



# OMNI Coupling System

## Cast Couplings — Straight & Reducing Transitions

# 441



**Description:** Cast Couplings

**Application:** To join plain end pipes with the same or different O.D.s by changing followers and gaskets.

### Key Features:

- Heavy cast Ductile Iron parts for long life
- Meets applicable AWWA C219 Standards
- Flanges and gaskets can be mixed and matched on the same size nominal sleeve
- Most couplings are stab fit, making installation a breeze. No disassembly is required
- Up to 2.4" of range with a single coupling, reducing the need for large coupling inventories
- One sleeve per nominal pipe size takes the guess work out of deciding which sleeve size to choose
- Flanges are color coded by pipe type: Red for iron pipe size O.D.; Blue for Ductile O.D.; and gray for Asbestos Cement O.D.
- Gaskets and flanges are permanently marked with a part number and range to facilitate proper selection
- Sleeves are available in a variety of lengths, and custom length Steel sleeves are available for special applications

### Materials Specifications (subject to change):

**SLEEVE:** Ductile Iron ASTM A536. Ends have smooth inside taper for uniform gasket seating

**GASKET:** Nitrile (Buna N) certified to NSF/ANSI 61G. Compounded to produce superior storage and performance characteristics while resisting water, acids, alkalies, most (aliphatic) hydrocarbon fluids and other chemicals

**FOLLOWER FLANGES:** Ductile Iron ASTM A536. Designed for high strength to weight ratio

**BOLTS & NUTS:** High strength low alloy Steel bolts with heavy, semi-finished hexagon nuts to AWWA C219 (ANSI A21.11) *Optional: Stainless Steel*

**FINISH:** Flexi-Coat® Fusion-Bonded Epoxy Finish

**Working Pressure:** Up to 250 PSI

**Pipe Applications:** Steel, Cast Iron, Asbestos Cement, PVC and other. For other pipe materials, please contact Smith-Blair Engineering.

**Sizes (in inches):** 2, 2½, 3, 4, 6, 8, 10, 12, 14, 16



**THIS PRODUCT DOES NOT RESTRAIN PIPE MOVEMENT.** Proper anchoring is required to prevent pipe pullout. Failure to anchor or improper anchoring can result in dangerous pipe content escape, property damage, serious injury, or death. Read the product installation instructions prior to installing this product.



441

# OMNI Coupling System

## Cast Couplings — Straight & Reducing Transitions

### Cast Straight and Transition

NOMINAL PIPE SIZE INCHES	CATALOG NUMBER END CODE	O.D.** END 1 INCHES	O.D.** END 2 INCHES	OVERALL BOLT & LAYING LENGTH (IN.)	5/8" BOLT QTY REQUIRED	SLEEVE LENGTH IN. †	APPROX. SHIPPING WEIGHT LBS.
2	441-00000263-900	2.34-2.63	2.34-2.63	8 1/2	2	4	8 1/2
2 1/2	441-00000288-900	2.65-2.88	2.65-2.88	8 1/2	2	4	9
3	441-00000313-900	2.85-3.13	2.85-3.13	8 1/2	4	4	13 1/2
	441-00000350-900	3.44-3.62	3.44-3.62	8 1/2	4	4	13 1/2
	441-00000396-900	3.80-3.96	3.80-3.96	8 1/2	4	4	13 1/2
	441-00000414-900	3.97-4.14	3.97-4.14	8 1/2	4	4	13 1/2
	441-03500313-900	3.44-3.62	2.85-3.13	8 1/2	4	4	13 1/2
	441-03960313-900	3.80-3.96	2.85-3.13	8 1/2	4	4	13 1/2
	441-03960350-900	3.80-3.96	3.44-3.62	8 1/2	4	4	13 1/2
	441-04140313-900	3.97-4.14	2.85-3.13	8 1/2	4	4	13 1/2
	441-04140350-900	3.44-3.62	3.44-3.62	8 1/2	4	4	13 1/2
4†	441-04140396-900	3.97-4.14	3.80-3.96	8 1/2	4	4	13 1/2
	441-00000415-900	4.00-4.15	4.00-4.15	8 1/2	4	5	15
	441-00000450-900	4.22-4.50	4.22-4.50	8 1/2	4	5	15
	441-00000486-900	4.46-4.86	4.46-4.86	8 1/2	4	5	15
	441-00000510-900	4.80-5.10	4.80-5.10	8 1/2	4	5	15
	441-00000545-900	5.11-5.45	5.11-5.45	8 1/2	4	5	15
	441-04500415-900	4.22-4.50	4.00-4.15	8 1/2	4	5	15
	441-04860415-900	4.46-4.86	4.00-4.15	8 1/2	4	5	15
	441-05100415-900	4.80-5.10	4.00-4.15	8 1/2	4	5	15
	441-05100450-900	4.80-5.10	4.22-4.50	8 1/2	4	5	15
	441-05100486-900	4.80-5.10	4.46-4.86	8 1/2	4	5	15
	441-05450415-900	5.11-5.45	4.00-4.15	8 1/2	4	5	15
	441-05450450-900	5.11-5.45	4.22-4.50	8 1/2	4	5	15
	441-05450486-900	5.11-5.45	4.46-4.86	8 1/2	4	5	15
	441-05450510-900	5.11-5.45	4.80-5.10	8 1/2	4	5	15
6†	441-00000615-900	6.00-6.15	6.00-6.15	8 1/2	4	5	25
	441-00000663-900	6.28-6.63	6.28-6.63	8 1/2	4	5	25
	441-00000696-900	6.56-6.96	6.56-6.96	8 1/2	4	5	25
	441-00000722-900	6.90-7.22	6.90-7.22	8 1/2	4	5	25
	441-00000765-900	7.25-7.65	7.25-7.65	8 1/2	4	5	25
	441-06630615-900	6.28-6.63	6.00-6.15	8 1/2	4	5	25
	441-06960615-900	6.56-6.96	6.00-6.15	8 1/2	4	5	25
	441-07220615-900	6.90-7.22	6.00-6.15	8 1/2	4	5	25
	441-07220663-900	6.90-7.22	6.28-6.63	8 1/2	4	5	25
	441-07220696-900	6.90-7.22	6.56-6.96	8 1/2	4	5	25
	441-07650615-900	7.25-7.65	6.00-6.15	8 1/2	4	5	25
	441-07650663-900	7.25-7.65	6.28-6.63	8 1/2	4	5	25
	441-07650696-900	7.25-7.65	6.56-6.96	8 1/2	4	5	25
441-07650722-900	7.25-7.65	6.90-7.22	8 1/2	4	5	25	

Type 441 Couplings will connect any two pipes within the O.D. range without changing parts. Suitable anchorage must be provided when excessive pipe movement could occur.  
 \*\* Published ranges indicate nominal pipe outside diameters. Couplings are designed for pipes within current AWWA standard tolerances. † For longer sleeve length see 442.

## Cast Straight and Cast Transition, Continued

NOMINAL PIPE SIZE INCHES	CATALOG NUMBER END CODE	O.D.** END 1 INCHES	O.D.** END 2 INCHES	OVERALL BOLT & LAYING LENGTH (IN.)	5/8" BOLT QTY REQUIRED	SLEEVE LENGTH IN. †	APPROX. SHIPPING WEIGHT LBS.
8†	441-00000800-900	8.00-8.16	8.00-8.16	8 1/2	6	5	31
	441-00000863-900	8.40-8.63	8.40-8.63	8 1/2	6	5	31
	441-00000911-900	8.54-9.11	8.54-9.11	8 1/2	6	5	31
	441-00000930-900	9.05-9.30	9.05-9.30	9 1/2	6	5	31
	441-00000945-900	9.05-9.45	9.05-9.45	9 1/2	6	5	31
	441-00000985-900	9.46-9.85	9.46-9.85	9 1/2	6	5	31
	441-08630800-900	8.40-8.63	8.00-8.16	8 1/2	6	5	31
	441-09110800-900	8.54-9.11	8.00-8.16	8 1/2	6	5	31
	441-09300800-900	8.00-8.16	8.00-8.16	8 1/2	6	5	31
	441-09300863-900	8.40-8.63	8.40-8.63	8 1/2	6	5	31
	441-09300911-900	8.54-9.11	8.54-9.11	8 1/2	6	5	31
	441-09450800-900	9.05-9.45	8.00-8.16	9 1/2	6	5	31
	441-09450863-900	9.05-9.45	8.40-8.63	9 1/2	6	5	31
	441-09450911-900	9.05-9.45	8.54-9.11	9 1/2	6	5	31
	441-09850800-900	9.46-9.85	8.00-8.16	9 1/2	6	5	31
	441-09850863-900	9.46-9.85	8.40-8.63	8 1/2	6	5	31
	441-09850911-900	9.46-9.85	8.54-9.11	8 1/2	6	5	31
	441-09850945-900	9.46-9.85	9.05-9.45	8 1/2	6	5	31
10†	441-00001000-900	10.00	10.00	9 1/2	6	6	47
	441-00001075-900	10.50-10.75	10.50-10.75	9 1/2	6	6	47
	441-00001160-900	11.10-11.60	11.10-11.60	11	6	6	47
	441-00001188-900	11.65-11.88	11.65-11.88	9 1/2	6	6	47
	441-00001220-900	11.90-12.20	11.90-12.20	9 1/2	6	6	47
	441-10751000-900	10.50-10.75	10.00	9 1/2	6	6	47
	441-11601000-900	11.10-11.60	10.00	11	6	6	47
	441-11601075-900	11.10-11.60	10.50-10.75	9 1/2	6	6	47
	441-11881000-900	11.65-11.88	10.00	9 1/2	6	6	47
	441-11881075-900	11.65-11.88	10.50-10.75	9 1/2	6	6	47
	441-11881160-900	11.65-11.88	11.10-11.60	11	6	6	47
	441-12201000-900	11.90-12.20	10.00	9 1/2	6	6	47
	441-12201075-900	11.90-12.20	10.50-10.75	9 1/2	6	6	47
	441-12201160-900	11.90-12.20	11.10-11.60	11	6	6	47
441-12201188-900	11.90-12.20	11.65-11.88	9 1/2	6	6	47	

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## Cast Straight and Cast Transition, Continued

NOMINAL PIPE SIZE INCHES	CATALOG NUMBER END CODE	O.D.** END 1 INCHES	O.D.** END 2 INCHES	OVERALL BOLT & LAYING LENGTH (IN.)	5/8" BOLT QTY REQUIRED	SLEEVE LENGTH IN. †	APPROX. SHIPPING WEIGHT LBS.
12†	441-00001200-900	12.00	12.00	9 1/2	8	6	52
	441-00001275-900	12.50-12.75	12.50-12.75	9 1/2	8	6	52
	441-00001350-900	13.20-13.50	13.20-13.50	11	8	6	52
	441-00001375-900	13.51-13.75	13.51-13.75	9 1/2	8	6	52
	441-00001420-900	13.90-14.20	13.90-14.20	9 1/2	8	6	52
	441-00001440-900	14.21-14.40	14.21-14.40	9 1/2	8	6	52
	441-12751200-900	12.50-12.75	12.00	9 1/2	8	6	52
	441-13501200-900	13.20-13.50	12.00	9 1/2	8	6	52
	441-13501275-900	13.20-13.50	12.50-12.75	9 1/2	8	6	52
	441-13751200-900	13.51-13.75	12.00	9 1/2	8	6	52
	441-13751275-900	13.51-13.75	12.50-12.75	9 1/2	8	6	52
	441-13751350-900	13.51-13.75	13.20-13.50	9 1/2	8	6	52
	441-14201200-900	13.90-14.20	12.00	9 1/2	8	6	52
	441-14201275-900	13.90-14.20	12.50-12.75	9 1/2	8	6	52
	441-14201350-900	13.90-14.20	13.20-13.50	9 1/2	8	6	52
	441-14201375-900	13.90-14.20	13.51-13.75	9 1/2	8	6	52
	441-14401200-900	14.21-14.40	12.00	9 1/2	8	6	52
	441-14401275-900	14.21-14.40	12.50-12.75	9 1/2	8	6	52
	441-14401350-900	14.21-14.40	13.20-13.50	9 1/2	8	6	52
	441-14401375-900	14.21-14.40	13.51-13.75	9 1/2	8	6	52
441-14401420-900	14.21-14.40	13.90-14.20	9 1/2	8	6	52	
14†	441-00001550-900	15.30-15.50	15.30-15.50	9 1/2	8	6	59
	441-00001580-900	15.55-15.80	15.55-15.80	9 1/2	8	6	59
	441-00001622-900	16.22-16.35	16.22-16.35	9 1/2	8	6	59
	441-00001655-900	16.41-16.55	16.41-16.55	9 1/2	8	6	59
	441-00001690-900	16.73-16.90	16.73-16.90	9 1/2	8	6	59
	441-15801550-900	15.55-15.80	15.30-15.50	9 1/2	8	6	59
	441-16221550-900	16.22-16.35	15.30-15.50	9 1/2	8	6	59
	441-16221580-900	16.22-16.35	15.55-15.80	9 1/2	8	6	59
	441-16551550-900	16.41-16.55	15.30-15.50	9 1/2	8	6	59
	441-16551580-900	16.41-16.55	15.55-15.80	9 1/2	8	6	59
	441-16551622-900	16.41-16.55	16.22-16.35	9 1/2	8	6	59
	441-16801550-900	16.73-16.90	15.30-15.50	9 1/2	8	6	59
	441-16901580-900	16.73-16.90	15.55-15.80	9 1/2	8	6	59
	441-16901622-900	16.73-16.90	16.22-16.35	9 1/2	8	6	59
	441-16901655-900	16.73-16.90	16.41-16.55	9 1/2	8	6	59
16†	441-00001780-900	17.40-17.80	17.40-17.80	11	10	6	71
	441-00001890-900	18.46-18.90	18.46-18.90	9 1/2	10	6	71
	441-00001920-900	18.90-19.20	18.90-19.20	9 1/2	10	6	71
	441-18901780-900	18.46-18.90	17.40-17.80	11	10	6	71
	441-19201780-900	18.90-19.20	17.40-17.80	11	10	6	71
	441-19201890-900	18.90-19.20	18.46-18.90	9 1/2	10	6	71

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## Cast Reducing Couplings

NOMINAL SIZE INCHES		CATALOG NUMBER END CODE (SEE PAGE 14)	O.D.** END 1 INCHES	O.D.** END 2 INCHES	LAYING LENGTH INCHES	5/8" BOLTS		APPROXIMATE SHIPPING WEIGHT LBS.
END 1	END 2					LENGTH INCHES	QUANTITY REQUIRED	
2 1/2	2	441-02880263-900	2.65-2.88	2.34-2.63	8 1/2	8	2	20
6	4	441-06630415-900	6.28-6.63	4.00-4.15	5	4 1/2	8	25
		441-06630450-900	6.28-6.63	4.22-4.50				
		441-06630486-900	6.28-6.63	4.46-4.86				
		441-06630510-900	6.28-6.63	4.80-5.10				
		441-06630545-900	6.28-6.63	5.11-5.45				
		441-06960415-900	6.56-6.96	4.00-4.15				
		441-06960450-900	6.56-6.96	4.22-4.50				
		441-06960486-900	6.56-6.96	4.46-4.86				
		441-06960510-900	6.56-6.96	4.80-5.10				
		441-06960545-900	6.56-6.96	5.11-5.45				
		441-07220415-900	6.90-7.22	4.00-4.15				
		441-07220450-900	6.90-7.22	4.22-4.50				
		441-07220486-900	6.90-7.22	4.46-4.86				
		441-07220510-900	6.90-7.22	4.80-5.10				
		441-07220545-900	6.90-7.22	5.11-5.45				
		411-07650415-900	7.25-7.65	4.00-4.15				
		441-07650450-900	7.25-7.65	4.22-4.50				
		441-07650486-900	7.25-7.65	4.46-4.86				
411-07650510-900	7.25-7.65	4.80-5.10						
441-07650545-900	7.25-7.65	5.11-5.45						
8	6	441-08630615-900	8.40-8.63	6.00-6.15	5	4 1/2	10	35
		441-08630663-900	8.40-8.63	6.28-6.63				
		441-08630696-900	8.40-8.63	6.56-6.96				
		441-08630722-900	8.40-8.63	6.90-7.22				
		441-08630765-900	8.40-8.63	7.25-7.65				
		441-09110615-900	8.54-9.11	6.00-6.15				
		441-09110663-900	8.54-9.11	6.28-6.63				
		441-09110696-900	8.54-9.11	6.56-6.96				
		441-09110722-900	8.54-9.11	6.90-7.22				
		441-09110765-900	8.54-9.11	7.25-7.65				
		441-09450615-900	9.05-9.45	6.00-6.15				
		441-09450663-900	9.05-9.45	6.28-6.63				
		441-09450696-900	9.05-9.45	6.56-6.96				
		441-09450722-900	9.05-9.45	6.90-7.22				
		441-09450765-900	9.05-9.45	7.25-7.65				
		441-09850615-900	9.46-9.85	6.00-6.15				
		441-09850663-900	9.46-9.85	6.28-6.63				
		441-09850696-900	9.46-9.85	6.56-6.96				
441-09850722-900	9.46-9.85	6.90-7.22						
441-09850765-900	9.46-9.85	7.25-7.65						

### Uses Studs Instead of Cross Bolts

NOM SIZE INCHES	O.D. RANGE INCHES	CATALOG NUMBER	WEIGHT EACH LBS.	OPTIONAL ANCHOR STUDS		DIMENSIONS/INCHES			
				QTY.	*PSI	A	B	E	L
3	2.85-3.13	912-90031303-000	17	N/A	N/A	3 7/8	3	7 3/4	4 9/16
	3.44-3.62	912-90035003-000	17	2	175	3 7/8	3	7 3/4	4 9/16
	3.80-3.96	912-90039603-000	17	2	175	3 7/8	3	7 3/4	4 9/16
	3.97-4.14	912-90041403-000	17	2	175	3 7/8	3	7 3/4	4 9/16
4	4.00-4.15	912-90041504-000	22	N/A	N/A	5 1/4	3	9 1/32	4 7/8
	4.22-4.50	912-90045004-000	22	2	175	5 1/4	3	9 1/32	4 7/8
	4.46-4.86	912-90048604-000	22	2	175	5 1/4	3	9 1/32	4 7/8
	4.80-5.10	912-90051004-000	22	2	175	5 1/4	3	9 1/32	4 7/8
6	6.00-6.15	912-90061506-000	29	N/A	N/A	7 1/4	3 1/2	10 7/8	5 3/4
	6.28-6.63	912-90066306-000	29	2	125	7 1/4	3 1/2	10 7/8	5 3/4
	6.56-6.96	912-90069606-000	29	N/A	175	7 1/4	3 1/2	10 7/8	5 3/4
	6.90-7.20	912-90072006-000	29	2	175	7 1/4	3 1/2	10 7/8	5 3/4
8	8.00	912-90080008-000	40	N/A	N/A	9 13/32	3 1/2	13 3/8	5 7/8
	8.40-8.63	912-90086308-000	40	2	100	9 13/32	3 1/2	13 3/8	5 7/8
	8.54-9.11	912-90091108-000	40	2	100	9 13/32	3 1/2	13 3/8	5 7/8
	9.05-9.40	912-90094008-000	40	2	175	9 13/32	3 1/2	13 3/8	5 7/8
10	10.00	912-90100010-000	60	N/A	N/A	11 5/8	4	15 7/8	6 3/8
	10.50-10.75	912-90107510-000	60	4	100	11 5/8	4	15 7/8	6 3/8
	11.10-11.60	912-90116010-000	60	4	120	11 5/8	4	15 7/8	6 3/8
	11.65-11.88	912-90118810-000	60	N/A	N/A	11 5/8	4	15 7/8	6 3/8
	11.90-11.95	912-90119510-000	60	N/A	N/A	11 5/8	4	15 7/8	6 3/8
12	12.00	912-90120012-000	80	N/A	N/A	14	4	18 3/4	6 3/8
	12.50-12.75	912-90127512-000	80	6	100	14	4	18 3/4	6 3/8
	13.20-13.50	912-90135012-000	80	6	100	14	4	18 3/4	6 3/8
	13.50-13.75	912-90137512-000	80	N/A	N/A	14	4	18 3/4	6 3/8
	13.90-14.20	912-90142012-000	80	N/A	N/A	14	4	18 3/4	6 3/8

### OMNI Nuts

NOMINAL SIZE INCHES	SIZE INCHES	+NUT ELECTRO-GALVANIZED	+NUT STAINLESS STEEL	+NUT LOW ALLOY
3" - 4"	5/8	100025-001	100025-202	100025-005
6" - 8"	3/4	100032-001	100032-202	100032-005
10" - 12"	7/8	100072-001	100072-202	100072-005

OMNI Parts

NOMINAL SIZE INCHES	O.D. RANGE INCHES	FOLLOWER FLANGE PART NUMBER	BODY PART NUMBER	"O" RING FLANGE GASKET NUMBER	BOLT OR STUD PART NUMBER*	CPLG. GASKET PART NUMBER	CROSS BOLT PART NUMBER	TEE BOLT PART NUMBER
3"	2.85-3.13	22137-045	60265-045	30019-069	(4) 90532 5/8 x 7	34610-069	(4) 90809 5/8 x 7	-
	3.44-3.62	22137-045	60265-045	30019-069		33829-069		
	3.80-3.96	22138-045	60265-045	30019-069		33830-069		
	3.97-4.14	22138-045	60265-045	30019-069		33831-069		
4"	3.96-4.15	22139-045	60266-045	30023-069	(4) 90364 5/8 x 3	33809-069	(4) 90809 5/8 x 7	(4) 90812 5/8 x 3
	4.22-4.50	22139-045	60266-045	30023-069	(4) 90532 5/8 x 7	33810-069		
	4.46-4.86	22575-045	60266-045	30023-069		34578-069		
	4.80-5.10	22140-045	60266-045	30023-069		33811-069		
6"	6.00-6.15	22141-045	60267-045	30024-069	(4) 90536 3/4 x 3 1/4	33801-069	(4) 90810 3/4 x 8	(4) 90813 3/4 x 3 1/4
	6.28-6.63	22141-045	60267-045	30024-069	(4) 90533 3/4 x 8	33802-069		
	6.56-6.96	22576-045	60267-045	30024-069		34579-069		
	6.90-7.20	22142-045	60267-045	30024-069		33803-069		
8"	8.00-8.16	22144-045	60268-045	30025-069	(4) 90536 3/4 x 3 1/4	33805-069	(4) 90810 3/4 x 8	(4) 90813 3/4 x 3 1/4
	8.40-8.63	22144-045	60268-045	30025-069	(4) 90533 3/4 x 8	33806-069		
	8.54-9.11	22577-045	60268-045	30025-069		34580-069		
	9.05-9.40	22145-045	60268-045	30025-069		33846-069		
10"	10.00	22147-045	60269-045	30026-069	(6) 90537 7/8 x 3 3/4  (6) 90534 7/8 x 9	33860-069	(6) 90811 7/8 x 9	(6) 90814 7/8 x 3 3/4
	10.50-10.75	22147-045	60269-045	30026-069		33813-069		
	11.10-11.60	22148-045	60269-045	30026-069		33814-069		
	11.65-11.88	22149-045	60269-045	30026-069		33815-069		
	11.90-11.95	22149-045	60269-045	30026-069		33816-069		
12"	12.00	22150-045	60270-045	30027-069	(6) 90537 7/8 x 3 3/4  (6) 60534 7/8 x 9	33859-069	(6) 90811 7/8 x 9	(6) 90814 7/8 x 3 3/4
	12.50-12.75	22150-045	60270-045	30027-069		33817-069		
	13.20-13.50	22151-045	60270-045	30027-069		33820-069		
	13.51-13.75	22151-045	60270-045	30027-069		33821-069		
	13.90-14.20	22152-045	60270-045	30027-069		33818-069		