2-channel Broadband Hybrid Combiner for the frequency range UHF/LTE 450 MHz

DESCRIPTION

- New improved design on PCB of high power hybrid combiners.
- Broadband, working in all the frequency range 380-470 MHz, without compromise the Tx-Tx isolation
- Used for combining two transmitters or receivers to just one antenna.
- Can also be used with two antennas combining to one transmitter or receiver.
- As standard the hybrid is supplied with a 30 W load.
- Other loads for higher input power are available on request.

SPECIFICATIONS

Electrical	
Model	PRO-PHY450-2/380-470
Filter Type	Hybrid Junction
Frequency	380 - 470 MHz
Max. Input Power	30 W per channel (Max. 100 W with larger load)
Insertion Loss	< 3.7 dB
Impedance	50 Ω
Isolation Tx - Tx	> 30 dB *
VSWR	< 1.5:1 on every port when the other ports are terminated with 50 Ω
Load	30 W load fitted (other ratings available) **
No. of channels	2

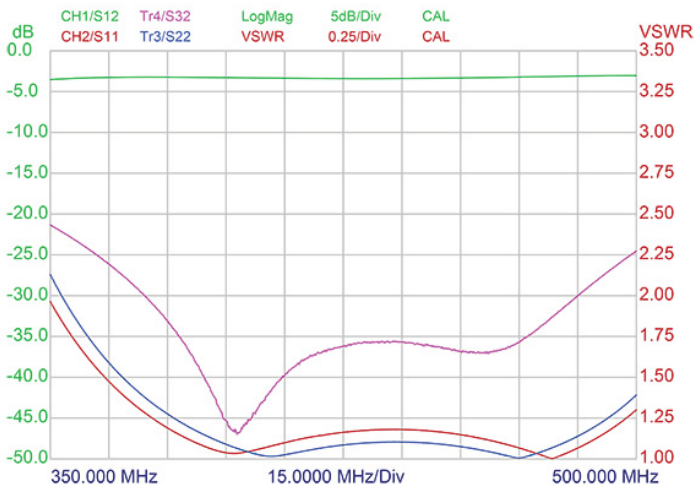
Mechanical	
Connection(s)	N(f)
Dimensions	200 x 46.7 x 70 mm / 7.9 x 1.83 x 2.76 in. (excl. load)
Weight	Approx. 0.5 kg / 1.1 lb. incl. 30 W load

Environmental	
Operating temperature range	-30 °C to +60 °C

ORDERING

Model	Product No.
PRO-PHY450-2/380-470/30W	210003129
PRO-PHY450-2/380-470/50W	210003134

TYPICAL RESPONSE CURVE

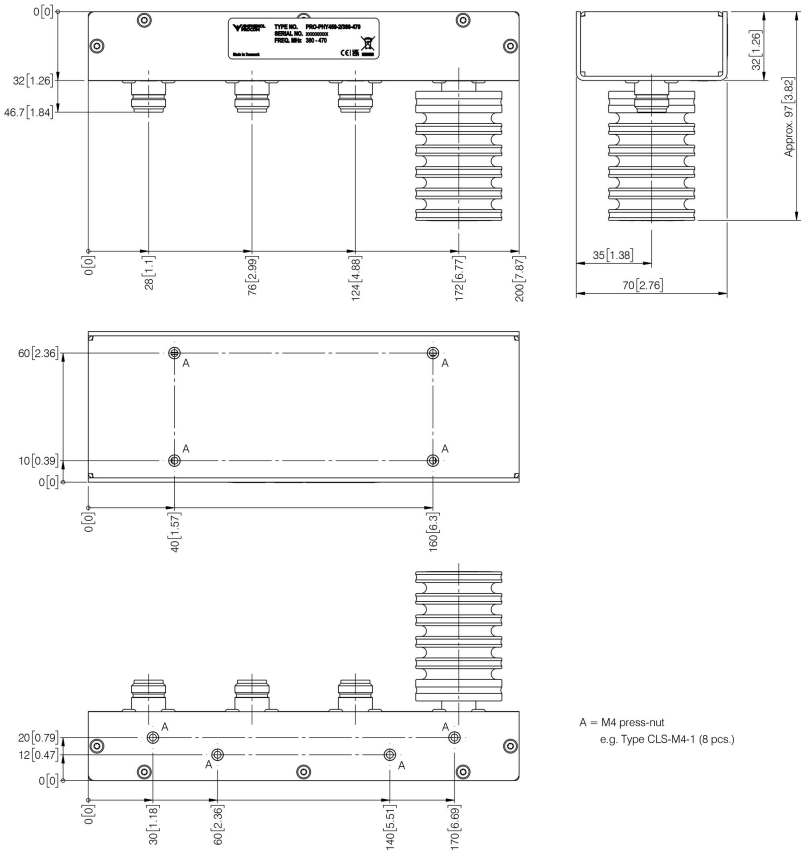


NOTE

* The isolation between the Tx ports is directly dependent on the terminating VSWR on the antenna port. E.g. with a VSWR = 1.5:1 on the ANT. port, the isolation between the Tx ports can be reduced to 20 dB @ in the 380-470 MHz range

**In a 2 channel hybrid 1/2 of the total input power will be led out to the Ant. port. The rest 1/2 of the total input power will be distributed to the 1 load. E.g. with 2 x 30 W input power, 1/2 = 30 W is accomodated to the load, this means the load in this case must be able to accomodate at least 30 W

MOUNTING DETAILS



A = M4 press-nut
e.g. Type CLS-M4-1 (8 pcs.)

All dimensions are given in mm [in.]