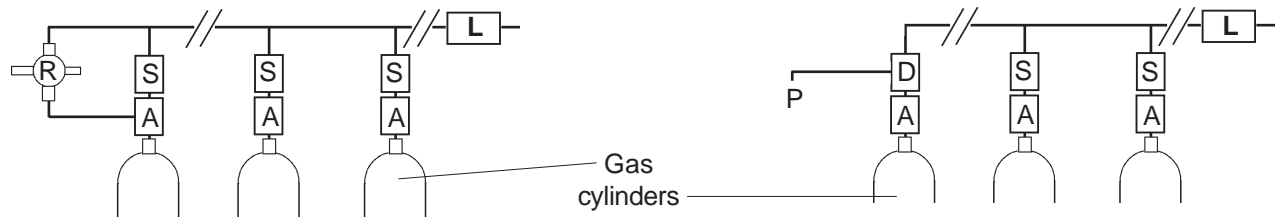


SAFETY NOTE

Before working with release disk valves, make sure that the gas cylinder head valves are closed and pipe lines are unpressurised.

After maintenance, make sure that the system is set to suitable operation mode.

Schematic connection diagrams of release disk valves in typical HI-FOG systems:



R = Release valve D80006 or D80030

D = Delta P valve D80020.A or D80022.A

S = Slave valve D80011.A

A = Adapter D820x5

L = Line valve D80016

P = Activating pressure from previous shot

Spare part kit contents:

V21000 for electric/manual release valve D80006

- 2 pcs Release disk D52010
- 2 pcs O-ring (11,1 x 1,78 NBR70) G01017
- 1 pc Electric actuator D81060

V21020 for line valve D80016

- 1 pc Release disk D81053
- 2 pcs O-ring (22 x 1,5 NBR70) G02033

V21002 for manual release valve D80030

- 1 pc Release disk D52010
- 1 pcs O-ring (11,1 x 1,78 NBR70) G01017

V21013 consists of:

- 1 pc Release disk D81050.B
- 1 pc Release disk D81050.C
- 1 pc O-ring (16 x 1,25 NBR70) G01275
- 2 pcs O-ring (15 x 2 NBR70) G01235

For slave valve D80011.A use:

- 1 pc Release disk D81050.B
- 2 pcs O-ring (15 x 2 NBR70) G01235
- Instructions, see sheet 4

For old slave valve D80011 use:

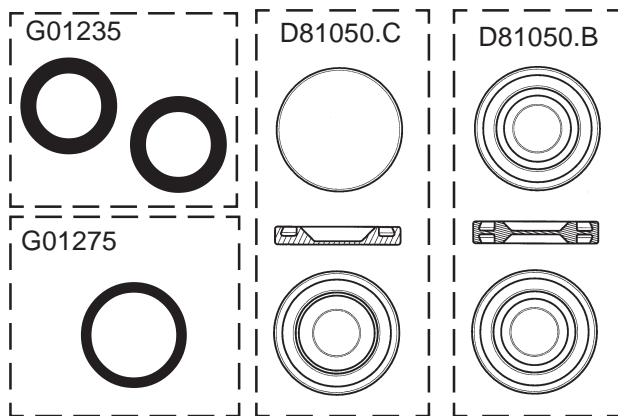
- 1 pc Release disk D81050.C
- 1 pc O-ring (16 x 1,25 NBR70) G01275
- 1 pc O-ring (15 x 2 NBR70) G01235
- Instructions, see sheet 3

For slave delta-P valves D80020.A and D80022.A use:

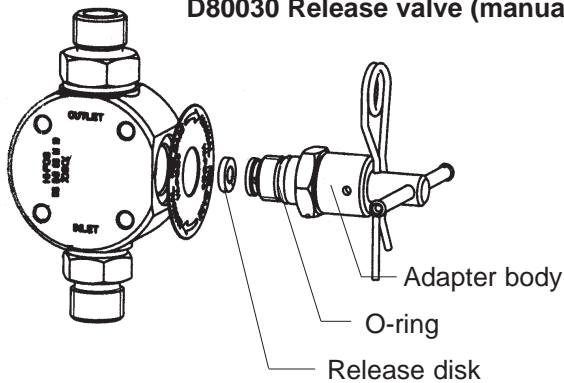
- 1 pc Release disk D81050.B
- 2 pcs O-ring (15 x 2 NBR70) G01235
- Instructions, see sheet 7

For old slave delta-P valves D80020 and D80022 use:

- 1 pc Release disk D81050.C
- 1 pc O-ring (16 x 1,25 NBR70) G01275
- 1 pc O-ring (15 x 2 NBR70) G01235
- Instructions, see sheet 6



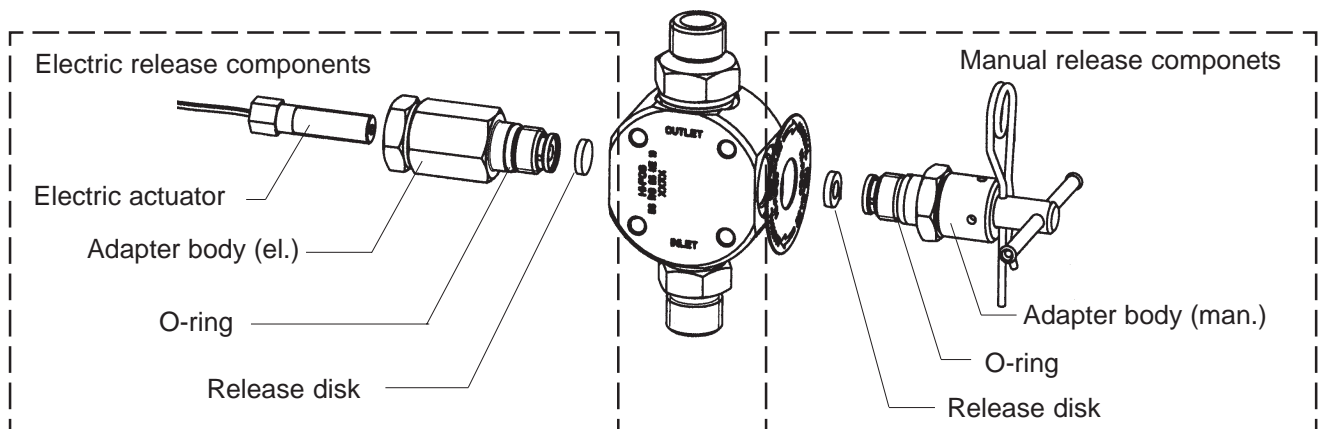
D80030 Release valve (manual release)



Spare part kit V21002 for D80030 consists of:

1 pc	Release disk	D52010
1 pc	O-ring (11,1 x 1,78 NBR70)	G01017

D80006 Release valve (electric and manual release)



Spare part kit V21000 for D80006 consists of:

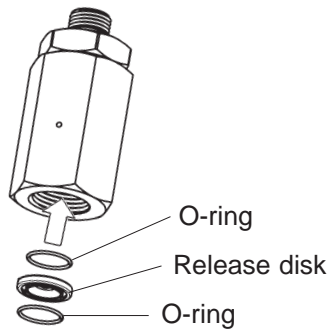
2 pcs	Release disk	D52010
2 pcs	O-ring (11,1 x 1,78 NBR70)	G01017
1 pc	Electric actuator	D81060

Actions after manual release (both models)

1. To change the release disk, unscrew the adapter body.
2. Change O-ring if damaged.
3. Change the release disk. Disk is placed blue color side facing to adapter body.
4. Screw the spindle to the open position and secure it with the pin before assembling the adapter.

Actions after electric release (D80006 only)

1. To change the release disk, unscrew the adapter body.
2. Change O-ring if damaged.
3. Change the release disk. Disk is placed blue color side facing to adapter body
4. Change the electric actuator before assembling adapter.



Note

The old slave valve D80011 has been replaced by the D80011.A. The old D80011 can be identified by the whole length hexagonal body shape.

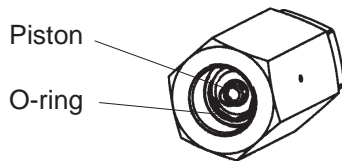
The valves are interchangeable but the spare part kit consists some parts tailored only for either one of the valves.

D80011 shown in drawings in this sheet.

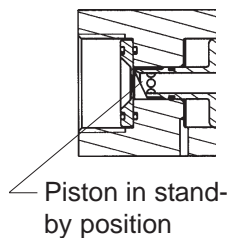
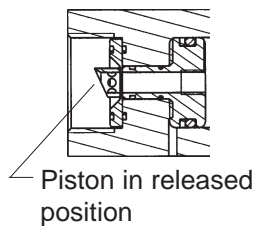
Spare part kit V21013 consists of the following items for D80011:

- | | | | |
|-------|--------------------------|----------|----------------------------------|
| 1 pc | Release disk | D81050.C | for D80011 |
| 1 pc | O-ring (16 x 1,25 NBR70) | G01275 | for groove in the body of D80011 |
| 1 pcs | O-ring (15 x 2 NBR70) | G01235 | for the release disk D81050.C |

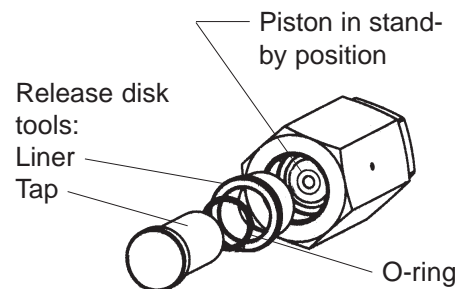
1.



Remove the used release disk and the O-ring and remove the other O-ring from the body. Push the piston to the stand-by position using soft tool like a wooden pencil.



2.



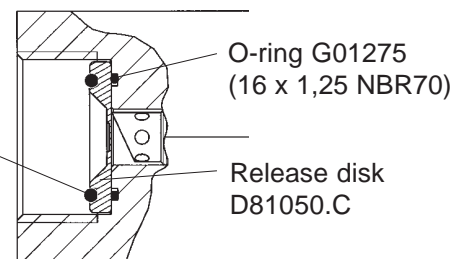
Installing the O-ring G01275 into the valve body:

1. Set the liner into the valve body.
2. Place the O-ring into the groove in valve body, inside the liner.
3. Put the tap inside the liner and push it to the bottom. Turn the tap at least 90 degrees to make sure that the O-ring is properly installed in the groove in the valve body.
4. Remove liner and tap.

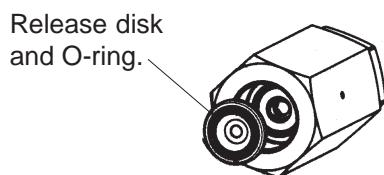
Release disk tool kit, stock code M12070 consists of:

- 1 pc tap
- 1 pc liner

O-ring G01235 (15 x 2 NBR70)



3.

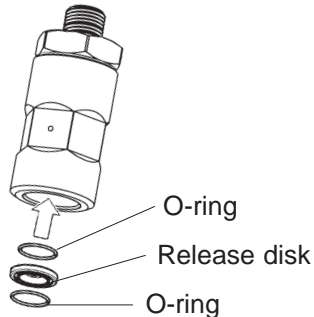


Install the new release disk (with new O-ring G01235) into the valve body (flat side facing to the body). Check that O-ring in the release disk is properly installed.

Resetting release disk slave valve

Stock code D80011.A

1 Nov 2007



Note

The slave valve D80011.A replaces the old D80011. The D80011.A can be identified by partially round, partially hexagonal body shape.

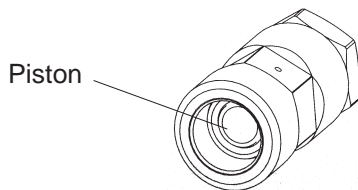
The valves are interchangeable but the spare part kit consists some parts tailored only for either of the valves.

D80011.A shown in drawings.

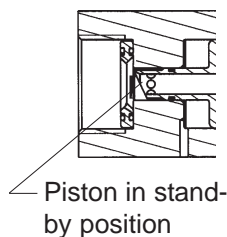
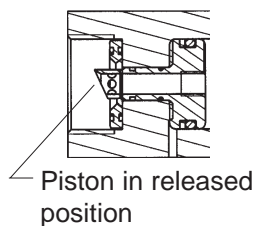
Spare part kit V21013 consists of the following items for D80011.A:

- | | | | |
|-------|-----------------------|----------|-------------------------------|
| 1 pc | Release disk | D81050.B | for D80011.A |
| 2 pcs | O-ring (15 x 2 NBR70) | G01235 | for the release disk D81050.B |

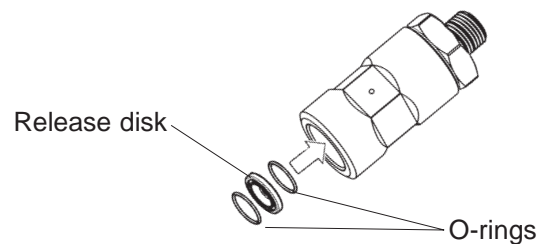
1.



Remove the used release disk and the O-rings from the valve body. Push the piston to the stand-by position using soft tool like a wooden pencil.



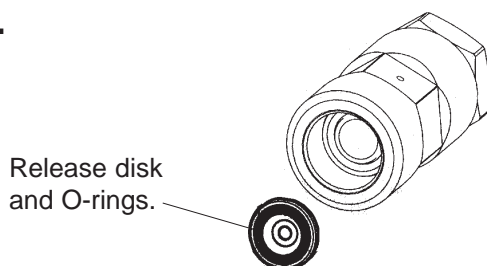
2.



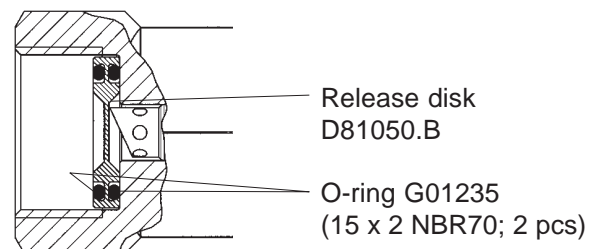
Installing the O-rings G01235 into the grooves in release disk:

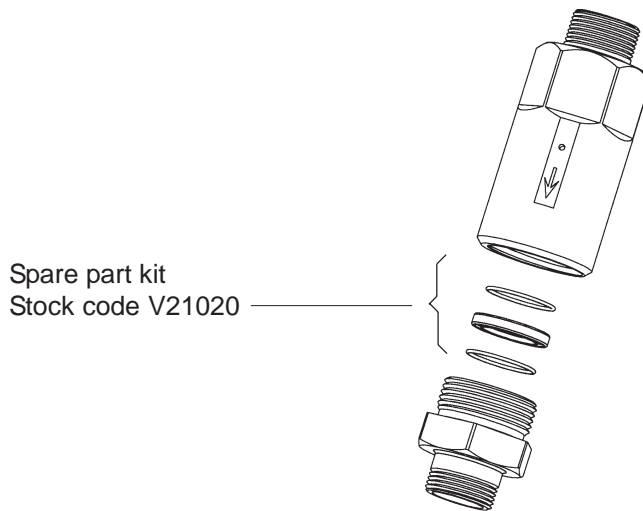
1. Install the O-rings in the grooves in both sides of the release disk.
2. Check that O-rings in the release disk are properly installed.

3.



Install the release disk into the valve body (the release disk is symmetric – either side can face to the valve body).

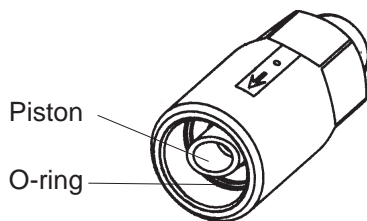




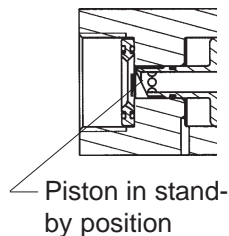
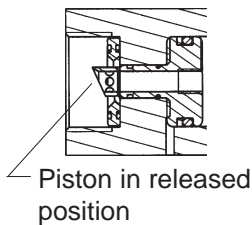
Spare part kit V21020 consists of the following items for D80016:

- 1 pc release disk, stock code D81053
- 2 pcs O-ring (22 x 1,5 NBR70), stock code G02033

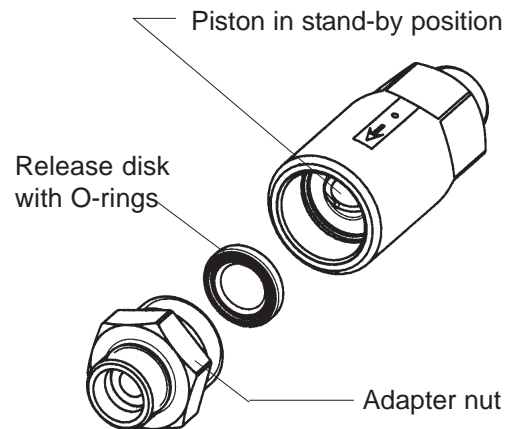
1.



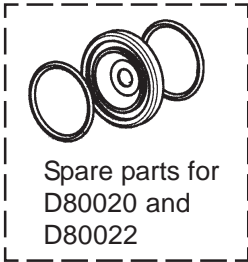
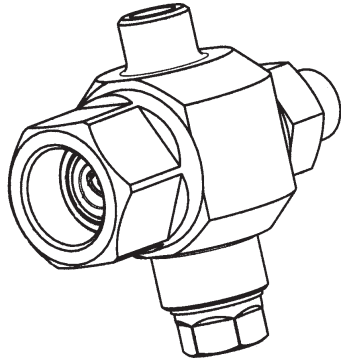
After unscrewing the valve adapter nut, remove used release disk and O-ring. Push the piston to the stand-by position using soft tool like a wooden pencil.



2.



Install the O-rings in the release disk are carefully. Install the release disk into the valve body. Release disk is symmetric and can be installed either side facing to valve body. Tighten the valve adapter nut.



Note

Two versions of delta-P valves have been used.

D80020 and D80022 are old versions replaced by D80020.A and D80022.A. In early versions D80020 and D80022, the O-ring used in the groove in the valve body is G01275 (16 x 1,25 NBR70).

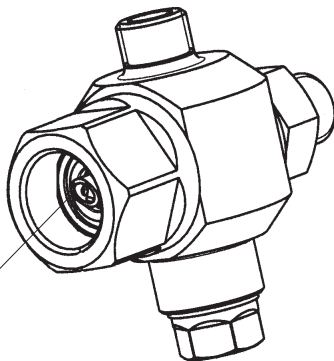
The spare part kit V21013 includes the parts for both early and later version.

Delta-P valve D80020 shown in drawings.

Spare part kit V21013 consists of the following items for D80020 and D80022

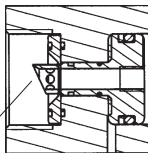
- | | | | |
|-------|--------------------------|----------|---|
| 1 pc | Release disk | D81050.C | for D80020 and D80022 |
| 1 pc | O-ring (16 x 1,25 NBR70) | G01275 | 1 pc for the body D80020 or D80022 only |
| 1 pcs | O-ring (15 x 2 NBR70) | G01235 | 1 pc only for the release disk D81050.C |

1.

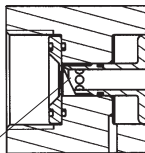


Remove the used release disk and the O-ring and also remove the other O-ring from the body.

Push the piston to the stand-by position using soft tool like a wooden pencil.



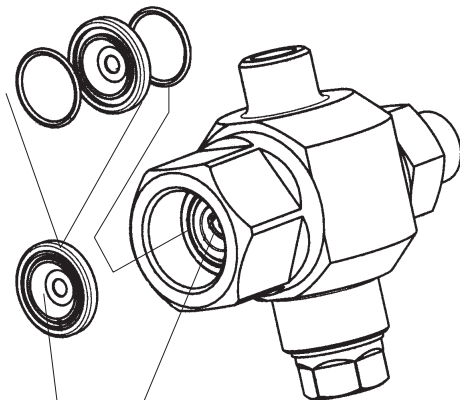
Piston in released position



Piston in stand-by position

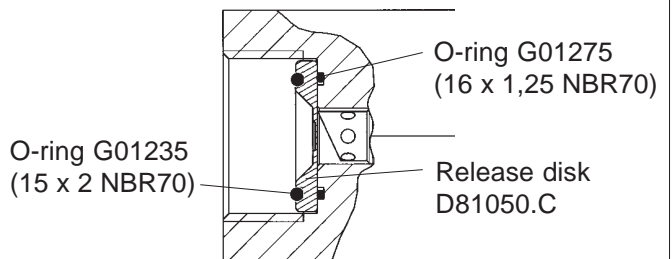
Delta-P valve D80020 shown in drawings

2.

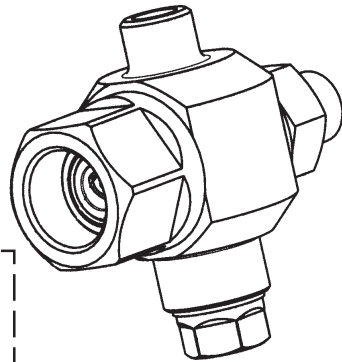


Install the O-ring in the body groove - make sure that the right O-ring is used (G01275). Use Marioff Tool kit M12070 as shown in sheet 3 pict 2.

Then, install the release disk into the valve body (flat side facing to the body). Check that O-ring in the release disk (G01235) is properly installed.



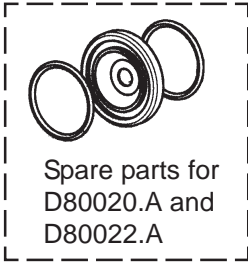
Flat side of the release disk facing to the valve body



Note

In D80020.A and D80022.A the O-rings G01235 (15 x 2 NBR70) are used in both sides of the release disk B81050.B.

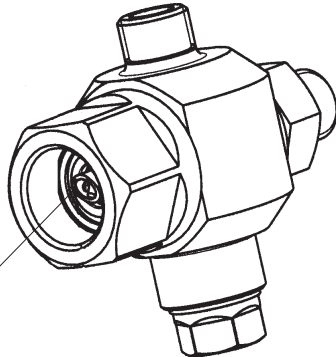
Delta-P valve D80020.A shown in drawings.



Spare part kit V21013 consists of the following items for D80020.A and D80022.A:

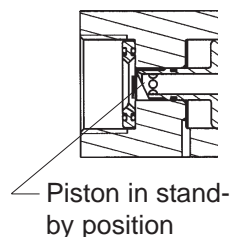
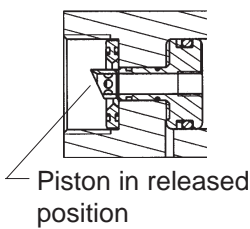
- | | | | |
|-------|-----------------------|----------|----------------------------|
| 1 pc | Release disk | D81050.B | for D80020.A and D80022.A |
| 2 pcs | O-ring (15 x 2 NBR70) | G01235 | 2 pcs for the release disk |

1.



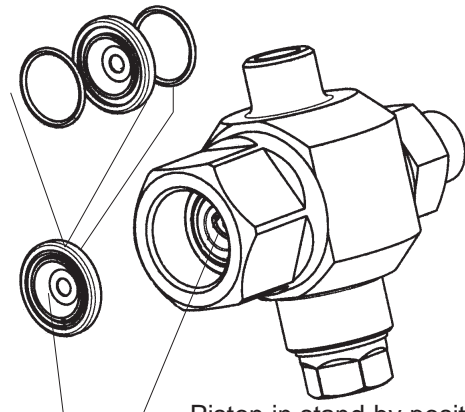
Remove the used release disk with the O-rings.

Push the piston to the stand-by position using soft tool like a wooden pencil.



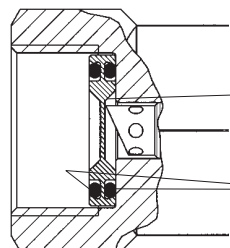
Delta-P valve D80020.A shown in drawings

2.



Install the O-rings in the body grooves - make sure that the right O-rings are used (G01235).

Check that O-rings in the release disk (G01235) are properly installed.



Release disk is symmetric.

Release disk D81050.B

O-ring G01235 (15 x 2 NBR70; 2 pcs)