

ROMAC INDUSTRIES, INC.
RESTRAINED FLANGED COUPLING ADAPTER (RFCA) FOR STEEL AND DUCTILE
IRON SIZE POYLVINYL CHLORIDE (PVC) PIPE
3 THROUGH 12 INCH



SUBMITTAL INFORMATION

USE	The Restrained Flanged Coupling Adapter is used to connect plain end PVC pipe to a standard ANSI class 125 and 150 bolt circle. It provides flexibility before and after installation. The RFCA replaces costly concrete thrust blocks, corrodible steel tie rods and clamps.
MATERIALS	
Gland and Flange Body	Ductile (nodular) iron, meeting or exceeding ASTM A 536, Grade 65-45-12.
Gaskets	Gasket is made from virgin Styrene Butadiene Rubber (SBR) compounded for water and sewer service in accordance with ASTM D 2000 MBA 710. Flange gasket is O ring style and is made of Nitrile Butadiene Rubber (NBR) in accordance with ASTM D 2000. Other compounds available for petroleum, chemical, or high temperature service on request.
Restraining Bolt	7/8 –9 roll thread, Ductile (nodular) iron, meeting or exceeding ASTM A 536.
Restraining Lugs	Ductile (nodular) iron, meeting or exceeding ASTM A 536. Heat treated using a proprietary process.
Lug Locators	Polyurethane, a thermal plastic.
T-bolts and Nuts	High strength low alloy steel T-head bolt. National coarse rolled thread and heavy hex nut. Steel meets AWWA C111 composition specifications. Stainless steel bolts and nuts available on request.
Coatings	Shop coat applied to cast parts for corrosion protection in transit. Fusion bonded epoxy available on request.
FLANGE	Compatible with ANSI Class 125 and 150 bolt circles.
AWWA C219	Romac couplings meet the specifications set forth in the AWWA Standard C219 coupling spec.
FM Approved	FM approved for AWWA C900 pipe class150 and 200.

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PERFORMANCE

Nominal Pipe Size (inches)	Maximum Pressure Rating (psi)		Max. Joint Deflection (°)	Pipe Insertion (inches)		
	Working	Test		Minimum	Maximum	Δ
3	275	412	2.0	2.0	4.5	2.5
4	275	412	3.5	2.0	5.0	3.0
6	275	412	3.5	2.0	5.5	3.5
8	275	412	3.3	2.0	5.5	3.5
10	275	412	3.0	2.0	6.3	4.3
12	275	412	3.0	2.0	6.3	4.3

Pipe Compatibility and Torque

PIPE MATERIAL	PIPE SIZE	WORKING PRESSURE	RECOMMENDED TORQUE FOR T-BOLTS	RECOMMENDED TORQUE FOR RESTRAINING BOLTS
PVC - D.I. SIZE (C900 Class 165)	4" - 12"	RATING OF PIPE	45 - 60 FT-LBS	30 - 40 FT-LBS
PVC - D.I. SIZE (C900 Class 235 & 305)	4" - 12"	RATING OF PIPE	75 - 90 FT-LBS	TORQUE OFF HEADS
PVC - "CLASS PIPE" (IPS Size Less than ASTM D224 Class 160)	3" - 12"	RATING OF PIPE	45 - 60 FT-LBS	30 - 40 FT-LBS
PVC - "CLASS PIPE" (IPS Size ASTM D224 Class 160 & 200)	3"	RATING OF PIPE	45 - 60 FT-LBS	TORQUE OFF HEADS
PVC - "CLASS PIPE" (IPS Size ASTM D224 Class 160 & 200)	4" - 12"	RATING OF PIPE	75 - 90 FT-LBS	TORQUE OFF HEADS
PVC - SCHED. 40 & 80 ASTM D1785	3"	RATING OF PIPE	45 - 60 FT-LBS	TORQUE OFF HEADS
PVC - SCHED. 40 & 80 ASTM D1786	4" - 12"	RATING OF PIPE	75 - 90 FT-LBS	TORQUE OFF HEADS
PVC - D.I. SIZE (C909)	4" - 6"	235 PSI	75 - 90 FT-LBS	30 - 40 FT-LBS
PVC - D.I. SIZE (C909)	8"	235 PSI	75 - 90 FT-LBS	TORQUE OFF HEADS
PVC - D.I. SIZE (C909)	10" - 12"	150 PSI	75 - 90 FT-LBS	TORQUE OFF HEADS
DUCTILE IRON	NOT COMPATIBLE WITH RFCA-PVC			
STEEL				
ASBESTOS CEMENT				
FIBERGLASS				
HDPE				
*PRESSURE RATINGS ARE DESIGNED WITH A 2:1 SAFTEY FACTOR				

SIZES AND RANGES See Catalog.

FM Approval FM approved for AWWA C900 pipe class 150 and 200, 4"-12".

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This information is based on the best data available at the date printed above, please check with Romac Engineering Department for any updates or changes.