

RACON 8 Tactile switches

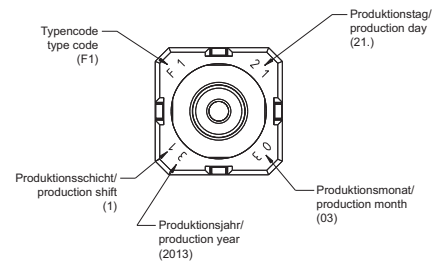
→ RACON 8 tactile switches offer an extremely high switching reliability while needing very little space. They can be arranged as single keys, in rows or key blocks.

When arranged under an overlay, RACON key switches should be combined with plungers.

The features at a glance:

- Suitable for the most common soldering methods
 - Wave soldering bath for THT versions
 - Reflow soldering for SMT version
 - Vapour phase soldering for SMT versions
 - Manual soldering
- SMT version suitable for processing with an automatic SMT assembly machine
- IMDS listed

You can download actual product information from our internet site www.rafi.de / Catalogues and Downloads



Technical Data




→ Dimensions	
Length of housing	8.4 mm
Width of housing	8.4 mm
Height of housing	see order block
→ Mechanical design	
Mounting	soldering
Terminals	see order block
Contact system	snap-action contact
Contact arrangement	1 NO
Contact materials	Au
Illumination	no
→ Mechanical characteristics	
Switching travel	0.34 ^{±0.1} mm
→ Electrical characteristics	
Rated voltage min.	0.02 V
Rated voltage max.	35 V
Rated current min.	0.01 mA
Rated current max.	100 mA
Rated power max. (ohmic load)	1 W
Contact resistance when new max.	100 mΩ
Insulation resistance	10 ⁹ Ω
→ Other specifications	
Ambient temp. operating min.	-40 °C
Ambient temp. operating max.	+90 °C
Resistance to environment	DIN EN 60068-2 -14,-30,-33 and -78
Operating life	1,000,000
Solderability / Solder heat resistance	see order block
Flammability of materials	UL 94 HB
Packing	see order block
Produkt type	see order block
ROHS compliant	yes
REACH compliant	yes



PCB KEY SWITCHES

RACON 8 - TACTILE SWITCHES

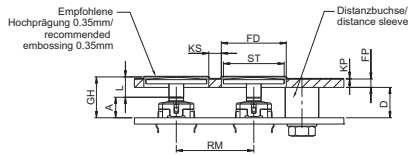
Accessories RACON 8 - Tactile switch

→ Description	Photo	Order no.	Additional accessories see page
Spacer, round, length 6.25 mm, red		5.30.759.034/0000	2 - 265, 4 - 97, 5 - 32
Plunger round		5.46.167.311/0209	4 - 49
RK 90 - Keycap body, for lenses 9 x 9 mm		5.55.103.265/1013	4 - 110

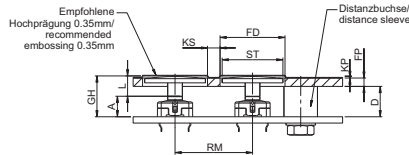
For other plungers, refer to the chapter „RACON special accessories“; for keycaps, refer to the chapter „RK 90“

RACON 8, Typical system assembly with plunger under overlay

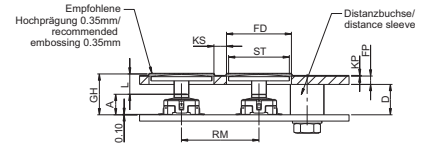
THT terminal outward



THT terminal inward



SMT gullwing terminal



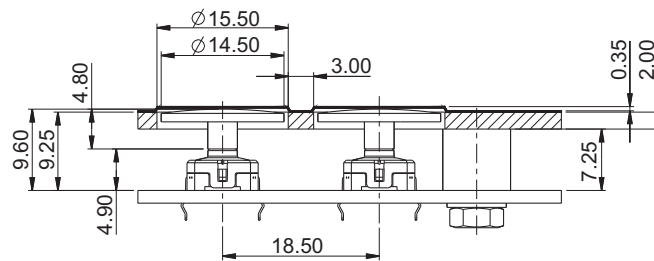
Variable Declaration

THT terminal inward and outward

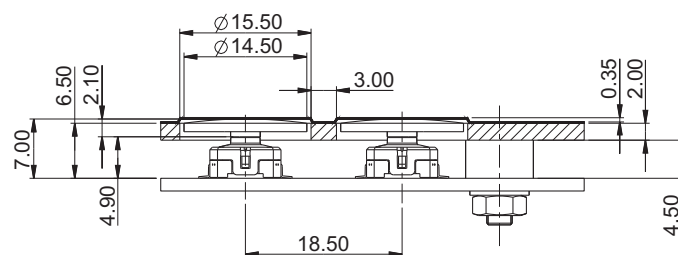
SMT terminal

A	Height of key switch	$A = 4.90 \pm 0.1 \text{ mm}$	
D	Length of spacer $D = GH - KP - FP$		
FD	Front panel cut-out $FD = ST + 1 \text{ mm}$		
FP	Front panel thickness		
GH	Overall height	$GH = A + L$	$GH = A + L + 0.1 \text{ mm}$
KP	Thickness of overlay + embossing		
KS	Glue webs for overlay, min. 3 mm		
L	Length of plunger	$L = GH - A$	$L = GH - A - 0.1 \text{ mm}$
RM	Key grid		
ST	Diameter of plunger		

RACON 8, Standard system assembly



RACON 8, Lowest system assembly

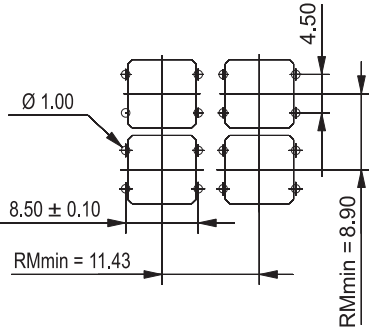


PCB KEY SWITCHES

RACON 8 - TACTILE SWITCHES

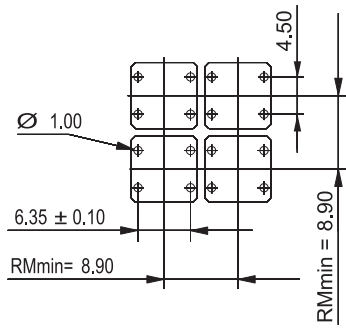
RACON 8, PCB hole pattern, smallest grid

THT terminal outward



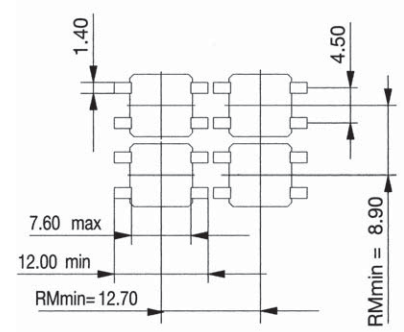
view on component side

THT terminal inward



view on component side

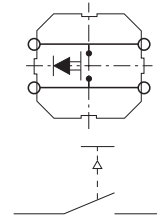
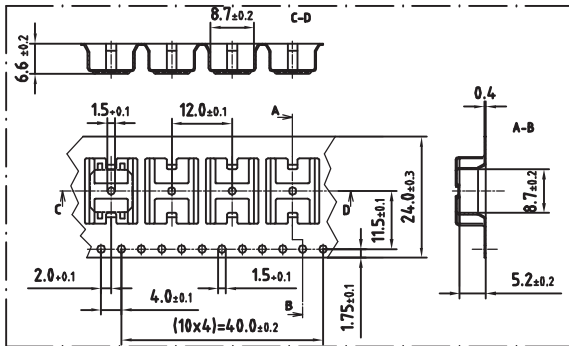
SMT gullwing terminal



view on component side

RACON 8, SMT terminal, tape and reel

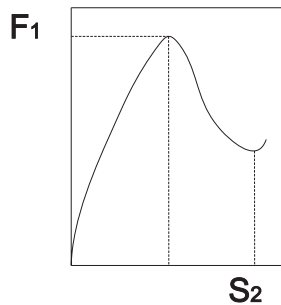
Circuit diagram RACON 8



Switching symbols acc. to IEC 60 617 form X (twice interrupting)

4

Typical force travel diagram

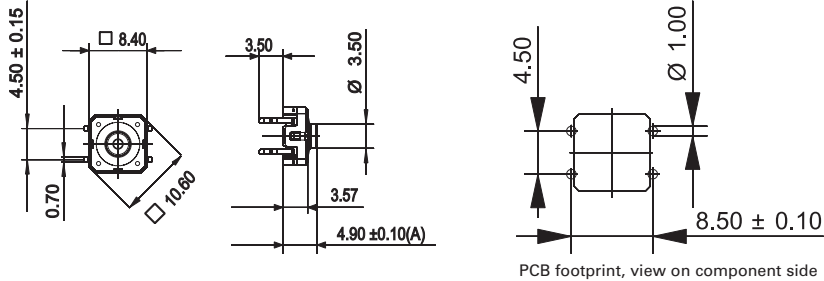


Operating force F1 and switching travel S2 see order block

DISTRIBUTED BY TEXIM EUROPE

RACON 8 Tactile switch, THT outward

Technical data see page 4 - 33

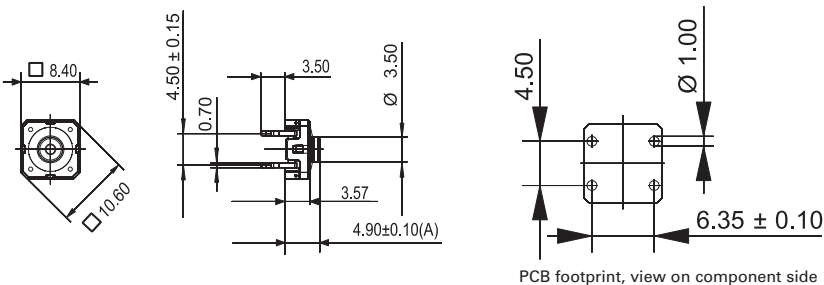


→ Produkt type	Terminals	Operating force	Solderability / Solder heat resistance	Packing	Order no.
A1	THT outward	3.3 ^{±0.6} N	DIN EN 60068-2-20	tubes à 60 pieces	1.14.100.501/0000

For keycaps refer to chapter „RK 90“; plungers see „RACON special accessories“

RACON 8 Tactile switch, THT inward

Technical data see page 4 - 33



→ Produkt type	Terminals	Operating force	Solderability / Solder heat resistance	Packing	Order no.
B1	THT inward	3.3 ^{±0.6} N	DIN EN 60068-2-20	tubes à 60 pieces	1.14.100.502/0000

For keycaps refer to chapter „RK 90“; plungers see „RACON special accessories“

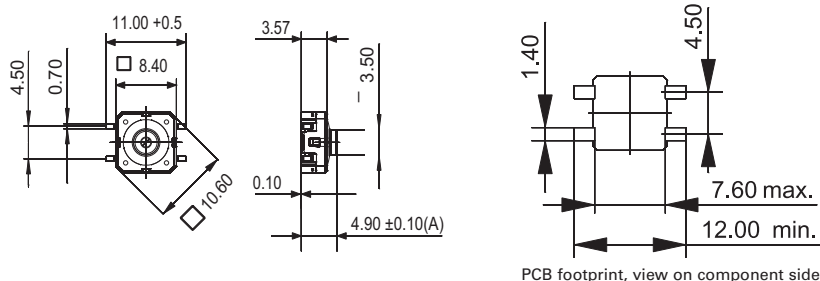
PCB KEY SWITCHES

RACON 8 - TACTILE SWITCHES



RACON 8 Tactile switch, SMT gullwing (Z) terminals

Technical data see page 4 - 33



→ Produkt type	Operating force	Switching travel	Operating life	Packing	Solderability / Solder heat resistance	Order no.
C1	3.3 ^{±0.6} N	0.34 ^{±0.1} mm	1,000,000	tape and reel à 1000 pieces	DIN EN 60068-2-58	1.14.100.503/0000
C2	4.8 ^{±0.8} N	0.42 ^{±0.1} mm	1,000,000	tape and reel à 1000 pieces	DIN EN 60068-2-58	1.14.100.603/0000
C4	6.0 ^{±1.0} N	0.47 ^{±0.1} mm	50,000	tape and reel à 1000 pieces	DIN EN 60068-2-58	1.14.100.803/0000

For keycaps refer to chapter „RK 90“; plungers see „RACON special accessories“.

The Netherlands



Elektrostraat 17
NL-7483 PG Haaksbergen

T: +31 (0)53 573 33 33
F: +31 (0)53 573 33 30
E: nl@texim-europe.com

Belgium



Zuiderlaan 14 bus 10
B-1731 Zellik

T: +32 (0)2 462 01 00
F: +32 (0)2 462 01 25
E: belgium@texim-europe.com

UK & Ireland



St. Mary's House, Church Lane
Carlton Le Moorland
Lincoln LN5 9HS

T: +44 (0)1522 789 555
F: +44 (0)845 299 22 26
E: uk@texim-europe.com

Germany North



Bahnhofstrasse 92
D-25451 Quickborn

T: +49 (0)4106 627 07-0
F: +49 (0)4106 627 07-20
E: germany@texim-europe.com

Germany South



Martin-Kollar-Strasse 9
D-81829 München

T: +49 (0)89 436 086-0
F: +49 (0)89 436 086-19
E: germany@texim-europe.com

Austria



Warwitzstrasse 9
A-5020 Salzburg

T: +43 (0)662 216 026
F: +43 (0)662 216 026-66
E: austria@texim-europe.com

Nordic region



Sdr. Jagtvej 12
DK-2970 Hørsholm

T: +45 88 20 26 30
F: +45 88 20 26 39
E: nordic@texim-europe.com

Italy



Via Matteotti 43
IT-20864 Agrate Brianza (MB)

T: +39 (0)395 967 226
F: +39 (0)395 967 226
E: italy@texim-europe.com

General information



info@texim-europe.com
www.texim-europe.com