

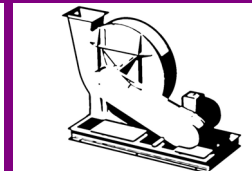
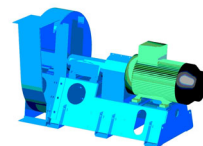
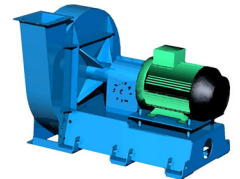
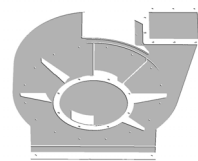
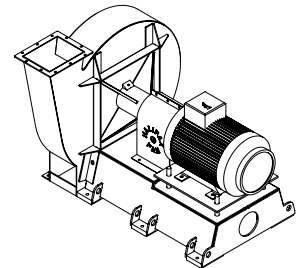
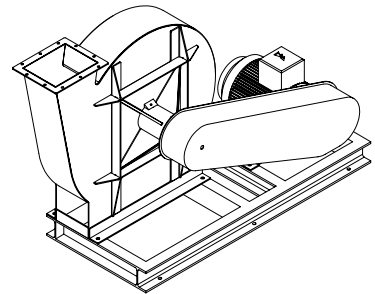
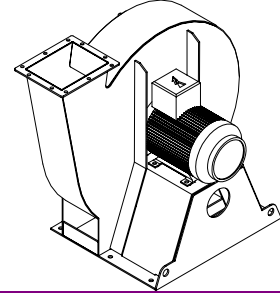
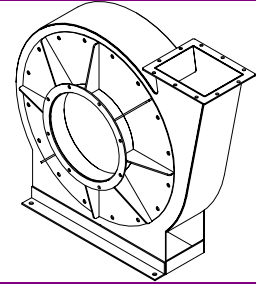
# Mercury fan range



**HALIFAX FAN**  
leaders in fan technology

## Typical driving arrangements and dimensions

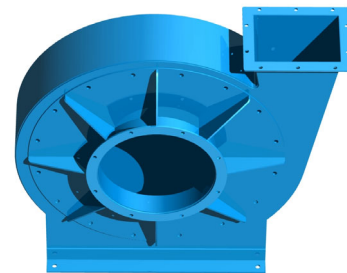
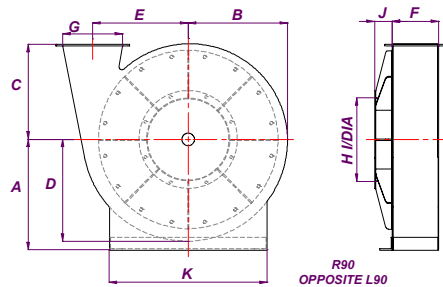
CATALOGUE REF: - MEBI002-603



FM 00701

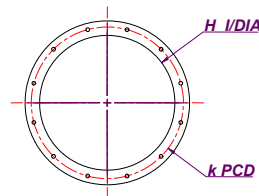


FAN SIZE	A	A	A	A	A	A	A	B	C	D	E	F	G	H	J	K
	R90	R135	R180	R225	R270	R0	R45									
15	270	270	270	270	275	370	280	244	236	251	236	114	145	208	50	396
18	330	325	320	310	325	440	335	293	283	302	283	137	174	248	50	476
21	380	375	370	365	375	500	385	341	331	352	331	160	203	289	64	554
24	440	430	420	410	430	560	450	390	378	402	378	183	232	329	76	634
27	480	470	460	450	470	640	490	439	425	453	425	206	261	369	76	714
30	540	530	520	510	540	700	550	488	472	503	472	229	290	410	76	790
33	590	580	570	560	580	780	600	536	520	553	520	250	319	450	80	872
36	640	620	610	600	640	840	650	585	567	604	567	274	347	491	80	950
39	690	670	660	650	650	920	700	634	614	654	614	291	376	535	80	1030
42	740	730	720	710	661	990	750	683	661	704	661	320	405	565	80	1110
45	790	780	770	760	707	1050	800	732	707	755	707	343	434	606	80	1188
48	860	840	830	820	756	1110	870	780	756	805	756	366	463	646	80	1268
51	920	900	880	860	803	1180	940	829	803	855	803	387	492	687	100	1348
54	1000	980	960	940	850	1240	1020	878	850	905	850	410	520	727	100	1426
60	1070	1050	1030	1010	945	1360	1090	975	945	1006	945	457	580	808	100	1584
66	1180	1155	1140	1110	1040	1500	1200	1074	1040	1105	1039	502	638	900	100	1728

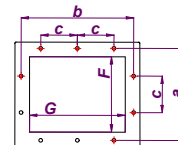


## Flange dimensions

FAN SIZE	a	b	c	d	e	f	g	h	k
15	144	175	80	25	3	1	10	8	238
18	167	204	90	25	3	2	10	8	278
21	190	233	100	25	3	2	10	8	319
24	223	272	100	30	3	2	10	8	369
27	252	307	100	40	3	2	10	12	415
30	275	336	140	40	3	2	10	12	456
33	296	365	100	40	4	3	10	16	496
36	320	393	100	40	4	3	10	16	537
39	337	422	150	40	3	2	10	16	581
42	366	451	150	40	3	3	10	16	611
45	389	480	150	40	3	3	10	16	652
48	412	509	150	40	4	3	10	16	692
51	443	548	150	50	4	3	13	16	743
54	466	576	150	50	4	3	13	16	783
60	513	636	150	50	4	4	13	16	864
66	556	694	160	50	5	4	14	24	956

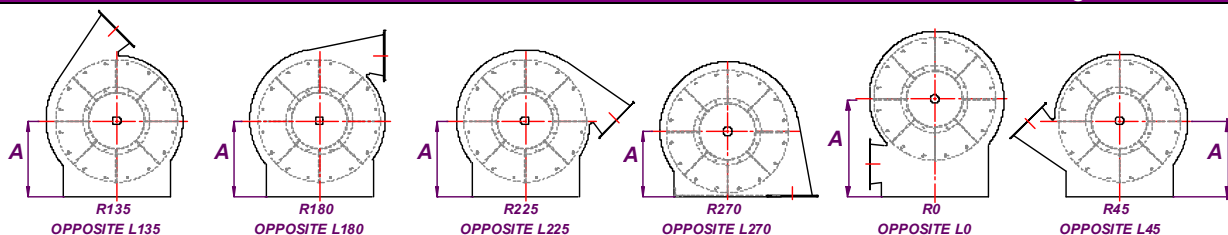


**INLET FLANGE**  
 d - SIZE OF INLET FLANGE  
 h - No. OF HOLES OFF CENTRES  
 g - SIZE OF HOLES  
 k - P.C.D OF HOLES



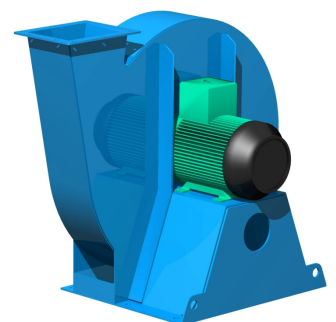
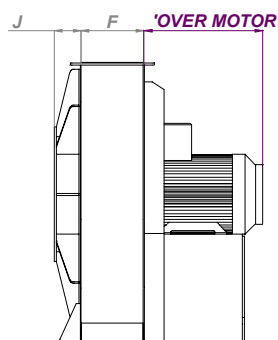
**OUTLET FLANGE**  
 d - SIZE OF OUTLET FLANGE  
 e - No. OF HOLES IN LONG SIDE  
 f - No. OF HOLES IN SHORT SIDE  
 g - SIZE OF HOLES

## 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	D100	310	ADD 50
21	D112	325	ADD 50
24	D132	375	ADD 50
27	D160	495	ADD 70
30	D180	560	ADD 70
33	D200	700	ADD 70
36	D250S	845	ADD 100
39	D250M	890	ADD 100
42	D280S	960	ADD 100

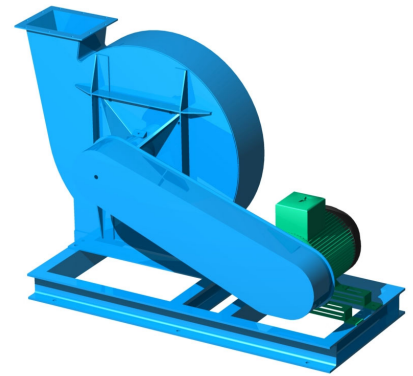
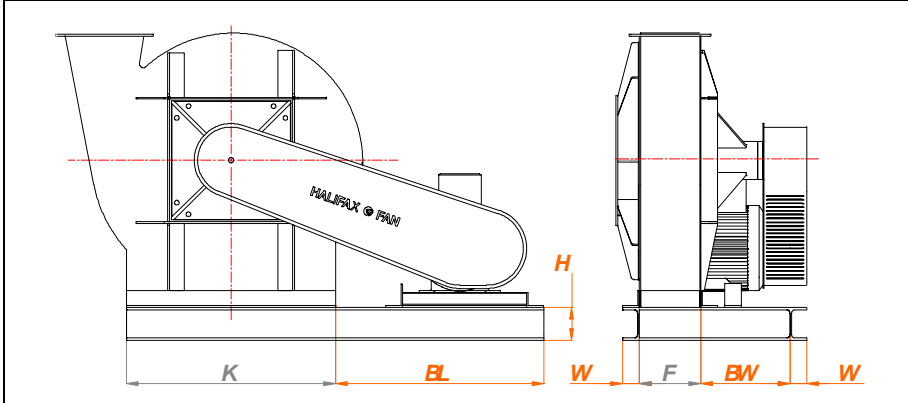


Use these dimensions combined with the Casing dimensions to give overall fan sizes for your chosen driving arrangement

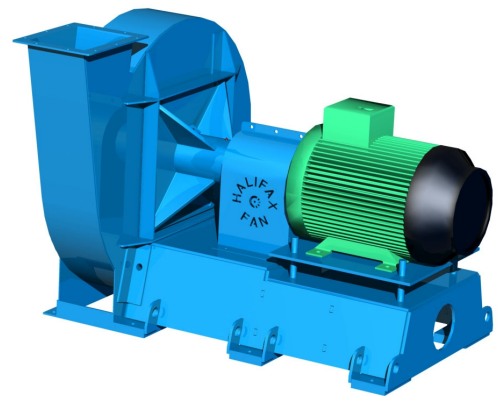
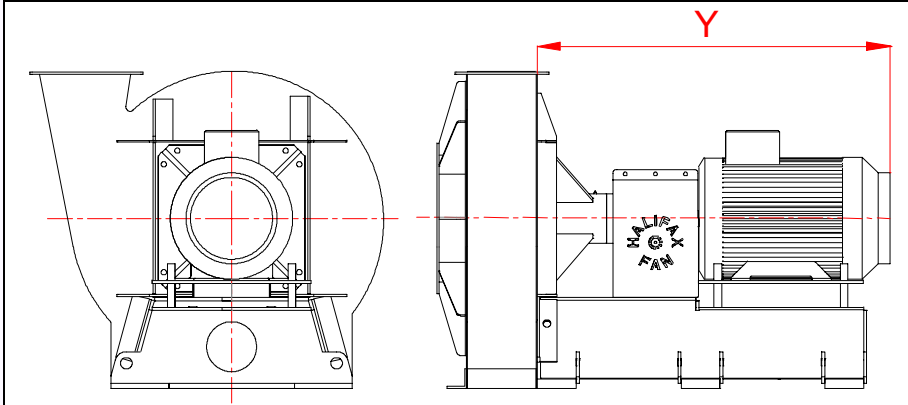
**Typical dimensions for driving arrangements 1,2a,1/3 and 2a/3**

SPECIFICATION			ARRANGEMENT No.1 SPECIFIC DIMENSIONS	ARRANGEMENT 1/3 SPECIFIC	ARRANGEMENT 2A/3 SPECIFIC	HIGH TEMP. EXTRAS				
FAN SIZE	BEARING UNIT		TYPICAL 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	V2		76	38	440	165	480		ADD 40	ADD 75
18	V2				440	165	505		ADD 40	ADD 75
21	V3				615	210	670		ADD 50	ADD 75
24	V4		100	50	615	240	720		ADD 50	ADD 75
27	V5				775	260	905		ADD 50	ADD 75
		M6			D200	1040	450		1275	ADD 70
30 - 33		M7	D225	125	65	1040	500	1430	ADD 70	ADD 100
	V6		D180			775	290	970	ADD 50	ADD 75
		M6	D200			1040	450	1275	ADD 50	ADD 75
36		M7	D225	150	75	1040	490	1430	ADD 70	ADD 100
		M8	D250			1200	540	1620	ADD 70	ADD 100
		M7	D225			1040	490	1430	ADD 70	ADD 100
39 - 45		M8	D250	150	75	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

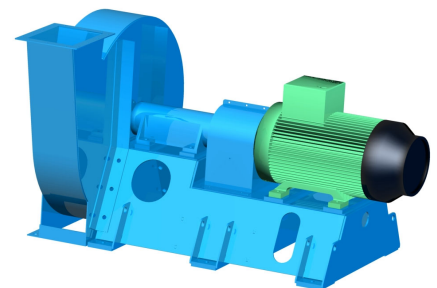
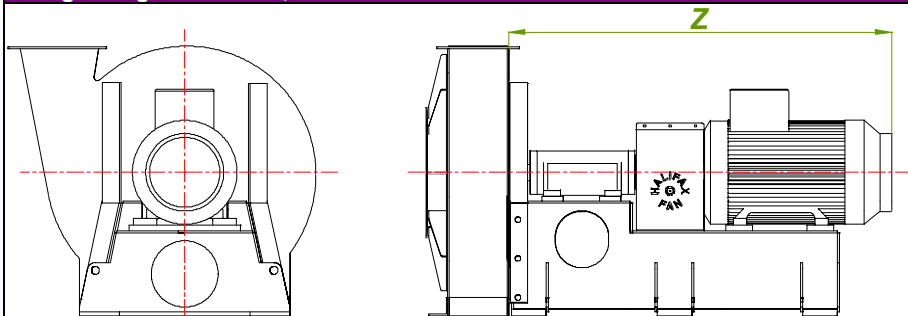
**Driving arrangement No.1 and No.2a**















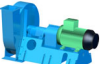



**Driving arrangement No.1/3**





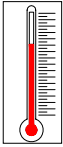
**Driving arrangement No.2a/3**

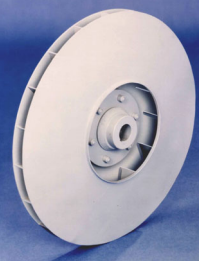


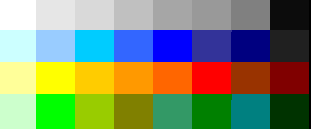
Typical dimensions only, contact Halifax Fan for full arrangement drawing.

		<b>The Mercury fan range</b>	
		<p>The Mercury Fan range is the result of continued development and the demand for higher-pressure fans.</p> <p>The range is available with three different types of impeller design;</p> <p>The Backward Inclined impellers steep angled blade design gives excellent self cleaning properties, enabling application in contaminated airstreams.</p> <p>The Backward Curved design has improved efficiency for clean gas applications and has a non-overloading power characteristic.</p> <p>The Parallel Curved impeller retains all the benefits of the backward curved but is designed for even higher pressures.</p>	<ul style="list-style-type: none"> <li>➤ <b>Developed for higher-pressure applications.</b></li> <li>➤ <b>Good operating efficiency.</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>Parallel Curved design available for higher efficiency at greater pressures.</b></li> </ul>
			
			
			
			
			
			
			

<b>Performance rating</b>	
  <p>FM 00701</p>	<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>

<b>Temperature range</b>	
	<p>Standard Halifax Mercury 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>

<b>Construction details</b>	
	<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 made up of twenty blades and 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>

<b>Finish</b>	
	<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>

**HALIFAX FAN**  
**Leaders in fan technology**

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