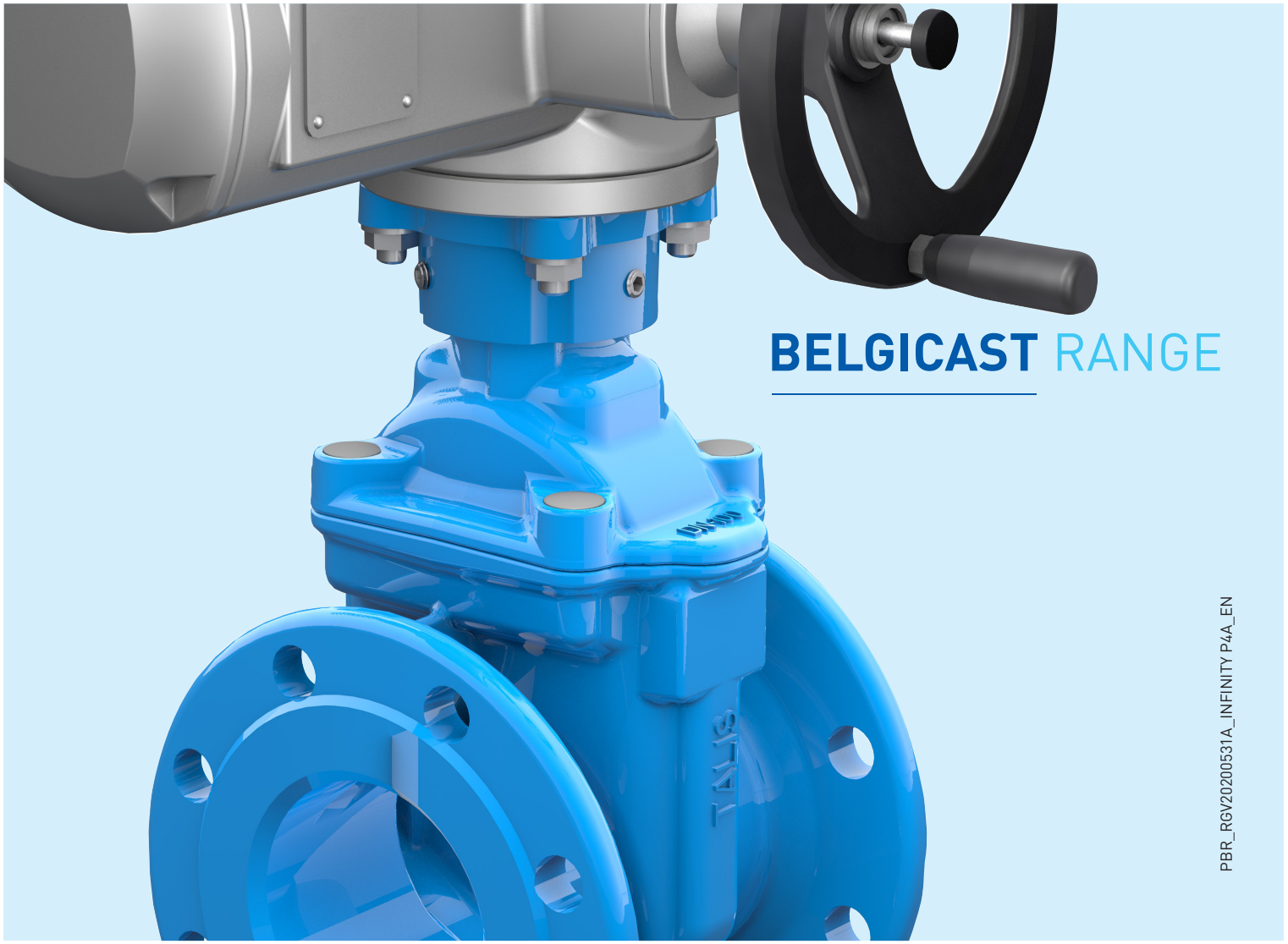
TALIS

INFINITY resilient seated gate valve

Prepared FOR / WITH electric actuator



PBR_RGV20200531A_INFINITY P4A_EN

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RESILIENT SEATED GATE VALVES

INFINITY

The latest in TALIS's proven range of valves, the INFINITY represents a new generation of resilient seated gate valves [DN40-700]. As well as boasting of the latest technological advances and unique technical features, INFINITY has been 100% designed and manufactured in Europe using high quality materials and the latest manufacturing technologies, to guarantee, to our valuable customers, an extraordinary lifetime, outstanding operability and unique safety features.

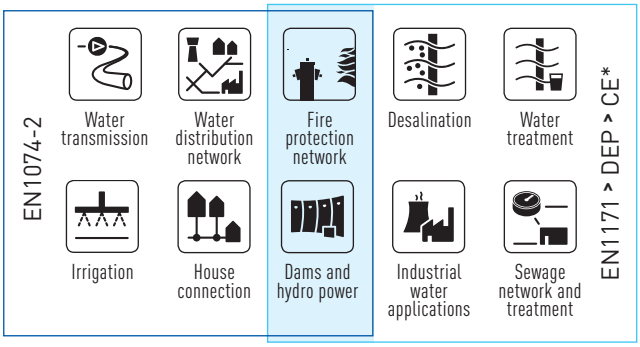
FUNCTIONS

Isolation resilient seated gate valves, with wedge fully encapsulated in elastomer, for ON/OFF duty, and operation by mean of multi-turn electric actuator.

ADVANTAGES

- **Low torque:** INFINITY and its new wedge and stem technology ensures smooth functionality with outstanding low torque values.
- **Longer service life:** new guiding system for the wedge with male composite sliding skate in order to easily achieve the 2500 cycles endurance test required by European standards.
- **Corrosion resistance:** high quality materials. Wide range of coatings available. Threadless bonnet up to DN300 that allows continuous coating.
- **Low head loss:** clear way and straight bore design from DN40 up to DN600 in order to allow a free path without restriction of the fluid.
- **Bubble tight shut off:** new wedge design with increased thickness of the elastomer at the sealing areas to improve tightness.

APPLICATIONS



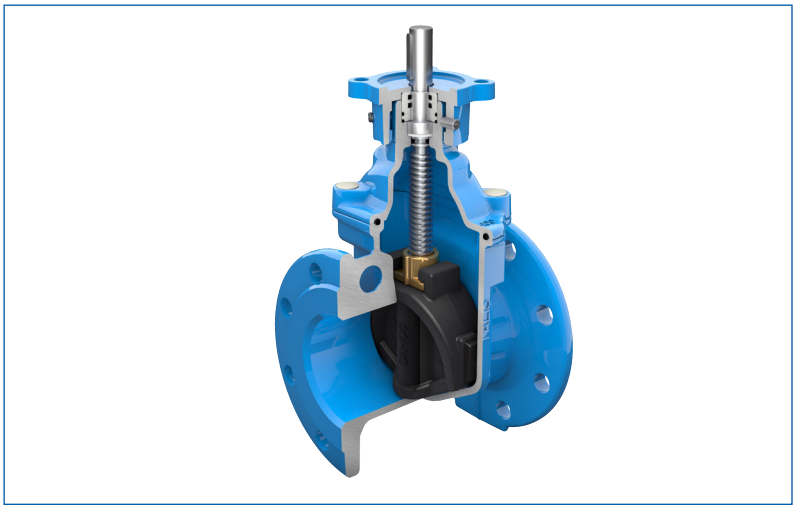
* See INFINITY general documentation for gate valves which are subjected to CE marking according to the European "Pressure Equipment Directive" 2014/68/EU (PED).

USES

- **On networks, gate valves can be:**
  - Used both as part of new works and renovations.
  - Installed outside, in valves' room, or in buildings.
- **The use of gate valves allows user:**
  - To balance the distribution of water at all points in the mesh network (in open or closed position).
  - To isolate control valves, fire hydrants, air valves, pumps, etc. for their maintenance.
  - To perform maintenance on the network (isolation of part of the network).
  - To stop the flow in the case of failure or pipe incident.
  - To drain water tanks or sections of the water network.

CHARACTERISTICS

- Made of **high quality materials** according to the relevant standards.
- **Clear way and straight bore,** so the flow is optimum with minimum head losses.
- **Replaceable packing** under pressure.
- Wedge **fully encapsulated** in EPDM for a better resistance to corrosion.
- Integral male composite sliding skate as guiding system for **easy operation** under maximum differential pressure.
- Body bonnet bolts are protected with hot melt glue.
- **Rounded surfaces** of the body ensure a uniform coating and protection of the highest quality.
- **Excellent corrosion resistance** thanks to the fully coated bonnet (not threads) and a coating thickness of **minimum 250 microns of epoxy**.
- Stem in stainless steel.
- **Maintenance free.**
- Designed to be operated by **multi-turn electric actuator**.
- **Approved** by major organizations worldwide for drinking water.
- In conformity with **European standard** EN 1074-2 (annex A) and EN 1171 (category 3).
- **100% tested** acc. to EN 12166-1 standard.
- **2.500 cycles** endurance resistance.



APPROVALS

- DVGW, NF, ACS, KIWA, OVGW, WRAS, VdS, ...

OPTIONS/VARIANTS

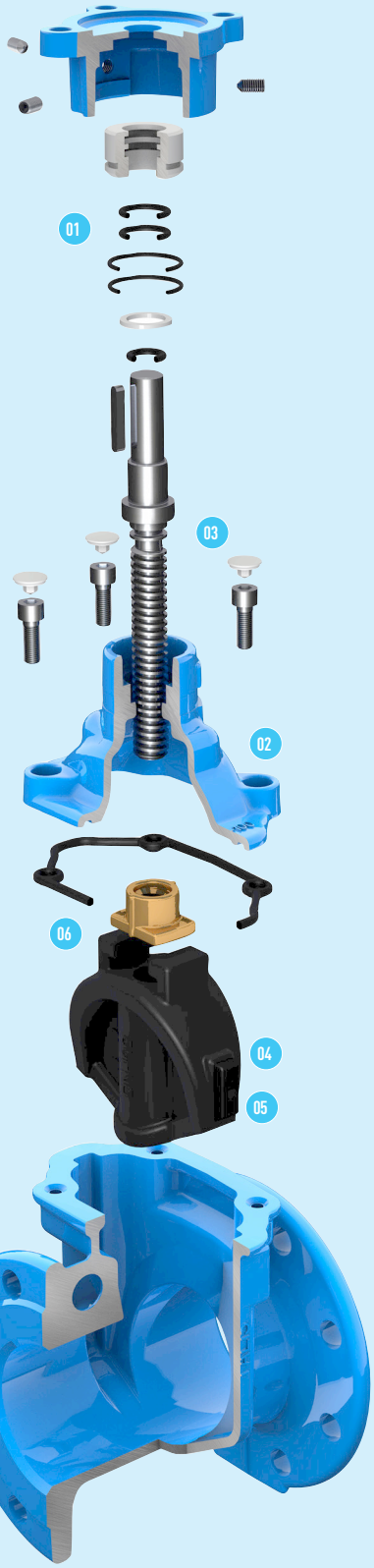
- GSK approved, epoxy 300 microns mini, others ...
- Full enamel coating.
- Pneumatic/Hydraulic cylinder, different brands of electric actuator.
- Configuration for sea water, sewage water and hot water.
- Wedge fully encapsulated in NBR or hot potable water approved EPDM (up to 70°C).
- Bolts in stainless steel A4.

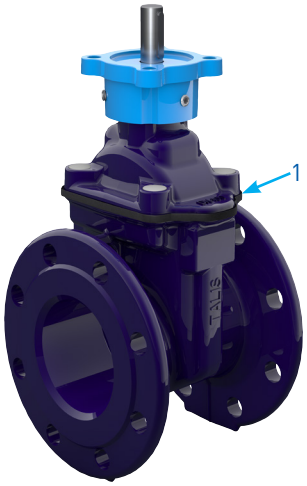
TECHNICAL DATA

- **Nominal Diameter (DN):** DN40 to DN700.
- **Body length to EN558:**
  Series 14: short body (F4).
  Series 15: long body (F5).
  Series 3: BS.
- **Closing direction:**
  Clockwise closing (CC).
- **Nominal Pressure (PN):** PN16.
- **Flange Drilling:** PN10 or PN16 according to EN 1092-2.
- **Medium Temperature (EN1074-2):**
  - Epoxy coating: -10 to 50°C
  - Enamel coating: -10 to 50°C (up to 70°C under request, in the case of EN1171).
- **Water tightness:**
  Rate A according to EN 12266-1.
- **Maximum Velocity:**

PFA/PS	EN1074-2	EN1171
10 bar	3 m/s	5 m/s
16 bar	4 m/s	5 m/s

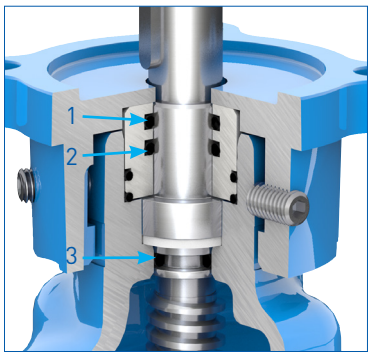
TECHNICAL ADVANTAGES



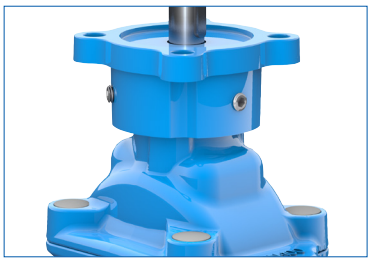


FOR ENAMELED VERSION, THE VALVE INTEGRATES AN EDGE PROTECTION (1) PLACED ALL AROUND BETWEEN THE BODY AND THE BONNET, AND THE ISO TOP FLANGE IS EPOXY COATED.

TECHNICAL ADVANTAGES



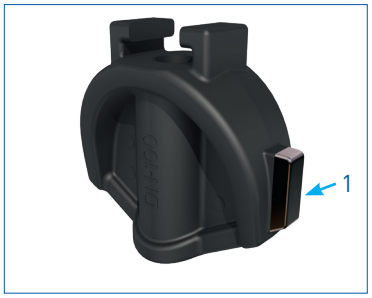
01: Triple seal at the operating stem to ensure tightness with the test of time (2500 cycles).



02: The more compact new bonnet, reduces the water retention areas in order **to reduce the risk of bacterial growth.**

03: Stem and collar made in one piece in stainless steel for **better resistance to axial load and to withstand higher operating torques.** A polyamid washer (1) placed under the collar allows to reduce friction torque and protect coating inside the Bonnet.

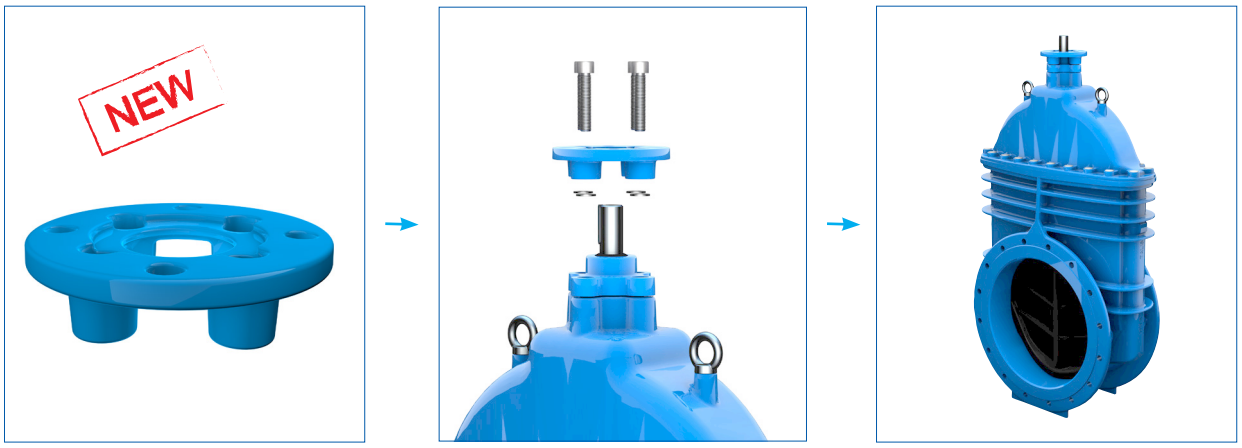
04: Our **new male composite sliding skate technology** minimizes the wedge friction against the body ensuring a low operating torque even under high differential pressure and preventing damage or corrosion generated by the friction.



05: Male guiding system with composite sliding skate (1) reduces the wear of the wedge against the body, allowing a smooth functionality and a longer life time of the valve. Furthermore, the increased thickness of the elastomer at the sealing areas improves product resilience to the usual small impurities encountered in networks.

06: Free wedge nut, **reduces the stem bending forces** and at the same time enables it to be easily replaced.

DN350 TO 700: EASY CONVERSION FROM STANDARD VERSION TO VERSION PREPARED FOR ACTUATOR

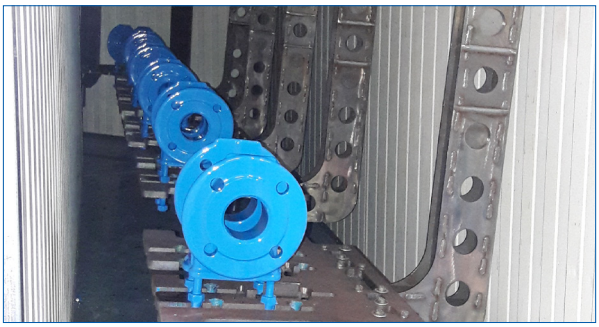


From DN350 up to DN700, a standard gate valve can be easily transformed into a version prepared for electric actuator, just by fixing a dedicated ISO flange on the top of the bonnet. This ISO flange is deliver in the form of a kit with all necessary boltings.

COATING

OPTIMUM PROTECTION

The INFINITY resilient seated gate valve has been designed with even more rounded surfaces and more ergonomic shapes that allow more uniform coating and ensure protection of the highest quality.



Minimum 250 micron corrosion protection

The new state-of-the-art coating line installed in BELGICAST, based on an innovative process with fluidized bath and dipping robot, ensures an excellent adhesion, as well as controlled thicknesses and perfect continuity of the coating without porosity.

The epoxy powder used by BELGICAST is approved for use with potable water by the most prestigious institutions worldwide. Moreover, BELGICAST painting facilities are approved according to GSK standard (RAL Quality Mark). If you need your valves coated according to this process, please do not hesitate to enquire.

Permanent protection with enamel

Optionally, BELGICAST can manufacture gate valves completely enamelled. Vitreous enamel is highly resistant to corrosion, abrasion, sunlight and sedimentation due to its low porosity and smooth surface. The enamel is vitrified at 720° C and forms a perfect and permanent bond at the foundry.

BELGICAST's extensive experience in the manufacture of gate valves, together with modern enamel equipment, allows production of the highest quality.

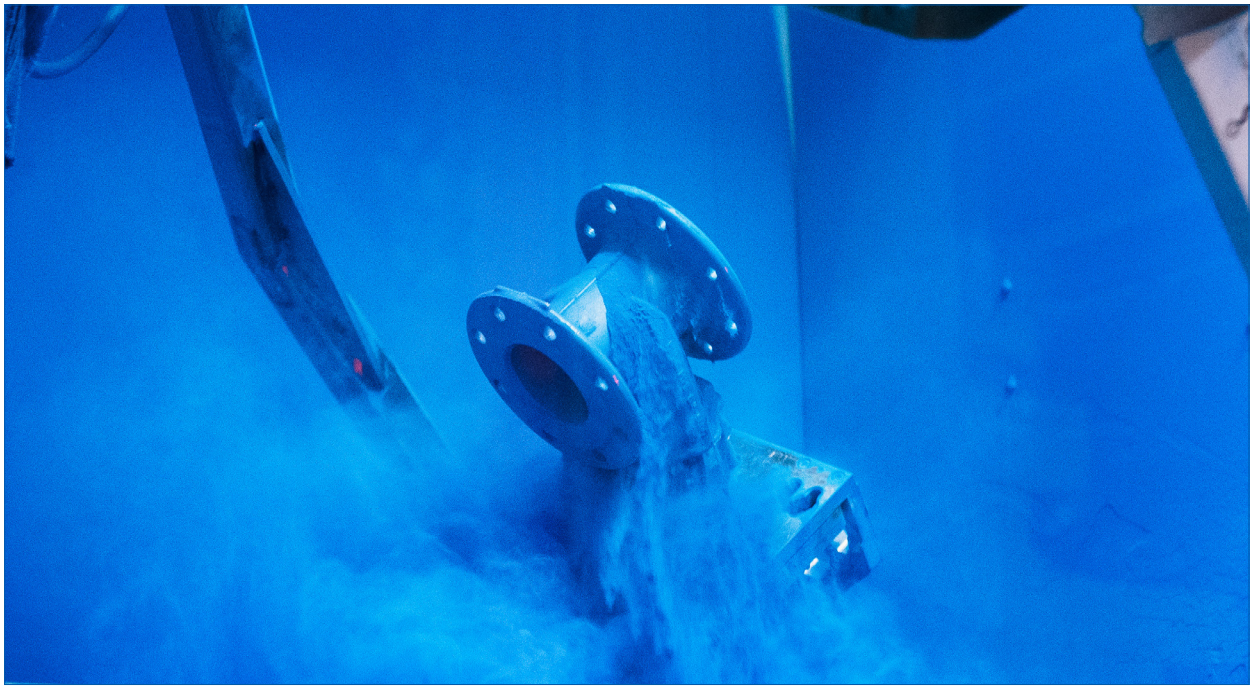
TEMPERATURES

Depending on the applied anticorrosive coating, the INFINITY gate valve is suitable for the following continuous operating temperatures:

- Epoxy powder protection: –10 °C to 50°C.
- Enamel protection: –10 °C to 50°C (70°C under request).

VERSION WITH EPOXY COATING

VERSION WITH ENAMEL COATING



QUALITY & TESTING

VALVE TESTING ACCORDING TO EN 12266-1 - EN 1074

Testing pressures

- Shell tightness: 25 bar at room temperature.
- Seat tightness: 17.6 bar at room temperature.

Minimum test duration (in seconds)

Nominal diameter DN	Shell	Seat
Up to DN50 included	15	15
From DN65 up to DN150 included	60	60
From DN200 up to DN300 included	120	120
DN350 and above	300	120

Maximum allowable seat leakage

The criterion for seat leakage of BELGICAST resilient seated gate valves is:
Rate A: no visually detectable leakage for the duration of the test ("zero drops").

Quality control

- 100% of BELGICAST resilient seated gate valves are tested according to EN 12266-1, DIN 3230, or as per customer requirements.
- According to EN 1074 (2,500 cycles endurance resistance).

PBR_RGV20200531A_INFINITY P4A_EN

MATERIALS & DIMENSIONS

F4/F5/BS - DN40/300 - PN10/16 - PREPARED FOR ELECTRIC ACTUATOR

(according to EN1074-2 (annex A) and EN1171 (category 3))

Item	Description	N°	Material	Standard
1	Body	1	EN-GJS-500-7 [2]	EN 1563
2	Bonnet	1	EN-GJS-500-7 [2]	EN 1563
3	Wedge	1	EN-GJS-500-7	EN 1563
4	Wedge coating	1	EPDM [1]	EN 681-1
5	Stem	1	1.4021	EN 10088
6	Wedge lock nut	1	Copper alloy	EN 12165
7	Body-bonnet gasket	1	EPDM [1]	EN 681-1
8	Stem washer	1	POM	-
9	O-ring (stem)	1	EPDM [1]	EN 681-1
10	Stuffing gland	1	POM	-
11	O-ring Int. (stuffing gland)	2	NBR	ASTM D2000
12	O-ring ext.(stuffing gland)	2	NBR	ASTM D2000
13	Body bonnet bolting	acc/DN	Steel 12.9 Geomet coated	EN ISO898-1
14	Wedge sliding skate [3]	2	Composite	
15	ISO Top Flange	1	EN-GJS-500-7 [2]	EN 1563
16	Grub screw	3	Stainless steel A4	DIN 914
17	Cotter	1	Steel	-

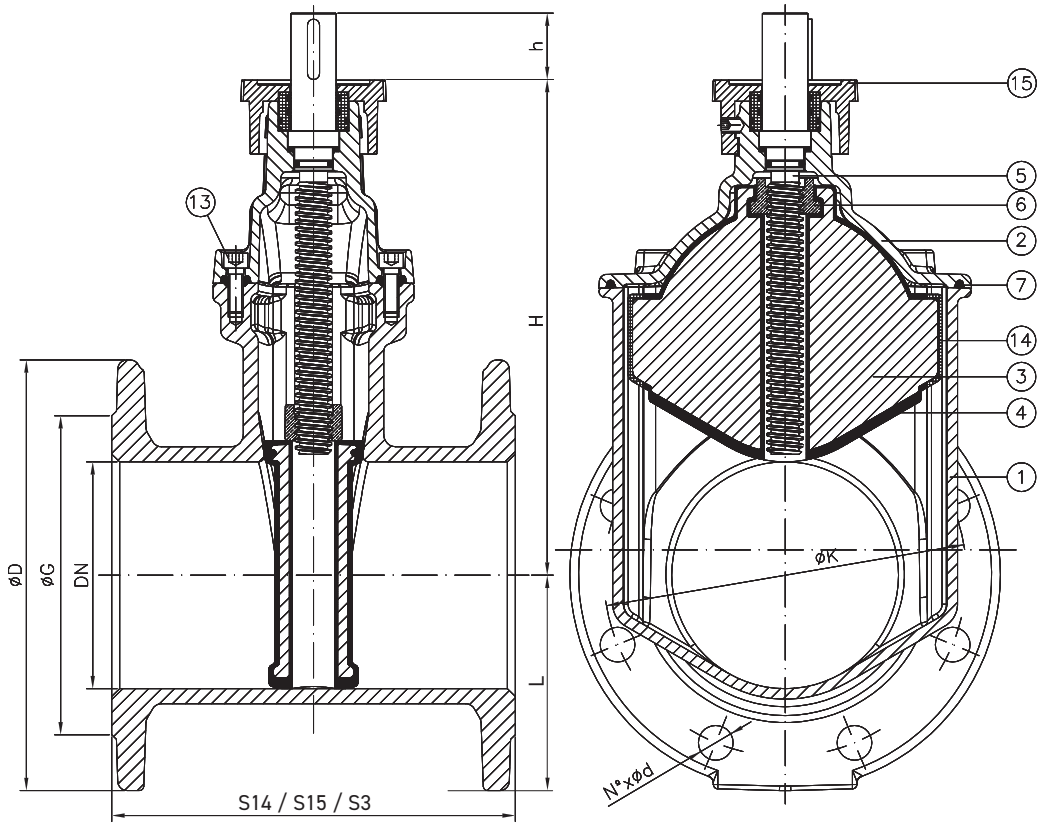
1) or NBR, depending on the approval and on the application. 2) blue coating (Ral 5015) with epoxy powder.
3) DN40/50 without wedge sliding skates.

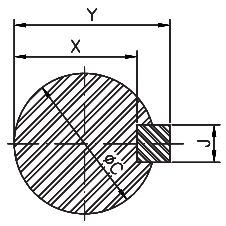
DN	øD (mm)	EN 1092-2 PN10			EN 1092-2 PN16			EN 558 (DIN 3202)			H (mm)	L (mm)	h (mm)	No. of turns for closing	Weight (kg)		
		øK (mm)	øG (mm)	n°xd	øK (mm)	øG (mm)	n°xd	S14 (F4) (mm)	S15 (F5) (mm)	S3 (BS) (mm)					S14 (F4)	S15 (F5)	S3 (BS)
40	150	110	84	4x19	110	84	4x19	140	240	-	151	75	44	11,5	8.1	8.7	-
50	165	125	99	4x19	125	99	4x19	150	250	178	171	83	44	14	9.7	10.2	9.7
65*	185	145	118	4x19	145	118	4x19	170	270	190	200	93	44	15	13.3	14	13.6
80**	200	160	132	8x19	160	132	8x19	180	280	203	223	100	44	18	14.7	15.9	15.1
100	220	180	156	8x19	180	156	8x19	190	300	229	248	110	44	21,5	17.4	18.9	17.8
125	250	210	184	8x19	210	184	8x19	200	325	254	296	125	44	27	23.6	26.3	24.7
150	285	240	211	8x23	240	211	8x23	210	350	267	328	143	44	32	28.3	31.7	29.6
200	340	295	266	8x23	295	266	12x23	230	400	292	417	170	60	41,5	47.9	55.2	51.1
250	400	350	319	12x23	355	319	12x28	250	450	330	499	200	60	43	71.7	81	74.9
300	455	400	370	12x23	410	370	12x28	270	500	356	580	228	60	51	98.6	116.6	101.1

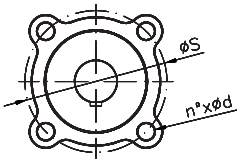
* DN60 drilling on request. ** DN80 with 4 holes drilling on request.

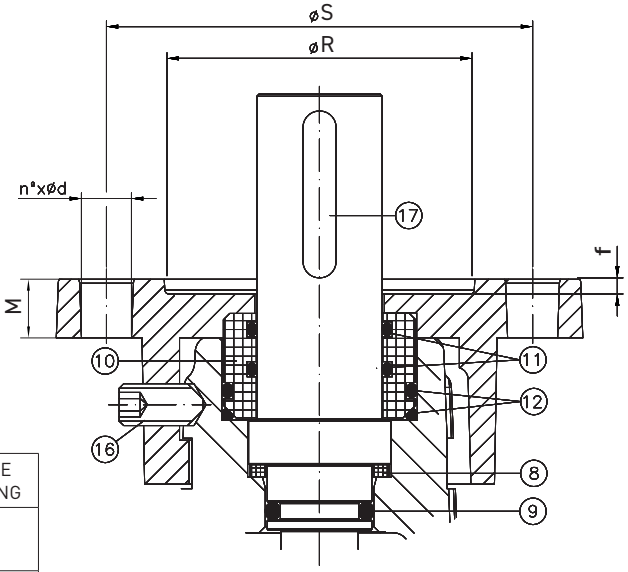
The technical data and performance may be modified without prior notice depending on the technical advances.

F4/F5/BS - DN40/300 - PN10/16 - PREPARED FOR ELECTRIC ACTUATOR









DN	øC (mm)	X (mm)	Y (mm)	J (mm)	COTTER DIN 6885
40/50/65/80/100	20	16.7	22.7	6	6x6x40
125/150	30	26.2	33.2	8	8x7x40
200/250/300	30	26.2	33.2	8	8x7x56

DN	øR (mm)	øS (mm)	n°xød	f (mm)	M (mm)	FLANGE COUPLING
40/50/65/80/100 125/150/200*	70.5	102	4xø12	4.5	14	F-10
250/300	100.5	140	4xø20	5.5	17	F-14

*DN200 fitted with F10 flange coupling as standard, F14 only on request.

MATERIALS & DIMENSIONS

F4/F5 - DN350/700 - PN10/16 - PREPARED FOR ELECTRIC ACTUATOR

(according to EN1074-2 (annex A) and EN1171 (category 3))

Item	Description	N°	Material	Standard
1	Body	1	EN-GJS-500-7 [2]	EN 1563
2	Bonnet	1	EN-GJS-500-7 [2]	EN 1563
3	Wedge	1	EN-GJS-500-7	EN 1563
4	Wedge coating	1	EPDM [1]	EN 681-1
5	Stem	1	1.4021	EN 10088
6	Wedge lock nut	1	Copper alloy	EN 12165
7	Body bonnet gasket	1	EPDM [1]	EN 681-1
8	Lower packing bushing	1	POM	-
9	O-ring (stem)	2	EPDM [1]	EN 681-1
10	Upper packing bushing	1	POM	-
11	O-ring int (upper packing bushing)	2	NBR	ASTM D2000
12	O-ring ext (upper packing bushing)	1	NBR	ASTM D2000
13	Body bonnet bolt	acc/DN	Steel 10.9 Geomet coated	EN ISO898-1
14	Dust guard	1	EPDM	EN 681-1
21	Wedge sliding skate	2	Composite	-
22	Upper bonnet	1	EN-GJS-500-7 [2]	EN 1563
23	O-ring (lower packing bushing)	1	EPDM [1]	EN 681-1
24	Axial ball bearing	2	Stainless steel	-
25	Bonnet-upper bonnet O-ring	1	NBR	ASTM D2000
26	Bonnet-upper bonnet bolt	4	Steel 8.8 Geomet coated	EN ISO898-1
27	Eyebolt	2	Steel 8.8 JS500 coated	EN ISO898-1
28	Cotter	1	Steel	-
29	Washer (upper packing bushing)	1	254 SMO	DIN 1.4547
30	Washer	4	POM	-
31	ISO Top Flange	1	EN-GJS-500-7 [2]	EN 1563

1) or NBR, depending on the approval and on the application. 2) blue coating (Ral 5015) with epoxy powder.

FOR VALVES WITH MAXIMUM WORKING PRESSURE OF 16 BAR:

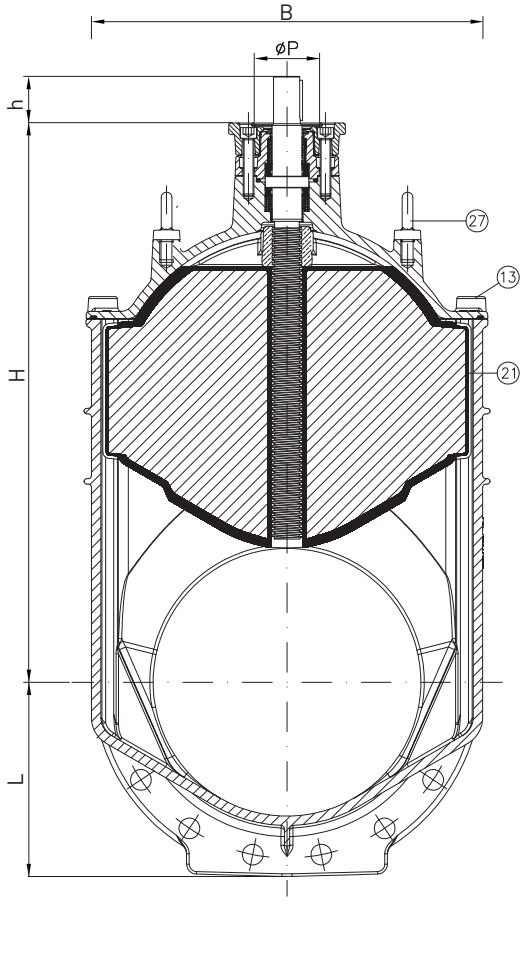
DN	EN 1092-2 PN 10				EN 1092-2 PN 16				EN 558 (DIN 3202)		H (mm)	L (mm)	B (mm)	h (mm)	No. of turns for closing	Weight kg			
																S14 (F4)		S15 (F5)	
	øD (mm)	øK (mm)	øG (mm)	no. x d	øD (mm)	øK (mm)	øG (mm)	no. x d	S14 (F4) (mm)	S15 (F5) (mm)						PN10	PN16	PN10	PN16
350	520	460	429	16x23	520	470	429	16x28	290	550	739	260	506	73	51	190	190	213	213
400	580	515	480	16x28	580	525	480	16x31	310	600	834	290	606	71	58	274	274	311	311
450	640	565	530	20x28	640	585	548	20x31	330	650	931	320	672	71	65	310	309	363	362
500	715	620	582	20x28	715	650	609	20x34	350	700	983	358	748	71	72	398	396	445	443
600	840	725	682	20x31	840	770	720	20x37	390	800	1190	420	955	95	87	670	668	776	774
700*	895	840	794	24x31	910	840	794	24x37	-	900	1190	455	955	95	87	-	-	970	975

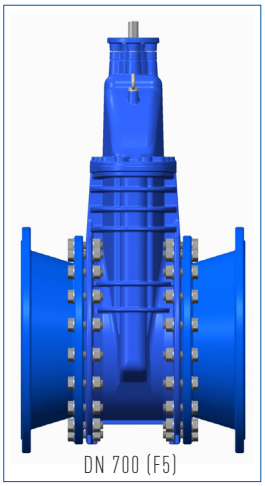
FOR VALVES WITH MAXIMUM WORKING PRESSURE OF 10 BAR:

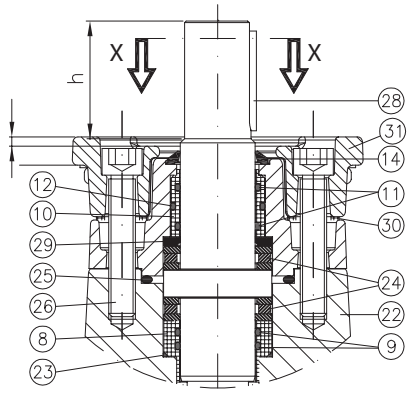
DN	EN 1092-2 PN10				EN 558 (DIN 3202)		H (mm)	L (mm)	B (mm)	h (mm)	No. of turns for closing	Weight (kg)	
	øD (mm)	øK (mm)	øG (mm)	n°xd	S14 (F4) (mm)	S15 (F5) (mm)						S14 (F4)	S15 (F5)
600	780	725	682	20x31	390	-	1190	390	955	95	87	553	-
700*	895	840	794	24x31	-	900	1190	447.5	955	95	87	-	815

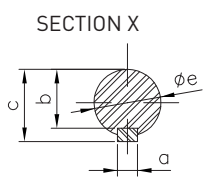
* Reduced bore of 600 mm. Valves produced from DN600/S14 with flanged conical adapters bolted on each side (see next page).
For DN600 to 700, version with by-pass possible on request.

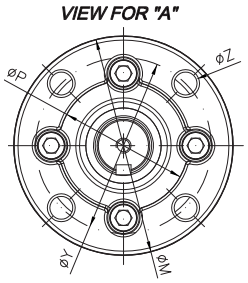
F4/F5 - DN350/700 - PN10/16 - PREPARED FOR ELECTRIC ACTUATOR




DN 700 (F5)







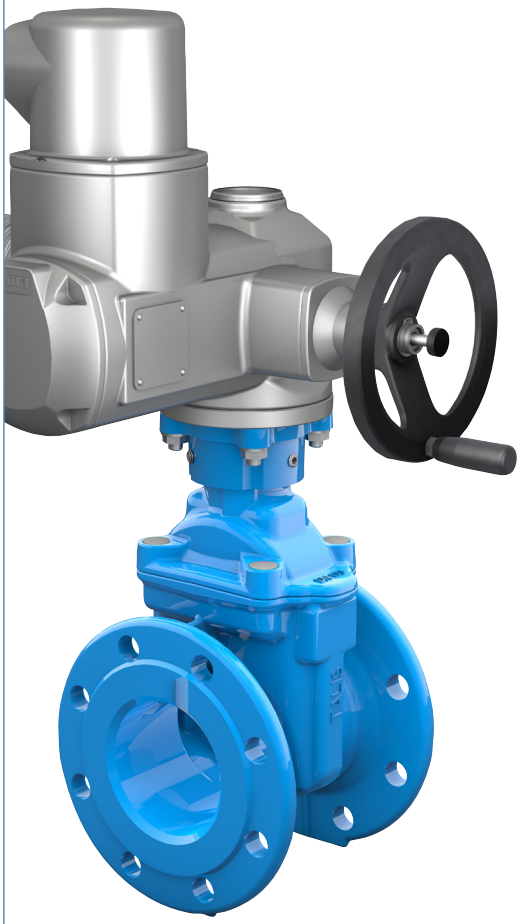
							COUPLING FLANGE						
DN	h	øe	b	c	a	COTTER	Type	n°xøZ	øY	øP	øM	f	s
350	73	30	26.2	33.2	8	8x7x56	F-14	4x18	140	102	175	5.5	15
400	71	42	37	45	12	12x8x60	F-14	4x18	140	102	175	5.5	17
450	71	42	37	45	12	12x8x60	F-14	4x18	140	102	175	5.5	17
500	71	42	37	45	12	12x8x60	F-14	4x18	140	102	175	5.5	17
600*	95	42	37	45	12	12x8x70	F-14	4x18	140	102	210	5.5	20.5
							F-16	4x22	165	132	210	5.5	20.5
700*	95	42	37	45	12	12x8x70	F-14	4x18	140	102	210	5.5	20.5
							F-16	4x22	165	132	210	5.5	20.5

* For DN600 and DN700, the flange for coupling with electric actuator has oblong holes in order to be compatible with connection types F14 and type F16.

MATERIALS & DIMENSIONS

F4/F5/BS - DN40/300 - PN10/16 - WITH AUMA ELECTRIC ACTUATOR

(according to EN1074-2 (annex A) and EN1171 (category 3))



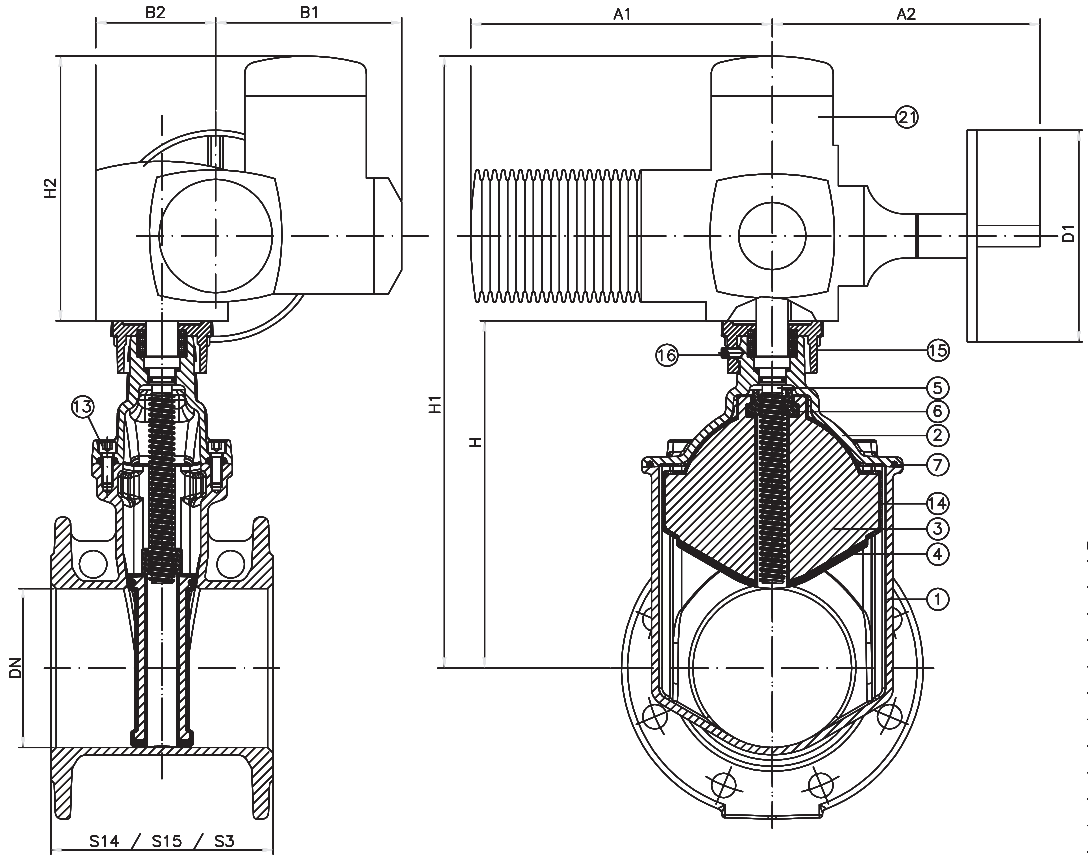
Item	Description	N°	Material	Standard
1	Body	1	EN-GJS-500-7 [2]	EN 1563
2	Bonnet	1	EN-GJS-500-7 [2]	EN 1563
3	Wedge	1	EN-GJS-500-7	EN 1563
4	Wedge coating	1	EPDM [1]	EN 681-1
5	Stem	1	1.4021	EN 10088
6	Wedge lock nut	1	Copper alloy	EN 12165
7	Body bonnet gasket	1	EPDM [1]	EN 681-1
8	Stem washer	1	POM	-
9	O-ring (stem)	2	EPDM [1]	EN 681-1
10	Stuffing gland	1	POM	-
11	O-ring int. (stuffing gland)	2	NBR	ASTM D2000
12	O-ring ext. (stuffing gland)	2	NBR	ASTM D2000
13	Body bonnet bolt	acc/DN	Steel 10.9 Geomet coated	EN ISO898-1
14	Wedge sliding skate [3]	2	Composite	-
15	ISO Top flange	1	EN-GJS-500-7 [2]	EN 1563
16	Grub screw	3	Stainless steel A4	DIN 914
17	Cotter	1	Steel	-
18	Threaded stud	4	Stainless steel A2	DIN 975
19	Washer top flange	4	Stainless steel A2	DIN 125
20	Nut top flange	4	Stainless steel A2	DIN 934
21	Auma electric actuator	1		

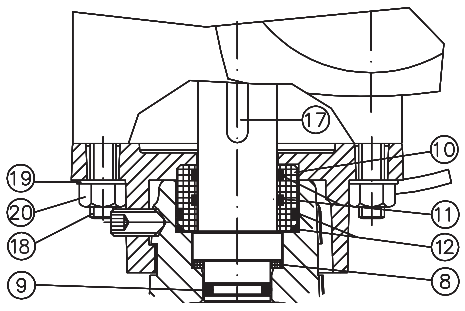
1) or NBR, depending on the approval and on the application. 2) blue coating (Ral 5015) with epoxy powder.
3) DN40/50 without wedge sliding skates.

DN	No. of turns for closing	Auma model	Type of Stem coupling	ISO Top flange	Max. torque actuator (Nm)	RPM*	Closing or Opening time (sec.)	Actuator power. (Kw)	EN 558 (DIN 3202)			H (mm)	H1 (mm)	H2 (mm)	A1 max. (mm)	A2 (mm)	B1 (mm)	B2 (mm)	D1 (mm)	Weight (kg)		
									S14 (F4) (mm)	S15 (F5) (mm)	S3 (BS) (mm)									S14 (F4)	S15 (F5)	S3 (BS)
40	11	SA 07.2	B3	F10	30	45	17.3	0.10	140	240	-	151	469	318	265	234	237	62	140	28	28.6	-
50	13.5	SA 07.2	B3	F10	30	45	19.3	0.10	150	250	178	171	489	318	265	234	237	62	140	29.6	30.1	29.6
65	15	SA 07.6	B3	F10	60	45	20	0.20	170	270	190	200	518	318	265	250	237	62	160	34.4	35.1	34.7
80	17	SA 07.6	B3	F10	60	45	22.7	0.20	180	280	203	223	473	250	265	250	237	62	200	35.8	37	36.2
100	21	SA 07.6	B3	F10	60	45	28.7	0.20	190	300	229	248	498	250	265	250	237	62	200	38.5	40.0	38.9
125	27	SA 10.2	B4	F10	120	45	34.7	0.40	200	325	254	296	546	250	282	256	247	65	200	48.5	51.2	49.6
150	31	SA 10.2	B4	F10	120	45	44	0.40	210	350	267	328	578	250	282	256	247	65	200	53.2	56.6	54.5
200	41	SA 10.2	B4	F10	120	45	48	0.40	230	400	292	417	707	290	282	256	247	65	315	72.9	80.2	76.1
250	43	SA 14.2	B3	F14	250	45	59.3	0.75	250	450	330	499	789	290	385	325	285	90	315	124.6	133.9	127.8
300	52	SA 14.2	B3	F14	250	45	69.3	0.75	270	500	356	580	870	290	385	325	285	90	315	151.6	159.6	154.1

*45 Revolutions Per Minute (RPM) as standard, others upon request.

F4/F5/BS - DN40/300 - PN10/16 - WITH AUMA ELECTRIC ACTUATOR





AUMA NORM Type SA multiturn electric actuator:

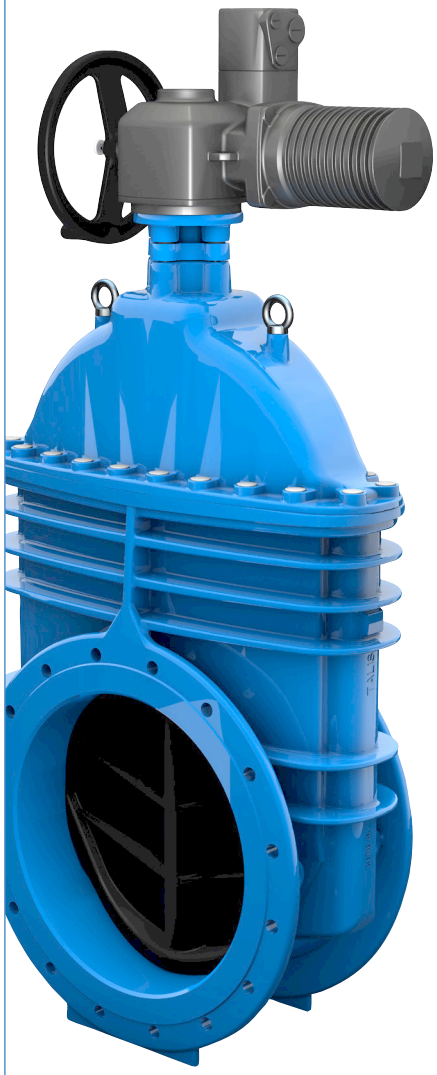
- on/off duty
- 2 torque switches
- 2 limit switches
- Short time service S2-15min
- Emergency handwheel
- Heating resistance to avoid condensation
- Protection IP 68 + KS coating protection
- Three-phase 400V-50Hz

Other options upon request.

MATERIALS & DIMENSIONS

F4/F5 - DN350/700 - PN10/16 - WITH AUMA ELECTRIC ACTUATOR

(according to EN1074-2 (annex A) and EN1171 (category 3))



Item	Description	N°	Material	Standard
1	Body	1	EN-GJS-500-7 [2]	EN 1563
2	Bonnet	1	EN-GJS-500-7 [2]	EN 1563
3	Wedge	1	EN-GJS-500-7	EN 1563
4	Wedge coating	1	EPDM [1]	EN 681-1
5	Stem	1	1.4021	EN 10088
6	Wedge lock nut	1	Copper alloy	EN 12165
7	Body bonnet gasket	1	EPDM [1]	EN 681-1
8	Lower packing bushing	1	POM	-
9	O-ring (stem)	2	EPDM [1]	EN 681-1
10	Upper packing bushing	1	POM	-
11	O-ring int (upper packing bushing)	2	NBR	ASTM D2000
12	O-ring ext (upper packing bushing)	1	NBR	ASTM D2000
13	Body bonnet bolt	acc/DN	Steel 10.9 Geomet coated	EN ISO898-1
14	Dust guard	1	EPDM	EN 681-1
21	Wedge sliding skate	2	Composite	-
22	Upper bonnet	1	EN-GJS-500-7 [2]	EN 1563
23	O-ring (lower packing bushing)	1	EPDM [1]	EN 681-1
24	Axial ball bearing	2	Stainless steel	-
25	Bonnet-upper bonnet O-ring	1	NBR	ASTM D2000
26	Bonnet-upper bonnet bolt	4	Steel 8.8 Geomet coated	EN ISO898-1
27	Eyebolt	2	Steel 8.8 JS500 coated	EN ISO898-1
28	Cotter	1	Steel	-
29	Washer (upper packing bushing)	1	254 SMO	DIN 1.4547
30	Washer	4	POM	-
31	ISO Top flange	1	EN-GJS-500-7 [2]	EN 1563
32	Auma electric actuator	1	-	-
33	Threaded stud top flange	4	Stainless steel A2	DIN 975
34	Washer top flange	4	Stainless steel A2	DIN 125
35	Nut top flange	4	Stainless steel A2	DIN 934

1) or NBR, depending on the approval and on the application. 2) blue coating (Ral 5015) with epoxy powder.

FOR VALVES WITH MAXIMUM WORKING PRESSURE OF 16 BAR:

DN	No. of turns for closing	Auma model	Type of Stem coupling	ISO Top flange	Max. torque actuator (Nm)	RPM*	Actuator power (Kw)	Closing or Opening time (sec.)	EN 558 (DIN 3202)		H (mm)	H1 (mm)	H2 (mm)	A1 max. (mm)	A2 (mm)	B1 (mm)	B2 (mm)	D1 (mm)	Weight			
									S14 (F4) (mm)	S15 (F5) (mm)									S14 (F4)		S15 (F5)	
																			PN10	PN16	PN10	PN16
350	51	SA 14.2	B3 - Ø30	F14	250	45	0.75	68	290	550	739	1055	316	389	336	219	157	315	240	240	263	263
400	58	SA 14.2	B4 - Ø42	F14	250	45	0.75	77	310	600	834	1150	316	389	336	219	157	315	324	324	361	361
450	65	SA 14.2	B4 - Ø42	F14	250	45	0.75	87	330	650	931	1247	316	389	336	219	157	315	360	359	413	412
500	72	SA 14.6	B4 - Ø42	F14	500	45	1.60	96	350	700	983	1299	316	389	339	219	157	400	453	451	500	498
600	87	SA 14.6	B4 - Ø42	F14/F16	500	45	1.60	116	390	800	1190	1506	316	389	339	219	157	400	725	723	831	829
700**	87	SA 14.6	B4 - Ø42	F14/ F16	500	45	1.60	116	-	900	1190	1506	316	389	339	219	157	400	-	-	1025	1030

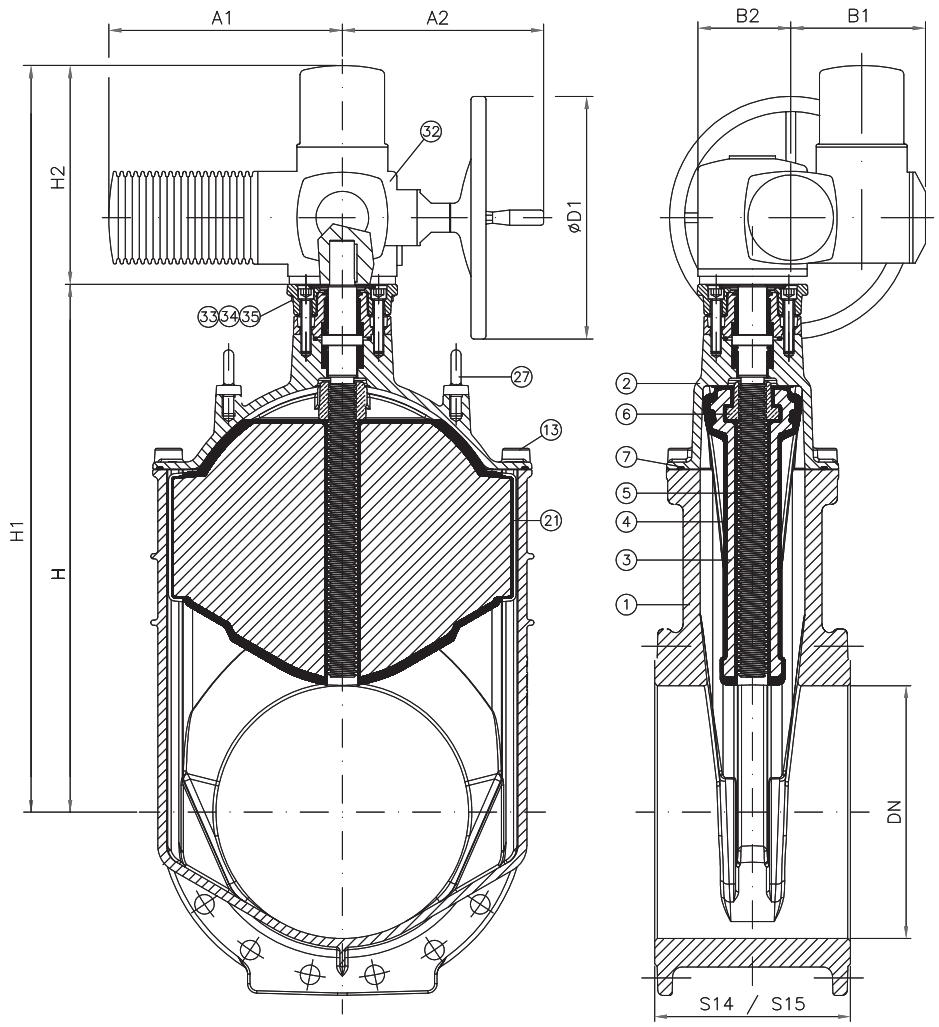
FOR VALVES WITH MAXIMUM WORKING PRESSURE OF 10 BAR:

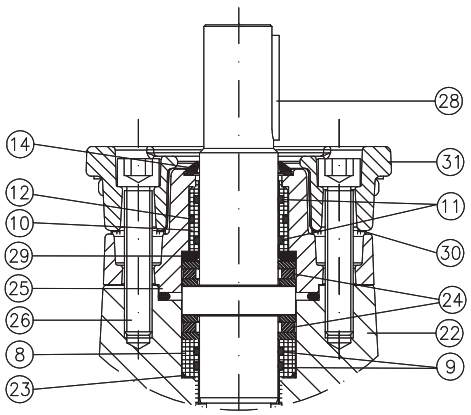
DN	No. of turns for closing	Auma model	Type of Stem coupling	ISO Top flange	Max. torque actuator (Nm)	RPM*	Actuator power (Kw)	Closing or Opening time (sec.)	EN 558 (DIN 3202)		H (mm)	H1 (mm)	H2 (mm)	A1 max. (mm)	A2 (mm)	B1 (mm)	B2 (mm)	D1 (mm)	Weight	
									S14 (F4) (mm)	S15 (F5) (mm)									PN10	
																			S14	S15
600	87	SA 14.6	B4 - Ø42	F14/F16	500	45	1.60	116	390	-	1190	1506	316	389	339	219	157	400	608	-
700**	87	SA 14.6	B4 - Ø42	F14/F16	500	45	1.60	116	-	900	1190	1506	316	389	339	219	157	400	-	870

*45 Revolutions Per Minute (RPM) as standard, others upon request.
**Reduced bore of 600 mm. Valves produced from DN600/S14 with flanged conical adapters bolted on each side.
For DN600 to 700, version with by-pass possible on request.

The technical data and performance may be modified without prior notice depending on the technical advances.

F4/F5 - DN350/700 - PN10/16 - WITH AUMA ELECTRIC ACTUATOR





AUMA NORM Type SA multiturn electric actuator:

- on/off duty
- 2 torque switches
- 2 limit switches
- Short time service S2-15min
- Emergency handwheel
- Heating resistance to avoid condensation
- Protection IP 68 + KS coating protection
- Three-phase 400V-50Hz

Other options upon request.

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TORQUES VALUES

DN	VALVE CLOSING TORQUE WITH SAFETY FACTOR (30%) (Kg/m)
40	2.6
50	2.6
65	3.9
80	5.2
100	5.2
125	7.8
150	9.1
200	11.7
250	22.1
300	23.4
350	23.4
400	26
450	29
500	32
600	45
700	45

Here stated torque values are for guidance only since they have been calculated under constant working pressure and conditions. Torques listed are valid for INFINITY resilient seated gate valves with EPDM wedge for potable water at room temperature (approx 20°C), and they include 30% as safety factor.

INIFNITY resilient seated gate valves torque values comply with the Maximum Operating Torque (MOT) requirements of the standard EN 1074.

TALIS INFINITY resilient seated gate valves are designed to work with fluids, which act like lubricants. For air, torque values stated on the table must be increased by 30%, for any other medium please contact our TALIS engineering support.

If any question, please do not hesitate to contact our Technical Department.

INFINITY resilient seated gate valves are designed to be used as isolating valves, and there are not recommended for regulating purposes.

TALIS, as specialist in control valves, can offer other solutions for modulating requirements and can provide full expertise and support.

WARNING

We do not recommend the installation of resilient seated gate valves for regulation purposes.

INSTALLATION AND OPERATION INSTRUCTIONS

GOOD TO KNOW BEFORE INSTALLATION

Before installation, in addition to the few informations given below, it is important to read the IOM manual related to this type of valve as well as the IOM manual of the electric actuator.

Storage

- Leave the rubber wedge slightly open: if it is closed completely, the rubber suffers unnecessary compression. Remove the flange cover just before the installation.
- The gate valves should preferably be stored under cover. A long storage under extreme weather conditions can cause alterations of the coating and seals.

Assembly in pipe

- The assembly of the valve in the pipe is independent of the flow direction.
- When connecting the valve to the pipe, avoid the transmission of stress from the pipe to the valve body. For that, any pipe or pipe sections or valve not yet finally clamped in place must be provisionally supported to prevent abnormal stress on one or both sides of the valve.
- Tighten screws gradually in a star-shaped pattern, respecting the tightening torques.
- Once the valve is assembled, the threads of the bolts/rods should be greased with a graphite based waterproof grease (MOLYCOTE or similar) to prevent corrosion and facilitate subsequent dismantling operations.

Operation

- Each valve must be operated in respect of the operating torques given in our IOM manual. Please follow all the instructions from the electric actuator manufacturer before installation and commissioning. Do not use the valves for regulating mode.
- For the valves delivered with electric actuator mounted, limit switches and torque switches are already set.
- In case of valves delivered without electric actuator or with electric actuator not mounted, please follow recommandations described in our IOM manual in order to assemble the electric actuator on the valve.
- For the valves delivered without electric actuator or with electric actuator not mounted, limit switches and torque switches must be set on site according to recommandations from the producer of the electric actuator, and torques values given in our IOM manual.
- For the electrical connection of the actuator, limit and torque switches, and choice of the opening and closing management, please follow recommandations described in the installation manual from the producer of the electric actuator.
- Do not use the valves with EPDM rubber with gaseous fluids such as propane, butane, natural gas and also with hydrocarbons fluids like petrol, diesel, ...

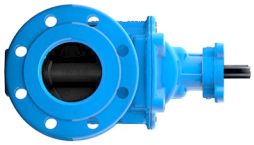
RECOMMENDED POSITIONS FOR GATE VALVES WITH FLANGES

For other installation positions, please contact our technical support.

From DN40 up to DN300:

1) Ideal position: vertical stem, horizontal flow

2) Horizontal stem, horizontal flow

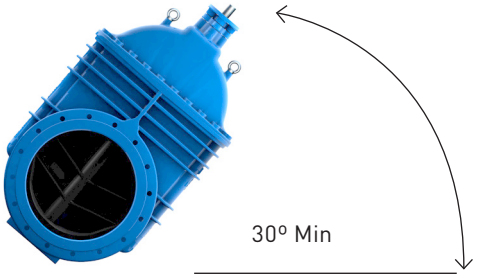


3) Horizontal stem, vertical flow

From DN350 up to DN700:

1) Ideal position: vertical stem, horizontal flow

2) Oblique stem, horizontal flow



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