

Cylindrical design - Thread

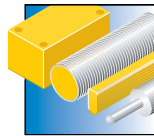


Threaded barrel sensors are available for all types of applications, ranging from the small 5 mm version to the big size PG36. In order to comply with the ambient conditions of individual applications, most sensors are available in different housing materials. The range of accessories is broad and enhances the functionality of the sensors if needed.

Features

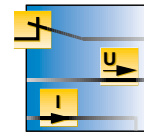
- Rugged 4-hole LED
- Different thread lengths
- Rugged housing materials
- Connection cable with approved sheath quality
- Many different electrical output functions

Properties



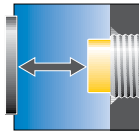
Designs

All standard thread sizes
M5 x 0.5, M8 x 1, M12 x 1,
M18 x 1, M30 x 1.5 and PG36
(G47)



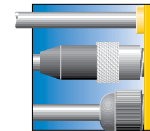
Electrical versions

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



Switching distances

non-flush 1 ... 25 mm and
flush 3 mm ... 25 mm



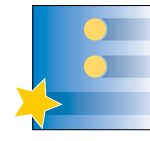
Electrical connections

Cable, connector, terminal
chamber and pigtail



Materials

Chrome-plated brass (op-
tionally PTFE-coated), stain-
less steel or rugged plastic
housings



Special features

Factor 1, all metals extended
temperature range, approv-
als (et al. ATEX and SIL)



Internet link

Scan the QR code to access
our products on the internet





M5



General data

Switching distance 1 mm,  **Housing material** V4A (1.4404)

Types and data – selection table

Type	Connection	Operating voltage	Output	Dimensions	w	d
BI1-EG05-Y1	2 m cable	8.2 VDC	NAMUR	Ø 5 x 30 mm	w014	d138
BI1-EG05-AP6X-V1331	male, M8 x 1	10...30 VDC	 , PNP	Ø 5 x 42.5 mm	w013	d139
BI1-EG05-RP6X-V1331	male, M8 x 1	10...30 VDC	 , PNP	Ø 5 x 42.5 mm	w029	d139
BI1-EG05-AP6X	2 m cable	10...30 VDC	 , PNP	Ø 5 x 30 mm	w012	d140
BI1-EG05-RP6X	2 m cable	10...30 VDC	 , PNP	Ø 5 x 30 mm	w030	d140

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







M8 – NAMUR



General data

Operating voltage 8.2 VDC **Output** NAMUR

Types and data – selection table

Type	Connection	Switching distance	Housing material	Dimensions	w	d
BI1,5-EG08K-Y1-H1341	male, M12 x 1	1.5 mm, 	V4A (1.4404)	Ø 8 x 39 mm	w017	d141
BI1,5-EG08-Y1-H1341	male, M12 x 1	1.5 mm, 	V4A (1.4404)	Ø 8 x 57 mm	w017	d142
NI3-EG08K-Y1-H1341	male, M12 x 1	3 mm, 	V4A (1.4404)	Ø 8 x 39 mm	w017	d143
BI1,5-EG08K-Y1	2 m cable	1.5 mm, 	V4A (1.4404)	Ø 8 x 23.6 mm	w014	d144
NI3-EG08K-Y1	2 m cable	3 mm, 	V4A (1.4404)	Ø 8 x 23.6 mm	w014	d145
BI1,5-GS880-Y1	2 m cable	1.5 mm, 	V2A (1.4301)	Ø 8 x 47 mm	w014	d146

M8 – 2-wire DC



General data

Operating voltage 10...55 VDC
Housing material V4A (1.4404)

Output

—, 2-wire

Types and data – selection table

Type	Connection	Switching distance	Dimensions	w	d
BI2-EG08-AG41X-H1341	male, M12 x 1	2 mm,	Ø 8 x 57 mm	w031	d027
NI4-EG08-AG41X	2 m cable	4 mm,	Ø 8 x 41.6 mm	w032	d147
BI2-EG08-AG41X	2 m cable	2 mm,	Ø 8 x 42 mm	w032	d148

M8 – 3-wire DC



General data

Operating voltage 10...30 VDC

Types and data – selection table

Type	Connection	Output	Switching distance	Housing material	Dimensions	w	d
BI1,5-EG08K-AP6X-V1131	male, M8 x 1	—, PNP	1.5 mm,	V4A (1.4404)	Ø 8 x 31 mm	w013	d149
BI2-EG08K-AP6X-V1131	male, M8 x 1	—, PNP	2 mm,	V4A (1.4404)	Ø 8 x 31 mm	w013	d149
BI1,5U-EG08-AP6X-V1131	male, M8 x 1	—, PNP	1.5 mm,	V4A (1.4404)	Ø 8 x 49 mm	w013	d150
BI1,5U-EGT08-AP6X-V1131	male, M8 x 1	—, PNP	1.5 mm,	V2A (1.4301), PTFE-coated	Ø 8 x 49 mm	w013	d150
BI2U-EG08-AP6X-V1131	male, M8 x 1	—, PNP	2 mm,	V4A (1.4404)	Ø 8 x 49 mm	w013	d150
BI2-EG08-AP6X-V1131	male, M8 x 1	—, PNP	2 mm,	V4A (1.4404)	Ø 8 x 49 mm	w013	d150
BI2U-EGT08-AP6X-V1131	male, M8 x 1	—, PNP	2 mm,	V2A (1.4301), PTFE-coated	Ø 8 x 49 mm	w013	d150
BI2U-EG08-RP6X-V1131	male, M8 x 1	—, PNP	2 mm,	V4A (1.4404)	Ø 8 x 49 mm	w029	d150
BI1,5-EG08-AP6X-V1131	male, M8 x 1	—, PNP	1.5 mm,	V4A (1.4404)	Ø 8 x 49 mm	w013	d150
NI3-EG08K-AP6X-V1131	male, M8 x 1	—, PNP	3 mm,	V4A (1.4404)	Ø 8 x 31 mm	w013	d151
NI3-EG08-AP6X-V1131	male, M8 x 1	—, PNP	3 mm,	V4A (1.4404)	Ø 8 x 49 mm	w013	d152
NI4U-EG08-AP6X-V1131	male, M8 x 1	—, PNP	4 mm,	V4A (1.4404)	Ø 8 x 49 mm	w013	d153
NI6U-EG08-AP6X-V1131	male, M8 x 1	—, PNP	6 mm,	V4A (1.4404)	Ø 8 x 49 mm	w013	d153
NI6U-EG08-RP6X-V1131	male, M8 x 1	—, PNP	6 mm,	V4A (1.4404)	Ø 8 x 49 mm	w029	d153
BI1,5-EG08K-AP6X-H1341	male, M12 x 1	—, PNP	1.5 mm,	V4A (1.4404)	Ø 8 x 39 mm	w013	d154
BI2-EG08K-AP6X-H1341	male, M12 x 1	—, PNP	2 mm,	V4A (1.4404)	Ø 8 x 39 mm	w013	d154

Table continues on the next page...

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Type	Connection	Output	Switching distance	Housing material	Dimensions	w	d
BI1,5U-EG08-AP6X-H1341	male, M12 x 1	—, PNP	1.5 mm,	V4A (1.4404)	Ø 8 x 57 mm	w013	d027
BI1,5U-EGT08-AP6X-H1341	male, M12 x 1	—, PNP	1.5 mm,	V2A (1.4301), PTFE-coated	Ø 8 x 57 mm	w013	d155
BI2U-EG08-AP6X-H1341	male, M12 x 1	—, PNP	2 mm,	V4A (1.4404)	Ø 8 x 57 mm	w013	d027
BI2-EG08-AP6X-H1341	male, M12 x 1	—, PNP	2 mm,	V4A (1.4404)	Ø 8 x 57 mm	w013	d027
BI2U-EGT08-AP6X-H1341	male, M12 x 1	—, PNP	2 mm,	V2A (1.4301), PTFE-coated	Ø 8 x 57 mm	w013	d027
BI2U-EG08-RP6X-H1341	male, M12 x 1	—, PNP	2 mm,	V4A (1.4404)	Ø 8 x 57 mm	w008	d027
BI1,5-EG08WD-AP6X-H1341	male, M12 x 1	—, PNP	1.5 mm,	V4A (1.4404)	Ø 8 x 57 mm	w013	d027
BI1,5-EG08-AP6X-H1341	male, M12 x 1	—, PNP	1.5 mm,	V4A (1.4404)	Ø 8 x 57 mm	w013	d027
NI3-EG08K-AP6X-H1341	male, M12 x 1	—, PNP	3 mm,	V4A (1.4404)	Ø 8 x 39 mm	w013	d156
NI4U-EG08-AP6X-H1341	male, M12 x 1	—, PNP	4 mm,	V4A (1.4404)	Ø 8 x 57 mm	w013	d157
NI6U-EG08-AP6X-H1341	male, M12 x 1	—, PNP	6 mm,	V4A (1.4404)	Ø 8 x 57 mm	w013	d157
NI6U-EG08-RP6X-H1341	male, M12 x 1	—, PNP	6 mm,	V4A (1.4404)	Ø 8 x 57 mm	w008	d157
NI3-EG08-AP6X-H1341	male, M12 x 1	—, PNP	3 mm,	V4A (1.4404)	Ø 8 x 57 mm	w013	d158
BI1,5-EG08K-AP6X	2 m cable	—, PNP	1.5 mm,	V4A (1.4404)	Ø 8 x 23.6 mm	w012	d159
BI2-EG08K-AP6X	2 m cable	—, PNP	2 mm,	V4A (1.4404)	Ø 8 x 23.6 mm	w012	d159
BI1,5U-EG08-AP6X	2 m cable	—, PNP	1.5 mm,	V4A (1.4404)	Ø 8 x 42 mm	w012	d148
BI2U-EG08-AP6X	2 m cable	—, PNP	2 mm,	V4A (1.4404)	Ø 8 x 42 mm	w012	d148
BI2-EG08-AP6X	2 m cable	—, PNP	2 mm,	V4A (1.4404)	Ø 8 x 42 mm	w012	d148
BI1,5-EG08-AP6X	2 m cable	—, PNP	1.5 mm,	V4A (1.4404)	Ø 8 x 42 mm	w012	d148
NI3-EG08K-AP6X	2 m cable	—, PNP	3 mm,	V4A (1.4404)	Ø 8 x 23.6 mm	w012	d160
NI4U-EG08-AP6X	2 m cable	—, PNP	4 mm,	V4A (1.4404)	Ø 8 x 42 mm	w012	d161
NI6U-EG08-AP6X	2 m cable	—, PNP	6 mm,	V4A (1.4404)	Ø 8 x 42 mm	w012	d161
NI3-EG08-AP6X	2 m cable	—, PNP	3 mm,	V4A (1.4404)	Ø 8 x 41.6 mm	w012	d147

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

M8 – 4-wire DC



General data

Connection	male, M12 x 1	Operating voltage	10...30 VDC
Output	—, PNP	Switching distance	2 mm,
Housing material	V4A (1.4404)		

Types and data – selection table



Type	Dimensions	w	d
BI2-EG08-VP6X-H1341	Ø 8 x 57 mm	w005	d027
BI2-EG08K-VP6X-H1341	Ø 8 x 39 mm	w005	d154

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

M8 – 2-wire AC/DC



General data

Connection	2 m cable	Operating voltage	20...132 VAC / 10... 140 VDC
Output		Switching distance	2 mm, 
Housing material	V4A (1.4404)	Dimensions	Ø 8 x 42 mm

Types and data – selection table

Type		
BI2-EG08-AZ14X	w033	d148



















M12 – NAMUR



General data

Operating voltage	8.2 VDC	Output	NAMUR
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Types and data – selection table

Type	Connection	Switching distance	Housing material	Dimensions		
NI5-EM12WDTC-Y1X	Terminal chamber, Removable cage clamp terminals	5 mm, 	V4A (1.4404)	Ø 12 x 70 mm	w025	d162
BI2-EM12WDTC-Y1X	Terminal chamber, Removable cage clamp terminals	2 mm, 	V4A (1.4404)	Ø 12 x 70 mm	w025	d163
BI2-G12SK-Y1X	Terminal chamber	2 mm, 	CuZn-Cr	Ø 12 x 65 mm	w025	d164
BI2-EG12SK-Y1X	Terminal chamber	2 mm, 	V2A (1.4301)	Ø 12 x 65 mm	w025	d164
BI2-P12SK-Y1X	Terminal chamber	2 mm, 	PA	Ø 12 x 70 mm	w025	d165
NI5-P12SK-Y1X	Terminal chamber	5 mm, 	PA	Ø 12 x 70 mm	w025	d165
NI5-G12SK-Y1X	Terminal chamber	5 mm, 	CuZn-Cr	Ø 12 x 65 mm	w025	d166
NI5-EG12SK-Y1X	Terminal chamber	5 mm, 	V2A (1.4301)	Ø 12 x 65 mm	w025	d166
NI5-G12-Y1X	2 m cable	5 mm, 	CuZn-Cr	Ø 12 x 34 mm	w014	d167
BI2-P12-Y1X	2 m cable	2 mm, 	PA	Ø 12 x 34 mm	w014	d168
NI5-P12-Y1X	2 m cable	5 mm, 	PA	Ø 12 x 34 mm	w014	d168
BI2-G12-Y1X	2 m cable	2 mm, 	CuZn-Cr	Ø 12 x 34 mm	w014	d169
BI2-M12-Y1X-H1141	male, M12 x 1	2 mm, 	CuZn-Cr	Ø 12 x 52 mm	w017	d170
BI2-EM12-Y1X-H1141	male, M12 x 1	2 mm, 	V2A (1.4301)	Ø 12 x 52 mm	w017	d170
NI5-M12-Y1X-H1141	male, M12 x 1	5 mm, 	CuZn-Cr	Ø 12 x 52 mm	w017	d171
NI5-EM12-Y1X-H1141	male, M12 x 1	5 mm, 	V2A (1.4301)	Ø 12 x 52 mm	w017	d171




















M12 – 2-wire DC



General data

Operating voltage 10...65 VDC **Output** , 2-wire

Types and data – selection table

Type	Connection	Switching distance	Housing material	Dimensions		
BI2-M12-AD4X-H1141	male, M12 x 1	2 mm, 	CuZn-Cr	Ø 12 x 52 mm	w021	d170
BI2U-M12E-AD4X-H1144	male, M12 x 1	2 mm, 	CuZn-Cr	Ø 12 x 62 mm	w018	d172
BI2U-MT12E-AD4X-H1144	male, M12 x 1	2 mm, 	CuZn-T	Ø 12 x 62 mm	w018	d173
NI4-M12-AD4X-H1141	male, M12 x 1	4 mm, 	CuZn-Cr	Ø 12 x 52 mm	w021	d171
NI8-M12-AD4X-H1141	male, M12 x 1	8 mm, 	CuZn-Cr	Ø 12 x 52 mm	w021	d171
NI5U-M12E-AD4X-H1144	male, M12 x 1	5 mm, 	CuZn-Cr	Ø 12 x 62 mm	w018	d174
NI5U-MT12E-AD4X-H1144	male, M12 x 1	5 mm, 	CuZn-T	Ø 12 x 62 mm	w018	d175
BI3-G12K-AD4X	2 m cable	3 mm, 	CuZn-Cr	Ø 12 x 34 mm	w034	d169
NI4-M12-AD4X	2 m cable	4 mm, 	CuZn-Cr	Ø 12 x 54 mm	w034	d176
NI8-M12-AD4X	2 m cable	8 mm, 	CuZn-Cr	Ø 12 x 54 mm	w034	d176
NI5U-M12E-AD4X	2 m cable	5 mm, 	CuZn-Cr	Ø 12 x 64 mm	w034	d177
NI8-G12K-AD4X	2 m cable	8 mm, 	CuZn-Cr	Ø 12 x 34 mm	w034	d167
BI2U-M12E-AD4X	2 m cable	2 mm, 	CuZn-Cr	Ø 12 x 64 mm	w034	d178
BI2-S12-AD4X	2 m cable	2 mm, 	PA	Ø 12 x 60 mm	w034	d179
NI4-S12-AD4X	2 m cable	4 mm, 	PA	Ø 12 x 64 mm	w034	d179
BI2-M12-AD4X	2 m cable	2 mm, 	CuZn-Cr	Ø 12 x 54 mm	w034	d180
BI3-M12-AD4X	2 m cable	3 mm, 	CuZn-Cr	Ø 12 x 54 mm	w034	d180

M12 – 3-wire DC



















General data

Operating voltage 10...30 VDC

Types and data – selection table

Type	Connection	Output	Switching distance	Housing material	Dimensions	w	d
NI8U-EG12SK-AP6X	Terminal chamber	—, PNP	8 mm,	V2A (1.4301)	Ø 12 x 75 mm	w022	d181
NI5-G12SK-AP6X	Terminal chamber	—, PNP	5 mm,	CuZn-Cr	Ø 12 x 75 mm	w022	d181
NI10U-EM12WDTC-AP6X	Terminal chamber, Removable cage clamp terminals	—, PNP	10 mm,	V4A (1.4404)	Ø 12 x 80 mm	w022	d182
BI3U-EG12SK-AP6X	Terminal chamber	—, PNP	3 mm,	V2A (1.4301)	Ø 12 x 75 mm	w022	d183
BI2-G12SK-AP6X	Terminal chamber	—, PNP	2 mm,	CuZn-Cr	Ø 12 x 75 mm	w022	d183
BI3U-P12SK-AP6X	Terminal chamber	—, PNP	3 mm,	PA	Ø 12 x 75 mm	w022	d184
NI8U-P12SK-AP6X	Terminal chamber	—, PNP	8 mm,	PA	Ø 12 x 75 mm	w022	d184
BI2-P12SK-AP6X	Terminal chamber	—, PNP	2 mm,	PA	Ø 12 x 75 mm	w022	d184
NI5-P12SK-AP6X	Terminal chamber	—, PNP	5 mm,	PA	Ø 12 x 75 mm	w022	d184
BI4U-EM12WDTC-AP6X	Terminal chamber, Removable cage clamp terminals	—, PNP	4 mm,	V4A (1.4404)	Ø 12 x 80 mm	w022	d185
BI4U-M12-AP6X-V1131	male, M8 x 1	—, PNP	4 mm,	CuZn-Cr	Ø 12 x 52 mm	w013	d186
NI10U-M12-AP6X-V1131	male, M8 x 1	—, PNP	10 mm,	CuZn-Cr	Ø 12 x 52 mm	w013	d039
NI10U-M12-AP6X	2 m cable	—, PNP	10 mm,	CuZn-Cr	Ø 12 x 54 mm	w012	d176
NI8U-M12-AP6X	2 m cable	—, PNP	8 mm,	CuZn-Cr	Ø 12 x 54 mm	w012	d176
NI8U-EM12-AP6X	2 m cable	—, PNP	8 mm,	V2A (1.4301)	Ø 12 x 54 mm	w012	d176
NI10U-EM12WD-AP6X	2 m cable	—, PNP	10 mm,	V4A (1.4404)	Ø 12 x 52 mm	w012	d187
NI5-G12K-AP6X	2 m cable	—, PNP	5 mm,	CuZn-Cr	Ø 12 x 34 mm	w012	d167
BI4U-EM12WD-AP6X	2 m cable	—, PNP	4 mm,	V4A (1.4404)	Ø 12 x 52 mm	w012	d188
BI3U-M12-AP6X	2 m cable	—, PNP	3 mm,	CuZn-Cr	Ø 12 x 54 mm	w012	d180
BI3U-EM12-AP6X	2 m cable	—, PNP	3 mm,	V2A (1.4301)	Ø 12 x 54 mm	w012	d180
BI4U-M12-AP6X	2 m cable	—, PNP	4 mm,	CuZn-Cr	Ø 12 x 54 mm	w012	d180
BI2-M12-AP6X	2 m cable	—, PNP	2 mm,	CuZn-Cr	Ø 12 x 54 mm	w012	d180
BI4-M12-AP6X	2 m cable	—, PNP	4 mm,	CuZn-Cr	Ø 12 x 54 mm	w012	d180
BI3U-S12-AP6X	2 m cable	—, PNP	3 mm,	PBT	Ø 12 x 54 mm	w012	d189
NI8U-S12-AP6X	2 m cable	—, PNP	8 mm,	PBT	Ø 12 x 54 mm	w012	d189
BI2-G12K-AP6X	2 m cable	—, PNP	2 mm,	CuZn-Cr	Ø 12 x 34 mm	w012	d169
BI4-G12K-AP6X	2 m cable	—, PNP	4 mm,	CuZn-Cr	Ø 12 x 34 mm	w012	d169
BI4-M12-AP6X 7M	7 m cable	—, PNP	4 mm,	CuZn-Cr	Ø 12 x 54 mm	w012	d180
BI2-G12K-AP6X-H1141	male, M12 x 1	—, PNP	2 mm,	CuZn-Cr	Ø 12 x 42 mm	w013	d190
BI3U-M12-AP6X-H1141	male, M12 x 1	—, PNP	3 mm,	CuZn-Cr	Ø 12 x 52 mm	w013	d170
BI3U-EM12-AP6X-H1141	male, M12 x 1	—, PNP	3 mm,	V2A (1.4301)	Ø 12 x 52 mm	w013	d170
BI4U-M12-AP6X-H1141	male, M12 x 1	—, PNP	4 mm,	CuZn-Cr	Ø 12 x 52 mm	w013	d170
BI4U-MT12-AP6X-H1141	male, M12 x 1	—, PNP	4 mm,	CuZn-T	Ø 12 x 52 mm	w013	d191
BI4U-EM12WD-AP6X-H1141	male, M12 x 1	—, PNP	4 mm,	V4A (1.4404)	Ø 12 x 52 mm	w013	d170
Bi4U-M12-RP6X-H1141	male, M12 x 1	—, PNP	4 mm,	CuZn-Cr	Ø 12 x 52 mm	w008	d170
BI2-M12-AP6X-H1141	male, M12 x 1	—, PNP	2 mm,	CuZn-Cr	Ø 12 x 52 mm	w013	d170
BI4-M12-AP6X-H1141	male, M12 x 1	—, PNP	4 mm,	CuZn-Cr	Ø 12 x 52 mm	w013	d170

... Table starts on previous page

Type	Connection	Output	Switching distance	Housing material	Dimensions	w	d
BI3U-MT12-AP6X-H1141	male, M12 x 1	—, PNP	3 mm, 	CuZn-T	Ø 12 x 52 mm	w013	d191
BI3U-S12-AP6X-H1141	male, M12 x 1	—, PNP	3 mm, 	PBT	Ø 12 x 52 mm	w013	d192
NI8U-S12-AP6X-H1141	male, M12 x 1	—, PNP	8 mm, 	PBT	Ø 12 x 52 mm	w013	d192
NI8U-M12EE-AP6X-H1141	male, M12 x 1	—, PNP	8 mm, 	CuZn-Cr	Ø 12 x 72 mm	w013	d193
BI3U-M12EE-AP6X-H1141	male, M12 x 1	—, PNP	3 mm, 	CuZn-Cr	Ø 12 x 72 mm	w013	d194
NI10U-M12-AP6X-H1141	male, M12 x 1	—, PNP	10 mm, 	CuZn-Cr	Ø 12 x 52 mm	w013	d171
NI10U-MT12-AP6X-H1141	male, M12 x 1	—, PNP	10 mm, 	CuZn-T	Ø 12 x 52 mm	w013	d195
NI10U-EM12WD-AP6X-H1141	male, M12 x 1	—, PNP	10 mm, 	V4A (1.4404)	Ø 12 x 52 mm	w013	d196
NI10U-M12-RP6X-H1141	male, M12 x 1	—, PNP	10 mm, 	CuZn-Cr	Ø 12 x 52 mm	w008	d171
NI10U-EM12WD-AP6X-H1141/3GD	male, M12 x 1	—, PNP	10 mm, 	V4A (1.4404)	Ø 12 x 52 mm	w013	d196
NI8U-M12-AP6X-H1141	male, M12 x 1	—, PNP	8 mm, 	CuZn-Cr	Ø 12 x 52 mm	w013	d171
NI8U-MT12-AP6X-H1141	male, M12 x 1	—, PNP	8 mm, 	CuZn-T	Ø 12 x 52 mm	w013	d195
NI8U-EM12-AP6X-H1141	male, M12 x 1	—, PNP	8 mm, 	V2A (1.4301)	Ø 12 x 52 mm	w013	d171
BI4U-EM12WD-AP6X-H1141/3GD	male, M12 x 1	—, PNP	4 mm, 	V4A (1.4404)	Ø 12 x 52 mm	w013	d170
NI8-M12-AP6X-H1141	male, M12 x 1	—, PNP	8 mm, 	CuZn-Cr	Ø 12 x 52 mm	w013	d171
NI10U-M12E-AP6X-H1141	male, M12 x 1	—, PNP	10 mm, 	CuZn-Cr	Ø 12 x 62 mm	w013	d174

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

M12 – 4-wire DC



General data














Output

—, PNP

Housing material

CuZn-Cr

Types and data – selection table

Type	Connection	Operating voltage	Switching distance	Dimensions	w	d
NI10U-M12E-VP44X	2 m cable	10...55 VDC	10 mm, 	Ø 12 x 64 mm	w010	d177
BI4U-M12E-VP44X	2 m cable	10...55 VDC	4 mm, 	Ø 12 x 64 mm	w010	d178
BI4-M12-VP6X	2 m cable	10...30 VDC	4 mm, 	Ø 12 x 54 mm	w010	d180
BI4-M12-VP6X 7M	7 m cable	10...30 VDC	4 mm, 	Ø 12 x 54 mm	w010	d180
NI8-M12-VP6X 7M	7 m cable	10...30 VDC	8 mm, 	Ø 12 x 54 mm	w010	d176
BI3U-M12E-VP4X-H1141	male, M12 x 1	10...65 VDC	3 mm, 	Ø 12 x 62 mm	w005	d172
BI4U-M12E-VP44X-H1141	male, M12 x 1	10...55 VDC	4 mm, 	Ø 12 x 62 mm	w035	d172
BI4U-M12-VP44X-H1141 L80	male, M12 x 1	10...55 VDC	4 mm, 	Ø 12 x 80 mm	w035	d197
BI4U-M12-VP44X-H1141 L100	male, M12 x 1	10...55 VDC	4 mm, 	Ø 12 x 100 mm	w035	d198
NI10U-M12E-VP44X-H1141	male, M12 x 1	10...55 VDC	10 mm, 	Ø 12 x 62 mm	w035	d174
NI8U-M12E-VP4X-H1141	male, M12 x 1	10...65 VDC	8 mm, 	Ø 12 x 62 mm	w005	d174
NI8-M12-VP6X-H1141	male, M12 x 1	10...30 VDC	8 mm, 	Ø 12 x 52 mm	w005	d171
BI4-M12-VP6X-H1141	male, M12 x 1	10...30 VDC	4 mm, 	Ø 12 x 52 mm	w005	d170

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

M12 – 2-wire AC/DC



General data

Operating voltage 20...250 VAC / 10... 300 VDC **Output**



Types and data – selection table

Type	Connection	Switching distance	Housing material	Dimensions	w	d
BI2U-G12-ADZ32X-B3131	male, 1/2"	2 mm,	CuZn-Cr	Ø 12 x 71 mm	w036	d199
NI8U-G12-ADZ32X-B3131	male, 1/2"	8 mm,	CuZn-Cr	Ø 12 x 71 mm	w036	d200
BI2-S12-AZ31X	2 m cable	2 mm,	PA	Ø 12 x 60 mm	w015	d179
NI4-S12-AZ31X	2 m cable	4 mm,	PA	Ø 12 x 64 mm	w015	d179
BI2-M12-AZ31X	2 m cable	2 mm,	CuZn-Cr	Ø 12 x 64 mm	w015	d178
NI4-M12-AZ31X	2 m cable	4 mm,	CuZn-Cr	Ø 12 x 64 mm	w015	d201

M18 – NAMUR



General data







Operating voltage 8.2 VDC **Output** NAMUR

Types and data – selection table

Type	Connection	Switching distance	Housing material	Dimensions	w	d
BI5-M18-Y1X-H1141	male, M12 x 1	5 mm,	CuZn-Cr	Ø 18 x 52 mm	w017	d202
BI5-EM18-Y1X-H1141	male, M12 x 1	5 mm,	V2A (1.4305)	Ø 18 x 52 mm	w017	d202
NI10-M18-Y1X-H1141	male, M12 x 1	10 mm,	CuZn-Cr	Ø 18 x 52 mm	w017	d203
NI10-EM18-Y1X-H1141	male, M12 x 1	10 mm,	V2A (1.4301)	Ø 18 x 52 mm	w017	d203
BI5-P18-Y1X	2 m cable	5 mm,	PA	Ø 18 x 34 mm	w014	d204
NI10-P18-Y1X	2 m cable	10 mm,	PA	Ø 18 x 34 mm	w014	d204
BI5-G18-Y1X	2 m cable	5 mm,	CuZn-Cr	Ø 18 x 34 mm	w014	d205
NI10-G18-Y1X	2 m cable	10 mm,	CuZn-Cr	Ø 18 x 34 mm	w014	d206
NI14-G18-Y1X	2 m cable	14 mm,	CuZn-Cr	Ø 18 x 34 mm	w014	d206
BI5-EM18WDTC-Y1X	Terminal chamber, Removable cage clamp terminals	5 mm,	V4A (1.4404)	Ø 18 x 71 mm	w025	d207
NI10-EM18WDTC-Y1X	Terminal chamber, Removable cage clamp terminals	10 mm,	V4A (1.4404)	Ø 18 x 71 mm	w025	d208

Table continues on the next page...

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Type	Connection	Switching distance	Housing material	Dimensions	w	d
BI5-G18SK-Y1X	Terminal chamber	5 mm, 	CuZn-Cr	Ø 18 x 67 mm	w025	d209
BI5-EG18SK-Y1X	Terminal chamber	5 mm, 	V2A (1.4301)	Ø 18 x 67 mm	w025	d209
NI10-P18SK-Y1X	Terminal chamber	10 mm, 	PA	Ø 18 x 67 mm	w025	d210
NI10-EG18SK-Y1X	Terminal chamber	10 mm, 	V2A (1.4301)	Ø 18 x 67 mm	w025	d211
BI5-P18SK-Y1X	Terminal chamber	5 mm, 	PA	Ø 18 x 67 mm	w025	d210
NI10-G18SK-Y1X	Terminal chamber	10 mm, 	CuZn-Cr	Ø 18 x 67 mm	w025	d211

M18 – 2-wire DC




General data















Operating voltage

10...65 VDC

Output

, 2-wire

Types and data – selection table

Type	Connection	Switching distance	Housing material	Dimensions	w	d
BI5-M18-AD4X-H1141	male, M12 x 1	5 mm, 	CuZn-Cr	Ø 18 x 52 mm	w021	d202
BI7-M18-AD4X-H1141	male, M12 x 1	7 mm, 	CuZn-Cr	Ø 18 x 52 mm	w021	d202
BI5U-M18M-AD4X-H1144	male, M12 x 1	5 mm, 	CuZn-Cr	Ø 18 x 61.5 mm	w018	d212
BI5U-MT18M-AD4X-H1144	male, M12 x 1	5 mm, 	CuZn-T	Ø 18 x 61.5 mm	w018	d212
NI10U-M18M-AD4X-H1144	male, M12 x 1	10 mm, 	CuZn-Cr	Ø 18 x 61.5 mm	w018	d213
NI10U-MT18M-AD4X-H1144	male, M12 x 1	10 mm, 	CuZn-T	Ø 18 x 61.5 mm	w018	d214
NI8-M18-AD4X-H1141	male, M12 x 1	8 mm, 	CuZn-Cr	Ø 18 x 52 mm	w021	d203
BI7-G18K-AD4X	2 m cable	7 mm, 	CuZn-Cr	Ø 18 x 34 mm	w034	d205
BI5-M18-AD4X	2 m cable	5 mm, 	CuZn-Cr	Ø 18 x 54 mm	w034	d215
BI7-M18-AD4X	2 m cable	7 mm, 	CuZn-Cr	Ø 18 x 54 mm	w034	d215
NI10U-M18M-AD4X	2 m cable	10 mm, 	CuZn-Cr	Ø 18 x 64 mm	w034	d216
BI5-S18-AD4X	2 m cable	5 mm, 	PA	Ø 18 x 64 mm	w034	d217
NI8-S18-AD4X	2 m cable	8 mm, 	PA	Ø 18 x 64 mm	w034	d217
NI8-M18-AD4X	2 m cable	8 mm, 	CuZn-Cr	Ø 18 x 54 mm	w034	d218

M18 – 3-wire DC



General data

















Operating voltage 10...30 VDC

Types and data – selection table

Type	Connection	Output	Switching distance	Housing material	Dimensions	w	d
BI5-G18KK-AP6-H1141	male, M12 x 1	—, PNP	5 mm,	CuZn-Cr	Ø 18 x 30 mm	w013	d219
BI8-M18K-AP6X-H1141	male, M12 x 1	—, PNP	8 mm,	CuZn-Cr	Ø 18 x 46 mm	w013	d220
BI5U-M18-AP6X-H1141	male, M12 x 1	—, PNP	5 mm,	CuZn-Cr	Ø 18 x 52 mm	w013	d202
BI8U-M18-AP6X-H1141	male, M12 x 1	—, PNP	8 mm,	CuZn-Cr	Ø 18 x 52 mm	w013	d202
BI8U-M18-RP6X-H1141	male, M12 x 1	—, PNP	8 mm,	CuZn-Cr	Ø 18 x 52 mm	w008	d202
BI8-M18-AP6X-H1141	male, M12 x 1	—, PNP	8 mm,	CuZn-Cr	Ø 18 x 52 mm	w013	d202
BI5-M18-AP6X-H1141	male, M12 x 1	—, PNP	5 mm,	CuZn-Cr	Ø 18 x 52 mm	w013	d202
BI8U-MT18-AP6X-H1141	male, M12 x 1	—, PNP	8 mm,	CuZn-T	Ø 18 x 52 mm	w013	d221
BI8U-EM18WD-AP6X-H1141	male, M12 x 1	—, PNP	8 mm,	V4A (1.4404)	Ø 18 x 52 mm	w013	d202
BI8U-EM18WD-AP6X-H1141/3GD	male, M12 x 1	—, PNP	8 mm,	V4A (1.4404)	Ø 18 x 52 mm	w013	d202
BI5U-EM18-AP6X-H1141	male, M12 x 1	—, PNP	5 mm,	V2A (1.4301)	Ø 18 x 52 mm	w013	d202
BI5U-MT18-AP6X-H1141	male, M12 x 1	—, PNP	5 mm,	CuZn-T	Ø 18 x 52 mm	w013	d221
BI5U-S18-AP6X-H1141	male, M12 x 1	—, PNP	5 mm,	PBT	Ø 18 x 52 mm	w013	d222
NI12U-S18-AP6X-H1141	male, M12 x 1	—, PNP	12 mm,	PBT	Ø 18 x 52 mm	w013	d222
BI8U-MT18E-AP6X-H1141	male, M12 x 1	—, PNP	8 mm,	CuZn-T	Ø 18 x 72 mm	w013	d223
BI5U-MT18E-AP6X-H1141	male, M12 x 1	—, PNP	5 mm,	CuZn-T	Ø 18 x 72 mm	w013	d223
NI12U-EM18-AP6X-H1141	male, M12 x 1	—, PNP	12 mm,	V2A (1.4301)	Ø 18 x 52 mm	w013	d203
NI12U-MT18-AP6X-H1141	male, M12 x 1	—, PNP	12 mm,	CuZn-T	Ø 18 x 52 mm	w013	d224
NI12U-M18-AP6X-H1141	male, M12 x 1	—, PNP	12 mm,	CuZn-Cr	Ø 18 x 52 mm	w013	d203
NI15U-M18-RP6X-H1141	male, M12 x 1	—, PNP	15 mm,	CuZn-Cr	Ø 18 x 52 mm	w008	d203
NI15U-MT18-AP6X-H1141	male, M12 x 1	—, PNP	15 mm,	CuZn-T	Ø 18 x 52 mm	w013	d224
NI15U-M18-AP6X-H1141	male, M12 x 1	—, PNP	15 mm,	CuZn-Cr	Ø 18 x 52 mm	w013	d203
NI15U-EM18WD-AP6X-H1141/3GD	male, M12 x 1	—, PNP	15 mm,	V4A (1.4404)	Ø 18 x 52 mm	w013	d225
NI15U-EM18WD-AP6X-H1141	male, M12 x 1	—, PNP	15 mm,	V4A (1.4404)	Ø 18 x 52 mm	w013	d225
NI12U-M18E-AP6X-H1141	male, M12 x 1	—, PNP	12 mm,	CuZn-Cr	Ø 18 x 72 mm	w013	d226
BI8U-M18E-AP6X-H1141	male, M12 x 1	—, PNP	8 mm,	CuZn-Cr	Ø 18 x 72 mm	w013	d223
NI14-M18-AP6X-H1141	male, M12 x 1	—, PNP	14 mm,	CuZn-Cr	Ø 18 x 52 mm	w013	d203
BI5-G18K-AP6X	2 m cable	—, PNP	5 mm,	CuZn-Cr	Ø 18 x 34 mm	w012	d205
BI5U-M18-AP6X	2 m cable	—, PNP	5 mm,	CuZn-Cr	Ø 18 x 54 mm	w012	d215
BI8U-M18-AP6X	2 m cable	—, PNP	8 mm,	CuZn-Cr	Ø 18 x 54 mm	w012	d215
BI5-M18-AP6X	2 m cable	—, PNP	5 mm,	CuZn-Cr	Ø 18 x 54 mm	w012	d215
BI5U-EM18-AP6X	2 m cable	—, PNP	5 mm,	V2A (1.4301)	Ø 18 x 54 mm	w012	d215
BI8U-EM18WD-AP6X	2 m cable	—, PNP	8 mm,	V4A (1.4404)	Ø 18 x 52 mm	w012	d227
BI5U-S18-AP6X	2 m cable	—, PNP	5 mm,	PBT	Ø 18 x 64 mm	w012	d217
NI12U-S18-AP6X	2 m cable	—, PNP	12 mm,	PBT	Ø 18 x 64 mm	w012	d217
NI10-G18K-AP6X	2 m cable	—, PNP	10 mm,	CuZn-Cr	Ø 18 x 34 mm	w012	d206

Table continues on the next page...

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Type	Connection	Output	Switching distance	Housing material	Dimensions	w	d
NI15U-EM18WD-AP6X	2 m cable	—, PNP	15 mm, 	V4A (1.4404)	Ø 18 x 52 mm	w012	d228
NI15U-M18-AP6X	2 m cable	—, PNP	15 mm, 	CuZn-Cr	Ø 18 x 54 mm	w012	d218
NI12U-M18-AP6X	2 m cable	—, PNP	12 mm, 	CuZn-Cr	Ø 18 x 54 mm	w012	d218
NI12U-EM18-AP6X	2 m cable	—, PNP	12 mm, 	V2A (1.4301)	Ø 18 x 54 mm	w012	d229
BI8-M18-AP6X	2 m cable	—, PNP	8 mm, 	CuZn-Cr	Ø 18 x 54 mm	w012	d215
BI8-M18-AP6X 7M	7 m cable	—, PNP	8 mm, 	CuZn-Cr	Ø 18 x 54 mm	w012	d215
NI15U-EM18WDTC-AP6X	Terminal chamber, Removable cage clamp terminals	—, PNP	15 mm, 	V4A (1.4404)	Ø 18 x 81 mm	w022	d230
BI5-G18SK-AP6X	Terminal chamber	—, PNP	5 mm, 	CuZn-Cr	Ø 18 x 77 mm	w022	d231
BI5U-EG18SK-AP6X	Terminal chamber	—, PNP	5 mm, 	V2A (1.4301)	Ø 18 x 77 mm	w022	d231
BI5U-P18SK-AP6X	Terminal chamber	—, PNP	5 mm, 	PBT	Ø 18 x 77 mm	w022	d232
NI12U-P18SK-AP6X	Terminal chamber	—, PNP	12 mm, 	PBT	Ø 18 x 77 mm	w022	d232
BI5-P18SK-AP6X	Terminal chamber	—, PNP	5 mm, 	PA	Ø 18 x 77 mm	w022	d232
NI10-P18SK-AP6X	Terminal chamber	—, PNP	10 mm, 	PA	Ø 18 x 77 mm	w022	d232
BI8U-EM18WDTC-AP6X	Terminal chamber, Removable cage clamp terminals	—, PNP	8 mm, 	V4A (1.4404)	Ø 18 x 81 mm	w022	d233
NI10-G18SK-AP6X	Terminal chamber	—, PNP	10 mm, 	CuZn-Cr	Ø 18 x 77 mm	w022	d234
NI12U-EG18SK-AP6X	Terminal chamber	—, PNP	12 mm, 	V2A (1.4301)	Ø 18 x 77 mm	w022	d234

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

M18 – 4-wire DC



General data










Output

—, PNP

Housing material

CuZn-Cr

Types and data – selection table

Type	Connection	Operating voltage	Switching distance	Dimensions	w	d
BI8U-M18M-VP44X-H1141	male, M12 x 1	10...55 VDC	8 mm, 	Ø 18 x 61.5 mm	w035	d212
NI15U-M18M-VP44X-H1141	male, M12 x 1	10...55 VDC	15 mm, 	Ø 18 x 61.5 mm	w035	d213
NI14-M18-VP6X-H1141	male, M12 x 1	10...30 VDC	14 mm, 	Ø 18 x 52 mm	w005	d203
BI8-M18-VP6X-H1141	male, M12 x 1	10...30 VDC	8 mm, 	Ø 18 x 52 mm	w005	d202
BI8U-M18M-VP44X	2 m cable	10...55 VDC	8 mm, 	Ø 18 x 64 mm	w010	d235
NI15U-M18M-VP44X	2 m cable	10...55 VDC	15 mm, 	Ø 18 x 64 mm	w010	d216
NI14-M18-VP6X 7M	7 m cable	10...30 VDC	14 mm, 	Ø 18 x 54 mm	w010	d218
BI8-M18-VP6X 7M	7 m cable	10...30 VDC	8 mm, 	Ø 18 x 54 mm	w010	d215
BI8-M18-VP6X	2 m cable	10...30 VDC	8 mm, 	Ø 18 x 54 mm	w010	d215

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

M18 – 2-wire AC/DC



General data

Operating voltage 20...250 VAC / 10... 300 VDC **Output**



Types and data – selection table

Type	Connection	Switching distance	Housing material	Dimensions	w	d
BI5-M18-AZ3X	2 m cable	5 mm,	CuZn-Cr	Ø 18 x 64 mm	w028	d235
BI5U-M18-ADZ30X2	2 m cable	5 mm,	CuZn-Cr	Ø 18 x 64 mm	w028	d236
NI8-P18-AZ3/S139-S90	2 m cable	8 mm,	POM	Ø 18 x 80 mm	w028	d237
BI5-P18-AZ3/S139-S90	2 m cable	5 mm,	POM	Ø 18 x 80 mm	w028	d237
BI5-S18-AZ3X	2 m cable	5 mm,	PA	Ø 18 x 64 mm	w028	d217
NI8-S18-AZ3X	2 m cable	8 mm,	PA	Ø 18 x 64 mm	w028	d217
NI12U-M18-ADZ30X2	2 m cable	12 mm,	CuZn-Cr	Ø 18 x 65 mm	w028	d238
NI8-M18-AZ3X	2 m cable	8 mm,	CuZn-Cr	Ø 18 x 64 mm	w033	d216
BI5U-G18-ADZ30X2-B1331	male, 7/8"	5 mm,	CuZn-Cr	Ø 18 x 82 mm	w027	d239
NI12U-G18-ADZ30X2-B1331	male, 7/8"	12 mm,	CuZn-Cr	Ø 18 x 82 mm	w027	d240
BI5U-G18-ADZ30X2-B3331	male, 1/2"	5 mm,	CuZn-Cr	Ø 18 x 82 mm	w027	d241
NI12U-G18-ADZ30X2-B3331	male, 1/2"	12 mm,	CuZn-Cr	Ø 18 x 82 mm	w027	d242

M30 – NAMUR



General data












Operating voltage 8.2 VDC **Output** NAMUR

Types and data – selection table

Type	Connection	Switching distance	Housing material	Dimensions	w	d
BI10-EM30-Y1X-H1141	male, M12 x 1	10 mm,	V2A (1.4301)	Ø 30 x 62 mm	w017	d243
BI10-M30-Y1X-H1141	male, M12 x 1	10 mm,	CuZn-Cr	Ø 30 x 62 mm	w017	d243
NI15-EM30-Y1X-H1141	male, M12 x 1	15 mm,	V2A (1.4301)	Ø 30 x 62 mm	w017	d244
NI15-M30-Y1X-H1141	male, M12 x 1	15 mm,	CuZn-Cr	Ø 30 x 62 mm	w017	d244
BI10-P30-Y1X	2 m cable	10 mm,	PA	Ø 30 x 44 mm	w014	d245
NI15-P30-Y1X	2 m cable	15 mm,	PA	Ø 30 x 44 mm	w014	d245
BI10-G30-Y1X	2 m cable	10 mm,	CuZn-Cr	Ø 30 x 44 mm	w014	d246

Table continues on the next page...

... Table starts on previous page

Type	Connection	Switching distance	Housing material	Dimensions		
NI15-G30-Y1X	2 m cable	15 mm, 	CuZn-Cr	Ø 30 x 44 mm	w014	d247
BI10-P30SK-Y1X	Terminal chamber	10 mm, 	PA	Ø 30 x 72 mm	w025	d248
NI15-P30SK-Y1X	Terminal chamber	15 mm, 	PA	Ø 30 x 72 mm	w025	d248
BI10-EG30SK-Y1X	Terminal chamber	10 mm, 	V2A (1.4301)	Ø 30 x 72 mm	w025	d249
BI10-G30SK-Y1X	Terminal chamber	10 mm, 	CuZn-Cr	Ø 30 x 72 mm	w025	d249
NI15-EG30SK-Y1X	Terminal chamber	15 mm, 	V2A (1.4301)	Ø 30 x 72 mm	w025	d250
NI15-G30SK-Y1X	Terminal chamber	15 mm, 	CuZn-Cr	Ø 30 x 72 mm	w025	d250
BI10-EM30WDTC-Y1X	Terminal chamber, Removable cage clamp terminals	10 mm, 	V4A (1.4404)	Ø 30 x 80 mm	w025	d251
NI15-EM30WDTC-Y1X	Terminal chamber, Removable cage clamp terminals	15 mm, 	V4A (1.4404)	Ø 30 x 80 mm	w025	d252



















M30 – 2-wire DC



General data

Operating voltage 10...65 VDC **Output** , 2-wire

Types and data – selection table

Type	Connection	Switching distance	Housing material	Dimensions		
BI10-M30-AD4X-H1141	male, M12 x 1	10 mm, 	CuZn-Cr	Ø 30 x 62 mm	w021	d243
BI10U-M30-AD4X-H1144	male, M12 x 1	10 mm, 	CuZn-Cr	Ø 30 x 62 mm	w018	d243
BI10U-MT30-AD4X-H1144	male, M12 x 1	10 mm, 	CuZn-T	Ø 30 x 62 mm	w018	d064
NI15-M30-AD4X-H1141	male, M12 x 1	15 mm, 	CuZn-Cr	Ø 30 x 62 mm	w021	d244
NI15U-M30-AD4X-H1144	male, M12 x 1	15 mm, 	CuZn-Cr	Ø 30 x 62 mm	w018	d244
NI15U-MT30-AD4X-H1144	male, M12 x 1	15 mm, 	CuZn-T	Ø 30 x 62 mm	w018	d253
NI20-M30-AD4X-H1141	male, M12 x 1	20 mm, 	CuZn-Cr	Ø 30 x 62 mm	w021	d244
BI12-G30K-AD4X	2 m cable	12 mm, 	CuZn-Cr	Ø 30 x 44 mm	w034	d246
BI10-S30-AD4X	2 m cable	10 mm, 	PA	Ø 30 x 64 mm	w034	d254
NI15-S30-AD4X	2 m cable	15 mm, 	PA	Ø 30 x 64 mm	w034	d254
BI10-M30-AD4X	2 m cable	10 mm, 	CuZn-Cr	Ø 30 x 64 mm	w034	d255
BI10U-M30-AD4X	2 m cable	10 mm, 	CuZn-Cr	Ø 30 x 64 mm	w034	d255
NI20-G30K-AD4X	2 m cable	20 mm, 	CuZn-Cr	Ø 30 x 44 mm	w034	d247
NI15-M30-AD4X	2 m cable	15 mm, 	CuZn-Cr	Ø 30 x 64 mm	w034	d256
NI20-M30-AD4X	2 m cable	20 mm, 	CuZn-Cr	Ø 30 x 64 mm	w034	d256
NI15U-M30-AD4X	2 m cable	15 mm, 	CuZn-Cr	Ø 30 x 64 mm	w034	d256

M30 – 3-wire DC

















General data
Operating voltage 10...30 VDC

Types and data – selection table

Type	Connection	Output	Switching distance	Housing material	Dimensions	w	d
Bi15U-M30-RP6X-H1141	male, M12 x 1	PNP	15 mm,	CuZn-Cr	Ø 30 x 62 mm	w008	d243
Bi15U-M30-AP6X-H1141	male, M12 x 1	PNP	15 mm,	CuZn-Cr	Ø 30 x 62 mm	w013	d243
Bi15U-MT30-AP6X-H1141	male, M12 x 1	PNP	15 mm,	CuZn-T	Ø 30 x 62 mm	w013	d064
Bi15U-EM30WD-AP6X-H1141	male, M12 x 1	PNP	15 mm,	V4A (1.4404)	Ø 30 x 62 mm	w013	d243
Bi15U-EM30WD-AP6X-H1141/3GD	male, M12 x 1	PNP	15 mm,	V4A (1.4404)	Ø 30 x 62 mm	w013	d243
Bi10-M30-AP6X-H1141	male, M12 x 1	PNP	10 mm,	CuZn-Cr	Ø 30 x 62 mm	w013	d243
Bi10U-M30-AP6X-H1141	male, M12 x 1	PNP	10 mm,	CuZn-Cr	Ø 30 x 62 mm	w013	d243
Bi10U-EM30-AP6X-H1141	male, M12 x 1	PNP	10 mm,	V2A (1.4301)	Ø 30 x 62 mm	w013	d243
Bi10U-MT30-AP6X-H1141	male, M12 x 1	PNP	10 mm,	CuZn-T	Ø 30 x 62 mm	w013	d064
Bi15-M30-AP6X-H1141	male, M12 x 1	PNP	15 mm,	CuZn-Cr	Ø 30 x 62 mm	w013	d243
Bi10U-S30-AP6X-H1141	male, M12 x 1	PNP	10 mm,	PBT	Ø 30 x 62 mm	w013	d257
Ni20U-S30-AP6X-H1141	male, M12 x 1	PNP	20 mm,	PBT	Ø 30 x 62 mm	w013	d257
Ni30U-M30-RP6X-H1141	male, M12 x 1	PNP	30 mm,	CuZn-Cr	Ø 30 x 62 mm	w008	d244
Ni30U-M30-AP6X-H1141	male, M12 x 1	PNP	30 mm,	CuZn-Cr	Ø 30 x 62 mm	w013	d244
Ni30U-MT30-AP6X-H1141	male, M12 x 1	PNP	30 mm,	CuZn-T	Ø 30 x 62 mm	w013	d253
Ni30U-EM30WD-AP6X-H1141/3GD	male, M12 x 1	PNP	30 mm,	V4A (1.4404)	Ø 30 x 62 mm	w013	d258
Ni20U-M30-AP6X-H1141	male, M12 x 1	PNP	20 mm,	CuZn-Cr	Ø 30 x 62 mm	w013	d244
Ni20U-EM30-AP6X-H1141	male, M12 x 1	PNP	20 mm,	V2A (1.4301)	Ø 30 x 62 mm	w013	d244
Ni20U-MT30-AP6X-H1141	male, M12 x 1	PNP	20 mm,	CuZn-T	Ø 30 x 62 mm	w013	d253
Ni20-M30-AP6X-H1141	male, M12 x 1	PNP	20 mm,	CuZn-Cr	Ø 30 x 62 mm	w013	d244
Bi10-G30K-AP6X	2 m cable	PNP	10 mm,	CuZn-Cr	Ø 30 x 44 mm	w012	d246
Bi10U-S30-AP6X	2 m cable	PNP	10 mm,	PA	Ø 30 x 64 mm	w012	d254
Ni20U-S30-AP6X	2 m cable	PNP	20 mm,	PA	Ø 30 x 64 mm	w012	d254
Bi15U-M30-AP6X	2 m cable	PNP	15 mm,	CuZn-Cr	Ø 30 x 64 mm	w012	d255
Bi10-M30-AP6X	2 m cable	PNP	10 mm,	CuZn-Cr	Ø 30 x 64 mm	w012	d255
Bi10U-EM30-AP6X	2 m cable	PNP	10 mm,	V2A (1.4301)	Ø 30 x 64 mm	w012	d255
Bi10U-M30-AP6X	2 m cable	PNP	10 mm,	CuZn-Cr	Ø 30 x 64 mm	w012	d259
Bi15U-EM30WD-AP6X	2 m cable	PNP	15 mm,	V4A (1.4404)	Ø 30 x 66 mm	w012	d260
Ni30U-M30-AP6X	2 m cable	PNP	30 mm,	CuZn-Cr	Ø 30 x 64 mm	w012	d256
Ni20U-M30-AP6X	2 m cable	PNP	20 mm,	CuZn-Cr	Ø 30 x 64 mm	w012	d256
Ni20U-EM30-AP6X	2 m cable	PNP	20 mm,	V2A (1.4301)	Ø 30 x 64 mm	w012	d256
Bi15-M30-AP6X	2 m cable	PNP	15 mm,	CuZn-Cr	Ø 30 x 64 mm	w012	d255
Bi15-M30-AP6X 7M	7 m cable	PNP	15 mm,	CuZn-Cr	Ø 30 x 64 mm	w012	d255
Bi10-G30SK-AP6X	Terminal chamber	PNP	10 mm,	CuZn-Cr	Ø 30 x 87 mm	w022	d261
Bi10U-EG30SK-AP6X	Terminal chamber	PNP	10 mm,	V2A (1.4301)	Ø 30 x 87 mm	w022	d261
Ni20U-EG30SK-AP6X	Terminal chamber	PNP	20 mm,	V2A (1.4301)	Ø 30 x 87 mm	w022	d262
Bi10-P30SK-AP6X	Terminal chamber	PNP	10 mm,	PA	Ø 30 x 87 mm	w022	d263

Table continues on the next page...

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Type	Connection	Output	Switching distance	Housing material	Dimensions	w	d
BI10U-P30SK-AP6X	Terminal chamber	 , PNP	10 mm, 	PA	Ø 30 x 87 mm	w022	d263
NI15-P30SK-AP6X	Terminal chamber	 , PNP	15 mm, 	PA	Ø 30 x 87 mm	w022	d263
NI20U-P30SK-AP6X	Terminal chamber	 , PNP	20 mm, 	PA	Ø 30 x 87 mm	w022	d263
BI15U-EM30WDTC-AP6X	Terminal chamber, Removable cage clamp terminals	 , PNP	15 mm, 	V4A (1.4404)	Ø 30 x 95 mm	w022	d264
BI10-P30SR-AP6X	Terminal chamber	 , PNP	10 mm, 	ABS	Ø 30 x 115 mm	w022	d265
NI15-P30SR-AP6X	Terminal chamber	 , PNP	15 mm, 	ABS	Ø 30 x 115 mm	w022	d265
NI15-G30SK-AP6X	Terminal chamber	 , PNP	15 mm, 	CuZn-Cr	Ø 30 x 87 mm	w022	d262
NI30U-EM30WDTC-AP6X	Terminal chamber, Removable cage clamp terminals	 , PNP	30 mm, 	V4A (1.4404)	Ø 30 x 95 mm	w022	d266


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

M30 – 4-wire DC



General data










Output

, PNP

Housing material

CuZn-Cr

Types and data – selection table

Type	Connection	Operating voltage	Switching distance	Dimensions	w	d
BI15U-M30-VP44X-H1141	male, M12 x 1	10...55 VDC	15 mm, 	Ø 30 x 62 mm	w035	d243
NI30U-M30-VP44X-H1141	male, M12 x 1	10...55 VDC	30 mm, 	Ø 30 x 62 mm	w035	d244
NI20-M30-VP6X-H1141	male, M12 x 1	10...30 VDC	20 mm, 	Ø 30 x 62 mm	w005	d244
BI15-M30-VP6X-H1141	male, M12 x 1	10...30 VDC	15 mm, 	Ø 30 x 62 mm	w005	d243
BI15U-M30-VP44X	2 m cable	10...55 VDC	15 mm, 	Ø 30 x 64 mm	w010	d255
NI30U-M30-VP44X	2 m cable	10...55 VDC	30 mm, 	Ø 30 x 64 mm	w010	d256
NI20-M30-VP6X 7M	7 m cable	10...30 VDC	20 mm, 	Ø 30 x 64 mm	w010	d256
BI15-M30-VP6X 7M	7 m cable	10...30 VDC	15 mm, 	Ø 30 x 64 mm	w010	d255
BI15-M30-VP6X	2 m cable	10...30 VDC	15 mm, 	Ø 30 x 64 mm	w010	d255

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

M30 – 2-wire AC/DC



General data

Operating voltage 20...250 VAC / 10...300 VDC

Types and data – selection table

Type	Connection	Output	Switching distance	Housing material	Dimensions	w	d
BI10-S30-AZ3X	2 m cable		10 mm,	PA	Ø 30 x 64 mm	w028	d254
NI15-S30-AZ3X	2 m cable		15 mm,	PA	Ø 30 x 64 mm	w028	d254
BI10-M30-AZ3X	2 m cable		10 mm,	CuZn-Cr	Ø 30 x 64 mm	w033	d255
BI10U-M30-ADZ30X2	2 m cable		10 mm,	CuZn-Cr	Ø 30 x 64 mm	w028	d267
NI15-M30-AZ3X	2 m cable		15 mm,	CuZn-Cr	Ø 30 x 64 mm	w033	d256
NI20U-M30-ADZ30X2	2 m cable		20 mm,	CuZn-Cr	Ø 30 x 64 mm	w028	d268
BI10-P30SR-FZ3X2	Terminal chamber		10 mm,	ABS	Ø 30 x 115 mm	w024	d269
NI15-P30SR-FZ3X2	Terminal chamber		15 mm,	ABS	Ø 30 x 115 mm	w024	d269
BI10U-G30-ADZ30X2-B1131	male, 7/8"		10 mm,	CuZn-Cr	Ø 30 x 80 mm	w027	d270
NI20U-G30-ADZ30X2-B1131	male, 7/8"		20 mm,	CuZn-Cr	Ø 30 x 80 mm	w027	d271
BI10U-G30-ADZ30X2-B3131	male, 1/2"		10 mm,	CuZn-Cr	Ø 30 x 80 mm	w027	d272
NI20U-G30-ADZ30X2-B3131	male, 1/2"		20 mm,	CuZn-Cr	Ø 30 x 80 mm	w027	d273

G47



General data



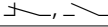

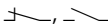

Housing material CuZn-Cr

Types and data – selection table

Type	Connection	Operating voltage	Output	Switching distance	Dimensions	w	d
BI20-G47-Y1X	2 m cable	8.2 VDC	NAMUR	20 mm,	Ø 47 x 70 mm	w014	d274
BI20-G47-AP4X	2 m cable	10...65 VDC		20 mm,	Ø 47 x 70 mm	w012	d274
NI25-G47-AP4X	2 m cable	10...65 VDC		25 mm,	Ø 47 x 70 mm	w012	d275
BI25-G47SR-VP4X2	Terminal chamber	10...65 VDC		25 mm,	Ø 47 x 96 mm	w023	d276
NI40-G47SR-VP4X2	Terminal chamber	10...65 VDC		40 mm,	Ø 47 x 106 mm	w023	d277
BI20-G47-AZ3X	2 m cable	20...250 VAC / 10...300 VDC		20 mm,	Ø 47 x 70 mm	w028	d274
NI25-G47-AZ3X	2 m cable	20...250 VAC / 10...300 VDC		25 mm,	Ø 47 x 70 mm	w028	d275

Table continues on the next page...

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Type	Connection	Operating voltage	Output	Switching distance	Dimensions		
BI25-G47SR-FZ3X2	Terminal chamber	20...250 VAC / 10...300 VDC		25 mm, 	Ø 47 x 96 mm	w024	d276
NI40-G47SR-FZ3X2	Terminal chamber	20...250 VAC / 10...300 VDC		40 mm, 	Ø 47 x 106 mm	w024	d277

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