

DIRECT DRIVE MOTOR

TC

Extremely robust, open blade and single inlet centrifugal fans with sheet steel casing and impeller
Designed for air that is very dusty and with materials suspended in the air



*The images are provided only for illustrative purposes, the product may vary depending on its size, specifications and position.

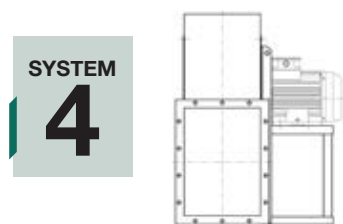
- Fan:**
- Sheet steel casing.
 - Impeller with reaction blades in extremely robust sheet steel, specially designed for air that is very dusty and with materials suspended in the air.
 - Motor coupled directly.
 - Casing continuously welded starting with size 800.

- Motor:**
- IE3 efficiency motors for powers equal to or higher than 0.75 kW except single-phase, 2-speed and 8-poles.
 - Class F motors with ball bearings and IP55 protection.
 - Three-phase 230/400 V-50 Hz (up to 4 kW) and 400/690 V-50 Hz (powers higher than 4 kW).
 - Maximum temperature of air to be carried: -25°C +90°C.

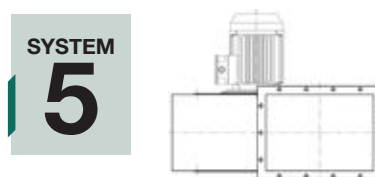
- Finish:**
- Anti-corrosive finish of polyester resin polymerised at 190°C, previously degreased with phosphate-free nanotechnological treatment.

- On request:**
- Special windings for different voltages.
 - Fan prepared for air transmission of up to +150°C.
 - Special executions for temperatures of +300°C.
 - Stainless steel fan.
 - Category 2 ATEX certification.
 - System 8 elastic coupling.

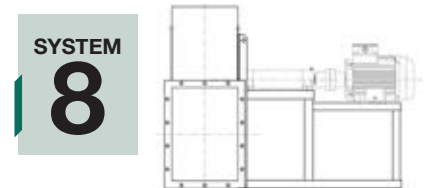
Direct drive motor construction method



Direct drive, impeller mounted on the motor shaft, mounted on the pedestal.



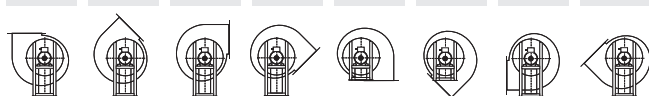
Direct drive, impeller mounted on the motor shaft, flange motor mounted on the fan casing.



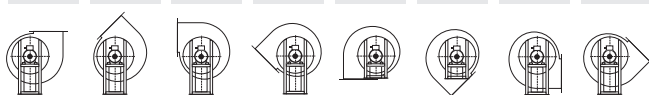
Elastic coupling drive, impeller mounted on the support shaft, mounted on the motor via an elastic coupling. Everything mounted together on a fan pedestal.

Orientations

RD 0 RD45 RD90 RD135 RD180 RD225 RD270 RD315



LG 0 LG45 LG90 LG135 LG180 LG225 LG270 LG315





BELT-DRIVEN MOTOR

TC/R

Centrifugal, open blade, belt driven fans fitted with electric motors and a standardised set of pulleys, belts and protectors in accordance with standard ISO 13857

Designed for air that is very dusty and with materials suspended in the air



Motor:

- IE3 efficiency motors.
- Class F motors with ball bearings and IP55 protection.
- Three-phase 230/400 V-50 Hz (up to 4 kW) and 400/690 V-50 Hz (powers higher than 4 kW).
- Maximum temperature of air to be carried: -25°C +90°C.

Finish:

- Anti-corrosive finish of polyester resin polymerised at 190°C, previously degreased with phosphate-free nanotechnological treatment.

On request:

- Special windings for different voltages.
- Fan prepared for air transmission of up to +300°C.
- Stainless steel fan.
- Category 2 ATEX certification.
- System 8 elastic coupling.

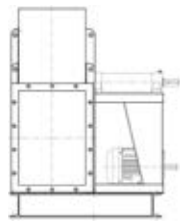
Fan:

- Sheet steel casing.
- Impeller with reaction blades in extremely robust sheet steel, specially designed for air that is very dusty and with materials suspended in the air.
- Motor assembled on the general bench.
- Casing continuously welded starting with size 800.

*The images are provided only for illustrative purposes, the product may vary depending on its size, specifications and position.

Belt-driven motor construction method

SYSTEM 12



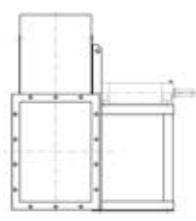
Transmission drive, identical to SYSTEM 1, with the motor and fan mounted on the common bench. Motor positions "W" or "Z" and exceptionally "X" or "Y".

SYSTEM 9



Transmission drive, identical to SYSTEM 1, with the motor mounted on the side of the pedestal, in position "W" or "Z".

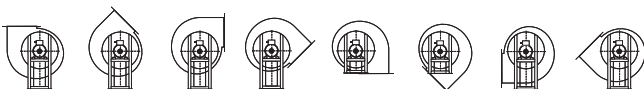
SYSTEM 1



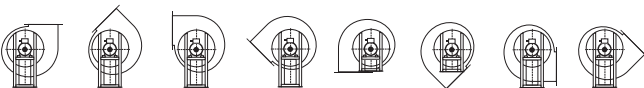
Transmission drive, impeller mounted on the support shaft. Support mounted on the pedestal.

Orientations

RD 0 RD45 RD90 RD135 RD180 RD225 RD270 RD315



LG 0 LG45 LG90 LG135 LG180 LG225 LG270 LG315



QUICK SELECT SYSTEM 4

Impulsion characteristics

Model	Frame	kW abs.	kW inst.	RPM	dB	V m ³ /s																			
						0.46	0.52	0.58	0.67	0.75	0.83	0.93	1.05	1.2	1.3	1.5	1.7	1.85	2.05	2.3					
						Pt kgf/m ² =mmH ₂ O																			
TC 630	112 M/4	3.8	4	1420	72						185	185	182	175	166	155	140								
TC 670	132 S/4	5.3	5.5	1430	74								215	212	210	200	193	185	172						
TC 700	132 MA/4	6.9	7.5	1430	76									240	240	235	223	210	195	180					
TC 750	160 M/4	10.5	11	1465	79												295	290	285	275	260				
TC 800	160 L/4	14	15	1465	80															330	328	319			
TC 630	90 L/6	1	1.1	910	64	78	78	77	74	71	66	60													
TC 670	112 M/6	1.5	2.2	940	65			93	93	91	87	84	81	75											
TC 700	112 M/6	1.9	2.2	940	67				103	103	100	94	90	84	77										
TC 750	132 MA/6	3	4	950	70							128	126	124	119	113	106	98							
TC 800	132 MB/6	4	5.5	950	71									143	142	139	132	126	119	109					
TC 835	132 MB/6	5	5.5	950	73												138	137	133	127					
TC 855	160 M/6	5.9	7.5	960	74															139	132				

Model	Frame	kW abs.	kW inst.	RPM	dB	V m ³ /s																			
						2.6	3	3.3	3.75	4.2	4.7	5.3													
						Pt kgf/m ² =mmH ₂ O																			
TC 750	160 M/4	10.5	11	1465	79	245	225																		
TC 800	160 L/4	14	15	1465	80	303	290	274	252																
TC 835	180 M/4	17.8	18.5	1470	82	320	318	307	294	275															
TC 855	180 L/4	21	22	1470	83			320	305	280	250	225													
TC 835	132 MB/6	5	5.5	950	73	119																			
TC 855	160 M/6	5.9	7.5	960	74	121	108	97																	

Flow margin ± 5%
Noise level margin +3...5 dB

Inlet characteristics

Model	Frame	kW abs.	kW inst.	RPM	dB	V m ³ /s																			
						0.46	0.52	0.58	0.67	0.75	0.83	0.93	1.05	1.2	1.3	1.5	1.7	1.85	2.05	2.3					
						Pt kgf/m ² =mmH ₂ O																			
TC 630	112 M/4	3.8	4	1420	75						167	167	164	158	149	140	126								
TC 670	132 S/4	5.3	5.5	1430	77								194	191	189	180	174	167	155						
TC 700	132 MA/4	6.9	7.5	1430	79									216	216	212	201	189	176	162					
TC 750	160 M/4	10.5	11	1465	81												266	261	257	248	234				
TC 800	160 L/4	14	15	1465	83															297	295	287			
TC 630	90 L/6	1	1.1	910	67	70	70	69	67	64	59	54													
TC 670	112 M/6	1.5	2.2	940	67			84	84	82	78	76	73	68											
TC 700	112 M/6	1.9	2.2	940	70				93	93	90	85	81	76	69										
TC 750	132 MA/6	3	4	950	73							115	113	112	107	102	95	88							
TC 800	132 MB/6	4	5.5	950	74										129	128	125	119	113	107	98				
TC 835	132 MB/6	5	5.5	950	76													124	123	120	114				
TC 855	160 M/6	5.9	7.5	960	77																				

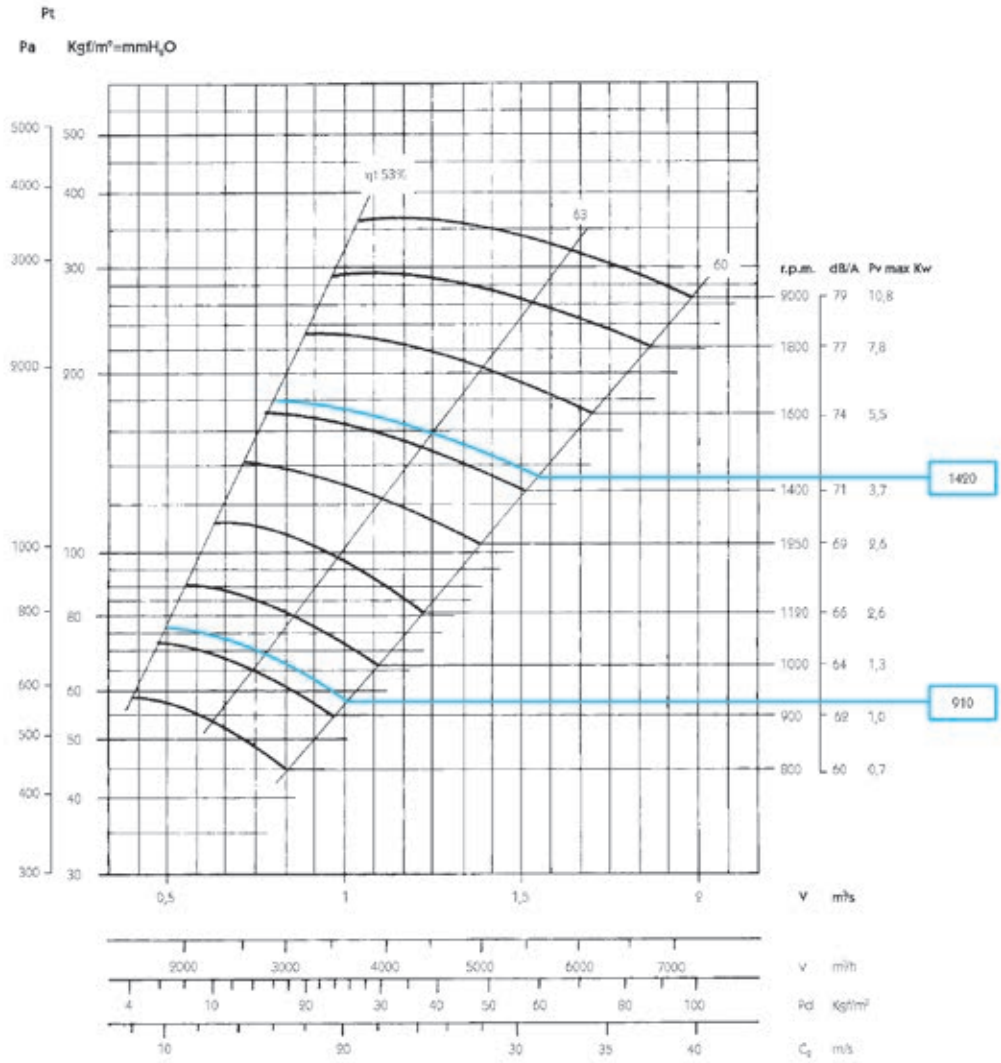
Model	Frame	kW abs.	kW inst.	RPM	dB	V m ³ /s																				
						2.6	3	3.3	3.75	4.2	4.7	5.3														
						Pt kgf/m ² =mmH ₂ O																				
TC 750	160 M/4	10.5	11	1465	81	221	203																			
TC 800	160 L/4	14	15	1465	83	273	261	247	227																	
TC 835	180 M/4	17.8	18.5	1470	85	288	286	276	265	248																
TC 855	180 L/4	21	22	1470	85			288	275	252	225	203														
TC 835	132 MB/6	5	5.5	950	76	107																				
TC 855	160 M/6	5.9	7.5	960	77	109	97	87																		

Flow margin ± 5%
Noise level margin +3...5 dB



Characteristic curves

TC 630



Flow margin $\pm 5\%$
 Noise level margin $+3...5$ dB
 Margin of kW absorbed $\pm 3\%$

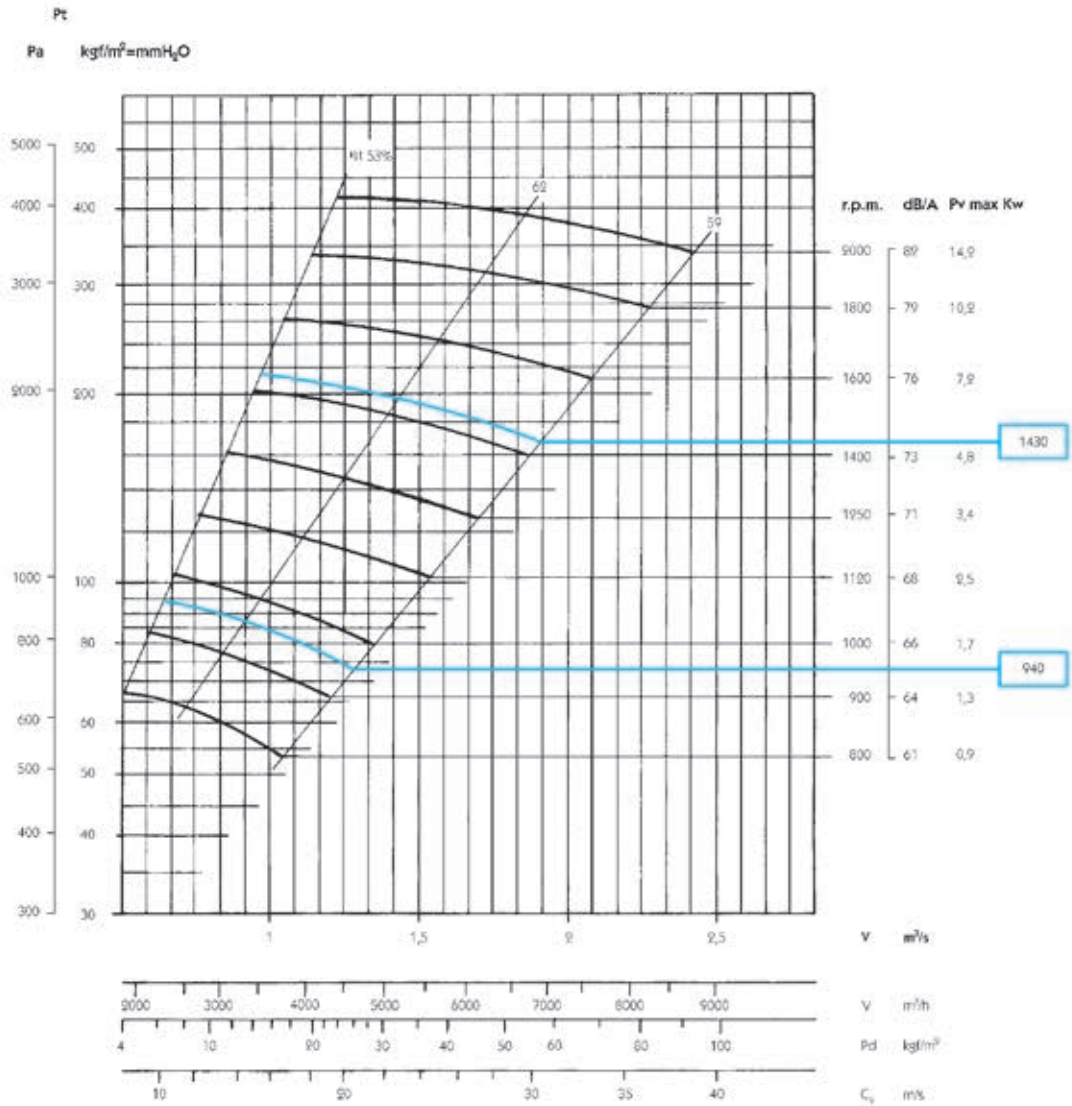
Impulsion characteristics

RPM

Characteristics for:
 system 4 and 5 in direct
 drive motor with 2/4/6/8
 poles depending on the
 model.

Characteristic curves

TC 670



Flow margin ±5%
Noise level margin +3...5 dB
Margin of kW absorbed ±3%

Impulsion characteristics

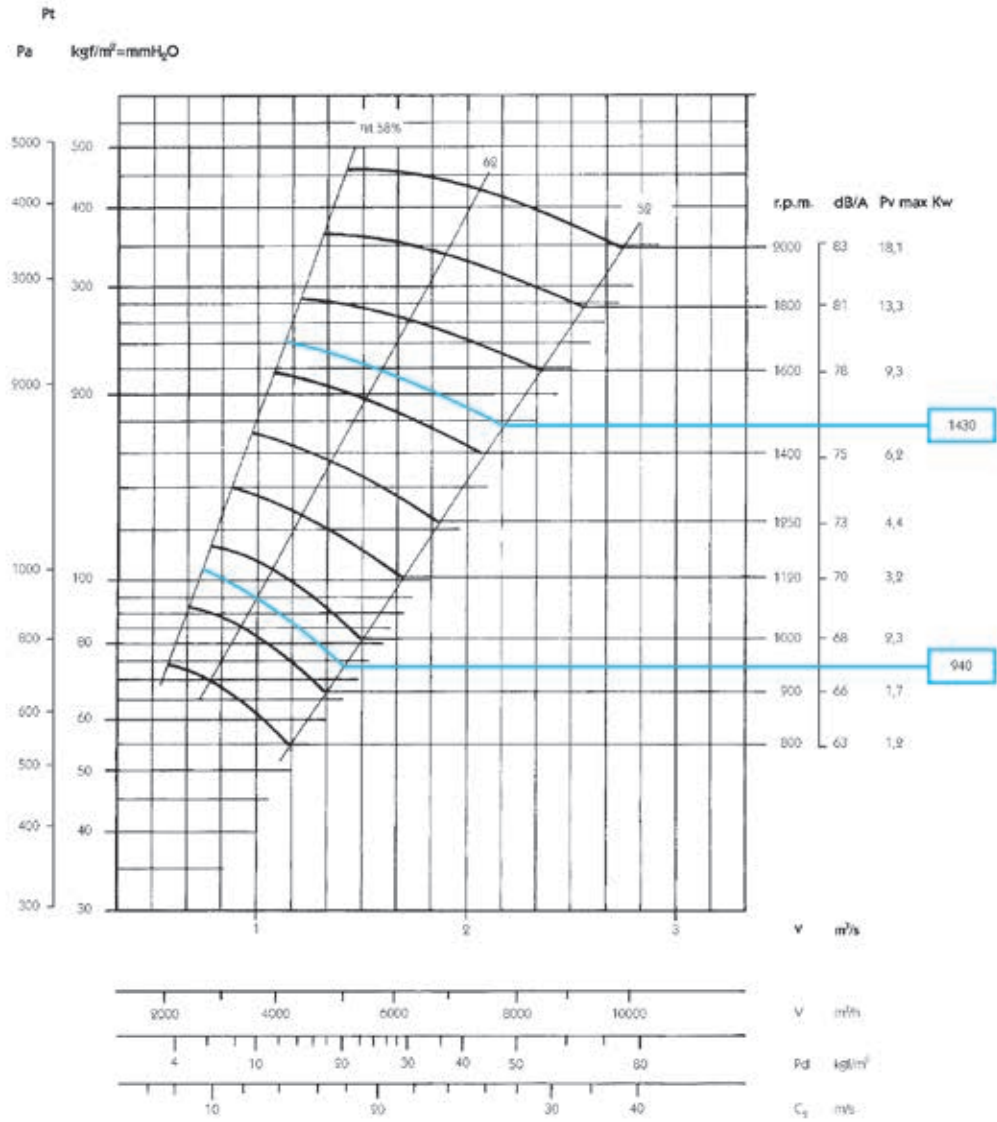
RPM

Characteristics for:
system 4 and 5 in direct
drive motor with 2/4/6/8
poles depending on the
model.



Characteristic curves

TC 700



Flow margin ±5%
 Noise level margin +3...5 dB
 Margin of kW absorbed ±3%

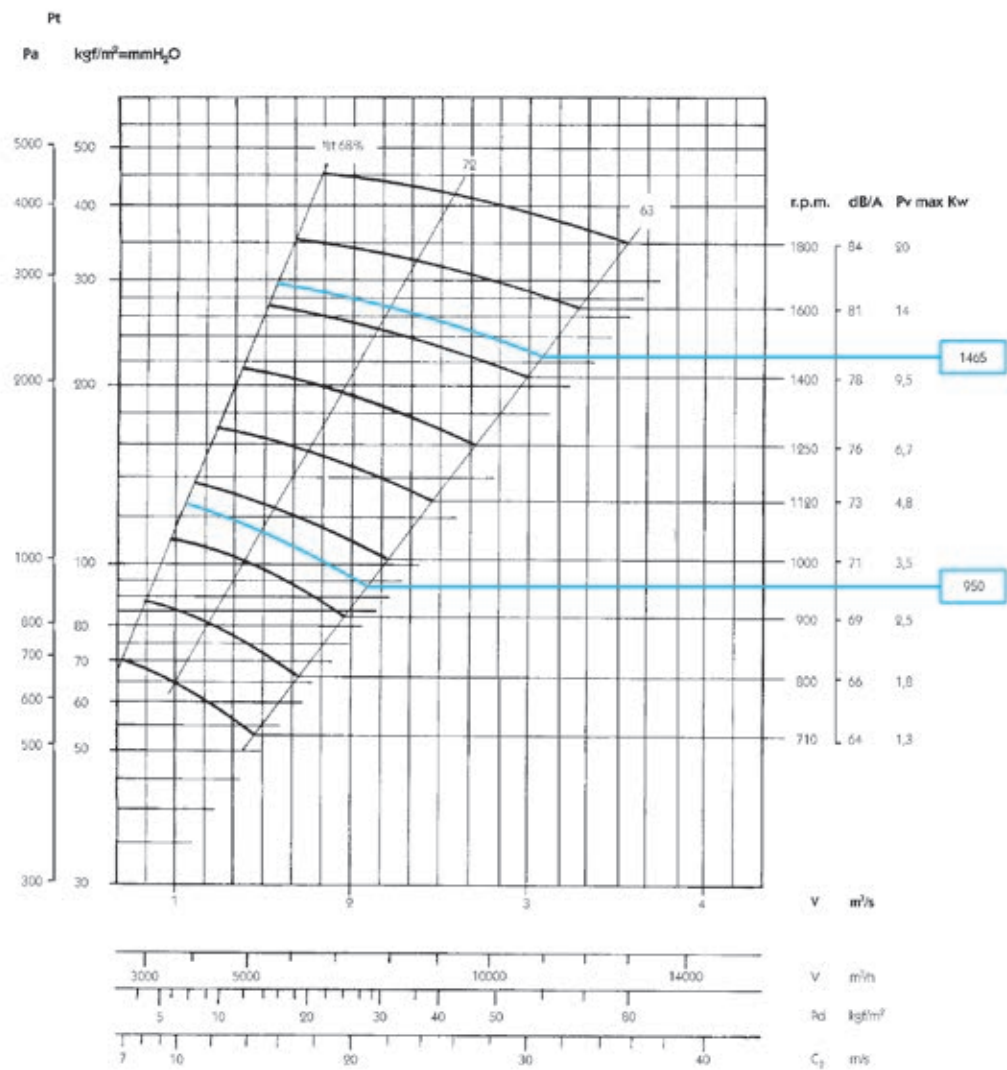
Impulsion characteristics

RPM

Characteristics for:
 system 4 and 5 in direct
 drive motor with 2/4/6/8
 poles depending on the
 model.

Characteristic curves

TC 750



Flow margin ±5%
Noise level margin +3...5 dB
Margin of kW absorbed ±3%

Impulsion characteristics

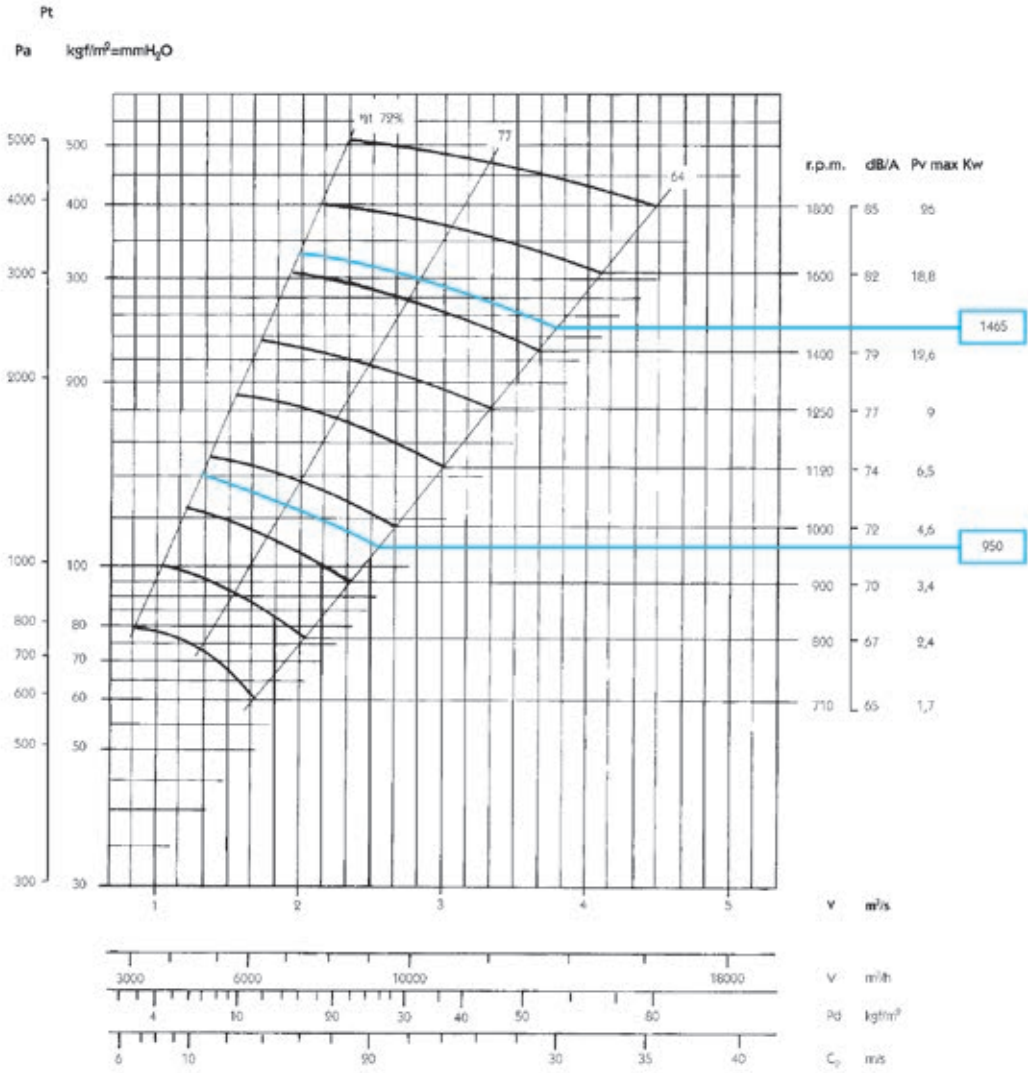
RPM

Characteristics for:
system 4 and 5 in direct
drive motor with 2/4/6/8
poles depending on the
model.



Characteristic curves

TC 800



Flow margin ±5%
 Noise level margin +3...5 dB
 Margin of kW absorbed ±3%

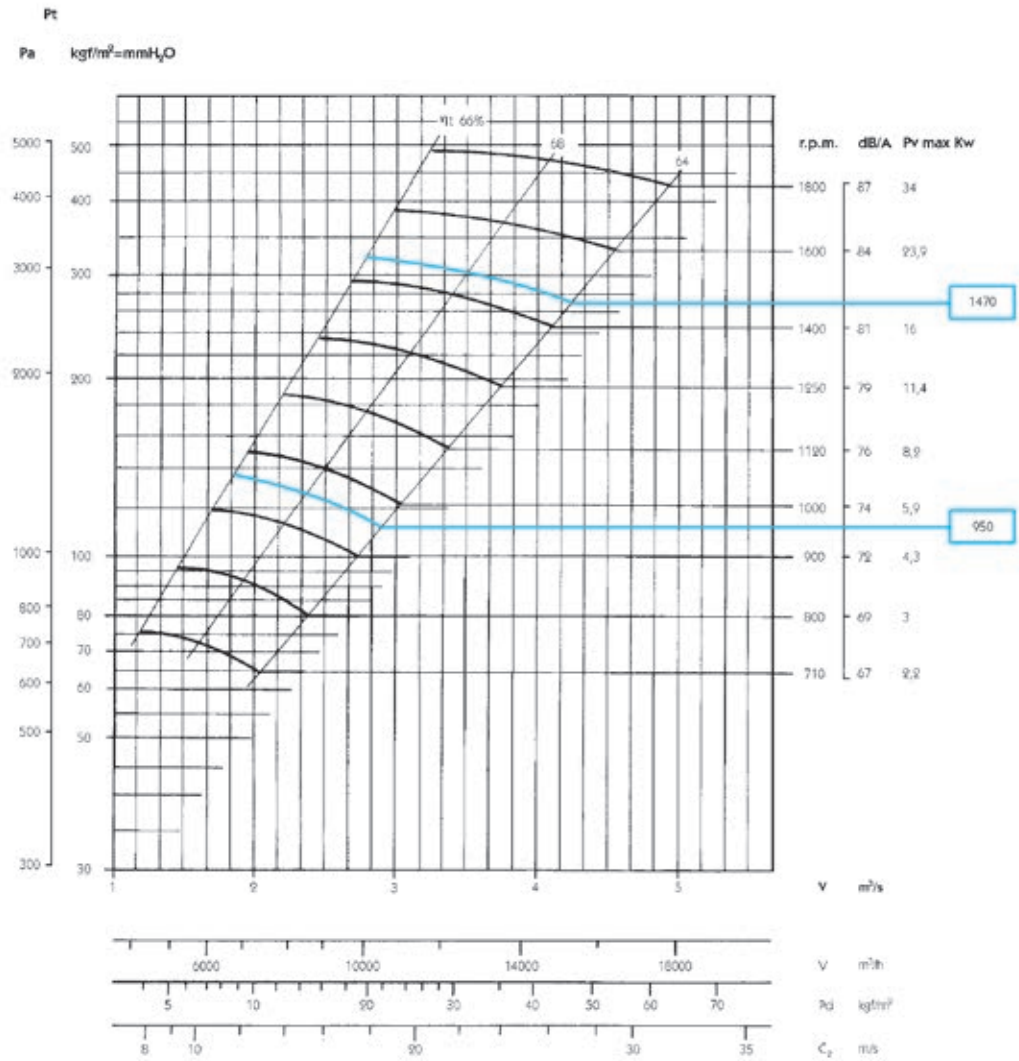
Impulsion characteristics

RPM

Characteristics for:
 system 4 and 5 in direct
 drive motor with 2/4/6/8
 poles depending on the
 model.

Characteristic curves

TC 835



Flow margin $\pm 5\%$
 Noise level margin $+3...5$ dB
 Margin of kW absorbed $\pm 3\%$

Impulsion characteristics

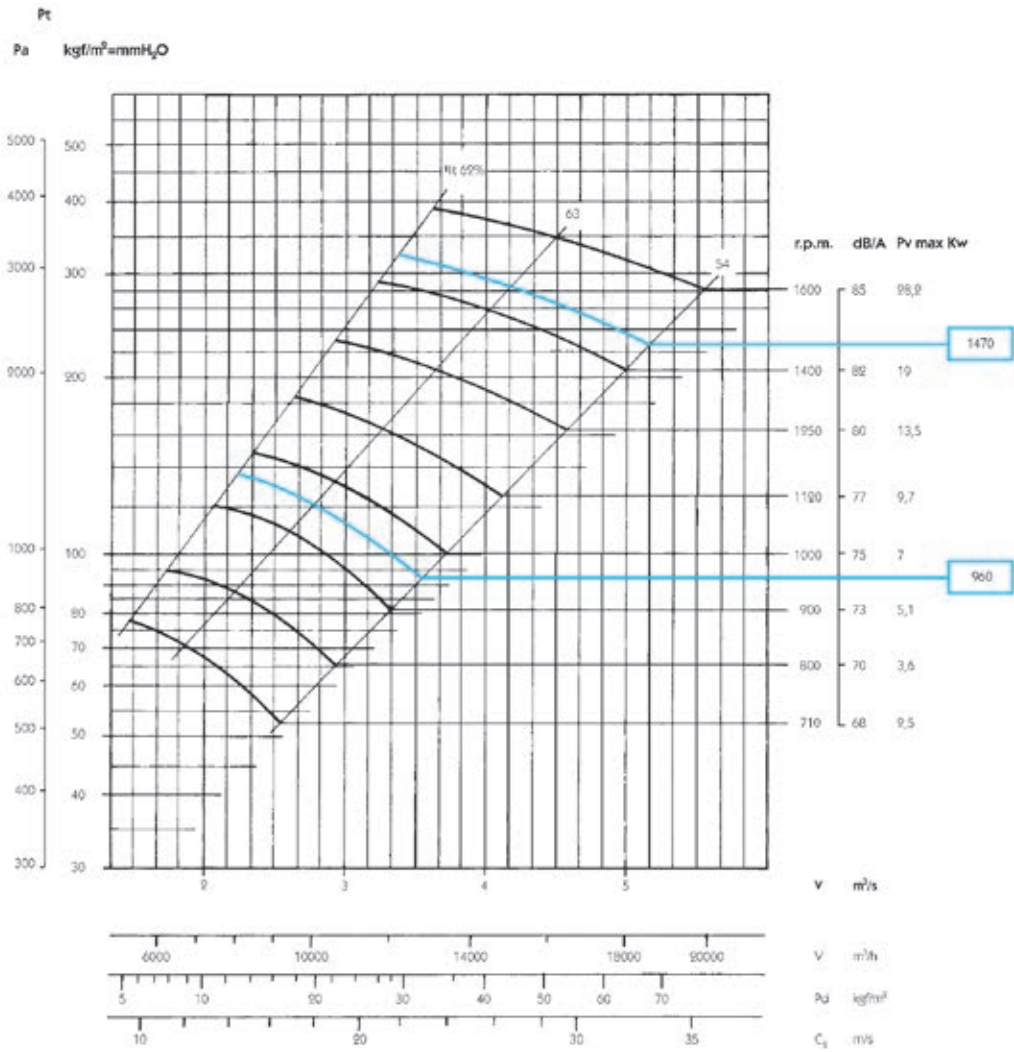
RPM

Characteristics for:
 system 4 and 5 in direct
 drive motor with 2/4/6/8
 poles depending on the
 model.



Characteristic curves

TC 855



Flow margin ±5%
 Noise level margin +3...5 dB
 Margin of kW absorbed ±3%

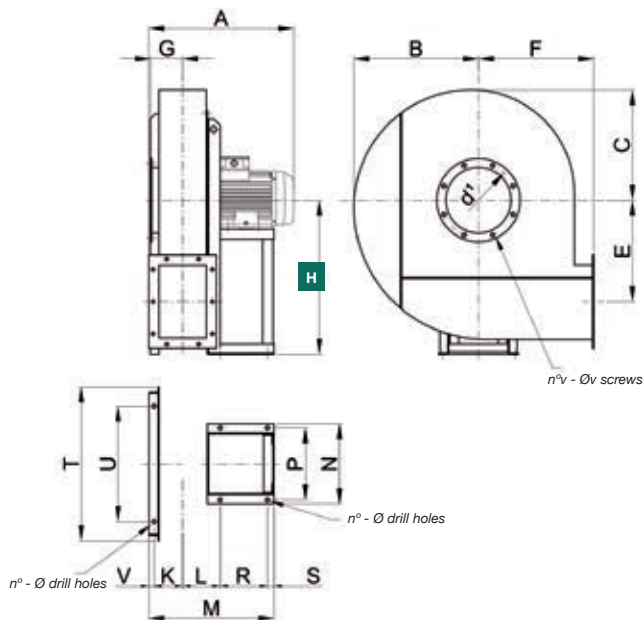
Impulsion characteristics

RPM

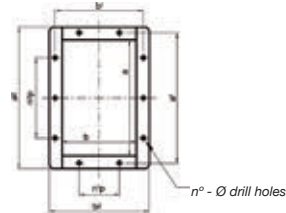
Characteristics for:
 system 4 and 5 in direct
 drive motor with 2/4/6/8
 poles depending on the
 model.

Dimensions mm

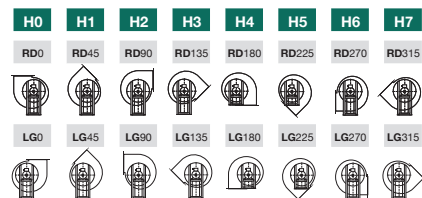
TC 630...855



OUTLET NOZZLE



ORIENTATIONS



H *The measurement of height H (distance between the ground and the axis) varies depending on the orientations

MOD.	FRAME	A*	B	C	E	F	G	HO-1-2-3	H4-5	H6-7	L	K	M*	N	P	R*	S	T	U
TC 630	112 M/4	540	490	435	395	450	125	600	450	600	146	-	260	312	280	185	25	-	-
TC 630	90 L/6	510	490	435	395	450	125	600	450	600	146	-	215	269	245	140	25	-	-
TC 670	132 S/4	650	535	480	425	475	145	630	475	630	157	-	320	342	310	245	25	-	-
TC 670	112 M/6	560	535	480	425	475	145	630	475	630	157	-	260	312	280	185	25	-	-
TC 700	132 MA/4	705	575	515	445	500	160	710	500	710	169	-	320	342	310	245	25	-	-
TC 700	112 M/6	590	575	515	445	500	160	710	500	710	169	-	260	312	280	185	25	-	-
TC 750	160 M/4	775	640	575	494	560	172	750	560	750	183	-	425	440	400	345	30	-	-
TC 750	132 MA/6	730	640	575	494	560	172	750	560	750	183	-	320	342	310	245	25	-	-
TC 800	160 L/4	915	655	580	500	560	195	800	560	800	198	183	776	440	400	345	30	820	660
TC 800	132 MB/6	790	655	580	500	560	195	800	560	800	198	183	671	342	310	245	25	820	660
TC 835	180 M/4	990	730	640	560	630	210	900	630	900	235	201	856	490	450	370	30	900	740
TC 835	132 MB/6	830	730	640	560	630	210	900	630	900	215	201	706	342	310	245	25	900	740
TC 855	180 L/4	990	730	640	560	630	210	900	630	900	235	201	856	490	450	370	30	900	740
TC 855	160 M/6	870	730	640	560	630	210	900	630	900	215	201	811	490	450	345	30	900	740

OUTLET NOZZLE

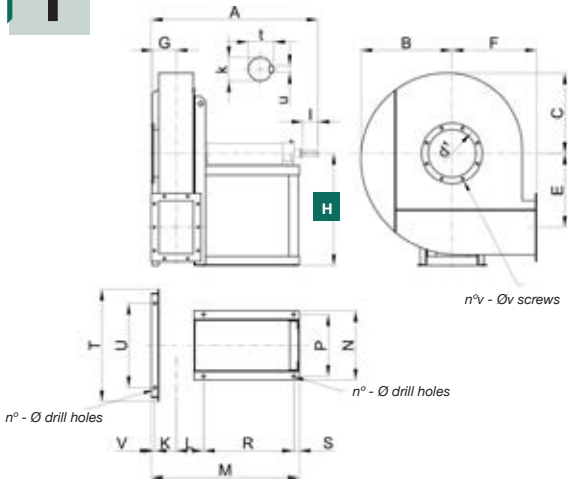
MOD.	V	n°	Φ	Φ ¹	d ¹	n°v	Φv	a	b	a ¹	b ¹	a ²	b ²	n ¹ p	n ² p	n ¹ f	Φf	kg	WD ²
TC 630	-	4	12	-	292	8	11	284	185	332	232	364	265	1-125	2-125	10	12	135	4.1
TC 630	-	4	10	-	292	8	11	284	185	332	232	364	265	1-125	2-125	10	12	105	4.1
TC 670	-	4	12	-	332	8	11	320	207	366	251	400	287	1-125	2-125	10	12	170	5.3
TC 670	-	4	12	-	332	8	11	320	207	366	251	400	287	1-125	2-125	10	12	150	5.3
TC 700	-	4	12	-	366	8	11	360	231	405	274	440	311	1-125	2-125	10	12	185	6.1
TC 700	-	4	12	-	366	8	11	360	231	405	274	440	311	1-125	2-125	10	12	155	6.1
TC 750	-	4	14	-	405	8	11	405	257	448	298	485	337	1-125	3-125	12	12	270	8.9
TC 750	-	4	12	-	405	8	11	405	257	448	298	485	337	1-125	3-125	12	12	225	8.9
TC 800	20	6	14	19	448	12	11	457	287	497	327	537	367	2-125	3-125	14	12	305	12
TC 800	20	6	12	19	448	12	11	457	287	497	327	537	367	2-125	3-125	14	12	255	12
TC 835	20	6	17	19	497	12	11	507	322	551	366	587	402	2-125	3-125	14	12	375	14
TC 835	20	6	12	19	497	12	11	507	322	551	366	587	402	2-125	3-125	14	12	290	14
TC 855	20	6	17	19	497	12	11	507	322	551	366	587	402	2-125	3-125	14	12	400	15.3
TC 855	20	6	14	19	497	12	11	507	322	551	366	587	402	2-125	3-125	14	12	320	15.3

(*) For "HIGH TEMP." constructions, elevations "A-M-R" + 50 mm.
(kg) = Weight of fan with motor.
WD² = Moment of inertia of the impeller, expressed in kg x m²

Dimensions mm

TC 630...855

SYSTEM
1



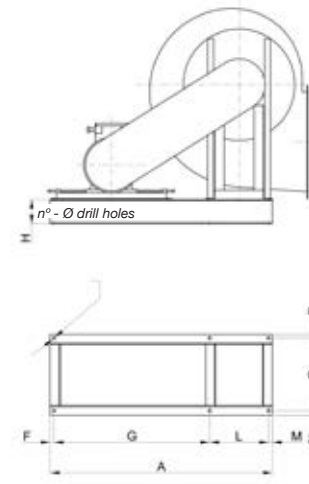
MOD.	A*	B	C	E	F	G	HO-1-2-3	H4-5	H6-7
TC 630	890	490	435	395	450	125	600	450	600
TC 670	1010	535	480	425	475	145	630	475	630
TC 700	1035	575	515	445	500	160	710	500	710
TC 750	1060	640	575	494	560	172	750	560	750
TC 800	1160	655	580	500	560	195	800	560	800
TC 835	1195	730	640	560	630	210	900	630	900
TC 855	1195	730	640	560	630	210	900	630	900

MOD.	L	K	M*	N	P	R*	S	T	U	V	n°	Φ	k
TC 630	146	-	560	370	330	480	30	-	-	-	4	14	38 k6
TC 670	157	-	605	456	395	515	40	-	-	-	4	19	48 k6
TC 700	169	-	605	456	395	515	40	-	-	-	4	19	48 k6
TC 750	183	-	605	456	395	515	40	-	-	-	4	19	48 k6
TC 800	198	183	1006	496	435	565	40	820	660	20	6	19	55 m6
TC 835	215	201	1041	496	435	565	40	900	740	20	6	19	55 m6
TC 855	215	201	1041	496	435	565	40	900	740	20	6	19	55 m6

MOD.	l	t	u	d ¹	n°	n°f ¹	kg	WD ²
TC 630	80	41	10	292	8	11	125	4.1
TC 670	110	51.5	14	332	8	11	165	5.3
TC 700	110	51.5	14	366	8	11	170	6.1
TC 750	110	51.5	14	405	8	11	215	8.9
TC 800	110	59	16	448	12	11	245	12
TC 835	110	59	16	497	12	11	285	14
TC 855	110	59	16	497	12	11	290	15.3

(*) For "HIGH TEMP." constructions, elevations "A-M-R" +50 mm.
(kg) = Weight of fan without motor.
WD² = Moment of inertia of the impeller, expressed in kg x m²

TC 630...750



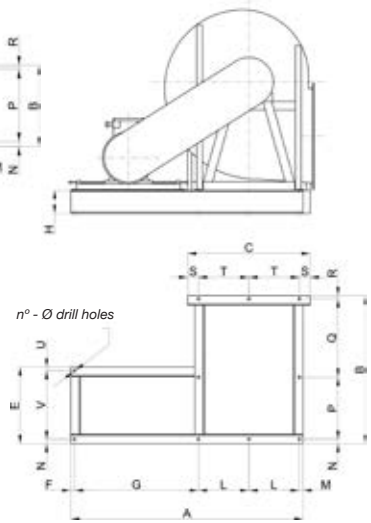
MOD.	A	B*	C	E	H	F	G	L	M	N
TC 630	1120	540	-	-	160	25	740	330	25	30
TC 670	1405	575	-	-	180	30	950	395	30	30
TC 700	1405	575	-	-	180	30	950	395	30	30
TC 750	1405	575	-	-	180	30	950	395	30	30
TC 800	1445	995	820	625	180	30	950	435	30	30
TC 835	1665	1035	900	625	180	30	1170	435	30	30
TC 855	1665	1035	900	625	180	30	1170	435	30	30

MOD.	P*	Q	R	S	T	U	V	n°	Φ	kg
TC 630	480	-	30	-	-	-	-	6	14	75
TC 670	515	-	30	-	-	-	-	6	19	105
TC 700	515	-	30	-	-	-	-	6	19	105
TC 750	515	-	30	-	-	-	-	6	19	105
TC 800	565	381	19	80	660	30	565	8	19	145
TC 835	565	416	24	80	740	30	565	8	19	155
TC 855	565	416	24	80	740	30	565	8	19	155

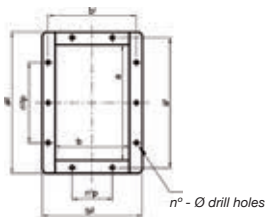
(*) For "HIGH TEMP." constructions, elevations "B-P" +50 mm.
kg = Weight of the support base

TC 800...855

SYSTEM
12

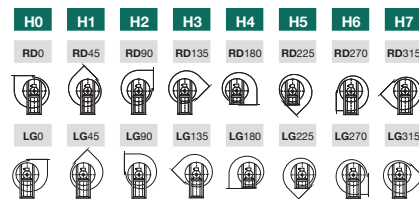


OUTLET NOZZLE



MOD.	a	b	a'	b'	a''	b''	n°p	n°p'	n°f	Φf
TC 630	284	185	332	232	364	265	1-125	2-125	10	12
TC 670	320	207	366	251	400	287	1-125	2-125	10	12
TC 700	360	231	405	274	440	311	1-125	2-125	10	12
TC 750	405	257	448	298	485	337	1-125	3-125	12	12
TC 800	457	287	497	327	537	367	2-125	3-125	14	12
TC 835	507	322	551	366	587	402	2-125	3-125	14	12
TC 855	507	322	551	366	587	402	2-125	3-125	14	12

ORIENTATIONS

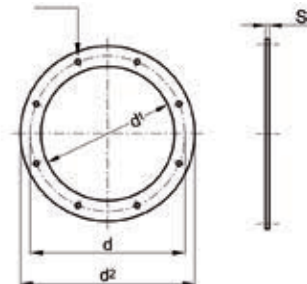


H *The measurement of height H (distance between the ground and the axis) varies depending on the orientations

Accessories

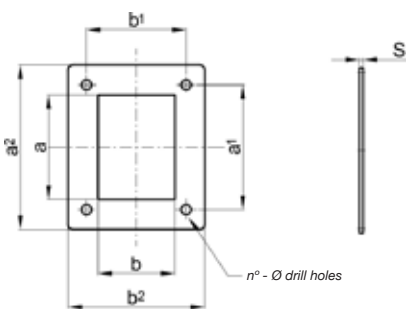
Inlet counter-flange

n° - \varnothing drill holes



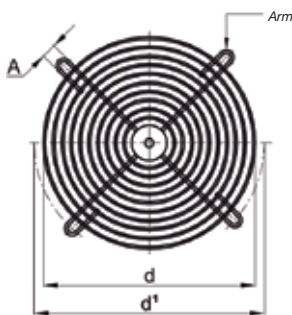
MOD.	d	d'	d ²	n [°]	Φ	s	kg
TC 630	292	255	325	8	11	4	1
TC 670	332	286	366	8	11	5	1.6
TC 700	366	321	401	8	11	5	1.8
TC 750	405	361	441	8	11	5	2
TC 800	448	406	486	12	11	5	2.2
TC 835	497	456	536	12	11	5	2.5
TC 855	497	456	536	12	11	5	2.5

Impulsion counter-flange



MOD.	a	b	a'	b'	a ²	b ²	n [°] p	n ² p	n [°]	Φ	s	kg
TC 630	284	185	332	232	364	265	1-125	2-125	10	12	5	1.7
TC 670	320	207	366	251	400	287	1-125	2-125	10	12	5	1.8
TC 700	360	231	405	274	440	311	1-125	2-125	10	12	5	2
TC 750	405	257	448	298	485	337	1-125	3-125	12	12	5	2.2
TC 800	457	287	497	327	537	367	2-125	3-125	14	12	5	2.5
TC 835	507	322	551	366	587	402	2-125	3-125	14	12	5	2.8
TC 855	507	322	551	366	587	402	2-125	3-125	14	12	5	2.8

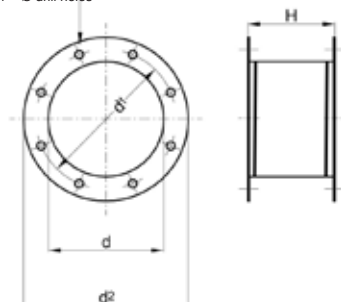
Inlet protection net



MOD.	d	d'	A	n [°]	kg
TC 630	255	292	11	4	0.3
TC 670	286	332	11	4	0.35
TC 700	321	366	11	4	0.4
TC 750	361	405	11	8	0.7
TC 800	406	448	11	8	0.8
TC 835	456	497	11	8	0.9
TC 855	456	497	11	8	0.9

Inlet anti-vibration seal

n° - \varnothing drill holes

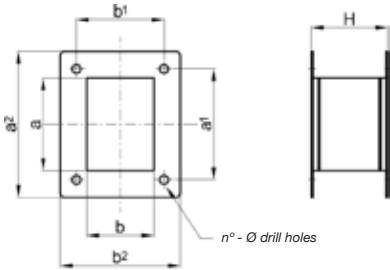


MOD.	d	d'	d ²	n [°]	Φ	H	kg
TC 630	255	292	325	8	11	200	2.2
TC 670	286	332	366	8	11	200	3.4
TC 700	321	366	401	8	11	200	3.8
TC 750	361	405	441	8	11	200	4.2
TC 800	406	448	486	12	11	200	4.6
TC 835	456	497	536	12	11	200	5.2
TC 855	456	497	536	12	11	200	5.2



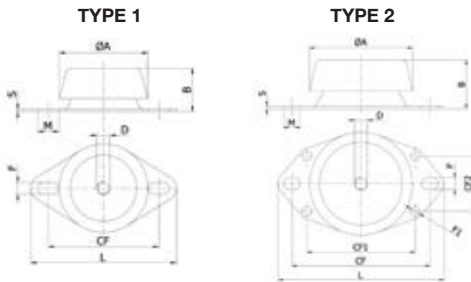
Accessories

Impulsion anti-vibration seal



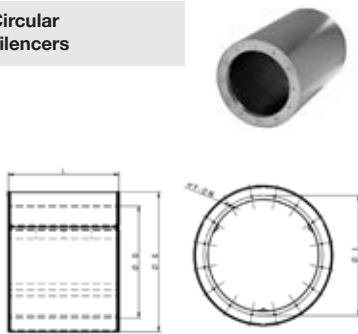
MOD.	a	b	a'	b'	a''	b''	n°p	n°p'	n°	Φ	H	kg
TC 630	284	185	332	232	364	265	1-125	2-125	10	12	200	3.7
TC 670	320	207	366	251	400	287	1-125	2-125	10	12	200	3.9
TC 700	360	231	405	274	440	311	1-125	2-125	10	12	200	4.3
TC 750	405	257	448	298	485	337	1-125	3-125	12	12	200	4.7
TC 800	457	287	497	327	537	367	2-125	3-125	14	12	200	5.3
TC 835	507	322	551	366	587	402	2-125	3-125	14	12	200	5.9
TC 855	507	322	551	366	587	402	2-125	3-125	14	12	200	5.9

Shock-absorbers



MOD.	MODEL SHOCK-ABSORBERS	TYPE	øA	B	D	CF	CF1	CF2	F	øF1	L	M	S
TC 630	CF 623110	1	67	33...34	10	76.5	-	-	9	-	90.5	16	2
TC 670	CF 623110	1	67	33...34	10	76.5	-	-	9	-	90.5	16	2
TC 700	CF 623110	1	67	33...34	10	76.5	-	-	9	-	90.5	16	2
TC 750	CF 924512	2	92	44...45	12	120	98	50	10.5	8.5	130	15.5	2.5
TC 800	CF 924512	2	92	44...45	12	120	98	50	10.5	8.5	130	15.5	2.5
TC 835	CF 924512	2	92	44...45	12	120	98	50	10.5	8.5	130	15.5	2.5
TC 855	CF 924512	2	92	44...45	12	120	98	50	10.5	8.5	130	15.5	2.5

Circular silencers



Silencers are used to lower the noise level at air conditioning or ventilation installation manufactured using galvanised steel

- Upon request: other constructions using different materials.

øD	øE	L	øI	F	øM	øD	øE	L	øI	F	øM
315	515	ØD,1,5ØD, 2ØD	355	8	M8	900	1100	ØD,1,5ØD, 2ØD	970	16	M10
355	555	ØD,1,5ØD, 2ØD	395	8	M8	1000	1200	ØD,1,5ØD, 2ØD	1070	16	M10
400	600	ØD,1,5ØD, 2ØD	450	8	M8	1120	1320	ØD,1,5ØD, 2ØD	1190	20	M10
450	650	ØD,1,5ØD, 2ØD	500	8	M8	1250	1450	ØD,1,5ØD, 2ØD	1320	20	M10
500	700	ØD,1,5ØD, 2ØD	560	12	M8	1400	1600	ØD,1,5ØD, 2ØD	1470	20	M10
560	760	ØD,1,5ØD, 2ØD	620	12	M8	1500	1700	ØD,1,5ØD, 2ØD	1570	20	M10
630	830	ØD,1,5ØD, 2ØD	690	12	M8	1600	1800	ØD,1,5ØD, 2ØD	1680	24	M14
710	910	ØD,1,5ØD, 2ØD	770	16	M8	1700	1900	ØD,1,5ØD, 2ØD	1780	24	M14
800	1000	ØD,1,5ØD, 2ØD	860	16	M8	1800	2000	ØD,1,5ØD, 2ØD	1880	24	M14