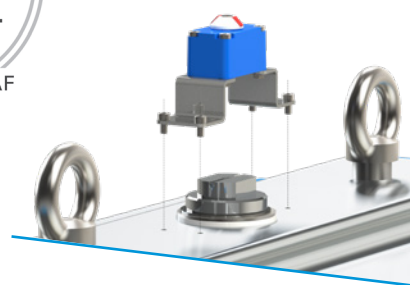


bar-miniswitch®

With patented self-setting

Technical datasheet



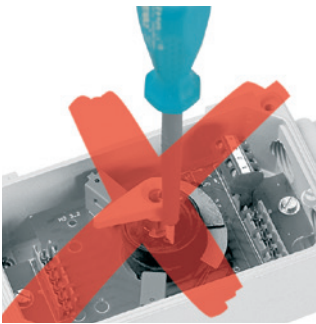
Objective

The optic/electrical position indicator bar-miniswitch was especially conceived for smaller installation space. The electrical connections are pluggable.

bar-miniswitch sets the switching point of the end position itself. Therefore, it does not need to be opened, either for adjusting or for electrical connection.

With our bar-miniswitch limit switch box, the dimensions of the final unit are reduced. Its compact design and plug & play installation minimize installation space and weight.

Fast, easy and safe installation



Automatic adjustment of the switching points

Small & Easy
Safe & Quick

The advantages at a glance

Description	Use
The optimal solution for the smallest actuators	Space-saving and harmonious proportions due to particularly small design
Self-setting switching point of both end positions	Time and cost savings; Switching points are always correctly set
Safety during installation	No need to open the switch housing
Pluggable, electrical connections	Plug & Play: Installation and replacement without qualified personnel possible
Closed direct mounting by means of spacer and adapter plates	Protects the actuators pinion compact, space-saving design
Clear optical position indicator	Good recognition of the flow paths for both for 2/2-way as well as 3/2-way valve
Protection class IP66	Can be used under a wide range of conditions
All components made of corrosion-resistant or corrosion-protected materials	High resistance and durability
Available for mechanical and inductive switches	Wide-ranging application possibilities
Mounting plates and bridge for all drive sizes	Flexible adaptation to all actuator sizes
For mounting dimensions 50 x 25 mm, 80 x 30 mm and 130 x 30 mm available. For pinion extensions of 15, 20 and 30 mm	Flexible application possibilities and suitable for different actuator sizes
Certificates	Certificate No: TAA0000368 to comply with DNV rules for classification – Ships, offshore units, and high speed and light craft

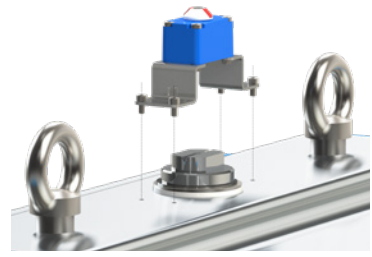
Flexible adaptation to actuator sizes



bar-miniswitch ...
Mounting size 50 x 25 mm,
shaft extension 15 mm

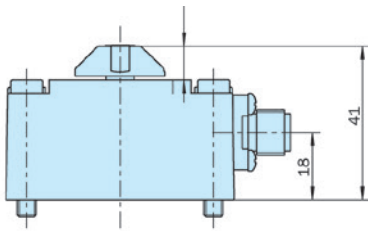


... with 2 distance plates and adapter
plate, mounting size 80 x 30 mm,
shaft extension 30 mm

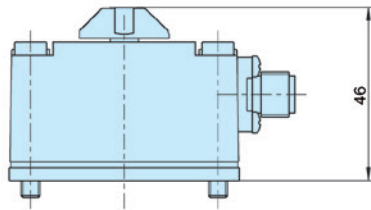


... with mounting bridge, connection
dimensions 80 x 30 and 130 x 30 mm,
optional shaft extension

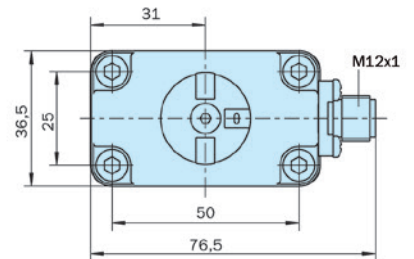
Mounting dimension 50 x 25 mm



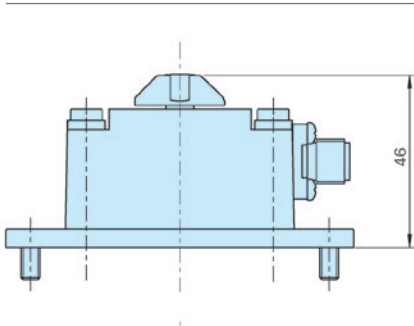
For shaft extension 15
MS-DV-M2-50/25-15
and MS-DV-D2-50/25-15



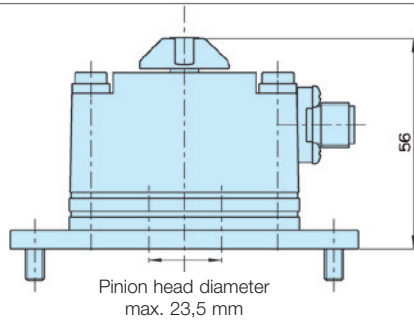
For shaft extension 20
MS-DV-M2-50/25-20
and MS-DV-D2-50/25-20



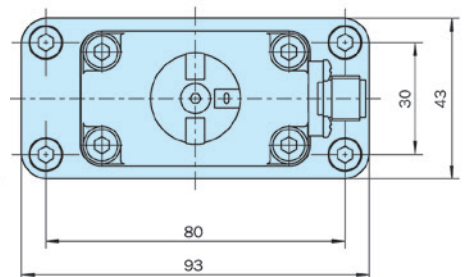
Mounting dimension 80 x 30 mm



For shaft extension 20
MS-DV-M2-80/30-20
und MS-DV-D2-80/30-20



For shaft extension 30
MS-DV-M2-80/30-30
und MS-DV-D2-80/30-30

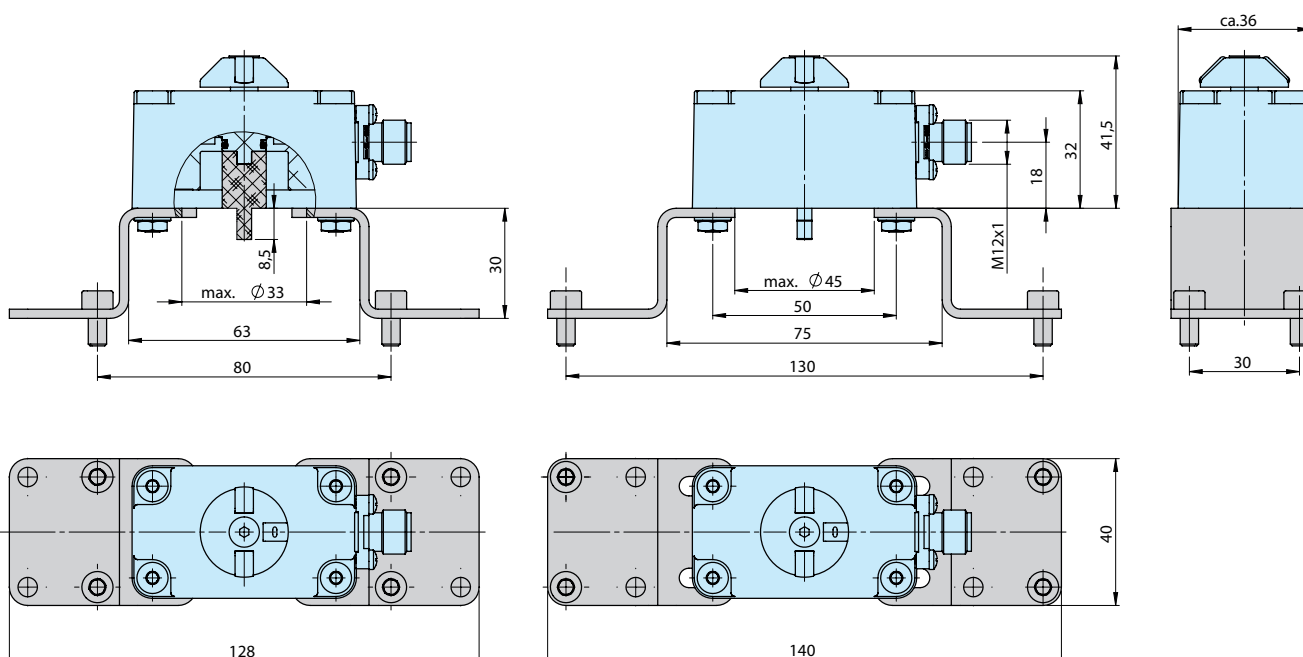


Suitable for these actuator sizes:
actubar® AD/AS-002 to AD/AS-520
bar-agturn® GD-032 and GD-040; GD/GS-052 to GD/GS-105

Technical data

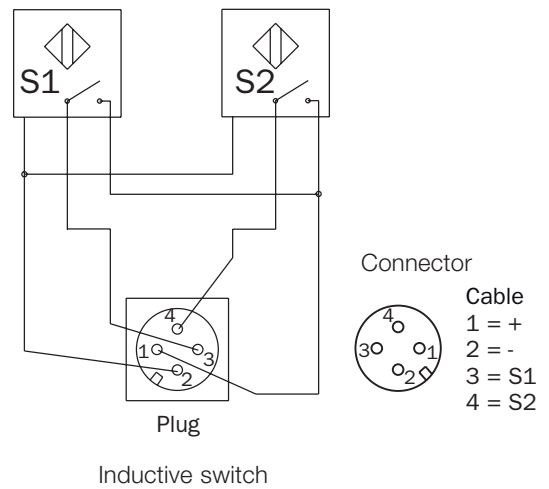
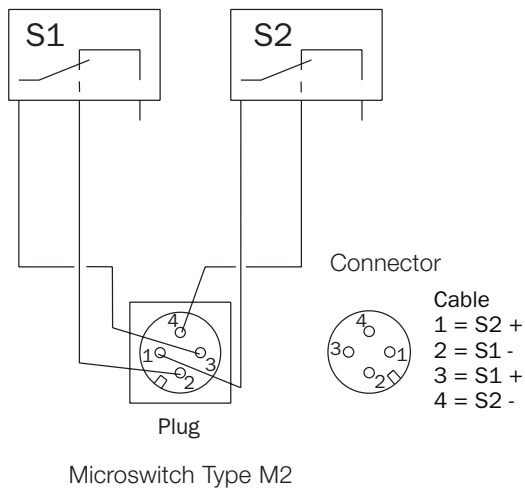
	Technical data
Description compact form	direct-mountable
Mounting size	50 x 25 mm, shaft extension 15 mm and 20 mm with adapter: 80 x 30 mm, shaft extension 20 i.e. 30 mm; with mounting bridge: 130 x 30 mm, shaft extension 30 mm
Constructional features	self-setting, with mechanical microswitches or inductive switches for actuators with 90° pivoting angle; on request for 180° pivoting angle
Mounting position	any orientation
Protection type	IP66
Input voltage	- mechanical: max. 250 V/AC, direct current max. 1 A - inductive: 5 bis 30 V/DC, direct current max. 100 mA
Material	- casing and shaft: plastic - screws: stainless steel A2
Switching functions	- mechanic: Normally open - inductive: PNP normally open
Ambient temperature	- mechanical: -20 °C to +70 °C - inductive: -20 °C to +70 °C
Connection	plug-connector M12x1, 4-pole DIN EN 61076-2-101
Weight	80 – 130 g, depending on model, without mounting bridge

Optional mounting set for fixing dimensions 80 x 30 and 130 x 30 mm



Suitable for these actuator sizes:
 actubar® AD/AS-002 to AD/AS-1200
 bar-agturn® GD-032 and GD-040; GD/GS 052 to GD/GS-400

Switching diagrams



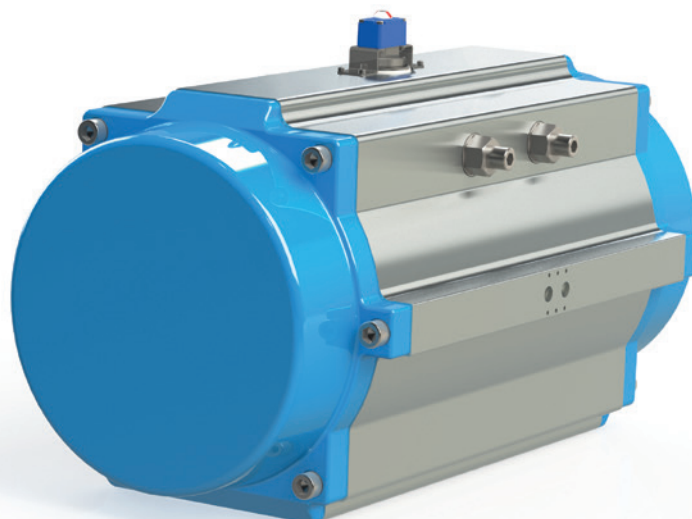
Ordering code

MS-	DV-	M2-	50/25-	15
Type MS	DNV certified	Switch type: M2 = microswitch D2 = inductive, direct-switch	Mounting size: 50 x 25 mm or 80 x 30 mm	Shaft extension: 15 or 20 or 30


Ordering code optional accessory

Mounting bridle 130 x 30 mm incl. shaft extension (please order separately)
MS-Set 80/130x30, Art.-No.: 60103418

Assembly on big actuator sizes



DNV Certificate



Certificate No:
TAA000368

TYPE APPROVAL CERTIFICATE

This is to certify:
That the Limiting Switches

with type designation(s)
bar-miniswitch MS-DV-..., bar-positswitch PH-DV-...

Issued to
bar pneumatische Steuerungssysteme GmbH
Dattenberg, Rheinland-Pfalz, Germany

is found to comply with
DNV rules for classification – Ships, offshore units, and high speed and light craft

Application :
Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.


Location classes:

Type	Temperature	Humidity	Vibration	EMC	Enclosure
bar-miniswitch MS-DV-...	D	B	B	--	C (IP66)
bar-positswitch PH-DV-...	D	B	B	--	C (IP66)

Issued at **Hamburg** on **2022-07-13**

This Certificate is valid until **2027-07-12**.
DNV local station: **Essen**

Approval Engineer: **Holger Jansen**




for DNV
Digitally Signed By: Papanuskas, Joannis
Location: DNV GL SE Hamburg, Germany

Joannis Papanuskas
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.

 Form code: TA 251
Revision: 2021-03
www.dnv.com
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Warranty: All sales and contracts for sale are expressly conditioned on the buyer's assent to bar GmbH terms and conditions found on its website at www.bar-gmbh.de.
bar GmbH hereby objects to any term, different from or additional to bar GmbH terms, contained in any buyer communication in any form,
unless agreed to in a writing signed by an officer of bar GmbH.