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GLASS CAPILLARIES

Capillaries made of borosilicate glass 3.3



- Single circular
- Ends cut
- Minimum purchase: 100 pieces

Outside-Ø (mm)	Inside-Ø (mm)	Wall thickness (mm)	Length (mm)	Code no.
1.00 ± 0.05	0.580 ± 0.05	0.21	75	1408499
			100	1406119
			150	1405005
1.00 ± 0.05	0.722 ± 0.05	0.13	75	1409257
			100	1408409
			150	1408410
1.20 ± 0.05	0.696 ± 0.05	0.252	75	1409255
			100	1405012
			150	1406179
1.50 ± 0.05	0.870 ± 0.05	0.315	75	1409249
			100	1405063
			150	1405060
1.50 ± 0.05	1.050 ± 0.05	0.225	75	1409250
			100	1408411
			150	1408412
2.00 ± 0.10	1.000 ± 0.10	0.5	75	1405020
			100	1406180
			150	1405006
2.00 ± 0.10	1.160 ± 0.10	0.42	75	1409256
			100	1407425
			150	1408414
2.00 ± 0.10	1.400 ± 0.10	0.3	75	1405059
			100	1405076
			150	1408413
2.00 ± 0.10	1.600 ± 0.05	0.2	75	1422037
			100	1423037
			150	1425037
3.00 ± 0.15	2.400 ± 0.15	0.3	75	1422057
			100	1423057
			150	1425057



GLASS CAPILLARIES

Capillaries made of borosilicate glass 3.3 for InVitro-fertilization



- Single circular
- Ends cut
- Minimum purchase: 1000 pieces

Outside-Ø (mm)	Inside-Ø (mm)	Wall thickness (mm)	Length (mm)	Code no.
0.250 ± 0.03	0.140 ± 0.030	0.055	120 ± 1	1409092
0.260 ± 0.03	0.130 ± 0.030	0.065	120 ± 1	1409091
0.268 ± 0.03	0.150 ± 0.030	0.059	120 ± 1	1409093
0.375 ± 0.01	0.161 ± 0.008	0.107	140 ± 1	1405084
0.405 ± 0.01	0.135 ± 0.010	0.135	140 ± 1	1408454
0.483 ± 0.02	0.145 ± 0.020	0.169	140 ± 1	1409271
0.536 ± 0.05	0.300 ± 0.010	0.118	140 ± 1	1405085
0.540 ± 0.05	0.162 ± 0.020	0.189	140 ± 1	1405097

Capillaries made of quartz glass



- Single circular
- Ends cut
- Minimum purchase: 100 pieces

Outside-Ø (mm)	Inside-Ø (mm)	Wall thickness (mm)	Length (mm)	Code no.
1.0 ± 0.10	0.80 ± 0.10	0.1	75	1406785
			100	1406730
			150	1406786
1.0 ± 0.15	0.58 ± 0.15	0.21	75	1406784
			100	1406752
			150	1406774
1.2 ± 0.10	0.60 ± 0.10	0.3	75	1406787
			100	1406707
			150	1406788
1.2 ± 0.10	0.90 ± 0.10	0.15	75	1406721
			100	1406720
			150	1406789

Now also available with filament or alternatively with partition in different dimensions



GLASS CAPILLARIES

Capillaries made of soda lime glass



- for various laboratory application
- Single circular, both ends cut
- 30 mm up to 100 mm Length
- Minimum order: 1.000 pieces

Outside-Ø (mm)	Inside-Ø (mm)	Wall thickness (mm)	Length (mm)	Code no.
0.80	0.64	0.08	30	1410213
0.75	0.60	0.075	50	1411012
1.25	1.00	0.125	50	1411022
2.00	1.60	0.2	50	1411037
2.00	1.60	0.2	65	1411637
0.50	0.40	0.05	70	1411807
0.55	0.44	0.055	70	1411808
0.90	0.72	0.09	70	1411815
2.00	1.60	0.2	70	1411837
0.70	0.56	0.07	75	1412011
2.50	2.00	0.25	75	1412047
0.40	0.32	0.04	80	1412205
0.50	0.40	0.05	80	1412207
0.60	0.48	0.06	80	1412209
0.70	0.56	0.07	80	1412211
0.80	0.64	0.08	80	1412213
0.90	0.72	0.09	80	1412215
1.00	0.80	0.1	80	1412217
1.50	1.20	0.15	80	1412227
0.50	0.40	0.05	100	1413007
0.55	0.44	0.055	100	1413008
0.60	0.48	0.06	100	1413009
0.70	0.56	0.07	100	1413011
0.80	0.64	0.08	100	1413013
1.00	0.80	0.1	100	1413017
1.20	0.96	0.12	100	1413021
1.25	1.00	0.125	100	1413022
1.30	1.04	0.13	100	1413023
1.40	1.12	0.14	100	1413025
1.50	1.20	0.150	100	1413027
1.80	1.44	0.18	100	1413033
2.00	1.60	0.2	100	1413037



GLASS CAPILLARIES

Capillaries made of soda lime glass



- for various laboratory application
- Single circular, both ends cut
- > 120 mm Lenght
- Minimum order: 1.000 pieces

Outside-Ø (mm)	Inside-Ø (mm)	Wall thickness (mm)	Lenght (mm)	Code no.
0.75	0.60	0.075	120	1413812
0.80	0.64	0.08	120	1413813
0.90	0.72	0.09	120	1413815
1.00	0.80	0.1	120	1413817
1.20	0.96	0.12	120	1413821
0.60	0.48	0.06	150	1415009
0.90	0.72	0.09	150	1415015
1.00	0.80	0.1	150	1415017
1.20	0.96	0.12	150	1415021
1.40	1.12	0.14	150	1415025
2.00	1.60	0.2	150	1415037
0.40	0.32	0.04	160	1415405
0.50	0.40	0.05	160	1415407
1.00	0.80	0.1	200	1416817
1.35	1.08	0.135	200	1416824
0.90	0.72	0.09	230	1417415

Capillaries made of borosilicate glass 3.3 up to an outer diameter of 1.2 mm



- Single circular, with filament
- Ends cut
- Minimum order: 100 Stück

Outside-Ø (mm)	Inside-Ø (mm)	Wall thickness (mm)	Filament-Ø (mm)	Lenght (mm)	Code no.
1.00 ± 0.05	0.580 ± 0.05	0.21	0.1	75	1403575
				100	1403547
				150	1403550
1.00 ± 0.05	0.580 ± 0.05	0.21	0.133	75	1403571
				100	1403501
				150	1403517
1.00 ± 0.05	0.750 ± 0.05	0.125	0.1	75	1405218
				100	1405201
				150	1405208
1.00 ± 0.05	0.800 ± 0.05	0.1	0.1	75	1404523
				100	1404502
				150	1404503



GLASS CAPILLARIES

Outside-Ø (mm)	Inside-Ø (mm)	Wall thickness (mm)	Filament-Ø (mm)	Lenght (mm)	Code no.
1.20 ± 0.05	0.696 ± 0.05	0.252	0.16	75	1403570
				100	1403526
				150	1403529
1.20 ± 0.05	0.764 ± 0.05	0.218	0.12	75	1406304
				100	1406301
				150	1406303
1.20 ± 0.05	0.900 ± 0.05	0.15	0.12	75	1405219
				100	1405202
				150	1405210
1.20 ± 0.05	0.960 ± 0.05	0.12	0.12	75	1403012
				100	1403003
				150	1403004

Capillaries made of borosilicate glass 3.3 with outer diameter > 1.2 mm



- Single circular. with filament
- Ends cut
- Minimum order: 100 pieces

Outside-Ø (mm)	Inside-Ø (mm)	Wall thickness (mm)	Filament-Ø (mm)	Lenght (mm)	Code no.
1.50 ± 0.05	0.870 ± 0.05	0.315	0.15	75	1403574
				100	1403542
				150	1403549
1.50 ± 0.05	0.870 ± 0.05	0.315	0.2	75	1403573
				100	1403512
				150	1403530
1.50 ± 0.05	1.124 ± 0.05	0.188	0.15	75	1405215
				100	1405203
				150	1405207
1.50 ± 0.05	1.177 ± 0.05	0.162	0.15	75	1403013
				100	1403005
				150	1403001
1.50 ± 0.05	1.200 ± 0.05	0.15	0.15	75	1404524
				100	1404501
				150	1404519
2.00 ± 0.10	1.160 ± 0.10	0.42	0.267	75	1403569
				100	1403513
				150	1403531
2.00 ± 0.10	1.600 ± 0.10	0.2	0.2	75	1408018
				100	1404506
				150	1404518
3.00 ± 0.15	1.740 ± 0.15	0.63	0.3	75	1403543
				100	1403551
				150	1403552



GLASS CAPILLARIES

In addition to the standard geometry of a simple, round cross-section with various wall thicknesses, special geometries that include flat, square and triangular capillaries are also available. Here, you will find a selection of the different capillary profiles that we offer as standard. The selection of profiles we have already manufactured for our customers goes far beyond this, however – everything from the simple, round tube to the repeat bundling of multi-channel capillaries.

Are you looking for something in particular, a combination tailored specifically to your requirements? Talk to us today!



Theta-profile capillaries made of borosilicate glass 3.3



- Capillaries with internal septum
- Ends cut
- Minimum order: 100 pieces

Outside-Ø (mm)	Inside-Ø (mm)	Wall thickness (mm)	Septum (mm)	Length (mm)	Code no.
1.50 ± 0.05	1.05 ± 0.05	0.225	0.165	75	1401010
				100	1401016
				150	1401019
2.00 ± 0.15	1.40 ± 0.15	0.3	0.22	75	1401046
				100	1401021
				150	1401025

Theta cross-section-capillaries made of Borosilicate glass 3.3



- with crossed septum
- Ends cut
- Minimum order: 100 pieces



Outside-Ø (mm)	Inside-Ø (mm)	Wall thickness (mm)	Septum (mm)	Length (mm)	Code no.
1.00 ± 0.10	0.70 ± 0.10	0.15	0.044	100	1401730
2.00 ± 0.10	1.40 ± 0.10	0.3	0.088	100	1401731
3.00 ± 0.20	2.20 ± 0.20	0.4	0.12	100	1401728

Rectangular capillaries made of borosilicate glass 3.3



- with two parallel walls
- Minimum order: 25 pieces

HIGHLIGHT PRODUCT

Outer Dimension (mm)	Wall thickness (mm)	Length (mm)	packed per	Code no.
2.0 x 1.00	~ 0.110	80	25 Stück	1470640
4.2 x 1.25	~ 0.125	80	25 Stück	1408963
5.0 x 1.32	~ 0.220	80	25 Stück	1470641
6.5 x 1.40	~ 0.160	80	25 Stück	1408964



GLASS CAPILLARIES

Multiple bundled capillaries made of Borosilicate glass 3.3



- dual
- Ends cut
- Minimum order: 100 pieces

Outside-Ø (mm)	Inside-Ø (mm)	Wall thickness (mm)	Filament-Ø (mm)	Length (mm)	Code no.
1.20 ± 0.05	0.600 ± 0.05	0.3	0.12	75	1402837
				100	1402810
				150	1402813
1.50 ± 0.05	0.750 ± 0.05	0.375	0.15	75	1402838
				100	1402806
				150	1402819
1.50 ± 0.05	0.870 ± 0.05	0.315	0.15	75	1402839
				100	1402817
				150	1402818



- triple bundled
- Ends cut
- Minimum order: 100 pieces

Outside-Ø (mm)	Inside-Ø (mm)	Wall thickness (mm)	Filament-Ø (mm)	Length (mm)	Code no.
1.20 ± 0.05	0.695 ± 0.05	0.253	0.12	75	1402920
				100	1402917
				150	1402916



- quadruple bundled
- Ends cut
- Minimum order: 100 pieces

Outside-Ø (mm)	Inside-Ø (mm)	Wall thickness (mm)	Filament-Ø (mm)	Length (mm)	Code no.
1.20 ± 0.05	0.600 ± 0.05	0.3	0.12	75	1405118
				100	1405102
				150	1405106



Our bundled capillaries come in a wide variety of combinations. There are various diameters to choose from, with a choice between solid rods or fibres, with and without filament. We will be more than happy to provide you with a version that best meets your requirements.



GLASS CAPILLARIES



- quintuple bundled
- Ends cut
- Minimum order: 100 pieces

Outside-Ø (mm)	Inside-Ø (mm)	Wall thickness (mm)	Filament-Ø (mm)	Length (mm)	Code no.
1.20 ± 0.05	0.672 ± 0.05	0.264	0.12	75	1405317
				100	1405302
				150	1405303



- sevenfold bundled
- Ends cut
- Minimum order: 100 pieces

Outside-Ø (mm)	Inside-Ø (mm)	Wall thickness (mm)	Filament-Ø (mm)	Length (mm)	Code no.
1.00 ± 0.05	0.560 ± 0.05	0.22	0.1	75	1406809
				100	1406801
				150	1406802

There are plenty of options when it comes to ordering our bundled capillaries. Unlike multi-capillaries, the hollow spaces between the bundled capillaries are not filled. Channels and gaps are created from the bundling of assorted simple capillaries. It is possible to combine various diameters, wall thicknesses and rods, as well as capillaries with or without filament.



Multi-capillaries



Multiple bundle capillaries



9-fold capillary

This multi channel capillary is shaped by the symmetrically arranged in tiers capillaries with their 9 channels. The single channels are manufactured with solid walls. can also be shaped thinner. The capillaries are applicable in the electrophysiology and electrochemistry.



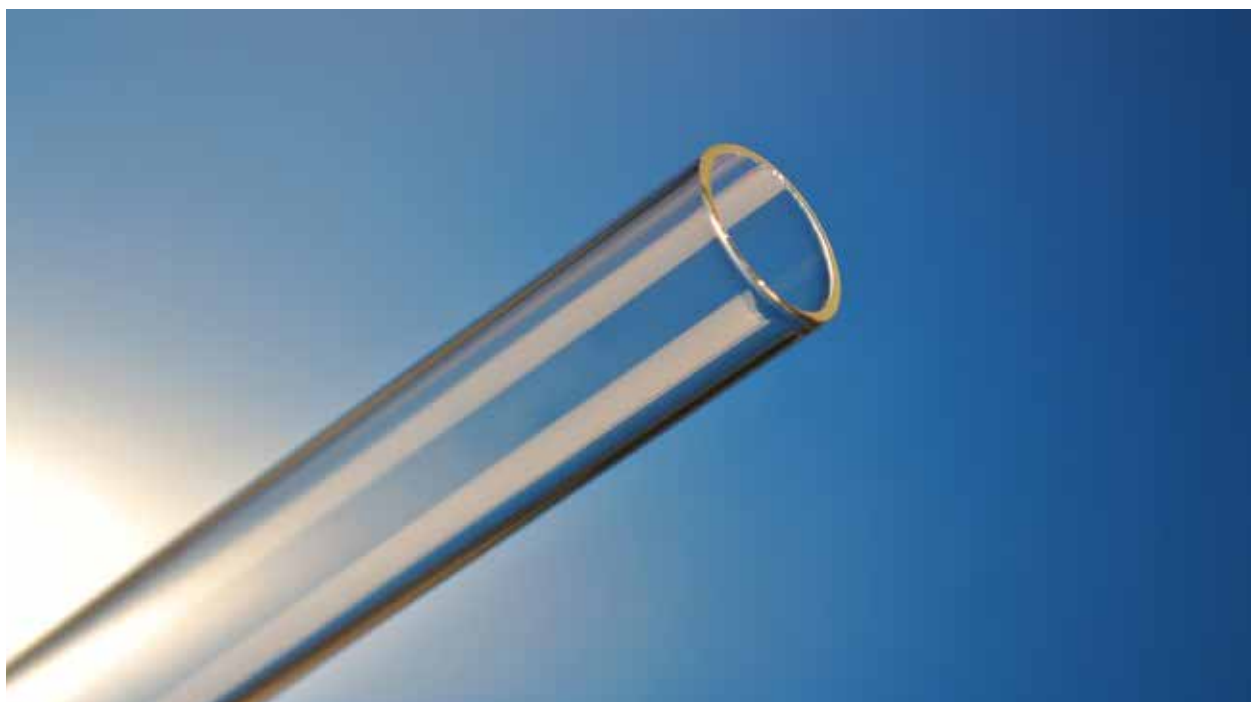
GLASS CAPILLARIES

Thin walled tubes made of borosilicate glass 3.3

- for measuring cells used for research on extra large molecules
- wall thickness < 0.1 mm
- Minimum order: 25 pieces

HIGHLIGHT PRODUCT

Outside- Ø (mm)	Wall thick- ness (mm)	Length (mm)	packed per	Code no.
1.1	0.05	100	25 Stück	1470263
2.1	0.05	100	25 Stück	1409364
3.8	0.05	100	25 Stück	1409363
4.1	0.05	80	25 Stück	1409346
4.7	0.1	100	25 Stück	1409365
5.2	0.1	100	25 Stück	1409366
6.0	0.05	100	25 Stück	1471153



The distinctiveness of these capillaries is their very thin wall-thickness in relation to their diameter. The extremely thin walls lead to the special feature of these capillaries to be deformed easily. Additional features linked to the thin wall-thickness are minimal optical distortion as well as very low absorption for a wide range of radiation. This feature is used e.g. for the construction of optical measuring cells.

Advantages

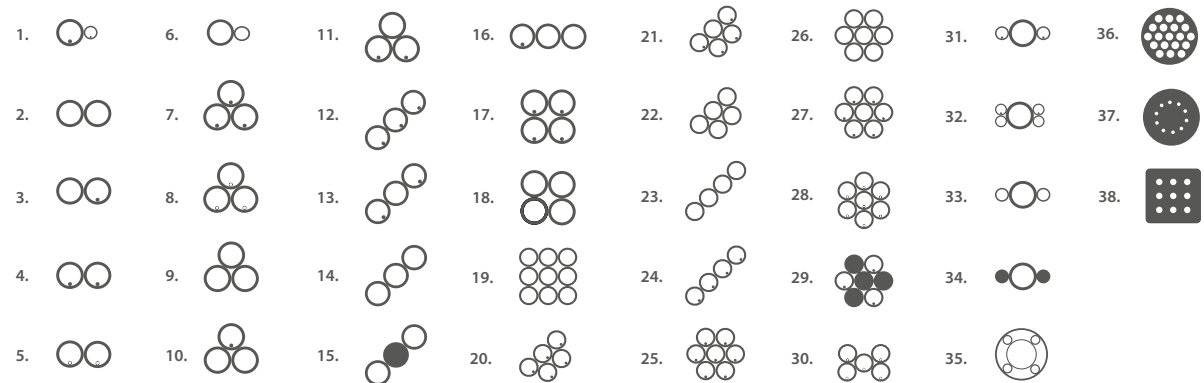
- Low absorption of radiation
- Low optical distortion
- Very low weight of the components'
- Easy to process via laser (cut to length, cut in half, outline-cut)
- Mechanically flexible, easily deformed

Capillary profiles (single)



- | | | |
|--|--|---|
| 1. single. circular. thin-walled | 10. theta cross-section profile | 18. six-jagged profile. circular inside. without filament |
| 2. single. circular. standard wall | 11. single. square. standard wall thickness | 19. three-jagged profile. circular inside. without filament |
| 3. single. circular. thick-walled | 12. flat capillary-profile | 20. triangular profile with hole |
| 4. single. circular. very thick-walled | 13. oval capillary-profile. thin-walled | 21. triangular capillary profile. thin-walled |
| 5. single. circular. with hollow filament | 14. oval capillary-profile | 22. triangular capillary profile |
| 6. single. circular. with solid filament | 15. 2-hole capillary profile | |
| 7. theta profile. circular. with internal septum | 16. 4-hole capillary profile | |
| 8. theta profile with filaments on inner wall | 17. internal profile. circular outside. without filament | |
| 9. theta profile with filaments on outer wall | | |

Capillary profiles (multiple)



- | | |
|--|--|
| 1. dual. different diameters. with solid filaments | 21. quintuple bundle. same diameters. with only 4 filaments |
| 2. dual. same diameters. without filaments | 22. quintuple bundle. same diameters. without filaments |
| 3. dual. same diameters. with only one filament | 23. quadruple parallel. same diameters. without filaments |
| 4. dual. same diameters. with filaments | 24. quadruple parallel. same diameters. with filaments |
| 5. dual. same diameters. with hollow filaments | 25. sevenfold bundle. same diameters. with filaments |
| 6. piggybag-profile | 26. sevenfold bundle. same diameters. without filaments |
| 7. triple bundle. same diameters. with filaments | 27. sevenfold bundle. same diameters. with only 6 filaments |
| 8. triple bundle. same diameters. with hollow filaments | 28. sevenfold bundle. same diameters. with hollow filaments |
| 9. triple bundle. same diameters. without filaments | 29. threesome and foursome geometry. bundled. with filaments |
| 10. triple bundle. same diameters. with only one filament | 30. quintuple bundle. same diameters. in X-array with hollow filaments |
| 11. triple bundle. same diameters. with only 2 filaments | 31. triple bundle. different diameters. with filaments outside |
| 12. triple parallel. same diameters. with filaments | 32. quintuple bundle. different diameters. in x-array with only 2 filaments |
| 13. triple parallel. same diameters. with only 2 filaments | 33. triple bundle. different diameters. with flanking capillaries. without filaments |
| 14. triple parallel. same diameters. without filaments | 34. triple bundle. different diameters. with flanking rods |
| 15. triple parallel. same diameters. with center rod | 35. 1+4 internal geometry. circular. without filaments |
| 16. triple. same diameters. with only one filament | 36. multi-channel capillary profile |
| 17. quadruple bundle. same diameters. with filaments | 37. multi-channel capillary profile (circular) |
| 18. quadruple bundle. same diameters. without filaments | 38. multi-channel capillary profile (square) |
| 19. ninefold bundle. same diameters. without filaments | |
| 20. quintuple bundle. same diameters. with filaments | |



TUBES & CYLINDERS

Tubes made of borosilicate glass 3.3

- Minimum order: 1 Packaging Unit (PU)

Outside-Ø (mm)	Wall thickness (mm)	Length (mm)	Weight per 1 piece (g)	Number of pieces in box (pieces)	Weight of box (kg) = 1 PU	Weight per pallet (kg)	Code no.
4.0 ± 0.15	0.8 ± 0.04	1500 ± 20	27	400	10.8	453.6	1201501
5.0 ± 0.15	0.8 ± 0.04	1500 ± 20	35	256	9	441	1201502
6.0 ± 0.15	1.0 ± 0.04	1500 ± 20	53	170	9	441	1201503
6.0 ± 0.15	1.5 ± 0.10	1500 ± 20	71	170	12.1	423.5	1201504
7.0 ± 0.15	1.0 ± 0.04	1500 ± 20	63	121	7.6	425.6	1201505
7.0 ± 0.15	1.5 ± 0.10	1500 ± 20	87	121	10.5	441	1201506
8.0 ± 0.15	1.0 ± 0.04	1500 ± 20	74	100	7.4	414.4	1201507
8.0 ± 0.15	1.5 ± 0.10	1500 ± 20	102	100	10.2	428.4	1201508
9.0 ± 0.15	1.0 ± 0.04	1500 ± 20	84	81	6.8	380.8	1201509
9.0 ± 0.15	1.5 ± 0.10	1500 ± 20	118	81	9.6	403.2	1201510
10.0 ± 0.15	1.0 ± 0.04	1500 ± 20	95	64	6.1	341.6	1201500
10.0 ± 0.15	1.5 ± 0.10	1500 ± 20	134	64	8.6	421.4	1201511
10.0 ± 0.15	2.2 ± 0.15	1500 ± 20	180	64	11.5	402.5	1201512
10.0 ± 0.30	3.5 ± 0.25	1500 ± 20	239	64	15.3	428.4	1201619
11.0 ± 0.20	1.0 ± 0.04	1500 ± 20	105	121	12.7	444.5	1201513
11.0 ± 0.20	1.5 ± 0.10	1500 ± 20	150	121	18.2	455	1201514
11.0 ± 0.20	2.2 ± 0.15	1500 ± 20	203	50	10.2	428.4	1201515
12.0 ± 0.20	1.0 ± 0.04	1500 ± 20	116	100	11.6	406	1201516
12.0 ± 0.20	1.5 ± 0.10	1500 ± 20	166	100	16.6	415	1201517
12.0 ± 0.20	2.2 ± 0.15	1500 ± 20	227	49	11.1	466.2	1201518
12.0 ± 0.30	3.5 ± 0.15	1500 ± 20	313	49	15.3	428.4	1201620
13.0 ± 0.20	1.0 ± 0.04	1500 ± 20	126	81	10.2	357	1201519
13.0 ± 0.20	1.5 ± 0.10	1500 ± 20	181	81	14.7	441	1201520
13.0 ± 0.20	2.2 ± 0.15	1500 ± 20	250	81	20.3	406	1201521
14.0 ± 0.20	1.0 ± 0.04	1500 ± 20	137	64	8.8	308	1201522
14.0 ± 0.20	1.5 ± 0.10	1500 ± 20	197	64	12.6	441	1201523
14.0 ± 0.20	2.2 ± 0.15	1500 ± 20	273	64	17.5	437.5	1201524
15.0 ± 0.20	1.2 ± 0.05	1500 ± 20	174	49	8.5	297.5	1201525
15.0 ± 0.20	1.8 ± 0.10	1500 ± 20	250	49	12.3	430.5	1201526
15.0 ± 0.20	2.5 ± 0.15	1500 ± 20	328	49	16.1	402.5	1201527
16.0 ± 0.20	1.2 ± 0.05	1500 ± 20	187	49	9.2	322	1201528
16.0 ± 0.20	1.8 ± 0.10	1500 ± 20	269	49	13.2	462	1201529
16.0 ± 0.20	2.5 ± 0.15	1500 ± 20	355	49	17.4	435	1201530
16.0 ± 0.25	3.5 ± 0.40	1500 ± 20	460	49	22.5	450	1201621
17.0 ± 0.20	1.2 ± 0.05	1500 ± 20	199	36	7.2	252	1201531
17.0 ± 0.20	1.8 ± 0.10	1500 ± 20	288	36	10.4	364	1201532
17.0 ± 0.20	2.5 ± 0.15	1500 ± 20	381	36	13.7	411	1201533
18.0 ± 0.20	1.2 ± 0.05	1500 ± 20	212	36	7.6	266	1201534
18.0 ± 0.20	1.8 ± 0.10	1500 ± 20	306	36	11	385	1201535
18.0 ± 0.20	2.5 ± 0.15	1500 ± 20	407	36	14.7	441	1201536



TUBES & CYLINDERS

Outside-Ø (mm)	Wall thickness (mm)	Length (mm)	Weight per 1 piece (g)	Number of pieces in box (pieces)	Weight of box (kg) = 1 PU	Weight per pallet (kg)	Code no.
19.0 ± 0.20	1.2 ± 0.05	1500 ± 20	224	64	14.3	286	1201537
19.0 ± 0.20	1.8 ± 0.10	1500 ± 20	325	64	20.8	416	1201538
19.0 ± 0.20	2.5 ± 0.15	1500 ± 20	433	36	15.6	468	1201539
20.0 ± 0.25	1.2 ± 0.05	1500 ± 20	237	49	11.6	278.4	1201540
20.0 ± 0.25	1.8 ± 0.10	1500 ± 20	344	49	16.9	405.6	1201541
20.0 ± 0.25	2.5 ± 0.15	1500 ± 20	460	49	22.5	450	1201542
20.0 ± 0.30	4.0 ± 0.40	1500 ± 20	673	36	24.2	484	1201622
22.0 ± 0.25	1.2 ± 0.05	1500 ± 20	262	36	9.4	225.6	1201543
22.0 ± 0.25	1.8 ± 0.10	1500 ± 20	382	36	13.8	331.2	1201544
22.0 ± 0.25	2.5 ± 0.15	1500 ± 20	512	36	18.4	441.6	1201545
24.0 ± 0.25	1.2 ± 0.05	1500 ± 20	288	36	10.4	249.6	1201546
24.0 ± 0.25	1.8 ± 0.10	1500 ± 20	420	36	15.1	362.4	1201547
24.0 ± 0.25	2.5 ± 0.15	1500 ± 20	565	36	20.3	406	1201548
24.0 ± 0.30	4.0 ± 0.40	1500 ± 20	841	25	21	420	1201623
26.0 ± 0.25	1.4 ± 0.05	1500 ± 20	362	36	13	260	1201549
26.0 ± 0.25	2.0 ± 0.10	1500 ± 20	504	36	18.1	362	1201550
26.0 ± 0.25	2.8 ± 0.15	1500 ± 20	683	36	24.6	393.6	1201551
28.0 ± 0.25	1.4 ± 0.05	1500 ± 20	391	25	9.8	235.2	1201552
28.0 ± 0.25	2.0 ± 0.10	1500 ± 20	546	25	13.7	328.8	1201553
28.0 ± 0.25	2.8 ± 0.15	1500 ± 20	741	25	18.5	444	1201554
28.0 ± 0.30	4.0 ± 0.40	1500 ± 20	1009	16	16.1	402.5	1201624
30.0 ± 0.40	1.4 ± 0.10	1500 ± 20	421	36	15.2	228	1201555
30.0 ± 0.40	2.0 ± 0.15	1500 ± 20	588	36	21.2	318	1201556
30.0 ± 0.40	2.8 ± 0.20	1500 ± 20	800	25	20	400	1201557
30.0 ± 0.60	4.0 ± 0.40	1500 ± 20	1093	16	17.5	437.5	1201645
32.0 ± 0.40	1.4 ± 0.10	1500 ± 20	450	25	11.3	226	1201558
32.0 ± 0.40	2.0 ± 0.15	1500 ± 20	631	25	15.8	316	1201559
32.0 ± 0.40	2.8 ± 0.20	1500 ± 20	859	25	21.5	430	1201560
32.0 ± 0.60	4.0 ± 0.40	1500 ± 20	1177	16	18.8	658	1201625
33.0 ± 0.40	2.0 ± 0.15	1500 ± 20	652	27	17.6	281.6	1203662
34.0 ± 0.40	1.4 ± 0.10	1500 ± 20	480	16	7.7	184.8	1201561
34.0 ± 0.40	2.0 ± 0.15	1500 ± 20	673	16	10.8	259.2	1201562
34.0 ± 0.40	2.8 ± 0.20	1500 ± 20	918	16	14.7	352.8	1201563
36.0 ± 0.45	1.4 ± 0.10	1500 ± 20	509	16	8.1	194.4	1201564
36.0 ± 0.45	2.0 ± 0.15	1500 ± 20	715	16	11.4	273.6	1201565
36.0 ± 0.45	2.8 ± 0.20	1500 ± 20	977	16	15.6	374.4	1201566
36.0 ± 0.60	4.0 ± 0.40	1500 ± 20	1345	16	21.5	430	1201626
38.0 ± 0.45	1.4 ± 0.10	1500 ± 20	538	16	8.6	172	1201567
38.0 ± 0.45	2.0 ± 0.15	1500 ± 20	757	16	12.1	242	1201568
38.0 ± 0.45	2.8 ± 0.20	1500 ± 20	1036	16	16.6	332	1201569
40.0 ± 0.60	1.6 ± 0.10	1500 ± 20	646	16	10.3	206	1201570
40.0 ± 0.60	2.3 ± 0.20	1500 ± 20	911	16	14.6	292	1201571
40.0 ± 0.60	3.2 ± 0.30	1500 ± 20	1237	16	19.8	396	1201572
40.0 ± 0.60	5.0 ± 0.40	1500 ± 20	1845	9	16.6	498	1201646



TUBES & CYLINDERS

Outside-Ø (mm)	Wall thickness (mm)	Length (mm)	Weight per 1 piece (g)	Number of pieces in box (pieces)	Weight of box (kg) = 1 PU	Weight per pallet (kg)	Code no.
42.0 ± 0.60	1.6 ± 0.10	1500 ± 20	679	16	10.9	218	1201573
42.0 ± 0.60	2.3 ± 0.20	1500 ± 20	960	16	15.4	308	1201574
42.0 ± 0.60	3.2 ± 0.30	1500 ± 20	1305	16	20.9	418	1201575
44.0 ± 0.60	1.6 ± 0.10	1500 ± 20	713	16	11.4	171	1201576
44.0 ± 0.60	2.3 ± 0.20	1500 ± 20	1008	16	16.1	241.5	1201577
44.0 ± 0.60	3.2 ± 0.30	1500 ± 20	1372	16	22	330	1201578
44.0 ± 0.80	4.5 ± 0.40	1500 ± 20	1868	9	16.8	420	1201628
45.0 ± 0.70	5.0 ± 0.40	1500 ± 20	2109	9	19	456	1201647
46.0 ± 0.70	1.6 ± 0.10	1500 ± 20	747	16	12	180	1201579
46.0 ± 0.70	2.3 ± 0.20	1500 ± 20	1056	16	16.9	253.5	1201580
46.0 ± 0.70	3.2 ± 0.30	1500 ± 20	1439	16	23	345	1201581
48.0 ± 0.70	1.6 ± 0.10	1500 ± 20	780	9	7	168	1201582
48.0 ± 0.70	2.3 ± 0.20	1500 ± 20	1105	9	9.9	237.6	1201583
48.0 ± 0.70	3.2 ± 0.30	1500 ± 20	1507	9	13.6	326.4	1201584
50.0 ± 0.70	1.8 ± 0.15	1500 ± 20	912	12	10.9	174.4	1201585
50.0 ± 0.70	2.5 ± 0.20	1500 ± 20	1248	12	15	240	1201586
50.0 ± 0.70	3.5 ± 0.30	1500 ± 20	1710	9	15.4	396.6	1201587
50.0 ± 0.70	5.0 ± 0.40	1500 ± 20	2363	9	21.3	426	1201629
50.0 ± 0.70	7.0 ± 0.60	1500 ± 20	3174	9	28.6	686.4	1201648
52.0 ± 0.80	1.8 ± 0.15	1500 ± 20	950	12	11.4	182.4	1201588
52.0 ± 0.80	2.5 ± 0.20	1500 ± 20	1300	12	15.6	249.6	1201589
52.0 ± 0.80	3.5 ± 0.30	1500 ± 20	1784	9	16.1	322	1201590
52.0 ± 0.80	5.0 ± 0.40	1500 ± 20	2478	9	22.3	446	1201649
54.0 ± 0.80	1.8 ± 0.15	1500 ± 20	987	9	8.9	178	1201591
54.0 ± 0.80	2.5 ± 0.20	1500 ± 20	1353	9	12.2	244	1201592
54.0 ± 0.80	3.5 ± 0.30	1500 ± 20	1857	9	16.7	334	1201593
54.0 ± 0.80	5.0 ± 0.40	1500 ± 20	2575	9	23.2	464	1201650
55.0 ± 0.80	5.0 ± 0.40	1500 ± 20	2627	9	23.6	472	1201651
56.0 ± 0.80	1.8 ± 0.15	1500 ± 20	1025	12	12.3	172.2	1201594
56.0 ± 0.80	2.5 ± 0.20	1500 ± 20	1406	12	16.9	236.6	1201595
56.0 ± 0.80	3.5 ± 0.30	1500 ± 20	1931	9	17.4	348	1201596
56.0 ± 0.80	5.0 ± 0.40	1500 ± 20	2680	9	24.1	482	1201652
58.0 ± 0.80	1.8 ± 0.15	1500 ± 20	1063	12	12.8	179.2	1201597
58.0 ± 0.80	2.5 ± 0.20	1500 ± 20	1458	12	17.5	245	1201598
58.0 ± 0.80	3.5 ± 0.30	1500 ± 20	2005	4	8	280	1201599
58.0 ± 0.80	5.0 ± 0.40	1500 ± 20	2794	4	11.2	392	1201653
60.0 ± 0.90	2.2 ± 0.20	1500 ± 20	1336	12	16	224	1201600
60.0 ± 0.90	3.2 ± 0.25	1500 ± 20	1910	12	22.9	320.6	1201601
60.0 ± 0.90	4.2 ± 0.40	1500 ± 20	2463	4	9.9	346.5	1201654
60.0 ± 0.90	5.0 ± 0.40	1500 ± 20	2890	4	11.6	406	1201631
60.0 ± 0.90	7.0 ± 0.60	1500 ± 20	3912	4	15.6	546	1201655
60.0 ± 0.90	9.0 ± 0.70	1500 ± 20	4840	4	19.4	679	1201656
65.0 ± 0.90	2.2 ± 0.20	1500 ± 20	1452	8	11.6	162.4	1201602
65.0 ± 0.90	3.2 ± 0.25	1500 ± 20	2078	8	16.6	232.4	1201603
65.0 ± 0.90	4.2 ± 0.40	1500 ± 20	2683	8	21.5	301	1201657
65.0 ± 0.90	5.0 ± 0.40	1500 ± 20	3153	4	12.6	441	1201634



TUBES & CYLINDERS

Outside-Ø (mm)	Wall thickness (mm)	Length (mm)	Weight per 1 piece (g)	Number of pieces in box (pieces)	Weight of box (kg) = 1 PU	Weight per pallet (kg)	Code no.
70.0 ± 1.00	2.2 ± 0.20	1500 ± 20	1567	8	12.5	150	1201604
70.0 ± 1.00	3.2 ± 0.25	1500 ± 20	2246	8	18	216	1201605
70.0 ± 1.00	4.2 ± 0.40	1500 ± 20	2904	8	23.2	278.4	1201658
70.0 ± 1.00	5.0 ± 0.40	1500 ± 20	3415	4	13.7	328.8	1201659
70.0 ± 1.00	7.0 ± 0.60	1500 ± 20	4650	4	18.6	446.4	1201660
70.0 ± 1.00	9.0 ± 0.70	1500 ± 20	5788	4	23.2	556.8	1201661
75.0 ± 1.00	2.2 ± 0.20	1500 ± 20	1683	4	6.7	160.8	1201606
75.0 ± 1.00	3.2 ± 0.25	1500 ± 20	2414	4	9.7	232.8	1201607
75.0 ± 1.00	4.2 ± 0.40	1500 ± 20	3125	4	12.5	300	1201662
75.0 ± 1.00	5.0 ± 0.40	1500 ± 20	3678	4	14.7	352.8	1201616
80.0 ± 1.30	2.5 ± 0.20	1500 ± 20	2036	4	8.1	162	1201608
80.0 ± 1.30	3.5 ± 0.30	1500 ± 20	2814	4	11.3	226	1201609
80.0 ± 1.30	5.0 ± 0.50	1500 ± 20	3941	4	15.8	316	1201617
80.0 ± 1.30	9.0 ± 0.80	1500 ± 20	6737	4	26.9	538	1201663
85.0 ± 1.30	2.5 ± 0.2	1500 ± 20	2167	4	8.7	174	1201610
85.0 ± 1.30	3.5 ± 0.3	1500 ± 20	2998	4	12	240	1201611
85.0 ± 1.30	5.0 ± 0.3	1500 ± 20	4203	4	16.8	336	1201618
90.0 ± 1.30	2.5 ± 0.2	1500 ± 20	2299	4	9.2	138	1201664
90.0 ± 1.30	3.5 ± 0.3	1500 ± 20	3181	4	12.7	190.5	1203714
90.0 ± 1.30	5.0 ± 0.3	1500 ± 20	4466	4	17.9	268.5	1201665
90.0 ± 1.30	7.0 ± 0.7	1500 ± 20	6126	4	24.5	367.5	1201666
90.0 ± 1.30	9.0 ± 0.8	1500 ± 20	7686	4	30.7	460.5	1201667
95.0 ± 1.30	2.5 ± 0.2	1500 ± 20	2430	4	9.7	145.5	1201668
95.0 ± 1.30	3.5 ± 0.3	1500 ± 20	3365	4	13.5	202.5	1201669
95.0 ± 1.30	5.0 ± 0.3	1500 ± 20	4729	4	18.9	283.5	1201670
100.0 ± 1.50	2.5 ± 0.2	1500 ± 20	2561	3	7.7	123.2	1201671
100.0 ± 1.50	3.0 ± 0.2	1500 ± 20	3058	3	9.2	147.2	1201672
100.0 ± 1.50	3.5 ± 0.3	1500 ± 20	3549	3	10.6	169.6	1203716
100.0 ± 1.50	5.0 ± 0.5	1500 ± 20	4992	3	15	240	1201673
100.0 ± 1.50	7.0 ± 0.7	1500 ± 20	6864	3	20.6	329.6	1201674
100.0 ± 1.50	9.0 ± 0.8	1500 ± 20	8635	3	25.9	414.4	1201675
105.0 ± 1.70	3.0 ± 0.3	1500 ± 20	3216	3	9.6	153.6	1201676
105.0 ± 1.70	5.0 ± 0.5	1500 ± 20	5254	3	15.8	252.8	1201677
110.0 ± 1.7	3.0 ± 0.3	1500 ± 20	3373	3	10.1	141.4	1201678
110.0 ± 1.7	5.0 ± 0.5	1500 ± 20	5517	3	16.6	232.4	1201679
110.0 ± 1.7	7.0 ± 0.8	1500 ± 20	7602	3	22.8	319.2	1201680
115.0 ± 1.7	3.0 ± 0.3	1500 ± 20	3531	3	10.6	148.4	1201681
115.0 ± 1.7	5.0 ± 0.5	1500 ± 20	5780	3	17.3	242.2	1201682
115.0 ± 1.7	7.0 ± 0.8	1500 ± 20	7971	3	23.9	334.6	1201683
120.0 ± 1.7	3.0 ± 0.4	1500 ± 20	3689	3	11.1	155.4	1201684
120.0 ± 1.7	5.0 ± 0.6	1500 ± 20	6042	3	18.1	253.4	1201685
120.0 ± 1.7	7.0 ± 0.8	1500 ± 20	8340	3	25	350	1201686
120.0 ± 1.7	9.0 ± 0.9	1500 ± 20	10533	1	10.5	367.5	1201687
125.0 ± 1.7	3.0 ± 0.4	1500 ± 20	3846	3	11.5	161	1201688
125.0 ± 1.7	5.0 ± 0.5	1500 ± 20	6305	3	18.9	264.6	1201689
125.0 ± 1.7	9.0 ± 0.9	1500 ± 20	11008	1	11	385	1201690



TUBES & CYLINDERS

Outside-Ø (mm)	Wall thickness (mm)	Length (mm)	Weight per 1 piece (g)	Number of pieces in box (pieces)	Weight of box (kg) = 1 PU	Weight per pallet (kg)	Code no.
130.0 ± 1.8	3.0 ± 0.5	1500 ± 20	4004	2	8	112	1201691
130.0 ± 1.8	5.0 ± 0.6	1500 ± 20	6568	2	13.1	183.4	1201692
130.0 ± 1.8	7.0 ± 0.9	1500 ± 20	9078	2	18.2	254.8	1201693
130.0 ± 1.8	9.0 ± 0.9	1500 ± 20	11482	1	11.5	402.5	1201694
135.0 ± 1.8	3.0 ± 0.5	1500 ± 20	4161	2	8.3	116.2	1201695
135.0 ± 1.8	5.0 ± 0.6	1500 ± 20	6831	2	13.7	191.8	1201696
135.0 ± 1.8	7.0 ± 0.9	1500 ± 20	9447	2	18.9	264.6	1201697
140.0 ± 1.9	3.0 ± 0.5	1500 ± 20	4319	2	8.6	103.2	1201698
140.0 ± 1.9	5.0 ± 0.6	1500 ± 20	7093	2	14.2	170.4	1201699
140.0 ± 1.9	7.0 ± 0.9	1500 ± 20	9816	2	19.6	235.2	1208100
145.0 ± 1.9	3.0 ± 0.5	1500 ± 20	4477	2	9	108	1208101
145.0 ± 1.9	5.0 ± 0.6	1500 ± 20	7356	2	14.7	176.4	1208102
150.0 ± 2.0	3.0 ± 0.5	1500 ± 20	4634	1	4.6	110.4	1208103
150.0 ± 2.0	5.0 ± 0.6	1500 ± 20	7619	1	7.6	182.4	1208104
150.0 ± 2.0	7.0 ± 0.9	1500 ± 20	10554	1	10.6	254.4	1208105
150.0 ± 2.0	9.0 ± 1.0	1500 ± 20	13380	1	13.4	321.6	1208106
155.0 ± 2.0	5.0 ± 0.7	1500 ± 20	7881	1	7.9	221.2	1208107
160.0 ± 2.0	5.0 ± 0.7	1500 ± 20	8144	1	8.1	194.4	1208108
160.0 ± 2.0	7.0 ± 1.0	1500 ± 20	11292	1	11.3	271.2	1208109
165.0 ± 2.0	5.0 ± 0.7	1500 ± 20	8407	1	8.4	168	1208110
165.0 ± 2.0	7.0 ± 1.0	1500 ± 20	11661	1	11.7	234	1208111
170.0 ± 2.0	5.0 ± 0.7	1500 ± 20	8699	1	8.7	174	1208112
170.0 ± 2.0	7.0 ± 1.0	1500 ± 20	12030	1	12	240	1208113
170.0 ± 2.0	9.0 ± 1.1	1500 ± 20	15278	1	15.3	306	1208114
180.0 ± 2.2	5.0 ± 0.7	1500 ± 20	9226	1	9.2	138	1208115
180.0 ± 2.2	7.0 ± 1.0	1500 ± 20	12768	1	12.8	192	1208116
180.0 ± 2.2	9.0 ± 1.2	1500 ± 20	16227	1	16.2	243	1208117

Hilgenberg provides glass tubes and cylinders made from various types of glass – either in full length or cut to size with subsequent edge treatment. We can manufacture a product that meets your requirements in almost any length from 1 to 2000 mm.

We also make precision glass tubes and cylinders with calibrated internal diameters and cylindrically ground outer surfaces – technically polished on request.



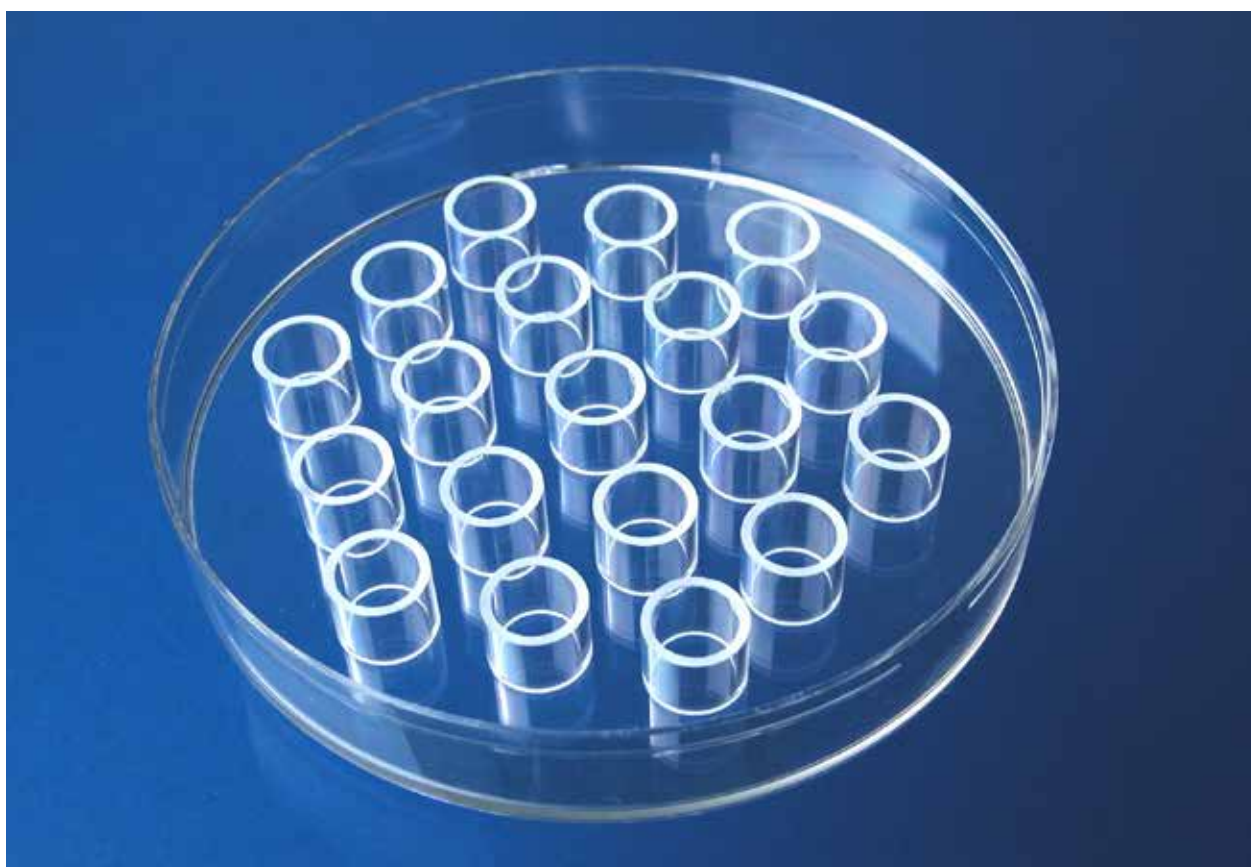
TIP: On request we manufacture for you the tubes, also blanks with custom ends and in other sorts of glass.



Cloning cylinders

- made of borosilicate glass 3.3
- ground edges
- Minimum order: 100 pieces

Height (mm)	Outside-Ø (mm)	Wall thickness (mm)	packed per	Code no.
8	6	1	100 Stück	1980004
8	8	1	100 Stück	1980003
8	10	1	100 Stück	1980005
10	10	1	100 Stück	1740174



Cloning cylinders or rings are ideally suited for separate cloning of individual cells or cell groups on a single nutrient solution. A specific cell or cell group is separated from the other cells in the nutrient solution, simply by placing the cloning ring over it. The rings are made of high-grade borosilicate glass, which can be sterilized thermally without any problems. The ring faces are ground perfectly flat, which allows them to be fixed to e.g. the bottom of a Petri dish, using a suitable grease. Subsequently, the nutrient solution can be filled into the ring. The grease provides a seal between the ring and the Petri dish, whereby the precise, flat end ensures that very little grease is required to provide an optimum seal. The same applies for Petri dishes, which already contain a nutrient solution – here, the seal is provided by simply pressing the ring into the solution and down to the floor of the dish.

Materials

- Borosilicate glass (e. g. DURAN®, PYREX®, SIMAX®)

Dimensions

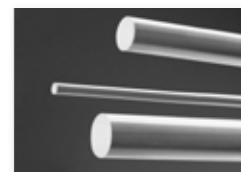
- Diameters: 4 - 20 mm
- Wall thicknesses: 0.5 - 2.8 mm



RODS & FIBERS

Glass rods and fibres made of borosilicate glass 3.3

- for fixing samples and filling of Mark-tubes
- ends cut
- Minimum order: 100 pieces



Diameter (mm)	Length (mm)	packed per	Code no.
0.1	100	100 Stück	7347700
0.2	100	100 Stück	7347701
0.3	100	100 Stück	7347705
0.4	100	100 Stück	7347710
0.5	100	100 Stück	7347715
0.6	100	100 Stück	7347720
0.7	100	100 Stück	7347725
0.8	100	100 Stück	7347730
0.9	100	100 Stück	7347735
1.0	100	100 Stück	7347740
2.0	100	100 Stück	7445401

Rod profiles – Variety of shapes and sizes

In addition to round profiles, we are also able to shape rectangular and square profiles, stretching them out to form thin rods or fibres. This enables us to create very fine bundles of parallel fibres, for example. This broad spectrum of potential profiles can be used for a variety of applications. Made from borosilicate glass, the rods boast outstanding quality.

- | | | | | | |
|--|--|--|---|----------------------------|----------------------------------|
| 1.  | 4.  | 7.  | 10.  | 1. single circular profile | 7. square profile |
| 2.  | 5.  | 8.  | 11.  | 2. semicircular profile | 8. triangular profile |
| 3.  | 6.  | 9.  | 12.  | 3. flat rod profile | 9. 3-jagged star profile |
| | | | | 4. oval rod profile | 10. 6-jagged star profile |
| | | | | 5. half shell profile | 11. 4-jagged star profile |
| | | | | 6. octagonal profile | 12. quadruple bundle rod profile |





TEST TUBES

The right tube for any application. We manufacture top-quality sample and test tubes from glass, specifically designed to meet your requirements. Choose from an almost unlimited variety of sizes and types of glass. Available as standard or tailored to your specific requirements: We'll help you find the right solution for your application.

Standard 3 mm NMR-Tubes in "economy"

- one end closed, one end fire-polished
- Minimum order: 100 pieces

Outside-Ø (mm)	Inside-Ø (mm)	Wall thickness (mm)	Length (mm)	Code no.
2.95 ± 0.03	2.36 ± 0.03	0.295	178 (7")	2001749
2.95 ± 0.03	2.36 ± 0.03	0.295	203 (8")	2001770

Standard 5 mm NMR-Tubes in "economy"

- one end closed, one end fire-polished
- Minimum order: 100 pieces

Outside-Ø (mm)	Inside-Ø (mm)	Wall thickness (mm)	Length (mm)	Code no.
4.95 ± 0.050	4.19 ± 0.050	0.38	178 (7")	2001745
4.95 ± 0.050	4.19 ± 0.050	0.38	203 (8")	2001748

Standard 5 mm NMR-Tubes (UV protection)

- one end closed, one end fire-polished
- silver ion diffusion colored (brown)
- including cap
- Minimum order: 5 pieces

Outside-Ø (mm)	Wall thickness (mm)	Length (mm)	Code no.
2.95 +0.03 / -0.03	0.295	178 (7")	2001786
4.97 +0.02 / -0.05	0.380	178 (7")	2001774

NMR-Tubes 5 & 3 mm with screw cap

- one end closed
- treat type 8-425
- including cap with Butyl septum, with Teflon layer, with through hole 9 mm
- Minimum order: 5 pieces

Outside-Ø (mm)	Inside-Ø (mm)	Wall thickness (mm)	Length (mm)	Code no.
2.95 ± 0.030	2.36 ± 0.030	0.295	190 mm	2001785
4.95 ± 0.050	4.19 ± 0.050	0.380	190 mm	2001782
4.95 ± 0.050	4.19 ± 0.050	0.380	215 mm	2001781



TEST TUBES

Test tubes for the imaging NMR

- flat bottom, rim fire polished
- Minimum order: 10 pieces

Outside-Ø (mm)	Wall thickness (mm)	Length (mm)	packed per	Code no.
5.0	0.5	160	10 Stück	2009040
10.0	0.6	160	10 Stück	2009041
15.0	0.6	160	10 Stück	2009042
20.0	0.8	160	10 Stück	2009043
25.0	0.8	160	10 Stück	2009044
30.0	1.2	160	10 Stück	2009045

Thick-walled NMR-tubes

- Thick-walled NMR-tubes made of borosilicate glass 3.3 for use in standard 5 mm spinners. with significantly reduced volume in the measuring area.
- Extremely stable design
- Minimum order: 50 pieces

Product description	Length (mm)	Outside Ø (mm)	Wall thickness (mm)	packed per	Code no.
Thick-walled NMR-tubes	178	4.95 ± 0.05	0.88	10 Stück	2001784



NMR-labels for standard 5 mm tubes

- Resistant labels for clear long-term marking of samples in 5 mm NMR-tubes. suitable for laser printing and manual labeling.

Product description	packed per	Code no.
NMR-tubes labels for laser printers or hand writing. Resistant to solvents, sterilizeable, temperature resistant. Labelling field size 25 x 13 mm, total length 37 mm	1 sheet 49 labels	6000026

HIGHLIGHT PRODUCT



EPR tubes made of quartz glass

- Standard and individualized EPR test tubes made of high-grade quartz glass. for use in routine and single measurements with devices from various manufacturers.
- Minimum order: 10 pieces

Product description	Length (mm)	Outside Ø (mm)	Wall thickness (mm)	packed per	Code no.
EPR tubes made of quartz glass	250	4.95 ± 0.05	0.38	10 pieces	2009832
EPR tubes made of quartz glass	250	3.95 ± 0.03	0.30	10 pieces	2009831
EPR tubes made of quartz glass	250	2.95 ± 0.03	0.30	10 Pieces	2009830





TEST TUBES

100 mm NMR-Tubes for Bruker Match™ system

- one end closed. rim fire polished
- Minimum order: 100 pieces

Outside-Ø (mm)	Inside-Ø (mm)	Wall thickness (mm)	Length (mm)	packed per	Code no.
1.0 ± 0.010	0.7 ± 0.010	0.15	100	10 pieces	2001727
1.7 ± 0.010	1.3 ± 0.010	0.20	100	10 pieces	2001710
2.0 ± 0.010	1.6 ± 0.010	0.20	100	10 pieces	2001711
2.5 ± 0.010	2.1 ± 0.010	0.20	100	10 pieces	2001712
3.0 ± 0.025	2.4 ± 0.025	0.30	100	10 pieces	2001724
4.0 ± 0.025	3.3 ± 0.025	0.35	100	10 pieces	2001725
4.25 ± 0.03	3.45 ± 0.03	0.40	100	10 pieces	2001734
5.0 ± 0.025	4.20 ± 0.025	0.40	100	10 pieces	2001726



Specially developed test tubes made of high-quality glass for the NMR-spectroscopy-sample-holder „MicWB40“ by Bruker Biospion serve a fast and cost-effective sample preparation. The tubes are submitted in units of 10 pieces.

Examination objects

- Hard materials:
e. g. rocks. oil cores. wood. polymers. tablets.
concrete. batteries. fuel cells
- Plant materials. including living plants:
seeds. leaves. roots. berries and flowers
- Animal tissue samples:
e. g. excised perfused organs (kidney. heart). eyes.
fixed embryos
- Living animals:
e. g. mice. rats. fish. and insects

Advantages

- Low costs/disposable
- Visual control
- Inert material
- Adjusted to the Bruker holder

Fields of application

- Medical & scientific studies
- Material analyses
- Studies on living objects like insects or plants
- Studies on soft. not hard structures



TEST TUBES

Mark-tubes made of borosilicate glass 3.3

- for x-ray analysis according to the method of Debye-Scherrer
- Minimum order: 25 pieces

Outside-Ø (mm)	Wall thickness (mm)	Length (mm)	packed per	Code no.
0.1	0.01	80	25 pieces	4007601
0.2	0.01	80	25 pieces	4007602
0.3	0.01	80	25 pieces	4007603
0.4	0.01	80	25 pieces	4007604
0.5	0.01	80	25 pieces	4007605
0.6	0.01	80	25 pieces	4007606
0.7	0.01	80	25 pieces	4007607
0.8	0.01	80	25 pieces	4007608
0.9	0.01	80	25 pieces	4007609
1.0	0.01	80	25 pieces	4007610
1.5	0.01	80	25 pieces	4007615
2.0	0.01	80	25 pieces	4007620
2.5	0.01	80	15 pieces	4007625
3.0	0.01	80	15 pieces	4007630
3.5	0.01	80	10 pieces	4007690
4.0	0.01	80	5 pieces	4007691

Mark-tubes with funnel

- made of Borosilicat glass 3.3
- for x-ray analysis according to the method of Debye-Scherrer
- with funnel length of 10 mm
- Minimum order: 25 pieces

Outside-Ø (mm)	Wall thickness (mm)	Length (mm)	packed per	Code no.
0.2	0.01	80	25 pieces	4007652
0.4	0.01	80	25 pieces	4007654
0.5	0.01	80	25 pieces	4007655
0.6	0.01	80	25 pieces	4007656
0.7	0.01	80	25 pieces	4007657





TEST TUBES

Mark-tubes made of quartz glass

- for x-ray analysis according to the method of Debye-Scherrer
- Minimum order: 25 pieces

Outside-Ø (mm)	Wall thickness (mm)	Length (mm)	packed per	Code no.
0.1	0.01	80	25 pieces	4017501
0.2	0.01	80	25 pieces	4017502
0.3	0.01	80	25 pieces	4017503
0.4	0.01	80	25 pieces	4017504
0.5	0.01	80	25 pieces	4017505
0.6	0.01	80	25 pieces	4017506
0.7	0.01	80	25 pieces	4017507
0.8	0.01	80	25 pieces	4017508
0.9	0.01	80	25 pieces	4017509
1.0	0.01	80	25 pieces	4017510
1.5	0.01	80	25 pieces	4017515
2.0	0.01	80	25 pieces	4017520
2.5	0.01	80	15 pieces	4017525
3.0	0.01	80	15 pieces	4017530
3.5	0.01	80	10 pieces	4017535
4.0	0.01	80	5 pieces	4017540

Mark-tubes made of soda lime glass

- for x-ray analysis according to the method of Debye-Scherrer
- made of glass no. 10
- Minimum order: 25 pieces

Outside-Ø (mm)	Wall thickness (mm)	Length (mm)	packed per	Code no.
0.1	0.01	80	25 Stück	4007801
0.2	0.01	80	25 Stück	4007802
0.3	0.01	80	25 Stück	4007803
0.4	0.01	80	25 Stück	4007804
0.5	0.01	80	25 Stück	4007805
0.6	0.01	80	25 Stück	4007806
0.7	0.01	80	25 Stück	4007807
0.8	0.01	80	25 Stück	4007808
0.9	0.01	80	25 Stück	4007809
1.0	0.01	80	25 Stück	4007810
1.5	0.01	80	25 Stück	4007815
2.0	0.01	80	25 Stück	4007820



TEST TUBES

Mark-tubes made of special glass „Lindemann“

- for x-ray analysis according to the method of Debye-Scherrer
- made of glass no. 14
- Minimum order: 25 pieces

Outside- Ø (mm)	Wall thickness (mm)	Length (mm)	packed per	Code no.
0.1	0.01	80	25 Stück	4007401
0.2	0.01	80	25 Stück	4007402
0.3	0.01	80	25 Stück	4007403
0.4	0.01	80	25 Stück	4007404
0.5	0.01	80	25 Stück	4007405
0.6	0.01	80	25 Stück	4007406
0.7	0.01	80	25 Stück	4007407
0.8	0.01	80	25 Stück	4007408
0.9	0.01	80	25 Stück	4007409
1.0	0.01	80	25 Stück	4007410
1.5	0.01	80	25 Stück	4007415
2.0	0.01	80	25 Stück	4007420

Mark-tubes made of special glass „Lindemann“

- for x-ray analysis according to the method of Debye-Scherrer
- made of glass no. 14
- packed in glass wool
- Minimum order: 25 pieces

Outside- Ø (mm)	Wall thickness (mm)	Length (mm)	packed per	Code no.
0.3	0.01	80	25 Stück	4001403



TIP: Our mark-tubes made of glass „Lindemann“, which are packed in glass wool, can be ordered very low-priced!



TEST TUBES

Double funnel Mark-tubes made of borosilicate glass 3.3

- for measurements under flow
- other sizes and material on request
- Minimum order: 25 pieces

Outside-Ø (mm)	Wall thickness (mm)	Length (mm)	packed per	Code no.
0.3	~ 0.02	75 ± 5.0	25 pieces	4008914
0.5	~ 0.02	75 ± 5.0	25 pieces	4008906
0.6	~ 0.02	75 ± 5.0	25 pieces	4008917
0.7	~ 0.02	75 ± 5.0	25 pieces	4008907
0.8	~ 0.02	75 ± 5.0	25 pieces	4008913
0.9	~ 0.02	75 ± 5.0	25 pieces	4008916
1.0	~ 0.02	75 ± 5.0	25 pieces	4008903
1.5	~ 0.02	75 ± 5.0	25 pieces	4008915

These special sample tubes are particularly well suited for flow measurements. The wall thickness of the measuring section in the middle of the capillary is only about 10 µm. On the other hand, the sides have thicker walls, which permits easier installation in a liquid flow circuit. Thin connecting hoses have proved to be most suitable for the adaptation of these capillaries. The hoses are attached to both funnels using liquid Teflon (PTFE).

Main specifications

- Outside funnel diameter: 3.0 mm
- Inside funnel diameter: 2.4 mm
- Overall length: 80 mm
- Diameter of measuring section: 0.5/0.7/1.0 mm
- Length of measuring section: 30 mm
- Material: Borosilicate glass (0500)



Glass crucible for thermal analyses (DSC/TGA/SDTA)

- made of borosilicate glass 3.3
- with constriction
- flat grinded bottom
- Minimum order: 50 pieces



Length (mm)	Outside-Ø (mm)	Wall thickness (mm)	Code no.
50 ± 1.0	6 ± 0.15	1.0 ± 0.04	2003004



TEST TUBES

Melting-and boiling point determination tubes

- one end open, one end sealed
- made of soda lime glass
- Minimum order: 1000 pieces



Outside- Ø (mm)	Inside-Ø (mm)	Wall thickness (mm)	Length (mm)	Code no.
1.60	1.28	0.16	75	2102029
0.80	0.64	0.08	80	2102213
1.00	0.80	0.1	80	2102217
1.20	0.96	0.120	80	2102221
1.25	1.00	0.125	80	2102222
1.30	1.04	0.130	80	2102223
1.40	1.12	0.140	80	2102225
1.50	1.20	0.15	80	2102227
1.20	0.96	0.120	90	2102621
1.50	1.20	0.150	90	2102627
1.60	1.28	0.160	90	2102629
1.00	0.80	0.100	100	2103017
1.40	1.12	0.140	100	2103025
1.50	1.20	0.150	100	2103027
1.60	1.28	0.160	100	2103029
2.00	1.60	0.200	100	2103037



Weighing bottles

- made of soda lime glass
- with flat bottom and fire-polished rim
- Minimum order: 1000 pieces



Outside- Ø (mm)	Inside-Ø (mm)	Wall thickness (mm)	Length (mm)	Code no.
7.5	4	0.5	1,000 pieces	2000578
7.5	5	0.5	1,000 pieces	2000574
7.5	6	0.7	1,000 pieces	2000562
8	6	0.7	1,000 pieces	2000567
10	7	0.7	1,000 pieces	2000565
10	10	0.6	1,000 pieces	2000576
11	12	0.8	1,000 pieces	2000564
20	17	1.5	1,000 pieces	2000560

PIPETTES

These pipettes are made of a bio-compatible material, and are resistant against most solvents and cleaning agents, as well as acids and lyes. Consequently, they are a high-quality and practical alternative to plastic pipettes. For more than 30 years, Hilgenberg has been manufacturing Pasteur pipettes on their own production sites in Germany, and ever since, customers have valued their extremely high quality. This long experience enables us to supply high-grade products that leave nothing to be desired, e.g. when working in a laboratory. Apart from our standard range of Pasteur pipettes, we also supply individual solutions that are precisely matched to your requirements.

Pasteur pipettes made of borosilicate glass

- 4 x 250 pieces per box
- all pipettes can also be sterilized by gas at a minimum order quantity of one pallet
- Minimum order: 1000 pieces



Length (mm)	with cotton plug	tip open	tip closed	with constriction	sterilized by gas	packed per	Pallet quantity	Code-no.
150	-	✓	-	✓	-	1,000 pieces	130,000 pieces	3150301
230	-	✓	-	✓	-	1,000 pieces	100,000 pieces	3150302



PIPETTES

Pasteur pipettes made of soda lime glass

- 4 x 250 pieces per box
- all pipettes can also be sterilized by gas at a minimum order quantity of one pallet
- Minimum order: 1000 pieces



Length (mm)	with constriction	tip open	tip closed	with cotton plug	sterilized by gas	gamma-sterilizable	packed per	Pallet quantity	Code-no.
150	✓	✓	-	-	-	✓	1,000 pieces	130,000 pieces	3150212
150	✓	-	✓	-	-	-	1,000 pieces	130,000 pieces	3170101
150	-	✓	-	-	-	-	1,000 pieces	130,000 pieces	3110101
150	✓	✓	-	-	-	-	1,000 pieces	130,000 pieces	3150101
150	✓	-	✓	✓	-	-	1,000 pieces	130,000 pieces	3171101
150	✓	-	✓	✓	✓	-	1,000 pieces	110,000 pieces	3177101
150	✓	✓	-	✓	-	-	1,000 pieces	130,000 pieces	3151101
230	✓	-	✓	-	-	-	1,000 pieces	100,000 pieces	3170102
230	-	✓	-	-	-	-	1,000 pieces	100,000 pieces	3110102
230	✓	✓	-	-	-	-	1,000 pieces	100,000 pieces	3150102
230	✓	-	✓	✓	✓	-	1,000 pieces	77,000 pieces	3177102
230	✓	✓	-	✓	-	-	1,000 pieces	100,000 pieces	3151102
230	✓	✓	-	-	-	✓	1,000 pieces	100,000 pieces	3150213

- Minimum order: 1000 pieces

Length (mm)	with constriction	tip open	tip closed	with cotton plug	sterilized by gas	gamma-sterilizable	packed per	Pallet quantity	Code-no.
270	✓	✓	-	-	-	-	1,000 pieces	45,000 pieces	3150151
300	✓	✓	-	-	-	-	500 pieces	50,000 pieces	3150162
350	✓	✓	-	-	-	-	1,000 pieces	28,000 pieces	3150166



ACCESSORIES: Also order our pipette sucker made of silicone or rubber! These you will find on page 40.



FILLING NEEDLES

Filling needles for the Bruker Match™ system

- with flexible and thin tip
- Minimum order: 100 pieces

Product description	packed per	Code no.
NMR-micro pipettes, with reservoir and luer-connector (syringe needed)	10 pieces	4010313
NMR-micro pipettes, with reservoir and integrated plastic plunger	10 pieces	4010339

Syringe needles for filling Mark-tubes with liquids

- with Luer connector
- made of borosilicate glass 3.3
- Minimum order: 20 pieces

fitting to Mark-tubes	Inside-Ø (mm)	Length (mm)	packed per	Code no.
>= 0.6 mm	~ 0.4	~ 70.00	20 pieces	4018103
>= 0.3 mm	~ 0.2	~ 70.00	20 pieces	4018104
>= 0.6 mm	~ 0.4	~ 100.00	20 pieces	4018105
>= 0.3 mm	~ 0.2	~ 100.00	20 pieces	4018106
>= 0.2 mm	~ 0.08	~ 100.00	20 pieces	4018107
>= 0.1 mm	~ 0.05	~ 100.00	20 pieces	4018108



Filling the very small NMR-tubes for the Bruker Match™ system is a particular challenge. Therefore, we have developed two different needles specifically for this task, which greatly simplify the filling procedure. While one needle is intended for use with a standard one-way syringe, the other needle is fitted with an integral plunger. Like our NMR-tubes, both needles are made of high-grade borosilicate glass 3.3. As an accessory for the needles with syringe coupling, we also supply one-way syringes with only 0.5 ml volume.

For filling small test tubes with liquid samples, we manufacture special filling needles of borosilicate glass. Our thinnest needle has a diameter of less than 0.1 mm. This enables even the finest test tubes to be filled without problems. Various diameters are available.

ACCESSORIES: Order our one-way syringes from our accessories! These you will find on page 41.



COLUMN PACKING

Raschig rings made of borosilicate glass 3.3

- Hydrologic resistance class 1 (according to DIN 12 111)
- Acid resistance class 1 (according to DIN 12 116)
- Alkali resistance class 2 (according to DIN 52 322)
- Minimum order: 1 kg

Dimensions (mm)	packed per	Code no.
2 x 2	1 kg	1580202-12
3 x 3	1 kg	1580307-12
4 x 4	1 kg	1580408-12
5 x 5	1 kg	1580508-12
6 x 6	1 kg	1580610-12
8 x 8	1 kg	1580810-12
10 x 10	1 kg	1571010-12
12 x 12	1 kg	1571210-12

Raschig rings made of borosilicate glass 3.3

- Hydrologic resistance class 1 (according to DIN 12 111)
- Acid resistance class 1 (according to DIN 12 116)
- Alkali resistance class 2 (according to DIN 52 322)
- Minimum order: 1L

Dimensions (mm)	packed per	Code no.
2 x 2	1 l	1580202-32
3 x 3	1 l	1580307-32
4 x 4	1 l	1580408-32
5 x 5	1 l	1580508-32
6 x 6	1 l	1580610-32
8 x 8	1 l	1580810-32
10 x 10	1 l	1571010-32
12 x 12	1 l	1571210-32



TIP: Larger dimensions of our raschig rings: on request! Feel free to contact us!



Raschig rings made of borosilicate glass 3.3

- Hydrologic resistance class 1 (according to DIN 12 111)
- Acid resistance class 1 (according to DIN 12 116)
- Alkali resistance class 2 (according to DIN 52 322)
- Minimum order: 20 L

Dimensions (mm)	packed per	Code no.
2 x 2	20 l	1580202-52
3 x 3	20 l	1580307-52
4 x 4	20 l	1580408-52
5 x 5	20 l	1580508-52
6 x 6	20 l	1580610-52
8 x 8	20 l	1580810-52
10 x 10	20 l	1571010-52
12 x 12	20 l	1571210-52

Raschig rings made of soda lime glass

- Hydrologic resistance class 3 (according to ISO 719)
- Acid resistance class 1 (according to DIN 12 116)
- Alkali resistance class 2 (nach ISO 695)
- Minimum order: 1 kg

Dimensions (mm)	packed per	Code no.
2 x 2	1 kg	1510204-12
3 x 3	1 kg	1510306-12
4 x 4	1 kg	1510405-12
5 x 5	1 kg	1510505-12
6 x 6	1 kg	1510605-12
8 x 8	1 kg	1510807-12
10 x 10	1 kg	1511010-12
12 x 12	1 kg	1511212-12



TIP: Larger dimensions of our raschig rings: on request! Feel free to contact us!



Raschig rings made of soda lime glass

- Hydrologic resistance class 3 (according to ISO 719)
- Acid resistance class 1 (according to DIN 12 116)
- Alkali resistance class 2 (nach ISO 695)
- Minimum order: 1 L

Dimensions (mm)	packed per	Code no.
2 x 2	1 l	1510204-32
3 x 3	1 l	1510306-32
4 x 4	1 l	1510405-32
5 x 5	1 l	1510505-32
6 x 6	1 l	1510605-32
8 x 8	1 l	1510807-32
10 x 10	1 l	1511010-32
12 x 12	1 l	1511212-32

Raschig rings made of soda lime glass

- Hydrologic resistance class 3 (according to ISO 719)
- Acid resistance class 1 (according to DIN 12 116)
- Alkali resistance class 2 (nach ISO 695)
- Minimum order: 20 L

Dimensions (mm)	packed per	Code no.
2 x 2	20 l	1510204-52
3 x 3	20 l	1510306-52
4 x 4	20 l	1510405-52
5 x 5	20 l	1510505-52
6 x 6	20 l	1510605-52
8 x 8	20 l	1510807-52
10 x 10	20 l	1511010-52
12 x 12	20 l	1511212-52



TIP: Larger dimensions of our raschig rings: on request! Feel free to contact us!

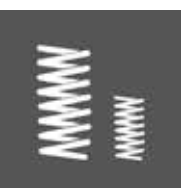


Raschig rings made of quartz glass

- Hydrologic resistance class 1 (according to DIN 12 111)
- Acid resistance class 1 (according to DIN 12 116)
- Alkali resistance class 2 (according to DIN 52 322)
- Minimum order: 1 L



Dimensions (mm)	packed per	Code no.
3 x 3	1 l	1500308-32
4 x 4	1 l	1500408-32
6 x 6	1 l	1500608-32
8 x 8	1 l	1500810-32
10 x 10	1 l	1501010-32
12 x 12	1 l	1501210-32



Wilson multi turn helices made of borosilicate glass 3.3

- Hydrologic resistance class 1 (according to DIN 12 111)
- Acid resistance class 1 (according to DIN 12 116)
- Alkali resistance class 2 (according to DIN 52 322)
- Minimum order: 1 L



Dimensions (mm)	packed per	Code no.
3	1 l	4002130-32
4	1 l	4002140-32
7	1 l	4002170-32
10	1 l	4002110-32
12	1 l	4002112-32
15	1 l	4002115-32



TIP: Larger dimensions of our raschig rings and wilson multi turn helices: on request! Feel free to contact us!



GLASS BEADS

Glass beads made of quartz glass

- Hydrologic resistance class 1 (according to DIN 12 111)
- Acid resistance class 1 (according to DIN 12 116)
- Alkali resistance class 2 (according to DIN 52 322)
- Minimum order: 1 kg

HIGHLIGHT PRODUCT

Diameter (mm)	packed per	Code no.
2.0 ± 0.5	1 kg	8000802
3.0 ± 0.5	1 kg	8000803
4.0 ± 0.5	1 kg	8000804
5.0 ± 0.5	1 kg	8000805
6.0 ± 0.5	1 kg	8000806
7.0 ± 0.5	1 kg	8000807
8.0 ± 0.5	1 kg	8000808
9.0 ± 0.5	1 kg	8000809
10.0 ± 0.5	1 kg	8000810

TIP: Larger dimensions of our glass beads made of quartz glass: on request!

Glass beads made of soda lime glass

- Hydrologic resistance class 3 (according to ISO 719)
- Acid resistance class 1 (according to DIN 12 116)
- Alkali resistance class 2 (nach ISO 695)
- Minimum order: 1 kg

Diameter (mm)	packed per	Code no.
2.0 ± 0.2	1 kg	8413020-12
3.0 ± 0.2	1 kg	8413030-12
4.0 ± 0.3	1 kg	8413040-12
4.5 ± 0.3	1 kg	8413045-12
5.0 ± 0.3	1 kg	8413050-12
6.0 ± 0.3	1 kg	8413060-12
7.0 ± 0.3	1 kg	8413070-12
8.0 ± 0.4	1 kg	8413080-12
9.0 ± 0.4	1 kg	8413090-12
10.0 ± 0.5	1 kg	8413100-12
11.0 ± 0.5	1 kg	8413110-12
12.0 ± 0.5	1 kg	8413120-12
13.0 ± 0.5	1 kg	8413130-12
14.0 ± 0.5	1 kg	8413140-12
15.0 ± 0.5	1 kg	8413150-12
16.0 ± 0.5	1 kg	8413160-12



GLASS BEADS

Glass beads made of soda lime glass

- Hydrologic resistance class 3 (according to ISO 719)
- Acid resistance class 1 (according to DIN 12 116)
- Alkali resistance class 2 (nach ISO 695)
- Minimum order: 20 kg

Diameter (mm)	packed per	Code no.
2.0 ± 0.2	20 kg	8413020-22
3.0 ± 0.2	20 kg	8413030-22
4.0 ± 0.3	20 kg	8413040-22
4.5 ± 0.3	20 kg	8413045-22
5.0 ± 0.3	20 kg	8413050-22
6.0 ± 0.3	20 kg	8413060-22
7.0 ± 0.3	20 kg	8413070-22
8.0 ± 0.4	20 kg	8413080-22
9.0 ± 0.4	20 kg	8413090-22
10.0 ± 0.5	20 kg	8413100-22
11.0 ± 0.5	20 kg	8413110-22
12.0 ± 0.5	20 kg	8413120-22
13.0 ± 0.5	20 kg	8413130-22
14.0 ± 0.5	20 kg	8413140-22
15.0 ± 0.5	20 kg	8413140-22
16.0 ± 0.5	20 kg	8413160-22

Porous sintered borosilicate glass granulate 3.3

- Hydrologic resistance class 1 (according to DIN 12 111)
- Acid resistance class 1 (according to DIN 12 116)
- Alkali resistance class 2 (according to DIN 52 322)
- Minimum order: 1 L

Dimensions (mm)	packed per	Code no.
approx. 4 mm	1 l	4020800





GLASS BEADS

Precision glass beads made of borosilicate glass 3.3

- packed per 100 pieces
- with polished or frosted surface
- Minimum order: 100 pieces

Diameter (mm)	Code no. polished	Code no. frosted
2 ± 0.02	8672020	-
3 ± 0.02	8672030	-
4 ± 0.02	8672040	-
5 ± 0.02	8672050	-
6 ± 0.02	8672060	-
7 ± 0.02	8672070	-
8 ± 0.02	*	8632080
9 ± 0.02	*	8632090
10 ± 0.02	*	8632100
11 ± 0.02	*	8632110
12 ± 0.02	*	8632120
13 ± 0.02	*	8632130
14 ± 0.02	*	8632140
15 ± 0.02	*	8632150

* On request

Precision glass beads made of soda lime glass

- packed per 100 pieces
- with polished or frosted surface
- Minimum order: 100 pieces

Diameter (mm)	Code no. polished	Code no. frosted
0.8 ± 0.02	8671008	-
0.9 ± 0.02	8671009	-
1 ± 0.02	8671010	-
2 ± 0.02	8671020	-
3 ± 0.02	8671030	-
4 ± 0.02	8671040	-
5 ± 0.02	8671050	-
6 ± 0.02	8671060	-
7 ± 0.02	8671070	-
8 ± 0.02	*	8631080
9 ± 0.02	*	8631090
10 ± 0.02	*	8631100
11 ± 0.02	*	8631110
12 ± 0.02	*	8631120
13 ± 0.02	*	8631130
14 ± 0.02	*	8631140
15 ± 0.02	*	8631150

* On request



ACCESSORIES & TOOLS

Micro hand torch and accessories

- for closing Mark-tubes and glass capillaries

Product description	Unit	Code no.
Micro hand torch. including 2 nozzles 0.5 mm and 0.8 mm	1	6000010
Table stand for micro hand torch. with heavy base & gooseneck	1	6000050
Manifold for using two flames on one torch (including 2 nozzles 0.5 mm)	1	6000012
Extra fine nozzle made of ruby with 0.18 mm opening. for finest hottest flames	1	6000013
Micro hand torch set consists of 6000010, 6000011, 6000012, 6000013	1	6000014
Connection-kit consist of 2 x 2 mtr. hose. 4x clips and 1x of 1/4 & 1x 3/8 inch pipe thread fittings	1	6000009
Standard glass blowers glasses	1	6000022



Hilgenberg Pipette bulb

- Pipette bulbs made of medical soft-silk silicone
- with patent pending roll block properties
- for standard pipettes with $\varnothing = 7$ mm

HIGHLIGHT PRODUCT

Product description	Color	Unit	Code no.
Hilgenberg Pipette bulb	turquoise	100 pieces	4019703
Hilgenberg Pipette bulb	anthracite	100 pieces	4019704
Hilgenberg Pipette bulb	red	100 pieces	4019705
Hilgenberg Pipette bulb	yellow	100 pieces	4019706
Hilgenberg Pipette bulb	blue	100 pieces	4019707
Hilgenberg Pipette bulb	pink (magenta)	100 pieces	4019708





Special blades made of ceramic and holders

- for cutting and carving glass tubing
- suitable to cut off the bottom of Mark-tubes

Product description	Code no.
Blade-holder made of aluminium. with plastic clamping for the blades	4018304
Special blades made of ceramic. for cutting glass	4018303



Glass tube cutting tool

- with replaceable carbide wheel
- for cutting glass tubes in a Ø - range of 4 - 30 mm

Product description	Code no.
Glass tube cutting tool	6000021
Carbide cutting wheel Ø 9.8 mm (for glass tube cutting tool)	6001507



Cutting device for glass capillaries

- with length-stop 200 mm
- exchangeable diamond-wire for scratching of the glass surface
- adjustable length stop / lockable on the slide rail
- stop surface in glass version. for minimized friction resistance

Product description	Code no.
Cutting device for glass capillaries	6002200
Diamond wire (Diameter = 0.30 mm, Length = 50 mm, Grain size = D60)	6000913
Diamond wire (Diameter = 0.50 mm, Length = 50 mm, Grain size = D76)	6000915
Diamond wire (Diameter = 0.70 mm, Length = 50 mm, Grain size = D91) (only while stocks last, replacement code no. 6000923)	6000917
Diamond wire (Diameter = 0.70 mm, Length = 50 mm, Grain size = D76)	6000923

TIP: Our diamond wires can be used with our blade-holders



0.5 ml syringes. with low sliding force

- small volume 0.5 ml
- precise dosing
- with Luer connector

Product description	packed per	Code no.
0.5 ml. Polypropylen. Luer	100 pieces	6000020



Closing caps for 5 & 3 mm NMR-Tubes

- available in various colors



Caps for Ø 5 mm

Color	PU (packed per)	Code no. Ø 5 mm
red	1000 pieces	332500
	50 pieces	332500-50
green	1000 pieces	332501
	50 pieces	332501-50
yellow	1000 pieces	332502
	50 pieces	332502-50
blue	1000 pieces	332504
	50 pieces	332504-50
black	1000 pieces	332505
	50 pieces	332505-50
purple	1000 pieces	332506
	50 pieces	332506-50
light blue	1000 pieces	332507
	50 pieces	332507-50
pink	1000 pieces	332508
	50 pieces	332508-50
white	1000 pieces	332509
	50 pieces	332509-50
signal orange	1000 pieces	332510
	50 pieces	332510-50

Caps for Ø 3 mm

Color	PU (packed per)	Code no. Ø 3 mm
red	1000 pieces	332511
	50 pieces	332511-50
green	1000 pieces	332512
	50 pieces	332512-50
yellow	1000 pieces	332513
	50 pieces	332513-50
blue	1000 pieces	332514
	50 pieces	332514-50
black	1000 pieces	332516
	50 pieces	332516-50
purple	1000 pieces	332517
	50 pieces	332517-50
light blue	1000 pieces	332523
	50 pieces	332523-50
pink	1000 pieces	332518
	50 pieces	332518-50
white	1000 pieces	332519
	50 pieces	332519-50
signal orange	1000 pieces	332522
	50 pieces	332522-50

Please note the changed code no. for our various packaging units (PU) when placing your next order!

NMR-Septum-Caps

- consisting of a base with premounted septum snap cap

Product description	packed per	Code no.
NMR-Septum cap - Ø 5 mm consisting of abase with premounted septum snap cap natural rubber rot / TEF transparent 60° shore A 1.3 mm. without slot-cut	100 pieces	332520
NMR-Septum cap - Ø 5 mm consisting of abase with premounted septum snap cap white silicone / PTFE blue 55° shore A 0.9 mm. with slot-cut	100 pieces	332521

HIGHLIGHT PRODUCT





По вопросам продаж и поддержки обращайтесь:

Алматы (727)345-47-04
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
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Казань (843)206-01-48
Калининград (4012)72-03-81
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Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
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Липецк (4742)52-20-81

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Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37
Пермь (342)205-81-47

Ростов-на-Дону (863)308-18-15
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Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Саранск (8342)22-96-24
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97
Тверь (4822)63-31-35

Тольятти (8482)63-91-07
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Тула (4872)33-79-87
Тюмень (3452)66-21-18
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