

CIVIL-F

CIVIL DRAINAGE

CIVIL-F

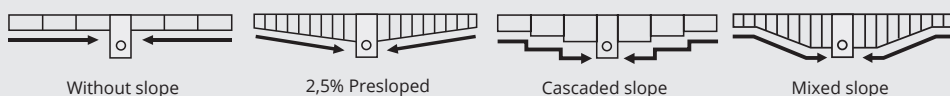
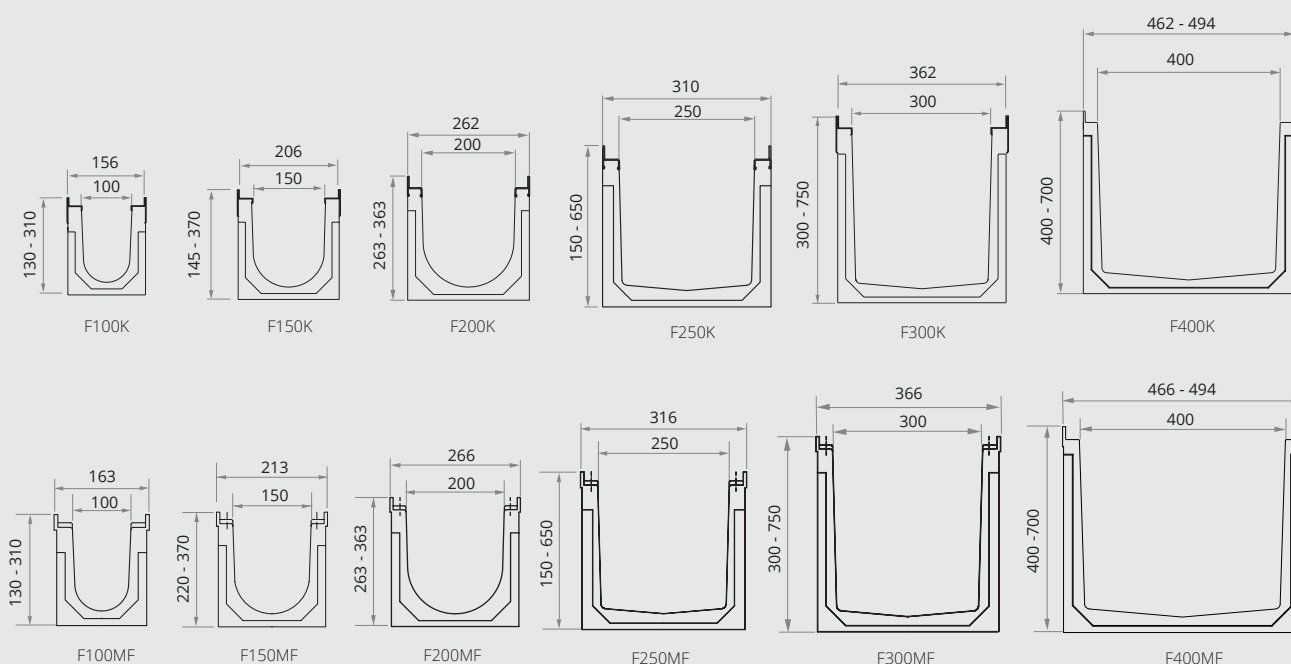
SYSTEM

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 galvanised 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.



F100
F150
F200
F250
F300
F400

F150
F250

F100
F150
F200
F250
F300

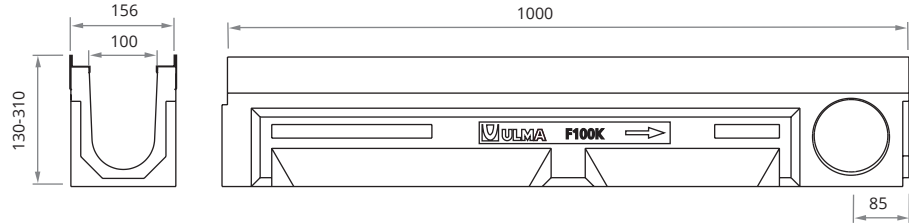
F150
F250

Load Class
up to F900
EN-1433 Standard

F100K



ULMA Linear Drainage Channel type F100K: External width 156 mm; Internal width 100 mm; Available with overall heights between 130 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 galvanised steel edges for lateral protection.



CHANNELS

Code Channel	L mm	H mm	Width mm		Ø Outlet* mm		Hydraul. Section cm ²	Pcs. pallet	Weight Kg	Qref l/s
			Ext.	Int.	Vert.	Hor.				
F100K00R	1000	130	156	100	110	-	70	49	20,0	1,26
F100K00R	1000	190	156	100	110	110	126	52	26,7	5,55
F100K10R	1000	250	156	100	110	-	184	39	28,9	9,96
F100K20R	1000	310	156	100	110	110	242	39	34,2	15,19

* Vert. and horiz. outlets on order

GRATINGS



Material	Design	Load	Code	L mm	Width mm	Opening mm	Weight Kg	Intake area cm ² /ml	HOW TO FIX	
									Code	Units ml
DUCTILE IRON	HEELPROOF SLOTTED	D400	FNHX100FTDM	500	145	8	4,1	229	TF1023 + TP	8 + 8
	SLOTTED	E600	FNX100FTEM	500	145	19	4,0	457	TF1023 + TP	8 + 8
	CLOSED	F900	FC100FTFM	500	145	-	6,5	-	TF1023 + TP	8 + 8
	SLOTTED	F900	FNX100FTFM	500	145	19	4,4	457	TF1023 + TP	8 + 8
	HEELPROOF SLOTTED	F900	FNHX100FTFM	500	145	8	4,8	229	TF1023 + TP	8 + 8

HOW TO FIX



SUMP UNITS

Code	L mm	H mm	Width mm	Lateral outlets Ø mm	Front outlet Ø mm	Sump units	Weight Kg
AF100	500	580	156	110/160	110	1	38,7

BUCKET

Code
CU100

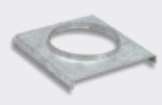
STEP UNITS

Code
CEF100

To install in the changes of height with cascaded slope.

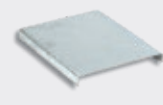
OPEN END CAP

Channel	Code	Ø mm
F100K00R	T100F000A	110
F100K00R	T100F00A	110
F100K10R	T100F10A	110
F100K20R	T100F20A	110



CLOSED END CAP

Code
T100F000C
T100F00C
T100F10C
T100F20C



SLOPE DESIGNS

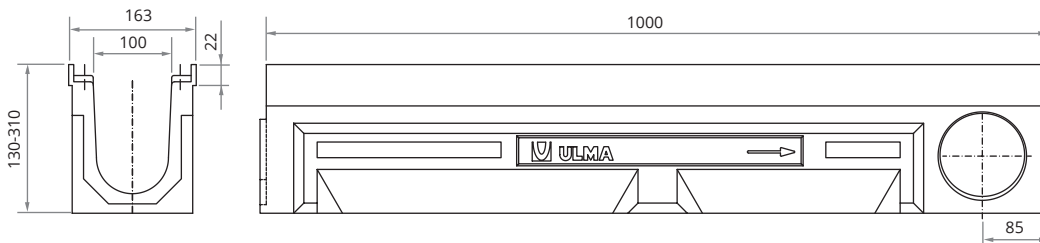


Load Class
up to F900
EN-1433 Standard

F100MF



ULMA Linear Drainage Channel type F100MF: External width 163 mm; Internal width 100 mm; Available with overall heights between 130 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 galvanised steel edges for lateral protection.

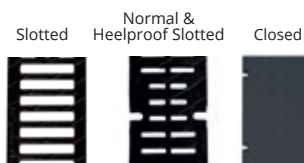


CHANNELS

Code Channel	L mm	H mm	Width mm		Ø Outlet* mm		Hydraul. Section cm ²	Pcs. pallet	Weight Kg	Qref l/s
			Ext.	Int.	Vert.	Hor.				
F100MF00R	1000	130	163	100	110	-	70	49	21,5	1,26
F100MF00R	1000	190	163	100	110	110	126	52	26,8	5,55
F100MF10R	1000	250	163	100	110	-	184	39	29,4	9,96
F100MF20R	1000	310	163	100	110	110	242	39	35,8	15,19

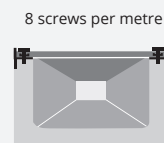
* Vert. and horiz. outlets on order.

GRATINGS



Material	Design	Load	Code	L mm	Width mm	Opening mm	Weight Kg	Intake area cm ² /ml	Code	Units ml
									Code	Units ml
DUCTILE IRON	HEELPROOF SLOTTED	D400	FNHX100FTDM	500	145	8	4,1	229	TF1023 + TP	8 + 8
	SLOTTED	E600	FNX100FTEM	500	145	19	4,0	457	TF1023 + TP	8 + 8
	CLOSED	F900	FC100FTFM	500	145	-	6,5	-	TF1023 + TP	8 + 8
	SLOTTED	F900	FNX100FTFM	500	145	19	4,4	457	TF1023 + TP	8 + 8
	HEELPROOF SLOTTED	F900	FNHX100FTFM	500	145	8	4,8	229	TF1023 + TP	8 + 8

HOW TO FIX



SUMP UNITS

Code	L mm	H mm	Width mm	Lateral outlets Ø mm	Front outlet Ø mm	Sump units	Weight Kg
AMF100	500	580	163	110/160	110	1	39,4

BUCKET

Code
CU100

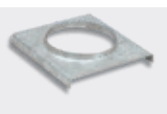
STEP UNITS

Code
CEF100

To install in the changes of height with cascaded slope.

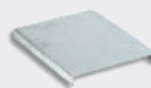
OPEN END CAP

Channel	Code	Ø mm
F100MF00R	T100F000A	110
F100MF00R	T100F00A	110
F100MF10R	T100F10A	110
F100MF20R	T100F20A	110



CLOSED END CAP

Code
T100F000C
T100F00C
T100F10C
T100F20C



SLOPE DESIGNS

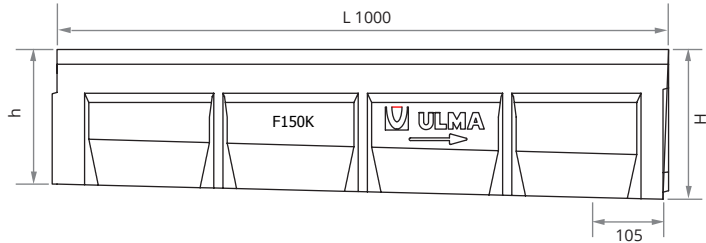
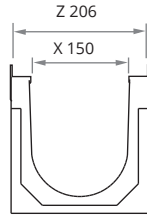


Load Class
up to F900
EN-1433 Standard

F150K

SLOPE
2,5% CE

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 for 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 galvanised steel* edges for lateral protection.



* Also available with cast iron edges.

CHANNELS

Code Channel	L mm	H mm		Width mm		Ø Outlet* mm		Hydraul. Section cm ²	Pcs. pallet	Weight Kg	Qref l/s
		h	H	Z	X	Vert.	Hor.				
F150K01M	500	145	145	212	150	-	-	120	-	14,1	-
F150K02	1000	145	170	206	150	-	-	155	-	28,3	-
F150K03	1000	170	195	206	150	-	-	190	-	30,4	-
F150K04	1000	195	220	206	150	-	-	230	-	32,5	-
F150K00R	1000	220	220	206	160	160	-	230	45	29,4	11,59
F150K05	1000	220	245	206	150	-	-	265	-	34,6	-
F150K06	1000	245	270	206	150	-	-	305	-	36,7	-
F150K10R	1000	270	270	206	150	160	-	305	36	33,4	17,83
F150K07	1000	270	295	206	150	-	-	340	-	38,8	-
F150K08	1000	295	320	206	150	-	-	375	-	40,8	-
F150K20R	1000	320	320	206	150	160	160	375	27	41,5	24,96
F150K09	1000	320	345	206	150	-	-	410	-	42,9	-
F150K10	1000	345	370	206	150	-	-	457	-	45,0	-
F150K30R	1000	370	370	206	150	160	-	457	27	43,9	33,26

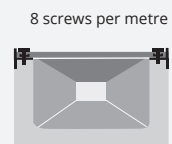
* Vert. and horiz. outlets on order .

GRATINGS



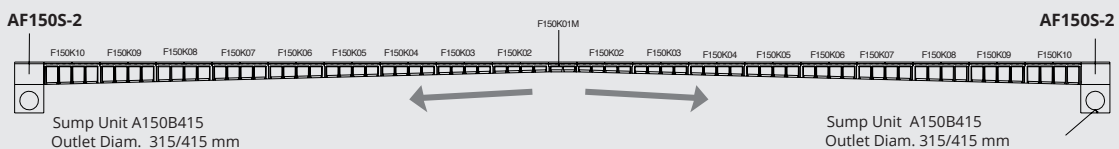
Material	Design	Load	Code	L mm	Width mm	Opening mm	Weight Kg	Intake area cm ² /ml
DUCTILE IRON	SLOTTED	D400	FNX150FTDM	500	195	13,75	6,2	672
	HEELPROOF SLOTTED	D400	FNHX150FTDM	500	195	8	6,3	364
	SLOTTED	E600	FNX150FTEM	500	195	19	7,0	672
	SLOTTED	F900	FNX150FTFM	500	195	19	7,3	723
	HEELPROOF SLOTTED	F900	FNHX150FTFM	500	195	8	8,5	364
	CLOSED	F900	FC150FTFM	500	195	-	12,2	-
DUCTILE IRON STAINLESS	SLOTTED	D400	FIN150FTDM	500	195	25	8,9	566

HOW TO FIX



Code	Units ml
TF1023 + TP	8 + 8
TF1023 + TP	8 + 8
TF1023 + TP	8 + 8
TF1023 + TP	8 + 8
TF1023 + TP	8 + 8
TF1023 + TP	8 + 8
TFX1020	8

CONTINUOUS PRESLOPED OF 2,5%



FIRST POLYMER CONCRETE CHANNEL WITH PRESLOPED OF 2,5% ON THE MARKET

- High hydraulic capacity.
- Self-cleaning effect.
- Minimum maintenance.

F150K

SUMP UNITS



Code	L mm	H mm	Width mm	Lateral outlets Ø mm	Front outlet Ø mm	Sump units	Weight Kg
AF150-2	500	402	206	160/200	-	1	33,3
AF150S-2 + A150B415	500	918**	206	315/415	-	2	73,2
AF150 *	500	350	206	160	110	1	24,9
AF150S + A150B **	500	655**	206	160	110	2	46,9

*Available up to 320 mm height.

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

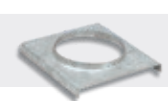
BUCKET

Code**
-
C150
-
C150

** Only applicable if 2 sump units are installed.

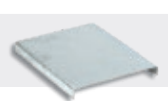
OPEN END CAP

Channel	Code	Ø mm
F150K00R	T150K00A	160
F150K10R	T150K10A	160
F150K20R	T150K20A	160
F150K30R	T150K30A	160



CLOSED END CAP

Code
T150K00C
T150K10C
T150K20C
T150K30C



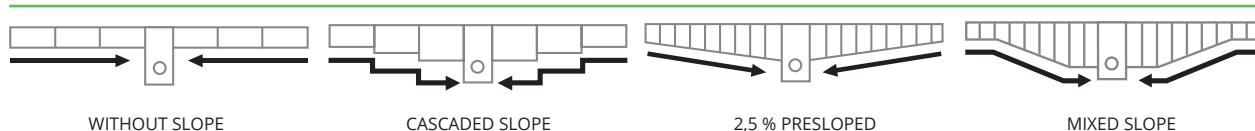
STEP UNITS

Code
CE150



To install in the changes of height with cascaded slope.

SLOPE DESIGNS



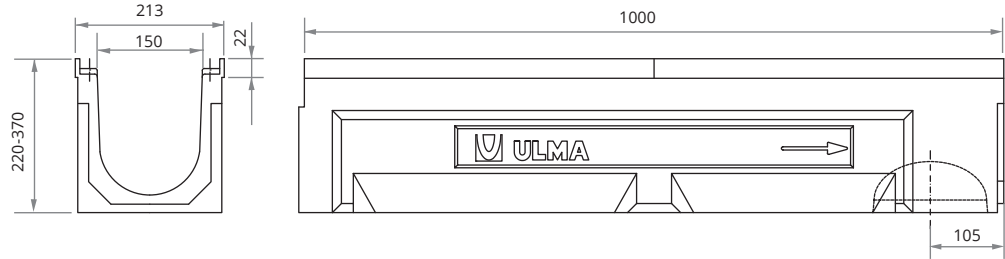
Load Class
up to F900
EN-1433 Standard

F150MF



ULMA Linear Drainage Channel type F150MF: External width 213 mm; Internal width 150 mm; Available with overall heights between 220 mm and 370 mm. Suitable for cascaded slope, to collect rainwater, in 1 metre long units. Safe locking system consists of eight bolts per LM; Integrated galvanised steel* edges for lateral protection.

* Also available with cast iron edges.

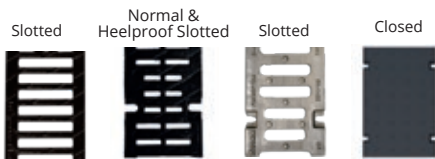


CHANNELS

Code Channel	L mm	H mm	Width mm		Ø Outlet* mm		Hydraul. Section cm ²	Pcs. pallet	Weight Kg	Qref l/s
			Z	X	Vert.	Hor.				
F150MF00R	1000	220	213	160	160	-	230	45	33,2	11,59
F150MF10R	1000	270	213	150	160	-	305	36	34,3	17,83
F150MF20R	1000	320	213	150	160	160	375	27	41,4	24,96
F150MF30R	1000	370	213	150	160	-	457	27	47,4	33,26

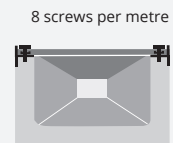
* Vert. and horiz. outlets on order .

GRATINGS



Material	Design	Load	Code	L mm	Width mm	Opening mm	Weight Kg	Intake area cm ² /ml
DUCTILE IRON	SLOTTED	D400	FNX150FTDM	500	195	13,75	6,2	672
	HEELPROOF SLOTTED	D400	FNHX150FTDM	500	195	8	6,3	364
	SLOTTED	E600	FNX150FTEM	500	195	19	7,0	672
	SLOTTED	F900	FNX150FTFM	500	195	19	7,3	723
	HEELPROOF SLOTTED	F900	FNHX150FTFM	500	195	8	8,5	364
DUCTILE IRON STAINLESS	CLOSED	F900	FC150FTFM	500	195	-	12,2	-
	SLOTTED	D400	FIN150FTDM	500	195	25	8,9	566

HOW TO FIX



Code	Units ml
TF1023 + TP	8 + 8
TF1023 + TP	8 + 8
TF1023 + TP	8 + 8
TF1023 + TP	8 + 8
TF1023 + TP	8 + 8
TF1023 + TP	8 + 8
TFX1020	8

SUMP UNITS

Code	L mm	H mm	Width mm	Lateral outlets Ø mm	Front outlet Ø mm	Sump units	Weight Kg
AMF150-2	500	402	213	160/200	-	1	34,0
AMF150-2 + A150B415	500	918**	213	315/415	-	2	75,8
AMF150*	500	350	213	160	110	1	22,3
AMF150S + A150B**	500	655**	213	160	110	2	46,3

*Available up to 320 mm height.

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

BUCKET

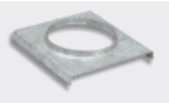
Code**
-
C150
-
C150

** Only applicable if 2 sump units are installed.

F150MF

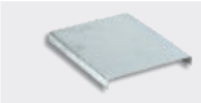
OPEN END CAP

Channel	Code	Ø mm
F150K00R	T150K00A	160
F150K10R	T150K10A	160
F150K20R	T150K20A	160
F150K30R	T150K30A	160



CLOSED END CAP

Code
T150K00C
T150K10C
T150K20C
T150K30C



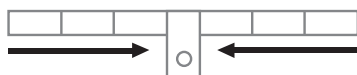
STEP UNITS

Code
CE150

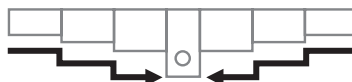


To install in the changes of height with cascaded slope.

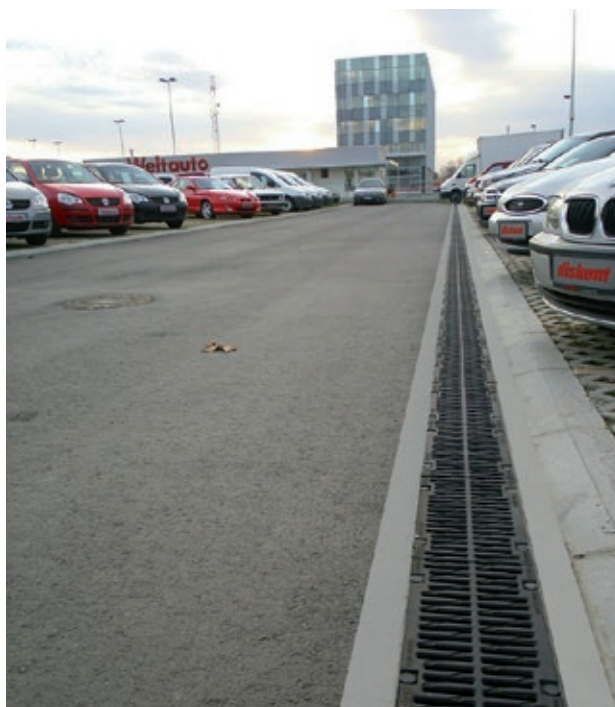
SLOPE DESIGNS



WITHOUT SLOPE



CASCADED SLOPE

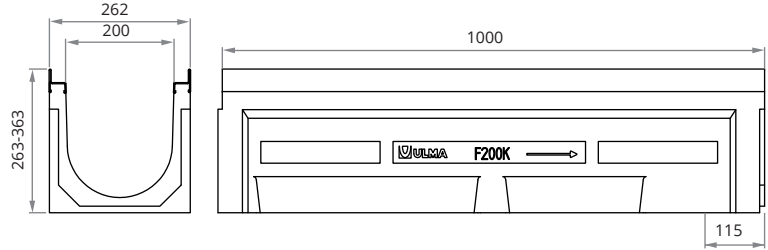


Load Class
up to F900
EN-1433 Standard

F200K



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 galvanised steel edges for lateral protection.

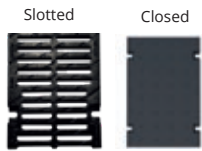


CHANNELS

Code Channel	L mm	H mm	Width mm		Ø Outlet* mm		Hydraul. Section cm ²	Pcs. pallet	Weight Kg	Qref l/s
			Ext.	Int.	Vert.	Hor.				
F200K00R	1000	263	262	200	160	-	374	28	43,8	21,37
F200K10R	1000	313	262	200	160	160	473	21	48,0	30,75
F200K20R	1000	363	262	200	160	160	571	21	53,8	41,49

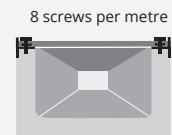
* Vert. and horiz. outlets on order.

GRATINGS



Material	Design	Load	Code	L mm	Width mm	Opening mm	Weight Kg	Intake area cm ² /ml	HOW TO FIX	
									Code	Units ml
DUCTILE IRON	SLOTTED	D400	FNX200FTDM	500	251	13,75	8,3	552	TF1023 + TP	8 + 8
	SLOTTED	E600	FNX200FTEM	500	251	13,75	10,1	552	TF1023 + TP	8 + 8
	SLOTTED	F900	FNX200FTFM	500	251	19	10,1	920	TF1023 + TP	8 + 8
	CLOSED	F900	FC200FTFM	500	251	-	13,3	-	TF1023 + TP	8 + 8

HOW TO FIX



SUMP UNITS



Code	L mm	H mm	Width mm	Lateral outlets Ø mm	Front outlet Ø mm	Sump units	Weight Kg
AF200	500	363	262	160/200	-	1	34,4
AF200S + A200B	500	705*	262	160/200	-	2	53,5

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

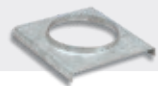
BUCKET

Code**
C200

** Only applicable if 2 sump units are installed.

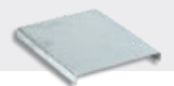
OPEN END CAP

Channel	Code	Ø mm
F200K00R	T200K00A	200
F200K10R	T200K10A	200
F200K20R	T200K20A	200



CLOSED END CAP

Code
T200K00C
T200K10C
T200K20C



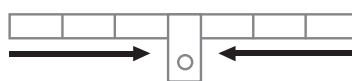
STEP UNITS

Code
CE200



To install in the changes of height with cascaded slope.

SLOPE DESIGNS



WITHOUT SLOPE



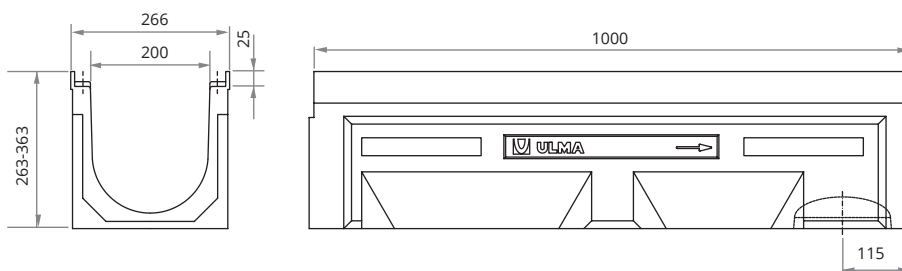
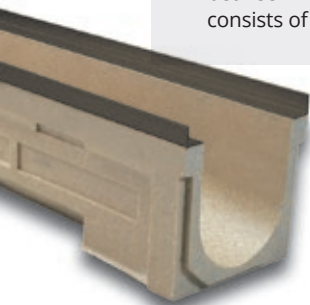
CASCADED SLOPE

Load Class
up to F900
EN-1433 Standard

F200MF



ULMA Linear Drainage Channel type F200MF: External width 266 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 galvanised steel edges for lateral protection.

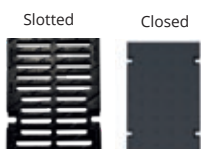


CHANNELS

Code Channel	L mm	H mm	Width mm		Ø Outlet* mm		Hydraul. Section cm ²	Pcs. pallet	Weight Kg	Qref l/s
			Ext.	Int.	Vert.	Hor.				
F200MF00R	1000	263	266	200	160	-	374	28	42,4	21,37
F200MF10R	1000	313	266	200	160	160	473	21	49,7	30,75
F200MF20R	1000	363	266	200	160	160	571	21	55,8	41,49

* Vert. and horiz. outlets on order.

GRATINGS



Material	Design	Load	Code	L mm	Width mm	Opening mm	Weight Kg	Intake area cm ² /ml
DUCTILE IRON	SLOTTED	D400	FNX200FTDM	500	251	13,75	8,3	552
	SLOTTED	E600	FNX200FTEM	500	251	13,75	10,1	552
	SLOTTED	F900	FNX200FTFM	500	251	19	10,1	920
	CLOSED	F900	FC200FTFM	500	251	-	13,3	-

HOW TO FIX



Code	Units ml
TF1023 + TP	8 + 8
TF1023 + TP	8 + 8
TF1023 + TP	8 + 8
TF1023 + TP	8 + 8

SUMP UNITS



Code	L mm	H mm	Width mm	Lateral outlets Ø mm	Front outlet Ø mm	Sump units	Weight Kg
AMF200	500	363	266	160/200	-	1	35,3
AMF200S + A200B	500	705*	266	160/200	-	2	56,4

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

BUCKET

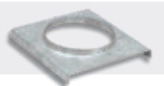


Code**
C200

** Only applicable if 2 sump units are installed.

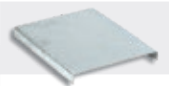
OPEN END CAP

Channel	Code	Ø mm
F200MF00R	T200K00A	200
F200MF10R	T200K10A	200
F200MF20R	T200K20A	200



CLOSED END CAP

Code
T200K00C
T200K10C
T200K20C



STEP UNITS

Code
CE200



To install in the changes of height with cascaded slope.

SLOPE DESIGNS



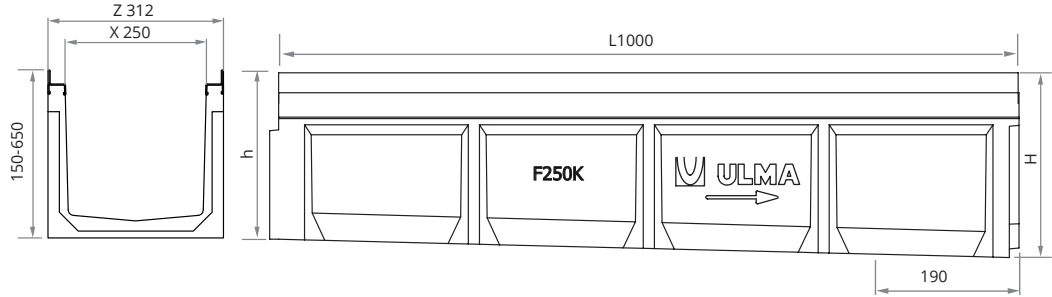
Load Class
up to F900
EN-1433 Standard

F250K

SLOPE
2,5% CE

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 for 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 galvanised steel* edges for lateral protection.

* Also available with cast iron edges.

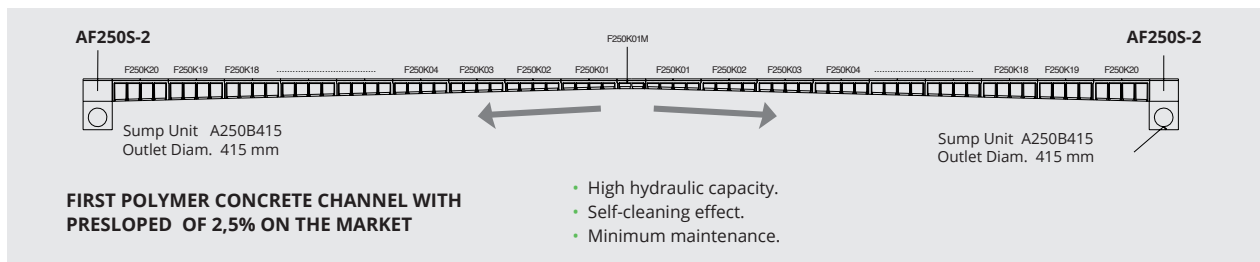


CHANNELS

Code Channel	L mm	H mm		Width mm		Ø Outlet* mm		Hydraul. Section cm ²	Pcs. pallet	Weight Kg	Qref l/s
		h	H	Z	X	Vert.	Hor.				
F250K01RM	500	150	150	312	250	-	-	220	-	19,8	-
F250K01	1000	150	175	312	250	-	-	280	-	34,4	-
F250K02	1000	175	200	312	250	-	-	340	-	38,1	-
F250K03	1000	200	225	312	250	-	-	400	-	40,7	-
F250K04	1000	225	250	312	250	-	-	460	-	42,3	-
F250K05	1000	250	275	312	250	-	-	520	-	44,3	-
F250K06	1000	275	300	312	250	-	-	580	-	46,8	-
F250K00R	1000	300	300	312	250	250	200	580	28	47,1	38,57
F250K07	1000	300	325	312	250	-	-	640	-	48,2	-
F250K08	1000	325	350	312	250	-	-	700	-	52,8	-
F250K10R	1000	350	350	312	250	250	200	700	28	49,6	51,52
F250K09	1000	350	375	312	250	-	-	760	-	55,1	-
F250K10	1000	375	400	312	250	-	-	820	-	57,7	-
F250K20R	1000	400	400	312	250	250	200	820	21	55,0	65,68
F250K11	1000	400	425	312	250	-	-	870	-	69,6	-
F250K12	1000	425	450	312	250	-	-	930	-	73,3	-
F250K30R	1000	450	450	312	250	-	-	935	14	63,2	80,98
F250K13	1000	450	475	312	250	-	-	985	-	77,5	-
F250K14	1000	475	500	312	250	-	-	1045	-	79,8	-
F250K15	1000	500	525	312	250	-	-	1100	-	83,7	-
F250K16	1000	525	550	312	250	-	-	1160	-	87,9	-
F250K17	1000	550	575	312	250	-	-	1215	-	90,0	-
F250K18	1000	575	600	312	250	-	-	1270	-	94,2	-
F250K19	1000	600	625	312	250	-	-	1320	-	98,4	-
F250K20	1000	625	650	312	250	-	-	1380	-	103,6	-
F250K40R	1000	650	650	312	250	250	-	1383	8	91,1	151,7

* Vert. outlets on order.

CONTINUOUS PRESLOPED OF 2,5%



F250K

GRATINGS



Material	Design	Load	Code	L mm	Width mm	Opening mm	Weight Kg	Intake area cm ² /ml
DUCTILE IRON	SLOTTED	C250	FNX250FTCM	500	301	13,75	11,3	1146
	SLOTTED	D400	FNX250FTDM	500	301	13,75	13,2	1146
	SLOTTED	F900	FNX250FTFM	500	301	19	20,4	1185
	CLOSED	F900	FC250FTFM	500	301	-	23,9	-
GALVANISED STEEL	SINGLE SLOT	D400	GRL250FOD	1000	301	18 / H150	22,9	180

HOW TO FIX

8 screws per metre



Code	Units ml
TF1023 + TP	8 + 8
TF1023 + TP	8 + 8
TF1023 + TP	8 + 8
TF1023 + TP	8 + 8
(1)	(1)

(1) Click. Without screws.

SUMP UNITS



Code	L mm	H mm	Width mm	Lateral outlets Ø mm	Front outlet Ø mm	Sump units	Weight Kg
AF250*	500	400	316	160/200	-	1	38,6
AF250-65	500	680	312	415	-	1	67,4
AF250S + A250B**	500	750*	316	160/200	-	2	88,8
AF250S - 65 + A250B415	500	1183*	316	415	200	2	133,7
F250K40RS+ A250B415	1000	1155	316	415	200	2	116,5

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

** Available up to 400 mm height.

BUCKET



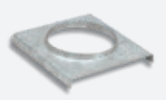
Code**

C250

** Only applicable if 2 sump units are installed.

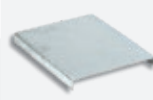
OPEN END CAP

Channel	Code	Ø mm
F250K00R	T250K00A	200
F250K10R	T250K10A	200
F250K20R	T250K20A	200
F250K30R	T250K30A	200
F250K40R	T250K40A	200



CLOSED END CAP

Code
T250K00C
T250K10C
T250K20C
T250K30C
T250K40C



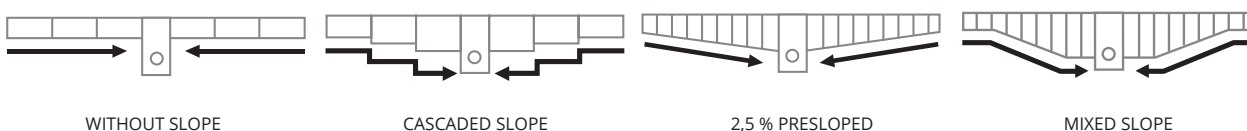
STEP UNITS

Code
CE250



To install in the changes of height with cascaded slope.

SLOPE DESIGNS



WITHOUT SLOPE

CASCADED SLOPE

2,5 % PRESLOPED

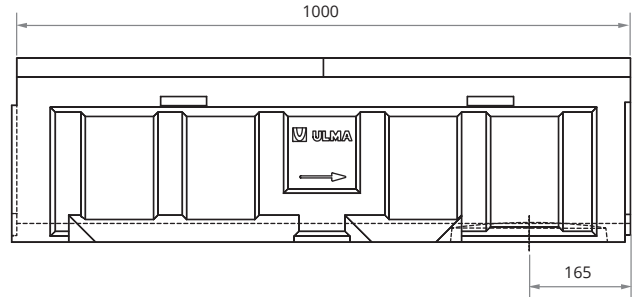
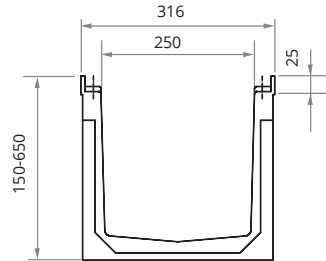
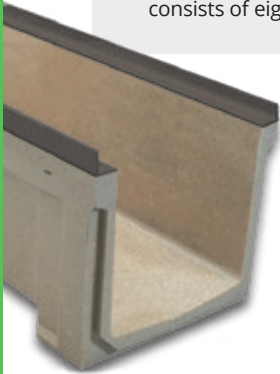
MIXED SLOPE

Load Class
up to F900
EN-1433 Standard

F250MF



ULMA Linear Drainage Channel type F250MF: External width 316 mm; Internal width 250 mm; Available with overall heights between 150 mm and 650 mm. Suitable for cascaded slope, to collect rainwater in 1 metre long units. Safe locking system consists of eight bolts per LM; Integrated galvanised steel edges for lateral protection.

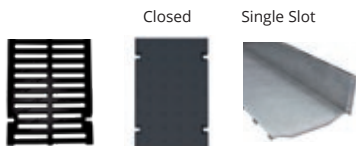


CHANNELS

Code Channel	L mm	H mm	Width mm		Ø Outlet* mm		Hydraul. Section cm ²	Pcs. pallet	Weight Kg	Qref l/s
			Z	X	Vert.	Hor.				
F250MF01RM	500	150	316	250	-	-	220	-	20,6	-
F250MF00R	1000	300	316	250	250	-	580	28	50,4	38,57
F250MF10R	1000	350	316	250	250	-	700	28	54,6	51,52
F250MF20R	1000	400	316	250	250	-	820	21	59,0	65,68
F250MF30R	1000	450	316	250	-	-	935	14	64,8	80,98
F250MF40R	1000	650	316	250	250	-	1383	8	84,6	151,7

* *Vert. outlets on order.

GRATINGS



Material	Design	Load	Code	L mm	Width mm	Opening mm	Weight Kg	Intake area cm ² /ml
DUCTILE IRON	SLOTTED	C250	FNX250FTCM	500	301	13,75	11,3	1146
	SLOTTED	D400	FNX250FTDM	500	301	13,75	13,2	1146
	SLOTTED	F900	FNX250FTFM	500	301	19	20,4	1185
	CLOSED	F900	FC250FTFM	500	301	-	23,9	-
GALVANISED STEEL	SINGLE SLOT	D400	GRL250FOD	1000	301	18 / H150	22,9	180

HOW TO FIX

8 screws per metre



Code	Units ml
TF1023 + TP	8 + 8
TF1023 + TP	8 + 8
TF1023 + TP	8 + 8
TF1023 + TP	8 + 8
(1)	(1)

(1) Click. Without screws.

SUMP UNITS

Code	L mm	H mm	Width mm	Lateral outlets Ø mm	Front outlet Ø mm	Sump units	Weight Kg
AMF250*	500	400	316	160/200	-	1	39,4
AMF250-65	500	680	316	415	-	1	74,9
AMF250S + A250B**	500	750*	316	160/200	-	2	68,2
F250MF40RS+ A250B415	1000	1155	316	415	200	2	129,5

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

** Available up to 400 mm height.

BUCKET

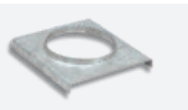
Code**
C250

** Only applicable if 2 sump units are installed.

F250MF

OPEN END CAP

Channel	Code	Ø mm
F250MF00R	T250K00A	200
F250MF10R	T250K10A	200
F250MF20R	T250K20A	200
F250MF30R	T250K30A	200
F250MF40R	T250K40A	200



CLOSED END CAP

Code
T250K00C
T250K10C
T250K20C
T250K30C
T250K40C



STEP UNITS

Code
CE250



To install in the changes of height with cascaded slope.

SLOPE DESIGNS



WITHOUT SLOPE

CASCADED SLOPE

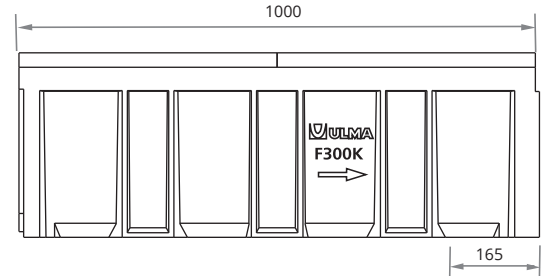
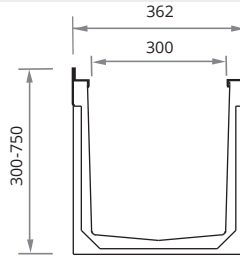


Load Class
up to F900
EN-1433 Standard

F300K



ULMA Linear Drainage Channel type F300K: External width 362 mm; Internal width 300 mm; Available with overall heights between 300 mm and 750 mm. Suitable for cascaded type slope to collect rainwater in 1 metre long units. Safe locking system consists of eight bolts per LM; Integrated galvanised steel edges for lateral protection.

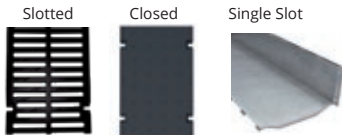


CHANNELS

Code Channel	L mm	H mm	Width mm		Ø Outlet* mm		Hydraul. Section cm ²	Pcs. pallet	Weight Kg	Qref l/s
			Ext.	Int.	Vert.	Hor.				
F300K00R	1000	300	362	300	250	-	710	15	54,3	46,44
F300K00R	1000	390	362	300	250	-	975	9	62,0	77,50
F300K10R	1000	440	362	300	250	-	1110	9	70,4	94,20
F300K20R	1000	490	362	300	250	-	1240	9	75,9	113,89
F300K60R	1000	600	362	300	-	-	1525	9	96,1	163,86
F300K75R	1000	750	394	300	-	-	1933	4	112,0	230,23

* Vert. outlets on order.

GRATINGS



Material	Design	Load	Code	L mm	Width mm	Opening mm	Weight Kg	Intake area cm ² /ml
DUCTILE IRON	SLOTTED	C250	FNX300FTCM	500	351	17,75	13,2	1351
	SLOTTED	D400	FNX300FTDM	500	351	13,75	17,8	1340
	SLOTTED	F900	FNX300FTFM	500	351	14	27,1	1371
	CLOSED	D400	FC300FTDM	500	351	-	16,3	-
	CLOSED	F900	FC300FTFM	500	351	-	29,4	-
GALVANISED STEEL	SINGLE SLOT	D400	GRL300FOD	1000	351	18 / H150	26,0	180

HOW TO FIX

8 screws per metre



Code	Units ml
TF1023 + TP	8 + 8
TF1023 + TP	8 + 8
TF1023 + TP	8 + 8
TF1023 + TP	8 + 8
TF1023 + TP	8 + 8
(1)	(1)

(1) Click. Without screws.

SUMP UNITS

Code	L mm	H mm	Width mm	Lateral outlets Ø mm	Front outlet Ø mm	Sump units	Weight Kg
AF300 *	500	390	362	200	-	1	42,8
AF300S + A300B **	500	730**	362	200	-	2	71,0
F300K60RS + UNIS60**	1000	1148**	362	200/400	200	2	120,2
F300K75RS + UNIS60**	1000	1298**	362	200/400	200	2	136,5

* Available up to 390 mm height. (F300K00R)

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

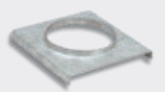
BUCKET

Code**
C250

** Only applicable if 2 sump units are installed.

OPEN END CAP

Channel	Code	Ø mm
F300K00R	T300K00A	315
F300K00R	T300K00A	315
F300K10R	T300K10A	315
F300K20R	T300K20A	315
F300K60R	T300K60A	315



CLOSED END CAP

Code
T300K00C
T300K00C
T300K10C
T300K20C
T300K60C



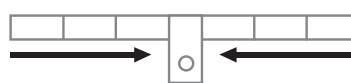
STEP UNITS

Code
CE300



To install in the changes of height with cascaded slope.

SLOPE DESIGNS



WITHOUT SLOPE



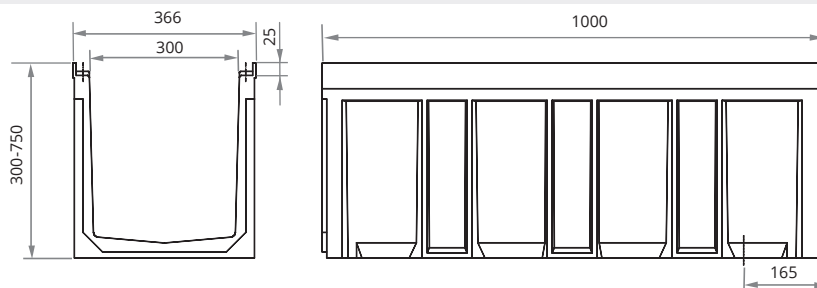
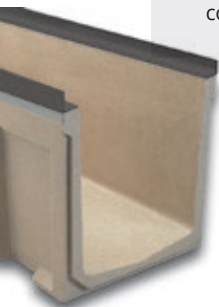
CASCADED SLOPE

Load Class
up to F900
EN-1433 Standard

F300MF



ULMA Linear Drainage Channel type F300MF: External width 366 mm; Internal width 300 mm; Available with overall heights between 300 mm and 750 mm. Suitable for cascaded type slope to collect rainwater in 1 metre long units. Safe locking system consists of eight bolts per LM; Integrated galvanised steel edges for lateral protection.



CHANNELS

Code Channel	L mm	H mm	Width mm		Ø Outlet* mm		Hydraul. Section cm²	Pcs. pallet	Weight Kg	Qref l/s
			Ext.	Int.	Vert.	Hor.				
F300MF00R	1000	300	366	300	250	-	710	15	56,0	46,44
F300MF00R	1000	390	366	300	200	-	975	15	62,2	77,50
F300MF10R	1000	440	366	300	200	-	1110	10	69,7	94,20
F300MF20R	1000	490	366	300	200	-	1240	10	77,6	113,89
F300MF60R	1000	600	366	300	-	-	1525	6	97,8	163,86
F300MFH75R	1000	750	394	300	-	-	1933	4	115,5	230,23

* Vert. outlets on order.

GRATINGS

Slotted Closed Single Slot



Material	Design	Load	Code	L mm	Width mm	Opening mm	Weight Kg	Intake area cm²/ml
DUCTILE IRON	SLOTTED	C250	FNX300FTCM	500	351	17,75	13,2	1351
	SLOTTED	D400	FNX300FTDM	500	351	13,75	17,8	1340
	SLOTTED	F900	FNX300FTFM	500	351	14	27,1	1371
	CLOSED	D400	FC300FTDM	500	351	-	16,3	-
	CLOSED	F900	FC300FTFM	500	351	-	29,4	-
GALVANISED STEEL	SINGLE SLOT	D400	GRL300FOD	1000	351	18 / H150	26,0	180

HOW TO FIX

8 screws per metre



Code	Units ml
TF1023 + TP	8 + 8
TF1023 + TP	8 + 8
TF1023 + TP	8 + 8
TF1023 + TP	8 + 8
TF1023 + TP	8 + 8
(1)	(1)

(1) Click. Without screws.

SUMP UNITS

Code	L mm	H mm	Width mm	Lateral outlets Ø mm	Front outlet Ø mm	Sump units	Weight Kg
AMF300 *	500	390	366	200	-	1	43,6
AMF300S + A300B **	500	730**	366	200	-	2	71,8
F300MF60RS UNI560**	1000	1148**	366	200/400	200	2	120,3
F300MF75RS UNI560**	1000	1298**	394	200/400	200	2	136,5

* Available up to 390 mm height. (F300MF00R)
** The sump unit can be higher incorporating an intermediate unit.

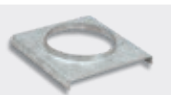
BUCKET

Code**
C250

** Only applicable if 2 sump units are installed.

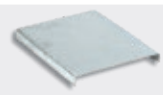
OPEN END CAP

Channel	Code	Ø mm
F300MF00R	T300K000A	315
F300MF00R	T300K00A	315
F300MF10R	T300K10A	315
F300MF20R	T300K20A	315
F300MF60R	T300K60A	315



CLOSED END CAP

Code
T300K000C
T300K00C
T300K10C
T300K20C
T300K60C



STEP UNITS

Code
CE300



To install in the changes of height with cascaded slope.

SLOPE DESIGNS

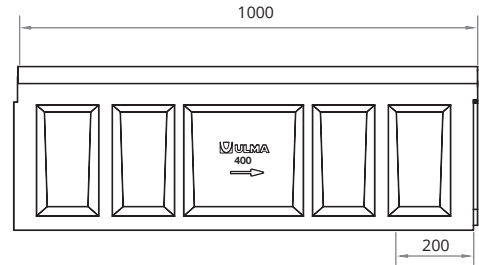
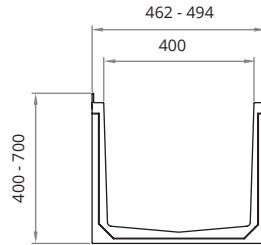


Load Class
up to F900
EN-1433 Standard

F400K



ULMA Linear Drainage Channel type F400K: External width between 462 mm and 494 mm; Internal width 400 mm; Available with overall heights between 400 mm and 700 mm to collect rainwater in 1 metre long units. Safe locking system consists of eight bolts per LM; Integrated galvanised steel edges for lateral protection.



CHANNELS

Code Channel	L mm	H mm	Width mm		Ø Outlet* mm		Hydraul. Section cm ²	Pcs. pallet	Weight Kg	Qref l/s
			Ext.	Int.	Vert.	Hor.				
F400K00R	1000	400	462	400	315	-	1337	6	85,6	100,03
F400K40R	1000	700	494	400	315	-	2490	4	129,1	280,50

*Vert. outlets on order.

GRATINGS

Slotted



Material	Design	Load	Code	L mm	Width mm	Opening mm	Weight Kg	Intake area cm ² /ml
DUCTILE IRON	SLOTTED	D400	FNX400FTDM	500	451	18,5	25,8	1604
	SLOTTED	F900	FNX400FTFM	500	451	18,5	30,3	1615

HOW TO FIX

8 screws per metre



Code	Units ml
TF1023 + TP	8 + 8
TF1023 + TP	8 + 8

SUMP UNITS

Code	L mm	H mm	Width mm	Lateral outlets Ø mm	Front outlet Ø mm	Sump units	Weight Kg
AF400	500	585	462	315	-	1	80,0
AF400S+ A400B*	500	1115	462	315	-	2	167,6
F400K40RS + A400B	1000	1285	494	315	-	2	211,1

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

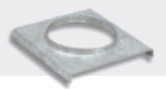
BUCKET

Code**
C400

** Only applicable if 2 sump units are installed.

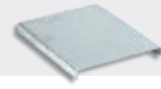
OPEN END CAP

Channel	Code	Ø mm
F400K00R	T400K00A	315
F400K40R	T400K40A	315



CLOSED END CAP

Code
T400K00C
T400K40C

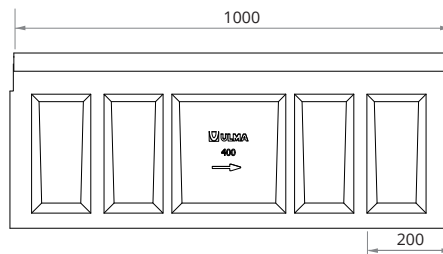
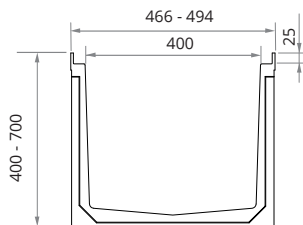
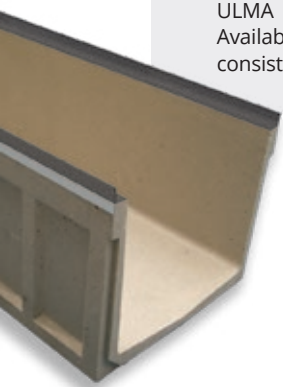


**Load Class
up to F900**
EN-1433 Standard

F400MF



ULMA Linear Drainage Channel type F400MF: External width between 466 mm and 494 mm; Internal width 400 mm; Available with overall heights between 400 mm and 700 mm to collect rainwater in 1 metre long units. Safe locking system consists of eight bolts per LM; Integrated galvanised steel edges for lateral protection.



CHANNELS

Code Channel	L mm	H mm	Width mm		Ø Outlet* mm		Hydraul. Section cm ²	Pcs. pallet	Weight Kg	Qref l/s
			Ext.	Int.	Vert.	Hor.				
F400MF00R	1000	400	466	400	315	-	1337	6	87,3	100,03
F400MF40R	1000	700	494	400	315	-	2490	4	130,4	280,50

*Vert. outlets on order.

GRATINGS

Slotted



Material	Design	Load	Code	L mm	Width mm	Opening mm	Weight Kg	Intake area cm ² /ml
DUCTILE IRON	SLOTTED	D400	FNX400FTDM	500	451	18,5	25,8	1604
	SLOTTED	F900	FNX400FTFM	500	451	18,5	30,3	1615

HOW TO FIX

8 screws per metre



Code	Units ml
TF1023 + TP	8 + 8
TF1023 + TP	8 + 8

SUMP UNITS



Code	L mm	H mm	Width mm	Lateral outlets Ø mm	Front outlet Ø mm	Sump units	Weight Kg
AMF400	500	585	466	315	-	1	80,8
AMF400S+ A400B*	500	1115	466	315	-	2	168,4
F400MF40RS + A400B	1000	1285	494	315	-	2	205,7

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

BUCKET



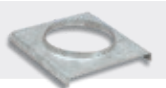
Code**

C400

** Only applicable if 2 sump units are installed.

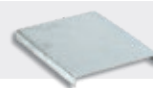
OPEN END CAP

Channel	Code	Ø mm
F400MF00R	T400K00A	315
F400MF40R	T400K40A	315



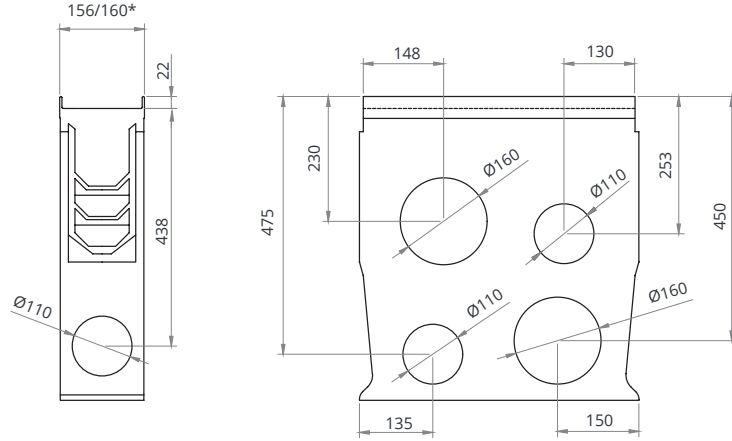
CLOSED END CAP

Code
T400K00C
T400K40C

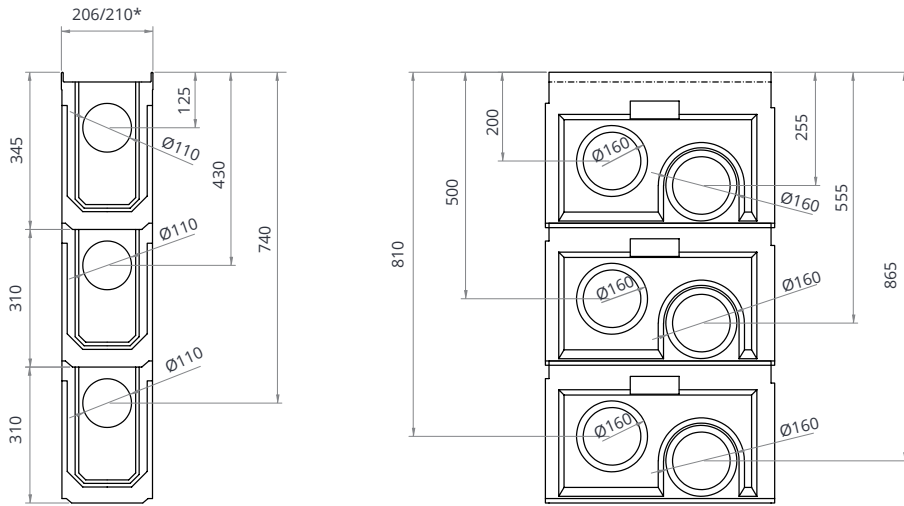


SUMP UNITS

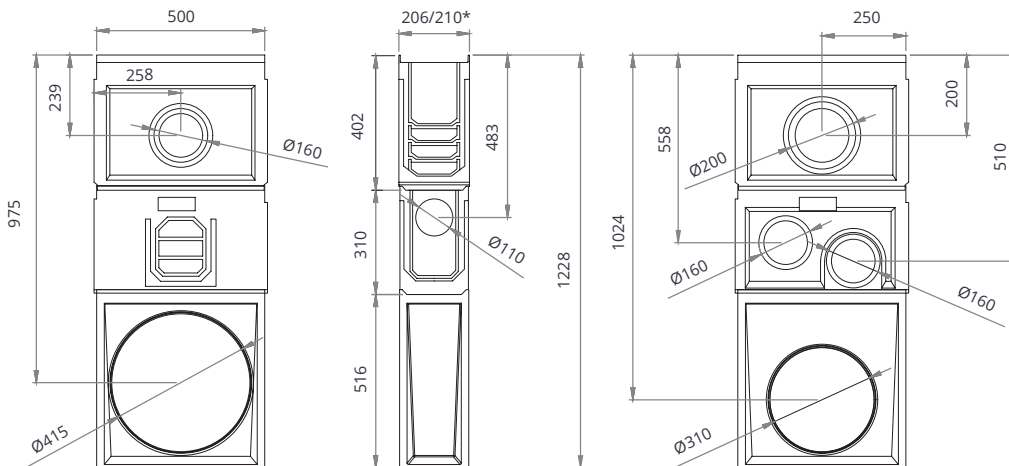
AF100 / AMF100*



AF150S + A150I + A150B / AMF150S + A150I + A150B*

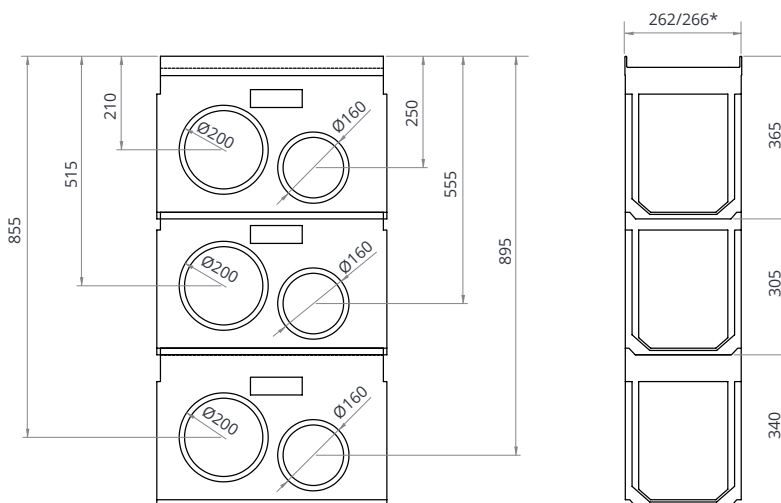


AF150S-2 + A150I + A150B415 / AMF150-2 + A150I + A150B415*

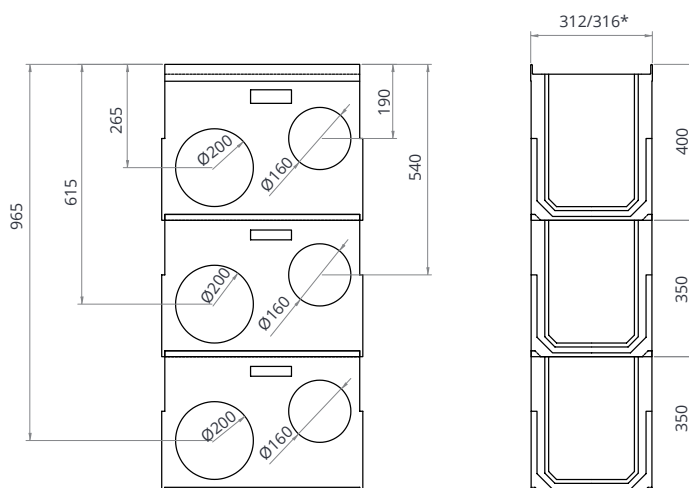


SUMP UNITS

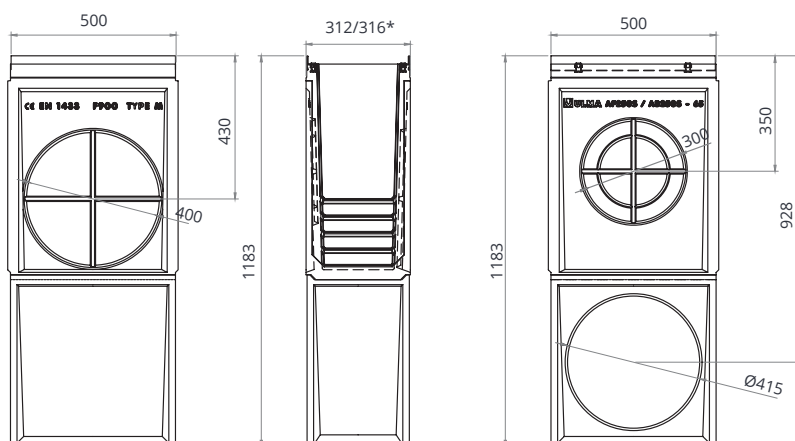
AF200S + A200I + A200B / AMF200S + A200I + A200B*



AF250S + A250I + A250B / AMF250S + A250I + A250B*

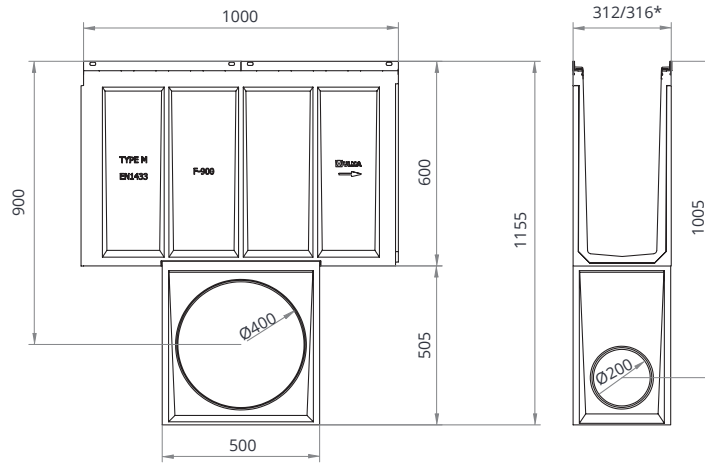


AF250-65 + A250B415 / AMF250-65 + A250B415*

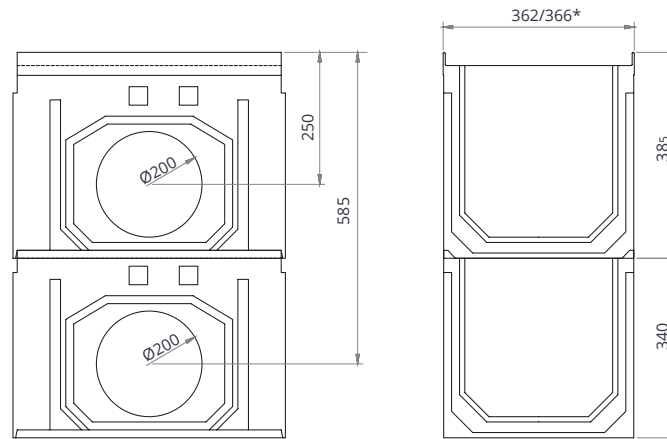


SUMP UNITS

F250K40RS + A250B415 / F250MF40RS + A250B415*

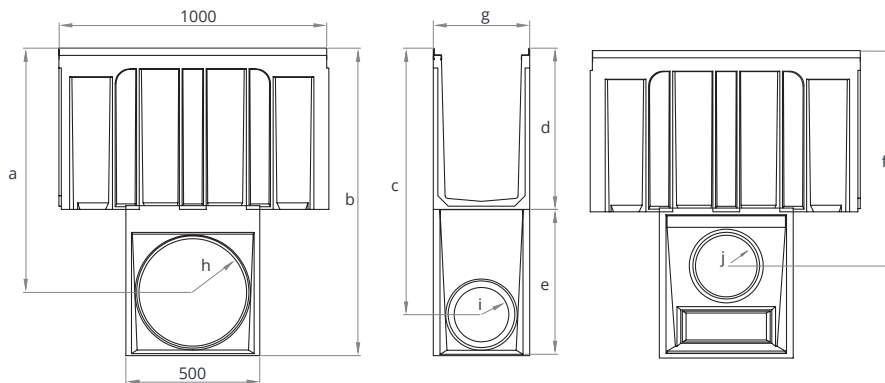


AF300+A300B / AMF300+A300B*



Code channel	a mm	b mm	c mm	d mm	e mm
AF300S+A300B	250	585	385	340	362

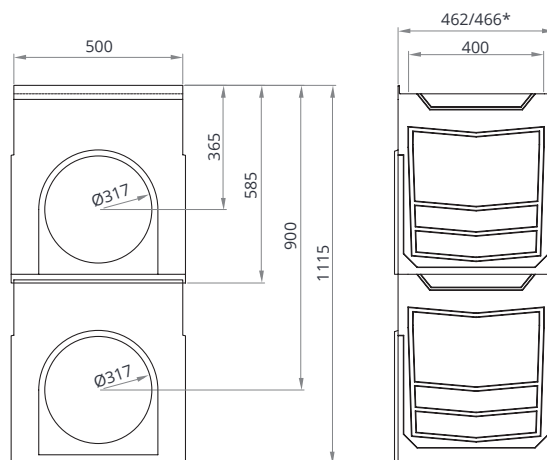
F300K60RS + UNI560 / F300MF60RS + UNI560 / F300K75RS + UNI560 / F300MF75RS + UNI560



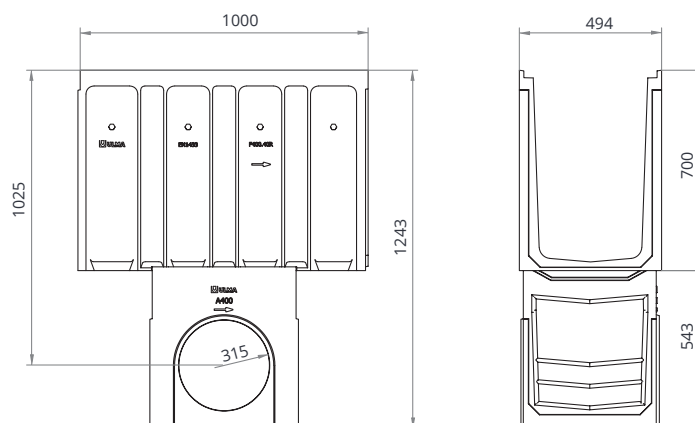
Code channel	a mm	b mm	c mm	d mm	e mm	f mm	g mm	h mm	i mm	j mm
F300K60RS+UNI560/F300MF60RS+UNI560	910	1148	995	600	540	805	362	400	200	200
F300K75RS+UNI560/F300MF75RS+UNI560	1060	1298	1145	750	540	955	362	400	200	200

SUMP UNITS

AF400+A400B / AMF400+A400B*



F400K40RS + A400B / F400MF40RS + A400B



Code channel	a mm	b mm	c mm	d mm	e mm
AF400S+A400B	365	950	580	535	462