

# Iso-VK EC

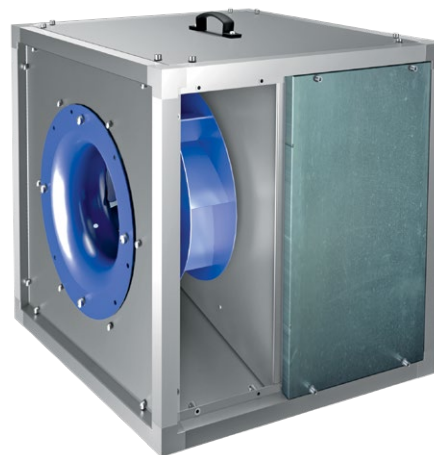
## Sound-insulated inline centrifugal fans

### Use

- Designed to extract contaminated hot air up to 120 °C, containing grease (when using grease filters), in high resistance conditions.
- Ideally function in various ventilation systems for restaurant or café kitchens, industrial bakeries, removal of gases generated during welding operations.
- Various application possibilities due to a special transformable casing design.
- Compatible with Ø 315 up to 800 mm round or 500x500 up to 1175x1175 mm rectangular air ducts.

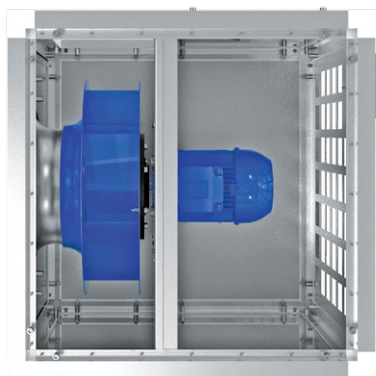


**Air flow:**  
up to 27500 m³/h  
7640 l/s



### Design

- Casing made of aluminium frame and removable aluzinc thermal- and sound-insulated double-skinned sandwich panels.
- Casing internally filled with 20 mm non-flammable mineral wool.
- Position of the removable panels can be adjusted to inline air flow or 90° angle air flow.
- Due to corrosion-resistant casing and thermal insulation the fan is suitable for external mounting.
- The electric motor, located outside the air flow, is mounted on an additional panel inside the fan.



### Motor

- Highly reliable single-phase or three-phase EC motor with steel high-performance centrifugal impeller with backward curved blades.
- Motor is suitable for 50 Hz and 60 Hz.

### Speed control

- The fan is controlled by an external 0-10 V control signal. Maximum fan speed does not depend on the available current frequency and is suitable for operation both at 50 and 60 Hz.

### Mounting

- The fan is mounted with rectangular or round air ducts.
- Connected to air ducts with flexible vibration-absorbing connectors or connecting reducers of respective diameters.
- Power is supplied to the fan through an external terminal box.
- The fans can be installed in any mounting position with respect to air flow direction in the system. While mounting provide enough servicing space.

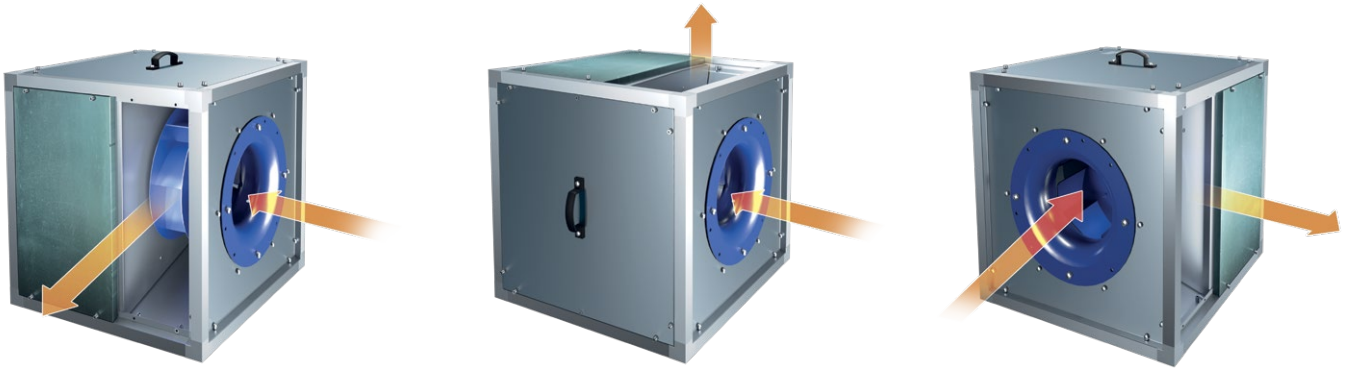
### Designation key

Series	Motor type	Spigot diameter [mm]	Motor Phase
Iso-VK	EC: electronically commutated motor	315; 355; 400; 450; 500; 560; 630; 710; 800	E: single-phase D: three-phase

### Accessories

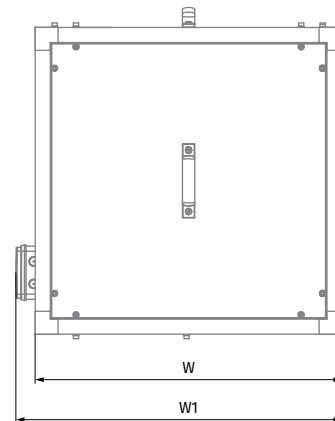
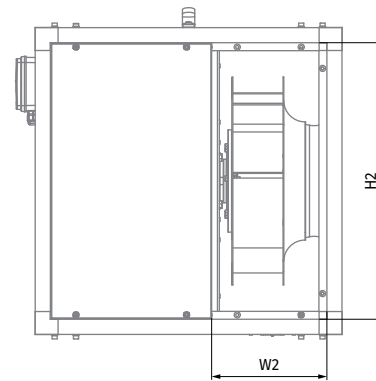
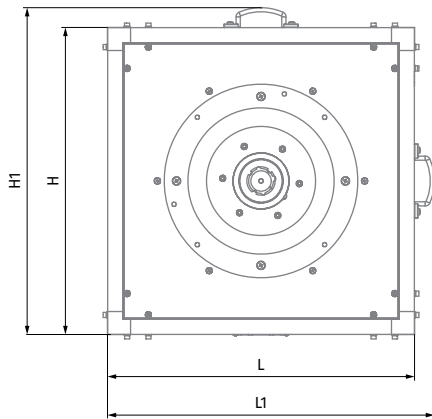
Flexible connector	Mounting bracket	Hood	Round flange	Speed controllers
 EVA Iso-VK	 MH Iso-VK	 RSD Iso-VK	 FR Iso-VK	 CDT E/0-10

- The direction of air flow can be easily changed by rearranging the panel.



**Dimensions [mm]**

Model	H	H1	H2	L	L1	W	W1	W2	Weight [kg]
Iso-VK EC 315 E	500	538	440	500	538	500	538	200	38
Iso-VK EC 355 E	600	638	540	600	638	600	638	225	47.5
Iso-VK EC 400 E	670	708	610	670	708	670	708	252	57
Iso-VK EC 450 E	700	738	640	700	738	700	738	282	69.5
Iso-VK EC 500 E	820	858	760	820	858	820	858	321	95.5
Iso-VK EC 560 D	900	938	840	900	938	900	938	365	113
Iso-VK EC 630 D	1000	1038	940	1000	1038	1000	1038	409	164.5
Iso-VK EC 710 D	1075	1114	1015	1075	1152	1075	1112	455	199



**Technical data**

Parameters	Iso-VK EC 315 E	Iso-VK EC 355 E	Iso-VK EC 400 E	Iso-VK EC 450 E
Voltage [V]	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230
Frequency [Hz]	50/60	50/60	50/60	50/60
Power [kW]	0.55	0.55	0.55	1.1
Current [A]	4.9	4.9	4.9	7.9
Maximum air flow [m <sup>3</sup> /h (l/s)]	2600 (722)	3500 (972)	4600 (1278)	7200 (2000)
RPM [min <sup>-1</sup> ]	1500	1500	1500	1500
Sound pressure level at 3 m [dBA]	57	58	60	62
Transported air temperature [°C]	-25...+120	-25...+120	-25...+120	-25...+120
IP rating	IPX4	IPX4	IPX4	IPX4
Motor IP rating	IP55	IP55	IP55	IP55

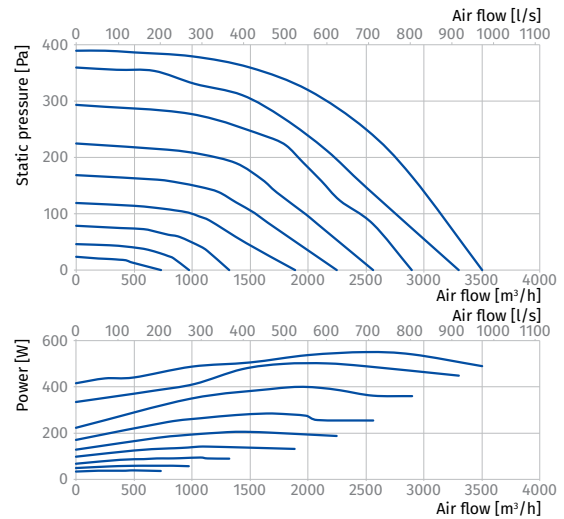
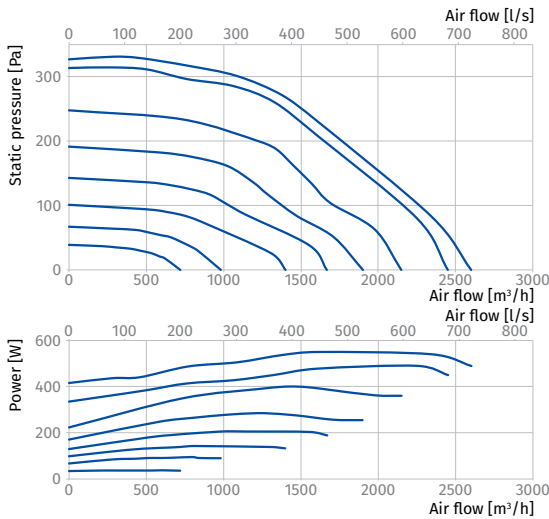
**ISO-VK EC 315 E**

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	89	70	84	86	78	72	65	55	45	68	78
LWA to outlet [dBA]	93	69	86	92	82	69	65	59	50	73	83
LWA to environment [dBA]	77	57	71	74	69	64	56	47	40	57	67

**ISO-VK EC 355 E**

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	89	70	84	86	78	72	65	55	45	68	78
LWA to outlet [dBA]	94	67	83	93	84	68	65	58	46	74	84
LWA to environment [dBA]	79	64	76	73	66	64	55	41	34	58	68

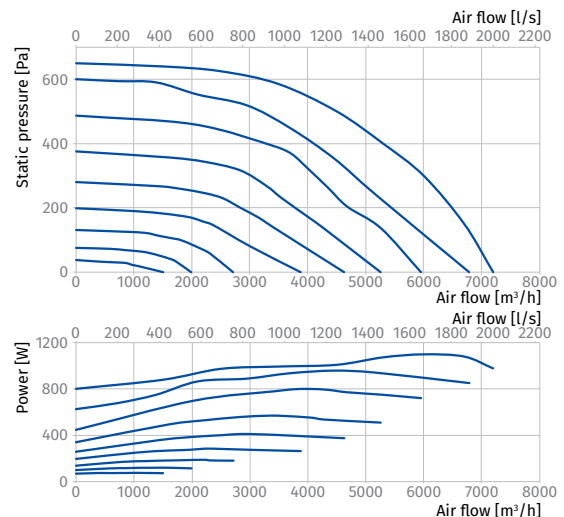
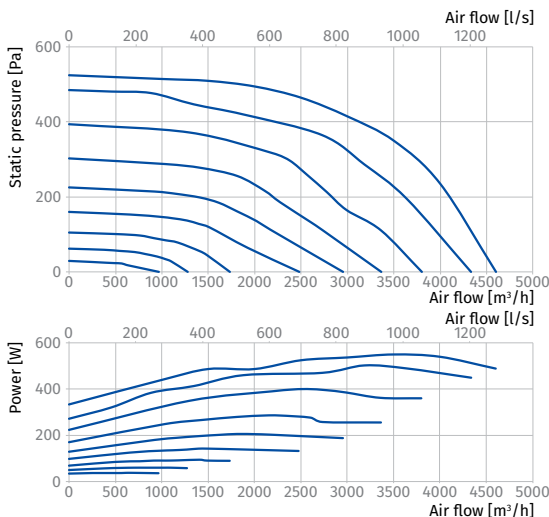
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**ISO-VK EC 400 E**

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	90	70	85	87	78	72	66	55	45	69	79
LWA to outlet [dBA]	95	68	84	94	85	69	66	58	47	74	84
LWA to environment [dBA]	80	65	78	75	68	65	56	42	35	60	70

**ISO-VK EC 450 E**

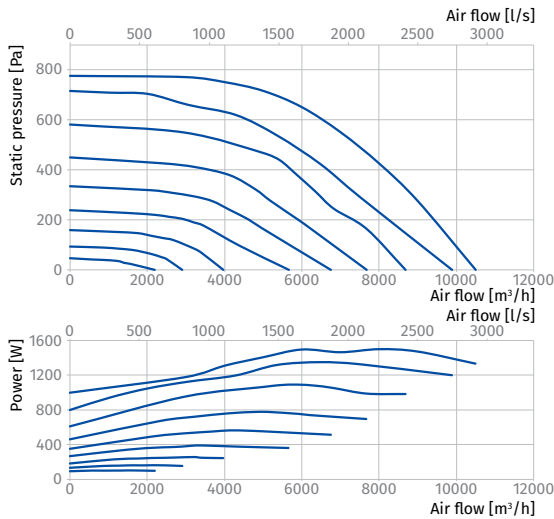
Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	91	72	87	89	80	74	67	56	46	71	81
LWA to outlet [dBA]	97	70	85	96	86	70	67	59	48	76	86
LWA to environment [dBA]	83	68	80	77	69	67	57	43	36	62	72



Parameters	Iso-VK EC 500 E	Iso-VK EC 560 D	Iso-VK EC 630 D	Iso-VK EC 630 D max
Voltage [V]	1 ~ 230	3 ~ 400	3 ~ 400	3 ~ 400
Frequency [Hz]	50/60	50/60	50/60	50/60
Power [kW]	1.5	3	3	5.5
Current [A]	10.5	6.4	7.2	10.9
Maximum air flow [m³/h (l/s)]	10500 (2917)	15700 (4361)	14000 (3889)	21000 (5834)
RPM [min⁻¹]	1500	1500	1000	1500
Sound pressure level at 3 m [dBA]	63	64	65	67
Transported air temperature [°C]	-25...+120	-25...+120	-25...+120	-25...+120
IP rating	IPX4	IPX4	IPX4	IPX4
Motor IP rating	IP55	IP55	IP55	IP55

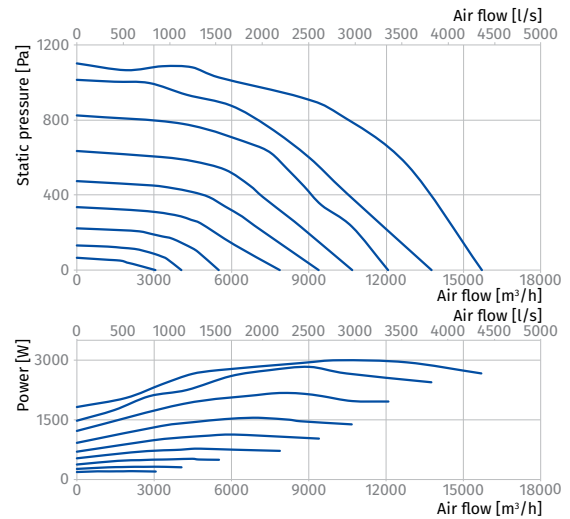
### ISO-VK EC 500 E

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	92	73	88	89	81	74	67	56	46	72	82
LWA to outlet [dBA]	98	71	86	97	87	71	68	60	48	77	87
LWA to environment [dBA]	83	69	81	78	70	67	58	43	36	63	73



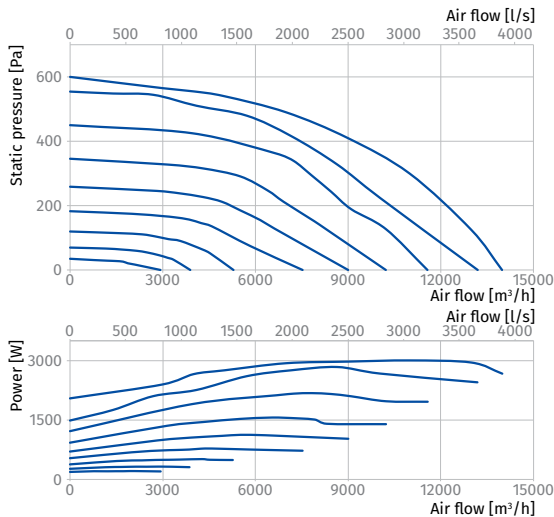
### ISO-VK EC 560 D

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	93	74	89	90	81	75	68	57	47	72	82
LWA to outlet [dBA]	100	73	88	99	89	72	69	61	49	79	89
LWA to environment [dBA]	85	70	83	79	71	68	59	44	37	64	74



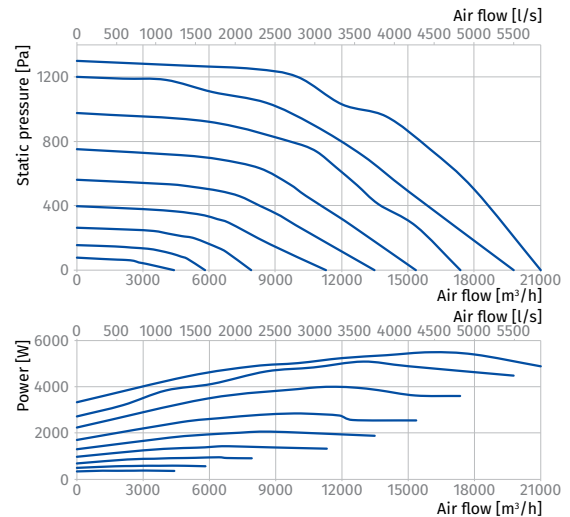
### ISO-VK EC 630 D

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	93	74	89	90	81	75	68	57	47	72	82
LWA to outlet [dBA]	100	73	88	99	89	72	69	61	49	79	89
LWA to environment [dBA]	86	71	84	80	72	69	59	44	37	65	75



### ISO-VK EC 630 D MAX

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	95	75	90	92	83	76	69	58	47	74	84
LWA to outlet [dBA]	102	74	90	101	91	73	70	62	50	81	91
LWA to environment [dBA]	87	73	85	81	73	70	60	45	38	67	77



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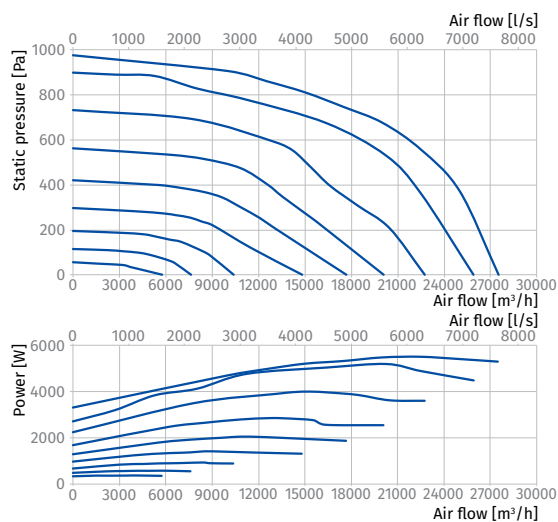
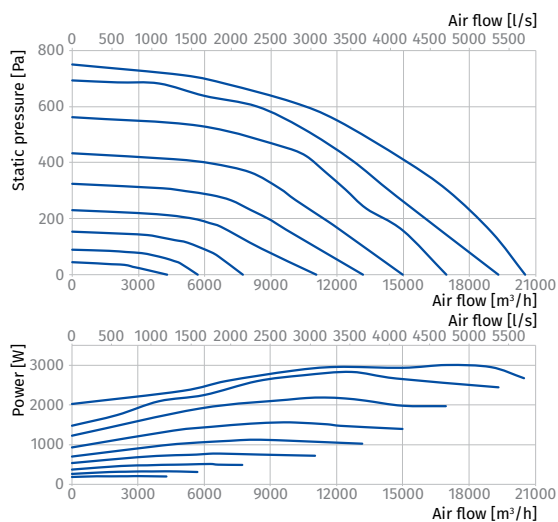
Parameters	Iso-VK EC 710 D	Iso-VK EC 800 D
Voltage [V]	3 ~ 400	3 ~ 400
Frequency [Hz]	50/60	50/60
Power [kW]	3	5.5
Current [A]	7.2	12.9
Maximum air flow [m <sup>3</sup> /h (l/s)]	20500 (5695)	27500 (7640)
RPM [min <sup>-1</sup> ]	1000	1000
Sound pressure level at 3 m [dBA]	66	67
Transported air temperature [°C]	-25...+120	-25...+120
IP rating	IPX4	IPX4
Motor IP rating	IP55	IP55

### ISO-VK EC 710 D

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
L <sub>WA</sub> to inlet [dBA]	94	75	90	91	82	76	68	57	47	73	83
L <sub>WA</sub> to outlet [dBA]	101	73	89	100	90	73	70	61	49	80	90
L <sub>WA</sub> to environment [dBA]	86	72	84	81	72	69	59	44	37	66	76

### ISO-VK EC 800 D

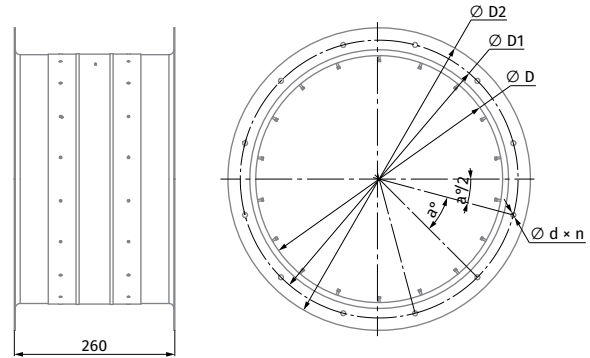
Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
L <sub>WA</sub> to inlet [dBA]	94	75	90	91	82	76	69	58	47	74	84
L <sub>WA</sub> to outlet [dBA]	101	74	90	101	90	73	70	62	50	81	91
L <sub>WA</sub> to environment [dBA]	87	73	85	81	73	70	60	45	38	67	77



## Modifications and options

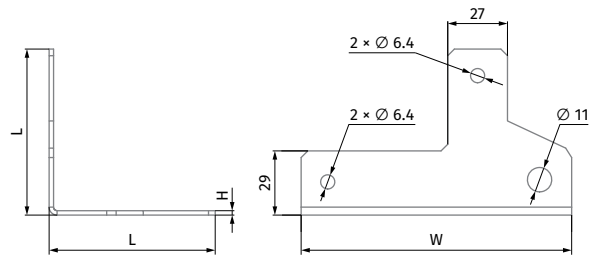
### FLEXIBLE CONNECTOR EVA ISO-VK

Type	Dimensions [mm]						Weight [kg]
	Ø d	Ø D	Ø D1	Ø D2	n	a°	
EVA ISO-VK 315	8	315	365	405	6	60	4.76
EVA ISO-VK 355	10	355	395	435	8	45	4.08
EVA ISO-VK 400	8	400	450	490	12	30	4.76
EVA ISO-VK 450	8	450	500	540	12	30	5.34
EVA ISO-VK 500	12	500	560	600	12	30	6.12
EVA ISO-VK 560	12	560	620	660	12	30	6.83
EVA ISO-VK 630	12	630	690	730	12	30	7.66
EVA ISO-VK 710	12	710	770	810	16	22.5	8.6
EVA ISO-VK 800	12	800	860	900	16	22.5	9.67



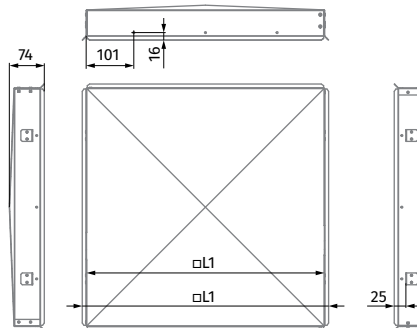
### MOUNTING BRACKET MH ISO-VK

Type	Dimensions [mm]			Weight [kg]
	H	L	W	
MH ISO-VK 315...450	2	90	125	0.12
MH ISO-VK 500...800	3	90	125	0.21



### HOOD RSD ISO-VK

Type	Dimensions [mm]		Weight [kg]
	L	L1	
RSD ISO-VK 315	503	522	2.42
RSD ISO-VK 355	603	622	3.25
RSD ISO-VK 400	673	692	3.91
RSD ISO-VK 450	703	722	4.21
RSD ISO-VK 500	823	842	6.57
RSD ISO-VK 560	903	922	7.71
RSD ISO-VK 630	1003	1022	9.27
RSD ISO-VK 710	1078	1097	10.53
RSD ISO-VK 800	1178	1197	12.3



### ROUND FLANGE FR ISO-VK

Type	Dimensions [mm]						Weight [kg]
	Ø D	Ø D1	Ø D2	Ø d	n	a°	
FR ISO-VK 315	315	365	405	8	6	15	1.7
FR ISO-VK 355	355	405	445	8	6	15	1.9
FR ISO-VK 400	400	450	490	8	12	15	2.13
FR ISO-VK 450	450	500	540	8	12	15	2.39
FR ISO-VK 500	500	560	600	12	12	15	2.75
FR ISO-VK 560	560	620	660	12	12	15	3.06
FR ISO-VK 630	630	690	730	12	12	15	3.44
FR ISO-VK 710	710	770	810	12	16	11.25	22.5
FR ISO-VK 800	800	860	900	12	16	11.25	22.5

