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<th>Current Published</th>
<th>Issued Document Revision Number:</th>
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### DISTANCE FROM TIP (mm)

<table>
<thead>
<tr>
<th>ORIENTATION</th>
<th>FITTING DESCRIPTION</th>
<th>TUBE LENGTH</th>
<th>FITTING PURPOSE</th>
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<tbody>
<tr>
<td>0</td>
<td>Depth indication mark</td>
<td>585</td>
<td>Tip ring and pole cap</td>
</tr>
<tr>
<td>100</td>
<td>M12 earth ferrule (30mm thread)</td>
<td>315</td>
<td>Fall Arrest Bracket and Step bolt to pole</td>
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<td>200</td>
<td>M16 ferrule (25mm thread)</td>
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<td>300</td>
<td>M16 ferrule (25mm thread length)</td>
<td>325</td>
<td>Fall Arrest Bracket and Step bolt to pole</td>
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<td>400</td>
<td>M16 ferrule (25mm thread)</td>
<td>315</td>
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<td>500</td>
<td>M16 ferrule (25mm thread)</td>
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<td>Fall Arrest Bracket and Step bolt to pole</td>
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<td>600</td>
<td>M12 earth ferrule (30mm thread)</td>
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<td>M16 ferrule (25mm thread)</td>
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<td>800</td>
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<td>M16 ferrule (25mm thread)</td>
<td>315</td>
<td>Fall Arrest Bracket and Step bolt to pole</td>
</tr>
</tbody>
</table>

### NOTES

1. Orientation is measured clockwise when looking down on pole tip.
2. Bracketed fittings require +/-2 mm tolerance between them and +/-2mm orientation tolerance.
3. Longitudinal capacities to be not less than transverse capacities.
4. Stainless steel tubes are to be accurately positioned and free from concrete and deformity.
5. A nominal Ø10 vent hole is required at the centre of the through tube provided for square rigging.
6. No subsidiary to be included on 18m poles.

### SET FITTING DESCRIPTION QTY

| 1 | A | Tip ring and pole cap | 1 |
| 2 | J | Depth indication mark | 2 |
| 1 | H | M16 ferrule (25mm thread length) | 21 |
| 1 | G | M12 earth ferrule (30mm thread length) | 12 |
| 1 | I | Name plate | 1 |
| 2 | D | 22 OD S/S tube for M16 bolt | 3 |
| 2 | E | 25 OD S/S tube for M20 bolt | 5 |
| 2 | T | 38 OD S/S tube | 1 |
| 2 | K | 5mm galv. cross wires (access barrier) | 2 |
NOTES
1. Orientation is measured clockwise when looking down on pole tip.
2. Bracketed fittings require +/- 2 mm tolerance between them and +/- 2mm orientation tolerance
3. Longitudinal capacities to be not less than transverse capacities.
4. Stainless steel tubes are to be accurately positioned and free from concrete and deformity.
5. A nominal Ø10 vent hole is required at the centre of the through tube provided for square rigging.

Refer dwg 5-7-3-1 for Foundations
Refer dwg 5-4-9-2 or 5-4-14-4 for pole construction

OVERHEAD SUB-TRANSMISSION
66kV CONCRETE POLE MANUFACTURING DETAILS
SINGLE CIRCUIT RURAL DELTA SUSPENSION
21m x 30kN - 2 EXTENDED & 3 EXTENDED CROSSARMS

NAME PLATE INFORMATION
MANUFACTURERS NAME/TRADE MARK
ERGON ENERGY CORPORATION LTD
ABN 50 087 646 062

STOCK CODE: C6RSD123D0/223D0, C6RSD133D0/233D0

REFERENCE: 5-20-3-2

DRAWING NUMBER: C6RSD123D0/223D0
Delta Suspension - 2 Ext. Crossarms

DRAWING NUMBER: C6RSD133D0/233D0
Delta Suspension - 3 Ext. Crossarms

FITTING DESCRIPTION
1. Tip ring and pole cap
2. Depth indication mark
3. M16 female (25mm thread length)
4. Name plate
5. 22 OD S/S tube for M16 bolt
6. 25 OD S/S tube for M20 bolt
7. 38 OD S/S tube
8. 5mm galv. cross wires (access barrier)

FITTING USE
1. For rigging and pole tip
2. Tip tension brace (M16
3. M16 female (25mm thread)
4. Additional washing (for poles in black soil)
5. Additional washing (for poles in normal soil)
6. Tip ring and pole cap
7. Name plate
8. Tip ring and pole cap

FITTING LENGTH
1. 313
2. 313
3. 436
4. 244
5. 344
6. 344
7. 344
8. 344
9. 241
10. 241
11. 241
12. 241
13. 430
14. 430
15. 430
16. 430
17. 430
18. 430
19. 430
20. 430
21. 310
22. 310

FITTING PURPOSE
1. For rigging and pole tip
2. Tip tension brace (M16
3. M16 female (25mm thread)
4. Additional washing (for poles in black soil)
5. Additional washing (for poles in normal soil)
6. Tip ring and pole cap
7. Name plate
8. Tip ring and pole cap
9. M16 female (25mm thread)
10. M16 female (25mm thread)
11. M16 female (25mm thread)
12. M16 female (25mm thread)
13. M16 female (25mm thread)
14. M16 female (25mm thread)
15. M16 female (25mm thread)
16. M16 female (25mm thread)
17. M16 female (25mm thread)
18. M16 female (25mm thread)
19. M16 female (25mm thread)
20. M16 female (25mm thread)
21. M16 female (25mm thread)
22. M16 female (25mm thread)

FITTING PURPOSE
1. For rigging and pole tip
2. Tip tension brace (M16
3. M16 female (25mm thread)
4. Additional washing (for poles in black soil)
5. Additional washing (for poles in normal soil)
6. Tip ring and pole cap
7. Name plate
8. Tip ring and pole cap
9. M16 female (25mm thread)
10. M16 female (25mm thread)
11. M16 female (25mm thread)
12. M16 female (25mm thread)
13. M16 female (25mm thread)
14. M16 female (25mm thread)
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17. M16 female (25mm thread)
18. M16 female (25mm thread)
19. M16 female (25mm thread)
20. M16 female (25mm thread)
21. M16 female (25mm thread)
22. M16 female (25mm thread)

SET FITTING DESCRIPTION
1. Tip ring and pole cap
2. Depth indication mark
3. M16 female (25mm thread length)
4. Name plate
5. 22 OD S/S tube for M16 bolt
6. 25 OD S/S tube for M20 bolt
7. 38 OD S/S tube
8. 5mm galv. cross wires (access barrier)
NOTES

1. Orientation is measured clockwise when looking down on pole tip.

2. Bracketed fittings require +/- 2 mm tolerance between them and +/- 2 mm orientation tolerance.

3. Longitudinal capacities to be less than transverse capacities.

4. Stainless steel tubes are to be accurately positioned and free from concrete and deformity.

5. A nominal Ø10 vent hole is required at the centre of the through tube provided for square rigging.

Refer dwg 5-7-3-1 for Foundations
Refer dwg 5-4-9-2 or 5-4-14-4 for pole construction

Length (m) 24
Limit state design load (kN) 30
TIP DIA. (mm) 315
Butt dia. (mm) 675
Planting depth (m) 3.2 (normal soil)
Planting depth (m) 3.7 (black soil)
Structure type C6RSD123E0/233E0, C6RSD133E0/233E0
Stock code 2421337

Distance from Or horizontal
Orientation
Fitting description
Tube (dia.)
Fitting purpose

Notes

1. Orientation is measured clockwise when looking down on pole tip.

2. Bracketed fittings require +/- 2 mm tolerance between them and +/- 2 mm orientation tolerance.

3. Longitudinal capacities to be less than transverse capacities.

4. Stainless steel tubes are to be accurately positioned and free from concrete and deformity.

5. A nominal Ø10 vent hole is required at the centre of the through tube provided for square rigging.

Refer dwg 5-7-3-1 for Foundations
Refer dwg 5-4-9-2 or 5-4-14-4 for pole construction

Length (m) 24
Limit state design load (kN) 30
TIP DIA. (mm) 315
Butt dia. (mm) 675
Planting depth (m) 3.2 (normal soil)
Planting depth (m) 3.7 (black soil)
Structure type C6RSD123E0/233E0, C6RSD133E0/233E0
Stock code 2421337

Distance from Or horizontal
Orientation
Fitting description
Tube (dia.)
Fitting purpose

Notes

1. Orientation is measured clockwise when looking down on pole tip.

2. Bracketed fittings require +/- 2 mm tolerance between them and +/- 2 mm orientation tolerance.

3. Longitudinal capacities to be less than transverse capacities.

4. Stainless steel tubes are to be accurately positioned and free from concrete and deformity.

5. A nominal Ø10 vent hole is required at the centre of the through tube provided for square rigging.

Refer dwg 5-7-3-1 for Foundations
Refer dwg 5-4-9-2 or 5-4-14-4 for pole construction
1. Orientation is measured clockwise when looking down on pole tip.
2. Bracketed fittings require +/- 2 mm tolerance between them and +/- 2 mm orientation tolerance.
3. Longitudinal capacities to be not less than transverse capacities.
4. Stainless steel tubes are to be accurately positioned and free from concrete and deformity.
5. A nominal 210 vent hole is required at the centre of the through tube provided for square rigging.
6. Pole manufacturer to nominate joint locations on poles above 24m.

NOTES

Refer dwg 5-7-3-1 for Foundations
Refer dwg 5-4-9-2 or 5-4-14-4 for pole construction

HARD COPY UNCONTROLLED

EGON ENERGY CORPORATION LTD

DRAWING NUMBER:
C6RSDI123F0/223F0
C6RSDI133F0/233F0

OVERSEA SUB-TRANSMISSION
69kV CONCRETE POLE MANUFACTURING DETAILS
SINGLE CIRCUIT RURAL DELTA SUSPENSION

450kV DELTA SUSPENSION - 2 EXT. CROSSARMS
500kV DELTA SUSPENSION - 3 EXT. CROSSARMS

STOCK CODE:
2421386

NAME PLATE INFORMATION

EGON ENERGY CORPORATION LTD

Drawn
R MARGANI
14/03/2016

Checked
K STOLZ

Approved

SUPERSEDES:

5-20-3-4

LENGTH (m) 27
LIMIT STATE DESIGN LOAD (kN) 30

SP EA (mm) 315
 BUTT DIA (mm) 720
 PLANTING DEPTH (mm) 3 (NORMAL SOIL)

STOCK CODE 2421386

DESCRIPTION

MAKING AND TRADE MARK

MANUFACTURER'S NAME/TRADE MARK

MONTH AND YEAR OF MANUFACTURE

LENGTH OF POLE (m) / LIMIT STATE DESIGN LOAD

BATCH NO.

STANDARD / MARINE GRADE

ERGO ENERGY

STOCK CODE
NOTES
1. Orientation is measured clockwise when looking down on pole tip.
2. All sensitized fittings are +/– 2 mm tolerance between them and +/- 2 mm orientation tolerance.
3. Longitudinal capacities to be not less than transverse capacities.
4. Stainless steel tubes are to be accurately positioned and free from concrete and deformity.
5. A nominal B101 vent hole is required at the centre of the through tube provided for square rigging.
6. Pole manufacturer to nominate joints locations on poles above 24m

Refer dwg 5-7-3-1 for Foundations
Refer dwg 5-4-9-2 or 5-4-14-4 for pole construction

TIP DIA. (mm) 315
BUTT DIA. (mm) 765
PLANTING DEPTH (m) 3.5 (NORMAL SOIL) PLANTING DEPTH (m) 4.1 (BLACK SOIL)
STRUCTURE TYPE G6RSD123G0/223G0, G6RSD133G0/233G0

STOCK CODE 2439438

DISTANCE FROM TIP (mm)
ORIENTATION
FITTING DESCRIPTION
FITTING PURPOSE

1. Orientation is measured clockwise when looking down on pole tip.
2. All sensitized fittings are +/- 2 mm tolerance between them and +/- 2 mm orientation tolerance.
3. Longitudinal capacities to be not less than transverse capacities.
4. Stainless steel tubes are to be accurately positioned and free from concrete and deformity.
5. A nominal B101 vent hole is required at the centre of the through tube provided for square rigging.
6. Pole manufacturer to nominate joints locations on poles above 24m

Refer dwg 5-7-3-1 for Foundations
Refer dwg 5-4-9-2 or 5-4-14-4 for pole construction
NOTES

1. Orientation is measured clockwise when looking down on pole tip.
2. Bracketed fittings require +/- 2 mm tolerance between them and +/- 2 mm orientation tolerance.
3. Longitudinal capacities to be not less than transverse capacities.
4. Stainless steel tubes are to be accurately positioned and free from concrete and deformity.
5. A nominal Ø10 vent hole is required at the centre of the through tube provided for square rigging.

SET | FITTING | DESCRIPTION | QTY
--- | --- | --- | ---
1 | A | Tip ring and pole cap | 1
2 | J | Depth indication mark | 2
1 | H | M16 ferrule (25mm thread length) | 28
2 | G | M12 earth ferrule (30mm thread length) | 16
1 | I | Name plate | 1
2 | D | 22 OD S/S tube for M16 bolt | 5
2 | E | 25 OD S/S tube for M20 bolt | 9
2 | T | 38 OD S/S tube | 1
2 | K | 5mm galv. cross wires (access barrier) | 2

Refer dwg 5-7-3-1 for Foundations
Refer dwg 5-4-10-2 or 5-4-14-4 for pole construction

Length (m) 21
Limit State Design Load (kN) 40
Tip Dia. (mm) 315
Butt Dia. (mm) 630
Planting Depth (m) 3.4 (Normal Soil)
Planting Depth (m) 3.8 (Black Soil)
Structure Type: C5RSDi124D0/224D0, C6RSDi134D0/234D0
Stock Code: 2421295
NOTES
1. Orientation is measured clockwise when looking down on pole tip.
2. Bracketed fittings require ±2 mm tolerance between them and ±3 mm orientation tolerance.
3. Longitudinal capacities to be not less than transverse capacities.
4. Stainless steel tubes are to be accurately positioned and free from concrete and deformity.
5. A nominal Ø10 vent hole is required at the centre of the through tube provided for square rigging.

Refer dwg 5-7-3-1 for Foundations
Refer dwg 5-4-10-2 or 5-4-14-4 for pole construction

SUPERSEDES:
K STOLZ

NOTES
1. Orientation is measured clockwise when looking down on pole tip.
2. Bracketed fittings require ±2 mm tolerance between them and ±3 mm orientation tolerance.
3. Longitudinal capacities to be not less than transverse capacities.
4. Stainless steel tubes are to be accurately positioned and free from concrete and deformity.
5. A nominal Ø10 vent hole is required at the centre of the through tube provided for square rigging.

Refer dwg 5-7-3-1 for Foundations
Refer dwg 5-4-10-2 or 5-4-14-4 for pole construction

SUPERSEDES:
K STOLZ

NOTES
1. Orientation is measured clockwise when looking down on pole tip.
2. Bracketed fittings require ±2 mm tolerance between them and ±3 mm orientation tolerance.
3. Longitudinal capacities to be not less than transverse capacities.
4. Stainless steel tubes are to be accurately positioned and free from concrete and deformity.
5. A nominal Ø10 vent hole is required at the centre of the through tube provided for square rigging.

Refer dwg 5-7-3-1 for Foundations
Refer dwg 5-4-10-2 or 5-4-14-4 for pole construction

SUPERSEDES:
K STOLZ

NOTES
1. Orientation is measured clockwise when looking down on pole tip.
2. Bracketed fittings require ±2 mm tolerance between them and ±3 mm orientation tolerance.
3. Longitudinal capacities to be not less than transverse capacities.
4. Stainless steel tubes are to be accurately positioned and free from concrete and deformity.
5. A nominal Ø10 vent hole is required at the centre of the through tube provided for square rigging.

Refer dwg 5-7-3-1 for Foundations
Refer dwg 5-4-10-2 or 5-4-14-4 for pole construction

SUPERSEDES:
K STOLZ

NOTES
1. Orientation is measured clockwise when looking down on pole tip.
2. Bracketed fittings require ±2 mm tolerance between them and ±3 mm orientation tolerance.
3. Longitudinal capacities to be not less than transverse capacities.
4. Stainless steel tubes are to be accurately positioned and free from concrete and deformity.
5. A nominal Ø10 vent hole is required at the centre of the through tube provided for square rigging.

Refer dwg 5-7-3-1 for Foundations
Refer dwg 5-4-10-2 or 5-4-14-4 for pole construction

SUPERSEDES:
K STOLZ
NOTES
1. Orientation is measured clockwise when looking down on pole tip.
2. Bracketed fittings require +/- 2 mm tolerance between them and +/- 2 mm orientation tolerance
3. Longitudinal capacities to be not less than transverse capacities.
4. Stainless steel tubes are to be accurately positioned in concrete and deformed.
5. A nominal Ø10 vent hole is required at the centre of the through tube provided for square rigging.
6. Pole manufacturer to nominate joint locations on poles above 24m

Refer dwg 5-7-3-1 for Foundations
Refer dwg 5-4-10-2 or 5-4-14-4 for pole construction
Refer dwg 5-7-3-1 for Foundations
Refer dwg 5-4-11-2 or 5-4-14-4 for pole construction
NOTES
1. Orientation is measured clockwise when looking down on pole tip.
2. Bracketed fittings require +/- 2 mm tolerance between them and +/- 2 mm orientation tolerance.
3. Longitudinal capacities to be not less than transverse capacities.
4. Stainless steel tubes are to be accurately positioned and free from concrete and deformity.
5. A nominal Ø10 vent hole is required at the centre of the through tube provided for square rigging.
1. Orientation is measured clockwise when looking down on pole tip.
2. Bracketed fittings require +/- 2 mm tolerance between them and +/- 2mm orientation tolerance.
3. Longitudinal capacities to be not less than transverse capacities.
4. Stainless steel tubes are to be accurately positioned and free from concrete and deformity.
5. A nominal Ø10 vent hole is required at the centre of the through tube provided for square rigging.
<table>
<thead>
<tr>
<th>DISTANCE</th>
<th>ORIENTATION</th>
<th>FITTING DESCRIPTION</th>
<th>TUBE LENGTH</th>
<th>FITTING PURPOSE</th>
</tr>
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<tbody>
<tr>
<td>0°</td>
<td>A A</td>
<td>Tip ring and pole cap</td>
<td>0</td>
<td>For tip and pole cap</td>
</tr>
<tr>
<td>90°</td>
<td>D D</td>
<td>25 OD S/S tube</td>
<td>315</td>
<td>For crossarm tension brace (M16)</td>
</tr>
<tr>
<td>180°</td>
<td>E E</td>
<td>430 OD S/S tube</td>
<td>315</td>
<td>For crossarm tension brace (M16)</td>
</tr>
<tr>
<td>270°</td>
<td>F F</td>
<td>25 OD S/S tube</td>
<td>315</td>
<td>For crossarm tension brace (M16)</td>
</tr>
</tbody>
</table>

**Notes:**

1. Orientation is measured clockwise when looking down on pole tip.
2. Bracketed fittings require +/- 2 mm tolerance between them and +/- 2mm orientation tolerance.
3. Longitudinal capacities to be not less than transverse capacities.
4. Stainless steel tubes are to be accurately positioned and free from concrete and deformity.
5. A nominal Ø10 vent hole is required at the centre of the through tube provided for square rigging.
6. Pole manufacturer to nominate joint locations on poles above 24m.

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**DRAWING NUMBER:**

5-20-3-14

**NAME PLATE INFORMATION**

Manufacturer's Name/Trade Mark

Drawn: R MARGANI

Date: 14/03/2016

ABB 50 087 646 062

**STOCK CODE:**

C6RSD125F0/225F0

**OVERHEAD SUB-TRANSMISSION**

69kV CONCRETE POLE MANUFACTURING DETAILS

SINGLE CIRCUIT RURAL DELTA SUSPENSION

27m x 50kn - 2 EXTENDED OR 3 MANUFACTURED CROSSARMS

Egon Energy Corporation Limited

ABN 50 087 646 062

Hard Copy Uncontrolled

**DESCRIPTION**

Delta Suspension - 2 Ext. Crossarms

C6RSD125F0/225F0

Delta Suspension - 3 Ext. Crossarms

C6RSDH135F0/235F0