

## metric sizes

**NEW!**



Agru has been at the forefront of innovation and design for over 50 years and were the first European manufacturer to achieve factory mutual (FM) approval for High Density Polyethylene (PE100) pipes and fittings for underground services.

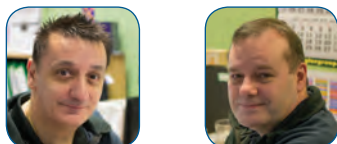
Agru now produces FM approved pipe and fittings from high quality PE100-RC resin. PE100-RC is ideal for buried applications. It has exceptional ductility and crack resistance and will withstand very unfavourable ground conditions. It is also very easy to instal using a simple butt or electro fusion welding technique.

There are 2 complete product ranges from Agru; FM1613 for 218psi (15 bar, SDR11) and for 250psi (17.5 bar, SDR9)

IPS can supply the complete range of Agru FM approved piping systems, together with documentation and welding equipment for butt and electrofusion jointing.

Comprehensive welder training is readily available by contacting:

Tony Charlton or Tom Tate on:



**0800 975 79 71**

### PE100-RC

#### FM218 PN15

Size	Code	Price/m
63	25 705 0063 11FM	10.03
75	25 705 0075 11FM	13.97
90	25 705 0090 11FM	20.03
110	25 705 0110 11FM	29.88
125	25 705 0125 11FM	38.46
140	25 705 0140 11FM	48.15
160	25 705 0160 11FM	63.36
180	25 705 0180 11FM	79.65
200	25 705 0200 11FM	117.19
225	25 705 0225 11FM	124.20
250	25 705 0250 11FM	153.57
280	25 705 0280 11FM	191.68
315	25 705 0315 11FM	243.41
355	25 705 0355 11FM	308.69
400	25 705 0400 11FM	391.05
450	25 705 0450 11FM	on application
500	25 705 0500 11FM	on application
560	25 705 0560 11FM	on application
630	25 705 0630 11FM	on application

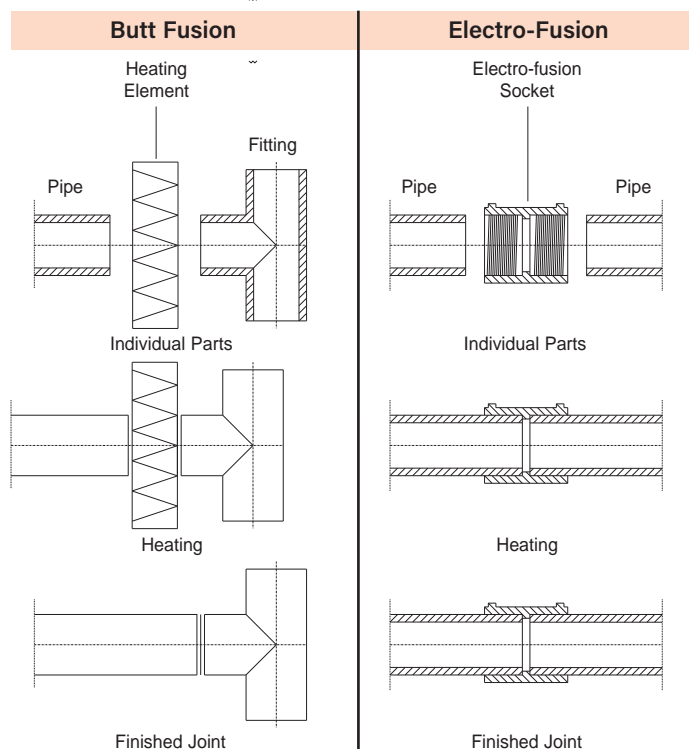
FM250 17.5 bar prices available on request.

Standard lengths 6m and 12 m

Please note that a transportation surcharge may be applied on pipe diameters 250mm or larger - please enquire for details.

### Jointing FM Approved Polyethylene Systems

PE pipe to pipe and pipe to fitting joints are easy to make, using butt fusion or electrofusion welds.



Welding equipment is available for sale or hire - see Tools and Installation Equipment. Detailed installation instructions, as well as free training, is available on request.

# FM 1613 approved PE100-RC electrofusion fittings



## Electrofusion Coupling



Size	Code	Price
63	25 173 0063 11FM	14.35
75	25 173 0075 11FM	20.46
90	25 173 0090 11FM	27.29
110	25 173 0110 11FM	32.81
125	25 173 0125 11FM	46.12
140	25 173 0140 11FM	51.94
160	25 173 0160 11FM	63.59
180	25 173 0180 11FM	91.21
200	25 173 0200 11FM	107.74
225	25 173 0225 11FM	138.78
250	25 173 0250 11FM	204.52
280	25 173 0280 11FM	276.35
315	25 173 0315 11FM	333.38
355	25 173 0355 11FM	609.45
400	25 173 0400 11FM	764.18

## Electrofusion Tee 90°

Fusion Spigot Branch



Size	Code	Price
63	25 176 0063 11FM	34.09
75	25 176 0075 11FM	47.99
90	25 176 0090 11FM	60.78
110	25 176 0110 11FM	97.40
125	25 176 0125 11FM	122.64
160	25 176 0160 11FM	227.17
180	25 176 0180 11FM	on application
225	25 176 0225 11FM	619.54

## Electrofusion Elbow 90°



Size	Code	Price
63	25 171 0063 11FM	34.09
75	25 171 0075 11FM	48.80
90	25 171 0090 11FM	60.78
110	25 171 0110 11FM	97.40
125	25 171 0125 11FM	122.64
160	25 171 0160 11FM	227.17
180	25 171 0180 11FM	on application
225	25 171 0225 11FM	619.54

## Electrofusion Elbow 45°



Size	Code	Price
63	25 170 0063 11FM	34.09
75	25 170 0075 11FM	48.80
90	25 170 0090 11FM	60.78
110	25 170 0110 11FM	97.48
125	25 170 0125 11FM	122.64
160	25 170 0160 11FM	227.17
180	25 170 0180 11FM	408.93
225	25 170 0225 11FM	619.54

## Electrofusion Reducer



Size	Code	Price
90x63	25 177 9063 11FM	45.81
110x63	25 177 1163 11FM	74.68
110x90	25 177 1190 11FM	74.68
125x90	25 177 1290 11FM	on application
160x90	25 177 1690 11FM	130.22
160x110	25 177 1611 11FM	133.54
180x125	25 177 1812 11FM	on application
225x160	25 177 2216 11FM	303.09

## Electrofusion Cap



Size	Code	Price
63	25 174 0063 11FM	29.59
75	25 174 0075 11FM	46.79
90	25 174 0090 11FM	66.10
110	25 174 0110 11FM	84.82
125	25 174 0125 11FM	104.23
140	25 174 0140 11FM	136.80
160	25 174 0160 11FM	146.41
180	25 174 0180 11FM	192.26
200	25 174 0200 11FM	227.31
225	25 174 0225 11FM	267.95
250	25 174 0250 11FM	430.99
280	25 174 0280 11FM	592.18
315	25 174 0315 11FM	736.56

## Automatic Electrofusion Welding Machine

- Barcode or manual entry
  - Welding is fully monitored throughout
    - Illuminated display
    - Fault messages displayed plus warning signal
    - Memory records weld information
    - USB Port for data output
    - 110v (230v available on request)
- Available for sale or hire



# FM 1613 approved PE100-RC fusion spigot fittings

## Tee 90°

Short Spigot



### PN15

Size	Code	Price
63	25 006 0063 11FM	13.86
75	25 006 0075 11FM	27.89
90	25 006 0090 11FM	41.65
110	25 006 0110 11FM	61.18
125	25 006 0125 11FM	84.22
140	25 006 0140 11FM	106.73
160	25 006 0160 11FM	179.56
180	25 006 0180 11FM	230.09
200	25 006 0200 11FM	329.86
225	25 006 0225 11FM	392.20
250	25 006 0250 11FM	498.97
280	25 006 0280 11FM	672.13
315	25 006 0315 11FM	958.32
355	25 006 0355 11FM	1119.99
400	25 006 0400 11FM	1672.31

## Reducing Tee 90°



### PN15

Size	Code	Price
125x63	25 016 1263 11FM	81.38
125x90	25 016 1290 11FM	81.38
140x63	25 016 1463 11FM	102.09
140x90	25 016 1490 11FM	103.76
140x110	25 016 1411 11FM	103.76
160x125	25 016 1612 11FM	172.16
180x63	25 016 1863 11FM	213.75
180x110	25 016 1811 11FM	213.75
180x125	25 016 1812 11FM	220.62
225x125	25 016 2212 11FM	372.19
250x110	25 016 2511 11FM	491.23
250x160	25 016 2516 11FM	501.38

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## Tee 90°

Elongated



Size	Code	Price
63	25 066 0063 11FM	18.66
75	25 066 0075 11FM	31.00
90	25 066 0090 11FM	44.07
110	25 066 0110 11FM	64.48
125	25 066 0125 11FM	88.52
140	25 066 0140 11FM	142.25
160	25 066 0160 11FM	184.59
180	25 066 0180 11FM	242.22
200	25 066 0200 11FM	347.14
225	25 066 0225 11FM	412.38
250	25 066 0250 11FM	532.46
280	25 066 0280 11FM	796.23
315	25 066 0315 11FM	1022.52

## Reducing Tee 90°

Elongated



Size	Code	Price
63x50	25 065 6350 11FM	19.48
90x63	25 065 9063 11FM	43.46
110x63	25 065 1163 11FM	64.45
110x90	25 065 1190 11FM	65.37
125x90	25 065 1290 11FM	89.65
125x110	25 065 1211 11FM	89.65
160x63	25 065 1663 11FM	176.23
160x90	25 065 1690 11FM	177.74
160x110	25 065 1611 11FM	182.22
180x90	25 065 1890 11FM	244.31
180x110	25 065 1811 11FM	238.48
180x160	25 065 1816 11FM	244.31
225x90	25 065 2290 11FM	413.04
225x110	25 065 2211 11FM	414.69
225x160	25 065 2216 11FM	416.18
225x180	25 065 2218 11FM	417.61
315x110	25 065 3111 11FM	1124.77
315x160	25 065 3116 11FM	1124.77
315x225	25 065 3122 11FM	1175.86
315x250	25 065 3125 11FM	1175.86



### Pressure Ratings

FM1613: 218 - 15 bar  
FM1613: 250 - 17.5 bar bar at 20°C.

# FM 1613 approved PE100-RC fusion spigot fittings

## Reducer

Concentric



PN15		
Size	Code	Price
90x63	25 009 9063 11FM	22.67
110x63	25 009 1163 11FM	28.81
110x90	25 009 1190 11FM	28.81
125x63	25 009 1263 11FM	37.02
125x90	25 009 1290 11FM	37.02
125x110	25 009 1211 11FM	37.02
140x90	25 009 1490 11FM	44.80
140x110	25 009 1411 11FM	44.80
140x125	25 009 1412 11FM	52.38
160x90	25 009 1690 11FM	52.38
160x110	25 009 1611 11FM	52.38
160x125	25 009 1612 11FM	52.38
160x140	25 009 1614 11FM	52.38
180x90	25 009 1890 11FM	82.26
180x110	25 009 1811 11FM	77.45
180x125	25 009 1812 11FM	71.42
180x140	25 009 1814 11FM	67.81
180x160	25 009 1816 11FM	64.69
225x140	25 009 2214 11FM	221.36
225x160	25 009 2216 11FM	190.01
225x180	25 009 2218 11FM	180.93
250x160	25 009 2516 11FM	253.67
250x180	25 009 2518 11FM	234.73
250x225	25 009 2522 11FM	204.79
280x200	25 009 2820 11FM	295.53
280x225	25 009 2822 11FM	275.54
280x250	25 009 2825 11FM	265.30
315x225	25 009 3122 11FM	318.96
315x250	25 009 3125 11FM	291.55

## Cap

Elongated



PN15		
Size	Code	Price
63	25 064 0063 11FM	13.83
75	25 064 0075 11FM	21.30
90	25 064 0090 11FM	32.50
110	25 064 0110 11FM	44.07
125	25 064 0125 11FM	47.61
140	25 064 0140 11FM	59.55
160	25 064 0160 11FM	66.73
180	25 064 0180 11FM	86.73
200	25 064 0200 11FM	108.57
225	25 064 0225 11FM	129.02
250	25 064 0250 11FM	193.28
280	25 064 0280 11FM	273.81
315	25 064 0315 11FM	369.17

## Cap

Short Spigot

Size	Code	Price
355	25 004 0355 11FM	274.56
400	25 004 0400 11FM	369.17

## Reducer

Concentric - Elongated



Size	Code	Price
90x63	25 067 9063 11FM	23.14
110x63	25 067 1163 11FM	31.14
110x90	25 067 1190 11FM	31.14
125x63	25 067 1263 11FM	37.39
125x90	25 067 1290 11FM	37.39
125x110	25 067 1211 11FM	37.44
140x125	25 067 1412 11FM	53.81
160x90	25 067 1690 11FM	71.84
160x110	25 067 1611 11FM	72.06
160x125	25 067 1612 11FM	72.06
160x140	25 067 1614 11FM	69.68
180x125	25 067 1812 11FM	93.38
180x160	25 067 1816 11FM	93.38
225x160	25 067 2216 11FM	164.61
250x160	25 067 2516 11FM	222.59
250x225	25 067 2522 11FM	232.84
280x250	25 067 2825 11FM	310.29
315x225	25 067 3122 11FM	399.22
315x250	25 067 3125 11FM	399.22

## Machine Hire

Don't have the tools?  
We have a dedicated fleet of  
welding equipment available to  
hire on a weekly basis.



# FM 1613 approved PE100-RC fusion spigot fittings

## Bend 90°



### PN15

Size	Code	Price
250	25 001 0250 11FM	368.53
280	25 001 0280 11FM	477.40
315	25 001 0315 11FM	661.48
355	25 001 0355 11FM	967.60
400	25 001 0400 11FM	1328.79

## Bend 60°

Elongated



### PN15

Size	Code	Price
90	25 398 0090 11FM	
110	25 398 0110 11FM	
125	25 398 0125 11FM	
140	25 398 0140 11FM	
160	25 398 0160 11FM	
180	25 398 0180 11FM	on application
200	25 398 0200 11FM	
225	25 398 0225 11FM	
250	25 398 0250 11FM	
280	25 398 0280 11FM	
315	25 398 0315 11FM	

## Multi-Bend 90°

Elongated



Size	Code	Price
63	25 068 0063 11FM	12.24
75	25 068 0075 11FM	16.86
90	25 068 0090 11FM	24.49
110	25 068 0110 11FM	46.58
125	25 068 0125 11FM	65.63
140	25 068 0140 11FM	87.77
160	25 068 0160 11FM	106.93
180	25 068 0180 11FM	126.63
200	25 068 0200 11FM	188.67
225	25 068 0225 11FM	225.02

## Bend 45°

Elongated



Size	Code	Price
90	25 397 0090 11FM	88.05
110	25 397 0110 11FM	167.60
125	25 397 0125 11FM	on application
140	25 397 0140 11FM	on application
160	25 397 0160 11FM	248.58
180	25 397 0180 11FM	300.47
200	25 397 0200 11FM	on application
225	25 397 0225 11FM	384.94
250	25 397 0250 11FM	602.09
280	25 397 0280 11FM	on application
315	25 397 0315 11FM	on application

## Elbow 90°

Elongated



Size	Code	Price
250	25 061 0250 11FM	390.24
280	25 061 0280 11FM	587.60
315	25 061 0315 11FM	737.30

## Bend 30°

Elongated



Size	Code	Price
90	25 396 0090 11FM	88.05
110	25 396 0110 11FM	167.60
125	25 396 0125 11FM	on application
140	25 396 0140 11FM	on application
160	25 396 0160 11FM	265.88
180	25 396 0180 11FM	300.47
200	25 396 0200 11FM	on application
225	25 396 0225 11FM	384.94
250	25 396 0250 11FM	585.20
280	25 396 0280 11FM	on application
315	25 396 0315 11FM	on application

## Elbow 45°

Elongated



Size	Code	Price
63	25 060 0063 11FM	20.27
75	25 060 0075 11FM	26.15
90	25 060 0090 11FM	31.55
110	25 060 0110 11FM	60.50
125	25 060 0125 11FM	74.73
140	25 060 0140 11FM	97.77
160	25 060 0160 11FM	113.02
180	25 060 0180 11FM	123.71
200	25 060 0200 11FM	169.09
225	25 060 0225 11FM	201.48
250	25 060 0250 11FM	390.24
280	25 060 0280 11FM	587.58
315	25 060 0315 11FM	737.30

## Bend 22°

Elongated



Size	Code	Price
90	25 395 0090 11FM	88.05
110	25 395 0110 11FM	167.60
125	25 395 0125 11FM	on application
140	25 395 0140 11FM	on application
160	25 395 0160 11FM	248.58
180	25 395 0180 11FM	300.47
200	25 395 0200 11FM	on application
225	25 395 0225 11FM	384.94
250	25 395 0250 11FM	602.09
280	25 395 0280 11FM	on application
315	25 395 0315 11FM	on application

## Bend 11°

Elongated



Size	Code	Price
90	25 394 0090 11FM	88.05
110	25 394 0110 11FM	167.60
125	25 394 0125 11FM	on application
140	25 394 0140 11FM	on application
160	25 394 0160 11FM	248.58
180	25 394 0180 11FM	300.47
200	25 394 0200 11FM	on application
225	25 394 0225 11FM	384.94
250	25 394 0250 11FM	602.09
280	25 394 0280 11FM	on application
315	25 394 0315 11FM	on application

# FM 1613 approved PE100-RC fusion spigot fittings

## Stub Flange



PN15		
Size	Code	Price
63	25 012 0063 11FM	8.12
75	25 012 0075 11FM	9.57
90	25 012 0090 11FM	13.72
110	25 012 0110 11FM	17.65
125	25 012 0125 11FM	21.29
140	25 012 0140 11FM	24.90
160	25 012 0160 11FM	31.37
180	25 012 0180 11FM	48.74
200	25 012 0200 11FM	53.64
225	25 012 0225 11FM	59.77
250	25 012 0250 11FM	90.70
280	25 012 0280 11FM	98.85
315	25 012 0315 11FM	116.77
355	25 012 0355 11FM	207.28
400	25 012 0400 11FM	408.35

## Backing Ring

Polypropylene with Steel Core



PN10		
Size	Code	Price
63	14 014 0063 11*	21.72
75	14 014 0075 11*	24.12
90	14 014 0090 11*	28.50
110	14 014 0110 11*	33.87
125	14 014 0125 11*	33.87
140	14 014 0140 11*	52.17
160	14 014 0160 11*	59.75
180	14 014 0180 11*	59.75
200	14 014 0200 11*	85.06
225	14 014 0225 11*	85.06
250	14 014 0250 11*	135.83
280	14 014 0280 11*	135.83
315	14 014 0315 11*	170.68
355	14 014 0355 11*	359.51
400	14 014 0400 11*	407.30

\*Black

## Stub Flange

Elongated



Size	Code	Price
63	25 062 0063 11FM	10.94
75	25 062 0075 11FM	14.21
90	25 062 0090 11FM	18.46
110	25 062 0110 11FM	23.56
125	25 062 0125 11FM	28.69
140	25 062 0140 11FM	37.00
160	25 062 0160 11FM	42.29
180	25 062 0180 11FM	65.15
200	25 062 0200 11FM	74.34
225	25 062 0225 11FM	80.04
250	25 062 0250 11FM	123.09
280	25 062 0280 11FM	185.83
315	25 062 0315 11FM	236.59

## Blind Flange

Polypropylene with steel insert



PN10		
Size	Code	Price
63	14 045 0063 11	86.82
75	14 045 0075 11	101.61
90	14 045 0090 11	111.87
110	14 045 0110 11	152.70
125	14 045 0125 11	152.70
140	14 045 0140 11	187.66
160	14 045 0160 11	236.74
180	14 045 0180 11	236.74
200	14 045 0200 11	263.41
225	14 045 0225 11	263.41
250	14 045 0250 11	344.30
280	14 045 0280 11	344.30
315	14 045 0315 11	502.13
355	14 045 0355 11	980.61
400	14 045 0400 11	1120.69

## Stub Flange

To adapt to cast iron flanges



Size	Code	Price
63	25 912 0063 11FM	
90	25 912 0090 11FM	
110	25 912 0110 11FM	
125	25 912 0125 11FM	
140	25 912 0140 11FM	
160	25 912 0160 11FM	
180	25 912 0180 11FM	
225	25 912 0225 11FM	on application
250	25 912 0250 11FM	
280	25 912 0280 11FM	
315	25 912 0315 11FM	
355	25 912 0355 11FM	
400	25 912 0400 11FM	

## Backing Ring

Polypropylene with Steel Core



PN16		
Size	Code	Price
200	14 014 1200 11	131.46
225	14 014 1225 11	131.42
250	14 014 1250 11	195.58
280	14 014 1280 11	192.60
315	14 014 1315 11	223.34
355	14 014 1355 11	444.37
400	14 014 1400 11	491.10



### Connection to other materials

Connecting to metal pipe systems, particularly cast or ductile iron, requires care as the pipe diameters differ widely. We can advise on the selection of the correct flange components.