

polypropylene pipe availability - PP-H

Metric Sizes DIN 8077/8078								
Size	Series SDR Working Pressure	Ventilation -	S-20 SDR41 PN2.5	S-16 SDR33 PN3.2	S-12.5 SDR26 PN4	S-8.3 SDR17.6 PN6	S-5 SDR11 PN10	S-3.2 SDR7.4 PN16
10	O.D. (mm)							10
	Wall (mm)							1.8
	Weight/m (kg)							0.05
12	O.D. (mm)							12
	Wall (mm)							1.8
	Weight/m (kg)							0.06
16	O.D. (mm)						16	16
	Wall (mm)						1.8	2.2
	Weight/m (kg)						0.08	0.09
20	O.D. (mm)					20	20	20
	Wall (mm)					1.8	2.5	2.8
	Weight/m (kg)					0.10	0.14	0.15
25	O.D. (mm)					25	25	25
	Wall (mm)					1.8	2.7	3.5
	Weight/m (kg)					1.13	0.16	0.23
32	O.D. (mm)					32	32	32
	Wall (mm)					1.9	2.9	4.4
	Weight/m (kg)					0.17	0.26	0.37
40	O.D. (mm)				40	40	40	40
	Wall (mm)				1.8	2.3	3.7	5.5
	Weight/m (kg)				0.22	0.27	0.41	0.58
50	O.D. (mm)			50	50	50	50	50
	Wall (mm)			1.8	2.0	2.9	4.6	6.9
	Weight/m (kg)			0.27	0.30	0.42	0.64	0.90
63	O.D. (mm)		63	63	63	63	63	63
	Wall (mm)		1.8	2.0	2.5	3.6	5.8	8.6
	Weight/m (kg)		0.35	0.38	0.47	0.66	1.01	1.41
75	O.D. (mm)		75	75	75	75	75	75
	Wall (mm)		1.9	2.3	2.9	4.3	6.8	10.3
	Weight/m (kg)		0.44	0.52	0.65	0.93	1.40	2.00
90	O.D. (mm)		90	90	90	90	90	90
	Wall (mm)		2.2	2.8	3.5	5.1	8.2	12.3
	Weight/m (kg)		0.60	0.76	0.94	1.32	2.02	2.86
110	O.D. (mm)		110	110	110	110	110	110
	Wall (mm)		2.7	3.4	4.2	6.3	10.0	15.1
	Weight/m (kg)		0.90	1.11	1.36	1.98	3.01	4.29
125	O.D. (mm)		125	125	125	125	125	125
	Wall (mm)		3.1	3.9	4.8	7.1	11.4	17.1
	Weight/m (kg)		1.17	1.45	1.76	2.54	3.89	5.52
140	O.D. (mm)		140	140	140	140	140	140
	Wall (mm)		3.5	4.3	5.4	8.0	12.7	19.2
	Weight/m (kg)		1.48	1.78	2.21	3.20	4.87	6.93
160	O.D. (mm)		160	160	160	160	160	160
	Wall (mm)		4.0	4.9	6.2	9.1	14.6	21.9
	Weight/m (kg)		1.91	2.32	2.89	4.15	6.38	9.04
180	O.D. (mm)		180	180	180	180	180	180
	Wall (mm)		4.4	5.5	6.9	10.2	16.4	24.6
	Weight/m (kg)		2.36	2.94	3.63	5.22	6.05	11.40
200	O.D. (mm)		200	200	200	200	200	200
	Wall (mm)		4.9	6.2	7.7	11.4	18.2	27.4
	Weight/m (kg)		2.92	3.65	4.50	6.47	9.92	14.10
225	O.D. (mm)		225	225	225	225	225	225
	Wall (mm)		5.5	6.9	8.6	12.8	20.5	30.8
	Weight/m (kg)		3.70	4.57	5.65	8.19	12.60	17.90
250	O.D. (mm)		250	250	250	250	250	250
	Wall (mm)		6.2	7.7	9.6	14.2	22.7	34.4
	Weight/m (kg)		4.59	5.67	6.99	10.10	15.50	23.0
280	O.D. (mm)		280	280	280	280	280	280
	Wall (mm)		6.9	8.6	10.7	15.9	25.4	38.6
	Weight/m (kg)		5.73	7.09	8.72	12.60	19.40	28.8
315	O.D. (mm)		315	315	315	315	315	315
	Wall (mm)		7.7	9.7	12.1	17.9	28.6	43.5
	Weight/m (kg)		7.19	8.97	11.10	16.00	24.60	36.8
355	O.D. (mm)		355	355	355	355	355	355
	Wall (mm)		8.7	10.9	13.6	20.1	32.2	49.1
	Weight/m (kg)		9.14	11.30	14.00	20.20	31.10	46.4
400	O.D. (mm)	400	400	400	400	400	400	400
	Wall (mm)	6.0	9.8	12.3	15.3	22.7	36.3	54.3
	Weight/m (kg)	7.20	11.60	14.40	17.70	25.70	39.50	58.4
450	O.D. (mm)	450	450	450	450	450	450	450
	Wall (mm)	6.0	11.0	13.8	17.2	25.5	40.9	60.5
	Weight/m (kg)	8.10	14.60	18.20	22.40	32.50	50.10	72.8
500	O.D. (mm)	500	500	500	500	500	500	500
	Wall (mm)	8.0	12.3	15.3	19.1	28.3	45.4	67.0
	Weight/m (kg)	11.90	18.10	22.30	27.60	40.10	61.70	90.0
560	O.D. (mm)	560	560	560	560	560	560	560
	Wall (mm)	10.0	13.7	17.2	21.4	31.7	50.0	73.0
	Weight/m (kg)	13.41	22.60	28.10	34.60	50.30	74.5	108.0
630	O.D. (mm)	630	630	630	630	630	630	630
	Wall (mm)	10.0	15.4	19.3	24.1	35.7	54.0	78.0
	Weight/m (kg)	18.80	28.50	35.50	43.90	63.70	93.0	135.0
710	O.D. (mm)	710	710	710	710	710	710	710
	Wall (mm)	12.0	17.4	21.8	27.2	40.2	60.0	87.0
	Weight/m (kg)	25.30	36.30	45.20	55.80	80.70	118.0	172.0
800	O.D. (mm)	800	800	800	800	800	800	800
	Wall (mm)	12.0	19.6	24.5	30.6	45.0	66.0	96.0
	Weight/m (kg)	28.60	46.10	57.20	70.80	101.0	148.0	216.0
900	O.D. (mm)	900	900	900	900	900	900	900
	Wall (mm)	15.0	22.0	27.6	34.4	50.0	72.0	105.0
	Weight/m (kg)	40.10	58.10	72.50	89.40	127.0	186.0	270.0
1000	O.D. (mm)	1000	1000	1000	1000	1000	1000	1000
	Wall (mm)	15.0	24.5	30.6	38.2	54.0	78.0	114.0
	Weight/m (kg)	44.60	72.00	89.20	110.00	157.0	228.0	336.0
1200	O.D. (mm)	1200	1200	1200	1200	1200	1200	1200
	Wall (mm)	18.0	29.4	36.7	45.6	65.0	93.0	136.0
	Weight/m (kg)	64.10	103.00	128.00	157.00	225.0	328.0	480.0
1400	O.D. (mm)	1400	1400	1400	1400	1400	1400	1400
	Wall (mm)	21.0	34.3	42.6	52.5	74.0	106.0	154.0
	Weight/m (kg)	83.20	141.00	176.00	216.00	305.0	444.0	648.0

polypropylene pipe availability - PP-R and special grades

Metric Sizes DIN 8077/8078		PP-R	PPs: Flame Retardent				PPs-el: Flame Retardent Electric Conductive			
Size	Series SDR Working Pressure	S-5 SDR11 PN10	Ventilation -	S-20 SDR41 PN2.5	S-16 SDR33 PN3.2	S-5 SDR11 PN10	Ventilation -	S-16 SDR33 PN3.2	S-8.3 SDR17.6 PN6	S-5 SDR11 PN10
20	O.D. (mm)	20				20				
	Wall (mm)	2.5				2.5				
	Weight/m (kg)	0.14				0.14				
25	O.D. (mm)	25				25				
	Wall (mm)	2.7				2.7				
	Weight/m (kg)	0.19				0.19				
32	O.D. (mm)	32				32				32
	Wall (mm)	2.9				2.9				2.9
	Weight/m (kg)	0.26				0.27				0.32
40	O.D. (mm)	40				40				
	Wall (mm)	3.7				3.7				
	Weight/m (kg)	0.41				0.42				
50	O.D. (mm)	50				50				50
	Wall (mm)	4.6				4.6				4.6
	Weight/m (kg)	0.64				0.65				0.79
63	O.D. (mm)	63			63	63				63
	Wall (mm)	5.8			2.0	5.8				5.8
	Weight/m (kg)	1.01			0.39	1.03				1.20
75	O.D. (mm)	75		75		75				75
	Wall (mm)	6.8		1.9		6.8				6.8
	Weight/m (kg)	1.40		0.45		1.44				1.70
90	O.D. (mm)	90		90	90	90		90		90
	Wall (mm)	8.2		2.2	2.8	8.2		2.8		8.2
	Weight/m (kg)	2.02		0.62	0.78	2.08		0.93		2.50
110	O.D. (mm)	110		110	110	110	110	110	110	110
	Wall (mm)	10.0		2.7	3.4	10.0	3.0	3.4	6.3	10
	Weight/m (kg)	3.01		0.92	1.14	3.09	1.24	1.40	2.40	3.31
125	O.D. (mm)	125		125						
	Wall (mm)	11.4		3.1						
	Weight/m (kg)	3.89		1.20						
140	O.D. (mm)	140	140			140				
	Wall (mm)	12.7	3.0			12.7				
	Weight/m (kg)	4.87	1.32			4.99				
160	O.D. (mm)	160	160	160	160	160	160	160	160	
	Wall (mm)	14.6	3.0	4.0	4.9	14.6	3.0	4.9	9.1	
	Weight/m (kg)	6.38	1.53	1.97	2.38	6.55	1.82	2.90	5.10	
180	O.D. (mm)	180	180			180				
	Wall (mm)	16.4	3.0			16.4				
	Weight/m (kg)	8.05	1.71			8.05				
200	O.D. (mm)	200	200	200	200	200	200	200	200	
	Wall (mm)	18.2	3.0	4.9	6.2	18.2	3.0	6.2	11.4	
	Weight/m (kg)	9.92	1.90	3.00	3.75	9.92	2.28	4.50	8.00	
225	O.D. (mm)	225	225			225	225	225		
	Wall (mm)	20.5	3.5			20.5	3.5	6.9		
	Weight/m (kg)	12.60	2.47			12.60	2.62	5.86		
250	O.D. (mm)	250	250	250	250	250	250			
	Wall (mm)	22.7	3.5	6.2	7.7	22.7	3.5			
	Weight/m (kg)	15.50	2.75	4.72	5.82	15.50	3.50			
280	O.D. (mm)	280	280			280				
	Wall (mm)	25.4	4.0			25.4				
	Weight/m (kg)	19.40	3.48			19.40				
315	O.D. (mm)	315	315		315	315	315			
	Wall (mm)	28.6	5.0		9.7	28.6	5.0			
	Weight/m (kg)	24.60	4.91		9.21	24.60	5.80			
355	O.D. (mm)		355		355	355	355			
	Wall (mm)		5.0		10.9	355	5.0			
	Weight/m (kg)		5.54		11.60	355	6.60			
400	O.D. (mm)		400	400		400	400			
	Wall (mm)		6.0	9.8		400	6.0			
	Weight/m (kg)		7.39	11.88		400	7.40			
450	O.D. (mm)		450	450						
	Wall (mm)		6.0	11.0						
	Weight/m (kg)		8.33	14.99						



Temperature De-Rating Factors

Pressure ratings for Polypropylene pipework systems are always quoted at 20°C. As working temperature increases, the maximum working pressure decreases by the factor indicated.

* For continuous use at these temperatures, consult our Customer Services Department

Working Temperature (°C)	Pressure De-Rating Factor
20	1.00
30	1.00
40	0.82
50	0.66
60	0.50
70	0.36
80	0.25
90*	0.13
100*	0.05



PP-H Homopolymer Pipe

Ventilation				PN2.5/S-20/SDR41		PN3.2/S-16/SDR33		PN4/S-12.5/SDR26	
Size	Wall	Code	Price/m	Code	Price/m	Code	Price/m	Code	Price/m
12		-	-	-	-	-	-	-	-
16		-	-	-	-	-	-	-	-
20		-	-	-	-	-	-	-	-
25		-	-	-	-	-	-	-	-
32		-	-	-	-	-	-	-	-
40		-	-	-	-	-	-	12 705 0040 26	1.93
50	3.0	12 705 0050 00	on application	-	-	12 705 0050 33	2.54	12 705 0050 26	2.62
63	3.0	12 705 0063 00	on application	12 705 0063 41	3.06	12 705 0063 33	3.51	12 705 0063 26	4.12
75	3.0	12 705 0075 00	on application	12 705 0075 41	3.83	12 705 0075 33	4.77	12 705 0075 26	5.60
90	3.0	12 705 0090 00	on application	12 705 0090 41	5.33	12 705 0090 33	6.92	12 705 0090 26	8.15
110	3.0	12 705 0110 00	on application	12 705 0110 41	7.80	12 705 0110 33	10.13	12 705 0110 26	11.84
125	3.0	12 705 0125 00	on application	12 705 0125 41	10.43	12 705 0125 33	13.27	12 705 0125 26	15.31
140	3.0	12 705 0140 00	on application	12 705 0140 41	13.05	12 705 0140 33	16.23	12 705 0140 26	19.14
160	3.0	12 705 0160 00	on application	12 705 0160 41	16.45	12 705 0160 33	21.16	12 705 0160 26	25.10
180	3.0	12 705 0180 00	on application	12 705 0180 41	20.85	12 705 0180 33	26.80	12 705 0180 26	31.49
200	3.0	12 705 0200 00	18.15	12 705 0200 41	25.24	12 705 0200 33	33.26	12 705 0200 26	39.01
225	3.5	12 705 0225 00	on application	12 705 0225 41	32.05	12 705 0225 33	41.56	12 705 0225 26	48.95
250	3.5	12 705 0250 00	26.38	12 705 0250 41	44.72	12 705 0250 33	51.68	12 705 0250 26	60.57
280	4.0	12 705 0280 00	on application	12 705 0280 41	53.62	12 705 0280 33	70.01	12 705 0280 26	81.98
315	5.0	12 705 0315 00	46.95	12 705 0315 41	67.80	12 705 0315 33	88.60	12 705 0315 26	104.39
355	6.0	12 705 0355 00	56.88	12 705 0355 41	90.07	12 705 0355 33	117.49	12 705 0355 26	138.58
400	6.0	12 705 0400 00	71.35	12 705 0400 41	114.88	12 705 0400 33	149.67	12 705 0400 26	175.18
450	6.0	12 705 0450 00	94.61	12 705 0450 41	171.62	12 705 0450 33	222.65	12 705 0450 26	260.95
500	8.0	12 705 0500 00	138.58	12 705 0500 41	209.91	12 705 0500 33	272.52	12 705 0500 26	321.26
560	10.0	12 705 0560 00	193.61	12 705 0560 41	263.08	12 705 0560 33	344.01	12 705 0560 26	402.78
630	10.0	12 705 0630 00	219.14	12 705 0630 41	333.28	12 705 0630 33	434.10	12 705 0630 26	511.29
710	12.0	12 705 0710 00	295.00	12 705 0710 41	424.07	12 705 0710 33	552.49	12 705 0710 26	649.56
800	12.0	12 705 0800 00	324.18	12 705 0800 41	536.83	12 705 0800 33	699.18	12 705 0800 26	824.02
900	15.0	12 705 0900 00	493.57	12 705 0900 41	714.79	12 705 0900 33	936.69	12 705 0900 26	1100.58
1000	15.0	12 705 1000 00	548.87	12 705 1000 41	882.17	12 705 1000 33	1152.63	12 705 1000 26	1354.45
1200	18.0	12 705 1200 00	832.51	12 705 1200 41	1340.26	12 705 1200 33	1743.83		
1400	20.0	12 705 1400 00	1131.77	12 705 1400 41	1917.50				

Standard length 5m

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

Electrofusion Coupling



Manufactured from PP-H (Homopolymer) material

PN10

Size	Code	Price
20	11 375 0020 11	10.79
25	11 375 0025 11	12.28
32	11 375 0032 11	13.27
40	11 375 0040 11	13.92
50	11 375 0050 11	21.60
63	11 375 0063 11	22.64
75	11 375 0075 11	31.73
90	11 375 0090 11	42.46
110	11 375 0110 11	51.68
125	11 375 0125 11	73.12
140	11 375 0140 11	82.65
160	11 375 0160 11	94.72
180	11 375 0180 11	139.09
200	11 375 0200 11	160.82
225	11 375 0225 11	198.05
250	11 375 0250 11	521.65
315	11 375 0315 11	842.44



Flame Retardant PP

Flame retardant (PPs) and flame retardant electrically conductive (PPs-el) grades of PP are featured at the end of the Polypropylene section.

Machine Hire

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





PP-H Homopolymer Pipe

PP-R Copolymer Pipe

PN6/S-8.3/SDR17.6			PN10/S-5/SDR11		PN16/S-3.2/SDR7.4		PN10/S-5/SDR 11		
Size	Code	Price/m	Code	Price/m	Code	Price/m	Size	Code	Price/m
10	-	-	-	-	12 705 0010 07	0.65	20	11 705 0020 11	1.71
12	-	-	-	-	12 705 0012 07	0.92	25	11 705 0025 11	2.32
16	-	-	12 705 0016 11	0.91	12 705 0016 07	1.33	32	11 705 0032 11	3.28
20	12 705 0020 17	1.13	12 705 0020 11	1.65	12 705 0020 07	1.72	40	11 705 0040 11	4.55
25	12 705 0025 17	1.48	12 705 0025 11	2.16	12 705 0025 07	2.61	50	11 705 0050 11	7.00
32	12 705 0032 17	2.09	12 705 0032 11	3.06	12 705 0032 07	4.32	63	11 705 0063 11	11.13
40	12 705 0040 17	2.46	12 705 0040 11	3.80	12 705 0040 07	5.30	75	11 705 0075 11	15.41
50	12 705 0050 17	3.87	12 705 0050 11	5.90	12 705 0050 07	8.19	90	11 705 0090 11	22.22
63	12 705 0063 17	6.02	12 705 0063 11	9.16	12 705 0063 07	12.87	110	11 705 0110 11	33.15
75	12 705 0075 17	8.56	12 705 0075 11	12.74	12 705 0075 07	18.33	125	11 705 0125 11	42.83
90	12 705 0090 17	11.84	12 705 0090 11	18.33	12 705 0090 07	26.07	140	11 705 0140 11	53.56
110	12 705 0110 17	18.33	12 705 0110 11	25.61	12 705 0110 07	39.02	160	11 705 0160 11	70.18
125	12 705 0125 17	23.69	12 705 0125 11	35.60	12 705 0125 07	50.19	180	11 705 0180 11	88.55
140	12 705 0140 17	29.19	12 705 0140 11	44.68	12 705 0140 07	63.14	200	11 705 0200 11	109.15
160	12 705 0160 17	38.27	12 705 0160 11	58.20	12 705 0160 07	82.21	225	11 705 0225 11	138.62
180	12 705 0180 17	47.36	-	-	-	-	250	11 705 0250 11	170.56
200	12 705 0200 17	59.12	12 705 0200 11	90.10	12 705 0200 07	122.27	280	11 705 0280 11	213.45
225	12 705 0225 17	74.62	12 705 0225 11	114.66	12 705 0225 07	155.64	315	11 705 0315 11	270.77
250	12 705 0250 17	91.89	12 705 0250 11	141.04					
280	12 705 0280 17	124.49	12 705 0280 11	192.86					
315	12 705 0315 17	158.61	12 705 0315 11	243.49					
355	12 705 0355 17	211.46	12 705 0355 11	324.65					
400	12 705 0400 17	267.32	12 705 0400 11	412.51					
450	12 705 0450 17	397.62	12 705 0450 11	613.55					
500	12 705 0500 17	489.93	12 705 0500 11	757.99					
560	12 705 0560 17	615.03							
630	12 705 0630 17	778.84							
710	12 705 0710 17	987.33							
800	12 705 0800 17	1084.69							

Standard length 5m

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



Polypropylene Material

AGRU Polypropylene pipes and fittings are manufactured in accordance with DIN 8077/8078 using the following materials:

Pipes: Nucleoid PP-H 100 (Beta β-PP)
Fittings: PP-R (polypropylene random copolymer)

Nucleoid PP-H is chosen for pipes because of its exceptional impact strength at cold temperatures, good stress fracture and chemical resistance. PP-R (also optionally available as pipe) provides high long term creep strength at continuous high temperatures. Other types of Polypropylene are also available:

Flame Retardant

PPs (Polypropylene homo-polymer, flame-retardant)

Due to its higher stiffness, PPs is ideally suited for ventilation pipes. The flame-retardant properties enhance the material for this application. Note that this material may not be used outdoors, as it is not UV stabilised.

PPs-el (Polypropylene random copolymer flame-retardant, electro-conductive)

This material combines the benefits of flame retardant properties and electro-conductivity. It can be used for safety reasons in the transport of combustible material.

High Purity

PP Pure PP-R (High purity grade Polypropylene random copolymer)

Selected and fully traceable raw materials are manufactured under strictly controlled conditions. This materials is ideal for less critical ultra-pure water applications (see High Purity Systems).

Polypure PP-R: Natural (Polypropylene random copolymer, natural coloured)

As natural PP-R contains no colour additives, it is ideally suited for high purity water piping systems. Note that it is not UV stabilised (see High Purity Systems).