

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)
		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)

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.) ± 5% at 100Hz, 25°C
Max. Velocity	1,270mm/s (50in/s REF.)pk
Vibration Limit	2,450m/s ² (250g REF.)pk
Shock Limit	24,500m/s ² (2,500g REF.)pk (non-Intrinsically Safe) 23,520m/s ² (2,400g REF.)pk (Intrinsically Safe)
Max. Shock Energy	4J (Intrinsically safe)
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
Range of Temperature at Explosion proof construction	EX1 : -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	D/MS3106A10SL-4S
Cabling	CV-861 : Twisted pair shielded cable CV-862 : Coax. cable (intergral cabling type)
Recommended Cable Shielded Specifications	AWG No.20 to No.16 gage (0.5mm ² to 1.25mm ²) Twisted pair shielded cable

*4 CV-861 TYPE SPECIFICATIONS

[NOTICE]

The instructions manual contains important information such as conditions necessary for safe handling of the system.
Such information and conditions are important and indispensable for ensuring safety.
Therefore, be sure to read the instructions manual thoroughly before handling the system.

CV SERIES
TRANSDUCER
SPECIFICATIONS

CV-861 PIEZOELECTRIC VELOCITY TRANSDUCER
【ATEX】



Model Code

CV-861 /EX5

Cable Type		Intrinsically Safety	
1	Connector Type	5	ATEX (Ex ia IIC T4 Ga)

Standard type

CW- E-EF- 0-

Drip-proof type

CW- F-FF- 0-

Note) *1 M3.5 crimping terminals at the cable ends are standard.

*2 With armor : Cable length ≤ 50m

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

SPECIFICATIONS

Sensitivity	3.94mV/mm/s (100mV/in/s REF.) ± 5% at 100Hz, 25°C
Max. Velocity	1,270mm/s (50in/s REF.)pk
Vibration Limit	2,450m/s ² (250g REF.)pk
Shock Limit	23,520m/s ² (2,400g REF.)pk (Intrinsically Safe)
Max. Shock Energy	4J (Intrinsically safe)
Natural Frequency	15kHz
Frequency Response	6.0 to 3,500Hz ± 10%, 4.5 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
Range of Temperature at Explosion proof construction	-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)
Weight	Approx.145g
Accessories Supplied	M6 mounting stud
Output Connector	MIL-C-5015 2-pin
Matching Connector	D/MS3106A10SL-4S
Cabling	Twisted pair shielded cable
Recommended Cable Shielded Specifications	AWG No.20 to No.16 gage (0.5mm ² to 1.25mm ²) Twisted pair shielded cable

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The instructions manual contains important information such as conditions necessary for safe handling of the system. Such information and conditions are important and indispensable for ensuring safety. Therefore, be sure to read the instructions manual thoroughly before handling the system.