



Manhole Covers and gully gratings made of ductile iron

P-TOP® DRAINEX®







P-TOP® / DRAINEX® Philosophy



Ductile Iron

Ductile iron behaves elastically over a considerable stress range in both tension and compression. These attributes are caused by the spheroidal shaping of graphite in the material (see diagram). When exceedingly stressed, the material will be elastically deformed but will not break. The spheroidal structure also provides a higher strength-to-weight ratio compared with the properties inherent with grey iron manufacture.

The spheroidal shape of graphite in ductile iron optimizes the distribution of force lines in between the

material.

The **benefits** of ductile iron:

- Higher resistance and durability;
- Ergonomic handling caused by less weight;

• Construction of safety items such as hinges or locking systems.

High drainage capacity

Due to the constructional advantages of ductile iron the design of DRAINEX® is optimized for a better drainage performance. The wider slot cross-section ensures faster dewatering of traffic areas.

Locking system

Covers and gratings of the P-TOP®/DRAINEX® series automatically lock when closed due to the dual elastic spring bars on the underside of the cover.

They click into the frame, locking the manhole safely and firmly. To open the cover/grating, the resistance of the spring bars is overcome by a light jerk. The locking systems ensures the child-safety regulations according to EN 124.

Clatter-free

All manhole covers and gully gratings in the P-TOP® and DRAINEX® series are equipped with a damping system. This system is based on long-lasting elastomer inserts in the contact surfaces which prevent direct metal contact between frame and cover or gully grating.





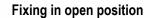
Hinged covers/gratings

The material characteristics of ductile cast iron enable the design of hinged manhole covers and gully gratings. The hinges considerably simplify working with manhole covers. The cover can be opened and closed easily and safely with minimum effort and without special tools.

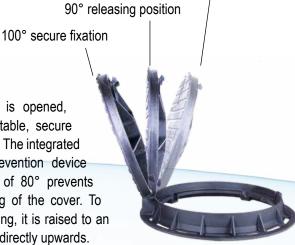
On closing the cover or the grating it is automatically aligned by an additional centring device in the frame. In the event of flooding, the hinge and centring device prevent the cover from being washed away and after flooding they ensure that the cover is lowered back into its secure original position.



80° closure prevention



When the cover/grating is opened, it remains fixed in a stable, secure upright position at 100°. The integrated accidental closure prevention device at an opening angle of 80° prevents the inadvertent closing of the cover. To release the cover/grating, it is raised to an angle of 90° and lifted directly upwards.



Custom logos and lettering

PURATOR provides custom logo covers for many municipalities and corporations in a multitude of cover designs to promote their identity.

Easy replacement

Covers and gratings of all P-Top types and all roundshaped Drainex types can be easily replaced by parts of the same series, even when frames are already mounted. For that purpose the cover has to be put in an opened position at 90°, now it can be pulled out of the hinge. The replacement cover can be attached in the same way.





General information

for manhole covers and gully gratings



Manhole tops and gully gratings are regulated by standard EN 124 and E DIN 1229:2013-5 (draft). Within areas subjected to pedestrian and/or vehicular traffic the standard classifies products according to their installation point in group 1 – 6:

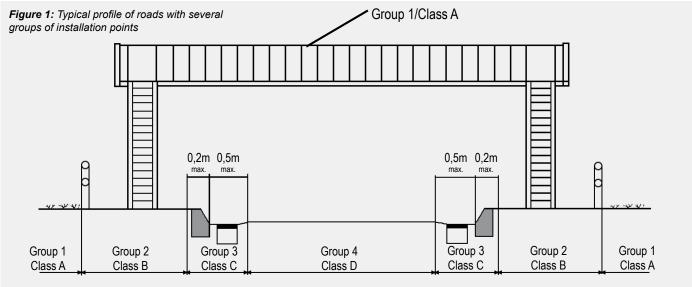
Group 1 / Class A015 Group 2 / Class B125 Areas which can only be used by pedestrians and cyclists Footways, pedestrian areas, car parks, car parking decks For gully tops installed in the area of kerbside channels of roads Group 4 / Class D400 Group 5 / Class E600 Group 6 / Class F900

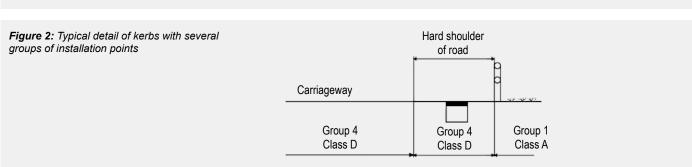
carriageways of roads for all types of road vehicles

Areas imposing high wheel loads, e.g. docks, industrial areas

Areas imposing particularly high wheel loads, e.g. aircraft pavements

NOTE: the effective wheel load conforms to only 25-30% of the test load (loading class). The group assigning of the standard is to be understood as a MINIMUM RECOMMENDATION! In case of any doubt always decide for higher loading class.





Following abbreviations are used in drawings: a (a x b) ... outside dimension of cover/ grating e (e x f) ... clear opening c (c x d) ... outside dimension of frame h ... overall height



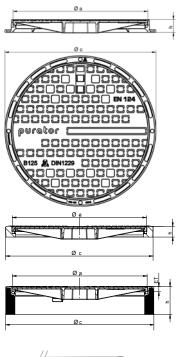


P-TOP® Medio

For footpaths and parking areas









Medio with sand capture (art.no. P11125SVX): The all-around tongue-and-groove shaped contactsurface between cover and frame avoids the intrusion of surface water and mud into the shaft.

Product features:

- Produced and tested according to EN 124 and DIN 1229
- Cover and frame: ductile iron
- Clatter-free due to elastomer insert integrated in the frame
- Single spring locking bar, automatic-locking
- Prepared for mud pans

Field of application:

For footpaths, passenger car parking and parking decks

Product details:

Art. No.	D	imensions m	m	01	Weight
	Ø e	Øс	h	Class	approx. kg
round frame, ducti	le iron				
P11125D(-1)X 1	602	707	60	B125	37,0
one-screw fitted					
P11125SSEC-X ²	602	707	60	B125	37,0
with sand capture					
P11125SVX	602	707	60	B125	37,0
round frame with o	oncrete base				
P17125D(-1)X 1	602	690	130	B125	69,0
round frame, ducti	le iron, liftabl	е			
P16125D(-1)X 1	602	690	50	B125	47,0
¹ Art.no. for variation	ns with vents: .	1			

Tender specifications:

Manhole cover DN 600 produced and tested according to EN 124 and DIN 1229, class B 125 without vents. Cover and frame: ductile iron, with elastomer insert integrated in the frame, cover with single locking-bar, prepared for mud pans.

Dimensions and weight s. table.

Options: with vents, bolted, with sand capture.



Liftable frame, ductile iron (Art.Nr. P16125DX)



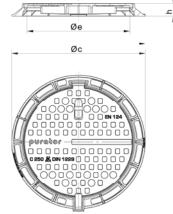
Medio one-screw fitted (Art.No. P11125SSEC-X)

² suitable wrench s. page 18

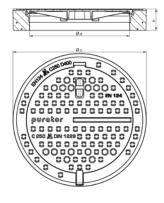












Product features:

- Produced and tested according to EN 124 and DIN 1229
- Cover and frame: ductile iron
- Clatter-free due to elastomer insert integrated in the frame
- Double spring locking bar, automatic-locking
- Safety hinge blocks at 80° when closing, fixes in open position at 100°
- Cover-centring unit
- Cover removable
- Prepared for mud pans

Field of application:

For all applications class A015 up to class C250 (see page 4: general Information)

Product details:

Art. No.	D	imensions m	m	Weight					
	Ø e	Øс	h	Class	approx. kg				
Round frame, ductile iron									
P11250D(-1)X1	604	785	75	C250	50,0				
Round frame with	concrete base	e							
P17250D(-1)X1	604	800	130	C250	115,0				
¹ Art. No. for variation	ons with vents:	¹ Art. No. for variations with vents:1							

Tender specifications:

Manhole cover DN 600 produced and tested according to EN 124 and DIN 1229, class C 250; Cover and frame: ductile iron, with an elastomer insert and double spring locking bar integrated in the cover, automatic-locking; frame prepared for mud pans; with safety hinge, blocking at 80° when closing, fixing in open position at 100°; cover-centring unit; cover removable.

Dimensions and weight s. table.

Options: with vents, with concrete-base frame.



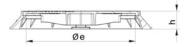
P-TOP® Cesar with rectangular frame and cast iron surface (Art.No. P13250DX) s. page 15

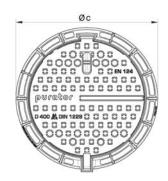




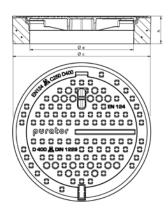
P-TOP® L Manhole covers for traffic areas loading class D400











Product features:

- Produced and tested according to EN 124 and DIN 1229
- Cover and frame: ductile iron
- Clatter-free due to elastomer insert integrated in the frame
- Double spring locking bar, automatic-locking
- Safety hinge blocks at 80° when closing, fixes in open position at 100°
- Cover-centring unit
- Cover removable
- Prepared for mud pans

Field of application:

For urban traffic in traffic-calmed areas (for areas with high traffic volume we recommend P-TOP Strong)

Product details:

Art. No.	D	imensions m	m	Class Weigh					
	Ø e	Øс	h	Ciass	approx. kg				
Round frame, ductile iron, frame height 100 mm									
P11400DL (-1)X1	604	785	100	D400	55,0				
Rectangular frame	, ductile iron								
P12400DL(-1)X1	604	□ 830	100	D400	65,0				
Round frame with concrete base, frame height 160 mm									
P17400DL(-1)X1	604	806	160	D400	131,0				
¹ Art. No. for variation	ns with vents:	1							

Tender specifications:

Manhole cover DN 600 produced and tested according to EN 124 and DIN 1229, class D400; Light type suitable for areas with urban-traffic. Cover and frame: ductile iron, with an elastomer insert and double spring locking bar integrated in the cover, automaticlocking; frame prepared for mud pans; with safety hinge, blocking at 80° when closing, fixing in open position at 100°; cover-centring unit; cover removable.

Dimensions and weight s. table.

Options: with vents, with rectangular frame; with concrete-base frame.



P-TOP® L with rectangular frame and cast iron surface (Art.No. P13400DLX) s. page 15



P-TOP® L with rectangular frame (Art.No. P12400DLX)

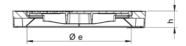


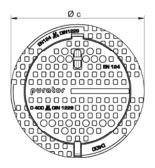


P-TOP® L variation

with liftable frame



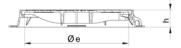


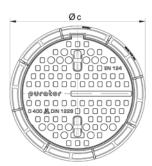




P-TOP® L variation with hingeless cover







Product features:

- see P-TOP L page before
- with liftable frame

Field of application:

For urban traffic in traffic-calmed areas (for areas with high traffic volume we recommend P-TOP® Strong).

Product details:

Art. No.	Di	imensions m	m	Class Weigl		
	Ø e	Øс	h	Class	approx. kg	
Round frame, duct						
P16400DLH(-1)X1	604	808	D400	66,0		
¹ Art. No. for variatio	¹ Art. No. for variations with vents:1					

Tender specifications:

Manhole cover DN 600 produced and tested according to EN 124 and DIN 1229, class D400; Light type with liftable frame suitable for areas with urban-traffic. Cover and frame: ductile iron, with an elastomer insert and double spring locking bar integrated in the cover, automatic-locking; frame prepared for mud pans; with safety hinge, blocking at 80° when closing, fixing in open position at 100°; cover-centring unit; cover removable.

Dimensions and weight s. table.

Options: with vents.

Product features:

- Produced and tested according to EN 124 and DIN 1229
- Cover and frame: ductile iron
- Triple spring locking bar
- Non-recessed contact surface (surface-water tight), without hinge
- Optional: with sand capture

Product details:

Art. No.	D	imensions m	m	Weight				
	Ø e	Øс	h	Class	approx. kg			
Non-recessed contact surface with elastomer								
P11400DLTO	604	785	100	D400	54,0			
Non-recessed con	tact surface v	vith elastome	r, with one-so	rew fixation				
P11400DL-SSEC	604	785	100	D400	55,0			
With sand capture through tongue-and-groove contact surface								
P11400LSV	604	785	100	D400	54,0			

Tender specifications:

Manhole cover DN 600 produced and tested according to EN 124 and DIN 1229, class D 400. Cover and Frame: ductile iron with elastomer insert and triple spring locking-bars integrated in the cover; with cover centring unit; non-recessed contact-surface between cover and frame. Dimensions and weight s. table.

Options: with one-screw fixation; with sand capture.

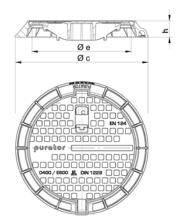




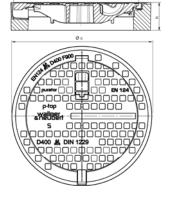
P-TOP® Strong

The strong type to resist to highest traffic volumes









Product features:

- Produced and tested according to EN 124 and DIN 1229
- Cover and frame: ductile iron
- Clatter-free due to elastomer insert integrated in the frame
- Double spring locking bar, automatic-locking
- Safety hinge blocks at 80° when closing, fixes in open position at 100°
- Cover-centring unit
- Cover removable
- Prepared for mud pans

Field of application:

For versatile usage suitable for all traffic loads up to F900

Product details:

Art. No.	D	imensions m	m	Class	Weight				
	Ø e	Øс	h	Class	approx. kg				
Round frame, ductile iron									
P11400D (-1) 1	604	808	100	D400	74,0				
P11600D (-1) ¹	604	808	100	E600	78,0				
P11900D (-1) 1	604	808	100	F900	92,0				
Rectangular frame	, ductile iron								
P12400D (-1) 1	604	830	100	D400	84,0				
P12600D (-1) 1	604	830	100	E600	87,0				
Round frame with	concrete base	е							
P17400D(-1) 1	604	806	160	D400	148,0				
P17600D(-1) 1	604	806	160	E600	152,0				
¹ Art. No. for variation	ns with vents:	1							

Tender specifications:

Manhole cover DN 600 produced and tested according to EN 124 and DIN 1229, for versatile usage suitable for all traffic loads up to class D400; Cover and frame of ductile iron, with elastomer insert integrated in the frame and double spring locking bar integrated in the cover, automatic-locking; with safety hinge, blocking at 80° when closing, fixing in open position at 100°; cover-centring unit; cover removable; prepared for mud pans. Dimensions and weight s. table.

Options: class E 600 / F 900; with vents; with rectangular frame; with concrete-base frame.



P-TOP® Strong with rectangular frame (Art.No. P12400D)





P-TOP® Strong Variation

with liftable frame



Product features:

- Produced and tested according to EN 124 and DIN 1229
- Cover and frame: ductile iron
- Clatter-free due to elastomer insert integrated in the frame
- Double spring locking bar, automatic-locking
- Safety hinge blocks at 80° when closing, fixes in open position at 100°
- Cover-centring unit
- Cover removable
- Prepared for mud pans
- with liftable frame

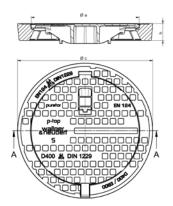


For versatile usage suitable for all traffic loads up to E600



Product details:

Art. No.	Di	imensions m	m	Class Weight			
	Ø e	Øс	h	Class	approx. kg		
Liftable frame, round shaped (without flange)							
P16400DH (-1) ¹	604	808	100	D400	80,0		
P16600DH (-1) ¹	604	808	100	E600	84,0		
1 Art. No. for variations with vents:1							



Tender specifications:

Manhole cover DN 600 with liftable frame, produced and tested according to EN 124 and DIN 1229, for versatile usage suitable for all traffic loads up to class D400; Cover and frame of ductile iron, with elastomer insert integrated in the frame and double spring locking bar integrated in the cover, automatic-locking; with safety hinge, blocking at 80° when closing, fixing in open position at 100°; cover-centring unit; cover removable; prepared for mud pans.

Dimensions and weight s. table. Options: class E 600; with vents.



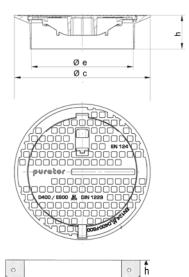


P-TOP® Strong Niveau

Up to 8 cm self-levelling manhole cover







Øс

Product features:

- Produced and tested according to EN 124 and DIN 1229
- Cover and frame: ductile iron
- Clatter-free due to elastomer insert integrated in the frame
- Double spring locking bar, automatic-locking
- Safety hinge blocks at 80° when closing, fixes in open position at 100°
- Cover-centring unit
- Cover removable
- Up to 8 cm self-levelling frame
- The chamfered outer-edge of the frame avoids damaging through lateral shearing forces (e.g. by snow ploughs)
- Narrow frame: up to 4 cm self-levelling for reconstruction
- Prepared for mud pans

Field of application:

Ideal for roads with heavy traffic and frequent re-paving

Product details:

A.4 No	D	imensions m	m	01	Weight			
Art. No.	Ø e	Øс	h	Class	approx. kg			
No vents (see imag	ge)							
P15400DN20	604	808	200	D400	82,0			
P15600DN20	604	808	200	E600	87,0			
P15400DN14 *	604	808	140	D400	77,0			
P15600DN14 *	604	808	140	E600	81,0			
With vents								
P15400DN20-1	604	808	200	D400	82,0			
P15600DN20-1	604	808	200	E600	87,0			
P15400DN14-1 *	604	808	140	D400	77,0			
P15600DN14-1 *	604	808	140	E600	81,0			
Adapter ring made of concrete								
PARN	628	850	75	-	34,0			
* narrow frame up to	4cm self-leve	elling for recon	struction					

Tender specifications:

Manhole cover DN 600 produced and tested according to EN 124 and DIN 1229, suitable for roads with heavy traffic up to class D 400; with up to 80 mm self-levelling frame. Cover and frame: ductile iron, with elastomer insert integrated in the frame and double spring locking bar integrated in the cover, automatic-locking; with safety hinge, blocking at 80° when closing, fixing in open position at 100°; cover-centring unit; cover removable; prepared for mud pans.

Dimensions and weight s. table.

Options: class E 600; with narrow frame; adapter ring of concrete.



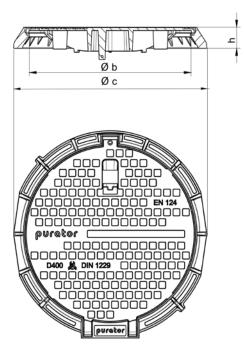


P-TOP® Strong 800

Extra wide clear opening with double hinge







Product features:

- Produced and tested according to EN 124 and DIN 1229
- Cover and frame: ductile iron, mit Doppelgelenk
- Clatter-free due to elastomer insert integrated in the frame
- Double spring locking bar, automatic-locking
- Safety hinge blocks at 80° when closing, fixes in open position at 100°
- Cover-centring unit
- Cover removable
- Clear Opening: 800 mm

Field of application:

For versatile usage suitable for all traffic loads up to D400

Product details:

Art. No.	D	imensions m	m	Weight	
	Ø e	Øс	h	Class	approx. kg
Round frame, ductile	iron				
P11400D (-1)F800 ¹	803	960	100	D400	124,0
Accessories					
P11400F-800KIT			Locking set		
with gas-filled spring	g assist				
P11400D(-1)FG-800	803	960	100	D400	128,0
¹ Art. No. for variations	with vents:	1			

Tender specifications:

Manhole cover DN800 produced and tested according to EN 124 and DIN 1229, for versatile usage suitable for all traffic loads up to class D400; Cover and frame of ductile iron, with elastomer insert integrated in the frame and double spring locking bar integrated in the cover, automatic-locking; with safety double-hinge, blocking at 80° when closing, fixing in open position at 100°; cover-centring unit; cover removable.

Dimensions and weight s. table.

Options: With vents; with spring assist.



P-TOP® Strong 800 with spring-assist (Art.No. P11400FG-800)

Manhole cover DN 600 backflow proof, bolted



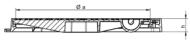


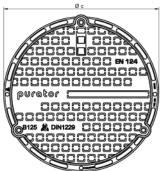


P-TOP® Medio RS / P-TOP® L RS

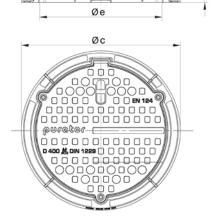
Manhole cover watertight and backflow proof up to 0,5 bar











Product features P-TOP® Medio RS:

- Water-tight and backflow-proof due to 3 bolts and suitable seal-ring
- Produced and tested according to EN 124 and DIN 1229
- Watertight and backflow-proof up to 0,5 bar
- Cover and frame: ductile iron
- Clatter-free
- No obstructions in the clear opening
- Cover easy to exchange

Field of application:

For footpaths, passenger car parking and parking decks

Product details:

Art. No.	D	imensions m	m	Class	Weight
	Ø e	Øс	h	Class	approx. kg
P11125RSX	602	707	60	B125	37,0
 suitable wrench se 	ee page 18				

Tender specifications:

Manhole cover DN 600 produced and tested according to EN 124 and DIN 1229, class B125. Cover and Frame: ductile iron with 3 bolts, watertight and backflow-proof up to 0.5 bar; no obstructions in the clear opening.

Dimensions and weight s. table.

Product features P-TOP® L RS:

- see above
- Water-tight and backflow-proof due to 3 bolts and suitable seal-ring

Field of application:

For urban traffic in traffic-calmed areas

Product details:

Art. No.	D	imensions m	m	Class	Weight
	Ø e	Øс	h	Class	approx. kg
P11400DLRS	604	785	100	D400	54,0
• suitable wrench s	ee page 18				

Tender specifications:

Manhole cover DN 600 produced and tested according to EN 124 and DIN 1229, class D 400 for traffic-calmed areas. Cover and Frame: ductile iron with 3 bolts, watertight and backflow-proof up to 0.5 bar; no obstructions in the clear opening. Dimensions and weight s. table.

Manhole cover DN600/DN800 backflow proof

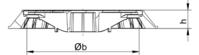


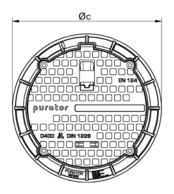


P-TOP® Strong RS / P-TOP® Strong 800 RS Manhole cover watertight and

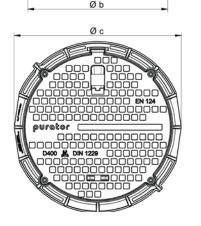
backflow proof up to 0,5 bar











Product features Strong RS:

- Water-tight and backflow-proof due to 4 bolts and suitable seal-ring
- Produced and tested according to EN 124 and DIN 1229
- Watertight and backflow-proof up to 0,5 bar
- Cover and frame: ductile iron
- Clatter-free
- No obstructions in the clear opening
- Cover easy to exchange

Field of application:

For versatile usage; suitable for all traffic loads up to F 900

Product details:

Art. No.	D	imensions m	Class	Weight	
	Ø e	Øс	h	Class	approx. kg
P11400RS	604	805	100	D400	75,0
P11900RS	604	805	100	F900	92,0
	4.0				

suitable wrench see page 18

Tender specifications:

Manhole cover DN 600, produced and tested according to EN 124 and DIN 1229, Class D400 / F900. Cover and Frame: ductile iron with 4 bolts, watertight and backflow-proof up to 0.5 bar; no obstructions in the clear opening. Dimensions and weight s. table.

Product features Strong 800 RS:

- see above
- Water-tight and backflow-proof due to 4 bolts and suitable seal-ring

Product details:

Art. No.	D	imensions m	Class	Weight			
	Ø e	Øс	h	Class	approx. kg		
P11400RS-800	803	960	100	D400	107,0		
a suitable wrongh see nage 19							

Tender specifications:

Manhole cover DN 800 produced and tested according to EN 124 and DIN 1229, class D 400. Cover and Frame: ductile iron with 4 bolts, watertight and backflow-proof up to 0.5 bar; no obstructions in the clear opening. Dimensions and weight s. table.

Special designs of manhole covers

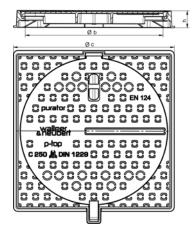




P-TOP® Sonderabdeckung

With rectangular frame with cast iron surface





Product features:

- Produced and tested according to EN 124 and DIN 1229
- Cover and frame: ductile iron
- Clatter-free due to elastomer insert integrated in the frame
- Double spring locking bar, automatic-locking
- Safety hinge blocks at 80° when closing, fixes in open position at 100°
- Cover-centring unit
- Cover removable
- Prepared for mud pans
- With rectangular frame with cast iron surface

Field of application:

For urban traffic in traffic-calmed areas class B125 and C250

Product details:

Art. No.		imensions m	Class	Weight	
	Ø e	c x d	h	Class	approx. kg
P13250DX	604	705x708	75	C250	56,7
P13400DLX	604	705x708	100	D400	68,0

Tender specifications:

Manhole cover DN 600 with rectangular frame with cast-iron surface, produced and tested according to EN 124 and DIN 1229, class B125/ C250; suitable for traffic-calmed areas. Cover and frame: ductile iron, with an elastomer insert and double spring locking bar integrated in the cover, automatic-locking; frame prepared for mud pans; with safety hinge, blocking at 80° when closing, fixing in open position at 100°; cover-centring unit; cover removable.

Dimensions and weight s. table.



P-TOP® Special cover Maintenance cover DN 300







Product features:

- Produced and tested according to EN 124
- Cover and frame: ductile iron
- Fixed by single secure-bolt

Product details:

Art. No.	D	imensions m	Class	Weight	
	Ø e	Øс	h	Class	approx. kg
P1058A300-S	302	437	75	A015	14,0
P1058B300-S	302	437	75	B125	15,0
P1058D300-S	302	437	75	D400	17,0

Tender specifications:

Manhole cover DN 300, produced and tested according to EN 124. Cover and frame: ductile iron, cover fixed by single secure-bolt. Dimensions and weight s. table.

Special designs of manhole covers

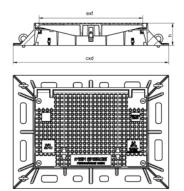


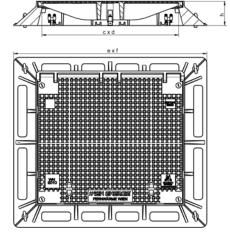


P-TOP® special cover design

Vienna district heating edition with customizable surface







Product features:

- Produced and tested according to EN 124
- Cover and frame: ductile iron with patented hinges
- Safety catch block at 80° when closing, fixes in open position at 100°
- Opening assist through gas-filled springs of stainless steel
- Tight against ingress of pressureless surface water
- Heavy eyelets for easy handling on site
- Optional with secure bolts
- One-piece construction of cover to reduce the amount of damage-prone parts and to optimize the sealing performance

Field of application:

Suitable for all shafts of heating district networks in traffic areas up to class E600

Product details:

Art. No.	Di	mensions m	Class	Weight			
AIL NO.	e x f	c x d	h	Ciass	approx. kg		
One-piece construction							
FWW3064GDF600(-1) ¹	1000x600	1500x1100	210	E600	440,0		
FWW4064GDF600(-1) 1,2	1000x1200	1500x1700	210	E600	520,0		
¹ Art. No. for variations with vents:1 ² substitutes older 2-part types							

Tender specifications:

Rectangular manhole cover for district-heating shafts, produced and tested according to EN 124, class E600. Cover and frame: ductile iron, with patented hinges; watertight against ingress of surface water, with safety catch at 80° and secure fixation at 100° opening angle; with opening assist through gas-filled springs. Dimensions and weight s. table.

Special designs of manhole covers

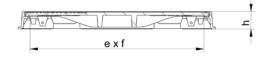


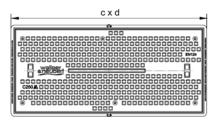


P-TOP® special cover design

For tunnels Loading class C250







Product features:

- Produced and tested according to EN 124
- Cover and frame: ductile iron
- Frame in two pieces with flanged connection, one-piece cover
- Water-tight through grouted elastomer-sealing
- Fixed with six securing-bolts

Field of application:

For all traffic loads up to class C250

Product details:

Art. No.	D	imensions m	Class	Weight				
	e x f	c x d	h	Class	approx. kg			
TET47-146-125S	600x1400	698x1500	80	B125	114,0			
TET47-146-250S	600x1400	698x1500	80	C250	114,0			
Please ask for more loading-class variations								

Tender specifications:

Rectangular manhole frame & cover, produced and tested according to EN 124. Frame and cover made of ductile iron, water-tight with elastomer sealing, fixed by six securingbolts. Dimensions s. table above.



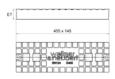
P-TOP® special cover design

for slot channels in tunnels









Cover for reconstruction Art. No. PUTZDE-400-SAN

Product features:

- Produced and tested according to EN 124
- Cover and frame: ductile iron
- Double bolted cover

Field of application:

For traffic areas in tunnels up to class E600

Product details:

Art. No.	D	imensions m	Class	Weight			
	e x f	c x d	h	Class	approx. kg		
One-part set of cov	er and frame)					
PUTZDE-400V-1	545 x 220	400 x 150	75	D400	25,0		
PUTZDE-600V-1	545 x 220	400 x 150	75	E600	27,0		
Two-part set of cov	er and frame)					
PUTZDE-400V-2	971 x 200	830 x 130	75	D400	44,0		
PUTZDE-600V-2	971 x 200	830 x 130	75	E600	48,0		
Cover for reconstruction of existing, functional frames							
PUTZDE-400-SAN	455 x 145	-	50	D400	19,7		

Tender specifications:

Rectangular frame and cover for existing slot channels, produced and tested according to EN 124. Frame and cover made of ductile iron, cover double bolted. Dimensions, weight and class s. table above. Optional: 2-part type; cover for reconstruction.

Special designs of manhole covers / Accessories

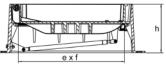


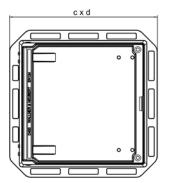


Recessed cover made of ductile iron

Heavy-duty recessed-cover for public traffic areas







Mud pans



Product features

- Material: ductile iron
- Produced and tested according to EN 124
- Load class D400
- Consisting of frame and recessed cover with opening support
- Patented hinges with removable bolts
- Hinge bolts are free of load when cover is closed
- 2 gas-filled springs of stainless steel for opening support
- Cover can be fixed by 2 bolts when closed
- Tray depth 100 mm
- Suitable for stone paving

Field of application:

For urban traffic in traffic-calmed areas for all applications where the maintenance of the visual aesthetic of the paving or the flooring is demanded (e.g. covers of manholes or inspection chambers in pedestrian or market areas)

Product details:

Art. No.	D	imensions mm	Class	Weight	
	e x f	c x d	h	Class	kg
92400PAT66GD-H	□ 600	□ 836	275	D400	160,0

Tender specifications:

Recessed cover for variable surface with opening support produced and tested according to EN 124, loading class D400. Cover and frame made of ductile iron, tray depth 100 mm, with patented hinges with removable bolts, hinge bolts are free of load when cover is closed. Opening support with 2 gas-filled springs made of stainless steel. Double fixation by bolts when cover is closed. Suitable for stone paving, stone thickness up to 80 mm.

Dimensions and weight see table.

Mud pans for the P-TOP® series

made of galvanised steel or plastics

Art. No.	#	Description	Weight approx. kg
PUR-SF-NL	-	Galvanised steel, low, light type	6,5
S8869T	1	Plastic, deep, cross bar, heavy type	3,0
PUR-SF-TL	2	Galvanised steel, low, light type	6,5

Cover openers



Cover openers to unlock and lift covers

made of steel

Art. No.	#	Description	Weight approx. kg
SCHL1	1	Crowbar	1,0
TET47/48-SCHL	0	Wrench	1,3

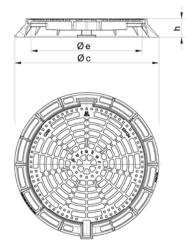




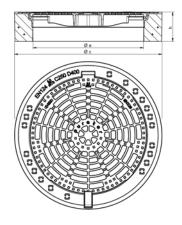
DRAINEX® L DN 600

Console type to be placed in lanes Up to class D400









Product features:

- Produced and tested according to EN 124 and DIN 1229
- Grating and frame: ductile iron
- Clatter-free due to elastomer insert integrated in the frame
- Double spring locking bar, automatic-locking
- Safety hinge blocks at 80° when closing, fixes in open position at 100°
- Grating removable, automatically centred in frame
- Intake cross-section 1.060 cm²

Field of application:

For versatile usage in class C250 and D400 areas

Product details:

Art. No.	D	imensions m	Class	Weight					
AIL NO.	Ø e	Øс	h	Class	approx. kg				
Round frame, ductile iron									
P31250D	604	770	75	C250	48,0				
P31400DL	604	785	100	D400	53,0				
Rectangular frame	, ductile iron								
P32400DL	604	785	100	D400	63,0				
Round frame with	Round frame with concrete base								
P37250D	604	806	130	C250	112,0				
P37400DL	604	806	160	D400	129,0				

Tender specifications:

Round shaped gully grating DN 600, produced and tested according to EN 124 and DIN 1229, class C250/ D400. Grating and frame: ductile iron, with an elastomer insert in frame and double spring locking bar integrated in the grating, automatic-locking; with safety hinge, blocking at 80° when closing, fixing in open position at 100°; Grating removable, automatically centred in frame.

Dimensions and weight s. table.

Options: with rectangular frame; with concrete-base frame.



DRAINEX® L DN 600 with rectangular frame (Art.No. P32400DL)

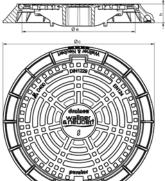




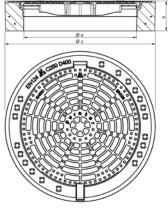
DRAINEX® Strong DN 600

Console type to be placed in lanes Up to class E600









Product features:

- Produced and tested according to EN 124 and DIN 1229
- Grating and frame: ductile iron
- Clatter-free due to elastomer insert integrated in the frame
- Double spring locking bar, automatic-locking
- Safety hinge blocks at 80° when closing, fixes in open position at 100°
- Grating removable, automatically centred in frame
- Intake cross-section 1.060 cm²

Field of application:

For versatile usage in class D400 and E600 areas

Product details:

Art. No.	D	imensions m	m	Class	Weight				
AIL NO.	Ø e	Øс	h	Class	approx. kg				
Round frame, ductile iron									
P31400D	604	808	100	D400	75,2				
P31600D	604	808	100	E600	78,2				
Rectangular frame	, ductile iron								
P32400D	604	□ 830	100	D400	80,9				
P32600D	604	□ 830	100	E600	83,9				
Round frame, duct	tile iron, liftab	le							
P36400DH	604	808	100	D400	80,7				
P36600DH	604	808	100	E600	83,7				
Round frame with concrete base									
P37400D	604	806	160	D400	148,0				
P37600D	604	806	160	E600	151,0				

Tender specifications:

Round shaped gully grating DN 600, produced and tested according to EN 124 and DIN 1229, class D400/ E600. Grating and frame: ductile iron, with an elastomer insert in frame and double spring locking bar integrated in the grating, automatic-locking; with safety hinge, blocking at 80° when closing, fixing in open position at 100°; Grating removable, automatically centred in frame.

Dimensions and weight s. table.

Options: with rectangular frame; with round liftable frame; with concrete-base frame.



DRAINEX® Strong DN 600 with rectangular frame (Art.No. P32400D)



DRAINEX® Strong DN 600 w ith liftable frame (Art.No. P36400DH)





DRAINEX® Strong Niveau DN 600

Up to 8 cm self-levelling frame



Product features:

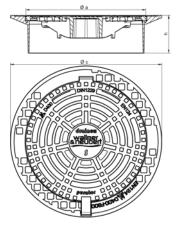
- Produced and tested according to EN 124 and DIN 1229
- Grating and frame: ductile iron
- Clatter-free due to elastomer insert integrated in the frame
- Double spring locking bar, automatic-locking
- Safety hinge blocks at 80° when closing, fixes in open position at 100°
- Grating removable, automatically centred in frame
- Intake cross-section 1.060 cm²
- Up to 8 cm self-levelling frame
- Narrow frame: up to 4 cm self-levelling for reconstruction

Field of application:

Ideal for roads with heavy traffic and frequent re-paving



Ø e h



Product details:

Art. No.	D	imensions m	Class	Weight	
Art. No.	Ø e	Øс	h	Class	approx. kg
Frame height 200 r	nm				
P35400DN20	604	808	200	D400	80,9
P35600DN20	604	808	200	E600	85,0
Frame height 140 r	nm				
P35400DN14	604	808	140	D400	74,3
P35600DN14	604	808	140	E600	79,0
Adapter ring of cor	ncrete				
PARN	631	850	75	-	34,0
PARN-12	631	850	120	-	69,0

Tender specifications:

Round shaped gully grating DN 600 with up to 8 cm self-levelling frame, produced and tested according to EN 124 and DIN 1229, class D400/ E600. Grating and frame: ductile iron, with an elastomer insert in frame and double spring locking bar integrated in the grating, automatic-locking; with safety hinge, blocking at 80° when closing, fixing in open position at 100°; Grating removable, automatically centred in frame. Dimensions and weight s. table.

Options: with narrow frame, up to 4 cm self-levelling for reconstruction.

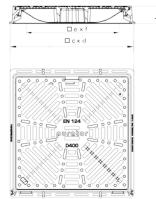




DRAINEX® DN 600 / 600

Heavy, square shaped grating, for versatile usage up to class D400





Product features:

- Produced and tested according to EN 124 and DIN 1229
- Grating and frame: ductile iron
- Clatter-free due to elastomer insert integrated in the grating
- Double spring locking bar, automatic-locking
- Intake cross-section 1.390 cm²
- Retrofittable bolting

Field of application:

Suitable for all lanes up to class D400

Product details:

Art. No.	D	imensions mr	Class	Weight	
	е	С	h	Class	approx. kg
Console type					
P43400P66-ST	600x600	714x714	80	D400	55,6
Concave type					
P43400R66-ST	600x600	714x714	80	D400	58,3

Tender specifications:

Square shaped gully grating DN 60/ 6000, console type, produced and tested according to EN 124 and DIN 1229, class D400. Grating and frame: ductile iron, with an elastomer insert and double spring locking bar integrated in the grating, automatic-locking; grating removable. Dimensions and weight s. table.

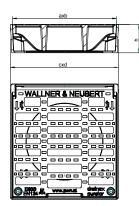
Options: concave type, retrofittable bolting.



DRAINEX® Highway

High performance grating for road gullies on highways





Product features:

- Produced and tested according to EN 124 and DIN 1229
- Grating and frame: ductile iron
- Grating console type, double bolted
- Easy opening through patented hinge system
- Bucket holder integrated in the frame
- Intake cross-section 893 cm²

Field of application:

Ideal for roads with heavy traffic up to class F900

Product details:

Art. No.	D	imensions mr	Class	Weight	
	е	С	h	Class	approx. kg
P1005HI-SCH-600	475x505	495x530	130	E600	75,0
P1005HI-SCH-900	475x505	495x530	130	F900	81,0

Tender specifications:

Square shaped gully grating special built for highways, dimensions 500x500 mm. Produced and tested according to EN 124 and DIN 1229, class D400. Grating and frame: ductile iron with patented hinge, grating console type, double bolted. Bucket holder integrated in the frame Dimensions and weight s. table.

Options: Class F900.



Square and rectangular road-gully gratings



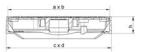


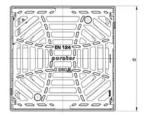
DRAINEX® DN 500 x 500 / 500 x 300

High performance grating for road gullies For versatile usage

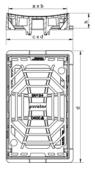












Product features:

- Produced and tested according to EN 124 and DIN 1229
- Grating and frame: ductile iron
- Clatter-free due to elastomer insert integrated in the grating
- Double spring locking bar, automatic-locking
- Easy opening through hinge system
- Available as concave type for kerbside channels or as console type for lanes
- Bucket holder integrated in the frame
- Retrofittable bolting
- Intake cross-section 500x500 console/ concave: 910/760 cm²
- Intake cross-section 300x500 console/ concave: 480/510 cm²

Field of application:

For all traffic loads up to D 400

Product details:

	_	Di	mensions m		Weight		
Art. No.	Form	axb	c x d	h	Class	kg	
300x500 with bucket holder							
P43400P35	Console	282x480	340x560	80	D400	30,0	
P43400R35	Concave	282x480	340x560	80	D400	30,0	
500x500 with bu	icket holde	r					
P43250P55	Console	476x480	505x505	80	C250	40,0	
P43400P55	Console	476x480	505x505	80	D400	42,0	
P43250R55	Concave	476x480	505x505	80	C250	40,0	
P43400R55	Concave	476x480	505x505	80	D400	42,0	
500x500 without bucket holder, with flange							
P43250P55-O-F	Console	476x480	540x560	80	C250	42,7	
P43400P55-O-F	Console	476x480	540x560	80	D400	43,5	
P43250R55-O-F	Concave	476x480	540x560	80	C250	42,8	
P43400R55-O-F	Concave	476x480	540x560	80	D400	44,5	
Retrofittable bolting with ribbed flange bolts							
P43400-SCHR Set of 2 pcs.							

Tender specifications:

Square/ rectangular gully grating, dimension 500x500/ 300x500 mm, produced and tested according to EN 124 and DIN 1229, class C250/ D400. Grating and frame: concave type for kerbside channels of roads, made of ductile iron; clatter-free with elastomer insert and double-spring locking-system integrated in the grating, with hinges, frame with integrated bucket holder.

Dimensions and weight s. table.

Options: console type for lanes; flanged frame without bucket holder; retrofittable bolting.

Square road-gully gratings



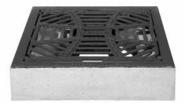


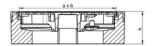


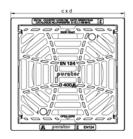
DRAINEX® DN 500x 500 concrete frame

High performance grating for road gullies For versatile usage

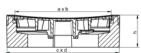


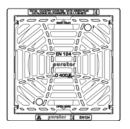












Product features:

- Produced and tested according to EN 124 and DIN 1229
- Grating: ductile iron; frame: with concrete base
- Clatter-free due to elastomer insert integrated in the grating
- Double spring locking bar, automatic-locking
- Easy opening through hinge system
- Available as concave type for kerbside channels or as console type for lanes
- Bucket holder integrated in the frame
- Retrofittable bolting
- Intake cross-section 500 x 500 Console/Concave: 910/760 cm²

Field of application:

For all traffic loads up to D 400

Product details:

Art. No.	Dimensions mm			Class	Weight	
	axb	c x d	h	Class	kg	
Console type						
P44250P55	450 x 450	560x560	180	C250	108,0	
P44400P55	450 x 450	560x560	180	D400	114,0	
Concave type (not for lanes)						
P44250R55	450 x 450	560x560	180	C250	106,0	
P44400R55	450 x 450	560x560	180	D400	115,0	

Tender specifications:

Square gully grating, dimension 500x500 mm, produced and tested according to EN 124 and DIN 1229, class C250/ D400. Grating and frame: concave type for kerbside channels of roads, grating made of ductile iron, frame with concrete base; clatter-free with elastomer insert and double-spring locking-system integrated in the grating, with hinges, frame with integrated bucket holder.

Dimensions and weight s. table.

Options: console type for lanes; retrofittable bolting.



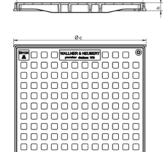


DRAINEX® WG

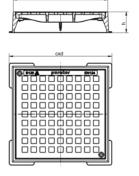
Square grating with square-shaped holes











Product features:

- Produced and tested according to EN 124
- Grating and frame: ductile iron
- Diagonally bolted

Field of application:

For all traffic loads up to C250 in non-public areas

Product details:

Art. No.	D	imensions mı	m	Class			
	a x b	c x d	h	Glass	kg		
Gully gratings Class B125							
P1001B200	200x200	262x262	30	B125	7,2		
P1001B300	300x300	362x362	30	B125	11,3		
P1001B400	400x400	462x462	40	B125	20,1		
P1001B500	500x500	562x562	40	B125	27,5		
P1001B600	600x600	662x662	40	B125	40,2		
Gully gratings (Gully gratings Class C250						
P1001C400	400x400	462x462	40	C250	25,1		
P1001C500	500x500	562x562	40	C250	31,0		
P1001C600	600x600	662x662	40	C250	42,0		
Type ÖBB with swing plates							
1008P-S-ÖBB	450x450	489x489	100	B125	40,0		

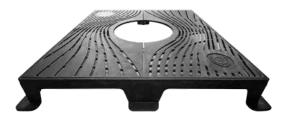
Tender specifications:

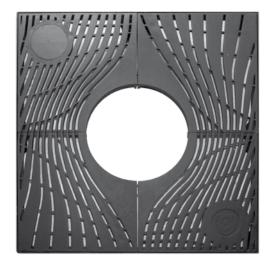
Square gully grating suitable for non-public traffic areas, produced and tested according to EN 124. Grating and frame made of ductile iron, with square-shaped holes, grating diagonally bolted.

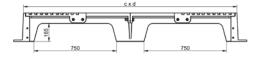
Dimensions, class and weight s. table.

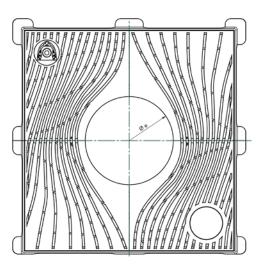












Product features:

- Gratings and base construction made of ductile iron
- Gratings 4-parted with flange joint
- Base construction 2-parted with flange joint and largely dimensioned recesses for roots
- Optional with recess Ø 300 mm for irrigation, for lighting installation or for customized logo-plates (e.g. municipal coat of arms)
- Slot width 20 mm

Field of application:

For tree protection areas which can only be used by pedestrians and cyclists

Product details:

Art. No.		Weight				
	Ø e	c x d	h	kg		
BSP-200-190	800	1940 x 2040	280	524,4		
Please ask for further types						

Tender specifications:

Square tree grate in waving design, consisting of 4 flange jointed grating segments and 2 parted, flanged base construction made of ductile iron. 2 root recesses on each grate side, clear opening min. $750 \times 165 \text{ mm}$.

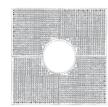
Dimensions, class and weight s. table.

Optional: 1 or 2 gratings segments with horizontal recesse $\[]$ 300 mm; customized logo plate.









DRAINEX® tree grates: please ask for furher types



Special designs, reconstruction and maintenance

We always focus on the requirements of our clients. These often deviate from market mainstream. Therefore Wallner & Neubert developed flexible but economic manufacturing processes to be able to offer you adequate solutions.



Manhole cover with securing bolt and customized surface



Retrofitted installation of an emergency escape

Our service in special designs:

- Development and production of special constructions
- Construction of special technical solutions
- Realisation of special requirements
- Single-unit and low-volume production
- Processing of different metals (steel, stainless steel, aluminium, cast iron...)

Maintenance and reconstruction

To retain the value and daily functionality of Your components we offer service and maintenance for all products of our range. Among other things we care for

- Elastomer insets and sealing
- Fitting systems
- Safety catches
- Gas-filled springs
- Emergency escape installations

We offer retrofitted adaptations as:

- Fitting systems
- Welded constructions
- Opening devices etc.

The members of our experienced service team are pleased to be contacted by you: sonderbau@pwn.at.

Product range manhole covers and gully gratings

As a leading specialist in dewatering solutions Wallner & Neubert offers a wider range of covers and gratings



TETRA® rectangular covers of ductile iron

The complete product family of rectangular covers, with fitting bolts, hinge systems, surface-water-tight, optional with opening device.

www.pwn.at











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