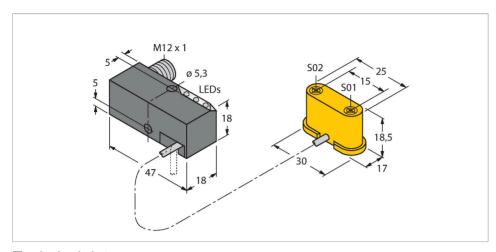


NI1.5-VEP-2AP6-0.185-FS4.4X3/S304 Inductive Sensor – Monitoring Kit for Power Clamps



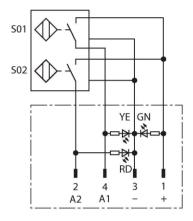
Technical data

Repeat accuracy $\leq 2\%$ of full scaleTemperature drift $\leq \pm 10\%$ Hysteresis 315% Ambient temperature $-25+70$ °COperating voltage 1030 VDCResidual ripple $\leq 10\%$ UsDC rated operational current ≤ 150 mANo-load current ≤ 20 mAResidual current ≤ 0.1 mAIsolation test voltage ≤ 0.5 kVShort-circuit protectionyes / CyclicVoltage drop at I_e ≤ 1.8 V	Туре	NI1.5-VEP-2AP6-0.185-FS4.4X3/S304
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	ldent. no.	1650123
Mounting conditionsNon-flushSecured operating distance $\leq (0.81 \times Sn) \text{ mm}$ Correction factors $St37 = 1$; Al = 0.3; stainless steel = 0.7; Ms = 0.4Repeat accuracy $\leq 2\%$ of full scaleTemperature drift $\leq \pm 10\%$ Hysteresis 315% Ambient temperature $-25+70\%$ Operating voltage 1030 VDC Residual ripple $\leq 10\% \text{ U}_{ss}$ DC rated operational current $\leq 150 \text{ mA}$ No-load current $\leq 20 \text{ mA}$ Residual current $\leq 0.1 \text{ mA}$ Isolation test voltage $\leq 0.5 \text{ kV}$ Short-circuit protectionyes / CyclicVoltage drop at I_0 $\leq 1.8 \text{ V}$	Special version	2x Ni/BiAP(N)6/S34. function for Device Net. Defined length at connector FS4.4/FS4.4K or FSF5.5/FSF5.5K (with PEconnection) or FS4.4X3. Example for order:
Secured operating distance $\leq (0.81 \times Sn) \text{ mm}$ Correction factors $St37 = 1$; $Al = 0.3$; stainless steel = 0.7; $Ms = 0.4$ Repeat accuracy $\leq 2\%$ of full scaleTemperature drift $\leq \pm 10\%$ Hysteresis 315% Ambient temperature $-25+70\%$ Operating voltage 1030 VDC Residual ripple $\leq 10\% \text{ U}_{ss}$ DC rated operational current $\leq 150 \text{ mA}$ No-load current $\leq 20 \text{ mA}$ Residual current $\leq 0.1 \text{ mA}$ Isolation test voltage $\leq 0.5 \text{ kV}$ Short-circuit protection $yes / Cyclic$ Voltage drop at I_e $\leq 1.8 \text{ V}$	Rated switching distance	1.5 mm
Correction factors $St37 = 1$; Al = 0.3; stainless steel = 0.7; Ms = 0.4 Repeat accuracy ≤ 2 % of full scale Temperature drift ≤ ± 10 % Hysteresis 315 % Ambient temperature -25+70 °C Operating voltage 1030 VDC Residual ripple ≤ 10 % U _s DC rated operational current ≤ 150 mA No-load current ≤ 20 mA Residual current ≤ 0.1 mA Isolation test voltage ≤ 0.5 kV Short-circuit protection yes / Cyclic Voltage drop at I_e ≤ 1.8 V	Mounting conditions	Non-flush
Repeat accuracy $\leq 2\%$ of full scaleTemperature drift $\leq \pm 10\%$ Hysteresis 315% Ambient temperature $-25+70$ °COperating voltage 1030 VDCResidual ripple $\leq 10\%$ U,sDC rated operational current ≤ 150 mANo-load current ≤ 20 mAResidual current ≤ 0.1 mAIsolation test voltage ≤ 0.5 kVShort-circuit protectionyes / CyclicVoltage drop at I_e ≤ 1.8 V	Secured operating distance	≤ (0.81 × Sn) mm
Temperature drift $\leq \pm 10 \%$ Hysteresis 315% Ambient temperature $-25+70 \degree C$ Operating voltage 1030 VDC Residual ripple $\leq 10 \% \text{ U}_{ss}$ DC rated operational current $\leq 150 \text{ mA}$ No-load current $\leq 20 \text{ mA}$ Residual current $\leq 0.1 \text{ mA}$ Isolation test voltage $\leq 0.5 \text{ kV}$ Short-circuit protection yes / Cyclic Voltage drop at I_e $\leq 1.8 \text{ V}$	Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Hysteresis 315% Ambient temperature $-25+70\%$ Operating voltage 1030 VDC Residual ripple $\leq 10\% \text{ U}_{ss}$ DC rated operational current $\leq 150 \text{ mA}$ No-load current $\leq 20 \text{ mA}$ Residual current $\leq 0.1 \text{ mA}$ Isolation test voltage $\leq 0.5 \text{ kV}$ Short-circuit protectionyes / CyclicVoltage drop at I_e $\leq 1.8 \text{ V}$	Repeat accuracy	≤ 2 % of full scale
Ambient temperature $-25+70 ^{\circ}\text{C}$ Operating voltage 1030VDC Residual ripple $\leq 10 ^{\circ}\text{U}_{\text{ss}}$ DC rated operational current $\leq 150 \text{mA}$ No-load current $\leq 20 \text{mA}$ Residual current $\leq 0.1 \text{mA}$ Isolation test voltage $\leq 0.5 \text{kV}$ Short-circuit protection yes / Cyclic Voltage drop at I_{e} $\leq 1.8 \text{V}$	Temperature drift	≤ ± 10 %
Operating voltage 1030 VDC Residual ripple ≤ $10 \% \text{ U}_{ss}$ DC rated operational current ≤ 150 mA No-load current ≤ 20 mA Residual current ≤ 0.1 mA Isolation test voltage ≤ 0.5 kV Short-circuit protection yes / Cyclic Voltage drop at I_e ≤ 1.8 V	Hysteresis	315 %
Residual ripple $\leq 10 \% \text{U}_{\text{s}}$ DC rated operational current $\leq 150 \text{mA}$ No-load current $\leq 20 \text{mA}$ Residual current $\leq 0.1 \text{mA}$ Isolation test voltage $\leq 0.5 \text{kV}$ Short-circuit protection yes / Cyclic Voltage drop at I_{e} $\leq 1.8 \text{V}$	Ambient temperature	-25+70 ℃
DC rated operational current $\leq 150 \text{ mA}$ No-load current $\leq 20 \text{ mA}$ Residual current $\leq 0.1 \text{ mA}$ Isolation test voltage $\leq 0.5 \text{ kV}$ Short-circuit protection yes / Cyclic Voltage drop at I_e $\leq 1.8 \text{ V}$	Operating voltage	1030 VDC
No-load current ≤ 20 mA Residual current ≤ 0.1 mA Isolation test voltage ≤ 0.5 kV Short-circuit protection yes / Cyclic Voltage drop at I_e ≤ 1.8 V	Residual ripple	≤ 10 % U _{ss}
Residual current ≤ 0.1 mA Isolation test voltage ≤ 0.5 kV Short-circuit protection yes / Cyclic Voltage drop at I_e ≤ 1.8 V	DC rated operational current	≤ 150 mA
Isolation test voltage ≤ 0.5 kV Short-circuit protection yes / Cyclic Voltage drop at I_e ≤ 1.8 V	No-load current	≤ 20 mA
Short-circuit protection yes / Cyclic Voltage drop at I _e ≤ 1.8 V	Residual current	≤ 0.1 mA
Voltage drop at I _e ≤ 1.8 V	Isolation test voltage	≤ 0.5 kV
	Short-circuit protection	yes / Cyclic
	Voltage drop at I.	≤ 1.8 V
Wire breakage/Reverse polarity protection Complete	Wire breakage/Reverse polarity protection	Complete
Output function 4-wire, NO contact, PNP	Output function	4-wire, NO contact, PNP

Features

- VEP power block with two connected sensors and LEDs
- M12 x 1 male connector
- Plastic, PBT-GF20-V0
- Resistant to magnetic fields (weld-resistant), for DC and AC fields up to 100 mT
- 2 x NO contact, PNP output
- DC 4-wire, 10...30 VDC

Wiring diagram



Functional principle

TURCK offers special monitoring kits, consisting of two miniature sensors, as a convenient solution for "Open/Closed" detection on pneumatic power clamps. This product line provides almost unlimited combination possibilities, comprising four different power blocks and over 40 different modular sensor types.



Technical data

Switching frequency	0.03 kHz
Design	Monitoring kit for power clamps, VEP
Dimensions	47 x 18 x 18 mm
Housing material	Metal, V2A (1.4305)
Active area material	Plastic, PBT-GF30-V0
Electrical connection	Connector, M12 × 1
Cable quality	Ø 2 mm, Gray, Lif9Y-11Y, PUR, 0.185 m
Core cross-section	3 x 0.08 mm ²
Litz wire	40 x0.05 mm
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	2283 years acc. to SN 29500 (Ed. 99) 40 °C
Power-on indication	LED, Green
Switching state	2 × LEDs, Yellow/Red

Mounting instructions

Mounting instructions/Description

