

Technical Informations

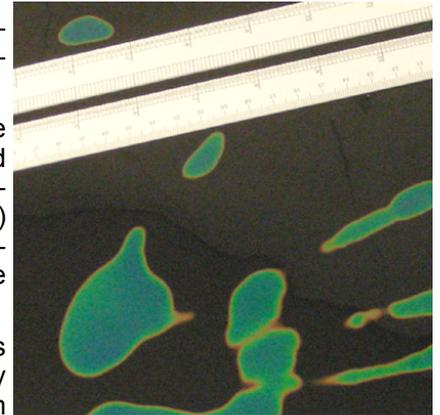
Reversible Temperature Sensitive Foils LC-Thermofoils **CelsiReverso®**

LC-THERMOFOILS reversible thermosensitive foils in liquid crystal technology

Such foils are coated with special, microencapsulated liquid-crystals reacting by colour changes to temperature variations within their specified range of "temperature versus colour" play. These Polyester material based foils are available with or without adhesive backing. Our LC-Foils are mostly manufactured to customers specific needs for size, temperature range and other parameters.

Below and above its specific colour play the LC-foil is black. Starting the temperature move from below temperature sensitive window towards and through the visible part of the colour play, the colours will go through a sequence of black -> reddish -> yellow ->green to -> final dark-blue (black) sequence. Any additional temperature increases will not cause any additional colour variations. The colour play reverses when temperatures are passed in opposite direction.

LC-Thermofoils are defined by the temperature level at which the colours start to play and the temperature band (width) within the colours do play from low end black to high end black. Most thermofoils are available from stock.



Part-no	System-no.	Colorplay °C	Red Start °C	Green Start °C	Blue Start °C	Bandwith °C	Dimension of sheet
CR/LCF-W20-30.45	16735	20-25	20	21	25	5	300x450 mm
CR/LCF-W25-30.45	16733	25-30	25	26	30	5	300x450 mm
CR/LCF-W30-30.45	16792	30-35	30	31	35	5	300x450 mm
CR/LCF-W35-30.45	16793	35-40	35	36	40	5	300x450 mm
CR/LCF-W40-30.45	16794	40-45	40	41	45	5	300x450 mm

Pricelists and discounts on request.

LC-THERMOSTRIPS

LC-Thermofoils can be printed with various staged temperature levels and become **LC-Thermostrips**, see image to the right.

Type LCT-25.100.20.132 with the temperature levels (25/30/35/40/45/50/55/60/65/70/75/80/85/90/95/100°C), each strip size 132 x 19 mm wide. The green "25" indicates that the supplied LC thermometer is on an ambient 25 °C temperature.



LCS-Slurries are liquid crystal "paint" mixture. Certain types *might* be available on **special request**. Application needs some training and experimenting on how to properly screen-print and handle. Application is by brushing, painting, spraying and printing. Each coating version one needs a special preparation of the formulation. Available in 250 or 500 ccm quantities. About 250 ccm per m2 gives a good coverage over the substrate. Application needs some training and experimenting on how to properly screen-print and handle.

part	no.	description
CR/LCT-00.40.21.120	# 15371	Liquid crystal thermometer strips, reversibel, 21 temperature levels 0/2/4/6/8/10/12/14/16/18/20/22/24/26/28/30/32/34/36/38/40 °C, Strip 120 x 10 mm wide, self-adhesive, 22 strips on release paper (125 x 220 mm)
CR/LCT-00.75.19.132	#17280	Liquid crystal thermometer strips, reversibel, 16 temperature levels 0/5/10/15/20/25/30/35/40/45/50/55/60/65/70/75 °C, Strip 132 mm x 19 mm wide, self-adhesive
CR/LCT-25.100.20.132	#16918	Liquid crystal thermometer strips, reversibel, 16 temperature levels 25/30/35/40/45/50/55/60/65/70/75/80/85/90/95/100°C, Strip 132mm x 20mm wide, self-adhesive
CR/LCT-S22.50.15.095.10	#17465	Liquid crystal thermometer strips, reversibel, 15 temperature levels 22/24/26/28/30/32/34/36/38/40/42/44/46/48/50°C, Strip 95mm x 10mm wide, self-adhesive
CR/LCT-32.49.16.12.137	#17080	Liquid crystal thermometer strips, reversibel, 18 temperature levels 32/33/34/35/36/37/38/39/40/41/42/43/44/45/46/47/48/49°C, strip 137 mm x 12 mm wide, self-adhesive
CR/LC-S- ...		Custom design on request

Pricelists and discounts on request

LCS-Micro-Encapsulated Slurries are liquid crystal "paint" mixtures with the LC particles encapsulated in tiny microspheres. Such coatings are relatively stable against "chemical attacks" from ambient atmospheres (oxygen, sulphur, ...) and electrically not conductive. Certain types *might* be available on special request. Available in 250 or 500 ccm quantities. About 250 ccm per m2 gives a good coverage over the substrate. Application needs some training and experimenting on how to properly screen-print and handle. Inquire on availability for your task. Need for detailed informations otherwise there is no meaningful response possible.