



# Product: <u>538HMD1</u>

OSDP Access Control Cable, Indoor/Outdoor CM, 14C (OSDP Reader 1Pr 22+#18-2, #18-4, #22-6), Overall PVC Jacket

# **Product Description**

OSDP Access Control Cable, Indoor/Outdoor CM OSDP 1PR 22 Shielded+18/2, 4-18 AWG conductors, 4-22 AWG conductors, 2-22 AWG conductors, Water-Blocking Tape, Overall PVC jacket CM Rated

# **Technical Specifications**

# **Product Overview**

Suitable Applications:

Indoor/Outdoor: Access Control, Security System, Power Limited Controls, OSDP

# **Construction Details**

# Conductor

| Element Description | Element      | No. of Conductors | No. of Pairs | Size   | Stranding | Material           | Notes   |
|---------------------|--------------|-------------------|--------------|--------|-----------|--------------------|---|
| Card Reader         | Data Pair(s) |                   | 1            | 22 AWG | 7x30      | TC - Tinned Copper | Data Pair - 1 Pr. 22AWG Shielded, RS-485 - Reader |
| Card Reader         | Power        | 2                 |              | 18 AWG | 7x26      | BC - Bare Copper   | Power Pair - 2C 18AWG Unshielded                  |
| Door Contact        | Conductor(s) | 2                 |              | 22 AWG | 7x30      | BC - Bare Copper   |   |
| REX/Spare           | Conductor(s) | 4                 |              | 22 AWG | 7x30      | BC - Bare Copper   |   |
| Lock Power          | Conductor(s) | 4                 |              | 18 AWG | 7x26      | BC - Bare Copper   |   |

#### Insulation

| Element Description | Element      | Material                 | Nom. Thickness    | Color Code               |
|---------------------|--------------|--------------------------|-------------------|--------------------------|
| Card Reader         | Data Pair(s) | PE - Polyethylene (Foam) | .029 in (0.74 mm) | Blue, White              |
| Card Reader         | Power        | PVC - Polyvinyl Chloride | .009 in (0.23 mm) | Black, Red               |
| Door Contact        | Conductor(s) | PVC - Polyvinyl Chloride | .009 in (0.23 mm) | Black, Red               |
| REX/Spare           | Conductor(s) | PVC - Polyvinyl Chloride | .009 in (0.23 mm) | Black, Red, White, Green |
| Lock Power          | Conductor(s) | PVC - Polyvinyl Chloride | .010 in (0.25 mm) | Black, Red, White, Green |

### Inner Shield

| Element Description | Element      | Shield Type | Material                | Coverage | Drainwire Type   |
|---------------------|--------------|-------------|-------------------------|----------|------------------|
| Card Reader         | Data Pair(s) | Таре        | Bi-Laminate (Alum+Poly) | 100%     | 22 AWG (7x30) TC |
| Card Reader         | Power        | No Shield   |                         |          |                  |
| Door Contact        | Conductor(s) | No Shield   |                         |          |                  |
| REX/Spare           | Conductor(s) | No Shield   |                         |          |                  |
| Lock Power          | Conductor(s) | No Shield   |                         |          |                  |

## Inner Jacket

| Element Description | Separator          | Material                 | Nom. Thickness    | Nom. Diameter     | Color  |
|---------------------|--------------------|--------------------------|-------------------|-------------------|--------|
| Card Reader         | Waterblocking Tape | PVC - Polyvinyl Chloride | .032 in (0.81 mm) | .275 in (6.99 mm) | Orange |
| Door Contact        | Waterblocking Tape | PVC - Polyvinyl Chloride | .025 in (0.64 mm) | .168 in (4.27 mm) | White  |
| REX/Spare           | Waterblocking Tape | PVC - Polyvinyl Chloride | .025 in (0.64 mm) | .187 in (4.75 mm) | Blue   |
| Lock Power          | Waterblocking Tape | PVC - Polyvinyl Chloride | .025 in (0.64 mm) | .232 in (5.89 mm) | Gray   |

#### Outer Jacket

| Material                               | Nom. Thickness    | Nom. Diam     | eter |  |
|--|-------------------|---------------|------|--|
| PVC - Polyvinyl Chloride               | .035 in (0.89 mm) | .595 in (15.1 | mm)  |  |
| Overall Cable Diameter (Nominal): .595 |                   |               |      |  |

# **Electrical Characteristics**

## Electricals

| Element<br>Description | Element      | Nom. Conductor DCR            | Nom. Capacitance Cond-to-Cond | Nom. Capacitance Cond-to-Other (Conds + Shield) | Nom. Characteristic Impedence |
|------------------------|--------------|-------------------------------|-------------------------------|---|-------------------------------|
| Card Reader            | Data Pair(s) | 16.5 Ohm/1000ft (54.1 Ohm/km) | 13.5 pF/ft (44.3 pF/m)        | 25 pF/ft (82 pF/m)                              | 120 Ohm                       |
| Card Reader            | Power        | 6.4 Ohm/1000ft (21 Ohm/km)    |                               |   |                               |
| Door Contact           | Conductor(s) | 16.5 Ohm/1000ft (54.1 Ohm/km) |                               |   |                               |
| REX/Spare              | Conductor(s) | 16.5 Ohm/1000ft (54.1 Ohm/km) |                               |   |                               |
| Lock Power             | Conductor(s) | 6.4 Ohm/1000ft (21 Ohm/km)    |                               |   |                               |

#### Voltage

UL Voltage Rating 300 V

# **Mechanical Characteristics**

### Temperature

| UL Temperature | Operating      |
|----------------|----------------|
| 60°C           | -20°C to +60°C |

### Bend Radius

| Stationary Min. | Installation Min. |
|-----------------|-------------------|
| 5.9 in (150 mm) | 5.9 in (150 mm)   |

| Max. Pull Tension: | 198 lbs (89.8 kg)          |
|--------------------|----------------------------|
| Bulk Cable Weight: | 110 lbs/1000ft (160 kg/km) |

# **Standards and Compliance**

| Environmental Suitability:       | Indoor/Outdoor   |
|----------------------------------|--|
| Flammability / Reaction to Fire: | UL 1685  |
| CPR Compliance:                  | CPR Euroclass: Eca   |
| NEC / UL Compliance:             | Article 800, CM  |
| CEC / C(UL) Compliance:          | СМ   |
| European Directive Compliance:   | EU CE Mark, EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE) |
| APAC Compliance:                 | China RoHS II (GB/T 26572-2011)  |
| Plenum Number:                   | 658HMs   |

# **History**

Update and Revision:

Revision Number: 0.13 Revision Date: 05-13-2024

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