

# Hardware Fittings



## Link (Single Plate)



**LSP**

Link plates are available in 70, 120 and 160kN. Substitute -070 for -120 or -160 respectively.

| Part Number | Rating (kN) | Hole Separation (mm) |
|-------------|-------------|----------------------|
| LSP-070-100 | 70          | 100                  |
| LSP-070-150 | 70          | 150                  |
| LSP-070-200 | 70          | 200                  |
| LSP-070-250 | 70          | 250                  |
| LSP-070-300 | 70          | 300                  |
| LSP-070-350 | 70          | 350                  |

**Note:** Contact PLP if other centre distances are required.

## Link (Double Plate)



**L**

Link plates are available in 70, 120 and 160kN. Substitute -070 for -120 or -160 respectively.

| Part Number | Rating (kN) | Hole Separation (mm) |
|-------------|-------------|----------------------|
| L-070-100   | 70          | 100                  |
| L-070-150   | 70          | 150                  |
| L-070-200   | 70          | 200                  |
| L-070-250   | 70          | 250                  |
| L-070-300   | 70          | 300                  |
| L-070-350   | 70          | 350                  |

**Note:** Contact PLP if other centre distances are required.

## Sag Link



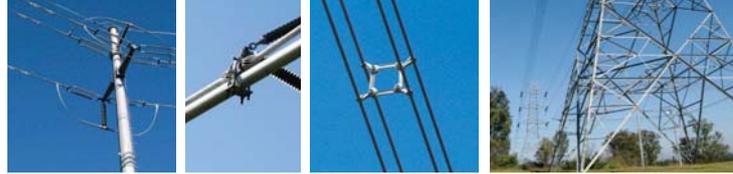
**CTSL**

For the adjustment of conductors;

- M16 and M20 Hardware.
- CTSLEW is a shorter version for Earthwire.

| Part Number    | Rating (kN) | Range       |              | Bolt Size |
|----------------|-------------|-------------|--------------|-----------|
|                |             | Minium (mm) | Maximum (mm) |           |
| CTSL-070-1     | 70          | 556         | 974          | M16       |
| CTSLEW-070-1   | 70          | 320         | 490          | M16       |
| CTSL-120       | 120         | 565         | 870          | M16       |
| CTSL-160-1     | 160         | 535         | 735          | M20       |
| CTSL-160-4     | 160         | 702         | 1075         | M20       |
| CTSL-160-30323 | 160         | 236         | 350          | M20       |
| CTSL-160-5S    | 160         | 638         | 974          | M20       |
| CTSLEW-160-1   | 160         | 320         | 490          | M20       |
| CTSL-210       | 210         | 320         | 490          | M20       |

# Hardware Fittings



## Yoke Plate - Triangular

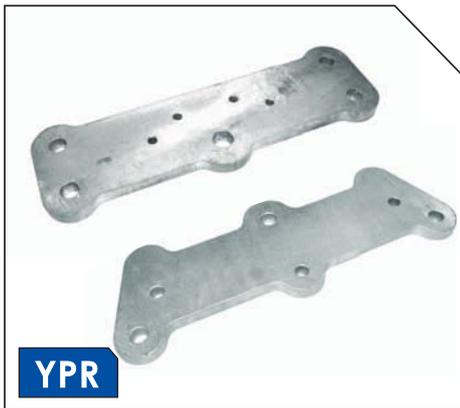


**YPT**

PLP design and manufacture an extensive range of Yoke plates to suit any application. Triangular and rectangular plates are available with various hole spacing and thickness to suit either tension or suspension applications. Standard ratings available are 70, 120, 160 and 210kN. Please contact PLP with your specific requirements.

| Part Number | Tension Rating (kN) | Hole Spacing (mm) | Part Number   | Tension Rating (kN) | Hole Spacing (mm) |
|-------------|---------------------|-------------------|---------------|---------------------|-------------------|
| YPT-070-060 | 70                  | 60                | YPT-160-125   | 160                 | 125               |
| YPT-070-070 | 70                  | 70                | YPT-160-130-1 | 160                 | 130               |
| YPT-070-100 | 70                  | 100               | YPT-160-180-4 | 160                 | 180               |
| YPT-070-125 | 70                  | 125               | YPT-160-200   | 160                 | 200               |
| YPT-070-150 | 70                  | 150               | YPT-160-250   | 160                 | 250               |
| YPT-070-200 | 70                  | 200               | YPT-160-380-1 | 160                 | 380               |
| YPT-070-250 | 70                  | 250               | YPT-160-460-6 | 160                 | 460               |
| YPT-070-380 | 70                  | 380               | YPT-160-500   | 160                 | 500               |
| YPT-070-460 | 70                  | 460               | YPT-160-520-6 | 160                 | 520               |
| YPT-070-560 | 70                  | 560               | YPT-160-560-1 | 160                 | 560               |
| YPT-070-660 | 70                  | 660               | YPT-160-60    | 160                 | 60                |
| YPT-120-060 | 120                 | 60                | YPT-160-660   | 160                 | 660               |
| YPT-120-100 | 120                 | 100               | YPT-190-380-6 | 190                 | 380               |
| YPT-120-200 | 120                 | 200               | YPT-190-460-6 | 190                 | 400               |
| YPT-120-380 | 120                 | 380               | YPT-210-380   | 210                 | 200               |
| YPT-120-400 | 120                 | 400               | YPT-210-400   | 210                 | 400               |
|             |                     |                   | YPT-320-380-1 | 320                 | 380               |

## Yoke Plate - Rectangular



**YPR**

**Note:** Please contact PLP with your specific requirements.

**Part Number**

YPR-\*\*\*

## Maintenance Tension Link



**MTL**

Galvanised Steel

| Part Number | Tension Rating kN | Hole Centre Spacing (mm) |
|-------------|-------------------|--------------------------|
| MTL-160-4   | 160               | 60                       |



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## Ball 'Y' Clevis



**BYC**

| Part Number | Minimum Failing Load (kN) | Ball Size (mm) | Bolt Size (mm) |
|-------------|---------------------------|----------------|----------------|
| BYC-120-AH  | 120                       | 16             | M16            |
| BYC-070-1   | 70                        | 16             | M16            |
| BYC-070-8   | 70                        | 16             | M16            |
| BYC-120-8   | 120                       | 16             | M16            |
| BYC-160-8   | 160                       | 20             | M20            |

**Note:** -AH refers to ball Y clevis for arcing horn

## Ball Eye for Arcing Horn



**BEAH**

| Part Number | Minimum Failing Load (kN) | Ball Size (mm) |
|-------------|---------------------------|----------------|
| BEAH-070-9  | 70                        | 16             |
| BEAH-160-1  | 160                       | 20             |
| BEAH-210-1  | 210                       | 20             |

## Ball Clevis for Arcing Horn



**BCAH**

| Part Number | Minimum Failing Load (kN) | Ball Size (mm) | Bolt Size (mm) |
|-------------|---------------------------|----------------|----------------|
| BCAH-070-1  | 70                        | 16             | M16            |

# Hardware Fittings



## Twisted Socket Tongue for Arcing Horn



**TSTA**

| Part Number | Minimum Failing Load (kN) | Socket Size (mm) | Security Clip Type |
|-------------|---------------------------|------------------|--------------------|
| TSTA-120-1  | 120                       | 16               | 16 r-clip          |

## Twisted Socket Tongue



**TST**

| Part Number | Rating (kN) | Ball Size (mm) |
|-------------|-------------|----------------|
| TST-070-1   | 70          | 16             |
| TST-120-1   | 120         | 16             |
| TST-160-1   | 160         | 20             |
| TST-210-1   | 210         | 20             |

## Arcing Horn



**AH**

Arcing horns are a cost effective device for protecting valuable line equipment by allowing short circuit currents to pass across an air gap. Please advise PLP of line specifics at time of order for a recommendation on suitable products.

### Part Number

AH\*\*\*

# Hardware Fittings



## Shackles - Galvanised Forged Steel



S

| Part Number (Shackle) | Tension Rating (kN) | Bolt Size (mm) | Standard Pack Quantity |
|-----------------------|---------------------|----------------|------------------------|
| S-070-1               | 70                  | M16            | 25                     |
| S-120-1               | 120                 | M16            | 25                     |
| S-160-1               | 160                 | M20            | 15                     |
| S-210-1               | 210                 | M20            | 15                     |

| Part Number (Twisted) | Tension Rating (kN) | Bolt Size (mm) |
|-----------------------|---------------------|----------------|
| TS-070-1              | 70                  | M16            |

## D - Shackles



DS

D - Shackles are used to suspend PLP aluminium sheaves in conjunction with twin grips or tygards.

### Part Number

DS-070-8

## Aluminium Sheave - 54mm



AS

Bolt holes to suit M16 and M20 bolts.

| Part Number | Bore Diameter (mm) | Standard Pack Quantity | Colour Code |
|-------------|--------------------|------------------------|-------------|
| AS-54-17    | 17                 | 25                     | Red         |
| AS-54-22    | 22                 | 25                     | Green       |

# Hardware Fittings



## Sheave - Machined Steel



**THGR**

| Part Number | Hole Size (mm) | Sheave Diameter (mm) |
|-------------|----------------|----------------------|
| THGR-57     | 21             | 57                   |
| THGR-75     | 26             | 75                   |
| THGR-146A-C | 50             | 146                  |
| THGR-146B-C | 26             | 146                  |
| THGR-150    | 32             | 150                  |
| THGR-150-25 | 25             | 150                  |
| THGR-150-36 | 38             | 150                  |

## Clevis Thimble - Galvanised Cast Iron



**CTH**

- MFL 70kN
- Used for small GZ or copper grips

| Par Number  | Maximum Grip Size     | Thimble Bend Radius (mm) | Standard Pack Quantity |
|-------------|-----------------------|--------------------------|------------------------|
| CTH-070-MCI | GFG-083<br>CFG-100-CL | 20                       | 25                     |

## Clevis Thimble - Galvanised Cast Iron



**GCT**

- MFL 120 kN
- Used for medium to large GZ and copper grips

| Part Number  | Maximum Grip Size        | Thimble Bend Radius (mm) | Standard Pack Quantity |
|--------------|--------------------------|--------------------------|------------------------|
| GCT-120-TC5F | GFG-163<br>CFG-260-LT-CL | 28.5                     | 25                     |



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## Socket Clevis - Galvanised Cast Iron



Available with 'W' or 'R' clip security pin.  
120kN available in cast steel option. Contact PLP for information.

| Part Number | Tension Rating (kN) | Socket Size (mm) | Bolt Size (mm) | Standard Pack Quantity |
|-------------|---------------------|------------------|----------------|------------------------|
| SC-070-1    | 70                  | 16               | M16            | 25                     |
| SC-120-1    | 120                 | 16               | M16            | -                      |
| SC-160-1    | 160                 | 20               | M20            | -                      |
| SC-210-1    | 210                 | 20               | M20            | 8                      |

## Socket Thimble - Galvanised Cast Iron



'W' clip security pin

| Part Number | Tension Rating (kN) | Thimble Bend Radius (mm) | Standard Pack Quantity |
|-------------|---------------------|--------------------------|------------------------|
| STH-070-1   | 70                  | 20                       | 25                     |

## Socket Tongue - Galvanised Forged Steel



Available with 'W' or 'R' clip security pin

| Part Number | Tension Rating (kN) | Bolt Size (mm) | Standard Pack Quantity |
|-------------|---------------------|----------------|------------------------|
| ST-070-1    | 70                  | M16            | 25                     |
| ST-160-1    | 160                 | M20            | -                      |
| ST-210-1    | 210                 | M20            | -                      |

# Hardware Fittings



## Socket Ball - Galvanised Forged Steel



**SB**

| Part Number  | Rating (kN) | Socket Size (mm) | Ball Size (mm) |
|--------------|-------------|------------------|----------------|
| SB-070-1     | 70          | 16               | 16             |
| SB-120-3     | 120         | 16               | 16             |
| SB-160-4     | 160         | 20               | 20             |
| SB-160/070-4 | 70          | 20               | 16             |

## Tongue Clevis - Galvanised Cast Iron



**TC**

| Part Number | Tension Rating (kN) | Bolt Size (mm) | Standard Pack Quantity |
|-------------|---------------------|----------------|------------------------|
| TC-070-1    | 70                  | M16            | 25                     |
| TC-120-1    | 120                 | M16            | 25                     |

## Ball Clevis - Galvanised Forged Steel



**BC**

| Part Number | Tension Rating (kN) | Bolt Size (mm) | Ball Size (mm) | Standard Pack Quantity |
|-------------|---------------------|----------------|----------------|------------------------|
| BC-070-1    | 70                  | M16            | 16             | 25                     |
| BC-120-1    | 120                 | M16            | 16             | 25                     |
| BC-160-3    | 160                 | M20            | 20             | 15                     |
| BC-210-1    | 210                 | M20            | 20             | -                      |

# Hardware Fittings



## Y Clevis Tongue - Galvanised Forged Steel



**CTY**

| Part Number   | Tension Rating (kN) | Bolt Size (mm) | Hole Size (mm) | Standard Pack Quantity |
|---------------|---------------------|----------------|----------------|------------------------|
| CTY-070-1     | 70                  | M16            | 18             | 25                     |
| CTY-160-120-2 | 120                 | M20            | 22             | -                      |

## Link Eye - Galvanised Forged Steel



**LE**

| Part Number | Tension Rating (kN) | Standard Pack Quantity |
|-------------|---------------------|------------------------|
| LE-070-1    | 70                  | 50                     |
| LE-120      | 120                 | -                      |
| LE-160-1    | 160                 | -                      |
| LE-210-1    | 210                 | -                      |
| LE-320      | 320                 | -                      |

## Eye Tongue - Galvanised Forged Steel



**ET**

| Part Number | Tension Rating (kN) | Bolt Size (mm) | Standard Pack Quantity |
|-------------|---------------------|----------------|------------------------|
| ET-070-1    | 70                  | M16            | 25                     |
| ET-070-22   | 70                  | M20            | 25                     |
| ET-120-1    | 120                 | M16            | -                      |
| ET-160-1    | 160                 | M20            | -                      |

# Hardware Fittings



## Twisted Eye Tongue - Galvanised Forged Steel



| Part Number | Tension Rating (kN) | Bolt Size (mm) | Standard Pack Quantity |
|-------------|---------------------|----------------|------------------------|
| TET-070     | 70                  | M16            | 25                     |
| TET-120-1   | 120                 | M16            | -                      |
| TET-160-1   | 160                 | M20            | 15                     |

## Ball Eyes - Galvanised Forged Steel



| Part Number | Tension Rating (kN) | Ball Size (mm) | Standard Pack Quantity |
|-------------|---------------------|----------------|------------------------|
| BE-070-1    | 70                  | 16             | 25                     |
| BE-120-1    | 120                 | 16             | -                      |
| BE-160-1    | 160                 | 20             | 15                     |
| BE-210-8    | 210                 | 20             | -                      |

## Ball Hook Long Shank - Galvanised Forged Steel



| Part Number | Tension Rating (kN) | Standard Pack Quantity |
|-------------|---------------------|------------------------|
| BHL-070-1   | 70                  | 25                     |

**Note:** Safety latch available. Substitute -1 for -2.

# Hardware Fittings



## Ball Hook Short Shank - Galvanised Forged Steel



**BHS**

| Part Number | Tension Rating (kN) | Standard Pack Quantity |
|-------------|---------------------|------------------------|
| BHS-070-1   | 70                  | 25                     |

## Tongue Hook - Galvanised Forged Steel



**TH**

| Part Number | Tension Rating (kN) | Standard Pack Quantity |
|-------------|---------------------|------------------------|
| TH-070-1    | 70                  | 25                     |

## Tongue Hook/Latched - Galvanised Forged Steel



**THL**

| Part Number | Tension Rating (kN) | Standard Pack Quantity |
|-------------|---------------------|------------------------|
| THL-070-1   | 70                  | 25                     |

# Hardware Fittings



## Ball Tongue



**BT**

| Par Number | Tension Rating (kN) | Ball Size (mm) | Hole Size-Tongue (mm) |
|------------|---------------------|----------------|-----------------------|
| BT-070-5   | 70                  | 16             | 18                    |
| BT-160-8   | 160                 | 20             | 21.5                  |
| BT-210-1   | 210                 | 20             | 22                    |

## Counterweight Assembly



**CW**

Counterweight assemblies are custom designed for installation on transmission line suspension points. Typical designs are shown below as an illustration of the design and manufacturing capabilities of PLP. Please contact PLP with line specifics at time of order for a recommendation on suitable products.

**Part Number**

CW\*\*\*

## Guy Crossover Plate



**GCP**

- For 20mm and 22mm strand.
- For locking together Tower Guy Wires where they cross each other.

| Part Number | Hole Size (mm) |
|-------------|----------------|
| GCP-020-8   | 20             |
| GCP-022C    | 22             |

# Hardware Fittings



## Extension Link Eye Eye Galvanised Forged Steel



| Part Number     | Rating (kN) | Length (mm) |
|-----------------|-------------|-------------|
| ELEE-160-450    | 160         | 450         |
| ELEE-160-1170-3 | 16          | 1170        |
| ELEE-160-1220-3 | 16          | 1220        |

## Extension Link Ball Eye Galvanised Forged Steel



| Part Number     | Rating (kN) | Length (mm) | Ball Size (mm) |
|-----------------|-------------|-------------|----------------|
| ELBE-160-250-1  | 160         | 250         | 20             |
| ELBE-160-350-1  | 160         | 350         | 20             |
| ELBE-160-500-1  | 160         | 500         | 20             |
| ELBE-160-620-1  | 160         | 620         | 20             |
| ELBE-160-800-1  | 160         | 800         | 20             |
| ELBE-160-1000   | 160         | 1000        | 20             |
| ELBE-160-1100-1 | 160         | 1100        | 20             |
| ELBE-160-1330   | 160         | 1330        | 20             |
| ELBE-160-1620   | 160         | 1620        | 20             |
| ELBE-160-2000   | 160         | 2000        | 20             |

## Extension Link Ball Clevis Galvanised Forged Steel



| Part Number | Rating (kN) | Length (mm) | Ball Size (mm) | Bolt Size |
|-------------|-------------|-------------|----------------|-----------|
| ELBC160-1   | 160         | 250         | 20             | M20       |

# Hardware Fittings

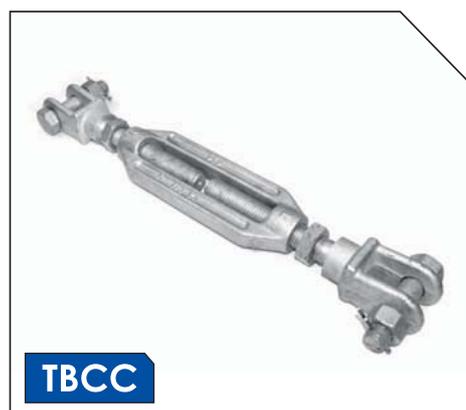


## Extension Link Socket Clevis Galvanised Steel



| Part Number | Rating (kN) | Length (mm) | Socket Size (mm) | Bolt Size | Material     |
|-------------|-------------|-------------|------------------|-----------|--------------|
| ELSC-160-2  | 160         | 310         | 20               | M20       | Cast Steel   |
| ELSC-160-4  | 160         | 310         | 20               | M20       | Forged Steel |

## Turnbuckles - Clevis/Clevis



Galvanised Forged Steel

| Part Number | Rating kN | Bolt Size (mm) | Range (mm) |         |
|-------------|-----------|----------------|------------|---------|
|             |           |                | Minimum    | Maximum |
| TBCC-070-1  | 70        | M16            | 350        | 480     |
| TBCC-160-1  | 160       | M20            | 480        | 600     |

## Turnbuckles - Clevis/Tongue



Galvanised Forged Steel

| Part Number | Rating kN | Bolt Size (mm) | Range (mm) |         |
|-------------|-----------|----------------|------------|---------|
|             |           |                | Minimum    | Maximum |
| TBCT-070-1  | 70        | M16            | 350        | 480     |
| TBCT-160-1  | 160       | M20            | 480        | 600     |



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## Turnbuckles - Eye/Clevis



**TBEC**

Galvanised Forged Steel

| Part Number | Rating kN | Bolt Size (mm) | Range (mm) |         |
|-------------|-----------|----------------|------------|---------|
|             |           |                | Minimum    | Maximum |
| TBEC-070-1  | 70        | M16            | 350        | 480     |
| TBEC-160-1  | 160       | M20            | 480        | 600     |

## Turnbuckles - Eye/Eye



**TBEE**

Galvanised Forged Steel

| Part Number | Rating kN | Range (mm) |         |
|-------------|-----------|------------|---------|
|             |           | Minimum    | Maximum |
| TBEE-070-1  | 70        | 350        | 480     |
| TBEE-160-1  | 160       | 480        | 600     |

## U-Bolt Stay Tensioner



**GADJ**

Made from galvanised steel for use on staywires and anchors. Used when loads exceed 140 kN.

| Part Number  | Tension Rating (kN) | Suites Anchor Rod Ø (mm) | Length Total (mm) | Thread Length (mm) | U-Bolt Ø (mm) |
|--------------|---------------------|--------------------------|-------------------|--------------------|---------------|
| GADJ-144-350 | 144                 | M24                      | 320               | 240                | M20           |
| GADJ-308-530 | 308                 | M30                      | 530               | 250                | M30           |
| GADJ-320-530 | 320                 | M36                      | 530               | 250                | M30           |

# Hardware Fittings



## M16 Galvanised Pole Step - For Concrete Poles



| Part Number | Bolt Size (mm) | Length (mm) | Standard Pack Quantity |
|-------------|----------------|-------------|------------------------|
| GPSC-16180  | M16            | 180         | 25                     |

## M20 and M24 Elongated Eye Bolt



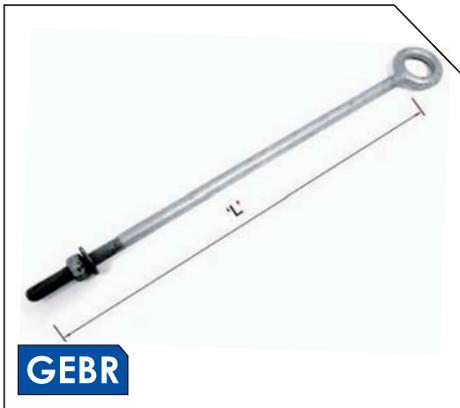
- This fitting used with the PLP Anchor
- Other lengths available on request

| Part Number (M20) | Part Number (M24) | Length (mm) | Threaded Length (mm) |
|-------------------|-------------------|-------------|----------------------|
| GEBE-20150        | GEBE-24150        | 150         | 150                  |
| GEBE-20200        | GEBE-24200        | 200         | 150                  |
| GEBE-20250        | GEBE-24250        | 250         | 150                  |
| GEBE-20300        | GEBE-24300        | 300         | 150                  |
| GEBE-20350        | GEBE-24350        | 350         | 150                  |
| GEBE-20400        | GEBE-24400        | 400         | 150                  |
| GEBE-20420        | GEBE-24420        | 420         | 150                  |
| GEBE-20450        | GEBE-24450        | 450         | 150                  |
| GEBE-20500        | GEBE-24500        | 500         | 150                  |
| GEBE-20550        | GEBE-24550        | 550         | 150                  |
| GEBE-20600        | GEBE-24600        | 600         | 150                  |
| GEBE-20650        | GEBE-24650        | 650         | 150                  |
| GEBE-20700        | GEBE-24700        | 700         | 150                  |
| GEBE-20750        | GEBE-24750        | 750         | 150                  |
| GEBE-20800        | GEBE-24800        | 800         | 150                  |
| GEBE-202500       | GEBE-242500       | 2500        | 150                  |

# Hardware Fittings



## M16 and M20 Round Eye Bolt



**Note:** Other lengths available on request.

Made of galvanised steel for use with either wood or concrete poles.

| Part Number | Length (mm) | Threaded Length (mm) | Part Number | Length (mm) | Threaded Length (mm) |
|-------------|-------------|----------------------|-------------|-------------|----------------------|
| GEBR-16150  | 150         | 100                  | GEBR-20190  | 190         | 150                  |
| GEBR-16200  | 200         | 100                  | GEBR-20200  | 200         | 150                  |
| GEBR-16250  | 250         | 100                  | GEBR-20250  | 250         | 150                  |
| GEBR-16300  | 300         | 100                  | GEBR-20300  | 300         | 150                  |
| GEBR-16350  | 350         | 100                  | GEBR-20350  | 350         | 150                  |
| GEBR-16400  | 400         | 100                  | GEBR-20400  | 400         | 150                  |
| GEBR-16450  | 450         | 100                  | GEBR-20450  | 450         | 150                  |
| GEBR-16500  | 500         | 100                  | GEBR-20500  | 500         | 150                  |
|             |             |                      | GEBR-20600  | 600         | 150                  |

## M20 Round Eye Bolt - Special Assembly



Made of galvanised steel for use with either wood or concrete poles.

| Part Number    | Length (mm) | Threaded Length (mm) |
|----------------|-------------|----------------------|
| GEBR-20400-SQW | 400         | 100                  |
| GEBR-20425-SQW | 425         | 100                  |
| GEBR-20450-SQW | 450         | 100                  |
| GEBR-20475-SQW | 475         | 100                  |
| GEBR-20500-SQW | 500         | 100                  |
| GEBR-20525-SQW | 525         | 150                  |
| GEBR-20550-SQW | 550         | 150                  |
| GEBR-20575-SQW | 575         | 150                  |
| GEBR-20600-SQW | 600         | 150                  |
| GEBR-20650-SQW | 650         | 150                  |