# The large professional sensor.

Fixed sizes for the future: the E-series M12.





Challenges are a routine matter for the circular connectors of the E-series M12: inductive or capacitative proximity switches, photoelectric barriers, flow-monitoring devices, pressure switches, limit switch connections, photoelectric barriers, AS interface bus components and field bus components – the best is just good enough. And in order to ensure a particularly long life, Hirschmann circular connectors are protected against dust and moisture and are resistant to many oils and chemical substances.

The ergonomic design of E-series makes handling easier; as a result, the connection of sensor and actuator technology in automation systems as for example in automatic installation units and machine tools can be done quickly and promptly. Our engineered design prevents the accidental unscrewing of the coupling nut. This provides an additional advantage in terms of safety in all fields of application that are subject to high vibration loads, for example in conveyor belt equipment and automatic punch presses.

Hirschmann circular connectors are used in all sensor and actuator device applications in automation technology – particularly where the risk of vibrations is especially high.

The E-series M12 with plug design as per IEC 61076-2-101 (Ed. 1) can be obtained in the design type with screw locking M12x1, and also in a shielded version if so desired.















with screw locking > Straight cable socket, self-assembled

Туре	ELKA 4012 PG7 schwarz/black	ELKA 4012 PG7 transparent/topa
Order No.	933 139-100  Straight cable socket, unassembled, strain relief by means of clamping cage	933 210-199  Straight cable socket, unassembled, strain relief by means of clamping cage,
Product description Type of contact Number of contacts Cable gland Standard Housing Color Drawing	female 4 PG 7 IEC 61076-2-101 (Ed. 1)/ IEC 60947-5-2 black	electronic insert (LED display) may be fitted  female 4 PG 7 IEC 61076-2-101 (Ed. 1)/ IEC 60947-5-2 transparent
	(5) blind hole	(5) blind hole
Technical data Rated voltage Rated current Type of termination Suitable cables	AC/DC 250 V 4 A screw diameter 4 mm to 6 mm, max. 0.75 mm <sup>2</sup>	AC/DC 250 V 4 A screw diameter 4 mm to 6 mm, max. 0.75 mm <sup>2</sup>
Material Contact material Contact surface material Contact bearer material Housing material Coupling mut material O-Ring	Cu Zn Sn PA PA Zn Al/Ni NBR	Cu Zn Sn PA PA Zn Al/Ni NBR
Environmental conditions Protection class (IEC 60529) Pollution severity Temperature range	IP 67 3 -25 °C to +90 °C	IP 67 3 -25 °C to +90 °C
Inflammability class Housing Contact bearer Packing unit	94 V-2 94 V-2	94 V-2 94 V-2
Packaging unit	100 pieces	100 pieces
Scope of delivery and accessories Accessories to order separately	protective cap M12 VS, order no. 734 209-100	protective cap M12 VS, order no. 734 209-100; LED insert E 2 LED PNP, order no. 933 405-001

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ELKA 4012 K PG7	ELKA 4012 PG9	ELKA 5012 PG7
Straight cable socket, unassembled, strain relief by means of clamping cage, plastic coupling nut	933 169-100  Straight cable socket, unassembled, strain relief by means of clamping cage	933 170-100  Straight cable socket, unassembled, strain relief by means of clamping cage
female	female	female
4	4	5
PG 7	PG 9	PG 7
IEC 61076-2-101 (Ed. 1)/ IEC 60947-5-2	IEC 61076-2-101 (Ed. 1)/ IEC 60947-5-2	IEC 61076-2-101 (Ed. 1)/ IEC 60947-5-2
black	black	black
(5) blind hole	(5) blind hole	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
AC/DC 250 V	AC/DC 250 V	AC/DC 50 V
4 A	4 A	4 A
screw	screw	screw
diameter 4 mm to 6 mm, max. 0.75 mm <sup>2</sup>	diameter 6 mm to 8 mm, max. 0.75 mm <sup>2</sup>	diameter 4 mm to 6 mm, max. 0.75 mm <sup>2</sup>
Cu Zn	Cu Zn	Cu Zn
Sn	Sn	Sn
PA	PA	PA
PA	PA	PA
PA	Zn Al/Ni	Zn Al/Ni
NBR	NBR	NBR
IP 67	IP 67	IP 67
3	3	3
-25 °C to +90 °C	-25 °C to +90 °C	-25 °C to +90 °C
94 V-2	94 V-2	94 V-2
94 V-2	94 V-2	94 V-2
100 pieces	100 pieces	100 pieces
protective cap M12 VS,	protective cap M12 VS,	protective cap M12 VS,
order no. 734 209-100	order no. 734 209-100	order no. 734 209-100

with screw locking > Straight cable socket, self-assembled

Order No.	ELKA 5012 PG9
Product description	933 171-100  Straight cable socket, unassembled, strain relief by means of clamping cage
Type of contact Number of contacts Cable gland Standard Housing Color Drawing	female 5 PG 9 IEC 61076-2-101 (Ed. 1)/ IEC 60947-5-2 black
	200 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Technical data Rated voltage Rated current Type of termination Suitable cables	AC/DC 50 V 4 A screw diameter 6 mm to 8 mm, max. 0.75 mm <sup>2</sup>
Rated voltage Rated current Type of termination Suitable cables  Material Contact material Contact surface material Contact bearer material Housing material Coupling nut material O-Ring	4 A screw
Rated voltage Rated current Type of termination Suitable cables  Material Contact material Contact surface material Contact bearer material Housing material Coupling nut material O-Ring Environmental conditions Protection class (IEC 60529) Pollution severity Temperature range Inflammability class	4 A screw diameter 6 mm to 8 mm, max. 0.75 mm²  Cu Zn Sn PA PA Zn Al/Ni NBR  IP 67 3 -25 °C to +90 °C
Rated voltage Rated current Type of termination Suitable cables  Material Contact material Contact surface material Contact bearer material Housing material Coupling nut material O-Ring Environmental conditions Protection class (IEC 60529) Pollution severity Temperature range	4 A Screw diameter 6 mm to 8 mm, max. 0.75 mm²  Cu Zn Sn PA PA Zn Al/Ni NBR

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with screw locking > Angled cable socket, self-assembled

Туре	ELWIKA 4012 PG7 schwarz/black	ELWIKA 4012 PG7 transparent/
Product description Type of contact Number of contacts	Angled cable socket, unassembled, strain relief by means of clamping cage  female 4	Angled cable socket, unassembled, strain relief by means of clamping cage, electronic insert (LED display) may be fitted female
Cable gland Standard	PG 7 IEC 61076-2-101 (Ed. 1)/ IEC 60947-5-2	PG 7 IEC 61076-2-101 (Ed. 1)/ IEC 60947-5-2
Housing Color  Drawing	black	transparent
	(5) blind hole  30.5  10  (a)  M 12  Ø 20	30.5 10 LL LU
Technical data Rated voltage Rated current	AC/DC 250 V 4 A	AC/DC 250 V 4 A
Type of termination Suitable cables	screw diameter 4 mm to 6 mm, max. 0.75 mm <sup>2</sup>	screw diameter 4 mm to 6 mm, max. 0.75 mm <sup>2</sup>
Material Contact material Contact surface material Contact bearer material Housing material Coupling nut material O-Ring	Cu Zn Sn PA PA Zn Al/Ni NBR	Cu Zn Sn PA PA Zn Al/Ni NBR
Environmental conditions Protection class (IEC 60529) Pollution severity Temperature range	IP 67 3 -25 °C to +90 °C	IP 67 3 -25 °C to +90 °C
Inflammability class Housing Contact bearer	94 V-2 94 V-2	94 V-2 94 V-2
Packing unit Packaging unit	100 pieces	100 pieces
Scope of delivery and accessories Accessories to order separately	protective cap M12 VS, order no. 734 209-100	protective cap M12 VS, order no. 734 209-100; LED insert E 2 LED PNP, order no. 933 405-001

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with screw locking > Angled cable socket, self-assembled

Туре	ELWIKA 4012 K PG7	ELWIKA 4012 PG9
Order No.	933 726-100  Angled cable socket, unassembled,	933 174-100  Angled cable socket, unassembled,
	strain relief by means of clamping cage, plastic coupling nut	strain relief by means of clamping cage
Product description Type of contact Number of contacts Cable gland Standard Housing Color Drawing	female 4 PG 7 IEC 61076-2-101 (Ed. 1)/ IEC 60947-5-2 black	female 4 PG 9 IEC 61076-2-101 (Ed. 1)/ IEC 60947-5-2 black
	(5) blind hole	30.5 × 10 × 10 × 10 × 10 × 10 × 10 × 10 × 1
Technical data Rated voltage Rated current Type of termination Suitable cables	AC/DC 250 V 4 A screw diameter 4 mm to 6 mm, max. 0.75 mm <sup>2</sup>	AC/DC 250 V 4 A screw diameter 6 mm to 8 mm, max. 0.75 mm <sup>2</sup>
Material Contact material Contact surface material Contact bearer material Housing material Coupling nut material O-Ring	Cu Zn Sn PA PA PA NBR	Cu Zn Sn PA PA Zn Al/Ni NBR
Environmental conditions Protection class (IEC 60529) Pollution severity Temperature range	IP 67 3 -25 °C to +90 °C	IP 67 3 -25 °C to +90 °C
Inflammability class Housing Contact bearer	94 V-2 94 V-2	94 V-2 94 V-2
Packing unit Packaging unit	100 pieces	100 pieces
Scope of delivery and accessories Accessories to order separately	protective cap M12 VS, order no. 734 209-100	protective cap M12 VS, order no. 734 209-100

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ELWIKA 5012 PG7	ELWIKA 5012 PG9
933 175-100	933 176-100
Angled cable socket, unassembled, strain relief by means of clamping cage	Angled cable socket, unassembled, strain relief by means of clamping cage
female 5 PG 7 IEC 61076-2-101 (Ed. 1)/ IEC 60947-5-2 black	female 5 PG 9 IEC 61076-2-101 (Ed. 1)/ IEC 60947-5-2 black
30.5 ≈ 10 L L L L L L L L L L L L L L L L L L	30.5 = 10 9 20
AC/DC 50 V	AC/DC 50 V
4 A	4 A
screw diameter 4 mm to 6 mm, max. 0.75 mm <sup>2</sup>	diameter 6 mm to 8 mm, max. 0.75 mm <sup>2</sup>
Cu Zn Sn PA PA Zn Al/Ni NBR	Cu Zn Sn PA PA Zn Al/Ni NBR
IP 67 3 -25 °C to +90 °C	IP 67 3 -25 °C to +90 °C
94 V-2 94 V-2	94 V-2 94 V-2
100 pieces	100 pieces
protective cap M12 VS, order no. 734 209-100	protective cap M12 VS, order no. 734 209-100

with screw locking > Straight cable plug, self-assembled

Туре	ELST 4012 PG7	ELST 4012 K PG7
Order No.	933 098-100	933 727-100
Product description	Straight cable plug, unassembled, strain relief by means of clamping cage	Straight cable plug, unassembled, strain relief by means of clamping cage, plastic coupling thread
Type of contact Number of contacts	male 4	male 4
Cable gland	PG 7	PG 7
Standard Housing Color	IEC 61076-2-101 (Ed. 1)/ IEC 60947-5-2 black	IEC 61076-2-101 (Ed. 1)/ IEC 60947-5-2 black
Technical data	© 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	© 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Pin dimensions	1 mm AC/DC 250 V	1 mm AC/DC 250 V
Rated voltage Rated current	4 A	4 A
Type of termination Suitable cables	screw diameter 4 mm to 6 mm, max. 0.75 mm <sup>2</sup>	screw diameter 4 mm to 6 mm, max. 0.75 mm <sup>2</sup>
Material Contact material Contact surface material Contact bearer material Housing material Coupling nut material O-Ring	Cu Zn Sn PA PA Zn Al/Ni NBR	Cu Zn Sn PA PA PA PA NBR
Environmental conditions Protection class (IEC 60529) Pollution severity Temperature range	IP 67 3 -25 °C to +90 °C	IP 67 3 -25 °C to +90 °C
Inflammability class Housing Contact bearer	94 V-2 94 V-2	94 V-2 94 V-2
Packing unit Packaging unit	100 pieces	100 pieces

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ELST 4012 PG9	ELST 5012 PG7	ELST 5012 PG9
933 162-100  Straight cable plug, unassembled, strain relief by means of clamping cage	933 163-100  Straight cable plug, unassembled, strain relief by means of clamping cage	933 164-100  Straight cable plug, unassembled, strain relief by means of clamping cage
male 4 PG 9 IEC 61076-2-101 (Ed. 1)/ IEC 60947-5-2 black	male 5 PG 7 IEC 61076-2-101 (Ed. 1)/ IEC 60947-5-2 black	male 5 PG 9 IEC 61076-2-101 (Ed. 1)/ IEC 60947-5-2 black
© 50 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	050 070 070 070 070 070 070 070 070 070	260 × 10 × 10 × 10 × 10 × 10 × 10 × 10 ×
1 mm AC/DC 250 V 4 A screw diameter 6 mm to 8 mm, max. 0.75 mm <sup>2</sup>	1 mm AC/DC 50 V 4 A screw diameter 4 mm to 6 mm, max. 0.75 mm <sup>2</sup>	1 mm AC/DC 50 V 4 A screw diameter 6 mm to 8 mm, max. 0.75 mm <sup>2</sup>
Cu Zn Sn PA PA Zn Al/Ni NBR	Cu Zn Sn PA PA Zn Al/Ni NBR	Cu Zn Sn PA PA Zn Al/Ni NBR
IP 67 3 -25 °C to +90 °C	IP 67 3 -25 °C to +90 °C	IP 67 3 -25 °C to +90 °C
94 V-2 94 V-2	94 V-2 94 V-2	94 V-2 94 V-2
100 pieces	100 pieces	100 pieces

with screw locking > Angled cable plug, self-assembled

Туре	ELWIST 4012 PG7	ELWIST 4012 K PG7
Order No.	933 165-100	933 728-100
	Angled cable plug, unassembled, strain relief by means of clamping cage	Angled cable plug, unassembled, strain relief by means of clamping cage, plastic coupling thread
Product description		
Type of contact Number of contacts	male 4	male 4
Cable gland	PG 7	PG 7
Standard	IEC 61076-2-101 (Ed. 1)/ IEC 60947-5-2	IEC 61076-2-101 (Ed. 1)/ IEC 60947-5-2
Housing Color Drawing	black	black
Technical data	30.5 × 10 × 10 × 10 × 10 × 10 × 10 × 10 × 1	30.5 ≈10 L L L L L L L L L L L L L L L L L L L
Pin dimensions	1 mm	1 mm
Rated voltage Rated current	AC/DC 250 V 4 A (2 A at 0.14 mm <sup>2</sup> )	AC/DC 250 V 4 A
Type of termination	screw	screw
Suitable cables	diameter 4 mm to 6 mm, max. 0.75 mm <sup>2</sup>	diameter 4 mm to 6 mm, max. 0.75 mm <sup>2</sup>
Material Contact material Contact surface material Contact bearer material Housing material Coupling nut material O-Ring	Cu Zn Sn PA PA Zn Al/Ni NBR	Cu Zn Sn PA PA PA NBR
Environmental conditions Protection class (IEC 60529) Pollution severity	IP 67	IP 67
Temperature range	-25 °C to +90 °C	-25 °C to +90 °C
Inflammability class Housing Contact bearer	94 V-2 94 V-2	94 V-2 94 V-2
Packing unit Packaging unit	100	100
Zarry artifort finii	100 pieces	100 pieces

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ELWIST 4012 PG9	ELWIST 5012 PG7	ELWIST 5012 PG9
Angled cable plug, unassembled, strain relief by means of clamping cage	Angled cable plug, unassembled, strain relief by means of clamping cage	Angled cable plug, unassembled, strain relief by means of clamping cage
male 4 PG 9 IEC 61076-2-101 (Ed. 1)/ IEC 60947-5-2 black	male 5 PG 7 IEC 61076-2-101 (Ed. 1)/ IEC 60947-5-2 black	male 5 PG 9 IEC 61076-2-101 (Ed. 1)/ IEC 60947-5-2 black
30.5 = 10 M 12 Ø 20	30.5 ≈10 M 12 Ø 20	30.5 ×10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
1 mm AC/DC 250 V 4 A screw diameter 6 mm to 8 mm, max. 0.75 mm <sup>2</sup>	1 mm AC/DC 50 V 4 A screw diameter 4 mm to 6 mm, max. 0.75 mm <sup>2</sup>	1 mm AC/DC 50 V 4 A screw diameter 6 mm to 8 mm, max. 0.75 mm <sup>2</sup>
Cu Zn Sn PA PA Zn Al/Ni NBR	Cu Zn Sn PA PA Zn Al/Ni NBR	Cu Zn Sn PA PA Zn Al/Ni NBR
IP 67 3 -25 °C to +90 °C	IP 67 3 -25 °C to +90 °C	IP 67 3 -25 °C to +90 °C
94 V-2 94 V-2	94 V-2 94 V-2	94 V-2 94 V-2
100 pieces	100 pieces	100 pieces