



1150-1158 BUTTERFLY VALVES + NA ELECTRIC ACTUATOR

Model/Ref: 260308023120



*Partnership.
Without Limits.*

www.lauridsenindustri.dk

1150-1158 BUTTERFLY VALVES + NA ELECTRIC ACTUATOR

CHARACTERISTICS

The butterfly valves 1150 to 1158 are dedicated to the automatic opening/shut-off of various fluid pipes. It has a ductile iron body. Thanks to various material possibilities for both the butterfly and the sleeve, it can be used in different applications. The wafer type body enables the mounting between PN10/16 or ANSI 150 flanges. The ISO 5211 pad enables the direct mounting of the NA electric actuator. It is perfectly adapted for an indoor or outdoor industrial use.



AVAILABLE ITEMS

DN 100 to DN 350

Flanged connections RF PN10/16 and ANSI 150

Voltage: 24 V AC/DC and 230 V AC

| Ref. | Butterfly | Sleeve | Application examples | Min. TS | Max. TS |
|-------|--------------------------|---------------------|---|---------|---------|
| 1141 | Ductile iron | NBR | Natural gas –NF-ROB GAZ 5 bar Certification | -10 °C | +60 °C |
| 1147 | Stainless steel 316 | Carboxylated NBR. | Powdery – abrasive material | -10 °C | +80 °C |
| 1150 | Ductile iron | EPDM | Cold water – warm water (max 110 °C) - ACS | -10 °C | +90 °C |
| 1151 | Stainless steel 316 | NBR | Hydrocarbons, natural gas, compressed air | -10 °C | +80 °C |
| 1152 | Ductile iron | NBR | Hydrocarbons, natural gas, compressed air | -10 °C | +80 °C |
| 1153 | Stainless steel 316 | EPDM | Demineralised water – Alkaline materials (max 110 °C) - ACS | -10 °C | +90 °C |
| 1154 | Stainless steel 316 | FKM | Compatible aggressive fluids, oil | -5 °C | +150 °C |
| 1156 | Stainless steel 316 | White NBR | Compatible aggressive fluids | -10 °C | +80 °C |
| 1157 | Stainless steel 316 | SILICONE | Oils and greases | -15 °C | +150 °C |
| 1157A | Polished Stainless steel | Food grade silicone | Food fluids (FDA certification) | -15 °C | +150 °C |
| 1158 | Aluminium bronze | NBR | Sea water | -10 °C | +80 °C |

LIMITS OF USE

| | |
|--------------------------------------|--|
| Max. allowable pressure (PS) | 16 bar until DN 200 10 bar until DN 400 |
| Min./max. allowable temperature (TS) | According to the upper chart |
| Room temperature | -15 °C / +70 °C |
| Service | S2 - 70% |

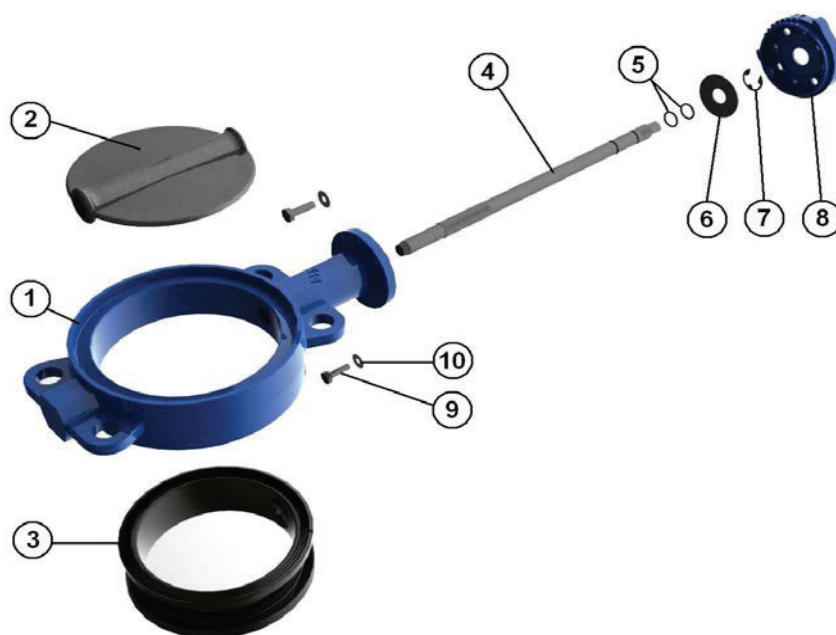


Technical data given for information purpose only. May be subject to alteration without prior notice

1150-1158 BUTTERFLY VALVES + NA ELECTRIC ACTUATOR

DIRECTIVES AND DEVELOPMENT STANDARDS APPLICABLE

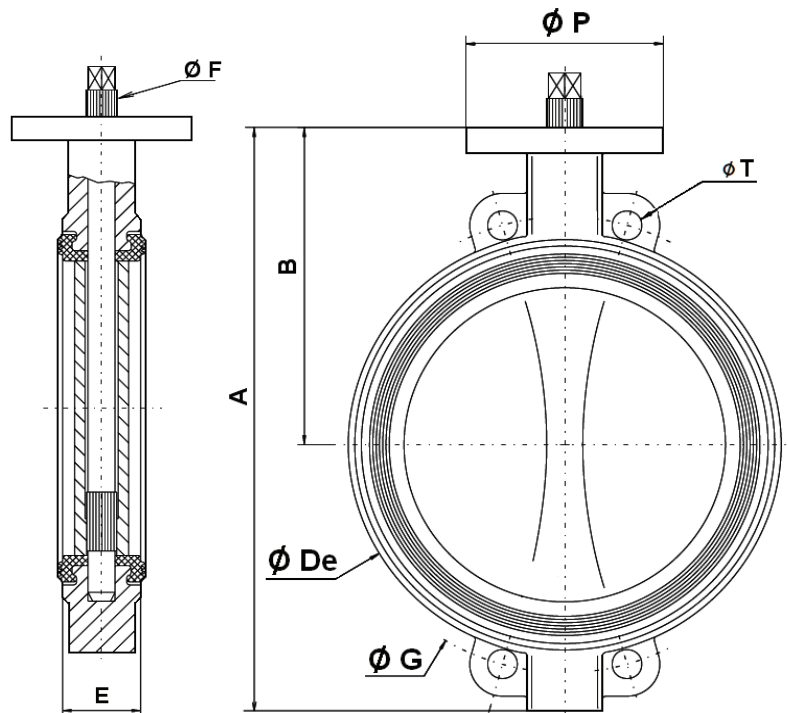
| | Standard | Notified bodies | | Standard |
|---------------------------------------|--------------------------------|-----------------|------------------------|----------------------|
| 97/23/EC Pressure Equipment Directive | Cat. III modules B+C1 | 0409 | Valve testing | ISO 5208 |
| ATEX Directive | II 2G/D Tx zones 1,2,21 and 22 | 0038 | Face-to-face dimension | ISO 5752 series 20 |
| Flanges dimension | EN 1092-1 | | Sanitary compliance | ACS N° 07 ACC LY 504 |
| Actuator attachment | ISO 5211 | | | |



CONSTRUCTION

| # | Item | 1147 | 1150 | 1151 | 1152 | 1153 | 1154 | 1156 | 1157 | 1158 |
|----|---------------------------|-----------------------------------|------------------------------|--------|--------|-----------------------------------|--------|-----------|----------|------------------|
| 1 | Body | Ductile iron GS EN GJS-500-7 | | | | | | | | |
| 2 | Butterfly DN32-100 | Stainless steel A351 CF8M /1.4408 | | | | | | | | |
| 3 | Butterfly DN125-400 | Stainless steel | Ductile iron GS EN GJS-500-7 | | | Stainless steel A351 CF8M /1.4408 | | | | Aluminium bronze |
| 3 | Sleeve | NBR C. | EPDM | NBR | NBR | EPDM | FKM | White NBR | Silicone | NBR |
| 4 | Stem | SS 304 | SS 420 | SS 304 | SS 420 | SS 304 | SS 304 | SS 304 | SS 304 | SS 304 |
| 5 | O-ring | NBR | EPDM | NBR | NBR | EPDM | FKM | NBR | EPDM | NBR |
| 6 | Ring | Steel | | | | | | | | |
| 7 | Securing rings / Circlips | Steel | | | | | | | | |
| 8 | ISO pad | Aluminium | | | | | | | | |
| 9 | Screw | Steel 5.6 | | | | | | | | |
| 10 | Washer | Steel | | | | | | | | |

Technical data given for information purpose only. May be subject to alteration without prior notice

1150-1158 BUTTERFLY VALVES + NA ELECTRIC ACTUATOR
DIMENSIONS (mm)


| DN | 32-40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 |
|-------------|-------|------|------|------|------|------|------|------|------|------|------|------|
| A | 206 | 228 | 243 | 266 | 294 | 324 | 349 | 438 | 461 | 523 | 582 | 645 |
| B | 140 | 156 | 162 | 170 | 185 | 207 | 216 | 256 | 248 | 280 | 300 | 340 |
| Ø De | 82 | 102 | 119 | 135 | 155 | 185 | 208 | 270 | 328 | 381 | 437 | 486 |
| E | 33 | 43 | 46 | 46 | 52 | 56 | 56 | 60 | 68 | 78 | 78 | 102 |
| Ø F | 10.5 | 10.5 | 14.5 | 16.5 | 16.5 | 18.5 | 18.5 | 22.5 | 25.5 | 30.5 | 30.5 | 35.5 |
| Ø G | 110 | 125 | 145 | 160 | 180 | 210 | 240 | 295 | 350 | 400 | 460 | 515 |
| Ø P | 88 | 88 | 88 | 88 | 88 | 105 | 105 | 105 | 150 | 150 | 170 | 170 |
| Ø T | 18 | 18 | 18 | 18 | 18 | 18 | 23 | 23 | 23 | 23 | 23 | 17 |
| Weight (kg) | 2.46 | 3.66 | 4.40 | 4.60 | 6 | 7.60 | 9.20 | 14.7 | 24.7 | 33 | 39 | 52 |

FLOW FACTOR Kv (m³/h)

| DN | 32-40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 |
|----|-------|-----|-----|-----|-----|-----|------|------|------|------|------|-------|
| Kv | 70 | 109 | 200 | 334 | 551 | 901 | 1427 | 2383 | 3825 | 5659 | 8177 | 10659 |

Technical data given for information purpose only. May be subject to alteration without prior notice

1150-1158 BUTTERFLY VALVES + 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 ($=\Delta P$)

The actuator is mounted:






- Directly with an aluminium actuation pad for DN 100 to 200
- With stainless steel bracket and coupler according to the EN 15081 standard for DN 250 and 300

| DN | Actuator | Power | Operating Time* | Standard equipment of the actuator |
|----------|-----------------------------|-------|-----------------|---|
| 32 to 80 | Refer to 1150 + SA actuator | | | |
| 100 | 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 NA150) Electrical connection: 2 gland packs M20 x 1.5 Manual override by declutchable handwheel |
| 125 | NA09 | 25 W | 17 s | |
| 150 | NA15 | 40 W | 20 s | |
| 200 | NA15 | 40 W | 20 s | |
| 250 | NA28 | 40 W | 20 s | |
| 300 | NA38 | 60 W | 24 s | |
| 350 | NA60 | 90 W | 29 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 ($=\Delta P$) | | | |
| 7 | NA electric actuator with a declutchable manual override by handwheel | | | |

VALVE OPTIONS

| | |
|---|---|
| 1 | Carbon steel body, stainless steel 304 and 316, bronze and aluminium |
| 2 | Carbon steel butterfly, stainless steel 304 and 316, bronze aluminium, uranium, hastelloy |
| 3 | Hypalon seats, steam silicone, white EPDM, natural rubber, vulcanized neoprene |
| 4 | Stainless steel 420, 304, 316 stems, hastelloy |

ATEX ZONES INSTALLATION

It is compulsory to specify if the installation of the automatic valve 1150+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 |
|-----------------------------------|-------------|--------------------------------------|-------------|

Technical data given for information purpose only. May be subject to alteration without prior notice