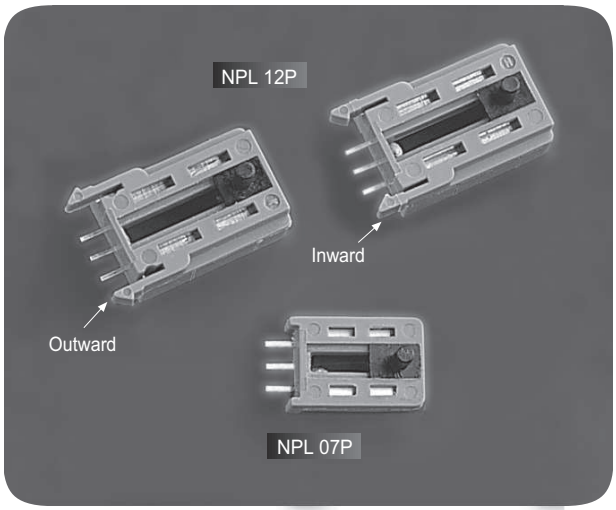
NPL

Linear position sensor



FEATURES

- High reliability
- Simple construction (only 3 component parts)
- Over-moulding manufacturing technique
- Plastic or metal clip versions available
- Various fixation means: clip type (inward/outward actuating), locating pins,...

TYPICAL APPLICATIONS

Provides a low cost, highly reliable solution for all position sensing applications:

- Automotive seat position memory, central locking, headlamp position and rear-view mirror position sensors.

MECHANICAL SPECIFICATIONS

Mechanical travel:

- NPL07.....7,25mm
- NPL08.....8mm
- NPL12.....12mm

Electrical travel:	(see how to order)
Sliding force:	≤ 2N @ 10mm/sec
Stop strenght:	30N for 5 secs

ELECTRICAL SPECIFICATIONS

Range of values:	1K to 100K ohms
Tolerance:	± 30%
Max. voltage*:	50 VDC to 100 VDC
Power rating*:	0.20 W @ 50°C
Operating temperature:	-40°C to +105°C
Taper**:	Linear
Relative linearity**:	± 2%
Mechanical Life:	50K cycles

** Depending on model ** Others check availability*

HOW TO ORDER

NPL07P	0 6	1 0 2	3 0 3 0	O
Series	Electrical Travel	Value	Tolerance	Clip Style
NPL 07 P NPL 12 P NPL 08M	6 to 8 6 to 12 6 to 8	102 = 1K 104 = 100 K	3030 = ±30%	I = Inward O = Outward W = Without clip S = Straight C = Crimped
(See note 1)	(See note 2)	(See note 3)	(See note 4)	(See note 5)

NOTES:

(1) Suffixes: P = Plastic, M= Metal

(2) Each NPL series has its own Electrical Travel range as shown.

(3) Value Example: Code: 10 2 1kΩ
- 2 → Number of zeros
- 10 → First two digits of the value.

(4) Non standard tolerance, check Example: +25% -20% Code: 25 20
- 25 → negative tolerance
- 20 → positive tolerance

(5) S and C options only available for NPL08M (metal version)
W option only available for NPL07P
I and O options only available for NPL12P

NOTE: The information contained here should be used for reference purposes only.

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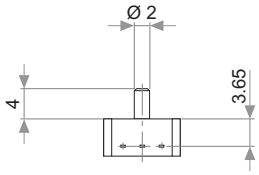
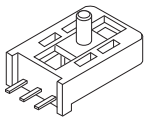
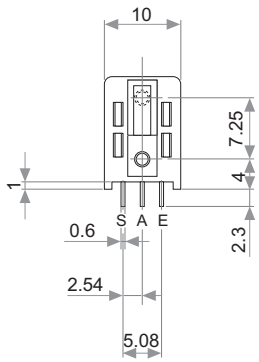
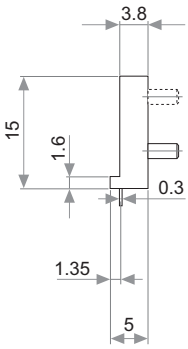
PLASTIC VERSION NPL-07P

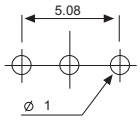






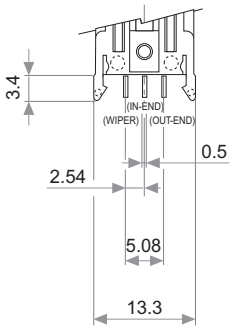


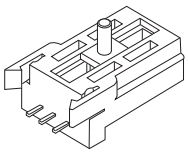
PCB Hole Layout



PLASTIC VERSION NPL-12P

INWARD FACING CLIPS





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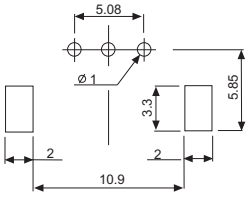
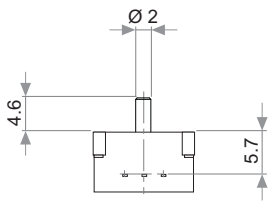
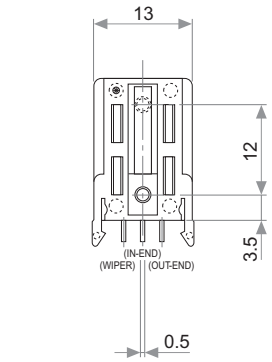
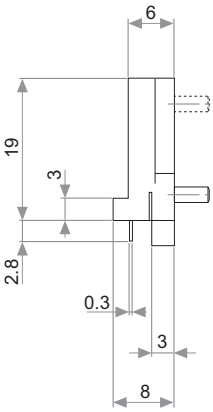
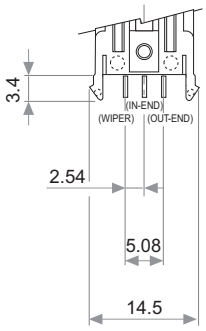


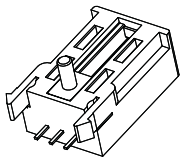






OUTWARD FACING CLIPS





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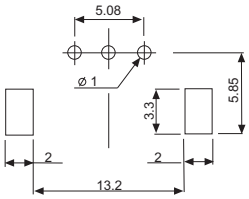
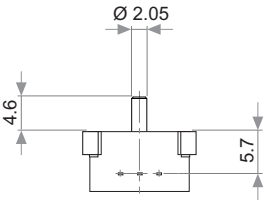
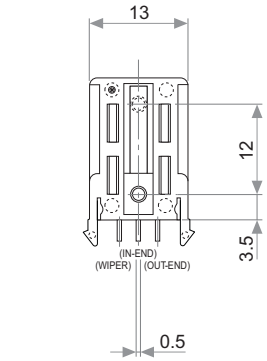
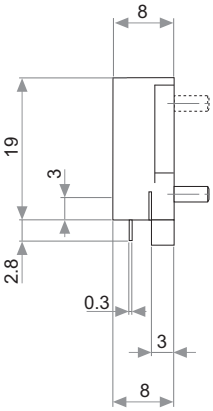


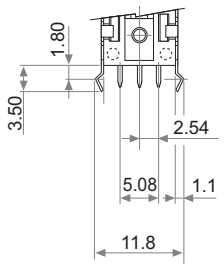


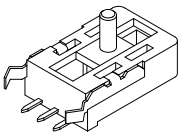




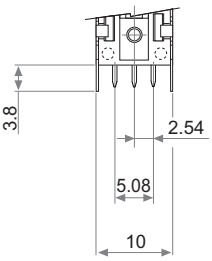
METAL VERSION (NPL08M)

CRIMPED





STRAIGHT



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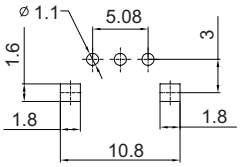

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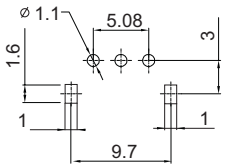
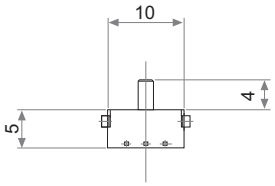
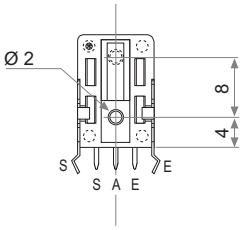
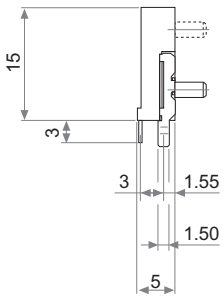
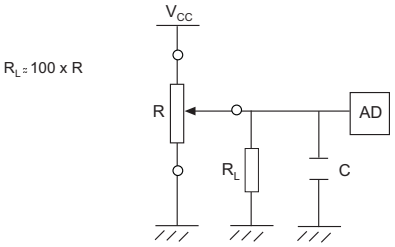








Piher potentiometer's recommended connection circuit for a position sensor or control application.(voltage divider circuit electronic design).



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