



B46B Series

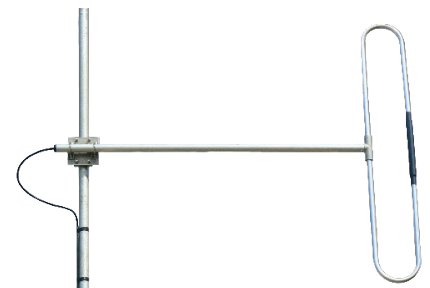
Industry standard medium powered sidemount dipoles FM Radio 87.5-108 MHz



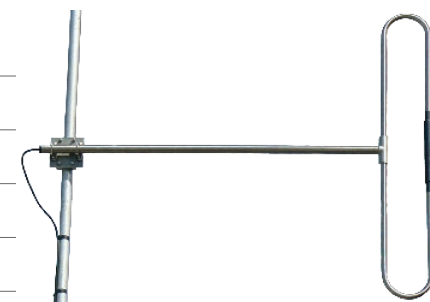
Sidemount dipoles are an ideal choice for use as an FM radio broadcast antenna. They are of reliable construction, cover a broad bandwidth and permit single antenna sharing with multiple FM transmit frequencies.

Popular with community and commercial radio stations in a low powered array configuration or as a singular backup transmit antenna for shutdown of main systems for maintenance or upgrades.

Mounting hardware, coaxial feeder cable, connectors and other installation accessories are all available separately.



B46B - aluminium dipole



B46BSS - stainless steel dipole



N-type female fitted as standard or specify requirements - B46B & B46BSS



B46BHPSS - stainless steel medium power dipole



7/16" DIN female fitted as standard or specify requirements - B46BHP-SS

	B46B	B46B-9	B46BSS	B46BHPSS*
Construction	Aluminium		304 grade stainless steel	
Frequency range	87.5-108 MHz - FM Radio			
Bandwidth	Full frequency range stated - 20.5 MHz			Specify 10 MHz
Tuning	Factory			
VSWR	<1.3:1			<1.2:1 at specified 10MHz
Gain	0 dBd for a single bay, stacking increases gain			
Polarisation	Vertical			
Impedance	50 Ohms			
Cable	1.5 metres RG213			1.5 metres 1/2" super flexible
Connector - fitted	N-type female			7/16" DIN female
Maximum power	500 Watts per bay			2 Kilowatts per bay
DC grounding	Yes			
Dipole height	1.4 metres			
Weight	3.5kg	3.3kg	5.0kg	
Projected area	0.090m ²			
Mount section	Length: 1.5m Dia: 40mmø	Length: 0.9m Dia: 40mmø	Length: 1.5m Dia: 38mmø	
Wind load at 160kph	10.875kg, 0.107kN			
Mounting hardware order separate	1 x Y2300		1 x Y2300-SS	
Installation tools required	8mm spanner for dipole to mount section			

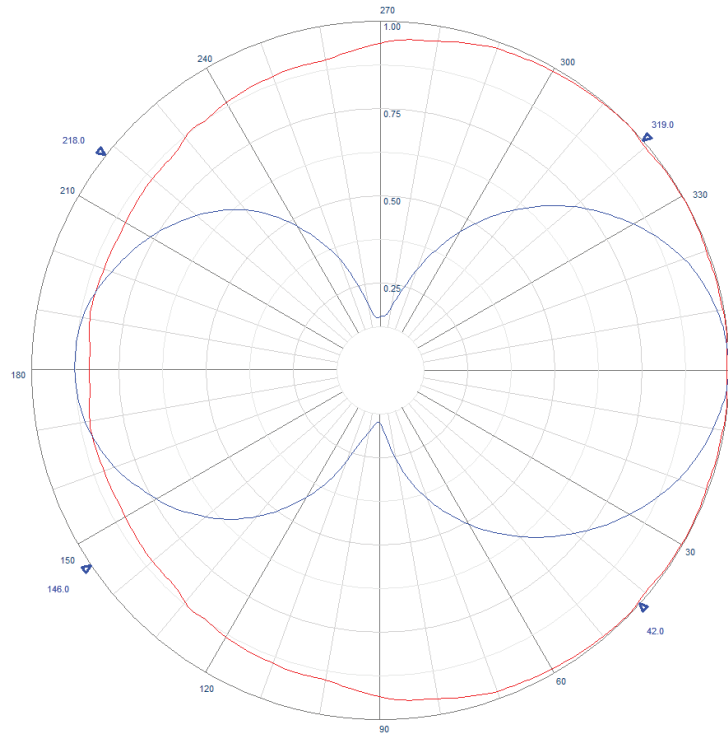


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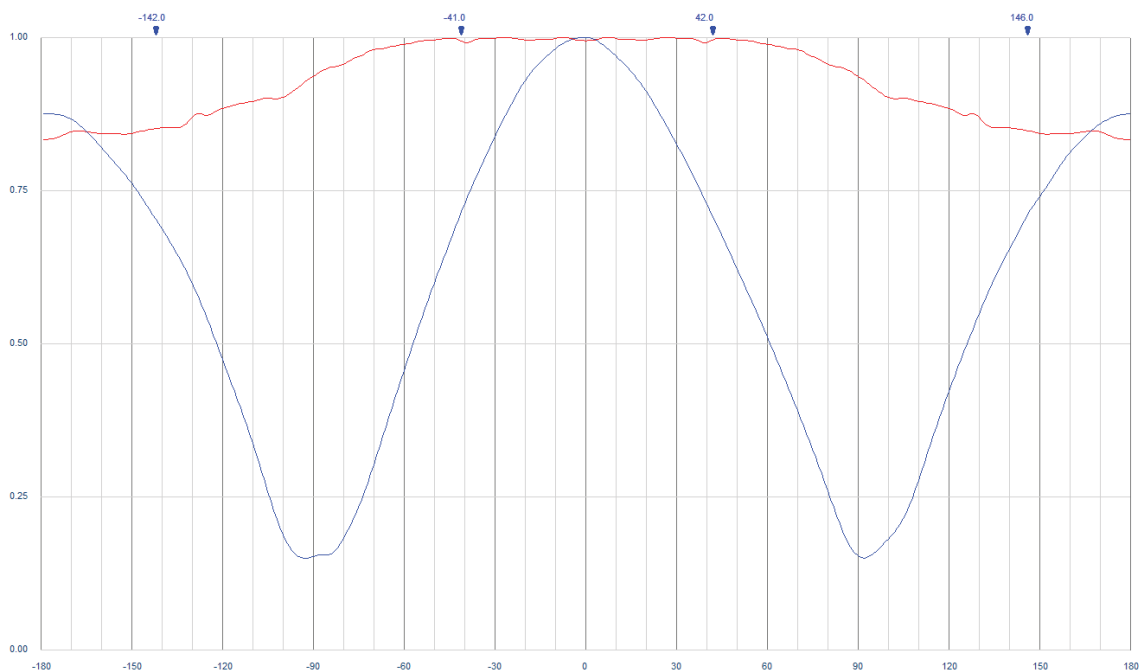
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FM Radio 87.5-108 MHz


In-stock
Ready to
Ship
*Build to order
item



Example polar radiation pattern - Single B46B



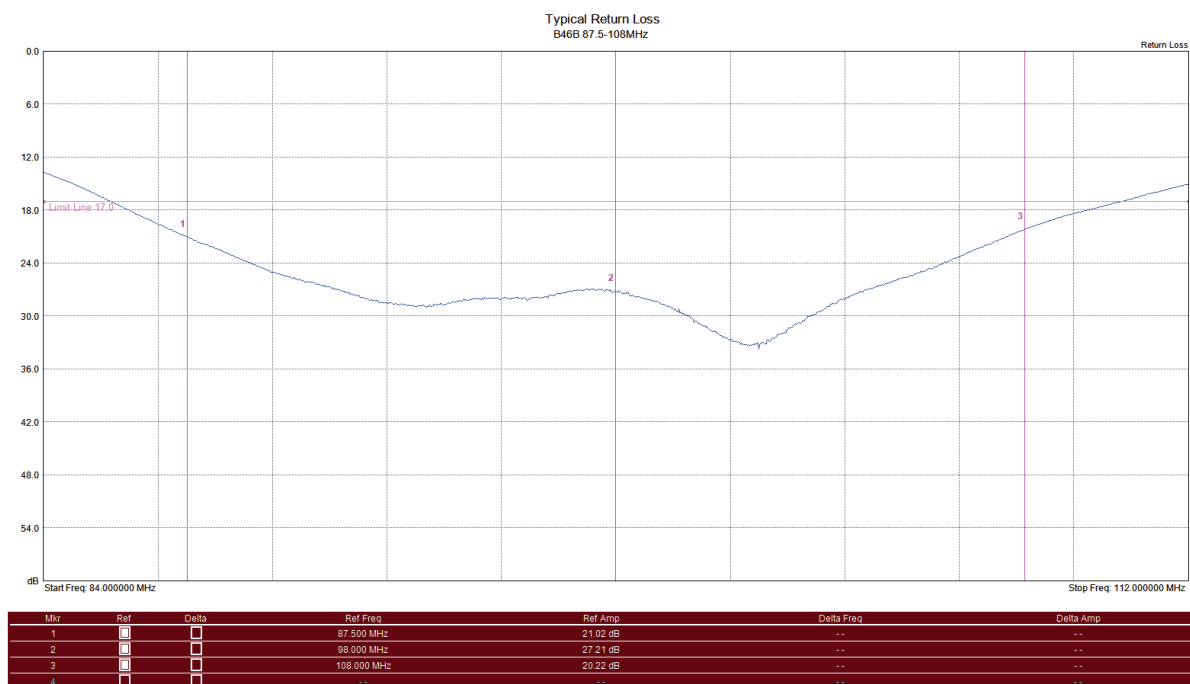
Example cartesian radiation pattern - Single B46B



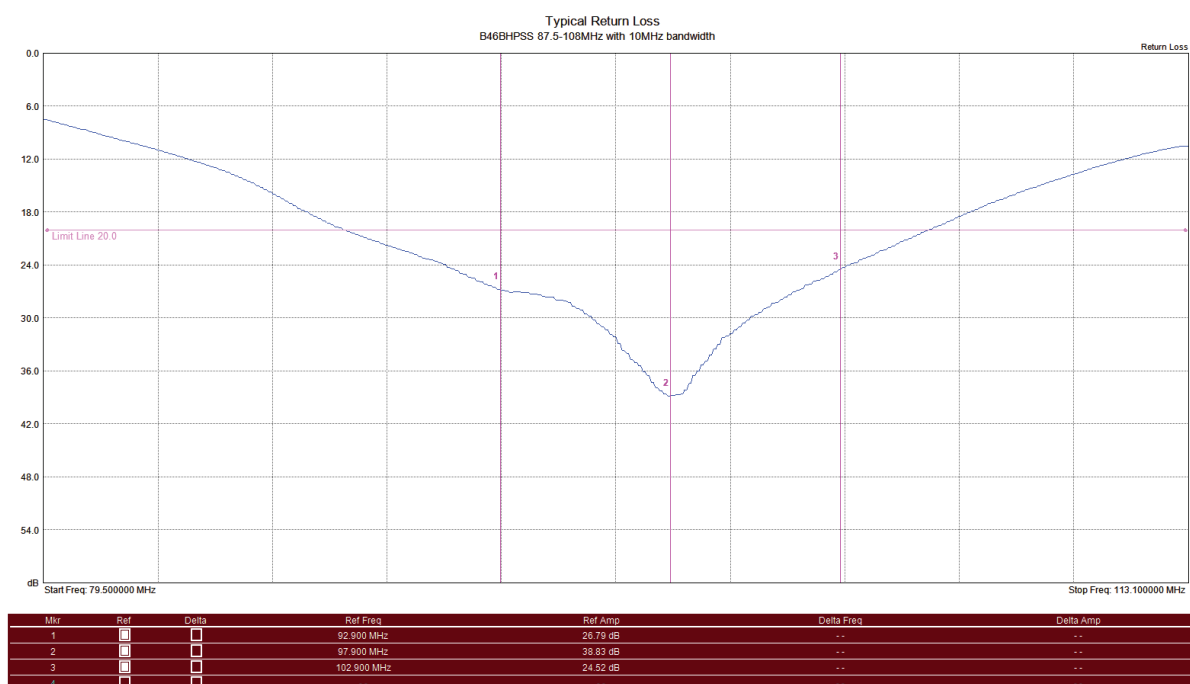
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Typical return loss - B46B / B46BSS



Typical return loss - B46BHP-SS



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Mechanical Data


Height of array	Subject to configuration
Total net weight	Refer to table
Wind Load	Refer to table
Mounting hardware	One clamp per dipole - order separate

Technical Data


Configuration	Off-set	Gain - dBd	Weight - kg	Antenna height L - m	Wind load - kN
1 dipole	0.9λ	0	3.5 / 5.0	1.4	0.107
2 dipoles		3.0	7.1 / 10.1	4.15	0.214
4 dipoles		7.5	14.3 / 20.5	9.65	0.428
6 dipoles		9.8	21.5 / 30.7	15.15	0.642
8 dipoles		11.0	28.9 / 41.2	20.65	0.856

- Gain: referred to half wave dipole, losses of power through cable or power dividers not included
- Gain: gain figures calculated utilising a rear mounting pole behind dipole/s.
- Weight: does not include mounting hardware, power dividers or mount poles
- Height calculated at spacing for 87.5 MHz, please check handbook for calculated frequency specific spacing.
- Wind load: V = 160km/h

Array requirements



Multi-termination power divider/splitter
Specify centre frequency when ordering.
Multi-input/output connector configuration available.
Includes mounting hardware



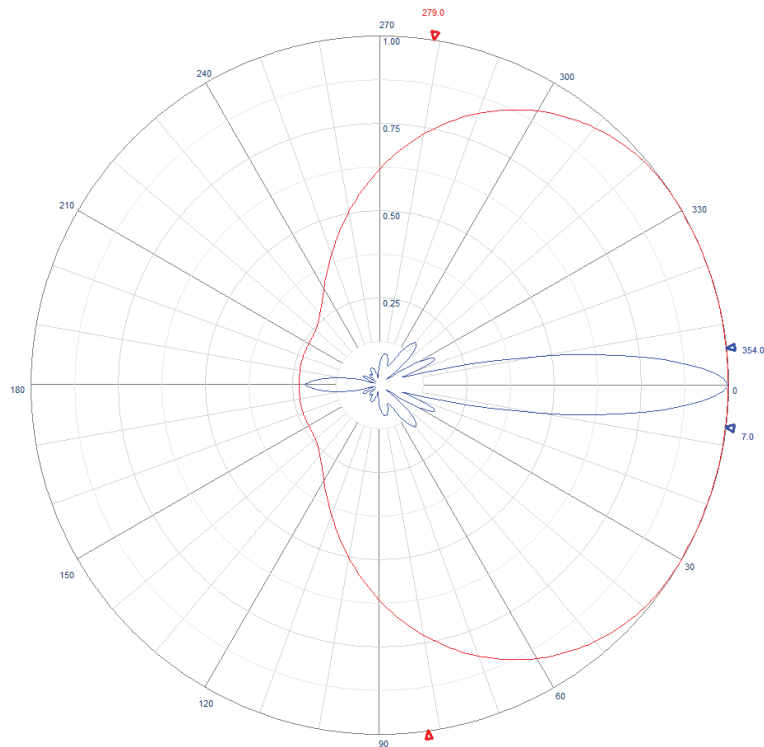
Custom cable branch feeders
Length and termination determined by model and power divider spec.
See following page for cable type recommended



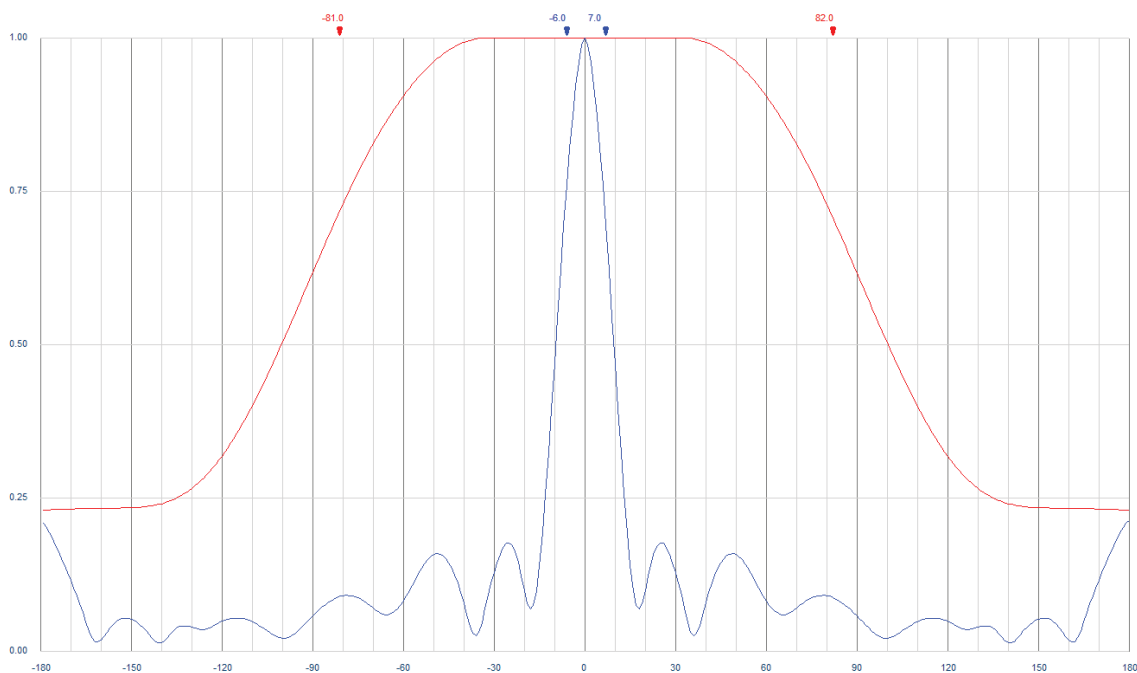
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Example polar radiation pattern - 4 bay B46B array



Example cartesian radiation pattern - 4-bay B46B array




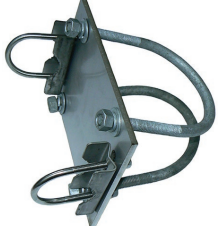
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Suitable mounting hardware

 <p>SKU: Y2300 Galvanised steel right-angle round boom Yagi clamp SKU: Y2300SS - stainless steel Boom: 30-50mm capability Mount pole: 30-50mm capability</p>	 <p>SKU: Y2300-L Galvanised steel large right-angle round boom Yagi clamp SKU: Y2300SS-L - stainless steel Boom: 32-50mm capability Mount pole: 55-76mm capability</p>
 <p>SKU: Y2300-XL Galvanised steel extra large right-angle round boom Yagi clamp SKU: Y2300SS-XL - stainless steel Boom: 32-50mm capability Mount pole: 80-90mm capability</p>	 <p>SKU: C-125 Galvanised steel extra large right-angle round boom Yagi clamp Boom: 32-50mm capability Mount pole: 140mm capability</p>

Suitable feeder coaxial cable and connectors

 <p>SKU: ZCG1250 1/2" corrugated shielding, foam dielectric coaxial cable SKU: ZCG1250SF - helical super flex SKU: ZCG1250-A - Air Dielectric Available in per metre, 500m roll or alternatively request a custom cable assembly</p>	 <p>SKU: NM1250 N-type male clamp connector for 1/2" flexible, corrugated shielded, coaxial cable Tri-metal plated SKU: NM1250SF - super flex</p>
 <p>SKU: ZCG7850 7/8" corrugated shielding, foam dielectric coaxial cable SKU: ZCG7850-A - Air-dielectric Available in per metre, 500m roll or alternatively request a custom cable assembly</p>	 <p>SKU: 716DINM1250 7/16" DIN male clamp connector for 1/2" flexible, corrugated shielded, coaxial cable Tri-metal plated SKU: 716DINM1250SF - super flex</p>
 <p>SKU: ZCG7850 7/8" corrugated shielding, foam dielectric coaxial cable SKU: ZCG7850-A - Air-dielectric Available in per metre, 500m roll or alternatively request a custom cable assembly</p>	 <p>SKU: NM7850 N-type male clamp connector for 7/8" flexible, corrugated shielded, coaxial cable Tri-metal plated</p>
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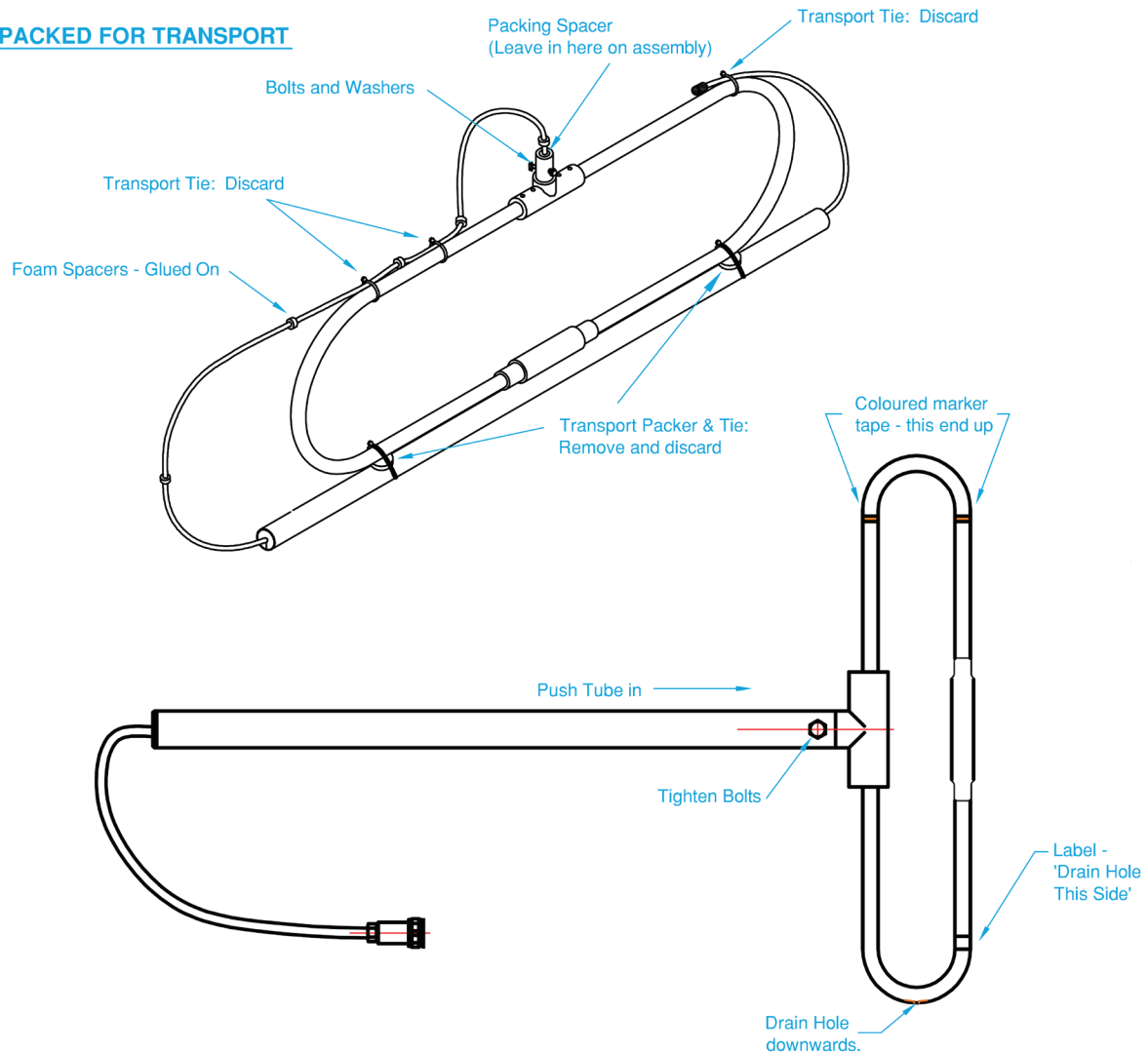


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PACKED FOR TRANSPORT



TO ASSEMBLE ANTENNA:

Remove and discard packing as shown above.
Hold Connector and carefully pull Cable through Mounting Tube, fitting each Spacer on Cable into Tube.
Push Mounting Tube fully home into in Dipole Frame Tee-piece and bolt home tight
For vertical mounting, make sure Drain Hole is downwards..