C(UL) Compliance:          | CMP FT6                                                                                                                   |
| European Directive Compliance:   | EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE) |
| APAC Compliance:                 | China RoHS II (GB/T 26572-2011)                                                                                           |
| Plenum Number:                   | 6281MD                                                                                                                    |

History

|                      |                                                  |
|----------------------|--------------------------------------------------|
| Update and Revision: | Revision Number: 0.141 Revision Date: 04-01-2024 |
|----------------------|--------------------------------------------------|

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