



Quantium 400T



Dispensing Success
The World Over

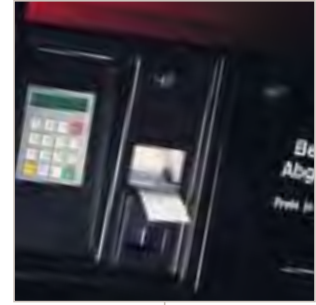
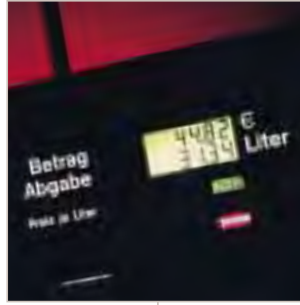
Quantium 400T

- Optimised ergonomics
- Compact design
- Best-in-industry components



Quantium 400
best-in-industry
components
for the first really global
high-hose multi-product
fuel dispenser





In the ever-challenging environment of the retail petroleum industry, the need to improve the efficiency of service stations is a permanent objective. Customer satisfaction and loyalty are the priorities, and outstanding performance and service are the essential key to attaining them.

The revolutionary Quantum T family of fuel dispensers has been conceived as the best response yet to this challenge. Through design innovation and the use across the range of a common core of the highest-performance components the industry has to offer we have established a universal platform which we believe will exceed your current and future expectations.

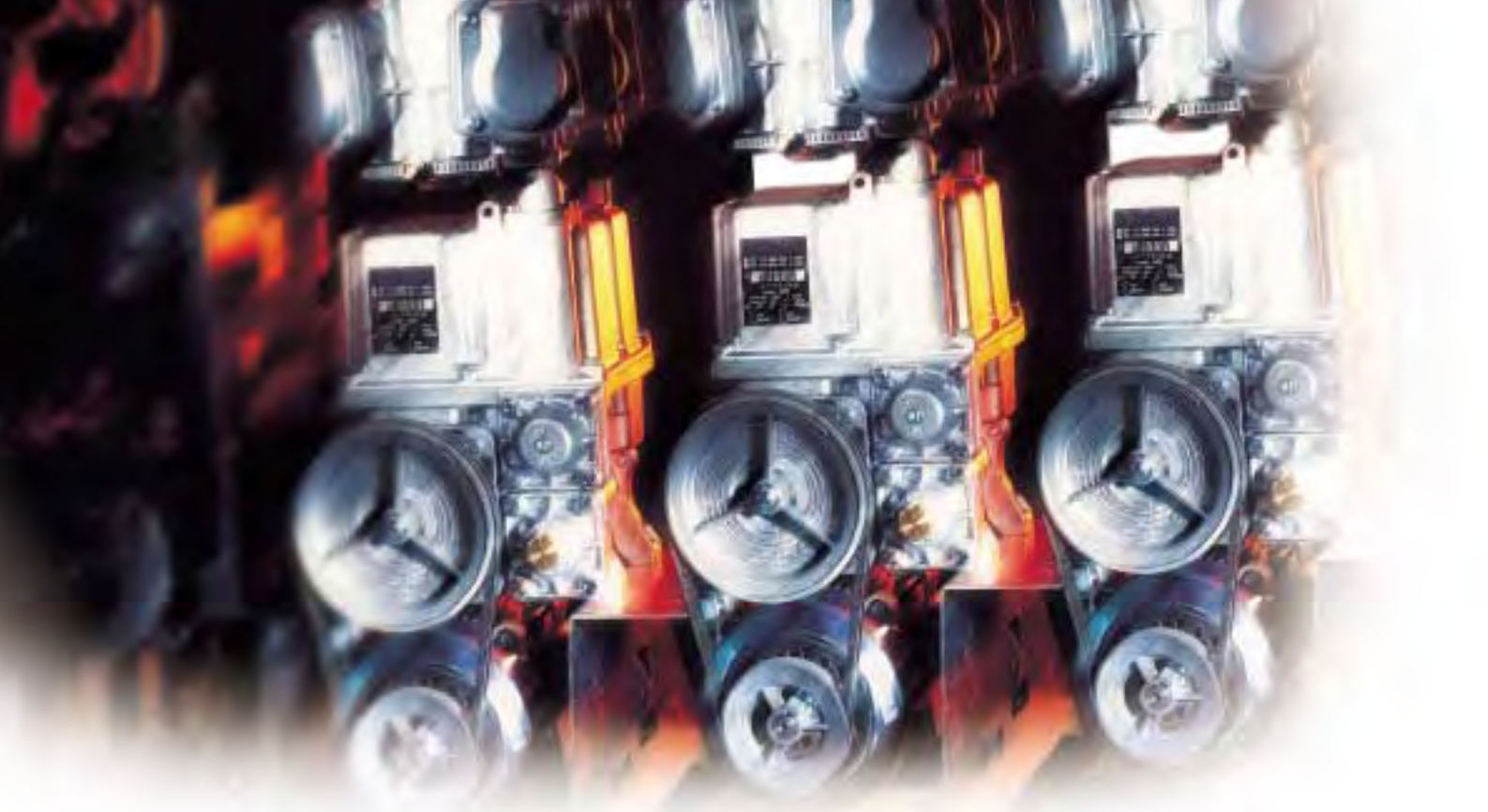
Modular design

The modular basic design of the Quantum 400T dispenser interfaces with a comprehensive set of peripherals and options (including payment terminals and multimedia devices) to offer levels of flexibility unmatched anywhere in the industry. Future-proof solutions with full plug-in capability for downstream product enhancements mean that we can guarantee our customers best-in-industry technology now and going forward, not to mention the lowest possible ownership costs.

Best-in-industry components for unmatched ergonomics

Built using proven components, the Quantum 400T is an industry reference in terms of ergonomics and performance. The EPZ pump and the MA 26 meter device are twinned with the WWC T1 calculator at the heart of the dispenser, making Quantum 400T the most advanced, most reliable offer in the market-place.





EPZ

The high performance suction pump

This pumping unit has become standard equipment within the Tokheim Group. It has proved its reliability and performance time and again in the toughest conditions and most hostile environments throughout the globe.

The pump operation speed can be modified by simply swapping the motor pulley, enabling the same unit to deliver both standard flows of 40 l/min. or 80 l/min.

This unit uses a rotary vane pump with carbon blades that produce exceptional suction power even when the pump is dry. Air elimination to extreme tolerances is provided by a patented, fully static device using a vortex effect.



Low electrical power consumption makes this unit a cost-effective solution.

Technical specifications

	40 l/min.	80 l/min.
Pump speed	450 rpm	650 rpm
Max. flow	40 l/min.	80 l/min.
Min. flow	5 l/min.	8 l/min.
Noise level	68 dB	72 dB
Bypass pressure	1.8 bar	2 bar
Power on motor	370 W	550 W
Min. dry suction	400 mbar	500 mbar
Min. wet suction	700 mbar	700 mbar
Air elimination	According to OIML, CEE 77.313 regulation	
Strainer	70 μ	
Bypass pressure adjustment	1.2 bar to 2.5 bar (about 0.1 bar per turn of the by-pass adjustment screw)	

MA 26

The high accuracy piston meter

The MA 26 piston meter integrates the MP T1 pulser. It features a four-cylinder sleeved body in which four pistons drive two connecting rods, guaranteeing enhanced reliability.



A valve actuated by the crankshaft travels along a linear axis to connect the cylinders successively with the meter inlet and outlet. The valve is mounted between a slide plate built into the meter body and a

gasket making a seal with the manifold. The slide plate has four ports, each opening onto one of the four cylinders. The connection between the gasket and the outlet manifold is realised using a teflon diaphragm which prevents any mixing between intake and exhaust.

Technical specifications

Cylinder capacity	0.7 l/rev.
Maximum flow	80 l/min.
Minimum flow	5 l/min.
Accuracy	± 0.3 %
Maximum service pressure	2 bar
Adjusting device action around neutral positions	± 1.1 %



WWC T1

The state-of-the-art world-wide calculator

The WWC T1 subsystem is the world-wide electronic heart of the Quantum T dispenser family. Its exceptional levels of reliability and industry-leading flexibility will add genuine value to your fuel retailing operation, while your customer at the pump will enjoy the benefits and comfort of the latest high-visibility display technology.

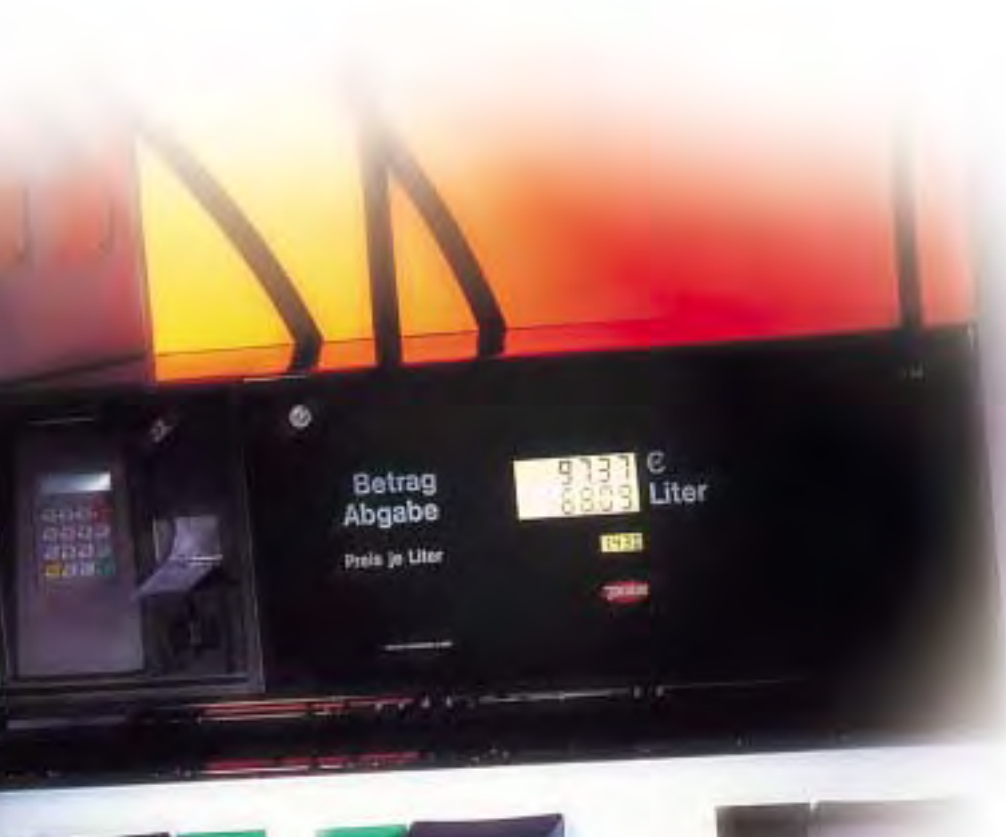
Designed to incorporate the latest state-of-the-art electronic technology, it allows for more flexibility and maximum efficiency to adapt to all operating requirements in a petroleum retailing environment.

Its adaptable architecture is built around a powerful central microprocessor board controlling a complete set of intelligent peripheral I/O boards with highly dedicated functions to meet your specific needs (e.g. Unit Price Display, Electronic Merchandising, blenders, product indication, preset buttons/keypads, etc.).

Normal data communication between the WWC T1 and forecourt controllers or POS systems already incorporates all major existing proprietary or international standard protocol combinations.

Technical specifications

- Number of digits:
 - total amount to pay (6),
 - volume (6),
 - unit price (4).
- Data configuration by console or by remote control
- Electronic totalisers provide data on total amount to pay, volume and number of deliveries
- Motor relays and thermal overload protection
- Battery-protected memory for security in the event of power failure
- Optional but fully integrated ECVR solution



Base models

- Standard speed (40 l/min.), one through four products
- Very high speed (130 l/min.)
- LPG one- and two-hose,
- Master + satellite
- High speed (80 l/min.) as one product within a multi-product (one through four products).

Standard features

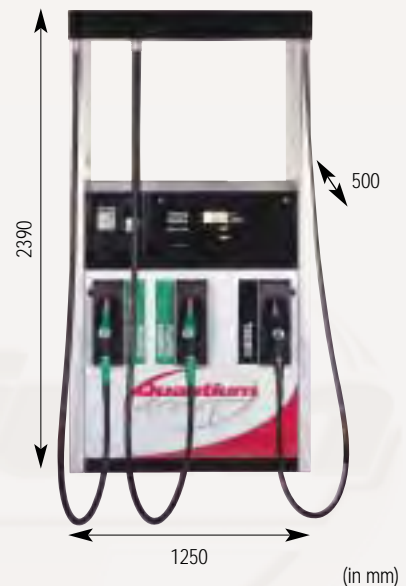
- Lane-oriented, with high hose handling
- Three-phase, 400V/50 Hz motors (same motor for suction pumps and VR vacuum pumps)
- Solenoid control valve (24V) allowing 2-stage (preset application) configurations
- Vapour recovery retrofittable
- OPTimum ready
- Corrosion-resistant chassis and panels with built-in driptray
- 3/4" ZVA automatic nozzle for standard speed (40 l/min.) & high speed (80 l/min.)
- 1" ZVA nozzle with truck spout for very high speed (130 l/min.) and master/satellite models
- Boesekoop nozzle for LPG
- DN16 for standard speed non-VR models (Elaflex or Goodyear)
- Coaxial European vapour recovery hoses for VR (Elaflex or Goodyear)
- DN19 for high speed non-VR models (Elaflex or Goodyear)
- DN21 for very high speed models (Elaflex) or DN25 (Goodyear)

Optional features

- Vapour recovery (upgradeable to the newly introduced Tokheim ECVR-Self-Calibrating System)
- VR status LED
- Programming switch
- Single-phase motor
- Alternate lighted Ferranti-Packard display
- Preset push buttons
- Unit price display per product
- Product-indication lights
- Indication lamps
- Speaker
- IR remote control compatible
- Mechanical totalizers on pulser
- Electromechanical totalizers
- Full range of nozzle options
- Full range of LPG nozzle options (Elaflex, Nettuno, URG)
- Full range of hose options
- Air vent
- Hydraulic inlet options
- Pressure feed
- Mouvex air separator
- Ground frame

Environmental conditions

Ambient temperature:	-25°C to +55°C for standard configuration -40°C to +40°C with the Ultra Low Temperature kit
Temperature of fluid:	-25°C to +25°C
Viscosity of fluid:	< 10 ⁻⁴ m ² /s
Relative humidity:	5% to 95% non condensing
Climate:	Marine, tropical, industrial and polar
Altitude:	From sea level to 2000m



Tokheim

DIRECT OPERATIONS

- A Austria**
Tokheim
Eitzenberger straÙe 4-6
A-2544 Leobersdorf
☎ +43 (0) 2256 606 0
☎ +43 (0) 2256 606 170
- B Belgium**
Tokheim
Everdongenlaan 31
2300 Turnhout
☎ +32 (0) 14 44 85 00
☎ +32 (0) 14 44 85 55
- CZ Czech Republic**
Tokheim
Pernerova 48
CZ - 186 02 Prague 8
☎ +420 2 24890312
☎ +420 2 232 72 67
- DK Denmark & Scandinavia**
Tokheim
Hejrevang 10
3450 Allerød
☎ +45 48 14 14 00
☎ +45 48 17 45 96
- F France**
Tokheim (Corporate headquarters)
ZAC Paris Nord 2
B.P. 40027
95912 Roissy C.D.G. Cedex
☎ +33 (0)1 49 90 77 00
☎ +33 (0)1 49 90 77 77
- F France**
Tokheim Services France
9, avenue Gallilée
92350 Le Plessis Robinson
☎ +33 (0)1 41 36 13 00
☎ +33 (0)1 41 36 13 70
- D Germany**
Tokheim GmbH
Lothstrasse 1a
D-80335 München
☎ +49 (0)89 18953-0
☎ +49 (0)89 18953-399
- I Italy**
Tokheim Sofitam
Quattordio KM 10800
S.P. 26
14030 Scurzolengo (AT)
☎ +39 0141 2038200
☎ +39 0141 2038222
- NL Netherlands**
Tokheim
Touwslagerstraat 17
Postbus 4186
2980 GD Ridderkerk
☎ +31 180 481500
☎ +31 180 481555
- N Norway**
Tokheim
Verkseier Furulunds vei 11B
P.O. Box 45 - Alnabru
0614 Oslo
☎ +47 22 90 49 50
☎ +47 22 90 49 51
- PL Poland**
Pol-Germann Tokheim
UL Narwicka 1
80557 Gdansk
☎ +48 58 343 21 71
☎ +48 58 343 22 15
- P Portugal**
G.N.C.
Parque de ciencia e Tecnologia
Edificio Tecnologia I, N° 27
2780 Oeiras
Lisboa
☎ +351 (0)1 422 04 20
☎ +351 (0)1 421 42 26
- RUS Russia**
Tokheim Representative Office
Roome 380 - Hotel "Ukraina"
Kutuzovski prospekt, 2/1, stroyenie 1
Moscow, 121249 Russia
☎ +7 (095) 933 69 35
☎ +7 (095) 933 69 34
- SK Slovak Republic**
Tokheim
Mlynske Nivy 70
SK- 82015 Bratislava
☎ +421 7 58270215
☎ +421 7 53414123
- E Spain**
Koppens Iberica
Calle Imprenta 5
Poligono industrial de Alcobendas
28100 Alcobendas (Madrid)
☎ +34 91 661 28 13
☎ +34 91 661 41 30
- CH Switzerland**
Tokheim
Route du Crochet 7
Case postale 50
1762 Givisiez
☎ +41 (0)26 460 51 11
☎ +41 (0)26 460 51 12
- GB United Kingdom**
Tokheim
Unit 3 Baker Road
West Pitkero Industrial Estate
Dundee DD5 3RT
☎ +44 (0)1382 598000
☎ +44 (0)1382 598001
- RFC Cameroon**
Socatam
B.P. 3941
Douala
☎ +237 40 57 86
☎ +237 40 57 88
- MA Morocco**
Matam
209, bd. Moulay Ismail
Route de Rabat
Casablanca
☎ +212 22 40 40 24
☎ +212 22 40 40 21
- SN Senegal**
Cosetam
Quartier de Bel Air
Route des Hydrocarbures
BP 1237
Dakar
☎ +221 832 23 71
☎ +221 832 68 34
- ZA South Africa**
Tokheim
Stand 110 Precision Road
Kya Sand, Randburg
☎ +27 11 4622105
☎ +27 11 4621942
- TN Tunisia**
Cottam
116, av. de l'Union
du Maghreb Arabe
B.P. 117
La Soukra
2036 Tunis
☎ +216 1 759 550
☎ +216 1 765 943

MIDDLE EAST, SOUTH CENTRAL AMERICA, AFRICA

Tokheim
ZAC Paris Nord 2
B.P. 40027
95912 Roissy C.D.G. Cedex
France
☎ +33 (0)1 49 90 77 56 - 77 31
☎ +33 (0)1 49 90 77 93

ASIA

Tokheim
POBOX # 16869
JAFZ
Dubai UAE
☎ +971 4 881 3305
☎ +971 4 881 4463

