SPG SERIES

Tank gauges SPG series are available with stainless steel wetted parts for all liquid applications compatible with AISI 316 stainless steel.

Special materials as Titanium or HC276 can be considered.

Mounting of the sensor, internally or externally of the tank, meet practically all existing installation requirements.

The SPG Self Powered Gauges have been designed for Marine and Industrial applications.
They are completely autonomous and provide remote continuous indication of tank contents without using any external energy.

Indicators are of stainless-steel construction. Calibration in unit of volume and/or depth of liquid.

Each scale is individually calibrated and printed on dial.

APPLICATION FIELDS & FEATURES

- Marine Certification (RINA)
- ATEX certification
- Standard EN-837-3
- Sea water, Oil and Chemical Resistant
- Submersible or externally mounted sensor

SCIENCE GATE
Your Automation Partner

SCIGATE AUTOMATION (S) PTE LTD
No.1 Bukit Batok Street 22 #01-01 Singapore 659592
Tel: (65) 6561 0488 Fax: (65) 6562 0588
Email: sales@scigate.com.sg Web: www.scigate.com.sg
Business Hours: Monday - Friday 8.30am - 6.15pm

TECHNICAL FEATURES

General Features

Indicator Nominal Diameter:	DN 100 DN 150
Capillary Length:	Up to 30 m
Calibration:	According to customer specified head or volume units and tank reference (Standard m^3)

Measurement Performance

Accuracy:	Class 1 (*)
Error introduced by diaphragm seal and capillary:	<±1,5% FS @ +25°C
System accuracy (0 ÷ 60°C):	<±2% FS (**)
Overload:	150 % FS

Notes

(*) Typical at standard conditions between 10% and 90% FS @ 25°C
(**) Accuracy related to a 30 meters capillary instrument

ENVIRONMENTAL FEATURES

Environmental Conditions

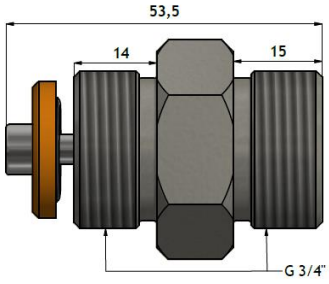
Working temperature limits:	Process: -20 ÷ 130°C Ambient: 0 ÷ 60°C
Ingress protection degree:	Sensor: IP68 @ 30 mH2O Indicator: IP65

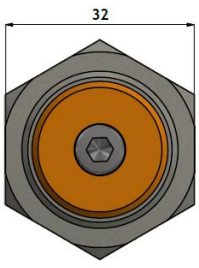
APPROVALS

Type Approvals

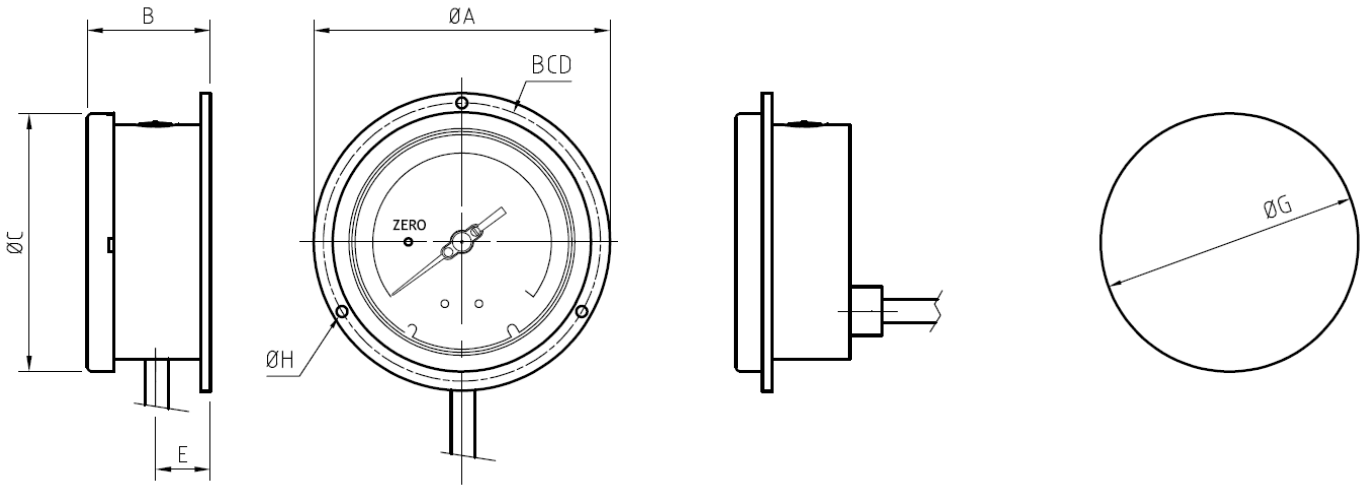
Directive 2014/34/EU (ATEX)	CE Ex II 2 GD_C T_X
Marine type approval	In compliance with applicable requirements of RINA type approval system

DRY BREAK VALVE ¾'' BSP



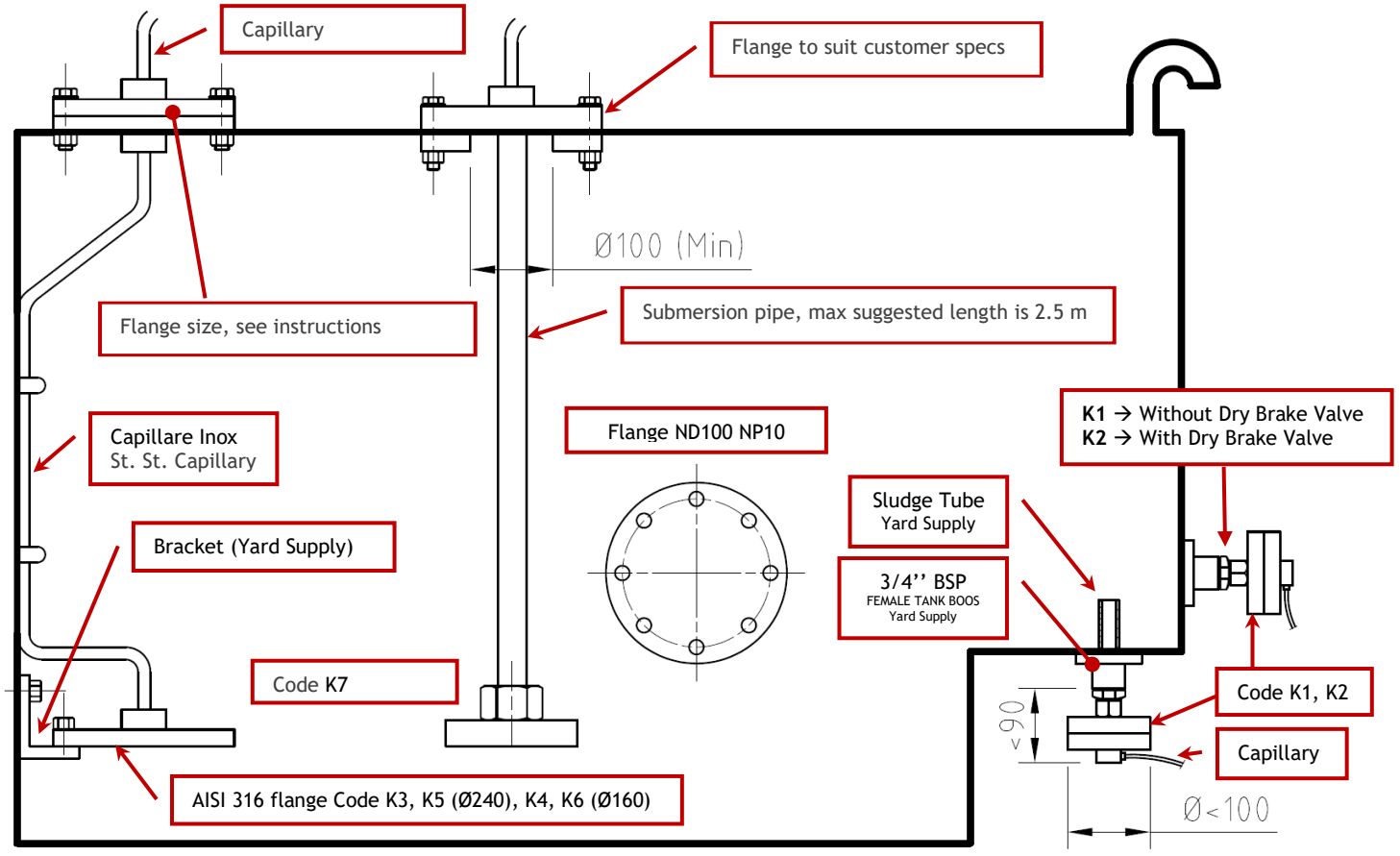


DIMENSIONAL DRAWINGS



Wall Mounting | Flush Mounting | Panel Cut Out

DN	ØA	B	ØC	E	ØG	ØH	BCD
100	127	55	113	16	100	6	116
150	190	59	163	16	150	6	175



Typical sensor installation

ORDERING CODE

SPG Self powered gauge

01 Indicator

301	Ø150 mm SS wall mounting (Back Flange)
302	Ø150 mm SS panel mounting (Front Flange)
303	Ø100 mm SS wall mounting (Back Flange)
304	Ø100 mm SS panel mounting (Front Flange)
Z99	Special

02 Process connections

K1	SS type 316 connection and all wetted parts , ¾'' BSP female running nut without Dry Break Valve
K2	SS type 316 connection and all wetted parts , ¾'' BSP female running nut with Dry Break Valve
K3	St.st.316 submersible Ø240 mm flanged sensor and bulkhead AISI 304 rectangular flange
K4	St.st.316 submersible Ø160 mm flanged sensor and bulkhead AISI 304 rectangular flange
K5	St.st.316 submersible Ø240 mm flanged sensor and bulkhead rectangular flange and protection guard in SS AISI 304
K6	St.st.316 submersible Ø160 mm flanged sensor and bulkhead rectangular flange and protection guard in SS AISI 304
K7	SS AISI 316 submersible sensor with pipe L_{MAX}=2.5 m and flange
Z9	Special

03a Capillary length

11_	Copper capillary + SS AISI 304 sheath	1 … 1.9 m
12_	Copper capillary + SS AISI 304 sheath	2 … 4.9 m
13_	Copper capillary + SS AISI 304 sheath	5 … 9.9 m
14_	Copper capillary + SS AISI 304 sheath	10 … 20 m
21_	SS AISI 304 capillary + SS AISI 304 sheath	1 … 1.9 m
22_	SS AISI 304 capillary + SS AISI 304 sheath	2 … 4.9 m
23_	SS AISI 304 capillary + SS AISI 304 sheath	5 … 9.9 m
24_	SS AISI 304 capillary + SS AISI 304 sheath	10 … 19.9 m
25_	SS AISI 304 capillary + SS AISI 304 sheath	20 … 30 m
Z9_	On request	

03b Measuring range

_A	Nominal measuring range (mH2O) 0÷1
_B	Nominal measuring range (mH2O) 0÷1,6
_C	Nominal measuring range (mH2O) 0÷2,5
_D	Nominal measuring range (mH2O) 0÷4
_E	Nominal measuring range (mH2O) 0÷6
_F	Nominal measuring range (mH2O) 0÷10
_9	On Request

04 Options and accessories

01	Test certificate according to EN 10204
02	AG transcription
03	Calibration report
04	RINA type approval
05	Other type approval
06	ATEX certificate Ⓔx II 2 GDC TX
07	Size ¾'' isolation valve (TIV) for codes K1 & K2.
08	Single scale (Volume → m^3 or liters)
09	Double scale (Volume + H → m3 or liters + m)
10	Dry display
Z9	On Request