

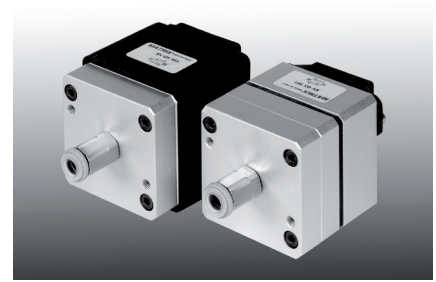
MATRIX
mechatronics

SNELSCHAKELVENTIELEN
860 Serie

With the 860 valve series MATRIX offers an unprecedented simple, compact and precise Digital Flow Control valve.

In a compact valve body of just 55 x 55 x 52 mm, 9 valves with 2/2 function in NC (normally closed) are combined on one pneumatic inlet/outlet. Each valve has a different nominal diameter and can be switched independently. This enables a proportional and/or linear flow rate.

Two configurations are available for a 6-Bit (64 levels) or 8-Bit (256 levels) control. Consequently, with the PCM technology up to 256 different, unambiguously defined as well as reproducible flow rate values can be set. The switchover between the respective levels takes place within a millisecond. This extraordinary performance is achieved through the unique and patented valve technique of MATRIX. With the MATRIX PCM control card the valve can be controlled by means of an input signal of 0-10 V, which is subsequently converted to binary codes.



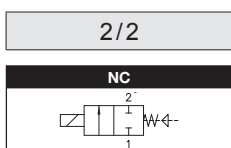
Technical data

Switching time opening*	< 1 ms
Switching time closing*	< 1 ms
Maximum frequency	500 Hz
Weight	450 g
Protection class	IP52

*Varies with the working pressure

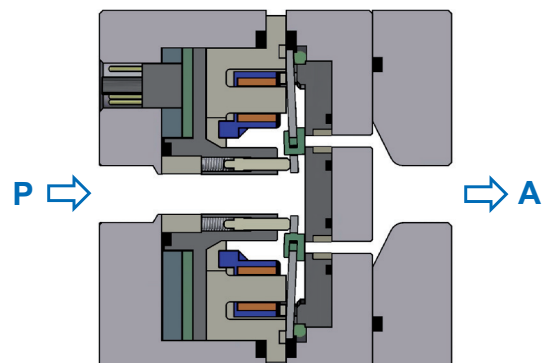
Outlets	1
Flow rate	up to 750 l/min.
Function	2/2 way in NC
Pressure range	between 0-6 bar

Possible function



Possible controls

Direct / PWM / PFM / PNM / PCM / Combination
 Information, see Page 5

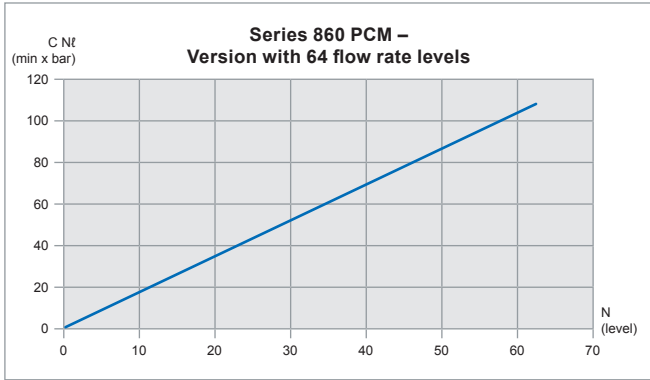


Section: Type 2/2 NC

Variable flow rate with 6-Bit (64 levels) or 8-Bit (256 levels) resolution.

Type PX with 6-Bit resolution

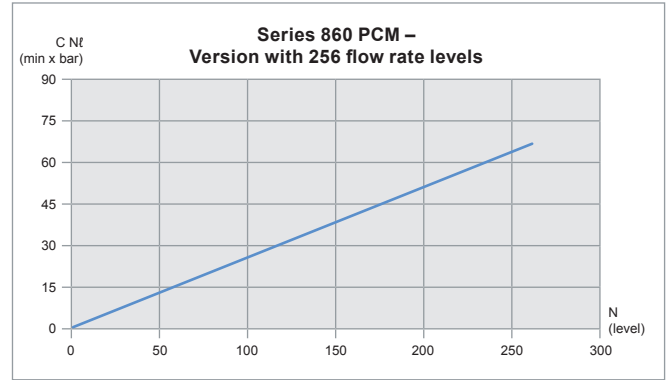
Flow rate: min. 1.7 l/min. @ 1 bar
max. 750 l/min. @ 6 bar



Characteristic of the flow rate when varying N (64 levels)

Type QX with 8-Bit resolution

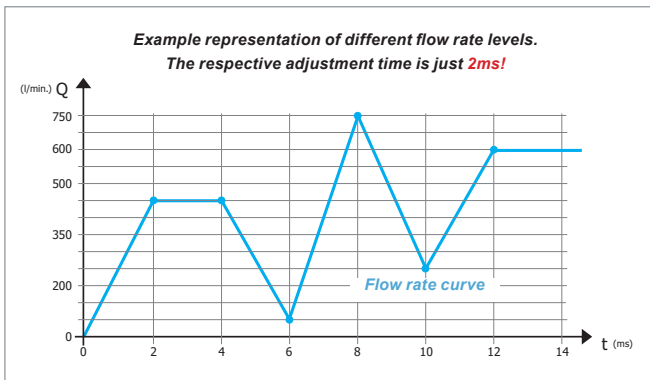
Flow rate: min. 0.3 l/min. @ 1 bar
max. 500 l/min. @ 6 bar



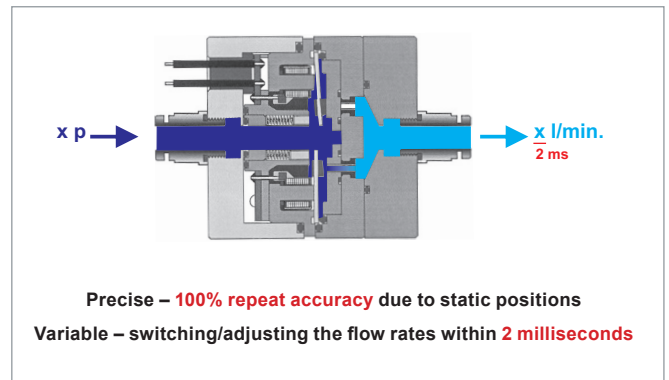
Characteristic of the flow rate when varying N (256 levels)

Extremely fast change of the flow rate level with very precise reproducibility

The performance of the MATRIX valves enables each of the 64 or 256 flow rate levels to be set within 2 milliseconds. Among other things, in process applications that enables a variety of individual process settings/changes during or in between the processes and consequently higher productivity as well as constant quality due to the reproducibility.

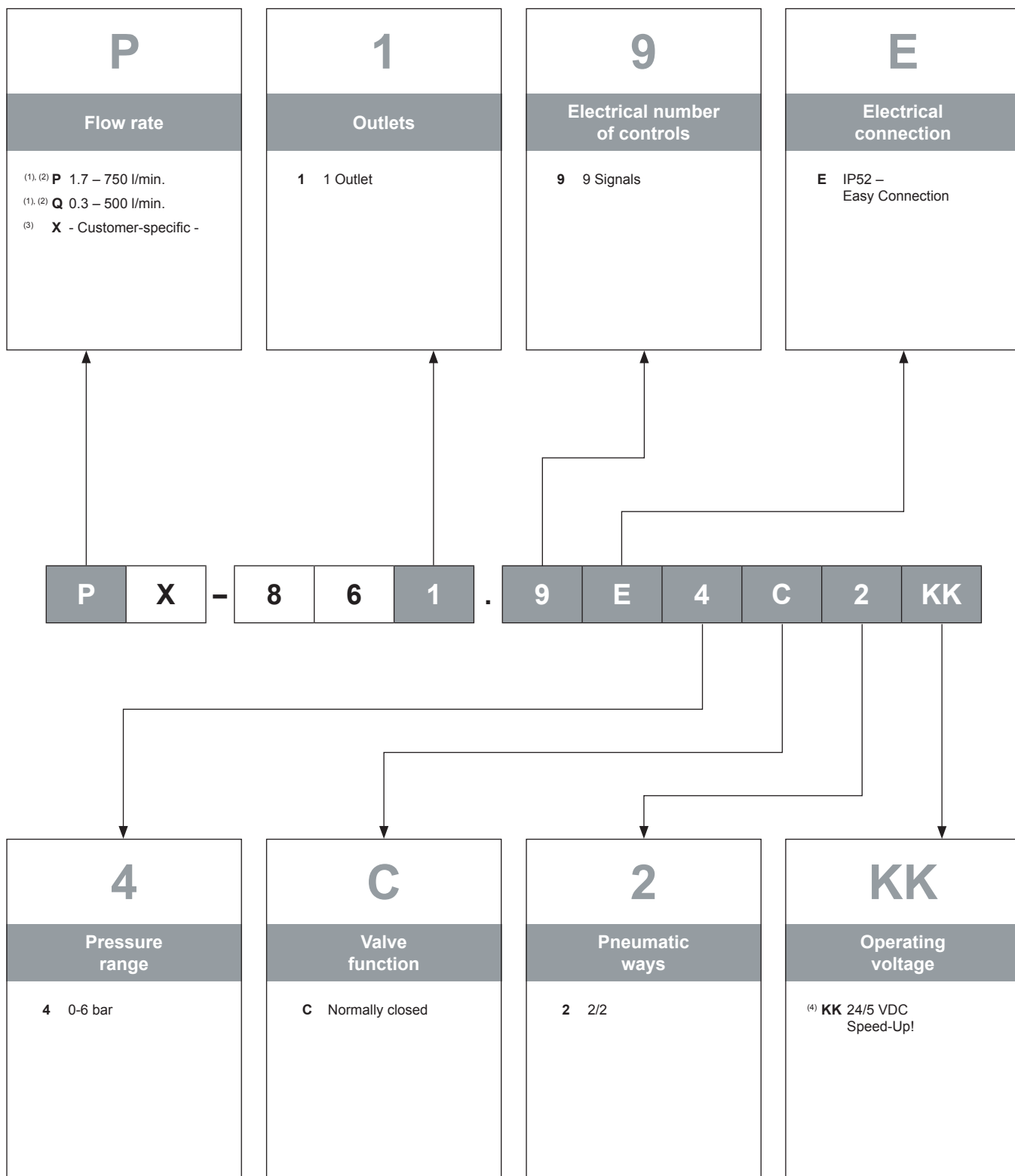


Example of the adjustment time between the flow rate levels (Fig. The 6-Bit Version)



Series 861 PCM with variable flow rate • 2/2

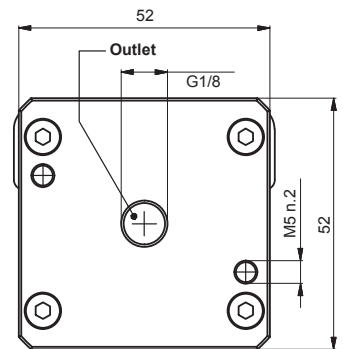
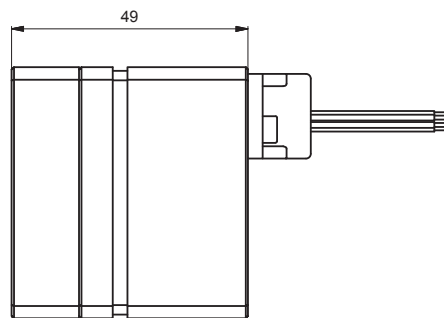
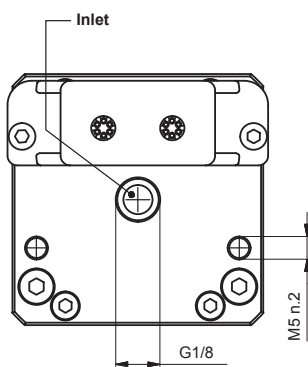
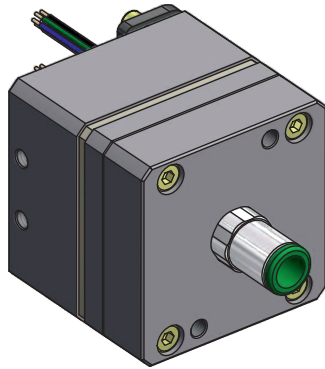
Ordering code



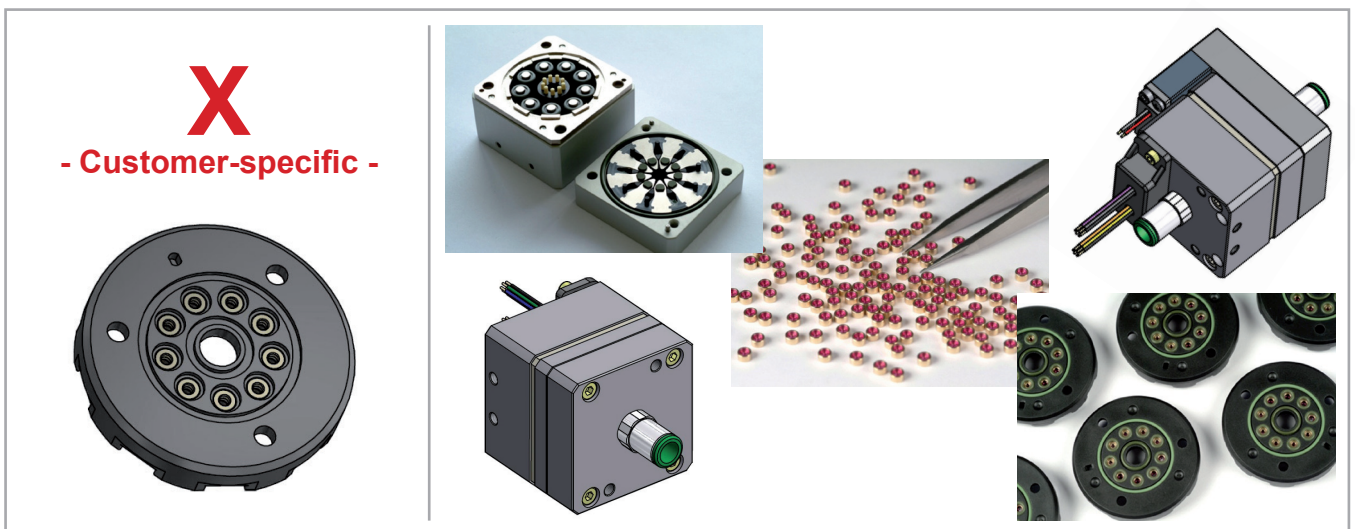
(1) Among other things the flow rate value is dependent on the supply pressure
 (2) The maximum flow rate refers to 6 bar rel. and completely open valve
 (3) Customer-specific flow rates on request
 (4) Requires a Speed-Up! Control (see intro pages)

Drawings and connections

Type 861



Customer Solutions



Switzerland Headquarter

BIBUS AG
Allmendstrasse 26
CH-8320 Fehraltorf
Tel. +41 44 877 50 11
info.bag@bibus.ch
www.bibus.ch

Austria

BIBUS Austria GmbH
Eduard Klinger-Strasse 12
AT-3423 St. Andrä-Wördern
Tel. +43 2242 33 388
info@bibus.at
www.bibus.at

Belarus

BIBUS (BY) COOO
8th Per. Ilyicha 13a, office 2.1
BY-246013 Gomel
Tel. +375 232 39 09 10
info@bibus.by
www.bibus.by

Bosnia

BIBUS doo
Karadordeva bb
BA-76311 Dvorovi-Bijeljina
Tel. +387 55 423 444
info@bibus.ba
www.bibus.ba

Bulgaria

BIBUS Bulgaria Ltd.
2 Blvd. Prof. Tzvetan Lazarov,
Floor 2
BG-1574 Sofia
Tel. +359 2 971 98 08
info@bibus.bg
www.bibus.bg

China

BIBUS Shanghai Mec., Ltd.
Block 4, 160 Xuanchun Road
Xuanquiao Town,
Pudong New Area
CN-201300 Shanghai
Tel. +86 21 5803 9270
info@bibuschina.cn
www.bibuschina.cn

Croatia

BIBUS Zagreb d.o.o.
Anina 91
HR-10000 Zagreb
Tel. +385 1 381 80 04
bibus@bibus.hr
www.bibus.hr

Czech Republic

BIBUS s.r.o.
Videnska 125
CZ-619 00 Brno
Tel. +420 5 47 125 300
bibus@bibus.cz
www.bibus.cz

Denmark

A/S H. SINDBY & Co
Edisonvej 11
DK-7100 Vejle
Tel. +45 75 88 21 22
sindby@sindby.dk
www.sindby.dk

France

BIBUS France S.A.S.
ZI du Chapotin
233, rue des Frères Voisin
FR-69970 Chaponnay
Tel. +33 4 7896 80 00
contact@bibusfrance.fr
www.bibusfrance.fr

Germany

BIBUS GmbH
Max-Eyth-Strasse 41/1
DE-89231 Neu-Ulm
Tel. +49 731 20 76 90
info@bibus.de
www.bibus.de

Great Britain

BIBUS (UK) Ltd
20 Soho Mills
GB-Wooburn Green HP10 0PF
Tel. +44 1628 533 300
info@bibus.uk
www.bibus.uk

Hungary

BIBUS Kft
Almáskert út 9
HU-2220 Vecsés
Tel. +36 1 265 27 33
info@bibus.hu
www.bibus.hu

India

**BIBUS Horizon
Mechatronics &
Automations Pvt. Ltd.**
Yellupura Village, Kasaba Hobli
Near KSSIDC Industrial Area,
Doddaballapura Taluk
No. 102/25, 1st Floor
IN-Bangalore - 561 203
Tel. +91 80 28562008
info@bibus.in
www.bibus.in

Italy

BIBUS Italia Srl
Via Tosarelli 334/2
IT-40055 Villanova Di
Castenaso (BO)
Tel. +39 051 893958
info@bibus.it
www.bibus.it

Latvia

BIBUS Baltics SIA
Kleistu iela 24
LV-1067 Riga
Tel. +371 67 63 05 01
info@bibusbaltics.eu
www.bibusbaltics.eu

Malaysia

**BIBUS Malaysia
Sdn. Bhd.**
7, Jalan Kartunis, U1/47
Glenmarie Temasya Ind. Park
MY-40150 Shah Alam
Tel. +60 3 5569 7077
sales@bibus.my
www.bibus.my

Poland

BIBUS MENOS Sp. z o.o.
ul. Spadochroniarzy 18
PL-80-298 Gdansk
Tel. +48 58 660 95 70
info@bibusmenos.pl
www.bibusmenos.pl

Portugal

BIBUS Portugal, Lda
Rua Ponte da Pedra, 240 - C4
PT-4470-108 Gueifães - Maia
Tel. +351 22 906 50 50
info@bibus.pt
www.bibus.pt

Romania

BIBUS SES SRL
134/1 Calea Lugojuului
RO-307200 Ghiroda, Timis
Tel. +40 356 446 500
office@bibus.ro
www.bibus.ro

Russia

BIBUS o.o.o.
Zemskaya street 94
RU-198205 Saint Petersburg
Tel. +7 812 309 41 51
info@bibus.ru
www.bibus.ru

Slovakia

BIBUS SK s.r.o.
Trnavska 31
SK-949 01 Nitra
Tel. +421 37 777 79 11
sale@bibus.sk
www.bibus.sk

Slovenia

INOTEH d.o.o.
K Železnici 7
SI-2345 Bistrica ob Dravi
Tel. +386 2 665 11 31
info@inoteh.si
www.inoteh.si

Spain

BIBUS SPAIN, S.L.
Poligono Industrial Porto do Molle
Rua do Arroncal Vial C-Nave 4A
ES-36350 Nigran
Tel. +34 986 24 72 86
info@bibus.es
www.bibus.es

Thailand

BIBUS (Thailand) Co., Ltd
72/2 Moo 2 Tiwanont Road
Banmai, Pak Kret District
TH-11120 Nonthaburi
Tel. +66 2 157 2407
info@bibus.co.th
www.bibus.co.th

The Netherlands

BIBUS B.V.
Meer en Duin 295
NL- 2163 HE Lisse
Tel. +31 (0)252 433 733
sales@bibus.nl
www.bibus.nl

Turkey

BIBUS Otomasyon Ltd. Sti.
İkitelli OSB Bedrettin Dalan Bulv.
Vip Plaza Kat: 2 No: 43-44
TR-34490 Başakşehir/ Istanbul
Tel. +90 212 293 82 00
info@bibus.com.tr
www.bibus.com.tr

Ukraina

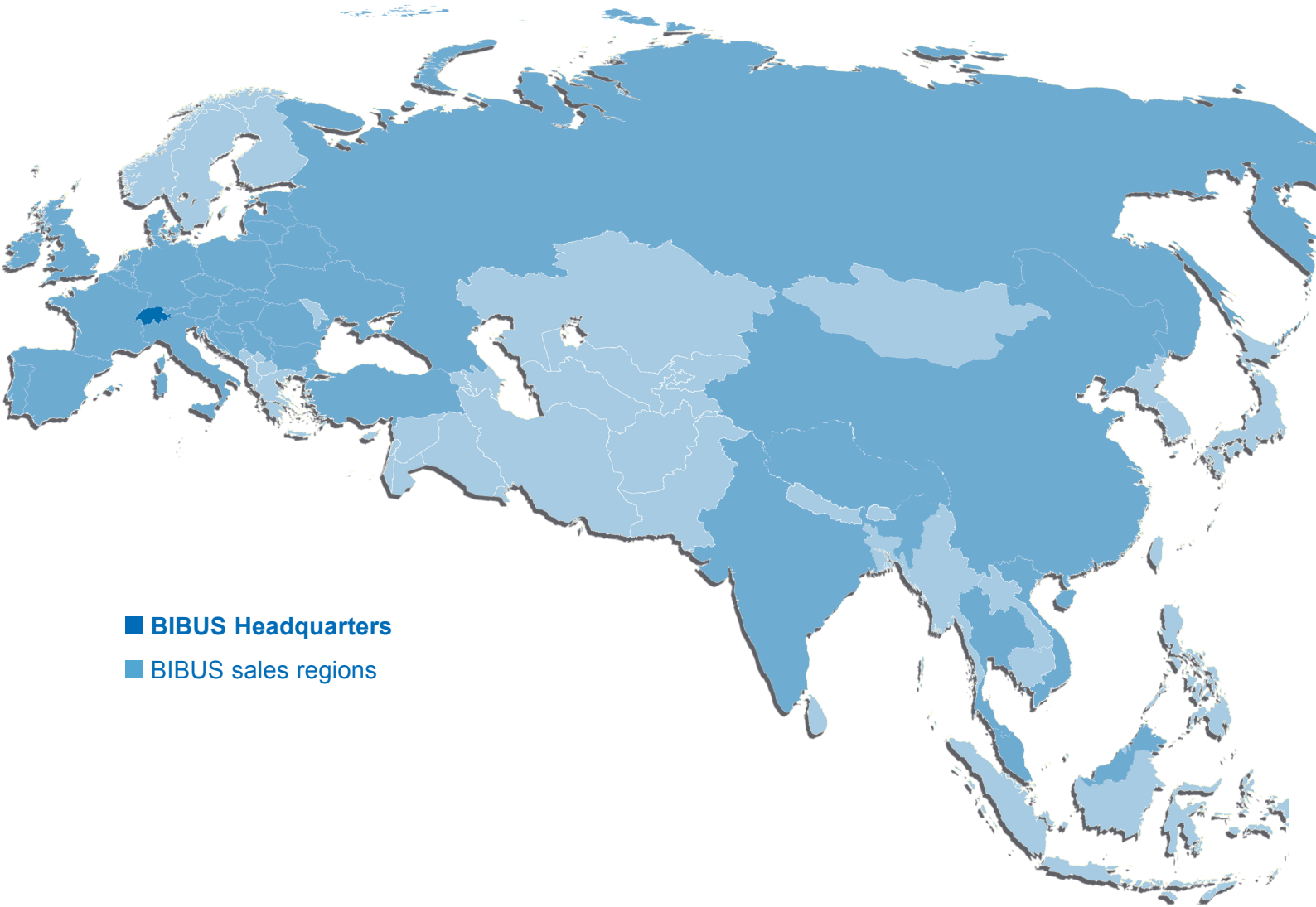
BIBUS Ukraine TOV
Odeska Street 22
Kyevo-Svyatoshinsky district
UA-08136 Kryukivshchina,
Kyiv Region
Tel. +380 44 545 44 04
info@bibus.ua
www.bibus.ua

Vietnam

**BIBUS VIETNAM E&C
Co. Ltd.**
No. 10, Lot K,
Hoang Quoc Viet Street
Phu My Ward, District 7
VN-70880 Ho Chi Minh City
Tel. +84 8 378 506 27
info@bibus.vn
www.bibus.vn

ENGINEERING
LOGISTICS
SERVICES

BIBUS®



- **BIBUS Headquarters**
- **BIBUS sales regions**

BIBUS BV
Meer en Duin 295
2163 HE
Lisse, The Netherlands
+31(0)252 433733
sales@bibus.nl
bibus.nl