Ref: FAQ-0010	Version: 1.0
Title – 4-20mA setting for flow	
Made By: AB_161013 (Issue 1)	

Question – How do you set up 4-20mA channels for flow output

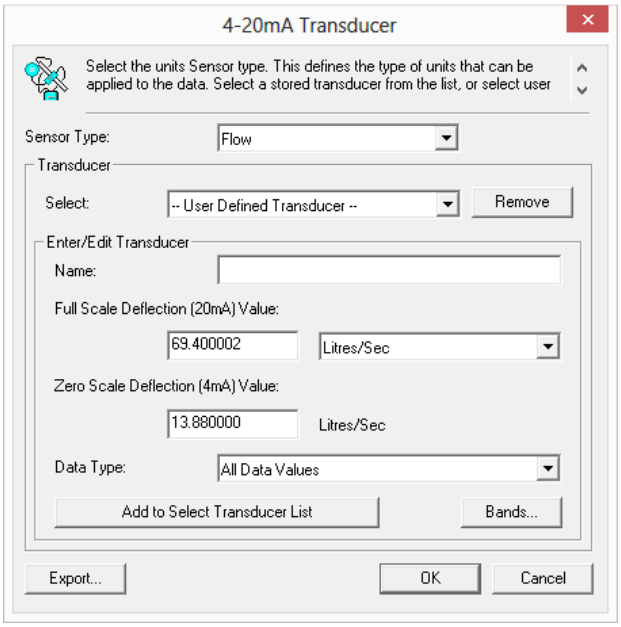
There are two ways of doing this depending on what your zero flow output corresponds to – this can either correspond to zero (0) mA or more usually 4mA

1. **Configuration for Zero flow = Zero mA**

The loggers 4-20mA channel is set up with the meters advised output (for example) of : –

20mA = 69.4 Litres per second and 0 mA = 0 litres per second.

In this case we calculate the 4mA value as being 13.88 litres per second (i.e 69.4/20 *4 = 13.88) and apply this to the logger Channel configuration as follows -



If a current source was applied to the logger in steps from 0mA to 4mA to 8mA to 10mA to 15mA to 20mA you would expect to see the results below :-

0mA= 0litres per sec

4mA = 13.9 litres/sec

8mA = 27.7 litres/sec

10mA=34.7 litres/sec

15mA =52.0 litres/sec

20mA= 69.4 litres/sec

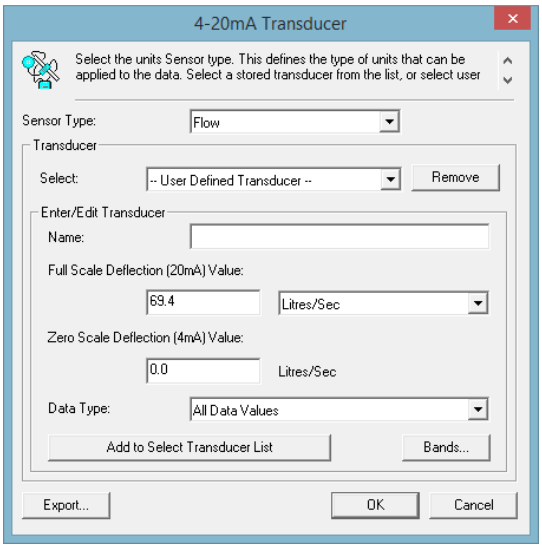
2. Configuration for Zero flow = 4mA

The loggers 4-20mA channel is set up with the meters advised output (for example) of : –

20mA = 69.4 Litres per second and 4mA = 0 litres per second.

In this case each mA step equates to 4.34 litres/second (i.e 69.4/16 = 4.34) and apply this to the logger. Note in this case zero mA would now equate to negative flow of – 17.36 litres/second

Channel configuration as follows –



If a current source was applied to the logger in steps from 0mA to 4mA to 8mA to 10mA to 15mA to 20mA you would expect to see the results below :-

0mA= - 17.4litres per sec

4mA = 0.0 litres/sec

8mA = 34.7 litres/sec

10mA= 43.4 litres/sec

15mA =65.1 litres/sec

20mA= 69.4 litres/sec

Document History:

Edition	Date of Issue	Modification	Notes
1st	16/10/13	Ist Release	