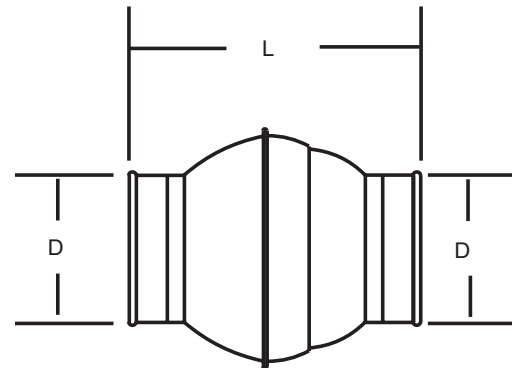


Size In.	Length In.	Galvanized Steel Gauge
3	8	20
4	9.5	20
5	10.75	20
6	11.75	20
7	10.75	20
8	14	18
9	15	18
10	14.25	18
12	15.25	16
14"	17.5	14



Allows 22° of movement off-center. Perfect for machines with moving dust ports.

#### Construction

**Collars:** located on the exterior side of each port and considered as air flow non-directional. Collars have a laser welded longitudinal seam (exception: 3" collars are lapped, spot welded, and caulked.) If air flow directional product is required, it must be stated on the PO and additional cost may be incurred. A raised lap seam and spot weld are used for attaching the collar to the body and no caulking is used. If caulking is required, additional cost may be incurred.

**Note:** Standard QF end can be changed to Raw ID (RAWID), Raw OD (RAWOD), No Fitting (NF), Hose Adapter (RAWFLEX), Flat Flange (FFL), Angle Flange (ANGFL).

Temperature Rating of Product Components						
° F	QF Ball Joint		Sealants			
-60°	Galvanized Steel	Optional - 304SS	3M Scotch Seal Metal Sealant 2084	Optional - 3M Polyurethane Adhesive Sealant 540	Optional - Rock River Silicone Sealant	Optional - Red Devil HVAC/R High Temperature Silicone Sealant
-40°				Optional - Epoxy - 3M DP 125 Gray Sealant		
0°						
194°						
250°						
400°						
500°						
1100°						

Additional Notes
Rock River Silicone Sealant and Red Devil HVAC/R High Temperature Silicone Sealant are not paintable
Galvanized steel provides little or no breakdown of zinc (zinc melting point 740°F)
304SS: <ul style="list-style-type: none"> <li>• 3" - caulking on collared seam only</li> <li>• bluing may occur at 800° F and above</li> </ul>

Compliance / Rating of Product Components		
Product	Material	Compliance / Rating
QF Ball Joint	Galvanized	ASTM A527 with a G-90 rating
	304SS	Finish meets ASTM A240
	316SS	Finish meets ASTM A240
3M Scotch Seal Metal Sealant 2084	Acetone blend	AAMA Specification 801.1
3M Polyurethane Sealant 540	Polyurethane	ASTM E 162, ASTM E 662, Bombardier SP 800-C
Rock River Sealant	100% Silicone	ASTM C920 Class 25, TT-S-00230C Class A and TT-S-001543A, FDA No 421 CFR 117.2600, conforms to FDA requirements
Red Devil HVAC/R High Temperature Sealant	Silicone	ASTM C920 Class 25, TT-S-00230C Class A and TT-S-001543A, CEBTP 432.6 140-2, Mil Spec 46106A, CGSB 19C9-9B, DIN 18540 Part 2, OREX 150031-2