Quantum QCG 295 capacitive probe

Current Telemetry Gauge System. For use with Liquid Cryogens (not Helium)

- Liquid level Gauge
- Option for linking into a computer
- Variable probe length to suit all vessels
- Probe design tested to 75 Bar
- Available with KF50 flange
- Easy readable display (0-100%)
- Both Probe unit and local display unit sealed to IP67
- 5m 2 core screened cable
- The QCG295 system consists of:
  QCG290- probe assembly containing sensor electronics attached by 1.5m cable
  QLD290- local meter display with 5m cable (connection to 4-20mA loop control unit)
- Designed to monitor the height of liquid in a vessel and to display the level on a panel meter (0 to 100% full).
- Calibrated specifically for a particular cryogenic fluid
- For use with with Liquid Cryogens (not Helium)
- Supplied with a black plastic protection cap covering the open end of the stainless steel probe to prevent contamination entering the probe during transport.
- Maximum operating current 22mA

- The operation of the QCG295 when properly installed and calibrated is summarised in the table below:

Level of Liquid in vessel	Current flowing in loop mA	Reading on panel meter
Full	20	100
75% full	16	75
50% full	12	50
25% full	8	25
Empty	4	0
Power off	0	Off

PRODUCT SPECIFICATIONS

Probe:	Material Stainless Steel Diameter 8mm (o.d.) Length To suit vessel
Readout:	Analogue Panel Meter scaled 0-100%
Gauge Head Enclosure:	Weatherproof polycarbonate case
Dimensions:	82x90x65 (h.w.d.)
Weight:	0.5kg
Temperature:	Housing 5-40°C Probe -196-40°C
Humidity:	0-90%R.H.
IP Rating:	IP65
Power:	4-20mA loop

Part Number	Details
QCG290	Level Gauge with 10m cable
QLD290	Remote display for QCG290 with 5m cable

CMT C-Stic Cryo Level Gauge

For the most basic direct control applications and to provide an additional remote indicator as well, a very easy to use control unit is available to complete the gauge to a real level control system: C-Stic Control Unit

ACCURATE, CLEAR AND EASY LEVEL READING !

The C-Stic is a very robust Level Gauge suited for cold stored liquefied gases like nitrogen, oxygen, argon, carbon dioxide and nitrous oxide. It provides an easy to mount, accurate and reliable digital liquid level indicator. The capacitance of the full stainless steel sensor increases ratiometrically with the liquid coverage and is converted into an easy to read, accurate digital read out with 0.1% resolution. Additionally it has standard an analog 4-20mA Loop connection to be used for industrial control or remote purposes. As the unit is battery powered there's no need for any additional power or cabling. By using the 4-20mA Loop the life indicator flashes and the battery is just needed to power the digital read out when required. By pressing the front key the unit measures and shows the actual level during 10s and switches off automatically afterwards. To change and justify the factory set pre-adjustments, the front cover has to be removed.

Three push buttons are provided for an easy and clear access to electronically stored settings. There are no adjusting potentimeters at all. To mount the Gauge on a tank, a few commonly used fittings are available, the probe diameter is 12mm. Please provide exact (internal) tank size and fitting dimensions when ordering.

PRODUCT SPECIFICATIONS

Sensor				
Material	stainless steel 304 / 316			
Diameter	12mm			
Length	according to tank size			
Temperature	-200ºC ... +100ºC	-328ºF ... +212ºF		
Maximum Pressure	35 bar	500 PSI		3.5 MPa
Tank fitting	7/8 -14 UNF	3/4 -16 UNF		

Display				
Supply	9V PP3-battery (6LR61)	or 4/20mA-Loop powered		
Battery life	3-5 years*	at 3 times/day with an alkaline battery (500mAh)		
Read out	3-digit high efficiency red LED	15mm characters		
Status Indication		**Display**		
Low battery	voltage < 6.5V	[bAt]	during 2 seconds preceeding level indication	
Underload	level < 0%	[uL]	< 3.8mA	Remote 4-20mA Loop Current
Measuring range	level 0-100%	[0.0]-[100]	4.0-20.0 mA	
	level 100-105%	[100]-[105]	20.0-20.8 mA	
Overload	level > 105%	[105]-[900]	< 3.8mA	
	level > 900%	[oL]	< 3.8mA	
Resolution	0.1%			
Reproducability	1%			
Measuring Rate	ca. 1/s			
Temperature	-40ºC ... +60ºC	-40ºF ... +140ºF		
Dimensions	ca. 100 x 65 x 40 mm	ca. 3.94 x 2.56 x 1.57 inch		
Material	Polycarbonate			
Ingress Protection	IP65			
Remote Connection				
Type	2-wire 4/20mA current loop	A ratiometric voltage output for low power applications is available on request: Us =typ.5V / 3mA (ts < 1s)		
Voltage	8... 30Vdc			
Accuracy	0.5% (0.08mA)			

* actual battery life depends on storage and operating temperature, time intervals, manufacturer, etc.