



[I-21/322/2024-W&M Section]
GOVERNMENT OF INDIA/भारत सरकार
MINISTRY OF CONSUMER AFFAIRS, FOOD AND PUBLIC DISTRIBUTION
उपभोक्ता मामले, खाद्य एवं सार्वजनिक वितरण मंत्रालय
DEPARTMENT OF CONSUMER AFFAIRS/ उपभोक्ता मामले विभाग
LEGAL METROLOGY DIVISION/ विधिक मापविज्ञान प्रभाग

Krishi Bhawan/कृषि भवन, नई दिल्ली
Dated/दिनांक:- 12.02.2025

Certificate of Approval of Model/ मॉडल का अनुमोदन प्रमाणपत्र

Whereas the Central Government, after considering the report submitted to it by prescribed authority, along with the OIML Certificate No. R117/2019-A-SE1-24.01 issued by RISE Research Institutes of Sweden AB, Box 857, SE-50115 Boras, Sweden is satisfied that the model described in the said report (see the figure given below) is in conformity with the provisions of the Legal Metrology Act, 2009 (1 of 2010) and the Legal Metrology (Approval of Models) Rules, 2011 and the said model is likely to maintain its accuracy over periods of sustained use and to render accurate service under varied conditions;

Now, therefore, in exercise of the powers conferred by section 22 of the Legal Metrology Act, 2009 (1 of 2010) read with sub-rule (6) of rule 8 and sub-rule (4) of rule 11 of the Legal Metrology (Approval of Models) Rules, 2011, the Central Government hereby issues the certificate of approval of measuring system of liquid other than water with digital indication of accuracy class 0.5 of "Tokheim Quantum QX30" series with brand name "Tokheim" (hereafter in referred to as the said model), manufactured by M/s Tokheim India Pvt. Limited, Building No.2, Plot No.66, TTC Industrial Area, MIDC Mahape, Navi Mumbai-400710, Maharashtra, India and which is assigned the approval mark IND/09/25/42 (the picture of the model is given below as Figure 1);

The said model is measuring system for liquid other than water.

Technical Data:

Measurement Range	
Maximum flow rate(qmax)	40 to 130 L/min (DEF down to 10 L/min)
Minimum flow rate (qmin)	≥2.0 L/min
Minimum measured quantity (MMQ)	DEF iMeter2 DM2-X DEF, 2.0 and 5.0 L TQM 2.0 L only TQM AL 5.0 L only
Scale interval, volume display	0.01 L
Maximum working pressure	0.35MPa
Minimum working pressure	0.10 MPa
Liquid temperature range	-30 °C to +55 °C, only for iMeter2 -40 °C to +50 °C only for TQM -25 °C to +55 °C iMeter2 FAME/RME -10 °C to +55 °C only for DEF iMeter2 -5 °C to +35 °C only for DEF TQM, TQM-AL
Type of liquid	
Volume Sensor iMeter2	Petrol, kerosene,diesel,ethanol or FAME/RME/HVO/Biofuels and its blends
Volume Sensor TQM	Petrol, kerosene,diesel,ethanol or FAME/RME/HVO/Biofuels and its blends
Viscosity range	0.4 – 8.0 mPas
Volume Sensor iMeter2 DM2-X DEF & TQM-AL	DEF (Diesel Exhaust Fluid, e.g. AdBlue)
Volume Sensor flow rate range	
iMeter2 Duplex (each meter) and Single (Flow compensating Pulses Transmitter)	0.2 to 110 L/min 0.4 to 40 L/min only for DEF

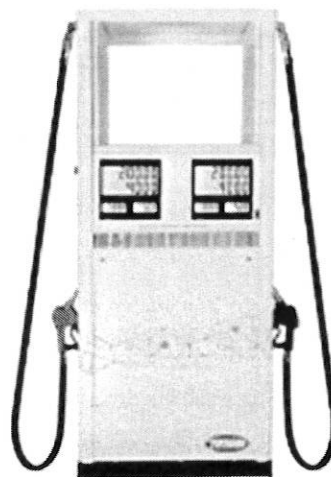


iMeter2 Duplex (each meter) and Single (Not flow compensating Pulses Transmitter)	1.6 to 70 L/min 0.2 to 70 L/min only for Petrol 4 to 70 L/min only for FAME/RME
TQM Meter	4 to 80 L/min
TQM-AL	2 to 40 L/min
Environmental class/influence quantities	
Mechanic	Class M1
Electromagnetic	Class E1
Humidity	Class H3
Ambient temperature limits	-40 °C to +55 °C, -5 °C to +55 °C for DEF

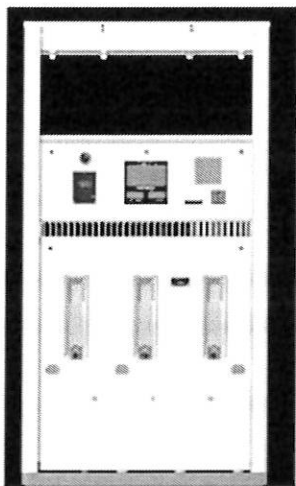
Figure 1



Quantum 330 or Q330 Dispenser series(Mono)



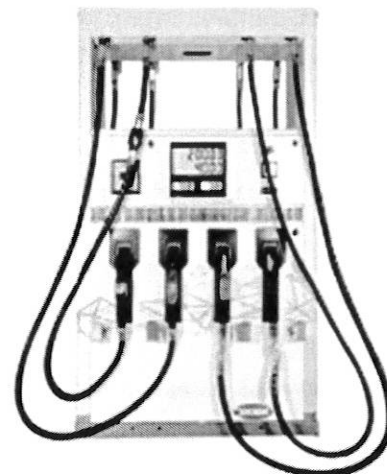
Quantum 330 or Q330 Dispenser series(Dual)

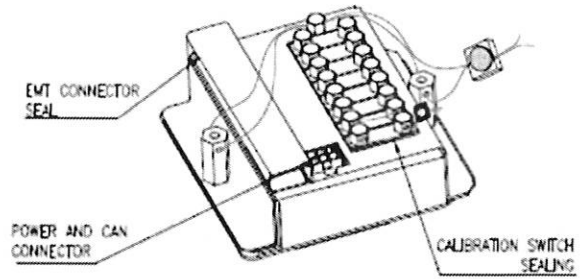
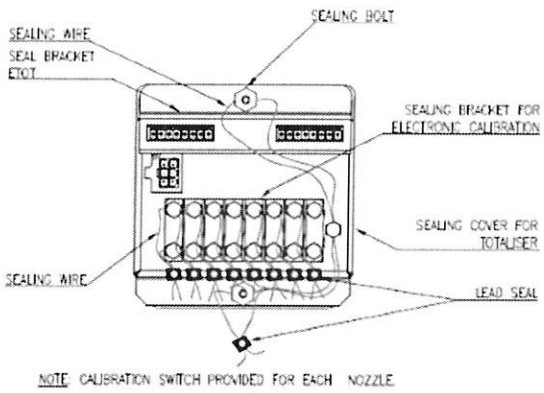


Quantum 330 or Q330 Dispenser Series
(MPD-Multi Products Dispenser)

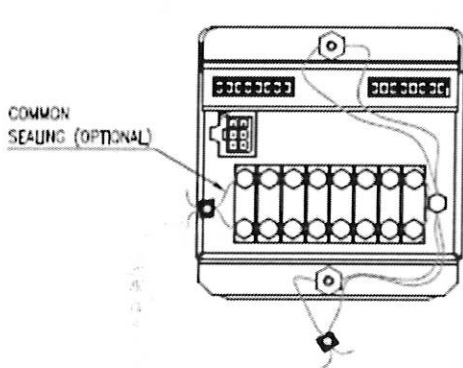


Quantum 430 or Q430 Dispenser Series
(MPD-Multi Products Dispenser)

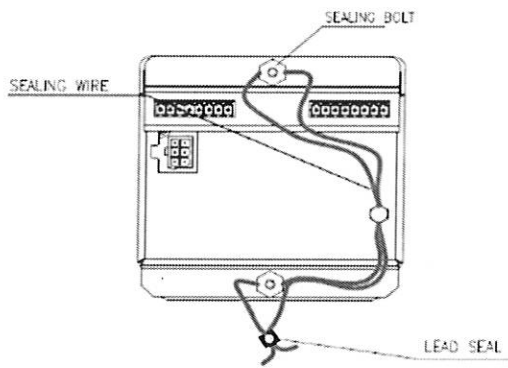




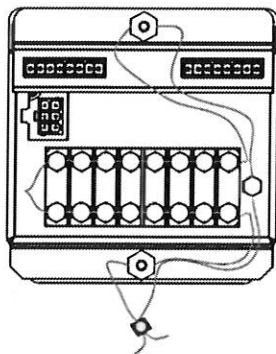
Individual Calibration Switch Sealing



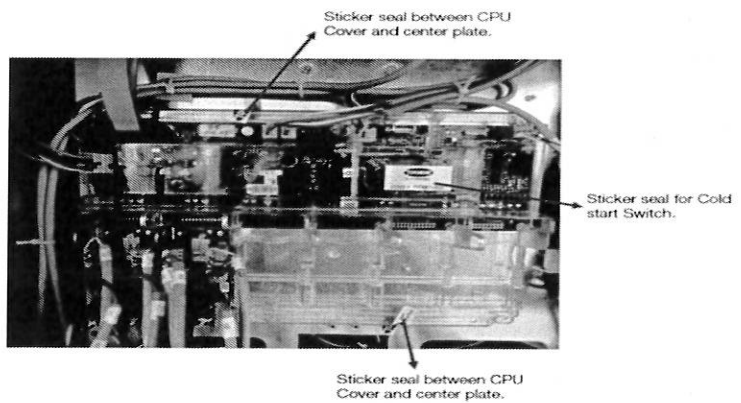
Common Sealing for Calibration Switches



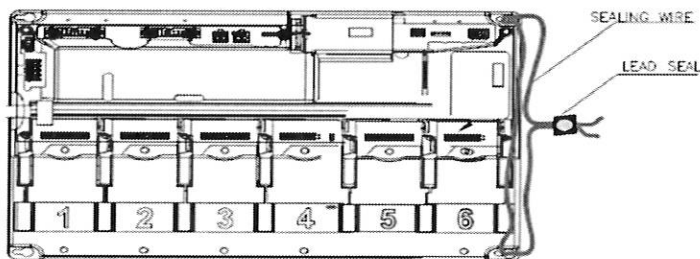
ET Sealing when Calibration Switches are provided on CPU



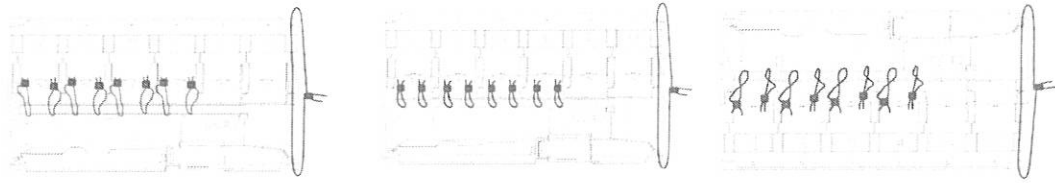
ET Sealing when Calibration Switches are provided on CPU



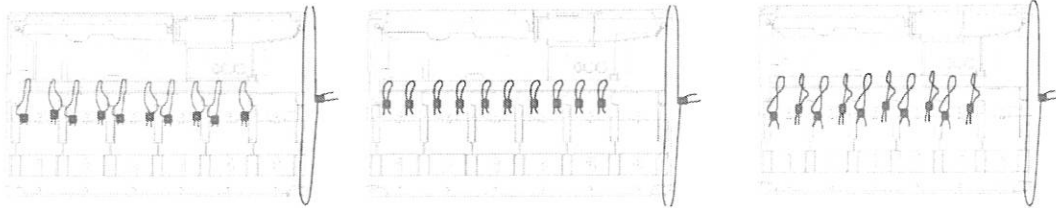
Sealing of CPU sticker



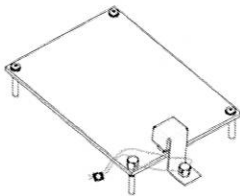
Seal between CPU cover and center plater



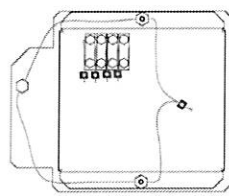
Seal between CPU cover and center plater



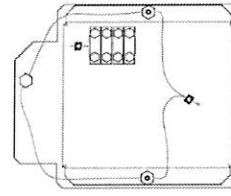
CPU Sealing when calibration switches are provided on CPU and ET is provided at HYM5 Position.



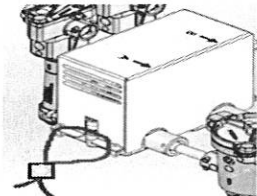
Vapour Recovery Board Sealing



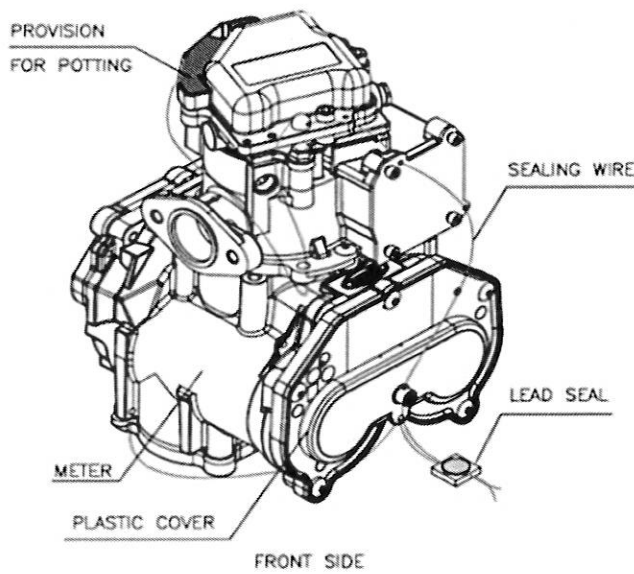
CE Board Per Nozzle Sealing



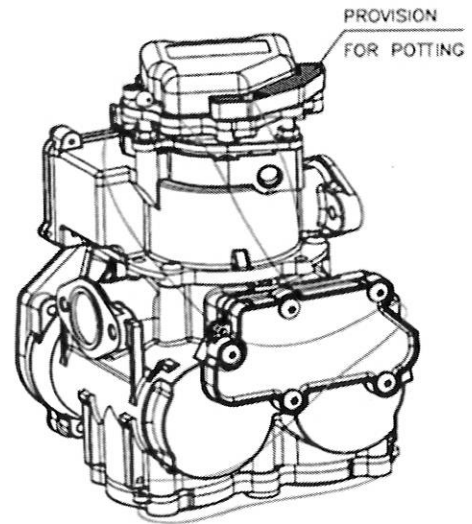
CE Board Per Common Sealing



VFM Sealing

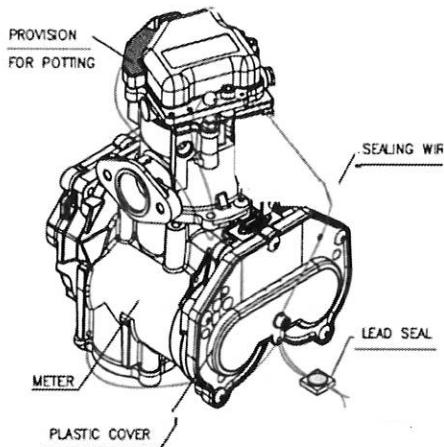


FRONT SIDE

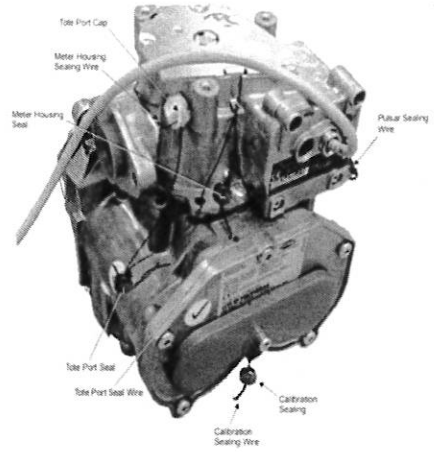


BACK SIDE

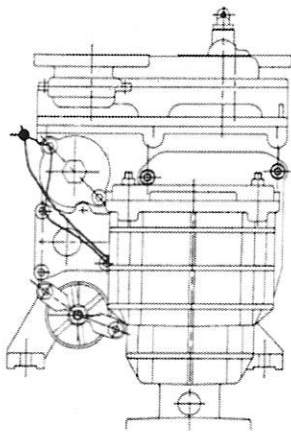
TQM Meter with Top mounted pulser arrangement



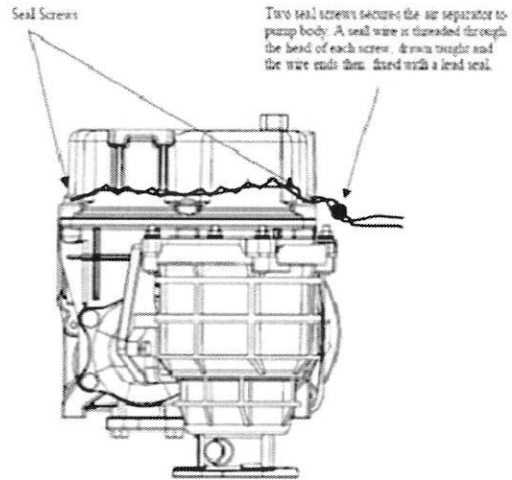
TQM Meter with new control housing and Top mounCM. SQulser arrangement



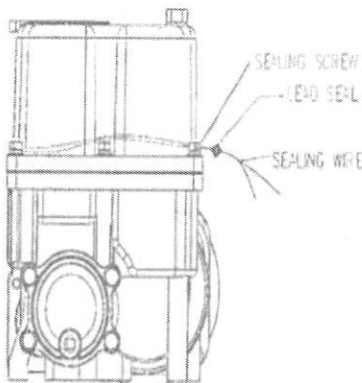
TQM Meter with TMV "side mounted pulser arrangement



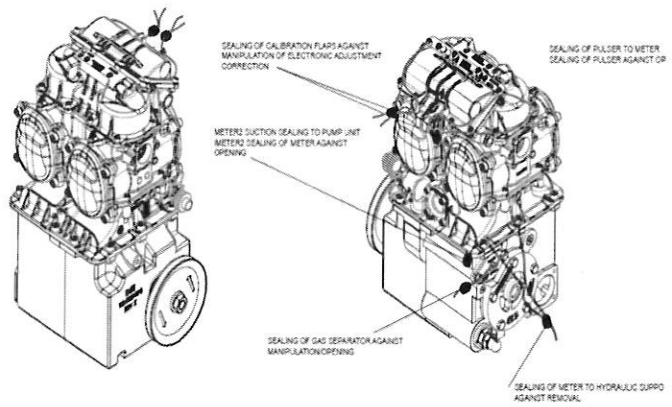
TQP-HS/PAS V3 Gas Separator Sealing Drawing



TQP-RS/EPZ Gas Separator Sealing Drawing



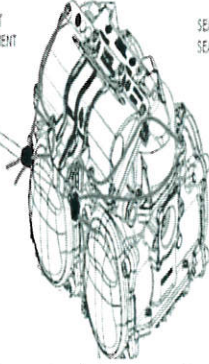
TQP-HS/PAS V3 Gas Separator Sealing Drawing



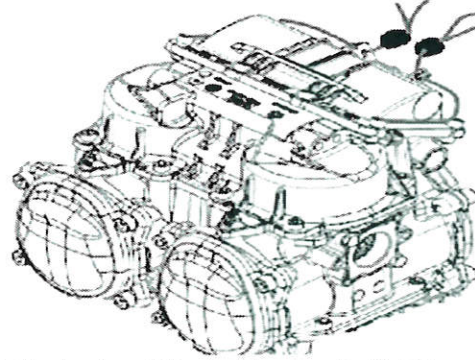
Sealing drawing of iMeter2 with CPU Pumping Unit (Suction Type)



SEALING OF CALIBRATION FLAPS AGAINST
MANIPULATION OF ELECTRONIC ADJUSTMENT
CORRECTION



SEALING OF PULSER TO METER
SEALING OF PULSER AGAINST OPENING



Sealing drawing of iMeter2 without Pumping Unit (Pressure Type) Sealing drawing of iMeter2 without Pumping Unit (Pressure Type)

Figure 2

A typical schematic diagram of sealing provision to prevent the fraudulent practices of the model is given above as Figure 2.

[F.No. I-21/322/2024-W&M Section]

Ashutosh Agarwal

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