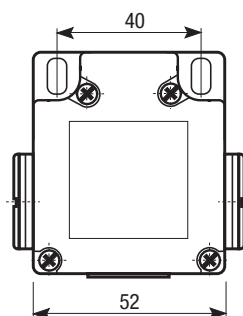
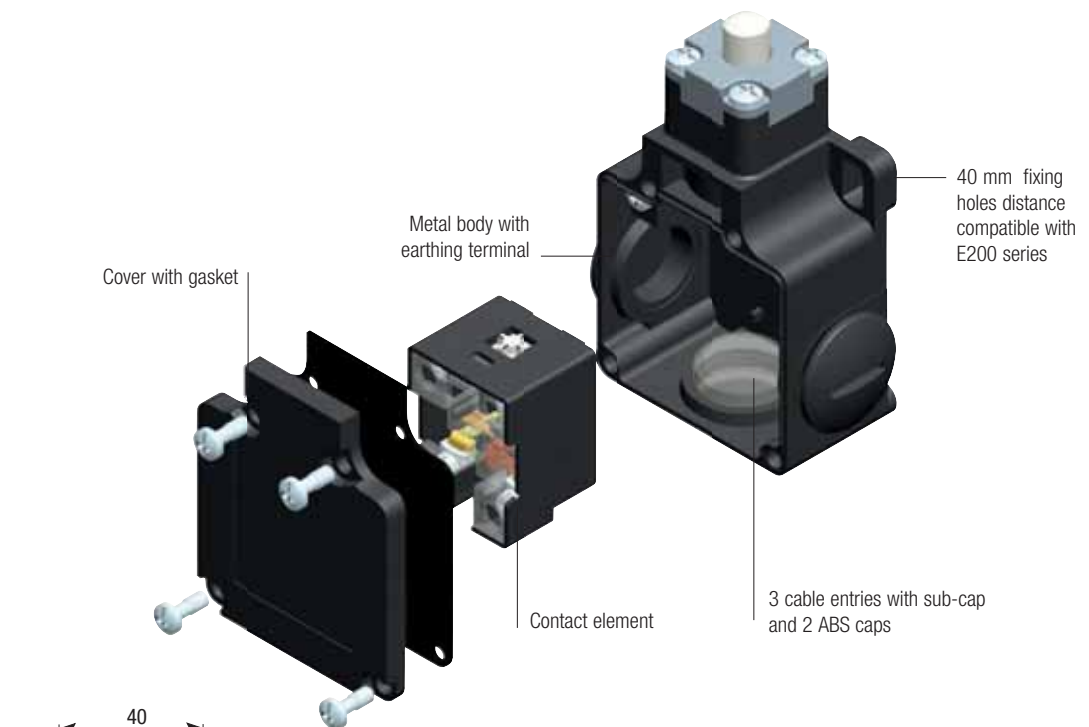


# Limit switches E300 series



## E300 series

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.



**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:



### 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 • EN 81-1 • EN 81-2

### Thread

Pg 13,5  
M20x1,5  
1/2" NPT (on request)  
M12 connector (on request)

### Series part no.

E300...  
E301...  
E302...  
E300...M12



Steel plunger

A



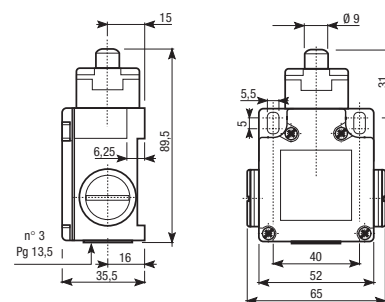
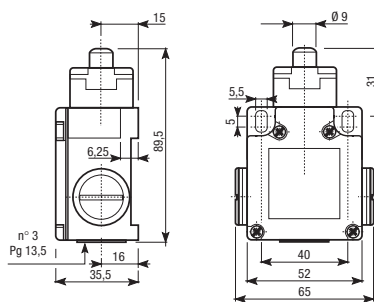
Steel plunger with rubber gasket

A•S1

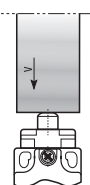
Contact element	
1NO+1NC snap action  13 21 14 22 Zb	00
1NO+1NC slow action  21 13 22 14 Zb	01
1NO+1NC slow overlap.  25 17 26 18 Zb	02
2NO slow action  13 23 14 24 X+X	03
2NC slow action  11 21 12 22 Y+Y	04
2NC snap action  11 21 12 22 Y+Y	05
Weight	kg
Pack	pcs

Cable entry		Contact travel
PG 13,5	M20 x 1,5	
Metal head	Metal head	
Metal body	Metal body	
E30000AM	E30100AM	
E30001AM	E30101AM	
E30002AM	E30102AM	
E30003AM	E30103AM	
E30004AM	E30104AM	
E30005AM	E30105AM	
0,32		
1		

Cable entry		Contact travel
PG 13,5	M20 x 1,5	
Metal head	Metal head	
Metal body	Metal body	
E30000AMS1	E30100AMS1	
E30001AMS1	E30101AMS1	
E30002AMS1	E30102AMS1	
E30003AMS1	E30103AMS1	
E30004AMS1	E30104AMS1	
E30005AMS1	E30105AMS1	
0,32		
1		



Drive cam operating parameters



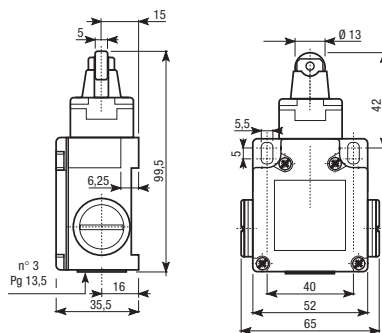
V max (m/s)	0,5
Drive forces	
Minimum command force	9 N
Minimum forced opening force	28 N



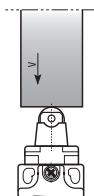
Steel roller plunger

B

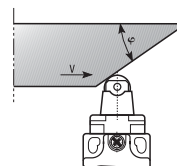
Contact element	Cable entry		Contact travel
	PG 13,5	M20 x 1,5	
1NO+1NC snap action  <b>00</b>	<b>E30000BM</b> Metal head Metal body	<b>E30100BM</b> Metal head Metal body	
1NO+1NC slow action  <b>01</b>	<b>E30001BM</b>	<b>E30101BM</b>	
1NO+1NC slow overlap.  <b>02</b>	<b>E30002BM</b>	<b>E30102BM</b>	
2NO slow action  <b>03</b>	<b>E30003BM</b>	<b>E30103BM</b>	
2NC slow action  <b>04</b>	<b>E30004BM</b>	<b>E30104BM</b>	
2NC snap action  <b>05</b>	<b>E30005BM</b>	<b>E30105BM</b>	
Weight	0,32		
Pack	1		



Drive cam operating parameters



V max (m/s)	0,5
Drive forces	
Minimum command force	9 N
Minimum forced opening force	28 N



φ	V max (m/s)
20°	1
30°	0,5
Drive forces	
Minimum command force	9 N
Minimum forced opening force	28 N



Thermoplastic roller lever, side actuation

C



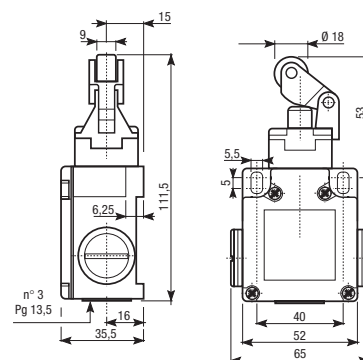
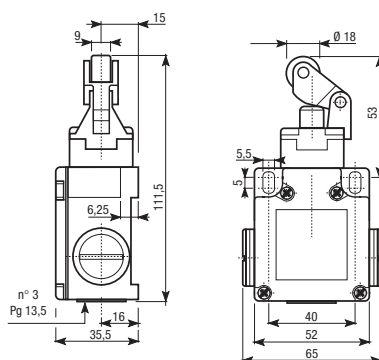
Thermoplastic roller lever with rubber gasket, side actuation

C•S1

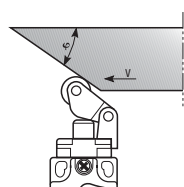
Contact element		
1NO+1NC snap action 	00	
1NO+1NC slow action 	01	
1NO+1NC slow overlap. 	02	
2NO slow action 	03	
2NC slow action 	04	
2NC snap action 	05	
Weight	kg	0,325
Pack	pcs	1

Cable entry		Contact travel
PG 13,5	M20 x 1,5	
Metal head	Metal head	
Metal body	Metal body	
E30000CM	E30100CM	
E30001CM	E30101CM	
E30002CM	E30102CM	
E30003CM	E30103CM	
E30004CM	E30104CM	
E30005CM	E30105CM	
0,325		
1		

Cable entry		Contact travel
PG 13,5	M20 x 1,5	
Metal head	Metal head	
Metal body	Metal body	
E30000CMS1	E30100CMS1	
E30001CMS1	E30101CMS1	
E30002CMS1	E30102CMS1	
E30003CMS1	E30103CMS1	
E30004CMS1	E30104CMS1	
E30005CMS1	E30105CMS1	
0,325		
1		



Drive cam operating parameters



$\varphi$	V max (m/s)
20°	1
30°	0,5

Drive forces	
Minimum command force	9 N
Minimum forced opening force	26 N



Thermoplastic roller lever, vertical actuation

D



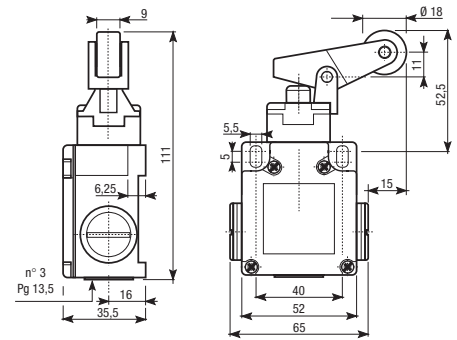
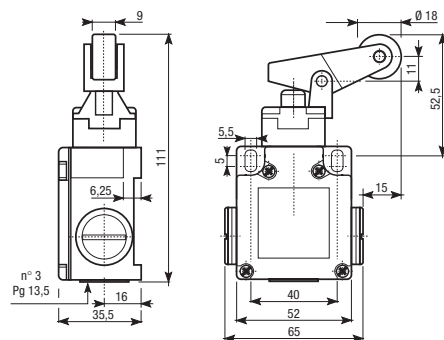
Thermoplastic roller lever with rubber gasket, vertical actuation

D•S1

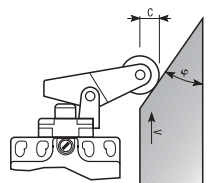
Contact element		
1NO+1NC snap action Zb	00	
1NO+1NC slow action Zb	01	
1NO+1NC slow overlap. Zb	02	
2NO slow action X+X	03	
2NC slow action Y+Y	04	
2NC snap action Y+Y	05	
Weight	kg	
Pack	pcs	

Cable entry		Contact travel
PG 13,5	M20 x 1,5	
Metal head	Metal head	
Metal body	Metal body	
E30000DM	E30100DM	
E30001DM	E30101DM	
E30002DM	E30102DM	
E30003DM	E30103DM	
E30004DM	E30104DM	
E30005DM	E30105DM	
0,325		
1		

Cable entry		Contact travel
PG 13,5	M20 x 1,5	
Metal head	Metal head	
Metal body	Metal body	
E30000DMS1	E30100DMS1	
E30001DMS1	E30101DMS1	
E30002DMS1	E30102DMS1	
E30003DMS1	E30103DMS1	
E30004DMS1	E30104DMS1	
E30005DMS1	E30105DMS1	
0,325		
1		



### Drive cam operating parameters



$\varphi$	V max (m/s)
20°	1
30°	0,5
Drive forces	
Minimum command force	9 N
Minimum forced opening force	26 N




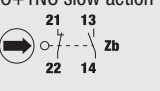
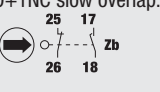
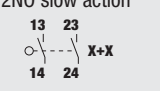
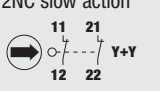
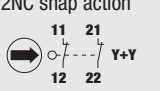
Thermoplastic roller lever

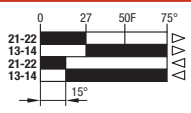
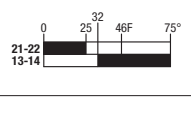
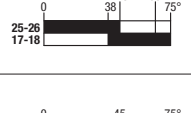
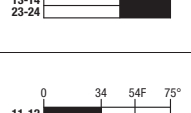
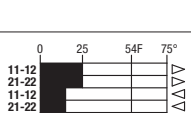

E

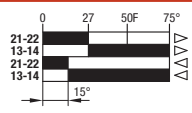
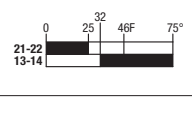
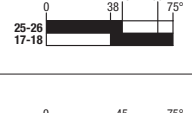
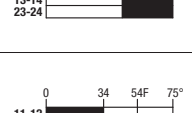

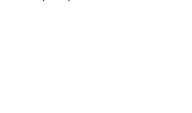


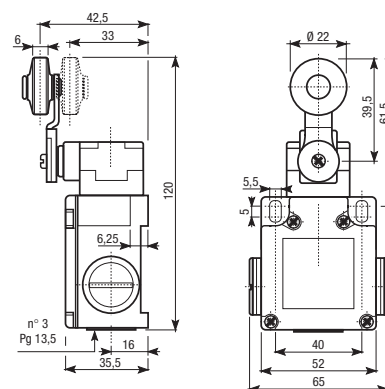
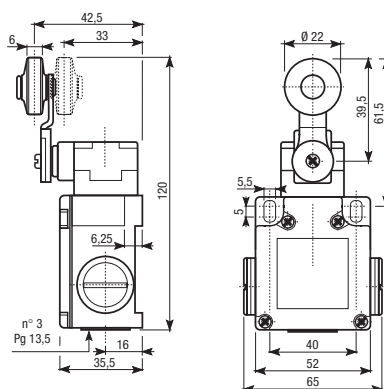
Steel roller lever

E•RA

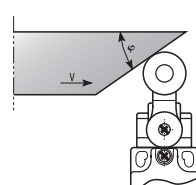
Contact element		
1NO+1NC snap action 	00	Zb
1NO+1NC slow action 	01	Zb
1NO+1NC slow overlap. 	02	Zb
2NO slow action 	03	X+X
2NC slow action 	04	Y+Y
2NC snap action 	05	Y+Y
Weight	kg	
Pack	pcs	

Cable entry		Contact travel
PG 13,5	M20 x 1,5	
Metal head Metal body	Metal head Metal body	
E30000EM	E30100EM	
E30001EM	E30101EM	
E30002EM	E30102EM	
E30003EM	E30103EM	
E30004EM	E30104EM	
E30005EM	E30105EM	
0,355		
1		

Cable entry		Contact travel
PG 13,5	M20 x 1,5	
Metal head Metal body	Metal head Metal body	
E30000EMRA	E30100EMRA	
E30001EMRA	E30101EMRA	
E30002EMRA	E30102EMRA	
E30003EMRA	E30103EMRA	
E30004EMRA	E30104EMRA	
E30005EMRA	E30105EMRA	
0,355		
1		



Drive cam operating parameters



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

Drive forces	
Minimum command force	15 Ncm
Minimum forced opening force	35 Ncm

# Limit switches - E300 series



Ø50 mm rubber roller lever

E•50



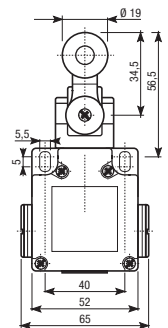
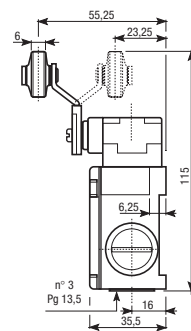
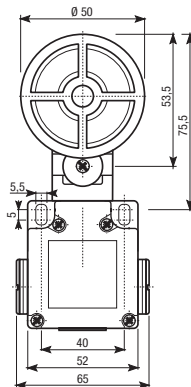
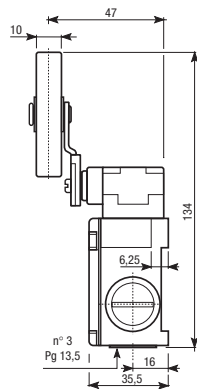
Thermoplastic roller lever

I

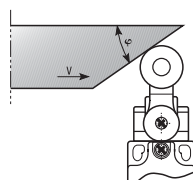
Contact element		
1NO+1NC snap action  13 21 14 22	Zb	00
1NO+1NC slow action  21 13 22 14	Zb	01
1NO+1NC slow overlap.  25 17 26 18	Zb	02
2NO slow action  13 23 14 24	X+X	03
2NC slow action  11 21 12 22	Y+Y	04
2NC snap action  11 21 12 22	Y+Y	05
Weight	kg	
Pack	pcs	

Cable entry		Contact travel
PG 13,5	M20 x 1,5	
Metal head	Metal head	
Metal body	Metal body	
E30000EM50	E30100EM50	
E30001EM50	E30101EM50	
E30002EM50	E30102EM50	
E30003EM50	E30103EM50	
E30004EM50	E30104EM50	
E30005EM50	E30105EM50	
0,365		
1		

Cable entry		Contact travel
PG 13,5	M20 x 1,5	
Metal head	Metal head	
Metal body	Metal body	
E30000IM	E30100IM	
E30001IM	E30101IM	
E30002IM	E30102IM	
E30003IM	E30103IM	
E30004IM	E30104IM	
E30005IM	E30105IM	
0,365		
1		



### Drive cam operating parameters



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

Drive forces	
Minimum command force	15 Ncm
Minimum forced opening force	35 Ncm



I•RA

Steel roller lever



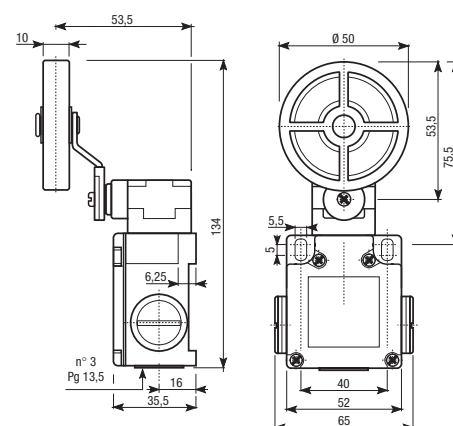
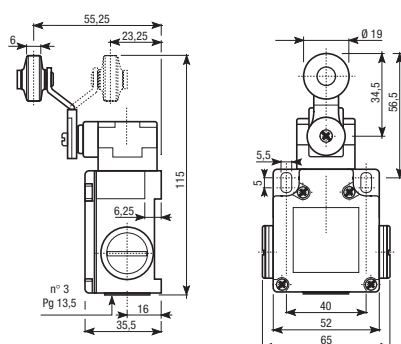
I•50

Ø50 mm rubber roller lever

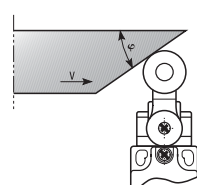
Contact element		
1NO+1NC snap action  13 21 14 22	Zb	00
1NO+1NC slow action  21 13 22 14	Zb	01
1NO+1NC slow overlap.  25 17 26 18	Zb	02
2NO slow action  13 23 14 24	X+X	03
2NC slow action  11 21 12 22	Y+Y	04
2NC snap action  11 21 12 22	Y+Y	05
Weight	kg	
Pack	pcs	

Cable entry		Contact travel
PG 13,5	M20 x 1,5	
Metal head	Metal head	
Metal body	Metal body	
E30000IMRA	E30100IMRA	
E30001IMRA	E30101IMRA	
E30002IMRA	E30102IMRA	
E30003IMRA	E30103IMRA	
E30004IMRA	E30104IMRA	
E30005IMRA	E30105IMRA	
0,355		
1		

Cable entry		Contact travel
PG 13,5	M20 x 1,5	
Metal head	Metal head	
Metal body	Metal body	
E30000IM50	E30100IM50	
E30001IM50	E30101IM50	
E30002IM50	E30102IM50	
E30003IM50	E30103IM50	
E30004IM50	E30104IM50	
E30005IM50	E30105IM50	
0,365		
1		



Drive cam operating parameters



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

Drive forces	
Minimum command force	15 Ncm
Minimum forced opening force	35 Ncm





Thermoplastic roller variable length lever

F



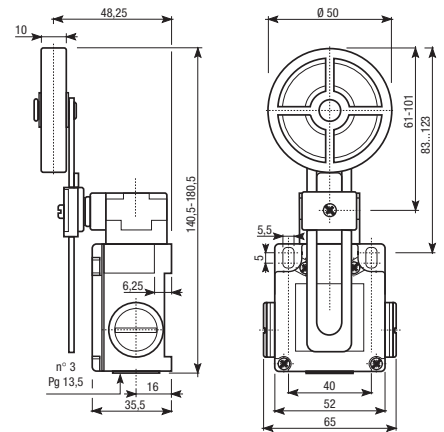
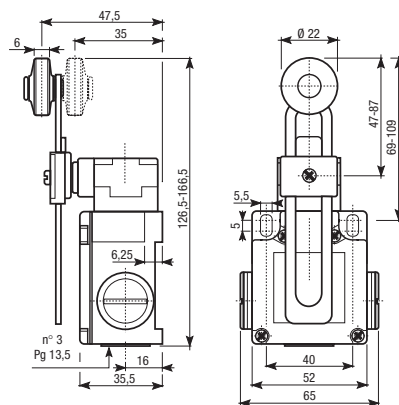
Ø50 mm rubber roller variable length lever

F•50

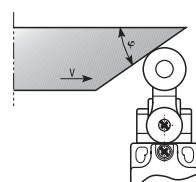
Contact element		
1NO+1NC snap action  13 21 14 22	Zb	00
1NO+1NC slow action  21 13 22 14	Zb	01
1NO+1NC slow overlap.  25 17 26 18	Zb	02
2NO slow action  13 23 14 24	X+X	03
2NC slow action  11 21 12 22	Y+Y	04
2NC snap action  11 21 12 22	Y+Y	05
Weight	kg	
Pack	pcs	

Cable entry		Contact travel
PG 13,5	M20 x 1,5	
Metal head	Metal head	
Metal body	Metal body	
E30000FM	E30100FM	
E30001FM	E30101FM	
E30002FM	E30102FM	
E30003FM	E30103FM	
E30004FM	E30104FM	
E30005FM	E30105FM	
0,375		
1		

Cable entry		Contact travel
PG 13,5	M20 x 1,5	
Metal head	Metal head	
Metal body	Metal body	
E30000FM50	E30100FM50	
E30001FM50	E30101FM50	
E30002FM50	E30102FM50	
E30003FM50	E30103FM50	
E30004FM50	E30104FM50	
E30005FM50	E30105FM50	
0,385		
1		



Drive cam operating parameters



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

Drive forces

Minimum command force	15 Ncm
Minimum forced opening force	35 Ncm



FR•50

Ø50 mm rubber roller adjustable lever



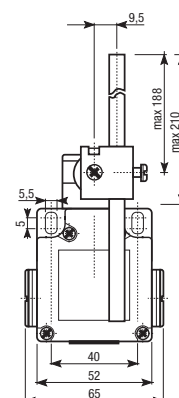
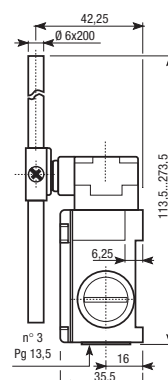
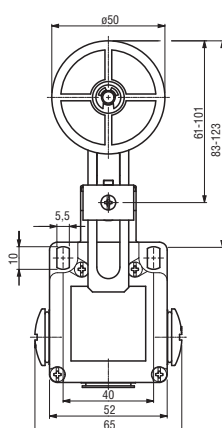
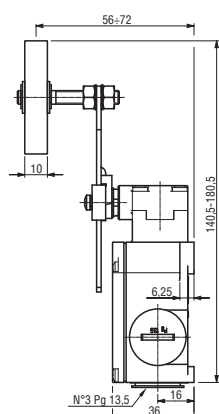
G

Side rotary adjustable Ø6 mm glass fiber rod

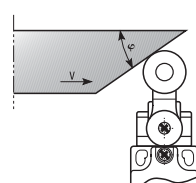
Contact element		
1NO+1NC snap action  13 21 14 22	00	Zb
1NO+1NC slow action  21 13 22 14	01	Zb
1NO+1NC slow overlap.  25 17 26 18	02	Zb
2NO slow action  13 23 14 24	03	X+X
2NC slow action  11 21 12 22	04	Y+Y
2NC snap action  11 21 12 22	05	Y+Y
Weight	kg	
Pack	pcs	

Cable entry				
PG 13,5	M20 x 1,5	Metal head	Metal head	Contact travel
Metal body	Metal body			
E30000FRM50	E30100FRM50			
E30001FRM50	E30101FRM50			
E30002FRM50	E30102FRM50			
E30003FRM50	E30103FRM50			
E30004FRM50	E30104FRM50			
E30005FRM50	E30105FRM50			
		0,395		
		1		

Cable entry				
PG 13,5	M20 x 1,5	Metal head	Metal head	Contact travel
Metal body	Metal body			
E30000GM	E30100GM			
E30001GM	E30101GM			
E30002GM	E30102GM			
E30003GM	E30103GM			
E30004GM	E30104GM			
E30005GM	E30105GM			
		0,385		
		1		



Drive cam operating parameters



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

Drive forces	
Minimum command force	15 Ncm
Minimum forced opening force	35 Ncm



Side rotary adjustable Ø6 mm aluminium rod

H



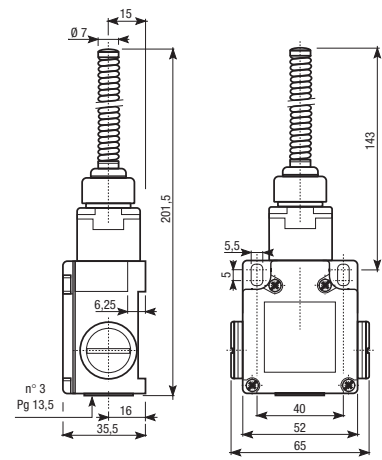
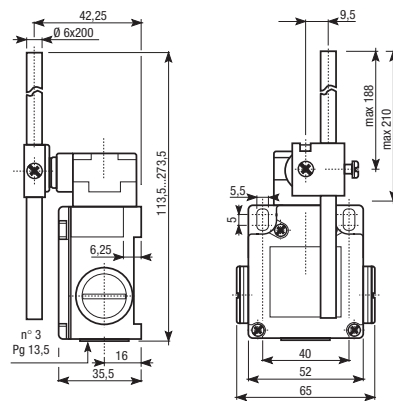
Flexible rod

L

Contact element		
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		Contact travel
PG 13,5	M20 x 1,5	
Metal head	Metal head	
Metal body	Metal body	
E30000HM	E30100HM	
E30001HM	E30101HM	
E30002HM	E30102HM	
E30003HM	E30103HM	
E30004HM	E30104HM	
E30005HM	E30105HM	
0,385		
1		

Cable entry		Contact travel
PG 13,5	M20 x 1,5	
Metal head	Metal head	
Metal body	Metal body	
E30000LM	E30100LM	
E30001LM	E30101LM	
E30002LM	E30102LM	
E30003LM	E30103LM	
E30004LM	E30104LM	
E30005LM	E30105LM	
0,35		
1		











Flexible rod with plastic terminal

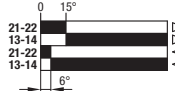
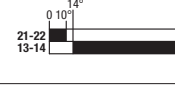




LP

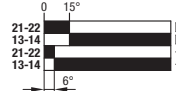
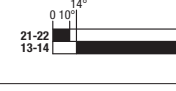

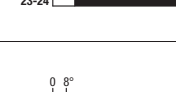
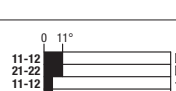



Cat's whisker

LS

Contact element		
1NO+1NC snap action  Zb	00	
1NO+1NC slow action  Zb	01	
1NO+1NC slow overlap.  Zb	02	
2NO slow action  X+X	03	
2NC slow action  Y+Y	04	
2NC snap action  Y+Y	05	
Weight	kg	0,35
Pack	pcs	1

Cable entry		Contact travel
PG 13,5	M20 x 1,5	
Metal head	Metal head	
Metal body	Metal body	
E30000LPM	E30100LPM	
E30001LPM	E30101LPM	
E30002LPM	E30102LPM	
E30003LPM	E30103LPM	
E30004LPM	E30104LPM	
E30005LPM	E30105LPM	
0,35		
1		

Cable entry		Contact travel
PG 13,5	M20 x 1,5	
Metal head	Metal head	
Metal body	Metal body	
E30000LSM	E30100LSM	
E30001LSM	E30101LSM	
E30002LSM	E30102LSM	
E30003LSM	E30103LSM	
E30004LSM	E30104LSM	
E30005LSM	E30105LSM	
0,35		
1		

