



Aluminium actuator with Rilsan & cataphoresis coating, rack & pinion type for quarter turn valves

- Actuator for quarter turn ball & butterfly valves
- Rilsan-cataphoresis inside & out, extreme service life
- Single & double acting units, torque to 5,043 Nm
- 1 million plus cycles

Actuator to assemble with...



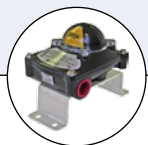
Type 2657

Stainless steel ball valve



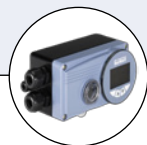
Type 2671

Cast iron butterfly valve



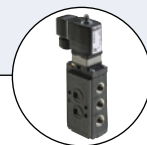
Switchbox

Feedback & position indicator



Type 8792

Digital positioner



Type 6519 Namur

Direct mount pilot valve



Complete system

Valve, actuator & positioner assembly

The black Bürkert aluminium rack and pinion actuator is highly resistant with heavy rilsan and cataphoresis coating. These actuators are therefore extremely robust even in difficult process areas and conditions.

Aluminium throughout, the heavy internal and external rilsan and cataphoresis coating makes the actuator very forgiving of lower quality pneumatic air and can even be water actuated (ie it will not fail due to water ingress).

Suitable for mounting onto Bürkert's complete quarter turn valve package (all with ISO mounting pads as standard), the actuator makes a particularly efficacious combination with cast iron butterfly and stainless steel ball valves. The actuator is certified for hazardous areas.

The wide accessory package includes limit switches, direct mount pilot valves, positioners and manual override.

Technical data	
Body material	Aluminium with rilsan & cataphoresis coating; silicone free See chart over page
Media Temperature	-32°C to 90°C (for extended periods; higher on request)
Pilot pressure	Up to 8bar (15 bar on request) Pilot with compressed air, water, any neutral fluid
Function	Single and double acting [180° version on request]
Torque	DA 17Nm to 5,043Nm (@6 bar) SR 6.7 - 1,769Nm (final) See torque chart
Mounting	ISO-5211, DIN-3337, VDE-3845, NAMUR flange
Certification	PED Directive 97-23-EC, ATEX Directive

Applications

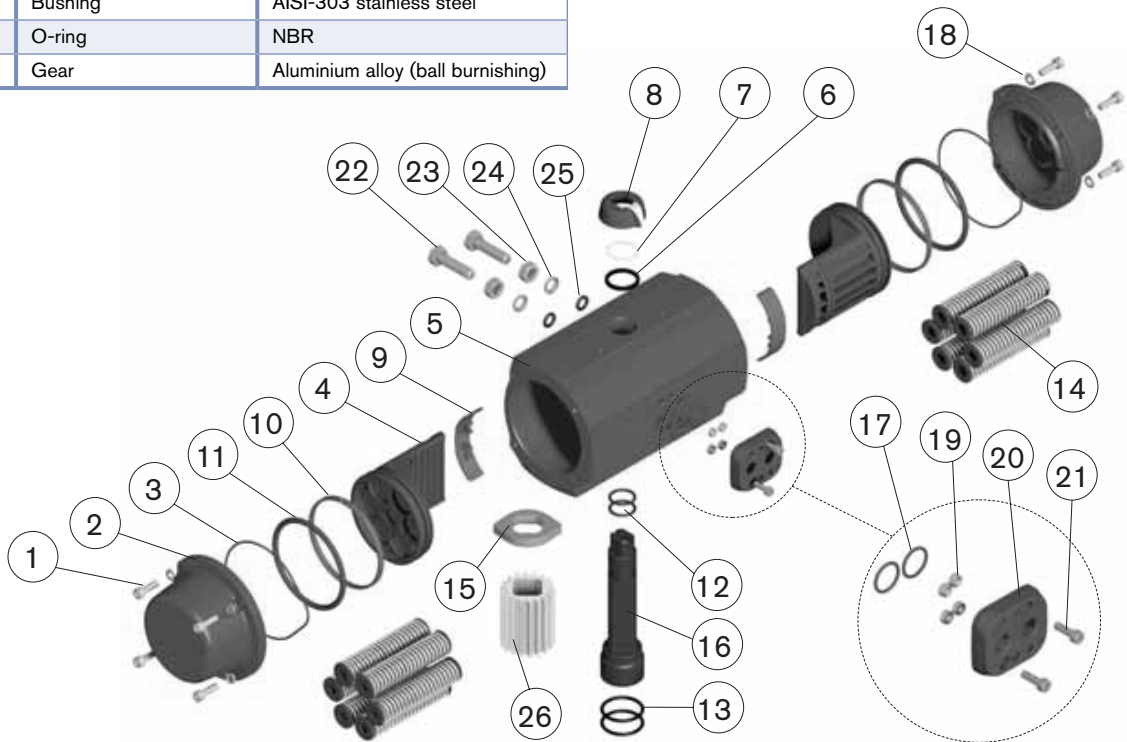
- Chemical environments
- Water treatment
- General purpose

Materials

Item	Description	Material
1	Cap allen screw	AISI-304 stainless steel
2	Cap	Aluminium alloy, polyurethane coated
3	Cap o-ring	NBR
4	Piston	Aluminium alloy
5	Cylinder	Aluminium alloy, polyamide coated
6	Washer	Polyamide
7	Spring clip	Steel
8	Position indicator	Polyamide
9	Piston guide	Polyacetal
10	Guide ring	Polyacetal
11	Piston o-ring	NBR
12	Shaft o-ring	NBR
13	Shaft o-ring	NBR
14	Pre-loaded springs	DIN-17223-C (trivalent chromium passivation)
15	Cam	CF8 stainless steel
16	Shaft	Steel
17	Plate o-ring	NBR
18	Cap washer	AISI-304 stainless steel
19	Nut	AISI-304 stainless steel
20	Pneumatic connection plate	Polyamide
21	Plate allen screw	AISI-304 stainless steel
22	Exagonal screw	Steel
23	Nut	AISI-304 stainless steel
24	Bushing	AISI-303 stainless steel
25	O-ring	NBR
26	Gear	Aluminium alloy (ball burnishing)

Indicative

Each Rilsan coated aluminium actuator size has specific components and materials list. This materials list is indicative for the sizes RI0W - RI25 and RI70.

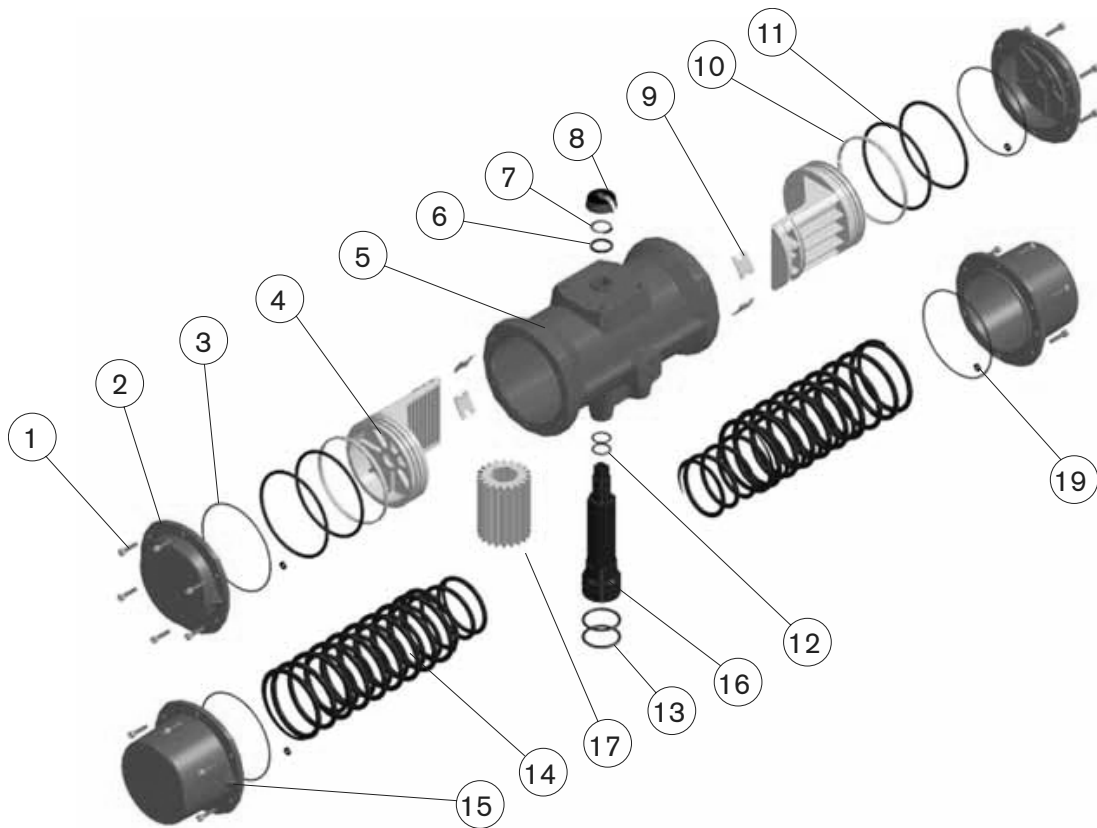


Materials

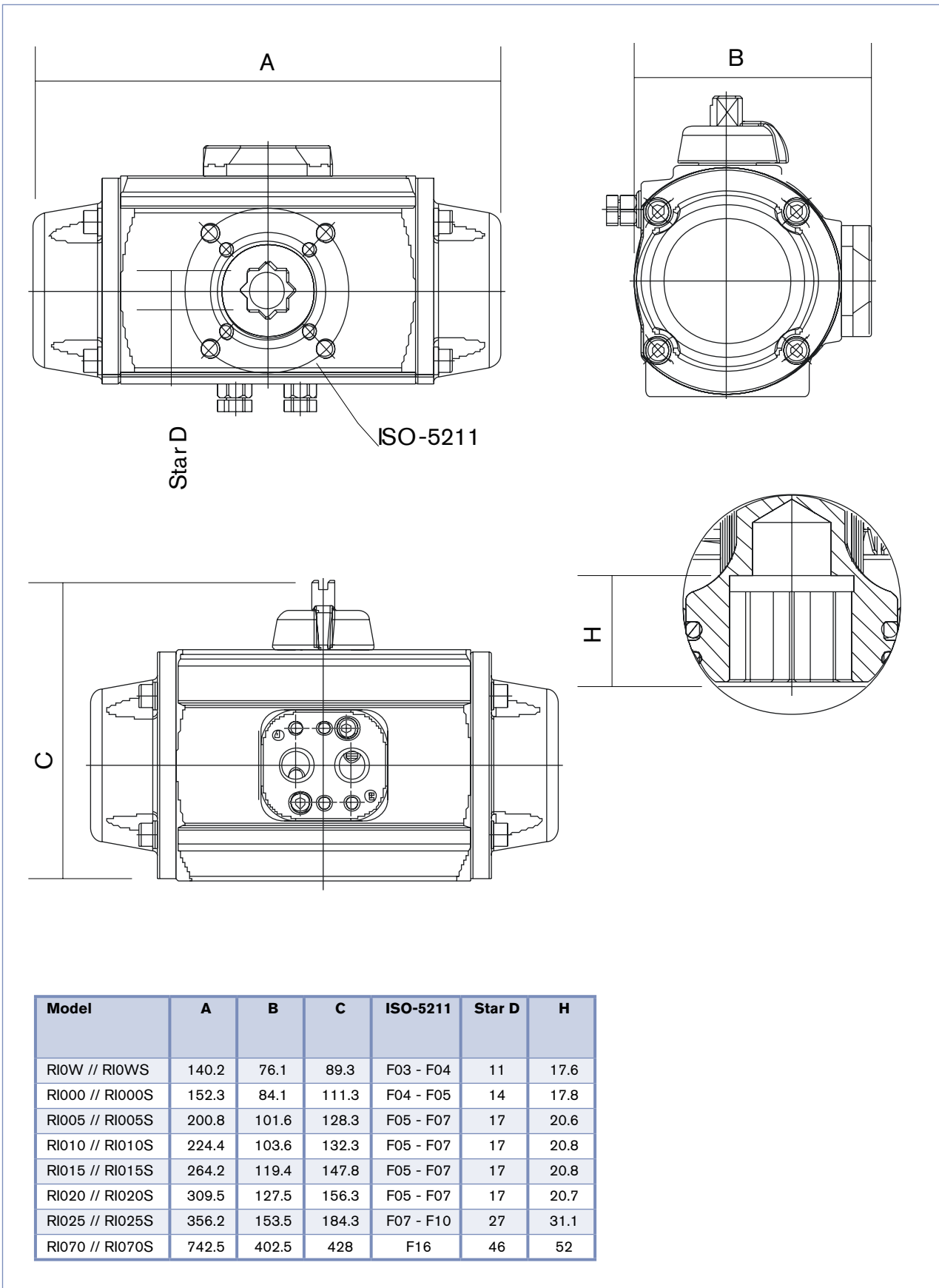
Item	Description	Material
1	Allen screw	AISI-304 stainless steel
2	Double acting cap	Aluminium alloy, rilsan & cataphoresis coated
3	Cap o-ring	NBR
4	Piston	Aluminium alloy, cataphoresis coated
5	Cylinder	Aluminium alloy, rilsan & cataphoresis coated
6	Washer	Polyamide
7	Spring clip	Steel, nickel-PTFE coated
8	Position indicator	Polyamide
9	Piston guide	PTFE & bronze
10	Guide ring	PTFE & bronze
11	Piston o-ring	NBR
12	O-ring	NBR
13	O-ring	NBR
14	Spring set	DIN-17223-C, cataphoresis coated
15	Spring return-cap	Aluminium alloy, rilsan & cataphoresis coated
16	Shaft	Steel, cataphoresis coated
17	Gear	Aluminium alloy (ball burnishing).
18	Water tightness plane gasket	NBR

Indicative

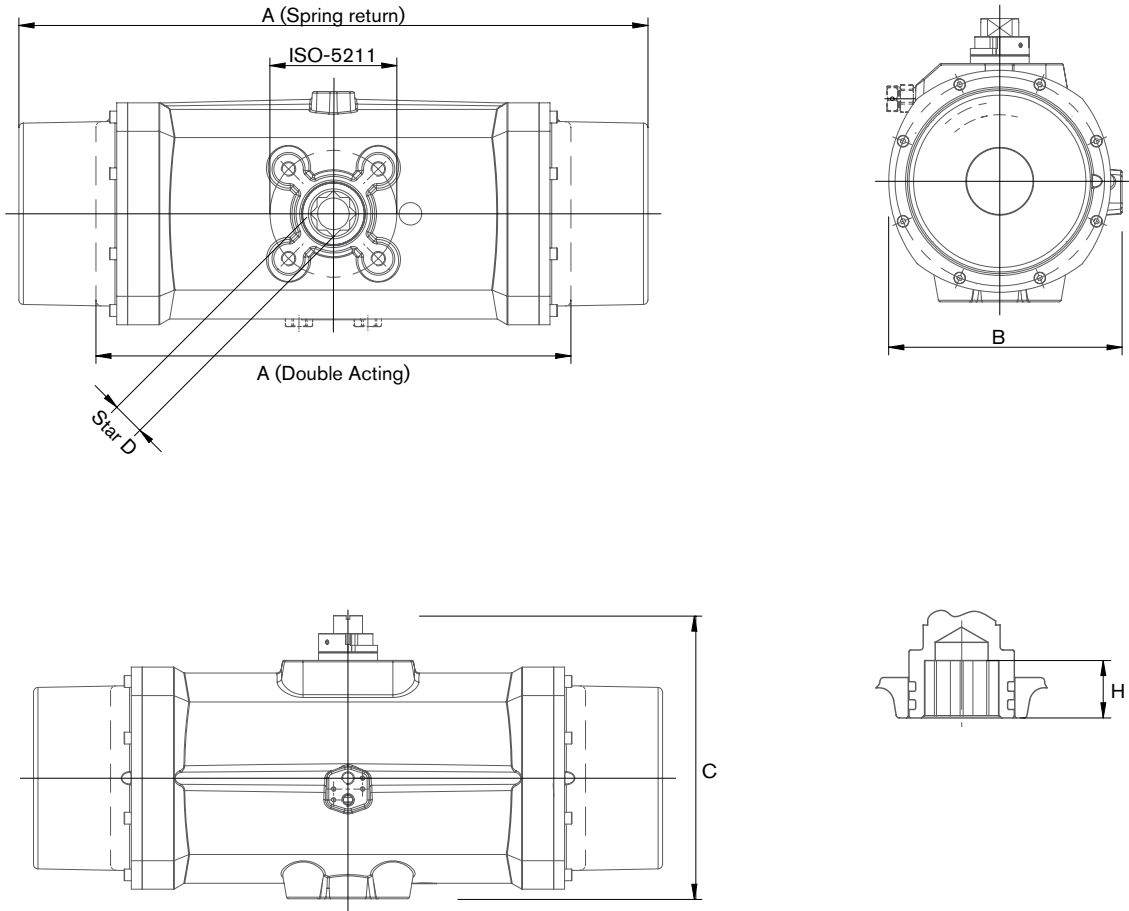
Each Rilsan coated aluminium actuator size has specific components and materials list. This materials list is indicative for the sizes RI30, RI40, RI50.



Dimensions



Dimensions



	A		B	C	ISO-5211	Star D	H
	DA	SR					
RI030 // RI030S	349	479	177	211	F07 - F10	27	30
RI040 // RI040S	444	598	226	272	F12	36	38
RI050 // RI050S	524	694	257.5	313	F14	36	38

Technical data: Rilsan coated pneumatic actuator

Rilsan coated pneumatic actuator

Bürkert's range of pneumatic actuators for quarter turn valves fulfil a wide variety of on/off process applications. Available in double acting and spring return configuration, these actuators deliver exceptionally long service life.

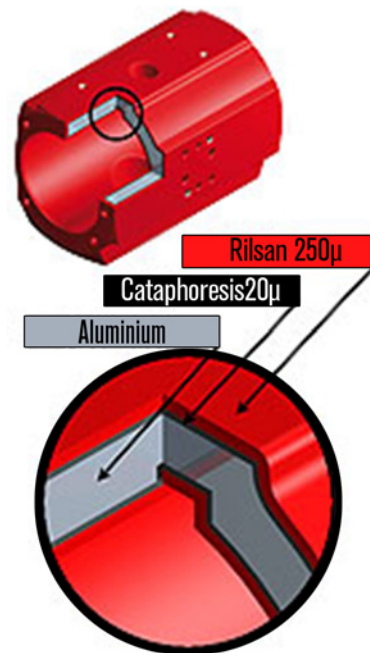
The actuator shown here is extremely protected against corrosion by double coating of epoxy (cataphoresis) and Rilsan (internal & external). All materials are resistant to oxidation (silicone free); the actuators are even rated to be water-actuated. Similarly, the actuator will not be damaged in case of water ingress and low quality pneumatic air.

This level of protection suits the valve system to field deployment in extreme conditions.

A wide selection of accessories is available including:

- Limit switches
- Positioners
- Manual override

Actuators require pilot solenoid valve; see accessories list.



Technical data: Rilsan coated pneumatic actuator

Double acting actuator

Actuator		Torque Nm (at given air pressure)				Weight
ID No	Size	5 bar	5.5 bar	6 bar	7 bar	Kg
AU42098	(RI00W DA)	14.1	15.5	17	19.8	0.92
AU16470	(RI000 DA)	20.5	22.7	25	29.5	1.4
AU44056	(RI005 DA)	41	45.3	49.7	58.4	2.57
AU16460	(RI010 DA)	58.3	65	71	83.7	3.08
AU44057	(RI015 DA)	96	106.2	116.5	136.9	4.2
AU44058	(RI020 DA)	136.3	151	165.5	194.8	5.61
AU44059	(RI025 DA)	240	264.9	290	339.9	9.3
AU44060	(RI030 DA)	388.3		469.2	550.1	9.1
AU44061	(RI040 DA)	980.8		1179.9	1379.1	17.6
AU44215	(RI050 DA)	1710.9		2067.4	2423.8	30.7
TBA	(RI070 DA)	4158	4600	5043	5927	77.9

Spring return actuator

Actuator		Spring No.	Spring Torques		Torque Nm (at given air pressure)								Weight
ID No	Size		Initial	End	5 bar		5.5 bar		6 bar		7 bar		Kg
AU44062	(RI00W SR)	6 + 6	10	6.7	7.4	4.1	8.8	5.5	10.3	7	13.1	9.8	1
AU16450	(RI000 SR)	6 + 6	16.5	11.1	9.4	4	11.6	6.2	13.9	8.5	18.4	13	1.6
AU44063	(RI005 SR)	6 + 6	31.4	20.9	20.1	9.6	24.4	13.9	28.8	18.3	37.5	27	2.94
AU10830	(RI010 SR)	6 + 6	45.6	30.8	27.5	12.7	34.2	19.4	40.2	25.4	52.9	38.1	3.48
AU44064	(RI015 SR)	6 + 6	71.5	49	47	24.5	57.2	34.7	67.5	45	87.9	65.4	5.04
AU16480	(RI020 SR)	6 + 6	104.7	65.8	70.5	31.6	85.2	46.3	99.7	60.8	129	90.1	6.63
AU44065	(RI025 SR)	6 + 6	181.8	119.4	120.6	58.2	145.5	83.1	170.6	108.2	220.5	158.1	11.3
AU44066	(RI030 SR)	4 + 4	273.7	179.9	208.4	114.6			289.3	195.5	370.2	276.4	15.9
AU44067	(RI040 SR)	4 + 4	766.9	491.6	489.1	213.8			688.3	413	887.4	612.1	36.4
AU44068	(RI050 SR)	4 + 4	1206	723.6	987.4	505			1343.8	861.4	1700.2	1217.8	58.4
TBA	(RI070 SR)	6 + 6	3539	1769	2389	619	2831	1062	3273	1504	4158	2389	118.2

Ordering information

Contact Bürkert; on request

Call 1300 888 868 (Australia) or 0800 BURKERT (NZ)