## Vishay Sfernice



# **Precision Linear Transducers, Conductive Plastic,** up to 150 mm



The 38 L is a very compact model especially designed for precise measurement of short travels.

### **FEATURES**

- Measurement range 12.5 mm to 150 mm
- High accuracy ± 1 % down to ± 0.1 %

- Long life
- Essentially infinite resolution
- Very small dimension: External diameter = 9.52 mm

ELECTRICAL SPECIFICATIONS					
Theoretical Electrical Travel (TET)	From 12.5 mm to 150 mm see table 1				
Actual Electrical Rravel (AET)	AET = TET + 1 mm				
Independent Linearity (over TET)	$\leq \pm 1 \% - \leq \pm 0.5 \%$ $\leq \pm 0.25 \%$ for E $\geq 25 \text{ mm}$ $\leq \pm 0.1 \%$ for E $\geq 50 \text{ mm}$				
Repeatability	≤ 0.01 %				
Ohmic Values (R <sub>T</sub> )	From 400 Ω/cm to 2 kΩ/cm				
Resistance Tolerance at 20 °C	± 20 %				
Wiper Current	Recommended: a few μA - 1 mA max. (continuous)				
Load Resistance	Minimum 10 <sup>3</sup> x R <sub>T</sub>				
Insulation Cesistance	$\geq$ 1000 M $\Omega$ , 500 V $_{DC}$				
Dielectric Strength	≥ 500 V <sub>RMS</sub> , 50 Hz				

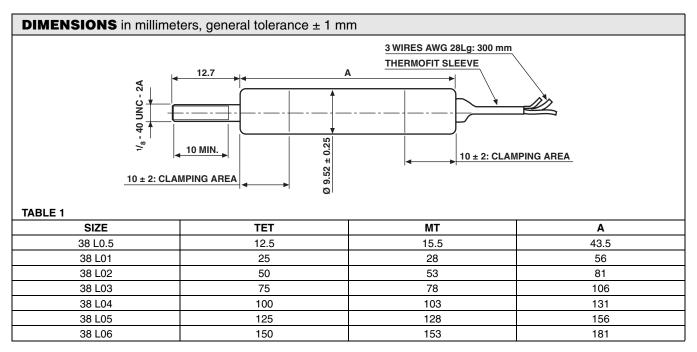
MECHANICAL SPECIFICATIONS				
Mechanical Travel (MT)	$MT = TET + 3 \pm 1 \text{ mm}$			
Housing	Anodized aluminum			
Operating Force	0.35 N typical			
Termination	3 wires PTFE AWG 28 length: 300 mm			
Wiper	Precious metal multifinger			

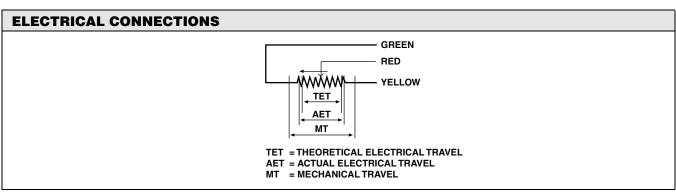
PERFORMANCE				
Operating Life	25 million cycles typical/1 Hz/T $^{\circ}$ = 20 $^{\circ}$ C ± 5 $^{\circ}$ C/80 $^{\circ}$ TET			
Temperature Range	- 55 °C to + 125 °C			
Sine Vibration on 3 Axes	1.5 mm peak to peak or 15 g - 10 Hz - 2000 Hz			
Mechanical Shocks on 3 Axes	50 g -11 ms - half sine			



# Precision Linear Transducers, Conductive Plastic, up to 150 mm

Vishay Sfernice





ORDERING INFORMATION/DESCRIPTION							
REC	38	L	0.5	С	102	W	e1
SERIES	MODEL	NUMBER OF TRACKS	ELECTRICAL TRAVEL	LINEARITY	OHMIC VALUE	MODIFICATIONS	LEAD FINISH
		L = 1 track	0.5 = 12.5 mm 1 = 25 mm 2 = 50 mm 3 = 75 mm 4 = 100 mm 5 = 125 mm 6 = 150 mm	A: ± 1 % B: ± 0.5 % C: ± 0.25 % D: ± 0.1 %	First 2 digits are significant numbers 3rd digit indicates number of zeros	Special feature code number	Sn Ag Cu

SAP PART NUMBERING GUIDELINES						
RE	38 L	0.5	С	102	<b>W</b>	
SERIES	MODEL	TET	LINEARITY	OHMIC VALUE	SPECIAL FEATURES	





Vishay

## **Disclaimer**

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and/or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Except as expressly indicated in writing, Vishay products are not designed for use in medical, life-saving, or life-sustaining applications or for any other application in which the failure of the Vishay product could result in personal injury or death. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk and agree to fully indemnify and hold Vishay and its distributors harmless from and against any and all claims, liabilities, expenses and damages arising or resulting in connection with such use or sale, including attorneys fees, even if such claim alleges that Vishay or its distributor was negligent regarding the design or manufacture of the part. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.

Document Number: 91000 www.vishay.com Revision: 11-Mar-11



OOO «ЛайфЭлектроникс" "LifeElectronics" LLC

ИНН 7805602321 КПП 780501001 P/C 40702810122510004610 ФАКБ "АБСОЛЮТ БАНК" (ЗАО) в г.Санкт-Петербурге К/С 3010181090000000703 БИК 044030703

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

### Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



Тел: +7 (812) 336 43 04 (многоканальный) Email: org@lifeelectronics.ru