

- (1) Requires a C1 option code.
- (2) H2O Range 0-3
- (3) PSI Range 4-5, and all 3051T

DIGITAL DISPLAY INFORMATION (One or more of the listed variables can be selected to be displayed on the LCD display.)

- Engineering Units ***
- % of Range
- Scaled Variable⁽¹⁾
- Sensor Temperature

SIGNAL SELECTION⁽²⁾

- 4–20 mA with simultaneous digital signal based on HART protocol ***
- Burst mode of HART digital process variable⁽¹⁾
 - Burst mode output options:
 - Primary variable
 - All dynamic variables in engineering units
 - Primary variable in percent of range and mA
 - All dynamic variables in engineering units and the primary variable mA value
- Multidrop Communication⁽¹⁾
 - Transmitter Address (1-15): |__|__| (default = 0)

SECURITY INFORMATION ⁽²⁾

Write Protect: On **Off *** Local Zero and Span: **Enabled *** Disabled

ANALOG OUTPUT ALARM AND SATURATION SIGNAL LEVELS^{(1) (2)}

All categories must be completed for custom configuration. Rosemount or NAMUR NE 43 values should be selected via option code.

- Custom (Requires Option C6 or C7)= Low Alarm: (\leq |__|.|__|__| mA)—values must be between 3.8 and 3.6
- Low Saturation (|__|.|__|__| mA)—values must be between 3.9 and 3.7
- * Low alarm must be 0.1 mA lower than the low saturation value
- High Alarm (\geq |__|__|.|__|__| mA)—values must be between 20.2 and 23.0
- High Saturation (|__|__|.|__|__| mA)—values must be between 20.1 and 21.5
- * High alarm must be at least 0.1 mA higher than the high saturation value

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.

Standard * =	Low Alarm: (\leq 3.75 mA)	Low Saturation (3.9 mA)
	High Alarm (\geq 21.75 mA)	High Saturation (20.8 mA)
NAMUR NE 43 (Option C4 or C5) =	Low Alarm: (\leq 3.6 mA)	Low Saturation (3.8 mA)
	High Alarm (\geq 22.5 mA)	High Saturation (20.5 mA)

PROCESS VARIABLE OUTPUT ASSIGNMENTS ⁽¹⁾

- | | | | |
|---------------------------|---|---|--|
| Primary Variable * | <input type="checkbox"/> Measured Pressure * | <input type="checkbox"/> Scaled Variable ⁽¹⁾ | |
| Secondary Variable: | <input type="checkbox"/> Measured Pressure | <input type="checkbox"/> Scaled Variable ⁽¹⁾ | <input type="checkbox"/> Device Temperature * |
| Tertiary Variable: | <input type="checkbox"/> Measured Pressure | <input type="checkbox"/> Scaled Variable^{(1) *} | <input type="checkbox"/> Device temperature |

- (1) Not available with output code B.
- (2) Requires a C1 option code.

SCALED VARIABLE INFORMATION ^{(1) (2)}	
Scaled Units = _ _ _ _ _ _ _ _ (5 characters max—spaces consume 0-9, A-Z, /, %, -, and * character positions)	
Transfer Function=	
<input type="checkbox"/> Linear *	<input type="checkbox"/> 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="checkbox"/> On <input type="checkbox"/> Off * _ _ _ _ _ _ _ _ (Scaled unit)
Range Values—both categories must be completed. (used when scaled variable is set to primary variable)	
LRV _ _ _ _ _ _ _ _ (Scaled Unit) (seven characters max)	URV _ _ _ _ _ _ _ _ (Scaled Unit) (seven characters max)
PROCESS ALERT SETPOINTS ⁽¹⁾	
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) <input type="checkbox"/> On <input type="checkbox"/> Off *	Temperature Process Alert (HART signal only) <input type="checkbox"/> On <input type="checkbox"/> 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)	
<input type="checkbox"/> High Alert _ _ _ _ _ _ _ _ (Eng. Unit)	<input type="checkbox"/> High Alert _ _ _ _ _ _ _ _ (Temp. Unit 185°F, 85 °C)

(1) Requires a C1 option code.

(2) Not available with output code B.

Rosemount 3051S Series

Product Data Sheet
00813-0100-4801, Rev GA
Catalog 2006-2007

Rosemount, Annubar, ProPlate, and the Rosemount logotype are registered trademarks of Rosemount Inc. PlantWeb is a mark of one of the Emerson Process Management companies. Instrument Toolkit, Saturn, MultiVariable and Coplanar are trademarks of Rosemount Inc. Eurofast and Minifast are registered trademarks of Turck Inc. SuperModule is a registered trademark of Rosemount, Inc. HART is a registered trademark of the HART Communications Foundation. Hastelloy and Hastelloy C-276 are registered trademarks of Haynes International. Monel is a registered trademark of International Nickel Co. Syltherm, Dow Corning, and D.C. are registered trademarks of Dow Corning Co. Neobee M-20 is a registered trademark of Stephan Chemical Co. FOUNDATION fieldbus is a trademark of the Fieldbus Foundation. Teflon is a registered trademark of E.I. du Pont de Nemours & Co. Grafoil is a trademark of Union Carbide Corp. WAGO is a registered trademark of WAGO Kontakttechnik GmbH, Germany. All other marks are the property of their respective owners.

This 3051 product may be protected by one or more of the following: U.S. Patent Nos. 4466290; 4612812; 4866435; 4988990; 5083091; 5122794; 5166678; 5248167; 5287746; 5333504; 5585777; 6017143; 6119047; Des. 439177; Des. 439178; Des. 439179; Des. 439180; Des. 439181; Des. 441672. May depend on model. Other U.S. and foreign patents issued and pending.

Emerson Process Management

Rosemount Inc.
8200 Market Boulevard
Chanhassen, MN 55317 USA
T (U.S.) 1 800 999 9307
T (International) (952) 906 8888
F (952) 949 7001

www.rosemount.com

Emerson Process Management	Emerson Process Management Asia
Heath Place	Pacific Private Limited
Bognor Regis	1 Pandan Crescent
West Sussex PO22 9SH	Singapore 128461
England	T (65) 6777 8211
T 44 (0) 1243 863121	F (65) 6777 0947
F 44 (0) 1243 867554	Enquiries@AP.EmersonProcess.com

