

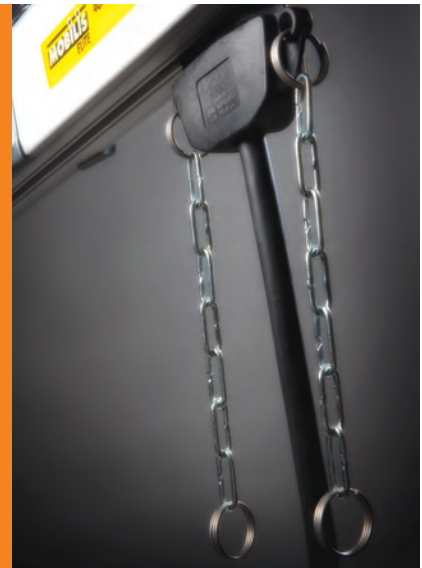
# Conductor Systems

## 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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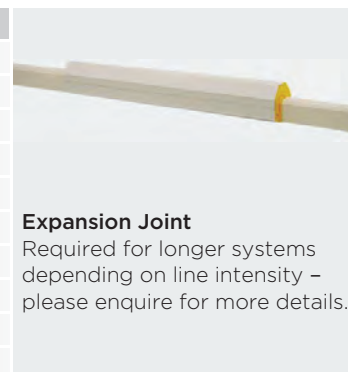
### Specification and Technical Details

- 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

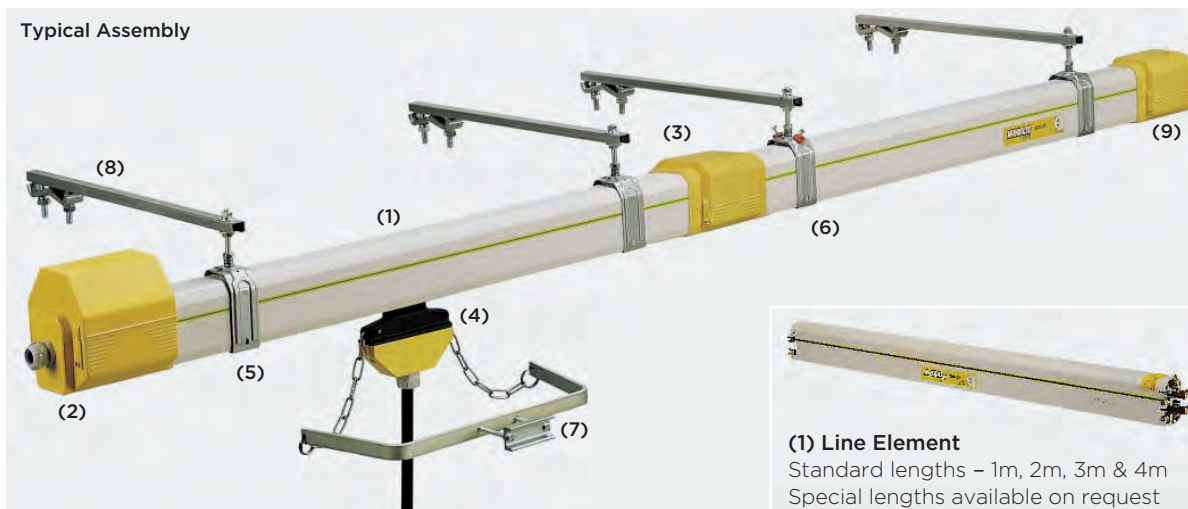
### Technical Data

Intensity	20 Amp		40 Amp		60 Amp		100 Amp	
Conductor section	Steel 16mm <sup>2</sup>		Copper 10mm <sup>2</sup>		Copper 16mm <sup>2</sup>		Copper 24mm <sup>2</sup>	
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 <sup>2</sup>		Copper 53mm <sup>2</sup>		Copper 70mm <sup>2</sup>	
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



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



## Conductor Systems

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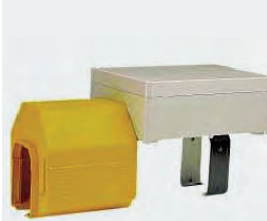
#### 2 - End Feed Box M25/M32/M40



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 6mm<sup>2</sup>  
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 6mm<sup>2</sup>  
Weight: 1.10kg

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

The following special features are also available for 'Mobilis Elite' :

- Curved sections (minimum radius - 1000m)
- Transfer elements
- High temperature sections (75°C max)
- Expansion joints
- Circuit interruption elements
- Special collectors

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### Tripe Collector Trolley



Self-extinguishing  
Nominal Intensity: 120Amp

Connection with 3x flexible cables – terminal 6mm<sup>2</sup>

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 16mm<sup>2</sup>

Double – terminals 16mm<sup>2</sup>

Triple – terminals 25mm<sup>2</sup>

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