

Construction

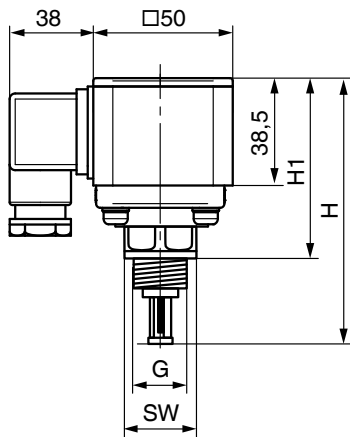
The GEMÜ 3220 temperature transducer converts the physical variable temperature proportionally into an electrical signal. The process connection is configured as standard with male threads to DIN 3852 in sizes G 1/2 and G 3/4. The electrical connection is via a plug complying with DIN EN 175301-803 Form A. The transducer can be mounted in any position. After screwing in the connecting element, the upper part of the housing can be turned up to ±180° to the required position by releasing the fastening screws. Medium wetted components are made of PVDF or ceramics, the housing is made of ABS and the seal of FPM.

Advantages

- Simple installation
- Linear output signal
- Fast response time
- Good long-term stability
- Medium wetted parts are of high-grade plastics and ceramics
- Quality through individual inspection
- Installation in standard T-junctions

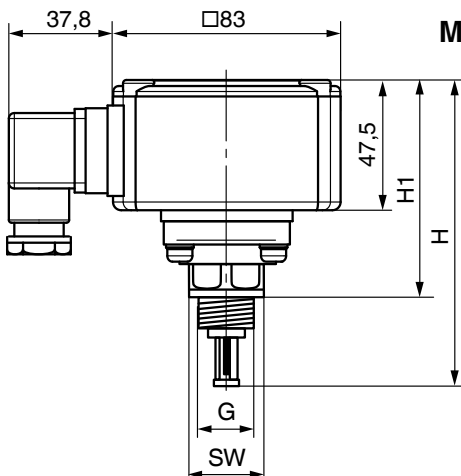


Dimensions [mm]



Two-wire transducer

G	SW	H	H1
G 1/2	27	99	67
G 3/4	32	105	69



Measurement device

G	SW	H	H1
G 1/2	27	112	80
G 3/4	32	118	82



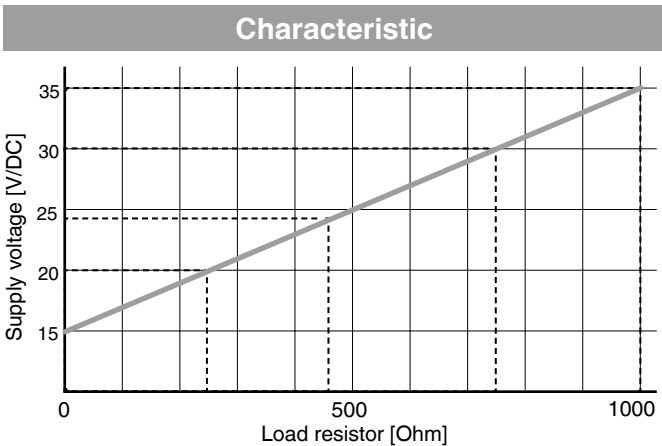
Technical data

Input variable	
Measuring span	0 ... 100°C

General information	
Operating position	optional
Mounting type	at medium connection point max. torque 20 Nm
Weight: Two-wire transducer	approx. 155 g
Measurement device	approx. 285 g
Other designs on request	

Ambient conditions	
Permissible ambient temperature	-10 ... +50°C
Permissible temperature of medium at maximum pressure	-10 ... +60°C
Permissible working pressure	≤ 10 bar
Storage temperature	-20 ... +60°C
Immunity to interference	350 A/m ind.

Materials	
Medium wetted parts	DIN 50100
Connecting element	PVDF
Sensor	ceramics 610
Seal	FPM
Housing	ABS
Housing cover of measurement device	PMMA



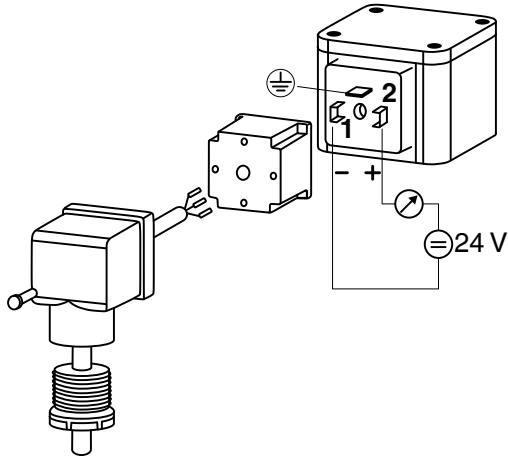
Output signal	
Two-wire transducer	
Signal type	4 - 20 mA
Characteristic	linear
Characteristic agreement	± 0.5% of measuring span
Load resistor	see characteristic
Measurement device with current output	
Signal type	0/4 - 20 mA
Characteristic	linear
Characteristic agreement	± 0.5% of measuring span
Load resistor	≤ 750 Ohm
Measurement device with relay output	
Switch rating	125V / 2 A / 60 W
Switch points	Min. relay adjustable from 0 - 100%
	Max. relay adjustable from 0 - 100%
Hysteresis relay	± 1% of measuring span
Optical display	
Type	LC display 3 1/2 digit (format 199.9)
Units of measurement	°C, °F
Functions (selection by switch)	Display of measured value Switch point MIN relay Switch point MAX relay
Accuracy	± 0.5% of measuring span ± 1 digit
Auxiliary power	
Two-wire transducer	15 - 35V DC
Measurement device	24V DC (+10%, -15%)
Supply voltage influence	≤ 0.1% of measuring span

Connections	
Electrical connection	Plug according to DIN EN 175301-803 Form A
Medium connection	G 1/2 A acc. to DIN 3852 G 3/4 A acc. to DIN 3852

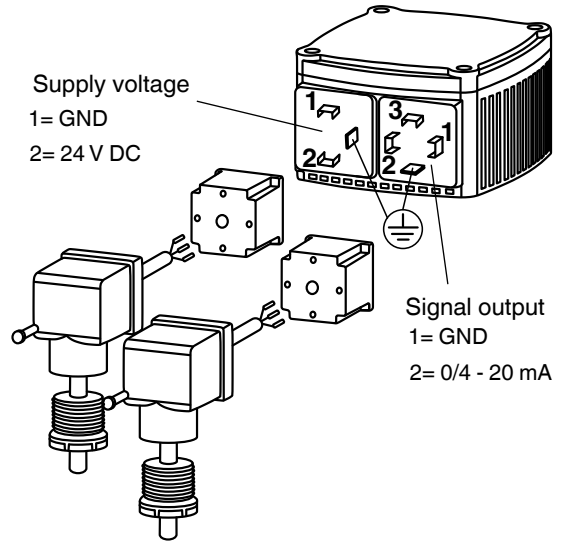
Pressure / temperature correlation																
Temperature [°C]	-20	-10	±0	5	10	20	25	30	40	50	60	70	80	90	100	
Material	permissible operating pressure in bar															
PVDF Code 20	-	10.0	10.0	10.0	10.0	10.0	10.0	9.0	8.0	7.1	6.3	5.4	4.7	3.6	2.5	

Connection diagram

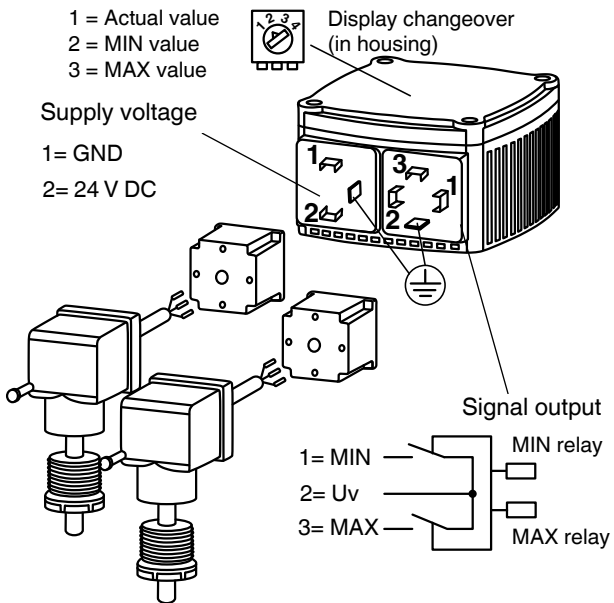
Two-wire transducer



Measurement device with current output



Measurement device with relay output



Order data

Connection size	Code
1/2"	G 2
3/4"	G 3

Accuracy	Code
± 0,5%	C

Connection type	Code
On rear of housing	R

Transducer	Code
2-wire transducer	600
Meas. device with display and current output 0 - 20 mA	610
Meas. device with display and current output 4 - 20 mA	620
Meas. device with display and relay output	630

Connection standard	Code
Acc. to DIN 3852	9B

Measuring range	Code
0 - 100°C	020
32 - 194°F	021
-20 - +80°C	022
-4 - +176°F	023

Material / Connecting element	Code
PVDF	20

Sensor material	Code
Ceramics 610	B0
Ceramic sensor PVDF encapsulated	20

Order example	3220	G2	R	9B	20	B0	C	620	020
Type	3220								
Connection size (Code)		G2							
Connection type (Code)			R						
Connection standard (Code)				9B					
Material / Connecting element (Code)					20				
Sensor material (Code)						B0			
Accuracy (Code)							C		
Transducer (Code)								620	
Measurement range (Code)									020

For further measurement devices, accessories and other products please see our Product Range catalogue and Price List.
Contact GEMÜ.