

CV SERIES  
TRANSDUCER  
SPECIFICATIONS

CV-86 PIEZOELECTRIC VELOCITY TRANSDUCER



Model Code

CV-861 /EX

Cable Type		Intrinsically Safety	
1	Connector Type	1	TIIS (Ex ia IIA T4 X)
		7	NEPSI (Ex ia IIA T4)
		8	KTL (Ex ia IIA T4)

CV-862 /EX

Cable Type		Intrinsically Safety	
2	With integral cable type *1 (Coax. cable 3m standard)	1	TIIS (Ex ia IIA T4 X)
		7	NEPSI (Ex ia IIA T4)

Standard type

CW-  E-EF-  0-

Drip-proof type

CW-  F-FF-  0-

Note) \*1 Cable length 3m (end cut off),  
CW cable not required.

\*2 M3.5 crimping terminals at the  
cable ends are standard.

\*3 With armor : Cable length ≤ 50m

Cable length		Lug type*2		Armor	
050	5m	0	Cut off	0	Without
100	10m	R	Ring lug	1	With*3
150	15m	Y	Spade lug		

SPECIFICATIONS

Sensitivity	3.94mV/mm/s (100mV/in/s REF.)pk ± 5% at 100Hz, 25°C (77°F REF.)
Max. Velocity	1,270mm/s (50in/s REF.)pk
Vibration Limit	2,450m/s <sup>2</sup> (250g REF.)pk
Shock Limit	24,500m/s <sup>2</sup> (2,500g REF.)pk (non-Intrinsically Safe) 23,520m/s <sup>2</sup> (2,400g REF.)pk (Intrinsically Safe)
Max. Shock Energy	4J (Intrinsically safe)
Linearity	± 1% of F.S.
Natural Frequency	15kHz
Frequency Response	2.5 to 3,500Hz ± 10%, 2 to 7,000Hz ± 3dB
Transverse Sensitivity	Max.5%
Output Impedance	200Ω(typical)
Grounding	Case isolated, internally shielded
Temperature Response	± 10% (around the operating temperature range)
Power Supply	18 to 30VDC, 2 to 10mADC (constant current)
Operating Temperature Range	-50 to +120°C (-58 to +248°F REF.)
Range of Temperature at Explosion proof construction	EX1,7 : -20 to +60°C (Transducer, Cable) EX8 : -50 to +120°C (Transducer, Cable)
Relative Humidity	100%RH
Case Material	Stainless Steel
Sealing	Hermetic
Protection Rating	IP67(CV-861 & CW- <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> F-FF, CV-862)
Weight	Approx.145g(CV-861) Approx.250g(CV-862(including cable))
Accessories Supplied	M6 mounting stud
Output Connector*4	MIL-C-5015 2-pin
Matching Connector*4	MS3106A-10SL-4S
Cabling	CV-861 : Twisted pair shielded cable CV-862 : Coax. cable (integral cabling type)
Recommended Cable Shielded Specifications	AWG No.20 to No.16 gage (0.5mm <sup>2</sup> to 1.25mm <sup>2</sup> ) Twisted pair shielded cable

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