

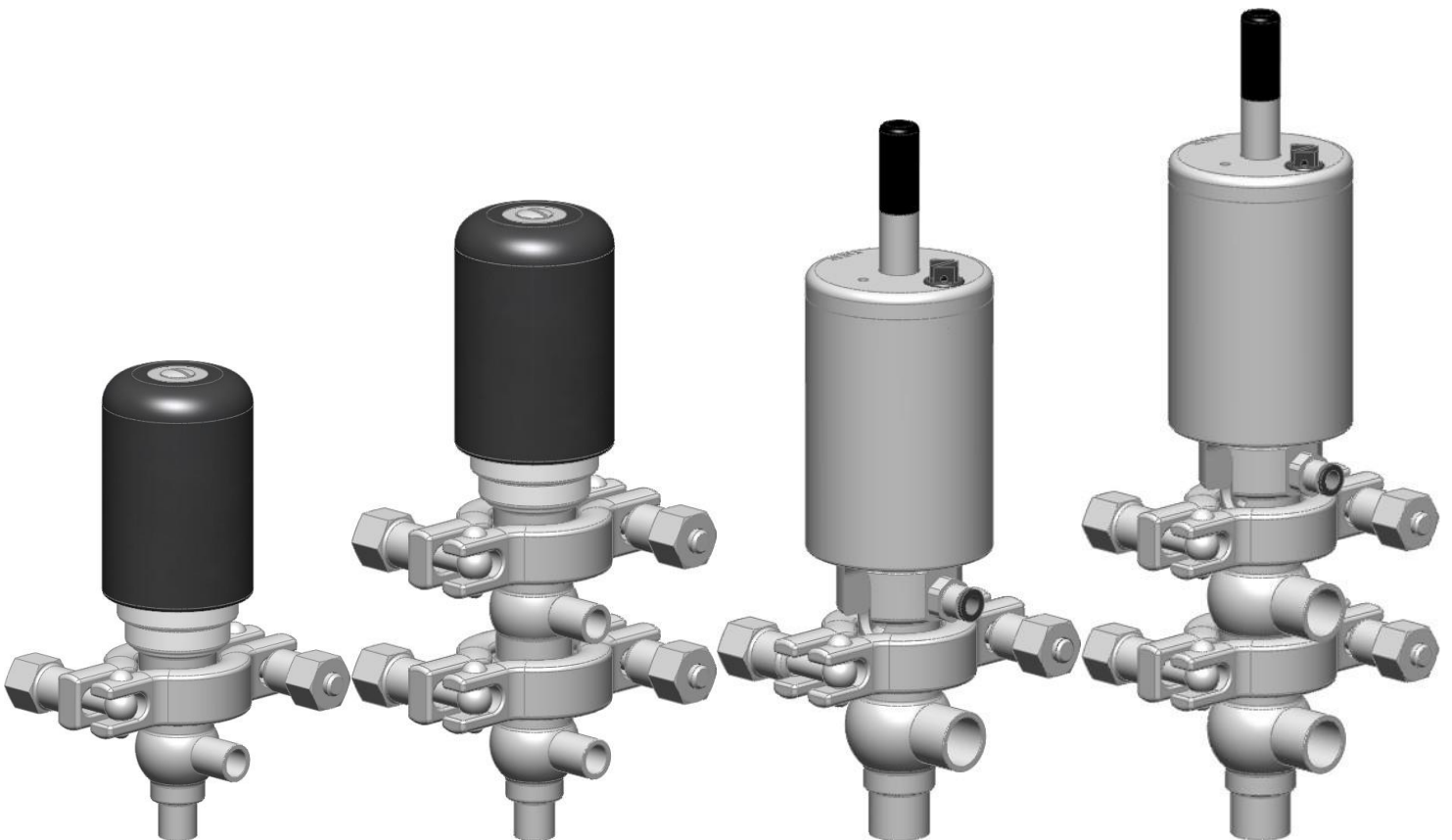
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**DCX3 small diameter MANUAL  
AND AUTOMATIC SHUT-OFF VALVE**

**&**

**DCX4 small diameter MANUAL  
AND AUTOMATIC DIVERT VALVE**

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## 1 CHANGE MANAGEMENT

CHANGES	INDEX	DATE	PAGE(S)	INITIALS
New version	1	February 2001	/	R. GABORIT
Add example: grease + seal kit	2	February 2002	10-11-21	R. GABORIT
Change item: 5	3	April 2003	19	R. GABORIT
Change tool for actuator reassembly + DN 1/2"-3/4" clamp collar	4	November 2005	10-13-15-17-19	R. GABORIT
Safety sheet added + updated	5	July 2006	All	D. VINET
Change item: 6 + Updated	6	January	22 / All	D. VINET
Updated clamp collar, lantern and straight air connection	7	October	/	G. ANDRE
Add PEEK plug and seals kits	8	December 2013	10-14-16-17-19-20-22-23-25-29-30	G. BEGAUD
Add seals kits detailed	9	December 2013	31 to 38	G. BEGAUD
Modification of visuals	10	September 2016	12-26	G. BEGAUD
Reference 7010878 was 7006114, 7010879 was 7006149, 7010885 was 7006214	11	April 2020	16/19/22/25/32/33/34/35/37/38	G. BEGAUD
Add of greases recommended for the actuator and the valve			5/6/12/13/29	
7010886 was 7006688 (Rep :31 et 32)	12	June 2020	16/19/22/37/38	G. BEGAUD
Update of Ref. references: 6 and 7	13	December 2023	19/25	G. BEGAUD

## 2 **SAFETY**

### 2.1 **IMPORTANT INFORMATION**

Always read the maintenance notice before manipulating the valve



Failure to observe these instructions can result in serious bodily injury or loss of life.



This can also result in less serious injuries or damage to the equipment.



Electricity can result in serious bodily injury or loss of life.



This can also result in less serious injuries or damage to the equipment.

### 2.2 **GENERAL INFORMATION**



The following advice is given to ensure optimum use of the equipment.

- The tasks must be performed in the order specified.
- A range of greases for cylinder seals and valve seals has been defined for be in phase with their nature and the regulations according to the uses (See § 12.3).

## MAINTENANCE NOTICE

### for DCX3 small diameter shut-off valve & DCX4 small diameter divert valve manual and automatic

## 3 INTRODUCTION

The disassembly process for a DCX3 small diameter shut-off valve or DCX4 small diameter divert valve is divided into two distinct steps:

### 3.1 DISASSEMBLING THE VALVE (Extracting the actuator and plug assembly from the body of the valve)

This operation enables access to the body seals (Changing the plug or seals, see § 12.3 for lubrication) and the removal of the actuator.

This is a straightforward procedure and can be performed on-site as it does not present any particular problems.

This is the case in the majority of maintenance operations on this type of valve.

### 3.2 DISASSEMBLING THE ACTUATOR (Changing the internal seals for the automatic version)



**DANGER !**

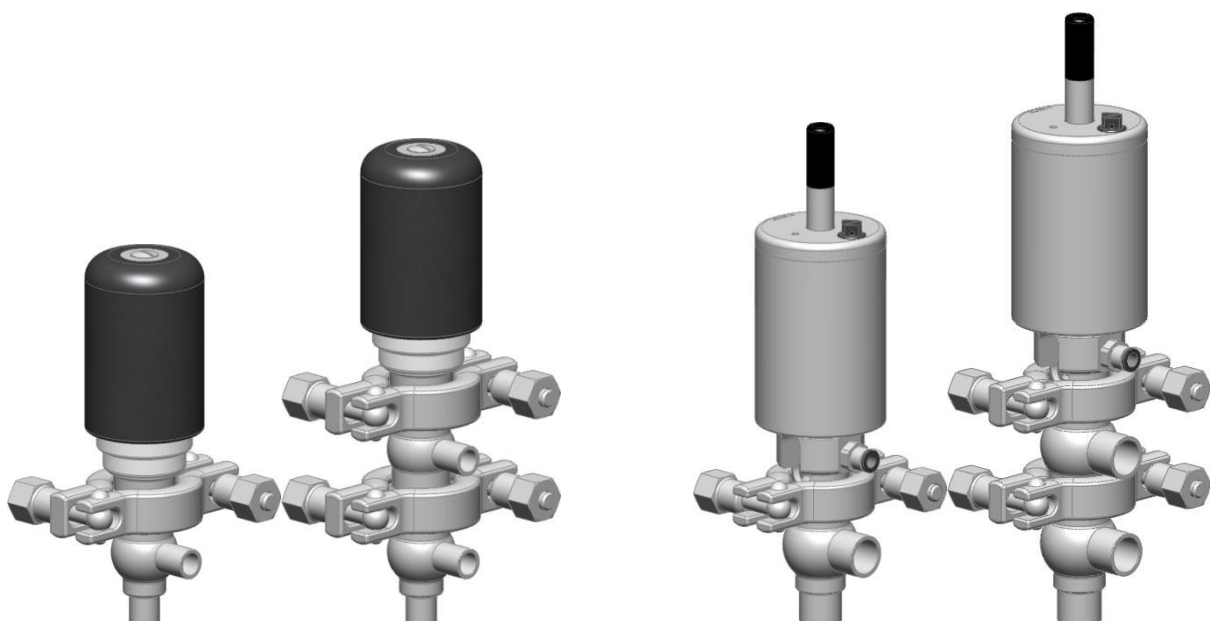
**CAUTION:** This operation must be performed using a special tool ensuring that the necessary precautions are taken. **(STRESSED SPRING)**

For changing from a NC valve to a NO or double-acting valve and vice versa, see "Changing configuration".



**NOTE**

NOTE: After carrying out any maintenance work on DEFINOX products it is essential that you check the correct function of the equipment concerned: tightness, pressure, etc...



*DCX3 and 4 manual small diameter valves*

*DCX3 and 4 automatic small diameter valves*

## 4 DISASSEMBLING THE VALVE

Before starting the disassembly procedure, if the valve is fitted with a signaling box it may be necessary to detach the signaling unit from the actuator.

### 4.1 DISASSEMBLING THE SIGNALLING BOX



#### Dismantling without disconnection

**IMPORTANT:** Before starting any work on the box, it is important to ensure that the air supply is closed and that the circuit is purged.



#### Dismantling with disconnection

**IMPORTANT:** Before starting any work on the box, it is important to ensure that the mains supply is switched off, that the air supply is closed and that the circuit is purged.

To fit and remove the control top, refer to maintenance notice:



**ICS LED  
Maintenance notice  
NM-258**

For the previous generations control top, refer to maintenance notice:

- **NM-182 for the ICS control top**

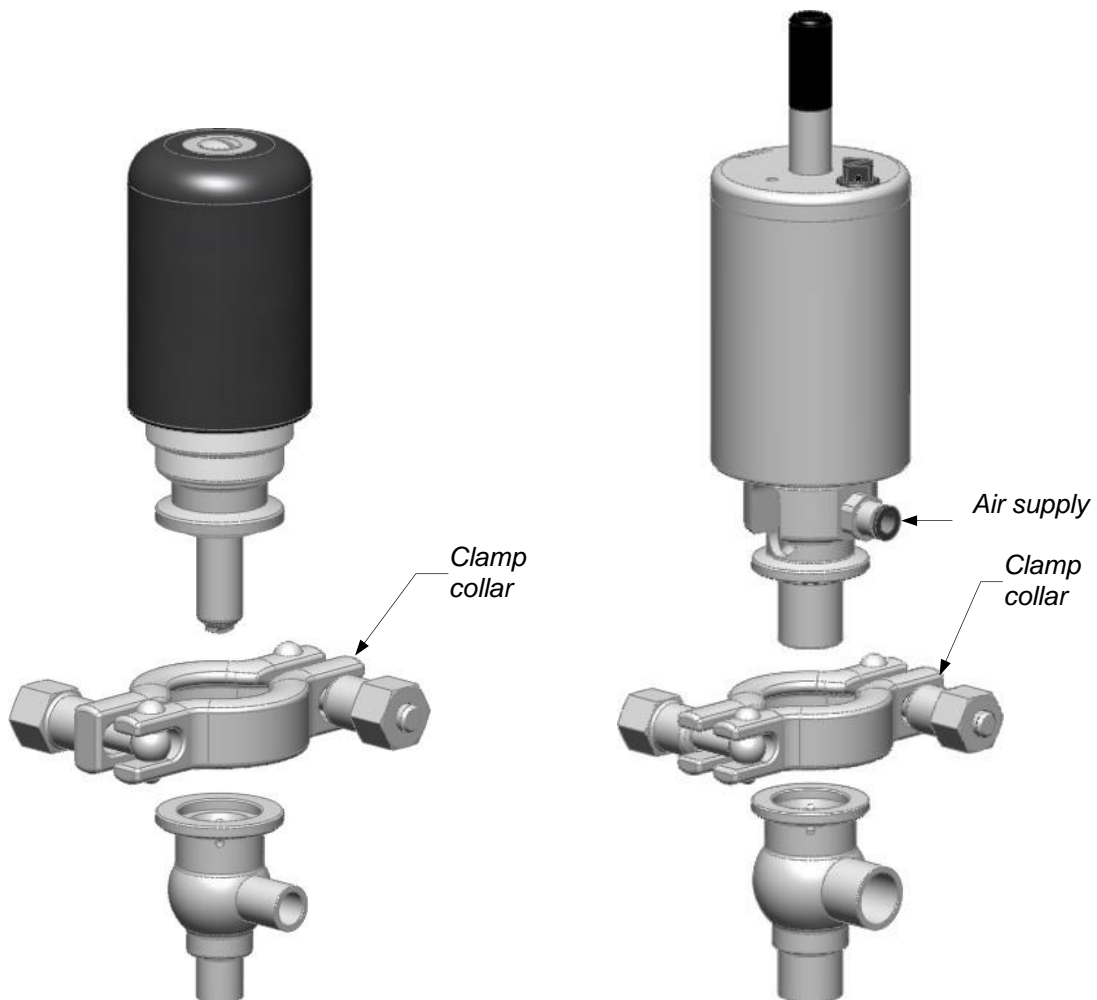
## 5 **DCX3 VALVE CLAMP COLLAR**

### 5.1 **MANUAL VERSION**

- Unscrew the handle several turns.
- Disassemble the clamp collar.
- Remove the manual actuator assembly from the DCX3 body.

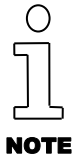
### 5.2 **AUTOMATIC VERSION**

- Supply air to the NC actuator to relieve the pressure on the clamp collar from the spring.
- Disassemble the clamp collar.
- Switch off the actuator air supply.
- Remove the automatic actuator/plug assembly from the DCX3 body.





## 6 **DCX4 VALVE CLAMP COLLARS**



**NOTE:** If the upper body is installed between couplings, it may be easier to dismantle it and remove it together with the plug assembly of the DCX4 valve.

In any cases, the bodies have to be moved apart in order to dismantle the valve.

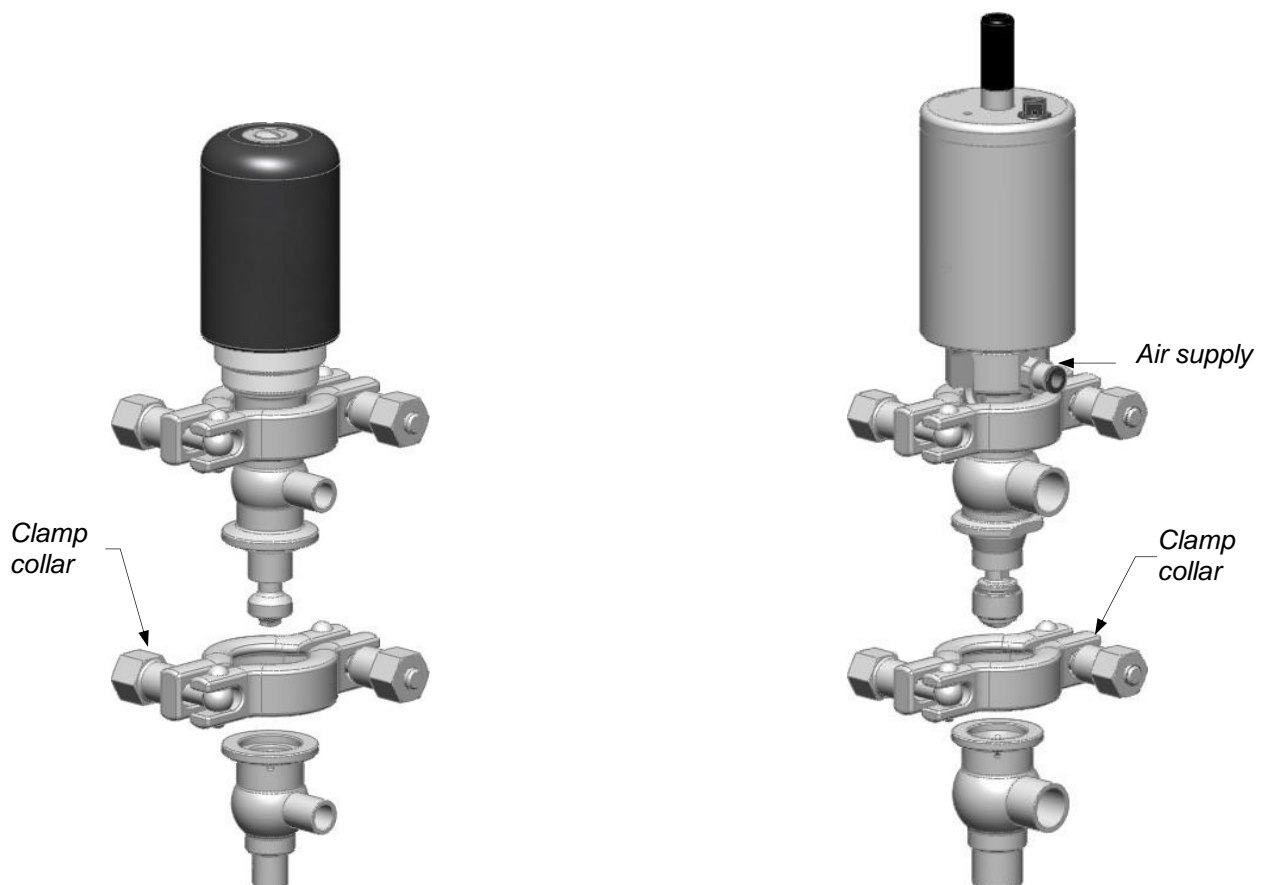
- Supply air to the NC actuator to relieve the pressure on the clamp collar from the spring.
- Disassemble the lower clamp collar.

### 6.1 **MANUAL VERSION**

- Unscrew the handle several turns.
- Disassemble the lower clamp collar.
- Remove the manual actuator/plug/upper body assembly from the lower body.

### 6.2 **AUTOMATIC VERSION**

- Supply air to the NC actuator to relieve the pressure on the clamp collar from the spring.
- Disassemble the lower clamp collar.
- Switch off the actuator air supply.
- Remove the automatic actuator/plug/upper body assembly from the lower body.



## 7 **PLUG ASSEMBLY**

### 7.1 **PFA or PEEK VERSION**

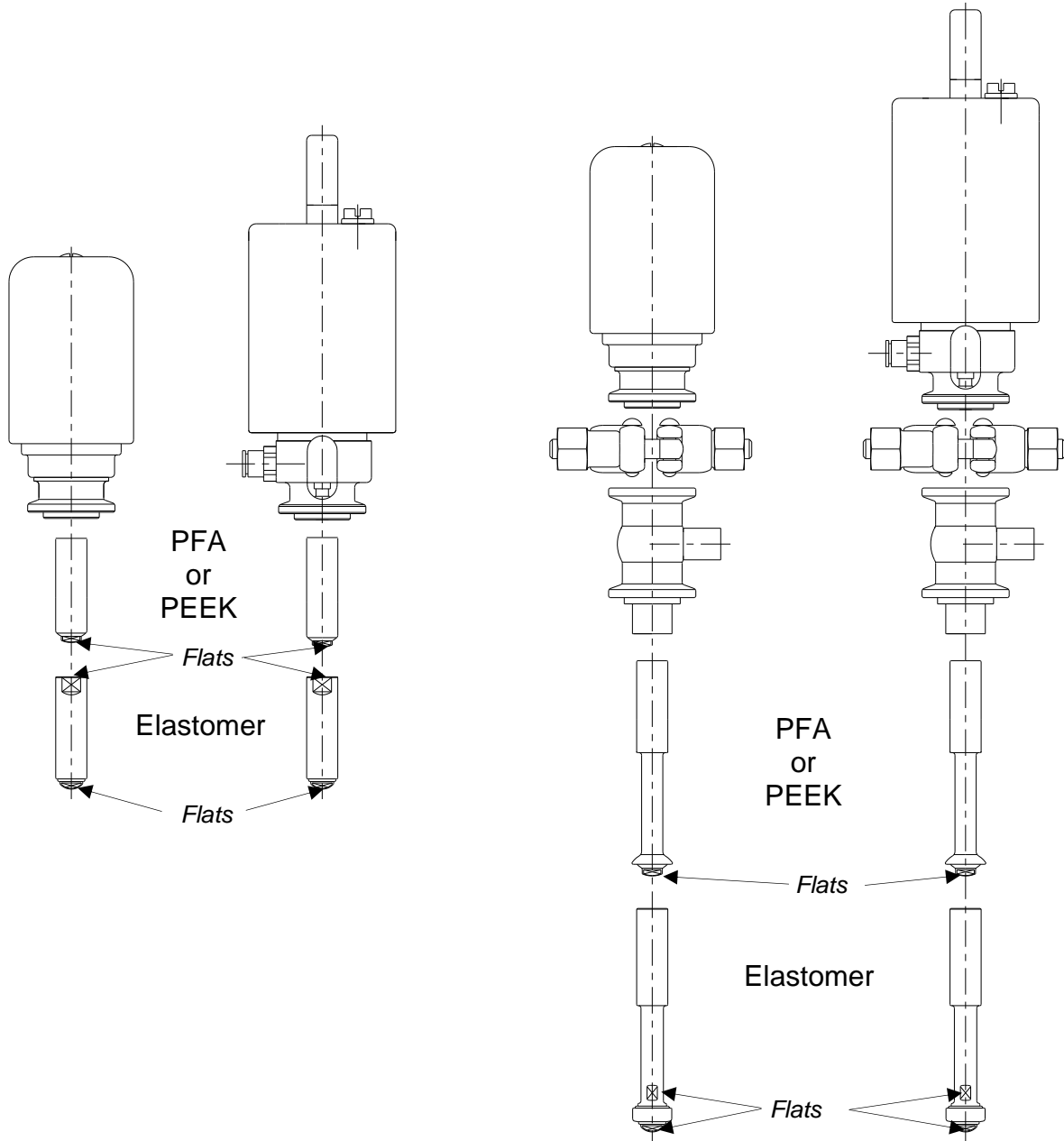
The plug assembly (DCX3 or DCX4) is provided with two flats allowing the plug to be unscrewed from the actuator assembly. Once unscrewed (DCX4 divert valves) remove the upper clamp collar to separate the body from the actuator assembly.

### 7.2 **ELASTOMER VERSION**

The plug assembly and plug plate (DCX3 or DCX4) are provided with two flats allowing the valve seal to be tightened.

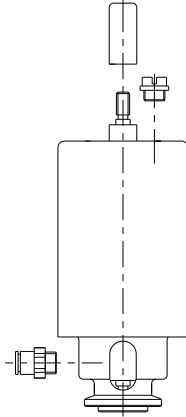
Use the flats on the plug plate to unscrew the DCX3 plug assembly.

Use the flats on the plug to unscrew the DCX4 plug assembly. Once unscrewed, remove the upper clamp collar to separate the body from the actuator assembly.



## 8 DISASSEMBLING AND REASSEMBLING THE AUTOMATIC ACTUATOR

Remove the air connection, the rod end and the plastic cap on the actuator



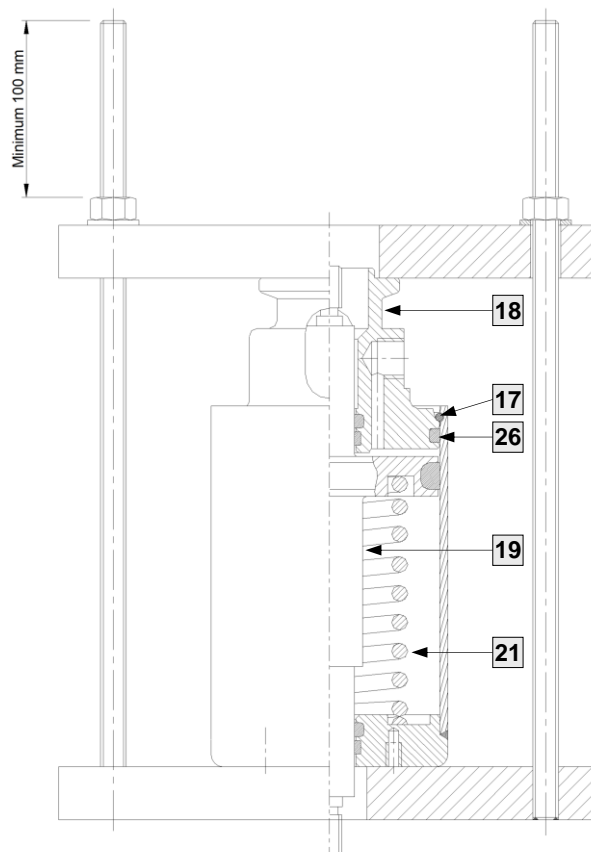
### 8.1 DISMANTLING THE INTERNAL ACTUATOR COMPONENTS



**CAUTION:** This is a hazardous operation if performed without using the correct tools. We recommend using a hydraulic press or a tool of the type shown in the diagram opposite (This tool must be made to accommodate a spring expansion of 100 mm).

With the actuator placed in vertically:

- Push down the lantern [18] to remove the snap-ring,
- Remove the snap-ring [17] from its recess using a small screwdriver,
- Release the pressure to allow the lantern to rise back,
- Take out the lantern together with its seal [26],
- Remove the stem/piston [19] and the spring(s) [21] from the actuator body.



## 8.2 CHANGING SEALS AND REASSEMBLY

### 8.2.1 ASSEMBLING THE ACTUATOR



**CAUTION !**

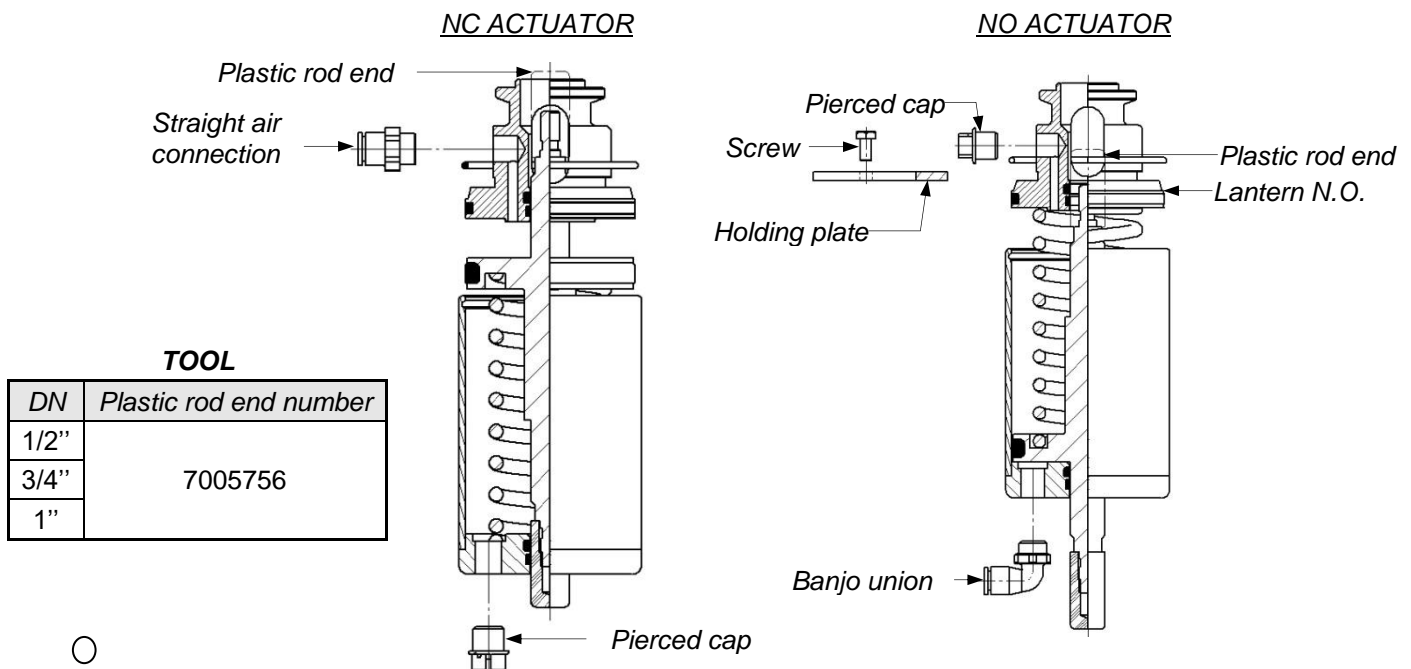
**CAUTION:** For changing the actuator configuration from **NC** (Normally Closed) to **NO** (Normally Open) or **DA.** (Double Acting), see the following chapter.

This procedure is performed in the reverse order to dismantling. However, it is necessary to take into account the following information:

- A guide pin centred on the actuator stem ensured that the piston is properly centred in the body. It also avoids also avoids the piston jumping if the spring(s) slip(s) sideways during compression,
- Before reassembling the parts, ensure that the assembly is lubricated with an appropriate lubricant (water-resistant and temperature-resistant food grade grease → Example: 4025 H1 QUINPLEX by Lubrication Engineers, see § 12.3). Ensure that the grease used is compatible with the elastomer seals,
- Take care not to damage the lantern seal [37] when fitting it with the press,
- Ensure that the snap-ring (31) is properly positioned in the recess of the body before releasing pressure,
- Test operation of the actuator before continuing assembly.

### 8.2.2 CHANGING THE CONFIGURATION OF THE ACTUATOR

After opening the actuator, simply refit the (stem/piston, spring) assembly the other way around in the actuator cylinder, then change the lantern. For DCX4, add a holding plate attached with a locking screw (see diagram below).



**IMPORTANT**

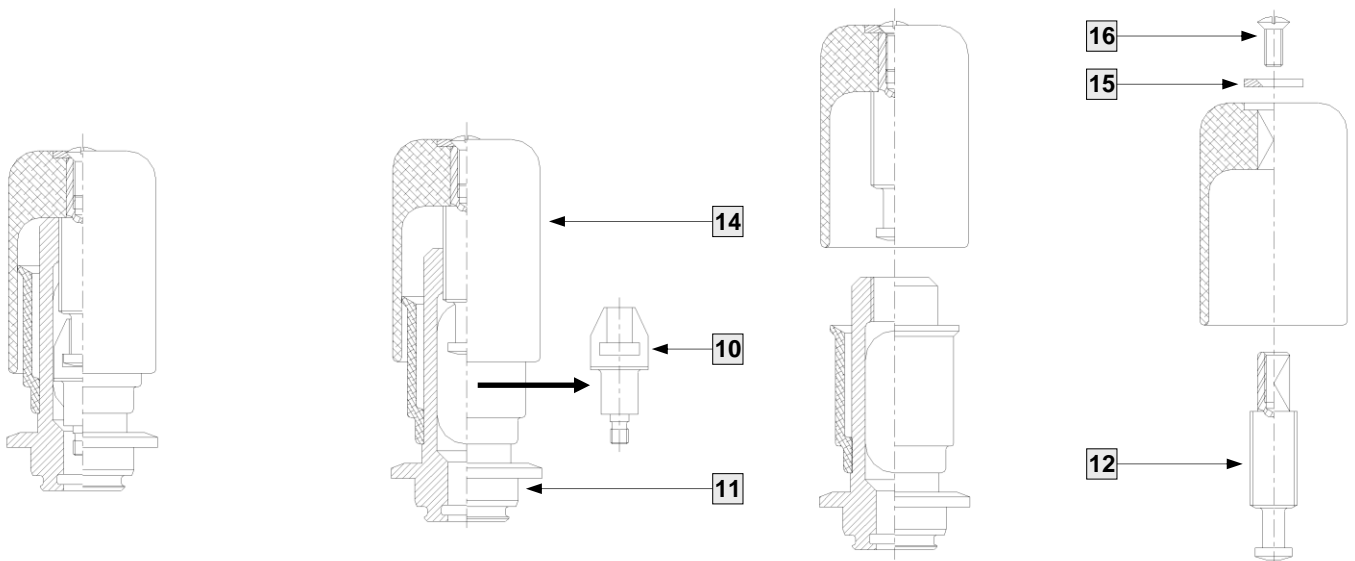
**NOTE:** For your own safety, check that the snap-ring is properly positioned in its recess. If the snap-ring is damaged or deformed, it must be replaced.

## 9 **DISASSEMBLING AND REASSEMBLING THE MANUAL ACTUATOR**

### 9.1 **DISMANTLING THE MANUAL ACTUATOR**

This operation is simple and does not require any special tools:

- Unscrew the handle (14) while holding the actuator nose (11).
- Remove the securing rod end (10) via the lamps on the actuator nose.
- Finish unscrewing the handle.
- Release the screw (16) from the handle, remove the washer (15), then the operating screw (12).



### 9.2 **LUBRICATING AND REASSEMBLING THE MANUAL ACTUATOR**

This procedure is performed in the reverse order to dismantling. However, it is necessary to take into account the following information:

Before reassembling the parts, ensure that the operating screw is lubricated with an appropriate lubricant (water-resistant and temperature-resistant food grade grease → Example: 4025 H1 QUINPLEX by Lubrication Engineers, see § 12.3).

- Operate the actuator before reassembling.

## 10 **REASSEMBLING DX3/4 VALVES**

This procedure is performed in the reverse order to dismantling. However, you should follow the guidelines given below:

- Remember to place the valve in the open position before tightening the clamp collars.
  - Before making the final network connections, check that the valve is operating normally.
- If you encounter problems when carrying out the operations described above, do not hesitate to contact us.

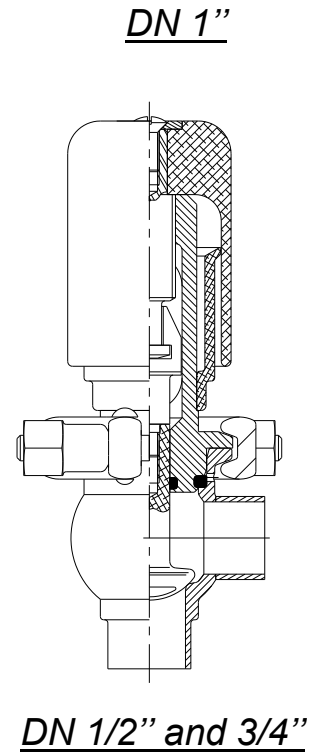
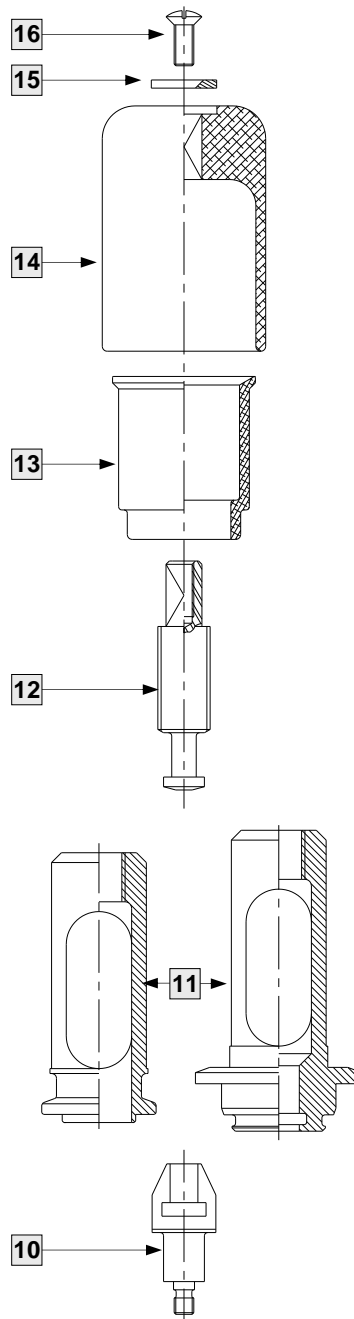
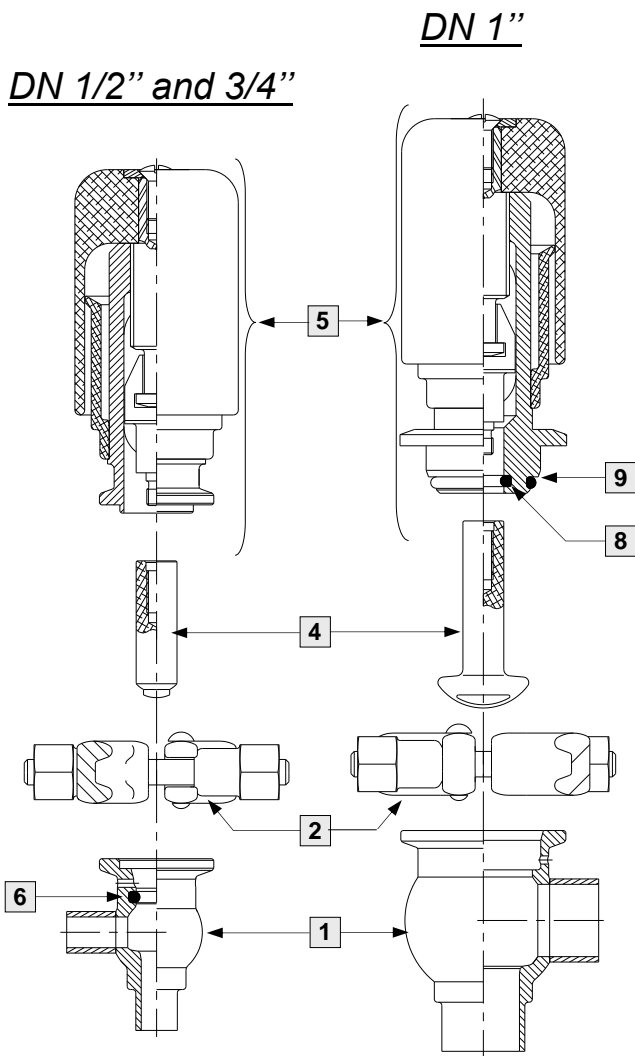
You can also contact us regarding maintenance for your valves either on-site or at our own premises.

# 11 SPARE PARTS DCX3/4 MANUAL AND AUTOMATIC VALVES

## 11.1 DCX3 MANUAL VALVE

### 11.1.1 PLUG DCX3 MANUAL PFA or PEEK

Sub-assembly : 5





**11.2 List of parts for DCX3 MANUAL Valves PFA and elastomer**

Ref.	Description	Qty	DN 1/2"	DN 3/4"	DN 1"
1	Valve Body L small DCX3 valve	1	7005731	7005721	7005711
1	Valve Body T small DCX3 valve	1	7005732	7005722	7005712
2	Locking clamp collar	1	7441846		7441844
4	Plug small DCX3 manual and automatic PEEK	1	7302954	7302953	7302952
4	Plug small DCX3 manual and automatic PFA	1	7005733	7005723	7005713
5	Actuator sub-assembly small DCX manual	1	7101002		7101007
6	Body seal small DCX3, <b>EPDM</b>	1	7006191	7006192	
6	Body seal small DCX3, <b>FKM</b>	1	7010878	7010879	
6	Body seal small DCX3 small, <b>SILICON</b>	1	7006189	7006190	
6	Body Seal small DCX3, <b>ISOLAST</b>	1	7006421	7006481	
8	Internal Lantern seal small DCX, <b>EPDM</b>	1			7006191
8	Internal Lantern seal small DCX, <b>FKM</b>	1			7010878
8	Internal Lantern seal small DCX, <b>SILICON</b>	1			7006189
8	Internal Lantern seal small DCX, <b>ISOLAST</b>	1			7006421
9	Internal Lantern seal small DCX, <b>EPDM</b>	1			7006038
9	External Lantern seal small DCX, <b>FKM</b>	1			7006128
9	External Lantern seal small DCX, <b>SILICON</b>	1			7006036
9	External Lantern seal small DCX, <b>ISOLAST</b>	1			7006476
10	Securing rod end small DCX manual	1	7005745		
11	Lantern small DCX manual	1	7005754		7005744
12	Operating screw small DCX manual	1	7005746		
13	Handle cover small DCX manual	1	7005749		
14	Handle small DCX manual	1	7005748		
15	Handle washer small DCX manual	1	7005747		
16	Handle screw small DCX manual	1	7080816		
29	Plug elastomer small DCX3	1	7301340	7301357	7301351
30	Plug plate for elastomer seal small DCX3	1	7301341	7301358	7301352
31	Plug seal elastomer small DCX3, <b>EPDM</b>	1	7006479	7006191	7006011
31	Plug seal elastomer, small DCX3, <b>FKM</b>	1	7006480	7010878	7010886
31	Plug seal elastomer, small DCX3, <b>ISOLAST</b>	1	7006459	7006421	7006475

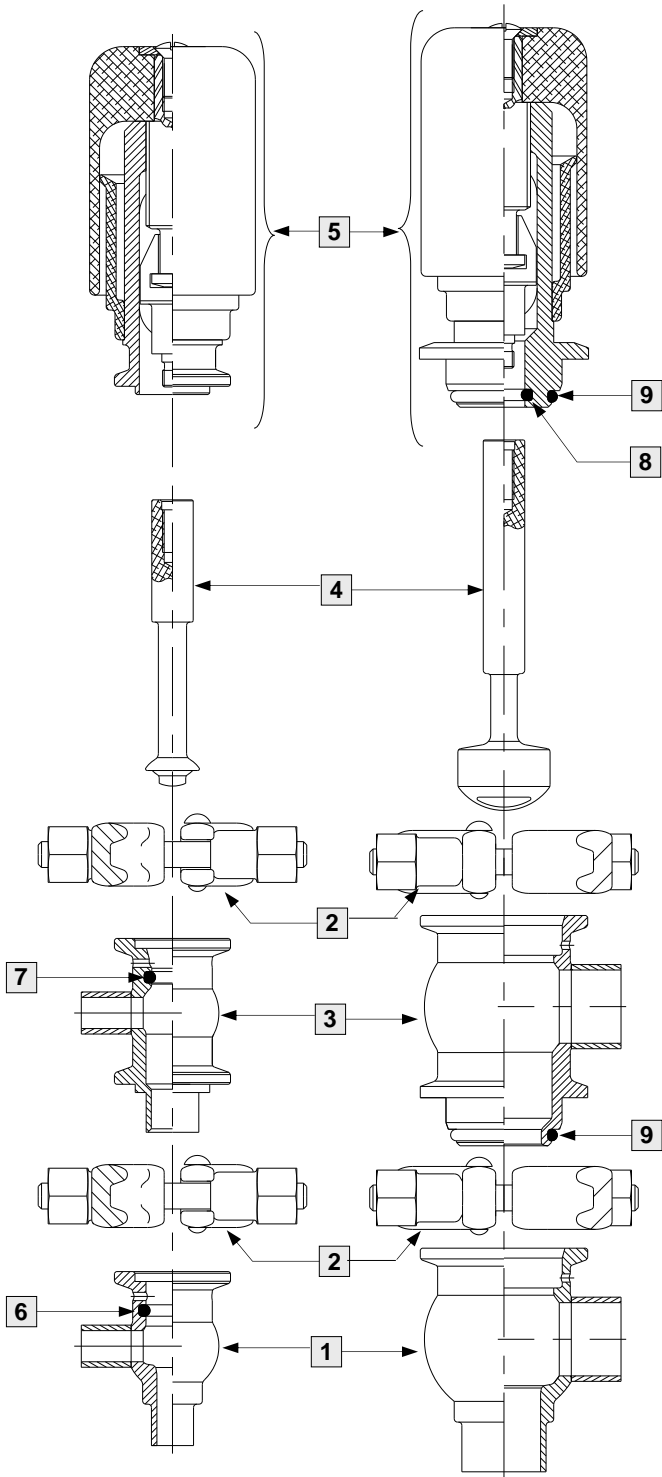


**11.3 DCX4 MANUAL VALVE**

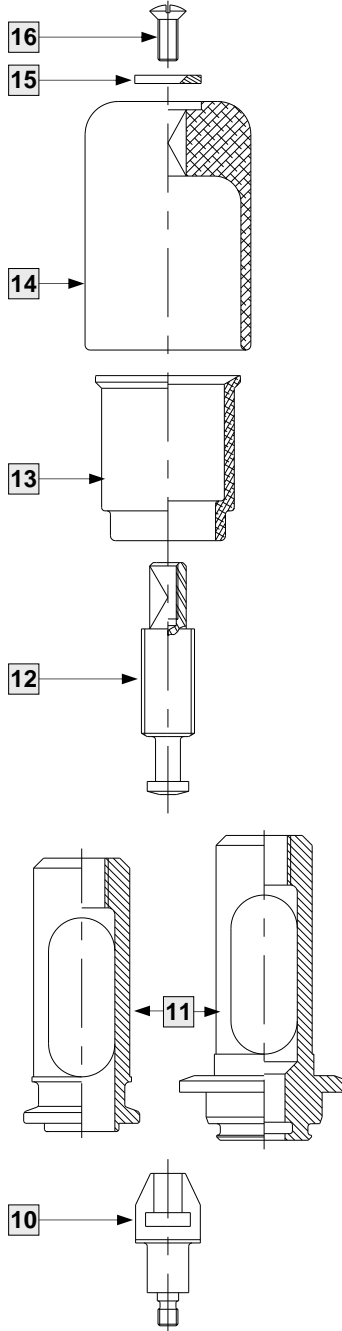
**11.3.1 PLUG DCX4 MANUAL P.F.A or PEEK**

DN 1/2" and 3/4"

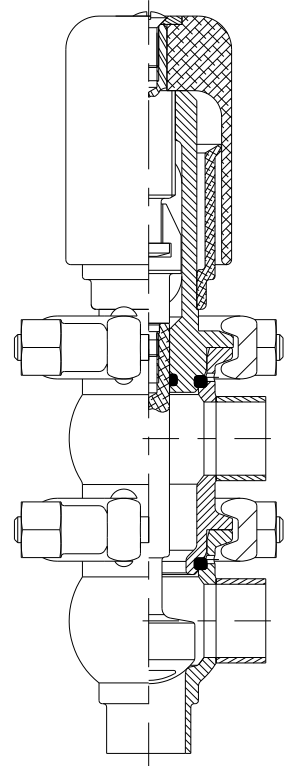
DN 1"



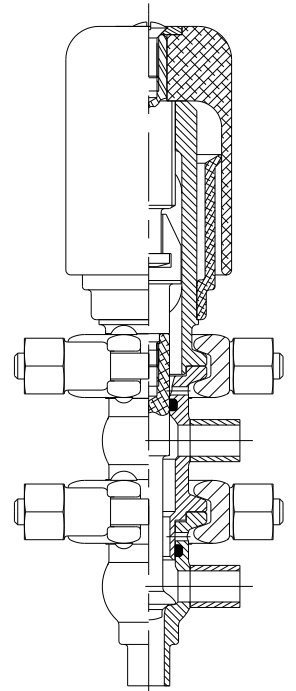
Sub-assembly : 5



DN 1"



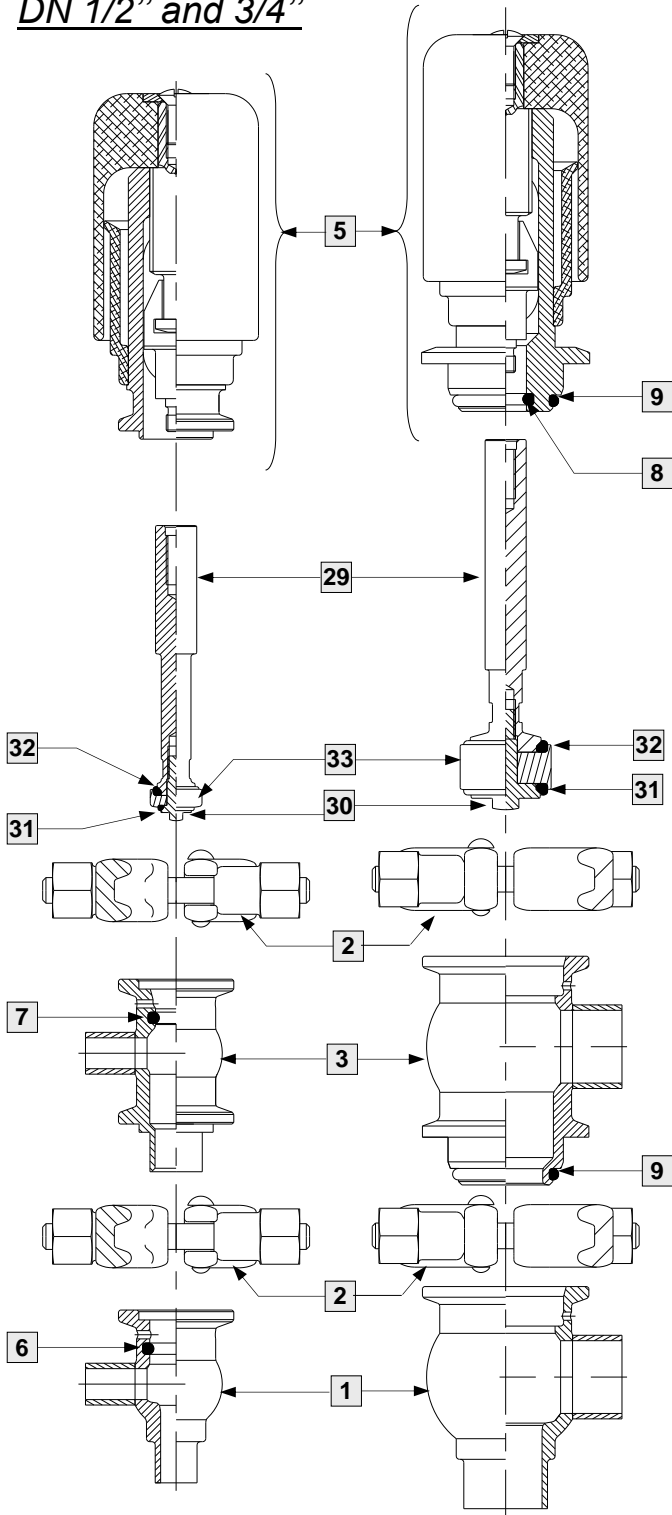
DN 1/2" and 3/4"



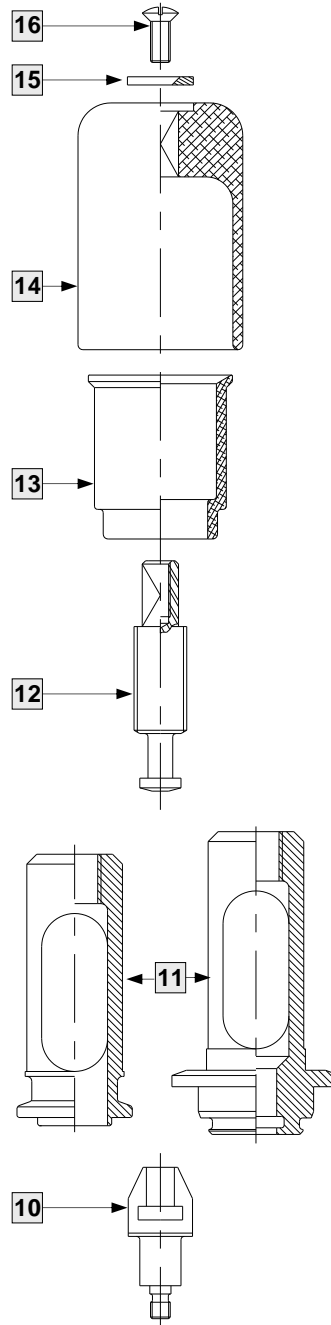
11.3.2 PLUG STAINLESS STEEL FOR ELASTOMER SEAL DCX4 MANUAL

DN 1"

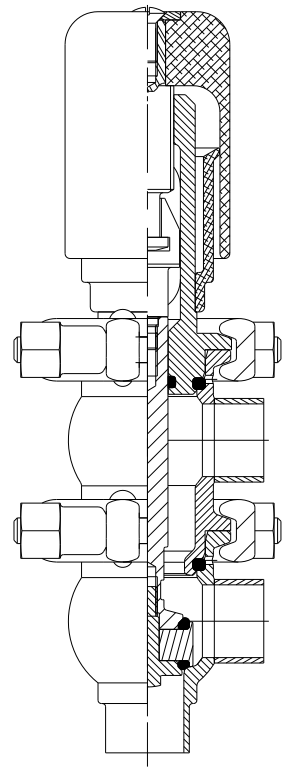
DN 1/2" and 3/4"



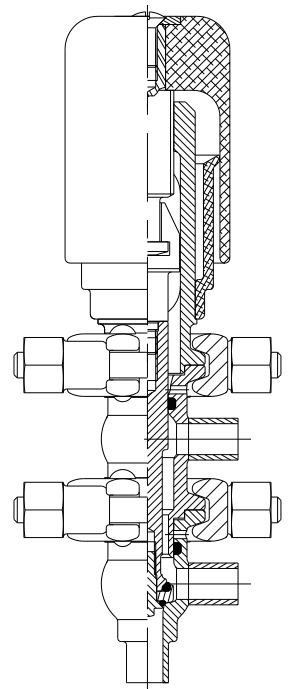
Sub-assembly : 5



DN 1"



DN 1/2" and 3/4"



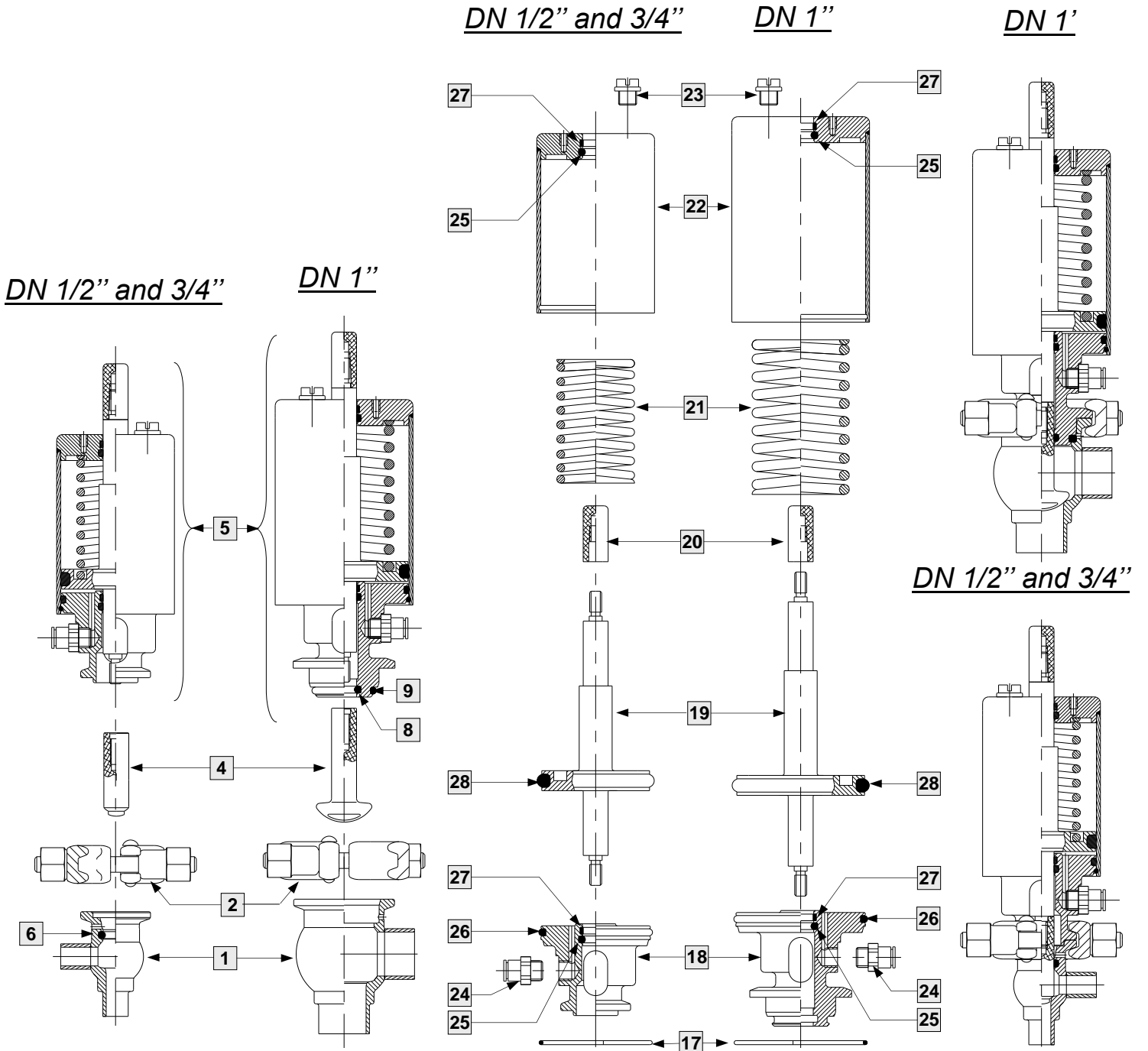
**11.4 List of parts for DCX4 MANUAL valves**

Ref.	Description	Qty	DN 1/2"	DN 3/4"	DN 1"
1	Valve Body L small DCX3 valve	1	7005772	7005721	7005711
1	Valve Body T small DCX3	1		7005722	7005712
2	Locking clamp collar	2	7441846		7441844
3	Valve Body L small DCX4	1	7005768	7005764	7005760
3	Valve Body T DCX4	1	7005769	7005765	7005761
4	Plug small DCX4 manual and automatic PEEK	1	7302957	7302956	7302955
4	Plug small DCX4 manual and automatic PFA	1	7005771	7005767	7005763
5	Actuator sub-assembly small DCX manual	1	7101002		7101007
6	Body seal small DCX3, <b>EPDM</b>	1	7006218	7006192	
6	Body seal small DCX3, <b>FKM</b>	1	7010885	7010879	
6	Body seal small DCX3, <b>SILICON</b>	1	7006217	7006190	
6	Body seal small DCX3, <b>ISOLAST</b>	1	7006430	7006481	
7	Body seal small DCX4, <b>EPDM</b>	1	7006191	7006218	
7	Body seal small DCX4, <b>FKM</b>	1	7010878	7010885	
7	Body seal small DCX4, <b>SILICON</b>	1	7006189	7006217	
7	Body seal small DCX4, <b>ISOLAST</b>	1	7006421	7006430	
8	Internal Lantern seal small DCX, <b>EPDM</b>	1			7006191
8	Internal Lantern seal small DCX, <b>FKM</b>	1			7010878
8	Internal Lantern seal small DCX, <b>SILICON</b>	1			7006189
8	Internal Lantern seal small DCX, <b>ISOLAST</b>	1			7006421
9	External Lantern seal small DCX, <b>EPDM</b>	2			7006038
9	External Lantern seal small DCX, <b>FKM</b>	2			7006128
9	External Lantern seal small DCX seal, <b>SILICON</b>	2			7006036
9	External Lantern seal small DCX, <b>ISOLAST</b>	2			7006476
10	Securing rod small DCX manual	1	7005745		
11	Lantern small DCX manual	1	7005754		7005744
12	Operating screw small DCX manual	1	7005746		
13	Handle cover small DCX manual	1	7005749		
14	Handle small DCX manual	1	7005748		
15	Handle washer small DCX manual	1	7005747		
16	Handle screw small DCX manual	1	7080816		
29	Elastomer Plug small DCX4	1	7301374	7301377	7301380
30	Plug plate for Elastomer seal small DCX4	1	7301375	7301378	7301381
31	Lower plug elastomer seal small DCX4 <b>EPDM</b>	1	7006479	7006191	7006011
31	Lower Plug elastomer seal small DCX4, <b>FKM</b>	1	7006480	7010878	7010886
31	Lower Plug elastomer seal small DCX4, <b>ISOLAST</b>	1	7006459	7006421	7006475
32	Upper Plug elastomer seal small DCX4, <b>EPDM</b>	1	7006497	7006191	7006011
32	Upper Plug elastomer seal small DCX4, <b>FKM</b>	1	7006448	7010878	7010886
32	Upper plug elastomer seal small DCX4, <b>ISOLAST</b>	1	7006447	7006421	7006475
33	Spacer for elastomer plug small DCX4	1	7301376	7301379	7301382

**11.5 DCX3 AUTOMATIC VALVE**

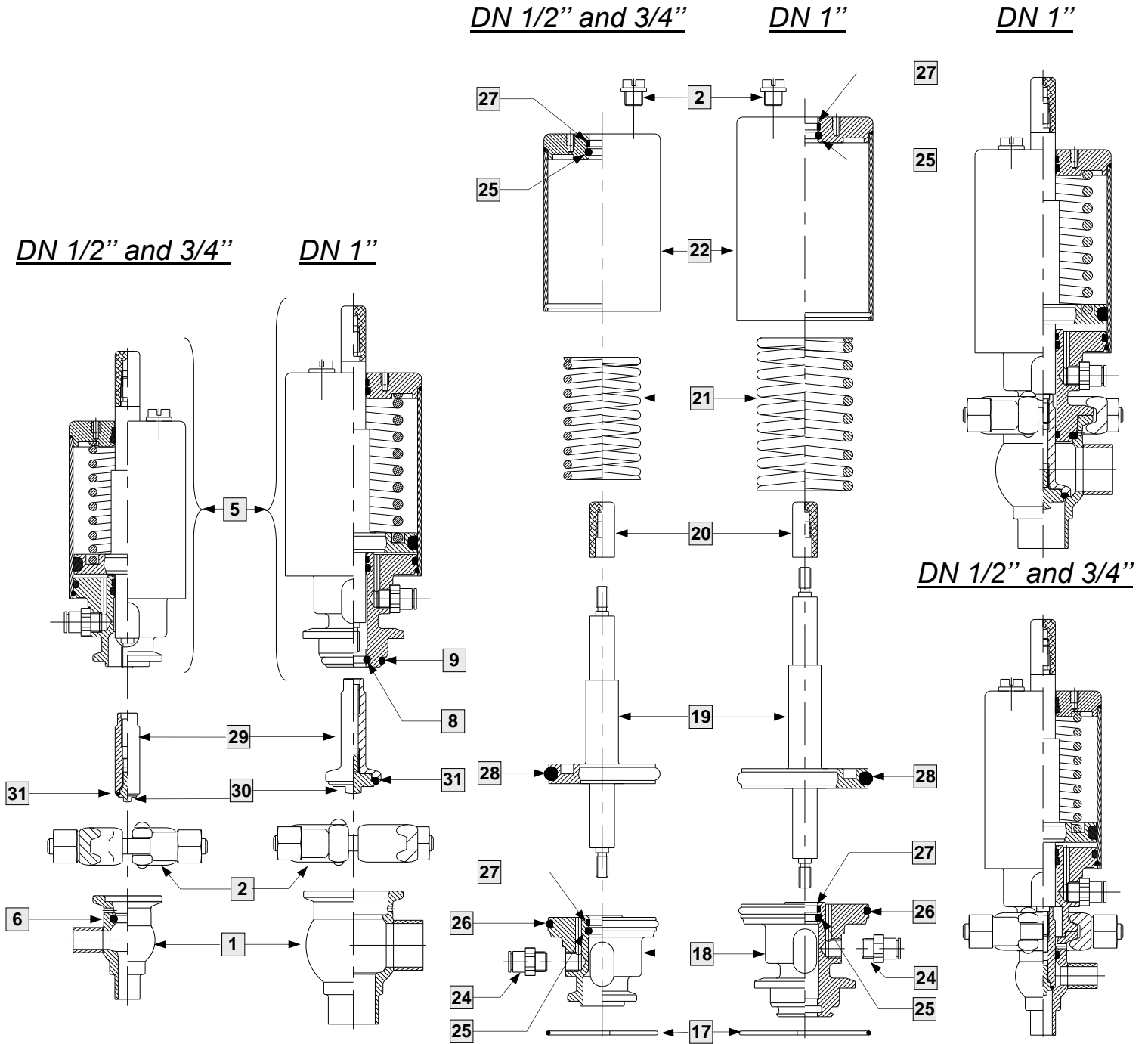
**11.5.1 PLUG DCX3 AUTOMATIC P.F.A or PEEK**

**Sub-assembly : 5**



11.5.2 PLUG STAINLESS STEEL FOR ELASTOMER SEAL SMALL DCX3

Sub-assembly : 5



**11.6 List of parts for DCX3 AUTOMATIC valves**

Ref.	Description	Qty	DN 1/2"	DN 3/4"	DN 1"
1	Valve Body L small DCX3	1	7005731	7005721	7005711
1	Valve Body T small DCX3	1	7005732	7005722	7005712
2	Locking clamp collar	1	7441846		7441844
4	Plug small DCX3 automatic and manual PEEK	1	7302954	7302953	7302952
4	Plug small DCX3 automatic and manual PFA	1	7005733	7005723	7005713
5	Actuator sub-assembly small DCX	1	7101013		7101010
6	Body seal small DCX3, <b>EPDM</b>	1	7006191	7006192	
6	Body seal small DCX3, <b>FKM</b>	1	7010878	7010879	
6	Body seal small DCX3, <b>SILICON</b>	1	7006189	7006190	
6	Body seal small DCX3, <b>ISOLAST</b>	1	7006421	7006481	
8	Internal Lantern seal small DCX automatic, <b>EPDM</b>	1			7006191
8	Internal Lantern seal small DCX automatic <b>FKM</b>	1			7010878
8	Internal Lantern seal small DCX automatic, <b>SILICON</b>	1			7006189
8	Internal Lantern seal small DCX automatic, <b>ISOLAST</b>	1			7006421
9	External Lantern seal small DCX automatic, <b>EPDM</b>	1			7006038
9	External Lantern seal small DCX automatic, <b>FKM</b>	1			7006128
9	External Lantern seal small DCX automatic, <b>SILICON</b>	1			7006036
9	External Lantern seal small DCX automatic, <b>ISOLAST</b>	1			7006476
17	Lantern/body assembly snap-ring	1	7005728		7005718
18	Lantern small DCX automatic	1	7005724		7005714
19	Stem/piston small DCX automatic	1	7005725		7005715
20	Rod/piston end small DCX automatic	1	7005756		
21	Actuator Spring small DCX automatic	1	7005727	7005717	
22	Actuator Body small DCX automatic	1	7005726	7005716	
23	Pierced plastic cap	1	7002496		
24	Straight air connection	1	7009065		
25	Internal seal Lantern and actuator body small DCX automatic, <b>NITRILE</b>	2	7006040		
26	Torque seal Lantern small DCX automatic, <b>NITRILE</b>	1	7006151	7006150	
27	Rod /piston guide ring small DCX automatic	2	7009996		
28	External seal rod/piston small DCX automatic, <b>NITRILE</b>	1	7006071	7380335	
29	Plug elastomer small DCX3	1	7301340	7301357	7301351
30	Plug plate elastomer seal small DCX3	1	7301341	7301358	7301352
31	Elastomer Plug seal small DCX3, <b>EPDM</b>	1	7006479	7006191	7006011
31	Elastomer plug seal small DCX3, <b>FKM</b>	1	7006480	7010878	7010886
31	Elastomer plug seal small DCX3, <b>ISOLAST</b>	1	7006459	7006421	7006475

**11.7 DCX4 AUTOMATIC VALVE**

11.7.1 PLUG DCX4 AUTOMATIC PFA or PEEK

DN 1"

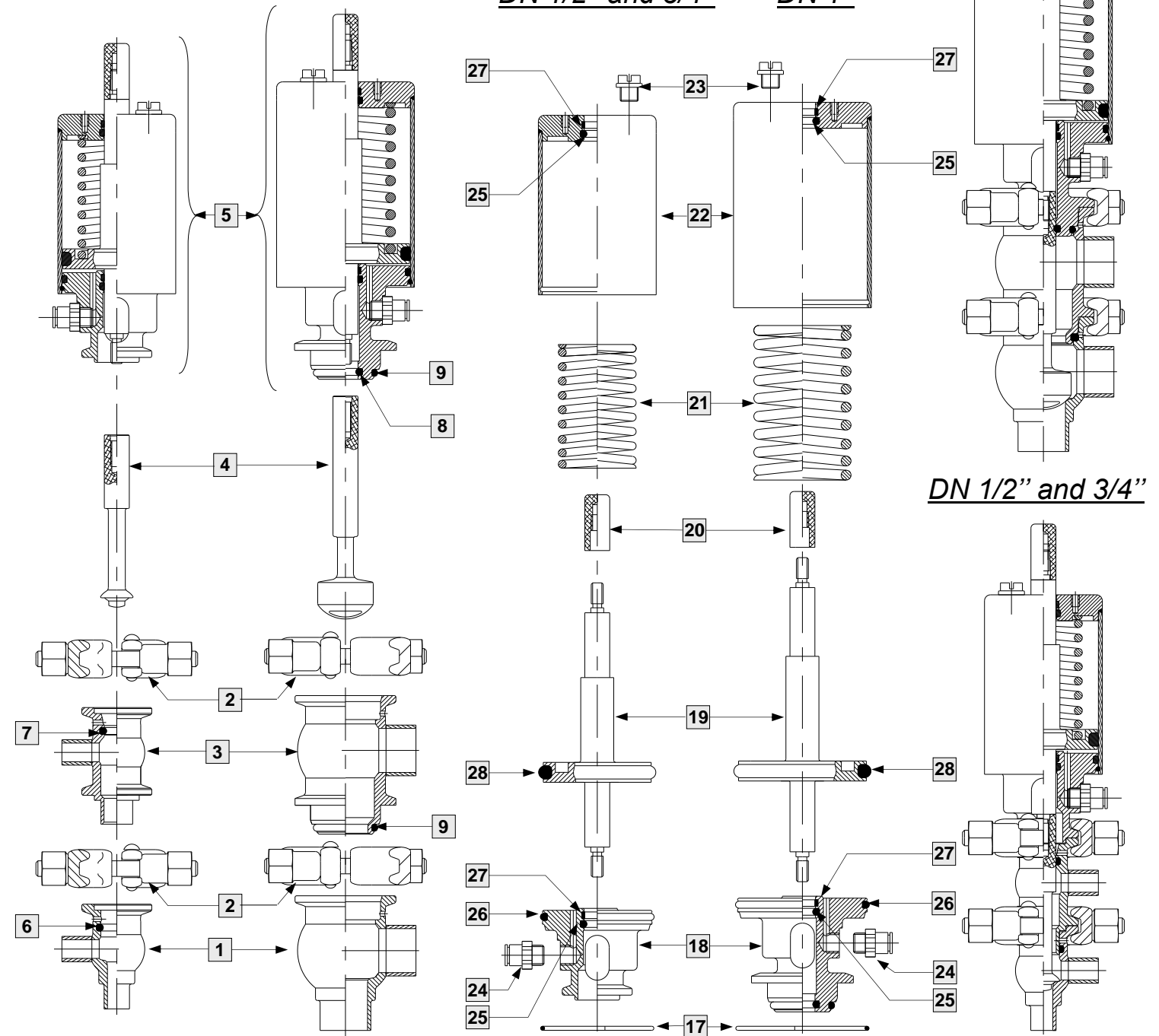
Sub-assembly : 5

DN 1/2" and 3/4"

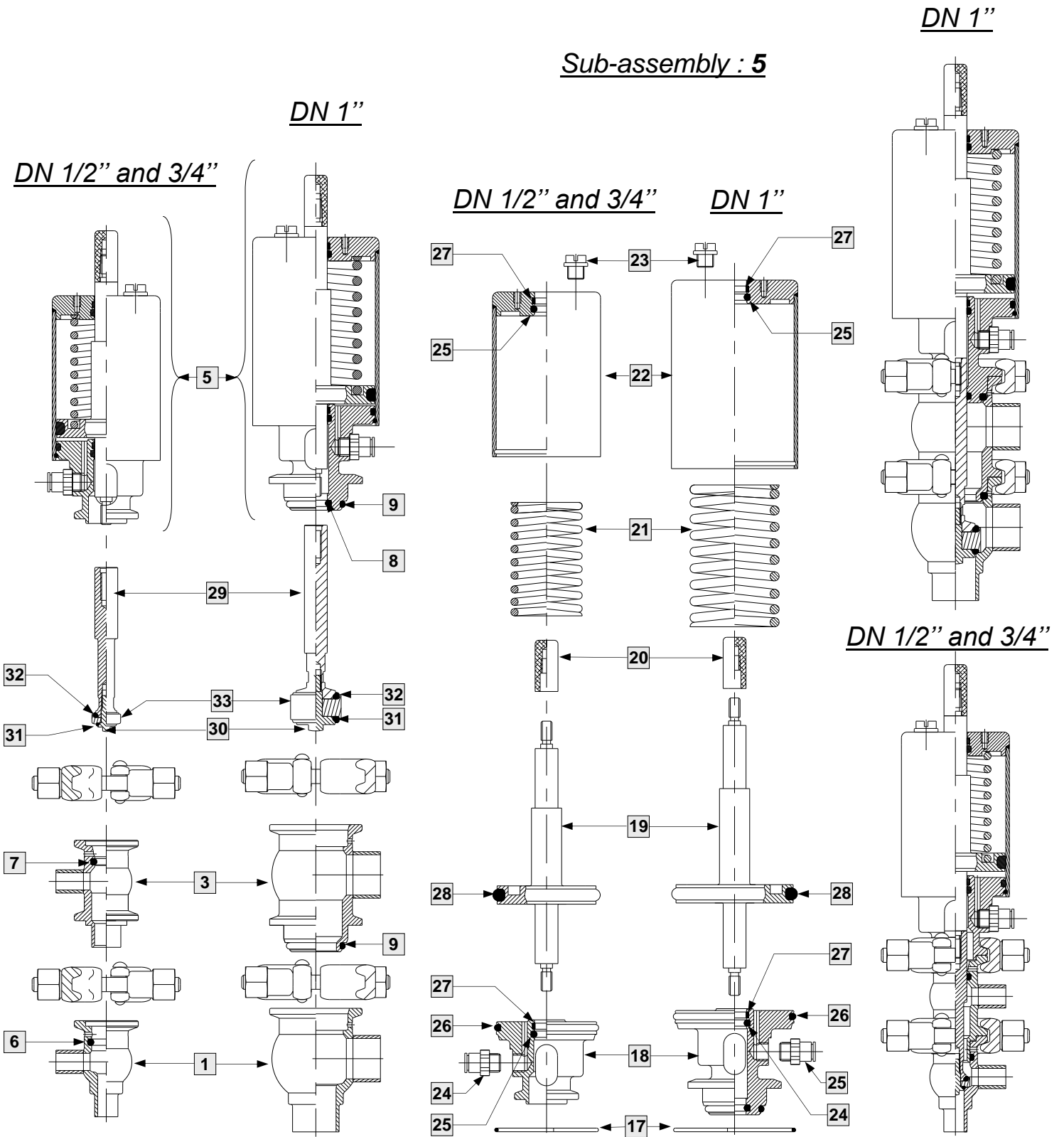
DN 1"

DN 1/2" and 3/4"

DN 1"



11.7.2 PLUG STAINLESS STEEL FOR ELASTOMER SEAL DCX4 AUTOMATIC

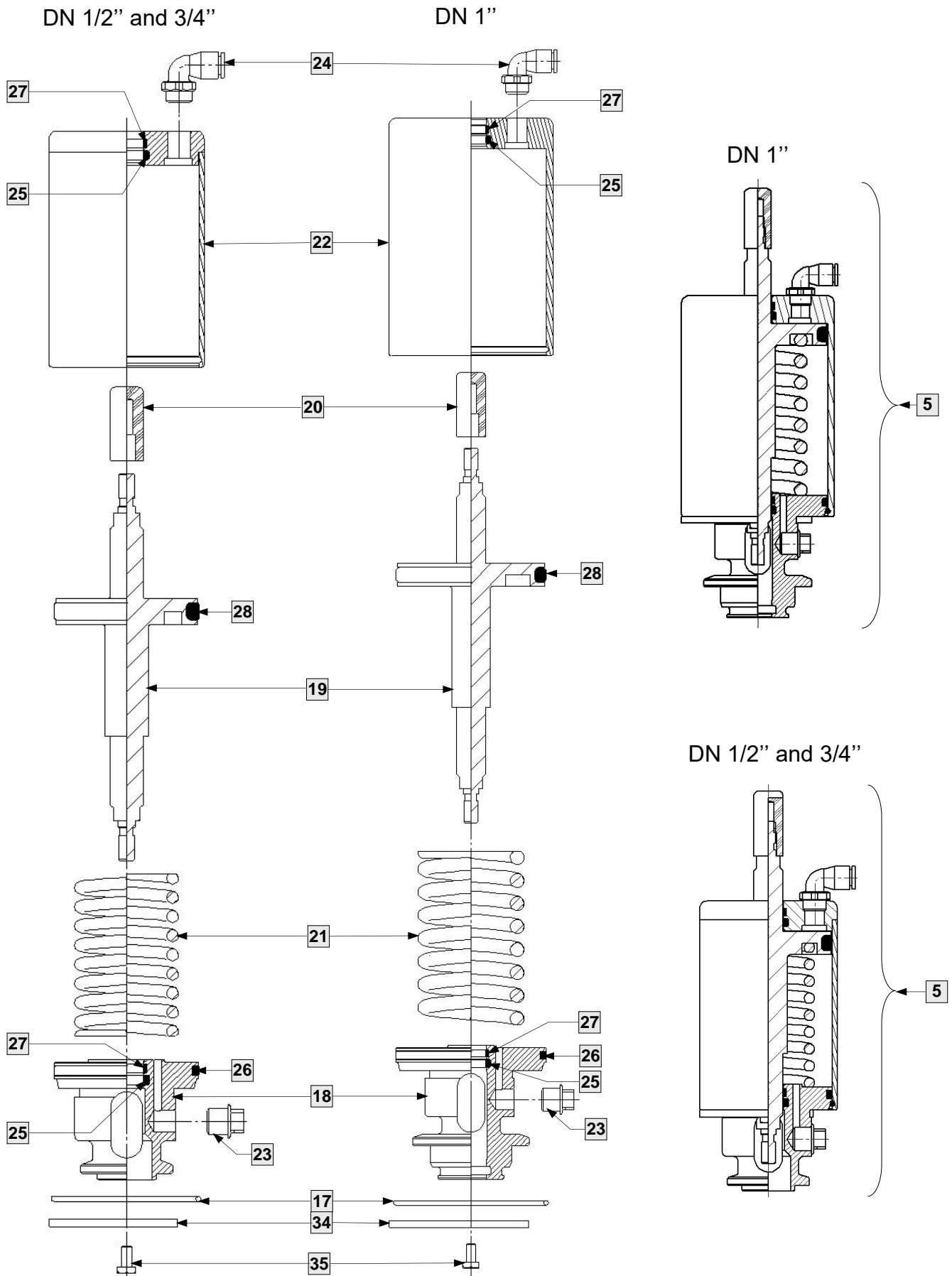




**11.8 List of parts for DCX4 AUTOMATIC valves**

Ref.	Description	Qty	DN 1/2"	DN 3/4"	DN 1"
1	Valve Body L small DCX3	1	7005772	7005721	7005711
1	Valve Body T small DCX3	1		7005722	7005712
2	Locking clamp collar	2	7441846		7441844
3	Valve Body L small DCX4	1	7005768	7005764	7005760
3	Valve Body T small DCX4	1	7005769	7005765	7005761
4	Plug small DCX4 automatic and manual PEEK	1	7302957	7302956	7302955
4	Plug small DCX4 automatic and manual PFA	1	7005771	7005767	7005763
5	Actuator sub-assembly small DCX automatic	1	7101013		7101010
6	Body seal small DCX3, <b>EPDM</b>	1	7006218	7006192	
6	Body seal small DCX3, <b>FKM</b>	1	7010885	7010879	
6	Body seal small DCX3, <b>SILICON</b>	1	7006217	7006190	
6	Body seal small DCX3, <b>ISOLAST</b>	1	7006430	7006481	
7	Body seal small DCX4, <b>EPDM</b>	1	7006191	7006218	
7	Body seal small DCX4 small, <b>FKM</b>	1	7010878	7010885	
7	Body seal small DCX4, <b>SILICON</b>	1	7006189	7006217	
7	Body seal small DCX4, <b>ISOLAST</b>	1	7006421	7006430	
8	Internal lantern seal small DCX automatic, <b>EPDM</b>	1			7006191
8	Internal lantern seal small DCX automatic, <b>FKM</b>	1			7010878
8	Internal lantern seal small DCX automatic, <b>SILICON</b>	1			7006189
8	Internal Lantern seal small DCX automatic, <b>ISOLAST</b>	1			7006421
9	External lantern seal small DCX automatic, <b>EPDM</b>	2			7006038
9	External lantern seal small DCX automatic, <b>FKM</b>	2			7006128
9	External lantern seal small DCX automatic, <b>SILICON</b>	2			7006036
9	External Lantern seal small DCX automatic, <b>ISOLAST</b>	2			7006476
17	Lantern/body assembly snap-ring	1	7005728		7005718
18	Lantern small DCX automatic	1	7005724		7005714
19	Stem/piston small DCX automatic	1	7005725		7005715
20	Rod/piston small small DCX automatic	1	7005756		
21	Actuator Spring small DCX automatic	1	7005727		7005717
22	Actuator Body small DCX automatic	1	7005726		7005716
23	Pierced plastic cap	1	7002496		
24	Straight air connection	1	7009065		
25	Internal lantern and actuator body seal small DCX, <b>NITRILE</b>	2	7006040		
26	External torque seal lantern small DCX, <b>NITRILE</b>	1	7006151		7006150
27	Rod/piston guide ring small DCX automatic	2	7009996		
28	External seal stem/piston small DCX automatic, <b>NITRILE</b>	1	7006071		7380335
29	Elastomer Plug small DCX4	1	7301374	7301377	7301380
30	Plug plate for elastomer seal small DCX4	1	7301375	7301378	7301381
31	Lower plug elastomer seal small DCX4, <b>EPDM</b>	1	7006479	7006191	7006011
31	Lower plug elastomer seal small DCX4, <b>FKM</b>	1	7006480	7010878	7010886
31	Lower plug elastomer seal small DCX4, <b>ISOLAST</b>	1	7006459	7006421	7006475
32	Upper plug elastomer seal small DCX4, <b>EPDM</b>	1	7006497	7006191	7006011
32	Upper plug elastomer seal small DCX4, <b>FKM</b>	1	7006448	7010878	7010886
32	Upper plug elastomer seal small DCX4, <b>ISOLAST</b>	1	7006447	7006421	7006475
33	Spacer for elastomer plug small DCX4	1	7301376	7301379	7301382

**11.9 ACTUATOR AUTOMATIC NORMALLY OPEN**



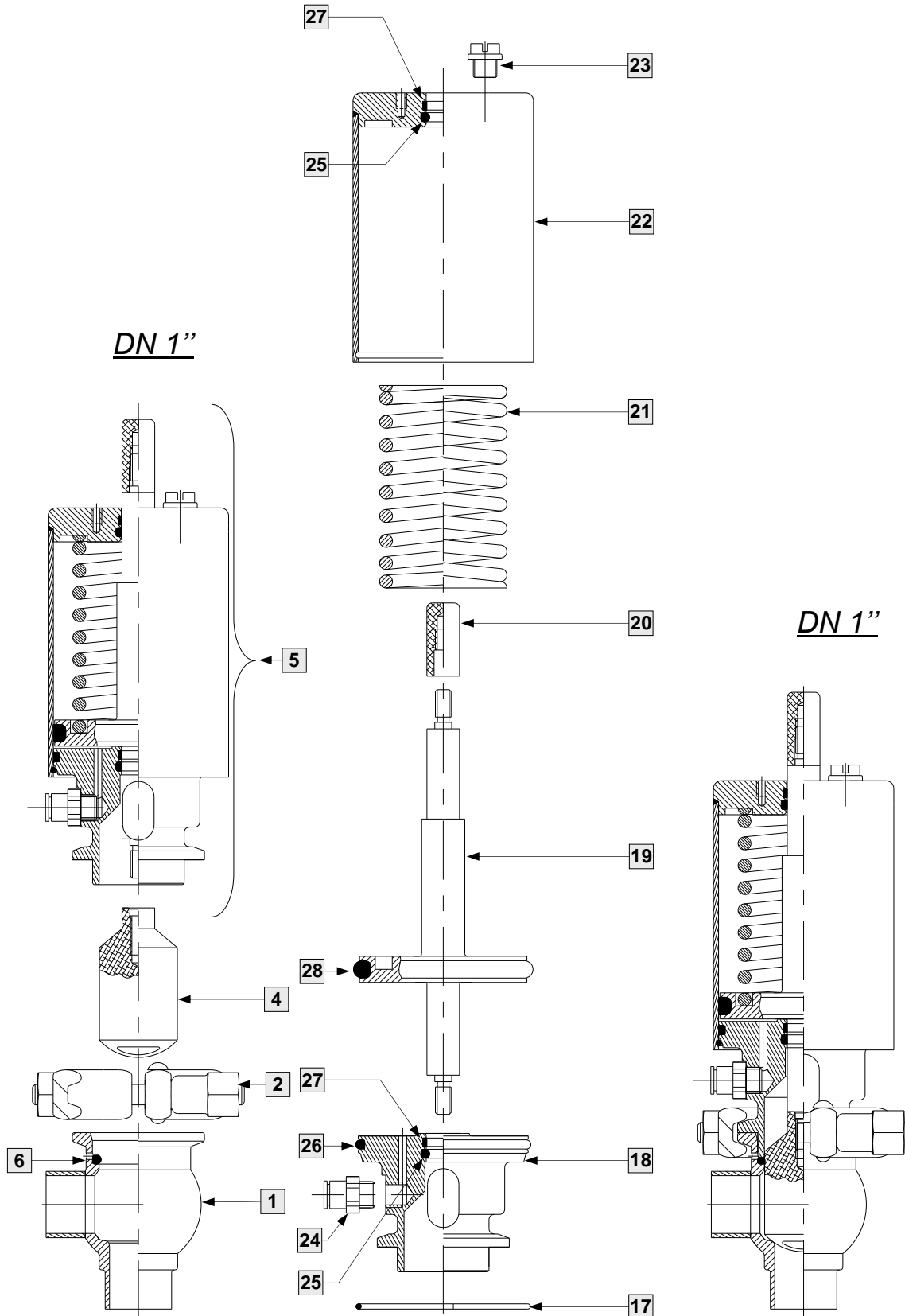
**11.10 List of parts for automatic actuator normally open**

<b>Ref.</b>	<b>Description</b>	<b>Qty</b>	<b>DN 1/2"</b>	<b>DN 3/4"</b>	<b>DN 1"</b>
5	Actuator sub-assembly N O small DCX automatic	1	7101015		7101016
17	Lantern/body assembly snap-ring	1	7005728		7005718
18	Lantern N O small DCX automatic	1	7301338		7301339
19	Stem/piston small DCX automatic	1	7005725		7005715
20	Stem/piston end small DCX automatic	1		7005756	
21	Actuator Spring small DCX automatic	1	7005727		7005717
22	Actuator Body small DCX automatic	1	7005726		7005716
23	Pierced plastic cap	1		7002496	
24	Straight air connection	1		7010116	
25	Internal lantern and body seal small DCX automatic, <b>NITRILE</b>	2		7006040	
26	External torque seal lantern small DCX automatic, <b>NITRILE</b>	1	7006151		7006150
27	Stem/piston guide ring small DCX automatic	2		7009996	
28	External seal Stem/piston small DCX, <b>NITRILE</b> .	1	7006071		7380335
34	Holding plate	1	7301327		7301328
35	Screw TH 4X8	2		7006966	

## 12 OPTIONS

### 12.1 DCX3 DN 1" VALVE WITH 1 LANTERN SEAL



Sub-assembly : 5



**12.2 List of spare parts for DCX3 AUTO valve with 1 lantern seal**

Ref.	Description	Qty	DN 1"
1	Valve Body L small DCX3	1	7005711
1	Valve Body T small DCX3 small	1	7005712
2	Locking clamp collar	1	7441844
4	Plug small DCX3 automatic and manual PEEK	1	7302958
4	Plug small DCX3 automatic and manual PFA	1	7810836
5	Actuator Sub-assembly small DCX automatic	1	7101041
6	Body seal small DCX3, <b>FKM</b>	1	7006267
17	Lantern/body assembly snap-ring	1	7005718
18	Lantern small DCX automatic	1	7810837
19	Stem/piston small DCX automatic	1	7005715
20	Stem/piston end small DCX automatic	1	7005756
21	Actuator Spring DCX automatic small	1	7005717
22	Actuator Body small DCX automatic	1	7005716
23	Pierced plastic cap	1	7002496
24	Straight air connection	1	7009065
25	Internal seal lantern and body small DCX, <b>NITRILE</b>	2	7006040
26	External torques seal lantern small DCX, <b>NITRILE</b>	1	7006150
27	Stem/piston guide ring small DCX automatic	2	7009996
28	External seal stem/piston small DCX automatic, <b>NITRILE</b>	1	7380335

**12.3 Reference of greases**

	Ref.	Designation	
Grease for actuator seals	7010662	grease cartridge 400 g (4025 H1 QUINPLEX)	
Grease for valve seals	7030668	grease cartridge 500 g (Kluber Paraliq GTE 703, NFS H1, FDA 21 CFR § 178.3570)	

**13 LIST OF REFERENCES OF SEAL KITS FOR DCX3/4 SMALL DIAMETER VALVES**

<i>Description</i>	<i>DN1/2"</i>	<i>DN3/4"</i>	<i>DN1"</i>
Seal kits for Actuator cylinder small diameter DCX3/4	7070674		7070675
Seal kits <b>EPDM/PFA</b> small diameter DCX3	7070676	7070677	7070678
Seal kits <b>FKM/PFA</b> small diameter DCX3	7070679	7070680	7070681
Seal kits <b>VMQ/PFA</b> small diameter DCX3	7070685	7070686	7070687
Seal kits <b>FFKM/PFA</b> small diameter DCX3	7070967	7070968	7070969
Seal kits <b>EPDM/PEEK</b> small diameter DCX3	7071353	7071354	7071355
Seal kits <b>FKM /PEEK</b> small diameter DCX3	7071356	7071357	7071358
Seal kits <b>VMQ/PEEK</b> small diameter DCX3	7071359	7071360	7071361
Seal kits <b>FFKM/PEEK</b> small diameter DCX3	7071362	7071363	7071364
Seal kits <b>EPDM/PFA</b> small diameter DCX4	7070689	7070690	7070691
Seal kits <b>FKM /PFA</b> small diameter DCX4	7070693	7070695	7070696
Seal kits <b>VMQ/PFA</b> small diameter DCX4	7070697	7070698	7070699
Seal kits <b>FFKMT/PFA</b> small diameter DCX4	7070970	7070971	7070972
Seal kits <b>EPDM/PEEK</b> small diameter DCX4	7071365	7071366	7071367
Seal kits <b>FKM /PEEK</b> small diameter DCX4	7071368	7071369	7071370
Seal kits <b>VMQ/PEEK</b> small diameter DCX4	7071371	7071372	7071373
Seal kits <b>FFKM/PEEK</b> small diameter DCX4	7071374	7071375	7071376
Seal kits <b>FKM/PFA</b> small diameter DCX3 (1 lantern seal)			7070683
Seal kits <b>FKM /PEEK</b> small diameter DCX3 (1 lantern seal)			7071377
Seal kits <b>EPDM</b> small diameter DCX3 elastomer	7070973	7070974	7070975
Seal kits <b>FKM</b> small diameter DCX3 elastomer	7070976	7070977	7070978
Seal kits <b>FFKM</b> small diameter DCX3 elastomer	7070979	7070980	7070981
Seal kits <b>EPDM</b> small diameter DCX4 elastomer	7070982	7070983	7070984
Seal kits <b>FKM</b> small diameter DCX4 elastomer	7070985	7070986	7070987
Seal kits <b>FFKM</b> small diameter DCX4 elastomer	7070988	7070989	7070990

Seal kits for Actuator cylinder small diameter DCX3/4 :

Diameter			DN1/2" US	DN3/4" US	DN1" US
Kit No.			7070674		7070675
Guide	Description	Qty	Seal reference		
25	Internal lantern and actuator body seal small DCX, <b>NITRILE</b>	2	7006040		
26	External torque seal lantern small DCX, <b>NITRILE</b>	1	7006151	7006150	
27	Rod/piston guide ring small DCX automatic	2	7009996		
28	External seal stem/piston small DCX automatic, <b>NITRILE</b>	1	7006071	7380335	

Seal kits **EPDM/PFA** small diameter DCX3 :

Diameter			DN1/2" US	DN3/4" US	DN1" US
Kit No.			7070676	7070677	7070678
Guide	Description	Qty	Seal reference		
4	Plug small DCX3 automatic and manual PFA	1	7005733	7005723	7005713
6	Body seal small DCX3, <b>EPDM</b>	1	7006191	7006192	
8	Internal Lantern seal small DCX, <b>EPDM</b>	1			7006191
9	External Lantern seal small DCX automaticl, <b>EPDM</b>	1			7006038

Seal kits **FKM/PFA** small diameter DCX3 :

Diameter			DN1/2" US	DN3/4" US	DN1" US
Kit No.			7070679	7070680	7070681
Guide	Description	Qty	Seal reference		
4	Plug small DCX3 automatic and manual PFA	1	7005733	7005723	7005713
6	Body seal small DCX3, <b>FKM</b>	1	7010878	7010879	
8	Internal Lantern seal small DCX, <b>FKM</b>	1			7010878
9	External Lantern seal small DCX automaticl, <b>FKM</b>	1			7006128

Seal kits **VMQ/PFA** small diameter DCX3 :

Diameter			DN1/2" US	DN3/4" US	DN1" US
Kit No.			7070685	7070686	7070687
Guide	Description	Qty	Seal reference		
4	Plug small DCX3 automatic and manual PFA	1	7005733	7005723	7005713
6	Body seal small DCX3, <b>VMQ</b>	1	7006189	7006190	
8	Internal Lantern seal small DCX, <b>VMQ</b>	1			7006189
9	External Lantern seal small DCX automaticl, <b>VMQ</b>	1			7006036

Seal kits **FFKM/PFA** small diameter DCX3 :

Diameter			DN1/2" US	DN3/4" US	DN1" US
Kit No.			7070967	7070968	7070969
Guide	Description	Qty	Seal reference		
4	Plug small DCX3 automatic and manual PFA	1	7005733	7005723	7005713
6	Body seal small DCX3, <b>FFKM</b>	1	7006421	7006481	
8	Internal Lantern seal small DCX, <b>FFKM</b>	1			7006421
9	External Lantern seal small DCX automaticl, <b>FFKM</b>	1			7006476



Seal kits **EPDM/PEEK** small diameter DCX3 :

Diameter			DN1/2" US	DN3/4" US	DN1" US
Kit No.			7071353	7071354	7071355
Guide	Description	Qty	Seal reference		
4	Plug small DCX3 manual and automatic PEEK	1	7302954	7302953	7302952
6	Body seal small DCX3, <b>EPDM</b>	1	7006191	7006192	
8	Internal Lantern seal small DCX, <b>EPDM</b>	1			7006191
9	External Lantern seal small DCX automaticl, <b>EPDM</b>	1			7006038

Seal kits **FKM/PEEK** small diameter DCX3 :

Diameter			DN1/2" US	DN3/4" US	DN1" US
Kit No.			7071356	7071357	7071358
Guide	Description	Qty	Seal reference		
4	Plug small DCX3 manual and automatic PEEK	1	7302954	7302953	7302952
6	Body seal small DCX3, <b>FKM</b>	1	7010878	7010879	
8	Internal Lantern seal small DCX, <b>FKM</b>	1			7010878
9	External Lantern seal small DCX automaticl, <b>FKM</b>	1			7006128

Seal kits **VMQ/PEEK** small diameter DCX3 :

Diameter			DN1/2" US	DN3/4" US	DN1" US
Kit No.			7071359	7071360	7071361
Guide	Description	Qty	Seal reference		
4	Plug small DCX3 manual and automatic PEEK	1	7302954	7302953	7302952
6	Body seal small DCX3, <b>VMQ</b>	1	7006189	7006190	
8	Internal Lantern seal small DCX, <b>VMQ</b>	1			7006189
9	External Lantern seal small DCX automaticl, <b>VMQ</b>	1			7006036

Seal kits **FFKM/PEEK** small diameter DCX3 :

Diameter			DN1/2" US	DN3/4" US	DN1" US
Kit No.			7071362	7071363	7071364
Guide	Description	Qty	Seal reference		
4	Plug small DCX3 manual and automatic PEEK	1	7302954	7302953	7302952
6	Body seal small DCX3, <b>FFKM</b>	1	7006421	7006481	
8	Internal Lantern seal small DCX, <b>FFKM</b>	1			7006421
9	External Lantern seal small DCX automaticl, <b>FFKM</b>	1			7006476

Seal kits **EPDM/PFA** small diameter DCX4 :

Diameter			DN1/2" US	DN3/4" US	DN1" US
Kit No.			7070689	7070690	7070691
Guide	Description	Qty	Seal reference		
4	Plug small DCX4 automatic and manual PFA	1	7005771	7005767	7005763
6	Body seal small DCX3, <b>EPDM</b>	1	7006191	7006192	
7	Body seal small DCX4, <b>EPDM</b>	1	7006218		
8	Internal Lantern seal small DCX, <b>EPDM</b>	1			7006191
9	External Lantern seal small DCX automaticl, <b>EPDM</b>	2			7006038

Seal kits **FKM/PFA** small diameter DCX4 :

Diameter			DN1/2" US	DN3/4" US	DN1" US
Kit No.			7070693	7070695	7070696
Guide	Description	Qty	Seal reference		
4	Plug small DCX4 automatic and manual PFA	1	7005771	7005767	7005763
6	Body seal small DCX3, <b>FKM</b>	1	7010878	7010879	
7	Body seal small DCX4, <b>FKM</b>	1	7010885		
8	Internal Lantern seal small DCX, <b>FKM</b>	1			7010878
9	External Lantern seal small DCX automaticl, <b>FKM</b>	2			7006128

Seal kits **VMQ/PFA** small diameter DCX4 :

Diameter			DN1/2" US	DN3/4" US	DN1" US
Kit No.			7070697	7070698	7070699
Guide	Description	Qty	Seal reference		
4	Plug small DCX4 automatic and manual PFA	1	7005771	7005767	7005763
6	Body seal small DCX3, <b>VMQ</b>	1	7006189	7006190	
7	Body seal small DCX4, <b>VMQ</b>	1	7006217		
8	Internal Lantern seal small DCX, <b>VMQ</b>	1			7006189
9	External Lantern seal small DCX automaticl, <b>VMQ</b>	2			7006036

Seal kits **FFKM/PFA** small diameter DCX4 :

Diameter			DN1/2" US	DN3/4" US	DN1" US
Kit No.			7070970	7070971	7070972
Guide	Description	Qty	Seal reference		
4	Plug small DCX4 automatic and manual PFA	1	7005771	7005767	7005763
6	Body seal small DCX3, <b>FFKM</b>	1	7006421	7006481	
7	Body seal small DCX4, <b>FFKM</b>	1	7006430		
8	Internal Lantern seal small DCX, <b>FFKM</b>	1			7006421
9	External Lantern seal small DCX automaticl, <b>FFKM</b>	2			7006476

Seal kits **EPDM/PEEK** small diameter DCX4 :

Diameter			DN1/2" US	DN3/4" US	DN1" US
Kit No.			7071365	7071366	7071367
Guide	Description	Qty	Seal reference		
4	Plug small DCX4 automatic and manual PEEK	1	7302957	7302956	7302955
6	Body seal small DCX3, <b>EPDM</b>	1	7006191	7006192	
7	Body seal small DCX4, <b>EPDM</b>	1	7006218		
8	Internal Lantern seal small DCX, <b>EPDM</b>	1			7006191
9	External Lantern seal small DCX automaticl, <b>EPDM</b>	2			7006038

Seal kits **FKM/PEEK** small diameter DCX4 :

Diameter			DN1/2" US	DN3/4" US	DN1" US
Kit No.			7071368	7071368	7071370
Guide	Description	Qty	Seal reference		
4	Plug small DCX4 automatic and manual PEEK	1	7302957	7302956	7302955
6	Body seal small DCX3, <b>FKM</b>	1	7010878	7010879	
7	Body seal small DCX4, <b>FKM</b>	1	7010885		
8	Internal Lantern seal small DCX, <b>FKM</b>	1			7010878
9	External Lantern seal small DCX automaticl, <b>FKM</b>	2			7006128

Seal kits **VMQ/PEEK** small diameter DCX4 :

Diameter			DN1/2" US	DN3/4" US	DN1" US
Kit No.			7071371	7071372	7071373
Guide	Description	Qty	Seal reference		
4	Plug small DCX4 automatic and manual PEEK	1	7302957	7302956	7302955
6	Body seal small DCX3, <b>VMQ</b>	1	7006189	7006190	
7	Body seal small DCX4, <b>VMQ</b>	1	7006217		
8	Internal Lantern seal small DCX, <b>VMQ</b>	1			7006189
9	External Lantern seal small DCX automaticl, <b>VMQ</b>	2			7006036

Seal kits **FFKM/PEEK** small diameter DCX4 :

Diameter			DN1/2" US	DN3/4" US	DN1" US
Kit No.			7071374	7071375	7071376
Guide	Description	Qty	Seal reference		
4	Plug small DCX4 automatic and manual PEEK	1	7302957	7302956	7302955
6	Body seal small DCX3, <b>FFKM</b>	1	7006421	7006481	
7	Body seal small DCX4, <b>FFKM</b>	1	7006430		
8	Internal Lantern seal small DCX, <b>FFKM</b>	1			7006421
9	External Lantern seal small DCX automaticl, <b>FFKM</b>	2			7006476

Seal kits **FKM/PFA** small diameter DCX3 (1 lantern seal) :

Diameter			DN1/2" US	DN3/4" US	DN1" US
Kit No.					7070683
Guide	Description	Qty	Seal reference		
4	Plug small DCX3 automatic and manual PFA	1			7810836
6	Body seal small DCX3, <b>FKM</b>	1			7006267

Seal kits **FKM/PEEK** small diameter DCX3 (1 lantern seal) :

Diameter			DN1/2" US	DN3/4" US	DN1" US
Kit No.					7071377
Guide	Description	Qty	Seal reference		
4	Plug small DCX3 automatic and manual PEEK	1			7302958
6	Body seal small DCX3, <b>FKM</b>	1			7006267

Seal kits **EPDM** small diameter DCX3 elastomer :

Diameter			DN1/2" US	DN3/4" US	DN1" US
Kit No.			7070973	7070974	7070975
Guide	Description	Qty	Seal reference		
6	Body seal small DCX3, <b>EPDM</b>	1	7006191	7006192	
8	Internal Lantern seal small DCX, <b>EPDM</b>	1			7006191
9	External Lantern seal small DCX automaticl, <b>EPDM</b>	1			7006038
31	Elastomer Plug seal small DCX3, <b>EPDM</b>	1	7006479	7006191	7006011

Seal kits **FKM** small diameter DCX3 elastomer :

Diameter			DN1/2" US	DN3/4" US	DN1" US
Kit No.			7070976	7070977	7070978
Guide	Description	Qty	Seal reference		
6	Body seal small DCX3, <b>FKM</b>	1	7010878	7010879	
8	Internal Lantern seal small DCX, <b>FKM</b>	1			7010878
9	External Lantern seal small DCX automaticl, <b>FKM</b>	1			7006128
31	Elastomer Plug seal small DCX3, <b>FKM</b>	1	7006480	7010878	7010886

Seal kits **FFKM** small diameter DCX3 elastomer :

Diameter			DN1/2" US	DN3/4" US	DN1" US
Kit No.			7070979	7070980	7070981
Guide	Description	Qty	Seal reference		
6	Body seal small DCX3, <b>FFKM</b>	1	7006421	7006481	
8	Internal Lantern seal small DCX, <b>FFKM</b>	1			7006421
9	External Lantern seal small DCX automaticl, <b>FFKM</b>	1			7006476
31	Elastomer Plug seal small DCX3, <b>FFKM</b>	1	7006459	7006421	7006475

Seal kits **EPDM** small diameter DCX4 elastomer :

Diameter			DN1/2" US	DN3/4" US	DN1" US
Kit No.			7070982	7070983	7070984
Guide	Description	Qty	Seal reference		
6	Body seal small DCX3, <b>EPDM</b>	1	7006191	7006192	
7	Body seal small DCX4, <b>EPDM</b>	1	7006218		
8	Internal Lantern seal small DCX, <b>EPDM</b>	1			7006191
9	External Lantern seal small DCX automaticl, <b>EPDM</b>	1			7006038
31	Lower plug elastomer seal small DCX4, <b>EPDM</b>	1	7006479	7006191	7006011
32	Upper plug elastomer seal small DCX4, <b>EPDM</b>	1	7006497	7006191	7006011

Seal kits **FKM** small diameter DCX4 elastomer :

Diameter			DN1/2" US	DN3/4" US	DN1" US
Kit No.			7070985	7070986	7070987
Guide	Description	Qty	Seal reference		
6	Body seal small DCX3, <b>FKM</b>	1	7010878	7010879	
7	Body seal small DCX4, <b>FKM</b>	1	7010885		
8	Internal Lantern seal small DCX, <b>FKM</b>	1			7010878
9	External Lantern seal small DCX automaticl, <b>FKM</b>	1			7006128
31	Lower plug elastomer seal small DCX4, <b>FKM</b>	1	7006480	7010878	7010886
32	Upper plug elastomer seal small DCX4, <b>FKM</b>	1	7006448	7010878	7010886

Seal kits **FFKM** small diameter DCX4 elastomer :

Diameter			DN1/2" US	DN3/4" US	DN1" US
Kit No.			7070988	7070989	7070990
Guide	Description	Qty	Seal reference		
6	Body seal small DCX3, <b>FFKM</b>	1	7006421	7006481	
7	Body seal small DCX4, <b>FFKM</b>	1	7006430		
8	Internal Lantern seal small DCX, <b>FFKM</b>	1			7006421
9	External Lantern seal small DCX automaticl, <b>FFKM</b>	1			7006476
31	Lower plug elastomer seal small DCX4, <b>FFKM</b>	1	7006459	7006421	7006475
32	Upper plug elastomer seal small DCX4, <b>FFKM</b>	1	7006447	7006421	7006475

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