QUALITROL®
Defining Reliability

STB000 TECHNICAL DATA

Features and parameters

ELECTRICAL	
Voltage / frequency	100 - 240 V AC, 50 / 60 Hz
Inrush control	Staged heating at 10 seconds
Conducted / radiated emissions	EN 55011
Immunity tests	EN 61000-4-2 EN 61000-4-3 EN 61000-4-4 EN 61000-4-5 EN 61000-4-6 EN 61000-4-8 EN 61000-4-11
Harmonics and flicker tests	EN 61000-3-2 EN 61000-3-3
Dielectric isolation	1500 V AC for 60 seconds to ground
Power consumption	Steady state, non-regeneration: < 10 Watts. Steady state regeneration heater current: < 3 Amp Regeneration heater inrush current: < 12 Amp

FUNCTIONS	
Regeneration frequency setting	10, 40, 70, 100 days
Humidity range	RH 2% to 100%
Status indication	LED - Green, Blinking Green or Red depending on breather status
Regeneration frequency control	2 position DIP switch

FUNCTIONS

Relative humidity trigger level	User configurable: 25% RH default value
Regeneration cycle	3 hours full power, 2 hour cool-down, 1 hour rest (standard)
Regeneration status monitoring	5 A(NO), 3 A(NC) at 30 V DC resistive 5 A(NO), 3 A(NC) at 125/250 V AC resistive
Failure mode detection	RH sensor, heater, solenoid
Analog output signal	4 - 20 mA @ maximum 500 ohms for RH
Communications	MODBUS (remote) and USB (local)

FUNCTIONS - DATALOGGING

Parameters recorded	Timestamp, Humidity, Temperature, Error State, Relay Status (Error and Regeneration Relays)
Sampling rate	15 minutes
Memory size	32 MB (20 years of data)

MECHANICAL - MATERIALS

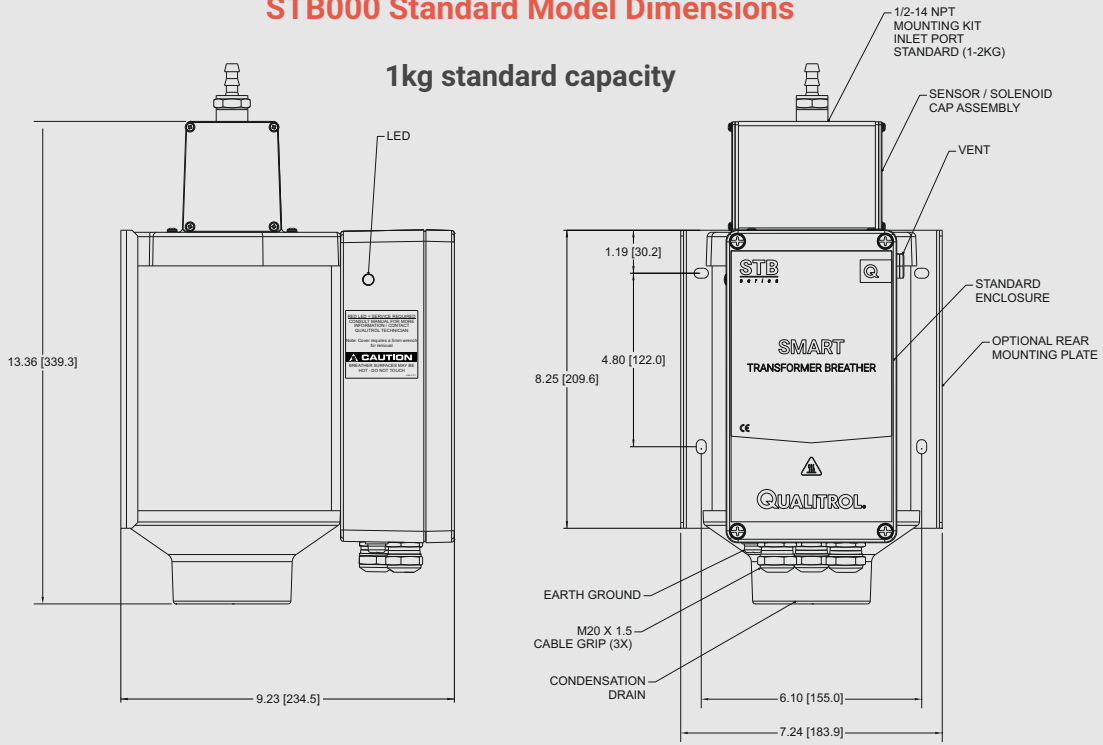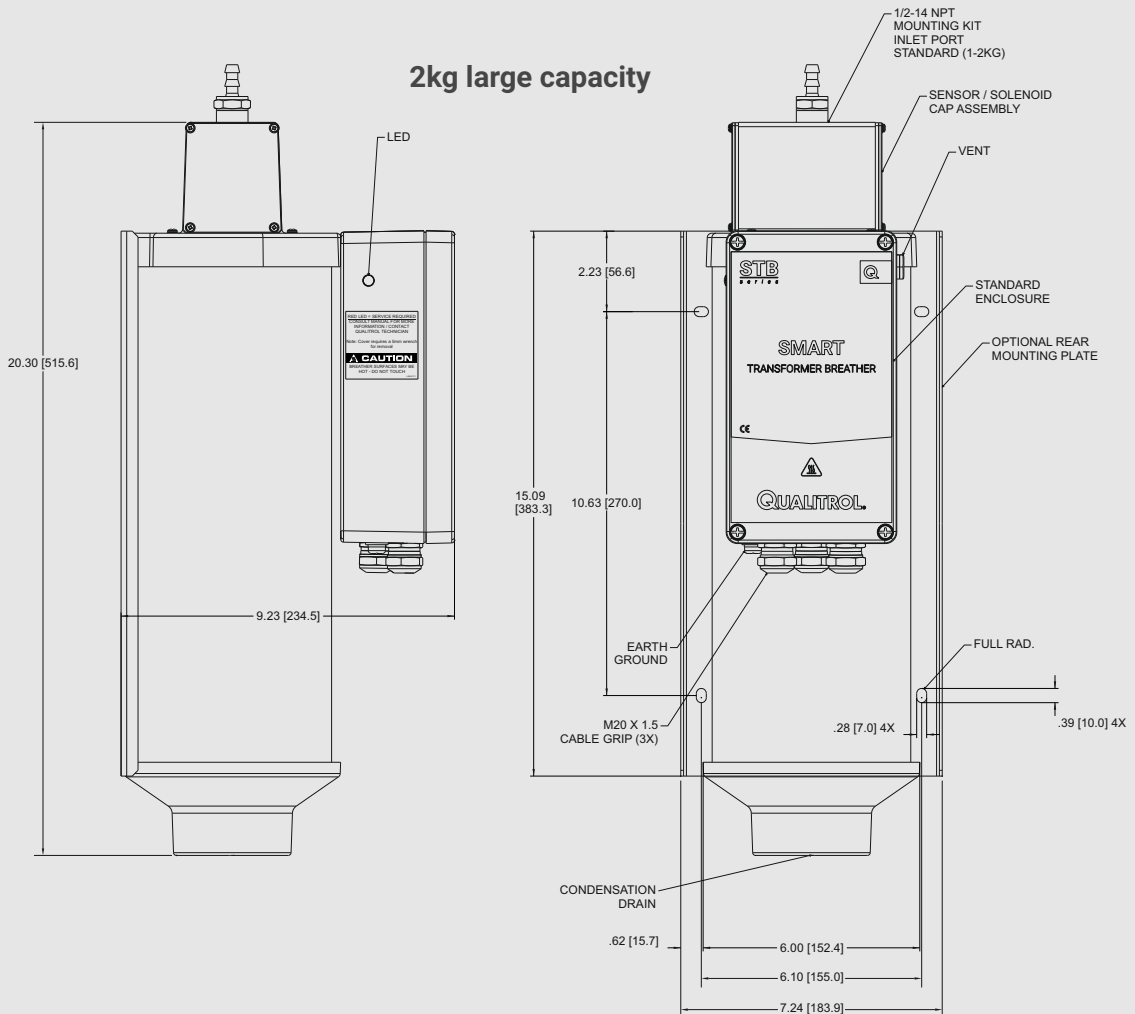|	
Housing and frame	Die-cast aluminum (standard). Stainless steel (optional)
Coating	C5M high durability paint (standard)
Tube	UV-Stabilized polycarbonate or glass
Desiccant	Colorless, non-poisonous silica gel

OPERATING CONDITIONS

Temperature relative	-40°C to 70°C or -60°C to 70°C (depending on model)
Control box humidity	95% non-condensing at 80°C IP65
Protection vibration	50 / 60 Hz @ .004" displacement

STB000 Standard Model Dimensions
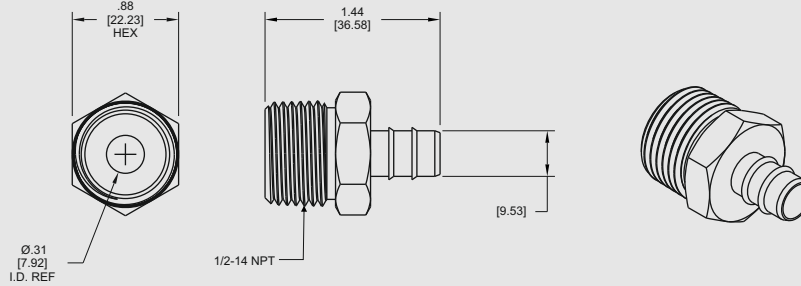
1kg standard capacity

LED

13.36 [339.3]

9.23 [234.5]

1/2-14 NPT
MOUNTING KIT
INLET PORT
STANDARD (1-2KG)

SENSOR / SOLENOID
CAP ASSEMBLY

VENT

1.19 [30.2]

4.80 [122.0]

8.25 [209.6]

STB
series

Q

SMART
TRANSFORMER BREATHER

CE

QUALITROL.

STANDARD
ENCLOSURE

OPTIONAL REAR
MOUNTING PLATE

EARTH GROUND

M20 X 1.5
CABLE GRIP (3X)

CONDENSATION
DRAIN

6.10 [155.0]

7.24 [183.9]

2kg large capacity

LED

20.30 [515.6]

9.23 [234.5]

1/2-14 NPT
MOUNTING KIT
INLET PORT
STANDARD (1-2KG)

SENSOR / SOLENOID
CAP ASSEMBLY

VENT

2.23 [56.6]

STB
series

Q

SMART
TRANSFORMER BREATHER

CE

QUALITROL.

STANDARD
ENCLOSURE

OPTIONAL REAR
MOUNTING PLATE

15.09
[383.3]

10.63 [270.0]

EARTH
GROUND

M20 X 1.5
CABLE GRIP (3X)

FULL RAD.

.28 [7.0] 4X

.39 [10.0] 4X

CONDENSATION
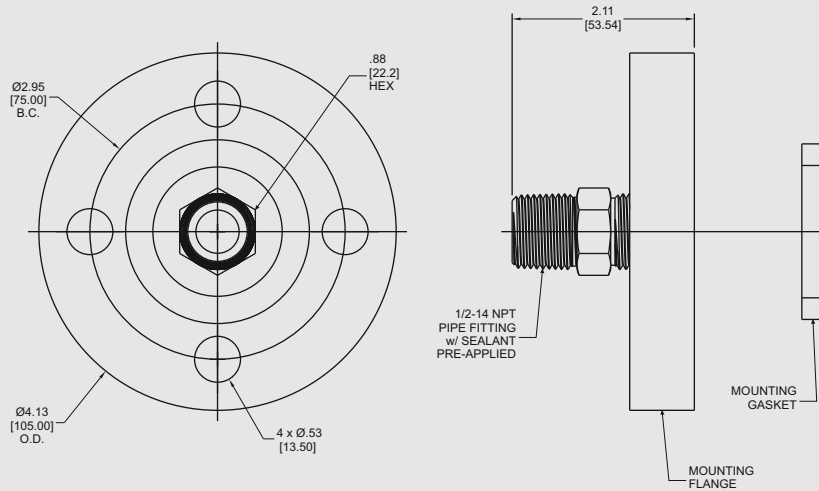DRAIN

.62 [15.7]

6.00 [152.4]

6.10 [155.0]

7.24 [183.9]

STB000 Mounting Options

Hose barb fitting
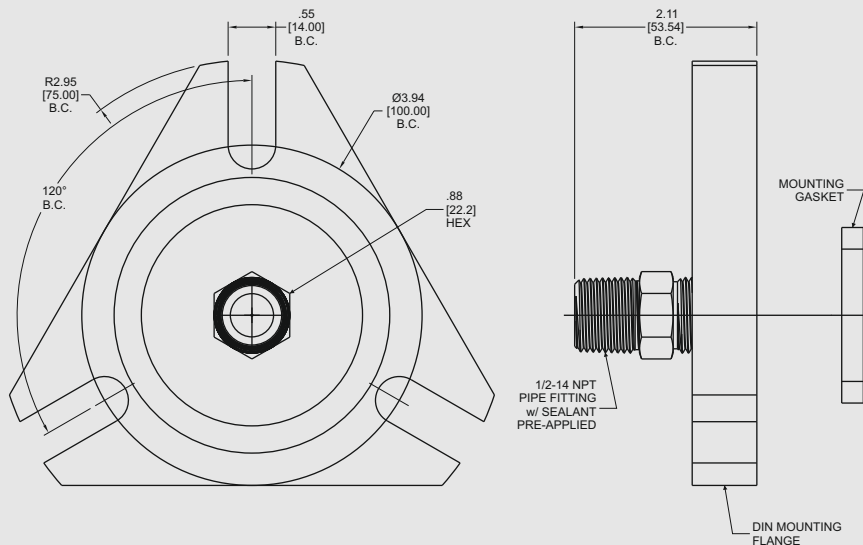3/8 inch I.D. hose barb with ½ inch NPT threads. Supplied with 6.5 foot (2 meter) black rubber hose

.88
[22.23]
HEX

1.44
[36.58]

[9.53]

Ø.31
[7.92]
I.D. REF

1/2-14 NPT

Circular flange
Circular flange provided with mounting gasket and bolts

2.11
[53.54]

Ø2.95
[75.00]
B.C.

.88
[22.2]
HEX

Ø4.13
[105.00]
O.D.

4 x Ø.53
[13.50]

1/2-14 NPT
PIPE FITTING
w/ SEALANT
PRE-APPLIED

MOUNTING
GASKET

MOUNTING
FLANGE

Triangular flange
Triangular flange provided with mounting gasket and bolts

.55
[14.00]
B.C.

2.11
[53.54]
B.C.

R2.95
[75.00]
B.C.

Ø3.94
[100.00]
B.C.

120°
B.C.

.88
[22.2]
HEX

MOUNTING
GASKET

1/2-14 NPT
PIPE FITTING
w/ SEALANT
PRE-APPLIED

DIN MOUNTING
FLANGE

Special mounting configurations
Other special mounting configurations can be ordered per request