

## ULV2 Roof Hood

ULV2 is an exhaust air diffuser with round or rectangular connection type. It is designed to look great and to withstand conditions in the Nordic countries.

- Water resistance class A according to standard EN 13030:2001
- Standard dimensions
- Innovative design
- Magnelis® steel sheet, corrosivity category is C4
- Long vertical exhaust pattern
- Strong structure
- Low pressure drop
- Low sound level



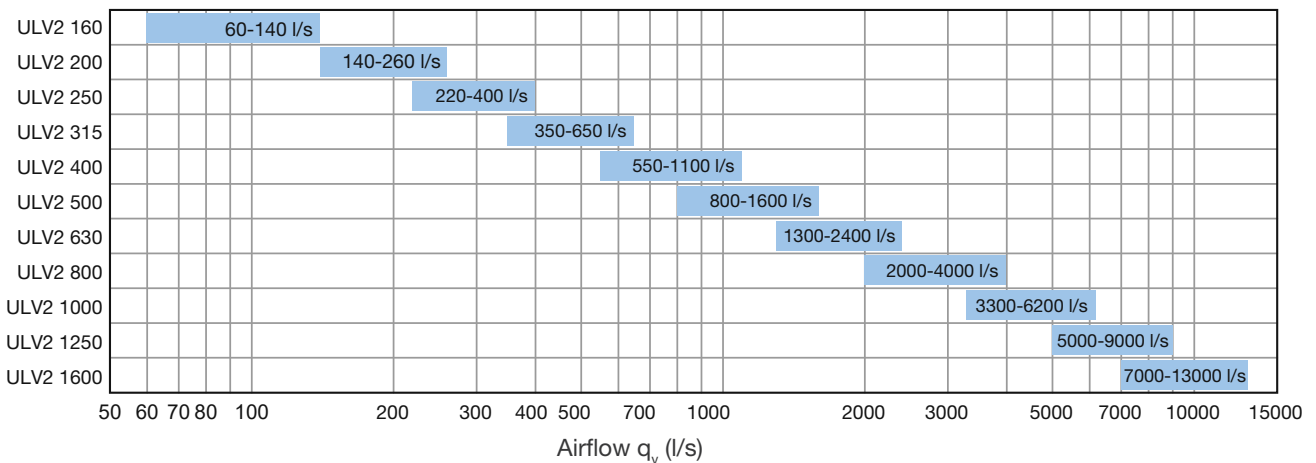
### Application

Design of the exhaust air diffuser efficiently prevents rainwater from entering the ventilation duct. Rainwater is drained onto the roof from the base of the unit.

The structure ensures good resistance also in stormy weather (wind speed up to 25 m/s).

Exhaust air is blown vertically up with low pressure drop and high speed through the unit. This ensures that odours and dirt in exhaust air will not fall on the area around the exhaust diffuser.

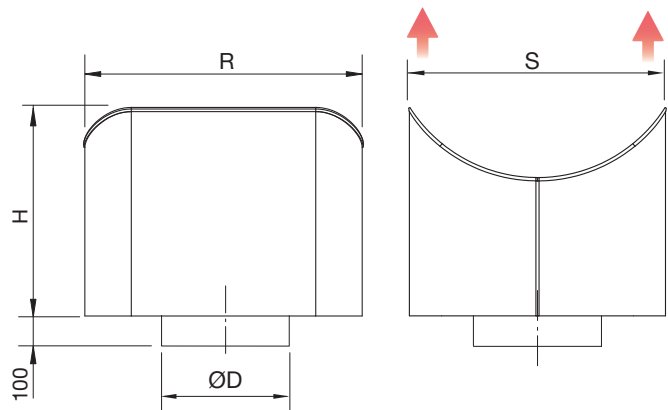
### Quick Selection



**Material and Dimensions**

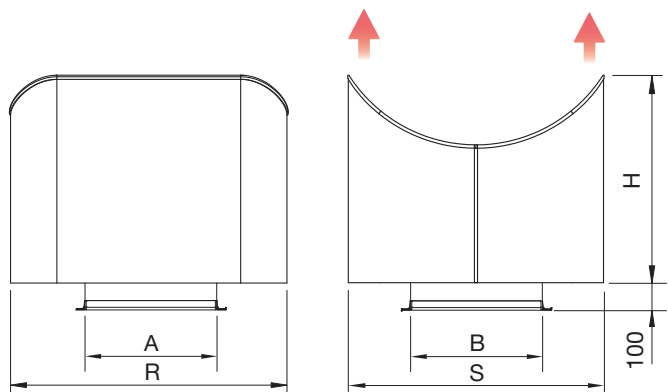
Manufactured of Magnelis® sheet steel (ZM310).  
 ULV2 with round duct connection sizes Ø 160...400 mm are with female connection which fits outside a fitting. Sizes Ø 500-1600 mm are with VRL flange duct connection. Counterflange ordered separately.

In special order can also be manufactured of acidproof steel (AISI 316L) or in powder coated finish (RAL colorcard).



**ULV2 exhaust air diffuser with round duct connection**

Nominal size ØD (mm)	RxS (mm)	H (mm)	Weight (kg)	Free area (m <sup>2</sup> )	Airflow (l/s)	
					Min	max
160	340x340	345	5	0,021	60	140
200	400x400	300	7	0,059	140	260
250	500x500	375	10	0,081	220	400
315	600x600	450	14	0,120	350	650
400	800x800	650	25	0,218	550	1100
500	1000x1000	800	37	0,307	800	1600
630	1200x1200	1000	57	0,393	1300	2400
800	1500x1500	1100	92	0,621	2000	4000
1000	1600x1600	1200	121	0,895	3300	6200
1250	1900x1900	1250	142	1,502	5000	9000
1600	2400x2400	1800	255	2,164	7000	13000



**ULV2 exhaust air diffuser with rectangular duct connection (E30-profile)**

Nominal size AxB (mm)	AxB (mm)	RxS (mm)	H (mm)	Weight (kg)	Free area (m <sup>2</sup> )	Airflow (l/s)	
						Min	max
200x200	200x200	400x400	300	7	0,059	140	260
250x250	250x250	500x500	375	12	0,081	220	400
300x300	300x300	600x600	450	14	0,120	350	650
400x400	400x400	800x800	650	25	0,218	550	1100
500x500	500x500	1000x1000	800	37	0,307	800	1600
600x600	600x600	1200x1200	1000	57	0,393	1300	2400
800x800	800x800	1500x1500	1100	92	0,621	2000	4000
1000x1000	1000x1000	1600x1600	1200	121	0,895	3300	6200
1200x1200	1200x1200	1900x1900	1250	142	1,502	5000	9000
1600x1600	1600x1600	2400x2400	1800	255	2,164	7000	13000

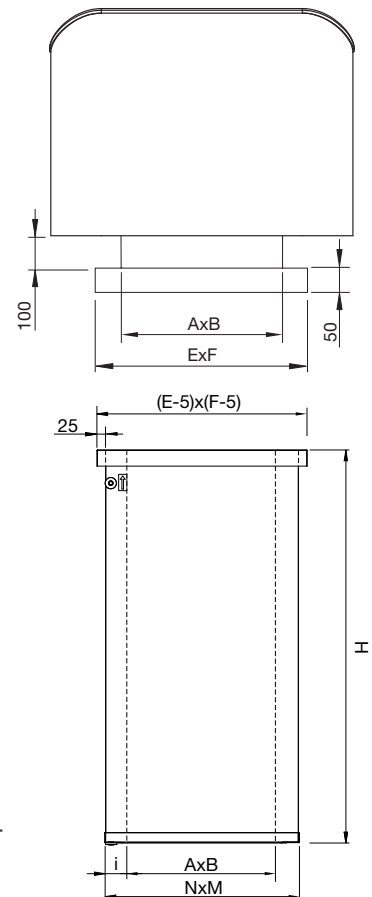
ULV2 exhaust air device with rain-plate connection (KL) for installation with MKL roof transition will provide the best possible combination for water resistance.



**ULV2 with rain-plate and MKL roof transition with rain-plate collar.**

MKL roof transition with 50 mm insulation.

ULV2 Nominal size AxB (mm)	Connection size ExF (mm)	MKL (i=50 mm)		
		MKL Nominal size (NxM KL-ExF)	AxB (mm)	NxM (mm)
200x200	350x350	MKL 300x300 KL-350x350	200x200	295x295
250x250	450x450	MKL 400x400 KL-450x450	300x300	395x395
300x300	450x450	MKL 400x400 KL-450x450	300x300	395x395
400x400	550x550	MKL 500x500 KL-550x550	400x400	495x495
500x500	650x650	MKL 600x600 KL-650x650	500x500	595x595
600x600	750x750	MKL 700x700 KL-750x750	600x600	695x695
800x800	950x950	MKL 900x900 KL-950x950	800x800	895x895
1000x1000	1150x1150	MKL 1100x1100 KL-1150x1150	1000x1000	1095x1095
1200x1200	1350x1350	MKL 1300x1300 KL-1350x1350	1200x1200	1295x1295
1600x1600	1750x1750	MKL 1700x1700 KL-1750x1750	1600x1600	1695x1695



MKL with 100 mm insulation.

ULV2 Nominal size AxB (mm)	Connection size ExF (mm)	MKL (i=100 mm)		
		MKL+KL Nominal size (NxM KL-ExF)	AxB (mm)	NxM (mm)
200x200	450x450	MKL 400x400 KL-450x450	200x200	395x395
250x250	550x550	MKL 500x500 KL-550x550	300x300	495x495
300x300	550x550	MKL 500x500 KL-550x550	300x300	495x495
400x400	650x650	MKL 600x600 KL-650x650	400x400	595x595
500x500	750x750	MKL 700x700 KL-750x750	500x500	695x695
600x600	850x850	MKL 800x800 KL-850x850	600x600	795x795
800x800	1050x1050	MKL 1000x1000 KL-1050x1050	800x800	995x995
1000x1000	1250x1250	MKL 1200x1200 KL-1250x1250	1000x1000	1195x1195
1200x1200	1450x1450	MKL 1400x1400 KL-1450x1450	1200x1200	1395x1395
1600x1600	1850x1850	MKL 1800x1800 KL-1850x1850	1600x1600	1795x1795

For more information about MKL roof transition and different insulation possibilities please check MKL datasheet.

**ULV2 with rain-plate and MKL roof transition.**

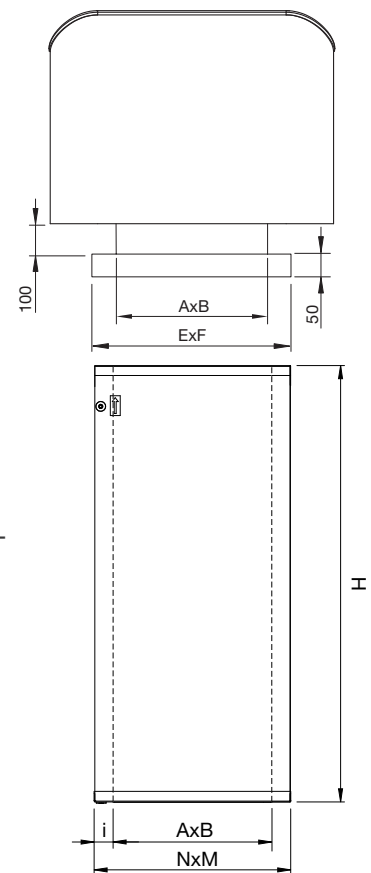
MKL roof transition with 50 mm insulation.

ULV2 Nominal size AxB (mm)	Connection size ExF (mm)	MKL Nominal size (N×M)	AxB (mm)	N×M (mm)
200×200	300×300	MKL 300×300	200×200	295×295
250×250	400×400	MKL 400×400	300×300	395×395
300×300	400×400	MKL 400×400	300×300	395×395
400×400	500×500	MKL 500×500	400×400	495×495
500×500	600×600	MKL 600×600	500×500	595×595
600×600	700×700	MKL 700×700	600×600	695×695
800×800	900×900	MKL 900×900	800×800	895×895
1000×1000	1100×1100	MKL 1100×1100	1000×1000	1195×1195
1200×1200	1300×1300	MKL 1300×1300	1200×1200	1495×1495
1600×1600	1700×1700	MKL 1700×1700	1600×1600	1795×1795



MKL with 100 mm insulation.

ULV2 Nominal size AxB (mm)	Connection size ExF (mm)	MKL (i=100 mm)		
		MKL Nominal size (N×M)	AxB (mm)	N×M (mm)
200×200	400×400	MKL 400×400	200×200	395×395
250×250	500×500	MKL 500×500	300×300	495×495
300×300	500×500	MKL 500×500	300×300	495×495
400×400	600×600	MKL 600×600	400×400	595×595
500×500	700×700	MKL 700×700	500×500	695×695
600×600	800×800	MKL 800×800	600×600	795×795
800×800	1000×1000	MKL 1000×1000	800×800	995×995
1000×1000	1200×1200	MKL 1200×1200	1000×1000	1195×1195
1200×1200	1400×1400	MKL 1400×1400	1200×1200	1495×1495
1600×1600	1800×1800	MKL 1800×1800	1600×1600	1795×1795



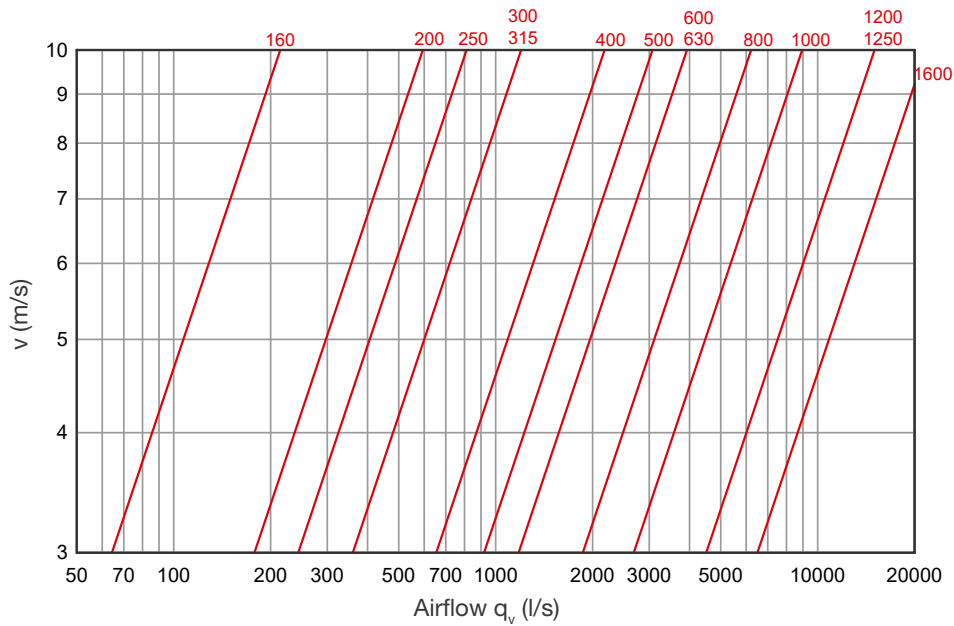
For more information about MKL roof transition and different insulation possibilities please check MKL datasheet.

Installation opening  
= (N+20) × (M+20) mm

Technical Data

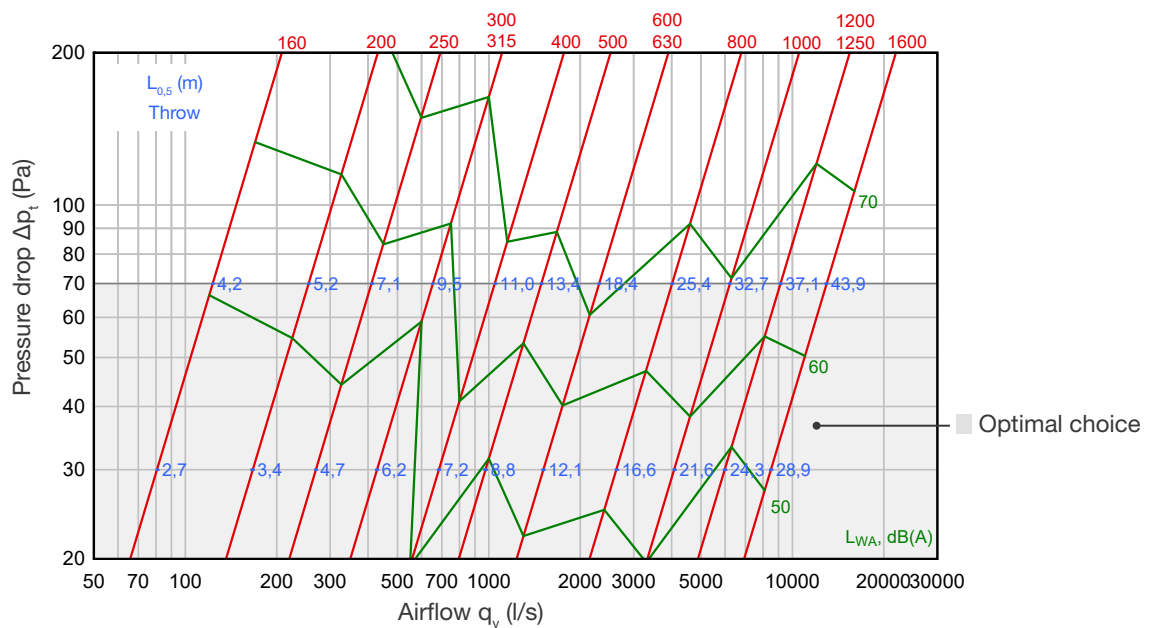
Velocity in the free area of the diffuser is dimensioned between 3 m/s and 10 m/s.

Exhaust air speed



Pressure drop - Airflow - Exhaust air

$L_{0,5}$ (m) Throw = Distance air travels up from roof hood until air speed drops to 0,5 m/s.

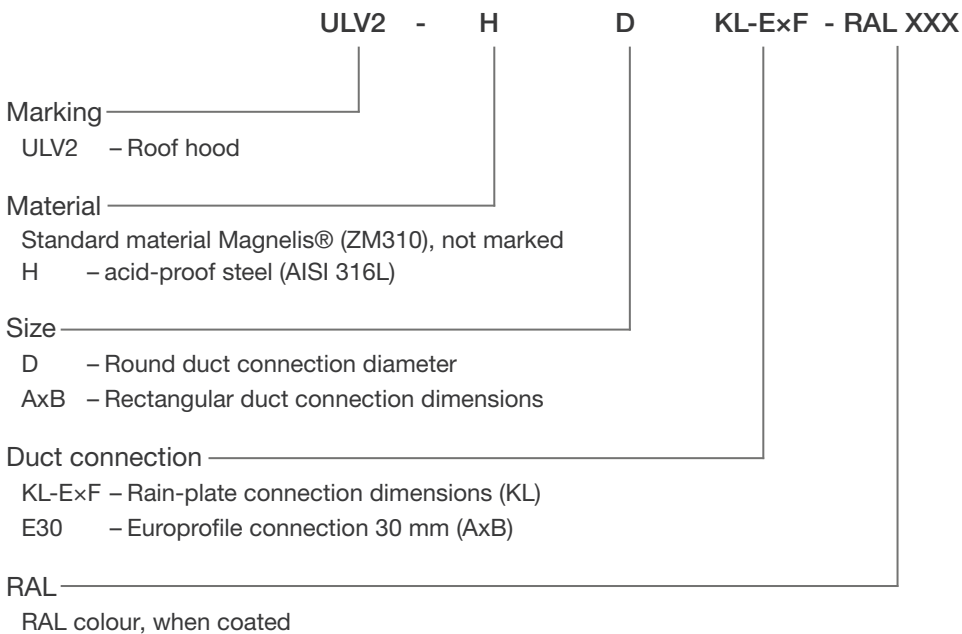


**Rain water effectiveness**

Airflow		Rain water flow rates			Performance	
$q_v$ (m <sup>3</sup> /s)	$v$ (m/s)	$q_s$ (l/h/m <sup>2</sup> )	$q_{do}$ (l/h)	$q_d$ (l/h)	E (%)	Class
0,0	0,00	75,0	2,32	0,18	99,2	A
0,8	4,07	75,0	0,74	0,06	99,6	A
1,6	8,15	75,0	0,23	0,00	100,0	A

- $q_v$  - Air flow rate, m<sup>3</sup>/s
- $v$  - Core velocity, m/s
- $q_s$  - Rainfall rate, l/h/m<sup>2</sup>
- $q_{do}$  - Rain water flow penetrating the core area, l/h
- $q_d$  - Rain water flow penetrating the device, l/h
- E - Effectiveness, %

**Product Marking**



**Example: ULV2 400 Exhaust air diffuser with round duct connection**

ULV2-H 400×400-KL-500×500 Exhaust air diffuser (AISI 316L), with rain-plate connection

ULV2 400×400-E30-RAL7000 Exhaust air diffuser (coated), with E30 profile connection