

Half-wave Dipole Side-mounted Vertical Polarization

380–470

V

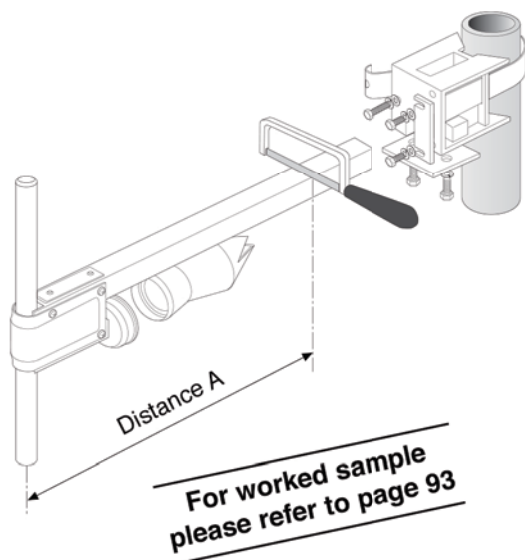
KATHREIN
Antennen · Electronic

- Omnidirectional antenna with variable antenna-to-mast distance.
- Depending on the distance of the radiator from the mast edge and also on the mast diameter, various radiation patterns can be achieved.

VPol Omni 380–470 360° 4dBi

Type No.	K752921
Frequency range	380 – 470 MHz
Polarization	Vertical
Gain	4 dBi
Impedance	50 Ω
VSWR	400 – 470 MHz: < 1.5 380 – 400 MHz: < 1.5; A = $\lambda/4$ 380 – 400 MHz: < 2.0; A > $\lambda/4$
Max. power	450 W (at 50 °C ambient temperature)

- Material:** Radiator: Hot-dip galvanized steel.
Horizontal support pipe: Stainless steel.
Mount: Aluminum.
Tightening band and all screws and nuts: Stainless steel.
Feedpoint radome: Fiberglass.
- Attachment:** To tubular masts of 60 – 320 mm diameter using supplied stainless steel tightening band (20 mm wide, 0.8 mm gauge).
- Special features:** The distance from tubular mast to radiator is adjustable from 170 – 580 mm.
- Grounding:** All metal parts of the antenna including the inner conductor and the supplied mount are DC grounded.
- Horizontal radiation pattern:** Depending on the distance A (edge of pipe mast to dipole) – see sketch.

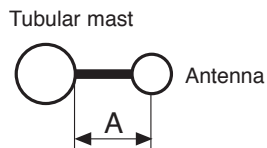

 Omnidirectional
370 – 470 MHz

Mechanical specifications	
Input	N female
Weight	1.6 kg
Wind load	40 N (at 150 km/h)
Max. wind velocity	200 km/h
Packing size	880 x 330 x 100 mm
Length	315 mm

Radiation Patterns for Side-mounted Omnidirectional Antennas

Examples of horizontal radiation patterns for different mast diameters where $A = 0.25 \lambda$; 0.5λ ; 0.75λ . Examples also apply for antenna K75292.

Distance A:



- $A = 0.25 \lambda$
- $A = 0.5 \lambda$
- $A = 0.75 \lambda$

Mast diameter	Horizontal Radiation Pattern
60 mm	
160 mm	
250 mm	
600 mm	
Triangular lattice mast with side length of 500 mm	

