

Technisches Englisch

Elektrotechniker sollten englischsprachige Dokumentationen und Pläne lesen können. In Kooperation mit www.engineering-report.de erleichtert diese Seite den Zugang zur englischen Sprache und vermittelt elektrotechnische Fachausdrücke.

Temperature Sensors Easy to Install

HBM is introducing the TT-3/100 **temperature sensor** that is made of a 5µm-thin nickel **measuring grid embedded** between two polyamide **foils**. It is therefore very flexible and can be **fitted** to both flat and **curved** surfaces. Each sensor is **glued on** to the component – in the same way as **strain gauges** – resulting in excellent **thermal contact** and a **rapid response time**. Integrated **solder tabs** are **provided** for making the electrical connections to the **data acquisition** system. The TT-3/100 temperature sensor covers a **range** of -70 to +180 degrees C and has a nominal (**rated**) **resistance** at 0 degrees C of 100 ohms. An **appropriate amplifier** for making resistance measurements is **required** for **temperature measurement**. HBM has designed the TT-3/100 to complement its range of strain gauges and the sensor is **particularly suitable** for applications where strain gauges are used at the same time. HBM's new temperature measurement sensor is easily installed on **undulating** surfaces.

By courtesy of Engineer Live

amplifier Verstärker
appropriate passend, zugehörig, geeignet
curved gebogen, gekrümmt
data acquisition Datenerfassung, Datenaufnahme
embed einbetten
fit anbringen, anbauen, einsetzen
foil Folie
glue onto kleben auf
measuring grid Messgitter, Messnetz
particular/ly besonders
provide zur Verfügung stehen, vorsehen
range Bereich, Größenordnung
rapid schnell
rated Nenn-
require benötigen, erfordern
resistance Widerstand (Wert)

response time Ansprech-, Reaktionszeit
solder tab (auch: tag) Lötflanke
strain gauge Dehnungsmesser
suitable passend, geeignet
temperature sensor Temperaturfühler
thermal contact Wärmekontakt, thermischer Kontakt
undulating gewellt, wellig

Passive Voice

A **feature** of technical English is the use of the **passive voice**. Where German texts **frequently** use the neutral word „man“ the English language **prefers** passive structures as the following example shows: *Im Bild erkennt man deutlich die Lage der Spule. – In fig. the position of the coil is clearly seen.*

The passive voice is applied to **describe** technical processes and procedures. It uses a form of „to be“ (am, is, are) + the third form of a verb (*seen, done, thrown, etc*). In the following activity please match the picture with its correct passive structure (all examples are in the simple present = *einfache Gegenwart*).

Four of the pictures have two matching verbs:

describe beschreiben
feature Merkmal, Kennzeichen, Charakteristikum
frequent/ly häufig
passive voice das Passiv
prefer vorziehen
suspend aufhängen

P. Zillmer

Lösungen
a = 1. is raised oder 25. is lifted up
b = 23. is lowered
c = 11. is dropped
d = 2. is heated
e = 20. is cut
f = 24. is pressed oder 22. is controlled
g = 3. is discarded oder 13. is thrown away
h = 12. is carried oder 19. is conveyed
i = 10. is turned
j = 4. is rotated
k = 18. is dipped
l = 21. is painted
m = 5. is weighed
n = 16. is packed
o = 9. is transported
p = 17. is attached to
q = 8. is supported by/on
r = 6. is housed in
s = 15. is connected to
t = 14. is secured to/by
u = 7. is suspended from/by

a)	b)	c)	1. is raised
d)	e)	f)	2. is heated
g)	h)	i)	3. is discarded
j)	k)	l)	4. is rotated
m)	n)	o)	5. is weighed
p)	q)	r)	6. is housed in
s)	t)	u)	7. is suspended from/by
			8. is supported by/on
			9. is transported
			10. is turned
			11. is dropped
			12. is carried
			13. is thrown away
			14. is secured to/by
			15. is connected to
			16. is packed
			17. is attached to
			18. is dipped
			19. is conveyed
			20. is cut
			21. is painted
			22. is controlled
			23. is lowered
			24. is pressed
			25. is lifted up