

EUROPE FORMAT STRAIN GAUGE CONDITIONER : SX 9300 SERIES



DESCRIPTION

The 9300 is a Europ format drawer signal conditioner operating full gauge bridge transducers of 120 Ohm or more, thanks to its 5 VDC or 10 VDC adjustable bridge supply, delivering 100 mA.

The 9300 delivers an output signal, after amplification and possible filtering, expressed either in VOLTAGE or in CURRENT for certain models.

The very high input impedance of the amplifier combined with the filtered output, provides an excellent immunity against interference.

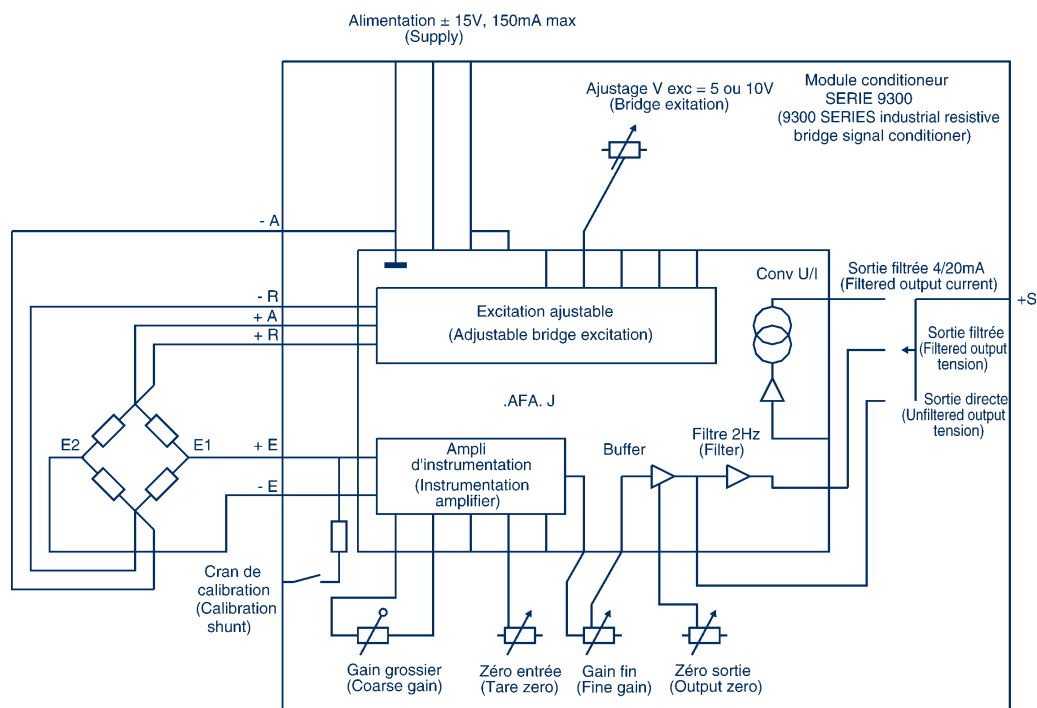
The bridge supply can be either 2 or 4 wires.

The 9300 set-up is made easy with push button calibration.

CHARACTERISTICS

Power supply	± 15 V, 30 to 150 mA
Signal processing	AFA-J or AFA-S hybrid module
Transducer excitation	5 V or 10 V, 100 mA max.
400 V/V fixed gain or jumper adjustable	20 to 1000 V/V
Zero and fine gain adjustment	by front panel trimmer pot
Push button calibration	
2 Hz lowpass filter	adjustable up to 1000 Hz
Current	0/10 V voltage or 4/20 mA
Location reserved for	
1/2 bridge and 1/4 bridge resistances	

SYNOPTIC



E00147A

SPECIFICATIONS

Power supply

+ 15 V, 30 mA + 30 to 100 mA bridge
 + 20 mA if current output
 - 15 V, 30 mA.

Measurement output

Voltage 0 ± 10 V DC, 5 mA max
 Current 4 to 20 mA
 Bandwith 2 Hz. - 3 dB
 Non filtered output 25 kHz. - 3dB
 The output mode, filtered or non filtered is selected
 by inside jumper.

Transducer excitation

10 VDC, 100 mA max nominal.
 5 VDC by removing inside jumper
 (inside trimmer ± 3 % adjustable)
 2 or 4 wires excitation

Input impedance

10 MOhm // 5 pF.

Offset

± 1.3 V fine adjust by front pannel trimmer
 -4 to + 4 V inside jumper ajustement.

Span

± 10 % fine ajustement by front panel trimmer pot
 9301-9303 option 400 V/V fixed gain
 9302-9304 option 20 to 1000 V/V inside jumper
 ajustements

Linearity

Better than 0.01 % of FSO for G = 1000 V/V.
 Common mode rejection 110 dB typical
 for gain between 100 and 1000 V/V

Operating temperature range

0 to 70°C

Thermal stability

25 ppm /° C typical for G = 1000 V/V

Calibration

By Shunt method, a front panel push button switches a resistance included
 in the transducer (external cal.) or set on the card.
 Former or later selection by inside jumpers.
 9303-9304 option: supplied relay remote calibration.

SELECTION GUIDE

Reference	Module	Output	Type	Gain	Transducer
9301	AFA-J	U/I	Fixed gain basic card	400 V/V	GB
9302	AFA-J	U/I	Variable gain basic card	20 to 1000 V/V	GB
9303	AFA-J	U/I	Similar to 9301 + calibration relay	400 V/V	GB
9304	AFA-J	U/I	Similar to 9302 + calibration relay	20 to 1000 V/V	GB
9310	AFA-S	U	Variable gain basic card	20 to 1000 V/V	GB

Note:

GB = Gauge Bridge transducer: full bridge (pressure, strain, etc...).