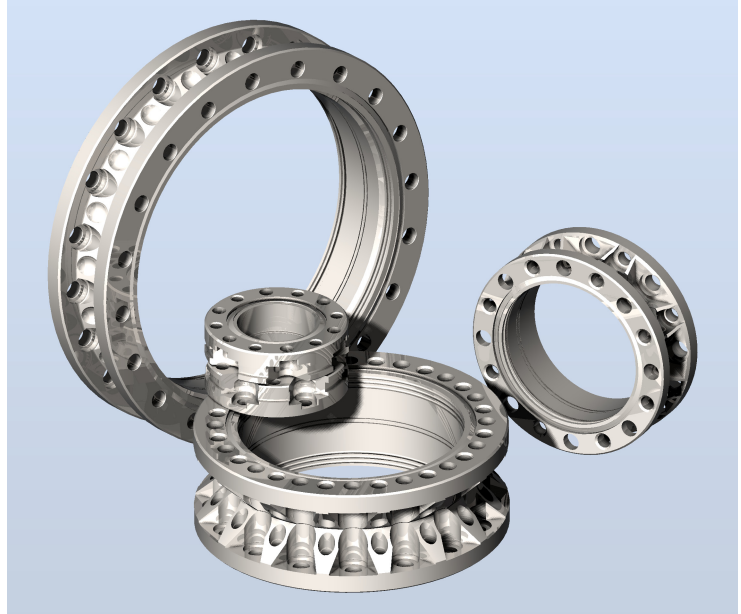


ROTATABLE, BOLT-REVERSING 8 CF, 6 CF, 4½ CF AND 2¾ CF UHV COUPLERS JOIN TWO TAPPED-HOLE COMPONENTS CLOSE TOGETHER

THE ROTATABLE CLOSE COUPLER

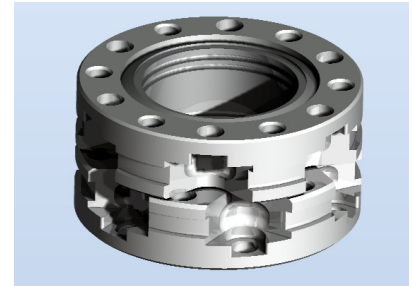
Rotatable Close Couplers are two-port Multi-CF Fittings, consisting of machined thick-wall cylinders, with opposing same-sized CF sealing surfaces (2¾, 4½, 6 or 8). The ability to rotate the two surfaces allows for increased flexibility in assembling fittings and in adjusting systems after assembly. The Close Coupler minimizes overall length in joining two tapped-hole components, resulting in the shortest possible distance between them. Under the bolt heads, flange thickness has been decreased, while adequate rigidity has been maintained through the use of an appropriately machined thick-wall cylinder. Care is needed to use the correct bolt lengths. All 2¾ CF, 4½ CF, 6 CF and 8 CF sealing surfaces have a pair of Grabber Grooves to allow internal apparatus mounting.



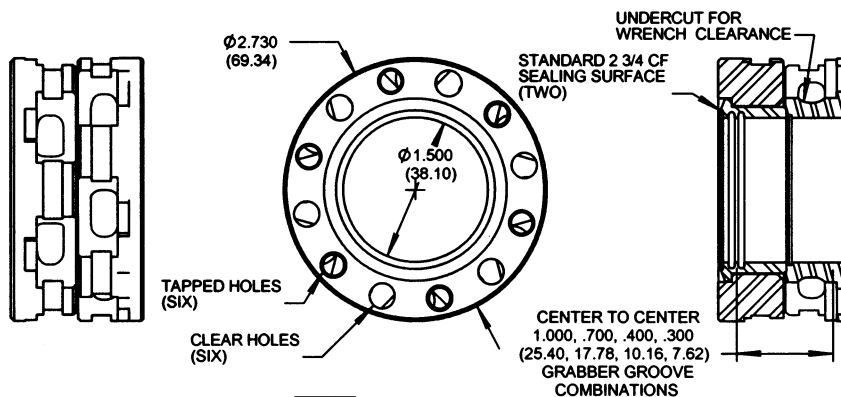
2¾ CF, 4½ CF, 6 CF and 8 CF rotatable close couplers (shown 1:4 scale)

2¾ Multi-CF Rotatable Close Coupler: MCF275-CC2R00-1400

MCF275-CC2R00-1400	
Multi-CF FITTING	Rotatable Close Coupler
COMMON APPLICATION	Bolt Reversing Coupler
CONSTRUCTION / MATERIAL	Unitary Stainless Steel 316L
2¾CF SEALING SURFACES	Two rotating surfaces with (6) 1/4-28 tapped bolt holes, and (6) 1/4-28 clear bolt holes, plus one pair of Grabber Grooves.
LENGTH, GASKET PLANE TO GASKET PLANE	1.400 inch
BOLT TYPE	12-point-head 1/4-28x1/2 short bolts



Rotatable Close Coupler
MCF275-CC2R00-1400



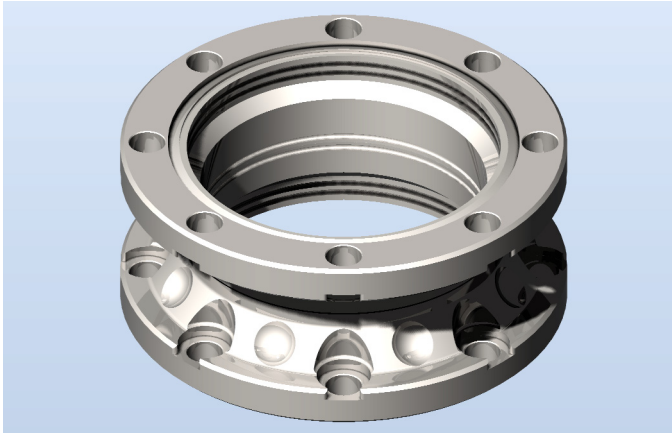
MCF275-CC2R00-1400. 0.5 X

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS IN PARENTHESES)

CAUTIONS:
 (1) SILVER PLATED BOLTS OR EQUIVALENT LUBRICATION MUST BE USED
 (2) USE CORRECT BOLT LENGTH



ROTATABLE CLOSE COUPLER



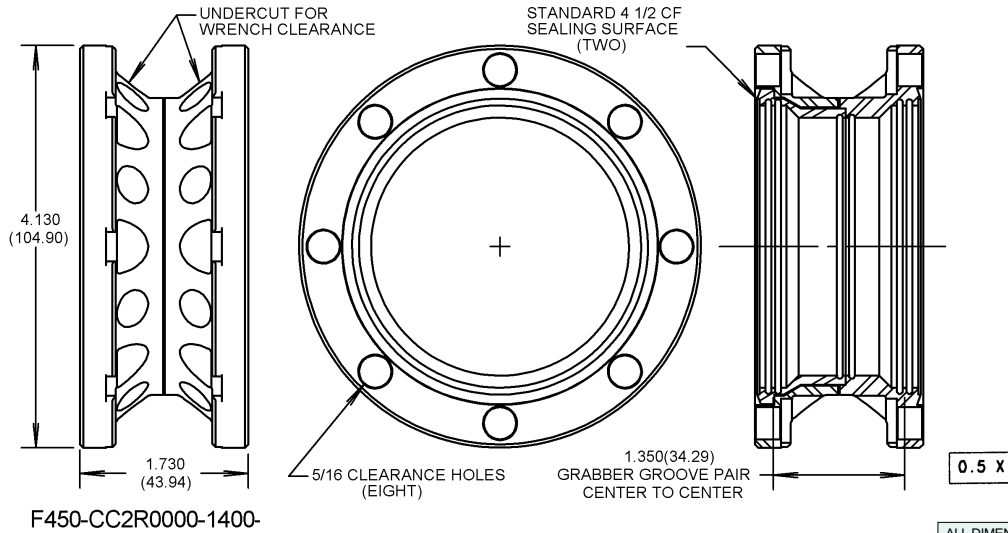
4 1/2 Multi-CF Rotatable Close Coupler: MCF450-CC2R0000-1400

THE 4 1/2 Multi-CF ROTATABLE CLOSE COUPLER

The MCF450-CC2R0000-1400 Rotatable Close Coupler is a two-port Multi-CF Fitting, consisting of rotatable, machined thick-wall cylinders, with opposing 4 1/2 CF sealing surfaces. Each sealing surface has one pair of Grabber Grooves for internal apparatus mounting.

Rotatable 4 1/2 Close Coupler MCF450CC-2R0000-1400

MCF450-CC2R0000-1400	
Multi-CF FITTING	Rotatable Close Coupler
COMMON APPLICATION	Bolt Reversing Coupler
CONSTRUCTION / MATERIAL	Unitary Stainless Steel 316L
4 1/2 CF SEALING SURFACES	Two rotating surfaces with (8) 5/16-24 clear bolt holes, plus one pair of Grabber Grooves per sealing surface
LENGTH, GASKET PLANE TO GASKET PLANE	1.750 inch
BOLT TYPE	12-point-head 5/16-24 x 3/4 bolts



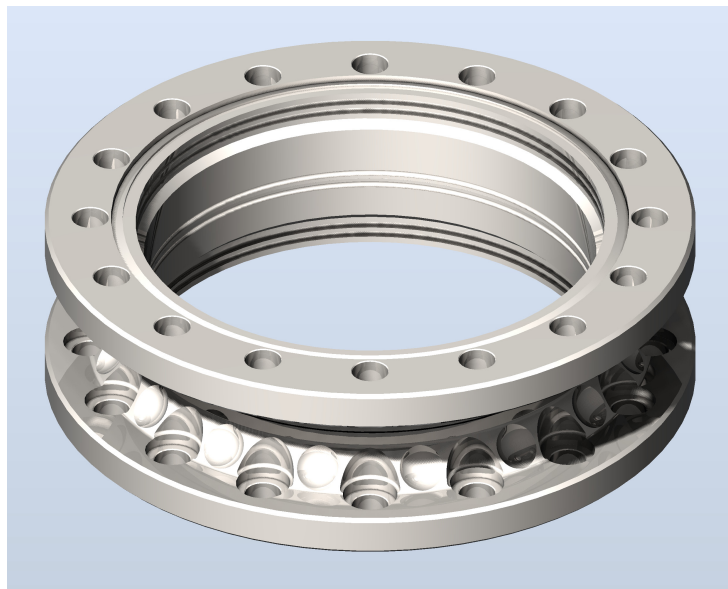
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS IN PARENTHESES)

CAUTIONS:
(1) SILVER PLATED BOLTS OR EQUIVALENT LUBRICATION MUST BE USED
(2) USE CORRECT BOLT LENGTH

6 Multi-CF Rotatable Close Coupler: MCF600-CC2R00000-1750

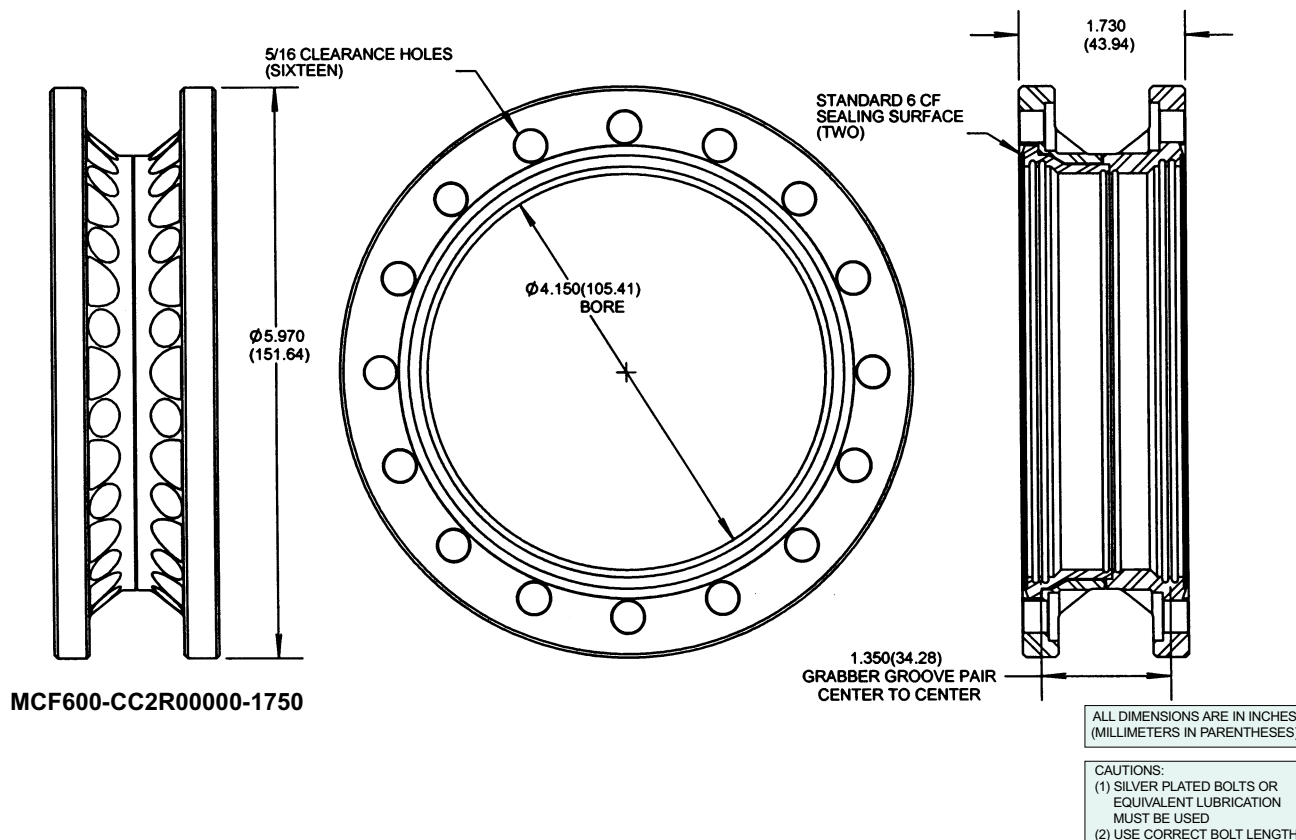
THE 6 Multi-CF ROTATABLE CLOSE COUPLER

The MCF600-CC2R00000-1750 Rotatable Close Coupler is a two-port Multi-CF Fitting, consisting of rotatable, machined thick-wall cylinders, with opposing 6 CF sealing surfaces. Each sealing surface has one pair of Grabber Grooves for internal apparatus mounting.



Rotatable Close Coupler MCF600-CC2R00000-1750

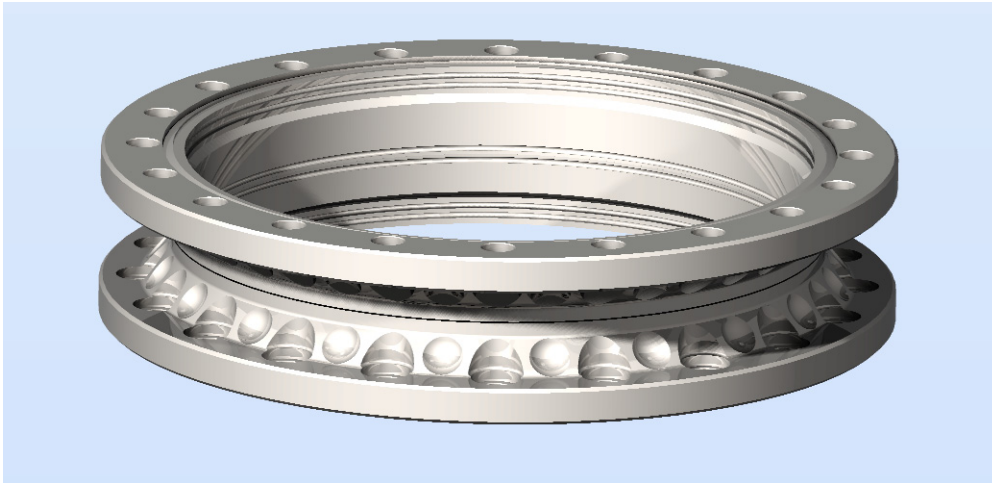
MCF600-CC2R00000-1750	
Multi-CF FITTING	Rotatable Close Coupler
COMMON APPLICATION	Bolt Reversing Coupler
CONSTRUCTION / MATERIAL	Unitary Stainless Steel 316L
6 CF SEALING SURFACES	Two rotating surfaces with (16) 5/16-24 clear bolt holes, plus one pair of Grabber Grooves per sealing surface
LENGTH, GASKET PLANE TO GASKET PLANE	1750 inch
BOLT TYPE	12-point-head 5/16-24 x 3/4 bolts





ROTATABLE CLOSE COUPLER

8 Multi-CF Rotatable Close Coupler: MCF800-CC2R000000-1750



THE 8 Multi-CF ROTATABLE CLOSE COUPLER

The MCF800-CC2R000000-1750 Rotatable Close Coupler is a two-port Multi-CF Fitting, consisting of rotatable, machined thick-wall cylinders, with opposing 8 CF sealing surfaces. Each sealing surface has one pair of Grabber Grooves for internal apparatus mounting.

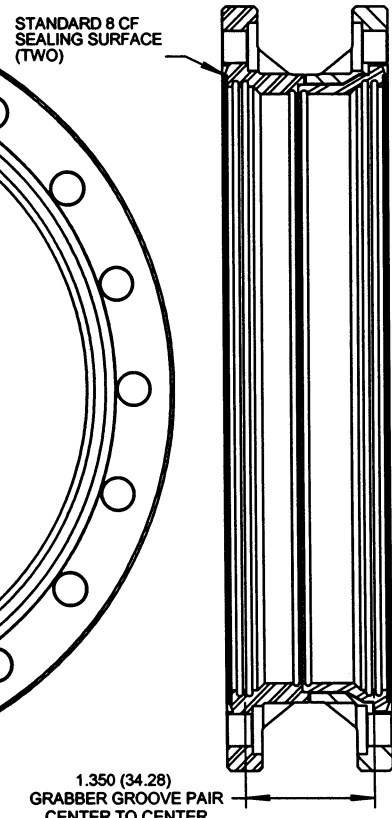
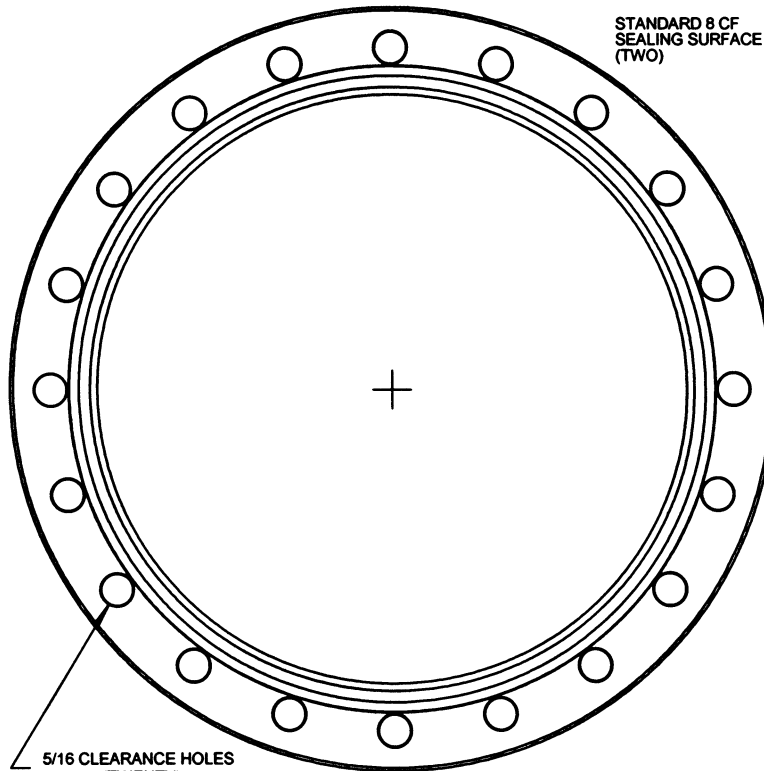
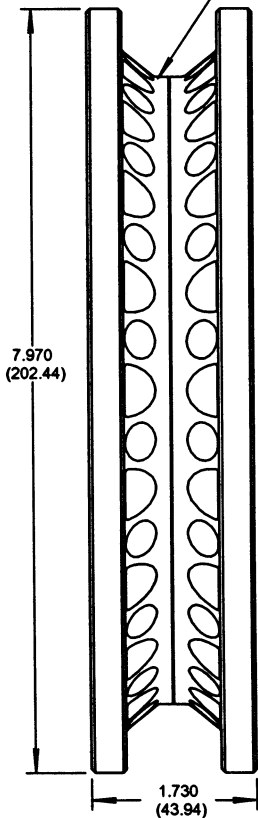
Rotatable Close Coupler MCF800-CC2R000000-1750

MCF800-CC2R000000-1750	
Multi-CF FITTING	Rotatable Close Coupler
COMMON APPLICATION	Bolt Reversing Coupler
CONSTRUCTION / MATERIAL	Unitary Stainless Steel 316L
8 CF SEALING SURFACES	Two rotating surfaces with (20) 5/16-24 clear bolt holes, plus one pair of Grabber Grooves per sealing surface
LENGTH, GASKET PLANE TO GASKET PLANE	1.750 inch
BOLT TYPE	12-point-head 5/16-24 x 3/4 bolts

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS IN PARENTHESES)

CAUTIONS:
(1) SILVER PLATED BOLTS OR EQUIVALENT LUBRICATION MUST BE USED
(2) USE CORRECT BOLT LENGTH

UNDERCUT FOR WRENCH CLEARANCE



0.5 X

MCF800-CC2R000000-17500