Switches Unlimited<br>Contact: sales@switchesunlimited.com<br>Phone: 800-221-0487 * Fax: 718-672-6370<br>www.switchesunlimited.com

## Type matrix of capacitive sensors



1 K = Non-contact proximity switch

2 C = Capacitive
$3 B=$ Flush installation
$N=$ Non-flush installation

4 Dash
$5 \mathrm{M}=$ Metric threaded barrel (metal housings)
T = Metric threaded barrel (plastic housings)
D = Cylindrical housings (metal)
$R=$ Cylindrical housings (plastic)
$\mathrm{Q}=$ Rectangular housings (metal)
$\mathrm{E}=$ Rectangular housings (plastic)
$N=$ Standard attachment according to DIN 50025/50037)

6/7 Two-digit number
14 Slash
$12=$ M $12 \times 1 \mathrm{~mm}$ threaded barrel
$18=\mathrm{M} 18 \times 1 \mathrm{~mm}$ threaded barrel
$30=\mathrm{M} 30 \times 1.5 \mathrm{~mm}$ threaded
15
$\mathrm{K}=$ Short-circuit proof
$32=$ M $32 \times 1.5 \mathrm{~mm}$ threaded barrel
$20=20 \mathrm{~mm}$ diameter
$22=22 \mathrm{~mm}$ diameter
$34=34 \mathrm{~mm}$ diameter
$44=40 \times 40 \times 120 \mathrm{~mm}$
$68=68 \times 30 \times 15 \mathrm{~mm}$
$8 \mathrm{P}=\mathrm{PNP}$
$\mathrm{N}=\mathrm{NPN}$
$A=A C 2$-wire
$R=$ Relay
G = Push/pull
D = Dual output switching device
$9 \mathrm{~S}=$ Normally-open contact
Ö = Normally-closed contact
P = Programmable switch
A = Analogue
$U=$ Complementary

10 Slash

11/12/13 Sensing distance
Examples: $1.5=1.5 \mathrm{~mm}$
$002=2 \mathrm{~mm}$
$040=40 \mathrm{~mm}$

## Wiring diagrams of DC output types

Key to colour coding of cable
$\mathrm{BN}=$ brown
$\mathrm{BU}=$ blue
$\mathrm{BK}=$ black


1) PNP Normally open

During operation, output of PNP transistor is switched to positive.


## 4) NPN Normally open

During operation, output of NPN transistor is switched to negative.


## PNP output

(Principle wiring diagram)


## 2) PNP Normally closed

During operation, output of PNP transisitor is separated from positive pole.


## 5) NPN Normally closed

During operation, output of NPN transistor is separated from negative pole.


## 8) Push/Pull-programmable

During operation, the output changes from negative to positive pole, invertable by integrated switch.

NPN output
(Principle wiring diagram)

3) PNP Switch selectable

The 1) PNP normally-open and 2) PNP normallyclosed functions can be selected via an integrated switch.


## 9) Complementary output

## PNP 4-wire

During operation, the positive operating voltage is applied alternatively to both outputs.

## Wiring diagrams of AC output types

Key to colour coding of cable
$\mathrm{BN}=$ brown
BU = blue
BK = black

10) Normally open AC 2-wire

During operation, athyristor which is positioned above a rectifier bridge separates the load from the operating voltage.


14) TYPE BKS D20 PA

Part number:
596.0223 .085
incl. 2 screws M $5 \times 35$ mm, DIN 912


13) AC-Relay
with adjustable operate lag.

15) TYPE BKS D22 PA

Part number:
596.0223.040
incl. 2 screws M $5 \times 35$ mm, DIN 912


