



Certificate of Compliance

This certificate is issued for the following:

Polyethylene (PE) Pipe and Fittings for Underground Fire Protection Service

(see attached listing)

Prepared for:

ISCO Industries LLC
100 Witherspoon St 2 West
Louisville, KY 40202
USA

Manufactured at:

ISCO Industries
10711 Freeport Court
Louisville, KY 40258
USA

ISCO Industries
701 Mid Atlantic Pkwy
Martinsburg, WV 25404
USA

ISCO Industries
305 North 7th Street
Corsicana, TX 75110
USA

ISCO Industries
5610 Almeda-Genoa Rd
Houston, TX 77048
USA

ISCO Industries
4725 Flightline Dr
Kingman, AZ 86401
USA

Approval Standard: FM 1613 (October 2022)

Approval Identification: PR460452
Revision Request: RR237800

Approval Granted: 12 Nov 2021
Date Authorized: 4 August 2023

To verify the availability of the Approved product, please refer to www.approvalguide.com

Said Approval is subject to satisfactory field performance, continuing Surveillance Audits, and strict conformity to the constructions as shown in the Approval Guide, an online resource of FM Approvals.



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A handwritten signature in dark ink, appearing to read "D.B. Fuller".

David B. Fuller
VP, Manager – Fire Protection
FM Approvals
1151 Boston-Providence Turnpike
Norwood, MA 02062





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Model No	Product Description	Nominal Pipe Size, in	Rated Working Pressure		Remarks
			psi	(kPa)	
Tees Molded	Class 200	2, 3, 4, 6	200	(1375)	a, c
Tees Molded	Class 250	2, 3, 4, 6	250	(1720)	a, c
Tees Molded	Class 335	2, 3, 4, 6	335	(2305)	a, c
Tees Molded	Class 200	4, 6	200	(1375)	a, d
Tees Molded	Class 250	4, 6	250	(1720)	a, d
Tees Molded	Class 335	4, 6	335	(2305)	a, d
90° Elbows Molded	Class 200	2, 3, 4, 6	200	(1375)	a, c
90° Elbows Molded	Class 250	2, 3, 4, 6	250	(1720)	a, c
90° Elbows Molded	Class 335	2, 3, 4, 6	335	(2305)	a, c
90° Elbows Molded	Class 200	4, 6	200	(1375)	a, d
90° Elbows Molded	Class 250	4, 6	250	(1720)	a, d
90° Elbows Molded	Class 335	4, 6	335	(2305)	a, d
45° Elbows Molded	Class 200	3, 4, 6	200	(1375)	a, c
45° Elbows Molded	Class 250	3, 4, 6	250	(1720)	a, c
45° Elbows Molded	Class 335	2, 3, 4, 6	335	(2305)	a, c
45° Elbows Molded	Class 200	4, 6	200	(1375)	a, d
45° Elbows Molded	Class 250	4, 6	250	(1720)	a, d
45° Elbows Molded	Class 335	4, 6	335	(2305)	a, d
End Caps Molded	Class 200	2, 3, 4, 6, 8	200	(1375)	a, c
End Caps Molded	Class 250	2, 3, 4, 6, 8	250	(1720)	a, c
End Caps Molded	Class 335	2, 3, 4, 6	335	(2305)	a, c
End Caps Fabricated	Class 200	10, 12, 14, 16, 18, 20, 22, 24	200	(1375)	a, c
End Caps Fabricated	Class 250	10, 12, 14, 16, 18, 20, 22, 24	250	(1720)	a, c



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Model No	Product Description	Nominal Pipe Size, in	Rated Working Pressure		Remarks
			psi	(kPa)	
End Caps Fabricated	Class 335	8, 10, 12, 14, 16, 18, 20, 22, 24	335	(2305)	a, c
End Caps Fabricated	Class 200	10, 12, 14, 16, 18, 20, 24	200	(1375)	a, d
End Caps Fabricated	Class 250	10, 12, 14, 16, 18, 20, 24	250	(1720)	a, d
Sweep Elbows 1-90°	Class 200	4, 6, 8, 10, 12, 14	200	(1375)	a, c
Sweep Elbows 1-90°	Class 250	4, 6, 8, 10, 12, 14	250	(1720)	a, c
Concentric Reducer	Class 200	4 DIPS x 3 IPS	200	(1375)	a, c, d
Concentric Reducer	Class 250	4 DIPS x 3 IPS	250	(1720)	a, c, d
Concentric Reducer	Class 200	3 x 2, 4 x 3, 6 x 4, 8 x 6, 10 x 8, 12 x 10, 14 x 12, 16 x 14, 18 x 16 20 x 18, 22 x 20, 24 x 22	200	(1375)	a, c
Forged Concentric Reducer	Class 200	12 x 8, 12 x 10, 14 x 12, 16 x 12, 16 x 14, 18 x 12, 18 x 14, 18 x 16, 20 x 18, 24 x 18, 24 x 20	200	(1375)	a, c
Concentric Reducer	Class 250	3 x 2, 4 x 3, 6 x 4, 8 x 6, 10 x 8, 12 x 10, 14 x 12, 16 x 14, 18 x 16 20 x 18, 22 x 20, 24 x 22	250	(1720)	a, c
Forged Concentric Reducer	Class 250	12 x 8, 12 x 10, 14 x 12, 16 x 12, 16 x 14, 18 x 12, 18 x 14, 18 x 16, 20 x 18, 24 x 18, 24 x 20	250	(1720)	a, c
Molded Concentric Reducer	Class 335	3 x 2, 4 x 2, 4 x 3, 6 x 4, 8 x 6	335	(2305)	a, c
Fabricated Concentric Reducer	Class 335	10 x 8, 12 x 10, 14 x 12, 16 x 14, 18 x 16, 20 x 18, 22 x 20, 24 x 22	335	(2305)	a, c
Fabricated Concentric Reducer (Shortened Version)	Class 335	10 x 8, 12 x 10, 14 x 12, 16 x 14, 18 x 16, 20 x 18, 22 x 20, 24 x 22	335	(2305)	a, c



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Model No	Product Description	Nominal Pipe Size, in	Rated Working Pressure		Remarks
			psi	(kPa)	
Concentric Reducer	Class 200	6 x 4, 8 x 6, 10 x 8, 12 x 10, 14 x 12, 16 x 14 18 x 16, 20 x 18, 24 x 20	200	(1375)	a, d
Concentric Reducer	Class 250	6 x 4, 8 x 6, 10 x 8, 12 x 10, 14 x 12, 16 x 14 18 x 16, 20 x 18, 24 x 20	250	(1720)	a, d
Molded Concentric Reducer	Class 335	6 x 4, 8 x 6	335	(2305)	a, d
Fabricated Concentric Reducer	Class 335	10 x 8, 12 x 10, 14 x 12, 16 x 14, 18 x 16, 20 x 18	335	(2305)	a, d
Compact Concentric Reducer	Class 200	6 x 2, 6 x 3, 6 x 4, 8 x 4, 8 x 6, 10 x 6, 10 x 8, 12 x 6, 12 x 8, 12 x 10, 14 x 6, 14 x 8, 14 x 10, 14 x 12, 16 x 6, 16 x 8, 16 x 10, 16 x 12, 16 x 14, 18 x 6, 18 x 8, 18 x 10, 18 x 12, 18 x 14, 18 x 16, 20 x 6, 20 x 8, 20 x 10, 20 x 12, 20 x 14, 20 x 16, 20 x 18, 22 x 6, 22 x 8, 22 x 10, 22 x 12, 22 x 14, 22 x 16, 22 x 18, 22 x 20, 24 x 6, 24 x 8, 24 x 10, 24 x 12, 24 x 14, 24 x 16, 24 x 18, 24 x 20, 24 x 22, 26 x 20, 26 x 22, 26 x 24, 28 x 20, 28 x 22, 28 x 24, 28 x 26, 30 x 22, 30 x 24, 30 x 26, 30 x 28, 32 x 24, 32 x 26, 32 x 28, 32 x 30, 34 x 30, 34 x 32, 36 x 28, 36 x 30, 36 x 32, 36 x 34	200	(1375)	a, c
Compact Concentric Reducer	Class 200	6 x 4, 8 x 4, 8 x 6, 10 x 6, 10 x 8, 12 x 6, 12 x 8, 12 x 10, 14 x 6, 14 x 8, 14 x 10, 14 x 12, 16 x 6, 16 x 8, 16 x 10, 16 x 12, 16 x 14, 18 x 6, 18 x 8, 18 x 10, 18 x 12, 18 x 14, 18 x 16, 20 x 6, 20 x 8, 20 x 10, 20 x 12, 20 x 14, 20 x 16, 20 x 18, 24 x 6, 24 x 8, 24 x 10, 24 x 12, 24 x 14, 24 x 16, 24 x 18, 24 x 20, 30 x 24, 36 x 30	200	(1375)	a, d



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Model No	Product Description	Nominal Pipe Size, in	Rated Working Pressure		Remarks
			psi	(kPa)	
Compact Concentric Reducer	Class 250	6 x 2, 6 x 3, 6 x 4, 8 x 4, 8 x 6, 10 x 6, 10 x 8, 12 x 6, 12 x 8, 12 x 10, 14 x 6, 14 x 8, 14 x 10, 14 x 12, 16 x 6, 16 x 8, 16 x 10, 16 x 12, 16 x 14, 18 x 6, 18 x 8, 18 x 10, 18 x 12, 18 x 14, 18 x 16, 20 x 6, 20 x 8, 20 x 10, 20 x 12, 20 x 14, 20 x 16, 20 x 18, 22 x 6, 22 x 8, 22 x 10, 22 x 12, 22 x 14, 22 x 16, 22 x 18, 22 x 20, 24 x 6, 24 x 8, 24 x 10, 24 x 12, 24 x 14, 24 x 16, 24 x 18, 24 x 20, 24 x 22, 26 x 20, 26 x 22, 26 x 24, 28 x 20, 28 x 22, 28 x 24, 28 x 26, 30 x 22, 30 x 24, 30 x 26, 30 x 28, 32 x 24, 32 x 26, 32 x 28, 32 x 30, 34 x 30, 34 x 32, 36 x 28, 36 x 30, 36 x 32, 36 x 34	250	(1720)	a, c
Compact Concentric Reducer	Class 250	6 x 4, 8 x 4, 8 x 6, 10 x 6, 10 x 8, 12 x 6, 12 x 8, 12 x 10, 14 x 6, 14 x 8, 14 x 10, 14 x 12, 16 x 6, 16 x 8, 16 x 10, 16 x 12, 16 x 14, 18 x 6, 18 x 8, 18 x 10, 18 x 12, 18 x 14, 18 x 16, 20 x 6, 20 x 8, 20 x 10, 20 x 12, 20 x 14, 20 x 16, 20 x 18, 24 x 6, 24 x 8, 24 x 10, 24 x 12, 24 x 14, 24 x 16, 24 x 18, 24 x 20, 30 x 24, 36 x 30	250	(1720)	a, d
Compact Concentric Reducer	Class 335	6 x 2, 6 x 3, 6 x 4, 8 x 4, 8 x 6, 10 x 6, 10 x 8, 12 x 6, 12 x 8, 12 x 10, 14 x 6, 14 x 8, 14 x 10, 14 x 12, 16 x 6, 16 x 8, 16 x 10, 16 x 12, 16 x 14, 18 x 6, 18 x 8, 18 x 10, 18 x 12, 18 x 14, 18 x 16, 20 x 6, 20 x 8, 20 x 10, 20 x 12, 20 x 14, 20 x 16, 20 x 18, 22 x 6, 22 x 8, 22 x 10, 22 x 12, 22 x 14, 22 x 16, 22 x 18, 22 x 20, 24 x 6, 24 x 8, 24 x 10, 24 x 12, 24 x 14, 24 x 16, 24 x 18, 24 x 20, 24 x 22	335	(2305)	a, c
Compact Concentric Reducer	Class 335	6 x 4, 8 x 4, 8 x 6, 10 x 6, 10 x 8, 12 x 6, 12 x 8, 12 x 10, 14 x 6, 14 x 8, 14 x 10, 14 x 12, 16 x 6, 16 x 8, 16 x 10, 16 x 12, 16 x 14, 18 x 6, 18 x 8, 18 x 10, 18 x 12, 18 x 14, 18 x 16, 20 x 6, 20 x 8, 20 x 10, 20 x 12, 20 x 14, 20 x 16, 20 x 18, 24 x 6, 24 x 8, 24 x 10, 24 x 12, 24 x 14, 24 x 16, 24 x 18, 24 x 20	335	(2305)	a, d





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Model No	Product Description	Nominal Pipe Size, in	Rated Working Pressure		Remarks
			psi	(kPa)	
Machined Concentric Reducer	Class 200	6 x 2, 6 x 3, 6 x 4, 8 x 4, 8 x 6, 10 x 6, 10 x 8, 12 x 6, 12 x 8, 12 x 10, 14 x 6, 14 x 8, 14 x 10, 14 x 12, 16 x 6, 16 x 8, 16 x 10, 16 x 12, 16 x 14, 18 x 6, 18 x 8, 18 x 10, 18 x 12, 18 x 14, 18 x 16, 20 x 6, 20 x 8, 20 x 10, 20 x 12, 20 x 14, 20 x 16, 20 x 18, 22 x 6, 22 x 8, 22 x 10, 22 x 12, 22 x 14, 22 x 16, 22 x 18, 22 x 20, 24 x 6, 24 x 8, 24 x 10, 24 x 12, 24 x 14, 24 x 16, 24 x 18, 24 x 20, 24 x 22, 26 x 20, 26 x 22, 26 x 24, 28 x 20, 28 x 22, 28 x 24, 28 x 26, 30 x 22, 30 x 24, 30 x 26, 30 x 28, 32 x 24, 32 x 26, 32 x 28, 32 x 30, 34 x 30, 34 x 32, 36 x 28, 36 x 30, 36 x 32, 36 x 34	200	(1375)	a, c
Machined Concentric Reducer	Class 200	6 x 4, 8 x 4, 8 x 6, 10 x 6, 10 x 8, 12 x 6, 12 x 8, 12 x 10, 14 x 6, 14 x 8, 14 x 10, 14 x 12, 16 x 6, 16 x 8, 16 x 10, 16 x 12, 16 x 14, 18 x 6, 18 x 8, 18 x 10, 18 x 12, 18 x 14, 18 x 16, 20 x 6, 20 x 8, 20 x 10, 20 x 12, 20 x 14, 20 x 16, 20 x 18, 24 x 6, 24 x 8, 24 x 10, 24 x 12, 24 x 14, 24 x 16, 24 x 18, 24 x 20, 30 x 24, 36 x 30	200	(1375)	a, d
Machined Concentric Reducer	Class 250	6 x 2, 6 x 3, 6 x 4, 8 x 4, 8 x 6, 10 x 6, 10 x 8, 12 x 6, 12 x 8, 12 x 10, 14 x 6, 14 x 8, 14 x 10, 14 x 12, 16 x 6, 16 x 8, 16 x 10, 16 x 12, 16 x 14, 18 x 6, 18 x 8, 18 x 10, 18 x 12, 18 x 14, 18 x 16, 20 x 6, 20 x 8, 20 x 10, 20 x 12, 20 x 14, 20 x 16, 20 x 18, 22 x 6, 22 x 8, 22 x 10, 22 x 12, 22 x 14, 22 x 16, 22 x 18, 22 x 20, 24 x 6, 24 x 8, 24 x 10, 24 x 12, 24 x 14, 24 x 16, 24 x 18, 24 x 20, 24 x 22, 26 x 20, 26 x 22, 26 x 24, 28 x 20, 28 x 22, 28 x 24, 28 x 26, 30 x 22, 30 x 24, 30 x 26, 30 x 28, 32 x 24, 32 x 26, 32 x 28, 32 x 30, 34 x 30, 34 x 32, 36 x 28, 36 x 30, 36 x 32, 36 x 34	250	(1720)	a, c



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Model No	Product Description	Nominal Pipe Size, in	Rated Working Pressure		Remarks
			psi	(kPa)	
Machined Concentric Reducer	Class 250	6 x 4, 8 x 4, 8 x 6, 10 x 6, 10 x 8, 12x 6, 12 x 8, 12 x 10, 14 x 6, 14 x 8, 14 x 10, 14 x 12, 16 x 6, 16 x 8, 16 x10, 16 x 12, 16 x 14, 18 x 6, 18 x 8, 18 x 10, 18 x 12, 18 x 14, 18 x 16, 20 x6, 20 x 8, 20 x 10, 20 x 12, 20 x 14, 20 x 16, 20 x 18, 24 x 6, 24 x 8, 24 x10, 24 x 12, 24 x 14, 24 x 16, 24 x 18, 24 x 20, 30 x 24, 36 x 30	250	(1720)	a, d
Machined Concentric Reducer	Class 335	6 x 2, 6 x 3, 6 x 4, 8 x 4, 8 x 6, 10 x6, 10 x 8, 12 x 6, 12 x 8, 12 x 10, 14 x 6, 14 x 8, 14 x 10, 14 x 12, 16 x 6,16 x 8, 16 x 10, 16 x 12, 16 x 14, 18 x 6, 18 x 8, 18 x 10, 18 x 12, 18 x 14,18 x 16, 20 x 6, 20 x 8, 20 x 10, 20 x 12, 20 x 14, 20 x 16, 20 x 18, 22 x 6,22 x 8, 22 x 10, 22 x 12, 22 x 14, 22 x 16, 22 x 18, 22 x 20, 24 x 6, 24 x 8,24 x 10, 24 x 12, 24 x 14, 24 x 16, 24 x 18, 24 x 20, 24 x 22	335	(2305)	a, c
Machined Concentric Reducer	Class 335	6 x 4, 8 x 4, 8 x 6, 10 x 6, 10 x 8, 12x 6, 12 x 8, 12 x 10, 14 x 6, 14 x 8, 14 x 10, 14 x 12, 16 x 6, 16 x 8, 16 x10, 16 x 12, 16 x 14, 18 x 6, 18 x 8, 18 x 10, 18 x 12, 18 x 14, 18 x 16, 20 x 6, 20 x 8, 20 x 10, 20 x 12, 20 x 14, 20 x 16, 20 x 18, 24 x 6, 24 x 8, 24 x10, 24 x 12, 24 x 14, 24 x 16, 24 x 18, 24 x 20	335	(2305)	a, d
Fabricated Concentric Reducer (Shortened Version)	Class 335	10 x 8, 12 x 10, 14 x 12, 16 x 14, 18 x 16, 20 x 18	335	(2305)	a, d
Flange Adapter, Molded	Class 200	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24	200	(1375)	a, b, c
Flange Adapter, Molded	Class 250	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24	250	(1720)	a, b, c
Flange Adapter, Molded	Class 335	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24	335	(2305)	a, b, c
Flange Adapter, Machined	Class 200	26, 28,30, 32, 34, 36	200	(1375)	a, b, c



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Model No	Product Description	Nominal Pipe Size, in	Rated Working Pressure		Remarks
			psi	(kPa)	
Flange Adapter, Machined	Class 250	26, 28,30, 32, 34, 36	250	(1720)	a, b, c
Fabricated Beveled Flange Adapter	Class 200	2, 3, 4, 6, 8, 10,12, 14, 16, 18, 20,22, 24	200	(1375)	a, b, c
Fabricated Beveled Flange Adapter	Class 250	2, 3, 4, 6, 8, 10,12, 14, 16, 18, 20,22, 24	250	(1720)	a, b, c
Fabricated Beveled Flange Adapter	Class 335	6, 8, 10	335	(2305)	a, b, c, d
Fabricated Beveled Flange Adapter	Class 200	4, 6, 8, 10,12, 14, 16, 18, 20, 24	200	(1375)	a, b, d
Fabricated Beveled Flange Adapter	Class 250	4, 6, 8, 10,12, 14, 16, 18, 20, 24	250	(1720)	a, b, d
Fabricated Beveled Flange Adapter	Class 335	2, 3, 4, 6, 8, 10,12, 14, 16, 18, 20,22, 24	335	(2305)	a, b, c
Flange Adapter, Molded	Class 200	4, 6, 8, 10, 12, 14 16, 18, 20, 24	200	(1375)	a, b, d
Flange Adapter, Molded	Class 250	4, 6, 8, 10, 12, 14 16, 18, 20, 24	250	(1720)	a, b, d
Flange Adapter, Molded	Class 335	4, 6, 8, 10, 12, 14 16, 18, 20, 24	335	(2305)	a, b, d
Flange Adapter, Machined	Class 200	30, 36	200	(1375)	a, b, d
Flange Adapter, Machined	Class 250	30, 36	250	(1720)	a, b, d
Ductile Iron Backup Rings	Class 200	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24	200	(1375)	b, c



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Model No	Product Description	Nominal Pipe Size, in	Rated Working Pressure		Remarks
			psi	(kPa)	
Ductile Iron Backup Rings	Class 250	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24	250	(1720)	b, c
Ductile Iron Backup Rings (Domestic)	Class 335	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24	335	(2305)	b, c
Ductile Iron Backup Rings (Import)	Class 335	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24	335	(2305)	b, c
Convuluted Ductile Iron Backup Rings	Class 200	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36	200	(1375)	b, c
Convuluted Ductile Iron Backup Rings	Class 250	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 36	250	(1720)	b, c
Convuluted Ductile Iron Backup Rings	Class 335	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24	335	(2305)	b, c
Stainless Steel Backup Rings	Class 200	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36	200	(1375)	b, c
Stainless Steel Backup Rings	Class 250	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 28, 30	250	(1720)	b, c
Stainless Steel Backup Rings	Class 335	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24	335	(2305)	b, c
Carbon Steel Lap Joint Flange	Class 200	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36	200	(1375)	b, c
Carbon Steel Lap Joint Flange	Class 250	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36	250	(1720)	b, c
Carbon Steel Lap Joint Flange	Class 335	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24	335	(2305)	b, c
Ductile Iron Backup Rings	Class 200	4, 6, 8, 10, 12, 14, 16, 18, 20, 24	200	(1375)	b, d
Ductile Iron Backup Rings	Class 250	4, 6, 8, 10, 12, 14, 16, 18, 20, 24	250	(1720)	b, d



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Model No	Product Description	Nominal Pipe Size, in	Rated Working Pressure		Remarks
			psi	(kPa)	
Ductile Iron Backup Rings (Domestic)	Class 335	4, 6, 8, 10, 12, 14, 16, 18, 20, 24	335	(2305)	b, d
Ductile Iron Backup Rings (Import)	Class 335	4, 6, 8, 10, 12, 14, 16, 18, 20, 24	335	(2305)	b, d
Convuluted Ductile Iron Backup Rings	Class 200	4, 6, 8, 10, 12, 14, 16, 18, 20, 24, 30, 36	200	(1375)	b, d
Convuluted Ductile Iron Backup Rings	Class 250	4, 6, 8, 10, 12, 14, 16, 18, 20, 24, 30, 36	250	(1720)	b, d
Stainless Steel Backup Rings	Class 200	4, 6, 8, 10, 12, 14, 16, 18, 20, 24, 30, 36	200	(1375)	b, d
Stainless Steel Backup Rings	Class 250	4, 6, 8, 10, 12, 14, 16, 18, 20, 24, 30	250	(1720)	b, d
Stainless Steel Backup Rings	Class 335	4, 6, 8, 10, 12, 14, 16, 18, 20, 24	335	(2305)	b, d
Carbon Steel Lap Joint Flange	Class 200	4, 6, 8, 10, 12, 14, 16, 18, 20, 24, 30, 36	200	(1375)	b, d
Carbon Steel Lap Joint Flange	Class 250	4, 6, 8, 10, 12, 14, 16, 18, 20, 24, 30, 36	250	(1720)	b, d
Carbon Steel Lap Joint Flange	Class 335	4, 6, 8, 10, 12, 14, 16, 18, 20, 24	335	(2305)	b, d



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Model No	Product Description	Nominal Pipe Size, in	Rated Working Pressure		Remarks
			psi	(kPa)	
Branch Saddle Reducing Tee	Class 200	3 x 2, 4 x 2, 4 x 3, 6 x 2, 6 x 3, 6 x 4, 8 x 2, 8 x 3, 8 x 4, 8 x 6, 10 x 2, 10 x 3, 10 x 4, 10 x 6, 10 x 8, 12 x 2, 12 x 3, 12 x 4, 12 x 6, 12 x 8, 12 x 10, 14 x 2, 14 x 3, 14 x 4, 14 x 6, 14 x 8, 14 x 10, 16 x 2, 16 x 3, 16 x 4, 16 x 6, 16 x 8, 16 x 10, 16 x 12, 18 x 2, 18 x 3, 18 x 4, 18 x 6, 18 x 8, 18 x 10, 18 x 12, 20 x 6, 20 x 8, 20 x 10, 20 x 12, 20 x 16, 22 x 6, 24 x 6, 24 x 8, 24 x 10, 24 x 12, 24 x 16	200	(1375)	a, c
Branch Saddle Reducing Tee	Class 250	3 x 2, 4 x 2, 4 x 3, 6 x 2, 6 x 3, 6 x 4, 8 x 2, 8 x 3, 8 x 4, 8 x 6, 10 x 2, 10 x 3, 10 x 4, 10 x 6, 10 x 8, 12 x 2, 12 x 3, 12 x 4, 12 x 6, 12 x 8, 12 x 10, 14 x 2, 14 x 3, 14 x 4, 14 x 6, 14 x 8, 14 x 10, 16 x 2, 16 x 3, 16 x 4, 16 x 6, 16 x 8, 16 x 10, 16 x 12, 18 x 2, 18 x 3, 18 x 4, 18 x 6, 18 x 8, 18 x 10, 18 x 12, 20 x 6, 20 x 8, 20 x 10, 20 x 12, 20 x 16, 22 x 6, 24 x 6, 24 x 8, 24 x 10, 24 x 12, 24 x 16	250	(1720)	a, c
Branch Saddle Reducing Tee	Class 335	8 x 6, 10 x 6, 10 x 8, 12 x 6, 12 x 8, 12 x 10, 14 x 6, 14 x 8, 14 x 10, 16 x 6, 16 x 8, 16 x 10, 16 x 12, 18 x 6, 18 x 8, 18 x 10, 18 x 12, 20 x 6, 20 x 8, 20 x 10, 20 x 12, 24 x 6, 24 x 8, 24 x 10, 24 x 12	335	(2305)	a, c, d



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Model No	Product Description	Nominal Pipe Size, in	Rated Working Pressure		Remarks
			psi	(kPa)	
Branch Saddle Reducing Tee	Class 200	6 x 4, 8 x 4, 8 x 6, 10 x 4, 10 x 6, 10 x 8, 12 x 4, 12 x 6, 12 x 8, 12 x 10, 14 x 4, 14 x 6, 14 x 8, 14 x 10, 16 x 4, 16 x 6, 16 x 8, 16 x 10, 16 x 12, 18 x 4, 18 x 6, 18 x 8, 18 x 10, 18 x 12, 20 x 6, 20 x 8, 20 x 10, 20 x 12, 24 x 6, 24 x 8, 24 x 10, 24 x 12	200	(1375)	a, d
Branch Saddle Reducing Tee	Class 250	6 x 4, 8 x 4, 8 x 6, 10 x 4, 10 x 6, 10 x 8, 12 x 4, 12 x 6, 12 x 8, 12 x 10, 14 x 4, 14 x 6, 14 x 8, 14 x 10, 16 x 4, 16 x 6, 16 x 8, 16 x 10, 16 x 12, 18 x 4, 18 x 6, 18 x 8, 18 x 10, 18 x 12, 20 x 6, 20 x 8, 20 x 10, 20 x 12, 24 x 6, 24 x 8, 24 x 10, 24 x 12	250	(1720)	a, d
Fabricated Tee	Class 200	8, 10, 12, 14, 16, 18, 20, 22, 24	200	(1375)	a, c
Fabricated Tee	Class 250	8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36	250	(1720)	a, c
Fabricated Tee	Class 335	8, 10, 12, 14, 16, 18, 20, 22, 24	335	(2305)	a, c
Fabricated Tee	Class 200	8, 10, 12, 14, 16, 18, 20, 24	200	(1375)	a, d
Fabricated Tee	Class 250	8, 10, 12, 14, 16, 18, 20, 24, 30, 36	250	(1720)	a, d
Fabricated Tee	Class 335	8, 10, 12, 14, 16, 18, 20, 24	335	(2305)	a, d
Fabricated ≤90° Elbow (5 segments)	Class 200	8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36	200	(1375)	a, c



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Model No	Product Description	Nominal Pipe Size, in	Rated Working Pressure		Remarks
			psi	(kPa)	
Fabricated $\leq 90^\circ$ Elbow (5 segments)	Class 250	8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36	250	(1720)	a, c
Fabricated $\leq 90^\circ$ Elbow (5 segments)	Class 335	8, 10, 12, 14, 16, 18, 20, 22, 24	335	(2305)	a, c
Fabricated $\leq 90^\circ$ Elbow (5 segments)	Class 200	8, 10, 12, 14, 16, 18, 20, 24, 30, 36	200	(1375)	a, d
Fabricated $\leq 90^\circ$ Elbow (5 segments)	Class 250	8, 10, 12, 14, 16, 18, 20, 24, 30, 36	250	(1720)	a, d
Fabricated $\leq 90^\circ$ Elbow (5 segments)	Class 335	8, 10, 12, 14, 16, 18, 20, 24	335	(2305)	a, d
Fabricated $\leq 90^\circ$ Elbow (3 segments)	Class 200	8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36	200	(1375)	a, c
Fabricated $\leq 90^\circ$ Elbow (3 segments)	Class 250	8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36	250	(1720)	a, c
Fabricated $\leq 90^\circ$ Elbow (3 segments)	Class 335	8, 10, 12, 14, 16, 18, 20, 22, 24	335	(2305)	a, c
Fabricated $\leq 90^\circ$ Elbow (3 segments)	Class 200	8, 10, 12, 14, 16, 18, 20, 24, 30, 36	200	(1375)	a, d
Fabricated $\leq 90^\circ$ Elbow (3 segments)	Class 250	8, 10, 12, 14, 16, 18, 20, 24, 30, 36	250	(1720)	a, d
Fabricated $\leq 45^\circ$ Elbow (3 segments)	Class 200	8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36	200	(1375)	a, c
Fabricated $\leq 45^\circ$ Elbow (3 segments)	Class 250	8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36	250	(1720)	a, c
Fabricated $\leq 45^\circ$ Elbow (3 segments)	Class 335	8, 10, 12, 14, 16, 18, 20, 22, 24	335	(2305)	a, c



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Model No	Product Description	Nominal Pipe Size, in	Rated Working Pressure		Remarks
			psi	(kPa)	
Fabricated ≤45° Elbow (3 segments)	Class 200	8, 10, 12, 14, 16, 18, 20, 24, 30, 36	200	(1375)	a, d
Fabricated ≤45° Elbow (3 segments)	Class 250	8, 10, 12, 14, 16, 18, 20, 24, 30, 36	250	(1720)	a, d
Fabricated ≤45° Elbow (3 segments)	Class 335	8, 10, 12, 14, 16, 18, 20, 24	335	(2305)	a, d
Fabricated ≤45° Elbow (2 segments)	Class 200	8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36	200	(1375)	a, c
Fabricated ≤45° Elbow (2 segments)	Class 250	8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36	250	(1720)	a, c
Fabricated ≤45° Elbow (2 segments)	Class 335	8, 10, 12, 14, 16, 18, 20, 22, 24	335	(2305)	a, c
Fabricated ≤45° Elbow (2 segments)	Class 200	8, 10, 12, 14, 16, 18, 20, 24, 30, 36	200	(1375)	a, d
Fabricated ≤45° Elbow (2 segments)	Class 250	8, 10, 12, 14, 16, 18, 20, 24, 30, 36	250	(1720)	a, d
Mechanical Joint Adapter	Class 200	2, 3, 4, 6, 8, 10, 12, 14, 16, 18	200	(1375)	a, b, c
Mechanical Joint Adapter	Class 250	2, 3, 4, 6, 8, 10, 12, 14, 16, 18	250	(1720)	a, b, c
Mechanical Joint Adapter	Class 200	4, 6, 8, 10, 12, 14, 16, 18	200	(1375)	a, b, d
Mechanical Joint Adapter	Class 250	4, 6, 8, 10, 12, 14, 16, 18	250	(1720)	a, b, d
Fabricated Mechanical Joint Adapter	Class 200	3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 24	200	(1375)	a, c



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Model No	Product Description	Nominal Pipe Size, in	Rated Working Pressure		Remarks
			psi	(kPa)	
Fabricated Mechanical Joint Adapter	Class 250	3, 4, 6, 8, 10, 12, 14, 16, 18	250	(1720)	a, c
Fabricated Mechanical Joint Adapter	Class 200	4, 6, 8, 10, 12, 14, 16, 18, 20, 24	200	(1375)	a, d
Fabricated Mechanical Joint Adapter	Class 250	4, 6, 8, 10, 12, 14, 16, 18	250	(1720)	a, d
Wall Anchor	Class 200	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24	200	(1375)	a, c
Wall Anchor	Class 250	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24	250	(1720)	a, c
Wall Anchor	Class 335	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24	335	(2305)	a, c
Wall Anchor	Class 200	4, 6, 8, 10, 12, 14, 16, 18, 20, 24	200	(1375)	a, d
Wall Anchor	Class 250	4, 6, 8, 10, 12, 14, 16, 18, 20, 24	250	(1720)	a, d
Wall Anchor	Class 335	4, 6, 8, 10, 12, 14, 16, 18, 20, 24	335	(2305)	a, d
Fabricated Wall Anchor	Class 200	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24	200	(1375)	a, c
Fabricated Wall Anchor	Class 250	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24	250	(1720)	a, c
Fabricated Wall Anchor	Class 335	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20	335	(2305)	a, c
Fabricated Wall Anchor	Class 200	4, 6, 8, 10, 12, 14, 16, 18, 20, 24	200	(1375)	a, d



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Model No	Product Description	Nominal Pipe Size, in	Rated Working Pressure		Remarks
			psi	(kPa)	
Fabricated Wall Anchor	Class 250	4, 6, 8, 10, 12, 14, 16, 18, 20, 24	250	(1720)	a, d
Stub End	Class 335	2, 3, 4, 6, 8, 10, 12, 14	335	(2305)	a, c
Stub End	Class 335	4, 6, 8, 10, 12, 14	335	(2305)	a, d
Reducing Flanges	Class 250	8 x 6, 10 x 8, 12 x 10, 14 x 12, 16 x 14, 18 x 16	250	(1720)	a, b, c, d
Reducing Flanges	Class 335	6 x 4, 8 x 6, 10 x 8, 12 x 10, 14 x 12, 16 x 14, 18 x 16, 20 x 18, 22 x 20, 24 x 20, 24 x 22, 26 x 24	335	(2305)	a, b, c
Reducing Flanges	Class 335	6 x 4, 8 x 6, 10 x 8, 12 x 10, 14 x 12, 16 x 14, 18 x 16, 20 x 18, 24 x 20, 26 x 24	335	(2305)	a, b, d
HDPE x Steel Weld End Transition Fitting	Class 200	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 24	200	(1375)	a, c
HDPE x Steel Weld End Transition Fitting	Class 250	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 24	250	(1720)	a, c
HDPE x Steel Weld End Transition Fitting	Class 335	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 24	335	(2305)	a, c
Fabricated HDPE x Steel Weld End Transition Fitting	Class 200	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20	200	(1375)	a, c
Fabricated HDPE x Steel Weld End Transition Fitting	Class 250	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24	250	(1720)	a, c
Fabricated HDPE x Steel Weld End Transition Fitting	Class 335	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24	335	(2305)	a, c
HDPE x Male Threaded Transition (Brass/SS)	Class 200	2, 3, 4	200	(1375)	a, c



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Model No	Product Description	Nominal Pipe Size, in	Rated Working Pressure		Remarks
			psi	(kPa)	
HDPE x Male Threaded Transition (Brass/SS)	Class 250	2, 3, 4	250	(1720)	a, c
HDPE x Male Threaded Transition (Brass/SS)	Class 335	2, 3, 4	335	(2305)	a, c
Electrofusion Coupling	Class 200	2, 4, 6, 8, 10, 12, 14, 16, 18, 20	200	(1375)	a, c
Electrofusion Coupling	Class 250	2, 4, 6, 8, 10, 12, 14, 16, 18, 20	250	(1720)	a, c

Remarks:

- a. Pipe and fittings may be directly connected together by the butt fusion process. Manufacturer fusion instructions must be strictly followed for a proper fusion joint. The pipe and fittings may also be joined to other FM Approved steel flanged pipe and fittings by using the listed flange adapters.
- b. Pipe and adapter, with ductile iron gland ring attached, are directly connected by the butt fusion process. Manufacturer fusion instructions must be strictly followed for a proper fusion joint. The polyethylene fitting, gland ring, gasket, and T-Head bolts are provided in a kit for field installation, which allows attachment to a compatible flange with ductile iron pipe.
- c. FM Approved in Iron Pipe Sized Diameter Basis.
- d. FM Approved in Ductile Iron Pipe Size Diameter Basis.



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