CV SERIES
TRANSDUCER

SPECIFICATIONS

CV-425 PIEZOELECTRIC VELOCITY TRANSDUCER

4-20mA loop powered transducer with temperature output

Model Code

CV-425 □□ - □□

4-20mA output type		4-20mA full scale	
VR	velocity , RMS output	10	1.0 ips (25.4mm/s)
		05	0.5 ips (12.7mm/s)
		20	2.0 ips (50.8mm/s)

Straight type CW-425S- □□ - □

Cable length		Armor	
16	Approx.4.8m (16ft)	0	Without
32	Approx.9.6m (32ft)	1	With

Standard

SPECIFICATIONS

Output	4-20mA
Full Scale, 20mA, ±5%	See Model Code below
Frequency Response	10Hz to 1.0kHz ± 10% 4Hz to 2.0kHz ± 3dB
Transverse Sensitivity	Max. 5%
Temperature Output Sensitivity	10mV/K (at 0°C = 2.73V)
Temperature Output Error	±5K (±5°C)
Temperature Measurement Range	223 to 358K (-50 to +85°C) / 2.23V to 3.58V
Power Requirements, 2-wire loop power Voltage, between pins A and B	10 to 30 VDC
Loop Resistance *1	Max. 700Ω at 24VDC
Turn On Time,4-20mA Loop	30 seconds
Grounding	Case isolated, internally shielded
Power Requirements, Tenperature Sensor *4	Voltage source 12 to 18V Current 0.4 to 5 mA
Operating Temperature Range	-40 to +85°C
Vibration Limit	2,450 m/s^2 (250g REF.) pk
Shock Limit	24,500 m/s^2 (2,500g REF.) pk
Weight	Approx. 320g (excluding cable)
Case Material	Stainless Steel
Protection Rating	IP66(CV-425&CW)
Mounting	M6 × 1 captive bolt (1 piece)

*1 Maximum loop resistance (R_L) can be calculated by: $R_L = \frac{V_{DC\ power} - 10V}{20mA}$

Supply voltage and R_L

DC supply voltage	R_L (max resistance)*2	R_L (minimum wattage capability)*3
12VDC	100Ω	1/8 watt
20VDC	500Ω	1/4 watt
24VDC	700Ω	1/2 watt
26VDC	800Ω	1/2 watt
30VDC	1,000Ω	1/2 watt

*2 Lower resistance is allowed, greater than 10 Ω recommended.

*3 Minimum R_L wattage determined by: (0.0004 x R_L).

*4 The temperature sensor must have a current flow to operate.
This current can be provided through constant-current diodes.

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