



**752-753 VALVE WITH NA ELECTRIC
ACTUATOR**

Model/Ref: 274282023310



*Partnership.
Without Limits.*

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752-753 VALVE WITH NA ELECTRIC ACTUATOR

CHARACTERISTICS

The 752-753+NA ball valve is dedicated to the automatic opening/shut-off of pipes carrying unloaded industrial fluids with a maximum 16 bar pressure (40 bar for DN15 to 50). This full bore split body ball valve is certified according to the following standards: 97/23/EC, ATEX, Firesafe and ISO 15848-1 (for fugitive emissions). The valve complies with the EN 558-1 series 27 face-to-face standards. The ISO 5211 pad allows a direct mounting of the NA actuator. It is perfectly suitable for an indoor or outdoor industrial use.

AVAILABLE ITEMS

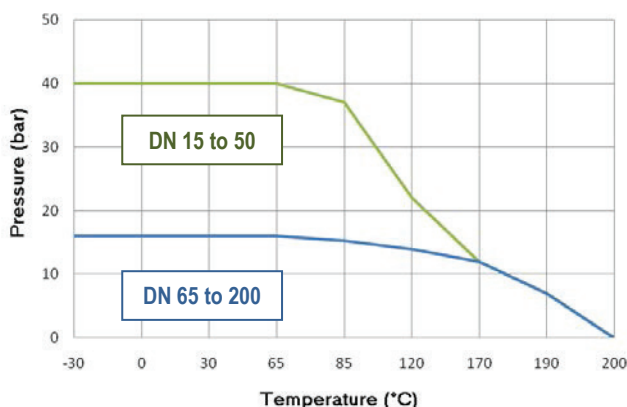
752: A216 WCB carbon steel (1.0619) body
 753: A351 CF8M stainless steel (1.4408) body
 DN 15 to DN 150
 Flanged connections RF PN10/16
 Voltages: 24 V AC/DC, 230 V AC, 3~400 V AC


IP 67
**3.1
Cert.**


With NA-X

LIMITS OF USE

| | |
|---|--|
| Max. allowable pressure (PS) | DN 15 to 50: 40 bar (20 °C) DN 65 to 200: 16 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% |



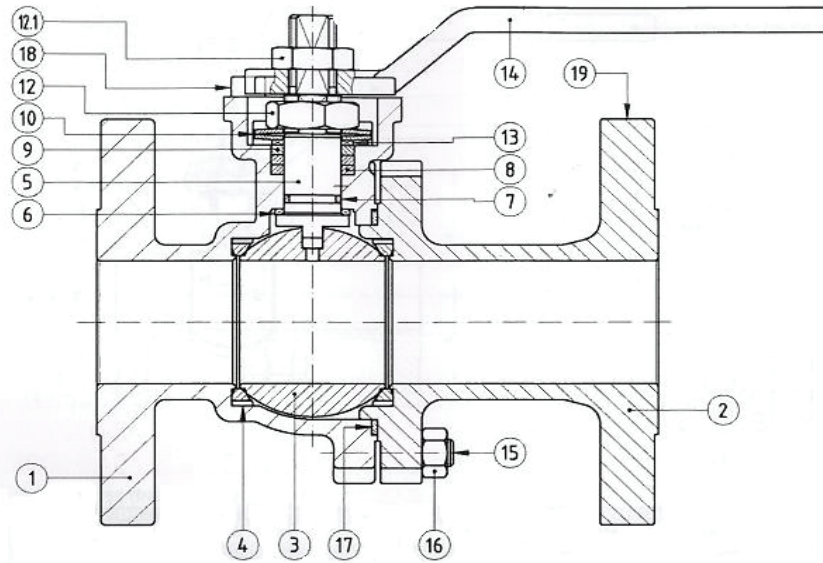
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DIRECTIVES AND DEVELOPMENT STANDARDS APPLICABLE

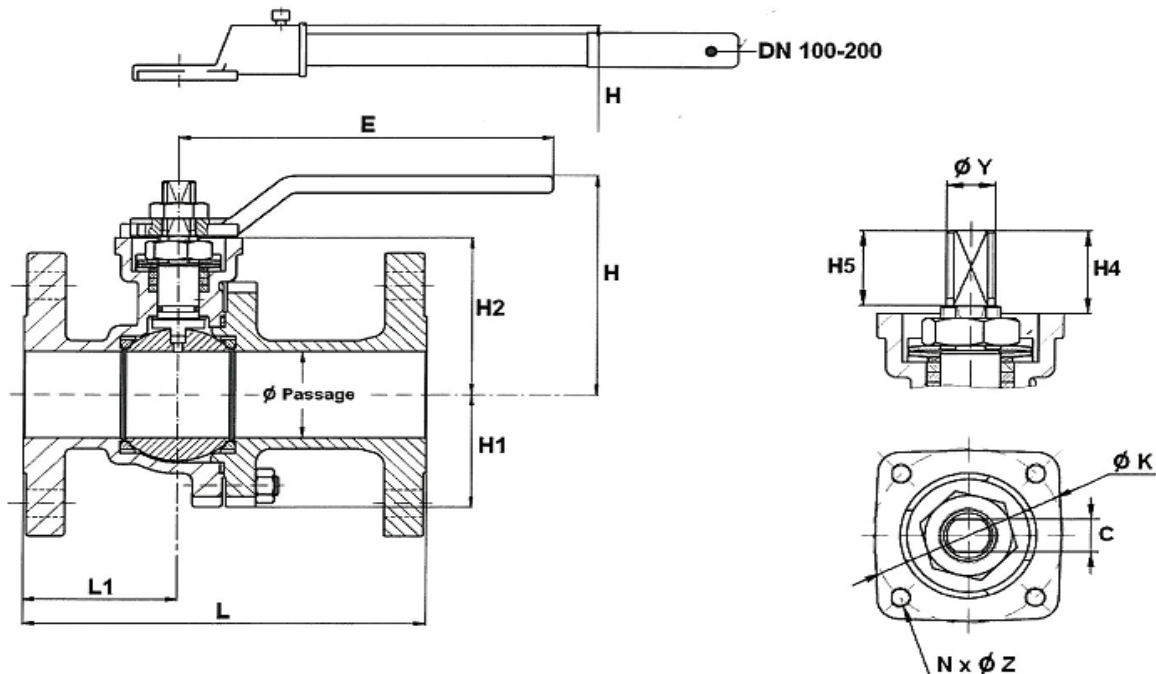
| | Standard | Notified bodies | | Standard |
|---------------------------------------|-----------------------------|-----------------|--|--------------------|
| 97/23/EC Pressure Equipment Directive | DN 15 and 20 : excluded | | Valve testing | EN 12266 |
| | DN 25 to 100 : category III | BV 0062 | Material certificate | EN 10204 |
| Conception | EN 1983 and ISO 17292 | | Alloy grade | EN 1503-1 |
| Shell design | EN 12516-1 | | Face-to-face dimension | EN 558-1 series 27 |
| Flanges dimension | EN 1092-1 | | Fugitive emissions | EN 15848-1 |
| Fire testing | ISO 10497 (2004) | | Actuator coupling | EN 15081 |
| Actuator attachment | ISO 5211 | | | |
| ATEX Directive | Valve | | II 2 G/D EEx c for zones 1,2,21 and 22 | |
| | Actuator (NA-X option) | NEMKO 0470 | II 2G EEx d II B T4 for zones 1 and 2 | |

CONSTRUCTION



| # | Item | 752 Steel | 753 SS | # | Item | 752 Steel | 753 SS |
|----|--------------------------|-------------------|-----------|------|--------------------|----------------------|----------|
| 1 | Body | Steel 1.0619 | SS 1.4408 | 12 | Gland pack nut | SS 303 | |
| 2 | Ends | Steel 1.0619 | SS 1.4408 | 12.1 | Lever nut | SS 303 | |
| 3 | Ball | SS 1.4408 | | 13 | Anti-friction ring | PTFE+25% graphite | |
| 4 | Seat | PTFE / TFM 1600 | | 14 | Lever | Ductile iron | |
| 5 | Stem | SS 1.4401 | | 15 | Bolts | A193 B7M | A193 B8M |
| 6 | Washer | PTFE+25% graphite | | 16 | Bolt nuts | A193 2HM | A194 8M |
| 7 | Stem O-ring | FKM | | 17 | Body gaskets | SS + PTFE + graphite | |
| 8 | Gland pack | Graphite | | 18 | End stop screw | A2 | |
| 9 | Gland follower | SS 303 | | 19 | Plate | SS | |
| 10 | Belleville spring washer | Inconel 718 | | | | | |

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752-753 VALVE WITH NA ELECTRIC ACTUATOR
DIMENSIONS (mm)


| DN | 15 | 20 | 25 | 32 | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 |
|-------------|------|------|------|------|-------|-------|------|-------|-------|-------|-------|-------|
| Ø | 15 | 20 | 25 | 32 | 40 | 50 | 65 | 78 | 100 | 125 | 151 | 203 |
| L | 115 | 120 | 125 | 130 | 140 | 150 | 170 | 180 | 190 | 325 | 350 | 400 |
| L1 | 53 | 52 | 52 | 54 | 55 | 61 | 72 | 73 | 83 | 120 | 135 | 200 |
| E | 170 | 170 | 170 | 170 | 215 | 215 | 350 | 450 | 466 | 775 | 775 | 845 |
| H | 68 | 70 | 86 | 89.5 | 122.5 | 127.5 | 140 | 190 | 192.5 | 240 | 259 | 319 |
| H1 | 31 | 33 | 39 | 43 | 48 | 63 | 78 | 87 | 108 | 134 | 152 | 202 |
| H2 | 41 | 43 | 58.5 | 63.5 | 86.5 | 91.5 | 104 | 118.5 | 144 | 184 | 203 | 250 |
| H4 | 18 | 18 | 22 | 22 | 33 | 33 | 34 | 34 | 45 | 56 | 56 | 69 |
| H5 | 11 | 11 | 21 | 21 | 32 | 32 | 33 | 33 | 43.5 | 54.5 | 54.5 | 67 |
| Ø Y | M10 | M10 | M12 | M12 | M18 | M18 | M22 | M22 | M28 | M36 | M36 | M48 |
| Ø K | 50 | 50 | 50 | 50 | 70 | 70 | 70 | 102 | 102 | 125 | 125 | 140 |
| ISO | F05 | F05 | F05 | F05 | F07 | F07 | F07 | F10 | F10 | F12 | F12 | F14 |
| N x Ø Z | 4xM6 | 4xM6 | 4xM6 | 4xM6 | 4xM8 | 4xM8 | 4xM8 | 4xM10 | 4xM10 | 4xM12 | 4xM12 | 4xM16 |
| Weight (kg) | 2.4 | 3.2 | 4.1 | 5.8 | 8.1 | 10.6 | 13.3 | 19.1 | 25.6 | 47.6 | 63.5 | 115.3 |

FLOW FACTOR Kv (m³/h)

| DN | 15 | 20 | 25 | 32 | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 |
|----|----|----|----|-----|-----|-----|-----|------|------|------|------|------|
| Kv | 20 | 40 | 75 | 130 | 170 | 270 | 550 | 1000 | 1650 | 3000 | 4200 | 9000 |

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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 752-753 + SA actuator | | | |
| 20 | | | | |
| 25 | | | | |
| 32 | | | | |
| 40 | | | | |
| | | | | Standard equipment of the actuator |
| 50 | NA09 | 25 W | 17 s | 2 adjustable limit switches + 2 dry auxiliary switches 20 W anti-condensation heater Visual position indicator Actuator thermal cut-out (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 | NA15 | 40 W | 20 s | |
| 100 | NA28 | 40 W | 20 s | |
| 125 | NA28 | 40 W | 20 s | |
| 150 | NA38 | 60 W | 24 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.

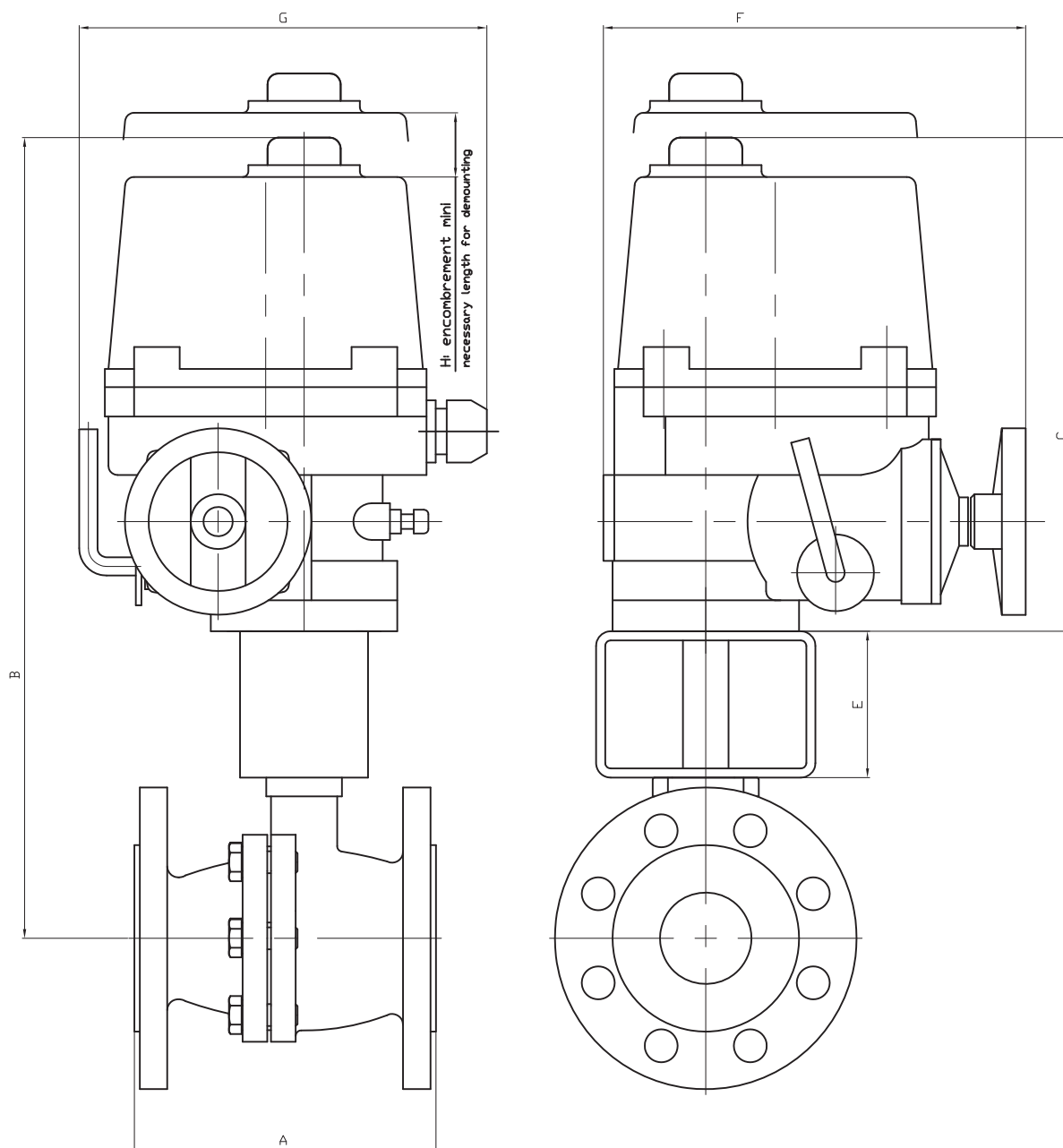
| 1 | 2 | 3 | 4 | 5 |
|---|---|---|--|---|
| NALCU: Actuator with a local control | NAPCU: Regulation actuator 4-20 mA or 0-10 V | NARBP: Safety actuator with an integrated battery emergency shutdown | NA-X: Actuator for use in ATEX zones 1 and 2 | SR: Safety spring return actuator |
|  |  |  |  |  |
| 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 752-753+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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752-753 VALVE WITH NA ELECTRIC ACTUATOR


| DN | 50 | 65 | 80 | 100 | 125 | 150 |
|------|-------|------|-------|------|------|------|
| TYPE | NA09 | NA09 | NA15 | NA28 | NA28 | NA38 |
| A | 150 | 170 | 180 | 190 | 325 | 350 |
| B | 406,5 | 419 | 453,5 | 526 | 566 | 585 |
| C | 255 | 255 | 255 | 302 | 302 | 302 |
| E | 60 | 60 | 80 | 80 | 80 | 80 |
| F | 231 | 231 | 261 | 285 | 285 | 285 |
| G | 223 | 223 | 266 | 300 | 300 | 300 |
| H | 108 | 108 | 108 | 130 | 130 | 130 |

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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



NA-X Version

IP 67

ISO
9001



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

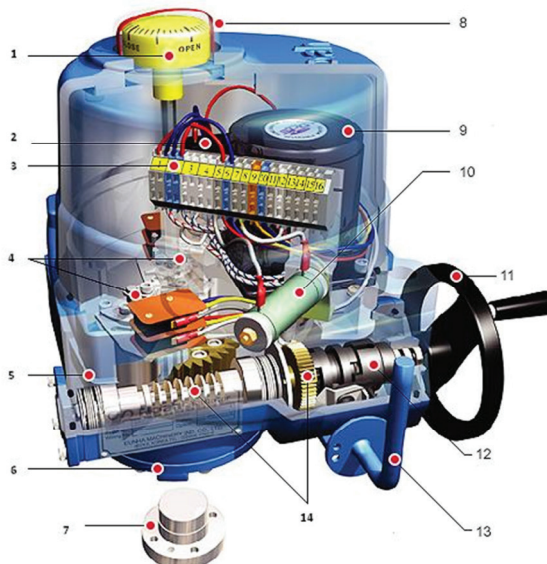
| | |
|---|---|
| Machine 2006/42/EC | Actuator attachments : ISO 5211 |
| Low Voltage Directive 2006/95/EC | Electromagnetic compatibility 2004/108/EC |
| ATEX 1994/9/EC: ATEX II 2 G EEx d II B T4 – NEMKO 03ATEX1342X (NA-X electric actuator only) | |

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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 |

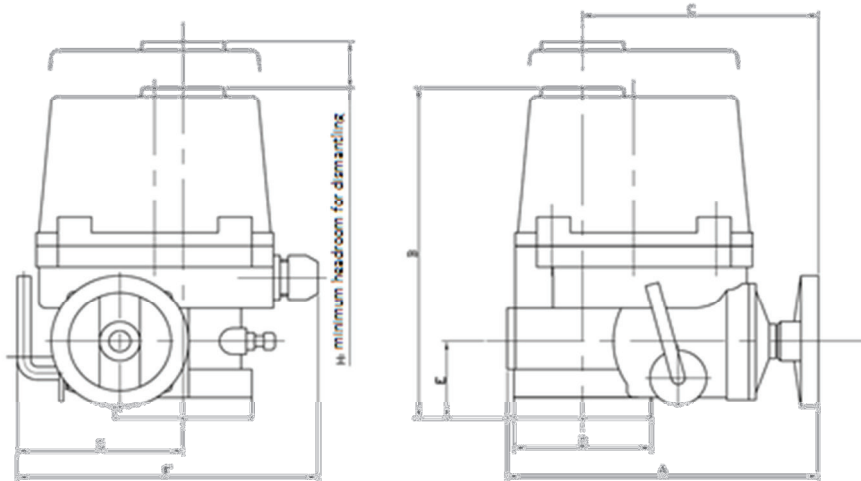
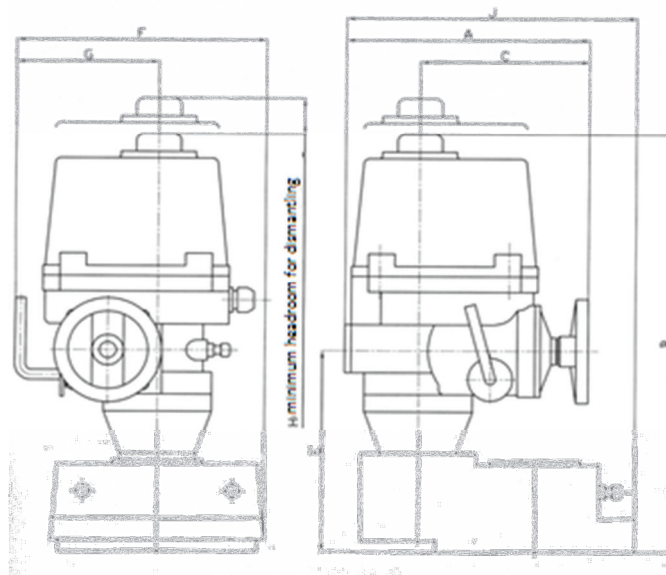


ELECTRICAL CHARACTERISTICS

| | | | |
|--------------------|---------------------------|-----------------------|-----------------------|
| Motor Protection | Thermal cut-out | Anti-condensation | 20 W heater |
| Limit switches | 2 adjustable switches | Electrical connection | 2 gland packs M20x1.5 |
| Auxiliary switches | 2 dry adjustable switches | | |

| Electric actuator | NA06 | NA09 | NA15 | NA28 | NA38 | NA60 | NA100 | NA150 | NA200 | NA250 |
|-------------------|---------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Power | 15 W | 25 W | 40 W | 40 W | 60 W | 90 W | 180 W | 98 W | 180 W | 180 W |
| Voltage | 380 V – 50 Hz | | | | | | | | | |
| Hold current | 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 |
| Inrush current | 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 |
| Voltage | 220 V – 50 Hz | | | | | | | | | |
| Hold current | 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 |
| Inrush current | 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 |
| Voltage | 24 V – 50 Hz | | | | | | | | | |
| Hold current | 3.2 A | 4.3 A | 6.5 A | 8.1 A | | | | | | |
| Inrush current | 6 A | 8 A | 12 A | 14 A | | | | | | |
| Voltage | 24 V DC | | | | | | | | | |
| Hold current | 2.2 A | 3.5 A | 4.5 A | 6.5 A | | | | | | |
| Inrush current | 4.1 A | 4.1 A | 6.6 A | 13.8 A | | | | | | |

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752-753 VALVE WITH NA ELECTRIC ACTUATOR
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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752-753 VALVE WITH NA ELECTRIC ACTUATOR**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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