### INSTALLATIONS AND OPERATING MANUAL



Series NKS-I, NKSP-I,

NKL-I, NKLP-I,

NKU-I, NKUP-I

# Shut-off and Control Butterfly Valve

U-style body: Series NKU-I/F

Wafer-style body: Series NKS-I/F

Lug-style body: Series NKL-I/F



#### Keep for future use!

This operating manual must be strictly observed before transport, installation, operation and maintenance

Subject to change without notice.

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9520-023-en Revision 00 Edition 03/2023



#### Installation



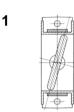
#### Introduction:

To guarantee the benefits of the RICHTER butterfly valves Quarter turn valve, proper procedures and compliance with the installation instruction are essential. The installation has to be carried out according to the state of the art and only by qualified personnel. RICHTER reserves the right to decline responsibility for damage or premature failure if the recommendations contained in this instruction are not being followed. Please consult the RICHTER datasheet «Flanges» concerning the allowed flange dimensions. Consult the corresponding valve datasheet concerning the installation of a valve at the end of the line. Dimension, material and application range of the butterfly Quarter turn valve are according to the technical documentation of the Quarter turn valve. If using the valve in explosive atmospheres, please consider the technical documentation "RICHTER butterfly valves for use in potentially explosive atmospheres".



#### Storage:

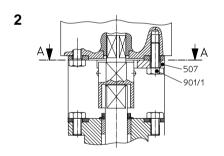
RICHTER butterfly valves Quarter turn valve should always be stored in the original package - never expose them to dust. For single-acting actuators a locking plate has been fitted into the bracket, blocking the stem at a disc opening of 10 – 15°. The valve is supplied with the disc in a slightly open position and should remain so until the installation is completed. (Fig. 1) Butterfly valves supplied with a single acting spring closing pneumatic actuator should be stored with disassembled actuator, this to avoid a lasting deformation of the liner. The actuator should be mounted only after the installation of the valve in the piping.

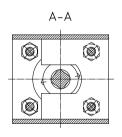




#### Precautions to be taken prior to installation:

Remove the locking plate 507 before the first test actuation, screw in again hex. screw 901/1. Slightly actuate the actuator. (FIG. 2) Please make sure that the valve intended for installation is suitable for the service conditions prevailing. The responsibility about the used fluids (corrosion resistance, pressure, temperature, etc.) lies by the user of the plant. Call your supplier or RICHTER if you need any assistance.

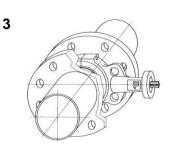






### Check before installation: Positioning:

For the installation of valves in horizontal pipelines, we recommend to install the valves with their shaft in a horizontal position. Please ensure that the lower edge of the disc opens with the direction of the flow. This prevents deposition of slurries and contamination in the shaft sealing area. (Fig. 3) Please consider that turbulences (i.e. created by piping bow) generate hydro dynamic forces increasing the operating torque of the valve. We recommend installing the valve minimum 5 x DN after pipe fittings.





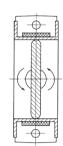


#### Gaskets:

There is no need to use gaskets between the flanges and the valve.

However, where the valve has to be mounted between flanges which are uneven or slightly distorted, PTFE-envelope gaskets should be fitted. (Fig. 4)



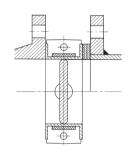




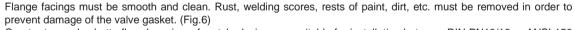
#### **Actuator-Torque:**

The PTFE liner, during extended period of storage, has the tendency to deform along the contact line with the valve disc. This will result in an increase of the working torque of the valve. By rotating the disc 360° for several times, after the valve is installed, the liner will regain its original shape and the torque returns to its initial rating. (Fig. 5)

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#### Installation:



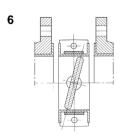


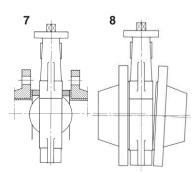
Quarter turn valve butterfly valves, in wafer style design, are suitable for installation between DIN PN10/16 or ANSI 150 flanges. Please consult the RICHTER datasheet « Flanges » concerning the allowed flange dimensions. For the installation of valve between flanges of other standards consult RICHTER or its authorised distributors.

The valve should not be mounted in pipes, where the actual bore diameter is less than the nominal bore dimension of the valve. In that case, spacer rings should be fitted between flanges and valve to prevent damage to the disc on opening. (Fig.7)

The valve should never be installed between flanges which are not parallel to each other. Make sure that pipes and valves are installed concentric. The disc of a misaligned valve may be damaged. (Fig.8). Furthermore, it is absolutely inadmissible to carry out any welding on the piping while the valve is between the flanges. This would destroy the liner of the valve.









#### Flange inside diameter:

The RICHTER butterfly valve has to be mounted between flanges without gasket. It has bidirectional tightness. Consult the corresponding valve datasheet concerning the installation of a valve at the end of the line. It is centered by stay-bolts or by screws. The diameter of the flange should be in accordance with the stated values Dopt, Dmin, Dmax.



D<sub>min</sub> Minimum diameter of the flange enabling to move the disc (in case of a perfectly centered valve)

Dopt Diameter of the flange for optimal mounting.

| DN   | 32/40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | 700 | 750 | 800 | 900 |
|------|-------|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Dmin | 31    | 50 | 47 | 74 | 94  | 120 | 148 | 199 | 249 | 298 | 338 | 395 | 444 | 492 | 588 | 692 | 734 | 789 | 885 |
| Dopt | 40    | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 339 | 400 | 450 | 500 | 600 | 703 | 750 | 803 | 900 |

When mounting the valve at the end of a line please contact technical department

#### Flange bolting tightening torques:

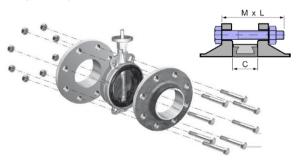
PTFE has the tendency to cold-flow. Therefore, it is very important to observe the tightening torques of the flange bolting according to the table below.

| DN   |                        | PN   | l10     | PN   | 116     | ANSI | UNC     | ANSI metr. |         |  |
|------|------------------------|------|---------|------|---------|------|---------|------------|---------|--|
| [mm] | [inch]                 | [Nm] | [lb-in] | [Nm] | [lb-in] | [Nm] | [lb-in] | [Nm]       | [lb-in] |  |
| 32   | 1 1/4"                 | 40   | 357     | 40   | 357     | 33   | 288     | 31         | 271     |  |
| 40   | 1 1/2"                 | 40   | 357     | 40   | 357     | 33   | 288     | 31         | 271     |  |
| 50   | <b>50 2"</b> 52 460 52 |      | 52      | 460  | 52      | 462  | 52      | 460        |         |  |
| 65   | 2 1/2"                 | 52   | 460     | 52   | 460     | 52   | 462     | 52         | 460     |  |
| 80   | 3"                     | 32   | 285     | 32   | 285     | 65   | 573     | 64         | 571     |  |
| 100  | 4"                     | 45   | 396     | 45   | 396     | 45   | 398     | 45         | 396     |  |
| 125  | 5"                     | 55   | 483     | 55   | 483     | 65   | 578     | 68         | 603     |  |
| 150  | 6"                     | 90   | 794     | 90   | 794     | 86   | 760     | 90         | 794     |  |
| 200  | 8"                     | 112  | 993     | 75   | 662     | 107  | 950     | 112        | 993     |  |
| 250  | 10"                    | 116  | 1028    | 139  | 1234    | 129  | 1144    | 127        | 1124    |  |
| 300  | 12"                    | 137  | 1209    | 164  | 1451    | 152  | 1345    | 149        | 1321    |  |

|      | N     | PI   | N10     | PI   | N16     | ANS  | UNC      | ANSI metr. |         |  |
|------|-------|------|---------|------|---------|------|----------|------------|---------|--|
| [mm  | [inch | [Nm] | [lb-in] | [Nm] | [lb-in] | [Nm] | [lb-in]  | [Nm]       | [lb-in] |  |
| 350  | 14"   | 142  | 1255    | 170  | 1506    | 240  | 2126     | 227        | 2009    |  |
| 400  | 16"   | 160  | 1414    | 178  | 1578    | 169  | 1496     | 160        | 1414    |  |
| 450  | 18"   | 183  | 1620    | 204  | 1808    | 273  | 2413     | 255        | 2259    |  |
| 500  | 20"   | 188  | 1664    | 234  | 2070    | 224  | 1983     | 210        | 1857    |  |
| 600  | 24"   | 249  | 2200    | 303  | 2681    | 293  | 2592     | 277        | 2453    |  |
| 700  | 28"   | 275  | 2436    | 335  | 2968    | 278  | 2460     | 263        | 2327    |  |
| 750  | 30"   | -    | -       | -    | -       | 355  | 3141     | 336        | 2972    |  |
| 800  | 32"   | 386  | 3415    | 462  | 4085    | 419  | 419 3706 |            | 3502    |  |
| 900  | 36"   | 453  | 4011    | 542  | 4797    | 502  | 4442     | 474        | 4198    |  |
| 1000 |       |      |         |      |         |      |          |            |         |  |
| 1200 |       |      |         |      |         |      |          |            |         |  |

#### **Bolting:**

Wafer + U-section body DN 32 - 400 A Bolt with nut



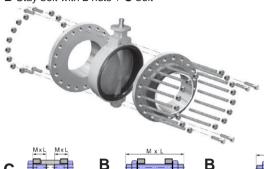
|    |   |     |    | PN 6    | PN 10 |         | PN 16 |         |    | ANSI 150             |
|----|---|-----|----|---------|-------|---------|-------|---------|----|----------------------|
|    |   |     |    | Α       |       | Α       |       | Α       |    | Α                    |
| DN | ٧ | С   | n  | MxL     | n     | MxL     | n     | MxL     | n  | UNC x L [Inch]       |
| 32 | 2 | 30  | 4  | M12x80  | 4     | M16x100 | 4     | M16x100 | 4  | UNC 1/2"-13 x 3 1/4" |
| 40 | ) | 33  | 4  | M12x90  | 4     | M16x100 | 4     | M16x100 | 4  | UNC 1/2"-13 x 3 1/2" |
| 50 | ) | 43  | 4  | M12x100 | 4     | M16x110 | 4     | M16x110 | 4  | UNC 5/8"-11 x 4"     |
| 65 | 5 | 46  | 4  | M12x100 | 4     | M16x110 | 4(8)  | M16x110 | 4  | UNC %"-11 x 4 1/2"   |
| 80 | ) | 46  | 4  | M16x110 | 8     | M16x120 | 8     | M16x120 | 4  | UNC %"-11 x 4 1/2"   |
| 10 | 0 | 52  | 4  | M16x120 | 8     | M16x120 | 8     | M16x120 | 8  | UNC %"-11 x 5"       |
| 12 | 5 | 56  | 8  | M16x120 | 8     | M16x130 | 8     | M16x130 | 8  | UNC 3/4"-10 x 5"     |
| 15 | 0 | 56  | 8  | M16x120 | 8     | M20x140 | 8     | M20x140 | 8  | UNC 3/4"-10 x 5 1/4" |
| 20 | 0 | 60  | 8  | M16x130 | 8     | M20x150 | 12    | M20x150 | 8  | UNC ¾"-10 x 5 ½"     |
| 25 | 0 | 68  | 12 | M16x140 | 12    | M20x160 | 12    | M24x170 | 12 | UNC %"-9 x 6 1/4"    |
| 30 | 0 | 78  | 12 | M20x160 | 12    | M20x170 | 12    | M24x180 | 12 | UNC 1/8"-9 x 6 3/4"  |
| 35 | 0 | 78  | 12 | M20x160 | 16    | M20x170 | 16    | M24x190 | 12 | UNC 1"-8 x 7 1/4"    |
| 40 | 0 | 102 | 16 | M20x190 | 16    | M24x200 | 16    | M27x220 | 16 | UNC 1"-8 x 8 1/4"    |

#### **QUARTER TURN VALVE - Installation and Maintenance**



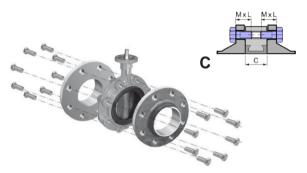
#### Wafer + U-section body DN 450 - 900

**B** Stay bolt with 2 nuts + **C** bolt



|     |     | PN 10 |         |   |        |    | PN 16   |   |         |    | ANSI 150               |   |                       |  |  |
|-----|-----|-------|---------|---|--------|----|---------|---|---------|----|------------------------|---|-----------------------|--|--|
|     |     | В     |         | C |        | В  |         | С |         | В  |                        |   | С                     |  |  |
| DN  | С   | n     | MxL     | n | MxL    | n  | MxL     | n | MxL     | n  | UNC x L [Inch]         | n | UNC x L [Inch]        |  |  |
| 400 | 102 | 16    | M24x200 | - | -      | 16 | M27x220 | - |         | 16 | UNC 1"-8 x 8 1/4       |   |                       |  |  |
| 450 | 113 | 16    | M24x240 | 8 | M24x60 | 16 | M27x280 | 8 | M27x80  | 12 | UNC 1 1/8"-7 x 9"      | 8 | UNC 1 1/8"-7 x 3 1/2" |  |  |
| 500 | 126 | 16    | M24x250 | 8 | M24x60 | 16 | M30x310 | 8 | M30x90  | 16 | UNC 1 1/8"-7 x 10"     | 8 | UNC 1 1/8"-7 x 4"     |  |  |
| 600 | 153 | 16    | M27x290 | 8 | M27x70 | 16 | M33x360 | 8 | M33x100 | 16 | UNC114"-7x111/2"       | 8 | UNC 1 1/4"-7 x 4 1/2" |  |  |
| 700 | 165 | 20    | M27x310 | 8 | M27x70 | 20 | M33x340 | 8 | M33x90  | 24 | UNC 1 1/4"-7 x 12"     | 8 | UNC 1 1/4"-7 x 5"     |  |  |
| 800 | 190 | 20    | M30x340 | 8 | M30x80 | 20 | M36x370 | 8 | M36x90  | 24 | UNC 1 1/2"-6 x 16 1/2" | 8 | UNC 1 ½"-6 x 7"       |  |  |
| 900 | 203 | 24    | M30x360 | 8 | M30x80 | 24 | M36x390 | 8 | M36x90  | 28 | UNC 1 ½"-6 x 17"       | 8 | UNC 11/2"-6 x 71/2"   |  |  |

LUG type DN 32 - 400 C Bolt



|     |     |    | PN 10  |    | PN 16  | ANSI 150 |                     |  |
|-----|-----|----|--------|----|--------|----------|---------------------|--|
| DN  | С   | n  | MxL    | n  | MxL    | n        | UNC x L [Inch]      |  |
| 32  | 30  | 8  | M16X30 | 8  | M16X30 | 8        | UNC ½"-13 x 1"      |  |
| 40  | 33  | 8  | M16X30 | 8  | M16X30 | 8        | UNC ½"-13 x 1 ¼"    |  |
| 50  | 43  | 8  | M16x30 | 8  | M16x30 | 8        | UNC %"-11 x 1 ½"    |  |
| 65  | 46  | 8  | M16x40 | 8  | M16x40 | 8        | UNC %"-11 x 1 ½"    |  |
| 80  | 46  | 16 | M16x40 | 16 | M16x40 | 8        | UNC %"-11 x 1 3/4"  |  |
| 100 | 52  | 16 | M16x40 | 16 | M16x40 | 16       | UNC %"-11 x 2"      |  |
| 125 | 56  | 16 | M16x50 | 16 | M16x50 | 16       | UNC 3/4"-10 x 2"    |  |
| 150 | 56  | 16 | M20x50 | 16 | M20x50 | 16       | UNC 3/4"-10 x 2"    |  |
| 200 | 60  | 16 | M20x50 | 24 | M20x50 | 16       | UNC 3/4"-10 x 2"    |  |
| 250 | 68  | 24 | M20x60 | 24 | M24x60 | 24       | UNC 1/8"-9 x 2 1/2" |  |
| 300 | 78  | 24 | M20x60 | 24 | M24x60 | 24       | UNC 1/8"-9 x 2 1/2" |  |
| 350 | 78  | 32 | M20x60 | 32 | M24x60 | 24       | UNC 1"-8 x 2 3/4"   |  |
| 400 | 102 | 32 | M24x70 | 32 | M27x80 | 32       | UNC 1"-8 x 3 1/4"   |  |

n = number of bolts for one valve

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#### **Function test:**

Prior starting to use the installation, we recommend to make a function test. Therefore, the valve must be opened and closed at least once in order to check that the disc doesn't touch the flanges and that the valve is tight through the passage and toward outside.

If a pressure test of the complete piping system is being carried out, it is very important that the testing pressure is not higher than the nominal pressure of the valve. An overpressure could destroy the valve.



#### Cleansing of the piping:

When cleansing the piping system, it is very important to assure that the cleaning products and devices are harmless for the valve. Not convenient products and devices might destroy the valve.



#### Removal:

Before removing the valve from the pipe consider that dangerous fluids might leak. Corresponding measures of precaution have to be applied.

When removing the valve from the pipe please take care not to damage the disc and the liner of the valve.



Please notice that some residues could remain in the inner of the valve and that they might be dangerous for people or the environment. Therefore, the butterfly valve has to be handled with the corresponding caution. After its use, the butterfly valve has to be disposed of according to the state of the art and under consideration of the environment.

#### **Maintenance**

#### Introduction:



parts.

Please notice that fluid residues inside the butterfly could be dangerous for humans and the environment. The butterfly valve must be handled accordingly and be cleaned carefully prior to the maintenance.

Maintenance is made at the own risk of the user. Maintenance on a QUARTER TURN VALVE must be executed by trained staff only. Only original spare parts are to be used.

The Teflon parts of the QUARTER TURN VALVE are very fragile and only a small scratch causes already a leaking. Thus, these parts have to be handled very carefully.

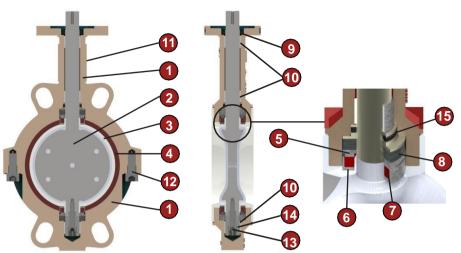
The frequency of replacement of the wear parts, is highly dependent on the fluid, cycles, operating conditions, etc. The user should include in its maintenance program a chapter for inspecting the valves to check the wear parts and change them if necessary. In the next paragraph the

spare parts are identified. Please contact RICHTER to obtain the specific codes and additional information for the recommended spare

9520-023-en Revision 00 TM 10521 Ausgabe 03/2023



#### 1. Parts of a QUARTER TURN VALVE



| Pai | rts list                            |
|-----|-------------------------------------|
| 1   | 2-piece body                        |
| 2   | Disc (PFA-coated/1.4435; AISI 316L) |
| 3   | Liner (PTFE)                        |
| 4   | Backliner (2 pieces)                |
| 5   | Thrust collar (2 pieces)            |
| 6   | Pressure capsule (2 pieces)         |
| 7   | Seal (2 pieces)                     |
| 8   | Spring washer (8 pieces)            |
| 9   | V-Ring                              |
| 10  | Bushing (3 pieces)                  |
| 11  | Label / Tag                         |
| 12  | Bolts of body (2 pieces)            |
| 13  | Extension screw                     |
| 10  | only for sizes DN50-100             |
| 14  | Extension                           |
|     | only for sizes DN50-100             |
| 15  | TA-Luft seal (optional)             |

#### 2 Disassembly

#### 2.1 Disassembly of the body halves:



**Important**: Before the body is disassembled, mark the body halves. It is important to reassemble the body halves in their original configuration.

Unscrew both body bolts (12) alternately (body halves are spring loaded) and remove them. Pay attention not to lose spring washers or seals. Remove Liner and disc unit. Afterwards remove O-ring and backliners.

#### 3. Reassembly

You may reassemble the valve in reverse order of disassembly. You should clean all parts before reassembling. It is necessary to replace all seals. Please use the pre-mounted spare part kit including disc/shaft/liner and all seals and springs.

#### 3.1 Reassembly of the liner and disc into the body:

Please stand the top body half on the top flange upside down on a surface or piece of wood with a hole for the shaft. Glue only the end of the backliners onto the body. This will hold the backliner In place during reassembly. Put the 4 spring washers and the thrust collar into the shaft bore of the top body half and following also the thrust collar. Put the pressure capsule and the seal over the long end of the shaft and make sure that the pressure capsule fits right on the liner. Then put the disc/shaft into the top body half. The position of the backliner has to be controlled before the installation of the bottom body half.

#### 3.2 Assembling of the 2 body halves:

Now you can mount the bottom body half. Note the marks on the body halves. Screw the body bolts alternately in, but keep 3mm between the body halves. From time to time, move the disc 2-3 times. This will insure proper alignment. Afterwards you can compress the body halves. The disc has to be closed during this process. Finally, insert the V-ring on the shaft on the actuator mounting flange.



Before using the valve in a piping system, if it is required to make a tightness test (e.g. EN 12266-1) or similar as well as a function test. Afterwards, put the disc in a slightly open position, so that the disc edge doesn't surpass the flange surface. This position must be kept until the valve is being installed.





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Händler Richter Chemie-Technik GmbH

Otto-Schott-Straße 2 Distributor 47906 Kempen

Germany

Wir erklären, dass die nachfolgend aufgeführten Armaturen die Sicherheitsanforderungen der Druckgeräterichtlinie 2014/68/EU erfüllen. We declare that the valves listed below comply with the requirements of the Pressure Equipment Directive 2014/68/EU.

Beschreibung der Armaturen PTFE-Absperrklappe Description of the valves PTFE Lined Butterfly Valve

**Bauart:** Absperr- und Regelklappe

Design: Shut-off and control butterfly valve

Baureihe / Series: Nennweite / Size:

DN 32 - 150 & 11/4" - 6" PN 16 - ANSI class 150 - p max. 16 bar NKS-I, NKL-I, NKSP-I, NKLP-I NKS-I, NKL-I, NKSP-I, NKLP-I DN 200 - 300 & 8" - 12" PN 10 - ANSI class 150 - p max. 10 bar NKS-I, NKSP-I DN 350 - 600 & 14" - 24" PN 10 - ANSI class 150 - p max. 6 bar NKL-I, NKLP-I DN 350 - 400 & 14" - 16" PN 10 - ANSI class 150 - p max. 6 bar DN 450 - 700 & 18" - 28" PN 10 - ANSI class 150 - p max. 6 bar NKU-I, NKUP-I NKU-I, NKUP-I DN 750 & 30" PN 10 - ANSI class 150 - p max. 2,5 bar NKU-I, NKUP-I DN 800 - 900 & 32" - 36" PN 10 - ANSI class 150 - p max. 6 bar DN 200 - 300 & 8" - 12" PN 16 - ANSI class 150 - p max. 16 bar NKS-I, NKL-I, NKSP-I, NKLP-I

- with disc in Super Duplex 1.4469

DN 350 - 600 & 14" - 24" PN 10 - ANSI class 150 - p max. 10 bar NKS-I, NKSP-I

- with disc in 1.4462, 1.4542 or core 1.0577 and shaft 1.4542

DN 350 - 400 & 14" - 16" PN 10 - ANSI class 150 - p max. 10 bar NKL-I, NKLP-I

- with disc in 1.4462, 1.4542 or core 1.0577 and shaft 1.4542

Einstufung der Armaturen Classification of the valves Fluid Group 1, incl. unstable gases

Konformitätsbewertungsverfahren Conformity Assessment Procedure Module B + C2

Benannte Stelle für die Kontrolle Notified Body for the Inspection

Swiss Safety Center AG Kennnummer 1253 CH-8304 Wallisellen

EU-Baumusterprüfung Nr. EU Type Examination

PED-Z-COS.EP.5522923 (Module B) 27.08.2030

Konformität mit Bauart Nr. Conformity to type

PED-Z-COS.EP.5127195 (Module C2) 02.09.2025

EN 593; EN 1563; EN 12266-1; EN 12516; EN 10213

**Angewendete Normen** Technical Standards used

Eine auftragsbezogene Konformitätserklärung wird auf Wunsch ausgestellt. An order related conformity declaration will be issued on request.

Bevollmächtigter für den Hersteller Authorised Person for the Manufacturer

Datum: 12.01.2023 Name: Olivier Notz, PM Unterschrift:

Name Signature: Date:

Erstellt/Compiled: MCP/Ma am/on: 01.02.2023 Seite/Page : QM-Nr./QM-No.: F722081-00

Genehmigt/Approved: CRE/GK

am/on: 01.02.2023 von/of:





Hersteller InterApp Technics AG

Manufacturer Grundstrasse 24

6343 Rotkreuz Switzerland

Richter Chemie-Technik GmbH Händler

Otto-Schott-Straße 2 Distributor

47906 Kempen Germany

Wir erklären, dass die nachfolgend aufgeführten Armaturen die Sicherheitsanforderungen der Druckgeräterichtlinie 2014/68/EU erfüllen. We declare that the valves listed below comply with the requirements of the Pressure Equipment Directive 2014/68/EU.

Beschreibung der Armaturen: PTFE-Absperrklappe Description of the valves: PTFE Lined Butterfly Valve

**Bauart:** Absperr- und Regelklappe

Design: Shut-off and control butterfly valve

Baureihen: NKS-I, NKSP-I, NKL-I, NKLP-I, NKU-I, NKUP-I

Series:

Richtlinie: FDA Regulation 21 CFR §177.15 50

Directive: 2014/68/EU, EU Nr. 10/2011, EU Nr. 1935/2004, 84/500/EWG, 2005/31/EG

Mediumberührte Werkstoffe: **PFA** Materials of media-wetted parts: **PTFE** 

Mod. PTFE 1.4404 1.4408

Der Hersteller InterApp Technics AG bescheinigt hiermit, dass in medium berührten Teilen der o.a. Baureihen Materialien verwendet wurden, welche die Vorschriften der FDA Regulation 21 CFR §177.15 50, die Verordnungen 2014/68/EU, EU Nr. 84/500/EWG und 2005/31/EG erfüllen bzw. 10/2011, EU Nr. 1935/2004, dafür die allgemeinen Unbedenklichkeitsbescheinigungen des Herstellers/Lieferanten oder Prüflabors vorliegen. Entsprechende Einzelnachweise sind vorhanden.

The manufacturer, InterApp Technics AG, herewith certifies that in medium-wetted parts of the above-mentioned series materials were used which satisfy the provisions of the FDA Regulation 21 CFR §177.15 50 and Directives 2014/68/EU, EU no. 10/2011, EU Nr. 1935/2004, 84/500/EWG and 2005/31/EG or for which general compliance certificates of the manufacturer/supplier/test laboratory are available. Relevant individual proof can be provided.

Eine auftragsbezogene Konformitätserklärung wird auf Wunsch ausgestellt. An order related conformity declaration will be issued on request.

Bevollmächtigter für den Hersteller Authorised Person for the Manufacturer

Name: Olivier Notz, PM Unterschrift: Datum: 07.11.2023

Name Signature: Date:

Seite/Page: 1 Erstellt/Compiled: MCP/Ma am/on: 07.11.2023 QM-Nr./QM-No.: F720084-00 am/on: 07.11.2023 von/of:

Genehmigt/Approved: CRE/Mu



# Herstellererklärung ATEX Richtlinie 2014/34/EU Manufacturer's Declaration ATEX Directive 2014/34/EU

Hersteller InterApp Technics AG

**Manufacturer** Grundstrasse 24

6343 Rotkreuz Switzerland

Händler Richter Chemie-Technik GmbH

**Distributor** Otto-Schott-Straße 2

47906 Kempen Germany

Im Sinne der EU-Richtlinie 2014/34/EU vom 26. Februar 2014 und mit den zu ihrer Umsetzung erlassenen Rechtsvorschriften erklärt der Hersteller, dass das in der Betriebsanleitung und Sicherheitsanleitung beschriebene, explosionsgeschützte ausgeführte Produkt

#### Zentrische Absperrklappe

DN32-900, Gehäuseform U-style, wafer-style, U-style

kein Gerät im Sinne des Artikels 1 der Richtlinie 2014/34/EU ist.

Corresponding to EC directive 2014/34/EU dated 26 February 2014 and to the legal regulations the manufacturer declares, that the explosion proofed product described in the operating and safety instructions

#### Centric Butterfly Valve

· DN32-900, body type U-style, wafer-style, U-style

is no equipment according to article 1 of the directive 2014/34/EU.

Eine Zündgefahrenanalyse gemäß IEC 80079-36 wurde durchgeführt und bestätigt, dass die Absperrklappe selbst keine eigene Zündquelle hat. Die Armaturen können in explosionsgefährdete Bereiche eingesetzt werden. An ignition risk analysis acc. to IEC 80079-36 has been carried out and confirms that the butterfly valve itself has no own ignition source. The valves can be used in potentially explosive atmospheres.

In potentiell gefährlichen Umgebungen ist der Betreiber dazu verpflichtet, gefährliche Zündquellen auszumachen, eine Risikoanalyse der gesamten Anlage durchzuführen und die notwendigen vorbeugenden Massnahmen einzuleiten. Dazu ist gegebenenfalls der Einsatz von leitfähigen Ausführungen notwendig.

Elektrische und mechanische Antriebe, sowie Zubehör müssen gesonderten Konformitätsbewertungen nach ATEX unterzogen werden.

Der Betreiber ist aufgefordert sämtliche Sicherheitshinweise für Anwendungen in explosionsgefährdeten Umgebung zu betrachten.

Ergänzende Sicherheitshinweise enthält das Dokument «absperrklapen-fuer-explosiongefaehrdetenbereich- xxxx.pdf», das unter www.interapp.net à DOWNLOADS à Absperrklappen à «Absperrklappen für explosionsgefährdeten Bereich» heruntergeladen werden kann.

In potentially explosive areas, the user is obliged to identify dangerous ignition sources, perform a risk analysis of the entire system and initiate the necessary preventive measures. Therefore, the use of conductive versions might be necessary. **Electrical and mechanical actuators as well as accessories** are subject to a separate conformity analysis according to ATEX.

The user is responsible to consider all the safety instructions for applications in explosion hazardous areas. Additional safety instructions for the proper selection the InterApp valves materials and their use in explosion hazardous zones are listed in the document "butterfly-valves-for-potentially-explosiveatmospheres-xxxx.pdf ", which can be downloaded from www.interapp.net à DOWNLOADS à Butterfly Valves à "Valves for potentially explosive atmospheres".

Bevollmächtigter für den Hersteller Authorised Person for the Manufacturer

Name: Olivier Notz, PM Name

Unterschrift: Signature:

Datum: 21.06.2023

Date:

Erstellt/Compiled: MCP/Ma am/on: 01.02.2023 Seite/Page: 1 QM-Nr./QM-No.: F722080-00 Genehmigt/Approved: CRE/GK am/on: 01.02.2023 von/of: 1





Richter Chemie-Technik GmbH · Postfach 10 06 09 · D-47883 Kempen

08.01.2015

#### **Declaration of no objection**

Dear Sirs,

The compliance with laws for the industrial safety obligates all commercial enterprises to protect their employees and/or humans and environment against harmful effects while handling dangerous materials.

The laws are such as: the Health and Safety at Work Act (ArbStättV), the Ordinance on Harzadous Substances (GefStoffV, BIOSTOFFV), the procedures for the prevention of accidents as well as regulations to environmental protection, e.g. the Waste Management Law (AbfG) and the Water Resources Act (WHG)

An inspection/repair of Richter products and parts will only take place, if the attached explanation is filled out correctly and completely by authorized and qualified technical personnel and is available.

In principle, radioactively loaded devices sent in, are not accepted.

Despite careful draining and cleaning of the devices, safety precautions should be necessary however, the essential information must be given.

The enclosed declaration of no objection is part of the inspection/repair order. Even if this certificate is available, we reserve the right to reject the acceptance of this order for other reasons.

Best regards
RICHTER CHEMIE-TECHNIK GMBH



## Safety Information / Declaration of No Objection Concerning the Contamination of Richter-Pumps, -Valves and Components

#### 1 SCOPE AND PURPOSE

Each entrepreneur (operator) carries the responsibility for the health and safety of his employees. This extends also to the personnel, who implements repairs with the operator or with the contractor.

Enclosed declaration is for the information of the contractor concerning the possible contamination of the pumps, valves and component sent in for repair. On the basis of this information for the contractor is it possible to meet the necessary preventive action during the execution of the repair.

Note: The same regulations apply to repairs on-site.

#### 2 PREPARATION OF DISPATCH

Before the dispatch of the aggregates the operator must fill in the following declaration completely and attach it to the shipping documents. The shipping instructions indicated in the respective manual are to be considered, for example:

- Discharge of operational liquids
- remove filter inserts
- lock all openings hermetically
- proper packing
- Dispatch in suitable transport container
- Declaration of the contamination fixed outside!! on the packing

 Prepared:
 CRQ/Lam
 on:
 Nov. 13, 2006
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 Approved:
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 Nov. 13, 2006
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# Declaration about the Contamination of Richter Pumps, -Valves and Components



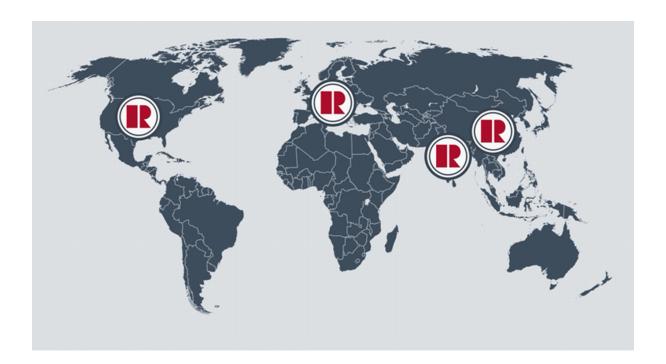
The repair and/or maintenance of pumps, valves and components can only be implemented if a completely filled out declaration is available. If this is not the case, delay of the work will occur. If this declaration is not attached to the devices, which have to be repaired, the transmission can be rejected.

#### Every aggregate has to have it's own declaration.

This declaration may be filled out and signed only by authorized technical personnel of the operator.

| Contractor/dep./institute :                                                | Reason for tr         | ansmitting & Please marl      | the applicable             |              |
|----------------------------------------------------------------------------|-----------------------|-------------------------------|----------------------------|--------------|
| Contractor/dep./matitute :                                                 | Repair:               | subject to fee                | • Warranty                 |              |
| Street:                                                                    | Austausch:            |                               | <ul><li>Warranty</li></ul> |              |
| Postcode, city:                                                            |                       | Replacement already ini       | •                          |              |
| Contact person :                                                           | Return:               | O Leasing O Loan              | • for credit no            | te           |
| Phone: Fax:                                                                | _                     |                               |                            |              |
| End user :                                                                 | <del>_</del>          |                               |                            |              |
| A. Details of Richter-product:                                             | Failure descrip       | tion:                         |                            |              |
| Classification:                                                            |                       |                               |                            |              |
| Article number:                                                            |                       |                               |                            |              |
| Serial number:                                                             |                       |                               |                            |              |
|                                                                            |                       |                               |                            |              |
| B. Condition of the Richter-                                               |                       |                               |                            |              |
| product: no <sup>1</sup>                                                   | yes no _              | Contamination :               | no¹)                       | yes          |
| Was it in operation?                                                       | 0 -                   | toxic                         |                            | 0            |
| Drained (product/operating supply item) ?                                  | 0 0                   | caustic                       | ŏ                          | Ö            |
| All openings hermetically locked!                                          | 0                     | inflammable                   |                            | 0            |
| Cleaned ?                                                                  | 0 0                   | explosive <sup>2)</sup>       |                            | 0            |
| If yes, with which cleaning agent:                                         |                       | mikrobiological <sup>2)</sup> |                            | 0            |
| and with which cleaning method:                                            |                       | radioactive <sup>3)</sup>     |                            |              |
| <sup>1)</sup> if "no", then forward to <b>D</b> .                          |                       | other pollutant               | •                          | 0            |
| <sup>2)</sup> Aggregates, which are contaminated with microbiological or e | explosive substances  | , are only accepted with do   | cumented                   | •            |
| evidence of an approved cleaning.                                          |                       |                               |                            |              |
| <sup>3)</sup> Aggregates, which are contaminated with radioactive substan  | ices, are not accepte | d in principle.               |                            |              |
| C. Details of the discharged materials (must be fill                       | lad out imporativ     | oly)                          |                            |              |
| With which materials did the aggregate come into                           |                       |                               | eignation of               |              |
| operational funds and discharged materials, material                       |                       |                               |                            |              |
| inflammable, caustic)                                                      | proportion, o.g. at   | por carety data effect        | (0.9. 10/110,              |              |
|                                                                            | l designation:        |                               |                            | <del></del>  |
| a)                                                                         | ii designation.       |                               |                            |              |
| b)                                                                         |                       |                               |                            | -            |
| c)                                                                         |                       |                               |                            |              |
| d)                                                                         |                       |                               |                            |              |
|                                                                            | no                    | VAS                           |                            |              |
| 2. Are the materials specified above harmful to health                     |                       | yes<br>•                      |                            |              |
| 3. Dangerous decomposition products during thermal                         |                       | ŏ 4                           |                            |              |
| If yes, which ones?                                                        |                       |                               |                            |              |
|                                                                            |                       |                               |                            |              |
| <b>D. Mandatory declaration:</b> We assure that the data in                | this explanation are  | truthful and complete an      | d as a signatory           | am able to   |
| form an opinion about this. We are aware that we a                         |                       |                               |                            |              |
| incomplete and incorrect data. We commit ourselves to                      |                       |                               |                            |              |
| incomplete or incorrect data. We are aware that we are                     |                       |                               |                            | ation, which |
| belongs in particularly to the employees of the contracto                  | r consigned with the  | e nandling repair of the pro  | oduct.                     |              |
|                                                                            |                       |                               |                            |              |
|                                                                            |                       |                               |                            |              |
|                                                                            |                       |                               |                            |              |
| Name of the authorized person                                              |                       |                               |                            |              |
| Name of the authorized person (in block letters):                          |                       |                               |                            |              |
|                                                                            |                       |                               |                            |              |
|                                                                            |                       |                               |                            |              |
| (in block letters):                                                        |                       |                               |                            |              |
| (in block letters):                                                        | nature                | Company st                    | amp                        |              |





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