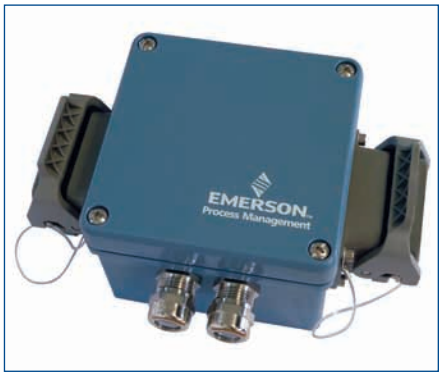
Shaft-Vibration Monitor

Emerson's Dual-Channel Shaft-Vibration Monitor is designed for small and low channel applications such as small steam, gas, and hydro turbines, and such as compressors, pumps, and fans to measure relative shaft vibration signals. Measurement settings, alarms, and provided outputs are field configurable via software.



Shown here is one product option. Other options have slightly different sockets and wiring.

CE

Measurement Performance		
Sensor Input Type		Eddy- Current Sensors
Measurement Range:	Sensor PR6422	0 to 250 µm
	Sensor PR6423	0 to 500 µm
	Sensor PR6424	0 to 1000 µm
	Sensor PR6425	0 to 1000 µm
Frequency Range:	High-Pass Filter	1 / 5 / 10 Hz
	Low-Pass Filter	50 to 1500 Hz
Connection Type:	Internal Converter	"LEMO" socket
	External Converter	"Harting" socket
Environmental		
Shock Limit		20 g pk
Temperature Range		-20 to 65°C (-4 to149°F)
Sealing		IP65
Agency Ratings		CE
Mechanical		
Case Material / Weight		Aluminum, stainless / ~1300 g (45.8 oz.)
Mounting		Wall mount
Electrical		
Supply Voltage		Nominal +24 VDC
	Permissible Voltage Range	+18 to +31.2 VDC
Power Consumption		max. 6 W
Buffered Out:	Connection	BNC and/or Pins (Cage Terminal)
(2x)	Voltage Range	2.0 to 10.0 VDC
	Accuracy	± 2.5%

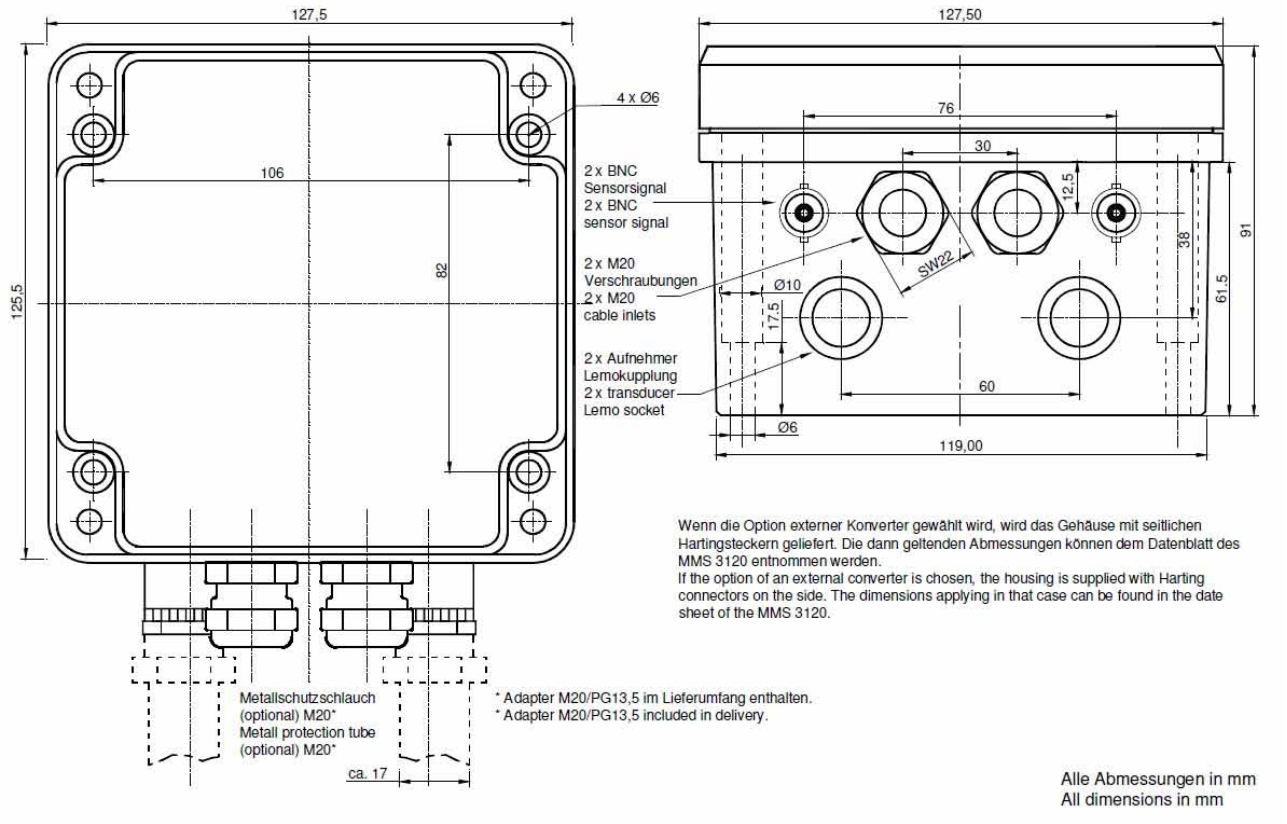
Current Out:	Current Range	0/4 to 20 mA (20 to 4/0 mA)
(2x)		Galvanically separated
		Open circuit and short-circuit proof
	Maximum Burden	500 Ohm
Relay Out:	Voltage	U_{MAX}: 48 VDC
(5x make contact)	Current	I_{MAX}: 1 A
	Contact Rating	P_{MAX}: 50 W

Ordering Information

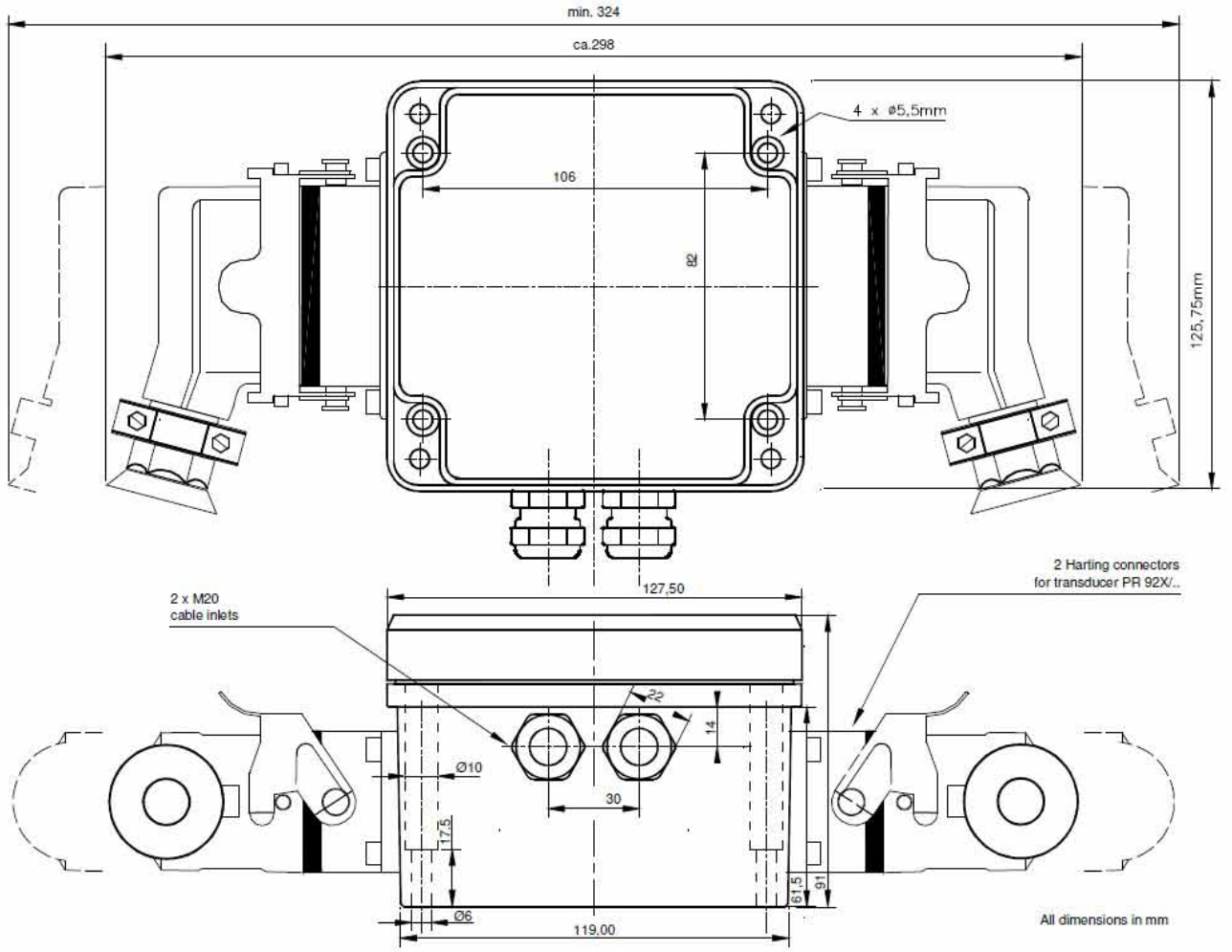
Part Number	Description
A3110/022-000	CSI 3110 Shaft-Vibration Monitor Eddy-Current Converters: INTERNAL
A3110/022-020	CSI 3110 Shaft-Vibration Monitor Eddy-Current Converters: EXTERNAL (to be ordered separately)

Dimensions

A 3110/022-000



A3110 /022-020



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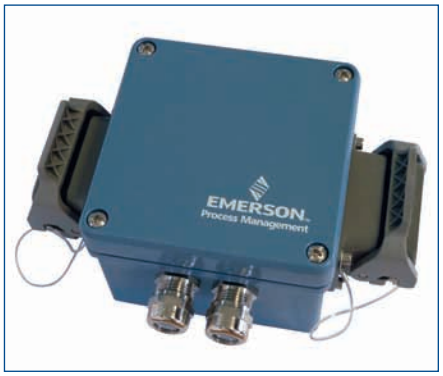
Bearing-Vibration Monitor

Emerson's Dual-Channel Bearing-Vibration Monitor is designed for small and low channel applications such as small steam, gas, and hydro turbines, and such as compressors, pumps, and fans to measure absolute bearing vibration signals. Measurement settings, alarms, and provided outputs are field configurable via software.



Shown here is one product option. Other options have slightly different sockets and wiring.

CE

Measurement Performance		
Sensor Input Type		Seismic Sensors of Type PR9268
Measurement Range		Freely selectable by means of configuration software according to the measuring range of the applied sensors
Frequency Range:	High-Pass Filter	5 / 10 / 15 Hz
	Low-Pass Filter	50 to 1500 Hz
Connection Type		"Harting" socket
Environmental		
Shock Limit		20 g pk
Temperature Range		-20 to 65°C (-4 to149°F)
Sealing		IP65
Agency Ratings		CE
Mechanical		
Case Material / Weight		Aluminum, stainless / ~1300 g (45.8 oz.)
Mounting		Wall mount
Electrical		
Supply Voltage		Nominal +24 VDC
	Permissible Voltage Range	+18 to +31.2 VDC
Power Consumption		max. 6 W
Buffered Out:	Connection	Available at Pins (Cage Terminal)
(2x)	Voltage Range	±5.0 VDC
	Accuracy	± 2.5%
Current Out:	Current Range	0/4 to 20 mA (20 to 4/0 mA)
(2x)		Galvanically separated
		Open circuit and short-circuit proof
	Maximum Burden	500 Ohm

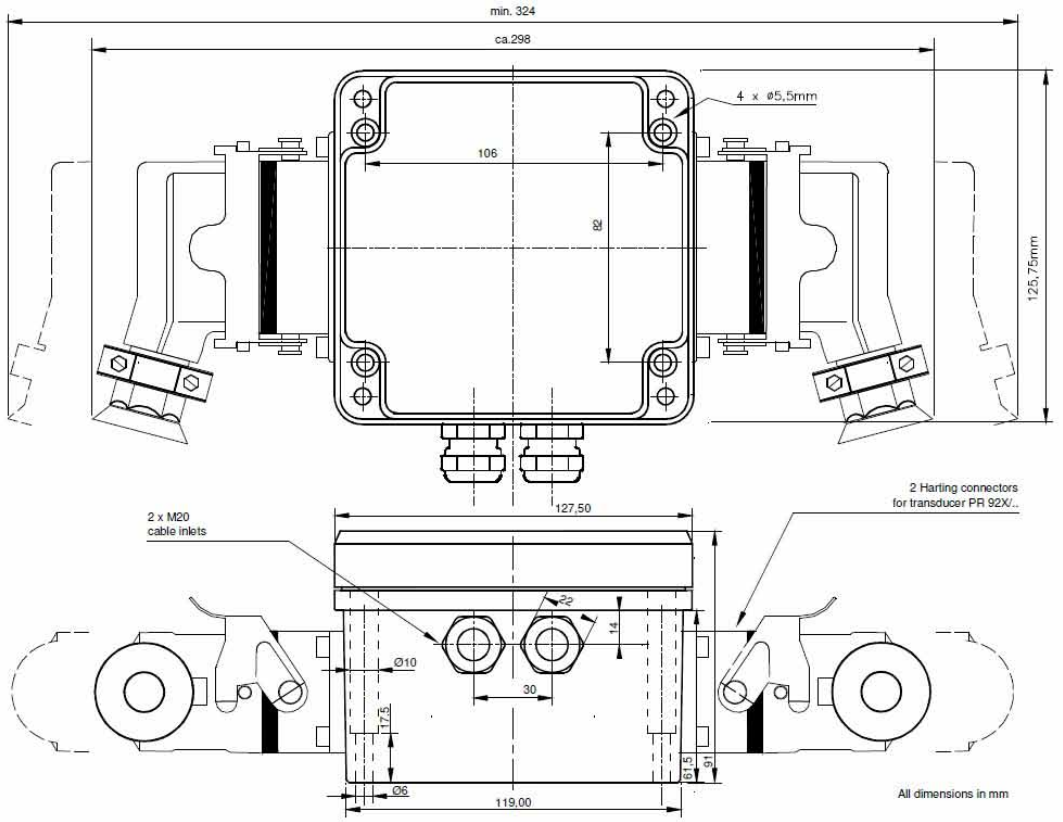
Relay Out:	Voltage	U_{MAX}: 48 VDC
(5x make contact)	Current	I_{MAX}: 1 A
	Contact Rating	P_{MAX}: 50 W

Ordering Information

Part Number	Description
A3120/022-000	CSI 3120 Bearing-Vibration Monitor

Dimensions

A 3120/022-000



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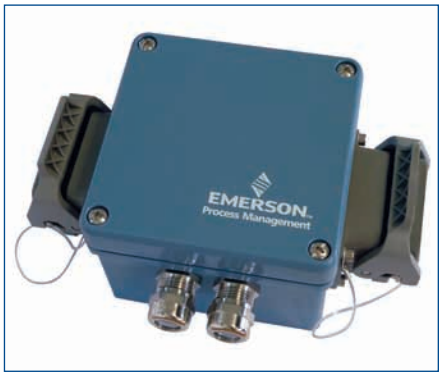
Bearing-Vibration Monitor

Emerson's Dual-Channel Bearing-Vibration Monitor is designed for small and low channel applications such as small steam, gas, and hydro turbines, and such as compressors, pumps, and fans to measure absolute bearing vibration signals. Measurement settings, alarms, and provided outputs are field configurable via software.



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CE

Measurement Performance		
Sensor Input Type		ICP Piezo-Electric Sensors
Measurement Range		Freely selectable by means of configuration software according to the measuring range of the applied sensors
Linearity Error		0.2% at 25°C
Linearity Error, Calculated with Sensor		<2.2% at 25°C
Output Stability as Function of Temperature		<0.08% / 10K
Long-Term Drift		max. 1% of measuring range
Frequency Range:	High-Pass Filter	5 to 5000 Hz
	Low-Pass Filter	50 to 5000 Hz
Connection Type:		"Harting" socket
Environmental		
Shock Limit		20 g pk
Temperature Range		-20 to 65°C (-4 to149°F)
Sealing		IP65
Agency Ratings		CE
Mechanical		
Case Material / Weight		Aluminum, stainless / ~1300 g (45.8 oz.)
Mounting		Wall mount
Electrical		
Supply Voltage		Nominal +24 VDC
	Permissible Voltage Range	+18 to +31.2 VDC
Power Consumption		max. 6 W
Buffered Out:	Connection	Available at Pins (Cage Terminal)
(2x)	Voltage Range	±4.0 VDC
	Accuracy	± 2.5%

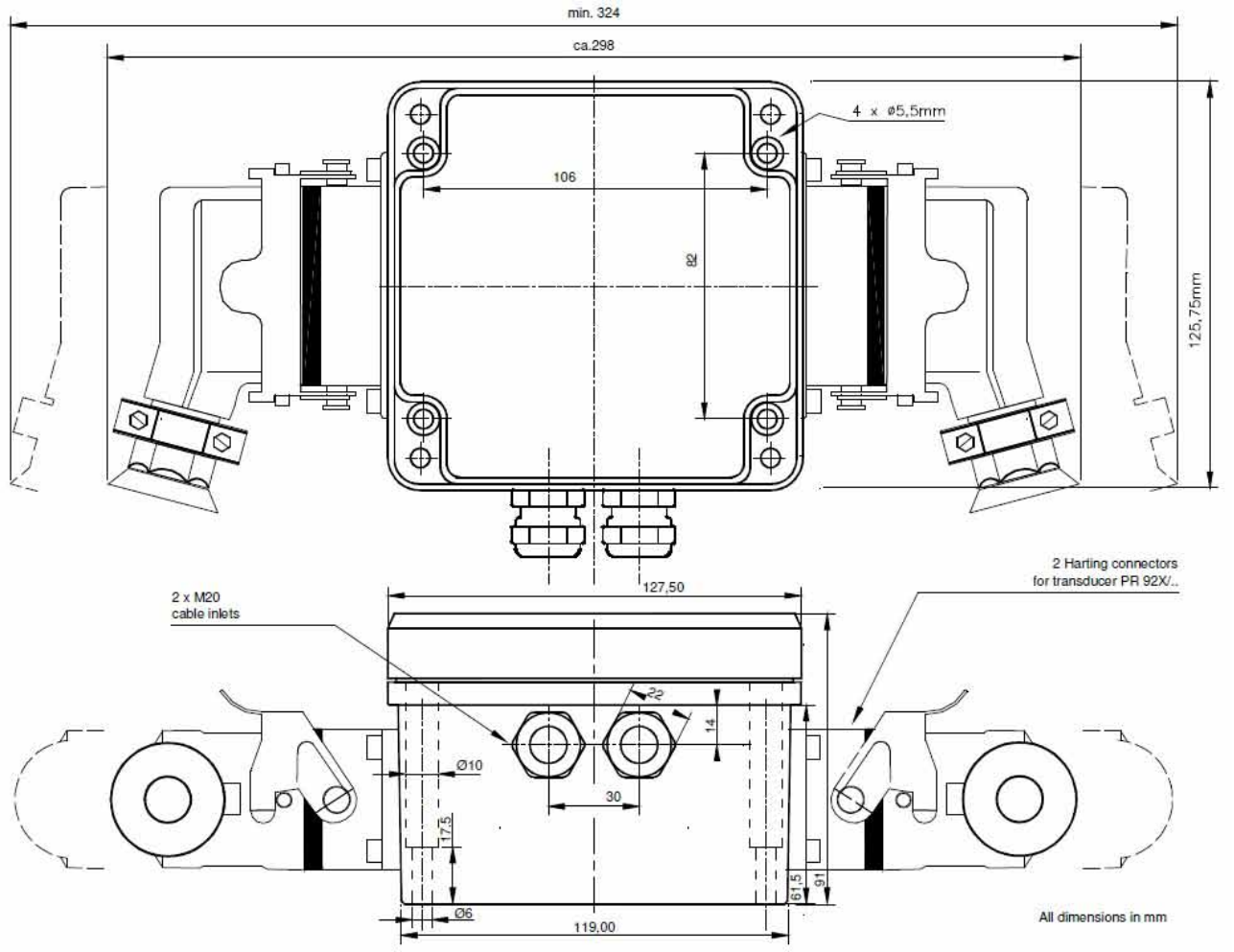
Current Out:	Current Range	0/4 to 20 mA (20 to 4/0 mA)
(2x)		Galvanically separated
		Open circuit and short-circuit proof
	Maximum Burden	500 Ohm
Relay Out:	Voltage	U_{MAX}: 48 VDC
(5x make contact)	Current	I_{MAX}: 1 A
	Contact Rating	P_{MAX}: 50 W

Ordering Information

Part Number	Description
A3125/022-010	CSI 3125 Bearing-Vibration Monitor Vibration Acceleration (100mV / g 40g)
A3125/022-020	CSI 3125 Bearing-Vibration Monitor Vibration Velocity (100mV / in / s)

Dimensions

A 3125/022-0x0



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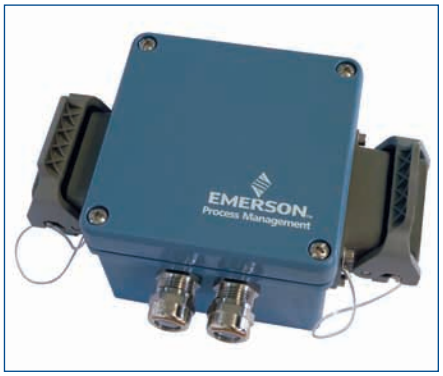
Shaft-Position Monitor

Emerson's Dual-Channel Shaft-Position Monitor is designed for small and low channel applications such as small steam, gas, and hydro turbines, and such as compressors, pumps, and fans to measure relative shaft displacement signals. Measurement settings, alarms, and provided outputs are field configurable via software.

Measurement Performance		
Sensor Input Type		Eddy- Current Sensors
Measurement Range		Freely selectable by means of configuration software according to the measuring range of the applied sensors
Frequency Range:	Low-Pass Filter	10 Hz
Connection Type:	Internal Converter	"LEMO" socket
Environmental		
Shock Limit		20 g pk
Temperature Range		-20 to 65°C (-4 to149°F)
Sealing		IP65
Agency Ratings		CE
Mechanical		
Case Material / Weight		Aluminum, stainless / ~1300 g (45.8 oz.)
Mounting		Wall mount
Electrical		
Supply Voltage		Nominal +24 VDC
	Permissible Voltage Range	+18 to +31.2 VDC
Power Consumption		max. 6 W
Buffered Out:	Connection	Available at Pins (Cage Terminal)
(2x)	Voltage Range	2.0 to 10.0 VDC
	Accuracy	± 2.5%
Current Out:	Current Range	0/4 to 20 mA (20 to 4/0 mA)
(2x)		Galvanically separated
		Open circuit and short-circuit proof
	Maximum Burden	500 Ohm



Shown here is one product option. Other options have slightly different sockets and wiring.

CE

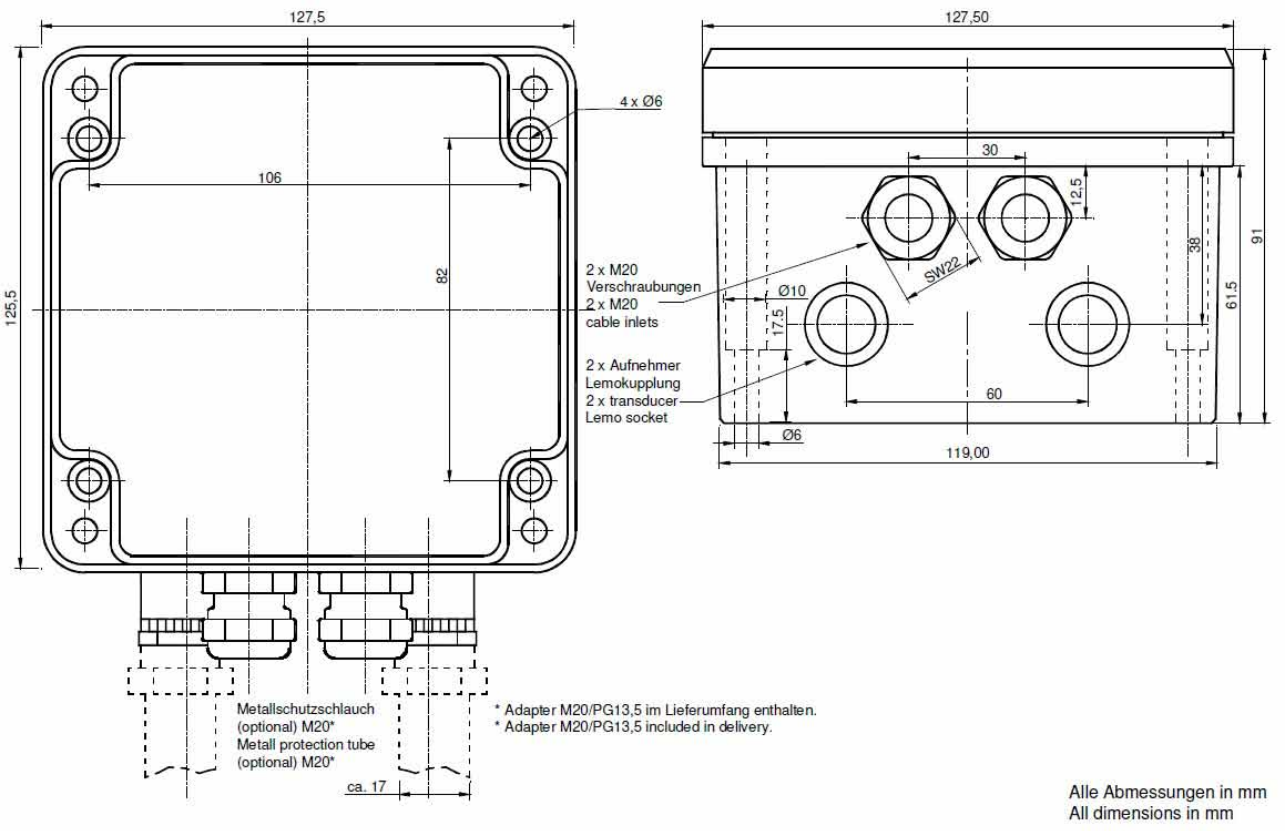
Relay Out:	Voltage	U_{MAX}: 48 VDC
(5x make contact)	Current	I_{MAX}: 1 A
	Contact Rating	P_{MAX}: 50 W

Ordering Information

Part Number	Description
A3210/022-000	CSI 3210 Shaft-Position Monitor Eddy-Current Converters: INTERNAL

Dimensions

A 3210/022-000



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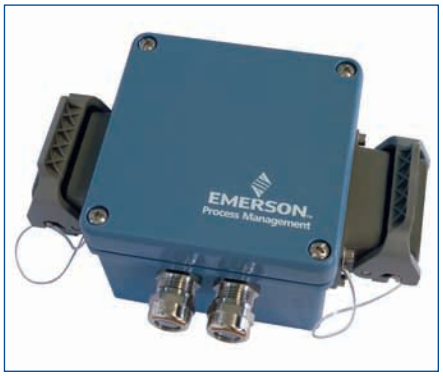
Speed and Key Monitor

Emerson's Speed and Key Monitor is designed for small and low channel applications such as small steam, gas, and hydro turbines, and such as compressors, pumps, and fans to measure speed and generate key signals. Measurement settings, alarms, and provided outputs are field configurable via software.

Measurement Performance		
Sensor Input Type		Eddy- Current Sensors
Measurement Range		Freely selectable by means of configuration software, max. 65535 rpm limited by input frequency
Linearity Error		0.25% at 25°C
Linearity Error, Calculated with Sensor		Depending on sensor, max. -6% at 25°C
Output Stability as Function of Temperature		<0.08% / 10K
Long-Term Drift		max. 1% of measuring range
Frequency Range		0 to 20 kHz Automatic setting of trigger level
Connection Type:	Internal Converter	"LEMO" socket
Environmental		
Shock Limit		20 g pk
Temperature Range		-20 to 65°C (-4 to149°F)
Sealing		IP65
Agency Ratings		CE
Mechanical		
Case Material / Weight		Aluminum, stainless / ~1300 g (45.8 oz.)
Mounting		Wall mount
Electrical		
Supply Voltage		Nominal +24 VDC
	Permissible Voltage Range	+18 to +31.2 VDC
Power Consumption		max. 6 W
Buffered Out:	Connection	Available at Pins (Cage Terminal)
(2x)	Voltage Range	2.0 to 10.0 VDC
	Accuracy	± 2.5%



Shown here is one product option. Other options have slightly different sockets and wiring.

CE

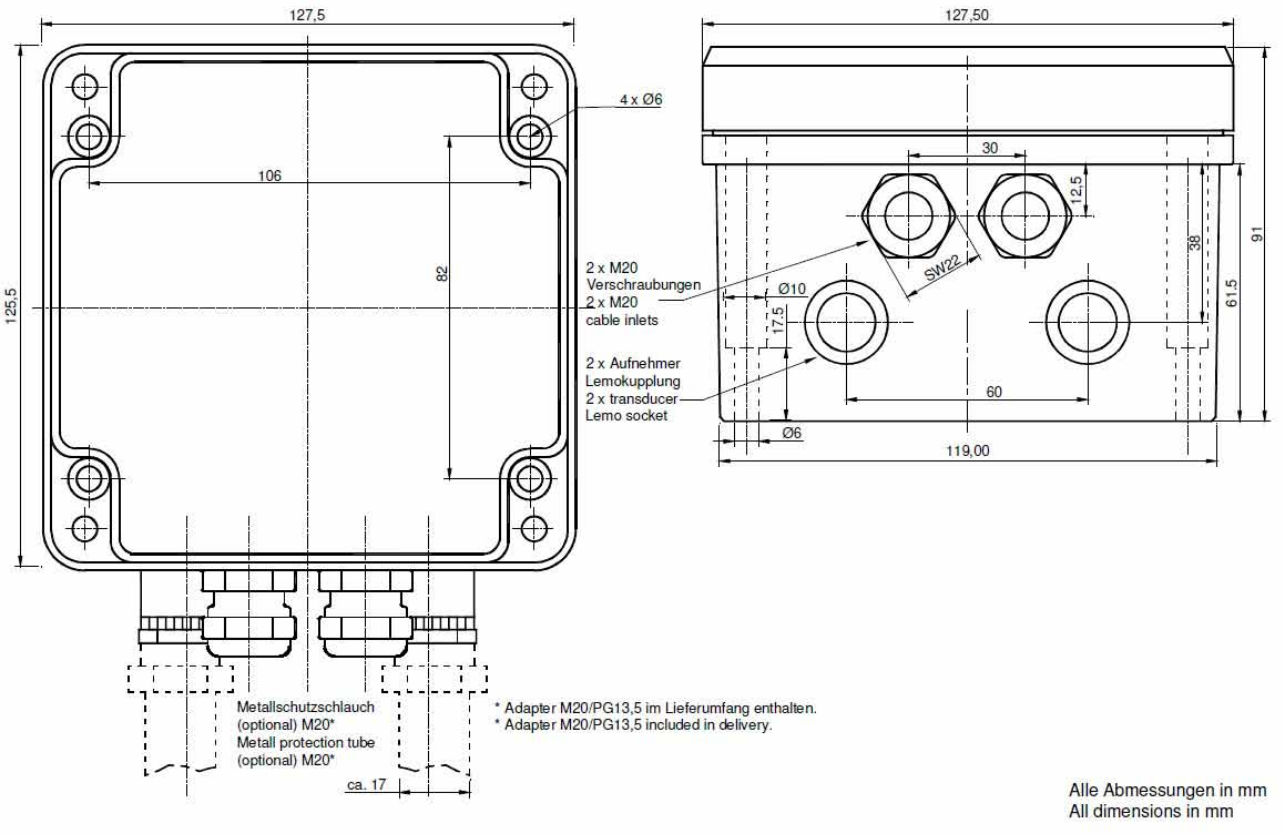
Current Out:	Current Range	0/4 to 20 mA (20 to 4/0 mA)
(2x)		Galvanically separated
		Open circuit and short-circuit proof
	Maximum Burden	500 Ohm
Relay Out:	Voltage	U_{MAX}: 48 VDC
(5x make contact)	Current	I_{MAX}: 1 A
	Contact Rating	P_{MAX}: 50 W

Ordering Information

Part Number	Description
A3311/022-000	CSI 3110 Speed & Key Monitor Eddy-Current Converters: INTERNAL

Dimensions

A 3311/022-000



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