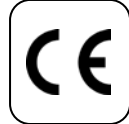


# 710-711 VALVE WITH NA ELECTRIC ACTUATOR

## CHARACTERISTICS

The 710-711+NA ball valve is dedicated to the automatic opening/shut-off of uncharged industrial fluid pipes with a 40 bar maximum pressure. This 3-piece full bore ball valve has the ATEX and EC 97/23 certification. It complies with the EN 558 series 1 face-to-face standard. The ISO 5211 pad enables the direct mounting of the NA electric actuator. It is perfectly adapted for an indoor or outdoor industrial use.



with NA-X

## AVAILABLE ITEMS

710: 1.0619 carbon steel (A216 WCB) body

711: 1.4408 stainless steel (A351 CF8M) body

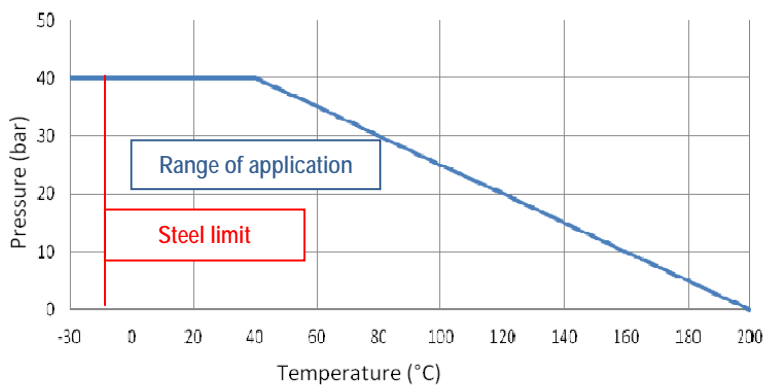
DN 50 to DN 100

Flanged connections RF PN40

Voltage: 24 V AC/DC, 230 V AC, 3~400 V AC

## LIMITS OF USE

Max. allowable pressure (PS)	40 bar (20 °C)
Min./max. allowable temperature (TS)	Steel: -20 °C / +200 °C Stainless steel: -30 °C / +200 °C
Room temperature	-20 °C / +70 °C
Service	S2 – 70%



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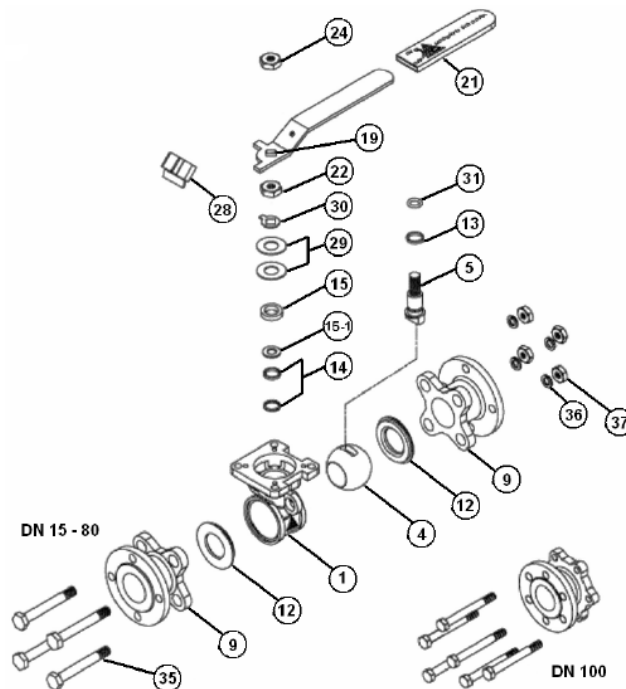
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# 710-711 VALVE WITH NA ELECTRIC ACTUATOR

## DIRECTIVES AND DEVELOPMENT STANDARDS APPLICABLE

	Standard	Notified bodies		Standard
97/23/EC Pressure Equipment Directive	DN 15 and 20 : excluded		Valve testing	EN 12266
	DN 25 to 100 : category II	#0035	Material certification	EN 10204
Shell design	EN 12516-1		Alloy grade	EN 1503-1
Flanges dimension	EN 1092-1		Face-to-face dimensions	EN 558 series 1
Actuator attachment	ISO 5211			
ATEX Directive	II 2G/D Tx zones 1,2,21 and 22			
	EN 13463-1			

## CONSTRUCTION



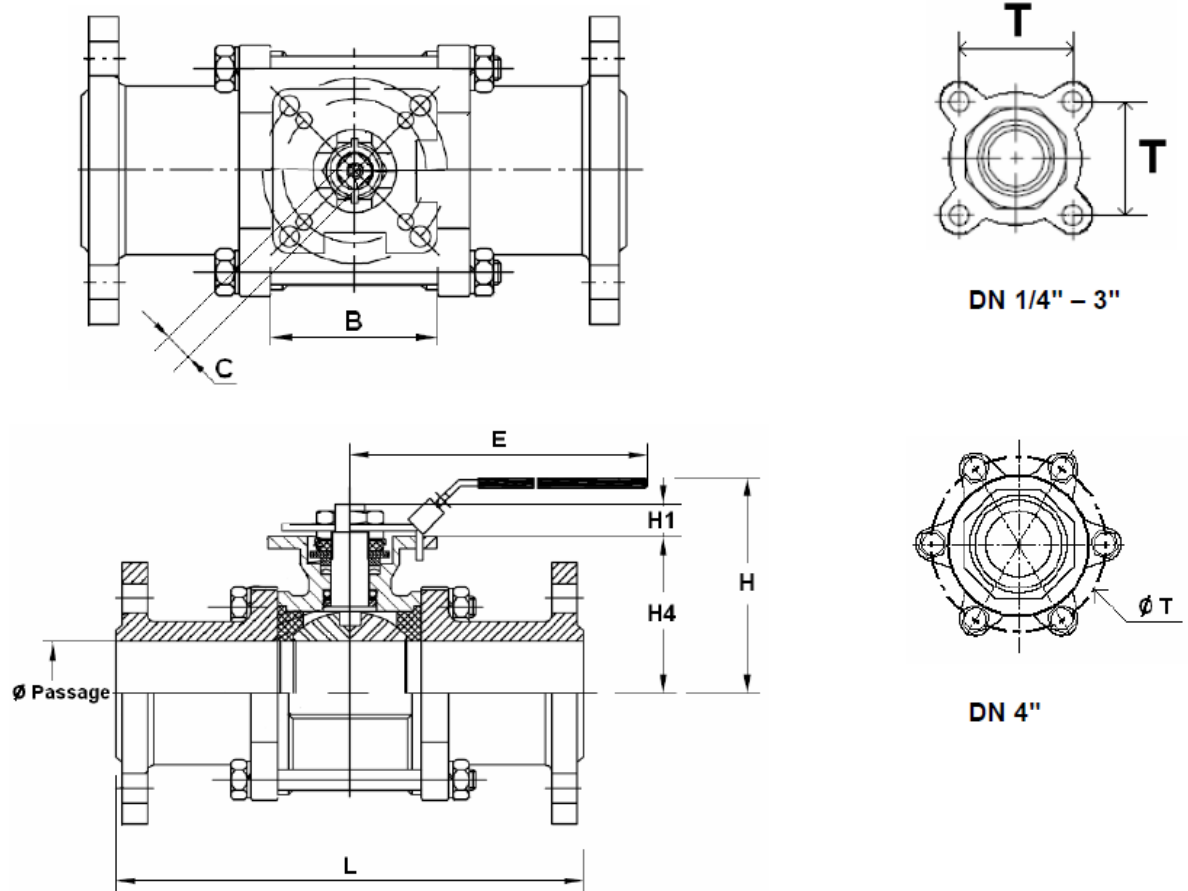
#	Item	710 Steel	711 SS	#	Item	710 Steel	711 SS
1	Body	Steel A216 WCB /1.0619	Stainless steel A351 CF8M /1.4408	22	Gland pack nut	Stainless steel 304	
4	Ball	Stainless steel A351 CF8M /1.4408		24	Handle nut	Stainless steel 304	
5	Stem	Stainless Steel 316		28	Locking device	Stainless steel 304	
9	Ends	Steel A216 WCB /1.0619	Stainless steel A351 CF8M /1.4408	29	Belleville spring washer	Stainless steel 301	
12	Seat	PTFE+50% Stainless steel		30	Locking washer	Stainless steel 304	
13	Ring	PTFE+25% Graphite		31	Stem gasket	FKM	
14	Gland pack	PTFE+25% Graphite		35	Bolts	SS 304	
15	Spacer sleeve	SS 304		36	Washers	SS 304	
19	Handle	SS 304		37	Nuts	SS + PTFE + Graphite	
21	Sleeve	PVC					

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# 710-711 VALVE WITH NA ELECTRIC ACTUATOR

## DIMENSIONS (mm)



DN	15	20	25	32	40	50	65	80	100
Φ	15	20	25	32	40	50	65	80	100
L	130	150	160	180	200	230	290	310	350
B	22.5	27.5	34	42.5	52	63.5	85.5	102	129
E	112	112	136	185	197.9	197.9	264	264	325
H	73	80.8	90.5	98.7	115.3	124	155	208.5	216.7
H1	8.5	8.5	11.4	11.4	14	13.7	18	18	23
H4	37	45	53.5	59	74.8	83.5	108.8	118.3	153.8
C	9	9	9	9	14	14	17	17	17
T	31	35	41	49	59	71	91	107	195
Weight (kg)	2.04	2.9	3.7	5.4	6.7	9.7	15.4	21.3	36.7

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# 710-711 VALVE WITH NA ELECTRIC ACTUATOR

## ACTUATION WITH NA

Suggested standard NA actuation under the following conditions:

- Electric actuator with an IP 67 epoxy coated aluminium enclosure and steel gears
- A minimum 1.3 safety factor compared with the valve nominal torque rating,
- A maximum pressure differential up/downstream of 10 bar (=ΔP)

Electric actuator mounted with stainless steel bracket and coupler according to the EN 15081 standard






DN	Actuator	Power	Operating Time*	
15	Refer to 710-711 + SA actuator			
20				
25				
32				
40				
				<b>Standard equipment of the actuator</b>
50	NA06	15 W	17 s	2 adjustable limit switches + 2 dry auxiliary switches 20 W anti-condensation heater Visual position indicator Actuator thermal cut-out (NA06 and NA09) Torque limiter (NA15 to NA38) Electrical connection: 2 gland packs M20 x 1.5 Manual override by declutchable handwheel
65	NA09	25 W	17 s	
80	NA09	25 W	17 s	
100	NA15	40 W	20 s	

\*Unloaded operating time given for information purpose only. May vary depending on the medium

For any other working conditions, please contact us.

## ACTUATION OPTIONS

There are many different options, please contact our commercial department.

1	2	3	4	5
NALCU: Actuator with a local control	NAPCU: Regulation actuator 4-20 mA or 0-10 V	NARBP: Safety actuator with an integrated battery emergency shutdown	NA-X: Actuation for use in ATEX zones 1 and 2	SR: Spring return safety actuator
				
6	Electric actuator sized for a maximum pressure differential up/downstream over 10 bar (=ΔP)			
7	NA electric actuator with a declutchable manual override by handwheel			

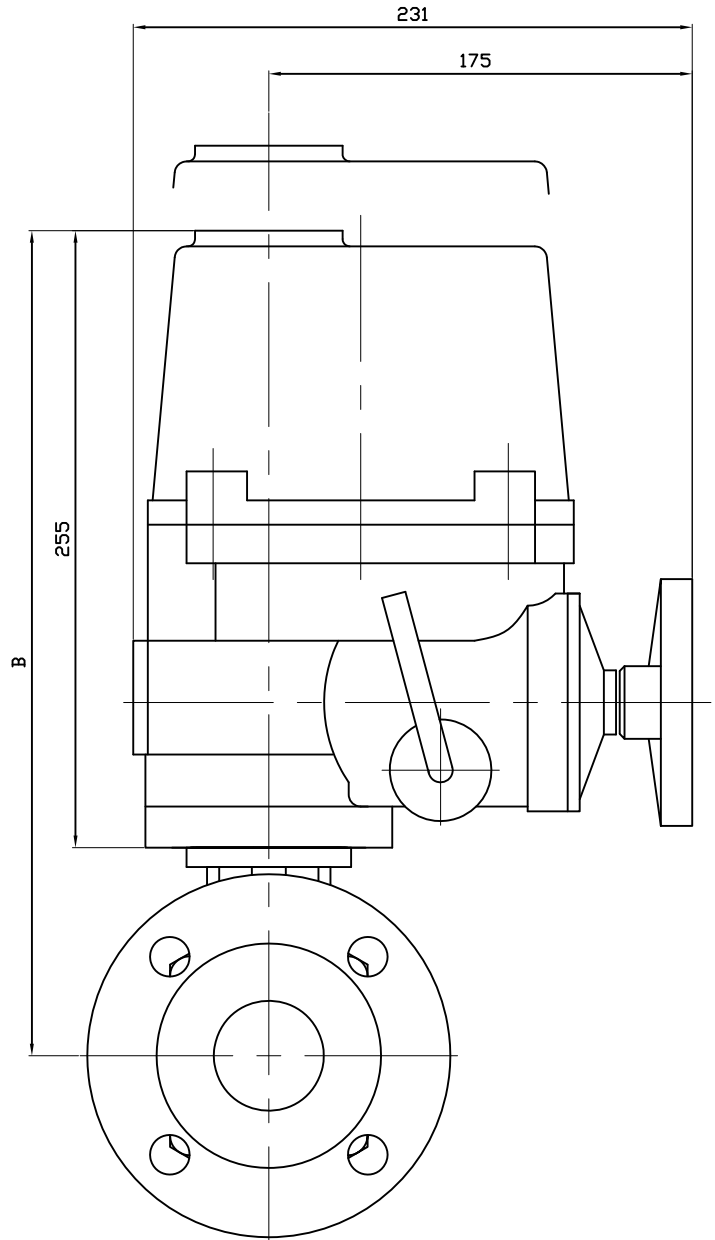
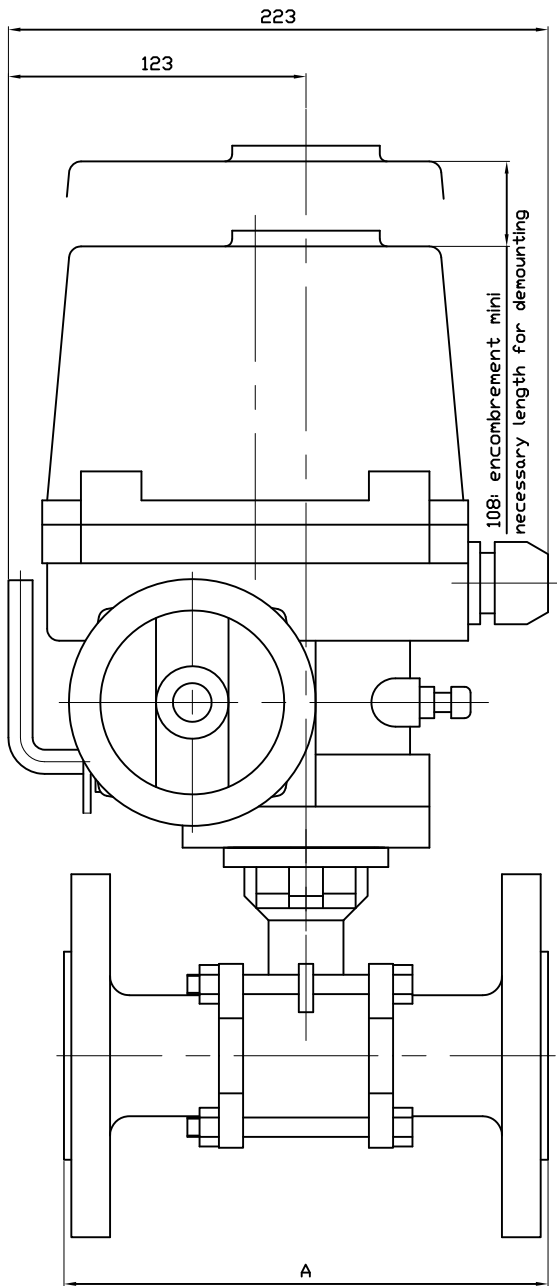
## ATEX ZONES INSTALLATION

It is compulsory to specify if the installation of the automatic valve 710-711+NA-X will take place in ATEX zones 1 or 2 while making the order. Our services will proceed to the mounting check, to a grounding strip installation and will edit a mounting certificate. Those operations are performed by our proper engineers. Please contact us for further details. It is also compulsory to follow the ATEX zone mounting and maintenance special instructions for motorized valves. The ATEX gland packs and sealing plugs are not provided. Please use the following codes:

ATEX aluminium gland pack M20x1.5	Code 980179	ATEX aluminium sealing plugs M20x1.5	Code 980180
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NA	06	09		15
DN	50	65	80	100
A	230	290	310	350
B	339	363	373	409
KG	20.8	26.4	32.3	48.7

Informations données à titre indicatif et sous réserve de modifications éventuelles  
data subject to alteration

Ech: /	Date	Dessiné par	Tolérances générales	Modifications	Date	REV.
	26/09/2006	LL	+/- 0.2		18/07/2012	A
<b>ROBINET A TOURNANT SPHERIQUE 710-711MD/BALL VALVE 710-711MD + SERVOMOTEUR NA/ELECTRIC ACTUATOR NA</b>				Matière :		
				Poids (Kg) :		
				Traitement : SANS		
				Plan n° Ens 961A		
45, Rue du Ruisseau 38297 SAINT QUENTIN FALLAVIER						

# ELECTRIC ACTUATOR TYPE NA / NA-X

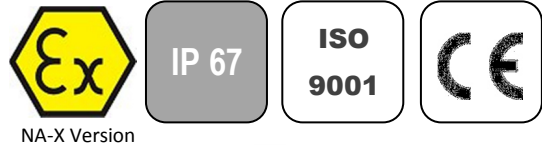
## GENERAL CHARACTERISTICS

The NA electric actuator is dedicated to the actuation of industrial ¼ turn valve. The maximum torque value is 2500 Nm. With a compact design, an IP 67 cast aluminium enclosure and an epoxy protection, the NA electric actuator is especially adapted to the actuation of ball valves and butterfly valves in dusty outdoor or indoor areas. It is equipped with a declutchable manual override and a torque limiter (except on NA06 and NA09). Many options are available. The NA-X version can be used in explosive areas 1 and 2 and complies with the EN 15714-2 standard.

## AVAILABLE MODELS

NA06: 60 Nm to NA250: 2500 Nm

Voltage: 230 V AC, 400 V AC, 24 V AC, 24 V DC



## LIMITS OF USE

Version	NA	NA-X
Protection rating	IP 67	
Temperature range	-20 °C / +70 °C	-20 °C / +55 °C
Service	S2-70%	
Explosive areas	Forbidden	Zone 1 and 2



## MECHANICAL CHARACTERISTICS

Gears	Treated steel pinions
Rotation angle	90° +/- 5°
Declutching	Lever
Manual override	Handwheel
Torque limiter	Except for NA06 and NA09

Electric actuator	NA06	NA09	NA15	NA28	NA38	NA60	NA100	NA150	NA200	NA250
Torque	60 Nm	90 Nm	150 Nm	280 Nm	380 Nm	600 Nm	1000 Nm	1500 Nm	2000 Nm	2500 Nm
Operating time	17 s	17 s	20 s	24 s	24 s	29 s	29 s	87 s	87 s	87 s
ISO 5211 pad	F07	F07	F07/F10	F10/F12	F10/F12	F12/F14	F12/F14	F14/F16	F14/F16	F14/F16
Star drive nut	17	17	17	22	27	27	27	36	36	46

## DIRECTIVES AND DEVELOPMENT STANDARDS APPLICABLE

Machine 2006/42/EC	Actuator attachments : ISO 5211
Low Voltage Directive 2006/95/EC	Electromagnetic compatibility 2004/108/EC
ATEX 1994/9/EC: ATEX II 2 G EEx d II B T4 – NEMKO 03ATEX1342X (NA-X electric actuator only)	

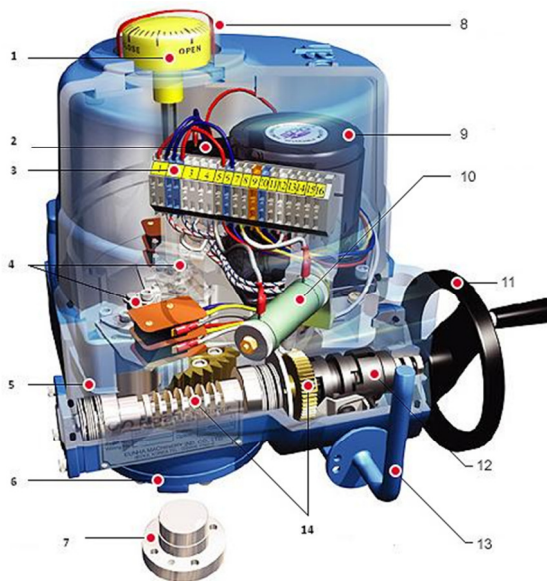
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		Date	06/2012

# ELECTRIC ACTUATOR TYPE NA / NA-X

## CONSTRUCTION

1	Position indicator	Polycarbonate
2	Condenser	
3	Terminal block	
4	Limit switches	
5	Body / cover	Aluminium alloy
6	Base / enclosure	Aluminium alloy
7	Drive nut	Steel
8	Dome	Polycarbonate
9	Electric motor	
10	Anti-condensation heater	
11	Handwheel	Steel
12	Manual override	Steel
13	Declutching lever	Steel
14	Worm gear	Steel



## ELECTRICAL CHARACTERISTICS

<b>Motor Protection</b>	Thermal cut-out		<b>Anti-condensation</b>		20 W heater					
<b>Limit switches</b>	2 adjustable switches		<b>Electrical connection</b>		2 gland packs M20x1.5					
<b>Auxiliary switches</b>	2 dry adjustable switches									
<b>Electric actuator</b>	<b>NA06</b>	<b>NA09</b>	<b>NA15</b>	<b>NA28</b>	<b>NA38</b>	<b>NA60</b>	<b>NA100</b>	<b>NA150</b>	<b>NA200</b>	<b>NA250</b>
<b>Power</b>	15 W	25 W	40 W	40 W	60 W	90 W	180 W	98 W	180 W	180 W
<b>Voltage</b>	380 V – 50 Hz									
<b>Hold current</b>	0.13 A	0.18 A	0.3 A	0.3 A	0.33 A	0.52 A	0.73 A	0.52 A	0.73 A	0.73 A
<b>Inrush current</b>	0.23 A	0.36 A	0.59 A	0.74 A	0.78 A	1.24 A	1.68 A	0.78 A	1.68 A	1.68 A
<b>Voltage</b>	220 V – 50 Hz									
<b>Hold current</b>	0.45 A	0.58 A	0.95 A	0.95 A	1.3 A	1.5 A	2.15 A	1.5 A	2.15 A	2.15 A
<b>Inrush current</b>	0.63 A	0.89 A	1.12 A	1.37 A	1.85 A	2.34 A	3.4 A	2.34 A	3.4 A	3.4 A
<b>Voltage</b>	24 V – 50 Hz									
<b>Hold current</b>	3.2 A	4.3 A	6.5 A	8.1 A						
<b>Inrush current</b>	6 A	8 A	12 A	14 A						
<b>Voltage</b>	24 V DC									
<b>Hold current</b>	2.2 A	3.5 A	4.5 A	6.5 A						
<b>Inrush current</b>	4.1 A	4.1 A	6.6 A	13.8 A						

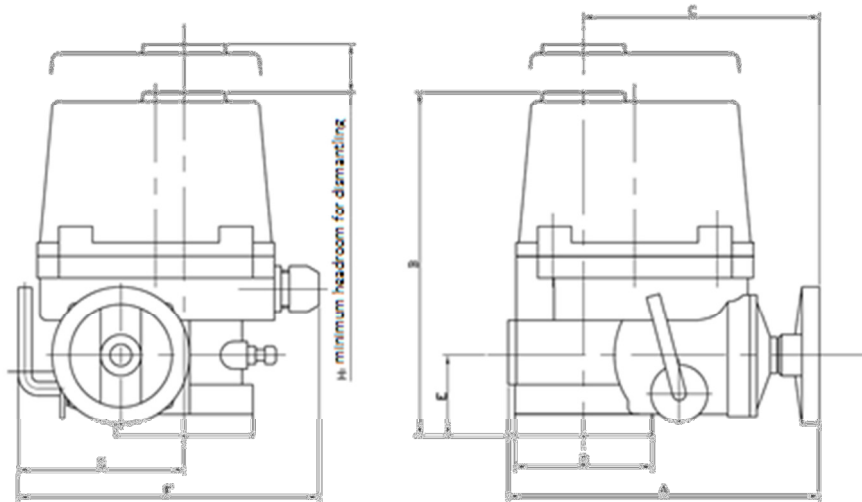
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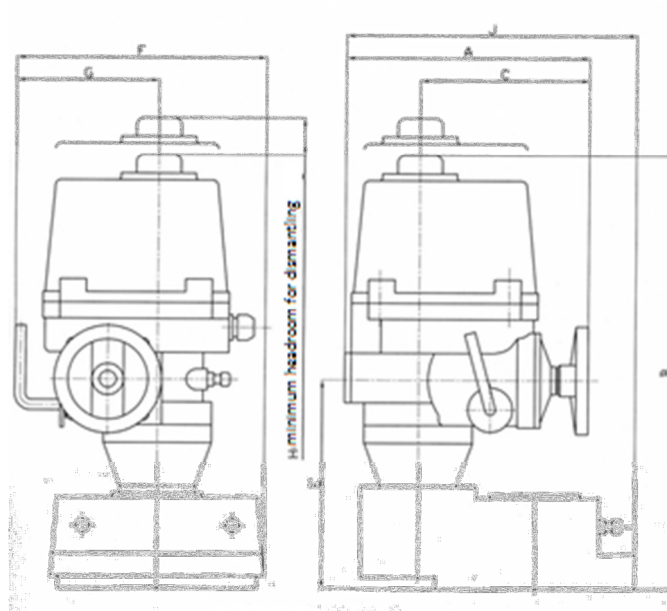
# ELECTRIC ACTUATOR TYPE NA / NA-X

## DIMENSIONS (mm)

### NA06 to NA100




### NA150 to NA250



NA	A	B	C	D	E	F	G	H
NA06 - NA09	231	255	175	102	60	223	113	108
NA15	261	255	184	120	60	266	139	108
NA28 - NA38	285	302	202	145	70	300	159	130
NA60 - NA100	325	343	226	175	78	349	191	178
NA150 - NA200 - NA250	325	556	226	-	273	388	191	178

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# ELECTRIC ACTUATOR TYPE NA / NA-X

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## OPTIONS

1	NAPIU : feedback potentiometer version
2	NACPT: 4-20 mA position transmitter version
3	NAPCU: 0-10, 2-10 V, 2-20 mA, 4-20 mA regulation card version
4	NALCU: local control version
5	NARBP: integrated battery emergency shutdown device version
6	Earthquake simulation test
7	Low temperature version (-40 °C)
8	IP 68 version
9	Rotation angles 120°, 135°, 180°, 270°

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