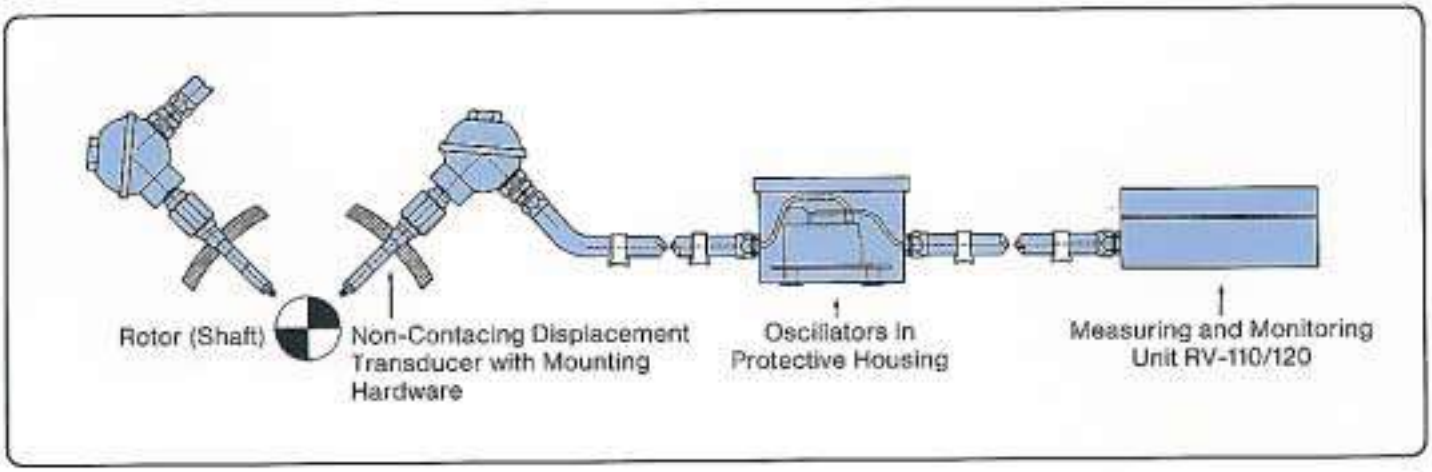
Fig 14: VIBROCONTROL RV-110 with displacement transducers, oscillator (in protective housing) and analog meter

Fig 15: The components of VIBROCONTROL 1000, Series R



Technical Data

Measuring/ Monitoring Unit

Electronic	RV-110 RV-116	RV-120 RV-126
Measured Parameter Dual channel operation (X,Y) Single channel operation (X)	Displacement „s_{max}" according to VDI 2059 s_p	Displacement Max (X,Y) according to API 670 s_{pp}
Input Signal	2 (X and Y), non-contacting displacement transducers of the SD-... and IN-... Series	
Frequency Range	2 ... 5000 Hz (–3 dB)	
Measuring Range	0 ... 20/50/100/200/ 500 µm	0 ... 75/125/250/400/ 500 µm
Analog Output	0/4 ... 20 mA and 0 ... 10 V working resistance ≦ 500 Ω / - Load resistance ≧ 100 kΩ	
Limits Adjustment range	2 10 ... 100 % of measuring range	
Response Delay Limit 1 Limit 2	 0.03/1/3/10 s 0.03/1/3/10 s	
Limit Relays Contact rating	 2 (single pole) AC 400 VA/250 V DC 10 ... 100 W	
Self-Monitoring[1]	yes	
Supply voltage RV-110, RV-120 RV-116, RV-126	 AC Voltage: 230/115 V (+10 ... –15%) 50/60 Hz DC Voltage: 24 V (15 ... 40 V)	
Operating Conditions	Operating temperature range –30 ... + 65°C Storage temperature range –40 ... +100°C Relative humidity max. 95%, non condensing	
Housing Construction	Sturdy aluminum housing meeting IP 65, painted RAL 7032, with cable feed-through fittings	
Weight	ca. 4.5 kg	

[1]) Self-Monitoring: A separate, normally energized "OK-Relay" monitors transducer gap voltage, cable, and power supply for possible faults.

Dimensions

RV-110
RV-120

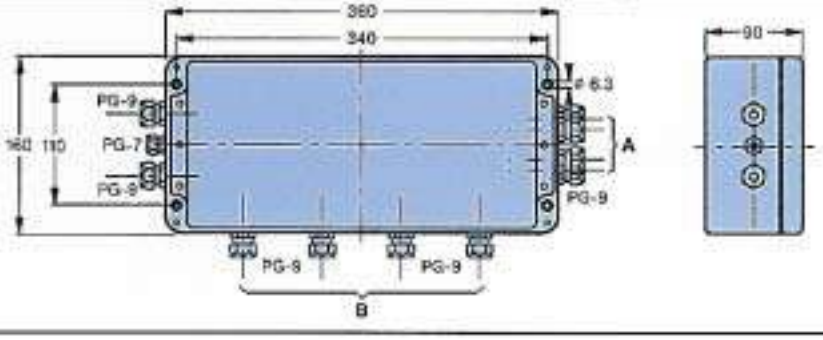


Fig 16:
A: Types RV-110, 116
B: Types RV-120, 126

Ordering Information VIBROCONTROL Series R (Measured Parameter s_{max})

RV- A

Monitoring Unit

110	Power supply 230/115 V ac
116	Power supply 24 V dc

B **Measured Parameter**

1	s_{max} (dual channel operation)
2	Peak value of X (single channel operation)

C **Input Sensitivity**

80	−8.0 mV/µm
40	−4.0 mV/µm
	−xx mV/µm (4.0 ≤ xx ≥ 10)

D **Measuring Range**

1	0 ... 100 µm
2	0 ... 20 µm
3	0 ... 50 µm
4	0 ... 200 µm
5	0 ... 500 µm

E **Analog Output**

1	0 ... 20 mA and 0 ... 10 V
2	4 ... 20 mA and 0 ... 10 V

F **Limit set to Customer Specification**

1	no
2	yes, to this value: Lim 1 = ... / Lim 2 = ...

G **Limit Relay 1**

1	Normally de-energized
2	Normally energized

H **Limit Relay 1**

1	Latching
2	Non-latching

I **Limit Relay 2**

1	Normally de-energized
2	Normally energized

J **Limit Relay 2**

1	Latching
2	Non-latching

K **Response Delay, Limit 1**

1	1 sec
2	3 sec
3	10 sec
4	30 ms

L **Response Delay, Limit 2**

1	1 sec
2	3 sec
3	10 sec
4	30 ms

M **Power Supply**

1	230 V	50/60 Hz
2	115 V	50/60 Hz
3	24 V	DC (only for RV-116)

N **Tropical Protection**

1	no
2	yes

O **Special Requirements**

0	no
1	yes, as follows:

Factory default setup

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	Control count
RV-	110	1	80	1	2	1	1	1	1	1	1	1	1	1	0	203
	116	1	80	1	2	1	1	1	1	1	1	1	3	1	0	211

Customer-specific setup

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	Control count
RV-	11															

Non-contacting displacement transducers, their installation hardware and use in hazardous environments is described in brochure BV-P 1001/e

Ordering Information for VIBROCONTROL Series R (Measured Parameter Max [X,Y])

RV- A

Monitoring Unit

120	Power supply 230/115 V ac

B **Measured Parameter**

1	Peak to Peak value (X,Y) (dual channel operation)
2	Peak to Peak value X (single channel operation)

C **Input Sensitivity**

80	–8.0 mV/µm
40	–4.0 mV/µm
	–xx mV/µm (4.0 ≤ xx ≥ 10)

D **Measuring Range**

1	0 ... 75 µm
2	0 ... 125 µm
3	0 ... 250 µm
4	0 ... 400 µm
5	0 ... 500 µm

E **Analog Output**

	Separate Outputs X and Y
1	0 ... 20 mA and 0 ... 10 V
2	4 ... 20 mA and 0 ... 10 V
	Separate Outputs X and Max (X,Y)
3	0 ... 20 mA and 0 ... 10 V
4	4 ... 20 mA and 0 ... 10 V

F **Limit set to Customer Specification**

1	no
2	yes, to this value: Lim 1 = ... / Lim 2 = ...

G **Limit Relay 1**

1	Normally de-energized
2	Normally energized

H **Limit Relay 1**

1	Latching
2	Non-Latching

I **Limit Relay 2**

1	Normally de-energized
2	Normally energized

J **Limit Relay 2**

1	Latching
2	Non-Latching

K **Response Delay, Limit 1**

1	1 sec
2	3 sec
3	10 sec
4	30 ms

L **Response Delay, Limit 2**

1	1 sec
2	3 sec
3	10 sec
4	30 ms

M **Power Supply**

1	230 V	50/60 Hz
2	115 V	50/60 Hz

N **Tropical Protection**

1	no
2	yes

O **Special Requirements**

1	no
2	yes, as follows:

Factory default setup

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	Control count
RV-	120	/ 1	/ 80	/ 1	/ 2	/ 1	/ 1	/ 1	/ 1	/ 1	/ 1	/ 1	/ 1	/ 1	/ 0	/ 213

Customer-specific setup

12	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	

Non-contacting displacement transducers, their installation hardware and use in hazardous environments is described in brochure BV-P 1001/e