# *uprox*®+ large rectangular design

The *uprox*®+ rectangular types offer highest flexibility in terms of installation, thus providing completely new application possibilities. All non-flush rectangular *uprox*®+ sensors are 4-side embeddable with reduced switching distance. Additional mechanical components and accessories are not required. As a result, installation is cost-effective, quicker and easier.
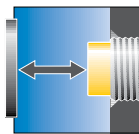
Features

- Highest switching distance
- Factor 1 for all metals
- Excellent EMC properties and magnetic field resistance
- Non-flush rectangular sensors are partially embeddable

Properties
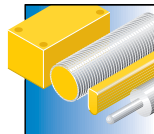
Designs
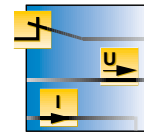From the variable 40 x 40 mm standard CK 40 to the large Ø 90 mm K90SR

Electrical versions
3/4-wire NO/NC contact as well as antivalent output, PNP and NPN

Switching distances
Large switching distances between 20 mm and max.100 mm on all metals
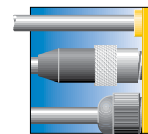
Electrical connections
2 m connection cable or male M12 x 1

Materials
Rugged plastic housing for harsh and uncompromising application conditions
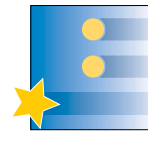
Special features
Protection class IP68; high luminance corner LEDs; variable orientation of active face in 5 directions

Internet link
Scan the QR code to access our products on the internet

CK40

General data

Connection	male, M12 x 1
Dimensions	40 x 40 x 65 mm

Housing material	PBT

Variable orientation of active face in 5 directions

Types and data – selection table

Type	Operating voltage	Output	Switching distance	Operating current	Ambient temperature	w	d
BI30U-CK40-AP6X2-H1141	10…30 VDC	⌐⌐, PNP	30 mm, ▱	200, Ⓚ	-10…+60 °C	w002	d012
BI20U-CK40-AP6X2-H1141	10…30 VDC	⌐⌐, PNP	20 mm, ▱	200, Ⓚ	-30…+85 °C	w002	d013
BI15U-CK40-AD4X-H1144	10…65 VDC	⌐⌐, 2-wire	15 mm, ▱	100, Ⓚ	-25…+70 °C	w004	d013
NI50U-CK40-AP6X2-H1141	10…30 VDC	⌐⌐, PNP	50 mm, ▱	200, Ⓚ	-30…+85 °C	w002	d012
NI50U-CK40-VP4X2-H1141	10…65 VDC	⌐⌐, PNP	50 mm, ▱	200, Ⓚ	-30…+85 °C	w005	d012
NI35U-CK40-AD4X-H1144	10…65 VDC	⌐⌐, 2-wire	35 mm, ▱	100, Ⓚ	-25…+70 °C	w004	d012

Many different types available, also as NPN version, see type code

QV40

General data

Connection	male, M12 x 1
Output	⌐⌐, PNP
Operating current [mA]	200, Ⓚ
Dimensions	40 x 40 x 65 mm

Operating voltage	10…30 VDC
Housing material	PBT
Ambient temperature	-30…+85 °C

Variable orientation of active face in 5 directions

Types and data – selection table

Type	Switching distance	w	d
BI20U-QV40-AP6X2-H1141	20 mm, ▱	w002	d014
NI50U-QV40-AP6X2-H1141	50 mm, ▱	w002	d014

CP40

General data

Connection	Terminal chamber	**Housing material**	PBT
Operating current [mA]	200, Ⓚ	**Dimensions**	40 x 40 x 114 mm

Variable orientation of active face in 9 directions

Types and data – selection table

Type	Operating voltage	Output	Switching distance	Ambient temperature	w	d
BI30U-CP40-AP6X2	10…30 VDC	⟍, PNP	30 mm, ▱	-10…+60 ℃	w006	d015
BI20U-CP40-AP6X2	10…30 VDC	⟍, PNP	20 mm, ▱	-30…+85 ℃	w006	d015
NI50U-CP40-AP6X2	10…30 VDC	⟍, PNP	50 mm, ▱	-30…+85 ℃	w006	d015
NI50U-CP40-VP4X2	10…65 VDC	⟝, PNP	50 mm, ▱	-30…+85 ℃	w007	d015

Many different types available, also as NPN version, see type code

Q42

General data

Connection	male, M12 x 1	**Operating voltage**	10…30 VDC
Output	⟝, PNP	**Switching distance**	50 mm, ▱
Housing material	PA	**Operating current [mA]**	200, Ⓚ
Ambient temperature	-40…+100 ℃	**Dimensions**	42.5 x 42.5 x 68 mm

Types and data – selection table

Type	w	d
NI50U-Q42FWD-VP6X-H1141	w005	d016
NI50U-Q42TWD-VP6X-H1141	w005	d017

Q80

General data

Connection	male, M12 x 1	**Housing material**	PBT
Operating current [mA]	200, Ⓚ	**Ambient temperature**	-25…+70 ℃
Dimensions	80 x 40 x 92 mm		

Types and data – selection table

Type	Operating voltage	Output	Switching distance	w	d
BI50U-Q80-AP6X2-H1141	10…30 VDC	, PNP	50 mm,	w002	d018
BI50U-Q80-VP4X2-H1141	10…65 VDC	, PNP	50 mm,	w005	d018
NI75U-Q80-AP6X2-H1141	10…30 VDC	, PNP	75 mm,	w002	d018
NI75U-Q80-VP4X2-H1141	10…65 VDC	, PNP	75 mm,	w005	d018

Many different types available, also as NPN version, see type code

K90

General data

Operating voltage	10…65 VDC	**Output**	, PNP
Switching distance	100 mm,	**Housing material**	PBT
Operating current [mA]	200, Ⓚ	**Ambient temperature**	-30…+85 ℃
Dimensions	75 x 60 x 130 mm		

Types and data – selection table

Type	Connection	w	d
NI100U-K90SR-VP4X2	Terminal chamber	w007	d019
NI100U-K90SR-VP4X2-H1141	male, M12 x 1	w005	d020

Many different types available, also as NPN version, see type code

Ⓦ Wiring diagrams on page 658   Ⓓ Dimension drawing on page 670   Accessories on page 560