



# aquatherm green pipe SDR 9 MF RP



A 632  
A 644



**aquatherm**

state of the pipe





# SDR9

## aquatherm green pipe SDR9 MF RP - THE NEXT GENERATION

aquatherm sets the innovation standard in the production of PP-pipes and fittings worldwide. We continually bother to push developments for product improvement. The current level of evolution is called "fusiolen PP-RP".

With "fusiolen PP-RP" we can produce fiber composite pipes with lower wall-thickness by keeping all the well-established advantages.

### Advantages PP-RP

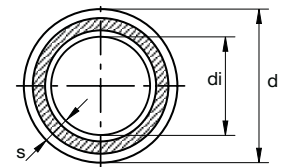
- lower wall thickness (see pictures above)
- 14% higher flow rate at same velocity compared to faser composite pipe SDR 7.4
- the permissible working pressures are on the same level like those of PP-R faser composite pipes SDR 7,4 or are even exceeding them in the higher temperature range
- 16% lower weight than aquatherm green pipe SDR7.4 MF
- lower weight than stainless steel, steel and copper pipes, thereby easier handling for transport and at site
- quicker processing of XXL-pipes by shorter butt-welding times
- trouble-free welding with all aquatherm green pipe fittings
- proven system of long-term heat stabilizers
- environmentally friendly by using less material

### Fields of application

- potable water application
- climate technology
- closed systems
- heating system construction
- swimming pool technology
- chemical transport
- rainwater utilization
- green area irrigation
- compressed air systems
- surface heating systems
- underground supply systems



**A 632**  
**A 644**  
(32-200mm)



SDR	Art.- No.	Dimension d [mm]	Wall thickness s [mm]	Internal diameter di [mm]	Water content [l/m]	Weight [kg]	DN	PU [m]
9	Socket welding							
	<b>0370712</b>	<b>32</b>	3,6	24,8	0,483	0,328	25	40
	<b>0370714</b>	<b>40</b>	4,5	31,0	0,754	0,511	32	40
	<b>0370716</b>	<b>50</b>	5,6	38,8	1,182	0,791	40	20
	<b>0370718</b>	<b>63</b>	7,1	48,8	1,869	1,261	50	20
	<b>0370720</b>	<b>75</b>	8,4	58,2	2,659	1,771	-	20
	<b>0370722</b>	<b>90</b>	10,1	69,8	3,825	2,553	65	12
	<b>0370724</b>	<b>110</b>	12,3	85,4	5,725	3,789	80	8
	<b>0370726</b>	<b>125</b>	14,0	97,0	7,386	4,886	100	4
	Butt welding							
	<b>0370730</b>	<b>160</b>	17,9	124,2	12,109	7,987	125	5,8
	<b>0370734</b>	<b>200</b>	22,4	155,2	18,908	12,489	150	5,8
	<b>0370738</b>	<b>250</b>	27,9	194,2	29,605	19,423	200	5,8
	<b>0370742</b>	<b>315</b>	35,2	244,6	46,966	30,877	250	5,8
	<b>0370744</b>	<b>355</b>	39,7	275,6	59,625	39,203	-	5,8

# SDR7,4

## aquatherm green pipe SDR9 MF RP

- Material:** fusiolen PP-RP fiber-reinforced
- Serie:** SDR9
- Standards:** SKZ HR 3.28, ASTM F 2389, ISO 21003
- Colour:** green with 4 dark-green stripes
- Form supplied:** 32 -125 mm in 4 m lengths  
160-355 mm in 5.8 m lengths
- Packing unit:** PU in meter
- Application:** drinking water, heating, general pressure pipes

Mechanically stabilized by fiber mixture, which is integrated as the middle layer in the material fusiolen PP-RP.

### Comparison of water content per meter

Dimension	aquatherm green pipe SDR9 MF RP	aquatherm green pipe SDR 7,4 MF
ø 355 mm	59,625 l/m	52,685 l/m
ø 315 mm	46,966 l/m	41,475 l/m
ø 250 mm	29,605 l/m	25,901 l/m
ø 200 mm	18,908 l/m	16,558 l/m
ø 160 mm	12,109 l/m	10,599 l/m
ø 125 mm	7,386 l/m	6,472 l/m
ø 110 mm	5,725 l/m	4,999 l/m
ø 90 mm	3,825 l/m	3,358 l/m
ø 75 mm	2,659 l/m	2,323 l/m
ø 63 mm	1,869 l/m	1,647 l/m
ø 50 mm	1,182 l/m	1,029 l/m
ø 40 mm	0,754 l/m	0,660 l/m
ø 32 mm	0,483 l/m	0,423 l/m

### Permissible working pressure

für potable water, heating systems or closed systems  
(fluid transported: water acc. to DIN 2000)

Temperature	Service life	Permissible working pressure in bar and (psi)							
		aquatherm blue pipe SDR 11 MF		aquatherm blue pipe SDR 17,6 MF		aquatherm green pipe SDR 7,4 MF		NEW aquatherm green pipe SDR 9 MF RP	
		bar	(psi)	bar	(psi)	bar	(psi)	bar	(psi)
10 °C	1	27,8	(403)	12,8	(186)	30,2	(438)	28,8	(418)
	5	26,2	(380)	12,0	(174)	28,2	(409)	27,9	(405)
	10	25,6	(371)	11,7	(170)	27,7	(402)	27,5	(399)
	25	24,7	(358)	11,4	(165)	26,9	(390)	27,1	(393)
	50	24,1	(350)	11,1	(161)	26,1	(379)	26,7	(387)
15 °C	100	23,5	(341)	10,8	(157)	25,2	(366)	26,3	(381)
	1	25,7	(373)	11,8	(171)	29,4	(426)	26,9	(390)
	5	24,2	(351)	11,1	(161)	27,4	(397)	26,0	(377)
	10	23,6	(342)	10,8	(157)	26,9	(390)	25,7	(373)
	25	22,8	(331)	10,5	(152)	26,1	(379)	25,2	(366)
20 °C	50	22,2	(322)	10,2	(148)	25,3	(367)	24,9	(361)
	100	21,6	(313)	9,9	(144)	24,5	(355)	24,5	(355)
	1	23,8	(345)	10,9	(158)	28,6	(415)	25,0	(363)
	5	22,3	(323)	10,3	(149)	26,8	(389)	24,2	(351)
	10	21,7	(315)	10,0	(145)	26,1	(379)	23,9	(347)
30 °C	25	21,0	(305)	9,6	(139)	25,3	(367)	23,5	(341)
	50	20,4	(296)	9,4	(136)	24,5	(355)	23,1	(335)
	100	19,9	(289)	9,1	(132)	23,7	(344)	22,8	(331)
	1	20,2	(293)	9,3	(135)	24,3	(352)	21,7	(315)
	5	18,9	(274)	8,7	(126)	22,8	(331)	20,9	(303)
40 °C	10	18,4	(267)	8,5	(123)	22,0	(319)	20,6	(299)
	25	17,8	(258)	8,2	(119)	21,3	(309)	20,2	(293)
	50	17,3	(251)	7,9	(115)	20,7	(300)	19,9	(289)
	100	16,8	(244)	7,7	(112)	20,0	(290)	19,7	(286)
	1	17,2	(248)	7,9	(115)	20,5	(297)	18,6	(270)
50 °C	5	16,0	(232)	7,4	(107)	19,2	(278)	18,0	(261)
	10	15,6	(226)	7,2	(104)	18,7	(271)	17,7	(257)
	25	15,0	(218)	6,9	(100)	18,0	(261)	17,3	(251)
	50	14,6	(212)	6,7	(97)	17,5	(254)	17,1	(248)
	100	14,1	(205)	6,5	(94)	16,8	(244)	16,8	(244)
60 °C	1	14,5	(210)	6,7	(97)	17,5	(254)	15,9	(231)
	5	13,5	(196)	6,2	(90)	16,2	(235)	15,3	(222)
	10	13,1	(190)	6,0	(87)	15,7	(228)	15,1	(219)
	25	12,6	(183)	5,8	(84)	15,2	(220)	14,7	(213)
	50	12,2	(177)	5,6	(81)	14,7	(213)	14,5	(210)
70 °C	100	11,9	(173)	5,5	(80)	14,1	(205)	14,3	(207)
	1	12,2	(177)	5,6	(81)	14,7	(213)	13,5	(196)
	5	11,4	(165)	5,2	(75)	13,7	(199)	13,0	(189)
	10	11,0	(160)	5,1	(74)	13,2	(191)	12,7	(184)
	25	10,6	(154)	4,9	(71)	12,6	(183)	12,4	(180)
75 °C	50	10,3	(149)	4,7	(68)	12,1	(175)	12,2	(177)
	1	10,3	(149)	4,7	(68)	12,4	(180)	11,3	(164)
	5	9,6	(139)	4,4	(64)	11,4	(165)	10,9	(158)
	10	9,2	(133)	4,2	(61)	11,1	(161)	10,7	(155)
	25	8,0	(116)	3,7	(54)	9,6	(139)	10,4	(151)
80 °C	50	6,8	(99)	3,1	(45)	8,1	(117)	10,2	(148)
	1	9,4	(136)	4,3	(62)	11,7	(170)	10,4	(151)
	5	8,7	(126)	4,0	(58)	10,8	(157)	9,9	(144)
	10	8,0	(116)	3,7	(54)	10,0	(145)	9,7	(141)
	25	6,4	(93)	3,0	(44)	8,0	(116)	9,5	(138)
90 °C	50	5,4	(78)	2,5	(36)	6,7	(97)	9,3	(135)
	1	8,6	(125)	4,0	(58)	10,4	(151)	9,5	(138)
	5	7,7	(112)	3,5	(51)	9,2	(133)	9,0	(131)
	10	6,5	(94)	3,0	(44)	7,8	(113)	8,9	(129)
	25	5,2	(75)	2,4	(35)	6,2	(90)	8,6	(125)
100 °C	1	7,2	(104)	3,3	(48)	8,7	(126)	7,8	(113)
	5	5,1	(74)	2,3	(33)	6,0	(87)	7,4	(107)
	10	4,3	(62)	2,0	(29)	5,1	(74)	7,3	(106)

potable water

SDR = Standard Dimension Ratio (diameter/wall thickness ratio) MF = multilayer faser composite pipe MF RP = multilayer faser composite pipe with raised pressure

# CERTIFICATES

**ZERTIFIKAT** **SKZ**


**Certificate**

SKZ - TeConA GmbH awards the following company

**aquatherm GmbH**  
**Biggen 5**  
**57439 Attendorn**  
**Germany**

Production plant: aquatherm GmbH, 01454 Radeberg

the right to use the SKZ - testing and inspection mark



**A 632**

for the following plastic products

**Pressure pipe system, group 1 and 2**  
**Fibre multilayer pipes made of**  
**PP-RP/PP-RP-GF/PP-RP, SDR 9**

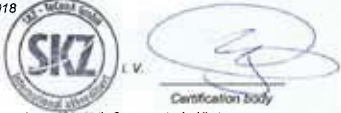
Trade name: aquatherm green pipe SDR9 MF- RP

SKZ specification for tests and inspection **HR 3.28**

Users of the SKZ - mark are obliged to observe the required regulations for the production and testing of these products.

Date of initial certification: ---

Date of expiry: 30 September 2018



Würzburg, 1 October 2013

The original language of this certificate is German. In case of doubt, the German version is obligatory.

**ZERTIFIKAT** **SKZ**


**Certificate**

SKZ - TeConA GmbH awards the following company

**aquatherm GmbH**  
**Biggen 5**  
**57439 Attendorn**  
**Germany**

Production plant: aquatherm GmbH, 57439 Attendorn

the right to use the SKZ - testing and inspection mark



**A 644**

for the following plastic products

**Pressure pipe system, group 1 and 2**  
**Fibre multilayer pipes made of**  
**PP-RP/PP-RP-GF/PP-RP, SDR 9**


Trade name: aquatherm green pipe SDR9 MF- RP

SKZ specification for tests and inspection **HR 3.28**

Users of the SKZ - mark are obliged to observe the required regulations for the production and testing of these products.

Date of initial certification: ---

Date of expiry: 30 September 2018



Würzburg, 1 October 2013

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Management System  
ISO 9001:2008  
ISO 14001:2004  
ISO 50001:2011  
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