

Replacement overview

All-inclusive

Replacement overview

March 2006

Introduction

Belimo actuators can be mounted on any linear valve from almost all common manufacturers with the help of specially developed retrofit products.

Thanks to the semi-automatic coupling between the valve and the NV actuator, no special tools or mechanical adjustments are required.

Actuators

Three Belimo actuator families are available for motorizing linear valves: the AV...-R, NV and NRDVX series cover the stroke range from 5.5 to 50 mm.

actuator control permits the stroke, force, running time and control and feedback signals to be customized. MFT actuators are in other words universally suitable, offering maximum compatibility with valves from a wide range of manufacturers.

AV...-R and NV actuators can be supplied with Belimo Multi-Function Technology (MFT). Their intelligent

Brackets and adapter sets

Various brackets and adapter sets can be purchased from Belimo as connecting elements between valves and actuators:

- ZAV adapters are designed for mounting AV...-R actuators.
- NRDVX actuators are equipped with a selectable Siemens (-Si) or Cazzaniga adapter (-CA).
- UNV brackets enable many valves to be motorised with NV actuators from Belimo.

Where Belimo actuators are used

Belimo linear actuators are ideal for valves in closed water circuits for heating, ventilating and air-conditioning.

For more information about using these actuators with other liquids or with gaseous media, please contact your Belimo representative.

How to select the optimum actuator

Proceed as follows to select the optimum actuators, brackets and adapters for your particular application:

- 1) Search for the valve type to be motorized and the required nominal width (DN) in the list.
- 2) You can then find the appropriate bracket/adapter type in the table together with a reference to the matching actuator series.
- 3) Finally, select the optimum actuator type in the overview.

The Belimo web site features a convenient, menu-guided replacement list of all linear actuators for a wide variety of valve types:

www.belimo.ch/retrofit

- 5 year warranty
- On site around the globe
- A complete range of products from one source
- Tested quality
- Short delivery times
- Comprehensive support

- Headquarters**
BELIMO Holding AG
 Brunnenbachstrasse 1
 CH-8340 Hinwil
 Tel. +41 (0)43 843 61 11
 Fax +41 (0)43 843 62 68
 info@belimo.ch
 www.belimo.com
- Subsidiaries, Representatives and Agencies**
- | | | | |
|---|---|--|---|
| Argentina
Australia
Austria
Bahrain
Belgium
Bosnia-Herzegovina
Brazil
Bulgaria
Canada
Chile
Croatia
Cyprus
Czech Republic
Denmark
Egypt
Estonia
Finland | France
Great Britain
Germany
Greece
Hong Kong
Hungary
Iceland
India
Indonesia
Ireland
Israel
Italy
Japan
Jordan
Kuwait
Latvia
Lebanon
Liechtenstein
Lithuania
Luxembourg | Malaysia
Mexico
Morocco
Netherlands
New Zealand
Norway
Oman
Pakistan
People's Republic of China
Philippines
Poland
Portugal
Qatar
Republic of Korea (South Korea)
Rumania
Russia
Saudi Arabia
Singapore | Slovakia
Slovenia
South Africa
Spain
Sweden
Switzerland
Taiwan
Turkey
Ukraine
United Arab Emirates
United States of America |
|---|---|--|---|



ENG - 9001-06121 - 03.06 - 2M - Printed in Switzerland - KSAG - Subject to technical changes

Linear actuators for control valves from almost all common manufacturers

Belimo worldwide: www.belimo.com



For retrofitting existing valves:

Belimo brackets and adapters

Valve series	DN [mm] min./max.	Bracket/ adapter	Actuator	
Cazzaniga	V02BM...LM	15/40	preassembled	NRDV
	V03BM...LM	15/40		
	V2BM	15/50	UNV-012	NV
	V3BM	15/50		
Controlli	VSB	15/50	UNV-036	NV
	VMB	15/50	UNV-036	NV
	VSB...F	15/50	UNV-036	NV
	VMB...F	15/50	UNV-036	NV
Danfoss	(H)VF2	25/50	UNV-038	NV
		65/150	on request	AV
	(H)VF3	15/50	UNV-038	NV
		65/150	on request	AV
	(H)VL2	15/50	UNV-038	NV
		65/100	on request	AV
	(H)VL3	15/50	UNV-038	NV
		65/100	on request	AV
	(H)VRB2	15/50	UNV-038	NV
	(H)VRB3	15/50	UNV-038	NV
	(H)VRG2	15/50	UNV-038	NV
	(H)VRG3	15/50	UNV-038	NV
(H)VE2	25/50	UNV-038	NV	
(H)VFS2	15/20	UNV-038	NV	
VR2	15/25	UNV-038	NV	
Honeywell	V5011R	15/50	UNV-015	NV
	V5013R	15/50	UNV-015	NV
	V5015	25/80	UNV-015	NV
	V5015A	100/150	ZAV-015	AV-R
	V5049A	15/65	UNV-015	NV
		80/150	ZAV-044	AV-R
	V5050A	15/80	UNV-015	NV
		80/150	ZAV-044	AV-R
	V5095A	20/80	UNV-015	NV
	V5328A	15/80	UNV-015	NV
	V5329A	15/80	UNV-015	NV
	V5329C	15/80	UNV-015	NV
HORA	BR206GG	15/50	UNV-024	NV
	BR216GG	15/50	UNV-024	NV
	BR216RGA	1/2"/2"	UNV-024	NV
	BR225RG	15/25	UNV-024	NV

Valve series	DN [mm] min./max.	Bracket/ adapter	Actuator	
UDM	RV102 EBK	15/50	UNV-055	NV
	MK	15/50	UNV-047	NV
	MTV	15/50	UNV-025	NV
		MTR	15/50	UNV-025
Osbay	GTV	25/40	UNV-025	NV
	RTV	25/40	UNV-025	NV
	BTV	25/40	UNV-025	NV
	Ram Herrsching	15/40	UNV-003	NV
Rim	50/80	ZAV-003	AV-R	
	Riccius+ Siebt	RGV315/4	15/15	UNV-028
Samson	V2001	15/50	UNV-049	NV
	Satchwell	MJF	15/32	UNV-023
MJF 3626		40/40	ZAV-023	AV-R
MJF 3676		50/50	ZAV-023	AV-R
MZF 3729		65/65	ZAV-023	AV-R
MZF 3779 (3/8")		80/80	ZAV-031	AV-R
MZF 3779 (1/4")		80/80	ZAV-023	AV-R
MZF 3854		100/100	ZAV-023	AV-R
MZF 3904		125/125	ZAV-023	AV-R
MZF 3958		150/150	ZAV-023	AV-R
MZ		15/15	UNV-023	NV
VSF		15/32	ZAV-023	NV
VSF 1626		40/40	ZAV-023	AV-R
VSF 1676	50/50	ZAV-023	AV-R	
VZF 1727	65/65	ZAV-023	AV-R	
VZF 1777 (3/8")	80/80	ZAV-031	AV-R	
VZF 1777 (1/4")	80/80	ZAV-023	AV-R	
VZF 1852	100/100	ZAV-023	AV-R	
VZF 1902	125/125	ZAV-023	AV-R	
VZF 1954	150/150	ZAV-023	AV-R	
VZ	15/50	UNV-023	NV	







1) UNV-019 medium temperature max. 120°C
UNV-041 medium temperature max. 150°C

Valve series	DN [mm] min./max.	Bracket/ adapter	Actuator	
Sauter	B6F..F	15/50	UNV-018	NV
		65/150	ZAV-018	AV-R
	B6G..F	15/50	UNV-018	NV
	B6R..F	15/50	UNV-018	NV
	B6S..F	15/50	UNV-018	NV
		65/150	ZAV-018	AV-R
	B4F..F	20/32	UNV-018	NV
	BT43B	15/40	UNV-043	NV
	BXD..F	15/40	UNV-018	NV
		65/80	ZAV-018	AV-R
	BXE..F	15/50	UNV-018	NV
		65/100	ZAV-018	AV-R
V1T	15/15	UNV-043	NV	
Siemens	V6F..F	15/50	UNV-018	NV
		65/150	ZAV-018	AV-R
	V6G..F	15/50	UNV-018	NV
	V6R..F	15/50	UNV-018	NV
	V6S..F	65/150	ZAV-018	AV-R
		15/50	UNV-018	NV
	VXD..F	15/50	UNV-018	NV
		65/80	ZAV-018	AV-R
	VXE..F	15/50	UNV-018	NV
		65/100	ZAV-018	AV-R
	VPF52E	15/40	UNV-003	NV
	VPF52F	15/40	UNV-003	NV
VVF21	15/80	UNV-003	NV	
	100/100	ZAV-003	AV-R	
VVF31	25/80	UNV-003	NV	
	100/150	ZAV-003	AV-R	
VVF40	15/80	UNV-003	NV	
	100/150	ZAV-003	AV-R	
VVF41	50	UNV-003	NV	
	65/150	ZAV-003	AV-R	
VVF45	50	UNV-003	NV	
VVF45	65/150	ZAV-003	AV-R	
VVF52	15/40	UNV-003	NV	
VVF61	15/50	UNV-003	NV	
	65/150	ZAV-003	AV-R	
VVG41	15/50	UNV-003	NV	
VVG44	15/40	preassembled	NRDV	
VVI52	15/15	preassembled	NRDV	
VXF21	20/80	UNV-003	NV	
	100/100	ZAV-003	AV-R	
VXF31	25/80	UNV-003	NV	
	100/150	ZAV-003	AV-R	
VXF40	15/80	UNV-003	NV	
	100/150	ZAV-003	AV-R	
VXF41	15/50	UNV-003	NV	
	65/150	ZAV-003	AV-R	
VXF61	15/50	UNV-003	NV	
	65/150	ZAV-003	AV-R	
VXG41	15/50	UNV-003	NV	
VXG44	15/40	preassembled	NRDV	

Valve series	DN [mm] min./max.	Bracket/ adapter	Actuator	
SpiraxSarco	LE31	15/50	UNV-033	NV
	LE33	15/50	UNV-033	NV
	KE43	15/50	UNV-033	NV
	KE71	15/50	UNV-033	NV
TAC	KE73	15/50	UNV-033	NV
	V221	65/150	ZAV-017	AV-R
	V241	15/50	UNV-017	NV
	V295	40/100	ZAV-017	AV-R
Trend	V294	15/15	UNV-050	NV
		20/32	UNV-017	NV
	V341	15/50	UNV-017	NV
	V348	15/50	UNV-017	NV
V395-1	40/100	ZAV-017	AV-R	
Trend	GIBT/21	15/50	UNV-036	NV
	GIBT/31	15/50	UNV-036	NV
	GIBF/21	15/50	UNV-036	NV
	GIBF/31	15/50	UNV-036	NV

For retrofitting existing valves:

Belimo actuators

Belimo retrofit linear actuators	Actuating force/stroke	AC 24 V	AC/DC 24 V	AC 230 V	Control ⁽²⁾	Emergency controll function	Running time ⁽³⁾
AV...-R 2000 N / 50 mm		•	•	•	3-point	•	7.5 s/mm
					3-point		150 s
					0...10 V		60 s
					0...10 V		
NVG 1600 N / 20 mm		•	•	•	0...10 V	•	150 s
NV 1000 N ⁽²⁾ / 20 mm		•	•	•	3-point	•	7.5 s/mm
					3-point		150 s
					0...10 V		35 s
					0...10 V		
NVF 800 N / 20 mm		•	•	•	0...10 V	•	150 s
					0...10 V		150 s
NRDVX 500 N / 5.5 mm		•	•	•	3-point	•	140 s
					3-point		140 s
					0...10 V		140 s
NRDVX 500 N / 5.5 mm		•	•	•	3-point	•	140 s
					3-point		140 s
					0...10 V		140 s

²⁾ Closing force 1000 N, inhibiting force 800 N
³⁾ MFT-types: Control, operating range, feedback, running time and other functions can be parameterised with the PC tool or the MFT-H adjuster

Ordering example:
NV24-MFT-T + UNV-003
1000 N actuator, mounted with bracket for Siemens valves