

# High Anti-Vibration Collet Gland Assembly

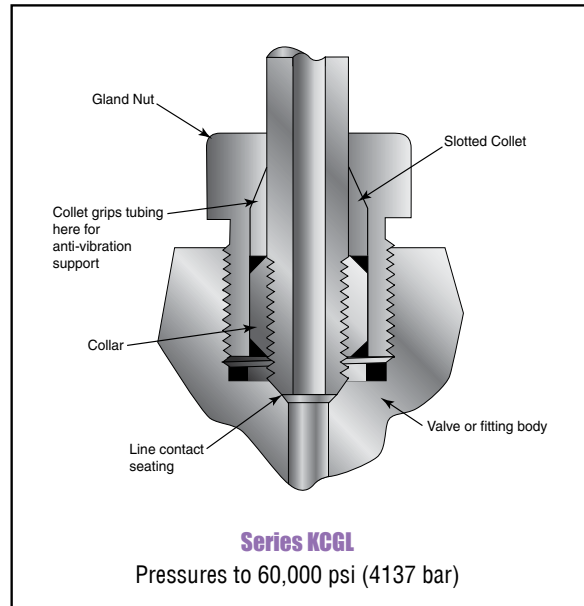
**Pressures to 150,000 psi (10342 bar)**

## Series KCGL Sizes to 9/16" (14.29 mm)

For extreme conditions of vibration and/or shock in tubing systems, such as locating valve or fitting on an unsupported line near a compressor, Parker Autoclave Engineers coned-and-threaded connections are offered with the Anti-Vibration Collet Gland Assemblies. Completely interchangeable with standard Parker Autoclave Engineers high pressure connections, the Collet Gland Assemblies provide equally effective pressure handling capability.

In standard connection systems, the bending stresses on the threaded area of the tubing imposed by excessive vibration or movement may cause premature fatigue failure of the tubing at the back of the thread. By moving the stress concentration back to the unthreaded part of the tubing and providing a wedge-type gripping action, the Parker Autoclave Engineers anti-vibration collet gland assembly strengthens the entire structure. With stress concentration reduced and overall stress level maintained well below the endurance limit of the material, the result is virtually unlimited vibrational fatigue life.

A less complex and more economical design than other vibration-resistant connections, the Collet Gland Assembly utilizes the same coned-and-threaded features of Parker Autoclave Engineers high pressure connections. In Series KCGL the gland nut is recessed to accommodate a tapered, slotted collet that grips the tubing at a point behind the threaded area of the tubing. The design provides a slight difference in angles between the collet and the corresponding taper of the gland nut. As the nut is tightened, it acts to wedge the tapered end of the collet into a gripping engagement with the tubing and, at the same time, forces the collar and tubing assembly into line contact with the connection seat.



- Note: 1) To order components with anti-vibration assemblies add -K to catalog numbers.  
 2) Special material assemblies may be supplied with four flats in place of standard hex.

Catalog Number	Part	Outside Diameter Tubing Size in. (mm)	Dimensions - inches (mm)		
			A	B	Hex
KCGL40-316	Complete assembly	1/4 (6.35)	0.50 (12.70)	0.81 (20.58)	0.62 (15.75)
KCL40-316	Slotted collet				
KGL40-316	Gland nut				
KCGL60-316	Complete assembly	3/8 (9.53)	0.62 (15.75)	1.12 (28.45)	0.81 (20.58)
KCL60-316	Slotted collet				
KGL60-316	Gland nut				
KCGL90-316	Complete assembly	9/16 (14.29)	1.00 (25.40)	1.50 (38.10)	1.19 (30.23)
KCL90-316	Slotted collet				
KGL90-316	Gland nut				

**Series KCGL**  
60,000 psi (4137 bar)

Standard Parker Autoclave Engineers collar not included in complete assembly

All dimensions for reference only and subject to change.  
 For prompt service, Parker Autoclave stocks select products. Consult your local representative.

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**Series KCBGLX** - Sizes to 1" (25.40)

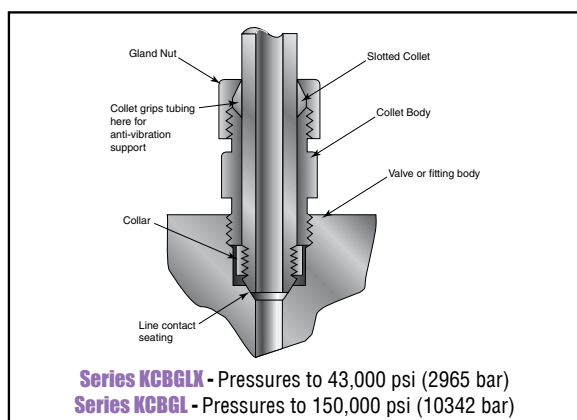
**Series KCBGL** - Sizes to 1/4" (6.35), 5/16" (7.94), 3/8" (9.53)

For extreme conditions of vibration and/or shock in tubing systems, such as locating a valve or fitting on an unsupported line near a compressor, Autoclave coned-and-threaded connections are offered with the Anti-Vibration Collet Gland Assemblies. A less complex and more economical design than other vibration-resistant connections, the collet gland assembly utilizes the same coned-and-threaded features of Autoclave high pressure connections.

Series KCBGLX and KCBGL extends the gland nut to provide room for the tapered, slotted collet and collet nut. The design provides a slight difference in angles between the collet and the corresponding taper of the gland nut. As the nut is tightened, it acts to wedge the tapered end of the collet into a gripping engagement with the tubing.

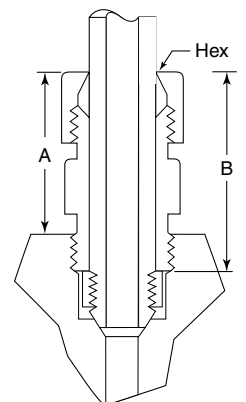
**Materials**

Type 316 stainless steel with bonded dry film (316MC) moly lubricant.



- Note: 1) To order components with anti-vibration assemblies add -K to catalog numbers.  
 2) Special material assemblies may be supplied with four flats in place of standard hex.

Catalog Number	Part	Outside Diameter Tubing Size in. (mm)	Dimensions - inches (mm)		
			A	B	Hex
KCBGLX160-316MC	Complete assembly	1.0 (25.40)	1.69 (25.40)	2.38 (60.45)	1.50 (38.10)
KCBLX160-316MC	Collet body				
KCCLX160-316MC	Slotted collet				
KGLX160-316MC	Gland nut	.250 (6.35)	1.38 (34.92)	1.88 (47.62)	.75 (19.05)
KCBGL40-316MC <sup>†</sup>	Complete assembly				
KCBL40-316MC	Collet body				
KCCL40-316MC	Slotted collet	.312 (7.94)	1.38 (34.92)	1.88 (47.62)	.75 (19.05)
KGL40-316MC	Gland nut				
KCBGL50-316MC <sup>†</sup>	Complete assembly				
KCBL50-316MC	Collet body	.375 (9.53)	1.38 (34.92)	1.88 (47.62)	.75 (19.05)
KCCL50-316MC	Slotted collet				
KGL50-316MC	Gland nut				
KCBGL60-316MC <sup>†</sup>	Complete assembly	.375 (9.53)	1.38 (34.92)	1.88 (47.62)	.75 (19.05)
KCBL60-316MC	Collet body				
KCCL60-316MC	Slotted collet				
KGL60-316MC	Gland nut				



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<sup>†</sup>KCBGL anti-vibes are for 100,000 and 150,000 psi components.

**WARNING**

**FAILURE, IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.**

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**Caution!** Do not mix or interchange parts or tubing with those of other manufacturers. Doing so is unsafe and will void warranty.

**Caution!** Parker Autoclave Engineers Valves, Fittings and Tools are not designed to work with common commercial instrument tubing and will only work with tubing built to Parker Autoclave Engineers AES Specifications. Failure to do so will void warranty.

**ISO-9001 Certified**