



Phthalate-free Flexible Tubing



Phthalate-free flexible tubing for beverage dispensing Versatile, high performance tubing

Tygon S3™ B-44-3 Tubing are specifically designed to transfer a wide variety of beverages. Whether it's soft drinks, fruit juices, flavored teas or mineral water*, Tygon S3™ B-44-3 does not affect the taste or smell. These media also have no influence on the mechanical properties of the hose (color, transparency, cracking, hardness, stickiness, weight change and flexibility).*

The excellent non-wetting properties of Tygon S3™ B-44-3 facilitate complete emptying and allow for easy flush cleaning. The exceptional chemical resistance is an advantage for harsh disinfectant solutions. The tubing is not affected by a variety of cleaning solutions. Tygon S3™ B-44-3 is the choice for Beverage transfer applications.

Lightweight and flexible

Tygon S3™ B-44-3 is light and easy to handle and can therefore be installed quickly during service. It can be easily bent and laid tightly. It can be laid around sharp corners without kinking and therefore requires a minimum of couplings and fittings.

Clear as Glass

The clarity of the Tygon S3™ B-44-3 tubing allows the user to visually monitor flow. This is particularly helpful in controlling or adjusting flow during the process.

Regulatory Compliance**

- Complies with applicable FDA Food Additive Regulation, NSF-51, NSF-61, 3-A, Japanese Food Hygiene Law #370/1959, REACH and 1935/2004/EC for many foods and drinks
- Does not contain any of the listed California Proposition 65 chemicals
- EU 10/2011



Features and Benefits

- does not affect taste or smell*
- Medium does not influence the mechanical properties
- crystal clear
- Lightweight and flexible – easy quick installation
- broad chemical resistance
- non-wetting properties
- does not contain BPA or phthalates

Typical Applications

- Transfer of food and drinks

*03/09/18 Siena Development Saint-Gobain Tubing Testing Certificate. 11/29/17 Corrosion Testing Laboratories Inc. CTL REF#33584

**for complete compliance information and corresponding instructions for use, please contact us

Tygon S3™ B-44-3 Standard Sizes

Part Number	ID	OD	Wall	Min. Bend Radius	Max. Working Pressure* 22°C (73°F)	Vacuum Rating at 22°C (73°F)
TY1,59BS3,18	1,59 mm (1/16")	3,18 mm (1/8")	0,79 mm (1/32")	6,4 mm	4,1 bar (60 psi)	760 mmHg
TY1,59BS4,76	1,59 mm (1/16")	4,76 mm (3/16")	1,59 mm (1/16")	3,2 mm	6,9 bar (100 psi)	760 mmHg
TY2,38BS3,97	2,38 mm (3/32")	3,97 mm (5/32")	0,79 mm (1/32")	9,5 mm	2,9 bar (43 psi)	760 mmHg
TY2,38BS5,56	2,38 mm (3/32")	5,56 mm (7/32")	1,59 mm (1/16")	6,4 mm	5,1 bar (74 psi)	760 mmHg
TY3,18BS4,76	3,18 mm (1/8")	4,76 mm (3/16")	0,79 mm (1/32")	12,7 mm	2,3 bar (34 psi)	635 mmHg
TY3,18BS6,35	3,18 mm (1/8")	6,35 mm (1/4")	1,59 mm (1/16")	9,5 mm	4,1 bar (60 psi)	760 mmHg
TY3,97BS5,56	3,97 mm (5/32")	5,56 mm (7/32")	0,79 mm (1/32")	19,1 mm	1,9 bar (28 psi)	406 mmHg
TY3,97BS7,14	3,97 mm (5/32")	7,14 mm (9/32")	1,59 mm (1/16")	12,7 mm	3,4 bar (50 psi)	760 mmHg
TY4,76BS6,35	4,76 mm (3/16")	6,35 mm (1/4")	0,79 mm (1/32")	25,4 mm	1,7 bar (25 psi)	279 mmHg
TY4,76BS7,94	4,76 mm (3/16")	7,94 mm (5/16")	1,59 mm (1/16")	15,9 mm	2,9 bar (43 psi)	760 mmHg
TY4,76BS9,53	4,76 mm (3/16")	9,53 mm (3/8")	2,38 mm (3/32")	12,7 mm	4,1 bar (60 psi)	760 mmHg
TY4,76BS11,11	4,76 mm (3/16")	11,11 mm (7/16")	3,18 mm (1/8")	9,5 mm	5,1 bar (74 psi)	760 mmHg
TY6,35BS7,94	6,35 mm (1/4")	7,94 mm (5/16")	0,79 mm (1/32")	41,3 mm	1,3 bar (19 psi)	152 mmHg
TY6,35BS9,53	6,35 mm (1/4")	9,53 mm (3/8")	1,59 mm (1/16")	25,4 mm	2,3 bar (34 psi)	635 mmHg
TY6,35BS11,11	6,35 mm (1/4")	11,11 mm (7/16")	2,38 mm (3/32")	19,1 mm	3,2 bar (47 psi)	760 mmHg
TY6,35BS12,7	6,35 mm (1/4")	12,7 mm (1/2")	3,18 mm (1/8")	15,9 mm	4,1 bar (60 psi)	760 mmHg
TY7,94BS11,11	7,94 mm (5/16")	11,11 mm (7/16")	1,59 mm (1/16")	34,9 mm	1,9 bar (28 psi)	406 mmHg
TY7,94BS12,7	7,94 mm (5/16")	12,7 mm (1/2")	2,38 mm (3/32")	25,4 mm	2,8 bar (40 psi)	760 mmHg
TY7,94BS14,29	7,94 mm (5/16")	14,29 mm (9/16")	3,18 mm (1/8")	22,2 mm	3,4 bar (50 psi)	760 mmHg
TY9,53BS12,7	9,53 mm (3/8")	12,7 mm (1/2")	1,59 mm (1/16")	44,4 mm	1,7 bar (25 psi)	279 mmHg
TY9,53BS14,29	9,53 mm (3/8")	14,29 mm (9/16")	2,38 mm (3/32")	35,0 mm	2,3 bar (34 psi)	635 mmHg
TY9,53BS15,88	9,53 mm (3/8")	15,88 mm (5/8")	3,18 mm (1/8")	28,6 mm	3,0 bar (44 psi)	760 mmHg
TY11,11BS17,46	11,11 mm (7/16")	17,46 mm (11/16")	3,18 mm (1/8")	35,0 mm	2,5 bar (36 psi)	760 mmHg
TY12,7BS15,88	12,7 mm (1/2")	15,88 mm (5/8")	1,59 mm (1/16")	73,0 mm	1,3 bar (19 psi)	152 mmHg
TY12,7BS17,46	12,7 mm (1/2")	17,46 mm (11/16")	2,38 mm (3/32")	54,0 mm	1,8 bar (27 psi)	355 mmHg
TY12,7BS19,05	12,7 mm (1/2")	19,05 mm (3/4")	3,18 mm (1/8")	44,5 mm	2,3 bar (34 psi)	635 mmHg
TY15,88BS22,23	15,88 mm (5/8")	22,23 mm (7/8")	3,18 mm (1/8")	60,3 mm	2,0 bar (29 psi)	406 mmHg
TY17,46BS23,81	17,46 mm (11/16")	23,81 mm (15/16")	3,18 mm (1/8")	73,0 mm	1,9 bar (27 psi)	330 mmHg
TY19,05BS25,4	19,05 mm (3/4")	25,4 mm (1")	3,18 mm (1/8")	82,6 mm	1,7 bar (25 psi)	279 mmHg
TY22,23BS28,58	22,23 mm (7/8")	28,58 mm (1-1/8")	3,18 mm (1/8")	104,8 mm	1,5 bar (22 psi)	203 mmHg
TY25,4BS31,75	25,4 mm (1")	31,75 mm (1-1/4")	3,18 mm (1/8")	130,2 mm	1,4 bar (20 psi)	152 mmHg
TY25,4BS34,93	25,4 mm (1")	34,93 mm (1-3/8")	4,76 mm (3/16")	95,3 mm	1,8 bar (27 psi)	355 mmHg
TY25,4BS38,1	25,4 mm (1")	38,1 mm (1-1/2")	6,35 mm (1/4")	76,2 mm	2,3 bar (34 psi)	127 mmHg
TY31,75BS38,1	31,75 mm (1-1/4")	38,1 mm (1-1/2")	3,18 mm (1/8")	187,3 mm	1,1 bar (16 psi)	101 mmHg
TY31,75BS41,28	31,75 mm (1-1/4")	41,28 mm (1-5/8")	4,76 mm (3/16")	139,7 mm	1,6 bar (23 psi)	229 mmHg
TY44,45BS44,45	31,75 mm (1-1/4")	44,45 mm (1-3/4")	6,35 mm (1/4")	111,1 mm	1,9 bar (28 psi)	406 mmHg

OPTUBUS GmbH – www.optubus.com – info@optubus.com

OPTUBUS believes that the information in this technical data sheet is an accurate description of the typical uses of the product. OPTUBUS, however, disclaims any liability for incidental or consequent damages, which may result from the use of the product that are beyond its control. Therefore it is the user's responsibility to thoroughly test the product in their particular application to determine its performance, efficiency and safety. Nothing contained herein is to be considered as permission or a recommendation to infringe any patent or any other intellectual property right.

Part Number	ID	OD	Wall	Min. Bend Radius	Max. Working Pressure* 22°C (73°F)	Vacuum Rating at 22°C (73°F)
TY38,1BS47,63	38,1 mm (1-1/2")	47,63 mm (1-7/8")	4,76 mm (3/16")	184,2 mm	1,3 bar (19 psi)	152 mmHg
TY38,1BS50,8	38,1 mm (1-1/2")	50,8 mm (2")	6,35 mm (1/4")	149,3 mm	1,7 bar (25 psi)	279 mmHg
TY44,45BS57,15	44,45 mm (1-3/4")	57,15 mm (2-1/4")	6,35 mm (1/4")	190,5 mm	1,5 bar (22 psi)	203 mmHg
TY50,8BS63,5	50,8 mm (2")	63,5 mm (2-1/2")	6,35 mm (1/4")	238,2 mm	1,3 bar (19 psi)	152 mmHg
TY50,8BS76,2	50,8 mm (2")	76,2 mm (3")	12,7 mm (1/2")	139,7 mm	2,3 bar (34 psi)	635 mmHg
TY57,15BS69,85	57,15 mm (2-1/4")	69,85 mm (2-3/4")	6,35 mm (1/4")	285,8 mm	1,2 bar (18 psi)	127 mmHg

*Working pressures are calculated at a 1:5 ratio relative to burst pressure using ASTM D1599

The values listed for working and burst pressures are derived from tests conducted under controlled laboratory conditions. Many factors will reduce the tubing's ability to withstand pressures, including temperature, chemical attack, stress, pulsation and the attachment to fittings. It is imperative that the user conduct tests simulating the conditions of the application prior to specifying the tubing for use.

Typical Physical Properties of Tygon S3™ B-44-3 Tubing

Eigenschaft	ASTM Methode	Wert
Durometer Hardness	D2240	66° Shore A, 15s
Farbe	-	Clear
Maximale Dehnung	D412	390,00%
Reißfestigkeit	D1004	43,8 kN/m (250 lb-f/in)
Dichte	D792	1,21
Druckverformungs-Konstante 22 Std. bei 70°C	D395 Method B	59,00%
Versprödungstemperatur	D746	-36°C (-32°F)
Kälteflexibilität in 5°C Schritten	D380	-55°C (-67°F)
Maximale empfohlene Betriebstemperatur	-	+74°C (+165°F)
Zugspannung bei 200% Dehnung	D412	9,5 MPa (1.379 psi)
Zugverformung bei 75% Dehnung	D412	57,00%
Wasserabsorption, 24 Std. bei 23°C	D570	0,22%

TYGON S3™ B-44-4X TUBING IS NOT INTENDED FOR USE AS AN IMPLANT MATERIAL