

# Drinking water supply solutions

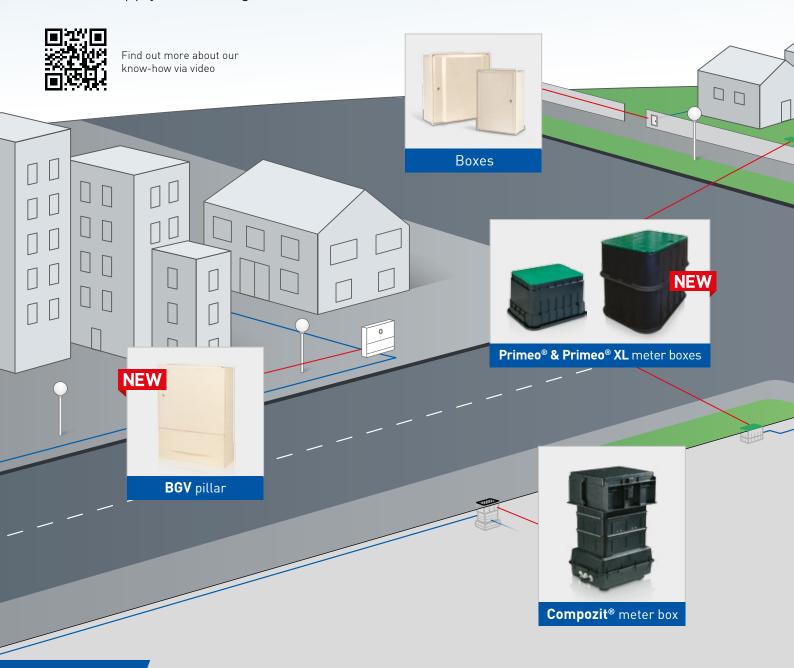
2017 edition





# Drinking water supply solutions

CAHORS is contributing to the development of drinking water distribution systems. To meet water supply needs and improve how resources are protected and managed, the CAHORS solutions offer a comprehensive range of connection boxes and pillars for the supply of drinking water.





# Summary

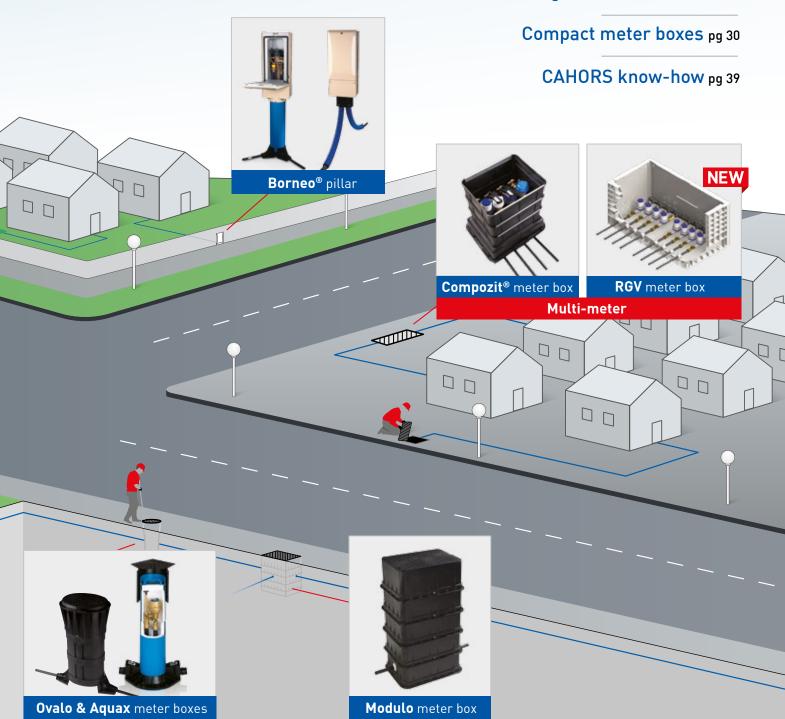
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Find out more about our know-how via video





# ABOVE-GROUND SOLUTIONS

**CONNECTION AND METER BOXES** 

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# Connection and meter boxes



#### Use

Boxes and pillars installed outside, on property boundary. Functions: cut-off, drainage, antipollution, metering.



#### **Description**

Manufactured from fibreglass-reinforced polyester. Optimal resistance to impact and external hazards. Various types of insulation against freezing available depending on risk.

#### **Features**

Chamber equipped with bosses for mounting rails. Pivoting door with 90° or 180° opening depending on version.

#### > MININTER BOX



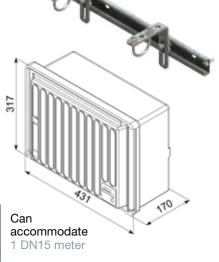
Mininter box Rectangular closure - Brass Ref. 0258.309



Fully insulated Mininter box Ref. 0258.313

Dimensions	Insulation	Width (mm)	Height (mm)	Depth (mm)	Weight (kg)
External	•	431	317	191	
Internal	None	380	280	170	4
	Insulated door	380	280	130	4
	Fully insulated	305	200	105	





Mounting rail with meter support Ref. 0925.077

Description	Reference	Packaging
Box without meter support	0258.309	
Box with horizontal meter support	0258.310	
Box with insulated door without meter support	0258.311	40/pallet
Box with insulated door with horizontal meter support	0258.312	49/pallet
Fully insulated box without meter support	0258.313	
Fully insulated box with horizontal meter support	0258.314	
Accessories		
Non-insulated door	0925.685	
Insulated door	0925.686	
Mounting rail with meter support	0925.077	
Bottom door pin + spring	0925.047	
Tropical zones		
Standard water box for base (open bottom + 2 ø 50 mm on sides)	0258.129	
Base (not insulated)	0258.336	

#### > MINIMIXT BOX



Minimixt box Rectangular closure - Brass Ref. 0258.231



Fully insulated Minimixt box (shown without rail)



Mounting rail with meter support Horizontal mount, convertible to vertical

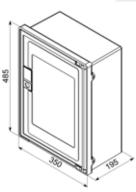
Ref. 0258.765

Box without meter support0258.228Box with vertical meter support0258.233Box with insulated door without meter support0258.229	45/
	457
Box with insulated door without meter support 0258.229	457
	45/
Box with insulated door with vertical meter support 0258.232	pallet
Fully insulated box without meter support 0258.227	
Fully insulated box with h. + v. meter support 0258.231	
Accessories	
Non-insulated door 0925.764	
Insulated door 0925.749	
Mounting rail with h. + v. meter support 0925.765	
Top door pin accessory 0925.627	
Bottom door pin accessory 0925.628	

Dimensions	Insulation (mm)	Width (mm)	Height (mm)	Depth (mm)	Weight (kg)
External	•	350	485	197	
Internal	Fully insulated	230	375	90	6



accommodate 1 DN15 meter



Can accommodate 2 DN15 or 1 DN20 meters

#### > PANINTER BOX



Paninter box Rectangular closure - Brass Ref. 0258.303

Insulation

None

Insulated door

Dimensions

External

Internal



Fully insulated Paninter box (shown without rail)



)	Height (mm)	Depth (mm)	Weight (kg)
	516	230	
	425	220	7
	425	170	,

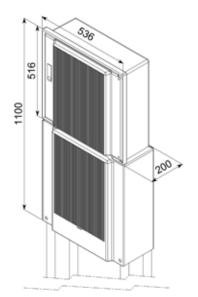
	Fully insulated	400	325	110	
Description				Reference	Packaging
Box without r	neter support			0258.303	
Box with hori	zontal meter suppor	t		0258.304	
Box with insu	lated door without m	neter support		0258.305	Od /n allat
Box with insulated door with horizontal meter support			upport	0258.306	21/pallet
Fully insulated box without meter support			0258.307		
Fully insulated box with horizontal meter support			0258.308		
Base		0541.026	16/pallet		
Bottom door pin + spring			0925.047		
Accessories					
Non-insulated	d door			0925.683	
Insulated doc	or			0925.684	
Mounting rail	with meter support			0925.073	

Width (mm

535

490 490







#### > BGV LARGE VOLUME PILLAR

The BGV is a connection pillar to connect customers to the drinking water network. It is installed on the property boundary (inset or surface-mounted).

The BGV includes the following elements:

- Baseboard to allow adjustment to final ground level
- Pivoting door with 90° opening, equipped with rectangular camlock
- Adjustable feet for embedding in trench





#### **Protection class**

- IP43 as per NF EN 60529
- IK10 as per NF EN 62262



Installation zone

Tropical/temperate zones



#### **Resistance:**

- Fibreglass-reinforced polyester
- Good mechanical strength
- Effective weather-resistance

#### Easy meter operation and reading

#### **Appearance:**

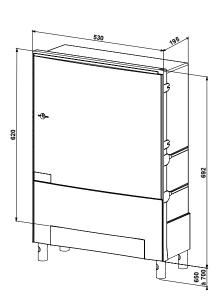
 Appearance and dimensions in keeping with "new generation" electricity and gas connection pillars.



▲ Integration into utility box

#### > DIMENSIONS





#### > METER CONFIGURATION EXAMPLES



Can accommodate 4 DN15 or 1 DN20 meters



2 DN15 meters



4 DN15 meters



1 DN20 meter

#### > REFERENCES

Description	Reference	Packaging
Empty water BGV	0294.034	10/pallet
Models equipped on request		
Accessories		
BGV door	0996.076	
Rail and fastenings for BGV	0996.130	
Door pin (pack of 1)	0925.047	

\*Meter not supplied



#### > GP 600 PILLAR Insula-tion W (mm) H (mm) D (mm) Weight (kg) Dimensions 1000 External 745 276 20 180° 940 Internal None 680 870 240 opening Possible to install up to 5 meters in line (DN15, length 110 mm) 274 GP 600 PILLAR Ref. 0258.267 Packaging 5/pallet



# **BORNEO®** pre-equipped pillars

#### **CONNECTION PILLARS**

FOR DN15 - 110 MM IN-LINE METER

**BORNEO**® is a connection pillar for connecting customers to the drinking water network. Located on the property boundary (inset or surface-mounted), it makes it easier for network managers to perform meter-reading and other operations.

Its high-performance materials provide BORNEO® with excellent insulation against freezing, and enable the integration of various hydraulic fittings.

**BORNEO**® is in keeping with electricity connection enclosures in utility boxes in terms of appearance and dimensions.



#### **Product advantages**

- Product manufactured using fibreglassreinforced polyester guaranteeing good mechanical strength and effective resistance to adverse weather and climate extremes
- Full set of hydraulic equipment (standard 1/4-turn valve + EA-type check valve (NF) with captive drain plugs upstream and downstream)
- Reinforced door pins
- Chamber volume enables integration of various hydraulic fittings (lockable valve before meter, valve after meter) and remote meter-reading system



#### **Technical characteristics**

- Customisable door (please contact us)
- Adjustable feet (supplied with approx.
   1.5 m PE) to facilitate installation and connection of polyethylene tubes
- Adjustable rail for optimum adjustment of hydraulics
- Door support stays (act as door stop when open)



#### Respect for the environment

Recycling of BORNEO® pillar at end of service life incorporated into product design:

- reduced number of components
- elements easy to separate
- reduced number of materials
- 100% recyclable insulation

The BORNEO  $^{\circledR}$  pillar has the design characteristics required of an eco-product.

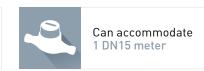


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#### NEW

Equipped with PE100D polyethylene pipes resistant to disinfectants





SMC envelope

1/4-turn closure (13 hex, slotted head)

Expanded polystyrene insulation with protective film

Lockable 1/4-turn valve

Anti-pollution check valve with captive drain plugs upstream and downstream

ø 25 mm PN20 (NF) PE tube

Expanded polystyrene insulation around post

Heat pipe

ack valve with
gs upstream and

IF) PE tube

Vene

Vene

Post

Outlet with
bare PE 25
as standard

\*H = 1570 for model 800
H = 1400 for model 600

1570

#### > HYDRAULIC FITTINGS

Example hydraulic fitting configurations with 1 DN15 - 110 mm meter



(meter not supplied)

Lockable valve before meter PE 25 - without heat pipe



Lockable valve before meter PE 25 - with heat pipe



Lockable valve before meter + valve after meter





Lockable valve before meter + valve after meter

PE 25 - with heat pipe

#### > ADJUSTABLE FEET

Positioning of adjustable feet and arrangement of polyethylene tubes



Adjustment from 90° to 270°





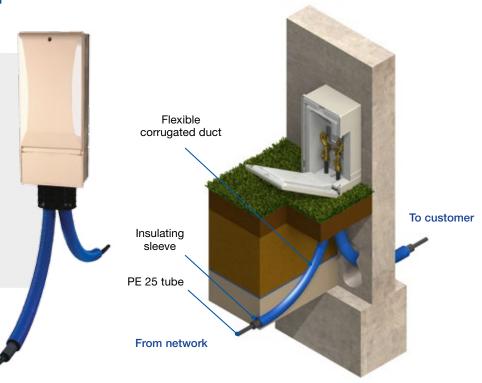
Example of connection at 135° with foot to improve stability



#### > RENOVATION BORNEO

The Renovation BORNEO from CAHORS facilitates the installation of challenging or problematic connections (e.g. wall with foundation).

Thanks to the structure of its chamber and the flexibility of its tubes, the renovation pillar is easily adapted to difficult routes, irregular ground and a range of inlet/outlet configurations.



> REFEREN	NCES	Version			Version with heat pipe measuring 1450 mm (250 mm overrun)	
		Lockable valve before meter	Lockable valve before meter + valve after meter	Lockable valve before meter	Lockable valve before meter + valve after meter	
BORNEO	PE 25	0294.035				
600	Without PE	0294.036	-	-	-	10/
BORNEO 800	PE 25 (length 1.5 m)	0294.192	0294.193	0294.194	0294.195	pallet
RENOVATION BORNEO	PE 25 (length 1.5 m)	0294.196	0294.197	Please contact us		

BORNEO® can accommodate various hydraulic fittings. Please contact our sales department regarding any specific requests.

BORNEO accessories	Reference
110 mm 3/4" by-pass plugs (5)	0990.889
110 mm 3/4" blanking plugs (5)	0990.890
Valve locking tool	0996.125
Insulated door	0996.141
Door pins (10)	0996.142
Door stays and rivets (10)	0996.143
Door insulation (with mounting)	0996.145
Base (+ fastenings)	0996.150
Insulated chamber (+ fastenings)	0996.149

## Customisation

#### PAINTED BOXES

Environmental considerations and a desire to improve users' living spaces have led us to rethink how we can visually integrate these materials into their surroundings.

Our boxes can be coloured in order to achieve a vital objective, that of blending into the background, whether architectural or natural.

Our wide range of colours makes it possible to adapt to any type of environment.



#### Test results as per RES 14083 A

- Resistance to ageing
- Colour stability
- Stability of mechanical properties (adhesion and impact resistance)



All the colours on the RAL colour chart are available.

Some examples are given below.











RAL 8012 Red brown RAL 7031 Blue grey RAL 7009 Green grey RAL 7006 Beige grey





Find out more about our know-how via video



# UNDERGROUND SOLUTIONS

RECTANGULAR METER BOXES

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## PRIMEO® XL meter box

#### THE MULTI-PURPOSE METER BOX

PRIMEO® XL is **a meter box** (underground in-line meter) that enables customers to be connected to the water distribution network.

It can be installed in green spaces, private gardens and anywhere likely to be used exclusively by pedestrians and cyclists.

In general, PRIMEO® XL can accommodate any underground equipment that requires a protective envelope with access via the cover.

The PRIMEO® XL meter box includes the following elements:

- Lockable cover with sill able to withstand 1.5 t load (class A15 as per standard NF EN 124)
- Insulation fitted beneath cover (optional)
- Extension section (optional)
- Knockouts for chamber inlets/outlets
- · Bottom (optional)



#### > PRODUCT DESCRIPTION





#### Easy installation & handling:

- Weight: 5 kg
- Impact on ground contained
- Knockouts for inlets/outlets

#### Application:

 Connection to water distribution network

#### Resistance:

• Class A15 as per NF EN 124



#### Meter integration:

 Enables integration of DN15 and 20 meters, with PE Ø 25 and PE Ø 32 connections

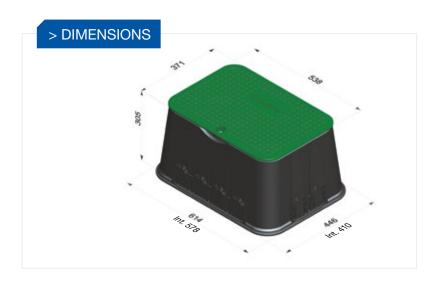
# > METER CONFIGURATION EXAMPLES The PRIMEO XL meter box can accommodate: 1 DN20 meter 2 DN15 meters 3 DN15 meters 4 DN15 meters

#### > REFERENCES

		Insulation				
Image	Description	Without insula- tion	Insulated cover	Bottom	Reference	Packag- ing
	Meter box (cover + chamber)	•			0258.207	96/ pallet
	Insulated meter box (cover + insulation + chamber)		•		0258.208	80/ pallet
	Complete meter box (cover + chamber + bottom*)	•		•	0258.209	48/ pallet
	Complete insulated meter box (cover + insulation + chamber + bottom*)		•	•	0258.210	40/ pallet
	Complete insulated meter box (cover + insulation + cham- ber + extension section* + bottom*)		•	•	0258.236	

 $<sup>{}^*\!</sup>Articles\ delivered\ separately\ not\ mounted.$ 

# Description Reference Extension section H = 165 mm 0996.063 Cover 0996.064 Insulation 0996.065 Bottom 0996.066







## PRIMEO® meter box

#### THE MULTI-PURPOSE METER BOX

The PRIMEO® box comprises components made from a fibreglass-reinforced synthetic material. It can be used as a **meter box** (underground in-line meter), enabling customers to be connected to the water distribution network.

PRIMEO® can be installed in green spaces and private gardens, thereby representing **the ideal solution for watering or irrigation equipment.** 

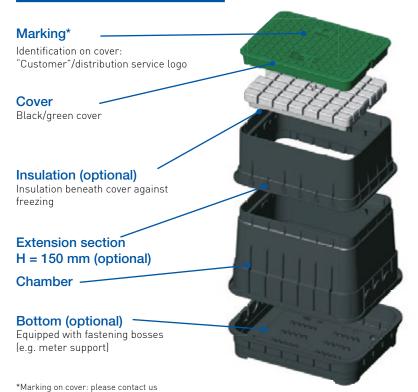
The PRIMEO® meter box includes the following elements:

- Cover with sill (lockable or customisable on request) able to withstand 500 kg load
- Insulation fitted beneath cover (optional)
- Extension section (optional)
- Knockouts for inlets/outlets
- · Bottom (optional)



#### > PRODUCT DESCRIPTION

\*\*Extension section sold with fastening kit ref: 0974.009





- Reduced impact on ground
- Knockouts for inlets/outlets

#### Applications:

- Connection to water distribution network
- Automatic watering system
- Hydrant

#### Resistance:

• 500 kg



#### Meter integration:

 Enables integration of **DN15 and 20** meters, with PE Ø 25 and PE Ø 32 connections



# > DIMENSIONS

#### > REFERENCES

Cavan	Insul	ation	Dottom	Deference	Deekeeine	
Cover	Without insulation	Insulated cover	Bottom	Reference	Packaging	
	•			0294.150	70 /p allat	
	•			0294.151	72/pallet	
		•	•	0294.152		
	•		•	0294.153	24/pallet	
Black		•	•	0258.000*		

<sup>\*1</sup> inlet/1 outlet drill holes (Ø 50 mm with sealing end-piece)

		•		0294.154	72/pallet
	•			0294.155	12/pailet
		•	•	0294.156	04/pollet
Green	•		•	0294.157	24/pallet
Extension section H = 150 mm	Sold with fastening kit			0974.009	-





# **MODULO** meter box

#### **EQUIPPED MODULAR SOLUTION**

#### Modulo is a range of rectangular meter boxes for in-line water meters.

The various configurations of the Modulo meter box allow it to be adapted to any environment. It offers a simple, comprehensive and high-performance solution for connecting customers to the drinking water network.



#### **NEW**

Equipped with PE100D polyethylene pipes resistant to disinfectants



Can accommodate DN15 or DN20 meter





#### Modular meter box

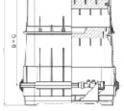
The **Modulo** range is available in several versions and can be adapted to the specific connections required and the climate conditions of the geographical zone:

- Single or double meter (delivered with Ø 32 manifold for double meter), DN15 for 110 - 170 mm meter and PE Ø 25 connection
- Several depth levels: 300 1300 mm
- Customised assemblies can be supplied on request:
- PE Ø 32 or PE Ø 40 connection
- Connection of DN20 meter, length 190 mm
- Installation of valve after meter
- Lock on 0.5 t and 1.5 t covers

#### "Ready-to-connect" meter box

Modulo meter boxes are delivered fully equipped, offering a solution that can be installed directly in trench. They include:

- Insulated cover able to withstand 0.5 t, 1.5 t or 12.5 t
- Insulated chamber without thermal bridge
- Standard hydraulic components: valve before meter, anti-pollution check valve, drain plugs, adjustable casing (depending on options). These components are fully accessible, allowing easier maintenance.
- Curved PE Ø 25 pipes (for offset version)
- Polypropylene manifold (for double meter versions), 1x Ø 32 inlet/2x Ø 25 outlets
- Removable fall-protection grill



Horizontal mount Internal dimensions: 450x350 mm

	1117
	1
١,	145
	4
	1111
	Offset mount

Internal dimensions: 350 x 240 mm

Fixed height Modulo range	300	450	600	750	900	1050
Horizontal mount (in-line)	Х	Х				
Vertical mount (offset)			X	X	X	X
Overall dimensions (A)	400	550	650	800	950	1100
Water line depth (B)	300	450	580	730	880	1030
Max. meter centreline depth (C)	300	450	355	305	305	305
Available height above meter centreline (D)	240	240	170/195	115/140	115/140	115/140

Adjustable height Modulo range	400/550	500/650	700/850	850/1000	1000/1150	1150/1300
Horizontal mount (in-line)	Х	Х				
Vertical mount (offset)			Х	Х	Х	Х
Overall dimensions (A)	500 - 650	600 - 750	730 - 880	860 - 1010	1010 - 1160	1150 - 1300
Water line depth (B)	400 - 550	500 - 650	700 - 850	790 - 940	940 - 1090	1090 - 1240
Max. meter centreline depth (C)	400 - 550	500 - 650	385	520	520	520
Available height above meter centreline (D)	315	240	170/195	115/140	115/140	115/140

#### > MOUNTING OPTIONS







#### > COVERS



Modulo 450

Horizontal mount

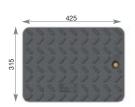
0.5 t load

Material: fibreglassreinforced thermoplastic

with sill



1.5 t load (class A15 as per NF EN 124) Material: fibreglassreinforced thermoplastic with sill



(class B125 as per NF EN 124)

Material: fibreglassreinforced polyester

with bolt

12.5 t load

#### > REFERENCES

Fixed height range												
Height	30	00	45	50	6	00	7	50	90	00	10	50
Cover	0.5 T	A15	0.5 T	A15								
Single meter 110 - 170 DN15	0258.033	0258.034	0258.035	0258.036	0258.037	0258.038	0258.003	0258.005	0258.006	0258.007	0258.008	0258.01
Ø 25 PE tubes	24/	pallet	18/p	pallet				8/p	allet			
Double meter 110 - 170 DN15	0258.043	0258.044	0258.045	0258.046	0258.047	0258.049	0258.011	0258.012	0258.013	0258.014	0258.016	0258.01
Ø 32 PE manifold + Ø 25 PE tubes	24/	pallet	18/	pallet	8/p	allet			6/pa	llet		

Adjustable height range									
Height	400-550	500-650	700-850	850-1000	1000-1150	1150-1300			
Cover	B125 with lock								
Single meter 110 - 170 DN15	0258.039	0258.040	0258.042	0258.020*	0258.022	0258.023			
Ø 25 PE tubes	24/pallet	18/pallet	12/pallet		8/pallet				
Double meter 110 - 170 DN15	0258.050	0258.051	0258.052	0258.024	0258.025	0258.026			
Ø 32 PE manifold + Ø 25 PE tubes	24/pallet	18/pallet	8/pallet		6/pallet				

\*Empty Modulo, height 850 - 1000, 2 curved PE Ø 25 pipes Ref. 0258.214 Empty Modulo, height 850 - 1000, 2 curved PE Ø 32 pipes Ref. 0258.215

Accessories and spare parts			
Insulated 0.5 t cover	0974.030	150 mm extension section with fastening kit	0974.009
A15 insulated cover	0996.022	SMC	0974.008
B125 insulated cover	0974.027	Bottom with end-pieces + mounting rails +	0974.007
Adjustable B125 frame	4087.501	screws	001 4.001
		Insulating cap	1022.607





# **COMPOZIT®** meter box

**CONNECTION BOX** 

The COMPOZIT® meter box comprises two sub-assemblies in composite materials:

- Cover and frame manufactured from fibreglassreinforced polyester
- Chamber manufactured from fibreglassreinforced thermoplastic

The two parts are independent to avoid transferring mechanical stress to the lower chamber and hydraulic equipment.



The CAHORS Compozit® underground meter box is for connecting customers to the water distribution network.

It is designed to make it quicker, easier and more secure to install connections to collective or individual dwellings. It allows integration of several in-line meters and the standard associated hydraulic equipment (rails, valves, check valves, etc.).

The use of composite materials makes it possible to offer a connection solution adapted to thermal, mechanical and installation conditions.



#### Meter integration:

• Enables integration of **DN15 & 20** meters, with PE Ø 25 and PE Ø 32 connections



#### Insulation against freezing

Check our guide to select the product according to your geographical zone.

See pg 35 of guide.



#### **Advantages**

• Lightweight: 20 kg max. Can be handled by 1 person

More than 400,000

meter boxes already installed!

- Ease of installation:
- Option of valve installation in factory
- Easy installation in trench
- Adaptable to majority of hydraulic fittings
- Thermal insulation adapted to various geographical zones and tested in climate chamber
- Resistance: 3.5 t or 12.5 t
- Reversible cover for perfect integration on site:





#### > DESCRIPTION

# The Compozit® comes in several depths: • Compozit® 400/600: meter

 Compozite 400/600: meter mounted at bottom of chamber

 Compozit® 800/1000: meter raised for improved access

Extension section

Equipped rail (sold as accessory) fastened at bottom of chamber

Non-slip glass-reinforced cover able to withstand 3.5 t or 12.5 t

Insulation block under cover (on version with extra insulation)

Casing

High-density polystyrene thermal insulation

End-piece for cleanliness

Compozit® 600 VERSION

# Compozit® 400 Compozit® 600 Compozit® 800 Compozit® 1000



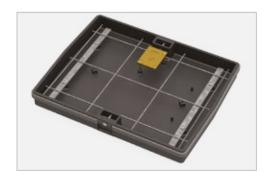




#### > VERSION WITHOUT EQUIPMENT

Туре	Insula	tion	Max. no. of meters	Rail	3.5 t cover	12.5 t cover	Pack.
Compozit® 400	Standard		1	None	0258.363	0258.357	
400 - 600 mm	Stariuaru		2	None	0258.380	0258.381	16/
± 4 ± 1 ± 1 ± 1 ± 1 ± 1 ± 1 ± 1 ± 1 ± 1	Extra		1	None	0258.366	0258.360	pallet
530 mm (Width: 420 mm)	Extra		2	None	0258.382	0258.383	
Compozit® 600	Otana da val		1	None	0258.362	0258.356	
mm o	Standard		2	None	0258.364	0258.358	12/
550 - 750 mm	E.L.		1	None	0258.365	0258.359	pallet
	Extra		2	None	0258.367	0258.361	
Compozit® 800	Extra	<u> </u>	2	None	0294.101	0294.102	12/ pallet
680 - 880 mm		Extra		2	1 rail mounted	0258.386	0258.387
Compozit® 1000			2	None	0294.103	0294.104	8/
mn (60) - 1059	Extra		2	1 rail mounted	0258.388	0258.389	pallet

Spare parts for COMPOZIT® 400, 600, 800 & 1000					
Frame	0925.775				
Cover opening hook (pair)	0925.733				
Water symbol	0925.755				
Cover-reverse kit with water symbol	0925.766				
3.5 t cover without insulation	0925.757				
3.5 t cover with insulation	0974.021				
12.5 t cover without insulation	0925.758				
12.5 t cover with insulation	0974.022				
Insulation block to screw under cover	0974.020				
Lower insulation block	0990.274				
Extension section + bracing	0990.286				
Extension section + bracing + casing	0990.290				
Cover seal	0990.284				



Cover-reverse kit with water symbol Ref. 0925.766 (cover not supplied in kit)

#### > COMPOZIT 400 & 600 ACCESSORIES

The meter box is delivered without fittings or accessories so it can be adapted to most hydraulic fittings:

- Possible to mount 1 or 2 DN15 (length 110 or 170 mm) or DN20 (length 190 mm) meters at bottom of chamber
- Provision for rails with height 70 mm to be screwed onto bottom of chamber (mounting length 120, 160 or 200 mm)
- 25 40 mm PE tubes
- Max. length of hydraulic fittings: 520 mm

Hydraulic accessories	
Rail equipped for DN15 meter* and 25 mm PE, length 170 mm	0974.030
Equipped rail for DN20 meter* and 32 mm PE, length 190 mm	0974.031
Meter supports for Ø 27 valves (pair)	0990.276
Meter supports for Ø 21 valves (pair)	0990.277













Meter supports for valves:

Ø 27 (x2) Ø 21 (x2) Ref. 0990.276 Ref. 0990.277

#### > COMPOZIT 800 & 1000 ACCESSORIES

The Compozit® 800 & 1000 meter boxes are delivered without fittings or accessories, or equipped with a sliding stainless steel rail compatible with 3/4" or 1" hydraulic equipment, and meters with mounting length 110, 170 or 190 mm.

They also offer the possibility of accommodating 2 meters in the same box.

Hydraulic accessories	
Curved Ø 25 mm PE pipes (pair)	0990.287
Curved Ø 32 mm PE pipes (pair)	0990.288
PE 25 hydraulic kit DN15 meter for Compozit® 800	0990.291
PE 32 hydraulic kit DN15 meter for Compozit® 800	0990.292
PE 32 hydraulic kit DN20 meter for Compozit® 800	0990.293
PE 25 hydraulic kit DN15 meter for Compozit® 1000	0990.294
PE 32 hydraulic kit DN15 meter for Compozit® 1000	0990.295
PE 32 hydraulic kit DN20 meter for Compozit® 1000	0990.296
Meter support rail kit	0996.130



Example of assembly with 2 meters



Equipped Compozit® 1000 without cover and frame



Equipped with PE100D polyethylene pipes resistant to disinfectants



PE 25 hydraulic kit Ref. 0990.291



#### > DN15 PRE-EQUIPPED MULTI-METER VERSION

The COMPOZIT multi-meter range offers a simple, optimised solution to meet the need for multiple metering for collective or individual dwellings.

The multi-meter solution is supplied fully equipped, ready to be connected to the drinking water network.

#### It includes the following elements:

- COMPOZIT range meter box
- Polypropylene manifold: PN16 Ø 32 inlet
- Curved Ø 25 pipes for offset mounting
- Hydraulics: valve before meter, anti-pollution check valve, drain plugs
- Hydraulic supports
- Provision for Ø 25 PN20 (NF) outlet





#### **NEW**

Equipped with PE100D polyethylene pipes resistant to disinfectants



#### Meter integration:

This range has been designed to allow integration of 2, 3 or 4 in-line DN15 meters\* in a single box:

- 110 mm (up to 4 meters)
- 170 mm (up to 3 meters)



#### **Advantages**

- Fully equipped box, ready to install
- Integration of up to 4 meters in a single box
- Polypropylene manifold\*\* (components assembled using polywelding)
- \*\*Polyethylene manifold: please contact us

#### > CONFIGURATION EXAMPLES



Compozit 400 Horizontal mount 1 inlet 3 outlets

Internal connection



Compozit 400
Horizontal mount
1 inlet 4 outlets
External connection



Compozit 800 Offset mount 1 inlet 3 outlets



Compozit 800
Offset mount
1 inlet 4 outlets
Meters not supplied

#### > REFERENCES

For general dimensions, see pg 23.

	Туре	Inlet/Outlet* (Ø 32) (Ø 25)	Insulation	Meter	3.5 t cover	12.5 t cover	Pack.
		1 inlet/2 outlets internal connection	Standard	110 or 170	0258.700	0258.701	12/
			Extra	110 01 170	0258.702	0258.703	
	COMPOZIT	1 inlet/3 outlets	Standard	110 or 170	0258.712	0258.713	
	<b>400</b> Depth:	Internal connection	Extra		0258.714	0258.715	pallet
Horizontal mount	Deptri: 400 - 600 mm	1 inlet/4 outlets	Standard	110	0258.724	0258.725	
Ŭ.		Tillion 4 Oddots	Extra	110	0258.726	0258.727	
nta		1 inlet/2 outlets	Standard	110 or 170	0258.704	0258.705	
rizo		internal connection	Extra	110 01 170	0258.706	0258.707	
운	COMPOZIT	1 inlet/3 outlets	Standard	110 or 170	0258.716	0258.717	8/ pallet
	<b>600</b> Depth: 550 - 750 mm	internal connection	Extra		0258.718	0258.719	
			nlet/4 outlets Standard 1		0258.728	0258.729	
		1 inlet/4 outlets		110	0258.730	0258.731	
	COMPOZIT 800 Depth:	1 inlet/2 outlets	Extra	110 or 170	0258.708	0258.709	6/ pallet
ount		1 inlet/3 outlets	Extra	110 or 170	0258.720	0258.721	8/ pallet
tical m	690 - 890 mm	1 inlet/4 outlets	Extra	110	0258.732	0258.733	8/ pallet
Offset vertical mount	COMPOZIT 1000 Depth: 830 - 1030 mm	1 inlet/2 outlets	Extra	110 or 170	0258.710	0258.711	
		1 inlet/3 outlets	Extra	110 or 170	0258.722	0258.723	8/ pallet
		1 inlet/4 outlets	Extra	110	0258.734	0258.735	

<sup>\*</sup>Custom products: please contact us





## **RGV** meter box

LARGE VOLUME CONNECTION BOX

The RGV includes the following elements:

- 4 SMC panels
- Base for cleanliness
- Insulation
- Provision made for fitting with 600 x 600 mm double cover closure (closure not supplied)



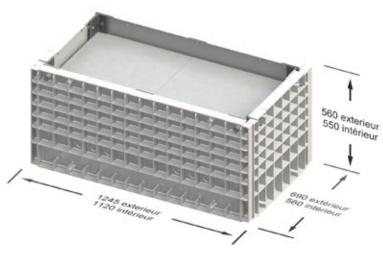


#### Use

The RGV is a large-volume meter box that enables customers to be connected to the water distribution network.

It allows integration of multiple meters or high-flow-rate metering.







#### TIMESAVER:

- Quicker installation of chambers in trenches
- Quicker transportation of chambers to worksite

#### **ECONOMIC SOLUTION:**

- Requires less laying and installation time
- Requires fewer personnel for installation
- Minimal use of worksite machinery (digger, lifting equipment, trucks, etc.)

#### • LIGHTWEIGHT:



60 kg Can be handled by 2 people

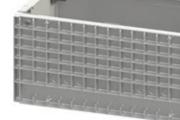


#### Meter integration:

Enables integration of **DN15 - 60 meters** with PE  $\emptyset$  25 connections







Flat-pack kit

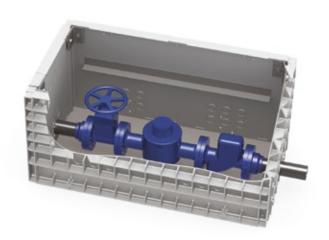
Pre-assembled

Description	Reference
Empty, insulated RGV without drill holes	0996.067
Insulated RGV with drill holes and manifold (PE 50 – 8 x PE 25) for 8 meters max.	0996.068
Upstream hydraulics (DN15 - PE 25 lockable valve)	0996.069
Downstream hydraulics (DN15 - PE 25 check valve)	0996.070
Downstream hydraulics with valve after meter (DN15 - PE 25 valve/check valve)	0996.071

#### > CONFIGURATION EXAMPLES



Equipped with 8 DN15 meter assemblies (meters not supplied)



Box with DN60 meter



## **AQUAX** meter box

COMPACT METER BOX FOR DN15/DN20 METERS

**AQUAX** is a range of compact meter boxes for **coaxial DN15** and **DN20 meters** that enable customers to be connected to the drinking water network.



#### **NEW**

Equipped with PE100D polyethylene pipes resistant to disinfectants



#### Ready to connect:

- Hydraulics equipped with a cut-off function (1/4-turn or multi-turn), NF check valve, upstream and downstream captive drain plugs
- 3 connection solutions (bare PE, automatic synthetic connector or brass connector with mechanical clamping)

#### Freeze resistance:

Fully insulated, can be equipped with heat pipe providing constant heat supply, improving freeze resistance performance



All components recyclable and easy to separate

#### Perfect integration on site:

- 2 levels of load resistance for cover
- 3 depth levels. Vertical adjustment up to 20 cm and angle adjustment.



#### Coaxial meter integration:

Nominal flow rate up to 2.5 m<sup>3</sup>/h **G1-1/2 thread** 

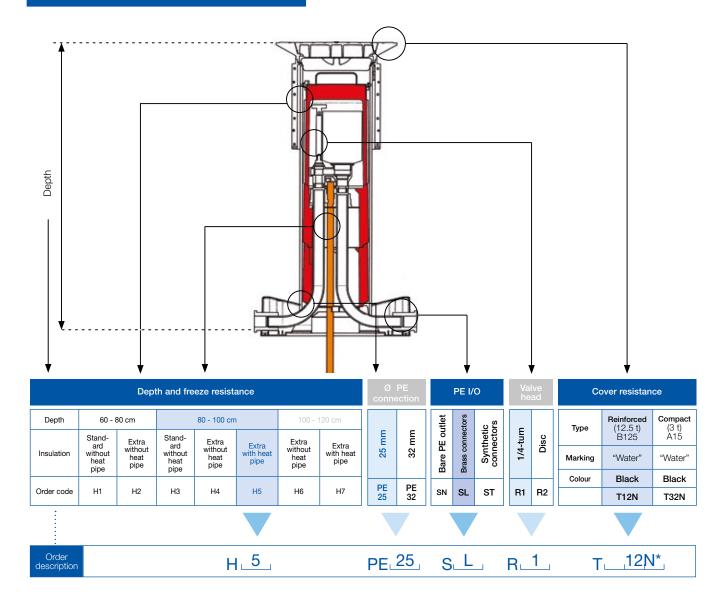


Standard cover (3.5 t)



Reinforced cover B125 (12.5 t)

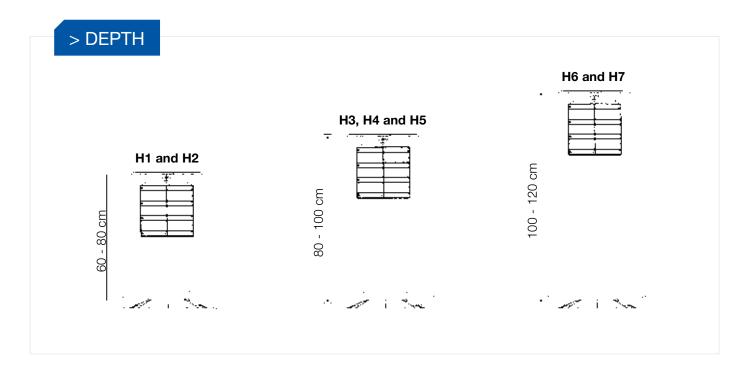
#### > CREATE YOUR REFERENCE

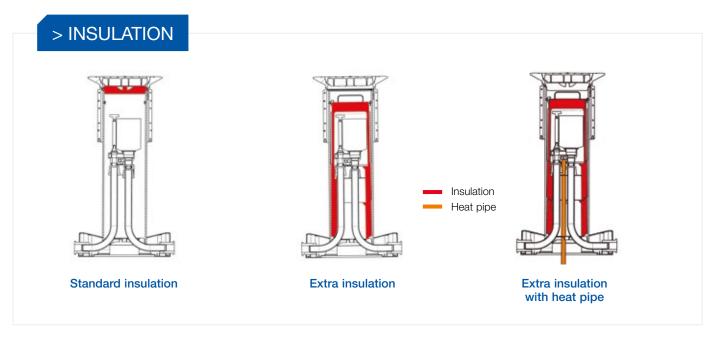


<sup>\*</sup>Reference example of 80-100 cm meter box with extra insulation and heat pipe, with 25 mm PE with brass connector outlet, 1/4-turn valve head and reinforced cover and frame (12.5 t).

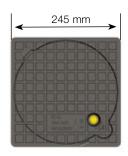
Descriptions	Ref.
Brass blanking plug for base	0925.794
By-pass plug for base	0925.795
1/4-turn valve head	0990.251
Square disc valve head	0990.252
Hydrant key for fluted 1/4-turn head	0990.254
Hydrant key for triangular disc head	0990.255
Hydrant key for square disc head	0990.868
1/4-turn head locking kit	0974.004
Lock cylinder + key	0974.003
Screw end-piece for lockable valve head	4.084.884
Disc valve disassembly tool	0990.257

Descriptions	Ref.
Check valve with support	0990.253
Drain plug (1 unit)	0990.256
3.5 t cover (A15) with hinge	0990.867
12.5 t cover (B125)	0990.870
3.5 t cover with lock and insulation	0990.282
12.5 t cover with extension section	0990.281
3.5 t cover with extension section	0990.280
Replacement lock for 3.5 t cover	0990.283
Standard insulation block	0990.271
Extra insulating cap	0990.270
Hinge + pin for hinged cover (pack of 10)	0990.875





#### > ADJUSTABLE AND TILTABLE COVER



Standard Load: 3.5 t (class A15 as per standard NF EN 124) for areas used by pedestrians and cyclists only



Reinforced Load: 12.5 t (class B125 as per standard NF EN 124) for pavements, pedestrian and comparable areas, car parks and multi-storey car parks

#### > PRODUCT PHOTOS



Meter box Ref. H4 PE 32 ST R1 T32N



Connections with quick synthetic connectors



3.5 t compact cover

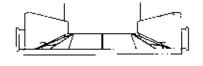


**Hydraulics** 

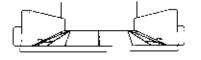
#### > PE CONNECTION



Bare PE connections



Brass connections for mechanical clamping



Automatic synthetic connectors





### **OVALO** meter box

#### COMPACT MFTFR BOX FOR DN15 IN-LINE METERS

**OVALO** is a range of compact meter boxes for **DN15 in-line water meters** measuring 110 mm - 170 mm (3/4" or 20/27 thread), making it possible to connect customers to the drinking water network.

Designed with fibreglass-reinforced synthetic material, these meter boxes provide an effective response to mechanical, thermal and installation conditions.





#### **NEW**

Equipped with PE100D polyethylene pipes resistant to disinfectants



#### **Advantages**

#### Standard meter boxes (ready to connect):

- Use of standard hydraulic components (valve with sliding meter, anti-pollution check valve with captive drain plugs upstream and downstream, and integrated PE connector)
- Delivered as standard with Ø 25 PN20 (NF) PE and adjustable feet

#### Fully insulated meter boxes:

- Optimal insulation without thermal bridge
- Insulation under cover
- Insulating cap on meter
- Insulation on vertical walls



Synthetic cover (5 t)



C250 cast iron cover

#### Functional meter boxes:

- 3 depth levels: 60/80-80/100-100/120 cm Vertical adjustment up to 20 cm and angle adjustment for each meter box
- Load resistance: range of covers for applications ranging from private areas to class C250 for public spaces
- Meter connection assistance: the Ovalo range has 2 types of fixed and plug-in hydraulics.
   Each one offers solutions that facilitate meter connection.

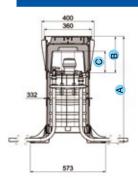
#### Environmentally-friendly meter boxes:

The Ovalo range has the design characteristics required of an eco-product.

It is easy to recycle these meter boxes at the end of their service life:

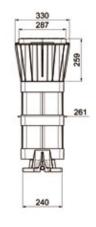
- reduced number of components
- elements easy to separate
- reduced number of materials
- 100% recyclable insulation

#### > PRODUCT SELECTION



#### **Fixed hydraulics version**

FIXED VERSION (in mm)	60/80	80/100	100/120
A (Overall dimensions)	600 - 800	800 - 1000	1000 - 1200
B (Meter centreline depth depending on plate position)	277 - 477	277 - 477	277 - 477
C (Available height above meter centreline depending on plate position)	165	165	165

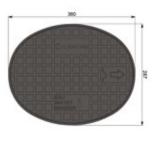


#### Plug-in hydraulics version

PLUG-IN VERSION (in mm)	60/80	80/100	100/120
A (Overall dimensions)	600 - 800	800 - 1000	1000 - 1200
B (Meter centreline depth			
depending on plate position)	225 - 425	300 - 500	300 - 500
C (Available height above meter centreline depending on plate position)	113	188	188

#### > COVERS

### Private areas (1.5 t), able to withstand everyday loads in private area (e.g. category B vehicle)

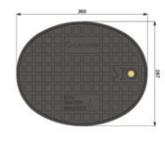


Class as per NF EN 124: A15 Resistance: 1.5 t Locking bar: No Cover material: Synthetic Frame material: Synthetic

Example of mechanical resistance:

withstands passage of vehicle (3.5 t) **Cover insulation:** Yes

### Public area (5 t), able to withstand difficult worksite conditions



Class as per NF EN 124: A15
Resistance: 5 t
Locking bar:
13 hex, slotted head
Cover material: Synthetic
Frame material: Synthetic
Example of mechanical resistance:
withstands passage of 10 m³ truck
(13 t axle weight)
Cover insulation: Yes

### **B125** (12.5 t) pavements, pedestrian areas, car parks



Class as per NF EN 124: B125 Resistance: 12.5 t Locking bar: 13 hex, slotted head Cover material: cast iron Frame material: Synthetic Cover insulation: Yes

#### C250 (25 t) up to gutter area, roads, alongside pavements\*



Class as per NF EN 124: C250 Resistance: 25T Locking bar: 14 x 14 square, slotted head Cover material: cast iron Frame material: synthetic Cover insulation: Yes

\*Up to 0.5 m onto the highway and 0.2 m into the verge



#### > PLUG-IN HYDRAULIC VERSION

# for DN15 110 - 170 mm meter (3/4" or 20/27 thread)

#### Advantages - easy meter connection:

- Meter removal and adjustment outside meter box
- Quick and easy removal of meter via 2 unlocking rings on automatic connectors



3/4" meter connection elbows



Meter integration: DN15, length 110 and 170 mm

Meter security seal supplied

Upstream automatic connector

Upstream automatic connector

Valve security seal (factory locked)

NF check valve with drain plugs

Valve before DN15 meter

PE connector
with mechanical
clamping





Meter removal

#### References

Depth	60/80** ▲	80/100 🛦	100/120 🛦	Pack- aging
Private area (1.5 t)	0258.528	0258.529	0258.530	
Public area (5 t)	0258.525	0258.526	0258.527	9/
B125 (12.5 t)	0258.522	0258.523	0258.524	pallet
C250 (25 t)	0258.519	0258.520	0258.521	



<sup>\*\*</sup>delivered with factory curved Ø 25 PE pipes

Other hydraulic fittings on request (PE 32, Excel Plus PE, valve after meter, etc.)





Descriptions	Ref.	Descriptions	Ref.
Cover with insulation for private area	0996.018	110 mm 3/4" blanking plugs (pack of 5)	0990.890
Cover with insulation for public area	0996.019	Meter connection elbow accessory	0996.024
Cover seals (pack of 10)	0996.017	Meter connection elbow accessory	
Frame for private or public area covers	4093.169	- flow limiter <b>0996.025</b>	
Insulated extension section	0996.016	Brass connectors (pack of 2)	
Insulating cap	4093.176	for PE Ø 32/25 connection	0974.063
Cover insulation with mounting	0996.020	Synthetic connections (pack of 2)	
Meter seal accessory (pack of 6 o-ring seals)	0990.865	for PE Ø 25/25 connection	0974.062
Blanking plugs, L 170 mm (pack of 5)	0990.891	Synthetic connections (pack of 2)	
110 mm 3/4" by-pass plugs (pack of 5)	0990.889	for PE Ø 32/25 connection	0974.064
		Brass connectors (pack of 2)	
		for PE Ø 25/25 connection	0974.061

<sup>▲</sup> delivered with Ø 25 PN20 (NF) PE

#### > FIXED HYDRAULICS VERSION

#### for DN15 meter, 110 mm (3/4" or 20/27 thread)

#### Advantages - easy meter connection:

- Flat captive seals
- Meter support bearings allowing alignment of meter with connection nuts
- Valve before sliding meter





Meter integration: DN15, length 110 mm



Valve before DN15 sliding meter

PE connector
with mechanical clamping
integrated into valve

Bearings (meter supports)



PE connector with mechanical clamping integrated into check valve



#### References

Depth	60/80*	80/100*	100/120*	Pack- aging
Private area (1.5 t)	0258.500	0258.501	0258.502	
Public area (5 t)	0258.503	0258.504	0258.505	9/
B125 (12.5 t)	0258.506	0258.507	0258.508	pallet
C250 (25 t)	0258.509	0258.510	0258.511	

\*delivered with Ø 25 PN20 (NF) PE

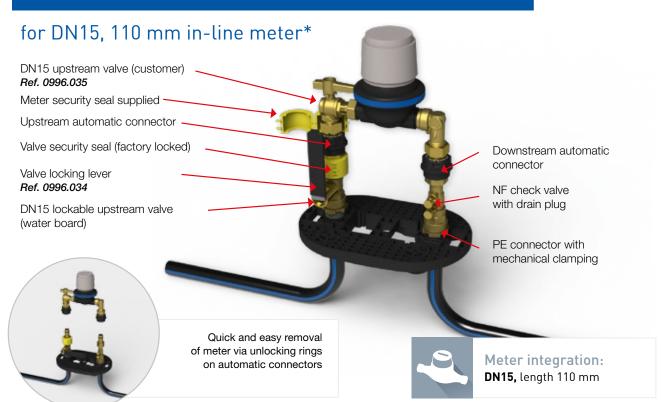


Other hydraulic fittings on request (PE 32, Excel Plus PE, valve after meter, etc.)

Descriptions	Ref.
Cover with insulation for private area	0996.018
Cover with insulation for public area	0996.019
Cover with insulation - B125	0996.027
Cover seals (pack of 10)	0996.017
Frame for private/public area or B125 covers	4093.169
Insulated extension section	0996.016
Insulating cap	4093.176
Cover insulation with mounting	0996.020
Pair of meter support bearings	0996.014
Sliding valve before meter, PE Ø 25 - 3/4"	4093.334
110 mm 3/4" by-pass plugs (pack of 5)	0990.889
110 mm 3/4" blanking plugs (pack of 5)	0990.890

Descriptions	Ref.
Check valve with upstream and downstream drain plugs, PE 25 - 3/4"	4093.335
EPDM 3/4" captive meter seals (pack of 20)	0996.015
Brass connectors (pack of 2)	
for PE Ø 25/25 connection	0974.061
Brass connectors (pack of 2)	
for PE Ø 32/25 connection	0974.063
Synthetic connections (pack of 2)	
for PE Ø 25/25 connection	0974.062
Synthetic connections (pack of 2)	
for PE Ø 32/25 connection	0974.064
Valve locking key	0996.125

#### > PLUG-IN HYDRAULIC VERSION WITH DOUBLE CUT-OFF



Covers Depth **equipped with lock	60/80 mm	80/100 mm	100/120 mm
Private area (synthetic) Withstands passage of 3.5 t vehicle	0258.542	Please contact us	
Public area (synthetic)** Withstands passage of 38 t vehicle	0258.543		
<b>B125 (cast iron)**</b> as per NF EN 124	0258.544		
<b>C250 (cast iron)**</b> as per NF EN 124	Ple	ease contact us	3

Meter boxes equipped with Ø 25 PN20 PE - EXCEL-PLUS® mounting (please contact us)

#### **Examples of accessories**





Ref. 0996.035

Ref. 0996.025

\*Meter not supplied
\*\*Equipped with lock

Descriptions	Ref.
Descriptions	nei.
Cover with insulation for private area	0996.018
Cover with insulation for public area	0996.019
Cover with insulation - B125	0996.027
Cover seals (pack of 10)	0996.017
Frame for private/public area or B125 covers	4093.169
Insulated extension section	0996.016
Insulating cap	4093.176
Cover insulation with mounting	0996.020
Meter seal accessory (pack of 6 o-ring seals)	0990.865

Descriptions	Ref.
110mm by-pass plug (pack of 5)	0990.889
110 mm blanking plug (pack of 5)	0990.890
Meter connection elbow accessory	0996.024
Meter connection elbow accessory - flow limiter	0996.025
Brass connectors for PE Ø 25/25 (pack of 2)	0974.061
Synthetic connectors for PE Ø 25/25 (pack of 2)	0974.062
Brass connectors for PE Ø 32/25 (pack of 2)	0974.063
Synthetic connectors for PE Ø 32/25 (pack of 2)	0974.064

# **CAHORS** know-how

#### SPECIALIST FIELDS



#### Hydraulic test bench

- Pressure tests
- Head loss tests
- Flow tests





#### Leak test bench

- Air/air leak testing
- In-production testing of hydraulic assemblies





#### Climate chamber

- Tests according to customer protocol
- Down to -20°C





#### Laboratory testing

- Material qualification
- Mechanical strength tests





#### Design office

- Product customisation
- New product design according to customer specifications







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