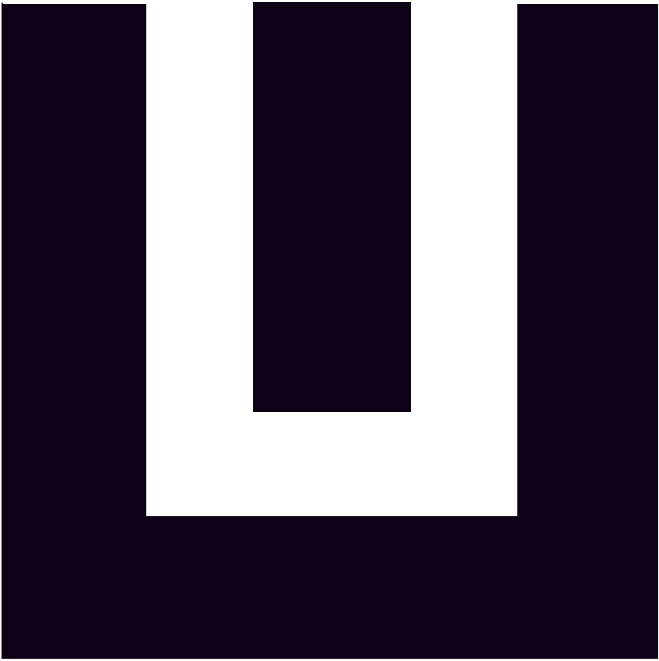




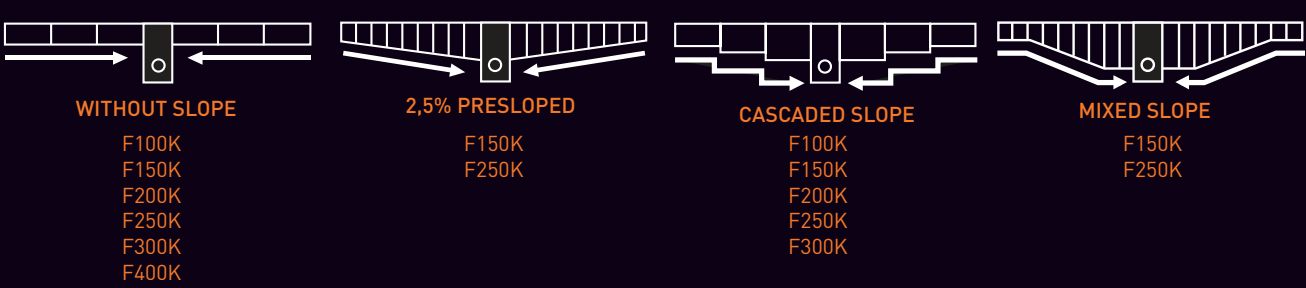
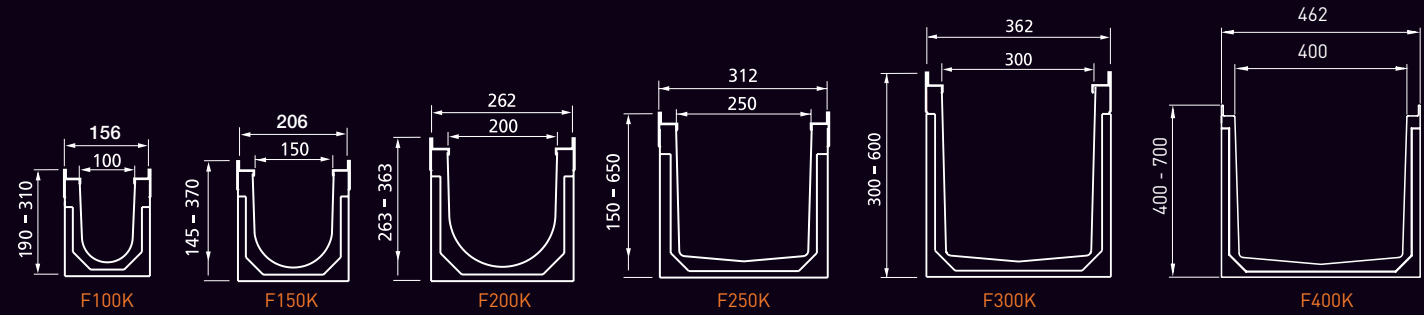
F SYSTEM

APPLICATIONS: MOTORWAYS AND AIRPORTS, LOADING AND UNLOADING AREAS, PORTS...

Channels with attachment of the grating to the channel with 4 screws per grating, designed for heavy traffic areas and especially for sections where the grating is subject to large axial forces due to the manoeuvring and braking of vehicles, such as service stations, loading and unloading areas in ports and warehouses, airports, public roads, car parks for heavy vehicles, etc.

The channels are reinforced with galvanized steel profiles at the sides. It is possible to incorporate a continuous 2.5% slope and or cascaded slope.

Available with modular cast iron grating with a load class of up to F900.



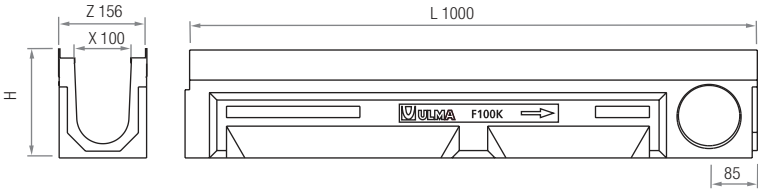


F100K

LOAD CLASS
UP TO F900
EN-1433 STANDARD

ULMA Linear Drainage Channel type F100K: External width 156 mm; Internal width 100 mm; Available with overall heights between 190 mm and 310 mm. Suitable for cascaded type slope to collect rainwater in 1 metre long units. Safe locking system consists of eight bolts per LM; Integrated galvanized steel* edges for lateral protection.

*Also available with cast iron edges.



Channel	L (mm)	H (mm)	Width (mm)		Ø Outlet*(mm)		Hydraul. Section (cm ²)	Pcs. / Pallet
			Z	X	Vert.	Hor.		
F100K00R	1000	190	156	100	110	110	126	52
F100K10R	1000	250	156	100	110	-	184	39
F100K20R	1000	310	156	100	110	110	242	39

*Vert. and horiz. outlets on order.

Slotted Normal
& Heelproof

Solid



GRATINGS

Material	Design	Load	Code	L (mm)	Width (mm)	Opening (mm)	Units (x LM)
DUCTILE IRON	SLOTTED	D400	FN100FTDM	500	145	13,75	2
	HEELPROOF SLOTTED	D400	FNHX100FTDM	500	145	8	2
	SLOTTED	E600	FNX100FTFM	500	145	19	2
	SOLID	F900	FC100FTFM	500	145	-	2
	SLOTTED	F900	FNX100FTFM	500	145	19	2
	HEELPROOF SLOTTED	F900	FNHX100FTFM	500	145	8	2

LOCKING SYSTEM

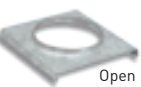
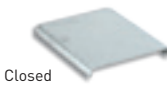
8 BOLT LOCKING SYSTEM.
8 screws with protection cap, per linear metre.



SUMP UNITS AND ACCESSORIES TABLE

Code	L (mm)	H (mm)	Width (mm)	Ø Outlet (mm)		Sump Units	Bucket
				Lateral	Front		
AF100	500	580	156	110/160	110	1	CU100

END CAPS



Channel	Code	Type	Ø (mm)
F100K00R	T100F00C	CLOSED	-
	T100F00A	OPEN	110
F100K10R	T100F10C	CLOSED	-
	T100F10A	OPEN	110
F100K20R	T100F20C	CLOSED	-
	T100F20A	OPEN	110

STEP UNITS

Code

CEF100



GALVANIZED STEEL BUCKET

Code

CU100



SLOPE DESIGNS



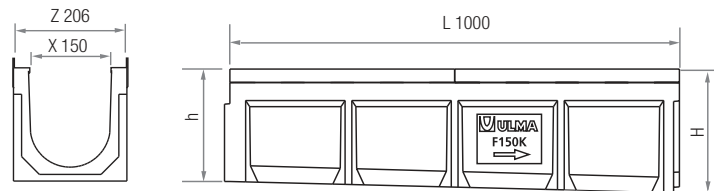
F150K

SLOPE
2,5%

LOAD CLASS
UP TO F900
EN-1433 STANDARD

ULMA Linear Drainage Channel type F150K: External width 206 mm; Internal width 150 mm; Available with overall heights between 145 mm and 370 mm. Suitable also with 2,5% presloped, cascaded or mixed slope, to collect rainwater, in 1 metre long units. Safe locking system consists of eight bolts per LM; Integrated galvanized steel* edges for lateral protection.

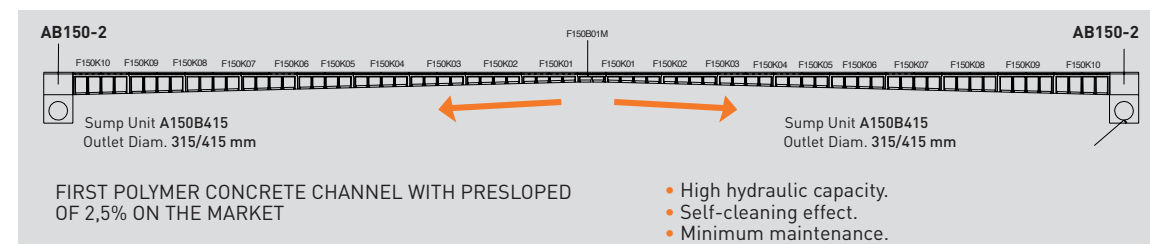
*Also available with cast iron or stainless steel edges.



Channel	L (mm)	H (mm)		Width (mm)		Ø Outlet* (mm)		Hydraul. Section (cm²)	Sloped	Pcs. (x pallet)
		h	H	Z	X	Vert.	Hor.			
F150K01M	500	145	145	212	150	-	-	120	-	*
F150K02	1000	145	170	206	150	-	-	155	2.5%	*
F150K03	1000	170	195	206	150	-	-	190	2.5%	*
F150K04	1000	195	220	206	150	-	-	230	2.5%	*
F150K00R	1000	220	220	206	150	160	-	230	-	45
F150K05	1000	220	245	206	150	-	-	265	2.5%	*
F150K06	1000	245	270	206	150	-	-	305	2.5%	*
F150K10R	1000	270	270	206	150	160	-	305	-	36
F150K07	1000	270	295	206	150	-	-	340	2.5%	*
F150K08	1000	295	320	206	150	-	-	380	2.5%	*
F150K20R	1000	320	320	206	150	160	160	380	-	27
F150K09	1000	320	345	206	150	-	-	410	2.5%	*
F150K10	1000	345	370	206	150	-	-	457	2.5%	*
F150K30R	1000	370	370	206	150	160	-	457	-	27

* Check minimum order
* Vert. and horiz. outlets on order.

CONTINUOUS PRESLOPED OF 2,5%

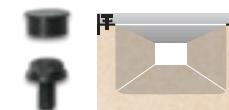


GRATINGS

Material	Design	Load	Code	L (mm)	Width (mm)	Opening (mm)	Uds. (xLM)
DUCTILE IRON	SLOTTED	D400	FNX150FTDM	500	195	13,75	2
	HEELPROOF SLOTTED	D400	FNHX150FTDM	500	195	8	2
	SLOTTED	E600	FNX150FTFM	500	195	19	2
	SLOTTED	F900	FNX150FTFM	500	195	19	2
	HEELPROOF SLOTTED	F900	FNHX150FTFM	500	195	8	2
	SOLID	F900	FC150FTFM	500	195	-	2

LOCKING SYSTEM

8 BOLT LOCKING SYSTEM.
8 screws with protection cap, per linear metre.



SUMP UNITS AND ACCESSORIES TABLE

Code	L (mm)	H (mm)	Width (mm)	Ø Lateral Outlet (mm)	Ø Frontal Outlet (mm)	Sump Units	Bucket
AB150-2	500	402	212	160/200	-	1	C150
AB150S-2 + A150B415	500	918**	212	315/415	-	2	C150
AF150-2	500	402	206	160/200	-	1	C150
AF150S-2 + A150B415	500	918**	206	315/415	-	2	C150
AF150*	500	350	206	160	110	1	-
AF150S + A150B*	500	655**	206	160	110	2	C150

*Available up to 320 mm height.
**The sump unit can be higher incorporating an intermediate unit.

END CAPS		Closed		Open	
Channel	Code	Type	Ø (mm)		
F150K00R	T150K00C	CLOSED	-		
	T150K00A	OPEN	160		
F150K10R	T150K10C	CLOSED	-		
	T150K10A	OPEN	160		
F150K20R	T150K20C	CLOSED	-		
	T150K20A	OPEN	160		
F150K30R	T150K30C	CLOSED	-		
	T150K30A	OPEN	160		

STEP UNITS

Code
CE150



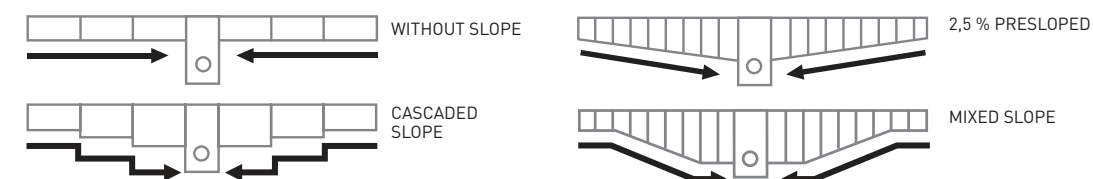
GALVANIZED STEEL BUCKET *

Code
C150



*Only applicable if 2 sump units are installed.

SLOPE DESIGNS

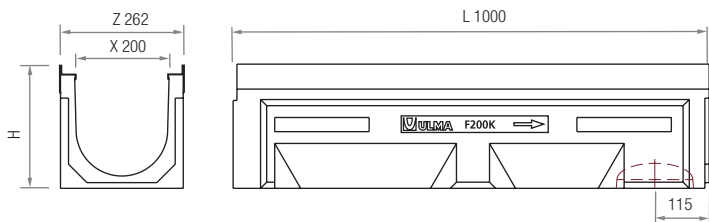


F200K

LOAD CLASS
UP TO F900
EN-1433 STANDARD

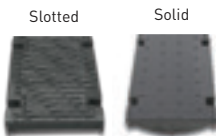
ULMA Linear Drainage Channel type F200K: External width 262 mm; Internal width 200 mm; Available with overall heights between 263 mm and 363 mm. Suitable for cascaded type slope to collect rainwater in 1 metre long units. Safe locking system consists of eight bolts per LM; Integrated galvanized steel* edges for lateral protection.

*Also available with cast iron edges.



Channel	L (mm)	H (mm)	Width (mm)		Ø Outlet* (mm)		Hydraul. Section (cm²)	Pcs. / Pallet
			Z	X	Vert.	Hor.		
F200K00R	1000	263	262	200	160	-	374	28
F200K10R	1000	313	262	200	160	160	473	21
F200K20R	1000	363	262	200	160	160	571	21

*Vert. and horiz. outlets on order.

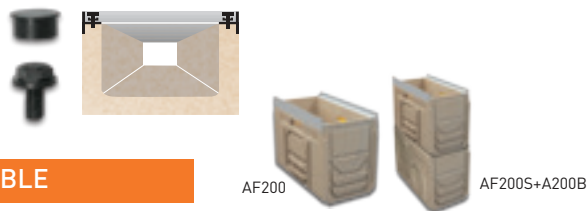


GRATINGS

Material	Design	Load	Code	L (mm)	Width (mm)	Opening (mm)	Units (x LM)
DUCTILE IRON	SLOTTED	D400	FNX200FTDM	500	251	13,75	2
	SLOTTED	E600	FNX200FTEM	500	251	13,75	2
	SLOTTED	F900	FNX200FTFM	500	251	19	2
	SOLID	F900	FC200FTFM	500	251	-	2

LOCKING SYSTEM

8 BOLT LOCKING SYSTEM.
8 screws with protection cap, per linear metre.



SUMP UNITS AND ACCESSORIES TABLE

Code	L (mm)	H (mm)	Width (mm)	Ø Outlet (mm)		Sump Units	Bucket
				Lateral	Front		
AF200	500	363	262	160/200	-	1	-
AF200S + A200B	500	705*	262	160/200	-	2	C200

* The sump unit can be higher incorporating an intermediate unit.

END CAPS		Closed		Open	
Channel	Code	Type	Ø (mm)		
F200K00R	T200K00C	CLOSED	-		
	T200K00A	OPEN	200		
F200K10R	T200K10C	CLOSED	-		
	T200K10A	OPEN	200		
F200K20R	T200K20C	CLOSED	-		
	T200K20A	OPEN	200		

STEP UNITS
Code
CE200

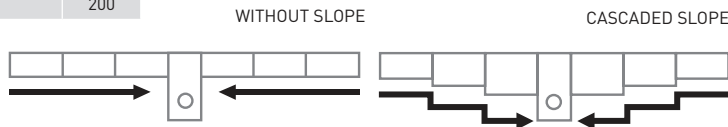


GALVANIZED STEEL BUCKET *
Code
C200



*Only applicable if 2 sump units are installed.

SLOPE DESIGNS



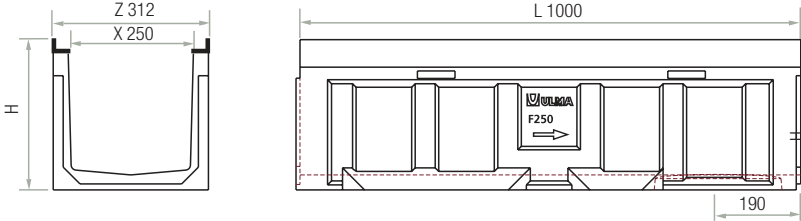
F250K

SLOPE
2,5%

LOAD CLASS
UP TO F900
EN-1433 STANDARD

ULMA Linear Drainage Channel type F250K: External width 312 mm; Internal width 250 mm; Available with overall heights between 150 mm and 650 mm. Suitable also with 2,5% presloped, cascaded or mixed slope, to collect rainwater in 1 metre long units. Safe locking system consists of eight bolts per LM; Integrated galvanized steel* edges for lateral protection.

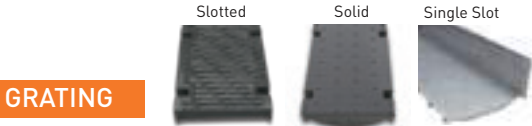
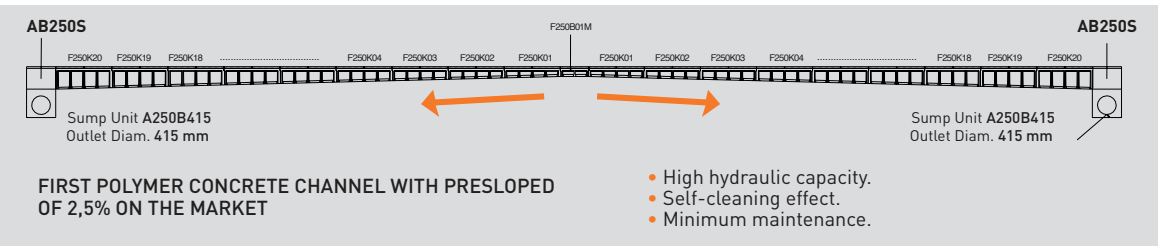
*Also available with cast iron edges.



Channel	L (mm)	H (mm)		Width (mm)		Ø Outlet* (mm)		Hydraul. Section (cm²)	Slope	Pcs. (x pallet)
		h	H	Z	X	Vert.	Horiz.			
F250K01RM	500	150	150	316	250	-	-	220	-	*
F250K01	1000	150	175	316	250	-	-	280	2,5%	*
F250K02	1000	175	200	312	250	-	-	340	2,5%	*
F250K03	1000	200	225	312	250	-	-	400	2,5%	*
F250K04	1000	225	250	312	250	-	-	460	2,5%	*
F250K05	1000	250	275	312	250	-	-	520	2,5%	*
F250K06	1000	275	300	312	250	-	-	580	2,5%	*
F250K00R	1000	300	300	312	250	250	-	580	-	28
F250K07	1000	300	325	312	250	-	-	640	2,5%	*
F250K08	1000	325	350	312	250	-	-	700	2,5%	*
F250K10R	1000	350	350	312	250	250	-	700	-	28
F250K09	1000	350	375	312	250	-	-	760	2,5%	*
F250K10	1000	375	400	312	250	-	-	820	2,5%	*
F250K20R	1000	400	400	312	250	250	-	820	-	21
F250K11	1000	400	425	312	250	-	-	870	2,5%	*
F250K12	1000	425	450	312	250	-	-	930	2,5%	*
F250K30R	1000	450	450	312	250	-	-	935	-	14
F250K13	1000	450	475	312	250	-	-	985	2,5%	*
F250K14	1000	475	500	312	250	-	-	1045	2,5%	*
F250K15	1000	500	525	312	250	-	-	1100	2,5%	*
F250K16	1000	525	550	312	250	-	-	1160	2,5%	*
F250K17	1000	550	575	312	250	-	-	1215	2,5%	*
F250K18	1000	575	600	312	250	-	-	1270	2,5%	*
F250K19	1000	600	625	312	250	-	-	1320	2,5%	*
F250K20	1000	625	650	312	250	-	-	1380	2,5%	*

*Vert. and horiz. outlets on order.

CONTINUOUS PRESLOPED OF 2,5%



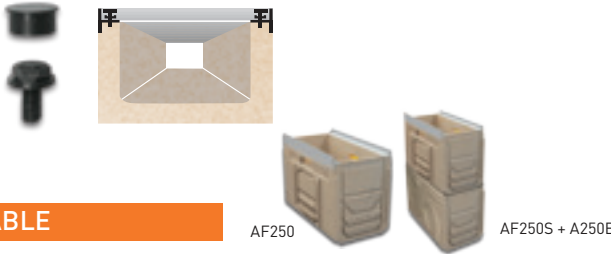
GRATING

Material	Design	Load	Code	L (mm)	Width (mm)	Opening (mm)	Units (x LM)
DUCTILE IRON	SLOTTED	C250	FNX250FTCM	500	301	13,75	2
	SLOTTED	D400	FNX250FTDM	500	301	13,75	2
	SLOTTED	F900	FNX250FTFM	500	301	19	2
	SOLID	F900	FC250FTFM	500	301	-	2
GALVANIZED STEEL	SINGLE SLOT	D400	GRL250FOD (1)	1000	301	18 / H150	1

(1) Without screws.

LOCKING SYSTEM

8 BOLT LOCKING SYSTEM.
8 screws with protection cap, per linear metre.



SUMP UNITS AND ACCESSORIES TABLE

Code	L (mm)	H (mm)	Width (mm)	Ø Lateral Outlet (mm)	Ø Frontal Outlet (mm)	Sump Units
AF250	500	400	316	160/200	-	1
AB250	500	400	316	160/200	-	1
AF250S-65	500	680	312	415	-	1
AB250S-65	500	680	312	415	-	1
AF250S+A250B	500	750*	316	160/200	-	2
AB250S+A250B	500	750*	316	160/200	-	2
AF250S + A250B415	500	916*	316	415	200	2
AB250S+A250B415	500	916*	316	415	200	2

* The sump unit can be higher incorporating an intermediate unit.

END CAPS		Closed	Open
Channel	Code	Type	Ø (mm)
F250K00R	T250K00C	CLOSED	-
	T250K00A	OPEN	200
F250K10R	T250K10C	CLOSED	-
	T250K10A	OPEN	200
F250K20R	T250K20C	CLOSED	-
	T250K20A	OPEN	200
F250K30R	T250K30C	CLOSED	-
	T250K30A	OPEN	200

STEP UNITS

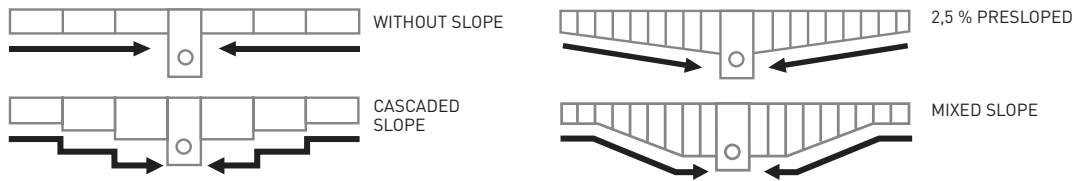
Code
CE250

BUCKET*

Code
C250

*Only applicable if 2 sump units are installed.

SLOPE DESIGNS

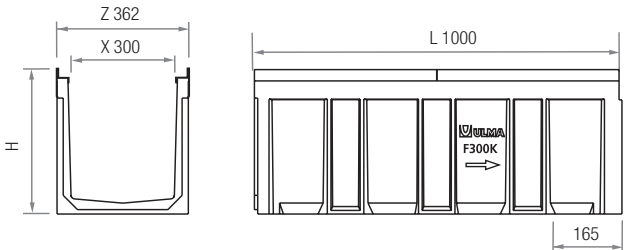


F300K

LOAD CLASS
UP TO F900
EN-1433 STANDARD

ULMA Linear Drainage Channel type F300K: External width 362 mm; Internal width 300 mm; Available with overall heights between 300 mm and 600 mm. Suitable for cascaded type slope to collect rainwater in 1 metre long units. Safe locking system consists of eight bolts per LM; Integrated galvanized steel* edges for lateral protection.

*Also available with cast iron edges.



Channel	L (mm)	H (mm)	Width (mm)		Ø Outlet* (mm)		Hydraul. Section (cm ²)	Pcs. / Pallet
			Z	X	Vert.	Hor.		
F300K00R	1000	300	362	300	250	-	725	15
F300K00R	1000	390	362	300	200	-	975	15
F300K10R	1000	440	362	300	200	-	1110	10
F300K20R	1000	490	362	300	200	-	1255	10
F300K60R	1000	600	362	300	-	-	1525	6

*Vert. outlets on order.



GRATINGS

Material	Design	Load	Code	L (mm)	Width (mm)	Opening (mm)	Units (x LM)
DUCTILE IRON	SLOTTED	C250	FNX300FTCM	500	351	13,75	2
	SLOTTED	D400	FNX300FTDM	500	351	13,75	2
	SLOTTED	F900	FNX300FTFM	500	351	14	2
	SOLID	F900	FC300FTFM	500	351	-	2
GALVANIZED STEEL	SINGLE SLOT	D400	GRL300FOD (1)	1000	351	18 / H150	1

(1) Without screws.

LOCKING SYSTEM

8 BOLT LOCKING SYSTEM.
8 screws with protection cap, per linear metre.



SUMP UNITS AND ACCESSORIES TABLE

Code	L (mm)	H (mm)	Width (mm)	Ø Outlet (mm)		Sump Units	Bucket
				Lateral	Front		
AF300*	500	390	362	200	-	1	-
AF300S + A300B*	500	730**	362	200	-	2	C300

* Available up to 490 mm height (F300K20R).

** The sump unit can be higher incorporating an intermediate unit

Channel	END CAPS		Type	Ø (mm)
	Code			
F300K00R	T300K00C	Closed	CLOSED	-
	T300K00A	Open	OPEN	300
F300K10R	T300K10C	Closed	CLOSED	-
	T300K10A	Open	OPEN	300
F300K20R	T300K20C	Closed	CLOSED	-
	T300K20A	Open	OPEN	300

STEP UNITS

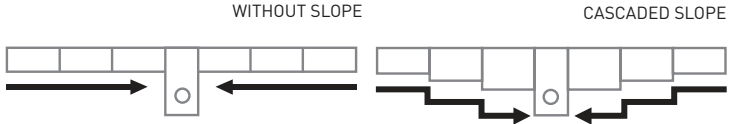
Code
CE300

GALVANIZED STEEL BUCKET*

Code
C300

*Only applicable if 2 sump units are installed.

SLOPE DESIGNS

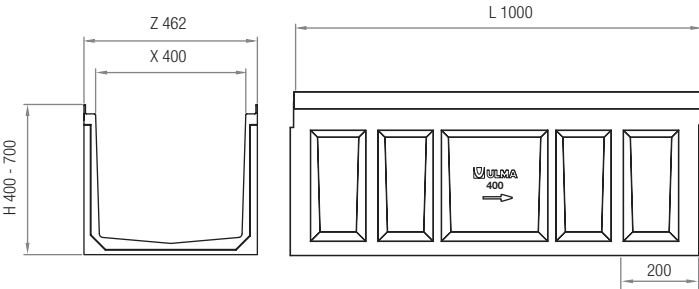


F400K

LOAD CLASS
UP TO F900
EN-1433 STANDARD

ULMA Linear Drainage Channel type F400K: External width 462 mm; Internal width 400 mm; Available with overall heights of 400 mm, to collect rainwater in 1 metre long units. Safe locking system consists of eight bolts per LM; Integrated galvanized steel* edges for lateral protection.

*Also available with cast iron edges.



Channel	L (mm)	H (mm)	Width (mm)		Ø Outlet* (mm)		Hydraul. Section (cm ²)	Pcs. (x pallet)
			Z	X	Vert.	Hor.		
F400K00R	1000	400	462	400	315	-	1312	9
F400K40R	1000	700	494	400	315	-	2490	4

*Vert. outlets on order.



GRATING

Material	Design	Load	Code	L (mm)	Width (mm)	Opening (mm)	Units (x LM)
DUCTILE IRON	SLOTTED	D400	FNX400FTDM	500	451	18,5	2
	SLOTTED	F900	FNX400FTFM	500	451	18,5	2

LOCKING SYSTEM

8 BOLT LOCKING SYSTEM. 8 screws with protection cap, per linear metre.



SUMP UNITS AND ACCESSORIES TABLE

Code	L (mm)	H (mm)	Width (mm)	Ø Lateral Outlet (mm)	Ø Frontal Outlet (mm)	Sump Units
AF400*	500	585	462	315	-	1

*Available only for 400 mm height.

Channel	END CAPS		Type	Ø (mm)
	Code			
F400K00R	T400K00C	Closed	CLOSED	-
	T400K00A	Open	OPEN	315
F400K40R	T400K40C	Closed	CLOSED	-
	T400K40A	Open	OPEN	315

BUCKET

Code
C400

