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1. Application:

DataTuff® Patchcord terminated with IP20 RJ45 on both sides for interconnection of data communication equipment such as Industrial Ethernet / PROFINET.

2. Description:

Cable assembly consisting of BELDEN 70007E: 2PR (quad) AWG22/7 CAT5E SF/UTP PVC with both sides connectorised to a IP20 Industrial RJ45 CRIMP MALE connector and molded boot.

3. Codenumber:

Belden Codenumbers: CA00730.00Cyy.

The “C” represents the cable is coiled into a ring, a D represents a ring with length <1mtr

The “yy” represents the length of the patchcord.

Example:

CA00730.00C10 = 70007E IP20 RJ45 - IP20 RJ45 10m

CA00730.00C1D5 = 70007E IP20 RJ45 - IP20 RJ45 1.50 m

4. Mechanical and electrical properties:

High voltage test : 1.5kV_dc between contacts and contact to housing

Wire continuity: tested each wire/contact and shield

Operating temperature rating: -10 up to +60°C


Storage temperature rating: -40 up to +70°C

See table 2 for additional mechanical requirements

Test Title	Agency Standard
Insert Loss/ attenuation	ISO/IEC 11801 or TIA/EIA-568-B.2 Clause 4.5 and 6.0 including 1.5 de-rating factor for stranded cables
FEXT loss	TIA/EIA-568-B.2 clause 6
NEXT(*)	ISO/IEC 11801 A2
Return Loss	ISO/IEC 11801 A2
Coupling attenuation	ISO/IEC 24702 table 4 E ₂ class D channel minimum
Delay	TIA/EIA-568-B.1 de-rated according to length based on 100 meter channel
Delay Skew	TIA/EIA-568-B.1
Note: Next requirement de-rated according ISO/IEC 11801 according to cable length	

Table 1: RJ- 45 Cordset Electrical/Transmission Requirements

Test Title	Test Conditions	Pass Criteria
Installation pull simulation	With connector mated to a jack, apply 20 pound load for 1 minutes to cable in line with axis of connector at room temperature.	Must Pass Electrical/Transmission requirements in chart above before, and after testing. No signs of degradation to cable, connector or cable to

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		connector interface after load removed.
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Table 2: RJ45 IDC Industrial cordset Additional Mechanical Requirements

5.1 Connector RJ45 requirements:

Mechanical	IEC 60603-7-4
Electrical/ Transmission	IEC 60603-7-4 and TIA 568B.2
Insertion life	> 750 mating cycles (EIA/TIA-568-B.2 annex K.6.2.2.2)
Contact resistance	20 mΩ maximum
Category	5e minimum

5.2 Wiring scheme:

RJ45 Connector	
Pin pos.	Colour of insulation
1	Yellow
2	Orange
3	White
6	Blue

6. Change history:

Revision #	Date	By
1	26-11-2013	PBe
2	24-1-2014	PBe
3	03-12-2014	Pbe
4	08-12-2014	LC



Belden declares this product to be in compliance with the environmental regulations EU RoHS (Directive 2011/65/EU, 02 Jan. 2013); this is valid for all material produced after the RoHS compliant date for this product.