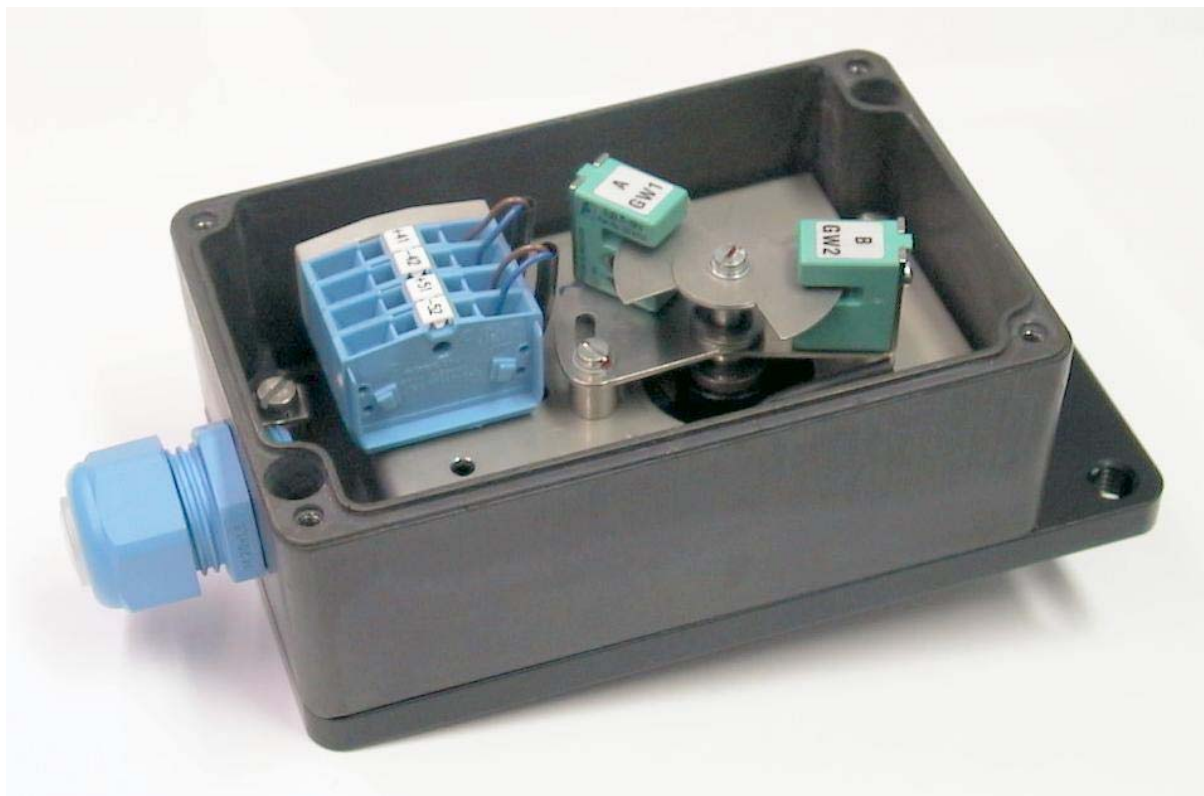


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# Technical Data Sheet

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## Signal Box 827.S

**Inductive proximity switches (slot initiators)  
for linear and part-turn actuators**

# Technical Data Sheet



## Technical Data

### 1. Basic Instrument

<b>Signal box</b>	827S. . . .
<b>Angular range</b>	60° for linear valves (10 - 120 mm) and 90° for part-turn valves
<b>Ambient temperature</b>	- 40 to + 80 ° C
<b>Connections</b>	
cable gland	1 x M20 x 1,5
cable terminals	suitable for max. 2,5 mm <sup>2</sup>
<b>Protection class</b>	IP 66
climate class	ZQF acc. to DIN 40040
<b>Weights</b>	0,8 kg

# Technical Data Sheet



## Technical Data

### 2. Inductive limit-value transmitter

Execution	827S.	X	.	1
Standard	2-core system acc. to DIN 19234 (NAMUR), for secondary switching amplifier			
2 slotted switch initiators	Type SC 3,5 NO-BU			
Function	NC, normally closed			
Switching difference	≤ 1 %			
Control current circuit	see secondary switching amplifier			
Explosion proof Zone 1+2 (gas)	Initiators II 2 G EEx ia II CT6 ①		Body II 2 G/D EEx e II	
Conformity certificate	PTB 99 ATEX 2219 X		PTB 98 ATEX3101 U	
Explosion proof Zone 20+22 (dust)	Initiators II 1D Ex ia D 20T...°C ①		Body II 2 G/D EEx e II	
Conformity certificate	ZELM 03 ATEX 0128 X		PTB 98 ATEX3101 U	
EMV conformance	EN 60947-5-2 and DIN 19234			

Execution	827S.	X	.	2
Intrinsically safe execution	2-core system acc. to DIN 19234 (NAMUR) for switch amplifier in safety execution (to be supplied by user)			
2 slotted switch initiators	Type SJ 3,5 SN			
Function	NC, normally closed			
Switching difference	≤ 1 %			
Control current circuit	see secondary switching amplifier			
Explosion proof Zone 1+2 (gas)	Initiators II 2 G EEx ia II CT6 ①		Body II 2 G/D EEx e II	
Conformity certificate	PTB 00 ATEX 2049 X		PTB 98 ATEX3101 U	
Explosion proof Zone 20+22 (dust)	Initiators II 1D Ex ia D 20T...°C ①		Body II 2 G/D EEx e II	
Conformity certificate	ZELM 03 ATEX 0128 X		PTB 98 ATEX3101 U	
EMV conformance	EN 60947-5-2 and DIN 19234			

Execution	827S.	E	.	3
Direct switching execution	3-core system with integrated switching for direct switching			
2 slotted switch initiators	Type SB 3,5 E2			
Function	NO, normally open			
Switching difference	≤ 1 %			
Operating voltage	10...30 V DC			
max. output current load	100 mA			

① only in combination with corresponding ex-proof switching amplifier

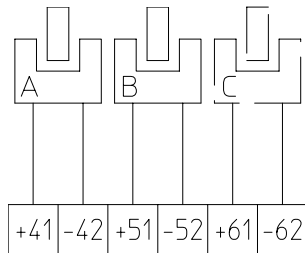
# Technical Data Sheet



## 3. Description of function

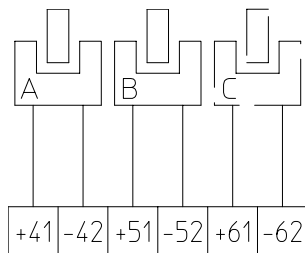
### 3.1 Standard execution (2-wire, N)

The proximity switches acc. to DIN 19234 or acc. to NAMUR respectively, are simple DC-switches in 2-core execution. The signals of the switches can be transmitted by means of a separate switch amplifier (to be supplied by customer). The values of current and voltage are so low that these proximity switches can be used - in combination with suitable switching amplifiers - in explosion hazardous zones. (protection class „intrinsically safe“) Generally, the switches have opening (NC) function.



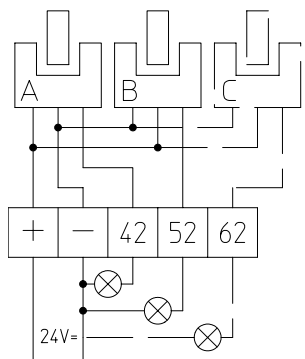
### 3.2 Safety system (2-wire, SN)

These proximity switches correspond to the standard execution, but with an additional function: In case of an error report of proximity switch, amplifier, or connecting cable, the output signal goes automatically into the safe „Out“- position (=logical „0“). Generally, the switches have opening (NC) function.



### 3.3 Direct switching execution (3-wire, E2)

The proximity switches of this type are provided with an integrated amplifier and have separate connections for current supply and load. This type must not be used in explosion hazardous zones. The switches have generally closing (NO), plus-switching (E2) function.

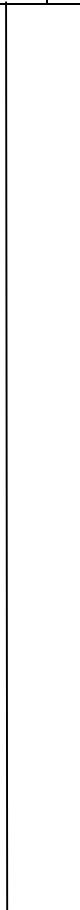
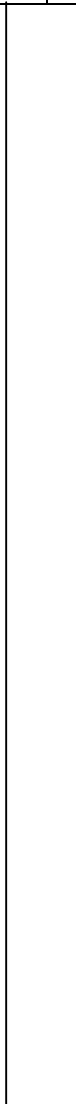
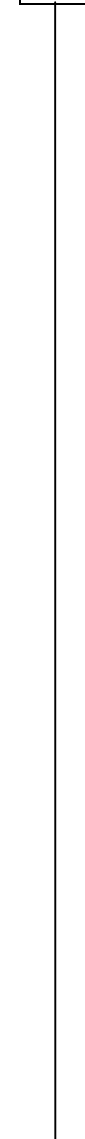


# Technical Data Sheet



## 4. Type Code

827	S.			
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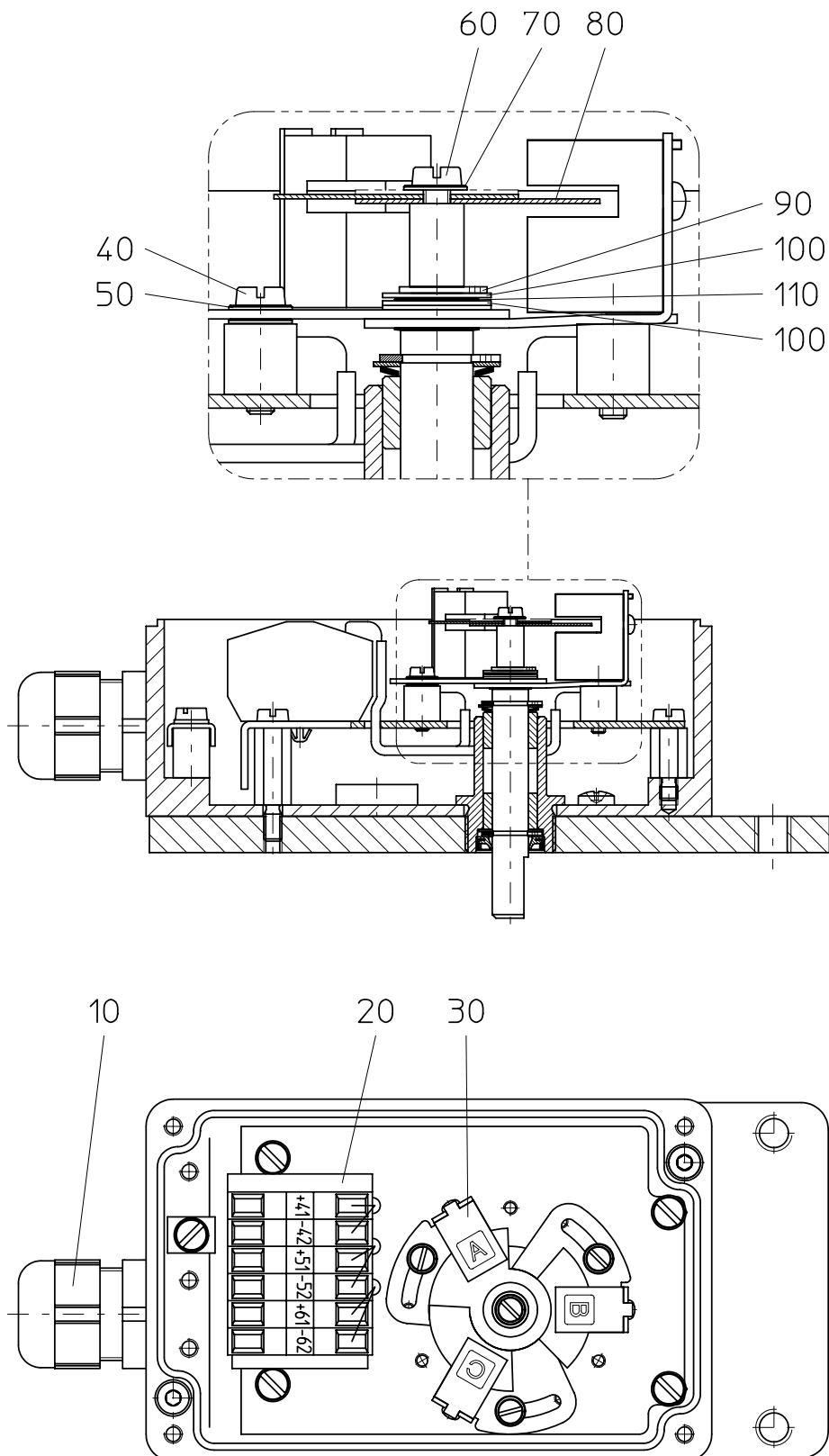
Series

- Limit Switch (inductive)
  - 1** standard type SC 3,5 N0-BU
  - 2** intrinsically safe type SJ 3,5 SN
  - 3** direct switching type SB 3,5 E2
  
- Quantity
  - 1** 1 initiator
  - 2** 2 initiators
  - 3** 3 initiators
  - X** 3 initiators (concurrent switching)
  
- Ex-Proof
  - E** w/o
  - X** with EEx i
  
- Operating Mode
  - S** signal box

# Technical Data Sheet



## 5. Design



# Technical Data Sheet



Pos.	Description
10	cable union
20	terminal block
30	proximity initiator
40	screw
50	washer
60	screw
70	washer
80	switch actuating disk
90	snap ring
100	washer
110	spring washer

## 6. Dimensions

