4 TO 20 MA ANALOG SCALING TABLE

Project: FT 3105 scaling	Calc no: CALC AI 001 Rev: 0

Yellow cells: enter data. Grey cells: calculated automatically. Free template from instrumentationblog.in

Loop data			
LRV (engineering units)	0	**URV (engineering units)**	50
Unit	m³/h	**Raw count at 4 mA**	0
Raw count at 20 mA	27648	**Square root (DP flow)?**	Yes
Low flow cutoff (% of flow)	5		

Scaling table

Signal (% of span)	Current (mA)	Raw counts	Value (units)	Value (% of range)	Displayed	Notes
0	4.000	0	0.00	0.0	0 (cutoff)	
5	4.800	1382	11.18	22.4	11.18	
10	5.600	2765	15.81	31.6	15.81	
20	7.200	5530	22.36	44.7	22.36	
25	8.000	6912	25.00	50.0	25.00	
30	8.800	8294	27.39	54.8	27.39	
40	10.400	11059	31.62	63.2	31.62	
50	12.000	13824	35.36	70.7	35.36	
60	13.600	16589	38.73	77.5	38.73	
70	15.200	19354	41.83	83.7	41.83	
75	16.000	20736	43.30	86.6	43.30	
80	16.800	22118	44.72	89.4	44.72	
90	18.400	24883	47.43	94.9	47.43	
100	20.000	27648	50.00	100.0	50.00	

Siemens S7 uses 0 to 27648 for 0 to 100 %; other PLCs use 0 to 32767, 4000 to 20000 or 0 to 65535. Apply square root only once, in the transmitter or the PLC.

Prepared by	Checked by
Name:	Name:
Signature:	Signature:
Date:	Date: