

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) Wall (mm) Weight/m (kg)							
12	O.D. (mm) Wall (mm) Weight/m (kg)							12 2.0 0.06
16	O.D. (mm) Wall (mm) Weight/m (kg)						16 1.8 0.08	
20	O.D. (mm) Wall (mm) Weight/m (kg)						20 1.9 0.14	20 2.8 0.15
25	O.D. (mm) Wall (mm) Weight/m (kg)						25 2.3 0.16	25 3.5 0.23
32	O.D. (mm) Wall (mm) Weight/m (kg)					32 2.0 0.17		32 4.4 0.37
40	O.D. (mm) Wall (mm) Weight/m (kg)				40 1.8 0.22	40 2.3 0.27	40 3.7 0.41	40 5.5 0.58
50	O.D. (mm) Wall (mm) Weight/m (kg)			50 2.0 0.27	50 2.0 0.30	50 2.9 0.42	50 4.6 0.64	50 6.9 0.90
63	O.D. (mm) Wall (mm) Weight/m (kg)		63 1.8 0.35	63 2.0 0.38	63 2.5 0.47	63 3.6 0.66	63 5.8 1.01	63 8.6 1.41
75	O.D. (mm) Wall (mm) Weight/m (kg)		75 1.9 0.44	75 2.3 0.52	75 2.9 0.65	75 4.3 0.93	75 6.8 1.40	75 10.3 2.00
90	O.D. (mm) Wall (mm) Weight/m (kg)		90 2.2 0.60	90 2.8 0.76	90 3.5 0.94	90 5.1 1.32	90 8.2 2.02	90 12.3 2.86
110	O.D. (mm) Wall (mm) Weight/m (kg)		110 2.7 0.90	110 3.4 1.11	110 4.2 1.36	110 6.3 1.98	110 10.0 3.01	110 15.1 4.29
125	O.D. (mm) Wall (mm) Weight/m (kg)		125 3.1 1.17	125 3.9 1.45	125 4.8 1.76	125 7.1 2.54	125 11.4 3.89	125 17.1 5.52
140	O.D. (mm) Wall (mm) Weight/m (kg)		140 3.5 1.48	140 4.3 1.78	140 5.4 2.21	140 8.0 3.20	140 12.7 4.87	140 19.2 6.93
160	O.D. (mm) Wall (mm) Weight/m (kg)		160 4.0 1.91	160 4.9 2.32	160 6.2 2.89	160 9.1 4.15	160 14.6 6.38	160 21.9 9.04
180	O.D. (mm) Wall (mm) Weight/m (kg)		180 4.4 2.36	180 5.5 2.94	180 6.9 3.63	180 10.2 5.22	180 16.4 6.05	
200	O.D. (mm) Wall (mm) Weight/m (kg)	200 3.0 1.83	200 4.9 2.92	200 6.2 3.65	200 7.7 4.50	200 11.4 6.47	200 18.2 9.92	
225	O.D. (mm) Wall (mm) Weight/m (kg)		225 5.5 3.70	225 6.9 4.57	225 8.6 5.65	225 12.8 8.19	225 20.5 12.60	
250	O.D. (mm) Wall (mm) Weight/m (kg)	250 3.5 2.66	250 6.2 4.59	250 7.7 5.67	250 9.6 6.99	250 14.2 10.10	250 22.7 15.50	
280	O.D. (mm) Wall (mm) Weight/m (kg)		280 6.9 5.73	280 8.6 7.09	280 10.7 8.72	280 15.9 12.60	280 25.4 19.40	
315	O.D. (mm) Wall (mm) Weight/m (kg)	315 5.0 4.74	315 7.7 7.19	315 9.7 8.97	315 12.1 11.10	315 17.9 16.00	315 28.6 24.60	
355	O.D. (mm) Wall (mm) Weight/m (kg)	355 6.0 6.39	355 8.7 9.14	355 10.9 11.30	355 13.6 14.00	355 20.1 20.20	355 32.2 31.10	
400	O.D. (mm) Wall (mm) Weight/m (kg)	400 6.0 7.20	400 9.8 11.60	400 12.3 14.40	400 15.3 17.70	400 22.7 25.70		
450	O.D. (mm) Wall (mm) Weight/m (kg)	450 6.0 8.10	450 11.0 14.60	450 13.8 18.20	450 17.2 22.40	450 25.5 32.50		
500	O.D. (mm) Wall (mm) Weight/m (kg)	500 8.0 11.90	500 12.3 18.10	500 15.3 22.30	500 19.1 27.60	500 28.3 40.10		
560	O.D. (mm) Wall (mm) Weight/m (kg)	560 8.0 13.41	560 13.7 22.60	560 17.2 28.10	560 21.4 34.60	560 31.7 50.30		
630	O.D. (mm) Wall (mm) Weight/m (kg)	630 10.0 18.80	630 15.4 28.50	630 19.3 35.50	630 24.1 43.90	630 35.7 63.70		
710	O.D. (mm) Wall (mm) Weight/m (kg)	710 12.0 25.30	710 17.4 36.30	710 21.8 45.20	710 27.2 55.80			
800	O.D. (mm) Wall (mm) Weight/m (kg)	800 12.0 28.60	800 19.6 46.10	800 24.5 57.20	800 30.6 70.80			
900	O.D. (mm) Wall (mm) Weight/m (kg)	900 15.0 40.10	900 22.0 58.10	900 27.6 72.50	900 34.4 89.40			
1000	O.D. (mm) Wall (mm) Weight/m (kg)	1000 15.0 44.60	1000 24.5 72.00	1000 30.6 89.20	1000 38.2 110.00			
1200	O.D. (mm) Wall (mm) Weight/m (kg)	1200 18.0 64.10	1200 29.4 103.00	1200 36.7 128.00				
1400	O.D. (mm) Wall (mm) Weight/m (kg)	1400 20.0 83.20	1400 34.3 141.00					

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)	1.9				1.9				
	Weight/m (kg)	0.11				0.12				
25	O.D. (mm)	25				25				
	Wall (mm)	2.3				2.3				
	Weight/m (kg)	0.16				0.17				
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				1.25
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				1.74
90	O.D. (mm)	90		90		90		90		90
	Wall (mm)	8.2		2.2		8.2		2.8		8.2
	Weight/m (kg)	2.02		0.62		2.08		0.93		2.52
110	O.D. (mm)	110		110		110	110	110	110	110
	Wall (mm)	10.0		2.7		10.0	3.0	3.4	6.3	10
	Weight/m (kg)	3.01		0.92		3.09	1.23	1.40	2.47	3.74
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	
	Wall (mm)	14.6	3.0			14.6	3.0	4.9	9.1	
	Weight/m (kg)	6.38	1.53			6.55	1.81	2.88	5.18	
180	O.D. (mm)	180	180			180				
	Wall (mm)	16.4	3.0			16.4				
	Weight/m (kg)	8.05	1.71			8.22				
200	O.D. (mm)	200	200			200		200	200	
	Wall (mm)	18.2	3.0			18.2		6.2	11.4	
	Weight/m (kg)	9.92	1.90			10.1		4.57	8.07	
225	O.D. (mm)	225	225			225		225		
	Wall (mm)	20.5	3.5			20.5		6.9		
	Weight/m (kg)	12.60	2.47			12.8		5.68		
250	O.D. (mm)	250	250			250				
	Wall (mm)	22.7	3.5			22.7				
	Weight/m (kg)	15.50	2.75			15.7				
280	O.D. (mm)	280	280			280				
	Wall (mm)	25.4	4.0			25.4				
	Weight/m (kg)	19.40	3.48			19.7				
315	O.D. (mm)	315	315			315	315	315		
	Wall (mm)	28.6	5.0			28.6	5.0	9.7		
	Weight/m (kg)	24.60	4.91			25.0	5.88	11.14		
355	O.D. (mm)		355			355				
	Wall (mm)		5.0			5.0				
	Weight/m (kg)		5.54			5.7				
400	O.D. (mm)	400	400			400				
	Wall (mm)	36.3	6.0			36.3				
	Weight/m (kg)	39.5	7.39			40.0				
450	O.D. (mm)	450	450			450				
	Wall (mm)	40.9	6.0			40.9				
	Weight/m (kg)	50.10	8.33			51.0				
500	O.D. (mm)	500	500			500				
	Wall (mm)	45.4	8.0			45.4				
	Weight/m (kg)	61.8	12.3			63.0				
560	O.D. (mm)		560			560				
	Wall (mm)		8.0			8.0				
	Weight/m (kg)		13.8			14.0				
630	O.D. (mm)		630			630				
	Wall (mm)		10.0			10.0				
	Weight/m (kg)		19.3			19.5				
710	O.D. (mm)	710*	710			710				
	Wall (mm)	40.2	12.0			40.2				
	Weight/m (kg)	80.7	26.0			81.0				
800	O.D. (mm)	800*	800			800				
	Wall (mm)	45.3	12.0			45.3				
	Weight/m (kg)	103.0	29.30			104.0				
900	O.D. (mm)		900			900				
	Wall (mm)		15.0			15.0				
	Weight/m (kg)		41.2			41.5				
1000	O.D. (mm)		1000			1000				
	Wall (mm)		15.0			15.0				
	Weight/m (kg)		45.9			46.0				
1200	O.D. (mm)		1200			1200				
	Wall (mm)		18.0			18.0				
	Weight/m (kg)		65.8			66.0				

* SDR 17



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
40		-	-	-	-	-	-	12 705 0040 26	2.24
50	3.0	12 705 0050 00	on application	-	-	12 705 0050 33	2.94	12 705 0050 26	3.03
63	3.0	12 705 0063 00	on application	12 705 0063 41	3.54	12 705 0063 33	4.06	12 705 0063 26	4.78
75	3.0	12 705 0075 00	on application	12 705 0075 41	4.43	12 705 0075 33	5.52	12 705 0075 26	6.48
90	3.0	12 705 0090 00	on application	12 705 0090 41	6.17	12 705 0090 33	8.01	12 705 0090 26	9.44
110	3.0	12 705 0110 00	on application	12 705 0110 41	9.03	12 705 0110 33	11.73	12 705 0110 26	13.70
125	3.0	12 705 0125 00	on application	12 705 0125 41	12.08	12 705 0125 33	15.36	12 705 0125 26	17.72
140	3.0	12 705 0140 00	on application	12 705 0140 41	15.11	12 705 0140 33	18.78	12 705 0140 26	22.17
160	3.0	12 705 0160 00	on application	12 705 0160 41	19.04	12 705 0160 33	24.50	12 705 0160 26	29.06
180	3.0	12 705 0180 00	on application	12 705 0180 41	24.13	12 705 0180 33	31.03	12 705 0180 26	36.45
200	3.0	12 705 0200 00	21.01	12 705 0200 41	29.22	12 705 0200 33	38.50	12 705 0200 26	45.16
225	3.5	12 705 0225 00	on application	12 705 0225 41	37.10	12 705 0225 33	48.11	12 705 0225 26	56.67
250	3.5	12 705 0250 00	30.54	12 705 0250 41	51.78	12 705 0250 33	59.82	12 705 0250 26	70.12
280	4.0	12 705 0280 00	on application	12 705 0280 41	62.08	12 705 0280 33	81.05	12 705 0280 26	94.90
315	5.0	12 705 0315 00	54.36	12 705 0315 41	78.49	12 705 0315 33	102.56	12 705 0315 26	120.84
355	6.0	12 705 0355 00	65.85	12 705 0355 41	104.27	12 705 0355 33	136.03	12 705 0355 26	160.43
400	6.0	12 705 0400 00	82.60	12 705 0400 41	132.98	12 705 0400 33	173.26	12 705 0400 26	202.80
450	6.0	12 705 0450 00	109.53	12 705 0450 41	198.67	12 705 0450 33	257.74	12 705 0450 26	302.09
500	8.0	12 705 0500 00	160.43	12 705 0500 41	243.00	12 705 0500 33	315.48	12 705 0500 26	371.90
560	10.0	12 705 0560 00	224.12	12 705 0560 41	304.54	12 705 0560 33	398.23	12 705 0560 26	466.27
630	10.0	12 705 0630 00	253.69	12 705 0630 41	385.81	12 705 0630 33	502.53	12 705 0630 26	591.87
710	12.0	12 705 0710 00	341.50	12 705 0710 41	490.91	12 705 0710 33	639.58	12 705 0710 26	751.95
800	12.0	12 705 0800 00	375.28	12 705 0800 41	621.44	12 705 0800 33	809.39	12 705 0800 26	953.90
900	15.0	12 705 0900 00	571.37	12 705 0900 41	827.46	12 705 0900 33	1084.34	12 705 0900 26	1274.06
1000	15.0	12 705 1000 00	635.39	12 705 1000 41	1021.22	12 705 1000 33	1334.31	12 705 1000 26	1567.94
1200	18.0	12 705 1200 00	963.74	12 705 1200 41	1551.51	12 705 1200 33	2018.70	-	-
1400	20.0	12 705 1400 00	1310.17	12 705 1400 41	2219.75	-	-	-	-

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 (SDR 11)

Size	Code	Price
20	11 375 0020 11	12.50
25	11 375 0025 11	14.21
32	11 375 0032 11	15.36
40	11 375 0040 11	16.12
50	11 375 0050 11	25.00
63	11 375 0063 11	26.21
75	11 375 0075 11	36.74
90	11 375 0090 11	49.15
110	11 375 0110 11	59.82
125	11 375 0125 11	84.65
140	11 375 0140 11	95.68
160	11 375 0160 11	109.65
180	11 375 0180 11	161.01
200	11 375 0200 11	186.17
225	11 375 0225 11	229.27



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

This data is provided for guidance only. For specific projects please contact our technical department

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	-	-	-	-	-	-	20	11 705 0020 11	
12	-	-	-	-	12 705 0012 07	1.07	25	11 705 0025 11	
16	-	-	12 705 0016 11	1.06	12 705 0016 07	1.54	32	11 705 0032 11	
20	-	-	12 705 0020 11	1.91	12 705 0020 07	2.00	40	11 705 0040 11	
25	-	-	12 705 0025 11	2.50	12 705 0025 07	3.02	50	11 705 0050 11	
32	12 705 0032 17	2.42	12 705 0032 11	3.54	12 705 0032 07	5.01	63	11 705 0063 11	
40	12 705 0040 17	2.85	12 705 0040 11	4.40	12 705 0040 07	6.14	75	11 705 0075 11	
50	12 705 0050 17	4.47	12 705 0050 11	6.84	12 705 0050 07	9.48	90	11 705 0090 11	
63	12 705 0063 17	6.97	12 705 0063 11	10.61	12 705 0063 07	14.90	110	11 705 0110 11	
75	12 705 0075 17	9.91	12 705 0075 11	14.75	12 705 0075 07	21.22	125	11 705 0125 11	on application
90	12 705 0090 17	13.70	12 705 0090 11	21.22	12 705 0090 07	30.18	140	11 705 0140 11	
110	12 705 0110 17	21.22	12 705 0110 11	29.64	12 705 0110 07	45.17	160	11 705 0160 11	
125	12 705 0125 17	27.42	12 705 0125 11	41.21	12 705 0125 07	58.11	180	11 705 0180 11	
140	12 705 0140 17	33.79	12 705 0140 11	51.72	12 705 0140 07	73.10	200	11 705 0200 11	
160	12 705 0160 17	44.30	12 705 0160 11	67.38	12 705 0160 07	95.17	225	11 705 0225 11	
180	12 705 0180 17	54.83	12 705 0180 11	85.33	-	-	250	11 705 0250 11	
200	12 705 0200 17	68.44	12 705 0200 11	104.31	-	-	280	11 705 0280 11	
225	12 705 0225 17	86.38	12 705 0225 11	132.73	12 705 0225 07	180.17	315	11 705 0315 11	
250	12 705 0250 17	106.37	12 705 0250 11	163.26			400	11 705 0400 11	
280	12 705 0280 17	144.11	12 705 0280 11	223.26			450	11 705 0450 11	
315	12 705 0315 17	183.61	12 705 0315 11	281.86			500	11 705 0500 11	
355	12 705 0355 17	244.79	12 705 0355 11	375.82			710*	11 705 0710 17	
400	12 705 0400 17	309.46					800*	11 705 0800 17	
450	12 705 0450 17	460.30							
500	12 705 0500 17	567.16							
560	12 705 0560 17	711.97							
630	12 705 0630 17	901.60							
710	12 705 0710 17	1142.97							

*SDR 17

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).