

## Technical data for stopcocks straight, acc. to DIN 12541.

Bore of plug mm	ST	Side arms O. D. mm	Side arms length mm
1.6	12.5	8	100
2.5	14.5	9	100
4 *	14.5	9	100
4	18.8	10	110
6.3 *	18.8	10	110
6.3	21.5	13	120
8	24	15	120
10	29.2	18	120

\* not acc. to DIN

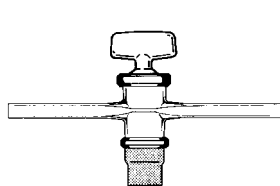
### Stopcocks straight and separate plugs, acc. to DIN 12541.

With solid ST-plug. PRECISO.

Bore of plug mm	Capillary side arms	Bent tube side arms	Separate plugs
*1.6	0.200.001	0.202.001	0.203.001
*2.5	0.200.002	0.202.002	0.203.002
*4	—	0.202.104	0.203.104
*4	—	0.202.004	0.203.004
*6.3	—	0.202.106	0.203.106
**6.3	—	0.202.006	0.203.006
**8	—	0.202.008	0.203.008
**10	—	0.202.010	0.203.010

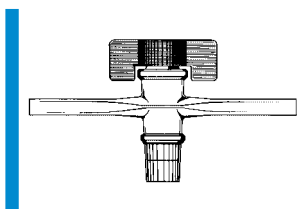
\*with special screw-thread retaining nut (DBGM).

\*\*with rubber retaining nuts "SIE" (DBGM).



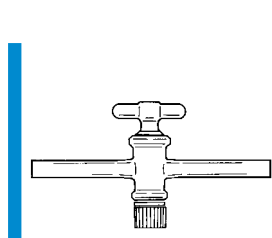
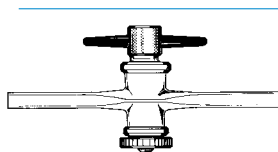
### Stopcocks straight and separate plugs, acc. to DIN 12541, hollow ST-plug, with special screw-thread retaining nut (DBGM). COMPACT.

Bore of plug mm	Capillary side arms	Bent tube side arms	Separate plugs
1.6	0.210.001	0.211.001	0.212.001
2.5	0.210.002	0.211.002	0.212.002
4	—	0.211.004	0.212.004
6.3	—	0.211.006	0.212.006



### Stopcocks straight and separate plugs, acc. to DIN 12541, with ST-PTFE-plug, with special screw-thread retaining nut (DBGM).

Bore of plug mm	Capillary side arms	Bent tube side arms	Separate plugs
1.6	0.204.001	0.205.001	0.206.001
2.5	0.204.002	0.205.002	0.206.002
4	—	0.205.004	0.206.004
4 *	—	0.205.104	0.206.104
6.3 *	—	0.205.106	0.206.106
6.3	—	0.205.006	0.206.006
8	—	0.205.008	0.206.008
10	—	0.205.010	0.206.010



### Stopcocks straight and separate plugs, acc. to DIN 12541, „Typ N“, with hollow ST-plug and glass grip, screw-thread retaining nut (double tested).

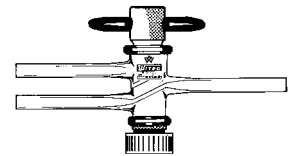
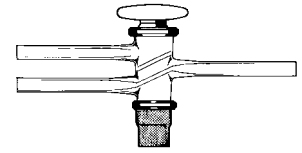
Bore of plug mm	Complete	Separate plugs	Screw-thread retaining nut
1.6	0.214.001	0.215.001	0.216.001
2.5	0.214.002	0.215.002	0.216.002
4	0.214.004	0.215.004	0.216.004
6	0.214.006	0.215.006	0.216.006
8	0.214.008	0.215.008	0.216.008
10	0.214.010	0.215.010	0.216.010



## Technical data for two- and three way stopcocks, acc. to DIN 12553/12554

Bore of plug mm	ST	Side arms O. D. mm	Side arms length mm
1.6	14.5	8	100
2.5	18.8	9	100
*4	21.5	10	110
4	24	10	110
*6.3	24	10	110
6.3	29.2	13	120
*8.0	29.2*	13	120

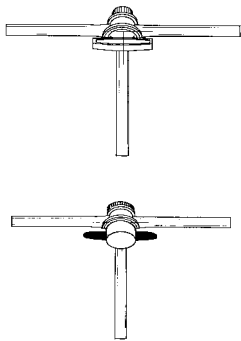
\* not acc. to DIN



## Stopcocks, double bore, acc. to DIN 12553, with screw-thread retaining nut (DBGM).

Bore of plug mm	With solid plug and capillary		With ST-PTFE-plug and Capillary		With hollow plug and bent tube side arms
	side arms	bent tube side arms	side arms	bent tube side arms	
1.6	0.250.001	0.251.001	0.252.001	0.253.001	0.254.001
2.5	0.250.002	0.251.002	0.252.002	0.253.002	0.254.002
*4	–	0.251.004	–	0.253.004	0.254.004
*6.3	–	0.251.006	–	0.253.006	0.254.006

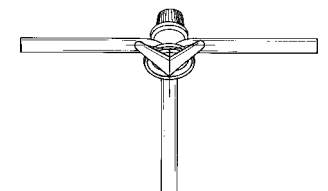
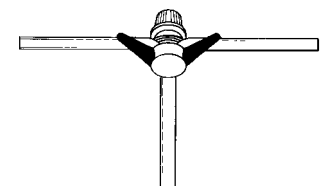
\* not acc. to DIN



## Stopcocks, three way, acc. to DIN 12554, with T-bore, with screw-thread retaining nut (DBGM).

Bore of plug mm	With solid plug and capillary		With ST-PTFE-plug and capillary		With hollow plug and bent tube side arms
	side arms	bent tube side arms	side arms	bent tube side arms	
1.6	0.262.001	0.263.001	0.264.001	0.265.001	0.266.001
2.5	0.262.002	0.263.002	0.264.002	0.265.002	0.266.002
*4	–	0.263.004	–	0.265.004	0.266.004
*6.3	–	0.263.006	–	0.265.006	0.266.006
*8	–	0.263.008	–	0.265.008	0.266.008

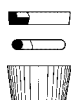
\* not acc. to DIN



## Stopcocks, three way, acc. to Czako, acc. to DIN 12563.

Bore of plug mm	With solid plug and capillary		With ST-PTFE-plug and capillary		With hollow plug and bent tube side arms
	side arms	bent tube side arms	side arms	bent tube side arms	
1.6	0.268.001	0.268.101	0.269.001	0.269.101	0.269.201
2.5	0.268.002	0.268.102	0.269.002	0.269.102	0.269.202
4	–	0.268.104	–	0.269.104	0.269.204

## Screw-thread retaining nuts and rubber-O-ring.



ST	Screw-thread GL	For solid plugs	For hollow plugs
12.5	8	0.245.008	0.245.108
14.5	9	0.245.009	0.245.109
18.8	12	0.245.012	0.245.112
21.5	14	0.245.014	0.245.114



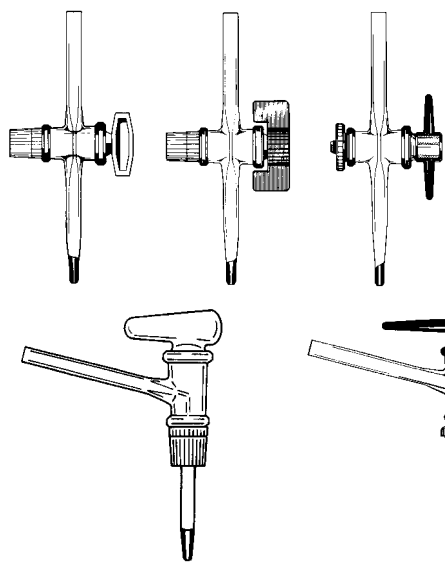
## Attention:

The tip opening of each burette stopcock is precisely adjusted to the total capacity of the burettes. We kindly ask you to specify the burette capacity when ordering.

For burette 10 ml \*...\*1\*

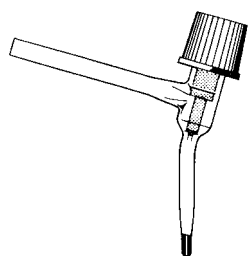
For burette 25 ml \*...\*2\*

For burette 50 ml \*...\*5\*



### Stopcocks for burettes, acc. to DIN 12541, bore 1.6 mm. ST 12.5.

ST-plug	Soda glass	Borosilicate
<b>Straight</b>		
solid	0.232.0*1	0.232.1*1
hollow ("COMPACT")	0.233.0*1	0.233.1*1
PTFE	0.234.0*1	0.234.1*1
<b>Lateral</b>		
solid	0.238.0*1	0.238.1*1
separate plugs	0.239.0*1	—
PTFE	0.240.0*1	0.240.1*1
PTFE-separate plugs	0.241.0*1	—

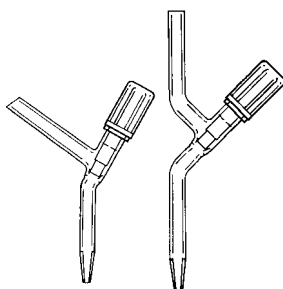


### Valves for burettes, lateral, with PTFE-valve plug.

Type	Bore of plug mm	
Soda glass	0-2.5	0.244.001
Borosilicate	0-2.5	0.244.101
Amber glass	0-2.5	0.244.201
Spare needle valve	0-2.5	0.244.300

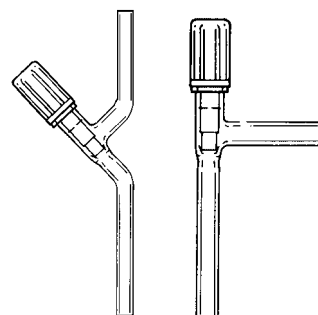
**Needle valve stopcocks "Economy"**, with PTFE-needle valve, with sealing system, with overtight safety device. DURAN.

Type	Bore of plug mm	
Lateral	0-3	0.243.300
Straight	0-3	0.243.400
Spare needle valve	0-3	0.243.500



**Needle valve stopcocks "Economy"**, with PTFE-needle valve, with sealing system, with overtight safety device. DURAN.

Bore of plug mm	Needle valve stopcock straight	Needle valve stopcock angled	Spare needle valve
0-3	0.243.100	0.243.200	0.243.500
0-6	0.243.150	0.243.250	0.243.550
0-10	0.243.160	0.243.260	0.243.560





## Technical data for high vacuum stopcocks, acc. to Schiff, acc. to DIN 12545.

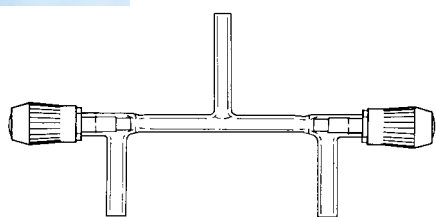
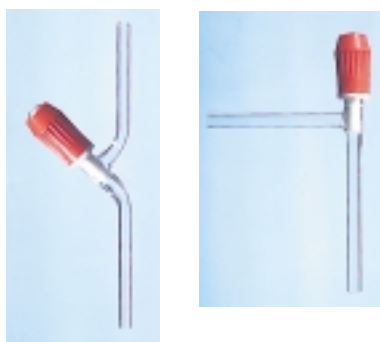
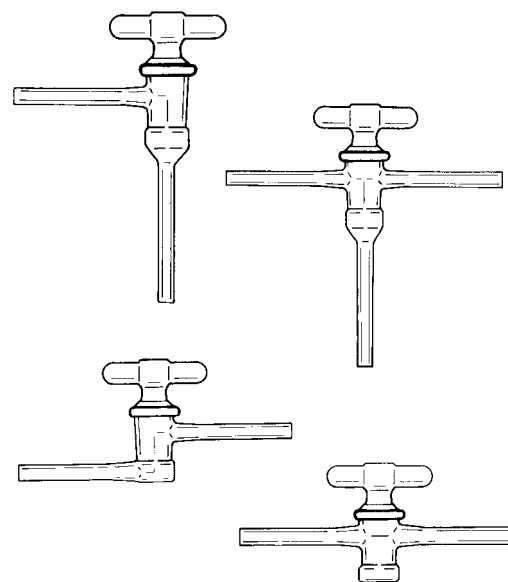
Bore of plug mm	ST	Side arms O. D. mm	Side arms length mm
2.5	14.5	9	100
4	18.8	10	110
6.3	21.5	13	120
10	29.2	18	120
*12	34.5	20	120
*15	45	22	120

\*not acc. to DIN

## High vacuum stopcocks, acc. to Schiff, acc. to DIN 12545, with hollow ST-plug.

Bore of plug mm	Stopcock angled	Stopcock double bore	Stopcock straight	Stopcock bag
2.5	0.270.002	0.272.002	0.274.002	0.276.002
4	0.270.004	0.272.004	0.274.004	0.276.004
6.3	0.270.006	0.272.006	0.274.006	0.276.006
10	0.270.010	0.272.010	0.274.010	0.276.010
*12	0.270.012	0.272.012	0.274.012	0.276.012

\* not acc. to DIN



## High vacuum stopcocks "Witaflor-red", borosilicate glass, with adjustable PTFE-seal, leak rate $<10^{-6}$ , usable between -20 and +200 °C, with overtwist safety device.

Bore of plug mm	Length mm	Side arms O. D. mm	Stopcock straight	Stopcock angled	Stopcock three way
2	210	8	*0.290.102	0.290.202	—
3	210	8	0.290.103	0.290.203	**0.290.303
6	210	10	0.290.106	0.290.206	***0.290.306
10	225	13	0.290.110	0.290.210	—
12	225	15	0.290.112	0.290.212	—
14	225	18	0.290.114	0.290.214	—

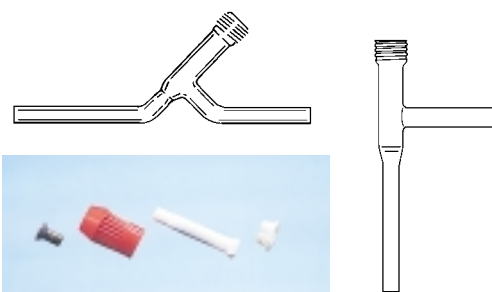
\*7/8 mm O. D., capillary

\*\*215 mm long

\*\*\*220 mm long

## High vacuum stopcocks, spare parts for "Witaflor-red".

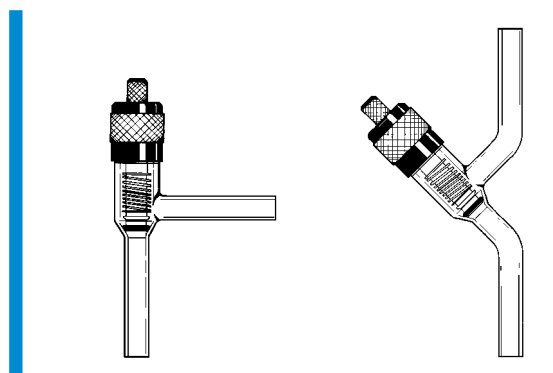
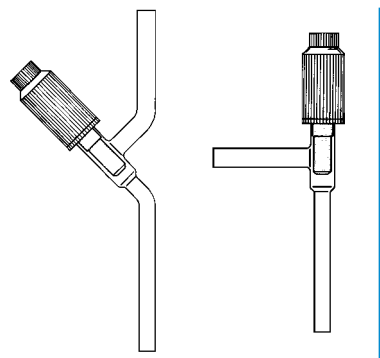
For bore of plug mm	PTFE needle valve	Glass- housings straight	Glass- housings angled	Overtwist safety device
2	0.290.402	0.290.502	0.290.602	0.290.702
3	0.290.403	0.290.503	0.290.603	0.290.703
6	0.290.406	0.290.506	0.290.606	0.290.706
10	0.290.410	0.290.510	0.290.610	0.290.710
12	0.290.412	0.290.512	0.290.612	0.290.712
14	0.290.414	0.290.514	0.290.614	0.290.714





**High vacuum stopcock** with PTFE needle valve, "Witaflo", adjustable, leakage rate  $< 10^{-8}$ , with interchangeable valve plug tip.

Bore	Side arms	Side arms length	Screw thread	Needle valve stopcock straight	Needle valve stopcock angled
mm	O. D. mm	mm	mm		
3	8	75	14	0.291.003	0.293.003
6	10	75	18	0.291.006	0.293.006
10	18	85	24	0.291.010	0.293.010
15	20	85	24	0.291.015	0.293.015
<b>Type-N</b>					
3	8	75	—	0.291.103	0.293.103
6	10	75	—	0.291.106	0.293.106

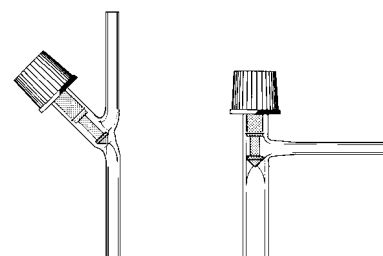


**Straight, ultra-high vacuum valves**, "SVT", with valve-bellow, made of V4A steel, with Viton-O-ring-seal, leak rate  $< 10^{-9}$ . PTFE sealing: please write TEF behind the order. no.

Bore	Side arms	Needle valve stopcock straight	Needle valve stopcock angled
mm	O. D. mm		
4	7	0.297.004	0.298.004
9	12	0.297.010	0.298.010
15	19	0.297.015	0.298.015
20	26	0.297.020	0.298.020

**Straight vacuum valves**, With PTFE valve-bellow and PTFE sealing, leak rate  $< 10^{-9}$ .

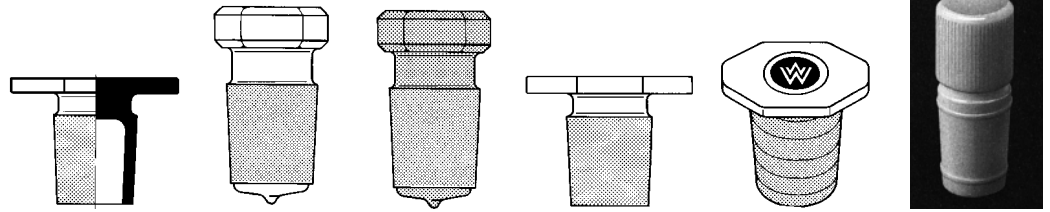
Bore	Side arms	Side arms length	Needle valve stopcock straight	Needle valve stopcock angled
mm	O. D. mm	mm		
0-4	10	110	0.290.804	0.290.904
0-6	-	-	0.290.806	0.290.906





## ST-stoppers.

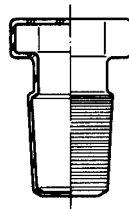
1. Borosilicate glass, solid, octagonal plate, DIN 12252.
2. Borosilicate glass, hollow, hexag. plate, DIN 12252, with drip tip.
3. Amber glass, hollow, hexagonal plate, DIN 12252, with drip tip.
4. Borosilicate glass, hollow, with safety nut.
5. PE, octagonal plate, DIN 12254.
6. PTFE (Teflon), solid.



ST	1.	2.	3.	4..	5.	6.
7/16	0.300.007	0.302.007	0.303.007	–	0.306.007	–
10/19	0.300.010	0.302.010	0.303.010	0.304.010	0.306.010	7.203.001
12/21	0.300.012	0.302.012	0.303.012	0.304.012	0.306.012	–
14/23	0.300.014	0.302.014	0.303.014	0.304.014	0.306.014	7.203.002
19/26	0.300.019	0.302.019	0.302.019	0.304.019	0.306.019	7.203.003
24/29	0.300.024	0.302.024	0.303.024	0.304.024	0.306.024	7.203.004
29/32	0.300.029	0.302.029	0.303.029	0.304.029	0.306.029	7.203.005
34/35	0.300.034	0.302.034	0.303.034	0.304.034	0.306.034	7.203.006
45/40	0.300.045	0.302.045	0.303.045	0.304.045	0.306.045	–
60/46	–	–	–	–	0.306.060	–
85/55	–	–	–	–	0.306.085	–

## ST-stoppers, short joint, hollow, hexagonal plate, flat.

ST	
10/13	0.305.010
12/14	0.305.012
14/15	0.305.014
19/17	0.305.019
24/20	0.305.024
29/22	0.305.029



**Cork stoppers**, for laboratory purposes, extra fine quality SI, packed in plastic bags (see minimum quantity). Smaller quantities are only available at surcharge of 40%.

Dia. top/bottom mm	Length mm	Type	Standard pack pcs.	
10/7	19	0	200	9.300.000
12/9	17	1	200	9.300.001
15/12	22	2	200	9.300.002
17/14	22	3	200	9.300.003
20/17	22	4	100	9.300.004
26/22	27	5	100	9.300.005
30/26	27	6	100	9.300.006
36/32	27	7	50	9.300.007
40/36	27	8	50	9.300.008
45/40	30	9	25	9.300.009
50/45	30	10	25	9.300.010
55/50	30	11	25	9.300.011
60/55	30	12	10	9.300.012
65/60	30	13	10	9.300.013
70/65	30	14	10	9.300.014
75/70	30	15	10	9.300.015
80/75	30	16	10	9.300.016
85/80	30	17	10	9.300.017
90/85	30	18	10	9.300.018
95/90	30	19	5	9.300.019
100/95	30	20	5	9.300.020





**Rubber stoppers**, grey natural rubber, solid, shore-hardness 35 - 5°, specific weight 0,99, non-toxic, low sulphur content, especially for laboratory purposes. Rubber stoppers are available with 1 or 2 holes, 3 - 8 mm Ø.

Dia. top/bottom mm	Length mm	Type	Standard- pack pcs.	
8/4	20	0	200	9.303.000
10/6	20	1	200	9.303.001
13/9	20	2	200	9.303.002
15/11	20	3	200	9.303.003
19/14	20	4	100	9.303.004
21/16	25	5	100	9.303.005
24/19	25	6	100	9.303.006
27/22	25	7	50	9.303.007
31/25	30	8	50	9.303.008
34/28	30	9	25	9.303.009
38/31	35	10	25	9.303.010
41/34	35	11	25	9.303.011
45/38	35	12	10	9.303.012
49/42	35	13	10	9.303.013
54/46	40	14	10	9.303.014
60/50	50	15	10	9.303.015
73/63	50	16	10	9.303.016
90/70	50	17	10	9.303.017
92/78	50	18	10	9.303.018
95/85	50	19	5	9.303.019
105/95	50	20	5	9.303.020
Surcharge for 1 hole				9.305.001
Surcharge for 2 holes				9.305.002



**Stoppers**, silicone, transparent, flexible, extremely resistant against high temperature, cold and chemical attacks (-60 to +180 °C).

Dia. top/bottom mm	Length mm	
6.5/3.5	15	9.201.001
9/5	20	9.201.002
12/8	20	9.201.003
14.5/10	20	9.201.004
16.5/12.5	20	9.201.005
18/14	20	9.201.006
22/17	25	9.201.007
24/18	30	9.201.008
27/21	30	9.201.009
29/23	30	9.201.010
32/26	30	9.201.011
35/29	30	9.201.012
38/31	35	9.201.013
44/36	40	9.201.014
45/41	40	9.201.015
55/47	40	9.201.016
59.5/50.5	45	9.201.017
65/56	45	9.201.018
70/60	50	9.201.019
75.5/64.5	55	9.201.020
83/71	60	9.201.021
92/79	65	9.201.022
100/87	65	9.201.023
107/94	65	9.201.024

Stoppers and caps for tissue culture see section Life science