DATA SHEET

SH 10 – SH 20

SOUND PROOF BOXES

for vacuum pumps and compressors

MAKE IT BECKER.

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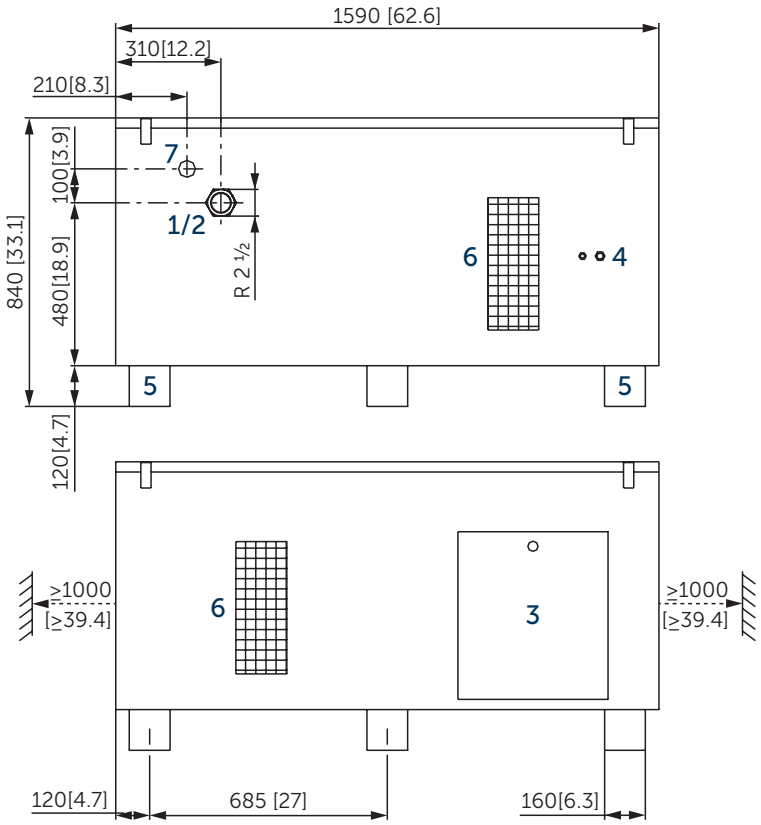
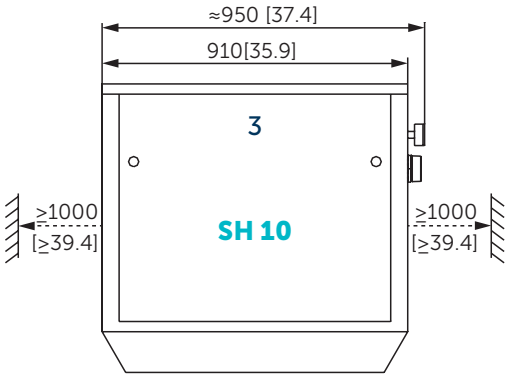
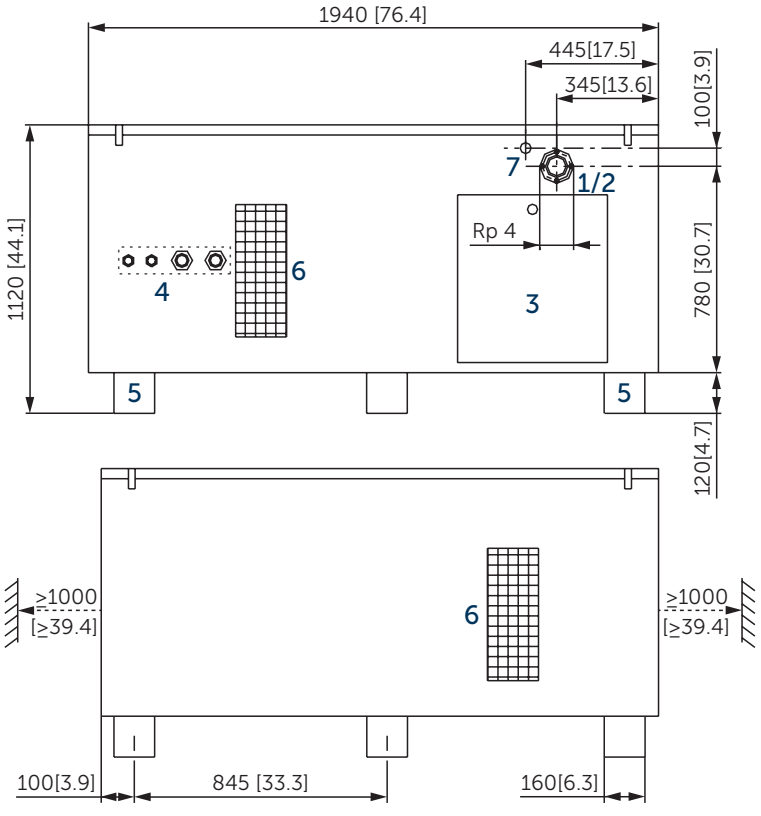
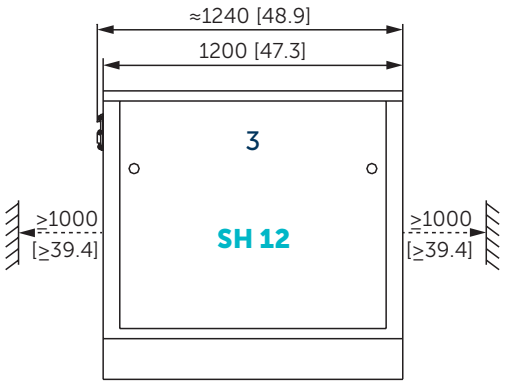
SH 10 • SH 12 • SH 13 SOUND PROOF BOXES
FOR ROTARY VANE PUMPS, OIL-FREE



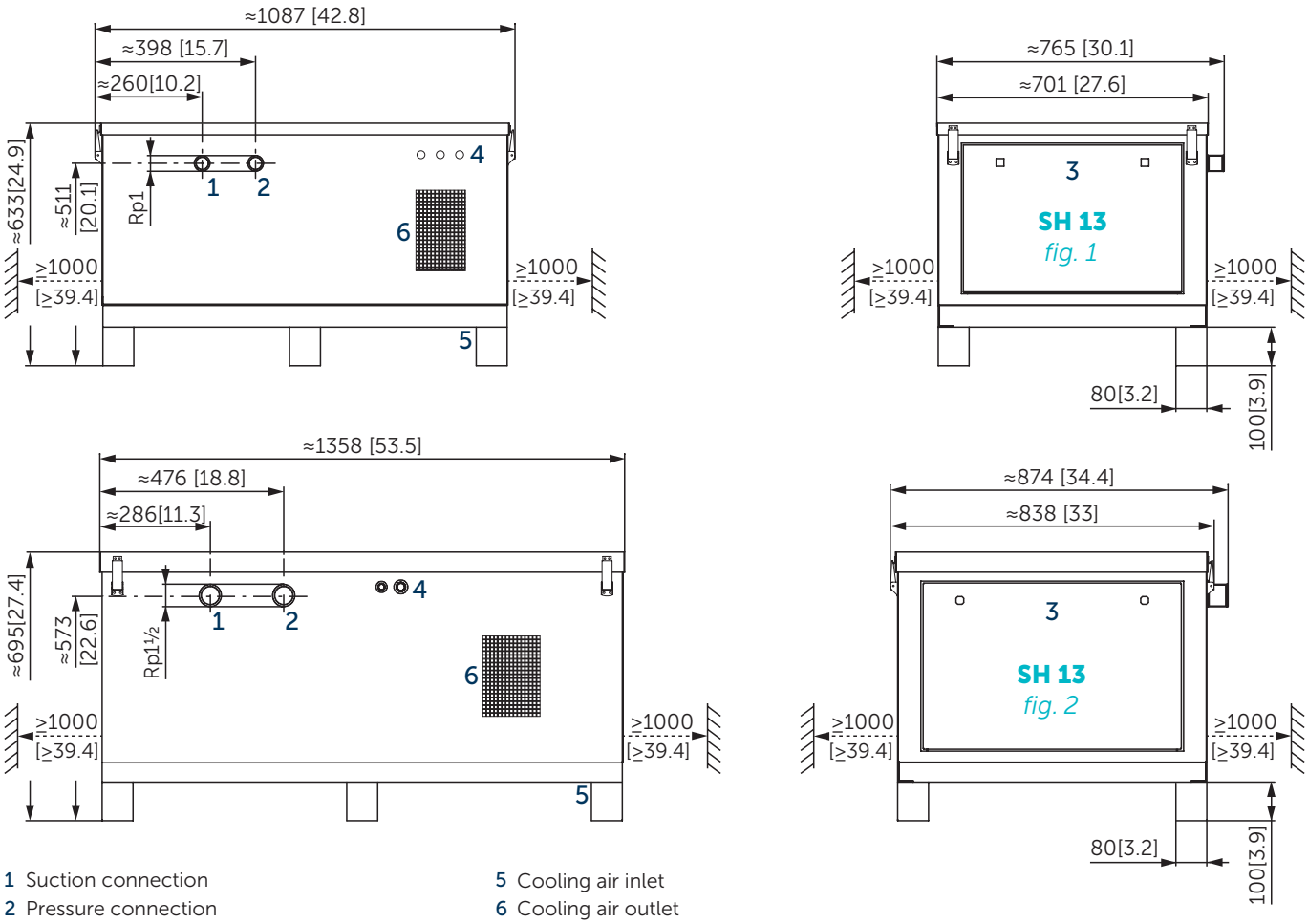


1 Suction connection
2 Pressure connection
3 Service flap
4 Cable entry for fan and motor connection
5 Cooling air inlet
6 Cooling air outlet
7 Vacuum meter or pressure gauge
▪ Dimensions in mm [inch]





1 Suction connection
2 Pressure connection
3 Service flap
4 Cable entry for fan and motor connection
5 Cooling air inlet
6 Cooling air outlet
7 Vacuum meter or pressure gauge
▪ Dimensions in mm [inch]



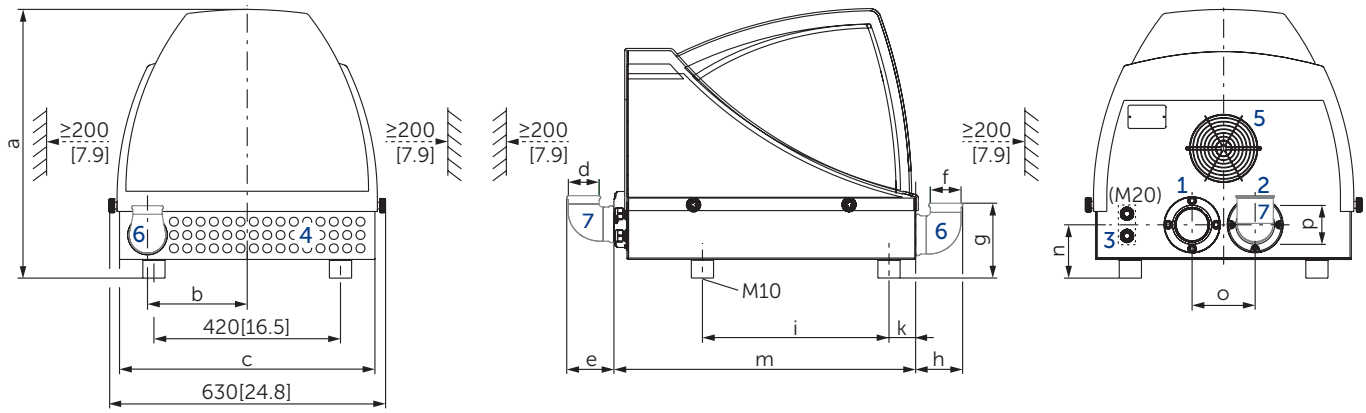
1 Suction connection
2 Pressure connection
3 Service flap
4 Cable entry for fan and motor connection
5 Cooling air inlet
6 Cooling air outlet
▪ Dimensions in mm [inch]

SH	for	Quantity fans	Weight	Order no. SH w/o pump	
			kg	230 V	115 V
SH 10	VTLF/VXLF 2.200, VTLF/VXLF 2.250 + VTLF 2.360	4	117	76710222200	–
	VTLF 2.250 SK	4	117	30010352200	–
	DTLF/DXLF 2.200, DTLF/DXLF 2.250 + DTLF 2.360	4	117	76710422200	–
SH 12	VTLF/VXLF 2.400 7,5 kW	8	192	30008252300	30008452300
	VTLF/VXLF 2.500 11 kW	8	192	30008252300	30008452300
	DTLF/DXLF 2.400 11/15/18,5 kW	8	192	30008052300	30008552300
	DTLF/DXLF 2.500 15/18,5/22 kW	8	192	30008052300	30008552300
	DTLF/DXLF 2.500 30 kW	8	192	30008152300	30008652300
SH 13 *fig. 1*	KDT/KDX 3.60 + KDT/KDX 3.80	2	77.5	30300521100	30309821100
	KVT/KVX 3.60 + KVT/KVX 3.80	2	77.5	30300621100	30309721300
	DVT/DVX 3.60 + DVT/DVX 3.80	2	77.5	30300721100	30309921100
SH 13 *fig. 2*	KDT/KDX 3.100 + KDT/KDX 3.140	3	111	30300821300	30310121300
	KVT/KVX 3.100 + KVT/KVX 3.140	3	111	30300921300	30310021300
	DVT/DVX 3.100 + DVT/DVX 3.140	3	111	30301021300	30310221300

1~ Fan (connection by customer, inside the box)							
V	Hz	W	rpm	A	m^3/h	dB(A)	
230	50	24	2800	0.12	375	55	0.75 µF (400 VDB)
	60	26	3300	0.11	440	60	
115	50	24	2800	0.25	375	55	3.0 µF (250 VDB)
	60	26	3300	0.23	440	60	UL on request

▪ Noise level reduction 10–18 db(A)
▪ Ambient temperature max. 35°C

SH 18 SOUND PROOF BOXES
FOR SIDE CHANNEL BLOWERS



1 Vacuum connection
2 Pressure connection
3 Cable entry for fan and motorconnection
4 Cooling air outlet
5 Fan: 1~ 230 V • 24/26 W • 0.10/0.11 A • 50/60 Hz – connection by customer (inside the box)

Vacuum pumps with elbow for exhaust (VARIAIR SV 300 without elbow):
6 SV 130, VARIAIR SV 130, SV 200, SV 201, VARIAIR SV 201, SV 300 and SV 400
7 SV 500

- Accessory parts, such as filters or safety valves, are attached on the outside of the sound enclosure.
- Dimensions in mm [inch]

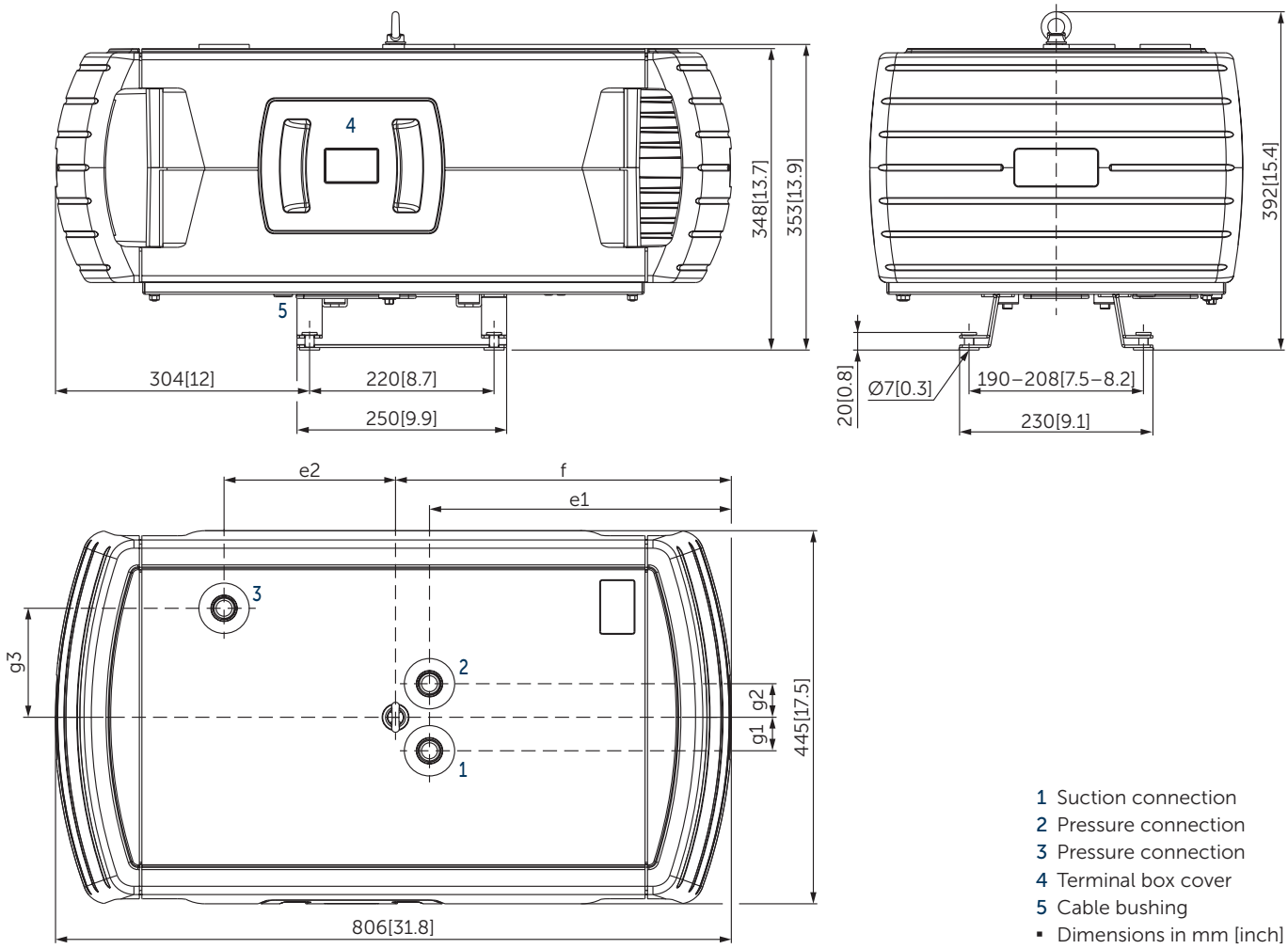
mm [inch]														
SH 18 for	a	b	c	d	e	f	g	h	i	k	m	n	o	r
SV 130 VARIAIR SV 130	605 [23.8]	214 [8.4]	575 [22.7]	–	–	R1½	151 [5.9]	80.5 [3.2]	480 [18.9]	45 [1.8]	680 [29.8]	118 [4.6]	150 [5.9]	G1½
SV 200 & 201 VARIAIR SV 201	605 [23.8]	214 [8.4]	575 [22.7]	–	–	R2	158 [6.2]	92 [3.6]	480 [18.9]	45 [1.8]	679 [26.8]	123 [4.8]	150 [5.9]	G2
SV 300	605 [23.8]	225 [8.9]	586 [23.1]	–	–	R2	170 [6.7]	100 [3.9]	420 [16.5]	60 [2.4]	675 [26.6]	133 [5.2]	190 [7.5]	G2½
VARIAIR SV 300	692 [27.3]	–	575 [22.7]	–	–	–	–	–	520 [20.5]	65 [2.6]	693 [27.3]	145.5 [5.7]	220 [8.7]	G3
SV 400	667 [26.3]	219 [8.6]	586 [23.1]	–	–	R3	188 [7.4]	126 [5]	490 [19.3]	45 [1.8]	686 [27]	143.5 [5.7]	206 [8.1]	G3
SV 500	692 [27.3]	–	575 [22.7]	G3	125 [4.9]	–	–	–	520 [20.5]	108 [4.3]	693 [27.3]	145.5 [5.7]	220 [8.7]	G3

Order number/Weight (SH 18 w/o blower)						
	SV 130 VARIAIR SV 130	SV 200 & 201 VARIAIR SV 201	SV 300	VARIAIR SV 300	SV 400	SV 500
Pressure	30101660100 ≈28.5 kg	30203060200 ≈28.5 kg	30303060300 ≈30.0 kg	30306860300 ≈36.0 kg	30402860400 ≈33.5 kg	30502860500 ≈35.0 kg
Vacuum	30101560100 ≈29.5 kg	30203160200 ≈30.0 kg	30302960300 ≈32.5 kg	30306860300 ≈36.0 kg	30402960400 ≈35.0 kg	30502960500 ≈37.0 kg

SH 18 for	Motor	Max. allowed ambient temperature °C								Emission sound pressure level [1] dB(A)			
	kW	Pressure 50 Hz		Pressure 60 Hz		Vacuum 50 Hz		Vacuum 60 Hz		Pressure		Vacuum	
	50/60 Hz	°C	max. mbar	°C	max. mbar	°C	max. mbar	°C	max. mbar	50 Hz	60 Hz	50 Hz	60 Hz
SV 130/1	1.5/1.8	40 25	+160 +280	40 35	+160 +300	40 15	-160 -240	40 20	-260 -270	57.6 (+160mbar)	58.7 (+160mbar)	59.8 (-160mbar)	59.3 (-265mbar)
SV 130/2	1.5/1.8	40	+400	40	+390	40 30	-255 -380	40 30	-260 -400	58.0 (+265mbar)	58.3 (+235mbar)	60.5 (-255mbar)	60.3 (-260mbar)
SV 200/1 SV 201/1	1.1/1.29	40	+145	40	+130	40	-150	40	-140	59.6 (+100mbar)	62.4 (+90mbar)	59.7 (-100mbar)	61.6 (-90mbar)
SV 200/1 SV 201/1	1.5/1.8	40	+225	40	+220	40	-215	40	-230	63.1 (+150mbar)	67.9 (+150mbar)	61.4 (-145mbar)	63.9 (-150mbar)
SV 200/2 SV 201/2	1.1/1.29	40	+300	40	+260	40	-330	40	-300	57.6 (+200mbar)	58.4 (+170mbar)	59.6 (-220mbar)	60.1 (-200mbar)
SV 200/2 SV 201/2	1.5/1.8	40	+410	40	+430	40	-330	40	-350	59.4 (+270mbar)	60.6 (+290mbar)	61.5 (-220mbar)	62.9 (-235mbar)
SV 300/1	2.2/2.65 & 3.0/3.60	40 35 30	+100 +250 +330	40 35 30	+100 +250 +275	40 35 30	-100 200 -300	35 30	-200 -275	62.5 (+165mbar)	66.6 (+155mbar)	68.4 (-180mbar)	67.6 (-165mbar)
SV 300/2	2.2/2.65 & 3.0/3.60	40 35 30 25	+100 +300 +400 +510	40 35 30 25	+150 +300 +400 +460	35 35 30 25	-100 -200 -300 -400	35 35 30 25	-100 -200 -300 -410	66.6 (+370mbar)	68.3 (+330mbar)	70.3 (-275mbar)	69.6 (-275mbar)
SV 400/1 [2]	3.0/3.6	40	+175	40	+155	40	-175	40	-175	60.2 (+120mbar)	64.6 (+100mbar)	44.0 (-120mbar)	47.1 (-120mbar)
SV 400/1 [2]	4.0/4.8	40	+330	40	+290	40 35	-250 -370	40	-350	60.2 (+220mbar)	68.6 (+190mbar)	62.3 (-250mbar)	68.6 (-240mbar)
SV 400/2 [2]	3.0/3.6	40	+250	40	+240	40	-260	40	-250	61.9 (+175mbar)	63.7 (+175mbar)	64.1 (-185mbar)	64.4 (-185mbar)
SV 400/2 [2]	4.0/4.8	40 35	+400 +500	40	+450	40 35	-300 -400	40 35	-300 -400	63.8 (+360mbar)	65.9 (+330mbar)	64.7 (-250mbar)	66.7 (-250mbar)
SV 500/1 [3]	4.0/4.8	40	+190	40	+175	40	-200	40	-175	62.6 (+130mbar)	61.9 (+120mbar)	60.9 (-130mbar)	60.4 (-120mbar)
SV 500/1 [3]	5.5/6.6	40	+295	40	+275	40	-315	40	-290	61.1 (+200mbar)	63.1 (+180mbar)	60.9 (-210mbar)	62.5 (-195mbar)
SV 500/2 [3]	4.0/4.8	40	+370	40	+340	40	-280	40	-240	60.8 (+250mbar)	61.7 (+230mbar)	61.0 (-190mbar)	61.1 (-160mbar)
SV 500/2 [3]	5.5/6.6	40 30	+400 +480	40 35 25	+350 +450 +530	40	-280	40 25	-270 -400	62.9 (+320mbar)	64.6 (+350mbar)	63.1 (-280mbar)	63.2 (-270mbar)
	kW	Pressure 67 Hz		Pressure 100 Hz		Vacuum 67 Hz		Vacuum 100 Hz		Pressure		Vacuum	
	100 Hz	°C	max. mbar	°C	max. mbar	°C	max. mbar	°C	max. mbar	67 Hz	100 Hz	67 Hz	100 Hz
VARIAIR SV 130/1	4.0	40	+315	40 35	+260 +360	40	-255	40 30	-215 -305	59.2 (+260mbar)	59.2 (+370mbar)	61.1 (-215mbar)	65.4 (-305mbar)
VARIAIR SV 130/2	4.0	40	+415	40 25	+390 +550	40	-360	40 35	-290 -410	59.7 (+390mbar)	63.9 (+550mbar)	60.1 (-290mbar)	64.1 (-410mbar)
VARIAIR SV 201/1	4.0			35	+250			35	-260		64.0 (+235mbar)		64.8 (-215mbar)
VARIAIR SV 201/2 [4]	4.0			35 30	+290 +370						62.8 (+370mbar)		
VARIAIR SV 300/1 [5]	7.5	40 40 35	+100 +200 +325	40 40	+100 +190	40 40 30	-100 -200 -290	40 40 35	-100 -200 -260	66.5 (+200mbar)	75.7 (+190mbar)	65.8 (-200mbar)	73.6 (-260mbar)

[1] According to DIN EN ISO 11203, accuracy class of measurement: class 2, extended measurement uncertainty: 3 dB
1 m [39.4 inch] distance, at 2/3 load, both connection sides piped
[2] SV 400 in SH 18 not available with 5.5/6.6 kW motors
[3] SV 500 in SH 18 not available with 7.5/9.0 kW motors
[4] VARIAIR SV 201/2 in SH 18 not available for vacuum operation
[5] VARIAIR SV 300/2 in SH 18 is not available

SH 19 SOUND PROOF BOXES
FOR ROTARY VANE PUMPS, OIL-FREE

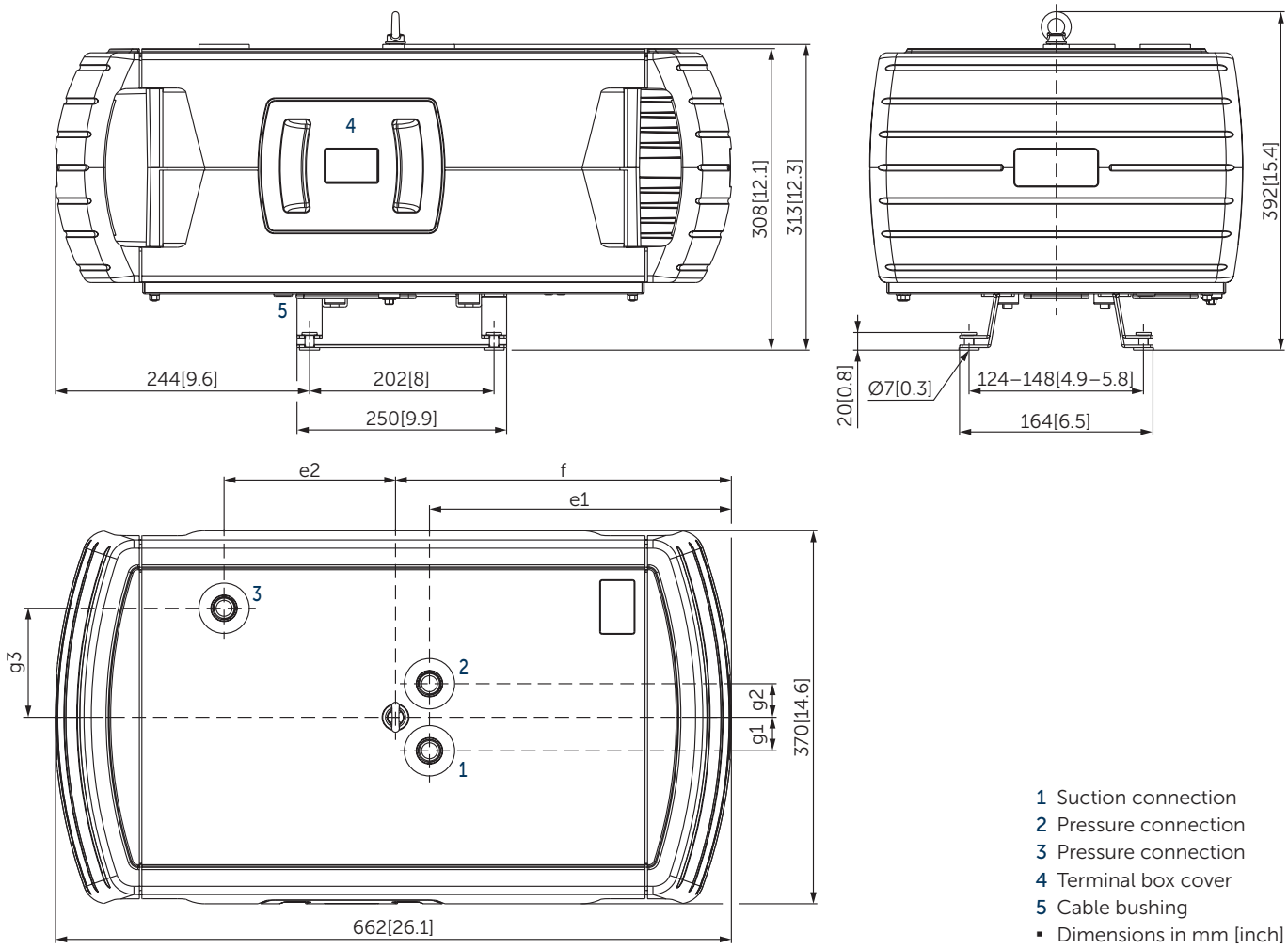


1 Suction connection
2 Pressure connection
3 Pressure connection
4 Terminal box cover
5 Cable bushing
▪ Dimensions in mm [inch]

SH 19 for	Emission sound pressure level [1]		Total weight	Connection		Dimensions					Order no. SH w/o pump
	dB(A)		kg	#		mm [inch]					
	50 Hz	60 Hz				e1	e2	f	g1/g2	g3	
VT 4.25	55	59	33.0	1	¾	358 [14,1]		400 [15,8]	40,0 [1,6]		57040153809
VX 4.25	55	59	33.0	1	¾	358 [14,1]		400 [15,8]	40,0 [1,6]		57040153810
VT 4.40	56	62	42.0	1	¾	290 [11,4]		362 [14,3]	40,0 [1,6]		57040153801
VX 4.40	56	62	42.0	1	¾	290 [11,4]		362 [14,3]	40,0 [1,6]		57040153802
DT 4.25 K	60	64	40.0	3	¾		243 [9,6]	362 [14,3]		130 [5,1]	57040153812
DX 4.25 K	60	64	40.0	3	¾		243 [9,6]	362 [14,3]		130 [5,1]	57040153813
DT 4.40 K	60	64	48.5	3	¾		289 [11,4]	316 [12,5]		130 [5,1]	57040153804
DX 4.40 K	60	64	48.5	3	¾		289 [11,4]	316 [12,5]		130 [5,1]	57040153805
T 4.25 DV	62	59	34.5	1+2	¾	358 [14,1]			40,0 [1,6]		57040153811
X 4.25 DV	62	59	34.5	1+2	¾	358 [14,1]			40,0 [1,6]		
T 4.25 DSK	64	65	39.0	1+3	¾	322 [12,7]	289 [11,4]	289 [11,4]	40,0 [1,6]	130 [5,1]	57040153814
X 4.25 DSK	64	65	39.0	1+3	¾	322 [12,7]	289 [11,4]	289 [11,4]	40,0 [1,6]	130 [5,1]	
T 4.40 DV	62	64	41.0	1+2	¾	290 [11,4]			40,0 [1,6]		57040153803
X 4.40 DV	62	64	41.0	1+2	¾	290 [11,4]			40,0 [1,6]		
T 4.40 DSK	62	63	48.0	1+3	¾	244 [9,6]	289 [11,4]	289 [11,4]	40,0 [1,6]	130 [5,1]	57040153808
X 4.40 DSK	62	63	48.0	1+3	¾	244 [9,6]	289 [11,4]	289 [11,4]	40,0 [1,6]	130 [5,1]	

[1] According to DIN EN ISO 11203, accuracy class of measurement: class 2, extended measurement uncertainty: 3 dB
1 m [39.4 inch] distance, at medium load, both connection sides piped

SH 20 SOUND PROOF BOXES
FOR ROTARY VANE PUMPS, OIL-FREE



1 Suction connection
2 Pressure connection
3 Pressure connection
4 Terminal box cover
5 Cable bushing
▪ Dimensions in mm [inch]

SH 20 for	Emission sound pressure level [1]		Total weight	Connection		Dimensions					Order no. SH w/o pump
	dB(A)		kg	#		mm [inch]					
	50 Hz	60 Hz				e1	e2	f	g1/g2	g3	
VT 4.10	56	56	19.0	1	½	278 [11]		310 [12,2]	35,0 [1,4]		57040153901
VX 4.10	56	56	19.0	1	½	278 [11]		310 [12,2]	35,0 [1,4]		57040153902
VT 4.16	54	56	26.5	1	½	245 [9,7]		295 [11,6]	37,5 [1,5]		57040153906
VX 4.16	54	56	26.5	1	½	245 [9,7]		295 [11,6]	37,5 [1,5]		57040153907
DT 4.10	58	60	19.0	2	½	278 [11]		310 [12,2]	35,0 [1,4]		57040153904
DX 4.10	58	60	19.0	2	½	278 [11]		310 [12,2]	35,0 [1,4]		57040153905
DT 4.16	57	56	26.5	2	½	245 [9,7]		295 [11,6]	37,5 [1,5]		57040153909
DX 4.16	57	56	26.5	2	½	245 [9,7]		295 [11,6]	37,5 [1,5]		57040153910
DT 4.16 K	55	56	28.5	3	½		190 [7,5]	295 [11,6]		115 [4,5]	57040153911
DX 4.16 K	55	56	28.5	3	½		190 [7,5]	295 [11,6]		115 [4,5]	
T 4.10 DV	55	56	19.0	1+2	½	278 [11]		310 [12,2]	35,0 [1,4]		57040153903
X 4.10 DV	55	56	19.0	1+2	½	278 [11]		310 [12,2]	35,0 [1,4]		
T 4.16 DV	55	57	26.5	1+2	½	245 [9,7]		295 [11,6]	37,5 [1,5]		57040153908
X 4.16 DV	55	57	26.5	1+2	½	245 [9,7]		295 [11,6]	37,5 [1,5]		

[1] According to DIN EN ISO 11203, accuracy class of measurement: class 2, extended measurement uncertainty: 3 dB
1 m [39.4 inch] distance, at medium load, both connection sides piped

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