

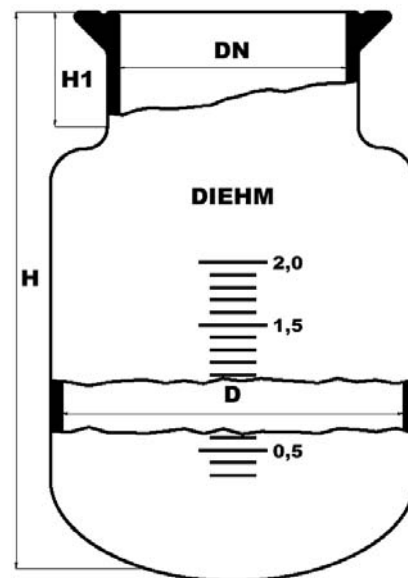
## Reaction vessels with dished bottom

These vessels up to DN 200 are provided with a Schott laboratory flange with groove.

Vessels DN 300 or larger are provided with a technical flange type Schott.

Different flanges are also available

Cap. liters	DN mm	D mm	H mm	H1 mm	Art.no.
0,1	60	65	110	50	33 001 02
0,25	60	65	160	50	33 001 04
0,5	60	65	230	50	33 001 08
0,25	100	100	130	50	33 001 06
0,5	100	100	170	50	33 001 10
1,0	100	100	230	50	33 001 13
2,0	100	150	245	50	33 001 18
3,0	100	150	300	50	33 001 24
4,0	100	150	360	50	33 001 30
1,0	120	120	200	60	33 001 15
2,0	120	120	290	60	33 001 19
3,0	120	150	310	60	33 001 25
4,0	120	150	370	60	33 001 35
5,0	120	180	340	60	33 001 43
6,0	120	180	380	60	33 001 52
10,0	120	240	390	60	33 001 61
2,0	150	150	220	50	33 001 21
3,0	150	150	280	50	33 001 27
4,0	150	150	335	50	33 001 36
5,0	150	180	330	50	33 001 45
6,0	150	180	370	50	33 001 53
6,0	150	180	290	50	33 001 54
10,0	150	240	350	50	33 001 64
15,0	150	240	490	50	33 001 72
20,0	150	260	535	50	33 001 81
4,0	200	200	270	70	33 001 39
5,0	200	200	310	70	33 001 48
6,0	200	200	345	70	33 001 57
10,0	200	200	470	70	33 001 66
10,0	200	240	390	70	33 001 70
10,0	200	260	360	70	33 001 71
15,0	200	260	460	70	33 001 78
20,0	200	260	550	70	33 001 87
30,0	200	300	610	70	33 001 89
20	300	300	500	100	33 001 86
25	300	300	550	100	33 001 95
30	300	300	610	100	33 001 96
50	300	300	900	100	33 001 98
50	300	355	760	100	33 001 99
50	400	400	550	100	33 001 050
100	400	460	800	100	33 001 100
100	450	460	800	100	33 001 102

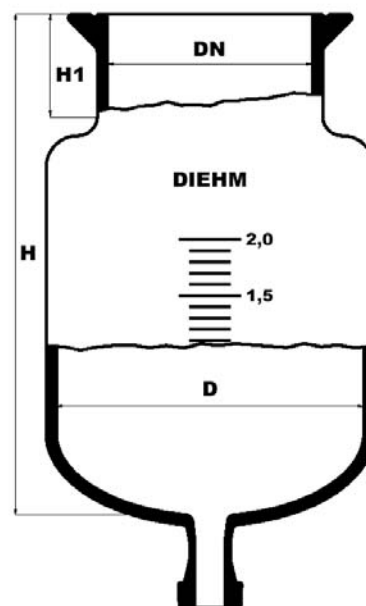


## Reaction vessels with dished bottom and bottom flange

These vessels up to DN 200 are provided with a Schott laboratory flange with groove.

Vessels DN 300 or larger are provided with a technical flange type Schott.

Different flanges are also available



Cap. liters	DN mm	D mm	H mm	H1 mm	Art.no.
0,1	60	65	110	50	33 003 02
0,25	60	65	160	50	33 003 04
0,5	60	65	230	50	33 003 08
0,25	100	100	130	50	33 003 06
0,5	100	100	170	50	33 003 10
1,0	100	100	230	50	33 003 13
2,0	100	150	245	50	33 003 18
3,0	100	150	300	50	33 003 24
4,0	100	150	360	50	33 003 30
1,0	120	120	200	60	33 003 15
2,0	120	120	290	60	33 003 19
3,0	120	150	310	60	33 003 25
4,0	120	150	370	60	33 003 35
5,0	120	180	340	60	33 003 43
6,0	120	180	380	60	33 003 52
10,0	120	240	390	60	33 003 61
2,0	150	150	220	50	33 003 21
3,0	150	150	280	50	33 003 27
4,0	150	150	335	50	33 003 36
5,0	150	180	330	50	33 003 45
6,0	150	180	370	50	33 003 53
6,0	150	205	290	50	33 003 54
10,0	150	240	350	50	33 003 64
15,0	150	240	490	50	33 003 72
20,0	150	260	535	50	33 003 81
4,0	200	200	270	70	33 003 39
5,0	200	200	310	70	33 003 48
6,0	200	200	345	70	33 003 57
10,0	200	200	470	70	33 003 66
10,0	200	240	390	70	33 003 70
10,0	200	260	360	70	33 003 71
15,0	200	260	460	70	33 003 78
20,0	200	260	550	70	33 003 87
30,0	200	300	610	70	33 003 89
20	300	300	500	100	33 003 86
25	300	300	550	100	33 003 95
30	300	300	610	100	33 003 96
50	300	300	900	100	33 003 98
50	300	355	760	100	33 003 99
50	400	400	550	100	33 003 050
100	400	460	800	100	33 003 100
100	450	460	800	100	33 003 102

This type of vessel is provided with a bottom flange DN 15 plane type Schott. Other flanges or screw connections are also available at no extra charge.

For usage of heating covers the vessels can be used with a longer flange.

#### order number informations:

The order number will be with KF 15; GL 25; KS 35.... completed.

#### Example:

A reactor DN 100 with 1 litre capacity and a outflow flange KF 15 have the order number:

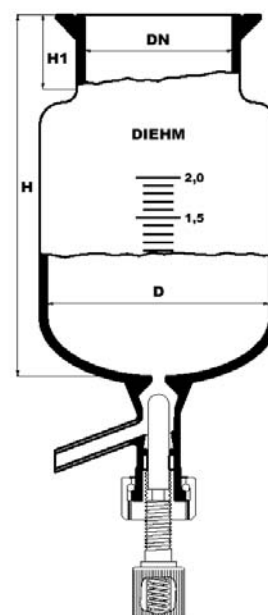
33 003 13 KF 15

## Reaction vessels with dished bottom and bottom valve

These vessels up to DN 200 are provided with a Schott laboratory flange with groove.

Vessels DN 300 or larger are provided with a technical flange type Schott.

Different flanges are also available



Cap. liters	DN mm	D mm	H mm	H1 mm	valve mm	Art.no.
0,1	60	65	110	50	10	33 004 02
0,25	60	65	160	50	10	33 004 04
0,5	60	65	230	50	10	33 004 08
0,25	100	100	130	50	10	33 004 06
0,5	100	100	170	50	10	33 004 10
1,0	100	100	230	50	10	33 004 13
2,0	100	150	245	50	10	33 004 18
3,0	100	150	300	50	10	33 004 24
4,0	100	150	360	50	10	33 004 30
1,0	120	120	200	60	10	33 004 15
2,0	120	120	290	60	10	33 004 19
3,0	120	150	310	60	10	33 004 25
4,0	120	150	370	60	10	33 004 35
5,0	120	180	340	60	10	33 004 43
6,0	120	180	380	60	10	33 004 52
10,0	120	240	390	60	16	33 004 61
2,0	150	150	220	50	10	33 004 21
3,0	150	150	280	50	10	33 004 27
4,0	150	150	335	50	10	33 004 36
5,0	150	180	330	50	10	33 004 45
6,0	150	180	370	50	10	33 004 53
6,0	150	205	290	50	10	33 004 54
10,0	150	240	350	50	16	33 004 64
15,0	150	240	490	50	20	33 004 72
20,0	150	260	535	50	20	33 004 81
4,0	200	200	270	70	10	33 004 39
5,0	200	200	310	70	10	33 004 48
6,0	200	200	345	70	10	33 004 57
10,0	200	200	470	70	16	33 004 66
10,0	200	240	390	70	16	33 004 70
10,0	200	260	360	70	16	33 004 71
15,0	200	260	460	70	20	33 004 78
20,0	200	260	550	70	20	33 004 87
30,0	200	300	610	70	20	33 004 89
20	300	300	500	100	20	33 004 86
25	300	300	550	100	25	33 004 95
30	300	300	610	100	25	33 004 96
50	300	300	900	100	25	33 004 98
50	300	355	760	100	25	33 004 99
50	400	400	550	110	25	33 004 050
100	400	460	800	110	25	33 004 100
100	400	460	800	110	50	33 004 101
100	450	460	800	110	25	33 004 102
100	450	460	800	110	50	33 004 103

The valve is designed so that liquid rests flow through without leaving deposits acc. **GMP**. It is also designed with a spring loaded stopper to prevent leakage caused by expansion and contraction. As alternative option we have 3 different stoppers for example with Pt100 sensor. All variations are available with pneumatic cylinders.

#### order number informations:

art. no. + Por. + valve + outflow

**Example:** filter vessel DN 150, 3 litre, filter 16 - 40 µm (Por. 3), valve 16 mm, outflow KF 25

#### order number:

33 004 27 3 V16 KF25

## Reaction vessels with glass filter plate and bottom flange

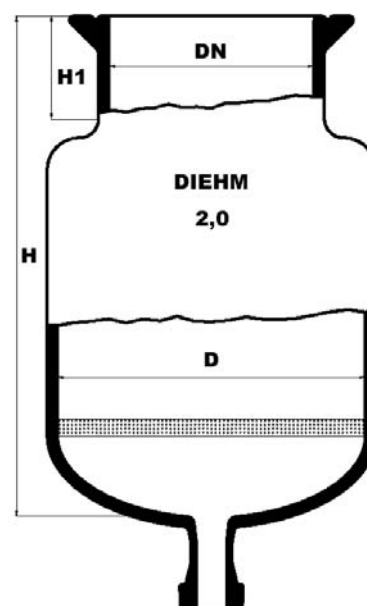
These vessels up to DN 200 are provided with a Schott laboratory flange with groove.

Vessels DN 300 or larger are provided with a technical flange type Schott.

Different flanges are also available

This type of vessel is provided with a bottom flange DN 15 plane type Schott. Other flanges or screw connections are also available at no extra charge.

For usage of heating covers the vessels can be used with a longer flange.



The article no. must be completed with the porosity of the glass filter disc.

### pore sizes :

Por. 0 =	160 - 250 µm
Por. 1 =	100 - 160 µm
Por. 2 =	40 - 100 µm
Por. 3 =	16 - 40 µm
Por. 4 =	10 - 16 µm
Por. 5 =	1,0 - 1,6 µm

### order number informations:

Art.no. + por. + outflow

**Example:** Filter vessel DN 150, 3 litre, filter 16 - 40 µm (Por. 3), outflow KF 25

### order number:

33 011 27 3 KF25

Cap. liters	DN mm	D mm	H mm	H1 mm	Art.no.
0,1	60	65	110	50	33 011 02
0,25	60	65	160	50	33 011 04
0,5	60	65	230	50	33 011 08
0,25	100	100	130	50	33 011 06
0,5	100	100	170	50	33 011 10
1,0	100	100	230	50	33 011 13
2,0	100	150	245	50	33 011 18
3,0	100	150	300	50	33 011 24
4,0	100	150	360	50	33 011 30
1,0	120	120	200	60	33 011 15
2,0	120	120	290	60	33 011 19
3,0	120	150	310	60	33 011 25
4,0	120	150	370	60	33 011 35
5,0	120	180	340	60	33 011 43
6,0	120	180	380	60	33 011 52
2,0	150	150	220	50	33 011 21
3,0	150	150	280	50	33 011 27
4,0	150	150	335	50	33 011 36
5,0	150	180	330	50	33 011 45
6,0	150	180	370	50	33 011 53
10,0	150	200	470	50	33 011 62
4,0	200	200	270	70	33 011 39
5,0	200	200	310	70	33 011 48
6,0	200	200	345	70	33 011 57
10,0	200	200	470	70	33 011 66
15,0	200	200	630	70	33 011 75
20,0	200	200	790	70	33 011 84

## Reaction vessel with glass filter plate and bottom valve

These vessels up to DN 200 are provided with a Schott laboratory flange with groove.

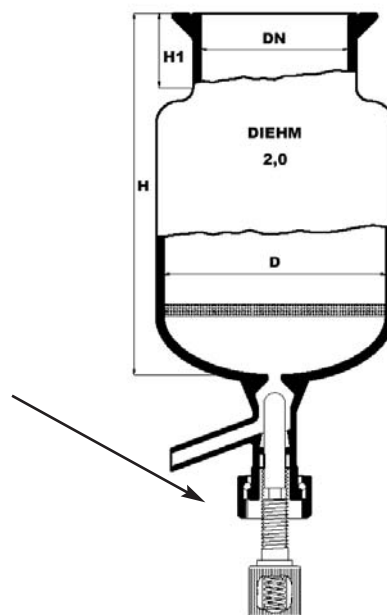
Vessels DN 300 or larger are provided with a technical flange type Schott.

Different flanges are also available

The valve is designed so that liquid rests flow through without leaving deposits. It is also designed with a spring loaded stopper to prevent leakage caused by expansion and contraction.

As alternative option we have 3 different stoppers for example with Pt100 sensor.

All variations are available with pneumatic cylinders.



Cap. liters	DN mm	D mm	H mm	H1 mm	valve mm	Art.no.
0,1	60	65	110	50	10	33 012 02
0,25	60	65	160	50	10	33 012 04
0,5	60	65	230	50	10	33 012 08
0,25	100	100	130	50	10	33 012 06
0,5	100	100	170	50	10	33 012 10
1,0	100	100	230	50	10	33 012 13
2,0	100	150	245	50	10	33 012 18
3,0	100	150	300	50	10	33 012 24
4,0	100	150	360	50	10	33 012 30
1,0	120	120	200	60	10	33 012 15
2,0	120	120	290	60	10	33 012 19
3,0	120	150	310	60	10	33 012 25
4,0	120	150	370	60	10	33 012 35
5,0	120	180	340	60	10	33 012 43
6,0	120	180	380	60	10	33 012 52
2,0	150	150	220	50	10	33 012 21
3,0	150	150	280	50	10	33 012 27
4,0	150	150	335	50	10	33 012 36
5,0	150	180	330	50	10	33 012 45
6,0	150	180	370	50	10	33 012 53
10,0	150	200	470	50	16	33 012 62
4,0	200	200	270	70	10	33 012 39
5,0	200	200	310	70	10	33 012 48
6,0	200	200	345	70	10	33 012 57
10,0	200	200	470	70	16	33 012 66
15,0	200	200	630	70	16	33 012 75
20,0	200	200	790	70	16	33 012 84

The article no. must be completed with the porosity of the glass filter disc.

### pore sizes :

Por. 0 =	160 - 250 µm
Por. 1 =	100 - 160 µm
Por. 2 =	40 - 100 µm
Por. 3 =	16 - 40 µm
Por. 4 =	10 - 16 µm
Por. 5 =	1,0 - 1,6 µm

### order number informations:

art. no. + Por. + valve + outflow

**Example:** filter vessel DN 150, 3 litre, filter 16 - 40 µm (Por. 3), valve 16 mm, outflow KF 25

### order number:

33 012 27 3 V16 KF25

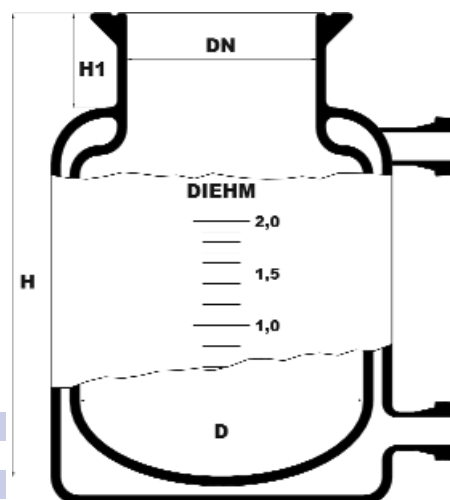
# Thermostatic reaction vessel

These vessels up to DN 200 are provided with a Schott laboratory flange with groove.

Vessels DN 300 or larger are provided with a technical flange type Schott. Different flanges are also available

The thermostatic connections are standard DN 15 plan type Schott.

The vessels can also be provided with GL18 screw tubes and plastic hose connections 10 mm at no extra charge.



Cap. liters	DN mm	D mm	H mm	H1 mm	Art.no.
0,1	60	65	110	50	33 102 02
0,25	60	65	160	50	33 102 04
0,5	60	65	230	50	33 102 08
0,25	100	100	130	50	33 102 06
0,5	100	100	170	50	33 102 10
1,0	100	100	230	50	33 102 13
2,0	100	150	245	50	33 102 18
3,0	100	150	300	50	33 102 24
4,0	100	150	360	50	33 102 30
1,0	120	120	200	60	33 102 15
2,0	120	120	290	60	33 102 19
3,0	120	150	310	60	33 102 25
4,0	120	150	370	60	33 102 35
5,0	120	180	340	60	33 102 43
6,0	120	180	380	60	33 102 52
10,0	120	240	390	60	33 102 61
2,0	150	150	220	50	33 102 21
3,0	150	150	280	50	33 102 27
4,0	150	150	335	50	33 102 36
5,0	150	180	330	50	33 102 45
6,0	150	180	370	50	33 102 53
10,0	150	240	370	50	33 102 64
15,0	150	240	490	50	33 102 72
20,0	150	260	535	50	33 102 81
4,0	200	200	270	70	33 102 39
5,0	200	200	310	70	33 102 48
6,0	200	200	345	70	33 102 57
10,0	200	200	470	70	33 102 66
10,0	200	240	390	70	33 102 70
10,0	200	260	350	70	33 102 71
15,0	200	260	460	70	33 102 78
20,0	200	260	550	70	33 102 87
30,0	200	300	610	70	33 102 89
20	300	300	500	100	33 102 86
25	300	300	550	100	33 102 95
30	300	300	610	100	33 102 96
50	300	300	900	100	33 102 98
50	300	355	760	100	33 102 99
50	400	400	550	100	33 102 050
100	400	460	800	100	33 102 100
100	450	460	800	100	33 102 102

## order number informations:

The order number will be completed by the desired thermostatic connection.

## Example:

Vessel DN 150, 3 litre, thermostatic connection KF 15

## order number:

33 102 27 KF 15

Hoseconnection for hose 12mm dia.



18 840 1512

Hoseconnection for metal hose M16 x 1



18 840 1516

## Suitable sealings

Silicone O-ring, seamless  
FEP coated

Art.no. F2922515

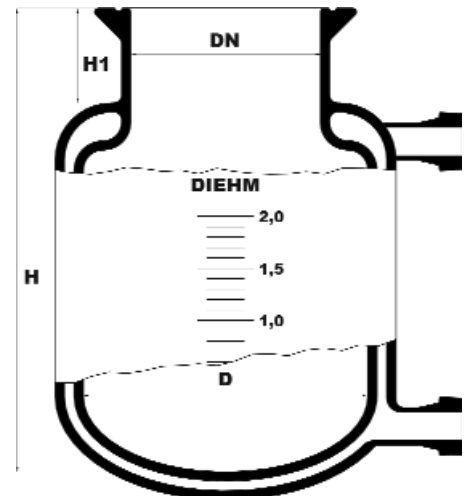
# Thermostatic reaction vessel, cylindrical with round bottom

These vessels up to DN 200 are provided with a Schott laboratory flange with groove.

Vessels DN 300 or larger are provided with a technical flange type Schott. Different flanges are also available

The thermostatic connections are standard DN 15 plan type Schott.

The vessels can also be provided with GL18 screw tubes and plastic hose connections 10 mm at no extra charge.



Cap. liters	DN mm	D mm	H mm	H1 mm	Art.no.
0,1	60	65	110	50	33 103 02
0,25	60	65	160	50	33 103 04
0,5	60	65	230	50	33 103 08
0,25	100	100	130	50	33 103 06
0,5	100	100	170	50	33 103 10
1,0	100	100	230	50	33 103 13
2,0	100	150	245	50	33 103 18
3,0	100	150	300	50	33 103 24
4,0	100	150	360	50	33 103 30
1,0	120	120	200	60	33 103 15
2,0	120	120	290	60	33 103 19
3,0	120	150	310	60	33 103 25
4,0	120	150	370	60	33 103 35
5,0	120	180	340	60	33 103 43
6,0	120	180	380	60	33 103 52
10,0	120	240	390	60	33 103 61
2,0	150	150	220	50	33 103 21
3,0	150	150	280	50	33 103 27
4,0	150	150	335	50	33 103 36
5,0	150	180	330	50	33 103 45
6,0	150	180	370	50	33 103 53
10,0	150	240	370	50	33 103 64
15,0	150	240	490	50	33 103 72
20,0	150	260	535	50	33 103 81
4,0	200	200	270	70	33 103 39
5,0	200	200	310	70	33 103 48
6,0	200	200	345	70	33 103 57
10,0	200	200	470	70	33 103 66
10,0	200	240	390	70	33 103 70
10,0	200	260	350	70	33 103 71
15,0	200	260	460	70	33 103 78
20,0	200	260	550	70	33 103 87
30,0	200	300	610	70	33 103 89
20	300	300	500	100	33 103 86
25	300	300	550	100	33 103 95
30	300	300	610	100	33 103 96
50	300	300	900	100	33 103 98
50	300	355	760	100	33 103 99
50	400	400	550	100	33 103 050
100	400	460	800	100	33 103 100
100	450	460	800	100	33 103 102

## order number informations:

The order number will be completed by the desired thermostatic connection.

## Example:

Vessel DN 150, 3 litre, thermostatic connection KF 15

## order number:

33 103 27 KF 15

## Hoseconnection for hose 12mm dia.



18 840 1512

## Hoseconnection for metal hose M16 x 1



18 840 1516

## Suitable sealings

Silicone O-ring, seamless FEP coated

Art.no. F2922515

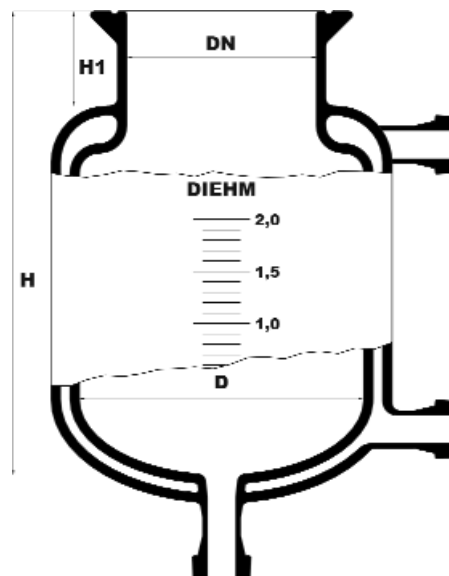
# Thermostatic reaction vessel with bottom flange

These vessels up to DN 200 are provided with a Schott laboratory flange with groove

Vessels DN 300 or larger are provided with a technical flange type Schott.  
Different flanges are also available

The thermostatic connections are standard DN 15 plan type Schott.

The vessels can also be provided with GL18 screw tubes and plastic hose connections 10 mm at no extra charge.



This type of vessel is provided with a bottom flange DN 15 plane type Schott

Other flanges or screw connections are also available at no extra charge.

#### order number informations:

The order number will be completed by the desired thermostatic connection and Bottom flange.

#### Example:

Vessel DN 150, 3 litre, thermostatic connection KF 15, Bottom flange GL 25.

#### order number:

33 111 27 KF15 GL25

#### Hoseconnection for metal hose M16 x 1



18 840 1516

#### Suitable sealings

Silicone O-ring, seamless

FEP coated

Art.no. F2922515

Cap. liters	DN mm	D mm	H mm	H1 mm	Art.no.
0,1	60	65	110	50	33 111 02
0,25	60	65	160	50	33 111 04
0,5	60	65	230	50	33 111 08
0,25	100	100	130	50	33 111 06
0,5	100	100	170	50	33 111 10
1,0	100	100	230	50	33 111 13
2,0	100	150	245	50	33 111 18
3,0	100	150	300	50	33 111 24
4,0	100	150	360	50	33 111 30
1,0	120	120	200	60	33 111 15
2,0	120	120	290	60	33 111 19
3,0	120	150	310	60	33 111 25
4,0	120	150	370	60	33 111 35
5,0	120	180	340	60	33 111 43
6,0	120	180	380	60	33 111 52
10,0	120	240	390	60	33 111 61
2,0	150	150	220	50	33 111 21
3,0	150	150	280	50	33 111 27
4,0	150	150	335	50	33 111 36
5,0	150	180	330	50	33 111 45
6,0	150	180	370	50	33 111 53
10,0	150	240	370	50	33 111 64
15,0	150	240	490	50	33 111 72
20,0	150	260	535	50	33 111 81
4,0	200	200	270	70	33 111 39
5,0	200	200	310	70	33 111 48
6,0	200	200	345	70	33 111 57
10,0	200	200	470	70	33 111 66
10,0	200	240	390	70	33 111 70
10,0	200	260	350	70	33 111 71
15,0	200	260	460	70	33 111 78
20,0	200	260	550	70	33 111 87
30,0	200	300	610	70	33 111 89
20	300	300	500	100	33 111 86
25	300	300	550	100	33 111 95
30	300	300	610	100	33 111 96
50	300	300	900	100	33 111 98
50	300	355	760	100	33 111 99
50	400	400	550	100	33 111 050
100	400	460	800	100	33 111 100 OR
100	400	460	800	100	33 111 101 OR
100	450	460	800	100	33 111 102 OR
100	450	460	800	100	33 111 103 OR



# Thermostatic reaction vessel with bottom valve

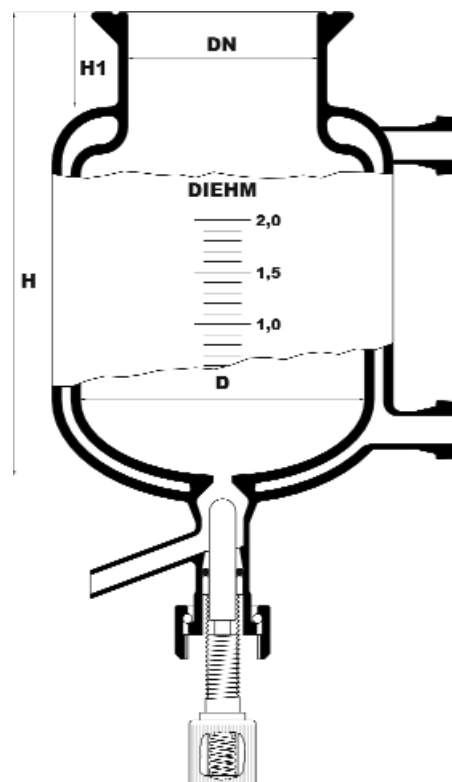
These vessels up to DN 200 are provided with a Schott laboratory flange with groove

Vessels DN 300 or larger are provided with a technical flange type Schott.

Different flanges are also available

The thermostatic connections are standard DN 15 plan type Schott.

The vessels can also be provided with GL18 screw tubes and plastic hose connections 10 mm at no extra charge.



The valve is designed so that liquid rests flow through without leaving deposits acc. **GMP**. It is also designed with a spring loaded stopper to prevent leakage caused by expansion and contraction. As alternative option we have 3 different stoppers for example with Pt100 sensor.

All variations are available with pneumatic cylinders.

#### order number informations:

The order number will be completed by the desired thermostatic connection and the bottom valve.

#### Example:

Vessel DN 150, 3 litre, thermostatic connection KF 15, bottom valve 10 mm

#### order number:

33 111 27 KF15 V10

#### Hoseconnection for hose 12mm dia.



18 840 1512

#### Suitable sealings

Silicone O-ring, seamless  
FEP coated

Art.no. F2922515

Cap. liters	DN mm	D mm	H mm	H1 mm	valve mm	Art.no.
0.1	60	65	110	50	10	33 111 02
0.25	60	65	160	50	10	33 111 04
0.5	60	65	230	50	10	33 111 08
0.25	100	100	130	50	10	33 111 06
0.5	100	100	170	50	10	33 111 10
1.0	100	100	230	50	10	33 111 13
2.0	100	150	245	50	10	33 111 18
3.0	100	150	300	50	10	33 111 24
4.0	100	150	360	50	10	33 111 30
1.0	120	120	200	60	10	33 111 15
2.0	120	120	290	60	10	33 111 19
3.0	120	150	310	60	10	33 111 25
4.0	120	150	370	60	10	33 111 35
5.0	120	180	340	60	10	33 111 43
6.0	120	180	380	60	10	33 111 52
10.0	120	240	390	60	16	33 111 61
2.0	150	150	220	50	10	33 111 21
3.0	150	150	280	50	10	33 111 27
4.0	150	150	335	50	10	33 111 36
5.0	150	180	330	50	10	33 111 45
6.0	150	205	290	50	10	33 111 54
10.0	150	230	380	50	16	33 111 63
10.0	150	240	370	50	16	33 111 64
15.0	150	240	490	50	20	33 111 72
20.0	150	260	535	50	20	33 111 81
6.0	200	200	345	70	10	33 111 57
10.0	200	230	400	70	16	33 111 69
10.0	200	240	390	70	16	33 111 70
10.0	200	260	350	70	16	33 111 71
15.0	200	260	420	70	20	33 111 78
20.0	200	260	550	70	20	33 111 87
30.0	200	300	610	70	20	33 111 89
20	300	300	500	100	20	33 111 86
25	300	300	540	100	20	33 111 95
30	300	300	610	100	25	33 111 96
50	300	300	900	100	25	33 111 98
50	300	355	760	100	25	33 111 99
50	400	400	550	100	25	33 111 050
100	400	460	800	100	25	33 111 100 OR
100	400	460	800	100	50	33 111 101 OR
100	450	460	800	100	25	33 111 102 OR
100	450	460	800	100	50	33 111 103 OR

# Special thermostatic vessel with bottom valve

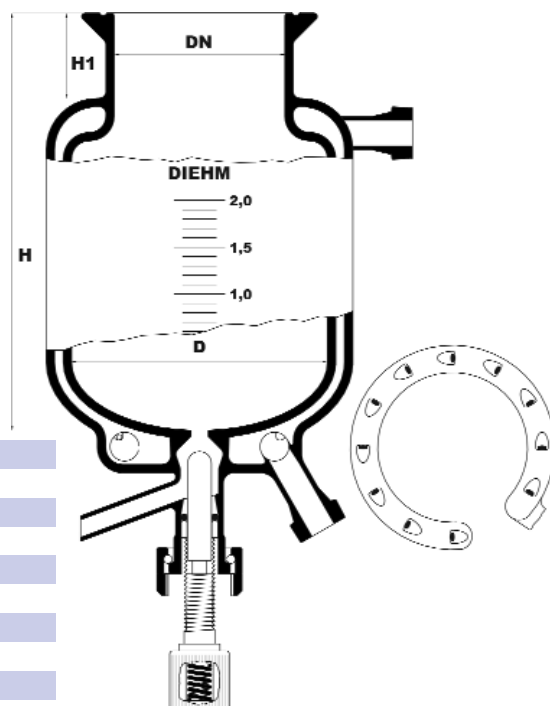
These vessels up to DN 200 are provided with a Schott laboratory flange with groove

Vessels DN 300 or larger are provided with a technical flange type Schott.

Different flanges are also available

The thermostatic connections are standard DN 15 plan type Schott.

The vessels can also be provided with GL18 screw tubes and plastic hose connections 10 mm at no extra charge.



The valve is designed so that liquid rests flow through without leaving deposits acc **GMP**. It is also designed with a spring loaded stopper to prevent leakage caused by expansion and contraction. As alternative option we have 3 different stoppers for example with Pt100 sensor.

All variations are available with pneumatic cylinders.

#### order number informations:

The order number will be completed by the desired thermostatic connection and the bottom valve.

#### Example:

Vessel DN 150, 3 litre, thermostatic connection KF 15, bottom valve 10 mm

#### order number:

33 115 27 KF15 V10

Cap. liters	DN mm	D mm	H mm	H1 mm	valve mm	Art.no.
0,1	60	65	110	50	10	33 115 02
0,25	60	65	160	50	10	33 115 04
0,5	60	65	230	50	10	33 115 08
0,25	100	100	130	50	10	33 115 06
0,5	100	100	170	50	10	33 115 10
1,0	100	100	230	50	10	33 115 13
2,0	100	150	245	50	10	33 115 18
3,0	100	150	300	50	10	33 115 24
4,0	100	150	360	50	10	33 115 30
1,0	120	120	200	60	10	33 115 15
2,0	120	120	290	60	10	33 115 19
3,0	120	150	310	60	10	33 115 25
4,0	120	150	370	60	10	33 115 35
5,0	120	180	340	60	10	33 115 43
6,0	120	180	380	60	10	33 115 52
10,0	120	240	390	60	16	33 115 61
2,0	150	150	220	50	10	33 115 21
3,0	150	150	280	50	10	33 115 27
4,0	150	150	335	50	10	33 115 36
5,0	150	180	330	50	10	33 115 45
6,0	150	180	370	50	10	33 115 53
10,0	150	240	370	50	16	33 115 64
15,0	150	240	490	50	20	33 115 72
20,0	150	260	535	50	20	33 115 81
4,0	200	200	270	70	10	33 115 39
5,0	200	200	310	70	10	33 115 48
6,0	200	200	345	70	10	33 115 57
10,0	200	200	470	70	16	33 115 66
10,0	200	240	390	70	16	33 115 70
10,0	200	260	350	70	16	33 115 71
15,0	200	260	460	70	20	33 115 78
20,0	200	260	550	70	20	33 115 87
30,0	200	300	610	70	20	33 115 89
20	300	300	500	100	20	33 115 86
25	300	300	550	100	25	33 115 95
30	300	300	610	100	25	33 115 96
50	300	300	900	100	25	33 115 98
50	300	355	760	100	25	33 115 99
50	400	400	550	100	25	33 115 050
100	400	460	800	100	25	33 115 100OR
100	400	460	800	100	50	33 115 101OR
100	450	460	800	100	25	33 115 102OR
100	450	460	800	100	50	33 115 103OR

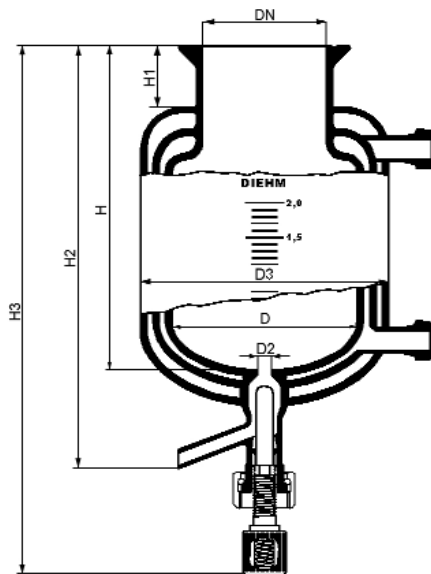
#### Hoseconnection for metal hose M16 x 1



18 840 1516

## Reaction vessels with tempering jacket and vacuum jacket (triple jacket)

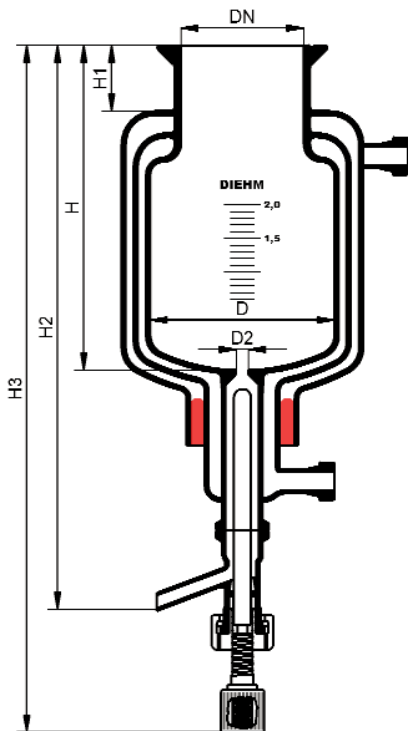
Temperature range - 20 to 60°C. Max. ΔT 40K.



Capacity litre	DN mm	DH mm	H mm	H mm	Art.no.
0,1	60	65	110	50	33 205 02 ...
0,25	60	65	160	50	33 205 04 ...
0,5	60	65	230	50	33 205 08 ...
0,5	100	100	170	50	33 205 10 ...
1,0	100	100	230	50	33 205 13 ...
2,0	100	150	245	50	33 205 18 ...
3,0	100	150	300	50	33 205 24 ...
4,0	100	150	360	50	33 205 30 ...
1,0	120	120	200	60	33 205 15 ...
2,0	120	120	290	60	33 205 19 ...
3,0	120	150	310	60	33 205 25 ...
4,0	120	150	370	60	33 205 35 ...
5,0	120	180	340	60	33 205 43 ...
6,0	120	180	380	60	33 205 52 ...
2,0	150	150	220	50	33 205 21 ...
3,0	150	150	265	50	33 205 27 ...
4,0	150	150	310	50	33 205 36 ...
5,0	150	180	330	50	33 205 45 ...
6,0	150	180	350	50	33 205 53 ...

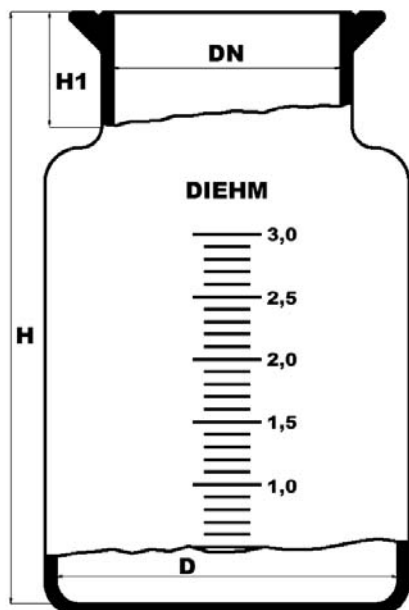
## Triplex reactors for stress free working with a ΔT up to 100K

Temperature range - 90 to 230°C, other temperatures on request.  
max Delta T 40 K.



Cap. liters	D mm	D mm	H mm	H1 mm	Art.no.
0.5	100	100	170	50	33 207 10 ...
1.0	100	100	230	50	33 207 13 ...
2.0	100	150	245	50	33 207 18 ...
3.0	100	150	300	50	33 207 24 ...
4.0	100	150	360	50	33 207 30 ...
1.0	120	120	200	60	33 207 15 ...
2.0	120	120	290	60	33 207 19 ...
3.0	120	150	310	60	33 207 25 ...
4.0	120	150	370	60	33 207 35 ...
5.0	120	180	340	60	33 207 43 ...
6.0	120	180	380	60	33 207 52 ...
10.0	120	240	390	60	33 207 61 ...
2.0	150	150	220	50	33 207 21 ...
3.0	150	150	265	50	33 207 27 ...
4.0	150	150	310	50	33 207 36 ...
5.0	150	180	330	50	33 207 45 ...
6.0	150	180	350	50	33 207 53 ...
10.0	150	240	380	50	33 207 70 ...
6.0	200	200	330	70	33 207 57 ...
10.0	200	200	470	70	33 207 66 ...
10.0	200	240	390	70	33 207 70 ...
10.0	200	260	350	70	33 207 71 ...
15.0	200	260	460	70	33 207 78 ...
20.0	200	260	550	70	33 207 87 ...
20.0	300	300	500	100	33 207 86 ...
30.0	300	300	610	100	33 207 96 ...
50.0	300	340	760	100	33 207 99 ...
50.0	400	400	550	100	33 207 050

## Reaction vessels with flat bottom

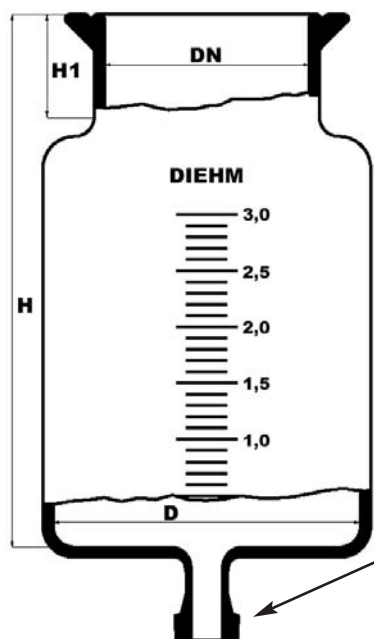


These vessels up to DN 200 are provided with a Schott laboratory flange with groove. Vessels DN 300 or larger are provided with a technical flange type Schott. Different flanges are also available

The circumference form depends on capacity. As shown on the graphic below

Cap. liters	DN mm	D mm	H mm	H1 mm	Art.no.
0.1	60	65	105	50	33 000 02
0.25	60	65	150	50	33 000 04
0.5	60	65	220	50	33 000 08
0.25	100	100	115	50	33 000 06
0.5	100	100	145	50	33 000 10
1.0	100	100	210	50	33 000 13
2.0	100	100	340	50	33 000 18
3.0	100	150	275	50	33 000 24
4.0	100	150	330	50	33 000 30
50.0	100	400	595	100	33 000 96
1.0	120	120	180	60	33 000 15
2.0	120	120	270	60	33 000 19
3.0	120	120	360	60	33 000 25
4.0	120	180	300	60	33 000 35
5.0	120	180	345	60	33 000 43
6.0	120	190	360	60	33 000 52
10.0	120	240	345	60	33 000 59
1.0	150	150	140	50	33 000 16
2.0	150	150	195	50	33 000 21
3.0	150	150	255	50	33 000 27
4.0	150	150	310	50	33 000 33
5.0	150	180	335	50	33 000 45
6.0	150	190	350	50	33 000 54
10.0	150	240	335	50	33 000 64
50.0	150	400	595	100	33 000 97
4.0	200	200	270	70	33 000 39
5.0	200	200	315	70	33 000 48
6.0	200	200	350	70	33 000 57
10.0	200	240	355	70	33 000 66
15.0	200	260	465	70	33 000 75
20.0	200	260	510	70	33 000 84

## Reaction vessels with flat bottom and bottom flange



These vessels up to DN 200 are provided with a Schott laboratory flange with groove.  
Vessels DN 300 or larger are provided with a technical flange typ Schott.  
Different flanges are also available

The circumference form depends on capacity.  
As shown on the graphic below

This type of vessel is provided with a bottom flange DN 15 plane type Schott.  
Other flanges or screw connections are also available at no extra charge.

Cap. liters	DN mm	D mm	H mm	H1 mm	Art.no.
0.1	60	65	105	50	33 007 02
0.25	60	65	150	50	33 007 04
0.5	60	65	220	50	33 007 08
0.25	100	100	115	50	33 007 06
0.5	100	100	145	50	33 007 10
1.0	100	100	210	50	33 007 13
2.0	100	100	340	50	33 007 18
3.0	100	150	275	50	33 007 24
4.0	100	150	330	50	33 007 30
50.0	100	400	595	100	33 007 96
1.0	120	120	180	60	33 007 15
2.0	120	120	270	60	33 007 19
3.0	120	120	360	60	33 007 25
4.0	120	180	300	60	33 007 35
5.0	120	180	345	60	33 007 43
6.0	120	190	360	60	33 007 52
10.0	120	240	345	60	33 007 59
1.0	150	150	140	50	33 007 16
2.0	150	150	195	50	33 007 21
3.0	150	150	255	50	33 007 27
4.0	150	150	310	50	33 007 33
5.0	150	180	335	50	33 007 45
6.0	150	190	350	50	33 007 54
10.0	150	240	335	50	33 007 64
4.0	200	200	270	70	33 007 39
5.0	200	200	315	70	33 007 48
6.0	200	200	350	70	33 007 57
10.0	200	240	355	70	33 007 66
15.0	200	260	465	70	33 007 75
20.0	200	260	510	70	33 007 84

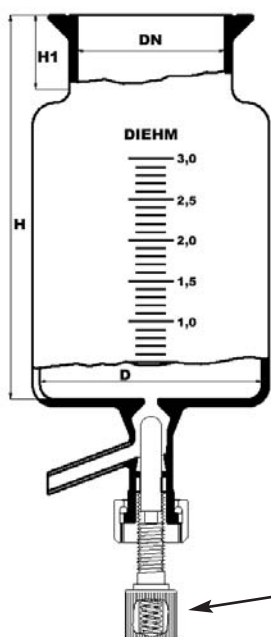
### order number informations:

The order number will be with KF 15; GL 25; KS 35.... completed.

### Example:

A reactor DN 100 with 1 litre capacity and a outflow flange KF 15 have the order number:  
33 007 13 KF 15

## Reaction vessel flat bottom with bottom valve



These vessels up to DN 200 are provided with a Schott laboratory flange with groove.  
Vessels DN 300 or larger are provided with a technical flange type Schott.  
Different flanges are also available

The circumference form depends on capacity.  
As shown on the graphic below

The valve is designed so that liquid rests flow through without leaving deposits acc. **GMP**. It is also designed with a spring loaded stopper to prevent leakage caused by expansion and contraction. As alternative option we have 3 different stoppers for example with Pt100 sensor.

All variations are available with pneumatic cylinders.

Cap. liters	DN mm	D mm	H mm	H1 mm	valve $\varnothing$ mm	Art.no.
0.1	60	65	105	50	10	33 008 02
0.25	60	65	150	50	10	33 008 04
0.5	60	65	220	50	10	33 008 08
0.25	100	100	115	50	10	33 008 06
0.5	100	100	145	50	10	33 008 10
1.0	100	100	210	50	10	33 008 13
2.0	100	100	340	50	10	33 008 18
3.0	100	150	275	50	10	33 008 24
4.0	100	150	330	50	10	33 008 30
1.0	120	120	180	60	10	33 008 15
2.0	120	120	270	60	10	33 008 19
3.0	120	120	360	60	10	33 008 25
4.0	120	180	300	60	10	33 008 35
5.0	120	180	345	60	10	33 008 43
6.0	120	180	360	60	10	33 008 52
10.0	120	240	345	60	16	33 008 59
1.0	150	150	140	50	10	33 008 16
2.0	150	150	195	50	10	33 008 21
3.0	150	150	255	50	10	33 008 27
4.0	150	150	310	50	10	33 008 33
5.0	150	180	335	50	10	33 008 45
6.0	150	180	350	50	10	33 008 54
10.0	150	240	335	50	16	33 008 64
4.0	200	200	270	70	10	33 008 39
5.0	200	200	315	70	10	33 008 48
6.0	200	200	350	70	10	33 008 57
10.0	200	240	355	70	16	33 008 66
15.0	200	260	465	70	20	33 008 75
20.0	200	260	510	70	20	33 008 84

### Order number informations:

The order number will at the end with V10...V25 (for the valve) and maybe GL 18... KF25 (for the relevant outflow) completed.

Reactors with a simple discharge pipe get the valve title only.

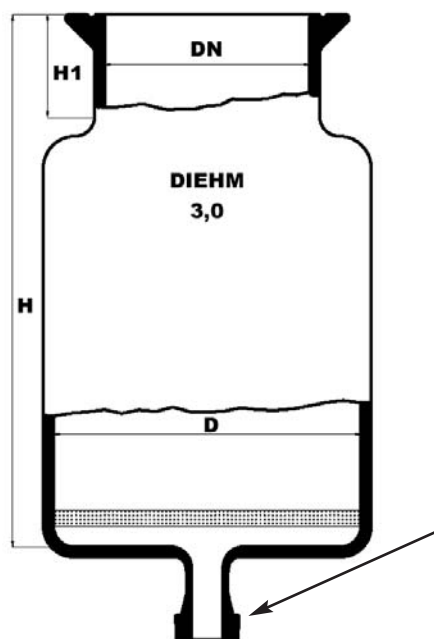
### Example:

Reactor 1 litre DN 100 with 16 mm valve and GL 25 outflow.

### Order number:

33 008 13 V 16 GL 25

## Reaction vessel flat bottom with sinter plate and bottom flange



These vessels up to DN 200 are provided with a Schott laboratory flange with groove.

Vessels DN 300 or larger are provided with a technical flange type Schott.

Different flanges are also available

The circumference form depends on capacity.

As shown on the graphic below

This type of vessel is provided with a bottom flange DN 15 plane type Schott

Other flanges or screw connections are also available at no extra charge.

Cap. liters	DN mm	D mm	H mm	H1 mm	Art.no.
0.1	60	65	105	50	33 009 02
0.25	60	65	150	50	33 009 04
0.5	60	65	220	50	33 009 08
0.25	100	100	115	50	33 009 06
0.5	100	100	145	50	33 009 10
1.0	100	100	210	50	33 009 13
2.0	100	100	340	50	33 009 18
3.0	100	150	240	50	33 009 24
4.0	100	150	330	50	33 009 30
1.0	120	120	180	60	33 009 15
2.0	120	120	270	60	33 009 19
3.0	120	120	360	60	33 009 25
4.0	120	180	300	60	33 009 35
5.0	120	180	345	60	33 009 43
6.0	120	180	380	60	33 009 52
1.0	150	150	140	50	33 009 16
2.0	150	150	195	50	33 009 21
3.0	150	150	255	50	33 009 27
4.0	150	150	310	50	33 009 33
5.0	150	180	335	50	33 009 45
6.0	150	180	380	60	33 009 54
4.0	200	200	270	70	33 009 39
5.0	200	200	315	70	33 009 48
6.0	200	200	350	70	33 009 57
10.0	200	200	480	70	33 009 66
15.0	200	200	640	70	33 009 75
20.0	200	200	800	70	33.009 84

The article no. must be completed with the porosity of the glass filter disc.

### pore sizes :

Por. 0 = 160 - 250  $\mu\text{m}$   
 Por. 1 = 100 - 160  $\mu\text{m}$   
 Por. 2 = 40 - 100  $\mu\text{m}$   
 Por. 3 = 16 - 40  $\mu\text{m}$   
 Por. 4 = 10 - 16  $\mu\text{m}$   
 Por. 5 = 1,0 - 1,6  $\mu\text{m}$

### order number informations:

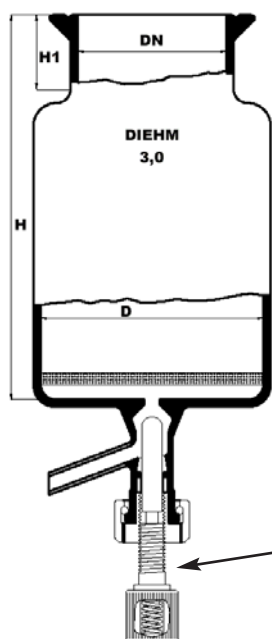
Art.no. + por. + outflow

**Example:** Filter vessel DN 150, 3 litre, filter 16 - 40  $\mu\text{m}$  (Por. 3), outflow KF 25

### order number:

33 009 27 3 KF25

## Reaction vessel flat bottom with sinter plate and bottom valve



These vessels up to DN 200 are provided with a Schott laboratory flange with groove.  
Vessels DN 300 or larger are provided with a technical flange type Schott.  
Different flanges are also available

The circumference form depends on capacity.  
As shown on the graphic below

The valve is designed so that liquid rests flow through without leaving deposits acc. **GMP**. It is also designed with a spring loaded stopper to prevent leakage caused by expansion and contraction.

As alternative option we have 3 different stoppers for example with Pt100 sensor.

All variations are available with pneumatic cylinders.

Cap. liters	DN mm	D mm	H mm	H1 mm	Art.no.
0.1	60	65	105	50	33 010 02
0.25	60	65	150	50	33 010 04
0.5	60	65	220	50	33 010 08
0.25	100	100	115	50	33 010 06
0.5	100	100	145	50	33 010 10
1.0	100	100	210	50	33 010 13
2.0	100	100	340	50	33 010 18
3.0	100	150	240	50	33 010 24
4.0	100	150	330	50	33 010 30
1.0	120	120	180	60	33 010 15
2.0	120	120	270	60	33 010 19
3.0	120	120	360	60	33 010 25
4.0	120	180	300	60	33 010 35
5.0	120	180	345	60	33 010 43
6.0	120	180	380	60	33 010 52
1.0	150	150	140	50	33 010 16
2.0	150	150	195	50	33 010 21
3.0	150	150	255	50	33 010 27
4.0	150	150	310	50	33 010 33
5.0	150	180	335	50	33 010 45
6.0	150	180	380	60	33 010 54
4.0	200	200	270	70	33 010 39
5.0	200	200	315	70	33 010 48
6.0	200	200	350	70	33 010 57
10.0	200	200	480	70	33 010 66
15.0	200	200	640	70	33 010 75
20.0	200	200	800	70	33.010 84

The article no. must be completed with the porosity of the glass filter disc.

### pore sizes :

Por. 0 = 160 - 250 µm  
 Por. 1 = 100 - 160 µm  
 Por. 2 = 40 - 100 µm  
 Por. 3 = 16 - 40 µm  
 Por. 4 = 10 - 16 µm  
 Por. 5 = 1,0 - 1,6 µm

### order number informations:

art. no. + Por. + valve + outflow

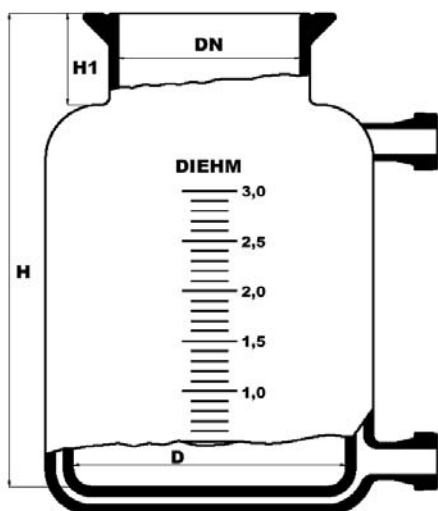
**Example:** filter vessel DN 150, 3 litre, filter 16 - 40 µm (Por. 3), valve 16 mm, outflow KF 25

### order number:

33 009 27 3 V16 KF25



# Thermostatic reaction vessel flat bottom



These vessels up to DN 200 are provided with a Schott laboratory flange with groove. Vessels DN 300 or larger are provided with a technical flange type Schott. Different flanges are also available

The thermostatic connections are standard DN 15 plan type Schott. The vessels can also be provided with GL18 screw tubes and plastic hose connections 10 mm at no extra charge.

The circumference form depends on capacity. As shown on the graphic below

Cap. liters	DN mm	D mm	H mm	H1 mm	Art.no.
0.1	60	65	105	50	33 100 02
0.25	60	65	150	50	33 100 04
0.5	60	65	220	50	33 100 08
0.25	100	100	115	50	33 100 06
0.5	100	100	145	50	33 100 10
1.0	100	100	210	50	33 100 13
2.0	100	100	340	50	33 100 18
3.0	100	150	275	50	33 100 24
4.0	100	150	330	50	33 100 30
50.0	100	400	595	100	33 100 96
1.0	120	120	180	60	33 100 15
2.0	120	120	270	60	33 100 19
3.0	120	120	360	60	33 100 25
4.0	120	180	300	60	33 100 35
5.0	120	180	345	60	33 100 43
6.0	120	190	360	60	33 100 52
10.0	120	240	345	60	33 100 59
1.0	150	150	140	50	33 100 16
2.0	150	150	195	50	33 100 21
3.0	150	150	255	50	33 100 27
4.0	150	150	310	50	33 100 33
5.0	150	180	335	50	33 100 45
6.0	150	190	350	50	33 100 54
10.0	150	240	335	50	33 100 63
50.0	150	400	595	100	33 100 97
4.0	200	200	270	70	33 100 39
5.0	200	200	315	70	33 100 48
6.0	200	200	350	70	33 100 57
10.0	200	240	355	70	33 100 66
15.0	200	240	465	70	33 100 75
20.0	200	270	510	70	33 100 84

Hoseconnection for hose 12mm dia.



18 840 1512

Hoseconnection for metal hose M16x1



18 840 1516

## Suitable sealings

Silicone O-ring, seamless  
FEP coated  
Art.no. F2922515

## order numer informations:

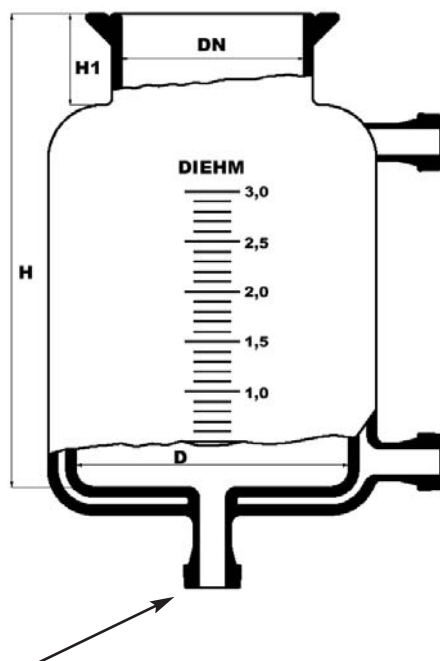
The order number will be completed by the desired thermostatic connection.

## Example:

Vessel DN 150, 3 litre, thermostatic connection KF 15

**order number:**  
33 100 27 KF 15

# Thermostatic reaction vessel flat bottom with bottom flange



These vessels up to DN 200 are provided with a Schott laboratory flange with groove. Vessels DN 300 or larger are provided with a technical flange type Schott. Different flanges are also available

The thermostatic connections are standard DN 15 plan type Schott. The vessels can also be provided with GL18 screw tubes and plastic hose connections 10 mm at no extra charge.

The circumference form depends on capacity. As shown on the graphic below

This type of vessel is provided with a bottom flange DN 15 plane type Schott. Other flanges or screw connections are also available at no extra charge.

For usage of heating covers the vessels can be used with a longer flange.

### order number informations:

The order number will be completed by the desired thermostatic connection and Bottom flange.

### Example:

Vessel DN 150, 3 litre, thermostatic connection KF 15, Bottom flange GL 25.

### order number:

33 105 27 KF15 GL25

### Hoseconnection for metal hose M16 x 1



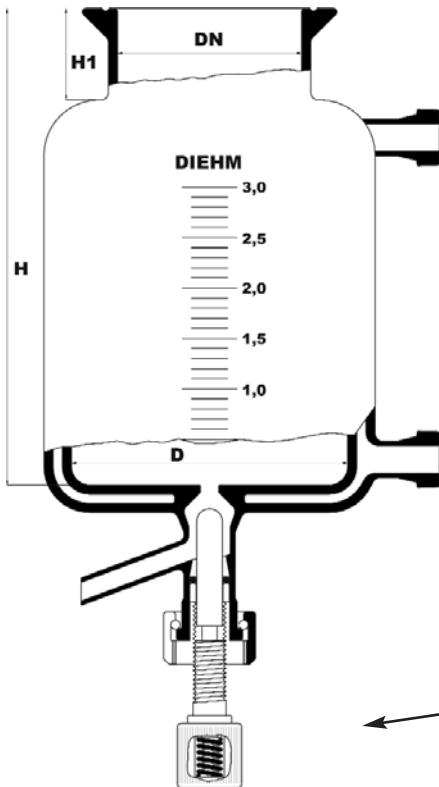
18 840 1516

### Suitable sealings

Silicone O-ring, seamless  
FEP coated  
Art.no. F2922515

Cap. liters	DN mm	D mm	H mm	H1 mm	Art.no.
0.1	60	65	105	50	33 105 02
0.25	60	65	150	50	33 105 04
0.5	60	65	220	50	33 105 08
0.25	105	105	115	50	33 105 06
0.5	105	105	145	50	33 105 10
1.0	105	105	210	50	33 105 13
2.0	105	105	340	50	33 105 18
3.0	105	150	275	50	33 105 24
4.0	105	150	330	50	33 105 30
50.0	105	400	595	105	33 105 96
1.0	120	120	180	60	33 105 15
2.0	120	120	270	60	33 105 19
3.0	120	120	360	60	33 105 25
4.0	120	180	300	60	33 105 35
5.0	120	180	345	60	33 105 43
6.0	120	190	360	60	33 105 52
10.0	120	240	345	60	33 105 59
1.0	150	150	140	50	33 105 16
2.0	150	150	195	50	33 105 21
3.0	150	150	255	50	33 105 27
4.0	150	150	310	50	33 105 33
5.0	150	180	335	50	33 105 45
6.0	150	190	350	50	33 105 54
10.0	150	240	335	50	33 105 63
50.0	150	400	595	105	33 105 97
4.0	200	200	270	70	33 105 39
5.0	200	200	315	70	33 105 48
6.0	200	200	350	70	33 105 57
10.0	200	240	355	70	33 105 66
15.0	200	240	465	70	33 105 75
20.0	200	270	510	70	33 105 84

# Thermostatic reaction vessel flat bottom with bottom valve



These vessels up to DN 200 are provided with a Schott laboratory flange with groove.  
Vessels DN 300 or larger are provided with a technical flange type Schott.  
Different flanges are also available

The thermostatic connections are standard DN 15 plan type Schott.  
The vessels can also be provided with GL18 screw tubes and plastic hose connections 10 mm at no extra charge.

The valve is designed so that liquid rests flow through without leaving deposits acc. **GMP**. It is also designed with a spring loaded stopper to prevent leakage caused by expansion and contraction. As alternative option we have 3 different stoppers for example with Pt100 sensor.  
All variations are available with pneumatic cylinders.

### order number informations:

The order number will be completed by the desired thermostatic connection and the bottom valve.

### Example:

Vessel DN 150, 3 litre, thermostatic connection KF 15, bottom valve 10 mm

### order number:

33 110 27 KF15 V10

Cap. liters	DN mm	D mm	H mm	H1 mm	valve mm	Art.no.
0.1	60	65	105	50	10	33 110 02
0.25	60	65	150	50	10	33 110 04
0.5	60	65	220	50	10	33 110 08
0.25	100	100	115	50	10	33 110 06
0.5	100	100	145	50	10	33 110 10
1.0	100	100	210	50	10	33 110 13
2.0	100	100	340	50	10	33 110 18
3.0	100	150	275	50	10	33 110 24
4.0	100	150	330	50	10	33 110 30
1.0	120	120	180	60	10	33 110 15
2.0	120	120	270	60	10	33 110 19
3.0	120	120	360	60	10	33 110 25
4.0	120	180	300	60	10	33 110 35
5.0	120	180	345	60	10	33 110 43
6.0	120	190	360	60	10	33 110 52
10.0	120	240	345	60	16	33 110 59
1.0	150	150	140	50	10	33 110 16
2.0	150	150	195	50	10	33 110 21
3.0	150	150	255	50	10	33 110 27
4.0	150	150	310	50	10	33 110 33
5.0	150	180	335	50	10	33 110 45
6.0	150	190	350	50	10	33 110 54
10.0	150	240	335	50	16	33 110 63
4.0	200	200	270	70	10	33 110 39
5.0	200	200	315	70	10	33 110 48
6.0	200	200	350	70	10	33 110 57
10.0	200	240	355	70	16	33 110 66
15.0	200	240	465	70	20	33 110 75

The circumference form depends on capacity. As shown on the graphic below

Hoseconnection for hose 12mm dia.



18 840 1512

Hoseconnection for metal hose M16 x 1

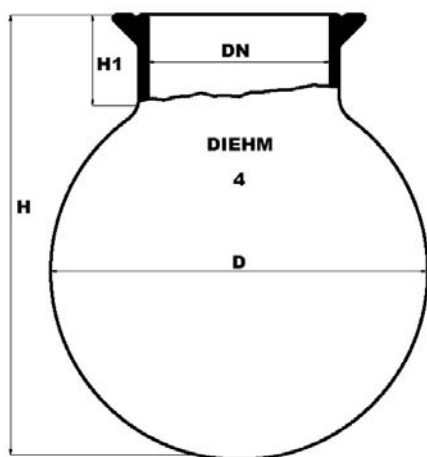


18 840 1516

### Suitable sealings

Silicone O-ring, seamless  
FEP coated  
Art.no. F2922515

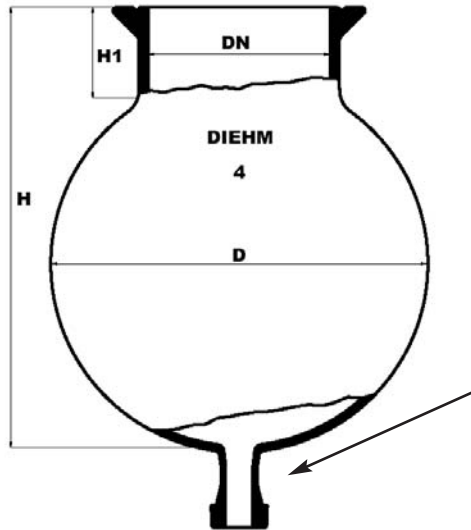
## Reaction vessel round bottom



These vessels up to DN 200 are provided with a Schott laboratory flange with groove  
 Vessels DN 300 or larger are provided with a technical flange type Schott.  
 Different flanges are also available

Cap. liters	DN mm	D mm	H mm ca.	H1 mm	Art.no.
2	100	166	225	60	33 002 05
3	100	185	235	60	33 002 10
4	100	207	270	60	33 002 13
5	100	223	275	60	33 002 16
6	100	236	285	60	33 002 19
2	120	166	225	60	33 002 07
3	120	185	245	60	33 002 11
4	120	207	270	60	33 002 14
5	120	223	285	60	33 002 17
6	120	236	300	60	33 002 20
3	150	185	230	80	33 002 40
4	150	207	255	80	33 002 43
5	150	223	280	80	33 002 46
6	150	236	295	80	33 002 49
10	150	279	325	70	33 002 52
10	200	279	350	70	33 002 70
20	200	345	380	70	33 002 73
50	200	510	580	70	33 002 76
50	300	510	610	100	33 002 90
100	300	610	710	100	33 002 98

# Spherical reaction vessels



These vessels up to DN 200 are provided with a Schott laboratory flange with groove.  
Vessels DN 300 or larger are provided with a technical flange type Schott.  
Different flanges are also available

This type of vessel is provided with a bottom flange DN 15 plane type Schott.  
Other flanges or screw connections are also available at no extra charge.

For usage of heating covers the vessels can be used with a longer flange.

Cap. liters	DN mm	D mm	H mm ca.	H1 mm	Art.no.
2	100	166	225	60	33 005 05
3	100	185	235	60	33 005 10
4	100	207	270	60	33 005 13
5	100	223	275	60	33 005 16
6	100	236	285	60	33 005 19
2	120	166	225	60	33 005 07
3	120	185	245	60	33 005 11
4	120	207	270	60	33 005 14
5	120	223	285	60	33 005 17
6	120	236	300	60	33 005 20
3	150	185	230	80	33 005 40
4	150	207	255	80	33 005 43
5	150	223	280	80	33 005 46
6	150	236	295	80	33 005 49
10	150	279	325	70	33 005 52
10	200	279	350	70	33 005 70
20	200	345	380	70	33 005 73
50	200	510	580	70	33 005 76
50	300	510	610	100	33 005 90
100	300	610	710	100	33 005 98

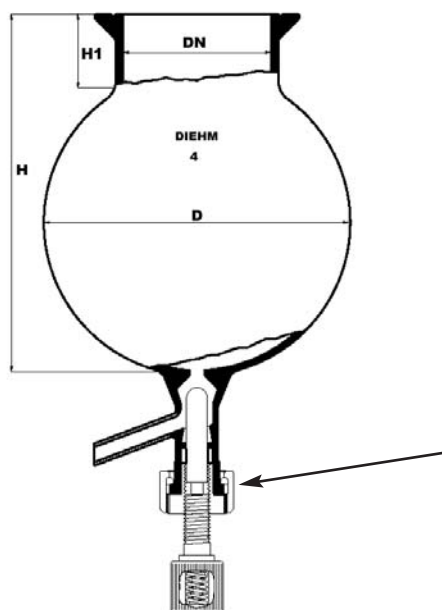
## order number informations:

The order number will be with KF 15; GL 25; KS 35.... completed.

## Example:

A reactor DN 100 with 1 litre capacity and a outflow flange KF 15 has the order number:  
33 005 13 KF 15

## Spherical reaction vessel with bottom valve



These vessels up to DN 200 are provided with a Schott laboratory flange with groove. Vessels DN 300 or larger are provided with a technical flange type Schott. Different flanges are also available

The valve is designed so that liquid rests flow through without leaving deposits acc. **GMP**. It is also designed with a spring loaded stopper to prevent leakage caused by expansion and contraction. As alternative option we have 3 different stoppers for example with Pt100 sensor.

All variations are available with pneumatic cylinders.

Cap. liters	DN mm	D mm ca.	H mm	H1 mm	valve mm	Art.no.
2	100	166	225	60	10	33 006 05
3	100	185	235	60	10	33 006 10
4	100	207	270	60	10	33 006 13
5	100	223	275	60	10	33 006 16
6	100	236	285	60	10	33 006 19
2	120	166	225	60	10	33 006 07
3	120	185	245	60	10	33 006 11
4	120	207	270	60	10	33 006 14
5	120	223	285	60	10	33 006 17
6	120	236	300	60	10	33 006 20
3	150	185	230	80	10	33 006 40
4	150	207	255	80	10	33 006 43
5	150	223	280	80	10	33 006 46
6	150	236	295	80	10	33 006 49
10	150	279	325	70	16	33 006 52
10	200	279	350	70	16	33 006 70
20	200	345	380	70	20	33 006 73
50	200	510	580	70	25	33 006 76
50	300	510	610	100	25	33 006 90
100	300	610	710	100	25	33 006 98

### Order number informations:

The order number will at the end with V10...V25 (for the valve) and maybe GL 18... KF25 (for the relevant outflow) completed. Reactors with a simple discharge pipe get the valve title only.

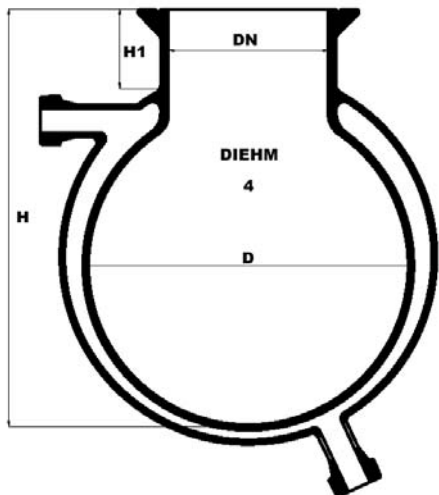
### Example:

Reactor 1 litre DN 100 with 16 mm valve and GL 25 outflow.

### Order number:

33 006 13 V 16 GL 25

# Spherical thermostatic reaction vessels



These vessels up to DN 200 are provided with a Schott laboratory flange with groove. Vessels DN 300 or larger are provided with a technical flange type Schott. Different flanges are also available

The thermostatic connections are standard DN 15 plan type Schott.

The vessels can also be provided with GL18 screw tubes and plastic hose connections 10 mm at no extra charge.

#### order numer informations:

The order number will be completed by the desired thermostatic connection.

#### Example:

Vessel DN 150, 3 litre, thermostatic connection KF 15

#### order number:

33 104 27 KF 15

Cap. liters	DN mm	D mm	H mm ca.	H1 mm	Art.no.
2	100	166	225	60	33 104 05
3	100	185	235	60	33 104 10
4	100	207	270	60	33 104 13
5	100	223	275	60	33 104 16
6	100	236	285	60	33 104 19
2	120	166	225	60	33 104 07
3	120	185	245	60	33 104 11
4	120	207	270	60	33 104 14
5	120	223	285	60	33 104 17
6	120	236	300	60	33 104 20
3	150	185	230	80	33 104 40
4	150	207	255	80	33 104 43
5	150	223	280	80	33 104 46
6	150	236	295	80	33 104 49
10	150	279	325	50	33 104 52
10	200	279	350	70	33 104 70
20	200	345	415	70	33 104 73
50	200	510	580	70	33 104 76
50	300	510	610	100	33 104 90
100	300	610	710	100	33 104 98

Hoseconnection for hose 12mm dia.



18 840 1512

Hoseconnection for metal hose M16 x 1

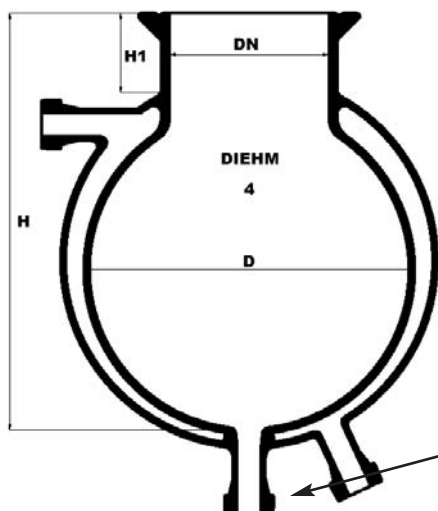


18 840 1516

#### Suitable sealings

Silicone O-ring, seamless  
FEP coated  
Art.no. F2922515

# Spherical thermostatic reaction vessels with bottom flange



These vessels up to DN 200 are provided with a Schott laboratory flange with groove.

Vessels DN 300 or larger are provided with a technical flange type Schott.

Different flanges are also available

The thermostatic connections are standard DN 15 plan type Schott.

The vessels can also be provided with GL18 screw tubes and plastic hose connections 10 mm at no extra charge.

This type of vessel is provided with a bottom flange DN 15 plane type Schott.

Other flanges or screw connections are also available at no extra charge.

For usage of heating covers the vessels can be used with a longer flange.

#### order number informations:

The order number will be completed by the desired thermostatic connection and Bottom flange.

#### Example:

Vessel DN 150, 3 litre, thermostatic connection KF 15, Bottom flange GL 25.

#### order number:

33 107 27 KF15 GL25

Cap. liters	DN mm	D mm	H mm ca.	H1 mm	Art.no.
2	100	166	225	60	33 107 05
3	100	185	235	60	33 107 10
4	100	207	270	60	33 107 13
5	100	223	275	60	33 107 16
6	100	236	285	60	33 107 19
2	120	166	225	60	33 107 07
3	120	185	245	60	33 107 11
4	120	207	270	60	33 107 14
5	120	223	285	60	33 107 17
6	120	236	300	60	33 107 20
3	150	185	230	80	33 107 40
4	150	207	255	80	33 107 43
5	150	223	280	80	33 107 46
6	150	236	295	80	33 107 49
10	150	279	325	50	33 107 52
10	200	279	350	70	33 107 70
20	200	345	415	70	33 107 73
50	200	510	580	70	33 107 76
50	300	510	610	100	33 107 90
100	300	610	710	100	33 107 98

Hoseconnection for  
hose 12mm dia.



18 840 1512

Hoseconnection for  
metal hose M16 x 1



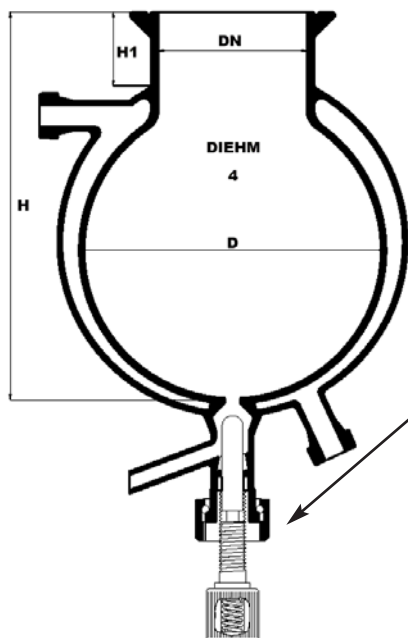
18 840 1516

#### Suitable sealings

Silicone O-ring, seamless  
FEP coated  
Art.no. F2922515



# Spherical thermostatic reaction vessels with bottom valve



These vessels up to DN 200 are provided with a Schott laboratory flange with groove.

Vessels DN 300 or larger are provided with a technical flange type Schott.

Different flanges are also available

The thermostatic connections are standard DN 15 plan type Schott.

The vessels can also be provided with GL18 screw tubes and plastic hose connections 10 mm at no extra charge.

The valve is designed so that liquid rests flow through without leaving deposits acc. **GMP**. It is also designed with a spring loaded stopper to prevent leakage caused by expansion and contraction. As alternative option we have 3 different stoppers for example with Pt100 sensor. All variations are available with pneumatic cylinders.

#### order number informations:

The order number will be completed by the desired thermostatic connection and the bottom valve.

#### Example:

Vessel DN 150, 3 litre, thermostatic connection KF 15, bottom valve 10 mm

#### order number:

33 113 27 KF15 V10

Cap. liters	DN mm	D mm ca.	H mm	H1 mm	valve mm	Art.no.
2	100	166	225	60	10	33 113 05
3	100	185	235	60	10	33 113 10
4	100	207	270	60	10	33 113 13
5	100	223	275	60	10	33 113 16
6	100	236	285	60	10	33 113 19
2	120	166	225	60	10	33 113 07
3	120	185	245	60	10	33 113 11
4	120	207	270	60	10	33 113 14
5	120	223	285	60	10	33 113 17
6	120	236	300	60	10	33 113 20
3	150	185	230	80	10	33 113 40
4	150	207	255	80	10	33 113 43
5	150	223	280	80	10	33 113 46
6	150	236	295	80	10	33 113 49
10	150	279	325	50	16	33 113 52
10	200	279	350	70	16	33 113 70
20	200	345	415	70	20	33 113 73
50	200	510	580	70	25	33 113 76
50	300	510	610	100	25	33 113 90
100	300	610	710	100	25	33 113 98

Hoseconnection for  
hose 12mm dia.



18 840 1512

Hoseconnection for  
metal hose M16 x 1



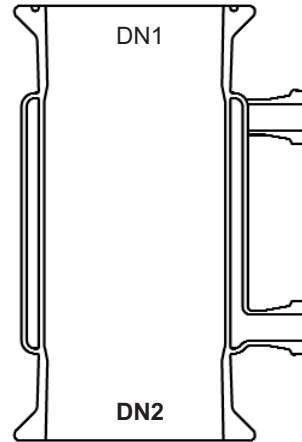
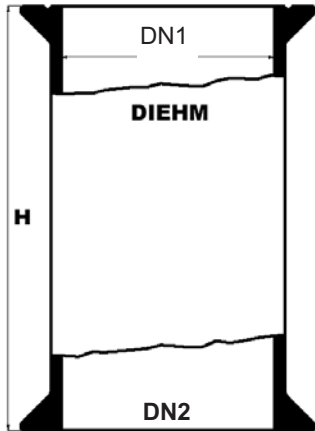
18 840 1516

#### Suitable sealings

Silicone O-ring, seamless  
FEP coated  
Art.no. F2922515

# Column with laboratory flange

At using laboratory flanges it is needed to keep that normally above of the column a flange with O-ring is needed and the pairing flange is without a groove. When the below end is a cap then the column needs also a groove for a O-ring below, because the caps never has a groove for a O-ring.

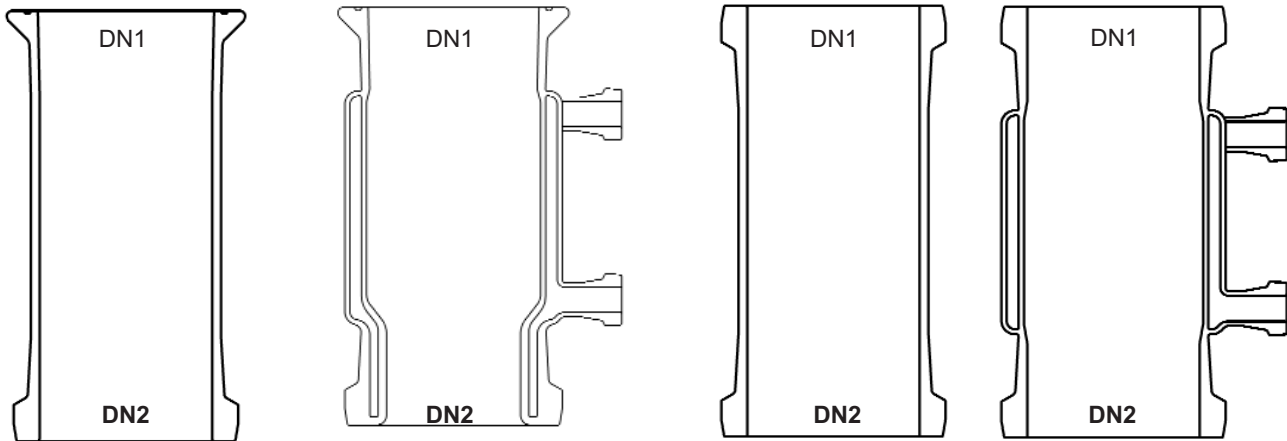


Column, above with groove, below without groove.

Columns above and below with groove.

DN mm	H mm	Article.No.	Article.No. double jacket	Article.No.	Article.No. double jacket
60	250	33 025 02 000	33 125 02 GL18	33 025 02 00N	33 128 02 GL18
60	250		33 125 02 KF15		33 128 02 KF15
60	300	33 025 04 000	33 125 04 GL18	33 025 04 00N	33 128 04 GL18
60	300		33 125 04 KF15		33 128 04 KF15
60	400	33 025 06 000	33 125 06 GL18	33 025 06 00N	33 128 06 GL18
			33 125 06 KF15		33 128 06 KF15
100	300	33 025 12 000	33 125 12 GL18	33 025 12 00N	33 128 12 GL18
			33 125 12 KF15		33 128 12 KF15
100	400	33 025 14 000	33 125 14 GL18	33 025 14 00N	33 128 14 GL18
			33 125 14 KF15		33 128 14 KF15
100	500	33 025 16 000	33 125 16 GL18	33 025 16 00N	33 128 16 GL18
			33 125 16 KF15		33 128 16 KF15
100	750	33 025 18 000	33 125 18 GL18	33 025 18 00N	33 128 18 GL18
			33 125 18 KF15		33 128 18 KF15
120	300	33 025 22 000	33 125 22 GL18	33 025 22 00N	33 128 22 GL18
			33 125 22 KF15		33 128 22 KF15
120	400	33 025 24 000	33 125 24 GL18	33 025 24 00N	33 128 24 GL18
			33 125 24 KF15		33 128 24 KF15
120	500	33 025 26 000	33 125 26 GL18	33 025 26 00N	33 128 26 GL18
			33 125 26 KF15		33 128 26 KF15
120	750	33 025 28 000	33 125 28 GL18	33 025 28 00N	33 128 28 GL18
			33 125 28 KF15		33 128 28 KF15
150	300	33 025 32 000	33 125 32 GL18	33 025 32 00N	33 128 32 GL18
			33 125 32 KF15		33 128 32 KF15
150	400	33 025 34 000	33 125 34 GL18	33 025 34 00N	33 128 34 GL18
			33 125 34 FK15		33 128 34 FK15
150	500	33 025 36 000	33 125 36 GL18	33 025 36 00N	33 128 36 GL18
			33 125 36 KF15		33 128 36 KF15
150	750	33 025 38 000	33 125 38 GL18	33 025 38 00N	33 128 38 GL18
			33 125 38 KF15		33 128 38 KF15
200	400	33 025 42 000	33 125 42KF15	33 025 42 00N	33 128 42 KF15
200	500	33 025 44 000	33 125 44KF15	33 025 44 00N	33 128 44 KF15
200	600	33 025 46 000	33 125 46KF15	33 025 46 00N	33 128 46 KF15
200	750	33 025 48 000	33 125 48KF15	33 025 48 00N	33 128 48 KF15

## Columns for filter reactors



**Columns, above laboratory flange with groove, below technical flange.**

**Column, above and below with technical flange**

DN1	DN2	H mm	Article no.: double jacket	Article no.: double jacket	Article no.:	Article no.: double jacket
100	100	300	33 025 12 0LT	33 127 12 GL18	33 025 12 0TT	33 126 12 GL18
100	100	300		33 127 12 KF15		33 126 12 KF15
100	100	400	33 025 14 0LT	33 127 14 GL18	33 025 14 0TT	33 126 14 GL18
100	100	400		33 127 14 KF15		33 126 14 KF15
100	100	500	33 025 16 0LT	33 127 16 GL18	33 025 16 0TT	33 126 16 GL18
100	100	500		33 127 16 KF15		33 126 16 KF15
100	100	750	33 025 18 0LT	33 127 18 GL18	33 025 18 0TT	33 126 18 GL18
100	100	750		33 127 18 KF15		33 126 18 KF15
150	150	300	33 025 32 0LT	33 127 32 GL18	33 025 32 0TT	33 126 32 GL18
150	150	300		33 127 32 KF15		33 126 32 KF15
150	150	400	33 025 34 0LT	33 127 34 GL18	33 025 34 0TT	33 126 34 GL18
150	150	400		33 127 34 FK15		33 126 34 FK15
150	150	500	33 025 36 0LT	33 127 36 GL18	33 025 36 0TT	33 126 36 GL18
150	150	500		33 127 36 KF15		33 126 36 KF15
150	150	750	33 025 38 0LT	33 127 38 GL18	33 025 38 0TT	33 126 38 GL18
150	150	750		33 125 38 KF15		33 126 38 KF15
200	150	400		33 127 42 KF15		33 126 42 KF15
200	150	500		33 127 44 KF15		33 126 44 KF15
200	150	600		33 127 46 KF15		33 126 46 KF15
200	150	750		33 127 48 KF15		33 126 48 KF15
200	200	400	33 025 42 0LT		33 025 42 0TT	33 126 42 KF15
200	200	500	33 025 44 0LT		33 025 44 0TT	33 126 44 KF15
200	200	600	33 025 46 0LT		33 025 46 0TT	33 126 46 KF15
200	200	750	33 025 48 0LT		33 025 48 0TT	33 126 48 KF15
300	200	500			33 025 52 000	33 126 52 KF15
300	200	600			33 025 54 000	33 126 54 KF15
300	200	800			33 025 56 000	33 126 56 KF15
300	200	1000			33 025 58 000	33 126 58 KF15
400	400	400			33 025 64 000	
400	300	500				33 126 65 KF25
400	400	500			33 025 65 000	
400	400	600			33 025 66 000	
400	400	800			33 025 67 000	
400	400	1000			33 025 68 000	
450	450	400			33 025 74 000	
450	450	500			33 025 75 000	
450	450	600			33 025 76 000	
450	450	800			33 025 77 000	
450	450	1000			33 025 78 000	

# Glass filter plates to press between two technical flanges

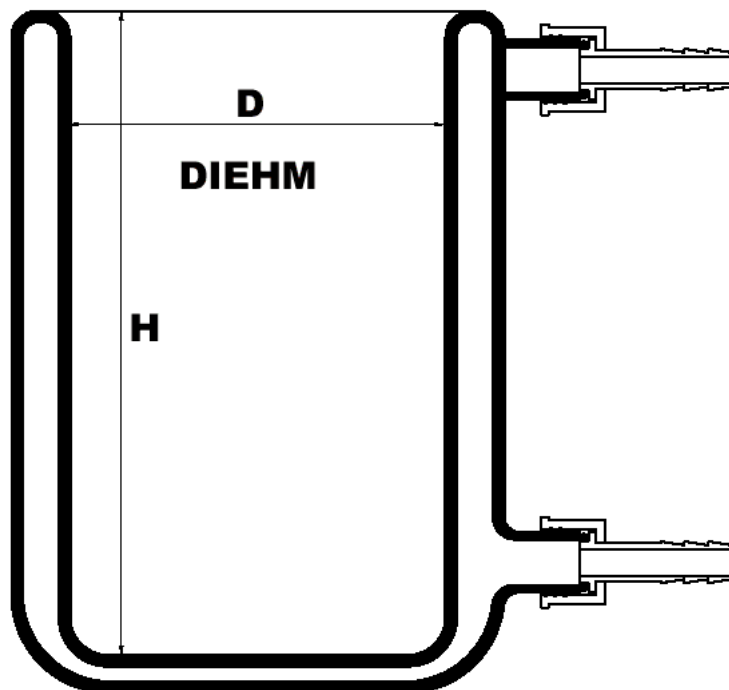
DN	Porosity pore dia	Typ	Article.No.
100	160-250 $\mu$	Por. 0	33 027 100
100	100-160 $\mu$	Por. 1	33 027 101
100	40-1000 $\mu$	Por. 2	33 027 102
100	16-40 $\mu$	Por. 3	33 027 103
100	10-16 $\mu$	Por. 4	33 027 104
150	160-250 $\mu$	Por. 0	33 027 150
150	100-160 $\mu$	Por. 1	33 027 151
150	40-1000 $\mu$	Por. 2	33 027 152
150	16-40 $\mu$	Por. 3	33 027 153
150	10-16 $\mu$	Por. 4	33 027 154
200	160-250 $\mu$	Por. 0	33 027 200
200	100-160 $\mu$	Por. 1	33 027 201
200	40-1000 $\mu$	Por. 2	33 027 202
200	16-40 $\mu$	Por. 0	33 027 203
200	10-16 $\mu$	Por. 4	33 027 204
300	160-250 $\mu$	Por. 0	33 027 300
300	100-160 $\mu$	Por. 1	33 027 301
300	40-1000 $\mu$	Por. 2	33 027 302
300	16-40 $\mu$	Por. 0	33 027 303
200	10-16 $\mu$	Por. 4	33 027 204
400	160-250 $\mu$	Por. 0	33 027 400
400	100-160 $\mu$	Por. 1	33 027 401
400	40-1000 $\mu$	Por. 2	33 027 402
400	16-40 $\mu$	Por. 0	33 027 403
400	10-16 $\mu$	Por. 4	33 027 404

Changable filter discs  
pressed in special PTFE sealings



# Thermostatic beaker

Thermostatic beaker with screw connections and plastic hose connections.



Cap. liter	D mm	H mm	Art.no.
0.1	60	70	33 302 02
0.25	60	120	33 302 04
0.5	60	210	33 302 08
1.0	100	170	33 302 13
2.0	100	290	33 302 18
2.0	120	205	33 302 19
3.0	120	295	33 302 25
3.0	150	205	33 302 27
4.0	150	260	33 302 33
5.0	150	365	33 302 42
6.0	150	390	33 302 51
10.0	230	400	33 302 66
15.0	260	460	33 302 75
20.0	260	550	33 302 84

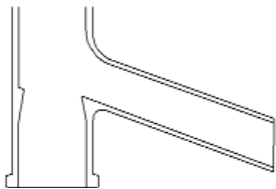
**bottom valve 16 mm**



**Pneumatic bottom valve**

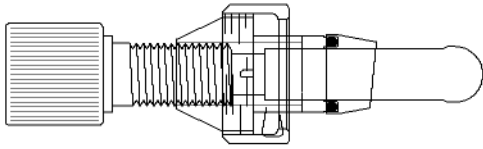


# Valve spare parts



**Glaspart**

	10 mm	16 mm	20 mm	25 mm
Article No	1891001	1891601	1892001	1892501



For standard applications without solid particles and crystals.

## Standard valve tape complete

for standard reactors type 33004../33111..

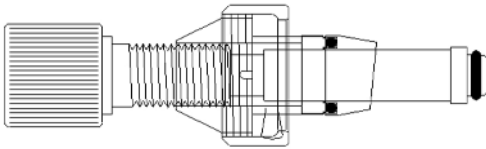
	10 mm	16 mm	20 mm	25 mm
Article no.:	1891002	1891602	1892002	1892502

for threeplex reactors type 33205..

Article no.:	1891002.205	1891602.205		
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for threeplex reactors type 33206..

Article no.:		1891602.206	1892002.206	1892502.206
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For standard applications with solid particles and crystals high resistant for chemicals and temperatures.

## Valve tape complete with O-ring made of Perfluorelastomere

for standard reactors type 33004../33111..

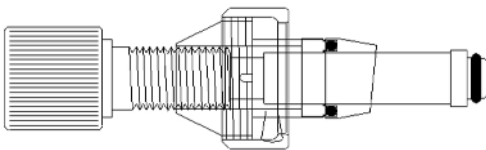
	10 mm	16 mm	20 mm	25 mm
Article no.:	1891003	1891603	1892003	1892503

for threeplex reactors type 33205..

Article no.:	1891003.205	1891603.205		
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for threeplex reactors type 33206..

Article no.:		1891603.206	1892003.206	1892503.206
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Für Standardanwendungen mit Feststoffen und Kristallen, mittelresistent für Chemikalien und Temperaturen.

## Valve tape complete with O-ring made of Viton

for standard reactors type 33004../33111..

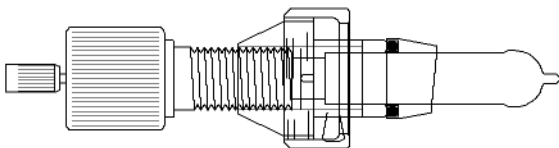
	10 mm	16 mm	20 mm	25 mm
Article no.:	1891004	1891604	1892004	1892504

for threeplex reactors type 33205..

Article no.:	1891004.205	1891604.205		
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for threeplex reactors type 33206..

Article no.:		1891604.206	1892004.206	1892504.206
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For standard applications without solid particles and crystals. The Pt 100 probe is slower as a glass probe from top and not so exact.

## Valve tape complete with Pt 100 sensor

for standard reactors type 33004../33111..

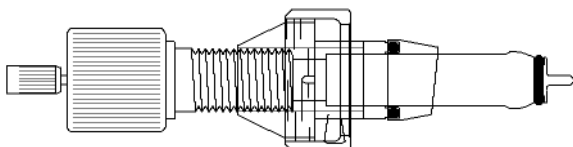
	10 mm	16 mm	20 mm	25 mm
Article no.:	1891005	1891605	1892005	1892505

for threeplex reactors type 33205..

Article no.:	1891005.205	1891605.205		
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for threeplex reactors type 33206..

Article no.:		1891605.206	1892005.206	1892505.206
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For standard applications with solid particles and crystals high resistant for chemicals and temperatures. The Pt 100 probe is slower as a glass probe from top and not so exact.

## Valve tape complete with Pt 100 sensor and O-ring made of Perfluorelastomere

for standard reactors type 33004../33111..

	10 mm	16 mm	20 mm	25 mm
Article no.:	1891007	1891607	1892007	1892507

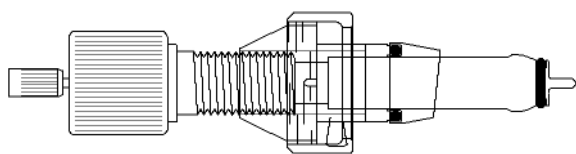
for threeplex reactors type 33205..

Article no.:	1891007.205	1891607.205		
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for threeplex reactors type 33206..

Article no.:		1891607.206	1892007.206	1892507.206
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## Valve spare parts



For standard applications with solid particles and crystals midle resistant for chemicals and temperatures. The Pt 100 probe is slower as a glass probe from top and not so exact.

### Valve tape complete with Pt 100 sensor and O-ring made of Viton

for standard reactors type 33004../33111..

	10 mm	16 mm	20 mm	25 mm
Article no.:	1891008	1891608	1892008	1892508

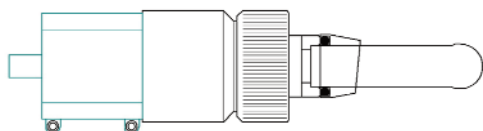
for threeplex reactors type 33205..

Article no.:	1891008.205	1891608.205
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for threeplex reactors type 33206..

Article no.:	1891608.206	1892008.206	1892508.206
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## Pneumactical valves



For standard applications without solid particles and crystals.

### Standard valve tape complete

for standard reactors type 33004../33111..

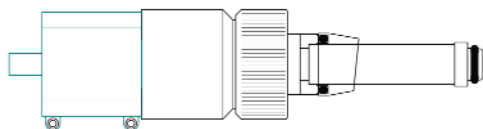
	10 mm	16 mm	20 mm	25 mm
Article no.:	1891062	1891662	1892062	1892562

for threeplex reactors type 33205..

Article no.:	1891062.205	1891662.205
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for threeplex reactors type 33206..

Article no.:	1891662.206	1892062.206	1892562.206
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For standard applications with solid particles and crystals high resistant for chemicals and temperatures.

### Valve tape complete with O-ring made of Perfluorelastomere

for standard reactors type 33004../33111..

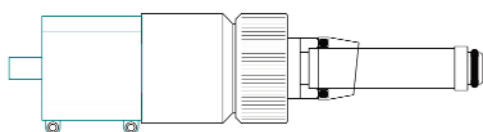
	10 mm	16 mm	20 mm	25 mm
Article no.:	1891063	1891663	1892063	1892563

for threeplex reactors type 33205..

Article no.:	1891063.205	1891663.205
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for threeplex reactors type 33206..

Article no.:	1891663.206	1892063.206	1892563.206
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For standard applications with solid particles and crystals midle resistant for chemicals and temperatures.

### Valve tape complete with Pt 100 sensor and O-ring made of Viton

for standard reactors type 33004../33111..

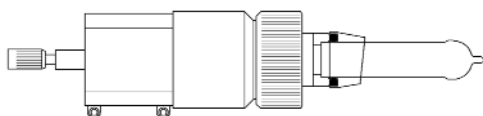
	10 mm	16 mm	20 mm	25 mm
Article no.:	1891064	1891664	1892064	1892564

for threeplex reactors type 33205..

Article no.:	1891064.205	1891664.205
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for threeplex reactors type 33206..

Article no.:	1891664.206	1892064.206	1892564.206
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For standard applications without solid particles and crystals. The Pt 100 probe is slower as a glass probe from top and not so exact.

### Valve tape complete with Pt 100 sensor

for standard reactors type 33004../33111..

	10 mm	16 mm	20 mm	25 mm
Article no.:	1891065	1891665	1892065	1892565

for threeplex reactors type 33205..

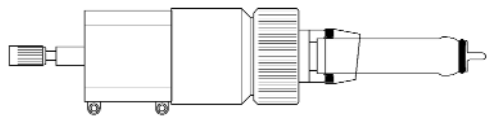
Article no.:	1891065.205	1891665.205
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for threeplex reactors type 33206..

Article no.:	1891665.206	1892065.206	1892565.206
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## Valve spare parts



For standard applications with solid particles and crystals high resistant for chemicals and temperatures. The Pt 100 probe is slower as a glass probe from top and not so exact.

### Valve tape complete with Pt 100 sensor and O-ring made of Perfluorelastomere

for standard reactors type 33004../33111..

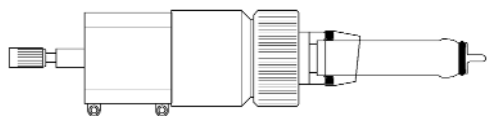
	10 mm	16 mm	20 mm	25 mm
Article no.:	1891067	1891667	1892067	1892567

for threeplex reactors type 33205..

Article no.:	1891067.205	1891667.205
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for threeplex reactors type 33206..

Article no.:	1891667.206	1892067.206	1892567.206
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For standard applications with solid particles and crystals middle resistant for chemicals and temperatures. The Pt 100 probe is slower as a glass probe from top and not so exact

### Valve tape complete with Pt 100 sensor and O-ring made of Viton

for standard reactors type 33004../33111..

	10 mm	16 mm	20 mm	25 mm
Article no.:	1891068	1891668	1892068	1892568

for threeplex reactors type 33205..

Article no.:	1891068.205	1891668.205
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for threeplex reactors type 33206..

Article no.:	1891068.206	1891668.206	1892068.206	1892568.206
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## Piece parts



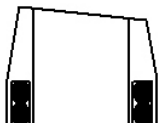
Articles	Sizes	10 mm	16 mm	20 mm	25 mm
<b>Back nut</b>		1891011	1891611	1892011	1892511



<b>Deposit spring</b>		1891012	1891612	1892012	1892512
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Valve seal					
<b>Perfluorelastomere</b>		1891026	1891626	1892026	1892526
<b>Viton</b>		1891027	1891627	1892027	1892527



<b>Conical seal compl.</b>		1891021	1891621	1892020	1892520
<b>O-rings set for conical seal</b>		1891026	1891626	1892026	1892526



<b>PTFE plug standard</b>		1891031	1891631	1892031	1892531
for type 33205..	1891031.205		1891631.205	1892031.205	1892531.205
for type 33206..			1891631.206	1892031.206	1892531.206



<b>PTFE plug with groove</b>		1891032	1891632	1892032	1892532
type 205	1891032.205		1891632.205	1892032.205	1892532.205
for type 33206..			1891632.206	1892032.206	1892532.206