



AUTOMATION AND DIGITALIZATION

GEAR ACTUATORS

TECHNICAL BULLETIN



ANDRITZ

ENGINEERED SUCCESS

Primary characteristics

These actuators are equipped with worm gear unit. The following are the characteristics of the actuators:

- They are totally enclosed
- They have a position indicator
- They are operated by a handwheel and have adjustable limit stops
- The speed gear is designed so that the actuator will be self-breaking.
- IP 68

TABLE 1:

Actuator size	Art. No. locking device
791051-1XXXX	349 25 120
791051-2XXXX	349 25 121
791051-3XXXX	349 25 122
791051-4XXXX	349 25 123
791051-5XXXX	349 25 124
791051-6XXXX	349 25 124
791051-7XXXX	349 25 125
791051-8XXXX	349 25 125

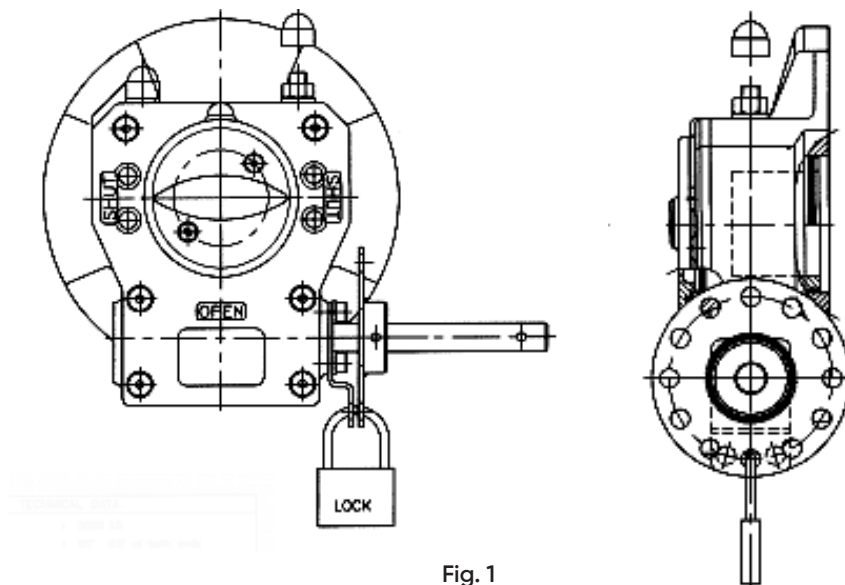


Fig. 1

Design

The actuator gear-segment, worm and input stem are totally enclosed in a body with a cover. The handwheel is mounted on the input stem. The body is lubricated and no further lubrication is normally required. The actuator has two adjustable limit stops to provide accurate adjustment of the torsional angle (-5° to 95° stroke).

THE ACTUATORS CAN ALSO BE DELIVERED IN SPECIAL VERSIONS:

- For services in high corrosive atmospheres
- With chainwheels

LOCKING DEVICE

NAF 791051 can be equipped with a locking device, see Fig. 1 for locking in optional position. For secure locking a padlock can be mounted in the holes (the padlock is normally not included).

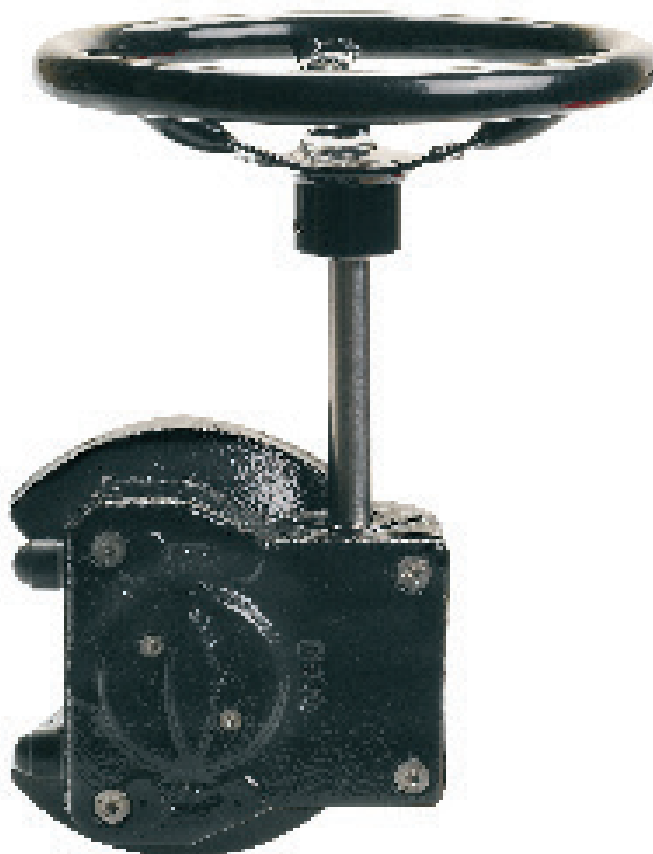
TABLE 2: MATERIAL

Part	Material
	NAF 791051
Body	GG 25 ¹⁾
Cover	GG 25 ¹⁾
Indicator cup	GG 25 ¹⁾
Quadrant	GGG 40
Worm	Carbon steel C45-K
Shaft	AISI 303
Worm bearings	Axial needle bearing
O-rings sealing	Nitrile
Gasket	Nitrile/Silicone
Grease	Lithium/Calcium

APPLICATIONS

The actuators are designed to be used on ball valves, ball sector valve and butterfly valves.

Temperature range for continuous operation: -25° to $+110^{\circ}\text{C}$. IP 68 sealing.



Dimensions and mass

NAF 791051 size 1-4

NAF 791051 size 5-8

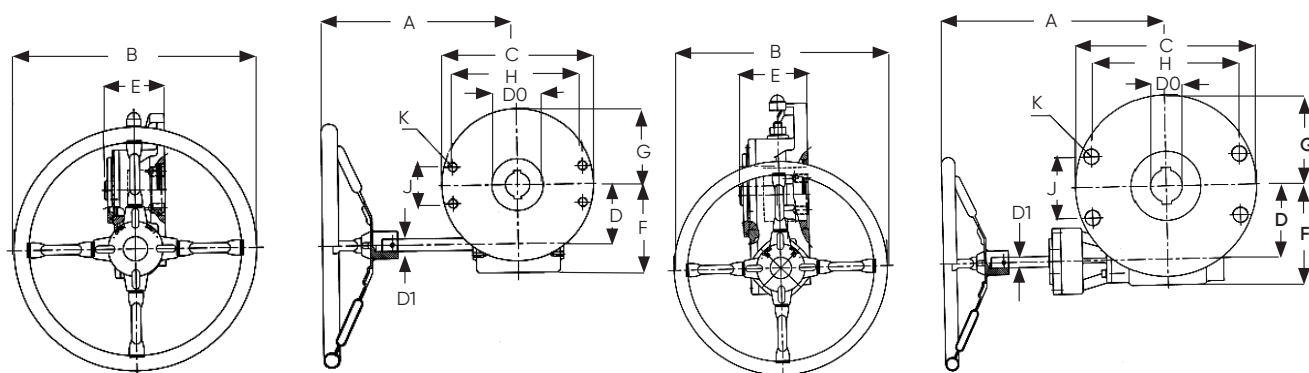


TABLE 3: NAF 791051

Size	Dimensions												Max. output torque NM	Operating turns Open / Closed	Mass kg
	A	B	C	D	d ₀	d ₁	E	F	G	H	J	K			
-1XXXX	174	200	150	53	Max 30	15	75	82	56	*	*	*	400	11	3,9
-2XXXX	243	300	190	69	Max 45	20	91	115	74	*	*	*	800	10	8,4
-3XXXX	291	400	250	97	Max 65	20	100	144	125	*	*	*	2000	12	16,3
-4XXXX	337	500	340	138	Max 100	20	128	186	170	*	*	*	4000	18	31,5
-5XXXX	421	400	340	138	Max 100	20	128	186	170	*	*	*	6500	67	37,5
-6XXXX	487	600	420	180	Max 130	20	145	240	210	*	*	*	12000	67	66,7
-7XXXX	537	600	420	180	Max 130	25	145	240	210	*	*	*	16000	162	80,5
-8XXXX	593	700	510	253	Max 160	25	189	335	255	*	*	*	24000	180	192

TABLE 4: OPTIONS PREPARED FOR LIMIT SWITCH (NAMUR)

Actuator size	Art. No. locking device
791051-1XXXX	349 25 130
791051-2XXXX	349 25 131
791051-3XXXX	349 25 132
791051-4XXXX	349 25 133
791051-5XXXX	349 25 133
791051-6XXXX	349 25 134
791051-7XXXX	349 25 134
791051-8XXXX	349 25 135

Product code NAF Setball SF

Example:

	<u>791051</u>	-	<u>1</u>	<u>1</u>	<u>025</u>
Code			1	2	3

1. Size 1-8
- 1 = Max valve conn. N1
 - 2 = Max valve conn. N2
 - 3 = Max valve conn. N3
 - 4-5 = Min valve conn. N2
 - 6-8 = Min valve conn. N3

2. Valve connection

	H	J	K
1 = N1	115	30	4xM10
2 = N2	160	40	4xM12
3 = N3	214	60	4xM16
4 = N4	240	100	4xM24
5 = N5	277	115	4xM30

3. Stem diameter (mm) (d_0)
- 025 = 25 mm



CONTACT US!

ANDRITZ NAF AB

NAF Control Valves

+46-13-316100

sales.naf@andritz.com

ANDRITZ.COM



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