

**Room temperature sensors and measuring transducers**  
**in-wall, panel switch programme,**  
**general**

A room temperature sensor or measuring transducer **THERMASGARD® FSTF** is used for air temperature measurement or setpoint adjustment, for presence detection or as room control and operating panel with temperature sensor, push-buttons, potentiometers, status indicators (LEDs), in residential rooms, in working, office and business facilities. In-wall installation in combination with high-quality panel switch programmes, preferably with products by Gira, Busch-Jaeger (by means of in-wall adapter), Berker, Merten, Jung, Siemens. These room temperature sensors can be installed individually or in combination with light switches, socket outlets, or other in-wall devices.

**TECHNICAL DATA**

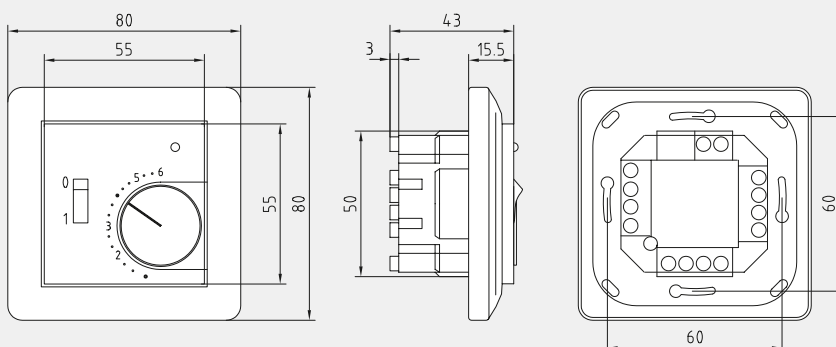
Measuring ranges:	-30...+60 °C (passive sensors) and 0...+50 °C (for U variant)
Sensor / output:	see table, assembled on board, passive or active
Range suppression:	in the button
Testing current:	approx. 1 mA
Potentiometers:	standard 1 kΩ, max. 0.1 W (other ratings optional on request, e. g. 100 Ω, 2.5 kΩ, 5 kΩ, 10 kΩ optional 0-10 V linear)
Turn switches:	max. 24 V AC / DC, max. 130 mA, max. 5 steps (0, Auto, I, II, III)
Rocker switch:	max. 24 V AC / DC, max. 130 mA
Push-buttons:	normally open contact, max. 35 V DC / 10 mA
LEDs:	max. 24 V DC (optional max. 24 V AC), standard green (red, yellow or two-colour optional)
Installation:	in in-wall flush box Ø 55 mm
Electrical connection:	via plug terminals, 0.14 - 1.5 mm <sup>2</sup> , on safety extra-low voltage only, max. 42 V AC, 60 V DC
Humidity:	max. 90% r.H., non-precipitating air
Protection class:	III (according to EN 60730)
Protection type:	IP 20 (according to EN 60529)
Measuring transducer:	power supply 24 V DC, range 0...+50 °C (other ranges optional)
Output:	0 - 10 V

**SWITCH PROGRAMMES**

Manufacturer:	GIRA System 55 (other switch programmes, manufacturers, colours and prices upon request)
Enclosure:	plastic, standard colour pure white, glossy (similar to RAL 9010) (other colours are possible on request with colour variants depending on the respective light switch programme)

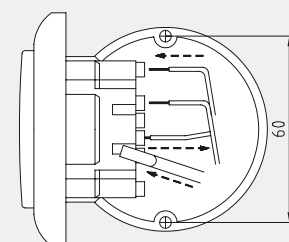
Dimensional drawing

FSTF -xx



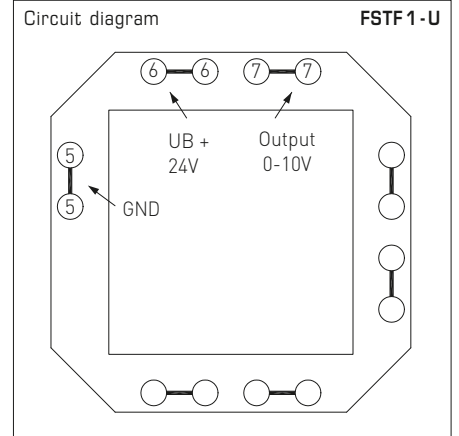
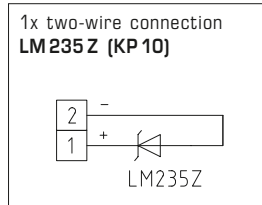
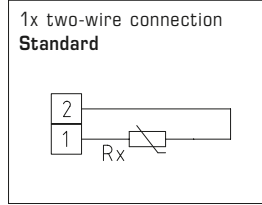
Installation scheme

FSTF -xx



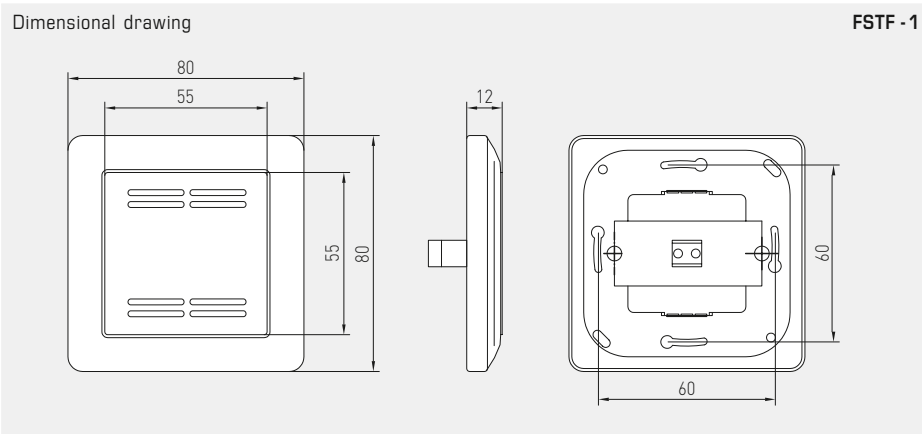


**FSTF 1**  
Standard version  
with sensor



**THERMASGARD® FSTF 1 – Room temperature sensors and measuring transducers**

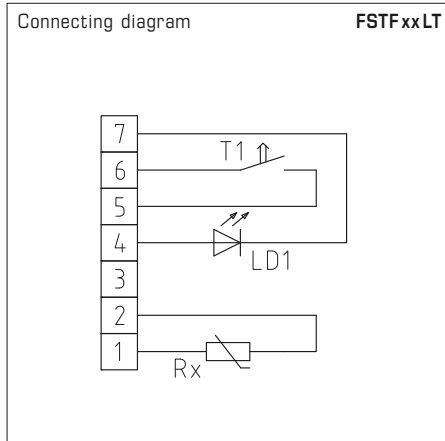
Type / WG01	Sensor / Output	Item No.	Price
<b>FSTF1</b>	<b>passive</b>	<b>IP20</b> (-30...+60 °C)	
FSTF1 PT100	Pt100 (according to DIN EN 60751, class B)	1101-5020-1000-162	<b>42,84 €</b>
FSTF1 PT1000	Pt1000 (according to DIN EN 60751, class B)	1101-5020-5000-162	<b>42,84 €</b>
FSTF1 Ni1000	Ni1000 (according to DIN EN 43760, class B, TCR = 6180 ppm/K)	1101-5020-9000-162	<b>44,13 €</b>
FSTF1 Ni1000TK5000	Ni1000 TK5000 (TCR = 5000 ppm/K), LG-Ni1000	1101-5021-0000-162	<b>46,17 €</b>
FSTF1 LM235Z	LM235Z (TCR = 10 mV/K; 2.73 V at 0 °C), KP10	1101-5022-1000-162	<b>42,96 €</b>
FSTF1 NTC1,8K	NTC 1.8K	1101-5021-2000-162	<b>42,43 €</b>
FSTF1 NTC10K	NTC 10K	1101-5021-5000-162	<b>41,99 €</b>
FSTF1 NTC10K PRECON	NTC 10K Precon	1101-5021-9000-162	<b>41,99 €</b>
FSTF1 NTC20K	NTC 20K	1101-5021-6000-162	<b>41,99 €</b>
FSTF1 KTY81-210	KTY 81-210	1101-5022-0000-162	<b>41,99 €</b>
<b>FSTM-U</b>	<b>passive / active</b>	<b>IP20</b> (0...+50 °C)	
FSTM-U PT1000	Pt1000 / 0-10V	1101-5120-5000-484	<b>93,96 €</b>



Room temperature sensors and measuring transducers  
in-wall, panel switch programme,  
different versions



**FSTF xx LT**  
Version with sensor,  
LED (green), and push-button  
(max. 24 V DC, max. 10 mA)

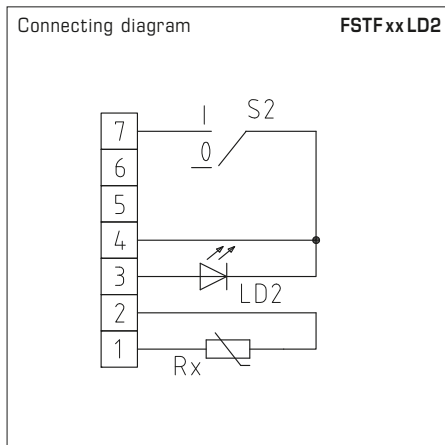


**THERMASGARD® FSTF xx LT – Room temperature sensors**

Type / WG01	Sensor / Output	Item No.	Price
<b>FSTF xx LT</b>	<b>passive</b>	<b>IP 20 (-30...+60 °C)</b>	
FSTF PT100 L T	Pt100 (according to DIN EN 60 751, class B)	1101-5020-1593-350	<b>56,38 €</b>
FSTF PT1000 L T	Pt1000 (according to DIN EN 60 751, class B)	1101-5020-5593-350	<b>56,38 €</b>
FSTF Ni1000 L T	Ni1000 (according to DIN EN 43 760, class B, TCR = 6180 ppm / K)	1101-5020-9593-350	<b>57,98 €</b>
FSTF Ni1000TK L T	Ni1000 TK5000 (TCR = 5000 ppm / K), LG - Ni1000	1101-5021-0593-350	<b>57,98 €</b>
FSTF LM235Z L T	LM235Z (TCR = 10 mV / K; 2.73 V at 0 °C), KP10	1101-5022-1593-350	<b>56,91 €</b>
FSTF NTC1,8K L T	NTC 1.8K	1101-5021-2593-350	<b>56,38 €</b>
FSTF NTC10K L T	NTC 10K	1101-5021-5593-350	<b>55,84 €</b>
FSTF NTC10KPRE L T	NTC 10K Precon	1101-5021-9593-350	<b>55,84 €</b>
FSTF NTC20K L T	NTC 20K	1101-5021-6593-350	<b>55,84 €</b>
FSTF KTY81-210 L T	KTY 81-210	1101-5022-0593-350	<b>55,84 €</b>

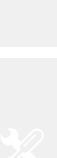
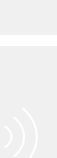
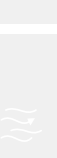


**FSTF xx LD2**  
Version with sensor,  
LED (green), and turn switch (2-step)  
(max. 24 V AC / DC, max. 130 mA)

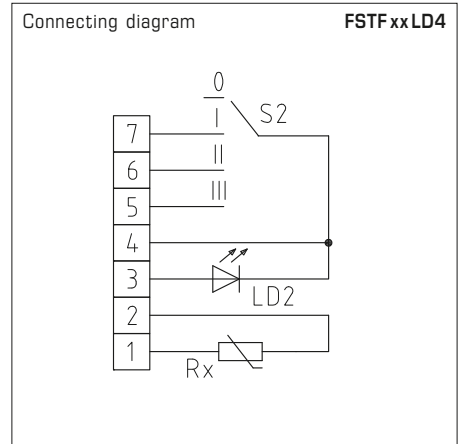


**THERMASGARD® FSTF xx LD2 – Room temperature sensors**

Type / WG01	Sensor / Output	Item No.	Price
<b>FSTF xx LD2</b>	<b>passive</b>	<b>IP 20 (-30...+60 °C)</b>	
FSTF PT100 D2 L	Pt100 (according to DIN EN 60 751, class B)	1101-5020-1631-351	<b>64,53 €</b>
FSTF PT1000 D2 L	Pt1000 (according to DIN EN 60 751, class B)	1101-5020-5631-351	<b>64,53 €</b>
FSTF Ni1000 D2 L	Ni1000 (according to DIN EN 43 760, class B, TCR = 6180 ppm / K)	1101-5020-9631-351	<b>66,57 €</b>
FSTF Ni1000TK D2 L	Ni1000 TK5000 (TCR = 5000 ppm / K), LG - Ni1000	1101-5021-0631-351	<b>66,57 €</b>
FSTF LM235Z D2 L	LM235Z (TCR = 10 mV / K; 2.73 V at 0 °C), KP10	1101-5022-1631-351	<b>64,97 €</b>
FSTF NTC1,8K D2 L	NTC 1.8K	1101-5021-2631-351	<b>64,97 €</b>
FSTF NTC10K D2 L	NTC 10K	1101-5021-5631-351	<b>64,43 €</b>
FSTF NTC10KPRE D2 L	NTC 10K Precon	1101-5021-9631-351	<b>64,43 €</b>
FSTF NTC20K D2 L	NTC 20K	1101-5021-6631-351	<b>64,43 €</b>
FSTF KTY81-210 D2 L	KTY 81-210	1101-5022-0631-351	<b>64,43 €</b>



**FSTFxxLD4**  
Version with sensor,  
LED (green) and turn switch (4-step)  
(max. 24 V AC/DC, max. 130 mA)

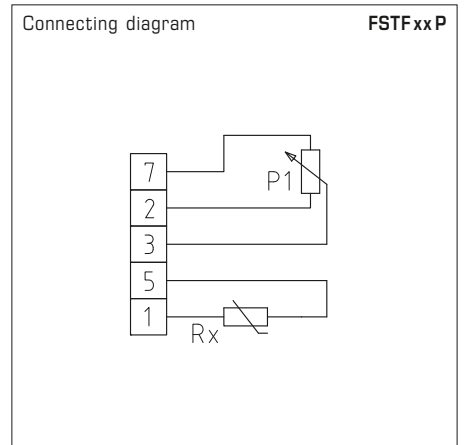


**THERMASGARD® FSTFxxLD4 – Room temperature sensors**

Type / WG01	Sensor / Output	Item No.	Price
<b>FSTFxxLD4</b>	<b>passive</b>	<b>IP20 (-30...+60 °C)</b>	
FSTF PT100 D4 L	Pt100 (according to DIN EN 60751, class B)	1101-5020-1643-352	<b>67,12 €</b>
FSTF PT1000 D4 L	Pt1000 (according to DIN EN 60751, class B)	1101-5020-5643-352	<b>67,12 €</b>
FSTF Ni1000 D4 L	Ni1000 (according to DIN EN 43760, class B, TCR = 6180 ppm/K)	1101-5020-9643-352	<b>68,72 €</b>
FSTF Ni1000TK D4 L	Ni1000 TK5000 (TCR = 5000 ppm/K), LG-Ni1000	1101-5021-0643-352	<b>68,72 €</b>
FSTF LM235Z D4 L	LM235Z (TCR = 10 mV/K; 2.73 V at 0 °C), KP10	1101-5022-1643-352	<b>67,65 €</b>
FSTF NTC1,8K D4 L	NTC 1.8K	1101-5021-2643-352	<b>67,12 €</b>
FSTF NTC10K D4 L	NTC 10K	1101-5021-5643-352	<b>66,57 €</b>
FSTF NTC10KPRE D4 L	NTC 10K Precon	1101-5021-9643-352	<b>66,57 €</b>
FSTF NTC20K D4 L	NTC 20K	1101-5021-6643-352	<b>66,57 €</b>
FSTF KTY81-210 D4 L	KTY 81-210	1101-5022-0643-352	<b>66,57 €</b>



**FSTFxxP**  
Version with sensor  
and potentiometer  
(1 kOhm, max. 0.1 W)



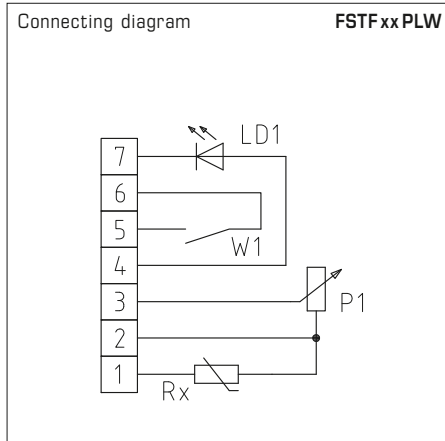
**THERMASGARD® FSTFxxP – Room temperature sensors**

Type / WG01	Sensor / Output	Item No.	Price
<b>FSTFxxP</b>	<b>passive</b>	<b>IP20 (-30...+60 °C)</b>	
FSTF PT100 P	Pt100 (according to DIN EN 60751, class B)	1101-5020-1001-282	<b>69,26 €</b>
FSTF PT1000 P	Pt1000 (according to DIN EN 60751, class B)	1101-5020-5001-162	<b>69,26 €</b>
FSTF Ni1000 P	Ni1000 (according to DIN EN 43760, class B, TCR = 6180 ppm/K)	1101-5020-9001-162	<b>69,91 €</b>
FSTF NiTK P	Ni1000 TK5000 (TCR = 5000 ppm/K), LG-Ni1000	1101-5021-0001-162	<b>72,27 €</b>
FSTF LM235Z P	LM235Z (TCR = 10 mV/K; 2.73 V at 0 °C), KP10	1101-5022-1001-162	<b>66,04 €</b>
FSTF NTC1,8K P	NTC 1.8K	1101-5021-2001-162	<b>67,12 €</b>
FSTF NTC10K P	NTC 10K	1101-5021-5001-162	<b>66,04 €</b>
FSTF NTC10KPRECON P	NTC 10K Precon	1101-5021-9001-162	<b>66,04 €</b>
FSTF NTC20K P	NTC 20K	1101-5021-6001-162	<b>66,04 €</b>
FSTF KTY81-210 P	KTY 81-210	1101-5022-0001-162	<b>66,04 €</b>

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different versions



**FSTFxxPLW**  
Version with sensor,  
potentiometer (1 kOhm, max. 0.1 W),  
LED (green), and rocker switch  
(max. 24 V AC / DC, max. 130 mA)

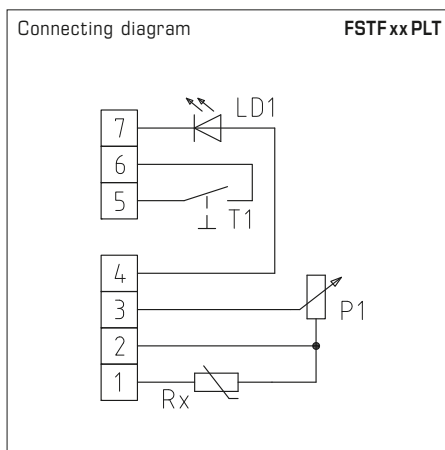


**THERMASGARD® FSTFxxPLW – Room temperature sensors**

Type / WG01	Sensor / Output	Item No.	Price
<b>FSTFxxPLW</b>	<b>passive</b>	<b>IP 20 (-30...+60 °C)</b>	
FSTF PT100 P L W	Pt100 (according to DIN EN 60 751, class B)	1101-5020-1655-353	<b>87,89 €</b>
FSTF PT1000 P L W	Pt1000 (according to DIN EN 60 751, class B)	1101-5020-5655-353	<b>90,09 €</b>
FSTF Ni1000 P L W	Ni1000 (according to DIN EN 43 760, class B, TCR = 6180 ppm / K)	1101-5020-9655-353	<b>90,62 €</b>
FSTF Ni1000TK P L W	Ni1000 TK5000 (TCR = 5000 ppm / K), LG-Ni1000	1101-5021-0655-353	<b>92,82 €</b>
FSTF LM235Z P L W	LM235Z (TCR = 10 mV / K; 2.73 V at 0 °C), KP10	1101-5022-1655-353	<b>88,43 €</b>
FSTF NTC1,8K P L W	NTC 1.8K	1101-5021-2655-353	<b>93,26 €</b>
FSTF NTC10K P L W	NTC 10K	1101-5021-5655-353	<b>87,89 €</b>
FSTF NTC10KPRE P L W	NTC 10K Precon	1101-5021-9655-353	<b>87,89 €</b>
FSTF NTC20K P L W	NTC 20K	1101-5021-6655-353	<b>87,89 €</b>
FSTF KTY81-210 P L W	KTY 81-210	1101-5022-0655-353	<b>87,89 €</b>



**FSTFxxPLT**  
Version with sensor,  
potentiometer (1 kOhm, max. 0.1 W),  
LED (green), and push-button  
(max. 24 V DC, max. 10 mA)

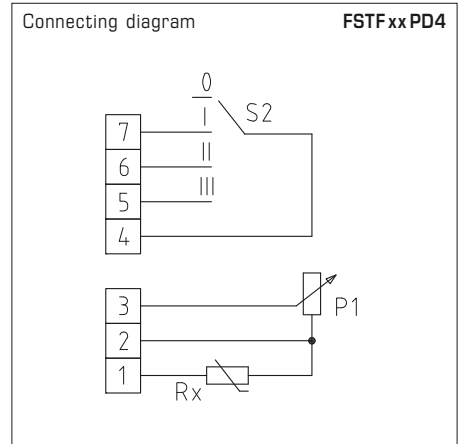


**THERMASGARD® FSTFxxPLT – Room temperature sensors**

Type / WG01	Sensor / Output	Item No.	Price
<b>FSTFxxPLT</b>	<b>passive</b>	<b>IP 20 (-30...+60 °C)</b>	
FSTF PT100 P L T	Pt100 (according to DIN EN 60 751, class B)	1101-5020-1663-162	<b>87,83 €</b>
FSTF PT1000 P L T	Pt1000 (according to DIN EN 60 751, class B)	1101-5020-5663-162	<b>90,04 €</b>
FSTF Ni1000 P L T	Ni1000 (according to DIN EN 43 760, class B, TCR = 6180 ppm / K)	1101-5020-9663-350	<b>90,57 €</b>
FSTF Ni1000TK P L T	Ni1000 TK5000 (TCR = 5000 ppm / K), LG-Ni1000	1101-5021-0663-350	<b>92,77 €</b>
FSTF LM235Z P L T	LM235Z (TCR = 10 mV / K; 2.73 V at 0 °C), KP10	1101-5022-1663-350	<b>88,37 €</b>
FSTF NTC1,8K P L T	NTC 1.8K	1101-5021-2663-350	<b>93,20 €</b>
FSTF NTC10K P L T	NTC 10K	1101-5021-5663-350	<b>87,83 €</b>
FSTF NTC10KPRE P L T	NTC 10K Precon	1101-5021-9663-350	<b>87,83 €</b>
FSTF NTC20K P L T	NTC 20K	1101-5021-6663-350	<b>87,83 €</b>
FSTF KTY81-210 P L T	KTY 81-210	1101-5022-0663-350	<b>87,83 €</b>



**FSTFxxPD4**  
Version with sensor,  
potentiometer (1 kOhm, max. 0.1 W)  
and turn switch  
(max. 24 V AC / DC, max. 130 mA)

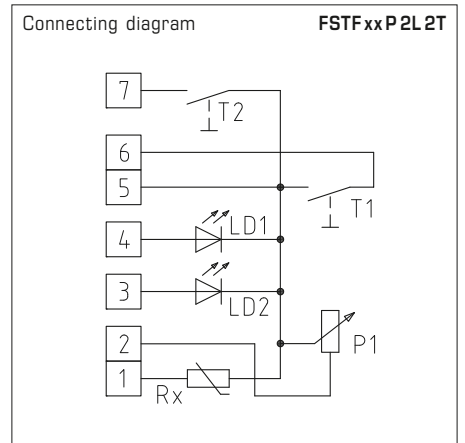


THERMASGARD® FSTF xx PD4 – Room temperature sensors

Type / WG01	Sensor / Output	Item No.	Price
<b>FSTF xx PD4</b>	<b>passive</b>	<b>IP20 (-30...+60 °C)</b>	
FSTF PT100 P D4	Pt100 (according to DIN EN 60751, class B)	1101-5020-1007-354	<b>90,58 €</b>
FSTF PT1000 P D4	Pt1000 (according to DIN EN 60751, class B)	1101-5020-5007-354	<b>92,78 €</b>
FSTF Ni1000 P D4	Ni1000 (according to DIN EN 43760, class B, TCR = 6180 ppm/K)	1101-5020-9007-354	<b>93,33 €</b>
FSTF Ni1000TK P D4	Ni1000 TK5000 (TCR = 5000 ppm/K), LG-Ni1000	1101-5021-0007-354	<b>95,53 €</b>
FSTF LM235Z P D4	LM235Z (TCR = 10 mV/K; 2.73 V at 0 °C), KP10	1101-5022-1007-354	<b>90,58 €</b>
FSTF NTC1,8K P D4	NTC 1.8K	1101-5021-2007-354	<b>92,21 €</b>
FSTF NTC10K P D4	NTC 10K	1101-5021-5007-354	<b>90,04 €</b>
FSTF NTC10KPRE P D4	NTC 10K Precon	1101-5021-9007-354	<b>90,04 €</b>
FSTF NTC20K P D4	NTC 20K	1101-5021-6007-354	<b>90,04 €</b>
FSTF KTY81-210 P D4	KTY 81-210	1101-5022-0007-354	<b>90,04 €</b>



**FSTF xx P2L2T**  
Version with sensor,  
potentiometer (1 kOhm, max. 0.1 W),  
2 LEDs (green, red), and 2 push-buttons  
(max. 24 V DC, max. 10 mA)



THERMASGARD® FSTF xx P2L2T – Room temperature sensors

Type / WG01	Sensor / Output	Item No.	Price
<b>FSTF xx P2L2T</b>	<b>passive</b>	<b>IP20 (-30...+60 °C)</b>	
FSTF PT100 P 2L 2T	Pt100 (according to DIN EN 60751, class B)	1101-5020-1672-256	<b>92,77 €</b>
FSTF PT1000 P 2L 2T	Pt1000 (according to DIN EN 60751, class B)	1101-5020-5672-256	<b>95,78 €</b>
FSTF Ni1000 P 2L 2T	Ni1000 (according to DIN EN 43760, class B, TCR = 6180 ppm/K)	1101-5020-9672-256	<b>98,89 €</b>
FSTF Ni1000TK P2L2T	Ni1000 TK5000 (TCR = 5000 ppm/K), LG-Ni1000	1101-5021-0672-256	<b>100,72 €</b>
FSTF LM235Z P 2L 2T	LM235Z (TCR = 10 mV/K; 2.73 V at 0 °C), KP10	1101-5022-1672-256	<b>94,92 €</b>
FSTF NTC1,8K P 2L 2T	NTC 1.8K	1101-5021-2672-256	<b>97,94 €</b>
FSTF NTC10K P 2L 2T	NTC 10K	1101-5021-5672-256	<b>93,20 €</b>
FSTF NTC10KPRE P2L2T	NTC 10K Precon	1101-5021-9672-256	<b>93,20 €</b>
FSTF NTC20K P 2L 2T	NTC 20K	1101-5021-6672-256	<b>93,20 €</b>
FSTF KTY81-210 P2L2T	KTY 81-210	1101-5022-0672-256	<b>93,20 €</b>