

# ROTATION SENSOR

FOR VARIABLE RATE SYSTEMS



**STANDARD  
VERSION**

THE BEST SENSOR FOR  
**PRECISION AGRICULTURE**

**COMPARE AND PROVE IT**



**VERSION  
WITH LED  
(DIAGNOSTIC)**



**GREATER PERFORMANCE AND ACCURACY IN MONITORING OF:**

**Seeders**

**Planters**

**Sprayers**

**Fertilizer Spreaders**



**SOLID SHAFT MODEL**



**HUBSHAFT MODEL**

## Why choose the AGBR Sensor?



# MADE TO LAST



**Electronics encapsulated in certified resin**

### **TURBO DELIVERY** Your Order in 24h

With local manufacturing, the AGBR features a manufacturing system that delivers within 24 hours. Check the conditions with our sales team.

- [+]** Customizable to meet the specific needs of each company
- [+]** Specialized engineering, local technical support, and 1-year warranty

In addition, Dynapar has a network of distributors spread across Brazil, making logistics easier so that your product reaches you faster.

The AGBR was developed to withstand the chemical attack of fertilizers such as NPK.

Chemical agents      Common sensors

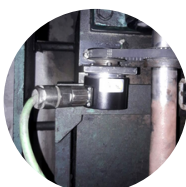
**Prevents damage to the magnetic/electronic system**

### **The best PRICE with more BENEFITS**

Manufactured in Brazil, the AGBR has a truly competitive price.

**Higher lifecycle, with less recurring maintenance**

## 100% INTERCHANGEABLE



## First sensor developed exclusively for the agricultural sector and manufactured in Brazil

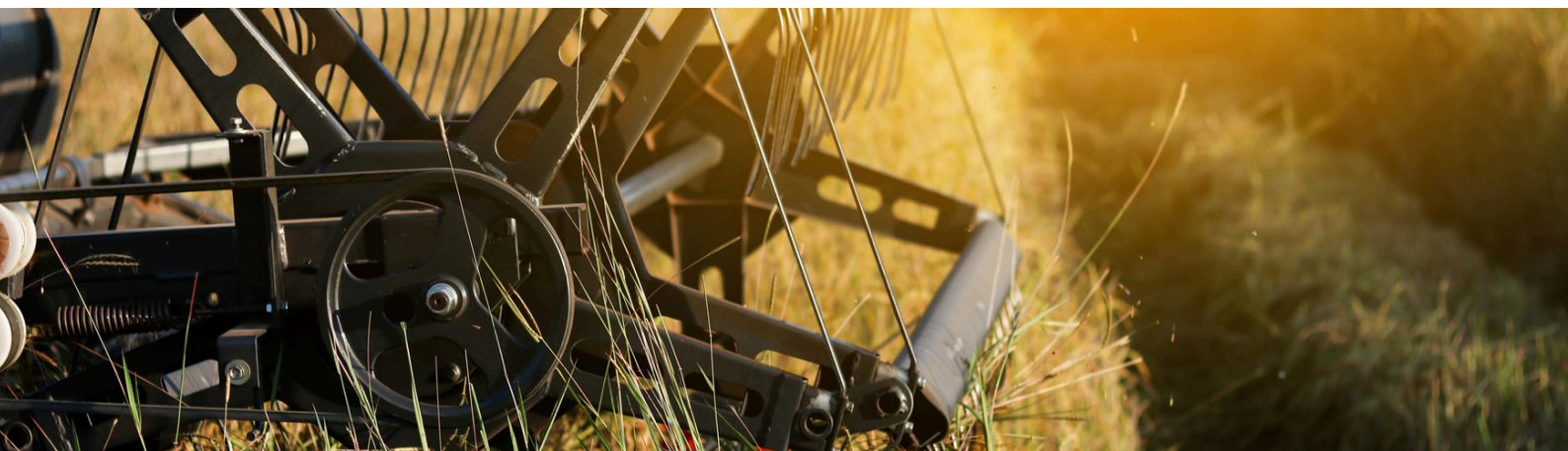
The AGBR is an Encoder for Variable Rate Systems and is used to measure speed in applications such as: Planters, Seeders, Fertilizer Spreaders, Sprayers and other similar applications that require precise speed measurement.

In its LED version, the AGBR has an important new feature: Visual Diagnostic or status, both of the Signal (pulses) and the Power-On condition (power supply).

### Integration with all controllers

- TRIMBLE FIELD-IQ
- ISOBUS MÜLLER
- FIELD-IQ
- ASC10 TOPCON
- STARA
- INTELLIAG
- RAVEN RCM NODO
- AGLEADER
- PRECISION PLANTING
- AGRES

## Applicable to agricultural machinery from main manufacturers, such as:



SENSOR  
**AGBR**  
WITH LED



Several positive experiences shared by different customers confirm the advantages of the AGBR with LED (or Visual Diagnostic). Customers themselves coined a term (or nickname) in the market to refer to our encoder with Visual Diagnostics: the "firefly," as the LEDs can even be seen in operation at dusk and during the night.



## MAIN BENEFITS OF THE AGBR WITH LED

- Checks the encoder's operation without removing it;
- Verification can be done without complex tools, such as multimeters, for example;
- Quickly detects power supply and signal failures, ensuring fast maintenance and minimal downtime.

**THE LED LIGHTS INDICATE THE OPERATING STATUS OF THE MACHINERY, MAKING IT EASIER TO IDENTIFY PROBLEMS.**

### GREEN LED (POWER SUPPLY STATUS)

GREEN LED	MACHINE OFF	MACHINE ON
OFF	NOT APPLICABLE	NO POWER. CHECK CABLES. CHECK ENCODER.
ON	CABLE WITH POWER. MACHINE STILL ON.	WITH POWER

### BLUE LED (SIGNAL STATUS)

BLUE LED	SHAFT STOPPED	SHAFT ROTATING
BLINKING	NOT APPLICABLE	ENCODER OPERATING
STEADY OFF	ENCODER STOPPED	SIGNAL CABLE ISSUE. ENCODER ISSUE.
STEADY ON	ENCODER STOPPED	SIGNAL CABLE ISSUE ENCODER ISSUE

The 3 modes of the Blue LED are for the "Green LED On" condition.

## OVERVIEW AND HIGHLIGHTS

The AGBR is a rotation sensor (variable rate) required in many agricultural machines, combining durability, compatibility and a competitive price. It is an excellent choice in terms of efficiency (increased productivity) and reliability. In the LED option, the AGBR also offers visual diagnostics to help with quick inspections.

### HIGHLIGHTS

Sensor with magnetic technology

Electronics encapsulated by exclusive resin to prevent corrosion by agricultural inputs or environmental factors

Resolution from 1 to 1024 PPR

Bearing-free mechanics

Special self-lubricating bushes for agricultural equipment.

Body and base made entirely of polymer & engineered fiber with unique additives



**Version**  
**Solid Shaft**  
**(3/8" diameter)**



**Rotation up to**  
**500 RPM**



**Version**  
**Hubshaft**  
**(1" diameter)**

### ENVIRONMENTAL CHARACTERISTICS

**Operating temperature:** -25°C à 70°C (-13°F to 158°F) **IP Rating (Protection):** IP69

**Storage temperature:** -40°C à 70°C (-40°F to 158°F)

### ELECTRICAL CHARACTERISTICS

**Power Supply:** 5-26Vcc

**Connection type:**

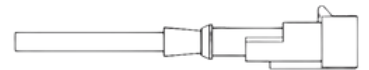
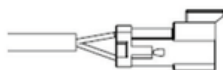
**Interface:** TTL (5V)  
HTL (5-26V)

**Deutsch 3-pin male connector**

**Delphi 3-pin connector**

**3-pin male SuperSeal connector**

**Resolution:** 1 to 1024 PPR



**MANY OTHER FEATURES AVAILABLE IN THE CATALOG ON OUR WEBSITE**

# Technical Data

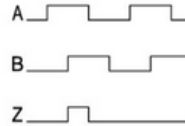
## Mechanical Features

Maximum speed	500 RPM
Initial torque	Hubshaft model: 0.28 N.m. Solid Shaft model: 0.55 N.m
Runout (mounting shaft)	+/- 0.13 mm (maximum)
Endplay (mounting shaft)	+/- 0.6 mm
Shaft diameter	1" Hubshaft 3/8" Solidshaft
Shaft attachment	2 headless screws (stainless steel)

## Electrical Features

Power Supply	5 to 26 Vcc
Outputs	HTL (5-26Vcc) or TTL ( 5Vcc) 40mA maximum
Consuming	< 100mA
Maximum frequency	300 kHz (sensor)
Resolution	0001 to 1024 PPR
Electrical Protection	Short Circuit
Quadrature Phasing	90° ± 45°
Symmetry	180° ± 90°

## Signal format

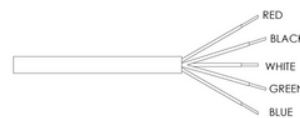


## Environmental Features

Operating temperature	-25°C to 70°C (-13°F to 158°F)
Storage temperature	-40°C to 70°C (-40°F to 158°F)
Shock	50G to 6ms
Vibration	5Hz to 2000Hz at 10G
Humidity	Up to 98%, no condensation
IP protection	IP-69 (ABNT NBR IEC 60529:2017)

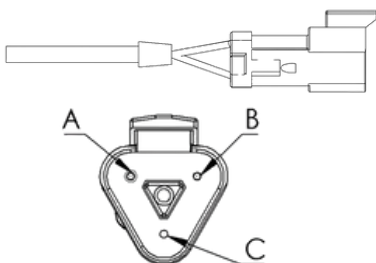
## Electrical connection

### Option "0" - No plug (track cable)



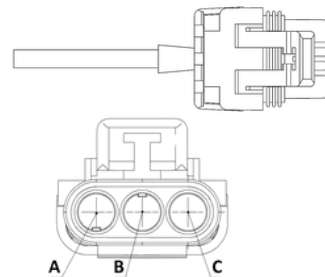
Color	Function
Red	Power Supply (+V)
Black	Common
White	Signal A
Green	Signal B
Blue	Signal Z

### Option "N" - 3-pin male Deutsch connector



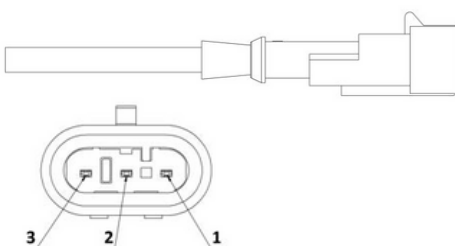
Pin	Function
A	Signal A
B	Common
C	Power Supply (+V)

### Option "P" - 3-pin male Delphi connector



Pin	Function
A	Power Supply(+V)
B	Common
C	Signal A

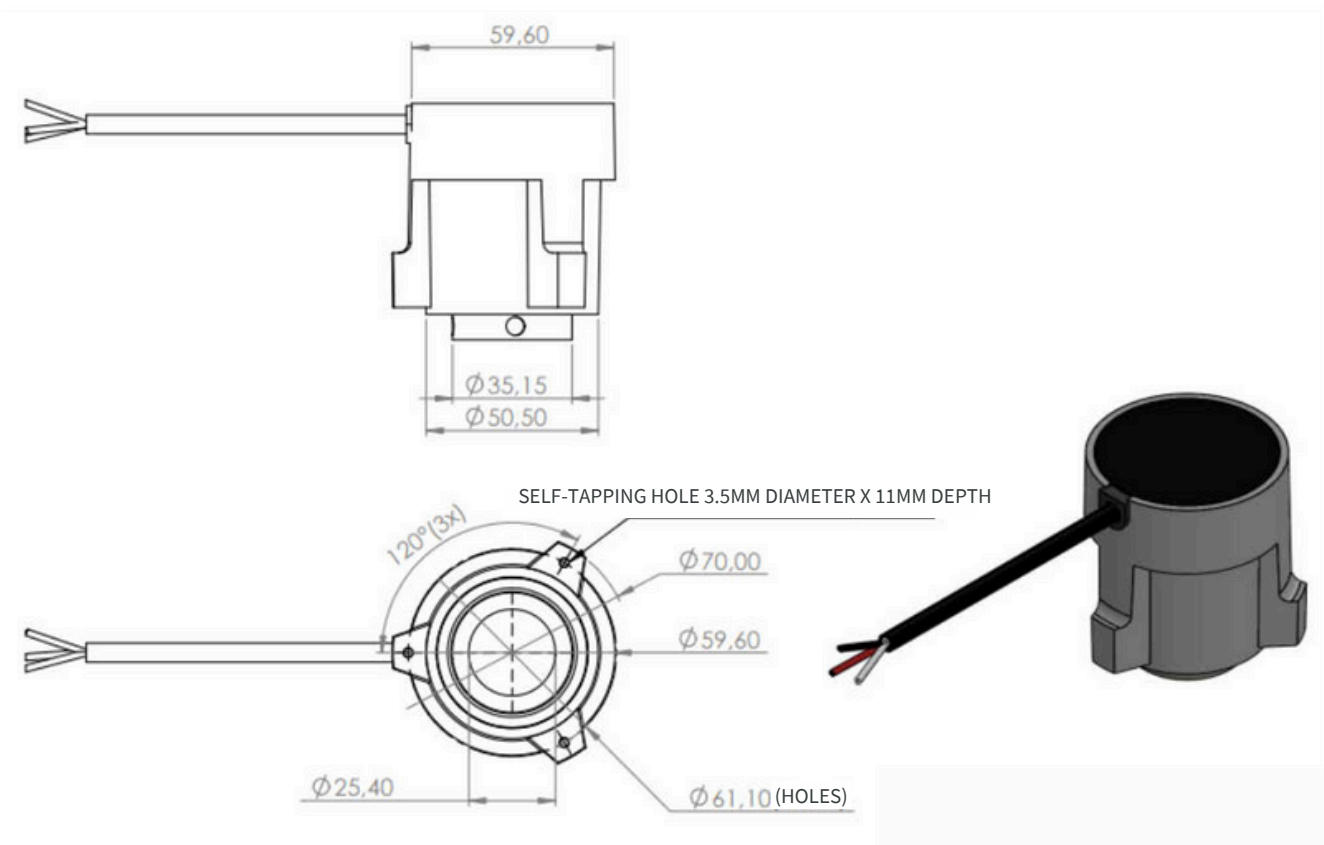
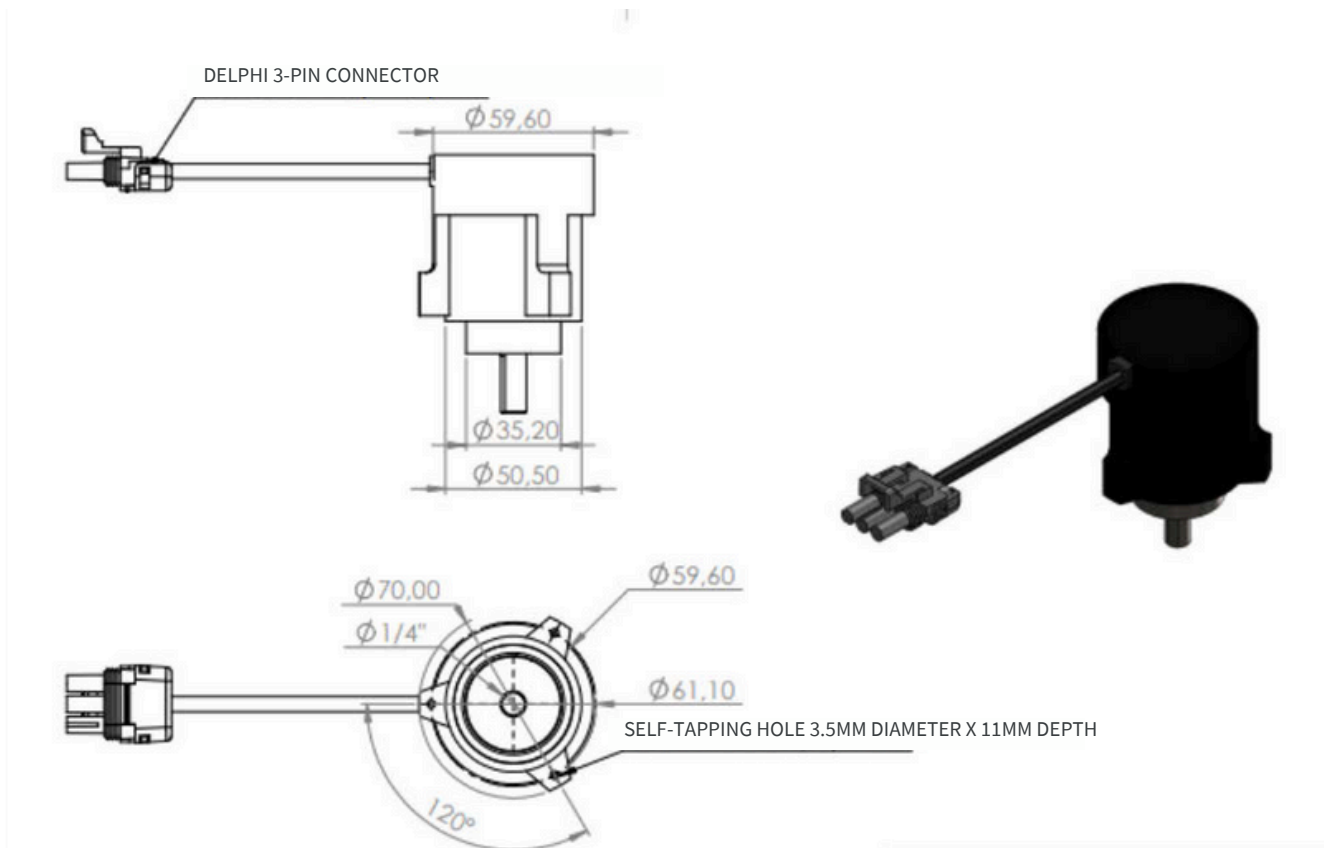
### Option "S" - 3-pin male SuperSeal connector



Pin	Function
1	Common
2	Power Supply (+V)
3	Signal A

# Technical Data

## Dimensional Drawing





# Technical Data

## Part Number

Code 1 Model	Code 2 PPR	Code 3 Shaft	Code 4 Fixing	Code 5 OutPut	Code 6 Connection	Code 7 Cable	Code 8 Termination	Code 9 Optional
AGBR	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>AGBR</b>	<b>0001 a 1024</b>	H Hubshaft 1" S 3/8" Solid	<b>N</b> No tether <b>Y</b> With tether	<b>A</b> 5V - TTL only Channel A -(push pull line driver) <b>B</b> 5V - 26V - HTL - only Channel A (push pull line driver) <b>D</b> 5V - 26V - HTL - Channel A and B (push pull line driver) <b>H</b> 5V - 26V - HTL - A, B and Z (push pull line driver) <b>G</b> 5V - TTL - A, B, and Z (push pull line driver)	<b>A</b> Rubber Cable Gland, side	<b>1</b> 1.5 meters <b>2</b> 2 meters <b>3</b> 3 meters <b>4</b> 4 meters <b>5</b> 5 meters <b>6</b> 6 meters <b>7</b> 7 meters <b>8</b> 8 meters <b>9</b> 9 meters <b>A</b> 10 meters <b>B</b> 15 meters <b>C</b> 20 meters <b>D</b> 25 meters <b>E</b> 30 meters <b>J</b> 0,1meter with corrugated tube <b>Q</b> 0.3 meter <b>T</b> 1 meter <b>S</b> 0.5 meter	<b>0</b> None <b>N</b> 3-pin male Deutsch (Jumil) <b>P</b> 3-pin male Delphi connector <b>S</b> 3-pin male SuperSeal connector	<b>DV</b> LED output

# ABOUT US

Dynapar is one of the operating companies of Specialty Product Technologies, which also includes Veeder-Root, West Control Solutions, Hengstler, Anderson-Negele, Gems Sensors, among others. It has factories in Brazil, the United States and Germany.

It has local technical assistance and a 1-year guarantee for all products. It offers the most complete range of encoders on the market: incremental, absolute, sinusoidal, heavy-duty.

Its encoders are used in a wide range of industries: steel, mining, off-highway vehicles, agriculture, wind energy, oil, etc.

Experience, competence, performance and reliability: to meet your needs with versatility.



[WWW.DYNAPARENCODERS.COM.BR](http://WWW.DYNAPARENCODERS.COM.BR)



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