



InstalPlast

SYSTEMY RUROWE PVC – PE – PP

CATALOG

PP-InCor® External
Sewage System

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The issue of the protection of the natural environment is becoming more significant these days. In order to meet the European requirements in this domain, manufacturers and constructors in Poland have to face new challenges. That is why, optimal raw materials for production of installation systems are constantly being explored. Traditionally, sewage pipes and fittings are made of concrete, stoneware or glass fiber reinforced polyester. However, these substances have their disadvantages, whereas the installation systems have to be complied with a great number of requirements in order to guarantee troublefree design, assembly and exploitation.

Material

It cannot be denied that the choice of system, apart from technical aspects, depends to a large extent on the cost of particular elements of a pipeline. That is a reason why the installation systems are frequently produced of polypropylene (PP). This material is obtained by polymerization of propylene, which is received from petroleum. Owing to the excellent properties resulted from polymer's chemical composition, polypropylene is becoming more and more popular on the market and it belongs to the group of materials which production is on increase.

In comparison to traditional materials, there are many benefits from using polypropylene. Those advantages result mostly from mechanical, chemical, thermal resistance, and relatively low density (about 0,9 g/cm³) in relation to production costs of this raw material.

InCor® System

InCor® - the product invented by InstalPlast Łask, is the optimum arrangement of non-pressure external sewage systems, when considering its characteristic.

The system consists of pipes and fittings made of block copolymer of polypropylene (PP-B) in internal diameters of DN/ID 160-1000 mm.

The pipes are produced according to the extrusion technique and have double wall enclosed construction of their side. The InCor pipes have smooth interior surface and their outer side is corrugated. This construction assures significant weight reduction in comparison to the solid wall pipes, while ring stiffness (SN 8 kN/m², SN 12 kN/m²) is still very high. Fittings are produced using the method of injection or by means of welding the pipe's elements with injected parts.

Pipes and fittings are made of colored PP. The outer layer is in orange-brown color (approximately RAL 8023). The color of the inner layer can be the same as the outer or light-grey, which may be helpful when controlling the pipe's interior via superintending camera.

The pipes are connected by fittings, mostly double socket or on-line sockets made within the process of extrusion. Sealing rings, located in the pipe's last notch, provide tightness of the system. The pipes are produced in sectors with the length of 3 or 6 meters, and of stiffness classes SN 8 and SN 12.

Benefits

The InCor pipes have a number of advantages, that make them alternative to PVC tubes:

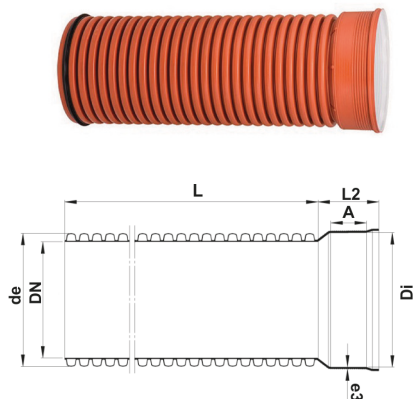
- ✓ high wall stiffness (SN8 kN/m², SN12 kN/m²),
- ✓ significant reduction of the pipe's weight,
- ✓ higher chemical (toxic sewerage) and environmental resistance,
- ✓ extended temperature tolerance (up to +95°C),
- ✓ increased resistance to mechanical impacts in low temperatures,
- ✓ easy and accurate cutting to demanded lengths.

A double socket and seal can be mounted on a pipe during construction works to eliminate waste products.

Norms and documents:

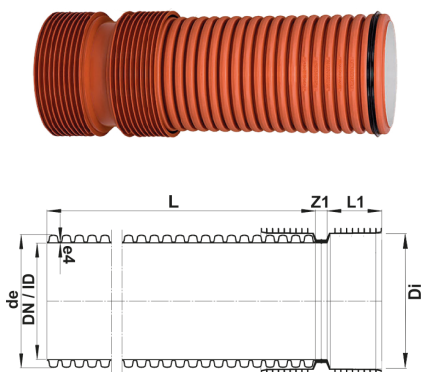
- ✓ PN-EN-13476-3+A1:2009
- ✓ DECLARATION OF PERFORMANCE
- ✓ TECHNICAL RECOMMENDATION - ROAD AND BRIDGE RESEARCH INSTITUTE (IBDiM)
- ✓ TECHNICAL OPINION - IBDiM
- ✓ TECHNICAL OPINION - CENTRAL MINING INSTITUTE (GIG)
- ✓ CERTIFICATE OF CONFORMITY- GIG
- ✓ TECHNICAL APPROVAL - THE BUILDING RESEARCH INSTITUTE (ITB)

PP SN 8 i SN 12 sewage pipe
with on-line socket
(seal includede)



Diameter	Dimension [mm]						Weight [kg/m]
	DN (ID)	de	Di	e3	A	L2	
150	170	172	2,8	84	110	3000 6000	1,4
200	227	230	4,2	53	117	2900 6000	2,5
250	283	287	5,2	62	130	2900 6000	3,5
300	340	344	6,2	75	165	2850 6000	5,1
400	453	458	8,3	94	205	2800 6000	9,0
500	567	574	9,2	126	240	2750 5900	14,5
600	680	686	9,2	158	295	2700 5850	20,5
800	906	912	9,2	211	311	2600 5750	32,5
1000	1160	1166	10,7	253	350	2750 6000	55

PP SN 8 sewage pipe
with double-socket
(seal includede)



Diameter	Dimension [mm]						Weight [kg/m]
	DN (ID)	de	Di	e4	Z1	L1	
150	170	172	2,0	-	98	3000 6000	1,4
200	227	230	2,4	60	110	2900 6000	2,5
250	283	287	3,0	62	137	2900 6000	3,5
300	340	344	3,6	64	150	2850 6000	5,1
400	453	458	4,8	70	200	2800 6000	9,0
500	567	574	6,0	74	262	2750 5900	14,5
600	680	686	7,2	80	270	2700 5850	20,5
800	906	912	9,6	90	325	2600 5750	32,5
1000	1160	1166	8,9	-	-	2750 6000	55

Note

- Outside color
- Outside color (brown RAL 8023)
- Inside color

Socketless pipe
InCor SN 8

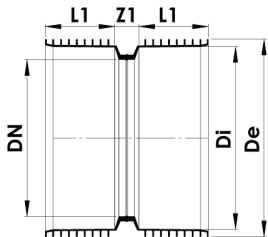


Dimension			pc.
OD (mm)	ID (mm)	L (m)	
	150	6,00	szt
	200	6,00	szt
	250	6,00	szt
	300	6,00	szt
	400	6,00	szt
	500	6,00	szt
	600	6,00	szt
	800	6,00	szt
	1 000	6,00	szt

Note

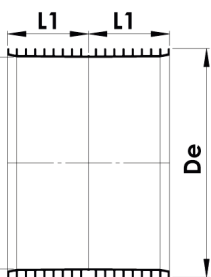
- Outside color
- Outside color (brqz RAL 8023)
- Inside color

Double socket



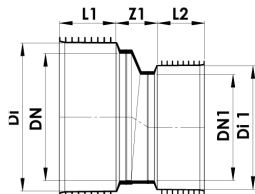
Diameter	Dimension [mm]				Weight [kg/pc.]
	DN (ID)	De	Di	L1	
150	196	172	98	-	0,65
200	252	230	110	60	1,0
250	312	286	137	62	1,6
300	375	344	150	64	2,4
400	498	458	200	70	4,6
500	624	574	262	74	8,1
600	748	686	270	80	13,6
800	960	912	325	90	25,0
1000	1189	1166	435	50	37,0

Coupling



Diameter	Dimension [mm]			Weight [kg/pc.]
	DN (ID)	De	Di	
150	196	170	98	0,63
200	252	230	110	0,7
250	312	286	137	1,2
300	375	344	150	1,8
400	498	458	200	3,4
500	624	574	262	6,2
600	748	686	270	10,8
800	960	912	325	20,0
1000	1189	1166	435	37,0

Reducer



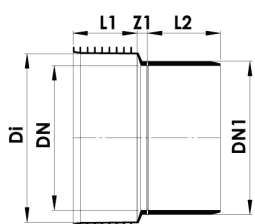
Diameter		Dimension [mm]					Weight
DN	DN1	Di	Di1	Z1	L1	Z2	[kg/pc.]
250	200	286	230	129	137	110	1,6
300	250	344	286	136	150	137	2,3
400	300	458	344	146	200	150	4,2
500	400	574	458	159	262	200	7,6
600	500	686	574	171	270	262	12,7

Seal



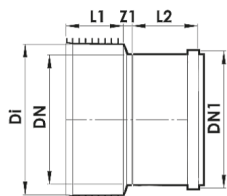
Weight	pc.
mm	
150	szt.
200	szt.
250	szt.
300	szt.
400	szt.
500	szt.
600	szt.
800	szt.
1 000	szt.

InCor-PVC pipe adaptor



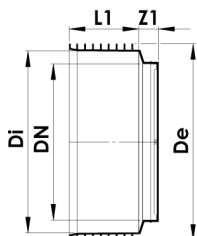
Diameter	PVC	Dimension [mm]				Weight
DN	DN1	Di	L1	Z1	L2	[kg/pc.]
150	160	172	101	3	115	0,62
200	200	230	110	30	118	1,0
250	250	286	137	31	138	1,9
300	315	344	150	32	164	2,7
400	400	458	200	35	198	5,7

InCor-PVC
pipe adaptor



Diameter	PVC	Dimension [mm]				Weight [kg/pc.]
		DN	DN1	Di	L1	
150	160	172	101	-	88	0,62
200	200	230	110	30	118	1,2
250	250	286	137	31	138	2,0
300	315	344	150	32	164	3,2
400	400	458	200	35	198	6,2

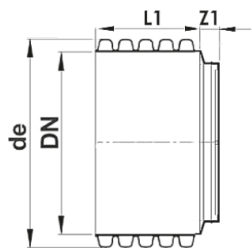
End cap



Diameter	Dimension [mm]				Weight [kg/pc.]
	DN (ID)	Di	de	L1	
150	172	196	98	14	0,4
200	230	252	110	60	0,6
250	286	312	137	62	1,1
300	344	375	150	64	1,8
400	458	498	200	70	2,9
500	574	624	262	74	5,6
600	686	748	270	80	8,8
800*	912	924	670	-	26
1000*	1166	1190	920	-	37

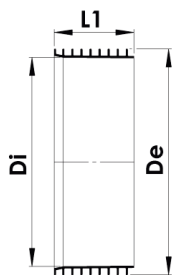
* Production at the customer's special order

End plug



Diameter	Dimension [mm]			Weight [kg/pc.]
	DN (ID)	de	L1	
150	170	-	-	0,27
200	227	125	60	0,7
250	283	150	62	1,3
300	340	170	64	2,1
400	453	185	70	3,0
500	567	245	74	6,5
600	680	310	80	9,1
800*	906	450	-	15,5
1000*	1160	650	-	24,5

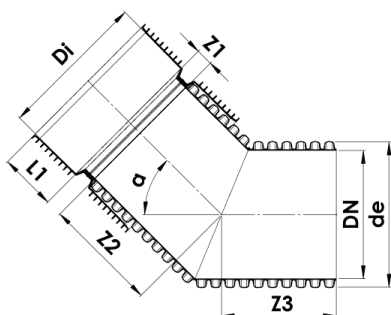
Protection sleeve



Diameter	Dimension [mm]			Weight [kg/pc.]
	DN (ID)	Di	de	
150	170	196	98	0,34
200	230	252	110	0,4
250	286	312	137	0,6
300	344	375	150	0,9
400	458	498	200	1,7
500	574	624	262	3,1
600	686	748	270	5,4
800	912	924	360	10,5
1000	1166	1190	460	18,5

* Production at the customer's special order

Bend 15°, 30°, 45°



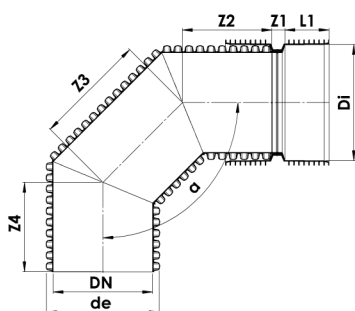
Diameter	Dimension [mm]							Weight
DN (ID)	Angle α	De	Di	L1	Z1	Z2	Z3	[kg/pc.]
150	15°	170	172	101	11	68	140	0,6
200	15°	227	230	110	60	180	180	0,8
250	15°	283	286	137	62	210	210	1,5
300	15°	340	344	150	64	252	252	2,5
400	15°	453	458	200	70	314	314	5,7
500	15°	567	574	262	74	423	423	11,8
600	15°	680	686	270	80	528	528	21,1
800*	15°	906	910	335	50	720	910	66,0
1000*	15°	1160	1166	435	50	1040	1300	132,0

Diameter	Dimension [mm]							Weight
DN (ID)	Angle α	De	Di	L1	Z1	Z2	Z3	[kg/pc.]
150	30°	170	172	101	11	80	135	0,63
200	30°	227	230	110	60	202	202	0,9
250	30°	283	286	137	62	236	236	1,7
300	30°	340	344	150	64	283	283	2,8
400	30°	453	458	200	70	354	354	6,4
500	30°	567	574	262	74	475	475	13,3
600	30°	680	686	270	80	592	594	23,8
800*	30°	906	910	335	50	720	910	67,0
1000*	30°	1160	1166	435	50	1040	1300	134,0

Diameter	Dimension [mm]							Weight
DN (ID)	Angle α	De	Di	L1	Z1	Z2	Z3	[kg/pc.]
150	45°	170	172	101	11	110	165	0,73
200	45°	227	230	110	60	225	225	1,0
250	45°	283	286	137	62	262	262	1,8
300	45°	340	344	150	64	314	314	3,1
400	45°	453	458	200	70	393	393	7,1
500	45°	567	574	262	74	528	528	14,8
600	45°	680	686	270	80	660	660	26,4
800*	45°	906	910	335	50	720	910	69,0
1000*	45°	1160	1166	435	50	1040	1300	136,0

* Production at the customer's special order

Bend 60°, 90°

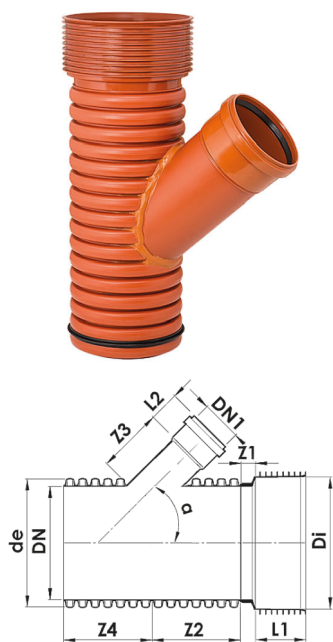


Diameter	Dimension [mm]								Weight
DN (ID)	Angle α	De	Di	L1	Z1	Z2	Z3	Z4	[kg/pc.]
150	60°	170	172	101	50	80	165	140	0,85
200	60°	227	230	110	60	180	202	180	1,6
250	60°	283	286	137	62	210	236	210	2,9
300	60°	340	344	150	64	252	283	252	5,0
400	60°	453	458	200	70	314	354	314	11,3
500	60°	567	574	262	74	423	475	423	23,7
600	60°	680	686	270	80	528	594	528	42,2
800*	60°	906	910	335	50	810	910	810	111,0
1000*	60°	1160	1166	435	50	1170	1300	1170	177,0

Diameter	Dimension [mm]								Weight
DN (ID)	Angle α	De	Di	L1	Z1	Z2	Z3	Z4	[kg/pc.]
150	90°	170	172	101	11	115	190	180	0,93
200	90°	227	230	110	60	180	225	180	1,8
250	90°	283	286	137	62	210	262	210	3,1
300	90°	340	344	150	64	252	314	252	5,3
400	90°	453	458	200	70	314	393	314	12,0
500	90°	567	574	262	74	423	528	423	25,1
600	90°	680	686	270	80	528	660	528	44,9
800*	90°	906	910	335	50	810	910	810	119,0
1000*	90°	1160	1166	435	50	1170	1130	1170	180,0

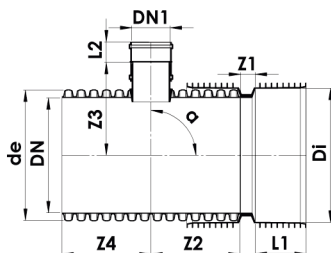
* Production at the customer's special order

Reducing branch
InCor-PVC 45°



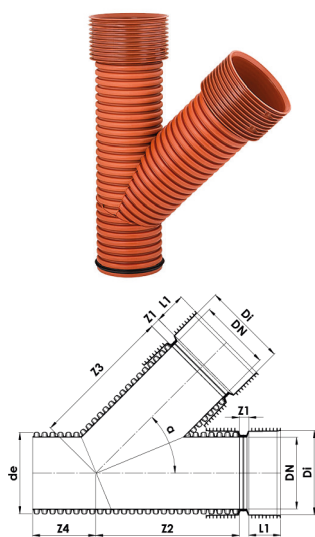
Diameter		Dimension [mm]							Weight [kg/pc.]
InCor	PVC	Angle α	L1	L2	Z1	Z2	Z3	Z4	
DN	DN1								
200	160	45°	110	98	60	205	418	205	2,2
250	160	45°	137	98	62	228	418	228	2,8
	200	45°	137	118	62	255	430	255	3,7
300	160	45°	150	98	64	252	418	252	3,6
	200	45°	150	118	64	283	430	283	4,6
	250	45°	150	150	64	309	457	309	6,3
400	160	45°	200	98	70	275	418	275	5,5
	200	45°	200	118	70	314	430	314	6,9
	250	45°	200	150	70	354	457	354	9,5
	315	45°	200	170	70	393	515	493	12,0
500	160	45°	262	98	74	318	418	318	9,8
	200	45°	262	118	74	370	430	370	11,8
	250	45°	262	150	74	423	457	423	14,6
	315	45°	262	170	74	476	515	476	18,2
600	160	45°	270	98	80	365	418	365	14,8
	200	45°	270	118	80	431	430	431	17,5
	250	45°	270	150	80	497	457	497	22,0
	315	45°	270	170	80	563	515	563	26,5
800	160	45°	335	98	50	540	160	540	60,8
	200	45°	335	118	50	585	205	585	64,5
	250	45°	335	150	50	630	280	630	67,7
	315	45°	335	170	50	675	350	675	71,2

Reducing branch
InCor-PVC 90°



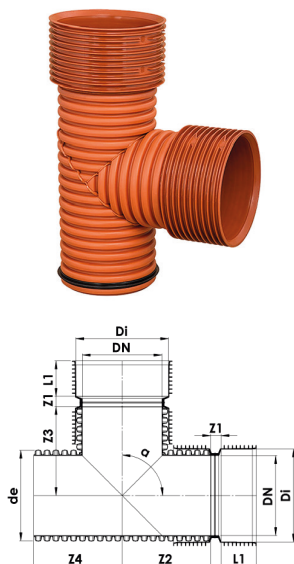
Diameter		Dimension [mm]							Weight [kg/pc.]
InCor	PVC	Angle α	L1	L2	Z1	Z2	Z3	Z4	
DN	DN1								
200	160	90°	110	98	60	208	218	208	2,0
250	160	90°	137	98	62	228	247	228	2,2
	200	90°	137	118	62	242	251	242	2,5
300	160	90°	150	98	64	252	275	252	3,0
	200	90°	150	118	64	283	280	283	3,8
	250	90°	150	150	64	309	319	309	4,4
400	160	90°	200	98	70	314	331	314	5,2
	200	90°	200	118	70	354	336	354	6,2
	250	90°	200	150	70	380	375	380	7,8
	315	90°	200	170	70	406	394	406	8,6
500	160	90°	262	98	74	423	388	423	10,2
	200	90°	262	118	74	475	393	475	12,5
	250	90°	262	150	74	528	432	528	14,2
	315	90°	262	170	74	581	451	581	17,3
600	160	90°	270	98	80	365	445	365	14,0
	200	90°	270	118	80	431	450	431	16,5
	250	90°	270	150	80	497	489	497	20,3
	315	90°	270	170	80	563	508	563	24,6
800	160	90°	335	98	50	540	503	540	60,1
	200	90°	335	118	50	585	515	585	64,1
	250	90°	335	150	50	630	515	630	66,7
	315	90°	335	170	50	630	533	630	68,1
	400	90°	335	200	50	720	673	720	74,8
1000	160	90°	435	98	50	730	610	730	113,0
	200	90°	435	118	50	730	610	730	114,0
	250	90°	435	150	50	795	630	795	118,0
	315	90°	435	170	50	864	660	864	126,0
	400	90°	435	200	50	931	780	931	132,0

InCor
branch 45°



Diameter	Dimension [mm]								Weight [kg/pc.]
	DN (ID)	Angle α	de	Di	L1	Z1	Z2	Z3	
150	45°	170	172	101	11	353	353	165	1,55
200	45°	227	230	110	60	404	404	180	2,4
250	45°	283	286	137	62	471	471	210	4,2
300	45°	340	344	150	64	566	566	252	7,2
400	45°	453	458	200	70	707	707	314	6,3
500	45°	567	574	262	74	950	950	423	34,0
600	45°	680	686	270	80	1188	1188	528	60,7
800	45°	906	932	335	50	1620	1710	540	182,0
1000	45°	1160	1166	435	50	2345	2520	1064	376,0

InCor
branch 90°



Diameter	Dimension [mm]								Weight [kg/pc.]
	DN (ID)	Angle α	de	Di	L1	Z1	Z2	Z3	
150	90°	170	172	101	11	80	75	280	1,24
200	90°	227	230	110	60	247	248	247	2,0
250	90°	283	286	137	62	288	299	288	3,5
300	90°	340	344	150	64	346	359	346	6,0
400	90°	453	458	200	70	432	462	432	13,4
500	90°	567	574	262	74	581	600	581	28,1
600	90°	680	686	270	80	726	736	726	50,2
800	90°	906	932	335	50	900	540	900	175,0
1000	90°	1160	1166	435	50	1130	800	1130	235,0

Reducing
branch 45°



Dimension			pc.
mm	mm	°	
200	150	45	szt.
250	150	45	szt.
300	150	45	szt.
300	200	45	szt.
400	150	45	szt.
400	200	45	szt.
500	150	45	szt.
500	200	45	szt.
600	150	45	szt.
600	200	45	szt.

Reducing
branch 90°



Dimension			pc.
mm	mm	°	
200	150	90	szt.
250	150	90	szt.
300	150	90	szt.
300	200	90	szt.
400	150	90	szt.
400	200	90	szt.
500	150	90	szt.
500	200	90	szt.
600	150	90	szt.
600	200	90	szt.

**Maximum quantities of InCor pipes to be loaded on a truck
(in the longest offered lengths)**

Diameter	Auto standard		Auto mega		Pallet dimension L x W x H
	H- 2,7 m		H- 3,0 m		
DN (ID)					
150	336	2016	448	2688	621 x 134 x 74
200	168	1008	224	1344	625 x 128 x 70
250	88	528	176	1056	629 x 120 x 82
300	64	384	96	576	633 x 120 x 83
400	50	300	60	360	642 x 136 x 46
500	32	192	32	192	650 x 115 x 58
600	18	108	24	144	664 x 136 x 69
800	18	48	12	96	680 x 182 x 92
1000	18	48	8	48	670 x 232 x 117

InCor socket types



Double socket



"Online" socket



Each pipe includes elastomeric rubber seal to obtain the best tightness of pipe connection.



InstalPlast

SYSTEMY RUROWE PVC – PE – PP

Sales Department

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