

## ETC Tie-on cable markers (ladder format)

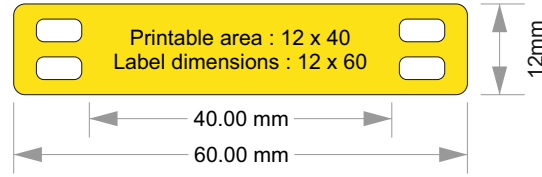


expressMARK ETC cable markers are designed for marking of cable, conduit, pipes and valves. The ladder style format presents markers in an organised fashion for ease of installation on site using the pre-cut cable tie slots. The product is manufactured from UL94-V0 LFH material making them ideal for applications where low smoke, low toxicity and zero halogen properties are critical.

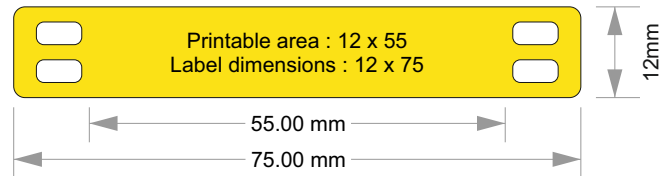


### Ordering information

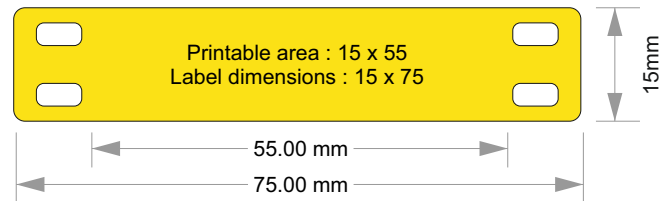
Part Number	Colour	Pack Size
ETC-4-012040-D	YELLOW	1000pcs
ETC-9-012040-D	WHITE	1000pcs
ETC-2-012040-D	RED	1000pcs
ETC-3-012040-D	ORANGE	1000pcs
ETC-5-012040-D	GREEN	1000pcs
ETC-6-012040-D	BLUE	1000pcs
ETC-0-012040-D	BLACK	1000pcs



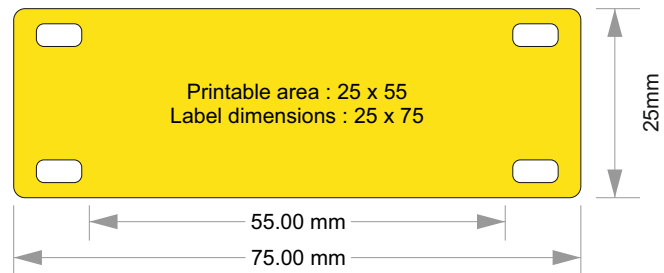
Part Number	Colour	Pack Size
ETC-4-012055-D	YELLOW	1000pcs
ETC-9-012055-D	WHITE	1000pcs
ETC-2-012055-D	RED	1000pcs
ETC-3-012055-D	ORANGE	1000pcs
ETC-5-012055-D	GREEN	1000pcs
ETC-6-012055-D	BLUE	1000pcs
ETC-0-012055-D	BLACK	1000pcs



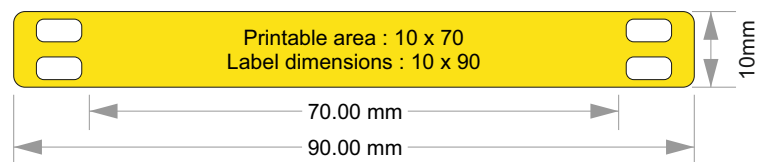
Part Number	Colour	Pack Size
ETC-4-015055-D	YELLOW	1000pcs
ETC-9-015055-D	WHITE	1000pcs
ETC-2-015055-D	RED	1000pcs
ETC-3-015055-D	ORANGE	1000pcs
ETC-5-015055-D	GREEN	1000pcs
ETC-6-015055-D	BLUE	1000pcs
ETC-0-015055-D	BLACK	1000pcs



Part Number	Colour	Pack Size
ETC-4-025055-C	YELLOW	500pcs
ETC-9-025055-C	WHITE	500pcs
ETC-2-025055-C	RED	500pcs
ETC-3-025055-C	ORANGE	500pcs
ETC-5-025055-C	GREEN	500pcs
ETC-6-025055-C	BLUE	500pcs
ETC-0-025055-C	BLACK	500pcs



Part Number	Colour	Pack Size
ETC-4-010070-D	YELLOW	1000pcs
ETC-9-010070-D	WHITE	1000pcs
ETC-2-010070-D	RED	1000pcs
ETC-3-010070-D	ORANGE	1000pcs
ETC-5-010070-D	GREEN	1000pcs
ETC-6-010070-D	BLUE	1000pcs
ETC-0-010070-D	BLACK	1000pcs



### Printer Ribbon Part Numbers

EMR-0-RIBBON-A	EM High performance black ribbon
EMR-9-RIBBON-A	EM High performance white ribbon



Ribbons are compatible with the following printer models : T200-IDENT, EOS1, EOS2, TE3112, TE3124, T3212 and T3224.

## ETC Tie-on cable markers (ladder format)

The ETC ladder format cable markers are manufactured from halogen free, flame retardant thermoplastic polyether-polyurethane material. The base compound material fulfills the requirements of UL94-V0.

### Test results

Properties	Test Method	Typical Value
Hardness	DIN 53505	58 Shore D
Density	DIN 53479	1.27g/cm <sup>3</sup>
Tensile strength	DIN 53504	30 MPa
Elongation at break	DIN 53504	400%
Stress at 20% elongation	DIN 53504	13 Mpa
Stress at 100% elongation	DIN 53504	19 Mpa
Stress at 300% elongation	DIN 53504	33 Mpa
Tear strength	DIN 53515	110 N/mm
Abrasion loss	DIN 53516	30 mm <sup>3</sup>
Compression set at room temperature	DIN EN ISO 815	30%
Compression set at +70°C	DIN EN ISO 815	45%
Tensile strength (stored in water at 80°C for 42 days)	DIN 53504	20 MPa
Elongation at break (stored in water at 80°C for 42 days)	DIN 53504	400%
Charpy V-notch impact test at +23°C	DIN EN ISO 815	50 kJ/m <sup>2</sup>
Charpy V-notch impact test at -30°C	DIN EN ISO 815	3 kJ/m <sup>2</sup>

### Weathering Performance

	Conditions	Result
UV lamp : UV340	Light 60° irradiation 0.76 W/m <sup>2</sup> for a duration of 8 hours.  Spray duration - 15 minutes.  Condensation 50° for a duration of 3 hours 45 minutes.	No visible change
Xenon lamp : XENON340	Light 65° irradiation 0.50 W/m <sup>2</sup> for a duration of 1 hours 42 minutes.  Light and spray irradiation 0.60 W/m <sup>2</sup> for a duration of 8 minutes.	No visible change
Notes	Accelerated weathering testing was conducted within a laboratory using UV wet/dry cycle weathering simulation equipment.  Duration of the test was 500 hours which equates to 10 years exposure within a typical northern European environment.	

### Pre-printed Markers Service

You need ETC markers but don't have a printer on site? No problem, we have the answer. Simply email us your data and let us print your markers and dispatch within 24 hours to site. Available to purchase online or contact a member of our team to discuss your requirements. More details on our pre-print services can be found on page 22.



email data



print & pack



deliver on time

## Technical Datasheet



### Standard Colours

Yellow, white, red, orange, green, blue and black.

### Material

Thermoplastic polyether-polyurethane

### Operating temperature

-25°C up to +80°C.

### Specifications

#### Mark permanence

SAE AS81531:1998, point 4.6.2.

#### Chemical and solvent resistance

MIL-STD-202F method 215J.

### Storage

Store in original packaging. Recommended storage environment is +10°C to +25°C and 45-55% relative humidity.

### Printing method

Thermal transfer

### Packaging

Supplied on printer ready reels.

Inner cores are sized to allow loading inside most printers.