

Product manual

Snap-in switch for switches PSE, MSM and MCS 30

CONTENTS

1. PRODUCT DESCRIPTION

2. DATA AND DIMENSIONAL DRAWINGS

2.1. Technical Data

- 2.2. Dimensions of PSE with a Mounting Diameter 19 mm
- Dimensions of PSE with a Mounting Diameter 22 mm
- Dimensions of PSE with a Mounting Diameter 24 mm
- Dimensions of PSE with a Mounting Diameter 27 mm
- Dimensions of PSE with a Mounting Diameter 30 mm
- Dimensions of MSM with a Mounting Diameter 22 mm
- Dimensions of MSM with a Mounting Diameter 30 mm
- Dimensions of MCS 30 with a Mounting Diameter 30 mm

2.3. Cut-out

2.4. Assembling Instruction

3. ORDER NUMBERS

3.1. MSM 22

3.2. Variants Parts List

4. PACKAGING

Änderungen, die dem technischen Fortschritt dienen, bleiben vorbehalten

Seite	Erstelldatum:	Ersteller:	Änderungsdatum:	Geändert von:	Änderungs-Nr.	Datenblatt Nr.	Index
1 of 7	29.09.2005	Birmelin	17.01.07	Birmelin	9353	105.9511	c

1 PRODUCT DESCRIPTION

The advantage of the switches with snap-in mounting is that the switches can be assembled from the front side of the equipment without additional fastening from the rear side. Due to this method of mounting, the metal switches can be used in applications with limited assembly space or where the access to the rear side of the housing is not possible. This means that the switches can adapt where conventional switches will not be applied.

Furthermore, this type of mounting realizes cost savings by a significant reduction of assembly time. The assembly becomes effective by the force fitting of the switch into the drilling hole, whereas the O-Ring will be displaced. After inserting the switch through the drilling hole, the O-Ring expands and the switch is fixed in the drilling hole. It must be pointed out that the panel cut-out is without flash and the set-up of the drilling diameter has to lie in a minimum range of tolerance (+ 0.15 mm to the nominal drilling diameter), so that a protective position of the switch can be guaranteed. Also the thickness of the front panel is important as the position of the switch is determined by the panel thickness. By using sharp objects the switch can be released from the front panel. Therefore, switches with such an assembling technique are only suitable to a minimum extent in applications which are exposed to vandalism.

2 DATA AND DIMENSIONAL DRAWINGS

2.1 Technical Data

The technical data for the assembling of the snap-in switches is listed in this section. The mechanical, electrical and climatical features of the used switches are described in their particular product manuals.

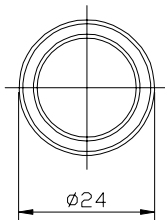
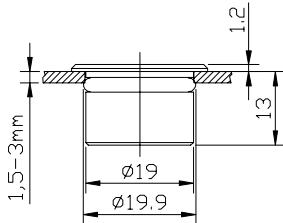
Mounting Diameter	[mm]	19, 22, 24, 27, 30
Standard Front Panel Thickness	[mm]	1.5; 2.0; 2.5; 3.0
Assembly Force	[N]	50 - 100
Drilling Tolerance	[mm]	max. + 0.15 Panel cut-out without flash
Torsion Protection		without Torsion Protection If the switch is assembled in right direction, lettered switches can be used.
ESD-Protection		In combination with a coated or anodised surface of the front panel the ESD protection cannot be guaranteed.

Änderungen, die dem technischen Fortschritt dienen, bleiben vorbehalten

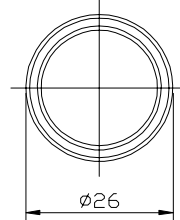
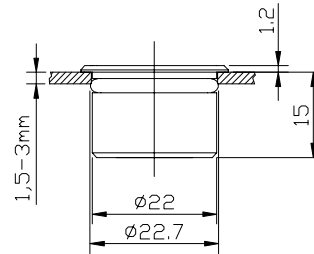
Seite	Erstelldatum:	Ersteller:	Änderungsdatum:	Geändert von:	Änderungs-Nr.	Datenblatt Nr.	Index
2 of 7	29.09.2005	Birmelin	17.01.07	Birmelin	9353	105.9511	c

2.2 Dimensional drawings

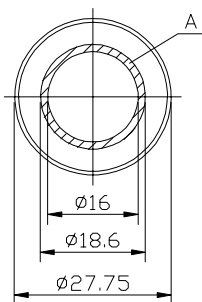
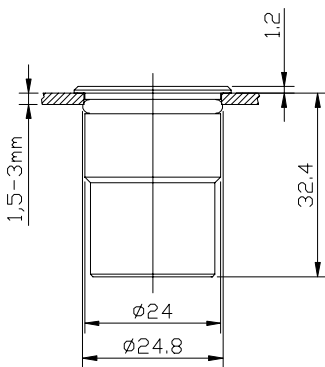
PSE 19



PSE 22

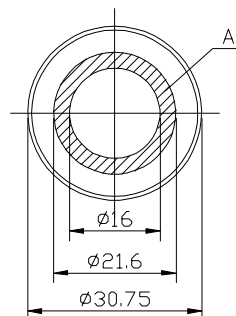
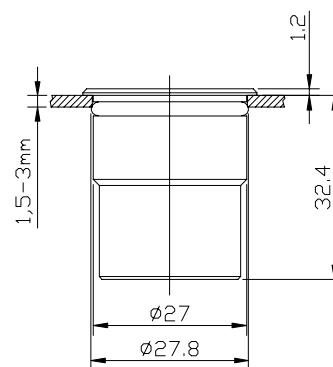


PSE 24 RI



A = Illuminated Surface

PSE 27 RI

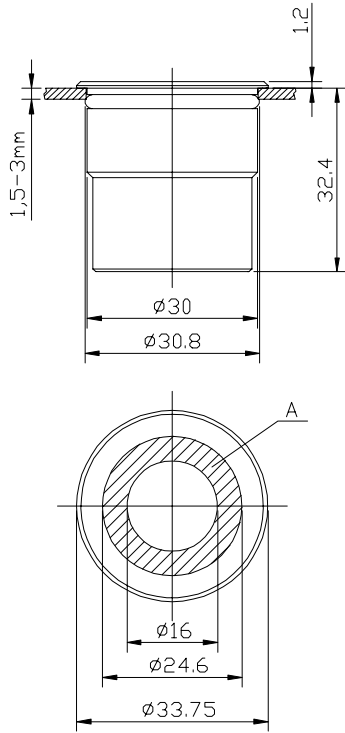


A = Illuminated Surface

Änderungen, die dem technischen Fortschritt dienen, bleiben vorbehalten

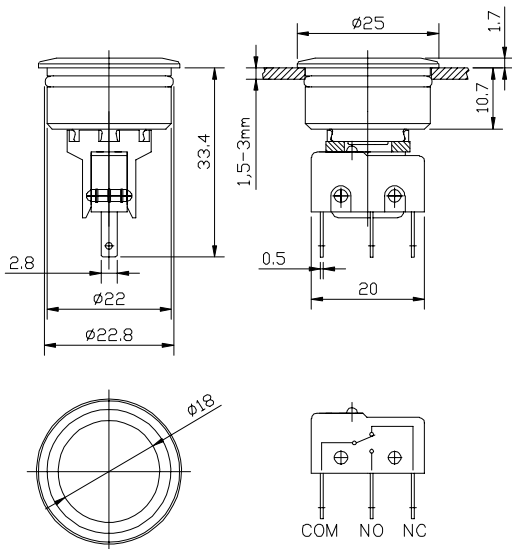
Seite	Erstelldatum:	Ersteller:	Änderungsdatum:	Geändert von:	Änderungs-Nr.	Datenblatt Nr.	Index
3 of 7	29.09.2005	Birmelin	17.01.07	Birmelin	9353	105.9511	c

PSE 30 RI

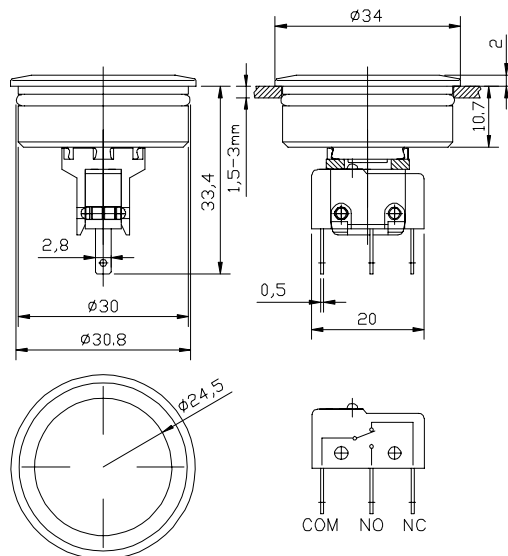


A = Illuminated Surface

MSM 22

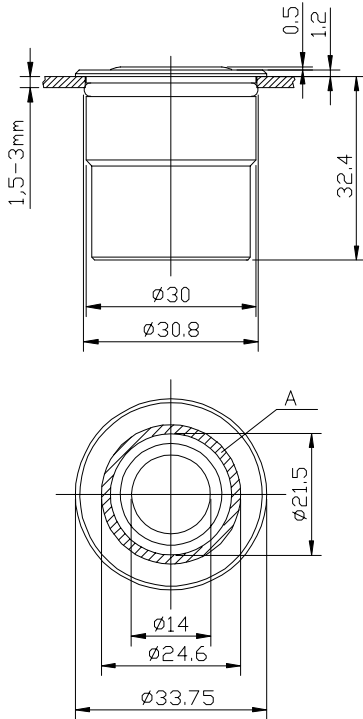


MSM 30



Änderungen, die dem technischen Fortschritt dienen, bleiben vorbehalten							
Seite	Erstelldatum:	Ersteller:	Änderungsdatum:	Geändert von:	Änderungs-Nr.	Datenblatt Nr.	Index
4 of 7	29.09.2005	Birmelin	17.01.07	Birmelin	9353	105.9511	c

MCS 30



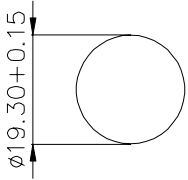
A = Illuminated Surface

Änderungen, die dem technischen Fortschritt dienen, bleiben vorbehalten

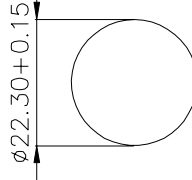
Seite	Erstelldatum:	Ersteller:	Änderungsdatum:	Geändert von:	Änderungs-Nr.	Datenblatt Nr.	Index
5 of 7	29.09.2005	Birmelin	17.01.07	Birmelin	9353	105.9511	c

2.3 Cut-out

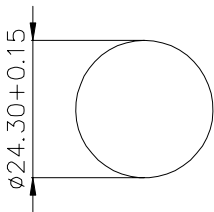
Mounting Diameter 19 mm



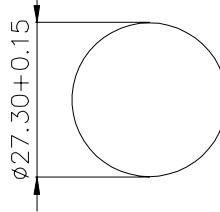
Mounting Diameter 22 mm



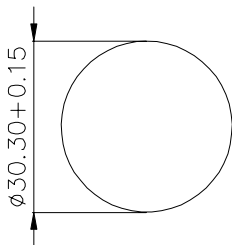
Mounting Diameter 24 mm



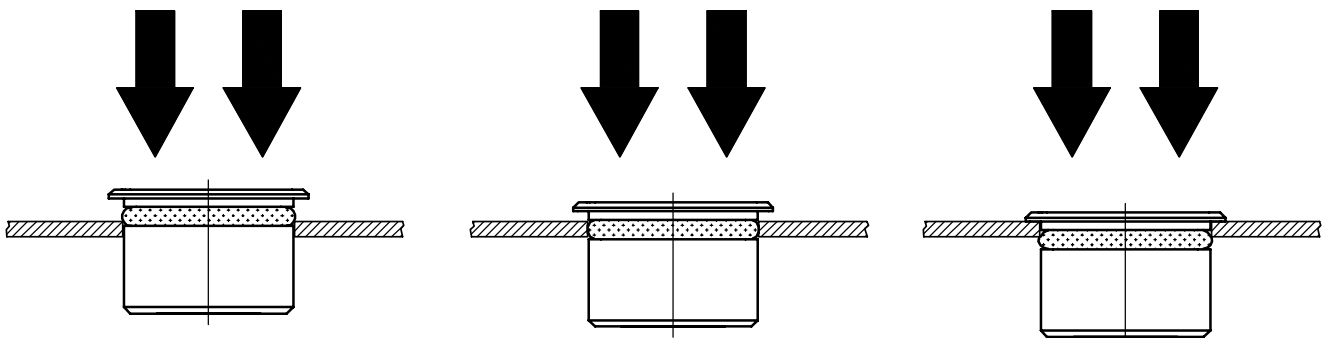
Mounting Diameter 27 mm



Mounting Diameter 30 mm



2.4 Assembling Instruction



Änderungen, die dem technischen Fortschritt dienen, bleiben vorbehalten

Seite	Erstelldatum:	Ersteller:	Änderungsdatum:	Geändert von:	Änderungs-Nr.	Datenblatt Nr.	Index
6 of 7	29.09.2005	Birmelin	17.01.07	Birmelin	9353	105.9511	c

3 ORDER NUMBERS

3.1 MSM 22

Mounting Diameter [mm]	Ø 22	Ø 22
Front Panel Thickness [mm]	1.5	2.0
Electrical Rating	max. 5A / 125VAC or 3A / 250VAC	
Standard	1241.6695.1120000	1241.6699.1120000
Point Illumination - red	1241.6693.1121000	1241.6697.1121000
Point Illumination - green	1241.6693.1122000	1241.6697.1122000

3.2 Variants Parts List

Mounting Diameter (mm)	Ø 19	Ø 22	Ø 24	Ø 27	Ø 30
MSM		X			X
MSM labelled *		X			X
MSM Point Illumination *		X			X
MSM Ring Illumination		X			X
MCS 30 Ring Illumination					X
PSE *	X	X			
PSE Ring Illumination			X	X	X

* The switches are provided without torsion protection.

By a correct positioning of the switch while assembling, also lettered and illuminated switches can be used.

For product requesting, please determine the standard article type and furthermore declare for the snap-in version the thickness of the front panel.

4 PACKAGING

The MSM 22 switches are packaged into a carton with a patterned inlay where 10 parts are included.

The MSM 30 configuration as well as the MCS 30 and the PSE are packaged into boxes either with inlays or with air cushion bags, dependent on the connection configuration.

Änderungen, die dem technischen Fortschritt dienen, bleiben vorbehalten							
Seite	Erstelldatum:	Ersteller:	Änderungsdatum:	Geändert von:	Änderungs-Nr.	Datenblatt Nr.	Index
7 of 7	29.09.2005	Birmelin	17.01.07	Birmelin	9353	105.9511	c