

Required model components

Model

Code	Description
3051S	Scalable pressure transmitter

Performance class

For additional details, see [Specifications](#).

Code	Description	
1	Ultra: 0.025% span accuracy, 200:1 rangedown, 15-year stability, 15-year limited warranty	★
3 ⁽¹⁾	Ultra for Flow: 0.04% reading accuracy, 200:1 turndown, 15-year stability, 15-year limited warranty	★
2	Classic: 0.035% span accuracy, 150:1 rangedown, 15-year stability	★

(1) This option is only available with range codes 2A and 3A, 316L SST or Alloy C-276 isolating diaphragm and silicone fill fluid.

Connection type

Code	Description	
C	Coplanar	★

Measurement type

Performance Class code 3 is available with Measurement Type code D only.

Code	Description	
D	Differential	★
G	Gauge	★
A	Absolute	

Pressure range

Code	Description			
	Differential	Gauge	Absolute	
1A	-25 to 25 inH ₂ O (-62.16 to 62.16 mbar)	-25 to 25 inH ₂ O (-62.16 to 62.16 mbar)	0 to 30 psia (0 to 2.07 bar)	★
2A	-250 to 250 inH ₂ O (-621.60 to 621.60 mbar)	-250 to 250 inH ₂ O (-621.60 to 621.60 mbar)	0 to 150 psia (0 to 10.34 bar)	★
3A	-1000 to 1000 inH ₂ O (-2.49 to 2.49 bar)	-393 to 1000 inH ₂ O (-0.97 to 2.49 bar)	0 to 800 psia (0 to 55.16 bar)	★
4A	-300 to 300 psi (-20.68 to 20.68 bar)	-14.2 to 300 psig (-0.97 to 20.68 bar)	0 to 4000 psia (0 to 275.79 bar)	★

Code	Description			
5A	-2000 to 2000 psi (-137.89 to 137.89 bar)	-14.2 to 2000 psig (-0.97 to 137.89 bar)	N/A	★
0A ⁽¹⁾	-3 to 3 inH ₂ O (-7.46 to 7.46 mbar)	N/A	0 to 5 psia (0 to 0.34 bar)	

(1) 3051S_CD0 is only available with SST traditional flange, 316L SST diaphragm material, and Bolting option L4.

Isolating diaphragm

Code	Description	
2 ⁽¹⁾	316L SST	★
3 ⁽¹⁾	Alloy C-276	★
4 ⁽¹⁾	Alloy 400	
5 ⁽²⁾	Tantalum	
6 ⁽¹⁾	Gold-plated Alloy 400 (includes graphite-filled PTFE O-ring)	
7 ⁽¹⁾	Gold-plated 316L SST	

(1) Materials of Construction comply with metallurgical requirements highlighted within 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. Order with Q15 or Q25 to receive a NACE certificate.

(2) Tantalum diaphragm material is only available for ranges 2A-5A, differential and gauge.

Process connection

Code	Description	Size	Materials of construction			
			Flange material	Drain vent	Bolting	
000	None (no process flange)	N/A	N/A	N/A	N/A	★
A11 ⁽¹⁾	Assemble to Rosemount 305 integral manifold	N/A	N/A	N/A	N/A	★
A12 ⁽¹⁾	Assemble to Rosemount 304 or AMF manifold and SST traditional flange	N/A	N/A	N/A	N/A	★
A15	Assemble to Rosemount 304 or AMF manifold to SST traditional flange with Alloy C-276 drain vents	N/A	N/A	N/A	N/A	★
A16 ⁽¹⁾	Assemble to 304 or AMF manifold to DIN SST traditional flange	N/A	N/A	N/A	N/A	★
A22	Assemble to Rosemount 304 or AMF manifold to SST coplanar flange	N/A	N/A	N/A	N/A	★
B11 ⁽¹⁾⁽²⁾⁽³⁾	Assemble to one Rosemount 1199 seal	N/A	SST	N/A	N/A	★

Code	Description	Size	Materials of construction			
			Flange material	Drain vent	Bolting	
B12 ⁽¹⁾⁽²⁾⁽³⁾	Assemble to two Rosemount 1199 seals	N/A	SST	N/A	N/A	★
C11 ⁽¹⁾	Assemble to Rosemount 405C or 405P primary element	N/A	N/A	N/A	N/A	★
D11 ⁽¹⁾	Assemble to Rosemount 1195 integral orifice and Rosemount 305 integral manifold	N/A	N/A	N/A	N/A	★
EA2 ⁽¹⁾	Assemble to Rosemount 485 or 405A Annubar primary element with coplanar flange	N/A	SST	316 SST	N/A	★
EA3 ⁽¹⁾	Assemble to Rosemount 485 or 405A Annubar primary element with coplanar flange	N/A	Cast C-276	Alloy C-276	N/A	★
EA5 ⁽¹⁾	Assemble to Rosemount 485 or 405A Annubar primary element with coplanar flange	N/A	SST	Alloy C-276	N/A	★
E11	Coplanar flange	¼–18 NPT	CS	316 SST	N/A	★
E12	Coplanar flange	¼–18 NPT	SST	316 SST	N/A	★
E13 ⁽⁴⁾	Coplanar flange	¼–18 NPT	Cast C-276	Alloy C-276	N/A	★
E14	Coplanar flange	¼–18 NPT	Cast Alloy 400	Alloy 400/K-500	N/A	★
E15 ⁽⁴⁾	Coplanar flange	¼–18 NPT	SST	Alloy C-276	N/A	★
E16 ⁽⁴⁾	Coplanar flange	¼–18 NPT	CS	Alloy C-276	N/A	★
E21	Coplanar flange	RC ¼	CS	316 SST	N/A	★
E22	Coplanar flange	RC ¼	SST	316 SST	N/A	★
E23 ⁽⁴⁾	Coplanar flange	RC ¼	Cast C-276	Alloy C-276	N/A	★
E24	Coplanar flange	RC ¼	Cast Alloy 400	Alloy 400/K-500	N/A	★
E25 ⁽⁴⁾	Coplanar flange	RC ¼	SST	Alloy C-276	N/A	★
E26 ⁽⁴⁾	Coplanar flange	RC ¼	CS	Alloy C-276	N/A	★
F12	Traditional flange	¼–18 NPT	SST	316 SST	N/A	★
F13 ⁽⁴⁾	Traditional flange	¼–18 NPT	Cast C-276	Alloy C-276	N/A	★
F14	Traditional flange	¼–18 NPT	Cast Alloy 400	Alloy 400/K-500	N/A	★
F15 ⁽⁴⁾	Traditional flange	¼–18 NPT	SST	Alloy C-276	N/A	★
F22	Traditional flange	RC ¼	SST	316 SST	N/A	★
F23 ⁽⁴⁾	Traditional flange	RC ¼	Cast C-276	Alloy C-276	N/A	★
F24	Traditional flange	RC ¼	Cast Alloy 400	Alloy 400/K-500	N/A	★
F25 ⁽⁴⁾	Traditional flange	RC ¼	SST	Alloy C-276	N/A	★
F52	DIN-compliant traditional flange	¼–18 NPT	SST	316 SST	7/16-in. bolting	★
G11	Vertical mount level flange	2-in. ANSI Class 150	SST	316 SST	N/A	★

Code	Description	Size	Materials of construction			
			Flange material	Drain vent	Bolting	
G12	Vertical mount level flange	2-in. ANSI Class 300	SST	316 SST	N/A	★
G21	Vertical mount level flange	3-in. ANSI Class 150	SST	316 SST	N/A	★
G22	Vertical mount level flange	3-in. ANSI Class 300	SST	316 SST	N/A	★
G31	Vertical mount level flange	DIN- DN 50 PN 40	SST	316 SST	N/A	★
G41	Vertical mount level flange	DIN- DN 80 PN 40	SST	316 SST	N/A	★
F32	Bottom vent traditional flange	¼–18 NPT	SST	316 SST	N/A	
F42	Bottom vent traditional flange	RC ¼	SST	316 SST	N/A	
F62	DIN-compliant traditional flange	¼–18 NPT	SST	316 SST	M10 bolting	
F72	DIN-compliant traditional flange	¼–18 NPT	SST	316 SST	M12 bolting	

- (1) "Assemble to" items are specified separately and require a completed model number. Process connection option codes B12, C11, D11, EA2, EA3, and EA5 are only available on differential Measurement Type, code D.
- (2) Consult an Emerson representative for performance specifications.
- (3) Not available with Performance Class code 3.
- (4) Materials of Construction comply with metallurgical requirements highlighted within 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. Order with Q15 or Q25 to receive a NACE certificate.

Transmitter output

Code	Description	
A	4–20 mA with digital signal based on HART® protocol	★
F(1)	FOUNDATION™ Fieldbus protocol	★
X(2)	Wireless (requires wireless options and wireless Plantweb™ housing)	★

- (1) Requires Plantweb housing.
- (2) Only intrinsically safe approval codes apply.

Housing style

Code	Description	Material	Conduit entry size	
00	None (SuperModule spare part, order output code A)	N/A	N/A	★
1A	Plantweb™ housing	Aluminum	½–14 NPT	★
1B	Plantweb housing	Aluminum	M20 x 1.5	★
1J	Plantweb housing	SST	½–14 NPT	★
1K	Plantweb housing	SST	M20 x 1.5	★
5A(1)	Wireless Plantweb housing	Aluminum	½–14 NPT	★
5J(1)	Wireless Plantweb housing	SST	½–14 NPT	★

Code	Description	Material	Conduit entry size	
2A	Junction box housing	Aluminum	½–14 NPT	★
2B	Junction box housing	Aluminum	M20 x 1.5	★
2J	Junction box housing	SST	½–14 NPT	★
2E	Junction box housing with output for remote display and interface	Aluminum	½–14 NPT	★
2F	Junction box housing with output for remote display and interface	Aluminum	M20 x 1.5	★
2M	Junction box housing with output for remote display and interface	SST	½–14 NPT	★
7J ⁽²⁾	Quick connect (A size mini, 4-pin male termination)	SST	N/A	★
1C	Plantweb housing	Aluminum	G½	
1L	Plantweb housing	SST	G½	
2C	Junction box housing	Aluminum	G½	
2G	Junction box housing with output for remote display and interface	Aluminum	G½	

(1) Only available with output code X.

(2) Available with output code A only. Available approvals are FM Intrinsically Safe; Nonincendive (option code I5), CSA Intrinsically Safe (option code I6), ATEX Intrinsic Safety (option code I1), or IECEx Intrinsic Safety (option code I7). Contact an Emerson representative for additional information.

Wireless options

Update rate

Code	Description	
WA	User configurable update rate	★

Operating frequency and protocol

Code	Description	
3	2.4 GHz DSSS, IEC 62591 (<i>WirelessHART</i>)	★

Omni-directional wireless antenna

Code	Description	
WK	External antenna	★
WM	Extended range, external antenna	★
WJ	Remote antenna	★
WN	High-gain, remote antenna	

Smartpower™

Long-Life Power Module must be shipped separately, order Power Module 701PBKKF.

Code	Description	
1	Adapter for black power module (I.S. Power Module sold separately)	★

Additional options

HART® Revision configuration (requires HART Protocol output code A)

Option HR7 configures the HART output to HART Revision 7. This option requires the selection of the Advanced Diagnostics (DA2) option. The device with this option can be field configured to HART Revision 5 or 7 if desired.

Code	Description	
HR7	Configured for HART Revision 7	★

Extended product warranty

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

Plantweb control functionality

Code	Description	
A01	FOUNDATION™ Fieldbus advanced control function block suite	★

Diagnostics suite

Code	Description	
D01	FOUNDATION™ Fieldbus diagnostics suite (Process Intelligence, Plugged Impulse Line diagnostic)	★
DA2 ⁽¹⁾	Advanced HART® diagnostics suite (Process Intelligence, Loop Integrity, Plugged Impulse Line diagnostic, Process Alerts, Service Alerts, Variable Log, Event Log)	★

(1) Requires Plantweb housing and output code A. Includes Hardware Adjustments as standard.

Mounting bracket

For process connection option code A11, the mounting bracket must be ordered as part of the manifold model number.

Code	Description	
B4	Coplanar flange bracket, all SST, 2-in. pipe and panel	★
B1	Traditional flange bracket, CS, 2-in. pipe	★
B2	Traditional flange bracket, CS, panel	★
B3	Traditional flange flat bracket, CS, 2-in. pipe	★

Code	Description	
B7	Traditional flange bracket, B1 with SST bolts	★
B8	Traditional flange bracket, B2 with SST bolts	★
B9	Traditional flange bracket, B3 with SST bolts	★
BA	Traditional flange bracket, B1, all SST	★
BC	Traditional flange bracket, B3, all SST	★
BE	316SST B4-style bracket with 316SST bolting	★

Software configuration

Code	Description	
C1 ⁽¹⁾	Custom software configuration (requires Configuration Data Sheet)	★
C2	Custom flow configuration (requires H01 and Configuration Data Sheet)	★

(1) Not available with output code F.

Gauge pressure calibration

Code	Description	
C3	Gauge pressure calibration on Rosemount 3051S_CA4 only	★

Alarm limit

This is not available with output code F and X.

Code	Description	
C4	NAMUR alarm and saturation levels, high alarm	★
C5	NAMUR alarm and saturation levels, low alarm	★
C6	Custom alarm and saturation signal levels, high alarm (requires C1 and Configuration Data Sheet)	★
C7	Custom alarm and saturation signal levels, low alarm (requires C1 and Configuration Data Sheet)	★
C8	Low alarm (standard Rosemount alarm and saturation levels)	★

Hardware adjustments

This is not available with output code F, X, and housing style codes 00, 2E, 2F, 2G, 2M, 5A, 5J, or 7J.

Code	Description	
D1	Hardware adjustments (zero, span, alarm, security)	★

Flange adapter

This is not available with process connection option code A11.

Code	Description	
D2	½-14 NPT flange adapter	★

Code	Description
D9	RC½ SST flange adapter

Custody transfer

Requires Plantweb™ housing and Hardware Adjustments option code D1. Limited availability depending on transmitter type and range. Contact an Emerson representative for additional information.

Code	Description
D3	Measurement Canada accuracy approval

Ground screw

This assembly is included with options EP, KP, E1, N1, K1, ND, E4, E7, N7, K7, E2, E3, KA, KC, KD, IA, IB, IE, IF, IG, KG, T1, K2, N3, EM, and KM.

Code	Description
D4	External ground screw assembly

Drain/vent valve

This is not available with process connection option code A11.

Code	Description
D5	Delete transmitter drain/vent valves (install plugs)
D7	SST coplanar flange without drain/vent ports

Conduit plug

Transmitter is shipped with 316 SST conduit plug (uninstalled) in place of standard carbon steel conduit plug.

Code	Description
DO	316 SST conduit plug

Product certifications

Valid when SuperModule™ Platform and housing have equivalent approvals.

Code	Description
E1	ATEX Flameproof
I1	ATEX Intrinsic Safety
IA	ATEX FISCO Intrinsic Safety (FOUNDATION fieldbus protocol only)
N1	ATEX Type n
K1	ATEX Flameproof, Intrinsic Safety, Type n, Dust
ND	ATEX Dust
E4	TIIS Flameproof
I4 ⁽¹⁾	TIIS Intrinsic Safety
E5	FM Explosion-proof, Dust Ignition-proof

Code	Description	
I5	FM Intrinsically Safe; Nonincendive	★
IE	FM FISCO Intrinsically Safe (FOUNDATION Fieldbus protocol only)	★
K5	FM Explosion-proof, Dust Ignition-proof, Intrinsically Safe, Division 2	★
E6 ⁽²⁾	CSA Explosion-proof, Dust Ignition-proof, Division 2	★
I6	CSA Intrinsically Safe	★
IF	CSA FISCO Intrinsically Safe (FOUNDATION Fieldbus protocol only)	★
K6 ⁽²⁾	CSA Explosion-proof, Dust Ignition-proof, Intrinsically Safe, Division 2	★
E7	IECEX Flameproof, Dust	★
I7	IECEX Intrinsic Safety	★
IG	IECEX FISCO Intrinsic Safety (FOUNDATION Fieldbus protocol only)	★
N7	IECEX Type n	★
K7	IECEX Flameproof, Dust, Intrinsic Safety, Type n	★
E2	INMETRO Flameproof	★
I2	INMETRO Intrinsic Safety	★
IB	INMETRO FISCO Intrinsic Safety	★
K2	INMETRO Flameproof, Intrinsic Safety	★
E3	China Flameproof	★
I3	China Intrinsic Safety	★
N3	China Type n	★
EP	Korea Flameproof	★
IP	Korea Intrinsic Safety	★
KP	Korea Flameproof, Intrinsic Safety	★
EM	Technical Regulations Customs Union (EAC) Flameproof	★
IM	Technical Regulations Customs Union (EAC) Intrinsic Safety	★
IN	Technical Regulations Customs Union (EAC) FISCO Intrinsic Safety	★
KM	Technical Regulations Customs Union (EAC) Flameproof, Intrinsic Safety	★
KA ⁽²⁾	ATEX and CSA Flameproof, Intrinsically Safe, Division 2	★
KB ⁽²⁾	FM and CSA Explosion-proof, Dust Ignition-proof, Intrinsically Safe, Division 2	★
KC	FM and ATEX Explosion-proof, Intrinsically Safe, Division 2	★
KD ⁽²⁾	FM, CSA, and ATEX Explosion-proof, Intrinsically Safe	★
KG	FM, CSA, ATEX and IECEX FISCO Intrinsic Safety	★
KQ	USA, Canada, ATEX Intrinsic Safety Combination	★
KS	USA, Canada, IECEX, ATEX Explosion Proof, Intrinsically Safe, Dust, Non-Incendive, Type-N, Division 2	★

(1) Only available with output code X.

(2) Not available with M20 or 1/2" conduit entry size.

Shipboard approvals

Code	Description	
SBS	American Bureau of Shipping	★
SBV	Bureau Veritas (BV) Type Approval	★
SDN	Det Norske Veritas (DNV) Type Approval	★
SLL	Lloyds Register (LR) Type Approval	★

Stainless steel tagging

Code	Description	
Y2	316 SST nameplate, top tag, wire-on tag(s), and fasteners	★

Sensor fill fluid

Only available on differential and gauge measurement types. Silicone fill fluid is standard.

Code	Description	
L1	Inert sensor fill fluid	★

O-ring

Code	Description	
L2	Graphite-filled PTFE O-ring	★

Bolting material

This is not available with process connection option code A11.

Code	Description	
L4	Austenitic 316 SST bolts	★
L5	ASTM A 193, Grade B7M bolts	★
L6	Alloy K-500 bolts	★
L7 ⁽¹⁾	ASTM A453, Class D, Grade 660 bolts	★
L8	ASTM A193, Class 2, Grade B8M bolts	★

(1) Bolts are not considered process wetted. In instances where NACE MR0175/ISO 15156 and NACE MR0103 conformance is required for bolting, L7 is the recommended bolting option.

Display type

This is not available with housing code 7].

Code	Description	
M5	Plantweb™ LCD display	★
M7 ⁽¹⁾⁽²⁾⁽³⁾	Remote mount LCD display and interface, Plantweb housing, no cable, SST bracket	★
M8 ⁽¹⁾⁽²⁾	Remote mount LCD display and interface, Plantweb housing, 50 ft. (15 m) cable, SST bracket	★

Code	Description	
M9 ⁽¹⁾⁽²⁾	Remote mount LCD display and interface, Plantweb housing, 100 ft. (31 m) cable, SST bracket	★

(1) Not available with output code X.

(2) Not available with output code F, option code DA2, or option code QT.

(3) See the Rosemount 3051S [Reference Manual](#) for cable requirements. Contact an Emerson representative for additional information.

Pressure testing

P1 is not available with 3051S_CA0.

Code	Description	
P1	Hydrostatic testing with certificate	

Special cleaning

This is not available with process connection option code A11.

Code	Description	
P2	Cleaning for special services	
P3	Cleaning for special services with testing for <1PPM chlorine/fluorine	

Maximum static line pressure

Code	Description	
P9 ⁽¹⁾	4500 psig (310 bar) static pressure limit (Rosemount 3051S_CD only)	★
P0 ⁽²⁾	6092 psig (420 bar) static pressure limit (Rosemount 3051S2CD only)	★

(1) When assembled to remote diaphragm seal system using B11 or B12 process connections, the maximum working pressure of the system may be limited by the rating of the Rosemount 1199 Seal System selected.

(2) Requires 316L SST, Alloy C-276, or Gold-plated 316L SST diaphragm material, assemble to Rosemount 305 integral manifold or DIN-compliant traditional flange process connection, and bolting option L8. Limited to Pressure Range (Differential), ranges 2A – 5A.

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	★

Positive material identification (PMI)

Code	Description	
Q76	PMI verification and certificate	★

Quality certification for safety

This is not available with output code F or X. Not available with housing code 7J.

Code	Description	
QS	Prior-use certificate of FMEDA data	★
QT	Safety-certified to IEC 61508 with certificate of FMEDA data	★

Transient protection

The T1 option is not needed with FISCO Product Certifications; transient protection is included in the FISCO product certification codes IA, IB, IE, IF, IG, and KG. This is not available with Housing code 00, 5A, 5J, or 7J.

Code	Description	
T1	Transient terminal block	★

Drinking water approval

Requires 316L SST diaphragm material, glass-filled PTFE O-ring (standard), and Process Connection code E12 or F12.

Code	Description	
DW	NSF drinking water approval	★

Surface finish certification

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

This is not available with Housing code 00, 5A, 5J, or 7J. Available with Intrinsically Safe approvals only. For FM Intrinsically Safe; Nonincendive (option code I5) or FM FISCO Intrinsically Safe (option code IE), install in accordance with Rosemount drawing 03151-1009. Suitable for use with all IS approvals (I1, I2, I3, I5, I6, I7, IA, IB, IE, IF, IG, IP, IM, KG).

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

NACE® Certificate

NACE compliant wetted materials are identified by Materials of Construction comply with metallurgical requirements highlighted within 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. Order with Q15 or Q25 to receive a NACE certificate. .

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

Cold temperature

This is only available on pressure ranges 1-5, with silicone sensor fill fluid and SST or C-276 isolating diaphragms.

Code	Description	
BR5	-58 °F (-50 °C) cold temperature	★
BR6	-76 °F (-60 °C) cold temperature	★

Thread sealants

Code	Description	
Z1	High temperature liquid thread sealant (-65 to 400 °F temperature rating)	★
Z2	Liquid thread sealant (-63 to 302 °F temperature rating)	★
Z3	Anaerobic PTFE paste	★