

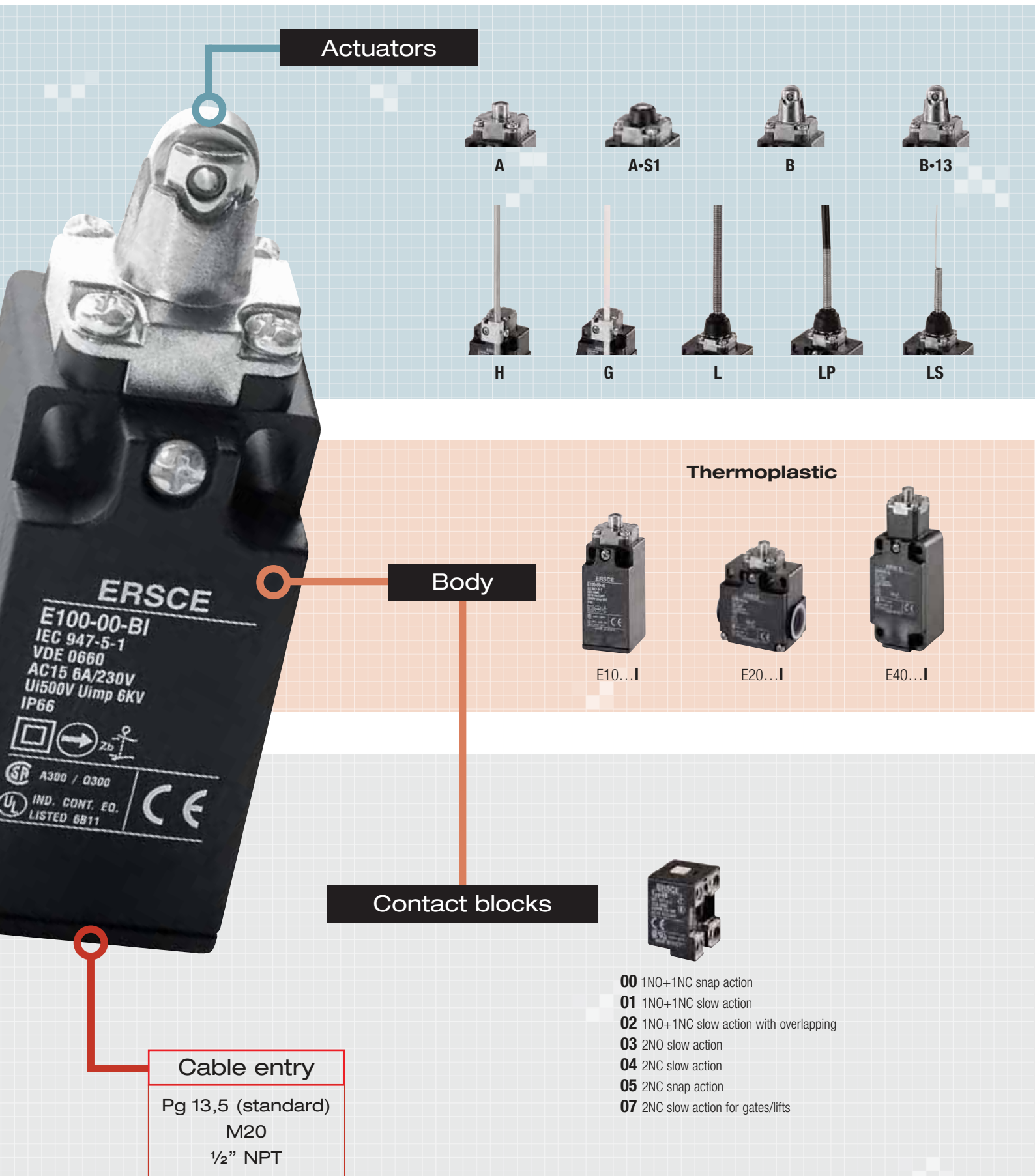


ERSCE
E100-00-B1
IEC 947-5-1
VDE 0660
AC15 6A/230V
UI500V Uimp 6kV
IP66
A308 / 0300
IND. CONT. EQ.
LISTED 6811

ERSCE
E400-00-B1
IEC 947-5-1
VDE 0660
AC15 6A/230V
UI500V Uimp 6kV
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A308 / 0300
IND. CONT. EQ.
LISTED 6811

Limit switches







Metal



Part no. structure

E10 0 00 A I S1

Series

- E100** 1 Cable entry, thermoplastic/metal
- E200** 2 cable entries, thermoplastic
- E300** 3 cable entries, metal
- E400** 1 Cable entry, thermoplastic/metal

Cable entry

- 0** Pg 13,5 (standard)
- 1** M20
- 2** 1/2" NPT

Contact blocks

- 00** 1NO+1NC snap action
- 01** 1NO+1NC slow action
- ...**

Options

- S1** With rubber gasket
- 50** With roller Ø50 mm
- 13** With roller Ø13 mm
- C** For gates/lifts
- 50C** With roller Ø50 mm for gates/lifts
- RA** With steel roller

Body material

- I** Thermoplastic
- M** Metal

Actuator type

- A** Steel plunger
- B** Steel roller plunger
- ...**

Note: Please verify the effective availability of a product before ordering.

General characteristics

The position switches are ERSCE's main product, and are the result of more than 40 years of experience in industrial automation. They are suitable for use in the most different environmental conditions, thanks to their solid construction, IP66 certified, and proven reliability over decades of fieldwork.

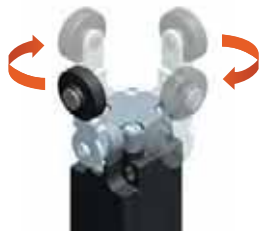


- thermoplastic or metal body
- IP66
- contact blocks with positive opening of the NC contact according to IEC EN 60947-5-1 e VDE 0660-200
- form conforming to EN 50047 (E100 series) and to EN 50041 (E400 series))



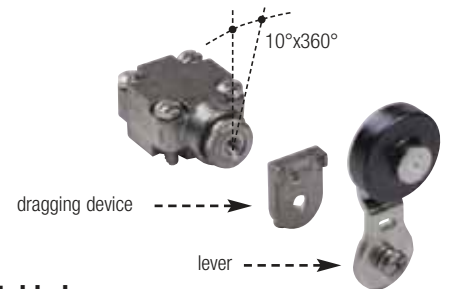
Metal heads

All the heads are made of metal, to ensure maximum performance and lifetime of the switch.



Rotating heads

Possibility to supply, on request, the limit switch lever rotated by 180° steps, and the actuator by 90° steps.



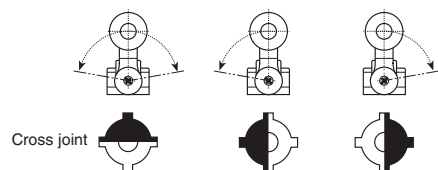
Adjustable levers

Possibility to adjust the lever every 10°, for 360°, by moving the lever and the dragging device.



Overturning levers

Possibility to fasten the lever on the straight or reverse side, maintaining the positive opening of the NC contact.



Unidirectional heads

The lever can be activated to the left or right only or in both directions by adjusting the cross joint.

Technical data

Insulation resistance		500 V DC	MΩ	100	
Dielectric strength		50/60 Hz per 1' *	V AC	2500	
Rated insulation voltage	Ui	IEC947-5-1	V AC	500	
Rated thermal current	Ithe	IEC947-5-1	A	10	
Rated operating current		IEC947-5-1/EN60947-5-1			
Category AC15 A300	Ie	24 V	A	10	
		125 V	A	6	
		230 V	A	6	
		400 V	A	3	
Category DC13 Q300	Ie	24 V	A	6	
		48 V	A	4	
		120 V	A	1	
		250 V	A	0,4	
Contact resistance	IEC255-7 cat.3	initial value	mΩ	25	
Short circuit protective devices	IEC269 (IEC947-5-1)	gl or gG type fuse	A	10	
Rated conditionals short circuit current	IEC947-5-1		A	1000	
Pollution degree	IEC947-5-1			3	
Protection degree	EN 60529			IP66	
Protection against electric shock		plastic	class	II	
		metal	class	I	
Vibration resistance	IEC68-2-6	mm		0,35 ± 15% (10 ÷ 55 Hz ± 1 Hz)	
Shock resistance	IEC68-2-27	11 ms	g	30	
Mechanical life			cycles	15.000.000	
Electrical life		at 250 V AC 6A with resistance load cos φ=1	cycles	500.000	
		at 250 V AC 6A with inductive load cos φ=0,4	cycles	500.000	
Distance between contacts		snap action type	mm	2x1,25	
		low action type	mm	2x2	
Terminals		type		Screw with combined notch and retravtable plate (notch Ph. size 1)	
		screw	M	3,5	
		protection degree		IP20	
		material		Steel class 8,8/ Galvanized	
		max. screw tightening torque	cNm (Kg cm)	120 (12,24)	
		max connecting capacity	rigid cable	mm ²	2x1,5
			flexible cable	mm ²	2x1,5
	with prod terminal			In accordance with EN50013	
Air ambient temperature		operational	°C	-35 ÷ +85 (without formation of ice)	
Relative humidity		operational		95% max	

* between terminals of the same polarity; between terminals with different polarity; between live mechanical parts and ground;
between live mechanical parts and non-current-carrying metal parts

Approvals



IEC EN 60947

E100	•	•	+
E200	•	•	+
E300	•	•	+
E400	•	•	+

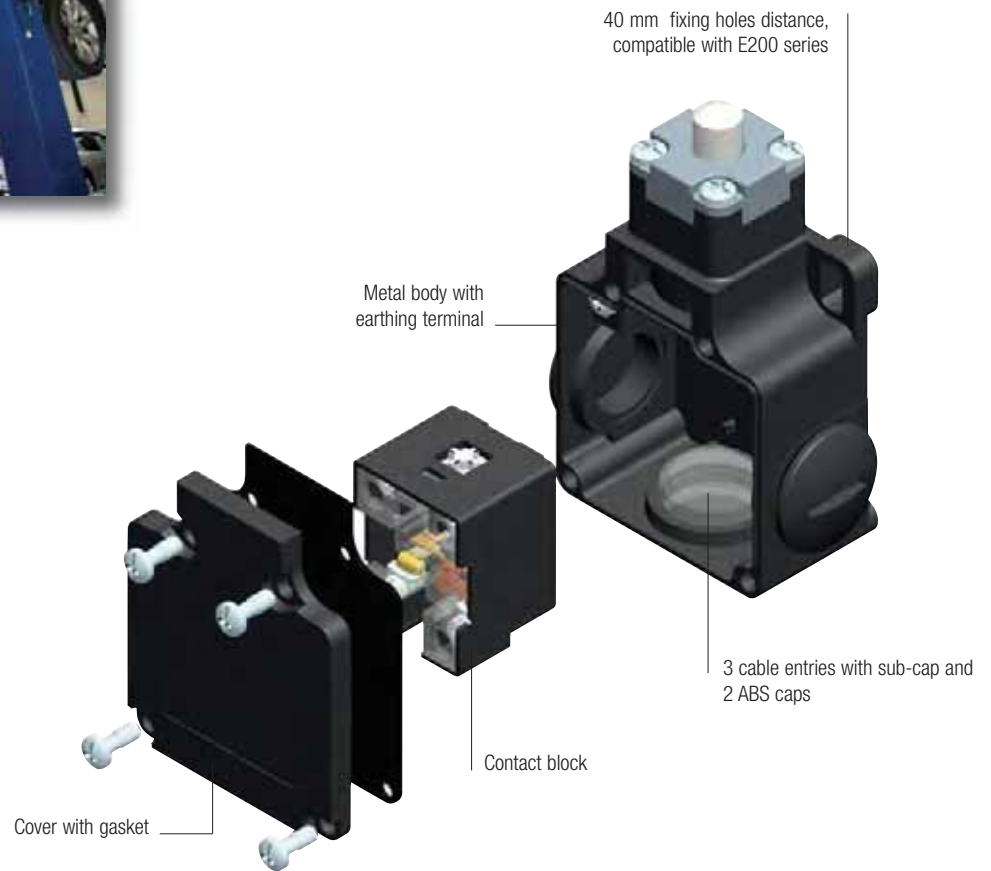
- UL approval file E72861
- CSA approval file 026716-0-000
- Approved
- + Conforms to requirements



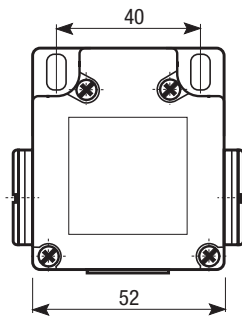
The **E300** series is designed to withstand to the most severe conditions. It has two fixing holes with distance 40mm. Each switch has three cable entries, two on each side and one on the bottom, for maximum wiring flexibility. Available with metal body and actuators.

In conformity with standards:

IEC EN 60947-5-1 • EN 60947-1 • UNI EN 1088 • EN ISO 12100-1
EN ISO 12100-2 • IEC 529 • EN 60529 • VDE 0660-200 • VDE 0113



Fixing
2 fixing holes
with 40 mm
distance



Cable entry
3 cable entries,
2 on the sides and
one the bottom
of the switch with
thread:



Thread

Pg 13,5
M20 (on request)
1/2" NPT (on request)

Series part no.

E300...
E301...
E302...



Steel plunger

A



Steel plunger with rubber gasket

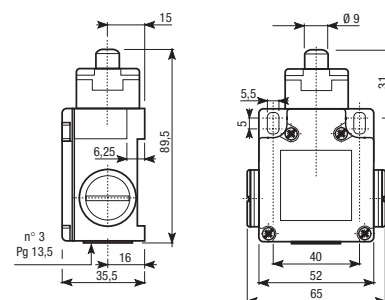
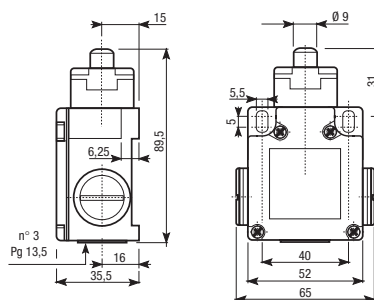
A•S1

Contact block		
1NO+1NC snap action 13 21 14 22	Zb	00
1NO+1NC slow action 21 13 22 14	Zb	01
1NO+1NC slow overlap. 25 17 26 18	Zb	02
2NO slow action 13 23 14 24	X+X	03
2NC slow action 11 21 12 22	Y+Y	04
2NC snap action 11 21 12 22	Y+Y	05
Weight	kg	
Pack	pcs	
Cable entry		

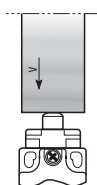
Metal	Contact travel
E30000AM	
E30001AM	
E30002AM	
E30003AM	
E30004AM	
E30005AM	
0,320	
1	
Pg 13,5	

Metal	Contact travel
E30000AMS1	
E30001AMS1	
E30002AMS1	
E30003AMS1	
E30004AMS1	
E30005AMS1	
0,320	
1	
Pg 13,5	

standard article article on request



Drive cam operating parameters



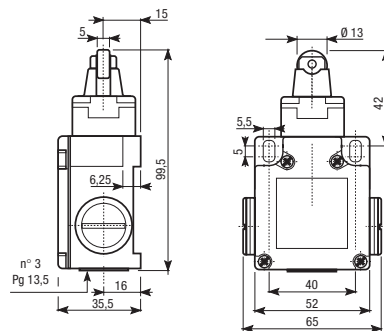
V max (m/s)	0,5
Min. force (N)	
for tripping	9
for positive opening	28



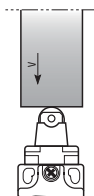
Steel roller plunger

Contact block		Metal	Contact travel
1NO+1NC snap action 	00	E30000BM	
1NO+1NC slow action 	01	E30001BM	
1NO+1NC slow overlap. 	02	E30002BM	
2NO slow action 	03	E30003BM	
2NC slow action 	04	E30004BM	
2NC snap action 	05	E30005BM	
Weight	kg	0,320	
Pack	pcs	1	
Cable entry		Pg 13,5	

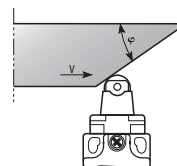
standard article article on request



Drive cam operating parameters



V max (m/s)	0,5
Min. force (N) for tripping	9
for positive opening	28



φ	V max (m/s)
20°	1
30°	0,5
Min. force (N) for tripping	9
for positive opening	28



C

Thermoplastic roller lever, side actuation



C•S1

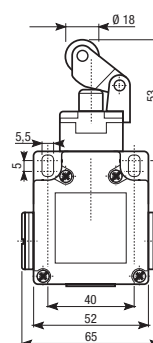
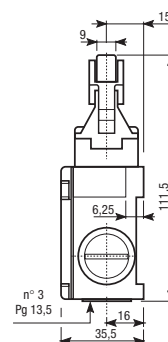
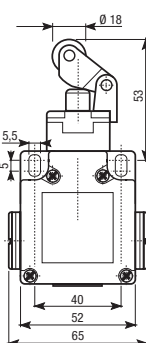
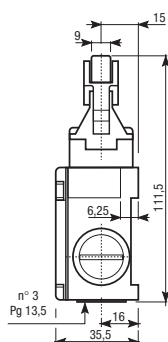
Thermoplastic roller lever with rubber gasket, side actuation

Contact block		
1NO+1NC snap action 13 21 14 22 Zb	00	
1NO+1NC slow action 21 13 22 14 Zb	01	
1NO+1NC slow overlap. 25 17 26 18 Zb	02	
2NO slow action 13 23 14 24 X+X	03	
2NC slow action 11 21 12 22 Y+Y	04	
2NC snap action 11 21 12 22 Y+Y	05	
Weight	kg	0,325
Pack	pcs	1
Cable entry		Pg 13,5

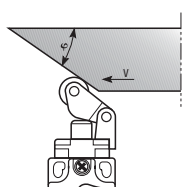
Metal	Contact travel
E30000CM	
E30001CM	
E30002CM	
E30003CM	
E30004CM	
E30005CM	
0,325	
1	
Pg 13,5	

Metal	Contact travel
E30000CMS1	
E30001CMS1	
E30002CMS1	
E30003CMS1	
E30004CMS1	
E30005CMS1	
0,325	
1	
Pg 13,5	

standard article article on request



Drive cam operating parameters



φ	V max (m/s)
20°	1
30°	0,5

Min. force (N)	
for tripping	9
for positive opening	26



D

Thermoplastic roller lever, vertical actuation

Contact block		
1NO+1NC snap action		00
1NO+1NC slow action		01
1NO+1NC slow overlap.		02
2NO slow action		03
2NC slow action		04
2NC snap action		05
Weight	kg	
Pack	pcs	
Cable entry		

Metal	Contact travel
E30000DM	
E30001DM	
E30002DM	
E30003DM	
E30004DM	
E30005DM	
0,325	
1	
Pg 13,5	

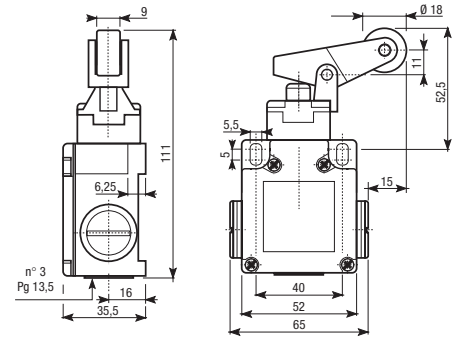
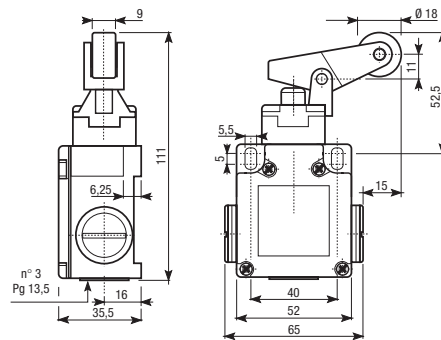


D•S1

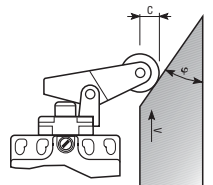
Thermoplastic roller lever with rubber gasket, vertical actuation

Metal	Contact travel
E30000DMS1	
E30001DMS1	
E30002DMS1	
E30003DMS1	
E30004DMS1	
E30005DMS1	
0,325	
1	
Pg 13,5	

standard article article on request



Drive cam operating parameters



φ	V max (m/s)
20°	1
30°	0,5

Min. force (N)	
for tripping	9
for positive opening	26



Thermoplastic roller lever

E



Steel roller lever

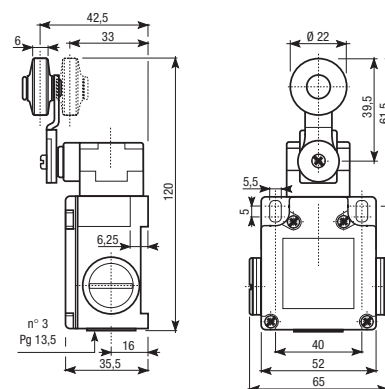
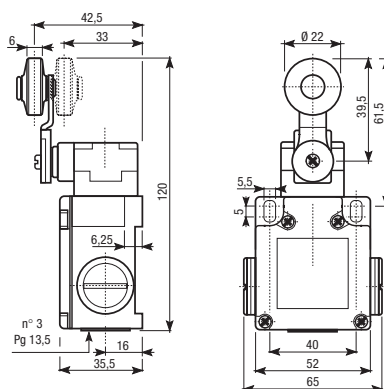
E•RA

Contact block		
1NO+1NC snap action 13 21 14 22	00	Zb
1NO+1NC slow action 21 13 22 14	01	Zb
1NO+1NC slow overlap. 25 17 26 18	02	Zb
2NO slow action 13 23 14 24	03	X+X
2NC slow action 11 21 12 22	04	Y+Y
2NC snap action 11 21 12 22	05	Y+Y
Weight	kg	
Pack	pcs	
Cable entry		

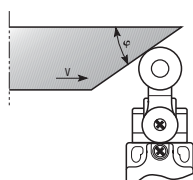
Metal	Contact travel
E30000EM	
E30001EM	
E30002EM	
E30003EM	
E30004EM	
E30005EM	
0,355	
1	
Pg 13,5	

Metal	Contact travel
E30000EMRA	
E30001EMRA	
E30002EMRA	
E30003EMRA	
E30004EMRA	
E30005EMRA	
0,355	
1	
Pg 13,5	

standard article article on request



Drive cam operating parameters



φ	V max (m/s)
30°	1,5
45°	1
60°	0,75
60-90°	0,25

Min. force (cNm)	
for tripping	15
for positive opening	35


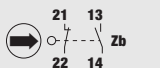
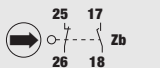
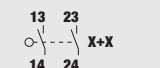
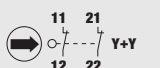
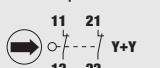


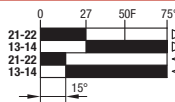
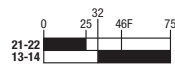
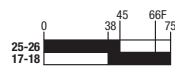
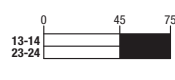
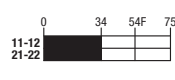

E•50

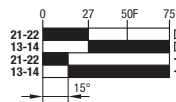
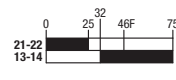
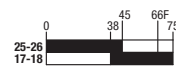
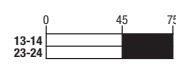
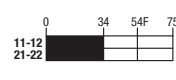

Ø50 mm rubber roller lever



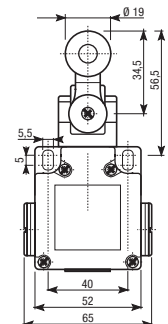
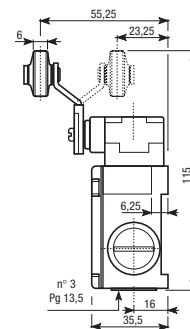
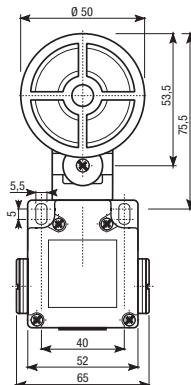
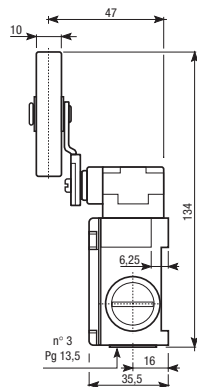
Thermoplastic roller lever

Contact block		
1NO+1NC snap action		00
1NO+1NC slow action		01
1NO+1NC slow overlap.		02
2NO slow action		03
2NC slow action		04
2NC snap action		05
Weight	kg	
Pack	pcs	
Cable entry		

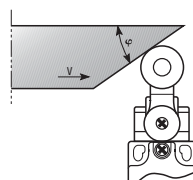
Metal	Contact travel
E30000EM50	
E30001EM50	
E30002EM50	
E30003EM50	
E30004EM50	
E30005EM50	
0,365	
1	
Pg 13,5	

Metal	Contact travel
E30000IM	
E30001IM	
E30002IM	
E30003IM	
E30004IM	
E30005IM	
0,355	
1	
Pg 13,5	

 standard article  article on request



Drive cam operating parameters



φ	V max (m/s)
30°	1,5
45°	1
60°	0,75
60-90°	0,25

Min. force (cNm)	
for tripping	15
for positive opening	35



I•RA

Steel roller lever



I•50

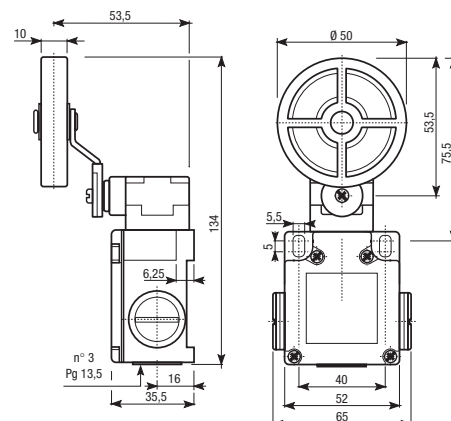
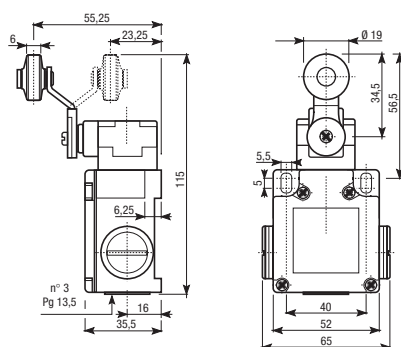
Ø50 mm rubber roller lever

Contact block		
1NO+1NC snap action		00
1NO+1NC slow action		01
1NO+1NC slow overlap.		02
2NO slow action		03
2NC slow action		04
2NC snap action		05
Weight	kg	
Pack	pcs	
Cable entry		

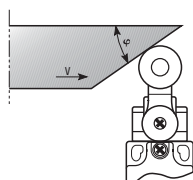
Metal	Contact travel
E30000IMRA	
E30001IMRA	
E30002IMRA	
E30003IMRA	
E30004IMRA	
E30005IMRA	
0,355	
1	
Pg 13,5	

Metal	Contact travel
E30000IM50	
E30001IM50	
E30002IM50	
E30003IM50	
E30004IM50	
E30005IM50	
0,365	
1	
Pg 13,5	

standard article article on request



Drive cam operating parameters



φ	V max (m/s)
30°	1,5
45°	1
60°	0,75
60-90°	0,25

Min. force (cNm)	
for tripping	15
for positive opening	35



F

Thermoplastic roller variable length lever



F•50

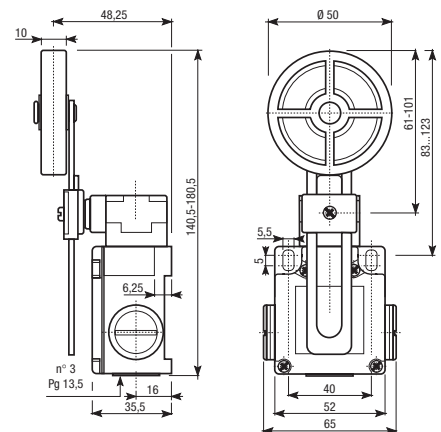
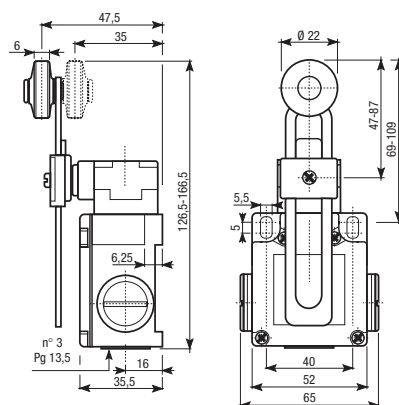
Ø50 mm rubber roller variable length lever

Contact block		
1NO+1NC snap action		00
1NO+1NC slow action		01
1NO+1NC slow overlap.		02
2NO slow action		03
2NC slow action		04
2NC snap action		05
Weight	kg	
Pack	pcs	
Cable entry		

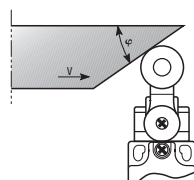
Metal	Contact travel
E30000FM	
E30001FM	
E30002FM	
E30003FM	
E30004FM	
E30005FM	
0,375	
1	
Pg 13,5	

Metal	Contact travel
E30000FM50	
E30001FM50	
E30002FM50	
E30003FM50	
E30004FM50	
E30005FM50	
0,385	
1	
Pg 13,5	

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Drive cam operating parameters



φ	V max (m/s)
30°	1,5
45°	1
60°	0,75
60-90°	0,25

Min. force (cNm)	
for tripping	15
for positive opening	35



FR•50

Ø50 mm rubber roller adjustable lever



G

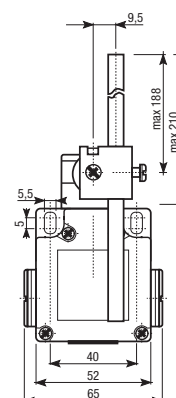
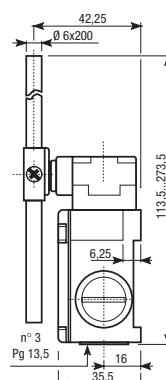
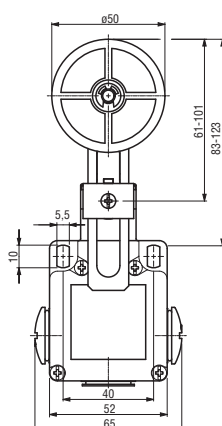
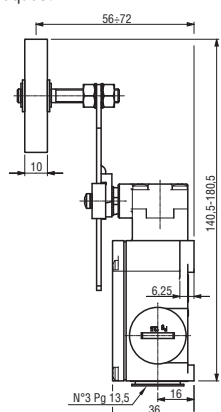
Side rotary adjustable Ø6 mm glass fiber rod

Contact block		
1NO+1NC snap action		00
1NO+1NC slow action		01
1NO+1NC slow overlap.		02
2NO slow action		03
2NC slow action		04
2NC snap action		05
Weight	kg	
Pack	pcs	
Cable entry		

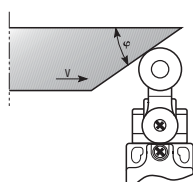
Metal	Contact travel
E3000FRM50	
E30001FRM50	
E30002FRM50	
E30003FRM50	
E30004FRM50	
E30005FRM50	
0,395	
1	
Pg 13,5	

Metal	Contact travel
E30000GM	
E30001GM	
E30002GM	
E30003GM	
E30004GM	
E30005GM	
0,385	
1	
Pg 13,5	

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Drive cam operating parameters



φ	V max (m/s)
30°	1,5
45°	1
60°	0,75
60-90°	0,25

Min. force (cNm)	
for tripping	15
for positive opening	35



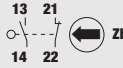
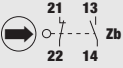
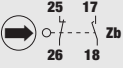
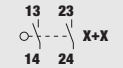
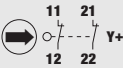
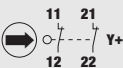
H

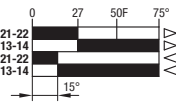
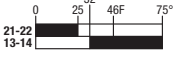

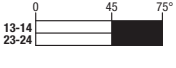
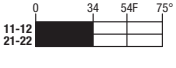

Side rotary adjustable Ø6 mm aluminium rod

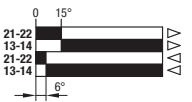


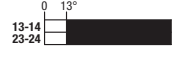

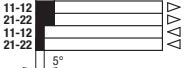


L

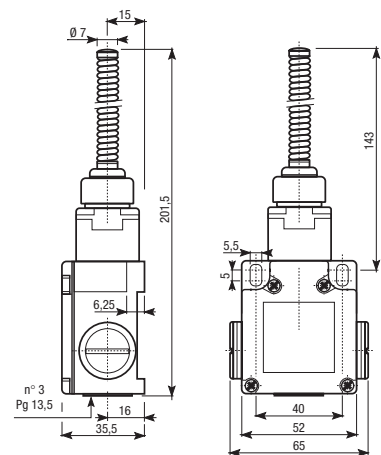
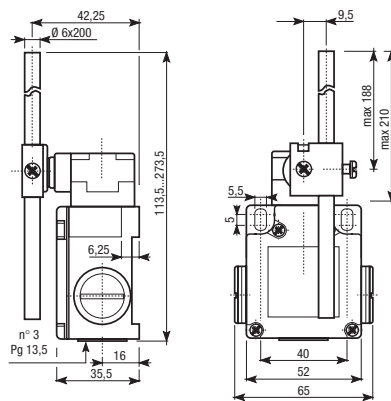
Flexible rod

Contact block		
1NO+1NC snap action 	00	
1NO+1NC slow action 	01	
1NO+1NC slow overlap. 	02	
2NO slow action 	03	
2NC slow action 	04	
2NC snap action 	05	
Weight	kg	
Pack	pcs	
Cable entry		

Metal	Contact travel
E30000HM	
E30001HM	
E30002HM	
E30003HM	
E30004HM	
E30005HM	
0,385	
1	
Pg 13,5	

Metal	Contact travel
E30000LM	
E30001LM	
E30002LM	
E30003LM	
E30004LM	
E30005LM	
0,350	
1	
Pg 13,5	

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LP

Flexible rod with plastic terminal



LS

Cat's whisker

Contact block		
1NO+1NC snap action		00
1NO+1NC slow action		01
1NO+1NC slow overlap.		02
2NO slow action		03
2NC slow action		04
2NC snap action		05
Weight	kg	
Pack	pcs	
Cable entry		

Metal	Contact travel
E30000LPM	
E30001LPM	
E30002LPM	
E30003LPM	
E30004LPM	
E30005LPM	
0,350	
1	
Pg 13,5	

Metal	Contact travel
E30000LSM	
E30001LSM	
E30002LSM	
E30003LSM	
E30004LSM	
E30005LSM	
0,350	
1	
Pg 13,5	

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