



SITRANS TS200 Temperature sensor (Ø 3,5/3mm) Pt100 Cl. A with fast response time, sensor length 13mm and integrated process connection NPT 1/4". Inclusive IO-Link / 4...20mA output, stainless steel housing 316L

manufacturer's name	Siemens
product brand name	SITRANS TS200
product designation	Temperature sensor
supplier name	Siemens
Slogan 1	SITRANS TS - Precision in temperature measurement
Short text / max. 80 Characters	SITRANS TS200 IO, 3/13mm, Pt100, NP1/4, 316L
hardware version	4
firmware version	01.02.01
product feature / of the firmware version / can be updated	Yes
design, dimensions and weights	
length / of the enclosure	70 mm
outer diameter / of the enclosure	18 mm
weight / without packaging	0.038 kg
length / of packaging	200 mm
width / of packaging	10 mm
weight / with packaging	0.043 kg
physical measuring principle	temperature determination by resistance measurement
electrical data / input	
measured variable	Temperature
unit / of the measurand	°C
temperature measuring range / at input	-50 ... +120
type of connection technology / at input / for resistance thermometer	4-wire system
design of the sensor / at input / is supported / according to EN 60751	Pt100
number of measuring resistors	1
delayed display (T90) / at electronic damping time constant	0.1 ... 3.7 s
sensor current	0.0001 A
response time / T63	3.5 s
electrical data / output	
number of analog outputs	1
signal range / at analog output	4 ... 20 mA
diagnostics function / at analog output / sensor fault / according to NAMUR NE43	Yes
design of the digital output	IO-Link, transistor (NPN), transistor (PNP)
number of digital outputs	1
connector type	M12 plug, 4-pole, A-coded
product feature / connection plug according to IEC 61076-2-101	Yes
accuracy class / for resistance thermometers / according to IEC 60751	Accuracy class A

type of connection technology	2- and 3-wire technology
type of voltage	DC
supply voltage / at DC / 4 mA ... 20 mA	8 ... 32 V
supply voltage / at DC / IO-Link / switching output	18 ... 30 V
consumed active power • maximum • IO-Link • 4 mA ... 20 mA • switching output	0.8 W 0.65 W 0.55 W 0.8 W
product function • reverse polarity protection • galvanic isolation between in and outputs • localization via LED	Yes No Yes
type of light source	RGB-LED, multicolor
IO-Link	
protocol / between master and IO-Link device / Version 1.1	Yes
symbol data transfer rate / to COM2	38.4 kBd
cycle time / minimum	8.4 ms
data volume / of process data / per module input	4 byte
type of IO-Link port / A	Yes
switching output	
active current / maximum	0.15 A
product function / at the digital outputs / parameterizable OFF delay	Yes
ambient conditions	
ambient temperature / during operation	-40 ... +80 °C
relative humidity / during operation	0 ... 100 %
ambient temperature / during storage	-40 ... +80 °C
protection class IP / of the enclosure	IP67
standard / for EMC	EN 61326-1
mechanical data	
design of the housing	compact version, transmitter integrated
design of the process connection	male thread
nominal size / of the process connection	1/4 inch-18 NPT
pressure rating / of the process connection	PN 100
material / of the process connection	stainless steel
material number / of the process connection • according to EN 10027-2 • according to AISI	1.4404 316L
material / of the sensor sheath	Stainless steel
material number / of the sensor sheath • according to EN 10027-2 • according to AISI	1.4404 316L
Material / of the connection head	Stainless steel
installation length	13 mm
outer diameter / of the temperature measurement insert	3 mm
vibration resistance / according to IEC 60068-2-6	10 g
factory setting	
design of the sensor / in factory setting / according to EN 60751	Pt100
type of connection technology / in factory setting / for resistance thermometer	4-wire system
temperature measuring range / in factory setting	0 ... 100 °C
environmental footprint	
Environmental Product Declaration	Yes
global warming potential	
global warming potential [CO2 eq] • total • during manufacturing • during operation	17.4 kg 0.85 kg 16.5 kg

• after end of life

0.002 kg

last modified:

7/17/2026 