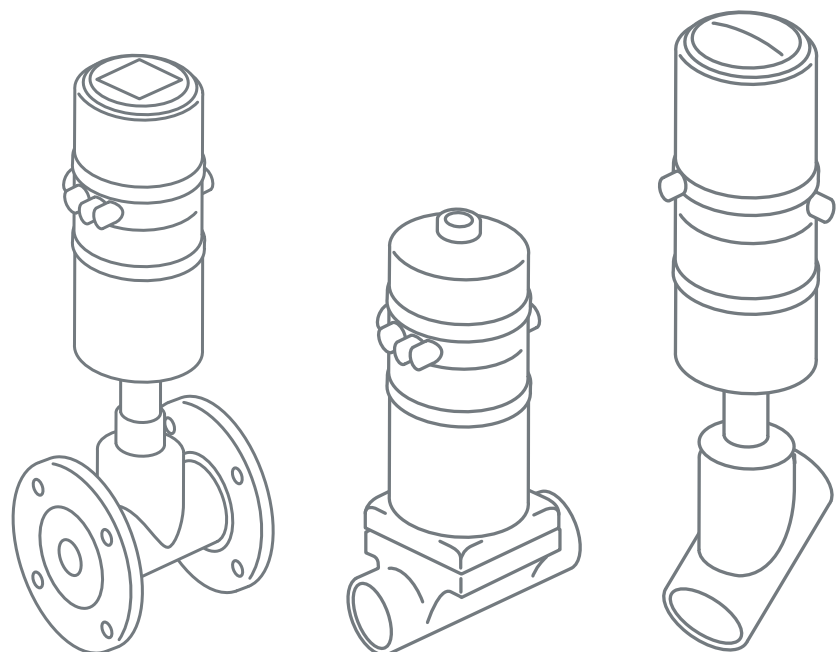




bürkert
FLUID CONTROL SYSTEMS

ELEMENT

On/Off and Control Valves



ELEMENT Intelligent, Integrated and Beautiful

ELEMENT is a complete system approach to allow you to solve process problems. It encompasses the total loop: valves, sensors and controllers in one beautifully simple architecture which can be relied on to monitor and control inert fluids, steam, corrosive solvents, chemicals or abrasive fluids in a wide variety of application environments.

Combining the chemical characteristics of engineered polymers with the beauty and endurance of stainless steel, ELEMENT's platform is rugged and clean. There is no paint, no pockets, no pneumatic lines and valves are delivered with superBRIGHT visual feedback.

Bürkert's ongoing development in combining control and communications technology with process control hardware is unparalleled. ELEMENT surpasses industry standards in flexibility, simplicity and intuitive thinking, each device being a joy to commission, calibrate and use.

Give your plant a competitive edge. The new ELEMENTs of success.

- 3 Introduction
- 4 Beauty and the Beast
- 6 On/Off Advantages
- 8 Continuous Advantages
- 10 Compatibility Advantages
- 12 Air Advantages
- 14 Intuitive Intelligence Inside Valves
- 16 Sensors and Transmitters
- 18 Contacts at Bürkert

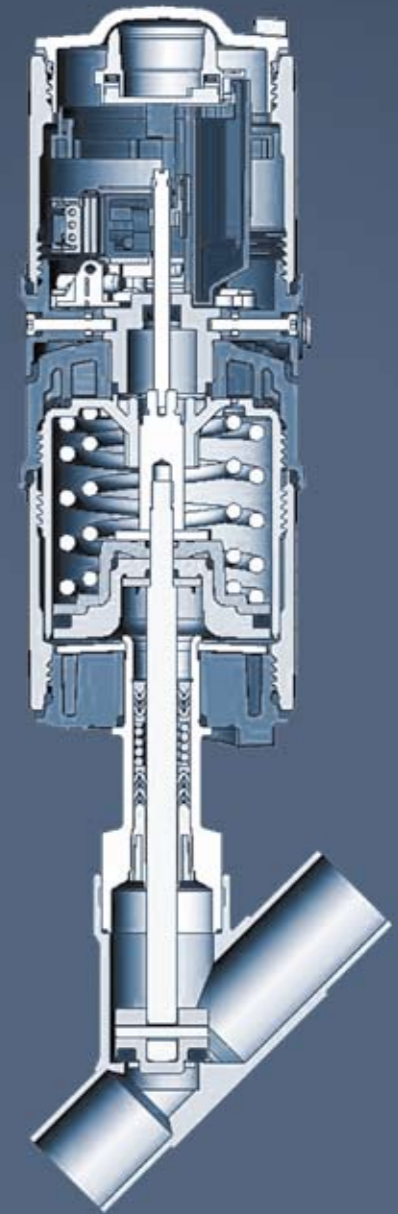
Beauty



- One beautiful look and feel for your process and valves
- Intuitive programming
- Graphical backlit display
- SuperBRIGHT illumination tell you what the valve is thinking
- Perfect mix of engineered plastics meaning that your investment will keep on looking great in your plant environment
- A remarkable range of attractive and hardworking valves and sensors which can be combined to give the user real joy of use
- Designed according to EHEDG guideline for materials compatibility, smooth surfaces and external seals

- IP65/IP67/Nema4X
- Unrivalled control characteristics
- On board PID Controller
- Modularity to combine various parts of the ELEMENT program
- Positive head pressure and overpressure relief
- Resistance to cleaning materials
- High valve cycle life means a maximum of plant availability
- FreshAIR innovation eliminates corrosion of the spring chamber
- Software programmable
- Security coded

Beast



On/Off Advantages

Mechanical

- Optimised for tough and agile process environments
- Designed according to EHEDG guideline for materials compatibility, smooth surfaces and external seals
- Contactless, wear-free displacement transmitter
- Simple, one button, reliable drive adaptation by automatic TEACH calibration between parts
- Integrated pilot valve with manual override
- ATEX Zone 2/22 and Zone 1
- On board air filter
- Integrated control air channels
- External seals
- Protection against cleaning materials
- Adaptation also to classic 2000, 2012 and 2031 series valves

Communication

- AS-interface
- DeviceNET

Set Up

- Extremely compact integrated actuation without external air lines
- SuperBRIGHT illumination tell you what the valve is thinking
- FreshAIR innovation eliminates corrosion of the spring chamber

Look and Feel

- Exceptional

DeviceNet
CONFORMANCE TESTED



Control heads for the integrated mounting on process valves

On/Off valves



Type 8690
Control head including pilot solenoid valve and mechanical or inductive limit switches.



Type 8691
Control head with SensorPAD contactless sensor and process actuation solenoid valve.



Type 8695
Control head with SensorPAD contactless sensor and process actuation solenoid valve for Bürkert's 50 mm actuator.



Type 2000
2/2-way angle-seat valve, DN 13-65, pneumatically operated, gun-metal or stainless steel body.



Type 2100
2/2-way angle-seat valve with ELEMENT design, DN 13-50.



Type 2012
2/2-way globe valve, pneumatically operated, stainless steel body, DN 10-100.



Type 2101
2/2-way globe valve with ELEMENT design, DN 13-50.



Type 2031
2/2-way diaphragm valve pneumatically operated, stainless steel body, DN 4-100.



Type 2103
2/2-way diaphragm valve with ELEMENT design, DN 4-25.



Type 8692
Positioner



Type 8693
Process controller



Type 8694
Positioner BASIC



Type 8696
Positioner BASIC for Bürkert's
50 mm actuator.



Type 2300
2/2-way globe control valve
with ELEMENT design, DN 13-50.



Type 2301
2/2-way globe control valve with
ELEMENT design, DN 13-50.



Type 2103
2/2-way diaphragm valve with
ELEMENT design, DN 4-25.

Continuous Advantages

Mechanical

- Optimised for tough and agile process environments
- Designed according to EHEDG guideline for materials compatibility, smooth surfaces and external seals
- Extremely compact integrated actuation without external air lines
- Contactless, wear-free analog displacement transmitter
- Simple and reliable drive adaptation by automatic TEACH calibration between parts
- ATEX Zone 2/22
- On board air filter
- Resistant to cleaning solutions
- External seals
- Integrated control air channels
- Adaptation also to classic 2000, 2012 and 2031 series valves

Communication

- Profibus DPV1
- DeviceNET
- AS-interface

Set Up

- Intuitive graphical man-machine interface with multilingual software
- Parameterization over PC interface
- Process controller with advanced ProcestUNE
- Access code security
- Close tight cut off, inversion, free customized characteristic, filter, dead band, start position, safe position, split range, max min time and digital signal calibration
- Binary input and 2 binary outputs
- Analog output for position, setpoint or process variable

Look and Feel

- Exceptional



Compatibility Advantages

Classic Style

The new ELEMENT actuators offer a 300% improvement in controllability but the range's modularity also encompasses the possibility to adapt new On/Off and continuous control heads to our classic rugged actuators which are known around the world.

It is even possible to use the FreshAIR advantage with the classic actuators to obtain even longer life.

Want More Flexibility?

The program can also be adapted to other linear actuators and other linear valves like sanitary plug valves, radial seal valves or sterile bellow valves.

All the control advantages on the valve you need.

Step 3: Pilot/Communicate



Step 2: Operate



Step 1: Choose your valve style



Air Advantages

The ELEMENT range of control heads, positioners and controllers offers four technological breakthroughs which effect the efficiency and lifetime of all the actuators it is coupled with. Innovative thinking and acting has produced advantages which should easily find their way into solid engineering specifications as they will be appreciated in the field saving headaches and time while maximizing investment.

As well as the inherent good looks of the system these four points are tough to overlook.

Control Flush Over Pressure Protection

Inside the control head there is always a positive pressure controlled by a small integrated check valve. As the pilot valve exhausts clean instrument air refreshes the environment in the head.

Integrated Pneumatic Actuation

Bürkert's 6144 process ready pneumatic flipper valves control On/Off and positioner functions perfectly. Bürkert specializes in making processes work. Solenoid isolation techniques formed over many years mean our "process actuation" offers more than what is expected in simple "pneumatics".

Integrated Air Inlet Filter

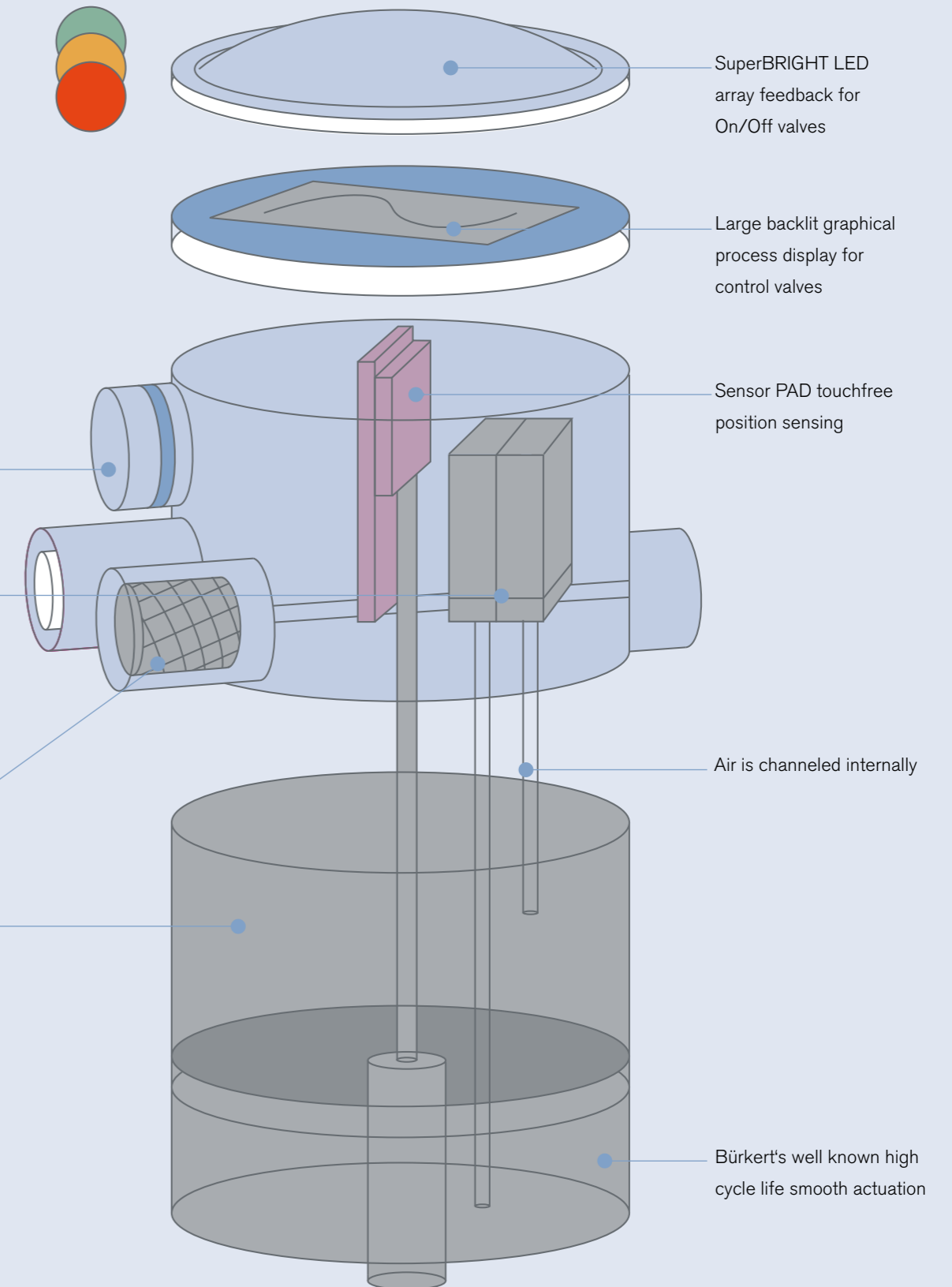
A removable mesh filter saves the valve from both installation dirt and any chance of dirty air during normal operation.

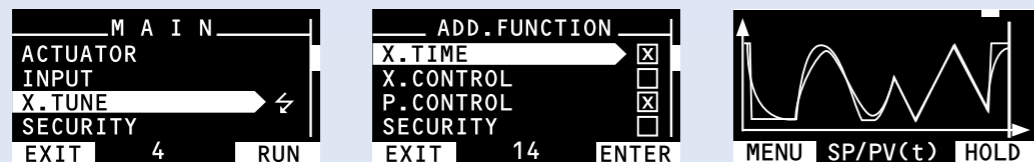
FreshAIR

Unlike any other actuator system, each time the actuator strokes the spring chamber is replenished by clean instrument air.

This means

- no corrosion of the actuator springs
- no dirt inside the actuator
- no humidity transmitted into the control head through the spindle
- no biological contamination inside the actuator





Intuitive Intelligence Inside Valves

Complete and adaptable to individual needs

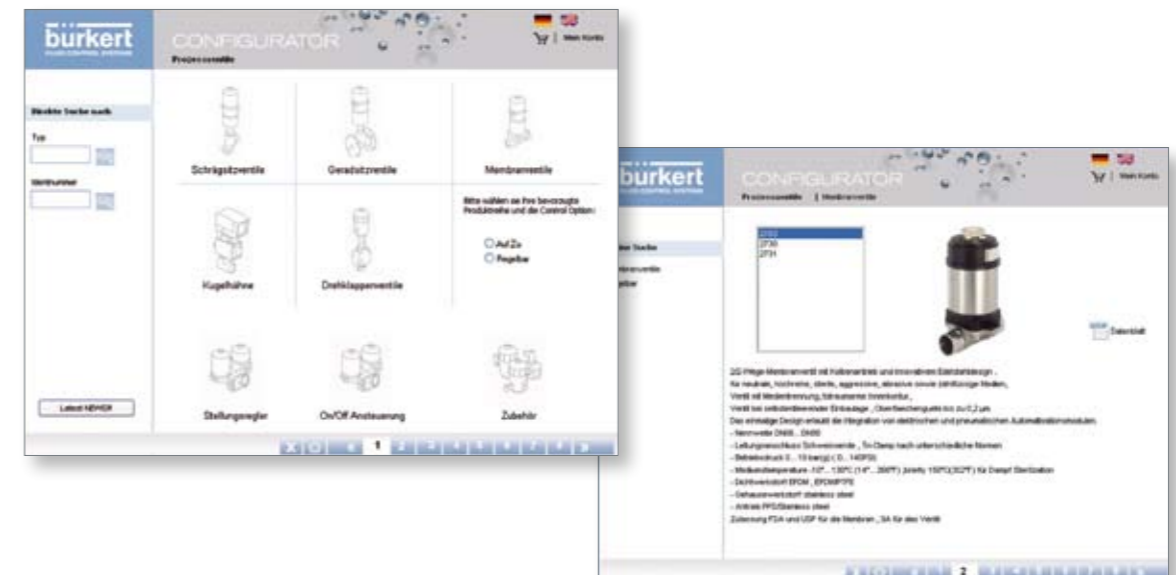
The innovative positioner and controller range offers a complete automation concept for integration into the most up-to-date control systems. Designed for tough and agile process environments the devices' design is particularly suited to the specific requirements of users in the food, cosmetic, beverage and pharmaceutical industries in terms of size, shape and cleanability, footprint and access code security.

Flexibility to meet customer requirements

ELEMENT positioners and controllers offer flexible opportunities for optimizing the function for the application. Distributed intelligence with a clear connection to the co-ordination and supervisory level is an important part of the design. Inside this small package is a fully functional process controller with advanced ProceSTUNE. Add to this specific valve software functions like, inversion, free customized characteristic, start position and split range, and you have the perfect collection of advantages.

Configuration and sizing software tools

Uncomplicated and updated configuration tools are available online backed up with our local well trained and friendly technical support.



With considerably less investment in planning, assembly and costly wiring ELEMENT makes your process life simpler.

Sensors and Transmitters

ELEMENT field transmitters complete the loop for level, pH, ORP and conductivity are excellent proof that the whole can be a lot more than the sum of its parts.

As part of a complete modular concept they can be combined in a broad array of configurations to be perfectly suited to your exact process.

Level now includes radar, guided microwave, ultrasonic transmitters and tuning fork switches while pH, conductivity and ORP have been redesigned to be completely intuitive and a joy to use.

You are able to quickly determine the process status at a glance, and the beautiful stainless steel design means they are specially suited for the requirements of both environmentally aggressive and hygienic areas. They are easy to clean, deliver excellent precision across a wide range of fluids and look as stunning as the valves.



Type 8111

Vibrating level switch; for food and beverage; typical applications are overflow and dry run protection; with ATEX approvals.



Type 8137

General purpose high pressure radar level transmitter, compact for level measurement up to 30m, 4-20 mA/Hart - 2 wires, adjustable with PC, ATEX approvals.

Type 8222

Conductivity and temperature transmitter with programmable outputs for switching and dual analog 4-20mA.



Type 8186

Guided microwave - level transmitter - aseptic version; with rod probe; also with ATEX approval.



Bürkert – Close to you

Germany

Sales Center

Ingelfingen
Bürkert GmbH & Co. KG
Christian-Bürkert-Straße 13-17
DE-74653 Ingelfingen
Tel: +49 (0)7940/10-91 111
Fax: +49 (0)7940/10-91 448
E-mail: info@buerkert.de

Sales Offices

Berlin
Bürkert GmbH & Co. KG
Paradiesstraße 206 b
DE-12526 Berlin
Tel: +49 (0)30/679717-0
Fax: +49 (0)30/679717-66

Hannover

Bürkert GmbH & Co. KG
Rendsburger Straße 18
DE-30659 Hannover
Tel: +49 (0)511/90276-0
Fax: +49 (0)511/90276-66

Dortmund

Bürkert GmbH & Co. KG
Holzener Straße 70
DE-58708 Menden
Tel: +49 (0)2373/9681-0
Fax: +49 (0)2373/9681-50

Frankfurt

Bürkert GmbH & Co. KG
Am Flugplatz 27
DE-63329 Egelsbach
Tel: +49 (0)6103/9414-0
Fax: +49 (0)6103/9414-66

Stuttgart

Bürkert GmbH & Co. KG
Ulmer Straße 4
DE-70771 Leinfelden-Echterdingen
Tel: +49 (0)711/45110-0
Fax: +49 (0)711/45110-66

München

Bürkert GmbH & Co. KG
Eisenheimerstraße 47
DE-80687 München
Tel: +49 (0)89/829228-0
Fax: +49 (0)89/829228-50

North and South America

Argentina

Bürkert-Contromatic Argentina S.A.
Uruguay 2602, Centro Uruguay Norte,
P.B. Oficina 1, (B1643EKP) Beccar,
Pcia. de Buenos Aires, ARGENTINA
Tel: +54 (0)11-5648-6350
Fax: +54 (0)11-5648-6355
E-mail: contacto.argentina@buerkert.com

Brazil

Bürkert-Contromatic Brasil Ltda.
Rua Américo Brasiliense, 2069
Chacara Santo Antônio
04715-005 São Paulo - SP BRAZIL
Tel: +55 (0)11-2186 1155
Fax: +55 (0)11-2186 1165
E-mail: pedidos.brasil@buerkert.com

Canada

Bürkert Contromatic Inc.
5002 South Service Road
Burlington, Ontario L7L 5Y7, CANADA
Tel: +1 905-632 30 33
Fax: +1 905-632 38 33
E-mail: sales.ca@buerkert.com

USA

BURKERT CONTROMATIC CORP.
2915 Whitehall Park Drive, Suite 100
Charlotte, NC 28273, USA
Tel: +1 704-504 44 40
Fax: +1 949-223 31 98
E-mail: marketing-usa@buerkert.com

Europe

Austria

Bürkert-Contromatic G.m.b.H.
Diefenbachgasse 1-3
AT-1150 Wien
Tel: +43 (0)1-894 13 33
Fax: +43 (0)1-894 13 00
E-mail: info@buerkert.at

Belgium

Bürkert Contromatic NV
Wijnegem Zone 1 "De Hoek"
Bijkhoevelaan 3
BE-2110 Wijnegem
Tel: +32 (0)3-325 89 00
Fax: +32 (0)3-325 61 61
E-mail: BC-B@buerkert.com

Czech Rep.

Bürkert-Contromatic G.m.b.H. organizacni slozka
Krenova 35
CZ-602 00 Brno
Tel: +420 543-25 25 05
Fax: +420 543-25 25 06
E-mail: obchod@buerkert.cz

Denmark

Bürkert-Contromatic A/S
Hørkær 24
DK-2730 Herlev
Tel: +45 44-50 75 00
Fax: +45 44-50 75 75
E-mail: info.dk@buerkert.com

Estonia

Bürkert Oy Eesti
Laki 11 E
EE-12915 Tallinn
Tel: +372 6440 698
Fax: +372 6313 759
E-mail: info@buerkerte.ee

Europe, continued

Finland

Bürkert Oy
Atomitie 5
FI-00370 Helsinki
Tel: +358 (0)207 412 550
Fax: +358 (0)207 412 555
E-mail: sales.fi@buerkert.com

France

BURKERT CONTROMATIC SAS
Rue du Giessen
FR-67220 Triembach au Val
Tel: +33 (0)388-58 91 11
Fax: +33 (0)388-57 20 08
E-mail: burkert.france@buerkert.com

Italy

Bürkert Contromatic Italiana S.p.A.
Centro Direzionale „Colombiolo“
Via Roma, 74
IT-20060 Cassina De' Pecchi (Mi)
Tel: +39 02-959 07 1
Fax: +39 02-959 07 251
E-mail: info@buerkert.it

Netherlands

Bürkert Contromatic BV
Computerweg 9
NL-3542 DP Utrecht
Tel: +31 (0)346-58 10 10
Fax: +31 (0)346-56 37 17
E-mail: info@buerkert.nl

Norway

Bürkert-Contromatic A/S
Hvamstuppen 17
NO-2013 Skjetten
Tel: +47 63-84 44 10
Fax: +47 63-84 44 55
E-mail: info@buerkert.no

Poland

Bürkert-Contromatic GmbH Oddzial w Polsce
Bernardynska street 14 a
PL-02-904 Warszawa
Tel: +48 (0)22-840 60 10
Fax: +48 (0)22-840 60 11
E-mail: buerkert@buerkert.pl

Portugal

Tel: +351 212 898 275
Fax: +351 212 898 276
E-mail: portugal@buerkert.com

Spain

Bürkert Contromatic S.A.
Avda. Barcelona, 40
ES-08970 Sant Joan Despi, Barcelona
Tel: +34 93-477 79 80
Fax: +34 93-477 79 81
E-mail: spain@buerkert.com

Sweden

Bürkert-Contromatic AB
Kattsundsgatan 27
SE-211 26 Malmö
Tel: +46 (0)40-664 51 00
Fax: +46 (0)40-664 51 01
E-mail: info.se@buerkert.com

Switzerland

Bürkert-Contromatic AG Schweiz
Bösch 71
CH-6331 Hünenberg ZG
Tel: +41 (0)41-785 66 66
Fax: +41 (0)41-785 66 33
E-mail: info.ch@buerkert.com

Europe, continued

Turkey

Bürkert Contromatic Akiskan Kontrol
Sistemleri Ticaret A.S.
1203/8 Sok. No2-E
TR-Yenisehir, Izmir
Tel: +90 (0)232-459 53 95
Fax: +90 (0)232-459 76 94
E-mail: burkert@superonline.com

United Kingdom

Bürkert Contromatic Limited
Brimscombe Port Business Park
Brimscombe, Stroud
Glos, GL5 2QQ / UNITED KINGDOM
Tel: +44 (0)1453-731 353
Fax: +44 (0)1453-731 343
E-mail: sales.uk@buerkert.com

Africa

South Africa

Bürkert Contromatic (Proprietary) Limited
233 Albert Amon Road
Millennium Business Park
Meadowdale,
Germiston
(Postal: P.O. Box 26260, East Rand 1462)
SOUTH AFRICA
Tel: +27 (0)11-574 60 00
Fax: +27 (0)11-454 14 77
E-mail: sales.za@buerkert.com

Asia Pacific

Australia

BURKERT CONTROMATIC AUSTRALIA PTY.
LIMITED
15 Columbia Way, Norwest Business Park
Baulkham Hills, NSW 2153, AUSTRALIA
Tel: +61 2 8853 6353
Fax: +61 2 8853 6363
E-mail: sales.au@buerkert.com

Victoria

BURKERT CONTROMATIC AUSTRALIA
PTY. LIMITED
Unit 11/26-30 Howleys Road
Notting Hill Victoria 3168
Tel: 1300 888 868
Fax: 1300 888 076

Queensland

BURKERT CONTROMATIC AUSTRALIA
PTY. LIMITED
Unit 4/43 Sandgate Road
Albion Queensland 4010
Tel: 1300 888 868
Fax: 1300 888 076

Western Australia

BURKERT CONTROMATIC AUSTRALIA
PTY. LIMITED
Unit 8, 1st Floor, 85 Reid Promenade
Joondalup WA 6027
Tel: 1300 888 868
Fax: 1300 888 076

South Australia

BURKERT CONTROMATIC AUSTRALIA
PTY. LIMITED
Innovation House, First Avenue
Mawson Lakes SA 5095
Tel: 1300 888 868
Fax: 1300 888 076

Asia Pacific, continued

China

Bürkert Contromatic (Suzhou), Co., Ltd.
(System House) Unit A5, Suhong Square
No. 81 Suhong West Road
SIP Suzhou P.R. China, 215021
Tel: +86 512 6265 8498
Fax: +86 512 6265 9337

Bürkert Contromatic (Shanghai), Co., Ltd.
(logistic and warehouse for BC China)
Floor 2, block 6, 166 Mingdong Road
Pudong New District
Shanghai 201209, P.R. CHINA
Tel: +86 21-5863 9990
Fax: +86 21-5863 9968
E-mail: info.chn@buerkert.com

Beijing

Bürkert Contromatic (Shanghai), Co., Ltd.
Room A 1708, Luowa Building, No.203
Er Qu Lizezhongyuan, Wangjing,
Chaoyang District
Beijing P.R. China, 100102
Tel: +86 10 6439 9783, 6439 9793
Fax: +86 10 6439 9612

Chengdu

Bürkert Contromatic (Shanghai), Co., Ltd.
B zone, 2nd floor,
DongFangGuangYi office building
LongTan city industrial zone, 2nd section,
East 3rd ring Rd.
Chengdu, China 610051
Tel: +86 28 8425 1434, 8425 1435
Fax: +86 28 8425 1560

Guangzhou

Bürkert Contromatic (Shanghai), Co., Ltd.
Room 1502, Tower 4, Dong Jun Plaza
828 - 836 Dong Feng Road East
Guangzhou P.R. China, 510080
Tel: +86 20 8769 8379, 8767 8703
Fax: +86 20 8767 1131

Shanghai

Bürkert Contromatic (Shanghai), Co., Ltd.
Room 501/502 Xin Gai Nian Mansion
No.39 Wu Zhong Road
Shanghai P.R. China, 200233
Tel: +86 21 6486 51 10
Fax: +86 21 6487 4815

Suzhou

Bürkert Contromatic (Shanghai), Co., Ltd.
Unit 11-12, 5th Floor, Block A
No.5 Xinghan Street
SIP Suzhou P.R. China, 215021
Tel: +86-512-6265 9881
Fax: +86-512-6265 9882

Hong Kong

Bürkert Contromatic (China/HK) Limited
Unit K, 9/Floor, Kwai Shun Industrial Centre
No. 51-63 Container Port Road
Kwai Chung, N.T., HONG KONG
Tel: +852 2480 1202
Fax: +852 2418 1945
E-mail: info.hkg@buerkert.com

India

Bürkert Contromatic PVT Ltd
Apex Towers, 1st Floor, No. 54 II Main Rd
RA Puram
Chennai 600 028, INDIA
Tel: +91 (0)44-4230 3456
Fax: +91 (0)44-4230 3232
E-mail: sales.in@buerkert.com

Japan

Bürkert Ltd.
Imasu moto asakusa-building
4-9-14 Moto Asakusa, Taito-ku
Tokyo 111-0041, JAPAN
Tel: +81 (0)3-5827-0066
Fax: +81 (0)3-5827-0067
E-mail: info.jpn@buerkert.com

Osaka

Bürkert Ltd.
2-8-8-1103 Higashi Nakajima,
Higashi-Yodogawa-ku
Osaka 533-0033, JAPAN
Tel: +81 (0)6-6320-0880
Fax: +81 (0)6-6320-0881

Korea

Bürkert Contromatic Korea Co., Ltd.
C-401, Micro Office Bldg. 554-2
Gasam-Dong, Keumcheon-Gu
Seoul 153-803, KOREA
Tel: +82 (0)2-3462 5592
Fax: +82 (0)2-3462 5594
E-mail: info.kor@buerkert.com

Malaysia

BURKERT CONTROMATIC SINGAPORE P
2F-1, Tingkat Kenari 6
Sungai Ara
11960 Penang, MALAYSIA
Tel: +60 (0)4-643 5008
Fax: +60 (0)4-643 7010
E-mail: info.sin@buerkert.com

New Zealand

BURKERT CONTROMATIC NEW ZEALAND
LIMITED
44 Rennie Drive
Airport Oaks, Auckland 2022
NEW ZEALAND
Tel: +64 (0)9-256 77 37
Fax: +64 (0)9-256 77 47
E-mail: sales.nz@buerkert.com

Philippines

BURKERT CONTROMATIC PHILIPPINE
8467 West Service Road, Km. 14, Sunva
South Superhighway, Parañaque City, 17
Metro Manila, PHILIPPINES
Tel: +63 (0)2-7766071 / 7764384
Fax: +63 (0)2-7764382
E-mail: info.rp@buerkert.com

Singapore

BURKERT CONTROMATIC SINGAPORE P
51 Ubi Avenue 1, #03-14
Paya Ubi Industrial Park
Singapore 408933, SINGAPORE
Tel: +65 6844 2233
Fax: +65 6844 3532
E-mail: info.sin@buerkert.com

Taiwan

Bürkert Contromatic Taiwan Ltd.
9 F, No. 32, Chenggong Road, Sec. 1,
Nangang District
Taipei
TAIWAN 115, R.O.C.
Tel: +886 (0)2-2653 7868
Fax: +886 (0)2-2653 7968
E-mail: info.rc@buerkert.com



bürkert
FLUID CONTROL SYSTEMS

894414 / 05/09

Bürkert Fluid Control Systems

Christian-Bürkert-Straße 13-17
74653 Ingelfingen
Germany

Tel. +49 (0) 7940/10-0
Fax +49 (0) 7940/10-91 204

info@burkert.com
www.burkert.com