



Certificate of Compliance

This certificate is issued for the following:

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

Polyethylene Pipe and Fittings (imperial sizes)

(see attached listing)

Prepared for:

Nupi Industrie Italiane Spa
Via Stefano Ferrario 8, ZI Sud Ovest, Busto Arsizio,
Varese 21052 Italy

Approval Standard: FM 1613 (October 2022)

Approval Identification: PR466025

Approval Granted: 26 March 2024

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.

A handwritten signature in black ink, appearing to read 'D.B. Fuller', written over a horizontal line.

David B. Fuller
VP, Manager – Fire Protection
FM Approvals
One Technology Way
Norwood, MA 02062



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Model No	Product Description	Nominal Pipe Size, in	Rated Working Pressure		Remarks
			psi	(kPa)	
Pipe	SDR 11	3, 4, 5, 5 1/2, 6, 7, 8, 9, 10, 11, 12	180	(1240)	a
Pipe	SDR 11	14, 16	215	(1480)	a
Pipe	SDR 11	18	200	(1375)	a
Pipe	SDR 11	20	170	(1170)	a
Pipe	SDR 11	22	215	(1480)	a
Pipe	SDR 11	24	170	(1170)	a
Pipe	SDR 7.4	2, 2-1/2, 3	300	(2065)	a
EIME	EF Coupler, SDR11	2, 3, 4, 6, 8, 10	245	(1685)	a, b
EIME	EF Coupler, SDR11	12, 14, 16, 18, 20, 22, 24	200	(1375)	a, b
EIME	EF Coupler, SDR11	28	180	(1240)	a, b
EICOL	EF Branch Saddle, SDR11	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 28	180	(1240)	a, b
EIG	BF Elbow 90°, SDR11	2, 3, 4, 6, 8, 10, 12	200	(1375)	a, b
EIC	BF Elbow 45°, SDR11	2, 3, 4, 6, 8, 10, 12	200	(1375)	a, b
EIT	BF Tee, SDR11	2, 3	180	(1240)	a, b
EIT	BF Tee, SDR11	4, 6, 8, 10, 12	200	(1375)	a, b
EIR	BF Concentric Reducer, SDR11	4 x 2, 3 6 x 3, 4 8 x 4, 6 10 x 6, 8 12 x 6, 8, 10 14 x 10, 12	200	(1375)	a, b
EIR	BF Concentric Reducer, SDR11	16 x 12, 14 18 x 16 20 x 16, 18 22 x 18, 20	170	(1170)	a, b
EICRT	BF Stub End, SDR11	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24	200	(1375)	a, b
FLAVN	Backing Ring, SDR11	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24	200	(1375)	a



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Model No	Product Description	Nominal Pipe Size, in	Rated Working Pressure		Remarks
			psi	(kPa)	
HICRT	BF Stub End Long Spigot, SDR9	4, 6, 8, 10, 12, 14, 16, 18, 20, 24	250	(1720)	a, b
HIG	BF Elbow 90°, SDR9	4, 6, 8, 10, 12	250	(1720)	a, b
HIC	BF Elbow 45°, SDR9	4, 6, 8, 10, 12	250	(1720)	a, b
HIT	BF Tee, SDR9	4, 6, 8	250	(1720)	a, b
HIR	BF Concentric Reducer, SDR9	4 x 2, 3 6 x 3, 4 8 x 4, 6 10 x 6, 8 12 x 6, 8, 10 14 x 10, 12 16 x 12, 14	250	(1720)	a, b
GIME	EF Coupler, SDR7	4, 6, 8, 10, 12, 14, 16, 18, 20	335	(2305)	a, b
GIR	BF Concentric Reducer, SDR7	4 x 2, 3 6 x 3, 4 8 x 4, 6 10 x 6, 8 12 x 6, 8, 10 14 x 10, 12 16 x 12, 14 18 x 16 20 x 16, 18 24 x 16, 18, 22	335	(2305)	a, b
GICRT	BF Stub End, SDR7	2, 3	290	(1995)	a, b
GICRT	BF Stub End, SDR7	4, 6, 8, 10, 12, 14, 16, 18, 20, 24	335	(2305)	a, b
FLAVN	Backing Ring, SDR7	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20	335	(2305)	a

a. Iron Pipe Size (IPS) outside diameter basis.
b. Injection molded.



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Model No	Product Description	Nominal Pipe Size, mm	Rated Working Pressure	
			bar	(psi)
Pipe	SDR 11	90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315	12.75	(180)
Pipe	SDR 11	355, 400	15	(215)
Pipe	SDR 11	450	14	(200)
Pipe	SDR 11	500	12	(170)
Pipe	SDR 11	560	15	(215)
Pipe	SDR 11	630	12	(170)
Pipe	SDR 7.4	50, 63, 75	20.9	(300)
EME	EF Coupler, SDR11	63, 75	16	(230)
EME	EF Coupler, SDR11	90, 110, 125, 140, 160, 180, 200, 225, 250, 280	17	(245)
EME	EF Coupler, SDR11	315, 355, 400, 450, 500, 560, 630	12.75	(180)
ERDE	EF Reducer, SDR11	75 x 63 90 x 63 110 x 63, 90	16	(230)
ERDE	EF Reducer, SDR11	125 x 63, 90, 110 160 x 90, 110, 125 200 x 160, 180 225 x 160, 180, 200 250 x 180, 200, 225 315 x 250, 280	12	(170)
EGEM	EF Elbow 90°, SDR11	63	16	(230)
EGEM	EF Elbow 90°, SDR11	75, 90, 110, 125, 160, 200, 225, 250	12	(170)
ECEM	EF Elbow 45°, SDR11	63	16	(230)
ECEM	EF Elbow 45°, SDR11	75, 90, 110, 125, 160, 200, 225, 250	12	(170)
ETCE	EF Tee (Spigot Branch), SDR11	63, 75, 90, 110	12	(170)



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Model No	Product Description	Nominal Pipe Size, mm	Rated Working Pressure	
			bar	(psi)
ECALE	EF Cap, SDR11	63	16	(230)
ECOL	EF Branch Saddle, SDR11	90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315, 355, 400, 450, 500, 560, 630	12.75	(180)
ECALC	BF Cap, SDR11	90, 110, 125, 140, 160, 180, 200, 315, 355, 400, 450, 500	12	(170)
ERD	BF Reducer, SDR11	110 x 90 125 x 90,110 140 x 90,110,125 140 x 90,110,125 160 x 90,110,125,140 180 x 125,160 200 x 160,180 225 x 160,180,200 250 x 180,200,225 280 x 200,225,250 315 x 225,250,280 355 x 250,280,315 400 x 315,355 450 x 355 500 x 355,400,450 560 x 450,500	12	(170)
EG	BF Elbow 90°, SDR11	90, 110, 125, 140, 160, 180, 200, 225, 250	12.75	(180)
EG	BF Elbow 90°, SDR11	315	12	(170)
EC	BF Elbow 45°, SDR11	90, 110, 125, 140, 160, 180, 200, 225, 250	12.75	(180)
EC	BF Elbow 45°, SDR11	315	12	(170)
ETCE	BF Tee, SDR11	90, 110, 125, 140, 160, 180, 200, 225, 250, 315	12.75	(180)



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Model No	Product Description	Nominal Pipe Size, mm	Rated Working Pressure	
			bar	(psi)
ETRA	BF Reducing Tee, SDR11	110 x 90 125 x 90,110 140 x 90,110,125 160 x 90,110,125,140 180 x 125,160 200 x 160,180 225 x 160,180,200 250 x 180,200,225 280 x 200,225,250 315 x 225,250,280 355 x 250,280,315 400 x 315,355 450 x 355 500 x 355,400,450 560 x 450,500	12	(170)
ECRT	BF Stub End, SDR11	90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315, 355, 400, 450, 500, 560, 630	12.75	(180)
ERPEAL	PE/Steel Plain Transition Fitting, SDR11	75, 90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315	12.75	(180)
ERPEAF	PE/Steel Threaded Transition Fitting, SDR11	63, 75, 90, 110, 125	12.75	(180)
ERPEARCZ	PE/Steel Coated Threaded Transition Fitting, SDR11	63, 75, 90, 110	12.75	(180)
ERTCFZ	PE/Steel Threaded Curved Transition Fitting, SDR11	63, 75, 90	12.75	(180)
ERFM	PE/Brass Male Threaded Transition Fitting, SDR11	63, 75, 90, 110, 125	12.75	(180)
ERFF	PE/Brass Female Threaded Transition Fitting, SDR11	63, 75, 90, 110, 125	12.75	(180)



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Model No	Product Description	Nominal Pipe Size, mm	Rated Working Pressure	
			bar	(psi)
FLAAC	Galvanized Steel Flange, SDR11	63, 75, 90, 110, 125, 140, 160, 180, 225	12.75	(180)
FLAAC	Galvanized Steel Flange, SDR11	250, 280, 315	10.35	(150)
HG	BF 90° Elbow long spigot, SDR9	63, 75, 90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315	18.2	(260)
HC	BF 45° Elbow long spigot, SDR9	63, 75, 90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315	18.2	(260)
HRD	BF Reducer long spigot, SDR9	90 x 63, 75 110 x 63, 75, 90 125 x 63, 75, 90, 110 140 x 90, 110, 125 160 x 90, 110, 125, 140 180 x 125, 140, 160 200 x 140, 160, 180	18.2	(260)
HRDC	BF Reducer short spigot, SDR9	200 x 160, 180 225 x 160, 180, 200 250 x 180, 200, 225 280 x 200, 225, 250 315 x 225, 250, 280 355 x 250, 280, 315 400 x 280, 315, 355	18.2	(260)
HCAL	BF Cap long spigot, SDR9	63, 75, 90, 110, 125, 140, 160, 180, 200, 225, 250	18.2	(260)
HCALC	BF Cap short spigot, SDR9	280, 315	18.2	(260)
HCRT	BF Stub End Long Spigot, SDR9	63, 75, 90, 110, 125, 140, 160, 180, 200, 225, 250, 400	18.2	(260)
HCRTC	BF Stub End Short Spigot, SDR9	110, 125, 140, 160, 180, 400	18.2	(260)
HT	BF 90° Tee long spigot, SDR9	63, 75, 90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315	18.2	(260)



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Model No	Product Description	Nominal Pipe Size, mm	Rated Working Pressure	
			bar	(psi)
HTRA	BF Reducing Tee spigot, SDR9	315 x 63, 75, 90, 110, 125, 140, 160, 200, 250 355 x 90, 125, 140, 160, 200, 250 400 x 90, 125, 140, 160, 200, 250, 315	18.2	(260)
GME	EF Couplers, SDR7.4	50, 63, 75, 90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315, 355, 400	21.3	(305)

All fittings are injection molded.



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