

CV SERIES
TRANSDUCER
SPECIFICATIONS

CV-420 PIEZOELECTRIC VELOCITY TRANSDUCER
4-20mA loop powered transducer



Model Code

CV-420 -

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)

Right angle type CW-420R- - (Standard)

Straight type CW-420S- -

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% 3.5Hz to 2.0kHz ± 3dB
Transverse Sensitivity	Max. 5%
Power Requirement (two-wire loop power) Voltage at transducer terminals	12 to 30 VDC
Loop Resistance*1	Max. 700Ω at 24VDC
Turn On Time, 4-20mA Loop	30 seconds
Grounding	Case isolated, internally shielded
Operating Temperature Range	-40 to +105°C
Vibration Limit	2,450 m/s ² (250g REF.) pk
Shock Limit	24,500 m/s ² (2,500g REF.) pk
Weight	Approx. 160g
Case Material	Stainless Steel
Protection Rating	IP67(CV-420&CW)
Mounting	M6 × 1 Mounting stud (1 piece)

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

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 × R_L).