GEFRAN

GSF

How to set ZERO/SPAN values
ANALOG VERSIONS ONLY

*Option available for analogue versions (single or redundant): A1-A2-A3**

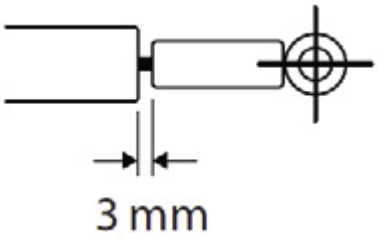
Code 85207B **Edit.** 03-2019

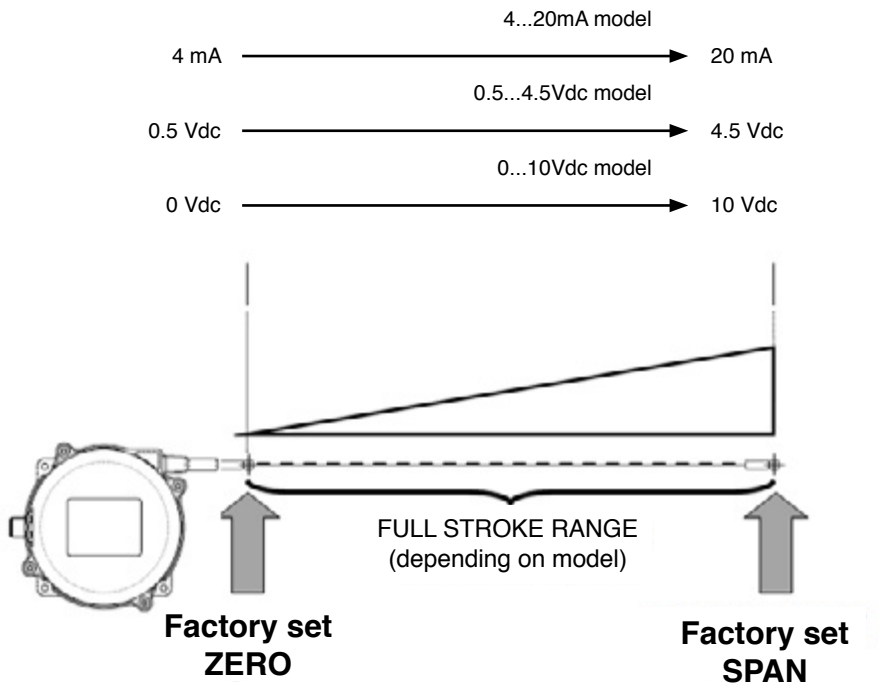
1. *Full scale (factory set)*
2. *How to modify the output*
3. *Reprogramming of ZERO and SPAN values (ascending output signal)*
4. *Reprogramming of ZERO and SPAN values (descending output signal)*

** NOT available for the A0 (digital divider) version; for the C1 (digital) version please refer to the dedicated CANopen manual.*

1. Factory set full scale

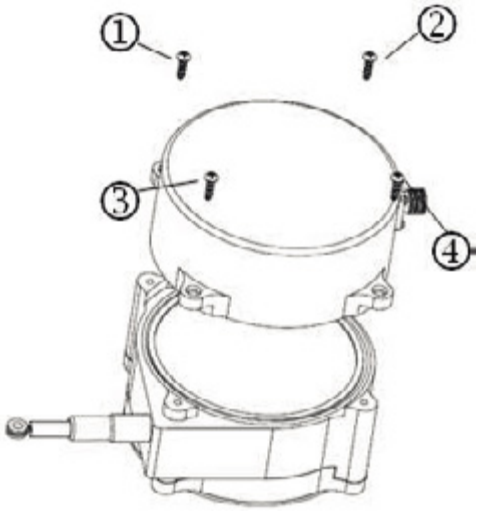
The full scale output signal is set to the maximum value in the production of the full stroke of the sensor. The ZERO POINT (output = 4mA or 0VDC or 0,5Vdc) is set at the beginning of the race and the SPAN POINT output = 20mA or 4.5Vdc or 10Vdc) is set at the end of the stroke (depending on the model).
The ZERO POINT is set at the factory with the measuring cable pulled out 3.0 mm from full retraction (see image).





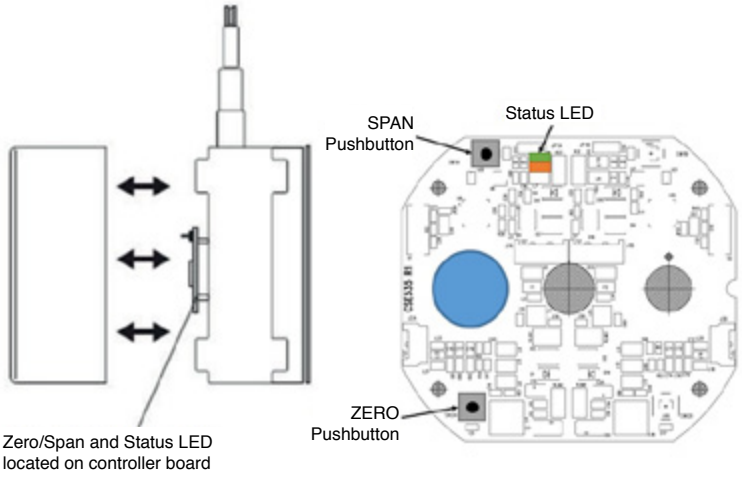
2. How to modify the output

With the aim to modify ZERO/OUTPUT values remove the four screws (as indicated in the following image) and remove the FRONT cover.

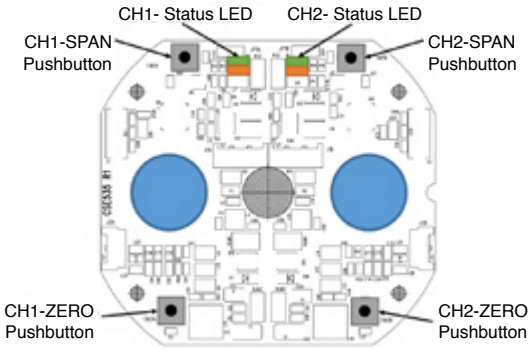


IMPORTANT NOTE!!!
Do not remove the eight screws on the REAR cover.

SINGLE VERSION



REDUNDANT VERSION



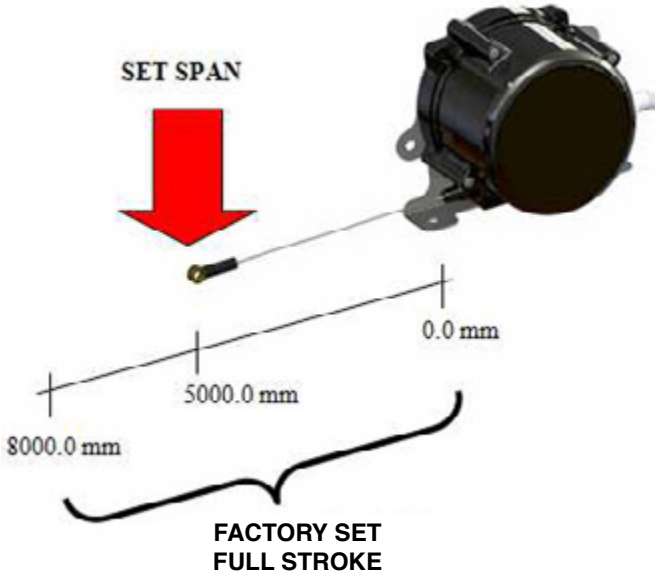
3. Reprogramming of ZERO and SPAN values (ascending output signal)

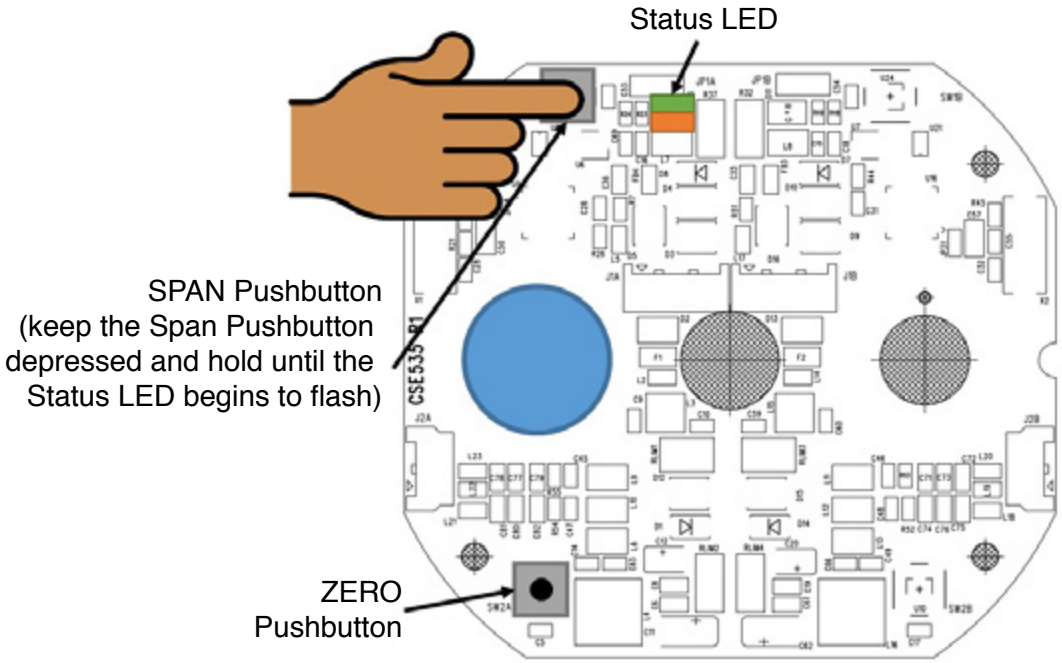
The ZERO and SPAN factory set values can be easily reprogrammed to match any desired stroke within the full stroke limits of the sensor (down to 25mm). Please note that ZERO and SPAN points can be set **independently**: you can set one without setting the other. This operation must be performed with the sensor **under power**.

NOTICE: technical data are always referred to the ordered stroke on which the sensor is programmed inhouse (eg: resolution of the ordered stroke is NOT re-scaled on the new ZERO/SPAN).
It is therefore advisable to order, if possible, the closest stroke to the requested one (eg: to set 1000mm is recommended to order a 1800mm stroke).

Setting SPAN:
set the cable to the desired **SPAN point** (e.g. 5000 mm on a full stroke of 8000mm) then depress and hold the button until the STATUS LED begins to flash.

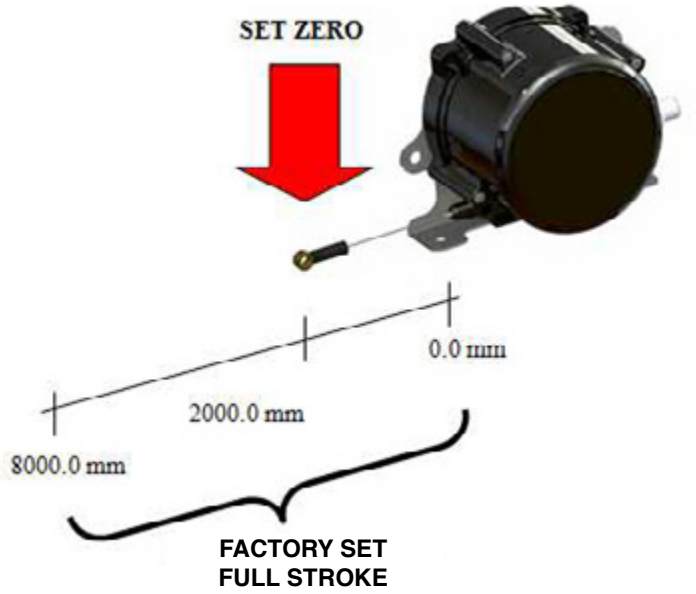
Example in case of 8000 mm full stroke

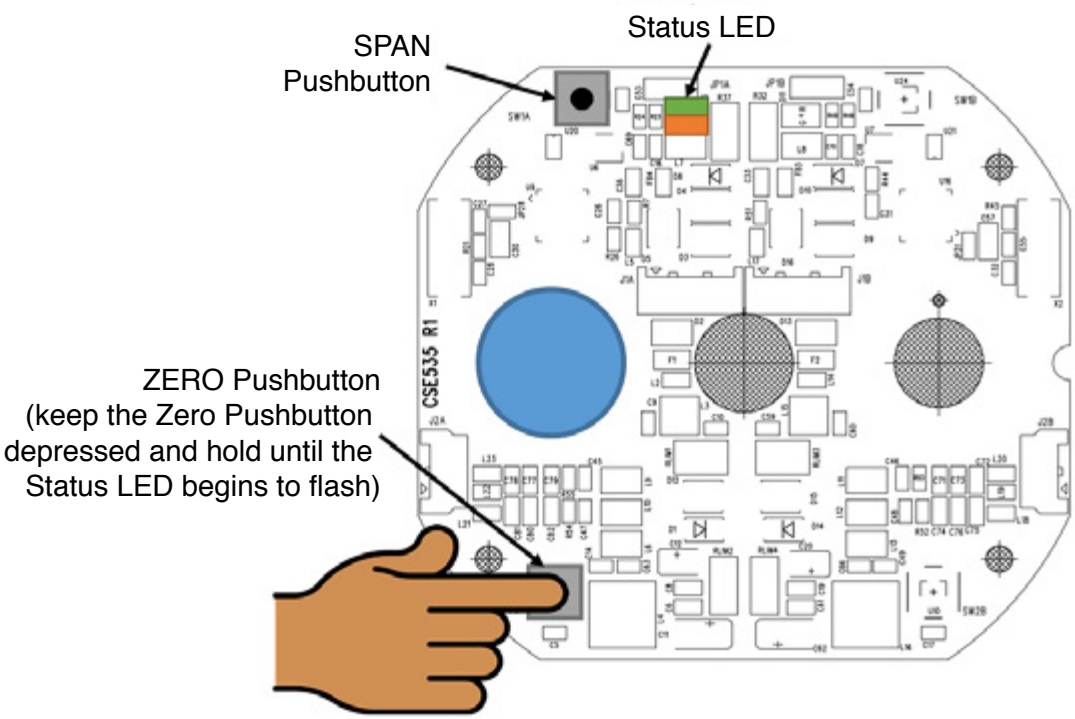




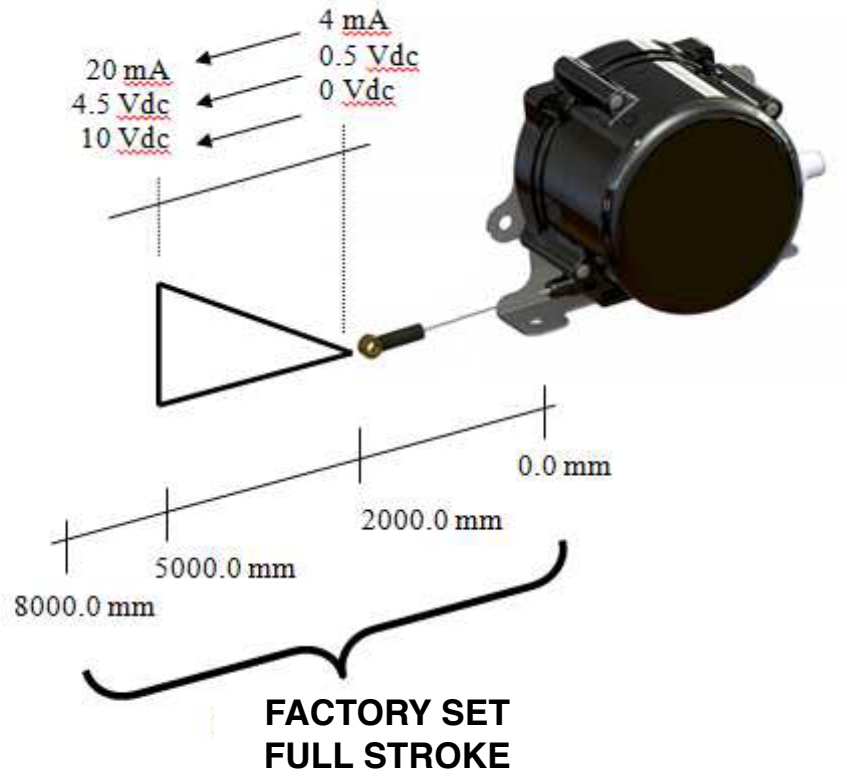
Setting ZERO:
set the cable to the desired **ZERO point** (e.g. 2000 mm on a full stroke of 8000mm) then depress and hold the button until the STATUS LED begins to flash.

Example in case of 8000 mm full stroke





Example of sensor with a new ZERO value (2000mm) and new SPAN value (5000mm) on a full stroke of 8000mm and **ASCENDING** output signal.



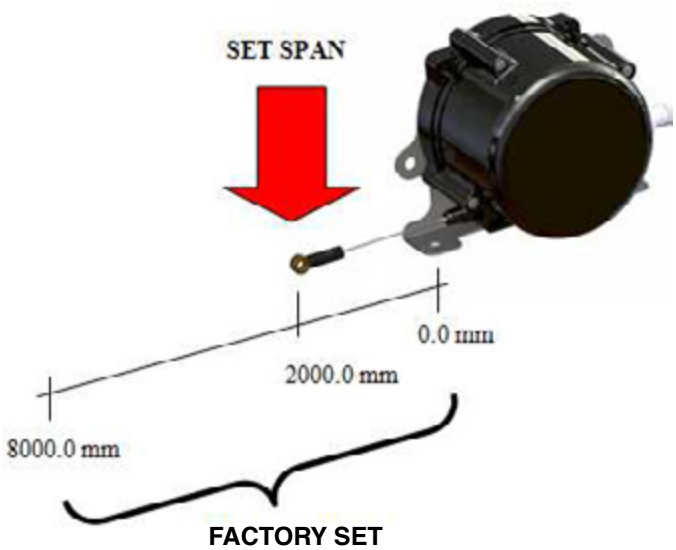
4. Reprogramming of ZERO and SPAN values (descending output signal)

The ZERO and SPAN factory set values can be easily reprogrammed to match any desired stroke within the full stroke limits of the sensor (down to 25mm). Please note that ZERO and SPAN points can be set **independently**: you can set one without setting the other. This operation must be performed with the sensor **under power**.

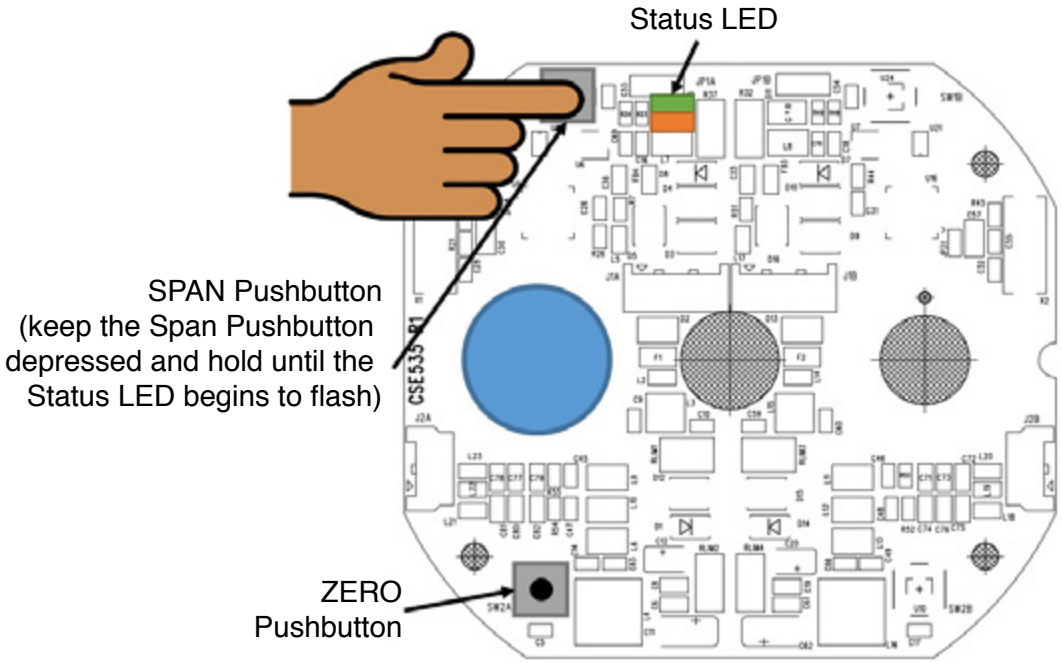
NOTICE: technical data are always referred to the ordered stroke on which the sensor is programmed inhouse (eg: resolution of the ordered stroke is NOT re-scaled on the new ZERO/SPAN).
It is therefore advisable to order, if possible, the closest stroke to the requested one (eg : to set 1000mm is recommended to order a 1800mm stroke).

Setting SPAN:
set the cable to the desired **SPAN point** (e.g. 2000 mm on a full stroke of 8000mm) then depress and hold the button until the STATUS LED begins to flash.

Example in case of 8000 mm full stroke

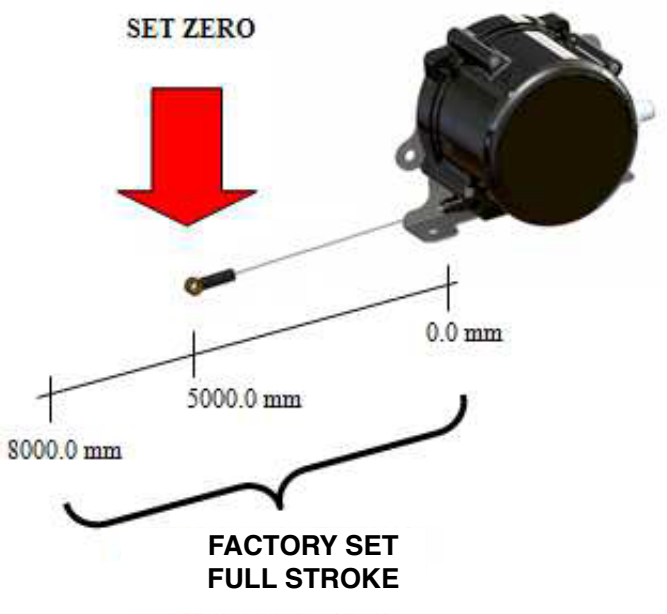


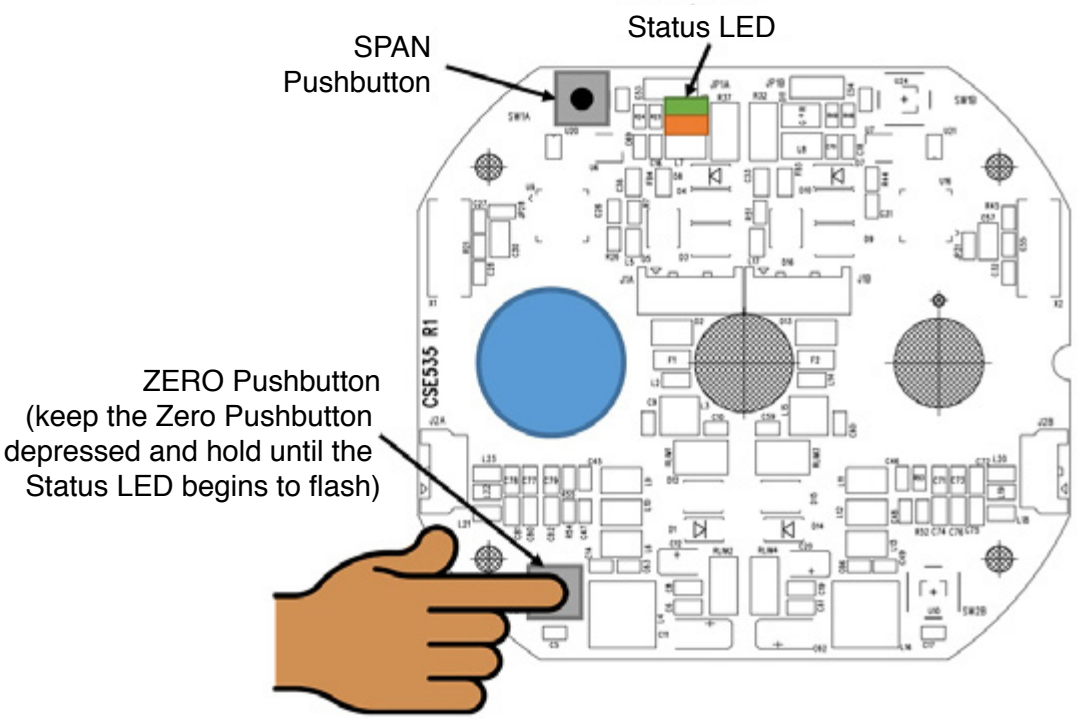
FACTORY SET
FULL STROKE



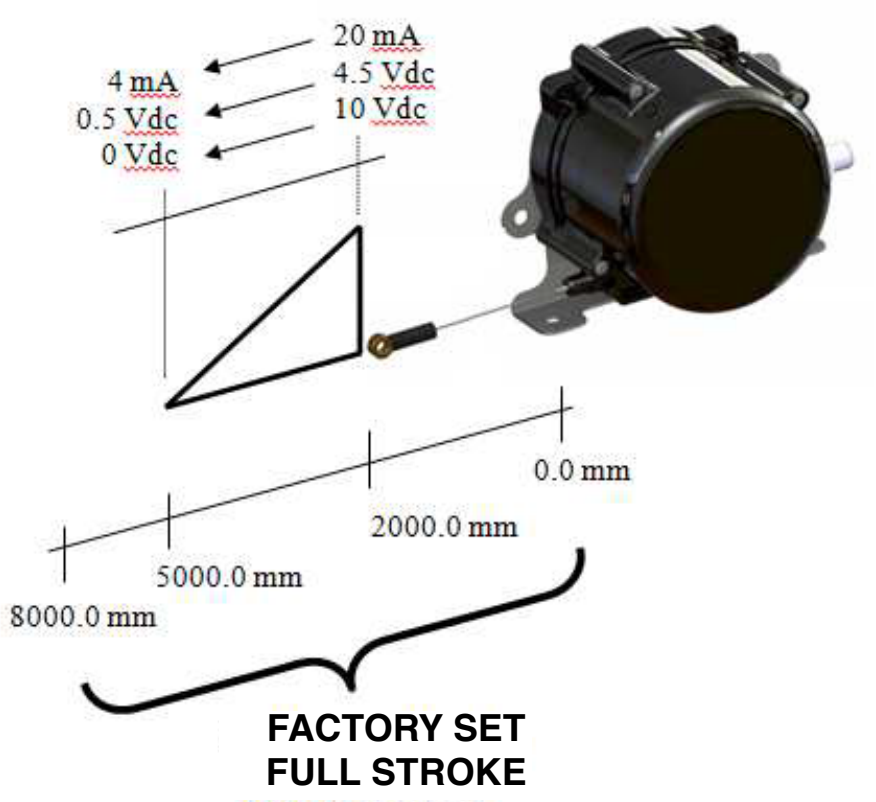
Setting ZERO:
set the cable to the desired **ZERO point** (e.g. 5000 mm on a full stroke of 8000mm) then depress and hold the button until the STATUS LED begins to flash.

Example in case of 8000 mm full stroke





Example of sensor with a new ZERO value (5000mm) and new SPAN value (2000mm) on a full stroke of 8000mm and **DESCENDING** output signal.



Note

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