

STT04 Quick Reference Card

2600T (262/264, 266/268) & 600T Pressure Transmitters



Database Parameters

Parameter Name	CONF Sequence Step Name	Parameter Value	Note
Xmtr Tag Name	STT04 CONFIGURATION	Text entry, 8 chars.	
Xmtr Mode	SELECT MODE	Analog or Digital Selection	
Xmtr Message	MESSAGE	Text entry, 32 chars.	
Xmtr Descriptor	DESCRIPTOR	Text entry, 16 chars.	
Xmtr Date	DATE	Day, Month, & Year Entry	
Xmtr Transfer Function	OUTPUT TYPE	Linear, SQR(x), SQR(x ³), SQR(x ⁵), 5th Order Poly, or Double Poly	
Linear to Square Root Transition Point	LINEAR-SQ ROOT POINT (10%-20%)	Numeric Entry in %	1
Xmtr Damping	DAMPING (0-16 SEC)	Numeric Entry in secs.	
PV Pressure Engineering Units	PRESSURE UNIT	iH ₂ O-68F, iHg-0C, fH ₂ O-68F, mmH ₂ O-20C, mmHg-0C, PSI, BAR, mBAR, g/cm ² , kg/cm ² , Pa, kPa, torr-0C, ATM, Mpa, iH ₂ O-4C, or mmH ₂ O-4C Selection	
Pressure PV Lower & Upper Range Values	LOWER & UPPER RANGE VAL	Numeric entry in Engineering Units	
Xmtr SV Sensor Temperature Units	TEMPERATURE UNITS	°C, °F, °R, or °K, Selection	
Xmtr TV Static Pressure Units	STATIC PRESSURE UNIT	PSI, BAR, or Mpa Selection	
Xmtr QV Free Variable Unit	ENGINEERING UNIT	Choose one from large Selction List	2
Free Variable QV Lower & Upper Range Values	LOWER & UPPER ENG RANGE	Numeric entry in Engineering Units	2

STORE THIS CONFIGURATION? (NO/YES)

Notes:	
1	The linear square root transition pont is only required for the SQR(x) Xmtr transfer function
2	262/264 Xmtrs have a configurable QV. 266/268 and 600T Xmtrs do not have a configurable QV.

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Calibration Functions

Adjustment	Access Method CALIB	Adjustment Method	Note
Xmtr Sensor Full Calibration	SENSOR TRIM - FULL TRIM	Enter low and high calibration pressure values then apply those pressures and press 'Enter' when stable	1
Xmtr Sensor Zero Calibration	SENSOR TRIM - ZERO TRIM	Apply zero pressure, press 'Enter' when stable	
Xmtr Sensor Restore Factory Calibration	SENSOR TRIM - FACTRY TRIM	The factory calibration immediately restored when FACTRY TRIM is selected.	
Xmtr Sensor Static Pressure (TV) Calibration	SENSOR TRIM - STATIC TRIM	The present static pressure (TV) value is displayed. Then the new static pressure value can be entered.	
Xmtr DAC Trim	D-TO-A ADJUST	Arrow keys or mA current value entry	1
Reset Pressure Sensor (PV) Bias	PV BIAS - RESET	Select 'YES' at the RESET PV SCALE CONDITION?	
Set Pressure Sensor PV Bias Zero	PV BIAS - SET PV ZERO	The PV pressure value is displayed, press 'Enter' to apply a PV bias which zeroes the pressure reading.	
Set Pressure Sensor PV Bias Value	PV BIAS - SET PV VAL	The PV pressure value is displayed, press 'Enter' to enter a new pressure value, a PV bias will be applied which will produce the pressure value entered.	
Single Point Re-range, maintains span but not URV or LRV	SET PV OUTPUT % LOW	The PV pressure range is adjusted such that the entered PV value is set by automatic adjustments of the URV and LRV	
Single Point Re-range, maintains LRV but not URV or span	SET PV OUTPUT % HIGH	The PV pressure value range is adjusted such that the entered PV value is set by automatic adjustments to the URV	

Notes:	
1	Requires additional equipment to properly perform the function



Additional Device Parameters

Parameter Name	Access Method MORE	Values/Adjustments	Note
Sensor Information	SENSOR SETUP	Displays sensor and Xmtr URL, LRL, URV, LRV, MWP, temperature limits, and serial numbers	
Xmtr Reset	MASTER RESET	Select to reset the Xmtr, <i>I_{out}</i> is momentarily effected but the Xmtr configuration is unaffected.	
Reset Configuration Changed Flag	RST CFG CHANGED FLAG	Select to reset the Xmtr 'configuration changed flag'	
Xmtr 4-20mA Loop Test	FIX/CANCEL OUTPUT	Select FIX or CANCEL. When FIX is selected a value in mA can be entered	
Xmtr HART Preambles	# RESP PREAMBLES	Numeric entry of the number of HART communications preambles, usually 5	
Integral Digital LCD Setup	LCD SETUP	Select PV, % <i>I_{out}</i> , or Local Value for display. For Local Value select units, ranges, and transfer function	1,2,3
Xmtr Local Keys Enable/Disable	LOCAL KEYS CNTRL	Select to enable or disable the local Xmtr Keys	
Safety Xmtr Proof Test	PROOF TEST	Select to perform Xmtr proof test. Xmtr must be in maintenance mode.	4
Safety Xmtr - maintenance mode operation	ENTER MAINT MODE	Select to place the Xmtr in maintenance mode	4
Safety Xmtr - operate mode operation	ENTER OPERATE MODE	Select to place the Xmtr in operate mode.	4

Notes:	
1	600T Xmtrs have different LCD options; ie, PV, %, & <i>I_{out}</i>
2	2600T 266/268 Xmtrs do not support the integral display option
3	Does not apply to the Cometer or Prometer
4	Only applies to the 2600T 266/268 Safety Xmtr

STT04 Quick Reference Card



For: TH02 Temperature Transmitter,
2600T (262/264, 266/268)
& 600T Pressure Transmitters

STT04 Quick Reference Card

TH02 Temperature Transmitter



Database Parameters

Parameter Name	CONF Sequence Step Name	Parameter Value	Note
Xmtr Tag Name	STT04 CONFIGURATION	Text entry, 8 chars.	
Xmtr Mode	SELECT MODE	Analog or Digital Selection	
Xmtr Message	MESSAGE	Text entry, 32 chars.	
Xmtr Descriptor	DESCRIPTOR	Text entry, 16 chars.	
Xmtr Date	DATE	Day, Month, & Year Entry	
Xmtr Sensor Type	SENSOR TYPE	Linear Wide, Linear Small, Free Style, RTD, or Thermocouple	
RTD Sensor Type	RTD TYPE	Pt100 $\alpha = 0.00385, 0.003916$ or $0.00392, Ni100$ or Cu100 Selection	
t/c Sensor Type	THERMOCOUPLE TYPE	B, C, D, E, J, K, L, N, R, S, T, OR U Selection	
t/c Cold Junction Compensation	REFERENCE JUNCTION	NONE, EXTERNAL, INTERNAL Selection	1
RTD Sensor Factor	SENSOR FACTOR	0.1, 0.2, 0.5, 1, 1.2, 2, 3, 4, 5, 6, 7, 8, 9, or 10 Selection	2
t/c Sensor Factor	SENSOR FACTOR	1, 2, 3, 4, 5, 6, 7, 8, 9, or 10 Selection	2
Xmtr Measurement Type	TYPE OF MEASUREMENT	Single Channel, Differential, or Averaging Selection	3
RTD & Ω , Number of Wires	NUMBER OF WIRES	2, 3, or 4 Selection	4
RTD & Ω Sensor Monitor	SENSOR MONITOR	None, Break Mon, Short Ckt Mon, or Break/Short Ckt Selection	
Xmtr Failure Signal	FAILURE SIGNAL	Over Range, Under Range, Default Value, or Hold Last Selection	5
Xmtr Underrange & Overrange Values	UNDERRANGE & OVERRANGE VALUES	Numeric entry in mA	
RTD & t/c Engineering Unit	ENGINEERING UNIT	$^{\circ}C, ^{\circ}F, ^{\circ}R, \text{ or } ^{\circ}K$, Selection	
Free Style Engineering Unit	ENGINEERING UNIT	$^{\circ}C, ^{\circ}F, ^{\circ}R, ^{\circ}K$, or Spcl Selection	
Linear Wide & Linear Small Engineering Unit	MEASUREMENT	OHMS OR mV Selection	
Sensor Filter	MAINS FILTER	50 Hz, or 60 Hz Selection	
Xmtr Sensor	DAMPING	Numeric Entry in secs.	
Xmtr Lower & Upper Range Values	LOWER & UPPER RANGE VAL	Numeric entry in Engineering Units	
Xmtr Threshold 1 & 2 Values	THRESHOLD 1& 2 VALUES	Numeric entry in %	

STORE THIS CONFIGURATION? (NO/YES)

Notes:	
1	For EXTERNAL a fixed temperature offset is entered
2	The Sensor Factor in most cases is 1
3	Differential & Averaging requires 2 sensors
4	3 & 4 wires is available only for single channel
5	For DEFAULT Value a fixed value in % is entered

STT04 Quick Reference Card

TH02 Temperature Transmitter



Calibration Functions

Adjustment	Access Method CALIB	Adjustment Method	Note
Xmtr DAC Trim	D TO A	Arrow keys or mA current value entry	1
Sensor Input Calibration	INPUT CAL	Value entry in $^{\circ}C, ^{\circ}F, ^{\circ}R, ^{\circ}K, mV$, or Ω configured units	1
Sensor Restore	RESET TRIM	Selection	
Factory Sensor Input Calibration			
Sensor Lead Balance	LEAD BALANCE	Selection	1

Notes:	
1	Requires additional equipment to properly perform the function



Additional Device Parameters

Parameter Name	Access Method MORE	Values/Adjustments	Note
Sensor Operative Limits	SENSOR SETUP	Sensor Limits are displayed	
Xmtr Minimum Sensor Span	SENSOR SETUP	Sensor minimum span is displayed	
Xmtr Serial Number	SENSOR SETUP	Xmtr serial number is displayed	
Xmtr Assembly Identification	SENSOR SETUP	Xmtr assembly identification is displayed	
Xmtr Master Reset	MASTER RESET	Xmtr reset Selection	
Xmtr HART Preambles	# RESP PREAMBLES	Numeric entry of the number of HART communications preambles, usually 5	
Xmtr Configuration Changed Flag	RST CFG CHANGED FLAG	Xmtr reset configuration changed flag Selection	
Xmtr Self Test	DEVICE SELF TEST	Xmtr self test Selection	
Xmtr 4-20mA Loop Test	FIX/CANCEL OUTPUT	Select FIX or CANCEL. When FIX is selected a value in mA can be entered	
Xmtr Factory Initialize	FACTORY PRESET	Select to delete all configuration data. Restores device to factory default state	
Xmtr Piecewise Linear Transfer Function	CHARACTERIST. CURVE	Enter values for up to 32 FREE STYLE transfer function breakpoints	

STT04 Key	Name	Description
	Power Off	Turns off STT04.
	Back	Moves back one step in a menu sequence.
	Options	STT04 Options Configuration Menu.
	Escape	Escape from current operation and return to READY state.
	Power On	Turns on STT04.

STT04 Key	Name	Description
	STT04 Options	Language Communications Format Battery STT04 Name STT04 Rev Auto Shut-Off Keypad Layout

HART Devices:	
ABB Pressure Transmitters:	262/264, 266/268, 263/265, 267/269, 600T, 2000T, AS800, & PTH
ABB Temperature	TH02-202, TS11/TS01, EBTH, TEU211,
ABB Multivariable	267/269
ABB Positioners:	TZID-C, TZID/AZH
ABB Magmeters:	50XE4, 50XM2, & 50SM1
ABB Analytic Transmitters:	82PH, 82EC, 82TE, & 82TC
Generic Type:	HART Universal & popular HART Common Practice commands
Bailey-FSK Devices:	
ABB Pressure Transmitters:	PTS, & BCN
ABB Temperature	EQS, & EQN
ABB Positioners:	AVS
ABB Analytic Transmitters:	TBN480, TBN580, & TBN581

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