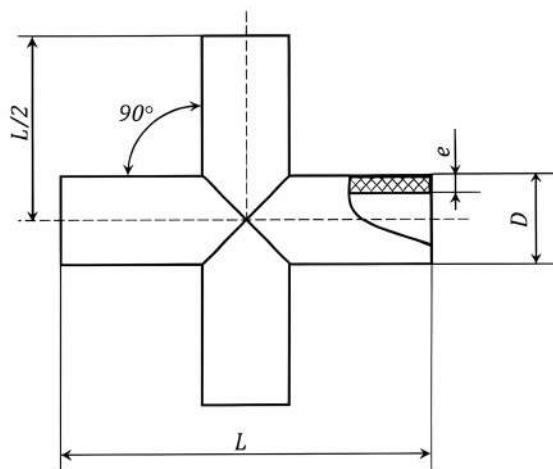
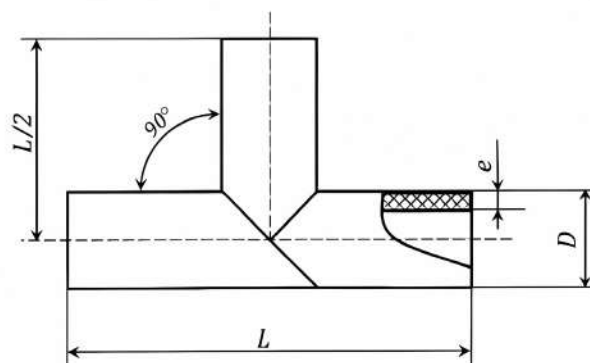


## Крестовина сегментная равнопроходная Parus



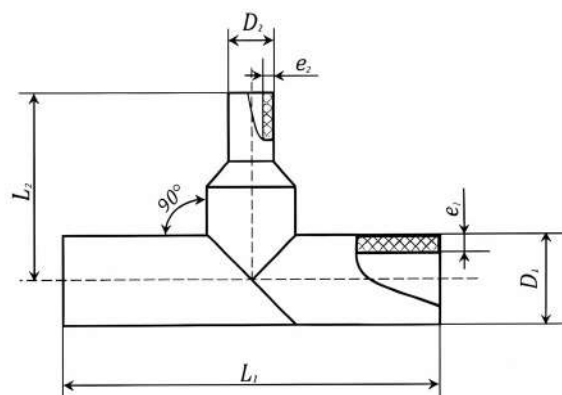
ТУ 22.21.29-003-28551776-2020			SDR 11	SDR 17	SDR 21
Наименование полистилена			Номинальное давление, 10 <sup>5</sup> Па (бар)		
ПЭ100/ПЭ100RC			PN16	PN10	PN8
D, mm	L, mm	L/2, mm	e, mm	e, mm	e, mm
63	500	250	5,8	3,8	3,0
75	510	255	6,8	4,5	3,6
90	520	260	8,2	5,4	4,3
110	540	270	10,0	6,6	5,3
125	570	285	11,4	7,4	6,0
140	590	295	12,7	8,3	6,7
160	610	305	14,6	9,5	7,7
180	630	315	16,4	10,7	8,6
200	650	325	18,2	11,9	9,6
225	660	330	20,5	13,4	10,8
250	690	345	22,7	14,8	11,9
280	700	350	25,4	16,6	13,4
315	1000	500	28,6	18,7	15,0
355	1200	600	32,2	21,1	16,9
400	1200	600	36,3	23,7	19,1
450	1250	625	40,9	26,7	21,5
500	1250	625	45,4	29,7	23,9
560	1300	650	50,8	33,2	26,7
630	1300	650	57,2	37,4	30,0

# Тройник сегментный равнопроходной Parus



ТУ 22.21.29-003-28551776-2020			SDR 11	SDR 17	SDR 21
Наименование полиэтилена			Номинальное давление, 10 <sup>5</sup> Па (бар)		
ПЭ100/ПЭ100RC			PN16	PN10	PN8
D, mm	L, mm	L/2, mm	e, mm	e, mm	e, mm
63	500	250	5,8	3,8	3,0
75	510	255	6,8	4,5	3,6
90	520	260	8,2	5,4	4,3
110	540	270	10,0	6,6	5,3
125	570	285	11,4	7,4	6,0
140	590	295	12,7	8,3	6,7
160	610	305	14,6	9,5	7,7
180	630	315	16,4	10,7	8,6
200	650	325	18,2	11,9	9,6
225	660	330	20,5	13,4	10,8
250	690	345	22,7	14,8	11,9
280	700	350	25,4	16,6	13,4
315	1000	500	28,6	18,7	15,0
355	1200	600	32,2	21,1	16,9
400	1200	600	36,3	23,7	19,1
450	1250	625	40,9	26,7	21,5
500	1250	625	45,4	29,7	23,9
560	1300	650	50,8	33,2	26,7
630	1300	650	57,2	37,4	30,0

## Тройник сегментный неравнопроходной Parus



ТУ 22.21.29-003-28551776-2020				SDR 11		SDR 17		SDR 21	
Наименование полиэтилена				Номинальное давление, 10 <sup>5</sup> Па (бар)					
ПЭ100/ПЭ100RC				PN16		PN10		PN8	
D <sub>1</sub> , mm	D <sub>2</sub> , mm	L <sub>1</sub> , mm	L <sub>2</sub> , mm	e <sub>1</sub> , mm	e <sub>2</sub> , mm	e <sub>1</sub> , mm	e <sub>2</sub> , mm	e <sub>1</sub> , mm	e <sub>2</sub> , mm
63	32	500	230	5.8	3.0	3.8	2.0	3.0	-
	40		230		3.7		2.4		-
	50		230		4.6		3.0		2.4
75	32	510	350	6.8	3.0	4.5	2.0	3.6	-
	40		250		3.7		2.4		-
	50		240		4.6		3.0		2.4
	63		230		5.8		3.8		3.0
90	32	520	354	8.2	3.0	5.4	2.0	4.3	-
	40		354		3.7		2.4		-
	50		344		4.6		3.0		2.4
	63		333		5.8		3.8		3.0
	75		323		6.8		4.5		3.6
110	32	540	382	10.0	3.0	6.6	2.0	5.3	-
	40		382		3.7		2.4		-
	50		372		4.6		3.0		2.4
	63		361		5.8		3.8		3.0
	75		350		6.8		4.5		3.6
	90		337		8.2		5.4		4.3
125	32	570	398	11.4	3.0	7.4	2.0	6.0	-
	40		398		3.7		2.4		-
	50		388		4.6		3.0		2.4
	63		388		5.8		3.8		3.0
	75		378		6.8		4.5		3.6
	90		365		8.2		5.4		4.3
	110		348		10.0		6.6		5.3
140	32	590	501	12.7	3.0	8.3	2.0	6.7	-
	40		501		3.7		2.4		-
	50		491		4.6		3.0		2.4
	63		491		5.8		3.8		3.0
	75		401		6.8		4.5		3.6
	90		388		8.2		5.4		4.3
	110		371		10.0		6.6		5.3
	125		358		11.4		7.4		6.0

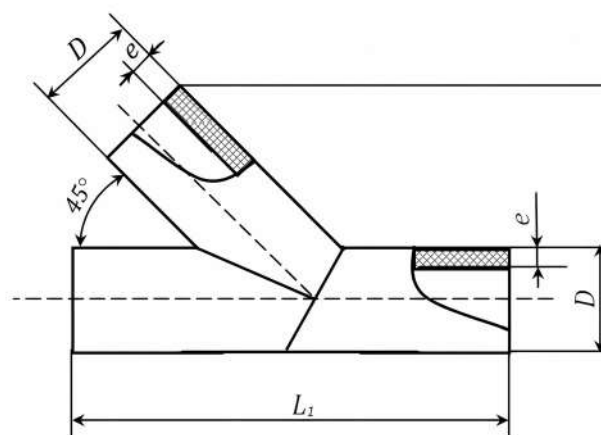
ТУ 22.21.29-003-28551776-2020				SDR 11		SDR 17		SDR 21			
Наименование полиэтилена				Номинальное давление, 10 <sup>5</sup> Па (бар)							
ПЭ100/ПЭ100RC				PN16		PN10		PN8			
D <sub>1</sub> , mm	D <sub>2</sub> , mm	L <sub>1</sub> , mm	L <sub>2</sub> , mm	e <sub>1</sub> , mm	e <sub>2</sub> , mm	e <sub>1</sub> , mm	e <sub>2</sub> , mm	e1, mm	e <sub>2</sub> , mm		
160	32	610	618	14.6	3.0	9.5	2.0	7.7	-		
	40		618						3.7	2.4	-
	50		518						4.6	3.0	2.4
	63		518						5.8	3.8	3.0
	75		518						6.8	4.5	3.6
	90		498						8.2	5.4	4.3
	110		398						10.0	6.6	5.3
	125		385						11.4	7.4	6.0
	140		372						12.7	8.3	6.7
180	32	630	645	16.4	3.0	10.7	2.0	8.6	-		
	40		645						3.7	2.4	-
	50		545						4.6	3.0	2.4
	63		545						5.8	3.8	3.0
	75		545						6.8	4.5	3.6
	90		525						8.2	5.4	4.3
	110		425						10.0	6.6	5.3
	125		412						11.4	7.4	6.0
	140		399						12.7	8.3	6.7
160	382	14.6	9.5	7.7							
200	32	650	645	18.2	3.0	11.9	2.0	9.6	-		
	40		645						3.7	2.4	-
	50		545						4.6	3.0	2.4
	63		545						5.8	3.8	3.0
	75		545						6.8	4.5	3.6
	90		545						8.2	5.4	4.3
	110		525						10.0	6.6	5.3
	125		425						11.4	7.4	6.0
	140		412						12.7	8.3	6.7
160	399	14.6	9.5	7.7							
180	382	16.4	10.7	8.6							
225	32	660	699	20.5	3.0	13.4	2.0	10.8	-		
	40		699						3.7	2.4	-
	50		599						4.6	3.0	2.4
	63		599						5.8	3.8	3.0
	75		599						6.8	4.5	3.6
	90		579						8.2	5.4	4.3
	110		479						10.0	6.6	5.3
	125		466						11.4	7.4	6.0
	140		453						12.7	8.3	6.7
160	436	14.6	9.5	7.7							
180	419	16.4	10.7	8.6							
200	401	18.2	11.9	9.6							
250	32	690	842	22.7	3.0	14.8	2.0	11.9	-		
	40		842						3.7	2.4	-
	50		742						4.6	3.0	2.4
	63		742						5.8	3.8	3.0
	75		742						6.8	4.5	3.6
	90		722						8.2	5.4	4.3
	110		622						10.0	6.6	5.3
	125		622						11.4	7.4	6.0
	140		622						12.7	8.3	6.7
160	472	14.6	9.5	7.7							
180	455	16.4	10.7	8.6							
200	438	18.2	11.9	9.6							
225	416	20.5	13.4	10.8							

ТУ 22.21.29-003-28551776-2020				SDR 11		SDR 17		SDR 21	
Наименование полиэтилена				Номинальное давление, 10 <sup>5</sup> Па (бар)					
ПЭ100/ПЭ100RC				PN16		PN10		PN8	
D <sub>1</sub> , mm	D <sub>2</sub> , mm	L <sub>1</sub> , mm	L <sub>2</sub> , mm	e <sub>1</sub> , mm	e <sub>2</sub> , mm	e <sub>1</sub> , mm	e <sub>2</sub> , mm	e1, mm	e <sub>2</sub> , mm
280	32	700	1032	25.4	3.0	16.6	2.0	13.4	-
	40		1032		3.7		2.4		-
	50		932		4.6		3.0		2.4
	63		932		5.8		3.8		3.0
	75		932		6.8		4.5		3.6
	90		912		8.2		5.4		4.3
	110		812		10.0		6.6		5.3
	125		812		11.4		7.4		6.0
	140		812		12.7		8.3		6.7
	160		662		14.6		9.5		7.7
	180		491		16.4		10.7		8.6
	200		474		18.2		11.9		9.6
	225		452		20.5		13.4		10.8
	250		431		22.7		14.8		11.9
315	32	1000	1328	28.6	3.0	18.7	2.0	15.0	-
	40		1328		3.7		2.4		-
	50		1228		4.6		3.0		2.4
	63		1228		5.8		3.8		3.0
	75		1228		6.8		4.5		3.6
	90		1208		8.2		5.4		4.3
	110		1108		10.0		6.6		5.3
	125		1108		11.4		7.4		6.0
	140		1108		12.7		8.3		6.7
	160		958		14.6		9.5		7.7
	180		786		16.4		10.7		8.6
	200		769		18.2		11.9		9.6
	225		748		20.5		13.4		10.8
	250		727		22.7		14.8		11.9
280	700	25.4	16.6	13.4					
355	32	1200	1562	32.2	3.0	21.1	2.0	16.9	-
	40		1562		3.7		2.4		-
	50		1462		4.6		3.0		2.4
	63		1462		5.8		3.8		3.0
	75		1462		6.8		4.5		3.6
	90		1442		8.2		5.4		4.3
	110		1342		10.0		6.6		5.3
	125		1342		11.4		7.4		6.0
	140		1342		12.7		8.3		6.7
	160		1192		14.6		9.5		7.7
	180		1192		16.4		10.7		8.6
	200		1192		18.2		11.9		9.6
	225		982		20.5		13.4		10.8
	250		960		22.7		14.8		11.9
280	935	25.4	16.6	13.4					
315	904	28.6	18.7	15.0					
400	32	1200	1745	36.3	3.0	23.7	2.0	19.1	-
	40		1745		3.7		2.4		-
	50		1645		4.6		3.0		2.4
	63		1645		5.8		3.8		3.0
	75		1645		6.8		4.5		3.6
	90		1625		8.2		5.4		4.3
	110		1525		10.0		6.6		5.3
	125		1525		11.4		7.4		6.0
	140		1525		12.7		8.3		6.7
	160		1375		14.6		9.5		7.7
	180		1375		16.4		10.7		8.6
	200		1375		18.2		11.9		9.6
	225		1165		20.5		13.4		10.8
	250		998		22.7		14.8		11.9
280	970	25.4	16.6	13.4					
315	945	28.6	18.7	15.0					
355	909	32.2	21.1	16.9					

ТУ 22.21.29-003-28551776-2020				SDR 11		SDR 17		SDR 21			
Наименование полиэтилена				Номинальное давление, 10 <sup>5</sup> Па (бар)							
ПЭ100/ПЭ100RC				PN16		PN10		PN8			
D <sub>1</sub> , mm	D <sub>2</sub> , mm	L <sub>1</sub> , mm	L <sub>2</sub> , mm	e <sub>1</sub> , mm	e <sub>2</sub> , mm	e <sub>1</sub> , mm	e <sub>2</sub> , mm	e1, mm	e <sub>2</sub> , mm		
450	32	1250	1787	40.9	40.9	26.7	26.7	21.5	-		
	40		1787						3.0	2.0	-
	50		1687						3.7	2.4	-
	63		1687						4.6	3.0	2.4
	75		1687						5.8	3.8	3.0
	90		1667						6.8	4.5	3.6
	110		1567						8.2	5.4	4.3
	125		1567						10.0	6.6	5.3
	140		1567						11.4	7.4	6.0
	160		1417						12.7	8.3	6.7
	180		1417						14.6	9.5	7.7
	200		1417						16.4	10.7	8.6
	225		1207						18.2	11.9	9.6
	250		1207						20.5	13.4	10.8
	280		1019						22.7	14.8	11.9
	315		987						25.4	16.6	13.4
	355		952						28.6	18.7	15.0
400	913	32.2	21.1	16.9							
500	32	1250	1834	45.4	45.4	29.7	29.7	23.9	-		
	40		1834						3.0	2.0	-
	50		1734						3.7	2.4	-
	63		1734						4.6	3.0	2.4
	75		1734						5.8	3.8	3.0
	90		1714						6.8	4.5	3.6
	110		1614						8.2	5.4	4.3
	125		1614						10.0	6.6	5.3
	140		1614						11.4	7.4	6.0
	160		1464						12.7	8.3	6.7
	180		1464						14.6	9.5	7.7
	200		1464						16.4	10.7	8.6
	225		1254						18.2	11.9	9.6
	250		1254						20.5	13.4	10.8
	280		1254						22.7	14.8	11.9
	315		1034						25.4	16.6	13.4
	355		996						28.6	18.7	15.0
400	956	32.2	21.1	16.9							
450	913	36.3	23.7	19.1							
560	32	1300	2150	50.8	50.8	33.2	33.2	26.7	-		
	40		2150						3.0	2.0	-
	50		2050						3.7	2.4	-
	63		2050						4.6	3.0	2.4
	75		2050						5.8	3.8	3.0
	90		2030						6.8	4.5	3.6
	110		1930						8.2	5.4	4.3
	125		1930						10.0	6.6	5.3
	140		1930						11.4	7.4	6.0
	160		1780						12.7	8.3	6.7
	180		1780						14.6	9.5	7.7
	200		1780						16.4	10.7	8.6
	225		1570						18.2	11.9	9.6
	250		1570						20.5	13.4	10.8
	280		1570						22.7	14.8	11.9
	315		1350						25.4	16.6	13.4
	355		1130						28.6	18.7	15.0
400	1090	32.2	21.1	16.9							
450	1045	36.3	23.7	19.1							
500	1002	40.9	26.7	21.5							
			45.4	29.7	23.9						

ТУ 22.21.29-003-28551776-2020				SDR 11		SDR 17		SDR 21	
Наименование полиэтилена				Номинальное давление, 10 <sup>5</sup> Па (бар)					
ПЭ100/ПЭ100RC				PN16		PN10		PN8	
D <sub>1</sub> , mm	D <sub>2</sub> , mm	L <sub>1</sub> , mm	L <sub>2</sub> , mm	e <sub>1</sub> , mm	e <sub>2</sub> , mm	e <sub>1</sub> , mm	e <sub>2</sub> , mm	e <sub>1</sub> , mm	e <sub>2</sub> , mm
630	32	1300	2635	57.2	3.0	37.4	2.0	30.0	-
	40		2635		3.7		2.4		-
	50		2535		4.6		3.0		2.4
	63		2535		5.8		3.8		3.0
	75		2535		6.8		4.5		3.6
	90		2515		8.2		5.4		4.3
	110		2415		10.0		6.6		5.3
	125		2415		11.4		7.4		6.0
	140		2415		12.7		8.3		6.7
	160		2265		14.6		9.5		7.7
	180		2265		16.4		10.7		8.6
	200		2265		18.2		11.9		9.6
	225		2055		20.5		13.4		10.8
	250		2055		22.7		14.8		11.9
	280		2055		25.4		16.6		13.4
	315		1835		28.6		18.7		15.0
	355		1585		32.2		21.1		16.9
	400		1285		36.3		23.7		19.1
450	1245	40.9	26.7	21.5					
500	1199	45.4	29.7	23.9					
560	1145	50.8	33.2	26.7					

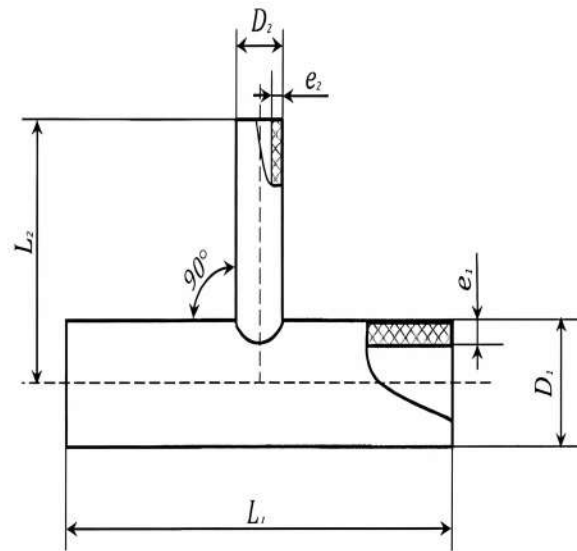
# Тройник сегментный равнопроходной 45° Parus



ТУ 22.21.29-003-28551776-2020			SDR 11	SDR 17
Наименование полиэтилена			Номинальное давление, 10 <sup>5</sup> Па (бар)	
ПЭ 100/ПЭ100RC			PN16	PN10
D, mm	L <sub>1</sub> , mm	L <sub>2</sub> , mm	e, mm	e, mm
110	610	350	10,0	6,6
125	630	400	11,4	7,4
140	690	450	12,7	8,3
160	750	500	14,6	9,5
180	750	550	16,4	10,7
200	800	600	18,2	11,9
225	800	600	20,5	13,4
250	1000	650	22,7	14,8



# Тройник сегментный редуционный Parus (седловая врезка)

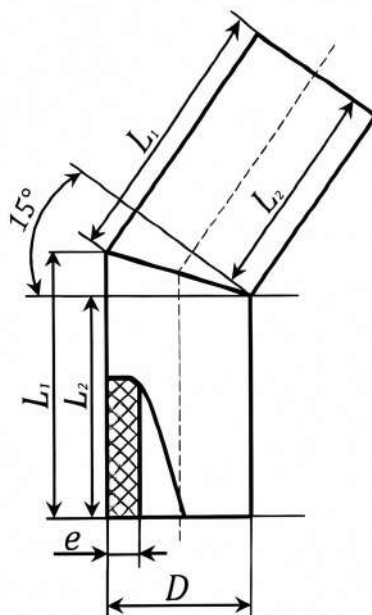


ТУ 22.21.29-003-28551776-2020				SDR 11		SDR 17		SDR 21	
Наименование полиэтилена				Номинальное давление, 10 <sup>5</sup> Па (бар)					
ПЭ100/ПЭ100RC				PN16		PN10		PN8	
D <sub>1</sub> , mm	D <sub>2</sub> , mm	L <sub>1</sub> , mm	L <sub>2</sub> , mm	e <sub>1</sub> , mm	e <sub>2</sub> , mm	e <sub>1</sub> , mm	e <sub>2</sub> , mm	e <sub>1</sub> , mm	e <sub>2</sub> , mm
315	32	1000	1328	28.6	3.0	18.7	2.0	15.0	--
	40		1328		3.7		2.4		--
	50		1228		4.6		3.0		2.4
	63		1228		5.8		3.8		3.0
	75		1228		6.8		4.5		3.6
	90		1208		8.2		5.4		4.3
	110		1108		10.0		6.6		5.3
	125		1108		11.4		7.4		6.0
	140		1108		12.7		8.3		6.7
	160		958		14.6		9.5		7.7
	180		786		16.4		10.7		8.6
	200		769		18.2		11.9		9.6
	225		748		20.5		13.4		10.8
	250		727		22.7		14.8		11.9
280	700	25.4	16.6	13.4					
355	32	1200	1562	32.2	3.0	21.1	2.0	16.9	--
	40		1562		3.7		2.4		--
	50		1462		4.6		3.0		2.4
	63		1462		5.8		3.8		3.0
	75		1462		6.8		4.5		3.6
	90		1442		8.2		5.4		4.3
	110		1342		10.0		6.6		5.3
	125		1342		11.4		7.4		6.0
	140		1342		12.7		8.3		6.7
	160		1192		14.6		9.5		7.7
	180		1192		16.4		10.7		8.6
	200		1192		18.2		11.9		9.6
	225		982		20.5		13.4		10.8
	250		960		22.7		14.8		11.9
	280		935		25.4		16.6		13.4
	315		904		28.6		18.7		15.0

ТУ 22.21.29-003-28551776-2020				SDR 11		SDR 17		SDR 21			
Наименование полиэтилена				Номинальное давление, 10 <sup>5</sup> Па (бар)							
ПЭ100/ПЭ100RC				PN16		PN10		PN8			
D <sub>1</sub> , mm	D <sub>2</sub> , mm	L <sub>1</sub> , mm	L <sub>2</sub> , mm	e <sub>1</sub> , mm	e <sub>2</sub> , mm	e <sub>1</sub> , mm	e <sub>2</sub> , mm	e <sub>1</sub> , mm	e <sub>2</sub> , mm		
400	32	1200	1745	36.3	3.0	23.7	2.0	19.1	--		
	40		1745						3.7	2.4	--
	50		1645						4.6	3.0	2.4
	63		1645						5.8	3.8	3.0
	75		1645						6.8	4.5	3.6
	90		1625						8.2	5.4	4.3
	110		1525						10.0	6.6	5.3
	125		1525						11.4	7.4	6.0
	140		1525						12.7	8.3	6.7
	160		1375						14.6	9.5	7.7
	180		1375						16.4	10.7	8.6
	200		1375						18.2	11.9	9.6
	225		1165						20.5	13.4	10.8
	250		998						22.7	14.8	11.9
	280		970						25.4	16.6	13.4
	315		945						28.6	18.7	15.0
355	909	32.2	21.1	16.9							
450	32	1250	1787	40.9	3.0	26.7	2.0	21.5	--		
	40		1787						3.7	2.4	--
	50		1687						4.6	3.0	2.4
	63		1687						5.8	3.8	3.0
	75		1687						6.8	4.5	3.6
	90		1667						8.2	5.4	4.3
	110		1567						10.0	6.6	5.3
	125		1567						11.4	7.4	6.0
	140		1567						12.7	8.3	6.7
	160		1417						14.6	9.5	7.7
	180		1417						16.4	10.7	8.6
	200		1417						18.2	11.9	9.6
	225		1207						20.5	13.4	10.8
	250		1207						22.7	14.8	11.9
	280		1019						25.4	16.6	13.4
	315		987						28.6	18.7	15.0
355	952	32.2	21.1	16.9							
400	913	36.3	23.7	19.1							
500	32	1250	1834	45.4	3.0	29.7	2.0	23.9	--		
	40		1834						3.7	2.4	--
	50		1734						4.6	3.0	2.4
	63		1734						5.8	3.8	3.0
	75		1734						6.8	4.5	3.6
	90		1714						8.2	5.4	4.3
	110		1614						10.0	6.6	5.3
	125		1614						11.4	7.4	6.0
	140		1614						12.7	8.3	6.7
	160		1464						14.6	9.5	7.7
	180		1464						16.4	10.7	8.6
	200		1464						18.2	11.9	9.6
	225		1254						20.5	13.4	10.8
	250		1254						22.7	14.8	11.9
	280		1254						25.4	16.6	13.4
	315		1034						28.6	18.7	15.0
355	996	32.2	21.1	16.9							
400	956	36.3	23.7	19.1							
450	913	40.9	26.7	21.5							

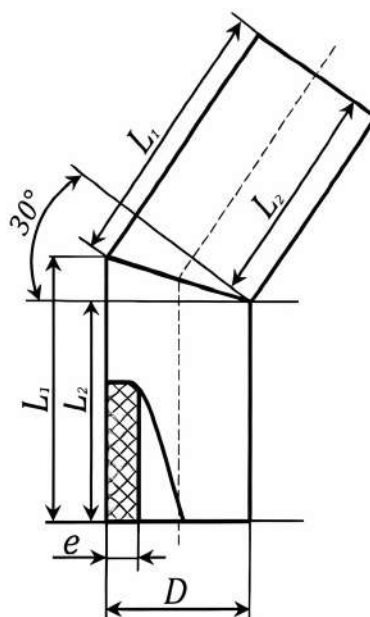
ТУ 22.21.29-003-28551776-2020				SDR 11		SDR 17		SDR 21			
Наименование полиэтилена				Номинальное давление, 10 <sup>5</sup> Па (бар)							
ПЭ100/ПЭ100RC				PN16		PN10		PN8			
D <sub>1</sub> , mm	D <sub>2</sub> , mm	L <sub>1</sub> , mm	L <sub>2</sub> , mm	e <sub>1</sub> , mm	e <sub>2</sub> , mm	e <sub>1</sub> , mm	e <sub>2</sub> , mm	e <sub>1</sub> , mm	e <sub>2</sub> , mm		
560	32	1300	2150	50.8	3.0	33.2	2.0	26.7	--		
	40		2150						3.7	2.4	--
	50		2050						4.6	3.0	2.4
	63		2050						5.8	3.8	3.0
	75		2050						6.8	4.5	3.6
	90		2030						8.2	5.4	4.3
	110		1930						10.0	6.6	5.3
	125		1930						11.4	7.4	6.0
	140		1930						12.7	8.3	6.7
	160		1780						14.6	9.5	7.7
	180		1780						16.4	10.7	8.6
	200		1780						18.2	11.9	9.6
	225		1570						20.5	13.4	10.8
	250		1570						22.7	14.8	11.9
	280		1570						25.4	16.6	13.4
	315		1350						28.6	18.7	15.0
	355		1130						32.2	21.1	16.9
400	1090	36.3	23.7	19.1							
450	1045	40.9	26.7	21.5							
500	1002	45.4	29.7	23.9							
630	32	1300	2635	57.2	3.0	37.4	2.0	30.0	--		
	40		2635						3.7	2.4	--
	50		2535						4.6	3.0	2.4
	63		2535						5.8	3.8	3.0
	75		2535						6.8	4.5	3.6
	90		2515						8.2	5.4	4.3
	110		2415						10.0	6.6	5.3
	125		2415						11.4	7.4	6.0
	140		2415						12.7	8.3	6.7
	160		2265						14.6	9.5	7.7
	180		2265						16.4	10.7	8.6
	200		2265						18.2	11.9	9.6
	225		2055						20.5	13.4	10.8
	250		2055						22.7	14.8	11.9
	280		2055						25.4	16.6	13.4
	315		1835						28.6	18.7	15.0
	355		1585						32.2	21.1	16.9
400	1285	36.3	23.7	19.1							
450	1245	40.9	26.7	21.5							
500	1199	45.4	29.7	23.9							
560	1145	50.8	33.2	26.7							

# Отвод сегментный 15° Parus



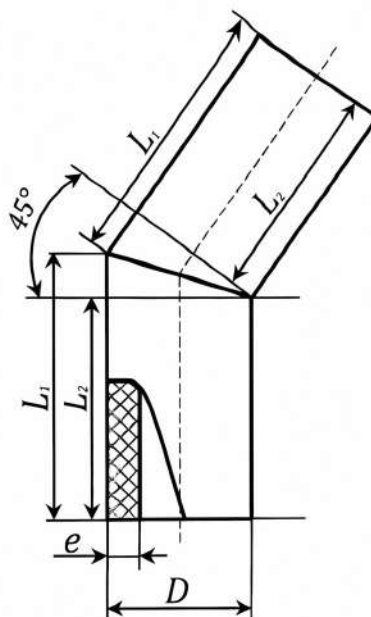
ТУ 22.21.29-003-28551776-2020			SDR 11	SDR 17	SDR 21
Наименование полистилена			Номинальное давление, 10 <sup>5</sup> Па (бар)		
ПЭ100/ПЭ100RC			PN16	PN10	PN8
D, mm	L <sub>1</sub> , mm	L <sub>2</sub> , mm	e, mm	e, mm	e, mm
63	207	200	5,8	3,8	3,0
75	209	200	6,8	4,5	3,6
90	210	200	8,2	5,4	4,3
110	214	200	10,0	6,6	5,3
125	216	200	11,4	7,4	6,0
140	218	200	12,7	8,3	6,7
160	271	250	14,6	9,5	7,7
180	274	250	16,4	10,7	8,6
200	276	250	18,2	11,9	9,6
225	280	250	20,5	13,4	10,8
250	283	250	22,7	14,8	11,9
280	337	300	25,4	16,6	13,4
315	241	300	28,6	18,7	15,0
355	297	350	32,2	21,1	16,9
400	403	350	36,3	23,7	19,1
450	409	350	40,9	26,7	21,5
500	416	350	45,4	29,7	23,9
560	474	400	50,8	33,2	26,7
630	474	400	57,2	37,4	30,0

## Отвод сегментный 30° Parus



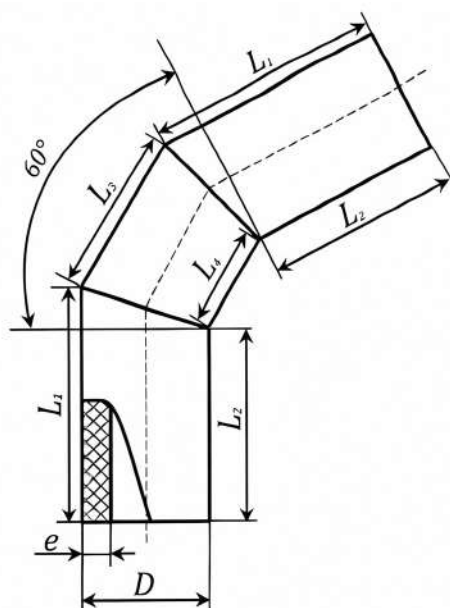
ТУ 22.21.29-003-28551776-2020			SDR 11	SDR 17	SDR 21
Наименование полиэтилена			Номинальное давление, 10 <sup>5</sup> Па (бар)		
ПЭ100/ПЭ100RC			PN16	PN10	PN8
D, mm	L <sub>1</sub> , mm	L <sub>2</sub> , mm	e, mm	e, mm	e, mm
63	215	200	5,8	3,8	3,0
75	223	200	6,8	4,5	3,6
90	225	200	8,2	5,4	4,3
110	229	200	10,0	6,6	5,3
125	233	200	11,4	7,4	6,0
140	238	200	12,7	8,3	6,7
160	293	250	14,6	9,5	7,7
180	298	250	16,4	10,7	8,6
200	304	250	18,2	11,9	9,6
225	310	250	20,5	13,4	10,8
250	317	250	22,7	14,8	11,9
280	375	300	25,4	16,6	13,4
315	384	300	28,6	18,7	15,0
355	445	350	32,2	21,1	16,9
400	457	350	36,3	23,7	19,1
450	470	350	40,9	26,7	21,5
500	484	350	45,4	29,7	23,9
560	550	400	50,8	33,2	26,7
630	569	400	57,2	37,4	30,0

# Отвод сегментный 45° Parus



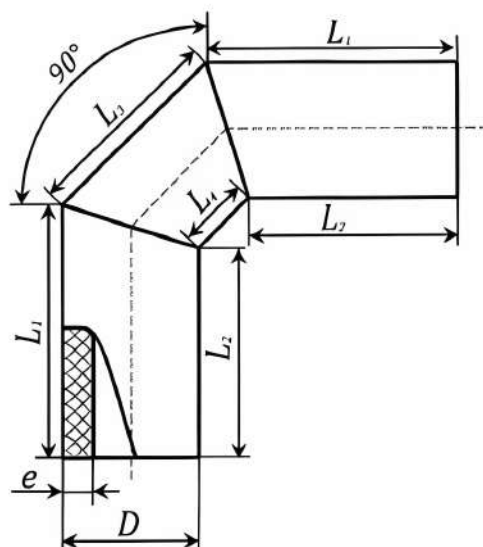
ТУ 22.21.29-003-28551776-2020			SDR 11	SDR 17	SDR 21
Наименование полиэтилена			Номинальное давление, 10 <sup>5</sup> Па (бар)		
ПЭ100/ПЭ100RC			PN16	PN10	PN8
D, mm	L <sub>1</sub> , mm	L <sub>2</sub> , mm	e, mm	e, mm	e, mm
63	230	200	5,8	3,8	3,0
75	234	200	6,8	4,5	3,6
90	240	200	8,2	5,4	4,3
110	246	200	10,0	6,6	5,3
125	252	200	11,4	7,4	6,0
140	258	200	12,7	8,3	6,7
160	316	250	14,6	9,5	7,7
180	325	250	16,4	10,7	8,6
200	333	250	18,2	11,9	9,6
225	343	250	20,5	13,4	10,8
250	354	250	22,7	14,8	11,9
280	416	300	25,4	16,6	13,4
315	430	300	28,6	18,7	15,0
355	497	350	32,2	21,1	16,9
400	516	350	36,3	23,7	19,1
450	536	350	40,9	26,7	21,5
500	557	350	45,4	29,7	23,9
560	632	400	50,8	33,2	26,7
630	661	400	57,2	37,4	30,0

## Отвод сегментный 60° Parus



ТУ 22.21.29-003-28551776-2020					SDR 11	SDR 17	SDR 21
Наименование полиэтилена					Номинальное давление, 10 <sup>5</sup> Па (бар)		
ПЭ100/ПЭ100RC					PN16	PN10	PN8
D, mm	L <sub>1</sub> , mm	L <sub>2</sub> , mm	L <sub>3</sub> , mm	L <sub>4</sub> , mm	e, mm	e, mm	e, mm
63	215	200	150	50	5,8	3,8	3,0
75	222	200	150	65	6,8	4,5	3,6
90	225	200	150	65	8,2	5,4	4,3
110	229	200	129	70	10,0	6,6	5,3
125	233	200	137	70	11,4	7,4	6,0
140	238	200	150	75	12,7	8,3	6,7
160	293	250	166	80	14,6	9,5	7,7
180	298	250	186	90	16,4	10,7	8,6
200	304	250	207	100	18,2	11,9	9,6
225	310	250	261	140	20,5	13,4	10,8
250	317	250	274	140	22,7	14,8	11,9
280	375	300	290	140	25,4	16,6	13,4
315	384	300	309	140	28,6	18,7	15,0
355	445	350	340	150	32,2	21,1	16,9
400	457	350	374	160	36,3	23,7	19,1
450	470	350	416	175	40,9	26,7	21,5
500	484	350	458	190	45,4	29,7	23,9
560	550	400	515	215	50,8	33,2	26,7
630	569	400	563	225	57,2	37,4	30,0

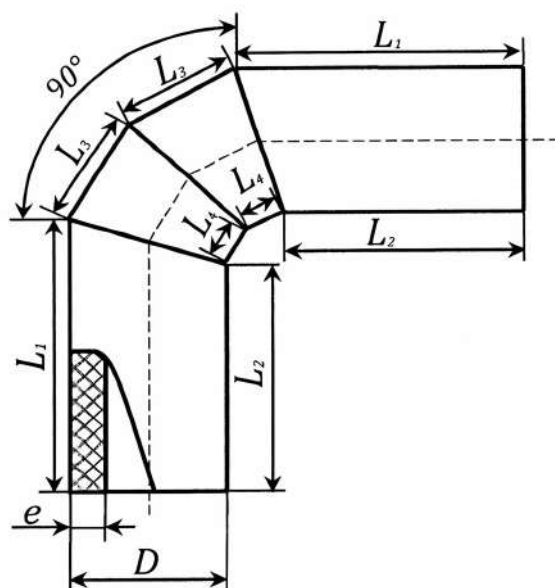
# Отвод сегментный 90° Parus односекционный



ТУ 22.21.29-003-28551776-2020					SDR 11	SDR 17	SDR 21
Наименование полиэтилена					Номинальное давление, 10 <sup>5</sup> Па (бар)		
ПЭ100/ПЭ100RC					PN16	PN10	PN8
D, mm	L <sub>1</sub> , mm	L <sub>2</sub> , mm	L <sub>3</sub> , mm	L <sub>4</sub> , mm	e, mm	e, mm	e, mm
63	230	200	100	50	5,8	3,8	3,0
75	234	200	110	65	6,8	4,5	3,6
90	240	200	120	65	8,2	5,4	4,3
110	246	200	161	70	10,0	6,6	5,3
125	252	200	174	70	11,4	7,4	6,0
140	258	200	191	75	12,7	8,3	6,7
160	316	250	213	80	14,6	9,5	7,7
180	325	250	239	90	16,4	10,7	8,6
200	333	250	266	100	18,2	11,9	9,6
225	343	250	326	140	20,5	13,4	10,8
250	354	250	347	140	22,7	14,8	11,9
280	416	300	372	140	25,4	16,6	13,4
315	430	300	401	140	28,6	18,7	15,0
355	497	350	444	150	32,2	21,1	16,9
400	516	350	491	160	36,3	23,7	19,1
450	536	350	548	175	40,9	26,7	21,5
500	557	350	604	190	45,4	29,7	23,9
560	632	400	679	215	50,8	33,2	26,7
630	661	400	747	225	57,2	37,4	30,0

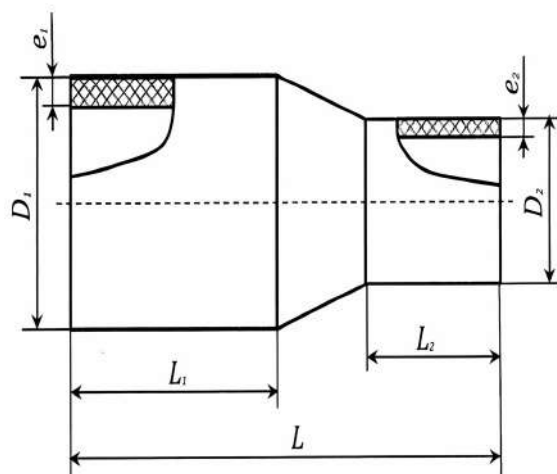


## Отвод сегментный 90° Parus двухсекционный



ТУ 22.21.29-003-28551776-2020					SDR 11	SDR 17	SDR 21
Наименование полиэтилена					Номинальное давление, 10 <sup>5</sup> Па (бар)		
ПЭ100/ПЭ100RC					PN16	PN10	PN8
D, mm	L <sub>1</sub> , mm	L <sub>2</sub> , mm	L <sub>3</sub> , mm	L <sub>4</sub> , mm	e, mm	e, mm	e, mm
63	215	200	150	50	5,8	3,8	3,0
75	222	200	150	65	6,8	4,5	3,6
90	225	200	150	65	8,2	5,4	4,3
110	229	200	129	70	10,0	6,6	5,3
125	233	200	137	70	11,4	7,4	6,0
140	238	200	150	75	12,7	8,3	6,7
160	293	250	166	80	14,6	9,5	7,7
180	298	250	186	90	16,4	10,7	8,6
200	304	250	207	100	18,2	11,9	9,6
225	310	250	261	140	20,5	13,4	10,8
250	317	250	274	140	22,7	14,8	11,9
280	375	300	290	140	25,4	16,6	13,4
315	384	300	309	140	28,6	18,7	15,0
355	445	350	340	150	32,2	21,1	16,9
400	457	350	374	160	36,3	23,7	19,1
450	470	350	416	175	40,9	26,7	21,5
500	484	350	458	190	45,4	29,7	23,9
560	550	400	515	215	50,8	33,2	26,7
630	569	400	563	225	57,2	37,4	30,0

# Переход сварной удлиненный Parus



ТУ 22.21.29-003-28551776-2020					SDR 11		SDR 17		SDR 21	
Наименование полиэтилена					Номинальное давление, 10 <sup>5</sup> Па (бар)					
ПЭ100/ПЭ100RC					PN16		PN10		PN8	
D <sub>1</sub> ,mm	D <sub>2</sub> ,mm	L,mm	L <sub>1</sub> ,mm	L <sub>2</sub> ,mm	e <sub>1</sub> ,mm	e <sub>2</sub> ,mm	e <sub>1</sub> ,mm	e <sub>2</sub> ,mm	e <sub>1</sub> ,mm	e <sub>2</sub> ,mm
63	32	210	70	70	5.8	3.0	3.8	2.0	3.0	-
	40		70	70		3.7		2.4		-
	50		70	70		4.6		3.0		2.4
75	32	210	70	70	6.8	3.0	4.5	2.0	3.6	-
	40		70	70		3.7		2.4		-
	50		70	70		4.6		3.0		2.4
	63		70	70		5.8		3.8		3.0
90	32	240	100	70	8.2	3.0	5.4	2.0	4.3	-
	40		100	70		3.7		2.4		-
	50		100	70		4.6		3.0		2.4
	63		100	70		5.8		3.8		3.0
	75		100	70		6.8		4.5		3.6
110	32	240	100	70	10.0	3.0	6.6	2.0	5.3	-
	40		100	70		3.7		2.4		-
	50		100	70		4.6		3.0		2.4
	63		100	70		5.8		3.8		3.0
	75		100	70		6.8		4.5		3.6
	90		267	100		100		8.2		5.4

ТУ 22.21.29-003-28551776-2020					SDR 11		SDR 17		SDR 21	
Наименование полиэтилена					Номинальное давление, 10 <sup>5</sup> Па (бар)					
ПЭ100/ПЭ100RC					PN16		PN10		PN8	
D <sub>1</sub> ,mm	D <sub>2</sub> ,mm	L,mm	L <sub>1</sub> ,mm	L <sub>2</sub> ,mm	e <sub>1</sub> ,mm	e <sub>2</sub> ,mm	e <sub>1</sub> ,mm	e <sub>2</sub> ,mm	e <sub>1</sub> ,mm	e <sub>2</sub> ,mm
125	32	403	100	70	11.4	3.0	7.4	2.0	6.0	–
	40		100	70		3.7		2.4		–
	50		100	70		4.6		3.0		2.4
	63		100	70		5.8		3.8		3.0
	75	100	70	6.8		4.5		3.6		
	90	330	100	100		8.2		5.4		4.3
	110	263	100	100		10.0		6.6		5.3
140	32	441	125	70	12.7	3.0	8.3	2.0	6.7	–
	40		125	70		3.7		2.4		–
	50		125	70		4.6		3.0		2.4
	63		125	70		5.8		3.8		3.0
	75	125	70	6.8		4.5		3.6		
	90	368	125	100		8.2		5.4		4.3
	110	301	125	100		10.0		6.6		5.3
	125	288	125	100		11.4		7.4		6.0
160	32	468	135	70	14.6	3.0	9.5	2.0	7.7	–
	40		135	70		3.7		2.4		–
	50		135	70		4.6		3.0		2.4
	63		135	70		5.8		3.8		3.0
	75	135	70	6.8		4.5		3.6		
	90	395	135	100		8.2		5.4		4.3
	110	328	135	100		10.0		6.6		5.3
	125	315	135	100		11.4		7.4		6.0
	140	327	135	125		12.7		8.3		6.7
180	32	540	140	70	16.4	3.0	10.7	2.0	8.6	–
	40		140	70		3.7		2.4		–
	50		140	70		4.6		3.0		2.4
	63		140	70		5.8		3.8		3.0
	75	140	70	6.8		4.5		3.6		
	90	467	140	100		8.2		5.4		4.3
	110	400	140	100		10.0		6.6		5.3
	125	380	140	100		11.4		7.4		6.0
	140	399	140	125		12.7		8.3		6.7
	160	342	140	135		14.6		9.5		7.7
200	32	567	150	70	18.2	3.0	11.9	2.0	9.6	–
	40		150	70		3.7		2.4		–
	50		150	70		4.6		3.0		2.4
	63		150	70		5.8		3.8		3.0
	75	150	70	6.8		4.5		3.6		
	90	494	150	100		8.2		5.4		4.3
	110	427	150	100		10.0		6.6		5.3
	125	414	150	100		11.4		7.4		6.0
	140	426	150	125		12.7		8.3		6.7
	160	369	150	135		14.6		9.5		7.7
	180	357	150	140		16.4		10.7		8.6

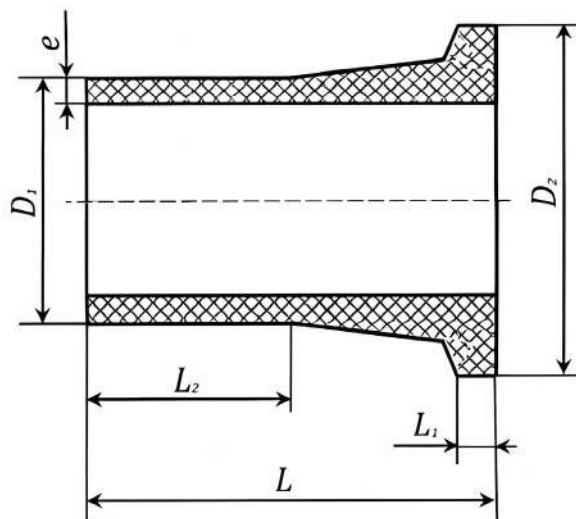
ТУ 22.21.29-003-28551776-2020					SDR 11		SDR 17		SDR 21	
Наименование полиэтилена					Номинальное давление, 10 <sup>5</sup> Па (бар)					
ПЭ100/ПЭ100RC					PN16		PN10		PN8	
D <sub>1</sub> ,mm	D <sub>2</sub> ,mm	L,mm	L <sub>1</sub> ,mm	L <sub>2</sub> ,mm	e <sub>1</sub> ,mm	e <sub>2</sub> ,mm	e <sub>1</sub> ,mm	e <sub>2</sub> ,mm	e <sub>1</sub> ,mm	e <sub>2</sub> ,mm
225	32	589	150	70	20.5	3.0	13.4	2.0	10.8	-
	40		150	70		3.7		2.4		-
	50		150	70		4.6		3.0		2.4
	63		150	70		5.8		3.8		3.0
	75		150	70		6.8		4.5		3.6
	90	516	150	100		8.2		5.4		4.3
	110	449	150	100		10.0		6.6		5.3
	125	436	150	100		11.4		7.4		6.0
	140	448	150	125		12.7		8.3		6.7
	160	391	150	135		14.6		9.5		7.7
	180	379	150	140		16.4		10.7		8.6
	200	371	150	150		18.2		11.9		9.6
250	32	710	200	70	22.7	3.0	14.8	2.0	11.9	-
	40		200	70		3.7		2.4		-
	50		200	70		4.6		3.0		2.4
	63		200	70		5.8		3.8		3.0
	75		200	70		6.8		4.5		3.6
	90	633	200	100		8.2		5.4		4.3
	110	570	200	100		10.0		6.6		5.3
	125	557	200	100		11.4		7.4		6.0
	140	569	200	125		12.7		8.3		6.7
	160	512	200	135		14.6		9.5		7.7
	180	500	200	140		16.4		10.7		8.6
	200	492	200	150		18.2		11.9		9.6
225	421	200	150	20.5	13.4	10.8				
280	32	736	200	70	25.4	3.0	16.6	2.0	13.4	-
	40		200	70		3.7		2.4		-
	50		200	70		4.6		3.0		2.4
	63		200	70		5.8		3.8		3.0
	75		200	70		6.8		4.5		3.6
	90	663	200	100		8.2		5.4		4.3
	110	596	200	100		10.0		6.6		5.3
	125	583	200	100		11.4		7.4		6.0
	140	595	200	125		12.7		8.3		6.7
	160	538	200	135		14.6		9.5		7.7
	180	526	200	140		16.4		10.7		8.6
	200	518	200	150		18.2		11.9		9.6
225	447	200	150	20.5	13.4	10.8				
250	476	200	200	22.7	14.8	11.9				

ТУ 22.21.29-003-28551776-2020					SDR 11		SDR 17		SDR 21	
Наименование полиэтилена					Номинальное давление, 10 <sup>5</sup> Па (бар)					
ПЭ100/ПЭ100RC					PN16		PN10		PN8	
D <sub>1</sub> ,mm	D <sub>2</sub> ,mm	L,mm	L <sub>1</sub> ,mm	L <sub>2</sub> ,mm	e <sub>1</sub> ,mm	e <sub>2</sub> ,mm	e <sub>1</sub> ,mm	e <sub>2</sub> ,mm	e <sub>1</sub> ,mm	e <sub>2</sub> ,mm
315	32	786	200	70	28.6	3.0	18.7	2.0	15.0	-
	40		200	70		3.7		2.4		-
	50		200	70		4.6		3.0		2.4
	63		200	70		5.8		3.8		3.0
	75		200	70		6.8		4.5		3.6
	90	713	200	100		8.2		5.4		4.3
	110	646	200	100		10.0		6.6		5.3
	125	633	200	100		11.4		7.4		6.0
	140	645	200	125		12.7		8.3		6.7
	160	588	200	135		14.6		9.5		7.7
	180	576	200	140		16.4		10.7		8.6
	200	568	200	150		18.2		11.9		9.6
	225	547	200	150		20.5		13.4		10.8
	250	526	200	200		22.7		14.8		11.9
280	500	200	200	25.4	16.6	13.4				
355	32	940	250	70	32.2	3.0	21.1	2.0	16.9	-
	40		250	70		3.7		2.4		-
	50		250	70		4.6		3.0		2.4
	63		250	70		5.8		3.8		3.0
	75		250	70		6.8		4.5		3.6
	90	867	250	100		8.2		5.4		4.3
	110	800	250	100		10.0		6.6		5.3
	125	787	250	100		11.4		7.4		6.0
	140	799	250	125		12.7		8.3		6.7
	160	742	250	135		14.6		9.5		7.7
	180	730	250	140		16.4		10.7		8.6
	200	722	250	150		18.2		11.9		9.6
	225	651	250	150		20.5		13.4		10.8
	250	680	250	200		22.7		14.8		11.9
280	654	250	200	25.4	16.6	13.4				
315	554	250	200	28.6	18.7	15.0				
400	32	979	250	70	36.3	3.0	23.7	2.0	19.1	-
	40		250	70		3.7		2.4		-
	50		250	70		4.6		3.0		2.4
	63		250	70		5.8		3.8		3.0
	75		250	70		6.8		4.5		3.6
	90	906	250	100		8.2		5.4		4.3
	110	839	250	100		10.0		6.6		5.3
	125	826	250	100		11.4		7.4		6.0
	140	838	250	125		12.7		8.3		6.7
	160	781	250	135		14.6		9.5		7.7
	180	769	250	140		16.4		10.7		8.6
	200	761	250	150		18.2		11.9		9.6
	225	690	250	150		20.5		13.4		10.8
	250	719	250	200		22.7		14.8		11.9
280	693	250	200	25.4	16.6	13.4				
315	593	250	200	28.6	18.7	15.0				
355	609	250	250	32.2	21.1	16.9				

ТУ 22.21.29-003-28551776-2020					SDR 11		SDR 17		SDR 21	
Наименование полиэтилена					Номинальное давление, 10 <sup>5</sup> Па (бар)					
ПЭ100/ПЭ100RC					PN16		PN10		PN8	
D <sub>1</sub> ,mm	D <sub>2</sub> ,mm	L,mm	L <sub>1</sub> ,mm	L <sub>2</sub> ,mm	e <sub>1</sub> ,mm	e <sub>2</sub> ,mm	e <sub>1</sub> ,mm	e <sub>2</sub> ,mm	e <sub>1</sub> ,mm	e <sub>2</sub> ,mm
450	32	1142	300	70	40.9	3.0	26.7	2.0	21.5	-
	40		300	70		3.7		2.4		-
	50		300	70		4.6		3.0		2.4
	63		300	70		5.8		3.8		3.0
	75		300	70		6.8		4.5		3.6
	90	1069	300	100		8.2		5.4		4.3
	110	1002	300	100		10.0		6.6		5.3
	125	989	300	100		11.4		7.4		6.0
	140	1001	300	125		12.7		8.3		6.7
	160	944	300	135		14.6		9.5		7.7
	180	932	300	140		16.4		10.7		8.6
	200	924	300	150		18.2		11.9		9.6
	225	853	300	150		20.5		13.4		10.8
	250	882	300	200		22.7		14.8		11.9
	280	856	300	200		25.4		16.6		13.4
	315	756	300	200		28.6		18.7		15.0
	355	702	300	250		32.2		21.1		16.9
400	663	300	250	36.3	23.7	19.1				
500	32	1185	300	70	45.4	3.0	29.7	2.0	23.9	-
	40		300	70		3.7		2.4		-
	50		300	70		4.6		3.0		2.4
	63		300	70		5.8		3.8		3.0
	75		300	70		6.8		4.5		3.6
	90	1112	300	100		8.2		5.4		4.3
	110	1045	300	100		10.0		6.6		5.3
	125	1032	300	100		11.4		7.4		6.0
	140	1044	300	125		12.7		8.3		6.7
	160	987	300	135		14.6		9.5		7.7
	180	975	300	140		16.4		10.7		8.6
	200	967	300	150		18.2		11.9		9.6
	225	896	300	150		20.5		13.4		10.8
	250	925	300	200		22.7		14.8		11.9
	280	899	300	200		25.4		16.6		13.4
	315	799	300	200		28.6		18.7		15.0
	355	815	300	250		32.2		21.1		16.9
400	706	300	250	36.3	23.7	19.1				
450	713	300	300	40.9	26.7	21.5				
560	32	1307	350	70	50.8	3.0	33.2	2.0	26.7	-
	40		350	70		3.7		2.4		-
	50		350	70		4.6		3.0		2.4
	63		350	70		5.8		3.8		3.0
	75		350	70		6.8		4.5		3.6
	90	1234	350	100		8.2		5.4		4.3
	110	1167	350	100		10.0		6.6		5.3
	125	1154	350	100		11.4		7.4		6.0
	140	1166	350	125		12.7		8.3		6.7
	160	1159	350	135		14.6		9.5		7.7
	180	1147	350	140		16.4		10.7		8.6
	200	1139	350	150		18.2		11.9		9.6
	225	1068	350	150		20.5		13.4		10.8
	250	1097	350	200		22.7		14.8		11.9
	280	1071	350	200		25.4		16.6		13.4
	315	971	350	200		28.6		18.7		15.0
	355	917	350	250		32.2		21.1		16.9
400	808	350	250	36.3	23.7	19.1				
450	815	350	300	40.9	26.7	21.5				
500	772	350	300	45.4	29.7	23.9				

ТУ 22.21.29-003-28551776-2020					SDR 11		SDR 17		SDR 21	
Наименование полиэтилена					Номинальное давление, 10 <sup>5</sup> Па (бар)					
ПЭ100/ПЭ100RC					PN16		PN10		PN8	
D <sub>1</sub> ,mm	D <sub>2</sub> ,mm	L,mm	L <sub>1</sub> ,mm	L <sub>2</sub> ,mm	e <sub>1</sub> ,mm	e <sub>2</sub> ,mm	e <sub>1</sub> ,mm	e <sub>2</sub> ,mm	e <sub>1</sub> ,mm	e <sub>2</sub> ,mm
630	32	1517	350	70	57.2	3.0	37.4	2.0	30.0	–
	40		350	70		3.7		2.4		–
	50		350	70		4.6		3.0		2.4
	63		350	70		5.8		3.8		3.0
	75		350	70		6.8		4.5		3.6
	90	1294	350	100		8.2		5.4		4.3
	110	1277	350	100		10.0		6.6		5.3
	125	1264	350	100		11.4		7.4		6.0
	140	1276	350	125		12.7		8.3		6.7
	160	1219	350	135		14.6		9.5		7.7
	180	1207	350	140		16.4		10.7		8.6
	200	1150	350	150		18.2		11.9		9.6
	225	1128	350	150		20.5		13.4		10.8
	250	1157	350	200		22.7		14.8		11.9
	280	1131	350	200		25.4		16.6		13.4
	315	1031	350	200		28.6		18.7		15.0
	355	1047	350	250		32.2		21.1		16.9
	400	938	350	250		36.3		23.7		19.1
	450	875	350	300		40.9		26.7		21.5
	500	832	350	300		45.4		29.7		23.9
560	830	350	350	50.8	33.2	26.7				

# Втулка сегментная удлиненная Parus



ТУ 22.21.29-003-28551776-2020					SDR 11	SDR 17	SDR 21
Наименование полиэтилена					Номинальное давление, 10 <sup>5</sup> Па (бар)		
ПЭ100/ПЭ100RC					PN16	PN10	PN8
D <sub>1</sub> , mm	L, mm	D <sub>2</sub> , mm	L <sub>1</sub> , mm	L <sub>2</sub> , mm	e, mm	e, mm	e, mm
40	80	78	11	60	3.7	2.4	2.0
50	80	88	12	60	4.6	3.0	2.4
63	115	102	14	90	5.8	3.8	3.0
75	130	122	16	105	6.8	4.5	3.6
90	135	138	17	105	8.2	5.4	4.3
110	135	158	20	105	10.0	6.6	5.3
125	160	158	25	125	11.4	7.4	6.0
140	170	190	25	135	12.7	8.3	6.7
160	175	212	30	135	14.6	9.5	7.7
180	180	212	30	140	16.4	10.7	8.6
200	230	268	32	150	18.2	11.9	9.6
225	230	268	34	150	20.5	13.4	10.8
250	310	320	40	200	22.7	14.8	11.9
280	310	320	40	200	25.4	16.6	13.4
315	320	370	50	200	28.6	18.7	15.0
355	420	430	50	250	32.2	21.1	16.9
400	435	482	50	250	36.3	23.7	19.1
450	430	585	60	300	40.9	26.7	21.5
500	430	585	60	300	45.4	29.7	23.9
560	435	685	60	350	50.8	33.2	26.7
630	435	685	60	350	57.2	37.4	30.0