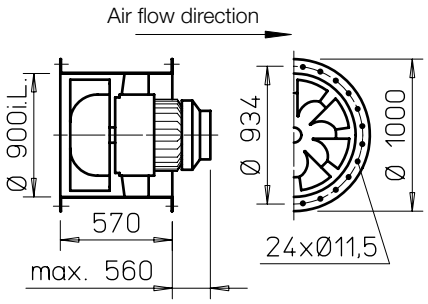
VAR and B VAR 900 F300/F400



40 °C 60 °C Ex F300 F400

Dimensions VAR and B VAR 900 F300/F400



All dim. in mm

Casing
Duct with flanges on both sides DIN 24155 pt. 3. Welded construction, hot-dip galvanised. Welded guide vane with inner hub for mounting the flange motor, hot-dip galvanised.

Impeller
Optimised for high pressure and volume output.
Special development with spatially curved hot-dip galvanised steel blades

Motor
Direct through IEC three phase motor.

☐ **Series VAR**
Enclosed design IP54. With condensation drain holes upon request, installation type specification necessary when ordering for this purpose.

☐ **Series B VAR**
Efficient IE3 three phase motor (smoke extraction motors F300 and F400). Pole-switching fans with IEC standard motor. Protection class IP55. Insulation class H. External cable with sheathing.

Motor protection

☐ **Series VAR**
All types (except explosion-proof and pole-switching models) have PTC resistors. For effective motor protection, these must be wired to a full motor protection device (see type table). Motors without PTC resistors must be protected with an on-site motor-protective circuit-breaker.

☐ **Series B VAR**
All types (except pole-switching) have PTC resistors as standard and must be protected with aa full motor protection device (MSA, Ref. no. 01289). This must be bridged in smoke extraction situation.

Installation
Installation in any position.

☐ **Series VAR**
Consider potential condensation drain holes depending on application.

☐ **Series B VAR**
Suitable for installation within and outside of the fire zone.

Electrical connection
Standard plastic terminal box (protection class IP54) (series VAR) or in temperature-resistant design (series B VAR), outside of duct.

Double pressure

Mounting package MP-Z for two-stage Z unit
For arrangement of two identical fans in a row, for highest pressure ratings.
Scope of delivery: Extension ducts (2 pcs.) and assembly kit.
Weight: 68 kg

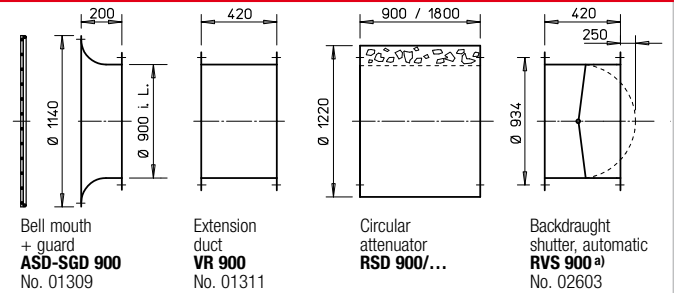
MP-Z 900	Ref. no. 04912
Additional extension duct required.	
VR 900	Ref. no. 01311

Double volume

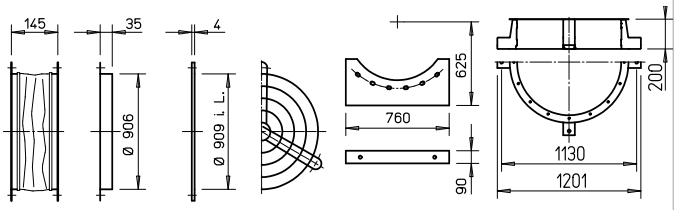
Mounting package MP-P for parallel P unit
For arrangement of two identical fans side by side, for highest flow rates.
Scope of delivery: Extension ducts, backdraught shutter, mounting rails (2 pcs. each), mounting brackets (4 pcs.) and assembly kits.
Weight: 235 kg

MP-P 900	Ref. no. 04896

Accessories VAR + B VAR 900 F300/F400 Description see page 163 ff.



Bell mouth + guard **ASD-SGD 900** No. 01309 | Extension duct **VR 900** No. 01311 | Circular attenuator **RSD 900/…** | Backdraught shutter, automatic **RVS 900** [a] No. 02603

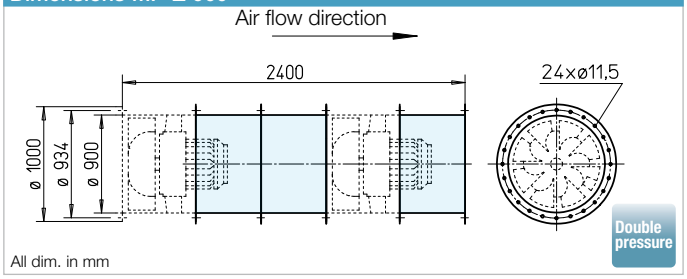


Flang. flex. connector **STS 900** [b] No. 01234 | Counter flange **FR 900** No. 01199 | Flat flange **FF 900** No. 04952 | Duct-side guard **SG 900** No. 01246 | Mounting brackets **MK 900** (1 set = 2 pcs.) No. 01374 | Mounting ring for vertical installation **MRV 900** No. 01745

[a] Backdraught shutter, motorised, **for ventilation**, see main Helios catalogue

[b] Type for B VARD: STSB 900 F400, No. 01920 bis 02000 Pa

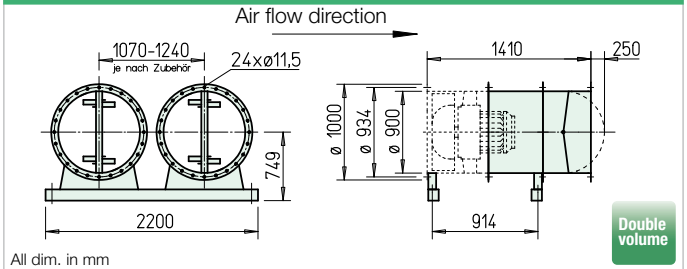
Dimensions MP-Z 900



All dim. in mm

Double pressure

Dimensions MP-P 900



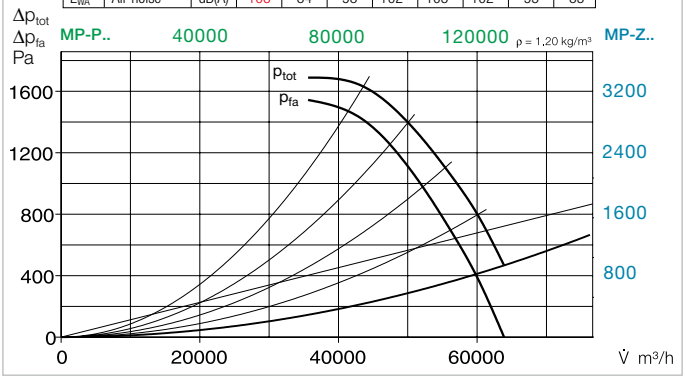
All dim. in mm

Double volume

Performance curves VAR / B VAR 900/4 F300/F400

n=1480 1/min

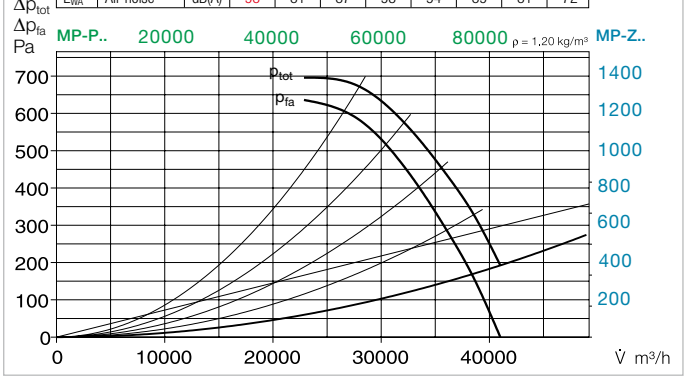
Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Air noise	dB(A)	108	84	98	102	105	102	95	85



Performance curves VAR / B VAR 900/6 F300/F400

n=950 1/min

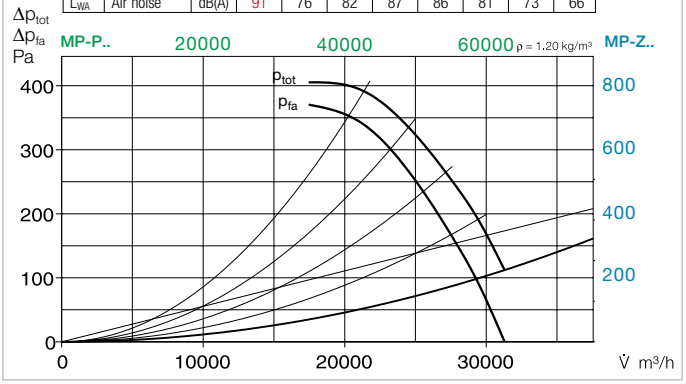
Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Air noise	dB(A)	98	81	87	93	94	89	81	72



Performance curves VAR / B VAR 900/8 F300/F400

n=725 1/min

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L_{WA}	Air noise	dB(A)	91	76	82	87	86	81	73	66



Certification

The smoke extraction fans B VARD have been tested according to DIN EN 12101-3. Certificate of performance reliability:
F300: 0036-CPR-RG05-01
F400: 0036-CPR-RG05-05

Information

Information	Page
Techn. description	84 f.
Project planning information	10 ff.
Accessory details	
Mounting accessories	163 ff.
Attenuator	168
Gas warning systems, switch and control technology	170 ff.

Safety information B VAR

Protection against accidental contact for impeller must be ensured by installation pursuant to DIN EN ISO 13857.

Noise levels

See information on sound power levels above the performance curves. The lower sound pressure level can be determined using the diagram on the “Technical information” page. Noise emmissions and room acoustics see page 5.

Type	Ref. no.	Speed	Output free-blowing	Nom. motor power. (output)	Nominal voltage	Power consumption at nom. voltage	Wiring diagram	max. air flow temp.[3] at nom. voltage	Net weight approx.	Smoke exhaust fan control system incl. full motor protection		Anti-vibration mount [2]			
												Pressure		Tensile	
		min^{-1}	V̇ m³/h	kW	V	A	No.	+°C	kg	Type	Ref. no.	Type	Ref. no.	Type	Ref. no.
40° Three phase motor, 50 Hz, protection class IP54															
VARD 900/4	06743	1480	63890	37.00*	400/690	73.0/42.2	776	40	500.0	—		**SDD 3**	01367	**SDZ 7**	01929
60° Pole-switching, 2 Drehzahlen (Dahlander winding Y/YY), Three phase motor, 50 Hz, protection class IP54															
VARD 900/8/4	06800	730/1450	31510/62600	9.50/40.00*	400	35.0/80.0	471	60	540.0	—		**SDD 3**	01367	**SDZ 7**	01929
Ex Explosion-proof, E Exe II, three phase motor, 50 Hz, temperature class T 3, protection class IP54															
VARD 900/8 Ex[1]	06744	725	31300	4.80*	400	11.8/6.8	498	40	325.0	—		**SDD 3**	01367	**SDZ 6**	01927
VARD 900/6 Ex[1]	06745	980	42310	13.20*	400	28.0/16.2	498	40	390.0	—		**SDD 3**	01367	**SDZ 6**	01927
VARD 900/4 Ex[1]	06746	1475	63670	36.00*	400	67.0/38.7	498	40	545.0	—		**SDD 3**	01367	**SDZ 7**	01929
F300 Three phase motor, 50 Hz, protection class IP54															
B VARD 900/4 F300	02370	1480	63460	37.0	400	66.8	776	40 / 300[3]	533.0	**EVS-SD 009**	04578	**SDD 8**	01930	**SDZ 8**	01931
F300 Pole-switching, 2 speed (Dahlander winding Y/YY), Three phase motor, 50 Hz, protection class IP54															
B VARD 900/8/4 F300	02371	740/1485	31730/63460	9.2/37.0	400	25.4/74.2	777	40 / 300[3]	551.0	**on demand**		**SDD 8**	01930	**SDZ 8**	01931
F400 Three phase motor, 50 Hz, protection class IP54															
B VARD 900/4 F400	02456	1480	63460	37.0	400	66.8	776	40 / 400[3]	554.0	**EVS-SD 009**	04578	**SDD 8**	01930	**SDZ 8**	01931
F400 Pole-switching, 2 speed (Dahlander winding Y/YY), Three phase motor, 50 Hz, protection class IP54															
B VARD 900/8/4 F400	02457	740/1485	31730/63460	9.2/37.0	400	25.4/74.2	777	40 / 400[3]	551.0	**on demand**		**SDD 8**	01930	**SDZ 8**	01931

[1] There must be a vibration monitoring system (on-site) pursuant to DIN EN 14986. [2] Types SDZ not permitted for installation within fire zone.
[3] Smoke extraction (once 120 min. at 300 °C or 120 min. at 400 °C).