INDUSTRIAL NETWORKING

Архангельск (8182)63-90-72
Астана (7172)727-132
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89
Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Липецк (4742)52-20-81
Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Пермь (342)205-81-47
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Тверь (4822)63-31-35
Томск (3822)98-41-53
Тула (4872)74-02-29
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Ярославль (4852)69-52-93

Киргизия (996)312-96-26-47
Россия (495)268-04-70
Казахстан (772)734-952-31

balluff.nt-rt.ru || bfd@nt-rt.ru

Extraordinary parameter settings and diagnostics capabilities

NETWORK BLOCKS

Balluff has developed a new generation of network modules for perfect linking of sensors and actuators. The system features highly versatile parameter settings and diagnostics possibilities that can be carried out via display, LEDs and an integrated Web server.

The status LEDs on the modules are large, bright and easy to read and interpret. This saves you time in setup, maintenance or troubleshooting. With an output current of up to 2 A, the Balluff network modules are capable of driving almost any load. Each output also offers overload protection with LED indicator and a memory feature for easy troubleshooting. The rugged, full-jacket enclosure also withstands high mechanical loads.

Features

- High performance in all networks
- Faster, simpler connection
- Reliable even in harsh environments, shock and vibration resistant
- IP67 design and rugged full-jacket enclosure
- Integrated Web server
- Line topology construction

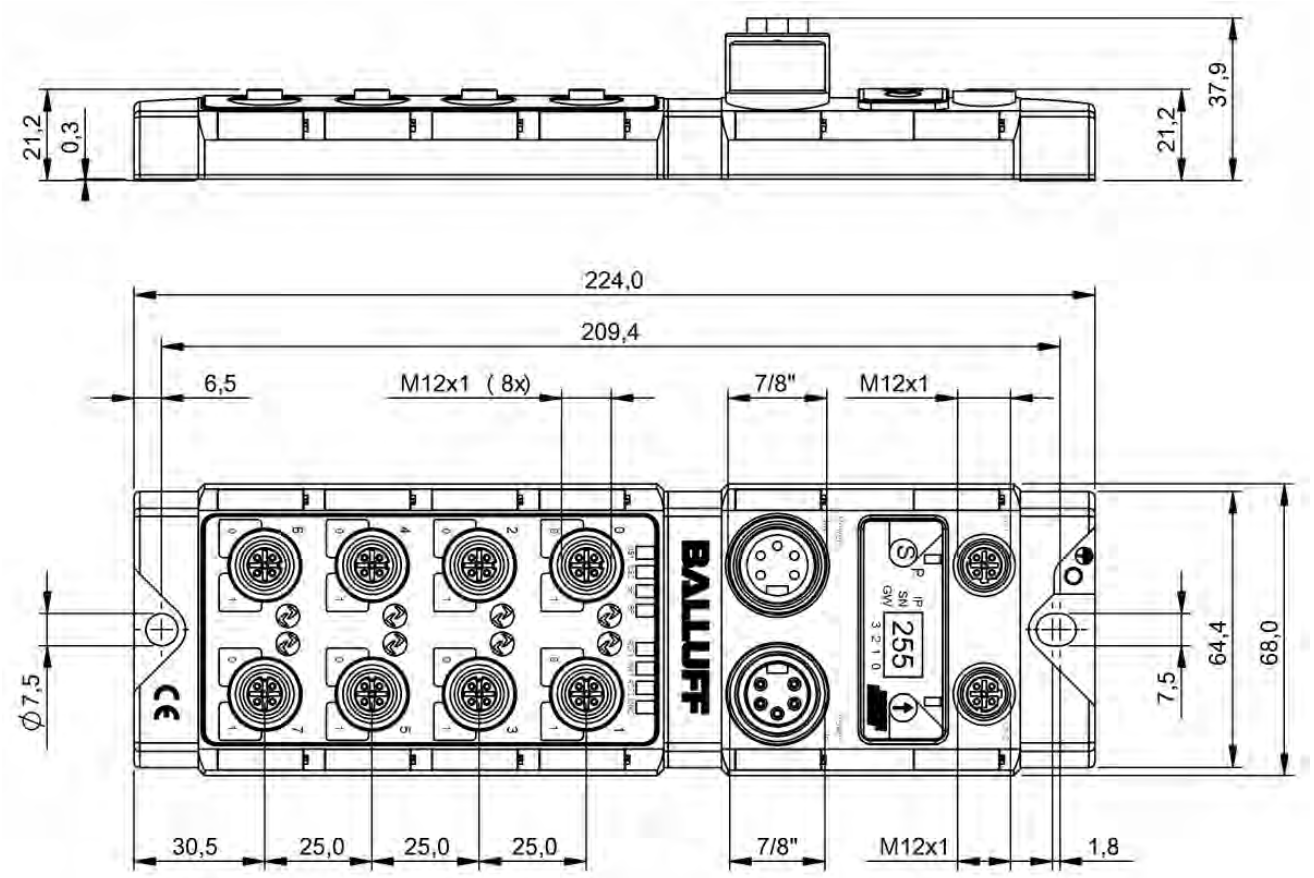


	BNI005H BNI PNT-508-105-Z015	BNI007M BNI PNT-509-105-Z033	BNI004U BNI PNT-502-105-Z015	
Interface	Profinet I/O	Profinet I/O	Profinet I/O	
Fast Start-Up (FSU)	yes	yes	yes	
Operating voltage Ub	18...30.2 VDC	18...30.2 VDC	18...30.2 VDC	
Connection (COM 1)	M12x1-Female, 4-pin, D-coded	M12x1-Female, 4-pin, D-coded	M12x1-Female, 4-pin, D-coded	
Connection (COM 2)	M12x1-Female, 4-pin, D-coded	M12x1-Female, 4-pin, D-coded	M12x1-Female, 4-pin, D-coded	
Connection (supply voltage IN)	7/8“-Male, 5-pin	7/8“-Male, 5-pin	7/8“-Male, 5-pin	
Connection (supply voltage OUT)	7/8“-Female, 5-pin	—	7/8“-Female, 5-pin	
Connection slots	8x M12x1-Female, 5-pin, A-coded	16x M12x1-Female, 5-pin, A-coded	8x M12x1-Female, 5-pin, A-coded	
Digital inputs	16x PNP, Type 3	32x PNP, Type 3	16x PNP, Type 3	
Digital outputs	16x PNP	32x PNP	16x PNP	
Configurable inputs/outputs	yes	yes	yes	
Output current max.	2 A	2 A	2 A	
Current sum US, sensor	9.0 A	9.0 A	9.0 A	
Current sum UA, actuator	9.0 A	9.0 A	9.0 A	
Housing material	Zinc, Die casting	Zinc, Die casting	Zinc, Die casting	
Dimension	68 x 37.9 x 224 mm	68 x 37.9 x 334 mm	68 x 37.9 x 224 mm	
Ambient temperature	-5...70 °C	-5...70 °C	-5...70 °C	
IP rating	IP67	IP67	IP67	
Auxiliary interfaces	8x IO-Link	8x IO-Link 8x IO-Link	4x IO-Link	
IO-Link version	1.1	1.1	1.1	
Port-class	Type A	Type A	Type A	
Productview	Seite 102	Seite 102	Seite 103	

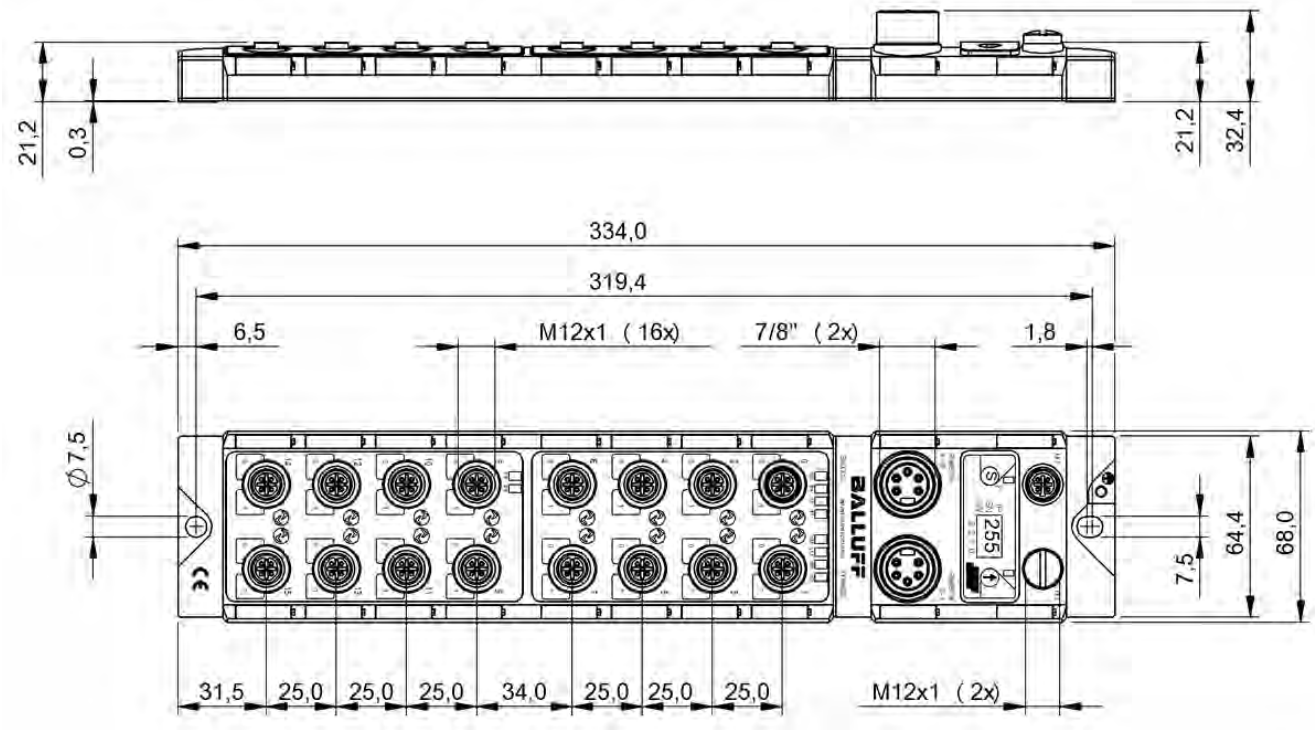




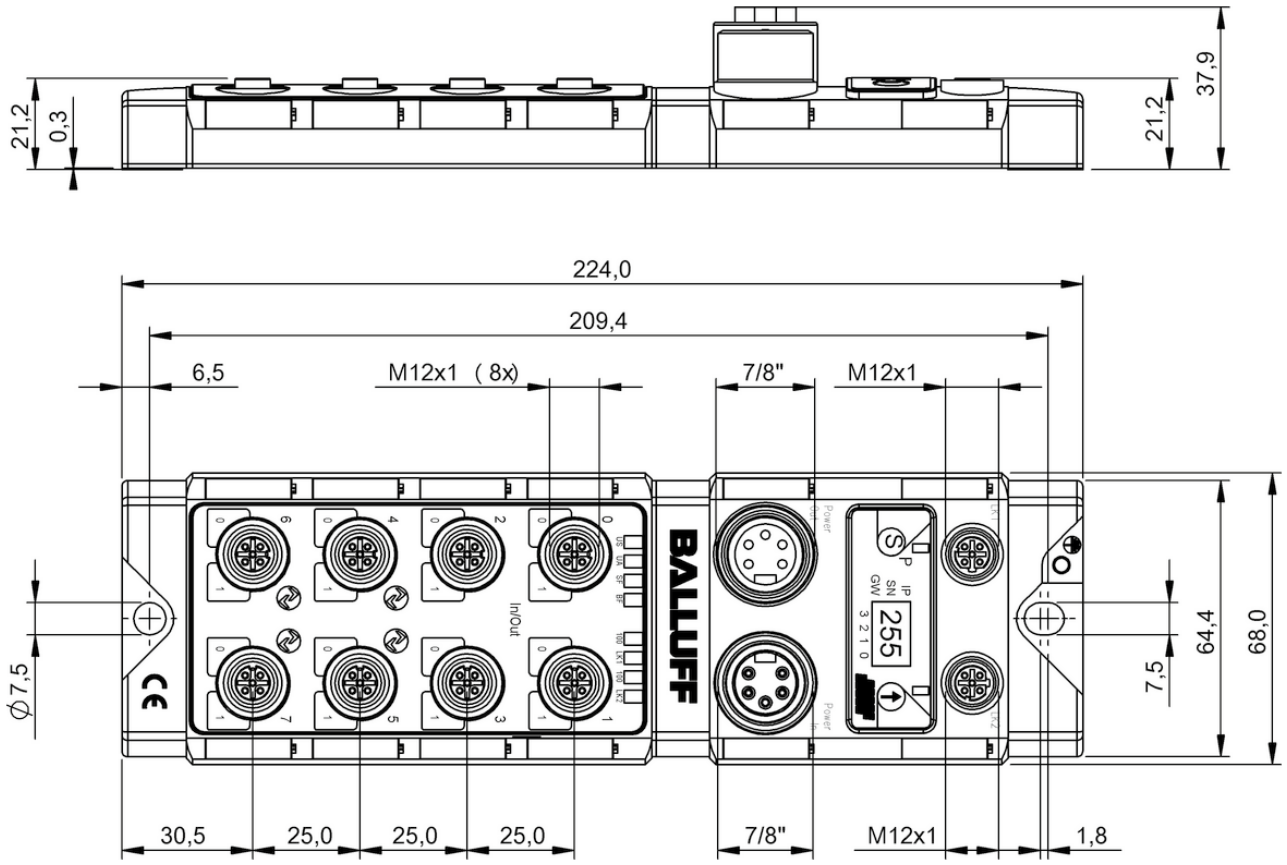
	BNI006C BNI PNT-502-102-Z015	BNI0092 BNI PNT-507-005-Z040	BNI00A9 BNI PNT-527-005-Z040	BNI0052 BNI PNT-302-105-Z015	BNI0053 BNI PNT-104-105-Z015
	Profinet I/O	Profinet I/O	Profinet I/O	Profinet I/O	Profinet I/O
	yes	yes	yes	yes	yes
	18...30.2 VDC	18...30.2 VDC	18...30.2 VDC	18...30.2 VDC	18...30.2 VDC
	M12x1-Female, 4-pin, D-coded	M12x1-Female, 4-pin, D-coded	M12x1-Female, 4-pin, D-coded	M12x1-Female, 4-pin, D-coded	M12x1-Female, 4-pin, D-coded
	M12x1-Female, 4-pin, D-coded	M12x1-Female, 4-pin, D-coded	M12x1-Female, 4-pin, D-coded	M12x1-Female, 4-pin, D-coded	M12x1-Female, 4-pin, D-coded
	7/8“-Male, 5-pin	7/8“-Male, 5-pin	7/8“-Male, 5-pin	7/8“-Male, 5-pin	7/8“-Male, 5-pin
	7/8“-Female, 5-pin	—	—	7/8“-Female, 5-pin	7/8“-Female, 5-pin
	8x M12x1-Female, 5-pin, A-coded	4x M12x1-Female, 5-pin, A-coded	4x M12x1-Female, 5-pin, A-coded	8x M12x1-Female, 5-pin, A-coded	8x M12x1-Female, 5-pin, A-coded
	16x PNP, Type 3	8x PNP, Type 3	4x PNP, Type 3	16x PNP, Type 2	16x PNP, Type 2
	16x PNP	8x PNP	—	16x PNP	—
	yes	yes	no	yes	no
	2 A	2 A	—	2 A	—
	9.0 A	9.0 A	9.0 A	9.0 A	9.0 A
	9.0 A	9.0 A	9.0 A	9.0 A	—
	Zinc, Die casting	Zinc, Die casting	Zinc, Die casting	Zinc, Die casting	Zinc, Die casting
	68 x 37.9 x 224 mm	37 x 32.6 x 224 mm	37 x 32.6 x 224 mm	68 x 37.9 x 224 mm	68 x 37.9 x 224 mm
	-5...70 °C	-40...70 °C	-40...70 °C	-5...70 °C	-5...70 °C
	IP67	IP67	IP67	IP67	IP67
	4x IO-Link	4x IO-Link	4x IO-Link	—	—
	1.1	1.1	1.1	—	—
	Type A	Type A	Type B	—	—
	Seite 103	Seite 104	Seite 104	Seite 105	Seite 105



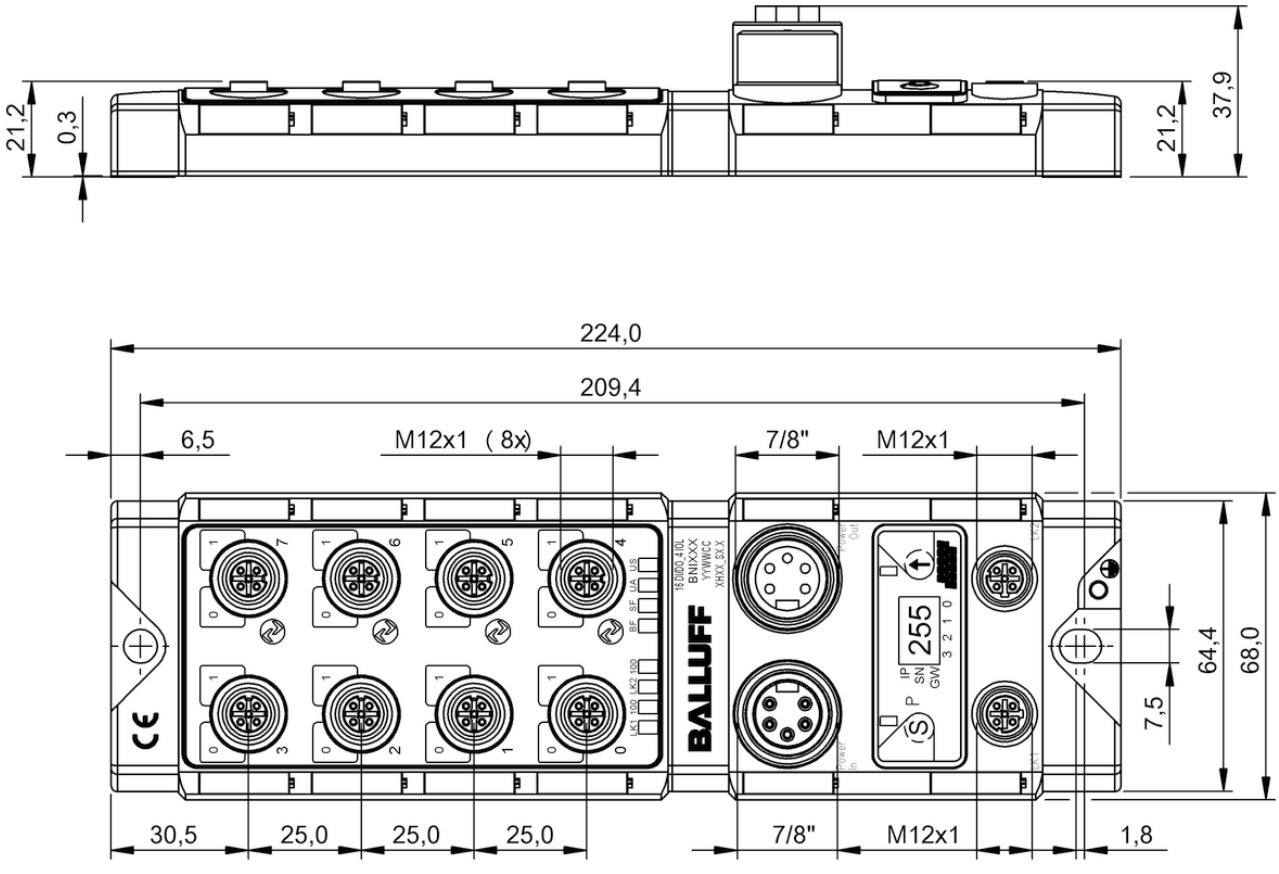
BNI005H



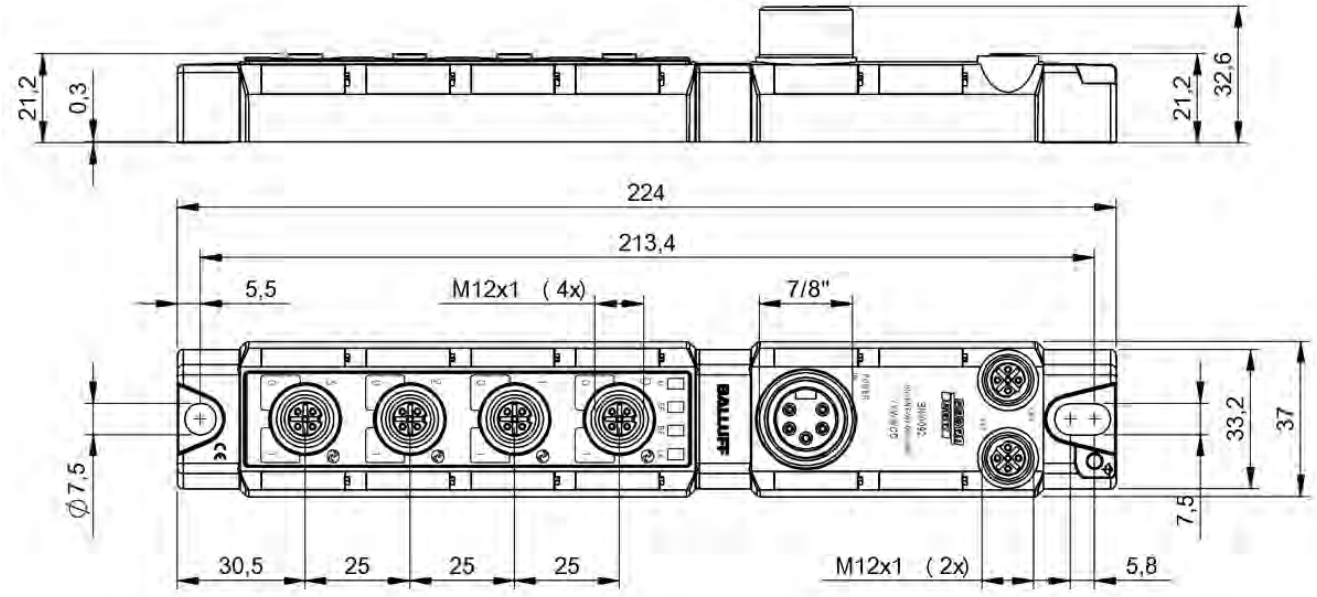
BNI007M



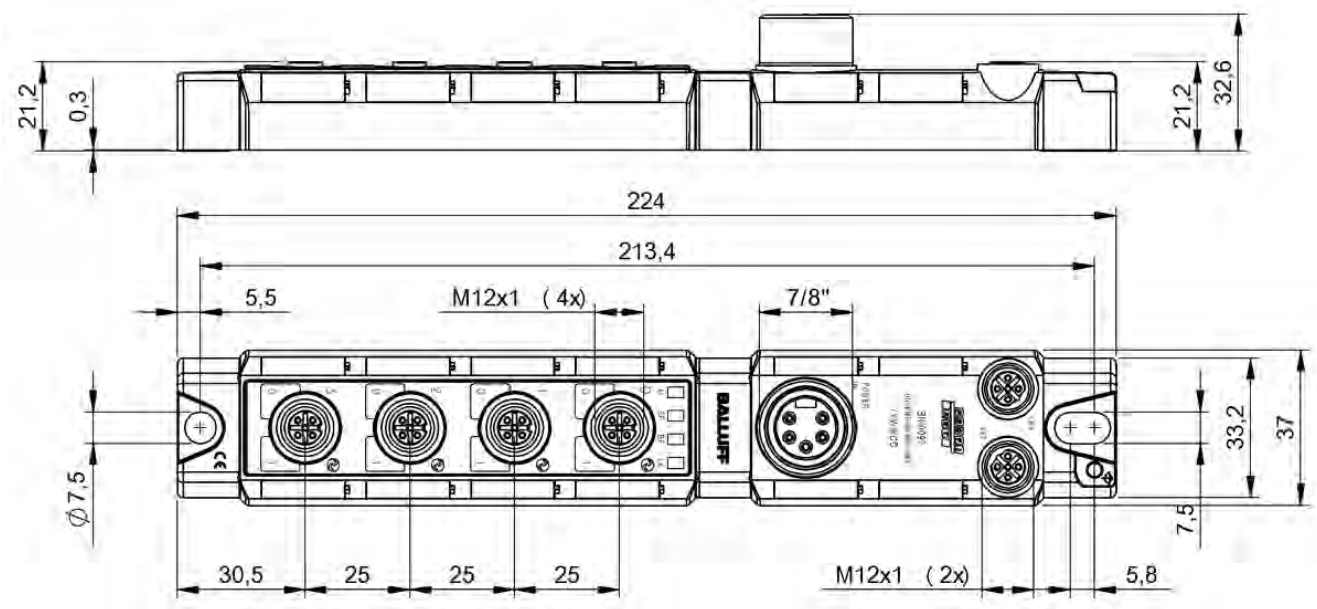
BNI004U



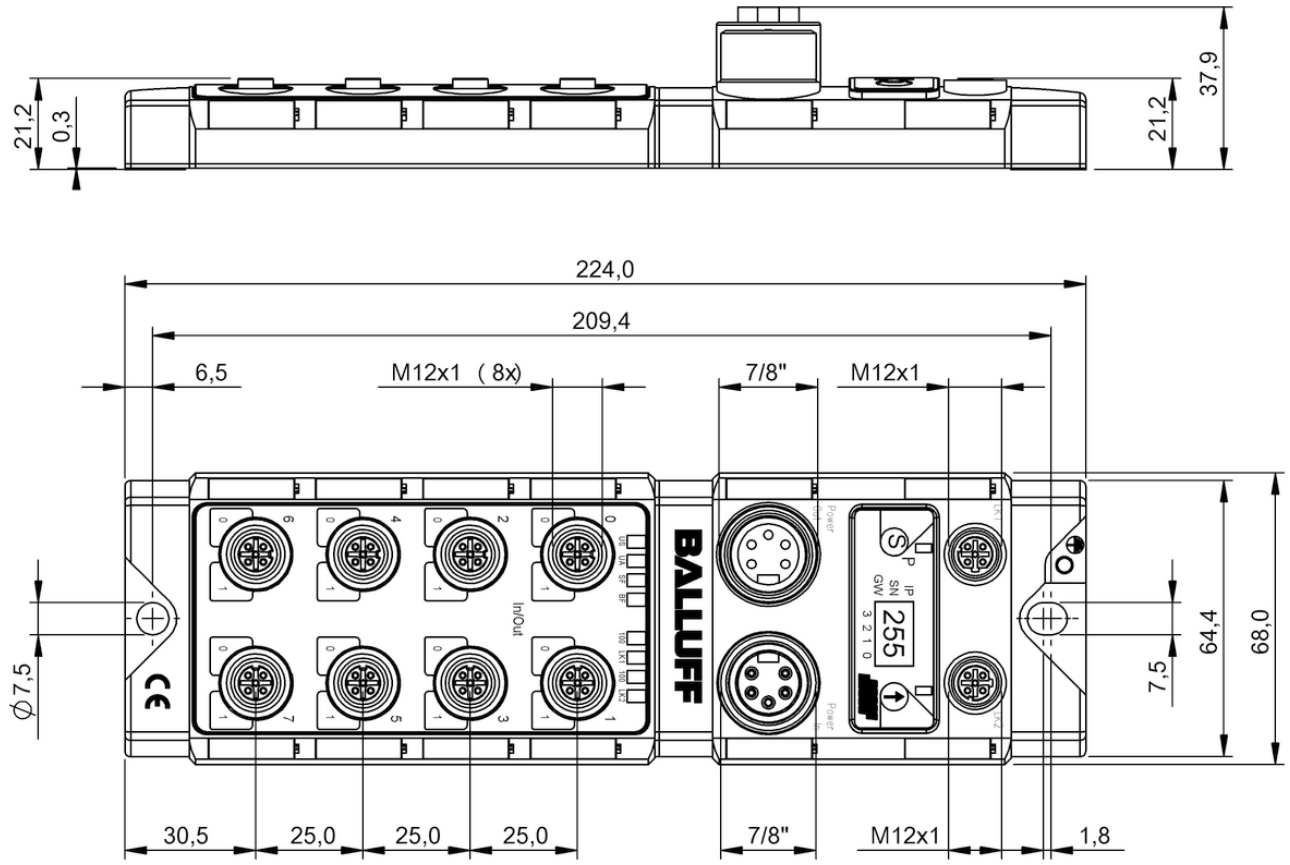
BNI006C



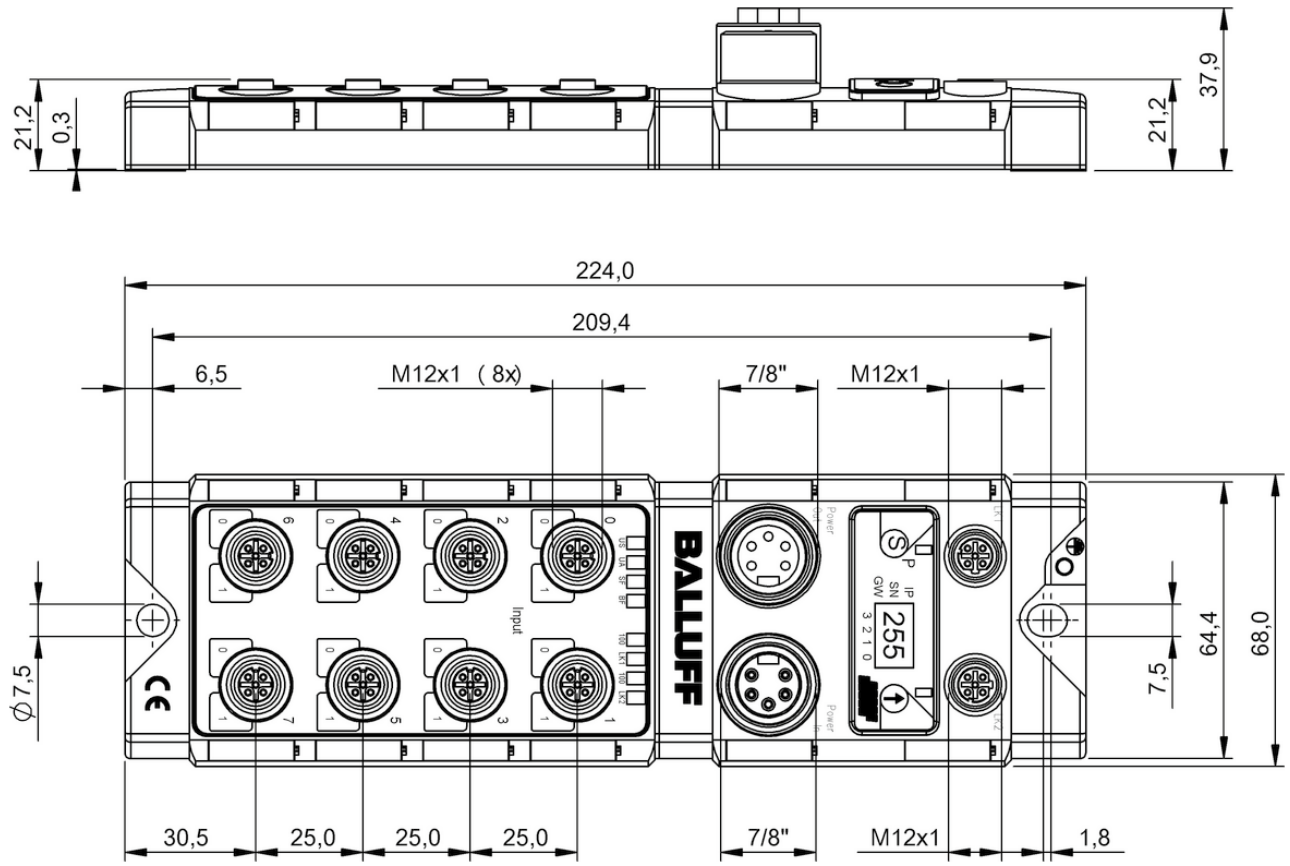
BNI0092



BNI00A9



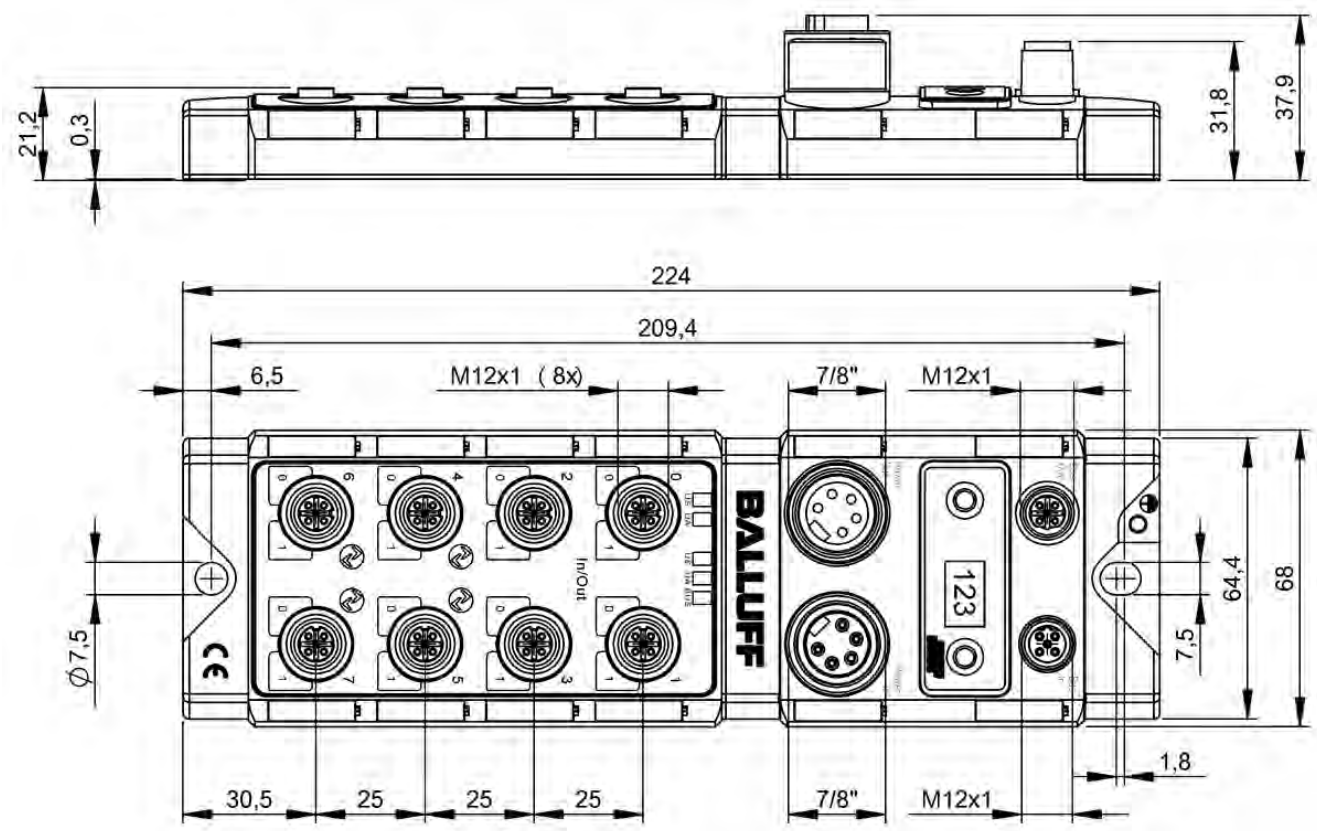
BNI0052



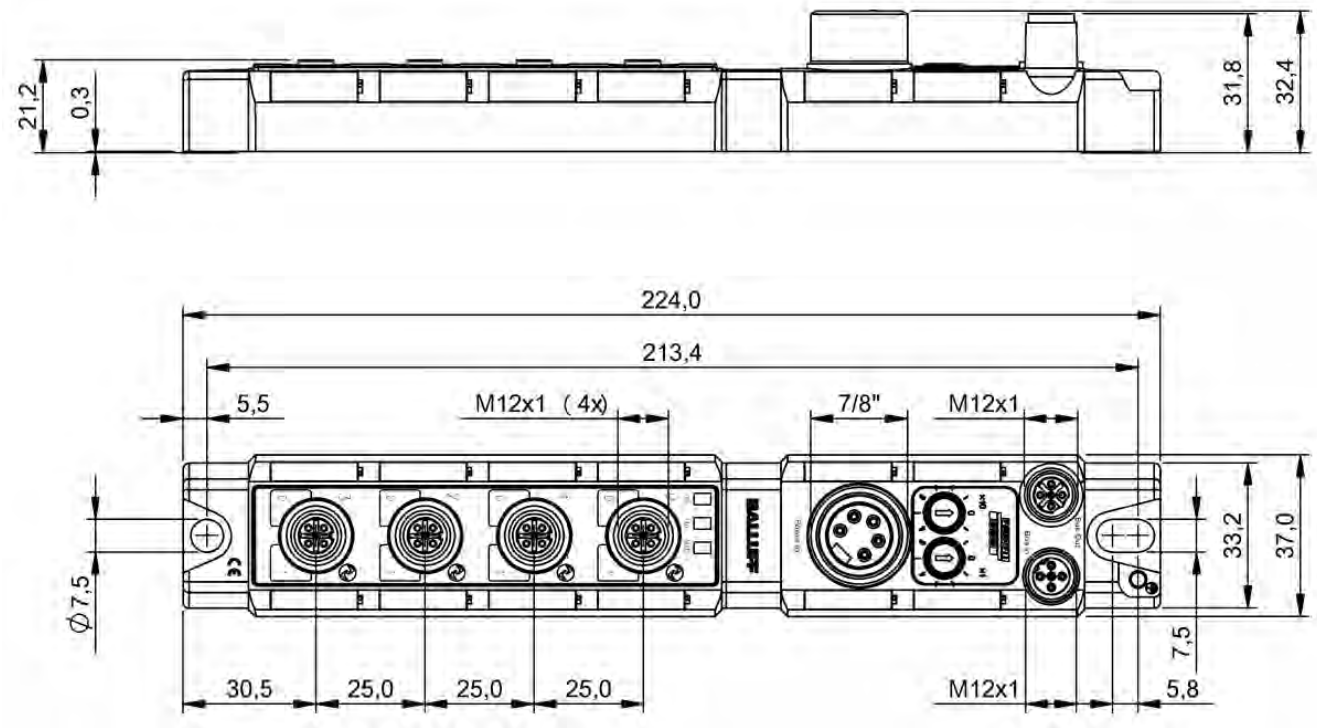
BNI0053

	BNI005R BNI PBS-502-101-Z001	
Interface	Profibus DP EN 50170	
Operating voltage Ub	18...30.2 VDC	
Connection (COM 1)	M12x1-Male, 5-pin, B-coded	
Connection (COM 2)	M12x1-Female, 5-pin, B-coded	
Connection (supply voltage IN)	7/8“-Male, 5-pin	
Connection (supply voltage OUT)	7/8“-Female, 5-pin	
Connection slots	8x M12x1-Female, 5-pin, A-coded	
Digital inputs	16x PNP, Type 2	
Digital outputs	16x PNP	
Configurable inputs/outputs	yes	
cal_current_load_capacity_max	2 A	
Current sum US, sensor	9.0 A	
Current sum UA, actuator	9.0 A	
Housing material	Zinc, Die casting	
Dimension	68 x 37.9 x 224 mm	
Ambient temperature	-5...70 °C	
IP rating	IP67	
Auxiliary interfaces	4x IO-Link	
IO-Link version	1.1	
Port-class	Type A	
Productview	Seite 108	

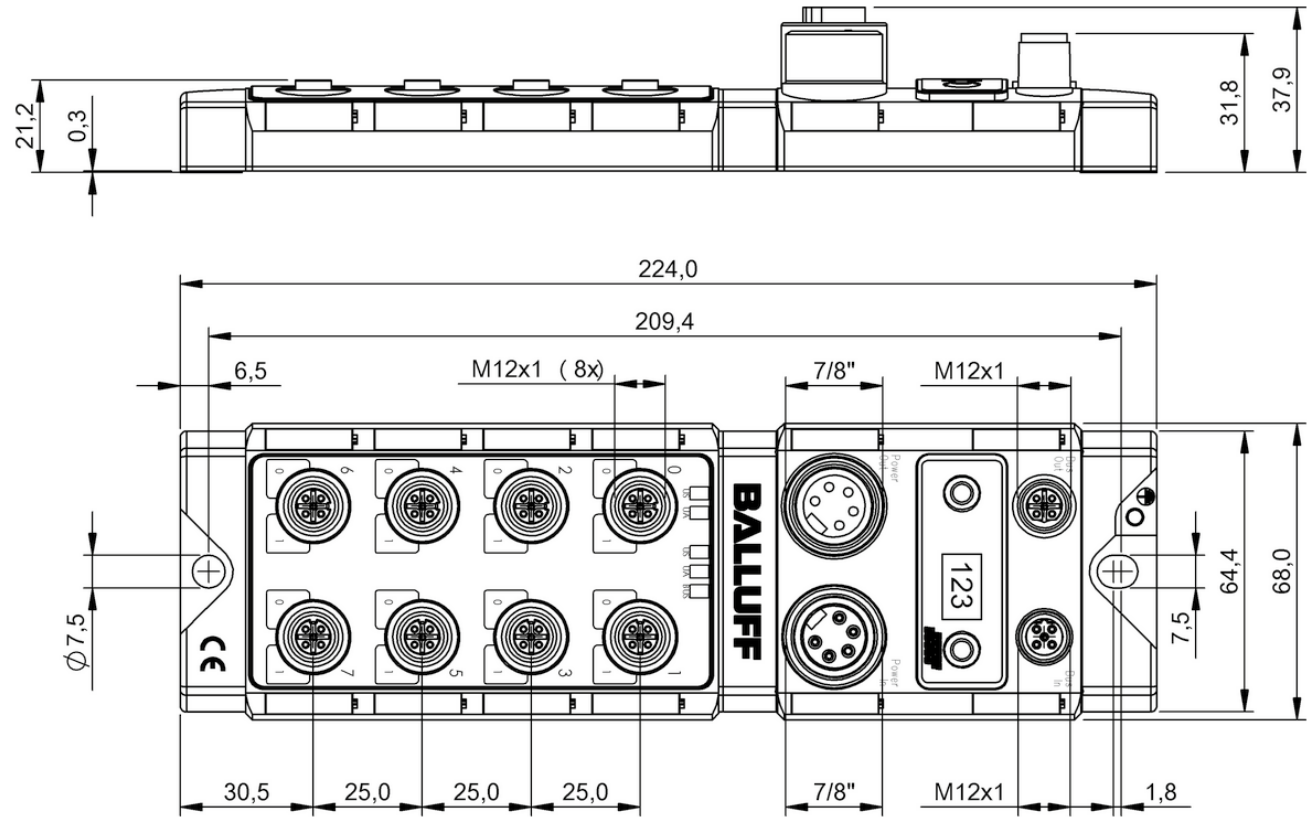
BNI004N BNI PBS-507-002-Z011	BNI0047 BNI PBS-302-101-Z001	BNI005C BNI PBS-104-101-Z001
Profibus DP EN 50170	Profibus DP EN 50170	Profibus DP EN 50170
18...30.2 VDC	18...30.2 VDC	18...30.2 VDC
M12x1-Male, 5-pin, B-coded	M12x1-Male, 5-pin, B-coded	M12x1-Male, 5-pin, B-coded
M12x1-Female, 5-pin, B-coded	M12x1-Female, 5-pin, B-coded	M12x1-Female, 5-pin, B-coded
7/8“-Male, 5-pin	7/8“-Male, 5-pin	7/8“-Male, 5-pin
—	7/8“-Female, 5-pin	7/8“-Female, 5-pin
4x M12x1-Female, 5-pin, A-coded	8x M12x1-Female, 5-pin, A-coded	8x M12x1-Female, 5-pin, A-coded
8x PNP, Type 2	16x PNP, Type 2	16x PNP, Type 2
8x PNP	16x PNP	—
yes	yes	no
2 A	2 A	—
9.0 A	9.0 A	9.0 A
9.0 A	9.0 A	—
Zinc, Die casting	Zinc, Die casting	Zinc, Die casting
37 x 32.4 x 224 mm	68 x 37.9 x 224 mm	68 x 37.9 x 224 mm
-5...70 °C	-5...70 °C	-5...70 °C
IP67	IP67	IP67
4x IO-Link	—	—
1.1	—	—
Type A	—	—
Seite 108	Seite 109	Seite 109



BNI005R



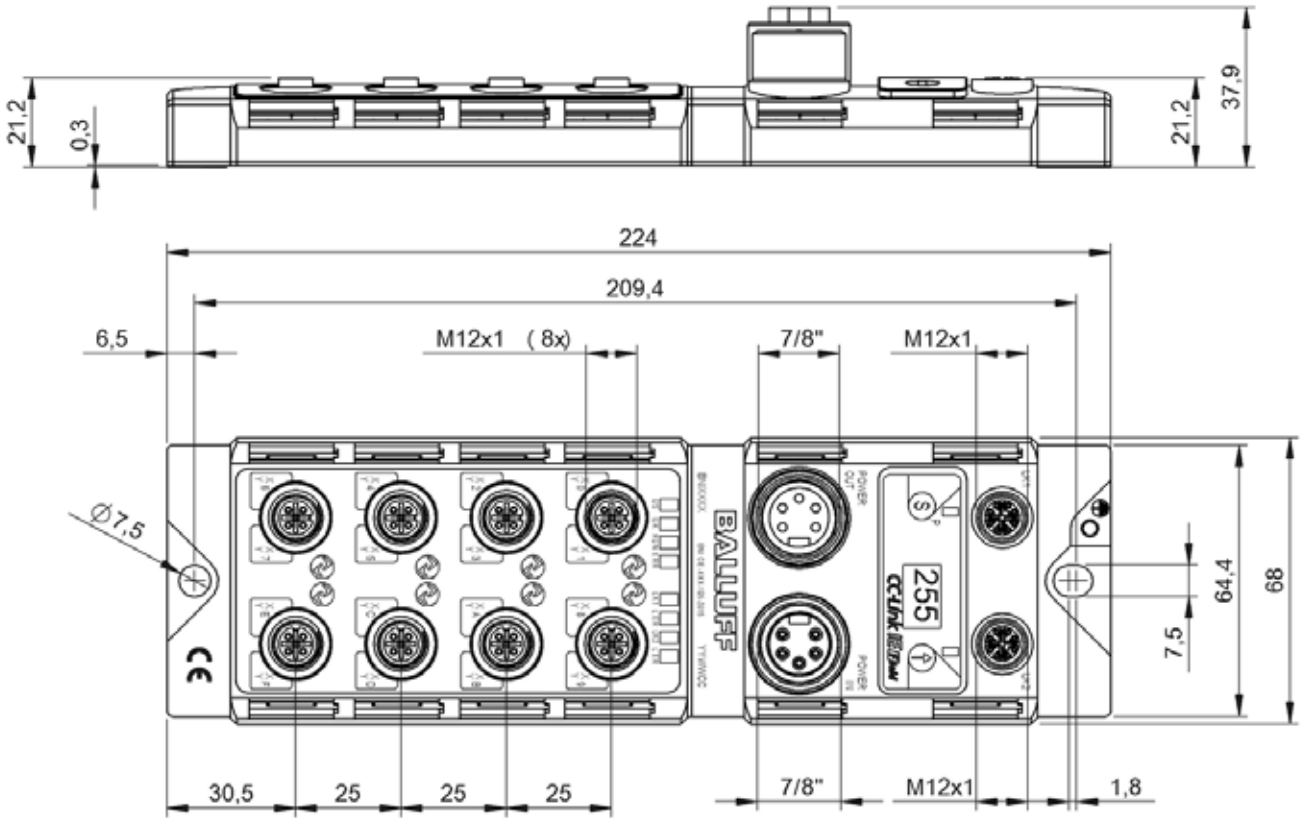
BNI004N



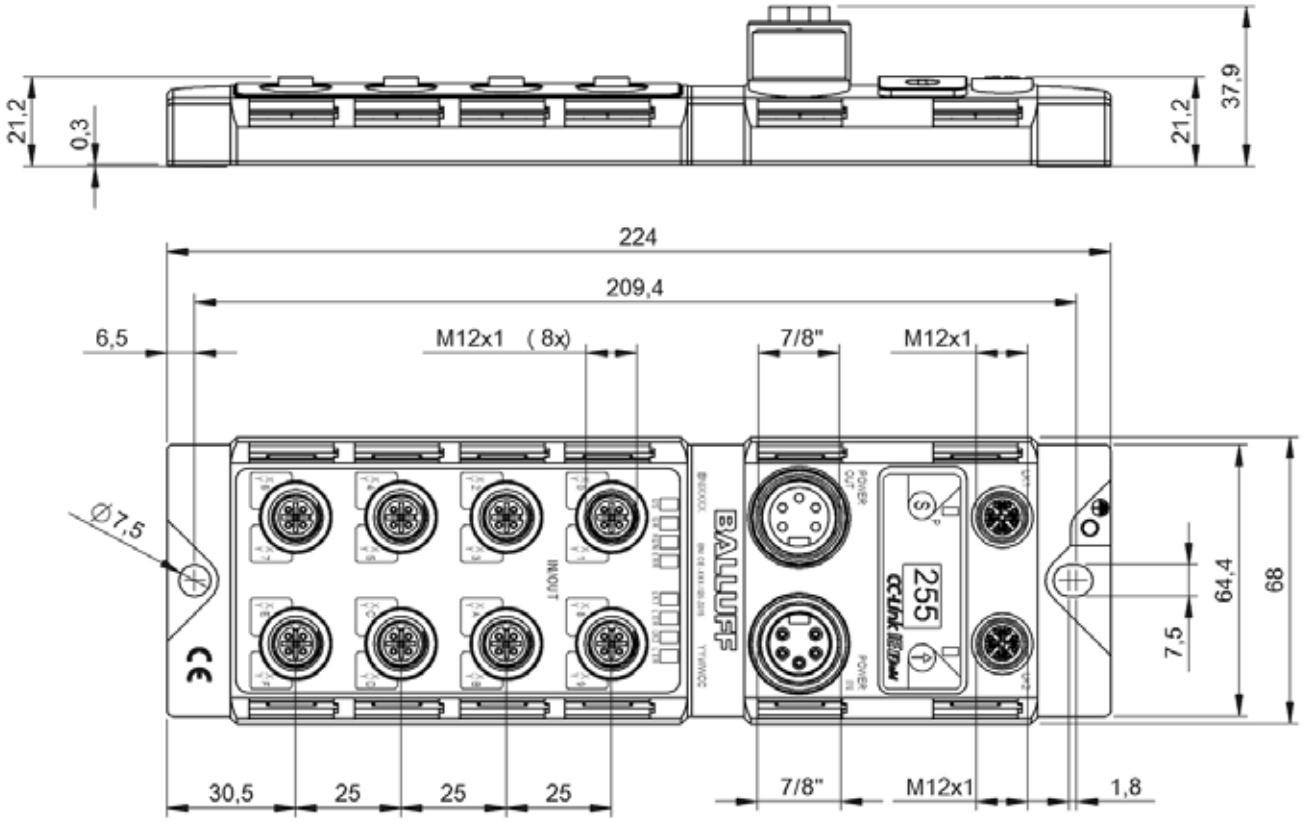
BNI0047, BNI005C

Interface	
Fast Start-Up (FSU)	
Operating voltage Ub	
Connection (COM 1)	
Connection (COM 2)	
Connection (supply voltage IN)	
Connection (supply voltage OUT)	
Connection slots	
Digital inputs	
Digital outputs	
Configurable inputs/outputs	
Output current max.	
Current sum US, sensor	
Current sum UA, actuator	
Housing material	
Dimension	
Ambient temperature	
IP rating	
Auxiliary interfaces	
IO-Link version	
Port-class	
Productview	

	BNI008C BNI CIE-508-105-Z015	BNI0095 BNI CIE-302-105-Z015
	CC-Link IE Field V0	CC-Link IE Field V0
	—	—
	18...30.2 VDC	18...30.2 VDC
	M12x1-Female, 8-pin, X-coded	M12x1-Female, 8-pin, X-coded
	M12x1-Female, 8-pin, X-coded	M12x1-Female, 8-pin, X-coded
	7/8“-Male, 5-pin	7/8“-Male, 5-pin
	7/8“-Female, 5-pin	7/8“-Female, 5-pin
	8x M12x1-Female, 5-pin, A-coded	8x M12x1-Female, 5-pin, A-coded
	16x PNP, Type 3	16x PNP, Type 3
	16x PNP	16x PNP
	yes	yes
	2 A	2 A
	9.0 A	9.0 A
	9.0 A	9.0 A
	Zinc, Die casting	Zinc, Die casting
	68 x 37.9 x 224 mm	68 x 37.9 x 224 mm
	-5...70 °C	-5...70 °C
	IP67	IP67
	8x IO-Link	—
	1.1	—
	Type A	—
	Seite 112	Seite 112



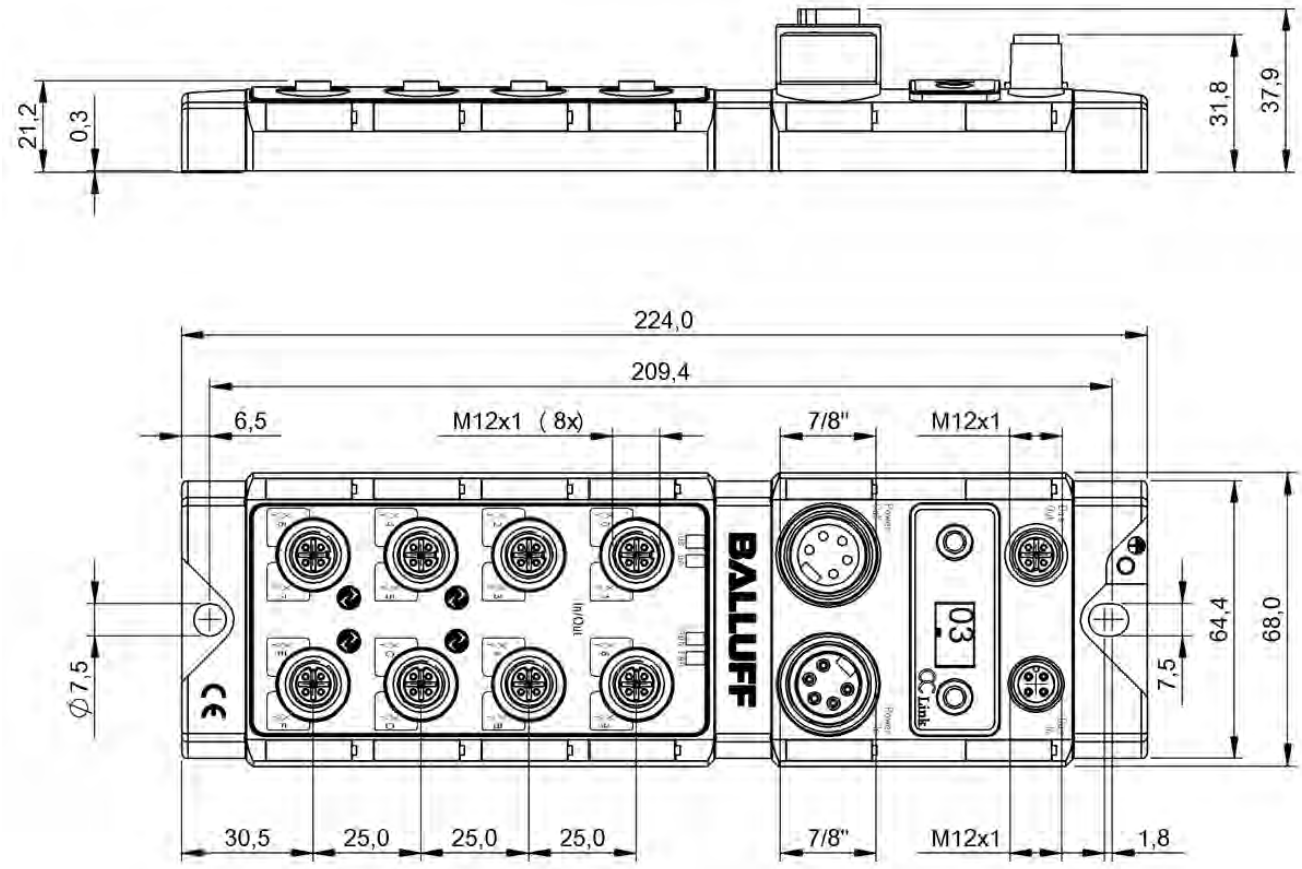
BNI008C



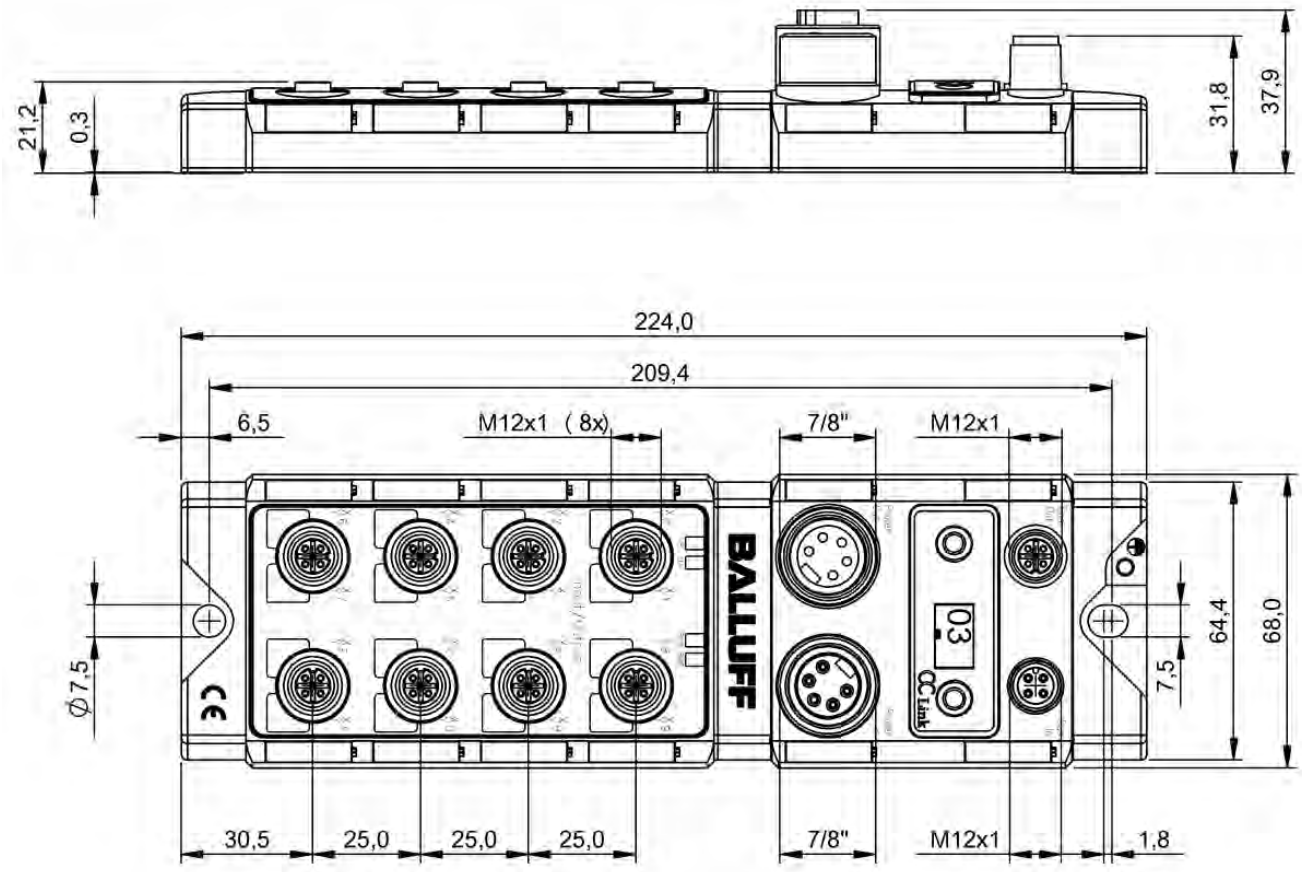
BNI0095

Interface	
Fast Start-Up (FSU)	
Operating voltage Ub	
Connection (COM 1)	
Connection (COM 2)	
Connection (supply voltage IN)	
Connection (supply voltage OUT)	
Connection slots	
Digital inputs	
Digital outputs	
Configurable inputs/outputs	
Output current max.	
Current sum US, sensor	
Current sum UA, actuator	
Housing material	
Dimension	
Ambient temperature	
IP rating	
Auxiliary interfaces	
IO-Link version	
Port-class	
Productview	

BNI0040 BNI CCL-502-100-Z001	BNI002A BNI CCL-302-100-Z001
CC-Link V1.1	CC-Link V1.1
—	—
18...30.2 VDC	18...30.2 VDC
M12x1-Male, 4-pin, A-coded	M12x1-Male, 4-pin, A-coded
M12x1-Female, 4-pin, A-coded	M12x1-Female, 4-pin, A-coded
7/8“-Male, 5-pin	7/8“-Male, 5-pin
7/8“-Female, 5-pin	7/8“-Female, 5-pin
8x M12x1-Female, 5-pin, A-coded	8x M12x1-Female, 5-pin, A-coded
16x PNP, Type 2	16x PNP, Type 2
16x PNP	16x PNP
yes	yes
2 A	2 A
9.0 A	9.0 A
9.0 A	9.0 A
Zinc, Die casting	Zinc, Die casting
68 x 37.9 x 224 mm	68 x 37.9 x 224 mm
-5...70 °C	-5...55 °C
IP67	IP67
4x IO-Link	—
1.1	—
Type A	—
Seite 118	Seite 118



BNI0040



BNI002A

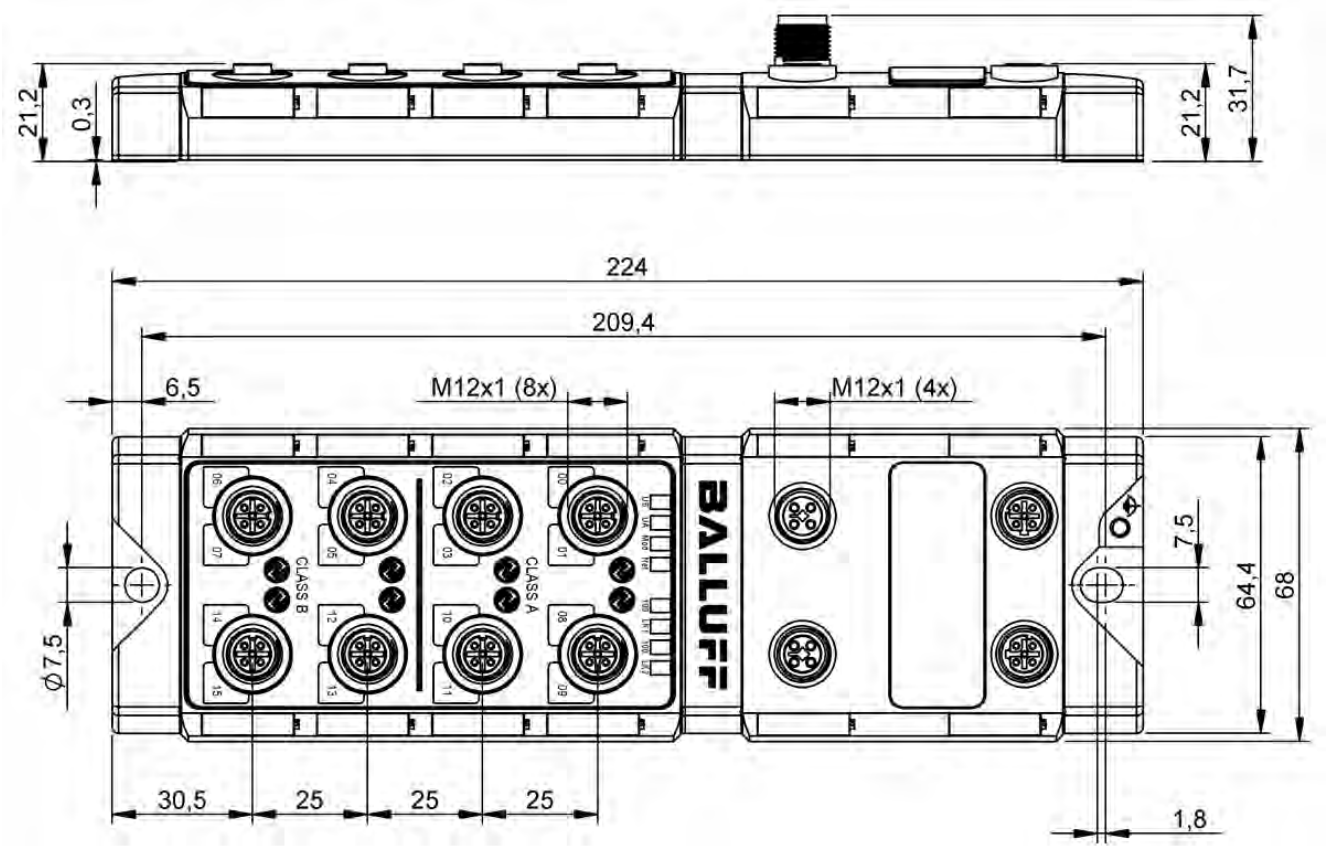
	BNI006A BNI EIP-508-105-Z015	BNI004A BNI EIP-502-105-Z015	
Interface	Ethernet/IP	Ethernet/IP	
Fast Start-Up (FSU)	—	—	
Operating voltage Ub	18...30.2 VDC	18...30.2 VDC	
Connection (COM 1)	M12x1-Female, 4-pin, D-coded	M12x1-Female, 4-pin, D-coded	
Connection (COM 2)	M12x1-Female, 4-pin, D-coded	M12x1-Female, 4-pin, D-coded	
Connection (supply voltage IN)	7/8“-Male, 4-pin	7/8“-Male, 4-pin	
Connection (supply voltage OUT)	7/8“-Female, 4-pin	7/8“-Female, 4-pin	
Connection slots	8x M12x1-Female, 5-pin, A-coded	8x M12x1-Female, 5-pin, A-coded	
Digital inputs	16x PNP, Type 3	16x PNP, Type 2	
Digital outputs	16x PNP	16x PNP	
Configurable inputs/outputs	yes	yes	
Output current max.	2 A	2 A	
Current sum US, sensor	9.0 A	9.0 A	
Current sum UA, actuator	9.0 A	9.0 A	
Housing material	Zinc, Die casting	Zinc, Die casting	
Dimension	68 x 37.9 x 224 mm	68 x 37.9 x 224 mm	
Ambient temperature	-5...70 °C	-5...70 °C	
IP rating	IP67	IP67	
Auxiliary interfaces	8x IO-Link	4x IO-Link	
IO-Link version	1.1	1.1	
Port-class	Type A	Type A	
Productview	Seite 124	Seite 125	

	BNI009T BNI EIP-507-005-Z040	BNI00AA BNI EIP-527-005-Z040	BNI004F BNI EIP-302-105-Z015	
	Ethernet/IP	Ethernet/IP	Ethernet/IP	
	—	—	—	
	18...30.2 VDC	18...30.2 VDC	18...30.2 VDC	
	M12x1-Female, 4-pin, D-coded	M12x1-Female, 4-pin, D-coded	M12x1-Female, 4-pin, D-coded	
	M12x1-Female, 4-pin, D-coded	M12x1-Female, 4-pin, D-coded	M12x1-Female, 4-pin, D-coded	
	7/8“-Male, 4-pin	7/8“-Male, 4-pin	7/8“-Male, 4-pin	
	—	—	7/8“-Female, 4-pin	
	4x M12x1-Female, 5-pin, A-coded	4x M12x1-Female, 5-pin, A-coded	8x M12x1-Female, 5-pin, A-coded	
	8x PNP, Type 3	4x PNP, Type 3	16x PNP, Type 2	
	8x PNP	—	16x PNP	
	yes	no	yes	
	2 A	—	2 A	
	9.0 A	9.0 A	9.0 A	
	9.0 A	9.0 A	9.0 A	
	Zinc, Die casting	Zinc, Die casting	Zinc, Die casting	
	37 x 32.6 x 224 mm	37 x 32.6 x 224 mm	68 x 37.9 x 224 mm	
	-40...70 °C	-40...70 °C	-5...70 °C	
	IP67	IP67	IP67	
	4x IO-Link	4x IO-Link	—	
	1.1	1.1	—	
	Type A	Type B	—	
	Seite 125	Seite 125	Seite 126	

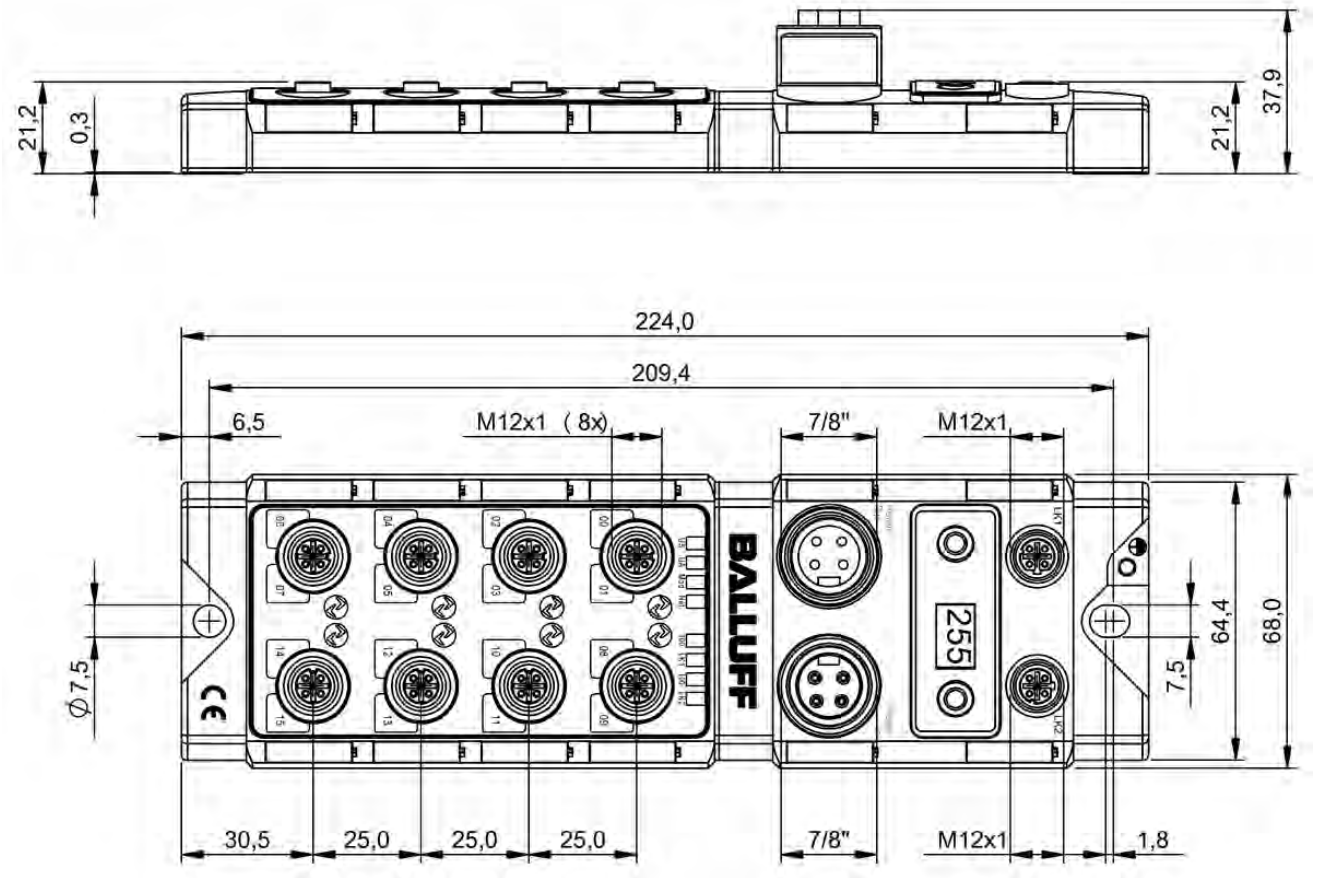
	BNI004M BNI EIP-104-105-Z015	BNI008M BNI EIP-508-105-R015	
Interface	Ethernet/IP	Ethernet/IP	
Fast Start-Up (FSU)	—	—	
Operating voltage Ub	18...30.2 VDC	18...30.2 VDC	
Connection (COM 1)	M12x1-Female, 4-pin, D-coded	M12x1-Female, 4-pin, D-coded	
Connection (COM 2)	M12x1-Female, 4-pin, D-coded	M12x1-Female, 4-pin, D-coded	
Connection (supply voltage IN)	7/8“-Male, 4-pin	7/8“-Male, 4-pin	
Connection (supply voltage OUT)	7/8“-Female, 4-pin	7/8“-Female, 4-pin	
Connection slots	8x M12x1-Female, 5-pin, A-coded	8x M12x1-Female, 5-pin, A-coded	
Digital inputs	16x PNP, Type 2	16x PNP, Type 3	
Digital outputs	—	16x PNP	
Configurable inputs/outputs	no	yes	
Output current max.	—	2 A	
Current sum US, sensor	9.0 A	9.0 A	
Current sum UA, actuator	—	9.0 A	
Housing material	Zinc, Die casting	PPS	
Dimension	68 x 37.9 x 224 mm	68 x 42.9 x 226 mm	
Ambient temperature	-5...70 °C	-5...70 °C	
IP rating	IP67	IP67	
Auxiliary interfaces	—	8x IO-Link	
IO-Link version	—	1.1	
Port-class	—	Type A	
Productview	Seite 126	Seite 127	



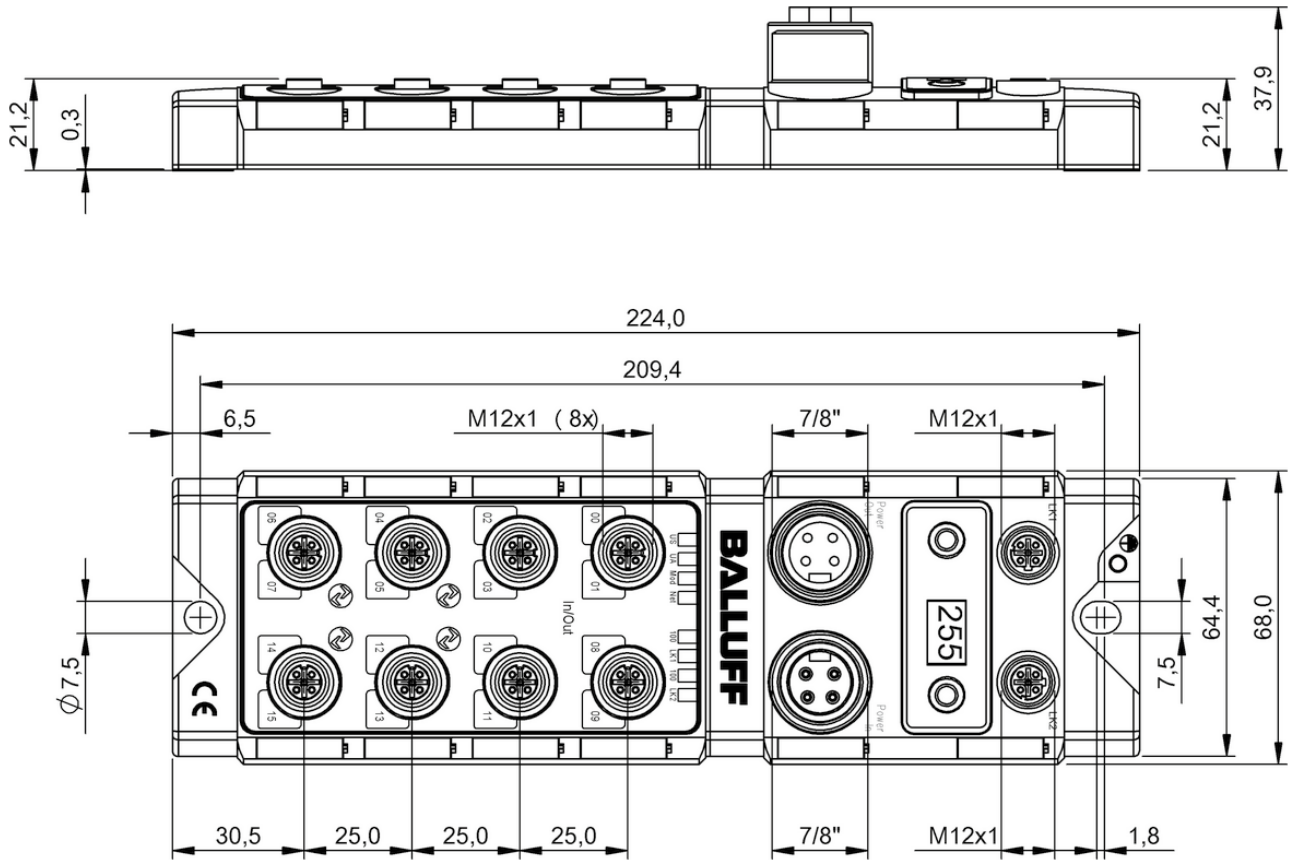

	BNI00CY BNI EIP-538-105-R015	BNI008Z BNI EIP-502-105-R015	BNI008P BNI EIP-302-105-R015	BNI008Y BNI EIP-104-105-R015
	Ethernet/IP	Ethernet/IP	Ethernet/IP	Ethernet/IP
	—	—	—	—
	18...30.2 VDC	18...30.2 VDC	18...30.2 VDC	18...30.2 VDC
	M12x1-Female, 4-pin, D-coded	M12x1-Female, 4-pin, D-coded	M12x1-Female, 4-pin, D-coded	M12x1-Female, 4-pin, D-coded
	M12x1-Female, 4-pin, D-coded	M12x1-Female, 4-pin, D-coded	M12x1-Female, 4-pin, D-coded	M12x1-Female, 4-pin, D-coded
	7/8“-Male, 4-pin	7/8“-Male, 4-pin	7/8“-Male, 4-pin	7/8“-Male, 4-pin
	7/8“-Female, 4-pin	7/8“-Female, 4-pin	7/8“-Female, 4-pin	7/8“-Female, 4-pin
	8x M12x1-Female, 5-pin, A-coded	8x M12x1-Female, 5-pin, A-coded	8x M12x1-Female, 5-pin, A-coded	8x M12x1-Female, 5-pin, A-coded
	12x PNP, Type 3	16x PNP, Type 3	16x PNP, Type 3	16x PNP, Type 3
	8x PNP	16x PNP	16x PNP	—
	yes	yes	yes	no
	2 A	2 A	2 A	—
	9.0 A	9.0 A	9.0 A	9.0 A
	9.0 A	9.0 A	9.0 A	—
	PPS	PPS	PPS	PPS
	68 x 42.9 x 226 mm	68 x 42.9 x 226 mm	68 x 42.9 x 226 mm	68 x 42.9 x 226 mm
	-5...70 °C	-5...70 °C	-5...70 °C	-5...70 °C
	IP67	IP67	IP67	IP67
	8x IO-Link	4x IO-Link	—	—
	1.1	1.1	—	—
	Type A (4x) + Type B (4x)	Type A	—	—
	Seite 127	Seite 128	Seite 128	Seite 129



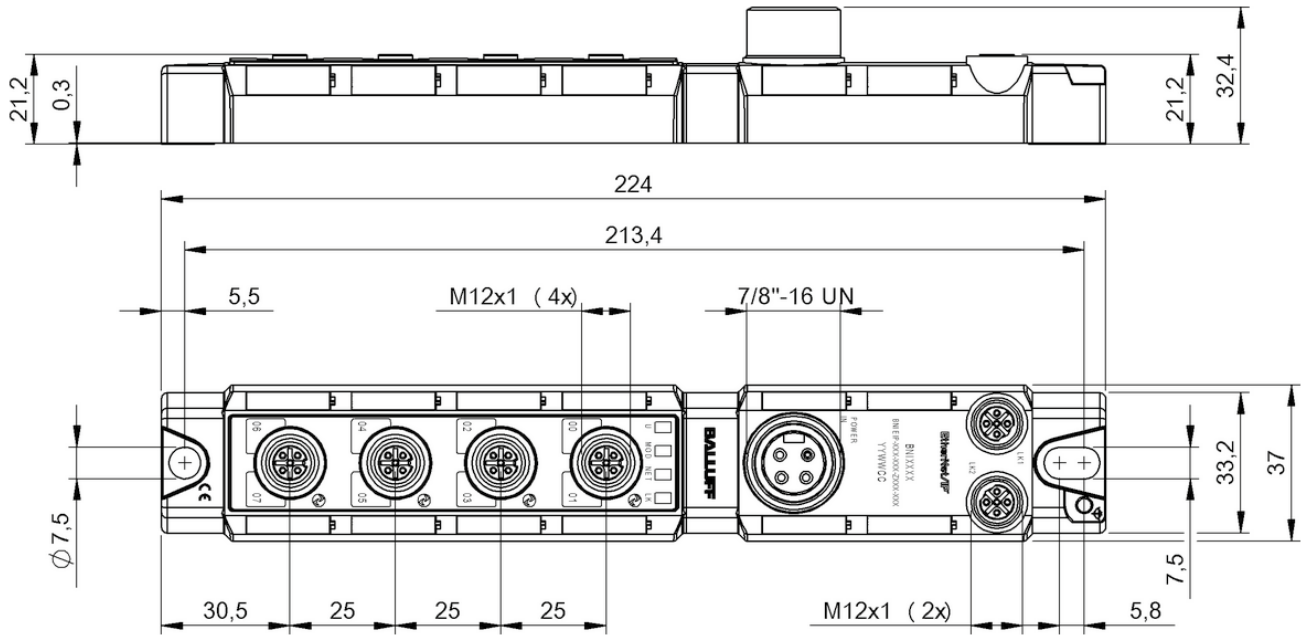
BNI00E1



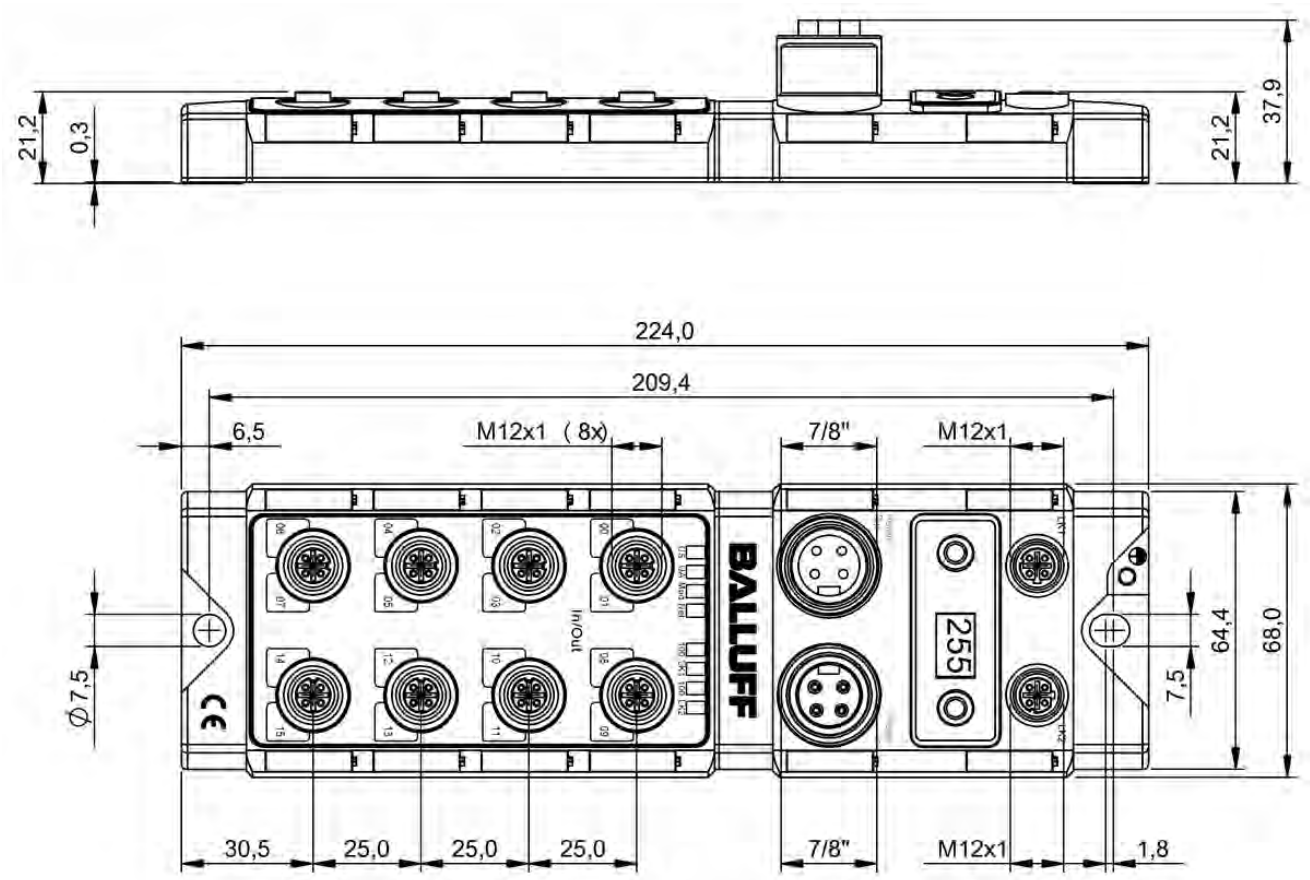
BNI006A



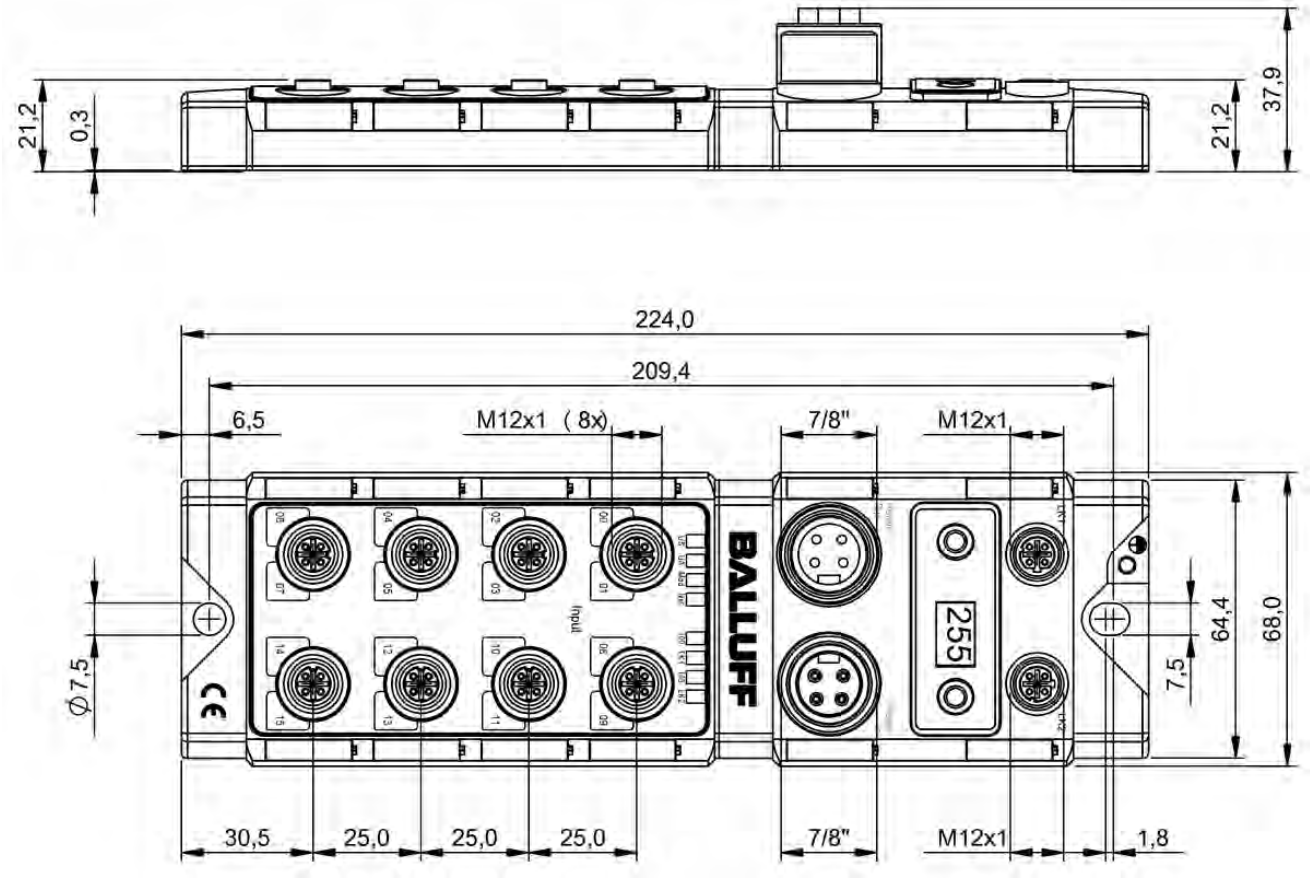
BNI004A



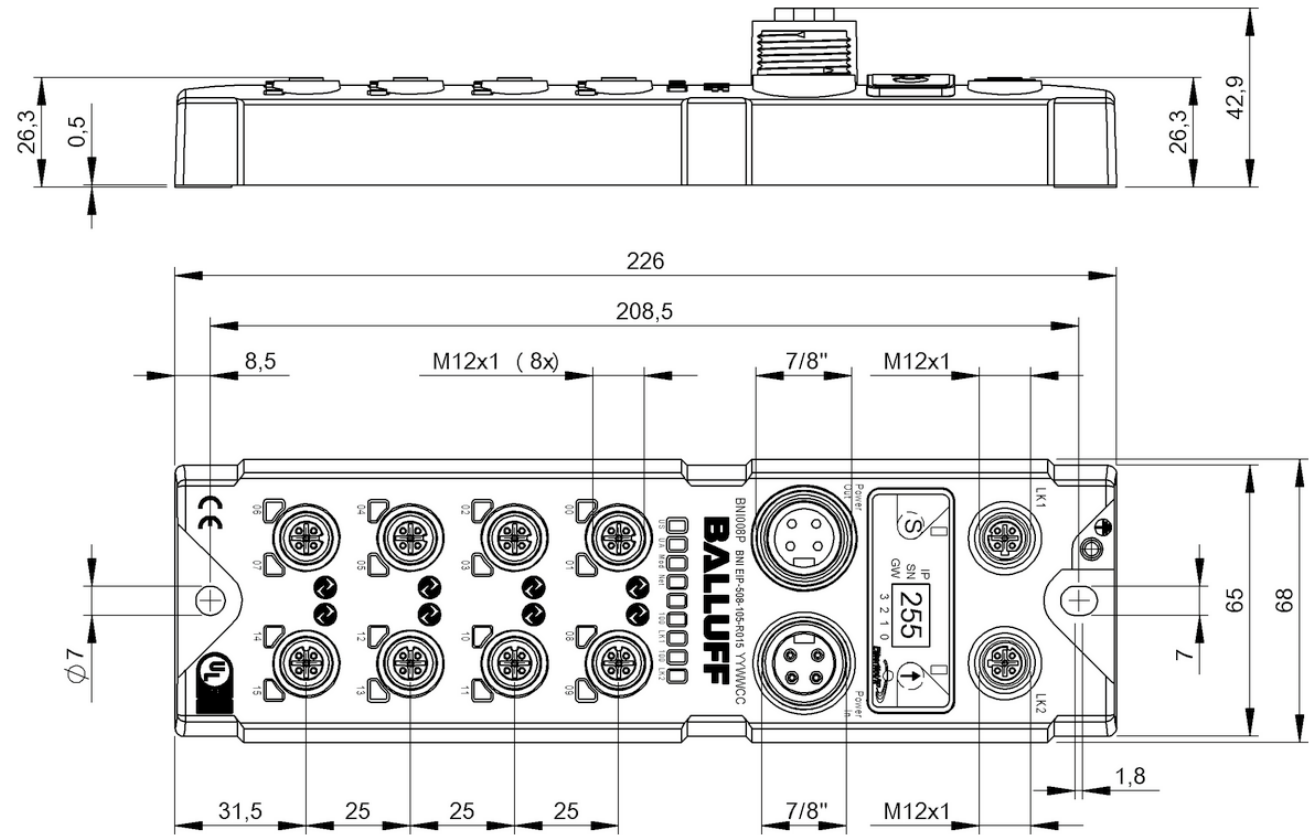
BNI009T, BNI00AA



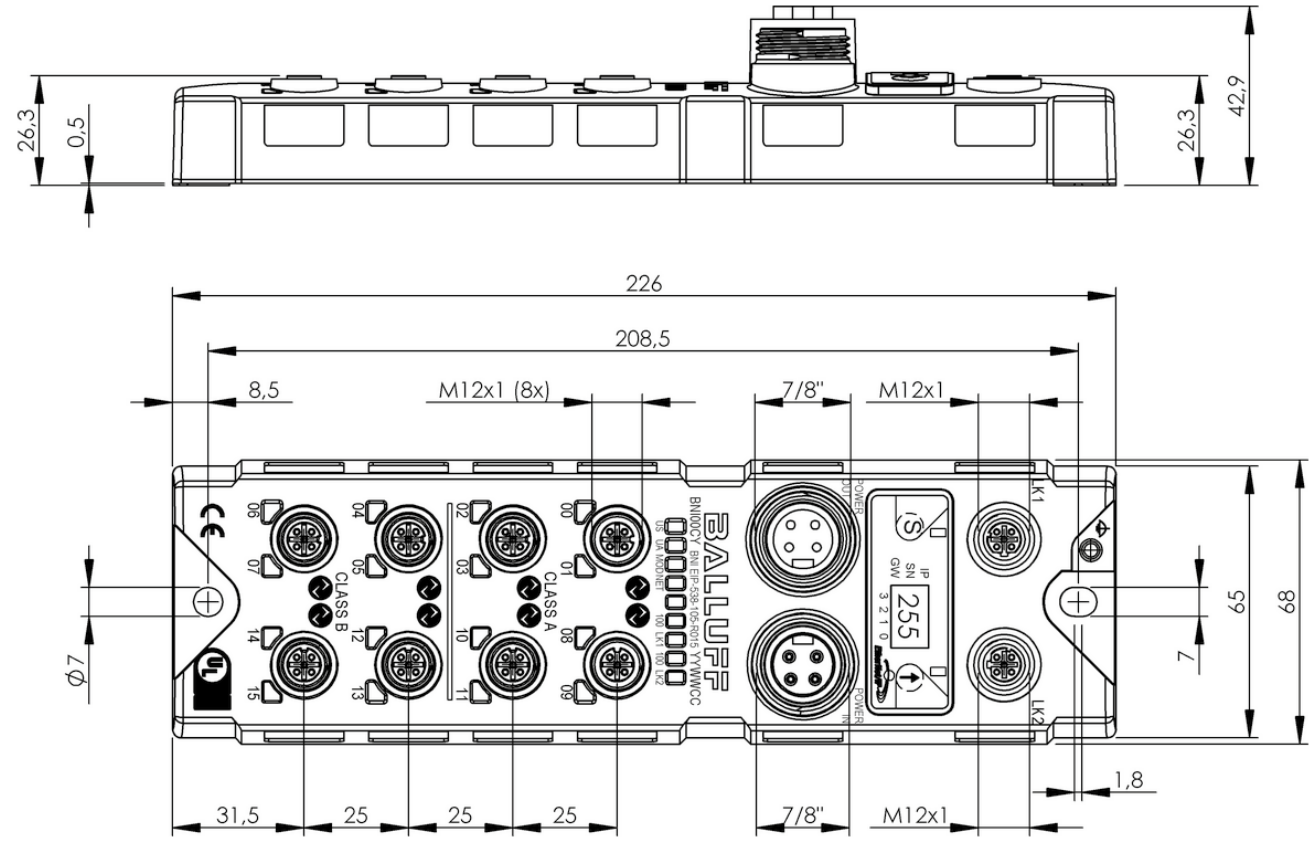
BNI004F



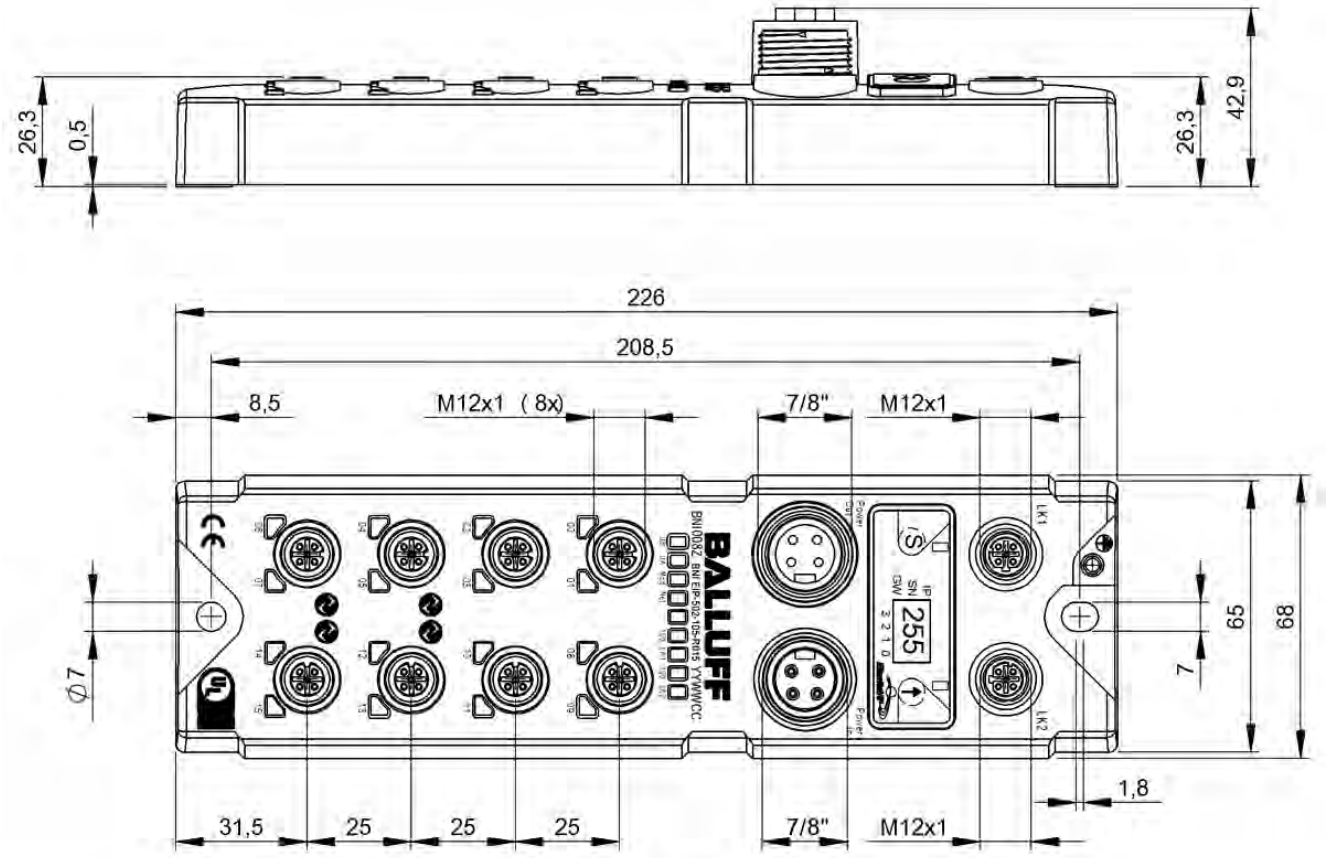
BNI004M



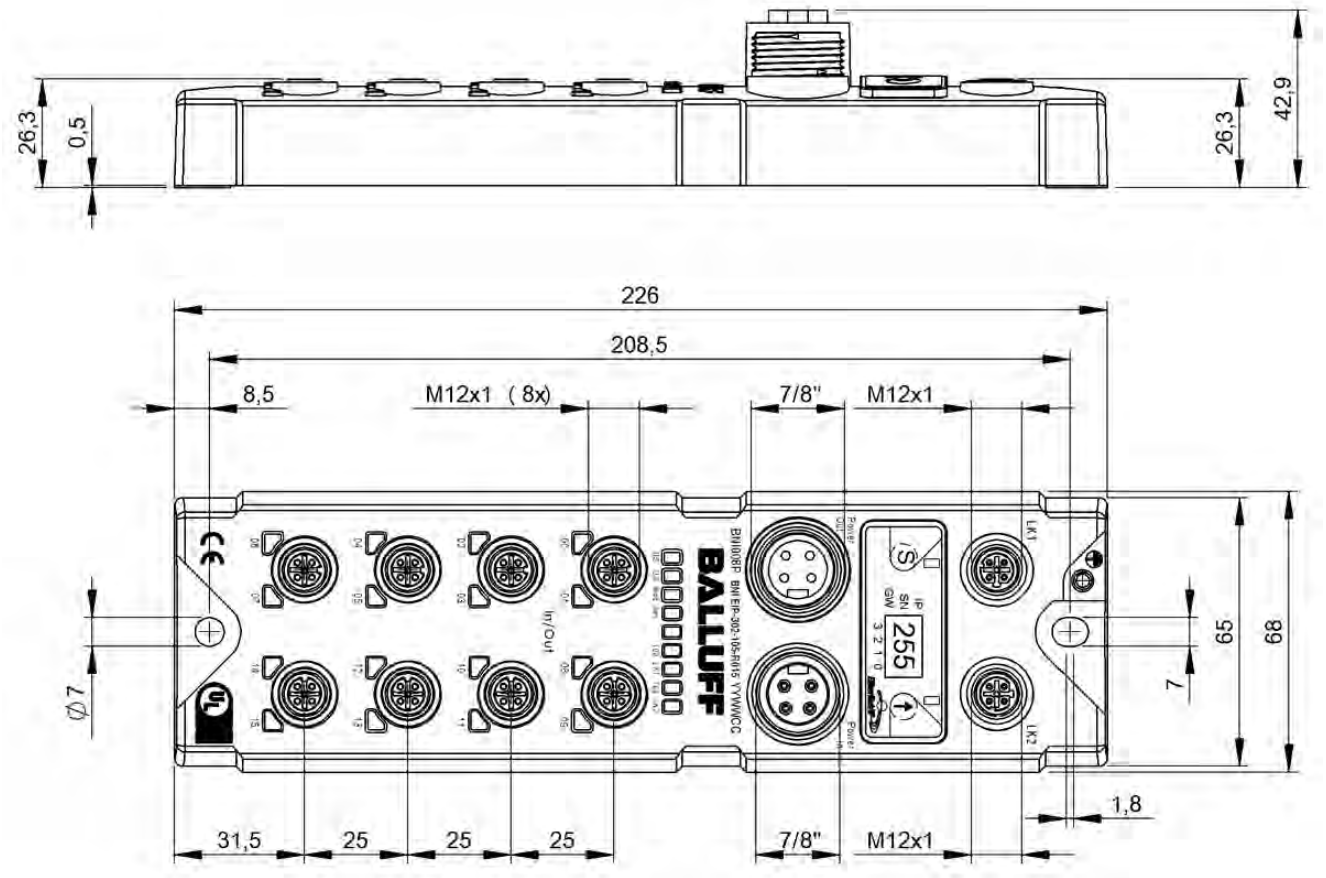
BNI008M



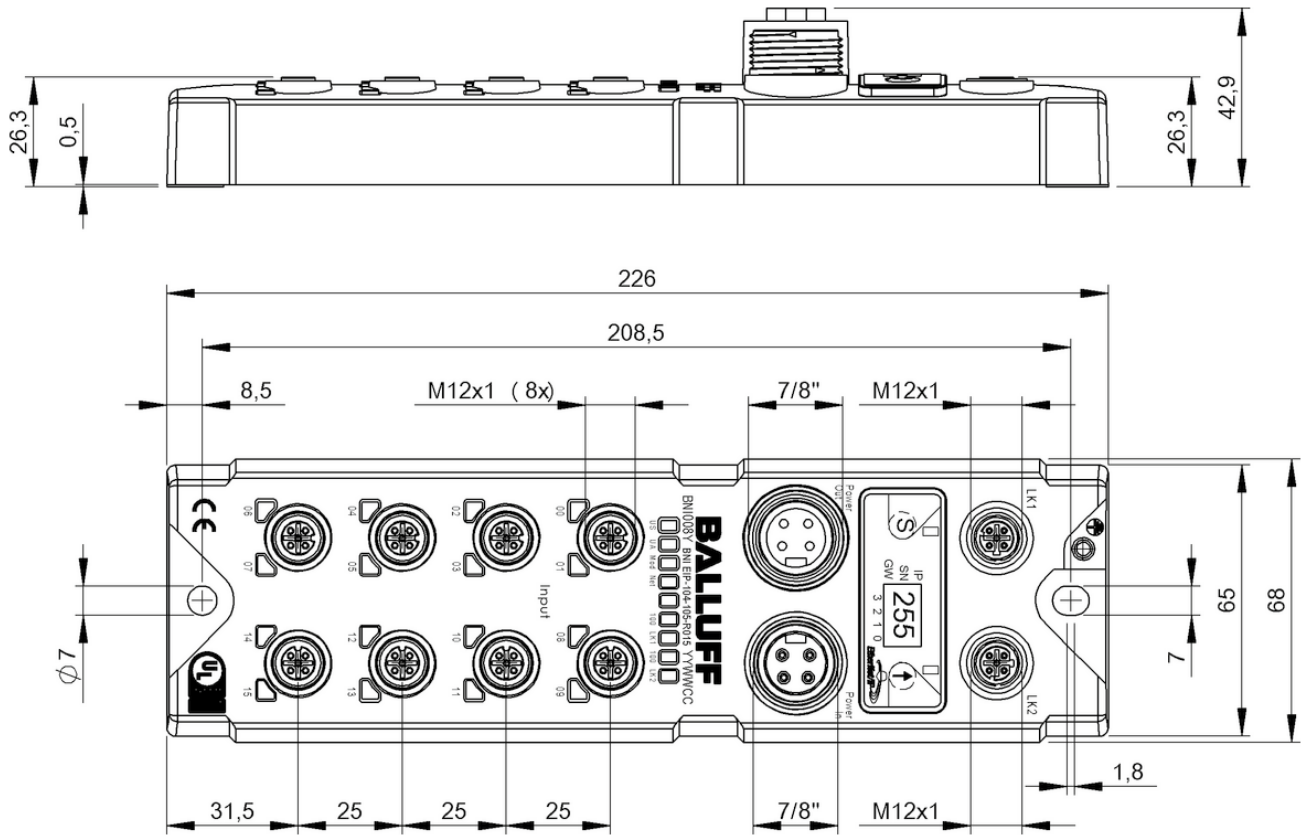
BNI00CY



BNI008Z



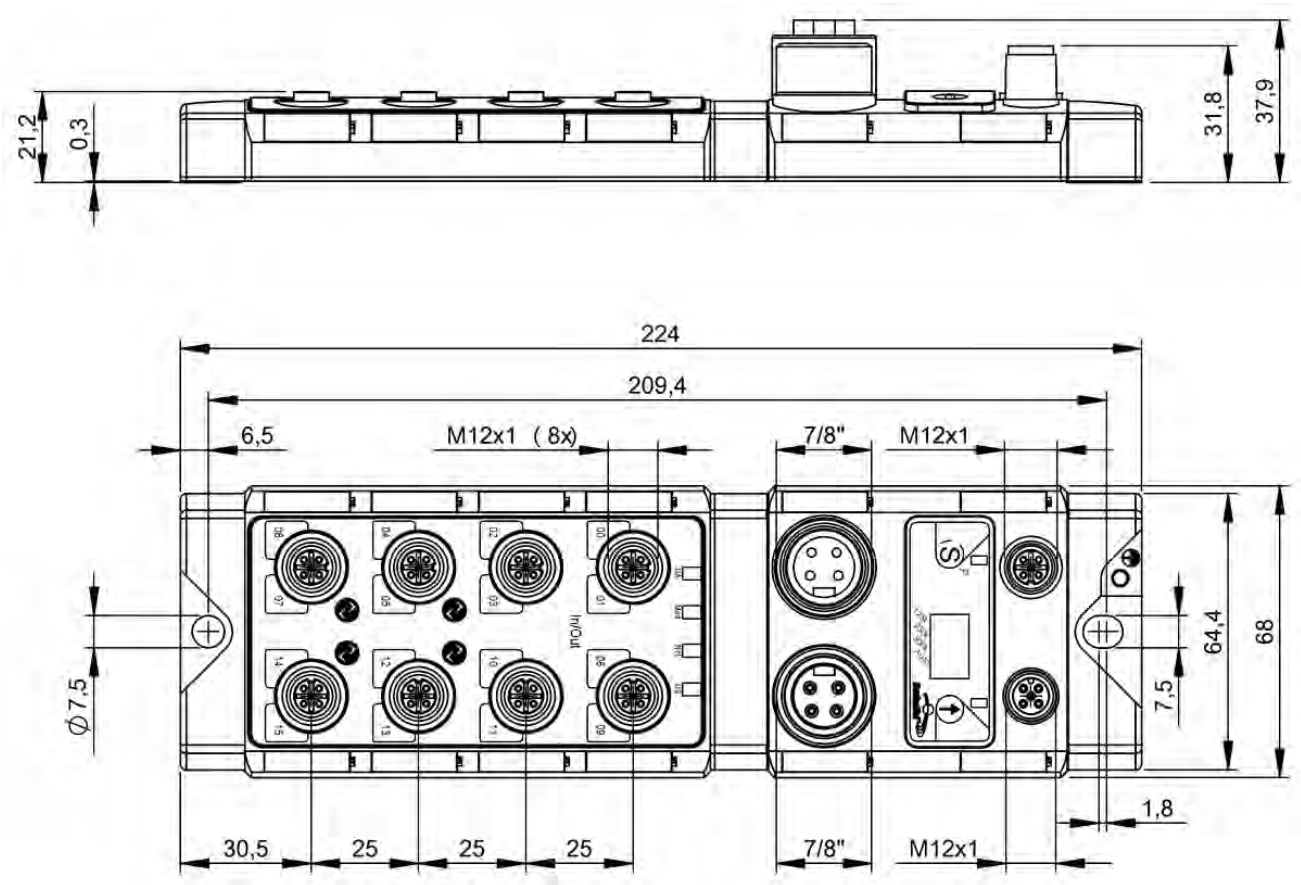
BNI008P


26,3
0,5
26,3
42,9
226
208,5
8,5
M12x1 (8x)
7/8"
M12x1
BALLUFF
BNI008Y
BNI EIP-104-105-R015 YYWWCC
Input
Power Out
Power In
LK1
LK2
IP
SN
GW
255
65
68
7
ϕ 7
1,8
31,5
25
25
25
7/8"
M12x1

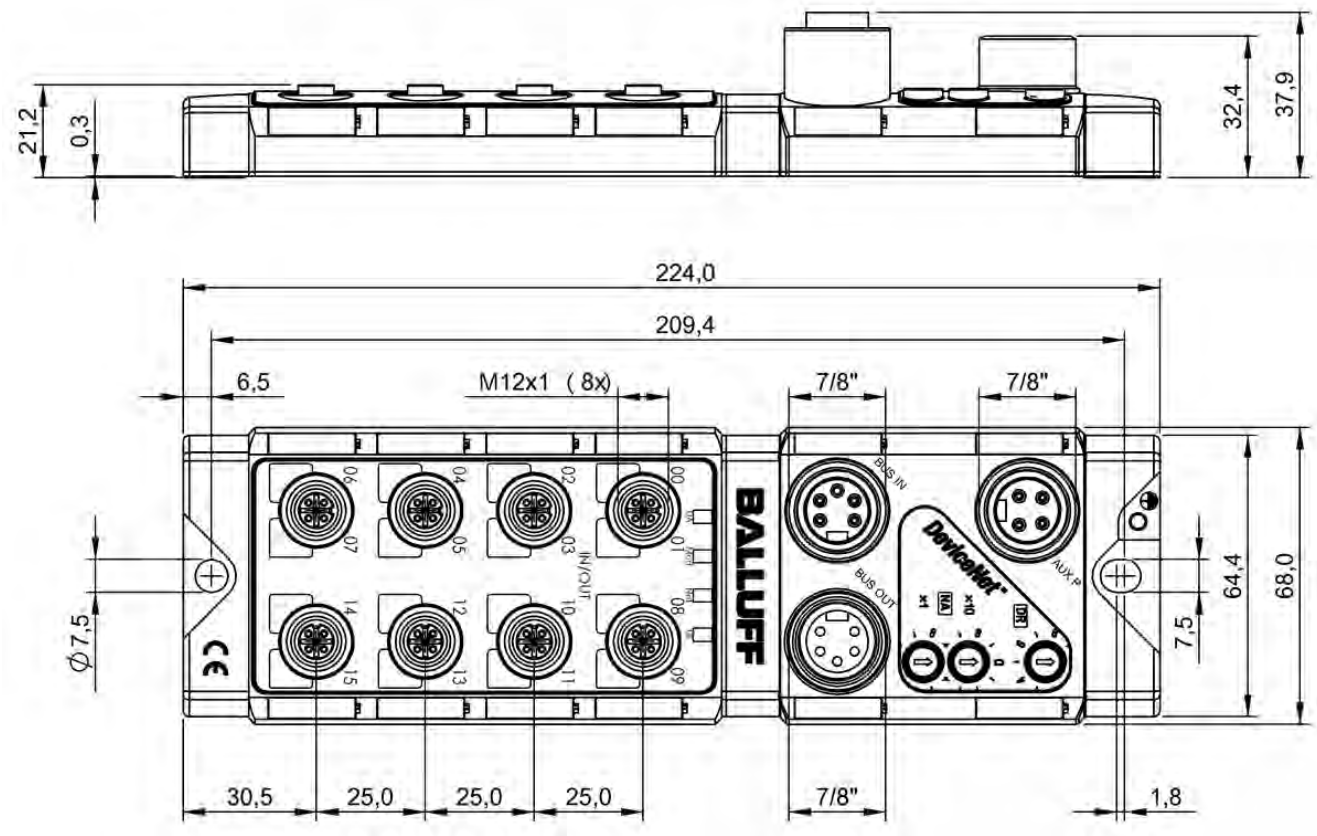
BNI008Y

	BNI005A BNI DNT-502-100-Z001	
Interface	DeviceNet	
Fast Start-Up (FSU)	—	
Operating voltage Ub	18...30.2 VDC	
Connection (COM 1)	M12x1-Male, 5-pin, A-coded	
Connection (COM 2)	M12x1-Female, 5-pin, A-coded	
Connection (supply voltage IN)	7/8“-Male, 4-pin	
Connection (supply voltage OUT)	7/8“-Female, 4-pin	
Connection slots	8x M12x1-Female, 5-pin, A-coded	
Digital inputs	16x PNP, Type 2	
Digital outputs	16x PNP	
Configurable inputs/outputs	yes	
Output current max.	2 A	
Current sum US, sensor	9.0 A	
Current sum UA, actuator	9.0 A	
Housing material	Zinc, Die casting	
Dimension	68 x 37.9 x 224 mm	
Ambient temperature	-5...70 °C	
IP rating	IP67	
Auxiliary interfaces	4x IO-Link	
IO-Link version	1.1	
Port-class	Type A	
Productview	Seite 132	

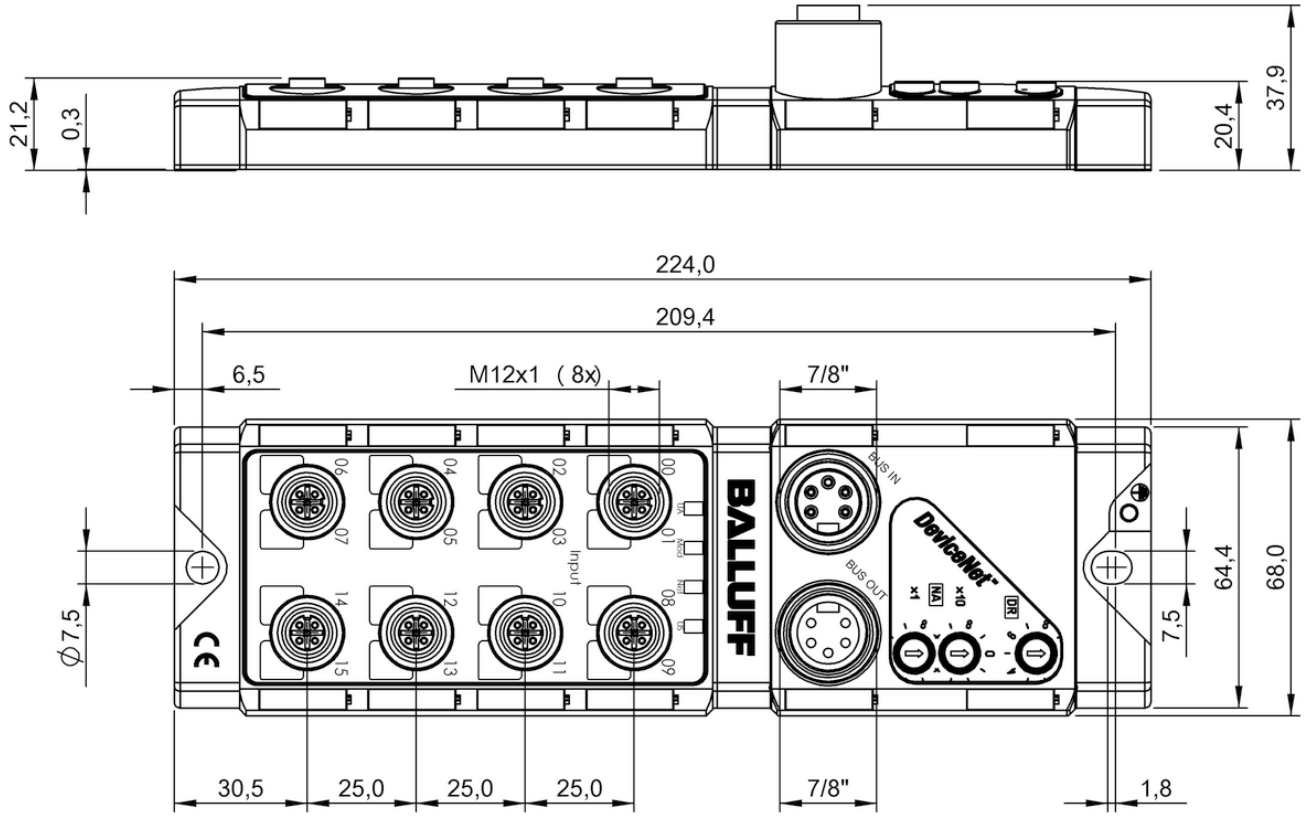
BNI0003 BNI DNT-302-000-Z005	BNI0001 BNI DNT-104-000-Z004
DeviceNet	DeviceNet
—	—
18...30.2 VDC	18...30.2 VDC
7/8“-Male, 5-pin	7/8“-Male, 5-pin
7/8“-Female, 5-pin	7/8“-Female, 5-pin
7/8“-Male, 4-pin	7/8“-Male, 4-pin
—	—
8x M12x1-Female, 5-pin, A-coded	8x M12x1-Female, 5-pin, A-coded
16x PNP, Type 2	16x PNP, Type 2
16x PNP	—
yes	no
2 A	—
9.0 A	9.0 A
9.0 A	—
Zinc, Die casting	Zinc, Die casting
68 x 37.9 x 224 mm	68 x 37.9 x 224 mm
-5...70 °C	-5...70 °C
IP67	IP67
—	—
—	—
—	—
Seite 132	Seite 133



BNI005A



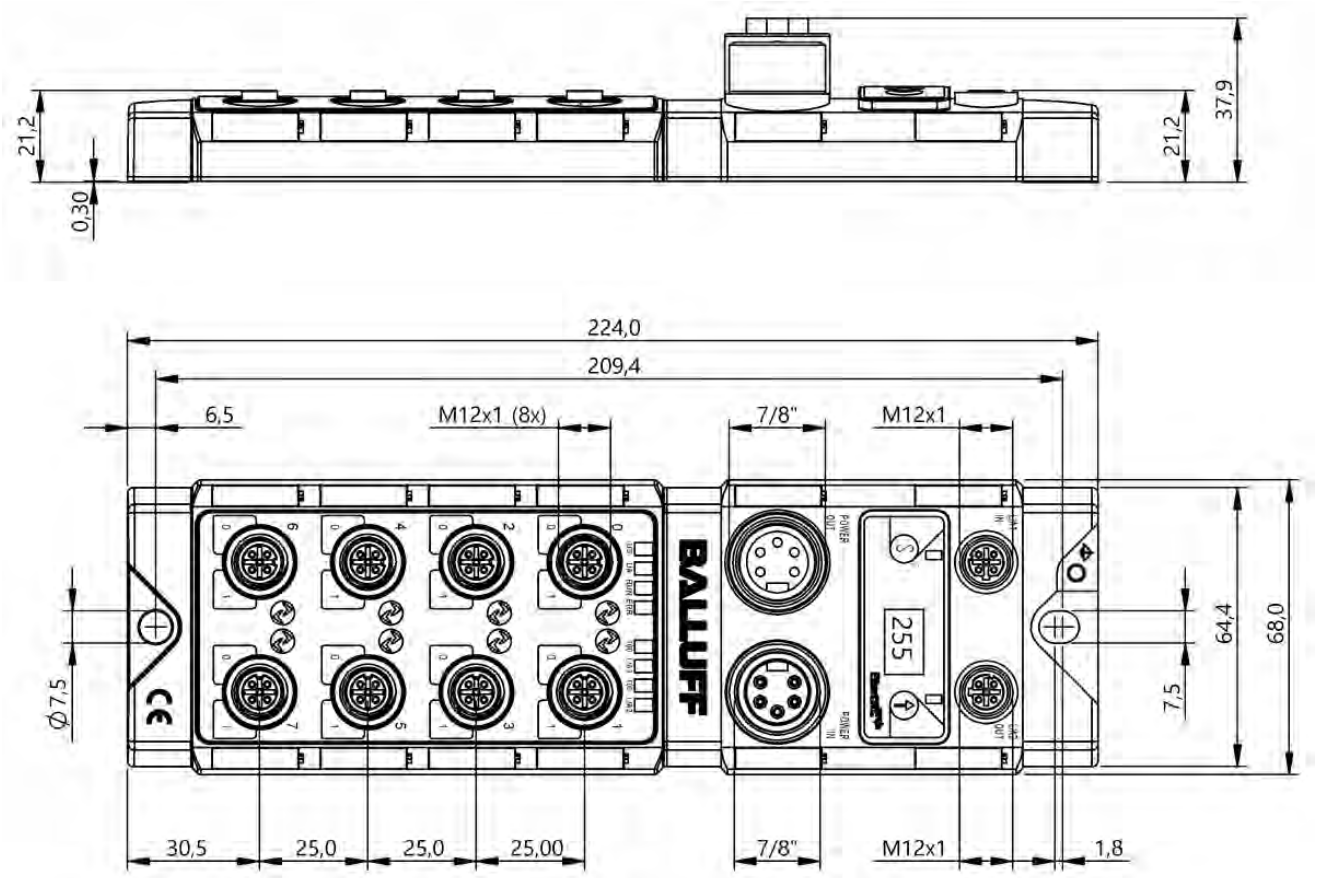
BNI0003


21,2
0,3
37,9
20,4
224,0
209,4
6,5
M12x1 (8x)
7/8"
BALLUFF
BUS IN
BUS OUT
DeviceNet
Input
64,4
68,0
7,5
ϕ7,5
30,5
25,0
25,0
25,0
7/8"
1,8

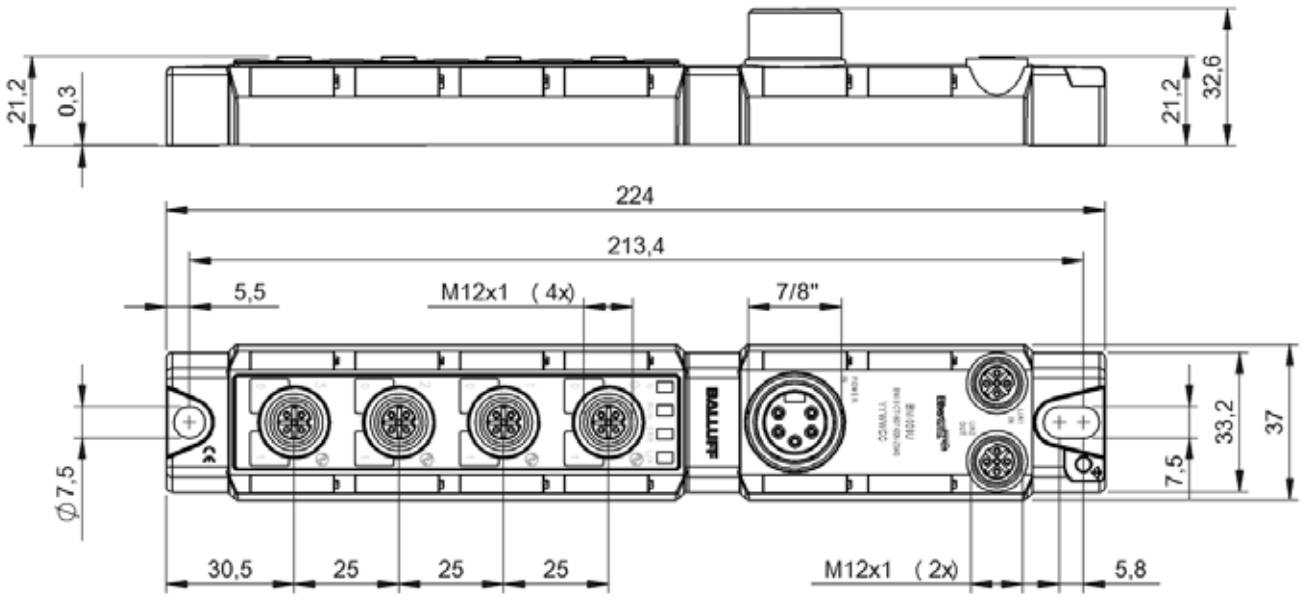
BNI0001

Interface	
Fast Start-Up (FSU)	
Operating voltage Ub	
Connection (COM 1)	
Connection (COM 2)	
Connection (supply voltage IN)	
Connection (supply voltage OUT)	
Connection slots	
Digital inputs	
Digital outputs	
Configurable inputs/outputs	
Output current max.	
Current sum US, sensor	
Current sum UA, actuator	
Housing material	
Dimension	
Ambient temperature	
IP rating	
Auxiliary interfaces	
IO-Link version	
Port-class	
Productview	

BNI0077 BNI ECT-508-105-Z015	BNI009U BNI ECT-507-005-Z040
EtherCAT	EtherCAT
—	—
18...30.2 VDC	18...30.2 VDC
M12x1-Female, 5-pin, D-coded	M12x1-Female, 5-pin, D-coded
M12x1-Female, 5-pin, D-coded	M12x1-Female, 5-pin, D-coded
7/8“-Male, 5-pin	7/8“-Male, 5-pin
7/8“-Female, 5-pin	—
8x M12x1-Female, 5-pin, A-coded	4x M12x1-Female, 5-pin, A-coded
16x PNP, Type 2	8x PNP, Type 3
16x PNP	8x PNP
yes	yes
2 A	2 A
9.0 A	9.0 A
9.0 A	9.0 A
Zinc, Die casting	Zinc, Die casting
68 x 37.9 x 224 mm	37 x 32.6 x 224 mm
-5...70 °C	-40...70 °C
IP67	IP67
8x IO-Link	4x IO-Link
1.1	1.1
Type A	Type A
Seite 136	Seite 136



BNI0077



BNI009U

System solutions for efficient network design

SWITCHES

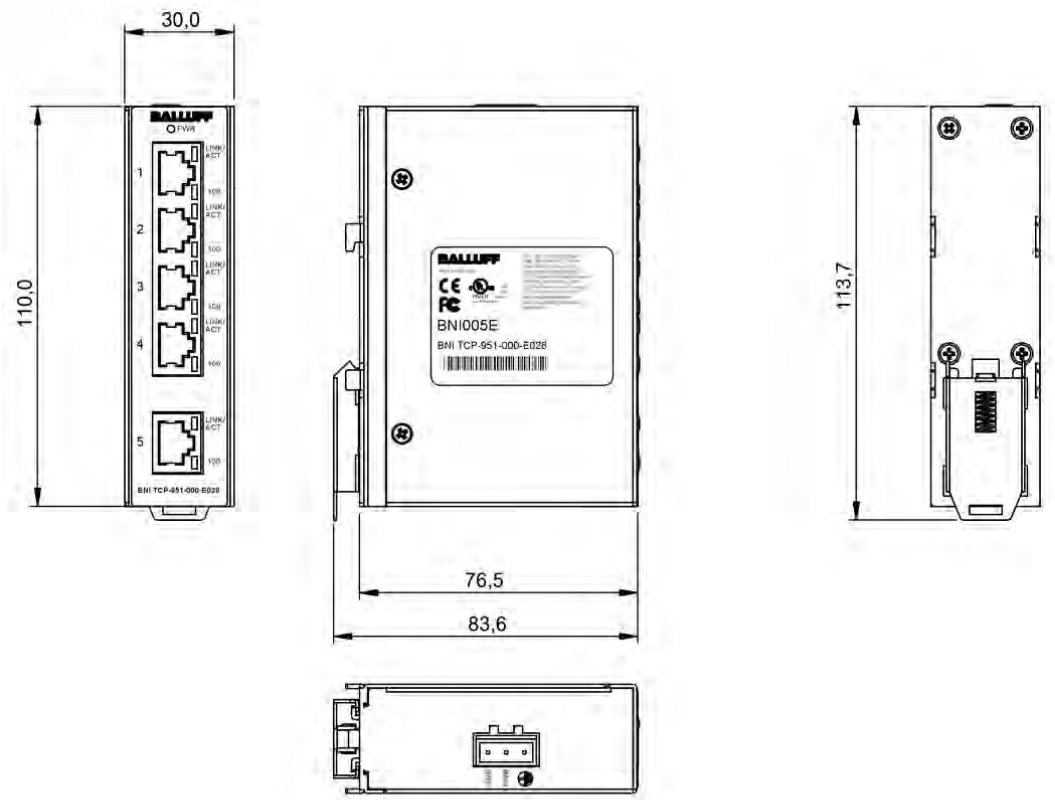
Ethernet-based network systems are increasingly gaining significance in industrial automation. To enable you to easily link all Ethernet system components with Ethernet, Balluff provides you with a complete system. We offer you a multiplicity of Ethernet-based systems and network components for machine and system outfitting, including Profinet and Ethernet/IP. This means optimum infrastructure for complex networks.

Features

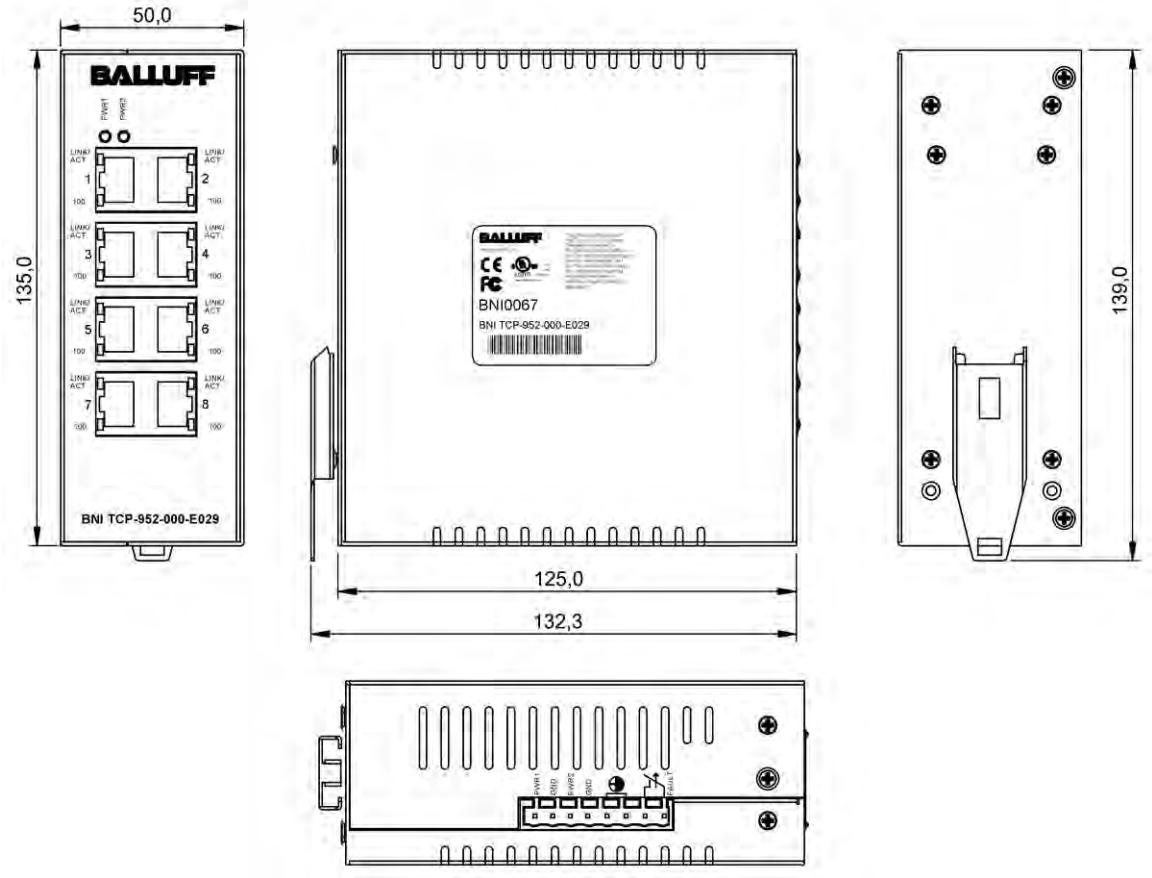
- Variety of Ethernet-based systems and network components
- Complete system for linking Ethernet system components with Ethernet

	BNI005E BNI TCP-951-000-E028	
Principle of operation	Active splitter	
Dimension	30 x 76.5 x 110 mm	
Mounting	DIN rail mount	
Housing material	Steel, coated	
Interface	Ethernet TCP/IP 10Base-T/100Base-TX	
Operating voltage Ub	12...48 VDC	
Connection slots	5x RJ45-Female, 8-pole	
Ambient temperature	-10...60 °C	
Protection degree	IP30	
Productview	Seite 142	

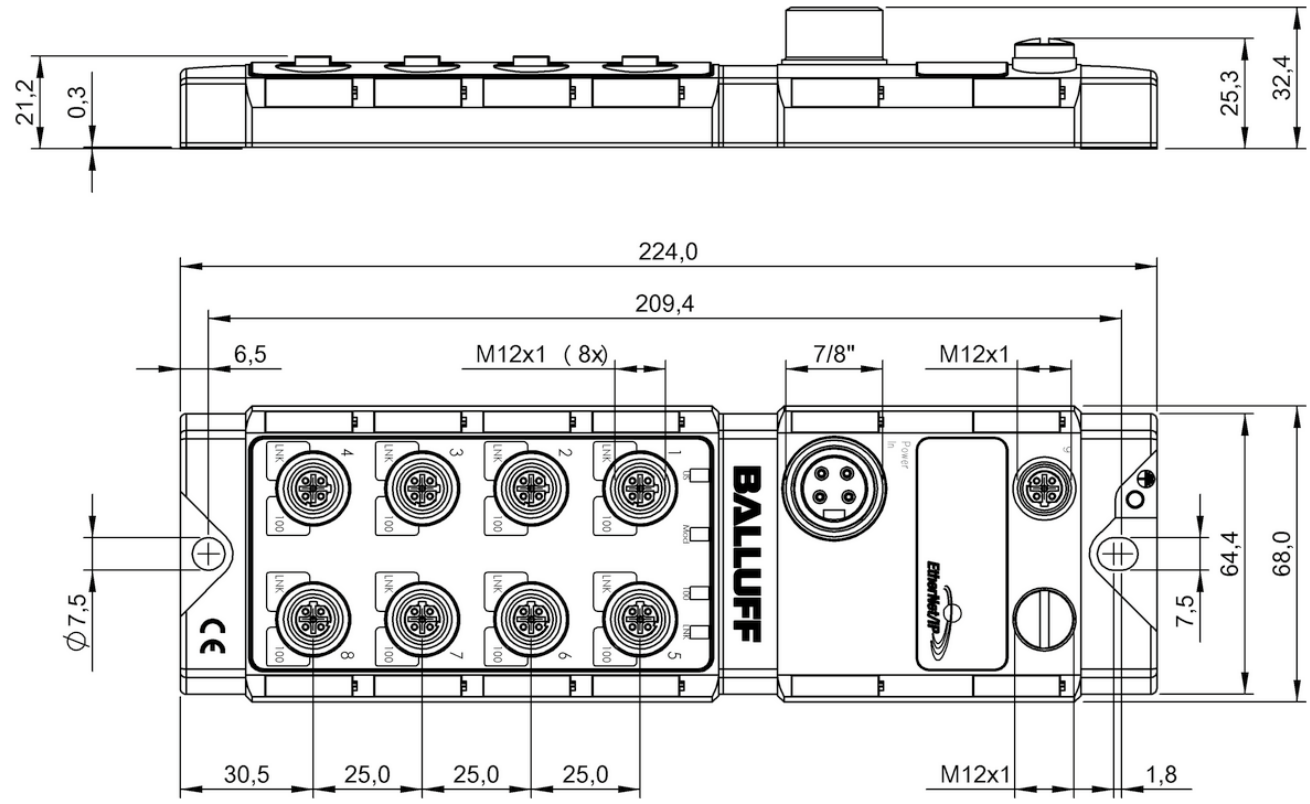
BNI0067 BNI TCP-952-000-E029	BNI000F BNI EIP-950-000-Z009
Active splitter	Active splitter
50 x 76.5 x 135 mm	68 x 32.4 x 224 mm
DIN rail mount	2-hole screw mount
Steel, coated	Zinc, die-cast
Ethernet TCP/IP 10Base-T/100Base-TX	Ethernet TCP/IP 10Base-T/100Base-TX
12...48 VDC	18...30.2 VDC
8x RJ45-Female, 8-pole	8x M12x1-Female, 4-pole, D-coded
-20...60 °C	-5...55 °C
IP30	IP67
Seite 142	Seite 143



BNI005E



BNI0067


21,2
0,3
25,3
32,4
224,0
209,4
6,5
M12x1 (8x)
7/8"
M12x1
BALLUFF
EtherNet/IP
⌀7,5
64,4
68,0
7,5
30,5
25,0
25,0
25,0
M12x1
1,8

BNI000F

**Reliable signal transmission,
even under extreme conditions**

I/O MODULES

I/O modules from Balluff connect binary and analog sensors and actuators to the control level via a bus. By using our modules you can significantly reduce the number of cables required. The Balluff I/O modules also offer additional functions for signal preprocessing and expanded diagnostic options. Various form factors and connection technologies provide solutions for a wide range of requirements – even under extreme ambient conditions.

Features

- Simple to install
- Efficient configuration
- Continuous diagnostics
- Individual solutions through a variety of designs and connection techniques
- Suitable for use under extreme conditions



	BNI0093 BNI IOL-309-002-Z019	BNI0099 BNI IOL-102-002-Z019	BNI00AU BNI IOL-302-002-Z046	
Interface	IO-Link 1.1	IO-Link 1.1	IO-Link 1.1	
Operating voltage Ub	18...30.2 VDC	18...30.2 VDC	18...30.2 VDC	
Connection (COM 1)	M12x1-Male, 4-pin, A-coded	M12x1-Male, 4-pin, A-coded	M12x1-Male, 4-pin, A-coded	
Connection (supply voltage IN)	—	—	—	
Connection slots	8x M8x1-Female, 3-pin	8x M8x1-Female, 3-pin	16x M8x1-Female, 3-pin	
Digital inputs	8x PNP, Type 3	8x PNP, Type 3	16x PNP, Type 3	
Digital outputs	8x PNP	—	16x PNP	
Analog inputs	—	—	—	
Configurable inputs/outputs	yes	no	yes	
Extension port	yes	yes	yes	
Single-channel monitoring	—	—	—	
Additional function	—	—	—	
Current sum US, sensor	4 A	4 A	4 A	
Current sum UA, actuator	4 A	—	4 A	
Switching current	8x 300 mA	—	16x 300 mA	
Housing material	Zinc, Die casting, nickel plated	Zinc, Die casting	Zinc, Die casting, nickel plated	
Dimension	30 x 32.8 x 132 mm	30 x 32.8 x 132 mm	30 x 32.8 x 220 mm	
Ambient temperature	-5...70 °C	-5...70 °C	-5...70 °C	
IP rating	IP67, when threaded in	IP67, when threaded in	IP67, when threaded in	
Transfer rate	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)	
Process data cycle min.	3.5 ms	3.2 ms	4.0 ms	
Process data IN	1 bytes	1 bytes	2 bytes	
Process data OUT	1 bytes	—	2 bytes	
Productview	Seite 158	Seite 158	Seite 158	





	BNI00AY BNI IOL-104-002-Z046	BNI000R BNI IOL-102-000-K019	BNI001Y BNI IOL-102-S01-K019	BNI0021 BNI IOL-104-000-K021	BNI0022 BNI IOL-104-S01-K021
	IO-Link 1.1	IO-Link 1.0	IO-Link 1.0	IO-Link 1.0	IO-Link 1.0
	18...30.2 VDC	18...30.2 VDC	18...30.2 VDC	18...30.2 VDC	18...30.2 VDC
	M12x1-Male, 4-pin, A-coded	M12x1-Male, 4-pin, A-coded	M12x1-Male, 4-pin, A-coded	M12x1-Male, 4-pin, A-coded	M12x1-Male, 4-pin, A-coded
	–	–	–	–	–
	16x M8x1-Female, 3-pin	8x M8x1-Female, 3-pin	8x M8x1-Female, 3-pin	8x M8x1-Female, 4-pin	8x M8x1-Female, 4-pin
	16x PNP, Type 3	8x PNP, Type 2	8x PNP, Type 2	16x PNP, Type 2	16x PNP, Type 2
	–	–	–	–	–
	–	–	–	–	–
	no	no	no	no	no
	yes	–	–	–	–
	–	–	yes	–	yes
	–	–	–	–	–
	4 A	4 A	4 A	4 A	4 A
	–	–	–	–	–
	–	–	–	–	–
	Zinc, Die casting, nickel plated	PBT, GF	PBT, GF	PBT, GF	PBT, GF
	30 x 32.8 x 220 mm	30 x 24 x 129.5 mm	30 x 24 x 129.5 mm	30 x 24 x 129.5 mm	30 x 24 x 129.5 mm
	-5...70 °C	-5...55 °C	-5...55 °C	-5...55 °C	-5...55 °C
	IP67, when threaded in	IP67, when threaded in	IP67, when threaded in	IP67, when threaded in	IP67, when threaded in
	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)
	3.5 ms	2.5 ms	2.5 ms	2.5 ms	10 ms
	2 bytes	1 bytes	2 bytes	2 bytes	4 bytes
	–	–	–	–	–
	Seite 159	Seite 159	Seite 159	Seite 160	Seite 160

	BNI000P BNI IOL-101-000-K018	BNI001W BNI IOL-101-S01-K018	BNI00CN BNI IOL-302-S02-Z012	
Interface	IO-Link 1.0	IO-Link 1.0	IO-Link 1.1	
Operating voltage Ub	18...30.2 VDC	18...30.2 VDC	18...30.2 VDC	
Connection (COM 1)	M12x1-Male, 4-pin, A-coded	M12x1-Male, 4-pin, A-coded	M12x1-Male, 4-pin, A-coded	
Connection (supply voltage IN)	—	—	—	
Connection slots	4x M8x1-Female, 3-pin	4x M8x1-Female, 3-pin	8x M12x1-Female, 5-pin, A-coded	
Digital inputs	4x PNP, Type 2	4x PNP, Type 2	16x PNP, Type 3	
Digital outputs	—	—	16x PNP	
Analog inputs	—	—	—	
Configurable inputs/outputs	no	no	yes	
Extension port	—	—	yes	
Single-channel monitoring	—	yes	yes	
Additional function	—	—	—	
Current sum US, sensor	4 A	4 A	4 A	
Current sum UA, actuator	—	—	4 A	
Switching current	—	—	16x 200 mA	
Housing material	PBT, GF	PBT, GF	Zinc, Die casting	
Dimension	30 x 24 x 85.5 mm	30 x 24 x 85.5 mm	68 x 31.8 x 181.5 mm	
Ambient temperature	-5...55 °C	-5...55 °C	-5...55 °C	
IP rating	IP67, when threaded in	IP67, when threaded in	IP67, when threaded in	
Transfer rate	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)	
Process data cycle min.	2.5 ms	2.5 ms	6.2 ms	
Process data IN	1 bytes	2 bytes	8 bytes	
Process data OUT	—	—	2 bytes	
Productview	Seite 160	Seite 160	Seite 161	





	BNI00CR BNI IOL-104-S02-Z012	BNI0063 BNI IOL-106-000-Z012	BNI0062 BNI IOL-106-S01-Z012	BNI0061 BNI IOL-106-S01-Z012-C01	BNI00AJ BNI IOL-719-002-Z012
	IO-Link 1.1	IO-Link 1.1	IO-Link 1.1	IO-Link 1.1	IO-Link 1.1
	18...30.2 VDC	18...30.2 VDC	18...30.2 VDC	18...30.2 VDC	18...30.2 VDC
	M12x1-Male, 4-pin, A-coded	M12x1-Male, 4-pin, A-coded	M12x1-Male, 4-pin, A-coded	M12x1-Male, 4-pin, A-coded	M12x1-Male, 4-pin, A-coded
	—	—	—	—	—
	8x M12x1-Female, 5-pin, A-coded	8x M12x1-Female, 5-pin, A-coded	8x M12x1-Female, 5-pin, A-coded	8x M12x1-Female, 5-pin, A-coded	8x M12x1-Female, 5-pin, A-coded
	16x PNP, Type 3	16x NPN, Type 2	16x NPN, Type 2	16x NPN, Type 2	—
	—	—	—	—	—
	—	—	—	—	8x Analog, voltage/analog, current/analog, temperature (0…10 V/-10…10 V/0…5 V/-5…5 V/5...10 V/4…20 mA/0…20 mA/ Pt100/Pt1000/Thermocouple Type J/Thermocouple Type K)
	no	no	no	no	no
	yes	—	—	—	—
	yes	—	yes	yes	—
	—	—	—	Identification 2 bytes	—
	4 A	4 A	4 A	4 A	4 A
	4 A	—	—	—	4 A
	—	—	—	—	—
	Zinc, Die casting	Zinc, Die casting	Zinc, Die casting	Zinc, Die casting	Zinc, Die casting
	68 x 31.8 x 181.5 mm	68 x 31.8 x 181.5 mm	68 x 31.8 x 181.5 mm	68 x 31.8 x 181.5 mm	68 x 31.8 x 181.5 mm
	-5...55 °C	-5...70 °C	-5...70 °C	-5...70 °C	-5...70 °C
	IP67, when threaded in	IP67, when threaded in	IP67, when threaded in	IP67, when threaded in	IP67, when threaded in
	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)
	4.4 ms	3.0 ms	3.5 ms	4.0 ms	55 ms
	4 bytes	2 bytes	4 bytes	6 bytes	22 bytes
	—	—	—	—	1 bytes
	Seite 161	Seite 161	Seite 161	Seite 161	Seite 162



	BNI003U BNI IOL-302-000-Z012	BNI0032 BNI IOL-104-000-Z012	BNI003T BNI IOL-104-S01-Z012-C01	
Interface	IO-Link 1.0	IO-Link 1.0	IO-Link 1.0	
Operating voltage Ub	18...30.2 VDC	18...30.2 VDC	18...30.2 VDC	
Connection (COM 1)	M12x1-Male, 4-pin, A-coded	M12x1-Male, 4-pin, A-coded	M12x1-Male, 4-pin, A-coded	
Connection (supply voltage IN)	—	—	—	
Connection slots	8x M12x1-Female, 5-pin, A-coded	8x M12x1-Female, 5-pin, A-coded	8x M12x1-Female, 5-pin, A-coded	
Digital inputs	16x PNP, Type 2	16x PNP, Type 2	16x PNP, Type 2	
Digital outputs	16x PNP	—	—	
Analog inputs	—	—	—	
Configurable inputs/outputs	yes	no	no	
Extension port	—	—	—	
Single-channel monitoring	—	—	yes	
Additional function	—	—	Identification 2 bytes	
Current sum US, sensor	4 A	4 A	4 A	
Current sum UA, actuator	4 A	—	—	
Switching current	16x 500 mA	—	—	
Housing material	Zinc, Die casting	Zinc, Die casting	Zinc, Die casting	
Dimension	68 x 31.8 x 181.5 mm	68 x 31.8 x 181.5 mm	68 x 31.8 x 181.5 mm	
Ambient temperature	-5...70 °C	-5...70 °C	-5...70 °C	
IP rating	IP67, when threaded in	IP67, when threaded in	IP67, when threaded in	
Transfer rate	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)	
Process data cycle min.	12 ms	3.0 ms	18 ms	
Process data IN	2 bytes	2 bytes	6 bytes	
Process data OUT	2 bytes	—	—	
Productview	Seite 162	Seite 161	Seite 161	





	BNI005P BNI IOL-104-S01-Z012-C02	BNI0031 BNI IOL-102-000-Z012	BNI00CM BNI IOL-302-002-Z042	BNI0046 BNI IOL-302-S02-Z013	BNI0035 BNI IOL-302-000-Z013
	IO-Link 1.0	IO-Link 1.0	IO-Link 1.1	IO-Link 1.1	IO-Link 1.0
	18...30.2 VDC	18...30.2 VDC	18...30.2 VDC	18...30.2 VDC	18...30.2 VDC
	M12x1-Male, 4-pin, A-coded	M12x1-Male, 4-pin, A-coded	M12x1-Male, 4-pin, A-coded	M12x1-Male, 4-pin, A-coded	M12x1-Male, 4-pin, A-coded
	–	–	–	7/8“-Male, 5-pin	7/8“-Male, 5-pin
	8x M12x1-Female, 5-pin, A-coded	8x M12x1-Female, 5-pin, A-coded	8x M12x1-Female, 5-pin, A-coded	8x M12x1-Female, 5-pin, A-coded	8x M12x1-Female, 5-pin, A-coded
	16x PNP, Type 2	8x PNP, Type 2	16x PNP, Type 3	16x PNP, Type 3	16x PNP, Type 2
	–	–	16x PNP	16x PNP	16x PNP
	–	–	–	–	–
	no	no	yes	yes	yes
	–	–	yes	yes	–
	yes	–	–	yes	–
	Identification 4 bytes	–	–	–	–
	4 A	4 A	4 A	9.0 A	9.0 A
	–	–	4 A	9.0 A	9.0 A
	–	–	16x 2 A	16x 2 A	16x 2 A
	Zinc, Die casting	Zinc, Die casting	Zinc, Die casting	Zinc, Die casting	Zinc, Die casting
	68 x 31.8 x 181.5 mm	68 x 31.8 x 181.5 mm	68 x 31.8 x 181.5 mm	68 x 32.4 x 181.5 mm	68 x 32.4 x 181.5 mm
	-5...70 °C	-5...70 °C	-5...55 °C	-5...55 °C	-5...70 °C
	IP67, when threaded in	IP67, when threaded in	IP67, when threaded in	IP67, when threaded in	IP67, when threaded in
	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)
	24 ms	3.0 ms	4.4 ms	6.2 ms	12 ms
	8 bytes	1 bytes	2 bytes	8 bytes	2 bytes
	–	–	2 bytes	2 bytes	2 bytes
	Seite 161	Seite 163	Seite 161	Seite 163	Seite 164

	BNI0048 BNI IOL-302-S01-Z013-C01	BNI00CP BNI IOL-302-S02-Z026	BNI0050 BNI IOL-302-000-Z026	
Interface	IO-Link 1.0	IO-Link 1.1	IO-Link 1.0	
Operating voltage Ub	18...30.2 VDC	18...30.2 VDC	18...30.2 VDC	
Connection (COM 1)	M12x1-Male, 4-pin, A-coded	M12x1-Male, 4-pin, A-coded	M12x1-Male, 4-pin, A-coded	
Connection (supply voltage IN)	7/8“-Male, 5-pin	7/8“-Male, 4-pin	7/8“-Male, 4-pin	
Connection slots	8x M12x1-Female, 5-pin, A-coded	8x M12x1-Female, 5-pin, A-coded	8x M12x1-Female, 5-pin, A-coded	
Digital inputs	16x PNP, Type 2	16x PNP, Type 3	16x PNP, Type 2	
Digital outputs	16x PNP	16x PNP	16x PNP	
Analog inputs	—	—	—	
Configurable inputs/outputs	yes	yes	yes	
Extension port	—	yes	—	
Single-channel monitoring	yes	yes	—	
Additional function	Identification 2 bytes	—	—	
Current sum US, sensor	9.0 A	9.0 A	9.0 A	
Current sum UA, actuator	9.0 A	9.0 A	9.0 A	
Switching current	—	16x 2 A	16x 2 A	
Housing material	Zinc, Die casting	Zinc, Die casting	Zinc, Die casting	
Dimension	68 x 32.4 x 181.5 mm	68 x 32.4 x 181.5 mm	68 x 32.4 x 181.5 mm	
Ambient temperature	-5...70 °C	-5...55 °C	-5...70 °C	
IP rating	IP67, when threaded in	IP67, when threaded in	IP67, when threaded in	
Transfer rate	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)	
Process data cycle min.	30 ms	5.6 ms	12 ms	
Process data IN	10 bytes	6 bytes	2 bytes	
Process data OUT	2 bytes	2 bytes	2 bytes	
Productview	Seite 164	Seite 164	Seite 165	





	BNI0090 BNI IOL-104-S02-R012	BNI0091 BNI IOL-302-S02-R026	BNI005L BNI IOL-302-000-K006	BNI005U BNI IOL-302-000-K006-C01	BNI007Z BNI IOL-302-002-K006
	IO-Link 1.1	IO-Link 1.1	IO-Link 1.1	IO-Link 1.1	IO-Link 1.1
	18...30.2 VDC	18...30.2 VDC	18...30.2 VDC	18...30.2 VDC	18...30.2 VDC
	M12x1-Male, 4-pin, A-coded	M12x1-Male, 4-pin, A-coded	M12x1-Male, 4-pin, A-coded	M12x1-Male, 4-pin, A-coded	M12x1-Male, 4-pin, A-coded
	—	7/8“-Male, 4-pin	—	—	—
	8x M12x1-Female, 5-pin, A-coded	8x M12x1-Female, 5-pin, A-coded	8x M12x1-Female, 5-pin, A-coded	8x M12x1-Female, 5-pin, A-coded	8x M12x1-Female, 5-pin, A-coded
	16x PNP, Type 3	16x PNP, Type 3	16x PNP, Type 3	16x PNP, Type 3	16x PNP, Type 3
	—	16x PNP	16x PNP	16x PNP	16x PNP
	—	—	—	—	—
	no	yes	yes	yes	yes
	yes	yes	—	—	yes
	yes	yes	—	—	—
	—	—	—	Identification 2 bytes	—
	3.5 A	9 A	4 A	4 A	4 A
	—	9 A	4 A	4 A	4 A
	—	16x 2 A	16x 350 mA	16x 350 mA	16x 350 mA
	PPS	PPS	PA, Transparent	PA, Transparent	PA, Transparent
	68 x 36.8 x 183.5 mm	68 x 37.6 x 183.5 mm	50 x 30.8 x 115 mm	50 x 30.8 x 115 mm	50 x 30.8 x 115 mm
	-5...70 °C	-5...55 °C	-5...55 °C	-5...55 °C	-20...55 °C
	IP67, when threaded in	IP67, when threaded in	IP67, when threaded in	IP67, when threaded in	IP67, when threaded in
	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)
	4.5 ms	6.0 ms	3.5 ms	4.0 ms	3.5 ms
	4 bytes	6 bytes	2 bytes	4 bytes	2 bytes
	—	2 bytes	2 bytes	2 bytes	2 bytes
	Seite 165	Seite 166	Seite 166	Seite 167	Seite 167

	BNI005T BNI IOL-302-S01-K006	BNI005W BNI IOL-302-S01-K006-C01	BNI00AF BNI IOL-311-002-K006	
Interface	IO-Link 1.1	IO-Link 1.1	IO-Link 1.1	
Operating voltage Ub	18...30.2 VDC	18...30.2 VDC	18...30.2 VDC	
Connection (COM 1)	M12x1-Male, 4-pin, A-coded	M12x1-Male, 4-pin, A-coded	M12x1-Male, 4-pin, A-coded	
Connection (supply voltage IN)	—	—	—	
Connection slots	8x M12x1-Female, 5-pin, A-coded	8x M12x1-Female, 5-pin, A-coded	8x M12x1-Female, 5-pin, A-coded	
Digital inputs	16x PNP, Type 3	16x PNP, Type 3	16x NPN, Type 3	
Digital outputs	16x PNP	16x PNP	16x NPN	
Analog inputs	—	—	—	
Configurable inputs/outputs	yes	yes	yes	
Extension port	—	—	yes	
Single-channel monitoring	yes	yes	—	
Additional function	—	Identification 2 bytes	—	
Current sum US, sensor	4 A	4 A	4 A	
Current sum UA, actuator	4 A	4 A	4 A	
Switching current	16x 350 mA	16x 350 mA	16x 200 mA	
Housing material	PA, Transparent	PA, Transparent	PA, Transparent	
Dimension	50 x 30.8 x 115 mm	50 x 30.8 x 115 mm	50 x 30.8 x 115 mm	
Ambient temperature	-5...55 °C	-5...55 °C	-5...55 °C	
IP rating	IP67, when threaded in	IP67, when threaded in	IP67, when threaded in	
Transfer rate	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)	
Process data cycle min.	5.0 ms	5.5 ms	3.5 ms	
Process data IN	8 bytes	10 bytes	2 bytes	
Process data OUT	2 bytes	2 bytes	2 bytes	
Productview	Seite 168	Seite 168	Seite 169	





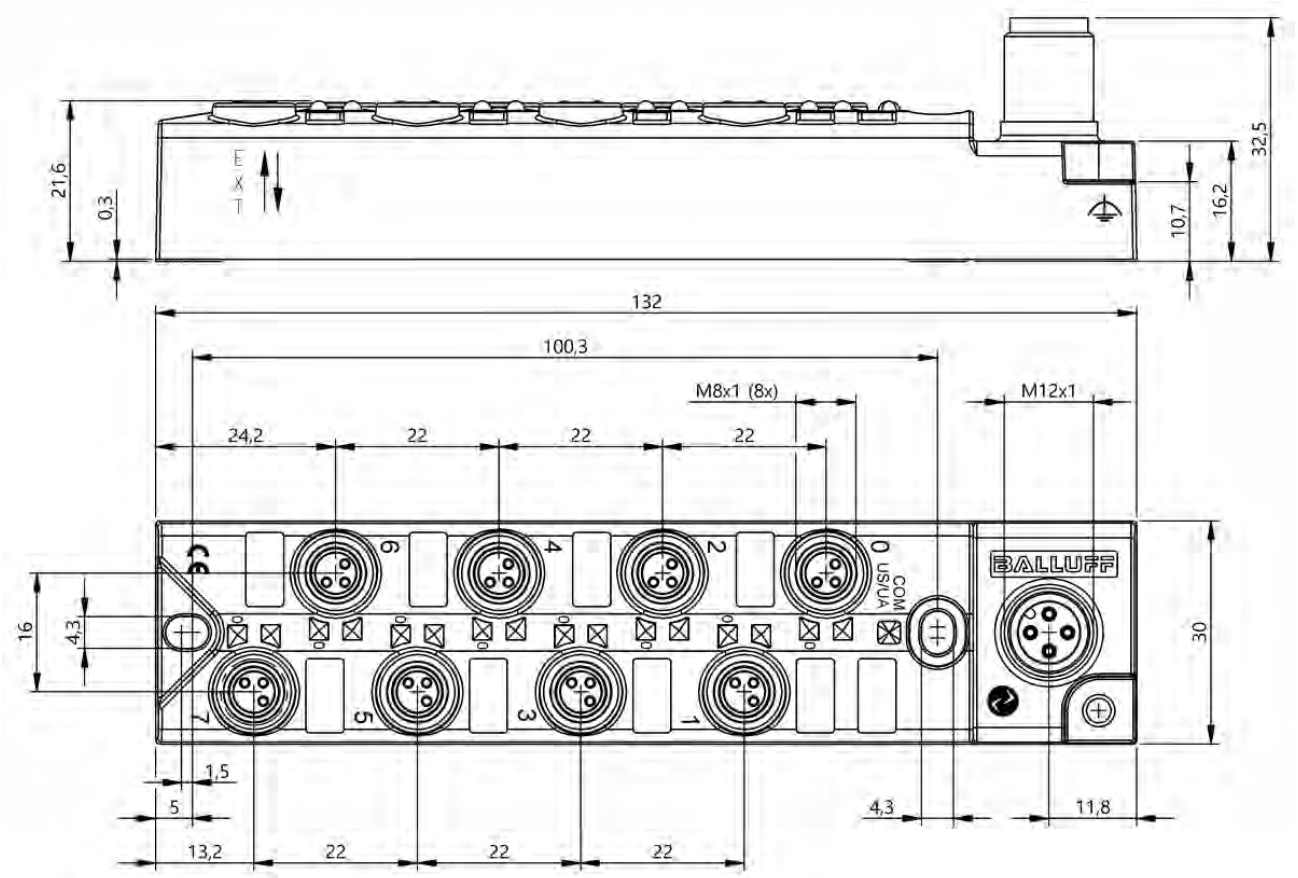
BNI00AW BNI IOL-311-S02-K006-C01	BNI0074 BNI IOL-106-000-K006	BNI0075 BNI IOL-106-S01-K006	BNI0076 BNI IOL-106-S01-K006-C01	BNI0006 BNI IOL-104-000-K006
IO-Link 1.1	IO-Link 1.1	IO-Link 1.1	IO-Link 1.1	IO-Link 1.0
18...30.2 VDC	18...30.2 VDC	18...30.2 VDC	18...30.2 VDC	18...30.2 VDC
M12x1-Male, 4-pin, A-coded	M12x1-Male, 4-pin, A-coded	M12x1-Male, 4-pin, A-coded	M12x1-Male, 4-pin, A-coded	M12x1-Male, 4-pin, A-coded
–	–	–	–	–
8x M12x1-Female, 5-pin, A-coded	8x M12x1-Female, 5-pin, A-coded	8x M12x1-Female, 5-pin, A-coded	8x M12x1-Female, 5-pin, A-coded	8x M12x1-Female, 5-pin, A-coded
16x NPN, Type 3	16x NPN, Type 2	16x NPN, Type 2	16x NPN, Type 2	16x PNP, Type 2
16x NPN	–	–	–	–
–	–	–	–	–
yes	no	no	no	no
yes	–	–	–	–
yes	–	yes	yes	–
Identification 2 bytes	–	–	Identification 2 bytes	–
4 A	4 A	4 A	4 A	4 A
4 A	–	–	–	–
16x 200 mA	–	–	–	–
PA, Transparent	PA, Transparent	PA, Transparent	PA, Transparent	PA, Transparent
50 x 30.8 x 115 mm	50 x 30.8 x 115 mm	50 x 30.8 x 115 mm	50 x 30.8 x 115 mm	50 x 30.8 x 115 mm
-5...55 °C	-5...55 °C	-5...55 °C	-5...55 °C	-5...55 °C
IP67, when threaded in	IP67, when threaded in	IP67, when threaded in	IP67, when threaded in	IP67, when threaded in
COM2 (38.4 kBaud)	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)
6.0 ms	3.0 ms	3.5 ms	4.0 ms	3.0 ms
10 bytes	2 bytes	4 bytes	6 bytes	2 bytes
2 bytes	–	–	–	–
Seite 169	Seite 170	Seite 170	Seite 171	Seite 171



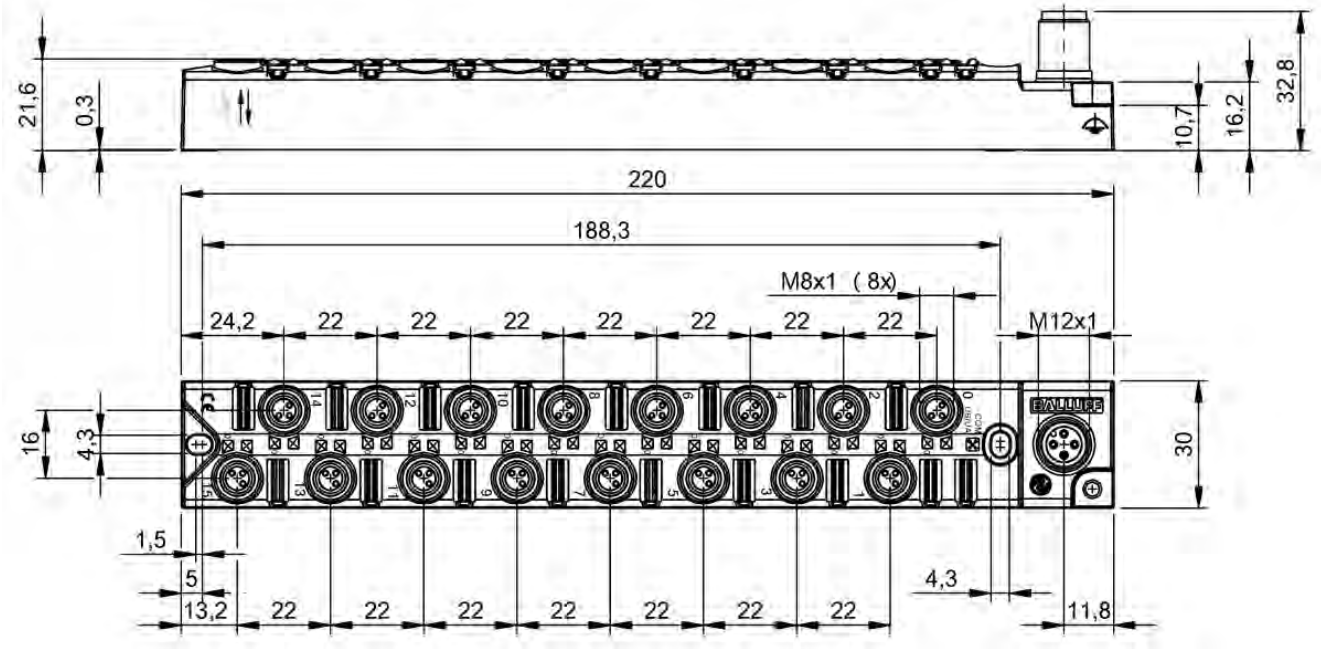
	BNI0005 BNI IOL-102-000-K006	BNI0007 BNI IOL-709-000-K006	BNI0008 BNI IOL-710-000-K006	
Interface	IO-Link 1.0	IO-Link 1.0	IO-Link 1.0	
Operating voltage Ub	18...30.2 VDC	18...30.2 VDC	18...30.2 VDC	
Connection (COM 1)	M12x1-Male, 4-pin, A-coded	M12x1-Male, 4-pin, A-coded	M12x1-Male, 4-pin, A-coded	
Connection (supply voltage IN)	—	—	—	
Connection slots	8x M12x1-Female, 5-pin, A-coded	8x M12x1-Female, 5-pin, A-coded	8x M12x1-Female, 5-pin, A-coded	
Digital inputs	8x PNP, Type 2	8x PNP, Type 2	8x PNP, Type 2	
Digital outputs	—	—	—	
Analog inputs	—	4x Analog, current (4…20 mA)	4x Analog, voltage (0…10 V)	
Configurable inputs/outputs	no	no	no	
Extension port	—	—	—	
Single-channel monitoring	—	—	—	
Additional function	—	—	—	
Current sum US, sensor	4 A	4 A	4 A	
Current sum UA, actuator	—	—	—	
Switching current	—	—	—	
Housing material	PA, Transparent	PA, Transparent	PA, Transparent	
Dimension	50 x 30.8 x 115 mm	50 x 30.8 x 115 mm	50 x 30.8 x 115 mm	
Ambient temperature	-5...55 °C	-5...55 °C	-5...55 °C	
IP rating	IP67, when threaded in	IP67, when threaded in	IP67, when threaded in	
Transfer rate	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)	
Process data cycle min.	3.0 ms	30 ms	30 ms	
Process data IN	1 bytes	10 bytes	10 bytes	
Process data OUT	—	—	—	
Productview	Seite 172	Seite 172	Seite 173	



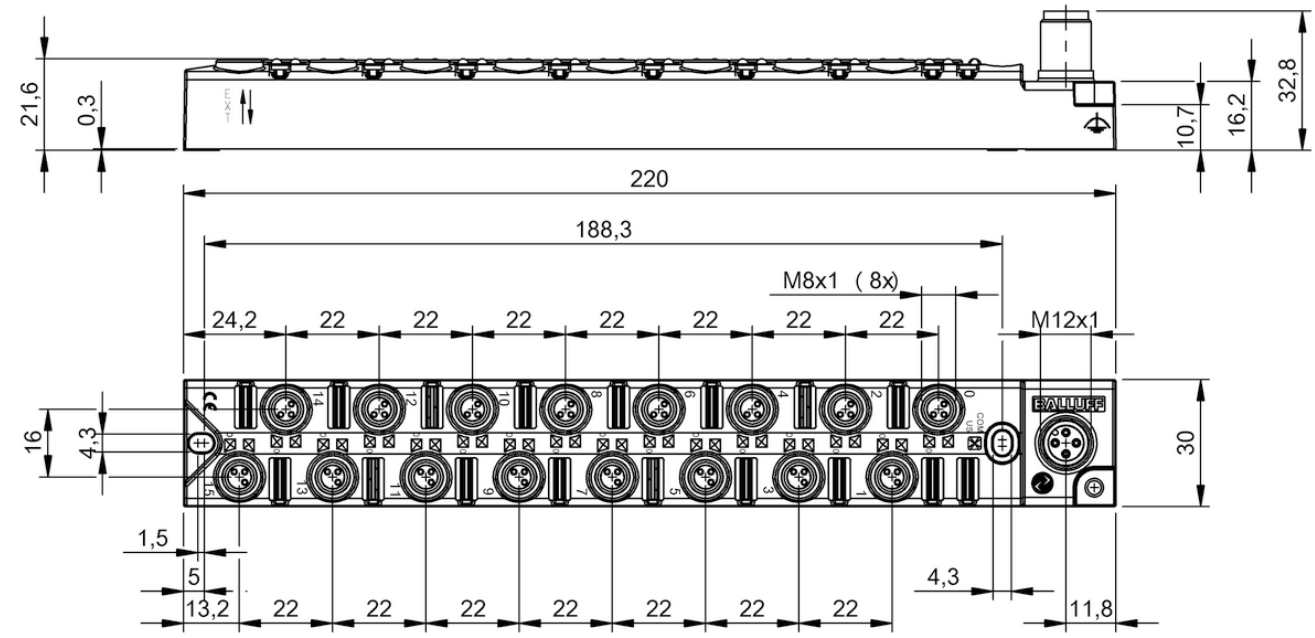

	BNI007P BNI IOL-309-000-K024-001	BNI004K BNI IOL-309-000-K024	BNI004L BNI IOL-310-000-K025	BNI007R BNI IOL-310-000-K025-001	
	IO-Link 1.0	IO-Link 1.0	IO-Link 1.0	IO-Link 1.0	
	18...30.2 VDC	18...30.2 VDC	18...30.2 VDC	18...30.2 VDC	
	Pluggable without terminals, 4-pin	Screw/plug-in terminals, 4-pin	Screw/plug-in terminals, 4-pin	Pluggable without terminals, 4-pin	
	Pluggable without terminals	Screw/plug-in terminals	Screw/plug-in terminals	Pluggable without terminals	
	Pluggable without terminals	Screw/plug-in terminals	Screw/plug-in terminals	Pluggable without terminals	
	8x PNP, Type 2	8x PNP, Type 2	16x PNP, Type 2	16x PNP, Type 2	
	8x PNP	8x PNP	16x PNP	16x PNP	
	—	—	—	—	
	yes	yes	yes	yes	
	—	—	—	—	
	—	—	—	—	
	—	—	—	—	
	1.0 A	1.0 A	1.0 A	1.0 A	
	1.6 A	1.0 A	1.6 A	1.6 A	
	8x 350 mA	—	16x 350 mA	16x 350 mA	
	PA 6.6, UL94V-0	PA 6.6, UL94V-0	PA 6.6, UL94V-0	PA 6.6, UL94V-0	
	48.6 x 33.6 x 84 mm	48.6 x 42.6 x 84 mm	79 x 33.6 x 84 mm	79 x 33.6 x 84 mm	
	-20...50 °C	-20...50 °C	-20...50 °C	-20...50 °C	
	IP20	IP20	IP20	IP20	
	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)	
	3.0 ms	3.0 ms	12 ms	12 ms	
	1 bytes	1 bytes	2 bytes	2 bytes	
	1 bytes	1 bytes	2 bytes	2 bytes	
	Seite 173	Seite 174	Seite 174	Seite 175	



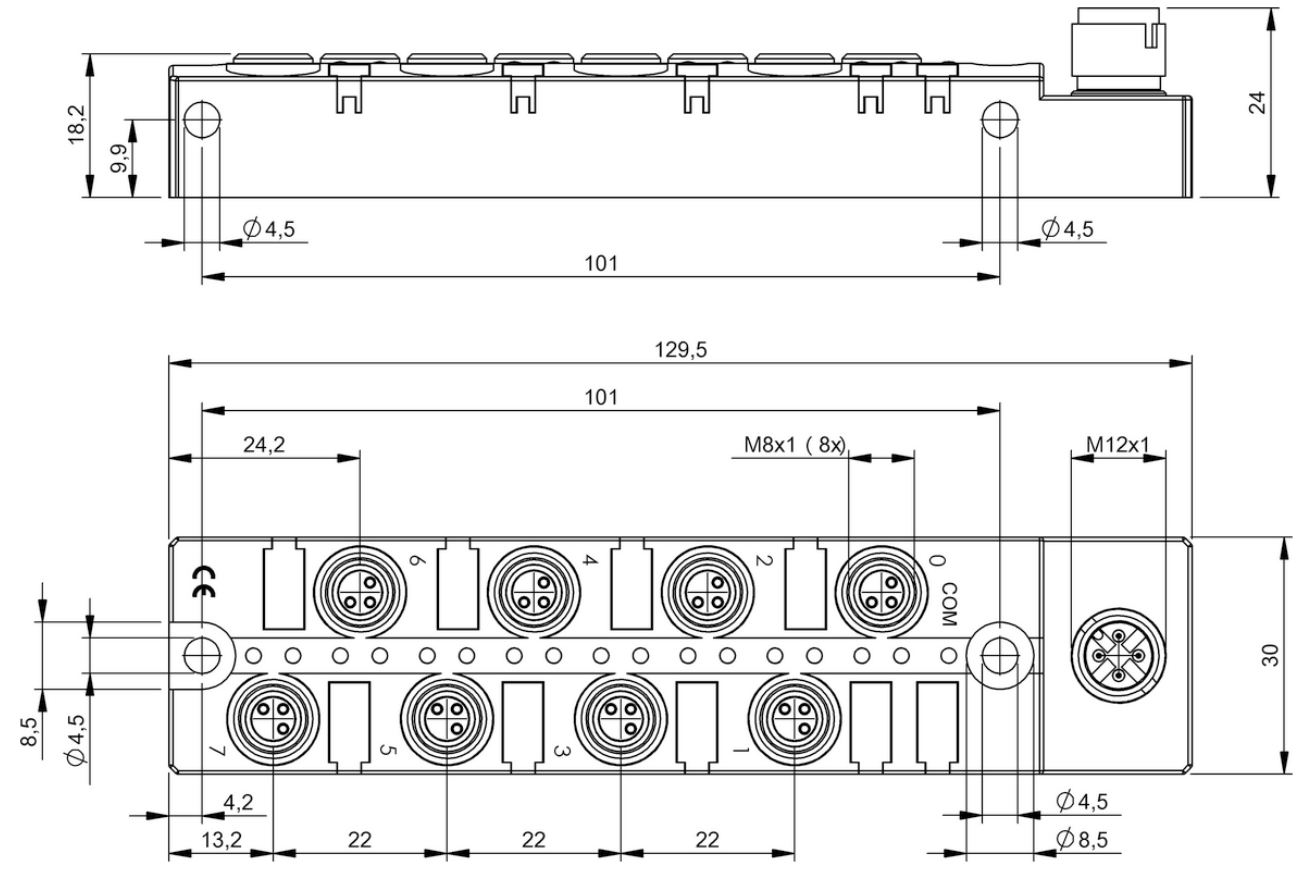
BNI0093, BNI0099



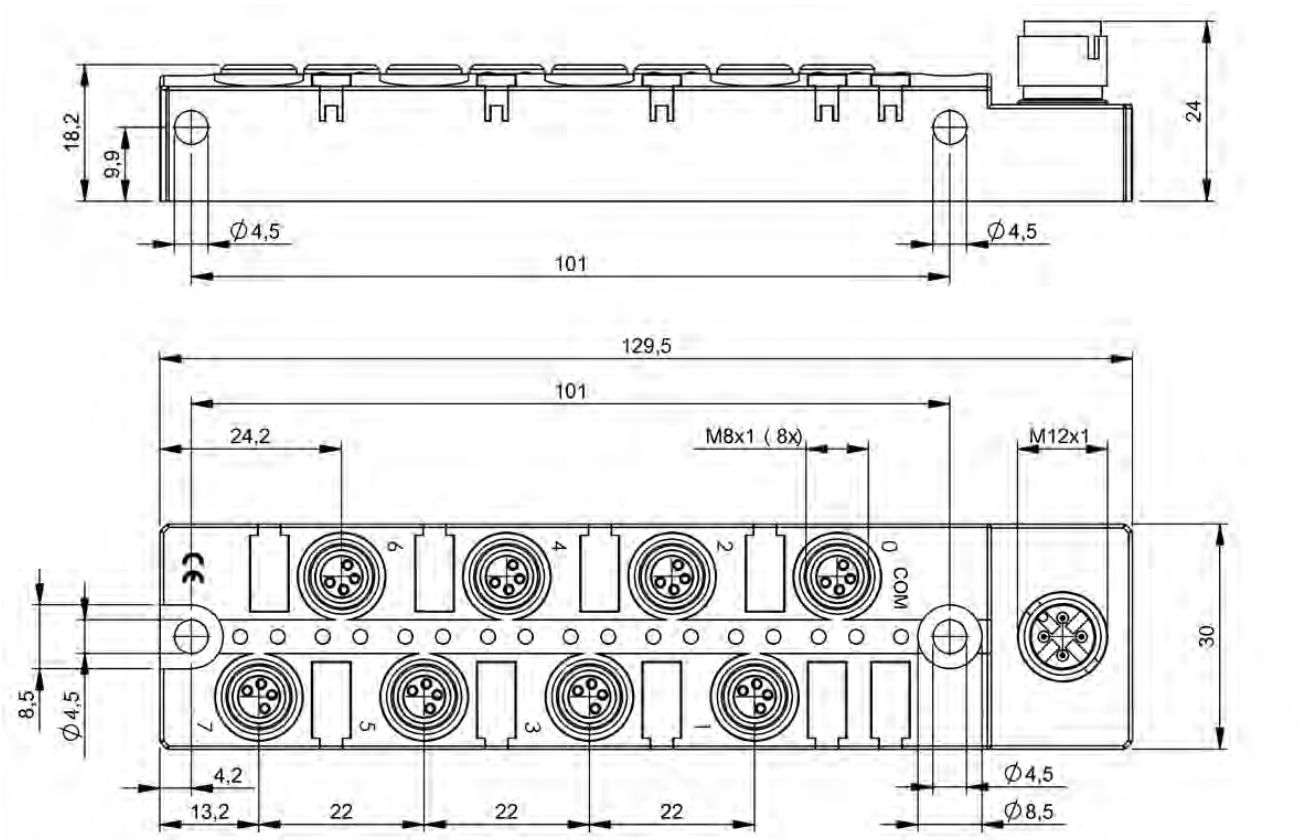
BNI00AU



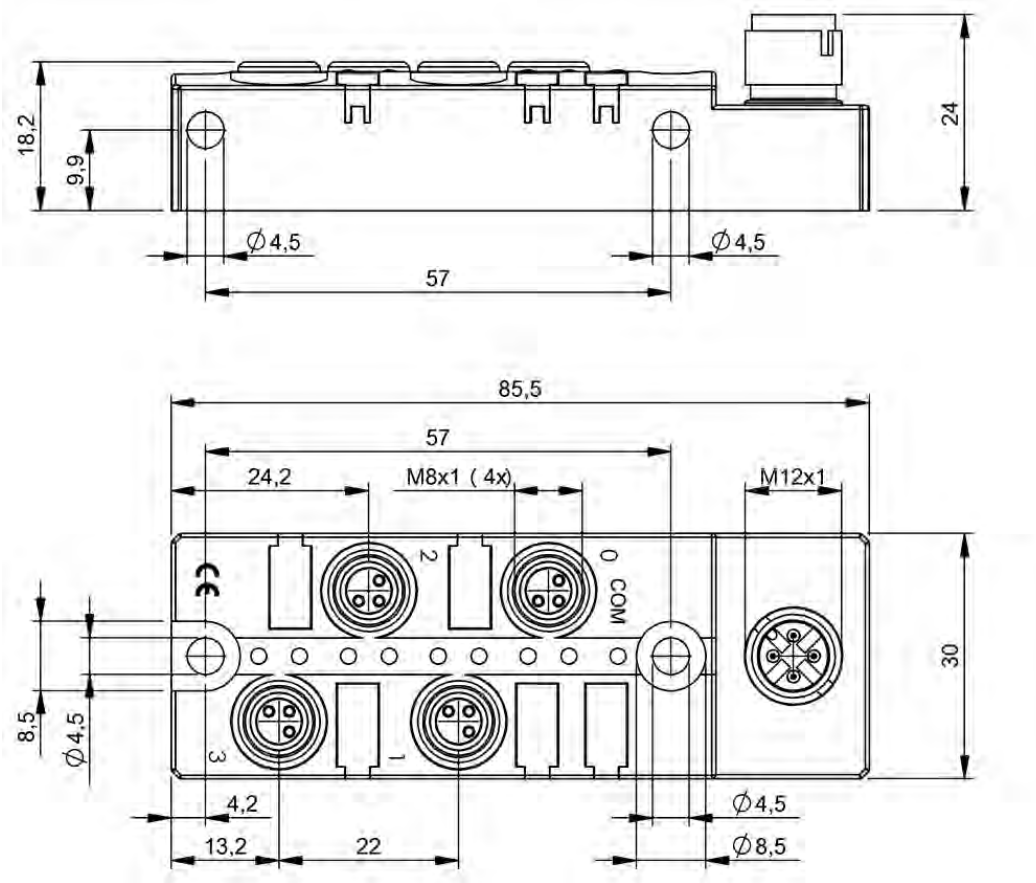
BNI00AY



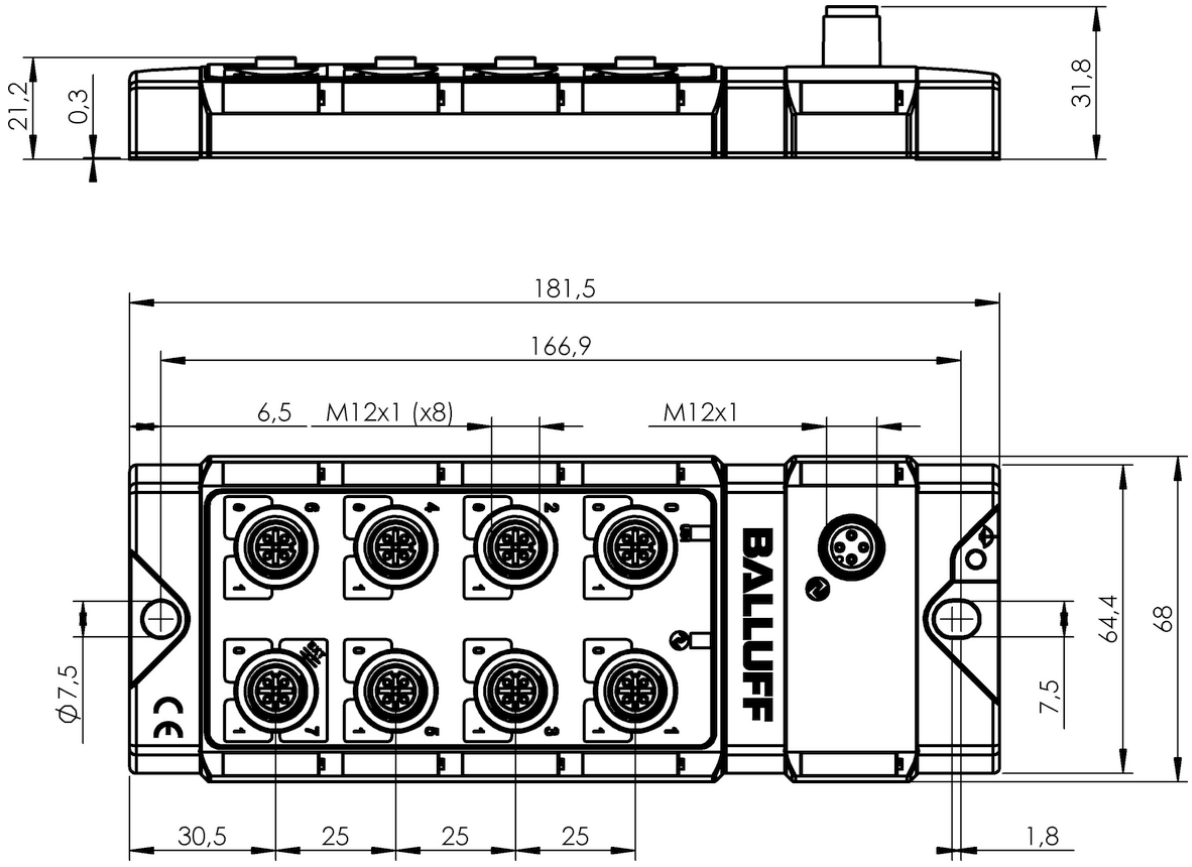
BNI000R, BNI001Y



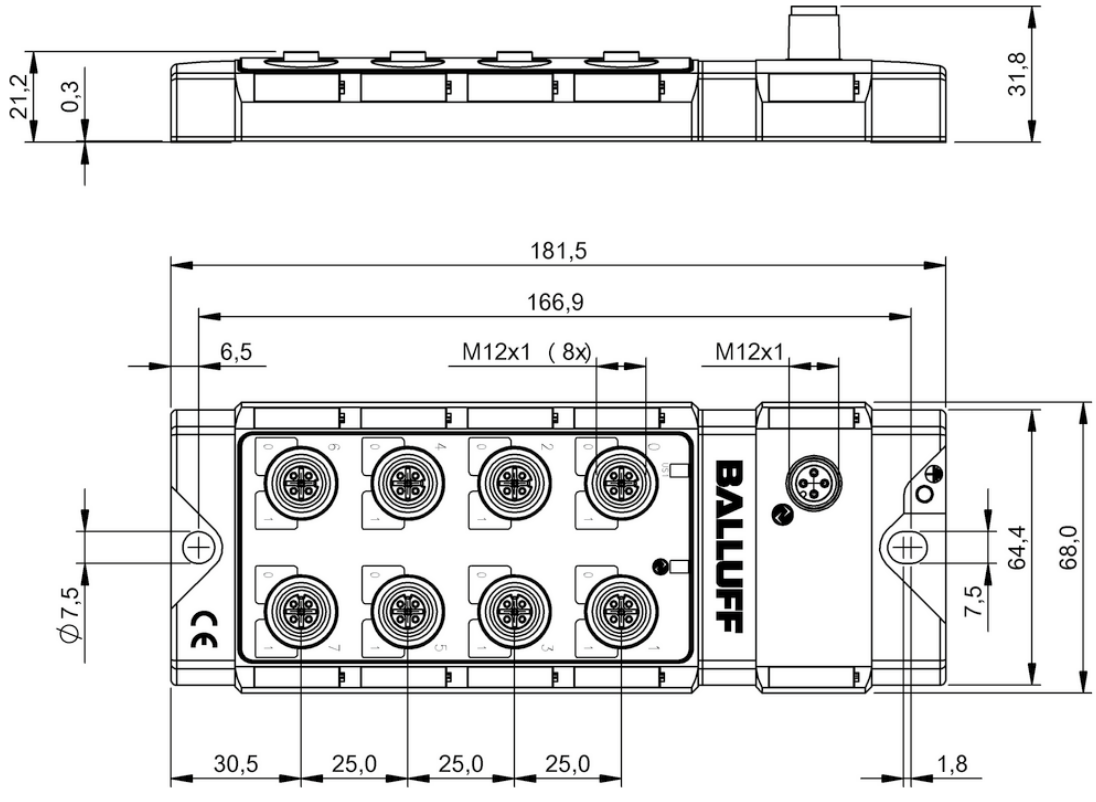
BNI0021, BNI0022



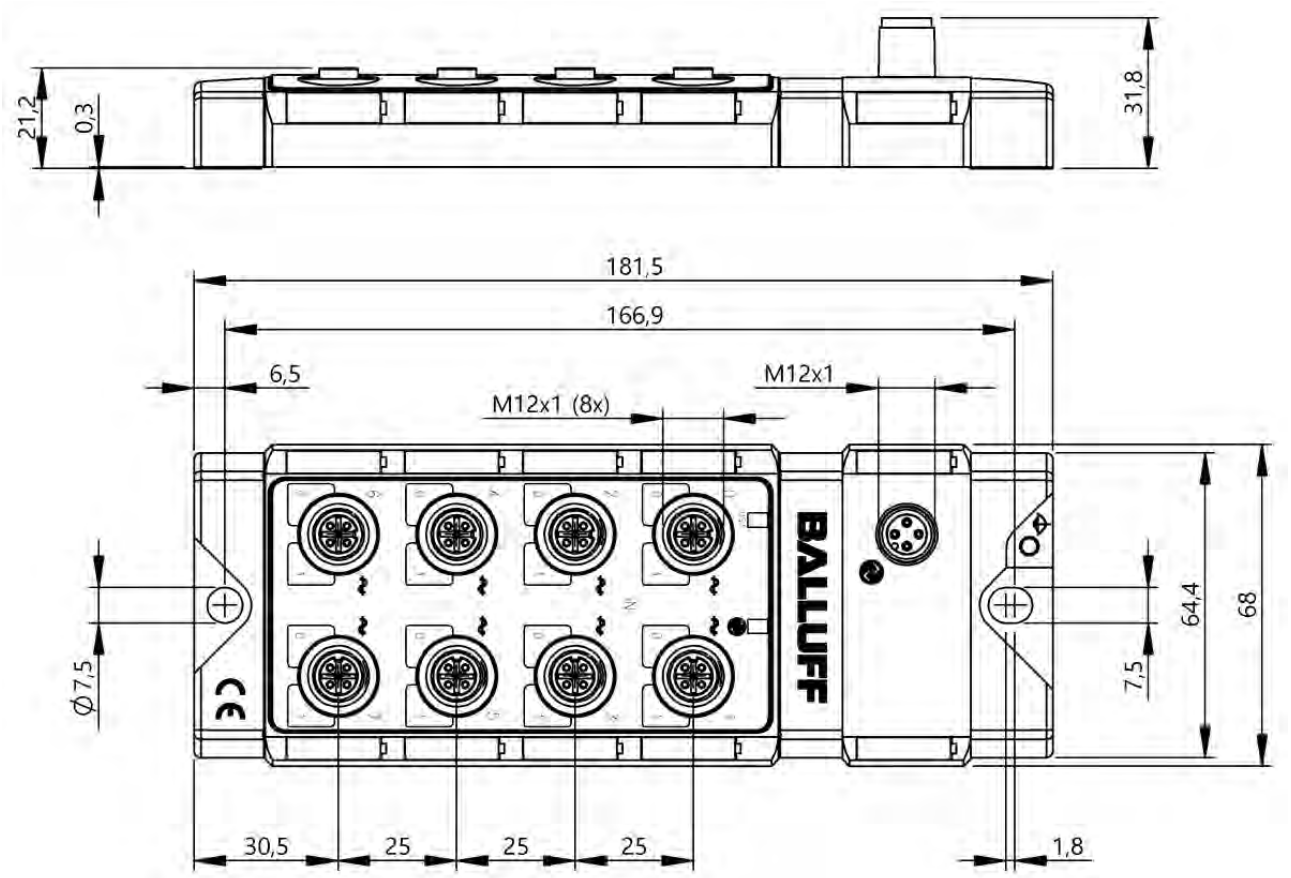
BNI000P, BNI001W



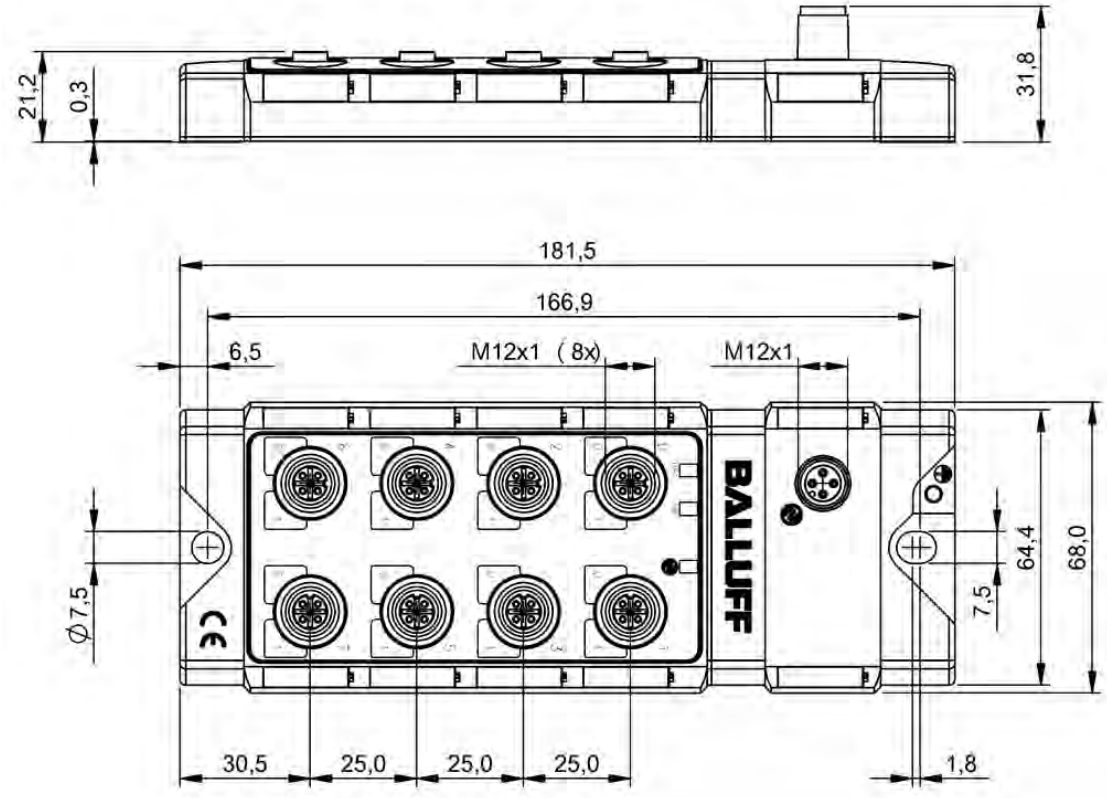
BNI00CN, BNI00CR, BNI00CM



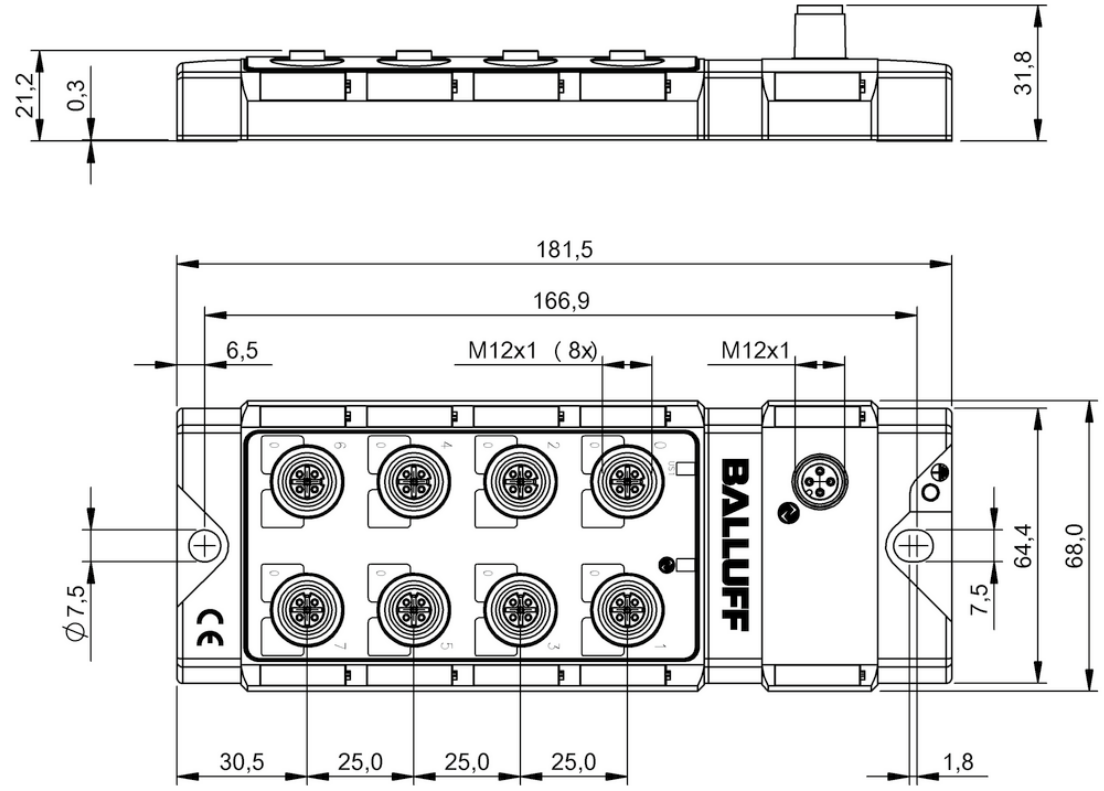
BNI0063, BNI0062, BNI0061, BNI0032, BNI003T, BNI005P



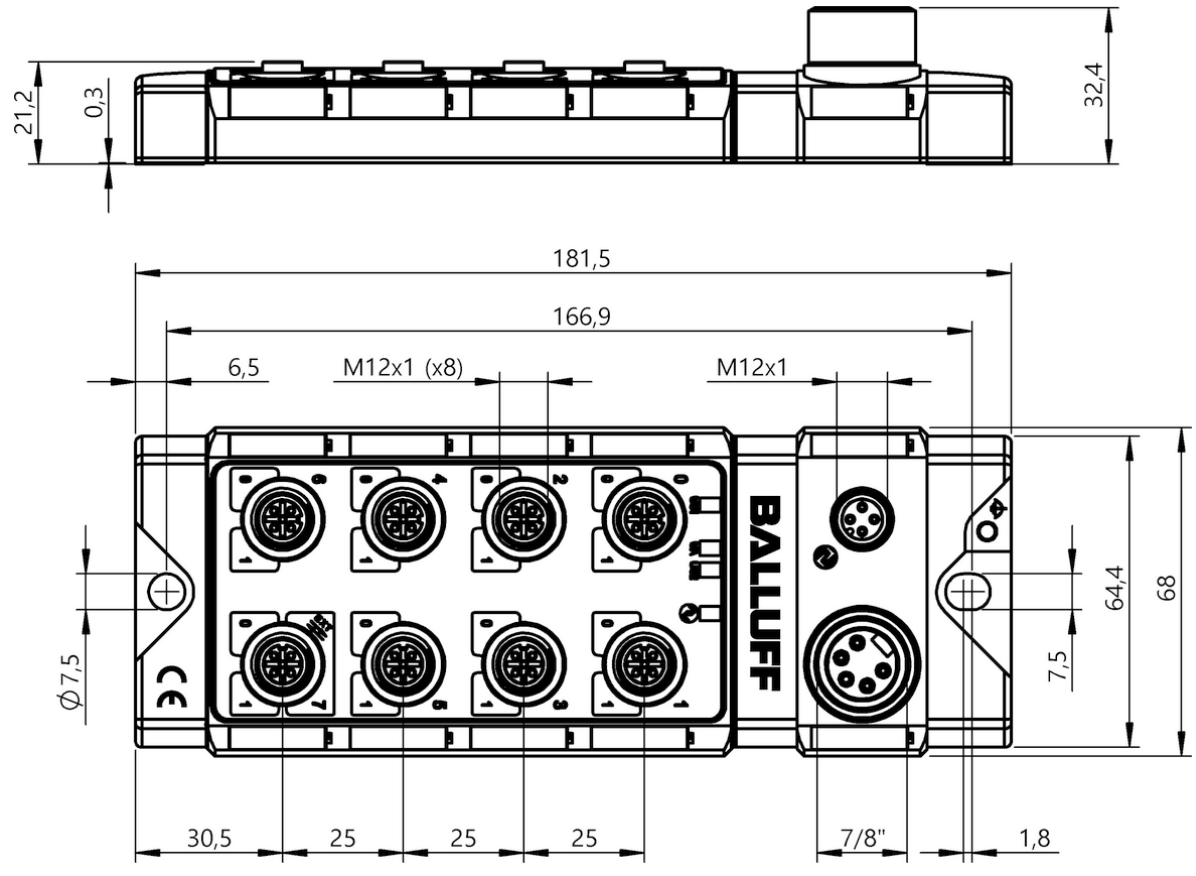
BNI00AJ



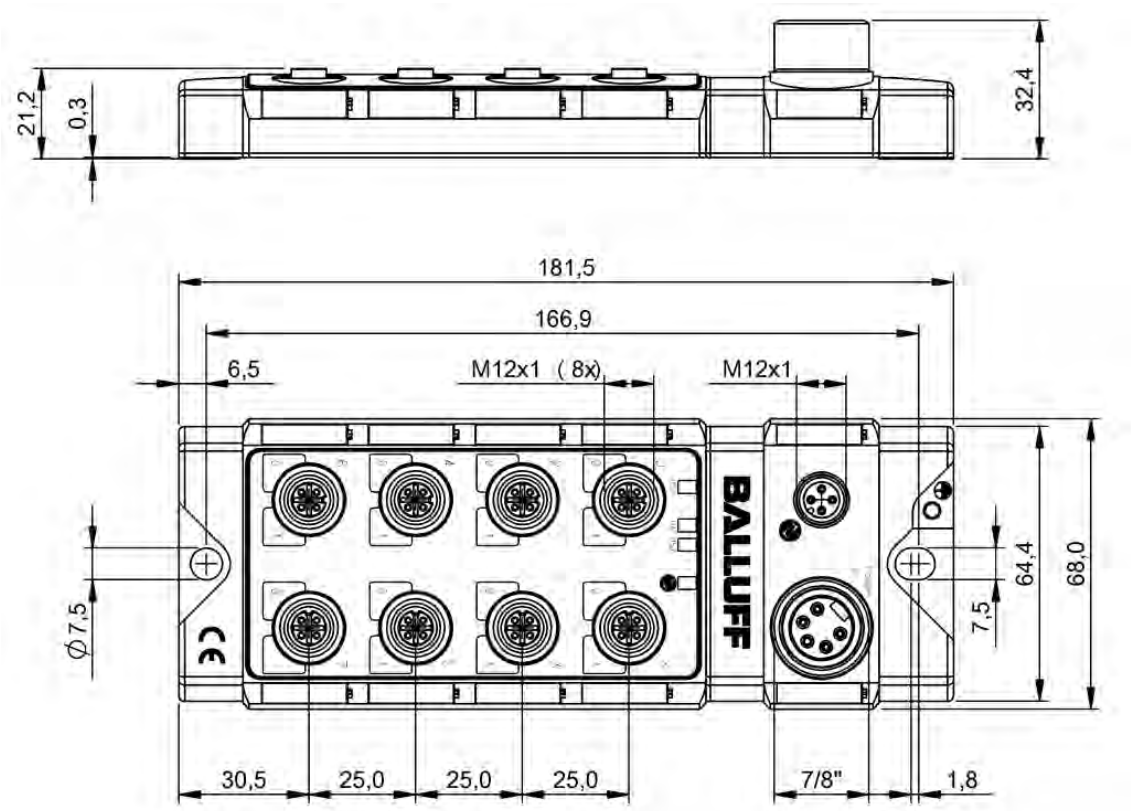
BNI003U



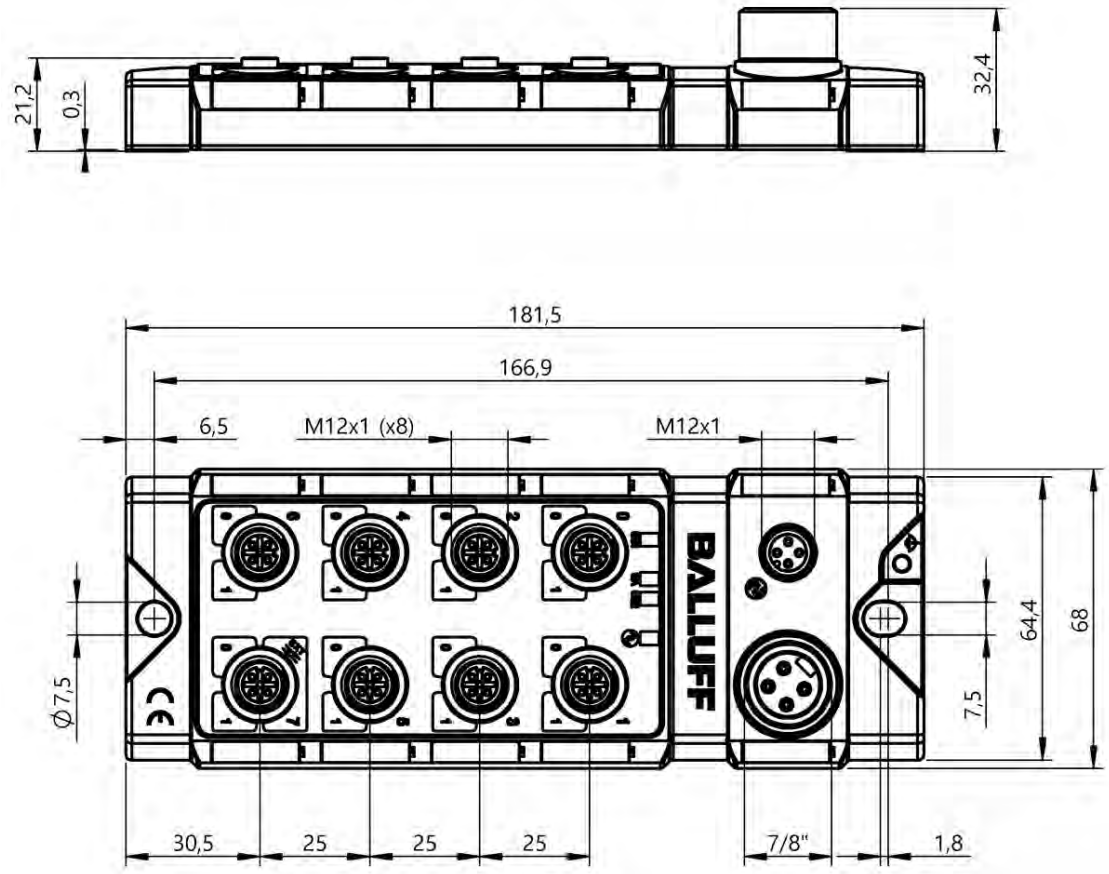
BNI0031



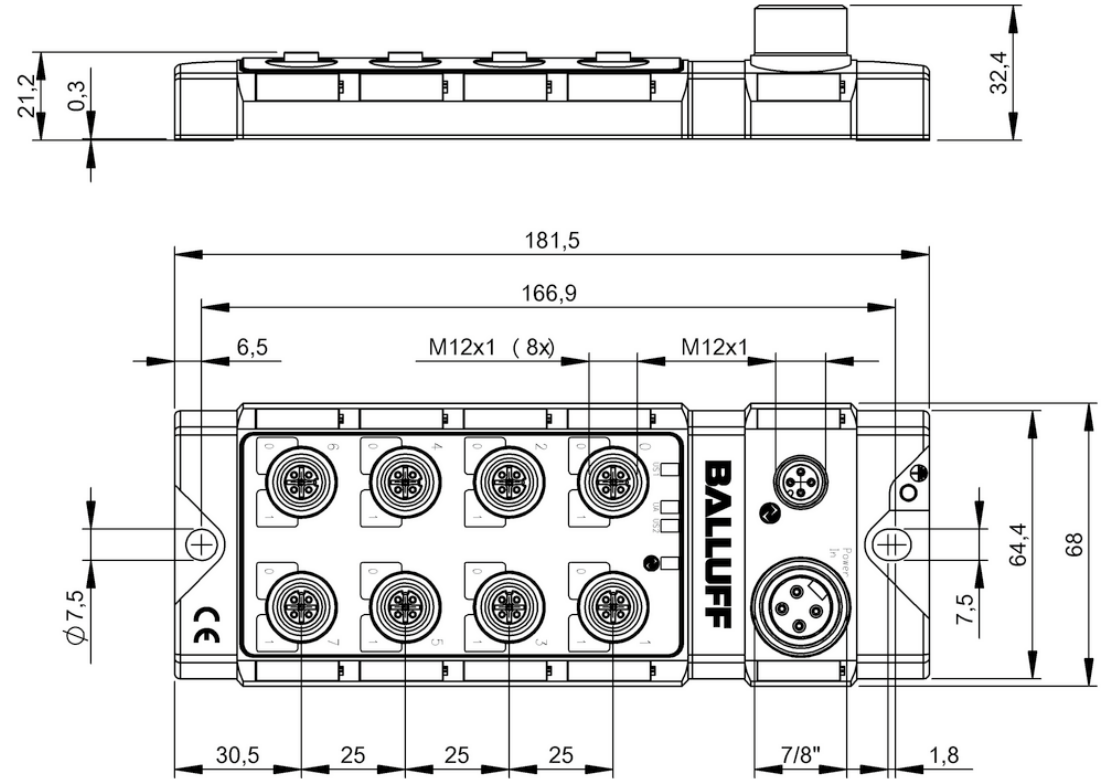
BNI0046



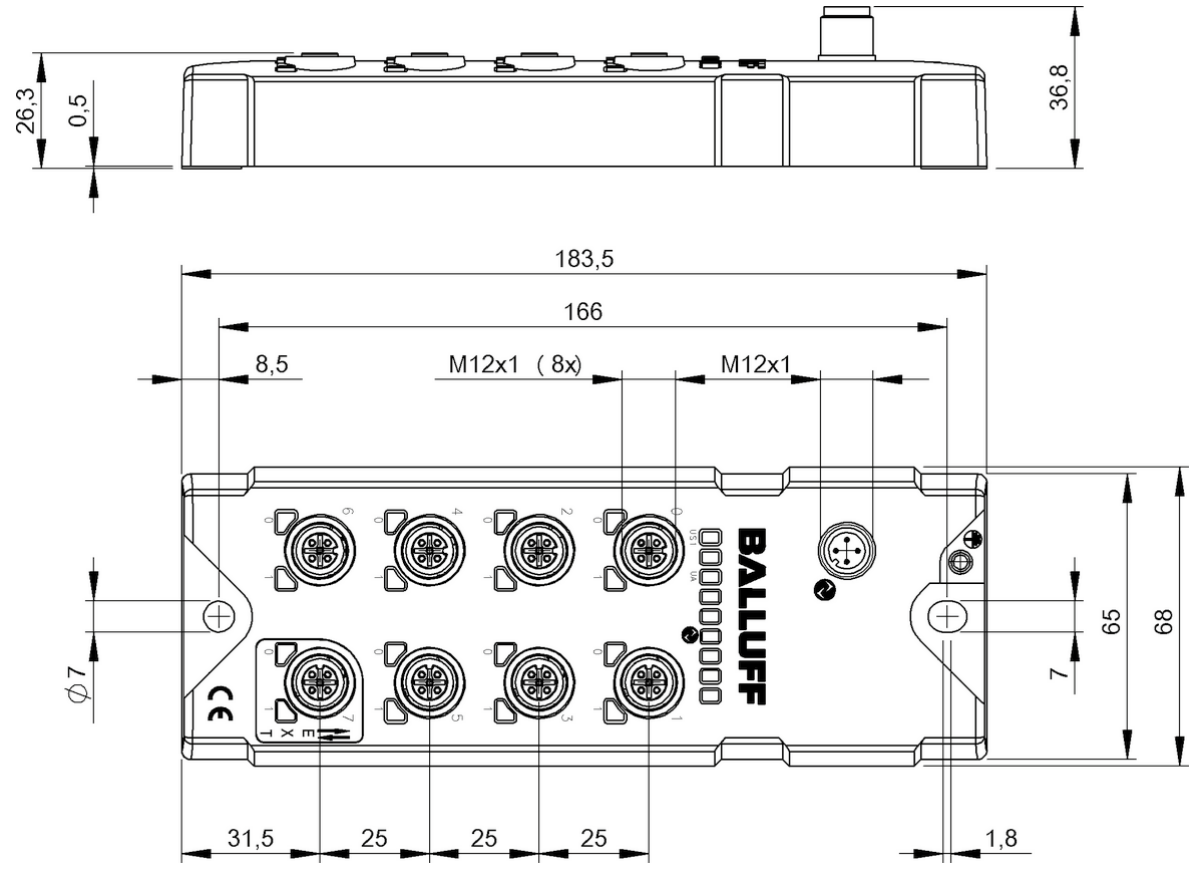
BNI0035, BNI0048



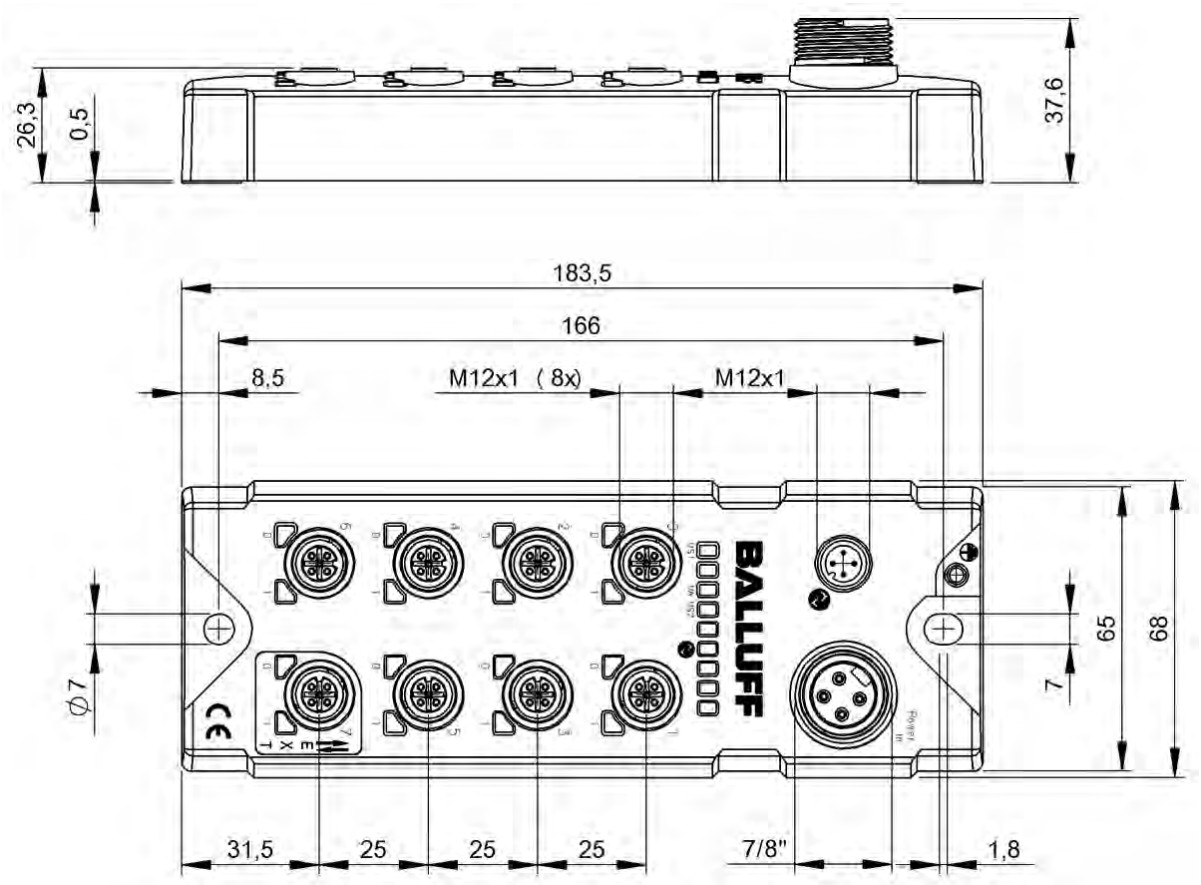
BNI00CP



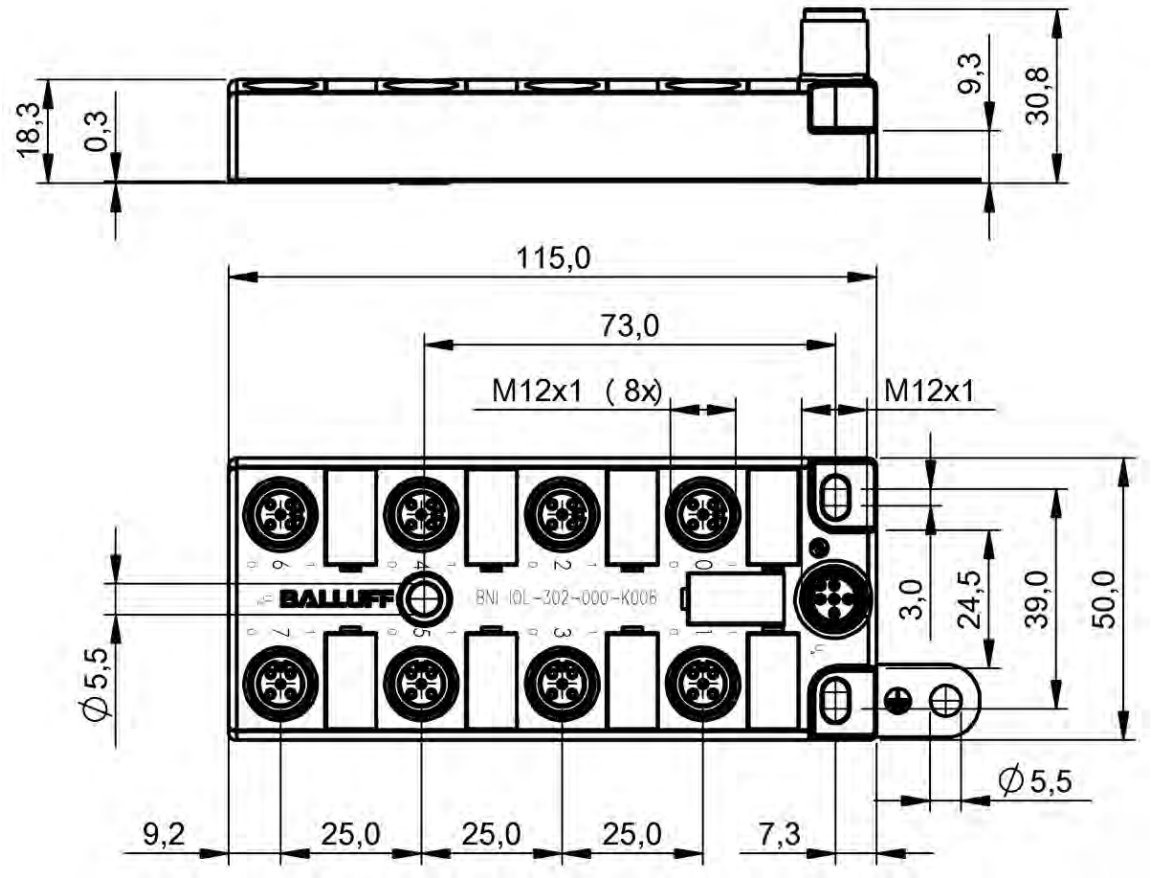
BNI0050



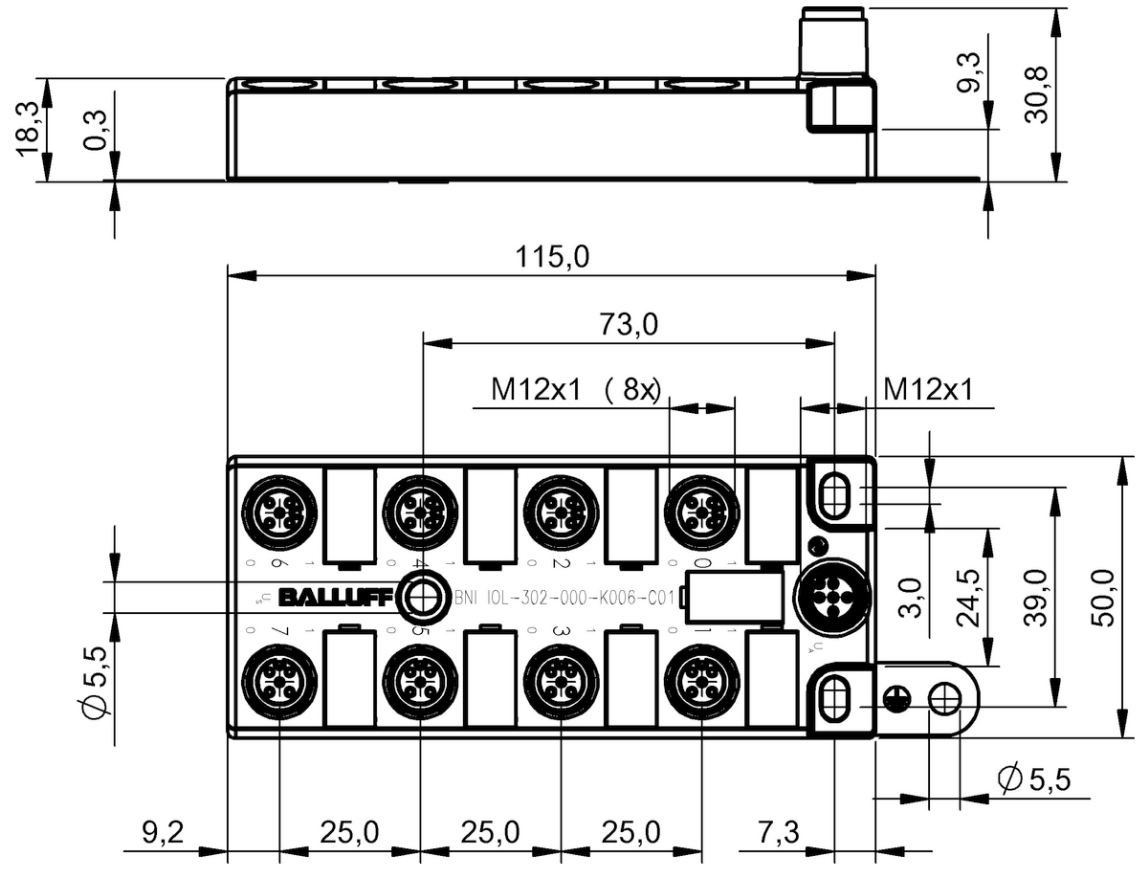
BNI0090



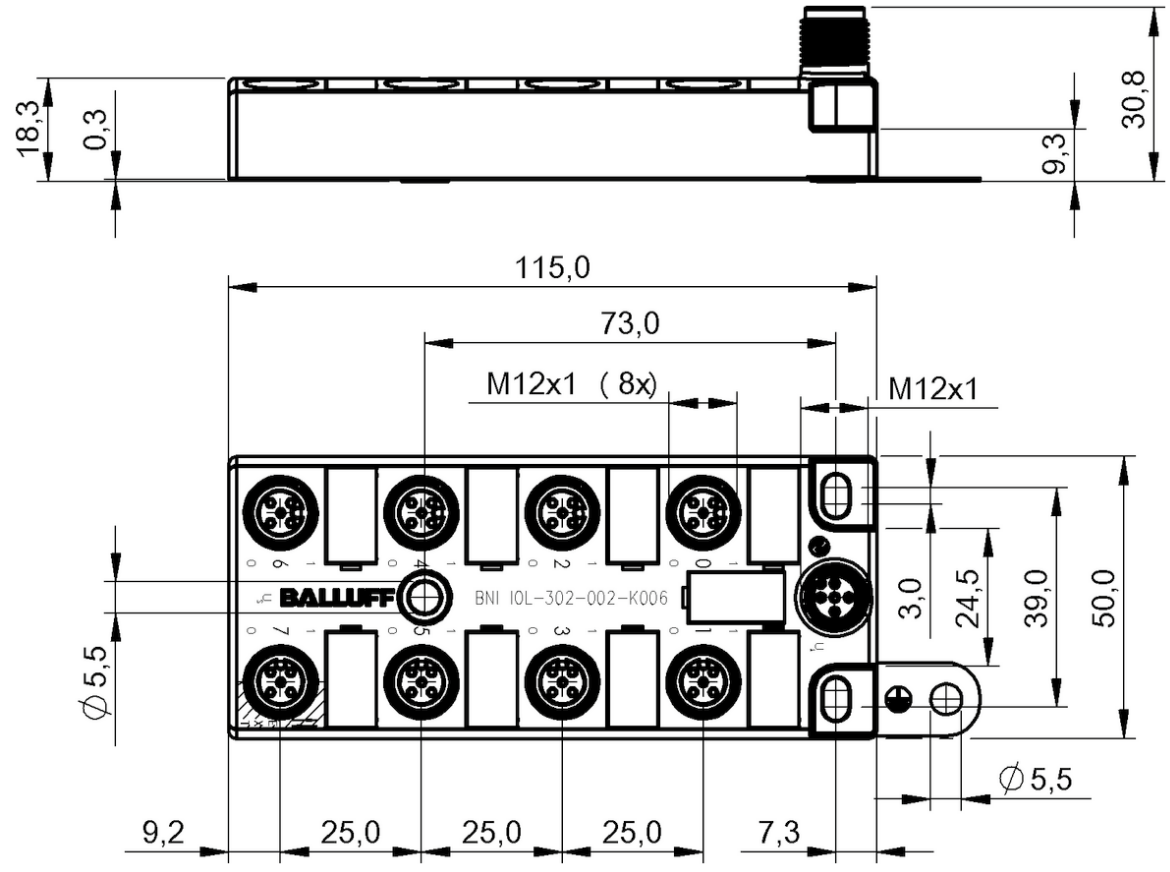
BNI0091



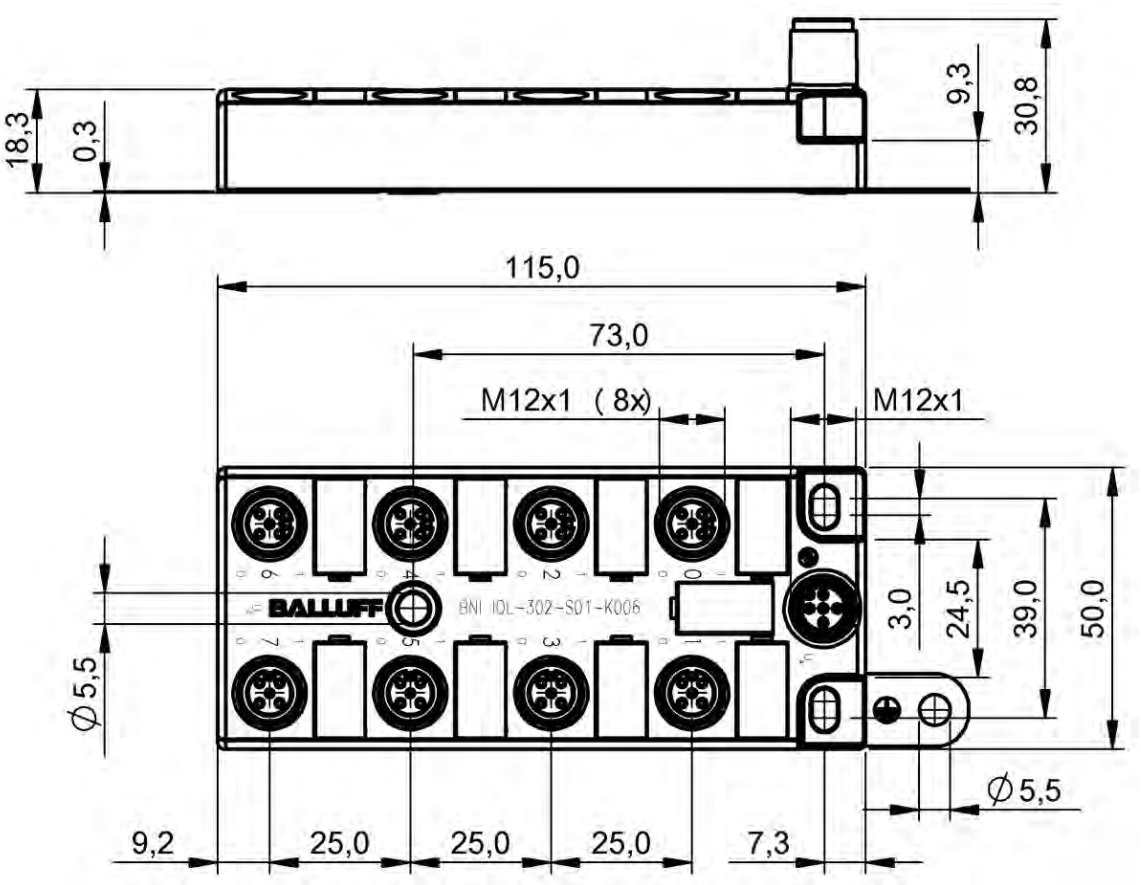
BNI005L



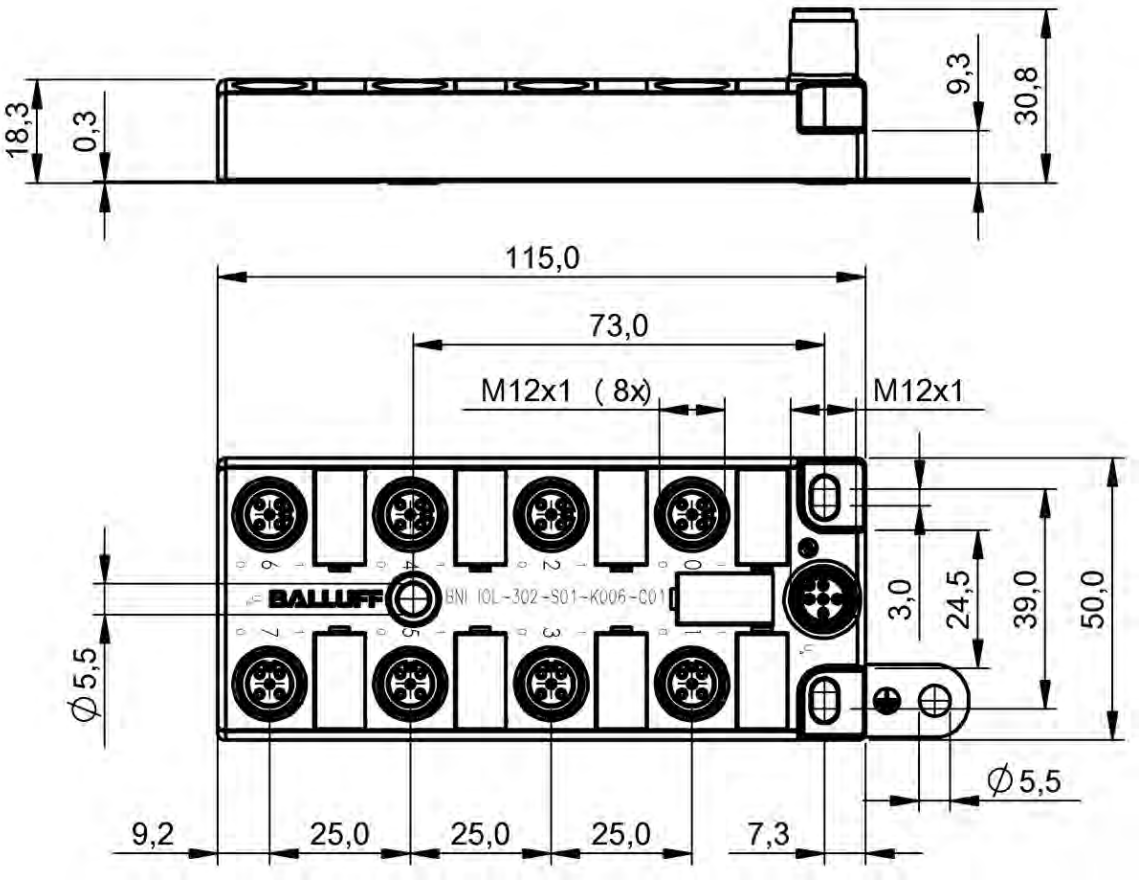
BNI005U



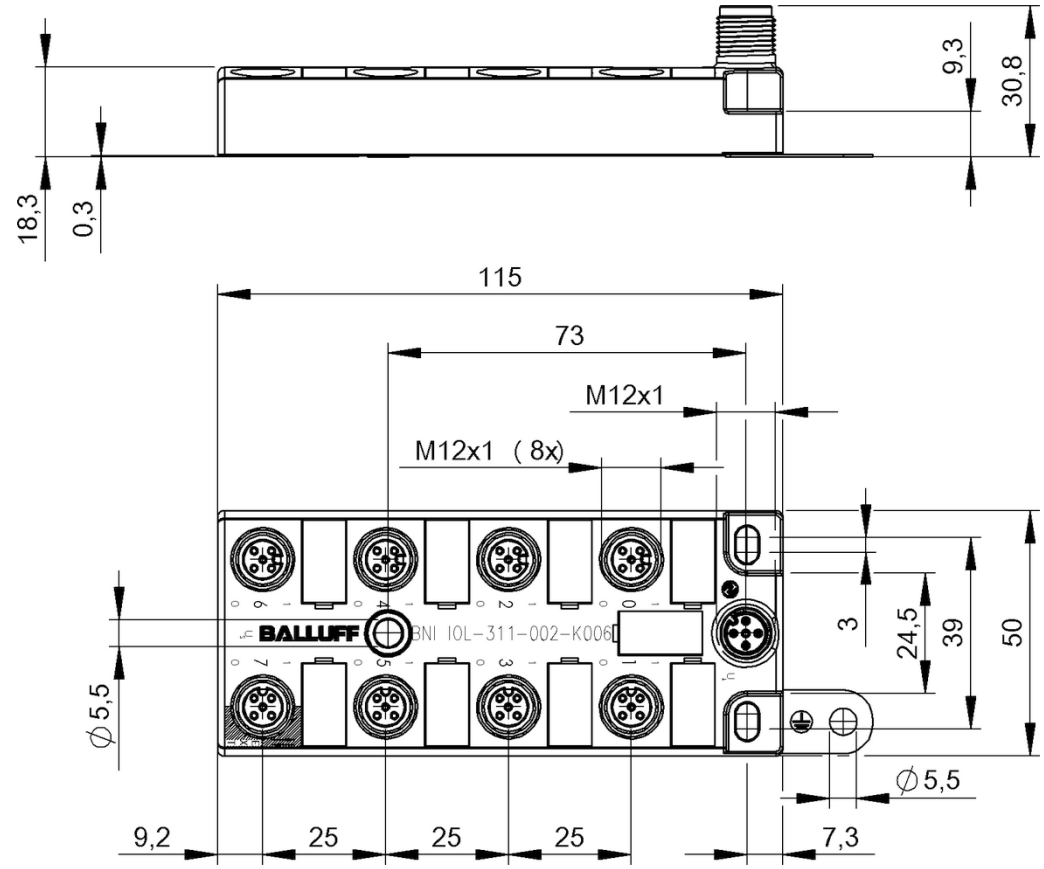
BNI007Z



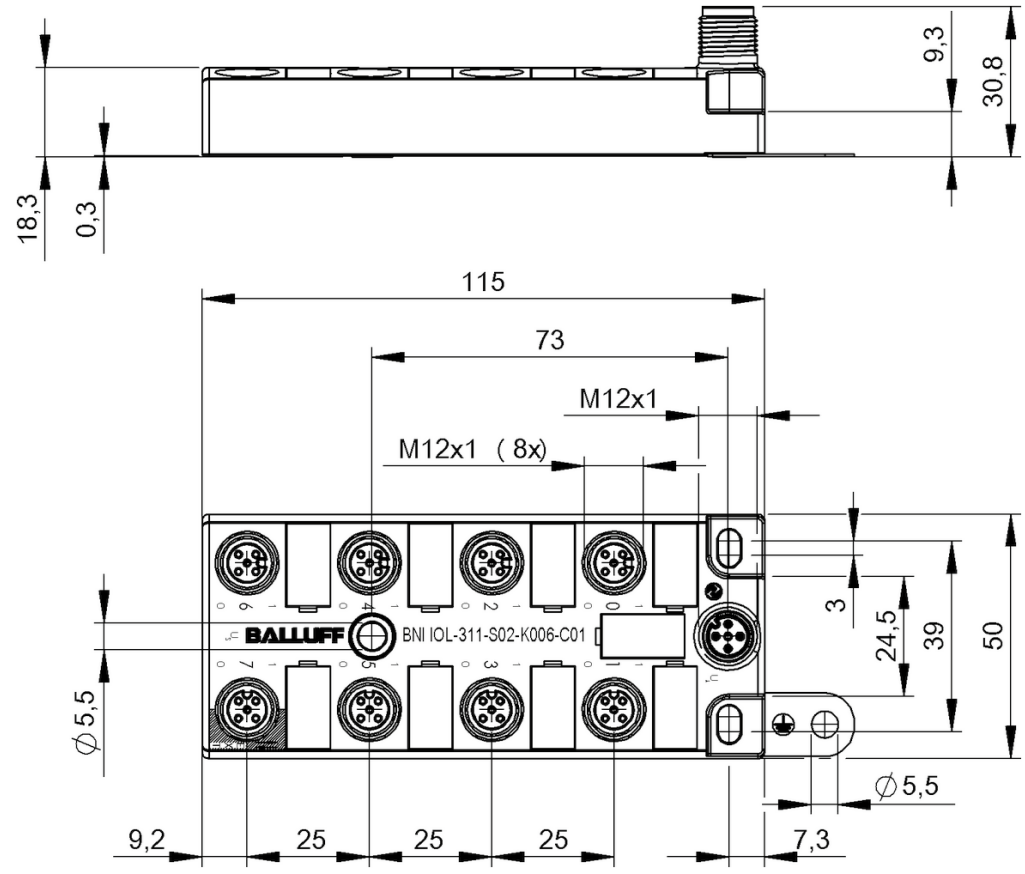
BNI005T



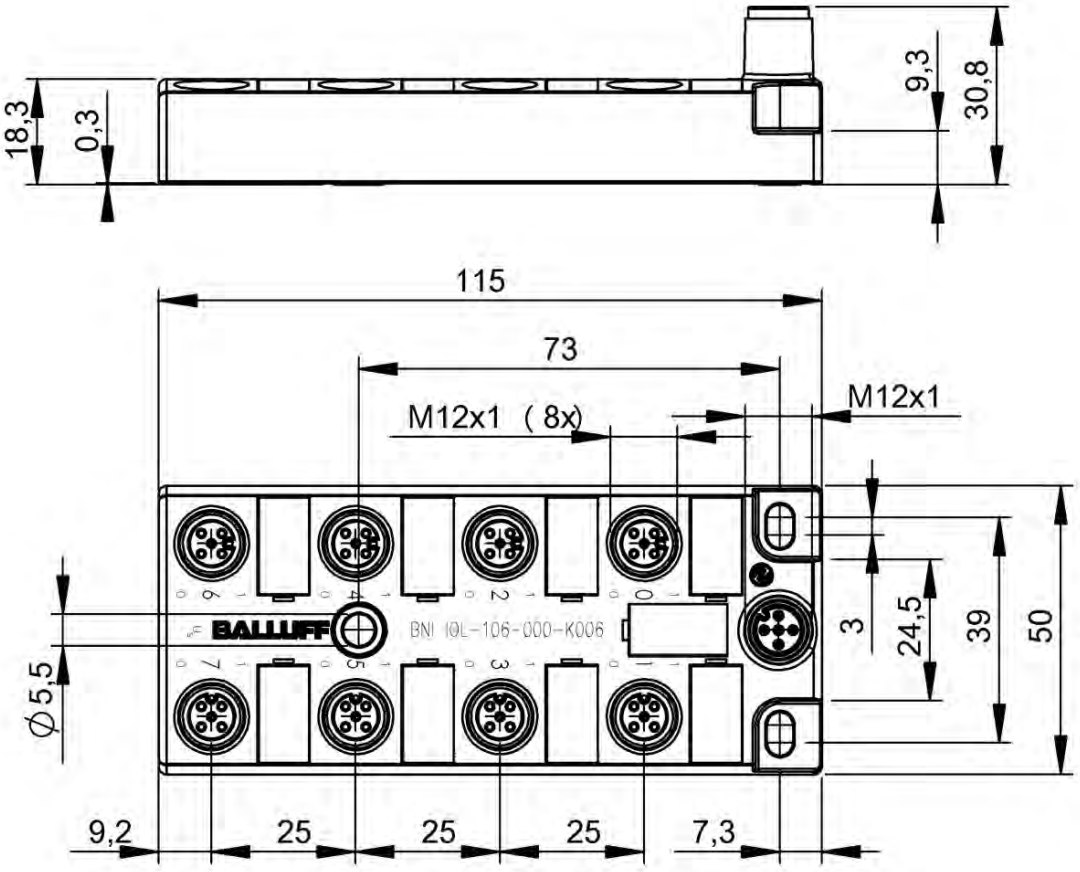
BNI005W



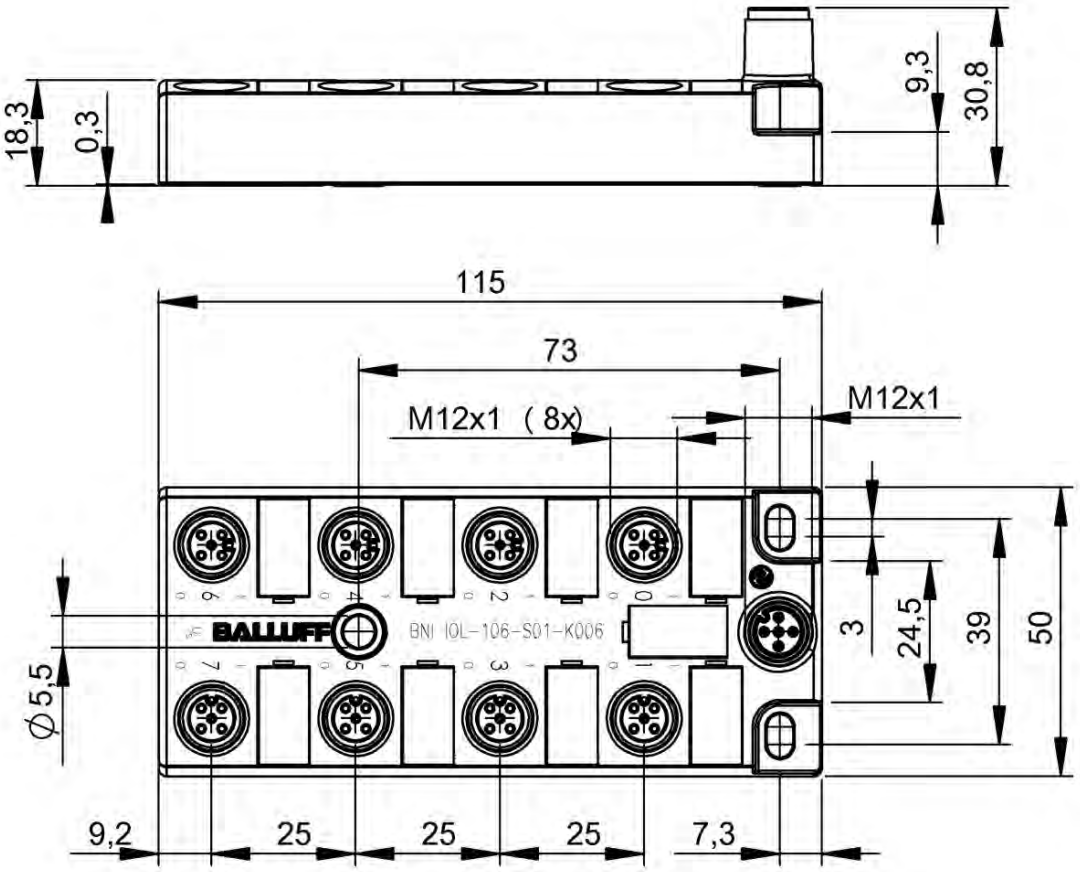
BNI00AF



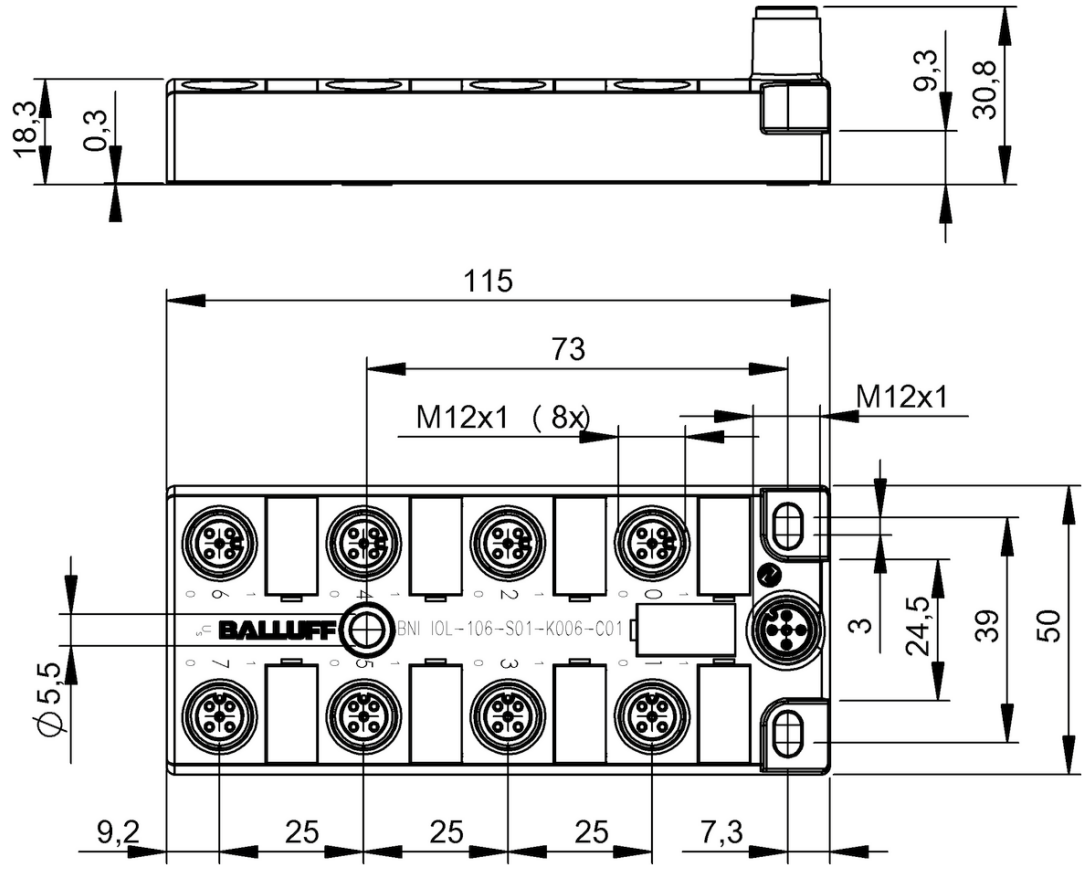
BNI00AW



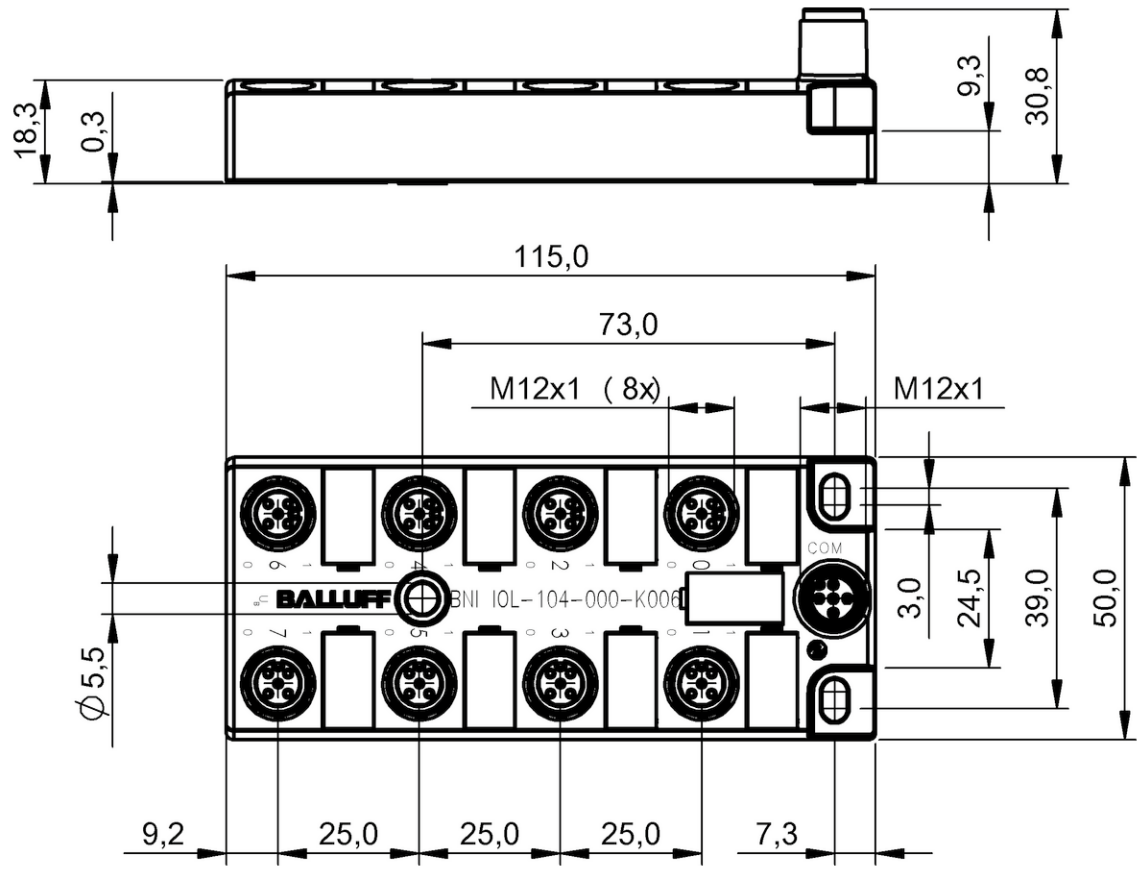
BNI0074



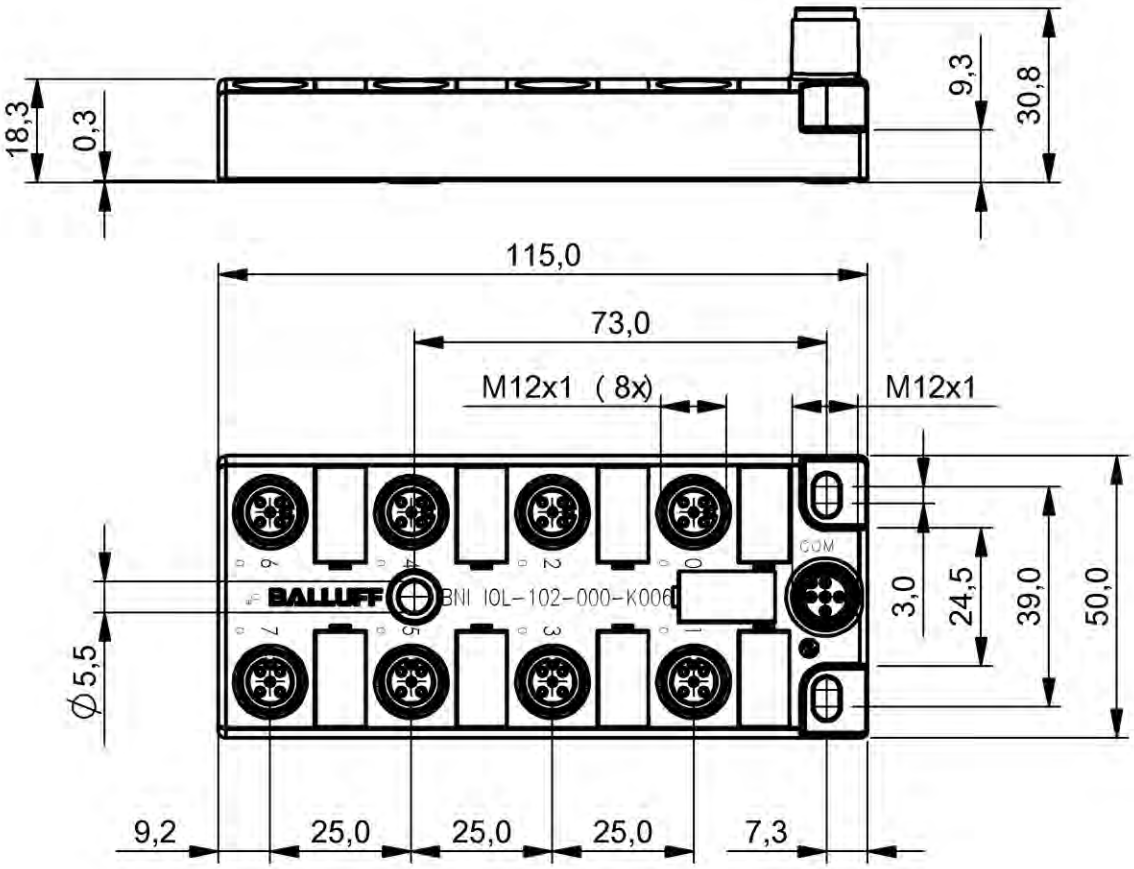
BNI0075



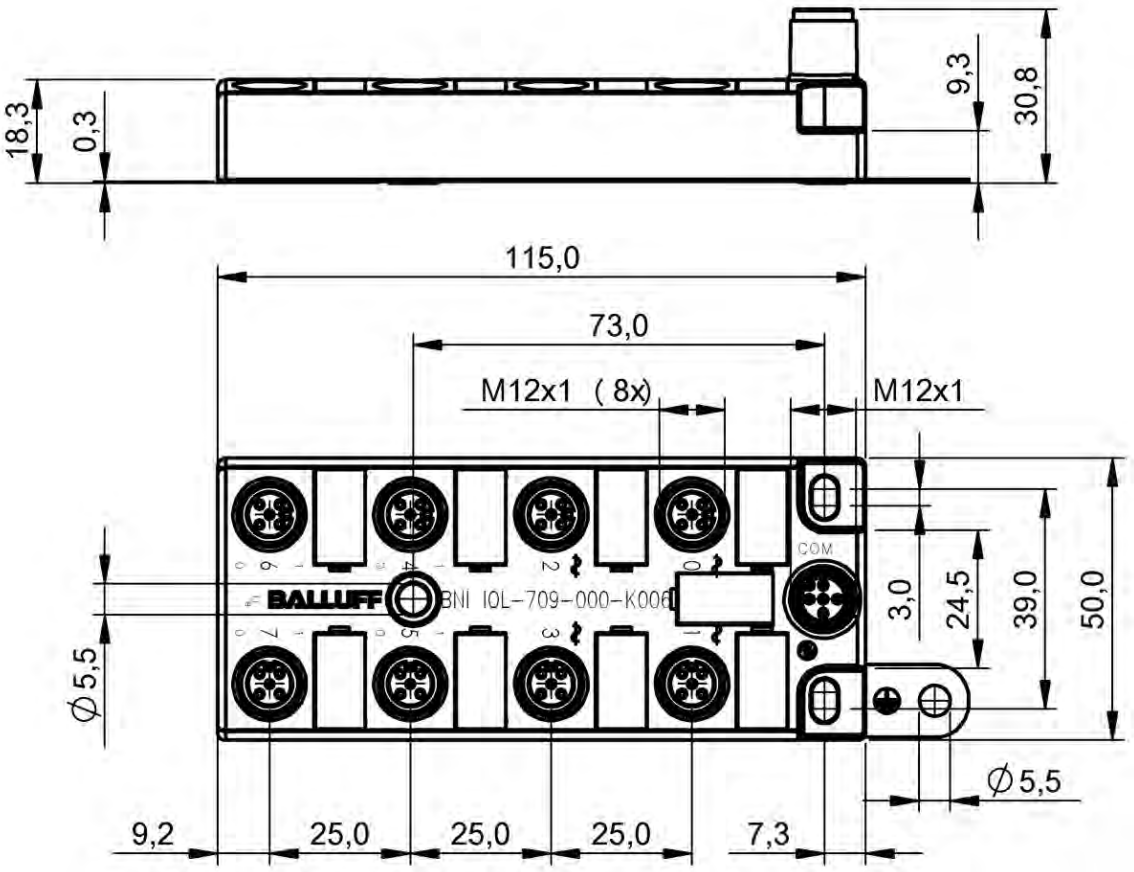
BNI0076



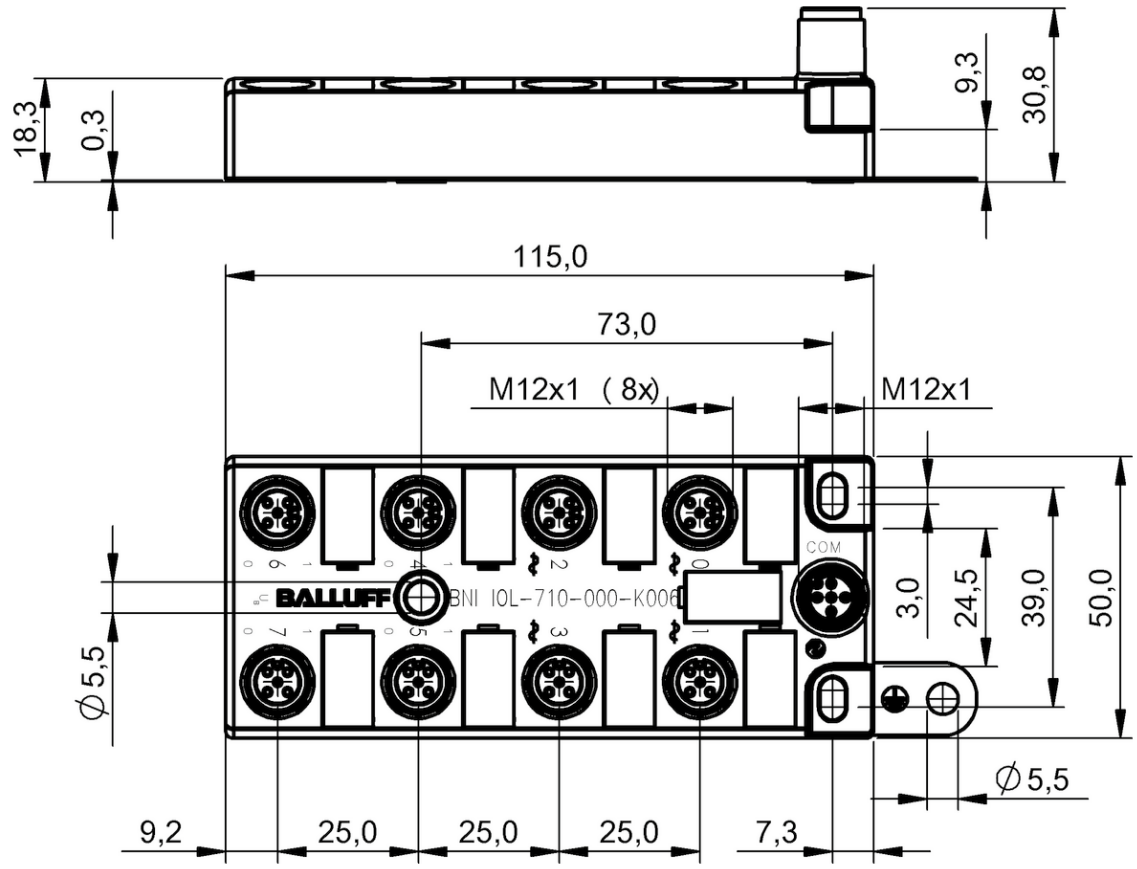
BNI0006



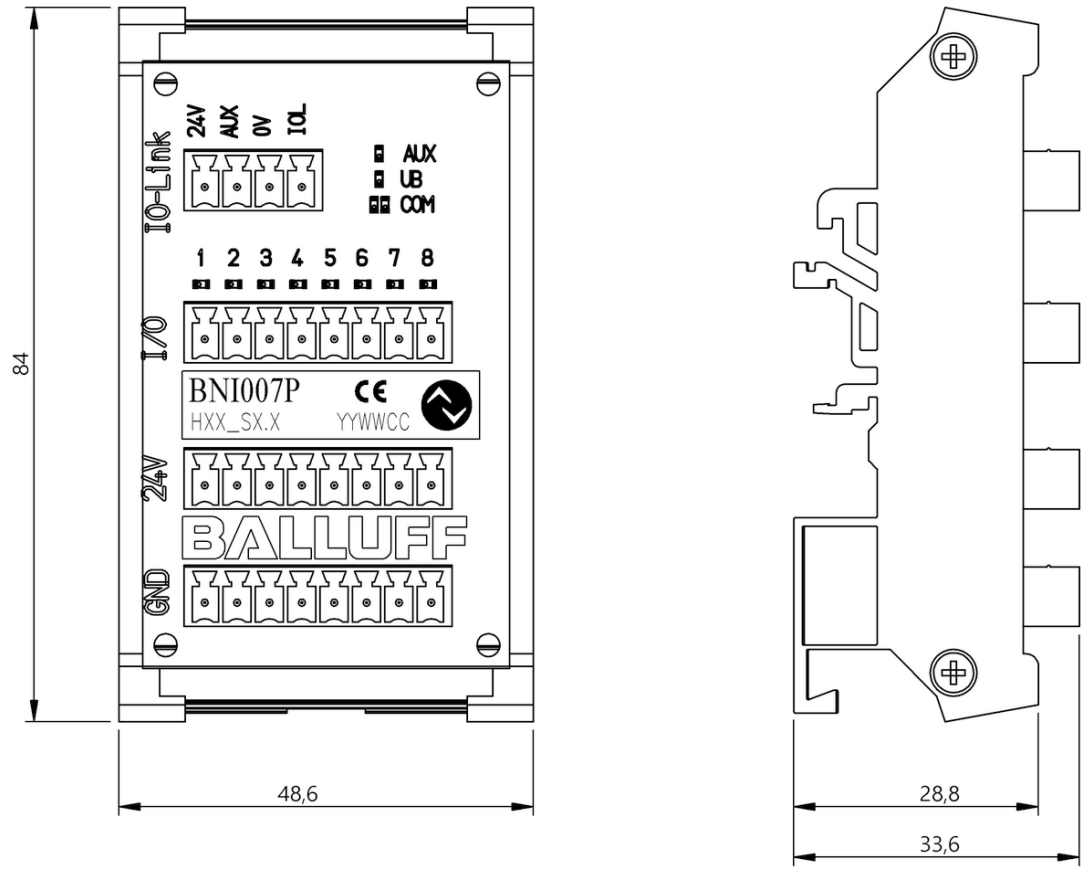
BNI0005



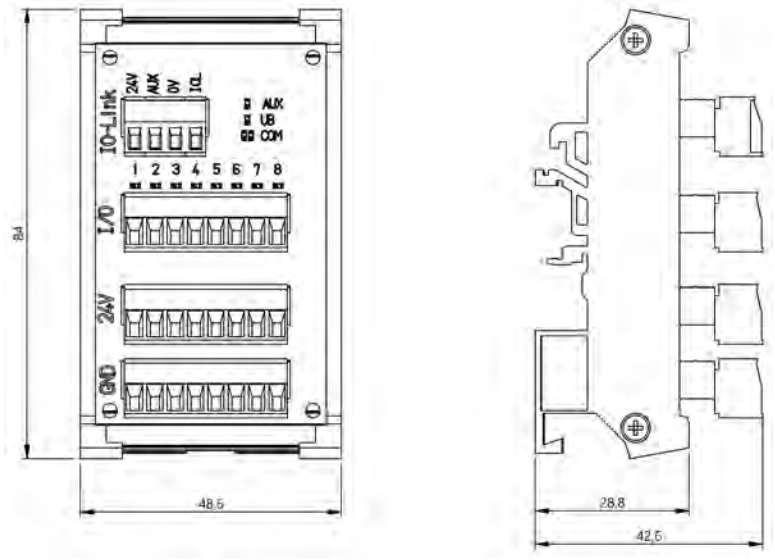
BNI0007



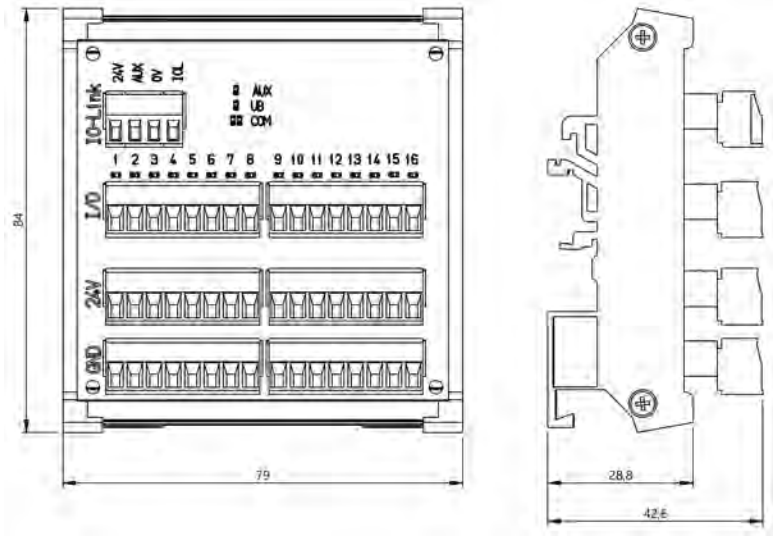
BNI0008



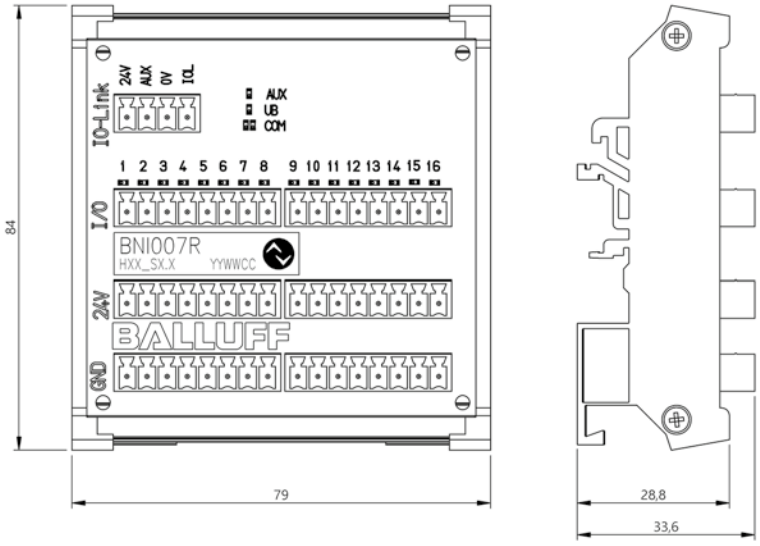
BNI007P



BNI004K



BNI004L


84
79
IO-Link
24V
AUX
0V
IOL
AUX
UB
COM
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
I/O
BNI007R
HXX_SX.X
YYWWCC
24V
BALLUFF
GND
28,8
33,6

BNI007R



	BNI006J BNI IOL-750-V08-K007	BNI006E BNI IOL-750-V09-K007	BNI006K BNI IOL-750-V10-K007	
Version	Valve interface	Valve interface	Valve interface	
Application	Festo with D-Sub female, 25-pin, GND on Pin 25, Bosch Rexroth LS04, Bürkert Typ 8640	Festo with D-Sub female, 25-pin, GND on Pin 25, Bosch Rexroth LS04	SMC VQC 1000/2000/4000	
Interface	IO-Link 1.1	IO-Link 1.1	IO-Link 1.1	
Operating voltage Ub	18...30.2 VDC	18...30.2 VDC	18...30.2 VDC	
Connection (COM 1)	M12x1-Male, 5-pin, A-coded	M12x1-Male, 5-pin, A-coded	M12x1-Male, 5-pin, A-coded	
Valve terminal connection	—	—	—	
Cable length L	0.6 m	0.6 m	0.6 m	
Outputs, number	24	16	24	
Output current max. UA, actuator	—	—	—	
Current sum UA, actuator	4 A	4 A	4 A	
Function	3-pin connection, Actuator supply on Pin 1	3-pin connection, Actuator supply on Pin 1	3-pin connection, Actuator supply on Pin 1	
Housing material	PA	PA	PA	
Dimension	53 x 61 x 12.5 mm	53 x 61 x 12.5 mm	53 x 61 x 12.5 mm	
Ambient temperature	-5...55 °C	-5...55 °C	-5...55 °C	
IP rating	IP40, plugged in	IP40, plugged in	IP40, plugged in	
Transfer rate	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)	
Process data cycle min.	3.5 ms	3.0 ms	3.5 ms	
Process data IN	—	—	—	
Process data OUT	4 bytes	2 bytes	4 bytes	
Productview	Seite 180	Seite 180	Seite 180	





	BNI006H BNI IOL-750-V11-K007	BNI006L BNI IOL-750-V13-K007	BNI006N BNI IOL-751-V08-K007	BNI006M BNI IOL-751-V09-K007	BNI006P BNI IOL-751-V10-K007
	Valve interface	Valve interface	Power Aux valve terminal connector	Power Aux valve terminal connector	Power Aux valve terminal connector
	SMC VQC 1000/2000/4000	Numatics	Festo with D-Sub female, 25-pin, GND on Pin 25, Bosch Rexroth LS04, Bürkert Typ 8640	Festo with D-Sub female, 25-pin, GND on Pin 25, Bosch Rexroth LS04	SMC VQC 1000/2000/4000
	IO-Link 1.1	IO-Link 1.1	IO-Link 1.1	IO-Link 1.1	IO-Link 1.1
	18...30.2 VDC	18...30.2 VDC	18...30.2 VDC	18...30.2 VDC	18...30.2 VDC
	M12x1-Male, 5-pin, A-coded	M12x1-Male, 5-pin, A-coded	M12x1-Male, 5-pin, A-coded	M12x1-Male, 5-pin, A-coded	M12x1-Male, 5-pin, A-coded
	–	–	–	–	–
	0.6 m	0.6 m	0.6 m	0.6 m	0.6 m
	16	22	24	16	24
	–	–	–	–	–
	4 A	4 A	4 A	4 A	4 A
	3-pin connection, Actuator supply on Pin 1	3-pin connection, Actuator supply on Pin 1	4-pin connection, Power Aux on Pin 2	4-pin connection, Power Aux on Pin 2	4-pin connection, Power Aux on Pin 2
	PA	PA	PA	PA	PA
	53 x 61 x 12.5 mm	53 x 61 x 12.5 mm	53 x 61 x 12.5 mm	53 x 61 x 12.5 mm	53 x 61 x 12.5 mm
	-5...55 °C	-5...55 °C	-5...55 °C	-5...55 °C	-5...55 °C
	IP40, plugged in	IP40, plugged in	IP40, plugged in	IP40, plugged in	IP40, plugged in
	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)
	3.0 ms	3.5 ms	3.5 ms	3.0 ms	3.5 ms
	–	–	–	–	–
	2 bytes	4 bytes	4 bytes	2 bytes	4 bytes
	Seite 180	Seite 180	Seite 180	Seite 180	Seite 180

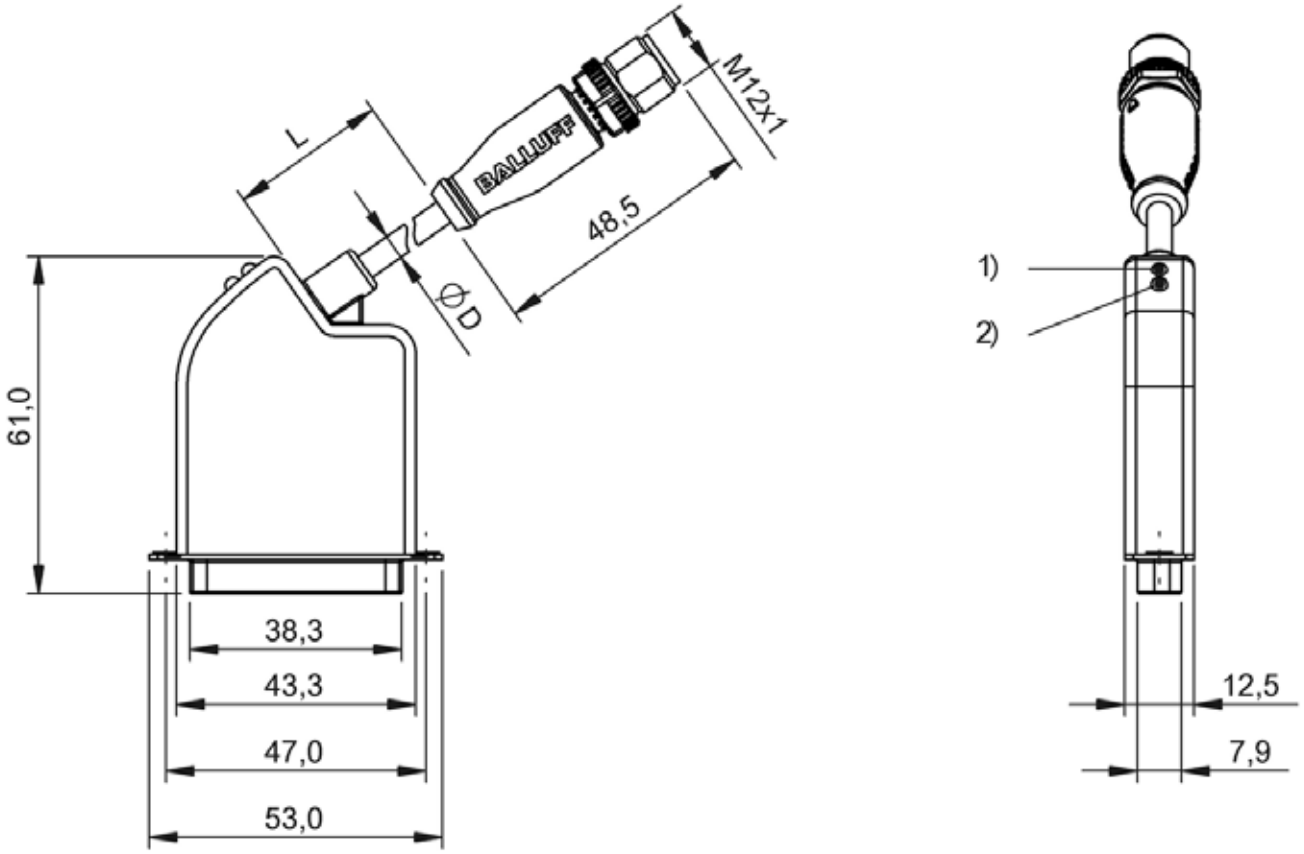


	BNI006T BNI IOL-751-V11-K007	BNI006R BNI IOL-751-V13-K007	BNI006Y BNI IOL-752-V08-K007	
Version	Power Aux valve terminal connector	Power Aux valve terminal connector	Power Aux valve terminal connector	
Application	SMC VQC 1000/2000/4000	Numatics	Festo with D-Sub female, 25-pin, GND on Pin 25, Bosch Rexroth LS04, Bürkert Typ 8640	
Interface	IO-Link 1.1	IO-Link 1.1	IO-Link 1.1	
Operating voltage Ub	18...30.2 VDC	18...30.2 VDC	18...30.2 VDC	
Connection (COM 1)	M12x1-Male, 5-pin, A-coded	M12x1-Male, 5-pin, A-coded	M12x1-Male, 5-pin, A-coded	
Valve terminal connection	—	—	—	
Cable length L	0.6 m	0.6 m	0.6 m	
Outputs, number	16	22	24	
Output current max. UA, actuator	—	—	—	
Current sum UA, actuator	4 A	4 A	4 A	
Function	4-pin connection, Power Aux on Pin 2	4-pin connection, Power Aux on Pin 2	5-pin connection, Power Aux on Pin 2, also 0V on Pin 5	
Housing material	PA	PA	PA	
Dimension	53 x 61 x 12.5 mm	53 x 61 x 12.5 mm	53 x 61 x 12.5 mm	
Ambient temperature	-5...55 °C	-5...55 °C	-5...55 °C	
IP rating	IP40, plugged in	IP40, plugged in	IP40, plugged in	
Transfer rate	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)	
Process data cycle min.	3.0 ms	3.5 ms	3.5 ms	
Process data IN	—	—	—	
Process data OUT	2 bytes	4 bytes	4 bytes	
Productview	Seite 180	Seite 180	Seite 180	

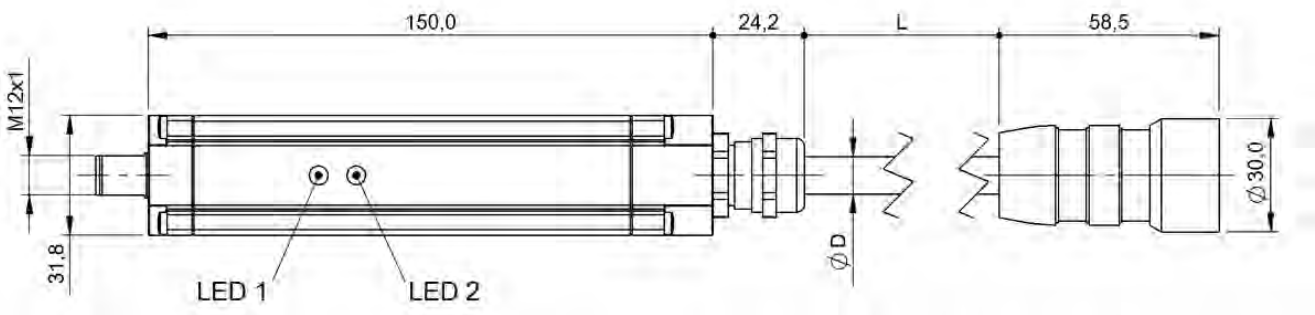




	BNI006U BNI IOL-752-V09-K007	BNI006Z BNI IOL-752-V10-K007	BNI006W BNI IOL-752-V11-K007	BNI006F BNI IOL-752-V13-K007	BNI004W BNI IOL-770-V06-A027
	Power Aux valve terminal connector	Power Aux valve terminal connector	Power Aux valve terminal connector	Power Aux valve terminal connector	Power Aux valve terminal connector
	Festo with D-Sub female, 25-pin, GND on Pin 25, Bosch Rexroth LS04	SMC VQC 1000/2000/4000	SMC VQC 1000/2000/4000	Numatics	SMC VQC 1000/2000/4000
	IO-Link 1.1	IO-Link 1.1	IO-Link 1.1	IO-Link 1.1	IO-Link 1.1
	18...30.2 VDC	18...30.2 VDC	18...30.2 VDC	18...30.2 VDC	18...30.2 VDC
	M12x1-Male, 5-pin, A-coded	M12x1-Male, 5-pin, A-coded	M12x1-Male, 5-pin, A-coded	M12x1-Male, 5-pin, A-coded	M12x1-Male, 5-pin, A-coded
	—	—	—	—	—
	0.6 m	0.6 m	0.6 m	0.6 m	0.5 m
	16	24	16	22	24
	—	—	—	—	—
	4 A	4 A	4 A	4 A	4.0 A
	5-pin connection, Power Aux on Pin 2, also 0V on Pin 5	5-pin connection, Power Aux on Pin 2, also 0V on Pin 5	5-pin connection, Power Aux on Pin 2, also 0V on Pin 5	5-pin connection, Power Aux on Pin 2, also 0V on Pin 5	4-pin connection, Power Aux on Pin 2, Diagnostics
	PA	PA	PA	PA	Aluminum
	53 x 61 x 12.5 mm	53 x 61 x 12.5 mm	53 x 61 x 12.5 mm	53 x 61 x 12.5 mm	31.8 x 31.8 x 185 mm
	-5...55 °C	-5...55 °C	-5...55 °C	-5...55 °C	-5...70 °C
	IP40, plugged in	IP40, plugged in	IP40, plugged in	IP40, plugged in	IP67, plugged in
	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)
	3.0 ms	3.5 ms	3.0 ms	3.5 ms	5.5 ms
	—	—	—	—	9 bytes
	2 bytes	4 bytes	2 bytes	4 bytes	4 bytes
	Seite 180	Seite 180	Seite 180	Seite 180	Seite 180



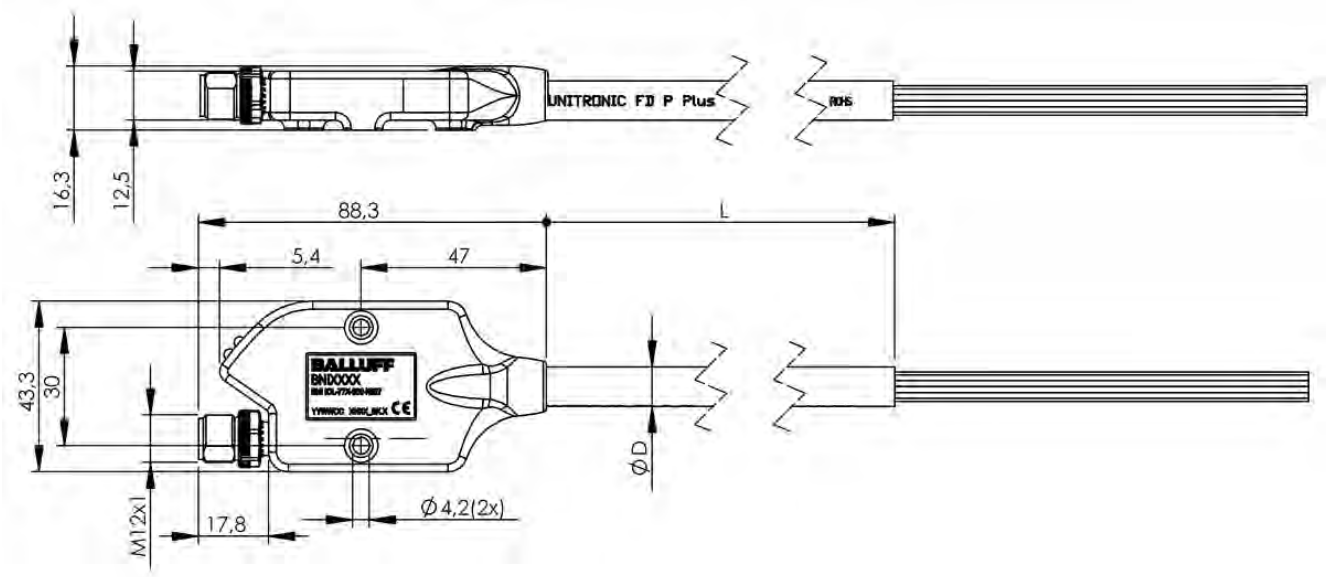
BNI006J, BNI006E, BNI006K, BNI006H, BNI006L, BNI006N, BNI006M, BNI006P, BNI006T, BNI006R, BNI006Y, BNI006U, BNI006Z, BNI006W, BNI006F



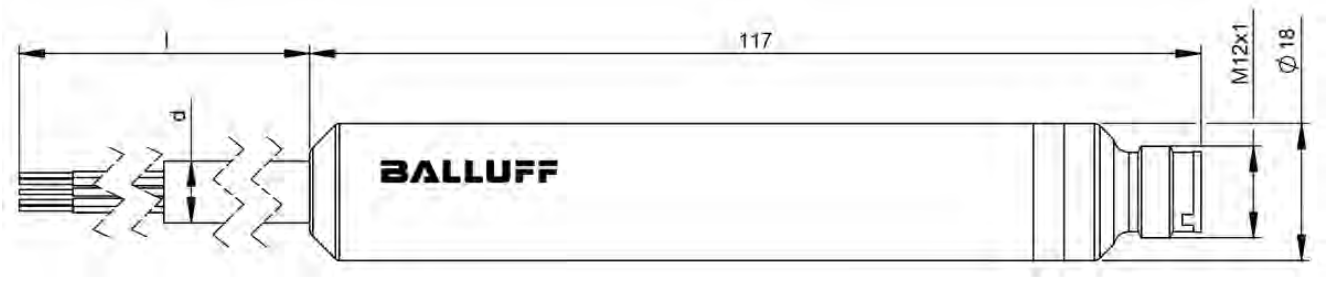
BNI004W

	BNI005M BNI IOL-771-000-K027	BNI00CA BNI IOL-771-002-K027-003	
Version	Universal cable I/O interface	Universal cable I/O interface	
Interface	IO-Link 1.1	IO-Link 1.1	
Operating voltage Ub	18...30.2 VDC	18...30.2 VDC	
Connection (COM 1)	M12x1-Male, 5-pin, A-coded	M12x1-Male, 5-pin, A-coded	
Connection for sensor	open cable end-Leads	open cable end-Leads	
Cable length L	0.5 m	3 m	
Digital inputs	16x PNP, Type 3	16x PNP, Type 3	
Digital outputs	16x PNP	16x PNP	
Configurable inputs/outputs	yes	yes	
Output current max.	—	—	
Additional function	—	—	
Housing material	PA	PA	
Dimension	43.3 x 16.3 x 88.3 mm	43.3 x 16.3 x 88.3 mm	
Ambient temperature	-5...55 °C	-5...55 °C	
IP rating	IP54, to open cable end	IP54, to open cable end	
Transfer rate	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)	
Process data cycle min.	4 ms	4 ms	
Process data IN	2 bytes	2 bytes	
Process data OUT	2 bytes	2 bytes	
Productview	Seite 184	Seite 184	

	BNI005N BNI IOL-772-000-K027	BNI00CC BNI IOL-772-002-K027-003	BNI00AE BNI IOL-772-002-E032	
	Universal cable I/O interface	Universal cable I/O interface	Universal cable I/O interface	
	IO-Link 1.1	IO-Link 1.1	IO-Link 1.1	
	18...30.2 VDC	18...30.2 VDC	18...30.2 VDC	
	M12x1-Male, 5-pin, A-coded	M12x1-Male, 5-pin, A-coded	M12x1-Male, 4-pin, A-coded	
	open cable end-Leads	open cable end-Leads	open cable end-Leads	
	0.5 m	3 m	1.3 m	
	8x PNP, Type 3	8x PNP, Type 3	8x PNP, Type 3	
	8x PNP	8x PNP	8x PNP	
	yes	yes	yes	
	—	—	—	
	—	—	—	
	PA	PA	Stainless steel (1.4404) PTFE	
	43.3 x 16.3 x 88.3 mm	43.3 x 16.3 x 88.3 mm	Ø 18 x 117 mm	
	-5...55 °C	-5...55 °C	-5...60 °C	
	IP54, to open cable end	IP54, to open cable end	IP69K, IP68, when threaded in	
	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)	
	3.2 ms	3.2 ms	8.4 ms	
	1 bytes	1 bytes	1 bytes	
	1 bytes	1 bytes	1 bytes	
	Seite 184	Seite 184	Seite 184	



BNI005M, BNI00CA, BNI005N, BNI00CC



BNI00AE

Efficient communication without wear

INDUCTIVE COUPLERS

Fixed wiring of sensors and actuators comes with drawbacks: cable and contacts are often severely loaded in automation, and cables can fatigue and break. In the worst case scenario this can result in a machine failure. Our BIC inductive couplers transmit data and power contactlessly across an air gap. Thus, no mechanical wear is produced. The system availability is higher, the cycle times are shorter and the sequences are more flexible. The units can quickly be disconnected, are easy to handle and are maintenance-free. This enables you to meet new demands quickly.

Features

- No mechanical wear
- Higher system availability, shorter cycle times, more flexible sequences
- Quickly disconnectable, easy to handle, maintenance free

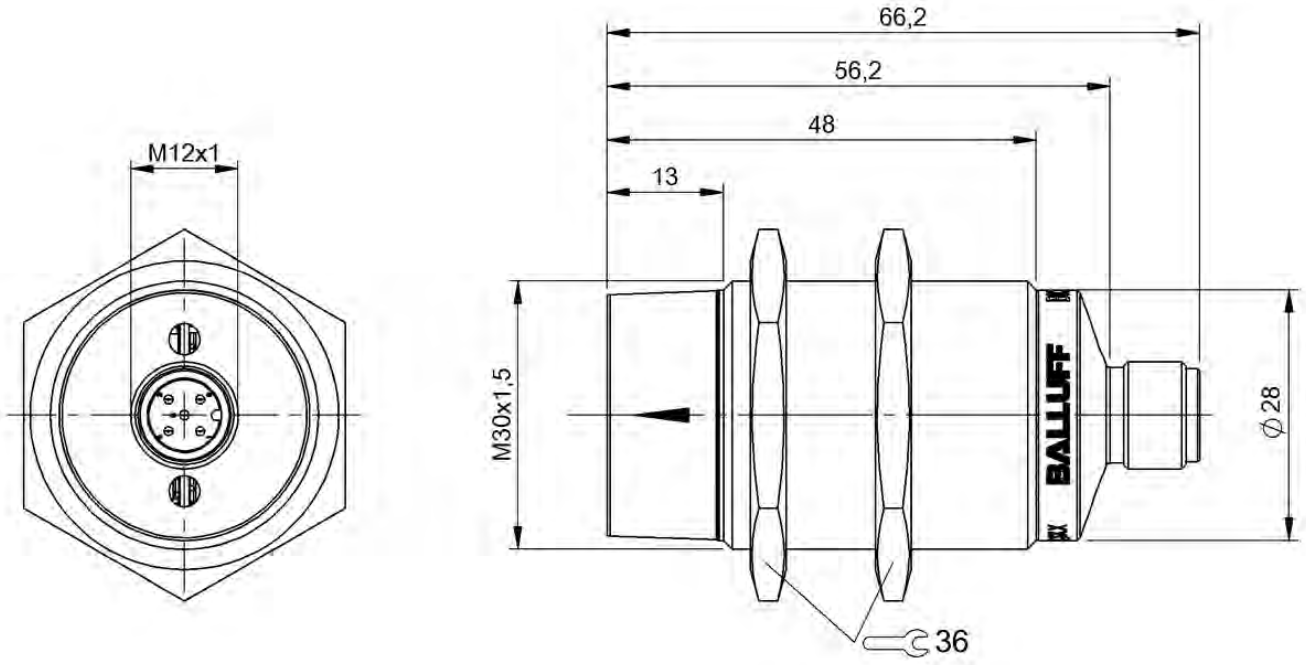


	BIC0086 BIC 1B1-IT1A0-M30EI21-SM4A5A	**BIC0087** BIC 2B1-IT1A0-M30EI21-SM4A5A	**BIC007L** BIC 1B0-ITA50-M30MF1-SM4A5A	
Function	IO-Link	IO-Link	IO-Link signal transmission	
Signal type	bi-directional	bi-directional	bi-directional	
Transmission distance	0...5 mm	0...5 mm	0...10 mm	
Component	Base	Remote	Base	
Interface	—	—	IO-Link 1.1	
Connection	Connector, M12x1-Male	Connector, M12x1-Female	Connector, M12x1-Male, 5-pin	
Rated operating voltage Ue	24 VDC	—	24 VDC	
Output voltage	—	24 VDC	—	
Rated output current	—	1.5 A	—	
Output current max.	—	2.2 A	—	
Housing material	Stainless steel	Stainless steel	Brass, coated	
Dimension	—	—	Ø 30 x 66.2 mm	
Ambient temperature	-5...70 °C	-5...70 °C	-5...55 °C	
IP rating	IP67	IP67	IP67	
Transfer rate	COM2 (38.4 kBaud), COM3 (230.4 kBaud), Diagnostic channel: COM2 (38.4 kBaud)	COM2 (38.4 kBaud), COM3 (230.4 kBaud)	COM2 (38.4 kBaud)	
Additive cycle time	0 ms	0 ms	Device + 2.0 ms	
Process data IN	0…32 bytes, Diagnostic channel: 2 bytes	0…32 bytes	0…32 bytes	
Process data OUT	0…32 bytes, Diagnostic channel: 1 byte	0…32 bytes	0…32 bytes	
SIO mode	no	no	yes	
Productview	Seite 190	Seite 190	Seite 190	

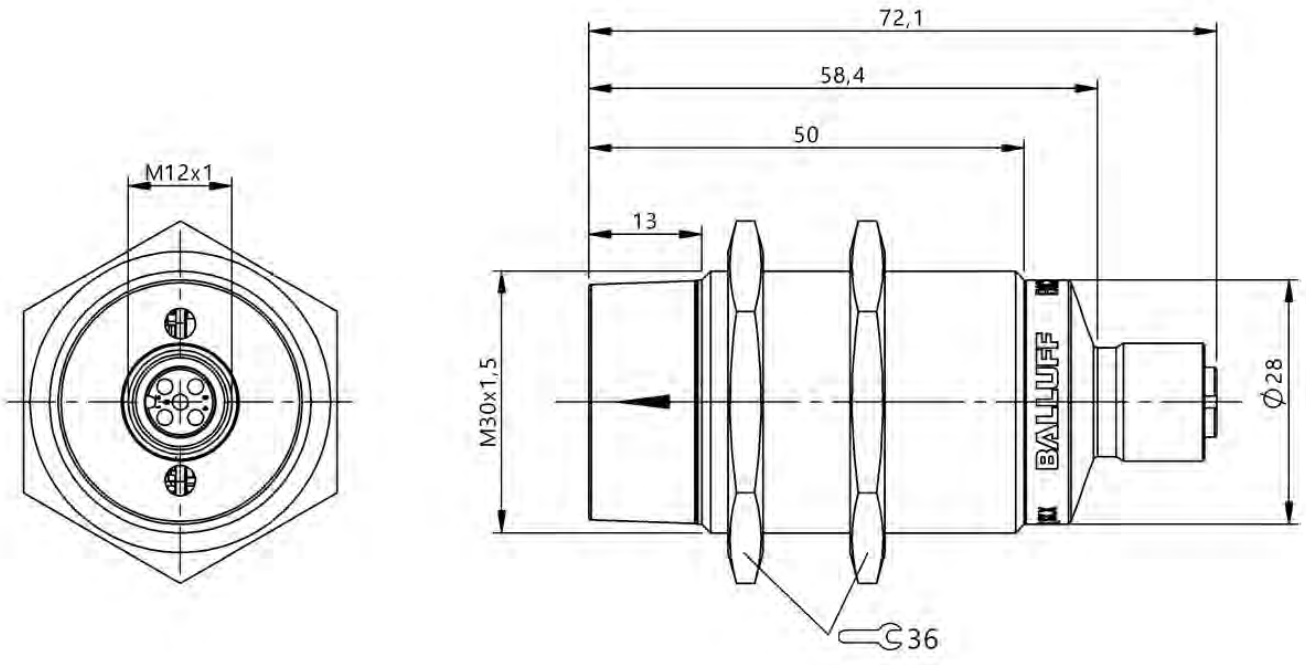




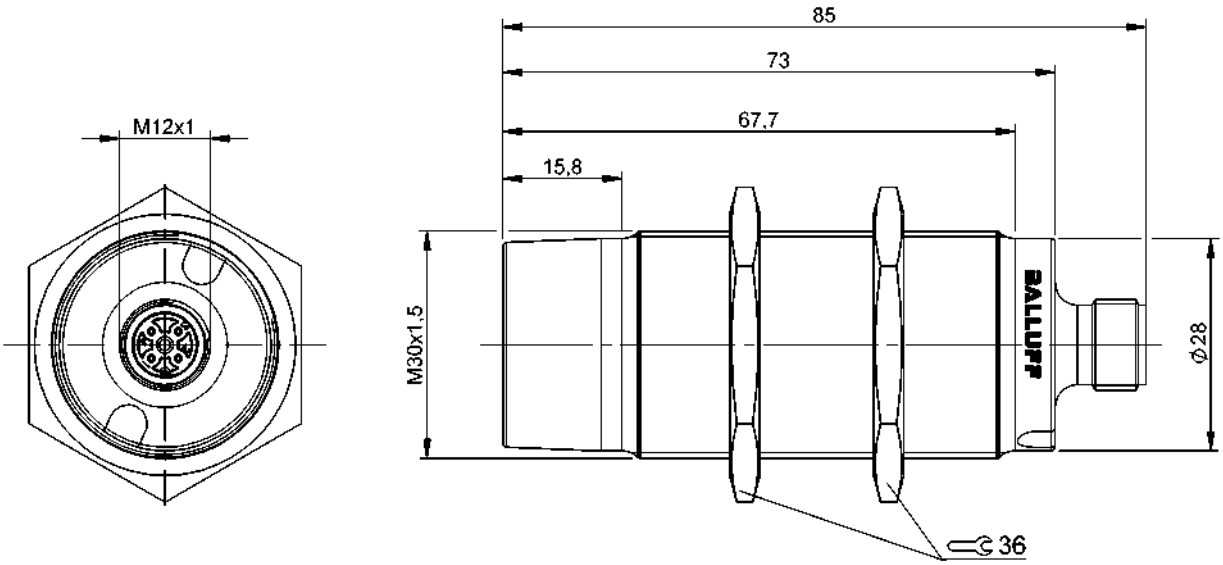
	BIC007E BIC 2B0-ITA50-M30MF1-SM4A5A	BIC007F BIC 1B0-IT1A7-Q40KFU-SM4A4A	BIC007H BIC 2B0-IT1A7-Q40KFU-SM4A5A	BIC0070 BIC 1B0-ITA50-Q40KFU-SM4A4A	BIC0071 BIC 2B0-ITA50-Q40KFU-SM4A5A
	IO-Link signal transmission	IO-Link signal transmission	IO-Link signal transmission	IO-Link signal transmission	IO-Link signal transmission
	bi-directional	bi-directional	bi-directional	bi-directional	bi-directional
	0...10 mm	0...5 mm	0...5 mm	0...5 mm	0...5 mm
	Remote	Base	Remote	Base	Remote
	IO-Link 1.1	IO-Link 1.1	IO-Link 1.1	IO-Link 1.1	IO-Link 1.1
	Connector, M12x1-Male, 5-pin	Connector, M12x1-Male, 4-pin	Connector, M12x1-Female, 5-pin	Connector, M12x1-Male, 4-pin	Connector, M12x1-Female, 5-pin
	—	24 VDC	—	24 VDC	—
	24 VDC	—	24 VDC	—	24 VDC
	650 mA	—	1.7 A	—	500 mA
	5 A / 0.12 ms	—	5 A / 1 ms	—	5 A / 0.05 ms
	Brass, coated	PBTP	PBTP	PBTP	PBTP
	Ø 30 x 72.1 mm	40 x 40 x 62 mm	40 x 40 x 62 mm	40 x 40 x 62 mm	40 x 40 x 62 mm
	-5...55 °C	-5...55 °C	-5...55 °C	-5...65 °C	-5...65 °C
	IP67	IP67	IP67	IP67	IP67
	COM2 (38.4 kBaud)	COM2 (38.4 kBaud), COM3 (230.4 kBaud)	COM2 (38.4 kBaud), COM3 (230.4 kBaud)	COM2 (38.4 kBaud)	COM2 (38.4 kBaud)
	Device + 2.0 ms	Device + 2.8 ms	Device + 2.8 ms	Device + 2.0 ms	Device + 2.0 ms
	0…32 bytes	0…32 bytes	0…32 bytes	0…32 bytes	0…32 bytes
	0…32 bytes	0…32 bytes	0…32 bytes	0…32 bytes	0…32 bytes
	yes	no	no	yes	yes
	Seite 190	Seite 191	Seite 192	Seite 192	Seite 193



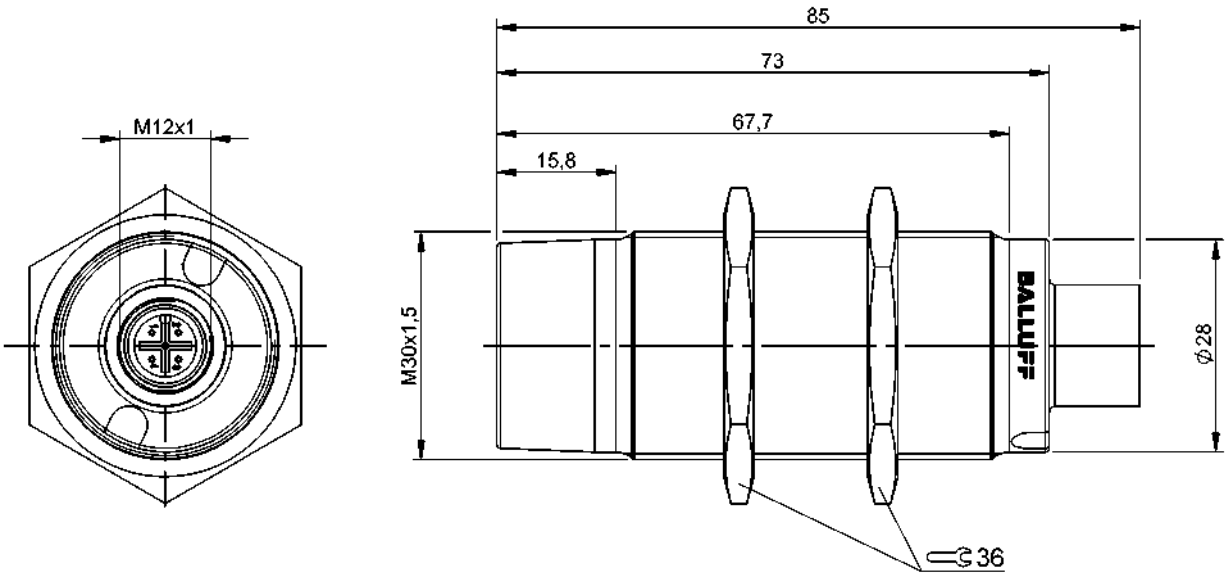
BIC007L



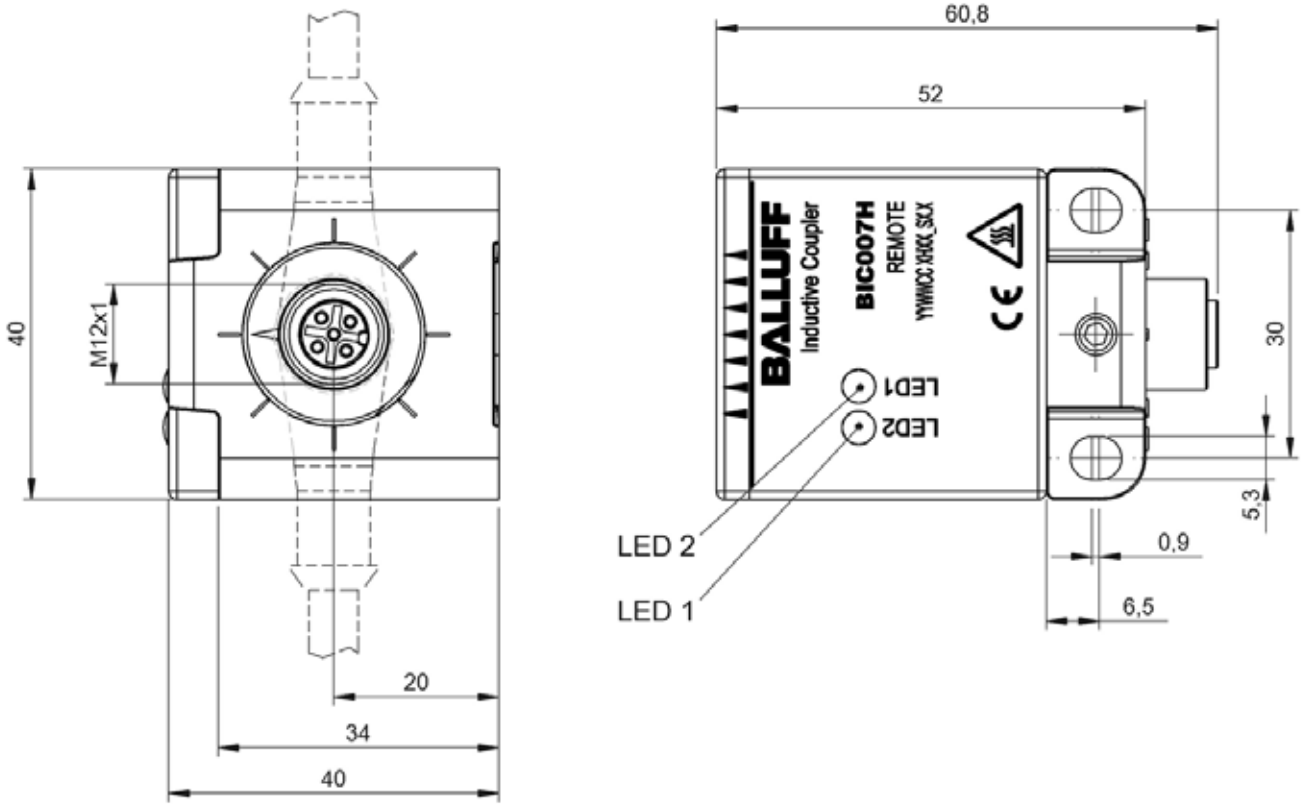
BIC007E



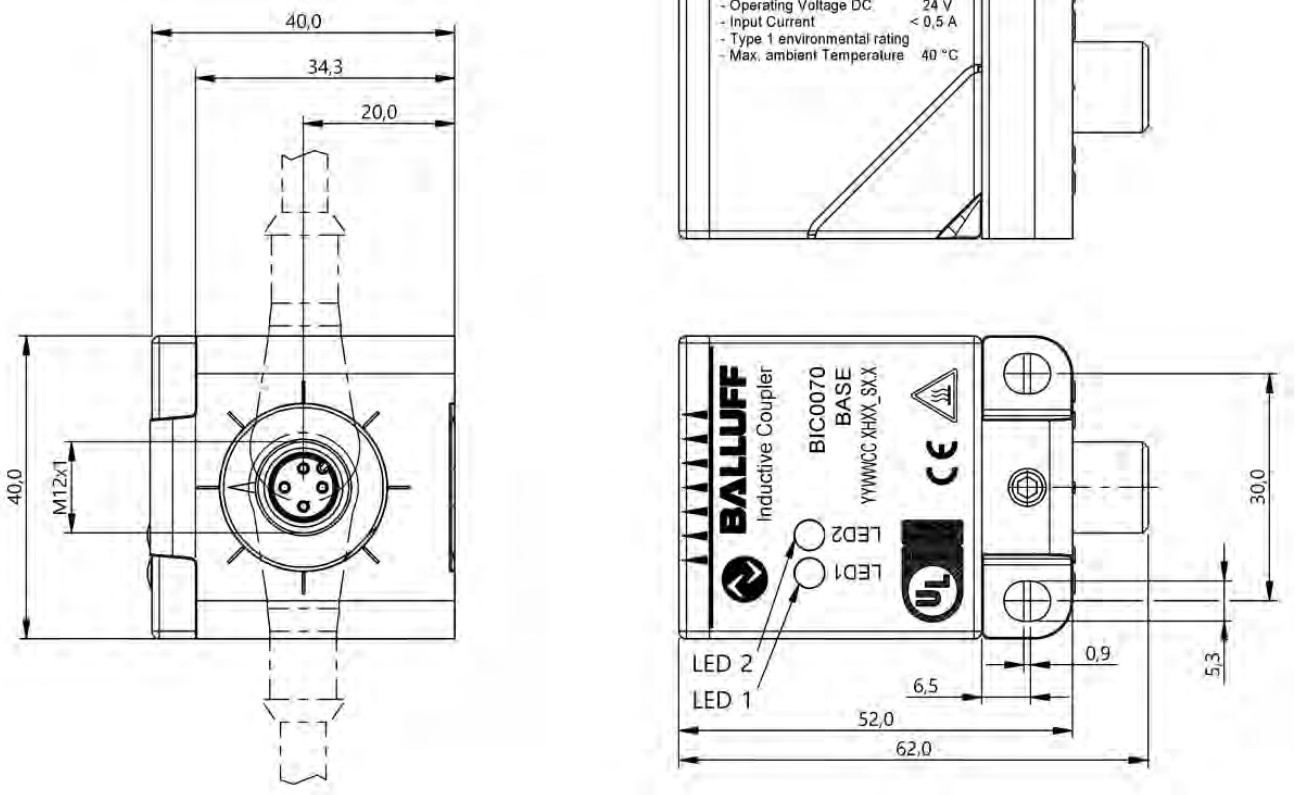
BIC0086



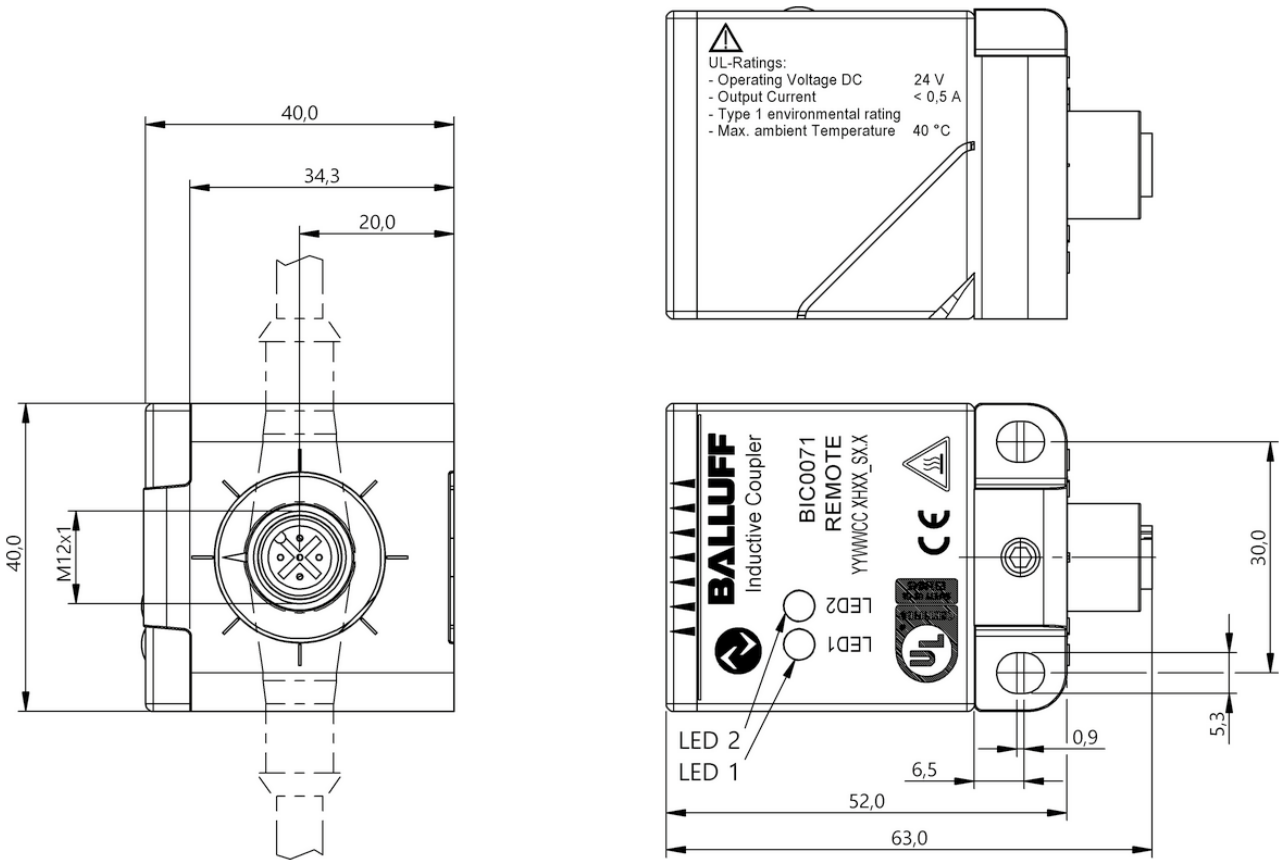
BIC0087



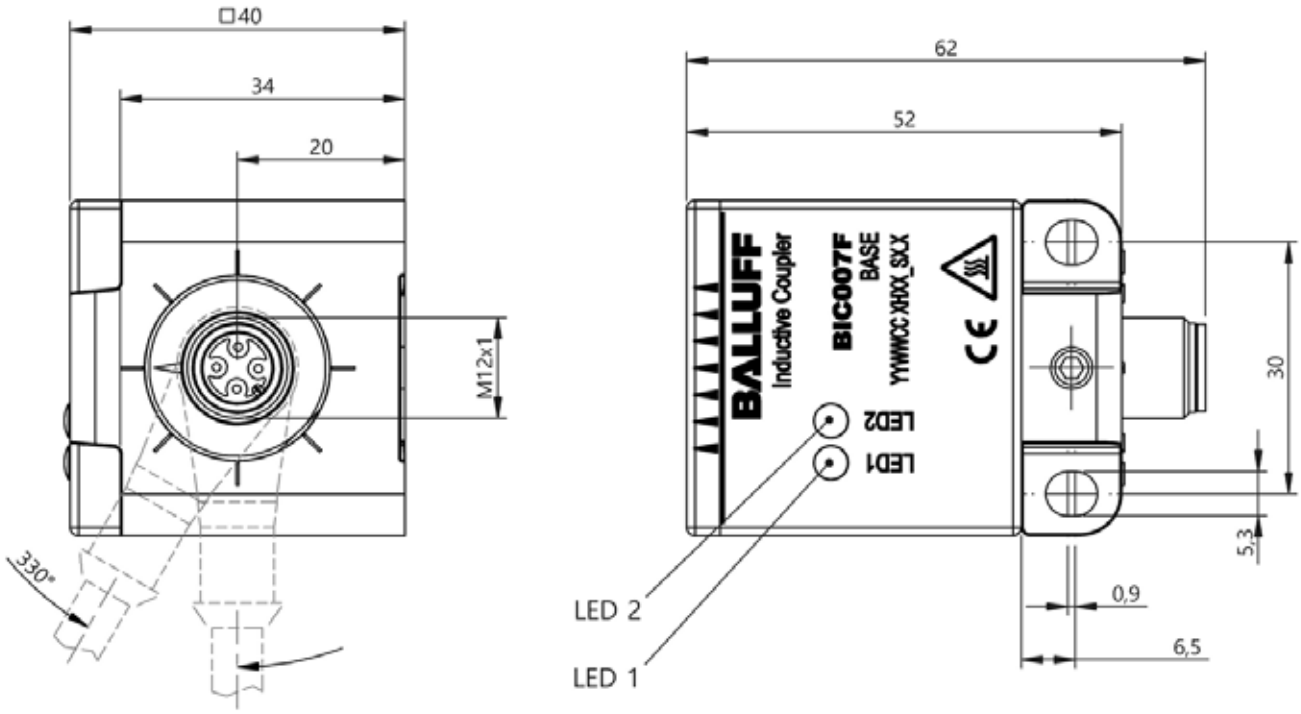
BIC007H



BIC0070



BIC0071



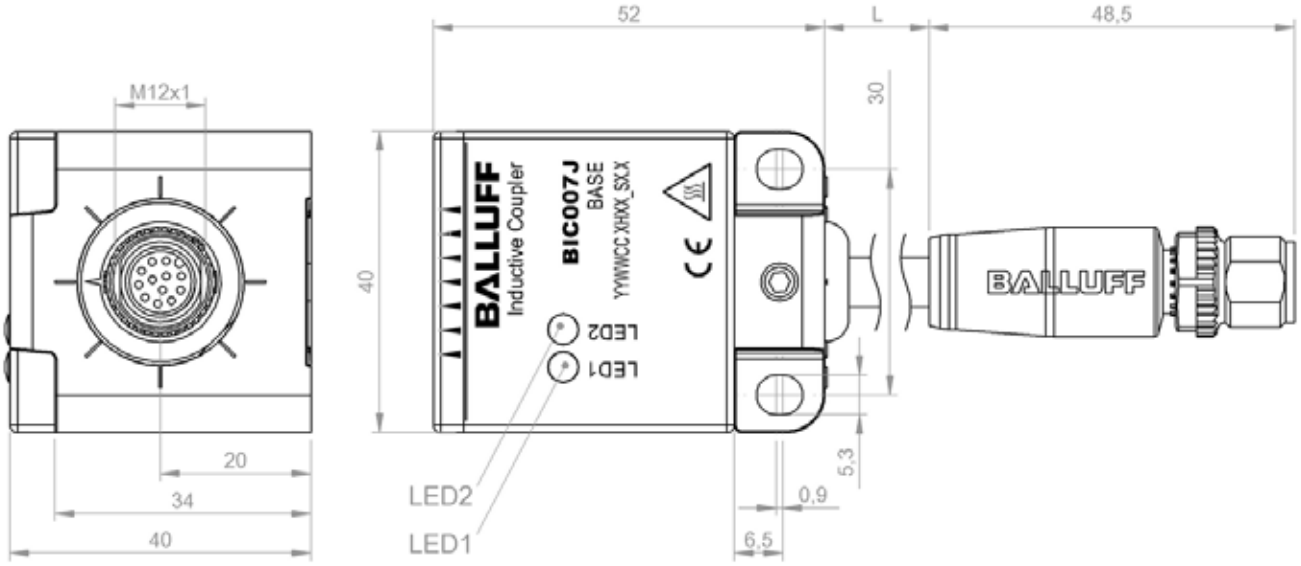
BIC007F

	BIC007J BIC 1I3-P2A50-Q40KFU-EPX0-002-M4CA	BIC007K BIC 2I3-P2A50-Q40KFU-EPX0-002-M4CA	
Function	Signal transmission	Signal transmission	
Signal type	unidirectional	unidirectional	
Digital inputs	—	8x PNP	
Digital outputs	8x PNP	—	
Transmission distance	0...5 mm	0...5 mm	
Component	Base	Remote	
Connection	Connector, M12x1, 12-pin, 0.20 m, PUR	Connector, M12x1, 12-pin, 0.20 m, PUR	
Rated operating voltage Ue	24 VDC	—	
Output voltage	—	24 VDC	
Rated output current	—	500 mA	
Housing material	PBTP	PBTP	
Dimension	40 x 40 x 52 mm	40 x 40 x 52 mm	
Ambient temperature	-5...65 °C	-5...65 °C	
Protection degree	IP67	IP67	
Productview	Seite 198	Seite 198	

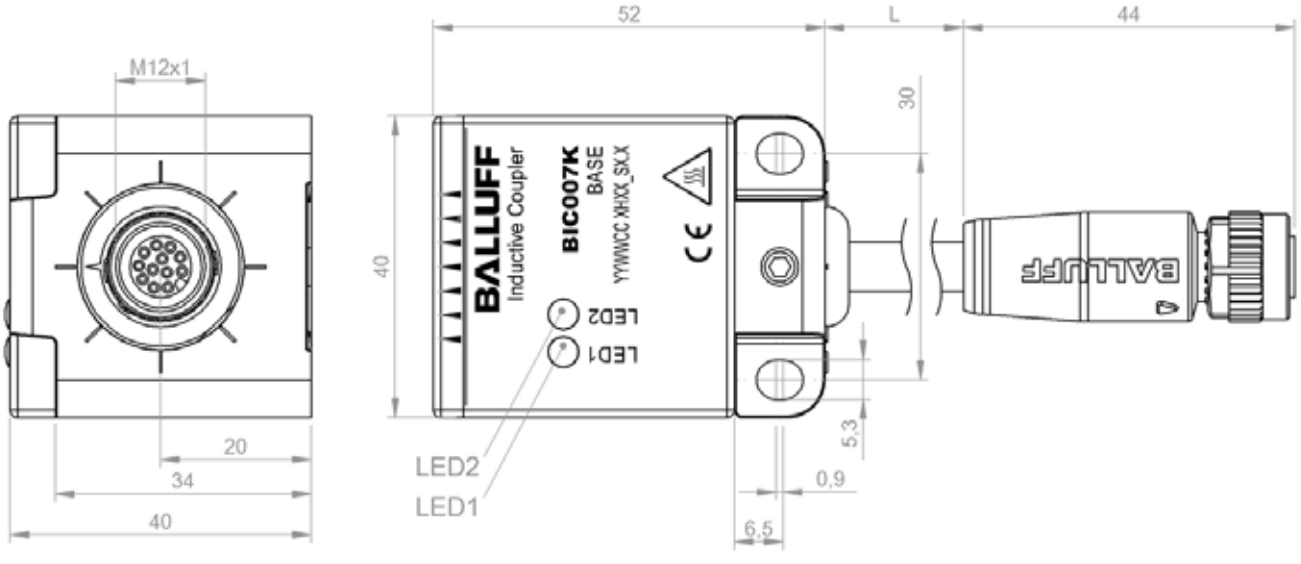
	BIC0077 BIC 1I1-P2A05-M12MM-BPX0-003-M45A	BIC0078 BIC 2I1-P2A05-M12MF-BPX0-003-M44A	BIC007T BIC 1I22-P2A02-M18MN2-EPX07-050	BIC007U BIC 2I22-P2A02-M18MF2-EPX07-050
	Signal transmission	Signal transmission	Signal transmission	Signal transmission
	unidirectional	unidirectional	unidirectional	unidirectional
	—	2x PNP	—	4x PNP
	2x PNP	—	4x PNP	—
	0...2.5 mm	0...2.5 mm	1...3 mm	1...3 mm
	Base	Remote	Base	Remote
	Connector, M12x1, 5-pin, 0.30 m, PUR	Connector, M12x1, 5-pin, 0.30 m, PUR	Cable, 5.00 m, PUR	Cable, 5.00 m, PUR
	24 VDC	—	24 VDC	12 VDC
	—	24 VDC	—	24 VDC
	—	50 mA	—	100 mA
	Brass, coated	Brass, coated	Brass, coated	Brass, coated
	Ø 12 x 65 mm	Ø 12 x 41 mm	Ø 18 x 94 mm	Ø 18 x 61 mm
	-10...50 °C	-10...50 °C	0...50 °C	0...50 °C
	IP67	IP67	IP67	IP67
	Seite 199	Seite 199	Seite 200	Seite 200

	BIC0009 BIC 1I3-P2A50-M30MI3-SM4ACA	**BIC005J** BIC 2I3-P2A50-M30MI3-BPX0C-002-M4CA	
Function	Signal transmission	Signal transmission	
Signal type	unidirectional	unidirectional	
Digital inputs	—	8x PNP	
Digital outputs	8x PNP	—	
Transmission distance	0...5 mm	0...5 mm	
Component	Base	Remote	
Connection	Connector, M12x1, 12-pole	Connector, M12x1, 12-pin, 0.20 m, PUR	
Rated operating voltage Ue	24 VDC	—	
Output voltage	—	24 VDC	
Rated output current	—	500 mA	
Housing material	Brass, coated	Brass, coated	
Dimension	Ø 30 x 107 mm	Ø 30 x 85.5 mm	
Ambient temperature	0...55 °C	0...55 °C	
Protection degree	IP67	IP67	
Productview	Seite 201	Seite 201	

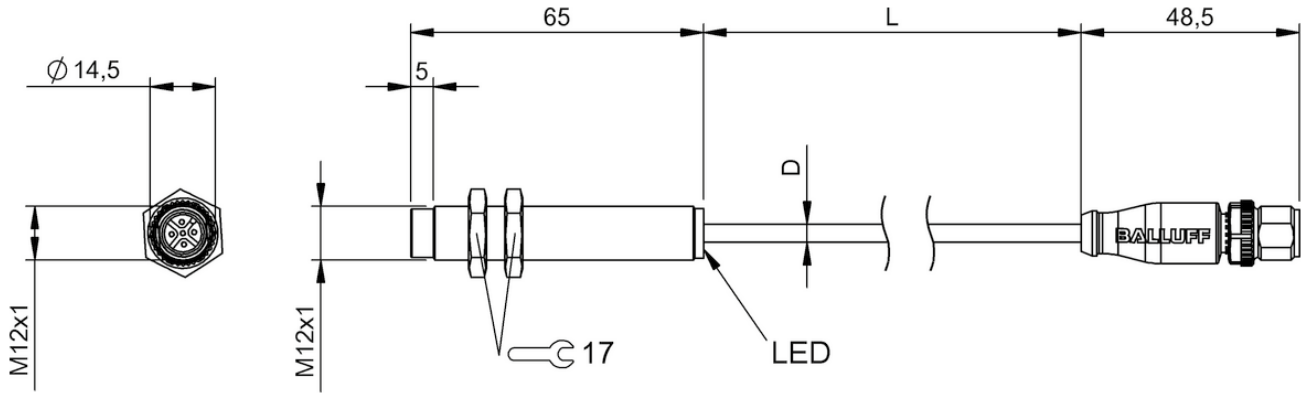
	BIC000A BIC 2I3-P2A50-M30MI3-SM4ACA			
	Signal transmission			
	unidirectional			
	8x PNP			
	—			
	0...5 mm			
	Remote			
	Connector, M12x1, 12-pole			
	—			
	24 VDC			
	500 mA			
	Brass, coated			
	Ø 30 x 106 mm			
	0...55 °C			
	IP67			
	Seite 202			



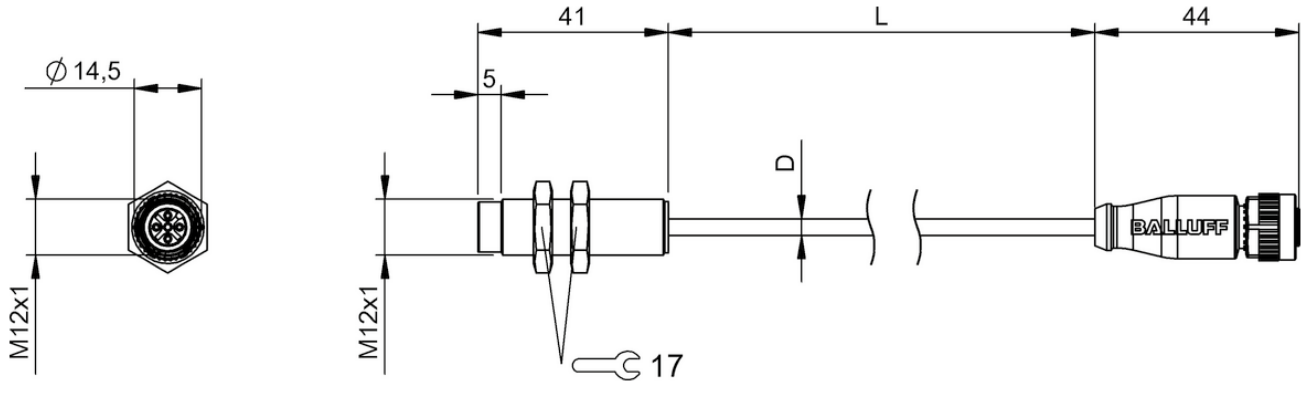
BIC007J



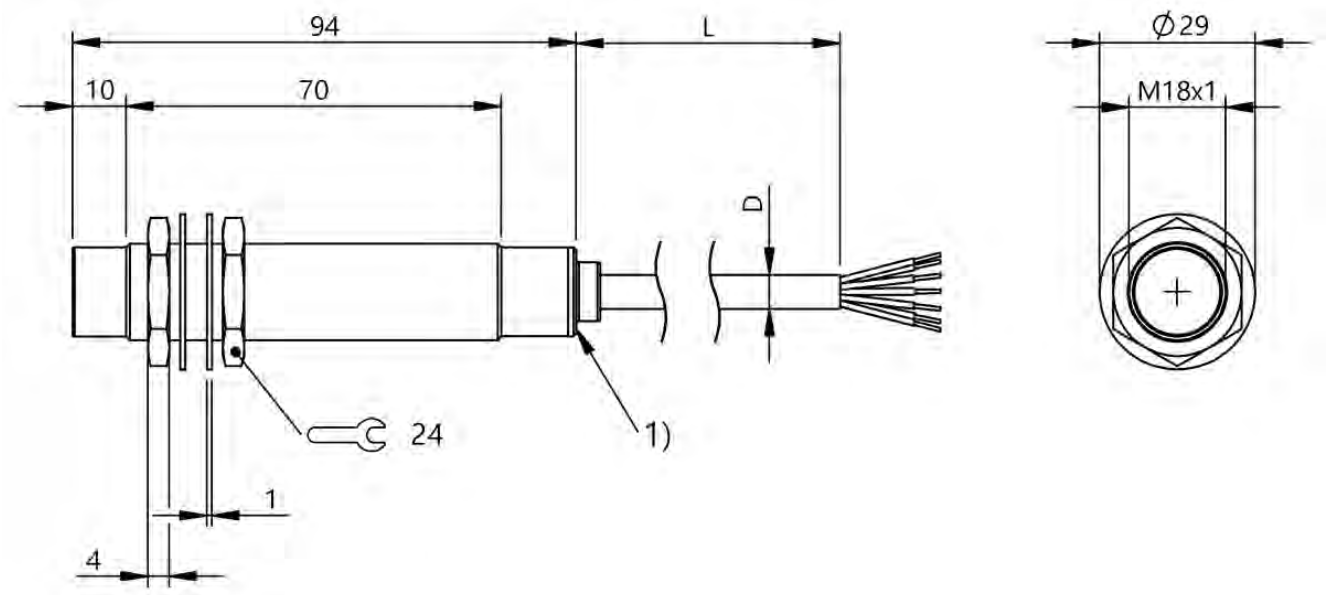
BIC007K



BIC0077

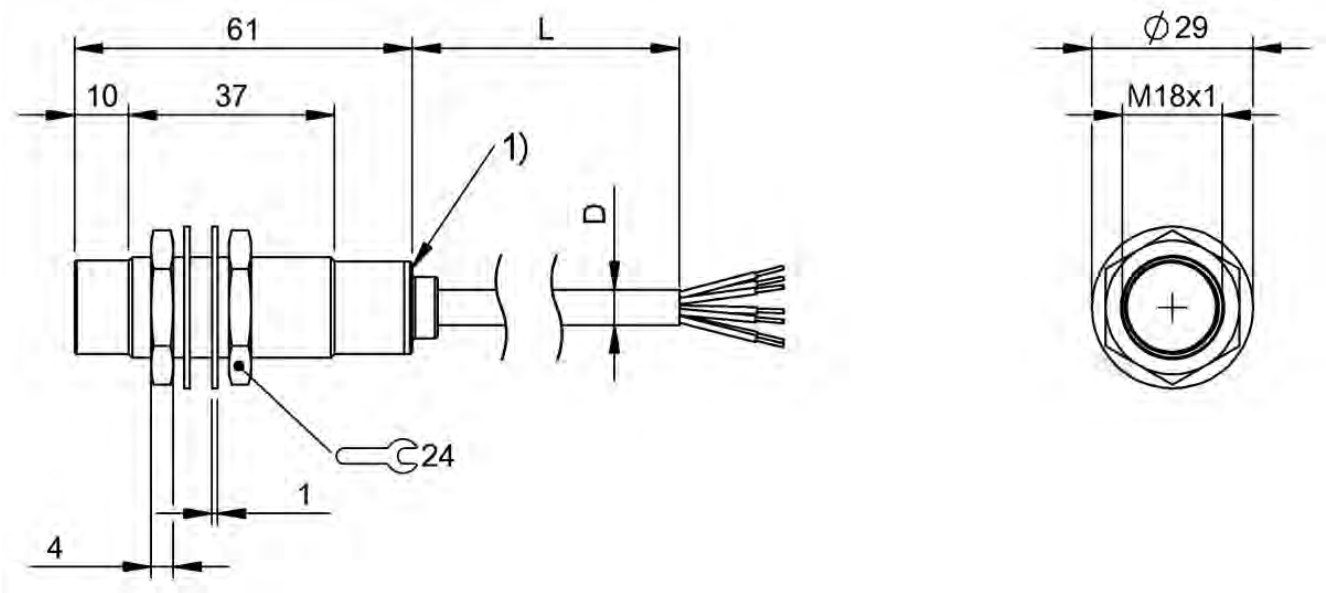


BIC0078



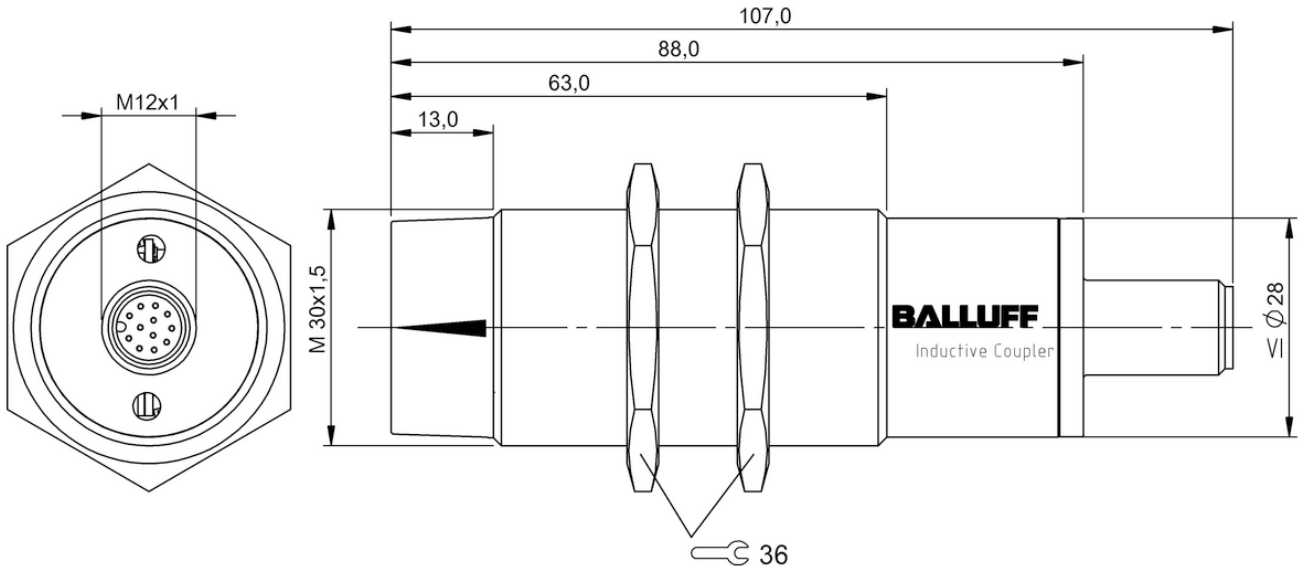
1) LED function indicator

BIC007T

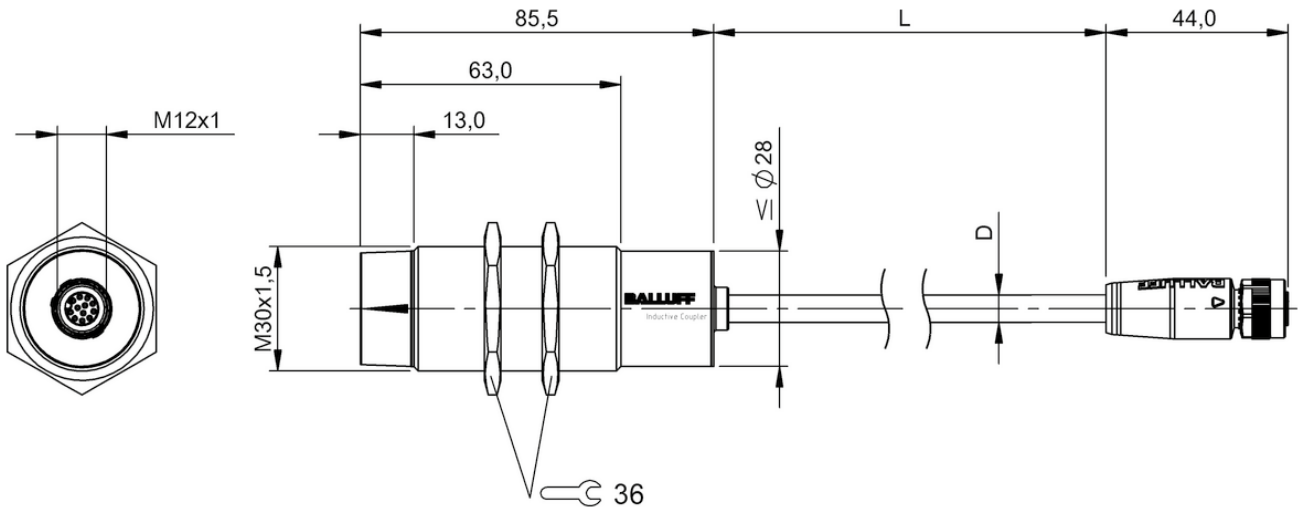


1) LED function indicator

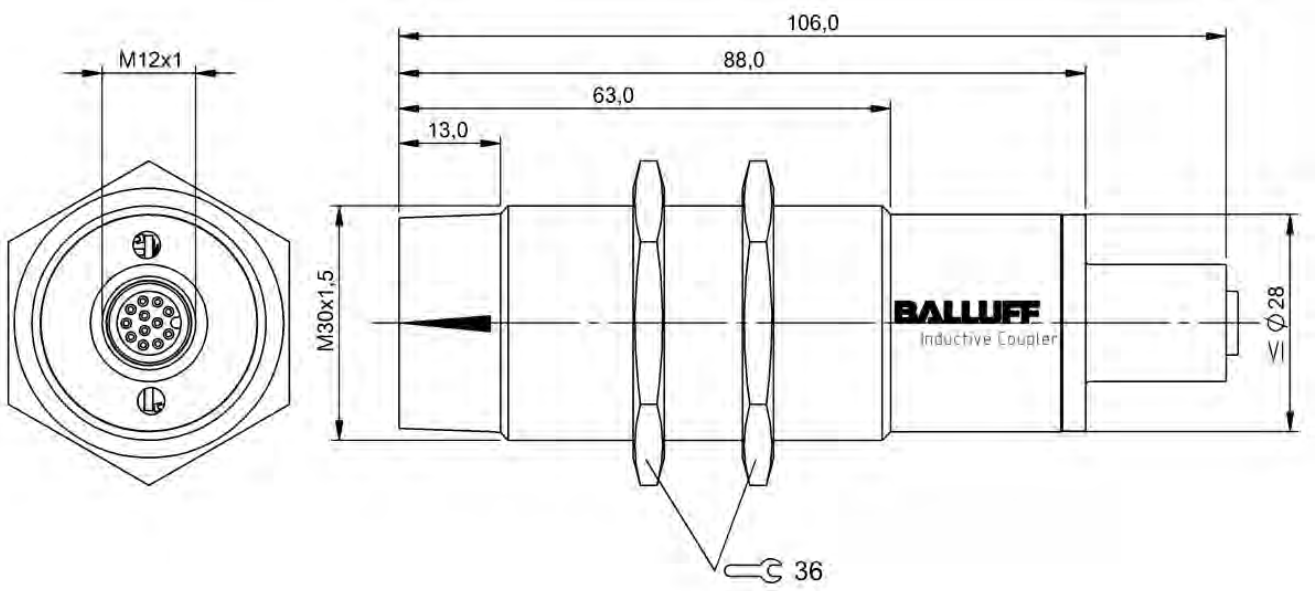
BIC007U



BIC0009



BIC005J


M12x1
106,0
88,0
63,0
13,0
M30x1,5
BALLUFF
Inductive Coupler
Ø28
36

BIC000A

	BIC0007 BIC 1P0-P2A50-M30MI3-SM4A4A	BIC0008 BIC 2P0-P2A50-M30MI3-SM4A5A	
Function	Power only	Power only	
Transmission distance	0...5 mm	0...5 mm	
Component	Base	Remote	
Connection	Connector, M12x1, 4-pin	Connector, M12x1, 5-pin	
Rated operating voltage Ue	24 VDC	—	
Output voltage	—	24 VDC	
Rated output current	—	500 mA	
Housing material	Brass, coated	Brass, coated	
Dimension	Ø 30 x 100 mm	Ø 30 x 107.5 mm	
Ambient temperature	-5...55 °C	-5...55 °C	
Protection degree	IP67	IP67	
Productview	Seite 206	Seite 206	




	BIC0075 BIC 1P0-P25A0-Q120AE-SA3A40	BIC0076 BIC 2P0-P25A0-Q120AE-SA3A40	BIC0073 BIC 1P0-P25A0-Q120AE-SA3A50	BIC0074 BIC 2P0-P25A0-Q120AE-SA3A50
	Power only	Power only	Power only	Power only
	0...4 mm	0...4 mm	0...4 mm	0...4 mm
	Base	Remote	Base	Remote
	Connector, 7/8“, 4-pole	Connector, 7/8“, 4-pole	Connector, 7/8“, 5-pole	Connector, 7/8“, 5-pole
	24 VDC	—	24 VDC	—
	—	24 VDC	—	24 VDC
	—	5 A	—	5 A
	Aluminum, black anodized	Aluminum, black anodized	Aluminum, black anodized	Aluminum, black anodized
	120 x 45 x 120 mm	120 x 45 x 120 mm	120 x 45 x 120 mm	120 x 45 x 120 mm
	-10...50 °C	-10...50 °C	-10...50 °C	-10...50 °C
	IP67	IP67	IP67	IP67
	Seite 207	Seite 207	Seite 207	Seite 207