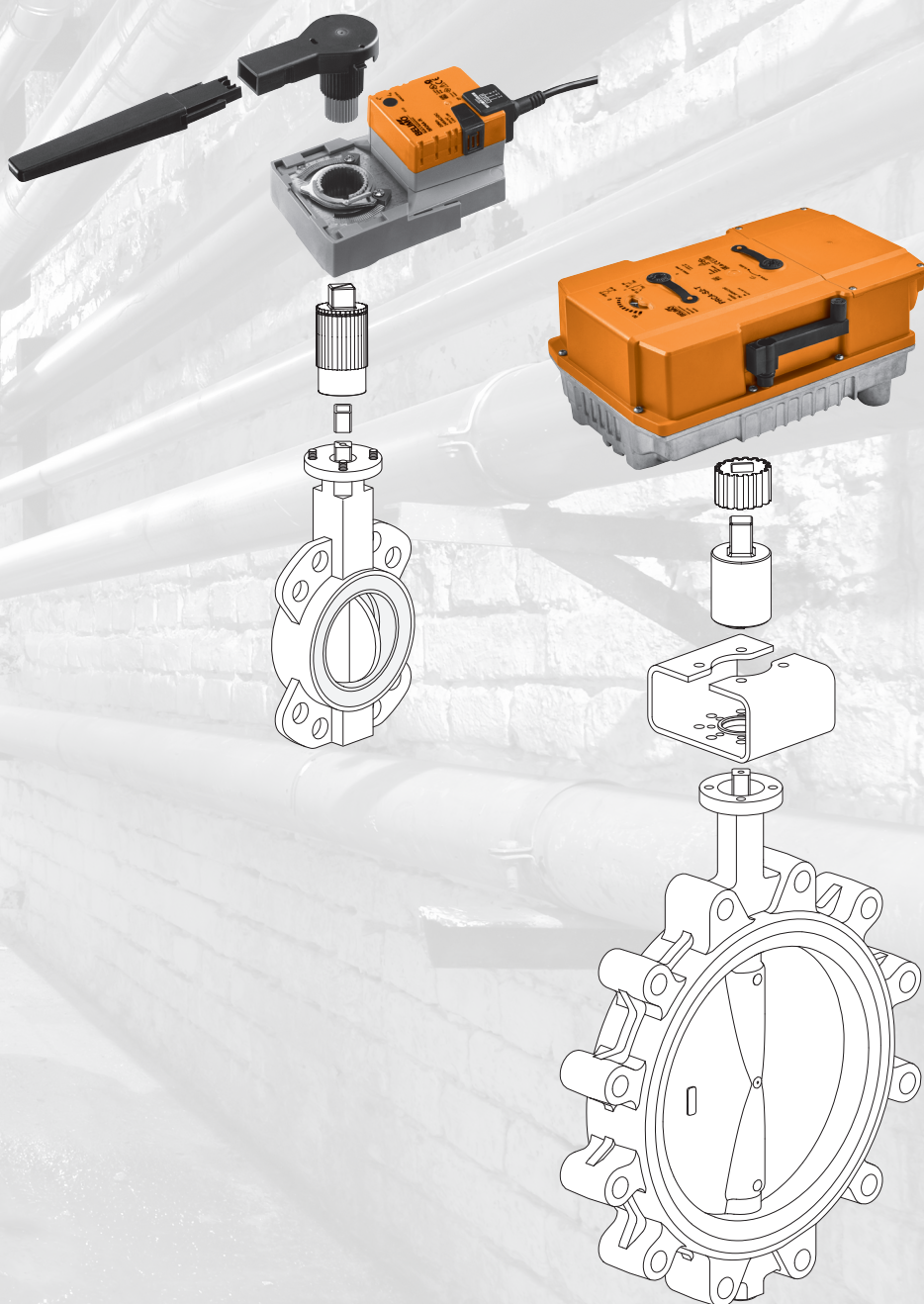
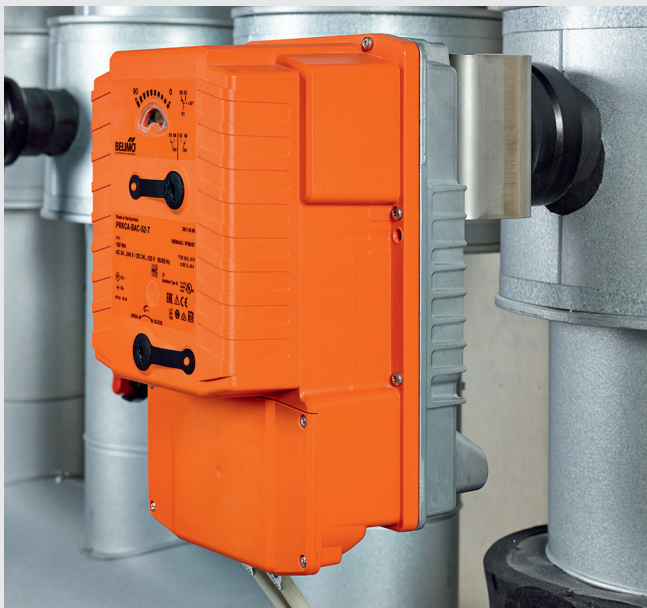


RETRO  FIT[®]

Retrofit – Rotary valves and butterfly valves





Effortless upgrades with retrofit solutions from Belimo

The reasons why a plant needs to be retrofitted or modernised are varied. Often it is a question of prolonging the service life of a plant, or rather enhancing its quality and efficiency. Sooner or later for that reason, components will need to be replaced. The universal butterfly valve actuators from Belimo are eminently suitable for enabling the desired modernisation and a maximum amount of automation in an existing plant. With the help of simple adapters, the retrofit linkage from Belimo, allows the actuators to be mounted without difficulty on installed butterfly valves from a variety of manufacturers.

Retrofit – Rotary valves and butterfly valves

Replacement / Renovation / Modernisation

Water

Page

Actuators for third-party rotary valves and third-party butterfly valves	Belimo Retrofit App or checklist	2
	Form fit adapter	7
Mechanical accessories for butterfly valves	Reducers / form fit adapter, Adapter kit for SY., Adapter kits for PR.. / PRK..	9



Retrofit App

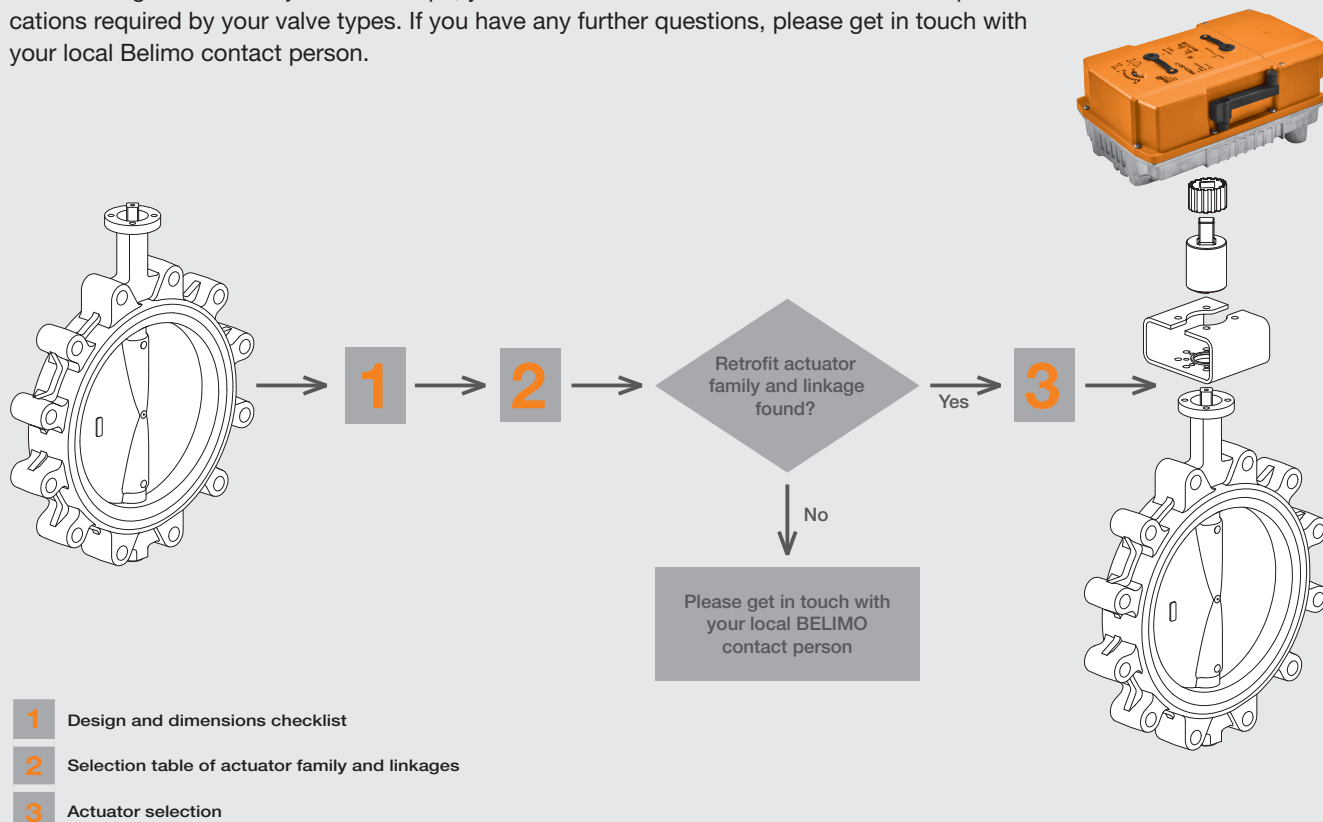
Convenient replacement and modernisation of actuators in existing installations. Install the App via "AppStore" or "Google Play". The QR codes take you there directly.



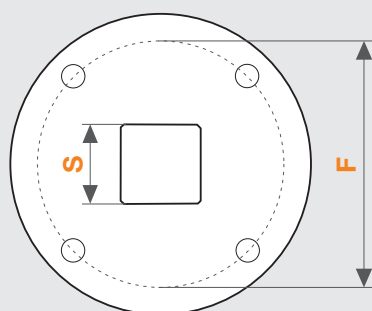
Belimo Retrofit App or checklist

Belimo offers the right actuator solution for practically all of the valves and butterfly valves from other manufacturers and covers a wide array of nominal diameters while doing so. Using the Belimo Retrofit App (page 3) is the quickest way to find out which valve types can be equipped and modernised with a Belimo actuator.

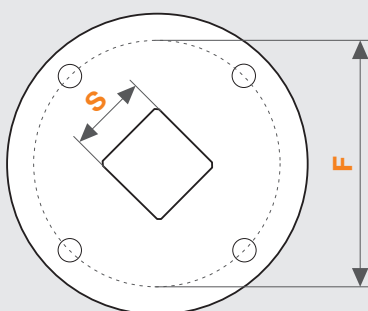
Perhaps you do not know the manufacturer and type of your valves? Then you simply find the right Retrofit actuator using the following checklist. In just a few steps, you can then determine the dimensions and specifications required by your valve types. If you have any further questions, please get in touch with your local Belimo contact person.



1 Design and dimensions checklist

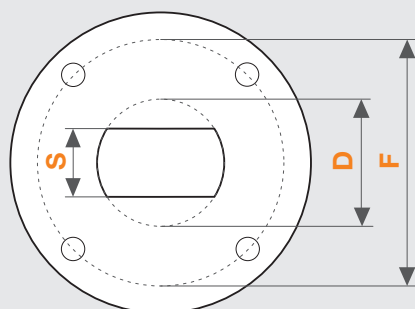


Square Selection table Page 5

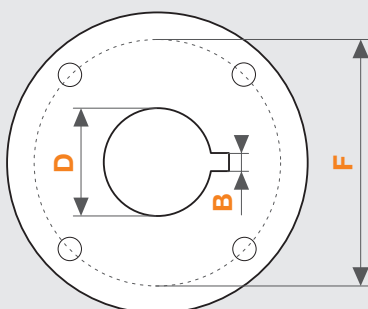


Square 45° rotated Selection table Page 6

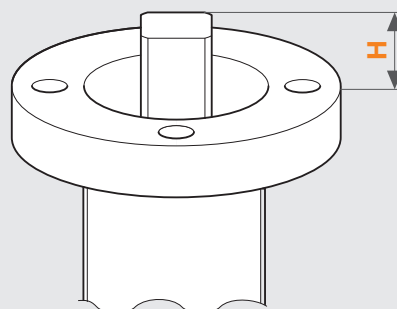
F	F04	=	42 mm
	F05	=	50 mm
	F07	=	70 mm
	F10	=	102 mm



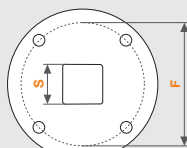
Flat head Selection table Page 7



Wedge groove Selection table Page 7



2 Selection table of actuator family and linkages – Square



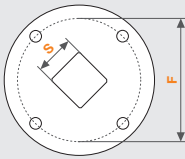
F Flange

Wrench size [mm] S	Max. height [mm] H	F04 / F05			F05 / F07	F05	F07 / F10
8	40				GR..-R ZGV-19 + ZGI-014		
	55	SR..-R ZSV-08	SR..P-R ZPV-08	SRF..-R ZSFV-08			
9	40				GR..-R ZGV-19 + ZGI-015		
	55	SR..-R ZSV-09	SR..P-R ZPV-09	SRF..-R ZSFV-09			
10	40				GR..-R ZGV-16 + ZGI-013		
	55	SR..-R ZSV-10	SR..P-R ZPV-10	SRF..-R ZSFV-10			
11	40				GR..-R ZGV-16 + ZGI-004		
	55	SR..-R ZSV-11	SR..P-R ZPV-11	SRF..-R ZSFV-11			
12	40				GR..-R ZGV-19 + ZGI-012		
	55	SR..-R ZSV-12	SR..P-R ZPV-12	SRF..-R ZSFV-12			
13	33				DR..-R ZDV-01		
14	31					PR.. ZPR10	PR.. ZPR09
	40				GR..-R ZGV-14		
	55	SR..-R ZSV-14	SR..P-R ZPV-14	SRF..-R ZSFV-14			
16	34						PR.. ZPR12
	40				GR..-R ZGV-16		
17	20				GR..-R ZGV-17		
	33				DR..-R ZDV-03		PR.. ZPR05
19	40				GR..-R ZGV-19		

Actuator family Specific actuator must be determined in the table at step 3.

Linkage Belimo type, can be ordered directly with this designation.

2 Selection table of actuator family and linkages – Square 45° rotated

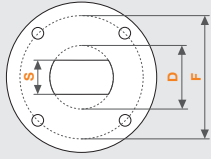
S Wrench size [mm]	H Max. height [mm]	 F Flange						
		F04 / F05			F05 / F07	F05	F07	F10
8	40				GR..-R ZGV-19 + ZGI-014			
	55	SR..-R ZSV-08	SR..P-R ZPV-08	SRF..-R ZSFV-08				
9	40				GR..-R ZGV-19 + ZGI-015			
	55	SR..-R ZSV-09	SR..P-R ZPV-09	SRF..-R ZSFV-09				
10	40				GR..-R ZGV-16 + ZGI-013			
	55	SR..-R ZSV-10	SR..P-R ZPV-10	SRF..-R ZSFV-10				
11	40				GR..-R ZGV-16 + ZGI-004			
	55	SR..-R ZSV-11	SR..P-R ZPV-11	SRF..-R ZSFV-11				
12	40				GR..-R ZGV-19 + ZGI-012			
	55	SR..-R ZSV-12	SR..P-R ZPV-12	SRF..-R ZSFV-12				
14	14					DR..-5 Direct mounting		
	24					PR.. ZPR03		
	31						PR.. ZPR06	PR.. ZPR06
	40				GR..-R ZGV-14			
	55	SR..-R ZSV-14	SR..P-R ZPV-14	SRF..-R ZSFV-14				
16	40				GR..-R ZGV-16			
17	19						DR..-7 Direct mounting	
	20				GR..-R ZGV-17			
	40						PR.. ZPR08	
	24						PR.. ZPR01	
18	31						PR.. ZPR11	PR.. ZPR11
19	40				GR..-R ZGV-19			
22	45							SY4.. ZSY-011
35	40							SY4.. Direct mounting

Actuator family Specific actuator must be determined in the table at step 3.

Linkage Belimo type, can be ordered directly with this designation.

Direct mounting Actuator can be mounted directly. No linkage required.

2 Selection table of actuator family and linkages – Flat head

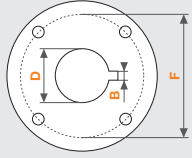


Wrench size [mm] S	Max. height [mm] H	Max. diameter [mm] D	F Flange					
			F04 / F05			F05 / F07		F05 F07 / F10
8	55	17	SR..-R	SR..P-R	SRF..-R	GR..-R		
			ZSF-08	ZPF-08	ZSFF-08	ZGF-08		
9	55	12	SR..-R	SR..P-R	SRF..-R			
			ZSF-09	ZPF-09	ZSFF-09			
10	55	17	SR..-R	SR..P-R	SRF..-R			
			ZSF-10	ZPF-10	ZSFF-10			
11	30	27						PR.. ZPR13
	55	14	SR..-R	SR..P-R	SRF..-R			
			ZSF-11	ZPF-11	ZSFF-11			
12.7	30	27						PR.. ZPR14
13	33	19				DR..-R ZDV-01		
							PR.. ZPR10	PR.. ZPR09
14	31	28				GR..-R ZGF-14		
	40	18	SR..-R	SR..P-R	SRF..-R			
	55	18	ZSF-14	ZPF-14	ZSFF-14			
16	34	31						PR.. ZPR12
17	33	31						PR.. ZPR05
	40	22				GR..-R ZGF-17	DR..-R ZDV-03	

Actuator family Specific actuator must be determined in the table at step 3.

Linkage Belimo type, can be ordered directly with this designation.

2 Selection table of actuator family and linkages – Wedge groove



Diameter [mm] D	Max. height [mm] H	Width [mm] B	F Flange		
			F04 / F05		
12	55	4	SR..-R	SR..P-R	SRF..-R
			ZSK-12	ZPK-12	ZSFK-12
14	55	5	SR..-R	SR..P-R	SRF..-R
			ZSK-14	ZPK-14	ZSFK-14

Actuator family Specific actuator must be determined in the table at step 3.

Linkage Belimo type, can be ordered directly with this designation.

3 Actuator selection

Actuator family	Nominal torque	DN 25	DN 32	DN 40	DN 50	DN 65	DN 80	DN 100	DN 125	DN 150	DN 200	DN 250	DN 300
SR...-R	20 Nm												
SR..P-R													
SRF...-R													
GR...-R	40 Nm												
DR...-R	90 Nm												
DR...-5													
DR...-7													
PR..	160 Nm												
SY4..	400 Nm												

Recommended

Recommended under certain circumstances

		Recommended	Recommended under certain circumstances							
Actuator family	Actuator type	Nominal torque	Open-close	3-point	Modulating	Degree of protection	Nominal voltage AC/DC 24 V AC 230 V	Running time motor 90°	Auxiliary switch SPDT	
Standard actuators										
SR...-R	SR24A-R	20 Nm	•	•		IP54	24 V	90 s		
	SR230A-R						230 V			
GR...-R	GR24A-R	40 Nm	•			IP54	24 V	150 s		
	GR230A-R						230 V			
DR...-R	DR24A-R	90 Nm	•			IP54	24 V	150 s		
	DR230A-R						230 V			
DR...-5	DR24A-5						24 V			
	DR230A-5						230 V			
DR...-7	DR24A-7						24 V			
	DR230A-7						230 V			
RobustLine										
SR...P-R	SR24P-R	20 Nm	•	•		IP66 + IP67	24 V	90 s		
	SR230P-R						230 V			
Fast runners										
PR..	PRCA-S2-T	160 Nm	•	•		IP66 + IP67	AC 24...240 V DC 24...125 V	35 s ¹⁾	2	
SY4..	SY4-24-3-T	400 Nm	•	•		IP67	24 V	16 s	2	
	SY4-230-3-T						230 V	18 s	2	
Actuators with mechanical emergency control function (spring assembly)										
SRF...-R	SRFA-R	20 Nm	•			IP54	AC 24...240 V DC 24...125 V	75 s	2	
	SRFA-S2-R									
Actuator with electrical emergency control function (SuperCap)										
PR..	PRKCA-BAC-S2-T	160 Nm	•	•	• ²⁾	IP66 + IP67	AC 24...240 V DC 24...125 V	35 s ¹⁾	2	
Modulating actuators										
PR..	PRCA-BAC-S2-T	160 Nm	•	•	• ²⁾	IP66 + IP67	AC 24...240 V DC 24...125 V	35 s ¹⁾	2	
SY4..	SY4-24-SR-T	400 Nm			• ³⁾	IP67	24 V	16 s	2	
	SY4-230-SR-T						230 V	18 s	2	
Communicative actuators										
SR...-R	SR24A-MP-R	20 Nm			•	IP54	24 V	90 s		
	SR24P-MP-R					IP66 + IP67				
GR...-R	GR24A-MP-R	40 Nm			•	IP54	24 V	90 s		
PR..	PRCA-BAC-S2-T	160 Nm	•	•	• ²⁾	IP66 + IP67	AC 24...240 V DC 24...125 V	35 s ¹⁾	2	
SY4..	SY4-24-MP-T	400 Nm			• ³⁾	IP67	24 V	16 s	2	
	SY4-230-MP-T						230 V	18 s	2	

¹⁾ (30...120 s variable)

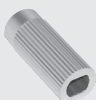
²⁾ 0...10 V, 2...10 V, 4...20 mA

³⁾ 0...10 V

Form fit adapter, square

		Suitable for actuator				Type
		GR.	SR.	SR..P	SRF.	
	8x8x55 mm (LxWxH)				•	ZSFV-08
	9x9x55 mm (LxWxH)				•	ZSFV-09
	10x10x55 mm (LxWxH)				•	ZSFV-10
	11x11x55 mm (LxWxH)				•	ZSFV-11
	12x12x55 mm (LxWxH)				•	ZSFV-12
	14x14x55 mm (LxWxH)				•	ZSFV-14
	8x8x55 mm (LxWxH)		•			ZSV-08
	9x9x55 mm (LxWxH)		•			ZSV-09
	10x10x55 mm (LxWxH)		•			ZSV-10
	11x11x55 mm (LxWxH)		•			ZSV-11
	11x11x55 mm (LxWxH)		•			ZSV-11-4K
	12x12x55 mm (LxWxH)		•			ZSV-12
	14x14x55 mm (LxWxH)		•			ZSV-14
	14x14x40 mm (LxWxH)	•				ZGV-14
	16x16x40 mm (LxWxH)	•				ZGV-16
	17x17x20 mm (LxWxH)	•				ZGV-17
	19x19x40 mm (LxWxH)	•				ZGV-19
	8x8x55 mm (LxWxH)			•		ZPV-08
	9x9x55 mm (LxWxH)			•		ZPV-09
	10x10x55 mm (LxWxH)			•		ZPV-10
	11x11x55 mm (LxWxH)			•		ZPV-11
	12x12x55 mm (LxWxH)			•		ZPV-12
	14x14x55 mm (LxWxH)			•		ZPV-14

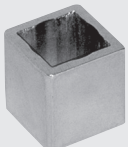
Form fit adapter, flat head

		Suitable for actuator				Type
		GR..	SR..	SR..P	SRF..	
	8xØ17x55 mm (LxWxH)				•	ZSFF-08
	9xØ12x55 mm (LxWxH)				•	ZSFF-09
	10xØ17x55 mm (LxWxH)				•	ZSFF-10
	11xØ14x55 mm (LxWxH)				•	ZSFF-11
	14xØ18x55 mm (LxWxH)				•	ZSFF-14
	8xØ17x55 mm (LxWxH)		•			ZSF-08
	9xØ12x55 mm (LxWxH)		•			ZSF-09
	10xØ17x55 mm (LxWxH)		•			ZSF-10
	11xØ14x55 mm (LxWxH)		•			ZSF-11
	14xØ18x55 mm (LxWxH)		•			ZSF-14
	8xØ11x36 mm (LxWxH)	•				ZGF-08
	14xØ18x33 mm (LxWxH)	•				ZGF-14
	17xØ22x33 mm (LxWxH)	•				ZGF-17
	8x17x55 mm (LxWxH)			•		ZPF-08
	9x12x55 mm (LxWxH)			•		ZPF-09
	10x17x55 mm (LxWxH)			•		ZPF-10
	11xØ14x55 mm (LxWxH)			•		ZPF-11
	14xØ18x55 mm (LxWxH)			•		ZPF-14

Form fit adapter, wedge groove

		Suitable for actuator			Type
		SR..	SR..P	SRF..	
	12x4x55 mm (ØxWxH)			•	ZSFK-12
	14x5x55 mm (ØxWxH)			•	ZSFK-14
	12x4x55 mm (ØxWxH)	•			ZSK-12
	14x5x55 mm (ØxWxH)	•			ZSK-14
	12x4x55 mm (ØxWxH)		•		ZPK-12
	14x5x55 mm (ØxWxH)		•		ZPK-14

Reducers / form fit adapter

		Suitable for actuator	Suitable for adapter		Type
		DR...-R	ZGV-16	ZGV-19	
	Reducer for form fit adapter 14x14x20 mm (LxWxH)			•	ZGI-001
	Reducer for form fit adapter 11x11x20 mm (LxWxH)		•		ZGI-002
	Reducer for form fit adapter 14x14x35 mm (LxWxH)			•	ZGI-003
	Reducer for form fit adapter 11x11x35 mm (LxWxH)		•		ZGI-004
	Reducer for form fit adapter 11x17x15 mm (LxWxH)			•	ZGI-009
	Reducer for form fit adapter 10x17x15 mm (LxWxH)			•	ZGI-010
	Reducer for form fit adapter 12x12x35 mm (LxWxH)			•	ZGI-012
	Reducer for form fit adapter 10x10x15 mm (LxWxH)		•		ZGI-013
	Reducer for form fit adapter 8x17x15 mm (LxWxH)			•	ZGI-014
	Reducer for form fit adapter 9x17x15 mm (LxWxH)			•	ZGI-015
	Form fit adapter 13xØ19x33 mm (LxWxH)	•			ZDV-01
	Form fit adapter 17x17x19 mm (LxWxH)	•			ZDV-02
	Form fit adapter 17xØ22x33 mm (LxWxH)	•			ZDV-03

Adapter kit for SY..

		Suitable for actuator			Type
		SY4..	SY5..	SY6..	
	Mounting/adapter kit SY4/5/6 Square 35x35 mm to flat head SW22	•	•	•	ZSY-011

Adapter kits for PR.. / PRK..

		Square				Flat head					Type	
		SW14	SW16	SW17	SW18	SW11	SW12.7	SW14	SW16	SW17		SW18
	Mounting / adapter kit for PR.. / PRK..			•						•		ZPR05
		•						•				ZPR06
				•								ZPR08
		•						•				ZPR09
		•						•				ZPR10
					•						•	ZPR11
			•						•			ZPR12
						•						ZPR13
							•					ZPR14

In your vicinity – Everywhere



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BELIMO Automation AG

Brunnenbachstrasse 1
CH-8340 Hinwil

Telephone: +41 43 843 61 11
Telefax: +41 43 843 62 68
info@belimo.ch
www.belimo.eu

Worldwide: www.belimo.com