

# Rosemount 3051T In-Line Transmitter ordering information



Rosemount 3051T In-Line Pressure Transmitters are the industry standard for gage and absolute pressure measurement. The in-line, compact design allows the transmitter to be connected directly to a process for quick, easy and cost effective installation.

- Loop Integrity and Plugged Impulse Line Diagnostics detect issues that might compromise the integrity of the output signal (code DA1).
- Bluetooth® Connectivity enables efficient, reliable, and safe configuration and maintenance (code BLE).
- Back-lit Graphical Display with Local Language Capability (code M6).
- Safety certification and proof testing (code QT and T9).

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## Online product configurator

Many products are configurable online using our Product Configurator. Select the **Configure** button or visit our [website](#) to start. With this tool's built-in logic and continuous validation, you can configure your products more quickly and accurately.

## Specifications and options

See the Specifications and options section for more details on each configuration. Specification and selection of product materials, options, or components must be made by the purchaser of the equipment. See the Material selection section for more information.

## Model codes

Model codes contain the details related to each product. Exact model codes will vary; an example of a typical model code is shown in [Figure 2](#).

**Figure 2: Model Code Example**

**3051TG3A2B21A WR5M6BLEDA1**

**1**

**2**

1. Required model components (choices available on most)
2. Additional options (variety of features and functions that may be added to products)

## Optimizing lead time

The starred offerings (★) represent the most common options and should be selected for the fastest delivery times. The non-starred offerings are subject to additional delivery lead time.

## Required model components

### Model

Code	Description	
3051T	In-Line Pressure Transmitter	★

### Pressure type

Code	Description	
G	Gage	★
A <sup>(1)</sup>	Absolute	★

(1) Wireless output (code X) available in absolute measurement type (code A) with only range 1–5, with 14-NPT process connection (code 2B) and housing (code P).

### Pressure range

Code	Gage (Rosemount 3051TG) <sup>(1)</sup>	Absolute (Rosemount 3051TA)	
0	-5 to 5 psi (-344.74 to 344.74 mbar)	N/A	★
1	-14.7 to 30 psi (-1.01 to 2.06 bar)	0 to 30 psia (0 to 2.06 bar)	★
2	-14.7 to 150 psi (-1.01 to 10.34 bar)	0 to 150 psia (0 to 10.34 bar)	★
3	-14.7 to 800 psi (-1.01 to 55.15 bar)	0 to 800 psia (0 to 55.15 bar)	★
4	-14.7 to 4000 psi (-1.01 to 275.79 bar)	0 to 4000 psia (0 to 275.79 bar)	★
5	-14.7 to 10000 psi (-1.01 to 689.47 bar)	0 to 10000 psia (0 to 689.47 bar)	★
6 <sup>(2)</sup>	-14.7 to 20000 psi (-1.01 to 1378.95 bar)	0 to 20000 psia (0 to 1378.95 bar)	

(1) Rosemount 3051TG lower range limit assumes atmospheric pressure of 14.7 psig.

(2) Not available with PROFIBUS PA or Low Power 1–5 Vdc transmitter output (option code W or M), inert sensor fill fluid (option code 2), NSW drinking water approval (option code DW), or assemble to manifolds (option code S5).

### Transmitter output

Code	Description	
A	4–20 mA with digital signal based on HART® Protocol	★
F	FOUNDATION™ Fieldbus Protocol	★
W <sup>(1)</sup>	PROFIBUS® PA Protocol	★
X <sup>(2)</sup>	Wireless (requires wireless options and engineered polymer housing)	★
M <sup>(3)</sup>	Low-power, 1–5 Vdc with digital signal based on HART Protocol	

(1) For local addressing and configuration, M4 (LOI) is required. Not available with product certification codes E4, EM, EP, I6, IM, KD, KL, KM, KP, KS, and N3.

(2) This option is only available with intrinsically safe approvals.

(3) Only available with C6, E2, E5, I5, K5, KB, EM, IM, KM, EP, and E8 product certifications.

### Process connection style

Code	Description	
2B	½-14 NPT female (range 0-5 only)	★
2C <sup>(1)</sup>	G½ A EN837-1 male (range 0-4 only)	★
2F <sup>(2)</sup>	Coned and threaded, compatible with autoclave Type F-250-C (range 5-6 only)	
61 <sup>(3)(4)</sup>	Non-threaded instrument flange (range 1-4 only)	

(1) Not available with S1, S5, or WSM. Wireless output (code X) not available with absolute pressure type or C-276 diaphragm material.

(2) Not available with wireless (output code X) for range 5.

(3) Not available with wireless (output code X).

(4) Only available with 316L stainless steel isolating diaphragm.

### Isolating diaphragm

Materials of Construction comply with recommendations per NACE MR0175/ISO 15156 for sour oil field production environments. Environmental limits apply to certain materials. Consult latest standard for details. Selected materials also conform to NACE MR0103 for sour refining environments.

Code	Isolating diaphragm	Process connection wetted parts material	
2	316L stainless steel	316L stainless steel	★
3	Alloy C-276	Alloy C-276	★
7	Gold-plated 316 stainless steel	316L stainless steel	

### Sensor fill fluid

Code	Description	
1	Silicone	★
2 <sup>(1)</sup>	Inert	

(1) Not available with wireless (output code X).

### Housing material

Code	Housing material	Conduit entry size	
A	Aluminum	½-14 NPT	★
B	Aluminum	M20 x 1.5	★
E	Aluminum, ultra low copper	½-14 NPT	
F	Aluminum, ultra low copper	M20 x 1.5	
J	Stainless steel	½-14 NPT	★
K	Stainless steel	M20 x 1.5	
P <sup>(1)</sup>	Engineered polymer	No conduit entries	★
D <sup>(2)</sup>	Aluminum	G½	
M <sup>(2)</sup>	Stainless steel	G½	

(1) Only available with wireless (output code X). Only available with gauge pressure ranges 1-4.

(2) Transmitter conduit entry will be ½ NPT, and a ½ NPT to G½ thread adapter will be provided. Only available with product certifications options I1, I2, I3, I7, IA, IB, IM, KA, N1, N3, N7. Product certifications options E4 and IG are available with aluminum only (option D).

## Wireless options

Requires wireless output (code X) and engineered polymer housing (code P).

### Wireless transmit rate, operating frequency, and protocol

Code	Description	
WA3	User configurable transmit rate, 2.4 GHz WirelessHART®	★

### Antenna and SmartPower™

Code	Description	
WP5	Internal antenna, compatible with Green Power Module (I.S. Power Module sold separately).	★

## Additional options

### Local wireless device access

Code	Description	
BLE <sup>(1)</sup>	Bluetooth® configuration and maintenance	★

(1) Requires the Graphical LCD Display (code M6).

### Extended product warranty

Code	Description	
WR3	3-year limited warranty	★
WR5	5-year limited warranty	★

### Plantweb™ control functionality

Code	Description	
A01	FOUNDATION™ Fieldbus control function block suite	★

### Plantweb™ diagnostic functionality

Code	Description	
DA0 <sup>(1)</sup>	Loop Integrity Diagnostic	★
DA1 <sup>(1)</sup>	Loop Integrity and Plugged Impulse Line Diagnostics	★
D01	FOUNDATION™ Fieldbus Diagnostics Suite	★

(1) Only available with 4-20 mA HART protocol (code A).

## Integral assembly

“Assemble-to” items are specified separately and require a completed model number.

Code	Description	
S5	Assemble to Rosemount 306 Integral Manifold	★

## Diaphragm seal assemblies

“Assemble-to” items are specified separately and require a completed model number.

Code	Description	
S1	Assemble to one Rosemount seal	★

## Mounting bracket

Panel mounting bolts are not supplied.

Code	Description	
B4	Bracket for 2-in. pipe or panel mounting, all stainless steel	★

## Product certifications

Code	Description	
E8	ATEX Flameproof	★
I1 <sup>(1)</sup>	ATEX Intrinsic Safety	★
IA	ATEX FISCO Intrinsic Safety; for FOUNDATION™ Fieldbus or PROFIBUS® PA Protocol only	★
N1	ATEX Type n Certification	★
K8	ATEX Flameproof, Intrinsic Safety, Type n, Dust (combination of E8, I1 and N1)	★
E4 <sup>(2)</sup>	Japan Flameproof	★
E5	USA Explosion-proof, Dust Ignition-proof	★
I5 <sup>(3)</sup>	USA Intrinsically Safe, Nonincendive	★
K5	USA Explosion-proof, Dust Ignition-proof, Intrinsically Safe, and Division 2	★
E6	Canada Explosion-proof, Dust Ignition-proof, Division 2	★
I6	Canada Intrinsic Safety	★
C6	Canada Explosion-proof, Dust Ignition-proof, Intrinsically Safe, and Division 2	★
K6	Canada and ATEX Explosion-proof, Intrinsically Safe, and Division 2 (combination of C6, E8, and I1)	★
E7	IECEX Flameproof	★
I7	IECEX Intrinsic Safety	★
N7	IECEX Type n Certification	★
K7	IECEX Flameproof, Dust Ignition-proof, Intrinsic Safety, and Type n (combination of I7, N7, and E7)	★
IG	IECEX FISCO Intrinsically Safe; for FOUNDATION Fieldbus or PROFIBUS PA Protocols only	★
E2	Brazil Flameproof	★
I2	Brazil Intrinsic Safety	★
IB	Brazil FISCO intrinsically safe; for FOUNDATION Fieldbus or PROFIBUS PA Protocols only	★
K2	Brazil Flameproof, Intrinsic Safety	★

E3	China Flameproof	★
I3	China Intrinsic Safety	★
EM	Technical Regulations Customs Union (EAC) Flameproof	★
IM	Technical Regulations Customs Union (EAC) Intrinsic Safety	★
KM	Technical Regulations Customs Union (EAC) Flameproof and Intrinsic Safety	★
KB	USA and Canada Explosion-proof, Dust Ignition-proof, Intrinsically Safe, and Division 2 (combination of K5 and C6)	★
KD	USA, Canada, and ATEX Explosion-proof, Intrinsically Safe (combination of K5, C6, I1, and E8)	★
KL <sup>(4)</sup>	USA, Canada, IECEx, ATEX Intrinsic Safety Combination	★
KS	USA, Canada, IECEx, ATEX Explosion-proof, Intrinsically Safe, Dust, Non-Incendive, Type-N, Div. 2	★
EP	Republic of Korea Flameproof	★
IP	Republic of Korea Intrinsic Safety	★
KP	Republic of Korea Flameproof, Intrinsic Safety	★

- (1) *Dust approval not applicable to wireless (output code X). See [Rosemount 3051 product certifications](#) for wireless approvals.*
- (2) *Only available with 4-20 mA HART<sup>®</sup> (output code A), FOUNDATION<sup>™</sup> Fieldbus (output code F), or PROFIBUS<sup>®</sup> PA (output code W). Only available with aluminum housing and G½ conduit entry size (housing material code D).*
- (3) *Nonincendive certification not provided with wireless (output code X).*
- (4) *Only available with wireless (output code X).*

### Drinking water approval

Not available with alloy C-276 isolator (code 3), assemble-to manifolds (code S5), assemble-to seals (code S1), and surface finish certification (code Q16).

Code	Description	
DW	NSF drinking water approval	★

### Shipboard approvals

Not available with wireless output (code X).

Code	Description	
SBS	American Bureau of Shipping	★
SBV <sup>(1)</sup>	Bureau Veritas (BV)	★
SDN	Det Norske Veritas	★
SLL <sup>(1)</sup>	Lloyds Register (LR)	★

- (1) *Only available with product certifications E7, E8, I1, I7, IA, K7, K8, KD, N1, and N7.*

### SST tagging

Code	Description	
Y2	316 SST nameplate, top tag, wire-on tag, and fasteners	

### Custody transfer

The custody transfer option is only available with HART 4–20 mA output (code A).

Code	Description	
C5	Measurement Canada Accuracy Approval (limited availability depending on transmitter type and range; contact an Emerson representative).	★

### Calibration certification

Code	Description	
Q4	Calibration certificate	★
QP	Calibration certificate and tamper evident seal	★

### Material traceability certification

Code	Description	
Q8	Material traceability certification per EN 10204 3.1.B	★

### Positive material identification (PMI)

Code	Description	
Q76	PMI verification and certificate	★

### Quality certification for safety

The quality certification for safety is only available with HART® 4–20 mA output (code A).

Code	Description	
QT	Safety certified to IEC 61508 with certificate of FMEDA	★

### Enhanced safety

Only available with HART® 4-20 mA output (Code A).

Code	Description	
T9	Enhanced SIS proof testing and logging	★

### Configuration buttons

Code	Description	
D1 <sup>(1)</sup>	Quick service buttons	★
D4 <sup>(2)</sup>	Analog zero and span	★
DZ <sup>(3)</sup>	Digital zero trim	★

(1) Only available with Graphical LCD Display (code M6)

(2) Only available with HART 4–20 mA output (code A).

(3) Only available with HART 4–20 mA output (output code A) and wireless output (output code X).

### Display and interface options

Code	Description	
M6 <sup>(1)</sup>	Graphical LCD display	★
M5	LCD display	★

Code	Description	
M4 <sup>(2)</sup>	LCD display with LOI	★

(1) Only available with 4-20 mA HART® output (code A).

(2) Only available with 4-20 mA HART output (code A) and PROFIBUS-PA (code W).

## Wireless sensor module

Code	Description	
WSM	Wireless stainless steel sensor module	★

## Transient protection

The transient protection option is not available with wireless (output code X). The T1 option is not needed with FISCO Product Certifications; transient protection is included in the FISCO product certification codes IA, IB, and IE.

Code	Description	
T1	Transient protection terminal block	★

## Conduit plug

The conduit plug option is not available with wireless output (code X).

Code	Description	
DO	316 SST conduit plug	★

## Software configuration

Code	Description	
C1	Custom software configuration. (For wired, see the <a href="#">Rosemount 3051 Configuration Data Sheet</a> . For wireless, see the <a href="#">Rosemount 3051 Wireless Configuration Data Sheet</a> .)	★

## Low power output

Code	Description	
C2	0.8–3.2 Vdc output with digital signal based on HART Protocol (available with output code M only)	★

## Alarm levels

The alarm levels option is only available with HART 4–20 mA output (code A).

Code	Description	
C4 <sup>(1)</sup>	Analog output levels compliant with NAMUR recommendation NE 43, alarm high	★
CN <sup>(1)</sup>	Analog output levels compliant with NAMUR recommendation NE 43, alarm low	★
CR	Custom alarm and saturation signal levels, high alarm (requires C1)	★
CS	Custom alarm and saturation signal levels, low alarm (requires C1)	★
CT	Rosemount standard low alarm	★

(1) NAMUR-compliant operation is preset at the factory and can be changed to standard operation in the field for the standard Rosemount 3051.



## Pressure testing

Code	Description	
P1 <sup>(1)</sup>	Hydrostatic testing with certificate	★

(1) Not available with pressure range 0.

## Cleaning process area

Not valid with alternate process connection (code S5).

Code	Description	
P2	Cleaning for special service	
P3	Cleaning for < 1 ppm chlorine/fluoride	

## Ground screw

The ground screw option is not available with wireless output (code X). The V5 option is not needed with the T1 option; external ground screw assembly is included with the T1 option.

Code	Description	
V5	External ground screw assembly	★

## Surface finish

Code	Description	
Q16	Surface finish certification for sanitary remote seals	★

## Toolkit total system performance reports

Code	Description	
QZ	Remote seal system performance calculation report	★

## Conduit electrical connector

The conduit electrical connector option is not available with wireless output (code X).

Code	Description	
GE	M12, 4-pin, male connector (eurofast <sup>®</sup> )	★
GM	A size mini, 4-pin, male connector (minifast <sup>®</sup> )	★

## NACE certificate

Note that NACE<sup>®</sup>-compliant wetted materials are required. Materials of construction must comply with recommendations per NACE MR0175/ISO 15156 for sour oil field production environments. Environmental limits apply to certain materials. Consult the latest standard for details. All selected materials must also conform to NACE MR0103 for sour refining environments.

Code	Description	
Q15	Certificate of Compliance to NACE MR0175/ISO 15156 for wetted materials	★
Q25	Certificate of Compliance to NACE MR0103 for wetted materials	★

## Enhanced software

Enhanced software enables application specific configuration, expanded process alerts, and logging capabilities.

Code	Description	
RK	Enhanced software	★

## Cold temperature

This option is only available for pressure ranges 1–5 with 4-20 mA HART® and FOUNDATION Fieldbus Protocol, and silicone sensor fill fluid. BR5 and BR6 are not available with Non-threaded instrument flange (code 61) or the assemble to one Rosemount seal (option S1).

Code	Description	
BR5 <sup>(1)</sup>	–58 °F (–50 °C) cold temperature operation	★
BR6 <sup>(2)</sup>	–76 °F (–60 °C) cold temperature operation	★

(1) *If Product Certification Options are required, the BR5 option is only available with approval codes C6, E2, E5, E6, E7, EM, EP, I2, I5, I6, I7, IM, IP, K2, K5, K7, KB, KM, and KP.*

(2) *If Product Certification Options are required, the BR6 option is only available with approval codes E2, E7, EM, I2, I6, I7, IM, IP, K2, K7, and KM.*

## Wireless power accessory

This option is only available with wireless output (code X).

Code	Description	
HS	Hot swap power adapter for power module replacement	