

Sensors Book

© Kanardia d.o.o.

February 2025



Revision 1

Contact Information

Publisher and producer:

Kanardia d.o.o.

Lopata 24a

SI-3000

Slovenia

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A lot of useful and recent information can be also found on the Internet.

See <http://www.kanardia.eu> for more details.

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Credits

This document was written using TeX Live (L^AT_EX) based document creation system using Kile running on Linux operating system. Most of the figures were drawn using Inkscape. Photos and scanned material was processed using Gimp (GNU Image Manipulation Program). Qcad and FreeCAD are used for preparing technical documentation.

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Revision History

The following table shows the revision history of this document.

Rev.	Date	Description
1	February 2025	Initial release.

Introduction

This document displays all the specification drawings of the sensors offered by Kanardia. It includes basic specifications, photo/part drawings, and DAQU/Mini DAQU configurations.

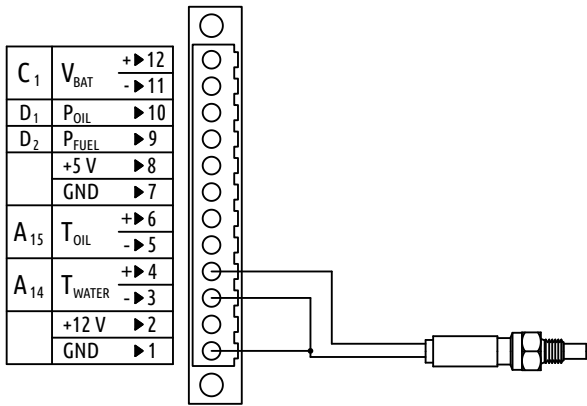
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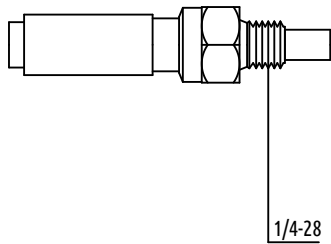
SPECIFICATION DRAWING

DAQU CONFIGURATION



OPTION	SELECTION/SETTING
CHANNEL	ANY A, but A13
FUNCTION	CARBURETOR TEMP., AIRBOX
SENSOR	PT1000
REPORT TIME	0.5 - 1.0 s
FREQUENCY	1Hz - 2Hz
FILTER	2000ms or 2s

PART PHOTO/DRAWING



SPECIFICATION

WEIGHT	30g
TEMPERATURE RANGE	-50 to +500 °C / -58 to 932°F
TYPE	Resistive, Linear

NOTES

- NPT threads are NOT self-sealing! Thread sealant must be used!
- Do not overtight or housing may break!

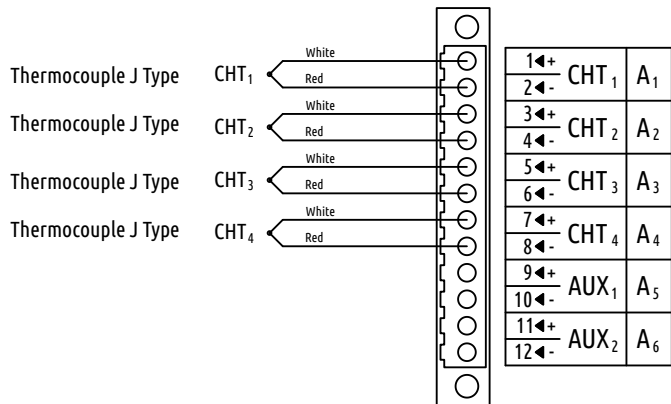
PART NAME:
S-CAT

FILE NAME: ~/Shared/Sensors/S-CAT.dxf

				TITLE: Temperature Sensor Carburetor/Airbox, 1/4-28	KANARDIA d.o.o. Lopata 24a 3000 Celje Slovenia	
B	25.11.2024	Airbox function added.	ŽP	DATE: 25.11.2024	SCALE: N/A	SHEET: 1 of 1
A	10.3.2022	Initial release.	ŽP	DRAW BY: ŽP	CHECK BY: GT	REV: B
REV	DATE	DESCRIPTION	DR			

SPECIFICATION DRAWING

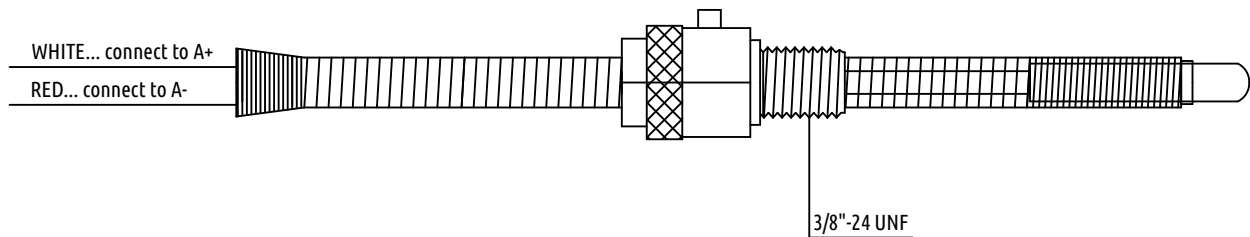
DAQU CONFIGURATION



OPTION	SELECTION/SETTING
CHANNEL	Any A, but A13
FUNCTION	CHT1, CHT2, ...
SENSOR	J type
ISOLATED	NO
REPORT TIME	0.5 - 1.0 s
FREQUENCY	1Hz - 2Hz
FILTER	2000ms or 2s

PART PHOTO/DRAWING

Type	US	
J	+	white
	-	red



SPECIFICATION

WEIGHT	40g
TEMPERATURE RANGE	-40 - 750 °C / -40 - 1382 °F
TYPE	Thermocouple J-Type
CABLE LENGTH	700mm

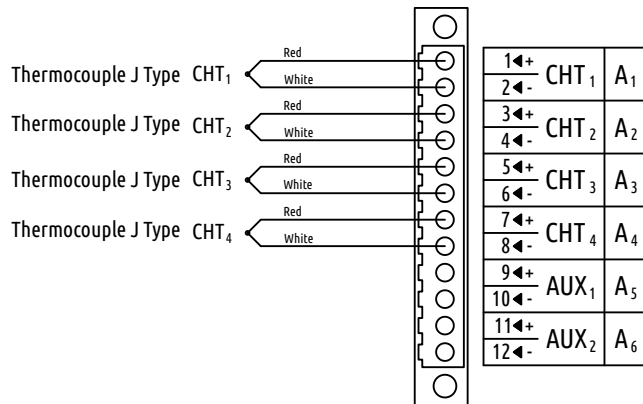
NOTES

- Do not bend! Warranty void when curved.
- Make sure to use a J-Type extension cable if an extension is needed!
- You may cut cable to length.

PART NAME:		S-CBLY		You can find this product under part numbers: PRODUCER PART No: DYNON 100404-000	
FILE NAME: ~/ownCloud/Sensors/S-CBLY.dxf					
TITLE: CHT Temperature Sensor, Bayonet J Type, 3/8"-24 UNF				KANARDIA d.o.o. Lopata 24a 3000 Celje Slovenia	
REV	DATE	DESCRIPTION	DR	DATE:	SCALE:
A	10.3.2022	Initial release.	ŽP	10.3.2022	N/A
				DRAW BY: ŽP	CHECK BY: GT
				SHEET: 1 of 1	REV: A

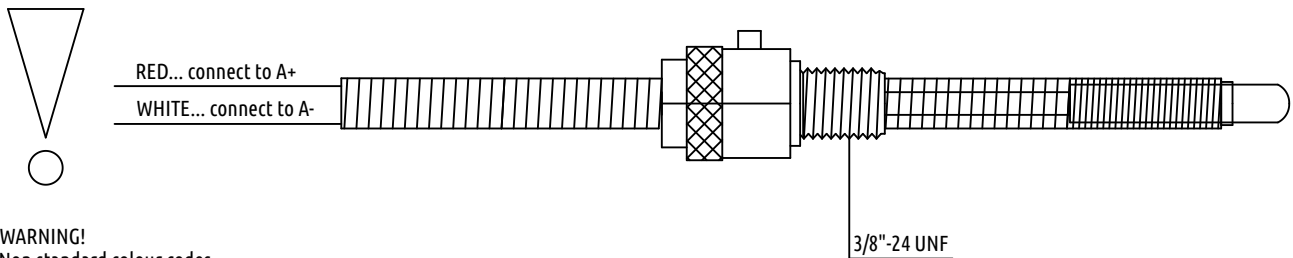
SPECIFICATION DRAWING

DAQU CONFIGURATION



OPTION	SELECTION/SETTING
CHANNEL	Any A, but A13
FUNCTION	CHT1, CHT2, ...
SENSOR	J type
ISOLATED	NO
REPORT TIME	0.5 - 1.0 s
FREQUENCY	1Hz - 2Hz
FILTER	2000ms or 2s

PART PHOTO/DRAWING



SPECIFICATION

WEIGHT	40g
TYPE	Thermocouple J-Type
CABLE LENGTH	1.5m

NOTES

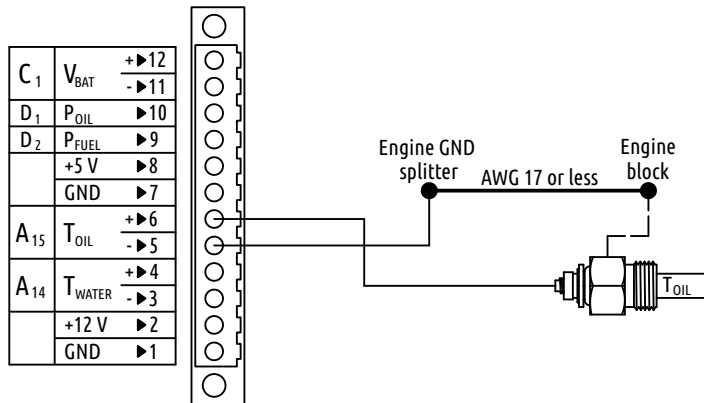
- Do not bend! Warranty void when curved.
- You may cut cable to length.

PART NAME:		<h1>S-CBLY-K1</h1>	
FILE NAME: ~/ownCloud/Iso/TechDoc/SensorsCables/S-CBLY-K1.dxf			
TITLE: CHT Temperature Sensor, Bayonet J Type, 3/8"-24 UNF Kanardia Custom		KANARDIA d.o.o.	
		Lopata 24a	
DATE: 20.12.2022	SCALE: N/A	SHEET: 1 of 1	3000 Celje
REV: A	CHECK BY: GT	REV: A	Slovenia

REV	DATE	DESCRIPTION	DR
A	20.12.2022	Initial release.	ŽP

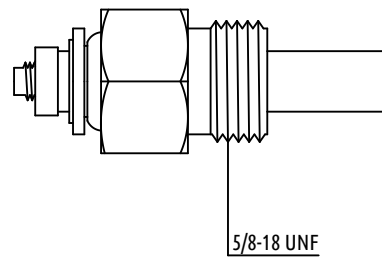
SPECIFICATION DRAWING

DAQU CONFIGURATION



OPTION	SELECTION/SETTING
CHANNEL	ANY A, but A13
FUNCTION	OIL TEMP.
SENSOR	DYNON 100409
REPORT TIME	0.5 - 1.0 s
FREQUENCY	1Hz - 2Hz
FILTER	2000ms or 2s

PART PHOTO/DRAWING



SPECIFICATION

WEIGHT	48g
TEMPERATURE RANGE	100-240 °F or 38-116 °C
TYPE	Resistive, NTC Thermistor

STEINHART-HART COEFFICIENTS

$$\frac{1}{T} = a + b \ln R + c(\ln R)^3$$

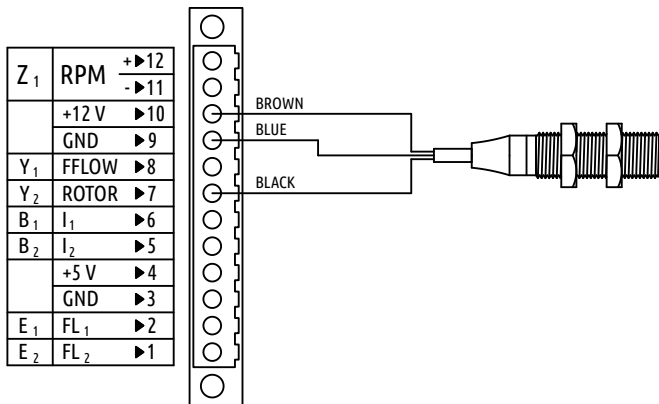
a	1.63577E-03
b	2.64823E-04
c	-9.94675E-08

T	temperature in °K
R	sensor resistance in Ohm

PART NUMBER: S-OT-DATCON-UNF_5_8		You can also find this product under part numbers: DATCON 02037-00 DYNON 100409-001	
FILE NAME: ~/Shared/Sensors/S-OT-DATCON-UNF_5_8.dxf			
TITLE: Oil Temperature Sensor 5/8-18 UNF		KANARDIA d.o.o. Lopata 24a 3000 Celje Slovenia	
DATE: 10.3.2022	SCALE: N/A		
REV: A	DATE: 10.3.2022	DESCRIPTION: Initial release.	DR: ŽP
REV	DATE	DESCRIPTION	DR
	DRAW BY: ŽP	CHECK BY: GT	REV: A

SPECIFICATION DRAWING

DAQU CONFIGURATION

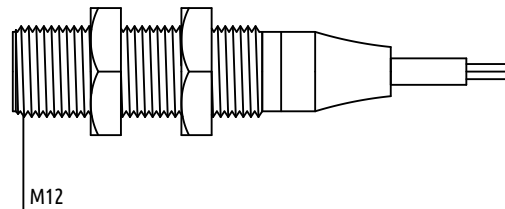
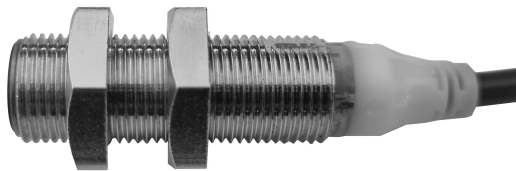


OPTION	SELECTION/SETTING
CHANNEL	Y only
FUNCTION	Rotor RPM
SENSOR	Digital pulse - NPN
REPORT TIME	0.2 - 0.5 s
FREQUENCY	2Hz - 5Hz
FILTER	about 500ms or 0.5s
PULSES	*
REDUCTION	1.0**

*Pulses are specific for your rotor, check your rotor manual. Example, if your rotor head has X teeth, pulses should be set to X.

**Usually 1.0, but in some cases it may be different.

PART PHOTO/DRAWING



SPECIFICATION

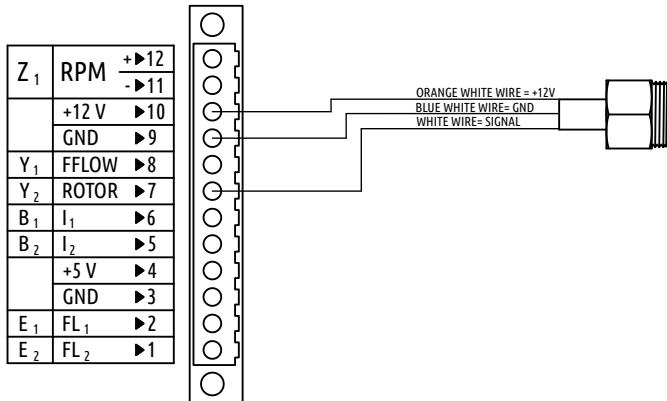
WEIGHT	85g
TEMPERATURE RANGE	-40 to +70°C/-40 to +158°F
TYPE	NPN proximity sensor - inductive
VOLTAGE SUPPLY	10V ~ 32V
MAX. OPERATING CURRENT	200mA
CABLE LENGTH	2m

PART NAME:		S-ROTOR		You can find this product under part numbers: OMRON E2A-M12KS04-WP-C1	
FILE NAME: ~/ownCloud/Sensors/S-ROTOR.dxf					
TITLE: Rotor RPM					
DATE: 10.3.2022		SCALE: N/A		SHEET: 1 of 1	
REV: A		DRAW BY: ŽP		CHECK BY: GT	
REV: A		REV: A		REV: A	
KANARDIA d.o.o. Lopata 24a 3000 Celje Slovenia					

A	10.3.2022	Initial release.	ŽP
REV	DATE	DESCRIPTION	DR

SPECIFICATION DRAWING

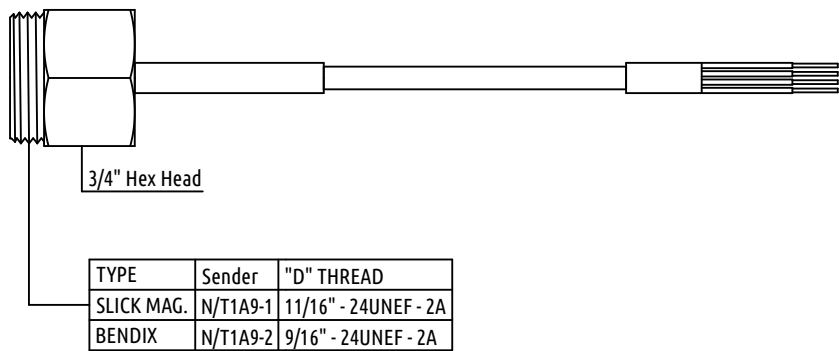
DAQU CONFIGURATION



OPTION	SELECTION/SETTING
CHANNEL	ANY Y
FUNCTION	ENGINE RPM
SENSOR	DIGITAL PULSE
REPORT TIME	0.2-0.5 s
FREQUENCY	2Hz - 5Hz
FILTER	about 0.5s/500ms
PULSES	1 (4 cylinder), 3 (6 cylinder)
PROP REDUCTION	1 (4 cylinder), 0.5 (6 cylinder)

*This is an example for Lycoming engine.
6 cylinder version uses trick with reduction set to 0.5 in order to get 1.5 pulses per revolution.

PART PHOTO/DRAWING



SPECIFICATION

WEIGHT:	28.35g/1 oz.
TEMPERATURE:	-40°C to 150°C
VOLTAGE IN:	5-24v DC Regulated
SIGNAL OUT:	95% of supply Sq. Wave
OUTPUT IMPEDENCE:	4.7K
SUPPLY CURRENT:	7.5ma. max.
VOLTAGE IN:	5-24v DC Regulated
PULSE OUTPUT FOR 2 POLE MAGNET:	1 Pulse/Rev 4 Cyl.--1.5 Pulse/Rev 6 Cyl.

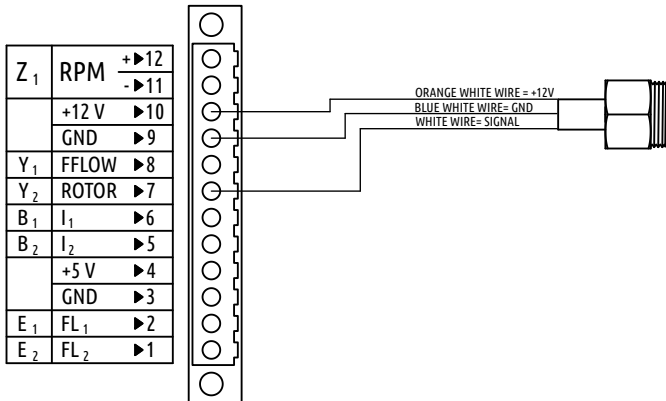
NOTES

- Installation Torque - finger tight plus 1/6 turn
- Use Loctite 242 or equivalent
- Typically used for Lycoming & Continental.
- Please refer to the sensor documentation for more details.

PART NAME:		S-TACH-MAG		You can find this product under part numbers:	
				Slick Mag PART No: N/T1A9-1 (10-02432)	
				Bendix PART No: N/T1A9-2 (10-02433)	
FILE NAME: ~/ownCloud/Sensors/S-TACH.dxf					
TITLE:		Sensor, UMA Sending Units For Tachometers FAA TSO (Slick Mag)		KANARDIA d.o.o.	
		Sensor, UMA Sending Units For Tachometers FAA TSO (Bendix)		Lopata 24a	
A	10.3.2022	Initial release.	ŽP	DATE:	10.3.2022
REV	DATE	DESCRIPTION	DR	SCALE:	N/A
				SHEET:	1 of 1
				DRAW BY:	ŽP
				CHECK BY:	GT
				REV:	A
					Slovenia

SPECIFICATION DRAWING

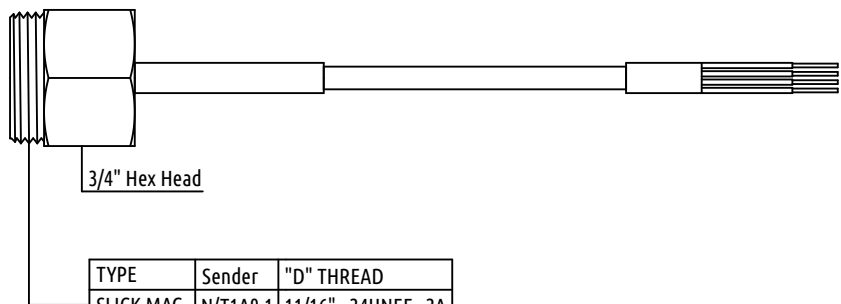
DAQU CONFIGURATION



OPTION	SELECTION/SETTING
CHANNEL	ANY Y
FUNCTION	ENGINE RPM
SENSOR	DIGITAL PULSE
REPORT TIME	0.2-0.5 s
FREQUENCY	2Hz - 5Hz
FILTER	about 0.5s/500ms
PULSES	1 (4 cylinder), 3 (6 cylinder)
PROP REDUCTION	1 (4 cylinder), 0.5 (6 cylinder)

*This is an example for Lycoming engine.
6 cylinder version uses trick with reduction
set to 0.5 in order to get 1.5 pulses per revolution.

PART PHOTO/DRAWING



TYPE	Sender	"D" THREAD
SLICK MAG.	N/T1A9-1	11/16" - 24UNEF - 2A
BENDIX	N/T1A9-2	9/16" - 24UNEF - 2A

SPECIFICATION

WEIGHT:	28.35g/1 oz.
TEMPERATURE:	-40°C to 150°C
VOLTAGE IN:	5-24v DC Regulated
SIGNAL OUT:	95% of supply Sq. Wave
OUTPUT IMPEDENCE:	4.7K
SUPPLY CURRENT:	7.5ma. max.
VOLTAGE IN:	5-24v DC Regulated
PULSE OUTPUT FOR 2 POLE MAGNET:	1 Pulse/Rev 4 Cyl.--1.5 Pulse/Rev 6 Cyl.

NOTES

- Installation Torque - finger tight plus 1/6 turn
- Use Loctite 242 or equivalent
- Typically used for Lycoming & Continental.
- Please refer to the sensor documentation for more details.

PART NAME:	S-TACH-MAG	You can find this product under part numbers: Slick Mag PART No: N/T1A9-1 (10-02432) Bendix PART No: N/T1A9-2 (10-02433)
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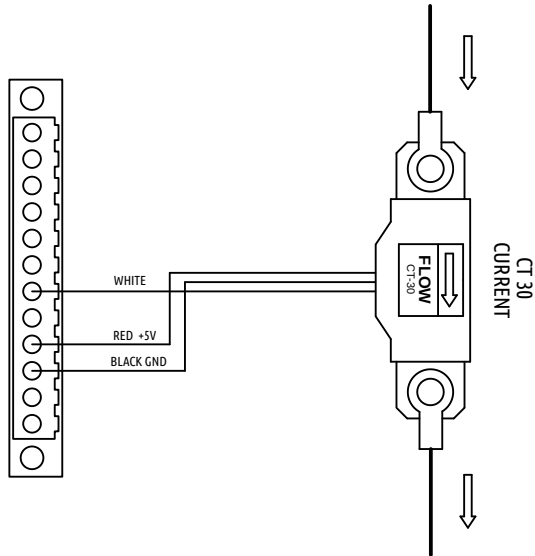
FILE NAME: ~/ownCloud/Sensors/S-TACH.dxf

REV	DATE	DESCRIPTION	DR	TITLE	DATE	SCALE	SHEET	REV	DESCRIPTION
A	10.3.2022	Initial release.	ŽP	Sensor, UMA Sending Units For Tachometers FAA TSO (Slick Mag) Sensor, UMA Sending Units For Tachometers FAA TSO (Bendix)	10.3.2022	N/A	1 of 1	A	KANARDIA d.o.o. Lopata 24a 3000 Celje Slovenia
REV	DATE	DESCRIPTION	DR	DRAW BY: ŽP	CHECK BY: GT				

SPECIFICATION DRAWING

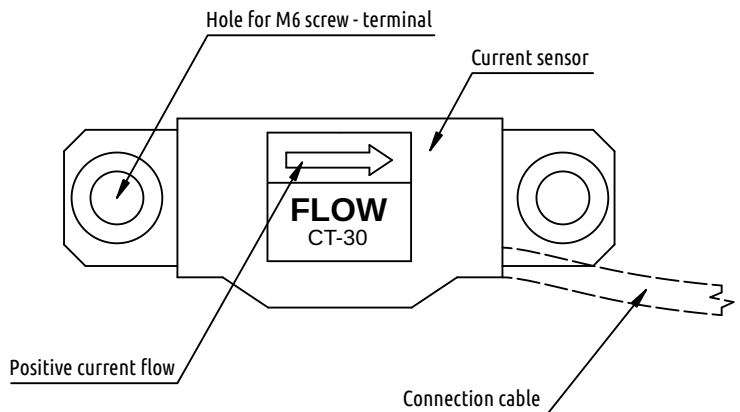
DAQU CONFIGURATION

Z ₁	RPM	+►12
		-►11
	+12 V	►10
	GND	►9
Y ₁	FFLOW	►8
Y ₂	ROTOR	►7
B ₁	I ₁	►6
B ₂	I ₂	►5
	+5 V	►4
	GND	►3
E ₁	FL ₁	►2
E ₂	FL ₂	►1



OPTION	SELECTION/SETTING
CHANNEL	Any B, D, E, F
FUNCTION	EL. CURRENT 1/2
SENSOR	Current 30 A
REPORT TIME	0.5 - 1.0 s
FREQUENCY	1Hz - 2Hz
FILTER	2000ms/2s

PART PHOTO/DRAWING



SPECIFICATION

WEIGHT	47g
DIMENSIONS	69x18.5x18mm
CONTINUOUS CURRENT	-/+30A
MAX BURST CURRENT	100A/100ms
VOLTAGE	up to 100V

OUTPUT SIGNAL

NO CURRENT	2.5V
MAX NEGATIVE CURRENT (-32A)	0.5V
MAX POSITIVE CURRENT (+32A)	4.5V
GAIN	16A per V

PART NAME:
CT-30

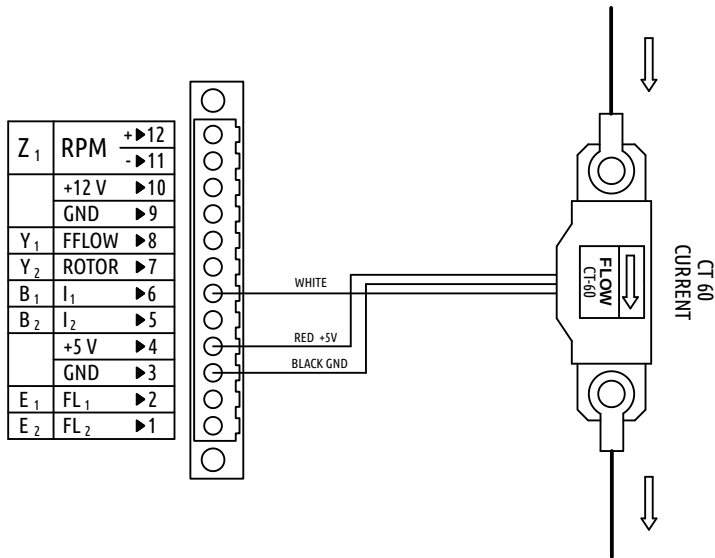
FILE NAME: ~/Shared/Sensors/CT30.dxf

TITLE: Current Transducer 30A

A	10.3.2022	Initial release.	ŽP	DATE: 10.3.2022	SCALE: N/A	SHEET: 1 of 1	KANARDIA d.o.o. Lopata 24a 3000 Celje Slovenia
REV	DATE	DESCRIPTION	DR	DRAW BY: ŽP	CHECK BY: GT	REV: A	

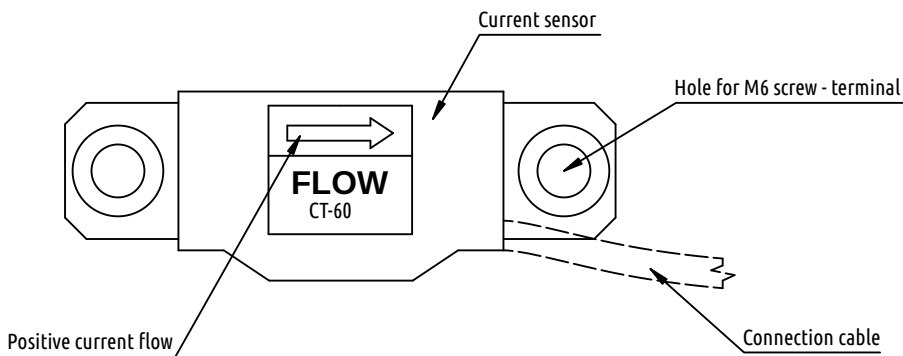
SPECIFICATION DRAWING

DAQU CONFIGURATION



OPTION	SELECTION/SETTING
CHANNEL	Any B, D, E, F
FUNCTION	EL. CURRENT 1/2
SENSOR	Current 60 A
FREQUENCY	1Hz - 2Hz
REPORT TIME	0.5 - 1.0 s
FILTER	2000ms/2s

PART PHOTO/DRAWING



SPECIFICATION

WEIGHT	47g
DIMENSIONS	69x18.5x18mm
CONTINUOUS CURRENT	-/+60A
MAX BURST CURRENT	100A/100ms
VOLTAGE	up to 100V

OUTPUT SIGNAL

NO CURRENT	2.5V
MAX NEGATIVE CURRENT (-64A)	0.5V
MAX POSITIVE CURRENT (+64A)	4.5V
GAIN	32A per V

PART NAME:
CT-60

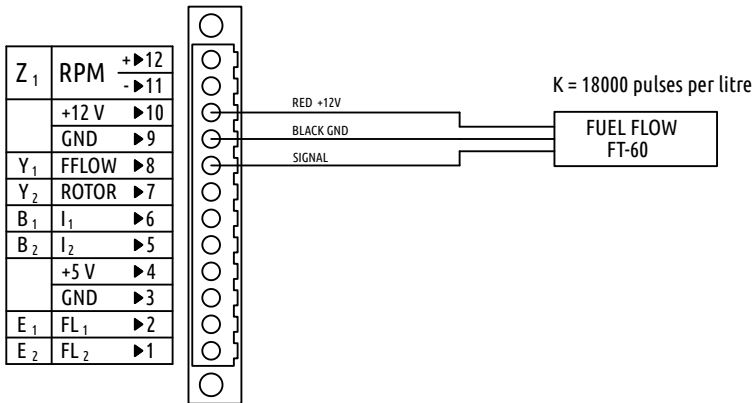
FILE NAME: ~/Shared/Sensors/CT60.dxf

TITLE: Current Transducer 60A

						KANARDIA d.o.o. Lopata 24a 3000 Celje Slovenia			
A	10.3.2022	Initial release.	ŽP	DATE:	10.3.2022	SCALE:	N/A	SHEET:	1 of 1
REV	DATE	DESCRIPTION	DR	DRAW BY:	ŽP	CHECK BY:	GT	REV:	A

SPECIFICATION DRAWING

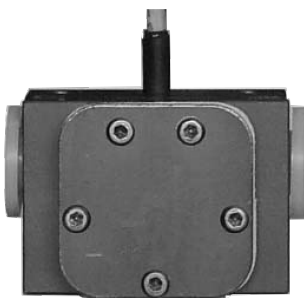
DAQU CONFIGURATION



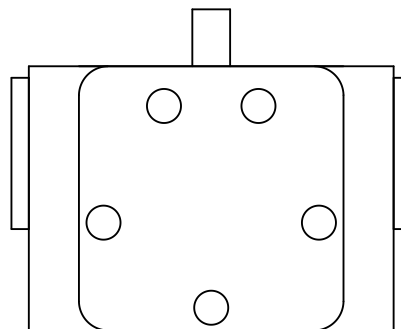
OPTION	SELECTION/SETTING
CHANNEL	Any Y
FUNCTION	Fuel flow 1
SENSOR	Digital Pulse
REPORT TIME	0.2 - 0.5 s
FREQUENCY	2Hz - 5Hz
FILTER	about 0.5 s
PULSES*	18000
CORRECTION	1.0

*pulses per liter

PART PHOTO/DRAWING



1/4" NPT Outlet Port
Do NOT use straight threads.
Thread sealant must be used.



1/4" NPT Outlet Port
Do NOT use straight threads.
Thread sealant must be used.

Do NOT wrench or clamp in this area!

SPECIFICATION

WEIGHT	300g
DIMENSIONS	3.49x 4.11x 4.83cm / 1.375x 1.62x 1.9 inch
FUEL FLOW RANGE	2.3 to 265+ L/h or 0.6 to 70+ GPH
FUEL FLOW OVER RANGE	UNLIMITED
LINEARITY	+/- 1% over an engine's normal operating range
REPEATABILITY	+/- 0.25%
BURST PRESSURE	275BAR/ 4000 PSI
WORKING PRESSURE	17BAR/ 250 PSI
TEMPERATURE RANGE	-65° C to 125° C / -85° F to 257° F
LIFE EXPECTANCY	10000 Hrs. Min

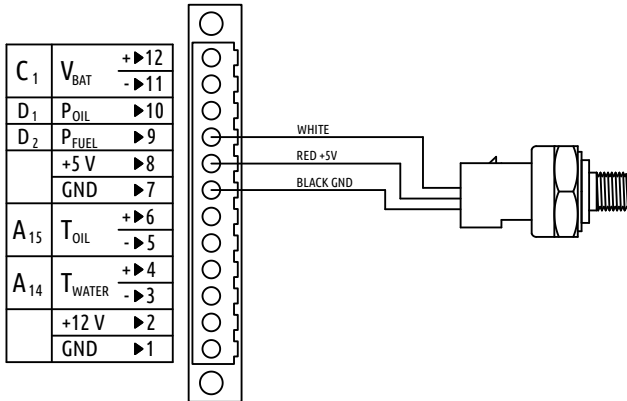
NOTES

- Check Daqu manual, section 4.16 for additional info.
- Up to 350 HP engines, engine driven fuel pumps only.
- NPT threads are NOT self-sealing, thread sealant must be used. If thread sealant is not used, NPT threads WILL leak.

PART NAME:		S-FT60		You can find this product under part numbers: FT-60 "Red cube" DYNON 100403-003	
FILE NAME: ~/Shared/Sensors/S-FT60.dxf					
TITLE: Fuel Flow Transducer (FT-60)				KANARDIA d.o.o. Lopata 24a 3000 Celje Slovenia	
REV	DATE	DESCRIPTION	DR	DATE:	SCALE:
A	10.3.2022	Initial release.	ŽP	10.3.2022	N/A
				DRAW BY: ŽP	CHECK BY: GT
				SHEET: 1 of 1	REV: A

SPECIFICATION DRAWING

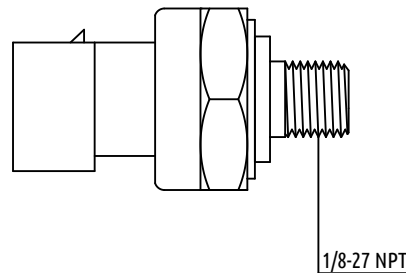
DAQU CONFIGURATION



OPTION	SELECTION/SETTING
CHANNEL	Any B,D or E
FUNCTION	FUEL PRESSURE
SENSOR	Active 0.5-4.5V
REPORT TIME	0.5 - 1.0 s
FREQUENCY	1Hz - 2Hz
FILTER	2000ms or 2s
MAX VALUE*	1.034 BAR

*Always enter MAX VALUE in BAR.
Do not enter PSI value!

PART PHOTO/DRAWING



SPECIFICATION

WEIGHT	40g
OUTPUT	0.5-4.5V
RANGE	0-15PSI
MAX VALUE(at 4.5V)	15PSI or 1.034BAR
BURST PRESSURE	600PSI or 41BAR
PRINCIPLE	VENTED GAUGE

NOTES

- Typically used for fuel pressure on carburetor engines.
- NPT threads are NOT self-sealing! Thread sealant must be used!
- Do not overtight or housing may break!

PART NUMBER: S-PR-KAV-1B-NPT	You can also find this product under part numbers: KAVLICO P4055-5025-1
--	--

FILE NAME: ~/Shared/Sensors/S-PR-KAV-1B-NPT.dxf

TITLE: Pressure Sensor 15PSI/1BAR	KANARDIA d.o.o. Lopata 24a 3000 Celje Slovenia
DATE: 10.3.2022	SCALE: N/A
SHEET: 1 of 1	REV: A
DRAW BY: ŽP	CHECK BY: GT

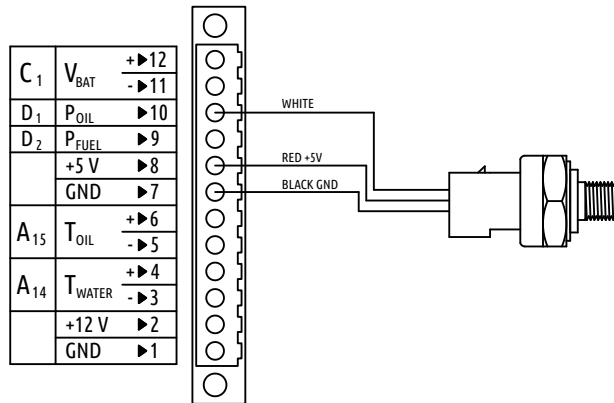
REV	DATE	DESCRIPTION	DR
A	10.3.2022	Initial release.	ŽP

SPECIFICATION DRAWING

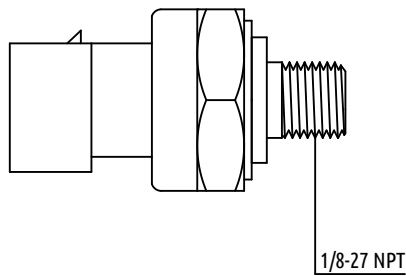
DAQ CONFIGURATION

OPTION	SELECTION/SETTING
CHANNEL	Any B,D or E
FUNCTION	OIL PRESSURE
SENSOR	Active 0.5-4.5V
REPORT TIME	0.5 – 1.0 s
FREQUENCY	1Hz - 2Hz
FILTER	2000ms/2s
MAX VALUE*	10.34 BAR

*Always enter MAX VALUE in BAR.
Do not enter PSI value!



PART PHOTO/DRAWING



SPECIFICATION

WEIGHT	40g
OUTPUT	0.5-4.5V
RANGE	0-150PSI
MAX VALUE(at 4.5V)	150PSI or 10.34BAR
BURST PRESSURE	600PSI or 41BAR
PRINCIPLE	VENTED GAUGE

NOTES

- Typically used for oil pressure on Lycoming, Continental and older Rotax engines (check thread on your Rotax engine).
- It can also be used as fuel pressure on injection engines.
- NPT threads are NOT self-sealing! Thread sealant must be used!
- Do not overtight or housing may break!

PART NUMBER: S-PR-KAV-10B-NPT		You can also find this product under part numbers: KAVLICO P4055-5025-6	
FILE NAME: ~/Shared/Sensors/S-PR-KAV-10B-NPT-B.dxf			
TITLE: Pressure Sensor 150PSI/10BAR		KANARDIA d.o.o. Lopata 24a 3000 Celje Slovenia	
REV	DATE	DESCRIPTION	DR
A	10.3.2022	Initial release.	ŽP
DATE	DESCRIPTION	DR	DATE
10.3.2022	Initial release.	ŽP	10.3.2022
DRAW BY:	CHECK BY:	SHEET:	REV:
ŽP	GT	1 of 1	A

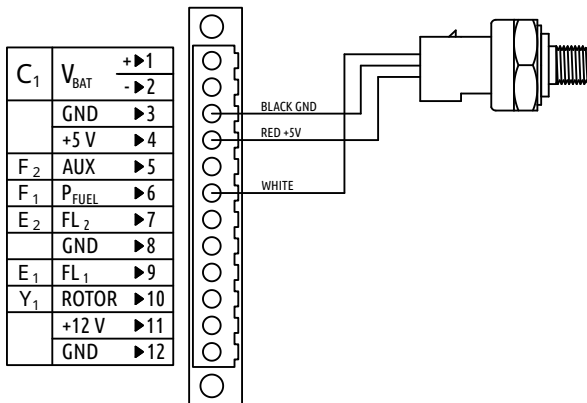
SPECIFICATION DRAWING

mini DAQU CONFIGURATION

OPTION	SELECTION/SETTING
CHANNEL	Any E or F
FUNCTION	FUEL P. cmp.*
SENSOR	Active 0.5-4.5V
REPORT TIME	0.5 - 1.0 s
FREQUENCY	1Hz - 2Hz
FILTER	2000ms/2s
MAX VALUE**	10.34 BAR

*See miniDaqu manual, section 9.2.

**Always enter MAX VALUE in BAR.
Do not enter PSI value!

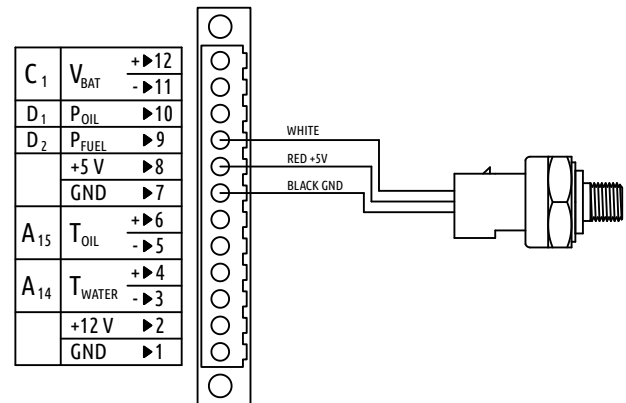


DAQU CONFIGURATION

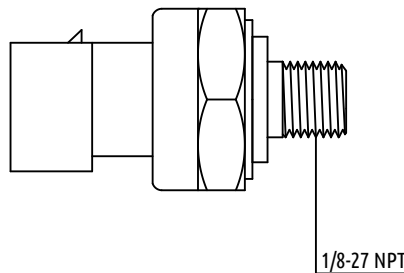
OPTION	SELECTION/SETTING
CHANNEL	Any B,D or E
FUNCTION	FUEL PRESSURE*
SENSOR	Active 0.5-4.5V
REPORT TIME	0.5 - 1.0 s
FREQUENCY	1Hz - 2Hz
FILTER	2000ms/2s
MAX VALUE**	10.34 BAR

*When Daqu modified for Rotax IS or ULPower is used, then you should set "FUEL P. cmp." option instead.

**Always enter MAX VALUE in BAR.
Do not enter PSI value!



PART PHOTO/DRAWING



SPECIFICATION

WEIGHT	40g
OUTPUT	0.5-4.5V
RANGE	0-150PSI
MAX VALUE(at 4.5V)	150PSI or 10.34BAR
BURST PRESSURE	600PSI or 41BAR
PRINCIPLE	VENTED GAUGE

NOTES

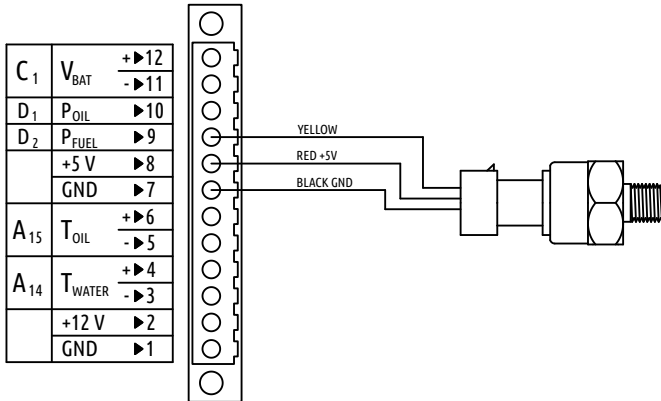
- Typically used for fuel pressure on injection engines or as an oil pressure on Lycoming, Continental and older Rotax engines (check thread on your Rotax engine).
- NPT threads are NOT self-sealing! Thread sealant must be used!
- Do not overtight or housing may break!

PART NUMBER: S-PR-KAV-10B-NPT		You can also find this product under part numbers: KAVLICO P4055-5025-6	
FILE NAME: ~/Shared/Sensors/S-PR-KAV-10B-NPT.dxf			
TITLE: Pressure Sensor 150PSI/10BAR		KANARDIA d.o.o. Lopata 24a 3000 Celje Slovenia	
DATE: 10.3.2022	SCALE: N/A	SHEET: 1 of 1	
REV: A	DRAW BY: ŽP	CHECK BY: GT	REV: A

REV	DATE	DESCRIPTION	DR
A	10.3.2022	Initial release.	ŽP

SPECIFICATION DRAWING

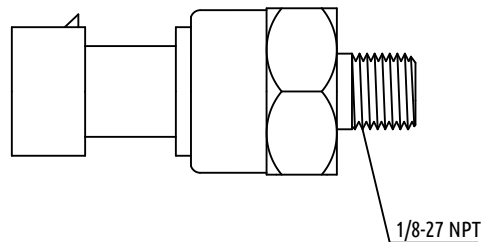
DAQU CONFIGURATION



OPTION	SELECTION/SETTING
CHANNEL	Any B,D or E
FUNCTION	FUEL PRESSURE
SENSOR	Active 0.5-4.5V
REPORT TIME	0.5 - 1.0 s
FREQUENCY	1Hz - 2Hz
FILTER	2000ms or 2s
MAX VALUE*	1.034 BAR

*Always enter MAX VALUE in BAR.
Do not enter PSI value!

PART PHOTO/DRAWING



SPECIFICATION

WEIGHT	65g
OUTPUT	0.5-4.5V
RANGE	0-15PSI
MAX VALUE(at 4.5V)	15PSI or 1.034BAR
BURST PRESSURE	300%FS
OVERLOAD PRESS.	150%FS
PRINCIPLE	VENTED GAUGE
CYCLE LIFE	500,000 times

NOTES

- Typically used for fuel pressure on carburetor engines.
- NPT threads are NOT self-sealing! Thread sealant must be used!
- Do not overtight or housing may break!

PART NUMBER: S-PR-15-CF	You can also find this product under part numbers: SP-15PV
-----------------------------------	---

FILE NAME: ~/Shared/Tech/SensorsCables/S-PR-15-CF.dxf

TITLE: Pressure Sensor 15PSI/1BAR

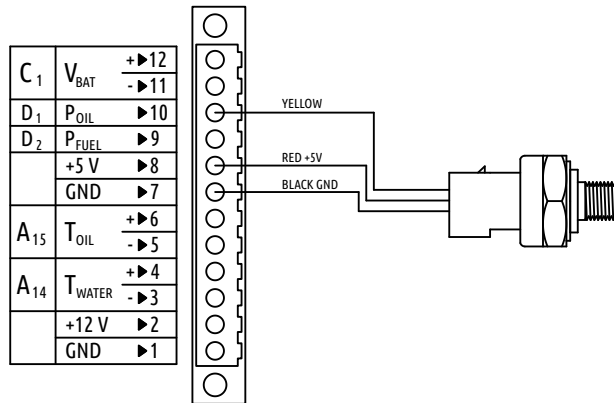
A	13.10.2023	Initial release.	ŽP	DATE: 13.10.2023	SCALE: N/A	SHEET: 1 of 1	KANARDIA d.o.o. Lopata 24a 3000 Celje Slovenia
REV	DATE	DESCRIPTION	DR	DRAW BY: ŽP	CHECK BY: GT	REV: A	

SPECIFICATION DRAWING

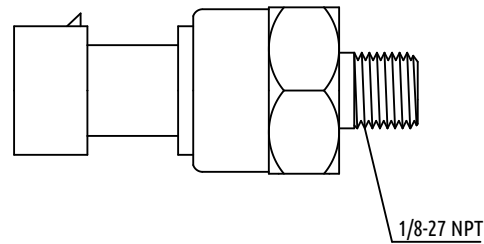
DAQ CONFIGURATION

OPTION	SELECTION/SETTING
CHANNEL	Any B,D or E
FUNCTION	OIL PRESSURE
SENSOR	Active 0.5-4.5V
REPORT TIME	0.5 – 1.0 s
FREQUENCY	1Hz - 2Hz
FILTER	2000ms/2s
MAX VALUE*	10.34 BAR

*Always enter MAX VALUE in BAR.
Do not enter PSI value!



PART PHOTO/DRAWING



SPECIFICATION

WEIGHT	65g
OUTPUT	0.5-4.5V
RANGE	0-150PSI
MAX VALUE(at 4.5V)	150PSI or 10.34BAR
BURST PRESSURE	300%FS
OVERLOAD PRESS.	150%FS
PRINCIPLE	VENTED GAUGE
CYCLE LIFE	500,000 times

NOTES

- Typically used for oil pressure on Lycoming, Continental and older Rotax engines (check thread on your Rotax engine).
- It can also be used as fuel pressure on injection engines.
- NPT threads are NOT self-sealing! Thread sealant must be used!
- Do not overtight or housing may break!

PART NUMBER: S-PR-150-CF		You can also find this product under part numbers: SP-150PV	
FILE NAME: ~/Shared/Tech/SensorsCables/S-PR-150-CF-B.dxf			
TITLE: Pressure Sensor 150PSI/10BAR		KANARDIA d.o.o. Lopata 24a 3000 Celje Slovenia	
REV	DATE	DESCRIPTION	DR
A	13.10.2023	Initial release.	ŽP
DATE	DESCRIPTION	DR	
DATE:	13.10.2023	SCALE:	N/A
DRAW BY:	ŽP	CHECK BY:	GT
SHEET:	1 of 1	REV:	A

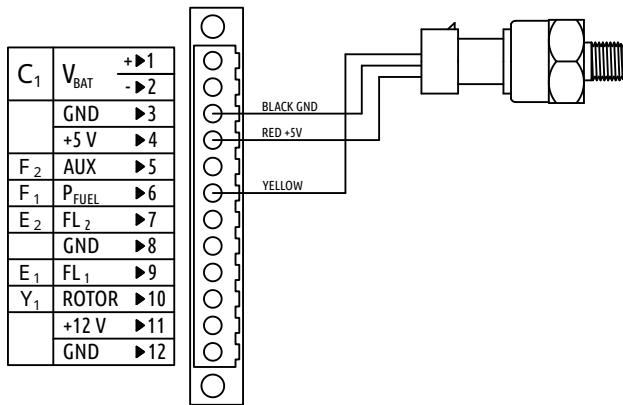
SPECIFICATION DRAWING

mini DAQU CONFIGURATION

OPTION	SELECTION/SETTING
CHANNEL	Any E or F
FUNCTION	FUEL P. cmp.*
SENSOR	Active 0.5-4.5V
REPORT TIME	0.5 - 1.0 s
FREQUENCY	1Hz - 2Hz
FILTER	2000ms/2s
MAX VALUE**	10.34 BAR

*See miniDaqu manual, section 9.2.

**Always enter MAX VALUE in BAR.
Do not enter PSI value!

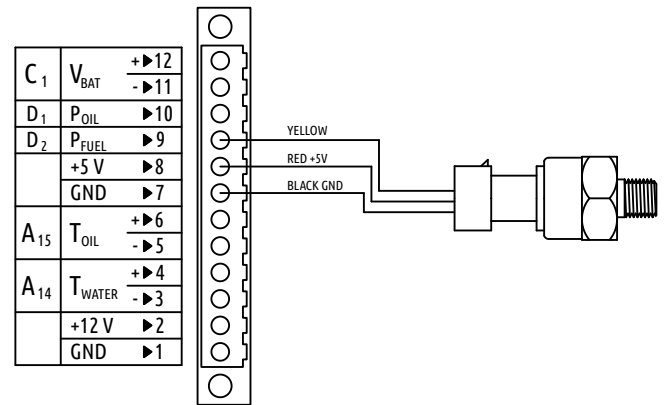


DAQU CONFIGURATION

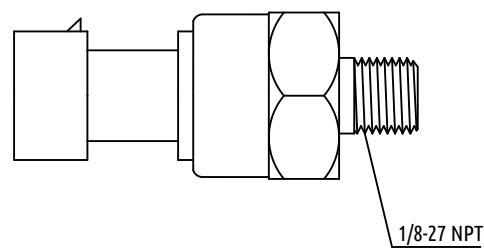
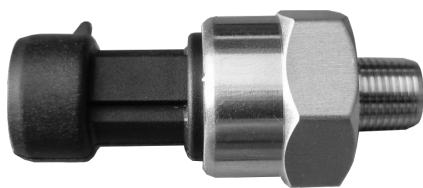
OPTION	SELECTION/SETTING
CHANNEL	Any B, D or E
FUNCTION	FUEL PRESSURE*
SENSOR	Active 0.5-4.5V
REPORT TIME	0.5 - 1.0 s
FREQUENCY	1Hz - 2Hz
FILTER	2000ms/2s
MAX VALUE**	10.34 BAR

*When Daqu modified for Rotax IS or ULPower is used, then you should set "FUEL P. cmp." option instead.

**Always enter MAX VALUE in BAR.
Do not enter PSI value!



PART PHOTO/DRAWING



SPECIFICATION

WEIGHT	65g
OUTPUT	0.5-4.5V
RANGE	0-150PSI
MAX VALUE(at 4.5V)	150PSI or 10.34BAR
BURST PRESSURE	300%FS
OVERLOAD PRESS.	150%FS
PRINCIPLE	VENTED GAUGE
CYCLE LIFE	500,000 times

NOTES

- Typically used for fuel pressure on injection engines or as an oil pressure on Lycoming, Continental and older Rotax engines (check thread on your Rotax engine).
- NPT threads are NOT self-sealing! Thread sealant must be used!
- Do not overtight or housing may break!

PART NUMBER: S-PR-150-CF	You can also find this product under part numbers: SP-150PV
------------------------------------	--

FILE NAME: ~/Shared/Tech/SensorsCables/S-PR-150-CF.dxf

TITLE: Pressure Sensor 150PSI/10BAR	KANARDIA d.o.o. Lopata 24a 3000 Celje Slovenia
DATE: 13.10.2023	SCALE: N/A
DRAW BY: ŽP	CHECK BY: GT
DATE: 13.10.2023	SHEET: 1 of 1
DESCRIPTION: Initial release.	REV: A

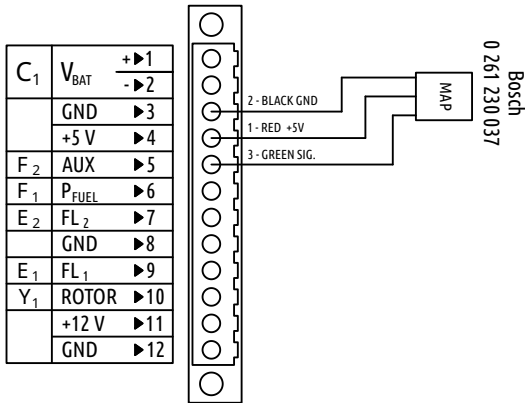
REV	DATE	DESCRIPTION	DR
A	13.10.2023	Initial release.	ŽP

SPECIFICATION DRAWING

mini DAQU configuration

OPTION	SELECTION/SETTING
CHANNEL	Any E or F
FUNCTION	Manifold Pressure
SENSOR	Bosch 0 261 230 037
REPORT TIME	0.2 s
FILTER	about 0.5 s

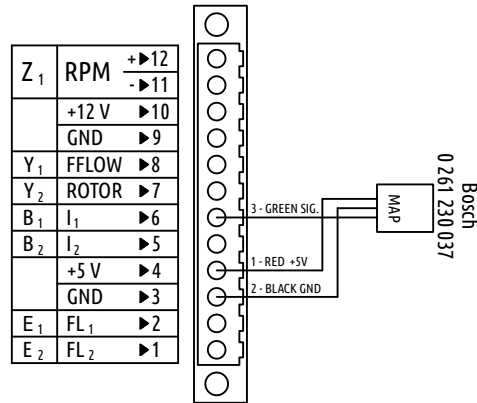
*More info in miniDaqu manual Section 9.9 Manifold Pressure



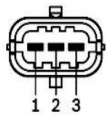
DAQU CONFIGURATION

OPTION	SELECTION/SETTING
CHANNEL	Any B, D or E
FUNCTION	Manifold Pressure
SENSOR	Bosch 0 261 230 037
REPORT TIME	0.2 s
FILTER	about 0.5 s

*More info in Daqu manual Section 4.14 Manifold Pressure

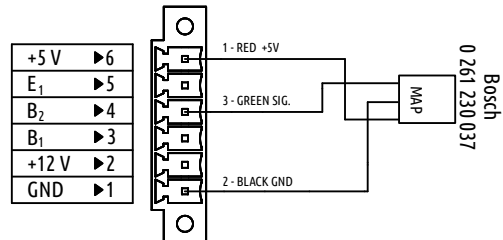


PART PHOTO/DRAWING



Pin 1 +5 V
Pin 2 Ground
Pin 3 Output signal

Indu MAP Configuration



NOTES

- The sensor comes with a connection cable in the package.
- The color of the signal wire can vary. It is usually green or white.

PART NUMBER:

0 261 230 037

FILE NAME: ~/Shared/Tech/SensorsCables/SensorMAP-Bosch-1BAR

TITLE: Sensor pressure MAP Bosch 1 Bar

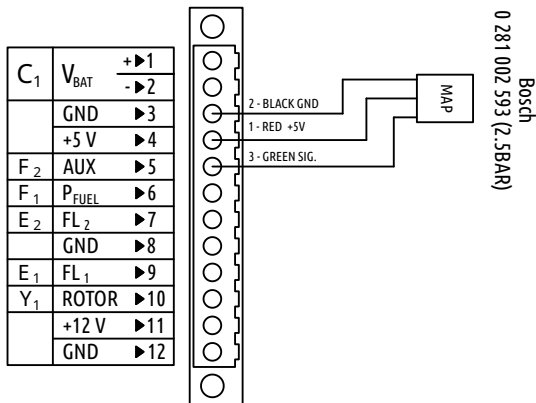
A	14.2.2024	Initial release.	ŽP	DATE: 14.2.2024	SCALE: N/A	SHEET: 1 of 1	KANARDIA d.o.o. Lopata 24a 3000 Celje Slovenia
REV	DATE	DESCRIPTION	DR	DRAW BY: ŽP	CHECK BY: GT	REV: A	

SPECIFICATION DRAWING

mini DAQU configuration

OPTION	SELECTION/SETTING
CHANNEL	Any E or F
FUNCTION	Manifold Pressure
SENSOR	Bosch 0 281 002 593 (2.5BAR)
REPORT TIME	0.2 s
FILTER	about 0.5 s

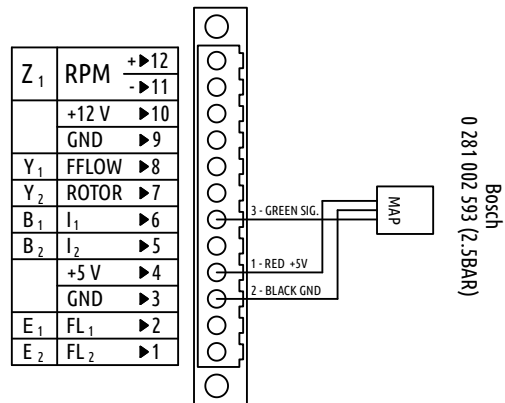
*More info in miniDaqu manual Section 9.9 Manifold Pressure



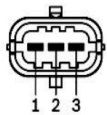
DAQU CONFIGURATION

OPTION	SELECTION/SETTING
CHANNEL	Any E or F
FUNCTION	Manifold Pressure
SENSOR	Bosch 0 281 002 593 (2.5BAR)
REPORT TIME	0.2 s
FILTER	about 0.5 s

*More info in Daqu manual Section 4.14 Manifold Pressure

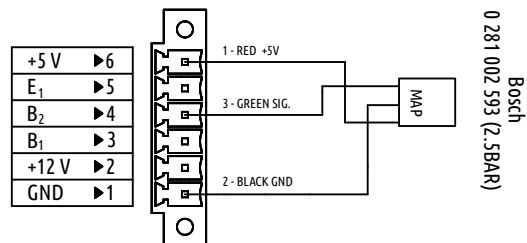


PART PHOTO/DRAWING



Pin 1 +5 V
Pin 2 Ground
Pin 3 Output signal

Indu MAP Configuration



NOTES

- The sensor comes with a connection cable in the package.
- The color of the signal wire can vary. It is usually green or white.

PART NUMBER:
0 281 002 593

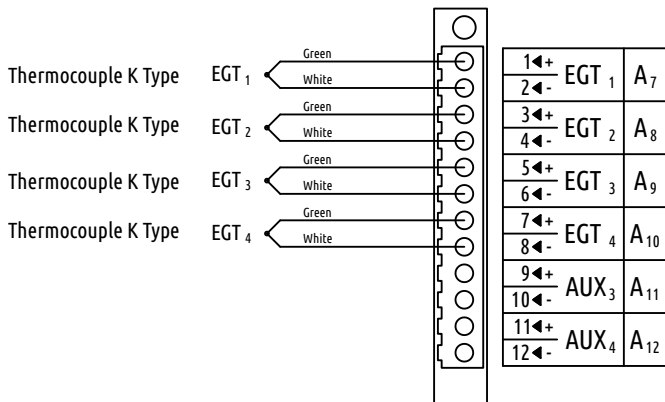
FILE NAME: ~/Shared/Tech/SensorsCables/SensorMAP-Bosch-2.5

TITLE: Sensor pressure MAP Bosch 2.5

A	14.2.2024	Initial release.	ŽP	DATE: 14.2.2024	SCALE: N/A	SHEET: 1 of 1	KANARDIA d.o.o. Lopata 24a 3000 Celje Slovenia
REV	DATE	DESCRIPTION	DR	DRAW BY: ŽP	CHECK BY: GT	REV: A	

SPECIFICATION DRAWING

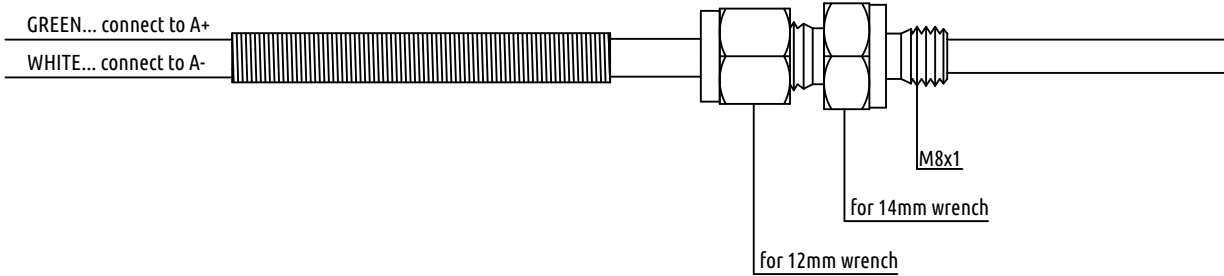
DAQU CONFIGURATION



OPTION	SELECTION/SETTING
CHANNEL	Any A, but A13
FUNCTION	EGT1, EGT2 ...
SENSOR	K type (NiCr-Ni) class 1
ISOLATED	YES
REPORT TIME	0.5 - 1.0 s
FREQUENCY	1Hz - 2Hz
FILTER	2000ms or 2s

PART PHOTO/DRAWING

Type	ISO, EU
K	+ green
	- white



SPECIFICATION

WEIGHT	60g
TEMPERATURE RANGE	-50 to 1100°C/ 58 to 2012°F
TYPE	Thermocouple K-Type (NiCr-Ni)
CABLE LENGTH	1200mm/47.2inch

NOTES

- Do not bend! Warranty void when curved.
- Make sure to use a K-Type extension cable if an extension is needed!
- You may cut cable to length.

PART NUMBER:
S-EGT-BAY

FILE NAME: ~/Shared/Sensors/S-EGT-BAY.dxf

TITLE: Exhaust Gas Temperature Sensor, M8x1, Bayonet

KANARDIA d.o.o.
Lopata 24a
3000 Celje
Slovenia

REV	DATE	DESCRIPTION	DR
A	10.3.2022	Initial release.	ŽP

DATE:	10.3.2022	SCALE:	N/A	SHEET:	1 of 1
DRAW BY:	ŽP	CHECK BY:	GT	REV:	A

SPECIFICATION DRAWING

DAQU CONFIGURATION

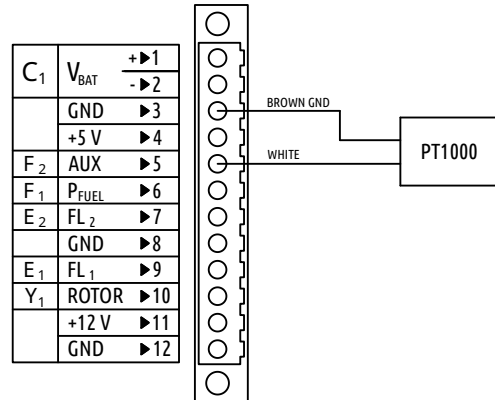
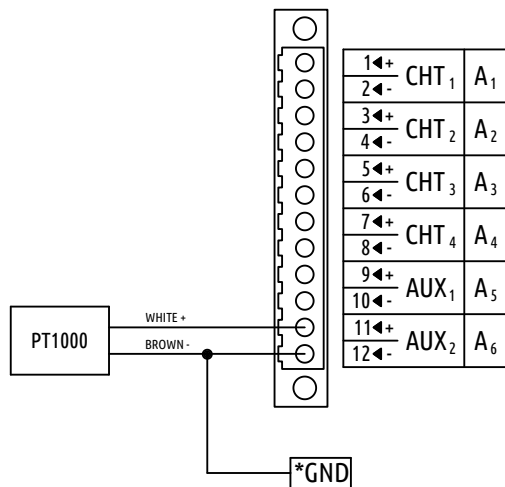
OPTION	SELECTION/SETTING
CHANNEL	Any A
FUNCTION	*Outside Air Temperature (OAT)
SENSOR	PT1000
REPORT TIME	0.5 – 1.0 s
FREQUENCY	1Hz - 2Hz
FILTER	2000ms/2s

*Function can also be Airbox or Gearbox.

mini DAQU CONFIGURATION

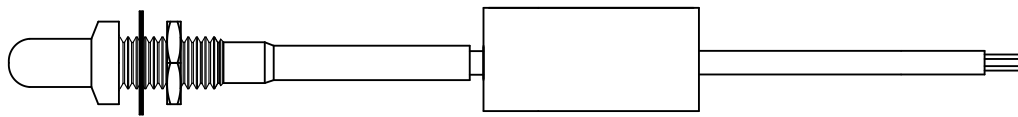
OPTION	SELECTION/SETTING
CHANNEL	Any E or F
FUNCTION	Outside Air Temperature (OAT)*
SENSOR	PT1000
REPORT TIME	0.5 – 1.0 s
FREQUENCY	1Hz - 2Hz
FILTER	2000ms/2s

*Function can also be Airbox or Gearbox.



*You must connect it to any GND. Typically to GND below A14 channel.

PART PHOTO/DRAWING



SPECIFICATION

Temp. °C	Resistance Ohms (Ω)
0	1000
20	1077.9
50	1194
100	1385.1

PART NAME: Sensor temp. OAT for Daqu		You can find this product under part numbers:	
- 1.5m		Variant:	Kanardia PN:
- 2m		1.5m	20010652
- 2.5m		2.0m	20010645
		2.5m	20010638

FILE NAME: ~Shared/Tech/SensorsCables/S-OAT-Daqu

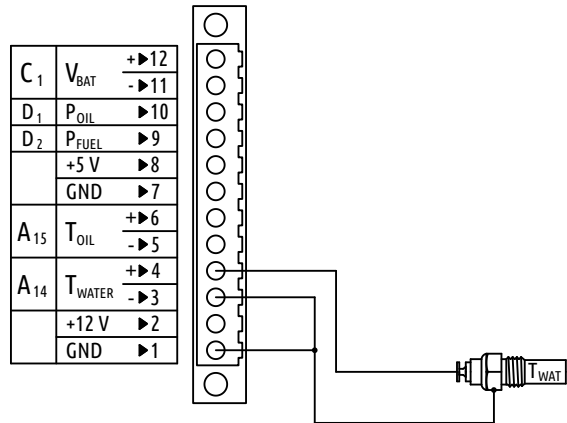
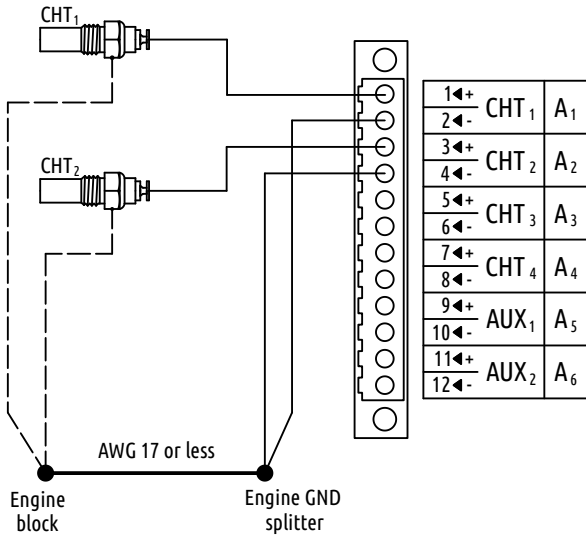
TITLE: Sensor Outside Air Temperature for Daqu	KANARDIA d.o.o.		
	Lopata 24a		
A 14.3.2024 Initial release.	ŽP	DATE: 14.3.2024	SCALE: N/A
REV DATE DESCRIPTION DR	DRAW BY: ŽP	CHECK BY: GT	SHEET: 1 of 1
			REV: A
			3000 Celje
			Slovenia

SPECIFICATION DRAWING

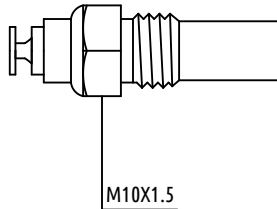
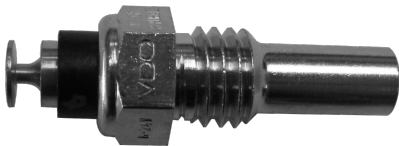
DAQU CONFIGURATION

OPTION	SELECTION/SETTING
CHANNEL	ANY A, but A13
FUNCTION	CHT 1, CHT 2, ...
SENSOR	VDO150C
REPORT TIME	0.5 - 1.0 s
FREQUENCY	1Hz - 2Hz
FILTER	2000ms or 2s

OPTION	SELECTION/SETTING
CHANNEL	ANY A, but A13
FUNCTION	COOLANT TEMP.
SENSOR	VDO150C
REPORT TIME	0.5 - 1.0 s
FREQUENCY	1Hz - 2Hz
FILTER	2000ms or 2s



PART PHOTO/DRAWING



SPECIFICATION

WEIGHT	13g
TEMPERATURE RANGE	50-150°C, 120-300°F
TYPE	Resistive, NTC Thermistor

NOTES

- "LO" may be shown when temperature is below 25°C.
- Typically used as coolant/CHT sensor on Rotax engines.

STEINHART-HART COEFFICIENTS

$$\frac{1}{T} = a + b \ln R + c(\ln R)^3$$

a	1.572336E-03
b	2.732929E-04
c	-2.862122E-07

T	temperature in °K
R	sensor resistance in Ohm

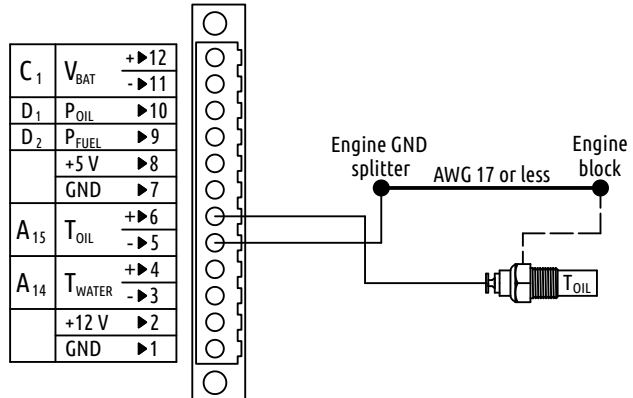
PART NUMBER:		You can also find this product under part numbers:	
S-WT-VDO150-M10		VDO A2C1755400001 VDO 323-801-010-001D	
FILE NAME: ~/Shared/Sensors/S-WT-VDO150-M10.dxf			
TITLE: VDO - Coolant/Water/CHT Temperature Sensor M10X1.5		KANARDIA d.o.o. Lopata 24a 3000 Celje Slovenia	
DATE: 10.3.2022	SCALE: N/A	SHEET: 1 of 1	
DRAW BY: ŽP	CHECK BY: GT	REV: A	

REV	DATE	DESCRIPTION	DR
A	10.3.2022	Initial release.	ŽP

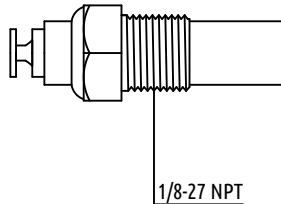
SPECIFICATION DRAWING

DAQU CONFIGURATION

OPTION	SELECTION/SETTING
CHANNEL	ANY A, but A13
FUNCTION	OIL TEMP.
SENSOR	VDO150C
REPORT TIME	0.5 - 1.0 s
FREQUENCY	1Hz - 2Hz
FILTER	2000ms or 2s



PART PHOTO/DRAWING



SPECIFICATION

WEIGHT	13g
TEMPERATURE RANGE	50-150°C, 120-300°F
TYPE	Resistive, NTC Thermistor

STEINHART-HART COEFFICIENTS

$$\frac{1}{T} = a + b \ln R + c(\ln R)^3$$

a	1.572336E-03
b	2.732929E-04
c	-2.862122E-07

T	temperature in °K
R	sensor resistance in Ohm

NOTES

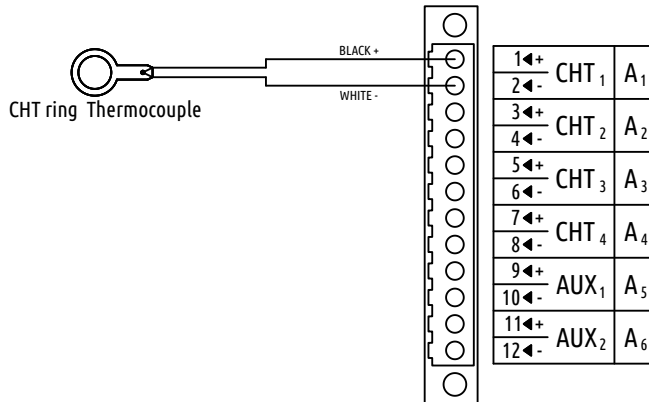
- Typically used as oil temperature sensor on Rotax and Jabiru engines.
- NPT threads are NOT self-sealing! Thread sealant must be used!
- Do not overtight or housing may break!
- "LO" may be shown when temperature is below 25°C.

PART NUMBER: S-OT-VDO150-NPT		You can also find this product under part numbers: VDO A2CS218492280 VDO 323-801-009-001D	
FILE NAME: ~/Shared/Sensors/S-OT-VDO150-NPT.dxf			
TITLE: VDO - Oil Temperature Sensor 1/8-27NPT		KANARDIA d.o.o. Lopata 24a 3000 Celje Slovenia	
A	10.3.2022	Initial release.	ŽP
DATE:	10.3.2022	SCALE:	N/A
SHEET:	1 of 1		
REV	DATE	DESCRIPTION	DR
DRAW BY:	ŽP	CHECK BY:	GT
REV:	A		

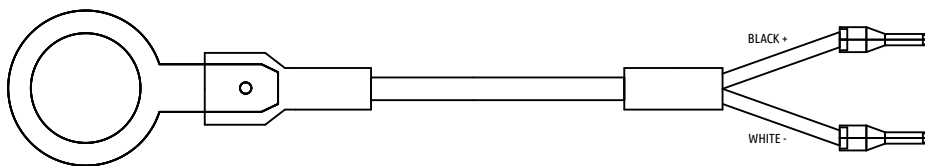
SPECIFICATION DRAWING

DAQU CONFIGURATION

OPTION	SELECTION/SETTING
CHANNEL	Any A but A13
FUNCTION	CHT 1, CHT 2, ...
SENSOR	J type
ISOLATED	No
REPORT TIME	0.5 - 1.0 s
FREQUENCY	1Hz - 2Hz
FILTER	2000ms/2s



PART PHOTO/DRAWING



TYPE J: BS EN 60584-3:2008	
BLACK	+
WHITE	-

SPECIFICATION

TEMP. RANGE	-18 TO 260°C (0 TO 500°F)
MAX TEMP.	500°C (932°F)
CABLE LENGTH	1.5m (4.9feet)

PART NAME: Sensor temp. CHT ring v2 - 12mm - 14mm - 18mm		You can find this product under part numbers:					
		Variant:	Kanardia PN:				
		12mm	20014445				
		14mm	20014452				
		18mm	20014469				
FILE NAME: ~Shared/Tech/S-CHT-RING							
TITLE: Sensor temp. CHT ring v2 12mm/14mm/18mm			KANARDIA d.o.o. Lopata 24a 3000 Celje Slovenia				
A	27.3.2024	Initial release.		ŽP			
REV	DATE	DESCRIPTION	DR	DATE: 27.3.2024	SCALE: N/A	SHEET: 1 of 1	
				DRAW BY: ŽP	CHECK BY: GT	REV: A	

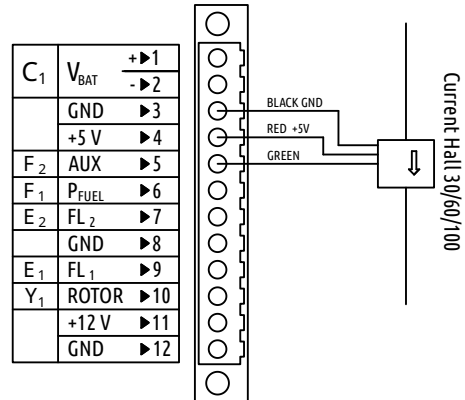
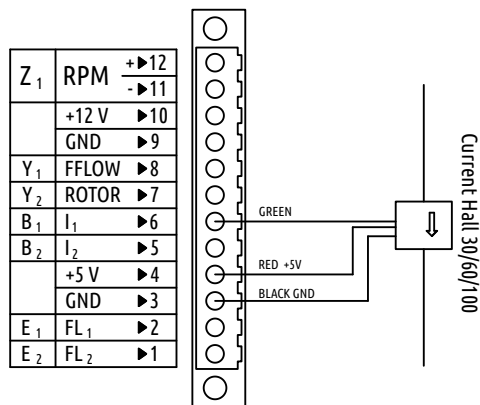
SPECIFICATION DRAWING

DAQU CONFIGURATION

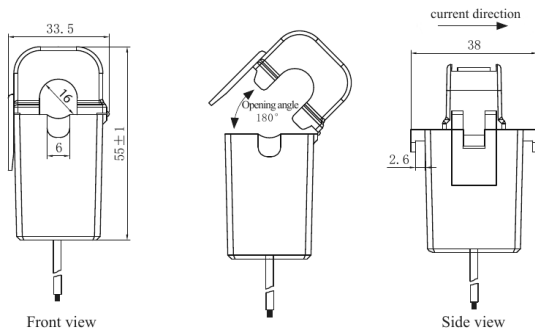
OPTION	SELECTION/SETTING
CHANNEL	Any B, D, E
FUNCTION	EL. CURRENT 1/2
SENSOR	Current Hall 30/60/100A
REPORT TIME	0.5 – 1.0 s
FREQUENCY	1Hz - 2Hz
FILTER	2000ms/2s

mini DAQU CONFIGURATION

OPTION	SELECTION/SETTING
CHANNEL	Any E or F
FUNCTION	EL. CURRENT 1/2
SENSOR	Current Hall 30/60/100A
REPORT TIME	0.5 – 1.0 s
FREQUENCY	1Hz - 2Hz
FILTER	2000ms/2s



PART PHOTO/DRAWING



OUTPUT SIGNAL

30A	No current	2.5V
	20A current	2.5V ± 0.625V
60A	No current	2.5V
	50A current	2.5V ± 0.625V
100A	No current	2.5V
	100A current	2.5V ± 0.625V

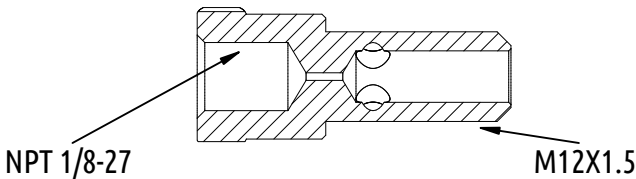
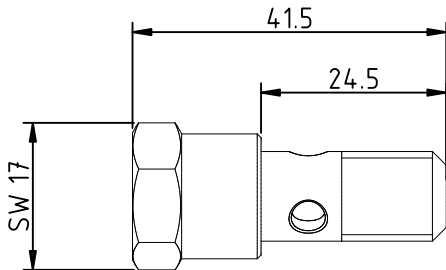
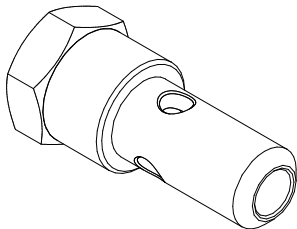
SPECIFICATION

Wire Colour	Function
Green	V out
Black	GND
Red	+5 V

PART NAME: Sensor Current Hall		You can find this product under part numbers:	
- 30A		Variant:	Kanardia PN:
- 60A		30A	20014537
- 100A		60A	20014544
		100A	20014520
FILE NAME: ~Shared/Tech/SensorsCables/SensorCurrentHallHSTS016L			
TITLE: Current Transducer 30/60/100A		KANARDIA d.o.o.	
		Lopata 24a	
A	19.2.2024	Initial release.	ŽP
DATE:	19.2.2024	SCALE:	N/A
SHEET:	1 of 1		
REV	DATE	DESCRIPTION	DR
DRAW BY:	ŽP	CHECK BY:	GT
REV:	A		
		3000 Celje	
		Slovenia	

SPECIFICATION DRAWING

PART PHOTO/DRAWING



INSTALLED PART PHOTO



NOTES

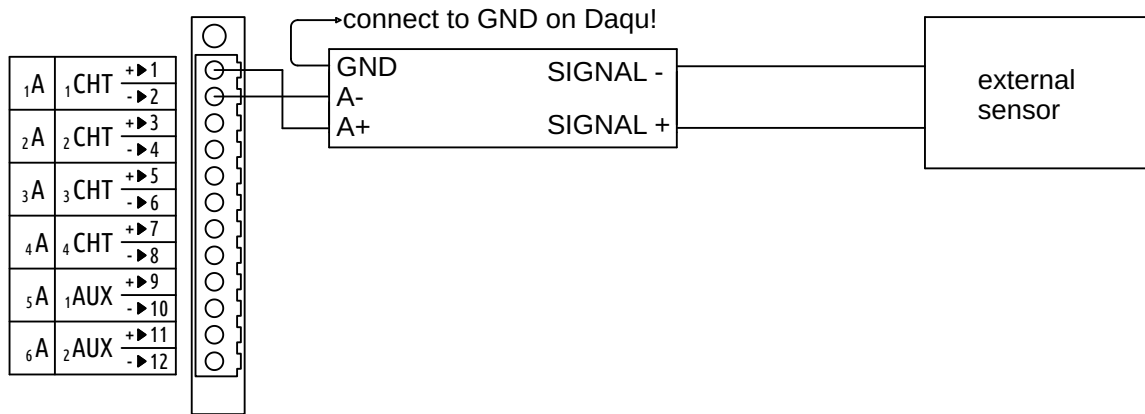
- Used for: Rotax 912iS, 915iS, 916iS
- For installation refer to Rotax SI-PAC-024 document
- 2x Washer A12x18-CU included
- Material stainless steel 1.4305

PART NUMBER:						
Fuel_Pressure_Sensor_Fitting_For_Rotax_iS_engine						
FILE NAME: ~/Shared/Tech/SensorsCables/Fuel_Pressure_Sensor_Fitting_For_Rotax_iS_engine						
TITLE: Fuel_Pressure_Sensor_Fitting_For_Rotax_iS_engine M12x1.5 NPT1/8-27			KANARDIA d.o.o. Lopata 24a 3000 Celje Slovenia			
A	15.5.2024	Initial release.		ŽP		
REV	DATE	DESCRIPTION	DR	DATE: 15.5.2024	SCALE: N/A	SHEET: 1 of 1
				DRAW BY: ŽP	CHECK BY: GT	REV: A

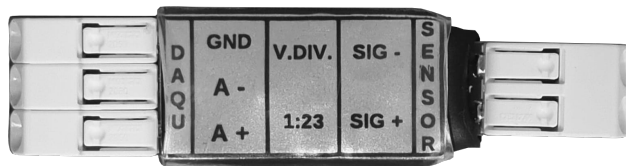
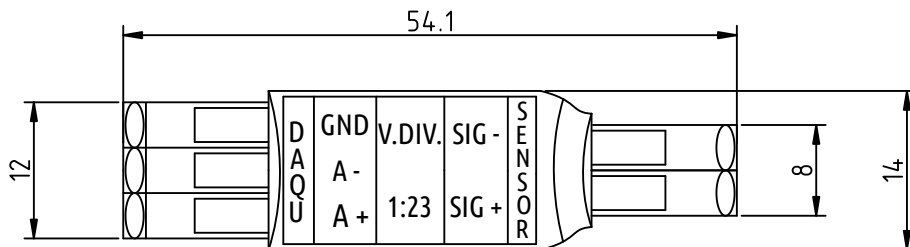
SPECIFICATION DRAWING

DAQU CONFIGURATION

OPTION	SELECTION/SETTING
CHANNEL	Any A
FUNCTION	Voltages, cell voltages
SENSOR	v div 1:23
REPORT TIME	0.5 - 1.0 s
FREQUENCY	1Hz - 2Hz
FILTER	1000ms/1s



PART PHOTO/DRAWING



SPECIFICATION:

WORKING RANGE:	±46V
WEIGHT:	5g
CONDUCTOR SIZE:	0.2- 0.5 mm ²

PART NAME:

Adapter-V-div-1:23

FILE NAME: ~/NextCloud/Tech/SensorsCables/Adapter-V-div-1:23/Working/Adapter-V-div-1:23.dxf

TITLE: Adapter Voltage Divider for Daqu 1:23

KANARDIA d.o.o.

Lopata 24a

3000 Celje

Slovenia

REV	DATE	DESCRIPTION	DR
A	3.7.2024	Initial release.	ŽP

DATE: 3.7.2024

SCALE: N/A

SHEET: 1 of 1

DRAW BY: ŽP

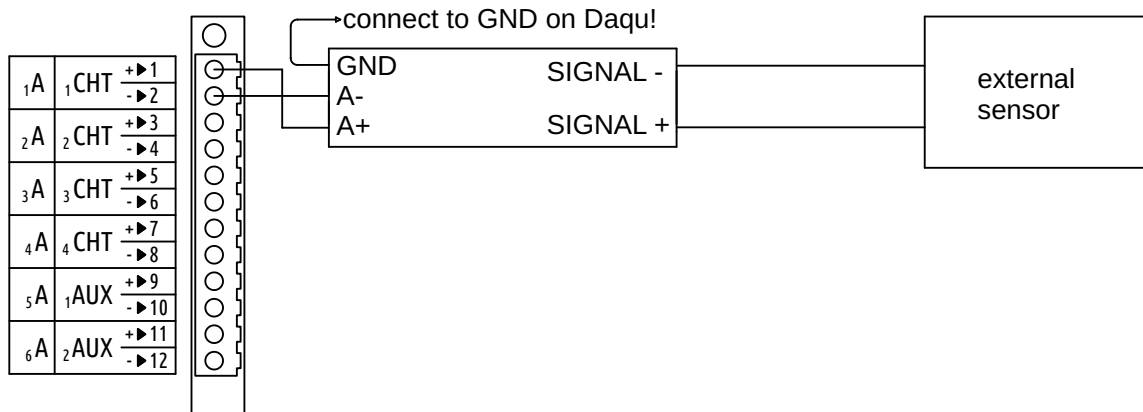
CHECK BY: MS

REV: A

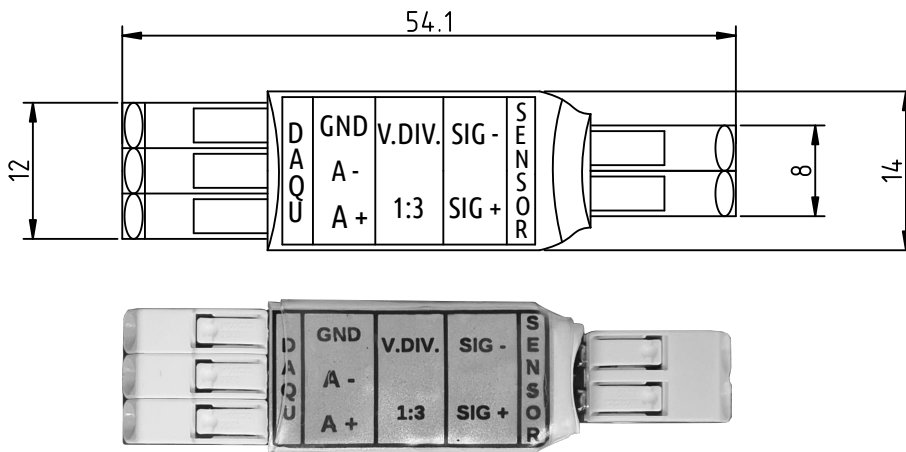
SPECIFICATION DRAWING

DAQU CONFIGURATION

OPTION	SELECTION/SETTING
CHANNEL	Any A
FUNCTION	Flap pos (also other positions, voltages)
SENSOR	v div 1:3
REPORT TIME	0.5 - 1.0 s
FREQUENCY	1Hz - 2Hz
FILTER	1000ms/1s



PART PHOTO/DRAWING



SPECIFICATION:

WORKING RANGE:	±6V
WEIGHT:	5g
CONDUCTOR SIZE:	0.2- 0.5 mm ²

PART NAME:

Adapter-V-div-1:3

FILE NAME: ~/NextCloud/Tech/SensorsCables/Adapter-V-div-1:3/Working/Adapter-V-div-1:3.dxf

TITLE: Adapter Voltage Divider for Daqu 1:3

KANARDIA d.o.o.
Lopata 24a
3000 Celje
Slovenia

REV	DATE	DESCRIPTION	DR
A	3.7.2024	Initial release.	ŽP

DATE:	3.7.2024	SCALE:	N/A
DRAW BY:	ŽP	CHECK BY:	MS

SHEET:	1 of 1
REV:	A