

## OVERSPEED SPEED SWITCH, GHM9 SERIES

### CHARACTERISTICS

Switching speed	800 ... 4 000 rpm
Principle	centrifugal
Mechanical life-time	500 000 cycles
Contact type	opened or closed

Max current	6 A / 240 Vac
Contact material	silver-cadmium
Maximum breaking sequence	4/min
Breaking accuracy	min <sup>-1</sup> - 5% ... +8%

The commutation speed  $n_s$  is definitely calibrated in our factory.

Right or left rotation direction.

The switching speed  $n_s$  is defined for an acceleration =  $100 \text{ s}^{-2}$  (other, consult us).

Nota:  $1 \text{ rad.s}^{-2} \leftrightarrow 9,55 \text{ rpm.s}^{-1}$

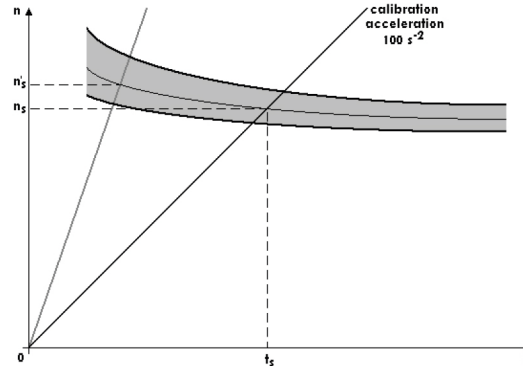
The hysteresys is about -3% in counter clockwise direction compared with clockwise direction.

It is advised to choose the switching speed  $n_s$  in order that  $n_s > 1,15.n_n$  ( $n_n$ : working speed, nominal speed).

The centrifugal relay must be used only in the case of an increasing speed.

In decreasing speed, the centrifugal switch will open automatically at a slower speed of approximately 40% of the calibrated switching speed  $n_s$ .

In the case of a higher acceleration than  $100 \text{ s}^{-2}$ , the switching speed will be higher ( $n_s$ 's, cf here-under drawing).

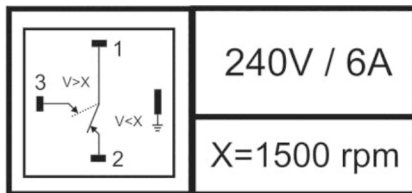


Shocks / impacts can create premature switching or transient opening. This is particularly the case when the switch's direction of action and the shock are the same. Rotating the mounting position ( $60^\circ$  division on flange) reduces the problem.

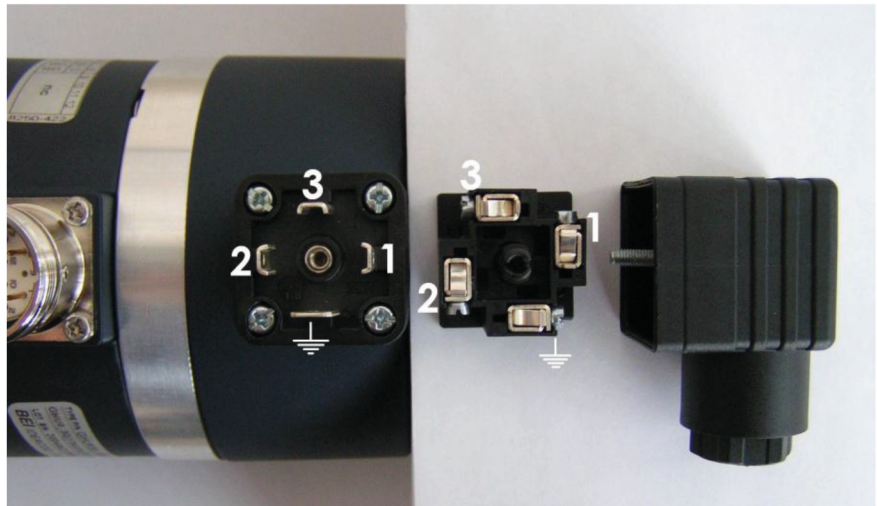
### STANDARD CONNECTION

With 4 pinout solenoid valve connector.

Contact 1 to 3 can be connected according to the desired configuration (rest, work or opposite).



The earth pin of the connector must be connected to the ground of the installation.



### AVAILABLE COMBINATION (Consult us for special version: ex: flange / connection / specific speed...)

Available combination:

- incremental encoder + overspeed switch,
- tacho-encoder + overspeed switch,
- absolute encoder + overspeed switch,
- incremental encoder + opto-tacho + overspeed switch,
- overspeed switch + overspeed switch ...

Standard speeds (rpm) : 1 000, 1 200, 1 500, 1 800, 3 000 (consult us for other speed).

Reference: consult us.

Note : The switch commutation speed is calibrated in our factory, no correction and no later modification is possible.

Made in France