



Description: Hardline Splice Reducer, E120 – B004.  
(Measured with TFC TX1015 & BETACavi RG11 Cable).

## DATA SHEET

### Electrical

	Specification		Standard
<b>Frequency Range</b>	5 MHz – 3.000 MHz		
<b>Impedance</b>	75 $\Omega$ nominal		
	<b>Better Than</b>	<b>Measured</b> – Worst case of 5 measurements	
<b>Return Loss of Assembly</b>	28 dB 24 dB 22 dB 18 dB	$\geq 31.0$ dB $\geq 27.0$ dB $\geq 25.2$ dB $\geq 21.0$ dB	5 MHz – 500 MHz 500 MHz – 860 MHz 860 MHz – 1.000 MHz 1.000 MHz – 1.750 MHz IEC 61169-1, 9.2.1.4
<b>Gated Return Loss of E120-B004-SPR</b>	30 dB 28 dB 28 dB 26 dB	$\geq 33.9$ dB $\geq 31.6$ dB $\geq 31.6$ dB $\geq 29.7$ dB	5 MHz – 500 MHz 500 MHz – 860 MHz 860 MHz – 1.000 MHz 1.000 MHz – 1.750 MHz IEC 61169-1, 9.2.1.4
<b>Insertion Loss of Assembly</b>	0.08 dB 0.10 dB 0.11 dB 0.13 dB	$\leq 0.05$ dB $\leq 0.07$ dB $\leq 0.08$ dB $\leq 0.10$ dB	5 MHz – 500 MHz 500 MHz – 860 MHz 860 MHz – 1.000 MHz 1.000 MHz – 1.750 MHz
<b>Shielding Effectiveness (Measured with CoMeT)</b>	Transfer Impedance @ 5 – 30 MHz $\leq 1.3$ m $\Omega$ /item Screening Attenuation @ 30 – 1.000 MHz $\geq 101.1$ dB Screening Attenuation @ 1.000 – 2.000 MHz $\geq 91.5$ dB Screening Attenuation @ 2.000 – 3.000 MHz $\geq 95.8$ dB Class: A+		IEC 62153-4-3 IEC 62153-4-4 IEC 62153-4-4 IEC 62153-4-4 EN 50117
<b>Common Path Distortion</b>	$\leq -110$ dBc		ANSI/SCTE 109 2005
<b>Inner Conductor Resistance</b>	$\leq 2.0$ m $\Omega$ @ 1 A DC.		IEC 61169-1, 9.2.3
<b>Amp. Rating</b>	$\leq 15$ A. @ 60 V.		
<b>Dielectric Strength</b>	$\geq 3$ KV.		IEC 61169-1, 9.2.1.6
<b>Insulation Resistance</b>	$\geq 29.99$ G $\Omega$ @ 500 V.		IEC 61169-1, 9.2.1.5

### Environmental

	Specification	Standard
<b>Temperature range Operating</b>	-40°C to +85°C	
<b>Temperature range Installation</b>	-5°C to +50°C	
<b>Sealing Test</b>	IPX8 – 1 meter / 24 hours	IEC 60529
<b>Red Dye</b>		ANSI/SCTE 60
<b>Corrosion Protection</b>		ASTM B 117-94

### Mechanical

	Specification	Standard
<b>Pull Strength</b>	$\geq 75$ kgf	ANSI/SCTE 99

### Material and Finish

	Specification	Standard
<b>Housing</b>	NiSn (NITIN) plated Brass	ASTM B605
<b>Inner conductor</b>	NiSn (NITIN) plated Brass	ASTM B605
<b>Compression ring</b>	NiSn (NITIN) plated Brass	ASTM B605
<b>O'ring</b>	EPDM	
<b>Insulator</b>	Polycarbonate/Polyethylene	

In order to continue to supply the best products, PPC reserves the right to change the products and specifications at any time without prior notice.

### **Measurement setup:**

Nm-58f, E120-58m, TFC cable, **E120-B004-SPR**, BETACavi cable, B004-58m, Nm-58f.

All results are the worst case result of measurement of 5 items.

All tests performed using instruments calibrated in accordance to our ISO 9001 certification.

Return Loss, Gated Return Loss (Time Domain Measurement of Return Loss of the Splice Reducer in setup), Insertion Loss and Shielding are measured with hp Network Analyzer hp 8753D and S-Parameter Test Set 85047A, according to IEC standards.

CPD (Common Path Distortion) are measured with hp Spectrum Analyzer hp 8591E, according to ANSI/SCTE standard.

In case of over current ( $\geq 15$  A.) there is a risk for high temperature inside the connector, which will cause damage of the insulator, and / or the cable.

Further test reports, technical specifications and installation instructions can be obtained on request.

