

F500GS

Intelligent Gauge Pressure and Sanitary Transmitter





www.fosten.com.br

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1. OPERATING PRINCIPLE

The Sanitary level and intelligent gauge pressure transmitter F500GS is based on the capacitive sensor principle.



Capacitive sensors are devices that receive and respond to a physical/chemical stimulus or signal. In turn, this technology is based on the capacitor concept, being able to detect the presence of objects without their contact. The sensor is triggered when it detects the presence of the object at a certain distance. The operating principle is based on changing the capacitance of the detector plate located in the region called sensitive.

But what is a capacitor? A capacitor is a simple device, being a passive electronic component that stores charge and energy in the electrostatic field. It consists of two electrical conductors (known as plates) that store opposite charges. These plates are separated by a special type of isolator (ie, a nonconductor) known as a dielectric. Because these plates have opposite charges, the storage process is characterized by the movement and transfer of electrons from one plate to another. The potential difference caused by this movement is the same as the potential energy stored in the plate. The capacitance of a capacitor is the ratio of the potential difference (PDD) between the plates and the charge on each of the plates. In turn, the capacitance is inversely proportional to the distance

between the plates and directly proportional to the area of the plates and the dielectric constant of the isolating material. Based on this concept on capacitors, the capacitive sensors work in a very similar way to the capacitor. The difference is in the way the plates are arranged. In the sensors, the plates are arranged parallel to each other. The operating principle is based on the change in the capacitance of the detector plate located in the region called sensitive, that is, when the dielectric in the middle varies.

The functioning of this capacitive sensor, in turn, is based on the variation of the electric field in the place in front of the electrode of the sensor, which we call the active zone. The sensor will be activated when the object approaches a certain distance and it is positioned in front of the active zone. The distance at which the sensor is triggered is called the switching distance, which can vary greatly depending on the permittivity constant in the diameter of the sensor, the material and mass of the approximate body and also the position at which the sensor is placed. The sensor also comprises an integrated RC oscillator circuit. As a metallic or non-metallic substance approaches the active zone, the capacitance value will change. As the capacitance varies, the frequency of the oscillator circuit changes. This frequency change is sent to another circuit called a detector, where it will transform the frequency variation caused by the capacitance variation into a voltage signal. The trigger schmitt circuit, in turn, has the purpose of transforming the voltage signal into a square wave. Last but not least, the switching circuit. The switching circuit is where the square wave will be excited and transferred to the external circuits.

Capacitive sensors can be used in the most varied types of processes, being able to monitor and detect the presence of dust, concentration of gases, objects and products of an organic and mineral nature, metals and non-metals, solids and liquids, even when fully submerged in the product.

The gauge-type capacitive sensor, as it is installed directly in the process, has a reading only on the high side. The low side is inactive.

2. MAIN APPLICATIONS

- Sugar and Alcohol
- Fertilizers
- Chemistry
- Food and Beverages
- Petrochemical
- Pharmaceutical
- Energy
- Plastic
- Among others

3. TECHNICAL CHARACTERISTICS

The following are the main technical characteristics of the F500GS Sanitary level and intelligent gauge pressure transmitter.

Accuracy	± 0,075%
Exit sign	4 a 20 mA
Communication protocol	Hart
Feeding	9 to 32 Vcc, without polarity – 12 mA
Operating temperature	-20 °C to 100 °C
Storage Temperature	-20 °C to 100 °C
Environment temperature	-20 °C to 85 °C
Types of exit	Linear and square root
Degree of protection	IP66
Response Time	50 ms
Rangeability	80:1
Thermal stability	± 0,15% URL, 5 years
Display	Backlight type
Approximate weight with support	3,5 kg for differential and gauge version



5. FIXING SUPPORT

The F500GS Sanitary level and intelligent gauge pressure transmitter, comes with a fixing support, suitable for assembling on 2" diameter pipes.



6. F500GS SANITARY LEVEL AND INTELLIGENT GAUGE PRESSURE TRANSMITTER

The Sanitary Level and Intelligent Gauge Pressure Transmitter F500GS can be made with different types of sanitary socket. A wide range of flange sizes, pressure rating, blade material for diaphragm and filling fluid allow for the precise specification that will best suit the process being controlled



Types of socket	Tri – Clamp, SMS, IDF, RJT
Diaphragm blade	Stainless Steel, Hastelloy, Moxnel 400, Tantalum, Stainless Steel with Hallar or Tefzel coating.
Filling Fluid	Silicon DC704, Silicon DC200, Neobee

Below we have the sale codes for purchasing and throughout this instructional and operational manual, more specifically in the spares section, the sale codes for purchasing spare parts.

PRODUCT														
F500GS	: Intelli	gent Ga	uge Pre	ssure A	And Sani	tary Tra	nsmitte	er						
•	СОММ	MUNIC	ATION F	PROTO	COL									
	Н	: 4 to 2	20 mA H	art										
		CALIE	BRATIO	NRAN	GE									
	•	2	: 0 to 5	000 mn	nH2O									
		3	: 0 to 2	5000 m	mH2O									
		4	: 0 to 2	5 Kgf /	CM 2									
		5	: 0 to 6	8 Kgf /	CM 2									
		6	: 0 to 1	60 Kgf	/ cm ² (s	sob con	sult)							
		DIAPHRAGM MATERIAL / FILLING OIL												
			1	: Stain	less Ste	el / Silic	one Oi							
				SENS	OR MA	TERIAL								
	•	•	•	I	: Stainl	ess Ste	el							
	•				SHELI	_ MATE	RIAL							
	•	•		•	Α	: Alumi	nium							
•	•	•	•	•	•	ELCE	FRICAL		IECTIO	N				
	•	•		•		1	: 1/2 N	PT Thre	ead					
	•	•	•	•		•	SANIT	ARY FL		CONN			_	
	•	•	•	•		•	1	: Tri-C	lamp 1	1/2" Wit	hout Exte	ension	В	: IDF 2" With Extension
	•	·	•	•	•	•	2	: Tri-C	lamp 2"	With Ex	dension		C	: IDF 2" Without Extension
	•	•	•	•	·	•	3	: Tri-C	lamp 2"	Without	t Extensi	on	D	: IDF 3" With Extension
	•	•	•	•	·	•	4	: Tri-C	lamp 3"	With Ex	dension		E	: IDF 3" Without Extension
	•	•	•	•	·	•	5	: Tri-C	lamp 3"	Without	t Extensi	on	F	: RJT 2" With Extension
·	•	·		•		•	6	: SMS	1 1/2" V		±xtensioi	n	G	RJT 2" Without Extension
·	•	•	•	•	•	•	1	: SMS	2" With	Extensi	on		н	RJT 3" With Extension
·	•	•	•	•	•	•	8	: SMS	2" With	out Exte	ension		-	: RJT 3" Without Extension
·	•	•	•	•	•	•	9		3" With	Extensi	on 		Ζ	: Special
	•	•	•	•	•	•	A				ension			
·	·	·	·	•	·	•	·	5ANIT				AL		
·	·	·	·	•	·	•	·		Stain				• NA NA A	
·	•	•	•	•	•	•	•	•		· Stain				
	•	·	·	•	·	•	·	•	2	· Haste		21		
	•	·	·	•	·	•	·	•	3	· Mone	1 400			
	•	•	•	•	•	•	•	•	4	· Tanta	alum			
		÷					÷			SANIT		ANGE FIL	LING (DIL
										1	: Silicor	e DC704		
										2	: Silicor	e DC200		
										3	: Neobe	e		
										Z	: Specia	al		
•											PAINT			
•											0	: Standard	Senso	r Br (Synthetic Liquid Paint)
											1	: Special		
F500GS	н	2	1	I	Α	1	3	1	1	1	0			

7. LOCAL ADJUSTMENT

The local adjustment functions include: Zero Trim, Damping, Unit, Range.

The following table shows the operation codes and their corresponding functions:

CHARACTERS DISPLAYED IN THE LOWER LEFT CORNER	FUNCTION
0	Display value.
1	The user can enter the operation code such as 2,3,5,6 or 7 to execute the corresponding function respectively.
2	Configuration of PV unit.
3	Configuration of the lower range value.
4	Configuration of the upper range value.
5	Damping.
6	Zero Trim.
7	Zero and Span configuration.

CONFIGURATION OF THE PV UNIT.

Press Z key to enter the menu mode. The lower left side of the display shows the operation code 1 to indicate the "Input Operation Code" function. The first 0 will start flashing.

Press the Z key to shift until the last 0 starts flashing. Press the S key to change the value. Enter multiple operation codes to perform the corresponding function. For example: enter 2 to set the unit.

Press the S key until the last number is 2, then press the Z key. The down arrow will start flashing.

Press the S key to save the operation code. The bottom left side of the display will show the operation code 2 to indicate enter the function "Unit Settings."

00000







MINIMUM RANGING CONFIGURATION.

Enter the operation code to execute the corresponding function, respectively.

Input **** 3 (* means a random number), Input Value Definition of The Lower PV range.

Input **** 5 (* means a random number), enter in Damping Adjustment.

Input **** 6 (* means a random number), enter in Zero Trim.

Input ****8 (* means a random number), enter in Output type.

MAXIMUM RANGE CONFIGURATION.

After completing the setting of the lower PV value, enter the upper range value of the PV.

The way to enter an upper value is the same as for entering the lower value (Please see PV for lower range value).

DAMPING CONFIGURATION.

Enter the operation code 5 to enter damping adjustment, or it will enter automatically on damping

The way to enter the damping value is the same as for entering a lower value. (See PV for lower range value).





LIN

8





OUTPUT TYPE CONFIGURATION.

The **F500** will automatically enter "Output Setup" after Zero Trim.

Enter operation code "8". In output type configuration mode, the operation code "08" is displayed at the bottom left side of the display. "LIN" or "SQRT" will be displayed at the bottom.

Press S key, then "LIN" symbol will flash, indicating enter into output and the selection is "Linear Output Mode."

Press the "S" key again to change, the "SQRT" symbol flashes, indicating that the selection is "Square Root Output Mode."

Press M or Z key to save output and complete the configuration.

ZERO TRIM.

Press the C and Z key simultaneously, and hold for less than 5 seconds.

Enter operation code "6".

After the adjustment of the damping values.

In Zero Trim function mode, the operation code "6" is displayed at the bottom left side of the display and the pressure value is shown in the middle. "YES" or "NO" will be displayed at the bottom.

Press "S" key to change, "YES" symbol will flash, indicating that the selection is "**TRIM**".

When displaying "YES", press "C" key or "Z" key to execute the function Zero Trim

The pressure value will be set to "0" after successful operation.





0







BEARISH TRIM.

Pressing the "C" and "S" keys simultaneously, and keeping them pressed for less than 5 seconds, it will enter the bearish TRIM mode.

Enter operation code "9" as follows:

Press "Z" key to enter the manual mode. The bottom left side of the display will show the operation code "1" to indicate the function "Entry Operation Code.

The first zero will start flashing.

Press the "Z" key to change until the last "0" starts flashing.

Press the "S" key to increase the setting number to "9".

Press "Z" key, the down arrow will start flashing.



1

00000





9 kPa



HIGh TRIM.

Enter Lower Trim mode, then press "Z" or "C" key to skip the lower compensation and enter the high TRIM mode, and the lower left side of the display will show the operation code "10".

It will automatically enter "High Trim" after successfully operating "Low Trim".

Use the following steps for **TRIM**:

1. Using a pressure source, apply a pressure equivalent to the higher calibrated value.

2. Enter the reference pressure to calibrate. The input method of data refers to "Setting the PV Lower Rate Value".



ZERO SPAN ADJUSTMENT.

Simultaneously pressing the S and Z keys, and holding down at least 5 seconds, it will enter Zero and Span adjustment mode and the operation code "07" will be displayed at the bottom left side of the display.

Use the following steps to adjust Zero and Span:

- 1 Using a pressure source, apply a pressure equivalent to the lower calibrated value.
- 2 Press the Z key for five seconds to adjust the 4mA point.
- 3 Apply the pressure equivalent to the highest calibrated value.
- 4 Press the S key for five seconds to adjust the 20mA point. Check whether the output is 20mA.



8. CONFIGURATION VIA SOFTWARE

The **F500** line transmitters are configured using the Hart Config Tool software, which is free and available on the website. A Hart communication interface of any model/manufacturer is required.



	HART Config Tool	_ X
Informations		
Transmitter informations	Message:	
Poll address	Sensor informations:	
Information	PV Snsr Unit: degC	
A	PV USL: 850.000	
More Information	PV LSL: -200.000	
	PV Min span: 1.000	
	PV Snsr s/n: 16777215	
Configuration	Transmitter informations:	
Monitor	PV Units: degC	
Transmitter Trim	PV URV: 100.000	
Waintenen	PV LRV: 0.000	
Maintenance	PV Damp: 0.000	
User Trim	PV Xfer fnctn: Linear	
Manufacturer Trim		
Advanced Function		
	COM Port: COM12	File Operate Polling

8.1. CONNECTING THE INSTRUMENT

Make sure the instrument and the Hart interface are turned on. Access the Hart Config Tool software and click on the "Polling 0" button in the lower right corner.

IMPORTANT

If necessary, a resistor must be connected in series with the positive pole in the instrument.

By choosing the "Information" button, all the information contained in the instrument will appear.

Information		
Configuration		
Monitor	Message:	
Transmitter Adjustment	Sensor Information:	
Transmitter Test	FV (Process Variable) Sensor Unit:	mail20
Maintenance	PV NSL (Upper Sensor Limit):	25538.691
User Calibration	PV LSL (Lower Sensor Limit):	-25538.691
Manufacturer	PV Min Span:	0.001
Advanced Functions	PV Sensor S/N:	66051
	Transmitter Information:	
	PV Unit:	neH20
	PV URV (Upper Range Value):	25000.000
	PV LEV (Lower Range Value):	0.000
	PV Damp:	0.000
	Xfer Fnctn(Transfer Function):	Linear
	- 🗶 com	COM1 - File Polling Polling

8.2. CALIBRATION

To adjust the calibration range, just choose the "Configuration" button. In the "Range" sub-option, the minimum and maximum ranges will be displayed ("Sensor Information" box) and then the working range in which the instrument is configured ("Output Range" box).

To change this range and adjust it, just select the LRV (low pressure or minimum value) and the URV boxes (high pressure or maximum value). Making change, click on the "Write" button to confirm and save.

Information	
Configuration	
Range	Sensor Information: PV Sensor S/N: 66051
🖉 Zero/Span Setup	PV USL: 25538.691 PV LSL: -25538.691
@ Output	PV Sensor Unit: mmH20 PV Min Span: 0.001
Fault Protection	
	Transmitter Output Range: PV Unit: mmM20
Monitor	
Transmitter Adjustment	PV URV: 25000.000
Transmitter Test	PV LEV: 0.000
Maintenance	
User Calibration	
Manufacturer Calibration	Read
Advanced Functions	
	▼ 🗶 COM: COM1 ▼ File Polling Polling 0

8.3. CURRENT TRIM

To perform the current trim, choose the "Configuration" button and the "Zero / Span Setup" sub-option.

On the next screen that will open, choose the "Zero: 4mA" button to adjust the current value to 4 mA, taking the minimum value (LRV) as a reference. Choose the "Span: 4mA" button to adjust the current value to 20 mA, having as reference the maximum value (URV).

Information	
Configuration	
Range	PV Range: PV Unit: mmH20
Zero/Span Setup	PV URV: 25000.000 PV LRV: 0.000
🕘 Output	Zero Setup:
Fault Protection	Set the current value of FV as LEV, i.e., Zero, but the Span will not be changed. Zero: 4mA
Monitor	
Transmitter Adjustment	Span Setup:
Transmitter Test	Set the current value of rv as ony, but the Lero will not be changed.
Maintenance	Span: 20mA
User Calibration	
Manufacturer Calibration	
Advanced Functions	
	💌 💥 COM: COM1 💌 File Polling Polling 0

8.4. DAMP, LINEAR OUTPUT OR SQUARE ROOT AND USER UNIT

To adjust options such as Damp, output to linear type or square root extraction, as well as choose the units to be shown on the display, choose the "Configuration" button and then the sub-option: "Output".

On the next screen that opens, choose in the "Output Characteristics" box the options for Damp, linear function or square root.

In the table below, select the desired option for Display 1 and Display 2.

Information	
Configuration	Output Characteristics:
Range	PV Damp: 0.000 s
Zero/Span Setup	Xfer Fnctn: Linear
Output	SQRT Mode: Current
Fault Protection	Display 1:
	Var. Type: Percent 💌
Monitor	Decimal Flaces: 0
Transmitter Adjustment	Display 2:
Transmitter Test	Var. Type: PV V
Maintenance	Decimal Places: 0
User Calibration	
Manufacturer Calibration	Read
Advanced Functions	
	T 🗶 COM: COM1 T File Polling Polling 0

8.5. INCLUDING USER UNIT

To include a user unit (drive), choose the "Configuration" button and the sub-option: "Range". In the box "Transmitter Output Range", option "PV Unit", select the desired unit.

If the unit to be chosen is not listed for choice, it will be necessary to make a simple adjustment as described below:

a) In the "PV Unit" select "Special". At this time, the calibration value will automatically be converted to kpa.

Information					
Configuration					
 Range Zero/Span Setup 	Sensor Information: FV Sensor S/N:	66051			
Output	PV USL: 25538.t PV Sensor Unit: mmH20	91 PV #	PV LSL: -25538.69		
Fault Protection					
	Transmitter Output Range: -				
Monitor	PV Unit:	nnH20 Pa kPa	•		
Transmitter Adjustment	PV URV	Torr atm MPa			
Transmitter Test	PV LEV	in4H20 mn4H20 mH20			
Maintenance		nHg 6+4H20			
User Calibration		n nn	=		
Manufacturer Calibration	Read	cn feet inch			
Advanced Functions		degC Special	F		
	- 1	COM: COM1	▼ File	Polling	Polling 0

b) Go to the last button "Advanced Functions" and choose the sub-option: "Additional Functions" as shown on the following screen.

Information	Small Signal Cutoff:	Temp. Value Cali.:				
Configuration	The value range is 0 \sim 3.	This calibration is used to adjust the				
Monitor	Select: 08	reading of the sensor temperature value to match the actual temperature when This molification does not				
Transmitter Adjustment	Mode: Zero pressure _▼	affect the temperature compensation of the actual sensor.				
Transmitter Test	Setting Value: 1.000 %	Display Temp. : Not disp 💌				
Naintenance	Trite	Actual Temp.: degC				
User Calibration	Measured Medium Density:	Trite				
Manufacturer Calibration	The density setting of the measured medium is only valid for the unit m,	Sum Balat				
Advanced Functions	cm, mm, inch and reet.	Save Date.				
Sensor	Medium Density: 1.000 g/cm3	Data will be saved to PC.				
Additional Functions		Save Data				
	User Unit:					
	Unit: SPEC	Data will be written to field.				
	Coefficient: 1.000 * kPa	Backup Data				
	- ¥ cont	COM1 - File Polling Polling				

In the "User Unit" box, indicated by the arrow in the previous figure, write the user unit you want to use. Enter the value of the "Coefficient", which must always be the maximum value of the calibration range divided by the maximum value of the user unit range.

Example:

The instrument works from 0 to 25000 mmH2O, which transformed into Kpa will be from 0 to 244727 kpa. The user unit you want to work with is from 0 to 200 m3/h.

So, the value of the "Coefficient" will be 244727 ÷ 200, which will result in 1223.63 (or 1224 rounded off to the decimal point).



From this setting, the user unit m3/h, which did not exist in the selection list, starts to appear on the display of the instrument.

Information	Small Signal Cutoff:	Temp. Value Cali.:
Configuration	The value range is 0 \sim 3.	This calibration is used to adjust the
Monitor	Select: ON 💌	reading of the sensor temperature value to match the actual temperature
Transmitter Adjustment	Mode: Zero pressure 💌	affect the temperature compensation of the actual sensor.
Transmitter Test	Setting Value: 1.000 %	Display Temp. : Not disp 💌
Maintenance	Trite	Actual Temp.: degC
User Calibration	Heasured Hedium Density:	Trite
Manufacturer Calibration	The density setting of the measured medium is only valid for the unit m,	
Advanced Functions	ce, me, inch and teet.	Save Data.
Sensor Configuration	Medium Density: [1.000 g/cm3 Trite	Bata will be saved to PC.
Additional Functions		Save Data
	User Unit:	
	Unit: n3/h	Data will be written to field.
-	Coefficient: 1.224 • kPa Write	Backop Data
	·	CONTLA File Polling Polling

8.6. WRITING AND ALARM PROTECTION

To enable the writing protection, preventing allowed changes to the configuration already made and saved in the memory of the instrument, simply choose the "Configuration" button and the sub-option: "Fault Protection".

On this same screen, there is also the possibility of setting the alarm, in which you can select an option for very low or very high current to send an alarm signal.

Information	
Configuration	
@Range	Write Protection:
Zero/Span Setup	Setting: OFF
@ Output	
Fault Protection	AD (Analog Output) Alarm:
Monitor	Setting: Alarn Low(3.8mA) 💌
Transmitter Adjustment	
Transmitter Test	
Maintenance	
User Calibration	Read
Manufacturer Calibration	
Advanced Functions	
	▼ 🗶 COM: COM1 ▼ File Polling Polling

8.7. MONITORING VARIABLES

Choose the "Monitor" button and the "Process Variable" sub-option. A screen will be available in which the variables can be selected to be monitored and displayed in a graph.



8.8. CURRENT TRIM AND LOOP

Choose the "Transmitter Adjustment" button and the "D/A Adjustment" sub-option to perform the current trim (4 to 20 mA), using a multimeter as a reference. To perform a simulation and test with various current values, see the options in the "Current Loop Test" table.

Information	
Configuration	Current Loop Calibration:
Monitor	• Vse standard apperemeter
Transmitter Adjustment	○ Use a standard voltmeter with a resistor of 250 ohm
OD/A Adjustment	○ Use a standard voltmeter with a resistor of ohm
Two-Point Adjustment	Theoretical Loop Current: 4 mA <u>v</u> Actual Loop Current: 4.000 mA
ØZero Adjustment	Start Cali. Send Exit
Cuncellation	Current Loop Test:
Transmitter Test	C 4.0nA C 20.0nA
No. 2014 - 1010 - 10	C 12 0-4 C 04bars 2.9
saintenance	1 12.08A S OLIVES D.O BA
User Calibration	
Maintenance User Calibration Manufacturer Calibration	Start Test Send Exit

8.9. LOWER TRIM AND HIGHER TRIM

To perform the pressure trims, choose the "Transmitter Adjustment" button and the sub-option: "Two-Point Adjustment".

Information	
Configuration	Two-Point Adjustment:
Monitor	Ontions:
Transmitter Adjustment	Adjusted Value: mmH20
OD/A Adjustment	Trite
Two-Point Adjustment	Readout:
Zero Adjustment	UEV Adjustment: LEV Adjustment:
Cancellation	
	Value: Value: mai/20 mai/20
Transmitter Test	
Maintenance	anH20 anH20
User Calibration	Read
Manufacturer Calibration	
Advanced Functions	
	💌 🎇 COM: COM1 💌 File Polling Polling 0

In the "Options" selection box, you can choose whether you want to make a lower trim or a higher trim.

-Two-Point Adjustment:			
Options:	URV Adjus		
Adjusted Value:	LKY Adjus	tment mmH20	
	Writ	e	
Readout:			
URV Adjustment:		LRV Adjustment:	
	1		1
Value:		Value:	
	mmH20		mmH20
	mmH2O		mmH20
	Re	ad	

8.10. ZERO TRIM

To perform the zero trim, choose the "Transmitter Adjustment" button and the sub-option: "Zero Adjustment".

Information	
Configuration	
Monitor	
Transmitter Adjustment	Zero Adjustment:
O/A Adjustment	Set the current FV to Zero.
Two-Point Adjustment	Adjust Zero
Zero Adjustment	
Cancellation	Arbitrary PV Adjustment:
	Adjust: mmH20
Transmitter Test	
Maintenance	Keud Frite
User Calibration	
Manufacturer Calibration	
Advanced Functions	
	▼ X COM: COM1 ▼ File Polling Polling 0

9. SPARE PARTS

The **F500** instrument line offers a wide variety of single pieces, also called spare parts. Practically all items can be purchased separately, through the list of codes below.

PRODUCT			
500-0010	Blind Cove	er - Univer	sal
	MATERIAL	_	
	А	: Aluminu	n
		PAINTING	3
		1	: Standard
		Z	: SPECIAL (see notes)
		•	
500-0010	Α	1	

PRODUCT			
500-0012	: Cover wit	h Viewfinde	er - Universal
	MATERIAL		
	А	: Aluminu	m
		PAINTIN	3
		1	: Standard
		Z	: Special (See Notes)
	•	•	
500-0012	Α	1	

PRODUCT			
500-0016	: Housing with	Hart pump for	pressure transmitter (without covers)
	MATERIAL		
	А	: Aluminum	
		PAINTING	
		1	: Standard
		Z	: Special (See Notes)
		•	
500-0016	Α	1	

PRODUCT	
500-0020	: Hart pump for pressure transmitter

PRODUCT				
500-0026	: - L-typ	: - L-type mounting support		
	MATER	MATERIAL		
	1	: Carbon steel		
	2	: Stainless steel		
500-0026	1			

PRODUCT	
500-0060	: - Hart main board for pressure transmitter

: sealing ring for blind cover / with viewfinder – Buna N 7750					
: sealing ring for the electrical connection plug – Buna N 2117					

PRODUCT	
500-0018	: sealing ring for the gauge sensor – Buna N 2136

PRODUCT				
500-000G	: Capacitive sensor for gauge pressure transmitter			
	RANGE			
	2	 : 0 to 5000 mmH2O : 0 to 25000 mmH2O : 0 to 25 Kgf / cm² : 0 to 68 Kgf / cm² : 0 to 160 Kgf / cm² (Sob Consult) 		
	3			
	4			
	5			
	6			
		DIAPHRAGN	Λ ΜΑΤΕΙ	RIAL AND FILLING FLUID
		1	: stainle	ess steel - silicone oil
		MATERIAL IN THE BODY OF THE SENSOR		
			I	: Stainless steel
		•		
500-000G	3	1	I	

10. WARRANTY

The F500GS Sanitary level and intelligent gauge pressure transmitter has a 12 month warranty.

Such warranty becomes invalid once the following situations are detected:

Incorrect installation of the instrument

- Use in inappropriate applications
- Mechanical damage by impacts
- Electrical damage as a result of damage from other instruments in the industrial plant.

FOSTER AUTOMATION

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