

783-4-5-6 VALVE WITH UV ACTUATOR

CHARACTERISTICS

The 3-way stainless steel 783-5+AP (L-port) and 784-6 +AP (T-port) ball valves are dedicated to the mixing, diverting or automatic discharging of industrial unloaded fluids. The valves with a DN from 50 to 80 have a floating ball construction and those with a DN from 100 to 150 have a trunnion mounted ball construction. They both have the EC and ATEX certifications. The ISO 5211 pad enables the direct mounting of the UV electric actuator. It is perfectly suitable for an indoor or outdoor service (under shelter).

3.1
Cert.

IP 65



AVAILABLE ITEMS

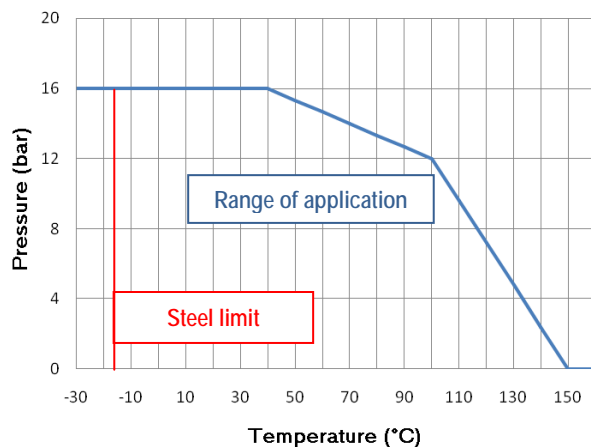
| Ref. | Material | Port | Function |
|------|---------------------------|------|-----------|
| 783 | Carbon steel A216WCB | L | Diverting |
| 784 | Carbon steel A216WCB | T | Mixing |
| 785 | Stainless steel A351 CF8M | L | Diverting |
| 786 | Stainless steel A351 CF8M | T | Mixing |

DN 50 to DN 150

Flanged connections RF PN16

LIMITS OF USE

| | |
|--------------------------------------|---|
| Max. allowable pressure (PS) | 16 bar (20 °C) |
| Min./max. allowable temperature (TS) | Steel: -20 °C / +150 °C SS: -30 °C / +150 °C |
| Room temperature | -10 °C / +50 °C |
| Service | S4 - 30% - 10 starts/h |



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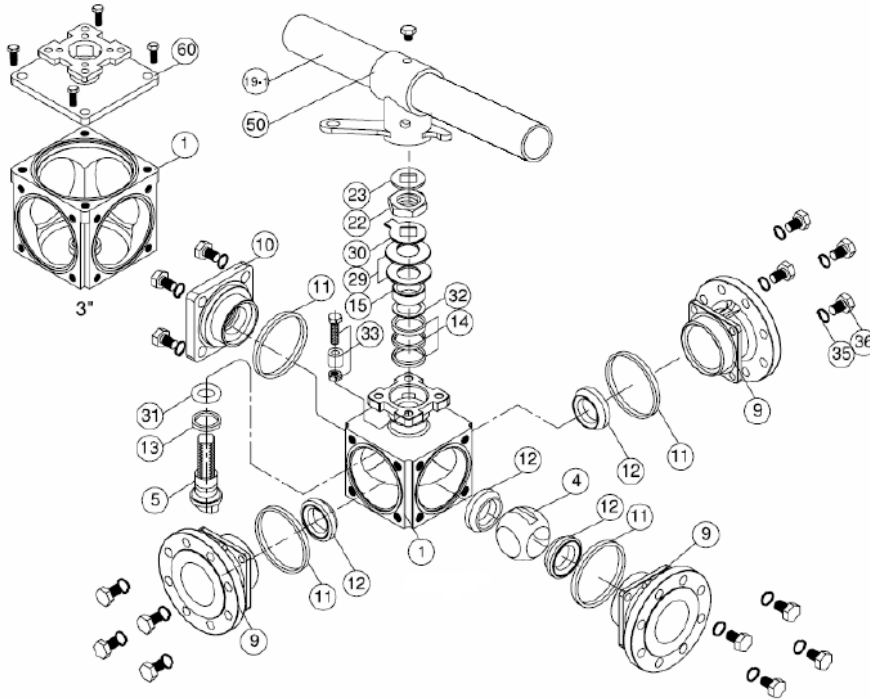
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| | | Rev. | 5 |
| | | Date | 05/2012 |

783-4-5-6 VALVE WITH UV ACTUATOR

DIRECTIVES AND DEVELOPMENT STANDARDS APPLICABLE


| | Standard | Notified bodies | | Standard |
|---------------------------------------|-------------|-----------------|----------------------|-----------|
| 97/23/EC Pressure Equipment Directive | Category II | #0035 | Material certificate | EN 10204 |
| Shell design | EN 12516-1 | | Alloy grade | EN 1503-1 |
| Flanges dimension | EN 1092-1 | | Valve testing | EN 12266 |
| Actuator attachment | ISO 5211 | | | |

CONSTRUCTION DN 50 to DN 80



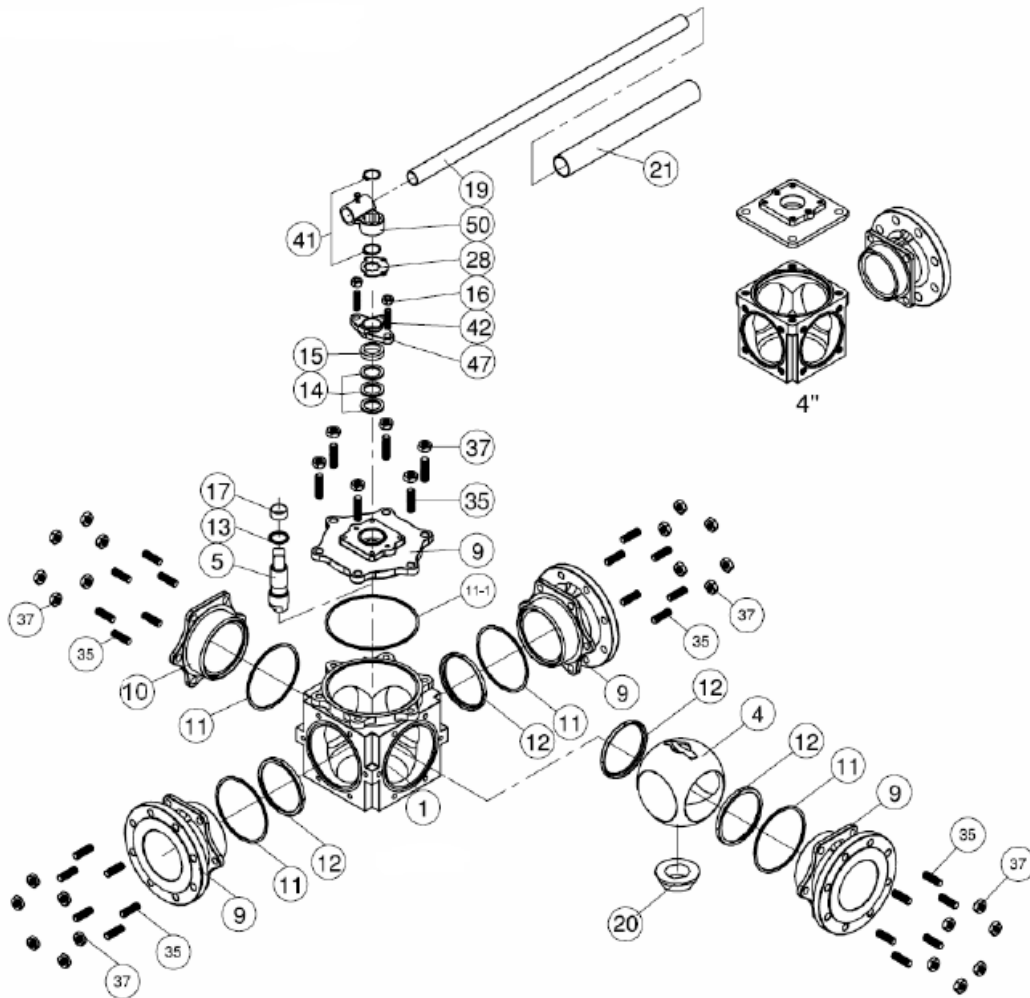
| # | Item | 783-784 CS | 785-786 SS | # | Item | Material |
|----|-------------|--------------------------|------------------------------|----|--------------------------|-------------------|
| 1 | Body | Carbon steel A216 WCB | Stainless steel A351 CF8M | 22 | Gland pack nut | SS 304 |
| 4 | Ball | SS 1.4308 | Stainless steel A351 CF8M | 23 | Washer | SS 304 |
| 5 | Stem | SS 304 | SS 316 | 29 | Belleville spring washer | SS 301 |
| 9 | Ends | Carbon steel A216 WCB | Stainless steel A351 CF8M | 30 | Locking washer | SS 304 |
| 10 | Cap | Carbon steel A216 WCB | Stainless steel A351 CF8M | 31 | O ring | FKM |
| 11 | Body gasket | PTFE | | 32 | Gland packing | PTFE+15% Graphite |
| 12 | Seat | PTFE+15% Graphite | | 33 | End stop | SS 304 |
| 13 | Ring | PTFE | | 35 | Washer | SS 304 |
| 14 | Gland pack | PTFE | | 36 | Screw | SS 304 |
| 15 | Ring | SS 304 | | 50 | Handle adapter | SS 304 |
| 19 | Handle | Steel | | | | |

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783-4-5-6 VALVE WITH UV ACTUATOR

CONSTRUCTION DN 100 to DN 150



| # | Item | 783-784 CS | 785-786 SS | # | Item | Material |
|------|-----------------|--------------------------|------------------------------|----|------------------|-----------|
| 1 | Body | Carbon steel A216 WCB | Stainless steel A351 CF8M | 17 | Stem gasket | PTFE |
| 4 | Ball | SS 1.4308 | Stainless steel A351 CF8M | 19 | Handle | Steel |
| 5 | Stem | SS 304 | SS 316 | 20 | Guide screw | SS 304 |
| 9 | Ends | Carbon steel A216 WCB | Stainless steel A351 CF8M | 21 | Handle sleeve | PVC |
| 10 | Housing cover | Carbon steel A216 WCB | Stainless steel A351 CF8M | 28 | Lock out device | SS 304 |
| 11 | Body gasket | PTFE | | 35 | Bolts | SS 304 |
| 11-1 | Top body gasket | PTFE | | 37 | Bolts screws | SS 304 |
| 12 | Seat | PTFE+15% Graphite | | 41 | Handle washer | SS 304 |
| 13 | Ring | PTFE | | 42 | Gland pack screw | SS 304 |
| 14 | Gland pack | PTFE | | 47 | Gland plate | SS 1.4308 |
| 15 | Fixing ring | SS 304 | | 50 | Handle adapter | SS 304 |
| 16 | Gland pack nut | SS 304 | | | | |

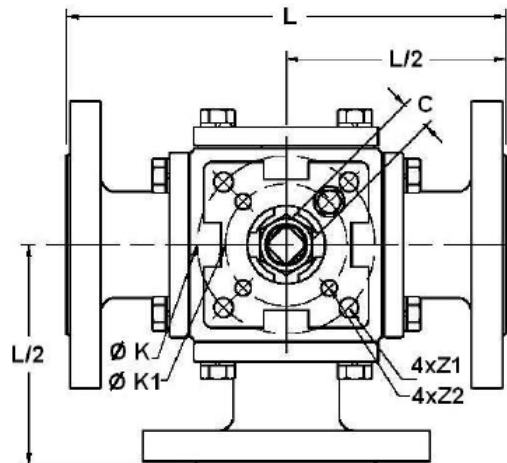
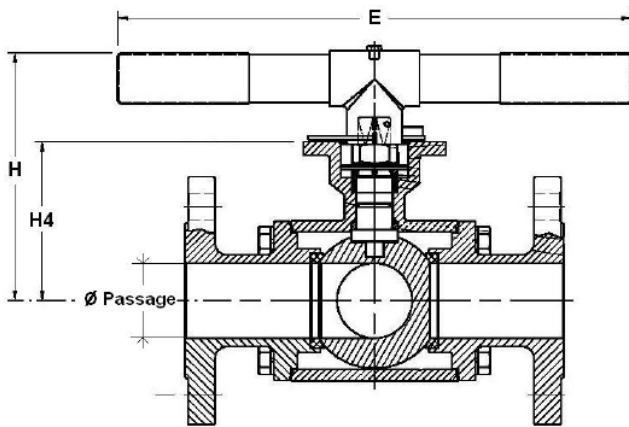
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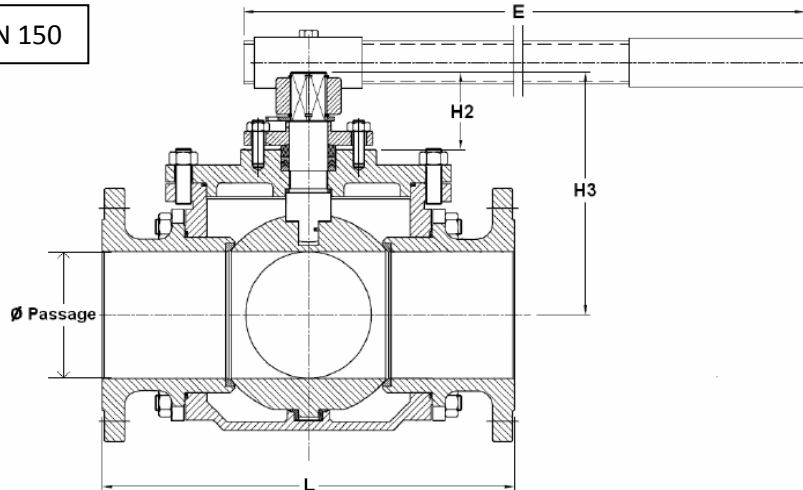
783-4-5-6 VALVE WITH UV ACTUATOR

DIMENSIONS (mm)

DN 50 to DN 80




DN 100 to DN 150



| DN | 50 | 65 | 80 |
|-------------|-------|-------|-------|
| Ø | 49 | 64 | 76 |
| L | 253 | 278 | 292.2 |
| L/2 | 126.5 | 139 | 146.1 |
| E | 300 | 300 | 300 |
| H | 156.6 | 168.9 | 178 |
| H1 | 17.8 | 17.5 | 17.5 |
| H4 | 105.8 | 117.3 | 128 |
| C | 17 | 17 | 17 |
| Ø K | 102 | 102 | 102 |
| Ø K1 | 70 | 70 | 70 |
| 4 x Z1 | 4x11 | 4x11 | 4x11 |
| 4 x Z2 | 4x9 | 4x9 | 4x9 |
| Weight (kg) | 19 | 23.8 | 34.5 |

| DN | 100 | 125 | 150 |
|---------------|------|------|------|
| Ø | 99 | 125 | 150 |
| L | 360 | 416 | 473 |
| L/2 | 180 | 203 | 236 |
| E | 600 | 600 | 800 |
| H1 | 33 | 33 | 43.5 |
| H2 | 70 | 70 | 77.5 |
| H3 | 193 | 233 | 266 |
| C | 27 | 27 | 36 |
| Ø K | 125 | 125 | 140 |
| 4xZ | 4x12 | 4x12 | 4x16 |
| Weight (kg) L | 67.4 | 95 | 124 |
| Weight (kg) T | 61.8 | 95 | 127 |

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| | | Date | 05/2012 |

783-4-5-6 VALVE WITH UV ACTUATOR

ACTUATION WITH UV

Suggested standard UV actuation under the following conditions:

- Electric actuator with an IP 65 plastic 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)

The actuator is mounted directly.

| DN | Actuator | Power | Operating time* 230 V AC | Operating time* 24 V AC/DC | Standard equipment of the actuator |
|-----|----------|-------|-----------------------------|-------------------------------|--|
| 50 | UVC15 | 25 W | 8 s | 8 s | 2 adjustable limit switches 2 dry auxiliary switches Actuator thermal cut-out Manual override by declutchable handwheel Visual position indicator Electric connection: 2 gland packs ½" PF <u>Optional equipment</u> Anti-condensation heater |
| 65 | UVC15 | 25 W | 8 s | 8 s | |
| 80 | UVD25 | 25 W | 20 s | 20 s | |
| 100 | UVD25 | 25 W | 20 s | 20 s | |


*Unloaded operating time given for information purpose only. May vary depending on the medium
For any other working conditions, please contact us.

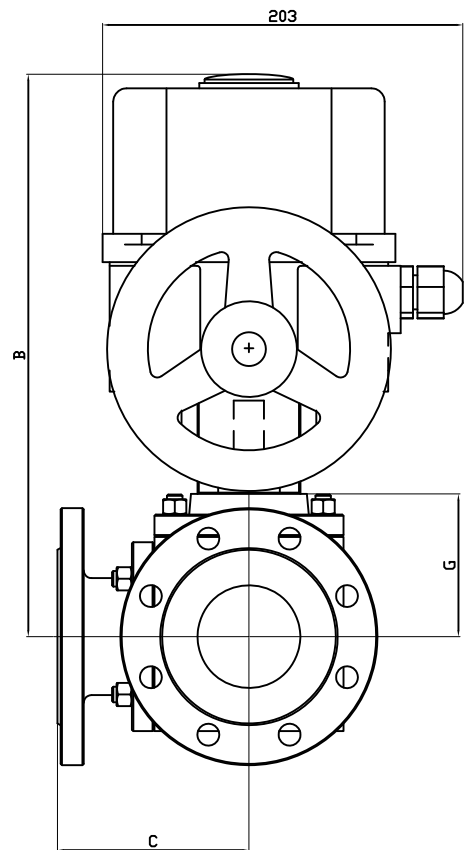
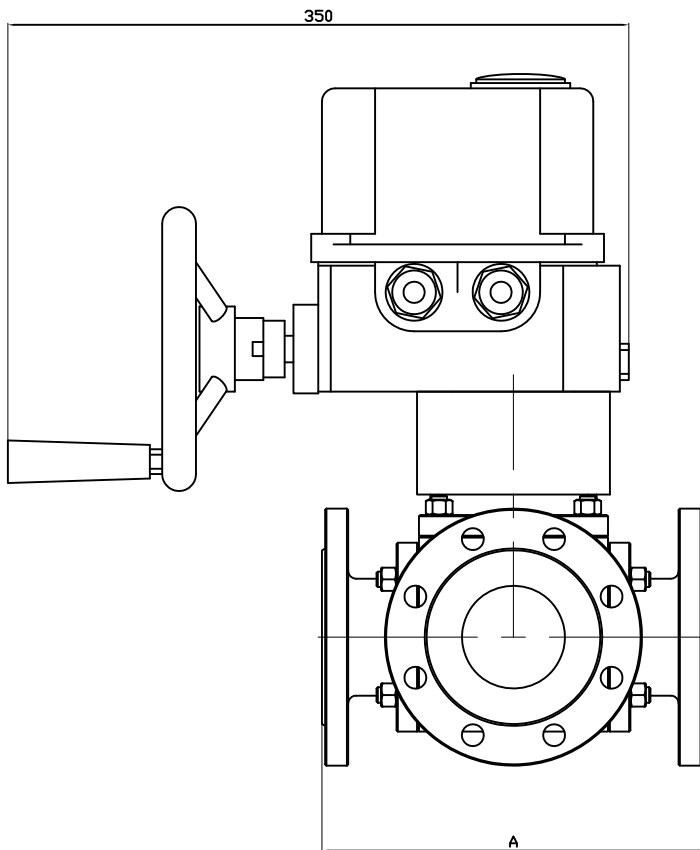
ACTUATION OPTIONS

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

| | |
|---|---|
| 1 | Electric actuator sized for a maximum pressure differential up/downstream over 10 bar (=ΔP) |
| 2 | Anti-condensation heater |

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| | | Date | 05/2012 |




| DN | 50 | 65 | 80 | 100 |
|------|--------|--------|--------|--------|
| TYPE | UVC-15 | UVC-15 | UVD-25 | UVD-25 |
| A | 253 | 278 | 292 | 360 |
| B | 320 | 332 | 368 | 463* |
| C | 126.5 | 139 | 146 | 180 |
| G | 105 | 117 | 128 | 123 |
| KG | 25 | 29.8 | 42.8 | 78.5 |

* Montage avec platine H=100mm

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

| | | |
|--|------------|---|
| Ajout poids-Maj.cote B-Suppression DN125,150 | 20/07/2012 | D |
| Maj cotes A-B-C Ajout cote G | 03/11/2009 | C |
| Maj cotes | 07/08/2008 | B |
| Enlever Marque moteur-895 ALD 871 | 17/05/2006 | A |

| Ech: / | Date :20/04/2004 | Dessiné par : F.G. | Tolérances générales : +/- 0.2 | Modifications | Date | REV. |
|--|------------------|--------------------|--------------------------------|-------------------|------|------|
| ROBINET A TOURNANT SPHERIQUE 783-786MD/BALL VALVE 783-786MD + SERVOMOTEUR UV/ELECTRIC ACTUATOR UV | | | | Matière : | | |
| | | | | Poids <Kg> : | | |
|  45, Rue du Ruisseau 38297 SAINT QUENTIN FALLAVIER | | | | Traitement : SANS | | |
| | | | | Plan n° Ens 895D | | |

ELECTRIC ACTUATOR UV

GENERAL CHARACTERISTICS

The UV electric actuators are generally used on ¼ turn valves. The maximum output torque is between 150 Nm and 600 Nm. Its compact construction with an aluminium alloy enclosure and a plastic cover makes it convenient for the actuation of ball valves and butterfly valves. The UV electric actuators are equipped with a manual override activated by handwheel. Protection IP 65: possible use indoor and outdoor under shelter.

AVAILABLE ITEMS

Torque: 150 Nm, 250 Nm, 490 Nm and 600 Nm

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

IP 65



LIMITS OF USE

| | |
|-------------------|------------------------|
| Protection rating | IP 65 |
| Temperature range | -10 °C / +60 °C |
| Service | S4 - 30% - 10 starts/h |

MECHANICAL CHARACTERISTICS

| | |
|-----------------|-----------------------|
| Gears | Treated steel pinions |
| Rotation angle | 90° +/- 5° |
| Declutching | N/A |
| Manual override | Handwheel |



| Electric actuator | UVC15 | | UVD25 | | | UVF50 | UVG60 |
|-------------------|----------|---------|----------|---------|---------|----------|----------|
| Voltage | 230 V AC | 24 V AC | 230 V AC | 24 V AC | 24 V DC | 230 V AC | 230 V AC |
| Torque | 150 Nm | | 250 Nm | | | 490 Nm | 600 Nm |
| Operating time | 8 s | | 20 s | | | 30 s | 30 s |
| ISO 5211 pad | F07 | | F07/F10 | | | F10/F12 | F10/F12 |
| Star drive nut | 17 | | 22 | | | 27 | 27 |

ELECTRICAL CHARACTERISTICS

| | | | |
|------------------|--|-----------------------|----------------------|
| Motor protection | Thermal cut-out | Anti-condensation | Optional, 2 W heater |
| Limit switch | 2 adjustable switches | Electrical connection | 2 gland packs. ½" PF |
| Auxiliary switch | 2 adjustable dry switches, cutting capacity: 3 A @ 230 V AC / 0.3 A @ 250 V DC | | |

| Electric actuator | UVC15 | | UVD25 | | | UVF50 | UVG60 |
|-------------------|----------|---------|----------|---------|---------|----------|----------|
| Voltage | 230 V AC | 24 V AC | 230 V AC | 24 V AC | 24 V DC | 230 V AC | 230 V AC |
| Power | 25 W | 30 W | 25 W | 30 W | 30 W | 40 W | 60 W |
| Intensity | 0.42 A | 0.5 A | 0.42 A | 0.5 A | 0.5 A | 0.58 A | 0.66 A |

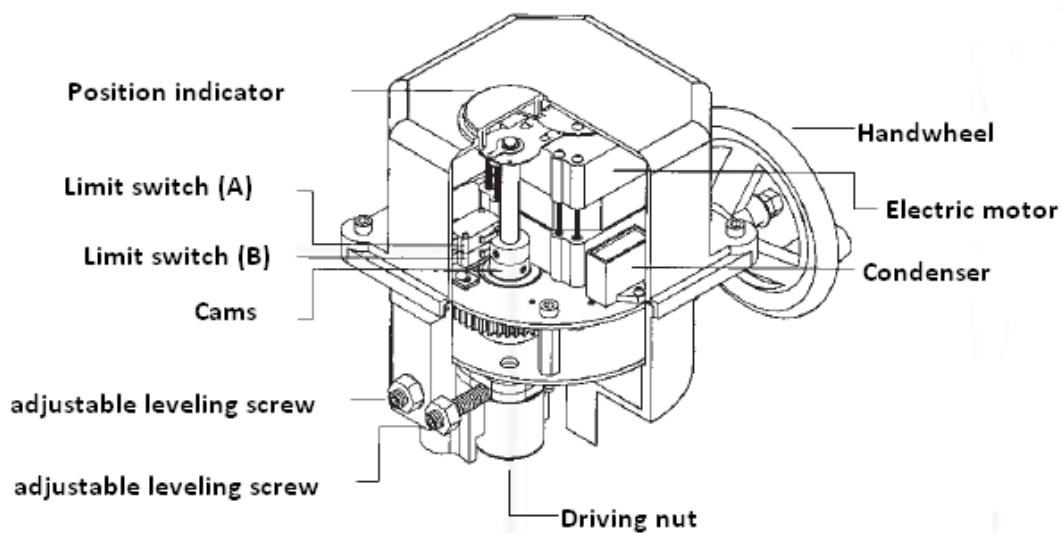
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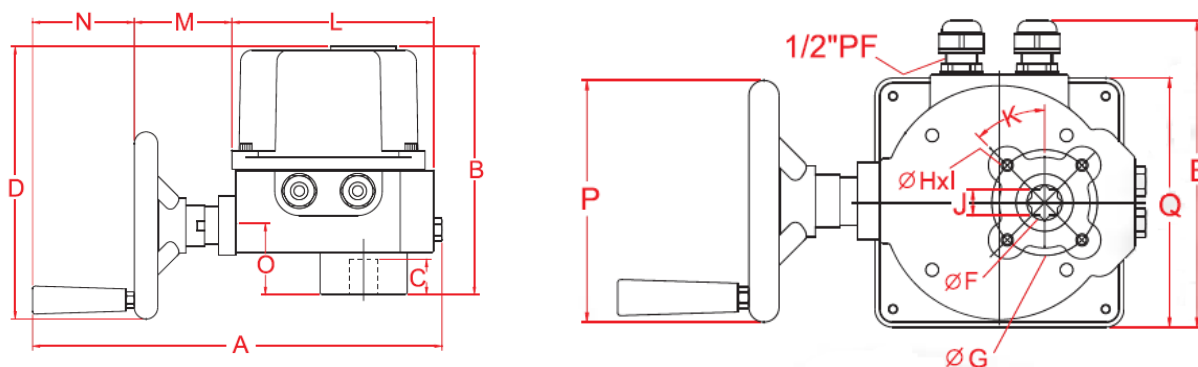
ELECTRIC ACTUATOR UV

CONSTRUCTION

| | | | |
|-----------|-----------------|--------------------|---------------|
| Enclosure | Aluminium alloy | Cams | Treated steel |
| Cover | PA66 plastic | Drive nut | Steel |
| Worm gear | Treated steel | Position indicator | Plexiglas® |
| Handwheel | Steel | | |




DIMENSIONS (mm)



| Dimension | A | B | C | D | E | G | J | L | M | N | O | P | Q |
|-----------|-----|------|----|-----|-----|-----|----|-----|----|----|----|-----|-----|
| UVC15 | 350 | 215 | 30 | 236 | 203 | 70 | 17 | 173 | 84 | 87 | 59 | 160 | 165 |
| UVD25 | 350 | 240* | 30 | 235 | 203 | 102 | 22 | 173 | 84 | 87 | 85 | 160 | 165 |
| UVF50 | 350 | 272 | 34 | 260 | 203 | 125 | 27 | 173 | 84 | 87 | 92 | 200 | 165 |
| UVG60 | 350 | 272 | 34 | 260 | 203 | 125 | 27 | 173 | 84 | 87 | 92 | 200 | 165 |

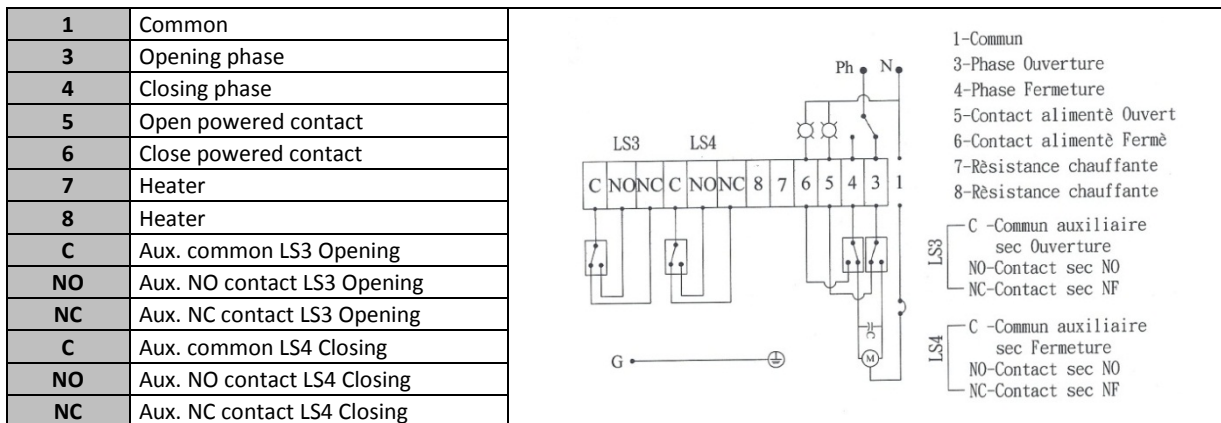
* This dimension is 266 mm for the 24 V AC/DC version.

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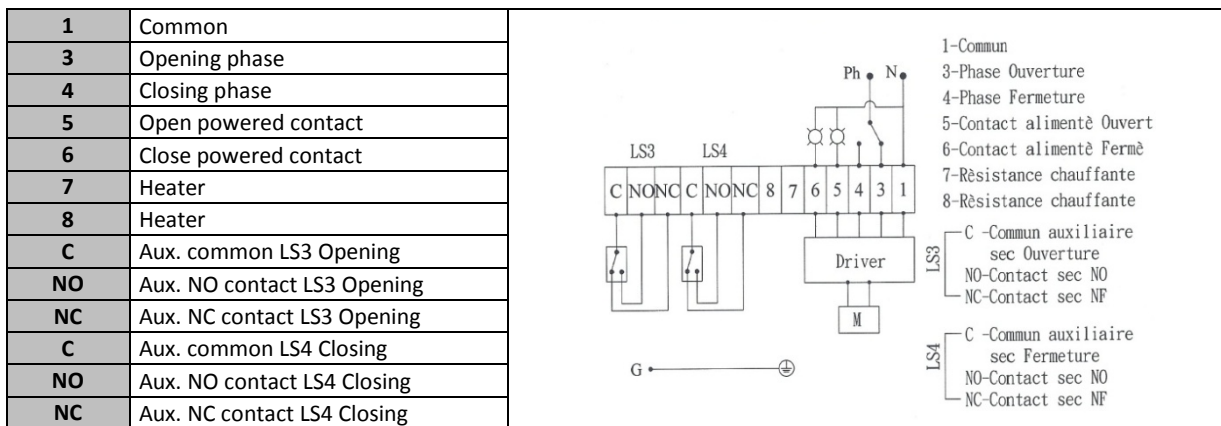
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ELECTRIC ACTUATOR UV

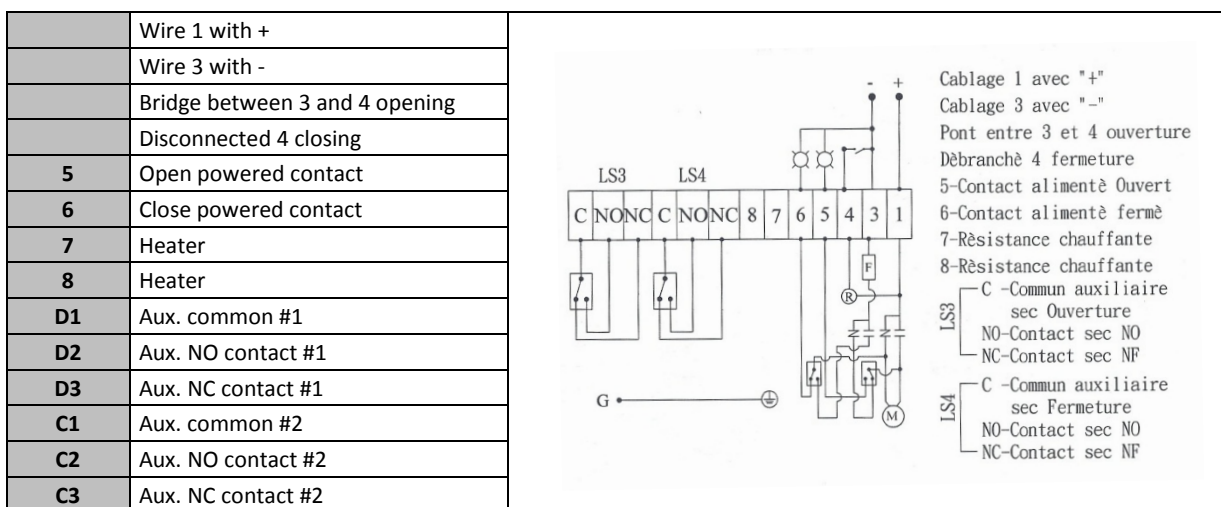
WIRING SCHEME 230 V AC




WIRING SCHEME 24 V AC



WIRING SCHEME 24 V DC



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