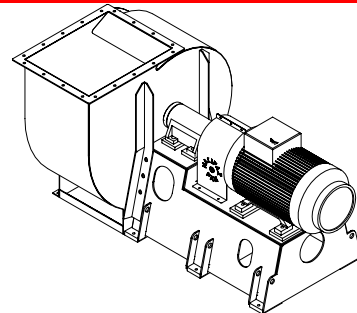
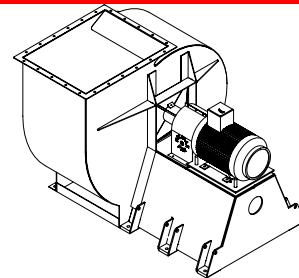
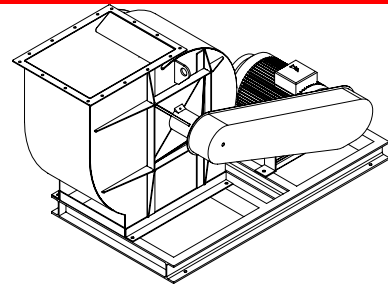
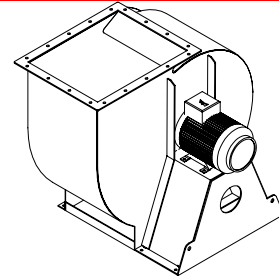


# Beaufort fan range



## Typical driving arrangements and dimensions

CATALOGUE REF: - BFBI002-603

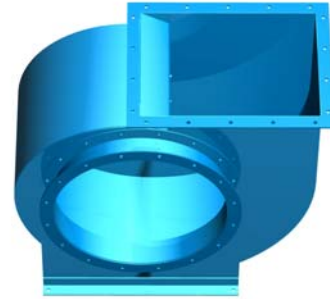
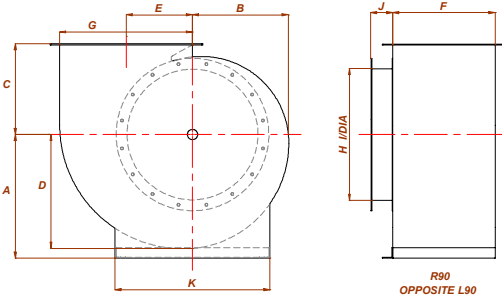




# THE HALIFAX BEAUFORT 'F' FAN

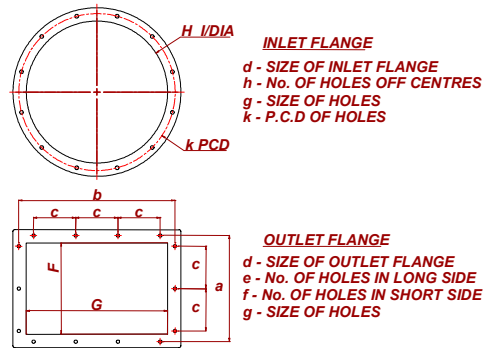
Fan casing dimensions

FAN SIZE	A	A	A	A	A	A	B	C	D	E	F	G	H	J	K
	R90	R135	R180	R270	R0	R45									
15	375	350	325	275	475	400	290	275	346	200	310	400	400	80	470
18	450	420	390	330	570	480	348	330	415	240	372	480	480	80	570
21	525	490	455	385	665	560	406	385	484	280	434	560	560	80	660
24	600	560	520	440	760	640	464	440	553	320	496	640	640	100	750
27	675	630	585	495	855	720	522	495	623	360	558	720	720	100	850
30	750	700	650	550	950	800	580	550	692	400	620	800	800	100	940
33	825	770	715	605	1045	880	638	605	761	440	682	880	880	100	1040
36	900	840	780	660	1140	960	696	660	830	480	744	960	960	100	1130
39	975	910	845	715	1235	1040	754	715	899	520	806	1040	1040	100	1230
42	1050	980	910	770	1330	1120	812	770	968	560	868	1120	1120	100	1320
45	1125	1050	975	825	1425	1200	870	825	1038	600	930	1200	1200	100	1420
48	1200	1120	1040	880	1520	1280	928	880	1107	640	992	1280	1280	100	1510
51	1275	1190	1105	935	1615	1360	986	935	1176	680	1054	1360	1360	100	1600
54	1350	1260	1170	990	1710	1440	1044	990	1245	720	1116	1440	1440	100	1700
60	1500	1400	1300	1100	1900	1600	1160	1100	1383	800	1240	1600	1600	130	1890
66	1650	1540	1430	1210	2090	1760	1276	1210	1522	880	1364	1760	1760	130	2070



## Flange dimensions

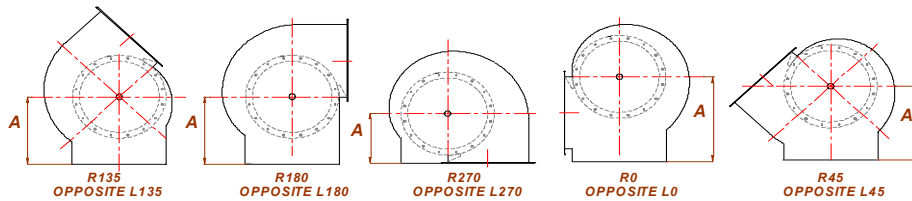
FAN SIZE	a	b	c	d	e	f	g	h	k
15	356	446	100	40	5	3	11	12	446
18	421	526	150	40	4	3	11	12	526
21	480	606	150	40	4	4	11	16	606
24	552	696	150	50	5	4	14	16	696
27	614	776	150	50	5	5	14	16	776
30	676	856	150	50	5	5	14	24	856
33	738	936	150	50	6	5	14	24	936
36	800	1016	150	50	7	6	14	24	1016
39	862	1096	150	50	8	6	14	24	1096
42	924	1176	150	50	8	7	14	24	1176
45	986	1256	150	50	9	7	14	24	1256
48	1048	1336	150	50	9	7	14	32	1336
51	1110	1416	150	50	10	8	14	32	1416
54	1172	1496	180	50	8	7	14	32	1496
60	1320	1680	180	70	10	8	17	32	1680
66	1444	1840	180	70	11	7	17	36	1840



**INLET FLANGE**  
 d - SIZE OF INLET FLANGE  
 h - No. OF HOLES OFF CENTRES  
 g - SIZE OF HOLES  
 k - P.C.D OF HOLES

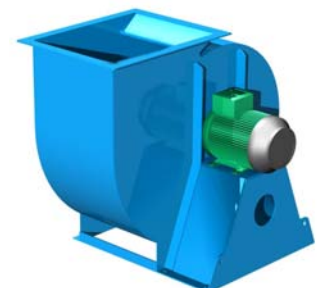
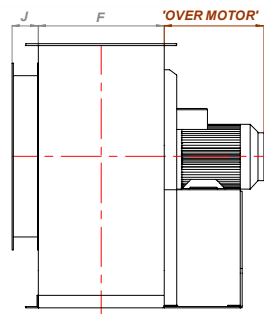
**OUTLET FLANGE**  
 d - SIZE OF OUTLET FLANGE  
 e - No. OF HOLES IN LONG SIDE  
 f - No. OF HOLES IN SHORT SIDE  
 g - SIZE OF HOLES

## Handings shown from drive side



## Arrangement No.3 specific dimensions

FAN SIZE	TYPICAL MOTOR SIZE	SIZE OVER MOTOR	COOLING DISC (ADD TO 'OVER MOTOR' IF REQ'D)
15	D90	275	ADD 50
18	D132	375	ADD 50
21	D160	495	ADD 70
24	D180	560	ADD 70
27	D200	700	ADD 70
30	D200	700	ADD 70
33	D200	700	ADD 70
36	D225	740	ADD 70
39	D250	845	ADD 100
42	D280	930	ADD 100

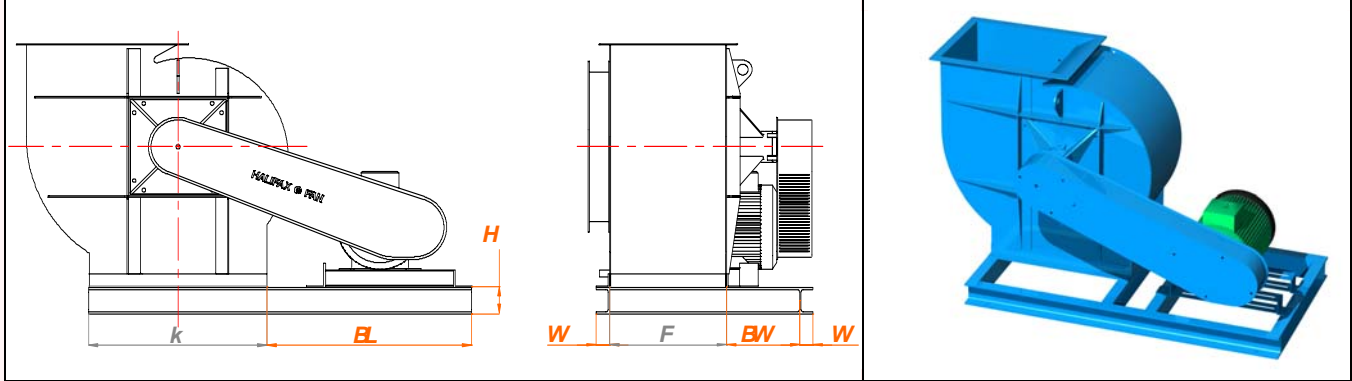


Use these dimensions combined with the Casing dimensions to give overall fan sizes for your chosen driving arrangement

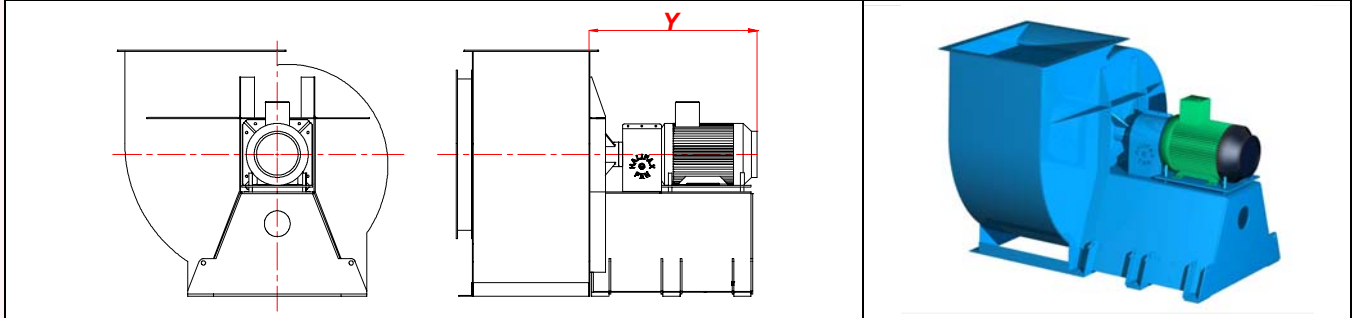
**Typical dimensions for driving arrangements 1,2a,1/3 and 2a/3**

SPECIFICATION			ARRANGEMENT No.1 SPECIFIC DIMENSIONS				ARRANGEMENT 1/3 SPECIFIC		ARRANGEMENT 2A/3 SPECIFIC		HIGH TEMP. EXTRAS			
FAN SIZE	BEARING UNIT		TYPICAL MOTOR SIZE	TYPICAL BASEFRAME SIZES				(Y)		(Z)		FOR EXTRAS ADD TO BW,Y OR Z		
	ARR. No.1	ARR. No.2A		CHANNEL HEIGHT (H)	CHANNEL WIDTH (W)	BL	BW	DIMENSION OVER BEARING UNIT AND MOTOR		DIMENSION OVER BEARING UNIT AND MOTOR		COOLING DISC	COOLING DISC & PLUG UNIT	
15	V3		D90	76	38	440	220	545			ADD 40	ADD 75		
18	V3		D112			680	220	610			ADD 40	ADD 75		
21	V4		D132			100	50	615	240		720		ADD 50	ADD 75
24	V5		D160					750	275		905		ADD 50	ADD 75
27	V5		D200			1040	260	1110		ADD 50	ADD 75			
		M6	D200			1040	450			1275	ADD 50	ADD 75		
		M7	D225			1040	500			1430	ADD 70	ADD 100		
30 - 33	V6		D180	125	65	775	290	970		ADD 50	ADD 75			
		M6	D200			1040	450			1275	ADD 50	ADD 75		
		M7	D225			1040	500			1430	ADD 70	ADD 100		
		M8	D250			1200	550			1620	ADD 70	ADD 100		
36		M6	D200	150	75	1040	435			1275	ADD 50	ADD 100		
		M7	D225			1040	490			1430	ADD 70	ADD 100		
		M8	D250			1200	540			1620	ADD 70	ADD 100		
39 - 45		M7	D225	150	75	1040	490			1430	ADD 70	ADD 100		
		M8	D250			1200	540			1620	ADD 70	ADD 100		
		M9	D250			1200	585			1665	ADD 70	ADD 100		
		M11	D280			1200	600			1805	ADD 70	ADD 100		
48 - 66		M9	D250	200	90	1200	610			1665	ADD 70	ADD 100		
		M11	D280			1200	630			1805	ADD 70	ADD 100		
		M12	D315			1540	740			2085	ADD 100	ADD 125		

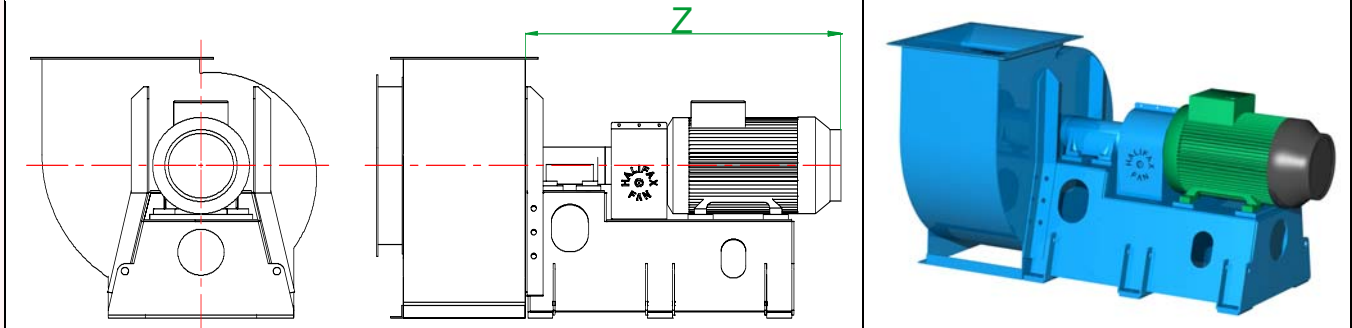
**Driving arrangement No.1 and No.2a**



**Driving arrangement No.1/3**



















**Driving arrangement No.2a/3**





Typical dimensions only, contact Halifax fan for full arrangement drawing.

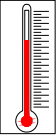
## The Beaufort 'f' fan range

		<p>The Halifax Beaufort range is now available with four non-overloading high efficiency impeller types, 'F' Backward Inclined, 'F' Backward Curved, 'L' Backward Curved and Aerofoil. All are specifically designed for large volume duties.</p> <p>The Beaufort 'F' Backward Inclined impeller has self-cleaning characteristics, suitable for light dust loaded air streams.</p> <p>The Beaufort 'F' and 'L' Backward Curved impellers offer higher efficiencies than backward inclined, but should only be used for dust free airstreams.</p> <p>Also new to the Beaufort range is the highly efficient aerofoil impeller which also offers reduced noise emissions.</p>	<ul style="list-style-type: none"> <li>➤ <b>Designed specifically for large volume duties.</b></li> <li>➤ <b>Good operating efficiency.</b></li> <li>➤ <b>Non-overloading impeller design.</b></li> <li>➤ <b>Backward inclined fans offer excellent self-cleaning blade characteristics.</b></li> <li>➤ <b>Backward Curved design available to give higher efficiency for clean gas airflows.</b></li> <li>➤ <b>Highly efficient aerofoil impeller now available that also offers reduced noise levels.</b></li> </ul>
			
			
			
			
			
			
			

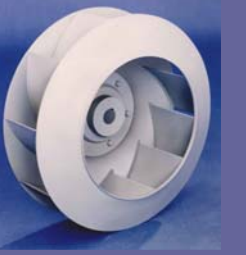
## Performance rating

  FM 00701	<p>All Halifax Fan performance ratings are a result of performance tests to BS848 Part 1: 1980 type D ducted inlet and outlet tests. They are also regularly audit tested in accordance with our quality assurance system, which conforms to ISO 9001.</p>
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## Temperature range

	<p>Standard Halifax Beaufort Fans normally serve applications at temperatures up to 70°C. Higher temperature requirements are effectively catered for by the incorporation of carefully designed modifications to protect the fan bearings. Fans operating between 70°C and 230°C are supplied with a cooling disc fitted to the fan shaft between the fan case and the bearing unit.</p> <p>For operating temperatures between 230°C and 315°C a cooling disc is fitted in addition to fibreglass filled plug unit located between the fan side plate and bearing unit. The fabrication techniques used in the construction of these impellers are modified to ensure operational stability in the high temperature environment</p>	<ul style="list-style-type: none"> <li>➤ <b>Standard Fan operating temperatures up to 70°C.</b></li> <li>➤ <b>Fans operating between 70°C and 230°C require a cooling disc.</b></li> <li>➤ <b>Fans operating between 230°C and 315°C require a plug unit and cooling disc.</b></li> <li>➤ <b>For fans operating above 315°C contact Halifax Fan Ltd.</b></li> </ul>
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## Construction details

	<p><b>Casing</b></p> <p>The fan casings are of an all welded construction and substantially braced for extra rigidity. Casings up to and including size 39 are made in one piece. The impellers can be removed from the inlet side after taking off the front plate. Standard sizes 42 and larger are made in two pieces and these pieces are flanged, drilled and bolted together (known as a split case). Above a size 60, the casings are in three parts with the top section being divided.</p>
	<p><b>Impeller</b></p> <p>The impellers are dynamically and statically balanced in accordance with BS. 6861: Part 1: 1987 and ISO 1940/1:1986. They are precision built components typically made up of twelve blades welded between a substantial back plate and conical shroud. The precision laser cut back plate with blade slots ensures utmost accuracy in the angle and position of blades. Impellers are fitted with a cast-iron centre boss, precision bored with a British standard keyway to suit.</p>

## Finish

	<p>Great care is taken with the protective finish of Halifax fans and their appearance. Fans selected for normal temperature conditions are powder coated RAL5015 (certain other colours available at no extra cost). Powder coating offers significant advantages over liquid paint finishes, as the process provides a harder, more durable high quality finish, giving added protection. Special finishes are also supplied to suit unusual operating conditions or customer requirements.</p>
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**HALIFAX FAN**  
 leaders in fan technology

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