## Superflat 🗒 LED pilot-lights "Flasi®" series



- > Superflat LED pilot lights and pilot light modules (clusters)
- Very long service life (half life of 100'000 hours= 11 years)
- Easiest "click-in" fixing by patent-protected click-in device for panel thicknesses of 1-4 mm
- > Bright and even illumination, wide visibility angle
- > Several available colours for the ill. screens, including bi-colour
- Service voltages from 12 V DC to 230 VAC
- Frame made of high impact strength "DELRIN"
- Prime quality, assembled in Switzerland. Each and every unit undergoes a function check before leaving the factory

	ArtNo.	Dimension		Panel	Mounting	Available	Standard	Connect.			
		Front-	Illumin.	cut-out	depth	colours for the	voltages				
		frame	screen(s)			ill. screens					
LED-pilot lights	WSF10-00. <sup>a)</sup> R <sup>b)</sup> dc	18x24	10x10	16x22 +/- 0,1	12,9	<ul> <li>1 = red</li> <li>2 = yellow</li> <li>3 = green</li> <li>4 = orange</li> <li>6 = blue</li> <li>7 = white</li> <li>8 = red/green<sup>†</sup></li> <li>9 = red/ yellow<sup>†</sup></li> </ul>	on request				Contraction of the second
LED	WSF15-00. <sup>a)</sup> R <sup>b)</sup> dc	24x24	15x15	22x22 +/- 0,1	14,9	<ul> <li>1 = red</li> <li>2 = yellow</li> <li>3 = green</li> <li>4 = orange</li> </ul>	<ul> <li>other service voltages upon request</li> </ul>	E			
oilot lights	WSF10-0 <sup>a)</sup> R <sup>b)</sup> dc	18x36	2 illumin. screens 10x10mm	16x34 +/- 0,1	12,9	<ul> <li>1 = red</li> <li>2 = yellow</li> <li>3 = green</li> <li>4 = orange</li> <li>6 = blue</li> <li>7 = white</li> <li>8 = red/green<sup>†</sup></li> <li>9 = red/ yellow<sup>†</sup></li> </ul>	12 V DC and 24 V DC – other servic	faston 2,8 x 0,5 mm			
Twin LED-pilot lights	WSF15-0 <sup>a)</sup> R <sup>b)</sup> dc	24x48	2 illumin. screens 15x15mm	22x46 +/- 0,1	14,9	<ul> <li>1 = red</li> <li>2 = yellow</li> <li>3 = green</li> <li>4 = orange</li> </ul>	12 V DC an		B		

<sup>a)</sup>: Colour of the ill. screen(s) according to the codes in the appropriate column

<sup>b)</sup>: Voltage "12" or "24"

Ordering example: WSF10-001 R24: LED pilot light Flasi<sup>®</sup> series 18x24 mm with ill. screen 10x10 mm red, 24 V DC Lettering possible (screen printing); Minimum quantity: 100 pieces

Accessory: WSF220/12F Voltage divider for connecting Flasi<sup>®</sup> single or twin LED pilot lights with a service voltage of 12V DC to a 230 V AC power source. (1 voltage divider per ill. screen). Dimensions: Ø 28 x 36,5 mm.

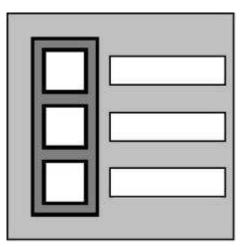




- LED-pilot light modules **48 x 48 mm** with **1-3** illuminated screens **10 x 10 mm** and adjacent title blocks (Screen printing is offered as separate service at extra charge).
- For service voltages of 12 V DC to 115 V DC and 115 V AC as well as 230 VAC.
- Available colours for the ill. screens: 
  red, 
  yellow, 
  green, 
  orange, 
  blue, 
  white, as well as bi-color red-green and red-yellow (bi-colour executions for voltages from 12 V DC to 60 DC only
- Free combination of the colours and numbers of the illuminated screens.
- Several special executions available like screw-on terminals, AC-executions of the low voltage versions etc. (see below)
- Faston connectors 2,8 x 0,8 mm (standard).
- Panel-cut-out: 45x45mm +/- 0,1

ArtNo.	Standard voltages	Description	Mounting depth	Diagram
WSF810 <sup>a)</sup> R <sup>b)</sup>	12/24/36/48/60 VDC 115 V DC 115 V AC 230 V AC	Standard execution with common 0V (-) connector	12-36 V DC: 10,4 mm 48 V DC: 12,4 mm 60 V DC: 12,4 mm 110 V DC: 18,7 mm 115/230 V AC: 21 mm	
WSF142 <sup>a)</sup> R <sup>b)</sup>	12/24/36/48/60 VDC 115 V DC	With separate connector for lamp test	12-48 V DC: 10,4 mm 60 V DC: 12,4 mm 110 V DC: 18,7 mm	
WSF143 <sup>a)</sup> R <sup>b)</sup>		Pushbutton module - <b>no</b> illuminated screens. Colour code in artno. is for push button cap	10,4 mm	0 0 F 1 0 F 2 0 F 3 0 F 4 0 F 5 0
WSF144 <sup>a)</sup> R <sup>b)</sup>	12/24/36/48/60 VDC 115 V DC	LED-cluster with 2 illuminated screens and 1 push-button instead of screen no. 3	same as WSF142	
WSF821 <sup>a)</sup> R <sup>b)</sup>	12/24/36/48/60 VDC 115 V DC	Special execution with connector for feedback to the control unit.	same asWSF142	
WSF822 <sup>a)</sup> R <sup>b)</sup>	12/24/36/48/60 VDC 115 V DC	Special execution with common Plus (+) 0V connector and separate negative (-) connectors	same as WSF142	
WSF826 <sup>a)</sup> R <sup>b)</sup>	12/24/36/48/60 VDC	Special executions with add. connectors for lamp test and feedback to control unit	12-48 V DC: 10,4 mm 60 V DC:	
WSF824 <sup>a)</sup> R <sup>b)</sup>	12/24/36/48/60 VDC 115 V DC	Special execution with individual connectors (6 connectors for 3 ill. screens)	same as WSF142	

<sup>a)</sup>: Colour(s) (from top to bottom): 0 = blank,  $1 = \blacksquare red$ ,  $2 = \blacksquare yellow$ ,  $3 = \blacksquare green$ ,  $4 = \blacksquare orange$ ,  $6 = \blacksquare blue$ ,  $7 = \square$  white <sup>b)</sup>: Supply voltage, e.g. 24VDC or 230VAC, other voltages upon request





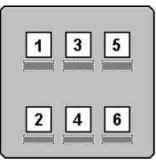
- LED pilot light modules **72 x 72 mm** with **1-3** ill. screens **15 x 15 mm** and adjacent title blocks (Screen printing is offered as separate service at extra charge).
- Available colours for the ill. screens: 
  red, 
  yellow, 
  green, 
  orange, 
  blue, 
  white
- For service voltages of 12 V DC up to 115 V DC and 115 V AC as well as 230 VAC.
- Free combination of the colours and the number of the illuminated screens
- Faston connectors 2,8 x 0,8 mm, Screw-on terminals available at extra cost.
- Panel cut-out: 67x67mm +0 / -0,5

ArtNo.	ArtNo. Standard voltage(s)		Mounting depth	Diagram
WSF815 <sup>a)</sup> R <sup>b)</sup>	12/24/36/48/60 VDC 115 V DC 115 V AC 230 V AC	Standard execution with common 0V (-) connector	12-48 V DC: 14 mm 60 V DC: 21 mm 110 V DC: 21 mm 115/230 V AC: 21 mm	
WSF145 <sup>a)</sup> R <sup>b)</sup>	12/24/36/48/60 VDC 115 V DC	Special execution with individual connectors (6 connectors for 3 ill. screens)	same as WSF815	+ 0 1 B1 B1 + 0 2 B2 B2 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0
WSF815B <sup>a)</sup> R <sup>b)</sup>	12/24/36/48/60 VDC 115 V DC 115 V AC 230 V AC	Special execution with separate connectors and individual voltages for each ill. screen (DC <i>and/or</i> AC!)	12-48 V DC: 10,4 mm 60 V DC: 110 V DC: 18,7 mm 115/230 V AC: 21 mm	

<sup>a)</sup>: Available colour(s) of the ill. screens : 0 = blank, 1 = red, 2 = yellow, 3 = green, 4 = orange, 6 = blue, 7 = white <sup>b)</sup>: Service voltage, e.g. 12VDC or 230VAC, other voltages upon request

## Accessories (for 🗒 LED pilot light clusters 48 x 48 mm and 72 x 72 mm):

ArtNo.	Description	
WSF94-240/125	Resistor module for connecting 115 V DC LED pilot light clusters to a power source of 230 V DC.	SW SKRJ SW SKRJ SW SKRJ
WSF05-400/12	Transformer module for connecting 12 V DC LED pilot light clusters to a power source of 380/400 V AC. One transformer module is needed for each illuminated screen.	







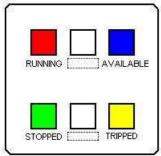
- LED-pilot light modules **48 x 48 mm** with **4-6** illuminated screens **10 x 10 mm** and adjacent title blocks (Screen printing is offered as a separate service at extra charge sequence according to the illustration).
- Available colours for the illuminated screens: 
  red, 
  yellow, 
  green, 
  orange, 
  blue, 
  white
- For service voltages of 12 V DC up to 60 V DC and 115 V AC as well as 230 VAC.
- Free combination of the colours and the number of the illuminated screens.
- Faston connectors 2,8 x 0,8 mm.
- Panel cut-out: 45x45mm +/- 0,1

ArtNo.	Standard voltages	Description	Mounting depth	
WSF910A <sup>a)</sup> R <sup>b)</sup> 12/24/36/48/60 V DC		LED pilot light module (cluster) with 4 to 6 illuminated screens 10x10 mm with common 0V (-) connector for service voltages from 12 V DC up to 60 V DC.	12-36 V DC: 10,4 mm 48 V DC: 12,4 mm 60 V DC: 12,7 mm 115/230 V AC: 21 mm	
WSF910B <sup>a)</sup> R <sup>b)</sup>	12/24/36/48/60 V DC	LED pilot light module (cluster) with 4 to 6 illuminated screens 10x10 mm with separate connectors for each ill. screen for service voltages from 12 V DC up to 60 V DC.	12-36 V DC: 10,4 mm 48 V DC: 12,4 mm 60 V DC: 12,4 mm 115/230 V AC: 21 mm	
WSF911 <sup>a)</sup> R <sup>b)</sup>	115 & 230 V AC	LED pilot light module (cluster) with 4 to 6 illuminated screens 10x10 mm with common 0V connector for service voltages of 115 V AC or to 230 V AC.	115 V AC: 41 mm 230 V AC: 41 mm	

<sup>a)</sup>: Available colour(s) of the ill. screens: 0 = blank, 1 = ■ red, 2 = ■ yellow, 3 = ■ green, 4 = ■ orange, 6 = ■ blue, 7 = □ white Sequence of the ill. screens according to the illustration on top of this page

<sup>b)</sup>: Voltage, e.g. 12VDC or 230VAC, other voltages upon request

Ordering example: WSF910A 130062 R24dc = LED pilot light module 48x48 mm with common 0V connector and 6 illuminated screens 10 x 10 mm (of which 4 are used), red / green / blank / blank / blue / yellow, 24 V DC.



Lettering according to information supplied by customer (max. 7 letters), screen printing will be charged separately.





		ArtNo.	Dimensio Front frame	ons (mm) Illumin. screen	Panel cut-out	Mount. depth	Available colours of the ill. screens	Standard voltage	Connect.	
ated push-buttons & switches		WSF10-0S. <sup>a)</sup> R <sup>b)</sup> dc WSF10-0T. <sup>a)</sup> R <sup>b)</sup> dc	18x24	10x10	16x22 +/- 0,1	12,9	<ul> <li>1 = red</li> <li>2 = yellow</li> <li>3 = green</li> <li>4 = orange</li> <li>6 = blue</li> <li>7 = white</li> <li>8 = red/ green<sup>†</sup></li> <li>9 = red/ yellow<sup>†</sup></li> </ul>	s upon request		
	non-illuminated!	WSF15-00S WSF15-00T	24x24		22x22 +/- 0,1	15.9	<ul> <li>1 = red</li> <li>2 = yellow</li> <li>3 = green</li> <li>4 = orange</li> </ul>	12 V DC and 24 V DC – other voltages upon request	faston 2,8 x 0,5 mm	
LED illuminated		WSF10-0S. <sup>a)</sup> R <sup>b)</sup> dc WSF10-0T. <sup>a)</sup> R <sup>b)</sup> dc	24x48	1 ill. screen 15x15mm, 1 push- button (latching or non- latching)	22x46 +/- 0,1	12.9	<ul> <li>1 = red</li> <li>2 = yellow</li> <li>3 = green</li> <li>4 = orange</li> <li>6 = blue</li> <li>7 = white</li> </ul>	12 V DC and		

<sup>a)</sup>: Available colours(s): 1 = ■ red, 2 = \_ yellow, 3 = ■ green, 4 = ■ orange, 6 = ■ blue, 7 = □ white Colours for caps of push-buttons: white, green, red, blue, yellow and orange. Please specify when ordering. If no specification is given, push-buttons with white caps will be supplied.

<sup>b)</sup>: Voltage: 12VDC or 24VDC, other voltages upon request S=switch (latching) / T=push-button (non latching), to be completed within the art.-no.

Special executions upon request.