

BEDIA Temperature Switches and Probes

Mechanical Temperature Switches

Electronical Temperature Switches

Electronical Temperature Sensor

Screw-in Resistance

In touch with the medium

BEDIA
Motorentechnik

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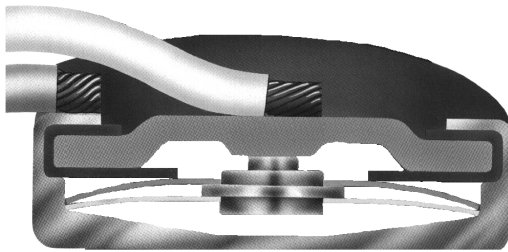
Mechanical Temperature Switches

with reset hysteresis $\leq 25^\circ\text{C}$

Technical Description

These high-power bimetal operated temperature switches are available either with normally closed or normally open contact configuration.

The robust round metal enclosure accommodates a resilient preloading disk, a bimetal disk and a silver contact. The compact switch system is covered by means of a plate which also carries a silver contact and is isolated from the enclosure by means of an isolating washer. The resilient preloading disk ensures excellent performance.



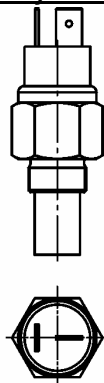
The resilient preloading disk keeps the contact pressure constant throughout the entire temperature range of the BEDIA switch until switching occurs. The mechanically and electrically unloaded bimetal disk snaps over at a preset temperature, with either opening or closing the contact arrangement. The bimetal will only snap back to its initial condition after the temperature has dropped significantly.

Compared to other temperature controllers with relatively low hysteresis, the temperature difference between the temperature switch opening and closing is significantly higher so as to ensure a more obvious status indication, i.e. longer switch-off times, in the event of a fault condition.

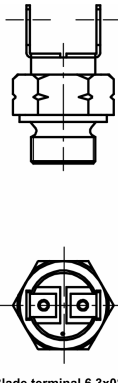
Technical data

Operating voltage	250VAC
Current rating	2,5A $\cos \varphi = 1,0$ 1,6A $\cos \varphi = 0,6$
Operating range and max load	250AC / 6,3A 110AC / 10A 40DC / 1,2A 6, 24DC / 1,5A
Type of switch	Normal close / normal open
Contact durability	10000 operations
Ambient temperature for the switch:	T 180 °C
Nominal switching temperature In 5 °C Steps	-50 °C - +180 °C
Tolerance	$\pm 3\text{K}$
Reset hysteresis	$\leq 25^\circ\text{C}$
Contact resistance	$\leq 40\Omega$
Vibration strength at 10..60Hz	10m/g
High voltage strength	2kV
Pressure on sensor	100bar
Degree of protection	Depending on connector type
Connector	On request

**Mechanical Temperature Switches
with reset hysteresis $\leq 25^\circ\text{C}$**

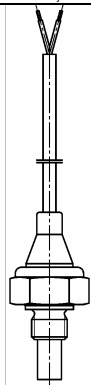


Blade terminal 6,3x0,8
IP 67

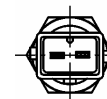
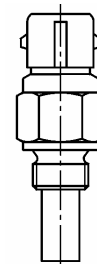


Blade terminal 6,3x0,8
IP 67

Switch contact	Switch point	Analog monitoring	Potential	Thread	Art.Nr.
NO	70 °C	----	groundfree	M14x1,5	421 079
NO	120 °C	----	groundfree	M14x1,5	420 155
NC	50 °C	----	groundfree	M14x1,5	421 087
NC	85 °C	----	groundfree	M18x1,5	420 222
NC	95 °C	----	groundfree	M18x1,5	420 223
NC	95 °C	----	groundfree	R1/2"	422 314
NC	115 °C	----	groundfree	M14x1,5	422 230
NC	130 °C	----	groundfree	M14x1,5	421 067
NO	80 °C	20 °C 698Ω±74Ω 60 °C 144Ω±12Ω 100 °C 39,6Ω±3Ω	Low side switch	M14x1,5	420 156
NO	95 °C	20 °C 698Ω±74Ω 60 °C 144Ω±12Ω 100 °C 39,6Ω±3Ω	Low side switch	M14x1,5	420 152
NO	100 °C	20 °C 698Ω±74Ω 60 °C 144Ω±12Ω 100 °C 39,6Ω±3Ω	Low side switch	M14x1,5	421 094
NO	110 °C	20 °C 698Ω±74Ω 60 °C 144Ω±12Ω 100 °C 39,6Ω±3Ω	Low side switch	M14x1,5	421 095



Cable connector
IP 69K

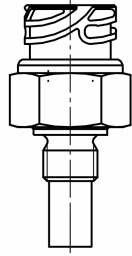


Minitimer 2,8x0,8
IP 67

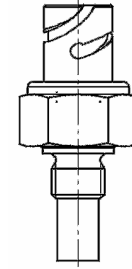
Switch contact	Switch point	Thread	Potential	Art. Nr.
NO	50 °C	M14x1,5	groundfree	421 096
NO	70 °C	M14x1,5	groundfree	421 097
NO	80 °C	M14x1,5	groundfree	420 149

Switch contact	Switch point	Analog monitoring	Potential	Thread	Art. Nr.
NO	96 °C	20 °C 699Ω±65Ω 60 °C 141Ω±10Ω 100 °C 39Ω± 2Ω	groundfree	M14x1,5	422 229
NC	50 °C	----	groundfree	M14x1,5	420 182

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Bajonett DIN 72 585
IP69K



Bajonett 10 SL
IP67

Switch contact	Switch point	Analog monitoring	Potential	Thread	Art. Nr.
NO	110 °C	----	groundfree	M14x1,5	422 320
NC	60 °C	----	groundfree	M14x1,5	421 069
NO	105 °C	20 °C 698Ω±74Ω 60 °C 144Ω±12Ω 100 °C 39,6Ω±3Ω	Low side switch	R 1/2"	420 232
NO	105 °C	20 °C 698Ω±74Ω 60 °C 144Ω±12Ω 100 °C 39,6Ω±3Ω	Low side switch	5/8"-18 UNF	422 319

Switch contact	Switch point	Thread	Potential	Art. Nr.
NO	45 °C	M14x1,5	groundfree	420 184
NO	50 °C	9/16"UNF	groundfree	420 186
NO	85 °C	M14x1,5	groundfree	422 312
NO	90 °C	M14x1,5	groundfree	420 183
NO	100 °C	9/16"UNF	groundfree	420 189
NO	120 °C	9/16"UNF	groundfree	420 187
NO	130 °C	M14x1,5	groundfree	422 313
NC	120 °C	M14x1,5	groundfree	421 088

Accessories for temperature switches and probes with bayonet connector 10 SL

421 652	Female bayonet connector 10SL, straight according to VG 0095234
421 885	Female bayonet connector 10SL, 90° according to VG 0095234

Accessories for temperature switches with bayonet to DIN 72 585

420 700	Straight connector for corrugated pipe NW* 10
420 701	90° connector for corrugated pipe NW 10
420 702	90° connector for cables
420 703	Straight connector for cable
420 739	Cable with connector 420 702 300 mm
420 750	Cable with connector 420 703 300 mm
420 732	Cable with connector 420 702 1000 mm
420 722	Cable with connector 420 703 1000 mm
420 731	Cable with connector 420 702 3000 mm
420 724	Cable with connector 420 703 3000 mm

Technical data sheets on demand

Temperature Switch with low Reset Hysteresis

Technical Description

These temperature switches feature reliable performance, close switching tolerances and a long life.

Custom designed versions of these temperature-sensitive switches are available on request.

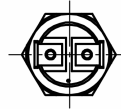
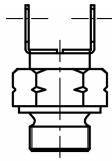
Major features are:

- 8A Switching current at a voltage of 24 V
- contact load up to 20 A
- protection degree IP 64 to DIN 40050
- Close switching tolerances (few degrees only)
- Low thermal contact resistance between medium and measuring shunt
- Wide operating temperature range
- Long life

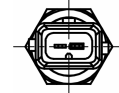
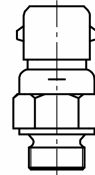
Technical data

Operating voltage	$U_B = 24 \text{ V DC}$
Continuous load at 24 V	$I_{\max} = 8 \text{ A}$
Short time load	$I = 20 \text{ A} / 1 \text{ min.}$
Switching capacity	$P_S = 100 \text{ W}$
Test voltage	$U_P = 13 \text{ V} \pm 0,25 \text{ V}$ (for Δ_U and life)
Voltage drop	$\Delta_U = 0,25 \text{ V}$ at I_{\max} .
Switch-on point	$S_E =$ as required by customer $\pm 3^\circ$
Hysteresis	$\Delta S < 8^\circ \text{ C}$
Contact making	Snap contact
Contact configuration	NO (normally closed) or NC (normally open)
Operating temperature	$S_B = -25^\circ \text{ C} \dots + 150^\circ \text{ C}$
Storage temperature	$S_L = -30^\circ \text{ C} \dots + 150^\circ \text{ C}$
Degree of protection	Depending on connector type
Vibration strength	5g in all planes, 5h at 20...200...20 Hz for 60 sec. Cycle period with cables connected
Corrosion	Salt spray test to ASTM B117-73, 144h
Tightening torque	Max. 30 Nm
Life	20 000 operations at U_P , I_{\max}
Test rig (switched on)	> 30 bar
Material of enclosure	CuZn 39 P63

Temperature Switch with low Reset Hysteresis



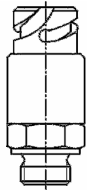
Blade terminal 6,3x08
IP 67



Minitimer 2,8x0,8
IP67

Switch contact	Switch point	Thread	Potential	Art. Nr.
NO	60 °C	M14x1,5	potential-free	420 129
NO	60 °C	M18x1,5	potential-free	421 083
NO	90 °C	M14x1,5	potential-free	420 130
NO	90 °C	M18x1,5	Low side switch	421 085
NC	100 °C	M14x1,5	potential-free	420 168

Switch contact	Switch point	Thread	Potential	Art. Nr.
NO	5 °C	M14x1,5	Low side switch	420 160
NO	20 °C	G 1/4"	potential-free	420 181
NO	105 °C	M16x1,5	Low side switch	420 143
NO	105 °C	M22x1,5	Low side switch	422 234
NO	105 °C	1/2"NPTF	potential-free	420 132



Bajonett 10 SL
IP67

Switch contact	Switch point ±3	Thread	Potential	Art. Nr.
NC	11 °C	M14x1,5	potential-free	420 148
NC	96 °C	M22x1,5	Low side switch	422 021

Accessories for Screw-in Resistances with Minitimer 2,8mm x 0,8mm

420 125	Connector 2,8 x 0,8 2-pole
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Accessories for temperature switches and probes with bayonet connector 10 SL

420 760	Female bayonet connector 10SL, straight
420 761	Female bayonet connector 10SL, 90 °C

Technical data sheets on demand

Electronical Temperature Switch

Technical Description

The electronic temperature switch of BEDIA is fitted with thin-film resistor PT 1000 in a bridge circuit. This sensor element provides close switch point tolerances and a quick response. Switch point and reset hysteresis may be selected within the admissible operating range when ordering so as to allow the monitoring of both very wide and very close temperature ranges. The switching output is protected from short-circuit and overload.

The short-circuit current is limited by the output transistor switching off in the event of a fault. It will automatically reset as soon as the fault has been remedied.

The switch is available with **ground-connected**, **plus-connected** or **potential-free DC switching output**.

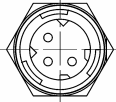
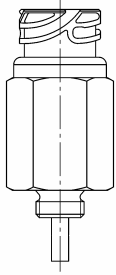
The switch is open in the event of power failure or disconnection of the power supply, independent of the switching function. It is available both as normally open (NC) or normally closed (NO) switch.

Technical data

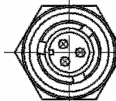
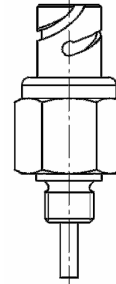
Operating voltage	9V – 36V DC
Current consumption	10mA
Operating temperature	-40°C to 125°C
Sensor element	PT1000 class B
Max. switching current	1A
Voltage drop	< 1,5 V (1A)
Max. switching voltage	36V
Off-State leakage current	10µA (25°C)
Overload	Short-circuit and overload proof
Switch point	Selectable between –40°C and +125°C
Repeat accuracy	± 1°C
Hysteresis	Selectable, ≥ 1°C
Hysteresis tolerance	+ - 2%
Switching mode	a) potential free DC switch, either closing or opening at T max. b) ground-connected switch, either closing or opening at T max. c) plus – connected switch, either closing or opening at T max.
Electrical isolation (with potential free switch only)	500 V
EMC	Tested to DIN 40839
Electrical connection	As requested by customer

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Electronical Temperature Switch



Bajonett DIN72 585
IP 69K

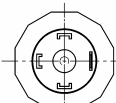
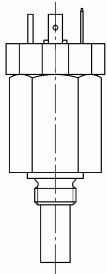


Bajonett 10 SL
IP 67

Switch contact	Switch point	Thread	Potential	Art. Nr.
NO	5°C	M14x1,5	groundfree	420 151
NC	0°C			
NO	5°C	M14x1,5	groundfree	420 215
NC	8°C			
NO	75°C	M14x1,5	High side switch	420 231
NC	68°C			
NO	50°C	G 3/8"	High side switch	420 178
NO	80°C	G 3/8"	High side switch	420 179
NO	87°C	M14x1,5	Low side switch	420 139
NO	90°C	M14x1,5	Low side switch	420 142
NO	96°C	M14x1,5	Low side switch	420 137

Switch contact	Switch point	Thread	Potential	Art. Nr.
NO	10°C	M14x1,5	Low side switch	421 084
NC	0°C			

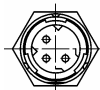
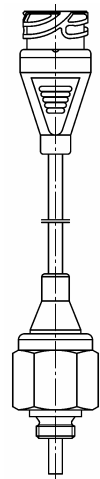
NC	-4°C	M14x1,5	Low side switch	420 228
NC	0°C	M14x1,5	groundfree	420 138
NC	4°C	M14x1,5	Low side switch	420 229



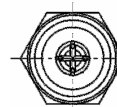
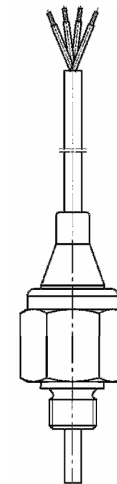
Connector for bayonet DIN43650
IP 65

Switch contact	Switch point	Thread	Potential	Art. Nr.
NO	70°C	G 1/2"	groundfree	423 084
NC	66°C			

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Bayonett DIN72 585
IP 69K



Cable connector 4-pole
IP 69K

Switch contact	Switch point	Thread	Potential	Art. Nr.
NO	45°	M14x1,5	High side switch	420 146
NC	100°C	M14x1,5	High side switch	420 147

Switch contact	Switch point	Thread	Potential	Art. Nr.
NO NC	15°C 20°C	G 3/8"	groundfree	420 144

Accessories for temperature switches and probes with bayonet connector 10 SL

421 652	Female bayonet connector 10SL, straight according to VG 0095234
421 885	Female bayonet connector 10SL, 90° according to VG 0095234

Accessories for temperature switches with bayonet to DIN 72 585

420 700	Straight connector for corrugated pipe NW* 10	
420 701	90° connector for corrugated pipe NW 10	
420 702	90° connector for cables	
420 703	Straight connector for cable	
420 739	Cable with connector 420 702	300 mm
420 750	Cable with connector 420 703	300 mm
420 732	Cable with connector 420 702	1000 mm
420 722	Cable with connector 420 703	1000 mm
420 731	Cable with connector 420 702	3000 mm
420 724	Cable with connector 420 703	3000 mm

Technical data sheets on demand.

Electronic Temperature Sensor

Technical description

This temperature sensor is for measuring the temperature of liquid and gaseous media in engines, sets of machines and utility vehicles.

A PT1000 thin-film precision resistor is used as the measuring element.

The temperature-dependent resistance of the PT1000 is evaluated by an electronic circuit and outputted as a temperature-dependent voltage at the sensor's output. The interrelationship between temperature and voltage corresponds to the characteristic curve for the PT100 and is thus nearly linear.

The assignment between temperature and output voltage is nearly freely selectable, the lesser temperature corresponding to the lesser output voltage.

The sensor's lowest possible output voltage is 0.1 V and its greatest is 10 V.

The output is overload-proof and short-circuit-proof.

The sensor has no mechanical moving parts and so is not susceptible to vibration and soiling.

Technical data

Operating voltage	18 V – 32 V
Current consumption	10 mA
Operating voltage	-30° C to +130° C
Precision resistor	Pt 1000 as per DIN 60751
Overload	Short-circuit-proof and overload-proof
Freely selectable signal within a range of:	0.5 V ±60 mV at -30° C 10 V ±120 mV at +180° C
Accuracy	±0.5 C at 0° C
Mediums measured	Lubricating oils, hydraulic oil, fuel, cooling water, air
Operating pressure	20 bar
Protective system	Depends on the electrical connection
Connection	According to customer request
EMC	
Conducted emission	CISPR 25:1995, 150 kHz-108 kHz
Radiated emission	CISPR 25:1995, 300 kHz-1000 kHz
Resistance to interference, conductor-bound	ISO 7637-2, test impulse: 1-5
Conducted interference	ISO11452-4, 150 kHz-80 MHz
Radiated interference	ISO11452-2, 30 MHz-1000 MHz
ESD	EN 61000-4-2:1995

Screw-in Resistances

Technical description

Temperature is one of the most measured physical parameters. Despite this, precise temperature measurement is one of the most difficult tasks in motor technology. To meet the constantly increasing requirements for improved motor performance, higher efficiency and reduced emissions, it is necessary to use reliable and precise sensors in modern motor control systems. Temperature has a decisive influence on process efficiency, energy consumption and other parameters. Even the service life of machines, equipment and motors is affected by temperature conditions. In many industry sectors, the most important factor is to use the information from reliable temperature measurements for control and regulation functions.

The increased requirements over the last few years regarding measurement accuracy and reliability of temperature measurements has meant that many equipment operators must reconsider the suitability and performance capacity of their temperature measurement equipment. Resistant thermometers can be used between - 200 °C and + 850 °C. BEDIA resistance thermometers are known to be the most precise and stable temperature sensors in their measurement properties. An important common property is that their output parameters are available in the form of electric signals that can be relatively easily transferred to measurement and control instruments for processing, storage and display.

BEDIA resistance thermometers enables temperature measurements under critical application conditions.

An optimal thermal coupling of the temperature sensor to the housing ensures a rapid response behaviour and high measurement accuracy despite its small installation length.

The socket connection can be selected from the following:

- Mini-timer 2.8 mm x 0.8 mm IP rating 67
- Bayonet 10 SL as per VG 0095342 IP rating 67
- Bayonet as per DIN 72 585 IP rating 69K
- Cable connection IP rating 69K

Other socket connections are available on request.

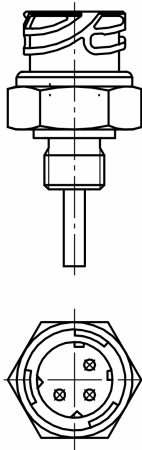
The connection thread can be made to customer specifications (the standard is M14 x 1.5).

The screw-in resistances can be fitted to customer specifications with the following temperature sensor

- PT100
- PT500
- PT1000
- Ni 100
- Ni 1000
- Semi-conductor (KTY)

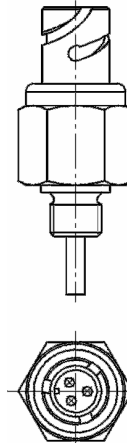
Measurement resistances can be fitted with 2, 3 or 4 wire technology (standard is 2 wire technology).

Screw-in Resistances



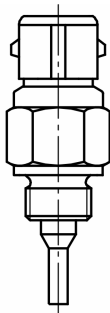
Bajonett DIN 72 585
IP69K

Type of Sensor	Temperature range	Thread	Method of measurement	Art. Nr.
Pt100	-50 °C--+300 °C	G 1/2"	2-Wire	420 108
Pt100	-50 °C--+300 °C	M14x1,5	2-Wire	420 105
Pt100	-50 °C--+300 °C	G 1/2"	2-Wire	420 100
Pt1000	-50 °C--+300 °C	M14x1,5	2-Wire	420 106
Pt1000	-50 °C-300 °C	M14x1,5	2-Wire	422 325
Ni 1000	-50 °C--+300 °C	M14x1,5	2-Wire	420 112
KTY	-50 °C--+150 °C	M14x1,5	2-Wire	420 116
KTY	-50 °C--+150 °C	M10x1,0	2-Wire	420 340



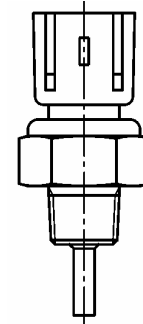
Bajonett 10 SL
IP67

Type of Sensor	Temperature range	Thread	Method of measurement	Art. Nr.
KTY	-50 °C-+150 °C	M14x1,5	2-Wire	420 185



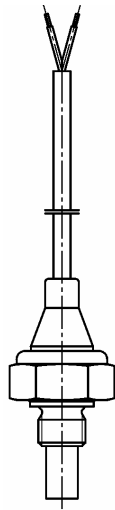
Minitimer 2,8x0,8
IP67

Type of Sensor	Temperature range	Thread	Method of measurement	Art. Nr.
Pt100	-50 °C-300 °C	M14x1,5	2-Wire	420 104
Pt100	-50 °C-300 °C	G 3/8"	2-Wire	420 102
Ni1000	-50 °C-300 °C	M14x1,5	2-Wire	420 110
Ni1000	-50 °C-250 °C	M14x1,5	2-Wire	420 111

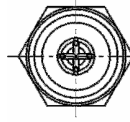
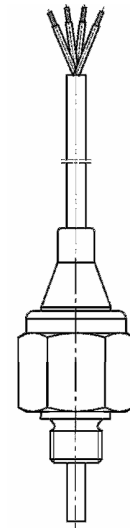


Packard connector
IP 67

Type of Sensor	Temperature range	Thread	Method of measurement	Art. Nr.
KTY	-50 °C--+150 °C	M14x1,5	2-Wire	420 185



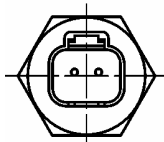
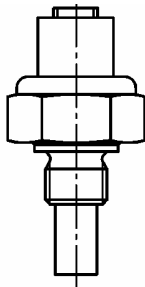
Cable connector
IP 69K



Cable connector 4-pole
IP 69K

Type of Sensor	Temperature range	Thread	Method of measurement	Art. Nr.
Pt100	-50°C-300°C	M14x1,5	Cable 4000mm 2-Wire	422 323
Pt100	-50°C-300°C	G 1/2"	Cable 250mm 2-Wire	420 100

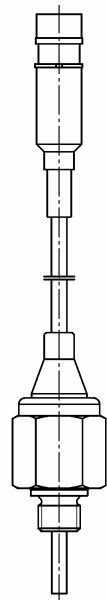
Type of Sensor	Temperature range	Thread	Method of measurement	Art. Nr.
Pt100	-50°C-300°C	M14x1,5	Cable 275mm 4-Wire	420 237
Pt100	-50°C-300°C	M14x1,5	Cable 5000mm 4-Wire	420 107
Pt100	-50°C-300°C	G 1/2"	Cable 275mm 4-Wire	420 236



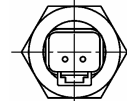
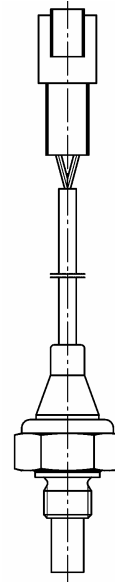
Deutsch-connector
IP 67

Type of Sensor	Temperature range	Thread	Method of measurement	Art. Nr.
NTC	-40°C-+140°C	M18x1,5	2-Wire	420 766

BEDIA
Motorentechnik



Sure-Seal connector 4-pole
IP 69K



Deutsch connector 2-pole
IP 69K

Type of Sensor	Temperature range	Thread	Method of measurement	Art. Nr.
Pt500	-50°C-+300°C	M14x1,5	Cable 500mm 2-Wire	420 103

Type of Sensor	Temperature range	Thread	Method of measurement	Art. Nr.
KTY	-50°C-+300°C	M14x1,5	Cable 250mm 4-Wire	420 115

Accessories for Screw-in Resistances with Minitimer 2,8mm x 0,8mm

420 125	Connector 2,8 x 0,8 ; 2-pole
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Accessories for temperature switches and probes with bayonet connector 10 SL

421 652	Female bayonet connector 10SL, straight according to VG 0095234
421 885	Female bayonet connector 10SL, 90° according to VG 0095234

Accessories for temperature switches with bayonet to DIN 72 585

420 700	Straight connector for corrugated pipe NW* 10	
420 701	90° connector for corrugated pipe NW 10	
420 702	90° connector for cables	
420 703	Straight connector for cable	
420 739	Cable with connector 420 702	300 mm
420 750	Cable with connector 420 703	300 mm
420 732	Cable with connector 420 702	1000 mm
420 722	Cable with connector 420 703	1000 mm
420 731	Cable with connector 420 702	3000 mm
420 724	Cable with connector 420 703	3000 mm

Technical data sheets on demand.

Measuring shunts – Basic values for platinum and nickel

Resistance at °C TK /C°	PT 100 Ω	PT 500 Ω	PT 1000 Ω	Ni 100 Ω	Ni 1000 Ω
Norm	.00385 DIN IEC 751	.00385 DIN IEC 751	.00385 DIN IEC 751	.00617 DIN IEC 43760	.00617 DIN IEC 43760
Temperature / °C	Resistance / Ω				
-250	2,51				
-240	4,26				
-230	6,99				
-220	10,49				
-210	14,45				
-200	18,49	92,47	184,93		
-190	22,8				
-180	27,08	135,39	270,78		
-170	31,32				
-160	35,53	177,66	355,31		
-150	39,71				
-140	43,87	219,35	438,69		
-130	48				
-120	52,11	260,53	521,06		
-110	56,19				
-100	60,25	301,27	602,54		
-90	64,3				
-80	68,33	341,63	683,25		
-70	72,33				
-60	76,33	381,64	763,28	69,5	695
-50	80,31			74,3	743
-40	84,27	421,36	842,71	79,1	791
-30	88,22			84,2	842
-20	92,16	460,8	921,6	89,3	893
-10	96,09			94,6	946
0	100	500	1000	100	1000
10	103,9		1039,02	105,6	1056
20	107,79	538,96	1077,93	111,2	1112
30	111,67		1116,71	117,1	1171
40	115,54	577,7	1155,39	123	1230
50	119,4		1193,95	129,1	1291
60	123,24	616,2	1232,39	135,3	1353
70	127,07		1270,71	141,7	1417
80	130,89	654,46	1308,93	148,2	1482
90	134,7		1347,02	154,9	1549
100	138,5	692,5	1385	161,8	1618
110	142,29		1422,86	168,8	1688
120	146,06	730,4	1460,61	176	1760
130	149,82		1498,24	183,3	1833
140	153,58	767,88	1535,76	190,9	1909
150	157,31		1573,16	198,6	1986
160	161,04	805,22	1610,54	206,6	2066
170	164,76		1647,62	214,8	2148
180	168,46	842,32	1684,67	223,2	2232
190	172,16		172,61	231,8	2318
200	175,84	9879,28	1758,43	240,7	2407
210	179,51		1795,14	249,8	2498
220	183,17	915,84	1831,73	259,2	2592
230	186,82		1868,21	268,9	2689
240	190,45	952,25	1904,57	278,9	2789

Resistance at °C TK /C° Norm	PT 100 Ω .00385 DIN IEC 751	PT 500 Ω .00385 DIN IEC 751	PT 1000 Ω .00385 DIN IEC 751	Ni 100 Ω .00617 DIN IEC 43760	Ni 1000 Ω .00617 DIN IEC 43760
Temperature / °C	Resistance / Ω				
250	194,07		1940,81		
260	197,69	988,43	1976,94		
270	201,29		2021,95		
280	204,88	1024,38	2048,85		
290	208,45		2084,63		
300	212,02	1060,09	2120,3		
310	215,57				
320	219,12	1095,58			
330	222,65				
340	226,17	1130,83			
350	229,67				
360	233,17	1165,85			
370	236,65				
380	240,13	1200,63			
390	243,59				
400	247,04	1235,19			
410	250,48				
420	253,9	1269,51			
430	257,32				
440	260,72	1303,6			
450	264,11				
460	267,49	1337,46			
470	270,86				
480	274,22	1371,09			
490	277,56				
500	280,9	1404,48			
510	284,22				
520	287,53	1437,64			
530	290,83				
540	294,11	1470,57			
550	297,39				
560	300,65	1503,27			
570	303,91				
580	307,15	1535,74			
590	310,38				
600	313,59	1567,97			
610	316,8				
620	319,99	1599,97			
630	323,18				
640	326,35	1631,74			
650	329,51				
660	332,66	1663,28			
670	335,79				
680	338,92	1694,59			
690	342,03				
700	345,13				
710	348,22				
720	351,3				
730	354,37				
740	357,42				
750	360,47				

Resistance at °C TK /C°	PT 100 Ω	PT 500 Ω	PT 1000 Ω	Ni 100 Ω	Ni 1000 Ω
Norm	.00385 DIN IEC 751	.00385 DIN IEC 751	.00385 DIN IEC 751	.00617 DIN IEC 43760	.00617 DIN IEC 43760
Temperature / °C	Resistance / Ω				
760	363,5				
770	366,52				
780	369,53				
790	372,52				
800	375,51				
810	378,48				
820	381,45				
830	384,4				
840	387,34				
850	390,26				