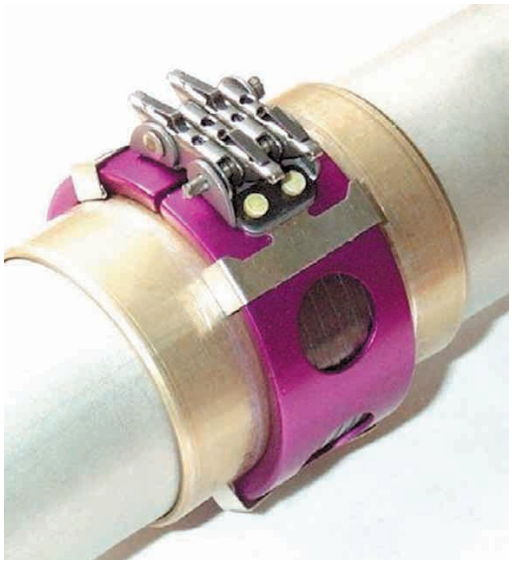
Flexible Tube Connectors with Threadless Clamshell Closure

Safety-Locking,
One Hand Installation



ORDERING INFORMATION:
Coupling Assembly
W991-(size*)(matl**)
consists of:

W994-(size*)(matl**)
Clam Shell Assembly

W908-(size*)(matl**)
Sleeve

The following items should be ordered separately:

W903B-(size*)(matl**)
Welded Ferrule (2 required)
and
"O" Ring Seals (2 required)

Part Numbering System

W991 - XX X

Coupling Assembly — Size Code — Material Code

*Tube O.D. in Sixteenth of an inch
**D/DE=Aluminum C/CE=CRES

800-541-2345
www.fluidcontrol.net

W991 SERIES

DESIGN FEATURES

Adel Wiggins has utilized its more than three decades of experience in the design and production of reliable flexible tube connectors to develop the W900 Series. This series has evolved in response to some very demanding application requirements - most particularly of one-hand installation and removal.

- The locking latch design eliminates troublesome and time-consuming installation of safety-wire. It also provides positive assurance of a full closure.
- The Electrical Bonding feature eliminates the external clamps, fastener and jumper wire required by most other connectors.
- Elimination of lockwire holes, grounding clamps and jumper provides for minimum weight and unit costs, while retaining the proven performance of other WIG-O-FLEX connectors.
- Fully qualified to AS1650 and MIL-C-22263.

Standard units are available in aluminum alloy. Other materials, such as stainless steel and titanium are available on special order.



W991 Coupling Assembly	
Operating Temperature	120°F to +800°F
Maximum Temperature	900°F
Operating Pressure	125 PSIG
Proof Pressure	250 PSIG
Burst Pressure	375 PSIG
Axial Movement	.250 inch
Max. Angular Misalignment	±4°
Flexure Capability	28,000 cycles with 3° flexure
Electrical Resistance	<1 ohm
Qualification Specs	AS1650

FLEXIBLE TUBE CONNECTORS

FLEXIBLE TUBE CONNECTORS

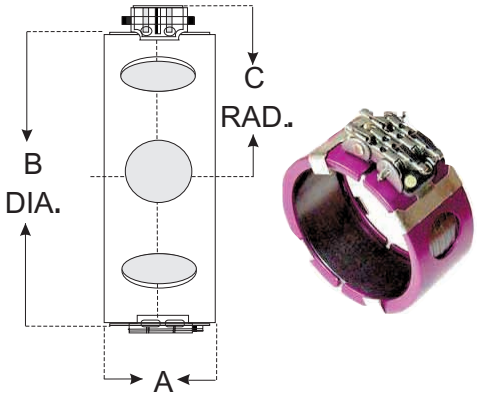
Performance Data

The W900 Series of flexible tube connectors has been qualified to the requirements of Specification MIL-C-22263 and AS1650, plus other special environmental tests such as random gunfire vibration.

Operating Pressure	125 PSI*
Proof Pressure	250 PSI
Burst Pressure	375 PSI
Temperature	To 450°F depending primarily on O-ring material. 120°F to +800°F in models using special lip seals.
Flexibility	±4° total angular tube flexure (+2° per tube end centerline).
Axial Movement	Up to +1/8" from initially centered installation for a total of 1/4".
Electrical Bonding	Conforms to MIL-B-5087, Class S (<1 ohm)
Seals	Uses standard AS568 O-ring sizes provided by user, with O-ring material selected to suit the application.

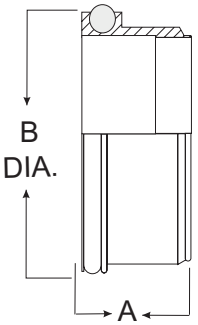
* Specification rated pressure — may be substantially higher depending upon size and other system requirements.

Full Connectors W991 - (less ferrules)



Tube O.D. Size	Aluminum		Stainless Steel		Seal Size per MS 33666	Dimensions		
	Part Number	Wt. Lbs.	Part Number	Wt. Lbs.		A Max	B Max	C Max
1/2	W991-8DE	.034	W991-8CE	.056	-015	.739	.851	.90
5/8	W991-10DE	.038	W991-10CE	.061	-017	.739	.976	.96
3/4	W991-12DE	.043	W991-12CE	.080	-117	.829	1.156	1.04
1	W991-16DE	.052	W991-16CE	.101	-214	.923	1.432	1.16
1 1/4	W991-20DE	.058	W991-20CE	.117	-218	.923	1.682	1.27
1 1/2	W991-24DE	.062	W991-24CE	.132	-222	.923	1.952	1.40
1 3/4	W991-28DE	.070	W991-28CE	.153	-224	.923	2.211	1.52
2	W991-32DE	.083	W991-32CE	.191	-226	.989	2.505	1.66
2 1/2	W991-40DE	.097	W991-40CE	.232	-230	.989	2.996	1.90
3	W991-48DE	.144	W991-48CE	.357	-234	.989	3.554	2.17
3 1/2	W991-56DE	.176	W991-56CE	.450	-238	.989	4.088	2.43
4	W991-64DE	.201	W991-64CE	.519	-242	1.002	4.596	2.67

Weld Ferrule (W903B)





1. Material of ferrule must be compatible with material of tube.
2. Certified drawings available upon request.
3. For design details and specifications contact Fluid Control Products
4. For installation boundary dimensions contact Fluid Control Products
5. Design details and specifications are subject to change without notice.

Tube O.D. Size	Aluminum		Stainless Steel		Seal Size per MS 33666	Dimensions	
	Part Number	Wt. Lbs.	Part Number	Wt. Lbs.		A Max	B Max
1/2	W903B8D	.010	W903B8C	.028	-015	.749	.689
5/8	W903B10D	.012	W903B10C	.033	-017	.749	.814
3/4	W903B12D	.016	W903B12C	.046	-117	.783	.994
1	W903B16D	.022	W903B16C	.062	-214	.838	1.270
1 1/4	W903B20D	.027	W903B20C	.076	-218	.838	1.520
1 1/2	W903B24D	.033	W903B24C	.093	-222	.838	1.790
1 3/4	W903B28D	.038	W903B28C	.107	-224	.838	2.040
2	W903B32D	.047	W903B32C	.132	-226	.854	2.313
2 1/2	W903B40D	.056	W903B40C	.164	-230	.854	2.813
3	W903B48D	.069	W903B48C	.195	-234	.854	3.313
3 1/2	W903B56D	.081	W903B56C	.227	-238	.854	3.823
4	W903B64D	.092	W903B64C	.260	-242	.854	4.322

How to Install W900 Series Flexible Connectors

After ferrules have been attached to tubes by swaging or welding, installation is made as follows:

1. Install "O" Ring seal on each ferrule (lubricate before installing).
2. Install body on one ferrule.
3. Pull body back over other ferrule.
4. Install clamp assembly on body.
5. Engage latch assembly.
6. Close into locked position.

Note: Ferrules are permanently attached to the tube by either welding or swaging. For complete information on swaging, see Adel Wiggins Installation Manual WIM-III.

