

LIMIT SWITCHES

Technical Data

26/03/97

**Series 14CE
Miniature Enclosed
Switches**

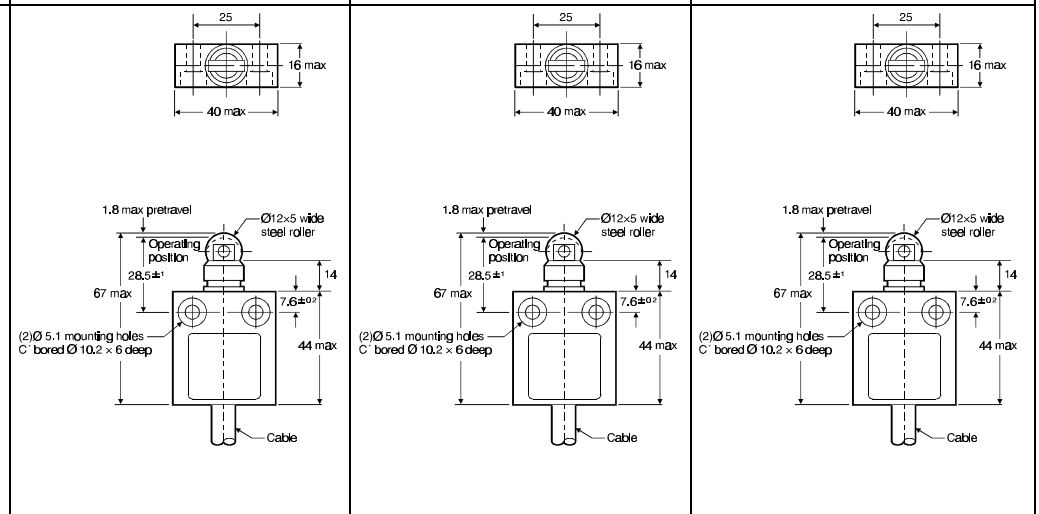
Ordering information	Product listing	14CE2-1	14CE2-2	14CE2-3
		1 metre harmonised CENELEC 4 x 0.75 mm ² cable	2 metre harmonised CENELEC 4 x 0.75 mm ² cable	3 metre harmonised CENELEC 4 x 0.75 mm ² cable
Specifications	Description	IP 65 REAR EXIT CABLE APPROVALS IEC 947-5-1, EN60947-5-1, AC14 D300, DC13 R300	IP 65 REAR EXIT CABLE APPROVALS IEC 947-5-1, EN60947-5-1, AC14 D300, DC13 R300	IP 65 REAR EXIT CABLE APPROVALS IEC 947-5-1, EN60947-5-1, AC14 D300, DC13 R300
	Actuator type	Roller plunger	Roller plunger	Roller plunger
	Circuitry	Snap-action contacts, SPDT	Snap-action contacts, SPDT	Snap-action contacts, SPDT
	Mechanical life	10 million operations	10 million operations	10 million operations
	Operating temperature	0°C to +70°C	0°C to +70°C	0°C to +70°C
	Electrical rating	See note	See note	See note
	Operating force	11.8 N max.	11.8 N max.	11.8 N max.
	Release force	4.4 N min.	4.4 N min.	4.4 N min.
	Pretravel	1.8 mm max.	1.8 mm max.	1.8 mm max.
	Overtravel	3 mm min.	3 mm min.	3 mm min.
	Differential travel	0.1 mm max.	0.1 mm max.	0.1 mm max.
	Operating position	28.5 mm +/- 1.0	28.5 mm +/- 1.0	28.5 mm +/- 1.0
	Free position			

Note:
Rated operational current and
voltage according to
IEC 947-5-1

AC14 D300
240 Vac - 0.3 A
120 Vac - 0.6 A

DC13 R300
250 Vdc - 0.1 A
125 Vdc - 0.22 A

Illustration values are in mm.



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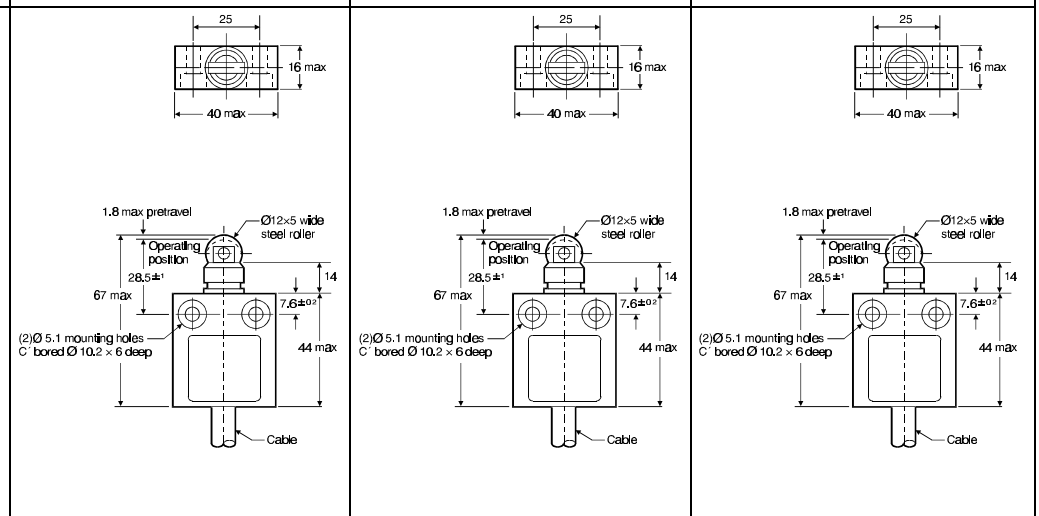
Ordering information	Product listing	14CE2-4	14CE2-5	14CE2-6
		4 metre harmonised CENELEC 4 x 0.75 mm ² cable	5 metre harmonised CENELEC 4 x 0.75 mm ² cable	6 metre harmonised CENELEC 4 x 0.75 mm ² cable
Specifications	Description	IP 65 REAR EXIT CABLE APPROVALS IEC 947-5-1, EN60947-5-1, AC14 D300, DC13 R300	IP 65 REAR EXIT CABLE APPROVALS IEC 947-5-1, EN60947-5-1, AC14 D300, DC13 R300	IP 65 REAR EXIT CABLE APPROVALS IEC 947-5-1, EN60947-5-1, AC14 D300, DC13 R300
	Actuator type	Roller plunger	Roller plunger	Roller plunger
	Circuitry	Snap-action contacts, SPDT	Snap-action contacts, SPDT	Snap-action contacts, SPDT
	Mechanical life	10 million operations	10 million operations	10 million operations
	Operating temperature	0°C to +70°C	0°C to +70°C	0°C to +70°C
	Electrical rating	See note	See note	See note
	Operating force	11.8 N max.	11.8 N max.	11.8 N max.
	Release force	4.4 N min.	4.4 N min.	4.4 N min.
	Pretravel	1.8 mm max.	1.8 mm max.	1.8 mm max.
	Overtravel	3 mm min.	3 mm min.	3 mm min.
	Differential travel	0.1 mm max.	0.1 mm max.	0.1 mm max.
	Operating position	28.5 mm +/- 1.0	28.5 mm +/- 1.0	28.5 mm +/- 1.0
	Free position			

Note:
Rated operational current and
voltage according to
IEC 947-5-1

AC14 D300
240 Vac - 0.3 A
120 Vac - 0.6 A

DC13 R300
250 Vdc - 0.1 A
125 Vdc - 0.22 A

Illustration values are in mm.



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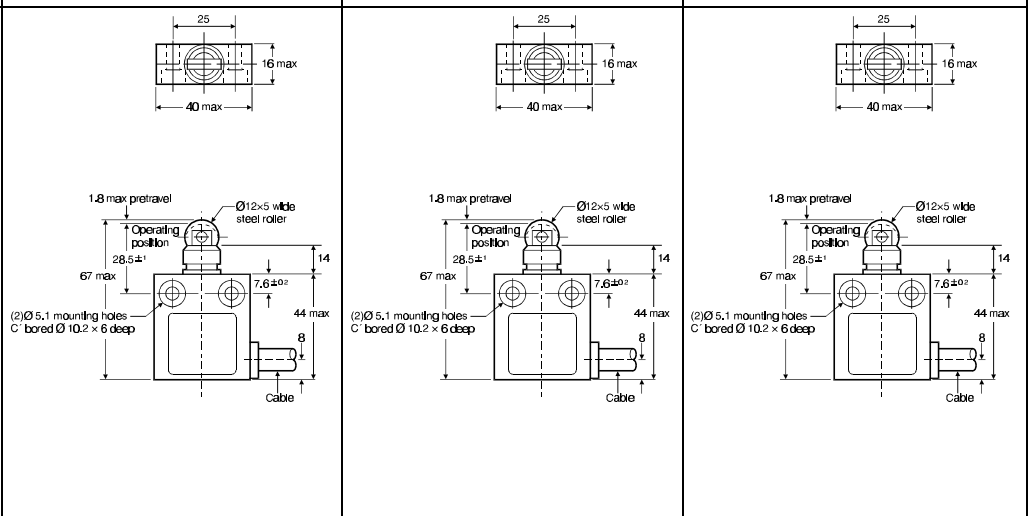
Ordering information	Product listing	14CE2-1A	14CE2-2A	14CE2-3A
		1 metre harmonised CENELEC 4 x 0.75 mm ² cable	2 metre harmonised CENELEC 4 x 0.75 mm ² cable	3 metre harmonised CENELEC 4 x 0.75 mm ² cable
Specifications	Description	IP 65 SIDE EXIT CABLE APPROVALS IEC 947-5-1, EN60947-5-1, AC14 D300, DC13 R300	IP 65 SIDE EXIT CABLE APPROVALS IEC 947-5-1, EN60947-5-1, AC14 D300, DC13 R300	IP 65 SIDE EXIT CABLE APPROVALS IEC 947-5-1, EN60947-5-1, AC14 D300, DC13 R300
	Actuator type	Roller plunger	Roller plunger	Roller plunger
	Circuitry	Snap-action contacts, SPDT	Snap-action contacts, SPDT	Snap-action contacts, SPDT
	Mechanical life	10 million operations	10 million operations	10 million operations
	Operating temperature	0°C to +70°C	0°C to +70°C	0°C to +70°C
	Electrical rating	See note	See note	See note
	Operating force	11.8 N max.	11.8 N max.	11.8 N max.
	Release force	4.4 N min.	4.4 N min.	4.4 N min.
	Pretravel	1.8 mm max.	1.8 mm max.	1.8 mm max.
	Overtravel	3 mm min.	3 mm min.	3 mm min.
	Differential travel	0.1 mm max.	0.1 mm max.	0.1 mm max.
	Operating position	28.5 mm +/- 1.0	28.5 mm +/- 1.0	28.5 mm +/- 1.0
	Free position			

Note:
Rated operational current and
voltage according to
IEC 947-5-1

AC14 D300
240 Vac - 0.3 A
120 Vac - 0.6 A

DC13 R300
250 Vdc - 0.1 A
125 Vdc - 0.22 A

Illustration values are in mm.



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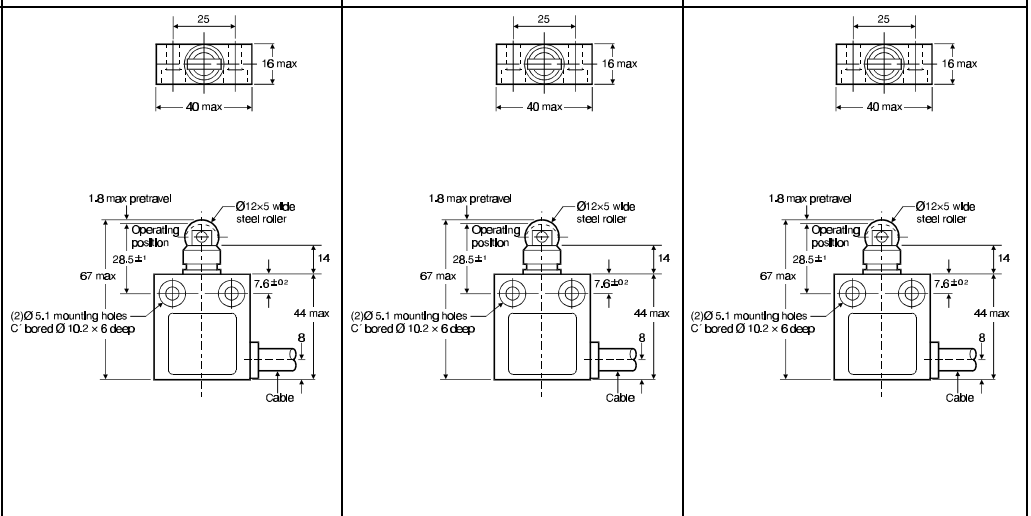
Ordering information	Product listing	14CE2-4A	14CE2-7A	14CE2-3AH
		4 metre harmonised CENELEC 4 x 0.75 mm ² cable	7 metre harmonised CENELEC 4 x 0.75 mm ² cable	3 metre SILICONE SHEATHED 4 x 0.75 mm ² cable
Specifications	Description	IP 65 SIDE EXIT CABLE APPROVALS IEC 947-5-1, EN60947-5-1, AC14 D300, DC13 R300	IP 65 SIDE EXIT CABLE APPROVALS IEC 947-5-1, EN60947-5-1, AC14 D300, DC13 R300	IP 65 SIDE EXIT CABLE APPROVALS IEC 947-5-1, EN60947-5-1, AC14 D300, DC13 R300
	Actuator type	Roller plunger	Roller plunger	Roller plunger
	Circuitry	Snap-action contacts, SPDT	Snap-action contacts, SPDT	Snap-action contacts, SPDT
	Mechanical life	10 million operations	10 million operations	10 million operations
	Operating temperature	0°C to +70°C	0°C to +70°C	0°C to +150°C
	Electrical rating	See note	See note	See note
	Operating force	11.8 N max.	11.8 N max.	11.8 N max.
	Release force	4.4 N min.	4.4 N min.	4.4 N min.
	Pretravel	1.8 mm max.	1.8 mm max.	1.8 mm max.
	Overtravel	3 mm min.	3 mm min.	3 mm min.
	Differential travel	0.1 mm max.	0.1 mm max.	0.1 mm max.
	Operating position	28.5 mm +/- 1.0	28.5 mm +/- 1.0	28.5 mm +/- 1.0
	Free position			

Note:
Rated operational current and
voltage according to
IEC 947-5-1

AC14 D300
240 Vac - 0.3 A
120 Vac - 0.6 A

DC13 R300
250 Vdc - 0.1 A
125 Vdc - 0.22 A

Illustration values are in mm.



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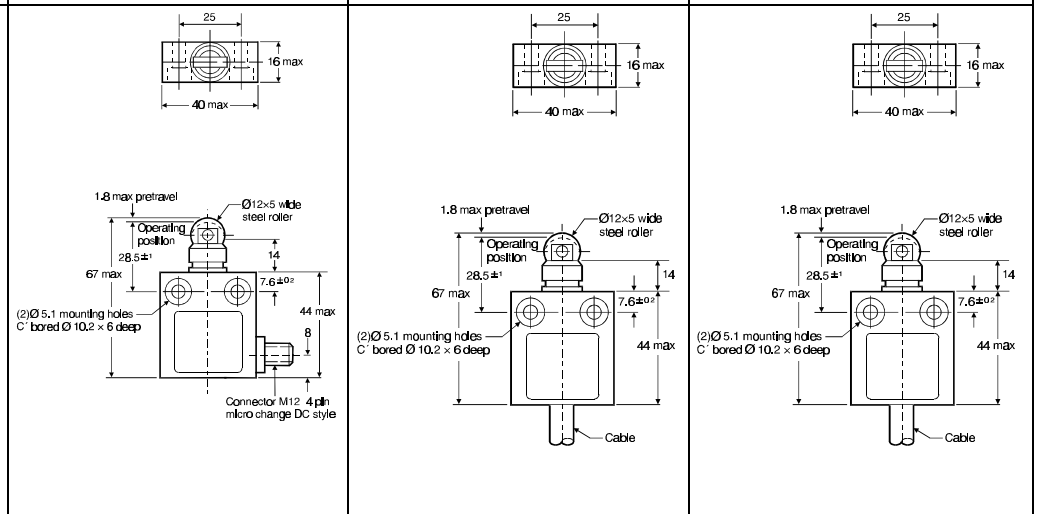
Ordering information	Product listing	14CE2-AQ Brad Harrison Micro change M12 4 pin D.C type.	14CE2-2B 2 metre harmonised CENELEC 4 x 0.75 mm ² cable	14CE2-1D 1 metre halogen free cable
Specifications	Description	IP 65 SIDE EXIT CONNECTOR APPROVALS IEC 947-5-1, EN60947-5-1, AC14 D300, DC13 R300	IP 65 REAR EXIT CABLE, ELONGATED MOUNTING HOLES, APPROVALS IEC 947- 5-1, EN60947-5-1, AC14 D300, DC13 R300	IP 65 REAR EXIT CABLE APPROVALS IEC 947-5-1, EN60947-5-1, AC14 D300, DC13 R300
	Actuator type	Roller plunger	Roller plunger	Roller plunger
	Circuitry	Snap-action contacts, SPDT	Snap-action contacts, SPDT	Snap-action contacts, SPDT
	Mechanical life	10 million operations	10 million operations	10 million operations
	Operating temperature	0°C to +70°C	0°C to +70°C	0°C to +70°C
	Electrical rating	See note	See note	See note
	Operating force	11.8 N max.	11.8 N max.	11.8 N max.
	Release force	4.4 N min.	4.4 N min.	4.4 N min.
	Pretravel	1.8 mm max.	1.8 mm max.	1.8 mm max.
	Overtravel	3 mm min.	3 mm min.	3 mm min.
	Differential travel	0.1 mm max.	0.1 mm max.	0.1 mm max.
	Operating position	28.5 mm +/- 1.0	28.5 mm +/- 1.0	28.5 mm +/- 1.0
	Free position			

Note:
Rated operational current and
voltage according to
IEC 947-5-1

AC14 D300
240 Vac - 0.3 A
120 Vac - 0.6 A

DC13 R300
250 Vdc - 0.1 A
125 Vdc - 0.22 A

Illustration values are in mm.



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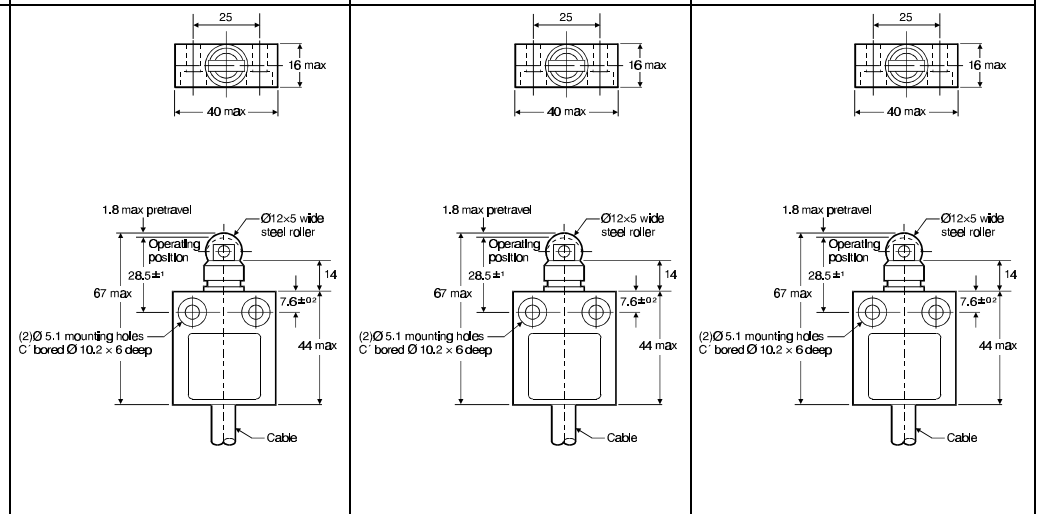
Ordering information	Product listing	14CE2-2D 2 metre halogen free cable	14CE2-3D 3 metre halogen free cable	14CE2-6D 6 metre halogen free cable
Specifications	Description	IP 65 REAR EXIT CABLE APPROVALS IEC 947-5-1, EN60947-5-1, AC14 D300, DC13 R300	IP 65 REAR EXIT CABLE APPROVALS IEC 947-5-1, EN60947-5-1, AC14 D300, DC13 R300	IP 65 REAR EXIT CABLE APPROVALS IEC 947-5-1, EN60947-5-1, AC14 D300, DC13 R300
	Actuator type	Roller plunger	Roller plunger	Roller plunger
	Circuitry	Snap-action contacts, SPDT	Snap-action contacts, SPDT	Snap-action contacts, SPDT
	Mechanical life	10 million operations	10 million operations	10 million operations
	Operating temperature	0°C to +70°C	0°C to +70°C	0°C to +70°C
	Electrical rating	See note	See note	See note
	Operating force	11.8 N max.	11.8 N max.	11.8 N max.
	Release force	4.4 N min.	4.4 N min.	4.4 N min.
	Pretravel	1.8 mm max.	1.8 mm max.	1.8 mm max.
	Overtravel	3 mm min.	3 mm min.	3 mm min.
	Differential travel	0.1 mm max.	0.1 mm max.	0.1 mm max.
	Operating position	28.5 mm +/- 1.0	28.5 mm +/- 1.0	28.5 mm +/- 1.0
	Free position			

Note:
Rated operational current and
voltage according to
IEC 947-5-1

AC14 D300
240 Vac - 0.3 A
120 Vac - 0.6 A

DC13 R300
250 Vdc - 0.1 A
125 Vdc - 0.22 A

Illustration values are in mm.



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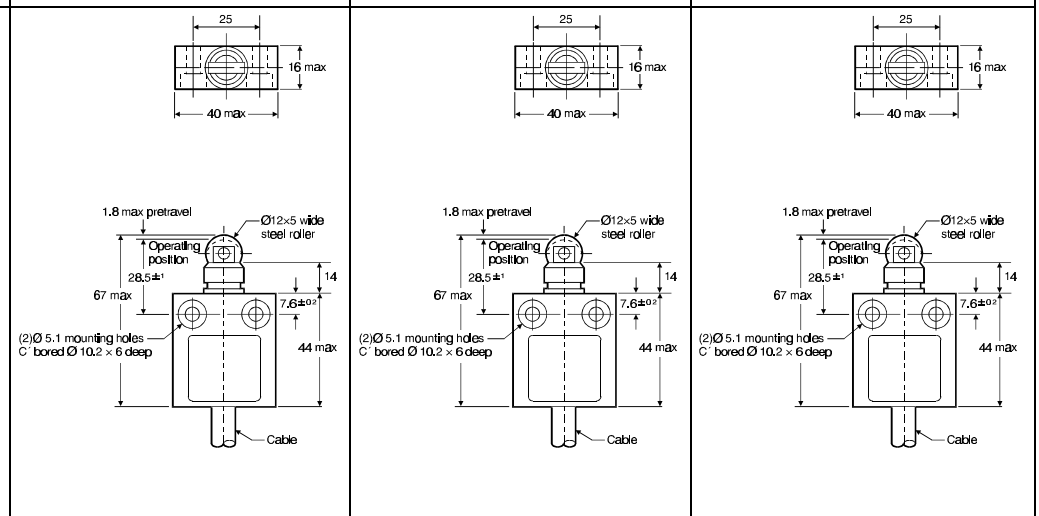
Ordering information	Product listing	14CE2-1G	14CE2-3G	14CE2-1K
		1 metre harmonised CENELEC 4 x 0.75 mm ² cable	3 metre harmonised CENELEC 4 x 0.75 mm ² cable	1 metre harmonised CENELEC 4 x 0.75 mm ² cable
Specifications	Description	IP 65 REAR EXIT CABLE GOLD CONTACT BASIC	IP 65 REAR EXIT CABLE GOLD CONTACT BASIC	IP 66 REAR EXIT CABLE APPROVALS IEC 947-5-1, EN60947-5-1, AC14 D300, DC13 R300
	Actuator type	Roller plunger	Roller plunger	Roller plunger
	Circuitry	Snap-action contacts, SPDT	Snap-action contacts, SPDT	Snap-action contacts, SPDT
	Mechanical life	10 million operations	10 million operations	10 million operations
	Operating temperature	0°C to +70°C	0°C to +70°C	0°C to +70°C
	Electrical rating	See note	See note	See note
	Operating force	11.8 N max.	11.8 N max.	22.5 N max.
	Release force	4.4 N min.	4.4 N min.	4.4 N min.
	Pretravel	1.8 mm max.	1.8 mm max.	1.8 mm max.
	Overtravel	3 mm min.	3 mm min.	3 mm min.
	Differential travel	0.1 mm max.	0.1 mm max.	0.1 mm max.
	Operating position	28.5 mm +/- 1.0	28.5 mm +/- 1.0	28.5 mm +/- 1.0
	Free position			

Note:
Rated operational current and
voltage according to
IEC 947-5-1

AC14 D300
240 Vac - 0.3 A
120 Vac - 0.6 A

DC13 R300
250 Vdc - 0.1 A
125 Vdc - 0.22 A

Illustration values are in mm.



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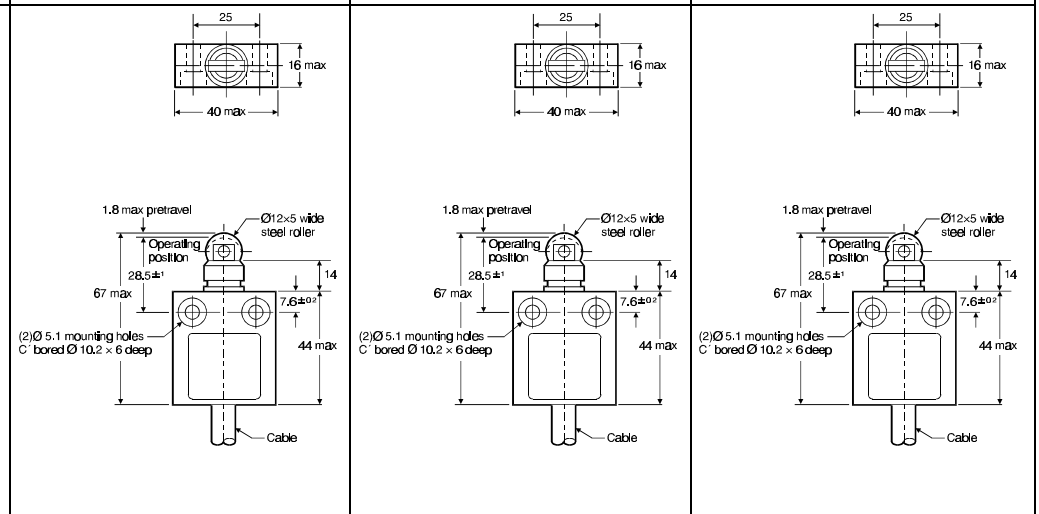
Ordering information	Product listing	14CE2-2K	14CE2-3K	14CE2-3KV
		2 metre harmonised CENELEC 4 x 0.75 mm ² cable	3 metre harmonised CENELEC 4 x 0.75 mm ² cable	3 metre harmonised CENELEC 4 x 0.75 mm ² cable
Specifications	Description	IP 66 REAR EXIT CABLE APPROVALS IEC 947-5-1, EN60947-5-1, AC14 D300, DC13 R300	IP 66 REAR EXIT CABLE APPROVALS IEC 947-5-1, EN60947-5-1, AC14 D300, DC13 R300	IP 66 REAR EXIT CABLE VITON 'O' RING SEALS, APPROVALS IEC 947-5-1, EN60947-5-1, AC14 D300, DC13 R300
	Actuator type	Roller plunger	Roller plunger	Roller plunger
	Circuitry	Snap-action contacts, SPDT	Snap-action contacts, SPDT	Snap-action contacts, SPDT
	Mechanical life	10 million operations	10 million operations	10 million operations
	Operating temperature	0°C to +70°C	0°C to +70°C	0°C to +70°C
	Electrical rating	See note	See note	See note
	Operating force	22.5 N max.	22.5 N max.	22.5 N max.
	Release force	4.4 N min.	4.4 N min.	4.4 N min.
	Pretravel	1.8 mm max.	1.8 mm max.	1.8 mm max.
	Overtravel	3 mm min.	3 mm min.	3 mm min.
	Differential travel	0.1 mm max.	0.1 mm max.	0.1 mm max.
	Operating position	28.5 mm +/- 1.0	28.5 mm +/- 1.0	28.5 mm +/- 1.0
	Free position			

Note:
Rated operational current and
voltage according to
IEC 947-5-1

AC14 D300
240 Vac - 0.3 A
120 Vac - 0.6 A

DC13 R300
250 Vdc - 0.1 A
125 Vdc - 0.22 A

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Ordering information	Product listing	14CE2-1L 1 metre SILICONE SHEATHED 4 x 0.75 mm ² cable	14CE2-1L1 1 metre harmonised CENELEC 4 x 0.75 mm ² cable	14CE2-Q Brad Harrison Micro change M12 4 pin D.C type.
Specifications	Description	IP 65 REAR EXIT CABLE APPROVALS IEC 947-5-1, EN60947-5-1, AC14 D300, DC13 R300	IP 65 REAR EXIT CABLE -40 C HEAD CONSTRUCTION, CABLE NOT TO BE FLEXED, APPROVALS IEC 947-5-1, EN60947-5-1, AC14 D300, DC13 R300	IP 65 REAR EXIT CONNECTOR APPROVALS IEC 947-5-1, EN60947-5-1, AC14 D300, DC13 R300
	Actuator type	Roller plunger	Roller plunger	Roller plunger
	Circuitry	Snap-action contacts, SPDT	Snap-action contacts, SPDT	Snap-action contacts, SPDT
	Mechanical life	10 million operations	10 million operations	10 million operations
	Operating temperature	-40°C to +70°C	-40°C to +70°C	0°C to +70°C
	Electrical rating	See note	See note	See note
	Operating force	11.8 N max.	11.8 N max.	11.8 N max.
	Release force	4.4 N min.	4.4 N min.	4.4 N min.
	Pretravel	1.8 mm max.	1.8 mm max.	1.8 mm max.
	Overtravel	3 mm min.	3 mm min.	3 mm min.
	Differential travel	0.1 mm max.	0.1 mm max.	0.1 mm max.
	Operating position	28.5 mm +/- 1.0	28.5 mm +/- 1.0	28.5 mm +/- 1.0
	Free position			

Note:
Rated operational current and
voltage according to
IEC 947-5-1

AC14 D300
240 Vac - 0.3 A
120 Vac - 0.6 A

DC13 R300
250 Vdc - 0.1 A
125 Vdc - 0.22 A

Illustration values are in mm.

