

Rack and Panel Float Mounting Connectors

- Railways approved float mount connector.
- Modular type, with mixed power signal and coax contacts.
- Featuring 1 coaxial contact #8 (GPS or ERTMS).
- Single size: 14 units (5.5mm).
- Cable length: from 0.25m to 5.0m, by multiple of 0.25m.

About ERTMS

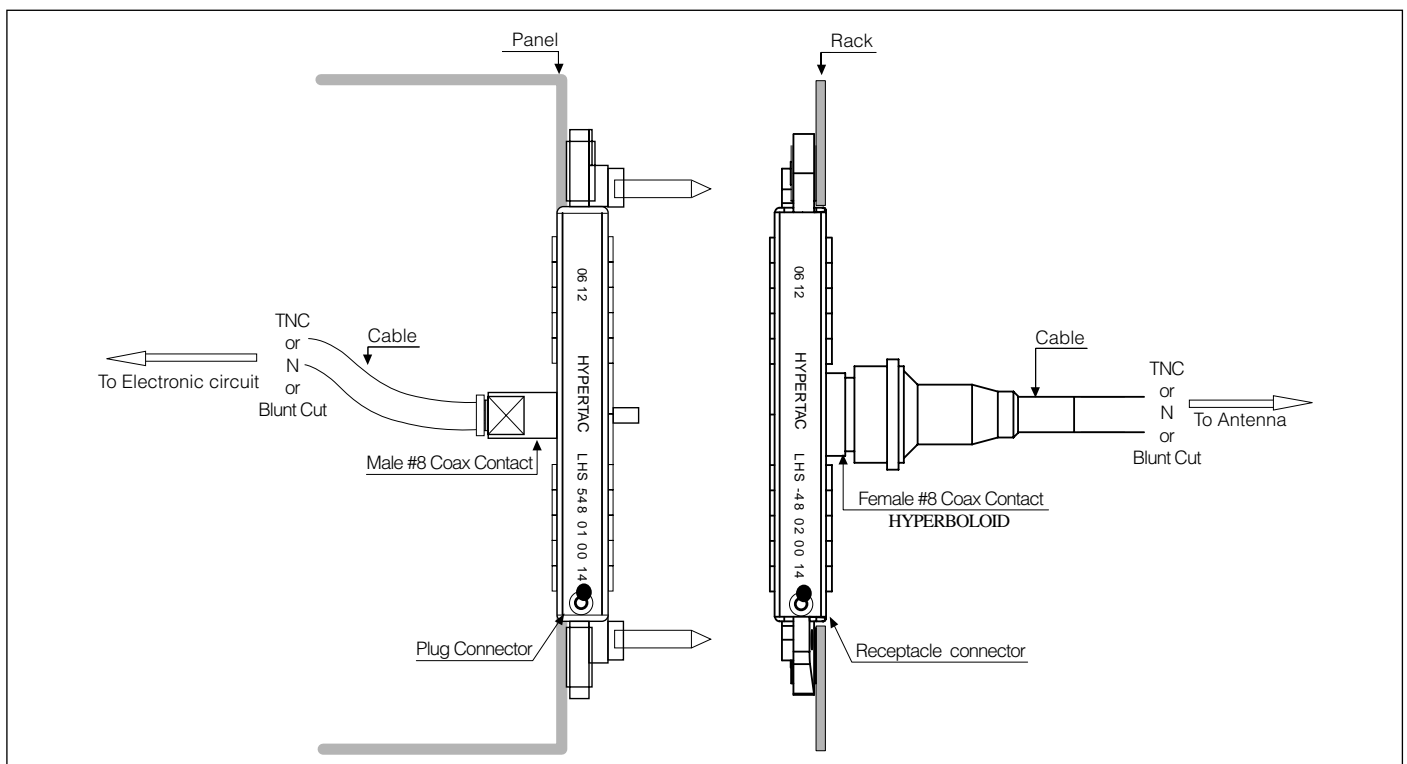
The European Rail Traffic Management System (ERTMS) was originated by the European Community (EC) to create a unique Automatic Train Control and railways management system to enable interoperability throughout the European rail network.

ERTMS is the combination of the new control-command system ETCS (European Train Control System) and the new GSM-R radio system for voice and data communication.

The ERTMS project has been set up to ensure safe operation of the trains in the network and to deal with the traffic and infrastructure management issues enabling the optimisation of the capacity of the lines and the utilisation of the fleet.

The ERTMS project involves 6 major suppliers in 7 countries (UK, France, Spain, the Netherlands, Germany, Switzerland and Italy).

Connector Configurations



Technical Characteristics

MATERIALS AND PLATINGS		ENVIRONMENTAL & MECHANICAL	
Frame	Soft Steel (Zinc coated)	Temperature range	- 40 °C to 100 °C
Side flange	Polycarbonate	Fire classification	Level 2 following NF F 16-102
Insulator	Polycarbonate	Salt spray test	96 hours
Pin & socket body	Brass, Au/Ni	Acid withstanding	Following NF F 61-032 par. 11.4.6
Socket wires	Copper alloy, Au/Ni	Vibration Withstanding	5g / 25 to 250 Hz
Pin	Au/Ni	Insulator mechanical resistance	1000 N
Floating eyelets	Brass (Ni plated)	Max torque for auto threading screws	75 Ncm

ELECTRICAL CHARACTERISTICS			
Contact Ø	Ø 1.50	Ø 2.50	Ø 3.50
Creepage distance	1.85 mm	2.25 mm	4.05 mm
Clearance distance	1.25 mm	3.40 mm	5.40 mm
Working current	8 A	16 A	25 A
Insulation resistance	≥ 5.10 ³ MΩ		
Contact resistance	≤ 2.50 mΩ	≤ 1.00 mΩ	≤ 0.80 mΩ
Dielectric withstanding voltage	1500 Vrms	2000 Vrms	3000 Vrms
Voltage rating	110 V	220 V	220 V
Contact retention	40 N	50 N	70 N
Max male contact mass	1.10 g	2.90 g	4.90 g
Max female contact mass	0.70 g	1.60 g	2.70 g
IF/SF* (Max value)	1.60N	9.00N	10.00N

Coaxial contact Ø	Ø 3.65
Nominal impedance	50 Ω
Frequency range	1.5GHz
RF Transmission Loss	0.05db at 1GHz 0.06db at 1.5GHz

*IF/SF: Insertion and separation force according to NF F 61-032

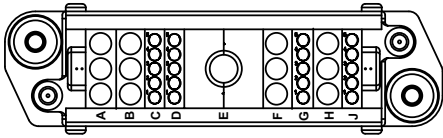
Antenna cable assembly receptacle connector

Cable & contact technical characteristics

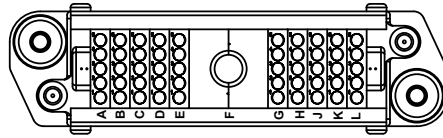
Impedance	50 Ω ±1Ω		
Cable 1/4" mechanical characteristics			
Zero halogen			
External diameter	6.40mm		
Static bending radius	25mm mini		
Dynamic bending radius	45mm mini		
Max pull force	500N		
α @ 1500MHz	24db/100m		
Transmission losses			
	1GHz	1.5GHz	
Hypertac coaxial contact	0.05db	0.06db	
Coaxial cable	19db/100m	24db/100m	
TNC contact	-	0.06db	
N contact	0.05db	-	
Cable assembly transmission loss: versus length			
Length	1GHz	1.5GHz	
0.25m	0.15db	0.18db	
0.50m	0.2db	0.24db	
0.75m	0.25db	0.30db	
1m	0.29db	0.36db	
1.25m	0.34db	0.42db	
1.50m	0.39db	0.48db	
1.75m	0.44db	0.54db	
2m	0.48db	0.60db	
2.25m	0.53db	0.66db	
2.50m	0.58db	0.72db	
2.75m	0.63db	0.78db	
3m	0.67db	0.84db	
3.25m	0.72db	0.90db	
3.50m	0.77db	0.96db	
3.75m	0.82db	1.02db	
4m	0.86db	1.08db	
4.25m	0.91db	1.14db	
4.50m	0.96db	1.20db	
4.75m	1.01db	1.26db	
5m	1.05db	1.32db	

Main Layout

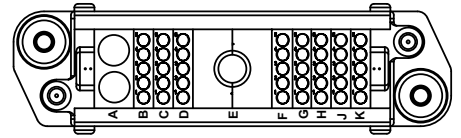
(For other layouts, please consult your representative.)



Layout -31



Layout -48



Layout -51

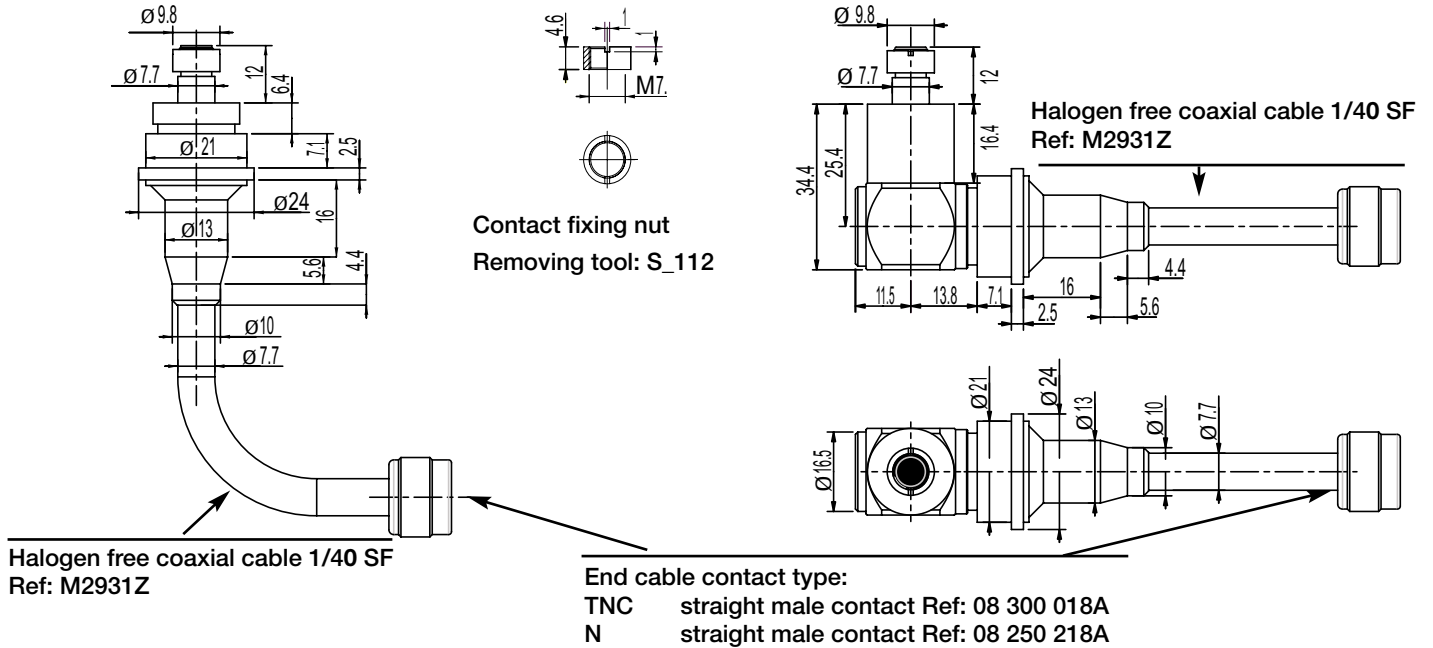
Ordering information

SERIES		LH	-	-	--	--	--	14	-	-
MODEL										
S	Standard									
Z	Customer specific program									
COAXIAL CABLE ASSEMBLY DETAILS										
5	Delivered without the #8 coaxial contact									
A to V	Delivered with the #8 coaxial contact cable assembly, A to V length table (meter)									
A: 0.25	B: 0.50	C: 0.75	D: 1	E: 1.25	F: 1.50	G: 1.75	H: 2	J: 2.25	K: 2.50	
L: 2.75	M: 3	N: 3.25	P: 3.50	Q: 3.75	R: 4	S: 4.25	T: 4.50	U: 4.75	V: 5	
LAYOUT										
31	48	51	Other layout : please consult factory							
PART POLARITY										
01	Plug without contact	13	Plug with male contact							
02	Receptacle without contact	22	Receptacle with female contact							
CONTACT TERMINATION										
00	Without contact	20	Crimp contact							
PITCH NUMBERS										
CONTACT TYPE										
S	Straight	C	Bent 90°							
CABLE TYPE										

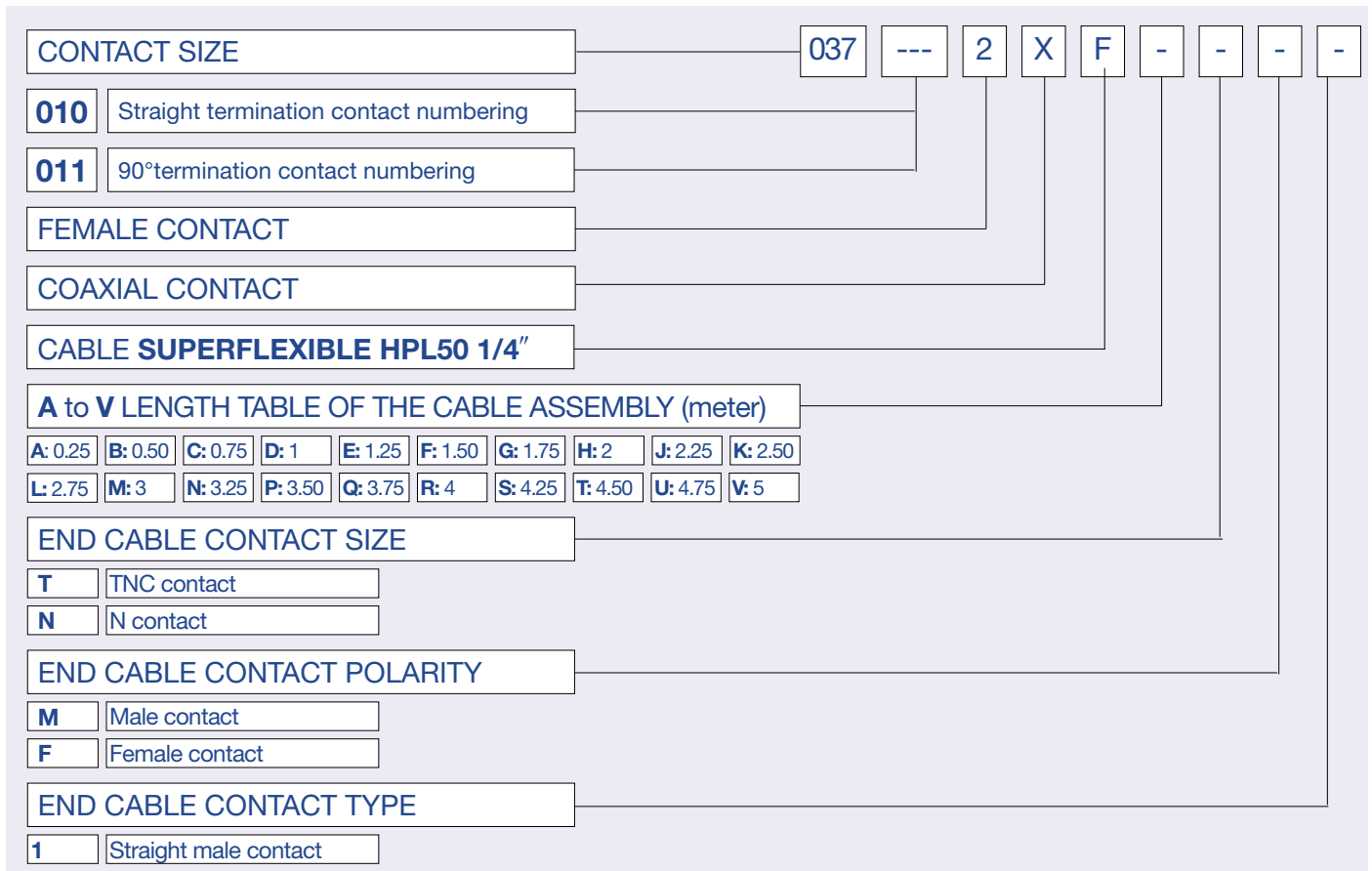
Cable assembly dimensions

Straight contact termination
Contact P/N: 037010 2-XF - - - -

90° contact termination
contact P/N: 037011 2-XF - - - -



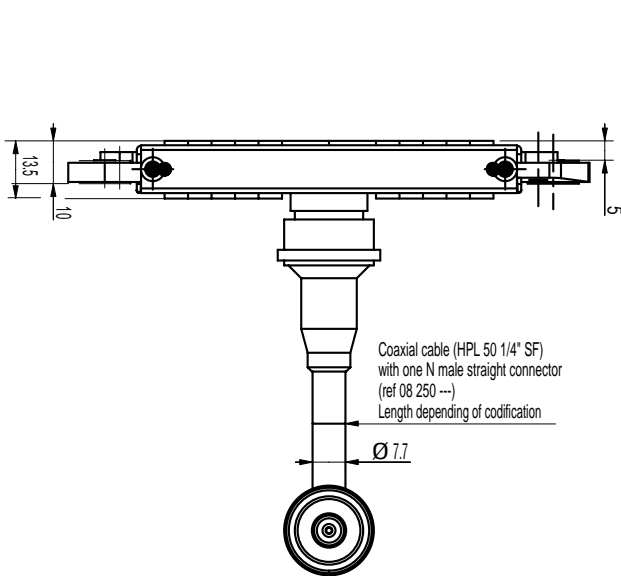
Cable assembly part numbering



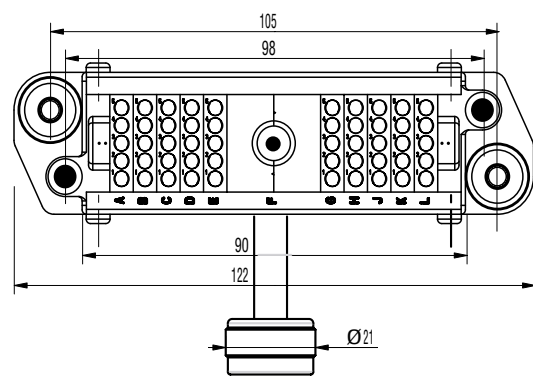
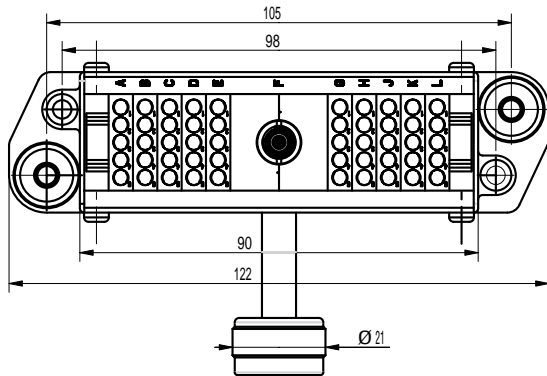
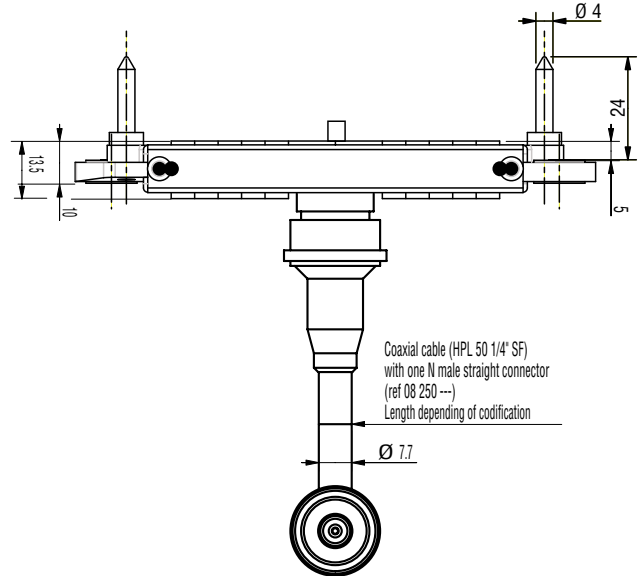
Dimensions are in mm

Contacts - crimp terminations

Receptacle mating side view



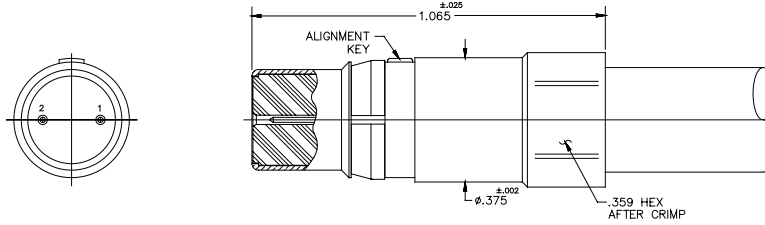
Plug mating side view



Dimensions are in mm

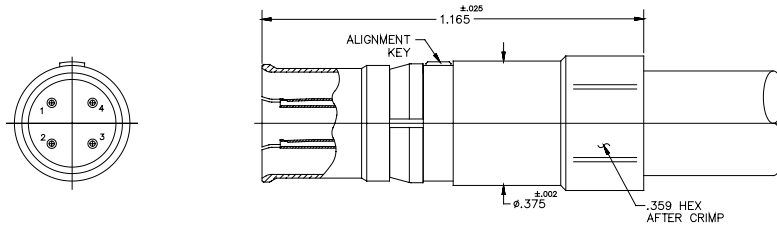
**LHS Series Twinax/Quadrax Contacts
For Hypertac LHS Series Receptacle**

Size 5 Twinax Pin Contact for Hypertac LHS Series Receptacle



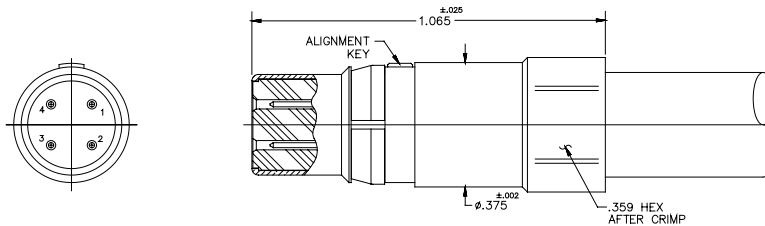
P/N: 019434-2002

Size 5 Twinax Socket Contact for Hypertac LHS Series Receptacle



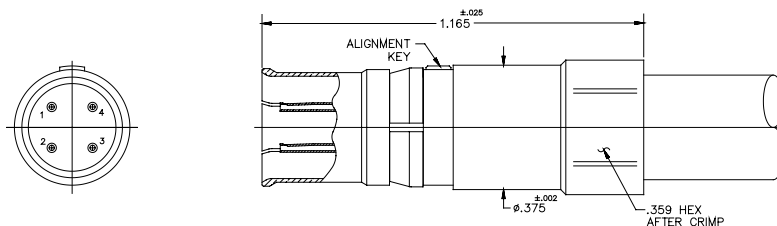
P/N: 019334-2002

Size 5 Quadrax Pin Contact for Hypertac LHS Series Receptacle



P/N: 019435-2003

Size 5 Quadrax Socket Contact for Hypertac LHS Series Receptacle



P/N: 019335-2004