

APV DA4

DOUBLE SEAT MIX PROOF VALVE

FORM NO.: H337927 REVISION: GB-3

READ AND UNDERSTAND THIS MANUAL PRIOR TO OPERATING OR SERVICING THIS PRODUCT.



A[®]
3

>APV[®]



**CE Declaration of Conformity
UKCA Declaration of Conformity**

We,

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Crawley, RH10 9PY

declare under our sole responsibility that the

APV double seal and double seat valves of the series
SD4, SDT4, SDU4, SDMS4, SDMSU4, SDTMS4, SWcip4, DSV, DA4, DA4 DPF, D4 SL, DU4
SL, DT4 SL, DP4 SL, D4, DA3, DA3SLD, DE3, DEU3, DET3, DKR2, DKRT2, DKRH2

APV butterfly valves of the series SV1, SVS1F, SV2, SVS2F, SVL, SVSL, SVE, SVSE

APV ball valves of the series BLV1

APV single seat, diaphragm and spring loaded valves of the series
S2, SW4, SWhp4, SW4DPF, SWmini4, SWT4, SWS4, MF4, MS4, MSP4, AP/T1, CPV, RG4,
RG4DPF, RGMS4, RGE4, RGE4DPF, RGEMS4, PR2, PRD2, SI2, UF/R3, UF/R4, VRA/H

and the valve manifolds installed thereof

meet the requirements of the Machinery Directive 2006/42/EC
& EN ISO 12100-2010, DIN EN ISO 14159-2008-07, DIN EN 1672-2-2009-07.

Holzwickede, November 2022

Dr.-Ing. Behdad Ariatabar, Design Center Lead - Valves

meet the requirements of the Supply of Machinery (Safety) Regulations 2008 No. 1597
& BS harmonized standards.

Crawley, November 2022

Ewout Roozendaal, Director Global Pricing

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1. General Terms

This instruction manual should be read carefully by the competent operating and maintenance personnel.

We point out that we will not accept any liability for damage or malfunctions resulting from the non-compliance with this instruction manual.

Descriptions and data given herein are subject to technical changes.

2. Safety

2.1 Symbols



Caution!

The technical safety symbol draws your attention to important directions for operating safety. You will find it wherever the activities described are bearing health hazards and risks for persons and / or material assets.



Important Note!

Critical technical information

2.2 Safety Instructions



Opening of the actuators and upper shafts is strictly forbidden. Danger to health and life!

Actuators and upper shafts which are no longer used and/or are defective must be disposed in professional manner.

Defective actuators and upper shafts must be returned to your SPX FLOW company for their professional disposal and free of charge for you.

Please address to your local SPX FLOW company.



- Never touch the valve or pipelines during hot liquid or sterilisation processes!



- Disconnect electric and pneumatic connections, e.g. before maintenance.



- Before any maintenance work, depressurize the line and cleaning system and discharge the lines if possible.

2. Safety



- Observe Service Instructions to ensure safe maintenance of the valve.
- Connections which are not used must be sealed by a plug!
- The safe discharge of the cleaning liquids must be ensured.
- The valves must be assembled, disassembled and reassembled only by persons who have been trained in the valves or by SPX FLOW service team members. If necessary, contact your local SPX FLOW representative.

3. Intended Use

The intended use as field of application of the double seat mix proof valve is the safe shut-off of pipeline sections and the separation of incompatible liquids in the food and beverage industries as well as in pharmaceutical and chemical applications.



Caution! The standard DA4 valve must not be used in explosive atmospheres.

Caution! Arbitrary, structural changes at the valves may affect safety as well as the intended functionality of the valves and are not permitted.

SPX FLOW Valves are intended for use in the food and beverage industries, as well as in pharmaceutical and chemical applications.

SPX FLOW Valves (without safety function) are allocated to Category 1 and are evaluated as per Conformity Assessment Module A of the Pressure Equipment Directive 2014/68/EU. According to Article 13, the following allocation applies for the fluids processed in the valves.

Product media – Fluid group 2 – valves in all dimensions.
CIP-cleaning liquids – Fluid group 1 – valves in the dimensions \leq DN100/4“ can be used at temperatures up to 140 °C, valves in the dimensions > DN100/4“ at temperatures up to 100 °C.

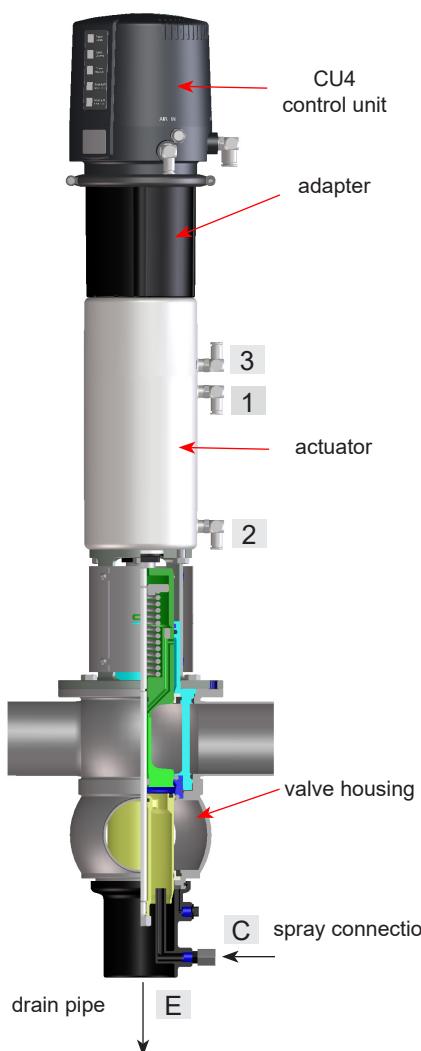
Authorizations and External Approvals

To view the certifications for this and other innovative SPX FLOW products, visit
<https://www.spxflow.com/en/apv/about-us/certifications/>

It is within the responsibility of the plant operator to evaluate and verify the suitability of SPX FLOW products for the intended purpose and service conditions, as well as to determine and follow the applicable laws for the intended applications and areas of application.

4. Mode of Operation

fig. 4.1



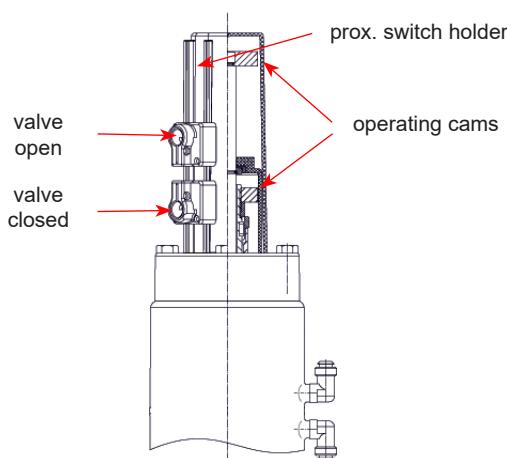
4.1. General terms

Due to its construction and mode of operation as well as to the use of high quality stainless steel and adequate seal materials, the DA4 double seat mix proof valve is suited for applications in the food and beverage industries as well as in pharmaceutical and chemical applications.

- The DA4 valve separates two line passages by two balanced and independently operating valve shafts with an intervening leakage chamber.
- The valve opens from the top to the bottom in a low-leakage design.
- Leakages are discharged via the drain pipe (E) in depressurized state.
- The pneumatic actuator opens the valve via the air connection (1). The spring force resets the valve into the "closed" safe position.
- The standard DA4 double seat mix proof valve is equipped with a CU43 control unit.
- Cleaning of the seat and shaft seal areas is controlled via the air connections.
2 = to lift upper shaft
3 = to lift lower shaft
- The spray connection (C) cleans the leakage chamber.
- As an option, the closed and open positions of the DA4 can be detected via proximity switches.

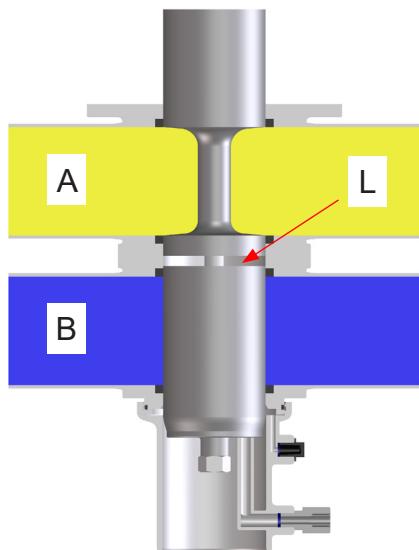
fig. 4.1.2.

DA4 with valve position indication



4. Mode of Operation

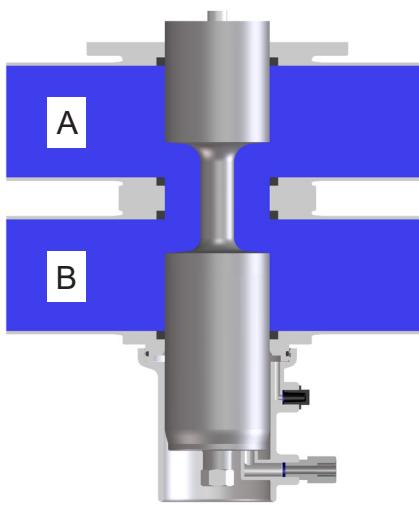
fig. 4.2.



4.2. Valve in "closed" position

The lower and upper valve shaft are in closed position and safely separate the different liquids A and B. The leakage chamber L, which is situated between the two valve shafts, provides for a free and depressurized discharge to the bottom. The valve shafts are balanced and protected against pressure hammer.

fig. 4.3.



4.3. Valve in "open" position

The upper valve shaft is pressed against the seal of the lower valve shaft by control of the actuator. First, the leakage chamber L is closed against the product chamber. Then the two valve shafts move downwards into the open position. The connection between the two pipelines A and B is established.

5. Control Units / Valve Position Indication

5.1. Control unit and adapter

An adapter is required to assemble the control unit on the DA4 valve.

All CU4's are available in communication protocols:

- AS-I
- Direct Connect
- IO-link
- AS-I 5

CU4 control unit



For available control units and adapters, see spare part list:
RN 502.047.01

5.2. Valve position indication

Proximity switches to signal the closed and open position of the DA4 valve can be installed at the proximity switch holder.

We recommend using one of these standard types:

three-wire proximity switch

operating distance: 5 mm

diameter: 11 mm

operating voltage: 10–30 V DC

pnp pulse-shifting, closing function

"non-flush" installation

Recommendation:

Proximity switch 24V DC, PNP, 11 mm DIA. (5 m cable): H16223

Proximity switch 24V DC, PNP, 11 mm DIA. (cable box): H16432

If the customer decides to use valve position indicators other than those listed above, SPX FLOW cannot assume any liability for the functionality of the valve.

6. Cleaning

In the cleaning process of DA4 valves, distinction is made between three areas: Flow areas, Seal surfaces and seat area, and Leakage chamber.

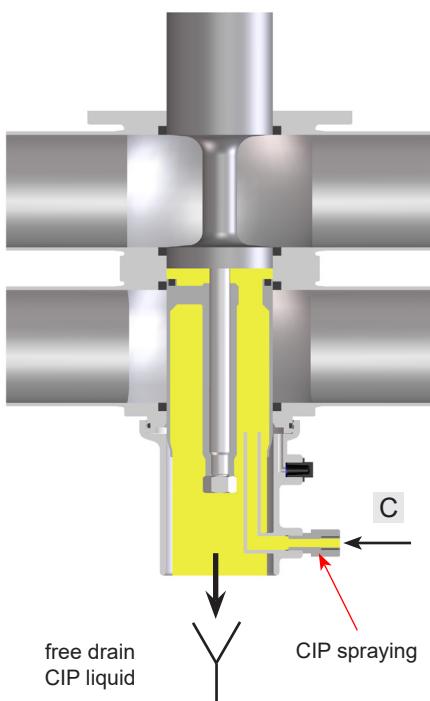
6.1. Flow areas

The CIP-fluid cleans the upper and lower passages of the valve during CIP.

6.2. Seal surfaces and seat area

The seal surfaces of the upper area (upper shaft and seat seal) and the lower area (lower shaft and seat seal) are flushed and cleaned when the individual valve shafts are lifted during cleaning. The seat area and leakage chamber are also cleaned during this process.

fig. 6.3.



6.3. Leakage chamber

CIP spraying cleans the leakage chamber. The cleaning connection is at item C in fig. 6.3.

CIP spraying does not produce pressure build-up in the leakage chamber. SPX FLOW recommends performing CIP-spraying in the closed valve position; however, it can also be done in the open valve position.

Under standard conditions 15 valves DN 40-100 / 1,5"-4" can be cleaned via one spray distribution line DN 25.

6.4. Cleaning recommendation

| Cleaning steps | Seat lifting cycle | CIP spraying |
|-----------------------|--------------------|--------------|
| pre-flushing | – | 3 x 10 sec. |
| caustic flushing 80°C | 3 x 5 sec. | 3 x 10 sec. |
| intermediate flushing | 2 x 5 sec. | 2 x 10 sec. |
| acid flushing | 3 x 5 sec. | 3 x 10 sec. |
| subsequent flushing | 2 x 5 sec. | 2 x 10 sec. |

- The lifting cycles refer to a cleaning pressure of $p = 2-5$ bar.
- Depending on the pressure ratio, cleaning temperatures, cleaning steps and degree of soiling, different cycles must be adjusted.
- Flushing quantities per CIP spraying cycle:
DN 40-100/1,5-4" about 1,2 ltr/10s
- Cleaning pressure at CIP cleaning connection: min. 2 bar
max. 5 bar

Caution!

The cleaning liquid applied must be compatible with the respective seal material.



6. Cleaning

6.5. Flushing quantity in ml per lifting cycle / 5 sec.

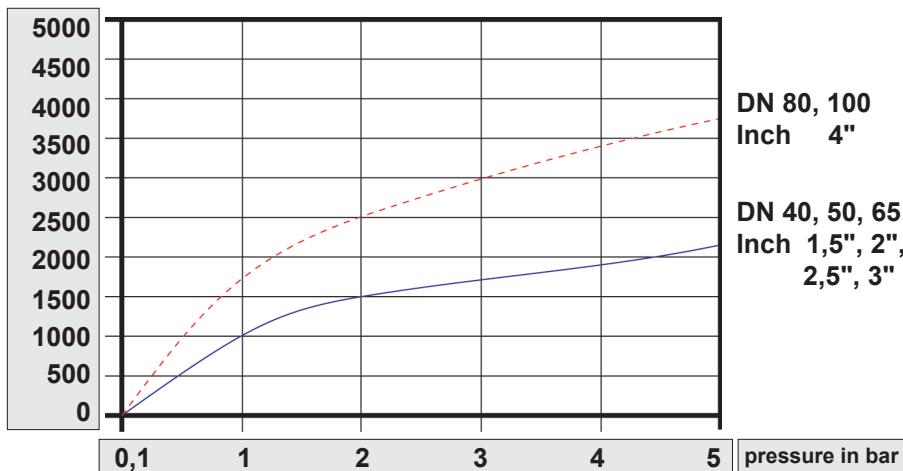
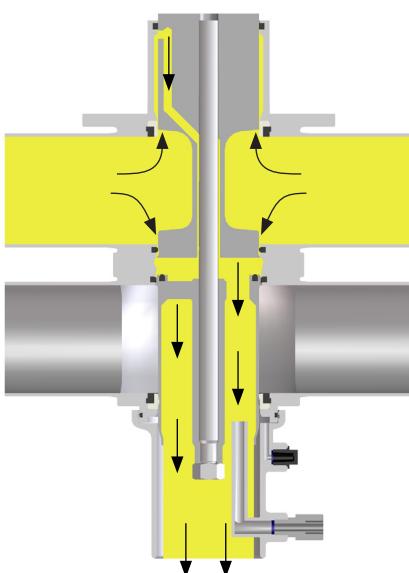


fig. 6.6.



6.6. Cleaning of upper area (fig. 6.6.)

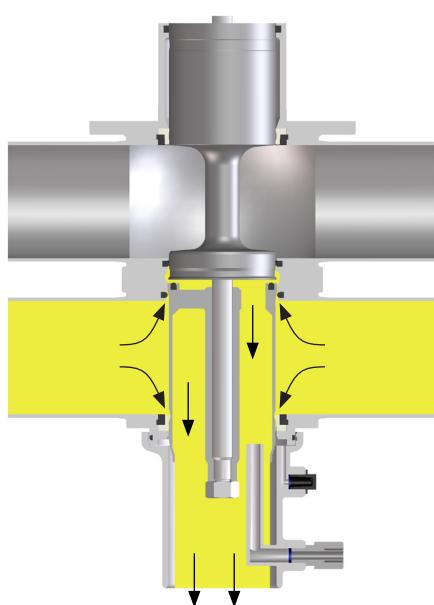
The upper valve shaft is lifted via connection (2), as shown in fig. 4.1 on page 8.

Through the lifting of the upper valve shaft, the cleaning fluid flushes over the upper seat seal and the upper valve seat into the leakage chamber and cleans this area. The cleaning fluid is drained off to the bottom in a depressurized state.

Simultaneously, the upper shaft seal and the outer surface of the upper valve shaft are cleaned. The cleaning fluid is guided into the leakage chamber and drained off to the bottom.

The lifting stroke is limited by a metallic stop.

fig. 6.7.



6.7. Cleaning of lower area (fig. 6.7.)

The lower valve shaft is lifted via connection (3), as shown in fig. 4.1 on page 8.

By lifting the lower valve shaft, the cleaning fluid flushes over the lower seat seal into the leakage chamber and cleans this area. The cleaning fluid is drained off to the bottom in a depressurized state.

Simultaneously, the lower shaft seal and the outer surfaces of the lower valve shaft are cleaned. The cleaning fluid is drained off to the bottom in a depressurized state.

The lifting stroke is limited by a metallic stop.

7. Installation and Commissioning

- The valve must be installed in vertical position to ensure that fluids can drain off freely from the valve housing and the leakage chamber.



Caution! Leakages and fluid losses from seat lifting and CIP spraying must be safely collected and drained!

- The valve housing can be welded directly into the pipeline (completely removable valve insert).



Note! Observe welding instructions.

- Observe heights of installation and dismantling!



Caution!

Before first startup:

- Actuate the valve by applying compressed air. The opening, closing and seat lifting processes must run smoothly.
- Check the function of the control unit or valve position indication.
- Check for possible leakages during commissioning. Replace defective seals.

7.1. Welding Instructions

- Before welding the valve, remove the valve insert from the housing.



Caution! Handle and store the valve insert carefully to avoid damaging the part.

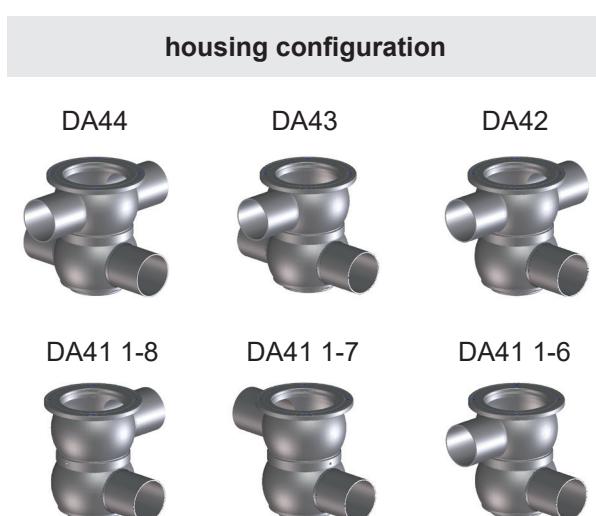
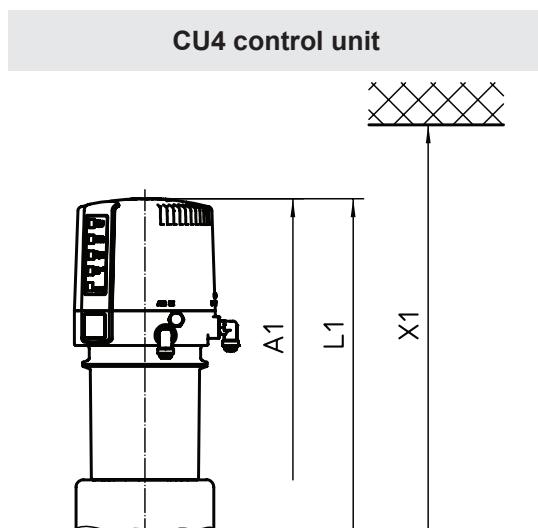
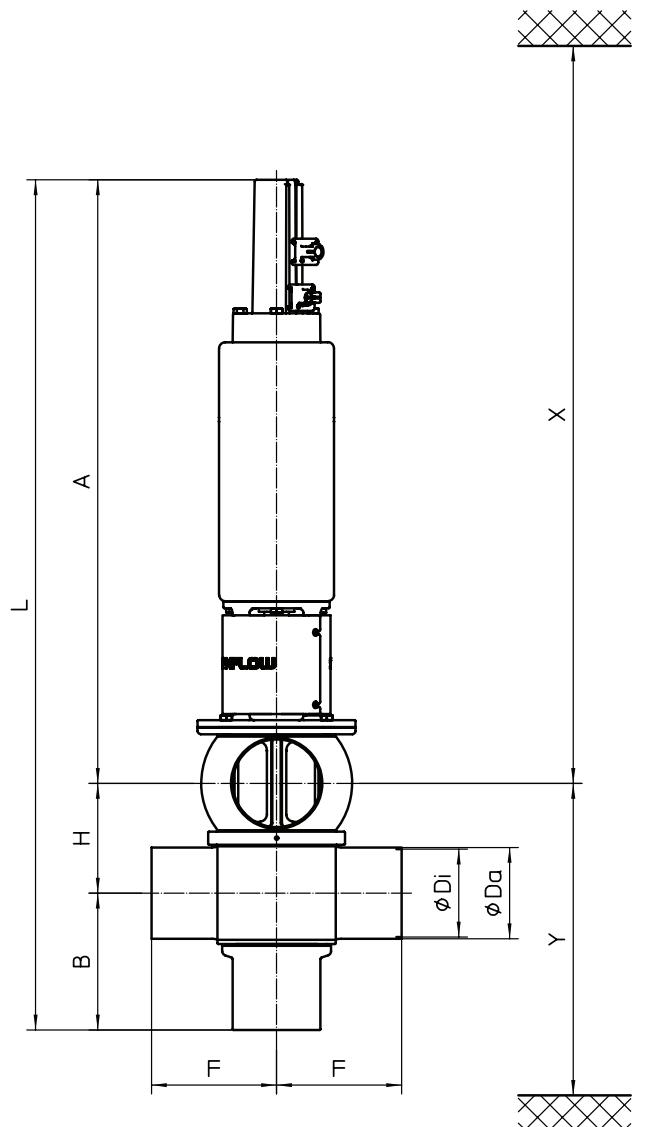
- It is not necessary to remove the lower shaft seal as it can be destroyed during removal.
- Welding should only be carried out by certified welders (DIN EN ISO 9606-1) (seam quality DIN EN ISO 5817).
- The welding of the valve housings must be undertaken in such a way that the valve body is not deformed.
- The preparation of the weld seam up to 3 mm thickness must be carried out as a square butt joint without air. Consider shrinkage!
- TIG orbital welding is recommended.



Caution! After welding the valve housing or mating flanges, and after performing any work on the piping, do not operate the valves until the corresponding areas of the installation and piping have been cleaned and welding residue has been removed. If the piping is not cleaned before operation, welding residue and dirt particles can settle in the valves and cause damage to the valves and seals.

- If these welding instructions are not followed, any resulting damage will not be covered by the warranty.
- Welding directives for aseptic applications shall be drawn from the AWS/ANSI Directives and EHEDG Guidelines.

8. Dimensions / Weights



| Dimensions in mm | | | | | | | | | | | install. dimen. min. in mm | | | weights in kg with CU |
|------------------|-----|-----|-----|-------|------|-------|------|-------|-------|------|----------------------------|-----|------|-----------------------|
| DN | A | A1 | B | Ø Da | Ø Di | F | H | L | L1 | X* | X1* | Y* | | |
| 40 | 589 | 672 | 120 | 41 | 38 | 125 | 63 | 772 | 855 | 810 | 895 | 200 | 16,5 | |
| 50 | 593 | 676 | 126 | 53 | 50 | 125 | 75 | 794 | 877 | 840 | 925 | 218 | 17,6 | |
| 65 | 601 | 684 | 134 | 70 | 66 | 125 | 91 | 826 | 909 | 880 | 965 | 242 | 18,7 | |
| 80 | 678 | 761 | 146 | 85 | 81 | 142,5 | 106 | 930 | 1013 | 980 | 1070 | 274 | 18,8 | |
| 100 | 688 | 771 | 156 | 104 | 100 | 142,5 | 125 | 969 | 1052 | 1035 | 1120 | 303 | 31,5 | |
| Inch | | | | | | | | | | | | | | |
| 1,5" | 588 | 671 | 119 | 38,1 | 34,8 | 125 | 63 | 770 | 853 | 815 | 895 | 199 | 16,5 | |
| 2" | 594 | 677 | 125 | 50,8 | 47,6 | 125 | 75 | 794 | 877 | 845 | 925 | 217 | 17,6 | |
| 2,5" | 598 | 681 | 131 | 63,5 | 60,3 | 125 | 85,3 | 814,3 | 897,3 | 870 | 950 | 234 | 18,5 | |
| 3" | 604 | 687 | 137 | 76,1 | 72,9 | 125 | 97,9 | 838,9 | 921,9 | 900 | 980 | 252 | 18,8 | |
| 4" | 689 | 772 | 155 | 101,6 | 97,6 | 142,5 | 125 | 969 | 1052 | 1040 | 1120 | 302 | 31,5 | |

*Minimum installation and valve insert removal dimensions

9. Technical Data

9.1. General data

| | |
|--|--|
| Product-wetted parts | 1.4404, 316L (DIN EN 10088) |
| Other parts | 1.4301,304 (DIN EN 10088) |
| Seals standard options | EPDM/ PTFE compound HNBR/ PTFE compound FPM/ PTFE compound |
| Max. line pressure | 10 bar |
| Max. operating temperature | 135 °C EPDM, HNBR *FPM |
| Short-term load | 140 °C EPDM, HNBR *FPM *no steam |
| Tightening torque for stop sleeve | 10 Nm |
| Tightening torque for safety nuts at lower and upper valve shaft | 40 Nm |
| Spray connection | PP (polypropylene) |
| Ø Cleaning connection DN 40–100/1,5-4" | 8 x 1 mm |
| Ø Air connection | 6 x 1 mm, 1/4" OD |
| Max. pneumatic air pressure | 8 bar |
| Min. pneumatic air pressure | 5 bar |

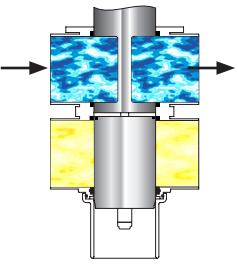
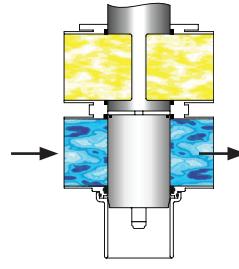
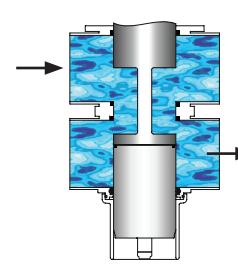
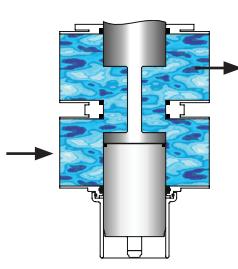
9.2. Compressed air quality

| | |
|----------------------------|--|
| Quality class | acc. to DIN ISO 8573-1 |
| Content of solid particles | quality class 3, max. size of solid particles per m ³ 10000 of 0,5 µm < d < 1,0 µm 500 of 1,0 µm < d < 5,0 µm |
| Content of water | quality class 3, max. dew point temperature -20°C For installations at lower temperatures or at higher altitudes, consider additional measures to reduce the pressure dew point accordingly. |
| Content of oil | quality class 1, max. 0,01 mg/m ³ |

The oil applied must be compatible with Polyurethane elastomer materials.

9. Technical Data

9.3. Kvs values in m³/hr

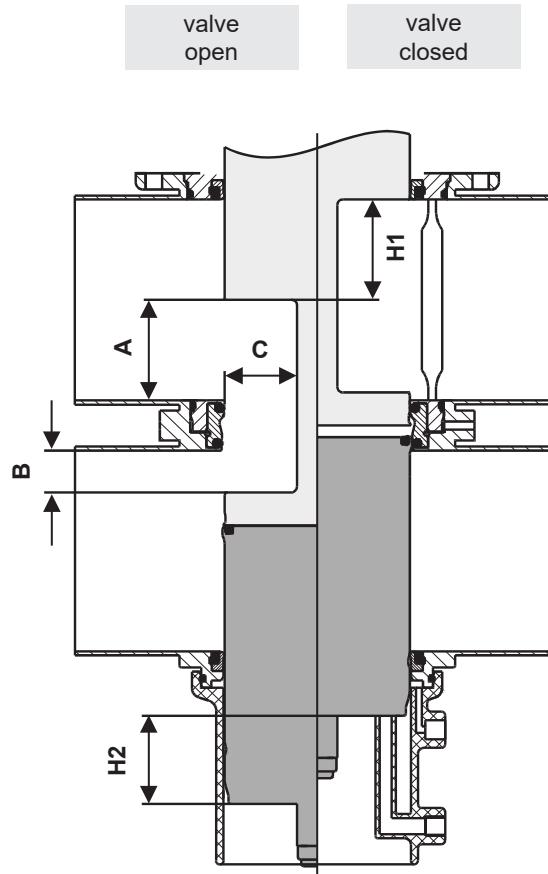
| | | | | |
|------|---|---|--|---|
| |  |  |  |  |
| DN | | | | |
| 40 | 48 | 44 | 24 | 24 |
| 50 | 91 | 75 | 48 | 46 |
| 65 | 184 | 150 | 74 | 74 |
| 80 | 205 | 170 | 131 | 126 |
| 100 | 335 | 246 | 170 | 156 |
| Inch | | | | |
| 1,5" | 42 | 38 | 24 | 23 |
| 2" | 83 | 71 | 46 | 46 |
| 2,5" | 147 | 122 | 67 | 67 |
| 3" | 183 | 160 | 83 | 82 |
| 4" | 329 | 237 | 167 | 156 |

9.4. Air consumption / Switching times

| | | Air consumption at 5 bar | | | Switching times in seconds at 5 bar / CU43 | |
|-----|------|--------------------------|------------------------------|------------------------------|---|--------|
| | | Actuator | Seat lift actuator | | | |
| DN | Inch | NL/stroke valve open | NL/stroke upper seat lift | NL/stroke lower seat lift | Open | Closed |
| 40 | 1,5" | 1,7 | 3,4 | 0,3 | 1,5 | 1,8 |
| 50 | 2" | 1,8 | 3,4 | 0,3 | 1,5 | 1,8 |
| 65 | 2,5" | 2,0 | 3,4 | 0,3 | 1,7 | 2,0 |
| | 3" | 2,0 | 3,4 | 0,3 | 1,7 | 2,0 |
| 80 | 4" | 3,7 | 7,7 | 0,4 | 2,6 | 3,3 |
| 100 | | 3,7 | 7,7 | 0,4 | 2,6 | 3,3 |

9. Technical Data

9.5. Valve stroke / Opening cross section



| Dimensions in mm | | | | | |
|------------------|----|----|------|--------------------------|--------------------------|
| DN | A | B | C | stroke H1 upper shaft | stroke H2 lower shaft |
| 40 | 4 | 5 | 21,2 | 34 | 28 |
| 50 | 11 | 10 | 21,2 | 39 | 33 |
| 65 | 21 | 16 | 21,2 | 45 | 39 |
| 80 | 31 | 21 | 35,2 | 50 | 44 |
| 100 | 50 | 21 | 35,2 | 50 | 44 |
| | | | | | |
| Inch | | | | | |
| 1,5" | 4 | 5 | 21,2 | 34 | 28 |
| 2" | 11 | 10 | 21,2 | 39 | 33 |
| 2,5" | 15 | 16 | 21,2 | 45 | 39 |
| 3" | 28 | 16 | 21,2 | 45 | 39 |
| 4" | 50 | 21 | 35,2 | 50 | 44 |

10. Maintenance

**Note!**

The maintenance intervals are different depending on the application and must be determined by the operator performing regular checks.

- Compressed air is not required to remove the valve.

**Caution!**

Do not clean the valve with products containing abrasive or polishing substances. Abrasive and polishing agents are especially harmful to the upper and lower shaft.

**Required tools for standard maintenance:**

- 1 x wrench SW13, SW24, SW30, SW32
- 1 x wrench SW36
- 2 x wrench SW17
- 1 x Allen key SW3, SW6
- pick tool for O-ring and rubber seal removal
- disassembly and assembly tool for lower shaft seal, see page 24
- assembly tool for middle seal, see page 25
- 2 long M8 hex screws for safe removal of valve insert
- For valve maintenance SPX FLOW offers complete seal kits (see spare parts lists).

**Caution!**

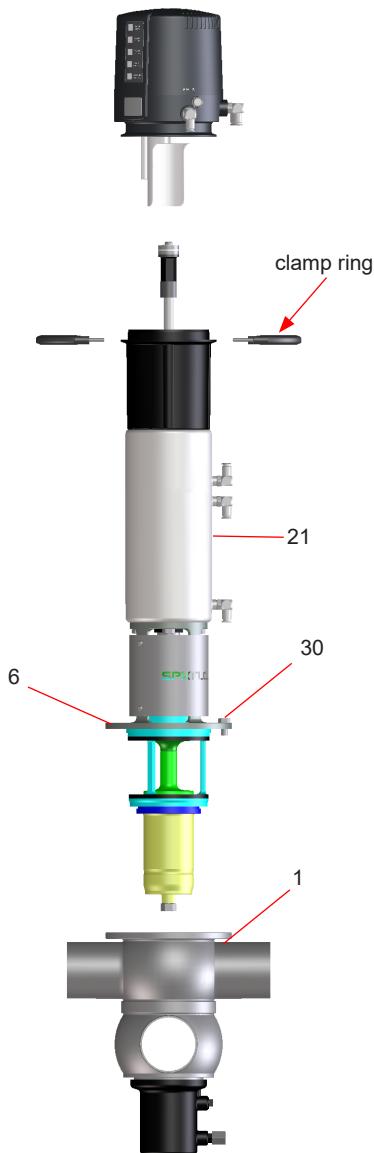
The use of seal materials being compatible with the product, application and CIP liquids must be ensured. In case of doubt, contact your local SPX FLOW representative.

- For seal replacement instructions, see pages 20 and 21.
- Provide all seals with a thin layer of grease before their installation!
Recommendation:
Assembly grease for EPDM, HNBR and FPM (Viton)
0,75 kg/tin - ref.-No. 000 70-01-019/93; H147382
60 g/tube - ref.-No. 000 70-01-018/93; H147381
- Provide all screws and threaded parts with grease before their installation.
Recommendation: Klüber paste UH1 84-201
60 g/Tube - ref.-No. 000 70-01-016/93; H147379
- Recommendation for actuator:
Pneumatic grease:
25 ml/tube - ref.-No. 000 70-01-008/93; H164725
- For valve assembly instructions, see page 21.

11. Service Instructions

The item numbers refer to the spare parts drawings
DIN and Inch designs: RN 502.047.01

fig. 11.1.



11.1. Removal from the line system

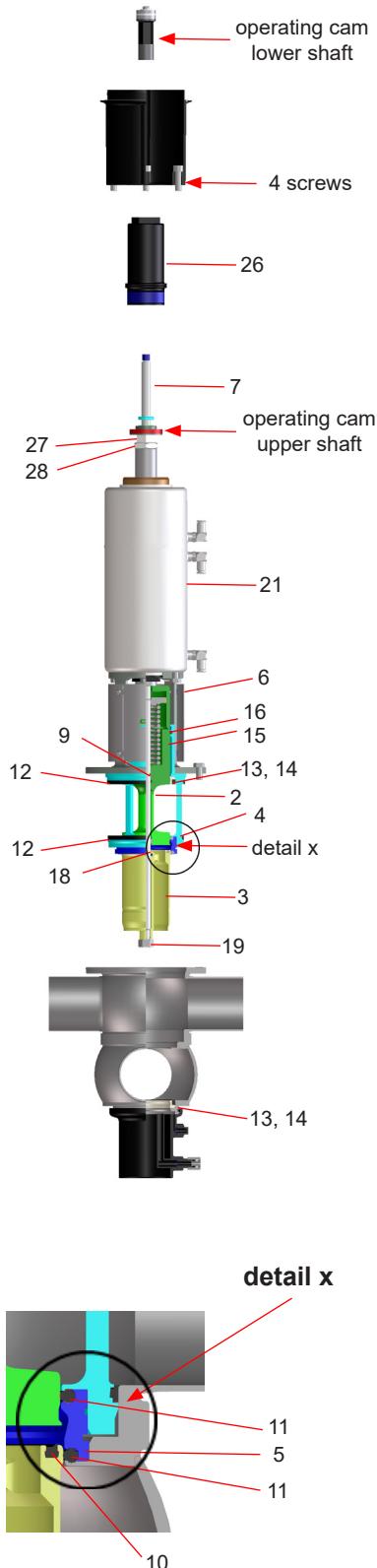


Caution!

1. Shut off the line pressure in the product and cleaning lines, and discharge the pipes if possible.
2. Remove the compressed air lines from the valve actuator (21).
3. Release the 2 screws at the clamp rings and lift the control unit off the adapter.
4. Design with proximity switch holder:
Release the screws at the proximity switch holder and lift off the proximity switch holder.
5. Remove the flange screws (30) in the yoke (6). For additional safety, replace two flange screws with longer screws that are partially threaded into the flange. Once these longer screws are in place, the other two flange screws can be safely removed.
6. Screw one flange screw (30) into the threaded bore of the yoke (6) to lift the complete valve insert. Do not remove the screw. It helps to re-install the valve insert.
7. Carefully lift the valve insert vertically out of the valve housing (1).

11. Service Instructions

fig. 11.2.

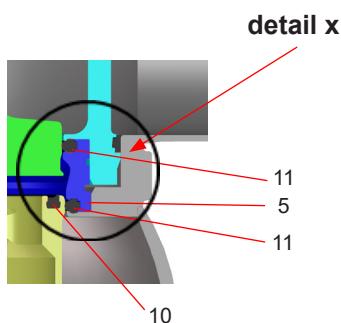
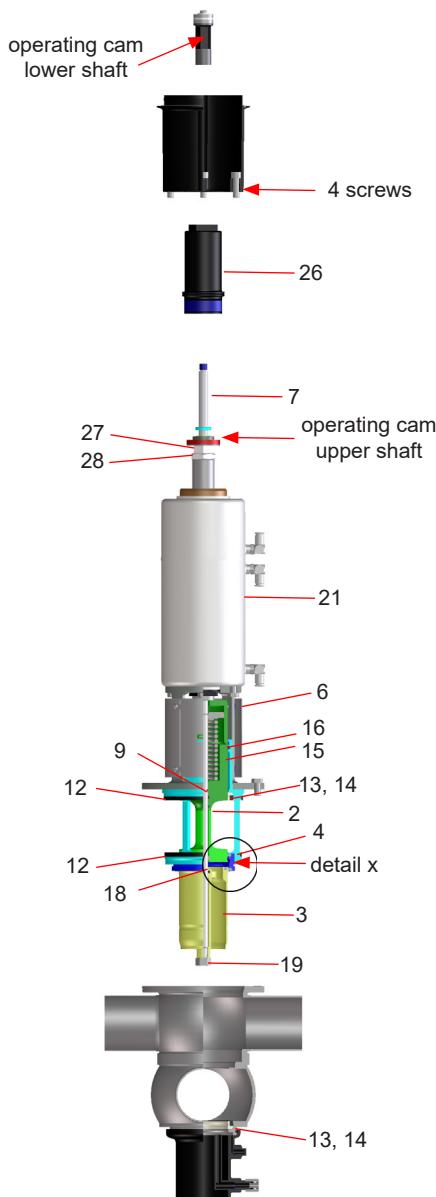


11.2. Removal of product-wetted parts

1. Remove the operating cam from the guide rod (7).
2. In order to take off the adapter, remove the 4 screws.
3. Remove the lower and upper housing seal (12) from the valve seat (4).
4. Release the lower safety nut (19). Hold the lower shaft (3) with an SW17 wrench to keep it from turning.
5. After removing the nut (19), lift off the lower shaft (3).
6. Place the point of the pick tool along the side of the middle seal (10) and pull it out of the groove. Take the quad ring (18) out of the groove.
7. Remove the stop screw (26).
8. Take the guide rod (7) out through the top of the actuator and remove the O-ring (9).
9. Remove the operating cam at the upper shaft.
10. Unscrew the safety nut (27). Hold up the lock washer (28) with a SW30 key to keep it from turning. Remove the lock washer.
11. Lift off the actuator (21) with yoke (6).
12. Press the upper valve shaft (2) with seat ring (5) to the bottom out of the valve seat (4).
13. Slide the seat ring (5) over the balancer of the upper valve shaft (2).
14. Remove the seat seals (11) from the grooves.
15. Removing the upper shaft seal (13, 14)
Place the point of a tool along the side of the seat seal (13) and pull it out of the valve seat, then remove the PTFE seal (14).
16. Remove the quad ring (15) and guide ring (16) from the groove of the valve seat (4).
17. Removing the lower shaft seal from the housing
Place the point of the disassembly tool along the side of the seat seal (13) and pull it out through the top of the housing. Then remove the PTFE seal (14) through the top of the housing, using the mandrel of the assembly tool, see page 20.

11. Service Instructions

fig. 11.3.



11.3. Installation of product-wetted seals and assembly of the valve



Note! Make sure that all seals and bearing surfaces in the product area are slightly greased before their installation.

1. Install the lower shaft seal (13, 14) in the lower housing flange.
2. Place the quad ring (15) and the guide ring (16) in the valve seat (4).
3. Installing the upper shaft seal (13, 14) in the valve seat (4). Insert the PTFE ring (14), first. Then press the seat seal (13), the wide side to the front, into the groove between the PTFE seal (14) and the valve seat (4).
4. Install the upper and lower housing seals (12).
5. Press the upper and lower seat seal (11) into the seat ring (5).



Note! The seal shoulder must fit properly into the groove.

6. Slide the seat ring (5) (the larger diameter to the bottom) from the top over the balancer of the upper valve shaft (2).
7. Slide the valve seat (4) over the balancer of the upper valve shaft (2) in the same way.
8. Insert the upper valve shaft (2) with seat ring (5) and valve seat (4) through the yoke (6) and actuator (21) until it stops.
9. Align key and fasten the upper valve shaft (2) with the lock washer (28) and safety nut (27). Hold the lock washer with a SW30 wrench to keep the safety nut (27) from turning.
Tightening torque: $Md = 40 \text{ Nm}$

Caution! Overtightening of the safety nut could result in thread damage on the upper shaft.

10. Screw the operating cam on the upper shaft.
11. Insert the middle seal (10) into the lower shaft (3) using the assembly tool (see page 21).
12. Assembling without the assembly tool:
Press the slightly greased seal into the groove at four locations. Then push in the four loops of seal with a blunt object. Vent the seal groove.
13. Insert the quad ring (18) in the lower shaft (3).
14. Install the O-ring (9) at the guide rod (7).
15. Ensure the key is secure on the guide rod. Slide in the guide rod (7) from the top through the actuator (21) until it stops.
16. Screw in the stop screw (26) until it stops.
Tightening torque $Md = 10 \text{ Nm}$
The stop screw must be flush with the top of the piston.



Note! Check the position of the lower seat seal (11).

11. Service Instructions

fig. 11.4.

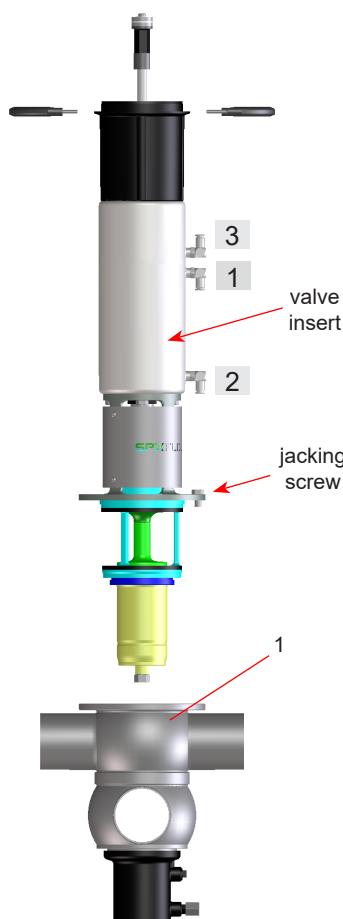
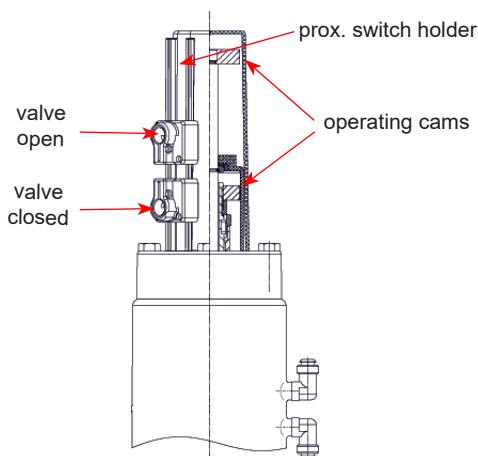


fig. 11.4.1.

DA4 with valve position indication



17. Slide the lower valve shaft (3) on the guide rod (7). Align key and fasten it with the safety nut (19).
Tightening torque: $M_d = 40 \text{ Nm}$

18. Fasten the adapter on the actuator with the 4 screws and ensure that the air fittings on the control unit will align properly with the air fittings on the DA4 valve.

19. Screw the operating cam on the guide rod (7).

11.4. Installation of the valve insert

1. Carefully place the valve insert in the valve housing (1) until the screw stops.
2. Remove the jacking screw and carefully press the valve insert into the housing (1).
3. Screw in the hex. screws (30) and fasten them crosswise.
4. Place the control unit on the adapter. Make sure that the control unit is centered on the adapter.
5. Place the clamp ring and fasten it with the screws.
6. Assemble the compressed air lines.
Air connection 1: to open valve
Air connection 2: to lift upper shaft
Air connection 3: to lift lower shaft
7. Check the valve position indicators

Closed valve position feedback – sensor 1 controlled

To adjust Hall sensor 1, ensure that the valve is in the closed position, the solenoid / manual override are not activated. Turn adjustment screw 3 into the required position. The LED "Valve Closed" lights up.

Open valve position feedback – sensor 2 controlled

To adjust Hall sensor 2, first activate the solenoid valve 1, either manually or electrically. Then turn adjustment screw 1, to adjust the open valve position and the corresponding feedback. When it reaches the required position, the LED "Valve Open" lights up.

Observe the switching hysteresis of the Hall effect sensors! Therefore, adjust the switch point of the sensors with overlap in order to permit small variations. We recommend additional $2 \times 360^\circ$ turns of the adjustment screw.

8. Design with proximity switch holder:
Set the proximity switch holder in position and fasten it with the screws. Check to see if the "Valve Closed" or "Valve Open" message appears. Re-position the proximity switch if required.

12. Maintenance of Actuator

fig. 12.1



The item numbers refer to the spare parts drawings DIN and Inch designs: RN 502.047.01

12.1 Removing the actuator screws

1. Remove yoke cover and yoke.
2. Unscrew the two actuator screws (20) with an SW36 socket wrench.
3. Remove the V-seals (24) and O-rings (23).

12.2 Installing the seals and assembling the actuator

1. Install the slightly greased O-rings (23) and V-seals (24) in the actuator screws (20) (fig. 12.2). Check the correct installation position of the V-seal (24).

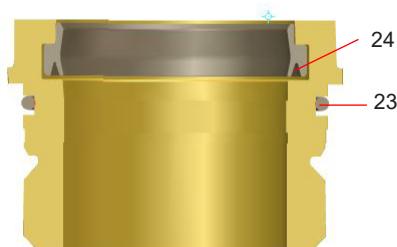
Recommendation for actuator:

Pneumatic grease

(25 ml /tube - ref.-No. 000 70-01-008/93; H164725)

2. Place the assembly tool (H338580) on the end of the piston rod. Screw the actuator screws (20) with a socket wrench SW36 over the piston rod at both sides of the actuator and fasten them.
3. Re-install yoke and yoke cover.

fig. 12.2



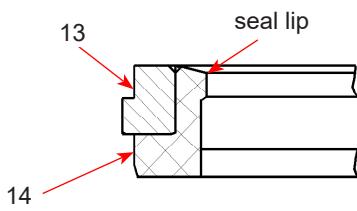
actuator screw

**Assembly tool
for actuator screw (H338580)**

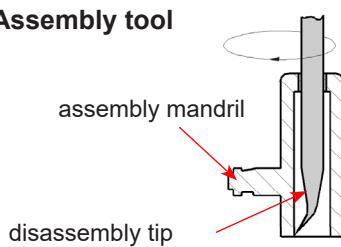


13. Assembly Instructions and Tools for Seals

Seal



Assembly tool



13.1. Lower shaft seal (pos. 13, 14)

For a simple disassembly and assembly of the lower shaft seal (13, 14) the universal tool (ref.-No. 000 51-13-100/17; H171889) can be used. This tool is especially recommended for valves of the small series (DN 40-65, 1,5"-3") as access to the lower shaft seal from the top is impossible as a result of the narrow seat.

Caution!

 Do not damage the seal lip of the PTFE seal during assembly.

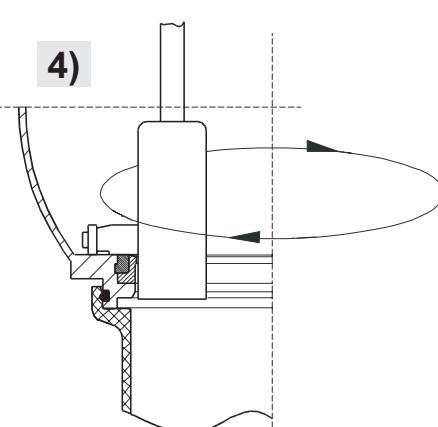
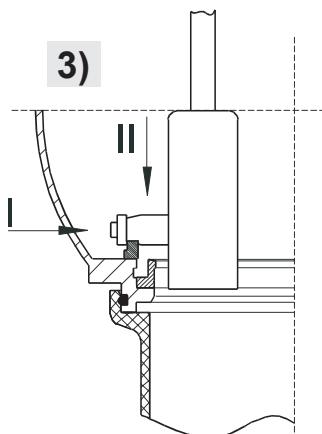
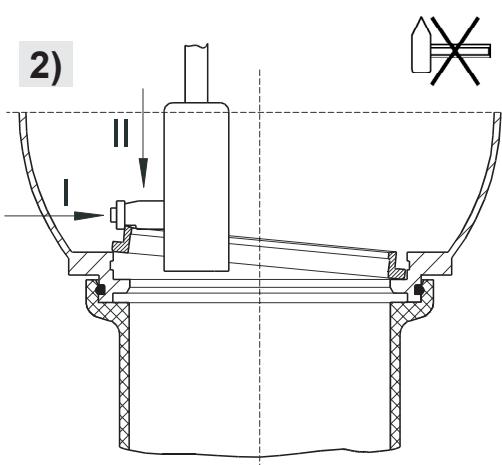
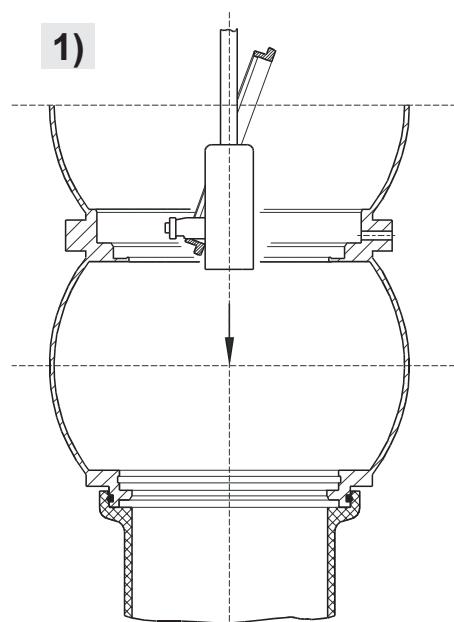
To avoid injuries the disassembly tip must be covered by the assembly mandril if not used.

13.2. PTFE seal (fig. 1, 2)

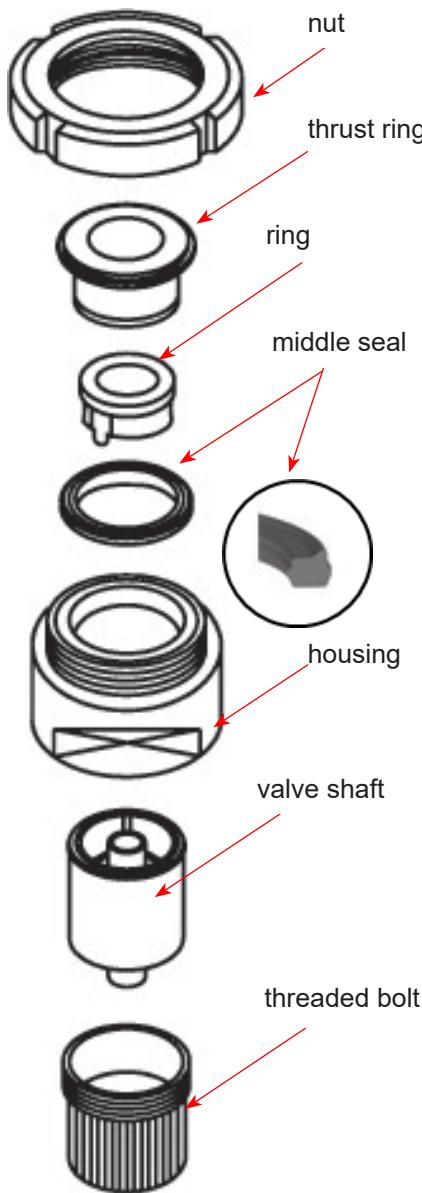
1. Press the PTFE ring (14) into an oval shape.
2. Introduce the PTFE ring (14) from the top using the assembly tool, the wide side to the front, through the intermediate ring of the housing into the lower housing (fig. 1).
3. Pull the PTFE ring (14) into a round shape with the assembly mandrel (fig. 2/I) and press it into the groove. Do not knock or beat (fig. 2/II)!

13.3. Seat seal (fig. 1, 3, 4)

1. Slightly grease the seal (13).
2. Use the assembly tool to insert the seat seal (13) from the top, the wide side to the front, through the intermediate ring of the housing into the lower housing ball (fig. 1).
3. Position the seat seal (13) using the groove of the assembly mandrel (fig. 3/I).
4. Press in the seat seal (13) at one spot between the housing flange and the PTFE seal (14) (fig. 3/II).
5. Slide the assembly mandrel around the seat seal (13) to insert the seal completely into the groove (fig. 4). Make sure the seat seal (13) fits evenly in the groove.



13. Assembly Instructions and Tools for Seals



13.4 Middle Seal

The assembly tool consists of:

- nut
- thrust ring
- ring with venting tip
- housing
- threaded bolt

Installation of the middle seal in the valve shaft

1. Insert the valve shaft into the housing making sure that the seal groove is in the housing.
2. Use the threaded bolt to clamp the shaft into the housing. Clamp the housing into a vice.
3. Slightly grease the middle seal with assembly grease. Then install the seal on the ring.
4. Insert the ring with the installed seat seal into the housing. Make sure that the venting tip is positioned in the seal groove.
5. Insert the thrust ring around the ring in the housing. Screw on the nut and tighten it with a hook spanner until it stops.
6. Release the nut. Take the ring and thrust ring off the housing.
7. Take the housing out of the vice. Take off the threaded bolt. Detach the valve shaft from the housing.

Make sure the middle seal fits evenly.

| Assembly tool for middle seal | | | |
|-------------------------------|------|-------------|------------------|
| DN | Inch | Designation | Reference number |
| 40 | 1,5" | | |
| 50 | 2" | | 51 - 13 - 210/17 |
| 65 | 2,5" | DA3 - 62 | H207310 |
| 80 | 3" | | |
| 100 | 4" | DA3 - 92 | 51 - 13 - 211/17 |
| | | | H207311 |

14. Trouble Shooting

| Failure | Valve position | | Required seal replacement |
|--|----------------|------|---|
| | closed | open | |
| Leakage at upper housing flange | x | x | upper housing seal (12) |
| Leakage from the leakage bore between the connecting ports | x | x | lower housing seal (12) and seat seals (11) |
| Leakage from the yoke | x | x | upper shaft seal (13, 14) and seal of flushing chamber (15) |
| Leakage from the inside of the lower valve shaft | x | | seat seals (11) and upper shaft seal (13, 14) |
| Leakage from the inside of the lower valve shaft | | x | middle seal (10) |
| Leakage at the outside of the lower valve shaft (remove spray connection for this purpose) | x | x | lower shaft seal (13, 14) |
| | | | |
| | | | |

The position numbers refer to the spare parts drawing.

15. Spare Parts Lists

The reference numbers of the spare parts for the different valve designs and sizes are included in the attached spare parts drawings with corresponding lists.

Please indicate the following data to place an order for spare parts:

- number of required parts
- reference number
- designation

Data are subject to change.

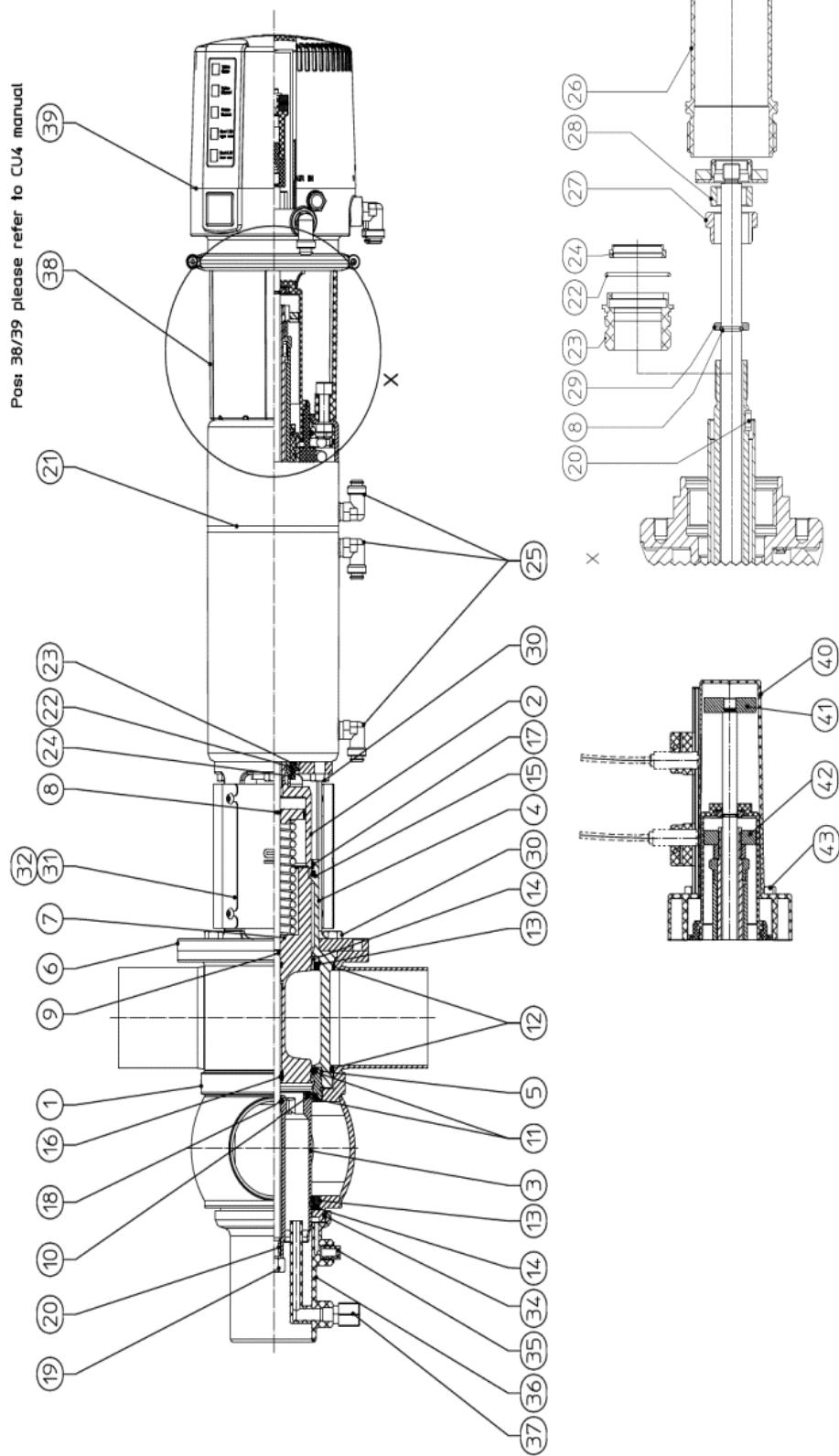
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Spare parts list:

Double seat mix proof valve DA4 1.5" -4"; DN 40 - 100

| SPX FLOW | | | |
|--------------|----------|----------|----------|
| Date: | 21.03.18 | 30.10.18 | 11.10.19 |
| Name: | C.Keil | C.Keil | Sze-Si. |
| Approved by: | | | C.Keil |
| Date: | 13.02.24 | | |
| Name: | N Shre | | |
| Approved by: | | | |

RN 502.047.01



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Spare parts list:

Double seat mix proof valve DA4 1.5" - 4"; DN 40 - 100 DN 40

| Item | Quantity | Description | Included in spare parts (Pos.) | Material | Part no. | Item | Quantity | Description | Included in spare parts (Pos.) | | Material | Part no. |
|------|----------|-------------------|---|--|--|----------------------------------|----------------------------|--|-----------------------------------|-------------------------------------|--------------------|----------|
| | | | | | | | | | Name: Approved by: | Date: Name: Approved by: | | |
| 1 | 1 | Housing | D41 1-6 D41 1-7 D41 1-8 DA42 DA43 DA44 | 1.4404 1.4404 1.4404 1.4404 1.4404 1.4404 | H337210 H337200 H337220 H337043 H337053 H335509 | 19 20 21 22 23 24 | 1 2 1 2 2 3 | Safety nut M10x1 Square key DIN68885 - A - 3x3x10 Actuator O-ring Actuator screw V-seal | A2 A2 | H118903 H335171 | SPX FLOW | |
| 2 | 1 | Upper valve shaft | 16, 20, 28 | 1.4404 | H341275 | 25 | 3 | W-union G1/8" Ø6mm | 22, 23, 24 30x2.5 | 1.4301 NBR | H335475 H337897 | |
| 3 | 1 | Lower valve shaft | | 1.4404 | H335369 | 26 | 1 | Stop screw | Iglidur J350 NBR | Iglidur J350 NBR | H334376 H334379 | |
| 4 | 1 | Valve seat | | 1.4404 | H335363 | 27 | 1 | Lock washer D4 | | 1.4301 | H335172 | |
| 5 | 1 | Seat ring | | 1.4404 | H334441 | 28 | 1 | Safety nut D3 | | 1.4301 | H147640 | |
| 6 | 1 | Yoke | | 1.4301 | H334450 | 29 | 1 | Thrust ring | | 1.4057 | H123151 | |
| 7 | 1 | Guide rod | 8, 9, 19, 20 | 1.4404 | H341304 | 30 | 8 | Hex screw M8 x 16 | | A2 | H78772 | |
| 8 | 2 | Retainer ring | 1.4310 | H14883 | H14883 | 31 | 1 | Yoke cover D4 | | 1.4301 | H341315 | |
| 9 | 1 | O-ring 9.25 x 178 | | EPDM | H148388 | 32 | 4 | Savetix head screw M4 x 8 washer M4 as set | | 1.4301 | H336707 | |
| 10 | 1 | Middle seal | | HNBR | H332652 | 33 | | | | | | |
| 11 | 2 | Seat seal | | FPM EPDM HNBR | H332653 H149618 H168900 | 34 35 36 | 1 1 1 | O-ring Venting plug G-1/8" Spray connection DE3 | EPDM PE-Hard PP | H77039 H16507 H168321 | SPX FLOW | |
| 12 | 2 | Housing seal | | FPM EPDM HNBR | H326355 H77543 H170075 | 37 38 39 | 1 1 1 | G-union 8x1-G1/8" CU4 , CU4plus adapter cmp. CU43 , CU43plus . | PVDF-black PA6.6 GF30 black | H16388 PA6.6 GF30 See page 22 | | |
| 13 | 2 | Seat seal | | HNBR FPM | H166678 H326354 | 40 | 1 | Prox. switch holder D4 compl. | PA 6.6 GF30 black | H336751 | | |
| 14 | 2 | Shaft seal | | PTFE | H335232 | 41 | 1 | Operating cam D4 top | 1.4523 / 444FR | H334387 | | |
| 15 | 1 | Quad ring | | EPDM | H150988 | 42 | 1 | Operating cam D4 bottom | 1.4523 / 444FR | H334386 | | |
| 16 | 1 | Guide ring | | Iglidur A500 | H320447 | 43 | 4 | Hex. screw M8x40 | A2-70 | H336675 | | |
| 17 | 1 | Piston ring | | Iglidur A500 | H334863 | | | | | | | |
| 18 | 1 | Quad ring | 12.37x2.62 | EPDM | H311646 | | | | | | | |

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Spare parts list:

Double seat mix proof valve DA4 1.5" - 4"; DN 40 - 100 1,5"

| Item | Quantity | Description | Included in spare parts (Pos.) | Material | Part no. | Item | Quantity | Description | Included in spare parts (Pos.) | | Material | Part no. |
|------|----------|--------------------|---|--|--|----------------------------------|----------------------------|--|--------------------------------|--------------------------------|--------------|----------|
| | | | | | | | | | Name: Approved by: | Date: Name: Approved by: | | |
| 1 | 1 | Housing | D41 1-6 D41 1-7 D41 1-8 DA42 DA43 DA44 | 1.4404 1.4404 1.4404 1.4404 1.4404 1.4404 | H337215 H337205 H337225 H337048 H337058 H335511 | 19 20 21 22 23 24 | 1 2 1 2 2 3 | Safety nut M10x1 Square key DIN68885 - A - 3x3x10 Actuator O-ring Actuator screw V-seal | A2 A2 | H118903 H335171 | | |
| 2 | 1 | Upper valve shaft | 16,20,28 | 1.4404 | H341275 | 25 | 3 | W-union G1/8" Ø6mm | NBR | H337897 | Iglidur J350 | H334376 |
| 3 | 1 | Lower valve shaft | | 1.4404 | H335369 | 26 | 1 | Stop screw | NBR | H334379 | NBR | H334379 |
| 4 | 1 | Valve seat | | 1.4404 | H335363 | 27 | 1 | Lock washer D4 | | H147640 | | |
| 5 | 1 | Seat ring | | 1.4404 | H334441 | 28 | 1 | Safety nut D3 | | H123151 | | |
| 6 | 1 | Yoke | | 1.4301 | H334450 | 29 | 1 | Thrust ring | | H147640 | | |
| 7 | 1 | Guide rod | 8, 9, 19, 20 | 1.4404 | H341304 | 30 | 8 | Hex screw M8 x 16 | A2 | H147640 | | |
| 8 | 2 | Retainer ring | 1.4310 | H14883 | | 31 | 1 | Yoke cover D4 | | H147640 | | |
| 9 | 1 | O-ring 9.25 x 1.78 | | EPDM | H148388 | 32 | 4 | Savetix head screw M4 x 8 washer M4 as set | | H147640 | | |
| 10 | 1 | Middle seal | | HNBR | H332652 | 33 | | | | H147640 | | |
| 11 | 2 | Seat seal | | FPM | H332653 | 34 | 1 | O-ring | EPDM | H77039 | | |
| 12 | 2 | Housing seal | | EPDM | H149618 | 35 | 1 | Venting plug G-1/8" | PE-Hard | H16507 | | |
| 13 | 2 | Seat seal | | HNBR | H168900 | 36 | 1 | Spray connection DE3 | PP | H168321 | | |
| 14 | 2 | Shaft seal | | FPM | H326355 | 37 | 1 | G-union 8x1-G1/8" | PVDF-black | H16388 | | |
| 15 | 1 | Quad ring | | EPDM | H77543 | 38 | 1 | CU4 , CU4plus adapter cmp. | PA6.6 GF30 | See page 22 | | |
| 16 | 1 | Guide ring | | HNBR | H170075 | 39 | 1 | CU43 , CU43plus . | PA6.6 GF30 | See page 22 | | |
| 17 | 1 | Piston ring | | FPM | H326353 | | | | black | | | |
| 18 | 1 | Quad ring | 12.37x2.62 | EPDM | H77515 | | | | PA 6.6 GF30 black | H336751 | | |

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Spare parts list:

Double seat mix proof valve DA4 1.5" - 4"; DN 40 - 100 DN 50

| | | Date: 21.03.18 | | 11.10.19 | | 13.02.24 | | SPX FLOW | |
|---------------|--------------------|--------------------------------|----------|--------------|---------------|--------------------|--------------------------------|----------------------------------|--------------------|
| | | Name: C.Keil | | Sze-Si. | | N.Shre | | | |
| | | Approved by: | | | | | | | |
| | | Date: _____ | | Name: _____ | | Approved by: _____ | | | |
| | | | | | | | | Page 6 of 22 | |
| | | | | | | | | RN 502.047.01 | |
| Item Quantity | Description | Included in spare parts (Pos.) | Material | Part no. | Item Quantity | Description | Included in spare parts (Pos.) | Material | Part no. |
| | | D41 1-6 | | 1.4404 | | H337211 | 19 1 | Safety nut M10x1 | A2 |
| | | D41 1-7 | | 1.4404 | | H337201 | 20 2 | Square key DIN68885 - A - 3x3x10 | A2 |
| 1 1 | Housing | D41 1-8 | | 1.4404 | | H337221 | 21 1 | Actuator | H335474 |
| | | DA42 | | 1.4404 | | H337044 | 22 2 | O-ring | NBR |
| | | DA43 | | 1.4404 | | H337054 | 23 2 | Actuator screw | Iglidur J350 |
| | | DA44 | | 1.4404 | | H335510 | 24 2 | V-seal | NBR |
| 2 1 | Upper valve shaft | 16,20,28 | | 1.4404 | | H341276 | 25 3 | W-union G1/8" Ø6mm | hard nickel plated |
| 3 1 | Lower valve shaft | | | 1.4404 | | H335370 | 26 1 | Stop screw | Grivory |
| 4 1 | Valve seat | | | 1.4404 | | H335364 | 27 1 | Lock washer D4 | H335172 |
| 5 1 | Seat ring | | | 1.4404 | | H334441 | 28 1 | Safety nut D3 | H147640 |
| 6 1 | Yoke | | | 1.4301 | | H334450 | 29 1 | Thrust ring | H123151 |
| 7 1 | Guide rod | 8, 9, 19, 20 | | 1.4404 | | H341305 | 30 8 | Hex screw M8 x 16 | A2 |
| 8 2 | Retainer ring | 1.4310 | | H14883 | | | 31 1 | Yoke cover D4 | H341315 |
| 9 1 | O-ring 9.25 x 1.78 | | | EPDM | | H148388 | 32 4 | Savetix head screw M4 x 8 | |
| | | | | EPDM | | H327602 | | washer M4 as set | 1.4301 |
| 10 1 | Middle seal | | | HNBR | | H332652 | 33 | | H336707 |
| | | | | FPM | | H332653 | 34 1 | O-ring | EPDM |
| | | | | EPDM | | H149618 | 35 1 | Venting plug G-1/8" | PE-Hard |
| 11 2 | Seat seal | | | HNBR | | H168900 | 36 1 | Spray connection DE3 | PP |
| | | | | FPM | | H326355 | 37 1 | G-union 8x1-G1/8" | PVDF-black |
| 12 2 | Housing seal | | | EPDM | | H77543 | 38 1 | CU4 , CU4plus adapter cmp. | PA6.6 GF30 |
| | | | | FPM | | H170075 | | | See page 22 |
| | | | | EPDM | | H326353 | 39 1 | CU43 , CU43plus . | PA6.6 GF30 |
| | | | | EPDM | | H77515 | | | See page 22 |
| 13 2 | Seat seal | | | HNBR | | H166678 | 40 1 | Prox. switch holder D4 compl. | PA 6.6 GF30 |
| | | | | FPM | | H326354 | | | black |
| 14 2 | Shaft seal | | | PTFE | | H335232 | 41 1 | Operating cam D4 top | 1.4523 / 444FR |
| 15 1 | Quad ring | | | EPDM | | H150988 | 42 1 | Operating cam D4 bottom | 1.4523 / 444FR |
| 16 1 | Guide ring | | | Iglidur A500 | | H320447 | 43 4 | Hex. screw M8x40 | A2-70 |
| 17 1 | Piston ring | | | Iglidur A500 | | H334863 | | | H336675 |
| 18 1 | Quad ring | 12.37x2.62 | | EPDM | | H311646 | | | |

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Spare parts list:

Double seat mix proof valve DA4 1.5" - 4"; DN 40 - 100 2"

| | | Date: 21.03.18 | | 11.10.19 | | 13.02.24 | | SPX FLOW | |
|---------------|-------------|--------------------------------|--------------|--------------|----------------------|--------------------------------------|--------------------------------|--------------------|----------|
| | | Name: C.Keil | | Sze-Si. | | N.Shre | | | |
| | | Approved by: | | | | | | | |
| | | Date: _____ | | Name: _____ | | Approved by: _____ | | | |
| | | | | | | | | | |
| | | RN 502.047.01 | | Page 8 of 22 | | | | | |
| Item Quantity | Description | Included in spare parts (Pos.) | Material | Part no. | Item Quantity | Description | Included in spare parts (Pos.) | Material | Part no. |
| | | D41 1-6 | | 1.4404 | H337216 | 19 1 Safety nut M10x1 | | A2 | H118903 |
| | | D41 1-7 | | 1.4404 | H337206 | 20 2 Square key DIN6885 - A - 3x3x10 | | A2 | H335171 |
| 1 | 1 | D41 1-8 | | 1.4404 | H337226 | 21 1 Actuator | 22, 23, 24 | 1.4301 | H335474 |
| | | DA42 | | 1.4404 | H337049 | 22 2 O-ring | 30x2.5 | NBR | H337897 |
| | | DA43 | | 1.4404 | H337059 | 23 2 Actuator screw | | Iglidur J350 | H334376 |
| | | DA44 | | 1.4404 | H335512 | 24 2 V-seal | | NBR | H334379 |
| 2 | 1 | Upper valve shaft | 16, 20, 28 | 1.4404 | H341276 | 25 3 W-union G1/8" Ø6mm | | hard nickel plated | H208825 |
| 3 | 1 | Lower valve shaft | | 1.4404 | H335370 | 26 1 Stop screw | | Grivory | H334382 |
| 4 | 1 | Valve seat | | 1.4404 | H335364 | 27 1 Lock washer D4 | | 1.4301 | H335172 |
| 5 | 1 | Seat ring | | 1.4404 | H334441 | 28 1 Safety nut D3 | | 1.4301 | H147640 |
| 6 | 1 | Yoke | | 1.4301 | H334450 | 29 1 Thrust ring | | 1.4057 | H123151 |
| 7 | 1 | Guide rod | 8, 9, 19, 20 | 1.4404 | H341305 | 30 8 Hex screw M8 x 16 | | A2 | H78772 |
| 8 | 2 | Retainer ring | 1.4310 | H14883 | | 31 1 Yoke cover D4 | 32 | 1.4301 | H341315 |
| 9 | 1 | O-ring 9.25 x 178 | | EPDM | H148388 | 32 4 Saverix head screw M4 x 8 | | 1.4301 | H336707 |
| 10 | 1 | Middle seal | | EPDM | H327602 | washer M4 as set | | | |
| | | HNBR | H332652 | | | | | | |
| | | FPM | H332653 | 34 1 | O-ring | | EPDM | H77039 | |
| 11 | 2 | Seat seal | | EPDM | H149618 | 35 1 Venting plug G-1/8" | PE-Hard | H16507 | |
| | | HNBR | H168900 | 36 1 | Spray connection DE3 | | PP | H168321 | |
| | | FPM | H326355 | 37 1 | G-union 8x1-G1/8" | | PVDF-black | H16388 | |
| 12 | 2 | Housing seal | | EPDM | H77543 | 38 1 CU4 , CU4plus adapter cmp. | PA6.6 GF30 | See page 22 | |
| | | HNBR | H170075 | | | black | | | |
| | | FPM | H326353 | 39 1 | CU43 , CU43plus . | | PA6.6 GF30 | See page 22 | |
| | | EPDM | H77515 | | | black | | | |
| 13 | 2 | Seat seal | | HNBR | H166678 | 40 1 Prox. switch holder D4 compl. | PA 6.6 GF30 | H336751 | |
| | | FPM | H326354 | | | black | | | |
| 14 | 2 | Shaft seal | | PTFE | H335232 | 41 1 Operating cam D4 top | 1.4523 / 444FR | H334387 | |
| 15 | 1 | Quad ring | | EPDM | H150988 | 42 1 Operating cam D4 bottom | 1.4523 / 444FR | H334386 | |
| 16 | 1 | Guide ring | | Iglidur A500 | H320447 | 43 4 Hex. screw M8x40 | A2-70 | H336675 | |
| 17 | 1 | Piston ring | | Iglidur A500 | H334863 | | | | |
| 18 | 1 | Quad ring | 12.37x2.62 | EPDM | H311646 | | | | |

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Spare parts list:

Double seat mix proof valve DA4 1.5" - 4"; DN 40 - 100 DN 65

| | | Date: 21.03.18 | | 11.10.19 | | 13.02.24 | | SPX FLOW | |
|---------------|--------------------|--------------------------------|----------|--------------|---------------|--------------------|--------------------------------|----------------------------------|--------------------|
| | | Name: C.Keil | | Sze-Si. | | N.Shre | | | |
| | | Approved by: | | | | | | | |
| | | Date: _____ | | Name: _____ | | Approved by: _____ | | | |
| | | | | | | | | Page 10 of 22 | |
| | | | | | | | | RN 502.047.01 | |
| Item Quantity | Description | Included in spare parts (Pos.) | Material | Part no. | Item Quantity | Description | Included in spare parts (Pos.) | Material | Part no. |
| | | D41 1-6 | | 1.4404 | | H337212 | 19 1 | Safety nut M10x1 | A2 |
| | | D41 1-7 | | 1.4404 | | H337202 | 20 2 | Square key DIN68855 - A - 3x3x10 | A2 |
| 1 1 | Housing | D41 1-8 | | 1.4404 | | H337222 | 21 1 | Actuator | H334430 |
| | | DA42 | | 1.4404 | | H337045 | 22 2 | O-ring | NBR |
| | | DA43 | | 1.4404 | | H337055 | 23 2 | Actuator screw | Iglidur J350 |
| | | DA44 | | 1.4404 | | H334418 | 24 2 | V-seal | NBR |
| 2 1 | Upper valve shaft | 16,20,28 | | 1.4404 | | H341277 | 25 3 | W-union G1/8" Ø6mm | hard nickel plated |
| 3 1 | Lower valve shaft | | | 1.4404 | | H334422 | 26 1 | Stop screw | Grivory |
| 4 1 | Valve seat | | | 1.4404 | | H334439 | 27 1 | Lock washer D4 | H335172 |
| 5 1 | Seat ring | | | 1.4404 | | H334441 | 28 1 | Safety nut D3 | H147640 |
| 6 1 | Yoke | | | 1.4301 | | H334450 | 29 1 | Thrust ring | H123151 |
| 7 1 | Guide rod | 8, 9, 19, 20 | | 1.4404 | | H341306 | 30 8 | Hex screw M8 x 16 | A2 |
| 8 2 | Retainer ring | 1.4310 | | H14883 | | | 31 1 | Yoke cover D4 | H341315 |
| 9 1 | O-ring 9.25 x 1.78 | | | EPDM | | H148388 | 32 4 | Savetix head screw M4 x 8 | |
| | | | | EPDM | | H327602 | | washer M4 as set | 1.4301 |
| 10 1 | Middle seal | | | HNBR | | H332652 | 33 | | H336707 |
| | | | | FPM | | H332653 | 34 1 | O-ring | EPDM |
| | | | | EPDM | | H149618 | 35 1 | Venting plug G-1/8" | H16507 |
| 11 2 | Seat seal | | | HNBR | | H168900 | 36 1 | Spray connection DE3 | PP |
| | | | | FPM | | H326355 | 37 1 | G-union 8x1-G1/8" | PVDF-black |
| 12 2 | Housing seal | | | EPDM | | H77543 | 38 1 | CU4 , CU4plus adapter cmp. | PA6.6 GF30 |
| | | | | FPM | | H170075 | | | See page 22 |
| | | | | EPDM | | H326353 | 39 1 | CU43 , CU43plus . | PA6.6 GF30 |
| | | | | EPDM | | H77515 | | | See page 22 |
| 13 2 | Seat seal | | | HNBR | | H166678 | 40 1 | Prox. switch holder D4 compl. | PA 6.6 GF30 |
| | | | | FPM | | H326354 | | | black |
| 14 2 | Shaft seal | | | PTFE | | H335232 | 41 1 | Operating cam D4 top | 1.4523 / 444FR |
| 15 1 | Quad ring | | | EPDM | | H150988 | 42 1 | Operating cam D4 bottom | 1.4523 / 444FR |
| 16 1 | Guide ring | | | Iglidur A500 | | H320447 | 43 4 | Hex. screw M8x40 | A2-70 |
| 17 1 | Piston ring | | | Iglidur A500 | | H334863 | | | H336675 |
| 18 1 | Quad ring | 12.37x2.62 | | EPDM | | H311646 | | | |

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Spare parts list:

Double seat mix proof valve DA4 1.5" - 4"; DN 40 - 100 2,5"

| Item | Quantity | Description | Included in spare parts (Pos.) | Material | Part no. | Item | Quantity | Description | Included in spare parts (Pos.) | | Material | Part no. |
|------|----------|--------------------|---|--|--|----------------------------------|----------------------------|---|--------------------------------------|--------------------------------|----------|----------|
| | | | | | | | | | Name: Approved by: | Date: Name: Approved by: | | |
| 1 | 1 | Housing | D41 1-6 D41 1-7 D41 1-8 DA42 DA43 DA44 | 1.4404 1.4404 1.4404 1.4404 1.4404 1.4404 | H337217 H337227 H337207 H337050 H337060 H335513 | 19 20 21 22 23 24 | 1 2 1 2 2 3 | Safety nut M10x1 Square key DIN6885 - A - 3x3x10 Actuator O-ring Actuator screw V-seal | A2 A2 | H118903 H335171 | | |
| 2 | 1 | Upper valve shaft | 16,20,28 | 1.4404 | H341278 | 25 | 3 | W-union G1/8" Ø6mm | NBR | H334430 | | |
| 3 | 1 | Lower valve shaft | | 1.4404 | H335371 | 26 | 1 | Stop screw | Iglidur J350 | H337897 | | |
| 4 | 1 | Valve seat | | 1.4404 | H335565 | 27 | 1 | Lock washer D4 | NBR | H334376 | | |
| 5 | 1 | Seat ring | | 1.4404 | H334441 | 28 | 1 | Safety nut D3 | Iglidur NBR | H334379 | | |
| 6 | 1 | Yoke | | 1.4301 | H334450 | 29 | 1 | Thrust ring | hard nickel plated | H208825 | | |
| 7 | 1 | Guide rod | 8, 9, 19, 20 | 1.4404 | H341307 | 30 | 8 | Hex screw M8 x 16 | Grivory | H334382 | | |
| 8 | 2 | Retainer ring | 1.4310 | H14883 | | 31 | 1 | Yoke cover D4 | A2 | H335172 | | |
| 9 | 1 | O-ring 9,25 x 1,78 | | EPDM | H148388 | 32 | 4 | Savetix head screw M4 x 8 washer M4 as set | | H147640 | | |
| 10 | 1 | Middle seal | | HNBR | H332652 | 33 | | | | H123151 | | |
| 11 | 2 | Seat seal | | FPM | H332653 | 34 | 1 | O-ring | EPDM | H78772 | | |
| 12 | 2 | Housing seal | | EPDM | H149618 | 35 | 1 | Venting plug G-1/8" | PE-Hard | H341315 | | |
| 13 | 2 | Seat seal | | HNBR | H168900 | 36 | 1 | Spray connection DE3 | PP | H336707 | | |
| 14 | 2 | Shaft seal | | FPM | H326355 | 37 | 1 | G-union 8x1-G1/8" | PVDF-black | H336388 | | |
| 15 | 1 | Quad ring | | EPDM | H77543 | 38 | 1 | CU4 , CU4plus adapter cmp. | PA6.6 GF30 | See page 22 | | |
| 16 | 1 | Guide ring | | HNBR | H170075 | | | | black | | | |
| 17 | 1 | Piston ring | | FPM | H326353 | 39 | 1 | CU43 , CU43plus . | PA6.6 GF30 | See page 22 | | |
| 18 | 1 | Quad ring | 12,37x2,62 | EPDM | H77515 | | | | black | | | |
| | | | | HNBR | H166678 | 40 | 1 | Prox. switch holder D4 compl. | PA 6.6 GF30 | H336751 | | |
| | | | | FPM | H326354 | | | | black | | | |
| | | | | PTFE | H335232 | 41 | 1 | Operating cam D4 top | 1.4523 / 444FR | H334387 | | |
| | | | | EPDM | H150988 | 42 | 1 | Operating cam D4 bottom | 1.4523 / 444FR | H334386 | | |
| | | | | Igidur A500 | H320447 | 43 | 4 | Hex. screw M8x40 | A2-70 | H336675 | | |
| | | | | Igidur A500 | H334863 | | | | | | | |
| | | | | EPDM | H311646 | | | | | | | |

SPX FLOW

RN 502.047.01

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Spare parts list:

Double seat mix proof valve DA4 1.5" - 4"; DN 40 - 100 3"

| | | Date: 21.03.18 | | 11.10.19 | | 13.02.24 | | SPX FLOW | |
|---------------|-------------|--------------------------------|--------------|--------------|---------------|----------------------|--------------------------------|----------------------------------|--------------------|
| | | Name: C.Keil | | Sze-Si. | | N.Shre | | | |
| | | Approved by: | | | | | | | |
| | | Date: _____ | | Name: _____ | | Approved by: _____ | | | |
| | | | | | | | | Page 14 of 22 | |
| | | | | | | | | RN 502.047.01 | |
| Item Quantity | Description | Included in spare parts (Pos.) | Material | Part no. | Item Quantity | Description | Included in spare parts (Pos.) | Material | Part no. |
| | | D41 1-6 | | 1.4404 | | H337218 | 19 1 | Safety nut M10x1 | A2 |
| | | D41 1-7 | | 1.4404 | | H337208 | 20 2 | Square key DIN68885 - A - 3x3x10 | A2 |
| 1 | 1 | D41 1-8 | | 1.4404 | | H337228 | 21 1 | Actuator | H334430 |
| | | DA42 | | 1.4404 | | H337051 | 22 2 | O-ring | NBR |
| | | DA43 | | 1.4404 | | H337061 | 23 2 | Actuator screw | Iglidur J350 |
| | | DA44 | | 1.4404 | | H335514 | 24 2 | V-seal | NBR |
| 2 | 1 | Upper valve shaft | 16,20,28 | 1.4404 | | H341280 | 25 3 | W-union G1/8" Ø6mm | hard nickel plated |
| 3 | 1 | Lower valve shaft | | 1.4404 | | H335372 | 26 1 | Stop screw | Grivory |
| 4 | 1 | Valve seat | | 1.4404 | | H335366 | 27 1 | Lock washer D4 | H335172 |
| 5 | 1 | Seat ring | | 1.4404 | | H334441 | 28 1 | Safety nut D3 | H147640 |
| 6 | 1 | Yoke | | 1.4301 | | H335748 | 29 1 | Thrust ring | H123151 |
| 7 | 1 | Guide rod | 8, 9, 19, 20 | 1.4404 | | H341309 | 30 8 | Hex screw M8 x 16 | A2 |
| 8 | 2 | Retainer ring | | 1.4310 | | H14883 | 31 1 | Yoke cover D4 | H341315 |
| 9 | 1 | O-ring 9.25 x 1.78 | | EPDM | | H148388 | 32 4 | Savetix head screw M4 x 8 | 1.4301 |
| 10 | 1 | Middle seal | | EPDM | | H327602 | | washer M4 as set | H336707 |
| | | HNBR | | H332652 | | | | | |
| | | FPM | | H332653 | 34 1 | O-ring | | EPDM | H77039 |
| 11 | 2 | Seat seal | | EPDM | | H149618 | 35 1 | Venting plug G-1/8" | PE-Hard |
| | | HNBR | | H168900 | 36 1 | Spray connection DE3 | | PP | H168321 |
| | | FPM | | H326355 | 37 1 | G-union 8x1-G1/8" | | PVDF-black | H16388 |
| 12 | 2 | Housing seal | | EPDM | | H77543 | 38 1 | CU4 , CU4plus adapter cmp. | PA6.6 GF30 |
| | | HNBR | | H170075 | | | | black | See page 22 |
| | | FPM | | H326353 | 39 1 | CU43 , CU43plus . | | PA6.6 GF30 | See page 22 |
| | | EPDM | | H77515 | | | | black | |
| 13 | 2 | Seat seal | | HNBR | | H166678 | 40 1 | Prox. switch holder D4 compl. | PA 6.6 GF30 |
| | | FPM | | H326354 | | | | black | H336751 |
| 14 | 2 | Shaft seal | | PTFE | | H335232 | 41 1 | Operating cam D4 top | 1.4523 / 444FR |
| 15 | 1 | Quad ring | | EPDM | | H150988 | 42 1 | Operating cam D4 bottom | 1.4523 / 444FR |
| 16 | 1 | Guide ring | | Iglidur A500 | | H320447 | 43 4 | Hex. screw M8x40 | A2-70 |
| 17 | 1 | Piston ring | | Iglidur A500 | | H334863 | | | H336675 |
| 18 | 1 | Quad ring | 12.37x2.62 | EPDM | | H311646 | | | |

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Spare parts list:

Double seat mix proof valve DA4 1.5" - 4"; DN 40 - 100 DN 80

| | | Date: 21.03.18 | | 11.10.19 | | 13.02.24 | | SPX FLOW | |
|---------------|--------------------|--------------------------------|----------|-------------|-----------------------------------|---------------------------------------|--------------------------------|--------------------|-------------|
| | | Name: C.Keil | | Sze-Si. | | N.Shre | | | |
| | | Approved by: | | | | | | | |
| | | Date: _____ | | Name: _____ | | Approved by: _____ | | | |
| | | | | | | | | Page 16 of 22 | |
| | | | | | | | | RN 502.047.01 | |
| Item Quantity | Description | Included in spare parts (Pos.) | Material | Part no. | Item Quantity | Description | Included in spare parts (Pos.) | Material | Part no. |
| | | D41 1-6 | | 1.4404 | H337213 | 19 1 Safety nut M10x1 | | A2 | H118903 |
| | | D41 1-7 | | 1.4404 | H337203 | 20 2 Square key DIN68885 - A - 3x3x10 | | A2 | H335171 |
| 1 1 | Housing | D41 1-8 | | 1.4404 | H337223 | 21 1 Actuator | 22, 23, 24 | 1.4301 | H335883 |
| | | DA42 | | 1.4404 | H337046 | 22 2 O-ring | 30x2.5 | NBR | H337897 |
| | | DA43 | | 1.4404 | H337056 | 23 2 Actuator screw | | Igidur J350 | H334376 |
| | | DA44 | | 1.4404 | H335845 | 24 2 V-seal | | NBR | H334379 |
| 2 1 | Upper valve shaft | 16, 20, 28 | | 1.4404 | H341279 | 25 3 W-union G1/8" Ø6mm | | hard nickel plated | H208825 |
| 3 1 | Lower valve shaft | | | 1.4404 | H335373 | 26 1 Stop screw | | Grivory | H334382 |
| 4 1 | Valve seat | | | 1.4404 | H335367 | 27 1 Lock washer D4 | | 1.4301 | H335172 |
| 5 1 | Seat ring | | | 1.4404 | H335872 | 28 1 Safety nut D3 | | 1.4301 | H147640 |
| 6 1 | Yoke | | | 1.4301 | H335748 | 29 1 Thrust ring | | 1.4057 | H123151 |
| 7 1 | Guide rod | 8, 9, 19, 20 | | 1.4404 | H341308 | 30 8 Hex screw M8 x 16 | | A2 | H78772 |
| 8 2 | Retainer ring | | | 1.4310 | H14883 | 31 1 Yoke cover D4 | 32 | 1.4301 | H341316 |
| 9 1 | O-ring 9.25 x 1.78 | | | EPDM | H148388 | 32 4 Saverix head screw M4 x 8 | | 1.4301 | H336707 |
| 10 1 | Middle seal | | | EPDM | H327985 | washer M4 as set | | | |
| | | HNBR | | H332249 | | | | | |
| | | FPM | | H332248 | 34 1 O-ring | | | EPDM | H77061 |
| 11 2 | Seat seal | | | EPDM | H149619 | 35 1 Venting plug G-1/8" | | PE-Hard | H16507 |
| | | HNBR | | H168901 | 36 1 Spray connection DE3 | | | PP | H168322 |
| | | FPM | | H153318 | 37 1 G-union 8x1-G1/8" | | | PVDF-black | H16388 |
| 12 2 | Housing seal | | | EPDM | H77583 | 38 1 CU4 , CU4plus adapter cmp. | | PA6.6 GF30 | See page 22 |
| | | HNBR | | H170074 | FPM | | | black | |
| | | | | H77582 | 39 1 CU43 , CU43plus . | | | PA6.6 GF30 | See page 22 |
| 13 2 | Seat seal | | | EPDM | H77586 | | | black | |
| | | HNBR | | H166682 | 40 1 Prox. switch holder D4 cmpl. | | | PA 6.6 GF30 | H336751 |
| | | FPM | | H336388 | | | | black | |
| 14 2 | Shaft seal | | | PTFE | H335934 | 41 1 Operating cam D4 top | | 1.4523 / 444FR | H334387 |
| 15 1 | Quad ring | | | EPDM | H148387 | 42 1 Operating cam D4 bottom | | 1.4523 / 444FR | H334386 |
| 16 1 | Guide ring | | | Igidur A500 | H320447 | 43 4 Hex. screw M8x40 | | A2-70 | H336675 |
| 17 1 | Piston ring | | | Igidur A500 | H335702 | | | | |
| 18 1 | Quad ring | 12.37x2.62 | | EPDM | H311646 | | | | |

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**Double seat mix proof valve DA4 1.5" - 4"; DN 40 - 100
DN 100**

Spare parts list:

| | | Date: 21.03.18 | | 11.10.19 | | 13.02.24 | | SPX FLOW | |
|---------------|--------------------|--------------------------------|----------|-------------|---------------|--------------------|--------------------------------|----------------------------------|--------------------|
| | | Name: C.Keil | | Sze-Si. | | N.Shre | | | |
| | | Approved by: | | | | | | | |
| | | Date: _____ | | Name: _____ | | Approved by: _____ | | | |
| | | | | | | | | Page 18 of 22 | |
| | | | | | | | | RN 502.047.01 | |
| Item Quantity | Description | Included in spare parts (Pos.) | Material | Part no. | Item Quantity | Description | Included in spare parts (Pos.) | Material | Part no. |
| | | D41 1-6 | | 1.4404 | | H337214 | 19 1 | Safety nut M10x1 | A2 |
| | | D41 1-7 | | 1.4404 | | H337204 | 20 2 | Square key DIN68885 - A - 3x3x10 | A2 |
| 1 1 | Housing | D41 1-8 | | 1.4404 | | H337224 | 21 1 | Actuator | H335883 |
| | | DA42 | | 1.4404 | | H337047 | 22 2 | O-ring | NBR |
| | | DA43 | | 1.4404 | | H337057 | 23 2 | Actuator screw | Igidur J350 |
| | | DA44 | | 1.4404 | | H335948 | 24 2 | V-seal | NBR |
| 2 1 | Upper valve shaft | 16,20,28 | | 1.4404 | | H341281 | 25 3 | W-union G1/8" Ø6mm | hard nickel plated |
| 3 1 | Lower valve shaft | | | 1.4404 | | H335374 | 26 1 | Stop screw | Grivory |
| 4 1 | Valve seat | | | 1.4404 | | H335368 | 27 1 | Lock washer D4 | H335172 |
| 5 1 | Seat ring | | | 1.4404 | | H335872 | 28 1 | Safety nut D3 | H147640 |
| 6 1 | Yoke | | | 1.4301 | | H335748 | 29 1 | Thrust ring | H123151 |
| 7 1 | Guide rod | 8, 9, 19, 20 | | 1.4404 | | H341310 | 30 8 | Hex screw M8 x 16 | A2 |
| 8 2 | Retainer ring | 1.4310 | | H14883 | | | 31 1 | Yoke cover D4 | H341316 |
| 9 1 | O-ring 9.25 x 1.78 | | | EPDM | | H148388 | 32 4 | Savetix head screw M4 x 8 | |
| | | | | EPDM | | H327985 | | washer M4 as set | 1.4301 |
| 10 1 | Middle seal | | | HNBR | | H332249 | 33 | | H336707 |
| | | | | FPM | | H332248 | 34 1 | O-ring | EPDM |
| | | | | EPDM | | H149619 | 35 1 | Venting plug G-1/8" | PE-Hard |
| 11 2 | Seat seal | | | HNBR | | H168901 | 36 1 | Spray connection DE3 | PP |
| | | | | FPM | | H153318 | 37 1 | G-union 8x1-G1/8" | PVDF-black |
| 12 2 | Housing seal | | | EPDM | | H77583 | 38 1 | CU4 , CU4plus adapter cmp. | PA6.6 GF30 |
| | | | | FPM | | H170074 | | | See page 22 |
| | | | | EPDM | | H77582 | 39 1 | CU43 , CU43plus . | PA6.6 GF30 |
| 13 2 | Seat seal | | | HNBR | | H166682 | | | See page 22 |
| | | | | FPM | | H336388 | 40 1 | Prox. switch holder D4 compl. | PA 6.6 GF30 |
| 14 2 | Shaft seal | | | PTFE | | H335934 | 41 1 | Operating cam D4 top | I.4523 / 444FR |
| 15 1 | Quad ring | | | EPDM | | H148387 | 42 1 | Operating cam D4 bottom | I.4523 / 444FR |
| 16 1 | Guide ring | | | Igidur A500 | | H320447 | 43 4 | Hex. screw M8x40 | A2-70 |
| 17 1 | Piston ring | | | Igidur A500 | | H335702 | | | H336675 |
| 18 1 | Quad ring | 12.37x2.62 | | EPDM | | H311646 | | | |

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Spare parts list:

Double seat mix proof valve DA4 1.5" - 4"; DN 40 - 100 4"

| | | Date: | 21.03.18 | 11.10.19 | 13.02.24 | SPX FLOW | | |
|------|----------|--------------------|--------------------------------|----------|----------|------------------------------------|---------------------------------|-------------|
| | | Name: | C.Keil | Sze-Si. | N.Shre | | | |
| | | Approved by: | | | | | | |
| | | Date: | | | | Page 20 of 22 | | |
| | | Name: | | | | RN 502.047.01 | | |
| | | Approved by: | | | | | | |
| Item | Quantity | Description | Included in spare parts (Pos.) | Material | Part no. | Item | Quantity | |
| | | D41 1-6 | 1.4404 | H337219 | 19 | 1 Safety nut M10x1 | A2 | |
| | | D41 1-7 | 1.4404 | H337209 | 20 | 2 Square key DIN68885 - A - 3x3x10 | A2 | |
| | | D41 1-8 | 1.4404 | H337229 | 21 | 1 Actuator | H335883 | |
| | | DA42 | 1.4404 | H337052 | 22 | 2 O-ring | NBR | |
| | | DA43 | 1.4404 | H337062 | 23 | 2 Actuator screw | Igidur J350 | |
| | | DA44 | 1.4404 | H3358851 | 24 | 2 V-seal | NBR | |
| 2 | 1 | Upper valve shaft | 16,20,28 | H341281 | 25 | 3 W-union G1/8" Ø6mm | hard nickel plated | |
| 3 | 1 | Lower valve shaft | 1.4404 | | 26 | 1 Stop screw | Grivory | |
| 4 | 1 | Valve seat | 1.4404 | H335368 | 27 | 1 Lock washer D4 | H335172 | |
| 5 | 1 | Seat ring | 1.4404 | H335872 | 28 | 1 Safety nut D3 | H147640 | |
| 6 | 1 | Yoke | 1.4301 | H335748 | 29 | 1 Thrust ring | H123151 | |
| 7 | 1 | Guide rod | 8, 9, 19, 20 | 1.4404 | 30 | 8 Hex screw M8 x 16 | A2 | |
| 8 | 2 | Retainer ring | 1.4310 | H14883 | 31 | 1 Yoke cover D4 | H78772 | |
| 9 | 1 | O-ring 9.25 x 1.78 | | EPDM | H148388 | 32 | 4 Saverix head screw M4 x 8 | H341316 |
| | | | | EPDM | H327985 | | washer M4 as set | H336707 |
| 10 | 1 | Middle seal | | HNBR | H332249 | 33 | | |
| | | | | FPM | H332248 | 34 | 1 O-ring | EPDM |
| | | | | EPDM | H149619 | 35 | 1 Venting plug G-1/8" | H77061 |
| 11 | 2 | Seat seal | | HNBR | H168901 | 36 | 1 Spray connection DE3 | PE-Hard |
| | | | | FPM | H153318 | 37 | 1 G-union 8x1-G1/8" | H16507 |
| 12 | 2 | Housing seal | | EPDM | H77583 | 38 | 1 CU4 , CU4plus adapter cmp. | PP |
| | | | | FPM | H170074 | | | H168322 |
| | | | | EPDM | H77582 | 39 | 1 CU43 , CU43plus . | PVDF-black |
| 13 | 2 | Seat seal | | HNBR | H166682 | 40 | 1 Prox. switch holder D4 compl. | H16388 |
| | | | | FPM | H336388 | | | H16388 |
| 14 | 2 | Shaft seal | | PTFE | H335934 | 41 | 1 Operating cam D4 top | PA6.6 GF30 |
| 15 | 1 | Quad ring | | EPDM | H148387 | 42 | 1 Operating cam D4 bottom | Igidur A500 |
| 16 | 1 | Guide ring | | | | 43 | 4 Hex. screw M8x40 | Igidur A500 |
| 17 | 1 | Piston ring | | | | | | Igidur A500 |
| 18 | 1 | Quad ring | 12.37x2.62 | EPDM | H311646 | | | |

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| Spare parts list: | | | | | | Date: | 21.03.18 | 11.10.19 | 13.02.24 | SPX FLOW | |
|--|-----------------------|-----------------|-------------------|--------------|--------------|--------------------------------|-------------------|----------|-------------------|---------------------|--|
| Item | Description | Air connections | Material | Part no. | Quantity | Name: | C.Keil | Sze-Sil. | N.Shre | | |
| Double seat mix proof valve DA4 Control unit and adapter | | | | | | Date: | | | | | |
| Item | Description | Air connections | Material | Part no. | Quantity | Name: | | | | RN 502.047.01 | |
| Approved by: | Approved by: | Approved by: | Approved by: | Approved by: | Approved by: | Approved by: | | | | Page 22 of 22 | |
| 38 | CU4 D4 adapter cmpl. | / | PA 6.6 GF30 black | H337098 | 38 | CU4plus D4 V2 adapter cmpl. | PA6.6 GF30 black | | | CU4plus adapter DA4 | |
| CU4 adapter DA4 | | | | | | CU4 Control Units | | | | | |
| 1 | CU43 D4 DC | 6mm | PA 6.6 GF30 black | H336955 | 1 | CU43plus D4 V2 AS-i Ext. | PA 6.6 GF30 black | 6mm | PA 6.6 GF30 black | H338822 | |
| 1 | CU43 D4 M12 DC | 6mm | PA 6.6 GF30 black | H341343 | 1 | CU43plus D4 V2 M12 AS-i Ext. | PA 6.6 GF30 black | 6mm | PA 6.6 GF30 black | H338867 | |
| 1 | CU43 D4 AS-i Ext. | 6mm | PA 6.6 GF30 black | H336957 | 1 | CU43plus-D4-M12 IO-LINK | PA 6.6 GF30 black | 6mm | PA 6.6 GF30 black | H345134 | |
| 1 | CU43 D4 M12 AS-i Ext. | 6mm | PA 6.6 GF30 black | H338897 | 1 | CU43plus-D4-M12 AS-I V5 | PA 6.6 GF30 black | 6mm | PA 6.6 GF30 black | H348035 | |
| 1 | CU43 D4 AS-i Std. | 6mm | PA 6.6 GF30 black | H338152 | 1 | CU43plus-D4-M12 Direct Connect | PA 6.6 GF30 black | 6mm | PA 6.6 GF30 black | H342472 | |
| 1 | CU43 D4 M12 AS-i Std. | 6mm | PA 6.6 GF30 black | H338899 | 1 | CU43plus-D4-Direct Connect | PA 6.6 GF30 black | 6mm | PA 6.6 GF30 black | H342452 | |
| 39 | CU43 D4 DC | 1/4" OD | PA 6.6 GF30 black | H336960 | 1 | CU43plus-D4-M12 IO-LINK | PA 6.6 GF30 black | 1/4" OD | PA 6.6 GF30 black | H345135 | |
| 1 | CU43 D4 M12 DC | 1/4" OD | PA 6.6 GF30 black | H341352 | 1 | CU43plus-D4-M12 AS-I V5 | PA 6.6 GF30 black | 1/4" OD | PA 6.6 GF30 black | H348036 | |
| 1 | CU43 D4 AS-i Ext. | 1/4" OD | PA 6.6 GF30 black | H336962 | 1 | CU43plus D4 V2 AS-i Ext. | PA 6.6 GF30 black | 1/4" OD | PA 6.6 GF30 black | H338826 | |
| 1 | CU43 D4 M12 AS-i Ext. | 1/4" OD | PA 6.6 GF30 black | H338901 | 1 | CU43plus D4 V2 M12 AS-i Ext. | PA 6.6 GF30 black | 1/4" OD | PA 6.6 GF30 black | H338871 | |
| 1 | CU43 D4 AS-i Std. | 1/4" OD | PA 6.6 GF30 black | H338153 | 1 | CU43plus-D4-M12 Direct Connect | PA 6.6 GF30 black | 1/4" OD | PA 6.6 GF30 black | H342473 | |
| 1 | CU43 D4 M12 AS-i Std. | 1/4" OD | PA 6.6 GF30 black | H338903 | 1 | CU43plus-D4-Direct Connect | PA 6.6 GF30 black | 1/4" OD | PA 6.6 GF30 black | H342453 | |

APV DA4

DOUBLE SEAT MIX PROOF VALVE



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