

LED light transmitter FS 4105 / FS 4106 / FS 4205

- Compact LED light transmitter for the acquisition of material webs by means of CCD line scan cameras
- With matt cover for transmitted light mode and clear cover for incident light mode
- Even light distribution and increased light intensity due to upstream cylindrical lens
- Straightforward mounting by means of integrated slots in the aluminum profile
- Flexible application due to graduation into several length variants



Function

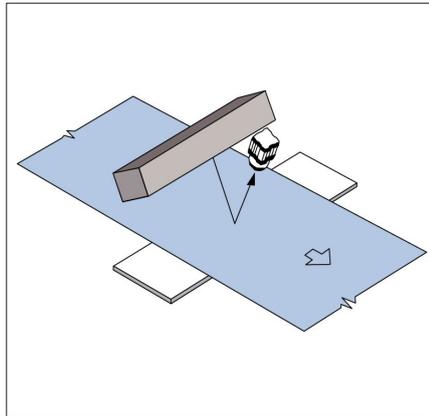
The LED modules with a module length of 50 mm are arranged in a row in an aluminum profile to reach the required length.

A corresponding attachment or a lens ensures the light is distributed resp. bundled evenly.

The cover type (clear or matt) depends on the scanning method. The failure of an LED has no effect on the function of the light transmitter.

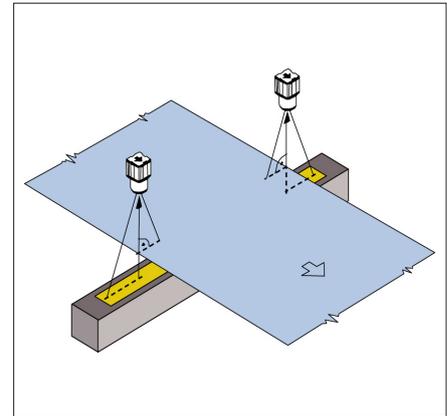
Incident light method

In incident light mode the **FS 41** light transmitter with clear cover is located in front of the web. The light is reflected by the web. Besides the detection of outer edges, this principle also permits the recording of lines, ribs or grooves on the web surface.



Transmitted light mode

In transmitted light mode the **FS 42** light transmitter with matt cover is located behind the web to be scanned. The camera acquires only the outer edges of non-transparent webs here.



Selection table

Light transmitter length L (mm)	Type FS 4105 Clear cover		Type FS 4106 Clear cover		Type FS 4205 Matt cover	
	Active light field length (mm)					
544	364	400	460			
594	414	450	510			
644	464	500	560			
694	514	550	610			
744	564	600	660			
794	614	650	710			
844	664	700	760			
894	714	750	810			
944	764	800	860			
994	814	850	910			

Available light transmitter lengths (L):
 344 mm to 1994 mm

Technical data

Operating voltage nominal value	24 V DC
Number of LEDs per module	6
Current consumption	max. 2.5 A (length-dependent)
Beam angle (FS 4105) (FS 4106)	30° parallel
Light field width (FS 4205)	11 mm at the light transmitter
Service life	> 30,000 h (at an ambient temperature < 40 °C and nominal operating voltage 24 V DC)
Ambient temperature	0 to +50 °C (at an ambient temperature > 40 °C additional cooling is required)
Protection class	max. IP 54 with suitable connector inserted
Dimensions WxHxL	35 x 49.5 x (L) mm, see table on the left
Subject to technical change without notice	