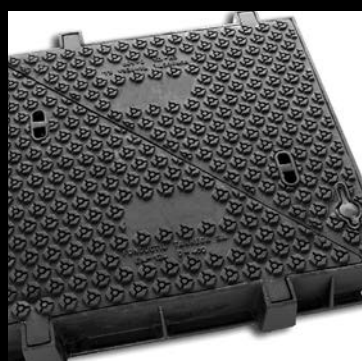


OPENSIN

Manhole covers, frames and grates made of ductile cast iron.



Exclusive importer for Romania
S.C. OPENSIN S.R.L. Sinaia – Prahova

Introduction

We are pleased to present the new general catalogue of products of OPENSIN SRL, a company founded in 1999 with an experience of 5 generations in cast iron industry.

These products will be imported and distributed by SC OPENSIN LLC Sinaia - Prahova.

Currently part of the group GLS (through merger with companies of prefabricated products LERIPRESA, CAFISOL and VITUC), our company offers a wide range of products of iron and solutions in the field of covering and closing devices, for sewage and drainage, aimed for public roads works.

All our products are manufactured from ductile iron, which has excellent mechanical properties and a high tensile strength and elasticity (ability to deform before breaking).

Our company offers a professional team of technical and sales professionals for advice and / or the projects you want to perform.

Our philosophy, desire for improvement, product quality, strict compliance with the standard UNE-EN 124, seriousness in providing fast and efficient services make us permanently adapt to market requirements.

We have a general catalogue of prices, drawings of parts and products test certificates issued by external laboratories and product certifications from SGS and LRQA.

However we hope all these to be of great help and trust in us and our products.

UNE-EN 124: 1995 sets out the constructive principles of materials, classification, terminology, tests and marking type and quality controls.

4. Classification: Coverage and closure devices are divided into the following classes: A-15, B-125, C-250, D-400, E-600, F-900.

5. Place of use: the class, suitable for installation of coverage and closure devices depends on the installation place. They were divided into groups numbered from 1 to 6:

Group 1

Class A -15, breaking load > 15 kN - 1.5 tons - areas frequented exclusively by pedestrians and cyclists.

Group 2

Class B -125, breaking load > 125 kN - 12.5 tons - Sidewalks, pedestrian zones and similar surfaces, parking areas and multi-level car parking.

Group 3

Class C -250, breaking load > 250 kN - 25 tons - Sidewalks and areas with manholes stuck to the sidewalks.

Group 4

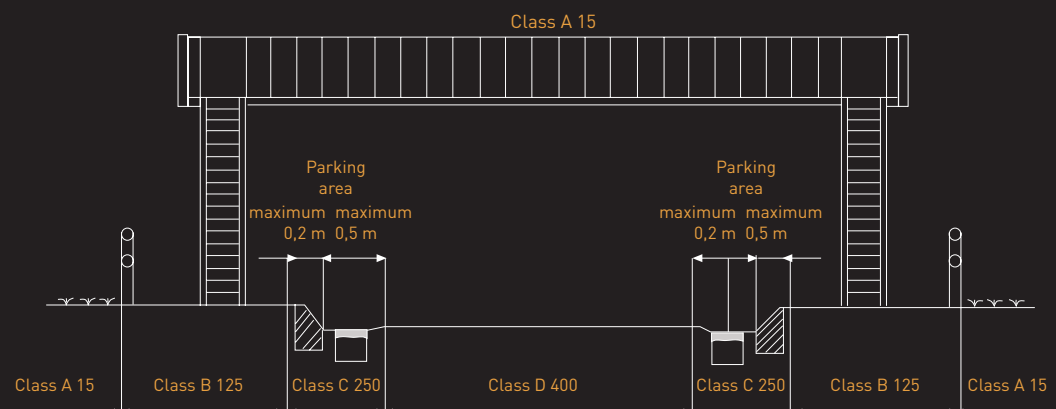
Class D -400, breaking load > 400 kN - 40 tons - road surfaces, stabilized shoulders and parking areas for all types of vehicles.

Group 5

Class E -600, breaking load > 600 kN - 60 tons - Areas with heavy traffic, airports and piers.

Group 6

Class F -900, breaking load > 900 kN - 90 tons - Areas subject to high loads, e.g. airport runways.



The responsibility for the appropriate class belongs to the designer. If there are doubts about the class to be used, it is necessary to choose the class with the highest resistance.

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Manhole cover with locking - circular frame

Dimensions in mm.



Locking is made by means of three flaps at the bottom of the cover, making a twist of 5 cm, the cover remaining combined (as if it would be screwed); the third flap has integrated an iron lock with threaded holes, which remains blocked.

Lockable with stainless steel screw. Anti-theft protection. Frame with polyethylene lining, noise protection.

General inscriptions: WITHOUT NUMBER, CLAVEGUERAM, DRAIN, SUPPLY.

Antioxidant black paint finish.

Ref.	External length of the frame ØA	Height H	Cover length ØB	Free step ØP	Weight kg/pc.	Class
TP1	850	100	650	600	57	D-400
TP111	750	75	600	550	44	D-400
TP1ECO	750	65	600	550	39	400 KN
TP1G	1120	150	840	800	129	D-400 / E-600

Manhole cover with locking - square frame

Dimensions in mm.



Locking is made by means of three flaps the bottom of the cover, making a twist of 5 cm, the cover remaining combined (as if it would be screwed); the third flap has integrated an iron lock with threaded holes, which remains blocked.

Lockable with stainless steel screw. Anti-theft protection. Frame with polyethylene lining, noise protection.

General inscriptions: WITHOUT NUMBER, CLAVEGUERAM, DRAIN, SUPPLY.

Antioxidant black paint finish.

Ref.	External length of the frame ØA	Height H	Cover length ØB	Free step ØP	Weight kg/pc.	Class
TP2	850x850	100	650	600	68	D-400
TP2G	1000x1000	100	780	700	130	D-400 / E-600

Manhole cover with locking - surface square frame

Dimensions in mm.



Locking is made by means of three flaps at the bottom of the cover, making a twist of 5 cm, the cover remaining combined (as if it would be screwed); the third flap has integrated an iron lock with threaded holes, which remains blocked.

Lockable with stainless steel screw. Anti-theft protection. **Surface square frame** with polyethylene lining, noise protection.

General inscriptions: WITHOUT NUMBER, CLAVEGUERAM, DRAIN, SUPPLY.

Antioxidant black paint finish.

Ref.	External length of the frame ØA	Height H	Cover length ØB	Free step ØP	Weight kg/pc.	Class
TP3	850x850	100	650	600	81	D-400

Manhole cover with hinges - circular frame

Dimensions in mm.



Cover with hinges, reversible up to 120° and detachable at 90°.

For TP1A and TP1AECO: elastic, flexible, cast iron closing, with back stroke flap.

Frame with polyethylene lining, noise protection.

General inscriptions: WITHOUT NUMBER, CLAVEGUERAM, DRAIN, SUPPLY.

Antioxidant black paint finish.

Ref.	External length of the frame ØA	Height H	Cover length ØB	Free step ØP	Weight kg/pc.	Class
TP1A	850	100	650	600	57	D-400
TP111A	750	75	600	550	44	D-400
TP1AECO	750	65	600	550	39	400KN
TP1ABCN	850	100	670	620	75	D-400 / E-600

Manhole cover with hinges - square frame

Dimensions in mm.



Cover with hinges, reversible up to 120° and detachable at 90°.

For TP2A: elastic, flexible closure made of cast iron, with back stroke flap.

Frame with polyethylene lining, noise protection.

General inscriptions: WITHOUT NUMBER, CLAVEGUERAM, DRAIN, SUPPLY.

Antioxidant black paint finish.

Ref.	External length of the frame ØA	Height H	Cover length ØB	Free step ØP	Weight kg/pc.	Class
TP2A	850x850	100	650	600	68	D-400
TP2ABCN	850x850	100	670	620	82	D-400 / E-600

Manhole cover with hinges - surface square frame

Dimensions in mm.



Cover with hinges, reversible up to 120° and detachable at 90°.

For TP3A: elastic, flexible closure made of cast iron, with back stroke flap.

Frame with polyethylene lining, noise protection.

General inscriptions: WITHOUT NUMBER, CLAVEGUERAM, DRAIN, SUPPLY.

Antioxidant black paint finish.

Ref.	External length of the frame ØA	Height H	Cover length ØB	Free step ØP	Weight kg/pc.	Class
TP3A	850x850	100	650	600	81	D-400
TP3ABCN	850x850	100	650	600	95	D-400



Manhole cover

Dimensions in mm.



Simple cover and frame, without locks or seals.

For TP60/ 250: General inscriptions: WITHOUT NUMBER, CLAVEGUERAM, DRAIN, SUPPLY.

Antioxidant black paint finish.

Ref.	External length of the frame ØA	Height H	Cover length ØB	Free step ØP	Weight kg/pc.	Class
TP60/400	660	40	590	550	35	C-250/400 KN
TP60/250	660	40	590	550	31	B-125/250 KN
TP50	560	35	490	450	30	B-125/250 KN
TP40	460	35	390	350	15	B-125/250 KN

Cover for grate type manhole

Dimensions in mm.



Locking is made by means of three flaps at the bottom of the cover, making a twist of 5 cm, the cover remaining combined (as if it would be screwed); the third flap has integrated an iron lock with threaded holes, which remains blocked.

Lockable with stainless steel screw. Anti-theft protection.

Frame with polyethylene lining, noise protection.

Antioxidant black paint finish.

Ref.	External length of the frame ØA	Height H	Cover length ØB	Free step ØP	Weight kg/pc.	Class
TPR1	850	100	650	600	61	D-400
TPR2	850x850	100	650	600	73	D-400

Cover for sealed manhole

Dimensions in mm.



Sealed cover and frame bearing a pressure of up to 1 bar.

Sealed closure (both sides) with four stainless steel screws and special elastomeric gasket.

Antioxidant black paint finish.

Ref.	External length of the frame ØA	Height H	Cover length ØB	Free step ØP	Weight kg/pc.	Class
TPE1	850	100	650	600	75	D-400
TPE2	850x850	100	650	600	85	D-400

Grate for IMPU drain

Dimensions in mm.



IMPU type folding grate and frame, anti-theft and anti-blocking protection for bicycles. **It can be adapted for installation in the continuation of a gutter of 30 cm.**

Antioxidant black paint finish.

Ref.	External length of the frame AxA	Height H	Grate length BxB	Free step PxP	Weight kg/pc.	Class
RI/IMPU	840x340	40	750x250	710x270	24	250 KN
RI/IMPUR	840x340	40	750x245	720x270	29	C-250
RI/IMPUV	840x340	70	750x245	720x270	33	C-250

IMPU-DIAGONAL Grate for drain

Dimensions in mm.



IMPU type folding grate and frame, anti-theft and anti-blocking protection for bicycles. **It can be adapted for installation in the continuation of a gutter of 30 cm.**

Antioxidant black paint finish.

Ref.	External length of the frame AxA	Height H	Grate length BxB	Free step PxP	Weight kg/pc.	Class
RI/IMPU-DIAG	840x340	40	750x245	720x270	29	250 KN

ONDA grate for drain

Dimensions in mm.



ONDULADA type folding grate and frame, anti-theft and anti-blocking protection for bicycles. **Reversible grate**, depending on the direction in which water comes (indicated by arrow).

Antioxidant black paint finish.



Ref.	External length of the frame AxA	Height H	Grate length BxB	Free step PxP	Weight kg/pc.	Class
RI/ONDA	810x360	40	730x285	710x270	33	C-250/400 KN

MERIDIANA Grate for drain

Dimensions in mm.



MER type folding grate and frame, anti-theft and anti-blocking protection for bicycles (Iron bars diagonally).

Reversible grate, depending on the direction in which water comes. **It can be adapted for installation in the continuation of a gutter of 30 cm.**

Antioxidant black paint finish.



Ref.	External length of the frame AxA	Height H	Grate length BxB	Free step PxP	Weight kg/pc.	Class
RI/MER	925x375	100	745x275	710x240	55	C-250/400 KN



CONCAVA Grate for drain

Dimensions in mm.



CONCAVAS type folding grate and frame, anti-theft and anti-blocking protection for bicycles.

Antioxidant black paint finish.

Ref.	External length of the frame AxA	Height H	Grate length BxB	Free step PxP	Weight kg/pc.	Class
RI/CONCAVA	570x370	40	535x335	500x300	18	250 KN
RI/6137	610x370	40	575x335	540x300	19	250 KN
RI/6137R	610x370	40	575x335	540x300	21	C-250
RI/6137R/400	630x400	104	565x330	520x290 570x340	65	D-400
RI/ASTUR	430x360	40	415x345	385x315	18	250 KN

TOPO Grate for drain

Dimensions in mm.



TOPO type folding grate and frame, anti-theft and anti-blocking protection for bicycles. At the bottom, it has an edge to join with the sewer.

Antioxidant black paint finish.

Ref.	External length of the frame AxA	Height H	Grate length BxB	Free step PxP	Weight kg/pc.	Class
RI/TOPO	720x420	40+40	600x350	550x295	38	250 KN

5026 Grate for drain

Dimensions in mm.



Folding grate and frame, anti-theft and anti-blocking protection for bicycles.

Antioxidant black paint finish.

Ref.	External length of the frame AxA	Height H	Grate length BxB	Free step PxP	Weight kg/pc.	Class
RI/5026	500x260	40	460x230	430x200	15	C-250

DIAGONAL Grate for drain

Dimensions in mm.



DIAGONAL type folding grate and frame, anti-theft and anti-blocking protection for bicycles.

Antioxidant black paint finish.

Ref.	External length of the frame AxA	Height H	Grate length BxB	Free step PxP	Weight kg/pc.	Class
RI/DIAGONAL	730x350	40	610x290	570x260	25	250 KN
RI/DIAG6239	620x390	40	560x290	530x310	25	250 KN

CUADRADA grate for drain

Dimensions in mm.



CUADRADA type folding grate and frame, anti-theft and anti-blocking protection for bicycles.

Antioxidant black paint finish.

Ref.	External length of the frame AxA	Height H	Grate length BxB	Free step PxP	Weight kg/pc.	Class
RA4040	465x465	37	400x400	350x350	17	C-250
RA5050	565x565	40	500x500	450x450	38	C-250
RA6060	660x620	40	600x600	550x550	43	C-250
RA7070	765x720	42	700x700	650x650	61	C-250
RA8080	860x820	44	800x800	750x750	85	C-250

CAZ grate for sewer

Dimensions in mm.

NOVELTY



Ref.	External length of the frame AxA	Height H	Grate length BxB	Free step PxP	Weight kg/pc.	Class
RI/CAZ	600x500	140	474x374	430x330	65	D-400
RI/CAZ-KVM	600x500	108	470x370	430x330	55	D-400

Grate for sewer, with ONDA cast iron drain

Dimensions in mm.



Drain housing made of ductile cast iron.
Cast iron counter-step, internal seal box.
Antioxidant black paint finish.

Ref.	External length AxA	Height H	Grate length BxB	Free step AxA	ØTube	Weight kg/pc.	Class
RISSF/ONDA	670x250	570	640x220	630x195	210	85	C-250

Grate for sewer, with 5730 cast iron drain

Dimensions in mm.



Drain housing made of ductile cast iron.
Cast iron counter-step, internal seal box.
Antioxidant black paint finish.

Ref.	External length AxA	Height H	Grate length BxB	Free step AxA	ØTube	Weight kg/buc.	Class
RISSF/5730	570x300	570	530x280	500x250	200	80	C-250

TA covers for manholes

TA cover for manholes

Dimensions in mm.



HYDRAULIC

Hydraulic U-shaped frame supported by the cover.

General inscriptions: TA40 S/N, E.P., A.P., T.C., TELEPHONY, WATER, PUBLIC LIGHTING, TA60 S/N, E.P., **A.P.WATER**, PUBLIC LIGHTING.
Antioxidant black paint finish.

Ref.	External length of the frame AxA	Height H	Grate length BxB	Free step PxP	Weight kg/pc.	Class
TA30	320x320	30	280x280	250x250	8	B-125
TA40	420x420	30	385x385	350x350	13	B-125
TA50	540x540	35	485x485	450x450	18	B-125
TA60	640x640	40	585x585	545x545	28	B-125
TA70	740x740	40	680x680	630x630	45	B-125
TA80	840x840	40	780x780	710x710	55	B-125
TA90	970x970	50	880x880	810x810	78	B-125
TA110	1100x1100	50	1080x1080(2)	1000x1000	125	A-15
TA130	1300x1300	50	1280x1280(2)	1200x1200	160	A-15

TAR – TARR cover for manhole

Dimensions in mm.



HYDRAULIC

Hydraulic U-shaped frame supported by the cover.

Antioxidant black paint finish.

Ref.	External length of the frame AxA	Height H	Grate length BxB	Free step PxP	Weight kg/pc.	Class
TAR30	300x300	45	240x240	200x200	12	C-250
TAR40	400x400	50	340x340	300x300	18	C-250
TAR50	500x500	50	430x430	400x400	26	C-250
TAR60	600x600	55	535x535	500x500	38	C-250
TAR70	700x700	60	640x640	600x600	55	C-250
TAR80	800x800	62	740x740	700x700	79	C-250

HYDRAULIC

Ref.	External length of the frame AxA	Height H	Grate length BxB	Free step PxP	Weight kg/pc.	Class
TARR40	400x400	100	340x340	300x300	29	D-400
TARR50	500x500	100	440x440	400x400	40	D-400
TARR60	610x610	100	535x535	500x500	59	D-400
TARR70	700x700	100	640x640	600x600	85	D-400
TARR90	960x960	110	840x840	800x800	94	D-400

TAPH cover for manhole

Dimensions in mm.



WITH THE POSSIBILITY OF MOUNTING IT IN CONCRETE

Hydraulic U-shaped frame supported by the cover.

Antioxidant black paint finish.

Ref.	External length of the frame AxA	Height H	Grate length BxB	Free step PxP	Weight kg/pc.	Class
TAPH40	415x415	60/35	385x385	330x330	18	B-125
TAPH50	490x490	60/35	460x460	400x400	24	B-125
TAPH60	610x610	60/35	585x585	530x530	35	B-125
TAPH70	700x700	60/35	680x680	600x600	62	B-125

TRMC cover for manhole

Dimensions in mm.



CAMPSA TYPE

CAMPSA type. Antioxidant black paint finish.

Ref.	External length of the frame AxA	Height H	Cover length BxB	Free step PxP	Weight kg/pc.	Class
TRMC32	420x420	30	Ø320	Ø300	14	B-125
TRMC56	620x620	35	Ø560	Ø520	32	B-125

Covers for TAE electric manholes

Electric covers for IBERDROLA manholes

Dimensions in mm.



IBERDROLA TYPE

For TAE-M1T1: it can be embedded in the concrete (on the opposite side).

For TAE-M3T3: with locking through 3 flaps at the bottom of the cover, performing a twisting of 5 cm, the cover remaining joined (as it would be screwed); the third flap is integrated with a stainless steel screw lock, which remains blocked. Anti-theft protection.

Antioxidant black paint finish.

Ref.	External length of the frame AxA	Height H	Cover length BxB/ØB	Free step PxP	Weight kg/pc.	Class
TAEI-M1T1	580x440	65	550x410	470x335	39	B-125
TAEI-M2T2	695x695	65	665x665	590x590	64	B-125
TAEI-M3T3	Ø850	100	Ø650	Ø610	59	D-400

Electric covers for SEVILLANA (Endesa) manholes

Dimensions in mm.



SEVILLANA (ENDESA) TYPE

Type A1 individual, with cast iron frame, and type A2 double, with angular frame, L-60mm.

Antioxidant black paint finish.

Ref.	External length of the frame AxA	Height H	Cover length BxB	Free step PxP	Weight kg/pc.	Class
TAES-A1	750x650	65	720x620	675x580	65	D-400
TAES-A2	1260x735	60	1240x720	1140x615	130	D-400

Electric covers for UNELCO manholes

Dimensions in mm.



UNELCO TYPE

General inscriptions: B.T., M.T., A.T.

Antioxidant black paint finish.

Ref.	External length of the frame AxA	Height H	Cover length BxB/ØB	Free step PxP	Weight kg/pc.	Class
TAEU-A1	460x460	40	450x450	420x420	24	B-125
TAEU-A2	750x500	40	710x460	675x425	35	B-125
TAEU-A3	960x710	45	960x710	910x670	75	B-125
TAEU-B2	Ø1000	150	Ø720	Ø670	98	D-400



Triangular type, with hinges TAF07070-2C

Dimensions in mm.



Double, triangular-shaped, reversible cover with safety locking at 120° and detachable at 90°.

Overlapping covers with the 3 possible closures: screw and threaded stainless steel sheath/ screw with spring and stainless steel passage / double elastic clamp with locking bars system (possibly with handling key, separate pulling and closing element).

Hinges and joints integrated in the frame for a natural continuation with the pavement.

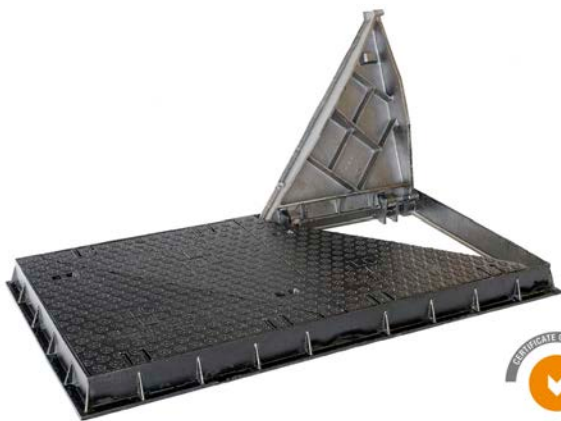
General inscriptions: T.C. / F.O. + OPERATOR'S LOGO.

Antioxidant black paint finish.

Ref.	External length of the frame AxA	Height H	Grate length BxB	Free step PxP	Weight kg/pc.	Class
TAF07070-2C	880x880	100	780x780	760x760	140	D-400

Triangular type, with hinges TAF014070-3C

Dimensions in mm.



Quadruple cover, triangular-shaped with safety locking at 120° and detachable at 90°.

Overlapping covers with the 3 possible closures: screw and threaded stainless steel sheath/ screw with spring and stainless steel passage / double elastic clamp with locking bars system (possibly with handling key, separate pulling and closing element).

Hinges and joints integrated in the frame for a natural continuation with the pavement.

General inscriptions: T.C. / F.O. + OPERATOR'S LOGO.

Antioxidant black paint finish.

Ref.	External length of the frame AxA	Height H	Grate length BxB	Free step PxP	Weight kg/pc.	Class
TAF014070-3C	1650x880	100	1560x780	1540x760	260	D-400
TAF011876	1280x870	100	1200x780	1180x760	235	D-400

TAHT Telephony type

Dimensions in mm.



Double cover, rectangular shape. Angular frame, L-65 mm.

General inscriptions: TELEPHONY

Antioxidant black paint finish.

Ref.	External length of the frame AxA	Height H	Grate length BxB	Free step PxP	Weight kg/pc.	Class
TAHF	900x800	60	875x390(x2)	800x700	98	B-125

TADF Telephony type

Dimensions in mm.



Triple cover, rectangular shape. Angular frame, L-65 mm.

General inscriptions: TELEPHONY

Antioxidant black paint finish.

Ref.	External length of the frame AxA	Height H	Grate length BxB	Free step PxP	Weight kg/pc.	Class
TADF	1220x1020	60	1000x400(x3)	1100x900	145	B-125
TADF-400	1320x1120	100	1000x410(x3)	1200x960	325	D-400

TAF0 - Covers for telecommunication manholes F.O.

Triangular type, with hinges TAF06060-1P

Dimensions in mm.



Double cover, triangular-shaped with safety locking at 120° and detachable at 90°.

Overlapping covers with spring screw closure and stainless steel passage (possibly with handling key, separate pulling and closing element).

General inscriptions: T.C. / F.O. + OPERATOR'S LOGO.

Antioxidant black paint finish.

Ref.	External length of the frame AxA	Height H	Grate length BxB	Free step PxP	Weight kg/pc.	Class
TAF06060-1P	740x740	100	640x540	600x600	105	D-400
TAF08070-A80	910x840	100	825x745	800x700	140	D-400

Triangular type, with hinges TAF012060-2P

Dimensions in mm.



Quadruple cover, triangular-shaped with safety locking at 120° and detachable at 90°.

Overlapping covers with spring screw closure and stainless steel passage (possibly with handling key, separate pulling and closing element).

General inscriptions: T.C. / F.O. + OPERATOR'S LOGO.

Antioxidant black paint finish.

Ref.	External length of the frame AxA	Height H	Grate length BxB	Free step PxP	Weight kg/pc.	Class
TAF012060-2P	1340x766	100	1210x640	1200x600	220	D-400
TAF012070-A120	1330x840	100	1210x733	1200x700	245	D-400
TAF010670	1200x860	100	1070x733	1060x700	230	D-400

Rectangular with hinges

Dimensions in mm.



Double cover, rectangular-shaped with safety locking at 120° and detachable at 90°.

Overlapping covers with stainless steel screw.

Antioxidant black paint finish.

Ref.	External length of the frame AxA	Height H	Grate length BxB	Free step PxP	Weight kg/pc.	Class
TAF0-ACESA	1160x970	70	1140x940	1100x900	225	C-250

Modular rectangular

Dimensions in mm.



Modular, rectangular covers (double, triple or quadruple) in a single cast iron frame.

Antioxidant black paint finish.

Ref.	External length of the frame AxA	Height H	Grate length BxB	Free step PxP	Weight kg/pc.	Class
TAFE2	900x900	150	750x750	700x700	220	D-400
TAFE3	1650x900	150	1130x750	1130x700	300	D-400
TAFE4	1730x900	150	1500x750	1500x700	395	D-400



CANALDREN type

Dimensions in mm.



CANALDREN SYSTEM

Linear chaining system of bayonet type, the components being joined together in a linear mode.

Antioxidant black paint finish.

Ref.	External length of the grate AxA	Height H	Free step P	dm ² absorption surface	Weight kg/pc.	Class
RCA16NL	500x155	25	100	3	8	C-250
RCA21ML	500x215	25	160	4,5	11	C-250

CANALFIX type

Dimensions in mm.



CANALFIX SYSTEM

Grate with holding system to channel frame by 4 screws per grate (8 screws / linear meter).

Adequate safety: anti lifting and noise.

Antioxidant black paint finish.

Ref.	External length of the grate AxA	Height H	Free step P	dm ² absorption surface	Weight kg/pc.	Class
RCA15/400	500x150	23	100	3	8	D-400
RCA20	500x200	27	110	3,5	10	C-250
RCA20/400	500x200	27	110	3,5	14	D-400
RCA30	500x305	27	230	5,5	15	C-250
RCA30/400	500x305	27	230	5,5	20	D-400
RCA40/400	500x400	27	350	8	23	D-400

CANALFUN type

Dimensions in mm.



CANALFUN SYSTEM

Channel and grate made of ductile cast iron.

Channel with the ends united in the tongue and groove to facilitate bonding and to minimize the number of connection elements.

Grate with holding system to the channel frame by 4 screws per grate

CARE-30 and 2 screws per grate CARE-15 and CARE-20. Adequate safety: anti lifting and noise.

Antioxidant black paint finish.

Ref.	Length of the grate AxA	External length of the channel AxA	Height H	Free step P	Weight kg/pc.	Class
CARE15	750x125	750x145	120	100	22	C-250
CARE20	750x165	750x185	180	155	29	C-250
CARE30	750x275	750x300	200	245	46	C-250

CANALFIX 50 type

Dimensions in mm.

**CHANEL 50 SYSTEM WITH ANGULAR FRAME L-80, FIXED WITH SCREWS**

High level of absorption, suitable to intercept a large amount of water.

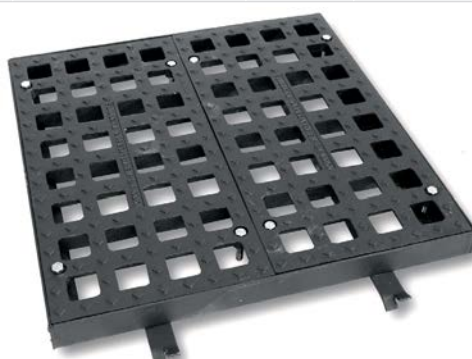
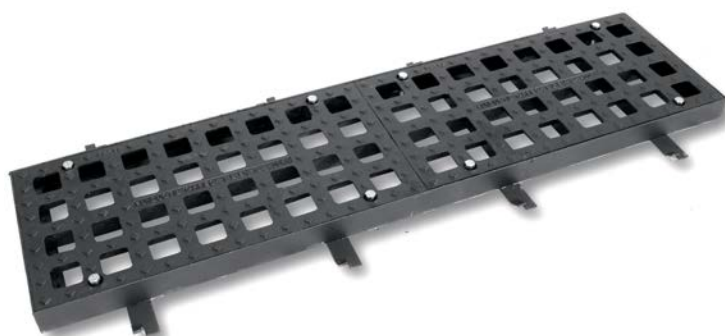
It can be supplied with screwed system.

Antioxidant black paint finish.

Ref.	External length of the grate AxA	Height H	Free step P	dm ² absorption surface	Weight kg/pc.	Class
RCA50	985x495	70	400	16	59	400 KN
RCA50/400	985x495	70	400	14	65	D-400
RC40505	500x400	53	320	7,5	25	D-400

Grate for canal 50 with angular frame, fixed with screws

Dimensions in mm.

**GRATE 50 SYSTEM WITH ANGULAR FRAME L-80, FIXED WITH SCREWS**

With frame fixed with screws.

High level of absorption, suitable to intercept a large amount of water.

It can be supplied with angular steel frame L-80 simultaneously with the screwed system.

Antioxidant black paint finish.

GRATES

Ref.	External length of the grate AxA	Height H	Free step P	dm ² absorption surface	Weight kg/pc.	Class
RCA50	985x495	70	400	16	59	400 KN
RCA50/400	985x495	70	400	14	65	D-400

ANGULAR FRAMES

Ref.	External length of the frame	Height H	Free step PxP
MA1xRCA50L	1000x500	80	850x360
MA2xRCA50L	2000x500	80	1840x360
MA3xRCA50L	3000x500	80	2380x360
MA2xRCA50A	1000x1000	80	850x850



Polymer concrete channel with CAPOL 13/15 grate

Dimensions in mm.



CAPOL SYSTEM WITHOUT FRAME

Polymeric channel, grate supported directly on the channel.
Grate fixed by the channel with a pulling screw against an internal pin.
Antioxidant black paint finish.

Ref.	Length of the grate AxA	Channel length AxBxH	Free step P	Weight kg/pc.	Class
CAPOL13/10	500x130	1000x130x105	100x85	18	C-250
CAPOL13/15	500x130	1000x130x155	100x175	25	C-250

Polymer concrete channel with CAPOL 18/25/30 grate

Dimensions in mm.



CAPOL SYSTEM WITH FRAME

Polymeric channel with embedded cast iron frame.
For CAPOL 18: grate fixed by the channel with a pulling screw against an internal pin.
For CAPOL 25, CAPOL 30: fixed with two screws in the frame.
Antioxidant black paint finish.

Ref.	Length of the grate AxA	Channel length AxBxH	Free step P	Greutate kg/buc.	Clasa
CAPOL18	500x180	1000x205x220	150x178	49	D-400
CAPOL25	500x250	1000x267x270	205x200	80	D-400
CAPOL30	500x300	1000x320x365	255x300	100	D-400

RC water retention grate

Dimensions in mm.



WATER RETENTION GRATE SYSTEM

It can be delivered with steel angular frame L-35.
Antioxidant black paint finish.

Ref.	External length of the grate AxA	Height H	Free step P	dm ² absorption surface	Weight kg/pc.	Class
RC20	750x200	27	150	5	13	C-250
RC25	750x250	27	200	6,5	18	C-250
RC30	750x300	27	250	8,5	23	C-250
RC35	750x350	27	300	10	29	C-250
RC40	750x400	27	350	12	32	C-250
RC50	750x500	27	450	16,5	40	C-250
RC60	750x600	27	550	19	85	C-250

TP · Customized covers

Madrid type covers

Cover for Madrid type manhole

Dimensions in mm.



For road surface

Covers without lock, 4 vents and a safety rib elevated 60 mm, for embedding surface.

Frame with rubber lining, noise protection.

General inscriptions: DRAINAGE - VISITING, CITY HALL OF MADRID - VISITING, CHANNEL ISABEL II - VISITING.

Antioxidant black paint finish.

Ref.	External length of the frame ØA	Height H	Cover length ØB	Free step ØP	Weight kg/pc.	Class
TP1M10	Ø825	100	Ø625	Ø580	56	D-400
TP1M16	Ø850	160	Ø625	Ø580	60	D-400

Cover for Madrid type manhole (sidewalk)

Dimensions in mm.



For sidewalk

Covers without lock, 4 vents.

Frame with rubber lining, noise protection.

General inscriptions: DRAINAGE - VISITING, CITY HALL OF MADRID - VISITING, CHANNEL ISABEL II - VISITING.

Antioxidant black paint finish.

Ref.	External length of the frame AxA	Height H	Cover length ØB	Free step ØP	Weight kg/pc.	Class
TP787862	780x780	45	Ø625	Ø580	45	B-125

Madrid type outlet channel

Dimensions in mm.



Manhole - absorbing device - channel pipe / sewer grate

Covers without lock, 4 vents.

General inscriptions: DRAINAGE - VISITING, CITY HALL OF MADRID - VISITING, CHANNEL ISABEL II - VISITING. **Grate adaptable to the outlet channel.**

Antioxidant black paint finish.

Grate with angular frame L-50 mm and L-55 mm.

Ref.	External length of the frame AxA	Height H	Cover length ØB	Free step ØP	Weight kg/pc.	Class
BM24	780x840	240	Ø625	Ø580	58	B-125

Ref.	External length of the frame AxA	Height H	Grate length ØB	Free step ØP	Weight kg/pc.	Class
RI/M6635	680x370	45	660x350	650x310	25	C-250
RI/M6040	690x420	50	640x400	600x320	35	C-250



Cover for Madrid type manhole

Dimensions in mm.



Covers for the sidewalk.

Ref.	External length of the frame AxA	Height H	Grate length BxB	Free step ØP	Weight kg/pc.	Class
TAM60	600x600	45	590x590	520x520	35	B-125
TAM80	800x800	45	790x790	720x720	50	B-125

Angular frame, L-45 mm. Antioxidant black paint finish.

TAMA60	665x665	75	560x560	520x520	42	C-250
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Cover and frame with hinges. Antioxidant black paint finish.

Connecting pipes Isabel II Channel

Dimensions in mm.



Connecting pipes CYII

With PVC attached tube and double lock with screws.
Antioxidant black paint finish.

Ref.	External length of the frame ØA	Height H	Cover length ØB	Free step ØP	Weight kg/pc.	Class
ACYII	300x300	250	Ø285	Ø250	12	B-125

Barcelona type covers

Barcelona type manhole cover- square frame

Dimensions in mm.



For road surface

Cover with hinges, reversible up to 120° and detachable at 90°.
Frame with polyethylene lining, noise protection.
General inscriptions: CLAVEGUERAM + Barcelona coat of arms
Antioxidant black paint finish.

Ref.	External length of the frame AxA	Height H	Cover length ØB	Free step ØP	Weight kg/pc.	Class
TP2ABCN	850x850	100	670	620	82	D-400

Cover for Barcelona type manhole- surface square frame

Dimensions in mm.



For road surface

Cover with surface hinges, reversible up to 120° and detachable at 90°.
Surface square frame, with polyethylene lining, noise protection.
General inscriptions: CLAVEGUERAM + Barcelona coat of arms
Antioxidant black paint finish.

Ref.	External length of the frame AxA	Height H	Cover length ØB	Free step ØP	Weight kg/pc.	Class
TP3ABCN	850x850	100	650	600	95	D-400

TP · Customized covers

Barcelona type grate

Dimensions in mm.



Grate for drain

MER type folding grate and frame, anti-theft and anti-blocking protection for bicycles. (Iron bars diagonally).

Reversible grate, depending on the direction in which water comes. It can be adapted for installation in the continuation of a gutter of 30 cm.

Antioxidant black paint finish.

Ref.	External length of the frame AxA	Height H	Grate length BxB	Free step PxP	Weight kg/pc.	Class
RI/MER	925x375	100	745x275	710x240	55	C-250/400 KN

Valencia type covers

Cover for Valencia type manhole

Dimensions in mm.



For road surface

Cover with hinges, reversible up to 120° and detachable at 90°.

Frame with polyethylene lining, noise protection.

Antioxidant black paint finish.

Ref.	External length of the frame AxA	Height H	Cover length ØB	Free step ØP	Weight kg/pc.	Class
TP2AVAL	850x850	100	670	620	100	D-400

Valencia type outlet channel

Dimensions in mm.



Curb

Antioxidant black paint finish.

Ref.	External length of the frame AxA	Height H	Cover length BxB	Free step PxP	Weight kg/pc.	Class
BVAL	950x550	200	400x400	380x380	83	B-125

Valencia type grate

Dimensions in mm.



Grate for drain

Antioxidant black paint finish.

Ref.	External length of the frame	Height H	Grate length BxB	Free step PxP	Weight kg/pc.	Class
RI/V3418	380x200	30	340x180	300x150	11	C-250



Zaragoza type covers

Cover for Zaragoza type manhole

Dimensions in mm.



For road surface

Cover and frame with mechanical support.
Antioxidant black paint finish.

Ref.	External length of the frame ØA	Height H	Cover length ØB	Free step ØP	Weight kg/pc.	Class
TP1ZAR	Ø820	150	Ø645	Ø600	100	D-400

Cover for Zaragoza type manhole

Dimensions in mm.



Covers for manholes

Antioxidant black paint finish.

Ref.	External length of the frame AxA	Height H	Grate length BxB	Free step ØP	Weight kg/pc.	Class
TAZ40	400x400	100	380x380	350x350	20,5	C-250
TAZ60	600x600	100	580x580	550x550	49	C-250

Zaragoza type grate

Dimensions in mm.



Grate for drain

It can be supplied with anti-theft chain.
Antioxidant black paint finish.

Ref.	External length of the frame AxA	Height H	Grate length BxB	Free step PxP	Weight kg/pc.	Class
RI/Z4732	470x320	65	420x270	380x230	24,5	C-250

Various cast iron products

Drain with syphon

Dimensions in mm.



Drain with syphon made of cast iron.
Antioxidant black paint finish.

Ref.	External length AxA	Height H	Ø tube output
SS1515	150x150	80	50
SS2020	200x200	80	70
SS2525	250x250	90	70
SS3030	300x300	100	90
SS4040	400x400	100	135

Irrigation hole

Dimensions in mm.



Irrigation hole, cast iron body, brass alloy connections.
Antioxidant black paint finish.

Ref.	External length AxA	Height H	Inferior input connection	Brass Output
BOCA1	230x150	200	1,5''	Filet metric 1,5''
BOCA2	230X150	200	1,5''	Piuliță fluture, racord BCN
BOCA3	230X150	200	1,5''	Filet Parcs y Jardins BCN
BOCA4	230X150	200	1,5''	Filet Madrid

Water passage hole

Dimensions in mm.

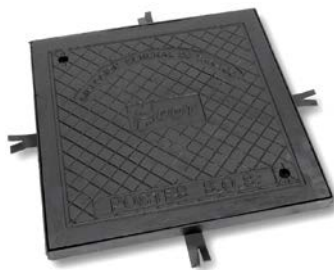


Ref.	External length of the frame AxA	Height H	Cover length BxB	Free step PxP	Weight kg/pc.	Class
BOCA5	Ø160/Ø215	200	110	90	8	B-125
BOCA6	Ø160/Ø230	170	130	105	9	B-125

Various cast iron products

DGT type cover

Dimensions in mm.

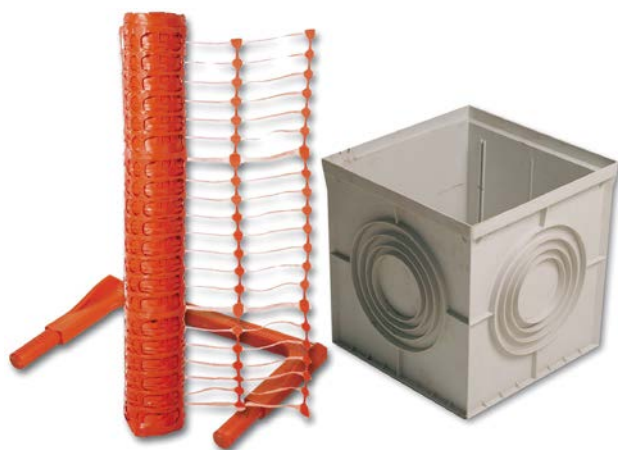


Angular frame, L-45 mm.
Antioxidant black paint finish.

Ref.	External length of the frame AxA	Height H	Cover length BxB	Free step PxP	Weight kg/pc.	Class
TADGT60	600x600	45	590x590	520x520	35	B-125
TADGT70	700x700	45	690x690	620x620	49	B-125

Polypropylene products

Dimensions in mm.



Polypropylene manhole

Ref.	Internal length AxA	Height H	External length BxB	Cover length CxC
APP25	254x254	300	290x290	284x284
APP35	354x354	400	393x393	383x383
APP50	500x500	480	550x550	530x530

Polypropylene frame

Ref.	Side x support element x side AxBxA
CADRU	250x330x250

With corrugated central steel rod with a diameter of 12 mm.
Standard colour: orange. Length of embedding spigot 80 mm and a hole of 25 mm diameter

Polypropylene mesh

Ref.	
MESH	rolls of 50 m x 1 m high (minimum 1000 m)

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