

VISIMOP II MONOBLOC INSPECTION BOX Ø600

FOR PVC DN125*/160/200

3 INPUTS - 1 OUTPUT

* INPUT ONLY

5455

1 Advantages

- Multiple PVC connections DN 125/160/200.
- Multiple connection angles.
- Complies with the general specifications of standard NF EN 476 and designed in accordance with standard NF EN 13598-2.
- Complies with the characteristics described in the NF 442 certification standard.

2 Installation

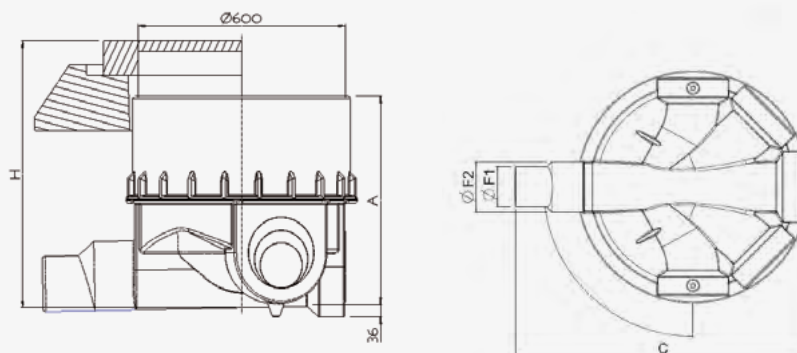
Refer to installation instructions P031)

- The manhole head can be cut by 150 mm.
- Height difference of 10 mm between inlet and outlet watercourse in direct route.
- Height difference of 20 mm between 67.5° inlet water and outlet water.
- 2% slope on the direct passage



CSTB - MARK NF442

Gravity drainage in thermoplastic materials
All product features certified under decision no. 78-04



H = HEADROOM/CAST-IRON BUFFER TOP

The RCB602-20 load distributor was used to calculate the H dimension (dimensions on page 17)

REFERENCES	TECHNICAL DATA FOR PVC PIPE						
	A	C	Ø F1	Ø F2	H without cutting	H with max. cut-out	NF A certified
5455D09PV-06	600	909	160	200	820	670	YES
5455D09PV-08	800	909	160	200	1020	870	YES
5455D09PV-10	1000	909	160	200	1220	1070	YES
5455D09PV-12	1200	909	160	200	1420	1270	YES
5455D09PV-14	1400	909	160	200	1620	1470	YES
5455D09PV-16	1600	909	160	200	1820	1650	YES
5455D09PV-18	1800	909	160	200	2020	1870	YES
5455D09PV-20	2000	909	160	200	2220	2070	YES
5455D09PV-22	2200	909	160	200	2420	2270	YES
5455D09PV-24	2400	909	160	200	2620	2470	YES
5455D09PV-26	2600	909	160	200	2820	2670	YES
5455D09PV-28	2800	909	160	200	3020	2870	NO
5455D09PV-30	3000	909	160	200	3220	3070	NO



ACCESSORIES : see data sheets 5496 and 5498 - Caution: for use with RCB602-15 distributor, see data sheet 5498

The unit is NF a-certified, provided SIMOP accessories are used (hole saw, joint, concrete load distributor).

VISIMOP II MONOBLOC WITHOUT RUNG MANHOLE Ø800

FOR PVC DN125*/160*/200*/250/315 3 INLETS - 1 OUTLET

* INPUT ONLY

5470

1 Definition

The VISIMOP Monobloc 5470, diameter 800 with 3 inlets, 1 outlet, in polyethylene is a manhole with access for cleaning and inspection, occasionally accessible by a person equipped with a harness. It is designed for free-flowing PVC networks in diameters 250 and 315, with the option of drilling inlets in diameters 125, 160, 200, 250 and 315.

Its strength and ease of use make it ideal for meet site requirements, whatever the access difficult.

As an option, the manhole can be fitted with accessories such as :

- 400 kN precast concrete load distributor, ref. RCB 602-20.
- Polyethylene adapter, height 100 mm, ref. AHV612.
- JVH connection joint for inlet tapping.
- Rubber gasket, diameter 630, ref. AD666-0630, for sealing between manhole head and load distributor.



NF A

CSTB - MARK NF442

Gravity drainage in thermoplastic materials

All product features certified under decision no. 78-04

DN PVC	Hole saws references unlogging and parasites	Joint references
125*	AD699-125	JVH125
160*	AD699-160	JVH160
200*	AD699-200	JVH200
250*	AD699-250	JVH250
315*	AD699-315	JVH315

* input only

2 Operation

In compliance with fascicule 70 and developed in partnership with public works professionals and project managers, it presents :

- Perfect sealing.
- Resistance to groundwater (height 2 m) through in relation to the culvert.
- A guarantee against corrosion.
- Ease of use.
- A hydraulic profile (2% slope).
- No retention of materials.
- A culvert with 3 connection options.

3 Installation

(see installation instructions P031)

Based on the floor plan you provided, a mark was made on each room and on the floor plan.

Check the diameter and orientation of your pipes.

Next, cut out the chosen location using the appropriate diameter hole saw.

Fit the appropriate connection seal.

Adjust the bottom of the excavation then place the manhole. Connect the inlet and outlet pipes. Place the backfill by compacting it in successive layers.

Position the gasket between the manhole head and the load distributor, if used.

Place the load distributor with the cast iron or polyethylene tear-off cover, as appropriate.

If groundwater is present, consult our Engineering Department.

4 Maintenance

Thanks to the quality of high-density polyethylene, VISIMOP manholes require no special maintenance.

5 Guarantee

Biennial warranty

Visimop comes with a 15-year guarantee against corrosion.

6 Option

See data sheet 5496



ACCESSORIES : see data sheets 5496 and 5498 - Caution: for use with RCB602-15 distributor, see data sheet 5498

The unit is NF A-certified, provided SIMOP accessories are used (hole saw, joint, concrete load distributor).

VISIMOP II MONOBLOC WITHOUT RUNG MANHOLE Ø800

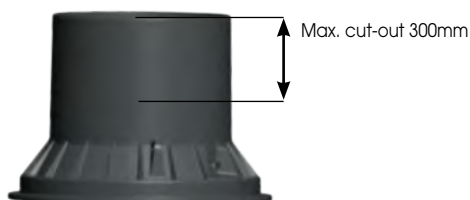
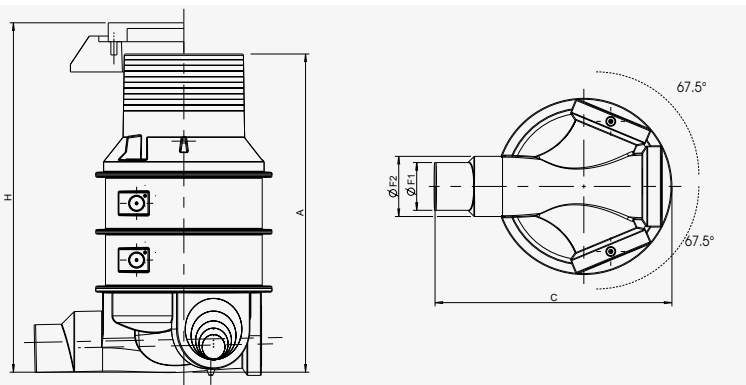
FOR PVC DN125*/160*/200*/250/315 3 INLETS - 1 OUTLET

* INPUT ONLY

5470

H = HEADROOM/CAST-IRON BUFFER TOP

The RCB602-20 load distributor was used to calculate the H dimension (see data sheet 5496)



Caution: height difference of 40 mm between inlet water fill at 67.5° and outlet water fill

REFERENCES	TECHNICAL DATA FOR PVC PIPE						
	A	C	Ø F1	Ø F2	H without cutting	H with max. cut-out	NF A certified
5470D16PV-11	1085	1211	250	315	1305	1005	YES
5470D16PV-14	1385	1211	250	315	1605	1305	YES
5470D16PV-17	1685	1211	250	315	1905	1605	YES
5470D16PV-20	1985	1211	250	315	2205	1905	YES
5470D16PV-23	2285	1211	250	315	2505	2205	YES
5470D16PV-26	2585	1211	250	315	2805	2503	YES
5470D16PV-29	2885	1211	250	315	3105	2805	NO
5470D16PV-30	3026	1211	250	315	3246	2946	NO
5470D16PV-33	3326	1211	250	315	3546	3246	NO
5470D16PV-36	3626	1211	250	315	3846	3546	NO
5470D16PV-39	3926	1211	250	315	4146	3846	NO
5470D16PV-42	4226	1211	250	315	4466	4146	NO

The unit is NF a-certified, provided SIMOP accessories are used (hole saw, joint, concrete load distributor).

VISIMOP II MONOBLOC WITHOUT RUNG MANHOLE Ø800

FOR PVC DN125*/160/200 5 INLETS - 1 OUTLET

* INPUT ONLY

5464

1 Advantages

- Multiple PVC connections DN 125/160/200.
- One-piece manhole ø 800 / 5 inlets without ladder.
- Multiple connection angles.
- Complies with the general specifications of standard NF EN 476 and designed in accordance with standard NF EN 13598-2.
- Complies with the characteristics described in the NF 442 certification standard.

2 Installation

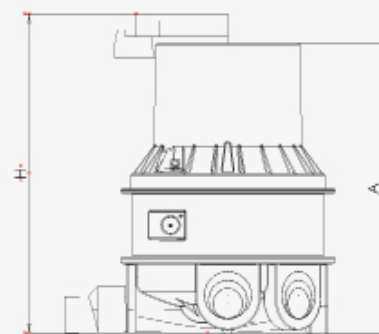
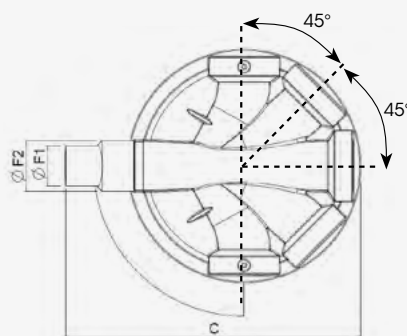
(Refer to P031 installation instructions)

- Manhole head can be cut by 300 mm.
- Height difference of 15 mm between inlet and outlet in direct route.
- 35 mm height difference between 45° inlet and outlet.
- 2% slope on the direct passage



CSTB - MARK NF442

Gravity drainage in thermoplastic materials
All product features certified under decision no. 78-04



H = HEADROOM/CAST-IRON BUFFER TOP

The RCB602-20 load distributor was used to calculate the H dimension (dimensions on page 17)

REFERENCES	TECHNICAL DATA FOR PVC PIPE						
	A	C	Ø F1	Ø F2	H without cutting	H with max. cut-out	NF A certified
5464D09PV-09	958	1180	160	200	1178	878	YES
5464D09PV-12	1258	1180	160	200	1478	1178	YES
5464D09PV-15	1558	1180	160	200	1778	1478	YES
5464D09PV-18	1858	1180	160	200	2078	1778	YES
5464D09PV-21	2158	1180	160	200	2378	2078	YES
5464D09PV-24	2458	1180	160	200	2678	2378	YES
5464D09PV-26	2758	1180	160	200	2978	2678	NO
5464D09PV-29	3058	1180	160	200	3278	2978	NO
5464D09PV-32	3199	1180	160	200	3419	3119	NO
5464D09PV-35	3499	1180	160	200	3719	3419	NO
5464D09PV-38	3799	1180	160	200	4019	3719	NO
5464D09PV-41	4099	1180	160	200	4319	4019	NO



ACCESSORIES : see data sheets 5496 and 5498 - Caution: for use with RCB602-15 distributor, see data sheet 5498

The unit is NF a-certified, provided SIMOP accessories are used (hole saw, joint, concrete load distributor).

VISIMOP II Ø1000

3 INLETS :FOR PVC BRANCH Ø 125/160 / 200/ 250/ 315/ 400

OUTLET FOR PVC Ø 200/250 OR PVC Ø 315/400

MADE OF POLYETHYLENE

5480

1 Advantages

The VISIMOP Monobloc 5480, diameter 1000 with 3 inlets - 1 outlet, made of polyethylene, is a manhole with steps. It is designed for free-flowing PVC networks in diameters 200, 250, 315 and 400, with the option of drilling inlets in diameters 125, 160, 200, 250, 315 and 400. Its strength and ease of installation enable it to meet all site requirements, whatever the difficulty of access.

As an option, the manhole can be fitted with accessories such as :

- 400KN precast concrete load distributor, ref. RCB 602-20 or RCB602-15
- Polyethylene adapter, 150 mm high, ref. AHV612.
- JVH connection joint for inlet tapping.
- Rubber gasket, ref. AD666-0630, for sealing between manhole head and load distributor.

Part no. Hole saw for uncorking	Joint reference
AD699-160	JVH160
AD699-200	JVH200
AD699-250	JVH250
AD699-315	JVH315
AD699-400	JVH400

For other accessories, see data sheet 5496

2 Operation

In compliance with fascicule 70 and developed with public works professionals and project managers, it presents :

- Perfect sealing.
- Resistance to groundwater (2 m above the culvert).
- A guarantee against corrosion.
- Ease of use.
- A hydraulic profile (2% slope).
- No retention of materials.
- A culvert with 5 connection options.



NF A

CSTB - MARK NF442

Gravity drainage in thermoplastic materials

All product features certified under decision no. 78-04

3 Guarantee

Visimop products are guaranteed for 10 years against corrosion.

4 Option

See data sheet 5496

5 Maintenance

Thanks to the quality of high-density polyethylene, VISIMOP manholes require no special maintenance.

Installation

See installation instructions P031

- Based on the floor plan you provided, a mark was made on each room and on the floor plan.
- Check the diameter and orientation of your pipes.
- Next, cut out the chosen location using the appropriate diameter hole saw.
- Fit the appropriate connection seal.
- Level the bottom of the excavation and place the manhole. Connect the inlet and outlet pipes. Place the backfill, compacting it in successive layers.
- Position the gasket between the manhole head and the load distributor, if used.
- Place the load distributor with the cast iron or polyethylene tear-off cover, as appropriate.
- If groundwater is present, consult our Engineering Department.
- The manhole must not be raised, otherwise it will no longer be guaranteed.

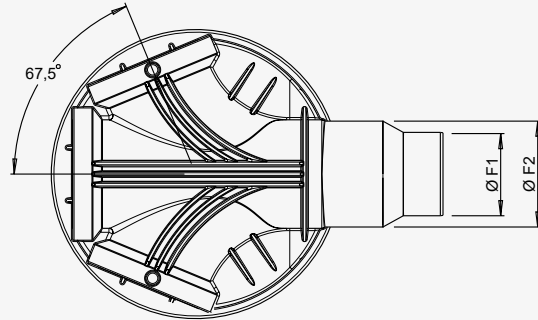
The unit is NF A-certified, provided SIMOP accessories are used (hole saw, joint, concrete load distributor).

VISIMOP II Ø1000

3 INLETS: FOR PVC CONNECTIONS Ø 125/160 / 200/ 250/ 315/ 400
OUTLET: FOR PVC Ø 200/250 OR PVC Ø 315/400



↑
Cutting
max. 300 mm
↓

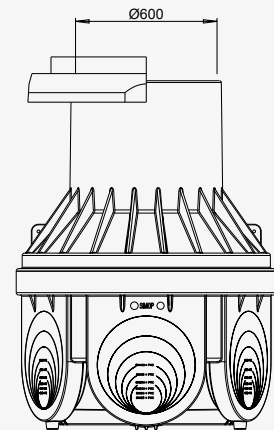
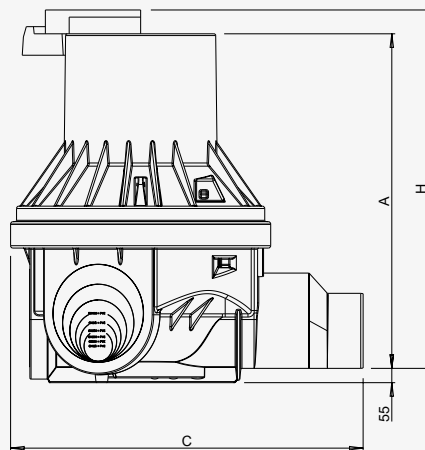


H = HEAD OF WATER/
CAST-IRON BUFFER TOP

To calculate dimension H,
the RCB602-20 load distributor
was used
(see data sheet 5498)

Please note:

- 10 mm height difference between inlet and outlet watercourse direct route
- Height difference of 30 mm between 67.5° inlet water and outlet water



REFERENCES	TECHNICAL SPECIFICATIONS FOR PVC TUBE						
	A	C	Ø F1 outlet	Ø F2 output	H without cut-out	H with max. cut-out	NF A certified
5480PV2025-14	1410	1470	200	250	1570	1270	yes
5480PV2025-17	1710	1470	200	250	1870	1570	yes
5480PV2025-20	2010	1470	200	250	2170	1870	yes
5480PV2025-23	2310	1470	200	250	2470	2170	yes
5480PV2025-26	2610	1470	200	250	2770	2470	no
5480PV2025-29	2910	1470	200	250	3070	2770	no
5480PV2025-32	3210	1470	200	250	3370	3070	no
5480PV2025-35	3445	1470	200	250	3605	3305	no
5480PV2025-38	3745	1470	200	250	3905	3605	no
5480PV2025-41	4028	1470	200	250	4188	3888	no

5480PV3140-14	1410	1480	315	400	1570	1270	no
5480PV3140-17	1710	1480	315	400	1870	1570	no
5480PV3140-20	2010	1480	315	400	2170	1870	no
5480PV3140-23	2310	1480	315	400	2470	2170	no
5480PV3140-26	2610	1480	315	400	2770	2470	no
5480PV3140-29	2910	1480	315	400	3070	2770	no
5480PV3140-32	3210	1480	315	400	3370	3070	no
5480PV3140-35	3445	1480	315	400	3605	3305	no
5480PV3140-38	3745	1480	315	400	3905	3605	no
5480PV3140-41	4028	1480	315	400	4188	3888	no

The unit is NF a-certified, provided SIMOP accessories are used (hole saw, joint, concrete load distributor).

5496

UNCLOGGING

Porthole connection seals

PVC	Reference	Designation
	JVH125	pVC inlet ø125
	JVH160	pVC inlet ø160
	JVH200	pVC inlet ø200
	JVH250	pVC inlet ø250
	JVH315	pVC inlet ø315
	JVH400	pVC inlet ø400



Hole saws

PVC	Reference	Designation
	AD699-125	for gasket JVH125
	AD699-160	for joint JVH160
	AD699-200	for gasket JVH200
	AD699-250	for gasket JVH250
	AD699-315	for gasket JVH315
	AD699	for gasket JVH400



PARASITE

Connection seals

PVC	Reference	Designation
	AD653-125	pVC inlet ø125
	AD653-160	pVC inlet ø160
	AD653-200	pVC inlet ø200



Hole saws

PVC	Reference	Designation
	AD692-125	for joint AD653-125 (for ø125 PVC pipe)
	AD692-160	for joint AD653-160 (for ø160 PVC pipe)
	AD692-200	for joint AD653-200 (for ø200 PVC pipe)

WATERTIGHT LID

Polyethylene cover to be placed on the manhole head (under the cast iron cover). Single-lip seal. Observed leak rate: 0.013l/min/m of gasket under 0.3M CE.

Reference	A	B	C
CV2/570	105	Ø 630	Ø 570



ANTI-GRAVEL COVER

Polyethylene cover to be placed over the manhole head. To protect networks and personnel during work.

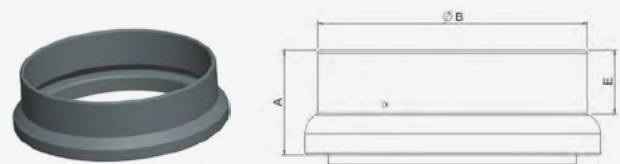
Reference	A	B	E
CU4204-N	105	Ø 630	150



HEIGHT ADAPTER

Made of polyethylene, to be placed on the manhole head. Its use should be the exception rather than the rule, as it removes the guarantee from the manhole as it will no longer be watertight.

Reference	A	Ø B	E
AHV612	245	630	150



SEALING RINGS

Reference	Designation
AD666-0630	Manhole head seal / concrete distributor



CONCRETE LOAD-DISTRIBUTING DEVICES



* see data sheet 5498

SCALE/STEP FOR VISIMOP II MANHOLE ACCESS

5496

1 Installation

VISIMOP II 5464 manholes can be fitted with an access ladder. Ladders comply with standard NF EN 131-1.



LADDER FOR MANHOLE Ø 800 - 5
ENTRIES
(Data sheet 5464)

LADDER FOR MANHOLE Ø 800 - 3
ENTRIES
(Data sheet 5470)

GAZE REFERENCE	Scale reference or adapted step	GAZE REFERENCE
5464D09PV-09	NOT EQUIPPABLE	5470D16PV-11
5464D09PV-12	KIT 147- 2ECH	5470D16PV-14
5464D09PV-15	AH147-15	5470D16PV-17
5464D09PV-18	AH147-18	5470D16PV-20
5464D09PV-21	AH147-21	5470D16PV-23
5464D09PV-24	AH147-24	5470D16PV-26
5464D09PV-26	AH147-26	5470D16PV-27
5464D09PV-29	AH147-29	5470D16PV-30
5464D09PV-32	AH147-32	5470D16PV-33
5464D09PV-35	AH147-35	5470D16PV-36
5464D09PV-38	AH147-38	5470D16PV-39
5464D09PV-41	AH147-41	5470D16PV-42

5550

1 Use

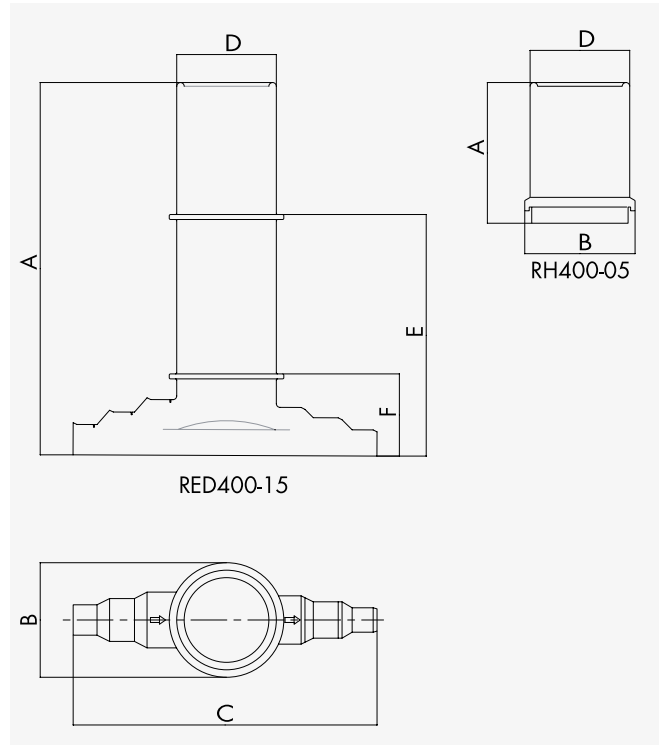
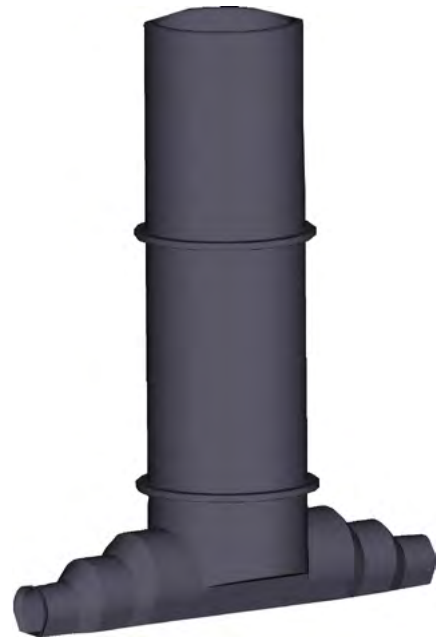
- Road drainage
- Major advantage: easy, quick installation.

2 Technical definition

- The RED400-15 manhole is used to connect road drains with 110, 160 and 200 diameter flat gutters.
- This high-density polyethylene manhole includes :
 - 1 body, 1500 mm high, with bottom inclined 1% towards outlet;
 - 1 adaptable female inlet for diameters 110, 160 and 200 ;
 - 1 adaptable male outlet for diameters 110, 160 and 200 ;
 - 1 bottom reinforcing collar ;
 - 1 reinforcing collar at top ;
 - 1 kapsto.

3 Installation

- RED400-15 can be installed without the need for handling equipment.
- Place the manhole on a horizontal bed of 0.10 mm thick gravel.
- Saw the inlet and outlet socket to the diameter of your drain. Connect it following the arrows on our manhole cover.
- Backfill the culvert with gravel. Then place a sheet of felt and backfill with sand to ground level.
- Cut the top of the manhole to finished ground level. Finish with a small concrete ring and a light cast-iron manhole cover.
- If vehicles are to pass through, pour a concrete slab on the undisturbed ground and fit a heavy cast-iron plug. The manhole must not support any load.
- To add an extension to the manhole, you must cut the top of the manhole to allow for nesting.



References	A	Ø B	C	Ø D	E	Ø F
RED 400-15	1500	460	1220	400	970	330
Option RH 400-05 - Extension	565	443		400		

CONCRETE LOAD DISTRIBUTOR IN PRECAST CONCRETE

5498

1 Use

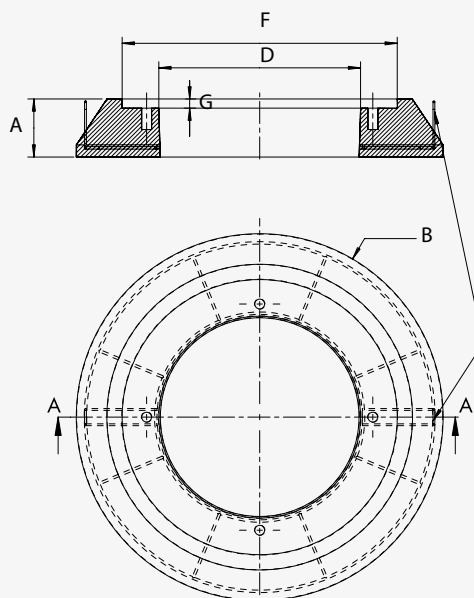
- The load distributor is required whenever a cast-iron buffer is installed.
- It is guaranteed for buffers from 125 to 400 kN.

2 Technical definition

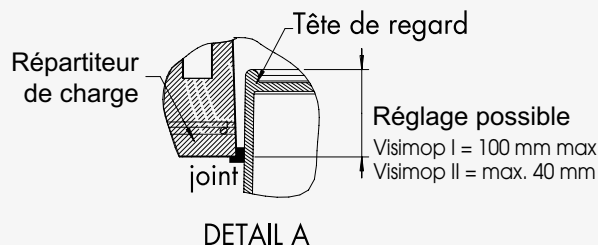
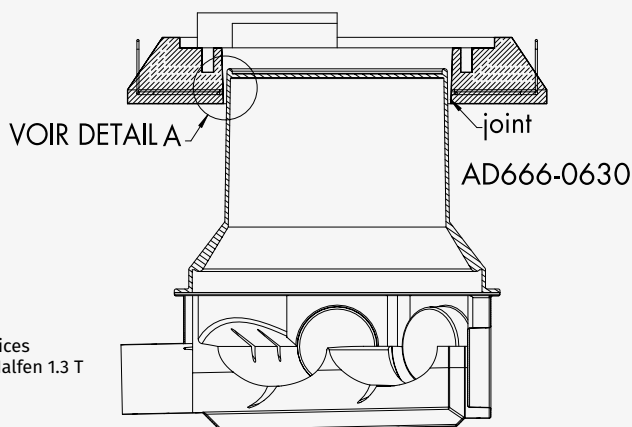
• The concrete load distributor is a specific product for VISIMOP. It has been designed to provide a large bearing surface, enabling loads to be distributed over a large backfill area.

NOTE: Simop RCB602-20 or RCB602-15 load distributors are an integral part of the NFA standard, and are subject to supplier audits and other controls. The use of a load distributor other than these cancels the marking of the manhole concerned and renders the product non-NFA.

- The cast-iron roadbed or cast-iron buffer will be installed on the load distributor.
- For handling tundishes with anchors, suitable lifting hands are required.



2 lifting devices
(buckle or Halfen 1.3 T
anchors)



Part no. for manhole Ø 600/800/1000	A	Outside Ø B	Outside Ø D	Ø F	G	Weight
RCB602-20	190	1200	660	900	30	280
RCB602-15	120	1010	660	900	30	100

IMPORTANT all technical specifications (dimension H) are calculated on the basis of the dimensions of the RCB602-20 distributor. For an RCB602-15 manhole and splitter assembly, subtract 70 from dimension H (this dimension can be found on Visimop manhole data sheets).

INSTALLATION INSTRUCTIONS FOR VISIMOP II MONOBLOC MANHOLES

PO31

1 General

A.1 - Generally speaking, follow the requirements of section 70 of the CCTG. Our manholes are designed to withstand a maximum water height of 2 m.

A.2 - The nature of the ground must be clearly understood by the user company. To do so, they must take into account the information provided by the project manager, or have a soil survey carried out.

A.3 - VISIMOP manholes must be installed in accordance with the installation instructions.

2 Excution of the excavation

B.1 - In order to properly compact the backfill, create the excavation by adding :

- at least 10 cm above the planned depth of the manhole
- about 60 cm Ø for Ø 600 manholes
- approximately 80 cm Ø for Ø 800 and Ø 1000 manholes

B.2 - Unless otherwise specified in the CCTP (TECHNICAL SPECIFICATIONS), to be submitted to Simop for approval, lay the bed with properly compacted sand to a minimum thickness of 10 cm.

3 Preparing the cunette

C.1 - Place the manhole in the excavation to check the location of the connections to be made.

C.2 - Use a hole saw ref. AD690-... to drill a hole in the drainage channel. corresponding to the pipe diameters to be connected and to the intended locations. Centering points are marked on the channel.

C.3 - After cutting, fit the joint ref. AD653 - ...corresponding to the diameter of the pipe to be connected

C.4 - Position the manhole on the laying bed and connect the pipes to the drainage channel as follows:

- at the outlet, connect the pipe with its built-in gasket to the male pipe of the manhole, or use a sanitizing lip sleeve

- at the inlet, insert the pipe directly into the joint previously placed on the gutter.

To facilitate interlocking, it is advisable to coat the joints with soft soap. Sealing: all cut-outs must be deburred.

4 Backfill

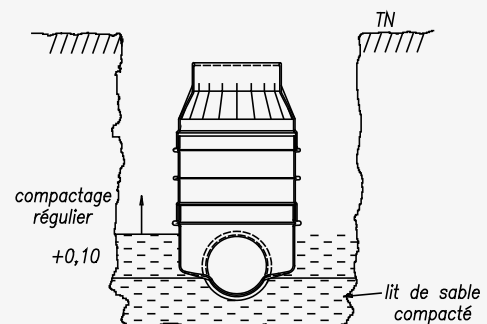
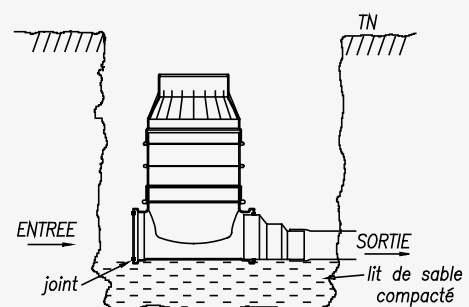
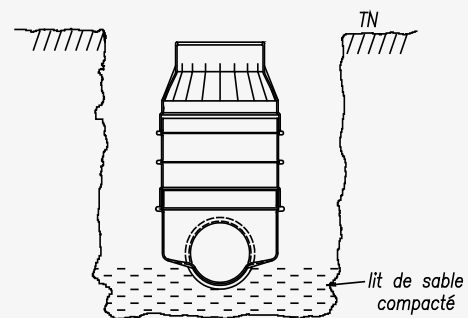
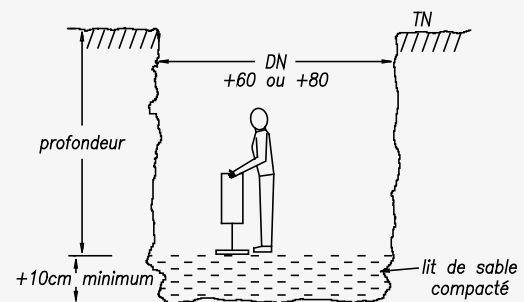
D.1 - Create the bedding by wedging the manhole box onto the bedding with sand up to a height of approximately +10 cm from the upper generatrix of the pipe (take care to compact the sand well under the box).

D.2 - After compaction all around the trench, backfill the trench between the manhole and the edge of the excavation with properly compacted sand in successive layers, using the reinforcement rings as reference points.

Compaction will be around 95% of the PROCTOR optimum.



IMPORTANT REMINDER the quality of compaction is essential to the durability of the structure.




INSTALLATION INSTRUCTIONS FOR VISIMOP II MONOBLOC MANHOLES

PO31

5 Closing

Place the gasket ref. AD 666-0630 around the manhole head, then install the prefabricated concrete load distributor ref. RCB602-20, topped with the cast-iron plug. The cast-iron plug will be fixed to the distributor in accordance with standard NFP98312-EN124.

If required, a 100 mm height adapter, ref. AHV612, can be fitted to the manhole head (the seal between the height adapter and the manhole head cannot be guaranteed)

 **IMPORTANT:** the manhole must not be enhanced, otherwise it will no longer be guaranteed.

6 Parasitic stings

- Parasitic tapping allows us to adapt to existing networks in the event of rehabilitation.
- They can only be carried out on the body of the manhole using the specific hole saws and gaskets supplied by SIMOP (parasitic hole saws).
- **The nominal diameter (DN) of a parasitic connection must never exceed 200 mm.**
- This type of connection should be the exception rather than the rule, as the rigidity of the manhole will be compromised **SIMOP does not guarantee the watertightness of parasitic tappings.**

7 Watertight cover for sub-buffer

CV2/570 cover to be placed under the cast iron pad.

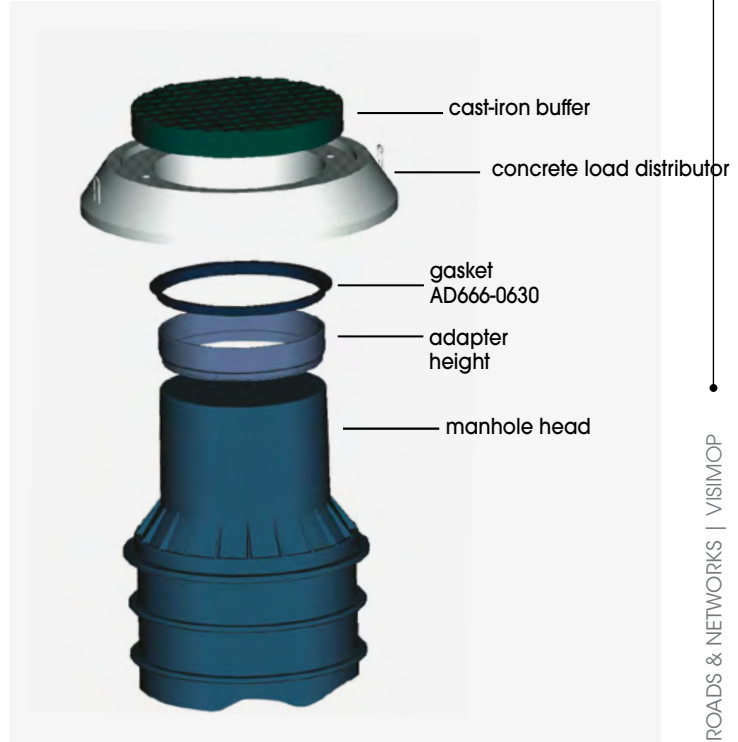
1. Tilt the pad and slide it through the cast-iron frame.
2. Press down on the other end so that it rests correctly on the eye's head.

To extract :

If water is present, use a screwdriver to remove the white plug in the center of the lid

to discharge effluent. Lift it up using the rope provided or with the help

a bar that can be used as a lever.



INSTALLATION INSTRUCTIONS FOR VISIMOP II MONOBLOC MANHOLES

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8 Special installation conditions in the presence of groundwater or hydromorphic soil

Backfilling is carried out under the same conditions as sand backfilling.

The backfill material (quarry gravel 0/31.5 recommended) must have a minimum density of 1.6 in the presence of water.

Visimop's one-piece design means it can be installed without risk of leakage in areas where the water table is very high (maximum 2 metres).

Visimop's reinforcement rings also act as anti-float rings on which the backfill rests, eliminating the need for concrete slab ballasting in most cases.

EXAMPLE OF FLOATABILITY CALCULATION

Assumptions :

Manhole height 3000 mm

Body diameter 800 mm

DN inlet / outlet 200 mm

Number of entries 5

Cast-iron buffer 250 kN

Concrete distributor 280 kg

Cone of thrust transmitted to embankment 16°

Archimedean thrust = 1345 liters or 1345 kg

Anti-floatation backfill load $2122 \text{ l} \times 1.6 = 3395 \text{ kg}$

So there's no need to backfill with concrete.



NOTE in this calculation, shear and friction forces have been neglected and must be added to the anti-floatation backfill load.