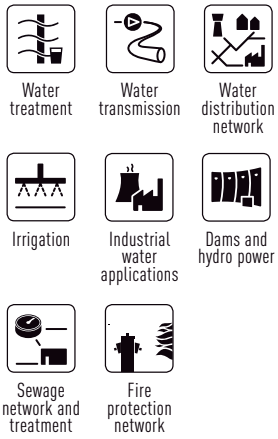
RESILIENT SEATED GATE VALVES

BELGICAST RANGE

BAKIO

BAKIO is a resilient seated gate valve designed to work entirely safely for a long lifetime for on/off applications. Free of maintenance, they are designed according to the more exigent international standards to offer a high quality valve that fits in multiple type of installations. BAKIO is approved by the major international organizations for drinking water applications.

MARKETS



TECHNICAL DATA

Nominal Diameter (DN):
DN40 to DN300

Body length: short and long series, S14 and S15, according to EN 558.

BS Type B version. S3 according to EN558

Clockwise closing as standard.
Anticlockwise closing as option.

Nominal Pressure (PN):
Working: PN16
Drilling: PN10 or PN16

Medium Temperature:
Epoxy coating: -10 to 50°C
Enamel coating: -10 to 70°C

APPROVALS

DVGW, NF, OVGW, WRAS

ADVANTAGES

RELIABLE

Completely tight throughout its whole life. BAKIO design has passed the 2500 cycles endurance test according to EN 1074.

SAFETY

The bayonet stuffing nut avoids any risk of blowout of the stem.

CORROSION RESISTANCE

High quality materials for every component and fully coated body and bonnet.

CHARACTERISTICS

- Made of **high quality materials** according to the relevant standards.
- **Full and straight bore**, so the flow is optimum with minimum head losses.
- **Bayonet** stuffing nut with three O-rings that guarantee the tightness through the stem (serie S14 and S15).
- **Maintenance free.**
- **Innovative dust guard** made of three O-rings integrated in one single piece that protects the valve from floods, salt spray and dust and ensures full isolation.
- **Guided wedge fully vulcanized** with a wide sealing profile and equipped with **plastic blocks**.
- **Excellent corrosion resistance** thanks to the fully coated bonnet and the epoxy powder coating. Body bonnet bolts are protected with wax.
- The **rounded surfaces** of the body ensure a uniform coating and protection of the highest quality.
- **Replaceable packing** under pressure.
- Designed to withstand **64 bar** in shell according to VdS standard.
- **Prepared for actuator** version available.
- **Approved** by major organizations worldwide.
- **100% tested** acc. to EN 12166-1 standard.

SCREWED STUFFING NUT FOR BS TYPE B GATE VALVE (SERIE S3)

BAYONET STUFFING NUT

The innovative bayonet system has been developed by BELGICAST and replaces the traditional threaded system of the stuffing nut (Series S14 and S15). It is made of corrosion resistant aluminium-bronze alloy and fits in place and locks safely through three locking tabs. This way, any risk of blowout of the stem is avoided, ensuring the safety of the installation.

On top of that, no threads means no machining of the bonnet - so all BAKIO bonnets are fully coated, opposed to the valves with threaded stuffing nuts. This assures full protection against corrosion.

EFFICIENT WEDGE

The wedge of the BAKIO gate valve is fully vulcanized, and the wide sealing profile guarantees full tightness even at minimal network pressure.

Thanks to the design of the wedge with guides, the stem is freed from the strength exerted by the flow because the wedge keeps in place. The wedge is equipped with plastic guides, made of a special polymer and vulcanized along with the core wedge, that reduce the opening and closing friction giving, as a result, a smooth operation and longer life.

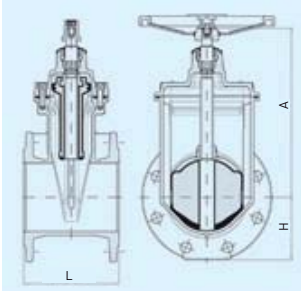
BAKIO PREPARED FOR ACTUATOR

A different version of BAKIO is available to be operated by an electric actuator. It is equipped with a top flange according to ISO 5211.

OPTIONAL COATINGS AND MATERIALS

On top of the usual epoxy coating, BAKIO can be supplied according to GSK standards and with enamel coating. The vitreous enamel is highly resistant to corrosion, abrasion, sunlight and sedimentation due to its low porosity. The enamel is vitrified at 720° C and gets a perfect and permanent bond at the foundry.

BAKIO can be made with components in other materials for special applications different from drinking water.



RELEVANT DIMENSIONS

	DN	40	50	65	80	100	125	150	200	250	300
Short or Long design	L (S14)	140	150	170	180	190	200	210	230	250	270
	L (S15)	240	250	270	280	300	325	350	400	450	500
	A	175	186	225	245	285	330	374	455	546	618
	H	71	76	87	100	110	122	138	170	200	227,5
BS type B design	L (S3)	-	178	190	203	229	254	267	292	330	356
	A	-	202,5	233	268	310	357,5	398,5	488,5	581,5	656,5
	H	-	82,5	92,5	100	110	125	142,5	170	200	227,5

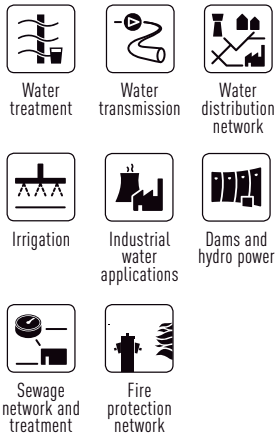
RESILIENT SEATED GATE VALVES

BELGICAST RANGE

BV-05-47

BV-05-47 is the traditional resilient seated gate valve of TALIS for on-off applications. It has a robust design and is available with different connections, so it is the right choice for multiple installations. BV-05-47 is approved by the most prestigious organisations all over the world and is suitable for drinking water applications.

MARKETS



TECHNICAL DATA

Nominal Diameter (DN):
DN20 to DN1200

Clockwise closing as standard.
Anticlockwise closing as option.

Nominal Pressure (PN):
Working: PN16 or PN25
Drilling: PN10, PN16, PN25

Medium Temperature:
Epoxy coating: -10 to 50°C
Enamel coating: -10 to 70°C

APPROVALS

ISO, NF, KIWA, DVGW, WRAS, ÖVGW, GOST, FM, VDS

ADVANTAGES

FULL RANGE
Available in multiple connections and in the whole range of DN.

RELIABLE
Completely tight throughout its whole life.

QUALITY
Internationally approved by the most prestigious organisations and used worldwide.

CHARACTERISTICS

- **Full and straight bore**, so the flow is optimum with minimum head losses.
- **Maintenance free.**
- **Made of high quality materials.**
- **Body and bonnet in high grade ductile iron** EN-GJS-500-7.
- **Stem in stainless steel.**
- Guided **high grade ductile iron wedge** fully vulcanized in EPDM.
- **Tightness** through the stem made with three O-rings.
- **Dust guard** to protect the spindle from any impurities.
- **Body bonnet bolts** fully protected against corrosion.
- **Replaceable packing** under pressure.
- **Epoxy coating as standard.**
- **Low operating torque values.**
- **100% tested** according to EN 12166-1 standard.
- Made in Europe.

BV-05-47 is available in short and long pattern, according to EN 558 Series 14 (F4) and Series 15 (F5).
For those markets where British standards are followed, BV-05-47 is also available in BS type A Series 3 (BS) according to EN 558.

BV-05-47 is available for those situations where high pressures are required. Thanks to the top bonnet and reinforced design, this version of BV-05-47 F5 can resist up to PN25.

BV-05-47 is available with the body with flange-to-flange distance according to EN 558 Series 3 ANSI B16.10 and with flanges and drilling according to ANSI B16.5.
Bigger sizes above DN300mm are available upon request.

BV-05-47 with outside screw and yoke is available in short and long bodies, F4 and F5, for those situations where an easy identification of the position of the wedge is required. Other types of bodies are also available upon request.

Special ANSI valve for fire protection complying with FM 1120/1130 standard. They can be prepared with top flange for post indicator or free stem, optional square cap.

For water or gas applications, these valves are equipped with PE pipes ends to be welded to the pipe where they are installed, which gives continuity to the installation.

The connection of this version of BV-05-47 is with couplings equipped with gaskets for PVC pipes, which eases and reduces the time of installation.

The connection of this version of BV-05-47 is with couplings with Tyton gaskets for ductile iron pipes, which eases and reduces the time of installation. Flexibility in the joints allows slight deflection and movement during the installation.

BV-05-47 with spigot ends for fibre cement pipes with class of pipes A, B, C, D, E and F.

This version of BV-05-47 has been designed to be installed in grooved piping systems.

With the body with the shape of a T-fitting, this combination has been designed to make the installation of deviation in the pipe easier. The advantage of this system is that it saves gaskets and space.

BV-05-47 equipped with a top flange according to ISO 5211 to install an electric actuator or gearbox.

These are compact designs of valve assemblies to use where space is at premium, for example, in urban applications.
All assemblies can be supplied to fulfil specific dimensional requirements in terms of combinations of different diameters.
They are operated with cap top as standard; other possibilities, such as handwheel, to be checked.

RELEVANT DIMENSIONS

DN	40	50	65	80	100	125	150	200	250	300
S14 (F4)	140	150	170	180	190	200	210	230	250	270
S15 (F5)	240	250	270	280	300	325	350	400	450	500
S3 (BS)	-	178	190	203	229	254	267	292	330	356

DN	350	400	450	500	600	700	800	900	1000	1200
S14 (F4)	290	310	330	350	390	-	470	-	550	-
S15 (F5)	550	600	650	700	800	900	-	1100	-	1400
S3 (BS)	381	406	432	457	508	-	-	-	-	-

OVERVIEW OF BV-05-47

DN	F4	F5	BS	PN25	ANSI-150	OSY	FM	Welding PE ends	PVC	Tyton	Spigot ends	Grooved ends	Belgi-T	Belgi-3, Belgi-4	Prepared for actuator
40	x	x	-	x	-	x	-	-	-	-	-	-	-	-	x
50	x	x	x	x	x	x	-	x	x	-	x	-	-	x	x
65	x	x	x	x	x	x	-	x	x	-	x	-	-	x	x
80	x	x	x	x	x	x	-	x	x	x	x	x	x	x	x
100	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
125	x	x	x	x	x	x	-	x	x		x			x	x
150	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
200	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
250	x	x	x	x	x	x	x	-	x	-	x	-	-	x	x
300	x	x	x	x	x	x	x	-	x	-	x	-	-	x	x
350	x	x	x	-	-	x	-	-		-	-	-	-	-	x
400	x	x	x	-	-	-	-	-	x	-	-	-	-	-	x
450	x	x	x	-	-	-	-	-	-	-	-	-	-	-	x
500	x	x	x	-	-	-	-	-	-	-	-	-	-	-	x
600	x	x	x	-	-	-	-	-	-	-	-	-	-	-	x
700*	-	x	-	-	-	-	-	-	-	-	-	-	-	-	x
800	x	-	-	-	-	-	-	-	-	-	-	-	-	-	x
900*	-	x	-	-	-	-	-	-	-	-	-	-	-	-	x
1000	x	-	-	-	-	-	-	-	-	-	-	-	-	-	x
1200*	-	x	-	-	-	-	-	-	-	-	-	-	-	-	x

* Bore dimension is DN600, 800, 1000 mm

FULL RANGE, ALSO FOR SMALLER DN

The BV-05-47 range is completed in smaller sizes, from DN20 to DN50, in two different versions: with threaded ends and with socket ends for polyethylene pipe.

OPTIONAL COATINGS AND MATERIALS

On top of the usual epoxy coating, suitable for usual applications, BV-05-47 can be supplied according to GSK standards and with enamel coating.

BV-05-47 can be made with components in other materials for special applications different from drinking water.

RESILIENT SEATED GATE VALVES

ACTUATION METHODS

TALIS offers a wide variety of actuation methods that will allow to choose the best option for each installation. The actuation can be made manually or by means of an electrical actuator with or without a gearbox. Also, we offer solutions for buried installations. Pneumatically actuated gate valves with a special design are also available for those installations where speed of actuation is a priority.

MANUAL ACTUATION

In most cases, resilient seated gate valves are operated manually by means of a handwheel or a cap top using a T-key. TALIS offers handwheels with the right dimension according to the DN and operating torque. Our standard handwheels are made of pressed steel and we also offer ductile iron as an option. Regarding cap tops, our products comply with the different national practices and standards.

BURIED INSTALLATIONS

One special case of manual actuation occurs when the valve is buried and the actuation has to be done from the surface. For those cases special stem extensions, fixed or telescopic, are offered to fit with different national practices and standards. We can offer customised solutions for each country where it is requested. For example, TALIS offers adaptors to fit plastic or casting pipes for the French market and stem extensions according to GW 336 for German market.

ELECTRICAL ACTUATION

Another option is to operate the gate valve by means of an electric actuator. This solution also offers the possibility of installing a remote control, what allows the final user to monitor the operations of the valves. Special versions of the gate valves prepared for the actuator are equipped with top flanges according to ISO 5211. Actuators from different suppliers can be installed on this standard flange, which gives the freedom to the customer to choose their actuator. TALIS can provide the operating torques of the gate valves as well as guidance in choosing the right actuator for each DN.

DN	40	50	65	80	100	125
Connecting flange ISO 5211	F10	F10	F10	F10	F10	F10

150	200	250	300	350	400	450
F10	F10	F14	F14	F14	F14	F14

500	600	700	800	900	1000	1200
F16	F16	F16	F25	F25	F25	F25