# Heating/Accessories-Tubing/Rubber

#### Gas lighter

For all types of gas. Bow-shaped. With flint.

Туре	PK	Cat. No.
Gas lighter	1	9.018 801
Flints	1	9.018 805



## 1 Piezoelectric gas lighter, Clipper

- electric gas lighter, Clipper

Piezoelectric.

Туре	PK	Cat. No.
Piezoelectric gas lighter, Clipper	1	9.018 820



### 2 Flame test glasses

Cobalt blue glass.

Width	Length	PK	Cat. No.
mm	mm		
50	50	1	9.140 205
100	100	1	9.140 210



### 3 Tubing

Red. Rubber. (NR). Supplied per metre or in standard coils of 25m.

Int.	Wall	PK	Cat. No.
dia.	thickness		
mm	mm		
2	1.00	1	9.205 157
3	1.00	1	9.205 158
3	1.50	1	9.205 159
4	1.00	1	9.205 160
4	1.50	1	9.205 166
5	1.50	1	9.205 170
5	2.00	1	9.205 171
6	1.50	1	9.205 173
6	2.00	1	9.205 174
7	1.50	1	9.205 179
7	2.00	1	9.205 180
8	2.00	1	9.205 184
9	2.00	1	9.205 187
10	2.00	1	9.205 192
12	2.50	1	9.205 195
18	3.00	1	9.205 200



## 4 Vacuum tubing

Red. Rubber (NR). Supplied per metre or standard coils of 25m.

Deutsch & Neumann

Int.	Wall	PK	Cat. No.
dia.	thickness		
mm	mm		
4	4.00	1	9.205 804
5	5.00	1	9.205 805
6	5.00	1	9.205 806
7	5.00	1	9.205 807
8	5.00	1	9.205 808
10	5.00	1	9.205 809

### 1 Tubing

Viton. Supplied per metre. Deutsch & Neumann

Int.	Wall	PK	Cat. No.
dia.	thickness		
mm	mm		
2	1.0	1	9.205 745
3	1.0	1	9.205 758
4	1.0	1	9.205 765
5	1.0	1	9.205 769
6	1.0	1	9.205 772
6	2.0	1	9.205 774
8	1.5	1	9.205 782
8	2.0	1	9.205 784
9	2.0	1	9.205 787
10	2.0	1	9.205 792



## 2 Tubing, silicone, Rausil FG

Suitable for food use, according to BfR (BgVV) and FDA§177.2600. Supplied per metre or in standard coils of 50m.

nt.	Wall	PK	
dia.	thickness		
mm	mm		
1.00	1.0	1	
1.50	1.0	1	
2.00	1.0	1	
2.00	2.0	1	
3.00	1.0	1	
3.00	1.5	1	
3.00	2.0	1	
4.00	1.0	1	
4.00	1.5	1	
5.00	1.0	1	
5.00	1.5	1	
5.00	1.5	1	
5.00	2.0	1	
7.00	1.5	1	
7.00	2.0	1	
8.00	1.5	1	
8.00	2.0	1	
9.00	2.0	1	
10.00	2.0	1	
12.00	2.0	1	



## 3 Tubing, Silicone, Rausil FG

Silicone. Rausil FG, suitable for food use.

Supplied per metre or in standard coils of 25m.

Deutsch & Neumann

Int. dia.	Wall thickness	PK	Cat. No.
mm	mm		
0.50	1.00	1	9.205 210
1.00	0.40	1	9.205 220
1.50	0.40	1	9.205 231
2.00	0.30	1	9.205 243
2.50	1.00	1	9.205 247
4.00	0.50	1	9.205 263
5.00	2.00	1	9.205 271
9.00	1.50	1	9.205 286







#### **Tubing/Plastic**



#### 1 Versilic silicone tubing

Pure silicone with high-grade properties. To Ph.Eur, DAB 10 and USP XXIII Class VI (biological tests). Suitable for food use to FDA, BGA and EU guidelines. Temperature range from -60 to  $\pm 200^{\circ}$ C (up to  $\pm 220^{\circ}$ C for short periods). Transparent to translucent. Shore strength 62  $\pm 5$ . Density 1.16. Biologically neutral. Suitable in particular for use in biotechnology, fermentation or pharmaceutical production. Good physical properties such as suppleness, elasticity, flexibility, resistant to bending and tearing. Good recovery characteristics, with high fatigue resistance when twisted. Elongation at tear >300%.

Supplied per metre or in standard coils of 25m.

Int.	Ext.	Wall	PK	Cat. No.
dia.	dia.	thickness		
mm	mm	mm		
0.50	2.5	1.0	1	9.205 300
1.00	3.0	1.0	1	9.205 301
2.00	4.0	1.0	1	9.205 302
3.00	5.0	1.0	1	9.205 303
4.00	6.0	1.0	1	9.205 304
5.00	7.0	1.0	1	9.205 305
6.00	10.0	2.0	1	9.205 275
7.00	11.0	2.0	1	9.205 306
8.00	12.0	2.0	1	9.205 285
9.00	13.0	2.0	1	9.205 307
10.00	14.0	2.0	1	9.205 308
12.00	17.0	2.5	1	9.205 309



#### Fabric-reinforced PVC tubing

Transparent. Supplied per metre or in standard coils of 50m. PVC with terylene mesh reinforcement. Certificated by German TÜV with due regard to regulatory of DIN EN ISO 5774:2008. Proofed by BGVO directive 2002/72/EC bis 2008/39/EC for food contact.

Int. dia.	Thickness	PK	Cat. No.
mm	mm		
6.00	3	1	9.205 816
8.00	3	1	9.205 818
10.00	3	1	9.205 820
12.50	3	1	9.205 823



#### 3 PVC-Tubing

Price per metre. Approved by BGVO directive 2002/72/EC and 2008/39/EC for food contact. Approved by KTW-C directive - Germany Federal Environment Agency for use in cold water.

Int.	Thickness	PK	Cat. No.
dia.			
mm	mm		
2.00	1.00	1	9.205 345
3.00	1.00	1	9.205 358
3.00	1.50	1	9.205 359
4.00	1.00	1	9.205 365
4.00	1.50	1	9.205 366
5.00	1.00	1	9.205 369
5.00	1.50	1	9.205 370
6.00	1.00	1	9.205 372
6.00	1.50	1	9.205 373
6.00	2.00	1	9.205 374
7.00	1.50	1	9.205 379
7.00	2.00	1	9.205 380
8.00	1.50	1	9.205 382
8.00	2.00	1	9.205 384
9.00	1.50	1	9.205 386
9.00	2.00	1	9.205 387
10.00	2.00	1	9.205 392
12.00	2.00	1	9.205 394
15.00	2.00	1	9.205 397
18.00	2.00	1	9.205 398



#### 4 Tubing

PVC. Price per metre.

Int. dia.	Thickness	PK	Cat. No.
mm	mm		
13.00	3.00	1	6.302 072
16.00	4.00	1	6.052 770
20.00	3.00	1	9.205 399

#### Laboratory tubing Isoflex

Autoclavable PVC tubing, transparent and non-toxic, non ageing and non oxidising. Packed in PE bags. The tubing is marked every metre. Good resistance against strong acids and akalis, fair resistance against organic solvents. Supplied in 20m coil.

Int.	Ext.	Wall	PK	(
dia.	dia.	thickness		
mm	mm	mm		
1	2.4	0.8	20	9.
2	4.0	1.0	20	9.
4	6.0	1.0	20	9.
5	8.0	1.5	20	9.
6	9.0	1.5	20	9.
7	11.0	2.0	20	9.
8	12.0	2.0	20	9.
10	14.0	2.0	20	9.
12	17.0	2.5	20	9.



#### 2 PE-Tubing

Price per metre.

Deutsch & Neumann

Int. dia.	Wall thickness	PK	Cat. No.
mm	mm		
2.00	0.40	1	6.079 602
2.00	1.00	1	6.070 172
8.00	1.00	1	9.205 482
8.00	1.50	1	6.900 070
9.00	2.00	1	6.070 228
10.00	2.00	1	9.205 492



#### 3 Tubing, PFA

PFA fluorocarbon resin. Highly chemical resistant and temperature resistant up to  $\pm 260^{\circ}$ C. Supplied per metre.

BOLA

Int.	Ext.	PK	Cat. No.
dia.	dia.		
mm	mm		
0.80	1.60	1	9.205 824
1.58	3.18	1	9.205 825
2.00	4.00	1	9.205 827
3.60	6.00	1	9.205 826
3.96	6.35	1	9.205 829
4.00	6.00	1	9.205 830
4.35	6.35	1	9.205 831
6.00	8.00	1	9.205 833
6.35	9.52	1	9.205 834
6.80	10.00	1	9.205 835
8.00	10.00	1	9.205 836
10.00	12.00	1	9.205 839



### 4 Flex tubing, PFA

axis and cylindrical BOLA

Corrugated tubing with circular corrugations around the longitudinal axis and cylindrical tubing ends with a length of 40mm which can for example be connected directly to fittings, stopcocks or hose connectors. Together with BOLA Laboratory Screw Joints, the connection is tight and suitable for vacuum.

- highly flexible
- tight bending radius only causes little cross-section reduction
- non-porous
- translucent
- ideal for connections under vibrations
- usable with a small bending radius
- for compensation of thermal expansions
- for easy handling of liquids

Size	Int.	Ext.	Length	PK	Cat. No.
	dia.	dia.	_		
NW	mm	mm	cm		
6.0	6.00	8.0	50	1	9.205 711
6.0	6.00	8.0	100	1	9.205 731
8.0	8.00	10.0	50	1	9.205 712
8.0	8.00	10.0	100	1	9.205 732
10.0	10.00	12.0	100	1	9.205 733
12.0	12.00	14.0	100	1	9.205 734
14.0	14.00	16.0	100	1	9.205 735
16.0	16.00	18.0	100	1	9.205 737

Special lengths available on request



#### **Tubing/Plastic**



#### 1 PTFE-Tubing

Highly chemical resistant and with stands temperatures from -200 $^{\circ}$ C to +260 $^{\circ}$ C. Supplied per metre. BOLA

Int.	Ext.	PK	Cat. No.
dia.	dia.		
mm	mm		
0.50	1.0	1	9.205 608
0.50	1.6	1	9.205 609
0.80	1.6	1	9.205 616
1.00	1.6	1	9.205 619
1.00	2.0	1	9.205 621
1.50	2.1	1	9.205 630
1.60	3.2	1	9.205 634
2.00	3.0	1	9.205 644
2.00	4.0	1	9.205 645
3.00	4.0	1	9.205 657
3.00	5.0	1	9.205 658
4.00	5.0	1	9.205 663
4.00	6.0	1	9.205 665
5.00	6.0	1	9.205 668
6.00	7.0	1	9.205 671
6.00	8.0	1	9.205 672
8.00	10.0	1	9.205 680
10.00	12.0	1	9.205 691
10.00	14.0	1	9.205 692



#### Iso-Versinic Tubing

Synthetic fluoroelastomer.

Chemically resistant to hydrocarbons (aromatic and aliphatic), oils, strong acids, oxidizing agents and chlorous solvents. Excellent resistance to abrasion and flexing. Good ozone and radiation protection. Impermeable to gas and steam. Shore hardness see table below. Density 1.9. Temperature range -20 to +200°C (up to +300°C for short periods). Elongation at tear >250%. Suitable for transporting corrosive liquids. Supplied per metre.

Int. dia.	Ext. diam.	Wall thickness	Shore	PK	Cat. No.
mm	mm	mm			
1	3	1.0	60	1	9.205 700
2	4	1.0	60	1	9.205 701
3	5	1.0	60	1	9.205 702
4	6	1.0	60	1	9.205 703
5	8	1.5	70	1	9.205 704
6	9	1.5	70	1	9.205 705
7	10	1.5	70	1	9.205 706
8	12	2.0	70	1	9.205 707
10	14	2.0	70	1	9.205 708
12	17	2.5	70	1	9.205 709



#### Norprene® tubing A 60 G

Black, Thermoplastic elastomer, Shore A 61. Temperature range -60 to +135  $^{\circ}\text{C}.$ 

Suitable for use as tubing for peristaltic pumps. Very high endurance. Resistant to many aggressive chemicals. Heat and ozone resistant (does not turn brittle). Fills the performance gap between single elastomers (such as EPDM, chloroprene) and expensive polymers (viton, silicone). Supplied per metre or in standard coils of 15m.

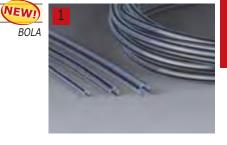
Int.	Ext.	Wall	PK	Cat. No.
dia.	dia.	thickness		
mm	mm	mm		
1.60	4.8	1.6	1	9.206 941
3.20	6.4	1.6	1	9.206 944
4.80	8.0	1.6	1	9.206 951
6.40	9.6	1.6	1	9.206 956
6.40	11.2	2.4	1	9.206 957
8.00	11.2	1.6	1	9.206 961
8.00	12.8	2.4	1	9.206 962
9.50	12.7	1.6	1	9.206 967
9.60	14.4	2.4	1	9.206 968
11.10	14.3	1.6	1	9.206 973
12.70	15.9	1.6	1	9.206 976
12.70	17.5	2.4	1	9.206 977

### Zebra Explosion-Proof Tubing, PFA EX

Transparent PFA tubing with black longitudinal conductive stripes on the outer surface.

The tubing is absolutely round and can be connected to all common fittings.

- the flowing product is only exposed to PFA
- no chemical restrictions due to the outer conducting stripes
- resistance less than 1.000kOhm
- smooth, non-porous interior surface
- clear visibility of the flowing product
- no corrosion unlike metal lines or metal meshes
- almost universally chemical resistance



Int.	Ext.	Thickness	PK	Cat. No.
dia.	diam.			
mm	mm	mm		
2	3	5	1	9.205 885
4	6	1	1	9.205 886
6	8	1	1	9.205 887
8	10	1	1	9.205 888
10	12	1	1	9.205 889

### TYGON® Tubing B-44-EU for food contact



Complies with European directive 2002/72/EC limiting the use of phtalate for food contact (excluding fatty aliments)

- Translucent, smooth, non porous - Density: 1.2, Shore Hardness: 64
- Good resistance to acids and alkalins

F. A

- REACH compliant
- Temperature: -35°C to +74°C
- Complies with the European Directive 2002/95/CE (RoHS)

Wall

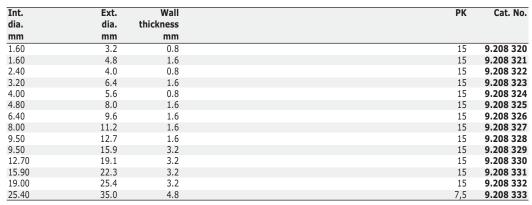
2	

int. dia.	Ext. dia.	thickness	PK	Cat. No.
mm	mm	mm		
0.80	2.4	0.8	15	9.208 240
1.60	3.2	0.8	15	9.208 241
3.20	4.8	0.8	15	9.208 242
3.20	6.4	1.6	15	9.208 243
4.00	7.2	1.6	15	9.208 244
4.80	8.0	1.6	15	9.208 245
6.40	9.6	1.6	15	9.208 246
9.60	12.7	1.6	15	9.208 247
9.60	15.9	3.2	15	9.208 248
12.70	15.9	1.6	15	9.208 249
12.70	19.1	3.2	15	9.208 250
15.90	22.2	3.2	15	9.208 251
19.00	25.4	3.2	15	9.208 252
22.20	28.6	3.2	15	9.208 253
25.40	31.8	3.2	15	9.208 254
25.40	38.1	6.4	15	9.208 255

#### Tygon®- tubing 2375

(NEW!)

Transparent. Density: 0.9. Shore: 75. Temperature from ≤59°C to +54°C. Resistant to highly agreesive chemicals. Platicizer-free, minimises risk of fluid contamination. Exceptionally smooth inner surface inhibits particulate builtup. Low absorption maintains fluid integrity. FDA approved for food contact and NSF 51. REACH compliant.





#### **Tubing/Plastic**



#### Tygon® tubing R3603

Clear, transparent, Shore A 55. Temperature range -50 to +74°C.

Universal laboratory tubing with very good gripping properties on glass or plastic fittings. Very low gas permeability level similar to rubber. Resistant to most laboratory chemicals. Also suitable for peristaltic pumps.

Further Tygon and Pharmed tubing can be found in the Biotechnology section of this catalogue.

Supplied per metre or in standard coils of 15m.

Int.	Wall	PK	Cat. No.
dia.	thickness		
mm	mm		
0.80	0.80	1	9.205 515
1.60	0.80	1	9.205 536
1.60	1.60	1	9.205 537
2.40	0.80	1	9.205 550
2.40	1.60	1	9.205 551
3.20	0.80	1	9.205 561
3.20	1.60	1	9.205 562
4.00	0.80	1	9.205 564
4.00	1.60	1	9.205 566
4.80	0.80	1	9.205 568
4.80	1.60	1	9.205 567
4.80	2.40	1	9.205 569
4.80	3.20	1	9.205 570
6.40	0.80	1	9.205 575
6.40	1.60	1	9.205 576
6.40	2.40	1	9.205 577
6.40	3.20	1	9.205 578
8.00	1.60	1	9.205 583
8.00	2.40	1	9.205 584
8.00	3.20	1	9.205 585
8.00	4.00	1	9.205 586
9.50	1.60	1	9.205 588
9.50	2.40	1	9.205 589
9.50	3.20	1	9.205 590
11.10	1.60	1	9.205 591
11.10	2.40	1	9.205 592
11.10	3,20	1	9.205 593
12.70	1.60	1	9.205 595
12.70	2.40	1	9.205 596
12.70	3.20	1	9.205 597
12.70	4.00	1	9.205 598
15.90	3.20	1	9.206 524
19.20	4.00	1	9.206 545



#### Tygon® tubing

Tygon® 3350. Silicone-platinum sanitary tubing, Shore A 50.

Temperature range -81 to +200°C. Very high-grade silicone tube with smooth inner surface. Ozone and UV resistant. High flexibility with good recovery characteristics. To FDA and USP Class VI, in accordance with ISO 10993. Supplied in 15m coil.

Int. dia.	Ext. dia.	Wall thickness	PK	Cat. No.
mm	mm	mm		
3.20	6.4	1.6	15	9.208 380
4.80	8.0	1.6	15	9.208 381
6.40	9.6	1.6	15	9.208 382
6.40	11.1	2.4	15	9.208 383
8.00	12.7	2.4	15	9.208 384
9.50	12.7	1.6	15	9.208 385
12.70	15.9	1.6	15	9.208 386
12.70	17.5	2.4	15	9.208 387



#### Tygon® tubing

Type Tygon® LFL. Transparent, flexible, Shore A 56.

Temperature range -54 to +74°C. Tygon tubing with the longest "Flex-Life" (lifespan) when used in peristatic pumps. To FDA/USP Class VI. Suitable for food, drinks or pharmaceutical applications. Resists ageing and non-toxic. Resistant to many chemicals.

Supplied in 7.5m coil.

Int. dia.	Ext. dia.	Wall thickness	PK	Cat. No.
mm	mm	mm		
3.20	6.4	1.6	1	9.208 340
4.80	8.0	1.6	1	9.208 341
6.40	9.6	1.6	1	9.208 342
8.00	11.2	1.6	1	9.208 343
12.70	19.1	3.2	1	9.208 344

#### Tygon® tubing 3370 iB

Tygon® 3370 iB.

Silicone tube, platinum-cured, reinforced material, Shore A 70.

Temperature range -80 to +160°C.

Suitable for high pressures. Very high-grade silicone tube with extremely smooth inner surface.

Ozone and UV resistant. Highly flexible with good recovery characteristics.

Suitable for food. To FDA and USP Class VI.

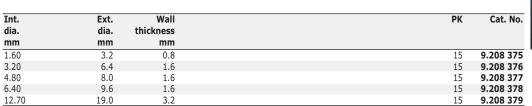
Supplied in 15m coil.

Dimensions	PK	Cat. No.
mm		
6.4 x 13.1 x 3.4	15	9.208 361
9.6 x 17.5 x 4.0	15	9.208 362
12.7 x 21.5 x 4.4	15	9.208 363
19.1 x 29.2 x 5.0	15	9.208 365



### 2 Tygon<sup>®</sup> SE 200 tubing

Tygon $^{\circ}$  SE 200. Clear, transparent, Shore A 67 (casing). Temperature range -40 to +77 $^{\circ}$ C. Resistant to the most aggresive liquids (acids, alkali solutions, solvents of all types) and gases. The only Tygon tubing which comprises of two layers: an FEP lining internally and transparent Tygon tubing externally. This combination combines the flexibility (can be bent to narrow angles) and transparency of Tygon R 3603 with the chemical resistance of fluorine polymers (FEP). Totally odourless and tasteless. Meets FDA and USP Class VI specifications. Supplied in 15m coil.





#### Peristaltic pump tubing, Tygon

With 2 colour-coded bridges (international standards). Wall thickness of 0.8mm. Shore: 55. Fits most common peristaltic pump models, e.g. Verder, Ismatec, Watson-Marlow, IKA and Heidolph. Standard tubing, transparent. Length 380mm. Long working lifespan. Good resistance to acids and alkalis. Suitable for general use and with food.

Int. dia. mm	Colour	PK	Cat. No.
0.13	orange-black	12	9.208 201
0.19	orange-red	12	9.208 202
0.25	orange-blue	12	9.208 203
0.38	oragne-green	12	9.208 204
0.51	orange-yellow	12	9.208 205
0.64	orange-white	12	9.208 206
0.76	black-black	12	9.208 207
0.89	orange-orange	12	9.208 208
1.02	white-white	12	9.208 209
1.14	red-red	12	9.208 210
1.30	grey-grey	12	9.208 211
1.42	yellow-yellow	12	9.208 212
1.52	yellow-blue	12	9.208 219
1.65	blue-blue	12	9.208 213
1.85	green-green	12	9.208 214
2.06	purple-purple	12	9.208 215
2.29	purple-black	12	9.208 216
2.54	purple-orange	12	9.208 217
2.79	purple-white	12	9.208 218



#### 4 Flow indicators LaboPlast®

Gives a visual indication of liquid or gas flow in tubing.

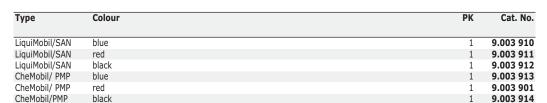
Operates in both directions and at any angle.

Can accomodate flow rates down to approx. 150ml/min. Length incl. nozzle

88mm. For tubing from 6mm to 11mm diameter. Maximum pressure: 2 bar. Food Safe.

Choice of models:

- LiquiMobil made of SAN up to 30°C working temperature.
- CheMobil made of PMP up to 60°C working temperature, autoclavable, chemically resistant.





Bürkle

#### **Tubing/Plastic-Adapters, Clips, Clamps**



#### 1 Tubing cutter

Suitable for cutting tubing with external  $\ensuremath{\text{\emptyset}}$  from 1.6mm to 19mm. Length 76mm.

Туре	PK	Cat. No.
Tubing cutter	1	9.205 898
Replacement blade	1	9.205 899



#### 2 Tube and tubing cutter

Suitable for all tubing, even PTFE and fabric-reinforced tubing. Interchangeable blade.

Buddeberg

**VACUUBRAND** 

Туре	PK	Cat. No.
Cutter	1	9.306 000
Replacement blades	10	9.306 001



#### 3 PTFE Vacuum tubing with stainless steel small flanges, KF

Antistatic PTFE. Flanges in grade 1.4305 stainless steel.

Virtually smooth internal walls to prevent accumulation of condensate or particles,

provide high throughput with minimal turbulence.

- chemically resistant PTFE
- antistatic according to BS 2050:1978\*, <10<sup>7</sup> Ohm resistance between inside and flanges to prevent formation of electrostatic charges inside and outside, as required for ATEX applications.

Size	Length	B* One-off bending	B* Repeated bending	PK	Cat. No.
	mm				
DN 16	500	150	300	1	9.882 617
DN 16	1000	150	300	1	9.882 618
DN 25	500	200	400	1	9.882 619
DN 25	1000	200	400	1	9.882 620
¥ M411	L				

<sup>\*</sup> Minimum bend radius for..

Other small-flange components, vacuum valves and tubes on request.



#### 4 Messfix tubing gauge

Small, blue, handy polypropylene gauge.

schuett-biotec

For rapid measurement of internal and external diameters of tubing , test tubes etc. within the range 1.5mm to 16mm.

Width	Length	Height	PK	
mm	mm	mm		
50	120	12	1	g



#### 5 Screwthread couplings, PBT

DIN screwthread. For flexible connection of two glass screwthreads. With integral PTFE-faced silicone (VMQ) seals. Temperature resistant to max.  $180^{\circ}$ C.

DURAN Group

N	leck thread	PK	Cat. No.
G	iL		
1	4	1	9.209 004
1	8	1	9.209 005
2	5	1	9.209 006
3	2	1	9.209 007

# Tubing/Adapters, Clips, Clamps

#### Laboratory threaded joints - GL 14

Enables GL threads to clamp easily to fluoroplastic or thick-walled tubing made out of other plastics, glass or metal. (Ideally suited for connection with Bola GL fittings, Bola pressure valves, Bola GL taps and Bola GL ball valves).

The laboratory threaded joints consist of a red screw cap made of glass-fibre reinforced ETFE, a sealing disc and a tapered sealing ring made of PTFE, as well as a V-ring made of glass-fibre reinforced ETFE. This patented system withstands pressures up to approx. 10 bar, is suitable for a vacuum (at room temperature in the case of sizes 14 to GL25) and is easy to assemble without tools. The substance that passes through only comes in contact with PTFE.

Bola laboratory threaded joints can, for example, be used to hold probes (including stainless steel probes), sensors, laboratory taps, submerged tubes, thermometers or as a cable feed.

4	
•	

For external tube Ø	PK	Cat. No.
mm		
3.0	1	9.209 806
3.2	1	9.209 807
4.0	1	9.209 808
6.0	1	9.209 809
6.35	1	9.209 810

#### Laboratory screwthread joints - GL 18

BOLA

BOLA

For external tube Ø mm	PK	Cat. No.
3.0	1	9.209 816
3.2	1	9.209 817
4.0	1	9.209 818
6.0	1	9.209 819
8.0	1	9.209 820
10.0	1	9.209 821



#### 3 Laboratory screwthread joints - GL 25

BOLA

For external tube Ø	PK	Cat. No.
mm		
3.0	1	9.209 836
3.2	1	9.209 837
4.0	1	9.209 838
5.0	1	9.209 839
3.0	1	9.209 840
10.0	1	9.209 841
12.0	1	9.209 842
14.0	1	9.209 843



#### 4 Screw connector caps

Red. PBT. With central hole (diameter outlined below). Temperature resistance to max.  $180^{\circ}\text{C}$ .

DURAN Group

Neck thread	Bore	PK	Cat. No.
GL	mm		
14	9.5	1	9.209 114
18	11.0	1	9.209 118
25	15.0	1	9.209 125
32	20.0	1	9.209 132
45	34.0	1	9.209 135



#### 5 Screwthread connection caps HT (High Temp.)

PPS (polyphenylene sulphide), reinforced with glassfibre, providing very high mechanical strength, even at temperatures up to  $+250\,^{\circ}$ C. The contoured grip ensures secure closing and easy opening.

BOLA

For thread size	Bore dia.	PK	Cat. No.
GL			
-	mm		
14	9	1	9.209 115
18	11	1	9.209 119
25	15	1	9.209 126
32	20	1	9.209 133
45	34	1	9.209 136



**BOLA** 

**DURAN Group** 

Cat No

## 1. Lab consumables

### Tubing/Adapters, Clips, Clamps



#### Ground Joint Reducing Sets

This set consists of PTFE reducing rings graduated in ground joint sizes 14.5/18.8/24/29.2/34.5/45 and 60. With these rings, different cone and socket sizes can be connected. For example, it is possible to fit a 14.5 cone into a socket of 45. Also other combinations are possible. With this set you can practically cover all requirements within the lab.

Cat. No. Size Height / PK **Ground Joint Length** NS 14,5 - NS 60 20 mm 9.207 162



#### Silicone cap wads/septa, VMQ

For GL-screwthread caps. Overall diameter and wad thickness as outlined below. **DURAN Group** Thermical resistance: 130°C (steam)/200°C (heat). Autoclavable.

For thread size	Dia.	Thickness	PK	Cat. No.
GL	mm	mm		
14	12	2	1	9.209 414
18	16	2	1	9.209 418
25	22	2	1	9.209 425
32	29	2	1	9.209 432
45	42	3	1	9.209 435



#### Silicone sealing rings, VMQ

With vulcanized PTFE sleeve. For screwthread caps.

Thermical resistance: 130°C (steam), 200°C (heat). Autoclavable.

Fyt For tubes

size	dia.	diam.	dia	PK .	Cat. No.
3126	uiai	ulaili.	uia.		
GL	mm	mm	mm		
14	6	12	5.5 to 6.5	1	9.209 146
18	6	16	5.5 to 6.5	1	9.209 186
18	8	16	7.5 to 9.0	1	9.209 188
18	10	16	9.0 to 11.0	1	9.209 190
25	8	22	7.5 to 9.0	1	9.209 258
25	10	22	9.0 to 11.0	1	9.209 260
25	12	22	11.0 to 13.0	1	9.209 262
32	10	29	9.0 to 11.0	1	9.209 320
32	12	29	11.0 to 13.0	1	9.209 322
32	14	29	13.0 to 15.0	1	9.209 324
32	16	29	15.0 to 17.0	1	9.209 326
32	18	29	17.0 to 19.0	1	9.209 327
45	26	42	25.0 to 27.0	1	9.209 329
45	32	42	31.0 to 33.0	1	9.209 331



#### Keck adapters KA 14

Glass fibre reinforced thermoplastic polyester (PBT).

Melting point 225°C. Temperature and chemically resistant.

For quick, secure, tight connection of tubing with glass screwthreads and ferrules.

For	Colour	PK	Cat. No.
Glass ferrule GL 14 complete	vollow		9.208 931
	yellow	1	
Glass ferrule RD 14 complete	red 	1	9.208 941
Glass screwthread GL 14	yellow	1	9.208 930
Glass screwthread RD 14	red	1	9.208 940

### 1. Lab consumables Tubing/Adapters, Clips, Clamps

#### Accessories for Keck adapter KA 14



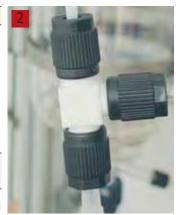
Туре	For	Colour	PK	Cat. No.
Tubing section with flat seal	9mm	blue	1	9.208 935
Screwthread cap	Glass screwthread GL 14	yellow	1	9.208 932
Screwthread cap	Glass screwthread RD 14	red	1	9.208 942
Clamping ring with 0-ring	Glass ferrules	yellow	1	9.208 933
Clamping ring with 0-ring	Glass ferrules	red	1	9.208 943
Coupling (PBT)	For connecting 2 tubing sections	-	1	9.208 957

#### 2 GL fittings

PTFE couplings with GL connector screwthread. Connect PTFE, PFA, FEP, glass and metal tubing. Fittings are chemical and temperature resistant to approx. 250°C. Can be used at working pressures of up to 10 bar when used in combination with Bola laboratory screwthread connections (at room temperature). A further advantage is that they can be used as expansion/reduction adapters to connect tubing of different diameters.

For easy tubing connection we recommend accessory Bola laboratory screwthread connectors - please order separately.

Neck thread	Bore	PK	Cat. No.
GL	mm		
14	6.5	1	9.207 133
18	10.5	1	9.207 134
25	14.5	1	9.207 135



#### 3 Distributors for Reaction Vessels (R), PP, PTFE

Blue, PP screw cap with GLS80 thread and PTFE body. Centre neck with GL25 thread for connecting tubing up to 15mm o.d., four lateral necks with GL18 thread. Exchangeable shaft guide (PTFE) with PPS screw cap included for inserting and fixing a stirrer shaft into the centre neck. Very good chemical resistance, for working temperatures up to max. +250°C (PP screw cap max. +140°C).

Centre neck	Lateral neck	For dia. stirring rod	PK	Cat. No.
		mm		
GL 25	4 x GL 18	8	1	9.209 920
GL 25	4 x GI 18	10	1	9.209 921



#### Bottle distributors, PTFE

With GL-threaded necks and screw caps. Suitable for GL45 threaded bottles. The
distributors are ideal for decanting liquids, whereby the necks are connected either to a
liquid source or to an excess pressure or vacuum system (up to 6mm max. tubing diameter). For hassle-free
connection, we recommend the Bola threaded connector (please order separately) in accordance with the outer
diameter of the tubing.

Туре	Central neck	PK	Cat. No.
PFA	2 x GL 14	1	9.209 851 4
PTFE	3 x GL 14	1	9.209 852
PTFE	3 x GL 18	1	9.209 844



9.209 851



9.209 852

### **Tubing/Adapters, Clips, Clamps**



#### 1 Ground Joint GL Adapters, PTFE

(NEW!)

**BOLA** 

**BOLA** 

Black, PPS screw cap with GL45 thread or blue PP, screw cap with GL80 thread,
movable insert with ground joint made of PTFE. Transition from a ground joint to a glass
thread. The body can be turned independently from the screw cap. The complete, assembled adapter can be removed
and fixed onto another bottle without the risk of disarranging the tubing. Very good chemical resistance, for working
temperatures up to max. +250°C.

Joint size NS	Thread	PK	Cat. No.
29/32	GL 45	1	6.224 507
29/32	GLS 80	1	9.209 926
45/40	GLS 80	1	9.209 927



#### Flexible Distributors, PP

For connecting elastic tubing by simply slipping it onto hose connectors.

Suitable for GL45 threaded bottles. With screw cap made of glass-fibre reinforced PP,

ideal for transferring liquids or gases. The angled tubing connectors can be attached to a liquid source,

a pressure source or a vacuum system. Avoid crimping of the tubing.

The distributor can be loosened by simply turning the screw cap. The complete distribution system can then be fixed onto another bottle.

7.634 892



number of nozzles	For tubing bore	PK	Cat. No.
	mm		
2	6 - 9	1	7.634 892
3	6 - 9	1	9.209 858
2	7 - 11	1	9.209 859



#### 4 GL stopcocks, PTFE

Stopcocks with cylindrical taps and GL screwthread made of pure PTFE, giving almost total chemical resistance. Can be used at working pressures of up to 6 bar when used in combination with Bola laboratory screwthread connections (at room temperature).

A further advantage is that they can be used as expansion/reduction adapters to connect tubing of different diameters. For easy tubing connection we recommend accessory Bola laboratory screwthread connectors - please order separately.

2-way construction.

Neck thread	Bore dia.	PK	Cat. No.
GL	mm		
14	4	1	9.207 153
18	6	1	9.207 154
25	8	1	9.207 155



#### Two-way valves Laboplast®

Resistant to compression max. 1 bar.

Bürkle

- PVDF: excellent chemical resistance, transparent, suitable for food
- PP/PE: for industrial use, red/white
- Operating temperature: PVDF +0 up to +40°C, PP/PE +5 up to +40°C

For tubing bore	Valve bore	Material	PK	Cat. No.
mm	mm			
5 to 7	4	PVDF	1	9.116 771
7 to 9	6	PVDF	1	9.116 772
9 to 11	8	PVDF	1	9.116 773
11 to 13	8	PVDF	1	9.116 775
5 to 7	4	PE / PP	1	9.116 781
7 to 9	6	PE / PP	1	9.116 782
9 to 11	8	PE / PP	1	9.116 783
11 to 13	8	PE / PP	1	9.116 784

#### Three-way valves Laboplast®

- Transparent, PVDF. Very high chemical resistance. Suitable for food use. Maximum pressure 1 bar.
- Red/white, PE/PP. Economical. For industrial use. Suitable for food use. Maximum pressure 1 bar.

Bürkle

For tubing	Valve	Material	PK	Cat. No.
bore	bore			
mm	mm			
5 to 7	4	PVDF	1	9.116 776
7 to 9	6	PVDF	1	9.116 777
9 to 11	8	PVDF	1	9.116 778
11 to 13	8	PVDF	1	9.116 780
5 to 7	4	PE / PP	1	9.116 786
7 to 9	6	PE / PP	1	9.116 787
9 to 11	8	PE / PP	1	9.116 788
11 to 13	8	PE / PP	1	9.116 789



#### 2 Stopcocks, PTFE

With 3-way GL screwthread connections. With L-shape key bore.

Neck thread	Bore dia.	PK	Cat. No.
GL	mm		
14	4	1	9.207 156
18	6	1	9.207 157
25	6	1	9.207 158



#### GL screwthread ferrules

Fluoroplastics, for tubing connection. Straight and curved models available, screw
connector caps made of PPS reinforced with glass fibre (max. +250°C), ferrules made of
PFA, with flexible PFA sealing rim and FPM O-ring. When in use, the contents only comes into contact with PFA
(or PTFE - GL25 and GL32).

Туре	Neck thread	Ext. dia.	Int. dia.	PK	Cat. No.
	GL	mm	mm		
Straight 35 mm	14	8.7	6.00	1	9.051 320
Straight 39 mm	18	10.5	7.00	1	9.051 321
Angled 40 mm	14	8.7	6.00	1	9.051 324
Angled 54 mm	18	10.5	7.00	1	9.051 325



#### 4 Plastic ferrule, angled, PP

PP. For screw connector caps GL 14. With silicone seal (VMQ). Temperature resistant up to max.  $\pm 140^{\circ}$ C. Autoclavable.

DURAN Group

Dia.	Neck	PK	Cat. No.
	dia.		
mm	mm		
8	4	1	9.051 308



#### 5 Tubing connectors, PP

Transparent, PP. Straight,

BRAND

For tubing bore	Length	PK	Cat. No.
mm	mm		
3 to 5	47	1	9.207 163
6 to 10	55	1	9.207 165
9 to 13	57	1	9.207 168



#### 6 Tubing connectors, PP

Transparent, PP. Straight. Used to link tubing of different diameters.

BRAND

For tubing bore	Length	РК	Cat. No.
mm	mm		
5 to 17	110	1	9.207 270



Kartell

# 1. Lab consumables

## **Tubing/Adapters, Clips, Clamps**



### Tubing connectors, PP

Grey. PP. Straight.			Kartell
For tubing bore	Length	РК	Cat. No.
mm	mm		
4 to 5	39	1	9.207 221
5 to 7	52	1	9.207 222
7 to 9	59	1	9.207 223
9 to 11	59	1	9.207 224
11 to 13	66	1	9.207 225
13 to 15	66	1	9.207 226



#### Tubing connectors, PP

PP. T- shape.			Kartell
For tubing bore	Length	PK	Cat. No.
mm	mm		
3 to 4	20	1	9.207 182
4 to 5	30	1	9.207 183
6 to 7	40	1	9.207 184
8 to 9	55	1	9.207 185
10 to 11	69	1	9.207 189
12 to 13	79	1	9.207 190



#### Tubing connectors, PE-HD

(NEW!) PE-HD. Straight. BRAND For tubing Length PK Cat. No. bore mm  $\boldsymbol{m}\boldsymbol{m}$ 9.207 167 10 to 11 45 74 74 12 to 14 9.207 169 19 to 21 9.207 174 84 9.207 179



### 4 Plug tubing connectors, PE

PE. Comprising of two pull-apart sections, similar to conical ground joint. Not suitable for high pressure applications.

For tubing bore	Length	PK	Cat. No.
mm	mm		
3 to 5	57	1	9.207 261
5 to 7	65	1	9.207 262
7 to 9	70	1	9.207 263
9 to 12	75	1	9.207 264
11 to 14	80	1	9.207 265



## Reduction adapters/Reducing adapters, PP

Transparent , PP.			BRAND
For tubing bore	Length	PK	Cat. No.
mm	mm		
3 to 5 / 6 to 10	55	1	9.207 336
3 to 5 / 9 to 13	55	1	9.207 338
6 to 10 / 9 to 13	59	1	9.207 340

# 1. Lab consumables **Tubing/Adapters, Clips, Clamps**

#### Reduction adapters/Reducing adapters, PE-HD

BRAND Transparent, PE-HD.

For tubing bore	Length	PK	Cat. No.
mm	mm		
8 to 10/11 to 14	66	1	9.207 356
12 to 14/18 to 20.5	73	1	9.207 357



### 2 GL fittings, PTFE

PTFE couplings with GL connector screwthread. Connect PTFE, PFA, FEP, glass and metal **BOLA** tubing. Fittings are chemical and temperature resistant to approx. 250°C. Can be used at working pressures of up to 10 bar when used in combination with Bola laboratory screwthread connections (at room temperature). A further advantage is that they can be used as expansion/reduction adapters to connect tubing of different diameters. For easy tubing connection we recommend accessory Bola Laboratory screwthread connectors which can be ordered separately.



Neck thread	Bore	PK	Cat. No.
GL	mm		
14	6.5	1	9.207 113
18	10.5	1	9.207 114
25	14.5	1	9.207 115

#### Y - tubing connectors, PP

Transparent, PP. Y- shape.			Kartell
For tubing bore	Length	РК	Cat. No.
mm	mm		
3 to 4	24	1	9.207 200
4 to 5	35	1	9.207 203
6 to 7	54	1	9.207 205
8 to 9	64	1	9.207 207
10 to 11	74	1	9.207 208
12 to 13	87	1	9.207 210



### 120° Y connectors, PP

Dia. mm	Tubing i.d.	PK	Cat. No.
min./max.	mm		
4/5/6	1.5	1	9.207 231
6/7/8	2.7	1	9.207 232
8/9/10	4.7	1	9.207 233
10/11/12	5.5	1	9.207 234
12/13/14	7.6	1	9.207 235
14/15/16	9.6	1	9.207 236



Kartell

Kartell

### 4 way connectors, PP

Dia.	Tubing i.d.	PK	Cat. No.
mm	mm		
3.5	1.5	1	9.207 241
6.0	2.7	1	9.207 242
8.0	4.6	1	9.207 243
10.0	7.0	1	9.207 244
12.0	8.0	1	9.207 245
13.5	9.5	1	9.207 246
15.0	11.6	1	9.207 247



# **Tubing/Adapters, Clips, Clamps**



# 1 L - tubing connectors, PP

Transparent, P	P. L-shape.		Kartell
For tubing bore	Length	PK	Cat. No.
mm	mm		
3 to 4	15	1	9.207 251
5	21	1	9.207 252
6 to 7	25	1	9.207 253
8 to 9	30	1	9.207 254
10 to 11	36	1	9.207 255
12 to 13	42	1	9.207 256
14 to 15	48	1	9 207 257



# Tubing connectors, TPX

Туре	For tubing bore	PK	Cat. No.
	mm		
C-1, straight	3-5	1	9.207 601
C-2, straight	5-8	1	9.207 602
C-3, straight	8-10	1	9.207 603
Y-1, Y-shape	3-5	1	9.207 611
Y-2, Y-shape	5-8	1	9.207 612
Y-3, Y-shape	8-10	1	9.207 613
T-1, T-shape	3-5	1	9.207 621
T-2, T-shape	5-8	1	9.207 622
T-3, T-shape	8-10	1	9.207 623
E-1, reduction adapter	3-5 / 5-8	1	9.207 631
E-2, reduction adapter	5-8 / 8-13	1	9.207 632



## 3 Mini tubing connectors, PP

Туре	For tubing bore	PK	Cat. No.
	mm		
Straight, AA	1.6	1	9.207 291
Straight, DD	2.5	1	9.207 292
Straight, CC	3.2	1	9.207 293
Straight, 4040	4.0	1	9.207 801
T-shape, T10	1.6	1	9.207 294
T-shape, T20	2.5	1	9.207 295
T-shape, T30	3.2	1	9.207 296
T-shape, T40	4.0	1	9.207 811
T-shape, T50	5.0	1	9.207 812
T-shape, T60	6.5	1	9.207 813
L-shape, L10	1.6	1	9.207 821
L-shape, L20	2.5	1	9.207 822
L-shape, L30	3.2	1	9.207 823
Y-shape, Y210	1.6	1	9.207 831
Y-shape, Y220	2.5	1	9.207 832
Y-shape, Y230	3.2	1	9.207 833
Reduction adapter, AD	1.6 - 2.5	1	9.207 297
Reduction adapter, AC	1.6 - 3.2	1	9.207 298
Reduction adapter, 1040	1.6 - 4.0	1	9.207 834
Reduction adapter, 1050	1.6 - 5.0	1	9.207 835
Reduction adapter, DC	2.5 - 3.2	1	9.207 299
Reduction adapter, 2040	2.5 - 4.0	1	9.207 841
Reduction adapter, 2050	2.5 - 5.0	1	9.207 842
Reduction adapter, 3040	3.2 - 4.0	1	9.207 843
Reduction adapter, 3050	3.2 - 5.0	1	9.207 844
Reduction adapter, 3060	3.2 - 6.5	1	9.207 845
Reduction adapter, 4050	4.0 - 5.0	1	9.207 846
T-reduction adapter, T230/210	1 x 1.6, 2 x 3.2	1	9.207 865
T-reduction adapter, T230/220	1 x 2.5, 2 x 3.2	1	9.207 866
T-reduction adapter, T210/220	1 x 2.5, 2 x 1.6	1	9.207 867
T-reduction adapter, T220/230	1 x 3.2, 2 x 2.5	1	9.207 869
Straight, threaded, M6210	1.6	1	9.207 871
Straight, threaded, M6220	2.5	1	9.207 872
Straight, threaded, M6230	3.2	1	9.207 873
Straight, threaded, M6240	4.0	1	9.207 874
Straight, threaded, M6250	5.0	1	9.207 875
Other materials on request!			

# 1. Lab consumables Tubing/Adapters, Clips, Clamps

#### 1 Non-return valves, PE-HD

PE-HD. FKM (Viton®) valve disc. Not suitable for pressure applications.

**BRAND** 

Int. dia.	Length	РК	Cat. No.
mm	mm		
6 to 9	80	1	9.303 039



### 2 Dialysis tubing clips

Orange, PP. Suitable for RC and Biotech RC membranes. Autoclavable.

Flat width	PK	Cat. No.
mm		
5	1	9.206 733
12	1	9.206 734
23	1	9.206 735
35	1	9.206 736
55	1	9.206 737
75	1	9.206 738



Further colours available on request.

#### 3 Mediclips

Robust PPF. For flat widths of dialysis tubing up to 40mm.

Туре	PK	Cat. No.
Mediclips	1	9.206 300



### 4 Keck tubing clamps KT

Thermoplastic polyester (PBT). Continuous control of flow rate in tubing with just one finger.

For external tube Ø	Colour	РК	Cat. No.
4.5	red	1	9.205 904
6.0	yellow	1	9.205 906
10.0	blue	1	9.205 910
14.0	red	1	9.205 914



#### 5 Tubing clamp, Acetal

Adjustable in 15 positions.

Resistant to deformation and corrosion.

Suitable for tubing with external diameters of 3.2mm to 11mm.

Туре	PK	Cat. No.
Tubing clamp	12	9.205 918



Tubing clamp, Acetal		(NEW!)
Suitable for tubing with external diameters up to 0.82mm.	Bel-Art Product	
Туре	PK	Cat. No.
Tubing clamp	12	6.200 838



### **Tubing/Adapters, Clips, Clamps**



#### 1 Curved tubing clamps stop-it, PVDF



Stepless flow regulation. The micro setting screw allows very fine stepless flow control, Bürkle the flow can also be shut off completely. The fully adjustable pressure plate squeezes the hose against the stable steel hook. The hose is compressed over a wide area in order to prevent it from being damaged. stop-it is made from the heat-resistant and chemical resistant plastic PVDF, the clamp is galvanised steel. Available in 3 sizes for hose diameters up to 20mm.

Colour	To fit	PK	Cat. No.
	tubing		
	mm		
red	0.5 to 10	1	9.303 775
red	0.5 to 15	1	9.303 776
red	1.0 to 20	1	9.303 777
yellow	0.5 to 10	1	9.303 778
yellow	0.5 to 15	1	9.303 779
yellow	1.0 to 20	1	9.303 780
blue	0.5 to 10	1	9.303 781
blue	0.5 to 15	1	9.303 782
blue	1.0 to 20	1	9.303 783
green	0.5 to 10	1	9.303 784
green	0.5 to 15	1	9.303 785
green	1.0 to 20	1	9.303 786



### Tubing clamps stop-it, Metall



Tubing clamps can regulate or stop the flow through of tubings that carry fluids or gases. Stepless flow regulation: The knurled screw allows very fine stepless flow control.

Bürkle

The flow can also be shut off completely. The fully adjustable pressure plate squeezes the hose against the stable steel hook. The hose is compressed over a wide area, in order to prevent it from being damaged, stop-it can be mounted on hoses after they have been connected. stop-it metal is extremely heat resistant and robust due to the steel and aluminum. The hose clamp is available in four different sizes up to a maximum hose diameter of 30mm.

To fit	PK	Cat. No.
tubing		
mm		
0.5 to 10	1	9.303 787
0.8 to 15	1	9.303 788
1.1 to 20	1	9.303 789
2.5 to 30	1	9,303 790



#### Tubing clips

Mohr pattern. Nickel plated. Spring pinchclip.

Length	PK	Cat. No.
mm		
40	1	9.180 040
50	1	9.180 050
60	1	9.180 060
70	1	9.180 070
80	1	9.180 080



#### 4 Tubing clips

Hofmann pattern. Brass nickel plated. Bottom hinged.

Clamping	PK	Cat. No.
range		
mm		
12	1	9.180 112
17	1	9.180 117
20	1	9.180 120
25	1	9.180 125
30	1	9.180 130
40	1	9.180 140
50	1	9.180 142

# 1. Lab consumables Tubing/Adapters, Clips, Clamps

#### 1 Tubing clips

Hofmann pattern. Brass/nickel. Extra strong. With wing nut closure. Bottom hinged.

Bochem

Clamping range	PK	Cat. No.
mm		
50	1	9.180 150



#### 2 Tubing clamps

Pean pattern. Polished stainless steel. For clamping tubing.

Bochem

Length	PK	Cat. No.
mm		
140	1	9.180 199
160	1	9.180 200
180	1	9.180 201



### 3 Curved tubing clamps

Wilo. SK range. Steel. Large, plastic knurled nut with embedded brass screwthread insert which closes a metal bracket onto the curved tubing stirrup. Clamping range 10mm to 30mm. Temperature resistant up to 150°C.



Clamping range	Material	PK	Cat. No.
<b>mm</b>	Knurled nut Aluminium	1	9.180 210
15	Knurled nut Moulded plastic	1	9.180 215
20	Knurled nut Moulded plastic	1	9.180 220
30	Knurled nut Moulded plastic	1	9.180 230

#### 4 Nickel chromium steel clips

Hose clips, with hexagonal head.

Jaw opening mm	РК	Cat. No.
10 to 5.5	1	9.207 510
12 to 8.5	1	9.207 512
14 to 9.5	1	9.207 514
17 to 12.0	1	9.207 517
21 to 16.0	1	9.207 521
25 to 20.0	1	9.207 525
29 to 24.0	1	9.207 529



#### 5 Worm drive tubing clamps

To DIN 3017. Chrome steel 1.4016. With galvanized, worm drive screw.

Jaw opening	Band- width	PK	Cat. No.
mm	nm		
7 to 11	5.0	1	9.207 435
11 to 19	5.0	1	9.207 436
8 to 12	7.5	1	9.207 437
10 to 16	7.5	1	9.207 439
12 to 22	9.0	1	9.207 440
16 to 25	9.0	1	9.207 445
20 to 32	9.0	1	9.207 452
25 to 40	9.0	1	9.207 460
32 to 50	9.0	1	9.207 465
40 to 60	9.0	1	6.241 130



# **Tubing/Adapters, Clips, Clamps-Stoppers**



#### 1 Herbie tubing clamps

Beetle nylon 6.6. Simple to assemble by pressing together without the need for tools. Quick to detach with side dislocation. Good chemical resistance. Temperature resistant from -40°C to +170°C. Longterm temperature 125°C, shortterm temperature 170°C.

Type	Jaw	PK	Cat. No.
	opening		
	mm		
AA	6.5 to 7.9	1	9.207 707
В	7.9 to 9.2	1	9.207 708
BB	9.2 to 10.3	1	9.207 709
С	10.2 to 11.8	1	9.207 710
D	12.0 to 13.8	1	9.207 712
E	13.1 to 15.1	1	9.207 713
F	15.0 to 17.1	1	9.207 715
G	16.9 to 19.1	1	9.207 717
Н	18.1 to 20.6	1	9.207 718
I	20.3 to 23.0	1	9.207 720
K	22.2 to 25.8	1	9.207 722
L	24.5 to 27.6	1	9.207 725



### 2 Tubing clamps POM

Bürkle

Jaw opening	PK	Cat. No.
mm		
6,0 to 6,5	10	6.052 587
9,0 to 10	10	6.052 588
10,0 to 11	10	6.052 589
11,0 to 12	10	6.052 590
12,0 to 14	10	6.052 591
13,0 to 15	10	6.052 592
15,0 to 17	10	6.052 593
17,0 to 19	10	6.052 594
18,0 to 20	10	6.052 595
20,0 to 22	10	6.052 596
21,0 to 23	10	6.052 597
23,0 to 25	10	6.052 598

#### Glass tubing cutters

For glass tubing up to 30mm  $\emptyset$ . With interchangeable hard metal wheel.

Туре	PK	Cat. No.
Glass tubing cutter	1	9.110 510
Replacement roller	1	9.110 511

#### Glass cutting knife

With interchangeable blades made of Widia metal.

Туре	PK	Cat. No.
Glass cutting knife	1	9.110 500
Replacement blade	1	9.110 501



3 Cork borers	(NEW!)	
Brass, with handles.	Juchheim Laborgeräte	
Diam.	PK Cat. No.	
5 - 11	1 9.143 471	
5 - 15	1 <b>9.143 473</b>	
5 - 19	1 <b>9.143 475</b>	
5 - 26	1 <b>9.143 477</b>	