Technical features

Non-entry inspection chambers **DIAMIR 315**

Main components of a chamber:

-**base unit, a base of an inspection chamber**, allowing for direct connection of storm water drainage or sanitary sewer systems installed in the ground, including incorporated channels with possible branches

-**a riser pipe** of internal diameter equalling 315

-**a telescope section**, allowing for compensation of settlement which may take place after installation and making it possible to adjust the chamber height. A telescope pipe is installed to the depth of 0,8 m below the ground level.

Standards:

-DIAMIR 315 inspection chamber is compliant with

EN 13598-2:2009

EN 476:2011

-approval for use in road ROWs

Technical Approval **IBDiM AT/2010-02-0830**

Technical Approval **IK AT/07-2011-0242-00**

Technical Approval **IBDiM AT/2011-02-2706**

-GIG (Central Mining Institute) Opinion approving their use in the areas of mining damages up to the 4th category;
-Resistance of PP chamber components to chemical substances is compliant with the guidelines issued by

ISO/TR 10358

-Gully tops and manhole tops meet the requirements of standard

EN 124:2000

-Seals meet the requirements of standard

EN 681-1:2002

-Chemical resistance of elastomeric seals to chemical substances is compliant with the requirements of the

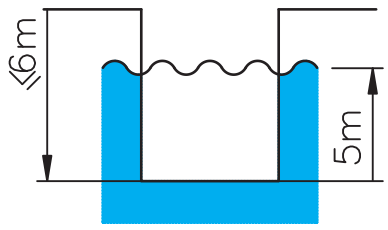
ISO/TR 7620 Guidelines

Usage:

-maximum installation depth 6 m

-acceptable ground water table 5 m

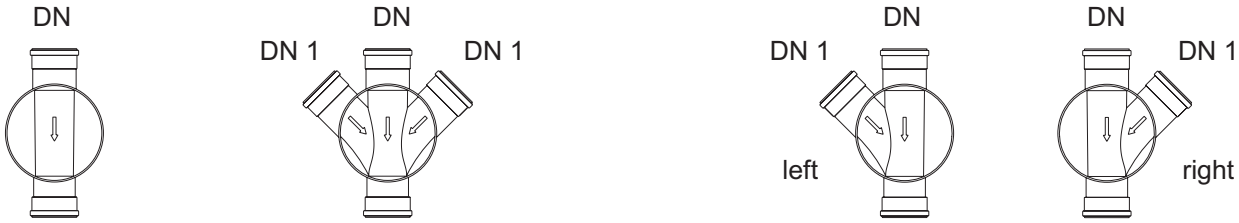
-acceptable load caused by traffic SLW60 according to ATV-A127P



Technical features

Technical data

Base units are made of polypropylene (PP), with reinforcing ribs. They are adapted to connection with vertical riser pipes. There is a horizontal channel in the base unit with one or a few inlet connector pipes and one outlet connector pipe ending with hubs for connection with plain wall pipes made of PVC-U, PP or PE.



Type 1	Type 2			Type 3		Type 4	
DN	DN 1	DN	DN 1	DN 1	DN	DN	DN 1
110	110	110	110	110	110	110	110
160	160	160	160	160	160	160	160
200	200	200	200	200	200	200	200

A ball-and-socket joints ±7,5 ° may be used in connection bells 160, 200 (page 28)

Height adjustment

Non-entry inspection chambers **DIAMIR 315**

Specifications and height adjustment

In specifications for materials required for an investment total numbers of individual inspection chamber components should be indicated:

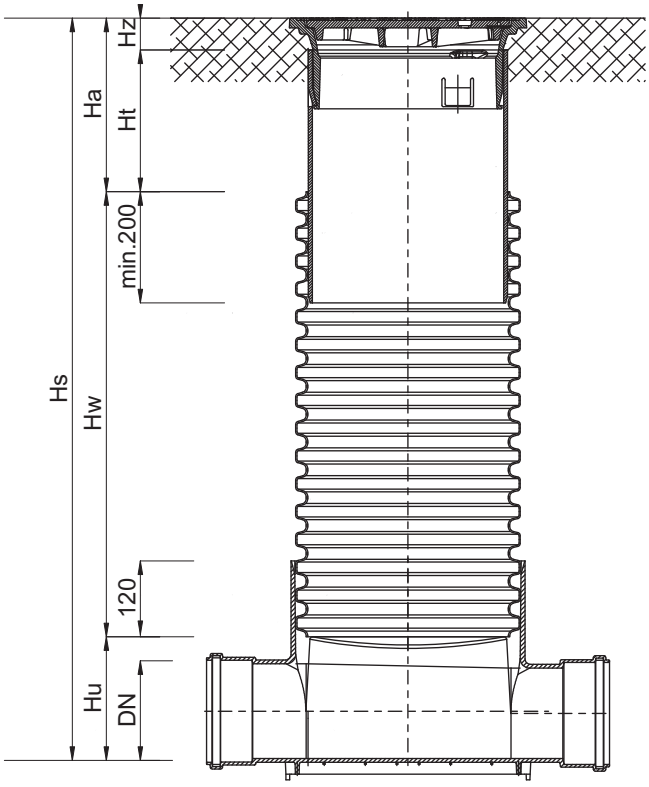
-base units

-riser pipes

-tops

The input parameter is chamber height specified in the design – the difference between the ground level and the chamber invert (base unit level). We label it as **Hs**. In order to make calculations easier, there is effective height (**Hu**) specified for each base unit type, that is, the distance between the bottom of a base unit and the bottom of base unit bell in which a riser pipe is installed.

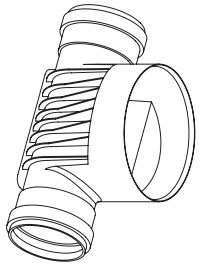
For calculations, we label the height of a riser pipe as **Hw**. The effective height of a top section (telescope) will be **Ha**. One should bear in mind that the effective height of the telescope must not be smaller that thickness of the structural pavement layer. Height of a non-entry inspection chamber DIAMIR 315



Hs = Hu + Hw + Ha

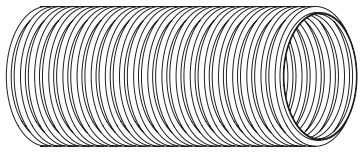
Ha = Ht + Hz

Flow-through base unit 315



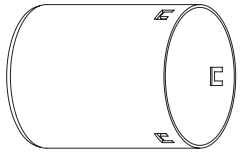
Outer pipe gasket 315
(complete with a base unit)

Riser pipe 315
corrugated, single-layer

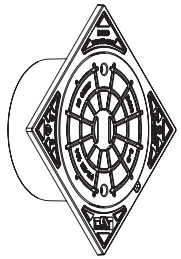


Inner pipe gasket
315

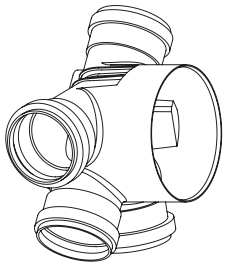
Telescope pipe 315



Cast iron manhole frating
315

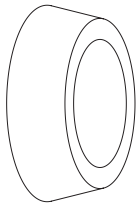


Multi-inlet base unit 315

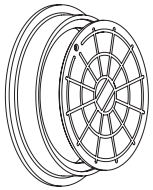


in-situ gasket

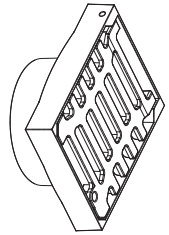
Concrete taper
315



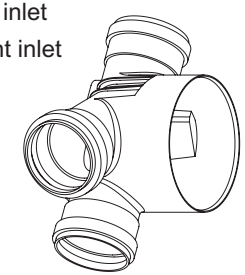
Cast iron cover for a
concrete taper



Gully grating 315

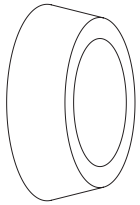


Flow-through base unit
left inlet
right inlet

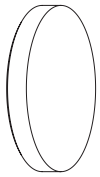


Ball-and-socket joint

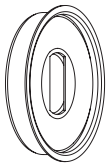
Concrete taper
315



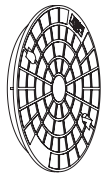
Concrete cover
315



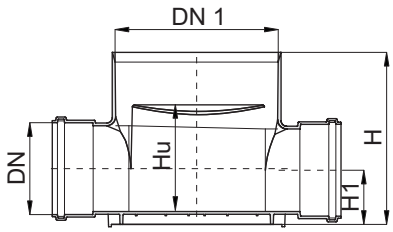
bottom PP 315

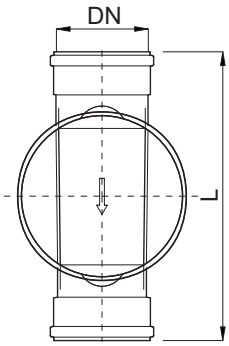


PP cover
315



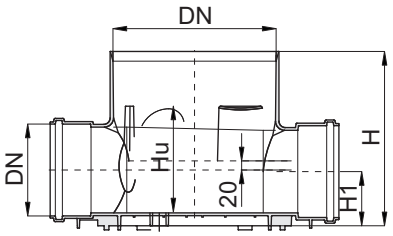
Flow-through base unit
with a gasket
Type 1

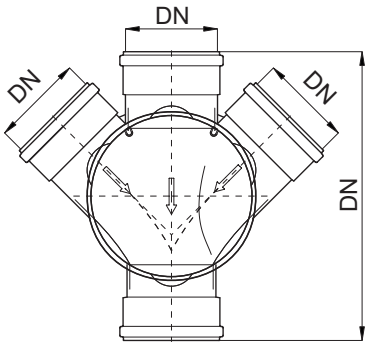




DN [mm]	DN 1 [mm]	H [mm]	Hu [mm]	H1 [mm]	L [mm]	Weight [kg]	index -
110	355	282	145	68	564	2,9	2531110300
160	355	337	192	100	636	3,6	2531120300
200	355	382	234	122	632	4,1	2531130300

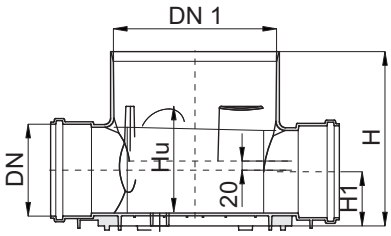
Kineta zbiorcza 315
with a gasket
Type 2

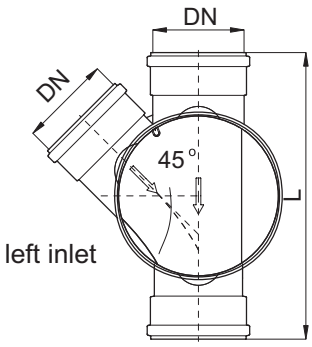




DN [mm]	DN 1 [mm]	H [mm]	Hu [mm]	H1 [mm]	L [mm]	Weight [kg]	index -
110	355	282	148	68	564	3,3	2532110300
160	355	337	192	100	636	4,4	2532120300
200	355	377	234	122	632	5,3	2532130300

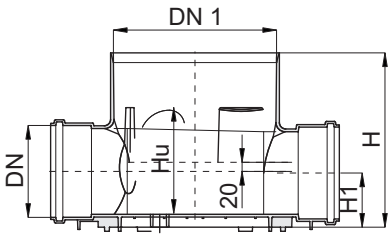
Flow-through base unit 315
with a gasket
with left inlet
Type 3

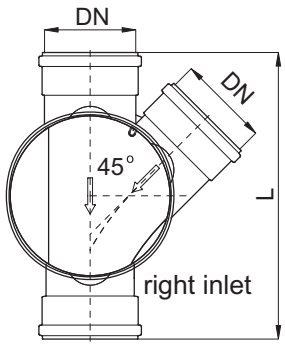




DN [mm]	DN 1 [mm]	H [mm]	Hu [mm]	H1 [mm]	L [mm]	Weight [kg]	index -
110	355	282	145	68	564	3,1	2533113300
160	355	337	192	100	636	4,0	2533123300
200	355	382	234	122	632	4,5	2533133300

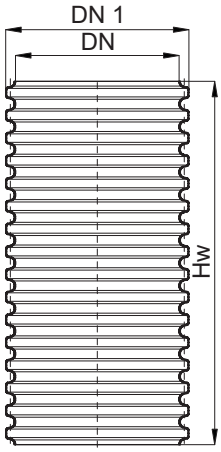
Flow-through base unit 315
with a gasket
with right inlet
Type 4





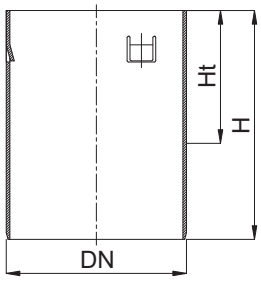
DN [mm]	DN 1 [mm]	H [mm]	Hu [mm]	H1 [mm]	L [mm]	Weight [kg]	index -
110	355	282	145	68	564	3,1	2534113300
160	355	337	192	100	636	4,0	2534123300
200	355	382	234	122	632	4,5	2534133300

Riser pipe 315
corrugated, single-layer
SN 4



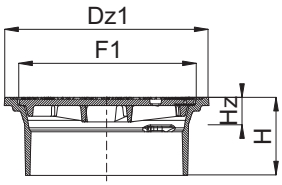
DN [mm]	DN 1 [mm]	Hw [mm]	Weight [kg]	index -
315	355	1000	4,0	2713312100
315	355	2000	8,0	2713312200
315	355	3000	12,0	2713312300
315	355	6000	24,0	2713312600

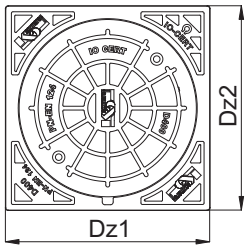
Telescope pipe 315
for cast iron chamber cover 315

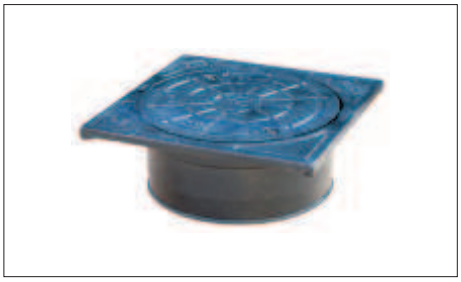


DN [mm]	H [mm]	Ht [mm]	Weight [kg]	index -
315	400	200	3,7	2781321040
315	800	600	7,4	2781321080

Cast iron chamber cover 315

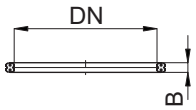


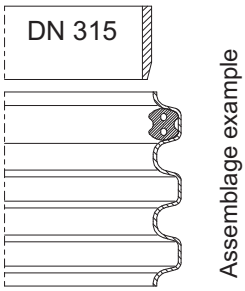




	Dz1 [mm]	Dz2 [mm]	F1 [mm]	H [mm]	Hz [mm]	Weight [kg]	index -
A15	375	375	320	143	50	20,5	2901131100
B125	375	375	320	143	50	22,9	2901132100
B125 K	375	375	320	143	50	22,3	2902132100
D400	375	375	320	143	50	31,5	2901134100
D400 K	420	340	395/320	150	60	40,0	2902134100

Corrugated pipe gasket 315
all-purpose

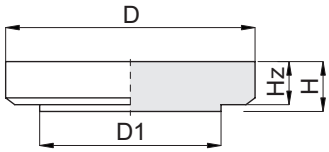




DN [mm]	B [mm]	Weight [kg]	index -
315	20	0,3	5162131050

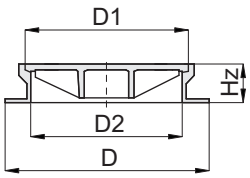
a gasket installed outside or inside a riser pipe groove

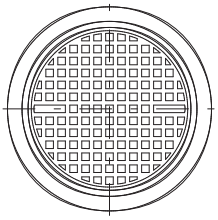
Concrete cover 315



	DN [mm]	D [mm]	D1 [mm]	H [mm]	Hz [mm]	Weight [kg]	index -
A15	315	510	355	110	95	51,3	2952131000

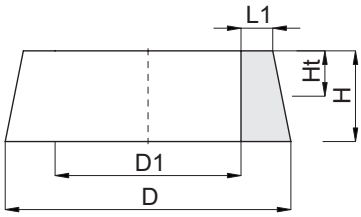
Cast iron chamber cover 315

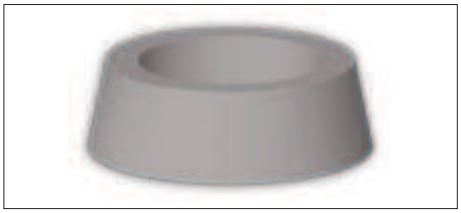




	DN [mm]	D [mm]	D1 [mm]	D2 [mm]	Hz [mm]	Weight [kg]	index -
B125	315	450	375	325	70	26,0	2901142500

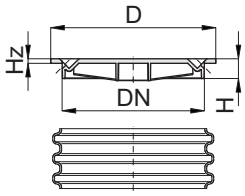
Concrete taper 315

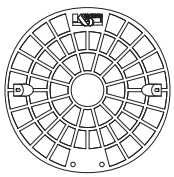




	DN [mm]	D [mm]	D1 [mm]	L1 [mm]	H [mm]	Ht [mm]	Weight [kg]	index -
B125	315	565	365	70	220	110	65,6	2951132000

PP Cover 315





	DN [mm]	D [mm]	H [mm]	Hz [mm]	Weight [kg]	index -
A15	315	364	110	95	1,3	2539405090

Technical features

Technical features

Non-entry inspection chambers **DIAMIR 400**
Main components of a chamber

-**a base unit, a base of an inspection chamber**, allowing for direct connection of storm water drainage or sanitary sewer systems installed in the ground, including incorporated channels with possible branches

-**a riser pipe** of external diameter equalling 400

-**a telescope section**, allowing for compensation of settlement which may take place after installation and making it possible to adjust the chamber height. A telescope pipe is installed to the depth of 0,8 m below the ground level.

Standards:

-DIAMIR 400 inspection chamber is compliant with

EN 13598-2:2009

EN 476:2011

-approval for use in road ROWs

Technical Approval **IBDiM AT/2010-02-0830**

Technical Approval **IK AT/07-2011-0242-00**

Technical Approval **IBDiM AT/2011-02-2706**

-GIG (Central Mining Institute) Opinion approving their use in the areas of mining damages up to the 4th category;
-Resistance of PP chamber components to chemical substances is compliant with the guidelines issued by

ISO/TR 10358

-Gully tops and manhole tops meet the requirements of standard

EN 124:2000

-Seals meet the requirements of standard

EN 681-1:2002

-Chemical resistance of elastomeric seals to chemical substances is compliant with the requirements of the

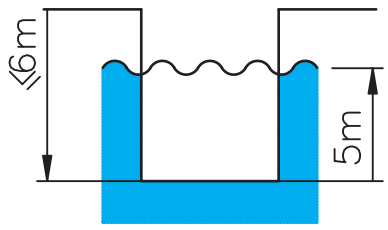
ISO/TR 7620 Guidelines

Usage:

-maximum installation depth 6 m

-acceptable ground water table 5 m

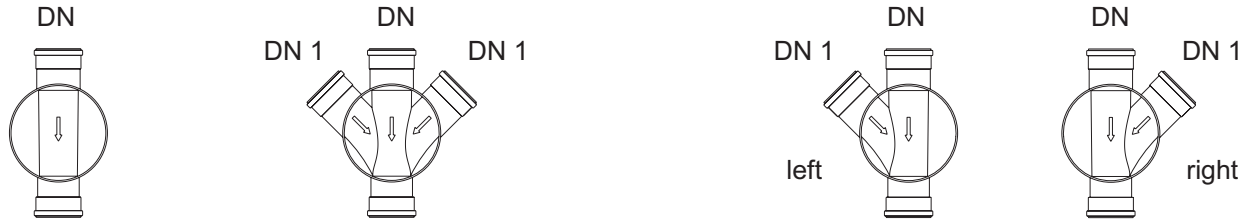
-acceptable load caused by traffic SLW60 according to ATV-A127P



Technical features

Technical data

Base units are manufactured of polypropylene, with reinforcing ribs. They are adapted to connection with vertical riser pipes. There is a horizontal channel in the base unit with one or a few inlet connector pipes and one outlet connector pipe ending with hubs for connection with plain wall pipes made of PVC-U, PP or PE or connector pipes adapted to connection with structural pipes K2-KAN.



Type 1	Type 2			Type 3		Type 4	
DN	DN 1	DN	DN 1	DN 1	DN	DN	DN 1
110	110	110	110	110	110	110	110
160	160	160	160	160	160	160	160
200	200	200	200	200	200	200	200
250	250	250	250	250	250	250	250
315	315	315	315	315	315	315	315
400	200-315	400	200-315	200-315	400	400	200-315
200K2-Kan	200K2-Kan	200K2-Kan	200K2-Kan	200K2-Kan	200K2-Kan	200K2-Kan	200K2-Kan
250K2-Kan	250K2-Kan	250K2-Kan	250K2-Kan	250K2-Kan	250K2-Kan	250K2-Kan	250K2-Kan
300K2-Kan	300K2-Kan	300K2-Kan	300K2-Kan	300K2-Kan	300K2-Kan	300K2-Kan	300K2-Kan
400K2-Kan	200-300	400K2-Kan	200-300	200-300	400K2-Kan	400K2-Kan	200-300

A ball-and-socket joints ±7,5 ° may be used in connection bells 160, 200, 250, 315 (page 28)

Height adjustment

Non-entry inspection chambers **DIAMIR 400**

Specifications and height adjustment

Preparing specifications for materials required for an investment, total numbers of individual inspection chamber components should be indicated:

-base units, -riser pipes, -tops

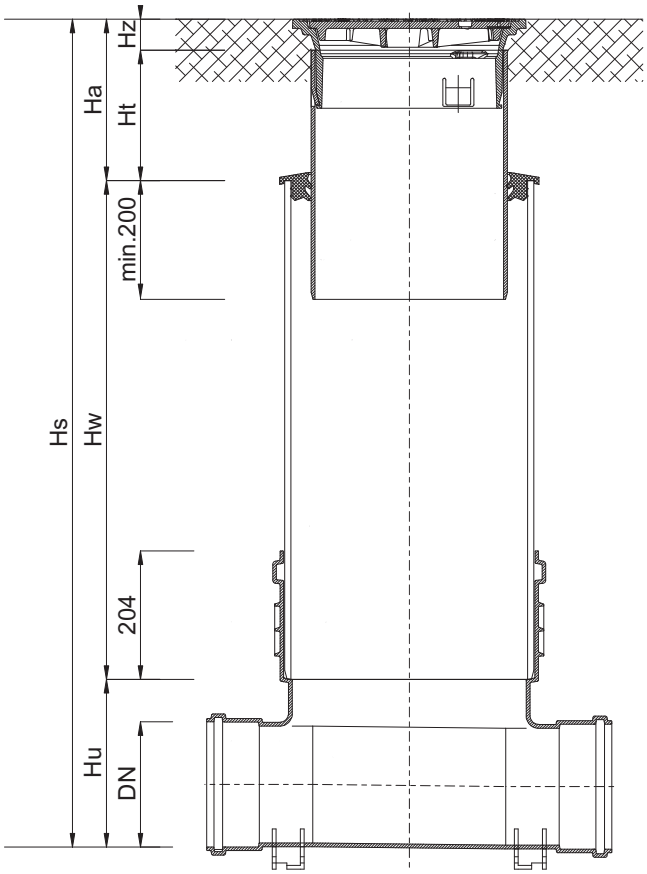
The input parameter is chamber height specified in the design – the distance between the ground level and the chamber invert (base unit level). We label it as **Hs**. In order to make calculations easier, there is effective height (**Hu**) specified for each base unit type, that is, the distance between the bottom of a base unit and the bottom of base unit bell in which a riser pipe is installed.

For calculations, we label the height of a riser pipe as **Hw**. The effective height of a top section (telescope) will be **Ha**. One should bear in mind that the useful height of the telescope must not be smaller that thickness of the structural pavement layer.

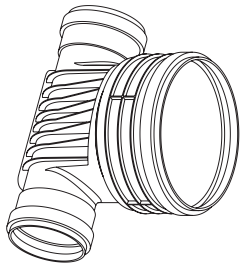
Height of a non-entry inspection chamber DIAMIR 400

Hs = Hu + Hw + Ha

Ha = Ht + Hz

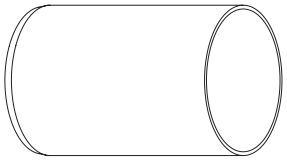


Flow-through base unit 400

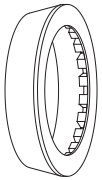


Outer pipe gasket 400 (complete with a base unit)

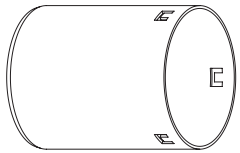
PVC plain wall riser pipe



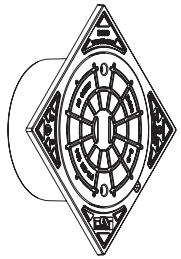
cuff gasket 400/315



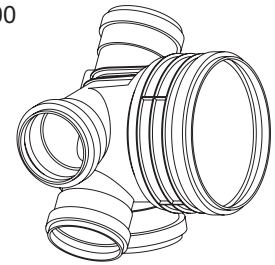
Telescope pipe 315



Właz żeliwny 315



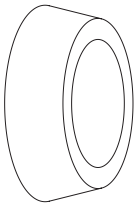
Multi-inlet base unit 400



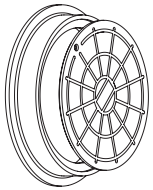
Outer pipe gasket 400 (complete with a base unit)

In-situ insert or gasket

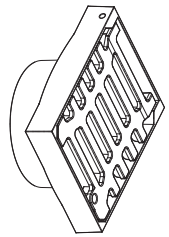
Concrete taper 400



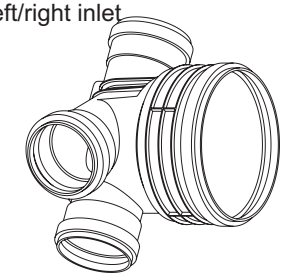
Cast iron cover for a concrete taper



Gully grating 315



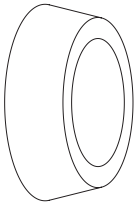
Flow-through base unit left/right inlet



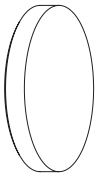
Outer pipe gasket 400 (complete with a base unit)

Ball-and-socket joint

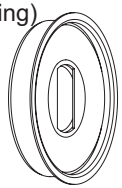
Concrete taper 400



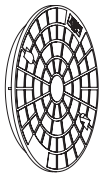
Concrete cover 400



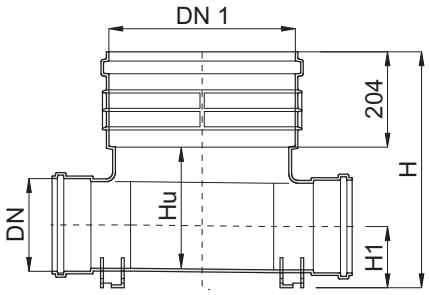
PVC bottom 400 (for glueing)

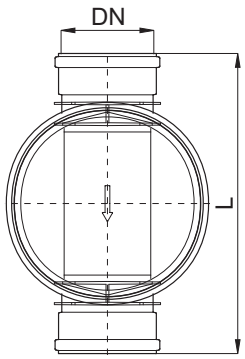


PP cover 400



Flow-through base unit 400
with a gasket
Type 1

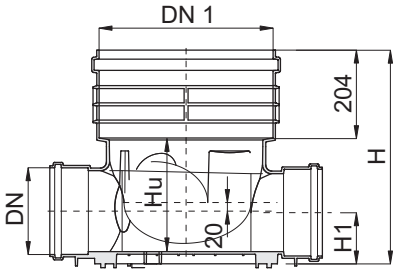


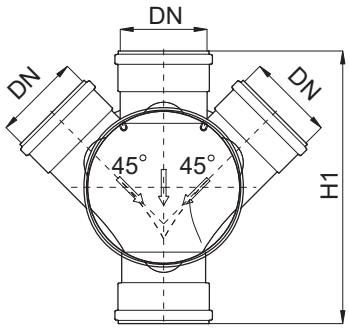


DN [mm]	DN 1 [mm]	H [mm]	Hu [mm]	H1 [mm]	L [mm]	Weight [kg]	index -
110	400	400	180	68	564	4,2	2541110300
160	400	492	244	116	622	4,0	2541120300
200	400	511	263	136	650	4,7	2541130300
250	400	714	455	168	1154	14,2	2541140300
315 **	400	714	455	198	1072	13,7	2541150300
400 **	400	714	455	238	1076	14,8	2541160300
200 K2 *	400	511	263	136	680	4,7	2541530300
250 K2 *	400	714	455	174	1074	14,1	2541540300
300 K2 *	400	714	455	198	1070	14,0	2541550300
400 K2 *	400	714	455	250	984	14,1	2541560300

* no gaskets in connection bells
** base unit outlet – bare end

Multi-inlet base 400
with a gasket
Type 2

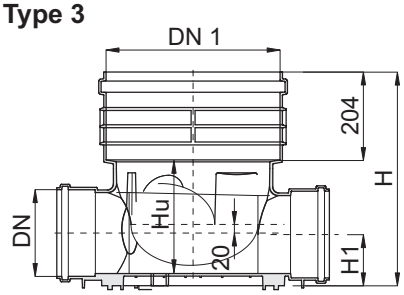


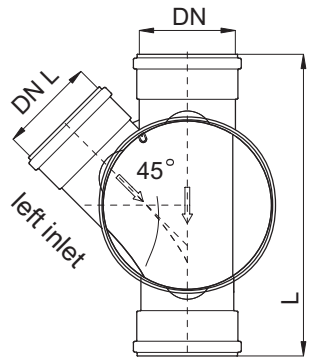


DN [mm]	DN 1 [mm]	H [mm]	Hu [mm]	H1 [mm]	L [mm]	Weight [kg]	index -
110	400	400	180	58	564	4,6	2541110300
160	400	456	222	100	636	5,4	2541120300
200	400	496	259	122	632	6,1	2541130300
250	400	714	455	168	1154	17,0	2541140300
315 **	400	714	455	198	1072	19,1	2541150300
200 K2 *	400	496	259	122	732	6,3	2541530300
250 K2 *	400	714	455	174	1074	16,9	2541540300
300 K2 *	400	714	455	198	1070	19,4	2541550300

* no gaskets in connection bells
** base unit outlet – bare end

Flow-through base unit 400
with a gasket, with left inlet
Type 3

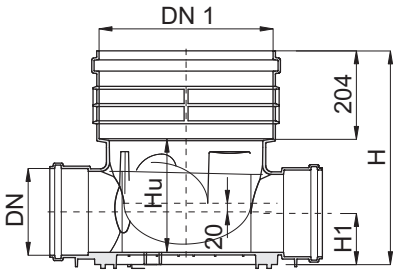


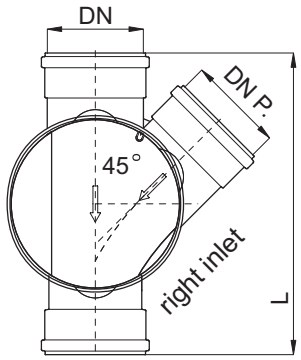


DN [mm]	DN L [mm]	DN 1 [mm]	H [mm]	Hu [mm]	H1 [mm]	L [mm]	Weight [kg]	index -
110	110	400	492	246	116	622	4,3	2543113300
160	160	400	492	246	116	622	4,6	2543123300
200	200	400	511	264	136	650	5,2	2543133300
250	250	400	720	462	168	1154	14,7	2543143300
315 **	315	400	720	462	198	1072	14,2	2543153300
200K2 *	200K2 *	400	400	180	68	564	4,5	2543533300
250K2 *	250K2 *	400	720	462	198	1072	14,2	2543543300
300K2 *	300K2 *	400	720	462	198	1072	14,2	2543553300

* no gaskets in connection bells
** base unit outlet – bare end

Flow-through base unit 400
with a gasket, with right inlet
Type 4





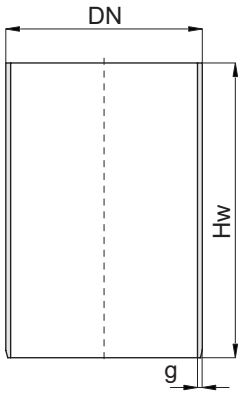
DN [mm]	DN L [mm]	DN 1 [mm]	H [mm]	Hu [mm]	H1 [mm]	L [mm]	Weight [kg]	index -
110	110	400	492	246	116	622	4,3	2544113300
160	160	400	492	246	116	622	4,6	2544123300
200	200	400	511	264	136	650	5,2	2544133300
250	250	400	720	462	168	1154	14,7	2544143300
315 **	315	400	720	462	198	1072	14,2	2544153300
200K2 *	200K2 *	400	400	180	68	564	4,5	2544533300
250K2 *	250K2 *	400	720	462	198	1072	14,2	2544543300
300K2 *	300K2 *	400	720	462	198	1072	14,2	2544553300

* no gaskets in connection bells
** base unit outlet – bare end

Unit base with additional inlets
with left or right inlet (45° or 90°)
with left and right inlet (45° or 90°)

DN [mm]	DN L [mm]	DN P. [mm]	DN 1 [mm]	H [mm]	Hu [mm]	H1 [mm]	L [mm]
400	200-300	200-300	400	720	462	198	1154
400	400 (90°)	400 (90°)	400	720	462	198	1154
400 K2	200-300	200-300	400	720	462	198	1154
400 K2	400 (90°)	400 (90°)	400	720	462	198	1154

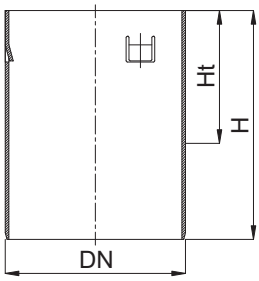
Riser pipe 400



DN [mm]	g [mm]	L [mm]	Weight [kg]	index -
400	7,9	1000	14,7	2713411100
400	7,9	2000	29,3	2713411200
400	7,9	3000	43,9	2713411300
400	7,9	6000	87,7	2713411600
400	9,8	3000	56,1	2713421300
400	9,8	6000	112,3	2713421600

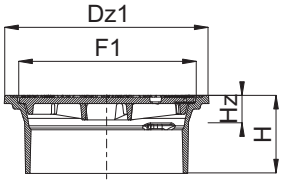
Telescope pipe 315

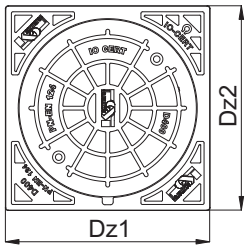
for a cast iron manhole top

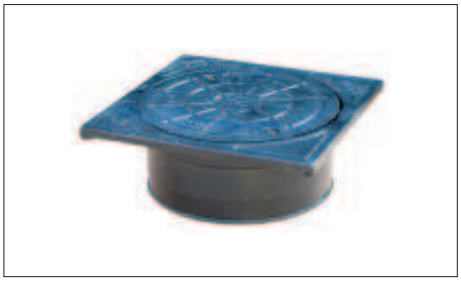


DN [mm]	H [mm]	Ht [mm]	Weight [kg]	index -
315	400	200	3,7	2781321040
315	800	600	7,4	2781321080

Cast iron chamber cover 315

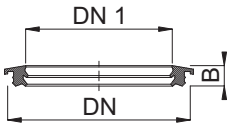


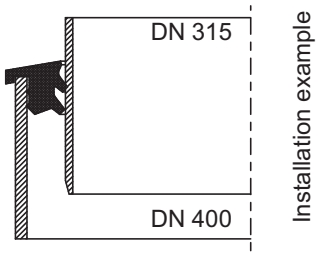




	Dz1 [mm]	Dz2 [mm]	F1 [mm]	H [mm]	Hz [mm]	Weight [kg]	index -
A15	375	375	320	143	50	20,5	2901131100
B125	375	375	320	143	50	22,9	2901132100
B125 K	375	375	320	143	50	22,3	2902132100
D400	375	375	320	143	50	31,5	2901134100
D400 K	420	340	395/320	150	60	40,0	2902134100

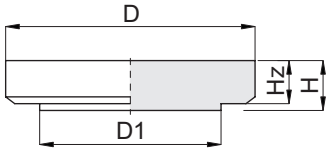
Cuff gasket 400/315
for a telescope pipe





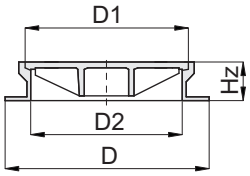
DN [mm]	DN 1 [mm]	B [mm]	Weight [kg]	index -
400	315	45	2,2	5165311060

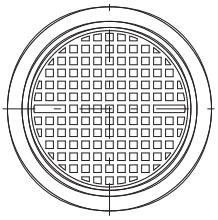
Concrete cover 400



	DN [mm]	D [mm]	D1 [mm]	H [mm]	Hz [mm]	Weight [kg]	index -
A15	400	550	400	110	95	59,7	2952141000

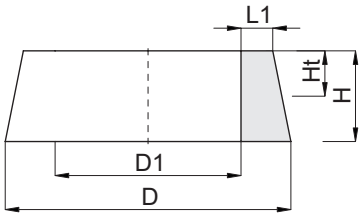
Cast iron chamber cover 400

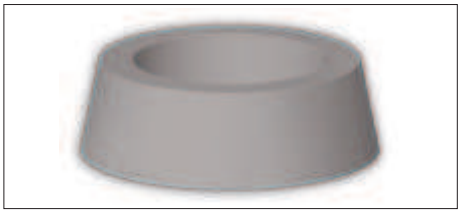




	DN [mm]	D [mm]	D1 [mm]	D2 [mm]	Hz [mm]	Weight [kg]	index -
B125	315	450	375	325	70	26,0	2901142500

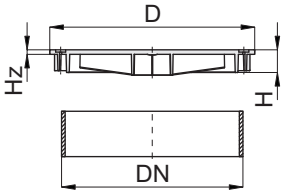
Concrete taper 400

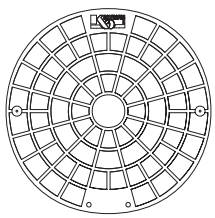




	DN [mm]	D [mm]	D1 [mm]	L1 [mm]	H [mm]	Ht [mm]	Weight [kg]	index -
B125	400	630	410	70	200	100	65,6	2951142000

PP Cover 400





	DN [mm]	D [mm]	H [mm]	Hz [mm]	Weight [kg]	index -
A15	400	452	50	10	1,8	2549405090

Technical features

Non-entry inspection chambers **DIAMIR 425 NW**

Main components of a chamber

-**a base unit, a base of an inspection chamber**, allowing for direct connection of storm water drainage or sanitary sewer systems installed in the ground, including incorporated channels with possible branches

-**a riser pipe of internal diameter equalling 425**

-**a telescope section, allowing for compensation of settlement** which may take place after installation and making it possible to adjust the chamber height. A telescope pipe is installed to the depth of 0,8 m below the ground level.

Standards:

-DIAMIR 425 NW inspection chamber is compliant with

EN 13598-2:2009

EN 476:2011

-approval for use in road ROWs

Technical Approval **IBDiM AT/2010-02-0830**

Technical Approval **IK AT/07-2011-0242-00**

Technical Approval **IBDiM AT/2011-02-2706**

-GIG (Central Mining Institute) Opinion approving their use in the areas of mining damages up to the 4th category;
-Resistance of PP chamber components to chemical substances is compliant with the guidelines issued by

ISO/TR 10358

-Gully tops and manhole tops meet the requirements of standard

EN 124:2000

-Seals meet the requirements of standard

EN 681-1:2002

-Chemical resistance of elastomeric seals to chemical substances is compliant with the requirements of the

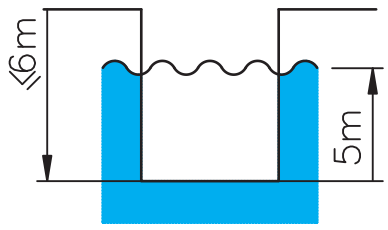
ISO/TR 7620 Guidelines

Usage:

-maximum installation depth 6 m

-acceptable ground water table 5 m

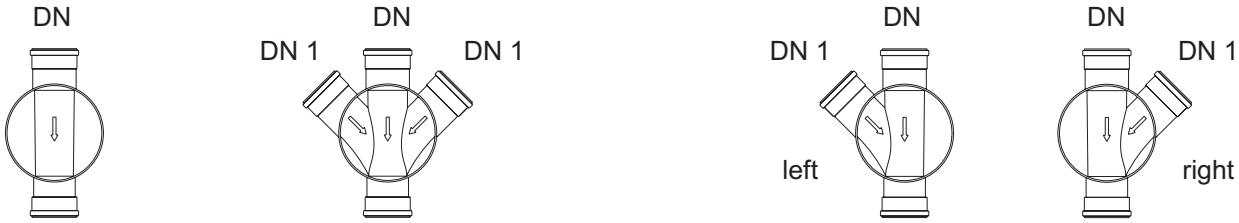
-acceptable load caused by traffic SLW60 according to ATV-A127P



Technical features

Technical data

Base units are made of polypropylene (PP), with reinforcing ribs. They are adapted to connection with vertical riser pipes. There is a horizontal channel in the base unit with one or a few inlet connector pipes and one outlet connector pipe ending with bells for connection with plain wall pipes made of PVC-U, PP or PE or connector pipes adapted to connection with structural pipes K2-KAN.



Type 1	Type 2			Type 3		Type 4	
DN	DN 1	DN	DN 1	DN 1	DN	DN	DN 1
110	110	110	110	110	110	110	110
160	160	160	160	160	160	160	160
200	200	200	200	200	200	200	200
250	250	250	250	250	250	250	250
315	315	315	315	315	315	315	315
400	200-400	400	200-400	200-400	400	400	200-400
200K2-Kan	200K2-Kan	200K2-Kan	200K2-Kan	200K2-Kan	200K2-Kan	200K2-Kan	200K2-Kan
250K2-Kan	250K2-Kan	250K2-Kan	250K2-Kan	250K2-Kan	250K2-Kan	250K2-Kan	250K2-Kan
300K2-Kan	300K2-Kan	300K2-Kan	300K2-Kan	300K2-Kan	300K2-Kan	300K2-Kan	300K2-Kan
400K2-Kan	200-400	400K2-Kan	200-400	200-400	400K2-Kan	400K2-Kan	200-400

A ball-and-socket joints ±7,5 ° may be used in connection bells 160; 200; 250; 315 (page 28)

Height adjustment

Non-entry inspection chambers **DIAMIR 425**

Specifications and height adjustment

Preparing specifications for materials required for an investment, total numbers of individual inspection chamber components should be indicated:

-base units, -riser pipes, -tops

The input parameter is chamber height specified in the design – the distance between the ground level and the chamber invert (base unit level). We label it as **Hs**.

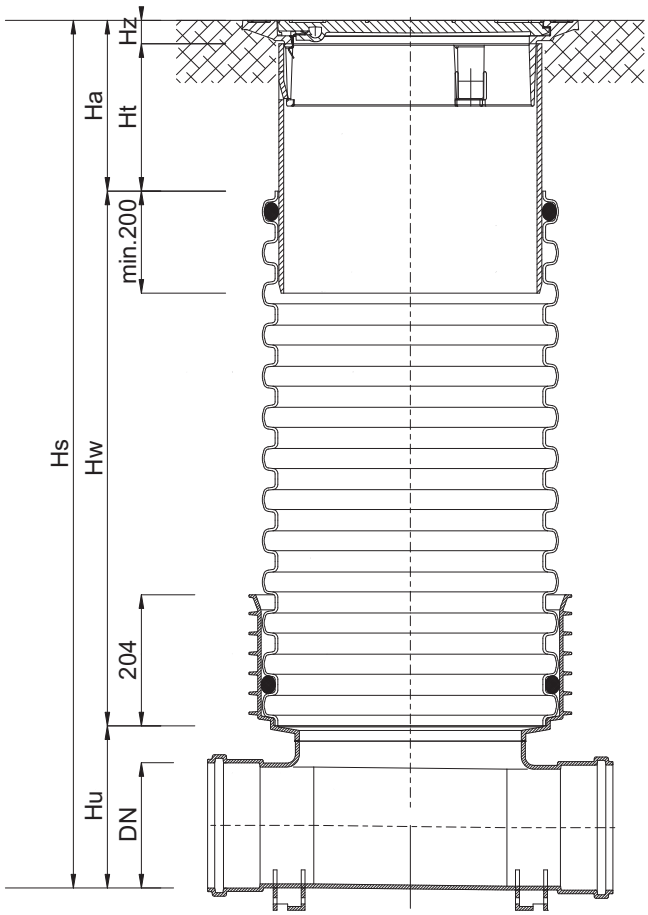
In order to make calculations easier, there is useful height (**Hu**) specified for each base unit type, that is, the difference between the bottom of a base unit and the bottom of base unit bell in which a riser pipe is installed.

For calculations, we label the height of a riser pipe as **Hw**. The height of a top section (telescope) will be **Ha**. One should bear in mind that the useful height of the telescope must not be smaller that thickness of the structural pavement layer.

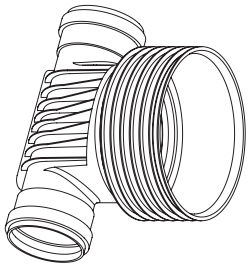
No-entry inspection chamber DIAMIR 425

Hs = Hu + Hw + Ha

Ha = Ht + Hz

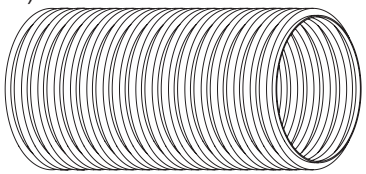


Flow-through base unit
425 NW



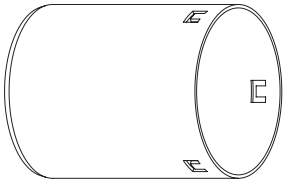
Outer pipe gasket
425 NW
(complete with a base unit)

Riser pipe 425 NW
corrugated, single-layer

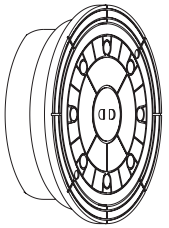


Inner pipe gasket
425 NW

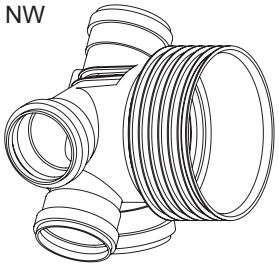
Telescope pipe 425



Cast iron chamber cover 425NW
Gully grating 425 NW



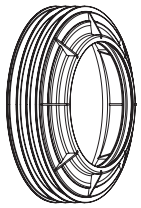
Multi-inlet base unit
425 NW



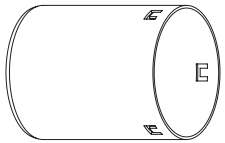
in-situ gasket

Outer pipe gasket
425 NW

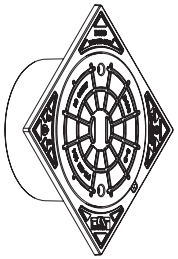
PP cuff
with a gasket 315



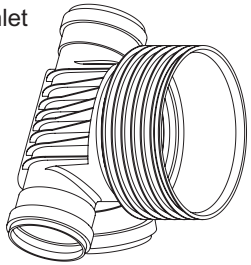
Telescope pipe
315



Cast iron
chamber cover 315

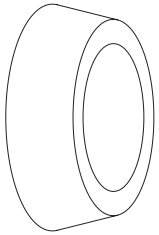


Flow-through base unit 425 NW
left inlet
right inlet

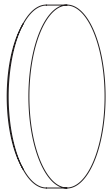


Ball-and-socket joint

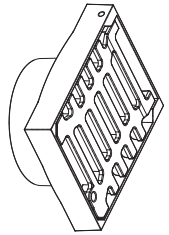
Concrete taper
425 NW



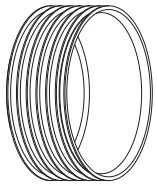
Concrete cover
425 NW



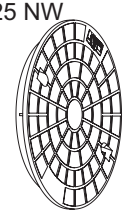
Gully grating 315



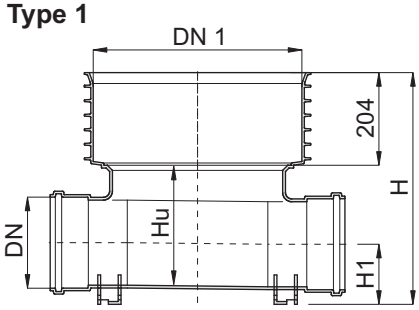
bottom PP 425

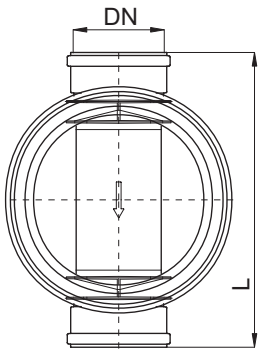


Pokrywa z PP
425 NW



Flow-through base unit 425 NW
with a gasket
Type 1

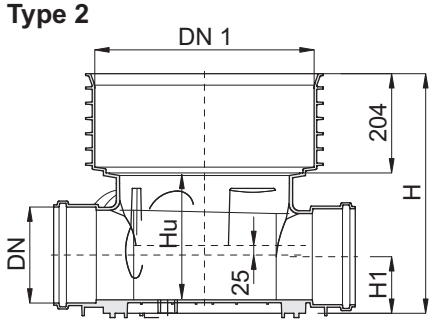


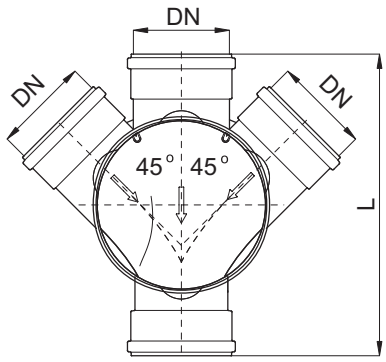


DN [mm]	DN 1 [mm]	H [mm]	Hu [mm]	H1 [mm]	L [mm]	Weight [kg]	index -
110	478	452	206	96	622	4,1	2561110300
160	478	492	246	116	622	4,6	2561120300
200	478	511	264	136	650	5,2	2561130300
250	478	720	462	168	1154	14,7	2561140300
315 **	478	720	462	198	1072	14,2	2561150300
400 **	478	720	462	238	1076	15,3	2561160300
200 K2 *	478	511	264	136	680	5,3	2561530300
250 K2 *	478	720	462	174	1074	14,6	2561540300
300 K2 *	478	720	462	198	1070	14,5	2561550300
400 K2 *	478	720	462	250	984	14,6	2561560300

* no gaskets in connection bells
** base unit outlet – bare end

Multi-inlet base unit 425 NW
with a gasket
Type 2

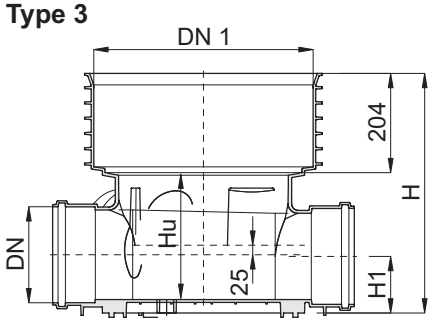


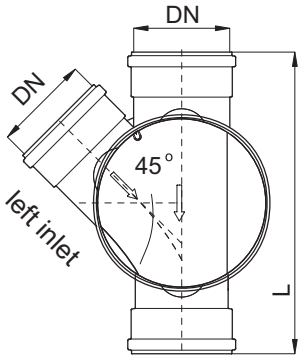


DN [mm]	DN 1 [mm]	H [mm]	Hu [mm]	H1 [mm]	L [mm]	Weight [kg]	index -
110	478	422	190	60	596	5,2	2561110300
160	478	462	230	100	636	5,9	2561120300
200	478	496	266	122	632	6,6	2561130300
250	478	720	462	168	1154	17,5	2561140300
315 **	478	720	462	198	1072	19,6	2561150300
200 K2 *	478	502	266	122	732	6,8	2561530300
250 K2 *	478	720	462	174	1074	17,4	2561540300
300 K2 *	478	720	462	198	1070	19,8	2561550300

* no gaskets in connection bells
** base unit outlet – bare end

Flow-through base unit 425 NW
with a gasket, with left inlet
Type 3

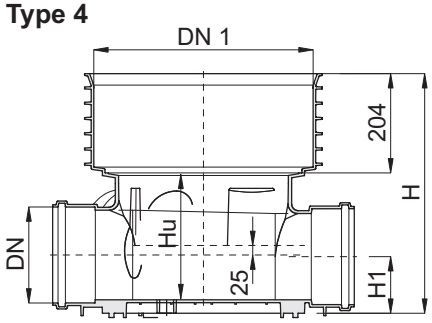


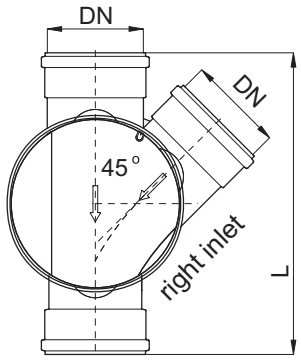


DN [mm]	DN L [mm]	DN 1 [mm]	H [mm]	Hu [mm]	H1 [mm]	L [mm]	Weight [kg]	index -
110	110	478	492	246	116	622	4,6	2563113300
160	160	478	492	246	116	622	4,6	2563123300
200	200	478	511	264	136	650	5,2	2563133300
250	250	478	720	462	168	1154	14,7	2563143300
315 **	315	478	720	462	168	1154	14,7	2563153300
200K2 *	200K2 *	478	511	264	136	680	5,3	2563533300
250K2 *	250K2 *	478	720	462	198	1072	14,2	2563543300
300K2 *	300K2 *	478	720	462	198	1072	14,2	2563553300

* no gaskets in connection bells ** base unit outlet – bare end

Flow-through base unit 425 NW
with a gasket, with right inlet
Type 4





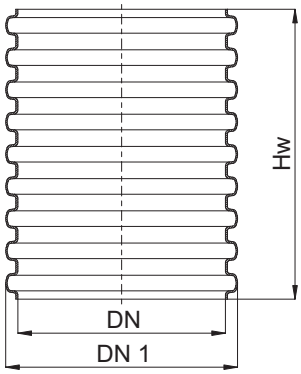
DN [mm]	DN L [mm]	DN 1 [mm]	H [mm]	Hu [mm]	H1 [mm]	L [mm]	Weight [kg]	index -
110	110	478	492	246	116	622	4,6	2564113300
160	160	478	492	246	116	622	4,6	2564123300
200	200	478	511	264	136	650	5,2	2564133300
250	250	478	720	462	168	1154	14,7	2564143300
315 **	315	478	720	462	168	1154	14,7	2564153300
200K2 *	200K2 *	478	511	264	136	680	5,3	2564533300
250K2 *	250K2 *	478	720	462	198	1072	14,2	2564543300
300K2 *	300K2 *	478	720	462	198	1072	14,2	2564553300

* no gaskets in connection bells ** base unit outlet – bare end

Flow-through base unit with additional inlets
with left or right inlet (45° or 90°)
with left and right inlet (45° or 90°)

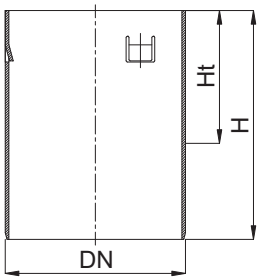
DN [mm]	DN L [mm]	DN P. [mm]	DN 1 [mm]	H [mm]	Hu [mm]	H1 [mm]	L [mm]
400	200-300	200-300	478	720	462	198	1154
400	400 (90°)	400 (90°)	478	720	462	198	1154
400 K2	200-300	200-300	478	720	462	198	1154
400 K2	400 (90°)	400 (90°)	478	720	462	198	1154

Riser pipe 425 NW
corrugated, single layer
SN 4



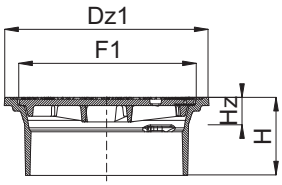
DN [mm]	DN 1 [mm]	Hw [mm]	Weight [kg]	index -
425	475	1000	6,7	2713632100
425	475	2000	13,4	2713632200
425	475	3000	20,1	2713632300
425	475	6000	40,2	2713632600

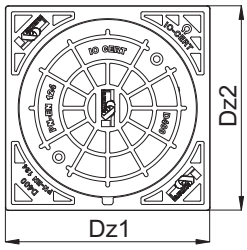
Telescope pipe 315
for a cast iron chamber cover

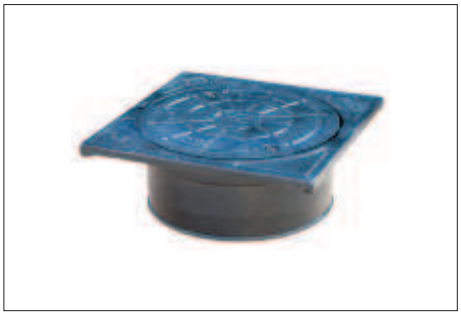


DN [mm]	H [mm]	Ht [mm]	Weight [kg]	index -
315	400	200	3,7	2781321040
315	800	600	7,4	2781321080

Cast iron chamber cover 315

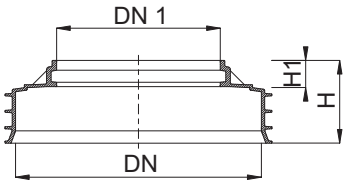






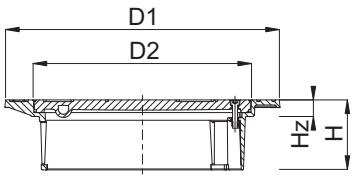
	Dz1 [mm]	Dz2 [mm]	F1 [mm]	H [mm]	Hz [mm]	Weight [kg]	index -
A15	375	375	320	143	50	20,5	2901131100
B125	375	375	320	143	50	22,9	2901132100
B125 K	375	375	320	143	50	22,3	2902132100
D400	375	375	320	143	50	31,5	2901134100
D400 K	420	470	340/340	150	60	40,0	2902134100

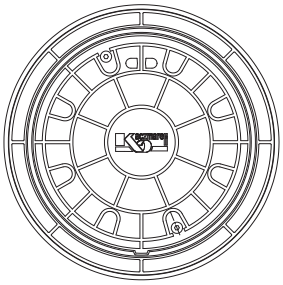
PP cuff 425 NW
with a gasket 315



DN [mm]	DN 1 [mm]	H [mm]	H1 [mm]	Weight [kg]	index -
425	315	161	52	2,6	2569250090

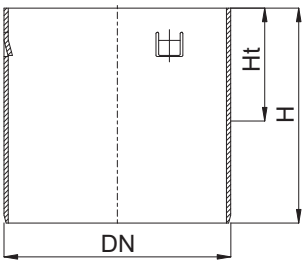
Cast iron chamber cover 425 NW





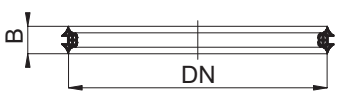
	D1 [mm]	D2 [mm]	H [mm]	Hz [mm]	Weight [kg]	index -
D400	540	428	138	35	36,0	2901164100

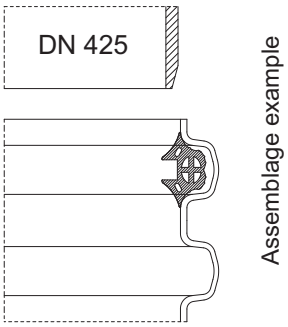
Telescope pipe 425
for a cast iron chamber cover 425 NW



DN [mm]	H [mm]	Ht [mm]	Weight [kg]	index -
425	400	200	6,3	2781612040
425	800	600	12,6	2781612080

Corrugated pipe gasket 425 NW
all-purpose

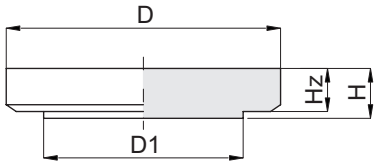


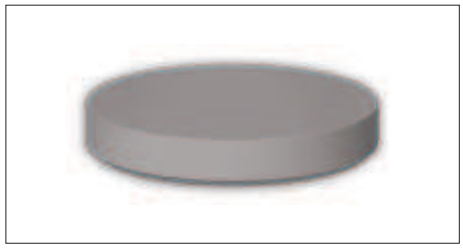


DN [mm]	B [mm]	Weight [kg]	index -
425	49	1,0	5162151050

gasket installed outside or inside riser pipe groove

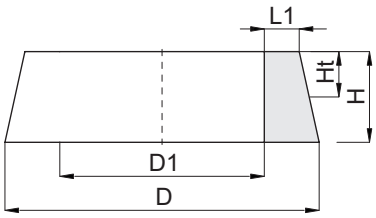
Concrete cover 425 NW

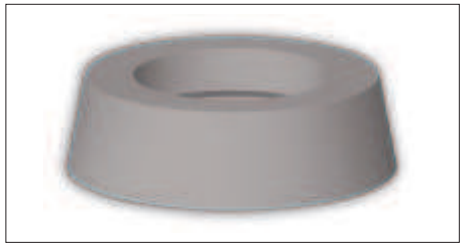




	DN [mm]	D [mm]	D1 [mm]	H [mm]	Hz [mm]	Weight [kg]	index -
A15	425	650	475	110	95	64,5	2952161000

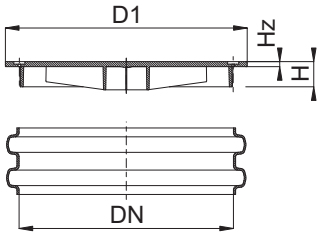
Concrete taper 425 NW

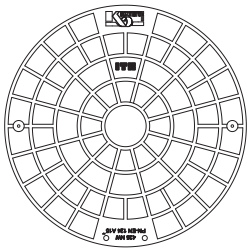




	DN [mm]	D [mm]	D1 [mm]	L1 [mm]	H [mm]	Ht [mm]	Weight [kg]	index -
B125	425	715	485	80	220	110	75,4	2951162000

PP cover 425 NW

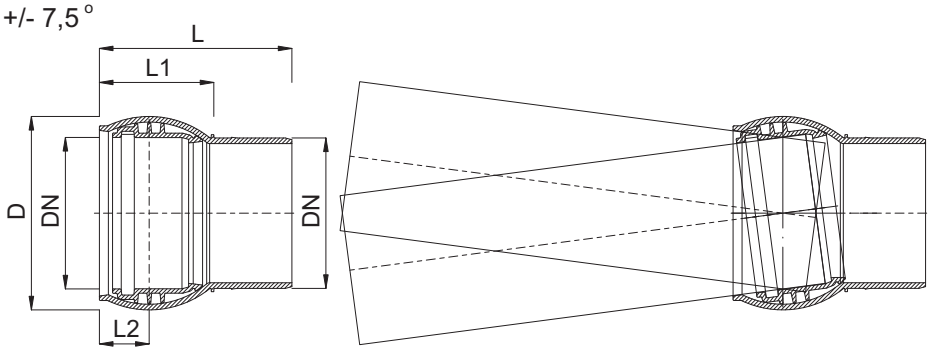




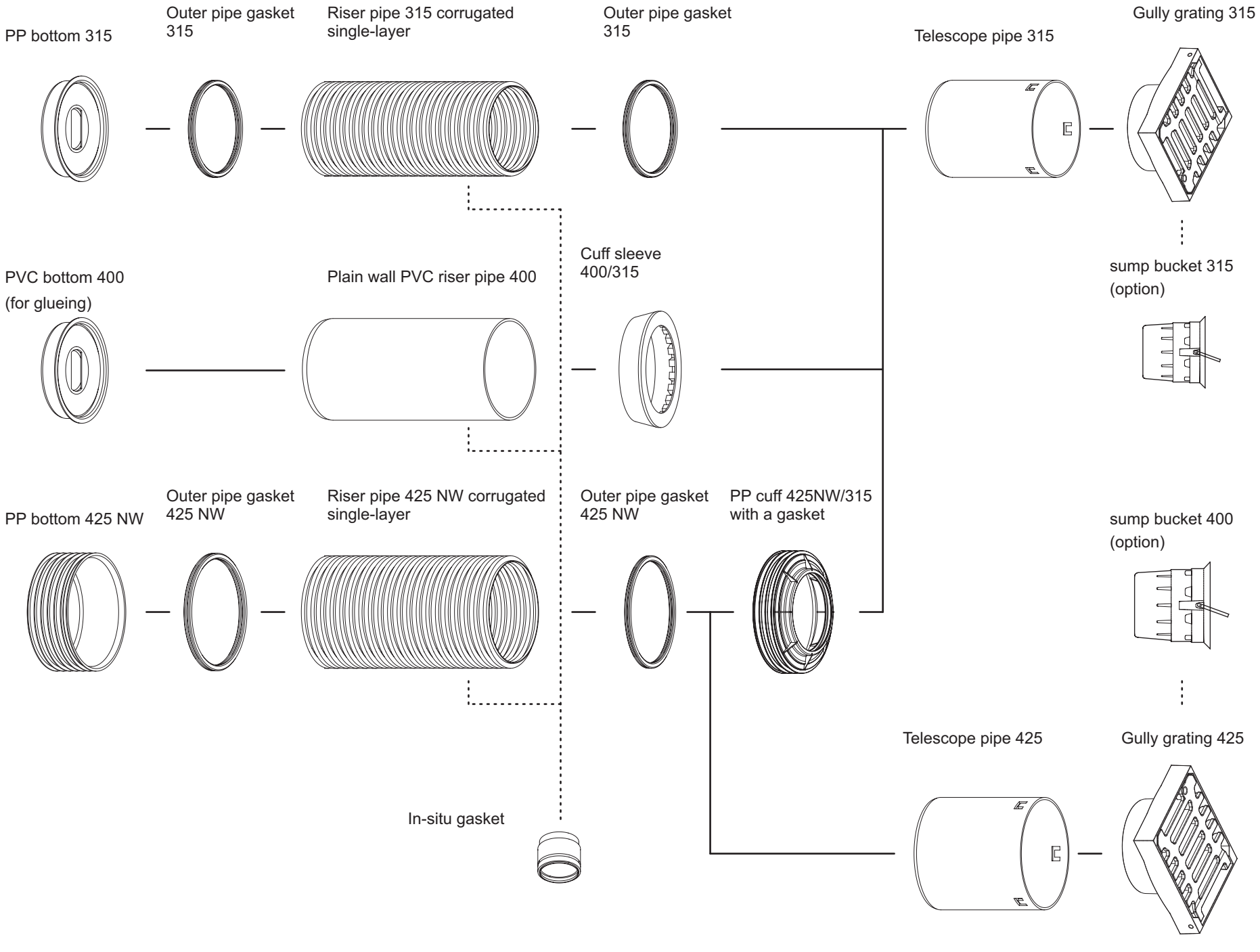
	DN [mm]	D1 [mm]	H [mm]	Hz [mm]	Weight [kg]	index -
A15	425	480	50	10	2,1	2569405090

Ball-and-socket joint

+/- 7,5°

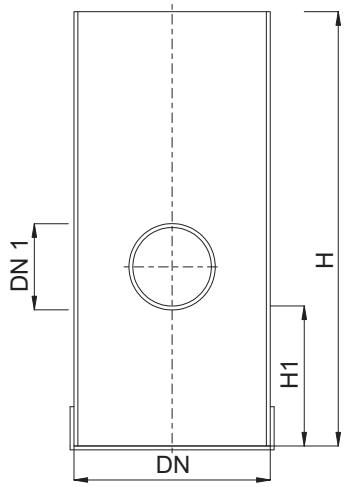


DN [mm]	D [mm]	L1 [mm]	L2 [mm]	L [mm]	Weight [kg]	index -
160	206	122	53	205	0,9	0718233310
200	254	146	63	245	1,7	0718253310
250	320	186	80	305	3,4	0718273310
315	395	217	92	362	6,1	0718293310

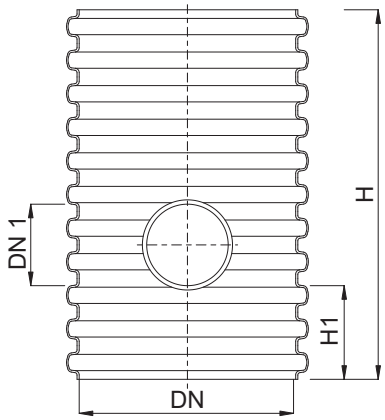

DN 315
DN 400
DN 425
PP bottom 315
Outer pipe gasket 315
Riser pipe 315 corrugated single-layer
Outer pipe gasket 315
Telescope pipe 315
Gully grating 315
sump bucket 315 (option)
PVC bottom 400 (for glueing)
Plain wall PVC riser pipe 400
Cuff sleeve 400/315
PP bottom 425 NW
Outer pipe gasket 425 NW
Riser pipe 425 NW corrugated single-layer
Outer pipe gasket 425 NW
PP cuff 425NW/315 with a gasket
sump bucket 400 (option)
In-situ gasket
Telescope pipe 425
Gully grating 425

Catch basin with a sump
with a bottom

DN 400



DN 315; 425

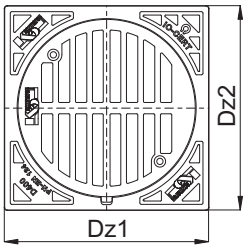


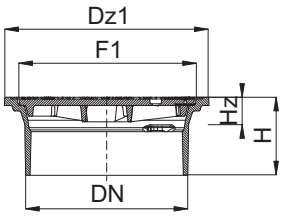
DN	Dw [mm]	Dz [mm]	D1 [mm]	H1 [mm]	H * [mm]	Weightindex [kg]	-
315	315	355	110	500	2000	9,0	2813110200
315	315	355	160	500	2000	9,9	2813120200
400	380	400	110	320	2000	48,3	2814110200
400	380	400	160	320	2000	49,0	2814120200
425	425	475	110	320	2000	15,5	2816110200
425	425	475	160	320	2000	16,1	2816120200

* other chamber heights are available on request

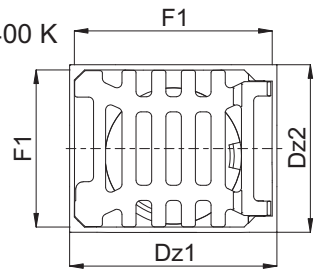
Stormwater gully

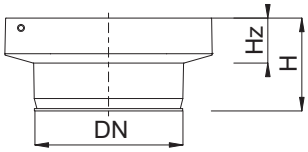
B125 K





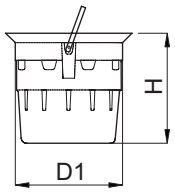
D400 K





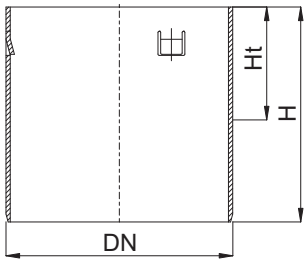
	DN [mm]	Dz1 [mm]	Dz2 [mm]	F1 [mm]	H [mm]	Hz [mm]	Inlet area [dm2]	Weight [kg]	index -
B125 K	315	375	375	320	143	50	3,3	22,3	2902132100
D400 K	315	420	340	395/320	185	90	5,3	40,0	2902134100
D400 K	425	500	500	474/474	210	115	9,0	76,4	2902164100

Sump bucket



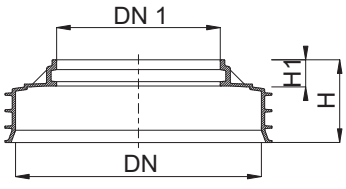
DN	D1 [mm]	H [mm]	Weight [kg]	index -
315	315	250	1,0	2981133100
400	400	240	3,0	2981163100

Telescope pipe
for a cast iron chamber cover



DN [mm]	H [mm]	Ht [mm]	Weight [kg]	index -
315	400	200	3,7	2781612040
315	800	600	7,4	2781612080
425	400	200	6,3	2781612040
425	800	600	12,6	2781612080

PP cuff 425 NW
with gasket 315



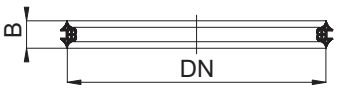
DN [mm]	DN 1 [mm]	H [mm]	H1 [mm]	Weight [kg]	index -
425	315	161	52	2,6	2569250090

Sump bottom

DN	D1 [mm]	H [mm]	Weight [kg]	index -
315	315	80	0,6	2539911090
400 *	400	105	4,0	2549921030
425	425	160	3,6	2569911030

* for gluing

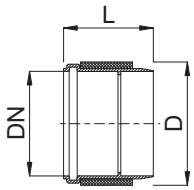
Sump chamber gasket
all-purpose



DN	B [mm]	Weight [kg]	index -
315	20	0,3	5162131050
425	49	1,0	5162151050

a gasket installed outside or inside riser pipe groove

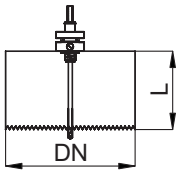
In-situ gasket



DN	D1 [mm]	L [mm]	Weight [kg]	index -
110	138	120	0,5	5168201010
160	177	120	0,8	5168231010

Hole cutter

Cutter holder – all-purpose



DN	D1 [mm]	L [mm]	Weight [kg]	index
110	138	90	0,8	5191202100
160	177	90	1,2	5191231100
all purpose	-	-	0,6	5191000100

Installation instructions

DIAMIR inspection chambers should be installed in conditions specified in the technical design. The ground around chambers (0.3 m) should be composed of compactable soil, approved for use in road construction according to standard PN-S-02205:1998. Earthworks should be carried out in accordance with standard PN-EN 1610:2002/Ap1:2007. Soil compaction should be performed in layers as specified in standard PN-ENV 1046:2007 to prevent from excessive ovalisation of a chamber cross-section.

Prepare a trench in an inspection chamber location removing large and sharp-edged stones. On the trench bottom prepare bedding composed of compactable soil, preferably sand (coarse- medium- or fine-grained) of minimum 10 cm thickness An inspection chamber zone should include an area of at least a 30 cm wide strip around the chamber.

Place a base unit on a prepared earlier sand bedding and level it and then connect sewage pipes to the chamber.

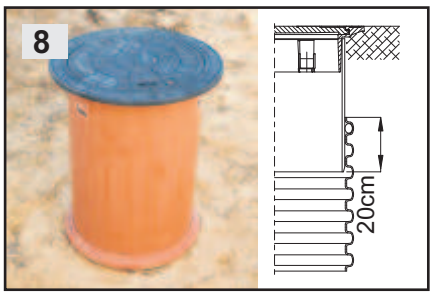
Fill up the trench with preliminary backfill (10 cm above the pipe level). Compaction should be performed manually, in layers every 15 cm or with light mechanical equipment (each layer up to 30 cm). Base unit socket should protrude above the backfill level.

Prepare a corrugated riser pipe of the required length. The pipe can be cut to the required chamber height.
Install a gasket in the lowest groove on the outside of the riser pipe. The gasket is delivered along with a base unit.

Lubricant should be applied on the inner side of a base unit socket and gasket. Products approved for rubber gaskets and plastic should be used.

Insert a riser pipe with an installed gasket into a base unit.

Compact the area around the pipe. Compaction should be performed manually, in layers every 15 cm or with light mechanical equipment (each layer up to 30 cm) in open areas to at least 90% of the Proctor compaction test and for inspection chambers located in a carriageway or road shoulder backfill should meet the requirements specified for compaction index resulting from the installation depth, road construction type (cutting, embankment) or traffic intensity category.



For inspection chambers equipped with riser pipes connected with telescope pipes with a gasket, ensure a telescope pipe is inserted into a riser pipe to the depth of approximately 20 cm.

Inspection chamber tops

Location of a DIAMIR chamber and expected load caused by traffic are the basis for selection of riser and telescope pipe stiffness and a choice of cast iron covers.

Depending on the chamber location within a ROW and a traffic intensity category, different manhole/gully tops are used, also construction requirements and top type which are classified into the following groups may differ.

Group 1 - Class A15 - green areas intended solely for pedestrians and pedal cyclists

Group 2 - Class B125 - Roads and areas for pedestrians, and comparable areas, parking lots or places where cars are parked

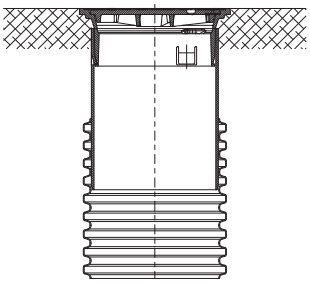
Group 3 - Class C250 - Applies solely do sewer gully tops installed in the area of kerbside channels of roads and road shoulders

Group 4 - Class D400 - Carriageways of roads (including pedestrian streets) hard shoulders, and parking areas for all types of road vehicles

There are different rules of the manhole/gully top support sepending on their type and class, and soil conditions. A manhole/gully top should sit on a reinforced concrete slab which is supported by an appropriately constructed load bearing structure adapted to loads caused by traffic. That may be reinforced bedding made of well compacted soil or a precast load-relieving slab made of reinforced concrete.

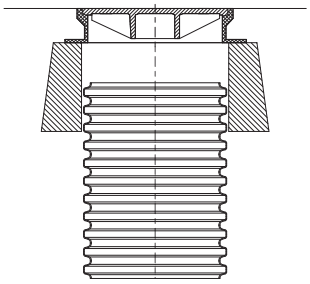
For very heavy load caused by traffic or doubts about compaction of soil constituting the top base, a slab with the chamber top should be based on a B30 concrete ring of minimum height of 20 cast on the building site

Cast iron chamber cover
and frame 315
Cast iron gully grating 315



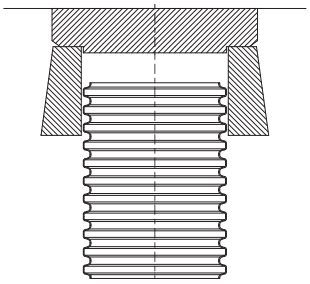
DIAMIR 315

Cast iron chamber cover
and frame 315
Concrete ring 315



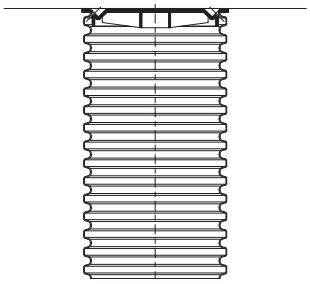
DIAMIR 315

Concrete cover 315
Concrete ring 315



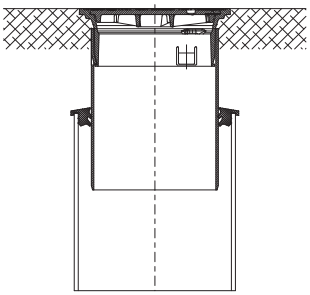
DIAMIR 315

PP cover 315



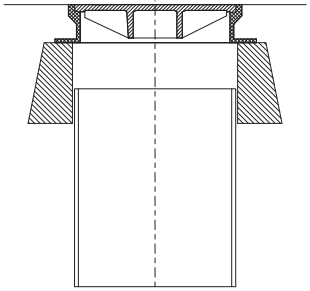
DIAMIR 315

Cast iron chamber cover
and frame 315
Cast iron gully grating 315



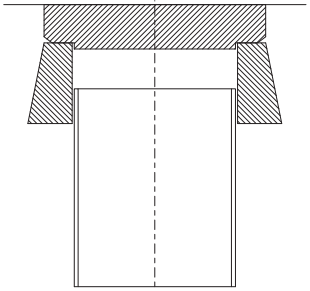
DIAMIR 400

Cast iron chamber cover 400
Concrete ring 400



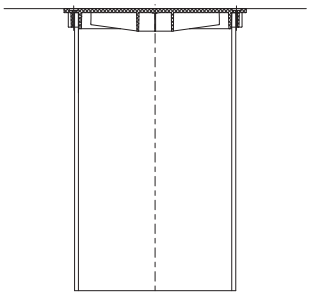
DIAMIR 400

Concrete cover 400
Concrete section 400



DIAMIR 400

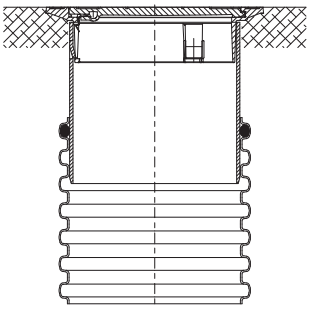
PP cover 400



DIAMIR 400

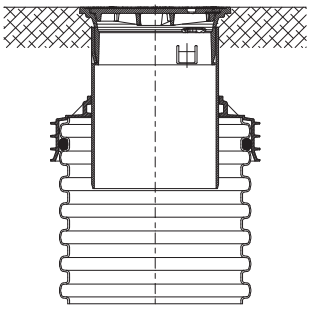
Inspection chamber tops

Cast iron cover and frame 425
Gully grating 425



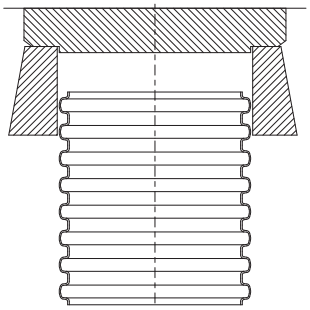
DIAMIR 425

Cast iron cover and frame 315
Gully grating 315



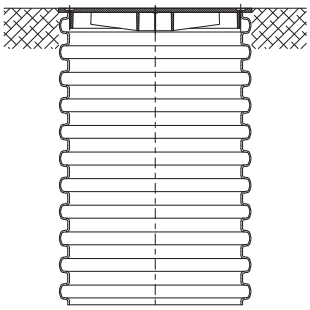
DIAMIR 425

Concrete cover 425
Concrete ring 425



DIAMIR 425

PP cover 425



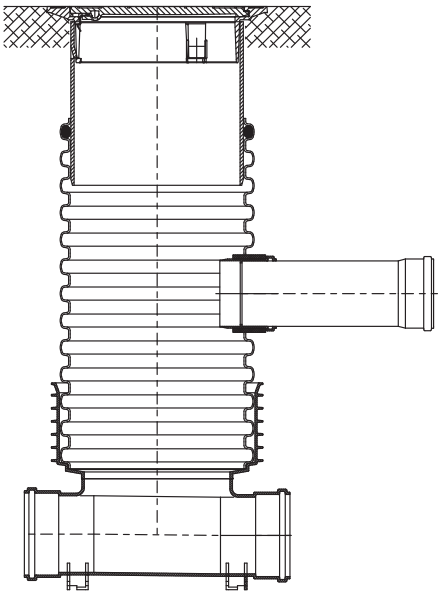
DIAMIR 425

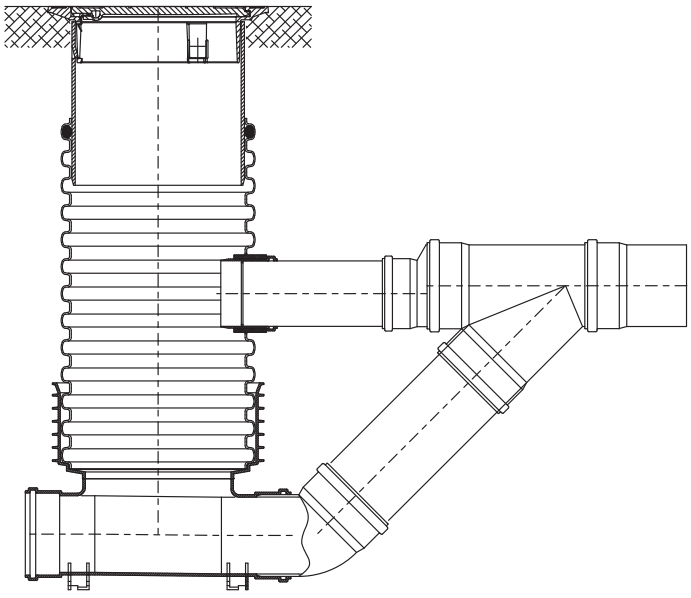
Backdrop manholes

Sometimes it is necessary to connect a channel to a manhole above a base unit. Then, a so called backdrop manhole is constructed. According to standard PN-B-10729 “backdrop manholes in channels of diameters up to 0,40 m and drop height from 0,5 – 4,0 m may be constructed with a backdrop pipe placed inside or outside of a manhole. In a non-entry inspection chamber a drop pipe may be not installed.

That means that for non-entry inspection chambers, if a channel diameter does not exceed 160 mm, connection may be made through a hole in a riser pipe.

Appropriate in-situ gaskets are installed in the hole. If a channel is a K2-Kan structured pipe, a special fitting (adapter to a PVC socket) should be inserted into the in-situ insert. A backdrop pipe is not used. However, if a channel diameter exceeds 200 mm, a backdrop pipe has to be used and it should be connected to a chamber base unit. A T-branch connection is fitted to the channel. One of T-branches is connected to the backdrop pipe and the second (after diameter reduction to 60 mm) is connected to a riser pipe (a hole with an in-situ gasket).





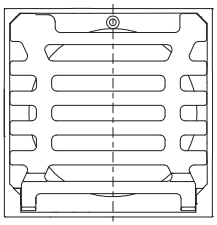
Catch basins with sumps

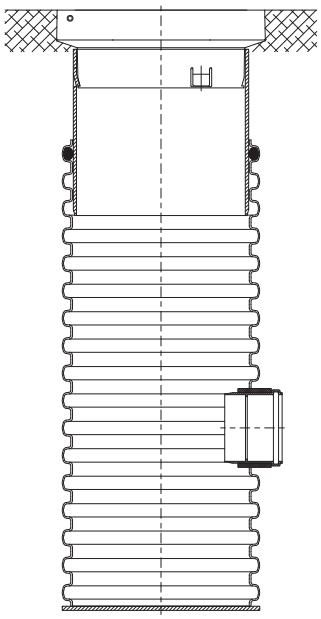
A catch basin is constructed using a corrugated riser pipe DN 315, 425 or plain wall pipe 400. A pre-blinded pipe of appropriate length should be ordered, it may be also blinded on a building site. A tight basin bottom blinds the pipe. For storm water chambers, a top is a cast iron grating mounted on a telescope pipe. For a drain age chambers all other tops specified in the catalogue of DIAMIR manholes/chambers are applied. They are used depending on the existing loads and investor preferences. In a riser pipe holes are made to construct appropriate outlets or inlets. Appropriate in-situ gaskets should be installed in the holes. In-situ gasket tightness depends on the riser pipe used. See the Declaration of Conformity for details.

In drainage chambers gaskets are mounted in situ and connectors are inserted to drainage pipes.

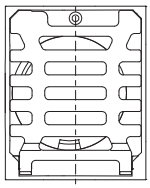
Note: There are precast drainage and storm water chambers available.

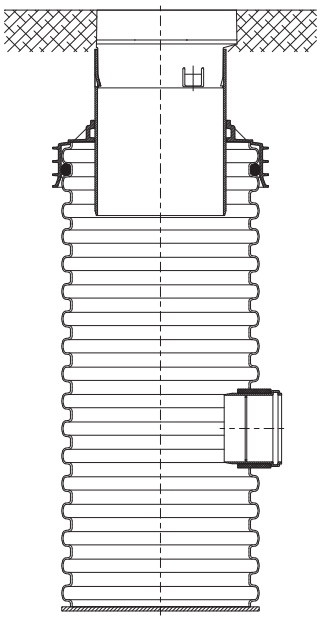
Gully grating 425 D400
500x500





Gully grating 315 D400
420x340





"In situ" gasket installation instructions

Intended use:

-"in-situ" gaskets 110 i 160 are used for connecting plastic pipes to riser pipes of inspection chambers DIAMIR 315, 400, 425, 600, 1000;
-"in-situ" gasket 200 is used for connecting plastic pipes to to risers of inspection chambers DIAMIR 600, 1000.

Bore a hole of the required diameter in the chamber riser and then remove remaining burrs.

NOTE! A hole for an in-situ gasket may be made only outside the base unit socket.

Insert the "in-situ" gasket so that an outer flange will adjoin a riser outer wall. The in-situ gasket should be coated with lubricant from inside.

Press in an hub into an "in-situ" gasket to its end. Connect a sewage pipe of an appropriate diameter.

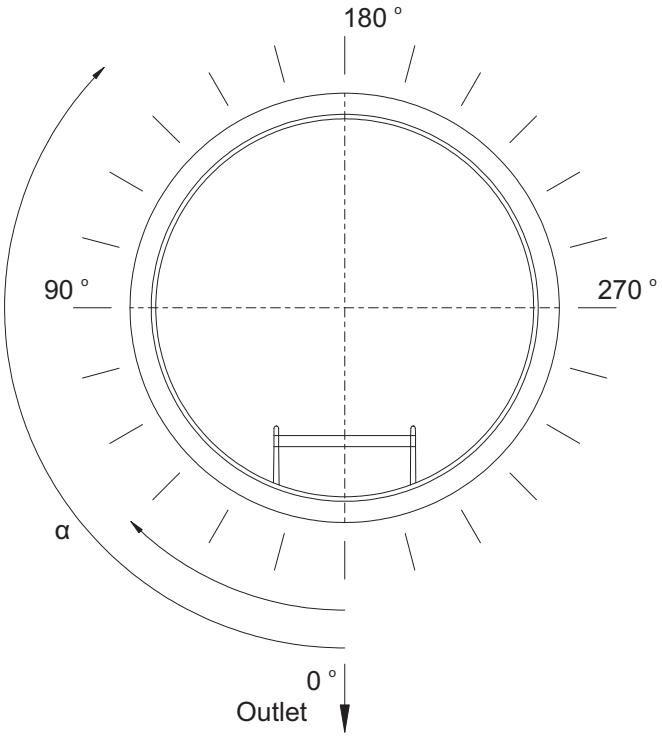
DIAMIR 1000 manholes

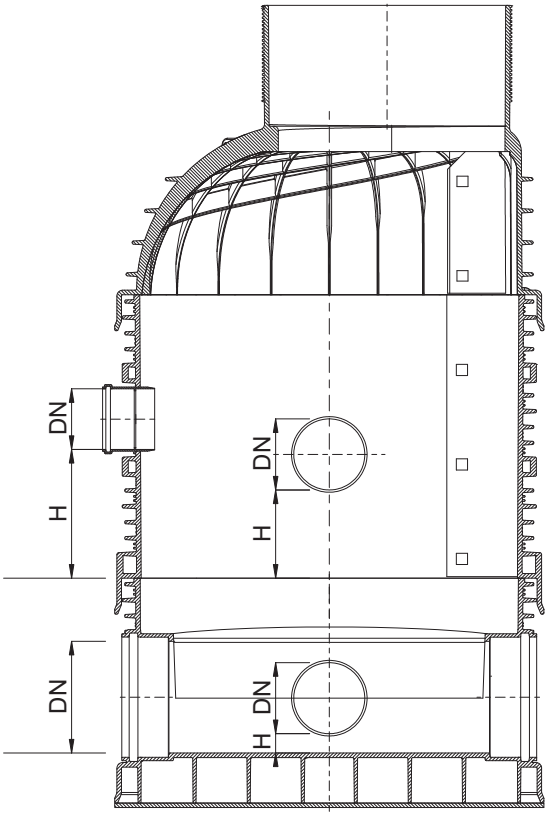
Order form/Query

Przedsiębiorstwo Barbara Kaczmarek Sp. J.
Malewo 2, 63-800 Gostyń
tel. 65 572 35 55 fax 65 572 35 30

Contact details:
Company / contractor:
Building site:
tel.: fax: mobile:
delivery date:

Flow-through base unit 1000
with additional inlets





☐ Flow-through base unit DIAMIR 1000 with additional inlets
☐ Blind base unit DIAMIR 1000 with additional inlets ☐ H500 ☐ H1000
☐ Ring DIAMIR 1000 with additional inlets ☐ H500 ☐ H750 ☐ H1000

No.		DN	α	H	Inlet/Outlet slope (standard 0%)
-	[mm]	[mm]	[°]	[mm]	%
	Outlet		0 °		
	Inlet 1				
	Inlet 2				
	Inlet 3				
	Inlet 4				

Notes:
-Distances are measured from the blind base unit invert or from the lowest point of a ring
-available diameters of sewerage plain-wall stump pipes *110;* 160; 200; 250; 315; 400; 500
-available diameters of K2-Kan sewerage plain-wall stump pipes 160; 200; 250; 300; 400; 500