

# SubConn® Micro Circular Double O-ring

## 2, 3, 4, 5, 6 and 8 contacts and G2 2, 3 and 4 contacts

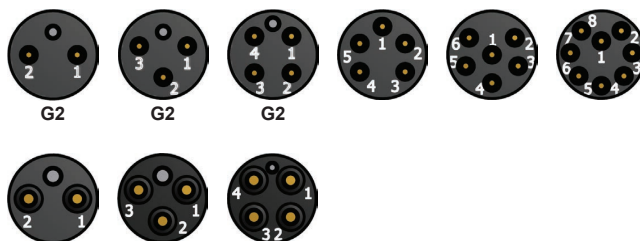
### Connector specifications

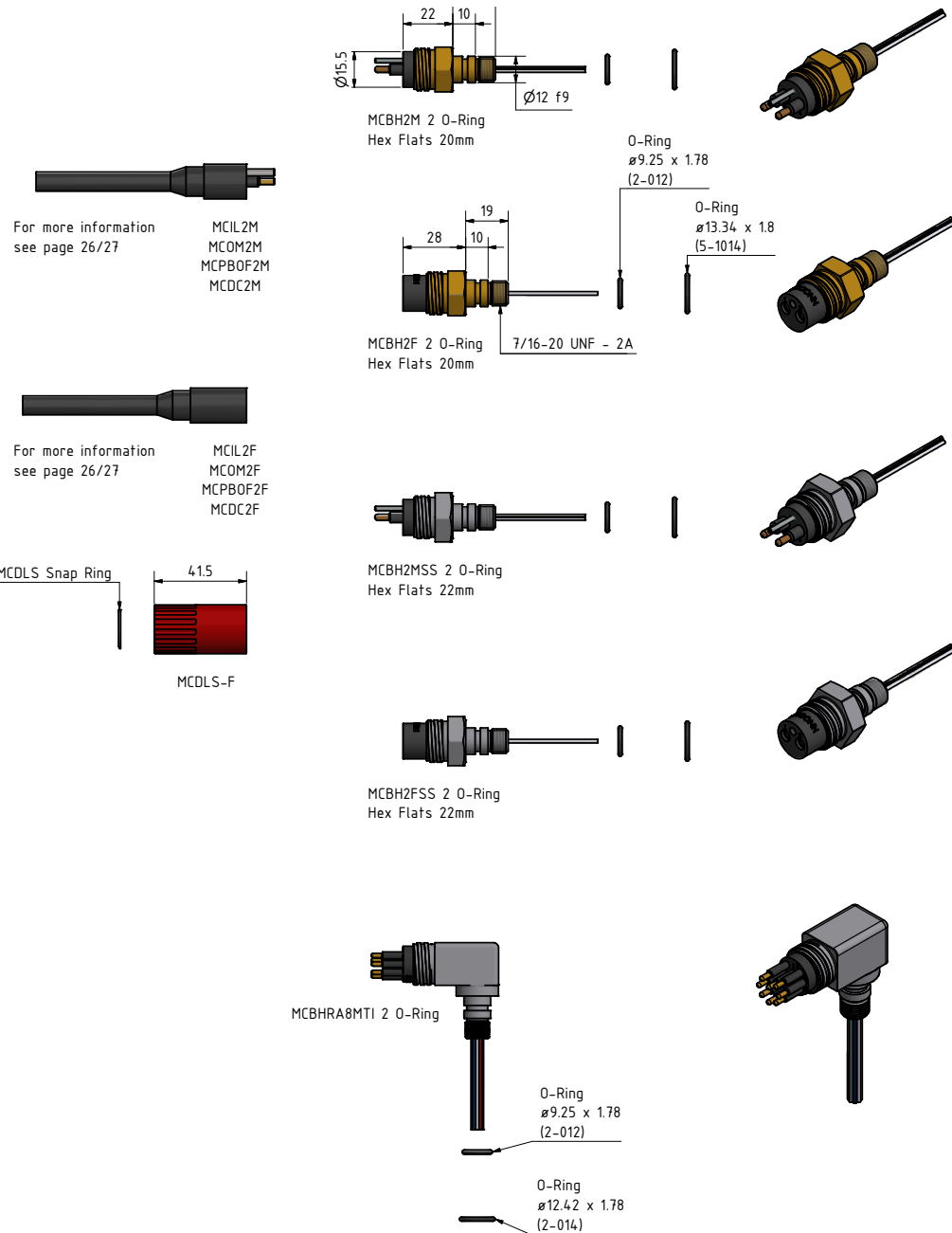
Voltage rating	300 V DC/AC rms
2, 3 and 4 contacts current rating	10 A per contact (max 20 A per connector)
5, 6 and 8 contacts current rating	5 A per contact (max 20 A per connector)
G2 2, 3 and 4 contacts connector current rating	5 A per contact (max 20 A per connector)
Insulation resistance	> 200 Mohm
Contact resistance	< 0.01 ohm
Wet matings	> 500
Temperature rating (water)	- 4 to 60°C, 25 to 140°F
Temperature rating (air)	- 40 to 60°C, - 40 to 140°F
Storage temperature rating	- 40 to 60°C, - 40 to 140°F
Qualified pressure tested	800 bar, 11,600 psi
Depth rating PEEK	300 bar, 4,350 psi

### Material specifications

Connector body	Chloroprene rubber
Bulkhead body with 20 mm hex flats	Brass, titanium or anodised aluminium
Bulkhead body with 22 mm hex flats	Anodised aluminium or stainless steel
Bulkhead RA body	Aluminium or titanium
2, 3 and 4 contacts	Gold plated brass UNS - C36000
5, 6, 8 contacts and G2 2, 3 and 4 contacts	Female sockets in gold plated brass UNS C36000
	Male pins in gold plated beryllium copper
Location pin	Stainless steel AISI 303
O-rings	Nitrile
Locking sleeves	ABS or stainless steel
Snap rings	Stainless steel AISI 302
2, 3 and 4 contact bulkhead leads (30 cm, 1 ft)	20 AWG 0.52 mm <sup>2</sup> coloured PTFE
5, 6 and 8 contact bulkhead leads (30 cm, 1 ft)	22 AWG 0.33 mm <sup>2</sup> coloured PTFE
G2 2, 3 and contact 4 bulkhead leads (30 cm, 1 ft)	20 AWG 0.52 mm <sup>2</sup> coloured PTFE

### Face view (male)





### Drawing information

Dimensions in mm (1 mm = 0.03937 inch)  
Threads in inches (1 inch = 25.4 mm)

## SubConn® Circular

### 2, 3, 4 and 5 contacts

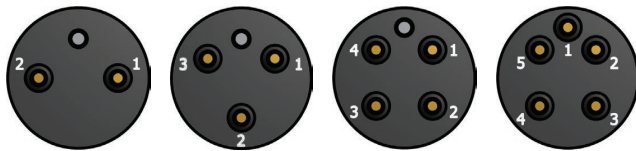
#### Connector specifications

Voltage rating	600 V DC/AC rms
2 contacts current rating	10 A per contact (max 20 A per connector)
3, 4 and 5 contacts current rating	10 A per contact (max 30 A per connector)
Insulation resistance	> 200 Mohm
Contact resistance	< 0.01 ohm
Wet matings	> 500
Temperature rating (water)	- 4 to 60°C, 25 to 140°F
Temperature rating (air)	- 40 to 60°C, - 40 to 140°F
Storage temperature rating	- 40 to 60°C, - 40 to 140°F
Design depth rating	1,400 bar, 20,000 psi
Qualified pressure tested	800 bar, 11,600 psi
Depth rating PEEK	300 bar, 4,350 psi

#### Material specifications

Connector body	Chloroprene rubber
Bulkhead body	Brass, stainless steel, titanium, anodised aluminium or PEEK
Contacts	Gold plated brass UNS - C36000
Location pin	Stainless steel AISI 303
O-rings	Nitrile
Locking sleeves	POM or stainless steel
Snap rings	Stainless steel AISI 302
2, 3 and 4 conductor inline cable (60 cm, 2 ft)	16 AWG 1.31 mm <sup>2</sup> chloroprene rubber
5 conductor inline cable (60 cm, 2 ft)	18 AWG 0.82 mm <sup>2</sup> chloroprene rubber
Bulkhead leads (30 cm, 1 ft)	18 AWG 0.82 mm <sup>2</sup> coloured PTFE

#### Face view (male)



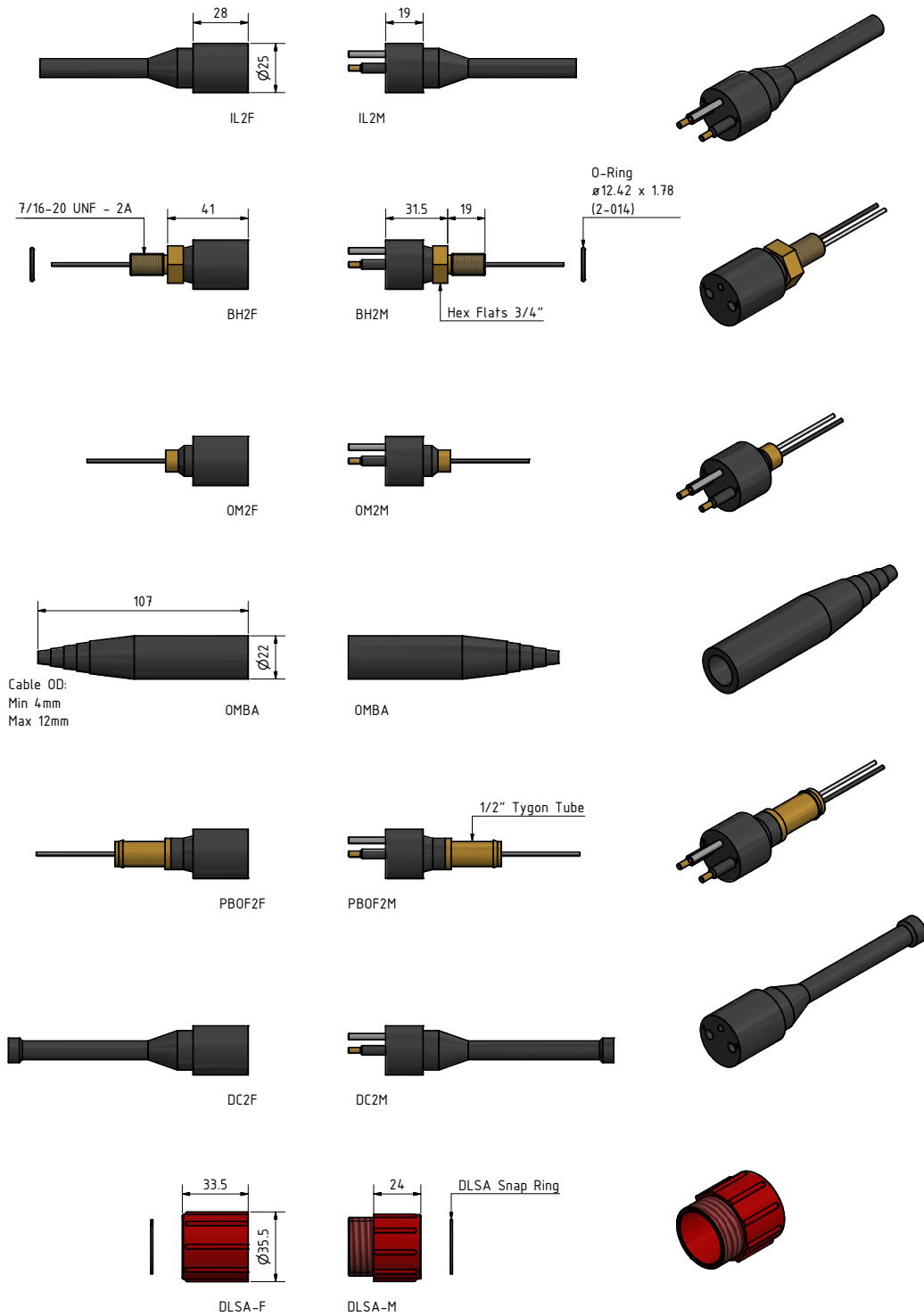
#### Inline cable colour code

1 Black	4 Green
2 White	5 Orange
3 Red	

(3 conductor cable colour code: 1 black, 2 white, 3 green)

#### Nominal cable outside diameter (OD)

2 conductor cable	0.365", 9.3 mm
3 conductor cable	0.385", 9.8 mm
4 conductor cable	0.410", 10.4 mm
5 conductor cable	0.465", 11.8 mm



### Drawing information

Dimensions in mm (1 mm = 0.03937 inch)  
Threads in inches (1 inch = 25.4 mm)

# SubConn® Low Profile

## 3 and 4 contacts

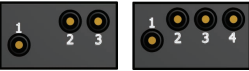
### Connector specifications

Single contact rating	600 V DC/AC rms
3 contacts current rating	10 A per contact (max 30 A per connector)
4 contacts current rating	10 A per contact (max 40 A per connector)
Insulation resistance	> 200 Mohm
Contact resistance	< 0.01 ohm
Wet matings	> 500
Temperature rating (water)	- 4 to 60°C, 25 to 140°F
Temperature rating (air)	- 40 to 60°C, - 40 to 140°F
Storage temperature rating	- 40 to 60°C, - 40 to 140°F
Qualified pressure tested	800 bar, 11,600 psi
Depth rating PEEK	300 bar, 4,350 psi

### Material specifications

Connector body	Chloroprene rubber
Bulkhead body	Brass, stainless steel, titanium, anodised aluminium or PEEK
Contacts	Gold plated brass UNS - C36000
O-rings	Nitrile
Locking strap	Chloroprene rubber
Inline cable (60 cm, 2 ft)	16 AWG 1.31 mm <sup>2</sup> chloroprene rubber
Bulkhead leads (30 cm, 1 ft)	18 AWG 0.82 mm <sup>2</sup> white tagged PTFE

### Face view (male)

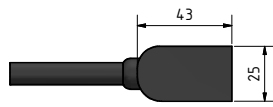


### Inline cable colour code

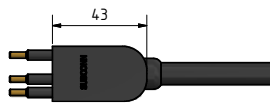
1 Black                      2 White                      3 Red                      4 Green  
(3 conductor cable colour code: 1 black, 2 white, 3 green)

### Nominal cable outside diameter (OD)

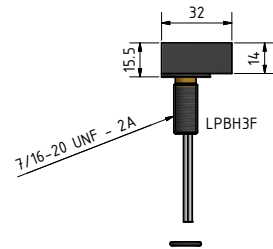
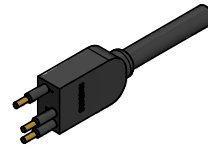
3 conductor cable 0.385", 9.8 mm  
4 conductor cable 0.410", 10.4 mm



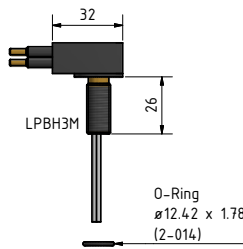
LPIL3F



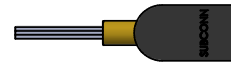
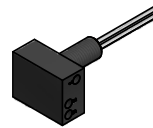
LPIL3M



LPBH3F



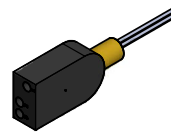
LPBH3M



LPOM3F



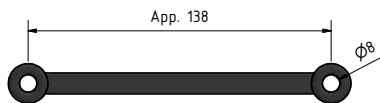
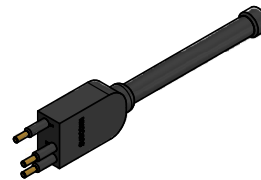
LPOM3M



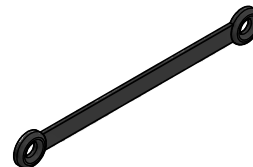
LPDC3F



LPDC3M



LPA Strap



Low Profile

### Drawing information

Dimensions in mm (1 mm = 0.03937 inch)  
Threads in inches (1 inch = 25.4 mm)

## Tygon® F-4040-A Fuel & Lubricant Tubing

Specifically designed to handle most fuels and industrial lubricants, it is routinely used with gasoline, kerosene, heating oils, cutting compounds, and glycol-based coolants. A consistent performer lot after lot, Tygon® Fuel and Lubricant Tubing is the most requested fuel and lubricant tubing for a variety of applications. Its minimum extractability safeguards the liquid or vapor being transferred against adulteration.

- Resists embrittlement, hardening & swelling
- Translucent yellow for positive identification
- Allows easy flow monitoring
- UV & ozone resistant
- Reduces the risk of failure due to cracking & leakage
- Easy to install, even in tight places
- Durometer hardness (shore A): 57
- Temperature range: -35°F to 165°F
- **Standard 50' rolls; ± 6" on cut lengths**
- **Priced per foot; sold in 10' intervals only**



# TYGON S<sup>3</sup>™ B-44-3

*The only choice for phthalate-free flexible tubing*

## Clear, flexible tubing for beverage transfer.

Tygon S<sup>3</sup>™ B-44-3 from Saint-Gobain Performance Plastics is now phthalate-free. Saint-Gobain is proud to be among the first companies to offer sustainable flexible tubing products. The bio-based Tygon S<sup>3</sup>™ line combines the high performance standards customers demand with an eco-friendly tubing design.

## Versatile, High-Performance Tubing

Tygon S<sup>3</sup>™ B-44-3 is specially formulated for transferring a wide variety of beverages including soft drinks, fruit juices, flavored teas and bottled water.\* In virtually all cases, Tygon S<sup>3</sup>™ B-44-3 will not affect the taste or odor of products transferred through it, while its excellent non-wetting properties facilitate complete drainage and permit simple flush-cleaning.

Many of the unique properties inherent to Tygon S<sup>3</sup>™ B-44-3 also apply to a wide variety of complex applications, ranging from fine cosmetic production to the dispensing of water-based printing inks found in the publishing industry. The versatility and proven performance of Tygon S<sup>3</sup>™ B-44-3 have made it today's most widely specified clear, flexible plastic tubing.

## Lightweight and Flexible

Light in weight and easy to handle, Tygon S<sup>3</sup>™ B-44-3 can be put into service quickly. It readily bends to accommodate abrupt corners and obstructions, requiring a minimum of couplings and fittings.

Its flexibility can save up to one-third the footage and much of the labor required to install rigid stainless steel or plastic piping.

## Clear as Glass

The glass-like clarity of Tygon S<sup>3</sup>™ B-44-3 allows the user to see product flow through it, so visual monitoring of flow is easy. This is particularly helpful in controlling or adjusting flow during processing.

## Different Sizes Available

Tygon S<sup>3</sup>™ B-44-3 is available in sizes ranging from 1/16" I.D. to 3-1/2" O.D. – all through our nationwide network of general plastics distributors. Leave it to Saint-Gobain Performance Plastics to make it convenient to select the right tubing for your application.

## Regulatory Standards

Tygon S<sup>3</sup>™ complies with FDA, NSF, 3-A, Japan Food Sanitation Law # 370/1959, REACH, 1935/2004/EC and 10/2011/EU for many foods and beverages. Tygon S<sup>3</sup>™ tubing products do not contain chemicals listed in California's Proposition 65.

\* For complete compliance information and appropriate use instructions, please refer to the detailed document of compliance. The complete compliance information and use instructions can be found at [www.TygonS3.com](http://www.TygonS3.com).



## Tygon S<sup>3</sup>™ B-44-3 Features/Benefits

- Clear as glass for easy visual monitoring of flow
- Lightweight and flexible for easy, quick installation
- Broad chemical resistance
- Non-wetting properties allow easy cleaning and complete drainage
- Contains no BPA or phthalates

## Typical Applications\*

- Beverage dispensing
- Bag-in-box
- Dairy processing
- Food dispensing
- Beverage transfer

## Typical Physical Properties

Property	ASTM Method	Value or Rating
Durometer Hardness (Shore A), 15 Sec	D2240	66
Tensile Strength, psi (MPa)	D412	2,200 (15.2)
Ultimate Elongation, %	D412	390
Tear Resistance, lb-f/inch (kN/m)	DI004	250 (43.8)
Specific Gravity	D792	1.21
Water Absorption, % 24 hrs. @ 73°F (23°C)	D570	0.22
Compression Set Constant Deflection, % @ 158°F (70°C) for 22 hrs.	D395 Method B	59
Brittleness Temp., °F (°C)	D746	-32 (-36)
Maximum Recommended Operating Temp. °F (°C)	-	165 (74)
Tensile Stress @ 200% Elongation, psi (MPa)	-	1,379 (9.5)
Tensile Set, %	D412	57
Color	-	Clear

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.

TYGONS<sup>3</sup>™ B-44-3 TUBING IS NOT INTENDED FOR USE AS AN IMPLANT MATERIAL.

Tygon S<sup>3</sup>™ B-44-3

Saint-Gobain Part Number	I.D.	O.D.	Minimum Bend Radius, in	Max. Working Pressure at 73°F, psi	Vacuum Rating In. of Mercury at 73°F
AAB00002	1/16	1/8	1/4	60	29.9
AAB00003	1/16	3/16	1/8	100	29.9
AAB00004	3/32	5/32	3/8	43	29.9
AAB00005	3/32	7/32	1/4	74	29.9
AAB00006	1/8	3/16	1/2	34	25.0
AAB00007	1/8	1/4	3/8	60	29.9
AAB00009	5/32	7/32	3/4	28	16.0
AAB00010	5/32	9/32	1/2	50	29.9
AAB00011	3/16	1/4	1	25	11.0
AAB00012	3/16	5/16	5/8	43	29.9
AAB00013	3/16	3/8	1/2	60	29.9
AAB00014	3/16	7/16	3/8	74	29.9
AAB00016	1/4	5/16	1-5/8	19	6.0
AAB00017	1/4	3/8	1	34	25.0
AAB00018	1/4	7/16	3/4	47	29.9
AAB00019	1/4	1/2	5/8	60	29.9
AAB00022	5/16	7/16	1-3/8	28	16.0
AAB00023	5/16	1/2	1	40	29.9
AAB00024	5/16	9/16	7/8	50	29.9
AAB00027	3/8	1/2	1-3/4	25	11.0
AAB00028	3/8	9/16	1-3/8	34	25.0
AAB00029	3/8	5/8	1-1/8	44	29.9
AAB00034	7/16	11/16	1-3/8	36	29.9
AAB00036	1/2	5/8	2-7/8	19	6.0
AAB00037	1/2	11/16	2-1/8	27	14.0
AAB00038	1/2	3/4	1-3/4	34	25.0
AAB00046	5/8	7/8	2-3/8	29	16.0
AAB00051	11/16	15/16	2-7/8	27	13.0
AAB00053	3/4	1	3-1/4	25	11.0
AAB00059	7/8	1-1/8	4-1/8	22	8.0
AAB00062	1	1-1/4	5-1/8	20	6.0
AAB00064	1	1-3/8	3-3/4	27	14.0
AAB00065	1	1-1/2	3	34	25.0
AAB00069	1-1/4	1-1/2	7-3/8	16	4.0
AAB00070	1-1/4	1-5/8	5-1/2	23	9.0
AAB00071	1-1/4	1-3/4	4-3/8	28	16.0
AAB00073	1-1/2	1-7/8	7-1/4	19	6.0
AAB00074	1-1/2	2	5-7/8	25	11.0
AAB00076	1-3/4	2-1/4	7-1/2	22	8.0
AAB00078	2	2-1/2	9-3/8	19	6.0
AAB05080	2	3	5-1/2	34	25.0
AAB05081	2-1/4	2-3/4	11-1/4	18	5.0

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

Unless otherwise noted, all tests were conducted at room temperature (73°F). Values shown were determined on 0.075" thick extruded strip or 0.075" thick molded ASTM plaques or molded ASTM durometer buttons.



## Saint-Gobain Performance Plastics

2664 Gilchrist Road  
Akron, OH 44305

Tel: (800) 798-1554  
Tel: (330) 798-9240  
Fax: (330) 798-6968

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**IMPORTANT:** It is the user's responsibility to ensure the suitability and safety of Saint-Gobain Performance Plastics tubing for all intended uses. Laboratory and clinical tests must be conducted in accordance with applicable regulatory requirements in order to determine the safety and effectiveness for use of tubing in any particular application.

For a period of 6 months from the date of first sale, Saint-Gobain Performance Plastics Corporation warrants this product to be free from defects in materials and workmanship. Our only obligation will be to replace any portion proving defective, or at our option, to refund the purchase price thereof. User assumes all other risk, if any, including the risk of injury, loss or damage, direct or consequential, arising out of the use, misuse, or inability to use, this product. THIS WARRANTY IS IN LIEU OF THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE, AND ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. No deviation is authorized.

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