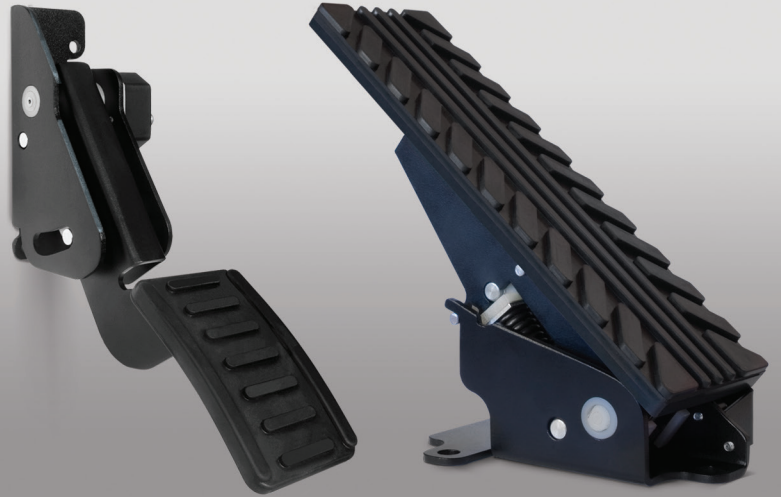


## MN and MP Electronic Pedals



Convert operator's control actions to an electronic signal.

The pedals are used together with the engine control unit to control speed and fuel supply of road construction machinery engines.

Microprocessor-based pedal position sensor is designed based on the wide engine range by various manufacturers and can be custom programmed.

The sensor is completely sealed and does not have moving wear parts.

The pedals can be optionally equipped with connecting harness made according to the agreed drawings.

### Key features:

- uniform pressure force along the pedal clearance;
- pedal pad antislip rubber protective cover;
- programmable electronic contactless sensor;
- easy and quick mounting on any vehicles;
- water, oil and diesel fuel resistance.

### Model designation

# MN1.1130-32HB-42

**Mounting:**  
 MN – horizontal  
 MP – vertical

**Pressure pad color:**  
 1 – black  
 2 – orange

**Rubber cover:**  
 0 – not installed  
 1 – black, installed  
 2 – orange, installed

**Initial inclination angle:**  
 1 – 30°    2 – 35°  
 3 – 40°    4 – 45°

**Kickdown (mechanical):**  
 1 – installed  
 0 – not installed

**Electrical connection:**  
 1 – AMP Superseal 1.5 connector (4 pins)  
 2 – Deutsch connector (3 pins)  
 3 – AMP Superseal 1.5 connector (6 pins)

**Cable length:**  
 1 - 150 mm    6 - 600 mm  
 2 - 200 mm    7 - 700 mm

**Contact coating:**  
 H – nickel/tin  
 A – gold

### Transfer characteristic

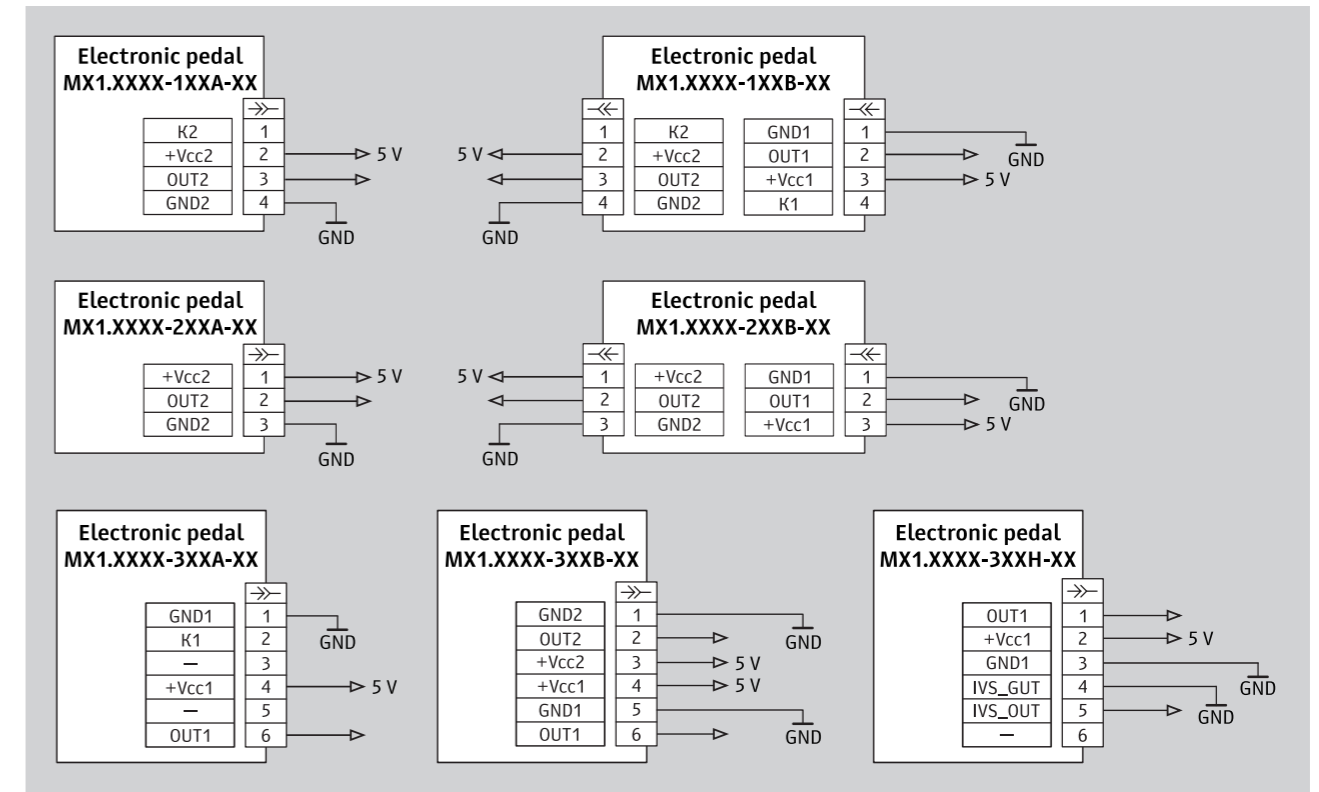
Designation	1st channel	2nd channel
For single-output pedals		
00 or without designation	from 1.10 V ±0.10 V to 4.20 V ±0.15 V	–
41	from 0.5 V ±0.10 V to 3.75 V ±0.15 V	–
For single-output pedals with Idle Validation Signal		
20	from 0.4 V ±0.10 V to 3.85 V ±0.15 V	4.4 V ±0.6 V (when released) 0.5 V ±0.5 V (after activation)
For double-output pedals		
00 or without designation	from 0.55 V ±0.10 V to 2.10 V ±0.15 V	from 1.10 V ±0.10 V to 4.20 V ±0.15 V
42	from 0.33 V ±0.10 V to 2.23 V ±0.13 V	from 0.65 V ±0.10 V to 4.45 V ±0.15 V
51	from 0.85 V ±0.10 V to 4.2 V ±0.15 V	from 0.85 V ±0.10 V to 4.20 V ±0.15 V

**Number of output signals:**  
 A – single output  
 H – single output + Idle Validation Signal  
 K – single output + Kick-down  
 C – single output + Shift point transition  
 B – two outputs

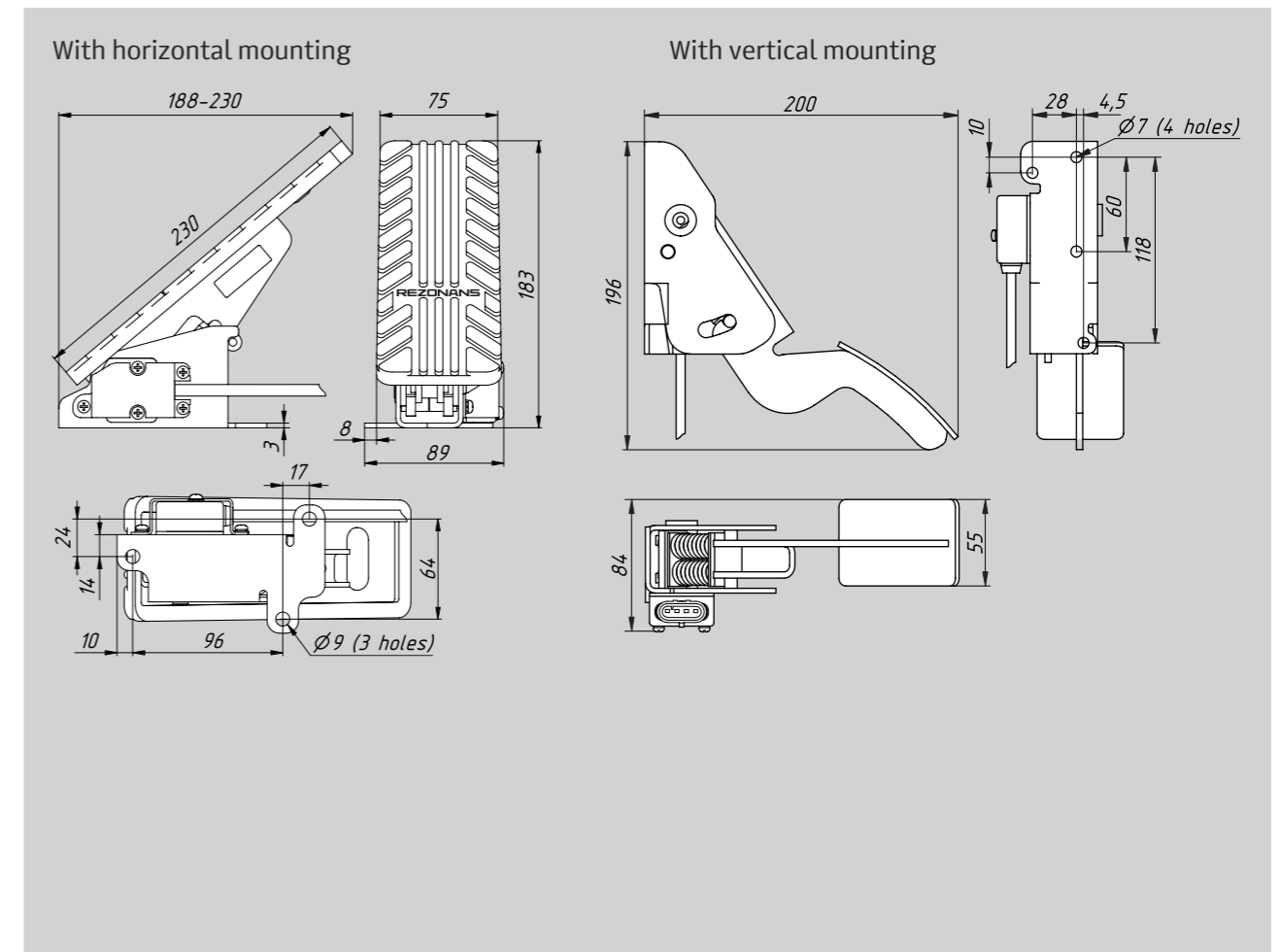
### Main specifications

Parameter	Value	
	MN1	MP1
Power supply voltage	5 ± 0.5 V	
Output voltage range	0.3...4.5 V	
Pedal clearance	25°	20°
Maximum pressure force:		
–clearance	50 N	
–kickdown (mechanical)	120 N	
Temperature range:		
–operating	–40...+55° C	
–limit	–50...+65° C	
Allowed vibratory loads:		
–maximum acceleration amplitude	up to 50 m/s <sup>2</sup>	
–within the frequency range	50...250 Hz	
Allowed impact loads	up to 100 m/s <sup>2</sup>	
IP rating (as per GOST14254-80) (for rotation sensor)	IP67	
Weight	up to 2.5 kg	up to 1 kg

### Wiring schemes



### Overall and connection dimensions



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