

Part No:

# HLL228R-29P-29J-L



## 2.92mm Male to 2.92mm Female Low Loss Ruggedized Test Cable - DC - 40 GHz

The HASCO HLL228R Series Cable is a low loss LL228 cable that operates from DC to 40 GHz. This cable series is constructed with 2.92mm Male to 2.92mm Female connectors. These cables are internally ruggedized with multi-layer copper spiral and braided armor. They offer excellent phase and amplitude stability vs. flexure. The HLL228R Series cables offer 1.30:1 max VSWR.

The HLL228R-29P-29J-L is RoHS Compliant.



HASCO offers many types and configurations of RF and microwave cable assemblies and can support most requirements, such as flexible, conformable, semi-rigid, VGA, low-loss, phase stable, armored, jacketed and more; all assembled with the highest quality RF connectors.

### Electrical

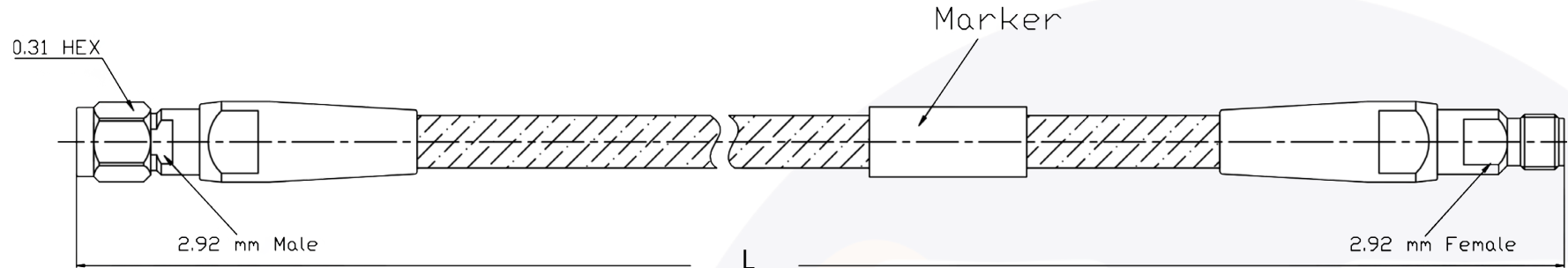
• Frequency Range	DC - 40 GHz	• Bend Radius	38mm
• VSWR	1.30:1 Max	• Impedance	50 Ohms
• Bending Phase Stability	$\leq \pm 4^\circ$ @ 50 GHz	• Durability	>5000
• Insertion Loss	$\leq 2.8 \times f(\text{GHz})$ dB	• Armor Stress Tolerance	100N / 25mm
• Phase Stability	$\pm 0.04$ dB @ 50 GHz	• Velocity	83%
• Insulation Resistance	$\geq 5000$ M $\Omega$	• Screening Effectiveness	>90 dB
• Capacitance	27pf / ft = 88pf / m	• Armor Outer Diameter	5.80mm
• RF Leakage	$\geq 90$ dB	• Weight	.046kg / m
• Temperature Range	-55°C to 125°C		

### Material

• Connector Body	Passivated Stainless Steel
• Connector Dielectric	PEI
• Connector Center Contact	Gold plated BeCu
• Cable Center Conductor	Silver plated Copper
• Cable Dielectric	LDPTFE
• Inner Shield	Silver plated flat Copper wire braid
• Middle Shield	LDPTFE
• Outer Shield	Silver plated Copper wire braid
• Jacket	FEP
• Inner Armor	Stainless Steel spring wire
• Strengthened Shield	Tin plated Copper wire
• Anti-Twist Layer	PTFE wrapping tape
• Outer Armor	PTFE Braid

Attenuation & Power Handling @ 25°C & Sea Level			
Frequency (GHz)	Attenuation		Power Handling
	dB / 100 ft	dB / 100m	Watts
1	11.4	37.5	509
3	20.0	65.7	291
6	28.6	93.8	203
10	37.3	122.4	156
12	41.4	135.8	141
18	50.8	166.7	115
26.5	62.4	204.8	93
40	77.7	254.8	75

## 2.92mm Male to 2.92mm Female Low Loss Ruggedized Test Cable | DC - 40 GHz | Outline Drawing



LTR	DESCRIPTION	DATE	APPR.	DRAWN BY: <i>NS</i>	REVIEWED BY: <i>JS</i>	<div style="display: inline-block; vertical-align: middle; margin-left: 10px;">                 5214 Bonsai Street • Moorpark, CA 93021                  (888) 498-3242 • sales@hasco-inc.com  <a href="http://www.hasco-inc.com">www.hasco-inc.com</a> </div>			
-	RELEASE	8/19	TC		APPROVED BY: <i>TC</i>				
A	JACKET COLOR CHANGE	10/20	TC	THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF HASCO COMPONENTS AND SHALL NOT BE REPRODUCED, COPIED NOR USED - IN WHOLE OR IN PART - AS THE BASIS FOR THE MANUFACTURE OR SALE OF OTHER ITEMS WITHOUT THE EXPRESS, WRITTEN PERMISSION OF HASCO COMPONENTS.		MATERIALS:	CAGE CODE:	SCALE:	SIZE:
B	SPECIFICATION UPDATE	5/23	TC			SEE DATA SHEET	OT8L4	N/A	A
						FINISHES:	PART NO./DRAWING NO.		REV:
						SEE DATA SHEET	<b>HLL228R-29P-29J-L</b>		B
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