

WPA-S-N/Ex – stationary fan



II 2 G c Ex e II T3

Purpose

WPA-S-N/Ex stationary fans have been developed for use in the areas of explosion hazard, where explosive atmosphere (i.e. mixture of flammable compounds in the form of gas and vapour with the air) is likely to occur.

Increased fan pressure make them particularly efficient within installations of local exhausts, filtering units and also within a system of significant flow resistances.

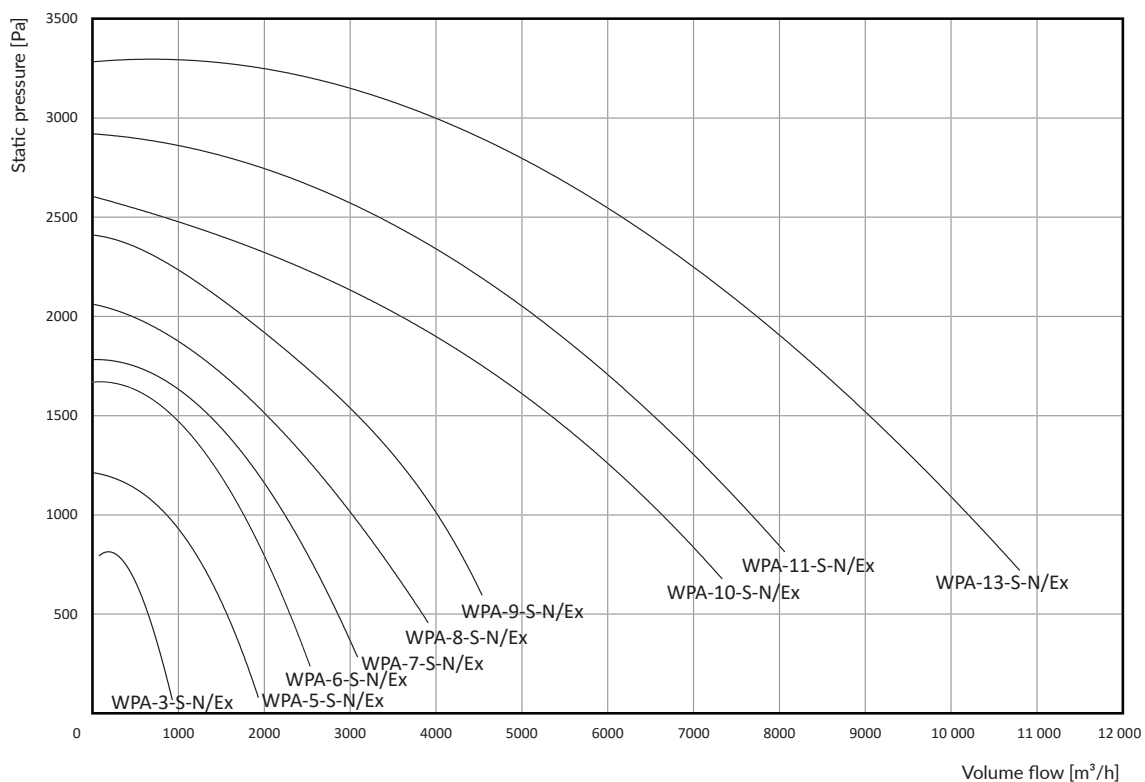
The fans can be operated within the range of temperatures -20°C up to $+40^{\circ}\text{C}$. They are efficient in forwarding the dry air, of dustiness not exceeding $0,3 \text{ g/m}^3$, without viscous contamination, aggressive compounds and of maximum temperature $+60^{\circ}\text{C}$.

Structure

Stationary fans consist of a spiral steel housing and a motor of Ex execution. The aluminium radial impeller is directly installed on the motor shaft, whereby the impeller blades cross-section is inspired by the aircraft wing profile, providing low acoustic pressure level. Outlet connection is adapted for attachment of round-section flexible connectors, whereas the inlet can be equipped with a connection ferrule.

For safety reason, the inlet and outlet are equipped with a protective grill. The fan motor is screwed to a base which is placed on a vibro-absorbing frame, to avoid vibration transmission to the floor.

NOTE: As additional accessory, we offer connectors to attach a flexible hose to the fan inlet (see catalogue card INSTALLATION ELEMENTS).



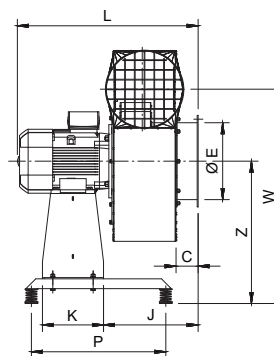
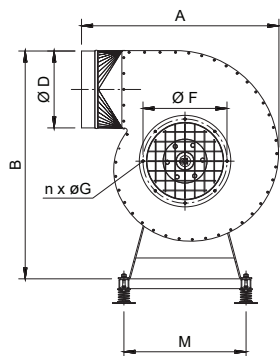
Technical data

Type	Part no.	Marking	Synchronous rotations [1/min]	Supply voltage [V]	Motor rate [kW]	Ingress protection IP	Acoustic pressure level [dB(A)] from a distance of:		Maximum volume flow [m³/h]	Maximum vacuum [Pa]	Weight [kg]
							1 m	5 m			
WPA-3-S-N/Ex	888W19	II 2 G c Ex e II T3	3000	3x400	0,37	54	78/70*	64/56*	1160	940	23
WPA-5-S-N/Ex	888W20	II 2 G c Ex e II T3	3000	3x400	0,55	54	76/67*	62/53*	1900	1250	27
WPA-6-S-N/Ex	888W21	II 2 G c Ex e II T3	3000	3x400	0,75	54	83/75*	69/61*	2500	1700	31
WPA-7-S-N/Ex	888W22	II 2 G c Ex e II T3	3000	3x400	1,1	54	86/74*	72/60*	3100	1800	32
WPA-8-S-N/Ex	888W23	II 2 G c Ex e II T3	3000	3x400	1,5	54	88/78*	74/64*	3900	2050	45
WPA-9-S-N/Ex	888W24	II 2 G c Ex e II T3	3000	3x400	2,2	54	91/82*	77/68*	4500	2400	47
WPA-10-S-N/Ex	888W25	II 2 G c Ex e II T3	3000	3x400	4,0	54	91/87*	77/67*	7400	2600	79
WPA-11-S-N/Ex	888W26	II 2 G c Ex e II T3	3000	3x400	5,5	54	97/88*	83/74*	8050	2950	104
WPA-13-S-N/Ex	888W27	II 2 G c Ex e II T3	3000	3x400	7,0	54	99/90*	85/76*	10 800	3300	140

* Acoustic pressure level was measured with the TK L = 500 mm silencers, installed at the fan inlet and outlet (for WPA-3-S-N/Ex is suitable the TK L = 370 mm silencer).

1. Maximum temperature of the conveyed air is +60°C. Maximum temperature in the work area +40°C.

2. Maximum dustiness of the conveyed air should not exceed 0,3 g/m³.



Dimensions

Type	A [mm]	B [mm]	C [mm]	W [mm]	Z [mm]	D [mm]	E [mm]	F [mm]	n [pc.]	G [mm]	M [mm]	P [mm]	K [mm]	J [mm]	L [mm]
WPA-3-S-N/Ex	415	520	50	555	405	125	125	155	6	7,0	345	400	200	170	400
WPA-5-S-N/Ex	485	575	60	595	405	160	160	194	6	7,0	345	400	200	195	420
WPA-6-S-N/Ex	500	600	60	620	410	160	160	194	6	7,0	345	400	200	205	445
WPA-7-S-N/Ex	550	605	60	605	410	200	160	194	6	7,0	345	400	200	220	460
WPA-8-S-N/Ex	570	685	60	685	480	200	200	224	8	9,0	425	450	220	215	490
								234	6	7,0					
								246	8	9,0					
WPA-9-S-N/Ex	615	730	60	725	480	200	200	224	8	9,0	425	450	220	215	510
								234	6	7,0					
								246	8	9,0					
WPA-10-S-N/Ex	655	810	80	780	550	250	250	274	8	9,0	500	550	250	325	650
WPA-11-S-N/Ex	675	830	80	805	565	250	250	274	8	9,0	500	550	250	335	665
WPA-13-S-N/Ex	805	940	90	880	585	315	315	274	8	9,0	500	550	250	390	775