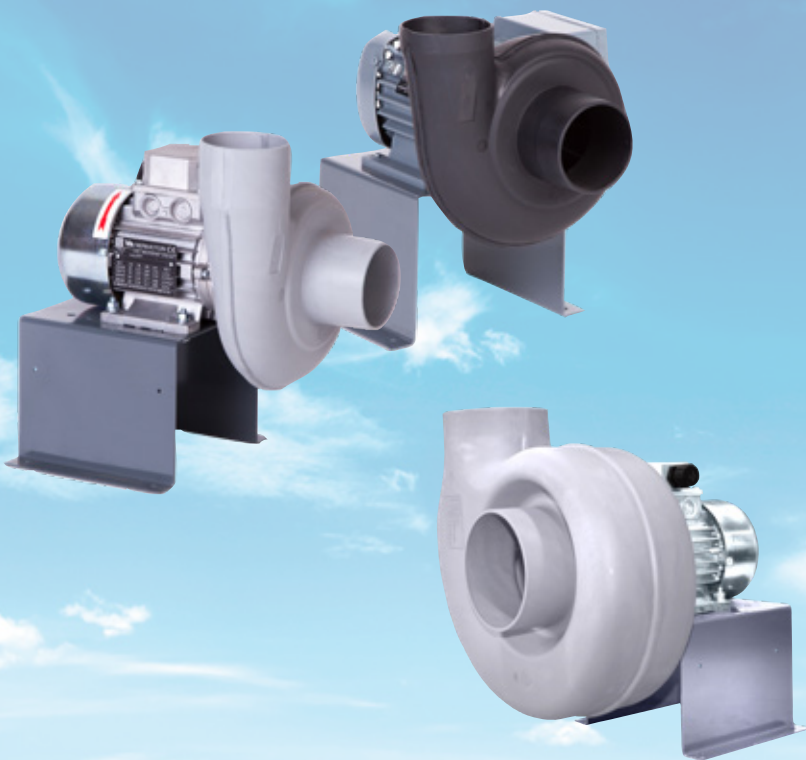


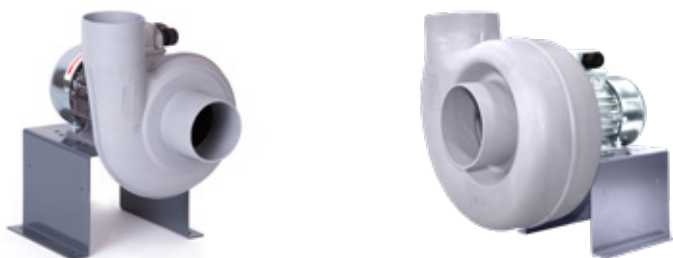
Small centrifugal fans made of plastic



durable
application-optimised
wide range of variants



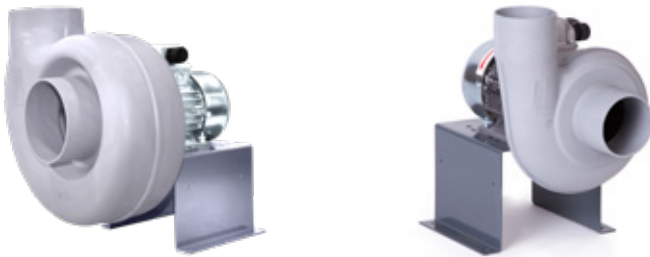
Index



Small centrifugal fans made of plastic HF R 75-16 D and HF R 110-18 D

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HF R 75-16 D | HF R 110-18 D



Small centrifugal fans with frame or flange design with three-phase or single-phase motor

Advantages

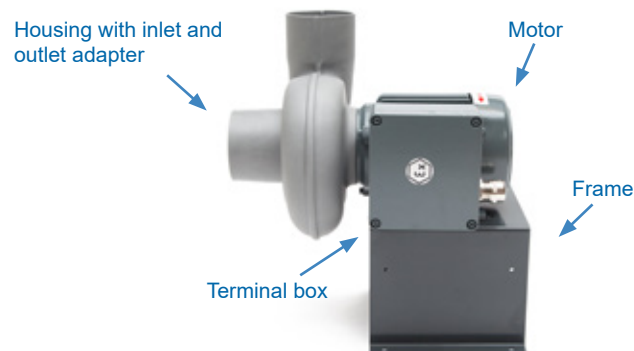
- Corrosion-resistant
- Compact design
- Variants for different installation situations
- Fast availability of standard variants

Design

- Impeller made of PP-el as standard
- Impeller and housing made of corrosion-resistant plastics
- Motor outside the airflow
- Standard with shaft seal
- Use of different explosion-proof motors possible

Application

- Ideal for 24h- exhaust air from chemical storage cabinets
- Handling of exhaust air and corrosive gases
- Handling of explosive atmospheres from Ex zones 2 and 1



HF - Small centrifugal fans
HF R 75-16 D

Specification

HF - radial fan direct driven

Corrosion- resistant plastic radial fan, single inlet, housing in flame retarding PP-FR, injection- moulded and tight welded version, with sealing and grease-barrier on the shaft passage. Impeller in electrical- conductive PP-el with vanes mounted on the back of the impeller for relief on shaft passage. All parts exposed to exhaust air are made of plastic or encapsulated by plastic. Motor encapsulated against the medium, with overload protection over the entire power range. Fan frame made of powder- coated steel sheet for mounting on horizontal ground.

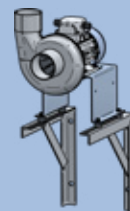
Manufacturer	: Hürner Luft- und Umwelttechnik	
Type	: HF R 75-16 D / ..	
Housing-material	: ...	
Impeller-material	: PP-el	
Housing position	: GL ...	
Inlet diameter	: ...	mm
Medium	: exhaust air	
Volume flow	: ...	m ³ /h
Total pressure difference	: ...	Pa
Static pressure difference	: ...	Pa
Sound pressure level Lp2A (1 m)	: ...	dB(A)
SFP	: ...	W/(m ³ /s)
Motor power	: ...	kW
Voltage	: ...	V
Frequency	: 50	Hz
Rated current	: ...	A
Enclosure/motor protection	: IP 55 / ...	

Accessories:

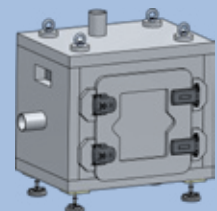

Flange connection
P. 15



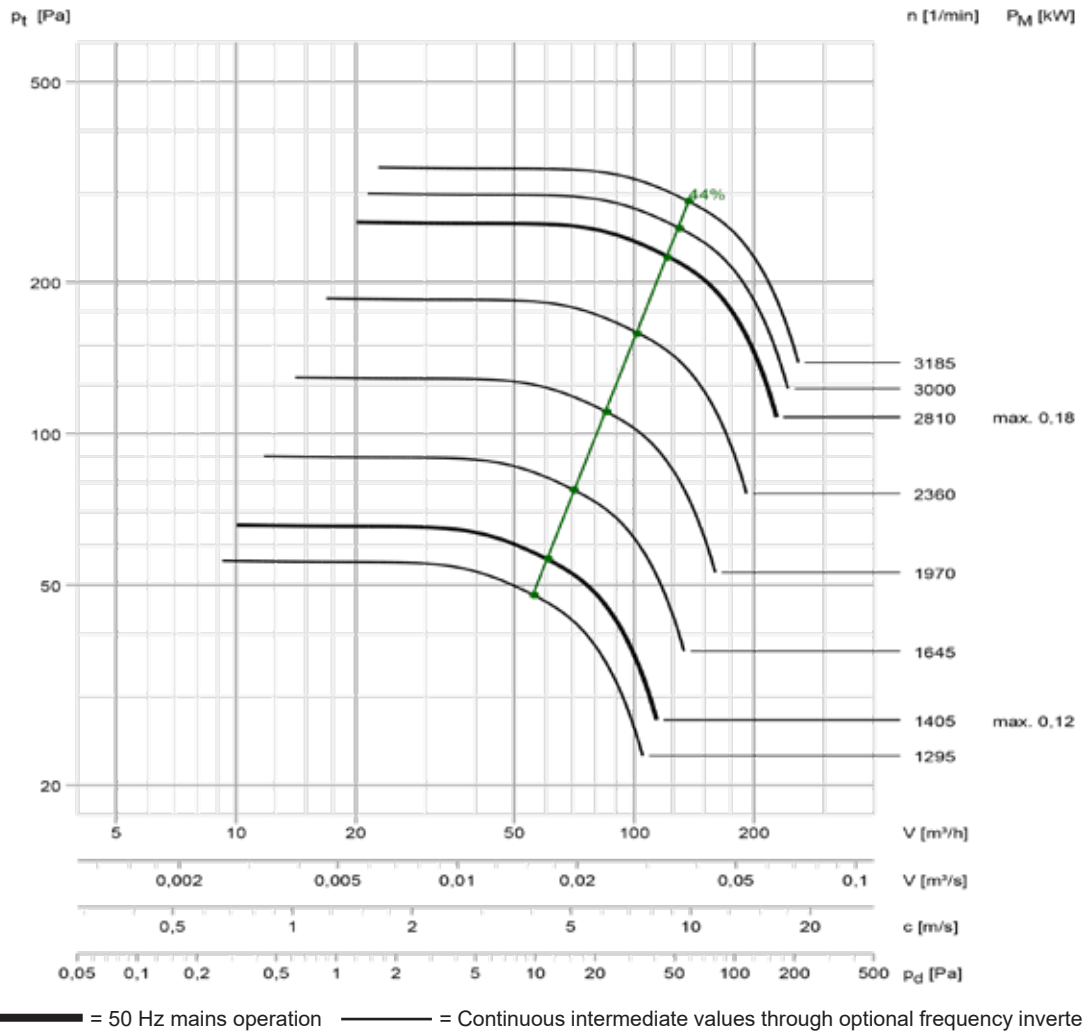
Motor cover
P. 16



Wall bracket
P. 17



Sound enclosure
P. 18



Acoustic level according to VDI 3731									
Speed [1/min]	inlet level / outlet level of the duct sound level non-valuated; Lw3 = Lw4 [dB]								Lp2A (1 m) [dB(A)]
	63	125	250	500	1000	2000	4000	8000	
3185	69	69	68	76	63	59	54	48	58
3000	68	68	67	74	61	57	52	46	57
2810	67	67	65	73	60	56	51	45	56
2360	64	64	62	70	56	52	46	40	52
1970	60	59	67	54	51	46	40	34	45
1645	57	55	63	50	46	42	36	29	42
1405	54	53	60	47	43	38	32	25	38
1295	52	51	59	45	41	36	30	23	37

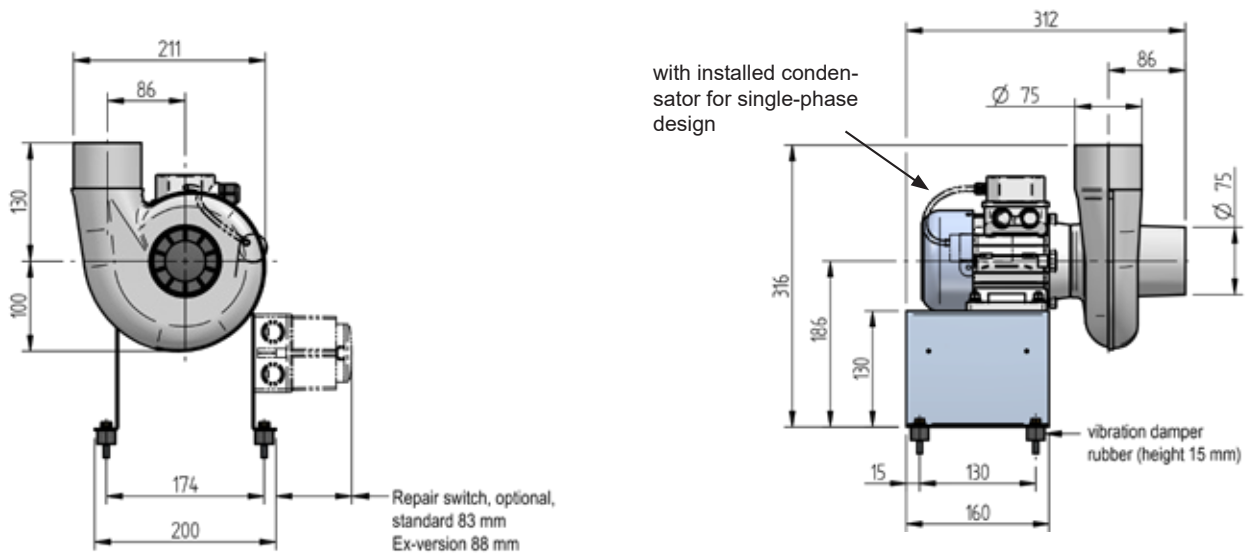

 Protection grid
P. 19

 Repair switch
P. 19

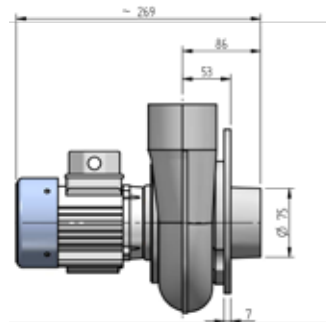
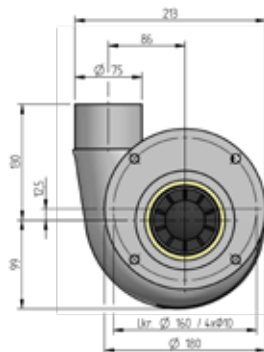
 Fans optionally available
for Ex-Zone!
P. 20

HF R 75-16 D / DS | HF R 75-16 D / WS
 Frame design with three-phase or single-phase motor

Speed [1/min]	Housing material PPs			
	DS-Motor		WS-Motor	
	Article no.	Motor power	Article no.	Motor power
1500	367-010-160501	0,09 kW	367-010-300510	0,09 kW
3000	367-010-150501	0,09 kW	367-010-300501	0,09 kW


HF R 75-16 D / FL-WS
 Flange design with single-phase motor

Speed [1/min]	Housing material PPs	
	WS-Motor	
	Article no.	Motor power
1500	367-010-000010	0,06 kW
3000	367-010-000011	0,08 kW

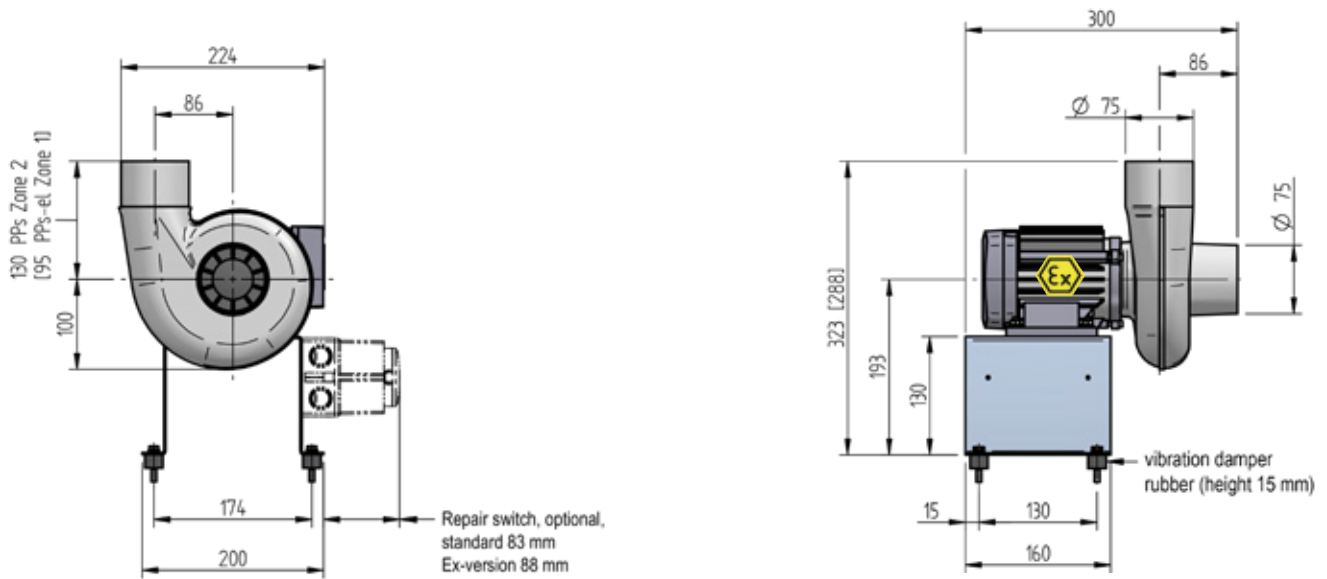


HF R 75-16 D

HF R 75-16 D / DS

Frame design with three-phase Ex-Motor | Motor manufacturer VEM

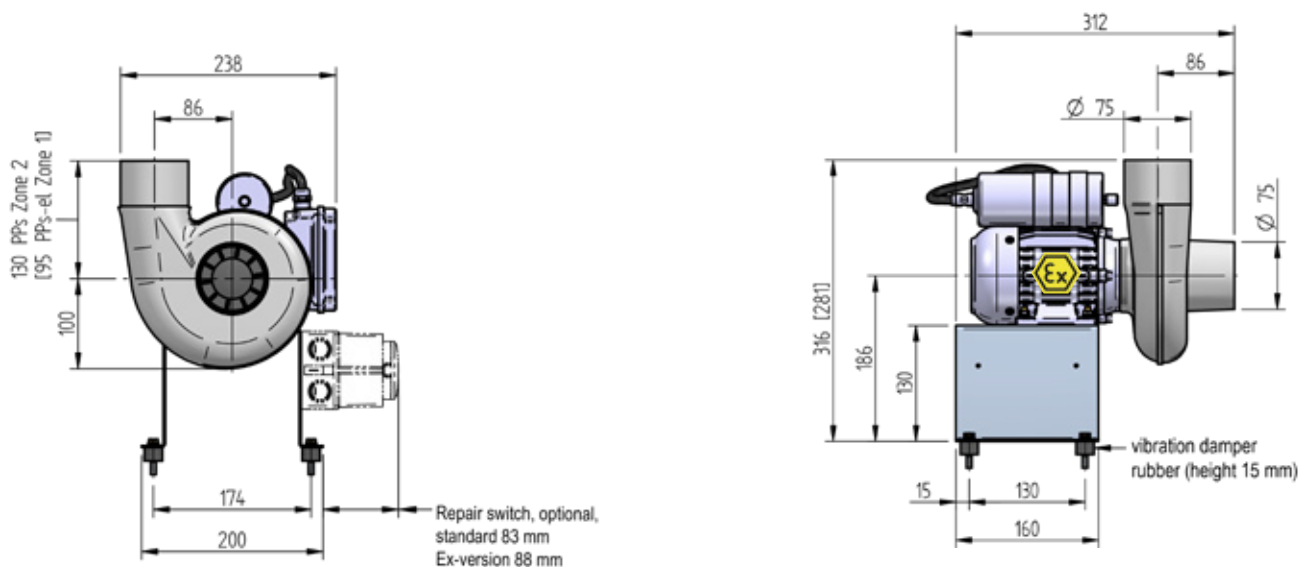
Speed [1/min]	Housing material PPs		Housing material PPs-el	
	DS-Motor		DS-Motor	
	Article no.	Motor power	Article no.	Motor power
1500	367-010-020001	0,12 kW	367-370-000001	0,12 kW
3000	367-010-040001	0,18 kW	367-370-040001	0,18 kW



HF R 75-16 D / WS

Frame design with single-phase Ex-Motor | Motor manufacturer EMOD

Speed [1/min]	Housing material PPs		Housing material PPs-el	
	WS-Motor		WS-Motor	
	Article no.	Motor power	Article no.	Motor power
3000	367-010-180000	0,12 kW	367-370-180000	0,12 kW

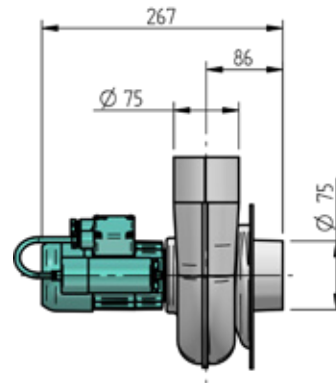
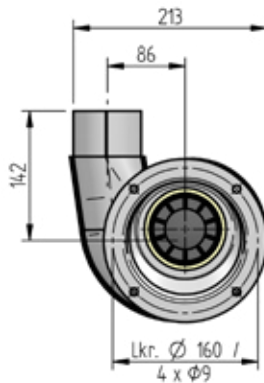


HF R 75-16 D / WS

Special design with flange | Motor manufacturer Dunker



Speed [1/min]	Housing material PPs	
	WS-Motor	
	Article no.	Motor power
1500	367-010-095000	0,014 kW
3000	367-010-075001	0,012 kW

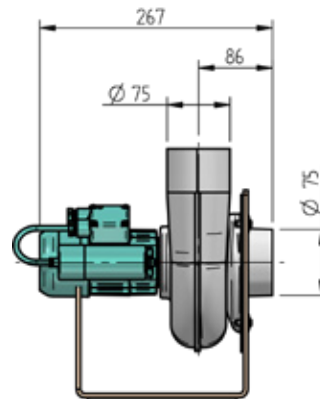
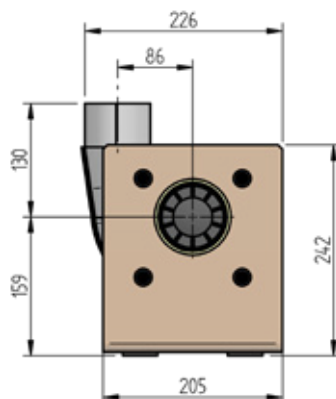


HF R 75-16 D / WS

Special design with angle console | Motor manufacturer Dunker



Speed [1/min]	Housing material PPs	
	WS-Motor	
	Article no.	Motor power
1500	367-010-085002	0,014 kW
3000	367-010-130002	0,012 kW

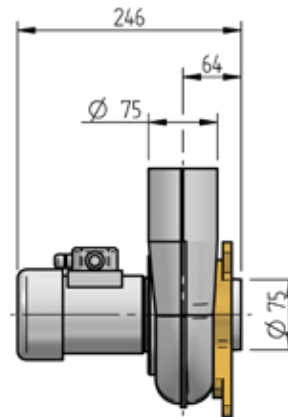
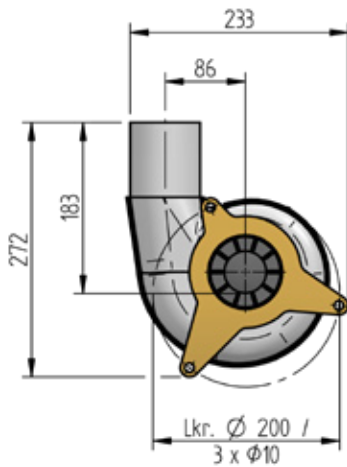


Special design HF R 75-16 D - wenn Vielfalt zum Standard wird

HF R 75-16 D / WS Special design with asymmetric mounting plate

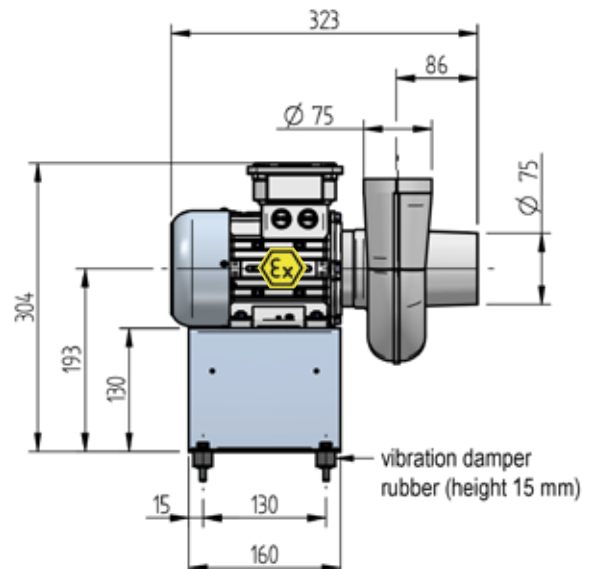
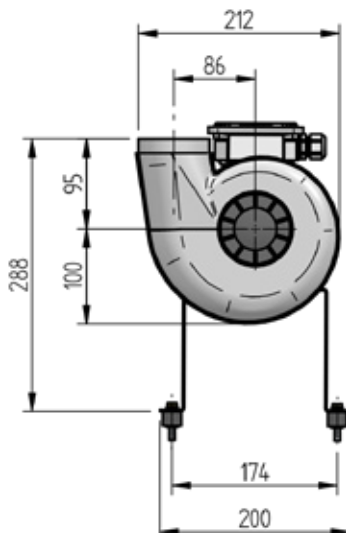


Speed [1/min]	Housing material PPs	
	WS-Motor	
	Article no.	Motorleistung
3000	301-010-170000	0,08 kW

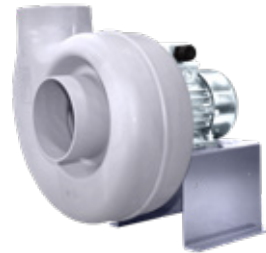


HF R 75-16 D Frame design with three-phase Ex-de-Motor | Motor manufacturer ELPROM

Speed [1/min]	Housing material PPs-el	
	DS-Motor	
	Article no.	Motor power
1500	367-370-000100	0,12 kW
3000	367-370-000101	0,18 kW



Small centrifugal fan
Type series HF R 110-18 D
Frame design with
three-phase or single-phase
motor



Specification

HF - radial fan direct driven

Corrosion- resistant plastic radial fan, single inlet, housing in flame retarding PP-FR, injection- moulded and tight welded version, with sealing and grease-barrier on the shaft passage. Impeller in electrical- conductive PP-el with vanes mounted on the back of the impeller for relief on shaft passage. All parts exposed to exhaust air are made of plastic or encapsulated by plastic. Motor encapsulated against the medium, with overload protection over the entire power range. Fan frame made of powder- coated steel sheet for mounting on horizontal ground.

Manufacturer	: Hürner Luft- und Umwelttechnik	
Type	: HF R 110-18 D / ..	
Housing-material	: ...	
Impeller-material	: PP-el	
Housing position	: GL 360	
Inlet diameter	: ...	mm
Medium	: exhaust air	
Volume flow	: ...	m ³ /h
Total pressure difference	: ...	Pa
Static pressure difference	: ...	Pa
Sound pressure level Lp2A (1 m)	: ...	dB(A)
SFP	: ...	W/(m ³ /s)
Motor power	: ...	kW
Voltage	: ...	V
Frequency	: 50	Hz
Rated current	: ...	A
Enclosure/motor protection	: IP 55 / ...	

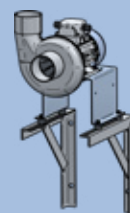
Accessories:



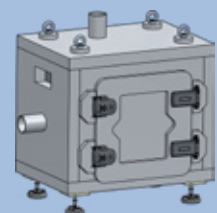
Flange connection
P. 15



Motor cover
P. 16

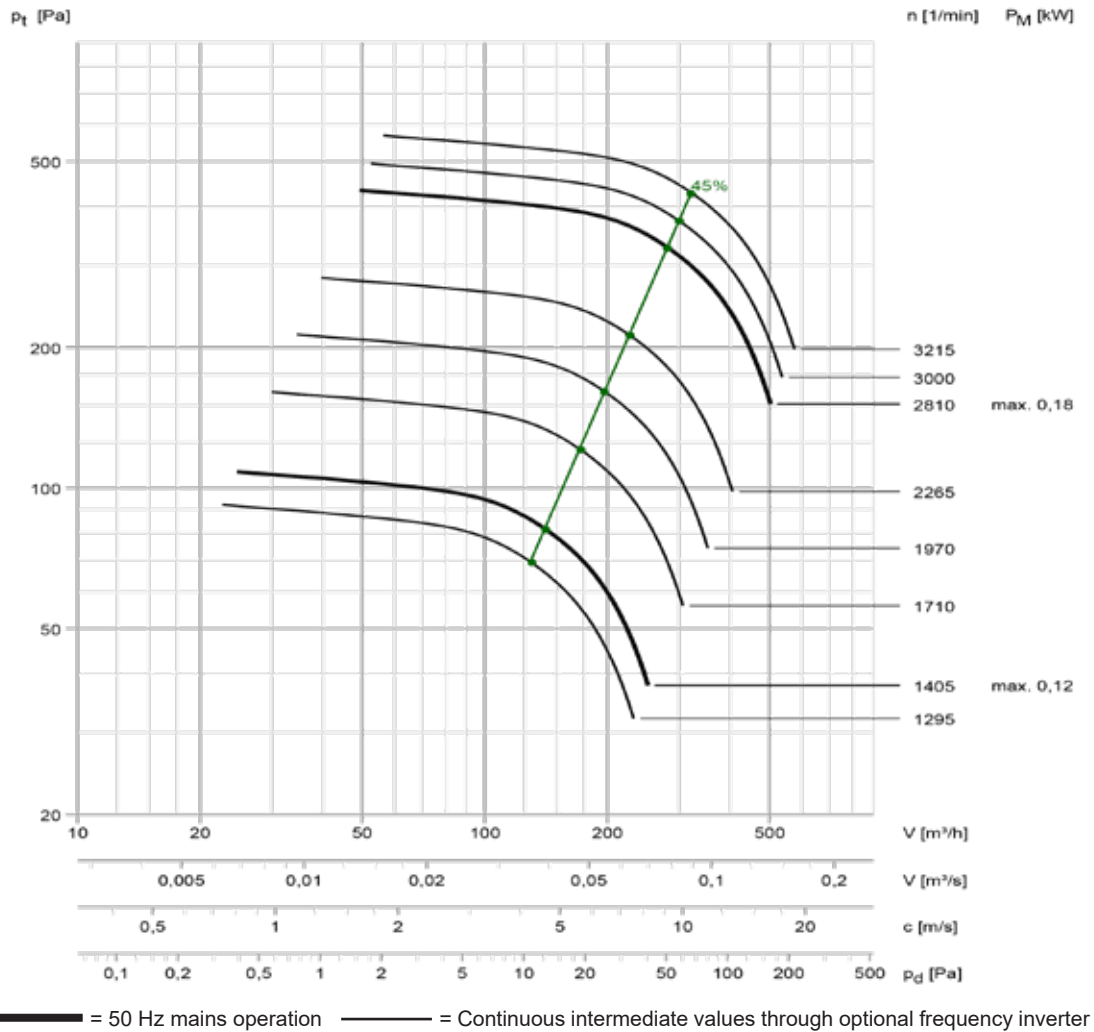


Wall bracket
P. 17



Sound enclosure
P. 18

HF R 110-18 D



Acoustic level according to VDI 3731									
Speed [1/min]	inlet level / outlet level of the duct sound level non-valuated; Lw3 = Lw4 [dB]								Lp2A (1 m) [dB(A)]
	63	125	250	500	1000	2000	4000	8000	
3215	77	77	76	84	71	67	62	56	66
3000	76	76	74	82	69	65	60	54	64
2810	75	75	73	81	68	64	58	53	63
2265	70	69	78	65	61	57	52	45	55
1970	68	67	75	62	58	54	48	42	53
1710	65	64	72	59	55	50	45	38	50
1405	62	60	68	55	51	46	40	33	46
1295	59	67	55	51	47	42	36	29	40

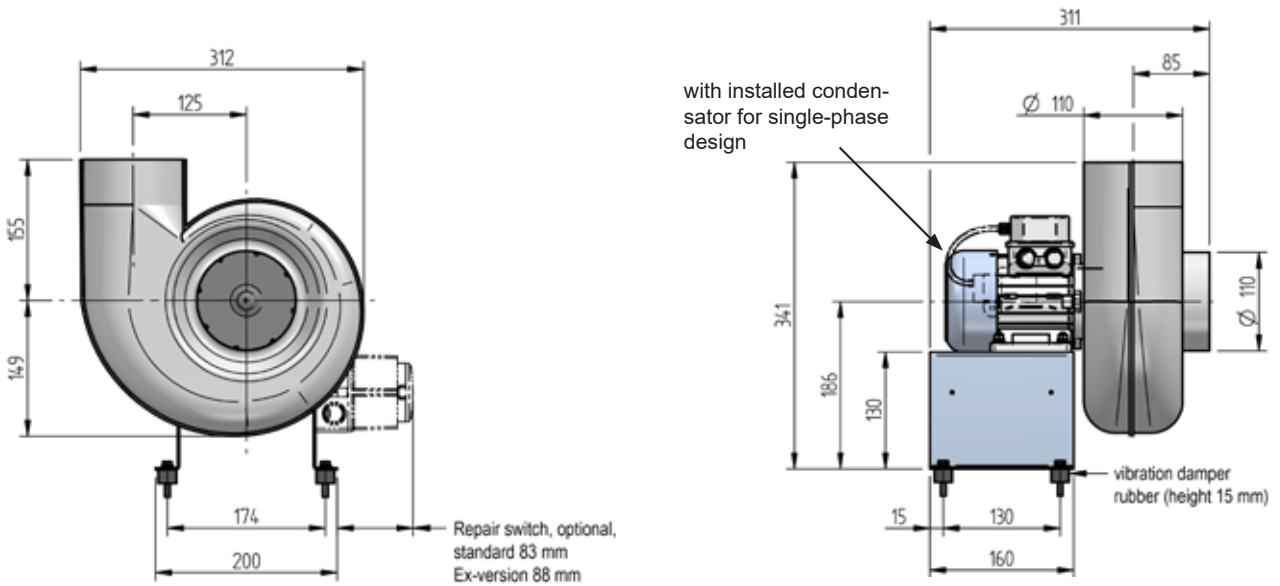

 Protection grid
P. 19

 Repair switch
P. 19

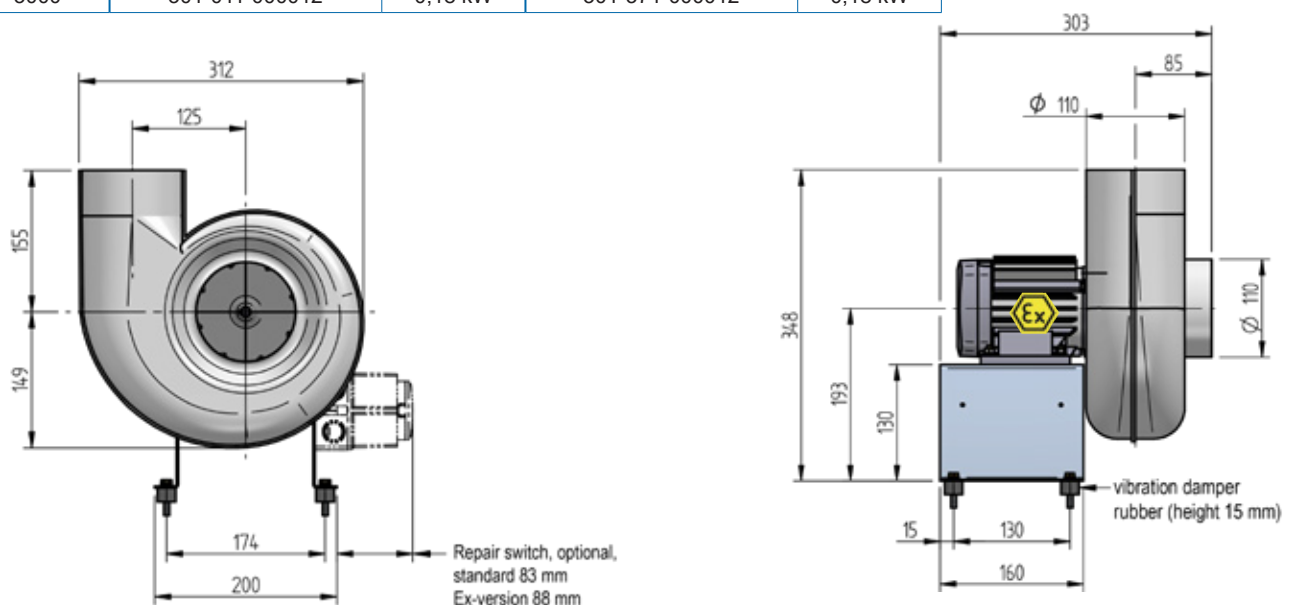
 Fans optionally available
for Ex-Zone!
P. 20

HF R 110-18 D / DS | HF R 110-18 D / WS
 Frame design with three-phase or single-phase motor

Speed [1/min]	Housing material PPs			
	DS-Motor		WS-Motor	
	Article no.	Motor power	Article no.	Motor power
1500	301-011-000016	0,09 kW	301-011-000008	0,09 kW
3000	301-011-000011	0,09 kW	301-011-000009	0,09 kW


HF R 110-18 D / DS
 Frame design with three-phase Ex-Motor | Motor manufacturer VEM

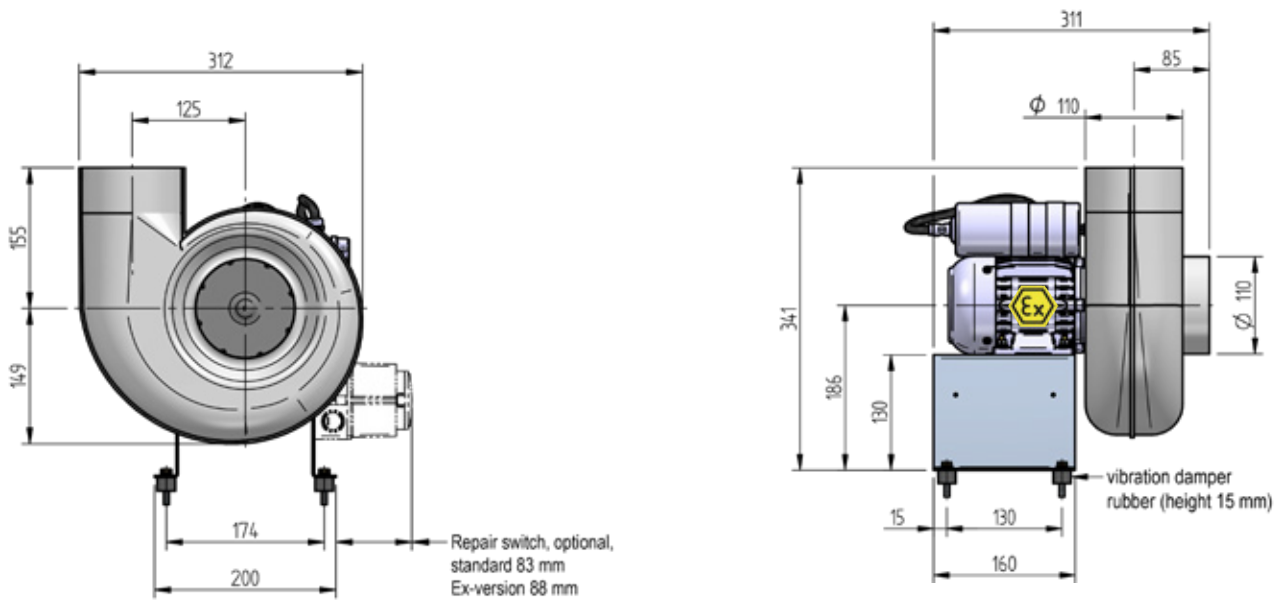
Speed [1/min]	Housing material PPs		Housing material PPs-el	
	DS-Motor		DS-Motor	
	Article no.	Motor power	Article no.	Motor power
1500	301-011-000002	0,12 kW	301-371-000002	0,12 kW
3000	301-011-000012	0,18 kW	301-371-000012	0,18 kW



HF R 110-18 D / WS

Frame design with single-phase Ex-Motor | Motor manufacturer EMOD

Speed [1/min]	Housing material PPs		Housing material PPs-el	
	WS-Motor		WS-Motor	
	Article no.	Motor power	Article no.	Motor power
3000	301-011-000014	0,12 kW	301-371-000014	0,12 kW



Accessories for HF - Small centrifugal fans



Vibration dampers

Protect against vibrations



Size	Rubber
Ø	Article no.
75	441-065-000000
110	441-065-000000

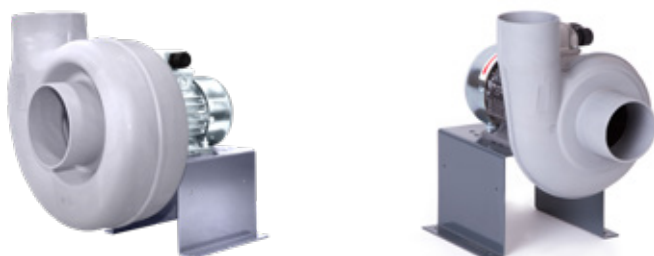
Sleeve with VA tightening straps

For easy flexible connection to duct



Size	PVC-soft	
	Inlet side	Outlet side
Ø	Article no.	Article no.
75	441-063-100012	441-064-100012
110	441-063-100013	441-064-100013

Size	PVC-el-soft	
	Inlet side	Outlet side
Ø	Article no.	Article no.
75	441-063-200012	441-064-200012
110	441-063-200013	441-064-200013



Accessories for
HF - Small centrifugal fans

Flange connection

Recommended for higher demands on tightness and at higher pressures



Size	PPs	
	Inlet side	Outlet side
Ø	Article no.	Article no.
75	441-060-075000	441-061-075000
110	441-061-110000	441-061-110003

Size	PPs-el	
	Inlet side	Outlet side
Ø	Article no.	Article no.
75	441-060-075001	441-061-075001
110	441-061-110001	441-061-110004

Sleeve with flanges

For flexible connection with higher demands on tightness and at higher pressures



Size	PVC-oft	
	Inlet side	Outlet side
Ø	Article no.	Article no.
75	441-063-000016	441-064-000016
110	441-063-000017	441-064-000017

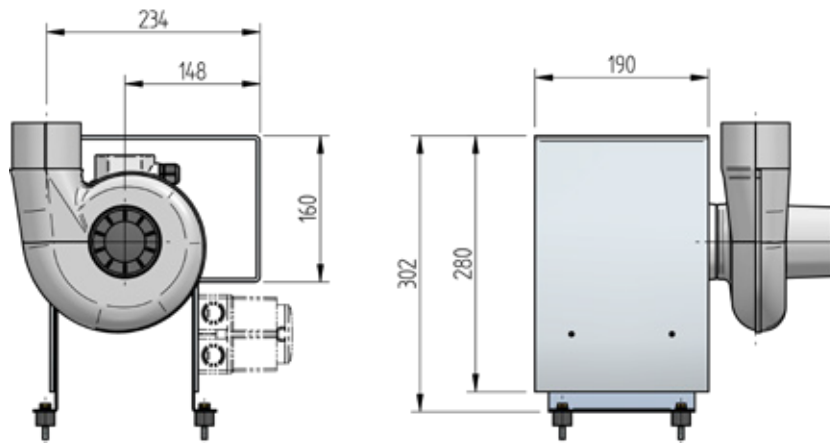
Accessories for
 HF - Small centrifugal fans

Motor cover

Protects the electric motor from weather influences

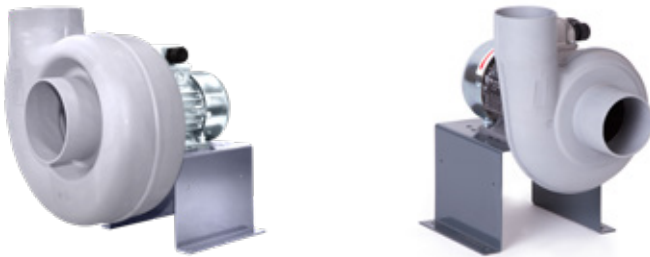


Size	PVC	PPs-el
Ø	Article no.	Article no.
75	441-030-110004	441-030-110003
110	441-030-110004	441-030-110003



The dimensions of the wall bracket size Ø 110 are identical.

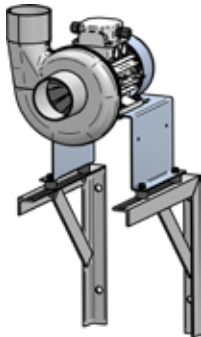
Accessories



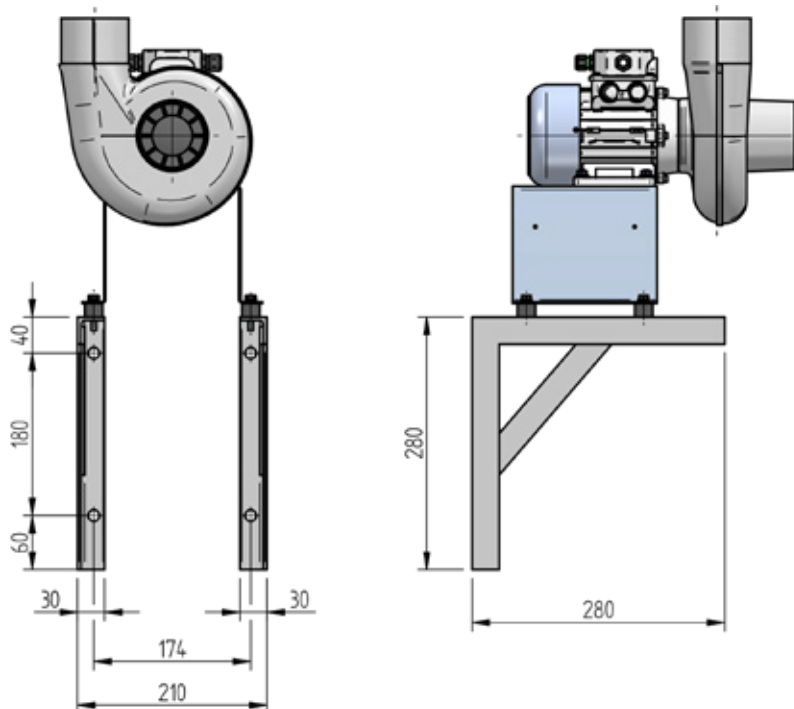
Accessories for
HF - Small centrifugal fans

Wall bracket set

For easy wall mounting



Size	Steel, galvanized
Ø	Article no.
75	017-829-101000
110	017-829-101000



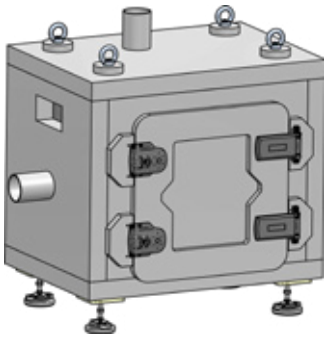
The dimensions of the wall bracket size Ø 110 are identical.

Accessories for
HF - Small centrifugal fans

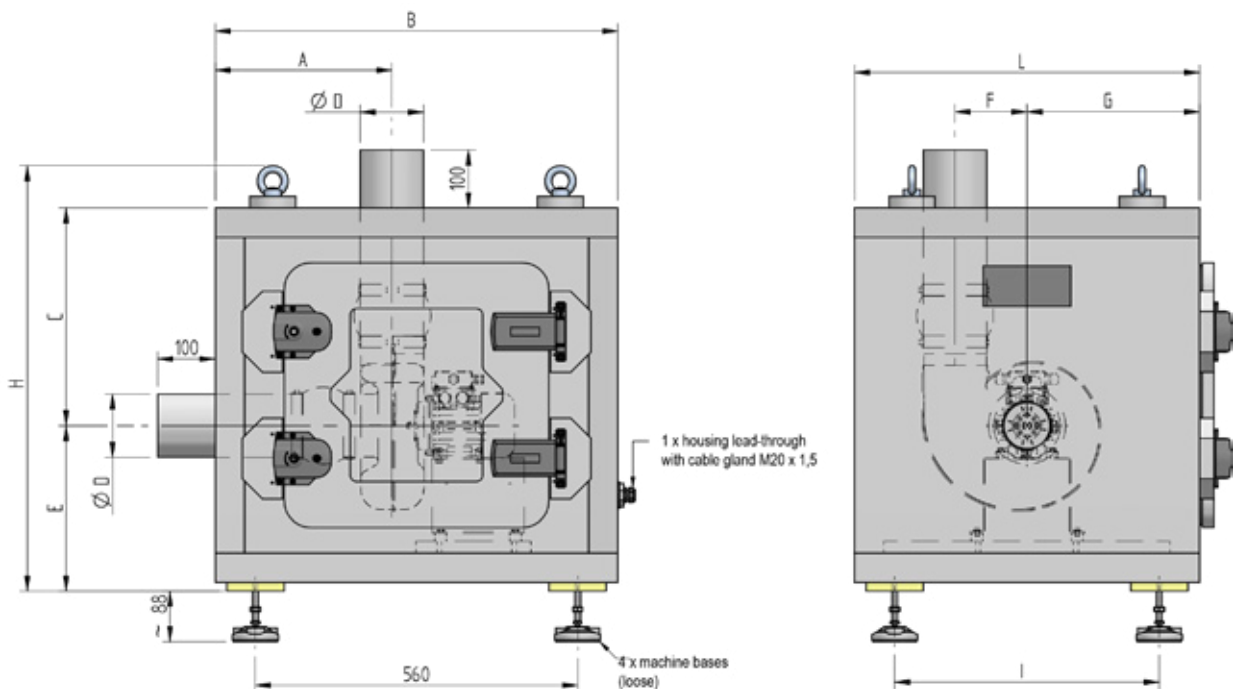


Sound enclosure GL 360°

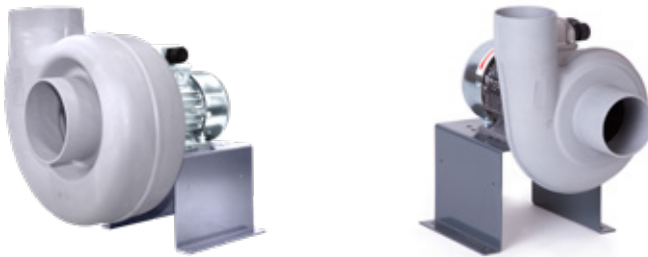
Reduces the sound emission from the fan



Size	PP
Ø	Article no.
75	440-023-007500
110	440-023-011000



Size	Dimension [mm]								
	A	B	C	E	F	G	H	I	L
75	304	700	333	282	86	250	688	360	500
110	307	700	378	287	125	300	738	460	600



Accessories for
HF - Small centrifugal fans

Protection grid

Protects against foreign bodies



Size	Inlet side	Outlet side
Ø	Article no.	Article no.
75	441-020-075001	441-021-075001
110	441-020-110001	441-021-110001

Repair switch

Protects during maintenance and repair work



Size	DS-Motor up to 2,2 kW	WS-Motor up to 2,2 kW
Ø	Article no.	Article no.
75	441-001-000112	441-001-000113
110	444-001-000112	441-001-000113

Size	DS-Motor with FU up to 2,2 kW	DS- / WS-Motor up to 2,2 kW Ex
Ø	Article no.	Article no.
75	441-002-000113	441-001-000212
110	441-002-000113	441-001-000212



ATEX 2014/34/EU



HLU fans according to ATEX 2014/34/EU

The ATEX Directive 2014/34/EU regulates the requirements with regard to placing products on the market that are used in potentially explosive atmospheres. The term ATEX is derived from the French abbreviation "Atmosphère explosible" and is used as a synonym for the two directives of the

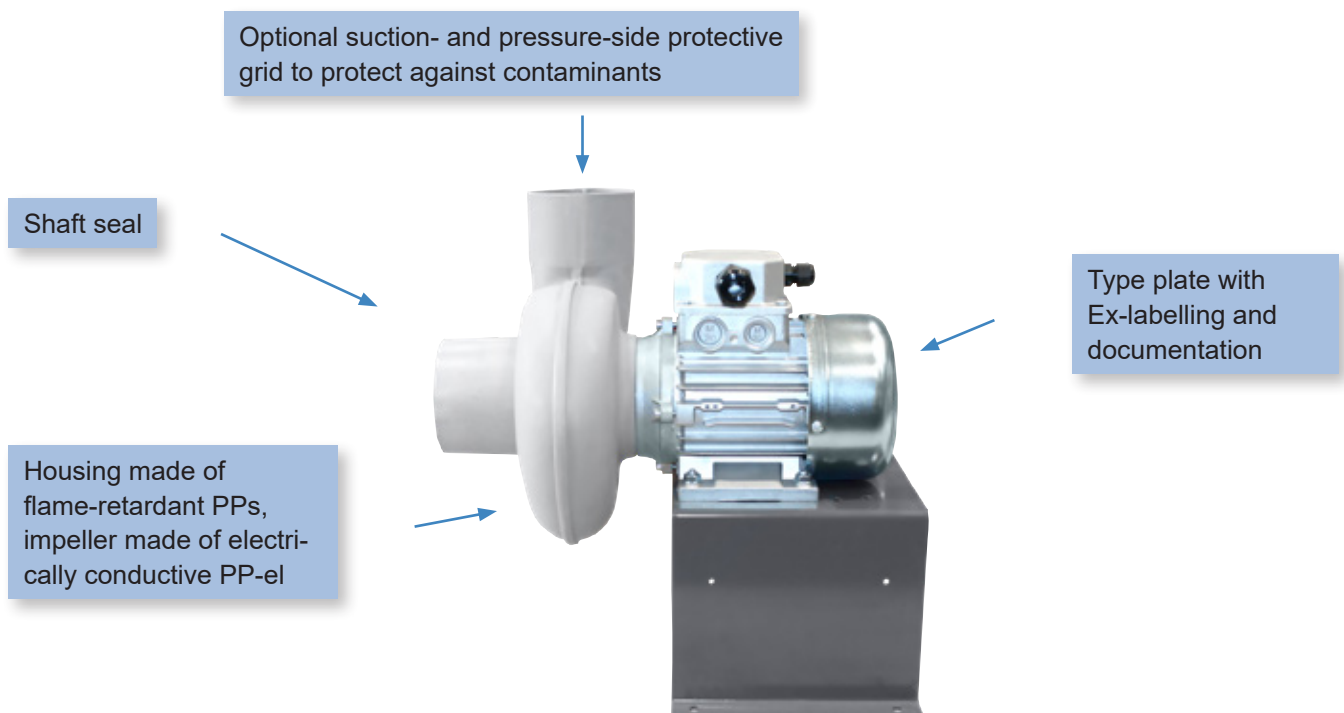
European Community in the area of explosion protection, ATEX Directive 2014/34/EU and ATEX Directive 1999/92/EG. The design of fans in the ATEX area is described in detail in the norms DIN EN 14986 and DIN EN ISO 80079.

Explosion protection is differentiated according to the conveyed atmosphere (inside) and the surroundings of the installation site (outside).

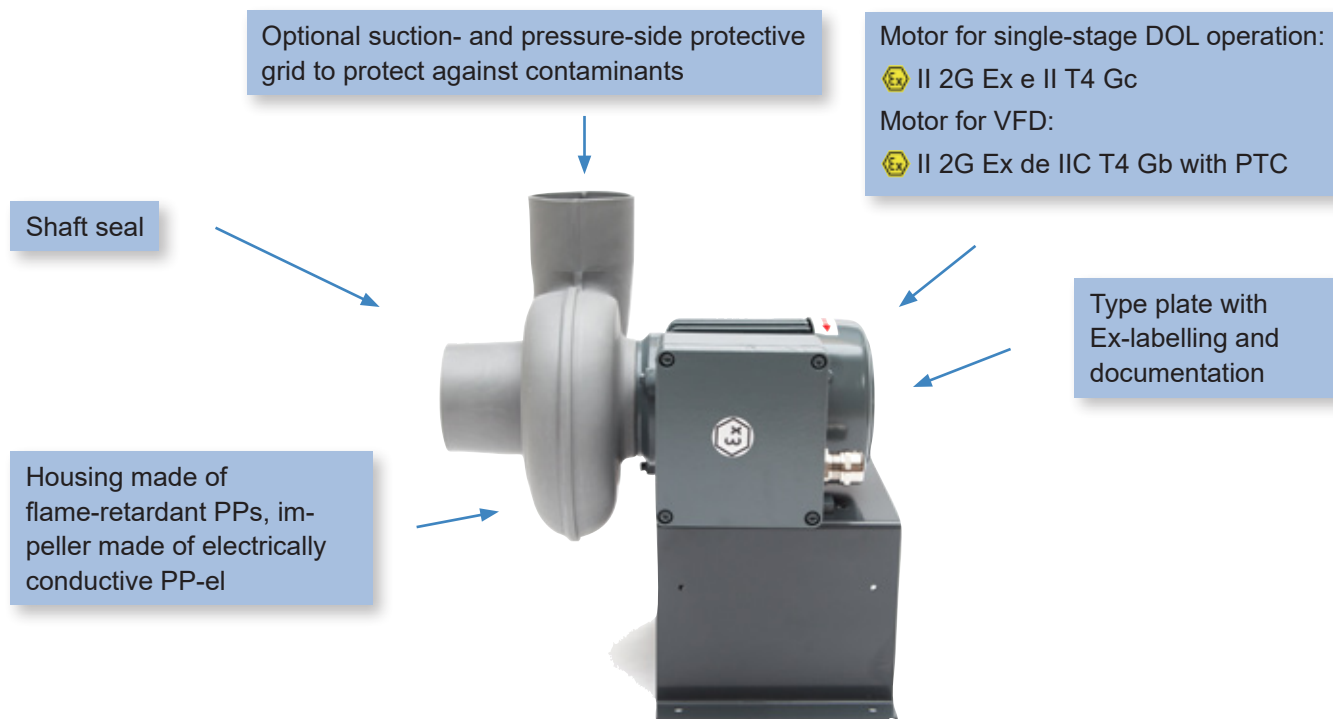
HLU supplies fans for the ATEX Zones 2 and 1 for different zone combinations.

inside	outside
Zone 1	Zone 1
Zone 1	Zone 2
Zone 2	Zone 2
Zone 2	no Zone

HF - Small centrifugal fan in ATEX version – for Zone 2 inside / no Zone outside:

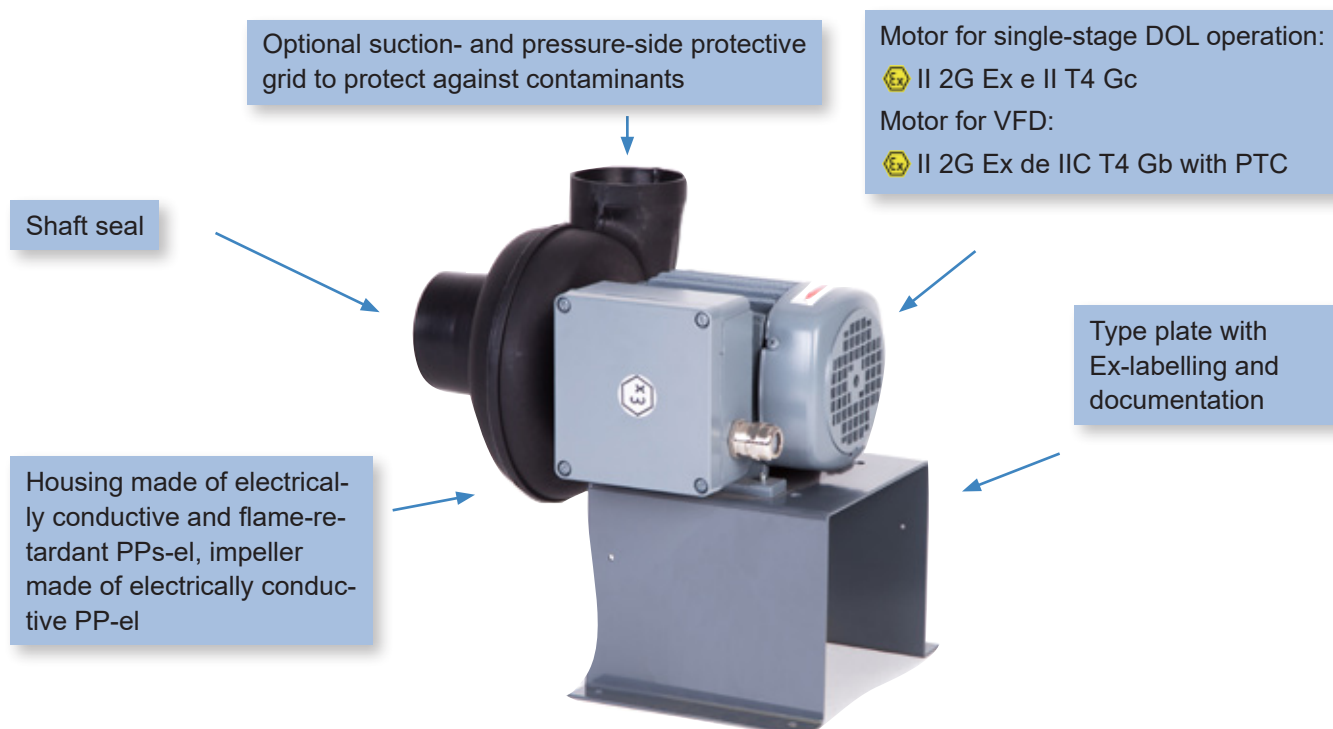


HF - Small centrifugal fan in ATEX version – for Zone 2 inside / Zone 2 outside:

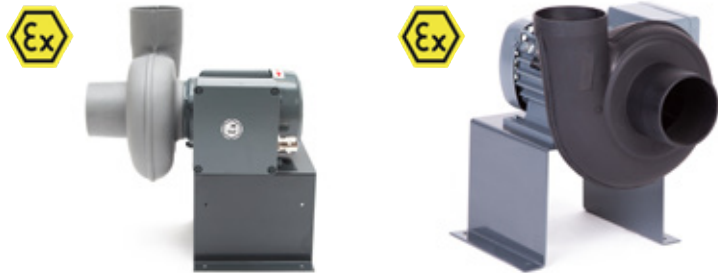


HF - Small centrifugal fan in ATEX version – for Zone 1 inside / Zone 2 outside: – for Zone 1 inside / Zone 1 outside:

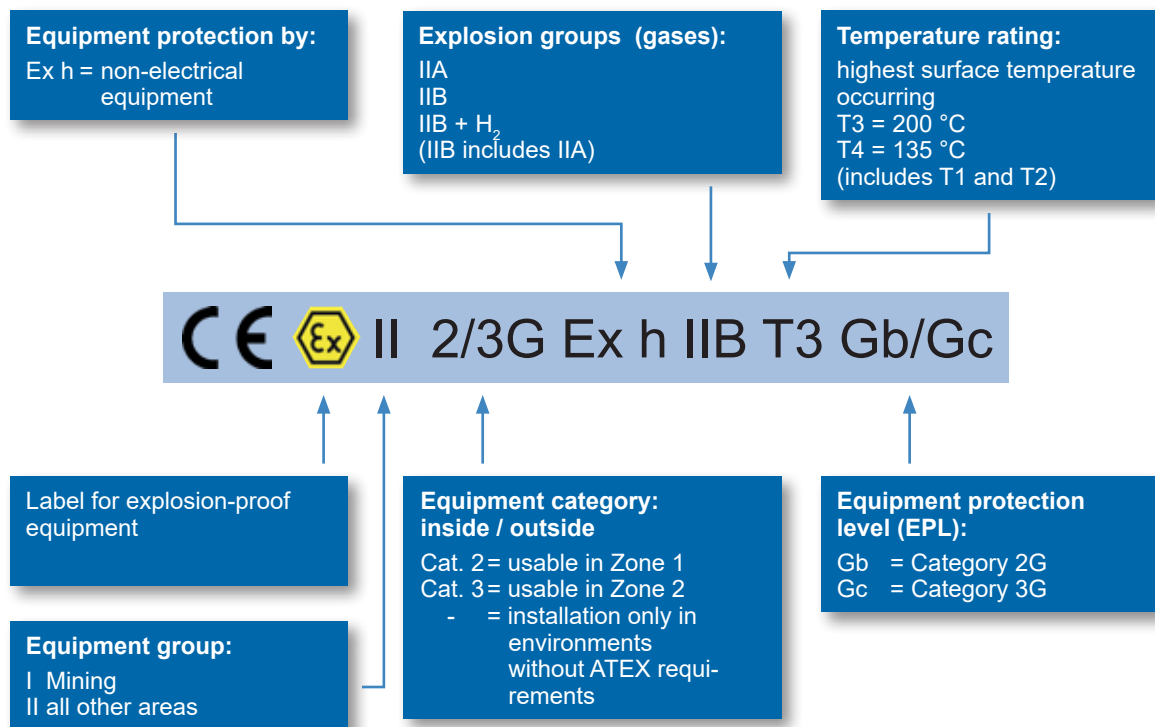
HLU fans for ATEX Zone 1 are made of electrical conductive plastics (el).



ATEX 2014/34/EU



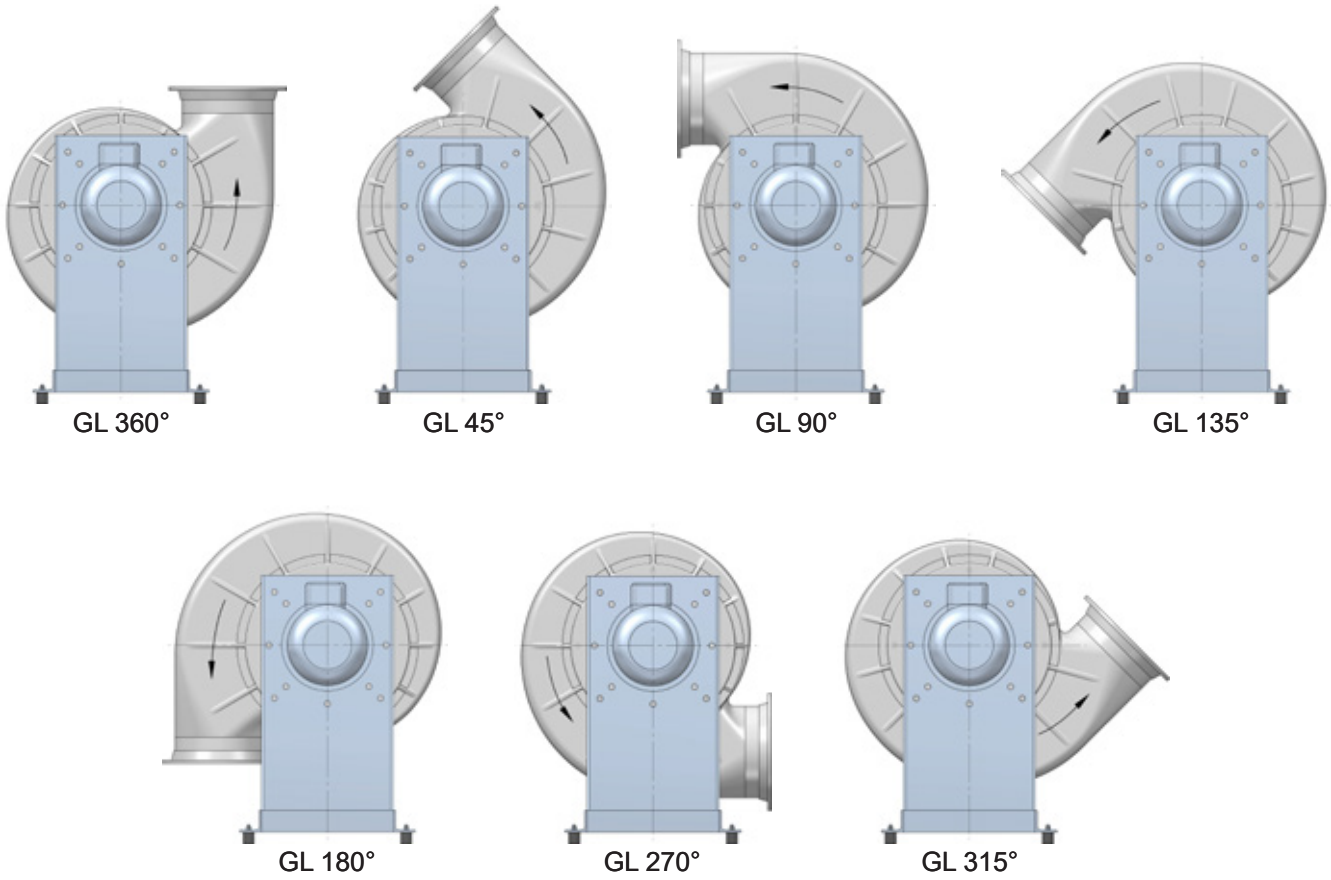
You will see on the fan's type plate a permanent identification of the explosion protection. The following illustration explains the labelling of equipment for potentially explosive atmospheres:



The operator of a facility is obligated to conduct a risk assessment. For questions regarding the Zone classification, you can contact various test centres such as for example safety engineers and special consultants. The following tables serve as reference:

An explosive gas atmosphere exists ...	ATEX Ex Zone	ATEX Device category	IEC EPL (International Equipment Protection Level)
for more than 30 min. per year, however, less than 50% of the operational period daily	Zone 1	Category 2G	Gb
for a max. of 30 min. in a year	Zone 2	Category 3G	Gc

Housing positions





Hürner Luft- und Umwelttechnik

www.hlu.eu

Hürner Luft- und Umwelttechnik GmbH
Ernst-Hürner-Straße
35325 Mücke-Atzenhain
Germany

Tel. +49 6401 9180 - 0
Fax +49 6401 9180 - 142

info@hlu.eu

Sälzerstraße 20a
56235 Ransbach-Baumbach
Germany

Tel. +49 2623 92 95 9 - 0
Fax +49 2623 92 95 9 - 99

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