

Mechanical Cam Switches
BNS 819-B04-D08-46-12-S4R-I
Order Code: BNS046E

BALLUFF

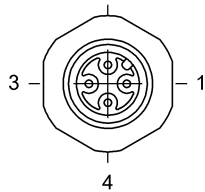
Output/Interface

Cycle time min.	3 ms
Interface	IO-Link 1.1
Process data cycle min.	3 ms

Range/Distance

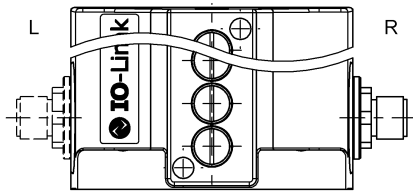
Reproducibility	1-4. Switch position: ± 0.02 mm
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Connector Drawings



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	Index	Sub-Index				
Identification Data	0x07				Vendor ID	2 Byte	read only	0x0378
	0x08				Decice ID	3 Byte		0x01010X X = No. of positions
	0x09							BALLUFF
	0x0A							www.balluff.com
	0x0B							BNS 819-xxx-xxx-xx-S4x-I
								BNSxxxx
		0x10	0		Vendor name	7 Byte		BNS xx-fach
		0x11	0		Vendor text	15 Byte		
		0x12	0		Product name	31 Byte		
		0x13	0		Product ID	7 Byte		
	0x14	0		Product text	10 / 11 Byte			
	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"
				1 - 16		> 8 positions = 2 Byte		
						1 Byte		

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		0x11	
single shot	Error	AL	Device application error		Sub-Index not available	
0x40	0x30	0x03	0x80		0x12	
			0x73		0x12	

Input data: No input data available