



Expedited lead time of 12 working days at no additional cost on orders of five units or less

Denotes eligibility for 20-working-day shipping program

[Hastelloy]
Denotes eligibility for working day shipping program

ATLAS™ MAGNETIC LEVEL INDICATOR | MODEL NUMBER

1																										
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25		

1 | PRODUCT TYPE

1	Atlas MLI
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2 | UNIT OF MEASURE

E	English Units (Inches)	Specifies the unit of measure for the Center-to-Center and Visual Indication Length (digits 23 – 25)
M	Metric Units (Centimeters)	

3 | CHAMBER CONFIGURATION

Process Connection Orientation			Chamber Top	Chamber Bottom	ANSI	
1	Side / Side		Welded end cap	Flanged (including mating blind flange)	A	150# H
2	Side / Side		Flanged (including mating blind flange)	Dome cap	B	300# H
3	Side / Side		Flanged (including mating blind flange)	Flanged (including mating blind flange)	C	600#
T	Top Mount		Threaded cap	Flanged process connection		

4 | FLANGE RATING

5 | MATERIAL SELECTION

Stainless Steels	
A	316/316L Stainless Steel
B	316/316L Stainless Steel w/Carbon Steel Flanges
C	304/304L Stainless Steel
D	304/304L Stainless Steel w/Carbon Steel Flanges
Q	Hastelloy C-276 H

6 | CONSTRUCTION CODE

1	Industrial Grade (std.) H
2	ASME B31.1 for Power Piping Standard H
3	ASME B31.3 for Process Piping Standard H
4	Industrial Grade with NACE MR0175/0103 H
6	ASME B31.3 for Process Piping Standard and NACE MR0103/0175 H
8	Extruded 'T' Industrial Grade (Code 8 = B)
9	ASME B31.3 (extruded outlet)

7 | CHAMBER FLANGE STYLE

A	RF slip-on (standard for digit 4 = A, B, C) H
B	RF Weldneck Flange H
C	RF Socketweld Flange (digit 4 = A or B)

8 | PROCESS CONNECTION TYPE

Flanged (Alloy)	
A	RF Slip-on Flange ① H
B	RF Weldneck Flange H
C	RF Socketweld Flange
M	Male Threaded (NPT)
N	Female Threaded (NPT)
P	Plain-end Nipple H
Q	Socket Weld ②
R	Buttweld H

9 | PROCESS CONNECTION SIZE

Standard	
A	1/2" H
B	3/4" H
C	1" H
D	1 1/2"
E	2" H

① Machined flange (to smaller pipe size) if process connection size > chamber size (e.g., 2"/DN50 process connection and 2" chamber) Available only in combination with digit 9 = A, B or C.

② Available only in combination with digit 9 = A, B or C

10 | GASKET STYLE

Gaskets for Metallic Flanges	
A	Flexible graphite ring ③
B	Spiral wound with graphite filler and carbon steel outer ring ④
C	Spiral wound with graphite filler, inner ring matching chamber material ④ and carbon steel outer ring H

③ Standard gasket for 150# and 300# flange ratings suitable for most applications.

④ Standard gasket for RF flanges with rating > 300# / PN 63. Winding material matches chamber material.

11 | CHAMBER FLANGE BOLTING

A	304 stainless steel class 2, A193 Gr. B8 class 2 / A194 Gr. 8 H
C	316 stainless steel class 2, A-193 Gr B8M class 2 / A-194 Gr 8M H
G	316 stainless steel class 2 + NACE H
M	Alloy Steel A193 Gr. B7 / A194 Gr. 2H ⑤
P	Alloy Steel + NACE A193 Gr. B7M / A194 Gr. 2HM ⑤
S	Alloy steel with zinc plating (+390 °F (+210 °C) is maximum temp for zinc-plated bolting)
T	Alloy steel with zinc plating + NACE (+390 °F (+210 °C) is max. temp for zinc-plated bolting) A-193 Gr B7M / A-194 Gr 2HM

⑤ Available only in combination with digit 5 = B or D.

12 | VENT SIZE

1	1/2" H
2	3/4" H
3	1" H
N	None H

13 | VENT TYPE

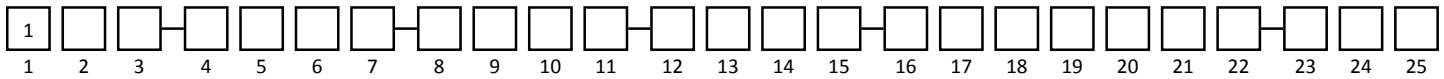
1	FNPT w/Hex Head Plug (std.) H
2	Socket Weld
3	Male Threaded (MNPT)
4	Plain-End Nipple H
5	Buttweld Nipple H
6	RF Slip On Flange H
7	RF Weld Neck Flange H
N	None H

14 | DRAIN SIZE

Same code as **12**

15 | DRAIN TYPE

Same code as **13**



ALL OPTIONS AVAILABLE WITH HASTELLOY [H] CHAMBER MATERIAL

16 | ACCESSORY / TECHNOLOGY CODE

N	None
Switches Only (No Transmitter. See options below if transmitter is required)	
Y	Orion Electronic Switch (OES or ORS) clamp-mounted to chamber
Z	Orion Electronic Switch (OES or ORS) with switch mount rod

17 | TEMPERATURE OPTIONS

N	None	Indicator: max. 250 °F (121 °C) OCT transmitter: max. 200 °F (93 °C) Jupiter transmitter: max. 175 °F (79 °C)
A	Chamber blanket, pipe only	up to 500 °F (260 °C)
B	Chamber pipe and flanges bracket	500 to 1000 °F (260 to 538 °C)
C	Chamber and flanges	up to 500 °F (260 °C)
D	Chamber and flanges	501 to 1000 °F (261 to 538 °C)
E	Indicator only	digit 16 = N, Y 250 °F (121 °C) < T ≤ 500 °F (260 °C)
F	Indicator only	digit 16 = N 501 °F (261 °C) < T ≤ 1000 °F (537 °C)
K	Transmitter ⑦	digit 16 = 2, 3 501 °F (261 °C) < T ≤ 850 °F (454 °C)
R	Indicator & Jupiter	digit 16 = 1, 2, 3, A, B, C 250 °F (121 °C) < T ≤ 500 °F (260 °C) ⑥
U	Transmitter	digit 16 = 1, 2, 3, A, B, C 175 °F (79 °C) < T ≤ 500 °F (260 °C) ①
V	Indicator & Jupiter ⑦	digit 16 = 2, 3 501 °F to 850 °F (261 to 454 °C)

⑥ Matches external mount Jupiter with digit 3 = E, F, H
⑦ Matches external mount Jupiter with digit 3 = K, L, M

18 | MEASUREMENT TYPE & INDICATOR STYLE

Total Level Measurement	
1	Orange / black metal flags
2	Yellow / black metal flags
3	Red / white metal flags (standard)
4	Red / silver metal flags
A	Orange / black metal flags with yellow float diagnostics
B	Yellow / black metal flags with orange float diagnostics ⑧
C	Red / white metal flags with yellow float diagnostics ⑧
D	Red / silver metal flags with black float diagnostics ⑧
S	Fluorescent orange shuttle / follower ⑨

Interface Level Measurement	
5	Orange / black metal flags
6	Yellow / black metal flags
7	Red / white metal flags (standard)
8	Red / silver metal flags
F	Orange / black metal flags with yellow float diagnostics ⑧
G	Yellow / black metal flags with orange float diagnostics ⑧
H	Red / white metal flags with yellow float diagnostics ⑧
J	Red / silver metal flags with black float diagnostics ⑧
N	No indicator (For external use of external Jupiter mount only)

⑧ Float diagnostics is a safety feature which indicates a contrasting color on the visual indicator when the float has fallen below the lowest measurable point on the scale. This can occur when the specific gravity of the liquid drastically decreases or the float collapses due to a pressure spike.

⑨ Only available with stainless steel indicator, refer to digit 19.

19 | INDICATOR HOUSING MATERIAL & MEASURING SCALE ⑩

reveal Wide View Stainless Steel indicator	
A	Foot / Inch Measurement
M	Meter / Centimeter Measurement
C	Running Inch Measurement
D	Percent (0 – 100%) Measurement
G	Meter / Millimeter Measurement
H	Foot / Inch with Percent (Dual Scale)
J	Meter / Millimeter with Percent (Dual Scale)
P	No scale

Anodized Aluminum Housing	
1	Foot / Inch Measurement
3	Running Inch Measurement
4	Percent (0 - 100%) Measurement
7	Meter / Millimeter Measurement
8	Meter / Centimeter Measurement
N	No scale

⑩ Aluminum indicator with glass window is required if the process operating temperature exceeds 800 °F (427 °C)

20, 21, 22 | FACTORY ASSIGNED

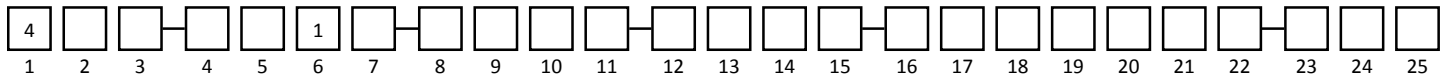
X X X	These codes are factory assigned.
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Not all chamber diameters and wall thicknesses are eligible for OrionXpress. Contact the factory or your local representative for more information.

23, 24, 25 | CENTER-TO-CENTER PROCESS CONNECTION DIMENSION & VISUAL INDICATION LENGTH

X X X	Specify in INCHES when model code 2 is E (length limitation is 12 to 192 inches ; 12 to 144 for Sch. 5) Specify in CENTIMETERS when model code 2 is M (length limitation is 30 to 488 cm; 30 to 366 cm for Sch. 5)
	Example #1: Center-to-Center is 84 inches. Enter as 084. (model digit 2 must be "E") Example #2: Center-to-Center is 124 centimeters. Enter as 124. (model digit 2 must be "M")

VECTOR™ MAGNETIC LEVEL INDICATOR | MODEL NUMBER



1 | PRODUCT TYPE

4	Vector MLI
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2 | UNIT OF MEASURE

E	English Units (Inches)	Specifies the unit of measure for the Center-to-Center and Visual Indication Length (digits 23 – 25)
M	Metric Units (Centimeters)	

3 | CHAMBER CONFIGURATION

Process Connection Orientation	Chamber Top	Chamber Bottom
A Side / Side	Welded Flat Cap	Threaded Plug (NPT)
B Side / Side	Threaded Plug (NPT)	Welded Flat Cap
1 Side / Side	Welded Flat Cap	Flanged
2 Side / Side	Flanged	Welded Flat Cap

4 | FLANGE RATING

ANSI	
A	150#
B	300#

5 | MATERIAL SELECTION

Stainless Steels	
A	316/316L Stainless Steel
B	316/316L Stainless Steel w/Carbon Steel Flanges

6 | CONSTRUCTION CODE

1	Industrial non-PED
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7 | CHAMBER FLANGE STYLE

N	No Chamber Flange	Code 3= A or B
A	Raised Face Slip-on Flange	Code 3= 1 or 2

8 | PROCESS CONNECTION TYPE

Flanged (Alloy)	
A	RF Slip-on Flange
M	Male Threaded (NPT)

9 | PROCESS CONNECTION SIZE

Standard	
A	½"
B	¾"
C	1"
E	2" (machined to 1" size)

10 | GASKET STYLE

Gaskets for Metallic Flanges	
N	None (required if model code 3 is either A or B)
A	Flexible graphite ring ①

① Standard gasket for 150# and 300# flange ratings suitable for most applications.

11 | CHAMBER FLANGE BOLTING

N	None (required if model code 3 is either A or B)
S	Zinc-plated Carbon Steel (standard) A-193 Gr B7 / A-194 Gr 2H (+390 °F (+210 °C) is maximum temperature for zinc-plated bolting)

12,13 | VENT SIZE & TYPE

NN	None
11	½" NPT with Hex Plug
21	¾" NPT with Hex Plug

14,15 | DRAIN SIZE & TYPE

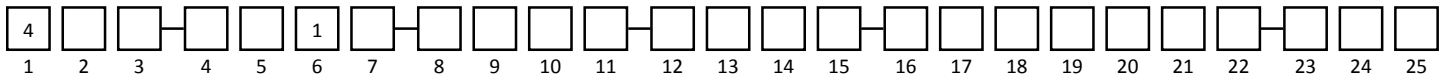
NN	None
11	½" NPT with Hex Plug
21	¾" NPT with Hex Plug

16 | ACCESSORY / TECHNOLOGY CODE

N	None
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Switches Only (No Transmitter. See options below if transmitter is required)	
Y	Orion Electronic Switch (OES or ORS) clamp-mounted to chamber

Jupiter® Magnetostrictive Transmitter (mounting configurations shown below)	Jupiter® Only, No switches	Jupiter® and at least one OES/ORs Switch (Clamp-mounted)
Top Mount	1	A
Top Mount Offset/High-Temp	2	B
Bottom Mount Offset/High-Temp	3	C



17 | TEMPERATURE OPTIONS

N	None
U	Transmitter digit 16 = 1, 2, 3, A, B, C 175 °F (79 °C) < T ≤ 500 °F (260 °C)
E	Indicator only digit 16 = N, Y 250 °F (121 °C) < T ≤ 500 °F (260 °C)
R	Indicator & Jupiter ② digit 16 = 2, 3 250 °F (121 °C) < T ≤ 500 °F (260 °C)

② Matches external mount Jupiter with digit 5 = E, F, H
This temperature rating applies to insulation ONLY. Refer to transmitter section for temperature ratings for transmitters.

18 | MEASUREMENT TYPE & INDICATOR STYLE

Total Level Measurement	
1	Orange / Black Flags
2	Yellow / Black Flags
3	Red / White Flags

19 | MEASURING SCALE

N	No scale
1	Foot / Inch Measurement
8	Meter / Centimeter Measurement
4	Percent (0–100%) Measurement

20, 21, 22 | FACTORY ASSIGNED

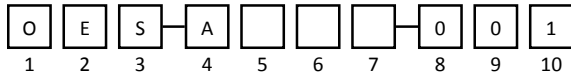
X X X	These codes are factory assigned. ③
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③ Not all chamber diameters and wall thicknesses are eligible for OrionXpress. Contact the factory or your local representative for more information.

23, 24, 25 | CENTER-TO-CENTER PROCESS CONNECTION DIMENSION & VISUAL INDICATION LENGTH

X X X	Specify in INCHES when model code 2 is E (length limitation is 12 to 192 inches ; 12 to 144 for Sch. 5) Specify in CENTIMETERS when model code 2 is M (length limitation is 30 to 488 cm; 30 to 366 cm for Sch. 5)
	Example #1: Center-to-Center is 84 inches. Enter as 084. (model digit 2 must be “E”) Example #2: Center-to-Center is 124 centimeters. Enter as 124. (model digit 2 must be “M”)

OES 10-Amp DPDT Point Level Switch | MODEL NUMBER



4 | ENCLOSURE MATERIAL

A	Cast Aluminum
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5 | AGENCY APPROVAL

N	Weatherproof
1	FM / CSA

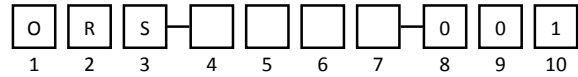
6 | CHAMBER MOUNTING CODE

1	MLI model code digit 20 is 1, 2, or 7 (2" chamber)
2	MLI model code digit 20 is 3, 4, 5 or 6 (2½" chamber)
3	MLI model code digit 20 is A, B, C, or D (3" chamber)
4	MLI model code digit 20 is E, F, G, H, or J (4" chamber)
5	MLI is a Top Mount design (¾" chamber)
N	No clamps required (for use with switch mount rod; digit 7=R)

7 | CHAMBER MOUNTING CODE

C	Clamp mounted on MLI (standard)
P	Clamp mounted on MLI with insulation pad
R	Attached to switch mount rod (digit 6 must = N)

ORS 1-Amp SPDT Point Level Switch | MODEL NUMBER



4 | ENCLOSURE

1	Standard stainless body without junction box
A	Option 1 with cast aluminum junction box

5 | AGENCY APPROVAL

1	FM / CSA
A	ATEX (digit 4 must NOT = 1)
N	General Purpose

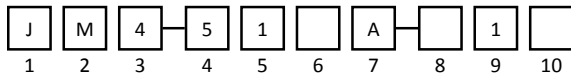
6 | CHAMBER MOUNTING CODE

1	MLI model code digit 20 is 1, 2, or 7 (2" chamber)
2	MLI model code digit 20 is 3, 4, 5 or 6 (2½" chamber)
3	MLI model code digit 20 is A, B, C, or D (3" chamber)
4	MLI model code digit 20 is E, F, G, H, or J (4" chamber)
5	MLI is a Top Mount design (¾" chamber)
N	No clamps required (for use with switch mount rod; digit 7 = R)

7 | CHAMBER MOUNTING CODE

C	Clamp mounted on MLI (standard)
P	Clamp mounted on MLI with insulation pad
R	Attached to switch mount rod (digit 6 must = N)

Jupiter Model JM4 MAGNETOSTRICTIVE TRANSMITTER | MODEL NUMBER – TRANSMITTER



1, 2, 3 | BASIC MODEL NUMBER

JM4	Jupiter 4th Generation Magnetostrictive Level Transmitter
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4 | POWER

5	24 VDC Two-Wire
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5 | SIGNAL OUTPUT

1	4–20 MA with HART®
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6 | SAFETY OPTIONS

0	None
1	SIL 2 Hardware (3rd-party FMEDA report available)

7 | ACCESSORIES/MOUNTING

A	Digital Display and Keypad – Integral
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8 | AREA CLASSIFICATION

0	General Purpose, Weatherproof (IP 67)
1	Intrinsically Safe / FISCO (cFMus)
3	Explosion-proof / FNICO (cFMus)

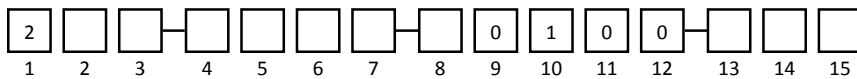
9 | HOUSING

1	Aluminum, Dual-component
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10 | CONDUIT CONNECTION

0	½" NPT
1	M20

Jupiter Model JM4 MAGNETOSTRICTIVE TRANSMITTER | MODEL NUMBER – PROBE



1 | TECHNOLOGY

2	Jupiter Magnetostrictive Probes – Model JM4
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2 | MEASUREMENT SYSTEM

A	English <i>Probe length to be provided in inches</i>
C	Metric <i>Probe length to be provided in centimeters</i>

3 | CONFIGURATION

E	STANDARD Top Mount	<i>suitable for process temperatures -40 to +500 °F (-40 to +260 °C)</i>
F	STANDARD Top Mount Offset	
H	STANDARD Bottom Mount Offset	
K	HIGH-TEMP Top Mount	<i>suitable for process temperatures +501 to +850 °F (+261 to +454 °C)</i>
L	HIGH-TEMP Top Mount Offset	
M	HIGH-TEMP Bottom Mount Offset	

4, 5 | MOUNTING SIDE

00	Left-side MLI Mount
01	Right-side MLI Mount

6 | PROBE MATERIAL OF CONSTRUCTION

A	Powder-coated Aluminum Sensor Enclosure with 316 SS Probe (Available only with Digit 3 options F, H, L or M)
1	316 SS Sensor Enclosure with 316 SS Probe

7 | PROBE OPTIONS AND HAZARDOUS LOCATION APPROVALS (XP, IS, NI)

N	Standard Probe
V	Vibration Resistant Probe (Available only w/ Digit 3 options F, H, L or M)

8 | CHAMBER SIZE (FOR MOUNTING HARDWARE)

0	No mounting clamps required
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Select from these options if chamber DOES NOT contain high-temp insulation

1	2" (or if digit 20 of MLI model code is 1, 2 or 7)
2	2½" (or if digit 20 of MLI model code is 3, 4, 5 or 6)
3	3" (or if digit 20 of MLI model code is A, B, C, or D)
4	4" (or if digit 20 of MLI model code is E, F, G, H, or J)
5	¾" (for Atlas Top Mount Configuration only)

Select from these options if chamber DOES contain high-temp insulation

E	2" (or if digit 20 of MLI model code is 1, 2 or 7)
F	2½" (or if digit 20 of MLI model code is 3, 4, 5 or 6)
G	3" (or if digit 20 of MLI model code is A, B, C, or D)
H	4" (or if digit 20 of MLI model code is E, F, G, H, or J)
J	¾" (for Atlas Top Mount Configuration only)

10 | LEVEL/INTERFACE MEASUREMENT PREFERENCE

1	Measure Only the Total Liquid Level
2	Measure Only the Interface Level

13, 14, 15 | PROBE LENGTH — max. 400" (999 cm)

XXX	Example: 87 inches = 087 (Code 2 must be A) Example: 120 centimeters = 120 (Code 2 must be C)
(limited to 192 inches (487 cm) when digit 3 = K, L or M)	