

- Input signal from model NM  
 0 - 5 V<sub>DC</sub>,  
 0 - 10 V<sub>DC</sub>,  
 0/4 - 20 mA, 0 - 4 mA
- Output signal  
 0 - 10 V<sub>DC</sub>, 0/4 - 20 mA
- 0 - 1 mA output  
 for additional display
- fully adjustable
- Supply voltage  
 24 V<sub>DC</sub>, 24 V<sub>AC</sub>,  
 115 V<sub>AC</sub>, 230 V<sub>AC</sub>
- Protection IP 40



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KOBOLD Messring GmbH  
 Nordring 22-24  
 D-65719 Hofheim/Ts.  
 ☎ +49(0)6192 299-0  
 Fax +49(0)6192 23398  
 E-Mail: info.de@kobold.com  
 Internet: www.kobold.com

**Model:**

DFA  
 DFM  
 DST



**Description**

The display and monitoring device model DFA is a universal device for evaluating a transmitter signal. The simple design of the instruments allows fast and secure installation.

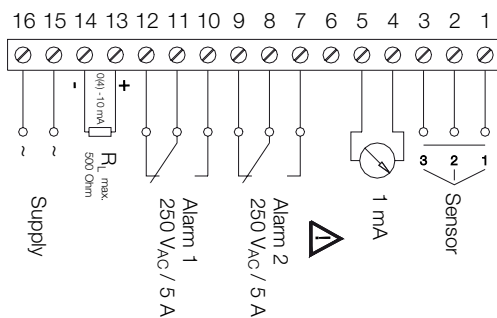
The instruments comprise the following components:

- Analogue indicator 0-100%
- Two adjustable limit contacts
- 0-1 mA output for additional analogue indicator
- 0-20 mA, 4-20 mA or 0-10 V<sub>DC</sub> output signal

The following transmitters can be connected to the instruments:

- Level transmitter model NM (0-5 kΩ; 0-40 kΩ)
- Potentiometer (0-1 kΩ)
- Standard signals 0-5 V<sub>DC</sub>, 0-10 V<sub>DC</sub>, 0-4 mA, 0-20 mA, 4-20 mA

**Wiring diagram**



PIN	ZA, NM	0(4)-20 mA 0-10 V
1	1 (yellow)	-
2	2 (red)	GND
3	3 (black)	SIGN
6	-	-

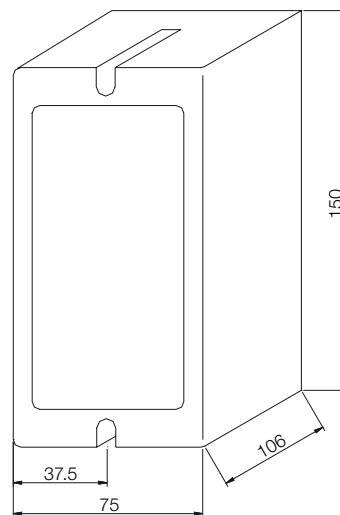
**Important!**

During installation make sure that the electrical wiring between remote transmitter and electronics transducer is carried out exactly as shown in the wiring diagram. Should the connection be incorrect the transmitter may be destroyed during initial operation. The warranty is then null and void.

**Technical Details**

- Supply voltage: 24 V<sub>DC</sub>; 24 V<sub>AC</sub>; 115 V<sub>AC</sub>; 230 V<sub>AC</sub> ±10%, 50-60 Hz
- Power input: approximately 3 VA
- Output: 0 or 4-20 mA (load 0-500 Ω)  
0-10 V<sub>DC</sub> (R ≥ 500 Ω)
- Accuracy: ±0.3% of full scale value
- Integral indicating instrument: 0-100%, category 2.5
- Relay: Two limit value relays, changeover contact  
max. 250 V<sub>AC</sub>, 5 A, 1300 VA;  
finely adjustable switch point  
indication with LEDs  
two keys for short-circuiting the display when adjusting the contacts
- Housing: plastic pluggable
- Dimensions: 150 x 75 x 106 mm
- Protection: IP 40
- Ambient temperature: -20°C to +60°C
- Weight: 600 g

**Dimensions**



**Order Details (Example: DFA-24GZA 0A)**

Input signal	Order no.				Output signal
	Supply 24 V <sub>DC</sub>	Supply 24 V <sub>AC</sub>	Supply 115 V <sub>AC</sub>	Supply 230 V <sub>AC</sub>	
Potentiometer (0 - 1 kΩ)	DFA-24GZA...	DFA-24WZA...	DFA-11WZA...	DFA-23WZA...	...0A= 0 - 20 mA ...4A= 4 - 20 mA ...V = 0 - 10 V <sub>DC</sub>
Level transducer NM-...	DFA-24GNM...	DFA-24WNM...	DFA-11WNM...	DFA-23WNM...	
Standard signal 0 - 20 mA	DFA-24G0A...	DFA-24W0A...	DFA-11W0A...	DFA-23W0A...	
Standard signal 4 - 20 mA	DFA-24G4A...	DFA-24W4A...	DFA-11W4A...	DFA-23W4A...	
Standard signal 0 - 10 V <sub>DC</sub>	DFA-24GV...	DFA-24WV...	DFA-11WV...	DFA-23WV...	

N2

**Description**

The universal transmitters of model DFM are universal devices for evaluating a transmitter signal. The simple design of the instruments allows fast and secure installation.

The instruments comprise the following components:

- 0-1 mA output for additional analogue indicator
- 0-20 mA, 4-20 mA or 0-10 V<sub>DC</sub> output signal

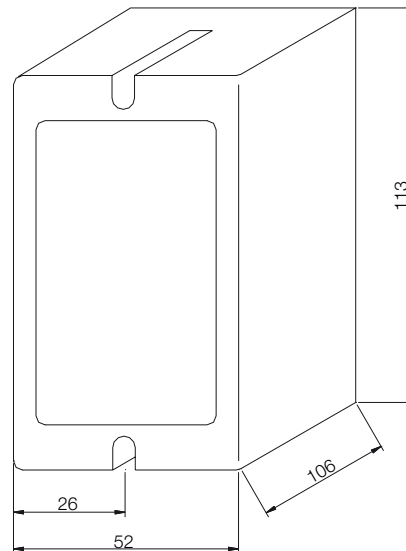
The following transmitters can be connected to the instruments:

- Temperature sensors Pt 100 (0 to +100°C, -20 to +150°C or 0 to +200°C)
- Level transmitter model NM (0-5 kΩ; 0-40 kΩ)
- Potentiometer (0-1 kΩ)
- Standard signals 0-5 V<sub>DC</sub>, 0-10 V<sub>DC</sub>, 0-4 mA, 0-20 mA, 4-20 mA

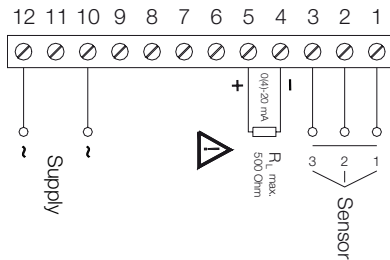
**Technical Details**

- Supply voltage: 24 V<sub>DC</sub>; 24 V<sub>AC</sub>; 115 V<sub>AC</sub>; 230 V<sub>AC</sub> ±10%, 50-60 Hz
- Power input: approximately 3 VA
- Output: 0 or 4-20 mA (load 0-500 Ω)  
0-10 V<sub>DC</sub> (R ≥ 500 Ω)
- Accuracy: ±0.3% of full scale value
- Housing: plastic pluggable
- Dimensions: 132 x 52 x 106 mm
- Protection: IP 40
- Ambient temperature: -20°C to +60°C
- Weight: 380 g

**Dimensions**



**Wiring diagram**



PIN	ZA, NM	0(4)-20 mA 0-10 V	Pt100 2-wire	Pt100 4-wire
1	1 (yellow)	-	-	SIGN (+)
2	2 (red)	GND	SIGN (-)	SIGN (-)
3	3 (black)	SIGN	SIGN (+)	SIGN (+)
6	-	-	-	SIGN (-)

**Important!**

During installation make sure that the electrical wiring between remote transmitter and electronics transducer is carried out exactly as shown in the

wiring diagram. Should the connection be incorrect the transmitter may be destroyed during initial operation. The warranty is then null and void.

**Order Details (Example: DFM-24GZA 0A)**

Input signal	Order no.				Output signal
	Supply 24 V <sub>DC</sub>	Supply 24 V <sub>AC</sub>	Supply 115 V <sub>AC</sub>	Supply 230 V <sub>AC</sub>	
Potentiometer (0 - 1 kΩ)	DFM-24GZA...	DFM-24WZA...	DFM-11WZA...	DFM-23WZA...	...0A= 0 - 20 mA ...4A= 4 - 20 mA ...V = 0 - 10 V <sub>DC</sub>
Level transducer NM-...	DFM-24GNM...	DFM-24WNM...	DFM-11WNM...	DFM-23WNM...	
Pt 100 (0 to +100°C), 2-wire	DFM-24GP1...	DFM-24WP1...	DFM-11WP1...	DFM-23WP1...	
Pt 100 (-20 to +150°C), 2-wire	DFM-24GP2...	DFM-24WP2...	DFM-11WP2...	DFM-23WP2...	
Pt 100 (0 to +200°C), 2-wire	DFM-24GP3...	DFM-24WP3...	DFM-11WP3...	DFM-23WP3...	
Pt 100 (0 to +100°C), 4-wire	DFM-24GP4...	DFM-24WP4...	DFM-11WP4...	DFM-23WP4...	
Pt 100 (-20 to +150°C), 4-wire	DFM-24GP5...	DFM-24WP5...	DFM-11WP5...	DFM-23WP5...	
Pt 100 (0 to +200°C), 4-wire	DFM-24GP6...	DFM-24WP6...	DFM-11WP6...	DFM-23WP6...	
Standard signal 0 - 20 mA	DFM-24G0A...	DFM-24W0A...	DFM-11W0A...	DFM-23W0A...	
Standard signal 4 - 20 mA	DFM-24G4A...	DFM-24W4A...	DFM-11W4A...	DFM-23W4A...	
Standard signal 0 - 10 V <sub>DC</sub>	DFM-24GV...	DFM-24WV...	DFM-11WV...	DFM-23WV...	

**Description**

Transmitters of model DST are universal devices for evaluating a transmitter signal. The simple design of the instruments allows fast and secure installation.

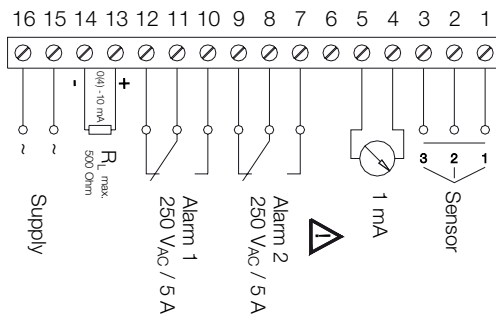
The instruments comprise the following components:

- Two adjustable limit contacts
- 0-1 mA output for additional analogue indication
- 0-20 mA, 4-20 mA or 0-10 V<sub>DC</sub> output signal

The following transmitters can be connected to the instruments:

- Level transmitter model NM (0-5 kΩ; 0-40 kΩ)
- Potentiometer (0-1 kΩ)
- Standard signals 0-5 V<sub>DC</sub>, 0-10 V<sub>DC</sub>, 0-4 mA, 0-20 mA, 4-20 mA

**Wiring diagram**



PIN	ZA, NM	0(4)-20 mA 0-10 V
1	1 (yellow)	-
2	2 (red)	GND
3	3 (black)	SIGN
6	-	-

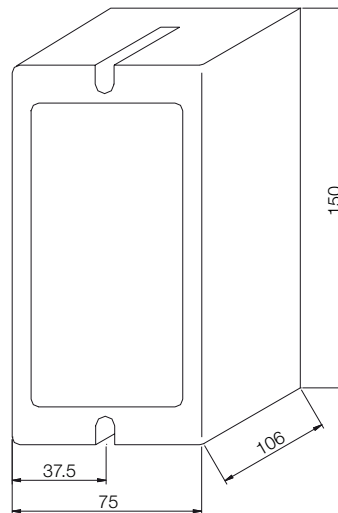
**Important!**

During installation make sure that the electrical wiring between remote transmitter and electronics transducer is carried out exactly as shown in the wiring diagram. Should the connection be incorrect the transmitter may be destroyed during initial operation. The warranty is then null and void.

**Technical Details**

- Power supply: 24 V<sub>DC</sub>; 24 V<sub>AC</sub>; 115 V<sub>AC</sub>; 230 V<sub>AC</sub> ±10%, 50-60 Hz
- Power input: approximately 3 VA
- Output: 0 or 4..20 mA (load 0-500 Ω)  
0-10 V<sub>DC</sub> (R ≥ 500 Ω)
- Accuracy: ±0.3% of full scale value
- Output: 0-1 mA
- Relay: Two limit value relays, changeover contact max. 250 V<sub>AC</sub>, 5 A, 1300 VA finely adjustable with potentiometer, switch point indication with LEDs
- Housing: plastic pluggable
- Dimensions: 150 x 75 x 106 mm
- Protection: IP 40
- Ambient temperature: -20°C to +60°C
- Weight: 600 g

**Dimensions**



**Order Details** (Example: DST-24GZA 0A)

Input signal	Order no.				Output signal
	Supply 24 V <sub>DC</sub>	Supply 24 V <sub>AC</sub>	Supply 115 V <sub>AC</sub>	Supply 230 V <sub>AC</sub>	
Potentiometer (0 - 1 kΩ)	DST-24GZA...	DST-24WZA...	DST-11WZA...	DST-23WZA...	...0A= 0 - 20 mA ...4A= 4 - 20 mA ...V = 0 - 10 V <sub>DC</sub>
Level transducer NM-...	DST-24GNM...	DST-24WNM...	DST-11WNM...	DST-23WNM...	
Standard signal 0 - 20 mA	DST-24G0A...	DST-24W0A...	DST-11W0A...	DST-23W0A...	
Standard signal 4 - 20 mA	DST-24G4A...	DST-24W4A...	DST-11W4A...	DST-23W4A...	
Standard signal 0 - 10 V <sub>DC</sub>	DST-24GV...	DST-24WV...	DST-11WV...	DST-23WV...	

