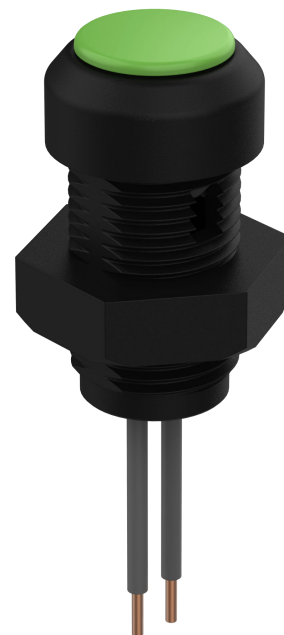


Microtaste grün

145MT00A03

für multifunktionalen Einsatz

- + lange Lebensdauer durch magnetisches Betätigungsprinzip
- + verschleißfreie Reedkontakte für niedrige Schaltströme
- + 2,5 mm Tastenhub
- + hohe Schutzart IP67 für raue Bedingungen



Elektrische Kennwerte

Ausführung 145MT mit Gewinde:

Typ	LED	Kontaktform	Schaltspannung	Schaltstrom	Schaltleistung
145 MT 00A	nein	Schließer	max. 48 V	max. 0,5 A	max. 10 W/VA

Anschlussart

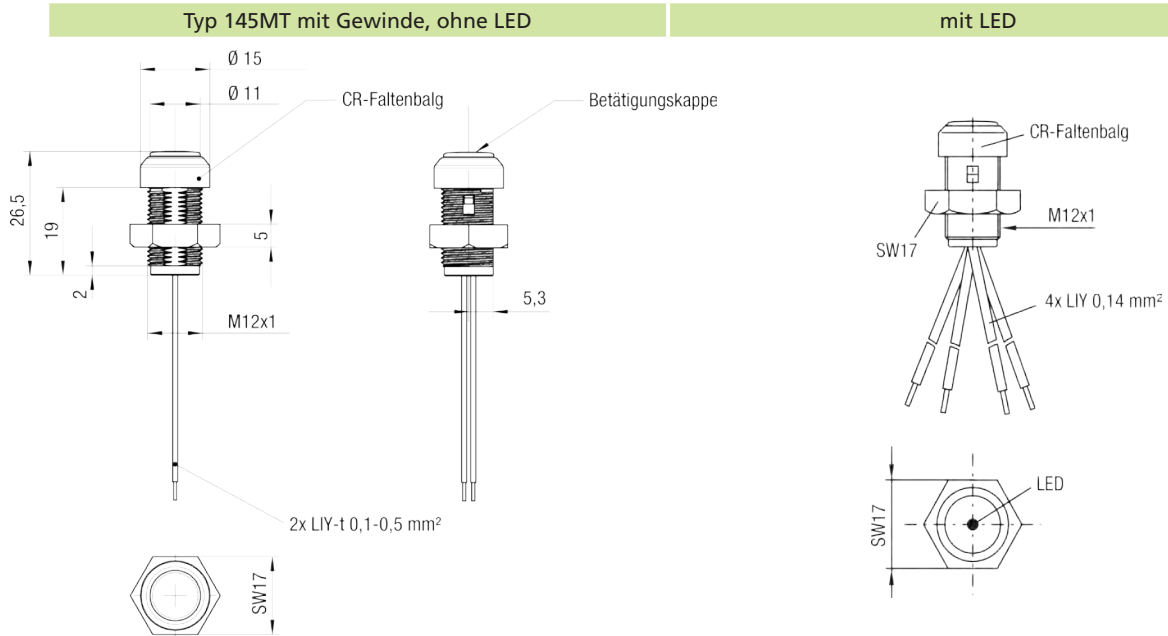
Typ	Litzen
ohne Beleuchtung	2x LIFY mit Ø 0,1 bis 0,5 mm ² möglich, Länge 500 mm ± 30 mm



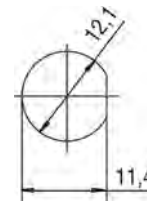
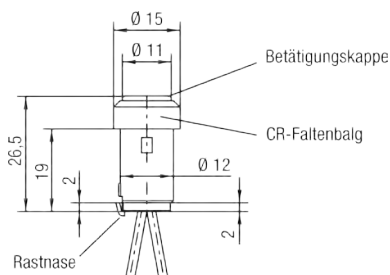
Chemische Beständigkeit

+ Getriebeöl	+ Motoröl	+ Diesel (bedingt)
+ Biodiesel (bedingt)	+ Batteriesäure (bedingt)	+ Reinigungsmittel
+ Benzin	+ Kühflüssigkeit	+ handelsübliche Getränke

Mechanischer Aufbau



Typ 145MT..D mit Rastnase



bei aufgedruckten Symbolen ist eine Fixierung über eine Flanke in der Montageöffnung sinnvoll

Einbaumaße

Einbauöffnung	Bohrung Ø 12 mm
Befestigung	Gewinde M12x1 mit Gegenmutter; Rastnase
Höhe	26,5 mm (Gehäuse mit Betätigerkappe und Faltenbalg)

Mechanische Kennwerte

Technologie	magnetisch betätigter Reedschalter
Lebensdauer	2 Millionen Schaltspiele
Betätigungskraft	mit Druckpunkt: 16 ±4 N ohne Druckpunkt: von 6 ansteigend auf 10 N
Betätigungsweg	ca. 2,5 mm
Anziehmoment der Mutter	1,5 Nm
Material	PEI rauch (Polyetherimid)
Temperaturbereich	-20°C bis +75°C
Schutzart Elektronik	IP67 DIN EN 60529
Anschlusslitzen	500 mm ± 30 mm, Ø 0,1 bis 0,5 mm²

Technische und inhaltliche Änderungen vorbehalten.

Micro push button

for multi-functional use

145MT.....

- + long service life due to magnetic actuation principle
- + different actuator colours and symbols to suit many applications
- + wear resistant reed contact for low switching current
- + 2.5 mm stroke depth
- + high international protection class IP67 for harsh conditions
- + optional LED illumination



Use

This push button is based on reed switch technology, and is therefore suitable for low switching current applications. The 145MT is ideal for control panels or joysticks in industrial vehicle construction. The switching element is completely separate from the actuation mechanism, therefore it fulfills the international protection class IP67 and is suitable for use in harsh applications.



Space-saving installation in multi-function handle

Types

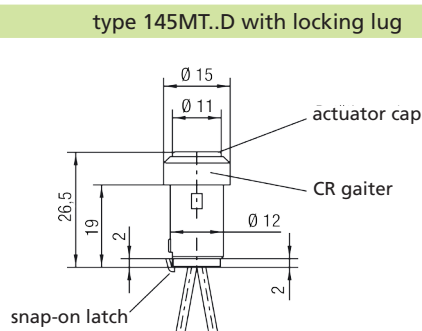
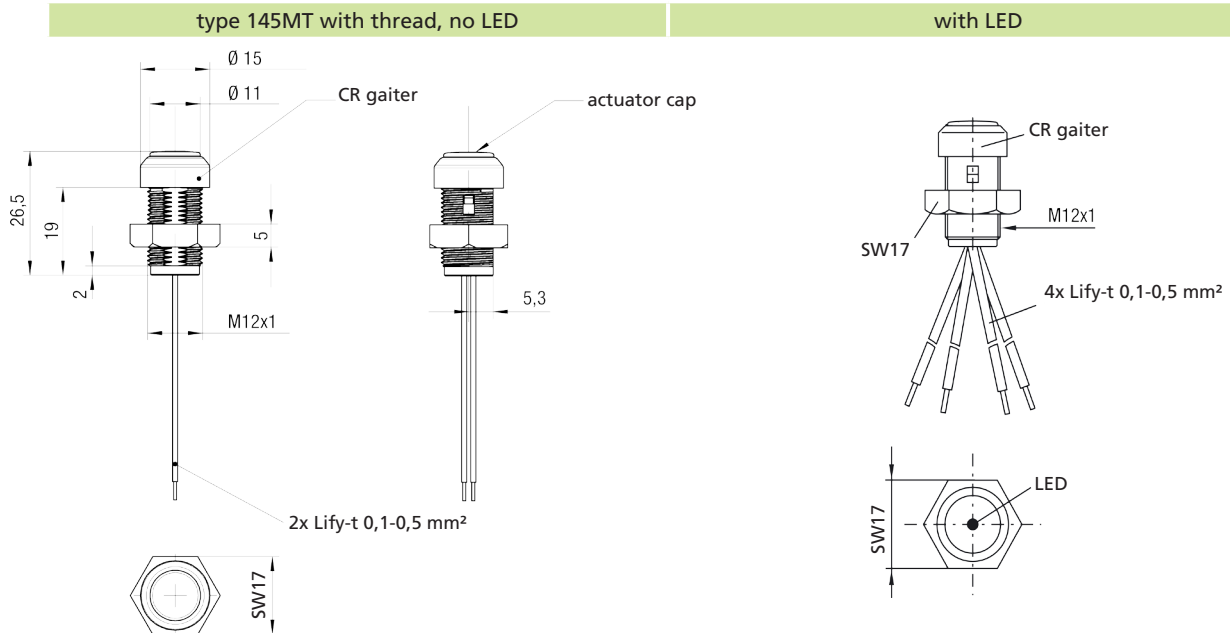


A variety of colours and symbols can be selected, as well as the option of illumination with an LED spotlight



Attached by locking lug (type MT..D) or thread with locking nut

Mechanical assembly



When special symbols are printed, it is recommended to install the push button in a D shaped mounting hole.

Installation dimensions

Mounting cut-out	drill hole Ø 12 mm
Mounting	mounting hole Ø 12 mm; snap-on lug
Height	26.5 mm (housing with actuator cap and gaiter)

Key mechanical data

Technology	magnetically actuated Reed switch
Life time	2 million switching operations
Actuation force	with feel point: 16 ± 4 N without feel point: from 6 up to 10 N
Actuation travel	approx. 2.5 mm
Nut tightening torque	1.5 Nm
Material	PEI smoke (polyetherimide)
Operating temperature range	-20 °C to +75°C (-4 °F to +167 °F)
International protection electronics	IP67 DIN EN 60529
Connection wires	500 mm \pm 30 mm, Ø 0.1 to 0.5 mm ²

Technical data and content subject to change without notice.

illumination

The button can also be illuminated by an LED fitted in the middle of the actuator cap.



Illumination colours available:

<input checked="" type="checkbox"/>	red	<input checked="" type="checkbox"/>	green
<input type="checkbox"/>	white	<input checked="" type="checkbox"/>	yellow

Colours and symbols of actuator caps

The following actuator colours are available in the standard range. Other colours are also available on request.

Colour	Colour number
<input checked="" type="checkbox"/> traffic red	RAL3020
<input checked="" type="checkbox"/> signal blue	RAL5005
<input checked="" type="checkbox"/> traffic blue	RAL5017
<input checked="" type="checkbox"/> yellow green	RAL6018
<input checked="" type="checkbox"/> pure orange	RAL2004
<input checked="" type="checkbox"/> traffic orange	RAL2009
<input checked="" type="checkbox"/> rape yellow	RAL1021
<input checked="" type="checkbox"/> slate grey	RAL7015
<input type="checkbox"/> white	
<input checked="" type="checkbox"/> black	



Customised symbols can also be embossed.

The cap has a diameter of 11 mm on standard types, the diameter can be increased to 13 mm to accommodate larger symbols.

Here are a few examples of symbols:



Key electrical data

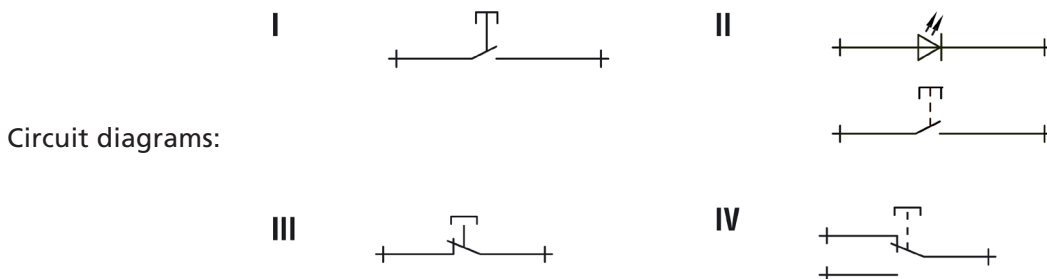
145MT model with thread:

Type	LED	Type of contact	Switching voltage	Switching current	Switching capacity	Circuit diagram
145 MT 00A	no	N.O.	max. 48 V	max. 0.5 A	max. 10 W/VA	I
145 MT 01A	no	N.C.	max. 48 V	max. 0.2 A	max. 1 W/VA	III
145 MT 02A	no	C.O.	max. 48 V	max. 0.2 A	max. 1 W/VA	IV
145 MT 00B	yes ($U_{B,LED} = \text{max. } 48 \text{ V}$)	N.O.	max. 24 V	max. 0.1 A	max. 1 W/VA	II

145MT..D..D model with locking lug:

Type	LED	Type of contact	Switching voltage	Switching current	Switching capacity	Circuit diagram
145 MT 00D	no	N.O.	max. 48 V	max. 0.5 A	max. 10 W/VA	I
145 MT 01D	no	N.C.	max. 48 V	max. 0.2 A	max. 1 W/VA	III
145 MT 02D	no	C.O.	max. 48 V	max. 0.2 A	max. 1 W/VA	IV
145 MT 00E	yes ($U_{B,LED} = \text{max. } 48 \text{ V}$)	N.O.	max. 24 V	max. 0.1 A	max. 1 W/VA	II

Connection



Connection type

Type	Wires
No illumination	2 x Lify with $\varnothing 0.1$ to 0.5 mm^2 possible, length $500 \text{ mm} \pm 30 \text{ mm}$
With illumination	4 x Lify $\varnothing 0.14 \text{ mm}^2$, length $500 \text{ mm} \pm 30 \text{ mm}$



Wires can be attached to all standard connector types, such as Molex or AMP. Please ask your sales contact for more information.

Chemical resistance

+ transmission oil	+ engine oil	+ diesel (limited)
+ biodiesel (limited)	+ battery acid (limited)	+ cleaning agent
+ petrol	+ coolant	+ common drinks

Part numbers

145MT			
	0		wires connection
	1		wires connection with connector
	3		cable connection
	6		with series resistor
	0		N.O.
	1		N.C.
	2		C.O.
	9		special model
		A	housing M12x1 without LED
		B	housing M12x1 with LED
		C	M12x1 without LED, large plate
		D	housing Ø 12 with snap- on mounting; without LED
		E	housing Ø 12 with snap-on mounting; with LED
		*	sequence numbers * 01 to 99

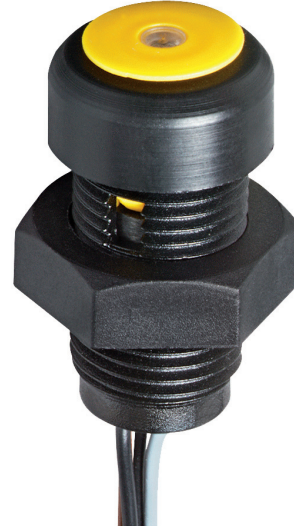
Ordering example

145MT00B	button with wires connection, N.O. and thread housing with LED
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Specifications of your micro push button

Actuation cap colour

Colour	Colour number
<input type="checkbox"/> traffic red	RAL3020
<input type="checkbox"/> signal blue	RAL5005
<input type="checkbox"/> traffic blue	RAL5017
<input type="checkbox"/> yellow green	RAL6018
<input type="checkbox"/> pure orange	RAL2004
<input type="checkbox"/> traffic orange	RAL2009
<input type="checkbox"/> rape yellow	RAL1021
<input type="checkbox"/> slate grey	RAL7015
<input type="checkbox"/> white	
<input type="checkbox"/> black	



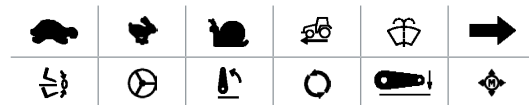
Symbol

- no symbol
- with symbol

sketch here:



Examples:



file available in *.dxf format

- yes
- no

cap Ø 11 mm

cap Ø 13 mm

Connection type

- wires connection without connector
- wires connection with connector

- Molex
- AMP
- other*: _____

* Connector must be suitable for the existing cross section of the wires (Ø 0.1 mm²)

Type and illumination

- 145 MT 00A - thread - N.O. without LED
- 145 MT 01A - thread - N.C. without LED
- 145 MT 02A - thread - C.O. without LED
- 145 MT 00B - thread - N.C. with LED
- 145 MT 00D - snap-on mounting - N.O. without LED
- 145 MT 01D - snap-on mounting - N.C. without LED
- 145 MT 02D - snap-on mounting - C.O. without LED
- 145 MT 00E - snap-on mounting - N.O. with LED

Colour LED

- red
- yellow
- green
- white