





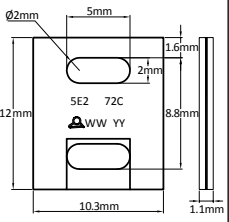
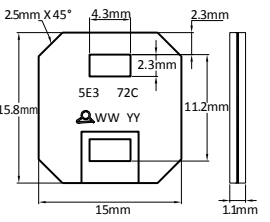
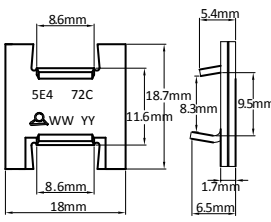
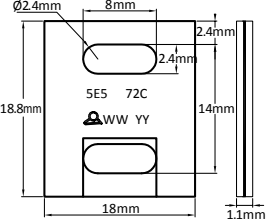
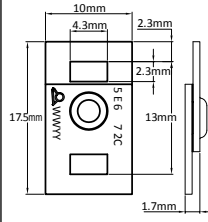


# Miniature eutectic alloy fusible links for large or very large series applications

P1

Material	Max Force	Quantities	Hole distances	Models
Plated Brass	 8 ~ 26DaN	>10, 000	6.8 ~ 10.7MM	5E2, 5E3, 5E4, 5E5, 5E6

				
				
5E2	5E3	5E4	5E5	5E6

Manufactured in a fully automated way, these fire detection fuses are particularly economical for domestic applications in mechanical ventilation, extractor hoods. They are also externally coated with an alloy protecting them from corrosion.

**Material:** Brass (possible realization in red copper if shorter response times are required).

**Surface Protection:** Eutectic alloy.

**ROHS compliance:** These fusible links are available in two versions.

- Non-ROHS compliant, using traditional alloys containing lead and cadmium, for temperatures 68°C (155°F); 72°C (162°F); 96°C (205°F); 103°C (218°F); 120°C (248°F).

- ROHS compliant, using ternary alloys based on bismuth, tin and indium, (the high cost of indium makes these models 2 to 3 times more expensive than the previous ones) for temperatures 60°C (140°F); 72°C (162°F); 79°C (174°F); 109°C (228°F); 117°C (242°F).

**Identification:** Model, temperature in °C and date of manufacture are printed on each fusible link.

**Tests:**

- Mechanical resistance at ambient temperature: 100% in production.

- Trip temperature under static load: by statistical sampling.

- Trip time in temperature rise under load according to ISO 10294-4: by statistical sampling.

- Holding load 1h at 60°C or 90°C: compliant and verified by statistical sampling in production

(Test according to ISO 10294-4).

- Triggering under minimum load: compliant and verified by statistical sampling in production (Test according to UL33).

**Salt spray resistance:** According to ISO9227-2012, subjected to a mist formed of 20% by weight of sodium chloride in distilled water, at 35°C for 5 days (120h), the apparatuses retain their aptitude for the function, in the response times specified by the standard.

Type	5E2	5E3	5E4	5E5	5E6
Welding surface (mm <sup>2</sup> )	84 mm <sup>2</sup>	159 mm <sup>2</sup>	224 mm <sup>2</sup>	258 mm <sup>2</sup>	80 mm <sup>2</sup>
Maximum permissible permanent load * (DaN)	8.5 DaN	16 DaN	22 DaN	26 DaN	8 DaN

Because of permanent improvement of our products, drawings, descriptions, features used on these data sheets are for guidance only and can be modified without prior advice



# Miniature eutectic alloy fusible links for large or very large series applications

P2

Type	5E2	5E3	5E4	5E5	5E6
Minimum breaking load	2N	4N	4N	4N	3N
Response time according to ISO 10294-4 under maximum load **	2min 43 sec	2min 46 sec	2min 51sec	2min 51sec	2min 38sec

\* Maximum permanent load depends on alloy composition and ambient temperature. Values are given for guidance only, and for a 72°C non ROHS eutectic alloy. **Alloys with temperatures below 72°C and those that are RoHS compliant, generally have a high proportion of Indium, which greatly reduces the mechanical strength.**

\*\* Values measured in our own testing equipment. Testing conditions and equipment comply with ISO10294-4 and ISO DIS 21925-1 2017, fig. C1.

## Main references (Not RoHS)

Model	Temperature	Reference
5E2	68°C (155°F)	5E2068H050000000
5E2	72°C (162°F)	5E2072H050000000
5E2	96°C (205°F)	5E2096H050000000
5E2	103°C (218°F)	5E2103H050000000
5E2	120°C (248°F)	5E2120H050000000
5E3	68°C (155°F)	5E3068H050000000
5E3	72°C (162°F)	5E3072H050000000
5E3	96°C (205°F)	5E3096H050000000
5E3	103°C (218°F)	5E3103H050000000
5E3	120°C (248°F)	5E3120H050000000
5E4	68°C (155°F)	5E4068H050000000
5E4	72°C (162°F)	5E4072H050000000
5E4	96°C (205°F)	5E4096H050000000
5E4	103°C (218°F)	5E4103H050000000
5E4	120°C (248°F)	5E4120H050000000
5E5	68°C (155°F)	5E5068H050000000
5E5	72°C (162°F)	5E5072H050000000
5E5	96°C (205°F)	5E5096H050000000
5E5	103°C (218°F)	5E5103H050000000
5E5	120°C (248°F)	5E5120H050000000
5E6	68°C (155°F)	5E6068H050000000
5E6	72°C (162°F)	5E6072H050000000
5E6	96°C (205°F)	5E6096H050000000
5E6	103°C (218°F)	5E6103H050000000
5E6	120°C (248°F)	5E6120H050000000

## Main references (RoHS compliant)

Model	Temperature	Reference
5E2	60°C (140°F)	5E2060H050R00000
5E2	72°C (162°F)	5E2072H050R00000
5E2	79°C (174°F)	5E2079H050R00000
5E2	109°C (228°F)	5E2109H050R00000
5E2	117°C (242°F)	5E2117H050R00000
5E3	60°C (140°F)	5E3060H050R00000
5E3	72°C (162°F)	5E3072H050R00000
5E3	79°C (174°F)	5E3079H050R00000
5E3	109°C (228°F)	5E3109H050R00000
5E3	117°C (242°F)	5E3117H050R00000
5E4	60°C (140°F)	5E4060H050R00000
5E4	72°C (162°F)	5E4072H050R00000
5E4	79°C (174°F)	5E4079H050R00000
5E4	109°C (228°F)	5E4109H050R00000
5E4	117°C (242°F)	5E4117H050R00000
5E5	60°C (140°F)	5E5060H050R00000
5E5	72°C (162°F)	5E5072H050R00000
5E5	79°C (174°F)	5E5079H050R00000
5E5	109°C (228°F)	5E5109H050R00000
5E5	117°C (242°F)	5E5117H050R00000
5E6	60°C (140°F)	5E6060H050R00000
5E6	72°C (162°F)	5E6072H050R00000
5E6	79°C (174°F)	5E6079H050R00000
5E6	109°C (228°F)	5E6109H050R00000
5E6	117°C (242°F)	5E6117H050R00000

\* : for same models in red copper, replace the 8th character of the reference (0) by C.

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