



**The best  
connection.**

**Bus solutions from Belimo**

**BELIMO**<sup>®</sup>

# Integrating, communicating and controlling.

The networking of building technology systems enhances comfort, safety and transparency in air-conditioned buildings. Thanks to this transparency, operation can be optimised and overall energy consumption reduced – just as readily in new systems as in retrofitting or renovation projects. This networking of the individual components can be easily undertaken with bus systems, extending throughout the entire building.

Bus systems can be used to exchange any volume of data from various bus participants over the same physical lines. The user has unrestricted access to control, feedback and parameters on the individual devices. Cabling expenditures are reduced by up to 90% compared with actuators with conventional wiring. The installation work is simpler and, thanks to time and material savings (cables, terminals, connectors, etc.), cheaper too. Further positive selling points for bus solutions include their lower fire load and the fact that they take up less space in cable trays and switch cabinets. Depending on the application and requirements, different bus systems are used.



# The best connection.

## MP actuators and sensors from Belimo

### Directed to all higher-level systems

The MP-Bus® from Belimo was specially developed as a master-slave system for HVAC actuators and sensors. It allows up to eight different final controlling elements to be grouped together and connected to any higher-level system. Gateways and DDC controllers with an integrated MP interface serve as the MP master.

### Easy wiring

The MP-Bus® combines supply and communication in just three wires and uses just one simple installation cable. It is very resistant to external interferences and does not need bus terminations.

### The right actuators for every application

Multifunctional MP and communicative MPL actuators from Belimo are suitable for the integration of the final controlling elements in the MP-Bus®. These are available as rotary, full-rotation and linear actuators for a very wide variety of damper types and volumetric flow units. Also available is the wide array of MP-Bus-capable motorised valves – ranging from characterised control valves through butterfly valves and globe valves all the way to the intelligent Belimo Energy Valve™ with built-in web server for energy monitoring.



## Modbus actuators and sensors from Belimo

### Used all over the world

Modbus is a communication protocol, which has become a de-facto standard, is used commonly all around the globe and in a huge range of applications. Its simple implementation makes Modbus very popular with many manufacturers.

### Direct connection to Modbus RTU & TCP

The RS-485 interface installed in the Modbus devices enables the direct connection of the HVAC final controlling elements to Modbus RTU. Up to 32 actuators can be connected to a Modbus line. Modbus TCP is very similar to RTU, but TCP/IP packets are used to transmit the data. Communication takes place on the IP network.

### Ready-to-connect for equipment manufacturing

The Modbus actuator can be provided with an RJ12 socket for the cabling of devices with a compact structure (e.g. air handling units). This actuator version permits rapid, error-free wiring.



# Utilise the advantages.

## BACnet actuators and sensors from Belimo

### Interoperability with BACnet

BACnet is a proven, commonly used communication protocol for building automation. The standard is open, requires no licence and is used by a large number of international providers, universities and associations. Implementing the BACnet Standard Device Profiles B-ASC and B-SS as well as the associated BACnet Interoperability Building Blocks guarantees genuine compatibility between various BACnet devices.



### BACnet IP and MS/TP

BACnet distinguishes between MS/TP and IP. BACnet MS/TP can be realised with a serial interface in the actuator. An Ethernet interface is used to connect to BACnet IP. The Belimo Energy Valve™, for example, can be integrated directly in the BACnet IP network.

## KNX actuators from Belimo

### KNX-certified actuators

KNX is a well-engineered building automation system used around the world to control systems spanning several building trade groups, such as heaters, blinds and security technology in buildings. The KNX-certified actuators enable a direct connection to the KNX network with a maximum of 64 nodes per line. Communication takes place via the integrated KNX interface (TP, S-Mode).



### Product database for ETS

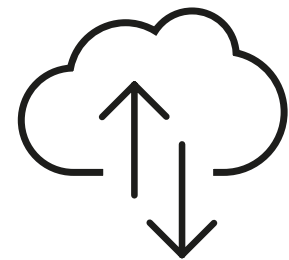
KNX systems are always commissioned using the project planning and commissioning tool ETS. The actuators from Belimo, including the sensor, can be easily configured in the ETS using the available product database, allowing integration errors to be minimised.

# Ready for the future.

## The IoT ecosystem from Belimo

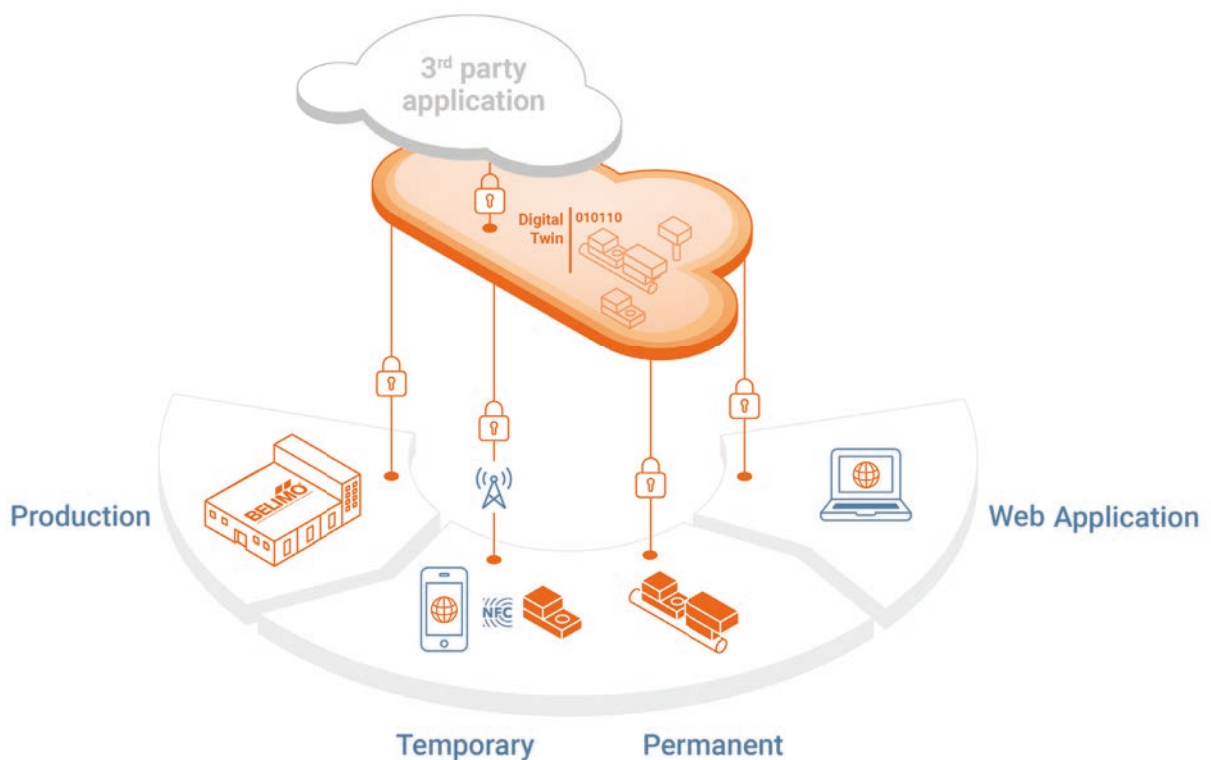
### Easy access to device data

As an integral part of our IoT products, the devices can be connected to the Belimo Cloud and thereby benefit from the possibilities of Belimo's IoT ecosystem. Device data can be read from anywhere via an easily accessible, secure interface – the Belimo Cloud Client API. If required, it can also be controlled via the cloud. This enables third-party providers to easily access data authorised by the customer and offer web services such as energy billing, energy optimisation, building analyses and remote maintenance.



### Actuators with an IoT ecosystem

IoT actuators are connected to the Belimo Cloud ecosystem and can therefore be controlled and read via the internet. They also offer two inputs for sensors to transmit actual measured values for temperature, pressure, humidity and air quality to the ecosystem. This eliminates additional I/O connections and enables easy integration of sensor values into the ecosystem.



# Simple and low-cost.

## Override control and sensor integration included

Conventional sensors can be connected directly to actuators or override control can be realised locally. This allows the costs for planning, installation, operation and maintenance to be minimised.

- A sensor<sup>1)</sup> can be connected to many actuators capable of communication. This may be a passive resistance sensor (Pt1000, Ni1000, NTC etc.), an active sensor (e.g. with a DC 0...10 V output) or a switching contact. Its signals are digitised in the Belimo actuator and transferred to the higher-level bus system.
- Using local override control, the actuator can be fully closed or opened and a preset maximum value also approached.

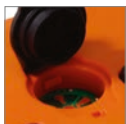


### Yellow LED and key<sup>2)</sup>

- Status display
- Key for addressing

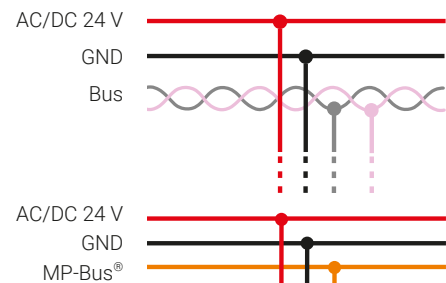
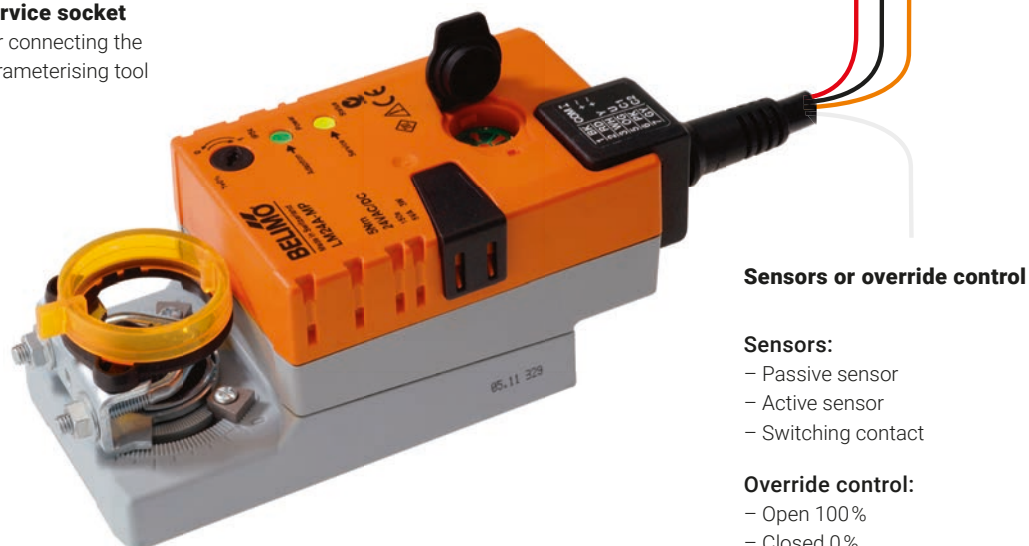
### Green LED and key<sup>2)</sup>

- Supply display
- Key for triggering adaptation



### Service socket

For connecting the parameterising tool



### Sensors or override control

#### Sensors:

- Passive sensor
- Active sensor
- Switching contact

#### Override control:

- Open 100%
- Closed 0%
- Max

<sup>1)</sup> For sensor compatibility per actuator, see overview list.

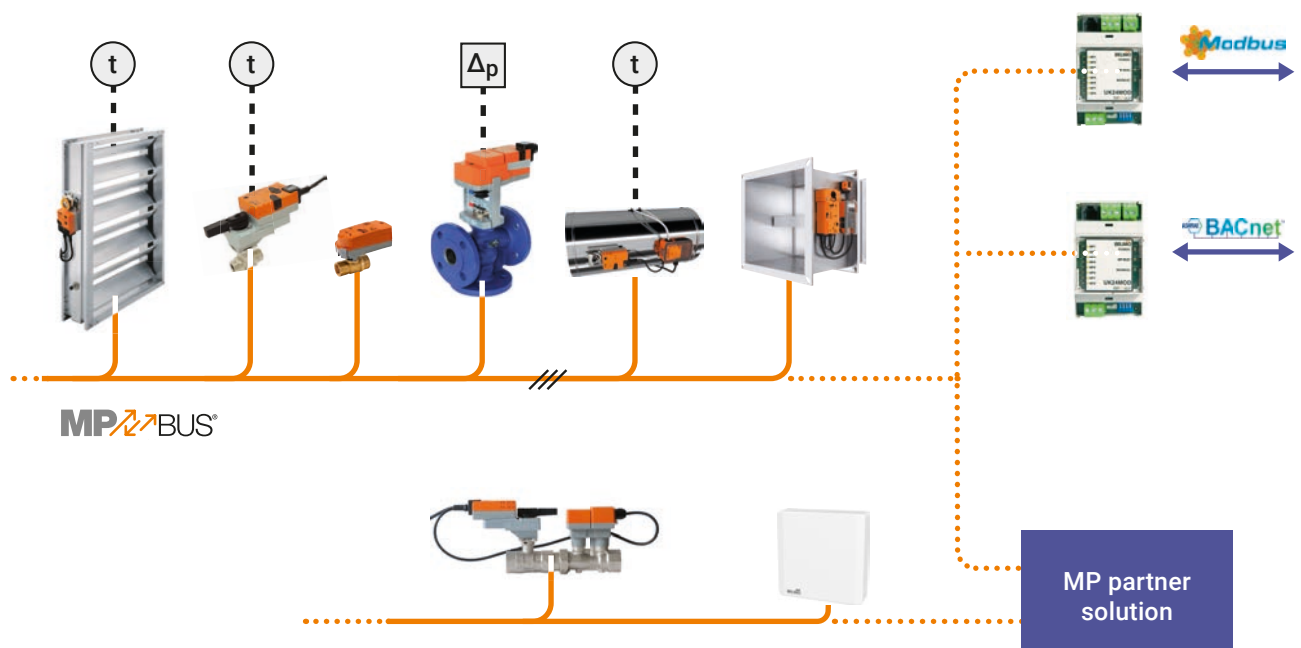
<sup>2)</sup> The function of the key differs depending on the type of actuator.

# Structured system integration.

## MP connections via Belimo gateways and solutions from third-party suppliers

The Belimo gateways and our MP partner solutions are used to convert the signals of the actuators which are grouped together in the MP-Bus<sup>®</sup> and those of the sensors for the relevant networks. This enables a structured integration of clearly arranged and manageable sub-systems.

Belimo provides the MP specification to interested manufacturers of DDC controllers. They can use these specifications to implement a corresponding hardware/software MP interface in their devices.



## Tested MP partner solutions

The close cooperation between the manufacturers of the DDC controllers and Belimo results in solutions of the highest possible quality. The integration solutions for the MP-Bus<sup>®</sup> resulting from the joint development efforts are subjected to a conformity test and awarded the MP-BUS COMPATIBLE label when they pass it successfully.

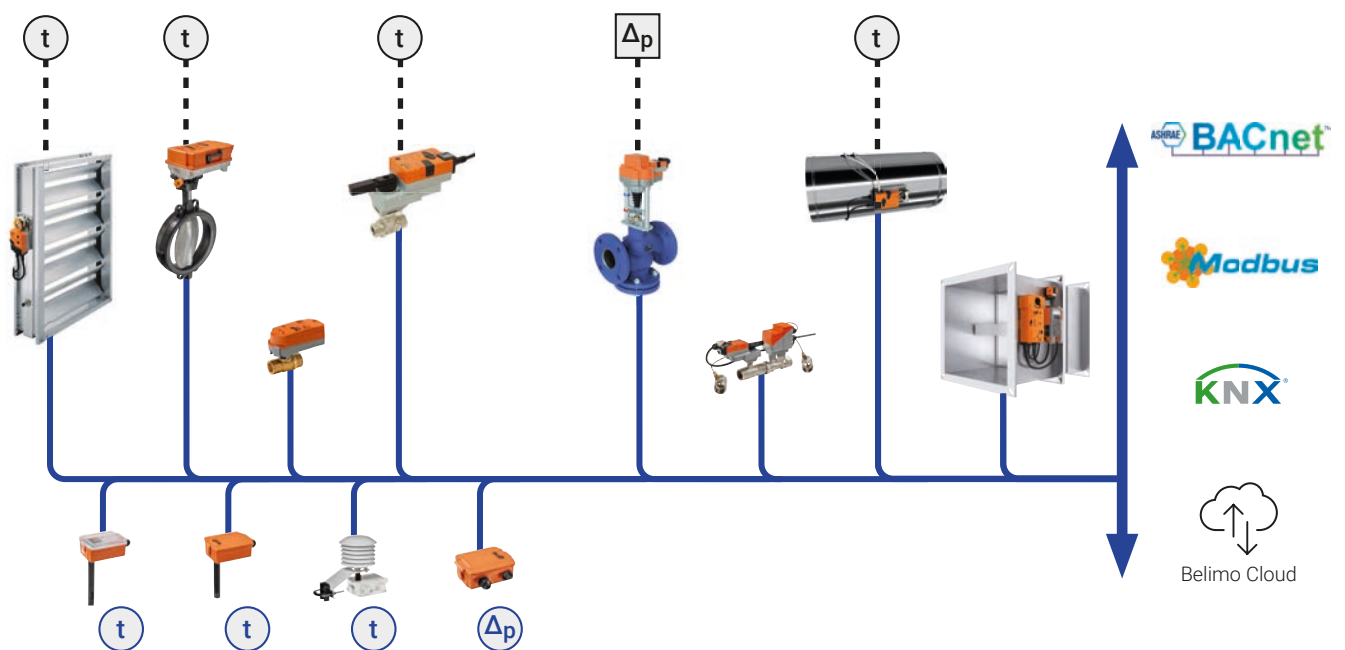
A current overview of recognised MP partners of Belimo can be found on your local Belimo website.

**MP-BUS<sup>®</sup>**  
MP-BUS COMPATIBLE

# Direct connection for dampers, valves and sensors.

## Easy integration into fieldbus systems

In cases where the customer wishes to connect a device directly to a higher level network, Belimo provides various actuators with an integrated interface. This enables a direct connection to field buses commonly used for HVAC without additional hardware, which eliminates additional sources of error. The system integrators can integrate the bus devices easily and using a software environment with which they are familiar.



## Comprehensive product range

Our range includes actuators and sensors for Modbus, BACnet, KNX and IoT. This range is continuously being expanded. You will find a complete product overview on your local Belimo website.



# Practical tools from Belimo.

## Simple parameterisation, commissioning and monitoring

As a rule, MP, Modbus, BACnet, KNX and IoT actuators and sensors are shipped from the factory with typical basic settings. Parameters such as running time, angle of rotation, stroke limitations, etc. can also be individually adjusted and customised precisely to the requirements of the respective system.

The Belimo PC-Tool MFT-P and the practical ZTH EU adjustment tool are available as aids for this purpose. Depending on the place of utilisation and the task, they facilitate on-site parameterisation, commissioning, diagnostics and evaluation. Actuators with the NFC function can be parameterised using the Belimo Assistant App via an NFC enabled smartphone or with the assistance of the Bluetooth to NFC converter.

### Belimo PC Tool

- Graphical display of setpoint and actual values
- Create and print trend evaluations
- Useful tool for troubleshooting on the MP-Bus®
- Access levels can be defined and managed via release code
- Specialised software for OEMs to make efficient use of the tool in the production process



### ZTH EU Service Tool

- The handy ZTH EU Service Tool is connected directly to the actuator for parameterisation
- Reliable and proven connection via the tool socket
- Supply via actuator – always ready
- MP-Bus® tester integrated (packet counter, signal level)
- ZIP level converter to USB for connecting the actuator with the PC Tool



You can find further information about the possible connections of the ZTH EU Service Tool on your local Belimo website or by scanning the QR code.



# Practical tools from Belimo.

## Belimo Assistant App

- Belimo devices marked with the NFC logo can be parameterised using the Assistant App
- Can be installed on all Android mobile phones and iPhones
- Can be operated with ease using the smartphone's touch display
- The actuator can be parameterised while de-energised
- Updates are undertaken automatically via the Google Play or Apple App store



## ZIP-BT-NFC Bluetooth to NFC converter

- Allows for simple use of the Belimo Assistant App via Bluetooth with Android mobile phones and iPhones in order to parameterise NFC enabled devices
- Safe to attach to the actuator thanks to countless micro suction cups attached to the bottom



## Parameterise with which tool?

Which tool is suitable for which actuator can be simplified as follows:

- All actuators with the endings “-MOD” and “-MP”: ZTH EU
- All actuators with the ending “-BAC”: Assistant App
- Belimo Energy Valve™: Webserver
- BKN230-24-MOD: DIP switch

# Actuator solutions for MP-Bus®.

## General air solutions



Types <sup>1)</sup>	Rating	Passive sensor	Active sensor	Switching contact	Parameterisable	UK24BAC	UK24MOD
<b>Rotary actuators</b>							
CM24-MPL-L	2 Nm	-	-	-	-	■	■
CM24-MPL-R	2 Nm	-	-	-	-	■	■
LM24A-MP	5 Nm	■	■	■	■	■	■
NM24A-MP	10 Nm	■	■	■	■	■	■
SM24A-MP	20 Nm	■	■	■	■	■	■
GM24A-MP	40 Nm	■	■	■	■	■	■
<b>Rotary actuators with fail-safe</b>							
TF24-MFT	2 Nm	-	■	■	■	■	■
LF24-MFT2	4 Nm	■	■	■	■	■	■
NF24A-MP	10 Nm	■	■	■	■	■	■
SF24A-MP	20 Nm	■	■	■	■	■	■
EF24A-MP	30 Nm	■	■	■	■	■	■
GK24A-MP	40 Nm	■	■	■	■	■	■
<b>Linear actuators</b>							
LH24A-MP... 60/100/200/300	150 N	■	■	■	■	■	■
SH24A-MP... 100/200/300	450 N	■	■	■	■	■	■
<b>Fast running rotary actuators</b>							
NMC24A-MP	10 Nm	■	■	■	■	■	■
SMC24A-MP	20 Nm	■	■	■	■	■	■
<b>Rotary actuators for special applications</b>							
NM24P-MP	10 Nm	■	■	■	■	■	■
SM24P-MP	20 Nm	■	■	■	■	■	■
GM24G-MP-T	40 Nm	■	■	■	■	■	■
<b>Rotary actuators for special applications with fail-safe</b>							
NF24G-MP-L	10 Nm	■	■	■	■	■	■
SF24G-MP-L	20 Nm	■	■	■	■	■	■
GK24G-MP	40 Nm	■	■	■	■	■	■

<sup>1)</sup> The currently available product range can be found on your local Belimo website.

# Actuator solutions for MP-Bus®.

## Water solutions



Types <sup>1)</sup>	Rating	Passive sensor	Active sensor	Switching contact	Parameterisable	UK24BAC	UK24MOD
<b>Actuators for control valves/open-close ball valves</b>							
CQ24A-MPL	1 Nm	-	-	-	-	■	■
LR24A-MP	5 Nm	■	■	■	■	■	■
NR24A-MP	10 Nm	■	■	■	■	■	■
SR24A-MP	20 Nm	■	■	■	■	■	■
<b>Actuators for control valves/open-close ball valves with fail-safe</b>							
CQK24A-MPL	1 Nm	■	-	■	■	■	■
TRF24-MFT	2 Nm	■	-	■	■	■	■
LRF24-MP	4 Nm	■	■	■	■	■	■
NRF24A-MP	10 Nm	■	■	■	■	■	■
<b>Actuators for globe valves</b>							
LV24A-MP-TPC	500 N	■	■	■	■	■	■
NV24A-MP-TPC	1000 N	■	■	■	■	■	■
SV24A-MP-TPC	1500 N	■	■	■	■	■	■
EV24A-MP-TPC	2500 N	■	■	■	■	■	■
<b>Actuators for globe valves with fail-safe</b>							
NVK24A-MP-TPC	1000 N	■	■	■	■	■	■
AVK24A-MP-TPC	2000 N	■	■	■	■	■	■
<b>Fast running actuators for globe valves</b>							
LVC24A-MP-TPC	500 N	■	■	■	■	■	■
NVC24A-MP-TPC	1000 N	■	■	■	■	■	■
SVC24A-MP-TPC	1500 N	■	■	■	■	■	■
<b>Fast running actuators for globe valves with fail-safe</b>							
NVKC24A-MP-TPC	1000 N	■	■	■	■	■	■
<b>Actuators for butterfly valves</b>							
SR24A-MP-5	20 Nm	■	■	■	■	■	■
GR24A-MP-5/7	40 Nm	■	■	■	■	■	■
DR24A-MP-...5/7	90 Nm	■	■	■	■	■	■
PRCA-BAC-S2-T	160 Nm	■	■	■	■	■	■
PRKCA-BAC-S2-T	160 Nm	■	■	■	■	■	■
SY2-24-MP-T	90 Nm	■	■	■	■	■	■
SY2-230-MP-T	90 Nm	-	-	-	■	■	■
SY3-24-MP-T	150 Nm	■	■	■	■	■	■
SY3-230-MP-T	150 Nm	-	-	-	■	■	■
SY4-24-MP-T	400 Nm	■	■	■	■	■	■
SY4-230-MP-T	400 Nm	-	-	-	■	■	■
SY5-24-MP-T	500 Nm	■	■	■	■	■	■

<sup>1)</sup> The currently available product range can be found on your local Belimo website.

# Actuator solutions for MP-Bus®.

## Safety solutions



Types <sup>1)</sup>	Rating	Passive sensor	Active sensor	Switching contact	Parameterisable	UK24BAC	UK24MOD
<b>Standard actuator for fire dampers</b>							
BKN230-24-C-MP for connecting BF..24-..ST	4/9/11/18 Nm	-	-	-	■	■	■

## Room and system solutions

<b>VAV-Compact rotary actuators</b>							
LMV-D3-MP	5 Nm	■	■	■	■	■	■
NMV-D3-MP	10 Nm	■	■	■	■	■	■
SMV-D3-MP	20 Nm	■	■	■	■	■	■
<b>VAV-Compact linear actuator</b>							
LHV-D3-MP	150 N	■	■	■	■	■	■
<b>VAV-Universal</b>							
VRU-D3-BAC	-	■	■	■	■	■	■
VRU-M1-BAC	-	■	■	■	■	■	■
VRU-M1R-BAC	-	■	■	■	■	■	■
<b>VAV control system for controlled living area ventilation systems</b>							
CMV-100-MP	DN 100	-	■	■	■	■	■
CMV-125-MP	DN 125	-	■	■	■	■	■
CMV-150-MP	DN 150	-	■	■	■	■	■
CMV-160-MP	DN 160	-	■	■	■	■	■

## HVAC performance devices

<b>EPIV</b>							
EP..R+(K)MP	DN 15...50	-	■	■	■	■	■
EP..F+(K)MP	DN 65...150	-	■	■	■	■	■
<b>Belimo Energy Valve™</b>							
EV..R2+MID <sup>2)</sup>	DN 15...50	■	■	■	■	-	-
EV..R2+(K)BAC <sup>2)</sup>	DN 15...50	■	■	■	■	-	-
EV..F+(K)BAC	DN 65...150	-	-	-	■	-	-
EV..R3+(K)BAC	DN 15...50	-	-	-	■	-	-

<sup>1)</sup> The currently available product range can be found on your local Belimo website.

<sup>2)</sup> Possibility to use M-Bus (with converter) instead of MP-Bus.

# Sensor solutions for MP-Bus®.

## Room/air



Types <sup>1)</sup>	Temperature	Humidity	CO <sub>2</sub>	Digital input
<b>Room units temperature/humidity/air quality</b>				
22RT-19-1	■	-	-	■
22RTH-19-1	■	■	-	■
22RTM-19-1	■	■	■	■

## Thermal Energy Meters (TEM)

Types <sup>1)</sup>	Thermal energy	Flow rate	Temperature	Passive sensor	Active sensor	Switching contact	Parametrisable
<b>Belimo Thermal Energy Meter™</b>							
22PEM-1U.. <sup>2)</sup> according to EN 1434 with MID approval	■	■	■	■	■	■	■
22PE-1U.. <sup>2)</sup> with glycol compensation	■	■	■	■	■	■	■

<sup>1)</sup> The currently available product range can be found on your local Belimo website.

<sup>2)</sup> Possibility to use M-Bus (with converter) instead of MP-Bus.

# Actuator solutions Modbus / BACnet combined.

## General air solutions



Types <sup>1)</sup>	Rating	Passive sensor	Active sensor	Switching contact	Parameterisable	Hybrid
<b>Rotary actuators</b>						
LM24A-MOD	5 Nm	■	■	■	■	■
NM24A-MOD	10 Nm	■	■	■	■	■
SM24A-MOD	20 Nm	■	■	■	■	■
GM24A-MOD	40 Nm	■	■	■	■	■
PMCA-BAC-S2-T	160 Nm	■	■	■	■	■
<b>Rotary actuators with fail-safe</b>						
NF24A-MOD	10 Nm	■	■	■	■	■
SF24A-MOD	20 Nm	■	■	■	■	■
GK24A-MOD	40 Nm	■	■	■	■	■
PKCA-BAC-S2-T	160 Nm	■	■	■	■	■
<b>Linear actuator</b>						
LH24A-MOD200	150 N	■	■	■	■	■
<b>Fast running rotary actuator</b>						
SMC24A-MOD	20 Nm	■	■	■	■	■

## Water solutions

<b>Actuators for control valves/open-close ball valves</b>						
CQ24A-BAC	1 Nm	–	–	–	■	■
LR24A-MOD	5 Nm	■	■	■	■	■
NR24A-MOD	10 Nm	■	■	■	■	■
SR24A-MOD	20 Nm	■	■	■	■	■
GR24A-MOD-5	40 Nm	■	■	■	■	■
<b>Actuators for control valves/open-close ball valves with fail-safe</b>						
SRF24A-MOD	20 Nm	■	■	■	■	■
<b>Fast running actuator for control valves/open-close ball valves</b>						
SRC24A-MOD	20 Nm	■	■	■	■	■
<b>Actuators for globe valves</b>						
LV24A-MOD	500 N	■	■	■	■	■
NV24A-MOD	1000 N	■	■	■	■	■
NVK24A-MOD	1000 N	■	■	■	■	■
SV24A-MOD	1500 N	■	■	■	■	■
AVK24A-MOD	2000 N	■	■	■	■	■
EV24A-MOD	2500 N	■	■	■	■	■

<sup>1)</sup> The currently available product range can be found on your local Belimo website.

# Actuator solutions

## Modbus / BACnet combined.

### Water solutions



Types <sup>1)</sup>	Rating	Passive sensor	Active sensor	Switching contact	Parameterisable	Hybrid
<b>Actuators for butterfly valves</b>						
PRCA-BAC-S2-T	160 Nm	■	■	■	■	■
PRKCA-BAC-S2-T (with fail-safe)	160 Nm	■	■	■	■	■

### Safety solutions

<b>Standard actuator for fire dampers</b>						
BKN230-24-MOD for connecting BF..(T)24(-T)-ST	4/9/11/18 Nm	-	-	-	■	-

### Room and system solutions

<b>VAV-Compact rotary actuators</b>						
LMV-D3-MOD	5 Nm	-	■	■	■	■
NMV-D3-MOD	10 Nm	-	■	■	■	■
SMV-D3-MOD	10 Nm	-	■	■	■	■
<b>VAV-Compact linear actuator</b>						
LHV-D3-MOD	150 N	-	■	■	■	■
<b>VAV-Universal</b>						
VRU-D3-BAC	-	■	■	■	■	■
VRU-M1-BAC	-	■	■	■	■	■
VRU-M1R-BAC	-	■	■	■	■	■

### HVAC performance devices

<b>EPIV</b>						
EP..R+(K)MP	DN 15...50	-	■	■	■	■
EP..F+(K)MP	DN 65...150	-	■	■	■	■
<b>Belimo Energy Valve™</b>						
EV..R2+MID	DN 15...50	■	■	■	■	■
EV..R2+(K)BAC	DN 15...50	■	■	■	■	■
EV..F+(K)BAC	DN 65...150	-	-	-	■	■
EV..R3+(K)BAC	DN 15...50	-	-	-	■	■

<sup>1)</sup> The currently available product range can be found on your local Belimo website.



# Sensor solutions for Modbus.



## Duct/air

Types <sup>1)</sup>	Measuring range <sup>2)</sup>	Multirange	Temperature	Humidity	CO <sub>2</sub>	Differential pressure	Display (LCD)	Auto-Zero
<b>Duct sensors pressure</b>								
22ADP-15Q	0...250 Pa	■	-	-	-	■	-	-
22ADP-15QL	0...250 Pa	■	-	-	-	■	■	-
22ADP-15QA	0...250 Pa	■	-	-	-	■	-	■
22ADP-15QB	0...250 Pa	■	-	-	-	■	■	■
22ADP-154	0...2500 Pa	■	-	-	-	■	-	-
22ADP-154D	0...2500 Pa	■	-	-	-	■	-	-
22ADP-154F	0...2500 Pa	■	-	-	-	■	■	-
22ADP-154H	0...2500 Pa	■	-	-	-	■	-	-
22ADP-154K	0...2500 Pa	■	-	-	-	■	■	-
22ADP-154L	0...2500 Pa	■	-	-	-	■	■	-
22ADP-156	0...7000 Pa	■	-	-	-	■	-	-
22ADP-156L	0...7000 Pa	■	-	-	-	■	■	-
<b>Duct sensors temperature/humidity/air quality</b>								
22DTH-15M	-	-	■	■	-	-	-	-
22DTH-15Q	-	-	■	■	-	-	-	-
22DTM-15	-	-	■	■	■	-	-	-

## Outdoor/air

<b>Outdoor sensor humidity/temperature</b>								
22UTH-150X	-	-	■	■	-	-	-	■

## Thermal Energy Meters (TEM)

Types <sup>1)</sup>	Thermal energy	Flow rate	Temperature	Passive sensor	Active sensor	Switching contact	Parametrisable
<b>Belimo Thermal Energy Meter™</b>							
22PEM-1U.. according to EN 1434 with MID approval	■	■	■	■	■	■	■
22PE-1U.. with glycol compensation	■	■	■	■	■	■	■

<sup>1)</sup> The currently available product range can be found on your local Belimo website.

<sup>2)</sup> Factory setting – ranges are configurable on the sensor.

# Sensor solutions for BACnet.

## Duct/air



Types <sup>1)</sup>	Multirange	Temperature	Humidity	CO <sub>2</sub>	Differential pressure	Display (LCD)	Auto-Zero
<b>Duct sensors temperature/humidity/air quality</b>							
22DTH-16M	-	■	■	-	-	-	-
22DTM-16	-	■	■	■	-	-	-

## Outdoor/air

Outdoor sensor humidity/temperature	Multirange	Temperature	Humidity	CO <sub>2</sub>	Differential pressure	Display (LCD)	Auto-Zero
22UTH-160X	-	■	■	-	-	-	-

## Thermal Energy Meters (TEM)

Types <sup>1)</sup>	Thermal energy	Flow rate	Temperature	Passive sensor	Active sensor	Switching contact	Parametrisable
<b>Belimo Thermal Energy Meter™</b>							
22PEM-1U.. according to EN 1434 with MID approval	■	■	■	■	■	■	■
22PE-1U.. with glycol compensation	■	■	■	■	■	■	■

<sup>1)</sup> The currently available product range can be found on your local Belimo website.

# Actuator solutions for KNX.

## General air solutions



Types <sup>1)</sup>	Rating	Passive sensor	Active sensor	Switching contact	Dew point monitor	Parameterisable
<b>Rotary actuators</b>						
LM24A-KNX	5 Nm	■	■	■	-	■
NM24A-KNX	10 Nm	■	■	■	-	■

## Water solutions

Actuators for control valves/open-close ball valves						
	Rating	Passive sensor	Active sensor	Switching contact	Dew point monitor	Parameterisable
LR24A-KNX	5 Nm	■	■	■	■	■
NR24A-KNX	10 Nm	■	■	■	■	■

## Room and system solutions

VAV-Compact rotary actuators						
	Rating	Passive sensor	Active sensor	Switching contact	Dew point monitor	Parameterisable
LMV-D3-KNX	5 Nm	-	■	■	-	■
NMV-D3-KNX	10 Nm	-	■	■	-	■
VAV-Compact linear actuator						
LHV-D3-KNX	150 N	-	■	■	-	■

<sup>1)</sup> The currently available product range can be found on your local Belimo website.

# Actuator solutions for IoT.



Belimo Cloud

## General air solutions

Types <sup>1)</sup>	Rating	Belimo Cloud	Modbus TCP	BA/Cnet IP	Hybrid
<b>Rotary actuators</b>					
VLM24A-LP1	5 Nm	■	■	■	■
VNM24A-LP1	10 Nm	■	■	■	■
VSM24A-LP1	20 Nm	■	■	■	■
VGM24A-LP1	40 Nm	■	■	■	■
<b>Rotary actuator with fail-safe</b>					
VSF24A-LP1	20 Nm	■	■	■	■

## Water solutions

<b>Actuators for control valves/open-close ball valves</b>					
VLR24A-LP1	5 Nm	■	■	■	■
VNR24A-LP1	10 Nm	■	■	■	■
VSR24A-LP1	20 Nm	■	■	■	■
<b>Actuators for control valves/open-close ball valves with fail-safe</b>					
VSRF24A-LP1	20 Nm	■	■	■	■
VSRK24A-LP1	20 Nm	■	■	■	■
<b>Actuators for globe valves</b>					
VNV24A-LP1	1000 N	■	■	■	■
<b>Actuator for butterfly valves</b>					
VGR24A-LP1-5	40 Nm	■	■	■	■
<b>Actuator for butterfly valves with fail-safe</b>					
VGRK24A-LP1-5	40 Nm	■	■	■	■

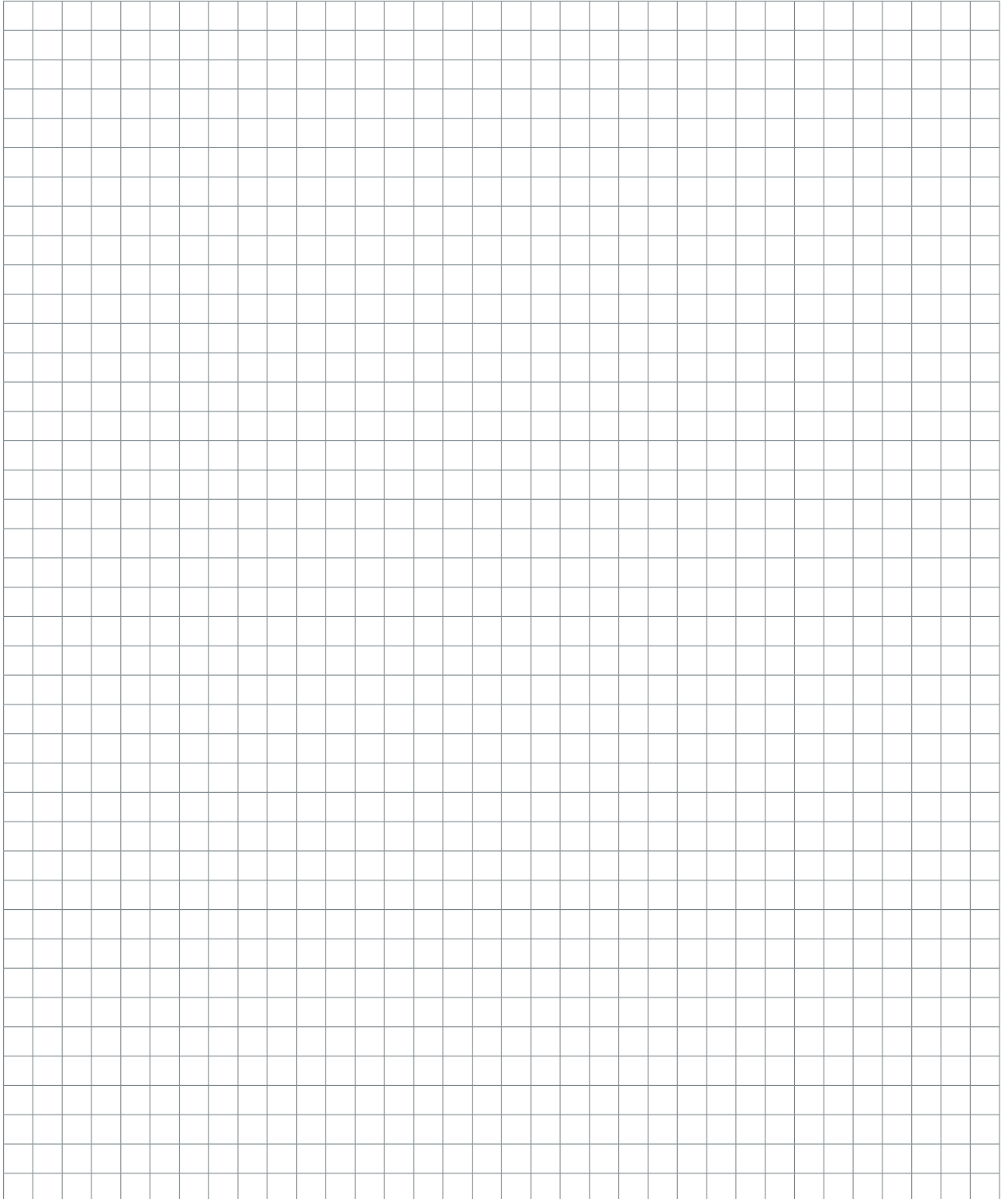
## HVAC performance devices

<b>EPIV</b>					
EP..R+(K)MP	DN 15...50	■	■	■	■
EP..F+(K)MP	DN 65...150	■	■	■	■
<b>Belimo Energy Valve™</b>					
EV..R2+MID	DN 15...50	■	■	■	■
EV..R2+(K)BAC	DN 15...50	■	■	■	■
EV..F+(K)BAC	DN 65...150	■	■	■	■
EV..R3+(K)BAC	DN 15...50	■	■	■	■

<sup>1)</sup> The currently available product range can be found on your local Belimo website.



# Notes



# Notes



# All inclusive.

Belimo as a global market leader develops innovative solutions for the controlling of heating, ventilation and air-conditioning systems. Actuators, valves and sensors represent our core business.

Always focusing on customer added value, we deliver more than only products. We offer you the complete product range for the regulation and control of HVAC systems from a single source. At the same time, we rely on tested Swiss quality with a five-year warranty. Our worldwide representatives in over 80 countries guarantee short delivery times and comprehensive support through the entire product life. Belimo does indeed include everything.

The "small" Belimo devices have a big impact on comfort, energy efficiency, safety, installation and maintenance.

In short: Small devices, big impact.



5-year warranty



On site around the globe



Complete product range



Tested quality



Short delivery times



Comprehensive support



**BELIMO Automation AG**

Brunnenbachstrasse 1, 8340 Hinwil, Schweiz

+41 43 843 61 11, [info@belimo.ch](mailto:info@belimo.ch), [www.belimo.com](http://www.belimo.com)

**BELIMO**<sup>®</sup>