

QUOTATION

Customer : University of Edinburgh, Edinburgh Quote nr. : U2311171-A

F.a.o. : Mrs. S Farrukh Date : 13 September 2023

Tel : Gen: 0131 650 8545 Pages : 3

Email : sfarrukh@ed.ac.uk

Dear Mrs. Farrukh,

Further to your recent enquiry, please find below our quotation for the requested items.

001/000 1 pc 7.10.024 <u>LOW-ΔP-FLOW F-201DV Mass Flow Controller</u>

Model key : F-201DV-AAD-11-K Product series : LOW-ΔP-FLOW

Ingress protection : IP-40

Material : Stainless steel 316
Control function : Flow control
Fluid : NH3 (Ammonia)

Flow range : 1.2...60 ml/min (8 bar (a), 20 °C)

Accuracy : ±1% FS

(At calibration conditions)

Calibration certificate : 3-point calibration

Inlet pressure (P1) : 8 bar (a) Outlet pressure (P2) : 0 bar (a)

Valve function : Normally Closed

Orifice : 0.14 mm
Temperature : 20 °C
Seals : Kalrez 6375
Plunger : Kalrez 6375

Inlet connection : 1/8" OD compression
Outlet connection : 1/8" OD compression
Output signal : RS-232 0...100 % (0...5 Vdc)
Setpoint : RS-232 0...100 % (0...5 Vdc)

Power supply : +15...24 Vdc

Price : £ 1,522.00 (€ 1,691.11) Discount : 15% (£ 228.30)

Total Price : £ 1,293.70 (€ 1,437.44)



002/000 7.10.019 EL-FLOW Select F-201CV-1K0 Mass Flow Controller рс

> Model key F-201CV-1K0-AAD-11-V Product series **EL-FLOW Select**

Ingress protection IP-40

Material Stainless steel 316

Multi Fluid Multi Range Disabled Control function Flow control Fluid N2 (Nitrogen)

Flow range 2...100 ml/min (10 bar (a), 20 °C)

±0.5% Rd plus ±0.1% FS Accuracy (At calibration conditions)

3-point calibration

Calibration certificate Inlet pressure (P1) 10 bar (a) Outlet pressure (P2) 0 bar (a) Valve function Normally Closed 0.20 mm Orifice Temperature 20 °C Viton 51415 Seals Plunger Viton 51415

1/8" OD compression Inlet connection 1/8" OD compression Outlet connection Output signal RS-232 0...100 % (0...5 Vdc) Setpoint RS-232 0...100 % (0...5 Vdc)

Power supply +15...24 Vdc

Price £ 1,241.00 (€ 1,378.89) Discount 15% (£ 186.15)

Total Price £ 1,054.85 (€ 1,172.05)

LOW-ΔP-FLOW F-101E Mass Flow Meter 003/000 7.10.053 pcs

> Model key F-101E-AAD-11-K LOW-ΔP-FLOW Product series

Ingress protection IP-40

Material Stainless steel 316

Fluid Mix: 80.0% N2 (Nitrogen) + 20.0% NH3 (Ammonia)

(mass %)

Flow range 10...500 ml/min (10 bar (a), 20 °C)

±1% FS Accuracy

(At calibration conditions)

Calibration certificate 3-point calibration

Inlet pressure (P1) 10 bar (a) Temperature 20 °C Seals Kalrez 6375

1/8" OD compression Inlet connection 1/8" OD compression Outlet connection RS-232 0...100 % (0...5 Vdc) Output signal

Power supply +15...24 Vdc

Price £ 1,164.00 (€ 1,293.33) Discount 15% (£ 174.60) Nett Price (per unit) £ 989.40 (€ 1,099.33) **Total Price** £ 1,978.80 (€ 2,198.66)

004/000 7.03.422 PiPS-EL Plug-in PS SubD9 Plug In Wall Power Supply

> £ 86.00 (€ 95.56) Price Discount 15% (£ 12.90) £ 73.10 (€ 81.22) Nett Price (per unit) **Total Price** £ 292.40 (€ 324.89)







Cable RS232 T-part DB9 MBC-II Length = 3 meters

 Price
 : £ 76.00 (€ 84.44)

 Discount
 : 15% (£ 11.40)

 Nett Price (per unit)
 : £ 64.60 (€ 71.78)

 Total Price
 : £ 258.40 (€ 287.11)

006/000 4 pcs

<u>Digitus USB 2.0 serial adapter</u> Serial to USB adapter

 Price
 : £ 31.00 (€ 34.44)

 Discount
 : 15% (£ 4.65)

 Nett Price (per unit)
 : £ 26.35 (€ 29.28)

 Total Price
 : £ 105.40 (€ 117.11)

Terms and Conditions

Lead time : Ca. 9 working weeks after receipt of order

Quote validity : 30 days from date of offer

9.09.122

Delivery : 1.5% of order value (CIF, UK mainland) £20.00 min. Payment : 30 days net, approved accounts, from invoice date

Potential Lead Time Change - we feel it is important to inform you of a global supply shortage impacting on electronic components. Bronkhorst is working closely with our supply chain partners to prevent effects of this shortage being felt by you the customer. As such please be advised that the stated lead times may be subject to change.

Gases are always assumed to be both Clean & Dry.

Warranty - all Bronkhorst instruments are supplied with a Warranty period, starting at time of despatch from our Factory in Holland & running for a length of 3 years. In the unlikely event that a unit needs to be returned for repair during this time, it would be returned (once repaired) with a Warranty of 1 year or the remainder of the 3 year period, whichever is longest.

Calibration Certificates - are generally supplied with Bronkhorst instruments as standard. For EL Flow Base, Calibration Certificates are available for an additional charge. For all Mass Flow Online products, please enquire with the Sales Team.

If you require any further information, please do not hesitate to get in touch.

Yours sincerely,

Rebecca Johnson Bronkhorst® UK

Bronkhorst UK offers:

Mass Flow Measurement and Control for Gases



lowest range: $0,014...0,7 \text{ ml}_n/\text{min}$ highest range: $220...11.000 \text{ m}_n^3/\text{h}$

www 🌐

Pressure Measurement and Control for Gases and Liquids



2...100 mbar absolute / differential or 0,7...35mbar gauge 0...400 bar absolute / gauge or 0,3...15 bar differential

www 🌐 🕽

Bronkhorst Dosing Solutions with Pump



www 🌓

Webshop for flow meters: www.massflow-online.com



www 🌑

Mass Flow Measurement and Control for Liquids



lowest range: 5...100 mg/h highest range: 6...600 kg/h

www 🌐 🔪

Liquid Delivery System with Vapour Control



www **(1)**

Customised Manifold Solutions for Mass Flow and/or Pressure Measurement and Control



www.

Accessories and Software





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