

Flow, Level and Temperature Control and Indicating Devices



measuring

monitoring

analysing



- Input signal from type NM, ZA, 0–5 VDC, 0–10 VDC, 0/4–20 mA, 0–4 mA
- Output signal 0-10 VDC, 0/4-20 mA
- 0–1 mA output for additional display
- fully adjustable
- Supply voltage 24 VDC, 24 VAC, 115 VAC, 230 VAC
- Protection IP 40





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.

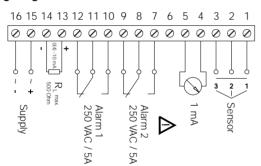
The instruments comprise the following components:

- One 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 VDC output signal

The following transmitters can be connected to the instruments:

- Level transmitter model NM (0-5 kOhm; 0-40 kOhm)
- potentiometer (0-1 kOhm)
- Standard signals 0–5 VDC, 0–10 VDC, 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 VDC; 24 VAC; 115 VAC;

230 VAC ±10%, 50-60 Hz

Power input: approximately 3 VA

Output: 0 or 4–20 mA (load 0–500 Ohm)

 $0-10 \text{ VDC } (R \ge 500 \text{ Ohm})$

Accuracy: $\pm 0.3\%$ of full scale value

Integral indicating

instrument: 0–100%, category 2.5
Relay: Two limit value relays, changeover contact

max. 250 VAC, 5 A, 1300 VA; finely adjustable switch point

indication with LEDs

two keys for short-circuiting the display when adjusting the contacts

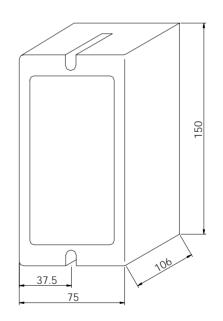
Housing: plastic pluggable
Dimensions: 150 x 75 x 106 mm

Protection: IP 40

Ambient temperature: -20°C to +60°C

Weight: 600 g

Dimensions



Order Details (Example: DFA-24GZA 04)

Input signal	Order no.				Output signal
	Supply 24 VDC	Supply 24 VAC	Supply 115 VAC	Supply 230 VAC	
porteniometer (0-1 kOhm)	DFA-24GZA	DFA-24WZA	DFA-11WZA	DFA-23WZA	0A = 0–20 mA
Level transducer NM	DFA-24GNM	DFA-24WNM	DFA-11WNM	DFA-23WNM	4A = 4-20 mA
Standard signal 0-20 mA	DFA-24G0A	DFA-24W0A	DFA-11W0A	DFA-23W0A	V = 0-10 VDC
Standard signal 4–20 mA	DFA-24G4A	DFA-24W4A	DFA-11W4A	DFA-23W4A	
Standard signal 0-10 VDC	DFA-24GV	DFA-24WV	DFA-11WV	DFA-23WV	



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.

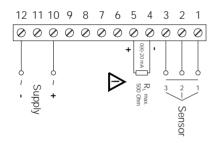
The instruments comprise the following components:

- 0–1 mA output for additional analogue indicator
- 0-20 mA, 4-20 mA or 0-10 VDC 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 kOhm; 0–40 kOhm)
- potentiometer (0-1 kOhm)
- Standard signals 0–5 VDC, 0–10 VDC, 0–4 mA, 0–20 mA, 4–20 mA

Wiring diagram



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

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 VDC; 24 VAC; 115 VAC;

230 VAC ±10%, 50-60 Hz

Power input: approximately 3 VA

Output: 0 or 4–20 mA (load 0–500 Ohm)

0–10 VDC (R ≥ 500 Ohm)

Accuracy: $\pm 0.3\%$ of full scale value

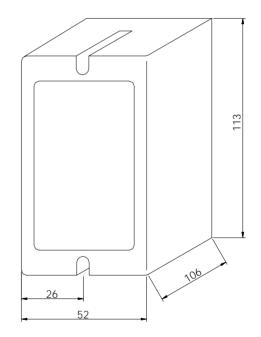
Housing: plastic pluggable
Dimensions: 132 x 52 x 106 mm

Protection: IP 40

Ambient temperature: -20°C to +60°C

Weight: 380 g

Dimensions



Order Details (Example: DFM-24GZA 04)

Input signal		Order no.			
	Supply 24 VDC	Supply 24 VAC	Supply 115 VAC	Supply 230 VAC	
potentiometer (0-1 kOhm)	DFM-24GZA	DFM-24WZA	DFM-11WZA	DFM-23WZA	0A = 0–20 mA
Level transducer NM	DFM-24GNM	DFM-24WNM	DFM-11WNM	DFM-23WNM	4A = 4−20 mA
Pt 100 (0 to +100°C)	DFM-24GP1	DFM-24WP1	DFM-11WP1	DFM-23WP1	V = 0–10 VDC
Pt 100 (-20 to +150°C)	DFM-24GP2	DFM-24WP2	DFM-11WP2	DFM-23WP2	
Pt 100 (0 to +200°C)	DFM-24GP3	DFM-24WP3	DFM-11WP3	DFM-23WP3	
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 VDC	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.

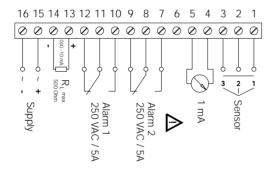
The instruments comprise the following components:

- Two adjustable limit contacts
- 0–1 mA output for additional analogue indication
- 0-20 mA, 4-20 mA or 0-10 VDC output signal

The following transmitters can be connected to the instruments:

- Level transmitter model NM (0..5 kOhm; 0..40 kOhm)
- potentiometer (0-1 kOhm)
- Standard signals 0–5 VDC, 0–10 VDC, 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 VDC; 24 VAC; 115 VAC;

230 VAC ±10%, 50-60 Hz

Power input: approximately 3 VA

Output: 0 or 4..20 mA (load 0-500 Ohm)

 $0-10 \text{ VDC } (R \ge 500 \text{ Ohm})$

Accuracy: $\pm 0.3\%$ of full scale value

Output: 0–1 mA

Relay: Two limit value relays,

changeover contact

max. 250 VAC, 5A, 1300 VA finely adjustable with potentiometer, switch point indication with LEDs

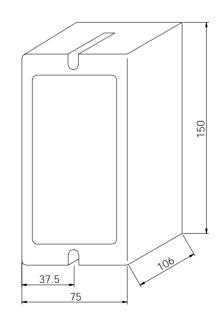
Housing: plastic pluggable
Dimensions: 150 x 75 x 106 mm

Protection: IP 40

Ambient temperature: -20°C to +60°C

Weight: 600 g

Dimensions



Order Details (Example: DST-24GZA 04)

Input signal		Orde	order no.		Output signal
	Supply 24 VDC	Supply 24 VAC	Supply 115 VAC	Supply 230 VAC	
potentiometer (0-1 kOhm)	DST-24GZA	DST-24WZA	DST-11WZA	DST-23WZA	0A = 0–20 mA
Level transducer NM	DST-24GNM	DST-24WNM	DST-11WNM	DST-23WNM	4A = 4-20 mA
Standard signal 0-20 mA	DST-24G0A	DST-24W0A	DST-11W0A	DST-23W0A	V = 0-10 VDC
Standard signal 4-20 mA	DST-24G4A	DST-24W4A	DST-11W4A	DST-23W4A	
Standard signal 0–10 VDC	DST-24GV	DST-24WV	DST-11WV	DST-23WV	