The type VC element assembly is specifically designed and built for severe clutch or brake applications in which large inertia loads and sustained slippage would normally result in loss of torque and reduced operating life.

VC design and construction is different from the CB and CM elements in that the torque is transmitted by torque bars rather than the sidewalls of the actuating tube. The loose actuating tube is contained within a housing formed by a rim and two side plates, and is replaceable. The torque bars, which are held in position by the side plates, pass through cavities in the backing plates of the friction shoes. Pressurizing the actuating tube forces the friction shoes to engage around a cylindrical drum. Leaf springs in the torque bar cavities of the backing plates retract the friction shoes when the actuating tube pressure is released.

Element torque capacity is dependent upon the applied pressure and rotating speed. Catalog ratings are given at 75 psi (5,2 bar) and zero rpm. Maximum recommended pressure is 125 psi (8,6 bar). Adjustment for pressure and speed is explained under Selection Procedure.

VC elements are available in 22 sizes which are identified by the drum diameter in inches on which they constrict and the width in inches of its friction lining. For a given drum diameter it is possible to have two different lining widths. For this reason, the elements are grouped by lining width into a narrow series and a wide series. As an example, the narrow series 20VC600 and the wide series 20VC1000 both constrict on a 20 inch diameter drum. But, the narrow unit has a lining width of 6 inches, and the wide unit has a lining width of 10 inches. The smallest VC element will constrict on a 11.5 inch (292 mm) diameter drum and the largest on a 66 inch (1676 mm) diameter drum.

Two elements of a narrow series can be bolted together to form a dual element having twice the torque capacity of a single element. With the exception of the 14VC1000 element, the wide series elements can also be dualed. The large drum hub diameter and small drum diameter restricts the radial space available for mechanically connecting the drums to the hub and makes dualing the 14VC1000 elements impractical.

The VC design offers the following features in addition to the constricting features described earlier in this section.

Ventilated Construction

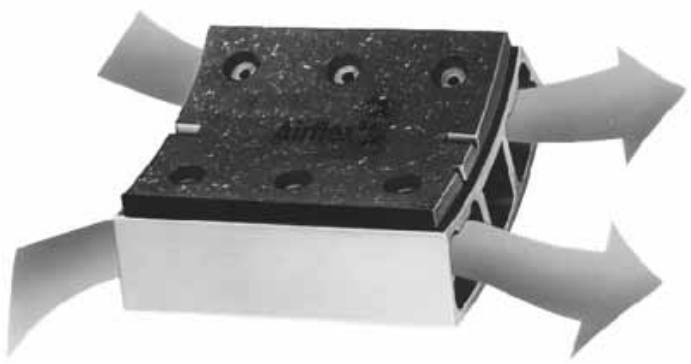
Friction shoe backing plates have large air passages through their entire length. This construction coupled with scalloped side plates allows cooling air to flow through the element. In addition, the large exposed inside diameter assures the coolest possible operation. None of the heat is generated deep in the element's internal parts where it can be trapped. The open construction assures rapid heat dissipation.

Serviceability

The VC clutch can be dismantled on the shaft to gain access to its component parts. All parts are available as replacement parts.

A limited number of element sizes are available in a split configuration. They are used in applications having limited axial access for element maintenance.

The following pages give additional descriptive information, selection procedures and common clutch and brake arrangements for the complete VC product line.

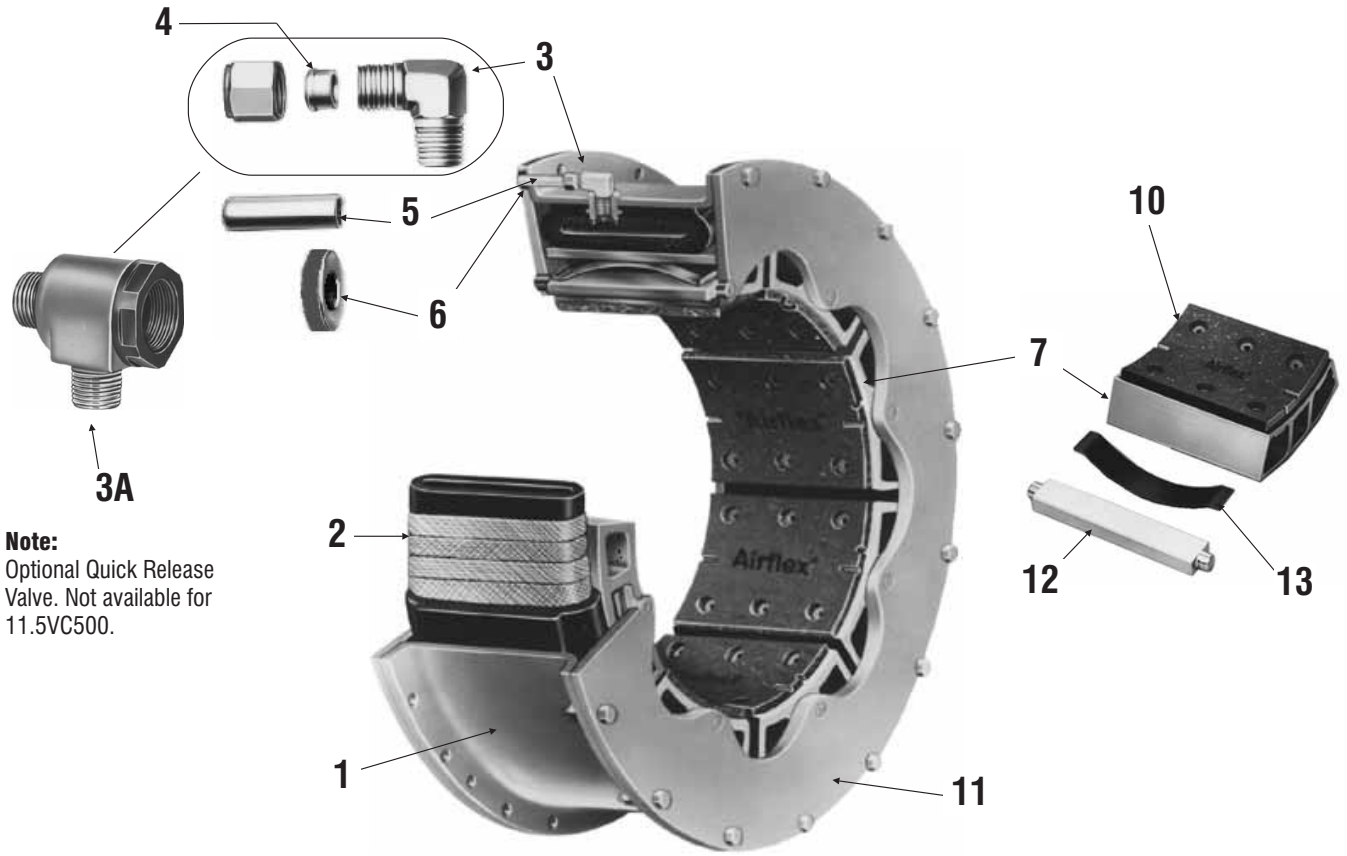


Where Used:

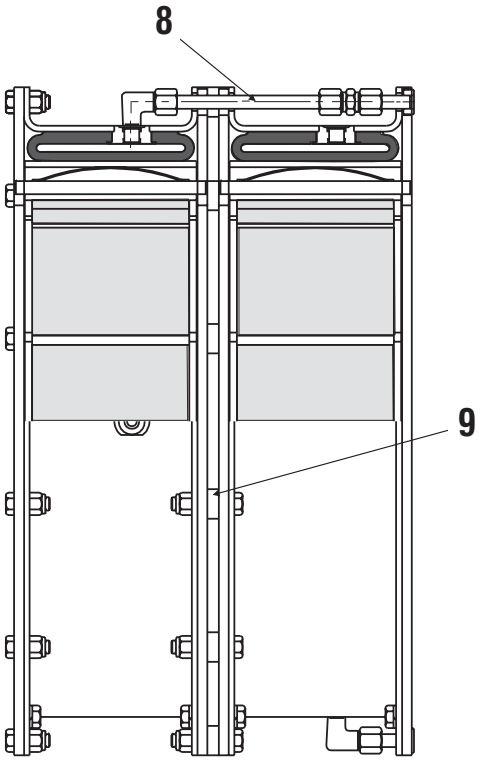
- Grinding Mills
- Marine Propulsion
- Metal Forming Machinery
- Oil Field Machinery

Narrow Sizes	Torque Rating	
	lb·in @ 75 psi	N·m @ 5, 2 bar
11.5VC500	27000	3050
14VC500	39200	4430
16VC600	65000	7350
20VC600	93000	10500
24VC650	135000	15300
28VC650	182000	20600
33VC650	255000	28800
37VC650	320000	36200
42VC650	380000	42900

Wide Sizes	Torque Rating	
	lb·in @ 75 psi	N·m @ 5, 2 bar
14VC1000	85000	9610
16VC1000	114000	12900
20VC1000	161000	18200
24VC1000	219000	24700
28VC1000	296000	33400
32VC1000	415000	46900
38VC1200	680000	76800
42VC1200	819000	92500
46VC1200	950000	107000
52VC1200	1215000	137000
51VC1600	1610000	182000
60VC1600	2183000	247000
66VC1600	2800000	316000



Note:
Optional Quick Release Valve. Not available for 11.5VC500.



Item	Component Description
1	Rim
2	Tube (with valve stem snap rings where required)
3	Elbow Assembly
3A	Optional - Quick Release Valve Assembly
4	Compression Ring (included with items 3 & 3A)
5	Air Connection Tube
6	Air Connection Gasket
7	Friction Shoe Assembly
8	Air Tube Group (Dual Mounted)
9	Spacer Group (Dual Mounted)
10	Replacement Friction Lining & Fastener Kit
11	Side Plate (2 required)
12	Torque Bar
13	Release Spring
7, 12, & 13	Friction Shoe, Torque Bar & Spring Kit

An alpha suffix is added to the basic element part number to completely describe the element configuration.

142128 C

Basic Part No — Configuration.

The basic element part number is shown on the element catalog pages. Alphas for the more common element configurations are shown on this page. The element part number used in the above example identifies a dual 42VC1200 element equipped with standard friction linings and four side connections.

Alpha Suffixes for Single VC Elements

Number of Valves, Side Connections or QRV's	Type of Lining	Alpha Suffixes		
		Valves Only	With Side Connections	With QRV's
1	Standard	-	HJ	HM
1	Cork	-	LR	MR
2	Standard	HA	HP	HN
2	Cork	HB	HS	HK
4	Standard	HA	HC	HE
4	Cork	HB	HD	HF

Alpha Suffixes for Dual VC Elements

Number of Valves, Side Connections or QRV's	Type of Lining	Alpha Suffixes		
		Valves Only	With Side Connections	With QRV's
2	Standard	-	none	E
2	Cork	AA	A	AK
4	Standard	F	C	D
4	Cork	AA	X	J

English		lb•in @ 75 psi	rpm	psi/rpm²	lb•ft²	lb	in²	inches		in³	inches
11.5VC500	142639	27000	1800	23 E-06	43	96	166	0.32	0.16	70	11.41
14VC500	143829	39200	1500	28 E-06	78	128	205	0.32	0.16	95	13.91
16VC600	142640	65000	1400	29 E-06	115	151	283	0.32	0.16	120	15.91
20VC600	142641	93000	1200	40 E-06	193	179	380	0.32	0.16	140	19.88
24VC650	142642	135000	1050	49 E-06	369	246	466	0.44	0.16	200	23.88
28VC650	142643	182000	1000	58 E-06	537	280	548	0.44	0.16	270	27.81
33VC650	142644	255000	900	74 E-06	1083	392	643	0.57	0.28	360	32.81
37VC650	142645	320000	800	90 E-06	1400	433	720	0.57	0.28	400	36.81
42VC650	142647	380000	800	95 E-06	1990	485	822	0.57	0.28	440	41.81

Size	❶ Part Number	M_r ❷ Torque Rating	❻ Maximum Speed	C_s Centrifugal Loss	Wk^2 J	Weight Mass	Friction Area	Friction Lining Thickness New	Friction Lining Thickness Worn	❼ Air Tube Cavity	Minimum Drum Diameter
11.5VC500	142639	3050	1800	1,59 E-06	1,81	43	1071	8	4	1,15	290
14VC500	143829	4430	1500	1,93 E-06	3,28	58	1322	8	4	1,56	353
16VC600	142640	7350	1400	2,00 E-06	4,83	68	1825	8	4	1,97	404
20VC600	142641	10500	1200	2,76 E-06	8,11	81	2451	8	4	2,30	505
24VC650	142642	15300	1050	3,38 E-06	15,50	111	3006	11	4	3,28	607
28VC650	142643	20600	1000	4,00 E-06	22,55	127	3535	11	4	4,43	706
33VC650	142644	28800	900	5,11 E-06	45,49	178	4147	14	7	5,90	833
37VC650	142645	36200	800	6,21 E-06	58,80	196	4644	14	7	6,56	935
42VC650	142647	42900	800	6,56 E-06	83,58	220	5302	14	7	7,22	1062
SI		N•m @ 5,2 bar	rpm	bar/rpm²	kg•m²	kg	cm²	millimeters		dm³	millimeters

Notes:

❶ Refers to basic part number only. When ordering, the number of air inlets and type of connection must be specified.

❷ Dynamic torque shown, static torque approximately 25% greater. Torque in each application is dependent upon air pressure and speed.

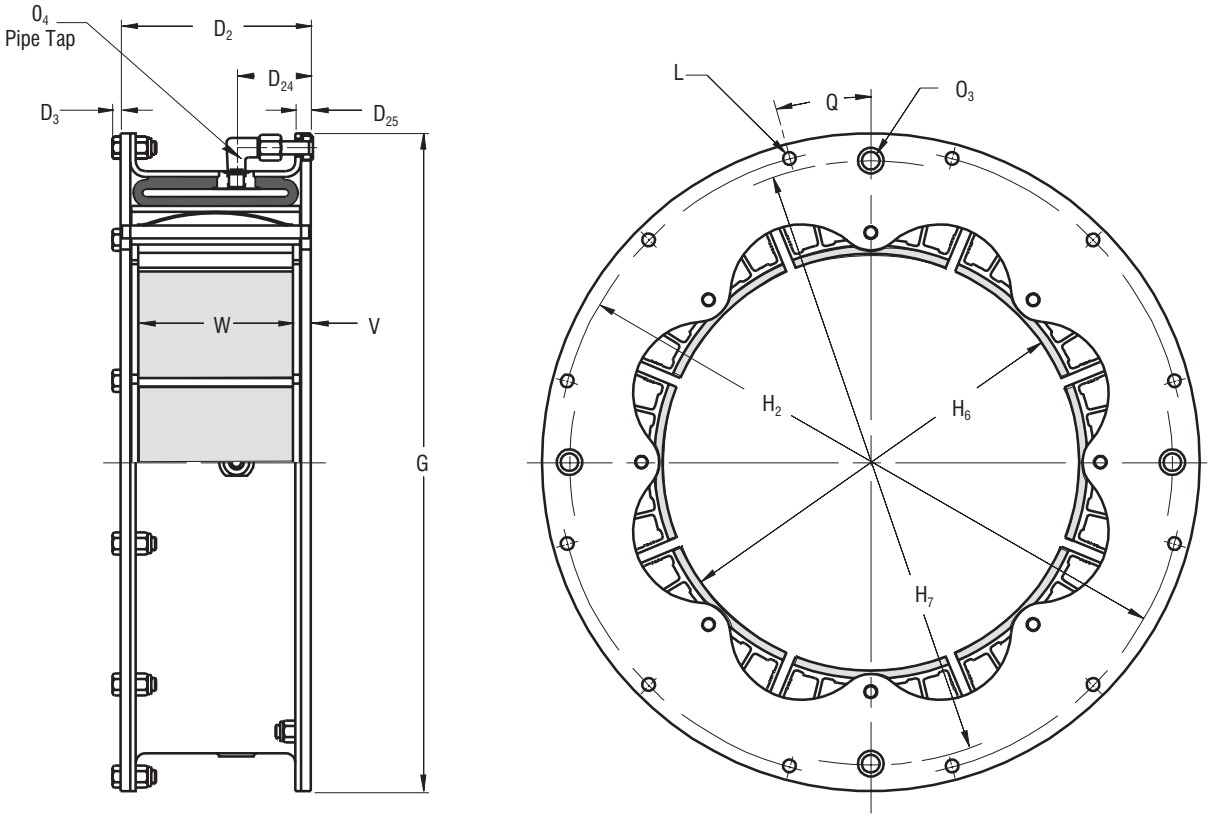
❸ Tolerance for sizes:
11.5 thru 20 +0.000/-0.005 in (+0,00/-0,13 mm)
24 thru 28 +0.000/-0.008 in (+0,00/-0,20 mm)
33 thru 42 +0.000/-0.010 in (+0,00/-0,25 mm)

❹ Tolerance +0.005/-0.000 in (+0,13/-0,00 mm)

❺ American National Pipe Thread.
Size 11.5 available with one or two inlets. All other sizes have four inlets.

❻ Maximum rpm is dependent upon operating conditions and varies for each application. Consult factory for applications exceeding these speeds.

❼ Drum contact with worn shoes.



English		lb·in @ 75 psi	Dimensions in inches																
11.5VC500	142639	27000	6.13	0.23	2.38	0.38	19.625	18.875	11.63	18.88	16	0.375	0.31	2	3/8-18	11.25	0.56	8	5.00
14VC500	143829	39200	6.13	0.31	2.88	0.58	23.500	22.500	14.22	22.25	8	0.500	0.38	4	3/8-18	22.50	0.56	8	5.00
16VC600	142640	65000	7.38	0.31	2.88	0.59	25.500	24.375	16.22	24.38	12	0.500	0.38	4	3/8-18	15.00	0.69	8	6.00
20VC600	142641	93000	7.38	0.31	2.88	0.59	29.500	28.375	20.22	28.38	12	0.500	0.38	4	3/8-18	15.00	0.69	10	6.00
24VC650	142642	135000	7.69	0.39	2.88	0.63	34.000	32.750	24.22	32.50	16	0.625	0.50	4	½-14	11.25	0.59	12	6.50
28VC650	142643	182000	7.69	0.39	2.88	0.63	38.000	36.750	28.22	36.50	16	0.625	0.50	4	½-14	11.25	0.59	14	6.50
33VC650	142644	255000	7.69	0.47	3.13	0.63	44.625	43.125	33.22	43.25	18	0.750	0.63	4	3/4-14	15.00	0.59	16	6.50
37VC650	142645	320000	7.69	0.47	3.13	0.69	48.625	47.125	37.22	47.25	20	0.750	0.63	4	3/4-14	9.00	0.59	18	6.50
42VC650	142647	380000	7.69	0.47	3.13	0.66	53.625	52.125	42.22	52.25	24	0.750	0.63	4	3/4-14	7.50	0.59	20	6.50
Size	**❶ Part Number**	**❷ M, Torque Rating**	D_2	D_3	D_{24}	D_{25}	**❸ G**	H_2	H_6	H_7	**No. L ❹**	**Dia. L ❹**	O_3	**No. O_4 ❺**	**Size O_4 ❺**	**Q (Deg)**	**V**	**No. W**	**Width W**
11.5VC500	142639	3050	156	6	60	10	498,5	479,4	295	479	16	9,5	8	2	3/8-18	11,25	14	8	127
14VC500	143829	4430	156	8	73	15	596,9	571,5	361	565	8	12,7	10	4	3/8-18	22,50	14	8	127
16VC600	142640	7350	187	8	73	15	647,7	619,1	412	619	12	12,7	10	4	3/8-18	15,00	17	8	152
20VC600	142641	10500	187	8	73	15	749,3	720,7	514	721	12	12,7	10	4	3/8-18	15,00	17	10	152
24VC650	142642	15300	195	10	73	16	863,6	831,9	615	826	16	15,9	13	4	½-14	11,25	15	12	165
28VC650	142643	20600	195	10	73	16	965,2	933,5	717	927	16	15,9	13	4	½-14	11,25	15	14	165
33VC650	142644	28800	195	12	79	16	1133,5	1095,4	844	1099	18	19,1	16	4	3/4-14	15,00	15	16	165
37VC650	142645	36200	195	12	79	17	1235,1	1197,0	945	1200	20	19,1	16	4	3/4-14	9,00	15	18	165
42VC650	142647	42900	195	12	79	17	1362,1	1324,0	1072	1327	24	19,1	16	4	3/4-14	7,50	15	20	165
SI		N·m @ 5,2 bar	Dimensions in millimeters																

English		lb·in @ 75 psi	rpm	psi/rpm²	lb·ft²	lb	in²	inches		in³	inches
11.5VC500	142112	54000	1800	23 E-06	86	197	332	0.32	0.16	140	11.41
14VC500	142114	78400	1500	28 E-06	156	258	410	0.32	0.16	190	13.91
16VC600	142115	130000	1400	29 E-06	230	307	566	0.32	0.16	240	15.91
20VC600	142116	186000	1200	40 E-06	386	363	760	0.32	0.16	280	19.88
24VC650	142117	270000	1050	49 E-06	738	497	932	0.44	0.16	400	23.88
28VC650	142118	364000	1000	58 E-06	1074	565	1096	0.44	0.16	540	27.81
33VC650	142119	510000	900	74 E-06	2166	784	1286	0.57	0.28	720	32.81
37VC650	142120	640000	800	90 E-06	2800	871	1440	0.57	0.28	800	36.81
42VC650	142121	760000	800	95 E-06	3980	980	1644	0.57	0.28	880	41.81

Size	Part ❶ Number	M_r ❷ Torque Rating	❻ Maximum Speed	C_s Centrifugal Loss	Wk^2 J	Weight Mass	Friction Area	Friction Lining Thickness New	Friction Lining Thickness Worn	❼ Air Tube Cavity	Minimum Drum Diameter
11.5VC500	142112	6100	1800	1,59 E-06	3,61	89	2141	8	4	2,30	290
14VC500	142114	8860	1500	1,93 E-06	6,55	117	2645	8	4	3,12	353
16VC600	142115	14700	1400	2,00 E-06	9,66	139	3651	8	4	3,94	404
20VC600	142116	21000	1200	2,76 E-06	16,21	164	4902	8	4	4,59	505
24VC650	142117	30500	1050	3,38 E-06	31,00	225	6011	11	4	6,56	607
28VC650	142118	41100	1000	4,00 E-06	45,11	256	7069	11	4	8,86	706
33VC650	142119	57600	900	5,11 E-06	90,97	355	8295	14	7	11,8	833
37VC650	142120	72300	800	6,21 E-06	117,6	395	9288	14	7	13,1	935
42VC650	142121	85900	800	6,56 E-06	167,2	444	10604	14	7	14,4	1062
SI		N·m @ 5,2 bar	rpm	bar/rpm²	kg·m²	kg	cm²	millimeters		dm³	millimeters

Notes:

❶ Refers to basic part number only. When ordering, the number of air inlets and type of connection must be specified.

❷ Dynamic torque shown, static torque approximately 25% greater. Torque in each application is dependent upon air pressure and speed.

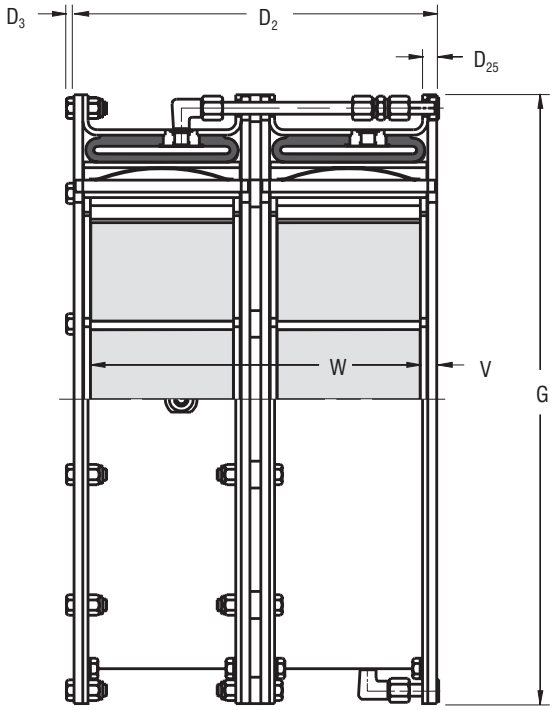
❸ Tolerance for sizes:
11.5 thru 20 +0.000/-0.005 in (+0,00/-0,13 mm)
24 thru 28 +0.000/-0.008 in (+0,00/-0,20 mm)
33 thru 42 +0.000/-0.010 in (+0,00/-0,25 mm)

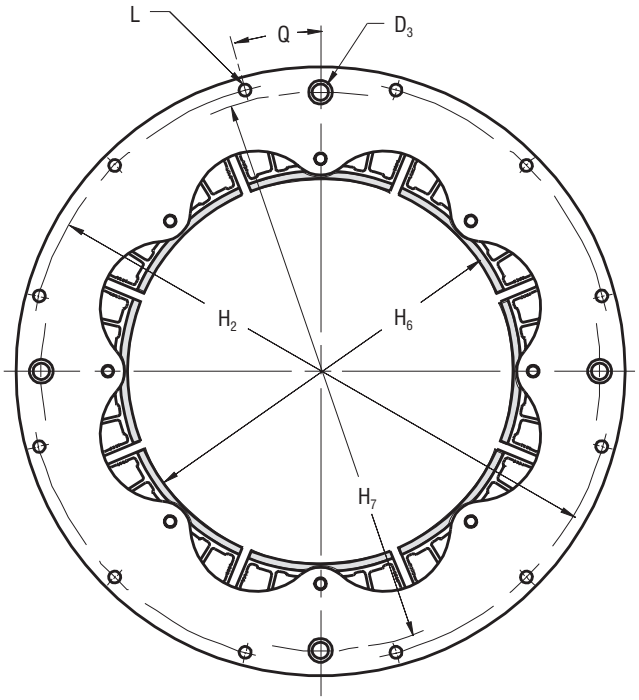
❹ Tolerance +0.005/-0.000 in (+0,13/-0,00 mm)

❺ Size 11.5 only available with two inlets. All other sizes have either two or four inlets.

❻ Maximum rpm is dependent upon operating conditions and varies for each application. Consult factory for applications exceeding these speeds.

❼ Drum contact with worn shoes.





English		lb·in @ 75 psi	Dimensions in inches														
11.5VC500	142112	54000	12.75	0.23	0.56	19.625	18.875	11.63	18.88	16	0.375	2	0.31	11.25	0.56	16	11.63
14VC500	142114	78400	12.69	0.31	0.56	23.500	22.500	14.22	22.25	8	0.500	4	0.38	22.50	0.56	16	11.57
16VC600	142115	130000	15.19	0.31	0.56	25.500	24.375	16.22	24.38	12	0.500	4	0.38	15.00	0.69	16	13.81
20VC600	142116	186000	15.19	0.31	0.56	29.500	28.375	20.22	28.38	12	0.500	4	0.38	15.00	0.69	20	13.81
24VC650	142117	270000	15.94	0.39	0.63	34.000	32.750	24.22	32.50	16	0.625	4	0.50	11.25	0.59	24	14.75
28VC650	142118	364000	15.94	0.39	0.63	38.000	36.750	28.22	36.50	16	0.625	4	0.50	11.25	0.59	28	14.75
33VC650	142119	510000	15.94	0.47	0.69	44.625	43.125	33.22	43.25	18	0.750	4	0.63	15.00	0.59	32	14.75
37VC650	142120	640000	15.94	0.47	0.69	48.625	47.125	37.22	47.25	20	0.750	4	0.63	9.00	0.59	36	14.75
42VC650	142121	760000	15.94	0.47	0.69	53.625	52.125	42.22	52.25	24	0.750	4	0.63	7.50	0.59	40	14.75

Size	Part Number ❶	M, Torque Rating ❷	D_2	D_3	D_{25}	G ❸	H_2	H_6	H_7	No. L ❹	Dia. L ❹	No. O_3 ❺	Size O_3 ❺	Q (Deg)	V	No. W	Width W
										No.	Dia.	No.	Size			No.	Width
11.5VC500	142112	6100	324	6	14	498,5	479,4	295	479	16	9,5	2	8	11,25	14	16	295
14VC500	142114	8860	322	8	14	596,9	571,5	361	565	8	12,7	4	10	22,50	14	16	294
16VC600	142115	14700	386	8	14	647,7	619,1	412	619	12	12,7	4	10	15,00	17	16	351
20VC600	142116	21000	386	8	14	749,3	720,7	514	721	12	12,7	4	10	15,00	17	20	351
24VC650	142117	30500	405	10	16	863,6	831,9	615	826	16	15,9	4	13	11,25	15	24	375
28VC650	142118	41100	405	10	16	965,2	933,5	717	927	16	15,9	4	13	11,25	15	28	375
33VC650	142119	57600	405	12	18	1133,5	1095,4	844	1099	18	19,1	4	16	15,00	15	32	375
37VC650	142120	72300	405	12	18	1235,1	1197,0	945	1200	20	19,1	4	16	9,00	15	36	375
42VC650	142121	85900	405	12	18	1362,1	1324,0	1072	1327	24	19,1	4	16	7,50	15	40	375

SI		N·m @ 5,2 bar	Dimensions in millimeters														

English		lb in @ 75 psi	rpm	psi/rpm²	lb·ft²	lb	in²	inches		in³	inches
14VC1000	142838	85000	1800	22 E-06	127	213	350	0.32	0.16	185	13.91
16VC1000	142821	114000	1400	27 E-06	212	240	470	0.32	0.16	255	15.91
20VC1000	142832	161000	1300	37 E-06	309	282	635	0.32	0.16	310	19.87
24VC1000	142675	219000	1250	46 E-06	552	378	720	0.44	0.16	465	23.87
28VC1000	142674	296000	1100	55 E-06	826	431	840	0.44	0.16	530	27.81
32VC1000	142673	415000	1050	63 E-06	1570	624	960	0.57	0.38	600	31.81
38VC1200	142739	680000	740	82 E-06	2330	684	1360	0.57	0.38	755	37.81
42VC1200	142677	819000	670	86 E-06	3670	895	1500	0.57	0.38	850	41.75
46VC1200	142671	950000	600	108 E-06	4830	980	1410	0.68	0.38	1205	45.75
52VC1200	142841	1215000	550	127 E-06	7285	1310	1590	0.68	0.38	1510	51.75
51VC1600	142835	1610000	550	125 E-06	10580	1830	2380	0.66	0.30	2000	50.75
60VC1600	142915	2183000	520	145 E-06	20532	2374	2800	0.66	0.30	2350	59.75
66VC1600	142097	2800000	480	186 E-06	24850	2630	3080	0.66	0.30	1960	65.75

Size	Part Number ❶	M_r Torque Rating ❷	Maximum Speed ❻	C_s Centrifugal Loss	Wk^2 J	Weight Mass	Friction Area	Friction Lining Thickness New	Friction Lining Thickness Worn	Air Tube Cavity ❼	Minimum Drum Diameter
14VC1000	142838	9610	1800	1,52 E-06	5,33	96	2258	8	4	3,03	353
16VC1000	142821	12900	1400	1,86 E-06	8,90	109	3032	8	4	4,18	404
20VC1000	142832	18200	1300	2,55 E-06	12,98	128	4096	8	4	5,08	505
24VC1000	142675	24700	1250	3,17 E-06	23,18	171	4644	11	4	7,63	606
28VC1000	142674	33400	1100	3,80 E-06	34,69	195	5418	11	4	8,69	706
32VC1000	142673	46900	1050	4,35 E-06	65,94	283	6192	14	10	9,84	808
38VC1200	142739	76800	740	5,66 E-06	97,86	310	8772	14	10	12,4	960
42VC1200	142677	92500	670	5,93 E-06	154,1	405	9675	14	10	13,9	1060
46VC1200	142671	107000	600	7,45 E-06	202,9	444	9097	17	10	19,8	1162
52VC1200	142841	137000	550	8,76 E-06	306,0	594	10256	17	10	24,8	1314
51VC1600	142835	182000	550	8,63 E-06	444,4	830	15351	17	8	32,8	1289
60VC1600	142915	247000	520	10,01 E-06	862,3	1077	18060	17	8	38,5	1518
66VC1600	142097	316000	480	12,83 E-06	1044	1191	19866	17	8	32,1	1670
SI		N·m @ 5,2 bar	rpm	bar/rpm²	kg·m²	kg	cm²	millimeters		dm³	millimeters

Notes:

❶ Refers to basic part number only. When ordering, the number of air inlets and type of connection must be specified.

❷ Dynamic torque shown, static torque approximately 25% greater. Torque in each application is dependent upon air pressure and speed.

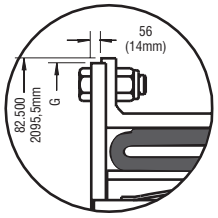
❸ Tolerance for sizes:
14 thru 20 +0.000/-0.005 in (+0,00/-0,13 mm)
24 thru 28 +0.000/-0.008 in (+0,00/-0,20 mm)
32 thru 60 +0.000/-0.010 in (+0,00/-0,25 mm)
66 +0.000/-0.005 in (+0,00/-0,13 mm)

❹ Tolerance +0.005/-0.000 in (+0,13/-0,00 mm)

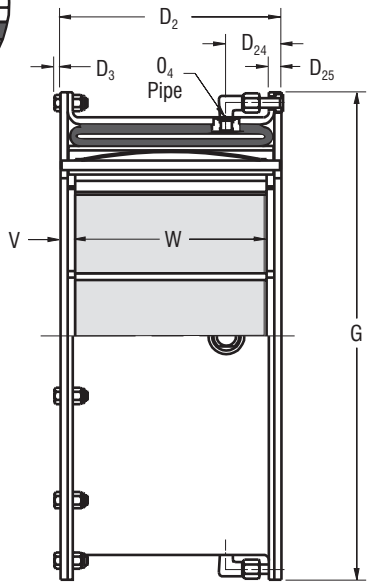
❺ American National Pipe Thread

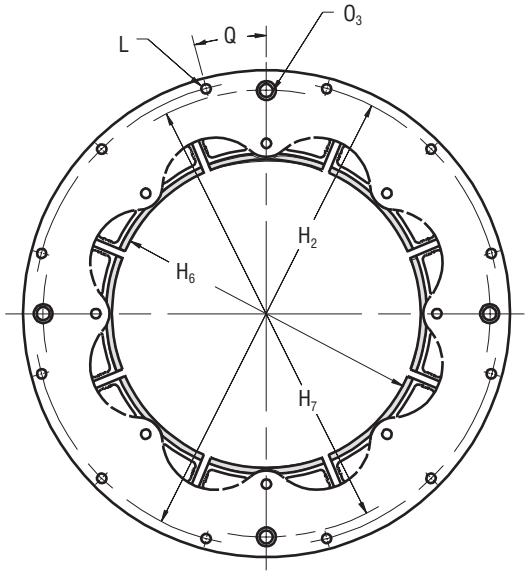
❻ Maximum rpm is dependent upon operating conditions and varies for each application. Consult factory for applications exceeding these speeds.

❼ Drum contact with worn shoes.



Construction for size 66 only





English		lb·in @ 75 psi	Dimensions in inches																
14VC1000	142838	85000	11.56	0.31	2.88	0.63	23.500	22.500	14.22	22.25	8	0.500	0.38	4	3/8-18	22.50	0.78	8	10
16VC1000	142821	114000	11.56	0.31	2.88	0.63	25.500	24.375	16.22	24.38	12	0.500	0.38	4	3/8-18	15.00	0.78	8	10
20VC1000	142832	161000	11.56	0.31	2.88	0.63	29.500	28.375	20.22	28.38	12	0.500	0.38	4	3/8-18	15.00	0.78	8	10
24VC1000	142675	219000	11.56	0.39	2.88	0.63	34.000	32.750	24.22	32.50	16	0.625	0.50	4	½-14	11.25	0.78	10	10
28VC1000	142674	296000	11.56	0.39	2.88	0.63	38.000	36.750	28.22	36.50	16	0.625	0.50	4	½-14	11.25	0.78	10	10
32VC1000	142673	415000	11.63	0.39	2.88	0.63	43.875	42.625	32.22	42.13	24	0.625	0.50	4	½-14	7.50	0.81	12	10
38VC1200	142739	680000	13.75	0.47	3.13	0.69	49.375	47.875	38.22	48.00	20	0.750	0.63	4	3/4-14	9.00	0.88	12	12
42VC1200	142677	819000	13.75	0.47	3.13	0.66	53.625	52.125	42.22	52.25	24	0.750	0.63	4	3/4-14	7.50	0.88	14	12
46VC1200	142671	950000	13.75	0.55	4.88	0.78	60.250	58.500	46.25	57.50	24	0.875	0.63	4	3/4-14	7.50	0.88	16	12
52VC1200	142841	1215000	14.25	0.55	7.13	1.13	67.000	65.500	52.25	65.00	32	0.875	0.88	4	1-11 ½	5.63	1.13	18	12
51VC1600	142835	1610000	18.25	0.55	9.13	1.13	67.000	65.500	51.25	65.00	32	0.875	0.88	4	1-11 ½	5.63	1.13	18	16
60VC1600	142915	2183000	18.50	0.61	9.25	1.38	77.000	75.000	60.43	74.25	36	1.000	0.88	4	1-11 ½	5.00	1.25	20	16
66VC1600	142097	2800000	18.50	0.78	9.25	1.38	82.123	79.625	66.22	78.38	40	1.312	0.88	4	1-11 ½	5.00	1.25	22	16
Size	**Part Number ❶**	**M, ❷ Torque Rating**	**D_2**	**D_3**	**D_{24}**	**D_{25}**	**❸ G**	**H_2**	**H_6**	**H_7**	**L ❹ No.**	**L ❹ Dia.**	**O_3**	**O_4 ❺ No.**	**O_4 ❺ Size**	**Q (Deg)**	**V**	**W No.**	**W Width**
											No.	**Dia.**		**No.**	**Size**			**No.**	**Width**
14VC1000	142838	9610	294	8	73	16	596,9	571,5	361	565	8	12,7	10	4	3/8-18	22,50	20	8	254
16VC1000	142821	12900	294	8	73	16	647,7	619,1	412	619	12	12,7	10	4	3/8-18	15,00	20	8	254
20VC1000	142832	18200	294	8	73	16	749,3	720,7	514	721	12	12,7	10	4	3/8-18	15,00	20	8	254
24VC1000	142675	24700	294	10	73	16	863,6	831,9	615	826	16	15,9	13	4	½-14	11,25	20	10	254
28VC1000	142674	33400	294	10	73	16	965,2	933,5	717	927	16	15,9	13	4	½-14	11,25	20	10	254
32VC1000	142673	46900	295	10	73	16	1114,4	1082,7	818	1070	24	15,9	13	4	½-14	7,50	21	12	254
38VC1200	142739	76800	349	12	79	18	1254,1	1216,0	971	1219	20	19,1	16	4	3/4-14	9,00	22	12	305
42VC1200	142677	92500	349	12	79	17	1362,1	1324,0	1072	1327	24	19,1	16	4	3/4-14	7,50	22	14	305
46VC1200	142671	107000	349	14	124	20	1530,4	1485,9	1175	1461	24	22,2	16	4	3/4-14	7,50	22	16	305
52VC1200	142841	137000	362	14	181	29	1701,8	1663,7	1327	1651	32	22,2	22	4	1-11 ½	5,63	29	18	305
51VC1600	142835	182000	464	14	232	29	1701,8	1663,7	1302	1651	32	22,2	22	4	1-11 ½	5,63	29	18	406
60VC1600	142915	247000	470	15	235	35	1955,8	1905,0	1535	1886	36	25,4	22	4	1-11 ½	5,00	32	20	406
66VC1600	142097	316000	470	20	235	35	2085,9	2022,5	1682	1991	40	33,3	22	4	1-11 ½	5,00	32	22	406
SI		N·m @ 5,2 bar	Dimensions in millimeters																

English		lb·in @ 75 psi	rpm	psi/rpm²	lb·ft²	lb	in²	inches		in³	inches
16VC1000	142122	228000	1400	27 E-06	380	430	940	0.32	0.16	510	15.91
20VC1000	142123	322000	1300	37 E-06	618	568	1270	0.32	0.16	620	19.87
24VC1000	142124	438000	1250	46 E-06	1104	756	1440	0.44	0.16	930	23.87
28VC1000	142125	592000	1100	55 E-06	1652	862	1680	0.44	0.16	1060	27.81
32VC1000	142126	830000	1050	63 E-06	3140	1248	1920	0.57	0.38	1200	31.81
38VC1200	142127	1360000	740	82 E-06	4660	1368	2720	0.57	0.38	1510	37.81
42VC1200	142128	1638000	670	86 E-06	7340	1790	3000	0.57	0.38	1700	41.75
46VC1200	142129	1900000	600	108 E-06	9660	1960	3280	0.68	0.38	2410	45.75
52VC1200	142131	2430000	550	127 E-06	14570	2384	3180	0.68	0.38	3020	51.75
51VC1600	142130	3220000	550	125 E-06	21160	3868	4760	0.66	0.30	4000	50.75
60VC1600	142132	4366000	520	145 E-06	41064	4900	5600	0.66	0.30	4700	59.75
66VC1600	142198	5600000	480	186 E-06	49700	5260	6160	0.66	0.30	3920	65.75

Size	❶ Part Number	❷ M_t Torque Rating	❸ Maximum Speed	C_s Centrifugal Loss	Wk^2 J	Weight Mass	Friction Area	Friction lining Thickness New	Friction lining Thickness Worn	Air ❼ Tube Cavity	Minimum Drum Diameter
16VC1000	142122	25800	1400	1,86 E-06	15,96	195	6063	8	4	8,36	404
20VC1000	142123	36400	1300	2,55 E-06	25,96	257	8192	8	4	10,2	505
24VC1000	142124	49500	1250	3,17 E-06	46,37	342	9288	11	4	15,3	606
28VC1000	142125	66900	1100	3,80 E-06	69,38	390	10836	11	4	17,4	706
32VC1000	142126	93800	1050	4,35 E-06	131,9	565	12384	14	10	19,7	808
38VC1200	142127	154000	740	5,66 E-06	195,7	620	17544	14	10	24,8	960
42VC1200	142128	185000	670	5,93 E-06	308,3	811	19350	14	10	27,9	1060
46VC1200	142129	215000	600	7,45 E-06	405,7	888	21156	17	10	39,5	1162
52VC1200	142131	275000	550	8,76 E-06	611,9	1080	20511	17	10	49,5	1314
51VC1600	142130	364000	550	8,63 E-06	888,7	1752	30702	17	8	65,6	1289
60VC1600	142132	493000	520	10,01 E-06	1725	2220	36120	17	8	77,1	1518
66VC1600	142198	633000	480	12,83 E-06	2087	2383	39732	17	8	64,3	1670

SI		N·m @ 5,2 bar	rpm	bar/rpm²	kg·m²	kg	cm²	millimeters		dm³	millimeters

Notes:

❶ Refers to basic part number only. When ordering, the number of air inlets and type of connection must be specified.

❷ Dynamic torque shown, static torque approximately 25% greater. Torque in each application is dependent upon air pressure and speed.

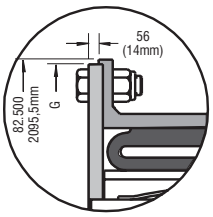
❸ Tolerance for sizes:
16 thru 20 +0.000/-0.005 in (+0,00/-0,13 mm)
24 thru 28 +0.000/-0.008 in (+0,00/-0,20 mm)
32 thru 60 +0.000/-0.010 in (+0,00/-0,25 mm)
66 +0.000/-0.005 in (+0,00/-0,13 mm)

❹ Tolerance +0.005/-0.000 in (+0,13/-0,00 mm)

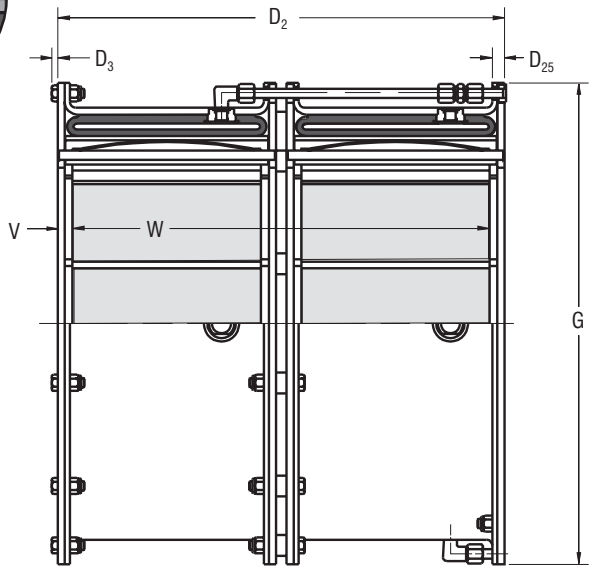
❺ All sizes available with either two or four inlets.

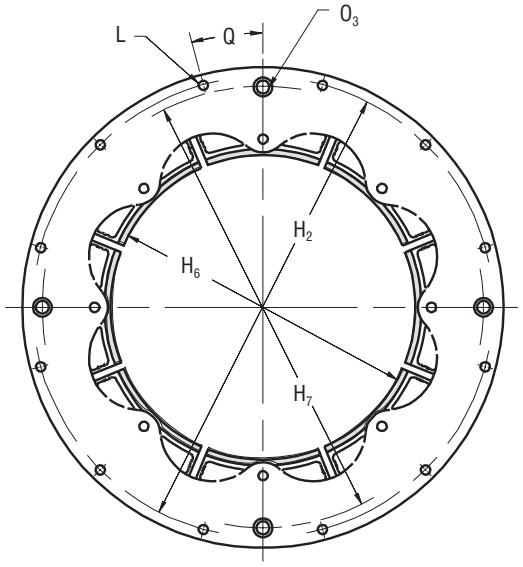
❻ Maximum rpm is dependent upon operating conditions and varies for each application. Consult factory for applications exceeding these speeds.

❼ Drum contact with worn shoes.



Construction for 66VC1600 only





English		lb in @ 75 psi	Dimensions in inches														
16VC1000	142122	228000	23.69	0.31	0.63	25.500	24.375	16.22	24.38	12	0.500	4	0.38	15.00	0.78	16	22.13
20VC1000	142123	322000	23.69	0.31	0.63	29.500	28.375	20.22	28.38	12	0.500	4	0.38	15.00	0.78	16	22.13
24VC1000	142124	438000	23.69	0.39	0.63	34.000	32.750	24.22	32.50	16	0.625	4	0.50	11.25	0.78	20	22.13
28VC1000	142125	592000	23.69	0.39	0.63	38.000	36.750	28.22	36.50	16	0.625	4	0.50	11.25	0.78	20	22.13
32VC1000	142126	830000	23.81	0.39	0.63	43.875	42.625	32.22	42.13	24	0.625	4	0.50	7.50	0.81	24	23.19
38VC1200	142127	1360000	28.06	0.47	0.66	49.375	47.875	38.22	48.00	20	0.750	4	0.63	9.00	0.88	24	26.31
42VC1200	142128	1638000	28.06	0.47	0.66	53.625	52.125	42.22	52.25	24	0.750	4	0.63	7.50	0.88	28	26.31
46VC1200	142129	1900000	28.06	0.55	0.75	60.250	58.500	46.25	57.50	24	0.875	4	0.63	7.50	0.88	32	26.31
52VC1200	142131	2430000	29.06	0.55	1.13	67.000	65.500	52.25	65.00	32	0.875	4	0.88	5.63	1.13	36	26.81
51VC1600	142130	3220000	37.06	0.55	1.13	67.000	65.500	51.25	65.00	32	0.875	4	0.88	5.63	1.13	36	34.81
60VC1600	142132	4366000	37.56	0.61	1.38	77.000	75.000	60.43	74.25	36	1.000	4	0.88	5.00	1.25	40	35.06
66VC1600	142198	5600000	37.00	0.78	1.13	82.123	79.625	66.22	78.38	40	1.312	4	0.88	4.50	1.13	44	34.50

Size	Part ❶ Number	M_t ❷ Torque Rating	D_2	D_3	D_{25}	❸ G	H_2	H_6	H_7	No. (L ❹)	Dia. (L ❹)	No. (O_3 ❺)	Dia. (O_3 ❺)	Q (Deg)	V	No. (W)	Size (W)
16VC1000	142122	25800	602	8	16	647,7	619,1	412	619	12	12,7	4	10	15,00	20	16	562
20VC1000	142123	36400	602	8	16	749,3	720,7	514	721	12	12,7	4	10	15,00	20	16	562
24VC1000	142124	49500	602	10	16	863,6	831,9	615	826	16	15,9	4	13	11,25	20	20	562
28VC1000	142125	66900	602	10	16	965,2	933,5	717	927	16	15,9	4	13	11,25	20	20	562
32VC1000	142126	93800	605	10	16	1114,4	1082,7	818	1070	24	15,9	4	13	7,50	21	24	589
38VC1200	142127	154000	713	12	17	1254,1	1216,0	971	1219	20	19,1	4	16	9,00	22	24	668
42VC1200	142128	185000	713	12	17	1362,1	1324,0	1072	1327	24	19,1	4	16	7,50	22	28	668
46VC1200	142129	215000	713	14	19	1530,4	1485,9	1175	1461	24	22,2	4	16	7,50	22	32	668
52VC1200	142131	275000	738	14	29	1701,8	1663,7	1327	1651	32	22,2	4	22	5,63	29	36	681
51VC1600	142130	364000	941	14	29	1701,8	1663,7	1302	1651	32	22,2	4	22	5,63	29	36	884
60VC1600	142132	493000	954	15	35	1955,8	1905,0	1535	1886	36	25,4	4	22	5,00	32	40	891
66VC1600	142198	633000	940	20	29	2085,9	2022,5	1682	1991	40	33,3	4	22	4,50	29	44	876

SI		Nm @ 5,2 bar	Dimensions in millimeters

Form VC 505

Ventilated Adapter Arrangement – Technical Data
Narrow Sizes 11.5 to 42

English ⑥	lb	lb·ft²	lb	lb·ft²	lb	lb·ft²	lb	lb·ft²	lb	lb·ft²
11.5VC500	96	43	28	13	54	4	46	9	35	2
14VC500	128	78	38	26	82	8	66	19	65	4
16VC600	151	115	48	40	99	14	94	35	62	4
20VC600	179	193	56	63	147	34	139	78	95	9
24VC650	246	369	74	110	192	56	178	148	124	19
28VC650	280	537	81	157	250	106	231	269	240	59
33VC650	392	1083	96	255	374	214	312	486	347	93
37VC650	433	1400	121	381	434	294	340	691	398	159
42VC650	485	1990	143	575	633	536	424	1100	545	243

Size	Weight	Wk²	Weight	Wk²	Weight	Wk²	Weight	Wk²	Weight	Wk²
	Element		Adapter		Adapter Hub		Drum		Drum Hub	
	Mass	J	Mass	J	Mass	J	Mass	J	Mass	J
11.5VC500	43	1,81	13	0,55	24	0,17	21	0,38	16	0,08
14VC500	58	3,28	17	1,09	37	0,34	30	0,80	29	0,17
16VC600	68	4,83	22	1,68	45	0,59	43	1,47	28	0,17
20VC600	81	8,11	25	2,65	67	1,43	63	3,28	43	0,38
24VC650	111	15,50	34	4,62	87	2,35	81	6,22	56	0,80
28VC650	127	22,55	37	6,59	113	4,45	105	11,30	109	2,48
33VC650	178	45,49	43	10,71	169	8,99	141	20,41	157	3,91
37VC650	196	58,80	55	16,00	197	12,35	154	29,02	180	6,68
42VC650	220	83,58	65	24,15	287	22,51	192	46,20	247	10,21
SI ⑥	kg	kg·m²	kg	kg·m²	kg	kg·m²	kg	kg·m²	kg	kg·m²

Size	Part Numbers				
	Element ❼	Adapter	Adapter Hub	Drum	Drum Hub
11.5VC500	142639	402162	406904	408291	406959
14VC500	143829	401337	407011	408284	406961
16VC600	142640	500411	407013	408293	406963
20VC600	142641	500374	407015	408295	406965
24VC650	142642	500345	407017	408297	406967
28VC650	142643	500367	407019	408299	406969
33VC650	142644	500369	407021	408301	406971
37VC650	142645	500371	407023	408303	406973
42VC650	142647	500373	407025	408305	406975

Notes:

❶ Refers to basic part number only and does not include the rotorseal and hose. When ordering, the number and type of element connections must be specified.

❷ Dynamic torque shown, static torque approximately 25% greater. Torque in each application is dependent upon air pressure and speed.

❸ Based upon minimum bores. Rotorseal and hose not included.

❹ American National Pipe Thread. Shaft to adapter piping similar to that shown on VC Spider Pipe and Configuration catalog page.

❺ Refer to Rotorseal section for mounting and dimension information.

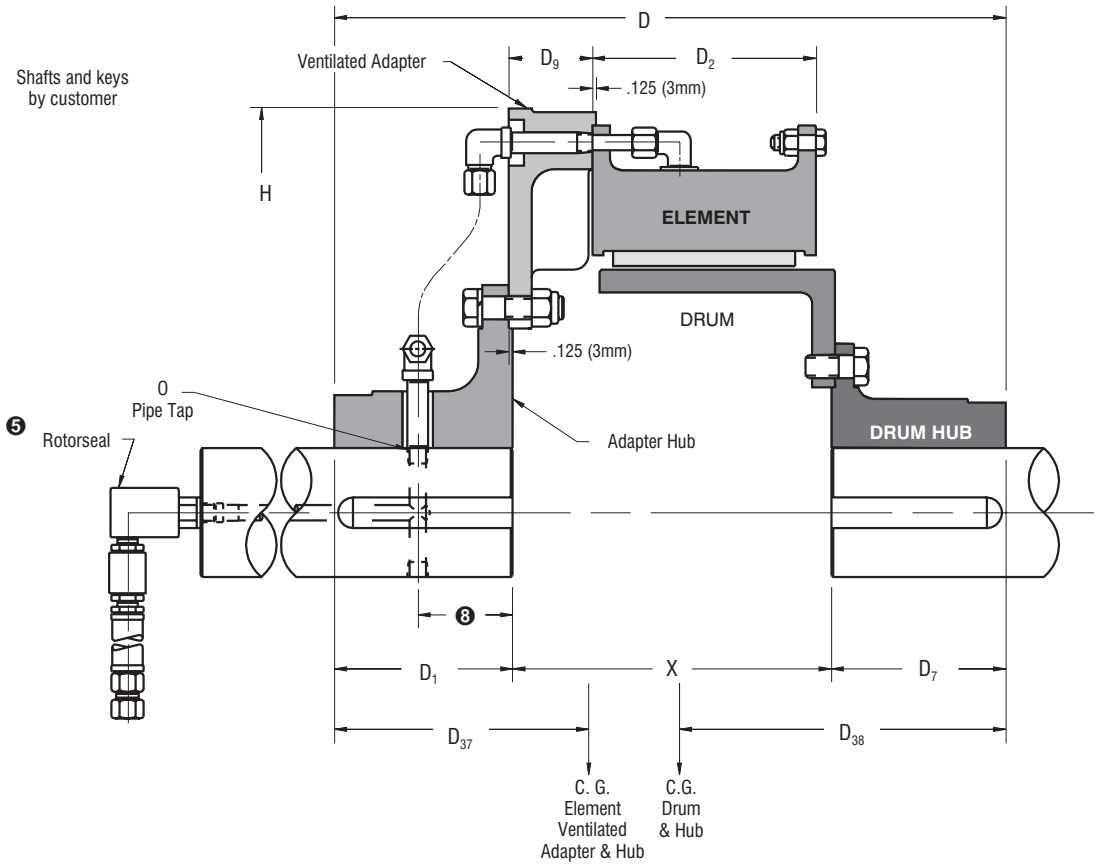
❻ Based upon minimum bores.

❼ Refers to basic part number only. When ordering, the number of air inlets and type of connection must be specified.

❽ Through hole in adapter hub is normally not provided. If required, the dimension is 3.00 in (76,2mm)

Form VC 505

Ventilated Adapter Arrangement – Dimensional Data
Narrow Sizes 11.5 to 42



English		lb·in @ 75 psi		lb ❸	Dimensions in inches													
11.5VC500	104162	27000	B3	259	2.50	4.13	2.50	4.13	19.38	5.00	6.13	5.00	2.75	7.6	5.5	20.38	2	1/4-18	9.38
14VC500	104163	39200	B3	379	2.75	5.00	2.75	5.00	20.88	5.75	6.13	5.75	2.75	8.2	5.8	24.63	2	3/8-18	9.38
16VC600	104164	65000	B3	454	3.25	5.00	3.25	5.00	22.13	5.75	7.38	5.75	2.75	8.4	6.5	26.63	2	3/8-18	10.63
20VC600	104165	93000	C2	616	3.75	5.50	3.75	5.50	23.63	6.50	7.38	6.50	2.75	8.9	7.0	30.63	2	3/8-18	10.63
24VC650	104166	135000	C2	814	4.25	6.00	4.25	6.00	24.13	6.50	7.69	6.50	2.75	9.0	7.2	35.13	2	3/8-18	11.13
28VC650	104167	182000	C2	1082	4.75	6.00	4.75	8.00	27.13	8.00	7.69	8.00	2.75	10.2	7.9	39.13	2	3/8-18	11.13
33VC650	104168	255000	3/4 RH	1521	5.25	7.00	5.25	9.50	29.13	9.00	7.69	9.00	2.75	11.0	8.3	45.88	2	½-14	11.13
37VC650	105433	320000	3/4 RH	1726	5.50	7.00	5.50	9.50	29.13	9.00	7.69	9.00	2.75	11.0	8.4	49.88	2	½-14	11.13
42VC650	105434	380000	3/4 RH	2230	6.00	8.25	6.00	10.50	31.13	10.00	7.69	10.00	2.75	11.2	9.0	54.88	2	½-14	11.13

Size	❶ Part Number	❷ M_r Torque Rating	Rotor Seal Size	Weight / Mass	Adapter Hub Bore Min	Adapter Hub Bore Max.	Drum Hub Bore Min	Drum Hub Bore Max.	D	D_1	D_2	D_7	D_9	D_{37}	D_{38}	H	O ❹ No.	O ❹ Size	X
11.5VC500	104162	3050	B3	117	64	105	64	105	492	127	156	127	70	193	140	518	2	1/4-18	238
14VC500	104163	4430	B3	172	70	127	70	127	530	146	156	146	70	208	147	626	2	3/8-18	238
16VC600	104164	7350	B3	206	83	127	83	127	562	146	187	146	70	213	165	676	2	3/8-18	270
20VC600	104165	10500	C2	279	95	140	95	140	600	165	187	165	70	226	178	778	2	3/8-18	270
24VC650	104166	15300	C2	369	108	152	108	152	613	165	195	165	70	229	183	892	2	3/8-18	283
28VC650	104167	20600	C2	490	121	152	121	203	689	203	195	203	70	259	201	994	2	3/8-18	283
33VC650	104168	28800	3/4 RH	689	133	178	133	241	740	229	195	229	70	279	211	1165	2	½-14	283
37VC650	105433	36200	3/4 RH	782	140	178	140	241	740	229	195	229	70	279	213	1267	2	½-14	283
42VC650	105434	42900	3/4 RH	1010	152	210	152	267	791	254	195	254	70	284	229	1394	2	½-14	283

SI		N·m @ 5,2 bar		kg ❸	Dimensions in millimeters

Form VC 507

Ventilated Adapter Arrangement – Technical Data
Dual Narrow Sizes 11.5 to 42

English ❻	lb	lb·ft²	lb	lb·ft²	lb	lb·ft²	lb	lb·ft²	lb	lb·ft²
11.5VC500	197	86	73	35	64	4	83	16	43	2
14VC500	258	156	103	70	74	8	139	40	60	4
16VC600	307	230	130	108	108	15	175	66	82	6
20VC600	363	386	146	167	166	34	234	138	124	13
24VC650	497	738	194	297	250	68	293	258	215	42
28VC650	565	1074	219	424	324	119	348	472	292	85
33VC650	784	2166	259	686	532	342	507	827	395	123
37VC650	871	2800	321	1026	595	360	553	1172	528	240
42VC650	980	3980	378	1550	769	608	662	1809	647	413

Size	Weight	Wk²	Weight	Wk²	Weight	Wk²	Weight	Wk²	Weight	Wk²
	Element		Ventilated Adapter		Adapter Hub		Drum		Drum Hub	
	Mass	J	Mass	J	Mass	J	Mass	J	Mass	J
11.5VC500	89	3,61	33	1,47	29	0,17	38	0,67	19	0,08
14VC500	117	6,55	47	2,94	34	0,33	63	1,68	27	0,17
16VC600	139	9,66	59	4,54	49	0,63	79	2,77	37	0,25
20VC600	164	16,21	66	7,01	75	1,43	106	5,80	56	0,55
24VC650	225	31,00	88	12,47	113	2,86	133	10,84	97	1,76
28VC650	256	45,11	99	17,81	147	5,00	158	19,82	132	3,57
33VC650	355	90,97	117	28,81	241	14,36	230	34,73	179	5,17
37VC650	395	117,6	145	43,09	270	15,12	251	49,22	239	10,08
42VC650	444	167,2	171	65,10	348	25,54	300	75,98	293	17,35
SI ❻	kg	kg·m²	kg	kg·m²	kg	kg·m²	kg	kg·m²	kg	kg·m²

Size	Part Numbers				
	Element ❼	Ventilated Adapter	Adapter Hub	Drum	Drum Hub
11.5VC500	142112	406949	408232	408307	406945
14VC500	142114	406950	408234	408309	406961
16VC600	142115	505030	408236	408311	407027
20VC600	142116	504974	408238	408313	406376
24VC650	142117	504975	408240	411828	405625
28VC650	142118	504976	408242	408317	405628
33VC650	142119	504977	408244	408319	405631
37VC650	142120	504978	408246	408321	405634
42VC650	142121	504979	408248	408323	405637

Notes:

❶ Refers to basic part number only and does not include the rotorseal and hose. When ordering, the number and type of element connections must be specified.

❷ Dynamic torque shown, static torque approximately 25% greater. Torque in each application is dependent upon air pressure and speed.

❸ Based upon minimum bores. Rotorseal and hose not included.

❹ American National Pipe Thread. Shaft to adapter piping similar to that shown on VC Spider Pipe and Configuration catalog page.

❺ Refer to Rotorseal Section for mounting and dimension information.

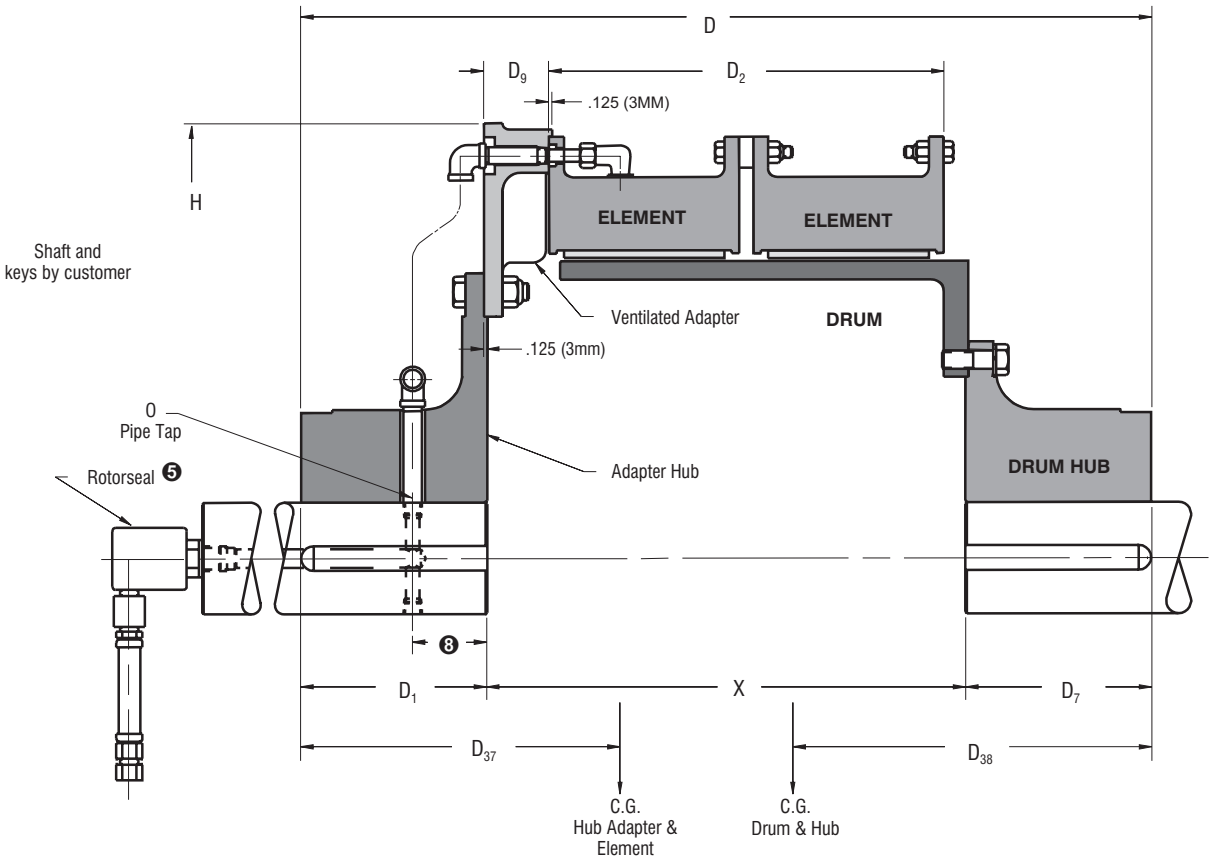
❻ Based upon minimum bores.

❼ Refers to basic part number only. When ordering, the number of air inlets and type of connection must be specified.

❽ Through hole in adapter hub is normally not provided. If required, the dimension is 3.00 in (76,2mm)

Form VC 507

Ventilated Adapter Arrangement – Dimensional Data
Dual Narrow Sizes 11.5 to 42



English		lb·in @ 75 psi		lb ❸	Dimensions in inches												
11.5VC500	104298	54000	C2	460	3.00	4.00	28.75	5.75	12.75	7.00	2.75	10.9	9.4	20.38	2	1/4-18	16.00
14VC500	105435	78400	C2	634	3.50	4.75	27.50	5.75	12.69	5.75	2.75	11.0	8.9	24.63	2	½-14	16.00
16VC600	105436	130000	C2	802	4.25	5.00	31.56	6.50	15.19	6.50	2.75	12.4	9.8	26.63	2	½-14	18.56
20VC600	104299	186000	C2	1033	4.75	6.00	32.56	7.00	15.19	7.00	2.75	12.2	9.7	30.63	2	½-14	18.56
24VC650	105437	270000	3/4 RH	1449	5.25	7.50	34.31	7.50	15.94	7.50	2.75	12.6	9.7	35.13	2	½-14	19.31
28VC650	105438	364000	3/4 RH	1748	5.75	8.50	35.31	8.00	15.94	8.00	2.75	12.8	9.9	39.13	2	½-14	19.31
33VC650	105439	510000	1RH	2477	6.50	9.00	38.38	9.50	15.94	9.50	2.75	13.8	11.0	45.88	2	3/4-14	19.38
37VC650	105440	640000	1RH	2868	7.00	9.50	39.38	10.00	15.94	10.00	2.75	14.2	11.2	49.88	2	3/4-14	19.38
42VC650	105441	760000	1 1/4 RH	3436	7.50	10.50	41.38	11.00	15.94	11.00	2.75	14.7	11.5	54.88	2	3/4-14	19.38

Size	❶ Part Number	❷ M, Torque Rating	Rotorseal Size	Weight Mass	Min. Bore Range	Max. Bore Range	D	D_1	D_2	D_7	D_9	D_{37}	D_{38}	H	O ❹ No.	O ❹ Size	X
					Min.	Max.									No.	Size	
11.5VC500	104298	6100	C2	208	76	102	730	146	324	178	70	276	239	518	2	1/4-18	406
14VC500	105435	8860	C2	287	89	121	699	146	322	146	70	279	226	626	2	1/2-14	406
16VC600	105436	14700	C2	363	108	127	802	165	386	165	70	314	249	676	2	1/2-14	471
20VC600	104299	21000	C2	468	121	152	827	178	386	178	70	309	246	778	2	1/2-14	471
24VC650	105437	30500	3/4 RH	656	133	191	871	191	405	191	70	319	246	892	2	1/2-14	490
28VC650	105438	41100	3/4 RH	792	146	216	897	203	405	203	70	324	251	994	2	1/2-14	490
33VC650	105439	57600	1RH	1122	165	229	975	241	405	241	70	350	279	1165	2	3/4-14	492
37VC650	105440	72300	1RH	1299	178	241	1000	254	405	254	70	361	284	1267	2	3/4-14	492
42VC650	105441	85900	1 1/4 RH	1557	191	267	1051	279	405	279	70	373	292	1394	2	3/4-14	492

SI		N·m @ 5,2 bar		kg ❸	Dimensions in millimeters

Form VC 506

Gap Mounted Arrangement – Technical Data
Narrow Sizes 11.5 VC to 42

English ❾	lb	lb·ft²	lb	lb·ft²	lb	lb·ft²	lb	lb·ft²
11.5VC500	96	43	70	19	46	9	35	2
14VC500	128	78	102	35	66	19	65	4
16VC600	151	115	139	50	94	35	62	4
20VC600	179	193	224	122	139	78	95	9
24VC650	246	369	260	174	178	148	124	19
28VC650	280	537	514	534	231	269	240	59
33VC650	392	1083	716	811	312	486	347	93
37VC650	433	1400	940	1404	340	691	398	159
42VC650	485	1990	1284	2106	424	1100	545	243

Size	Weight	Wk²	Weight	Wk²	Weight	Wk²	Weight	Wk²
	Element		Spider		Drum		Drum Hub	
	Mass	J	Mass	J	Mass	J	Mass	J
11.5VC500	43	1,81	32	0,80	21	0,38	16	0,08
14VC500	58	3,28	46	1,47	30	0,80	29	0,17
16VC600	68	4,83	63	2,10	43	1,47	28	0,17
20VC600	81	8,11	101	5,12	63	3,28	43	0,38
24VC650	111	15,50	118	7,31	81	6,22	56	0,80
28VC650	127	22,55	233	22,43	105	11,30	109	2,48
33VC650	178	45,49	324	34,06	141	20,41	157	3,91
37VC650	196	58,80	426	58,97	154	29,02	180	6,68
42VC650	220	83,58	582	88,45	192	46,20	247	10,21
SI ❾	kg	kg·m²	kg	kg·m²	kg	kg·m²	kg	kg·m²

Size	Part Numbers			
	Element ❿	Spider	Drum	Drum Hub
11.5VC500	142639	408376	408290	406959
14VC500	143829	411170	408283	406961
16VC600	142640	408277	408292	406963
20VC600	142641	408279	408294	406965
24VC650	142642	408281	408296	406967
28VC650	142643	505480	409479	406969
33VC650	142644	505285	408300	406971
37VC650	142645	504575	408302	406973
42VC650	142647	502369	408304	406975

Notes:

❶ Refers to basic part number only and does not include the rotorseal and hose. When ordering, the number and type of element connections must be specified.

❷ Dynamic torque shown, static torque approximately 25% greater. Torque in each application is dependent upon air pressure and speed.

❸ Based upon minimum bores. Rotorseal and hose not included.

❹ M (in)=0.268 (H/2-radius of bore) + 0.34
M (mm)=0,268 (H/2-radius of bore) + 8,7

❺ American National Pipe Thread

❻ Pipe tap not required. Thru hole diameter 0.44 in (11 mm).

❼ Refer to Rotorseal Section for mounting and dimension information.

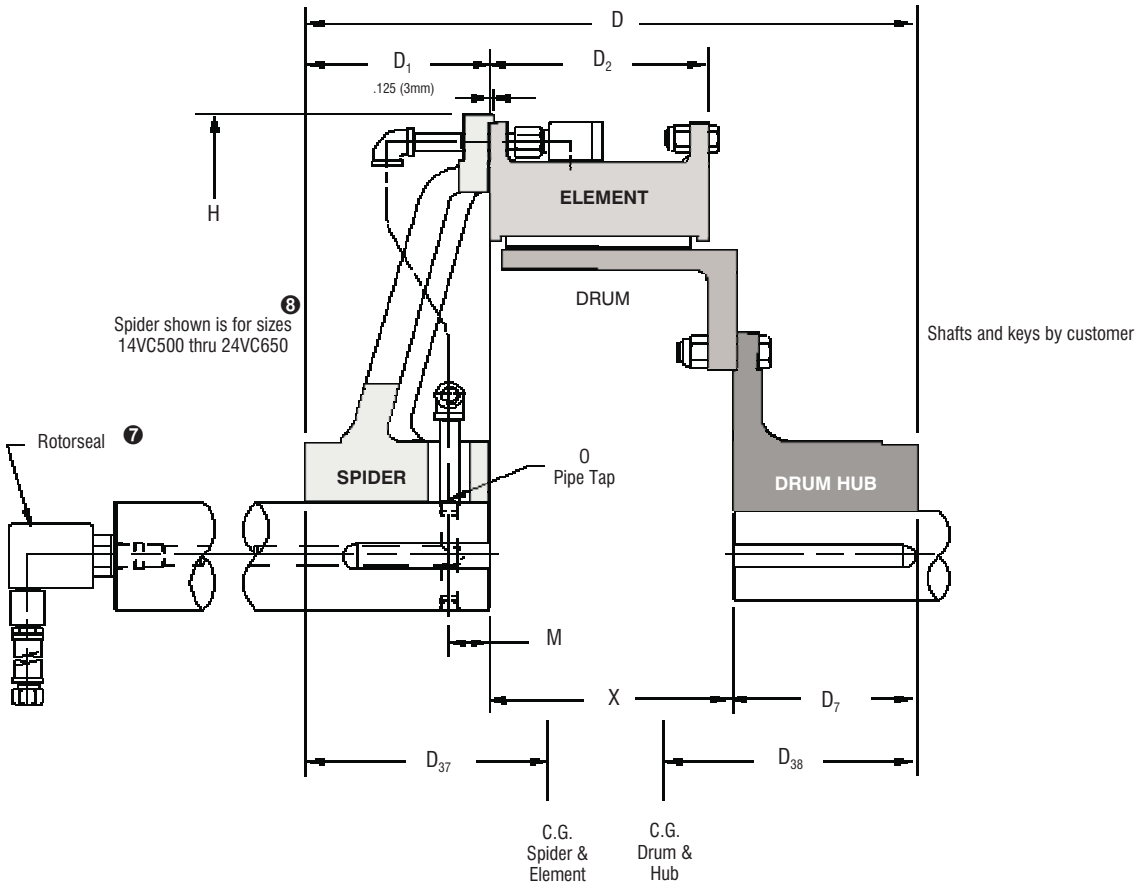
❽ Refer to VC Spider Piping and Configuration catalog page for other sizes.

❾ Based upon minimum bores.

❿ Refers to basic part number only. When ordering, the number of air inlets and type of connection must be specified.

Form VC 506

Gap Mounted Arrangement – Dimensional Data
Narrow Sizes 11.5 VC to 42



English		lb in @ 75 psi		lb ❸	Dimensions in inches											
11.5VC500	104601	27000	B3	247	2.50	4.13	16.09	4.34	6.13	5.00	5.3	5.5	20.00	❹	❻	6.75
14VC500	104602	39200	B3	361	2.75	5.00	18.06	5.50	6.13	5.75	6.0	5.8	24.00	1.44	3/8-18	6.81
16VC600	104603	65000	B3	446	3.25	5.00	19.31	5.50	7.38	5.75	6.2	6.5	26.00	1.44	3/8-18	8.06
20VC600	104604	93000	C2	637	3.75	5.50	20.56	6.00	7.38	6.50	6.0	6.9	30.00	1.44	3/8-18	8.06
24VC650	104605	135000	C2	808	4.25	6.00	21.56	6.50	7.69	6.50	6.6	7.2	34.63	1.44	3/8-18	8.56
28VC650	104606	182000	C2	1265	4.75	8.00	24.56	8.00	7.69	8.00	6.9	7.9	38.63	5.00	1/2-14	8.56
33VC650	104607	255000	3/4 RH	1767	5.25	9.50	26.56	9.00	7.69	9.00	7.5	8.3	45.25	5.00	1/2-14	8.56
37VC650	104608	320000	3/4 RH	2111	5.50	9.50	27.56	10.00	7.69	9.00	7.9	8.4	49.25	6.00	1/2-14	8.56
42VC650	104609	380000	3/4 RH	2738	6.00	10.50	29.56	11.00	7.69	10.00	8.2	9.0	54.25	6.00	1/2-14	8.56
Size	**❶ Part Number**	**M_r ❷ Torque Rating**	**Rotoseal Size**	**Weight / Mass**	**Min. / Max. Bore Range**		**D**	**D_1**	**D_2**	**D_7**	**D_{37}**	**D_{38}**	**H**	**M**	**❺ O**	**X**
					Min.	Max.										
11.5VC500	104601	3050	B3	112	64	105	409	110	156	127	135	140	508	❹	❻	171
14VC500	104602	4430	B3	164	70	127	459	140	156	146	152	147	610	37	3/8-18	173
16VC600	104603	7350	B3	202	83	127	490	140	187	146	157	165	660	37	3/8-18	205
20VC600	104604	10500	C2	289	95	140	522	152	187	165	152	175	762	37	3/8-18	205
24VC650	104605	15300	C2	366	108	152	548	165	195	165	168	183	880	37	3/8-18	217
28VC650	104606	20600	C2	573	121	203	624	203	195	203	175	201	981	127	1/2-14	217
33VC650	104607	28800	3/4 RH	800	133	241	675	229	195	229	191	211	1149	127	1/2-14	217
37VC650	104608	36200	3/4 RH	956	140	241	700	254	195	229	201	213	1251	152	1/2-14	217
42VC650	104609	42900	3/4 RH	1240	152	267	751	279	195	254	208	229	1378	152	1/2-14	217
SI		**N m @ 5,2 bar**		**kg ❸**	**Dimensions in millimeters**											

English ❾	lb	lb·ft²	lb	lb·ft²	lb	lb·ft²	lb	lb·ft²
11.5VC500	197	86	71	19	83	16	43	2
14VC500	258	156	102	35	139	40	60	4
16VC600	307	230	236	111	175	66	82	6
20VC600	363	386	295	167	234	138	124	13
24VC650	497	738	408	285	293	258	215	42
28VC650	565	1074	554	474	348	472	292	85
33VC650	784	2166	802	965	507	827	395	123
37VC650	871	2800	981	1356	553	1172	528	240
42VC650	980	3980	1116	1868	662	1809	647	413

Size	Weight	Wk²	Weight	Wk²	Weight	Wk²	Weight	Wk²
	Element		Spider		Drum		Drum Hub	
	Mass	J	Mass	J	Mass	J	Mass	J
11.5VC500	89	3,61	32	0,80	38	0,67	19	0,08
14VC500	117	6,55	46	1,47	63	1,68	27	0,17
16VC600	139	9,66	107	4,66	79	2,77	37	0,25
20VC600	164	16,21	134	7,01	106	5,80	56	0,55
24VC650	225	31,00	185	11,97	133	10,84	97	1,76
28VC650	256	45,11	251	19,91	158	19,82	132	3,57
33VC650	355	90,97	363	40,53	230	34,73	179	5,17
37VC650	395	117,6	444	56,95	251	49,22	239	10,08
42VC650	444	167,2	506	78,46	300	75,98	293	17,35
SI ❾	kg	kg·m²	kg	kg·m²	kg	kg·m²	kg	kg·m²

Size	Part Numbers			
	Element ⓾	Spider	Drum	Drum Hub
11.5VC500	142112	410856	408307	406945
14VC500	142114	411170	408309	406961
16VC600	142115	505283	408311	407027
20VC600	142116	509698	410862	406376
24VC650	142117	509699	409804	405625
28VC650	142118	509700	409706	405628
33VC650	142119	509701	410022	405631
37VC650	142120	509702	410866	405634
42VC650	142121	509703	409964	405637

Notes:

❶ Refers to basic part number only and does not include the rotorseal and hose. When ordering, the number and type of element connections must be specified.

❷ Dynamic torque shown, static torque approximately 25% greater. Torque in each application is dependent upon air pressure and speed.

❸ Based upon minimum bores. Rotorseal and hose not included.

❹ M (in)=0.268 (H/2-radius of bore) + 0.34
M (mm)=0,268 (H/2-radius of bore) + 8,7

❺ American National Pipe Thread

❻ Pipe tap not required. Thru hole diameter 0.44 in (11 mm).

❼ Refer to Rotorseal Section for mounting and dimension information.

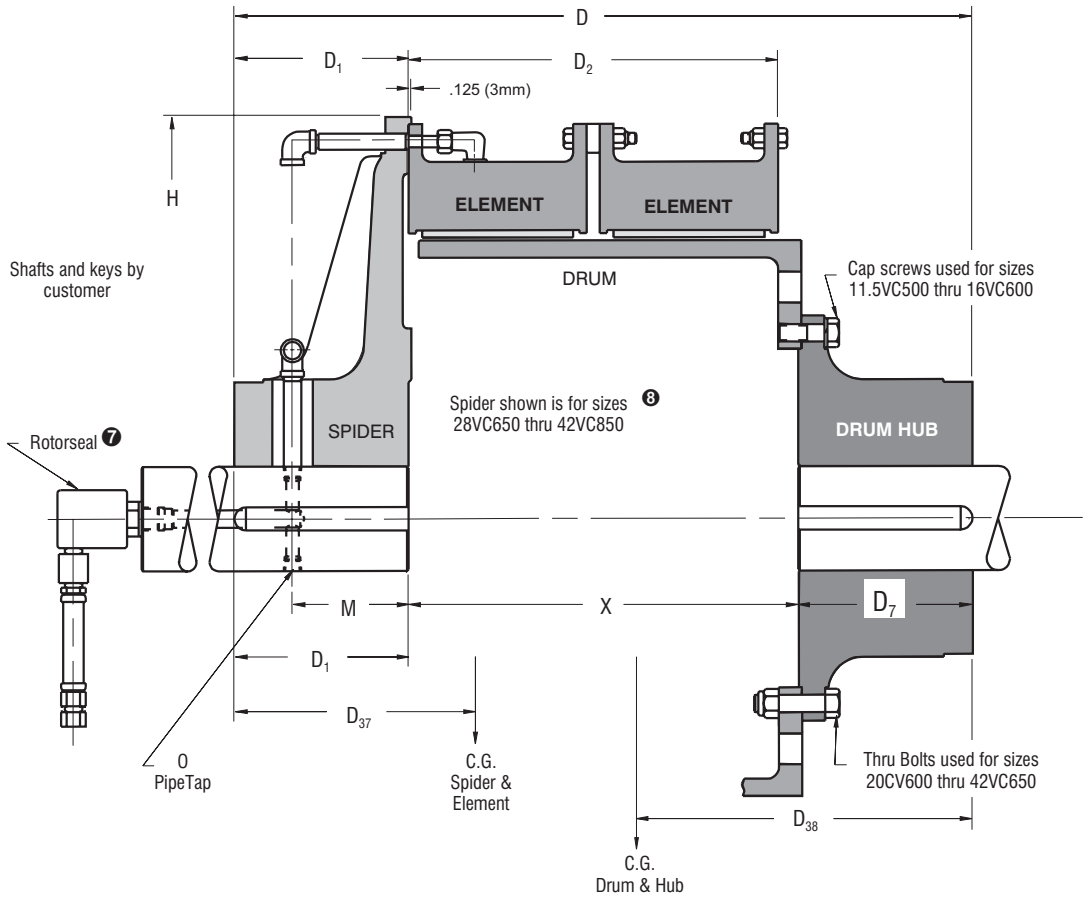
❽ Refer to VC Spider Piping and Configuration catalog page for other sizes.

❾ Based upon minimum bores.

⓾ Refers to basic part number only. When ordering, the number of air inlets and type of connection must be specified.

Form VC 508

Gap Mounted Arrangement – Dimensional Data
Dual Narrow Sizes 11.5 to 42



English		lb·in @ 75 psi		lb ❸	Dimension in inches											
11.5VC500	104610	54000	C2	394	3.00	4.00	25.22	4.84	12.75	7.00	8.8	9.4	20.00	❹	❻	13.38
14VC500	104611	78400	C2	559	3.50	4.75	24.69	5.50	12.69	5.75	9.2	8.9	24.00	1.44	1/2-14	13.44
16VC600	104612	130000	C2	800	4.25	6.00	27.94	5.50	15.19	6.50	9.6	9.7	26.00	4.00	1/2-14	15.94
20VC600	104613	186000	C2	1016	4.75	6.00	29.94	7.00	15.19	7.00	10.2	9.7	30.00	5.00	1/2-14	15.94
24VC650	104614	270000	3/4 RH	1413	5.25	7.50	31.69	7.50	15.94	7.50	10.1	9.9	34.63	5.00	3/4-14	16.69
28VC650	104615	364000	3/4 RH	1759	5.75	8.50	32.69	8.00	15.94	8.00	10.7	11.0	38.63	5.00	3/4-14	16.69
33VC650	104616	510000	1 RH	2488	6.50	9.00	35.25	9.00	15.94	9.50	11.1	11.2	45.25	5.00	3/4-14	16.75
37VC650	104617	640000	1 RH	2933	7.00	9.50	36.75	10.00	15.94	10.00	11.8	11.5	49.25	6.00	3/4-14	16.75
42VC650	104618	760000	1 1/4 RH	3405	7.50	10.50	38.75	11.00	15.94	11.00	8.6	9.8	54.25	6.00	3/4-14	16.75
Size	❶ Part Number	❷ M, Torque Rating	Rotoseal Size	Weight / Mass	Min. / Max. Bore Range		D	D_1	D_2	D_7	D_{37}	D_{38}	H	M	❺ O	X
					Min.	Max.										
11.5VC500	104610	6100	C2	178	76	102	641	123	324	178	224	239	508	❹	❻	340
14VC500	104611	8860	C2	253	89	121	627	140	322	146	234	226	610	37	1/2-14	341
16VC600	104612	14700	C2	362	108	152	710	140	386	165	244	246	660	102	1/2-14	405
20VC600	104613	21000	C2	460	121	152	760	178	386	178	259	246	762	127	1/2-14	405
24VC650	104614	30500	3/4 RH	640	133	191	805	191	405	191	257	251	880	127	3/4-14	424
28VC650	104615	41100	3/4 RH	797	146	216	830	203	405	203	272	279	981	127	3/4-14	424
33VC650	104616	57600	1 RH	1127	165	229	895	229	405	241	282	284	1149	127	3/4-14	425
37VC650	104617	72300	1 RH	1329	178	241	933	254	405	254	300	292	1251	152	3/4-14	425
42VC650	104618	85900	1 1/4 RH	1542	191	267	984	279	405	279	218	249	1378	152	3/4-14	425
SI		N·m @ 5,2 bar		Kg ❸	Dimension in millimeters											

Form VC 509

Gap Mounted Arrangement – Technical Data
Wide Sizes 14 to 66

English	lb	lb·ft²	lb	lb·ft²	lb	lb·ft²	lb	lb·ft²
14VC1000	213	127	205	79	122	35	70	5
16VC1000	240	212	264	113	98	38	97	9
20VC1000	282	309	295	167	169	112	150	21
24VC1000	378	552	408	285	225	192	215	44
28VC1000	431	826	554	474	295	350	297	82
32VC1000	624	1570	727	781	371	559	407	127
38VC1200	684	2330	1002	1502	552	1214	521	236
42VC1200	895	3670	1116	1868	582	1567	677	378
46VC1200	980	4830	1504	2968	729	2357	813	577
52VC1200	1192	7285	2579	5087	852	3552	1125	1000
51VC1600	1934	10580	2621	6706	890	4145	1475	1150
60VC1600	2450	20532	4096	13346	1640	8810	2526	3034
66VC1600	2630	24850	6500	19360	1905	15070	4940	6760

Size	Weight	Wk²	Weight	Wk²	Weight	Wk²	Weight	Wk²
	Element		Spider		Drum		Drum Hub	
	Mass	J	Mass	J	Mass	J	Mass	J
14VC1000	96	5,33	93	3,32	55	1,47	32	0,21
16VC1000	109	8,90	120	4,75	44	1,60	44	0,38
20VC1000	128	12,98	134	7,01	77	4,70	68	0,88
24VC1000	171	23,18	185	11,97	102	8,06	97	1,85
28VC1000	195	34,69	251	19,97	134	14,70	135	3,44
32VC1000	283	65,94	329	32,80	168	23,48	184	5,33
38VC1200	310	97,86	454	63,08	250	50,99	236	9,91
42VC1200	405	154,1	506	78,46	264	65,81	307	15,88
46VC1200	444	202,9	681	124,7	330	98,99	368	24,23
52VC1200	540	306,0	1168	213,7	386	149,2	510	42,00
51VC1600	876	444,4	1187	281,7	403	174,1	668	48,30
60VC1600	1110	862,3	1855	560,5	743	370,0	1144	127,4
66VC1600	1191	1044	2945	813,1	863	632,9	2238	283,9
SI	kg	kg·m²	kg	kg·m²	kg	kg·m²	kg	kg·m²

Size	Part Numbers			
	Element	Spider	Drum	Drum Hub
14VC1000	142838	508545	411111	411113
16VC1000	142821	505283	409506	407069
20VC1000	142832	509698	410087	407073
24VC1000	142675	509699	409794	405625
28VC1000	142674	509700	409537	405628
32VC1000	142673	509706	410824	405631
38VC1200	142739	509707	409474	405634
42VC1200	142677	509703	409947	405637
46VC1200	142671	509708	409980	405640
52VC1200	142841	509709	409715	407079
51VC1600	142835	509710	409711	408585
60VC1600	142915	509711	411501	411500
66VC1600	142097	514261	413727	413727

Notes:

❶ Refers to basic part number only and does not include the rotorseal and hose. When ordering, the number and type of element connections must be specified.

❷ Dynamic torque shown, static torque approximately 25% greater. Torque in each application is dependent upon air pressure and speed.

❸ Based upon minimum bores. Rotorseal and hose not included.

❹ American National Pipe Thread

❺ Spider is two piece construction consisting of a hub and adapter plate. D_1, length thru bore is 20 in(508 mm). D_1, length from hub face to element is 21.63 in (549 mm).

❻ Refer to Rotorseal Section for mounting and dimension information.

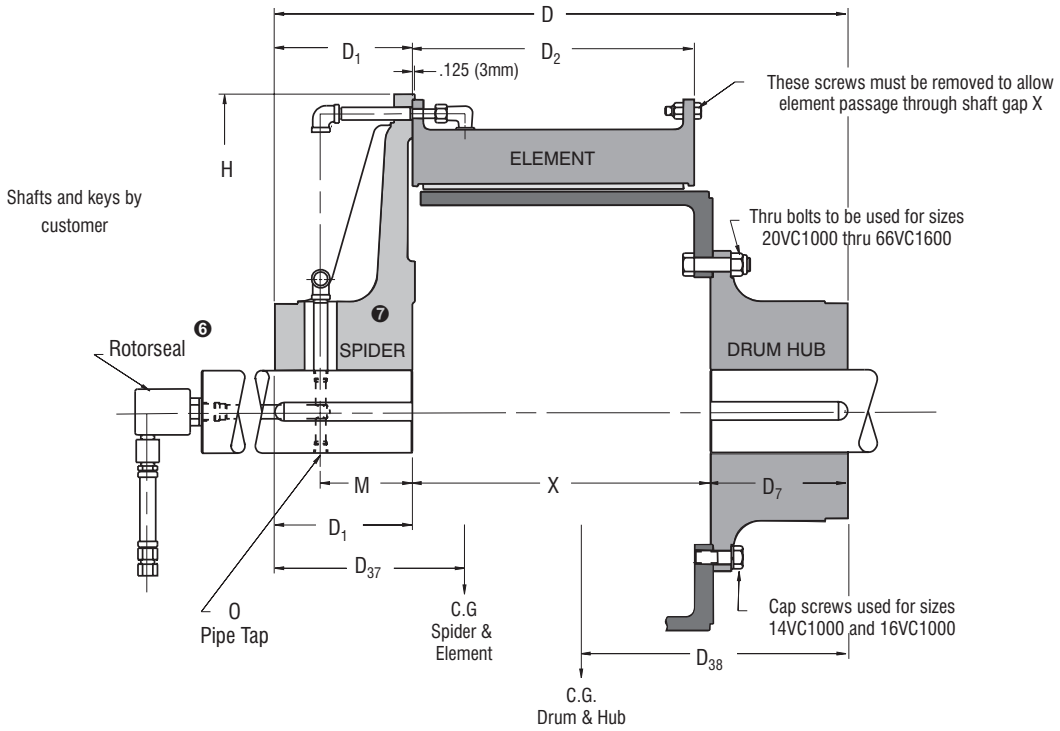
❼ Spider shown used for the majority of element sizes. Refer to VC Spider Piping and Configuration catalog page.

❽ Based upon minimum bores.

❾ Refers to basic part number only. When ordering, the number of air inlets and type of connection must be specified.

Form VC 509

Gap–Mounted Arrangement –Dimensional Data
Wide Sizes 14 to 66



English		lb·in @ 75 psi		lb ❸	Dimensions in inches										
14VC1000	104979	85000	C2	610	3.63	5.00	24.38	5.50	11.56	7.00	7.0	8.8	24.00	4.00	3/8-18	11.88
16VC1000	104680	114000	C2	699	3.88	6.00	22.88	5.50	11.56	5.50	6.7	6.6	26.00	4.00	3/8-18	11.88
20VC1000	104681	161000	C2	896	4.50	6.25	25.88	7.00	11.56	7.00	7.5	8.1	30.00	5.00	3/8-18	11.88
24VC1000	104682	219000	3/4 RH	1226	5.00	8.00	26.88	7.50	11.56	7.50	7.9	8.3	34.63	5.00	1/2-14	11.88
28VC1000	104683	296000	3/4 RH	1577	5.50	8.50	27.88	8.00	11.56	8.00	8.0	8.7	38.63	5.00	1/2-14	11.88
32VC1000	104684	415000	1 RH	2129	6.00	9.00	30.44	9.00	11.63	9.50	9.1	9.6	44.50	5.00	1/2-14	11.94
38VC1200	104685	680000	1 1/4 RH	2759	7.25	9.25	34.13	10.00	13.75	10.00	9.5	10.6	50.00	6.00	1/2-14	14.13
42VC1200	104686	819000	1 1/4 RH	3270	7.50	10.00	36.13	11.00	13.75	11.00	10.6	11.0	54.25	6.00	1/2-14	14.13
46VC1200	104687	950000	1 1/2 RH	4026	8.00	10.00	36.13	11.00	13.75	11.00	10.0	11.3	61.00	6.00	1/2-14	14.13
52VC1200	104688	1215000	1 1/2 RH	5748	8.75	11.00	39.63	12.50	14.25	12.50	10.3	12.3	67.75	7.00	3/4-14	14.63
51VC1600	104689	1610000	1 1/2 RH	6920	9.50	12.50	48.88	15.00	18.25	15.00	13.9	14.3	67.75	7.00	3/4-14	18.88
60VC1600	104690	2183000	1 1/2 RH	10750	10.50	18.00	50.75	16.00	18.50	16.00	14.2	15.2	77.75	7.00	1-11 1/2	18.75
66VC1600		2800000	1 1/2 RH	16200	11.25	18.50	60.25	❺	18.50	20.00	18.4	15.3	82.50	9.00	1-11 1/2	20.25

Size	Part ❶ Number	M_t ❷ Torque Rating	Rotoseal Size	Weight / Mass	Bore Range Min.	Bore Range Max.	D	D_1	D_2	D_7	D_{37}	D_{38}	H	M	O ❹	X
14VC1000	104979	9610	C2	276	92	127	619	140	294	178	178	224	610	102	3/8-18	302
16VC1000	104680	12900	C2	317	99	152	581	140	294	140	170	168	660	102	3/8-18	302
20VC1000	104681	18200	C2	406	114	159	657	178	294	178	191	206	762	127	3/8-18	302
24VC1000	104682	24700	3/4 RH	555	127	203	683	191	294	191	201	211	880	127	1/2-14	302
28VC1000	104683	33400	3/4 RH	714	140	216	708	203	294	203	203	221	981	127	1/2-14	302
32VC1000	104684	46900	1 RH	964	152	229	773	229	295	241	231	244	1130	127	1/2-14	303
38VC1200	104685	76800	1 1/4 RH	1250	184	235	867	254	349	254	241	269	1270	152	1/2-14	359
42VC1200	104686	92500	1 1/4 RH	1481	191	254	918	279	349	279	269	279	1378	152	1/2-14	359
46VC1200	104687	107000	1 1/2 RH	1824	203	254	918	279	349	279	254	287	1549	152	1/2-14	359
52VC1200	104688	137000	1 1/2 RH	2604	222	279	1007	318	362	318	262	312	1721	178	3/4-14	372
51VC1600	104689	182000	1 1/2 RH	3135	241	318	1242	381	464	381	353	363	1721	178	3/4-14	480
60VC1600	104690	247000	1 1/2 RH	4870	267	457	1289	406	470	406	361	386	1975	178	1-11 1/2	476
66VC1600		316000	1 1/2 RH	7339	286	470	1530	❺	470	508	467	389	2096	229	1-11 1/2	514

SI	N·m @ 5,2 bar	kg ❸	Dimensions in millimeters

English	lb	lb·ft²	lb	lb·ft²	lb	lb·ft²	lb	lb·ft²	lb	lb·ft²
16VC1000	430	380	264	113	98	38	94	37	199	19
20VC1000	568	618	333	197	169	112	164	109	203	32
24VC1000	756	1104	442	312	225	192	215	186	271	50
28VC1000	862	1652	680	597	295	350	282	338	370	99
32VC1000	1248	3140	967	932	371	559	352	537	574	185
38VC1200	1368	4660	1350	1625	552	1214	530	1173	806	368
42VC1200	1790	7340	1763	2445	582	1567	550	1510	1233	653
46VC1200	1960	9660	1855	3577	729	2357	700	2276	1316	856
52VC1200	2384	14570	2854	5277	852	3552	820	3425	1803	1514
51VC1600	3868	21160	3640	7610	890	4145	860	4035	2303	1993
60VC1600	4900	41064	5402	14489	1640	8810	1590	8575	4143	4967
66VC1600	5260	49700	7200	23300	1905	15070	1770	14340	6450	9140
Size	**Weight**	**Wk²**	**Weight**	**Wk²**	**Weight**	**Wk²**	**Weight**	**Wk²**	**Weight**	**Wk²**
	Element		**Spider**		**Male Drum**		**Female Drum**		**Drum Hub**	
	Mass	**J**	**Mass**	**J**	**Mass**	**J**	**Mass**	**J**	**Mass**	**J**
16VC1000	195	15,96	120	4,75	44	1,60	43	1,55	90	0,80
20VC1000	257	25,96	151	8,27	77	4,70	74	4,58	92	1,34
24VC1000	342	46,37	200	13,10	102	8,06	97	7,81	123	2,10
28VC1000	390	69,38	308	25,07	134	14,70	128	14,20	168	4,16
32VC1000	565	131,9	438	39,14	168	23,48	159	22,55	260	7,77
38VC1200	620	195,7	612	68,25	250	50,99	240	49,27	365	15,46
42VC1200	811	308,3	799	102,7	264	65,81	249	63,42	559	27,43
46VC1200	888	405,7	840	150,2	330	98,99	317	95,59	596	35,95
52VC1200	1080	611,9	1293	221,6	386	149,2	371	143,9	817	63,59
51VC1600	1752	888,7	1649	319,6	403	174,1	390	169,5	1043	83,71
60VC1600	2220	1725	2447	608,5	743	370,0	720	360,2	1877	208,6
66VC1600	2383	2087	3265	978	863	632,9	802	602,3	2922	383,9
SI	**kg**	**kg·m²**	**kg**	**kg·m²**	**kg**	**kg·m²**	**kg**	**kg·m²**	**kg**	**kg·m²**

Size	Part Number				
	Element ❾	Spider	Male Drum	Female Drum	Drum Hub
16VC1000	142122	505284	412589	412590	407072
20VC1000	142123	509693	410087	410088	407075
24VC1000	142124	509694	409794	409795	407077
28VC1000	142125	509695	409537	409538	408031
32VC1000	142126	509696	410824	410825	407082
38VC1200	142127	509646	409474	409475	406841
42VC1200	142128	509647	409947	409948	410990
46VC1200	142129	509691	409980	409981	408001
52VC1200	142131	509648	409715	409716	407876
51VC1600	142130	509649	409711	409712	408586
60VC1600	142132	509692	411501	411502	411691
66VC1600	142198	514261 ❿	413727	413726	413725

Notes:

❶ Refers to basic part number only and does not include the rotorseal and hose. When ordering, the number and type of element connections must be specified.

❷ Dynamic torque shown, static torque approximately 25% greater. Torque in each application is dependent upon air pressure and speed.

❸ Based upon minimum bores. Rotorseal and hose not included.

❹ American National Pipe Thread

❺ Spider is two piece construction consisting of a hub and adapter plate. D_1, length thru bore is 24 in. (610 mm). D_1, length from hub face to element is 25.38 in. (645 mm).

❻ Refer to Rotorseal Section for mounting and dimension information.

❼ Spider shown used for the majority of element sizes. Refer to VC Spider Piping and Configuration catalog page.

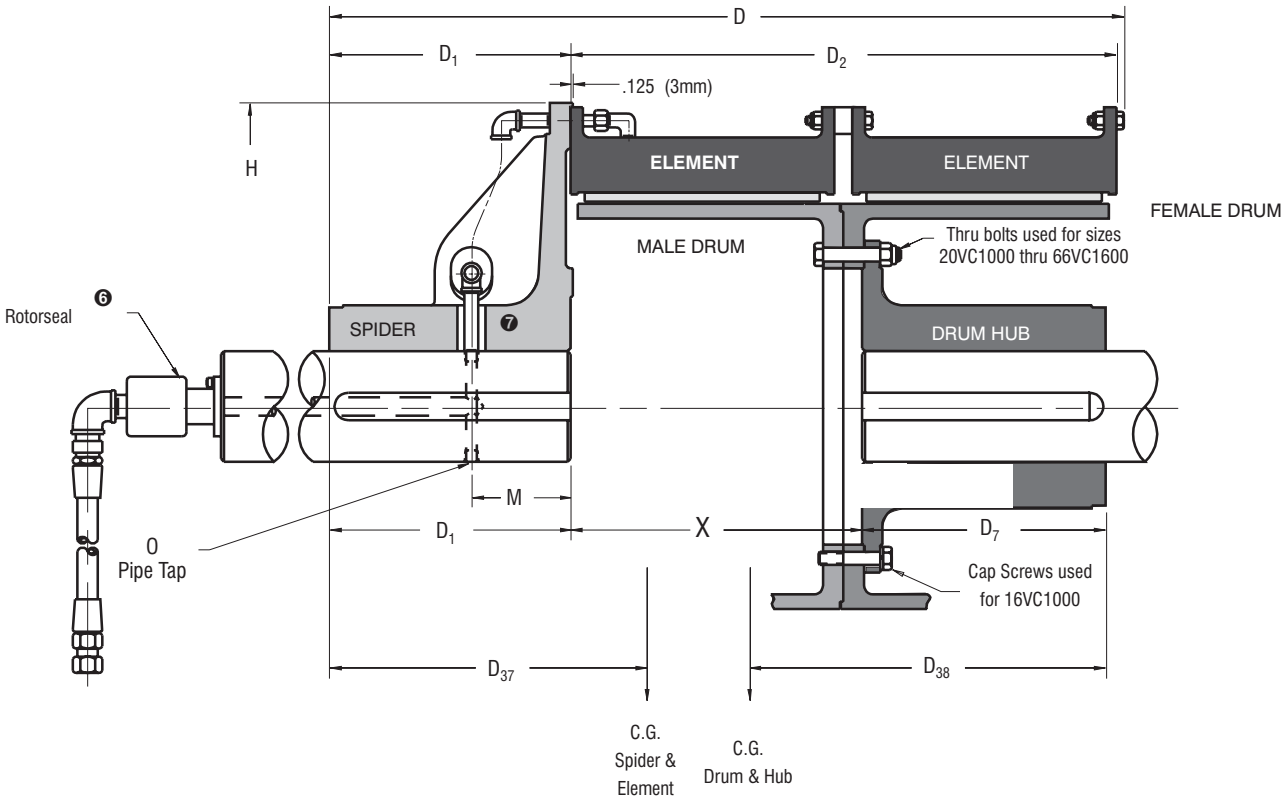
❽ Based upon minimum bores.

❾ Refers to basic part number only. When ordering, the number of air inlets and type of connection must be specified.

❿ Former two piece version of the spider consisted of hub 413724 and adapter 510767.

Form VC 510

Gap-Mounted Arrangement – Dimensional Data
Dual Wide Sizes 16 to 66



English		lb·in @ 75 psi		lb ❸	Dimensions in inches											
16VC1000	104720	228000	3/4 RH	1085	5.00	6.00	32.00	8.00	23.69	10.00	14.0	13.8	26.00	4.00	1/2-14	12.75
20VC1000	104721	322000	1 RH	1440	5.50	6.50	33.59	9.50	23.69	9.50	15.3	14.8	30.00	5.00	1/2-14	12.75
24VC1000	104722	438000	1 RH	1910	6.25	7.25	33.39	9.31	23.69	9.50	15.1	15.0	34.63	5.00	3/4-14	12.75
28VC1000	104723	592000	1 1/4 RH	2490	6.75	8.00	34.08	10.00	23.69	10.00	14.5	15.3	38.63	5.00	3/4-14	12.75
32VC1000	104724	830000	1 1/4 RH	3510	7.75	10.50	36.20	12.00	23.81	12.00	16.5	15.9	44.50	5.00	3/4-14	12.81
38VC1200	104725	1360000	1 1/2 RH	4610	9.00	11.00	41.53	13.00	28.06	13.00	17.0	18.0	50.00	6.00	3/4-14	15.00
42VC1200	104726	1638000	1 1/2 RH	5920	9.50	11.75	45.53	17.00	28.06	17.00	20.0	19.7	54.25	6.00	3/4-14	15.13
46VC1200	104727	1900000	1 1/2 RH	6560	10.00	12.50	45.61	17.00	28.06	17.00	20.3	20.8	61.00	6.00	3/4-14	15.25
52VC1200	104728	2430000	1 1/2 RH	8715	10.75	14.00	46.61	17.00	29.06	17.00	19.5	19.9	67.75	7.00	1-11 1/2	15.75
51VC1600	104729	3220000	1 1/2 RH	11560	12.00	15.50	57.61	20.00	37.06	20.00	27.0	23.0	67.75	7.00	1-11 1/2	20.00
60VC1600	104730	4366000	1 1/2 RH	17675	13.25	20.00	62.17	24.00	37.56	24.00	27.8	26.0	77.75	7.00	1 1/4-11 1/2	20.38
66VC1600	106981	5600000	1 1/2 RH	22960	15.00	22.00	69.16	❺	37.00	30.00	31.5	22.0	82.50	9.00	1 1/4-11 1/2	22.00

Size	Part ❶ Number	M, ❷ Torque Rating	Rotoseal Size	Weight Mass	Bore Range Min.	Bore Range Max.	D	D_1	D_2	D_7	D_{37}	D_{38}	H	M	❹ O	X
16VC1000	104720	25800	3/4 RH	492	127	152	813	203	602	254	356	351	660	102	1/2-14	324
20VC1000	104721	36400	1 RH	652	140	165	853	241	602	241	389	376	762	127	1/2-14	324
24VC1000	104722	49500	1 RH	865	159	184	848	236	602	241	384	381	880	127	3/4-14	324
28VC1000	104723	66900	1 1/4 RH	1128	171	203	866	254	602	254	368	389	981	127	3/4-14	324
32VC1000	104724	93800	1 1/4 RH	1590	197	267	919	305	605	305	419	404	1130	127	3/4-14	325
38VC1200	104725	154000	1 1/2 RH	2088	229	279	1055	330	713	330	432	457	1270	152	3/4-14	381
42VC1200	104726	185000	1 1/2 RH	2682	241	298	1156	432	713	432	508	500	1378	152	3/4-14	384
46VC1200	104727	215000	1 1/2 RH	2972	254	318	1158	432	713	432	516	528	1549	152	3/4-14	387
52VC1200	104728	275000	1 1/2 RH	3948	273	356	1184	432	738	432	495	505	1721	178	1-11 1/2	400
51VC1600	104729	364000	1 1/2 RH	5237	305	394	1463	508	941	508	686	584	1721	178	1-11 1/2	508
60VC1600	104730	493000	1 1/2 RH	8007	337	508	1579	610	954	610	706	660	1975	178	1 1/4-11 1/2	518
66VC1600	106981	633000	1 1/2 RH	10401	381	559	1757	❺	940	762	800	559	2096	229	1 1/4-11 1/2	559

SI	N·m @ 5,2 bar	kg ❸	Dimensions in millimeters

English ❹	lb	lb·ft²	lb	lb·ft²	lb	lb·ft²	lb	lb·ft²
11.5VC500	96	43	46	9	35	2	2	0.3
14VC500	128	78	66	19	65	4	6	1.3
16VC600	151	115	94	35	62	4	14	10.3
20VC600	179	193	139	78	95	9	15	16
24VC650	246	369	178	148	124	19	19	25
28VC650	280	537	231	269	240	59	20	32
33VC650	392	1083	312	486	347	93	19	42
37VC650	433	1400	340	691	398	159	23	56
42VC650	485	1990	424	1100	545	243	24	66

Size	Weight	Wk²	Weight	Wk²	Weight	Wk²	Weight	Wk²
	Element		Drum		Drum Hub		Air Bridge	
	Mass	J	Mass	J	Mass	J	Mass	J
11.5VC500	43	1,81	21	0,38	16	0,08	1	0,01
14VC500	58	3,28	30	0,80	29	0,17	3	0,05
16VC600	68	4,83	43	1,47	28	0,17	6	0,43
20VC600	81	8,11	63	3,28	43	0,38	7	0,67
24VC650	111	15,50	81	6,22	56	0,80	9	1,05
28VC650	127	22,55	105	11,30	109	2,48	9	1,34
33VC650	178	45,49	141	20,41	157	3,91	9	1,76
37VC650	196	58,80	154	29,02	180	6,68	10	2,35
42VC650	220	83,58	192	46,20	247	10,21	11	2,77
SI ❹	kg	kg·m²	kg	kg·m²	kg	kg·m²	kg	kg·m²

Size	Part Numbers			
	Element ❺	Drum	Hub	Air Bridge
11.5VC500	142639	408290	406960	410546
14VC500	143829	408283	406962	408165
16VC600	142640	408292	406964	407294
20VC600	142641	408294	406966	407307
24VC650	142642	408296	406968	411796
28VC650	142643	409479	406970	400203
33VC650	142644	408300	406972	413799
37VC650	142645	408302	406974	411797
42VC650	142647	408304	407000	411798

Notes:

❶ Refers to basic part number only and does not include the rotorseal and hose. When ordering, the number and type of element connections must be specified.

❷ Dynamic torque shown, static torque approximately 25% greater. Torque in each application is dependent upon air pressure and speed.

❸ Based upon minimum bores. Rotorseal and hose not included.

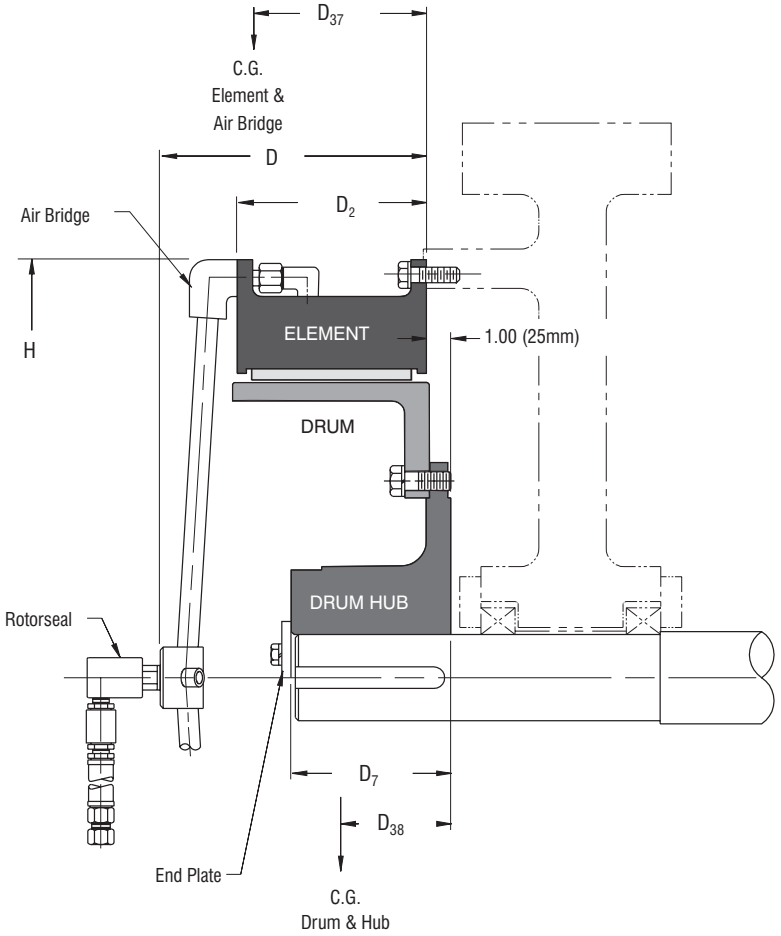
❹ Based upon minimum bores.

❺ Refers to basic part number only. When ordering, the number of air inlets and type of connection must be specified.

Form VC 529

Air Bridge Arrangement – Dimensional Data
Narrow Sizes 11.5 to 42

Shaft and key by customer



English		lb in @ 75 psi		Lb ❸	Dimensions in inches							
11.5VC500	107040	27000	B3	183	2.50	4.13	10.13	6.13	5.00	3.2	2.9	19.63
14VC500	107041	39200	C2	266	2.75	5.00	9.75	6.13	5.75	3.3	3.3	23.50
16VC600	107042	65000	C2	327	3.25	5.00	11.06	7.38	5.75	4.2	3.4	25.50
20VC600	107043	93000	C2	434	3.75	5.50	11.19	7.38	6.50	4.0	3.4	29.50
24VC650	107044	135000	C2	608	4.25	6.00	11.81	7.69	6.50	4.3	3.0	34.00
28VC650	107045	182000	C2	742	4.75	8.00	11.94	7.69	8.00	4.2	3.2	38.00
33VC650	107046	255000	3/4 RH	1004	5.25	9.50	11.97	7.69	9.00	4.1	3.3	44.63
37VC650	107047	320000	3/4 RH	1128	5.50	9.50	12.25	7.69	9.00	4.2	3.2	48.63
42VC650	107048	380000	3/4 RH	1442	6.00	10.50	12.41	7.69	10.00	4.1	3.4	53.63

Size	Part Number ❶	M_t Torque Rating ❷	Rotoseal Size	Weight / Mass	Bore Range Min.	Bore Range Max.	D	D_2	D_7	D_{37}	D_{38}	H
11.5VC500	107040	3050	B3	83	64	105	257	156	127	81	74	499
14VC500	107041	4430	C2	120	70	127	248	156	146	84	84	597
16VC600	107042	7350	C2	148	83	127	281	187	146	107	86	648
20VC600	107043	10500	C2	197	95	140	284	187	165	102	86	749
24VC650	107044	15300	C2	275	108	152	300	195	165	109	76	864
28VC650	107045	20600	C2	336	121	203	303	195	203	107	81	965
33VC650	107046	28800	3/4 RH	455	133	241	304	195	229	104	84	1134
37VC650	107047	36200	3/4 RH	511	140	241	311	195	229	107	81	1235
42VC650	107048	42900	3/4 RH	653	152	267	315	195	254	104	86	1362

SI		N m @ 5,2 bar		Kg ❸	Dimensions in millimeters							

Form VC 532

Gap-Mounted Arrangement – Technical Data
Narrow Sizes 11.5 to 42

English ⑨	lb	lb·ft²	lb	lb·ft²	lb	lb·ft²	lb	lb·ft²
11.5VC500	96	43	70	19	83	16	35	2
14VC500	128	78	102	35	139	40	65	4
16VC600	151	115	139	50	175	66	62	4
20VC600	179	193	224	122	234	138	95	9
24VC650	246	369	260	174	293	258	124	19
28VC650	280	537	514	534	348	472	240	59
33VC650	392	1083	716	811	507	827	347	93
37VC650	433	1400	940	1404	553	1172	398	159
42VC650	485	1990	1284	2106	662	1809	545	243

Size	Weight	Wk²	Weight	Wk²	Weight	Wk²	Weight	Wk²
	Element		Spider		Drum		Drum Hub	
	Mass	J	Mass	J	Mass	J	Mass	J
11.5VC500	43	1,81	32	0,80	38	0,67	16	0,08
14VC500	58	3,28	46	1,47	63	1,68	29	0,17
16VC600	68	4,83	63	2,10	79	2,77	28	0,17
20VC600	81	8,11	101	5,12	106	5,80	43	0,38
24VC650	111	15,50	118	7,31	133	10,84	56	0,80
28VC650	127	22,55	233	22,43	158	19,82	109	2,48
33VC650	178	45,49	324	34,06	230	34,73	157	3,91
37VC650	196	58,80	426	58,97	251	49,22	180	6,68
42VC650	220	83,58	582	88,45	300	75,98	247	10,21
SI ⑨	kg	kg·m²	kg	kg·m²	kg	kg·m²	kg	kg·m²

Size	Part Number			
	Element ⑩	Spider	Drum	Drum Hub
11.5VC500	142639	408376	408307	406959
14VC500	143829	411170	408309	406961
16VC600	142640	408277	408311	406963
20VC600	142641	408279	410862	406965
24VC650	142642	408281	409804	405625
28VC650	142643	505480	409706	406969
33VC650	142644	505285	410022	406971
37VC650	142645	505275	410866	406973
42VC650	142647	502369	409964	406975

Notes:

❶ Refers to basic part number only and does not include the rotorseal and hose. When ordering, the number and type of element connections must be specified.

❷ Dynamic torque shown, static torque approximately 25% greater. Torque in each application is dependent upon air pressure and speed.

❸ Based upon minimum bores. Rotorseal and hose not included.

❹ M (in)=0.268 (H/2-radius of bore) + 0.34
M (mm)=0,268 (H/2-radius of bore) + 8,7

❺ American National Pipe Thread

❻ Pipe tap not required. Thru hole diameter 0.44 in (11 mm).

❼ Refer to Rotorseal Section for mounting and dimension information.

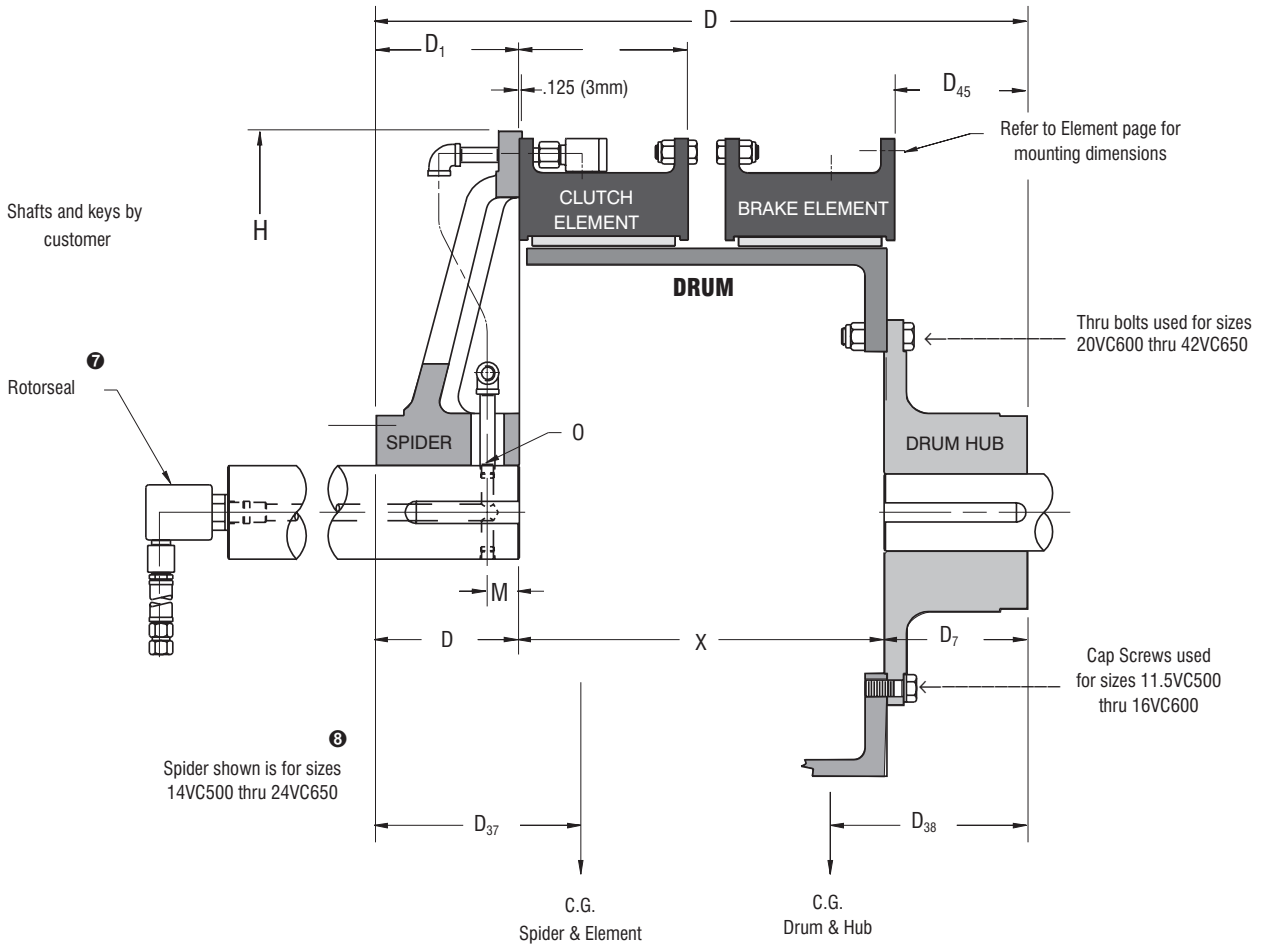
❽ Refer to VC Spider Piping and Configuration catalog page for other sizes.

❾ Based upon minimum bores.

❿ Refers to basic part number only. When ordering, the number of air inlets and type of connection must be specified.

Form VC 532

Gap-Mounted Arrangement – Dimensional Data
Narrow Sizes 11.5 to 42



English		lb·in @ 75 psi		lb ❸	Dimensions in inches												
11.5VC500	107594	27000	B3	380	2.50	4.13	22.72	4.34	6.13	5.00	5.3	8.3	4.50	20.00	❹	❻	13.38
14VC500	107595	39200	B3	562	2.75	5.00	24.69	5.50	6.13	5.75	6.0	8.7	5.19	24.00	1.44	3/8-18	13.44
16VC600	107596	65000	B3	678	3.25	5.00	27.19	5.50	7.38	5.75	6.2	9.8	5.19	26.00	1.44	3/8-18	15.94
20VC600	107597	93000	C2	911	3.75	5.50	28.44	6.00	7.38	6.50	6.0	10.0	5.94	30.00	1.44	3/8-18	15.94
24VC650	107598	135000	C2	1169	4.25	6.00	29.69	6.50	7.69	6.50	6.6	10.4	5.94	34.63	1.44	3/8-18	16.69
28VC650	107599	182000	C2	1662	4.75	8.00	32.69	8.00	7.69	8.00	6.9	10.7	7.45	38.63	5.00	1/2-14	16.69
33VC650	107600	255000	3/4 RH	2354	5.25	9.50	34.75	9.00	7.69	9.00	7.5	11.3	8.45	45.25	5.00	1/2-14	16.75
37VC650	107774	320000	3/4 RH	2757	5.50	9.50	35.75	10.00	7.69	9.00	7.9	11.3	8.45	49.25	6.00	1/2-14	16.75
42VC650	107775	380000	3/4 RH	3461	6.00	10.50	37.75	11.00	7.69	10.00	8.2	11.7	9.45	54.25	6.00	1/2-14	16.75

Size	Part ❶ Number	M, ❷ Torque Rating	Rotoseal Size	Weight Mass	Bore Range Min.	Bore Range Max.	D	D_1	D_2	D_7	D_{37}	D_{38}	D_{45}	H	M	❺ O	X
11.5VC500	107594	3050	B3	172	64	105	577	110	156	127	135	211	114	508	❹	❻	340
14VC500	107595	4430	B3	255	70	127	627	140	156	146	152	221	132	610	37	3/8-18	341
16VC600	107596	7350	B3	307	83	127	691	140	187	146	157	249	132	660	37	3/8-18	405
20VC600	107597	10500	C2	413	95	140	722	152	187	165	152	254	151	762	37	3/8-18	405
24VC650	107598	15300	C2	530	108	152	754	165	195	165	168	264	151	880	37	3/8-18	424
28VC650	107599	20600	C2	753	121	203	830	203	195	203	175	272	189	981	127	1/2-14	424
33VC650	107600	28800	3/4 RH	1066	133	241	883	229	195	229	191	287	215	1149	127	1/2-14	425
37VC650	107774	36200	3/4 RH	1249	140	241	908	254	195	229	201	287	215	1251	152	1/2-14	425
42VC650	107775	42900	3/4 RH	1568	152	267	959	279	195	254	208	297	240	1378	152	1/2-14	425

SI		N·m @ 5,2 bar		kg ❸	Dimensions in millimeters

English ❸	lb	lb	lb·ft²	lb	lb·ft²
11.5VC500	96	46	9	35	2
14VC500	128	66	19	65	4
16VC600	151	94	35	62	4
20VC600	179	139	78	95	9
24VC650	246	178	148	124	19
28VC650	280	231	269	240	59
33VC650	392	312	486	347	93
37VC650	433	340	691	398	159
42VC650	485	424	1100	545	243

Size	Weight	Weight	Wk²	Weight	Wk²
	Element	Drum		Drum Hub	
	Mass	Mass	J	Mass	J
11.5VC500	43	21	0,38	16	0,08
14VC500	58	30	0,80	29	0,17
16VC600	68	43	1,47	28	0,17
20VC600	81	63	3,28	43	0,38
24VC650	111	81	6,22	56	0,80
28VC650	127	105	11,30	109	2,48
33VC650	178	141	20,41	157	3,91
37VC650	196	154	29,02	180	6,68
42VC650	220	192	46,20	247	10,21
SI ❸	kg	kg	kg·m²	kg	kg·m²

Size	Part Numbers		
	Element ❶	Drum	Hub
11.5VC500	142639	408290	406960
14VC500	143829	408283	406962
16VC600	142640	408292	406964
20VC600	142641	408294	406966
24VC650	142642	408296	415398
28VC650	142643	409479	406970
33VC650	142644	408300	406972
37VC650	142645	408302	406974
42VC650	142647	408304	407000

Notes:

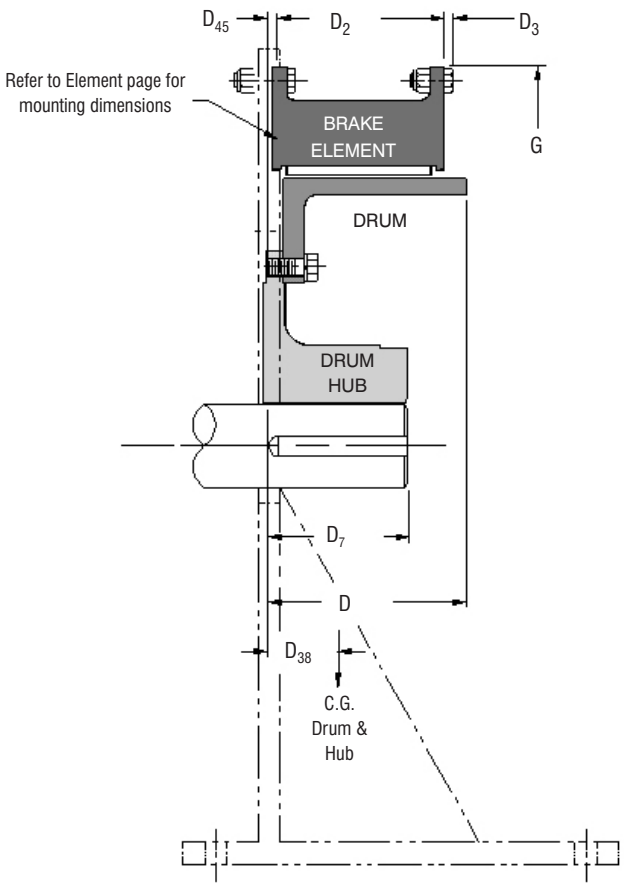
❶ Refers to basic part number only. When ordering, the number of air inlets and type of connection must be specified.

❷ Dynamic torque shown, static torque approximately 25% greater. Torque in each application is dependent upon air pressure and speed.

❸ Based upon minimum bores.

❹ Tolerance for sizes:
11.5 thru 20 +0.000/-0.005 in (+0,00/-0,13 mm)
24 thru 28 +0.000/-0.008 in (+0,00/-0,20 mm)
33 thru 42 +0.000/-0.010 in (+0,00/-0,13 mm)

Form VC 526 Dimensional Data – Narrow Sizes 11.5 to 42



English		lb·in @ 75 psi	lb ❸	Dimensions in inches							
11.5VC500	105861	27000	177	2.50	4.13	7.25	6.13	5.00	2.9	0.94	19.625
14VC500	105862	39200	259	2.75	5.00	7.38	6.13	5.75	3.1	1.07	23.500
16VC600	105863	65000	307	3.25	5.00	8.50	7.38	5.75	3.3	0.94	25.500
20VC600	105864	93000	413	3.75	5.50	8.63	7.38	6.50	3.2	1.06	29.500
24VC650	105865	135000	548	4.25	6.00	9.13	7.69	6.50	3.2	1.16	34.000
28VC650	105866	182000	751	4.75	8.00	9.13	7.69	8.00	3.2	1.16	38.000
33VC650	105867	255000	1051	5.25	9.50	9.13	7.69	9.00	3.5	1.16	44.625
37VC650	105868	320000	1171	5.50	9.50	9.13	7.69	9.00	3.2	1.16	48.625
42VC650	105869	380000	1454	6.00	10.50	9.13	7.69	10.00	3.4	1.16	53.625

Size	Part ❶ Number	M, ❷ Torque Rating	Weight / Mass	Min. Bore Range	Max. Bore Range	D	D_2	D_7	D_{38}	D_{45}	❹ G
11.5VC500	105861	3050	80	64	105	184	156	127	74	24	498,5
14VC500	105862	4430	117	70	127	187	156	146	79	27	596,9
16VC600	105863	7350	139	83	127	216	187	146	84	24	647,7
20VC600	105864	10500	187	95	140	219	187	165	81	27	749,3
24VC650	105865	15300	248	108	152	232	195	165	81	29	863,6
28VC650	105866	20600	340	121	203	232	195	203	81	29	965,2
33VC650	105867	28800	476	133	241	232	195	229	89	29	1133,5
37VC650	105868	36200	530	140	241	232	195	229	81	29	1235,1
42VC650	105869	42900	659	152	267	232	195	254	86	29	1362,1

SI		N·m @ 5,2 bar	kg ❸	Dimensions in millimeters							

English ❸	lb	lb	lb·ft²	lb	lb·ft²
14VC1000	213	122	35	70	5
16VC1000	240	98	38	106	10
20VC1000	282	169	112	173	23
24VC1000	378	225	192	243	47
28VC1000	431	295	350	332	88
32VC1000	624	371	559	450	133
38VC1200	684	552	1214	600	253
42VC1200	895	582	1567	780	430
46VC1200	980	729	2357	950	690
52VC1200	1192	852	3552	1212	1138
51VC1600	1934	890	4145	1961	2167
60VC1600	2450	1640	8810	2604	3270
66VC1600	2630	1905	19360	4940	6760

Size	Wk²	Weight	Wk²	Weight	Wk²
	Element	Drum		Drum Hub	
	J	Mass	J	Mass	J
14VC1000	96	55	1,47	32	0,21
16VC1000	109	44	1,60	48	0,42
20VC1000	128	77	4,70	78	0,97
24VC1000	171	102	8,06	110	1,97
28VC1000	195	134	14,70	150	3,70
32VC1000	283	168	23,48	204	5,59
38VC1200	310	250	50,99	272	10,63
42VC1200	405	264	65,81	353	18,06
46VC1200	444	330	98,99	430	28,98
52VC1200	540	386	149,2	549	47,80
51VC1600	876	403	174,1	888	91,01
60VC1600	1110	743	370,0	1180	137,3
66VC1600	1191	863	813,1	2238	283,9
SI ❸	kg	kg	kg·m²	kg	kg·m²

Size	Part Numbers		
	Element ❶	Drum	Drum Hub
14VC1000	142838	411111	411113
16VC1000	142821	409506	407069
20VC1000	142832	410087	407073
24VC1000	142675	409794	405625
28VC1000	142674	409537	405628
32VC1000	142673	410824	405631
38VC1200	142739	409474	405634
42VC1200	142677	409947	405637
46VC1200	142671	409980	405640
52VC1200	142841	409715	407079
51VC1600	142835	409711	408585
60VC1600	142915	411501	411500
66VC1600	142097	413727	

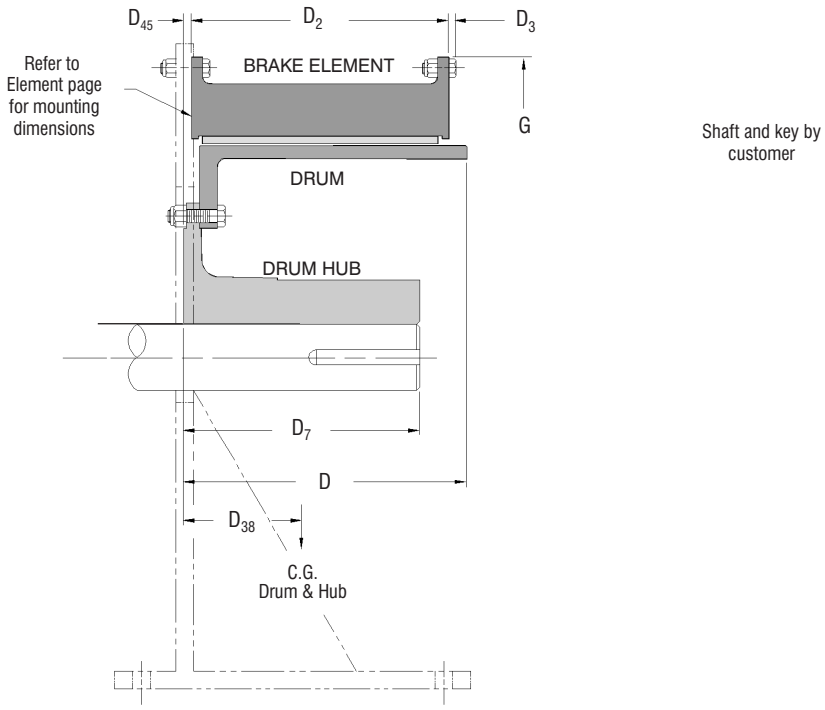
Notes:

❶ Refers to basic part number only. When ordering, the number of air inlets and type of connection must be specified.

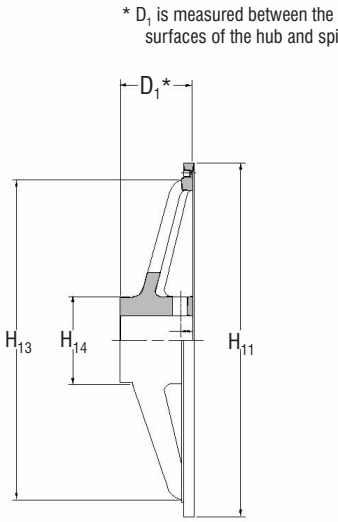
❷ Dynamic torque shown, static torque approximately 25% greater. Torque in each application is dependent upon air pressure and speed.

❸ Based upon minimum bores.

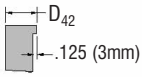
❹ Tolerance for sizes:
14 thru 20 +0.000/-0.005 in (+0,00/-0,13 mm)
24 thru 28 +0.000/-0.008 in (+0,00/-0,20 mm)
32 thru 60 +0.000/-0.010 in (+0,00/-0,25 mm)
66 +0.000/-0.005 in (+0,00/-0,13 mm)

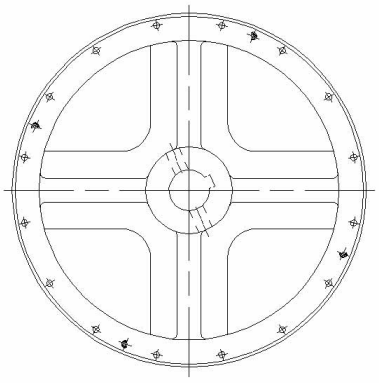


English		lb·in @ 75 psi	lb ❸	Dimensions in inches							
14VC1000	107601	85000	405	3.63	5.00	12.38	11.56	7.00	5.0	0.75	23.500
16VC1000	107602	114000	444	3.88	6.00	12.38	11.56	5.50	3.9	0.75	25.500
20VC1000	107603	161000	624	4.50	6.25	12.38	11.56	7.00	4.3	0.75	29.500
24VC1000	107604	219000	846	5.00	8.00	12.63	11.56	7.50	4.4	1.00	34.000
28VC1000	107605	296000	1058	5.50	8.50	12.63	11.56	8.00	4.4	1.00	38.000
32VC1000	107606	415000	1445	6.00	9.00	12.63	11.63	9.50	4.6	1.00	43.875
38VC1200	107607	680000	1836	7.25	9.25	14.75	13.75	10.00	5.1	1.00	49.375
42VC1200	107608	819000	2257	7.50	10.00	14.75	13.75	11.00	5.0	1.00	53.625
46VC1200	107609	950000	2659	8.00	10.00	15.00	13.75	11.00	5.0	1.25	60.250
52VC1200	107610A	1215000	3256	8.75	11.00	15.25	14.25	12.50	5.1	1.25	67.000
51VC1600	107611	1610000	4785	9.50	12.50	19.50	18.25	15.00	6.7	1.25	67.000
60VC1600	107612	2183000	6694	10.50	18.00	19.63	18.50	16.00	6.9	1.50	77.000
66VC1600	107613	2800000	9475	11.25	18.50	20.38	18.50	20.00	8.7	2.00	82.123
Size	**Part Number ❶**	**M_r Torque Rating ❷**	**Weight / Mass**	**Min. / Max. Bore Range**		**D**	**D_2**	**D_7**	**D_{38}**	**D_{45}**	**❹ G**
				Min.	**Max.**						
14VC1000	107601	9610	183	92	127	314	294	178	127	19	596,9
16VC1000	107602	12900	201	99	152	314	294	140	99	19	647,7
20VC1000	107603	18200	283	114	159	314	294	178	109	19	749,3
24VC1000	107604	24700	383	127	203	321	294	191	112	25	863,6
28VC1000	107605	33400	479	140	216	321	294	203	112	25	965,2
32VC1000	107606	46900	655	152	229	321	295	241	117	25	1114,4
38VC1200	107607	76800	832	184	235	375	349	254	130	25	1254,1
42VC1200	107608	92500	1022	191	254	375	349	279	127	25	1362,1
46VC1200	107609	107000	1205	203	254	381	349	279	127	32	1530,4
52VC1200	107610A	137000	1475	222	279	387	362	318	130	32	1701,8
51VC1600	107611	182000	2168	241	318	495	464	381	170	32	1701,8
60VC1600	107612	247000	3032	267	457	499	470	406	175	38	1955,8
66VC1600	107613	316000	4292	286	470	518	470	508	221	51	2085,9
SI		**N·m @ 5,2 bar**	**kg ❸**	**Dimensions in millimeters**							

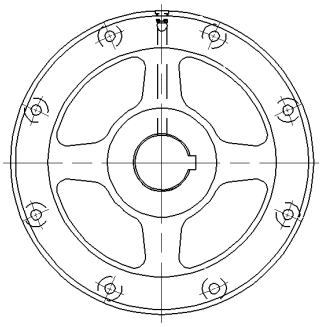


Spider shown is for sizes 14 thru 24 ❶



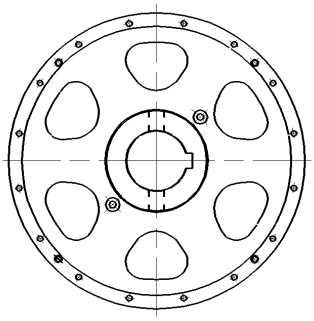


Sizes 14 thru 24



Size 11.5

Spider Web Configurations



Sizes 28 thru 42

English		lb	lb·ft²	Dimensions in inches				
11.5VC500	408376 ❷	70	19	4.34	0.59	20.00	N/A	6.00
14VC500	411170	102	35	5.50	1.06	24.00	21.25	8.00
16VC600	408277	139	50	5.50	1.06	26.00	23.25	8.00
20VC600	408279	224	122	6.00	1.06	30.00	27.00	8.50
24VC650	408281	260	174	6.50	1.06	34.63	31.00	9.00
28VC650	505480	514	534	8.00	1.13	38.63	35.25	11.50
33VC650	505285	716	811	9.00	1.13	45.25	41.00	13.50
37VC650	505275	940	1404	10.00	1.25	49.25	45.50	13.50
42VC650	502369	1284	2106	11.00	1.31	54.25	50.48	16.50
Size	**Part Number**	**Weight ❸ Mass ❸**	**Wk² J**	**D_1**	**D_{42}**	**H_{11}**	**H_{13}**	**H_{14}**
11.5VC500	408376 ❷	32	0,80	110	15	508	N/A	152
14VC500	411170	46	1,47	140	27	610	540	203
16VC600	408277	63	2,10	140	27	660	591	203
20VC600	408279	101	5,12	152	27	762	686	216
24VC650	408281	118	7,31	165	27	880	787	229
28VC650	505480	233	22,43	203	29	981	895	292
33VC650	505285	324	34,06	229	29	1149	1041	343
37VC650	505275	426	58,97	254	32	1251	1156	343
42VC650	502369	582	88,45	279	33	1378	1282	419
SI		kg	kg·m²	Dimensions in millimeters				

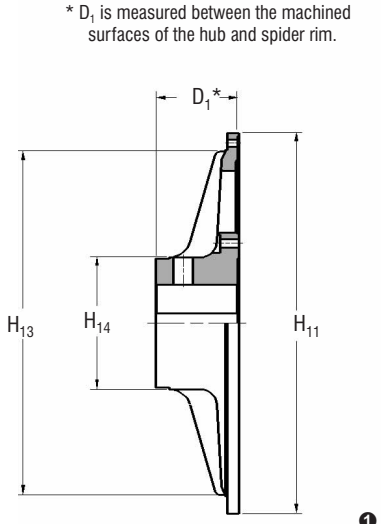
Notes:

❶ Refer to VC Spider Piping and Configuration catalog page for other sizes.

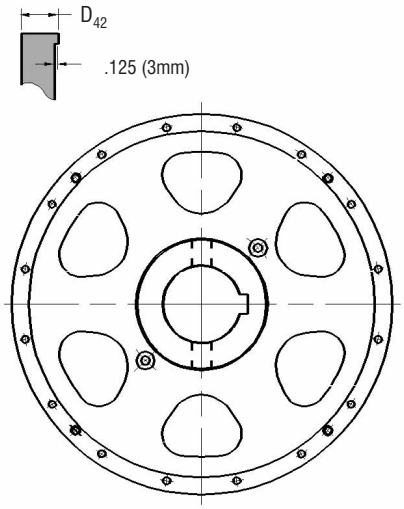
❷ Part number for two air passages. Part number for single air passage - 408375.

❸ Based upon minimum bore.

Form VC 52 Spiders – Dual Narrow Sizes – Dimensional and Technical Data

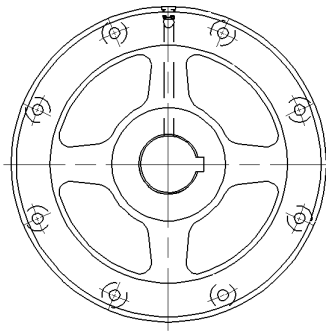


Spider shown is for sizes 20 and 24 ❶

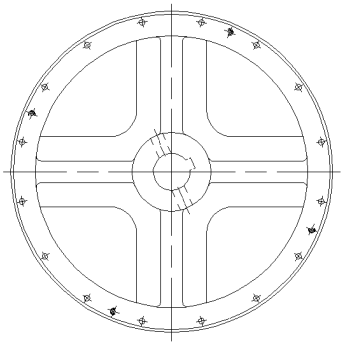


Sizes 16 thru 42

Spider Web Configurations



Size 11.5



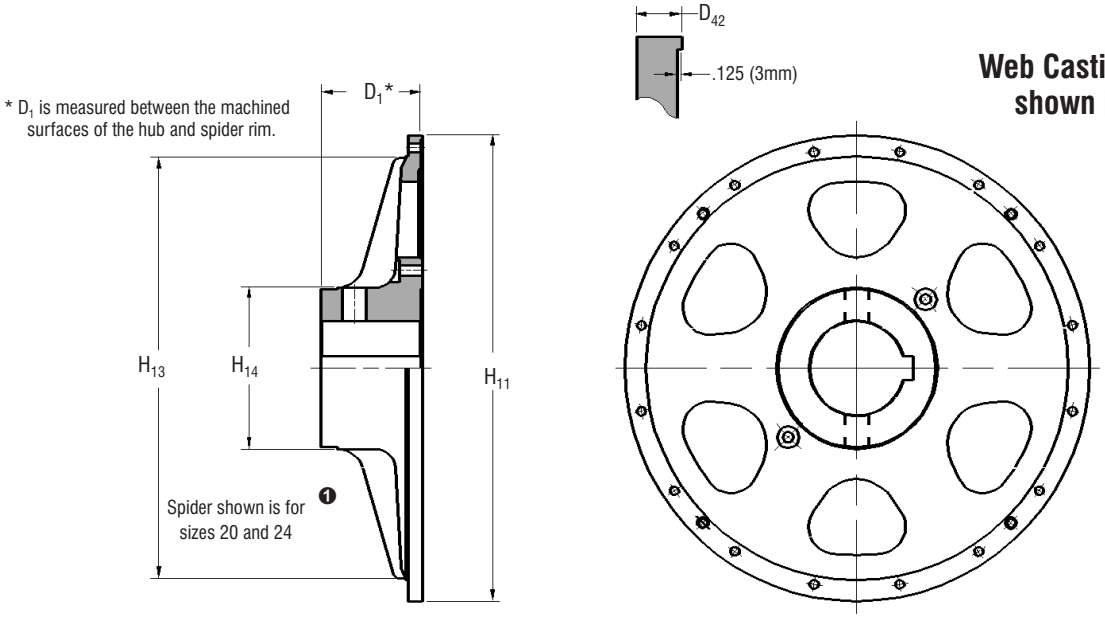
Size 14

English		lb	lb·ft²	Dimensions in inches				
11.5VC500	410856	71	19	4.84	0.62	20.00	N/A	7.50
14VC500	411170	102	35	5.50	1.06	24.00	21.25	8.00
16VC600	505283	236	111	5.50	1.50	26.00	23.00	10.00
20VC600	509698	295	167	7.00	1.13	30.00	27.00	10.00
24VC650	509699	408	285	7.75	1.13	34.63	31.50	12.00
28VC650	509700	554	474	8.00	1.13	38.63	35.25	14.00
33VC650	509701	802	965	9.00	1.13	45.25	41.00	15.00
37VC650	509702	981	1356	10.00	1.25	49.25	45.50	15.50
42VC650	509703	1116	1868	11.00	1.31	54.25	50.50	16.50
Size	**Part Number**	**Weight ❷ Mass ❷**	**Wk² J**	**D_1**	**D_{42}**	**H_{11}**	**H_{13}**	**H_{14}**
11.5VC500	410856	32	0,80	122.9	15.8	508	N/A	190.5
14VC500	411170	46	1,47	139.7	26.9	609.6	539.7	203.2
16VC600	505283	107	4,66	139.7	38.1	660.4	584.2	254
20VC600	509698	134	7,01	177.8	28.7	762	685.8	254
24VC650	509699	185	11,97	196.9	28.7	879.6	800.1	304.8
28VC650	509700	251	19,91	203.2	28.7	981.2	895.3	355.6
33VC650	509701	363	40,53	228.6	28.7	1149.4	1041.0	381
37VC650	509702	444	56,95	254	31.8	1251	1155.0	393.7
42VC650	509703	506	78,46	279.4	33.3	1378	1282.0	419.1
SI		kg	kg·m²	Dimensions in millimeters				

Notes:

❶ Refer to VC Spider Piping and Configuration catalog page for other sizes.

❷ Based on minimum bore.



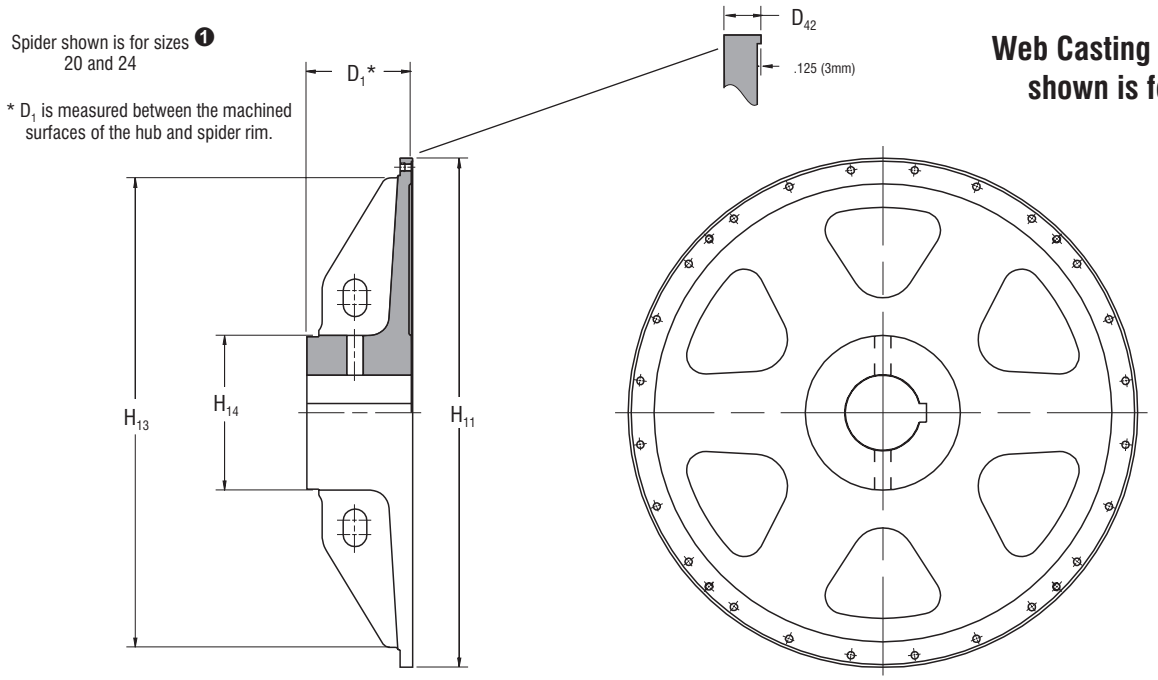
Web Casting Configuration shown is for all sizes

English		lb	lb·ft²	Dimensions in inches				
14VC1000	508545	205	79	5.50	1.13	24.00	21.00	8.00
16VC1000	505283	236	111	5.50	1.50	26.00	23.00	10.00
20VC1000	509698	295	167	7.00	1.13	30.00	27.00	10.00
24VC1000	509699	408	285	7.75	1.13	34.63	31.50	12.00
28VC1000	509700	554	474	8.00	1.13	38.63	35.25	14.00
32VC1000	509706	727	781	9.00	1.13	44.50	41.00	15.00
38VC1200	509707	1002	1502	10.00	1.25	50.00	45.50	15.50
42VC1200	509703	1116	1868	11.00	1.31	54.25	50.50	16.50
46VC1200	509708	1504	2968	11.00	1.50	61.00	56.50	17.00
52VC1200	509709	2579	5087	12.50	1.69	67.75	63.25	23.00
51VC1600	509710	2621	6706	15.00	1.69	67.75	63.25	20.00
60VC1600	509711	4096	13346	16.00	1.88	77.75	72.00	26.00
Size	**Part Number**	**Weight** ❷ **Mass** ❷	**Wk²** **J**	**D_1**	**D_{42}**	**H_{11}**	**H_{13}**	**H_{14}**
14VC1000	508545	93	3,32	140	29	610	533	203
16VC1000	505283	107	4,66	140	38	660	584	254
20VC1000	509698	134	7,01	178	29	762	686	254
24VC1000	509699	185	11,97	197	29	880	800	305
28VC1000	509700	251	19,91	203	29	981	895	356
32VC1000	509706	329	32,80	229	29	1130	1041	381
38VC1200	509707	454	63,08	254	32	1270	1156	394
42VC1200	509703	506	78,46	279	33	1378	1283	419
46VC1200	509708	681	124,7	279	38	1549	1435	432
52VC1200	509709	1168	213,7	318	43	1721	1607	584
51VC1600	509710	1187	281,7	381	43	1721	1607	508
60VC1600	509711	1855	560,5	406	48	1975	1829	660
SI		**kg**	**kg·m²**	**Dimensions in millimeters**				

Notes:

❶ Refer to VC Spider Piping and Configuration catalog page for other sizes.

❷ Based on minimum bore.



Web Casting Configuration shown is for all sizes

English		lb	lb·ft²	Dimensions in inches				
16VC1000	505284	264	113	8.00	1.50	26.00	23.00	10.00
20VC1000	509693	333	197	9.50	1.13	30.00	27.00	11.00
24VC1000	509694	442	312	9.31	1.13	34.63	31.50	12.50
28VC1000	509695	680	597	10.00	1.13	38.63	35.25	14.00
32VC1000	509696	967	932	12.00	1.13	44.50	41.00	16.75
38VC1200	509646	1350	1625	13.00	1.25	50.00	45.50	18.50
42VC1200	509647	1763	2445	17.00	1.31	54.25	50.50	19.00
46VC1200	509691	1855	3577	17.00	1.44	61.00	56.50	20.00
52VC1200	509648	2854	5277	17.00	1.69	67.75	63.25	23.00
51VC1600	509649	3639	7611	20.00	1.69	67.75	63.25	25.00
60VC1600	509692	5402	14489	24.00	1.88	77.75	72.00	30.00
Size	**Part Number**	**Weight ❷ Mass ❷**	**Wk² J**	**D_1**	**D_{42}**	**H_{11}**	**H_{13}**	**H_{14}**
16VC1000	505284	120	4,75	203	38	660	584	254
20VC1000	509693	151	8,27	241	29	762	686	279
24VC1000	509694	200	13,10	236	29	880	800	318
28VC1000	509695	308	25,07	254	29	981	895	356
32VC1000	509696	438	39,14	305	29	1130	1041	425
38VC1200	509646	612	68,25	330	32	1270	1156	470
42VC1200	509647	799	102,7	432	33	1378	1283	483
46VC1200	509691	840	150,2	432	37	1549	1435	508
52VC1200	509648	1293	221,6	432	43	1721	1607	584
51VC1600	509649	1648	319,7	508	43	1721	1607	635
60VC1600	509692	2447	608,5	610	48	1975	1829	762
SI		**kg**	**kg·m²**	**Dimensions in millimeters**				

Notes:

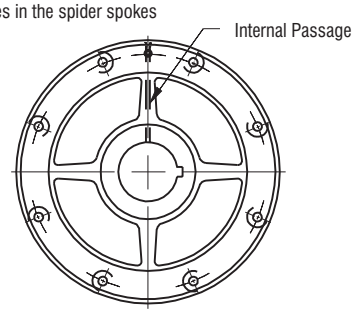
❶ Refer to VC Spider Piping and Configuration catalog page for other sizes.

❷ Based on minimum bore.

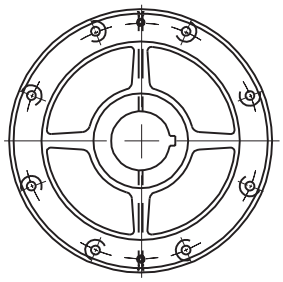
Form VC 537

Shaft to Clutch Element Piping

Spider for element 11.5VC500 has internal air passages in the spider spokes

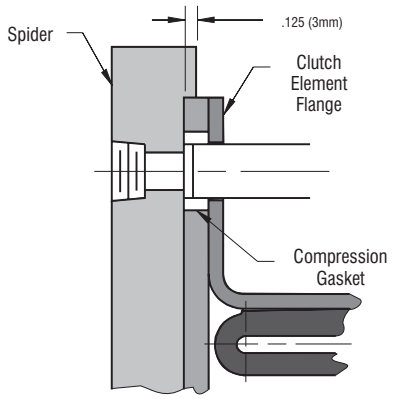


Single Connection

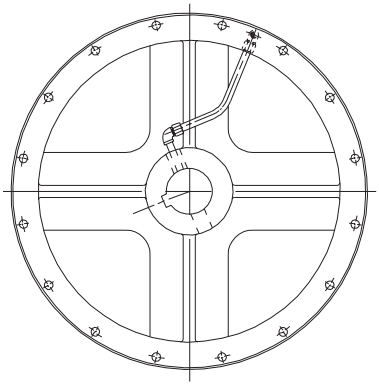


Two Connections

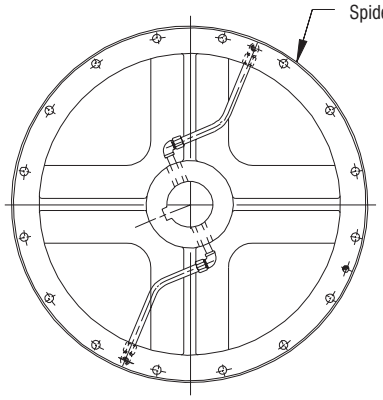
Spider to Flange Gasket
Compression gaskets are used to seal the spider and element flange interface.



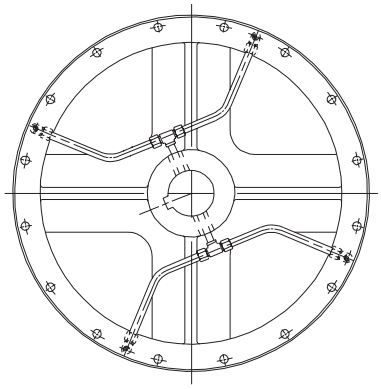
External spider piping versus number of connections for all other sizes of single and dual, narrow and wide VC elements



Single Connection

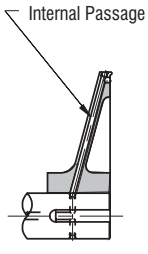


Two Connections

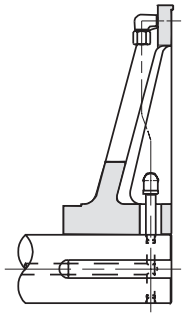


Four Connections

Spider Configuration versus Element Size

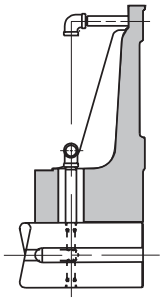


Single and Dual 11.5



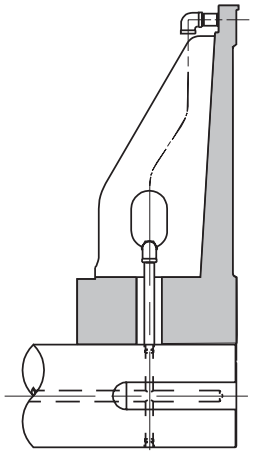
Single Narrow
14 thru 24

Dual Narrow
14



Dual Narrow
20 and 24

Single and Dual Wide
20 and 24

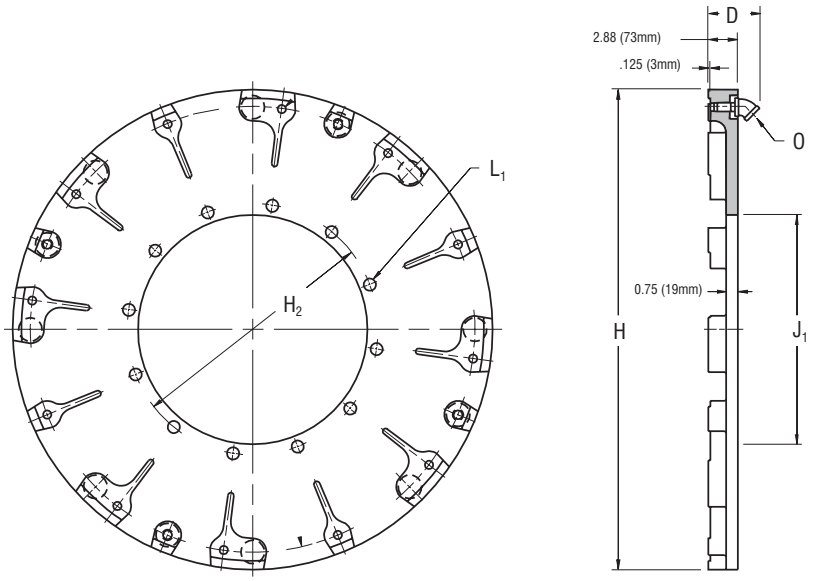


Dual Narrow
16

Single and Dual
Narrow
28 thru 42

Single Wide
14VC

Single and Dual
Wide
16VC, 28 thru 60



English			lb	lb·ft²	lb	lb·ft²	Dimesnions in inches						
11.5VC500	402162	406949	28	13	73	35	3.94	20.38	9.25	8.250	6	0.53	1/4-18
14VC500	401337	406950	38	16	103	70	3.94	24.63	12.00	10.750	6	0.78	3/8-18
16VC600	500411	505030	48	40	130	108	4.38	26.63	13.50	12.125	8	0.78	3/8-18
20VC600	500374	504974	56	63	146	167	4.38	30.63	18.50	16.750	10	0.78	3/8-18
24VC650	500345	504975	74	110	194	297	4.38	35.13	21.50	19.500	14	0.78	3/8-18
28VC650	500367	504976	81	157	219	424	4.38	39.13	25.00	23.000	18	0.78	3/8-18
33VC650	500369	504977	96	255	259	686	4.44	45.88	31.00	29.000	20	0.78	1/2-14
37VC650	500371	504978	121	381	321	1026	4.44	49.88	34.50	32.500	16	0.78	1/2-14
42VC650	500372	504979	143	575	378	1550	4.44	54.88	35.50	37.500	10	1.03	1/2-14

Size	Part No. for Single Element	Part No. for Dual Element	Weight (Single Adapter ❶) Mass	Wk² (Single Adapter ❶) J	Weight (Dual Adapter ❶) Mass	Wk² (Dual Adapter ❶) J	D	H	H_2	❷ J_1	Number	Size	❷ O
											L_1 Number	L_1 Size	
11.5VC500	402162	406949	13	0,55	33	1,47	100	518	235	210	6	13	1/4-18
14VC500	401337	406950	17	0,67	47	2,94	100	626	305	273	6	20	3/8-18
16VC600	500411	505030	22	1,68	59	4,54	111	676	343	308	8	20	3/8-18
20VC600	500374	504974	25	2,65	66	7,01	111	778	470	425	10	20	3/8-18
24VC650	500345	504975	34	4,62	88	12,47	111	892	540	495	14	20	3/8-18
28VC650	500367	504976	37	6,59	99	17,81	111	994	635	584	18	20	3/8-18
33VC650	500369	504977	43	10,71	117	28,81	113	1165	787	737	20	20	1/2-14
37VC650	500371	504978	55	16,00	145	43,09	113	1267	876	826	16	20	1/2-14
42VC650	500372	504979	65	24,15	171	65,10	113	1394	1003	953	10	26	1/2-14
SI			kg	kg·m²	kg	kg·m²	Dimensions in millimeters						

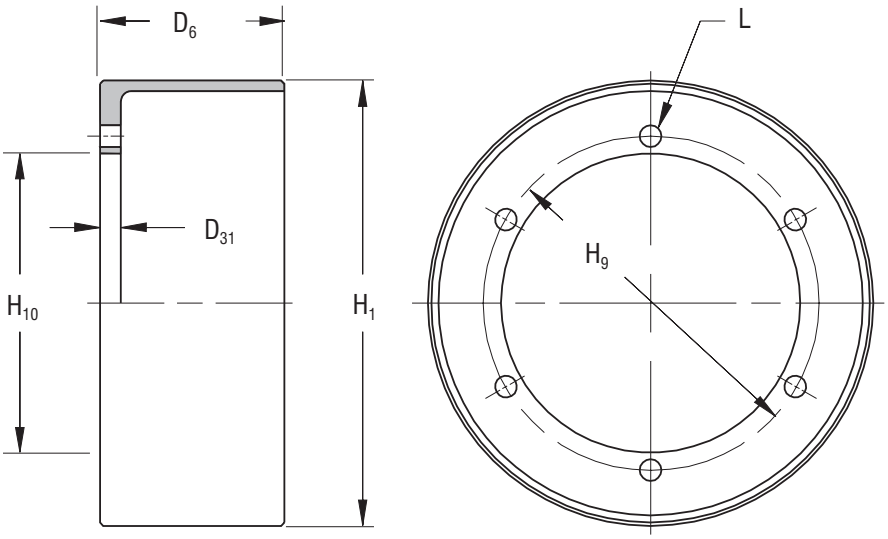
Notes:

❶ Single adapter made of aluminum alloy, dual adapter made of cast iron.

❷ Tolerance +0.005/-0.000 in (+0,13/-0,00 mm)

❸ American National Pipe Thread

Form VC 528 Internal Flange Drums – Narrow Sizes – Dimensional and Technical Data



Size	Drum Part Numbers for:			
	Single Elements		Dual Elements	
	Thru Holes	Tapped Holes	Thru Holes	Tapped Holes
11.5VC500	408290	408291	408306	408307
14VC500	408283	408284	408308	408309
16VC600	408292	408293	408310	408311
20VC600	408294	408295	408312	408313
24VC650	408296	408297	408314	411828
28VC650	409479	408299	408316	408317
33VC650	408300	408301	408318	408319
37VC650	408302	408303	408320	408321
42VC650	408304	408305	408322	408323

English	**Dimensions in inches**								**lb**	**lb·ft²**		**in**	**lb**	**lb·ft²**
11.5VC500	0.75	11.5	7.250	6.250	0.53	1/2-13	6	6.50	46	9	12	13.13	83	16
14VC500	0.75	14	9.250	8.250	0.53	1/2-13	12	6.50	66	19	12	13.13	139	40
16VC600	0.75	16	9.625	8.250	0.78	3/4-10	8	7.75	94	35	8	15.63	175	66
20VC600	1.00	20	12.000	10.500	0.78	3/4-10	12	7.75	139	78	12	15.63	234	138
24VC650	1.00	24	16.000	14.625	0.78	3/4-10	12	8.25	178	148	16	16.38	293	258
28VC650	1.00	28	20.000	18.500	0.78	3/4-10	16	8.25	231	269	16	16.38	348	472
33VC650	1.00	33	21.500	19.500	0.78	3/4-10	14	8.25	312	486	24	16.44	507	827
37VC650	1.00	37	27.000	25.000	0.78	3/4-10	18	8.25	340	691	32	16.44	553	1172
42VC650	1.13	42	31.000	29.000	0.78	3/4-10	20	8.25	424	1100	36	16.44	662	1809
Size	D_{31}	❶ H_1	H_9	❷ H_{10}	Thru	Tapped ❸	No.	D_6	Weight	WK^2	No.	D_6	Weight	WK^2
					L Holes				Single Drum		L Holes		Dual Drum	
					Thru	Tapped	No.	D_6	Mass	J	No.	D_6	Mass	J
11.5VC500	19	292	184,2	158,8	13	1/2-13	6	165	21	0,38	12	333	38	0,67
14VC500	19	356	235,0	209,6	13	1/2-13	12	165	30	0,80	12	333	63	1,68
16VC600	19	406	244,5	209,6	20	3/4-10	8	197	43	1,47	8	397	79	2,77
20VC600	25	508	304,8	266,7	20	3/4-10	12	197	63	3,28	12	397	106	5,80
24VC650	25	610	406,4	371,5	20	3/4-10	12	210	81	6,22	16	416	133	10,84
28VC650	25	711	508,0	469,9	20	3/4-10	16	210	105	11,30	16	416	158	19,82
33VC650	25	838	546,1	495,3	20	3/4-10	14	210	141	20,41	24	418	230	34,73
37VC650	25	940	685,8	635,0	20	3/4-10	18	210	154	29,02	32	418	251	49,22
42VC650	29	1067	787,4	736,6	20	3/4-10	20	210	192	46,20	36	418	300	75,98
SI	**Dimensions in millimeters**								**kg**	**kg·m²**		**mm**	**kg**	**kg·m²**

Notes:

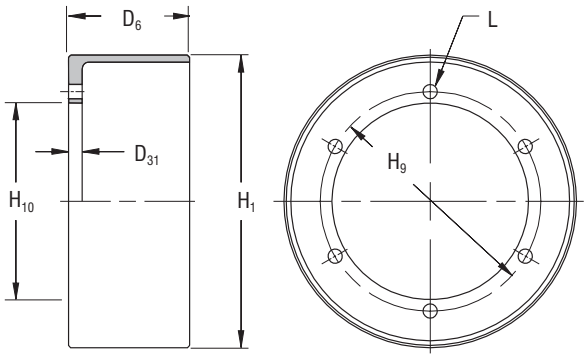
❶ Tolerance +0.000/-0.010 in
(+0,00/-0,25 mm)

❷ Tolerance +0.003/-0.000 in
(+0,08/-0,00 mm)

❸ American National Standard for Unified Screw Threads.

Size	Drum Part Numbers Having: ⑩	
	Male Register	Female Register
14VC1000	411111 ❶	N/A
16VC1000	409506	410320
20VC1000	410087	410088
24VC1000	409794	409795
28VC1000	409537	409538
32VC1000	410824	410825
38VC1200	409474	409475

Size	Drum Part Numbers Having: ⑩	
	Male Register	Female Register
42VC1200	409947	409948
46VC1200	409980	409981
52VC1200	409715	409716
51VC1600	409711	409712
60VC1600	411501	411502
66VC1600	413727	413726



English	Dimensions in inches							lb	lb·ft²	in	lb	lb·ft²
14VC1000	11.50	14	9.250	8.250	12	❾	0.88	122	35	N/A	N/A	N/A
16VC1000	11.50	16	11.500	10.000	❺	0.78 ❷	1.00	98	38	0.88	94	37
20VC1000	11.50	20	15.000	13.500	❺	0.78	1.00	169	112	0.88	164	109
24VC1000	11.50	24	16.000	14.625	❺	0.78	1.00	225	192	0.88	215	186
28VC1000	11.50	28	20.000	18.500	❺	0.78	1.00	295	350	0.88	282	338
32VC1000	11.50	32	21.000	19.000	❻	0.78	1.00	371	559	0.88	352	537
38VC1200	13.63	38	27.000	25.000	❼	0.78	1.00	552	1214	0.88	530	1173
42VC1200	13.63	42	31.000	29.000	❽	0.78	1.13	582	1567	1.00	550	1510
46VC1200	13.63	46	34.500	32.500	❼	1.03	1.25	729	2357	1.13	700	2276
52VC1200	13.88	52	40.000	38.000	❻	1.06	1.25	852	3552	1.13	820	3425
51VC1600	18.13	51	40.000	38.000	❻	1.06	1.25	890	4145	1.13	860	4035
60VC1600	17.75	60	46.000	42.000	24	1.56	1.75	1640	8810	1.63	1590	8575
66VC1600	18.25	66	48.000	44.000	❽	1.56	1.75	1905	15070	1.50	1770	14340

Size	D_6	❸ H_1	H_9	❹ H_{10}	L Holes No.	L Holes Size	Male Register Drum ⑩ D_{31}	Male Register Drum ⑩ Mass	Male Register Drum ⑩ J	Female Register Drum ⑩ D_{31}	Female Register Drum ⑩ Mass	Female Register Drum ⑩ J
14VC1000	292	356	235,0	209,6	12	❾	22	55	1,47	N/A	N/A	N/A
16VC1000	292	406	292,1	254,0	❺	20 ❷	25	44	1,60	22	43	1,55
20VC1000	292	508	381,0	342,9	❺	20	25	77	4,70	22	74	4,58
24VC1000	292	610	406,4	371,5	❺	20	25	102	8,06	22	97	7,81
28VC1000	292	711	508,0	469,9	❺	20	25	134	14,70	22	128	14,20
32VC1000	292	813	533,4	482,6	❻	20	25	168	23,48	22	159	22,55
38VC1200	346	965	685,8	635,0	❼	20	25	250	50,99	22	240	49,27
42VC1200	346	1067	787,4	736,6	❽	20	29	264	65,81	25	249	63,42
46VC1200	346	1168	876,3	825,5	❼	26	32	330	98,99	29	317	95,59
52VC1200	353	1321	1016,0	965,2	❻	27	32	386	149,2	29	371	143,9
51VC1600	461	1295	1016,0	965,2	❻	27	32	403	174,1	29	390	169,5
60VC1600	451	1524	1168,4	1066,8	24	40	44	743	370,0	41	720	360,2
66VC1600	464	1676	1219,2	1117,6	❽	40	44	863	632,9	38	802	602,3
SI	**Dimensions in millimeters**							**kg**	**kg·m²**	**mm**	**kg**	**kg·m²**

Notes:

❶ Drum furnished without male register.

❷ Male drum has tapped holes. Female has drilled holes. See VC510.

❸ Tolerance +0.000/-0.010 in
(+0,00/-0,25 mm)

❹ Tolerance for sizes:
14 thru 51 +0.003/-0.000 in
(+0,08/-0,00 mm)
60 and 66 +0.005/-0.000 in
(+0,13/-0,00 mm)

❺ 14 Holes based upon a 16 hole pattern. Two holes 180° apart not used.

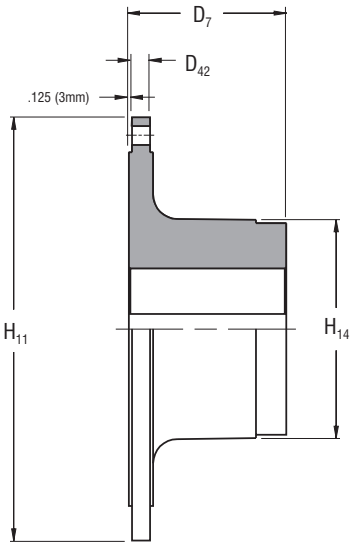
❻ 22 Holes based upon a 24 hole pattern. Two holes 180° apart not used.

❼ 30 Holes based upon a 32 hole pattern. Two holes 180° apart not used.

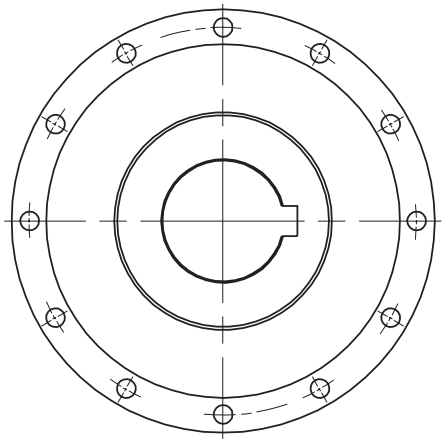
❽ 34 Holes based upon a 36 hole pattern. Two holes 180° apart not used.

❾ Furnished with tapped holes only. 1/2-13 American National Standards for Unified Screw Threads.

⑩ See form VC 510



Thru or Tapped Holes



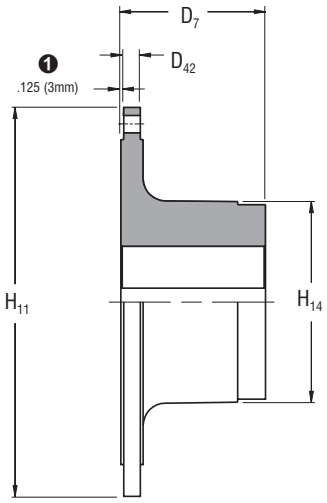
Size	Drum Hub Part Numbers for:			
	Single Elements		Dual Elements	
	Thru Holes	Tapped Holes	Thru Holes	Tapped Holes
11.5VC500	406959	406960	406945	406946
14VC500	406961	406962	406961	406962
16VC600	406963	406964	407027	407028
20VC600	406965	406966	406376	407029
24VC650	406967	406968	405625	405626
28VC650	406969	406970	405628	405629
33VC650	406971	406972	405631	405632
37VC650	406973	406974	405634	405635
42VC650	406975	407000	405637	405638

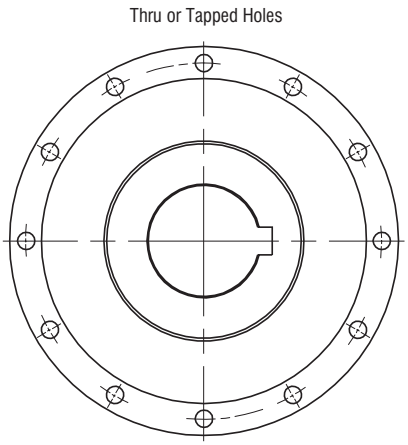
English	**in**	**lb**	**lb·ft²**	**Dimensions in inches**			**lb**	**lb·ft²**	**Dimensions in inches**		
11.5VC500	8.25	35	2	5.00	0.63	6.00	43	2	7.00	0.63	6.00
14VC500	10.25	65	4	5.75	0.75	7.50	60	4	5.75	0.75	7.50
16VC600	11.13	62	4	5.75	0.63	7.50	82	6	6.50	0.75	8.00
20VC600	13.50	95	9	6.50	0.75	8.50	124	13	7.00	0.75	10.00
24VC650	17.50	124	19	6.50	0.75	9.00	215	42	7.50	1.00	12.00
28VC650	21.50	240	59	8.00	0.75	11.50	292	85	8.00	1.00	13.00
33VC650	23.00	347	93	9.00	0.75	13.50	395	123	9.50	1.00	14.50
37VC650	28.50	398	159	9.00	0.75	13.50	528	240	10.00	1.00	15.50
42VC650	32.50	545	243	10.00	0.75	15.00	647	413	11.00	1.00	16.50
Size	**H_{11}**	**Weight** ❶	**Wk²**	**D_7**	**D_{42}**	**H_{14}**	**Weight** ❶	**Wk²**	**D_7**	**D_{42}**	**H_{14}**
		For Single Elements					**For Dual Elements**				
		Mass ❶	**J**	**D_7**	**D_{42}**	**H_{14}**	**Mass** ❶	**J**	**D_7**	**D_{42}**	**H_{14}**
11.5VC500	210	16	0,08	127	16	152	19	0,08	178	16	152
14VC500	260	29	0,17	146	19	191	27	0,17	146	19	191
16VC600	283	28	0,17	146	16	191	37	0,25	165	19	203
20VC600	343	43	0,38	165	19	216	56	0,55	178	19	254
24VC650	445	56	0,80	165	19	229	97	1,76	191	25	305
28VC650	546	109	2,48	203	19	292	132	3,57	203	25	330
33VC650	584	157	3,91	229	19	343	179	5,17	241	25	368
37VC650	724	180	6,68	229	19	343	239	10,08	254	25	394
42VC650	826	247	10,21	254	19	381	293	17,35	279	25	419
SI	**mm**	**kg**	**kg·m²**	**Dimensions in millimeters**			**kg**	**kg·m²**	**Dimensions in millimeters**		

Notes:

❶ Based upon minimum bores.

Size	Hub Part Numbers for:			
	Single Drums		Dual Drums	
	Thru Holes	Tapped Holes	Thru Holes	Tapped Holes
14VC1000	411113			
16VC1000	407069	407070	410487	407072
20VC1000	407073	407074	407075	407076
24VC1000	405625	405626	407077	407078
28VC1000	405628	405629	408031	407081
32VC1000	405631	405632	407082	407083
38VC1200	405634	405635	406841	407084
42VC1200	405637	405638	410990	407085
46VC1200	405640	405641	408001	407086
52VC1200	407079	407080	407876	407087
51VC1600	408585		408586	
60VC1600	411500		411691	
66VC1600			413725	





English	inches		lb	lb·ft²	inches		lb	lb·ft²	inches	
14VC1000	0.75	10.25	70	5	7.00	7.50				
16VC1000	0.75	13.00	97	9	5.50	9.50	199	19	10.00	9.50
20VC1000	0.75	16.50	150	21	7.00	10.00	203	32	9.50	11.00
24VC1000	1.00	17.50	215	44	7.50	12.00	271	50	9.50	12.75
28VC1000	1.00	21.50	297	82	8.00	13.00	370	99	10.00	14.00
32VC1000	1.00	22.50	407	127	9.50	14.50	574	185	12.00	16.50
38VC1200	1.00	28.50	521	236	10.00	15.50	806	368	13.00	18.50
42VC1200	1.00	32.50	677	378	11.00	16.50	1233	653	17.00	20.00
46VC1200	1.25	36.50	813	577	11.00	17.00	1316	856	17.00	20.00
52VC1200	1.25	42.00	1125	1000	12.50	18.50	1803	1514	17.00	23.00
51VC1600	1.25	42.00	1475	1150	15.00	20.00	2303	1993	20.00	25.00
60VC1600	1.75	49.00	2526	3034	16.00	26.00	4143	4967	24.00	30.00
66VC1600 ❸	2.00	51.50	4940	6760	20.00	34.00	6450	7800	24.00	34.00

Size	D_{42}	H_{11}	Weight ❷	Wk^2	D_7	H_{14}	Weight ❷	Wk^2	D_7	H_{14}
			For Single Element				For Dual Element			
			Mass ❷	J	D_7	H_{14}	Mass ❷	J	D_7	H_{14}
14VC1000	19	260	32	0,21	178	191				
16VC1000	19	330	44	0,38	140	241	90	0,80	254	241
20VC1000	19	419	68	0,88	178	254	92	1,34	241	279
24VC1000	25	445	97	1,85	191	305	123	2,10	241	324
28VC1000	25	546	135	3,44	203	330	168	4,16	254	356
32VC1000	25	572	184	5,33	241	368	260	7,77	305	419
38VC1200	25	724	236	9,91	254	394	365	15,46	330	470
42VC1200	25	826	307	15,88	279	419	559	27,43	432	508
46VC1200	32	927	368	24,23	279	432	596	35,95	432	508
52VC1200	32	1067	510	42,00	318	470	817	63,59	432	584
51VC1600	32	1067	668	48,30	381	508	1043	83,71	508	635
60VC1600	44	1245	1144	127,4	406	660	1877	208,6	610	762
66VC1600 ❸	51	1308	2238	283,9	508	864	2922	327,6	610	864
SI	millimeters		kg	kg·m²	millimeters		kg	kg·m²	millimeters	

Notes:

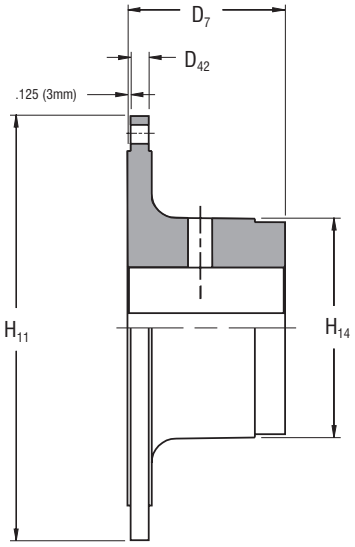
❶ 0.25 (6 mm) for size 66.

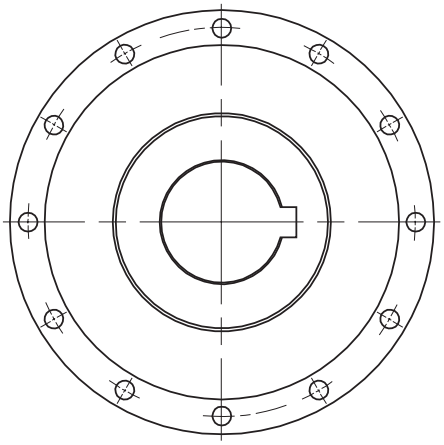
❷ Based upon minimum bores.

❸ Data for dual element hub also applies to the dual element adapter hub part number 413724.

Form VC 512

Ventilated Adapter Hub – Narrow Sizes
Dimensional and Technical Data





Size	Hub Part Numbers for:			
	Single Adapter		Dual Adapters	
	Thru Holes	Tapped Holes	Thru Holes	Tapped Holes
11.5VC500	406904	406905	408232	408233
14VC500	407011	407012	408234	408235
16VC600	407013	407014	408236	408237
20VC600	407015	407016	408238	408239
24VC650	407017	407018	408240	408241
28VC650	407019	407020	408242	408243
33VC650	407021	407022	408244	408245
37VC650	407023	407024	408246	408247
42VC650	407025	407026	408248	408249

English	**in**	**lb**	**lb·ft²**		**inches**		**lb**	**lb·ft²**		**inches**	
11.5VC500	10.25	54	4	5.00	0.63	7.00	64	4	5.75	0.75	7.50
14VC500	13.50	82	8	5.75	0.75	7.50	82	8	5.75	0.75	7.50
16VC600	15.00	99	14	5.75	0.75	8.00	108	15	6.50	0.75	8.00
20VC600	20.00	147	34	6.50	0.75	8.50	166	34	7.00	0.75	10.00
24VC650	23.00	192	56	6.50	0.75	9.50	250	68	7.50	0.75	12.00
28VC650	26.50	250	106	8.00	0.75	9.50	324	119	8.00	0.75	13.00
33VC650	33.50	374	214	9.00	0.75	11.00	532	342	9.50	1.00	14.50
37VC650	36.00	434	294	9.00	0.75	11.00	595	360	10.00	0.75	15.50
42VC650	41.50	633	536	10.00	0.75	13.50	769	608	11.00	0.75	16.50

Size	H_{11}	**Weight** ❶	**Wk²**	D_7	D_{42}	H_{14}	**Weight** ❶	**Wk²**	D_7	D_{42}	H_{14}
		For Single Elements					**For Dual Elements**				
		Mass ❶	**J**	D_7	D_{42}	H_{14}	**Mass** ❶	**J**	D_7	D_{42}	H_{14}
11.5VC500	260	24	0,17	127	16	178	29	0,17	146	19	191
14VC500	343	37	0,34	146	19	191	37	0,34	146	19	191
16VC600	381	45	0,59	146	19	203	49	0,63	165	19	203
20VC600	508	67	1,43	165	19	216	75	1,43	178	19	254
24VC650	584	87	2,35	165	19	241	113	2,86	191	19	305
28VC650	673	113	4,45	203	19	241	147	5,00	203	19	330
33VC650	851	169	8,99	229	19	279	241	14,36	241	25	368
37VC650	914	197	12,35	229	19	279	270	15,12	254	19	394
42VC650	1054	287	22,51	254	19	343	348	25,54	279	19	419
SI	**mm**	**kg**	**kg·m²**		**millimeters**		**kg**	**kg·m²**		**millimeters**	

Notes:

❶ Based upon minimum bores.