1. Application:

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

2. Description:

Cable assembly consisting of BELDEN 74002E: 4PR AWG26/7 CAT5E SF/UTP PVC with both sides connectorised to a 8 position IP20 Industrial RJ45 CRIMP MALE connector and molded boot.

3. Codenumber:

Belden Codenumbers: CA00613.00Cyy.
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:

CA00613.00C10 = 74002E IP20 RJ45 - IP20 RJ45 10m
CA00613.00D03 = 74002E IP20 RJ45 - IP20 RJ45 0.30 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 1.2 or greater 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 connector interface after load removed.

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: According EIA/TIA 568B

TIA568B	Pin assignment RJ45
Pin no.	Colour of insulation
1	White/Orange
2	Orange
3	White/Green
4	Blue
5	White/Blue
6	Green
7	White/Brown
8	Brown

6. Change history

Revision #	Date	By
1	3-10-2012	PBe
2	19-6-2013	PBe
3	25-11-2013	PBe
4	30-01-2014	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.