MAFI 2230* `MSS`

Adjustable Strut Family

Designed to provide flexible bracing to a pole.
The struts can be fitted as part of a new installation or retrofitted to an existing pole. All that is required is two structural attachment points within reach of the pole.
The attachment points can be horizontal, vertical or anything in between. The kit consists of a pair of adjustable struts with feet and a pole attachment bracket.

Flexibility

The **2230**-family comprises three lengths of struts and two standard sizes of pole attachment clamps available to fit poles with Ø 76.1 or 114.3 mm (3 in or 4.5 in).

Additional Data

For package data see section **Package Data**.
Additional information for this product can be found at www.mafigroup.com, or use the QR-codes on next page.

How to Order

To order this kit, please contact MAFI quoting article number or visit our webshop www.mafigroup.com.

2230 or E-order number (SEG)
2231 or E-order number (SEG)
2232 or E-order number (SEG)
2233 or E-order number (SEG)
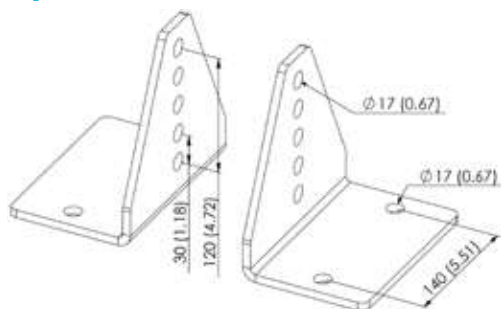**2234** or E-order number (SEG)
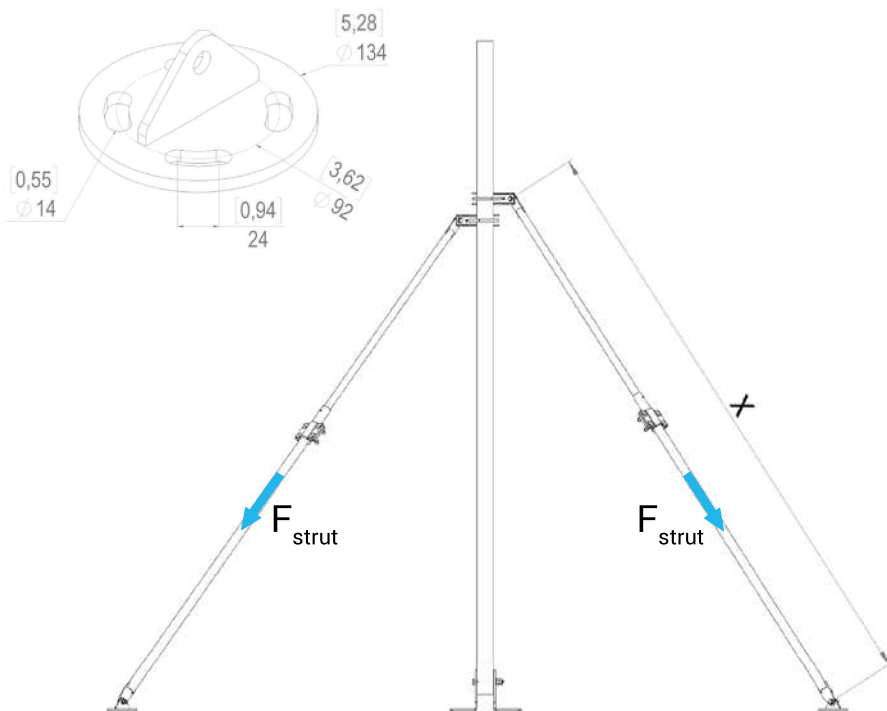**2235** or E-order number (SEG)
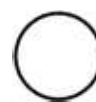

Content of kit

Option: 4328

Measurements in mm (in)

Option 4328

Included Foot

Parts list

Part	Material	Quantity
Strut	S355 HDG	2
Strut foot	S355MC HDG	2
Clamp	S355MC HDG	2
U-bolt M12	8.8 HDG	2
Bolt M12	8.8 HDG	4
Fasteners	8.8 HDG	Incl.

Package data

Product	Length mm (in)	Width mm (in)	Height mm (in)	Weight kg (lb)
2230	1100 (43.3)	160 (6.3)	100 (3.9)	13.8 (30.4)

Product options

4328: Equipment pole foot.

2240: Strut support for tube Ø 76.1 mm (3 in).

2250: Strut support for tube Ø 114.3 mm (4.5 in).

Tubes of various lengths, diameters and wall thicknesses can be ordered from MAFI.

Parent member

2230/-31/-32:
Ø 76.1 mm
Ø 3 in

2233/-34/-35:
Ø 114.3 mm
Ø 4.5 in
Optional Ø 76.1 mm (3 in)

Performance

Load capacity Ø 76.1 (3 in):
F_{strut}: 10 000 N
Load capacity Ø 114.3 (4.5 in):
F_{strut}: 15 000 N

Strut length and clamp width

Product	X Length m (ft)	Clamp width Ø mm (in)
2230	1.00−1.46 (3.28−4.79)	76.1 (3)
2231	1.35−2.16 (4.43−7.09)	76.1 (3)
2232	2.00−3.46 (6.56−11.35)	76.1 (3)
2233	1.00−1.46 (3.28−4.79)	114.3 (4.5)
2234	1.35−2.16 (4.43−7.09)	114.3 (4.5)
2235	2.00−3.46 (6.56−11.35)	114.3 (4.5)

EN 1090

How to calculate

For an evenly distributed load the recommended angle between struts is 90° as shown in the "Top view" picture. The recommended angle between strut and parent member is 45° as shown in the "Side view" picture.

Calculate strut length "b"

Follow this example to calculate the neccessary strut length:

The strut is to be fastened at 2.2 meter on the parent member. This is the value for "a" and "b" is to be calculated.

b = $\sqrt{2*a^2}$ Insert **a** = 2.2

b = $\sqrt{2*2.2^2}$

b = 3.11

The needed strut length is 3.11 meter, which means **2232** or **2235** depending on parent member diameter.

Calculate height and distance "a"

Follow this example to calculate how high the strut will be fastened and the distance from the parent member:

The strut length "**b**" is equal to 2.2 meter, and the unknown height and distance "a" is to be calulated.

a = **b**/$\sqrt{2}$ Insert **b** = 2.2
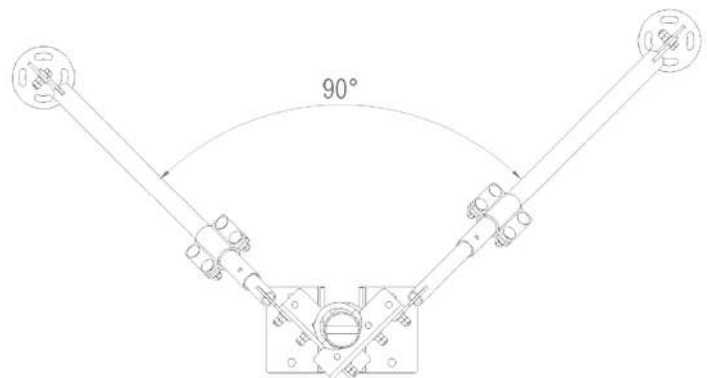
a = 2.2/$\sqrt{2}$

a = 1.56

The strut is to be fastened at a height of 1.56 meter and at a distance of 1.56 meter.

A stability claculation should be done in every case - if you need help, please contact MAFI.

$$a = \frac{b}{\sqrt{2}}$$

$$b = \sqrt{2*a^2}$$

Top view

Side view