CM_E Limit Switches

Metal Casing IP66 - 60 mm. width

Electrical Connection

CM1: three cable inlets for PG 13,5 Cable Gland

CM2: three cable inlets for 1/2" NPT Cable Gland

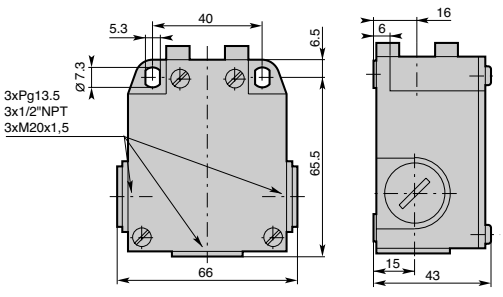
CM5: three cable inlets for M20 x 1,5 Cable Gland

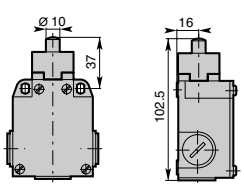
Operating Head Type	E11 - Stainless steel plain plunger	E12 - Stainless steel ball plunger	E13 - Stainless steel Ø 12 roller plunger
Conformity / ⊖ (N.C. contact with positive opening operation)	⊖	⊖	⊖
Max actuation speed [m/s]	0,5	0,5	0,5
Min. force [N] or torque [Nm]: actuation / positive opening operation	30 / 45	30 / 45	22 / 40

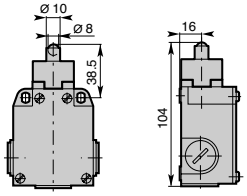
Additional Technical Datas

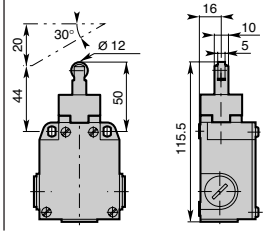
		E11 - Stainless steel plain plunger	E12 - Stainless steel ball plunger	E13 - Stainless steel Ø 12 roller plunger
Z11 Snap Action Contacts (1NO + 1NC)	Order Code	CM•E11Z11	CM•E12Z11	CM•E13Z11
	Operation Diagram	0 1.8 3.0 4.6 6.0 mm	0 1.8 3.0 4.6 6.0 mm	0 3.1 5.3 8.2 10.5 mm
X11 Non overlapping Slow Action Contacts (1NO + 1NC)	Order Code	CM•E11X11	CM•E12X11	CM•E13X11
	Operation Diagram	0 2.1 3.7 6.0 mm (3.0)	0 2.1 3.7 6.0 mm (3.0)	0 4.0 6.9 10.5 mm (5.4)
Y11 Overlapping Slow Action Contacts (1NO + 1NC)	Order Code	CM•E11Y11	CM•E12Y11	CM•E13Y11
	Operation Diagram	0 3.4 5.0 6.0 mm (2.0)	0 3.4 5.0 6.0 mm (2.0)	0 6.0 8.9 10.5 mm (3.7)
W02 Slow Action Contacts (2NC)	Order Code	CM•E11W02	CM•E12W02	CM•E13W02
	Operation Diagram	0 2.0 3.6 6.0 mm	0 2.0 3.6 6.0 mm	0 3.7 6.6 10.5 mm
W20 Slow Action Contacts (2NO) ⊗	Order Code	CM•E11W20	CM•E12W20	CM•E13W20
	Operation Diagram	0 1.9 6.0 mm	0 1.9 6.0 mm	0 3.5 10.5 mm
Z02 Snap Action Contacts (2NC)	Order Code	CM•E11Z02	CM•E12Z02	CM•E13Z02
	Operation Diagram	0 1.8 2.9 4.5 6.0 mm	0 1.8 2.9 4.5 6.0 mm	0 3.1 5.1 8.0 10.5 mm
X12 Non overlapping Slow Action Contacts (1NO + 2NC)	Order Code	CM•E11X12	CM•E12X12	CM•E13X12
	Operation Diagram	0 2.0 3.5 6.0 mm (3.7)	0 2.0 3.5 6.0 mm (3.7)	0 3.8 6.3 10.5 mm (6.5)
X21 Non overlapping Slow Action Contacts (2NO + 1NC)	Order Code	CM•E11X21	CM•E12X21	CM•E13X21
	Operation Diagram	0 2.1 3.6 6.0 mm (3.7)	0 2.1 3.6 6.0 mm (3.7)	0 3.9 6.4 10.5 mm (6.5)
W03 Simultaneous Slow Action Contacts (3NC)	Order Code	CM•E11W03	CM•E12W03	CM•E13W03
	Operation Diagram	0 2.0 3.5 6.0 mm	0 2.0 3.5 6.0 mm	0 3.8 6.3 10.5 mm
W30 Simultaneous Slow Action Contacts (3NO) ⊗	Order Code	CM•E11W30	CM•E12W30	CM•E13W30
	Operation Diagram	0 2.3 6.0 mm	0 2.3 6.0 mm	0 4.3 10.5 mm
Weight (packing per unit)	[kg]	0,265	0,265	0,270

Dimensions (in mm)









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CM_E Limit Switches

Metal Casing IP66 - 60 mm. width

E21 - Stainless steel lateral plain plunger

0,5
30 / 50

E22 - Stainless steel lateral plunger with Ø 12 vertical roller

0,5
30 / 50

E23 - Stainless steel lateral plunger with Ø 12 horizontal roller

0,5
30 / 50

E3• - One way lever

E31: Ø22 nylon roller
E32: Ø22 stainless steel roller
E33: Ø22 steel ball bearing

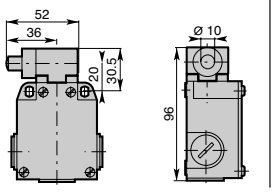
1,5
12 / 30

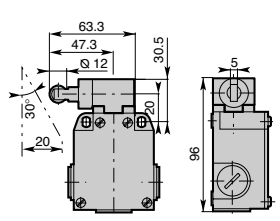
E4• - Ø 22 roller lever

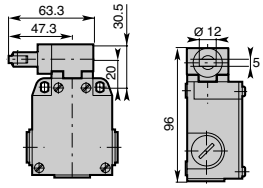
E41: nylon roller
E42: stainless steel roller
E43: steel ball bearing

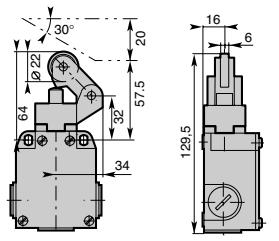
1,5
0,15 / 0,30

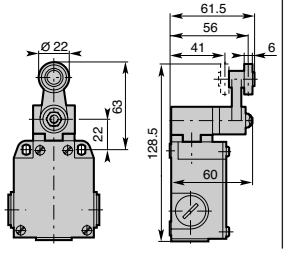
CM•E21Z11	**CM•E22Z11**	**CM•E23Z11**	**CM•E3•Z11**	**CM•E4•Z11**
CM•E21X11	**CM•E22X11**	**CM•E23X11**	**CM•E3•X11**	**CM•E4•X11**
CM•E21Y11	**CM•E22Y11**	**CM•E23Y11**	**CM•E3•Y11**	**CM•E4•Y11**
CM•E21W02	**CM•E22W02**	**CM•E23W02**	**CM•E3•W02**	**CM•E4•W02**
CM•E21W20	**CM•E22W20**	**CM•E23W20**	**CM•E3•W20**	**CM•E4•W20**
CM•E21Z02	**CM•E22Z02**	**CM•E23Z02**	**CM•E3•Z02**	**CM•E4•Z02**
CM•E21X12	**CM•E22X12**	**CM•E23X12**	**CM•E3•X12**	**CM•E4•X12**
CM•E21X21	**CM•E22X21**	**CM•E23X21**	**CM•E3•X21**	**CM•E4•X21**
CM•E21W03	**CM•E22W03**	**CM•E23W03**	**CM•E3•W03**	**CM•E4•W03**
CM•E21W30	**CM•E22W30**	**CM•E23W30**	**CM•E3•W30**	**CM•E4•W30**
0,285	**0,290**	**0,290**	**0,305**	**0,305**











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CM_E Limit Switches

Metal Casing IP66 - 60 mm. width

Electrical Connection

CM1: three cable inlets for PG 13,5 Cable Gland

CM2: three cable inlets for 1/2" NPT Cable Gland

CM5: three cable inlets for M20 x 1,5 Cable Gland

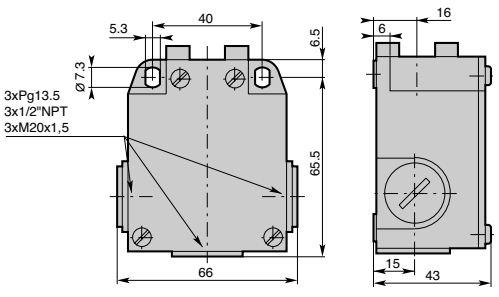
Operating Head Type

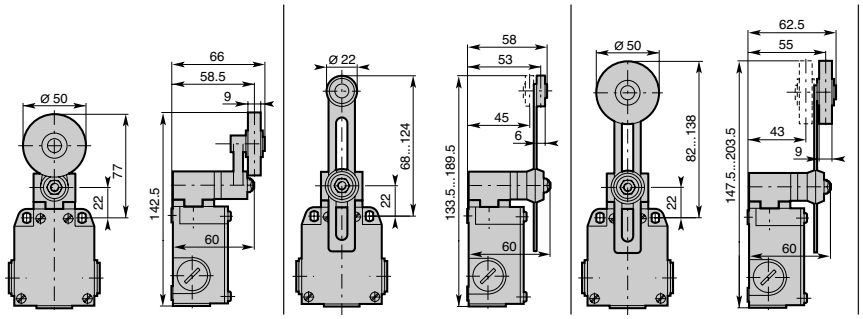
	E44 - Ø 50 rubber roller lever	E5• - Adjustable Ø 22 roller lever E51: nylon roller E52: stainless steel roller E53: steel ball bearing	E54 - Adjustable Ø 50 rubber roller lever
Conformity / ⊖ (N.C. contact with positive opening operation)	⊖	⊖	⊖
Max actuation speed [m/s]	1,5	1,5	1,5
Min. force [N] or torque [Nm]: actuation / positive opening operation	0,15 / 0,30	0,15 / 0,30	0,15 / 0,30

Additional Technical Datas

Z11 Snap Action Contacts (1NO + 1NC)	13 21 / 14 22 Zb	**Order Code**	**CM•E44Z11**	**CM•E5•Z11**	**CM•E54Z11**
		Operation Diagram	0 20° 33° 49° 78°	0 20° 33° 49° 78°	0 20° 33° 49° 78°
X11 Non overlapping Slow Action Contacts (1NO + 1NC)	13 21 / 14 22 Zb	**Order Code**	**CM•E44X11**	**CM•E5•X11**	**CM•E54X11**
		Operation Diagram	0 22° 38° 78° (33°)	0 22° 38° 78° (33°)	0 22° 38° 78° (33°)
Y11 Overlapping Slow Action Contacts (1NO + 1NC)	13 21 / 14 22 Zb	**Order Code**	**CM•E44Y11**	**CM•E5•Y11**	**CM•E54Y11**
		Operation Diagram	0 37° 53° 78° (21°)	0 37° 53° 78° (21°)	0 37° 53° 78° (21°)
W02 Slow Action Contacts (2NC)	11 21 / 12 22 Zb	**Order Code**	**CM•E44W02**	**CM•E5•W02**	**CM•E54W02**
		Operation Diagram	0 21° 37° 78°	0 21° 37° 78°	0 21° 37° 78°
W20 Slow Action Contacts (2NO) ⊗	13 23 / 14 24 Zb	**Order Code**	**CM•E44W20**	**CM•E5•W20**	**CM•E54W20**
		Operation Diagram	0 20° 78°	0 20° 78°	0 20° 78°
Z02 Snap Action Contacts (2NC)	11 21 / 12 22 Zb	**Order Code**	**CM•E44Z02**	**CM•E5•Z02**	**CM•E54Z02**
		Operation Diagram	0 20° 32° 48° 78°	0 20° 32° 48° 78°	0 20° 32° 48° 78°
X12 Non overlapping Slow Action Contacts (1NO + 2NC)	13 21 31 / 14 22 32 Zb	**Order Code**	**CM•E44X12**	**CM•E5•X12**	**CM•E54X12**
		Operation Diagram	0 18° 35° 78° (37°)	0 18° 35° 78° (37°)	0 18° 35° 78° (37°)
X21 Non overlapping Slow Action Contacts (2NO + 1NC)	13 23 31 / 14 24 32 Zb	**Order Code**	**CM•E44X21**	**CM•E5•X21**	**CM•E54X21**
		Operation Diagram	0 19° 36° 78° (37°)	0 19° 36° 78° (37°)	0 19° 36° 78° (37°)
W03 Simultaneous Slow Action Contacts (3NC)	11 21 31 / 12 22 32 Zb	**Order Code**	**CM•E44W03**	**CM•E5•W03**	**CM•E54W03**
		Operation Diagram	0 18° 35° 78°	0 18° 35° 78°	0 18° 35° 78°
W30 Simultaneous Slow Action Contacts (3NO) ⊗	13 23 33 / 14 24 34 Zb	**Order Code**	**CM•E44W30**	**CM•E5•W30**	**CM•E54W30**
		Operation Diagram	0 23° 78°	0 23° 78°	0 23° 78°
Weight (packing per unit)		**[kg]**	**0,315**	**0,325**	**0,330**

Dimensions (in mm)





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CM_E Limit Switches

Metal Casing IP66 - 60 mm. width

E61 - Nylon actuator with stainless steel spring

1,5
0,15 / –

E62 - Stainless steel spring actuator

1,5
0,15 / –

E7• - Adjustable rod lever
E71: stainless steel rod Ø3
E73: fiberglass rod Ø3
E75: square steel rod 3x3

1,5
0,15 / 0,30

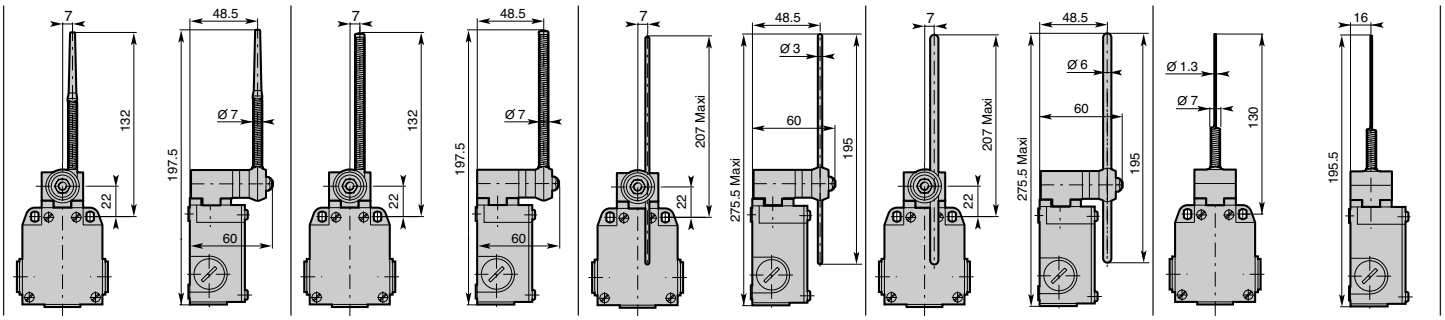
E7• - Adjustable Ø 6 rod lever
F72: nylon rod
F74: fiberglass rod

1,5
0,15 / 0,30

E91 - Stainless steel spring multidirectional actuator

1,0
0,18 / –

CM•E61Z11	**CM•E62Z11**	**CM•E7•Z11**	**CM•E7•Z11**	**CM•E91Z11**
CM•E61X11	**CM•E62X11**	**CM•E7•X11**	**CM•E7•X11**	**CM•E91X11**
CM•E61Y11	**CM•E62Y11**	**CM•E7•Y11**	**CM•E7•Y11**	**CM•E91Y11**
CM•E61W02	**CM•E62W02**	**CM•E7•W02**	**CM•E7•W02**	**CM•E91W02**
CM•E61W20	**CM•E62W20**	**CM•E7•W20**	**CM•E7•W20**	**CM•E91W20**
CM•E61Z02	**CM•E62Z02**	**CM•E7•Z02**	**CM•E7•Z02**	**CM•E91Z02**
CM•E61X12	**CM•E62X12**	**CM•E7•X12**	**CM•E7•X12**	**CM•E91X12**
CM•E61X21	**CM•E62X21**	**CM•E7•X21**	**CM•E7•X21**	**CM•E91X21**
CM•E61W03	**CM•E62W03**	**CM•E7•W03**	**CM•E7•W03**	**CM•E91W03**
CM•E61W30	**CM•E62W30**	**CM•E7•W30**	**CM•E7•W30**	**CM•E91W30**
0,330	**0,330**	**0,330**	**0,330**	**0,265**



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CM_E Limit Switches

Metal Casing IP66 - 60 mm. width

Electrical Connection

CM1: three cable inlets for PG 13,5 Cable Gland

CM2: three cable inlets for 1/2" NPT Cable Gland

CM5: three cable inlets for M20 x 1,5 Cable Gland

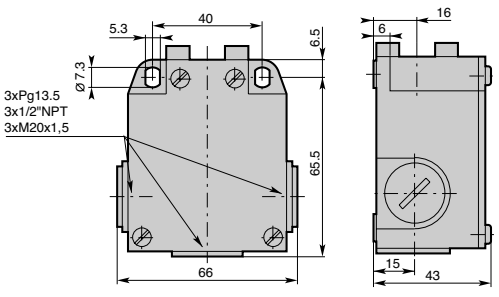
Operating Head Type

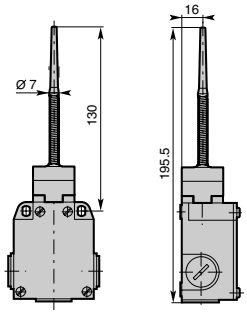
	E92 - Multidirectional nylon activator with stainless steel spring	E93 - Stainless steel spring multidirectional actuator	E99 - Pull action with ring
Conformity / ⊖ (N.C. contact with positive opening operation)			
Max actuation speed [m/s]	1,0	1,0	0,5
Min. force [N] or torque [Nm]: actuation / positive opening operation	0,18 / –	0,18 / –	25 / –

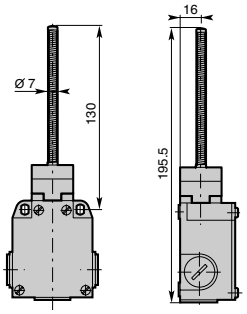
Additional Technical Datas

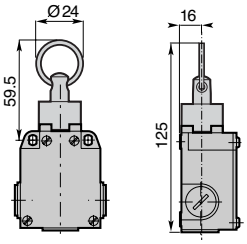
		E92	E93	E99
Z11 Snap Action Contacts (1NO + 1NC)	Order Code	CM•E92Z11	CM•E93Z11	CM•E99Z11A
	Operation Diagram	0 9° 21°	0 9° 21°	0 3.2 4.4 5.0 mm
X11 Non overlapping Slow Action Contacts (1NO + 1NC)	Order Code	CM•E92X11	CM•E93X11	CM•E99X11A
	Operation Diagram	0 12° 19°	0 12° 19°	0 2.5 5.0 mm 3.2
Y11 Overlapping Slow Action Contacts (1NO + 1NC)	Order Code	CM•E92Y11	CM•E93Y11	CM•E99Y11A
	Operation Diagram	0 23° 11°	0 23° 11°	0 3.4 5.0 mm 2.1
W02 Slow Action Contacts (2NC)	Order Code	CM•E92W02	CM•E93W02	CM•E99W02A
	Operation Diagram	0 11°	0 11°	0 3.4 5.0 mm
W20 Slow Action Contacts (2NO) ⊗	Order Code	CM•E92W20	CM•E93W20	CM•E99W20A
	Operation Diagram	0 10°	0 10°	0 3.6 5.0 mm
Z02 Snap Action Contacts (2NC)	Order Code	CM•E92Z02	CM•E93Z02	
	Operation Diagram	0 9° 20°	0 9° 20°	
X12 Non overlapping Slow Action Contacts (1NO + 2NC)	Order Code	CM•E92X12	CM•E93X12	CM•E99X12A
	Operation Diagram	0 12° 27°	0 12° 27°	0 1.6 5.0 mm 2.9
X21 Non overlapping Slow Action Contacts (2NO + 1NC)	Order Code	CM•E92X21	CM•E93X21	CM•E99X21A
	Operation Diagram	0 13° 27°	0 13° 27°	0 1.5 5.0 mm 3.0
W03 Simultaneous Slow Action Contacts (3NC)	Order Code	CM•E92W03	CM•E93W03	CM•E99W03A
	Operation Diagram	0 12°	0 12°	0 3.3 5.0 mm
W30 Simultaneous Slow Action Contacts (3NO) ⊗	Order Code	CM•E92W30	CM•E93W30	CM•E99W30A
	Operation Diagram	0 16°	0 16°	0 2.7 5.0 mm
Weight (packing per unit)	**[kg]**	**0,265**	**0,270**	**0,270**

Dimensions (in mm)









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NOTES