

Rosemount™ 3051S High Static Differential Pressure Configuration Data Sheet

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 number: _____	Fax number/email: _____
P.O./reference number: _____	P.O. line item: _____
Quote number: _____	Model number: _____
Customer signoff: _____	

Tagging	
Hardware tag:	<input type="radio"/> Wire-on _____ (85 characters, A-Z, 0-9) <input type="radio"/> Nameplate _____ (120 characters, A-Z, 0-9)
Software tag:	_____ (8 characters, A-Z, 0-9)
Long software tag ⁽¹⁾ :	_____ (32 characters, A-Z, 0-9)

1. Measurement type 7 or transmitter output code X only.

Output information					
Differential pressure:	<input type="radio"/> inH ₂ O*	<input type="radio"/> psi	<input type="radio"/> Pa	<input type="radio"/> ftH ₂ O	<input type="radio"/> MPa
	<input type="radio"/> inHg	<input type="radio"/> bar	<input type="radio"/> kPa	<input type="radio"/> g/cm ²	
	<input type="radio"/> mbar	<input type="radio"/> Torr	<input type="radio"/> mmH ₂ O	<input type="radio"/> inH ₂ O at 4 °C	
	<input type="radio"/> Atm	<input type="radio"/> kg/cm ²	<input type="radio"/> mmHg	<input type="radio"/> mmH ₂ O at 4 °C	
Output:	<input type="radio"/> Linear*	<input type="radio"/> Square Root			
Process pressure			Damping (0-6 sec.) = _____ (0.4 sec.*)		
Lower pressure calibration point (4 mA) = _____ (0*)		Upper pressure calibration point (20 mA) = _____ (URL*)			
Module temperature			Damping (0-6 sec.) = _____ (0.4 sec.*)		
Temperature units: <input type="radio"/> Deg. F	<input type="radio"/> Deg. C				
Lower module temperature calibration point (0%) = _____ (0*)		Upper module temperature calibration point (100%) = _____ (URL*)			
Process temperature⁽¹⁾			Damping (0-6 sec.) = _____ (0.4 sec.*)		
Temperature units: <input type="radio"/> Deg. F	<input type="radio"/> Deg. C				
Lower process temperature calibration point (0%) = _____ (0*)		Upper process temperature calibration point (100%) = _____ (URL*)			

1. Available with measurement type 7 only.

Note

Custom configuration information below this line requires C1 option code.

Digital display information					
<input type="checkbox"/> Differential pressure*	<input type="checkbox"/> % of Range	<input type="checkbox"/> Scaled variable	<input type="checkbox"/> Sensor temperature	<input type="checkbox"/> Process temperature ⁽¹⁾	<input type="checkbox"/> Supply voltage ⁽²⁾

1. Available with measurement type 7 only.
2. Available with transmitter output code X only.

Process variable output assignments				
Primary variable:	<input type="radio"/> Differential pressure*	<input type="radio"/> Scaled variable	<input type="radio"/> Process temperature ⁽¹⁾	
Secondary variable:	<input type="radio"/> Differential pressure	<input type="radio"/> Scaled variable	<input type="radio"/> Device temperature*	<input type="radio"/> Process temperature ⁽¹⁾
	<input type="radio"/> Standard deviation ⁽²⁾	<input type="radio"/> Mean ⁽²⁾	<input type="radio"/> Coefficient of variation ⁽²⁾	
Tertiary variable:	<input type="radio"/> Differential pressure	<input type="radio"/> Scaled variable*	<input type="radio"/> Device temperature	<input type="radio"/> Process temperature ⁽¹⁾
	<input type="radio"/> Standard deviation ⁽²⁾	<input type="radio"/> Mean ⁽²⁾	<input type="radio"/> Coefficient of variation ⁽²⁾	
Quaternary variable:	<input type="radio"/> Differential pressure	<input type="radio"/> Scaled variable	<input type="radio"/> Device temperature	<input type="radio"/> Process temperature ⁽¹⁾
	<input type="radio"/> Standard deviation ⁽²⁾	<input type="radio"/> Mean ⁽²⁾	<input type="radio"/> Coefficient of variation ⁽²⁾	

1. Available with measurement type 7 only.
2. Requires DA2 option code.

Transmitter information	
Descriptor:	_____ (16 characters)
Message:	_____ (32 characters)
Date:	_____ (MM/DD/YYYY) (Date of Calibration*)

Signal selection ⁽¹⁾	
<input type="radio"/> 4–20 mA with simultaneous digital signal based on HART® protocol*	
<input type="radio"/> Burst mode of HART digital process variable	
Burst mode output options:	
<input type="radio"/> Primary variable	<input type="radio"/> Primary variable in percent of range and mA
<input type="radio"/> All dynamic variables in engineering units	<input type="radio"/> All dynamic variables in engineering units and the primary variable mA value
<input type="radio"/> Multidrop communication	Transmitter address (1-15): _____ (1*)

1. Only available with transmitter output code A.

Security information	
Write protect:	<input type="radio"/> On <input type="radio"/> Off*
Local zero and span:	<input type="radio"/> Enabled* <input type="radio"/> Disabled

Custom alarm and saturation signal levels

All categories must be completed for custom configuration.

Requires option C6 or C7

Low alarm⁽¹⁾: ≤ _____ mA (must be between 3.8 and 3.6) High alarm⁽²⁾: ≥ _____ mA (must be between 20.2 and 23.0)

Low saturation: _____ mA (must be between 3.9 and 3.7) High saturation: _____ mA (must be between 20.1 and 21.5)

For reference only:

Alarm values: Values (mA) the transmitter outputs if it detects a gross malfunction condition.

Saturation values: Values (mA) the transmitter outputs if applied pressure goes outside the 4–20 mA range values.

1. Low alarm must be 0.1 mA lower than the low saturation value.
2. High alarm must be at least 0.1 mA higher than the high saturation value.

Scaled variable information

Scaled units = _____ (5 characters max— valid characters include 0-9, A-Z, /, %, -, and *)

Transfer function

Linear[★]

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 Off: On Off[★] _____ (Scaled units)

Range values — both categories must be completed. (used when scaled variable is set to primary variable)

LRV = _____ (Scaled unit) (7 characters max)

URV = _____ (Scaled unit) (7 characters max)

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)

On Off[★]

On Off[★]

Low alert _____ (Eng. unit)

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

High alert _____ (Eng. unit)

High alert _____ (Temp. unit 185 °F, 85 °C)

Service alert⁽¹⁾

Service alert is a configurable countdown timer that provides an alert and custom message to the user.

Alert mode

Countdown time

On Off[★]

Years _____

Message _____

Days _____

Hours _____

1. Requires DA2 option code.

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