

VIBRATION ISOLATORS

TYPE 13 - FIXED X FLOATING FLANGE (ANSI)

T-321 STAINLESS STEEL BELLOWS / FLEX
125/150# ANSI FLANGE INLET, A-36 STEEL
125/150# ANSI FLANGE OUTLET, A-36 STEEL



TYPE 13L - FIXED X FLOATING FLANGE (ANSI)

T-321 STAINLESS STEEL BELLOWS / FLEX WITH INTERNAL FLOW LINER
125/150# ANSI FLANGE INLET, A-36 STEEL
125/150# ANSI FLANGE OUTLET, A-36 STEEL



TYPE 13 - MULTI-PLY BELLOWS

| SIZE | OVERALL LENGTH | LIVE LENGTH | O.D. | BOLT CIRCLE | # OF HOLES | HOLE DIA | PART NUMBER |
|--------|----------------|-------------|-------|-------------|------------|----------|-------------|
| 3" | 12.00 | 9.00 | 7.50 | 6.00 | 4 | 0.75 | 13M0300-12 |
| 3-1/2" | 12.00 | 9.00 | 8.50 | 7.00 | 8 | 0.75 | 13M0350-12 |
| 4" | 12.00 | 9.00 | 9.00 | 7.50 | 8 | 0.75 | 13M0400-12 |
| 5" | 12.00 | 9.00 | 10.00 | 8.50 | 8 | 0.88 | 13M0500-12 |
| 6" | 12.00 | 9.00 | 11.00 | 9.50 | 8 | 0.88 | 13M0600-12 |
| 8" | 12.00 | 9.00 | 13.50 | 11.75 | 8 | 0.88 | 13M0800-12 |
| 10" | 12.00 | 9.00 | 16.00 | 14.25 | 12 | 1.00 | 13M1000-12 |
| 12" | 12.00 | 9.00 | 19.00 | 17.00 | 12 | 1.00 | 13M1200-12 |
| 14" | 12.00 | 9.00 | 21.00 | 18.75 | 12 | 1.13 | 13M1400-12 |
| 16" | 12.00 | 9.00 | 23.50 | 21.25 | 16 | 1.13 | 13M1600-12 |
| 18" | 12.00 | 9.00 | 25.50 | 22.75 | 16 | 1.25 | 13M1800-12 |
| 20" | 12.00 | 9.00 | 27.50 | 25.00 | 20 | 1.25 | 13M2000-12 |
| 22" | 12.00 | 9.00 | 29.50 | 27.25 | 20 | 1.38 | 13M2200-12 |
| 24" | 12.00 | 9.00 | 32.00 | 29.50 | 20 | 1.38 | 13M2400-12 |

TYPE 13L - MULTI-PLY BELLOWS WITH FLOW LINER

| SIZE | OVERALL LENGTH | LIVE LENGTH | O.D. | BOLT CIRCLE | I.D. | LINER O.D. | PART NUMBER |
|--------|----------------|-------------|-------|-------------|-------|------------|-------------|
| 3" | 12.00 | 9.00 | 7.50 | 6.00 | 3.50 | 2.88 | 13M0300-12L |
| 3-1/2" | 12.00 | 9.00 | 8.50 | 7.00 | 4.00 | 3.38 | 13M0350-12L |
| 4" | 12.00 | 9.00 | 9.00 | 7.50 | 4.50 | 3.88 | 13M0400-12L |
| 5" | 12.00 | 9.00 | 10.00 | 8.50 | 5.56 | 4.75 | 13M0500-12L |
| 6" | 12.00 | 9.00 | 11.00 | 9.50 | 6.63 | 5.75 | 13M0600-12L |
| 8" | 12.00 | 9.00 | 13.50 | 11.75 | 8.63 | 7.75 | 13M0800-12L |
| 10" | 12.00 | 9.00 | 16.00 | 14.25 | 10.75 | 9.88 | 13M1000-12L |
| 12" | 12.00 | 9.00 | 19.00 | 17.00 | 12.75 | 11.88 | 13M1200-12L |
| 14" | 12.00 | 9.00 | 21.00 | 18.75 | 14.00 | 13.00 | 13M1400-12L |
| 16" | 12.00 | 9.00 | 23.50 | 21.25 | 16.00 | 15.00 | 13M1600-12L |
| 18" | 12.00 | 9.00 | 25.50 | 22.75 | 18.00 | 17.00 | 13M1800-12L |
| 20" | 12.00 | 9.00 | 27.50 | 25.00 | 20.00 | 19.00 | 13M2000-12L |
| 22" | 12.00 | 9.00 | 29.50 | 27.25 | 22.00 | 21.00 | 13M2200-12L |
| 24" | 12.00 | 9.00 | 32.00 | 29.50 | 24.00 | 23.00 | 13M2400-12L |

TYPE 13 - SINGLE-PLY BELLOWS

| SIZE | OVERALL LENGTH | LIVE LENGTH | O.D. | BOLT CIRCLE | # OF HOLES | HOLE DIA | PART NUMBER |
|--------|----------------|-------------|-------|-------------|------------|----------|-------------|
| 3" | 12.00 | 9.00 | 7.50 | 6.00 | 4 | 0.75 | 13S0300-12 |
| 3-1/2" | 12.00 | 9.00 | 8.50 | 7.00 | 8 | 0.75 | 13S0350-12 |
| 4" | 12.00 | 9.00 | 9.00 | 7.50 | 8 | 0.75 | 13S0400-12 |
| 5" | 12.00 | 9.00 | 10.00 | 8.50 | 8 | 0.88 | 13S0500-12 |
| 6" | 12.00 | 9.00 | 11.00 | 9.50 | 8 | 0.88 | 13S0600-12 |
| 8" | 12.00 | 9.00 | 13.50 | 11.75 | 8 | 0.88 | 13S0800-12 |
| 10" | 12.00 | 9.00 | 16.00 | 14.25 | 12 | 1.00 | 13S1000-12 |
| 12" | 12.00 | 9.00 | 19.00 | 17.00 | 12 | 1.00 | 13S1200-12 |
| 14" | 12.00 | 9.00 | 21.00 | 18.75 | 12 | 1.13 | 13S1400-12 |
| 16" | 12.00 | 9.00 | 23.50 | 21.25 | 16 | 1.13 | 13S1600-12 |
| 18" | 12.00 | 9.00 | 25.50 | 22.75 | 16 | 1.25 | 13S1800-12 |
| 20" | 12.00 | 9.00 | 27.50 | 25.00 | 20 | 1.25 | 13S2000-12 |
| 22" | 12.00 | 9.00 | 29.50 | 27.25 | 20 | 1.38 | 13S2200-12 |
| 24" | 12.00 | 9.00 | 32.00 | 29.50 | 20 | 1.38 | 13S2400-12 |

TYPE 13L - SINGLE-PLY BELLOWS WITH FLOW LINER

| SIZE | OVERALL LENGTH | LIVE LENGTH | O.D. | BOLT CIRCLE | I.D. | LINER O.D. | PART NUMBER |
|--------|----------------|-------------|-------|-------------|-------|------------|-------------|
| 3" | 12.00 | 9.00 | 7.50 | 6.00 | 3.50 | 2.88 | 13S0300-12L |
| 3-1/2" | 12.00 | 9.00 | 8.50 | 7.00 | 4.00 | 3.38 | 13S0350-12L |
| 4" | 12.00 | 9.00 | 9.00 | 7.50 | 4.50 | 3.88 | 13S0400-12L |
| 5" | 12.00 | 9.00 | 10.00 | 8.50 | 5.56 | 4.75 | 13S0500-12L |
| 6" | 12.00 | 9.00 | 11.00 | 9.50 | 6.63 | 5.75 | 13S0600-12L |
| 8" | 12.00 | 9.00 | 13.50 | 11.75 | 8.63 | 7.75 | 13S0800-12L |
| 10" | 12.00 | 9.00 | 16.00 | 14.25 | 10.75 | 9.88 | 13S1000-12L |
| 12" | 12.00 | 9.00 | 19.00 | 17.00 | 12.75 | 11.88 | 13S1200-12L |
| 14" | 12.00 | 9.00 | 21.00 | 18.75 | 14.00 | 13.00 | 13S1400-12L |
| 16" | 12.00 | 9.00 | 23.50 | 21.25 | 16.00 | 15.00 | 13S1600-12L |
| 18" | 12.00 | 9.00 | 25.50 | 22.75 | 18.00 | 17.00 | 13S1800-12L |
| 20" | 12.00 | 9.00 | 27.50 | 25.00 | 20.00 | 19.00 | 13S2000-12L |
| 22" | 12.00 | 9.00 | 29.50 | 27.25 | 22.00 | 21.00 | 13S2200-12L |
| 24" | 12.00 | 9.00 | 32.00 | 29.50 | 24.00 | 23.00 | 13S2400-12L |

TYPE 13 - FLEX HOSE

| SIZE | OVERALL LENGTH | LIVE LENGTH | O.D. | BOLT CIRCLE | # OF HOLES | HOLE DIA | PART NUMBER |
|--------|----------------|-------------|-------|-------------|------------|----------|-------------|
| 3" | 20.00 | 17.00 | 7.50 | 6.00 | 4 | 0.75 | 13F0300-20 |
| 3-1/2" | 20.00 | 17.00 | 8.50 | 7.00 | 8 | 0.75 | 13F0350-20 |
| 4" | 20.00 | 17.00 | 9.00 | 7.50 | 8 | 0.75 | 13F0400-20 |
| 5" | 20.00 | 17.00 | 10.00 | 8.50 | 8 | 0.88 | 13F0500-20 |
| 6" | 20.00 | 17.00 | 11.00 | 9.50 | 8 | 0.88 | 13F0600-20 |
| 8" | 20.00 | 17.00 | 13.50 | 11.75 | 8 | 0.88 | 13F0800-20 |
| 10" | 20.00 | 17.00 | 16.00 | 14.25 | 12 | 1.00 | 13F1000-20 |
| 12" | 20.00 | 17.00 | 19.00 | 17.00 | 12 | 1.00 | 13F1200-20 |
| 14" | 20.00 | 17.00 | 21.00 | 18.75 | 12 | 1.13 | 13F1400-20 |
| 16" | 20.00 | 17.00 | 23.50 | 21.25 | 16 | 1.13 | 13F1600-20 |
| 18" | 20.00 | 17.00 | 25.50 | 22.75 | 16 | 1.25 | 13F1800-20 |

See pages 4-6 for bellows and flex hose specifications.

OPTIONS:

- Longer / Shorter Lengths
- Increasing / Reducing Flanges
- Special Drilled / Metric Flanges
- Cummins and Detroit Flanges
- T-304, T-316, and T-321 Stainless Steel Flanges
- Inconel 625 and Alloy "X" Bellows

NOTES:

- T-321 Stainless Steel Vanstone (Standard)
- Standard Flow Liner Diameter limits Lateral Offset to 3/8". For Increased Offset, Liner O.D. Must be Reduced.
- Internal Flow Liners are Required if Flow Conditions are Equal or Greater Than the Following:

6" and Under (Gas / Steam) - 4ft/sec/inch of Diameter
8" and Over (Gas / Steam) - 25ft/sec.

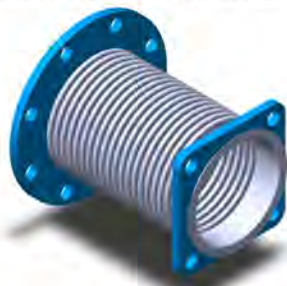
Contact One Of Our Product Specialists For Assistance



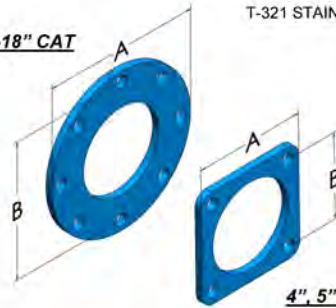
CAT VIBRATION ISOLATORS

TYPE 13C - FLOATING CAT X FIXED ANSI

T-321 STAINLESS STEEL BELLOWS / FLEX
125/150# ANSI A-36 STEEL OUTLET FLANGE
A-36 STEEL FLOATING CAT INLET FLANGE
T-321 STAINLESS STEEL VANSTONE STUB END



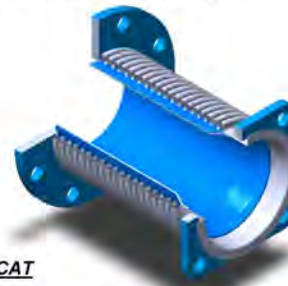
8"-18" CAT



4", 5", & 6" CAT

TYPE 13CL - FLOATING CAT X FIXED ANSI

T-321 STAINLESS STEEL BELLOWS / FLEX WITH FLOW LINER
125/150# ANSI A-36 STEEL OUTLET FLANGE
A-36 STEEL FLOATING CAT INLET FLANGE
T-321 STAINLESS STEEL VANSTONE STUB END



TYPE 13C - MULTI-PLY BELLOWS

| SIZE | OVERALL LENGTH | LIVE LENGTH | A | B | # OF HOLES | HOLE DIA. | PART NUMBER |
|------|----------------|-------------|-------|-------|------------|-----------|-------------|
| 4" | 12.00 | 9.00 | 5.50 | 4.15 | 4 | 0.56 | 13M0400-12C |
| 5" | 12.00 | 9.00 | 6.50 | 5.00 | 4 | 0.75 | 13M0500-12C |
| 6" | 12.00 | 9.00 | 8.0 | 6.00 | 4 | 0.88 | 13M0600-12C |
| 8" | 12.00 | 9.00 | 11.00 | 9.88 | 8 | 0.56 | 13M0800-12C |
| 10" | 12.00 | 9.00 | 13.50 | 12.44 | 12 | 0.50 | 13M1000-12C |
| 12" | 12.00 | 9.00 | 15.75 | 14.81 | 12 | 0.50 | 13M1200-12C |
| 14" | 12.00 | 9.00 | 17.10 | 16.13 | 12 | 0.50 | 13M1401-12C |
| 14" | 12.00 | 9.00 | 17.94 | 16.94 | 12 | 0.56 | 13M1402-12C |
| 16" | 12.00 | 9.00 | 23.50 | 21.25 | 16 | 0.81 | 13M1600-12C |
| 18" | 12.00 | 9.00 | 21.85 | 20.88 | 16 | 0.54 | 13M1800-12C |

TYPE 13CL - MULTI-PLY BELLOWS WITH LINER

| SIZE | OVERALL LENGTH | LIVE LENGTH | A | B | LINER O.D. | PART NUMBER |
|------|----------------|-------------|-------|-------|------------|--------------|
| 4" | 12.00 | 9.00 | 5.50 | 4.15 | 3.25 | 13M0400-12CL |
| 5" | 12.00 | 9.00 | 6.50 | 5.00 | 4.25 | 13M0500-12CL |
| 6" | 12.00 | 9.00 | 8.0 | 6.00 | 5.25 | 13M0600-12CL |
| 8" | 12.00 | 9.00 | 11.00 | 9.88 | 7.25 | 13M0800-12CL |
| 10" | 12.00 | 9.00 | 13.50 | 12.44 | 9.00 | 13M1000-12CL |
| 12" | 12.00 | 9.00 | 15.75 | 14.81 | 11.00 | 13M1200-12CL |
| 14" | 12.00 | 9.00 | 17.10 | 16.13 | 13.00 | 13M1401-12CL |
| 14" | 12.00 | 9.00 | 17.94 | 16.94 | 13.00 | 13M1402-12CL |
| 16" | 12.00 | 9.00 | 23.50 | 21.25 | 15.00 | 13M1600-12CL |
| 18" | 12.00 | 9.00 | 21.85 | 20.88 | 17.00 | 13M1800-12CL |

TYPE 13C - SINGLE-PLY BELLOWS

| SIZE | OVERALL LENGTH | LIVE LENGTH | A | B | # OF HOLES | HOLE DIA. | PART NUMBER |
|------|----------------|-------------|-------|-------|------------|-----------|-------------|
| 4" | 12.00 | 9.00 | 5.50 | 4.15 | 4 | 0.56 | 13S0400-12C |
| 5" | 12.00 | 9.00 | 6.50 | 5.00 | 4 | 0.75 | 13S0500-12C |
| 6" | 12.00 | 9.00 | 8.0 | 6.00 | 4 | 0.88 | 13S0600-12C |
| 8" | 12.00 | 9.00 | 11.00 | 9.88 | 8 | 0.56 | 13S0800-12C |
| 10" | 12.00 | 9.00 | 13.50 | 12.44 | 12 | 0.50 | 13S1000-12C |
| 12" | 12.00 | 9.00 | 15.75 | 14.81 | 12 | 0.50 | 13S1200-12C |
| 14" | 12.00 | 9.00 | 17.10 | 16.13 | 12 | 0.50 | 13S1401-12C |
| 14" | 12.00 | 9.00 | 17.94 | 16.94 | 12 | 0.56 | 13S1402-12C |
| 16" | 12.00 | 9.00 | 23.50 | 21.25 | 16 | 0.81 | 13S1600-12C |
| 18" | 12.00 | 9.00 | 21.85 | 20.88 | 16 | 0.54 | 13S1800-12C |

TYPE 13CL - SINGLE-PLY BELLOWS WITH LINER

| SIZE | OVERALL LENGTH | LIVE LENGTH | A | B | LINER O.D. | PART NUMBER |
|------|----------------|-------------|-------|-------|------------|--------------|
| 4" | 12.00 | 9.00 | 5.50 | 4.15 | 3.25 | 13S0400-12CL |
| 5" | 12.00 | 9.00 | 6.50 | 5.00 | 4.25 | 13S0500-12CL |
| 6" | 12.00 | 9.00 | 8.0 | 6.00 | 5.25 | 13S0600-12CL |
| 8" | 12.00 | 9.00 | 11.00 | 9.88 | 7.25 | 13S0800-12CL |
| 10" | 12.00 | 9.00 | 13.50 | 12.44 | 9.00 | 13S1000-12CL |
| 12" | 12.00 | 9.00 | 15.75 | 14.81 | 11.00 | 13S1200-12CL |
| 14" | 12.00 | 9.00 | 17.10 | 16.13 | 13.00 | 13S1401-12CL |
| 14" | 12.00 | 9.00 | 17.94 | 16.94 | 13.00 | 13S1402-12CL |
| 16" | 12.00 | 9.00 | 23.50 | 21.25 | 15.00 | 13S1600-12CL |
| 18" | 12.00 | 9.00 | 21.85 | 20.88 | 17.00 | 13S1800-12CL |

TYPE 13C - FLEX HOSE

| SIZE | OVERALL LENGTH | LIVE LENGTH | A | B | # OF HOLES | HOLE DIA. | PART NUMBER |
|------|----------------|-------------|-------|-------|------------|-----------|-------------|
| 4" | 20.00 | 17.00 | 5.50 | 4.15 | 4 | 0.56 | 13F0400-20C |
| 5" | 20.00 | 17.00 | 6.50 | 5.00 | 4 | 0.75 | 13F0500-20C |
| 6" | 20.00 | 17.00 | 8.0 | 6.00 | 4 | 0.88 | 13F0600-20C |
| 8" | 20.00 | 17.00 | 11.00 | 9.88 | 8 | 0.56 | 13F0800-20C |
| 10" | 20.00 | 17.00 | 13.50 | 12.44 | 12 | 0.50 | 13F1000-20C |
| 12" | 20.00 | 17.00 | 15.75 | 14.81 | 12 | 0.50 | 13F1200-20C |
| 14" | 20.00 | 17.00 | 17.10 | 16.13 | 12 | 0.50 | 13F1401-20C |
| 14" | 20.00 | 17.00 | 17.94 | 16.94 | 12 | 0.56 | 13F1402-20C |
| 16" | 20.00 | 17.00 | 23.50 | 21.25 | 16 | 0.81 | 13F1600-20C |
| 18" | 20.00 | 17.00 | 21.85 | 20.88 | 16 | 0.54 | 13F1800-20C |

See pages 4-6 for bellows and flex hose specifications.

OPTIONS:

- Longer / Shorter Lengths
- Increasing / Reducing Flanges
- Special Drilled / Metric Flanges
- T-304, T-316, and T-321 Stainless Steel Flanges
- Inconel 625 and Alloy "X" Bellows

NOTES:

- T-321 Stainless Steel Vanstone (Standard)
- Standard Flow Liner Diameter limits Lateral Offset to 3/8". For Increased Offset, Liner O.D. Must be Reduced.
- Internal Flow Liners are Required if Flow Conditions are Equal or Greater Than the Following:

6" and Under (Gas / Steam) - 4ft/sec/inch of Diameter
8" and Over (Gas / Steam) - 25ft/sec.

Contact One Of Our Product Specialists For Assistance

