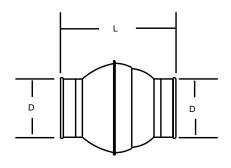
## QF Ball Joint 3209

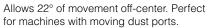
Size In.	Length <i>In.</i>	Galvanized Steel Gauge		
4	9.5	20		
5	10.75	20		
6	11.75	20		
7	10.75	20		
8	14	18		
9	15	18		
10	14.25	18		
12	15.25	16		
14	17.5	14		

## Construction

**Collars:** located on the exterior side of each port and considered as air flow non-directional. Collars have a laser welded longitudinal seam. 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				
1100°							
500°							
390°		Optional - 304SS			<b>Optional</b> - Red		
250°			3M Scotch Seal Metal Sealant 2084	Optional - Rock River Silicone Sealant	Devil HVAC/R High Temperature Silicone Sealant		
194°	Galvanized					0-4	
0°	Steel					Optional - Epoxy - 3M	
-40°						DP 125 Gray	
-60°						Sealant	

## **Additional Notes**

At temperatures ranging between 390° F and 480° F, the zinc-iron alloy layers in galvanized steel will continue to provide a high level of protection from corrosion. However, there may be some peeling, changes in mechanical properties, and reduction in the corrosion protection. Recommended max. service temperature is 390° F.

Rock River Silicone Sealant and Red Devil HVAC/R High Temperature Silicone Sealant are not paintable

## 304SS:

• bluing may occur at 800° F and above

Compliance / Rating of Product Components						
Product	Material	Compliance / Rating				
QF Ball Joint	Galvanized	ASTM A653 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				
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				

