

# LevelSite<sup>®</sup>

Level Control with new performance

*see the difference.*

DATA-  
SHEETS  
INSIDE



*see the difference.*

# LevelSite®

*see the difference.*

LevelSite® is Barksdale's robust magnetic level indicator engineered for safe, reliable liquid level measurement in demanding environments. Its rugged stainless-steel construction provides direct visual indication without exposing process fluid, eliminating leaks and spills common with other level indication technologies.

Using a magnetic coupling principle, a float with a permanent magnet tracks the liquid level inside a sealed chamber, driving an external rotating flag assembly for clear, high-visibility indication even under harsh conditions.

LevelSite® delivers direct visual indication, continuous monitoring, and simple control in one package, with optional accessories for enhanced functionality. Now featuring a modular design and standardized configurations, LevelSite® introduces a new level of simplicity in selection, ordering, and integration with accessories, ensuring faster deployment across diverse applications – see the difference.

## Key Features

- ▶ Visual indication for convenient level monitoring
- ▶ Compatibility with point level switches and continuous transmitters for level control
- ▶ Modular Design: Configurable as kits including indicator, transmitter, and limit switch
- ▶ Variety of certifications for different markets
- ▶ Application Versatility making it suitable for standard, pressurized, and cryo environments

## Markets

- ▶ **Marine**
- ▶ **Oil and Gas**
- ▶ **Industrial, OEM, HVAC**
- ▶ **Power Generation**
- ▶ **Water and Wastewater**





## Materials








Element	Material Options
Bypass Tube	Stainless steel 1.4571 (SS 316 Ti)
Float	Stainless Steel, Titanium, Buna-Nitrile
Indication Rail	Aluminium, Makrolon®, Stainless Steel (Coming Soon!)
Optional metals and cladding, Teflon lining and other coatings are available on demand.	

## Base Specifications

Element	Options										
Pressure	Upto 100 bar										
Pressure Order Code	1	2	3	4	5	6	7	A	B	C	D
Rating/ASME Class Type	<6 bar	<10 bar	<16 bar	<16 bar	<40 bar	<63 bar	<100 bar	150lbs	150lbs	300lbs	600lbs
Proof Pressure	According to DIN EN 13445 / AD 2000 HP 30										
Temperature	Standard: -10 °C... +150 °C						Option 'E' Extended Temperature Range: -196° C ... 250 °C				
Max. Length	3000mm / 5700mm, configuration dependent										

## Certifications and Approvals

Exceptions and limitations on availability of approval for certain LevelSite® configurations.

	Bureau Veritas	DNV	RINA	Lloyd's register	ATEX EX h	ATEX EX i	ATEX EX d
Levelsite®	 Consult factory	 Consult factory	 Consult factory	 Consult factory	 Consult factory	 Consult factory	 Consult factory
Accessories	Consult factory		Consult factory	Consult factory			Coming Soon!

# LevelSite®

## Key Specifications

### Floats

At the heart of every Barksdale Level Site magnetic level indicator lies its most essential component: the float. Engineered for precision and reliability, designed to meet the demands of specific applications across various process conditions.

**Key working principle:** The float contains a magnet placed inside that is connected to the vessel holding the liquid. As the liquid level rises or falls, the float moves accordingly. Outside the chamber, a series of bi-colored magnetic flags, that are magnetically coupled to the float, move. The movement of the float causes these flags to rotate, changing color to reflect the liquid level. This provides a clear, real-time visual indication without any direct contact with the process fluid.

### Material Highlights

- ▶ **Titanium:** Exceptional strength-to-weight ratio, corrosion resistance, and high-temperature tolerance.
- ▶ **1.4571 Stainless Steel:** Durable and versatile for standard applications.
- ▶ **Buna N:** Ideal for oil-based media up to 90°C.



### Accessories

Element	Options
Transmitter	All bypass level indicators are available with a transmitter either as a potentiometer or a two-wire transmitter with 4..20 mA output.
Limit Switches	Barksdale Magnetic Level Indicator comes with GK03 limit switches, optionally in Ex ia. These enable switching through bistable reed contacts and can be attached to the bypass tube in any selectable position with stainless steel clamps.
Protective Tubing	A transparent shrink tubing from polyolefine featuring good resistance to oil, vapours and gases in the ambient conditions in the chemical industry, also reduces freezing of the surface and ice build-up. Cleaning with water or steam is easy; no solvents are required. Temperature range: -55 °C...+115 °C. Consult factory to avail this option.
Accessory Manager	Coming Soon!
Heating Option	Consult Factory on heat option for LevelSite® leveraging Barksdale Thermostat Kelvin. Coming Soon!

# LevelSite®

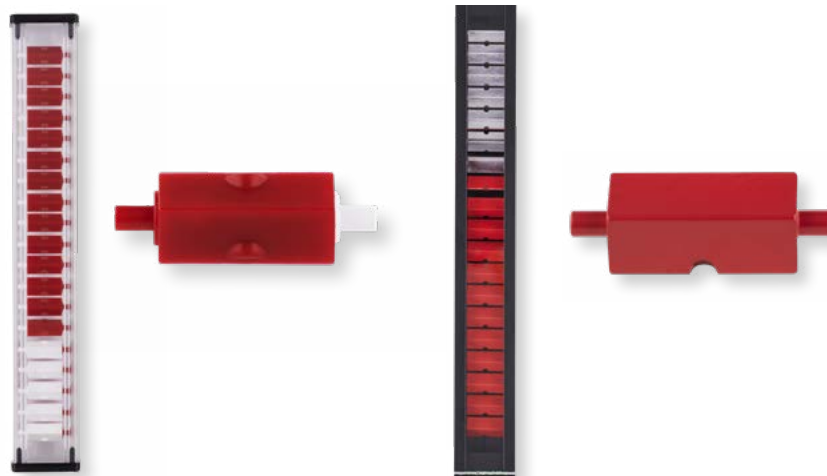
## Key Specifications

### Indication Flags

Attribute	Description
Flag design	Square section rotary flags
Flag colors	White → Red color change for clear level indication
Visibility	Clearly visible from distances of over 30 meters
Indication density	80 flags per meter of indication length

### Indications Rail Assembly

Option	Description
Polycarbonate/Makrolon®	26 mm wide, clear, virtually resistant against UV, chemically polluted atmospheres, offers 180° visibility. Upto 150 °C.
Aluminium	Anodised, 30mm wide and have glass panes to protect the flags. Upto 350 °C.
Stainless steel	Coming Soon!



### Pressure Equipment Directive

The Pressure Equipment Directive (PED 2014/68/EU) applies to pressure-containing equipment operating above 0.5 bar and defines essential safety requirements for design, manufacture, and conformity within the European Economic Area.

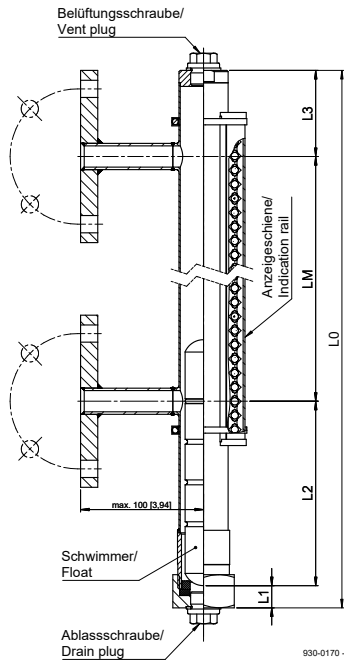
For magnetic level indicators (MLIs), PED applicability is determined by the pressure-containing components of the assembly—such as the bypass tube, process connections, and flanges. The applicable PED classification for a magnetic level indicator depends on:

- ▶ **Maximum allowable pressure (PS)**
- ▶ **Measuring length / volume or nominal size**
- ▶ **Fluid group (Group 1 or Group 2)**
- ▶ **Process connection size and rating**

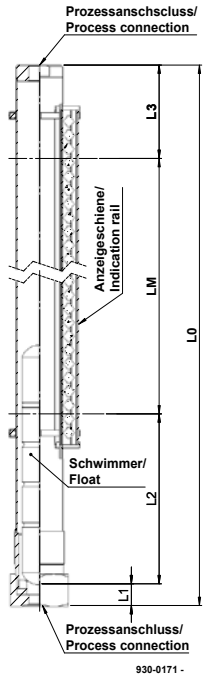
**Drawings**

Dimensions (mm / inch)

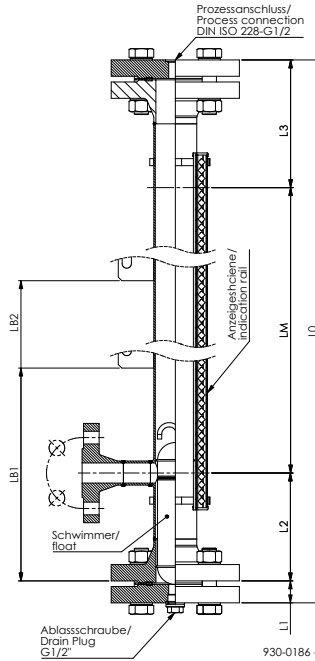
**Side - Side**



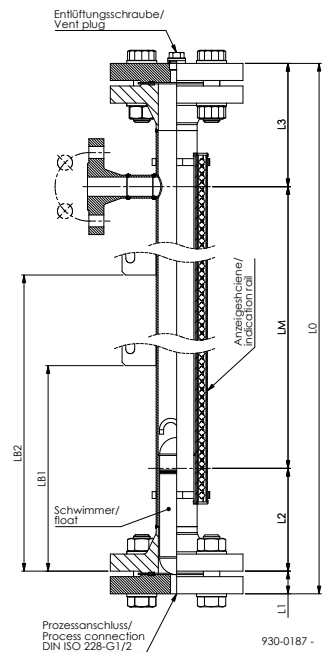
**Top - Bottom**



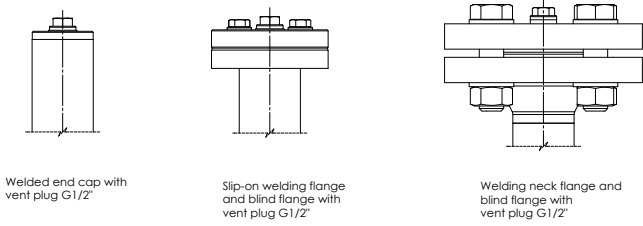
**Top - Side**



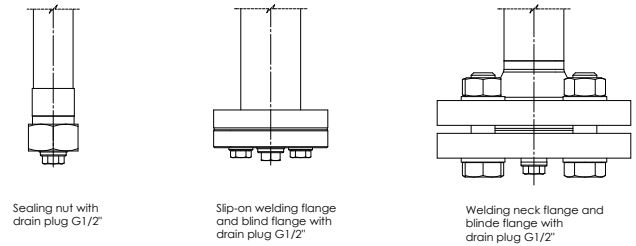
**Side - Bottom**



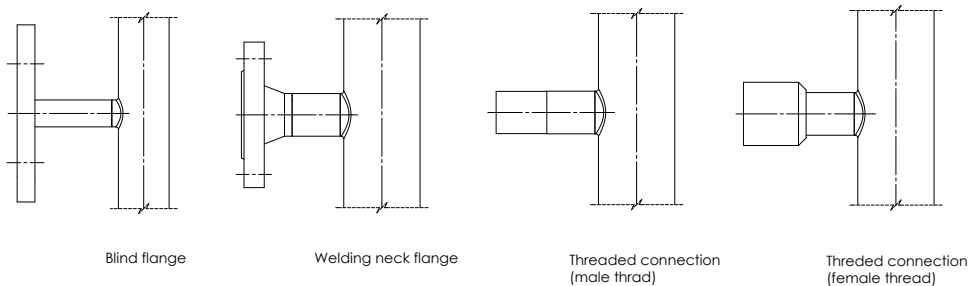
**Chamber - Top**



**Chamber - Bottom**



**Options Process Connection**



# LevelSite® New Nomenclature

## Magnetic Level Indicator

L	T	G	C	A	2500	A	M	Z	Z	-
Material	Pressure	PED Category	Process Connection	Orientation	Length in mm	Float	Indication Rail	Certification	Scale	Misc Options

## Accessory: Transmitter

XT	-Option	-Option	LM2500
Type of Transmitter			Length in mm



## Accessory: Limit Switch

0303-XXX
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Ordering Number of limit switch, use character to attribute into kit code.



## You can now order your LevelSite® as a kit.

You can now order your LevelSite® as a kit alongside unmounted limit switches and transmitters in one-part number, just designate a prefix for kit and truncated accessory characters to order your kit!

Kit	+ LevelSite®	+ Transmitter	+ Limit Switch	= LevelSite® Kit Number
K	L1GCA2500AMZZ	XT-HT-R12-LM2500 (N)	0303-031 (E) x 3	<b>KL1GCA2500AMZZNE3</b>

Designate K prefix for kit!

Designate a character for specific transmitter accessory

Designate a character for limit switch type, followed by a numeric character to designate number of limit switches required.

# LevelSite®

## Mini LevelSite® for Pressure upto 6 bar, 10 bar and 16 bar

Ø 40mm x max length of 3000mm

### Example

I Material	II Pressure	III PED	IV Pro. Con.	V Orientation	VI Length	VII Float	VIII Ind. Rail	IX Certs	X Scale	XI Misc
L	1	G	C	A	2500	A	M	Z	Z	-
+ XII Accessories										

Element	Material Options
Bypass Tube Dimension	40mm Ø x max length of 3000mm

### I ▶ Material

Code	Material
L	Stainless steel 1.4571 (SS 316 TI)

### II ▶ Pressure Range

Code	Pressure Range	Tube Size
1	< 6 bar	40 x 1 mm
2	< 10 bar	40 x 1 mm
3	< 16 bar	40 x 1 mm

### III ▶ PED Category

Code	PED Category
G	SEP/GIP
1	Class I
2	Class II
3	Class III

### V ▶ Orientation

Code	Orientation	
A	Process Orientation	Side Side
	Chamber Top	Welded End Cap
	Chamber Bottom	Service Flange
C	Process Orientation	Top Bottom
	Chamber Top	Welded End Cap
	Chamber Bottom	Flange

### IV ▶ Process Connection

Code	Process Connection
A	DN15
B	DN20
C	DN25
G	R ½ External
H	G ½ Internal
J	R ¾ External
K	G ¾ Internal
L	½ NPT External
M	¾ NPT External
V	G ½ Thread
W	1/2" NPT Thread
X	¾" NPT Internal

### VI ▶ Length

Max. lengths of 3000 mm

Code	Description
0000	Length in mm

# LevelSite®

## Mini LevelSite® for Pressure upto 6 bar, 10 bar and 16 bar

Ø 40mm x max length of 3000mm

### VII ▶ Float

Code	Float	Material	Float Length LS (mm)	Max Pressure (bar)	Max Temp. (deg C)	Weight (g)	Volume (cm³)	Min Density (g/cm³)
A	VA 30/02	1,4571	200	16	150	104	141	0.85
B	TT30/02	Titanium	200	25	150	102	141	0.85
D*	BN32/100	Buna N	100	10	90	51	78.4	0.75

\* Not for use with L3

### VIII ▶ Indication Rail

Code	Indication Rail
A	Aluminium
M	Makrolon®

### X ▶ Scale

Code	Scale
Z	Without Scale
1	Scale in cm
2	Scale in inches
3	Scale in %

### IX ▶ Approvals

Code	Approvals
Z	No Approval
A	ATEX ExH (Consult factory)
S	Shipbuilding DNV
B	DNV + ExH (Consult factory)

### XI ▶ Miscellaneous Options

Not applicable.

### XII ▶ Accessories

For accessories, refer to refer to pages 22/23

# LevelSite®

## Heavy-Duty LevelSite® for Pressure upto 16 bar

Ø 60.3mm x max length of 5700mm

### Example

I Material	II Pressure	III PED	IV Pro. Con.	V Orientation	VI Length	VII Float	VIII Ind. Rail	IX Certs	X Scale	XI Misc
L	4	G	C	A	4000	A	M	Z	Z	-
+ XII Accessories										

Element	Material Options
Bypass Tube Dimension	60.3mm Ø x max length of 5700mm

### I ▶ Material

Code	Material
L	Stainless steel 1.4571 (SS 316 TI)

### II ▶ Pressure Range

Code	Pressure Range	Tube Size
4	< 16 bar	60.3 x 2 mm

### III ▶ PED Category

Code	PED Category
G	SEP/GIP
1	Class I
2	Class II
3	Class III

### IV ▶ Process Connection

Code	Process Connection
A	DN15
B	DN20
C	DN25
D	DN32
E	DN40
F	DN50
G	R ½ External
H	G ½ Internal
J	R ¾ External
K	G ¾ Internal
L	½ NPT External
M	¾ NPT External
N	1NPT External
V	G ½ Thread
W	½ " NPT Thread
X	¾" NPT Internal

# LevelSite®

## Heavy-Duty LevelSite® for Pressure upto 16 bar

Ø 60.3mm x max length of 5700mm

### V ▶ Orientation

Code	Orientation	
A	Process Orientation	Side Side
	Chamber Top	Welded End Cap
	Chamber Bottom	Service Flange
B	Process Orientation	Side Side
	Chamber Top	Service Flange
	Chamber Bottom	Service Flange
C	Process Orientation	Top Bottom
	Chamber Top	Welded End Cap
	Chamber Bottom	Flange
D	Process Orientation	Top Bottom
	Chamber Top	Service Flange
	Chamber Bottom	Flange
E	Process Orientation	Top Side
	Chamber Top	Welded End Cap
	Chamber Bottom	Service Flange
F	Process Orientation	Top Side
	Chamber Top	Flange
	Chamber Bottom	Service Flange
G	Process Orientation	Side Bottom
	Chamber Top	Welded End Cap
	Chamber Bottom	Flange

### VI ▶ Length

Max. lengths of 5700 mm

Code	Length
0000	Length in mm

### VII ▶ Float

Code	Float	Material	Float Length LS (mm)	Max Pressure (bar)	Max Temp. (deg C)	Weight (g)	Volume (cm³)	Min Density (g/cm³)
E	VA50/10	1,4571	200	25	150	205	360	0.62
G	TT50/10	Titanium	200	40	320	202	360	0.56
J*	TT50/20-VAE	Titanium	200	No limitations	320	210	360	0.6

\* For use preferred with non-corrosive media

### VIII ▶ Indication Rail

Code	Indication Rail
A	Aluminium
M	Makrolon®

### IX ▶ Approvals

Code	Approvals
Z	No Approval
A	ATEX ExH (Consult factory)
S	Shipbuilding DNV
B	DNV + ExH (Consult factory)

### X ▶ Scale

Code	Scale
Z	Without Scale
1	Scale in cm
2	Scale in inches
3	Scale in %

### XI ▶ Miscellaneous Options

Code	Description
E*	Extended Temperature Range (-196 °C to 250 °C)

\*Accessories not available for extended temperature range, only the magnetic level indicator; Only for use with aluminium indication rail; ExH not applicable.

### XII ▶ Accessories

For accessories, refer to pages 22/23

# LevelSite®

## Heavy-Duty LevelSite® for Pressure upto 40 bar

Ø 60.3mm x max length of 5700mm

### Example

I Material	II Pressure	III PED	IV Pro. Con.	V Orientation	VI Length	VII Float	VIII Ind. Rail	IX Certs	X Scale	XI Misc
L	5	2	C	A	4000	A	M	Z	Z	-
+ XII Accessories										

Element	Material Options
Bypass Tube Dimension	60.3mm Ø x max length of 5700mm

### I ▶ Material

Code	Material
L	Stainless steel 1.4571 (SS 316 Ti)

### II ▶ Pressure Range

Code	Pressure Range	Tube Size
5	< 40 bar	60.3 x 2 mm

### III ▶ PED Category

Code	PED Category
G	SEP/GIP
1	Class I
2	Class II
3	Class III

### IV ▶ Process Connection

Code	Process Connection
A	DN15
B	DN20
C	DN25
D	DN32
E	DN40
F	DN50
G	R ½ External
H	G ½ Internal
J	R ¾ External
K	G ¾ Internal
L	½ NPT External
M	¾ NPT External
N	1NPT External
V	G ½ Thread
W	1/2" NPT Thread
X	¾" NPT Internal

# LevelSite®

## Heavy-Duty LevelSite® for Pressure upto 40 bar

Ø 60.3mm x max length of 5700mm

### V ▶ Orientation

Code	Orientation	
A	Process Orientation	Side Side
	Chamber Top	Welded End Cap
	Chamber Bottom	Service Flange
B	Process Orientation	Side Side
	Chamber Top	Service Flange
	Chamber Bottom	Service Flange
C	Process Orientation	Top Bottom
	Chamber Top	Welded End Cap
	Chamber Bottom	Flange
D	Process Orientation	Top Bottom
	Chamber Top	Service Flange
	Chamber Bottom	Flange
E	Process Orientation	Top Side
	Chamber Top	Welded End Cap
	Chamber Bottom	Service Flange
F	Process Orientation	Top Side
	Chamber Top	Flange
	Chamber Bottom	Service Flange
G	Process Orientation	Side Bottom
	Chamber Top	Welded End Cap
	Chamber Bottom	Flange

### VI ▶ Length

Max. lengths of 5700 mm

Code	Length
0000	Length in mm

### VII ▶ Float

Code	Float	Material	Float Length LS (mm)	Max Pressure (bar)	Max Temp. (°C)	Weight (g)	Volume (cm³)	Min Density (g/cm³)
G	TT50/10	Titanium	200	40	320	202	360	0.56
J*	TT50/20-VAE	Titanium	200	No limitations	320	210	360	0.6

\* For use preferred with non-corrosive media

# LevelSite®

## Heavy-Duty LevelSite® for Pressure upto 40 bar

Ø 60.3mm x max length of 5700mm

### VIII ▶ Indication Rail

Code	Indication Rail
A	Aluminium
M	Makrolon®

### X ▶ Scale

Code	Scale
Z	Without Scale
1	Scale in cm
2	Scale in inches
3	Scale in %

### IX ▶ Approvals

Code	Approvals
Z	No Approval
A	ATEX ExH (Consult factory)
S	Shipbuilding DNV
B	DNV + ExH (Consult factory)

### XI ▶ Miscellaneous Options

Code	Description
E*	Extended Temperature Range (-196 °C to 250 °C)

\*Accessories not available for extended temperature range, only the magnetic level indicator; Only for use with aluminium indication rail; ExH not applicable.

### XII ▶ Accessories

For accessories, refer to pages 22/23

# LevelSite®

## Heavy-Duty LevelSite® for Pressure upto 63 bar

Ø 60.3mm x max length of 5700mm

### Example

I Material	II Pressure	III PED	IV Pro. Con.	V Orientation	VI Length	VII Float	VIII Ind. Rail	IX Certs	X Scale	XI Misc
L	6	2	C	A	4000	A	M	Z	Z	-
+ XII Accessories										

Element	Material Options
Bypass Tube Dimension	60.3mm Ø x max length of 5700mm

### I ▶ Material

Code	Material
L	Stainless steel 1.4571 (SS 316 TI)

### II ▶ Pressure Range

Code	Pressure Range	Tube Size
6	< 63 bar	60.3 x 2 mm

### III ▶ PED Category

Code	PED Category
G	SEP/GIP
1	Class I
2	Class II
3	Class III

### IV ▶ Process Connection

Code	Process Connection
A	DN15
B	DN20
C	DN25
D	DN32
E	DN40
F	DN50

# LevelSite®

## Heavy-Duty LevelSite® for Pressure upto 63 bar

Ø 60.3mm x max length of 5700mm

### V ▶ Orientation

Code	Orientation	
B	Process Orientation	Side Side
	Chamber Top	Service Flange
	Chamber Bottom	Service Flange
D	Process Orientation	Top Bottom
	Chamber Top	Service Flange
	Chamber Bottom	Flange
F	Process Orientation	Top Side
	Chamber Top	Flange
	Chamber Bottom	Service Flange

### VI ▶ Length

Max. lengths of 5700 mm

Code	Length
0000	Length in mm

### VII ▶ Float

Code	Float	Material	Float Length LS (mm)	Max Pressure (bar)	Max Temp. (°C)	Weight (g)	Volume (cm³)	Min Density (g/cm³)
J*	TT50/20-VAE	Titanium	200	No limitations	320	210	360	0.6

\* For use preferred with non-corrosive media

### VIII ▶ Indication Rail

Code	Indication Rail
A	Aluminium
M	Makrolon®

### IX ▶ Approvals

Code	Approvals
Z	No Approval
A	ATEX ExH (Consult factory)

### X ▶ Scale

Code	Scale
Z	Without Scale
1	Scale in cm
2	Scale in inches
3	Scale in %

### XI ▶ Miscellaneous Options

Code	Description
E*	Extended Temperature Range (-196 °C to 250°C)

\*Accessories not available for extended temperature range, only the magnetic level indicator; Only for use with aluminium indication rail; ExH not applicable.

### XII ▶ Accessories

For accessories, refer to pages 22/23

# LevelSite®

## Heavy-Duty LevelSite® for Pressure upto 100 bar

Ø 60.3mm x max length of 5700mm

### Example

I Material	II Pressure	III PED	IV Pro. Con.	V Orientation	VI Length	VII Float	VIII Ind. Rail	IX Certs	X Scale	XI Misc
L	7	2	C	A	4000	A	M	Z	Z	-
+ XII Accessories										

Element	Material Options
Bypass Tube Dimension	60.3mm Ø x max length of 5700mm

### I ▶ Material

Code	Material
L	Stainless steel 1.4571 (SS 316 TI)

### II ▶ Pressure Range

Code	Pressure Range	Tube Size
7	< 100 bar	60.3 x 2.6 mm

### III ▶ PED Category

Code	PED Category
G	SEP/GIP
1	Class I
2	Class II
3	Class III

### IV ▶ Process Connection

Code	Process Connection
A	DN15
B	DN20
C	DN25

### V ▶ Orientation

Code	Orientation	
B	Process Orientation	Side Side
	Chamber Top	Service Flange
	Chamber Bottom	Service Flange
D	Process Orientation	Top Bottom
	Chamber Top	Service Flange
	Chamber Bottom	Flange
F	Process Orientation	Top Side
	Chamber Top	Flange
	Chamber Bottom	Service Flange

# LevelSite®

## Heavy-Duty LevelSite® for Pressure upto 100 bar

Ø 60.3mm x max length of 5700mm

### VI ▶ Length

Max. lengths of 5700 mm

Code	Length
0000	Length in mm

### VII ▶ Float

Code	Float	Material	Float Length LS (mm)	Max Pressure (bar)	Max Temp. (°C)	Weight (g)	Volume (cm³)	Min Density (g/cm³)
J*	TT50/20-VAE	Titanium	200	No limitations	320	210	360	0.6

\* For use preferred with non-corrosive media

### VIII ▶ Indication Rail

Code	Indication Rail
A	Aluminium
M	Makrolon®

### IX ▶ Approvals

Code	Approvals
Z	No Approval
A	ATEX ExH (Consult factory)

### X ▶ Scale

Code	Scale
Z	Without Scale
1	Scale in cm
2	Scale in inches
3	Scale in %

### XI ▶ Miscellaneous Options

Code	Description
E*	Extended Temperature Range (-196 °C to 250 °C)

\*Accessories not available for extended temperature range, only the magnetic level indicator; Only for use with aluminium indication rail; ExH not applicable. Refer to pressure degradation table below.

### XII ▶ Accessories

For accessories, refer to pages 22/23

### Important note on Pressure degradation dependent on Temperature

Maximum allowable pressure is dependent on both process connection size and operating temperature.

Process Connection	Pressure Rating at Room Temperature	Pressure Rating at 150 °C	Pressure Rating at 250 °C
DN15	100 bar	85 bar	77 bar
DN20	100 bar	95.5 bar	86 bar
DN25	100 bar	98 bar	88.5 bar

I Material	II Pressure	III PED	IV Pro. Con.	V Orientation	VI Length	VII Float	VIII Ind. Rail	IX Certs	X Scale	XI Misc
L	A	G	C	A	2500	A	M	Z	Z	-
+ XII Accessories										

Element	Pressure Range	Material Options
Bypass Tube Dimensions	A	40mm Ø x max length of 3000mm
	B	60.3mm Ø x max length of 5700mm
	C	60.3mm Ø x max length of 5700mm
	D	60.3mm Ø x max length of 5700mm

### I ▶ Material

Code	Material
L	Stainless steel 1.4571 (SS 316 TI)

### II ▶ Pressure Range

Code	Description	Max. Working Pressure	Tube Size
A	ASME Class Type 150lbs – ASME B16.5 -2020	12 bar	40 x 1 mm
B	ASME Class Type 150lbs – ASME B16.5 -2020	12 bar	60.3 x 2 mm
C	ASME Class Type 300lbs – ASME B16.5 -2020	31.4 bar	60.3 x 2 mm
D	ASME Class Type 600lbs – ASME B16.5 -2020	62.8 bar	60.3 x 2.6 mm

### III ▶ PED Category

Code	PED Category
G	SEP/GIP
1	Class I
2	Class II
3	Class III

**IV ▶ Process Connection**

Code	Process Connection	LA	LB	LC	LD
P	½" ASME RF flange				
R	¾" ASME RF flange				
S	1" ASME RF flange				
T	1 ½" ASME RF flange				
U	2" ASME RF flange				

**V ▶ Orientation**

Code	Orientation		LA	LB	LC	LD
A	Process Orientation	Side Side				
	Chamber Top	Welded End Cap				
	Chamber Bottom	Service Flange				
B	Process Orientation	Side Side				
	Chamber Top	Service Flange				
	Chamber Bottom	Service Flange				
C	Process Orientation	Top Bottom				
	Chamber Top	Welded End Cap				
	Chamber Bottom	Flange				
D	Process Orientation	Top Bottom				
	Chamber Top	Service Flange				
	Chamber Bottom	Flange				
E	Process Orientation	Top Side				
	Chamber Top	Welded End Cap				
	Chamber Bottom	Service Flange				
F	Process Orientation	Top Side				
	Chamber Top	Flange				
	Chamber Bottom	Service Flange				
G	Process Orientation	Side Bottom				
	Chamber Top	Welded End Cap				
	Chamber Bottom	Flange				

# LevelSite®

## LevelSite® ASME Class Type 150lbs, 300lbs, 600lbs

### VI ▶ Length

Max. lengths of 5700 mm

Code	Length
0000	Length in mm

### VII ▶ Float

Code	Float	Material	Float Length LS (mm)	Max Pressure (bar)	Max Temp. (deg C)	Weight (g)	Volume (cm³)	Min Density (g/cm³)	Applicable Pressure Categories			
									A	B	C	D
A	VA 30/02	1,4571	200	16	150	104	141	0.85	Green	Grey	Grey	Grey
B	TT30/02	Titanium	200	25	150	102	141	0.85	Green	Grey	Grey	Grey
D	BN32/100	Buna N	100	10	90	51	78,4	0.75	Green	Grey	Grey	Grey
E	VA50/10	1,4571	200	25	150	205	360	0.62	Grey	Green	Grey	Grey
G	TT50/10	Titanium	200	40	320	202	360	0.56	Grey	Green	Grey	Grey
J*	TT50/20-VAE	Titanium	200	No limitations	320	210	360	0.6	Grey	Green	Green	Green

\* For use preferred with non-corrosive media

### VIII ▶ Indication Rail

Code	Indication Rail
A	Aluminium
M	Makrolon®

### IX ▶ Approvals

Code	Description	A	B	C	D
Z	No Approval	Green	Green	Green	Green
A	ATEX ExH (IConsult factory)	Green	Green	Green	Green

### X ▶ Scale

Code	Scale
Z	Without Scale
1	Scale in cm
2	Scale in inches
3	Scale in %

### XI ▶ Miscellaneous Options

Code	Description
E*	Extended Temperature Range (-196 °C to 250 °C)

\*Only applicable for LB, LC; Accessories not available for extended temperature range, only the magnetic level indicator; Only for use with aluminium indication rail; ExH not applicable.

### XII ▶ Accessories

For accessories, refer to pages 22/23



**XII.I ▶ Accessory I: Transmitter (Unmounted)**

All bypass level indicators are available with a transmitter either as a potentiometer or a two-wire transmitter with 4...20 mA output.

**Working Principle:**

A float with integrated magnet system moves reliably up and down with the fluid. A board equipped with resistors and reed switches is located in the tube of the transmitter. The resistors are connected to form a measuring chain. The reed switches magnetically activated by the float measure a variable d.c. voltage on the measuring chain dependent on the filling level.

**Options:**

XM and XM<sub>i</sub> are designed as simple voltage dividers (potentiometers); XM<sub>i</sub> is the intrinsically safe version. The XT and XT<sub>i</sub> versions are the two-wire versions with 4...20mA output; XT<sub>i</sub> is the intrinsically safe version. For e.g. interface level measurements the output signal may be inverted (20...4 mA).

Element	XT	XT <sub>i</sub>
Power Supply	8...35 VDC, max. 10% residual ripple	8...24 VDC, max. 10% residual ripple
Output	4...20mA, reversed polarity protected	
Load	max. 700 Ohm at 24 V	
Delay	0.33 sec	
Accuracy	max. ±0.2% f. s.	
Temperature Range	-40 °C... +85 °C -50 °C...+150 °C for high-temperature version	T1...T4: -40 °C...+85 °C T5 and T6: -40 °C...+60 °C
Note	The configuration of the selective output control for fault recognition is ≤ 3.5 mA unless expressly specified otherwise in the order.	

Configuration	Approvals	High Temperature (-HT)	Screen (-R12)	Code to specify for kit	LM
XT-R12-LMXXX	N/A	N/A		A	
XT <sub>i</sub> -R12-LMXXX	Exi	N/A		B	
XM-R12-LMXXX	N/A	N/A		C	
XM <sub>i</sub> -R12-LMXXX	Exi	N/A	Screen (-R12)	D	Specify same as LM of magnetic level indicator
XT-HT-R12-LMXXX	N/A	-50 °C...+150 °C for high-temperature version		E	
XM-HT-R12-LMXXX	N/A	-50 °C...+150 °C for high-temperature version		F	



**XII.II ▶ Accessory II: Limit Switches (Unmounted)**

Barksdale Magnetic Level Indicators have limit switches available: GK03, optionally with Ex ia.

**Working Principle:**

GK03 limit switches have bistable reed contacts and can be attached to the tube in any position on the magnetic level indicator with stainless steel clamps. The HT1 version which is equipped with a microswitch. The magnet system in the float will switch over the contact whenever the switch is passed. This permits an arbitrary arrangement of many switches on the tube surface without the switches influencing each other.

When the switching power requirement is higher than permitted by the reed contact, suitable protective relays must be used.

When the application requires frequently changing process, making a permanent contact position is difficult to handle. In that case, we recommend ordering our transmitters (XT) with 4...20 mA output and a separate signal conditioner UAS3V3 with its four, easily changeable limit values and many additional features.

Element	Description		
Housing	Stainless steel 1.4305 and M16 x1,5 cable gland		
Cable	GK03 Silicone 3x0,5 mm <sup>2</sup> (-55 °C...+140 °C) PVC 3x0,34 mm <sup>2</sup> (-10 °C...+80 °C)	GK03-Exi Silicone 3x0,5 mm <sup>2</sup> (-40 °C...+75 °C) PVC 3x0,34 mm <sup>2</sup> (-10 °C...+75 °C)	GK03L PVC 4x0,55 mm <sup>2</sup> (-10 °C...+80 °C)
Protection Class	IP65		
Switching Power	GK03 230 V AC/DC · 1.0 A · 60 VA / W	GK03-Exi U <sub>i</sub> = 28 V · I <sub>i</sub> = 125 mA · P <sub>i</sub> = 0.5 W C <sub>i</sub> = 2 nF · L <sub>i</sub> = 10 µH	GK03L 24 V DC · 1.0 A · 40 W
Approvals	GK03-EXI: TÜV 18 ATEX 214370 X		

Code	Description	Wire	Approval	Code to use for Kit
If ordering individually		If ordering as part of kit		
0303-031	GK03 Limit Switch	1m PVC Cable	N/A	A
0303-028		1m Silicon Cable	N/A	B
0303-032		3m PVC Cable	N/A	C
0303-029		3m Silicon Cable	N/A	D
0303-033		5m PVC Cable	N/A	E
0303-030		5m Silicon Cable	N/A	F
0303-035		1m PVC Cable	EXi	G
0303-027		3m Silicon Cable	EXi	H
0303-036		5m PVC Cable	EXi	J
0303-038		GK03L Limit Switch	2m PVC Cable	N/A
Number of limit switches required				0-4

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