

## VSM025A Hall-effect Voltage Sensor Series

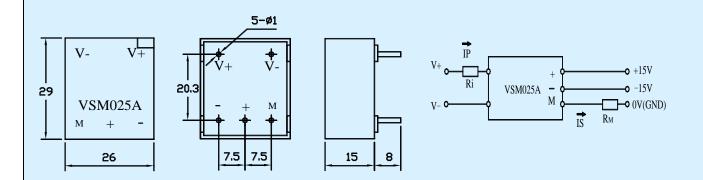


Closed loop voltage sensor based on the principle of Hall-effect. It can be used for measuring alternating, direct, pulsed and mixed voltage.

Electrical characteristics				
	Туре	VSM025A		
$I_{PN}$	Primary nominal input current	10		mA
$I_P$	Measuring range of primary current	0~±14		mA
$I_{SN}$	Secondary nominal output current	25		mA
$\mathbf{K}_{\mathbf{N}}$	Conversion ratio	2500:1000		
$\mathbf{R}_{\mathbf{M}}$	Measuring resistance $(V_C=\pm 12V)$	$I_{PN} = \pm 10 \text{mA}$ 30~350	$I_P = \pm 14 \text{mA}$ 30~235	$\mathbf{R}_{\mathbf{M}}$
	$(V_C = \pm 15V)$	$I_{PN} = \pm 10 \text{mA}$ 100~460	$I_P = \pm 14 \text{mA}$ 100~315	
$\mathbf{V}_{\mathbf{C}}$	Supply voltage	±12~±15(±5%)		V
$I_{C}$	Current consumption	$V_C = \pm 15V$ 10+Is		mA
$V_{D}$	Insulation voltage	AC/50Hz/1min 2.5		kV
$\epsilon_{ m L}$	Linearity	<0.2		%FS
X	Accuracy	$T_A = 25$ °C $V_C = \pm 15$ V $\pm 0.8$		%
Io	Zero offset current	T <sub>A</sub> =25℃ <±0.15		mA
I <sub>OT</sub>	Thermal drift of $\mathbf{I}_0$	$I_P=0$ $T_A=-25\sim+85$ °C $<\pm0.35$		mA
$T_R$	Response time	90% of V <sub>PN</sub> <40		μs
$T_A$	Ambient operating temperature	-25~+85		${\mathfrak C}$
$T_S$	Ambient storage temperature	-40~+100		°C
$R_P$	Primary coil resistance	T <sub>A</sub> =25°C 190		Ω
$\mathbf{R}_{\mathrm{S}}$	Secondary coil resistance	T <sub>A</sub> =85°C 55		Ω
	Standard	Q/3201CHGL02-2007		

**Dimensions of drawing (mm)** 

Connection



Elucidation: +:+15V -:-15V M:I<sub>out</sub>

## Remarks

Incorrect connection may lead to the damage of the sensor.

 $I_{\text{SN}}$  is positive when the  $I_{\text{P}}$  flows in the direction of the arrow.