

Configuration Data Sheet

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00806-0100-4007, Rev BA

Rosemount 3051

Rosemount® 3051 Pressure Transmitter with 4-20 mA HART® Revision 5 and 7 Selectable protocol

BOLD = Required Value
* = Default

Select only one of the items provided
 One or more of the listed items can be selected

Customer information	
Customer: _____	Contact Name: _____
Phone No: _____	Fax No./Email: _____
P.O./Reference No.: _____	P.O. Line Item: _____
Quote No. _____	Model No.: _____
Customer Signoff: _____	

Tagging	
Hardware Tag: _____	(56 characters)
Software Tag: _____	(8 characters)
Long Software Tag: _____	(32 characters) ⁽¹⁾

(1) Only available with HART Revision 7 Communication (option HR7).

Output information				
Pressure Units:	<input type="radio"/> inH ₂ O at 4 °C	<input type="radio"/> mmH ₂ O at 68 °F	<input type="radio"/> Psi	<input type="radio"/> MPa
	<input type="radio"/> inH ₂ O at 60 °F	<input type="radio"/> inHg at 0 °C	<input type="radio"/> Atm	<input type="radio"/> Bar
	<input type="radio"/> inH ₂ O at 68 °F	<input type="radio"/> mmHg at 0 °C	<input type="radio"/> Torr	<input type="radio"/> mbar
	<input type="radio"/> ftH ₂ O at 68 °F		<input type="radio"/> Pa	<input type="radio"/> g/cm ²
	<input type="radio"/> mmH ₂ O at 4 °C		<input type="radio"/> kPa	<input type="radio"/> kg/cm ²
Transfer Function:	<input type="radio"/> Linear*	<input type="radio"/> Square Root		
Range Points:	4mA = _____ (0*)	20mA = _____ (URL*) ⁽¹⁾		

(1) Default values may be different outside the U.S.A. Consult an Emerson Process Management Representative.

Note

Custom configuration information below this note requires C1 option code.

Output information	
Sensor Temperature units:	<input type="radio"/> °C* <input type="radio"/> °F Damping ⁽¹⁾ (0-60 sec): _____ (0.4 sec.*)

(1) For Range 0 default damping value is 3.2 seconds.



Transmitter information	
Descriptor:	_____ (16 characters)
Message:	_____ (32 characters)
Date:	_____ (Date of Calibration [★])

Digital display information			
<input type="checkbox"/> Engineering Units [★]	<input type="checkbox"/> % of Range	<input type="checkbox"/> Scaled Variable	<input type="checkbox"/> Sensor Temperature
<input type="checkbox"/> Review parameters at startup			

Process variable output assignments			
Primary Variable:	<input type="radio"/> Measured Pressure [★]	<input type="radio"/> Scaled Variable	
Secondary Variable:	<input type="radio"/> Measured Pressure	<input type="radio"/> Scaled Variable	<input type="radio"/> Sensor Temperature [★]
Tertiary Variable:	<input type="radio"/> Measured Pressure	<input type="radio"/> Scaled Variable	<input type="radio"/> Sensor Temperature [★]
Fourth Variable:	<input type="radio"/> Measured Pressure	<input type="radio"/> Scaled Variable	<input type="radio"/> Sensor Temperature [★]

Scaled variable information	
Scaled Units = _____ (5 characters max - spaces consume 0-9, A-Z, /, %, -, and * character positions)	
Transfer Function:	<input type="radio"/> Linear [★] <input type="radio"/> Square Root
Linear Scaled Variable (with Linear option only)	Square Root Scaled Variable (with Square Root option only)
Low pressure value = _____ (Eng. Units)	Low pressure value = 0 (Eng. Units)
High pressure value = _____ (Eng. Units)	High pressure value = _____ (Eng. Units)
Low scaled value = _____ (Scaled Units)	Low scaled value = 0 (Scaled Units)
High scaled value = _____ (Scaled Units)	High scaled value = _____ (Scaled Units)
Linear Offset = _____ (Eng. Units)	Low Flow Cut: <input type="radio"/> On [★] <input type="radio"/> Off _____ (Scaled Units)
Range Values - both categories must be completed.	
(used when scaled variable is set to primary variable)	
4mA = _____ (Scaled Unit) (seven digits max)	20 mA = _____ (Scaled Unit) (seven digits max)

Security information					
Security Switch:	<input type="radio"/> Enable	<input type="radio"/> Disabled [★]	Configuration Buttons ⁽¹⁾ :	<input type="radio"/> Enable [★]	<input type="radio"/> Disabled
Local Operator Interface Password ⁽²⁾ :	<input type="radio"/> Enable	<input type="radio"/> Disabled [★]	HART Lock ⁽³⁾ :	<input type="radio"/> Enable	<input type="radio"/> Disabled [★]
Password (4 digits): _____					

(1) Requires D4, DZ or M4.
 (2) Requires M4.
 (3) Only available with HART Revision 7 Communication (option HR7).

Process alert setpoints	
Process alert setpoints are values set by the user where the transmitter outputs a HART message and digital display information when the applied pressure or temperature goes outside the designated range. The pressure values are limited to the range of the transmitter.	
Pressure Process Alert (HART signal only)	Temperature Process Alert (HART signal only)
<input type="radio"/> On <input type="radio"/> Off*	<input type="radio"/> On <input type="radio"/> Off*
<input type="checkbox"/> Low alert _____ (Eng. Unit)	<input type="checkbox"/> Low alert _____ (Temp. Unit -40 °F, -40 °C)
(LRL ≤ Low Alert ≤ High Alert ≤ URL)	(-40 °C ≤ Low Alert ≤ High Alert ≤ 85 °C)* must have a 5 °C difference
<input type="checkbox"/> High Alert _____ (Eng. Unit)	<input type="checkbox"/> High Alert _____ (Temp. Unit 185 °F, 85 °C)

Custom Alarm and Saturation Signal Levels		
Alarm: Values (mA) the transmitter outputs if it detects a gross malfunction condition.		
Saturation: Values (mA) the transmitter outputs if applied pressure goes outside the 4–20 mA range values. If option CR or CS is ordered, fill out the respective custom alarm and saturation values:		
Alarm and Saturation levels are defined by option codes:	Alarm Value:	Saturation Value:
No option = Standard, High	≥ 21.75 mA	= 20.80 mA
CT = Standard, Low	≤ 3.75 mA	= 3.90 mA
C4 = NAMUR, High	≥ 22.50 mA	= 20.50 mA
CN = NAMUR, Low	≤ 3.60 mA	= 3.80 mA
CR = Custom, High	Enter Value (20.20 to 23.00) _____ (mA)	(20.10 to 22.9) _____ (mA)
CS = Custom, Low	Enter Value (3.40 to 3.80) _____ (mA) ⁽¹⁾	(3.50 to 3.90) _____ (mA) ⁽¹⁾

(1) High alarm must be 0.1 mA greater than high saturation value.

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