

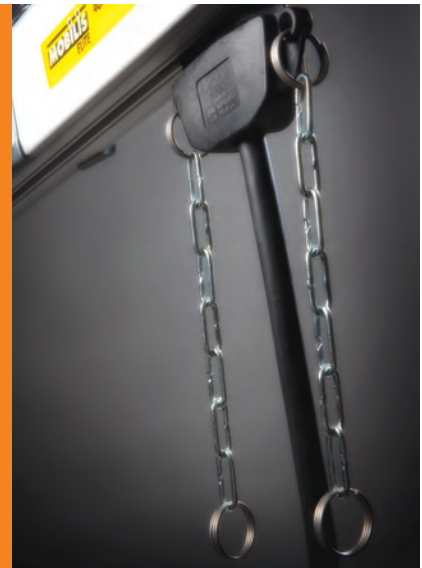
Conductor Systems

Mobilis Elite Enclosed Conductor System

Introduction

Mobilis Elite is a high quality enclosed multi-pole conductor system distributed exclusively in the UK by SIMBAL Ltd. Mobilis Elite is available in either 4 pole or 5 pole configuration with intensities from 20Amp up to 200Amp. The 20Amp system uses a galvanised steel conductor material, all other intensities from 40Amp up to 200Amp use a copper conductor which provides improved conductivity hence reducing voltage drop and allowing use of smaller systems for a given application.

Mobilis Elite also provides a solution for applications where high ambient temperatures are present, the standard system is suitable for operating temperatures from -20 up to +55°C, in addition a high temperature version is available which is designed to withstand temperatures up to 75°C.



Mobilis Elite offers many advantages when compared with other popular conductor systems as follows :

CELLULAR STRUCTURE

The cellular design of the Mobilis Elite section provides a lightweight and strong profile and gives excellent rigidity to the PVC casing, this rigidity ensures that the narrow lower opening prevents accidental contact with the conductor elements.



PERFORMANCE & ECONOMY

MOBILIS Elite has all the advantages of high quality design and manufacture at a competitive price. When combined with the cost savings associated with quick and easy installation the result is a high quality economical solution to most applications.

RELIABILITY

Product reliability is guaranteed by the use of high quality materials combined with strict quality control procedures throughout the design and manufacturing process.



SIMPLE INSTALLATION

The design of MOBILIS Elite is largely based around the principle of fast and easy installation. With connections that are an integral part of the conductor element and clip on covers and support brackets, installation is trouble free without the need for special tools.

CONNECTION USING SELF BREAKING SCREWS

Connection of the conductor bars is made using double headed bolts, when the bolt is tightened the top head breaks off when the correct torque rating is achieved, leaving the bottom head in place for future removal, the joint cover then clips in place protecting the conductor joint.



EASY MAINTENANCE

Joint covers, feed boxes and support brackets are all designed to clip together for fast and easy installation, however safety regulations state that removal of these components should not be possible without the use of a tool. With MOBILIS Elite all these components can be removed using a single, small flat blade screwdriver ensuring that maintenance or dismantling tasks can be carried out quickly without the need for any special tools.

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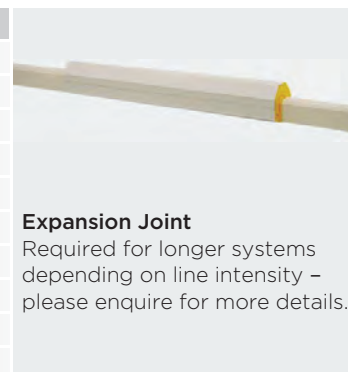
Specification and Technical Details

- Standard Intensities: 20A, 40A, 60A, 100A, 130A, 160A, 200A
- End feed, line feed or multiple feed points available
- 2000mm support centres
- Curved sections available (1000mm min. radius)
- High temperature systems available (up to 75°C)
- Introduction gates available for in-line removal/replacement of collector trolley

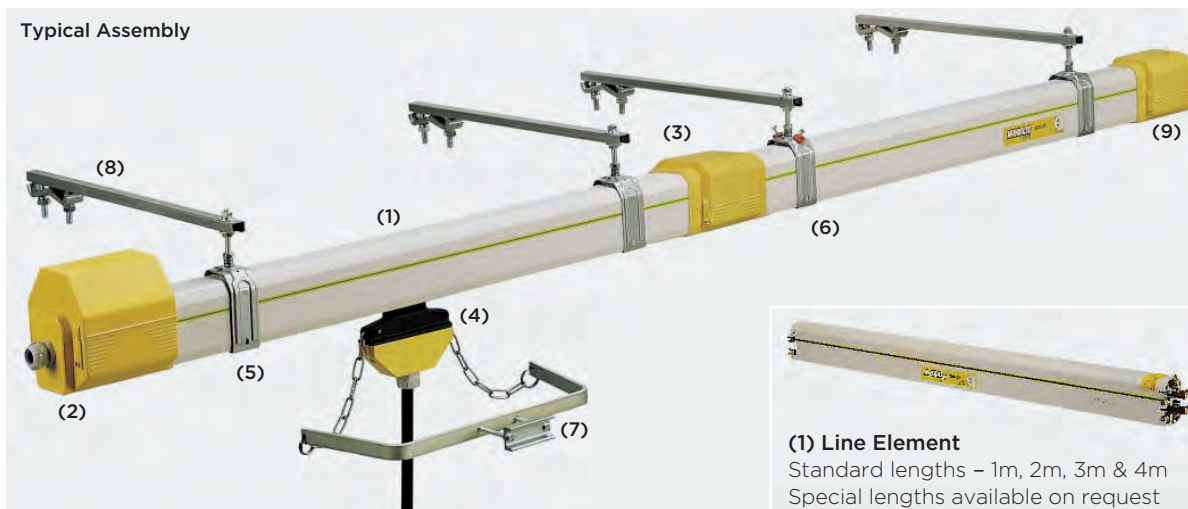
Technical Data

| Intensity | 20 Amp | | 40 Amp | | 60 Amp | | 100 Amp | |
|------------------------|-------------------------|--------|--------------------------|--------|--------------------------|--------|--------------------------|--------|
| Conductor section | Steel 16mm ² | | Copper 10mm ² | | Copper 16mm ² | | Copper 24mm ² | |
| Impedance @ 50Hz | 0.0116 Ohm/m | | 0.0017 Ohm/m | | 0.0012 Ohm/m | | 0.00077 Ohm/m | |
| No. of Poles | 4 | 5 | 4 | 5 | 4 | 5 | 4 | 5 |
| Weight (kg/m) | 1.70 | 1.80 | 1.50 | 1.60 | 1.80 | 1.90 | 2.0 | 2.10 |
| Code - 4m length | ME4204 | ME5204 | ME4404 | ME5404 | ME4604 | ME5604 | ME4104 | ME5104 |
| Code - 3m length | ME4203 | ME5203 | ME4403 | ME5403 | ME4603 | ME5603 | ME4103 | ME5103 |
| Code - 2m length | ME4202 | ME5202 | ME4402 | ME5402 | ME4602 | ME5602 | ME4102 | ME5102 |
| Code - 1m length | ME4201 | ME5201 | ME4401 | ME5401 | ME4601 | ME5601 | ME4101 | ME5101 |
| Code - Special Length | ME4200 | ME5200 | ME4400 | ME5400 | ME4600 | ME5600 | ME4100 | ME5100 |
| Code - Expansion Joint | ME8020 | ME8520 | ME8040 | ME8540 | ME8060 | ME8560 | ME8100 | ME8510 |

| Intensity | 130 Amp | | 160 Amp | | 200 Amp | |
|------------------------|--------------------------|--------|--------------------------|--------|--------------------------|--------|
| Conductor section | Copper 35mm ² | | Copper 53mm ² | | Copper 70mm ² | |
| Impedance @ 50Hz | 0.00056 Ohm/m | | 0.00038 Ohm/m | | 0.00026 Ohm/m | |
| No. of Poles | 4 | 5 | 4 | 5 | 4 | 5 |
| Weight (kg/m) | 2.40 | 2.70 | 3.10 | 3.40 | 3.60 | 4.20 |
| Code - 4m length | ME4134 | ME5134 | ME4164 | ME5164 | ME8284 | ME8285 |
| Code - 3m length | ME4133 | ME5133 | ME4163 | ME5163 | ME8283 | ME8289 |
| Code - 2m length | ME4132 | ME5132 | ME4262 | ME5162 | ME8282 | ME8286 |
| Code - 1m length | ME4131 | ME5131 | ME4161 | ME5161 | ME8281 | ME8287 |
| Code - Special Length | ME4130 | ME5130 | ME4160 | ME5160 | ME8280 | ME8288 |
| Code - Expansion Joint | ME8013 | ME8513 | ME8016 | ME8516 | ME8290 | ME8291 |



Typical Assembly



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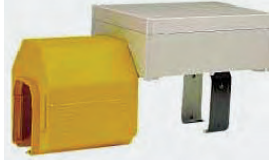
2 - End Feed Box M25/M32/M40



Thermoplastic
Self-extinguishing IP23
Intensities:
20, 40, 50, 100 Amp

| Gland | Code | Cable dia. |
|-------|--------|------------|
| M25 | ME1200 | 13 - 19mm |
| M32 | ME1230 | 15 - 25mm |
| M40 | ME1250 | 21 - 32mm |

In Line Feed Box M40



Intensities:
20, 40, 60 & 100 Amp

Cable dia.:
21mm - 32mm

Weight: 1.5kg

Codes: ME1332 (4 pole)
ME1329 (5 pole)

3 - Covering Flange ME2000



Thermoplastic
Self-extinguishing IP23
Weight: 0.4kg

In Line Feed Box M25/M32



Thermoplastic
Self-extinguishing IP23
Intensities:
20, 40, 60, 100 Amp

| Gland | Code | Cable dia. |
|-------|--------|------------|
| M25 | ME1300 | 13 - 19mm |
| M32 | ME1330 | 15 - 25mm |

4 - Single Collector Trolley



Self-extinguishing
Nominal Intensity:
40Amp
Includes connection
cable terminal 6mm²
Weight: 0.60kg

| Code | with Box | with Cable |
|--------|----------|------------|
| 4 Pole | ME3043 | ME2034-1M |
| 5 Pole | ME3051 | ME2051 |

Double Collector Trolley



Self-extinguishing
Nominal Intensity: 80Amp
Connection with 2x
cable - terminal 6mm²
Weight: 1.10kg

| Code | with Box | with Cable |
|--------|----------|------------|
| 4 Pole | ME4042 | ME4047-1M |
| 5 Pole | ME4050 | ME4051 |

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Tripe Collector Trolley



Self-extinguishing

Nominal Intensity: 120Amp

Connection with 3x flexible cables – terminal 6mm²

Weight: 1.60kg

| Code | with Box | with Cable |
|--------|----------|-------------|
| 4 Pole | ME5040 | ME5049 - 1m |
| 5 Pole | ME5050 | ME5059 - 1m |

7 – Carrier



Single

Double

Triple

Single Collector Carrier: Weight: 0.6kg Code: ME1600

Double Collector Carrier: Weight: 1.1kg Code: ME1610

Triple Collector Carrier: Weight: 2.6kg Code: ME1630

In Line Feed Line Element for 130, 160 & 200Amp



Pre-mounted on 1m or 4m line element

Max. weight: 130A – 15kg, 160A – 20kg, 200A – 24kg

Use 2 x hangers

| Intensity | Cable dia. | Length | 4 Pole | 5 Pole |
|-----------|------------|--------|--------|--------|
| 130Amp | 16mm | 1m | ME1313 | ME1317 |
| | | 4m | ME1343 | - |
| 160Amp | 20.5mm | 1m | ME1316 | ME1319 |
| | | 4m | ME1346 | - |
| 200Amp | 20.5mm | 1m | ME8299 | ME8294 |
| | | 4m | ME8279 | - |

Carrier with Box



Single – terminals 16mm²

Double – terminals 16mm²

Triple – terminals 25mm²

All suitable for cable dia. 22 – 30mm

| Type | 4 Pole | 5 Pole | Weight |
|--------|--------|--------|--------|
| Single | ME1660 | ME1660 | 1.4kg |
| Double | ME1640 | ME1645 | 1.9kg |
| Triple | ME1650 | ME1655 | 3.4kg |

5 – Sliding Hanger



Galvanised steel

Screw M8 x 60 pre-mounted

Intensities: 20–130Amp – use 2 hangers per 4m line element; 200Amp – use 3 hangers per 4m line element

Weight: 0.1kg

6 – Fixed Hanger



Galvanised steel

Screw M8 x 60 pre-mounted

c/w 2 no. anchoring screws – 2 fixed hangers should be used, positioned centrally along the conductor line

Weight: 0.1kg

9 – End Cap ME 2400



Thermoplastic

Self extinguishing – IP23

Weight: 0.3kg

We reserve the right to amend all technical details without prior notification

