

Construction

Innercore:

Annular convolutions, fabricated from thin wall welded and redrawn tubing through 1-1/2 inch in diameter and butt welded tubing for 2 inch diameter and above. Material is Type 321 stainless steel for general applications up to 850°F / 454°C or Inconel 625 for increased strength and fatigue resistance at temperatures up to 1200°F / 650°C.

Reinforcement:

Type 321 Stainless Steel wire braid

Fittings:

Permanently Attached Standard fittings:

- 37°/38° Seat to mate with MS33656 MS33657
- Flareless Seat per NAS 1760 to mate with AS33514/AS4375 and AS33515/AS4377
- Dynamic “Dual Seal” Beam to mate with MIL-F-85421/1 and /2
- Flange per AS4875

Special Fittings are available on special order. Consult the Factory.

Performance Capabilities

Operating Temperature:

-450°F to +1200°F (-268°C to +650°C)

Operating Pressure:

To 2000 psi (13 800kPa) at 70°F (21°C) depending on size.

Refer to Hose Chart below.

Specifications

AS1424 standard metal hose assemblies are sold to AS136 thru AS141 parts standards with Flareless Fittings per NAS 1760.

The following Titeflex standard hose assemblies for sizes -04 thru -16 are designed to the AS1424 standards:

CONFIGURATION	S145 ASSEMBLY DWG. NO.
Straight to Straight AS136	106494
Straight to 45° AS137	106495
Straight to 90° AS138	106496
45° to 45° AS139	106497
45° to 90° AS140	106498
90° to 90° AS141	106499



Hose Dimensions and Performance Data

Hose Size	-04	-05	-06	-08	-10	-12	-16	-20	-24
Hose O.D. (MAX)	.56	.63	.70	.86	1.00	1.15	1.45	1.75	2.30
Hose I. D. (MIN)	.23	.28	.34	.45	.57	.70	.95	1.20	1.55
S145 CENTERLINE Min Bend Rad (Static)	2.00	2.50	3.00	4.00	4.50	5.00	6.00	7.00	9.00
S245 CENTERLINE Min* Bend Rad (STATIC)	1.63*	1.75*	1.88*	3.38*	3.50*	3.75*	4.00*	4.25*	4.50*
S145/S245 CENTERLINE MIN BEND RAD (FLEXING)	4.00	5.00	6.00	8.00	9.00	10.00	12.00	14.00	18.00
Operating Pressure PSI (kPa) 70 DEG. F.	2000 (13 750)	1800 (12 400)	1600 (11 000)	1400 (9 600)	1200 (8 300)	1050 (7 200)	800 (5 500)	550 (3 800)	450 (3 000)
Operating Pressure PSI (kPa) 850 DEG. F.	1320 (9 100)	1190 (8 200)	1060 (7 300)	920 (6 300)	790 (5 400)	690 (4 700)	530 (3 600)	360 (2 400)	300 (2 000)
R. T. Proof Pressure PSI (kPa)	3000 (20 650)	2700 (18 600)	2400 (16 500)	2100 (14 500)	1800 (12 400)	1575 (10 800)	1200 (8 300)	825 (5 700)	675 (4 600)
R. T. Burst Pressure PSI (kPa)	8000 (55 150)	7200 (49 600)	6400 (44 100)	5600 (38 600)	4800 (33 000)	4200 (29 000)	3200 (22 000)	2200 (15 200)	1800 (12 400)
H. T. Burst Pressure PSI (kPa) 850 DEG. F.	5280 (36 400)	4750 (32 700)	4220 (29 100)	3690 (25 400)	3170 (21 800)	2770 (19 100)	2120 (14 600)	1450 (10 000)	1180 (8 100)
S145 Hose Weight LB/IN (KGS/M)	0.009 (0.161)	0.013 (0.232)	0.015 (0.268)	0.026 (0.465)	0.030 (0.536)	0.036 (0.643)	0.050 (0.894)	0.067 (1.198)	0.124 (2.216)
S245 HOSE WEIGHT LB/IN (KGS/M)	0.010 (0.179)	0.015 (0.268)	0.018 (0.322)	0.030 (0.536)	0.035 (0.626)	0.042 (0.751)	0.059 (1.055)	0.078 (1.394)	.153 (2.735)

* S245 has been specifically designed (increased # convolutions/inch) to achieve tighter bend radii than S145.

Operating Pressures are based on constant pressure values.

Sizes -32 (2") thru -96 (6") are available on special order - consult Titeflex Customer Engineering. S145 Assemblies may be certified to AS1424 as required by customer.