



Position switch ES 95 / EM 95

Features/Options:

- Thermoplastic enclosure
- Design to EN 50047
- Horizontally slotted mounting holes
- Double insulated
- ES 95: Slow action \ominus , change-over contact, change-over contact with overlapping, 2 NC contacts or 2 NO contacts with double break
- EM 95: Snap action, change-over contact with double break
- Snap action with constant contact pressure up to switching point
- Actuator can be repositioned by 4 x 90°
- Good resistance to oil and petroleum spirit
- Gold-plated contacts available on request
- Ex version available
- Corrosion-resistant version with high degree of protection IP 66 available - see chapter [/ ES 95 IP66 Niro Extreme >](#)

Technical data

Applied standards	EN ISO 13849-1, EN 60947-5-1, EN ISO 14119
Enclosure	thermoplastic, glass-fibre reinforced, impact resistant, self-extinguishing UL 94 V-0
Switch type	type 1
Coding level	no coding
Tightening torque	enclosure mounting screws: 1.2 ... 1.3 Nm cover screws: max. 0.7 Nm
Degree of protection	IP 67 to IEC/EN 60529
B_{10d} (10 % load)	2 million
T_M	max. 20 years
Contact material	silver
Switching system	slow or snap action, positive break NC contacts \ominus ; positive break depends on the actuator used
Switching elements	1 NC/1 NO, 2 NC or 2 NO contacts, type Zb
Connection	screw connection terminals
Cable cross-section	max. 2.5 mm ² (incl. conductor ferrules)
Cable entry	1 x M20 x 1.5
Rated impulse withstand voltage U_{imp}	4 kV
Rated operating isolation voltage U_i	400 V
Conventional thermal current I_{the}	6 A
Utilisation category	AC-15; DC-13
Rated operating current/voltage I_e/U_e	6 A/400 VAC; 0.25 A/230 VDC; 4 A/24 VDC
Short-circuit protection	6 A gG/gN fuse
Mechanical life	> 1 million operations

Errors and omissions excepted.



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Technical data

Operation cycles	max. 1800/h
Ambient temperature	-20 °C ... +80 °C
Contact opening	max. 2 x 3.5 mm

Approvals



* depending on the variant (see » Certificates)

Ordering details



Plunger with collar W, * with safety function

* with safety function

Type
ES 95 W 1Ö/1S
ES 95 W 1S/1Ö UE
ES 95 W 2Ö
ES 95 W 2S
EM 95 W 1Ö/1S

Material no.
1049911
1050169
1050303
1050460
1050060



Roller plunger R, * with safety function

* with safety function

Type
ES 95 R 1Ö/1S
ES 95 R 1S/1Ö UE
ES 95 R 2Ö
ES 95 R 2S
EM 95 R 1Ö/1S

Material no.
1049925
on request
1050315
1050467
1050071



Long roller plunger RL, * with safety function

* with safety function

Type
ES 95 RL 1Ö/1S
ES 95 RL 1S/1Ö UE
ES 95 RL 2Ö
ES 95 RL 2S
EM 95 RL 1Ö/1S

Material no.
1049931
1050180
1050320
on request
1050077

Errors and omissions excepted.



Position switch ES 95 / EM 95

Ordering details



Roller lever with collar WH, *
with safety function

* with safety function

Type
ES 95 WH 1Ö/1S
ES 95 WH 1S/1Ö UE
ES 95 WH 2Ö
ES 95 WH 2S
EM 95 WH 1Ö/1S

Material no.
1049944
on request
1050326
1050475
1050084



Metal roller lever with collar
WHM, * with safety function

* with safety function

Type
ES 95 WHM 1Ö/1S
ES 95 WHM 1S/1Ö UE
ES 95 WHM 2Ö
ES 95 WHM 2S
EM 95 WHM 1Ö/1S

Material no.
1049946
1050187
1050328
1050477
1050086



Long metal roller lever with
collar WHLM, * with safety
function

* with safety function

Type
ES 95 WHLM 1Ö/1S
ES 95 WHLM 1S/1Ö UE
ES 95 WHLM 2Ö
ES 95 WHLM 2S
EM 95 WHLM 1Ö/1S

Material no.
1049972
1050217
1050360
1050507
1050104



Plastic roller lever with collar
4K, * with safety function

* with safety function

Type
ES 95 4K 1Ö/1S
ES 95 4K 1S/1Ö UE
ES 95 4K 2Ö
ES 95 4K 2S
EM 95 4K 1Ö/1S

Material no.
1183312
on request
1183439
on request
1185690



Position switch ES 95 / EM 95

Ordering details



Offset metal roller lever with collar WHKM, * with safety function

* with safety function

Type
ES 95 WHKM 1Ö/1S
ES 95 WHKM 1S/1Ö UE
ES 95 WHKM 2Ö
ES 95 WHKM 2S
EM 95 WHKM 1Ö/1S

Material no.
1049983
1050233
1050376
1050523
1050112



Parallel roller lever with collar WPH, * with safety function

* with safety function

Type
ES 95 WPH 1Ö/1S
ES 95 WPH 1S/1Ö UE
ES 95 WPH 2Ö
ES 95 WPH 2S
EM 95 WPH 1Ö/1S

Material no.
1049995
on request
1050392
on request
1050120



Parallel metal roller lever with collar WPHM, * with safety function

* with safety function

Type
ES 95 WPHM 1Ö/1S
ES 95 WPHM 1S/1Ö UE
ES 95 WPHM 2Ö
ES 95 WPHM 2S
EM 95 WPHM 1Ö/1S

Material no.
1049997
on request
on request
on request
1050122



Rocking lever D, * with safety function

* with safety function

Type
ES 95 D 1Ö/1S
ES 95 D 1S/1Ö UE
ES 95 D 2Ö
ES 95 D 2S
EM 95 D 1Ö/1S

Material no.
1050006
1050281
1050426
1050571
1050138

Errors and omissions excepted.



Position switch ES 95 / EM 95

Ordering details



Adjustable rocking lever DS

Type
ES 95 DS 1Ö/1S
ES 95 DS 1S/1Ö UE
ES 95 DS 2Ö
ES 95 DS 2S
EM 95 DS 1Ö/1S

Material no.
1050035
on request
1050444
1050585
1050153



Spring-rod lever DF

Type
ES 95 DF 1Ö/1S
ES 95 DF 1S/1Ö UE
ES 95 DF 2Ö
ES 95 DF 2S
EM 95 DF 1Ö/1S

Material no.
1050031
1050291
1050440
1050581
1050149



Rod lever DD

Type
ES 95 DD 1Ö/1S
ES 95 DD 1S/1Ö UE
ES 95 DD 2Ö
ES 95 DD 2S
EM 95 DD 1Ö/1S

Material no.
1050022
1050286
1050434
1050577
1050146



Long spring rod TL

Type
ES 95 TL 1Ö/1S
ES 95 TL 2Ö
ES 95 TL 2S
EM 95 TL 1Ö/1S

Material no.
1050043
on request
on request
1050159



Spring rod with plastic tip TK

Type
ES 95 TK 1Ö/1S
ES 95 TK 2Ö
ES 95 TK 2S
EM 95 TK 1Ö/1S

Material no.
1052136
1050448
on request
1050161