



bar



barswitchcontrol[®]

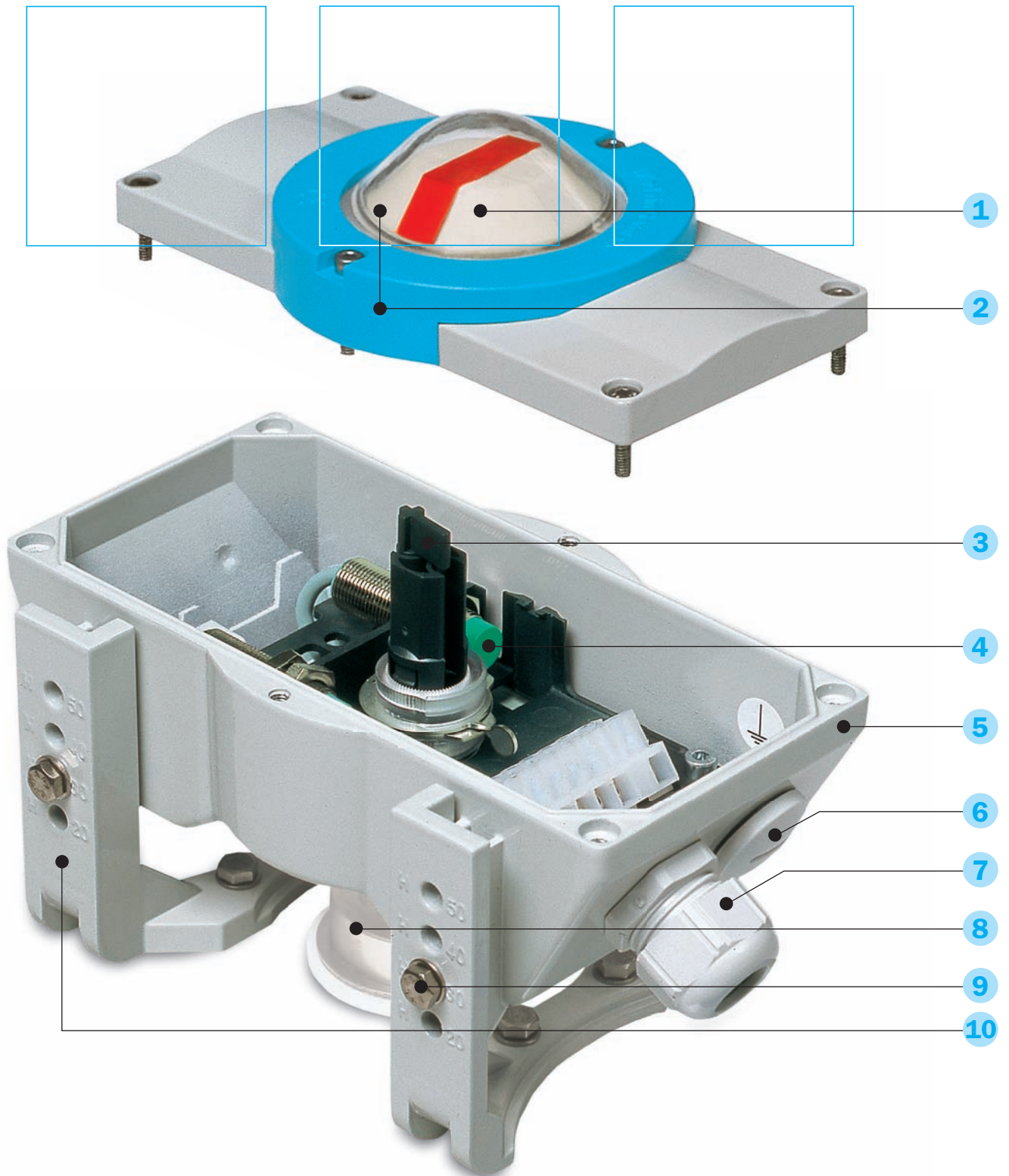
The robust opto-electric position indicator

The advantages of the **barswitchcontrol**[®] at a glance

Description

Advantages

1	clearly visible position display not only for the OPEN/ CLOSED position, but also the flow path	good visibility from far away enables recognition of the flow paths of a 2-way or a 3-way valve
2	ATEX-compliant design via NAMUR switch and special coating of the plastic components	clear recognition of the switching position of valves, even in explosion-protected areas
3	easy and fast adjustment of the switch points	time and therefore cost savings
4	available in various switching configurations including AS-interface communication	large field of application, even in explosion-protected areas, modular construction, means very short delivery times
5	robust construction: Aluminium die-cast housing	non-sensitive to external impacts
6	optional version with climatic valve to avoid condensed water inside housing	guarantees better service life for the electrical components and prevents corrosion
7	up to four cable entries possible	very simple wiring and afterwards re-wiring of solenoids in the bar-switchcontrol
8	easy access to driving pinion	manual operation of the actuator possible, cost-saving mounting of box
9	adjustable heights of 20, 30, 40 and 50mm to accommodate different pinions	bar-switchcontrol can be mounted to all actuators, being equipped with a signal unit interface according to VDI/VDE 3845
10	universal mounting of the switchcontrol to units with NAMUR size 80 & 130 via interchangeable feet	reduces the number of spare parts to be kept in stock
	precision-bearing on driven shaft	exact switching during the whole life-cycle of the unit
	easy removal of the complete camshaft from the housing	enables easy and rapid servicing
	all components made from corrosion-resistant or corrosion-protected materials	extensively wide field of application



barswitchcontrol® ...

... imaginative, economical, and unique.

The advantages, one by one:

Adjustable height for different pinion lengths with 20, 30, 40 and 50mm.

What's special:

The feet of the bar-switchcontrol can be easily and quickly adjusted in height; exact and safe.



Advantage:

The bar-switchcontrol can be mounted on all makes of actuator which are fitted with a signal unit interface acc. to VDI/VDE 3845.

Universal mounting on NAMUR dimensions of 80 x 30 and 130 x 30mm.

What's special:

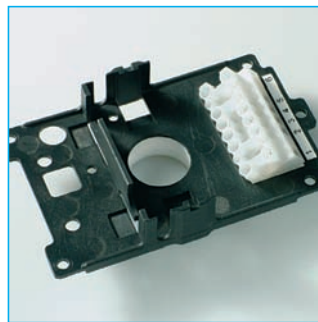
The bar-switchcontrol is delivered as standard for 80 x 30 mounting. To change over to 130 x 30, simply exchange the feet.

Advantage:

Simplified and reduced storage of spares.
Rapid mounting.



The flow paths of the valve are displayed via the red markings, which can easily be adapted to the application.

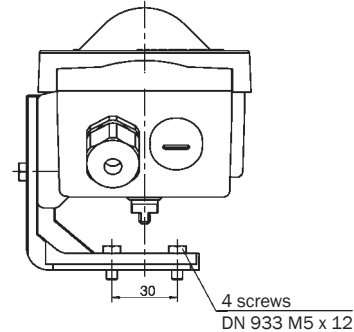
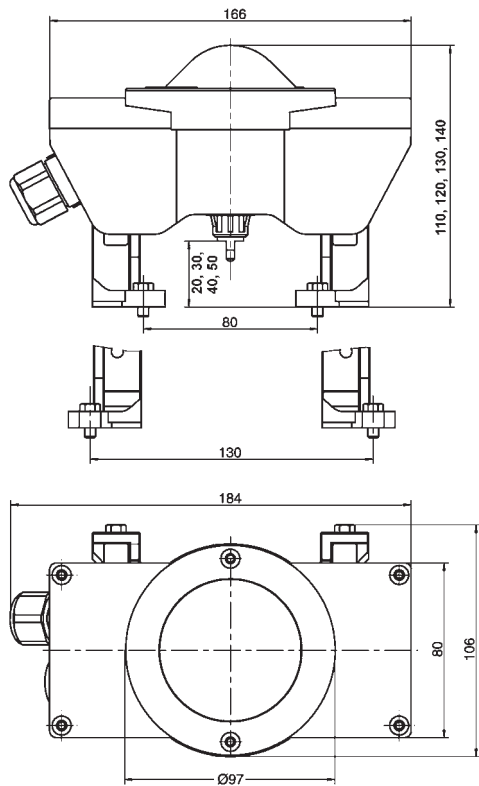


The design of the board enables the mounting of four different types of switches as well as the mounting of the terminal connector block.



Universal actuating cams

The patented actuating cam controls the electro-mechanical or proximity switch. Proximity switches can be operated either damped or undamped. The actuating point is easily and quickly adjusted using the setting tool. Robustness and form play a key role in the connection between actuating cam and shaft which guarantee actuating point stability.



- 1 dimensions 20, 30, 40, 50 via height adjustment of feet
- 2 dimension 130 achieved via exchange of feet
- 3 110 (20), 120 (30), 130 (40), 140 (50) to accommodate pinion lengths

Technical Data

Mounting criteria:	according to VDI/VDE 3845 for interfaces 30 x 80 and 30 x 130 (see drawing)
Materials:	
Housing parts:	Aluminium, resin-coated
Viewing glass:	PMMA, anti-static coating for ATEX version
Screws:	stainless steel
Blanking plugs and cable glands:	PA
Cover:	ABS+PC
Protection type:	IP 67
Temperature range:	-20° C up to +70° C
Cable gland:	M20 x 1,5; clamp range 7–13 mm
Cable:	\varnothing 7–13 mm; 2,5 mm ² max.
Weight:	0,8 kg
Display and switch range:	0 to 180° pivoting angle

Technical details of the **barswitchcontrol**® variations

Different standard switching types:

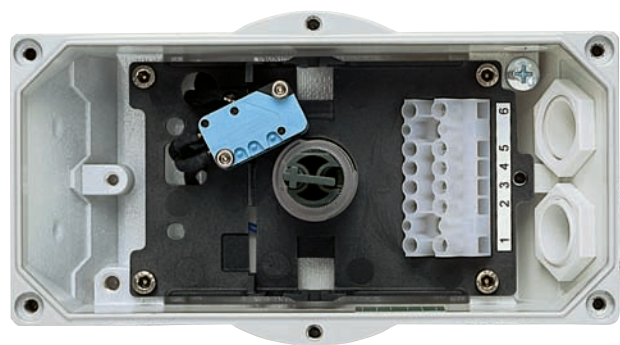
What's special:

Different types of switches enable modular constructions in ex and non-ex areas.

Microswitch

type SC-M2

Voltage range: up to 250V/AC
 Permanent current: 16A
 Contacts: silver-plated
 Switching function: SPDT change-over



Proximity round sensor

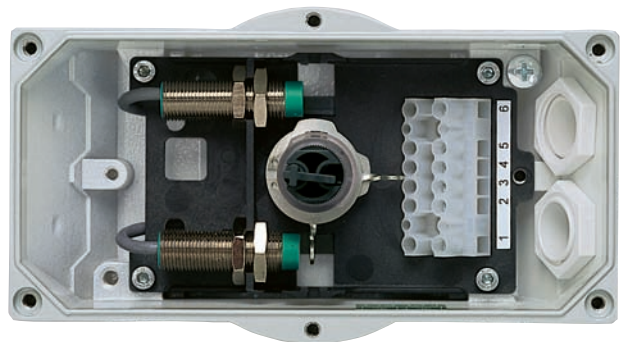
type SC-D2

(signal „open + closed“)

type SC-DA (signal „open“)

type SC-DZ (signal „closed“)

Voltage range: 10–30V/DC
 Operating current I_i : 0–100mA
 Idling current I_o : <15mA
 Switching function: PNP normally closed



Proximity round sensor


type SC-N2

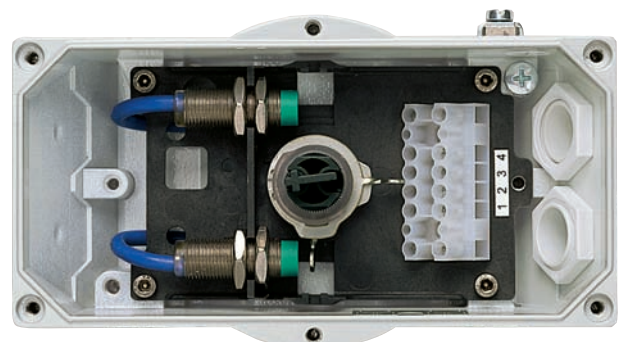
NAMUR

(signal „open + closed“)

type SC-NA (signal „open“)

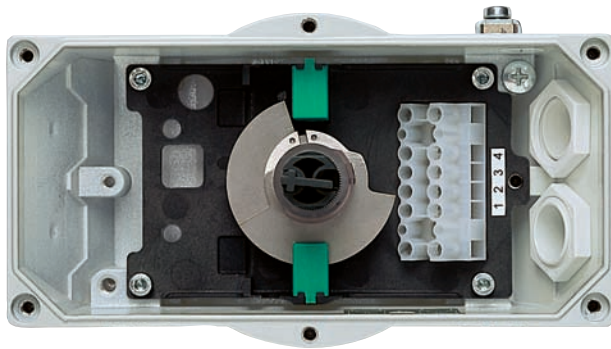
type SC-NZ (signal „closed“)

Rated voltage U_o : 8V/DC
 Current input: damped <1mA;
 undamped >3mA
 Switching function: NAMUR normally open, with yellow switching position display (LED)
 ATEX marking:  II 2 G Ex ia IIB T6



Advantage:

Wide-ranging application possibilities and short delivery times.
The AS-i bus board can be easily integrated into the bar-switch-control housing.



Inductive slot sensor NAMUR

Rated voltage U_o :

Current input:

Switching function:

ATEX marking:

type SC-NS2

(signal „open + closed“)

type SC-NSA (signal „open“)

type SC-NSZ (signal „closed“)

8V/DC

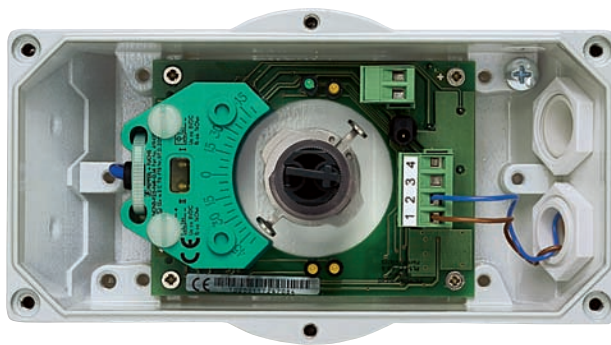
damped <1mA;

undamped >3mA

NAMUR-opener, with yellow

switching position display (LED)

Ⓔ II 2 D Ex ia D21 T 120°



AS-i bus

Operating voltage U_b :

Operating current I_j :

Total current input:

Loading capacity:

(e.g. solenoid valve)

type SC-AS-i

8V/DC

<40mA

<150mA

100mA max.

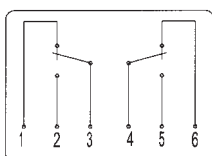
25–30V/DC

max. 2,6W / 24V/DC

Circuit diagrams

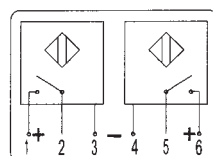
Microswitch

Type SC-M2



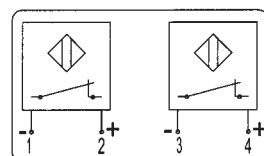
Proximity round sensor

Type SC-D



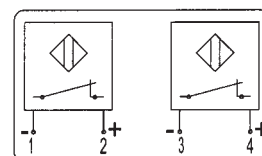
Proximity round sensor

NAMUR Type SC-N



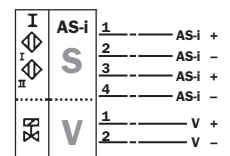
Inductive Slotsensor

NAMUR Type SC-NS



AS-i bus

Type SC-AS-i



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