

# SUBMERSIBLE SERVO-INCLINOMETER / ACCELEROMETER : SX 41170 SERIES



- ATEX version available

## SPECIFICATIONS

This inclinometer/accelerometer may be immersed up to 100 bar pressure and is based on the SENSOREX inclinometer SX 41200 series and its performances:

- 6 ranges:  $\pm 3.00^\circ$  (0.05 G) -  $0,5 \text{ ms}^{-2}$   
 $\pm 5.75^\circ$  (0.10 G) -  $1,0 \text{ ms}^{-2}$   
 $\pm 14.50^\circ$  (0.25 G) -  $2,5 \text{ ms}^{-2}$   
 $\pm 30.00^\circ$  (0.50 G) -  $5,0 \text{ ms}^{-2}$   
 $\pm 45.00^\circ$  (0.70 G) -  $7,0 \text{ ms}^{-2}$   
 $\pm 90.00^\circ$  (1.00 G) -  $10 \text{ ms}^{-2}$
- High performance.
- Outstanding temperature stability.
- Very high resistance to shock and vibration (GAM T 13 approved).
- 316L stainless steel rugged and 100 bar submersible housing.
- Submersible connector (100 bar encast).
- Conform to european standards of electromagnetic compatibility.
- ATEX qualification available.

## APPLICATIONS

- LNG ships pitch & roll control
- Offshore platforms pitch & roll control

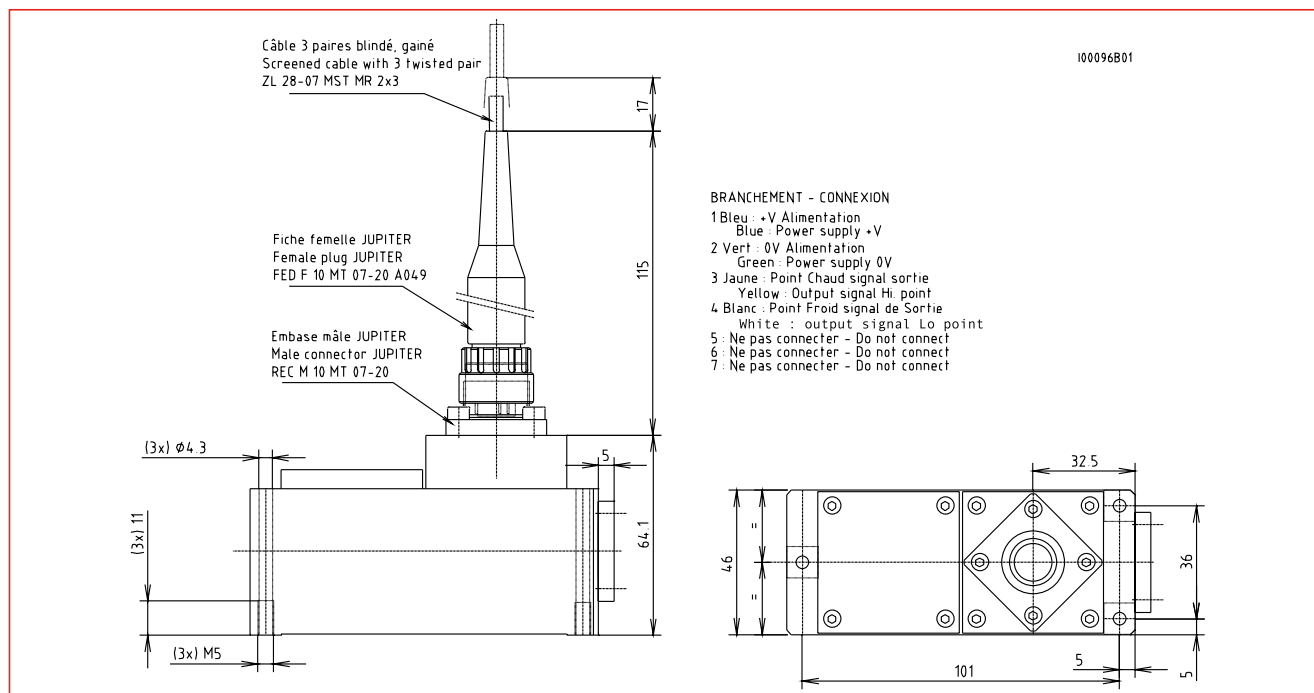
## GENERAL SPECIFICATIONS (AT 25 °C)

Characteristics	
Excitation voltage	10 to 30 V ; 60 mA max.
Output voltage	$\pm 5.0 \text{ V DC} \pm 0,5 \%$
Non linearity error (least square method)	$\pm 0.05 \%$ FSO standard ; $\pm 0.02 \%$ FSO optional ; (except $\pm 90^\circ$ range)
Initial unbalance	$\leq 0.15 \%$ FSO
Non repeatability and hysteresis	$\leq 0.001 \%$ FSO
Output noise	$\leq 2 \text{ mV rms}$
Output impedance	$\leq 1 \text{ Ohm}$
Bandwidth (-3 db)	from 3 to 15 Hz according to range
Cross axis sensitivity	$\leq 0.005 \text{ g/g}$
Housing/sensitive axis alignment	$\pm 0.5^\circ$
Thermal zero drift	$\leq 0.01 \%$ of FSO / °C
Thermal sensitivity drift	$\leq 0.01 \%$ of signal / °C
Environmental characteristics	
Operating temperature range	- 40 °C to + 80 °C
Storage temperature	- 55 °C to + 85 °C
Sine vibrations	5 g eff. from 10 to 500 Hz
Shocks	200 g - 6 ms
Airplane transportation	- 40°C - 265 mbar
Protection	IP68
Electromagnetic compatibility norms	EN 61236

## OPTIONS

- 4-20 mA current output (minimum supply voltage: 15 V).
- Special bandwidth.
- Shift initial unbalance (unipolar output).
- Special range or output (0,1 to 1,5 G).
- Intrinsic safety ATEX.

## RADIAL VERSION INTERFACE DRAWING



## AXIAL VERSION INTERFACE DRAWING

