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ENGINEERING SUPPLEMENT  
ES-676  
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**INDUSTRIAL DUCT FAN  
ARRANGEMENT 9 V-BELT  
Minimum-Maximum Center-to-Center Distances**

The following tables are general limitations for V-belt drive selections. Because of significant selection limitations, **nyb** requires the use of **nyb** selected drives only. The following guidelines are suitable to aid in selection of constant speed V-belt drives. Special consideration must be given in the selection of non-standard drives. Applications requiring higher service factor, banded belts, adjustable speeds, and speed ratios of 1.5:1 or greater require special consideration. For additional information or specific limitations, consult **nyb**.

1. All dimensions shown are in inches.
2. For belt center distances or specific drive information for motor frame sizes not shown below, consult **nyb**.
3. When selecting belt centers, avoid minimum and maximum extremes to assure ease of mounting and tensioning.
4. Consult the appropriate product bulletin to determine minimum/maximun motor size capability.
5. Because of inner tube space limitations, maximum allowable sheave sizes (O.D.) are as listed in the tables below.
6. Industrial Duct fans use tear shaped belt wells. Width limitations shown are for sheaves at maximum OD limits. Other combinations (smaller OD, wider sheaves) may be acceptable. Consult **nyb**.

**Sheave Limitations for  
Industrial Duct Fans**

Size	Maximum	
	O.D.	Width
12	3.73	2.00
15	3.73	2.00
18	3.73	2.00
24	4.10	2.39
27	4.10	2.39
30	4.10	2.39
34	9.10	2.50
36	9.85	2.56
42	9.85	2.56
48	9.85	2.56

**Belt Center Distances**

Size	Motor Frame Size							
	56	143T		182T		213T		254T
		145T	145T	184T	215T	256T		
12	13.63 - 15.88	13.63	--	15.88	--	--	--	--
15	15.63 - 17.88	15.63	--	17.88	--	--	--	--
18	16.75 - 19.00	16.75	--	19.00	17.75	--	20.00	--
24	19.75 - 22.00	19.75	--	22.00	20.75	--	23.00	21.50 -- 23.75
27	21.50 - 23.75	21.50	--	23.75	22.50	--	24.75	23.25 -- 25.50
30	--	23.25	--	25.50	24.25	--	26.50	25.00 -- 27.25
34	--	25.00	--	27.25	26.00	--	28.25	26.75 -- 29.00
36	--	25.50	--	27.75	26.50	--	28.75	27.25 -- 29.50
42	--	28.88	--	31.13	29.88	--	32.13	30.63 -- 32.88
48	--	--		33.00	--	35.25	33.75	36.00 -- 34.75