

REVERSIBLE ENGINE RPM INDICATOR SYSTEM

MCT 2.01

RPM INDICATOR

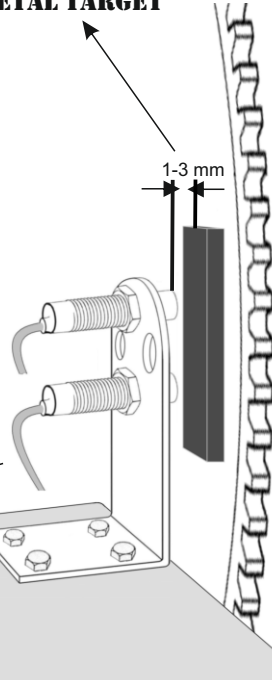


RPM CONVERTER



ENGINE SHAFT OR VOLANT

METAL TARGET



SENSORS AND BRACKET

BENEFITS

- * EASY TO INSTALL
- * SUITABLE FOR ALL KIND OF SHIP ENGINES
- * 3 TYPE OUTPUT FORM FOR ALL INDICATORS
- * SUITABLE FOR REVERSIBLE AND NON REVESIBLE ENGINES
- * NON CONTACT PROXIMITY SENSORS
- * NO MECHANICAL FRICTION DAMAGES
- * RELIBLE CORRECT RPM OUTPUT VALUE
- * STRONG OUTPUT FOR MULTIPLE METERS
- * REAL DIRECTION FINDING FEATURE
- * SUITABLE FOR MAIN ENGINES , DIESEL GENERATORS, PUMPS , REDUCTION GEARS ETC..
- * MAINTENANCE FREE DESIGN
- * 1 YEAR WARRANTY

ENGINE RPM INDICATOR SYSTEM MCT 2.01 Designed and manufactured to replace old mechanical type of rpm systems. New system fits for all type engines.

TECHNICAL DATA

POWER INPUT	: 24 VDC , 1A
OUTPUTS	: +- 10VDC , +- 20VDC , +- 1mA
INPUT SIGNAL	: PNP PICKUP SENSOR
RPM MEASURE RANGE	: UP TO 24000 RPM
OUTPUT LOAD TYPE	: ANALOG METER
POWER CONS. ON STBY	: 10 WATT
PROTECTION	: 4 AMP. RAPID FUSE 5X20 mm

DIMENSIONS(WxHxD)	: 210mm X 297mm X 90mm
WEIGHT	: 1,88 KG
CUT OUT	:

CONTROL TECHNIC

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MCT 2.01 is designed to indicate rpm value and revolution direction of engines. Main advantage of system is ; there is no frictional part.

Reversible engine RPM indicator system consist of 2 pcs of proximity sensors (sensor A and sensor B), 1 pc of RPM converter and requested amount of analog indicators.

Sensors are mounted to a special sensor holder bracket by positioning across a flywheel or shaft rpm to be measured as referred to installation manual. Specially fabricated metallic bracket is mounted or welded on wheel or shaft in line with the sensors to be affected.

Metallic target mounted to flywheel or shaft, triggers the sensors by affecting in order at every turn of the engine. Metallic target triggers first one of the sensors and then the other one too by getting closer.

The proximity sensor pick-up signals are transferred to the RPM converter unit. RPM converter unit outputs an analog signal by processing both rpm and direction.

The Converter calculates the RPM value from the signal comes from sensor A , while processing , sensor A and sensor B signals by using special technology produced in our company. So, converter defines rotation direction by using the signals coming from both sensor A and Sensor B.

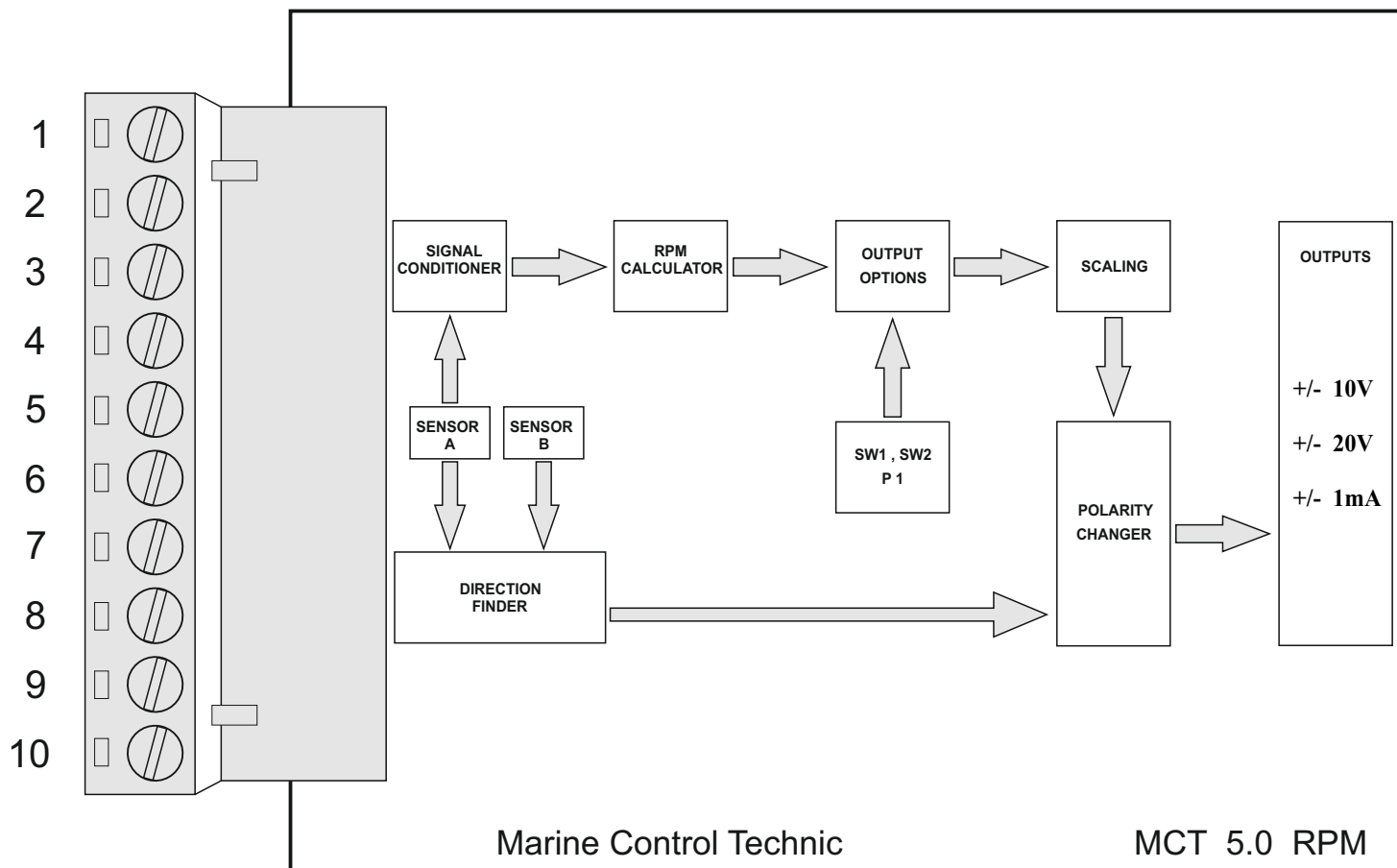
Direction detection function will be disabled if the sensor B is not connected. This condition can be preferred for some type of engines.

(Unidirectional type pumps, alternator diesel engines, or main engines with C.P.P. , etc.)

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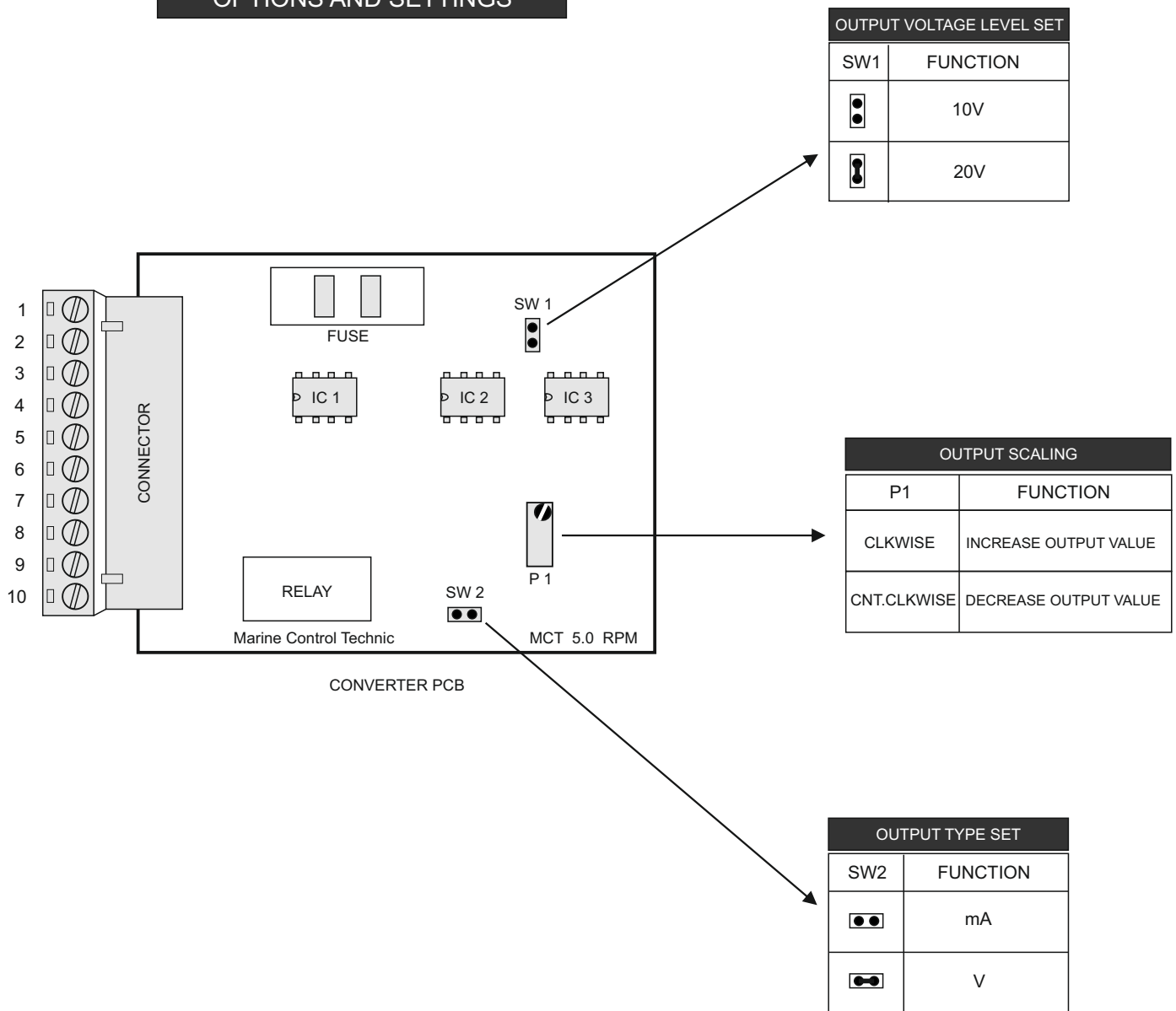
MCT 2.01 CONVERTER BLOCK DIAGRAM



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OPTIONS AND SETTINGS

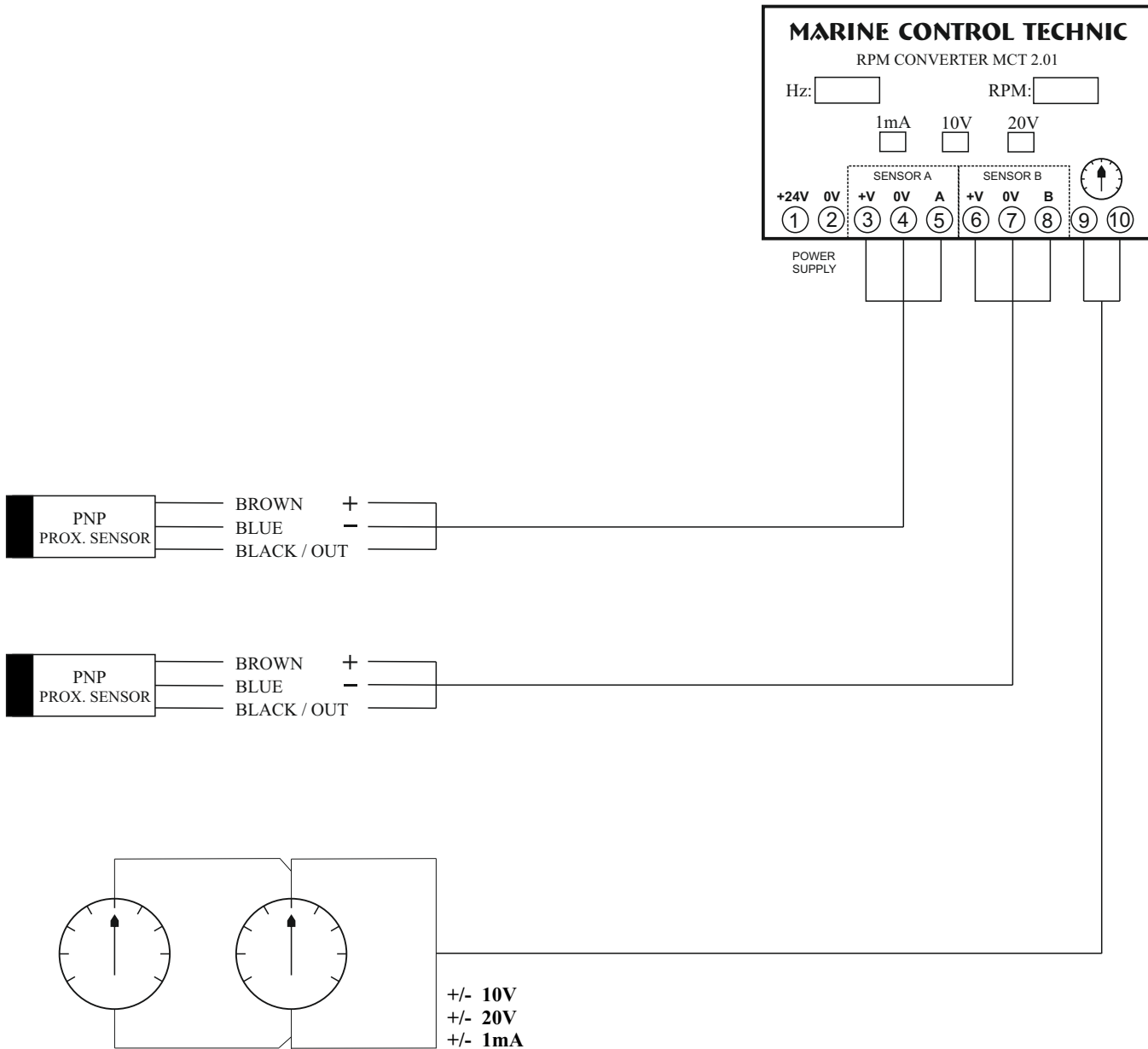


MCT 2.01 can be calibrated to project value via set point dip switches and pot.meter on converter PCB.

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WIRING DIGRAM FOR REVERSIBLE ENGINE

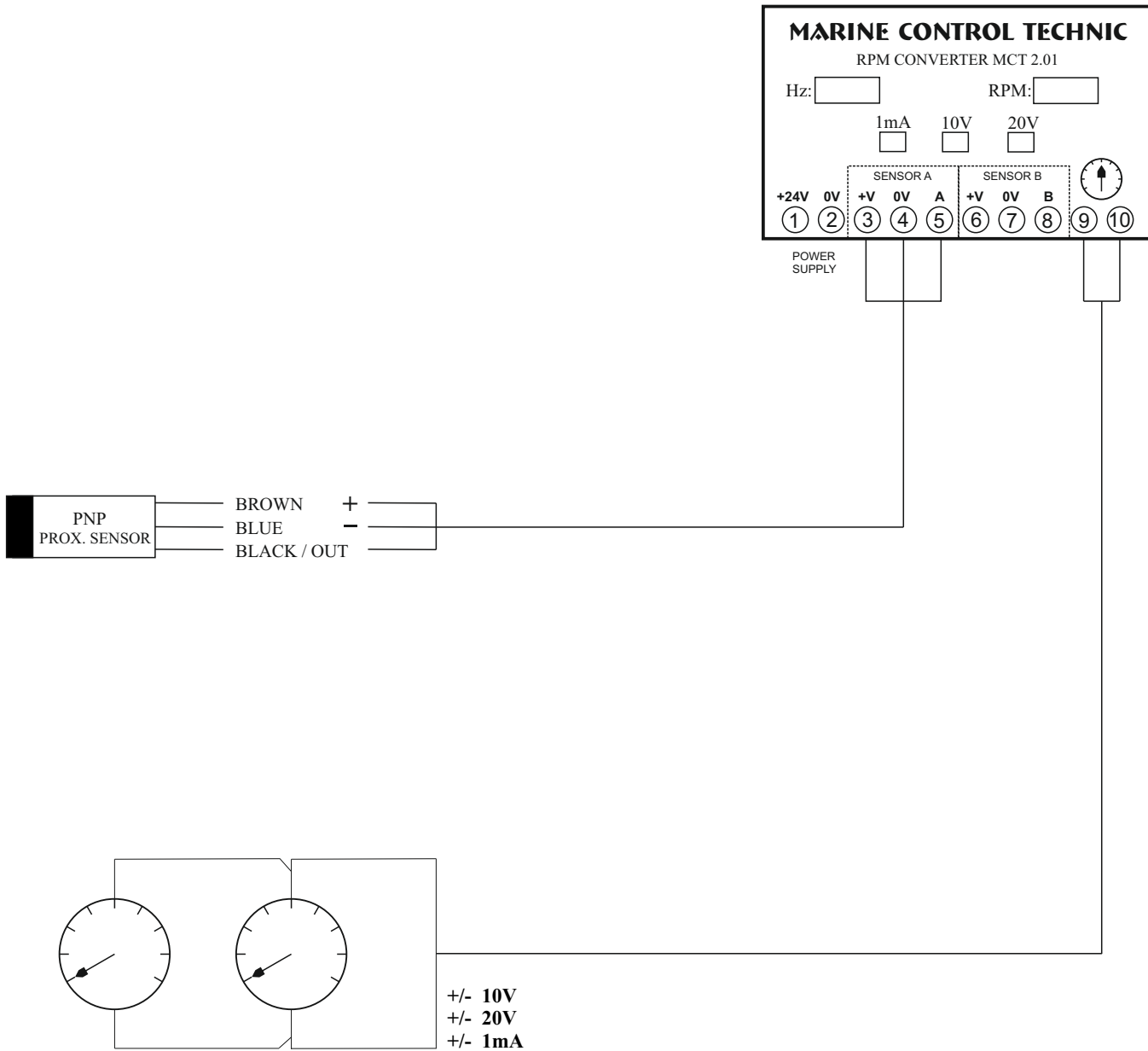


MCT 2.01 can be installed reversible engines and non-reversible engines. RPM indicator instruments should be chose according engine type. Instruments can be zero et center and zero at left.

REVERSIBLE ENGINE RPM INDICATOR SYSTEM

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WIRING DIGRAM FOR NON-REVERSIBLE ENGINE

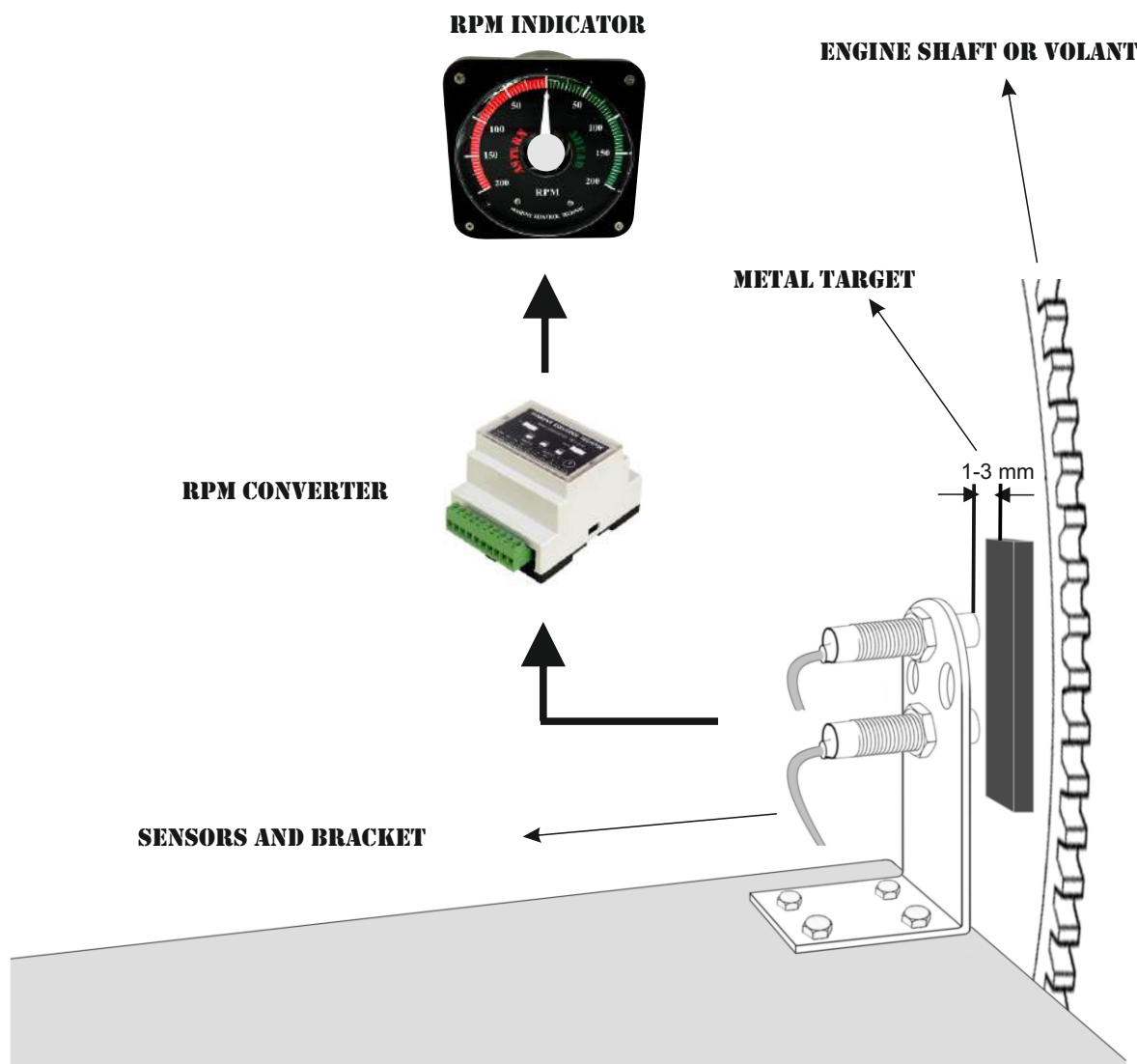


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INSTALLING MCT 2.01 TO VOLANT



REVERSIBLE ENGINE RPM INDICATOR SYSTEM

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INSTALLING MCT 2.01 TO PROPELLER SHAFT

RPM INDICATOR

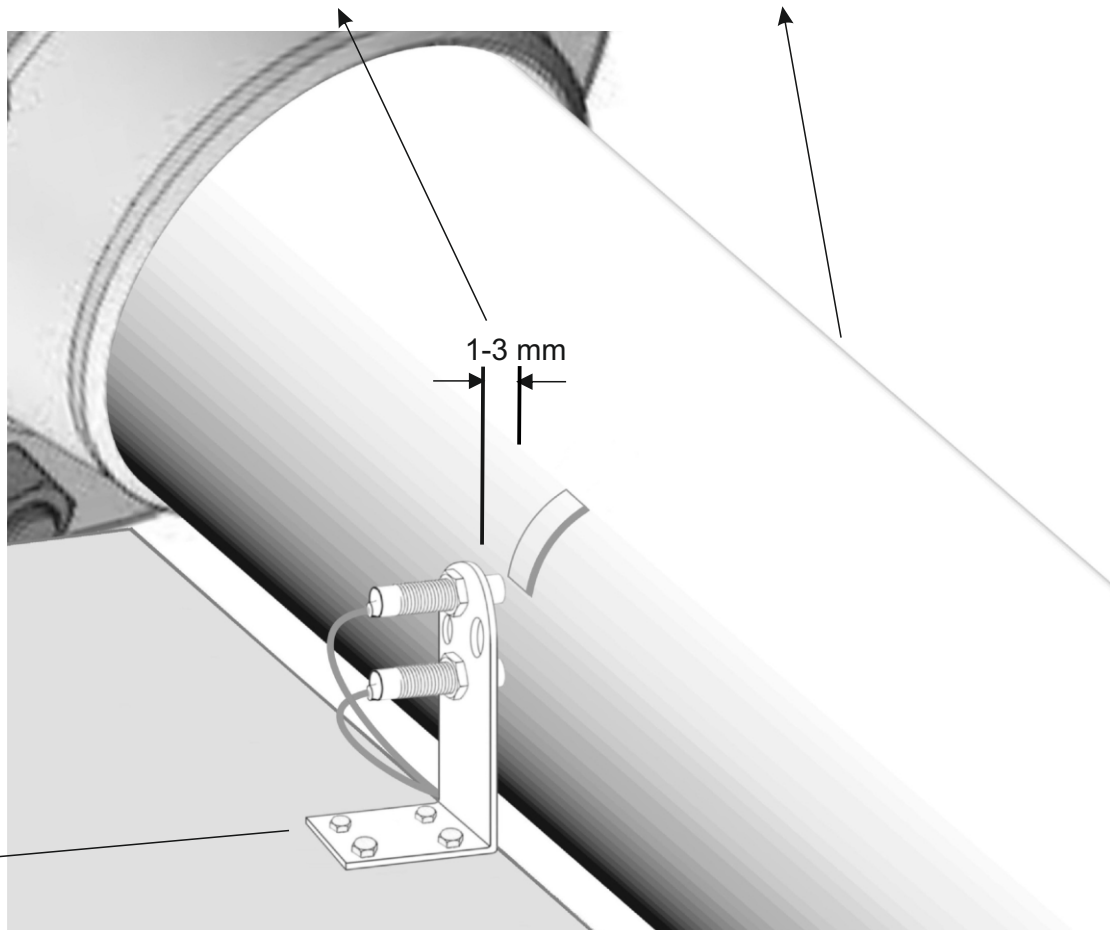


RPM CONVERTER



METAL TARGET

ENGINE SHAFT



SENSORS AND BRACKET

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SYSTEM COMPONENTS



INDICATOR

Input signal : +/- 10VDC - 0-20mA
Dimensions : 111 x 111 x 90 mm
Scale : Interchangeable as custom order
Moving angle : 240 °
Illumination : Back LED light , 24VDC
Weight : 1300 gr.



CONVERTER

Power supply : 24VDC / 250 mA
Input Signal : PNP Pick-up sensor , up to 24000 rpm
Output : +/- 0-10VDC , +/- 0-20VDC , +/- 0-1mA
Dimensions : 70 x 85 x 60 mm , DIN rail mounting
Weight : 115 gr.



SENSOR BRACKET

Material : Aluminium
Dimensions : 60 x 60 x 95 mm
Weight : 85 gr.



**SENSOR
A & B**

Power supply : 5 - 40 VDC
Output : 1,5 KHz / 200mA / PNP
Sens. distance : 2 - 4 mm
Dimensions : M 12
Weight : 85 gr.



TARGET

Material : Iron
Dimensions : 60 x 30 x 10 mm
Weight : 190 gr.