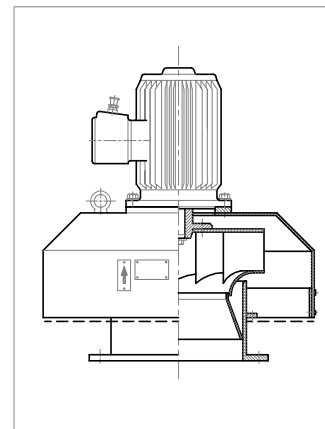
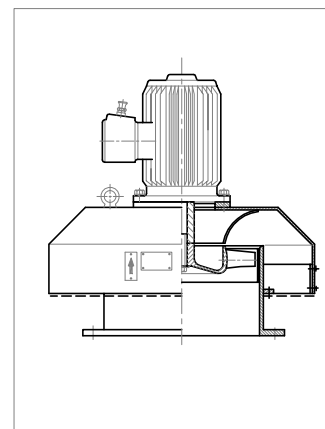


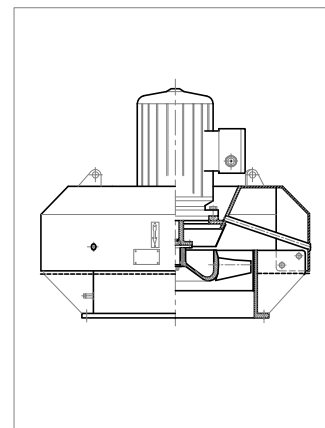
Mushroom-type fans WGM



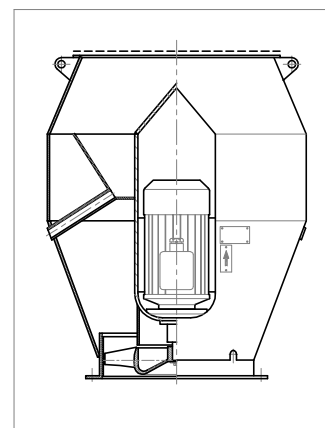
Mushroom-type fans WOGM



Mushroom-type fans WGN



Mushroom-type fans WGJ



1. DESTINATION

Marine mushroom-type WGM fans are destined to operation in ventilation systems of seagoing ships with unrestricted cruising area as well as offshore objects. They may be used exclusively as exhaust fans and be installed on the weather decks.

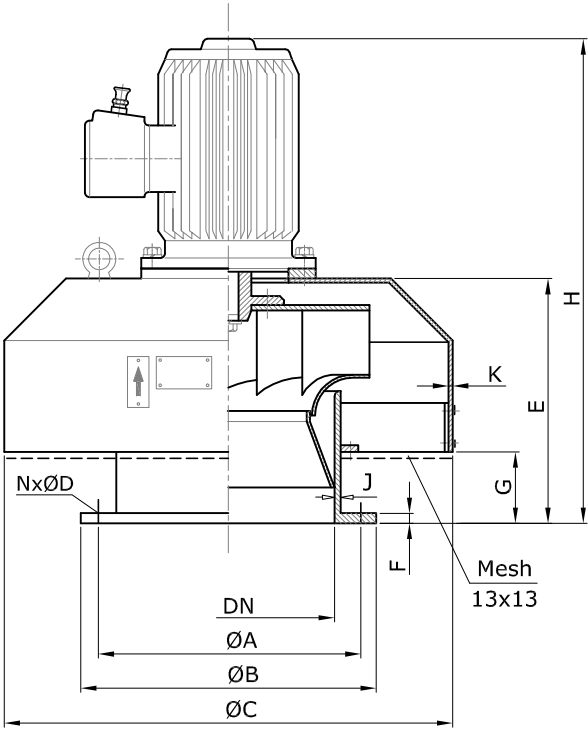
2. OPERATING CONDITIONS

Working parameters of fans are shown on enclosed performance curves $P_t=f(V)$ with respect to inert gas of specific density $\rho=1,2\text{ kg/m}^3$ and temperature $t=20\text{ deg.C}$, where :

- P_t (Pa) - fan total pressure
- V (m³/s) - air displacement

On curves the points of maximum fan efficiency have been marked. Allowable tolerances of working parameters of fans (air displacement, pressure, power consumption and efficiency) are in accordance with standard PN-77/M-43021.

Temperature of conveyed medium should not exceed +45 deg.C, dust contents 0,15 g/m³.



3. CONSTRUCTION

Housing of WGM fans is made of carbon steel, impeller made of sea water resistant aluminium alloy.

Electric motor: induction, squirrel-cage, three-phase, in marine execution, suitable for 50 or 60 Hz electric installation.

All the motors are of high-efficiency IE2 class "GREEN responsibility".

Fans in explosion-proof execution are provided with impeller made of brass.

4. SURFACE TREATMENT

Standard treatment - hot-dip galvanized.

On request fans may be painted with set of marine paints agreed with the Buyer.

WGM	ØA	ØB	ØC	E	F	G	H	J	K	NxØD	Weight
	mm										kg
160	220	250	350	195	10	60	445	5	3	8x12	14
200	260	290	440	240	10	70	490	5	3	8x12	22
250	310	340	540	300	10	90	610	6	3	8x12	38
315	370	405	680	380	10	120	800	6	3	12x12	46
400	460	490	880	480	10	140	1040	6	4	12x12	61
500	560	590	1100	600	12	180	1160	8	4	16x12	76
630	695	730	1360	760	12	240	1350	8	4	16x14	96
710	775	810	1540	860	12	260	1570	8	4	24x14	108
800	865	900	1730	960	12	280	1800	8	5	24x14	122
1000	1065	1100	2200	1200	12	360	2180	8	5	32x13	152

* Weight of fan without motor

5. TYPES AND SIZES OF FANS

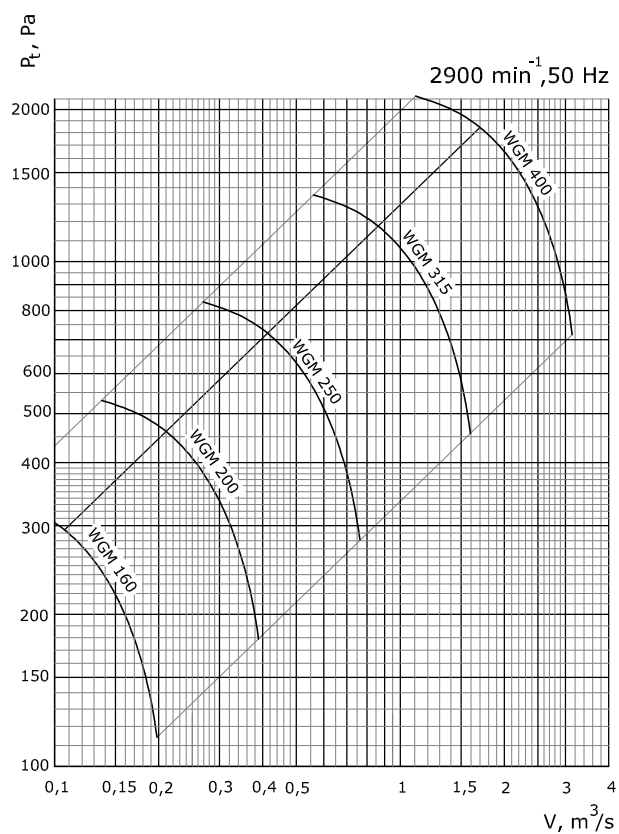
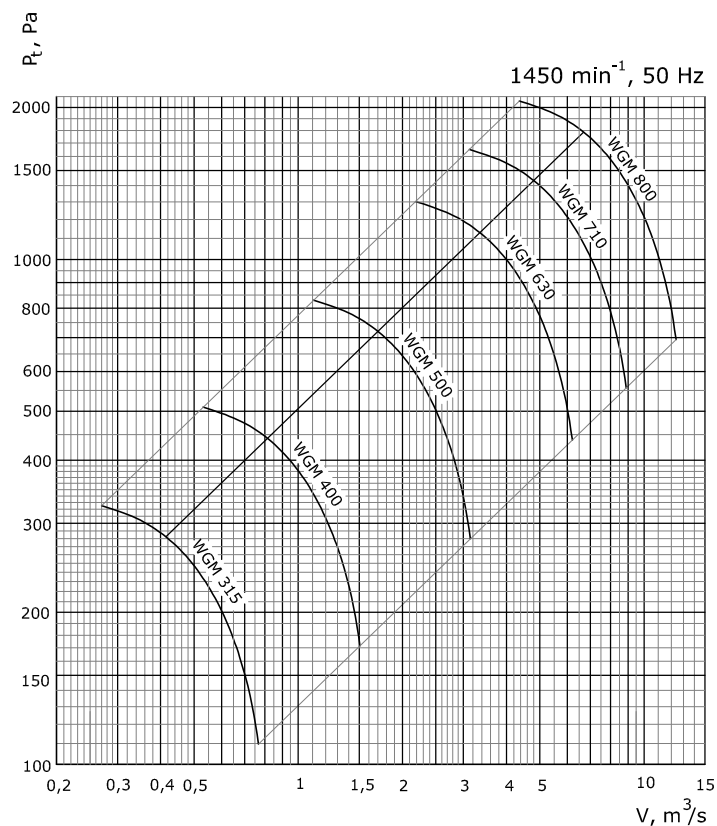
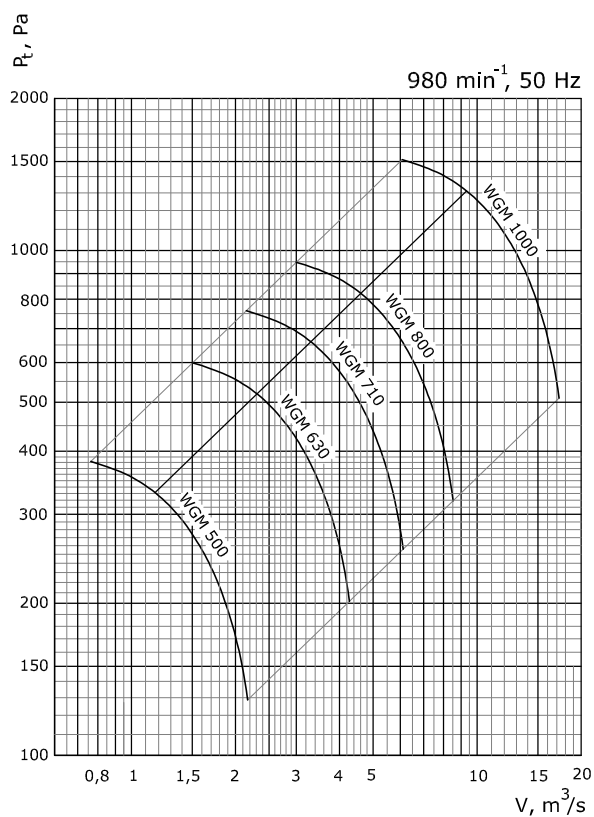
- nominal diameters : DN=160 DN=400 DN=710
DN=200 DN=500 DN=800
DN=250 DN=560 DN=1000
DN=315 DN=630
- execution: ordinary (without marking)
Ex - spark-proof execution

6. MARKING

of marine mushroom-type WGM, of diameter 200 mm:

MUSHROOM-TYPE FAN WGM-200

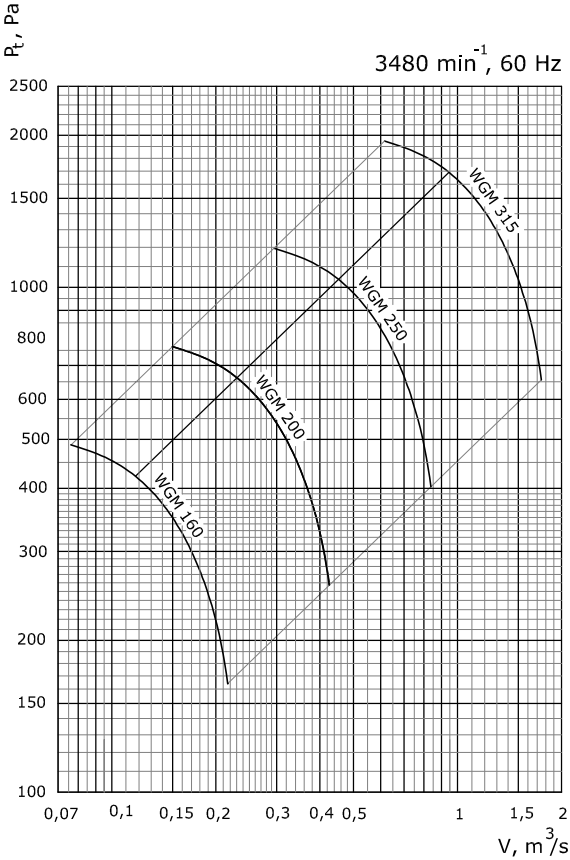
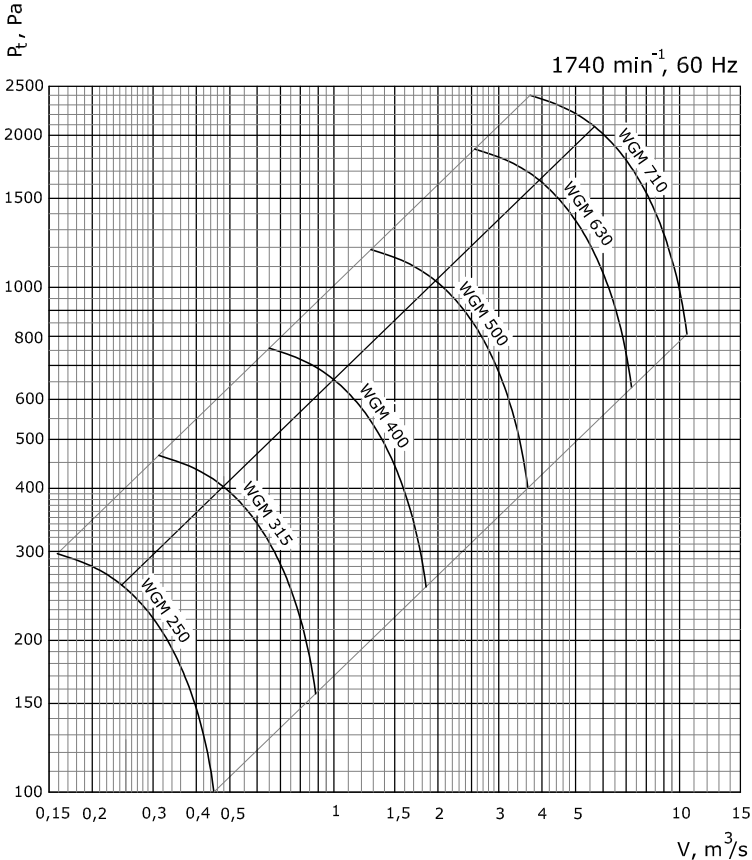
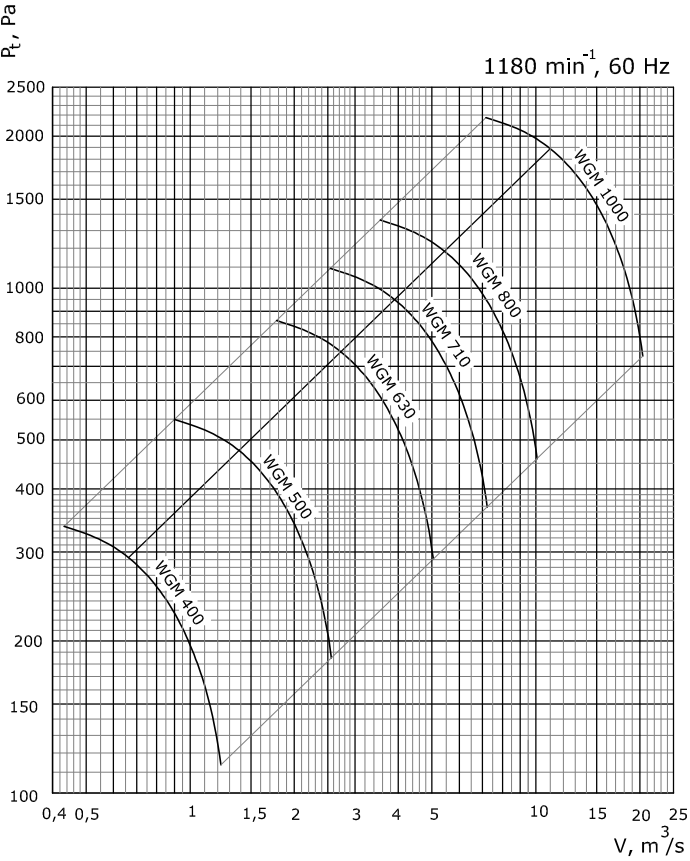
7. PERFORMANCE CURVES





MARINE MUSHROOM
TYPE FAN WGM

ALWO
B1-00
Sheet 3/3



DN	200	250	315	400	500
A	260	310	370	460	560
B	290	340	405	485	585
C	440	540	690	880	1080
NxØD	8x12	8x12	12x12	12x12	16x12
E	10	10	10	10	12
F	70	90	110	140	180
G	240	300	380	480	600
H	470	570	690	810	990
J	5	6	6	6	8
K	3	3	3	4	4
Weight kg	31	51	78	110	146

Weight of fan without motor

1. DESTINATION

Marine Mushroom-Type Axial-Flow Fans are destined for supply or exhaust of air containing explosive vapours or dusts from hazardous spaces of seagoing ships of unrestricted cruising area.

They are provided with flame-proof motors of EExd class determined by IMO Class of dangerous substances that are expected in conveyed air.

2. CONSTRUCTION

Fan housing made of steel is provided with drilled flange as well as wire mesh 13x13 mm on the bottom. On the housing in way of impeller a brass ring is fitted. A radial gap between fan housing and impeller blade edge is 2-13 mm depending on motor shaft bearing diameter. Fan impeller made of sea-water aluminium alloy AK11 (silumin) . Impeller blades screwed to the hub, impeller dynamically balanced.

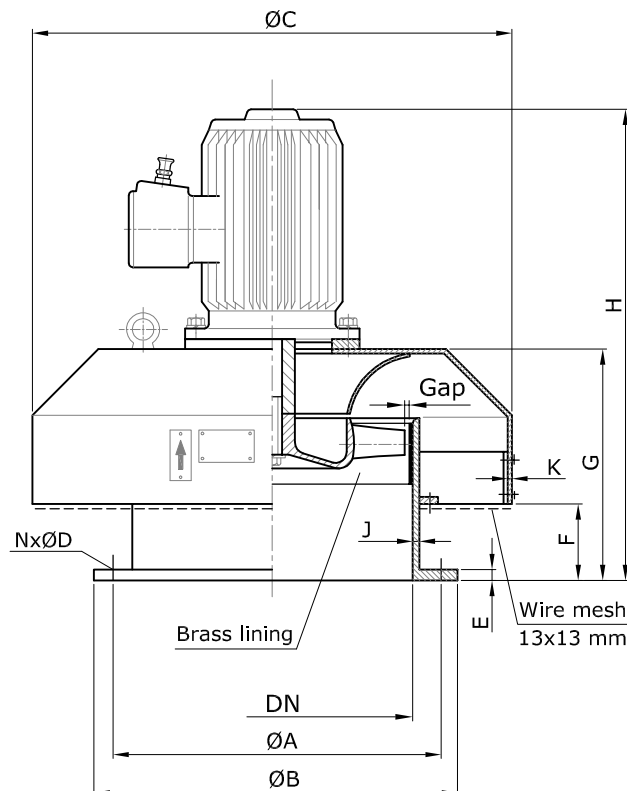
Fanmotor induction, squirrel cage, 3-phase, totally enclosed, enclosure IP56, in marine execution, 50 or 60 Hz installation, flameproof, EExd class. Fanmotor without internal cooling.

All the motors are of high-efficiency IE2 class "GREEN responsibility".

3. OPERATING PARAMETERS

For determining of fan working parameters the performance curves from Catalogue Card ALWO/A1-01(WMOR Fans) may be used.

Fan free-outlet pressure losses are to be considered.



4. SURFACE TREATMENT

Standard treatment - hot-dip galvanized.

On request fans may be painted with marine paints set agreed with the Buyer.

5. SIZES OF WOGM-Ex FANS

Nominal diameters: DN= 200, 250, 315, 400 and 500 mm.

6. MARKING

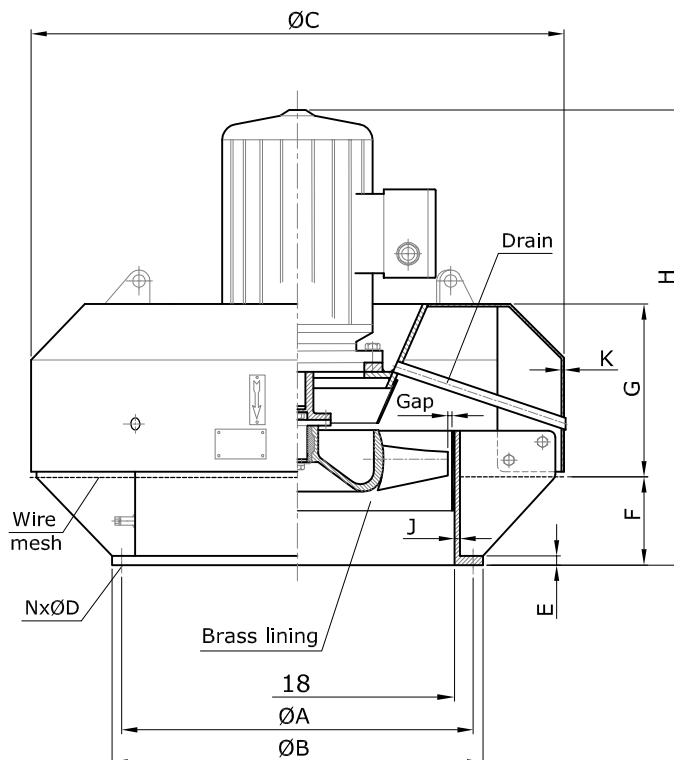
of WOGM-Ex Fan of nominal dia DN= 500 mm, with 280 mm impeller hub diameter and with 45° impeller blade angle.

MUSHROOM FAN WOGM 500/280-45°-Ex

Fans WOGM are also available in not non-sparking execution.

DN	630	710	800	900	1000
A	695	775	865	965	1065
B	730	810	900	1000	1100
C	1200	1360	1500	1700	1900
NxØD	16x14	24x14	24x14	32x14	32x14
E	12	12	12	12	12
F	185	210	240	270	300
G	330	375	420	470	520
H	950	1080	1200	1280	1350
J	10	10	10	10	10
K	5	5	5	6	6
Weight kg	200	270	340	430	520

Weight of fan without motor



1. DESTINATION

Marine Mushroom-Type Axial-Flow Fans are destined for supply or exhaust of air containing explosive vapours or dusts from hazardous spaces of seagoing ships of unrestricted cruising area.

They are provided with flame-proof motors of EExd class determined by IMO Class of dangerous substances that are expected in conveyed air.

2. CONSTRUCTION

Fan housing made of steel is provided with drilled flange as well as wire mesh 13x13 mm on the bottom. On the housing in way of impeller a brass ring is fitted. A radial gap between fan housing and impeller blade edge is 2-13 mm depending on motor shaft bearing diameter. Fan impeller made of sea-water aluminium alloy AK11 (silumin) . Impeller blades screwed to the hub, impeller dynamically balanced.

Fanmotor induction, squirrel cage, 3-phase, totally enclosed, enclosure IP56, in marine execution, 50 or 60 Hz installation, flameproof, EExd class. Fanmotor without internal cooling.

All the motors are of high-efficiency IE2 class "GREEN responsibility".

3. OPERATING PARAMETERS

curves from Catalogue Card ALWO/A1-01(WMOR Fans) may be used.

Fan free-outlet pressure losses are to be considered.

4. SURFACE TREATMENT

Standard treatment - hot-dip galvanized.

On request fans may be painted with marine paints set agreed with the Buyer.

5. SIZES OF WGN-Ex FANS

Nominal diameters: DN= 630, 710, 800, 900 and 1000 mm.

6. MARKING

of WGN-Ex Fan of nominal dia DN= 800 mm, with 480 mm impeller hub diameter and with 45° impeller blade angle.

MUSHROOM FAN WGN 800/480-45°-Ex

Fans WGM are also available in not non-sparking execution.

Fan size	DN	A	B	C	NxØD	E	F	G	H	L	Weight kg
WGJ 250	250	310	340	450	8x12	10	315	270	145	620	58
WGJ 315	315	370	405	560	12x12	10	400	340	182	780	75
WGJ 400	400	460	490	700	12x12	10	500	430	232	980	108
WGJ 500	500	560	590	840	16x12	12	630	540	290	1110	167
WGJ 560	560	640	690	930	16x14	12	710	605	325	1240	202
WGJ 630	630	695	730	1050	16x14	12	800	680	365	1400	251
WGJ 710	710	775	810	1140	24x14	12	900	765	410	1450	278
WGJ 800	800	865	900	1280	24x14	12	1000	865	465	1700	365
WGJ 1000	1000	1065	1100	1600	32x14	12	1250	1080	580	2100	690

Weight of fan without motor

1. DESTINATION

Marine Jet-Cowl Explosion-Proof Fans WGJ Ex are destined for extraction of air containing explosive vapours or dusts from hazardous spaces of seagoing ships of unrestricted cruising area.

They are provided with flame-proof motors of EExd class determined by IMO Class of dangerous substances that are expected in conveyed air.

2. CONSTRUCTION

Fan housing made of steel is provided with drilled flange and wire mesh 13x13 mm on the top. On the housing in way of impeller a brass ring is fitted.

A radial gap between fan housing and impeller blade edge is 2-13 mm depending on motor shaft bearing diameter.

Fan impeller made of sea-water aluminium alloy AK11 (silumin). Impeller blades screwed to the hub, impeller dynamically balanced.

Fanmotor induction, squirrel cage, 3-phase, totally enclosed, IP56, in marine execution, suitable for 50 or 60 Hz installation, flameproof, EExd class.

All the motors are of high-efficiency IE2 class "GREEN responsibility".

3. OPERATING PARAMETERS

Fan performance data available on request.

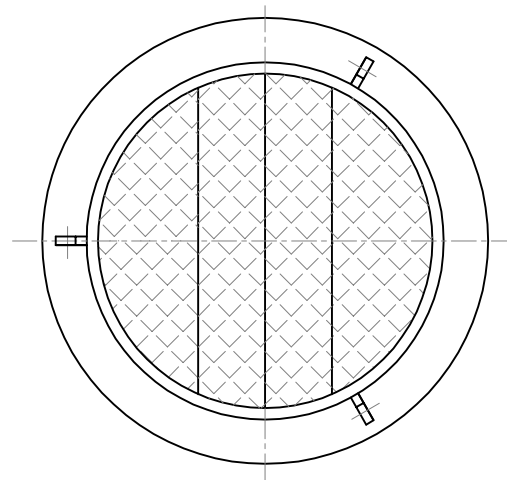
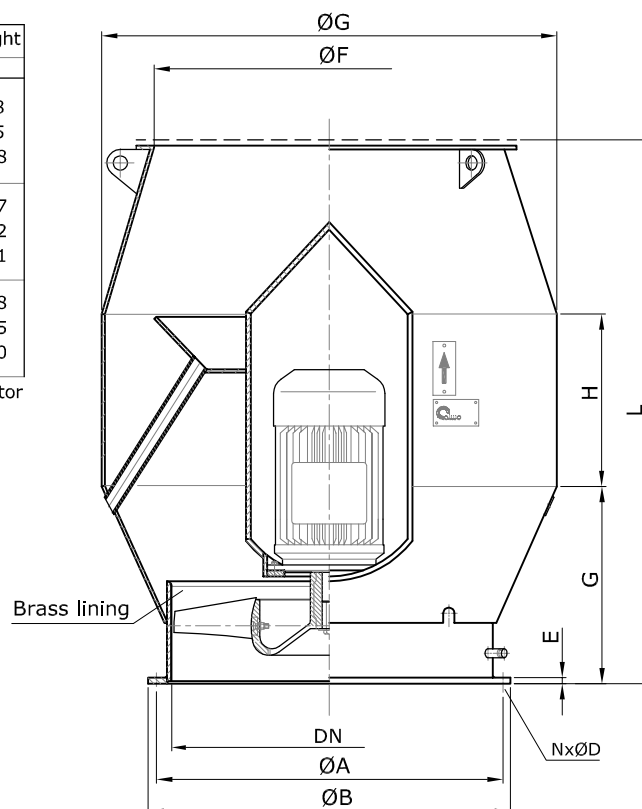
4. SURFACE TREATMENT

Standard treatment - hot-dip galvanized.

On request fans may be painted with marine paints set agreed with the Buyer.

5. SIZES OF WGJ-Ex FANS

Nominal diameters: DN= 250, 315, 400, 500, 560, 630, 710, 800 and 1000 mm.



6. MARKING

of WGJ-Ex Fan of nominal dia DN= 630 mm, with 440 mm impeller hub diameter and with 45° impeller blade angle.

JET-COWL FAN WGJ 630/440-45°-Ex

