Pressure pipes

HDPE EN-12201 and UPVC EN 1452

DYKA

Stock yard

DYKA plant

At **DYKA**

We proudly state that we can provide you "just-in-time" with all possible solutions for your specific requirements related to plastic pipe systems. Our "no-nonsense" statement is based on the following impressive figures and facts: The DYKA premises near the town of Steenwijk in the Netherlands, solely occupies some 180.000 m^2.
A full-service plant with automated production lines, special engineering department, quality control, research & development, storage and logistics.

Injection moulding
Our large number of special moulding machines do produce more than 44 million items per year, in any size and shape.

Thermo forming
Flexibility and enormous innovative capacity offered by thermo forming have resulted in our company's impressive range of plastic fittings. A product range that still offers ample potential for expansion, new applications are continually being discovered, and other plastics are being tested for their suitability for this renowned manufacturing technology.

Extrusion
Excellent tuned extrusion lines do assure the non-stop production of pipes and conduits in every possible colour, diameter and specific technical specifications. Total output: more than 55.000 kilometres of plastic pipes per year!

Storage & Logistics
Every day, full truck-loads and containers are shipped from our production plants in Europe, by road, air, train and waterway to satisfy the needs of our customers all over the world.

Export Sales
Our eager export staff is only too willing to serve and assist you with technical advice, customs documents and after-sales service.

Whatever you might need AT DYKA, we can do it for you!

General information about HDPE pressure pipes

PE is classified based on raw materials and pressure grade.

PE for potable water applications:

- HDPE can be used for distribution pipelines and for connection to the watermeter/ manifold. Pipes are produced according to the EN 12201. Within this standard there are metric sizes applicable.

PE Industrial and pressure sewers:

- Pipes are produced according to the EN 13244

HDPE raw material classification:

The classification number used for PE raw material types is dimensionless and is equal to the MRS (Minimum Required Strength) value multiplied by 10. The MRS value is the minimum required tangential wall stress (Sigma value) in N/mm2 that the material in pipe form must be able to withstand for 50 years at 20°C.

The permissible tangential wall stress (TS) is found by dividing the MRS value by the safety factor (SF). For PE 80 and PE 100 (water) this factor is 1.25, as applicable in the EN 12201

Classification PE-Type	MRS (N/mm2) at 20°C	TS (N/mm2) at 20°C permissible.
PE 80	8.0	6.3
PE 100	10.0	8.0

Pipe identification- Conversion of pressure grades:

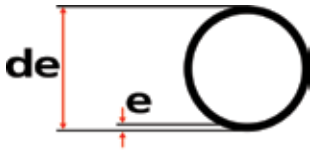
Pipes and fittings are identified by their SDR (Standard Dimension Ratio). This is the exterior diameter divided by the wall thickness. E.g. pipe Ø 110 mm with wall thickness 10 mm = SDR 11, the same pipe but with wall thickness 6.3 mm = SDR 17.6. From the combination of the SDR with material used (e.g. raw material type PE 80 or PE 100) the corresponding pressure grade (PN) can be derived by using table A. E.g. pipe SDR 11 made from raw material PE 80 allows a pressure (PN) of 12.5 bar. If the same pipe were to be manufactured from raw material PE 100 then the pressure resistance (PN) may increase to 16 bar.

Notes on HDPE pressure fittings:

1. HDPE pressure fittings SDR 17/17.6 can be welded to both SDR 17 pipes and to SDR 17.6 pipes (both for mirror- and electro fusion welds)!
2. HDPE pressure fittings PE 100 can be welded to both PE 80 pipes and to PE 100 pipes (both for mirror- and electro fusion welds)!

Important note relating to welding HDPE pressure pipes and pressure fitting:

To make a correct mirror weld, the wall thickness of the fitting must be equal to that of the pipe. Therefore the SDR class of the pipe must be in correspondence with the SDR class of the fitting.



$$SDR = \frac{de}{e}$$

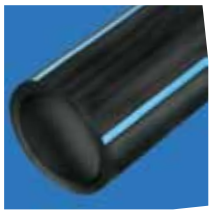
$$ISO\text{-}S = \frac{SDR-1}{2}$$

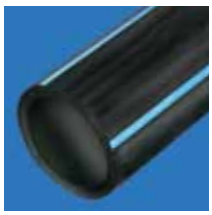
Table A: Conversion of the pressure grades			
		PE80	PE100
Safety factor (SF)		SF 1.25	SF 1.25
SDR	ISO-S	**Nominal pressure (PN)**	
		Water 20°C 50 years	
33	16	4	5
17.6	8.3	7.6	9.6
17	8	8	10
13.6	6.3	10	12.5
11	5	12.5	16

Potable water PE80 SDR17.	Available lengths (m)			
	5,8	11,8	50	100
Potable water PE80 32x2,0 SDR 17 KIWA			•	•
Potable water PE80 40X2,4 SDR 17 KIWA			•	•
Potable water PE80 50X3,0 SDR 17 KIWA			•	•
Potable water PE80 63X3,8 SDR 17 KIWA	•	•	•	•
Potable water PE80 75X4,5 SDR 17 KIWA	•	•	•	•
Potable water PE80 90X5,4 SDR 17 KIWA	•	•	•	•

Potable water PE80 SDR13,6.	Available lengths (m)			
	5,8	11,8	50	100
Potable water PE80 25x2,0 SDR 13,6 KIWA			•	•
Potable water PE80 32x2,4 SDR 13,6 KIWA			•	•
Potable water PE80 40X3,0 SDR 13,6 KIWA			•	•
Potable water PE80 50X3,7 SDR 13,6 KIWA			•	•
Potable water PE80 63X4,7 SDR 13,6 KIWA	•	•	•	•
Potable water PE80 75X5,6 SDR 13,6 KIWA	•	•	•	•
Potable water PE80 90X6,7 SDR 13,6 KIWA	•	•	•	•

Potable water PE80 SDR11.	Available lengths (m)			
	5,8	11,8	50	100
Potable water PE80 20X 2,0 SDR11 KIWA			•	•
Potable water PE80 25X 2,4 SDR11 KIWA			•	•
Potable water PE80 32X 3,0 SDR11 KIWA	•		•	•
Potable water PE80 40X 3,7 SDR11 KIWA	•		•	•
Potable water PE80 50X 4,6 SDR11 KIWA	•		•	•
Potable water PE80 63X 5,8 SDR11 KIWA	•	•	•	•
Potable water PE80 75X 6,8 SDR11 KIWA	•	•	•	•
Potable water PE80 90X 8,2 SDR11 KIWA	•	•	•	•

Potable water PE100 SDR17.	Available lengths (m)			
	5,8	11,8	50	100
Potable water PE100 110X 6,6 SDR17 KIWA	•	•	•	•
Potable water PE100 125X 7,4 SDR17 KIWA	•	•	•	•
Potable water PE100 160X 9,5 SDR17 KIWA	•	•		
Potable water PE100 200X11,9 SDR17 KIWA	•	•		
Potable water PE100 225X13,4 SDR17 KIWA		•		
Potable water PE100 250X14,8 SDR17 KIWA	•	•		
Potable water PE100 280X16,6 SDR17 KIWA		•		
Potable water PE100 315X18,7 SDR17 KIWA	•	•		
Potable water PE100 355X21,1 SDR17 KIWA	•	•		
Potable water PE100 400X23,7 SDR17 KIWA	•	•		
Potable water PE100 450X26,7 SDR17 KIWA	•	•		
Potable water PE100 500X29,7 SDR17 KIWA	•	•		
Potable water PE100 560X33,2 SDR17 KIWA	•	•		
Potable water PE100 630X37,4 SDR17 KIWA	•	•		

Potable water PE100 SDR13,6.	Available lengths (m)			
	5,8	11,8	50	100
Potable water PE100 110X8,1 SDR 13,6 KIWA	•	•	•	•
Potable water PE100 125X9,2 SDR 13,6 KIWA	•	•	•	•
Potable water PE100 160X11,8 SDR 13,6 KIWA	•	•		
Potable water PE100 200X14,7 SDR 13,6 KIWA	•	•		
Potable water PE100 250X18,4 SDR 13,6 KIWA	•	•		
Potable water PE100 315X23,2 SDR 13,6 KIWA	•	•		
Potable water PE100 355X26,1 SDR 13,6 KIWA	•	•		
Potable water PE100 400X29,4 SDR 13,6 KIWA	•	•		
Potable water PE100 450X33,1 SDR 13,6 KIWA	•	•		
Potable water PE100 500X36,8 SDR 13,6 KIWA	•	•		
Potable water PE100 560X41,2 SDR 13,6 KIWA	•	•		
Potable water PE100 630X46,3 SDR 13,6 KIWA	•	•		

Potable water PE100 SDR11.	Available lengths (m)			
	5,8	11,8	50	100
Potable water PE100 110X10,0 SDR11 KIWA	•	•	•	•
Potable water PE100 125X11,4 SDR11 KIWA	•	•	•	•
Potable water PE100 160X14,6 SDR11 KIWA	•	•		
Potable water PE100 200X18,2 SDR11 KIWA	•	•		
Potable water PE100 225X20,5 SDR11 KIWA		•		
Potable water PE100 250X22,7 SDR11 KIWA	•	•		
Potable water PE100 280X25,4 SDR11 KIWA		•		
Potable water PE100 315X28,6 SDR11 KIWA	•	•		
Potable water PE100 355X32,3 SDR11 KIWA	•	•		
Potable water PE100 400X36,4 SDR11 KIWA	•	•		
Potable water PE100 450X41,0 SDR11 KIWA	•	•		
Potable water PE100 500X45,5 SDR11 KIWA	•	•		

Pressure sewerage PE100 SDR17.	Available lengths (m)			
	5,8	11,8	50	100
Pressure sewerage PE100 32X 2,0 SDR17 KOMO			•	•
Pressure sewerage PE100 40X 2,4 SDR17 KOMO			•	•
Pressure sewerage PE100 50X 3,0 SDR17 KOMO			•	•
Pressure sewerage PE100 63X 3,8 SDR17 KOMO	•	•	•	•
Pressure sewerage PE100 75X 4,5 SDR17 KOMO	•	•	•	•
Pressure sewerage PE100 90X 5,4 SDR17 KOMO	•	•	•	•
Pressure sewerage PE100 110X 6,6 SDR17 KOMO	•	•	•	•
Pressure sewerage PE100 125X 7,4 SDR17 KOMO	•	•	•	•
Pressure sewerage PE100 140X8,3 SDR17 KOMO	•	•		
Pressure sewerage PE100 160X 9,5 SDR17 KOMO	•	•		
Pressure sewerage PE100 180X10,7 SDR17 KOMO	•	•		
Pressure sewerage PE100 200X11,9 SDR17 KOMO	•	•		
Pressure sewerage PE100 225X13,4 SDR17 KOMO	•	•		
Pressure sewerage PE100 250X14,8 SDR17 KOMO	•	•		
Pressure sewerage PE100 280X16,6 SDR17 KOMO	•	•		
Pressure sewerage PE100 315X18,7 SDR17 KOMO	•	•		
Pressure sewerage PE100 355X21,1 SDR17 KOMO	•	•		
Pressure sewerage PE100 400X23,7 SDR17 KOMO	•	•		
Pressure sewerage PE100 450X26,7 SDR17 KOMO	•	•		
Pressure sewerage PE100 500X29,7 SDR17 KOMO	•	•		
Pressure sewerage PE100 560X33,2 SDR17 KOMO	•	•		
Pressure sewerage PE100 630X37,4 SDR17 KOMO	•	•		

Pressure sewerage PE100 SDR13,6.	Available lengths (m)			
	5,8	11,8	50	100
Pressure sewerage PE100 32x2,4 SDR 13,6 KOMO			•	•
Pressure sewerage PE100 40X3,0 SDR 13,6 KOMO			•	•
Pressure sewerage PE100 50X3,7 SDR 13,6 KOMO			•	•
Pressure sewerage PE100 63X4,7 SDR 13,6 KOMO	•	•	•	•
Pressure sewerage PE100 75X5,6 SDR 13,6 KOMO	•	•	•	•
Pressure sewerage PE100 90X6,7 SDR 13,6 KOMO	•	•	•	•
Pressure sewerage PE100 110X8,1 SDR 13,6 KOMO	•	•	•	•
Pressure sewerage PE100 125X9,2 SDR 13,6 KOMO	•	•	•	•
Pressure sewerage PE100 160X11,8 SDR 13,6 KOMO	•	•		
Pressure sewerage PE100 200X14,7 SDR 13,6 KOMO	•	•		
Pressure sewerage PE100 250X18,4 SDR 13,6 KOMO	•	•		
Pressure sewerage PE100 315X23,2 SDR 13,6 KOMO	•	•		
Pressure sewerage PE100 355X26,1 SDR 13,6 KOMO	•	•		
Pressure sewerage PE100 400X29,4 SDR 13,6 KOMO	•	•		
Pressure sewerage PE100 450X33,1 SDR 13,6 KOMO	•	•		
Pressure sewerage PE100 500X36,8 SDR 13,6 KOMO	•	•		
Pressure sewerage PE100 560X41,2 SDR 13,6 KOMO	•	•		
Pressure sewerage PE100 630X46,3 SDR 13,6 KOMO	•	•		

Pressure sewerage PE100 SDR11.	Available lengths (m)			
	5,8	11,8	50	100
Pressure sewerage PE100 32X 3,0 SDR11 KOMO			•	•
Pressure sewerage PE100 40X 3,7 SDR11 KOMO			•	•
Pressure sewerage PE100 50X 4,6 SDR11 KOMO			•	•
Pressure sewerage PE100 63X 5,8 SDR11 KOMO	•	•	•	•
Pressure sewerage PE100 75X 6,8 SDR11 KOMO	•	•	•	•
Pressure sewerage PE100 90X 8,2 SDR11 KOMO	•	•	•	•
Pressure sewerage PE100 110X10,0 SDR11 KOMO	•	•	•	•
Pressure sewerage PE100 125X11,4 SDR11 KOMO	•	•	•	•
Pressure sewerage PE100 140X12,7 SDR11 KOMO	•	•		
Pressure sewerage PE100 160X14,6 SDR11 KOMO	•	•		
Pressure sewerage PE100 180X16,4 SDR11 KOMO	•	•		
Pressure sewerage PE100 200X18,2 SDR11 KOMO	•	•		
Pressure sewerage PE100 225X20,5 SDR11 KOMO	•	•		
Pressure sewerage PE100 250X22,7 SDR11 KOMO	•	•		
Pressure sewerage PE100 280X25,4 SDR11 KOMO	•	•		
Pressure sewerage PE100 315X28,6 SDR11 KOMO	•	•		
Pressure sewerage PE100 355X32,2 SDR11 KOMO	•	•		
Pressure sewerage PE100 400X36,3 SDR11 KOMO	•	•		
Pressure sewerage PE100 450X40,9 SDR11 KOMO	•	•		
Pressure sewerage PE100 500X45,4 SDR11 KOMO	•	•		

BCCA

BCCA

CERTIFICATE

Environmental Management System

DYKA PLASTICS N.V.

Industrieterrein Nollimpark 4004, 3990 OVERPELT,

design, production and delivery
of components for plastic piping systems
for applications with or without internal pressure,

NBN EN ISO 14001 : 2015.

BCCA

BCCA

CERTIFICATE

Quality Management System

DYKA PLASTICS N.V.

Industrieterrein Nollimpark 4004, 3990 OVERPELT,

design, production and delivery
of components for plastic piping systems
for applications with or without internal pressure,

NBN EN ISO 9001 : 2015.

BENOR

BCCA

BCCA

BENOR CERTIFICATE

Dyka Plastics N.V.

PE-pipes for water supply, drainage and sewerage under pressure,
size group 1 (16-110mm) and 2 (125-500mm)

Dyka Plastics N.V.

NBN EN 12201 "Plastics piping systems for water supply, and for drainage and sewerage under pressure - Polyethylene (PE)"

A full set of our certificates can be obtained from our website


KOMO®
productcertificaat
kiwa
Certificaat
Buizen van PE voor onder- en bovengrondse drukleidingsystemen voor buitenriolering
Dyka B.V.


Product certificate
K5017/05
kiwa
CERTIFICATE
Drinking water pipes of PE
Dyka B.V.


Certificate
MSC-K56663/05
kiwa
CERTIFICATE
ISO 14001
Dyka B.V.


Certificate
KSC-K22342/09
kiwa
CERTIFICATE
ISO 9001
Dyka B.V.

PVC Pressure pipes

EN1452

DYKA

Product Description

Plastics are synthetic macromolecular materials which, by processing acquire their specific functions. They are produced by chemical processes, the principle raw material being oil. The macromolecular structure of plastics is achieved by polymerisation of individual molecules or monomers into chain molecules that are between 1,000 and 100,000 times larger than those naturally occurring in water or salt. This macro molecular composition forms a spatial net-like structure with numerous internal chemical bonds.

Plastics can be divided into two main groups.
- Thermoplastic materials which, upon heating, soften and melt and can be reheated and reformed.
- Thermosetting materials which soften and melt with the initial heating but then set permanently in their final shape.

Polyvinylchloride or PVC-u is one of the most widely used thermoplastic materials, due to its flexibility of usage and competitive price. It is manufactured by the petrochemical industry who produce a dichloride from ethane and chloride and apply pyrolisis above 400°C to cause splitting into vinylchloride and hydrochloric acid.

The basic polymer is mixed with additives such as colour, filler, lubricants and stabilisers in accordance with a recipe determined by the properties of the finished product. The mix of compound is transported to either extruders or injection moulding machines to be converted into the end product.

DYKA PVC-u pipe is a high quality pipe suitable for pressure pipeline systems for cold water services. It is available in imperial and metric dimensions that are produced in accordance with appropriate national and international standards.
DYKA PVC-u pipe is supplied plain ended, with integral solvent weld socket or integral ring seal joint.

Standards of Manufacture and Quality Control

DYKA produce PVC-u pressure pipe in accordance with all the principal European quality standards.

All DYKA manufacturing facilities are accredited to ISO 9001. This defines the quality management system under which the manufacturing and support departments operate. It provides the overall framework within which production of pipes to a particular specification can take place.

DYKA manufactured PVC-u products are specifically certified against the requirements of:

KIWA	the Netherlands
DVGW	Germany
DIN	Germany
SECO	France

Unless otherwise specified, all DYKA, standard metric pipework is manufactured to the Dutch water industry standard KIWA K17301 and EN1452. Dykapipe is certified to this standard by the KIWA quality organisation. DYKA have the capability to manufacture to a number of the European standards and in many cases hold quality approvals against these. Details of these and copies of all certificates are available on request.

Quality Control

All quality control testing for conformity with the various production standards is carried out by the DYKA in house laboratory. All laboratory operations are monitored by the Dutch Standards Institute, The Dutch KIWA Quality Organisation and others.

A grey metric pipe system is available from DYKA, which is produced in accordance with the Dutch Water Authority Standard KIWA BRL K17301. This standard is derived from the specifications issued by the International standards Organisation (ISO) references ISO 161/1, ISO 4065 and EN1452.

The DYKA production facility for this pipe system is registered by the Dutch Water Authority and the Dutch quality assurance body KIWA/NEN. All DYKA PVC-u pipe is approved by the World Health Organisation (WHO) for use with potable water.

Other Pipe Standards

In addition to the above DYKA will manufacture pipe to most European national standards on specific request. Please refer to the technical department of DYKA for details.
Copies of all the applicable quality standards, e.g. EN1452, are available on request.

Pipe Length

Special lengths e.g. 5,7 meter (container lengths) or 6+ meter can be supplied to specific order providing the quantity constitutes a reasonable
production run. Contact your distributor or the technical department of DYKA for further information.

Pipe Colour

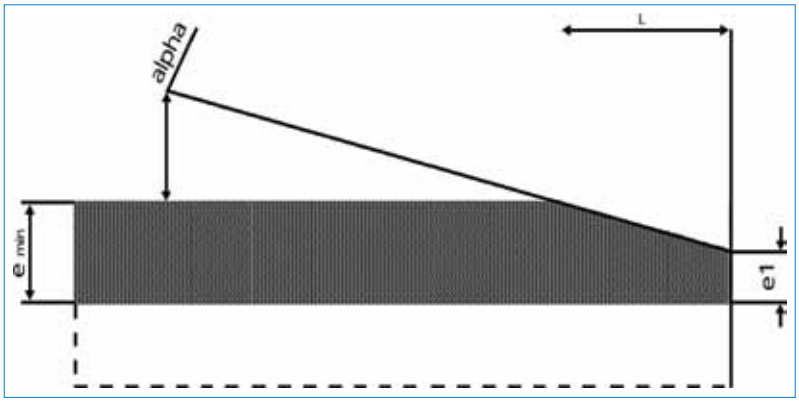
Metric pipes to KIWA K17301 can be supplied in standard PVC-u, cream colour RAL 1014 and grey RAL 7011. Pipework in other colours can be produced against specific requirements providing the quantity constitutes a reasonable production run. Contact your distributor or the technical department of DYKA for further information.

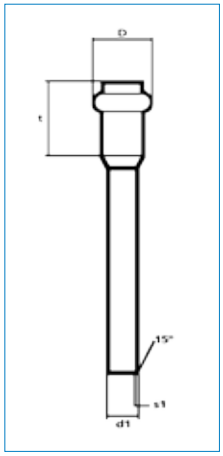
Chamfering of the pipes

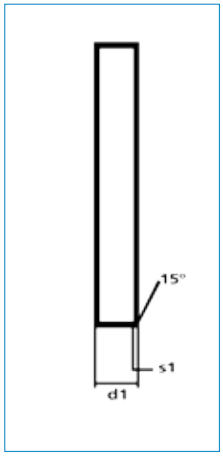
The chamfers on the pipes should be smooth and regular and comply to table 4.
The assessment is done visually and the parameters are taken from EN-ISO-3126.

Measurements for chamfering (dimensions in mm)

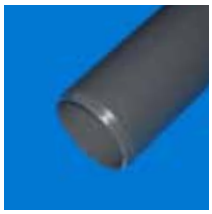
Nominal outside diameter		e1	l	alpha	
>	≤	min	min	min	max
-	90	0,50 x e min	4	5°	15°
90	110		6		
110	125		7		
125	400		8		
400	-		10		





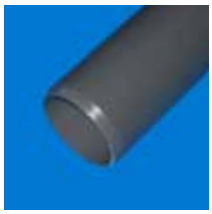


PVC PRESSUREPIPES PLAIN ENDED 0,8MPa KIWA



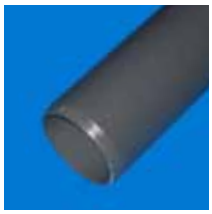
	Kg/m
PVC PRESSUREPIPES PLAIN ENDED 63x 2,5mm 0,8MPa KIWA	0,743
PVC PRESSUREPIPES PLAIN ENDED 75x 2,9mm 0,8MPa KIWA	1,015
PVC PRESSUREPIPES PLAIN ENDED 90x 3,5mm 0,8MPa KIWA	1,468
PVC PRESSUREPIPES PLAIN ENDED 110x 3,4mm 0,8MPa KIWA	1,762
PVC PRESSUREPIPES PLAIN ENDED 125x 3,9mm 0,8MPa KIWA	2,273
PVC PRESSUREPIPES PLAIN ENDED 160x 4,9mm 0,8MPa KIWA	3,639
PVC PRESSUREPIPES PLAIN ENDED 200x 6,2mm 0,8MPa KIWA	5,758
PVC PRESSUREPIPES PLAIN ENDED 250x 7,7mm 0,8MPa KIWA	8,879
PVC PRESSUREPIPES PLAIN ENDED 315x 9,7mm 0,8MPa KIWA	14,212
PVC PRESSUREPIPES PLAIN ENDED 400x 12,3mm 0,8MPa KIWA	22,865
PVC PRESSUREPIPES PLAIN ENDED 500x 15,3mm 0,8MPa KIWA	35,489
PVC PRESSUREPIPES PLAIN ENDED 630x 19,3mm 0,8MPa KIWA	56,309

PVC PRESSUREPIPES PLAIN ENDED 1,0MPa KIWA



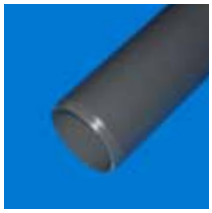
	Kg/m
PVC PRESSUREPIPES PLAIN ENDED 32x 1,6mm 1,0MPa KIWA	0,244
PVC PRESSUREPIPES PLAIN ENDED 40x 1,9mm 1,0MPa KIWA	0,357
PVC PRESSUREPIPES PLAIN ENDED 50x 2,4mm 1,0MPa KIWA	0,562
PVC PRESSUREPIPES PLAIN ENDED 63x 3,0mm 1,0MPa KIWA	0,870
PVC PRESSUREPIPES PLAIN ENDED 75x 3,6mm 1,0MPa KIWA	1,243
PVC PRESSUREPIPES PLAIN ENDED 90x 4,3mm 1,0MPa KIWA	1,779
PVC PRESSUREPIPES PLAIN ENDED 110x 4,2mm 1,0MPa KIWA	2,149
PVC PRESSUREPIPES PLAIN ENDED 125x 4,8mm 1,0MPa KIWA	2,765
PVC PRESSUREPIPES PLAIN ENDED 160x 6,2mm 1,0MPa KIWA	4,568
PVC PRESSUREPIPES PLAIN ENDED 200x 7,7mm 1,0MPa KIWA	7,043
PVC PRESSUREPIPES PLAIN ENDED 250x 9,6mm 1,0MPa KIWA	10,953

PVC PRESSUREPIPES PLAIN ENDED 1,25MPa KIWA



	Kg/m
PVC PRESSUREPIPES PLAIN ENDED 25x 1,5mm 1,25MPa KIWA	0,178
PVC PRESSUREPIPES PLAIN ENDED 32x 1,9mm 1,25MPa KIWA	0,282
PVC PRESSUREPIPES PLAIN ENDED 40x 2,4mm 1,25MPa KIWA	0,444
PVC PRESSUREPIPES PLAIN ENDED 50x 3,0mm 1,25MPa KIWA	0,681
PVC PRESSUREPIPES PLAIN ENDED 63x 3,8mm 1,25MPa KIWA	1,082
PVC PRESSUREPIPES PLAIN ENDED 75x 4,5mm 1,25MPa KIWA	1,525
PVC PRESSUREPIPES PLAIN ENDED 90x 5,4mm 1,25MPa KIWA	2,189
PVC PRESSUREPIPES PLAIN ENDED 110x 5,3mm 1,25MPa KIWA	2,663
PVC PRESSUREPIPES PLAIN ENDED 125x 6,0mm 1,25MPa KIWA	3,400
PVC PRESSUREPIPES PLAIN ENDED 160x 7,7mm 1,25MPa KIWA	5,576

PVC PRESSUREPIPES PLAIN ENDED 1,6MPa KIWA



	Kg/m
PVC PRESSUREPIPES PLAIN ENDED 12x 1,0mm 1,6MPa KIWA	0,056
PVC PRESSUREPIPES PLAIN ENDED 16x 1,5mm 1,6MPa KIWA	0,110
PVC PRESSUREPIPES PLAIN ENDED 20x 1,5mm 1,6MPa KIWA	0,140
PVC PRESSUREPIPES PLAIN ENDED 25x 1,9mm 1,6MPa KIWA	0,216
PVC PRESSUREPIPES PLAIN ENDED 32x 2,4mm 1,6MPa KIWA	0,349
PVC PRESSUREPIPES PLAIN ENDED 40x 3,0mm 1,6MPa KIWA	0,536
PVC PRESSUREPIPES PLAIN ENDED 50x 3,7mm 1,6MPa KIWA	0,825
PVC PRESSUREPIPES PLAIN ENDED 63x 4,7mm 1,6MPa KIWA	1,312
PVC PRESSUREPIPES PLAIN ENDED 75x 5,6mm 1,6MPa KIWA	1,856
PVC PRESSUREPIPES PLAIN ENDED 90x 6,7mm 1,6MPa KIWA	2,655
PVC PRESSUREPIPES PLAIN ENDED 110x 6,6mm 1,6MPa KIWA	3,251

PVC PRESSUREPIPES WITH RUBBERRING SOCKET PN6 / 20° C (EN1452)

DN	d1	s1	t	D
50	63	2,0	101	84
65	75	2,3	106	98
80	90	2,8	112	116
100	110	2,7	120	139
125	125	3,1	131	172
150	160	4,0	140	196
200	200	4,9	163	268
250	250	6,2	185	331
300	315	7,7	197	370
400	400	9,8	245	527

PVC PRESSUREPIPES WITH RUBBERRING SOCKET PN10 / 20° C (EN1452)

DN	d1	s1	t	D
50	63	3,0	101	84
65	75	3,6	106	98
80	90	4,3	112	116
100	110	4,2	120	139
125	125	4,8	131	172
150	160	6,2	140	196
200	200	7,7	163	268
250	250	9,6	185	331
300	315	12,1	197	370
400	400	15,3	245	527

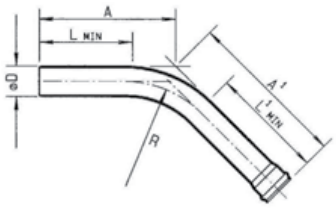
PVC PRESSUREPIPES WITH RUBBERRING SOCKET PN16 / 20° C (EN1452)

DN	d1	s1	t	D
50	63	4,7	101	84
65	75	5,6	106	98
80	90	6,7	112	116
100	110	6,6	120	139
125	125	7,4	131	172
150	160	9,5	140	196
200	200	11,9	163	268
250	250	14,8	185	331
300	315	18,7	197	370

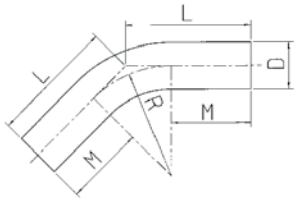
d1 Outside diameter
s1 Wall thickness
t Socket length
D Ring chamber width

PRESSURE BENDS SINGLE SOCKET

				11,25°		22,5°		30°		45°		90°	
OD	R	L	L1	A	A1	A	A1	A	A1	A	A1	A	A1
63	220	95	191	178	299	211	332	233	354	278	399	457	578
75	262	113	214	219	345	258	384	280	406	336	462	548	674
90	315	135	241	220	351	259	309	282	413	339	470	555	686
110	385	165	279	230	369	291	430	320	459	378	517	665	804
125	438	188	307	286	430	327	471	367	511	446	590	778	992
160	560	240	374	358	517	416	575	471	630	583	742	1040	1199
200	700	300	449	530	704	590	764	647	821	761	935	1230	1404
250	875	313	481	528	721	610	803	689	882	852	1045	1510	1703
315	1103	394	585	651	867	776	982	882	1098	1120	1336	2093	2309
400	1400	500	718	845	1088	1000	1243	1149	1392	1468	1711	2825	3068



PRESSURE BENDS PLAIN ENDS



			11,25°	22,5°	30°	45°	90°
OD	R	M	L	L	L	L	L
63	220	95	178	211	233	278	457
75	262	113	219	258	280	336	548
90	315	135	220	259	282	339	555
110	385	175	230	291	320	378	665
125	438	188	286	327	367	446	778
160	560	240	358	416	471	583	1040
200	700	300	530	590	647	761	1230
250	875	313	528	610	689	852	1510
315	1103	394	651	766	882	1120	2093
400	1400	500	845	1000	1149	1468	2435
500	1750	625	1105	1300	1487	1889	

Nominal (minimum) wallthickness

Nominal Outside Diameter	Nominal (minimum) Wallthickness. All measurements are in mm						
	S 20 SDR 41	S 16 SDR 33	S 12,5 SDR 26	S 10 SDR 21	S 8 SDR 17	S 6,3 SDR 13,6	S 5 SDR 11
	Nominal pressure PN based on service (design) coefficient C=2,5						
		PN 6	PN 8	PN 10	PN 12,5	PN 16	PN 20
12		-	-	-	-	-	1,5
16		-	-	-	-	-	1,5
20		-	-	-	-	1,5	1,9
25		-	-	-	1,5	1,9	2,3
32		-	1,5	1,5	1,9	2,4	2,9
40		1,5	1,6	1,9	2,4	3,0	3,7
50		1,6	2,0	2,4	3,0	3,7	4,6
63		2,0	2,5	3,0	3,8	4,7	5,8
75		2,3	2,9	3,6	4,5	5,6	6,8
90		2,8	3,5	4,3	5,4	6,7	8,2
	Nominal pressure PN based on service (design) coefficient C=2,0						
	PN 6	PN 8	PN 10	PN 12,5	PN 16	PN 20	PN 25
110	2,7	3,4	4,2	5,3	6,6	8,1	10,0
125	3,1	3,9	4,8	6,0	7,4	9,2	11,4
140	3,5	4,3	5,4	6,7	8,3	10,3	12,7
160	4,0	4,9	6,2	7,7	9,5	11,8	14,6
200	4,9	6,2	7,7	9,6	11,9	14,7	18,2
225	5,5	6,9	8,6	10,8	13,4	16,6	-
250	6,2	7,7	9,6	11,9	14,8	18,4	-
280	6,9	8,6	10,7	13,4	16,6	20,6	-
315	7,7	9,7	12,1	15,0	18,7	23,2	-
400	9,8	12,3	15,3	19,1	23,7	29,4	-
450	11,0	13,8	17,2	21,5	26,7	33,1	-
500	12,3	15,3	19,1	23,9	29,7	36,8	-
630	15,4	19,3	24,1	30,0	-	-	-

NOTE 1: The nominal wallthickness conform to ISO 4065:1996.
NOTE 2: To apply an overall service (design) coefficient of 2,5 (instead of 2,0) for pipes with nominal diameters above 90mm, the next higher pressure rating, PN, shall be chosen.
NOTE 3: The PN 6 value for S 20 and S 16 are calculated with the preferrred number 6,3

Packing information

	No.length per packages		L= 5 meter		Meter per packages	3 x wood packing Package size in cm (L x W x H) *
12	3000	x	5	=	15000	500 x 124 x 109
16	3500	x	5	=	17500	500 x 124 x 109
20	2000	x	5	=	10000	500 x 124 x 109
25	1250	x	5	=	6250	500 x 124 x 109
32	1035	x	5	=	5175	500 x 124 x 109
40	660	x	5	=	3300	500 x 124 x 109
50	440	x	5	=	2200	500 x 124 x 109
63	272	x	5	=	1360	500 x 124 x 109
75	189	x	5	=	945	500 x 124 x 109
90	132	x	5	=	660	500 x 124 x 109
110	85	x	5	=	425	500 x 124 x 109
125	68	x	5	=	340	500 x 124 x 109
160	39	x	5	=	195	500 x 124 x 109
200	25	x	5	=	125	500 x 120 x 100
250	16	x	5	=	80	500 x 120 x 110
315	9	x	5	=	45	500 x 120 x 100
400	5	x	5	=	25	500 x 120 x 100
500	4	x	5	=	20	500 x 120 x 60
630	2		5		10	500 x 120 x 70

* If the length of the pipe differs from 5 meter, the L size will change.
e.g. 1 package of pipe Ø110mm with a pipe length of 6 meter will result in a package size of 600x 122x 95cm.
In case of socketed pipe the L size will increase with twice the length of the socket.

Certificate
MSC-K56663/05

kiwa

CERTIFICATE

ISO 14001

Kiwa has determined that

Dyka B.V.

its environmental management system and its implementation comply with NEN-EN-ISO 14001:2015 for the scope

The development, production and supply of plastic piping systems.
Providing related (trade) items, tailor-made solutions, technical advice and logistic service

Ronald Karel
Kiwa

This certificate consists of 1 page.
Publication of this certificate is allowed.

SCCM

Certificate
KSC-K22342/09

kiwa

CERTIFICATE

ISO 9001

Kiwa has determined that the quality management system applied by

Dyka B.V.

and its implementation comply with NEN-EN-ISO 9001:2015 for the scope:

The development, production and supply of plastic piping systems.
Providing related (trade) items, tailor-made solutions, technical advice and logistic service.

Ronald Karel
Kiwa

Please contact the certified company for more information about the scope of this certificate in relation to the ISO 9001:2015 standard.

This certificate consists of 1 page.
Publication of this certificate is allowed.

Kiwa Nederland B.V.
Sir Winston Churchilllaan 273
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NL-2280 AB RIJSWIJK
Tel. +31 88 998 44 00
Fax +31 88 998 44 20
info@kiwa.nl
www.kiwa.nl

Company
Dyka B.V.
Produktieweg 7
NL-8331 LJ STEENWIJK
Postbus 33
NL-8330 AA STEENWIJK
Tel. +31 521-534382
info@dyka.nl
www.dyka.nl
KVK 05027264

Product certificate
K5023-03

kiwa

CERTIFICATE

Pipes of unplastizised PVC for drinking water and raw water

STATEMENT BY KIWA

Dyka B.V.

Luc Leroy
Kiwa

Publication of the certificate is allowed.

Certification process consists of initial and regular assessment of
- quality system
- product

A full set of our certificates can be obtained from our website

CENTRALNY OŚRODEK BADAWCZO-ROZWOJOWY TECHNIKI INSTALACYJNEJ

INSTAL

CERTIFIKÁT VÝROBKU

č. 06 0042 V/AO

Trubky a kompletační prvky z neměkčeného PVC.

DYKA s. r. o.

Česká republika

DYKA B. V.

PRODUKTIEWEG 7

8330 AA STEENWIJK, Holandsko

·INSTA-CERT·

CERTIFICATE

Date of valid edition 2017-04-13	**No:** 5169
Date of first issue 2017-04-13	**Reference**

Name and address of certificate holder

DYKA Sp. z o. o
Belgijska 5
PL-55-220 Jelcz-Laskowice
Poland

Conformity marks covered by certificate

Information regarding certificate holder/manufacturer

Contact person Jakub Wojnarowicz	**Telephone** +48 71 301 0044	**Telefax** +48 71 301 0001
	E-mail jwojnarowicz@dyla.com	
Manufacturer DYKA Sp. z o. o	**Place of manufacture** Jelcz-Laskowice	

Product covered by the certificate

Type of product	**Standard** **Normative document**	**Specific rules**
Plastics piping systems for water supply and for buried and above drainage and sewerage under pressure– Unplasticized poly(vinyl chloride) (PVC-U)	EN ISO 1452-2:2009	INSTA SBC EN ISO 1452

Specification of product

PVC-U pipes, dim group 2, Ø 90 mm, PN 10 SDR 21, PN 12.5 SDR 17, PN 16 SDR13.6
PVC-U pipes, dim group 2, Ø 110 – 225 mm, PN 10 SDR 26, PN 12.5 SDR 21, PN 16 SDR 17

Confidential information according to the enclosure

The certificate holder above is hereby given permission to use the INSTA-CERT mark on or in connection with products, which fulfil the requirements of the standard or the normative document specified above (what is said in this document about INSTA-CERT mark will also be valid for marks defined in relevant SBC). The certificate is valid on the condition that the certificate holder complies with the "General rules for certification by partners of INSTA-CERT" (GRC) and the specific rules applying to certification of products of the type mentioned. The certificate holder is obliged to indemnify INSTA-CERT partners of any claim for damages or any other expenses to which partners may become liable as a result of injuries caused by a product manufactured or sold by the licensee. This also applies to defective or faulty products.

Unless terminated, the certificate will be automatically extended for one year at a time. The certificate will be re-issued with a new "date of valid edition" only if the content and/or conditions of the certificate have been changed. Termination may take place to the end of a year subject to three months' notice on the part of the certificate holder and the certification body.
The certificate is not transferable.

MEMBER OF INSTA-CERT

SP Sveriges Tekniska Forskningsinstitut

Lennart Månsson

INSTA CERT CERTIFICATE

bsi.

By Royal Charter

Kitemark™ Certificate

This is to certify that:

Dyka BV
Produktieweg 7
Steenwijk
8331 LJ
Netherlands

Holds Certificate Number: KM 80016

In respect of:

BS EN 1452-2
Plastic Piping Systems for Water Supply - Unplasticized Poly (Vinyl Chloride) (PVC-U) - Pipes, Unplasticized Poly (Vinyl Chloride) PVC-U). Part 2: Pipes

This issues the right and licence to use the Kitemark in accordance with the Kitemark Terms and Conditions governing the use of the Kitemark, as may be updated from time to time by BSI Assurance UK Ltd (the "Conditions"). All defined terms in this Certificate shall have the same meaning as in the Conditions.

The use of the Kitemark is authorised in respect of the Product(s) detailed on this Certificate provided at or from the above address.

For and on behalf of BSI:

Gary Fenton, Global Product Certification Director

First Issued: 08/04/2005

Latest Issue: 09/06/2015

Page: 1 of 2

...making excellence a habit.

Approval Number: 1803510
Test Report: MA6284/U

WRAS APPROVED MATERIAL

Water Regulations Advisory Scheme Ltd.
Unit 13,
Willow Road,
Pen y Fan Industrial Estate,
Crumlin,
Gwent,
NP11 4EG

8th May 2018

Dyka B.V.
Postbus 33,
8330 AA Steenwijk,
Netherlands

WATER REGULATIONS ADVISORY SCHEME LTD. (WRAS)
MATERIAL APPROVAL

The material referred to in this letter is suitable for contact with wholesome water for domestic purposes having met the requirements of BS6920-1:2000 and/or 2014 'Suitability of non-metallic products for use in contact with water intended for human consumption with regard to their effect on the quality of the water'.

The reference relates solely to its effect on the quality of the water with which it may come into contact and does not signify the approval of its mechanical or physical properties for any use.

POLYVINYLCHLORIDE (PVC, PVC-U AND CPVC) - COMPONENTS. **5301**

'Dyka Grey PVC-U-NGS Pipe'. Dark grey coloured, extruded PVC pipe. For use with water up to 23°C.

APPROVAL NUMBER: 1803510
APPROVAL HOLDER: DYKA B.V.

The Scheme reserves the right to review approval.
Approval 1803510 is valid between March 2018 and March 2023

An entry, as above, will accordingly be included in the Water Fittings Directory on-line under the section headed, "Materials which have passed full tests of effect on water quality".

The Directory may be found at: www.wras.co.uk/directory

Yours faithfully

Jason Furnival
Approvals & Enquiries Manager
Water Regulations Advisory Scheme

The Water Regulations Advisory Scheme Ltd. Registered in England No. 06663930 Registered office: 6D Lowick Close, Hazel Grove, Stockport, SK7 5ED
Tel:+44(0)333 207 9030 Fax:+44(0)1495 248 540 Email:info@wras.co.uk website:www.wras.co.uk

dwi

DRINKING WATER INSPECTORATE

Mr Freddie Bouma
Manager Quality Control and Laboratory
Dyka BV
pcb 33 aA Steenwijk
The Netherlands

Thursday 23 November 2006
Ref DWI 56.4.637

Dear Mr Bouma

APPROVAL GIVEN UNDER REGULATION 31 (6) (a) OF THE WATER SUPPLY (WATER QUALITY) REGULATIONS 2000 NO. 3184 AND OF THE WATER SUPPLY (WATER QUALITY) REGULATIONS 2001 (WALES) NO. 3911

Product: Dyka Grey PVC-U Pipe NGS

1. The Secretary of State for Environment, Food and Rural Affairs and the National Assembly for Wales (collectively referred to as "the Authorities") have powers under Regulation 31 of the Water Supply (Water Quality) Regulations* to approve substances and products used in the provision of water which is to be supplied for drinking, washing, cooking or food production. The Authorities are advised on approval issues by the Committee on Products and Processes for Use in Public Water Supply (the Committee).

2. I am enclosing the Authorities' approval for **Dyka Grey PVC-U Pipe NGS** (the approved product). This approval is given on the basis that the Committee is satisfied that there is no objection on health grounds to the use of the approved product in the provision of public water supplies. The Committee does not assess fitness for purpose and approval by the Authorities can not be taken as a favourable assessment of the performance or technical merits of any product.

3. Please note that this approval relates only to **Dyka Grey PVC-U Pipe NGS** as notified to the Committee in your application DWI 56.4.637. I draw your attention to conditions of approval in (A) (B) (C) (D) relating to Instructions for Use, the need for approval of any changes relating to the Instructions for Use or the product itself, and audit requirement. Failure to comply with these or any other condition of approval will lead to revocation of approval.

4. This approval does not authorise you to use the Inspectorate's logo in advertisements or any other literature relating to the approved product. This approval is given by the Authorities

Notes

2019 11 Pressure pipes

DYKA International | +31(0)20-50 60 080 | info@dyka-international.com | www.dyka-international.com

DYKA International, part of Tessenderlo Group