

# MAFI 3263\*

## One-Direction Offset Family



3263

Designed to allow an equipment pole to be offset from a parent pole or tower leg.

### Flexibility

**3273** is the smallest one and offers a maximum offset of 240 mm (9.4 in). **3263** and **3265** are the medium sized ones and with two different U-bolt kits for a larger range of offset members. Maximum offset for the **3263** is 420 mm (16.5 in) and for **3265** with the largest offset member mounted is 397 mm (15.6 in).

**3272** has a maximum offset of 797 mm (31.4 in) and incorporates a double clamp to cope with the high torque loads imposed by antennas at that large offset. The hole pattern for **3272** is also suitable for option U-bolt kit **2867-1**. This enables offset members to range up to 114.3 mm (4.5 in).

### Additional Data

For more detailed product data see sections **Bracket Properties**, **Rotational Slip Table** and **Package Data**.

Additional information for this product can be found at [www.mafigroup.com](http://www.mafigroup.com), or use the QR-codes on next page.

### How to Order

To order this kit, please contact MAFI quoting article number:

**3263** or E-order number (SEG): **6000667**

**3265** or E-order number (SEG): **6000668**

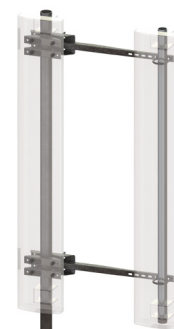
**3272** or E-order number (SEG): **6000665**

**3273** or E-order number (SEG): **6000666**

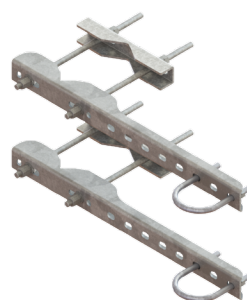
Contact information can be found at [www.mafigroup.com](http://www.mafigroup.com).



3273



3272



Content of kit 3263



Content of kit 3265



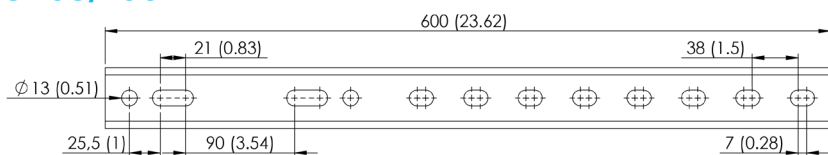
Content of kit 3272



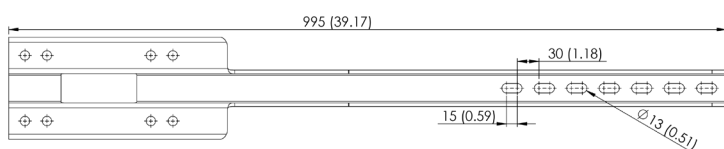
Content of kit 3273

Measurements in mm (in)

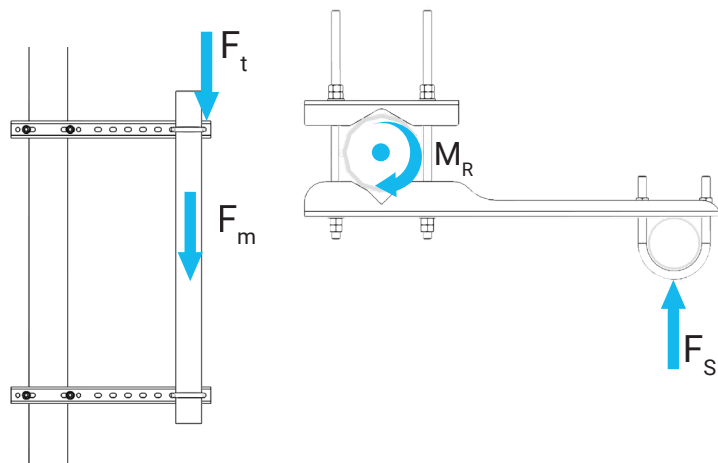
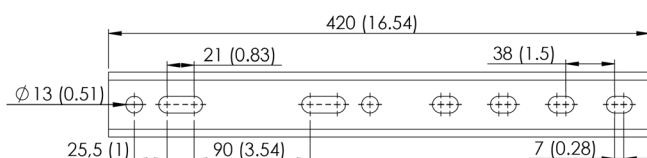
### 3263/-65



### 3272



### 3273



## Parent member



40 × 40 mm–120 × 120 mm  
1.6 × 1.6 in–4.7 × 4.7 in



**3263/-65/-73:**  
Ø 25–169 mm  
Ø 1–6.7 in

**3272:**  
Ø 48–193 mm  
Ø 1.9–15.5 in



40 × 40 mm–120 × 120 mm  
1.6 × 1.6 in–4.7 × 4.7 in

## Offset member



**3263/-72/-73:**  
Ø 60–76 mm  
Ø 2.4–3 in

**3265**, optional for **3272:**  
Ø 89–114 mm  
Ø 3.5–4.5 in

## Performance

Ultimate transient man-load ( $F_t$ ): 2.4 kN  
Maximum side force/offset arm ( $F_s$ ) **3263/-65**: 1660 N  
Maximum side force/offset arm ( $F_s$ ) **3272**: 1750 N  
Maximum side force/offset arm ( $F_s$ ) **3273**: 2900 N  
Load capacity/pair ( $F_m$ ) **3263/-65/-73**: 120 kg (265 lb)  
Load capacity/pair ( $F_m$ ) **3272**: 60 kg (132 lb)  
Rot. slip resistance ( $M_R$ ): See *Rotational Slip Table*  
*\*Performance is based on a minimum of two brackets with a connecting offset pole. Additional brackets will increase the performance, see bracket properties, page 4.*

### Parts list

Part	Material	Quantity 3263/-65/-73	Quantity 3272
Clamp	S355MC HDG	2	4
Bracket	S355MC HDG	2	2
U-bolt M12	8.8 HDG	2	2
Threaded rod M12	8.8 HDG	4	8
Fasteners	8.8 HDG	Incl.	Incl.

### Product options

**2867-1:** U-bolt kit for circular members Ø 88.9–114.3 mm (3.5–4.5 in). Optional for **3272**.



3263



3265



3272



3273



EN 1090

# Rotational Slip Table

## Design resistance data

Use the table below to check for rotational slip when mounting brackets on a circular member.

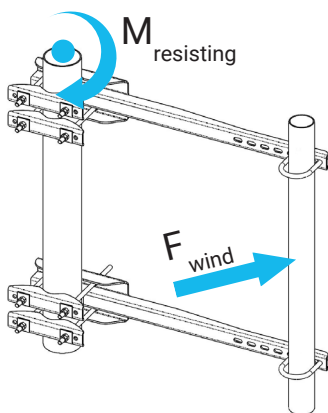
Use the unfactored wind load on the equipment multiplied by the actual offset dimension from the centreline of the parent tube to the centroid of the equipment to calculate the applied torque. The unfactored load is to be used because rotational slip is regarded as a serviceability failure and not a strength failure.

The values shown in the table are for a single bracket, so for a normal pair of brackets, the total torque resistance would be double that shown in the table.

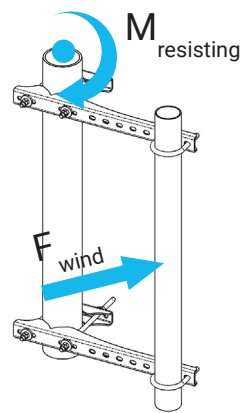
Each bracket added to the offset pole increases rotational slip resistance by the figure shown in the table. The resistance increases linearly with the diameter of the parent pole.

### Resisting torque per single bracket

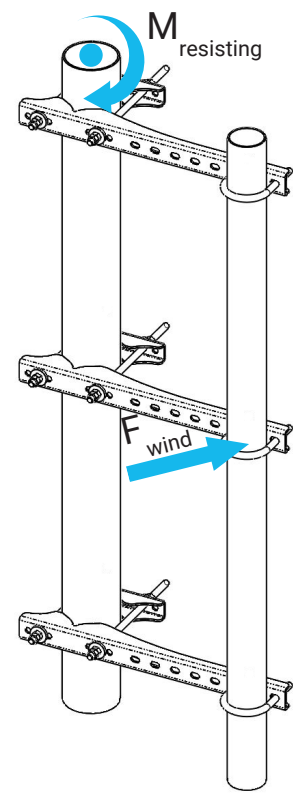
Parent member ø mm (in)	Torque (Nm) General	Torque (Nm) Product: 3272	Torque (Nm) Product: 3541	Torque (Nm) Product: 3544	Torque (Nm) Product: 2414
25 (1)	77	-	-	-	-
42.3 (1.7)	152	-	-	-	-
48.3 (1.9)	178	356	-	-	-
60.3 (2.4)	230	460	115	172	-
76.1 (3)	298	596	159	223	-
88.9 (3.5)	353	706	176	264	-
101.6 (4)	408	816	204	306	816
114.3 (4.5)	462	924	231	346	924
139.7 (5.5)	572	1144	-	-	-
152.4 (6)	627	1254	-	-	-
168.9 (6.6)	698	1396	-	-	-
193 (7.6)	802	1396	-	-	-
244.5 (9.6)	1025	-	-	-	-



Example using two brackets with double clamps. Parent member is ø 114.3 mm (4.5 in). Maximum torque is then  $2 \times 924 = 1848$  Nm.



Example using two brackets with single clamps. Parent member is ø 114.3 mm (4.5 in). Maximum torque is then  $2 \times 462 = 924$  Nm.



Example using three brackets with single clamps. Parent member is ø 114.3 mm (4.5 in). Maximum torque is then  $3 \times 462 = 1386$  Nm.

# Bracket Properties

## Guidance

MAFI brackets are flexible – they can fit different sizes and profiles of parent member, and the offset distance can be varied. The table on the next page shows a quick comparison of load capacity, parent member, offset member and offset range.

## U-bolts and offset-poles

It's OK to have the pole a size less than the U-bolt. A U-bolt works by squeezing the pole against the bracket through the tangential point of contact, not by gripping the sides of the pole. It's important to follow the installation instructions regarding the specified nut-tightening torque. The tightening torque is calculated for every MAFI U-bolt leg or threaded rod to produce the required tension. It's not going to slip if it's installed properly.

Ø U-bolt mm (in)	Offset Member Allowed Ø mm (in)				
	60.3 (2.4)	76.1 (3)	88.9 (3.5)	101.1 (4)	114.3 (4.5)
76.1 (3)	✓	✓	✗	✗	✗
114.3 (4.5)	✗	✗	✓	✓	✓

## Load Capacity

Load Capacity is the maximum mass (equipment plus offset member) that you can hang on a pair of brackets at the maximum offset. Extra brackets can be added to increase the load capacity proportionately e.g. two pairs of brackets supporting a single offset member can carry double the mass of a single pair. Same principle applies for side load.

In addition to the permitted equipment mass, brackets mounted at least as a pair can support a 160 kg rigger standing on the end, exceptions are **53XX** and **4324X**.

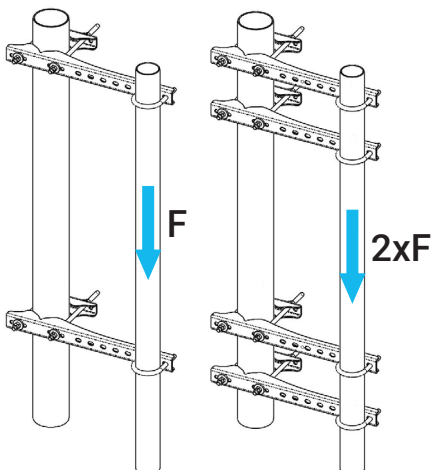
In addition to the permitted equipment mass, brackets mounted at least as a pair can support a fall arrest load of 6 kN. Exceptions are **3274**, **53XX** and **4324X**. If a fall arrest event would occur, all involved brackets should be replaced.

All brackets in the table apart from **532X** and **4324X** are sold as pairs.

## Load Capacity

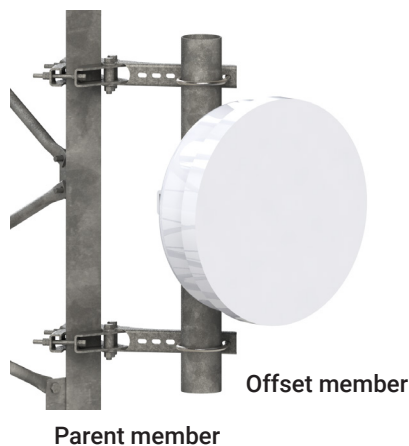
The **3263** bracket pair to the left can carry 120 kg/265 lb.

Using two pairs of bracket means that the load capacity doubles to 240 kg/529 lb. Same principle applies for side load.



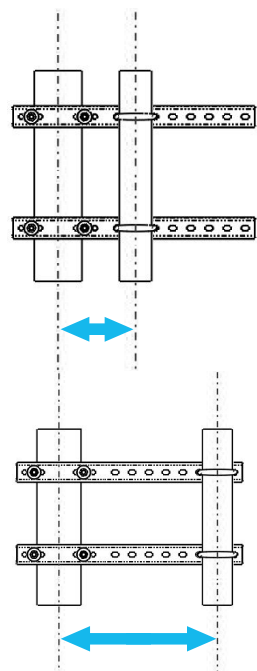
## Parent Member versus Offset Member





















































The parent member is what the bracket is attached to, while the offset member is where the equipment goes.



## Min and Max Offset

The minimum and maximum c/c distance between parent and offset member.



Product	Load Capacity	Parent Member	Offset Member	Min Offset	Max Offset
<b>3263</b> 	120 kg (265 lb)	 25 - 168.9 mm (1 - 6.7 in)  40 - 120 mm (1.6 - 4.7 in)  40 - 120 mm (1.6 - 4.7 in)	 60.3 - 76.1 mm (2.4 - 3 in)	195 mm (7.7 in)	420 mm (16.5 in)
<b>3265</b> 	120 kg (265 lb)	 25 - 168.9 mm (1 - 6.7 in)  40 - 120 mm (1.6 - 4.7 in)  40 - 120 mm (1.6 - 4.7 in)	 88.9 - 114 mm (3.5 - 4.5 in)	217 mm (8.5 in)	397 mm (15.6 in)
<b>3272</b> 	60 kg (132 lb)	 48.3 - 193 mm (1.9 - 7.6 in)  40 - 120 mm (1.6 - 4.7 in)  40 - 120 mm (1.6 - 4.7 in)	 60.3 - 76.1 mm (2.4 - 3 in)   88.9 - 114.3 mm <sup>1)</sup> (3.5 - 4.5 in) <sup>1)</sup>	617 mm (24.3 in)	797 mm (31.4 in)
<b>3273</b> 	120 kg (265 lb)	 25 - 168.9 mm (1 - 6.7 in)  40 - 120 mm (1.6 - 4.7 in)  40 - 120 mm (1.6 - 4.7 in)	 60.3 - 76.1 mm (2.4 - 3 in)	195 mm (7.7 in)	240 mm (9.4 in)
<b>3268</b> 	90 kg per offset (198 lb per offset)	 76.1 - 168.9 mm (3 - 6.7 in)	 60.3 - 76.1 mm (2.4 - 3 in)  88.9 - 114.3 mm <sup>1)</sup> (3.5 - 4.5 in) <sup>1)</sup>	217 mm (8.5 in)	422 mm (16.6 in)
<b>3270</b> 	60 kg per offset (132 lb per offset)	 76.1 - 168.9 mm (3 - 6.7 in)	 60.3 - 76.1 mm (2.4 - 3 in)	400 mm (15.7 in)	850 mm (33.5 in)
<b>3610</b> 	250 kg (551 lb)	 76.1 - 139.7 mm (3 - 5.5 in)  60 - 120 mm (2.4 - 4.7 in)  60 - 120 mm (2.4 - 4.7 in)	 60.3 - 76.1 mm (2.4 - 3 in)   88.9 - 114.3 mm <sup>1)</sup> (3.5 - 4.5 in) <sup>1)</sup>	<b>Upper arm:</b> 219 mm (8.6 in) <b>Lower arm:</b> 250 mm (9.8 in)	<b>Upper arm:</b> 424 mm (16.7 in) <b>Lower arm:</b> 305 mm (12 in)
<b>3611</b> 	250 kg (551 lb)	 76.1 - 139.7 mm (3 - 5.5 in)  60 - 120 mm (2.4 - 4.7 in)  60 - 120 mm (2.4 - 4.7 in)	 60.3 - 76.1 mm (2.4 - 3 in)   88.9 - 114.3 mm <sup>1)</sup> (3.5 - 4.5 in) <sup>1)</sup>	219 mm (8.6 in)	424 mm (16.7 in)
<b>3612</b> 	250 kg (551 lb)	 76.1 - 139.7 mm (3 - 5.5 in)  60 - 120 mm (2.4 - 4.7 in)  60 - 120 mm (2.4 - 4.7 in)	 60.3 - 76.1 mm (2.4 - 3 in)   88.9 - 114.3 mm <sup>1)</sup> (3.5 - 4.5 in) <sup>1)</sup>	250 mm (9.8 in)	305 mm (12 in)
<b>3613</b> 	250 kg (551 lb)	 139.7 - 244.5 mm (5.5 - 9.6 in)  120 - 200 mm (4.7 - 7.9 in)  120 - 200 mm (4.7 - 7.9 in)	 60.3 - 76.1 mm (2.4 - 3 in)   88.9 - 114.3 mm <sup>1)</sup> (3.5 - 4.5 in) <sup>1)</sup>	<b>Upper arm:</b> 264 mm (10.4 in) <b>Lower arm:</b> 295 mm (11.6 in)	<b>Upper arm:</b> 499 mm (19.6 in) <b>Lower arm:</b> 379 mm (14.9 in)

<sup>1)</sup> Requires U-bolt kit option 2867-1 for mounting on circular member 88.9 - 114.3 mm (3.5 - 4.5 in).

Product	Load Capacity	Parent Member	Offset Member	Min Offset	Max Offset
<b>3614</b> 	250 kg (551 lb)	○ 139.7 - 244.5 mm (5.5 - 9.6 in) □ 120 - 200 mm (4.7 - 7.9 in) └ 120 - 200 mm (4.7 - 7.9 in)	○ 60.3 - 76.1 mm (2.4 - 3 in) 88.9 - 114.3 mm <sup>1)</sup> (3.5 - 4.5 in) <sup>1)</sup>	264 mm (10.4 in)	499 mm (19.6 in)
<b>3615</b> 	250 kg (551 lb)	○ 139.7 - 244.5 mm (5.5 - 9.6 in) □ 120 - 200 mm (4.7 - 7.9 in) └ 120 - 200 mm (4.7 - 7.9 in)	○ 60.3 - 76.1 mm (2.4 - 3 in) 88.9 - 114.3 mm <sup>1)</sup> (3.5 - 4.5 in) <sup>1)</sup>	295 mm (11.6 in)	379 mm (14.9 in)
<b>3274</b> 	250 kg (551 lb)	○ 25 - 114.3 mm (1 - 4.5 in) □ 40 - 80 mm (1.6 - 3.1 in) └ 40 - 80 mm (1.6 - 3.1 in)	○ 48.3 - 114.3 mm (1.9 - 4.5 in)	96 mm (3.8 in)	186 mm (7.3 in)
<b>4415</b> 	60 kg per offset (132 lb per offset)	○ 76.1 - 114.3 mm (3 - 4.5 in)	○ 60.3 - 76.1 mm (2.4 - 3 in)	164 mm (6.5 in)	186 mm (7.3 in)
<b>4418</b> 	60 kg per offset (132 lb per offset)	○ 76.1 - 114.3 mm (3 - 4.5 in)	○ 60.3 - 76.1 mm (2.4 - 3 in)	264 mm (10.4 in)	286 mm (11.3 in)
<b>5310</b> 	100 kg (220 lb)	○ 25 - 35 mm (1 - 1.4 in)	□ 50 - 60 mm (2 - 2.4 in)	37.5 mm (1.5 in)	47.5 mm (1.9 in)
<b>5311</b> 	100 kg (220 lb)	○ 35 - 60.3 mm (1.4 - 2.4 in)	□ 50 - 60 mm (2 - 2.4 in)	42.5 mm (1.7 in)	60 mm (2.4 in)
<b>5312</b> 	100 kg (220 lb)	□ 50 - 60 mm (2 - 2.4 in)	□ 50 - 60 mm (2 - 2.4 in)	50 mm (2 in)	60 mm (2.4 in)
<b>5320</b> 	100 kg (220 lb)	□ 50 - 60 mm (2 - 2.4 in)	○ 76.1 mm (3 in)	82 mm (3.2 in)	87 mm (3.4 in)
<b>5321</b> 	100 kg (220 lb)	□ 50 - 60 mm (2 - 2.4 in)	○ 114.3 mm (4.5 in)	101 mm (4 in)	106 mm (4.2 in)
<b>43246</b> 	200 kg (441 lb)	○ 60.3 mm (2.4 in)	○ 48.3 mm (1.9 in)	96 mm (3.8 in)	96 mm (3.8 in)
<b>43247</b> 	200 kg (441 lb)	○ 76.1 mm (3 in)	○ 76.1 mm (3 in)	116 mm (4.6 in)	116 mm (4.6 in)
<b>43248</b> 	200 kg (441 lb)	○ 114.3 mm (4.5 in)	○ 76.1 mm (3 in)	131 mm (5.2 in)	131 mm (5.2 in)
<b>43249</b> 	200 kg (441 lb)	○ 114.3 mm (4.5 in)	○ 114.3 mm (4.5 in)	150 mm (5.9 in)	150 mm (5.9 in)

<sup>1)</sup> Requires U-bolt kit option 2867-1 for mounting on circular member 88.9 - 114.3 mm (3.5 - 4.5 in).