

# Iso-VK

## 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 25500 m³/h  
7083 l/s



**Power:**  
from 250 W

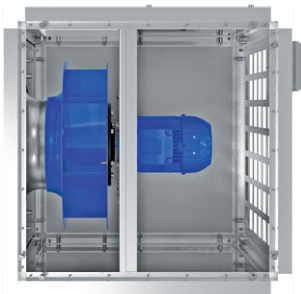


**Noise level:**  
from 48 dBA



### 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 motor with steel high-performance centrifugal impeller with backward curved blades.
- The motor is maintenance free.
- Motor insulation winding class – F.
- Degree of protection – IP55.

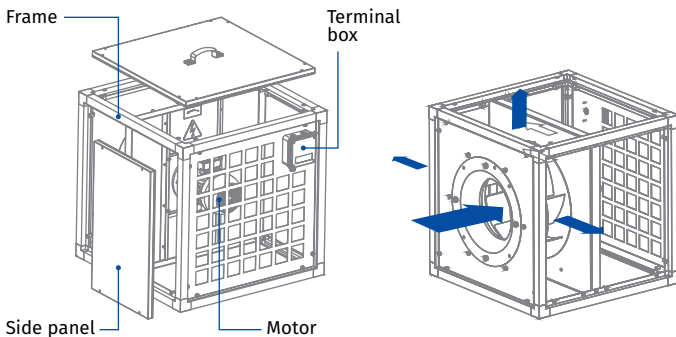
### Speed control

- Smooth speed control with an external thyristor controller or step speed control with an external auto transformer (both available upon separate order).

### 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.

SOUND-INSULATED INLINE FANS



### Accessories

Speed controllers



CDT E1.8 / CDTE E1.8

Flexible connector



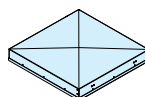
EVA Iso-VK

Mounting bracket



MH Iso-VK

Hood



RSD Iso-VK

Round flange

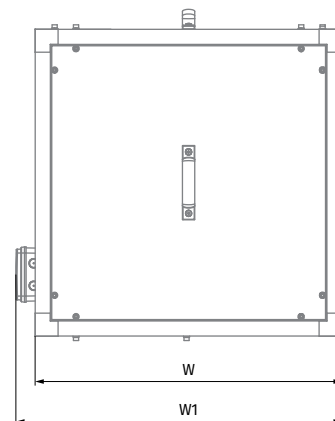
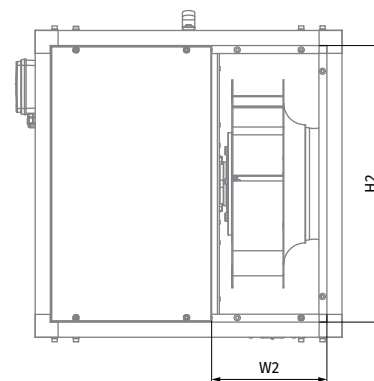
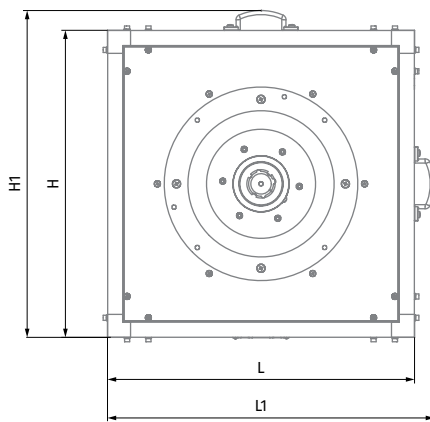


FR Iso-VK

Designation key			
Series	Spigot diameter [mm]	Motor	
		Number of poles	Phase
Iso-VK	315; 355; 400; 450; 500; 560; 630; 710; 800	2; 4; 6	E: single-phase D: three-phase

### Overall dimensions [mm]

Type	H	H1	H2	L	L1	W	W1	W2	Weight [kg]
Iso-VK 315 2D	500	538	440	500	538	500	538	200	41
Iso-VK 315 2E	500	538	440	500	538	500	538	200	40.2
Iso-VK 315 4D	500	538	440	500	538	500	538	200	37.2
Iso-VK 315 4E	500	538	440	500	538	500	538	200	37.2
Iso-VK 355 4D	600	638	540	600	638	600	638	225	48.1
Iso-VK 355 4E	600	638	540	600	638	600	638	225	47.4
Iso-VK 400 4D	670	708	610	670	708	670	708	252	58.1
Iso-VK 400 4E	670	708	610	670	708	670	708	252	60.3
Iso-VK 450 4D	700	738	640	700	738	700	738	282	73.3
Iso-VK 450 4E	700	738	640	700	738	700	738	282	71.8
Iso-VK 500 4D	820	858	760	820	858	820	858	321	101.8
Iso-VK 500 4E	820	858	760	820	858	820	858	321	96.3
Iso-VK 560 4D	900	938	840	900	938	900	938	365	130.3
Iso-VK 630 4D	1000	1038	940	1000	1038	1000	1038	409	173.8
Iso-VK 710 6D	1075	1114	1015	1075	1152	1075	1112	455	210
Iso-VK 710 4D	1075	1114	1015	1075	1152	1075	1112	455	240
Iso-VK 800 6D	1175	1214	1115	1175	1252	1175	1212	505	275



**Technical data**

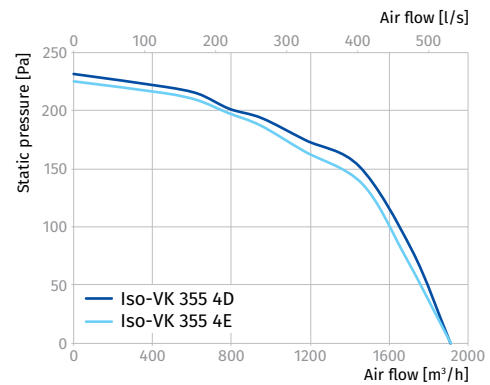
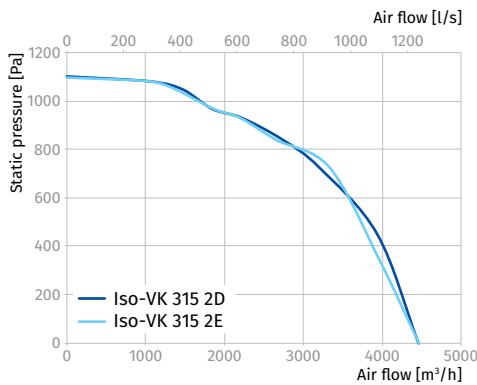
Parameters	Iso-VK 315 2D	Iso-VK 315 2E	Iso-VK 315 4D	Iso-VK 315 4E	Iso-VK 355 4D	Iso-VK 355 4E	Iso-VK 400 4D	Iso-VK 400 4E
Voltage [V]	3~400	1~230	3~400	1~230	3~400	1~230	3~400	1~230
Frequency [Hz]	50		50		50		50	
Power [W]	1100		250		370		550	
Current [A]	2.4	7.6	0.7	2.16	1.1	3.3	1.7	4.4
Maximum air flow [m³/h (l/s)]	4460 (1239)		1910 (531)		3200 (889)		4550 (1264)	
RPM [min <sup>-1</sup> ]	2885	2810	1385	1320	1375	1452	1400	1410
Sound pressure level at 3 m [dBA]	58	57	50	48	58	57	53	50
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 315 2D, ISO-VK 315 2E**

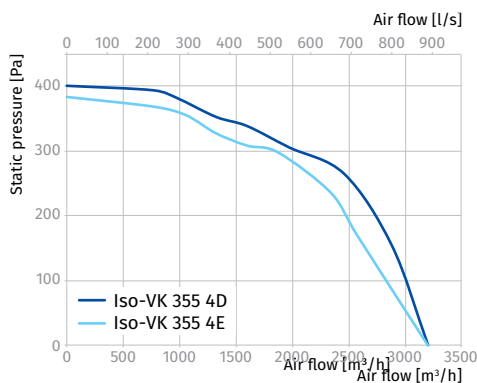
Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
<b>Iso-VK 315 2D</b>											
LWA to inlet [dBA]	90	63	86	87	70	58	54	58	48	69	79
LWA to outlet [dBA]	93	62	86	92	72	55	53	62	54	72	82
LWA to environment [dBA]	79	57	77	73	58	49	42	42	35	58	68
<b>Iso-VK 315 2E</b>											
LWA to inlet [dBA]	89	63	86	87	69	58	53	58	48	69	79
LWA to outlet [dBA]	91	60	85	90	71	54	52	61	53	71	81
LWA to environment [dBA]	78	56	76	72	57	49	42	41	34	57	67

**ISO-VK 315 4D, ISO-VK 315 4E**

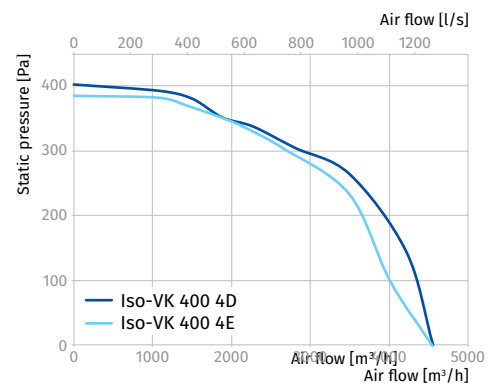
Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
<b>Iso-VK 315 4D</b>											
LWA to inlet [dBA]	83	58	79	81	65	54	50	55	45	63	73
LWA to outlet [dBA]	86	56	79	85	67	51	49	58	50	66	76
LWA to environment [dBA]	70	49	69	65	52	45	38	38	31	50	60
<b>Iso-VK 315 4E</b>											
LWA to inlet [dBA]	80	54	76	78	62	52	48	52	43	59	69
LWA to outlet [dBA]	84	54	77	83	65	50	48	56	49	64	74
LWA to environment [dBA]	69	48	67	64	51	44	37	37	31	48	58


**ISO-VK 355 4D, ISO-VK 355 4E**

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
<b>Iso-VK 355 4D</b>											
LWA to inlet [dBA]	86	60	83	84	67	56	52	56	47	66	76
LWA to outlet [dBA]	89	58	82	88	69	53	51	59	51	68	78
LWA to environment [dBA]	79	57	77	73	58	49	42	42	35	58	68
<b>Iso-VK 355 4E</b>											
LWA to inlet [dBA]	85	59	81	82	66	55	51	55	46	64	74
LWA to outlet [dBA]	88	57	81	87	68	53	50	59	51	68	78
LWA to environment [dBA]	78	56	76	72	57	49	42	41	34	57	67


**ISO-VK 400 4D, ISO-VK 400 4E**

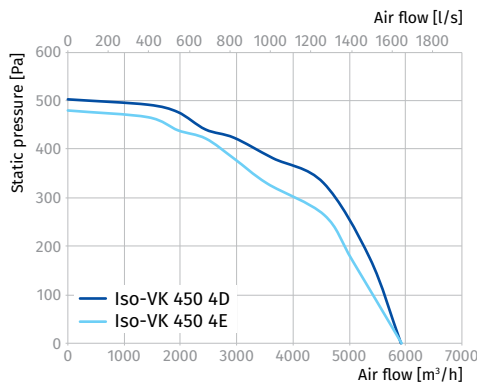
Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
<b>Iso-VK 400 4D</b>											
LWA to inlet [dBA]	82	56	78	79	63	53	49	53	44	61	71
LWA to outlet [dBA]	84	54	77	83	65	50	48	56	49	64	74
LWA to environment [dBA]	74	52	72	68	54	46	40	39	33	53	63
<b>Iso-VK 400 4E</b>											
LWA to inlet [dBA]	80	55	76	78	63	53	49	53	44	60	70
LWA to outlet [dBA]	82	52	75	81	64	49	47	55	48	62	72
LWA to environment [dBA]	70	49	69	65	52	45	38	38	31	50	60



Parameters	Iso-VK 450 4D	Iso-VK 450 4E	Iso-VK 500 4D	Iso-VK 500 4E	Iso-VK 560 4D	Iso-VK 630 4D
Voltage [V]	3~400	1~230	3~400	1~230	3~400	3~400
Frequency [Hz]	50		50		50	50
Power [W]	750		1500		3000	4000
Current [A]	1.9	5.6	3.4	10.6	6.4	8.1
Maximum air flow [m³/h (l/s)]	5920 (1644)		9100 (2528)		12750 (3542)	17300 (4806)
RPM [min⁻¹]	1435	1435	1450	1410	1450	1455
Sound pressure level at 3 m [dBA]	56	54	60	57	58	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

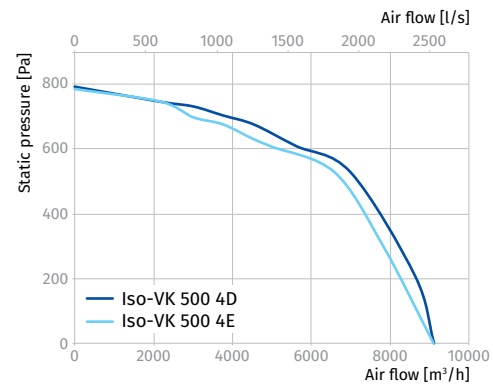
**ISO-VK 450 4D, ISO-VK 450 4E**

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
<b>Iso-VK 450 4D</b>											
LWA to inlet [dBA]	87	61	83	85	67	57	52	57	47	66	76
LWA to outlet [dBA]	90	60	83	89	70	54	52	60	52	70	80
LWA to environment [dBA]	77	55	75	71	57	48	41	41	34	56	66
<b>Iso-VK 450 4E</b>											
LWA to inlet [dBA]	83	58	79	81	65	54	50	55	45	63	73
LWA to outlet [dBA]	86	56	79	85	67	51	49	58	50	66	76
LWA to environment [dBA]	74	53	72	69	55	47	40	40	33	54	64



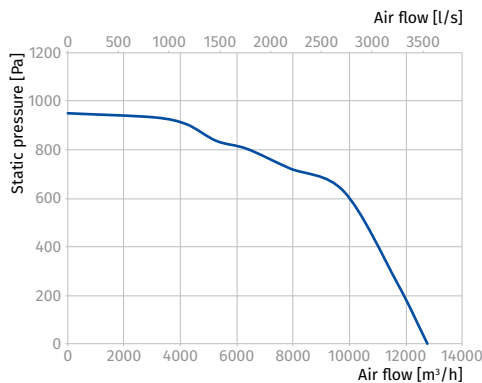
**ISO-VK 500 4D, ISO-VK 500 4E**

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
<b>Iso-VK 500 4D</b>											
LWA to inlet [dBA]	90	63	86	87	70	58	54	58	48	69	79
LWA to outlet [dBA]	91	60	84	90	70	54	52	60	53	70	80
LWA to environment [dBA]	81	59	80	75	59	50	43	43	35	60	70
<b>Iso-VK 500 4E</b>											
LWA to inlet [dBA]	86	60	83	84	67	56	52	56	47	66	76
LWA to outlet [dBA]	89	59	82	88	69	53	51	60	52	69	79
LWA to environment [dBA]	77	56	76	72	57	48	41	41	34	57	67



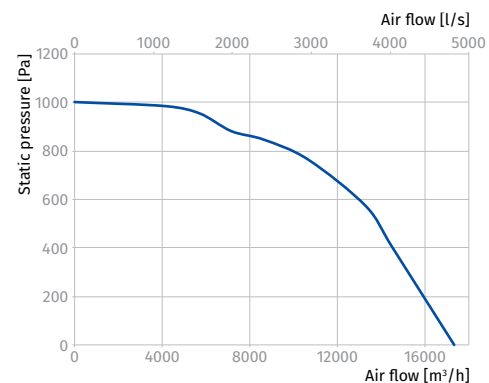
**ISO-VK 560 4D**

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	63	86	87	70	58	54	58	48	69	79
LWA to outlet [dBA]	91	60	84	90	70	54	52	60	53	70	80
LWA to environment [dBA]	78	57	77	73	58	49	42	42	34	58	68



**ISO-VK 630 4D**

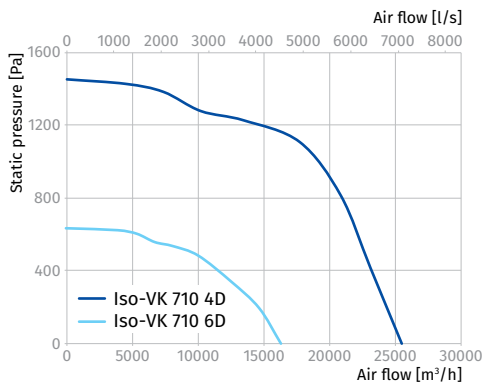
Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	92	65	88	89	71	59	54	59	49	71	81
LWA to outlet [dBA]	97	66	91	96	75	58	55	64	56	77	87
LWA to environment [dBA]	83	61	81	76	61	51	44	43	36	62	72



Parameters	Iso-VK 710 4D	Iso-VK 710 6D	Iso-VK 800 6D
Voltage [V]	3~400	3~400	3~400
Frequency [Hz]	50	50	50
Power [W]	7500	2200	4000
Current [A]	16.1	5.1	8.7
Maximum air flow [m <sup>3</sup> /h (l/s)]	25500 (7083)	16400 (4556)	21860 (6072)
RPM [min <sup>-1</sup> ]	1460	970	965
Sound pressure level at 3 m [dBA]	59	57	62
Transported air temperature [°C]	-25...+120	-25...+120	-25...+120
IP rating	IPX4	IPX4	IPX4
Motor IP rating	IP55	IP55	IP55

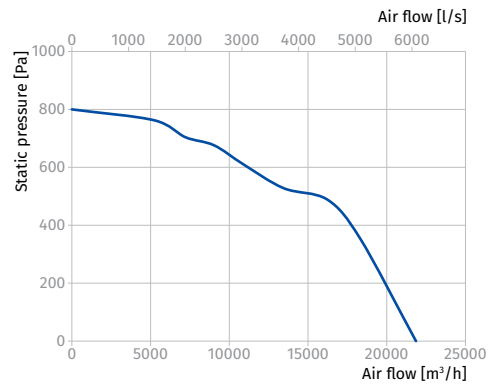
### ISO-VK 710 4D, ISO-VK 710 6D

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
<b>Iso-VK 710 4D</b>											
LWA to inlet [dBA]	91	64	87	88	70	59	54	59	49	70	80
LWA to outlet [dBA]	94	63	87	93	73	56	53	62	54	74	84
LWA to environment [dBA]	79	58	78	73	58	50	42	42	35	59	69
<b>Iso-VK 710 6D</b>											
LWA to inlet [dBA]	88	62	84	86	68	57	53	57	47	68	78
LWA to outlet [dBA]	91	60	84	90	70	54	52	60	53	70	80
LWA to environment [dBA]	77	56	76	72	57	48	41	41	34	57	67



### ISO-VK 800 6D

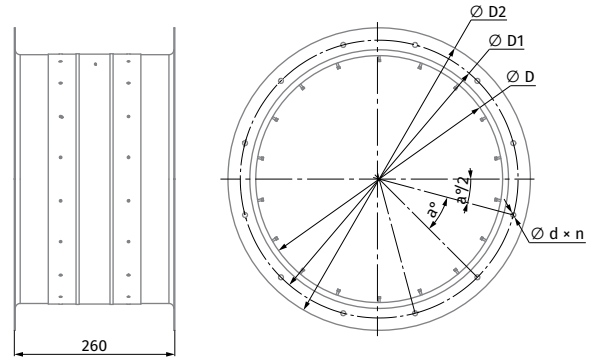
Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	90	63	86	87	70	58	54	58	48	69	79
LWA to outlet [dBA]	94	63	87	93	73	56	53	62	54	74	84
LWA to environment [dBA]	83	61	81	76	61	51	44	43	36	62	72



## Modifications and options

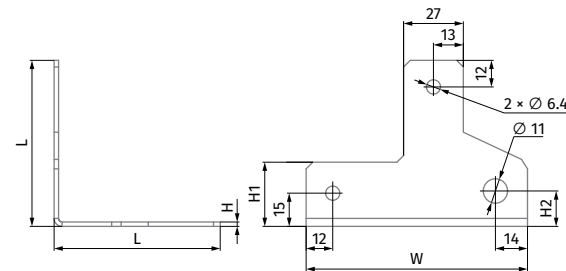
### FLEXIBLE CONNECTOR EVA ISO-VK

Type	Dimensions [mm]						Weight [kg]
	∅ d	∅ D	∅ D1	∅ 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



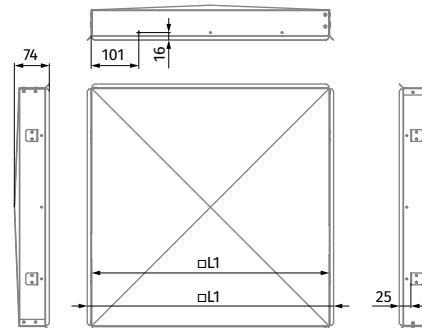
### MOUNTING BRACKET MH ISO-VK

Type	Dimensions [mm]				
	H	H1	H2	L	W
MH ISO-VK 315...450	2	29	16	75	100
MH ISO-VK 500...800	3	30	18	85	110



### 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]
	∅ D	∅ D1	∅ D2	∅ 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

