



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:

AGRU Kunststofftechnik GmbH
Ing. Pesendorferstr. 31
Bad Hall A-4540
Austria

Manufactured at:

AGRU Kunststofftechnik GmbH
Ing Pesendorfer Str 31
Bad Hall, A-4540
Austria

Approval Standard: FM 1613 (October 2022)

Approval Identification: 3058544
Revision Request: RR235432

Approval Granted: June 28, 2017
Date Authorized: February 21, 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.

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, mm	Rated Working Pressure	
			bar	(psi)
70.068	90° Elbow long spigot (Multibend)	63, 75, 90, 110, 125, 140, 160, 180, 200, 225	15	(215)
70.061	90° Elbow long spigot	63, 75, 90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315	15	(215)
70.060	45° Elbow, long spigot	63, 75, 90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315	15	(215)
70.001	90° Elbow, short spigot	63, 75, 90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315, 355, 400, 450, 500	15	(215)
70.066	Equal Tee, long spigot	63, 75, 90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315, 355, 400	15	(215)
70.036	Equal 45° Tee, long spigot	63, 75, 90, 110, 125, 140, 160, 180, 200, 225	15	(215)
70.065	Reducing Tee, long spigot	63 x 50, 73 x 63 90 x (63, 75) 110 x (63, 75, 90) 125 x (63,75, 90,110) 160 x (63, 75, 90,110) 180 x (90,110,160) 200 x (63,90,110, 125,160) 225 x (75,90,110,160,180) 250 x (75, 110, 160, 180, 200) 315 x (90, 110, 125, 160, 180, 200, 225, 250) 400 x (110, 160, 200, 225, 250, 315) 500 x 200	15	(215)
70.006	Equal Tee, short spigot	63,75,90,110, 125, 140, 160, 180, 200, 225, 250, 280, 315, 355, 400, 450, 500	15	(215)



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Model No	Product Description	Nominal Pipe Size, mm	Rated Working Pressure	
			bar	(psi)
70.016	Reducing Tee, short spigot	125 x 63 140 x (63,75,90,110) 160 x 125 180 x (63,75,125), 225 x 125 250 x (110,160)	15	(215)
70.307	Reducing Tee, short spigot machined	560 x (140,160,180,200,225,250,315, 355, 560) 630 x (90, 110, 140, 160, 180, 200, 225, 250, 280, 315, 355, 400, 500, 630)	15	(215)
70.062	Stub Flange, long spigot (DIN Standard)	63,75,90,110, 125, 140, 160, 180, 200, 225, 250, 315, 355, 400	15	(215)
70.012	Stub Flange, short spigot, (DIN Standard)	63, 75, 90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315, 355, 400, 450, 500, 560, 630	15	(215)
70.012.1	Stub Flange, short spigot, (ANSI Standard)	63, 75, 90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315, 355, 400, 450, 500, 560, 630	15	(215)
70.012.7 70.012.9 70.062.7 70.062.9	Chamfered stub flange DIN+ANSI	90, 110, 140, 160, 180, 200, 225, 250, 280, 315, 355, 400, 450, 500, 630	15	(215)
70.362	Stub Flange, Special Dimensions, bore pattern PN 10	160 x 125, 180 x 125, 200 x 150, 250 x 200, 315 x 250, 355 x 300, 400 x 350, 450 x 400, 560 x 500	15	(215)
70.362	Stub Flange, Special Dimensions, bore pattern PN 16	300, 400 x 350, 450 x 400, 560 x 500, 710 x 600	15	(215)
14.014	Backing Ring - DIN	63, 90, 110, 125, 140, 160, 180, 200, 225, 250, 315, 355, 400, 450, 500, 560, 630	15	(215)



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Model No	Product Description	Nominal Pipe Size, mm	Rated Working Pressure	
			bar	(psi)
14.013	Backing Ring - ANSI	63, 75, 90, 110, 125, 140, 160, 180, 200, 225, 250, 280 315, 355, 400, 450, 500, 560, 630	15	(215)
11.043	Blind Flange	63, 90, 110, 125, 140, 160, 180, 225, 250, 315	15	(215)
70.067	Concentric Reducer, long spigot	90 x 63 110 x (63,90) 125 x (63, 90,110) 140 x 125 160 x (90,110,125,140) 180 x (125,160) 200 x 160 225 x 160 250 x (160,225) 280 x 250 315 x (225,250)	15	(215)
70.069	Eccentric Reducer, long spigot	75/63, 90/63, 90/75,110/63, 110/90, 125/63, 125/90, 125/110, 140/125, 160/90, 160/110, 160/125, 160/140, 180/90, 180/125, 180/160, 200/160, 200/180, 225/160, 225/180,225/200, 250/200, 250/225	15	(215)
70.009	Concentric Reducer, short spigot	75 x 63 90 x (63, 75) 110 x (63, 75, 90) 125 x (63, 75, 90, 110) 140 x (75, 90, 110, 125) 160 x (90, 110, 125,140) 180 x (90,110,125, 140, 160, 180) 200 x (140, 160, 180) 225 x (140, 160, 180, 200) 250 x (160,180, 200, 225) 280 x (200, 225, 250) 315 x (200, 225, 250, 280) 355 x (200, 225, 250, 280, 315) 400 x (225, 250, 315, 355) 450 x (180, 200, 280,400, 355, 315, 500) 500 x (280, 315, 355, 400, 450) 560 x (225, 500) 630 x (315, 400, 450, 500, 560)	15	(215)



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Model No	Product Description	Nominal Pipe Size, mm	Rated Working Pressure	
			bar	(psi)
70.319	Eccentric Reducer, short spigot	OD 225/110, OD 280/110, OD 280/160, OD 280/180, OD 280/200, OD 280/225, OD 315/110, OD 315/140, OD 315/180, OD 315/200, OD 315/225, OD 315/250, OD 315/280, OD 355/225, OD 355/280, OD 355/315, OD 400/160, OD 400/225, OD 400/250, OD 400/315, OD 400/355, OD 450/315, OD 450/400, OD 500/315, OD 500/400, OD 500/450, OD 560/500, OD 630/415, OD 630/450, OD 630/500, OD 630/560.	15	(215)
70.064	End Cap, long spigot	63, 75, 90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315, 355, 400	15	(215)
70.004	End Cap, short spigot	450, 500, 560, 630	15	(215)
70.328	90° Elbow Long Spigot Segmented	140, 180, 225, 250, 280, 315, 355, 400, 450, 500, 560, 630	17.5	(250)
70.061	90° Elbow Long Spigot, molded, SDR7.4 with ends machined to SDR9	63, 75, 90, 110, 125, 140, 160, 180, 200, 225	17.5	(250)
70.060	45° Elbow, long spigot Segmented	140, 160, 180, 250, 280, 315, 355, 400, 450, 500, 560, 630	17.5	(250)
70.066	Equal Tee, long spigot, Socket Weld, SDR7.4 with ends machined to SDR9	63, 75, 90, 110, 125, 140, 160, 180, 200, 225	17.5	(250)
70.326	Equal Tee, long spigot, Butt Fusion, SDR7.4 with ends machined to SDR9	250, 280, 315, 355, 400, 450, 500, 560, 630	17.5	(250)
70.307.1	Equal tee, short spigot, machined-welded	250, 280, 315, 355, 400, 450, 500, 560, 630	17.5	(250)



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Model No	Product Description	Nominal Pipe Size, mm	Rated Working Pressure	
			bar	(psi)
70.307	Reducing Tee, short spigot, machined-welded	90 x (63, 75) 110 x (63, 75, 90) 125 x (63, 75, 90) 140 x (63, 75, 90, 110, 125) 160 x (63, 75, 90, 110, 125) 180 x (63, 75, 90, 110, 125) 200 x (63, 75, 90, 110, 125, 140, 160) 225 x (63, 75, 90, 110, 125, 140, 160) 250 x (63, 75, 90, 110, 125, 140, 160, 180, 200) 280 x (63, 75, 90, 110, 125, 140, 160, 180, 200) 315 x (63, 75, 90, 110, 125, 140, 160, 180, 200, 225) 355 x (63, 75, 90, 110, 140, 160, 180, 200, 225, 250, 280, 315) 400 x (63, 75, 90, 110, 160, 180, 200, 225, 250, 280, 315) 450 x (63, 75, 90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315) 500 x (63, 75, 90, 110, 125, 140, 160, 180, 200, 225, 250, 280) 560 x (140, 160, 180, 200, 225, 250, 315) 630 x (90, 110, 140, 160, 180, 225, 250, 280, 315, 355, 400, 500)	17.5	(250)
70.062	Stub Flange, long spigot - DIN, SDR7.4 with ends machined to SDR9	63, 75, 90, 110, 125, 140, 160, 180, 200, 225	17.5	(250)
70.312(for code 292)	Stub Flange, short spigot, for high pressure flange set (DIN Standard)	63, 75, 90, 110, 125, 140, 180, 250, 280, 315, 355, 400, 450, 500, 560, 630	17.5	(250)
70.314(for Code 294)	Stub Flange, short spigot for high pressure flange set - ANSI	63, 75, 90, 110, 160, 180, 200, 225, 250, 315, 355, 400, 450, 500, 560, 630	17.5	(250)
14.014	Backing Ring - DIN, PP-FRP Encased	63, 75, 90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315, 355, 400, 450, 500, 560, 630	17.5	(250)



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Model No	Product Description	Nominal Pipe Size, mm	Rated Working Pressure	
			bar	(psi)
90.014 (for Code 292)	Backing Ring - DIN, Galvanized Steel	63, 75, 90, 110, 125, 160, 180, 200, 225, 250, 280, 315, 355, 400, 450, 500, 560, 630	17.5	(250)
14.013	Backing Ring - ANSI, PP-FRP Encased	63, 75, 90, 110/125, 160, 180, 200/225, 250/280, 315, 355, 400, 450, 500, 560, 630	17.5	(250)
90.013 (for Code 294)	Backing Ring - ANSI, Galvanized Steel	63, 75, 90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315, 355, 400, 450, 500, 560, 630	17.5	(250)
14.045	Blind Flange, DIN PP-FRP Encased	63, 90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315, 355, 400	17.5	(250)
90.045	Blind Flange, DIN, Galvanized Steel	450/500	17.5	(250)
11.045	Blind Flange, ANSI, PP-FRP Encased	63, 75, 90, 110/125, 160, 200/225, 250, 315	17.5	(250)
90.045	Blind Flange, ANSI, Galvanized Steel	355, 400, 450, 500	17.5	(250)
70.317	Concentric Reducer, short spigot	75 x (63) 90 x (63, 75) 110 x (50, 63, 75, 90) 125 x (63, 75, 90, 110) 140 x (75, 90, 110, 125) 160 x (63, 75, 90, 110, 125, 140) 180 x (90, 110, 125, 140, 160) 200 x (140, 160, 180) 225 x (140, 160, 180, 200) 250 x (160, 180, 200, 225) 280 x (160, 180, 200, 225, 250) 315 x (160, 180, 200, 225, 250, 280) 355 x (160, 180, 200, 225, 250, 280, 315) 400 x (180, 200, 225, 250, 280, 315, 355) 450 x (200, 225, 250, 280, 315, 355, 400) 500 x (315, 355, 400, 450) 560 x (315, 355, 400, 450) 630 x (355, 400, 450, 500, 560)	17.5	(250)



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Model No	Product Description	Nominal Pipe Size, mm	Rated Working Pressure	
			bar	(psi)
70.067	Concentric Reducer, Long Spigot, Butt Fusion, SDR7.4 with ends machined to SDR9	110 x (63, 90) 125 x (63, 90, 110) 160 x (90, 110, 125) 200 x 160 225 x 160 250 x (160, 225)	17.5	(250)
70.302	End Cap, short spigot	250, 280, 315, 355, 400, 450, 500, 560, 630	17.5	(250)
70.064	End Cap, long spigot, SDR7.4 with ends machined to SDR9	63, 75, 90, 110, 125, 160, 200, 225	17.5	(250)
70.171	90° Elbow	63, 75, 90, 110, 125, 160, 180, 225	15	(215)
70.170	45° Elbow	63, 75, 90, 110, 125, 160, 180, 225	15	(215)
70.176	Equal Tee	63, 75, 90, 110, 125, 160, 180, 225	15	(215)
70.175	Equal Tee Reduced	75 x 63, 90 x 50, 63, 110 x 63, 75, 90, 125 x 63, 75, 90, 110 160 x 63, 75, 90, 110, 125	15	(215)
70.288	Spigot Saddle, bottom part screwable, molded	90 x 63 110 x 63 125 x 63 140 x 63 160 x (63, 90, 110) 180 x (63, 90, 110) 225 x (63, 90, 110) 250 x (63, 75, 90, 110) 280 x (63, 90, 110) 315 x (63, 90, 110) 355 x (63, 90, 110)	17.5	(250)



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Model No	Product Description	Nominal Pipe Size, mm	Rated Working Pressure	
			bar	(psi)
70.289	Spigot Saddle System, Topload	355 x (90, 110, 125) 400 x (90, 110, 125) 450 x (90, 110, 125) 500 x (90, 110, 125) 560 x (90, 110, 125) 630 x (90, 110, 125)	15	(215)
70.177	Concentric Reducer	75 x 63 90 x 63 110 x (63, 90) 125 x 90 160 x (90, 110) 180 x 125 225 x 160	15	(215)
70.173	Equal Coupling	63, 75, 90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315, 355, 400, 450, 500, 560, 630	15	(215)
70.174	End Cap	63, 75, 90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315	15	(215)
70.171	90° Elbow	63, 75, 90, 110, 125, 140, 160, 180, 200, 225	17.5	(250)
70.170	45° Elbow	63, 75, 90, 110, 125, 140, 160, 180, 200, 225	17.5	(250)
70.176	Equal Tee	63, 90, 110, 125, 140, 160, 180, 200, 225	17.5	(250)
70.175	Equal Tee Reduced	75 x 63, 90 x 50, 90 x 63, 110 x 63, 110 x 75, 110 x 90, 125 x 63, 125 x 75, 125 x 90, 125 x 110, 160 x 63, 160 x 75, 160 x 90, 160 x 110, 160 x 125	17.5	(250)
70.289	Spigot Saddle System, Topload	355 x (90, 110, 125) 400 x (90, 110, 125) 450 x (90, 110, 125) 500 x (90, 110, 125) 560 x (90, 110, 125) 630 x (90, 110, 125)	17.5	(250)



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Model No	Product Description	Nominal Pipe Size, mm	Rated Working Pressure	
			bar	(psi)
70.177	Concentric Reducer	75 x 63 90 x 63 110 x (63, 90) 125 x (90, 110) 160 x (90, 110) 180 x 125 225 x 160	17.5	(250)
70.173	Equal Coupling	63, 75, 90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315, 355, 400, 450, 500	17.5	(250)
51.173	Equal Coupling	2, 3, 4, 5, 8, 10, 12 Inch	17.5	(250)
70.174	End Cap	63, 75, 90, 110, 125, 140, 160, 180, 200, 225, 250, 280, 315	17.5	(250)



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