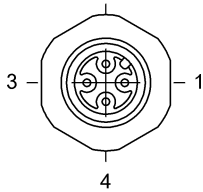


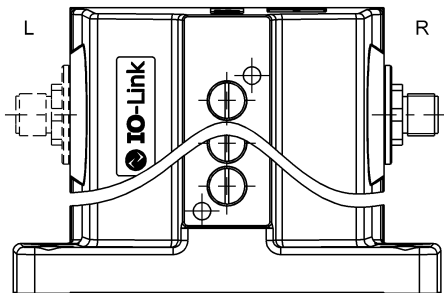


## Connector Drawings



View of connector side

## Wiring Diagrams



PIN 1: +24V  
PIN 3: 0V  
PIN 4: IO-Link



## Help Views

### BNS with IO-Link from 1 up to 16 positions

Frame type: 2.1  
 Process data length: 1 Byte

#### Process data image:

Process data: ≤ 8 positions							
Byte 0							
7	6	5	4	3	2	1	0
NO / NC 8	NO / NC 7	NO / NC 6	NO / NC 5	NO / NC 4	NO / NC 3	NO / NC 2	NO / NC 1

Process data: > 8 positions															
Byte 0								Byte 1							
7	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0
NO / NC 16	NO / NC 15	NO / NC 14	NO / NC 13	NO / NC 12	NO / NC 11	NO / NC 10	NO / NC 9	NO / NC 8	NO / NC 7	NO / NC 6	NO / NC 5	NO / NC 4	NO / NC 3	NO / NC 2	NO / NC 1

#### On-request data:

	DPP	SPDU		Object name	Length	Range	Default value	
	Index	Index	Sub-Index					
Identification Data	0x07			Vendor ID	2 Byte	read only	0x0378	
	0x08			Decice ID	3 Byte		0x01010X X = No. of positions	
	0x09							
	0x0A							
	0x0B							
		0x10	0	Vendor name	7 Byte		BALLUFF	
		0x11	0	Vendor text	15 Byte		www.balluff.com	
		0x12	0	Product name	31 Byte		BNS 819-xxx-xxx-xx-S4x-I	
		0x13	0	Product ID	7 Byte		BNSxxxx	
		0x14	0	Product text	10 / 11 Byte		BNS xx-fach	
	0x16	0	Hardware Revision	2 Byte				
	0x17	0	Firmware Revision	2 Byte				
Programmable Data		0x40	0	NO / NC	≤ 8 positions = 1 Byte	0x00 - (2^positions)-1 (1 Bit = 1 position)	"0"	
			> 8 positions = 2 Byte					
		1 - 16		1 Byte	"0" Not inverted "1" inverted			

#### Errors:

Class			Error Code	Additional Code
Mode	Type	Instance		
single shot	Error	AL	Device application error	Index not available
0x40	0x30	0x03	0x80	0x11
	0x73		0x80	0x11
single shot	Error	AL	Device application error	Sub-Index not available
0x40	0x30	0x03	0x80	0x12
	0x73		0x80	0x12

#### Input data: No input data available