



## Large-Bore Connectors

Non-Luers

High-Flow Large-Bore Connectors permit faster delivery of viscous fluids and minimize risk of connection errors between incompatible fluid systems

Increase fluid flow with our large-bore (Larger Lumen) connectors. A standard luer has a restriction of about 0.095 inch (2.4 mm). Qosina large-bore connectors have a minimum ID of 0.138 inch (3.5 mm), 50% larger than the standard luer. Our large-bore connectors are designed to bond into 0.197 inch (5 mm) ID tubing. Up to 5 times the flow rate of a luer. For more viscous fluids, we also offer extra large-bore connectors to bond into 0.236 inch (6 mm) ID tubing. With a 0.165 inch (4.2 mm) minimum ID, the flow rate is up to sixteen times that of a standard luer. Super large-bore connectors have a 0.28 inch (7.1 mm) minimum ID designed to bond onto or into 0.315 inch (8 mm) ID or OD tubing, allowing for an even faster flow.

### Poiseuille's Law:

The volume of a fluid flowing through a tube varies as the fourth power of the diameter of the tubing, or,  $V=D^4$ , other things being equal. The following formula determines rate of flow:

$$V = \frac{PD^4}{nL}$$

V=Volume flowing per unit time

n=Viscosity of the liquid

P=Pressure

L=Length of the tubing

D=Diameter of the tubing



**98804**  
0.315 inch OD x 0.28 inch  
Thru Hole  
(8 mm x 7.1 mm)  
ABS



**98802**  
0.236 inch OD x 0.165 inch  
Thru Hole  
(6 mm x 4.2 mm)  
ABS



**98663**  
0.236 inch OD x 0.181 inch  
Thru Hole  
(6 mm x 4.6 mm)  
ABS



**98664**  
0.236 inch OD x 0.181 inch  
Thru Hole  
(6 mm x 4.6 mm)  
ABS



**98805**  
0.315 inch OD x 0.28 inch  
Thru Hole  
(8 mm x 7.1 mm)  
ABS



**98803**  
0.236 inch OD x 0.165 inch  
Thru Hole  
(6 mm x 4.2 mm)  
ABS



**98633**  
0.236 inch OD x 0.181 inch  
Thru Hole  
(6 mm x 4.6 mm)  
ABS



**98634**  
0.236 inch OD x 0.181 inch  
Thru Hole  
(6 mm x 4.6 mm)  
ABS



**13148**

0.236 inch OD x 0.181 inch  
Thru Hole  
(6 mm x 4.6 mm)  
ABS



**13150**

0.236 inch OD x 0.181 inch  
Thru Hole  
(6 mm x 4.6 mm)  
ABS



**98800**

0.197 inch OD x 0.138 inch  
Thru Hole  
(5 mm x 3.5 mm)  
ABS



**98652**

0.208 inch OD x 0.146 inch  
Thru Hole  
(5.3 mm x 3.7 mm)  
PC



**13149**

0.197 inch OD x 0.181 inch  
Thru Hole  
(5 mm x 4.6 mm)  
ABS



**13151**

0.236 inch OD x 0.181 inch  
Thru Hole  
(6 mm x 4.6 mm)  
ABS



**98801**

0.197 inch OD x 0.138 inch  
Thru Hole  
(5 mm x 3.5 mm)  
ABS



**98612**

0.197 inch OD x 0.146 inch  
Thru Hole  
(5 mm x 3.7 mm)  
PC



**98653**

0.208 inch OD x 0.146 inch  
Thru Hole  
(5.3 mm x 3.7 mm)  
ABS



**98654**

0.208 inch OD x 0.146 inch  
Thru Hole  
(5.3 mm x 3.7 mm)  
ABS



**99920**

0.208 inch OD x 0.146 inch  
Thru Hole  
(5.3 mm x 3.7 mm)  
ABS



**89309**

0.208 inch OD x 0.146 inch  
Thru Hole  
(5.3 mm x 3.7 mm)  
ABS



**98613**

0.208 inch OD x 0.146 inch  
Thru Hole  
(5.3 mm x 3.7 mm)  
ABS



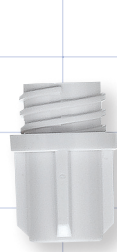
**98614**

0.208 inch OD x 0.146 inch  
Thru Hole  
(5.3 mm x 3.7 mm)  
ABS



**99921**

0.208 inch OD x 0.146 inch  
Thru Hole  
(5.3 mm x 3.7 mm)  
ABS



**89312**

0.28 inch ID x 0.216 inch  
Thru Hole  
(7.1 mm x 5.5 mm)  
ABS

Connectors on page 8 and page 9 mate only with each other and with Caps "Large-Bore Caps" on page 11



Large-Bore Connectors

Non-Luers



**11596**  
Large Bore Female Y Connector  
0.135 inch ID x 0.194 inch OD  
(3.43 mm x 4.93 mm)  
ABS



**11629**  
Large Bore Female Y Connector  
0.135 inch ID x 0.194 inch OD  
(3.43 mm x 4.93 mm)  
ABS



**98670**  
Straight Connector, White  
Fits 3/8 inch ID Tubing  
(0.375 inch; 9.5 mm)  
K-Resin



**98671**  
Straight Connector with Female Threads, White  
Fits 3/8 inch ID Tubing x 0.264 inch Thru Hole  
(0.375 inch; 9.5 mm x 6.7 mm)  
K-Resin



**96445**  
Female Luer Lock to  
Large Bore Female Adapter  
PC

All Connectors on this page work with Male Connectors on page 8 and page 9 and with Caps "Large-Bore Caps" on page 11