

Amphenol

NEW PRODUCT UPDATE NEW PRODUCT UPDATE NEW PRODUCT UPDATE NEW PRODUCT UPDATE

QUARTER WAVE STUB (QWS) LIGHTNING PROTECTION



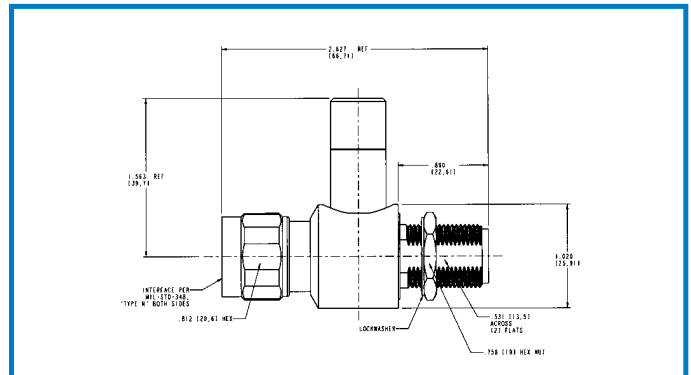
In-line Lightning Protection Units

Amphenol's coaxial Type Q protection connector houses a Quarter Wave Stub. The 50 ohm nominal impedance of this device makes the connector suitable for high frequency applications where characteristic impedance must be maintained. The QWS has two versions: the QA type (Quarter Wave Stub Adapter) and the the QC type (Quarter Wave Stub Cable). The adapter configuration consists of : N to N and 7/16 to 7/16 interfaces. Cable types include: Semi Rigid (SR) 0.085-0.250, Superflex (S) 1/4" - 1 1/4" and lastly Annular (A) 1/2" - 1 5/8"

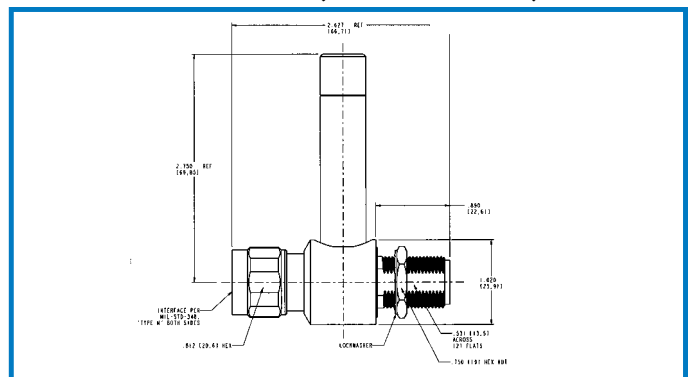
Applications:

- Antenna
- Base Stations
- Broadcast
- LAN
- Test Equipment

QAN-PB-D (DCS 1710-1880 MHz)



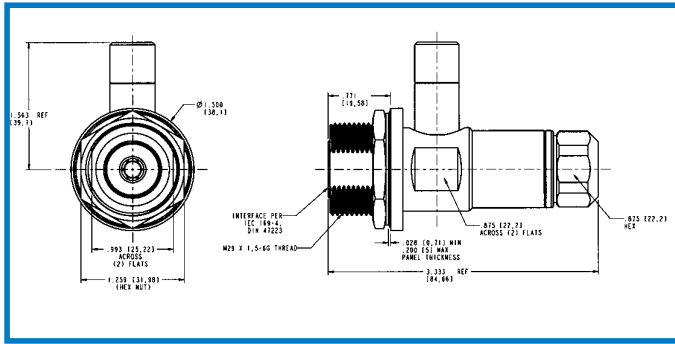
QAN-PB-G (GSM 880-960 MHz)



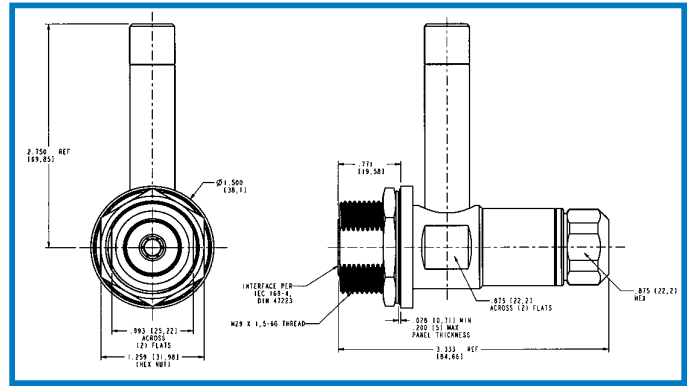
Features	Benefits
No active components	Reduces need for maintenance
Absorbs multiple lightning strikes	Eliminates the need to replace components
Multiple designs for all major frequency ranges	For use in different applications/frequency bands
Cable attachment unique gasketing system	Eliminates water intrusion
Cable attachment versions lower total installed cost	The need for cable plug is eliminated

QWS LIGHTNING PROTECTION

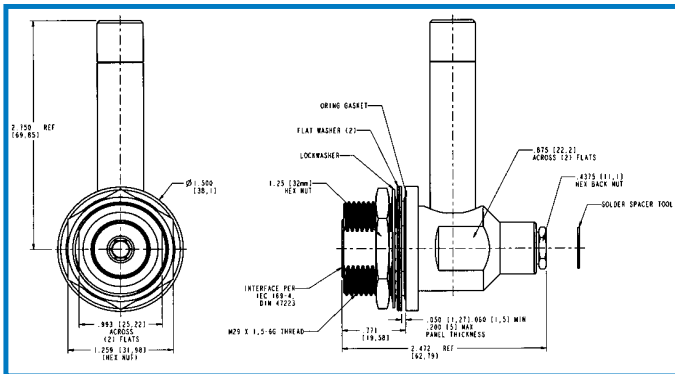
QCD-BS4-D (DCS 1710-1880 MHz) **QCD-BS4-P** (PCS 1850-1990 MHz)



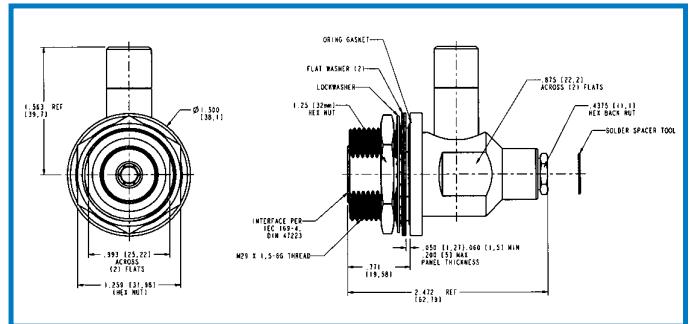
QCD-BS4-G (GSM 880-960 MHz)



QCD-BSR1-G (GSM 880-960 MHz)



QCD-BSR1-P (PCS 1850-1990 MHz)



Specifications:

Materials:

Body	Brass, white bronze
Contact plating	
7/16	Silver
Type N	Gold
Contacts	
Plug	Brass
Jack	BeCu
Insulators	PTFE
Durability	
7/16	MIL-C-39012, Sec. 4.6.12 500 cycles, 12 cycle min.
Type N	DIN 47275, Part 2/10.82 Sec. 2.10, 500 cycles

Note: Nickel is not used in Amphenol QWS

EMP:

Current handling capability	25 KA
Multiple strikes	10 strikes
Residual voltage	Less than 150 volts

Mechanical:

Mating	7/16 interface per IEC 169-4 DIN 47223 Type N interface per MIL-STD-348
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Electrical:

Impedance	50 ohms
Frequency range	Application specific
VSWR	1.12 max.
Return loss	-25 dB max.
Insertion loss	0.2 dB max.
IMD	-153 dBc min.

Ordering Information:

Type	Cable/Adapter Ends	Part No.
Adapter	N (plug) to N (jack)	QAN-PB-D
Adapter	N (plug) to N (jack)	QAN-PB-G
N straight jack QWS	1/4" corrugated cable	QCD-BS4-D /-P
N straight jack QWS	1/4" corrugated cable	QCD-BS4-G
N straight jack QWS	0.141 semi-rigid cable	QCD-BSR1-G
N straight jack QWS	0.141 semi-rigid cable	QCD-BSR1-P

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