

APV Double Seat Valve Type D4*

DOUBLE SEAT MIX PROOF VALVES (D4/D4SL)



SAFETY AGAINST EXPLOSION - FOR SPECIFIC IECEx ZONE 2 APPLICATIONS

FORM NO.: H345314 REVISION: GB-1

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





CE Declaration of Conformity
UKCA Declaration of Conformity

We,

DESIGN CENTER/MANUFACTURER: SPX Flow Technology Germany GmbH
Gottlieb-Daimler-Str. 13, D-59439 Holzwickede

MANUFACTURING FACILITY: SPX Flow Technology Poland sp. z o.o.
Rolbieskiego 2, 85-862 Bydgoszcz, Poland

AUTHORIZED REPRESENTATIVE: SPX Flow Europe Ltd.
(for UKCA) Part Ground floor, Alexander House
4 Station Road Cheadle Hulme
UK SK8 5AE United Kingdom

declare under our sole responsibility that the

APV D4 / D4 SL Double Seat Mix Proof Valves - IECEx ATEX Zone 2
equipped with the CU4, CU4plus Control Units - IECEx ATEX Zone 2

Explosion subcategory / Equipment marking:
II 3 G Ex ec h IIB T4 Gc
IECEX TUN 22.0020X
TÜV 23 ATEX 349764 X
0 °C ≤ Tamb. ≤ +55 °C

meet the requirements of the
Machinery Directive 2006/42/EC
& EN ISO 12100-2010, DIN EN ISO 14159-2008-7, DIN EN 1672-2-2009-07

Electromagnetic Compatibility Directive 2014/30/EU
& protection class IP 64 EN 60529, EN 61000-6-2, EN 61000-6-4, EN 60068-2-6

RoHS Directive 2011/65/EU

IECEX ATEX Standards
EN ISO 80079-36:2016, EN ISO 80079-37:2016
IEC 60079-0:2017, IEC 60079-7:2017 (Control Unit)
TÜV NORD CERT GmbH, Hanover-Office, Am TÜV 1, 30519 Hanover, Germany,
Notified Body number: 0032

Holzwickede, Nov. 2023



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

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

Electromagnetic Compatibility Regulations 2016 No. 1091 & BS harmonized standards

Restriction of Use of Certain Hazardous Substances in Electrical and Electronic Equipment
Regulation 2012 No. 3032

Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres
Regulations 2016 No. 1107 & BS harmonized standards

Manchester, Nov. 2023

DocuSigned by:


Mark Shanahan, VP Finance N&H Solutions



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DocuSigned by:


Mark Shanahan, VP Finance N&H Solutions

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1. General Terms

This instruction manual applies for APV double seat mix proof valves type D4* in the nominal dimensions DN 40-150, 1,5"-6" for use in specific IECEx Zone 2 Gas applications. The equipment was assessed according to the Standards ISO 80079-36:2016, ISO 80079-37:2016.

Notified body: TÜV NORD CERT GmbH
 Am TÜV 1, 30519 Hanover, Germany
 Notified Body number: 0044

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. General 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



Caution!

This symbol draws your attention to important directions which have to be observed for the operation in explosive areas.

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.

Actuators must be replaced after 250,000 operating cycles or after 10 years at the latest. Contact SPX FLOW or your distributor for replacement.



2. General Safety

2.2 Safety Instructions



- 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.



- 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. Instructions for Safe Use in Potentially Explosive Areas

3.1. Responsibility for IECEx certification - scope of supply

SPX FLOW will be held responsible only for the valves supplied and selected according to the operating conditions indicated by the customer or end user and as stated in the order confirmation. If in doubt, contact your local supplier.

All other assembled equipment and devices must have a separate certification of at least the same or higher grade of protection as the valve, provided by the supplier(s) of that equipment and devices. The complete unit must be certified separately by the final assembling manufacturer and must have a separate name plate supplied by the unit manufacturer.

3. Instructions for Safe Use in Potentially Explosive Areas

3.2. Safety Instructions



Caution!

If the valve is used for flammable liquids, it must be observed that every operation of the valve is combined with an operating leakage.

Switching leakage:

Valve	Criteria	Result
D4 DN40-65, 1,5"–3"	minimum switching leakage	0,03 ml per stroke
D4 DN80-100, 4"	minimum switching leakage	0,2 ml per stroke
D4 SL DN40-65, 1,5"–3"	minimum switching leakage	0,03 ml per stroke
D4 SL DN80-100, 4"	minimum switching leakage	0,2 ml per stroke
D4 DN125	minimum switching leakage	0,07 ml per stroke
D4 DN150, 6"OD	minimum switching leakage	0,1 ml per stroke
D4 SL DN125	minimum switching leakage	0,07 ml per stroke
D4 SL DN150, 6"OD	minimum switching leakage	0,1 ml per stroke

The operator shall consider these conditions in his considerations and classifications of explosive environments.

Installation, connection, start-up, maintenance and repair work must only be carried out by qualified personnel.

The following aspects must be observed:

- The instructions of this manual together with all relevant instructions for the components, equipment and installations installed.
- Warnings and installations fixed to the components.
- The specific regulations for and requirements to the system in which the valve is installed.
- The currently valid regional, national and international regulations.
- Any special requirement and national legislation relative to the use of flammable liquids or tools, e.g. the risk of ignition in case of spark formation, must be observed.

3. Instructions for Safe Use in Potentially Explosive Areas



It must be ensured that the group, the category and the temperature class of the valve complies with the minimum requirements of the operating environment!



Inflammable gas mixtures or dust concentrations in connection with hot, operational and movable parts of the valve can lead to serious or fatal injury!



It is recommended to perform installation, service and maintenance work in the absence of potentially explosive atmosphere in order to safeguard against unforeseen hazards. In accordance with Annex A of EN 1127-1:2019, it is allowed to use steel tools which can only cause single sparks in ATEX Zones 1 and 2 environment for such activities. In case of doubt, spark-resistant tools must be used!



Welding when necessary, shall always be carried out in the absence of explosive atmosphere. In all cases of installation, service or maintenance activity, all the energy sources of D4* valves shall be isolated.



Conductive connection to the pipeline must be provided. The integration into the local potential equalisation must be guaranteed!



All non-conductive parts used in the D4* valves follow the surface resistivity requirements of the applied harmonized standards. It is, however, recommended to clean such surface with a damp cloth and with slow rubbing motion during the presence of hazardous atmospheres.



If CIP cleaning is performed in hazardous areas, the temperatures of the cleaning liquids must comply with the temperature ranges as stated in the table 4.2 on page 9.

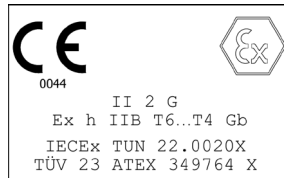
The standard SPX Flow control unit series CU2, CU3, CU4 and the 8681 control top are not suited for use in IECEx ATEX environments!

4. Identification of valves, Temperature classes, Responsibilities

4.1. Identification of valves for use in IECEx ATEX environment

4.1.1. D4* Valves Zone 2 with proximity switch

Identification:



Equipment group II

Explosion subcategory
Ex h IIB T6...T4 Gb



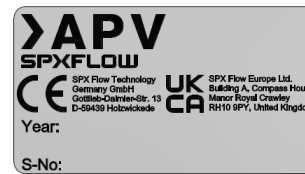
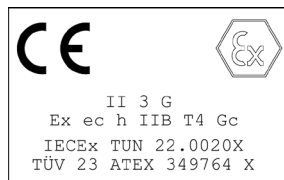
- Temperature classes T4 (according to table 4.2)



D4* valves with proximity switch can be used for temperature classes T6, T5, T4.

4.1.2. D4* Valves with CU4** resp. CU4*plus* Control Unit Zone 2

Identification:



Equipment group II

Explosion subcategory
Ex ec h IIB T4 Gc



- Temperature classes T6...T4 (according to table 4.2)



D4* valves equipped with CU4** or CU4*plus* IECEx Z2 control units can be used for temperature class T6...T4.



Reference is given to the **Instruction Manuals** of the APV Control Units with the different inner designs:
CU4** for IECEx Zone 2 Gas Applications
CU4*plus* for IECEx Zone 2 Gas Applications

4. Identification of valves, Temperature classes, Responsibilities

4.2. Temperature classes and permissible temperatures



The valve surface temperature mainly depends on the temperature of the process media. Select the temperature class relative to the temperature of your process media from the following table:

Media temperature	≤ 80 °C	≤ 95 °C	≤ 130 °C
Temperature class	T6	T5	T4

Under standard operating conditions the highest surface temperature will be comparably as high as the temperature of the medium plus a safety addition for local temperature increases. The valve must be completely free to the environment in order to provide for sufficient heat release.

All data (temperature classes) refer to an ambient temperature of 0°C and 55°C. If the ambient temperature is above 55°C, the temperature difference must be adjusted. In all cases, contact your responsible SPX FLOW representative!

4.3. Responsibilities



It is within the operator's responsibility to ensure that the specified product temperatures are not exceeded and that regular inspections and maintenance are carried out to provide for proper function of the valve.

5. 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 valve is suitable for use in hazardous areas as identified on the type label of the valve.

Its use is permissible only within the admissible pressure and temperature margins and under consideration of chemical and corrosive influences.

Any use exceeding the margins and specifications set forth, is considered to be not intended.

Any damage resulting therefrom is not within the responsibility of the manufacturer. The user will bear the full risk.



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 ≤ 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

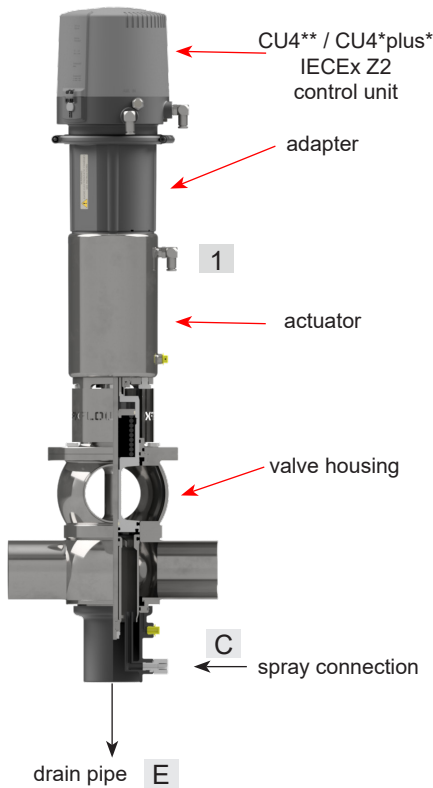
To view the certifications for this and other innovative SPX FLOW products, visit

<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.

6. Mode of Operation

fig. 6.1. D4* valve

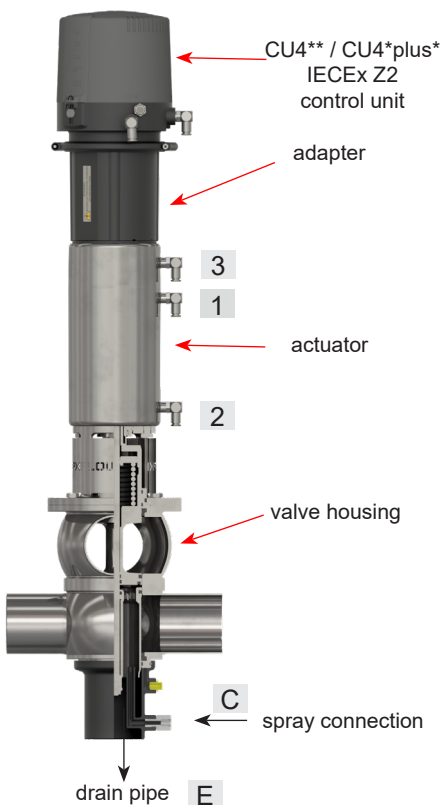


6.1. General terms

Due to its construction and mode of operation as well as to the use of high quality stainless steel and adequate seal materials, the D4* double seat mix proof valves are suited for applications in the food and beverage industries as well as in pharmaceutical and chemical applications.

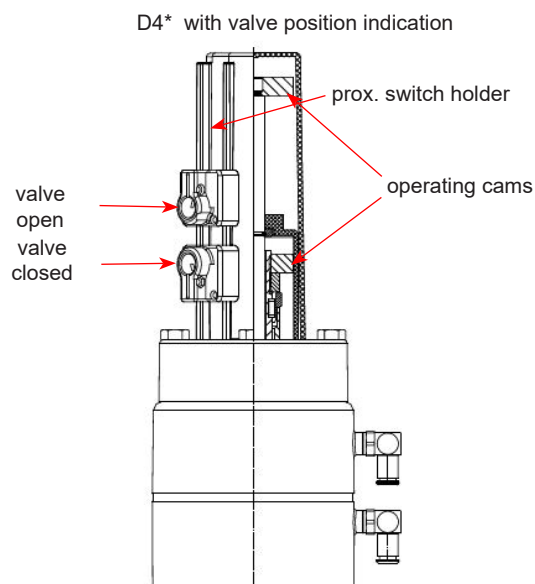
- The D4* valves separate two line passages by two balanced and independently operating valve shafts with an intervening leakage chamber.
- The valve opens from the top to the bottom in a low-leakage design.
- Leakages are discharged via the drain pipe (E) in depressurized state.
- The pneumatic actuator opens the valve via the air connection (1). The spring force resets the valve into the “closed” safe position.
- The standard D4* valve is equipped with a non-seat lift actuator and a CU4** / CU4*plus* IECEX Zone 2 control unit.
- The standard D4 SL (D4*) valve is equipped with an actuator including seat lift function and a CU4** / CU4*plus* IECEX Zone 2 control unit.
- D4 SL (D4*) valve:
Cleaning of the seat is controlled via the air connections.
2 = to lift upper shaft
3 = to lift lower shaft
- The spray connection (C) cleans the leakage chamber.

fig. 6.1.1. D4 SL (D4*) valve



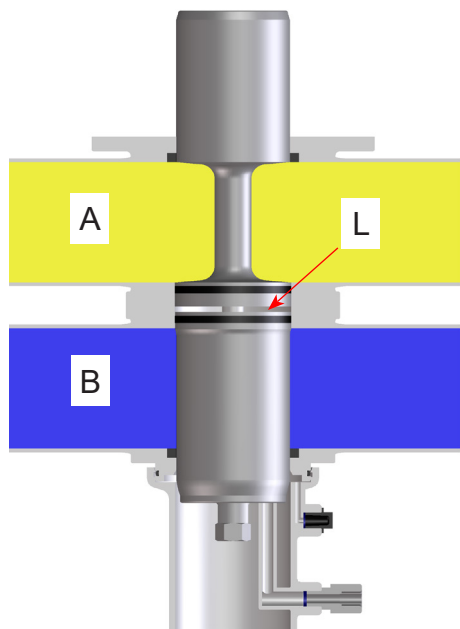
As an option, the closed and open positions of the D4* can be detected via proximity switches.

fig. 6.1.2.



6. Mode of Operation

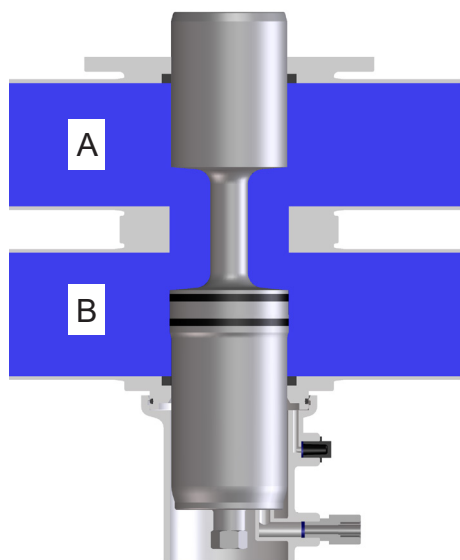
fig. 6.2.



6.2. 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. 6.3.



6.3. 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.

7. Control Units / Valve Position Indication

7.1. Control unit and adapter

fig. 7.1.



Caution!

Control units for the D4* valves for use in potentially explosive areas shall be selected in coordination with SPX FLOW. We point out that we will not accept any liability for damage, malfunctions or harm of any kind resulting from SPX FLOW - unauthorized and/or arbitrary solutions determined by the user.

Designation	D4*	D4 SL (D4*)
Ø Air connection	6 mm	6 mm
CU4 Control Unit		
CU4 D4 Direct Connect IECEX Z2 (Hall sensors)	CU41 D4 DC IECEX Z2 Ex ec IIB T4 Gc H345120	CU43 D4 DC IECEX Z2 Ex ec IIB T4 Gc H345116
CU4 D4 Direct Connect M12 IECEX Z2 (Hall sensors)	CU41 D4 DC M12 IECEX Z2 Ex ec IIB T4 Gc H345121	CU43 D4 DC M12 IECEX Z2 Ex ec IIB T4 Gc H345117
CU4 D4 AS-interface IECEX Z2 (Hall sensors)	CU41 D4 AS-i IECEX Z2 Ex ec IIB T4 Gc H345112	CU43 D4 AS-i IECEX Z2 Ex ec IIB T4 Gc H345108
CU4 D4 AS-interface M12 IECEX Z2 (Hall sensors)	CU41 D4 AS-i M12 IECEX Z2 Ex ec IIB T4 Gc H345113	CU43 D4 AS-i M12 IECEX Z2 Ex ec IIB T4 Gc H345109
Adapter	CU4 D4 adapter cmpl. H337098	
CU4 plus Control Unit		
CU4plus D4 Direct Connect IECEX Z2 (Linear sensors)	CU41plus D4 DC IECEX Z2 Ex ec IIB T4 Gc H345104	CU43plus D4 DC IECEX Z2 Ex ec IIB T4 Gc H345100
CU4plus D4 Direct Connect M12 IECEX Z2 (Linear sensors)	CU41plus D4 DC M12 IECEX Z2 Ex ec IIB T4 Gc H345105	CU43plus D4 DC M12 IECEX Z2 Ex ec IIB T4 Gc H345101
CU4plus D4 AS-interface IECEX Z2 (Linear sensors)	CU41plus D4 AS-i IECEX Z2 Ex ec IIB T4 Gcc H345096	CU43plus D4 AS-i IECEX Z2 Ex ec IIB T4 Gc H345092
CU4plus D4 AS-interface M12 IECEX Z2 (Linear sensors)	CU41plus D4 AS-i M12 IECEX Z2 Ex ec IIB T4 Gc H345097	CU43plus D4 AS-i M12 IECEX Z2 Ex ec IIB T4 Gc H345093
CU4plus D4 IO-Link M12 IECEX Z2 (Linear sensors)	CU41plus D4 IO-Link IECEX Z2 Ex ec IIB T4 Gc H348008	CU43plus D4 IO-Link IECEX Z2 Ex ec IIB T4 Gc H348004
Adapter	CU4plus D4 V2 adapter cmpl. H341891	



D4* valves equipped with CU4** resp. CU4*plus* IECEX Zone 2 Control Unit can be used for temperature classes T4. Please see table 4.2.

7. Control Units / Valve Position Indication

7.2. Valve position indication

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



Caution!

The use of valve position indicators which are approved for the application in explosive atmospheres is compulsory!

We recommend using our APV standard type for ATEX environments:

operating distance: 5 mm

diameter: 11 mm

cable length: 2 m

Approval according to: KEMA 02 ATEX 1090X

ref.-No. 000 86-01-127/93; H130435

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



The use and operation of valve position indicators shall be evaluated by the operator of the installation!

8. Cleaning

In the cleaning process of the valves, distinction is made between the following areas: Flow areas, Seat area, and Leakage chamber.

8.1. Flow area

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

8.2. D4 SL valve: Seat area (chapters 8.5. and 8.6.)

The seat area and leakage chamber are cleaned through lifting of the individual valve shafts during cleaning of the respective passage.

8.3. Seat area and Leakage chamber

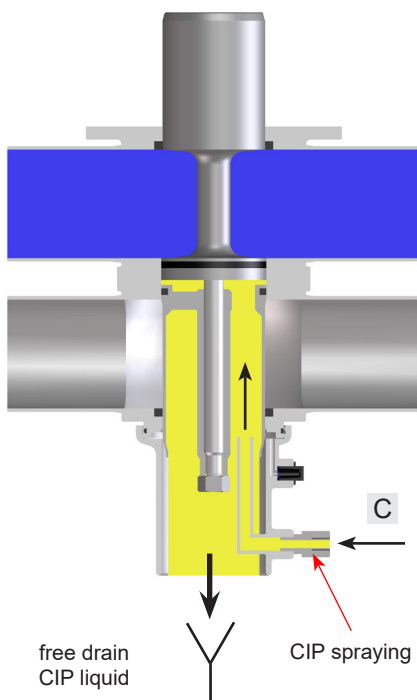
CIP spraying cleans the seat area and the leakage chamber. The cleaning connection is at item C in fig. 8.3.

D4 valve: CIP spraying must generally be undertaken.

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", 10 valves DN 125-150 / 6" can be cleaned via one spray distribution line DN 25.

fig. 8.3.



8.4. Cleaning recommendation

Cleaning steps	Seat lifting cycle (D4 SL)	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.

- **D4 SL Valve:** 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, time and number of cycles must be adjusted.
- Flushing quantities per CIP spraying cycle:

DN40-100/1,5-4"	about 1,2 ltr/10s
DN125-150/6"	about 5,0 ltr/10s
- Cleaning pressure at CIP cleaning connection:

min. 2 bar
max. 5 bar



Caution!

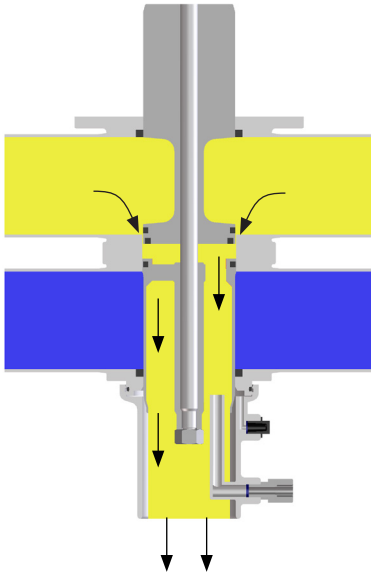
The cleaning liquid applied must be compatible with the respective seal material.

Caution!

All non-conductive parts used in the D4* valves follow the surface resistivity requirements of the applied harmonized standards. It is, however, recommended to clean such surfaces with a damp cloth and with slow rubbing motion during the presence of hazardous atmospheres.

8. Cleaning

fig. 8.5.



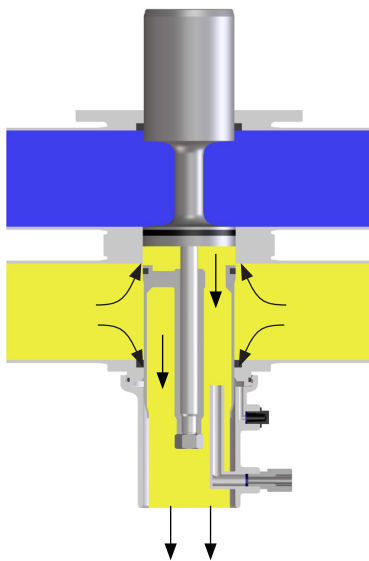
8.5. D4 SL valve: Cleaning of upper area (fig. 8.5.)

The upper valve shaft is lifted via connection (2), as shown in fig. 6.1.1 on page 11.

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.

The lifting stroke is limited by a stop in the actuator.

fig. 8.6.



8.6. D4 SL valve: Cleaning of lower area (fig. 8.6.)

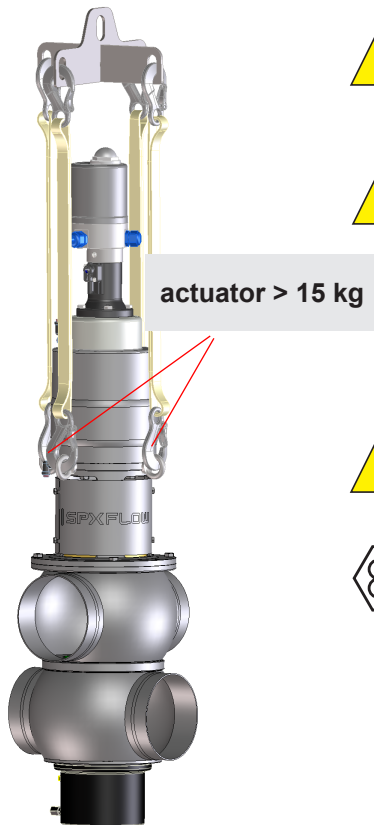
The lower valve shaft is lifted via connection (3), as shown in fig. 6.1.1 on page 11.

Through the lifting of 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.

The lifting stroke is limited by a stop in the actuator.

9. Installation and Commissioning

fig. 9.1.



- 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!

Conductive connection to the pipeline must be provided. The integration into the local potential equalisation must be guaranteed!



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 shaft 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.



Caution!

Use a lifting device for valves with actuators with a weight greater than 15 kg. The suspension points are illustrated in fig. 9.1.



Caution!

During installation, assembly and before first startup:

Ensure that all the moving parts are free from solid particles such as dust or metal pieces. Solid particles may produce potential risks of ignition due to mechanical sparks or rise in temperature as a result of friction.

9. Installation and Commissioning

9.1. Welding Instructions



Caution!

It is recommended to perform installation, service and maintenance work in the absence of potentially explosive atmosphere in order to safeguard against unforeseen hazards. In accordance with Annex A of EN 1127-1:2019, it is allowed to use steel tools which can only cause single sparks in ATEX Zones 1 and 2 environment for such activities. In case of doubt, spark-resistant tools must be used!



Welding when necessary, shall always be carried out in the absence of explosive atmosphere. In all cases of installation, service or maintenance activity, all the energy sources of D4* valves shall be isolated.

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



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



DN40-100/1,5-4": Remove the lower shaft seal and guide ring from the housing.

DN125-150/6": It is not necessary to remove the lower shaft seal as it can be damaged during dismantling.

- 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.

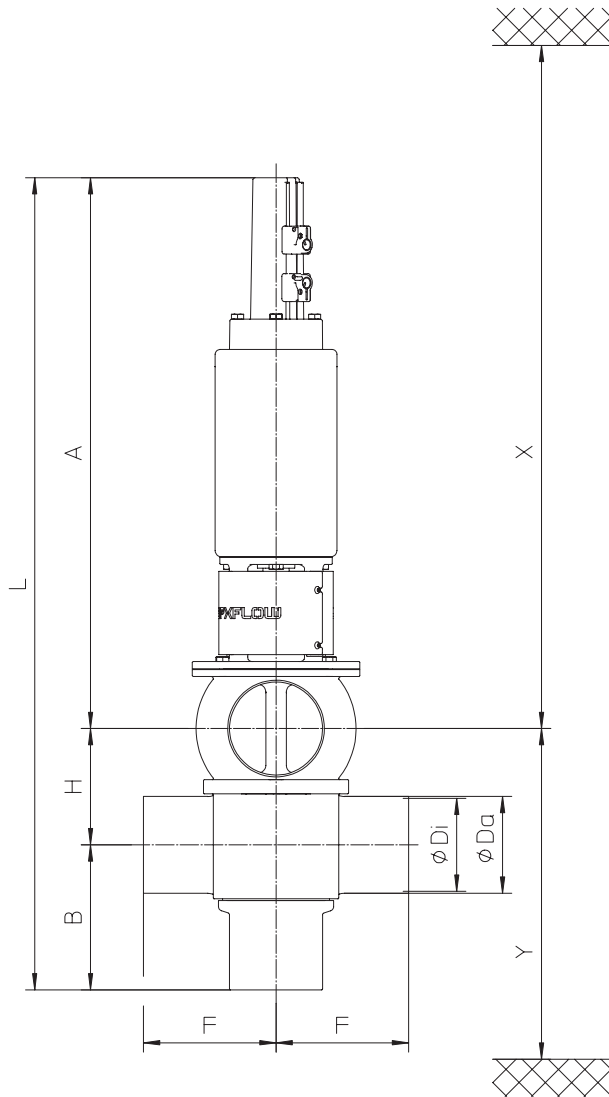


Caution! After welding the valve housing or mating flanges, and after performing any work on the piping, do not operate the valves until the corresponding areas of the installation and piping have been cleaned and welding residue has been removed. If the piping is not cleaned before operation, welding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

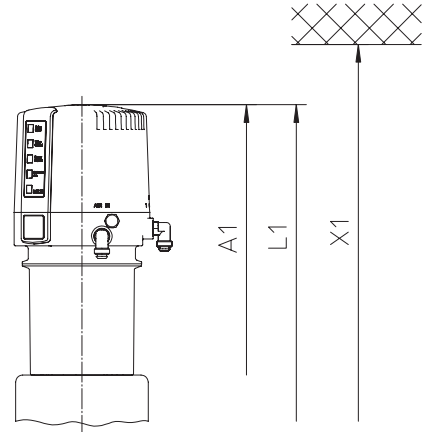
- If these welding instructions are not followed, any resulting damage will not be covered by the warranty.
- Welding directives for aseptic applications shall be drawn from the AWS/ANSI Directives and EHEDG Guidelines.

10. Dimensions / Weights

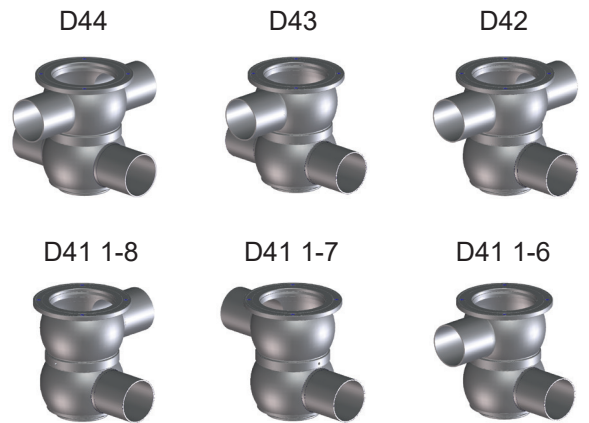
10.1. D4 Valve



CU4** resp. CU4*plus* IECEx Z2 control unit



housing configuration

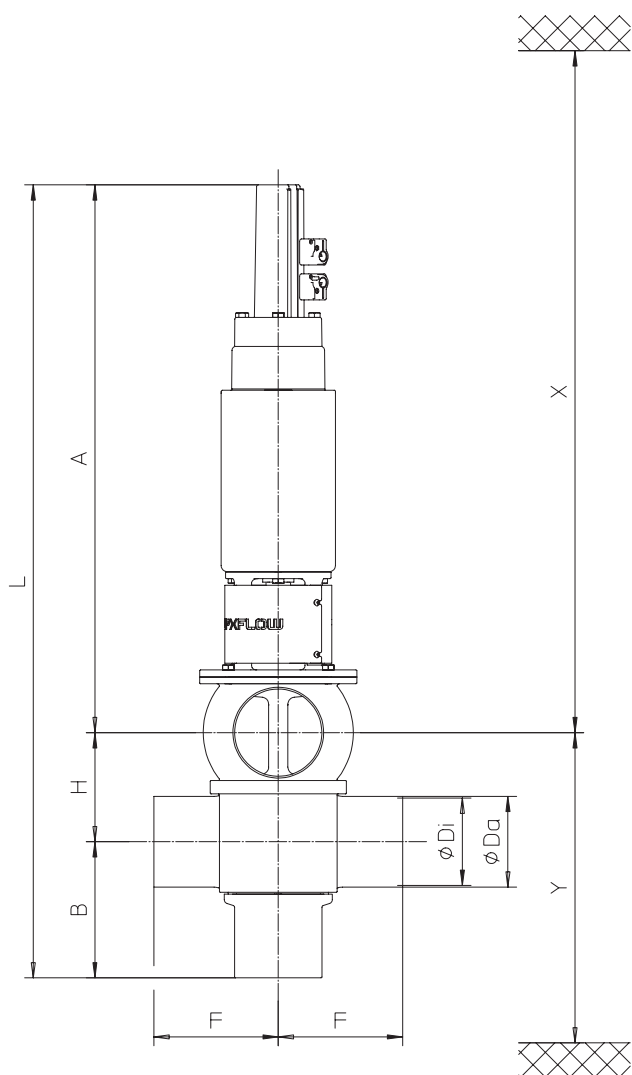


Dimensions in mm										install. dimen. min. in mm			weights in kg with CU
DN	A	A1	B	Ø Da	Ø Di	F	H	L	L1	X*	X1*	Y*	
40	483	566	120	41	38	125	63	666	749	710	790	200	14,9
50	487	570	126	53	50	125	75	688	771	740	820	218	15,0
65	495	578	134	70	66	125	91	720	803	780	860	242	16,6
80	583	666	146	85	81	142,5	106	835	918	890	980	274	25,5
100	593	676	156	104	100	142,5	125	874	957	940	1020	303	25,9
125	677	760	179	129	125	150	150	1006	1089	1030	1115	350	41,0
150	725	793	194	154	150	150	175	1094	1162	1075	1160	390	49,0
Inch													
1,5"	483	566	119	38,1	34,8	125	63	667	750	710	790	199	14,9
2"	487	570	125	50,8	47,6	125	75	688	771	740	820	217	15,0
2,5"	495	578	131	63,5	60,3	125	85,3	708,3	791,3	760	840	234	15,7
3"	583	666	137	76,1	72,9	125	97,9	732,9	815,9	790	880	252	16,1
4"	593	676	155	101,6	97,6	142,5	125	874	957	940	1030	302	25,3
6"	727	794	193	152,4	146,9	150	175	1095	1162	1080	1165	390	49,0

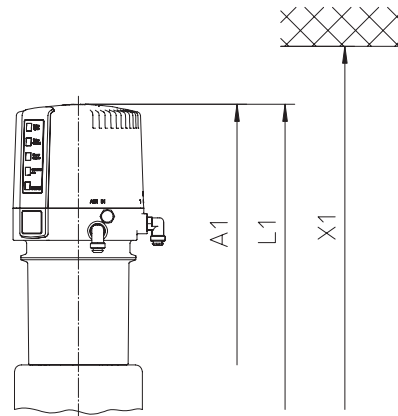
*Minimum installation and valve insert removal dimensions

10. Dimensions / Weights

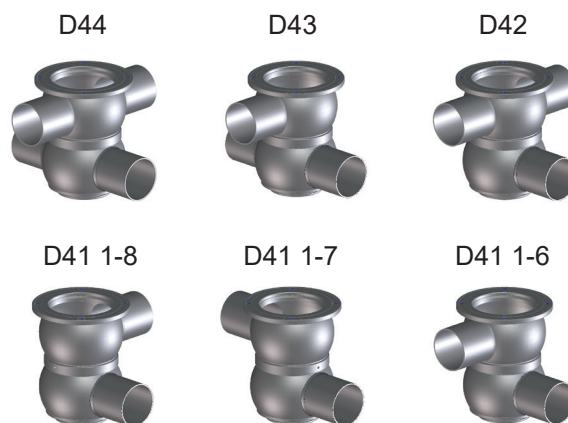
10.2. D4 SL Valve



CU4** resp. CU4*plus* IECEx Z2 control unit



housing configuration



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	524	607	120	41	38	125	63	707	790	750	830	200	15,5
50	528	611	126	53	50	125	75	729	812	780	860	218	15,6
65	536	619	134	70	66	125	91	761	844	820	900	242	17,2
80	618	701	146	85	81	142,5	106	870	953	925	1010	274	25,5
100	628	711	156	104	100	142,5	125	909	992	980	1060	303	25,9
125	677	760	179	129	125	150	150	1006	1089	1030	1115	350	41,0
150	725	793	194	154	150	150	175	1094	1162	1075	1160	390	53,5
Inch													
1,5"	526	609	119	38,1	34,8	125	63	708	791	750	840	199	15,5
2"	529	612	125	50,8	47,6	125	75	729	812	780	860	217	15,6
2,5"	534	617	131	63,5	60,3	125	85,3	750,3	833,3	800	890	234	16,3
3"	540	623	137	76,1	72,9	125	97,9	774,9	857,9	830	920	252	16,7
4"	629	712	155	101,6	97,6	142,5	125	909	992	980	1060	302	25,9
6"	727	794	193	152,4	146,9	150	175	1095	1162	1080	1165	390	53,5

*Minimum installation and valve insert removal dimensions

11. Technical Data

11.1. General data

Product-wetted parts	1.4404, 316L (DIN EN 10088)
Other parts	1.4301,304 (DIN EN 10088)
Seals	
DN40–100/1,5"-4" standard	EPDM
DN40–100/1,5"-4" options	HNBR, FPM
DN125-150, 6" standard	EPDM/PTFE compound
DN125-150, 6" options	HNBR/PTFE compound FPM/PTFE compound
Max. line pressure	10 bar
Ambient temperature	0 °C - 55 °C**
Max. operating temperature	135 °C** EPDM, HNBR FPM*
Short-term load	140 °C** EPDM, HNBR FPM*
	*no steam **see table 4.2.
Valves > DN100/4"	CIP cleaning liquids up to 100 °C
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
DN 125-150/6"	10 x 1 mm
Ø Air connection	6 x 1 mm
Max. pneumatic air pressure	8 bar
Min. pneumatic air pressure	5 bar

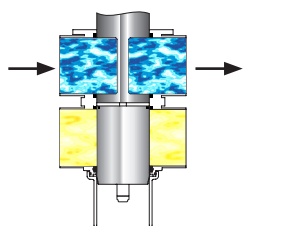
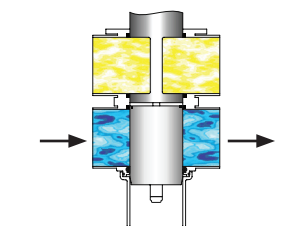
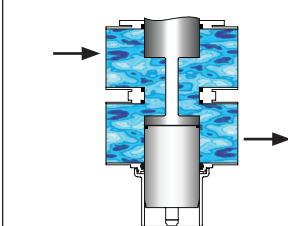
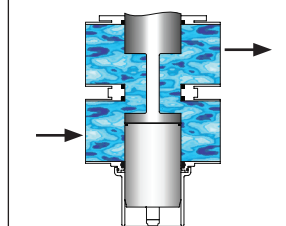
11.2. Compressed air quality

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.

11. Technical Data

11.3. Kvs values in m³/hr

								
DN	D4	D4 SL	D4	D4 SL	D4	D4 SL	D4	D4 SL
40	49	48	44	44	33	24	33	24
50	94	91	75	75	53	48	52	46
65	170	184	150	150	83	74	80	74
80	211	210	170	170	135	131	132	126
100	369	370	246	246	174	170	155	156
125	588	588	380	380	270	270	258	258
150	844	844	567	567	393	393	371	371
Inch								
1,5"	43	42	38	38	31	24	30	23
2"	87	83	71	71	51	46	51	46
2,5"	156	147	122	122	74	67	72	67
3"	192	183	160	160	88	83	85	82
4"	359	367	237	237	170	167	152	156
6"	808	808	548	548	386	386	370	370

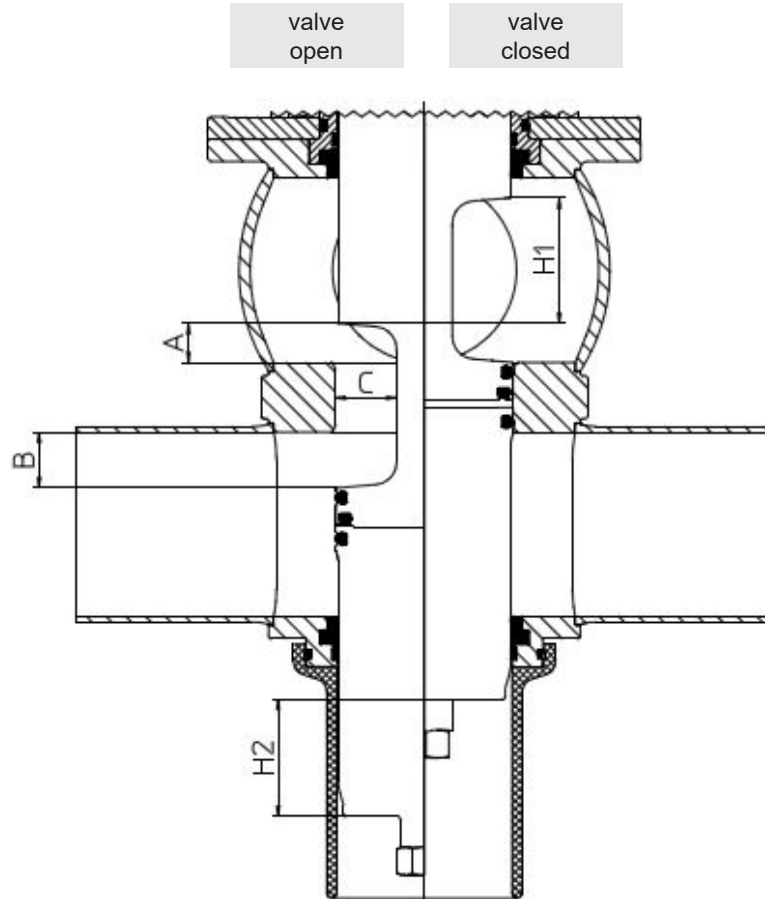
11.4. Air consumption / Switching times

D4 Valve		Air consumption at 5 bar	Switching times in seconds at 5 bar / CU41	
		Actuator		
DN	Inch	NL/stroke valve open	Open	Closed
40	1,5"	1,6	1,0	1,4
50	2"	1,8	1,1	1,7
65	2,5"	2	1,7	2,0
	3"	2	1,7	2,0
80	4"	3,7	2,6	3,3
100		3,7	2,6	3,3
125		5,5	3,4	5,2
150	6"	8,6	3,5	9,3

D4 SL Valve		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"	1,5	3,4	0,22	1,5	1,7
50	2"	1,7	3,4	0,22	1,5	1,7
65	2,5"	1,8	3,4	0,22	1,6	1,9
	3"	2	3,4	0,22	1,7	2,0
80	4"	3,7	7,7	0,22	2,6	3,3
100		3,7	7,7	0,22	2,6	3,3
125		5,5	10,5	0,22	3,4	5,2
150	6"	8,6	16,5	0,74	3,5	9,3

11. Technical Data

11.5. Valve stroke / Opening cross section



D4 Valve: Dimensions in mm					
DN	A	B	C	stroke H1 upper shaft	stroke H2 lower shaft
40	6	7	22	32	29
50	13	12	22	37	34
65	21	20	22	45	42
80	30	25	36	50	47
100	49	25	36	50	47
125	58	35	43	60	57
150	78	40	53	65	62
Inch					
1,5"	6	7	22	32	29
2"	13	12	22	37	34
2,5"	15,3	20	22	45	42
3"	27,9	20	22	45	42
4"	49	25	36	50	47
6"	78	40	53	65	62

D4 SL Valve: Dimensions in mm					
DN	A	B	C	stroke H1 upper shaft	stroke H2 lower shaft
40	4	4	22	29	26
50	9	9	22	34	31
65	13	12	22	45	42
80	24	25	36	50	47
100	43	25	36	50	47
125	58	35	43	60	57
150	78	40	53	65	62
Inch					
1,5"	4	4	22	29	26
2"	9	9	22	34	31
2,5"	14,3	14	22	39	36
3"	20,9	20	22	45	42
4"	43	25	36	50	47
6"	78	40	53	65	62

12. Maintenance



Note!

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



Inspection of the seals shall be done at regular intervals based on the application of the valve.

- 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
- long hook with 45° tip or long nose pliers
- pick tool for O-ring and rubber seal removal
- double joint forceps
- assembly stick D4 for assembly of lower shaft seal, see page 30
- disassembly and assembly tool for lower shaft seal, see page 30
- assembly tool for middle seal, see page 31
- assembly tool for seat seals, see page 32
- 2 long M8 hex screws for safe removal of valve insert



It is recommended to perform installation, service and maintenance work in the absence of potentially explosive atmosphere in order to safeguard against unforeseen hazards. In accordance with Annex A of EN 1127-1:2019, it is allowed to use steel tools which can only cause single sparks in ATEX Zones 1 and 2 environment for such activities. In case of doubt, spark-resistant tools must be used!



Welding when necessary, shall always be carried out in the absence of explosive atmosphere. In all cases of installation, service or maintenance activity, all the energy sources of D4* valve shall be isolated.

- 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 section 13.2 to 13.3.
- 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 section 13.3.

12. Maintenance



Caution!

Special instructions for seals and cylinder

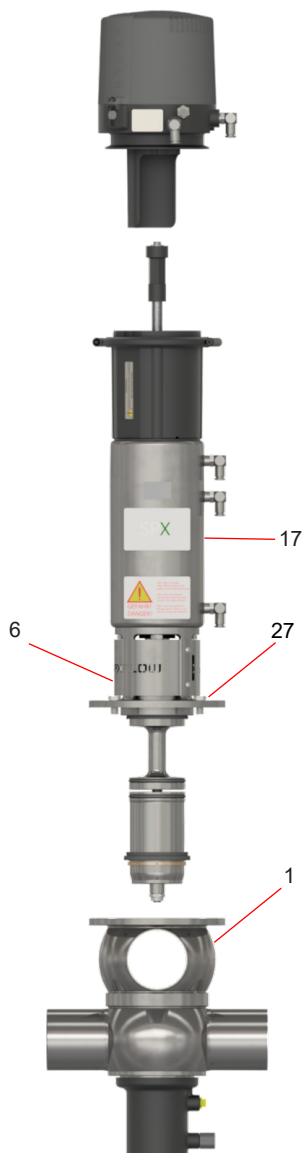
Valve maintenance for seals	Note
standard load 1-shift-operation	1 x annually up to 10.000 cycles p.a. 1 x semi-annually above 10.000 cycles p.a.
hot operation temperature above 80°C	minimum 1 x semi-annually
Valve maintenance for actuator with spring	Note
Functional test, visual inspection of valve stroke and control of abnormal running noise of spring	1 x per year
Change interval of actuator	In case of damage, incomplete actuator movement, considerable running noise of spring as well as after 250,000 cycles* as preventive measure, however, after 10 years at the latest.
*complies with about 8 years in 1-shift-operation and 10-15 cycles per hour.	

13. Service Instructions

The item numbers refer to the spare parts drawings

D4 1,5"-4", DN40-100	RN 500.047.06
D4 6", DN125-150	RN 500.047.07
D4 SL 1,5"-4", DN40-100	RN 501.047.07
D4 SL 6", DN125-150	RN 501.047.08

fig. 13.1.



For the Disassembly/Assembly tools, see chapter 15.



Caution!

It is recommended to perform installation, service and maintenance work in the absence of potentially explosive atmosphere in order to safeguard against unforeseen hazards. In accordance with Annex A of EN 1127-1:2019, it is allowed to use steel tools which can only cause single sparks in ATEX Zones 1 and 2 environment for such activities. In case of doubt, spark-resistant tools must be used!



Welding when necessary, shall always be carried out in the absence of explosive atmosphere. In all cases of installation, service or maintenance activity, all the energy sources of D4* valves shall be isolated.

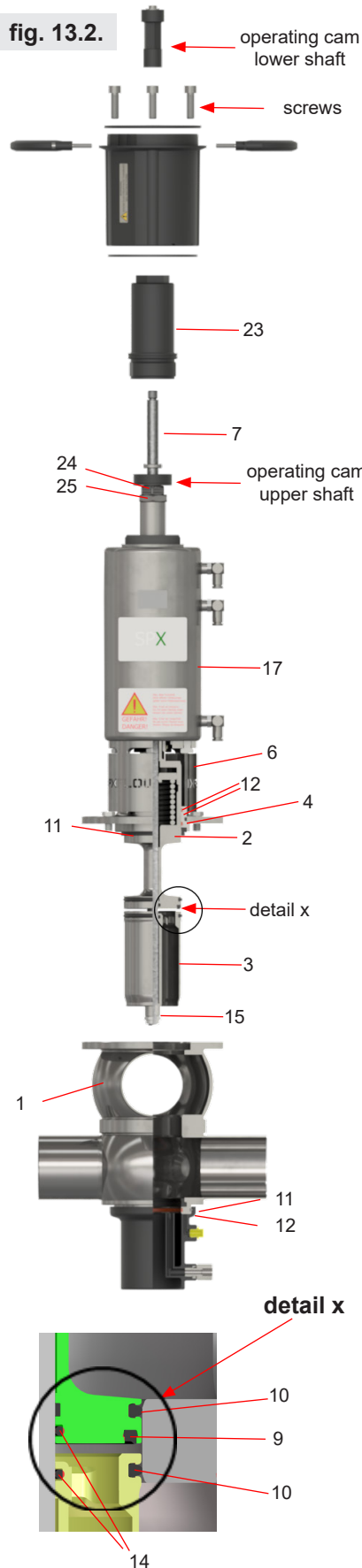
13.1. Removal from the line system



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 (17).
3. Remove the external proximity switch in the CU adapter. Release the 2 screws at the ring 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 (27) 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 (27) 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).

13. Service Instructions



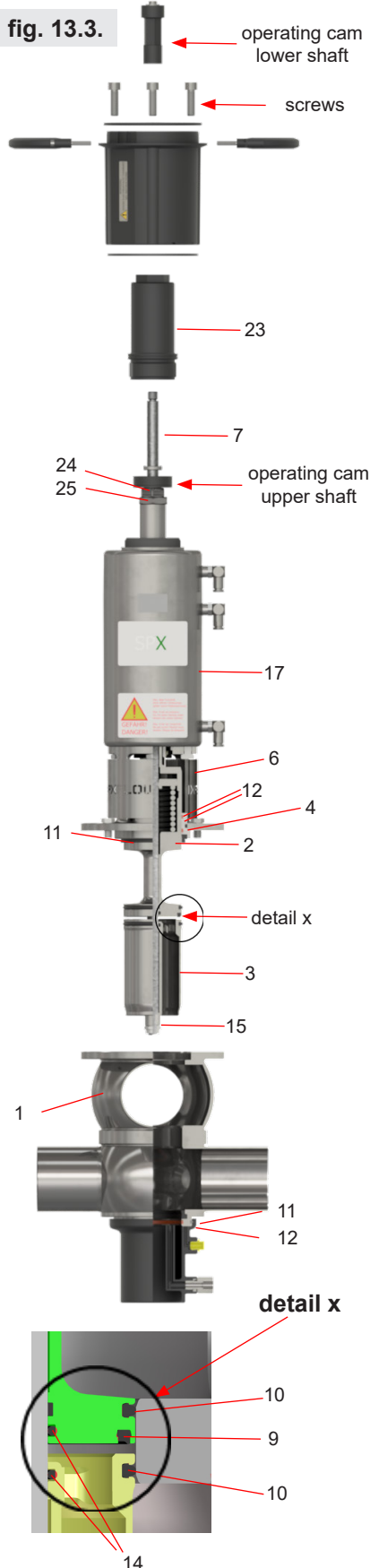
For the Disassembly/Assembly tools, see chapter 15.

13.2. 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. Release the lower safety nut (15). Hold the lower shaft (3) with an SW17 wrench to keep it from turning.
4. After removing the nut (15), lift off the lower shaft (3).
5. Place the point of the tool along the side of the seat seal (10) and pull it out of the groove. Take the quad ring (14) out of the groove.
6. Remove the stop screw (23).
7. Take the guide rod (7) out through the top of the actuator.
8. Remove the operating cam at the upper shaft.
9. Unscrew the safety nut (24). Hold up the lock washer (25) with a SW30 key to keep it from turning. Remove the lock washer.
10. Lift off the actuator (17) with yoke (6).
11. Slide the shaft bearing (4) over the balancer of the upper valve shaft (2).
12. Remove the shaft seal (11), DN125/150,6" also (11.1), and guide rings (12) from the grooves.
13. Removing the seals in the upper shaft
Place the point of the tool along the side of the seat seal (10) and middle seal (9) and pull them out of the groove. Take the quad ring (14) out of the groove.
14. Removing the lower shaft seal from the housing
Place the point of the disassembly tool along the side of the shaft seal (11) and pull it out through the top of the housing (1).
15. Only applies for sizes DN40-100, 1,5"-4": Place the metal point of a hook in the gap of the guide ring (12). Slightly turn the hook to lift the guide ring (12) out of the groove and housing (1).

13. Service Instructions

For the Disassembly/Assembly tools, see chapter 15.



13.3. 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. Only applies for sizes DN40-100, 1,5"-4": Install the guide ring (12) in the lower flange of the housing (1) using a double joint forceps or long nose pliers.
2. Install the lower shaft seal (11), DN125/150,6" also (11.1), in the lower housing flange. For the small size, we recommend using the 2 insertion tools, see chapter 15.
3. Install the quad ring (14) in the upper shaft (2) and lower shaft (3).
4. Insert the middle seal (9) in the upper shaft (3) using the assembly tool (see chapter 15.2).
5. Insert the 2 seat seals (10) in the grooves of the upper shaft (2) and lower shaft (3).
6. Install the shaft seal (11) and the two guide rings (12) in the shaft bearing (4).
7. Slide the shaft bearing (4) over the balancer of the upper shaft (2).
8. Slide the upper shaft (2) and the shaft bearing (4) through the yoke (6) and actuator (17).
9. Align key and fasten the upper valve shaft (2) with the lock washer (25) and safety nut (24). Hold the lock washer (25) with a SW30 wrench to keep the lock washer from turning. Tightening torque: $M_d = 40 \text{ Nm}$



Caution!

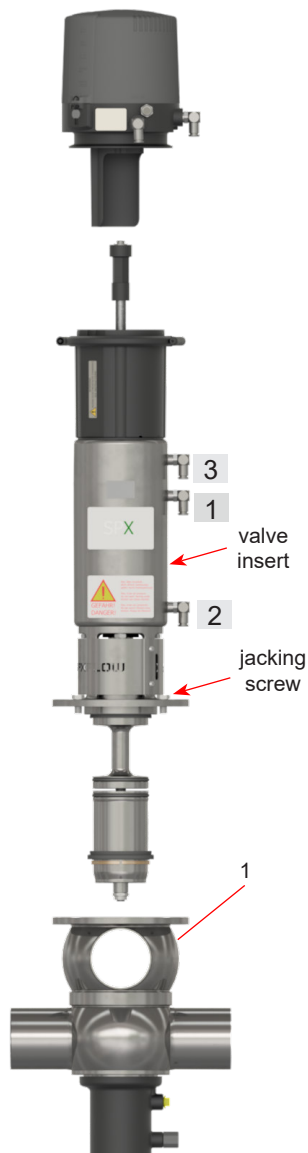
Overtightening of the safety nut could result in thread damage on the upper shaft.

10. Screw the operating cam on the upper shaft.
11. Ensure the key is secure on the guide rod. Slide in the guide rod (7) from the top through the actuator (17) until it stops.
12. Screw in the stop screw (23) until it stops. Tightening torque $M_d = 10 \text{ Nm}$
The stop screw must be flush with the top of the collar (D4) or piston (D4 SL).
13. Slide the lower valve shaft (3) on the guide rod (7). Align the lower shaft to the key on the guide rod and fasten it with the safety nut (15). Tightening torque: $M_d = 40 \text{ Nm}$
14. Fasten the adapter on the actuator with the 4 screws and ensure that the air fittings on the CU will align properly with the air fittings on the D4 valve.
15. Screw the operating cam on the guide rod (7).

13. Service Instructions

13.4. Installation of the valve insert

fig. 13.4.



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 (27) 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 ring and fasten it with the screws.
6. Assemble the compressed air lines.

D4 Valve:	Air connection 1:	to open valve
D4 SL Valve:	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 in the CU4** / CU4*plus* IECEx Z2 (with proximity switch holder - PSH):

Closed valve position

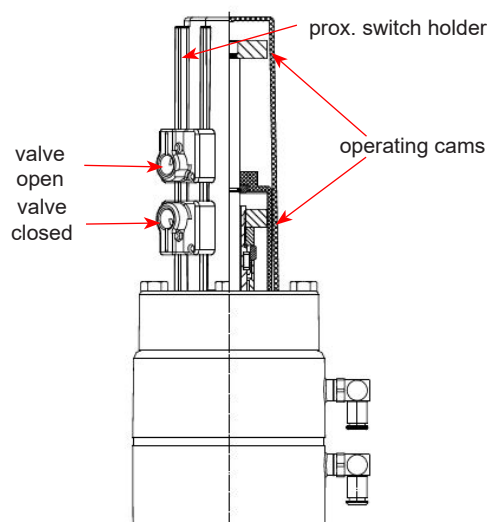
The adjustment of the external proximity switch has to be done against the closing direction of the D4 / D4 SL valve. First slide the proximity switch in closing direction until the signal of the proximity switch LED disappears. Then slowly slide against the closing direction. When the LED signal appears, shift another 2 mm to permit hysteresis and small variations.

Open valve position

The adjustment of the internal (with PSH: external) proximity switch has to be done against the opening direction of the D4 / D4 SL valve. First slide the proximity switch in opening direction until the signal of the proximity switch LED disappears. Then slowly slide against the opening direction. When the LED signal appears, shift another 2 mm to permit hysteresis and small variations.

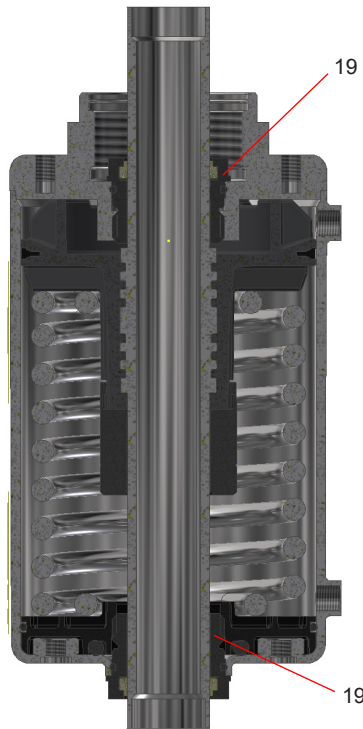
fig. 13.4.1.

D4 / D4 SL with valve position indication



14. Maintenance of Actuator

fig. 14.: D4 Valve actuator



The item numbers refer to the spare parts drawings

D4 1,5"-4", DN40-100	RN 500.047.06
D4 6", DN125-150	RN 500.047.07
D4 SL 1,5"-4", DN40-100	RN 501.047.07
D4 SL 6", DN125-150	RN 501.047.08



Actuators must be replaced after 250,000 operating cycles or after 10 years at the latest. Contact SPX FLOW or your distributor for replacement.

14.1 Removing the actuator screws

1. Remove yoke cover and yoke.
2. Unscrew the two actuator screws (19) with an SW36 socket wrench.
3. Remove the V-seals (20) and O-rings (18).

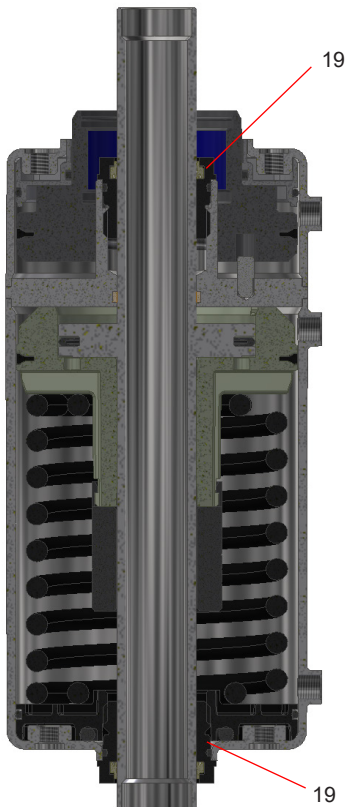
14.2 Installing the seals and assembling the actuator

1. Install the slightly greased O-rings (18) and V-seals (20) in the actuator screws (19). Check the correct installation position of the V-seal (20).

Recommendation for actuator:

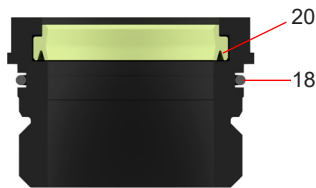
Pneumatic grease
(25 ml /tube - ref.-No. 000 70-01-008/93; H164725)

fig. 14.: D4 SL Valve actuator

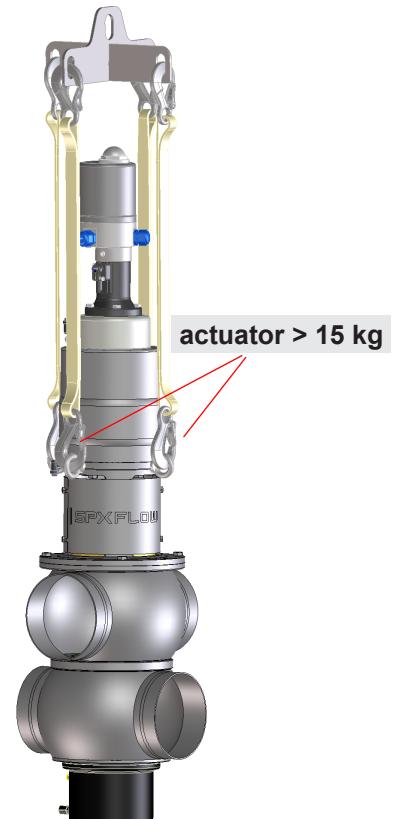


2. Place the assembly tool (H338580) on the end of the piston rod. Screw the actuator screws (19) with a socket wrench SW36 over the piston rod at both sides of the actuator and fasten them.
3. Re-install yoke and yoke cover.

ATEX actuator screw

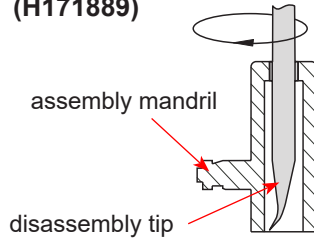


Assembly tool for actuator screw (H338580)

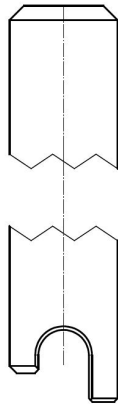


15. Assembly Instructions and Tools for Seals

Assembly tool (H171889)



Assembly stick (H338450)



15.1. Lower shaft seal

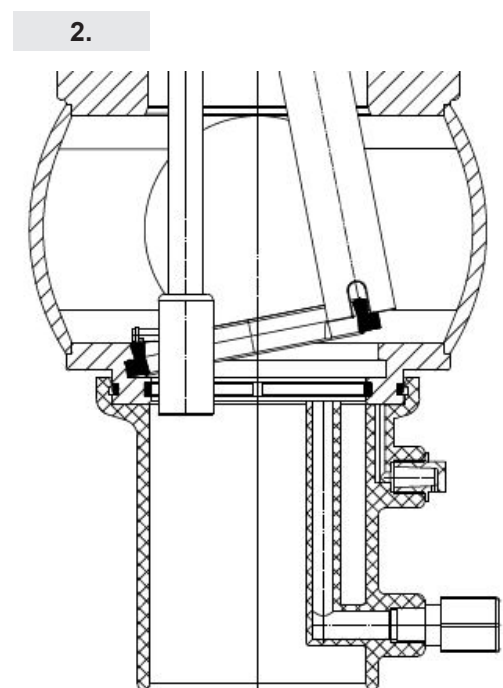
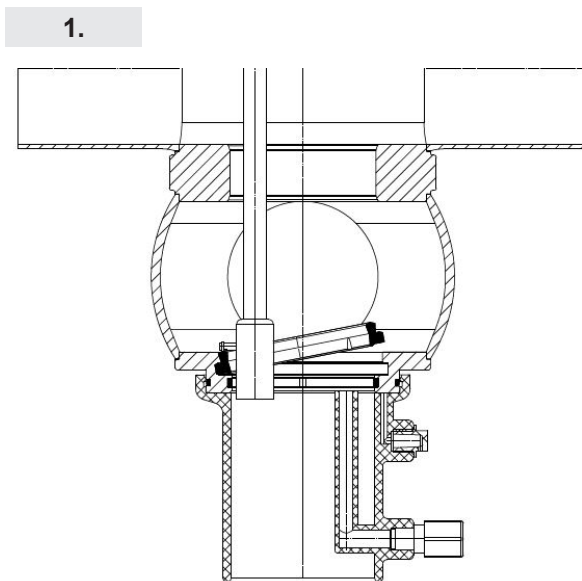
For the simple assembly of the lower shaft seal (11), the assembly/disassembly tool (H171889) and the assembly stick (H338450) can be used. These tools are especially recommended for valves of small series (DN40-65, 1,5"-3") as access to the lower shaft seal from the top is impossible as a result of the narrow seat.



Caution!

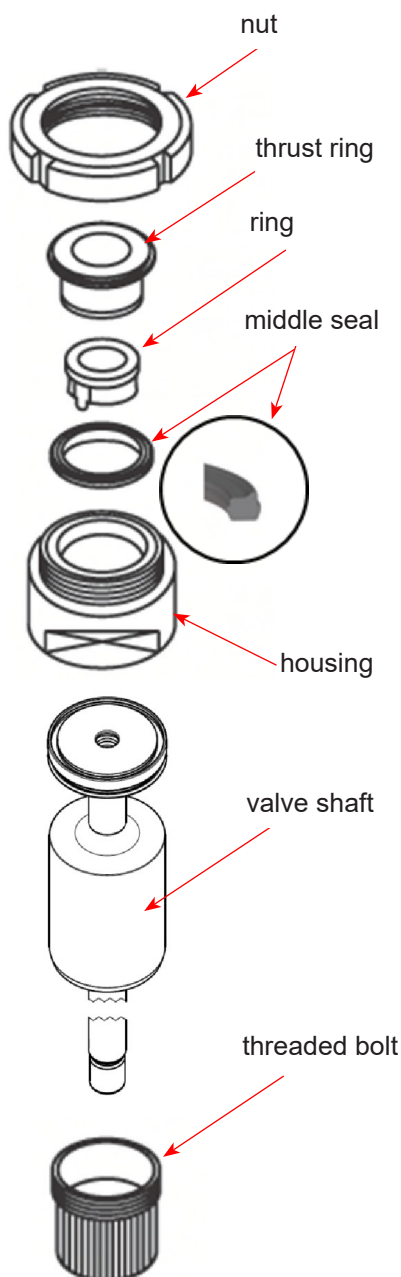
To avoid injuries the disassembly tip must be covered by the assembly mandril if not used.

1. Slightly grease the shaft seal (11).
2. Use the assembly tool to insert the shaft seal from the top, the wide side to the front, through the intermediate ring of the housing into the lower flange housing ball (fig 1.).
3. Position the shaft seal (11) using the groove of the assembly mandril.
4. Press the shaft seal (11) at one spot in the groove of the housing flange and continue to press on the shaft seal.
5. Position the groove of the assembly stick on the seal lip. Slightly turn the stick and position the shaft seal (11) in the groove. Slide further around the seal lip and insert the shaft seal in a similar manner until the shaft seal is completely in the groove.



15. Assembly Instructions and Tools for Seals

15.2. 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

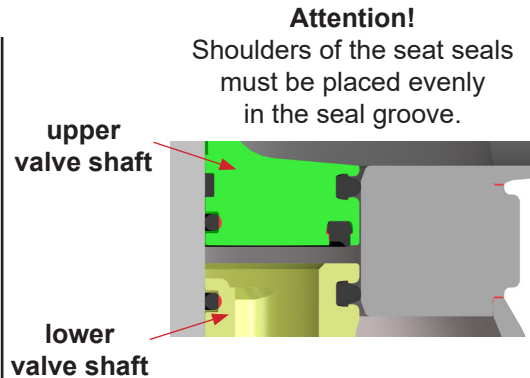
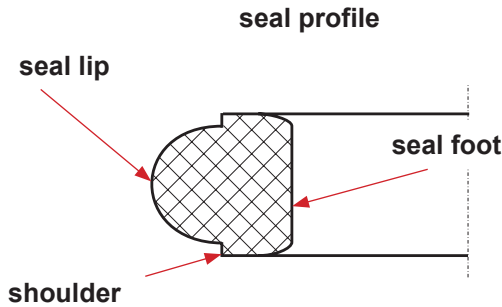
1. Insert the valve shaft into the housing making sure that the seal groove is in the housing.
2. Use the threaded bolt to clamp the shaft into the housing. Clamp the housing into a vice.
3. Slightly grease the middle seal with assembly grease. Then install the seal on the ring.
4. Insert the ring with 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.

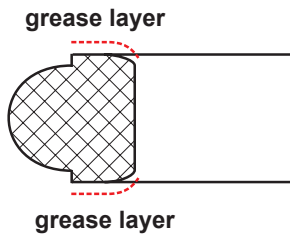
Assembly tool for middle seal			
DN	Inch	Designation	Reference number
40	1,5"	DA3 - 62	51-13-210/17 H207310
50	2"		
65	2,5" 3"		
80	4"	DA3 - 92	51-13-211/17 H207311
100			
125		D4 - 114	51-13-675/17 H340758
150	6"	D4 - 138	51-13-677/17 H340823

15. Assembly Instructions and Tools for Seals

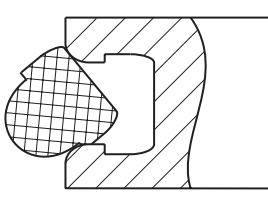
15.3. Seat seals



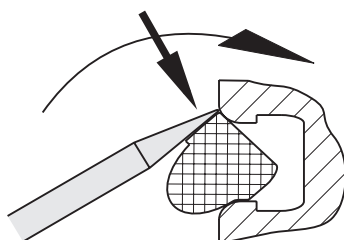
1. Provide the seal shoulder with a thin layer of grease.



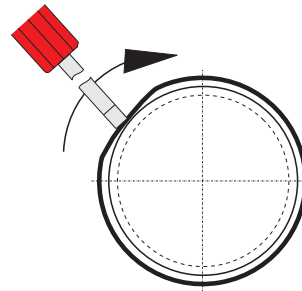
2. Insert the seat seal into the valve shaft; see to an even inclined position of the seal.



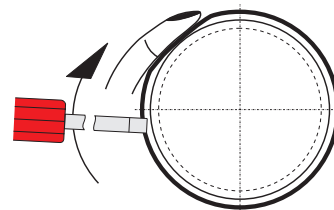
3. Press the seal circumferentially into the groove by means of an assembly tool (use screw driver with round edges). Place the assembly tool at the upper seal shoulder. To get an even fit of the seal, proceed step by step:



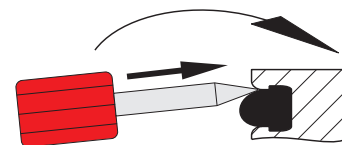
- 3.1. Press a short piece part of the seal into the groove.



- 3.2. Fix the seal - already pressed in - by your finger (to prevent loops). Use the assembly tool to press a short part of the seal into finger direction. Install the seal in the groove circumferences.



4. Press the assembly tool between the seal shoulder and the groove edge (both sides). Proceed around the circumferences. Then proceed around the circumferences of the lower seal shoulder. This is to vent the seal groove and to lock the seal shoulder.



16. Trouble Shooting

Failure	Valve position		Required seal replacement
	closed	open	
Leakage at upper housing flange or yoke	x	x	upper shaft seal (11)
Leakage from the inside of the lower valve shaft	x		seat seals (10)
Leakage from the inside of the lower valve shaft		x	middle seal (9)
Leakage at the outside of the lower valve shaft (remove spray connection for this purpose)	x	x	lower shaft seal (11)

The position numbers refer to the spare parts drawings.

Note!

Inspection of the seals shall be done in regular intervals based on the application of the valve.

Reference is given to the **Instruction Manuals** of the APV Control Units with the different inner designs:

CU4** for IECEx Zone 2 Gas Applications

CU4*plus* for IECEx Zone 2 Gas Applications

17. IECEx Certificate of Conformity

Please see attachment.

18. 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 consider that the spare parts lists for the **D4 valve** and the **D4 SL valve** - respectively standard and large sizes - are different. You find **four separate lists** in the annex to this instruction manual.

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

- number of required parts
- reference number
- designation.

Data are subject to change.



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	IECEX TUN 22.0020X	Page 1 of 3	Certificate history:
Status:	Current	Issue No: 0	
Date of Issue:	2023-09-11		
Applicant:	SPX Flow Technology Germany GmbH Gottlieb-Daimler-Str. 13 59439 Holzwickede Germany		
Equipment:	Control unit resp. Double seat valve resp. Assembly		
Optional accessory:	Control unit type CU4** resp. CU4*plus* resp. Double seat valve type D4* resp. Assembly type D4*-CU4**/CU4*plus* 3G		
Type of Protection:	Equipment protection by increased safety "ec"; Non-electrical equipment for explosive atmospheres		
Marking:	Control unit type CU4** resp. CU4*plus*: Ex ec IIB T4 Gc Double seat valve type D4*: Ex h IIB T6...T4 Gb Assembly type D4*-CU4** / D4*-CU4*plus*3G: Ex ec h IIB T4 Gc		

Approved for issue on behalf of the IECEx
Certification Body:

Thomas Heinen

Position:

Deputy Head of the IECEx Certification Body

Signature:
(for printed version)

TUVNORD

Digital unterschrieben
von Heinen Thomas
Datum: 2023.09.11
12:48:33 +02'00'

Date:
(for printed version)

1. This certificate and schedule may only be reproduced in full.
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Germany





IECEX Certificate of Conformity

Certificate No.: **IECEX TUN 22.0020X**

Page 2 of 3

Date of issue: 2023-09-11

Issue No: 0

Manufacturer: **SPX Flow Technology Germany GmbH**
Gottlieb-Daimler-Str. 13
59439 Holzwickede
Germany

Manufacturing locations: **SPX Flow Technology Germany GmbH**
Gottlieb-Daimler-Str. 13
59439 Holzwickede
Germany

SPX Flow Technology Poland Sp. z o.o.
Rolbieskiego 2
Bydgoszcz 85-862
Poland

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

[IEC 60079-0:2017](#) Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

[IEC 60079-7:2017](#) Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:5.1

[ISO 80079-36:2016](#) Explosive atmospheres - Part 36: Non-electrical equipment for explosive atmospheres - Basic methods and requirements
Edition:1.0

[ISO 80079-37:2016](#) Explosive atmospheres - Part 37: Non-electrical equipment for explosive atmospheres - Non electrical type of protection constructional safety "c", control of ignition source "b", liquid immersion "k"
Edition:1.0

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

[DE/TUN/ExTR22.0018/00](#)

Quality Assessment Report:

[DE/TUN/QAR18.0002/02](#)



IECEX Certificate of Conformity

Certificate No.: **IECEX TUN 22.0020X**

Page 3 of 3

Date of issue: 2023-09-11

Issue No: 0

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Description:

The control unit type CU4** resp. CU4*plus* is provided for controlling process valves in hazardous areas, it used as an interface between the process control and the process valve and operates the electrical and pneumatic signals.

The double seat valve type D4* used to process two different fluids efficiently through the valve simultaneously.

The assembly type D4*-CU4**/CU4*plus*3G is consisted of the electrical control unit CU4** resp. CU4*plus* and the non-electrical double seat valve type D4*.

Type code, electrical and thermal data:

See attachment to IECEx TUN 22.0020X issue No.0

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. For the control unit type CU4** resp. CU4*plus* the permissible ambient temperature range during operation is $0\text{ }^{\circ}\text{C} \leq T_a \leq +55\text{ }^{\circ}\text{C}$

For the double seat valve type D4* the permissible ambient temperature range depending on the temperature class is the medium or cleaning solution's temperature and is to be taken from the operating instructions.

For the assembly type D4*-CU4** / D4*-CU4*plus* 3G the permissible ambient temperature range during operation at the control unit type CU4** resp. CU4*plus* is $0\text{ }^{\circ}\text{C} \leq T_a \leq 55\text{ }^{\circ}\text{C}$ and on the double seat valve type D4* is $0\text{ }^{\circ}\text{C} \leq T_a \leq +130\text{ }^{\circ}\text{C}$

2. Metallic process connection parts of the double seat valve type D4* have to be included in the local potential equalization.

3. The control unit CU4** resp. CU4*plus* and the plastic base of the double seat valve type D4* have to be installed and used in such a way, that electrostatic charging from operation, maintenance and cleaning is excluded.

4. The base of the control unit CU4** resp. CU4*plus* has to be installed in such a way that it is protected from UV-radiation.

5. The connecting and disconnecting of the pluggable electrical circuits inclusive the field wirings is only permitted if no explosive atmosphere exists

6. The control unit type CU4** resp. CU4*plus* has to be erected in such a way that a pollution degree 2 or better, according to IEC 60664-1, is achieved.

7. Measures have to be taken, external to the control unit type CU4** resp. CU4*plus*, to provide a transient protection that ensures that the rated voltage, connected to the power supply terminals, is not exceeded by more than 40%

8. To prevent the breaking of the springs, the actuator has to be replaced after 250,000 cycles.

Annex:

[Attachment to IECEx TUN 22.0020X issue No.0.pdf](#)

Page 1 of 5
Attachment to IECEx TUN 22.0020X issue No.: 0

General product information:

Description:

The control unit type CU4** resp. CU4*plus* is provided for controlling process valves in hazardous areas, it used as an interface between the process control and the process valve and operates the electrical and pneumatic signals.

The double seat valve type D4* used to process two different fluids efficiently through the valve simultaneously.

The assembly type D4*-CU4**/CU4*plus*3G is consisted of the electrical control unit CU4** resp. CU4*plus* and the non-electrical double seat valve type D4*.

Type code:

Control unit type CU4* *		
		AS-interface 24V Direct Connect
		1: 1 solenoid 1N: 1 solenoid, 1NOT element 3: 3 solenoids

Control unit type CU4* plus*		
		AS-interface 24V Direct Connect 24V IO-Link
		1: 1 solenoid 1N: 1 solenoid, 1NOT element 3: 3 solenoids

Double seat valve type D4*		
		NSL: Non Seat Lift SL: Seat Lift

Marking:

Control unit type CU4** resp. CU4*plus*	Ex ec IIB T4 Gc
Double seat valve type D4*	Ex h IIB T6...T4 Gb
Assembly type D4*-CU4** / D4*-CU4*plus*3G	Ex ec h IIB T4 Gc

Page 2 of 5
Attachment to IECEx TUN 22.0020X issue No.: 0

Electrical data:

For the control unit type CU4* plus AS-interface

Internal / External	Terminal	Designation	Functional description
External	1	AS-i +	Connection AS-i network (26.5 V...31.6 V d.c.)
External	2	AS-i -	Connection AS-i network (GND)
Internal	3	Z +	Bridge Z+ / PELV E+ (in case of energy supply for solenoid valves via AS-i bus)
Internal	4	Z -	Bridge Z- / PELV E - (in case of energy supply for solenoid valves via AS-i bus)
Internal	5	PELV E+	Separate auxiliary energy PELV 24VDC + (for EMERGENCY STOP function, only)
Internal	6	PELV E-	Separate auxiliary energy PELV 24VDC - (for EMERGENCY STOP function, only)
Internal	7	5 VDC	Voltage supply for proximity switches
Internal	8	Sensor 3	Signal sensor 3 (evaluation of logic table for appropriate valve type) for the control unit type CU4* AS-interface V1 resp. CU4* AS-interface V1 plus
		No sensor	For the control unit type CU4* AS-interface V2 resp. CU4* plus AS-interface V2
Internal	9	GND	Mass potential for sensor voltage supply
Internal	10	5 VDC	Voltage supply for proximity switches
Internal	11	Sensor 4	Signal sensor 4 (evaluation of logic table for appropriate valve type)
Internal	12	GND	Mass potential for sensor voltage supply
Internal	Linear sensor		Linear sensor for valve position detection (for suitable SPX FLOW sensor, only!)
Internal	Y1	--	Solenoid valve 1 (main valve)
Internal	Y2	--	Solenoid valve 2 (upper seat lift)
Internal	Y3	--	Solenoid valve 3 (lower seat lift)
Internal	P	--	Optional connection - pressure sensor
External	Service port	--	Connection serial/USB converter for CU4plus toolbox software

Page 3 of 5
Attachment to IECEx TUN 22.0020X issue No.: 0

For the control unit type CU4* plus 24V Direct Connect:

Internal / External	Terminal	Designation	Functional description
External	1	Power+	Power supply 24V d.c. ± 20%
External	2	Power-	Power supply 24V d.c. (GND)
Internal	3	O0 Digital Output	PLC input valve status / closed
Internal	4	O1 Digital Output	PLC input valve status / open
Internal	5	O2 Digital Output	PLC input valve status / upper seat lift
Internal	6	O3 Digital Output	PLC input valve status / lower seat lift
Internal	7	SV Digital Output	PLC input service request
Internal	8	I0 Digital Input	PLC output to activate solenoid 1 / main valve
Internal	9	I1 Digital Input	PLC output to activate solenoid 2 / upper seat lift
Internal	10	I2 Digital Input	PLC output to activate solenoid 3 / lower seat lift
Internal	11	+5VDC	Supply voltage for SPX prox. sensor / linear sensor
Internal	12	S	Signal SPX prox. sensor
Internal	13	0V	Potential for SPX prox. sensor / linear sensor
Internal	Linear sensor	Linear sensor	--
Internal	Y1	PWM Output	Solenoid valve 1 (main valve)
Internal	Y2	PWM Output	Solenoid valve 2 (upper seat lift)
Internal	Y3	PWM Output	Solenoid valve 3 (lower seat lift)
External	Service port	--	Connection serial/USB converter for CU4plus toolbox software

For the control unit type CU4* plus 24V IO-Link:

Internal / External	Terminal	Designation	Functional description
External	1	Power+	Operating voltage + (18 V...30 V d.c.)
External	2	Power-	Operating voltage – or Ground
Internal	3	C / Q	IO-Link Signal
Internal	4...10	--	Not in use
Internal	11	5 VDC	Voltage supply for valve sensor or extension module
Internal	12	Sensor 2	Sensor 2 connection or extension module
Internal	13	GND	Mass potential for sensor supply or extension module
Internal	JST	Sensor 1	Linear Sensor 1
Internal	14	Sensor 2	Sensor Signal 2
Internal	15	GND	Mass potential for sensor supply
Internal	Y1	PWM Output	Solenoid valve 1 (main valve)
Internal	Y2	PWM Output	Solenoid valve 2 (upper seat lift)
Internal	Y3	PWM Output	Solenoid valve 3 (lower seat lift)
External	Service port	--	Connection serial/USB converter for CU4plus toolbox software
Internal	P	Pressure sensor	Pressure measurement of main actuator

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Attachment to IECEx TUN 22.0020X issue No.: 0

For the control unit type CU4*24V Direct Connect:

Internal / External	Terminal	Designation	Functional description
External	1	Power+	Power supply 24V d.c. ± 20%
External	2	Power-	Power supply 24V d.c. (GND)
External	3	O0 Digital Output	PLC input valve status / closed
External	4	O1 Digital Output	PLC input valve status / open
External	5	SV Digital Output	Common
External	6	DI0 Digital Input	PLC output to activate solenoid 1 / main valve
External	7	DI1 Digital Input	PLC output to activate solenoid 2 / upper seat lift
External	8	DI2 Digital Input	PLC output to activate solenoid 3 / lower seat lift
External	9	DI common	Common signal
Internal	10	+5VDC	Supply voltage for SPX prox. sensor / linear sensor
Internal	11	Signal	Signal SPX prox. sensor
Internal	12	GND	Potential for SPX prox. sensor / linear sensor
Internal	13	+5VDC	Supply voltage for SPX prox. sensor / linear sensor
Internal	14	Signal	Signal SPX prox. sensor
Internal	15	GND	Potential for SPX prox. sensor / linear sensor

For the control unit type CU4*AS-interface:

Internal / External	Terminal	Designation	Functional description
External	1	AS-i +	Connection AS-i network (26.5 V...31.6 V d.c.)
External	2	AS-i -	Connection AS-i network (GND)
Internal	3	5 VDC	Voltage supply for proximity switches
Internal	4	Sensor 1	Signal sensor 1 (closed valve position)
Internal	5	GND	Common potential
Internal	6	5 VDC	Voltage supply for proximity switches
Internal	7	Sensor 2	Signal sensor 2 (open valve position)
Internal	8	GND	Common potential
Internal	10	Normal	Bridge for feedback signal
Internal	11	Feedback	Bridge for feedback signal
Internal	12	Reverse	Bridge for feedback signal

Page 5 of 5
Attachment to IECEx TUN 22.0020X issue No.: 0

Thermal data:

Control unit type CU4** resp. CU4*plus*:

Permissible ambient temperature range during operation: $0\text{ °C} \leq T_a \leq +55\text{ °C}$

Double seat valve type D4*:

The permissible ambient temperature range as process temperature (medium or cleaning solutions temperature) depending on the temperature class is shown in the following table:

Temperature of the medium or cleaning solution	Temperature class
0°C...80°C	T6
0°C...95°C	T5
0°C...130°C	T4

Assembly type D4*-CU4** / D4*-CU4*plus* 3G consisted of the control unit CU4** resp. CU4*plus* and the valve type D4*:

Control unit type CU4** resp. CU4*plus*:

Permissible ambient temperature range during operation: $0\text{ °C} \leq T_a \leq +55\text{ °C}$

Double seat valve type D4*:

The permissible ambient temperature range as process temperature (medium or cleaning solutions temperature) is $0\text{ °C} \leq T_a \leq +130\text{ °C}$

The reverse heat flow from the process beyond the permissible ambient temperature of the control unit CU4** resp. CU4*plus* is not possible by construction.

Specific Conditions of Use

- For the control unit type CU4** resp. CU4*plus* the permissible ambient temperature range during operation is $0\text{ °C} \leq T_a \leq +55\text{ °C}$
For the double seat valve type D4* the permissible ambient temperature range depending on the temperature class is the medium or cleaning solution's temperature and is to be taken from the operating instructions.
For the assembly type D4*-CU4** / D4*-CU4*plus* 3G the permissible ambient temperature range during operation at the control unit type CU4** resp. CU4*plus* is $0\text{ °C} \leq T_a \leq 55\text{ °C}$ and on the double seat valve type D4* is $0\text{ °C} \leq T_a \leq +130\text{ °C}$
- Metallic process connection parts of the double seat valve type D4* have to be included in the local potential equalization.
- The control unit CU4** resp. CU4*plus* and the plastic base of the double seat valve type D4* have to be installed and used in such a way, that electrostatic charging from operation, maintenance and cleaning is excluded.
- The base of the control unit CU4** resp. CU4*plus* has to be installed in such a way that it is protected from UV-radiation.
- The connecting and disconnecting of the pluggable electrical circuits inclusive the field wirings is only permitted if no explosive atmosphere exists.
- The control unit type CU4** resp. CU4*plus* has to be erected in such a way that a pollution degree 2 or better, according to IEC 60664-1, is achieved.
- Measures have to be taken, external to the control unit type CU4** resp. CU4*plus*, to provide a transient protection that ensures that the rated voltage, connected to the power supply terminals, is not exceeded by more than 40 %.
- To prevent the breaking of the springs, the actuator has to be replaced after 250,000 cycles.

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Spare Parts list

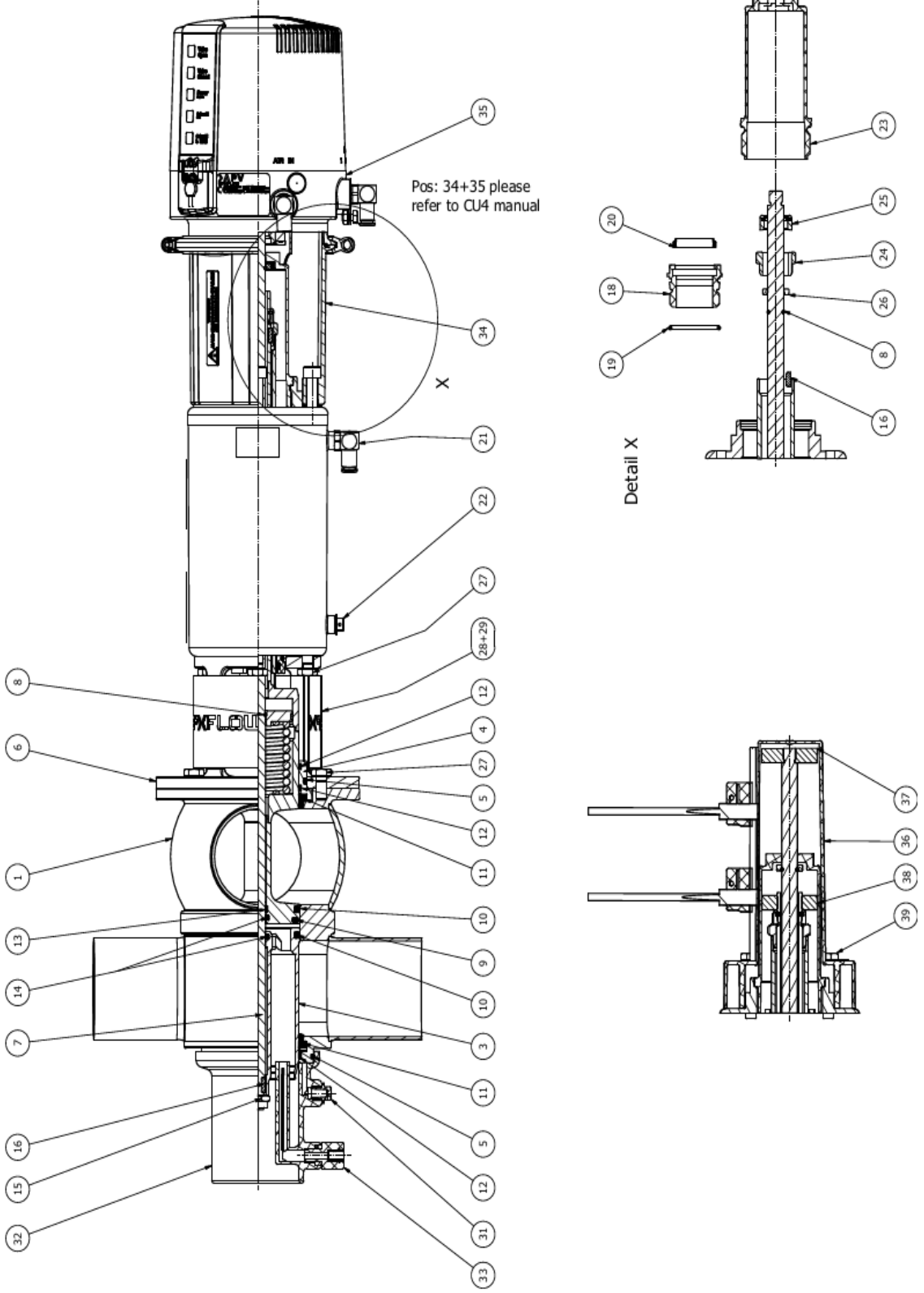
Double seat mix proof valve D4 IECEx Zone 2 DN40 - 100 , 1,5" - 4"

Date:	10.08.21	29.06.23
Name:	C. Keil	C. Keil
Reviewed:	N. Spl.	N. Spl.

SPX FLOW

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RN 500.047-06



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Spare parts list

Double seat mix proof valve D4 IECEX Zone 2 - DN40

Date:	10.06.21	29.06.23
Name:	C.Kell	C.Kell
Reviewed:	N.Spl.	N.Spl.
Date:		
Name:		
Reviewed:		

SPX FLOW

pos.	Quantity	Description, product contacted seals with reference number	included in spare parts (pos.)	Material	Part no.
1	1	Valve Housing D44-40		1.4404	H335273
		Valve Housing D43-40		1.4404	H337033
		Valve Housing D42-40		1.4404	H337023
		Valve Housing D41/ 1-8-40		1.4404	H337190
		Valve Housing D41/ 1-7-40		1.4404	H337170
		Valve Housing D41/ 1-6-40		1.4404	H337180
2	1	Upper valve shaft	13, 16, 25	1.4404	H341253
3	1	Lower valve shaft		1.4404	H334986
4	1	Shaft bearing D4 - 62		1.4404	H334381
5	1	O-ring		EPDM	H77039
6	1	Yoke D4 - 62		1.4305	H334383
7	1	Guide Rod D4- 40/1,5"	8, 15, 16	1.4571	H341282
8	2	Retainer ring		1.4301	H14883
		Middle seal 58-33-998/93		EPDM	H327602
		Middle seal 58-33-998/33		HNBR	H332652
		Middle seal 58-33-998/73		FPM	H332653
		Seat seal 58-33-132/93		EPDM	H168192
10	2	Seat seal 58-33-132/33		HNBR	H171561
		Seat seal 58-33-400/93		FPM	H171559
		Shaft seal 58-33-400/33		EPDM	H337476
11	2	Shaft seal 58-33-400/73		HNBR	H337478
		Shaft seal 58-33-400/73		FPM	H337477
12	1	Guide ring		Iglidur A500	H334863
13	1	Guide band		Acoflon	H334865
14	1	Quad ring 12,37x 2,62		EPDM	H311646
15	2	Hex. Screw M10x1		A2	H118903
16	1	Square key DIN6885 - A - 3x3x10		A2	H335171
17	1	Actuator D4-100/32 ATEX	18, 19, 20	1.4301	H344349
18	2	O-ring 30 x 2,5		NBR	H337897
19	2	ATEX Actuator screw D4		Iglidur X	H343859
20	2	V-seal		NBR	H334379
21	1	W-union G1/8" Ø6mm		hard nickel-pl.	H208825
22	1	Venting plug G-1/8"		PE-Hard	H16218
23	1	Stop screw		Grivory	H334382
24	1	Lock washer D4		1.4301	H335172
25	1	Safety nut D3		1.4301	H147640
26	1	Thrust ring		1.4057	H123151
27	8	Hex. screw M8 x 16		A2	H78772
28	1	Yoke cover D4 - 62	29	1.4301	H341311
29	4	Savetix head screw M4 x 8 washer M4 as set		1.4301	H336707
31	1	Venting plug G-1/8"		PE-Hard	H16507
32	1	Spray connection DE3		PP	H168321
33	1	G-union 8x1-G1/8"		PVDF-black	H16388
34	1	For Adapter Informations please go to page 12			
35	1	For Control Unit Informations please go to page 12			
36	1	Prox. Switch holder D4 compl.		SAXAMID	H344380
37	1	Operating cam D4 bottom		1.4523 / 444FR	H334386
38	1	Operating cam D4 top		1.4523 / 444FR	H334387
39	1	Hexagon screw M8 x 40		A2-70	H336675
<p>Pos. 9, 10, 11, 12, 14 available as complete seal kits only</p>					
		Seal kit D4-Ø62		EPDM	H337884
		Seal kit D4-Ø62		HNBR	H337885
		Seal kit D4-Ø62		FPM	H337886

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Spare parts list

Double seat mix proof valve D4 IECEx Zone 2 - DN50

Date:	10.08.21	29.06.23		
Name:	C.Kell	C.Kell		
Reviewed:	N.Spl.	N.Spl.		
Date:				Page 4 of 12
Name:				RN 500.047-06
Reviewed:				

SPX FLOW

pos. item	Description, product contacted seals with reference number	included in spare parts (pos.)	Material	Part no.	Quantity	Description, product contacted seals with reference number	included in spare parts (pos.)	Material	Part no.
1	Valve Housing D44-50		1.4404	H335274	1	Valve Housing D44-50		1.4404	H335274
	Valve Housing D43-50		1.4404	H337034	1	Valve Housing D43-50		1.4404	H337034
	Valve Housing D42-50		1.4404	H337024	1	Valve Housing D42-50		1.4404	H337024
	Valve Housing D41/ 1-8-50		1.4404	H337191	1	Valve Housing D41/ 1-8-50		1.4404	H337191
	Valve Housing D41/ 1-7-50		1.4404	H337171	1	Valve Housing D41/ 1-7-50		1.4404	H337171
	Valve Housing D41/ 1-6-50		1.4404	H337181	1	Valve Housing D41/ 1-6-50		1.4404	H337181
2	Upper valve shaft	13, 16, 25	1.4404	H341254	1	Upper valve shaft	13, 16, 25	1.4404	H341254
3	Lower valve shaft		1.4404	H334987	1	Lower valve shaft		1.4404	H334987
4	Shaft bearing D4 - 62		1.4404	H334381	1	Shaft bearing D4 - 62		1.4404	H334381
5	O-ring		EPDM	H77039	1	O-ring		EPDM	H77039
6	Yoke D4 - 62		1.4305	H334383	1	Yoke D4 - 62		1.4305	H334383
7	Guide Rod D4 - 50/2"	8, 15, 16	1.4571	H341283	1	Guide Rod D4 - 50/2"	8, 15, 16	1.4571	H341283
8	Retainer ring		1.4301	H14883	2	Retainer ring		1.4301	H14883
	Middle seal 58-33-998/93		EPDM	H327602	1	Middle seal 58-33-998/93		EPDM	H327602
	Middle seal 58-33-998/33		HNBR	H332652	1	Middle seal 58-33-998/33		HNBR	H332652
	Middle seal 58-33-998/73		FPM	H332653	1	Middle seal 58-33-998/73		FPM	H332653
	Seat seal 58-33-132/93		EPDM	H168192	2	Seat seal 58-33-132/93		EPDM	H168192
10	Seat seal 58-33-132/33		HNBR	H171561	2	Seat seal 58-33-132/33		HNBR	H171561
	Seat seal 58-33-132/73		FPM	H171559	2	Seat seal 58-33-132/73		FPM	H171559
	Shaft seal 58-33-400/93		EPDM	H337476	2	Shaft seal 58-33-400/93		EPDM	H337476
11	Shaft seal 58-33-400/33		HNBR	H337478	2	Shaft seal 58-33-400/33		HNBR	H337478
	Shaft seal 58-33-400/73		FPM	H337477	2	Shaft seal 58-33-400/73		FPM	H337477
12	Guide ring		Iglidur A500	H334863	1	Guide ring		Iglidur A500	H334863
13	Guide band		Acoifon	H334865	1	Guide band		Acoifon	H334865
14	Quad ring 12,37x 2,62		EPDM	H311646	1	Quad ring 12,37x 2,62		EPDM	H311646
15	Hex. Screw M10x1		A2	H118903	2	Hex. Screw M10x1		A2	H118903
16	Square key DIN6885 - A - 3x3x10		A2	H335171	1	Square key DIN6885 - A - 3x3x10		A2	H335171
17	Actuator D4-100/37 ATEX	18, 19, 20	1.4301	H344350	1	Actuator D4-100/37 ATEX	18, 19, 20	1.4301	H344350
18	O-ring 30 x 2,5		1.4301	H337897	2	O-ring 30 x 2,5		1.4301	H337897
19	ATEX Actuator screw D4		Iglidur X	H343859	2	ATEX Actuator screw D4		Iglidur X	H343859
Pos. 9, 10, 11, 12, 14 available as complete seal kits only									
	Seal kit D4-Ø62		EPDM	H337884		Seal kit D4-Ø62		EPDM	H337884
	Seal kit D4-Ø62		HNBR	H337885		Seal kit D4-Ø62		HNBR	H337885
	Seal kit D4-Ø62		FPM	H337886		Seal kit D4-Ø62		FPM	H337886

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Spare parts list

Double seat mix proof valve D4 IECEx Zone 2 - 2"

Date:	10.08.21	29.06.23	SPX FLOW	
Name:	C. Keil	C. Keil		
Reviewed:	N. Spl.	N. Spl.	Page 5 of 12	
Date:			RN 500.047-06	
Name:				
Reviewed:				

pos. item	Quantity	Description, product contacted seals with reference number	included in spare parts (pos.)	Material	Part no.	pos. item	Quantity	Description, product contacted seals with reference number	included in spare parts (pos.)	Material	Part no.
1	1	Valve Housing D44-2"		1.4404	H335271	20	2	V-seal		NBR	H334379
		Valve Housing D43-2"		1.4404	H337039	21	1	W-union G1/8" Ø6mm		hard nickel-pl.	H208825
		Valve Housing D42-2"		1.4404	H337029	22	1	Venting plug G-1/8"		PE-Hard	H16218
		Valve Housing D41/1-8-2"		1.4404	H337196	23	1	Stop screw		Grivory	H334382
		Valve Housing D41/1-7-2"		1.4404	H337176	24	1	Lock washer D4		1.4301	H335172
		Valve Housing D41/1-6-2"		1.4404	H337186	25	1	Safety nut D3		1.4301	H147640
2	1	Upper valve shaft	13, 16, 25	1.4404	H341254	26	1	Thrust ring		1.4057	H123151
3	1	Lower valve shaft		1.4404	H334987	27	8	Hex. screw M8 x 16		A2	H78772
4	1	Shaft bearing D4 - 62		1.4404	H334381	28	1	Yoke cover D4 - 62	29	1.4301	H341311
5	1	O-ring		EPDM	H77039	29	4	Savetix head screw M4 x 8 washer M4 as set		1.4301	H336707
6	1	Yoke D4 - 62		1.4305	H334383	31	1	Venting plug G-1/8"		PE-Hard	H16507
7	1	Guide Rod D4 - 50/2"	8, 15, 16	1.4571	H341283	32	1	Spray connection DE3		PP	H168321
8	2	Retainer ring		1.4301	H14883	33	1	G-union 8x1-G1/8"		PVDF-black	H16388
		Middle seal 58-33-998/93		EPDM	H327602	34	1	For Adapter Informations please go to page 12			
		Middle seal 58-33-998/33		HNBR	H332652	35	1	For Control Unit Informations please go to page 12			
		Middle seal 58-33-998/73		FPM	H332653	36	1	Prox. Switch holder D4 cmpl.		SAXAMID	H344380
10	2	Seat seal 58-33-132/93		EPDM	H168192	37	1	Operating cam D4 bottom		1.4523 / 444FR	H334386
		Seat seal 58-33-132/33		HNBR	H171561	38	1	Operating cam D4 top		1.4523 / 444FR	H334387
		Shaft seal 58-33-400/93		FPM	H171559	39	1	Hexagon screw M8 x 40		A2-70	H336675
11	2	Shaft seal 58-33-400/33		EPDM	H337476						
		Shaft seal 58-33-400/73		HNBR	H337478						
		Shaft seal 58-33-400/73		FPM	H337477						
12	1	Guide ring		Iglicur A500	H334863						
13	1	Guide band		Acoflon	H334865						
14	1	Quad ring 12,37x 2,62		EPDM	H311646						
15	2	Hex. Screw M10x1		A2	H118903						
16	1	Square key DIN6885 - A - 3x3x10		A2	H335171						
17	1	Actuator D4-100/37 ATEX	18, 19, 20	1.4301	H344350						
18	2	O-ring 30 x 2,5		1.4301	H337897						
19	2	ATEX Actuator screw D4		Iglicur X	H343859						
				Pos. 9, 10, 11, 12, 14 available as complete seal kits only							
					Seal kit D4-Ø62					EPDM	H337884
					Seal kit D4-Ø62					HNBR	H337885
					Seal kit D4-Ø62					FPM	H337886

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Spare parts list

Double seat mix proof valve D4 IECEx Zone 2 - DN 2,5"

Date: 10.08.21		29.06.23		SPX FLOW	
Name: C.Keil		C.Keil			
Reviewed: N.Spl.		N.Spl.			
Date: _____		_____		Page 6 of 12	
Name: _____		_____		RN 500.047-06	
Reviewed: _____		_____			

pos. item	Quantity	Description, product contacted seals with reference number	included in spare parts (pos.)	Material	Part no.
1	1	Valve Housing D44-2,5"		1.4404	H335270
		Valve Housing D43-2,5"		1.4404	H337040
		Valve Housing D42-2,5"		1.4404	H337030
		Valve Housing D41/1-8-2,5"		1.4404	H337197
		Valve Housing D41/1-7-2,5"		1.4404	H337177
		Valve Housing D41/1-6-2,5"		1.4404	H337187
2	1	Upper valve shaft	13, 16, 25	1.4404	H341256
3	1	Lower valve shaft		1.4404	H335391
4	1	Shaft bearing D4 - 62		1.4404	H334381
5	1	O-ring		EPDM	H77039
6	1	Yoke D4 - 62		1.4305	H334383
7	1	Guide Rod D4 - 2,5"	8, 15, 16	1.4571	H341285
8	2	Retainer ring		1.4301	H14883
	1	Middle seal 58-33-998/93		EPDM	H327602
	1	Middle seal 58-33-998/33		HNBR	H332652
	1	Middle seal 58-33-998/73		FPM	H332653
10	2	Seat seal 58-33-132/93		EPDM	H168192
	2	Seat seal 58-33-132/33		HNBR	H171561
	2	Seat seal 58-33-132/73		FPM	H171559
	2	Shaft seal 58-33-400/93		EPDM	H337476
11	2	Shaft seal 58-33-400/33		HNBR	H337478
	2	Shaft seal 58-33-400/73		FPM	H337477
12	1	Guide ring		Iglidur A500	H334863
13	1	Guide band		Acoflon	H334865
14	1	Quad ring 12,37x 2,62		EPDM	H311646
15	2	Hex. Screw M10x1		A2	H118903
16	1	Square key DIN6885 - A - 3x3x10		A2	H335171
17	1	Actuator D4-100/45 ATEX	18, 19, 20	1.4301	H344351
18	2	O-ring 30 x 2,5		1.4301	H337897
19	2	ATEX Actuator screw D4		Iglidur X	H343859

pos. item	Quantity	Description, product contacted seals with reference number	included in spare parts (pos.)	Material	Part no.
20	2	V-seal		NBR	H334379
21	1	W-union G1/8" Ø6mm		hard nickel-pl.	H208825
22	1	Venting plug G-1/8"		PE-Hard	H16218
23	1	Stop screw		Grivory	H334382
24	1	Lock washer D4		1.4301	H335172
25	1	Safety nut D3		1.4301	H147640
26	1	Thrust ring		1.4057	H123151
27	8	Hex. screw M8 x 16		A2	H78772
28	1	Yoke cover D4 - 62	29	1.4301	H341311
29	4	Savatix head screw M4 x 8 washer M4 as set		1.4301	H336707
31	1	Venting plug G-1/8"		PE-Hard	H16507
32	1	Spray connection DE3		PP	H168321
33	1	G-union 8x1-G1/8"		PVDF-black	H16388
34	1			For Adapter Informations please go to page 12	
35	1			For Control Unit Informations please go to page 12	
36	1	Prox. Switch holder D4 cmlp.		SAXAMID	H344380
37	1	Operating cam D4 bottom		1.4523 / 444FR	H334386
38	1	Operating cam D4 top		1.4523 / 444FR	H334387
39	1	Hexagon screw M8 x 40		A2-70	H336675

Pos. 9, 10, 11, 12, 14 available as complete seal kits only					
		Seal kit D4-Ø62		EPDM	H337884
		Seal kit D4-Ø62		HNBR	H337885
		Seal kit D4-Ø62		FPM	H337886

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Spare parts list

Double seat mix proof valve D4 IECEx Zone 2 - 65

Date:	10.08.21	29.06.23
Name:	C.Keil	C.Keil
Reviewed:	N.Spl.	N.Spl.
Date:		
Name:		
Reviewed:		

SPX FLOW

pos. item	Quantity	Description, product contacted seals with reference number	included in spare parts (pos.)	Material	Part no.
1	1	Valve Housing D44-65		1.4404	H334443
		Valve Housing D43-65		1.4404	H337035
		Valve Housing D42-65		1.4404	H337025
		Valve Housing D41/ 1-8-65		1.4404	H337192
		Valve Housing D41/ 1-7-65		1.4404	H337172
		Valve Housing D41/ 1-6-65		1.4404	H337182
2	1	Upper valve shaft	13, 16, 25	1.4404	H341255
3	1	Lower valve shaft		1.4404	H334446
4	1	Shaft bearing D4 - 62		1.4404	H334381
5	1	O-ring		EPDM	H77039
6	1	Yoke D4 - 62		1.4305	H334383
7	1	Guide Rod D4 - 65	8, 15, 16	1.4571	H341284
8	2	Retainer ring		1.4301	H14883
		Middle seal 58-33-998/93		EPDM	H327602
		Middle seal 58-33-998/33		HNBR	H332652
		Middle seal 58-33-998/73		FPM	H332653
		Seat seal 58-33-132/93		EPDM	H168192
10	2	Seat seal 58-33-132/33		HNBR	H171561
		Seat seal 58-33-132/73		FPM	H171559
		Shaft seal 58-33-400/93		EPDM	H337476
11	2	Shaft seal 58-33-400/33		HNBR	H337478
		Shaft seal 58-33-400/73		FPM	H337477
12	1	Guide ring		Iglidur A500	H334863
13	1	Guide band		Acoflon	H334865
14	1	Quad ring 12.37x 2.62		EPDM	H311646
15	2	Hex. Screw M10x1		A2	H118903
16	1	Square key DIN6885 - A - 3x3x10		A2	H335171
17	1	Actuator D4-100/45 ATEX	18, 19, 20	1.4301	H344351
18	2	O-ring 30 x 2.5		1.4301	H337897
19	2	ATEX Actuator screw D4		Iglidur X	H343859
		V-seal		NBR	H334379
		W-union G1/8" Ø6mm		hard nickel-pl.	H208825
		Venting plug G-1/8"		PE-Hard	H16218
		Stop screw		Grivory	H334382
		Lock washer D4		1.4301	H335172
		Safety nut D3		1.4301	H147640
		Thrust ring		1.4057	H123151
		Hex. screw M8 x 16		A2	H78772
		Yoke cover D4 - 62	29	1.4301	H341311
		Savetix head screw M4 x 8 washer M4 as set		1.4301	H336707
		Venting plug G-1/8"		PE-Hard	H16507
		Spray connection DE3		PP	H168321
		G-union 8x1-G1/8"		PVDF-black	H16388
		For Adapter Informations please go to page 12			
		For Control Unit Informations please go to page 12			
		Prox. Switch holder D4 cmpl.		SAXAMID	H344380
		Operating cam D4 bottom		1.4523 / 444FR	H334386
		Operating cam D4 top		1.4523 / 444FR	H334387
		Hexagon screw M8 x 40		A2-70	H336675
		Pos. 9, 10, 11, 12, 14 available as complete seal kits only			
		Seal kit D4-Ø62		EPDM	H337884
		Seal kit D4-Ø62		HNBR	H337885
		Seal kit D4-Ø62		FPM	H337886

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Spare parts list

Double seat mix proof valve D4 IECEx Zone 2 - 3"

Date:	10.08.21	29.06.23
Name:	C.Keil	C.Keil
Reviewed:	N.Spl.	N.Spl.
Date:		
Name:		
Reviewed:		
Page 8 of 12		
RN 500.047-06		

SPX FLOW

pos. item	Quantity	Description, product contacted seals with reference number	included in spare parts (pos.)	Material	Part no.	pos. item	Quantity	Description, product contacted seals with reference number	included in spare parts (pos.)	Material	Part no.
1	1	Valve Housing D44-3"		1.4404	H335275	20	2	V-seal		NBR	H334379
		Valve Housing D43-3"		1.4404	H337041	21	1	W-union G1/8" Ø6mm		hard nickel-pl.	H208825
		Valve Housing D42-3"		1.4404	H337031	22	1	Venting plug G-1/8"		PE-Hard	H16218
		Valve Housing D41/1-8-3"		1.4404	H337198	23	1	Stop screw		Grivory	H334382
		Valve Housing D41/1-7-3"		1.4404	H337178	24	1	Lock washer D4		1.4301	H335172
		Valve Housing D41/1-6-3"		1.4404	H337188	25	1	Safety nut D3		1.4301	H147640
2	1	Upper valve shaft	13, 16, 25	1.4404	H341258	26	1	Thrust ring		1.4057	H123151
3	1	Lower valve shaft		1.4404	H335392	27	8	Hex. screw M8 x 16		A2	H78772
4	1	Shaft bearing D4 - 62		1.4404	H334381	28	1	Yoke cover D4 - 62	29	1.4301	H341311
5	1	O-ring		EPDM	H77039	29	4	Savetix head screw M4 x 8 washer M4 as set		1.4301	H336707
6	1	Yoke D4 - 62		1.4305	H334383	31	1	Venting plug G-1/8"		PE-Hard	H16507
7	1	Guide Rod D4 - 3"	8, 15, 16	1.4571	H341287	32	1	Spray connection DE3 - 62		PP	H168321
8	2	Retainer ring		1.4301	H14883	33	1	G-union 8x1-G1/8"		PVDF-black	H16388
		Middle seal 58-33-998/93		EPDM	H327602	34	1	For Adapter Informations please go to page 12			
		Middle seal 58-33-998/33		HNBR	H332652	35	1	For Control Unit Informations please go to page 12			
		Middle seal 58-33-998/73		FPM	H332653	36	1	Prox. Switch holder D4 cmpl.		SAXAMID	H344380
10	2	Seat seal 58-33-132/93		EPDM	H168192	37	1	Operating cam D4 bottom		1.4523 / 444FR	H334386
		Seat seal 58-33-132/73		HNBR	H171561	38	1	Operating cam D4 top		1.4523 / 444FR	H334387
		Shaft seal 58-33-400/93		FPM	H171559	39	1	Hexagon screw M8 x 40		A2-70	H336675
		Shaft seal 58-33-400/33		EPDM	H337476						
		Shaft seal 58-33-400/33		HNBR	H337478						
		Shaft seal 58-33-400/73		FPM	H337477						
12	1	Guide ring		Iglidur A500	H334863						
13	1	Guide band		Acoflon	H334865						
14	1	Quad ring 12.37x 2.62		EPDM	H311646						
15	2	Hex. Screw M10x1		A2	H118903						
16	1	Square key DIN6885 - A - 3x3x10		A2	H335171						
17	1	Actuator D4-100/45 ATEX	18, 19, 20	1.4301	H344351						
18	2	O-ring 30 x 2.5		1.4301	H337897						
19	2	ATEX Actuator screw D4		Iglidur X	H343859						
Pos. 9, 10, 11, 12, 14 available as complete seal kits only											
		Seal kit D4-Ø62		EPDM	H337884						
		Seal kit D4-Ø62		HNBR	H337885						
		Seal kit D4-Ø62		FPM	H337886						

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Spare parts list

Double seat mix proof valve D4 IECEx Zone 2 - DN80

Date:	10.08.21	29.06.23
Name:	C.Keil	C.Keil
Reviewed:	N.Spl.	N.Spl.
Date:		
Name:		
Reviewed:		
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		RN 500.047-06

SPX FLOW

pos. item	Quantity	Description, product contacted seals with reference number	included in spare parts (pos.)	Material	Part no.
1	1	Valve Housing D44-80		1.4404	H335278
		Valve Housing D43-80		1.4404	H337036
		Valve Housing D42-80		1.4404	H337026
		Valve Housing D41/ 1-8-80		1.4404	H337193
		Valve Housing D41/ 1-7-80		1.4404	H337173
2	1	Valve Housing D41/ 1-6-80		1.4404	H337183
	1	Upper valve shaft	13, 16, 25	1.4404	H341257
3	1	Lower valve shaft		1.4404	H335393
4	1	Shaft bearing D4 - 92		1.4404	H335713
5	1	O-ring		EPDM	H77061
6	1	Yoke D4 - 92		1.4305	H335994
7	1	Guide Rod D4 - 80	8, 15, 16	1.4571	H341286
8	2	Retainer ring		1.4301	H14883
9	1	Middle seal 58-33-997/93		EPDM	H327985
	1	Middle seal 58-33-997/33		HNBR	H332649
	1	Middle seal 58-33-997/73		FPM	H332648
10	2	Seat seal 58-33-133/93		EPDM	H168153
	2	Seat seal 58-33-133/33		HNBR	H171565
11	2	Shaft seal 58-33-405/93		EPDM	H337668
	2	Shaft seal 58-33-405/33		HNBR	H337670
12	2	Shaft seal 58-33-405/73		FPM	H337669
	1	Guide ring		Iglidur A500	H337669
13	1	Guide band		Acoflon	H334865
14	1	Quad ring 12,37x 2,62		EPDM	H311646
15	2	Hex. Screw M10x1		A2	H118903
	1	Square key DIN6885 - A - 3x3x10		A2	H335171
17	1	Actuator D4-125/50 ATEX	18, 19, 20	1.4301	H344356
18	2	O-ring 30 x 2,5		1.4301	H337897
19	2	ATEX Actuator screw D4		Iglidur X	H343859
<p style="text-align: center;">Pos. 9, 10, 11, 12, 14 available as complete seal kits only</p>					
		Seal kit D4-Ø92		EPDM	H337887
		Seal kit D4-Ø92		HNBR	H337888
		Seal kit D4-Ø92		FPM	H337889

For Adapter Informations please go to page 12
For Control Unit Informations please go to page 12

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Spare parts list

Double seat mix proof valve D4 IECEx Zone 2 - DN100

Date:	10.06.21	29.06.23
Name:	C.Kell	C.Kell
Reviewed:	N.Spl.	N.Spl.
Date:		
Name:		
Reviewed:		
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SPX FLOW

pos. item	Quantity	Description, product contacted seals with reference number	included in spare parts (pos.)	Material	Part no.
1	1	Valve Housing D44-100		1.4404	H335279
		Valve Housing D43-100		1.4404	H337037
		Valve Housing D42-100		1.4404	H337027
		Valve Housing D41/ 1-8-100		1.4404	H337194
		Valve Housing D41/ 1-7-100		1.4404	H337174
		Valve Housing D41/ 1-6-100		1.4404	H337184
2	1	Upper valve shaft	13, 16, 25	1.4404	H341259
3	1	Lower valve shaft		1.4404	H335394
4	1	Shaft bearing D4 - 92		1.4404	H335713
5	1	O-ring		EPDM	H77039
6	1	Yoke D4 - 92		1.4305	H335994
7	1	Guide Rod D4 - 100/4"	8, 15, 16	1.4571	H341288
8	2	Retainer ring		1.4301	H14883
	1	Middle seal 58-33-997/93		EPDM	H327985
	1	Middle seal 58-33-997/33		HNBR	H332649
	1	Middle seal 58-33-997/73		FPM	H332648
	2	Seat seal 58-33-133/93		EPDM	H168153
10	2	Seat seal 58-33-133/33		HNBR	H171565
	2	Seat seal 58-33-405/93		FPM	H171563
	2	Shaft seal 58-33-405/33		EPDM	H337668
11	2	Shaft seal 58-33-405/33		HNBR	H337670
	2	Shaft seal 58-33-405/73		FPM	H337669
12	1	Guide ring		Iglidur A500	H337669
13	1	Guide band		Acoflon	H334865
14	1	Quad ring 12,37x 2,62		EPDM	H311646
15	2	Hex. Screw M10x1		A2	H118903
16	1	Square key DIN6885 - A - 3x3x10		A2	H335171
17	1	Actuator D4-125/50 ATEX	18, 19, 20	1.4301	H344356
18	2	O-ring 30 x 2,5		1.4301	H337897
19	2	ATEX Actuator screw D4		Iglidur X	H343859
20	2	V-seal		NBR	H334379
21	1	W-union G1/8" Ø6mm		hard nickel-pl.	H208825
22	1	Venting plug G-1/8"		PE-Hard	H16218
23	1	Stop screw		Grivory	H334382
24	1	Lock washer D4		1.4301	H335172
25	1	Safety nut D3		1.4301	H147640
26	1	Thrust ring		1.4057	H123151
27	8	Hex. screw M8 x 16		A2	H78772
28	1	Yoke cover D4 - 92	29	1.4301	H341312
29	4	Savetix head screw M4 x 8 washer M4 as set		1.4301	H336707
31	1	Venting plug G-1/8"		PE-Hard	H16507
32	1	Spray connection DE3 - 92		PP	H168322
33	1	G-union 8x1-G1/8"		PVDF-black	H16388
34	1				
35	1	For Adapter Informations please go to page 12			
36	1	For Control Unit Informations please go to page 12			
37	1	Prox. Switch holder D4 compl.		SAXAMID	H344380
38	1	Operating cam D4 bottom		1.4523 / 444FR	H334386
39	1	Operating cam D4 top		1.4523 / 444FR	H334387
		Hexagon screw M8 x 40		A2-70	H336675
Pos. 9, 10, 11, 12, 14 available as complete seal kits only					
		Seal kit D4-Ø92		EPDM	H337887
		Seal kit D4-Ø92		HNBR	H337888
		Seal kit D4-Ø92		FPM	H337889

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Spare parts list

Double seat mix proof valve D4 IECEx Zone 2 - 4"

Date:	10.08.21	29.06.23
Name:	C.Keil	C.Keil
Reviewed:	N.Spl.	N.Spl.
Date:		
Name:		
Reviewed:		

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pos. item	Quantity	Description, product contacted seals with reference number	included in spare parts (pos.)	Material	Part no.
1	1	Valve Housing D44-4"		1.4404	H335280
		Valve Housing D43-4"		1.4404	H337042
		Valve Housing D42-4"		1.4404	H337032
		Valve Housing D41/1-8-4"		1.4404	H337199
		Valve Housing D41/1-7-4"		1.4404	H337179
		Valve Housing D41/1-6-4"		1.4404	H337189
2	1	Upper valve shaft	13, 16, 25	1.4404	H341259
3	1	Lower valve shaft		1.4404	H335394
4	1	Shaft bearing D4 - 92		1.4404	H335713
5	1	O-ring		EPDM	H77039
6	1	Yoke D4 - 92		1.4305	H335994
7	1	Guide Rod D4 - 100/4"		1.4571	H341288
8	2	Retainer ring		1.4301	H14883
	1	Middle seal 58-33-997/93		EPDM	H327985
	1	Middle seal 58-33-997/33		HNBR	H332649
	1	Middle seal 58-33-997/73		FPM	H332648
10	2	Seat seal 58-33-133/93		EPDM	H168153
	2	Seat seal 58-33-133/33		HNBR	H171565
	2	Seat seal 58-33-133/73		FPM	H171563
	2	Shaft seal 58-33-405/93		EPDM	H337668
11	2	Shaft seal 58-33-405/33		HNBR	H337670
	2	Shaft seal 58-33-405/73		FPM	H337669
12	1	Guide ring		Iglidur A500	H337669
13	1	Guide band		Acoflon	H334865
14	1	Quad ring 12.37x 2.62		EPDM	H311646
15	2	Hex. Screw M10x1		A2	H118903
16	1	Square key DIN6885 - A - 3x3x10		A2	H335171
17	1	Actuator D4-125/50 ATEX	18, 19, 20	1.4301	H344356
18	2	O-ring 30 x 2.5		1.4301	H337897
19	2	ATEX Actuator screw D4		Iglidur X	H343859
<p>Pos. 9, 10, 11, 12, 14 available as complete seal kits only</p>					
		Seal kit D4-Ø92		EPDM	H337887
		Seal kit D4-Ø92		HNBR	H337888
		Seal kit D4-Ø92		FPM	H337889

For Adapter Informations please go to page 12

For Control Unit Informations please go to page 12

Prox. Switch holder D4 cmpl.

Operating cam D4 bottom

Operating cam D4 top

Hexagon screw M8 x 40

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Spare parts list

Double seat mix proof valve D4 IECEx Zone 2 - Adapters / Control Units

Date:	10.08.21	29.06.23	
Name:	C.Kell	C.Kell	
Reviewed:	N.Spl.	N.Spl.	
Date:			
Name:			
Reviewed:			

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pos. item	Quantity	Description, product contacted seals with reference number	air connections	Material	Part no.
34	1	CU4 D4 adapter cmpl.	/	PA6.6 GF30	H341891

pos. item	Quantity	Description, product contacted seals with reference number	air connections	Material	Part no.
CU4 D4 adapter Zone 2					
34	1	CU4 D4 adapter cmpl.	/	PA6.6 GF30	H337098

CU4plus Control Units Zone 2 (Linear-Sensors)					
pos. item	Quantity	Description, product contacted seals with reference number	air connections	Material	Part no.
35					
	1	CU41plus D4 AS-i IECEx Z2	6 mm	PA6.6 GF30	H345096
	1	CU41plus D4 AS-i M12 IECEx Z2	6 mm	PA6.6 GF30	H345097
	1	CU41plus D4 Direct Connect IECEx Z2	6 mm	PA6.6 GF30	H345104
	1	CU41plus D4 Direct Connect M12 IECEx Z2	6 mm	PA6.6 GF30	H345105
	1	CU41plus D4 M12 IO-Link IECEx Z2	6 mm	PA6.6 GF30	H348008

CU4 Control Units Zone 2 (Hall Sensors)					
pos. item	Quantity	Description, product contacted seals with reference number	air connections	Material	Part no.
35					
	1	CU41 D4 AS-i IECEx Z2	6 mm	PA6.6 GF30	H345112
	1	CU41 D4 AS-i M12 IECEx Z2	6 mm	PA6.6 GF30	H345113
	1	CU41 D4 Direct Connect IECEx Z2	6 mm	PA6.6 GF30	H345120
	1	CU41 D4 Direct Connect M12 IECEx Z2	6 mm	PA6.6 GF30	H345121

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Spare Parts list

Double seat mix proof valve D4 IECEx Zone 2

DN 125 - 150 , 6"

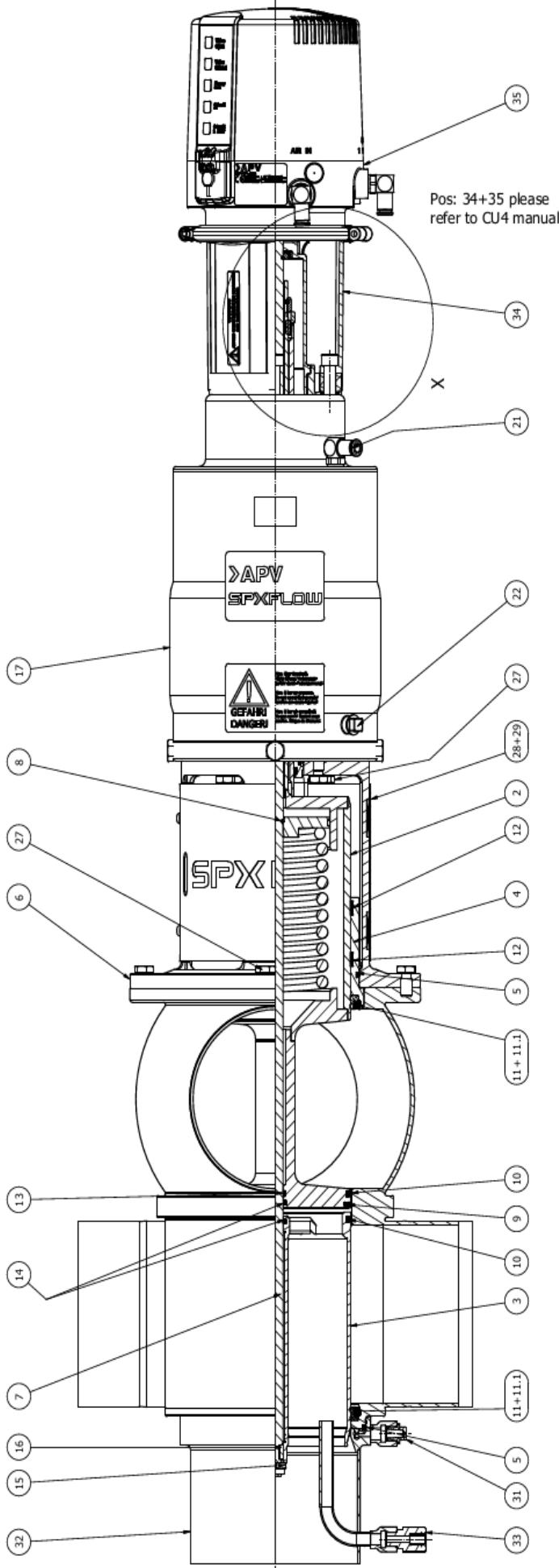
Date:	10.08.21	29.06.23
Name:	C. Keil	C. Keil
Reviewed:		N. Spl.

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Date:		
Name:		
Reviewed:		

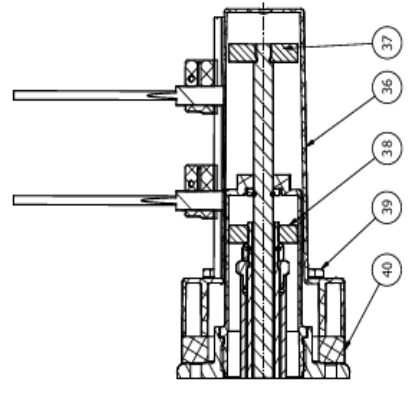
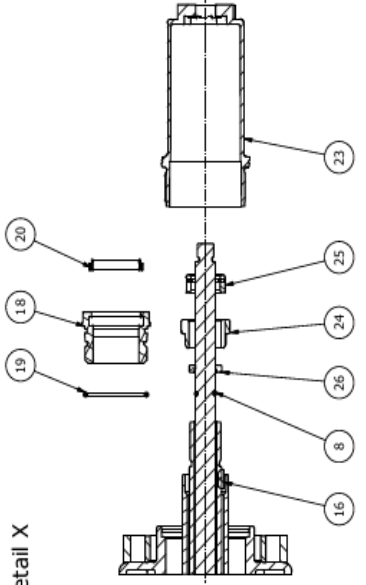
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Pos: 34+35 please refer to CU4 manual

Detail X



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Spare parts list

Double seat mix proof valve D4 IECEx Zone 2 - 125

Date:	10.08.21	08.06.22	09.06.23
Name:	C. Keil	C. Keil	C. Keil
Reviewed:			N.Spl.
Date:			
Name:			
Reviewed:			

SPX FLOW

pos. item	Quantity	Description, product contacted seals with reference number	included in spare parts (pos.)	Material	Part no.
1	1	Valve Housing D44-125		1.4404	H340119
		Valve Housing D43-125		1.4404	H340120
		Valve Housing D42-125		1.4404	H340121
		Valve Housing D41/ 1-8 -125		1.4404	H340124
		Valve Housing D41/ 1-7-125		1.4404	H340123
		Valve Housing D41/ 1-6-125		1.4404	H340122
2	1	Upper valve shaft	13, 16, 25	1.4404	H341269
3	1	Lower valve shaft		1.4404	H340230
4	1	Shaft bearing D4-114		1.4404	H340243
5	1	O-ring		EPDM	H77074
6	1	Yoke D4 - 114		1.4305	H340244
7	1	Guide Rod D4-125	8, 15, 16	1.4571	H341298
8	2	Retainer ring		1.4301	H14883
		Middle seal 58-33-996/93		EPDM	H340247
		Middle seal 58-33-996/33		HNBR	H340248
		Middle seal 58-33-996/73		FPM	H340294
		Seat seal 58-33-135/93		EPDM	H173940
10	2	Seat seal 58-33-135/33		HNBR	H173939
		Seat seal 58-33-135/73		FPM	H340246
		Seat seal 58-33-693/93		EPDM	H77611
		Seat seal 58-33-693/33		HNBR	H170178
		Seat seal 58-33-693/73		FPM	H77610
11.1	2	PTFE Shaft seal		PTFE	H340295
12	1	Guide ring		Iglidur A500	H340198
13	1	Guide band		Acoflon	H334865
14	1	Quad ring 12,37x 2,62		EPDM	H311646
15	2	Self locking nut M10x1		A2	H118903
16	1	Square key DIN6885 - A - 3x3x10		A2	H335171
17	1	Actuator D4-150/60 ATEX	18, 19, 20	1.4301	H344359
18	2	O-ring 30 x 2,5		1.4301	H337897
19	2	ATEX Actuator screw D4		Iglidur X	H343859
20	2	V-seal		NBR	H334379
21	3	W-union G1/8" Ø6mm		hard nickel-pl.	H208825
22	2	Venting plug G-1/8"		PE-Hard	H16218
23	1	Stop screw		Grivory	H334382
24	1	Safety nut D3		1.4301	H147640
25	1	Lock washer D4		1.4301	H335172
26	1	Thrust ring		1.4057	H123151
27	8	Hex. screw M8 x 16		A2	H78772
28	1	Yoke cover D4 - 114	29	1.4301	H341313
29	4	Savetix head screw M4 x 8 washer M4 as set		1.4301	H336707
31	1	Venting plug G-1/8"		PE-Hard	H16507
32	1	Spray connection D4 - 114		1.4301	H174102
33	1	G-union 8x1-G1/8"		PVDF-black	H16388
34	1				
35	1				
For Adapter Informations please go to page 5					
For Control Unit Informations please go to page 5					
36	1	Prox. Switch holder D4 cmpl.		SAXAMID	H344380
37	1	Operating cam D4 bottom		1.4523 / 444FR	H334386
38	1	Operating cam D4 top		1.4523 / 444FR	H334387
39	1	Hexagon screw M8 x 40		A2-70	H336675
40	1	Spacer D4-138		PA6.6 GF30 bla.	-
Pos. 9, 10, 11, 12, 14 available as complete seal kits only					
		Seal kit D4-Ø114		EPDM	H340575
		Seal kit D4-Ø114		HNBR	H340576
		Seal kit D4-Ø114		FPM	H340577

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Spare parts list

Double seat mix proof valve D4 IECEx Zone 2 - 6"

Date:	10.06.21	29.06.23				SPX FLOW
Name:	C.Keil	C.Keil				
Reviewed:		N.Spl.				
Date:						
Name:						Page 4 of 5
Reviewed:						RN 500.047-07

pos. item	Quantity	Description, product contacted seals with reference number	included in spare parts (pos.)	Material	Part no.
1	1	Valve Housing D44-6"		1.4404	H340138
		Valve Housing D43-6"		1.4404	H340139
		Valve Housing D42-125		1.4404	H340140
		Valve Housing D41/ 1-8 -6"		1.4404	H340143
		Valve Housing D41/ 1-7-6"		1.4404	H340142
		Valve Housing D41/ 1-6-6"		1.4404	H340141
2	1	Upper valve shaft	13, 16, 25	1.4404	H341270
3	1	Lower valve shaft		1.4404	H340311
4	1	Shaft bearing D4-138		1.4404	H340322
5	1	O-ring		EPDM	H77081
6	1	Yoke D4 - 138		1.4305	H340323
7	1	Guide Rod - 150 / 6"	8, 15, 16	1.4571	H341299
8	2	Retainer ring		1.4301	H14883
	1	Middle seal 58-33-995/93		EPDM	H340325
	1	Middle seal 58-33-995/33		HNBR	H340326
	1	Middle seal 58-33-995/73		FPM	H340327
	2	Seat seal 58-33-134/93		EPDM	H173739
10	2	Seat seal 58-33-134/33		HNBR	H173738
	2	Seat seal 58-33-134/73		FPM	H338070
	2	Seat seal 58-33-743/93		EPDM	H77628
	2	Seat seal 58-33-743/33		HNBR	H170177
	2	Seat seal 58-33-743/73		FPM	H77627
11.1	2	PTFE Shaft seal		PTFE	H340328
12	1	Guide ring		Igildur A500	H340182
13	1	Guide band		Acoflon	H334865
14	1	Quad ring 12,37x 2,62		EPDM	H311646
15	1	Self locking nut M10x1		A2	H118903
16	2	Square key DIN6885 - A - 3x3x10		A2	H335171
17	1	Actuator D4-180/65 ATEX	18, 19, 20	1.4301	H344358
18.	2	O-ring 30 x 2,5		1.4301	H337897

pos. item	Quantity	Description, product contacted seals with reference number	included in spare parts (pos.)	Material	Part no.
19	2	ATEX Actuator screw D4		Igildur X	H343859
20	2	V-seal		NBR	H334379
21	3	W-union G1/8" Ø6mm		hard nickel-pl.	H208825
22	2	Venting plug G-1/8"		PE-Hard	H16218
23	1	Stop screw		Grivory	H334382
24	1	Safety nut D3		1.4301	H147640
25	1	Lock washer D4		1.4301	H335172
26	1	Thrust ring		1.4057	H123151
27	8	Hex. screw M8 x 16		A2	H78772
28	1	Yoke cover D4 - 138	29	1.4301	H341314
29	4	Savetix head screw M4 x 8 washer M4 as set		1.4301	H336707
31	1	Venting plug G-1/8"		PE-Hard	H16507
32	1	Spray connection D4 - 138		1.4301	H344394
33	1	G-union 8x1-G1/8"		PVDF-black	H16388
34	1				
35	1				
36	1	Prox. Switch holder D4 compl.		SAXAMID	H344380
37	1	Operating cam D4 bottom		1.4523 / 444FR	H334386
38	1	Operating cam D4 top		1.4523 / 444FR	H334387
39	1	Hexagon screw M8 x 40		A2-70	H340751
40	1	Spacer D4-138		PA6.6 GF30 bla.	H340179

For Adapter Informations please go to page 5
For Control Unit Informations please go to page 5

pos. item	Quantity	Description, product contacted seals with reference number	included in spare parts (pos.)	Material	Part no.
9.	10, 11, 12, 14	Pos. 9, 10, 11, 12, 14 available as complete seal kits only			
		Seal kit D4-Ø138		EPDM	H340578
		Seal kit D4-Ø138		HNBR	H340579
		Seal kit D4-Ø138		FPM	H340580

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Spare parts list

Double seat mix proof valve D4 IECEX Zone 2 - Adapters / Control Units

Date:	10.08.21	29.06.23	SPX FLOW	
Name:	C. Kell	C. Kell		
Reviewed:	N. Spl.	N. Spl.		
Date:			Page	5 of 5
Name:			RN 500.047-07	
Reviewed:				

pos. item	Quantity	Description, product contacted seals with reference number	air connections	Material	Part no.
CU4 D4 adapter Zone 2					
34	1	CU4plus D4 V2 adapter cmpl.	/	PA6.6 GF30	H341891

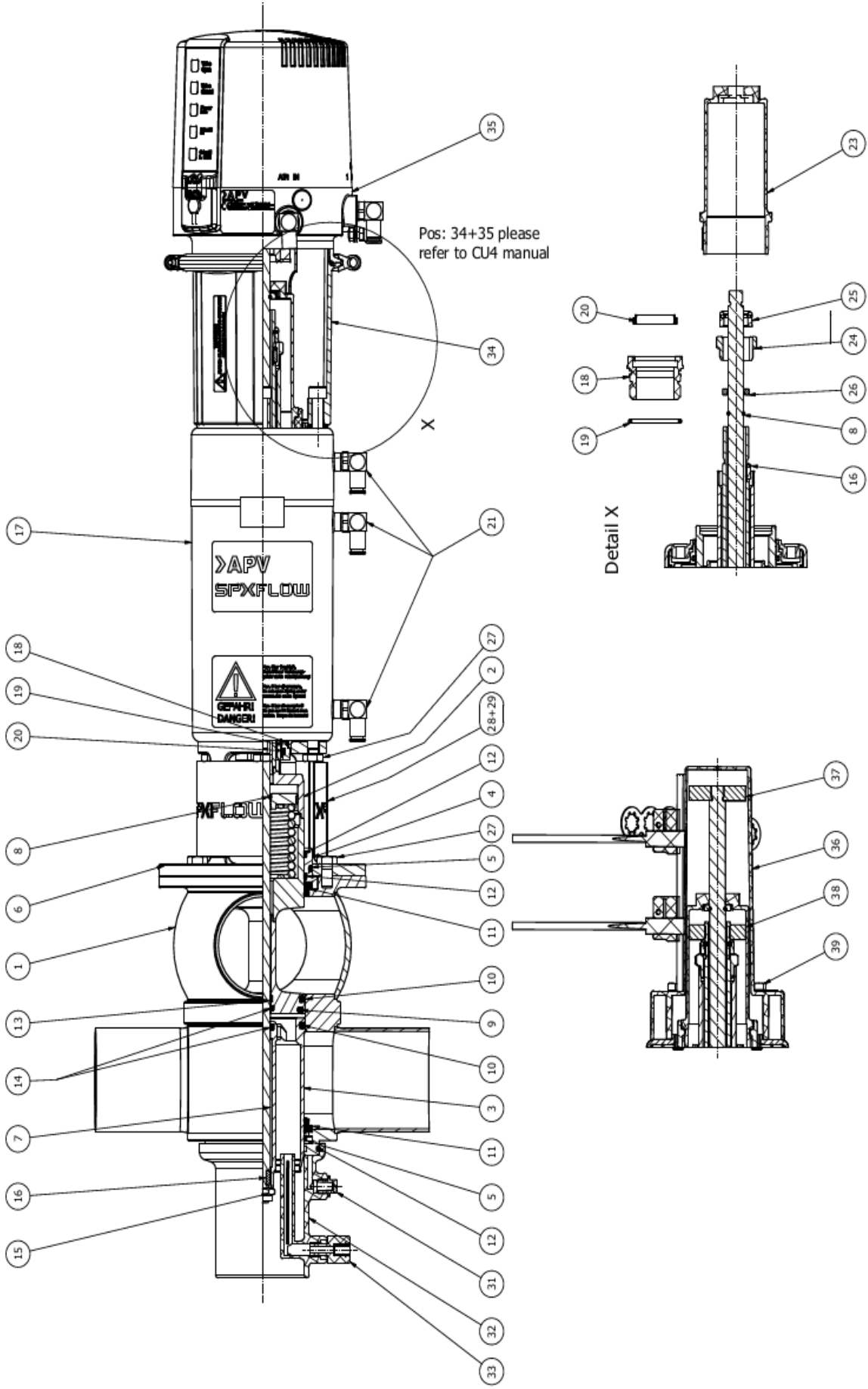
CU4plus Control Units Zone 2 (Linear-Sensors)					
pos. item	Quantity	Description, product contacted seals with reference number	air connections	Material	Part no.
CU4 Control Units Zone 2 (Hall Sensors)					
35	1	CU41 D4 AS-i IECEX Z2	6 mm	PA6.6 GF30	H345112
	1	CU41 D4 AS-i M12 IECEX Z2	6 mm	PA6.6 GF30	H345113
	1	CU41 D4 Direct Connect IECEX Z2	6 mm	PA6.6 GF30	H345120
	1	CU41 D4 Direct Connect M12 IECEX Z2	6 mm	PA6.6 GF30	H345121
CU4plus Control Units Zone 2 (Linear-Sensors)					
35	1	CU41plus D4 AS-i IECEX Z2	6 mm	PA6.6 GF30	H345096
	1	CU41plus D4 AS-i M12 IECEX Z2	6 mm	PA6.6 GF30	H345097
	1	CU41plus D4 Direct Connect IECEX Z2	6 mm	PA6.6 GF30	H345104
	1	CU41plus D4 Direct Connect M12 IECEX Z2	6 mm	PA6.6 GF30	H345105
	1	CU41plus D4 M12 IO-Link IECEX Z2	6 mm	PA6.6 GF30	H348008

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Spare Parts list

Double seat mix proof valve D4 SL IECEX Zone 2 DN40 - 100 , 1,5" - 4"

Date:	10.08.21	29.06.23
Name:	C. Keil	C. Keil
Reviewed:		
SPX FLOW		
Date:		
Name:		
Reviewed:		
Page 1 of 12		
RN 501.047-07		



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Spare parts list

Double seat mix proof valve D4 SL IECEx Zone 2 - 1,5"

Date:	10.08.21	29.06.23
Name:	C.Keil	C.Keil
Reviewed:		N.Spl.
Date:		
Name:		
Reviewed:		

SPX FLOW

pos. item	Quantity	Description, product contacted seals with reference number	included in spare parts (pos.)	Material	Part no.
1	1	Valve Housing D44-1,5"		1.4404	H335272
		Valve Housing D43-1,5"		1.4404	H337038
		Valve Housing D42-1,5"		1.4404	H337028
		Valve Housing D41/1-8-1,5"		1.4404	H337195
		Valve Housing D41/1-7-1,5"		1.4404	H337175
		Valve Housing D41/1-6-1,5"		1.4404	H337185
2	1	Upper valve shaft	13, 16, 25	1.4404	H341262
3	1	Lower valve shaft		1.4404	H334986
4	1	Shaft bearing D4 - 62		1.4404	H334381
5	1	O-ring		EPDM	H77039
6	1	Yoke D4 - 62		1.4305	H334383
7	1	Guide Rod D4 - 40/1,5" SL	8, 15, 16	1.4571	H341291
8	2	Retainer ring		1.4301	H14883
	1	Middle seal 58-33-998/93		EPDM	H327602
	1	Middle seal 58-33-998/33		HNBR	H332652
	1	Middle seal 58-33-998/73		FPM	H332653
	2	Seat seal 58-33-132/93		EPDM	H168192
10	2	Seat seal 58-33-132/33		HNBR	H171561
	2	Seat seal 58-33-132/73		FPM	H171559
	2	Shaft seal 58-33-400/93		EPDM	H337476
11	2	Shaft seal 58-33-400/33		HNBR	H337478
	2	Shaft seal 58-33-400/73		FPM	H337477
12	1	Guide ring		Iglidur A500	H334863
13	1	Guide band		Acoflon	H334865
14	1	Quad ring 12,37x 2,62		EPDM	H311646
15	2	Self locking Nut M10x1		A2	H118903
16	2	Square key DIN6885 - A - 3x3x10		A2	H335171
17	1	Actuator D4-100/29 SL ATEX	18, 19, 20	1.4301	H344352
18	2	O-ring 30 x 2,5		1.4301	H337897
19	2	ATEX Actuator screw D4		Iglidur X	H343859

pos. item	Quantity	Description, product contacted seals with reference number	included in spare parts (pos.)	Material	Part no.
20	2	V-seal		NBR	H334379
21	3	W-union G1/8" Ø6mm		hard nickel-pl.	H208825
23	1	Stop screw		Grivory	H334382
24	1	Lock washer D4		1.4301	H335172
25	1	Safety nut D3		1.4301	H147640
26	1	Thrust ring		1.4057	H123151
27	8	Hex. screw M8 x 16		A2	H78772
28	1	Yoke cover D4 - 62	29	1.4301	H341311
29	4	Savetix head screw M4 x 8 washer M4 as set		1.4301	H336707
31	1	Venting plug G-1/8"		PE-Hard	H16507
32	1	Spray connection DE3		PP	H168321
33	1	G-union 8x1-G1/8"		PVDF-black	H16388
34	1			For Adapter Informations please go to page 12	
35	1			For Control Unit Informations please go to page 12	
36	1	Prox. Switch holder D4 cmpl.		SAXAMID	H344380
37	1	Operating cam D4 bottom		1.4523 / 444FR	H334386
38	1	Operating cam D4 top		1.4523 / 444FR	H334387
39	1	Hexagon screw M8 x 40		A2-70	H336675

pos. item	Quantity	Description, product contacted seals with reference number	included in spare parts (pos.)	Material	Part no.
				Pos. 9, 10, 11, 12, 14 available as complete seal kits only	
				EPDM	H337884
				HNBR	H337885
				FPM	H337886

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Spare parts list

Double seat mix proof valve D4 SL IECEx Zone 2 - DN50		Date:	10.08.21	29.06.23	SPX FLOW	
		Name:	C.Keil	C.Keil		
		Reviewed:		N.Spl.	Page 4 of 12	
		Date:				
		Name:			RN 501.047-07	
		Reviewed:				

pos. item	Quantity	Description, product contacted seals with reference number	included in spare parts (pos.)	Material	Part no.
1	1	Valve Housing D44-50		1.4404	H335274
		Valve Housing D43-50		1.4404	H337034
		Valve Housing D42-50		1.4404	H337024
		Valve Housing D41/ 1-8-50		1.4404	H337191
		Valve Housing D41/ 1-7-50		1.4404	H337171
		Valve Housing D41/ 1-6-50		1.4404	H337181
2	1	Upper valve shaft	13, 16, 25	1.4404	H341263
3	1	Lower valve shaft		1.4404	H334987
4	1	Shaft bearing D4 - 62		1.4404	H334381
5	1	O-ring		EPDM	H77039
6	1	Yoke D4 - 62		1.4305	H334383
7	1	Guide Rod D4 - 50/2" SL	8, 15, 16	1.4571	H341292
8	2	Retainer ring		1.4301	H14883
	1	Middle seal 58-33-998/93		EPDM	H327602
	1	Middle seal 58-33-998/33		HNBR	H332652
	1	Middle seal 58-33-998/73		FPM	H332653
	2	Seat seal 58-33-132/93		EPDM	H168192
10	2	Seat seal 58-33-132/33		HNBR	H171561
	2	Seat seal 58-33-132/73		FPM	H171559
	2	Shaft seal 58-33-400/93		EPDM	H337476
11	2	Shaft seal 58-33-400/33		HNBR	H337478
	2	Shaft seal 58-33-400/73		FPM	H337477
12	1	Guide ring		Iglidur A500	H334863
13	1	Guide band		Acoflon	H334865
14	1	Quad ring 12,37x 2,62		EPDM	H311646
15	2	Self locking Nut M10x1		A2	H118903
16	2	Square key DIN6885 - A - 3x3x10		A2	H335171
17	1	Actuator D4-100/34 SL ATEX	18, 19, 20	1.4301	H344353
18	2	O-ring 30 x 2.5		1.4301	H337897
19	2	ATEX Actuator screw D4		Iglidur X	H343859

pos. item	Quantity	Description, product contacted seals with reference number	included in spare parts (pos.)	Material	Part no.
20	2	V-seal		NBR	H334379
21	3	W-union G1/8" Ø6mm		hard nickel-pl.	H208825
23	1	Stop screw		Grivory	H334382
24	1	Lock washer D4		1.4301	H335172
25	1	Safety nut D3		1.4301	H147640
26	1	Thrust ring		1.4057	H123151
27	8	Hex. screw M8 x 16		A2	H78772
28	1	Yoke cover D4 - 62	29	1.4301	H341311
29	4	Savetix head screw M4 x 8 washer M4 as set		1.4301	H336707
31	1	Venting plug G-1/8"		PE-Hard	H16507
32	1	Spray connection DE3		PP	H168321
33	1	G-union 8x1-G1/8"		PVDF-black	H16388
34	1				
35	1				
36	1				
37	1				
38	1				
39	1				

For Adapter Informations please go to page 12
For Control Unit Informations please go to page 12

36	1	Prox. Switch holder D4 cmpl.		SAXAMID	H344380
37	1	Operating cam D4 bottom		1.4523 / 444FR	H334386
38	1	Operating cam D4 top		1.4523 / 444FR	H334387
39	1	Hexagon screw M8 x 40		A2-70	H336675

Pos. 9, 10, 11, 12, 14 available as complete seal kits only					
		Seal kit D4-Ø62		EPDM	H337884
		Seal kit D4-Ø62		HNBR	H337885
		Seal kit D4-Ø62		FPM	H337886

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Spare parts list

Date:	10.08.21	29.06.23
Name:	C. Kell	C. Kell
Reviewed:		N.Spl.
Date:		
Name:		
Reviewed:		
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SPX FLOW	
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Double seat mix proof valve D4 SL IECEX Zone 2 - 2"

pos. item	Quantity	Description, product contacted seals with reference number	included in spare parts (pos.)	Material	Part no.	pos. item	Quantity	Description, product contacted seals with reference number	included in spare parts (pos.)	Material	Part no.	included in spare parts (pos.)		
												Material	Part no.	
1	1	Valve Housing D44-2"		1.4404	H335271	20	2	V-seal		NBR	H334379			
		Valve Housing D43-2"		1.4404	H337039	21	3	W-union G1/8" Ø6mm		hard nickel-pl.	H208825			
		Valve Housing D42-2"		1.4404	H337029									
		Valve Housing D41/1-8-2"		1.4404	H337196	23	1	Stop screw		Grivory	H334382			
		Valve Housing D41/1-7-2"		1.4404	H337176	24	1	Lock washer D4		1.4301	H335172			
		Valve Housing D41/1-6-2"		1.4404	H337186	25	1	Safety nut D3		1.4301	H147640			
2	1	Upper valve shaft	13, 16, 25	1.4404	H341263	26	1	Thrust ring		1.4057	H123151			
3	1	Lower valve shaft		1.4404	H334987	27	8	Hex. screw M8 x 16		A2	H78772			
4	1	Shaft bearing D4 - 62		1.4404	H334381	28	1	Yoke cover D4 - 62	29	1.4301	H341311			
5	1	O-ring		EPDM	H77039									
6	1	Yoke D4 - 62		1.4305	H334383	29	4	Savefix head screw M4 x 8 washer M4 as set		1.4301	H336707			
7	1	Guide Rod D4 - 50/2" SL	8, 15, 16	1.4571	H341292	31	1	Venting plug G-1/8"		PE-Hard	H16507			
8	2	Retainer ring		1.4301	H14883	32	1	Spray connection DE3		PP	H168321			
		Middle seal 58-33-998/93		EPDM	H327602	33	1	G-union 8x1-G1/8"		PVDF-black	H16388			
		Middle seal 58-33-998/33		HNBR	H332652	34	1							
		Middle seal 58-33-998/73		FPM	H332653	35	1							
		Seat seal 58-33-132/93		EPDM	H168192	36	1	Prox. Switch holder D4 cmpl.		SAXAMID	H344380			
		Seat seal 58-33-132/33		HNBR	H171561	37	1	Operating cam D4 bottom		1.4523 / 444FR	H334386			
		Seat seal 58-33-132/73		FPM	H171559	38	1	Operating cam D4 top		1.4523 / 444FR	H334387			
		Shaft seal 58-33-400/93		EPDM	H337476	39	1	Hexagon screw M8 x 40		A2-70	H336675			
		Shaft seal 58-33-400/33		HNBR	H337478									
		Shaft seal 58-33-400/73		FPM	H337477									
12	1	Guide ring		Igildur A500	H334863									
13	1	Guide band		Acoflon	H334865									
14	1	Quad ring 12,37x 2,62		EPDM	H311646									
15	2	Self locking Nut M10x1		A2	H118903									
16	2	Square key DIN6885 - A - 3x3x10		A2	H335171									
17	1	Actuator D4-100/34 SL ATEX	18, 19, 20	1.4301	H344353									
18	2	O-ring 30 x 2,5		1.4301	H337897									
19	2	ATEX Actuator screw D4		Igildur X	H343859									
				Pos. 9, 10, 11, 12, 14 available as complete seal kits only										
				Seal kit D4-Ø62						EPDM		H337884		
				Seal kit D4-Ø62								H337885		
				Seal kit D4-Ø62								H337886		

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Spare parts list

Double seat mix proof valve D4 SL IECEX Zone 2 - DN 2,5"

Date:	10.06.21	29.06.23
Name:	C.Keil	C.Keil
Reviewed:		N.Spl.
Date:		
Name:		
Reviewed:		
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SPX FLOW

pos. item	Quantity	Description, product contacted seals with reference number	included in spare parts (pos.)	Material	Part no.
1	1	Valve Housing D44-2,5"		1.4404	H335270
		Valve Housing D43-2,5"		1.4404	H337040
		Valve Housing D42-2,5"		1.4404	H337030
		Valve Housing D41/1-8-2,5"		1.4404	H337197
		Valve Housing D41/1-7-2,5"		1.4404	H337177
		Valve Housing D41/1-6-2,5"		1.4404	H337187
2	1	Upper valve shaft	13, 16, 25	1.4404	H341265
3	1	Lower valve shaft		1.4404	H335391
4	1	Shaft bearing D4 - 62		1.4404	H334381
5	1	O-ring		EPDM	H77039
6	1	Yoke D4 - 62		1.4305	H334383
7	1	Guide Rod D4 - 2,5" SL	8, 15, 16	1.4571	H341294
8	2	Retainer ring		1.4301	H14883
	1	Middle seal 58-33-998/93		EPDM	H327602
	1	Middle seal 58-33-998/33		HNBR	H332652
	1	Middle seal 58-33-998/73		FPM	H332653
	2	Seat seal 58-33-132/93		EPDM	H168192
	2	Seat seal 58-33-132/33		HNBR	H171561
	2	Seat seal 58-33-400/93		FPM	H171559
	2	Seat seal 58-33-400/33		EPDM	H337476
	2	Seat seal 58-33-400/73		HNBR	H337478
	2	Seat seal 58-33-400/73		FPM	H337477
12	1	Guide ring		Iglidur A500	H334863
13	1	Guide band		Acofflon	H334865
14	1	Quad ring 12,37x 2,62		EPDM	H311646
15	2	Self locking Nut M10x1		A2	H118903
16	2	Square key DIN6885 - A - 3x3x10		A2	H335171
17	1	Actuator D4-100/39 SL ATEX	18, 19, 20	1.4301	H344354
18	2	O-ring 30 x 2,5		1.4301	H337897
19	2	ATEX Actuator screw D4		Iglidur X	H343859

pos. item	Quantity	Description, product contacted seals with reference number	included in spare parts (pos.)	Material	Part no.
20	2	V-seal		NBR	H334379
21	3	W-union G1/8" Ø6mm		hard nickel-pl.	H208825
23	1	Stop screw		Grivory	H334382
24	1	Lock washer D4		1.4301	H335172
25	1	Safety nut D3		1.4301	H147640
26	1	Thrust ring		1.4057	H123151
27	8	Hex. screw M8 x 16		A2	H78772
28	1	Yoke cover D4 - 62	29	1.4301	H341311
29	4	Savetix head screw M4 x 8 washer M4 as set		1.4301	H336707
31	1	Venting plug G-1/8"		PE-Hard	H16507
32	1	Spray connection DE3		PP	H168321
33	1	G-union 8x1-G1/8"		PVDF-black	H16388
34	1				
35	1				
36	1				
37	1				
38	1				
39	1				

For Adapter Informations please go to page 12

For Control Unit Informations please go to page 12

Pos. 9, 10, 11, 12, 14 available as complete seal kits only

		Seal kit D4-Ø62		EPDM	H337884
		Seal kit D4-Ø62		HNBR	H337885
		Seal kit D4-Ø62		FPM	H337886

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Spare parts list

Double seat mix proof valve D4 SL IECEx Zone 2 - 65

Date: 10.08.21
 Name: C.Keil
 Reviewed: N.Spl.

Date: 29.06.23
 Name: C.Keil
 Reviewed: N.Spl.

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pos.	Quantity	Description, product contacted seals with reference number	included in spare parts (pos.)	Material	Part no.
item	pos. item	product contacted seals with reference number	included in spare parts (pos.)	Material	Part no.
1	1	Valve Housing D44-65		1.4404	H334443
		Valve Housing D43-65		1.4404	H337035
		Valve Housing D42-65		1.4404	H337025
		Valve Housing D41/ 1-8-65		1.4404	H337192
		Valve Housing D41/ 1-7-65		1.4404	H337172
		Valve Housing D41/ 1-6-65		1.4404	H337182
2	1	Upper valve shaft	13, 16, 25	1.4404	H341264
3	1	Lower valve shaft		1.4404	H334446
4	1	Shaft bearing D4 - 62		1.4404	H334381
5	1	O-ring		EPDM	H77039
6	1	Yoke D4 - 62		1.4305	H334383
7	1	Guide Rod D4 - 65 SL	8, 15, 16	1.4571	H341293
8	2	Retainer ring		1.4301	H14883
	1	Middle seal 58-33-998/93		EPDM	H327602
	1	Middle seal 58-33-998/33		HNBR	H332652
	1	Middle seal 58-33-998/73		FPM	H332653
	2	Seat seal 58-33-132/93		EPDM	H168192
10	2	Seat seal 58-33-132/33		HNBR	H171561
	2	Seat seal 58-33-132/73		FPM	H171559
	2	Shaft seal 58-33-400/93		EPDM	H337476
11	2	Shaft seal 58-33-400/33		HNBR	H337478
	2	Shaft seal 58-33-400/73		FPM	H337477
12	1	Guide ring		lglidur A500	H334863
13	1	Guide band		Acoifon	H334865
14	1	Quad ring 12,37x 2,62		EPDM	H311646
15	2	Self locking Nut M10x1		A2	H118903
16	2	Square key DIN6885 - A - 3x3x10		A2	H335171
17	1	Actuator D4-100/45 SL ATEX	18, 19, 20	1.4301	H343355
18	2	O-ring 30 x 2,5		1.4301	H337897
19	2	ATEX Actuator screw D4		lglidur X	H343859

pos.	Quantity	Description, product contacted seals with reference number	included in spare parts (pos.)	Material	Part no.
20	2	V-seal		NBR	H334379
21	3	W-union G1/8" Ø6mm		hard nickel-pl.	H208825
23	1	Stop screw		Grivory	H334382
24	1	Lock washer D4		1.4301	H335172
25	1	Safety nut D3		1.4301	H147640
26	1	Thrust ring		1.4057	H123151
27	8	Hex. screw M8 x 16		A2	H78772
28	1	Yoke cover D4 - 62	29	1.4301	H341311
29	4	Savetix head screw M4 x 8 washer M4 as set		1.4301	H336707
31	1	Venting plug G-1/8"		PE-Hard	H16507
32	1	Spray connection DE3		PP	H168321
33	1	G-union 8x1-G1/8"		PVDF-black	H16388
34	1				
35	1	For Adapter Informations please go to page 12			
36	1	For Control Unit Informations please go to page 12			
37	1	Prox. Switch holder D4 compl.		SAXAMID	H344380
38	1	Operating cam D4 bottom		1.4523 / 444FR	H334386
39	1	Operating cam D4 top		1.4523 / 444FR	H334387
		Hexagon screw M8 x 40		A2-70	H336675

Pos. 9, 10, 11, 12, 14 available as complete seal kits only					
		Seal kit D4-Ø62		EPDM	H337884
		Seal kit D4-Ø62		HNBR	H337885
		Seal kit D4-Ø62		FPM	H337886

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Spare parts list

Double seat mix proof valve D4 SL IECEx Zone 2 - 3"

Date:	10.08.21	29.06.23
Name:	C.Kell	C.Kell
Reviewed:		N.Spl.
Date:		
Name:		
Reviewed:		

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RN 501.047-07			

SPX FLOW

pos. item	Quantity	Description, product contacted seals with reference number	included in spare parts (pos.)	Material	Part no.
1	1	Valve Housing D44-3"		1.4404	H335275
		Valve Housing D43-3"		1.4404	H337041
		Valve Housing D42 -3"		1.4404	H337031
		Valve Housing D41/1-8-3"		1.4404	H337198
		Valve Housing D41/1-7-3"		1.4404	H337178
		Valve Housing D41/1-6-3"		1.4404	H337188
2	1	Upper valve shaft	13, 16, 25	1.4404	H341267
3	1	Lower valve shaft		1.4404	H335392
4	1	Shaft bearing D4 - 62		1.4404	H334381
5	1	O-ring		EPDM	H77039
6	1	Yoke D4 - 62		1.4305	H334383
7	1	Guide Rod D4 - 3" SL	8, 15, 16	1.4571	H341296
8	2	Retainer ring		1.4301	H14883
9	1	Middle seal 58-33-998/93		EPDM	H327602
	1	Middle seal 58-33-998/33		HNBR	H332652
	1	Middle seal 58-33-998/73		FPM	H332653
10	2	Seat seal 58-33-132/93		EPDM	H168192
	2	Seat seal 58-33-132/33		HNBR	H171561
	2	Seat seal 58-33-132/73		FPM	H171559
	2	Shaft seal 58-33-400/93		EPDM	H337476
11	2	Shaft seal 58-33-400/33		HNBR	H337478
	2	Shaft seal 58-33-400/73		FPM	H337477
12	1	Guide ring		Iglidur A500	H334863
13	1	Guide band		Acoflon	H334865
14	1	Quad ring 12,37x 2,62		EPDM	H311646
15	2	Self locking Nut M10x1		A2	H118903
16	2	Square key DIN6885 - A - 3x3x10		A2	H335171
17	1	Actuator D4-100/45 SL ATEX	18, 19, 20	1.4301	H344355
18	2	O-ring 30 x 2,5		1.4301	H337897
19	2	ATEX Actuator screw D4		Iglidur X	H343859

pos. item	Quantity	Description, product contacted seals with reference number	included in spare parts (pos.)	Material	Part no.
20	2	V-seal		NBR	H334379
21	3	W-union G1/8" Ø6mm		hard nickel-pl.	H208825
23	1	Stop screw		Grivory	H334382
24	1	Lock washer D4		1.4301	H335172
25	1	Safety nut D3		1.4301	H147640
26	1	Thrust ring		1.4057	H123151
27	8	Hex. screw M8 x 16		A2	H78772
28	1	Yoke cover D4 - 62	29	1.4301	H341311
29	4	Savefix head screw M4 x 8 washer M4 as set		1.4301	H336707
31	1	Venting plug G-1/8"		PE-Hard	H16507
32	1	Spray connection DE3 - 62		PP	H168321
33	1	G-union 8x1-G1/8"		PVDF-black	H16388
34	1				
35	1				
36	1	Prox. Switch holder D4 cmpl.		SAXAMID	H344380
37	1	Operating cam D4 bottom		1.4523 / 444FR	H334386
38	1	Operating cam D4 top		1.4523 / 444FR	H334387
39	1	Hexagon screw M8 x 40		A2-70	H336675

For Adapter Informations please go to page 12
For Control Unit Informations please go to page 12

Pos. 9, 10, 11, 12, 14 available as complete seal kits only

		Seal kit D4-Ø62		EPDM	H337884
		Seal kit D4-Ø62		HNBR	H337885
		Seal kit D4-Ø62		FPM	H337886

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Spare parts list

Double seat mix proof valve D4 SL IECEx Zone 2 - DN80

		Date:		10.08.21		29.06.23				SPX FLOW	
		Name:		C.Keil		C.Keil					
		Reviewed:				N.Spl.					
		Date:						Page		9 of 12	
		Name:								RN 501.047-07	
		Reviewed:									
pos. item	Quantity	Description, product contacted seals with reference number	included in spare parts (pos.)	Material	Part no.	pos. item	Quantity	Description, product contacted seals with reference number	included in spare parts (pos.)	Material	Part no.
1	1	Valve Housing D44-80		1.4404	H335278	20	2	V-seal		NBR	H334379
		Valve Housing D43-80		1.4404	H337036	21	3	W-union G1/8" Ø6mm		hard nickel-pl.	H208825
		Valve Housing D42-80		1.4404	H337026						
		Valve Housing D41/ 1-8-80		1.4404	H337193	23	1	Stop screw		Grivory	H334382
		Valve Housing D41/ 1-7-80		1.4404	H337173	24	1	Lock washer D4		1.4301	H335172
		Valve Housing D41/ 1-6-80		1.4404	H337183	25	1	Safety nut D3		1.4301	H147640
2	1	Upper valve shaft	13, 16, 25	1.4404	H341266	26	1	Thrust ring		1.4057	H123151
3	1	Lower valve shaft		1.4404	H335393	27	8	Hex. screw M8 x 16		A2	H78772
4	1	Shaft bearing D4 - 92		1.4404	H335713	28	1	Yoke cover D4 - 92	29	1.4301	H341312
5	1	O-ring		EPDM	H77061						
6	1	Yoke D4 - 92		1.4305	H335994	29	4	Savetix head screw M4 x 8 washer M4 as set		1.4301	H336707
7	1	Guide Rod D4 - 80 SL	8, 15, 16	1.4571	H341295	31	1	Venting plug G-1/8"		PE-Hard	H16507
8	2	Retainer ring		1.4301	H14883	32	1	Spray connection DE3 - 92		PP	H168322
		Middle seal 58-33-997/93		EPDM	H327985	33	1	G-union 8x1-G1/8"		PVDF-black	H16388
9	1	Middle seal 58-33-997/33		HNBR	H332649	34	1				
		Middle seal 58-33-997/73		FPM	H332648	35	1				
		Seat seal 58-33-133/93		EPDM	H168153	36	1	Prox. Switch holder D4 compl.		SAXAMID	H344380
10	2	Seat seal 58-33-133/33		HNBR	H171565	37	1	Operating cam D4 bottom		1.4523 / 444FR	H334386
		Seat seal 58-33-133/73		FPM	H171563	38	1	Operating cam D4 top		1.4523 / 444FR	H334387
		Shaft seal 58-33-405/93		EPDM	H337668	39	1	Hexagon screw M8 x 40		A2-70	H336675
11	2	Shaft seal 58-33-405/33		HNBR	H337670						
		Shaft seal 58-33-405/73		FPM	H337669						
12	1	Guide ring		Iglidur A500	H337669						
13	1	Guide band		Acoflon	H334865						
14	1	Quad ring 12,37x 2,62		EPDM	H311646						
15	2	Self locking Nut M10x1		A2	H118903						
16	2	Square key DIN6885 - A - 3x3x10		A2	H335171						
17	1	Actuator D4 - 125/50 SL ATEX	18, 19, 20	1.4301	H344357						
18	2	O-ring 30 x 2,5		1.4301	H337897						
19	2	ATEX Actuator screw D4		Iglidur X	H343859						
											Pos. 9, 10, 11, 12, 14 available as complete seal kits only
		Seal kit D4-Ø92		EPDM	H337887						
		Seal kit D4-Ø92		HNBR	H337888						
		Seal kit D4-Ø92		FPM	H337889						

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Spare parts list

Date: 10.08.21		29.06.23								SPX FLOW	
Name: C.Keil		C.Keil									
Reviewed:		N.Spl.									
Date:										Page 10 of 12	
Name:										RN 501.047-07	
Reviewed:											

Double seat mix proof valve D4 SL IECEx Zone 2 - DN100

pos. item	Quantity	Description, product contacted seals with reference number	included in spare parts (pos.)	Material	Part no.	pos. item	Quantity	Description, product contacted seals with reference number	included in spare parts (pos.)	Material	Part no.
1	1	Valve Housing D44-100		1.4404	H335279	20	2	V-seal		NBR	H334379
		Valve Housing D43-100		1.4404	H337037	21	3	W-union G1/8" Ø6mm		hard nickel-pl.	H208825
		Valve Housing D42-100		1.4404	H337027						
		Valve Housing D41/ 1-8-100		1.4404	H337194	23	1	Stop screw		Grivory	H334382
		Valve Housing D41/ 1-7-100		1.4404	H337174	24	1	Lock washer D4		1.4301	H335172
		Valve Housing D41/ 1-6-100		1.4404	H337184	25	1	Safety nut D3		1.4301	H147640
2	1	Upper valve shaft	13, 16, 25	1.4404	H341268	26	1	Thrust ring		1.4057	H123151
3	1	Lower valve shaft		1.4404	H335394	27	8	Hex. screw M8 x 16		A2	H78772
4	1	Shaft bearing D4 - 92		1.4404	H335713	28	1	Yoke cover D4 - 92	29	1.4301	H341312
5	1	O-ring		EPDM	H77039						
6	1	Yoke D4 - 92		1.4305	H335994	29	4	Savetix head screw M4 x 8 washer M4 as set		1.4301	H336707
7	1	Guide Rod D4 - 100/4" SL	8, 15, 16	1.4571	H341297	31	1	Venting plug G-1/8"		PE-Hard	H16507
8	2	Retainer ring		1.4301	H14883	32	1	Spray connection DE3 - 92		PP	H168322
		Middle seal 58-33-997/93		EPDM	H327985	33	1	G-union 8x1-G1/8"		PVDF-black	H16388
		Middle seal 58-33-997/33		HNBR	H332649	34	1				
		Middle seal 58-33-997/73		FPM	H332648	35	1				
		Seat seal 58-33-133/93		EPDM	H168153	36	1	Prox. Switch holder D4 compl.		SAXAMID	H344380
10	2	Seat seal 58-33-133/33		HNBR	H171565	37	1	Operating cam D4 bottom		1.4523 / 444FR	H334386
		Seat seal 58-33-133/73		FPM	H171563	38	1	Operating cam D4 top		1.4523 / 444FR	H334387
		Shaft seal 58-33-405/93		EPDM	H337668	39	1	Hexagon screw M8 x 40		A2-70	H336675
11	2	Shaft seal 58-33-405/33		HNBR	H337670						
		Shaft seal 58-33-405/73		FPM	H337669						
12	1	Guide ring		Iglidur A500	H337669						
13	1	Guide band		Acoflon	H334865						
14	1	Quad ring 12,37x2,62		EPDM	H311646						
15	2	Self locking Nut M10x1		A2	H118903						
16	2	Square key DIN6885 - A - 3x3x10		A2	H335171						
17	1	Actuator D4 - 125/50 SL ATEX	18, 19, 20	1.4301	H344357						
18	2	O-ring 30 x 2,5		1.4301	H337897						
19	2	ATEX Actuator screw D4		Iglidur X	H343859						

Pos. 9, 10, 11, 12, 14 available as complete seal kits only

		Seal kit D4-Ø92		EPDM							H337887
		Seal kit D4-Ø92		HNBR							H337888
		Seal kit D4-Ø92		FPM							H337889

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Spare parts list

Double seat mix proof valve D4 SL IECEx Zone 2 - 4"

Date:	10.08.21	29.06.23
Name:	C.Keil	C.Keil
Reviewed:		N.Spl.
Date:		
Name:		
Reviewed:		

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pos. item	Quantity	Description, product contacted seals with reference number	included in spare parts (pos.)	Material	Part no.	pos. item	Quantity	Description, product contacted seals with reference number	included in spare parts (pos.)	Material	Part no.
		Valve Housing D43-4"		1.4404	H337042	21	3	W-union G1/8" Ø6mm		hard nickel-pl.	H208825
		Valve Housing D42-4"		1.4404	H337032						
	1	Valve Housing D41/ 1-8-4"		1.4404	H337199	23	1	Stop screw		Grivory	H334382
		Valve Housing D41/ 1-7-4"		1.4404	H337179	24	1	Lock washer D4		1.4301	H335172
		Valve Housing D41/ 1-6-4"		1.4404	H337189	25	1	Safety nut D3		1.4301	H147640
	2	Upper valve shaft	13, 16, 25	1.4404	H341268	26	1	Thrust ring		1.4057	H123151
	3	Lower valve shaft		1.4404	H335394	27	8	Hex. screw M8 x 16		A2	H78772
	4	Shaft bearing D4 - 92		1.4404	H335713	28	1	Yoke cover D4 - 92	29	1.4301	H341312
	5	O-ring		EPDM	H77039						
	6	Yoke D4 - 92		1.4305	H335994	29	4	Savetix head screw M4 x 8 washer M4 as set		1.4301	H336707
	7	Guide Rod D4 - 100/4" SL	8, 15, 16	1.4571	H341297	31	1	Venting plug G-1/8"		PE-Hard	H16507
	8	Retainer ring		1.4301	H14883	32	1	Spray connection DE3 - 92		PP	H168322
		Middle seal 58-33-997/93		EPDM	H327985	33	1	G-union 8x1-G1/8"		PVDF-black	H16388
		Middle seal 58-33-997/33		HNBR	H332649	34	1				
		Middle seal 58-33-997/73		FPM	H332648	35	1				
	10	Seat seal 58-33-133/93		EPDM	H168153	36	1	Prox. Switch holder D4 compl.		SAXAMID	H344380
		Seat seal 58-33-133/33		HNBR	H171565	37	1	Operating cam D4 bottom		1.4523 / 444FR	H334386
		Seat seal 58-33-133/73		FPM	H171563	38	1	Operating cam D4 top		1.4523 / 444FR	H334387
		Shaft seal 58-33-405/93		EPDM	H337668	39	1	Hexagon screw M8 x 40		A2-70	H336675
	11	Shaft seal 58-33-405/33		HNBR	H337670						
		Shaft seal 58-33-405/73		FPM	H337669						
	12	Guide ring		Iglicur A500	H337669						
	13	Guide band		Acoflon	H334865						
	14	Quad ring 12,37x 2,62		EPDM	H311646						
	15	Self locking Nut M10x1		A2	H118903						
	16	Square key DIN6885 - A - 3x3x10		A2	H335171						
	17	Actuator D4 -125/50 SL ATEX	18, 19, 20	1.4301	H344357						
	18	O-ring 30 x 2,5		1.4301	H337897						
	19	ATEX Actuator screw D4		Iglicur X	H343859						

Pos. 9, 10, 11, 12, 14 available as complete seal kits only

Seal kit D4-Ø92	EPDM	H337887
Seal kit D4-Ø92	HNBR	H337888
Seal kit D4-Ø92	FPM	H337889

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Spare parts list

Double seat mix proof valve D4 SL IECEX Zone 2 - Adapters / Control Units

Date:	10.08.21	29.06.23		
Name:	C.Keil	C.Keil		
Reviewed:		N.Spl.		
Date:			Page	12 of 12
Name:			RN 501.047-07	
Reviewed:				

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pos. item	Quantity	Description, product contacted seals with reference number	air connections	Material	Part no.
CU4 D4 adapter Zone 2					
34	1	CU4 D4 adapter cmpl.	/	PA6.6 GF30	H337098

pos. item	Quantity	Description, product contacted seals with reference number	air connections	Material	Part no.
CU4plus D4 adapter Zone 2					
34	1	CU4plus D4 V2 adapter cmpl.	/	PA6.6 GF30	H341891

CU4 Control Units Zone 2 (Hall Sensors)					
pos. item	Quantity	Description, product contacted seals with reference number	air connections	Material	Part no.
CU4 Control Units Zone 2 (Linear-Sensors)					
35	1	CU43 D4 AS-i IECEX Z2	6 mm	PA6.6 GF30	H345108
	1	CU43 D4 AS-i M12 IECEX Z2	6 mm	PA6.6 GF30	H345109
	1	CU43 D4 Direct Connect IECEX Z2	6 mm	PA6.6 GF30	H345116
	1	CU43 D4 Direct Connect M12 IECEX Z2	6 mm	PA6.6 GF30	H345117

CU4plus Control Units Zone 2 (Linear-Sensors)					
pos. item	Quantity	Description, product contacted seals with reference number	air connections	Material	Part no.
35	1	CU43plus D4 AS-i IECEX Z2	6 mm	PA6.6 GF30	H345092
	1	CU43plus D4 AS-i M12 IECEX Z2	6 mm	PA6.6 GF30	H345093
	1	CU43plus D4 Direct Connect IECEX Z2	6 mm	PA6.6 GF30	H345100
	1	CU43plus D4 Direct Connect M12 IECEX Z2	6 mm	PA6.6 GF30	H345101
	1	CU43plus D4 IO-Link M12 IECEX Z2	6 mm	PA6.6 GF30	H348004

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Spare Parts list

Double seat mix proof valve D4 SL IECEx Zone 2 DN 125 - 150 , 6"

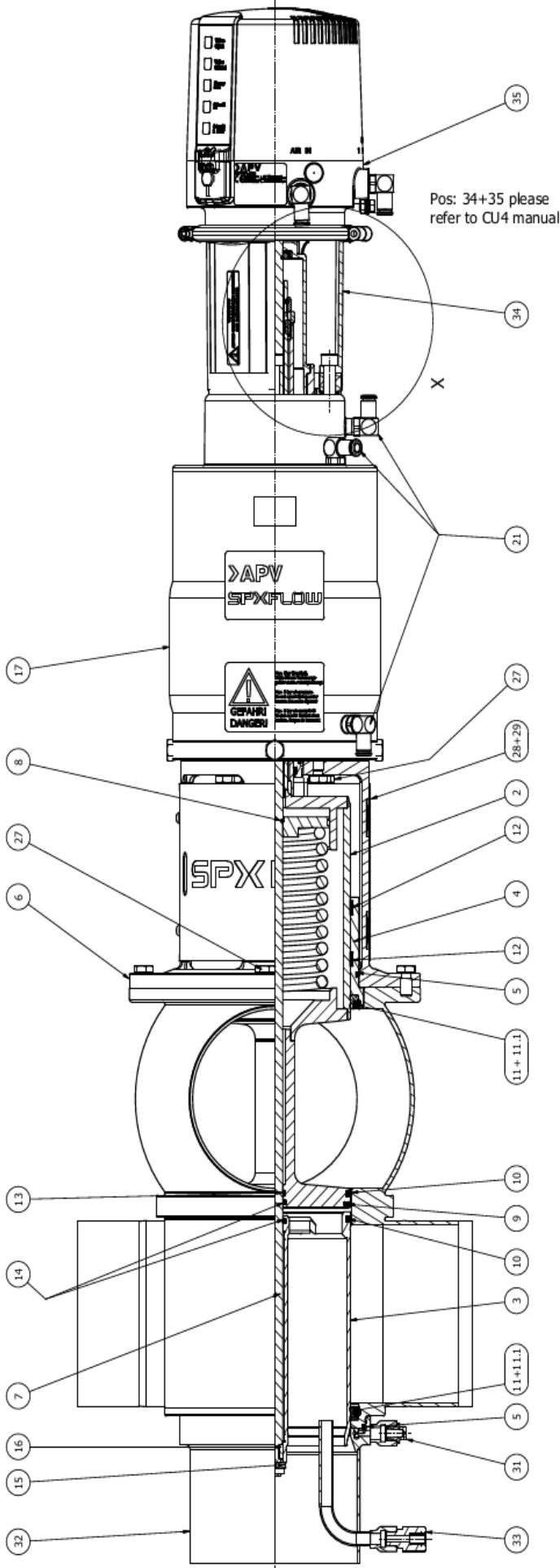
Date:	10.08.21	29.06.23
Name:	C. Keil	C. Keil
Reviewed:		N. Spl.

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Date:		
Name:		
Reviewed:		

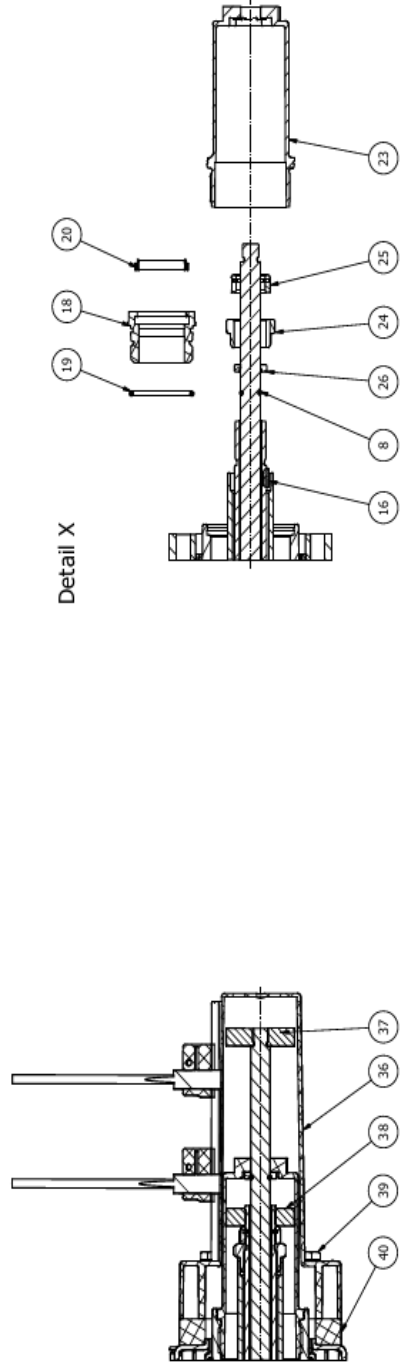
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Pos: 34+35 please refer to CU4 manual

Detail X



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Spare parts list

Double seat mix proof valve D4 SL IECEx Zone 2 - 125

Date:	10.08.21	29.06.23
Name:	C. Keil	C. Keil
Reviewed:		N.Spl.
Date:		
Name:		
Reviewed:		
Page 2 of 5		
RN 501.047-08		

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pos. item	Quantity	Description, product contacted seals with reference number	included in spare parts (pos.)	Material		Part no.	included in spare parts (pos.)	Description, product contacted seals with reference number	Quantity	pos. item	included in spare parts (pos.)	Material		Part no.
				Material	Part no.							Material	Part no.	
1	1	Valve Housing D44-125		1.4404	H340119			ATEX Actuator screw D4	2	19		Iglidur X	H343859	
		Valve Housing D43-125		1.4404	H340120			V-seal	2	20		NBR	H334379	
		Valve Housing D42-125		1.4404	H340121			W-union G1/8" Ø6mm	3	21		hard nickel-pl.	H208825	
		Valve Housing D41/ 1-8-125		1.4404	H340124			Stop screw	1	23		Grivory	H334382	
		Valve Housing D41/ 1-7-125		1.4404	H340123			Safety nut D3	2	24		1.4301	H147640	
		Valve Housing D41/ 1-6-125		1.4404	H340122			Lock washer D4	2	25		1.4301	H335172	
2	1	Upper valve shaft	13, 16, 25	1.4404	H341269			Thrust ring	2	26		1.4057	H123151	
3	1	Lower valve shaft		1.4404	H340230			Hex. screw M8 x 16	8	27		A2	H78772	
4	1	Shaft bearing D4-114		1.4404	H340243			Yoke cover D4 - 114	1	28	29	1.4301	H341313	
5	1	O-ring		EPDM	H77074			Savetix head screw M4 x 8 washer M4 as set	4	29		1.4301	H336707	
6	1	Yoke D4 - 114		1.4305	H340244			Venting plug G-1/8"	1	31		PE-Hard	H16507	
7	1	Guide Rod D4-125 SL	8, 15, 16	1.4571	H341298			Spray connection D4 - 114	1	32		1.4301	H174102	
8	2	Retainer ring		1.4301	H14883			G-union 8x1-G1/8"	1	33		PVDF-black	H16388	
9	1	Middle seal 58-33-996/93		EPDM	H340247			For Adapter Informations please go to page 5						
		Middle seal 58-33-996/33		HNBR	H340248			For Control Unit Informations please go to page 5						
		Middle seal 58-33-996/73		FPM	H340294			Prox. Switch holder D4 cmpl.	1	36		SAXAMID	H344380	
10	2	Seat seal 58-33-135/93		EPDM	H173940			Operating cam D4 bottom	1	37		1.4523 / 444FR	H334386	
		Seat seal 58-33-135/73		HNBR	H173939			Operating cam D4 top	1	38		1.4523 / 444FR	H334387	
		Seat seal 58-33-693/93		FPM	H340246			Hexagon screw M8 x 40	1	39		A2-70	H336675	
11	2	Seat seal 58-33-693/33		HNBR	H170178			Spacer D4-138	1	40		PA6.6 GF30 bla.	-	
		Seat seal 58-33-693/73		FPM	H77610									
11.1	2	PTFE Shaft seal		PTFE	H340295									
12	1	Guide ring		Iglidur A500	H340198									
13	1	Guide band		Acoflon	H334865									
14	1	Quad ring 12,37x 2,62		EPDM	H311646									
15	1	Self Looking Nut M10x1		A2	H118903									
16	2	Square key DIN6885 - A - 3x3x10		A2	H335171									
17	1	Actuator D4-150/60 SL ATEX	18, 19, 20	1.4301	H344361									
18	2	O-ring 30 x 2,5		1.4301	H337897									
<p style="text-align: center;">Pos. 9, 10, 11, 12, 14 available as complete seal kits only</p>														
								Seal kit D4-Ø114				EPDM	H340575	
								Seal kit D4-Ø114				HNBR	H340576	
								Seal kit D4-Ø114				FPM	H340577	

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Spare parts list

Double seat mix proof valve D4 SL IECEX Zone 2 - DN150

Date:	10.08.21	29.06.23
Name:	C. Keil	C. Keil
Reviewed:		N.Spl.
Date:		
Name:		
Reviewed:		

SPX FLOW

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pos. item	Quantity	Description, product contacted seals with reference number	included in spare parts (pos.)	Material	Part no.
1	1	Valve Housing D44-150		1.4404	H340132
		Valve Housing D43-150		1.4404	H340133
		Valve Housing D42-150		1.4404	H340134
		Valve Housing D41/ 1-8-150		1.4404	H340137
		Valve Housing D41/ 1-7-150		1.4404	H340136
		Valve Housing D41/ 1-6-150		1.4404	H340135
2	1	Upper valve shaft	13, 16, 25	1.4404	H341270
3	1	Lower valve shaft		1.4404	H340311
4	1	Shaft bearing D4-138		1.4404	H340322
5	1	O-ring		EPDM	H77081
6	1	Yoke D4 - 138		1.4305	H340323
7	1	Guide Rod - 150 / 6"	8, 15, 16	1.4571	H341299
8	2	Retainer ring		1.4301	H14883
		Middle seal 58-33-995/93		EPDM	H340325
		Middle seal 58-33-995/33		HNBR	H340326
		Middle seal 58-33-995/73		FPM	H340327
		Seat seal 58-33-134/93		EPDM	H173739
10	2	Seat seal 58-33-134/33		HNBR	H173738
		Seat seal 58-33-134/73		FPM	H338070
		Seat seal 58-33-743/93		EPDM	H77628
11	2	Seat seal 58-33-743/33		HNBR	H170177
		Seat seal 58-33-743/73		FPM	H77627
11.1	2	PTFE Shaft seal		PTFE	H340328
12	1	Guide ring		Iglidur A500	H340182
13	1	Guide band		Acoflon	H334865
14	1	Quad ring 12,37x 2,62		EPDM	H311646
15	1	Self Locking Nut M10x1		A2	H118903
16	2	Square key DIN6885 - A - 3x3x10		A2	H335171
17	1	Actuator D4-180/65 SL ATEX	18, 19, 20	1.4301	H344360
18	2	O-ring 30 x 2,5		1.4301	H337897
19	2	ATEX Actuator screw D4		Iglidur X	H343859
20	2	V-seal		NBR	H334379
21	3	W-union G1/8" Ø6mm		hard nickel-pl.	H208825
23	1	Stop screw		Grivory	H334382
24	1	Safety nut D3		1.4301	H147640
25	1	Lock washer D4		1.4301	H335172
26	1	Thrust ring		1.4057	H123151
27	8	Hex. screw M8 x 16		A2	H78772
28	1	Yoke cover D4 - 138	29	1.4301	H341314
29	4	Savetix head screw M4 x 8 washer M4 as set		1.4301	H336707
31	1	Venting plug G-1/8"		PE-Hard	H16507
32	1	Spray connection D4 - 138		1.4301	H344394
33	1	G-union 8x1-G1/8"		PVDF-black	H16388
34	1				
35	1				
36	1	Prox. Switch holder D4 compl.		SAXAMID	H344380
37	1	Operating cam D4 bottom		1.4523 / 444FR	H334386
38	1	Operating cam D4 top		1.4523 / 444FR	H334387
39	1	Hexagon screw M8 x 40		A2-70	H340751
40	1	Spacer D4-138		PA6.6 GF30 bla.	H340179
For Adapter Informations please go to page 5					
For Control Unit Informations please go to page 5					
Pos. 9, 10, 11, 12, 14 available as complete seal kits only					
		Seal kit D4-Ø138		EPDM	H340578
		Seal kit D4-Ø138		HNBR	H340579
		Seal kit D4-Ø138		FPM	H340580

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Spare parts list

Double seat mix proof valve D4 SL IECEX Zone 2 - 6"

Date:	10.08.21	29.06.23
Name:	C. Keil	C. Keil
Reviewed:		N.Spl.
Date:		
Name:		
Reviewed:		

SPX FLOW

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pos.	item	Quantity	Description, product contacted seals with reference number	included in spare parts (pos.)	Material	Part no.
1	1	1	Valve Housing D44-6"		1.4404	H340138
			Valve Housing D43-6"		1.4404	H340139
			Valve Housing D42-6"		1.4404	H340140
			Valve Housing D41/ 1-8-6"		1.4404	H340143
			Valve Housing D41/ 1-7-6"		1.4404	H340142
		Valve Housing D41/ 1-6-6"		1.4404	H340141	
2		1	Upper valve shaft	13, 16, 25	1.4404	H341270
3		1	Lower valve shaft		1.4404	H340311
4		1	Shaft bearing - 138 D4		1.4404	H340322
5		1	O-ring		EPDM	H77081
6		1	Yoke D4 - 138		1.4305	H340323
7		1	Guide Rod - 150 / 6"	8, 15, 16	1.4571	H341299
8		2	Retainer ring		1.4301	H14883
9	1	1	Middle seal 58-33-995/93		EPDM	H340325
			Middle seal 58-33-995/33		HNBR	H340326
			Middle seal 58-33-995/73		FPM	H340327
10	2	2	Seat seal 58-33-134/93		EPDM	H173739
			Seat seal 58-33-134/33		HNBR	H173738
11	2	2	Seat seal 58-33-134/73		FPM	H338070
			Seat seal 58-33-743/93		EPDM	H77628
			Seat seal 58-33-743/33		HNBR	H170177
11.1		2	Seat seal 58-33-743/73		FPM	H77627
12		2	PTFE Shaft seal		PTFE	H340328
13		1	Guide ring		Iglidur A500	H340182
14		1	Guide band		Acoflon	H334865
15		1	Quad ring 12,37x 2,62		EPDM	H311646
16		2	Self Locking Nut M10x1		A2	H118903
17		1	Square key DIN6885 - A - 3x3x10		A2	H335171
18	1	1	Actuator D4-180/65 SL ATEX	18, 19, 20	1.4301	H344360
	2	2	O-ring 30 x 2,5		1.4301	H337897
For Adapter Informations please go to page 5						
For Control Unit Informations please go to page 5						
19		2	ATEX Actuator screw D4		Iglidur X	H343859
20		2	V-seal		NBR	H334379
21		3	W-union G1/8" Ø6mm		hard nickel-pl.	H208825
23		1	Stop screw		Grivory	H334382
24		1	Safety nut D3		1.4301	H147640
25		1	Lock washer D4		1.4301	H335172
26		1	Thrust ring		1.4057	H123151
27		8	Hex. screw M8 x 16		A2	H78772
28		1	Yoke cover D4 - 138	29	1.4301	H341314
29		4	Savetix head screw M4 x 8 washer M4 as set		1.4301	H336707
31		1	Venting plug G-1/8"		PE-Hard	H16507
32		1	Spray connection D4 - 138		1.4301	H344394
33		1	G-union 8x1-G1/8"		PVDF-black	H16388
34		1				
35		1				
36		1	Prox. Switch holder D4 cmpl.		SAXAMID	H344380
37		1	Operating cam D4 bottom		1.4523 / 444FR	H334386
38		1	Operating cam D4 top		1.4523 / 444FR	H334387
39		1	Hexagon screw M8 x 40		A2-70	H340751
40		1	Spacer D4-138		PA6.6 GF30 bla.	H340179
Pos. 9, 10, 11, 12, 14 available as complete seal kits only						
			Seal kit D4-Ø138		EPDM	H340578
			Seal kit D4-Ø138		HNBR	H340579
			Seal kit D4-Ø138		FPM	H340580

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Spare parts list

Double seat mix proof valve D4 SL IECEx Zone 2 - Adapters / Control Units

Date:	10.08.21	29.06.23	
Name:	C.Keil	C.Keil	
Reviewed:		N.Spl.	
Date:			
Name:			
Reviewed:			

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pos. item	Quantity	Description, product contacted seals with reference number	air connections	Material	Part no.
CU4 D4 adapter Zone 2					
34	1	CU4 D4 adapter cmpl.	/	PA6.6 GF30	H337098

pos. item	Quantity	Description, product contacted seals with reference number	air connections	Material	Part no.
CU4plus D4 adapter Zone 2					
34	1	CU4plus D4 V2 adapter cmpl.	/	PA6.6 GF30	H341891
CU4plus Control Units Zone 2 (Linear-Sensors)					
35	1	CU43plus D4 AS-i IECEx Z2	6 mm	PA6.6 GF30	H345092
	1	CU43plus D4 AS-i M12 IECEx Z2	6 mm	PA6.6 GF30	H345093
	1	CU43plus D4 Direct Connect IECEx Z2	6 mm	PA6.6 GF30	H345100
	1	CU43plus D4 Direct Connect M12 IECEx Z2	6 mm	PA6.6 GF30	H345101
	1	CU43plus D4 IO-Link M12 IECEx Z2	6 mm	PA6.6 GF30	H348004

APV Double Seat Valve Type D4*

DOUBLE SEAT MIX PROOF VALVES (D4/D4SL)
FOR SPECIFIC IECE_x ZONE 2 APPLICATIONS

SPXFLOW[®]

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