

Rectangular designs

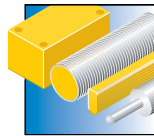


Rectangular inductive sensors fit to measure. Thanks to large switching distances and rugged housing materials, these sensors are highly reliable and secure. They are quickly and firmly mounted thanks to threaded holes in the housing. All standard electrical output and connection types are available.

Features

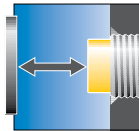
- Stable and resistant plastic housings
- Large switching distances
- Perfect mounting
- All connection types

Properties



Designs

From the small compact Q5SE to the big sized K90 Ø 90 mm version



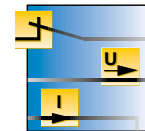
Switching distances

0.8 mm for exact position detection, 100 mm for long ranges



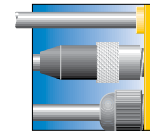
Materials

Rugged and chemical-resistant plastic and metal housings for all types of applications



Electrical versions

NAMUR, 2, 3 and 4-wire DC, 2-wire AC/DC



Electrical connections

Cable, connector, terminal chamber and pigtail



Special features

Factor 1, extended temperature range, approvals (et al. ATEX and SIL)





Internet link

Scan the QR code to access our products on the internet

Q5SE



General data

Connection	2 m cable	Operating voltage	10...30 VDC
Output	 , PNP	Switching distance	0.8 mm, 
Housing material	Al, anodized	Dimensions	5 x 5 x 25 mm

Active face on top


Types and data – selection table

Type		
BI0,8-Q5SE-AP6X	w012	d082

Q5.5



General data

Connection	2 m cable	Operating voltage	10...30 VDC
Output	 , PNP	Housing material	PP-GF20
Dimensions	8 x 5.5 x 28 mm		

Types and data – selection table



Type	Switching distance		
BI2-Q5,5-AP6X	2 mm, 	w012	d083
NI3,5-Q5,5-AP6X	3.5 mm, 	w012	d083

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

Q06



General data

Connection	2 m cable	Operating voltage	10...30 VDC
Output	 , PNP	Switching distance	3 mm, 
Housing material	PBT	Dimensions	17.3 x 6 x 27.8 mm

Types and data – selection table


Type	 
BI3-Q06-AP6X2	w012 d084

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



Q6.5



General data

Connection	2 m cable	Operating voltage	10...30 VDC
Output	 , PNP	Housing material	PP
Dimensions	17 x 6.5 x 20 mm		

Types and data – selection table

Type	Switching distance	 
BI1-Q6,5-AP6/S34	1 mm, 	w012 d085
NI2-Q6,5-AP6/S34	2 mm, 	w012 d085

Q8SE



General data

Operating voltage	10...30 VDC
Switching distance	4 mm,
Dimensions	8 x 8 x 40 mm

Output	, PNP
Housing material	PP

Lateral active face

Types and data – selection table

Type	Connection		
NI4U-Q8SE-AP6X	2 m cable	w012	d086
NI4U-Q8SE-AP6X-V1131	male, M8 x 1	w013	d087

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

Q08



General data

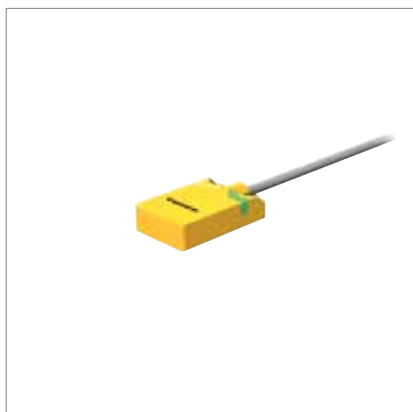
Housing material	GD-Zn	Dimensions	20 x 8 x 32 mm
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Types and data – selection table

Type	Connection	Operating voltage	Output	Switching distance		
BI8U-Q08-AP6X2	2 m cable	10...30 VDC	, PNP	8 mm,	w012	d088
BI8U-Q08-AP6X2-V1131	male, Ø 8 mm	10...30 VDC	, PNP	8 mm,	w013	d089
BI5U-Q08-AP6X2	2 m cable	10...30 VDC	, PNP	5 mm,	w012	d090
BI5U-Q08-AP6X2-V1131	male, Ø 8 mm	10...30 VDC	, PNP	5 mm,	w013	d091
BI5U-Q08-AP6X2-V2131	male, M8 x 1	10...30 VDC	, PNP	5 mm,	w013	d092
BI5U-Q08-AP6X2-0,5XOR-RS4	0.5 m Cable with connector, M12 x 1	10...30 VDC	, PNP	5 mm,	w013	d093
BI5U-Q08-AP6X2-1XOR-RS4	1 m Cable with connector, M12 x 1	10...30 VDC	, PNP	5 mm,	w013	d093
BI7-Q08-VP6X2	2 m cable	10...30 VDC	, PNP	7 mm,	w010	d090
BI7-Q08-VP6X2-V1141	male, Ø 8 mm	10...30 VDC	, PNP	7 mm,	w005	d091
BI5-Q08-Y1X	2 m cable	8.2 VDC	NAMUR	5 mm,	w014	d090
BI5-Q08-VP6X2	2 m cable	10...30 VDC	, PNP	5 mm,	w010	d090

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

QP08



General data

Operating voltage

10...30 VDC

Output

—, PNP

Switching distance

10 mm,

Housing material

PP

Dimensions

20 x 8 x 32 mm

Types and data – selection table

Type	Connection		
NI10U-QP08-AP6X2	2 m cable	w012	d094
NI10U-QP08-AP6X2-0,3-PSG3M	0.3 m Cable with connector, M8 x 1	w013	d095

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

Q9.5



General data

Connection

2 m cable

Operating voltage

10...30 VDC

Output

—, PNP

Switching distance

2 mm,

Housing material

PP

Dimensions

17 x 9.5 x 20 mm

Types and data – selection table

Type		
NI2-Q9,5-AP6/S34	w012	d096

Q10



General data

Operating voltage	10...30 VDC	Output	PNP
Switching distance	8 mm,	Housing material	PBT
Dimensions	25 x 10.8 x 42 mm		

Types and data – selection table

Type	Connection		
BI8U-Q10-AP6X2	2 m cable	w012	d097
BI8U-Q10-AP6X2-V1131	male, M8 x 1	w013	d098

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

Q10S



General data

Housing material	PP-GF20	Dimensions	16 x 10.2 x 27.8 mm
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Lateral active face

Types and data – selection table

Type	Connection	Operating voltage	Output	Switching distance		
BI2-Q10S-Y1X	2 m cable	8.2 VDC	NAMUR	2 mm,	w014	d099
BI2-Q10S-AP6X	2 m cable	10...30 VDC	PNP	2 mm,	w012	d099
BI2-Q10S-VP6X	2 m cable	10...30 VDC	PNP	2 mm,	w010	d099
BI2-Q10S-AZ31X	2 m cable	20...250 VAC / 10...300 VDC		2 mm,	w015	d099
BI2-Q10S-AP6X-0,2-PSG3M	0.2 m male, M8 x 1	10...30 VDC	PNP	2 mm,	w013	d100
NI5U-Q10S-AP6X	2 m cable	10...30 VDC	PNP	5 mm,	w012	d099
NI5U-Q10S-AP6X-0,3-PSG3M	0.3 m Cable with connector, M8 x 1	10...30 VDC	PNP	5 mm,	w013	d100

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

Q12



General data

Housing material PA **Dimensions** 26 x 12 x 40 mm

Types and data – selection table

Type	Connection	Operating voltage	Output	Switching distance	w	d
BI5U-Q12-AP6X2	2 m cable	10...30 VDC	PNP	5 mm,	w012	d101
BI5U-Q12-VP6X2 7M	7 m cable	10...30 VDC	PNP	5 mm,	w010	d101
BI5U-Q12-AP6X2-V1131	male, M8 x 1	10...30 VDC	PNP	5 mm,	w013	d010
BI5U-Q12-AP6X2-H1141	male, M12 x 1	10...30 VDC	PNP	5 mm,	w013	d102
BI2-Q12-AZ31X	2 m cable	20...250 VAC / 10...300 VDC		2 mm,	w015	d103
NI4-Q12-AZ31X	2 m cable	20...250 VAC / 10...300 VDC		4 mm,	w015	d103

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

Q14



General data

Housing material PBT **Dimensions** 30 x 14 x 52 mm

Types and data – selection table



Type	Connection	Operating voltage	Output	Switching distance	w	d
BI10U-Q14-AP6X2	2 m cable	10...30 VDC	PNP	10 mm,	w012	d104
BI10U-Q14-AP6X2-V1131	male, M8 x 1	10...30 VDC	PNP	10 mm,	w013	d105
BI10-Q14-Y1X	2 m cable	8.2 VDC	NAMUR	10 mm,	w014	d106
BI10-Q14-ADZ32X2	2 m cable	20...250 VAC / 10...300 VDC		10 mm,	w016	d104
NI20-Q14-AP6X2	2 m cable	10...30 VDC	PNP	20 mm,	w012	d104
NI20-Q14-AP6X2-V1131	male, M8 x 1	10...30 VDC	PNP	20 mm,	w013	d105

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

Q18



General data

Connection	2 m cable	Operating voltage	10...30 VDC
Output	 , PNP	Switching distance	5 mm, 
Housing material	PBT	Dimensions	18 x 18 x 29 mm

Types and data – selection table

Type		
NI5-Q18-AP6X	w012	d107

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













Q20



General data

Housing material	PBT	Dimensions	40 x 20 x 68 mm
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Types and data – selection table

Type	Connection	Operating voltage	Output	Switching distance		
BI15U-Q20-AP6X2	2 m cable	10...30 VDC	 , PNP	15 mm, 	w012	d108
BI15U-Q20-AP6X2-H1141	male, M12 x 1	10...30 VDC	 , PNP	15 mm, 	w013	d109
BI15-Q20-Y1X	2 m cable	8.2 VDC	NAMUR	15 mm, 	w014	d110
BI15-Q20-Y1X-H1141	male, M12 x 1	8.2 VDC	NAMUR	15 mm, 	w017	d109
NI25-Q20-AP6X2	2 m cable	10...30 VDC	 , PNP	25 mm, 	w012	d108
NI25-Q20-AP6X2-H1141	male, M12 x 1	10...30 VDC	 , PNP	25 mm, 	w013	d109

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

Q25



General data			
Connection	2 m cable	Operating voltage	10...30 VDC
Output	—, PNP	Switching distance	10 mm,
Housing material	PBT	Dimensions	25 x 25.5 x 38.5 mm

Types and data – selection table

Type		
NI10-Q25-AP6X	w012	d111

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

CA25



General data			
Operating voltage	10...30 VDC	Output	—, PNP
Housing material	GD-CuZn	Dimensions	25 x 25 x 40 mm

Variable orientation of active face in 5 directions

Types and data – selection table

Type	Connection	Switching distance		
BI10U-CA25-AP6X2-V1131	male, M8 x 1	10 mm,	w013	d112
BI10U-CA25-AP6X2-H1141	male, M12 x 1	10 mm,	w013	d113
NI15U-CA25-AP6X2-V1131	male, M8 x 1	15 mm,	w013	d112
NI15U-CA25-AP6X2-H1141	male, M12 x 1	15 mm,	w013	d113

QN26



General data

Connection	0.15 m Cable with connector, M12 x 1	Operating voltage	10...65 VDC
Output	—, 2-wire	Switching distance	10 mm,
Dimensions	26 x 26 x 43 mm		

Variable orientation of active face in 4 directions

Types and data – selection table

Type	Housing material		
BI10-QN26-AD4X-0,15-RS4.23/S90	PBT	w018	d114
BI10-QN26-AD4X-0,15XOR-RS4.23/S100-S1589	PBT, weldguard coated	w018	d115

CK40



General data

Housing material	PBT	Dimensions	40 x 40 x 65 mm
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Variable orientation of active face in 5 directions

Types and data – selection table

Type	Connection	Operating voltage	Output	Switching distance		
BI30U-CK40-AP6X2-H1141	male, M12 x 1	10...30 VDC	—, PNP	30 mm,	w013	d116
BI20U-CK40-AP6X2-H1141	male, M12 x 1	10...30 VDC	—, PNP	20 mm,	w013	d013
BI20U-CK40-VP4X2-H1141	male, M12 x 1	10...65 VDC	—, PNP	20 mm,	w005	d013
BI15U-CK40-AP6X2-H1141	male, M12 x 1	10...30 VDC	—, PNP	15 mm,	w013	d013
BI15U-CK40-VP4X2-H1141	male, M12 x 1	10...65 VDC	—, PNP	15 mm,	w005	d013
BI15U-CK40-AD4X-H1144	male, M12 x 1	10...65 VDC	—, 2-wire	15 mm,	w018	d013
BI15U-CK40-ADZ30X2-B1131	male, 7/8"	20...250 VAC / 10...300 VDC	—	15 mm,	w019	d117
BI15U-CK40-ADZ30X2-B3131	male, 1/2"	20...250 VAC / 10...300 VDC	—	15 mm,	w020	d118
BI15-CK40-Y1X-H1141	male, M12 x 1	8.2 VDC	NAMUR	15 mm,	w017	d119
BI15-CK40-AP6X2-H1141	male, M12 x 1	10...30 VDC	—, PNP	15 mm,	w013	d013
BI15-CK40-AD4X-H1141	male, M12 x 1	10...65 VDC	—, 2-wire	15 mm,	w021	d119
NI50U-CK40-AP6X2-H1141	male, M12 x 1	10...30 VDC	—, PNP	50 mm,	w013	d116
NI50U-CK40-VP4X2-H1141	male, M12 x 1	10...65 VDC	—, PNP	50 mm,	w005	d116
NI40U-CK40-AP6X2-H1141	male, M12 x 1	10...30 VDC	—, PNP	40 mm,	w013	d116
NI35U-CK40-AP6X2-H1141	male, M12 x 1	10...30 VDC	—, PNP	35 mm,	w013	d116

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Type	Connection	Operating voltage	Output	Switching distance	w	d
NI35U-CK40-AD4X-H1144	male, M12 x 1	10...65 VDC	—, 2-wire	35 mm,	w018	d116
NI35U-CK40-ADZ30X2-B1131	male, 7/8"	20...250 VAC / 10...300 VDC	—	35 mm,	w019	d120
NI35U-CK40-ADZ30X2-B3131	male, 1/2"	20...250 VAC / 10...300 VDC	—	35 mm,	w020	d121
NI25U-CK40-AP6X2-H1141	male, M12 x 1	10...30 VDC	—, PNP	25 mm,	w013	d116
NI25U-CK40-VP4X2-H1141	male, M12 x 1	10...65 VDC	—, PNP	25 mm,	w005	d116
NI35-CK40-AP6X2-H1141	male, M12 x 1	10...30 VDC	—, PNP	35 mm,	w013	d116
NI20-CK40-Y1X-H1141	male, M12 x 1	8.2 VDC	NAMUR	20 mm,	w017	d119
NI20-CK40-AP6X2-H1141	male, M12 x 1	10...30 VDC	—, PNP	20 mm,	w013	d013
NI20-CK40-AD4X-H1141	male, M12 x 1	10...65 VDC	—, 2-wire	20 mm,	w021	d119

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

CP40


General data
Housing material PBT **Dimensions** 40 x 40 x 114 mm










Variable orientation of active face in 9 directions

Types and data – selection table

Type	Connection	Operating voltage	Output	Switching distance	w	d
BI30U-CP40-AP6X2	Terminal chamber	10...30 VDC	—, PNP	30 mm,	w022	d122
BI20U-CP40-AP6X2	Terminal chamber	10...30 VDC	—, PNP	20 mm,	w022	d122
BI20U-CP40-VP4X2	Terminal chamber	10...65 VDC	—, PNP	20 mm,	w023	d122
BI15U-CP40-AP6X2	Terminal chamber	10...30 VDC	—, PNP	15 mm,	w022	d122
BI15U-CP40-VP4X2	Terminal chamber	10...65 VDC	—, PNP	15 mm,	w023	d122
BI15U-CP40-VP4X2-H1141	male, M12 x 1	10...65 VDC	—, PNP	15 mm,	w005	d123
BI15U-CP40-FDZ30X2	Terminal chamber	20...250 VAC / 10...300 VDC	—, —	15 mm,	w024	d122
BI20-CP40-Y1X	Terminal chamber	8.2 VDC	NAMUR	20 mm,	w025	d124
BI15-CP40-Y1X	Terminal chamber	8.2 VDC	NAMUR	15 mm,	w025	d124
BI15-CP40-AP6X2	Terminal chamber	10...30 VDC	—, PNP	15 mm,	w022	d122
BI15-CP40-VP4X2	Terminal chamber	10...65 VDC	—, PNP	15 mm,	w023	d122
BI15-CP40-AD4X	Terminal chamber	10...65 VDC	—, 2-wire	15 mm,	w026	d124
BI15-CP40-FZ3X2	Terminal chamber	20...250 VAC / 10...300 VDC	—, —	15 mm,	w024	d122
NI50U-CP40-AP6X2	Terminal chamber	10...30 VDC	—, PNP	50 mm,	w022	d122
NI50U-CP40-AP6X2-H1141	male, M12 x 1	10...30 VDC	—, PNP	50 mm,	w013	d123
NI50U-CP40-VP4X2	Terminal chamber	10...65 VDC	—, PNP	50 mm,	w023	d122
NI40U-CP40-AP6X2	Terminal chamber	10...30 VDC	—, PNP	40 mm,	w022	d122
NI40U-CP40-VP4X2	Terminal chamber	10...65 VDC	—, PNP	40 mm,	w023	d122
NI40U-CP40-VP4X2-H1141	male, M12 x 1	10...65 VDC	—, PNP	40 mm,	w005	d123
NI40U-CP40-FDZ30X2	Terminal chamber	20...250 VAC / 10...300 VDC	—, —	40 mm,	w024	d122
NI35-CP40-VP4X2	Terminal chamber	10...65 VDC	—, PNP	35 mm,	w023	d122
NI35-CP40-FZ3X2	Terminal chamber	20...250 VAC / 10...300 VDC	—, —	35 mm,	w024	d122
NI20-CP40-Y1X	Terminal chamber	8.2 VDC	NAMUR	20 mm,	w025	d124

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
Type	Connection	Operating voltage	Output	Switching distance	w	d
NI20-CP40-AP6X2	Terminal chamber	10...30 VDC	 , PNP	20 mm, 	w022	d122
NI20-CP40-VP4X2	Terminal chamber	10...65 VDC	 , PNP	20 mm, 	w023	d122
NI20-CP40-AD4X	Terminal chamber	10...65 VDC	 , 2-wire	20 mm, 	w026	d124
NI20-CP40-FZ3X2	Terminal chamber	20...250 VAC / 10...300 VDC	 , 	20 mm, 	w024	d122

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

QV40



General data

Connection	male, M12 x 1	Operating voltage	10...30 VDC
Output	 , PNP	Housing material	PBT
Dimensions	40 x 40 x 65 mm		

Variable orientation of active face in 5 directions



Types and data – selection table

Type	Switching distance	w	d
BI20U-QV40-AP6X2-H1141	20 mm, 	w013	d125
NI50U-QV40-AP6X2-H1141	50 mm, 	w013	d125

Q42



General data

Connection	male, M12 x 1	Operating voltage	10...30 VDC
Output	 , PNP	Switching distance	50 mm, 
Housing material	PA	Dimensions	42.5 x 42.5 x 68 mm

Types and data – selection table

Type	w	d
NI50U-Q42FWD-VP6X-H1141	w005	d126
NI50U-Q42TWD-VP6X-H1141	w005	d127













Q80



General data

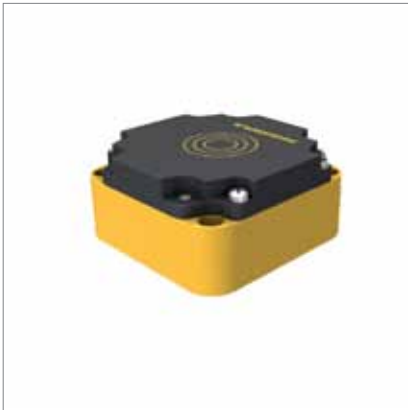
Housing material PBT **Dimensions** 80 x 40 x 92 mm

Types and data – selection table

Type	Connection	Operating voltage	Output	Switching distance	w	d
BI50U-Q80-AP6X2-H1141	male, M12 x 1	10...30 VDC	 , PNP	50 mm, 	w013	d128
BI50U-Q80-VP4X2-H1141	male, M12 x 1	10...65 VDC	 , PNP	50 mm, 	w005	d128
BI50U-Q80-VP4X2-H1141/3GD	male, M12 x 1	10...65 VDC	 , PNP	50 mm, 	w005	d128
BI50-Q80-Y1X	2 m cable	8.2 VDC	NAMUR	50 mm, 	w014	d129
NI75U-Q80-AP6X2-H1141	male, M12 x 1	10...30 VDC	 , PNP	75 mm, 	w013	d128
NI75U-Q80-VP4X2-H1141	male, M12 x 1	10...65 VDC	 , PNP	75 mm, 	w005	d128
NI60-Q80-Y1X	2 m cable	8.2 VDC	NAMUR	60 mm, 	w014	d129

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

CP80



General data

Housing material	PBT	Dimensions	80 x 41 x 80 mm
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Types and data – selection table

Type	Connection	Operating voltage	Output	Switching distance	w	d
BI40-CP80-VP4X2	Terminal chamber	10...65 VDC	—, PNP	40 mm,	w023	d130
BI40-CP80-VP4X2-H1141	male, M12 x 1	10...65 VDC	—, PNP	40 mm,	w005	d131
BI40-CP80-FZ3X2	Terminal chamber	20...250 VAC / 10...300 VDC		40 mm,	w024	d130
NI75U-CP80-VP4X2	Terminal chamber	10...65 VDC	—, PNP	75 mm,	w023	d130
NI75U-CP80-VP4X2-H1141	male, M12 x 1	10...65 VDC	—, PNP	75 mm,	w005	d131
NI75U-CP80-FDZ30X2	Terminal chamber	20...250 VAC / 10...300 VDC		75 mm,	w024	d130
NI50-CP80-VP4X2	Terminal chamber	10...65 VDC	—, PNP	50 mm,	w023	d130
NI50-CP80-FZ3X2	Terminal chamber	20...250 VAC / 10...300 VDC		50 mm,	w024	d130
NI40-CP80-Y1	Terminal chamber	8.2 VDC	NAMUR	40 mm,	w025	d132
NI40-CP80-VP4X2	Terminal chamber	10...65 VDC	—, PNP	40 mm,	w023	d130
NI40-CP80-FZ3X2	Terminal chamber	20...250 VAC / 10...300 VDC		40 mm,	w024	d130

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

K90



General data

Housing material	PBT	Dimensions	75 x 60 x 130 mm
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Types and data – selection table

Type	Connection	Operating voltage	Output	Switching distance	w	d
NI50-K90SR-Y1	Terminal chamber	8.2 VDC	NAMUR	50 mm,	w025	d133
NI100U-K90SR-VP4X2-H1141	male, M12 x 1	10...65 VDC	—, PNP	100 mm,	w005	d134
NI100U-K90SR-VP4X2	Terminal chamber	10...65 VDC	—, PNP	100 mm,	w023	d135
NI60-K90SR-VP4X2	Terminal chamber	10...65 VDC	—, PNP	60 mm,	w023	d135
NI60-K90SR-FZ3X2	Terminal chamber	20...250 VAC / 10...300 VDC		60 mm,	w024	d135

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

Q130



General data

Switching distance

30 mm,

Housing material

PBT

Dimensions

57 x 48 x 130 mm

Types and data – selection table

Type	Connection	Operating voltage	Output		
NI30-Q130-VP4X2	2 m cable	10...65 VDC	, PNP	w010	d136
NI30-Q130-ADZ30X2-B1131	male, 7/8"	20...250 VAC / 10...300 VDC		w027	d137
NI30-Q130-ADZ30X2	2 m cable	20...250 VAC / 10...300 VDC		w028	d136

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

