



# Akatherm HDPE Soil & waste solution

For demanding applications

 akatherm

  
aliaxis



# We are Aliaxis

**As a pipe and fittings systems manufacturer, we exist to bring solutions to the world's water challenges and accelerate the transition to clean energy.**

Water is central to who we are.

We are building on strong foundations and trust our teams to preserve this precious resource and enable access to clean water. We are also providing sanitation when millions and millions of people still do not have access to it.





**With Akatherm we have over 50 years of experience in drainage systems, focussing on innovation, quality and dedication.**

Our specialist plumbing solutions are suitable for applications in the commercial and industrial building sector.

We offer international certification, full training, unique products and the service standards you would expect from high performance drainage experts and the worldwide backing of the Aliaxis group.





# Driven by durability

**Modern building designs present ever more extreme challenges. Today, whether a consultant or installer, you need soil & waste solutions capable of responding to the commercial challenges faced by your clients' and end users' businesses.**

**The drive for more:**

## Durability

Akatherm HDPE soil & waste systems are made from polyethylene, a durable material with a very long lifetime.

## Low cost of ownership

Easy prefabrication and installation with secure joints all work together to keep the total cost of ownership at a minimum.

## Security & flexibility

The system can be poured into concrete, embedded in the ground or hung from the ceiling and still sustain and perform.

## Facts



### Fulfilling the standard of prefabrication

The labour costs are an increasing part of the total installed cost of a project. To keep these costs at a minimum all major builders are steering towards prefabrication and modular design.



### Sustainability is a key prerequisite

Worldwide, sustainability and the environmental footprint are high on the agenda with not only governments, but also future proof companies.



### Ever more durable

Total cost of ownership is the name of the game. When translating this to installed systems, it means durable and quality materials that are proven to be low maintenance, now and in the future.



### Complex modular designs

While building plans can take several years to develop because of large and complex designs, the building itself takes up less and less time. This requires modular design and smart use of materials on site.

## For demanding applications

Like every specialist drainage solution from Aliaxis, it comes with a comprehensive level of support. Our dedicated team is specialised in drainage solutions and helps you meeting these demands with confidence.

All our systems are backed by dedicated software, full training and unique products, plus the service standards you would expect from high performance drainage experts and the worldwide backing of the Aliaxis group.

## Decisive advantages of Akatherm HDPE

High Density Polyethylene is an exceptionally flexible and tough material, highly resistant to mechanical stress and impact even at low temperatures.

Akatherm HDPE has a complete product range consisting of pipes and fittings from 40 mm to 315 mm. It includes a wide range of branches, bends, traps, sanitary and connection fittings.

The light-weight material HDPE allows this system to benefit from simple and secure jointing techniques like electrofusion. It is a fully closed system with homogenous joints. Cost saving prefabrication is possible even in large sizes.



# Clever solutions from Aliaxis

Akatherm HDPE has a high temperature and chemical resistance which makes it ideal for drainage in residential housing, commercial kitchens and laundries. It is flexible and tough for installation underground and embedded in concrete. Its closed system is perfect for trade waste applications like industrial and laboratory fluids where system integrity and secure homogenous connections are critical.



**Chemical resistant**



**Elastic**



**Hot water resistant**



**Impact-resistant and tough**

## Quality and certification

Akatherm HDPE is developed and manufactured within an ISO 9001 Quality Assurance system and complies with the EN 1519 and other relevant international standards as well as meeting numerous national approved quality and safety standards.



Germany



The Netherlands



Switzerland



Belgium



Denmark



Sweden



United Kingdom



Australia



Austria



France



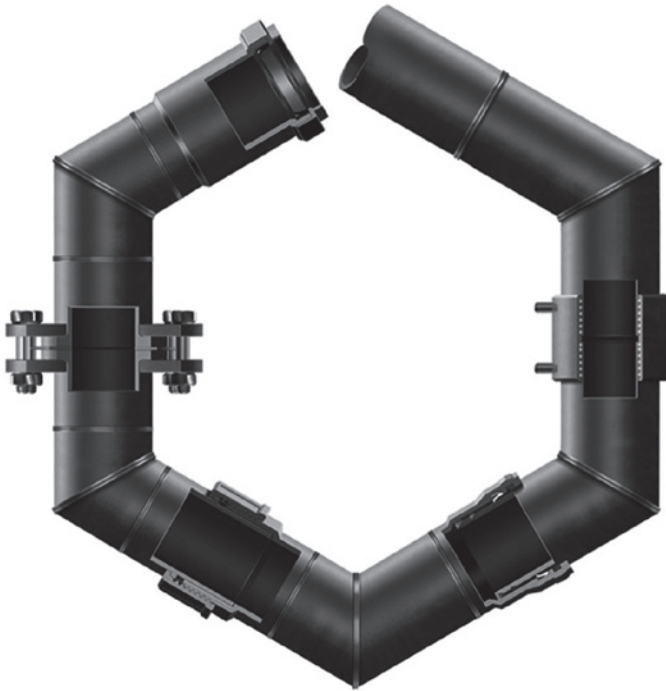
ISO 9001  
Quality  
management  
system



ISO 14001

## Joining technology

Akatherm HDPE offers a choice of welded and mechanical joining techniques. Welded joints provide a homogenous joint ideal for ceiling voids, vertical stacks and underground pipework. Mechanical joints offer adjustability, flexibility and the option to demount.



### Mechanical joints

- Plug-in joint
- Snap joint
- Screw-thread joint
- Flanged joint
- Contraction sleeve
- Sleeve coupling
- Metal coupling
- Rubber collar joint

### Welded joints

- Butt-weld joint
- Electrofusion joint

Suited for efficient joints and prefabrication



Butt-welding homogenously joints HDPE pipes and fittings into prefabricated sections without using additional connection fittings.

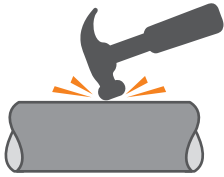
Suited for on-site joints in tight areas



Electrofusion is a rapid and simple way of permanently joining individual pipes and fittings or prefabricated pipe sections in tight places.

# Think it. Build it.

## Material advantages



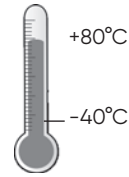
### Impact-resistant and tough:

Unbreakable at temperatures above 5°C



### Elastic and flexible:

Adjusts to local ground movement for underground use



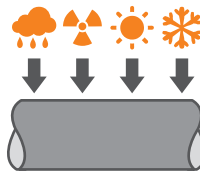
### Thermal resistant:

Applications possible between -40°C and 80°C. Up to 100°C for short periods of time.



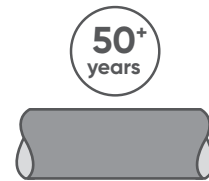
### Chemical resistant:

Suitable for transport of polluted waste water



### UV & weather resistant:

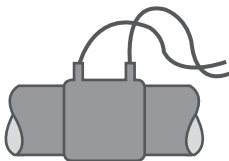
Unrestricted outside use through carbon black additives



### Wear resistant:

Lower cost due to long lifetime

## System advantages



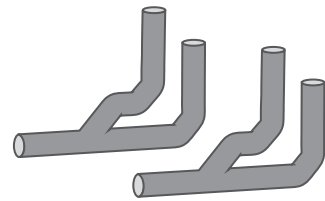
### Welded system:

Simple and secure installation using butt-welding and electrofusion



### Homogeneous welded joints:

Pull tight and leak proof for a completely closed system



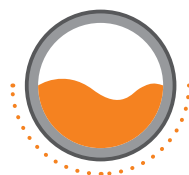
### Prefabrication:

Fast and cost-saving installation of repetitive systems



### Light in weight:

Cost saving in transport and handling



### Low heat conductivity:

No condensation insulation required during short periods of cooling



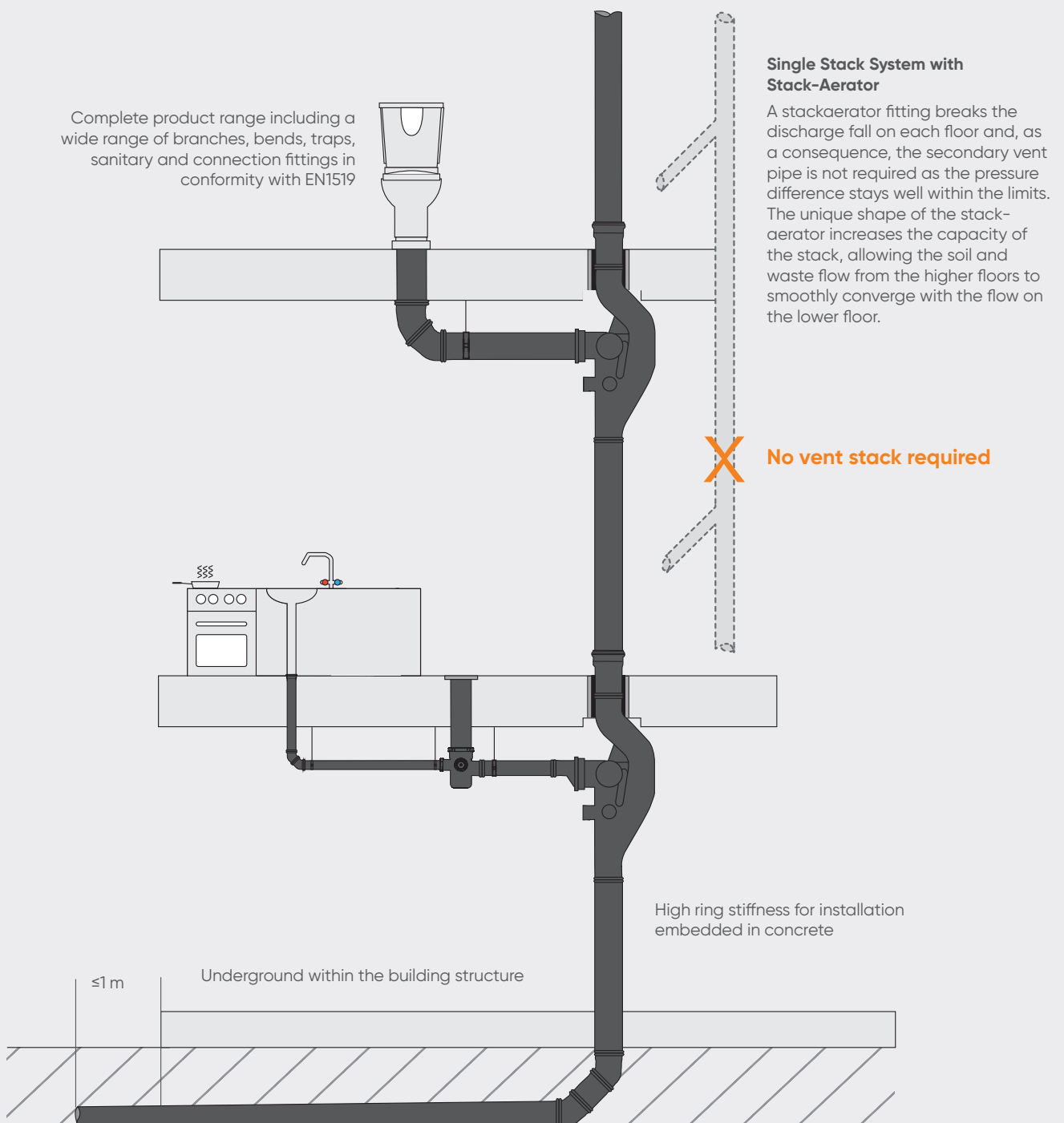
### Non-toxic:

100% recyclable and environmental friendly



# Aim higher

Because skyscrapers are designed evermore extreme, a single stack soil & waste system offers you the possibility to aim higher. End users gain more useable space inside the building because the vent pipe is obsolete. Architects can create extreme building shapes and go 'sky high' because the unique aspects offer several flexible connection possibilities. Material and installation costs are reduced through low weight, the vent pipe being obsolete and prefabricated pipe segments.



## Pipes

### Pipe tempered (length 5 m)



$d_1$	Code
40 x 3,0	100400
50 x 3,0	100500
56 x 3,0	105600
63 x 3,0	100600
75 x 3,0	100700
90 x 3,5	100900
110 x 4,2	101100
125 x 4,8	101200

$d_1$	Code
160 x 6,2	101600
200 x 7,7	102010
250 x 9,6	102510
315 x 12,1	103110
200 x 6,2	102000
250 x 7,7	102500
315 x 9,7	103100

## Fittings

### Bend 90°



d	Code
160	111691
200	112091
250	112591
315	113191

### Bend 90° with long side



d	Code
40	110492
50	110592
56	115692
63	110692
75	110792
90	110992
110	111196
125	111292

### Bend 30°



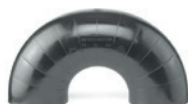
d	Code
110	181115
125	181215
160	181615
200	182015
250	182515
315	183115

### Bend 30°



d	Code
110	181130
125	181230
160	181630
200	182030
250	182530
315	183130

### Bend 180°



$d_1$	Code
50	110599
56	115699
63	110699

### Bend 90° reduced



$d_1/d_2$	Code
50/40	170504
63/50	170605



## Reducer eccentric



$d_1/d_2$	Code
50/40	160504
56/40	165604
56/50	165605
63/40	160604
63/50	160605
63/56	160656
75/40	160704
75/50	160705
75/56	160756
75/63	160706
90/40	160904
90/50	160905
90/56	160956
90/63	160906
90/75	160907
110/40	161104
110/50	161105
110/56	161156
110/63	161106
110/75	161107
110/90	161109
125/56	161256
125/63	161206
125/75	161207
125/90	161209
125/110	161211
160/110	161611
160/125	161612

## Reducer concentric



$d_1/d_2$	Code
40/32	150403
50/32	150503
50/40	150504
56/40	155604
56/50	155605
63/40	150604
63/50	150605
63/56	150656
75/40	150704
75/50	150705
75/56	150756
75/63	150706
90/40	150904
90/50	150905
90/56	150956
90/63	150906
90/75	150907
110/40	151104
110/50	151105
110/56	151156
110/63	151106
110/75	151107
110/90	151109
125/75	151207
125/90	151209
125/110	151211
160/110	151611
160/125	151612
200/160	152016
250/160	152516
250/200	152520
315/200	153120

## Reducer eccentric long



$d_1/d_2$	Code
200/110	142011
200/125	142012
200/160	142016
250/200	142520
315/200	143120
315/250	143125

## Bend 88,5° electrofusable



$d_1$	Code
110	111198

**Elbow 45°**

d	Code
40	120445
50	120545
56	125645
63	120645
75	120745
90	120945
110	121145
125	121245
160	121645
200	122045
250	122545
315	123145

**Elbow 45° with long side**

d	Code
75	120746
90	120946
110	121146

**Elbow 88,5°**

d	Code
40	120488
50	120588
56	125688
63	120688
75	120788
90	120988
110	121188
125	121288
160	121688
200	122088
250	122588
315	123188

**Elbow 90° with long side**

d	Code
90	120993
110	121193

**Y-piece 60°**

d <sub>1</sub> /d <sub>2</sub>	Code
110/110	371111

**Double branch 45°**

d <sub>1</sub> /d <sub>2</sub>	Code
110/110	361111

**Clean out branch 45°**

d <sub>1</sub> /d <sub>2</sub>	Code
110/110	331100
125/110	331200
160/110	331600

**Clean out branch 90°**

d <sub>1</sub> /d <sub>2</sub>	Code
40/40	230400
50/50	230500
56/56	235600
63/63	230600
75/75	230700
90/90	230900
110/110	231120
125/110	231200
160/110	231620
200/110	232000
250/110	232500
315/110	233100

**Branch 88,5° swept entry**

d <sub>1</sub> /d <sub>2</sub>	Code
110/110	251111



## Y-branch 45°



d <sub>1</sub> /d <sub>2</sub>	Code
40/40	300404
50/40	300504
50/50	300505
56/40	305604
56/50	305605
56/56	305656
63/40	300604
63/50	300605
63/56	300656
63/63	300606
75/40	300704
75/50	300705
75/56	300756
75/63	300706
75/75	300707
90/40	300904
90/50	300905
90/56	300956
90/63	300906
90/75	300907
90/90	300909
110/40	301104
110/50	301105

d <sub>1</sub> /d <sub>2</sub>	Code
110/56	301156
110/63	301106
110/75	301107
110/90	301109
110/110	301111
125/50	301205
125/56	301256
125/63	301206
125/75	301207
125/90	301209
125/110	301211
125/125	301212
160/50	301605
160/56	301656
160/63	301606
160/75	301607
160/90	301609
160/110	301611
160/125	301612
160/160	301616
200/50	302005
200/56	302056
200/63	302006

d <sub>1</sub> /d <sub>2</sub>	Code
200/75	302007
200/90	302009
200/110	302011
200/125	302012
200/160	302016
200/200	302020
250/75	302507
250/90	302509
250/110	302511
250/125	302512
250/160	302516
250/200	302520
250/250	302525
315/75	303107
315/90	303109
315/110	303111
315/125	303112
315/160	303116
315/200	303120
315/250	303125
315/315	303131

## Branch 88,5°



d <sub>1</sub> /d <sub>2</sub>	Code
40/40	200404
50/40	200504
50/50	200505
56/50	205605
56/56	205656
63/40	200604
63/50	200605
63/56	200656
63/63	200606
75/40	200704
75/50	200705
75/56	200756
75/63	200706
75/75	200707
90/40	200904
90/50	200905

d <sub>1</sub> /d <sub>2</sub>	Code
90/56	200956
90/63	200906
90/75	200907
90/90	200909
110/40	201104
110/50	201105
110/56	201156
110/63	201106
110/75	201107
110/90	201109
110/110	201111
125/50	201205
125/56	201256
125/63	201206
125/75	201207
125/90	201209
125/110	201211
125/125	201212
160/50	201605
160/56	201656
160/63	201606
160/75	201607

d <sub>1</sub> /d <sub>2</sub>	Code
160/90	201609
160/110	201611
160/160	201616
200/75	202007
200/90	202009
200/110	202011
200/125	202012
200/160	202016
200/200	202020
250/110	202511
250/125	202512
250/160	202516
250/200	202520
250/250	202525
315/110	203111
315/125	203112
315/160	203116
315/200	203120
315/250	203125
315/315	203131

## Stack-aerator



d <sub>1</sub>	Code
110	601117
160	601617

## End cap



d <sub>1</sub>	Code
40	670407
50	670507
56	675607
63	670607
75	670707
90	670907
110	671107
125	671209
160	671609
200	672009
250	672509
315	673109

## Double ball branch 88,5° - 90°



d <sub>1</sub> /d <sub>2</sub>	Code
110/50	241114
110/56	241115
110/63	241116
110/75	241117
110/90	241119
110/110	241101
125/110	241201

## Double ball branch 88,5° - 135°



d <sub>1</sub> /d <sub>2</sub>	Code
110/50	241124
110/56	241125
110/75	241127
110/110	241102
125/110	241202

## Double ball branch 88,5° - 180°



d <sub>1</sub> /d <sub>2</sub>	Code
110/50	241134
110/56	241135
110/63	241136
110/75	241137
110/90	241139
110/110	241103
125/110	241203

## Triple ball branch 88,5° - 90°



d <sub>1</sub> /d <sub>2</sub>	Code
110/50	341114
110/56	341115
110/63	341116
110/75	341117
110/90	341119
110/110	341101
125/110	341201

## Triple ball branch 88,5° - 135°



d <sub>1</sub> /d <sub>2</sub>	Code
110/56	341125
110/63	341126
110/75	341127
110/90	341129
110/110	341102

## Fourfold ball branch 88,5° - 90°



d <sub>1</sub> /d <sub>2</sub>	Code
110/110	441101
125/110	441201



# Connecting fittings

## Electrofusion coupler Akafusion



d <sub>1</sub>	Code
40	410495
50	410595
56	415695
63	410695
75	410795
90	410995
110	411195
125	411295
160	411695
200	412065
250	412565
315	413165

## Snap socket



d <sub>1</sub>	Code
40	400410
50	400510
63	400610
75	400710
90	400910
110	401110
125	401210
160	401610
200	402010

## Expansion socket with anchor point



d <sub>1</sub>	Code
40	400420
50	400520
56	405620
63	400620
75	420720
90	420920
110	421120
125	421220
160	421620
200	402020
250	402520
315	403120

## Snap socket short



d <sub>1</sub>	Code
110	401140

## Plug-in socket



d <sub>1</sub>	Code
40	420450
50	420550
56	425650
63	420650
75	420750
90	420950
110	421150
125	421250
160	421650

## Screw coupler short



d <sub>1</sub>	Code
40	430430
50	430530
56	435630
63	430630
75	430730
90	430930
110	431130

## Inspection screw lock long



d <sub>1</sub>	Code
40	660440
50	660540
56	665640
63	660640
75	660740
90	660940
110	661140

## Flange bushing for screw coupler



d <sub>1</sub>	Code
40	430405
50	430505
56	435605
63	430605
75	430705
90	430905
110	431105

## Inspection screw lock short



d <sub>1</sub>	Code
75	660700
110	661120

## Waste connector



$d_1$	Code
32 x 1¼"	980381
40 x 1½"	980482
50 x 2"	980583

## Female thread adaptor short



$d_1$	Code
40 x ¾"	910479
40 x 1"	910480
40 x 1¼"	910481
50 x 1"	910580
50 x 1¼"	910581
50 x 1½"	910582
63 x 1½"	910682
63 x 2"	910683

## Female thread adaptor long



$d_1$	Code
40 x ½"	920478
40 x ¾"	920479
40 x 1"	920480
40 x 1¼"	920481
50 x ½"	920578
50 x 1"	920580
50 x 1¼"	920581
50 x 1½"	920582
50 x 2"	920583
56 x 2"	925683
63 x 1½"	920682
63 x 2"	920683
75 x 2½"	920784

## Male thread adaptor short



$d_1$	Code
40 x ½"	960478
40 x ¾"	960479
40 x 1"	960480
40 x 1¼"	960481
50 x 1"	960580
50 x 1¼"	960581
50 x 1½"	960582
63 x 1½"	960682
63 x 2"	960683

## Contraction socket



$d_1/d_2$	Code
40/50	550401
50/70	550503
50/80	550504
56/75	555601
63/75	550601
63/85	550603
75/90	550701
90/110	550902
110/125	551102
110/135	551103
125/155	551201
125/170	551202
160/180	551602
160/195	551604
200/225	552001
250/280	552501

## Stub flange



$d_1$	Code
40	470402
50	470502
56	475602
63	470602
75	470702
90	470902
110	471102
125	471202
160	471602
200	472002
250	472502
315	473102

## Male thread adaptor long



$d_1$	Code
40 x ½"	970478
40 x ¾"	970479
40 x 1"	970480
40 x 1¼"	970481
50 x 1"	970580
50 x 1¼"	970581
50 x 1½"	970582
56 x 2"	975683
63 x 1½"	970682
63 x 2"	970683
75 x 2½"	970784

**Gasket flat**

$d_1$	Code
40/32	470413910
50/40	470513910
56/50	470613810
63/50	470613810
75/65	470713810
90/80	470913810
110/100	471113810
125/100	471213810
160/150	471613810
200/200	472013810
250/250	472513810
315/300	473113810

**Profile backing ring PP ductile iron core**

$d_1/DN$	Code
40/32	470409010
50/40	470509010
56/50	470609010
63/50	470609010
75/65	470709010
90/80	470909010
110/100	471109010
125/100	471209010
160/150	471609010
200/200	472009010
250/250	472509010
315/300	473109010

**Blind flange PP ductile iron core**

$d_1/DN$	Code
40/32	470485010
50/40	470585010
56/50	470685010
63/50	470685010
75/65	470785010
90/80	470985010
110/100	471185010
125/100	471185010
160/150	471685010
200/200	472085010
250/250	472585010
315/300	473185010

**Protection cap for pipe**

$d_1$	Code
40	400429
50	400529
56	405629
63	400629
75	400729
90	400929
110	401129
125	401229
160	401629

**Rubber collar for pipe in pipe joints**

$d_1/d$	Code
50/32	513301
50/40	513501
56/32	513303
56/40	513503
63/32	513502
63/40	513602
63/50	513702

## Sanitary fittings

### Wall-lavatory bend 90°



d <sub>v</sub> /d	Code
90/90	500984
110/90	501185
110/110	501182

### Double wall-lavatory bend 90° (vertical)



d <sub>v</sub> /d	Code
110/110	501134

### Double wall-lavatory bend 90° (horizontal)



d <sub>v</sub> /d	Code
110/90	500935
110/110	501135

### Wall-lavatory bend 90° left (horizontal)



d <sub>v</sub> /d	Code
90/90	500932
110/90	501032
110/110	501132

### Wall-lavatory bend 90° right (horizontal)



d <sub>v</sub> /d	Code
110/90	501033
110/110	501133

### Wall-lavatory socket



d <sub>v</sub> /d	Code
90/90	500951
110/110	501171

### Protection plug



d <sub>i</sub>	Code
90	430919
110	431119

### Floor-lavatory socket



d <sub>i</sub>	Code
90	500901
110	501101

### Floor-lavatory bend 90°



d <sub>i</sub>	Code
90	500911
110	501111

### Universal protection plug



Code
434619

### Trap connection socket



d <sub>i</sub>	Code
40	510401
50	510501
56	515601
50	510502
56	515602

### Trap connection bend 90°



d <sub>i</sub>	Code
40	510411
50	510511
56	515611
50	510512



### Rubber seal for floor-lavatory socket/bend



$d_1$	Code
129	501113

### Rubber collar for trap connection socket/bend



$d_1$	Code
46	513301
46	513501
58	513502
58	513602
58	513702

## Traps

### Floor waste gully electrofusable



$d_1/d_2/d_3$	Code
110/3x56/75	461156

### Floor waste gully push-fit



$d_1/d_2/d_3$	Code
110/3x50/75	461105

### Four way riser electrofusable



$d_1/d_2$	Code
110/4x56	461111

### Universal trap with flange bushing



$d_1$	Code
63	060609
75	070709
90	090909
110	111109

### S-trap



$d_1/d_2$	Code
40/40	040401
50/40	040501
50/50	050501
56/50	055601
63/63	060601
75/75	070701

### P-trap



$d_1/d_2$	Code
40/40	040402
50/40	040502
50/50	050502
63/50	050602
63/63	060602

### Running trap



$d_1/d_2$	Code
40/40	040403
50/50	050503
63/63	060603

## Spare parts

Collar for plug-in socket, plug-in socket short, snap socket and expansion socket



d <sub>1</sub>	Code
40	400413
50	400513
56	405613
63	400613
75	400713
75	420723
90	400913
90	420923
110	401113
110	421123
125	401213
125	421223
160	401613
160	421623
200	402013
200	402023
250	402523
315	403123

Protection plug for plug-in socket, plug-in socket short, snap socket and expansion socket



d <sub>1</sub>	Code
40	400419
50	400519
56	405619
63	400619
75	400719
90	400919
110	401119
125	401219
160	401619
200	402019

Protection plug for trap connection socket/bend



d <sub>1</sub>	Code
46	404619
58	405819

## Fixing material

### Anchor bracket



d <sub>1</sub>	Code
40	700478
50	700578
56	705678
63	700678
75	700778
90	700978
110	701178
125	701278
160	701678
200	702080
250	702580
315	703180

### Guide bracket



d <sub>1</sub>	Code
40	700410
50	700510
56	705610
63	700610
75	700710
90	700910
110	701110
125	701210
160	701610
200	702080
250	702580
315	703180

### Clamp liners



d <sub>1</sub>	Code
40	700415
50	700515
56	705615
63	700615
75	700715
90	700915
110	701115
125	701215
160	701615
200	702015

### Mounting plate for anchor bracket



d <sub>1</sub>	Code
40-160	709478
200-315	709480

### Mounting plate for guide bracket



d <sub>1</sub>	Code
40-160	709410
200-315	709480

## Electrofusion control boxes

Electrofusion control box CB160



d <sub>1</sub>	Code
40-315	419830

Electrofusion control box CB315-U



d <sub>1</sub>	Code
40-315	419910

Cables for CB315-U

d <sub>1</sub>		Code
40-160	Output leads	419971
200-315	Output leads	419972
	Weld extension cable	419975
	Connection cable USB	419977

## Butt-welding machines

Butt-welding machine 160C



d <sub>1</sub>	Code
40-160	492000

Butt-welding machine 250C



d <sub>1</sub>	Code
75-250	493000

Butt-welding machine 315C



d <sub>1</sub>	Code
90-315	494000

Manual welding plate



d <sub>1</sub>	Code
40-110	490010



## Tools & accessories

### Scraper



	Code
	613311

### Scraper Spider



	Code
Scraper	419860
Scraper & case	419865

### Spider accessories

Accessories	Code
Replacement blades	419861
Roller set 3x	419862
Roller holder	419863
Replacement screw M2, 5x6 for blades	419864
Case	419866

### Pipe cutter



d <sub>i</sub>	Code
40-63	490910
50-125	491010
110-160	491110

### Grease pencil



	Code
	419620

### PE cleaner



	Code
	601000

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