

# The new generation of Belimo CCV. Now with enhanced functionality.



➤ Water is our element.  
[www.belimo.eu](http://www.belimo.eu)

As precise as it always was – but simpler and more temperature-resistant.

Proven millions of times over and now optimised even more – effective immediately, the unique Belimo ball valves (open-close, change-over and characterised control valves) open up additional application possibilities and minimise the causes of errors during installation.

#### **Proven valve technology State-of-the-art**

As 2-way and 3-way types with internal thread or flanges, as well as with a stainless ball, the Belimo ball valves are now suitable for temperatures from  $-10^{\circ}\text{C}$  (without spindle heating) to  $120^{\circ}\text{C}$ . This means they are extending their radius of action as space-saving, inexpensive valves to include additional applications. In addition, they have been given a revised actuator connection (formclosure connection with a pin in the tappet shaft): This practically eliminates errors at the time of the actuator installation. The characterised control valves of the new generation continue to be equipped with the Belimo-patented characterising disk with many years of proven use behind it. It guarantees them an equal percentage valve characteristic curve and closes them air bubble tight.

#### **Comprehensive motorisation philosophy**

The ball valves are motorised to suit the respective application. Belimo actuators of the new generation are utilised in order to ensure that you can operate your water solutions with a comprehensive motorisation philosophy – in the performance classes from 2 to 20 Nm. Actuators with emergency control functions are also available for the purpose of system protection.

# The new generation of Belimo CCV. More versatile, simpler, more ecological.

The new characterised control valves



## Versatility

- Silicone-free lubrication with stainless ball permits utilisation with medium temperatures from  $-10^{\circ}\text{C}$  to  $120^{\circ}\text{C}$
- Pressure ps new: 1600 kPa

## Installation safety

- New form closure connection practically eliminates errors in actuator installation

## Environmentally friendly

- Optimised materials, reduced weight, identical robustness
- Closes air bubble-tight for the prevention of gradual energy losses

## Economic efficiency

- Tested Swiss quality with 5-year warranty
- Reverse compatibility with the previous characterised control valves

## Adapted actuator product range

Due to the fact that only one screw type (M4) is used for the actuator installation, the previously available ..D actuator types (e.g. TRD24-SR) are no longer required. The actuator product range remains however just as versatile as before:

- Compact actuators: KR.. series (2 Nm)
- Rotary actuators without emergency control function: TR.., LR.., NR.. and SR.. series (2, 5, 10 and 20 Nm)
- Rotary actuators with emergency control function: TRF.., LRF.., NRF.. and SRF.. series (2, 5, 10 and 20 Nm)
- Fast running actuators: TRC.., LRC.. and NRC.. series (2, 5 and 10 Nm)
- Very fast running actuators: LRQ.. and NRQ.. series (5 and 10 Nm)

Depending on the valve type, the actuators can be utilised with different types of controls (open-close, 3-point, modulating) or with bus-capable MP types.

## New type designations

In order to distinguish the further developed characterised control valves from the «old» types, they have been given new, more meaningful designations. These are composed as follows:

### Example: R3020-6P3-S2 (previously R318)

- R3020: 3-way internal thread, DN 20
- 6P3:  $k_{vs}$  value  $6.3 \text{ m}^3/\text{h}$
- S2: Material stainless steel ball, motorisation size

The comparison table of new/old type designations can be found on the following pages.

# Belimo CCV.

## New valve designations and actuators.

### 2-way, 120°C internal thread

Valve types			Actuator families				
Old	New	Sort	KR..**	TR(F)..	LR(F)..	NR(F)..	SR(F)..
R205K	R2015-P25-S1	▲	•	•	•	•	•
R206K	R2015-P4-S1	▲	•	•	•	•	•
R207K	R2015-P63-S1	▲	•	•	•	•	•
R208K	R2015-1-S1	▲	•	•	•	•	•
R209K	R2015-1P6-S1	▲	•	•	•	•	•
R210K	-						
R209	R2015-P63-S1	▲	•	•	•	•	•
R210	R2015-1-S1	▲	•	•	•	•	•
R211	R2015-1P6-S1	▲	•	•	•	•	•
R212	R2015-2P5-S1	▲	•	•	•	•	•
R213	R2015-4-S1	▲	•	•	•	•	•
R214	R2015-6P3-S1	▲	•	•	•	•	•
R215	R2015-S1	△	○	○	○	○	○
R217	R2020-4-S2	▲			•	•	•
R218	R2020-6P3-S2	▲			•	•	•
R219	R2020-8P6-S2	▲			•	•	•
R220	R2020-S2	△			○	○	○
R222	R2025-6P3-S2	▲			•	•	•
R223	R2025-10-S2	▲			•	•	•
R224	R2025-16-S2	▲			•	•	•
R225	R2025-S2	△			○	○	○
R229*	R2032-10-B2	▲			•	•	•
R230*	R2032-B2	△			○	○	○
R231	R2032-16-S3	▲			•	•	•
R232	R2032-S3	△			○	○	○
R238	R2040-16-S3	▲			•	•	•
R239	R2040-25-S3	▲			•	•	•
R240	R2040-S3	△			○	○	○
R248	R2050-25-S4	▲					•
R249	R2050-40-S4	▲					•
R250	R2050-S4	△					○

\* Supplementary product range, medium temperature 100°C

\*\* Medium temperature 80°C

▲ Characterised control valves

△ Open-close ball valves

◁▷ Change-over ball valves

• All types possible

○ Only open-close actuator types

### 3-way, 120°C internal thread

Valve types			Actuator families				
Old	New	Sort	KR..**	TR(F)..	LR(F)..	NR(F)..	SR(F)..
R305K	R3015-P25-S1	▲	•	•	•	•	•
R306K	R3015-P4-S1	▲	•	•	•	•	•
R307K	R3015-P63-S1	▲	•	•	•	•	•
R308K	R3015-1-S1	▲	•	•	•	•	•
R309	R3015-P63-S1	▲	•	•	•	•	•
R310	R3015-1-S1	▲	•	•	•	•	•
R311	R3015-1P6-S1	▲	•	•	•	•	•
R312	R3015-2P5-S1	▲	•	•	•	•	•
R313	R3015-4-S1	▲	•	•	•	•	•
R315	R3015-S1	◁▷	○	○	○	○	○
R317	R3020-4-S2	▲			•	•	•
R318	R3020-6P3-S2	▲			•	•	•
R320	R3020-S2	◁▷			○	○	○
R322	R3025-6P3-S2	▲			•	•	•
R323	R3025-10-S2	▲			•	•	•
R325	R3025-S2	◁▷			○	○	○
R329*	R3032-10-B2	▲			•	•	•
R330*	R3032-B2	◁▷			○	○	○
R331	R3032-16-S3	▲			•	•	•
R332	R3032-S3	◁▷			○	○	○
R338	R3040-16-S3	▲			•	•	•
R340	R3040-S3	◁▷			○	○	○
R339G	R3040-25-S4	▲					•
R348	R3050-25-S4	▲					•
R349G	R3050-40-S4	▲					•
R350	R3050-S4	◁▷					○
R350G-A	R3050-58-S4	▲					•

### 3-way, 100°C internal thread L hole

Valve types			Actuator families			
Old	New	Sort	TR(F)..	LR(F)..	NR(F)..	SR(F)..
R315BL	R3015-BL1	◁▷	○	○	○	○
R320BL	R3020-BL2	◁▷		○	○	○
R325BL	R3025-BL2	◁▷		○	○	○
R330BL	R3032-BL2	◁▷		○	○	○
R332BL	R3032-BL3	◁▷			○	○
R340BL	R3040-BL3	◁▷			○	○
R350BL	R3050-BL3	◁▷			○	○
R340GBL	R3040-BL4	◁▷				○
R350GBL	R3050-BL4	◁▷				○

# Belimo CCV.

## New valve designations and actuators.

2-way, 100°C flange PN6							3-way, 100°C flange PN6					
Valve types			Actuator families				Valve types			Actuator families		
Old	New	Sort	TR(F)..	LR(F)..	NR(F)..	SR(F)..-5	Old	New	Sort	TR(F)..	LR(F)..	NR(F)..
R609R	R6015RP63-B1	▲	•	•	•		R709R	R7015RP63-B1	▲	•	•	•
R610R	R6015R1-B1	▲	•	•	•		R711R	R7015R1P6-B1	▲	•	•	•
R611R	R6015R1P6-B1	▲	•	•	•		R713R	R7015R4-B1	▲	•	•	•
R612R	R6015R2P5-B1	▲	•	•	•		R715R	R7015R-B1	<▷	○	○	○
R613R	R6015R4-B1	▲	•	•	•		R718R	R7020R6P3-B1	▲	•	•	•
R615R	R6015R-B1	△	○	○	○		R720R	R7020R-B1	<▷	○	○	○
R618R	R6020R6P3-B1	▲	•	•	•		R723R	R7025R10-B2	▲		•	•
R620R	R6020R-B1	△	○	○	○		R725R	R7025R-B2	<▷		○	○
R623R	R6025R10-B2	▲		•	•		R731R	R7032R16-B3	▲			•
R625R	R6025R-B2	△		○	○		R732R	R7032R-B3	<▷			○
R631R	R6032R16-B3	▲			•		R738R	R7040R16-B3	▲			•
R632R	R6032R-B3	△			○		R740R	R7040R-B3	<▷			○
R639R	R6040R25-B3	▲			•		R748R	R7050R25-B3	▲			•
R640R	R6040R-B3	△			○		R750R	R7050R-B3	<▷			○
R649R	R6050R40-B3	▲			•							
R650R	R6050R-B3	△			○							
R664R*	R6065W63-S8	▲				•						
R665R	on request	△										
R679R*	R6080W100-S8	▲				•						
R680R	on request	△										

\* Replaced by PN16  
▲ Characterised control valves  
△ Open-close ball valves  
<▷ Change-over ball valves  
• All types possible  
○ Only open-close actuator types

Belimo worldwide: [www.belimo.com](http://www.belimo.com)



5-year guarantee



On site around the globe



Complete product range



Tested quality



Short delivery times



Comprehensive Support

**BELIMO Automation AG**, Brunnenbachstrasse 1, CH-8340 Hinwil  
Tel. +41 (0)43 843 61 11, Fax +41 (0)43 843 62 68, [info@belimo.ch](mailto:info@belimo.ch)

