



PS6500

Cylinder Sensor 50-1000 mm

The PS6500 is a part of the Regal Components Regasense® family of compact position sensors.

The sensor header design comprises a glass to metal seal that offers excellent pressure withstanding abilities, with a burst pressure of >600 bar.

The PS6500 has a sensor element made of conductive plastic, which provides a long lifetime and good linearity. As an option, the sensor can also be equipped with dual sensor elements, which provide two independent output signals as well as extra safety and redundancy.

Cylinder sensors in your system will achieve exact positioning in harsh environments - the sensor is resistant to external outer affects such as shocks and dirt.

With an absolute analog output, it is easy to connect to various types of measuring or steering systems and it does not need to be reset at machine start or power off.



- Pressure sealed header
- Single or dual - redundancy
- Regal header design
- Cost-effective

Electrical Connection

Power Supply Recommended	10 Vdc
Power Supply Max	36 Vdc

Signal Specification

Output Signal	Potentiometer
Linearity	< ±2.0%
Resolution	Near infinite
Repeatability	<±0.02%
Recommended Load	1000 x R _t
Effective Stroke	50-1000 mm

Operating Condition

Operating Temperature	-40°C...+125°C
Working Pressure	350 bar
Burst pressure (header)	>600 bar
Lifetime	200 000 meter

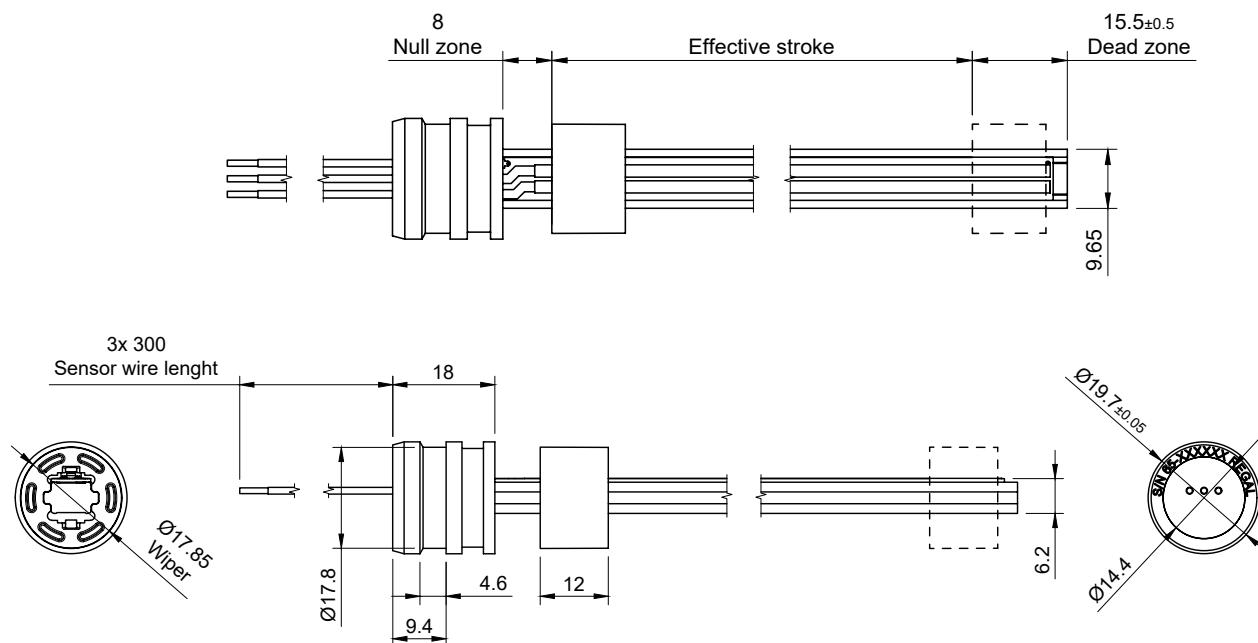
Material

Header	Stainless steel 304
Sensor Profile	Aluminium EN6063 T6
Sensor Element	Conductive plastic on FR4
Sensor Wire (SW/DW)	44A0131-22-0/2/4 (PVDF)
Sensor Cable (C)	Li9Y11Y 3x0,25 (PUR)

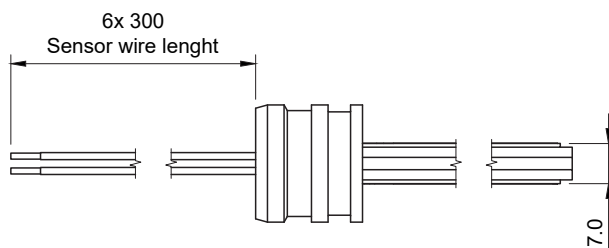
PS6500

Cylinder Sensor 50-1000 mm

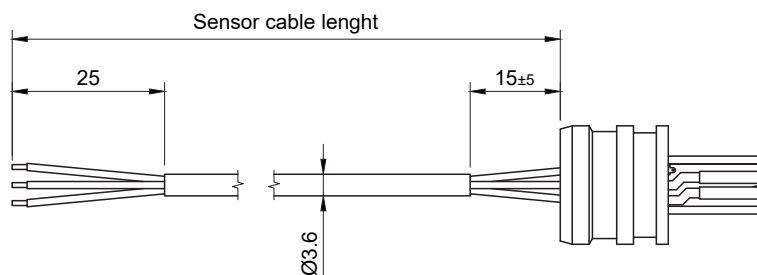
Sensor Dimensions (mm)



DW Version (mm)



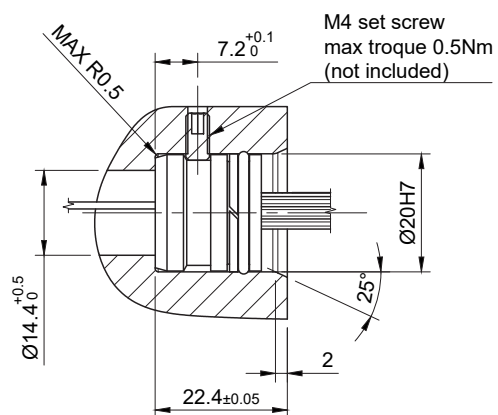
C Version (mm)



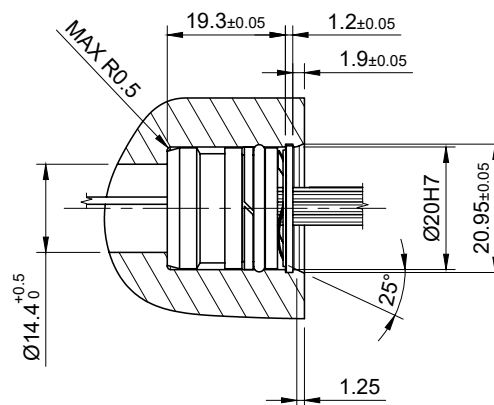
PS6500

Cylinder Sensor 50-1000 mm

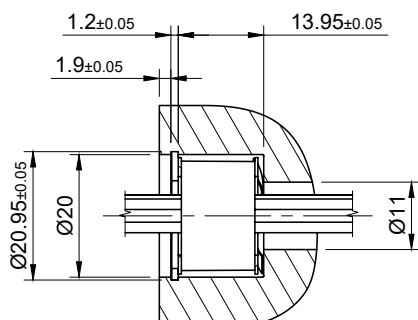
Recommended Installation Set Screw



Recommended Installation Retaining Ring



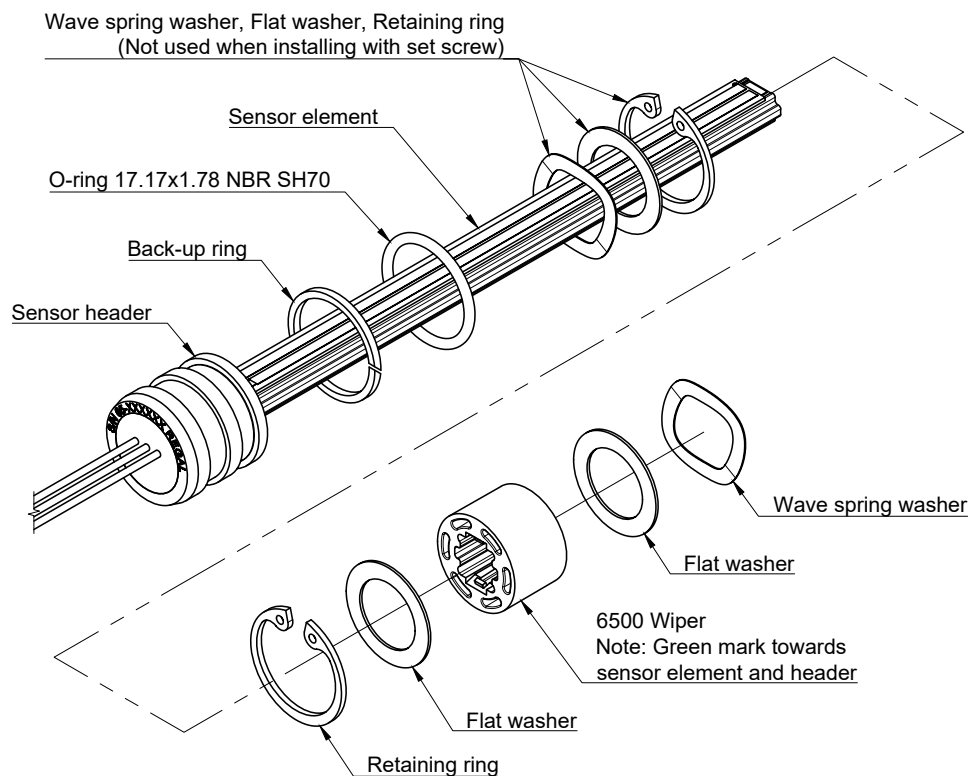
Recommended Installation Wiper



PS6500

Cylinder Sensor 50-1000 mm

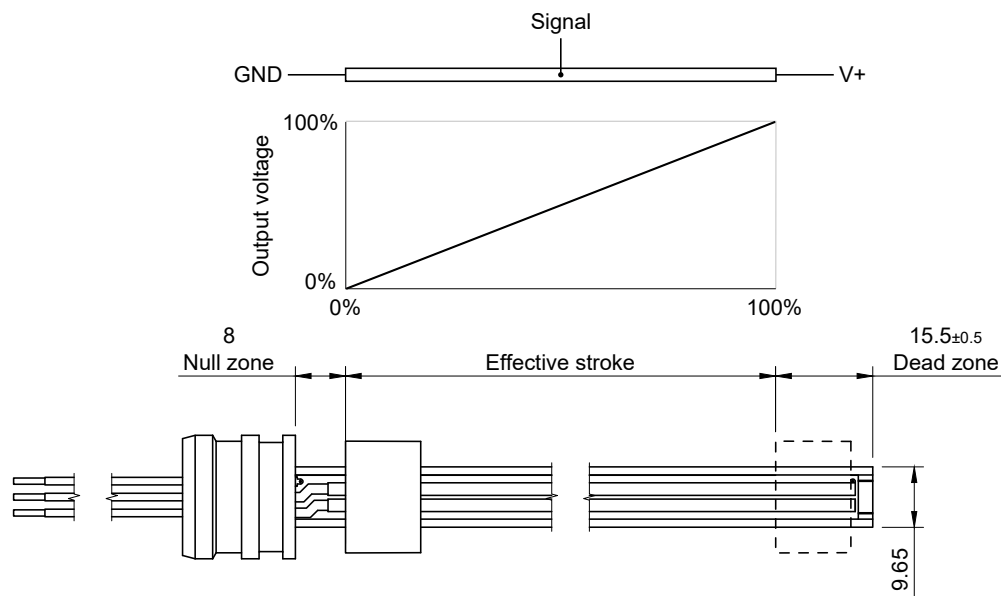
Exploded View



PS6500

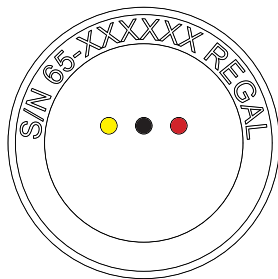
Cylinder Sensor 50-1000 mm

Connection



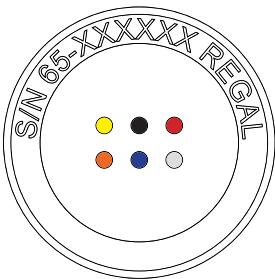
Connection SW Version

COLOR	FUNCTION
Red	V+
Black	GND
Yellow	Signal



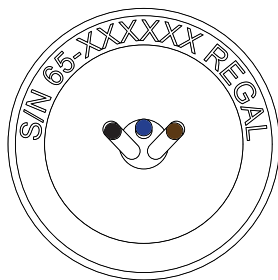
Connection DW Version

COLOR	FUNCTION
Red	V ₊₁
Black	GND ₁
Yellow	Signal ₁
Orange	V ₊₂
Blue	GND ₂
White	Signal ₂



Connection C Version

COLOR	FUNCTION
Brown	V+
Blue	GND
Black	Signal



PS6500

Cylinder Sensor 50-1000 mm

Connectors

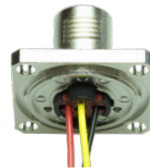
6140 (M12)

6140 is a hermetic glass-to-metal seal and pressure proof flange connector. The wires are soldered to the connector after the sensor is mounted in the cylinder.



6160 (M12)

6160 is a flange connector that do not require soldering. The connector is IP67 and supplied with pins mounted on the sensor cable from factory.



See separate datasheets for further details.

PS6500

Cylinder Sensor 50-1000 mm

Order Information

PS6500-XX300-X

1

2

3

4

1	EFFECTIVE STROKE	CODE	MM	RESISTANCE (kΩ) ±20%
		01	50	1.6
		02	100	3.2
		03	150	4.8
		04	200	6.4
		05	250	8.0
		06	300	9.6
		07	350	11.2
		08	400	12.8
		09	450	14.4
		10	500	16.0
		11	550	17.6
		12	600	19.2
		13	650	20.8
		14	700	22.4
		15	750	24.0
		16	800	25.6
		20	1000	32.0
2	VERSION	SW DW C	Single sensor element Two sensor element (dual output) PUR-cable	
3	CABLE/WIRE LENGTH	300 (std)	Cable/Wire length in mm	
4	CRIMP CONTACT	STD A	Blank Pre-crimped 6160 pins on wire (SW version only)	

Example Code Standard: PS6501-SW300

Example Code Option: PS6501-SW080-A

Note. Other versions or lengths are available to order on request.

Notes

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Important Notice

The specifications in this document are for reference purposes only and are subject to change without notice. Consult Regal Components for the latest specifications.

Copyright 2024 © Regal Components AB

Contact information: Regal Components AB, Lefflersgatan 1, 754 50 Uppsala, Sweden. info@regal.se.
+46 (0)18-65 70 00. www.regal.se