

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

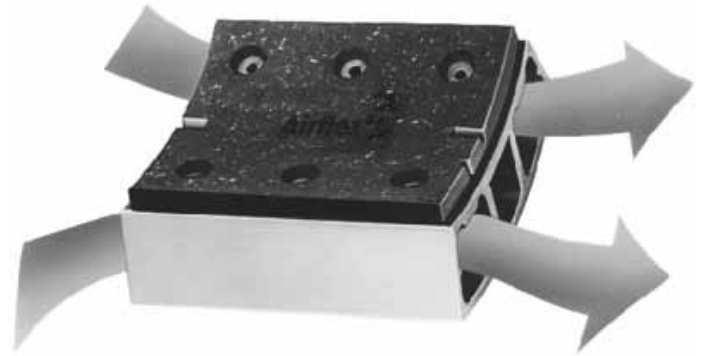
mm) diameter drum and the largest on a 66 inch (1676 mm) diameter drum.

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 dualled. 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.

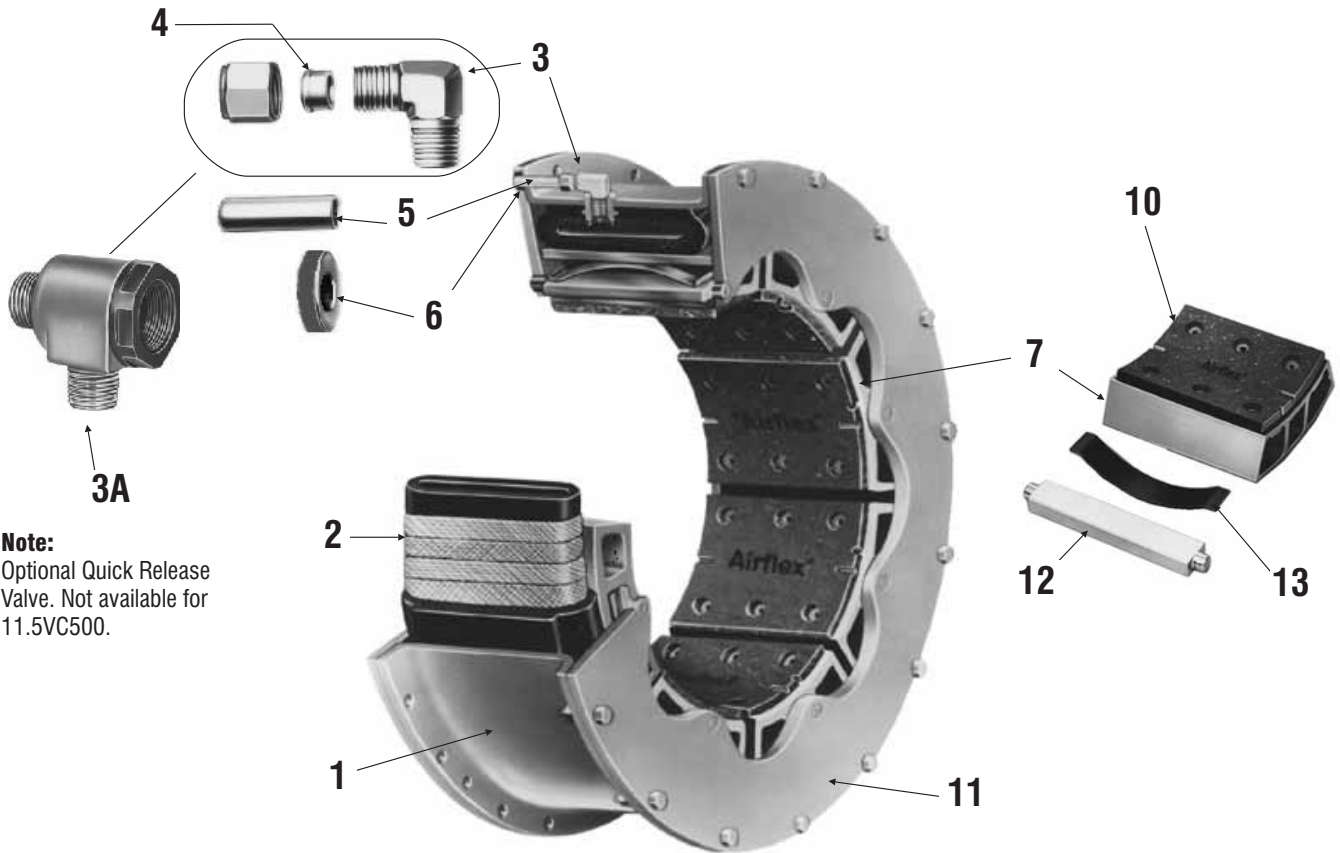
The following pages give additional descriptive information, selection procedures and common clutch and brake arrangements for the complete VC product line.

Where Used:

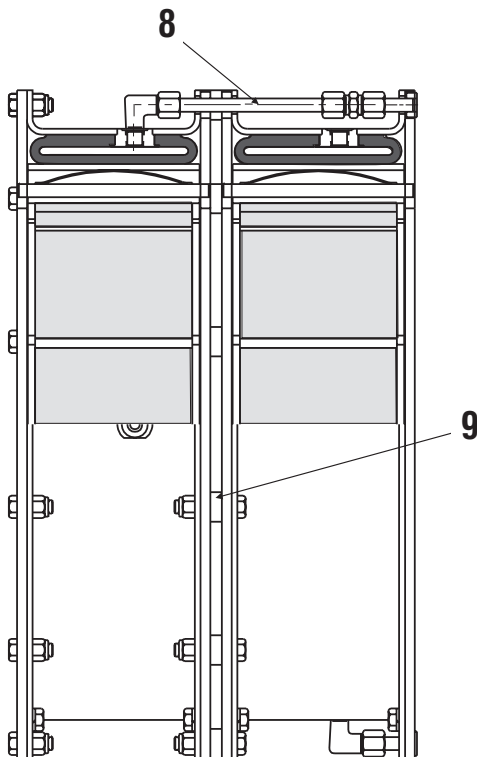
- Grinding Mills
- Marine Propulsion
- Metal Forming Machinery
- Oil Field Machinery

| Narrow Sizes | Torque Rating | |
|------------------|---------------|---------------|
| | lbin @ 75 psi | Nm @ 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 | |
|-----------------|---------------|---------------|
| | lbin @ 75 psi | Nm @ 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 |

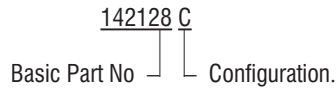


Note:
Optional Quick Release Valve. Not available for 11.5VC500.



| 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.



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/rpm ² | lb • ft ² | lb | in ² | inches | | in ³ | 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 | Part Number | M, Torque Rating | Maximum Speed | C, Centrifugal Loss | Wk ² | Weight Mass | Friction Area | Friction Lining Thickness | | Air Tube Cavity | Minimum Drum Diameter |
|------------------|-------------|------------------|---------------|---------------------|-----------------|-------------|---------------|---------------------------|------|-----------------|-----------------------|
| | | | | | | | | New | Worn | | |
| | | | | | | | | New | Worn | | |
| 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/rpm ² | kg • m ² | kg | cm ² | millimeters | dm ³ | millimeters |
|----|-----------------------|-----|----------------------|---------------------|----|-----------------|-------------|-----------------|-------------|
|----|-----------------------|-----|----------------------|---------------------|----|-----------------|-------------|-----------------|-------------|

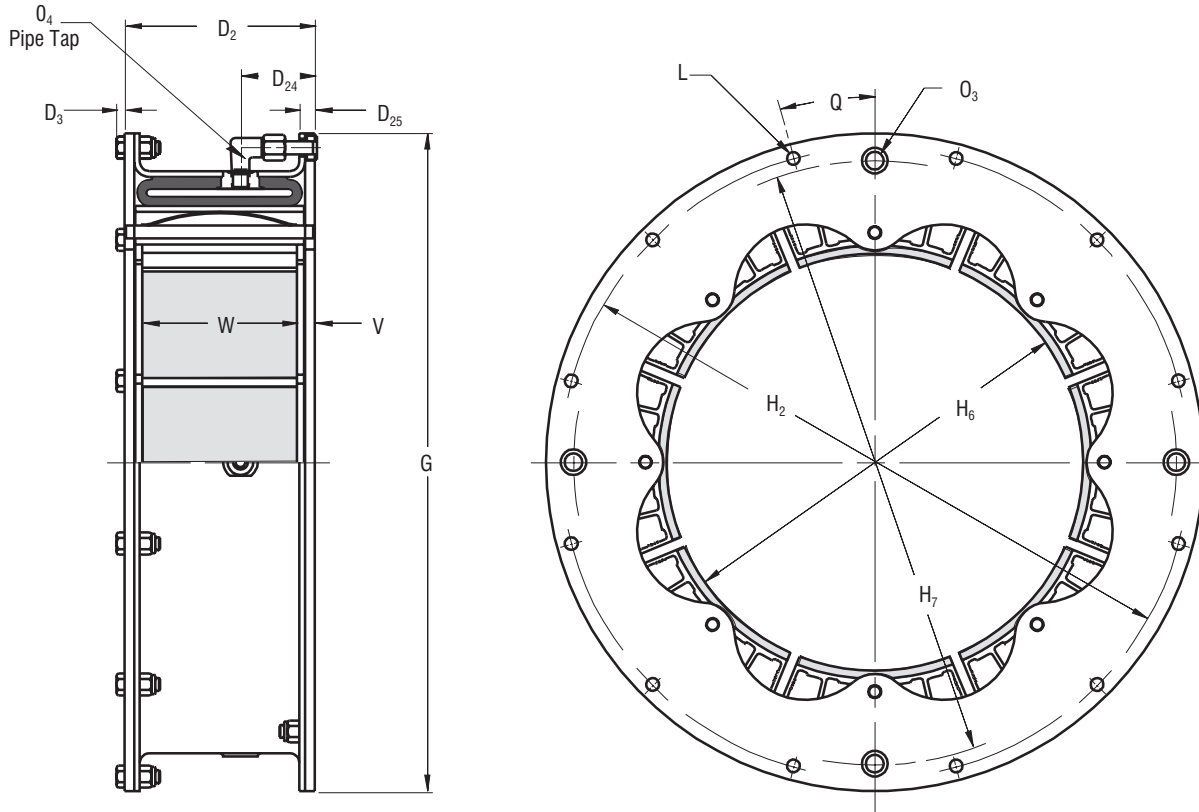
Notes:

- ① Refers to basic part number only. When ordering, the number of air inlets and type of connection must be specified.
- ② Dynamic torque shown, static torque approximately 25% greater. Torque in each application is dependent upon air pressure and speed.
- ③ 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)
- ④ Tolerance +0.005/-0.000 in (+0,13/-0,00 mm)
- ⑤ American National Pipe Thread. Size 11.5 available with one or two inlets. All other sizes have four inlets.
- ⑥ Maximum rpm is dependent upon operating conditions and varies for each application. Consult factory for applications exceeding these speeds.
- ⑦ Drum contact with worn shoes.

Airflex® Single Narrow VC Elements

Form VC 501

Dimensional Data – Sizes 11.5 to 42



| English | | Ib 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 | 1/2-14 | 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 | 1/2-14 | 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 | Part Number ① | M _t Torque Rating ② | D ₂ | D ₃ | D ₂₄ | D ₂₅ | G ③ | H ₂ | H ₆ | H ₇ | L ④ | | O ₃ | O ₄ ⑤ | | Q (Deg) | V | W | |
| | | | | | | | | | | | No. | Dia. | | No. | Size | | | No. | Width |
| | | | | | | | | | | | No. | Dia. | | No. | Size | | | No. | Width |
| 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 | 1/2-14 | 11,25 | 15 | 12 | 165 |
| 28VC650 | 142643 | 20600 | 195 | 10 | 73 | 16 | 965,2 | 933,5 | 717 | 927 | 16 | 15,9 | 13 | 4 | 1/2-14 | 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 | | Nm @ 5,2 bar | Dimensions in millimeters | | | | | | | | | | | | | | | | |

| English | lb in @ 75 psi | rpm | psi/rpm ² | lb ft ² | lb | in ² | inches | | in ³ | 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 Number ¹ | M, Torque Rating ² | Maximum Speed ⁶ | C, Centrifugal Loss | Wk ² | | Friction Area | Friction Lining Thickness | | Air Tube Cavity ⁷ | Minimum Drum Diameter |
|------------------|--------------------------|-------------------------------|----------------------------|---------------------|-----------------|------|---------------|---------------------------|------|------------------------------|-----------------------|
| | | | | | J | Mass | | New | Worn | | |
| | | | | | | | | New | Worn | | |
| 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 |

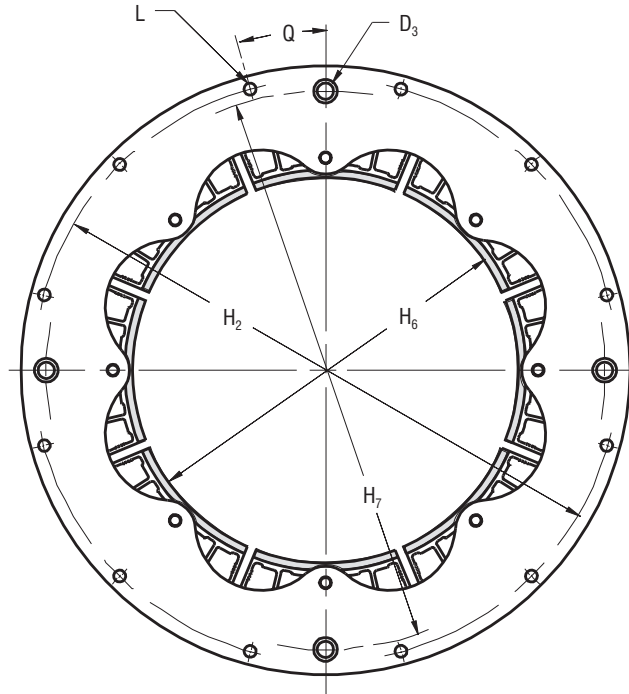
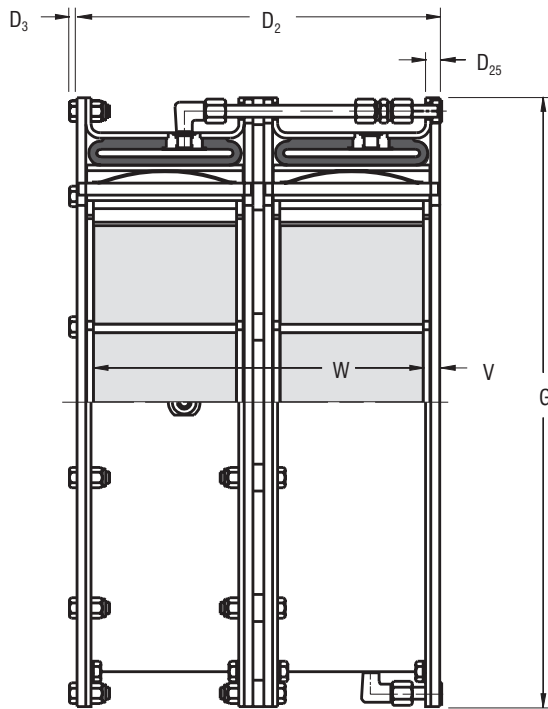
| SI | Nm @ 5,2 bar | rpm | bar/rpm ² | kg m ² | kg | cm ² | millimeters | dm ³ | millimeters |
|----|-----------------|-----|----------------------|-------------------|----|-----------------|-------------|-----------------|-------------|
|----|-----------------|-----|----------------------|-------------------|----|-----------------|-------------|-----------------|-------------|

Notes:

- 1** Refers to basic part number only. When ordering, the number of air inlets and type of connection must be specified.
- 2** Dynamic torque shown, static torque approximately 25% greater. Torque in each application is dependent upon air pressure and speed.
- 3** 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)
- 4** Tolerance +0.005/-0.000 in (+0,13/-0,00 mm)
- 5** Size 11.5 only available with two inlets. All other sizes have either two or four inlets.
- 6** Maximum rpm is dependent upon operating conditions and varies for each application. Consult factory for applications exceeding these speeds.
- 7** Drum contact with worn shoes.

Form VC 502

Dimensional Data – Sizes 11.5 to 42



| 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 ^① | M _t Torque Rating ^② | D ₂ | D ₃ | D ₂₅ | G ^③ | H ₂ | H ₆ | H ₇ | No. Dia. | | No. Size | | Q (Deg) | V | No. Width | |
| | | | | | | | | | | L ^④ | O ₃ ^⑤ | Q (Deg) | V | | | No. | Width |
| | | | | | | | | | | | | | | | | 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 | | Nm @ 5,2 bar | Dimensions in millimeters | | | | | | | | | | | | | | |

| English | | lb in @ 75 psi | rpm | psi/rpm ² | lbft ² | lb | in ² | inches | | in ³ | 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 ^① | M _t Torque Rating ^② | Maximum Speed ^⑥ | C _s Centrifugal Loss | Wk ² J | Weight Mass | Friction Area | Friction Lining Thickness | | Air Tube Cavity ^⑦ | Minimum Drum Diameter |
|-----------------|--------------------------|--|----------------------------|------------------------------------|----------------------|----------------|---------------|---------------------------|------|------------------------------|-----------------------|
| | | | | | | | | New | Worn | | |
| | | | | | | | | New | Worn | | |
| 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 |

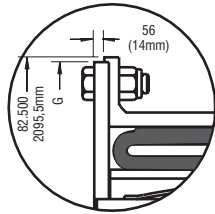
| SI | | Nm @ 5,2 bar | rpm | bar/rpm ² | kg m ² | kg | cm ² | millimeters | | dm ³ | millimeters |
|----|--|-----------------|-----|----------------------|-------------------|----|-----------------|-------------|--|-----------------|-------------|
|----|--|-----------------|-----|----------------------|-------------------|----|-----------------|-------------|--|-----------------|-------------|

Notes:

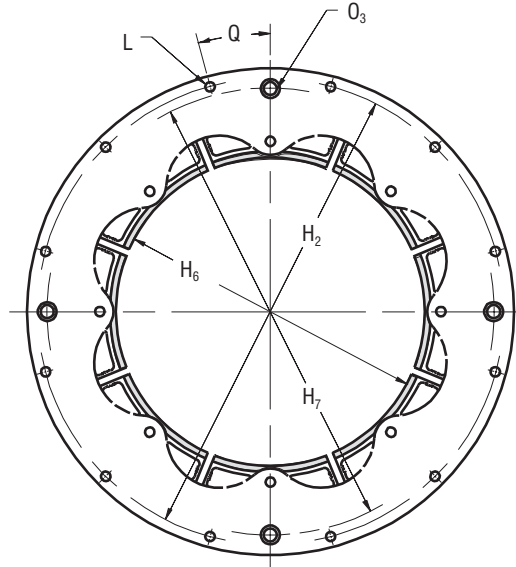
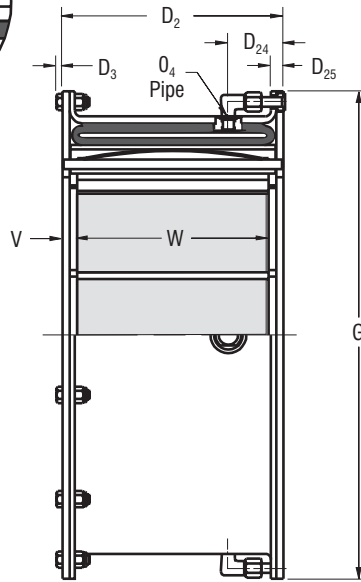
- ① Refers to basic part number only. When ordering, the number of air inlets and type of connection must be specified.
- ② Dynamic torque shown, static torque approximately 25% greater. Torque in each application is dependent upon air pressure and speed.
- ③ Tolerance for sizes:
 14 thru 20 +0.000/-0.005 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)
- ④ Tolerance +0.005/-0.000 in (+0,13/-0,00 mm)
- ⑤ American National Pipe Thread
- ⑥ Maximum rpm is dependent upon operating conditions and varies for each application. Consult factory for applications exceeding these speeds.
- ⑦ Drum contact with worn shoes.

Form VC 503

Dimensional Data – Sizes 14 to 66



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 | 1/2-14 | 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 | 1/2-14 | 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 | 1/2-14 | 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 1/2 | 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 1/2 | 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 1/2 | 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 1/2 | 5.00 | 1.25 | 22 | 16 |

| Size | Part Number | M, ② Torque Rating | D ₂ | D ₃ | D ₂₄ | D ₂₅ | ③ G | H ₂ | H ₆ | H ₇ | No. Dia. | | O ₃ | No. Size | | Q (Deg) | V | No. Width | |
|-----------------|-------------|-----------------------|----------------|----------------|-----------------|-----------------|--------|----------------|----------------|----------------|----------|------|----------------|------------------|----------|---------|----|-----------|-------|
| | | | | | | | | | | | L④ | | | O ₄ ⑤ | | | | W | |
| | | | | | | | | | | | 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 | 1/2-14 | 11.25 | 20 | 10 | 254 |
| 28VC1000 | 142674 | 33400 | 294 | 10 | 73 | 16 | 965.2 | 933.5 | 717 | 927 | 16 | 15.9 | 13 | 4 | 1/2-14 | 11.25 | 20 | 10 | 254 |
| 32VC1000 | 142673 | 46900 | 295 | 10 | 73 | 16 | 1114.4 | 1082.7 | 818 | 1070 | 24 | 19.1 | 13 | 4 | 1/2-14 | 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 1/2 | 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 1/2 | 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 1/2 | 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 1/2 | 5.00 | 32 | 22 | 406 |

| SI | Nm @ 5.2 bar | Dimensions in millimeters | | | | | | | | | | | | | | | | | |
|----|-----------------|---------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|----|-----------------|---------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

| English | | lb in @ 75 psi | rpm | psi/rpm ² | lb ft ² | lb | in ² | inches | | in ³ | 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 | 6160 | 6160 | 0.66 | 0.30 | 3920 | 65.75 |

| Size | ① Part Number | ② M _d Torque Rating | ③ Maximum Speed | ④ C _s Centrifugal Loss | Wk ² J | Weight Mass | Friction Area | Friction lining Thickness | | ⑦ Air Tube Cavity | Minimum Drum Diameter |
|-----------------|---------------------|---|-----------------------|--|----------------------|----------------|------------------|------------------------------|-----------|----------------------------|-----------------------------|
| | | | | | | | | New | Worn | | |
| | | | | | | | | ⑥ New | ⑥ Worn | | |
| 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 |

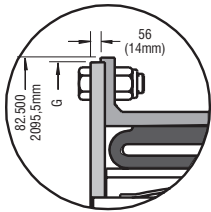
| SI | Nm @ 5,2 bar | rpm | bar/rpm ² | kg m ² | kg | cm ² | millimeters | dm ³ | millimeters |
|----|--------------------|-----|----------------------|-------------------|----|-----------------|-------------|-----------------|-------------|
|----|--------------------|-----|----------------------|-------------------|----|-----------------|-------------|-----------------|-------------|

Notes:

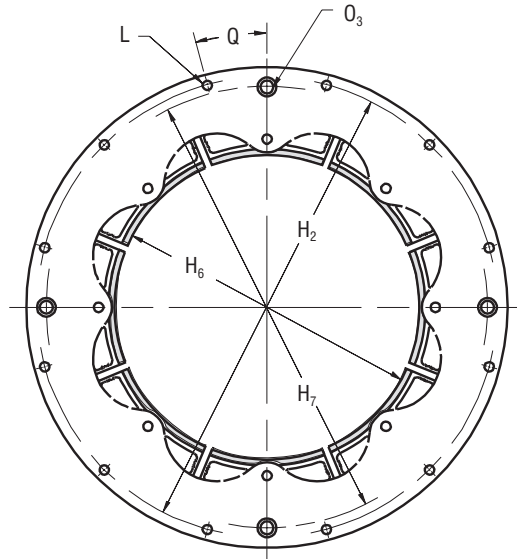
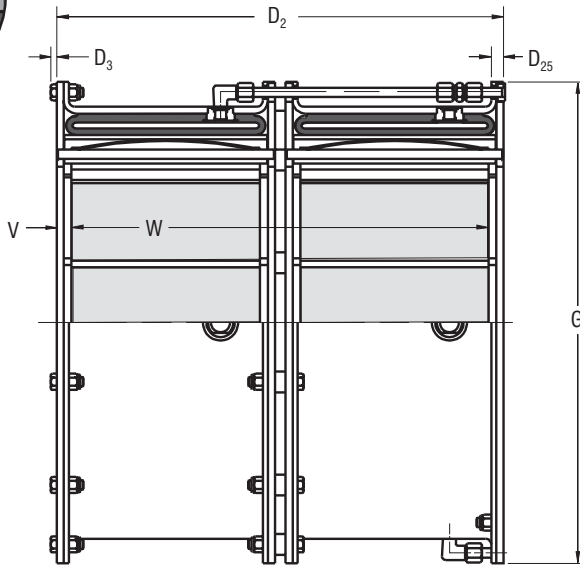
- ① Refers to basic part number only. When ordering, the number of air inlets and type of connection must be specified.
- ② Dynamic torque shown, static torque approximately 25% greater. Torque in each application is dependent upon air pressure and speed.
- ③ Tolerance for sizes:
 16 thru 20 +0.000/-0.005 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)
- ④ Tolerance +0.005/-0.000 in (+0,13/-0,00 mm)
- ⑤ All sizes available with either two or four inlets.
- ⑥ Maximum rpm is dependent upon operating conditions and varies for each application. Consult factory for applications exceeding these speeds.
- ⑦ Drum contact with worn shoes.

Form VC 504

Dimensional Data – Sizes 14 to 66



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 Number | M _t Torque Rating | D ₂ | D ₃ | D ₂₅ | G | H ₂ | H ₆ | H ₇ | No. | Dia. | No. | Dia. | Q (Deg) | V | No. | Size |
| | | | | | | | | | | L | | O ₃ | | | | W | |
| | | | | | | | | | | No. | Dia. | No. | Dia. | | | | |
| 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 ft ² | lb | lb ft ² | lb | lb ft ² | lb | lb ft ² | lb | lb ft ² |
|-----------|------------------------|--------------------|------------------------|--------------------|------------------------|--------------------|------------------------|--------------------|------------------------|--------------------|
| 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 Wk ² | | Weight Wk ² | | Weight Wk ² | | Weight Wk ² | | Weight Wk ² | |
| | 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 m ² | kg | kg m ² | kg | kg m ² | kg | kg m ² | kg | kg m ² |

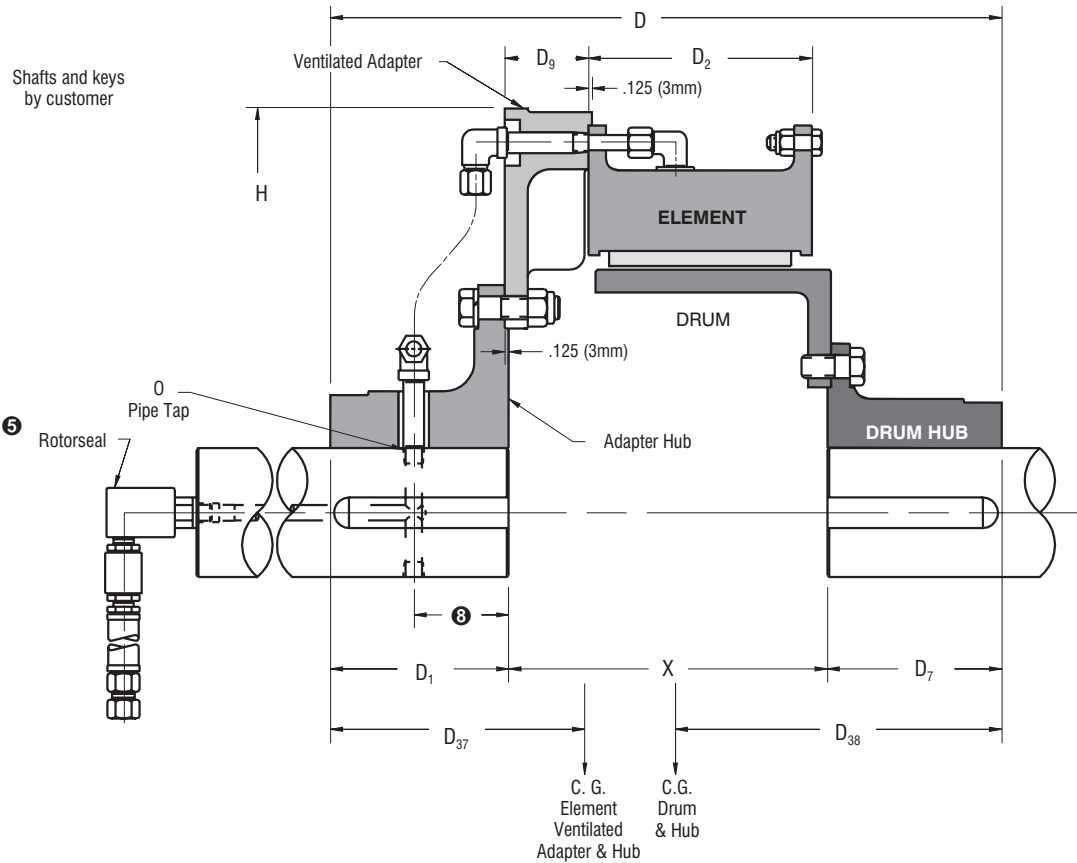
| Size | Part Numbers | | | | |
|-----------|--------------|---------|-------------|--------|----------|
| | Element ⑦ | Adapter | Adapter Hub | Drum | Drum Hub |
| 11.5VC500 | 142639 | 402162 | 406904 | 408291 | 406959 |
| 14VC500 | 143829 | 401337 | 407011 | 408284 | 406961 |
| 16VC600 | 142640 | 500411 | 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:

- ① Refers to basic part number only and does not include the rotor seal and hose. When ordering, the number and type of element connections must be specified.
- ② Dynamic torque shown, static torque approximately 25% greater. Torque in each application is dependent upon air pressure and speed.
- ③ Based upon minimum bores. Rotor seal and hose not included.
- ④ American National Pipe Thread. Shaft to adapter piping similar to that shown on VC Spider Pipe and Configuration catalog page.
- ⑤ Refer to Rotor seal section for mounting and dimension information.
- ⑥ Based upon minimum bores.
- ⑦ Refers to basic part number only. When ordering, the number of air inlets and type of connection must be specified.
- ⑧ 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 ③ | Dimensions in inches | | | | | | | | | | | | | | |
|-----------|-------------|------------------|-----------------|-------------|----------------------|------|------|-------|-------|----------------|----------------|----------------|----------------|-----------------|-----------------|-------|-----|--------|-------|
| Size | Part Number | M, Torque Rating | Rotor Seal Size | Weight Mass | Min | Max. | Min | Max. | D | D ₁ | D ₂ | D ₇ | D ₉ | D ₃₇ | D ₃₈ | H | No. | Size | X |
| 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 | 1/2-14 | 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 | 1/2-14 | 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 | 1/2-14 | 11.13 |

| Size | Part Number | M, Torque Rating | Rotor Seal Size | Weight Mass | Adapter Hub Bore | | | | Drum Hub Bore | | | | D | D ₁ | D ₂ | D ₇ | D ₉ | D ₃₇ | D ₃₈ | H | No. Size | | X |
|-----------|-------------|------------------|-----------------|-------------|------------------|------|-----|------|---------------|------|-----|-----|----|----------------|----------------|----------------|----------------|-----------------|-----------------|---|----------|--|---|
| | | | | | Min | Max. | Min | Max. | 0 ④ | | | | | | | | | | | | | | |
| | | | | | Min | Max. | Min | Max. | No. | Size | | | | | | | | | | | | | |
| 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 | 1/2-14 | 283 | | | | |
| 37VC650 | 105433 | 36200 | 3/4 RH | 782 | 140 | 178 | 140 | 241 | 740 | 229 | 195 | 229 | 70 | 279 | 213 | 1267 | 2 | 1/2-14 | 283 | | | | |
| 42VC650 | 105434 | 42900 | 3/4 RH | 1010 | 152 | 210 | 152 | 267 | 791 | 254 | 195 | 254 | 70 | 284 | 229 | 1394 | 2 | 1/2-14 | 283 | | | | |

| SI | | Nm @ 5.2 bar | | kg ③ | Dimensions in millimeters | | | | | | | | | | | | | |
|----|--|--------------|--|------|---------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|
|----|--|--------------|--|------|---------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|

Form VC 507

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

| English ⑥ | lb | lb ft ² | lb | lb ft ² | lb | lb ft ² | lb | lb ft ² | lb | lb ft ² |
|-----------|------------------------|--------------------|------------------------|--------------------|------------------------|--------------------|------------------------|--------------------|------------------------|--------------------|
| 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 Wk ² | | Weight Wk ² | | Weight Wk ² | | Weight Wk ² | | Weight Wk ² | |
| | 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 ⑥ | kg | kg m ² | kg | kg m ² | kg | kg m ² | kg | kg m ² | kg | kg m ² |

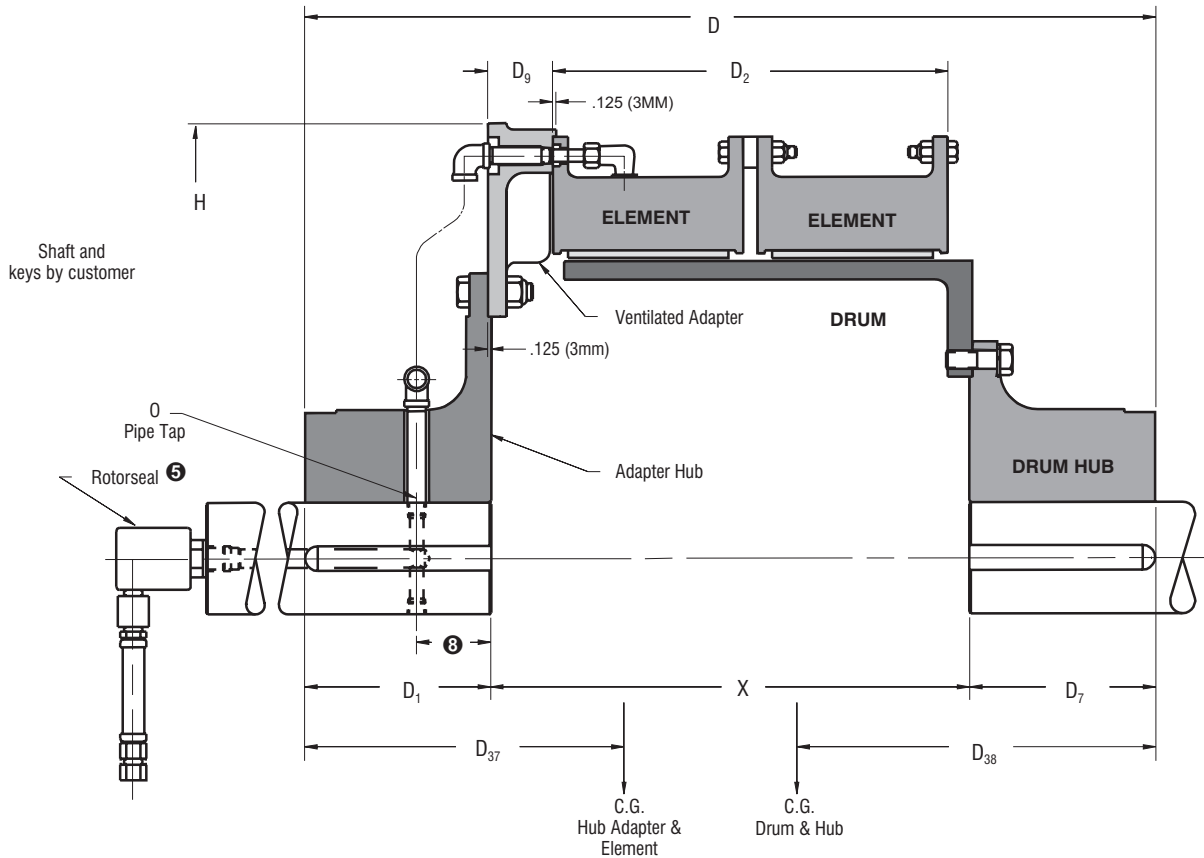
| Size | Part Numbers | | | | |
|-----------|--------------|--------------------|-------------|--------|----------|
| | Element ⑦ | Ventilated Adapter | Adapter Hub | Drum | Drum Hub |
| 11.5VC500 | 142112 | 406949 | 408232 | 408307 | 406945 |
| 14VC500 | 142114 | 406950 | 408234 | 408309 | 406961 |
| 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:

- ① 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.
- ② Dynamic torque shown, static torque approximately 25% greater. Torque in each application is dependent upon air pressure and speed.
- ③ Based upon minimum bores. Rotorseal and hose not included.
- ④ American National Pipe Thread. Shaft to adapter piping similar to that shown on VC Spider Pipe and Configuration catalog page.
- ⑤ Refer to Rotorseal Section for mounting and dimension information.
- ⑥ Based upon minimum bores.
- ⑦ Refers to basic part number only. When ordering, the number of air inlets and type of connection must be specified.
- ⑧ 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 ③ | 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 | 1/2-14 | 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 | 1/2-14 | 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 | 1/2-14 | 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 | 1/2-14 | 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 | 1/2-14 | 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 | Part Number ① | M, Torque Rating ② | Rotorseal Size | Weight Mass | Bore Range | | D | D ₁ | D ₂ | D ₇ | D ₉ | D ₃₇ | D ₃₈ | H | No. Size | | X |
| | | | | | Min. | Max. | | | | | | | | | No. | Size | |
| | | | | | Min. | Max. | | | | | | | | | | | |
| 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 | | Nm @ 5,2 bar | kg ③ | | Dimensions in millimeters | | | | | | | | | | | | |

Form VC 506

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

| English ⑨ | lb | lb ft ² | lb | lb ft ² | lb | lb ft ² | lb | lb ft ² |
|------------------|---------|--------------------|--------|--------------------|--------|--------------------|----------|--------------------|
| 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 | Wk ² | Weight | Wk ² | Weight | Wk ² | Weight | Wk ² |
| | 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 ⑨ | kg | kg m ² | kg | kg m ² | kg | kg m ² | kg | kg m ² |

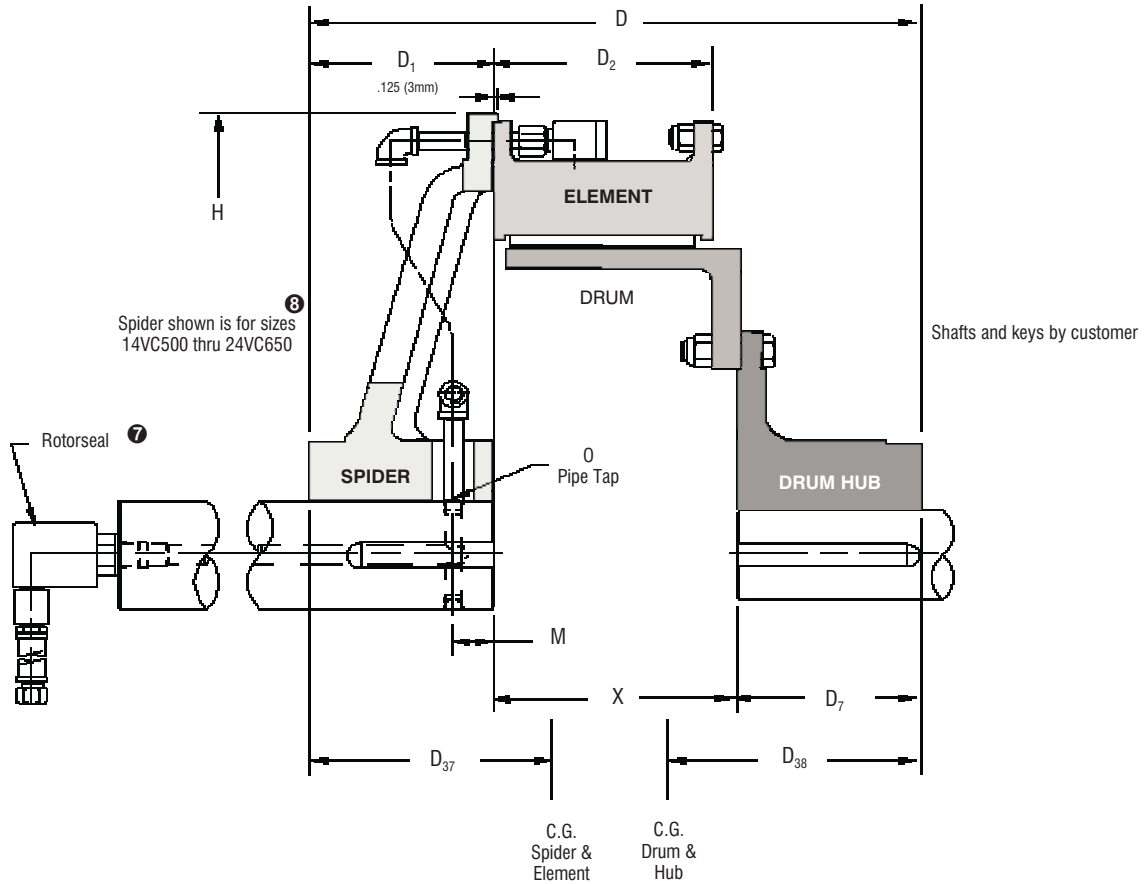
| Size | Part Numbers | | | |
|------------------|--------------|--------|--------|----------|
| | Element ⑩ | Spider | Drum | Drum Hub |
| 11.5VC500 | 142639 | 408376 | 408290 | 406959 |
| 14VC500 | 143829 | 411170 | 408283 | 406961 |
| 16VC600 | 142640 | 408277 | 408292 | 406963 |
| 20VC600 | 142641 | 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:

- ① Refers to basic part number only and does not include the rotor seal and hose. When ordering, the number and type of element connections must be specified.
- ② Dynamic torque shown, static torque approximately 25% greater. Torque in each application is dependent upon air pressure and speed.
- ③ Based upon minimum bores. Rotor seal and hose not included.
- ④ $M \text{ (in)} = 0.268 \text{ (H/2-radius of bore)} + 0.34$
 $M \text{ (mm)} = 0,268 \text{ (H/2-radius of bore)} + 8,7$
- ⑤ American National Pipe Thread
- ⑥ Pipe tap not required. Thru hole diameter 0.44 in (11 mm).
- ⑦ Refer to Rotor Seal Section for mounting and dimension information.
- ⑧ Refer to VC Spider Piping and Configuration catalog page for other sizes.
- ⑨ Based upon minimum bores.
- ⑩ 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 ⓐ | Dimensions in inches | | | | | | | | | | | | |
|-----------|-------------|-------------------|----------------|----------------------|-----------------|-----------------|-------|----------------|----------------|----------------|-----------------|-----------------|-------|------|--------|------|
| Size | Part Number | M, Torque Rating | Rotorseal Size | Weight Mass | Min. Bore Range | Max. Bore Range | D | D ₁ | D ₂ | D ₇ | D ₃₇ | D ₃₈ | H | M | 0 | X |
| 11.5VC500 | 104601 | 27000 | B3 | 247 | 2.50 | 4.13 | 16.09 | 4.34 | 6.13 | 5.00 | 5.3 | 5.5 | 20.00 | 4 | 6 | 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 |

| SI | Part Number | M, Torque Rating | Rotorseal Size | Weight Mass | Bore Range | | Dimensions in millimeters | | | | | | | | | |
|-----------|-------------|------------------|----------------|-------------|------------|------|---------------------------|----------------|----------------|----------------|-----------------|-----------------|------|-----|--------|-----|
| Size | Part Number | M, Torque Rating | Rotorseal Size | Weight Mass | Min. | Max. | D | D ₁ | D ₂ | D ₇ | D ₃₇ | D ₃₈ | H | M | 0 | X |
| 11.5VC500 | 104601 | 3050 | B3 | 112 | 64 | 105 | 409 | 110 | 156 | 127 | 135 | 140 | 508 | 4 | 6 | 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 |

Form VC 508

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

| English ⑨ | lb | lb ft ² | lb | lb ft ² | lb | lb ft ² | lb | lb ft ² |
|-----------|---------|--------------------|--------|--------------------|--------|--------------------|----------|--------------------|
| 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 | Wk ² | Weight | Wk ² | Weight | Wk ² | Weight | Wk ² |
| | 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 ⑨ | kg | kg m ² | kg | kg m ² | kg | kg m ² | kg | kg m ² |

| Size | Part Numbers | | | |
|-----------|--------------|--------|--------|----------|
| | Element ⑩ | 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:

- ① 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.
- ② Dynamic torque shown, static torque approximately 25% greater. Torque in each application is dependent upon air pressure and speed.
- ③ Based upon minimum bores. Rotorseal and hose not included.
- ④ $M (in) = 0.268 (H/2 - \text{radius of bore}) + 0.34$
 $M (mm) = 0,268 (H/2 - \text{radius of bore}) + 8,7$
- ⑤ American National Pipe Thread
- ⑥ Pipe tap not required. Thru hole diameter 0.44 in (11 mm).
- ⑦ Refer to Rotorseal Section for mounting and dimension information.
- ⑧ Refer to VC Spider Piping and Configuration catalog page for other sizes.
- ⑨ Based upon minimum bores.
- ⑩ Refers to basic part number only. When ordering, the number of air inlets and type of connection must be specified.

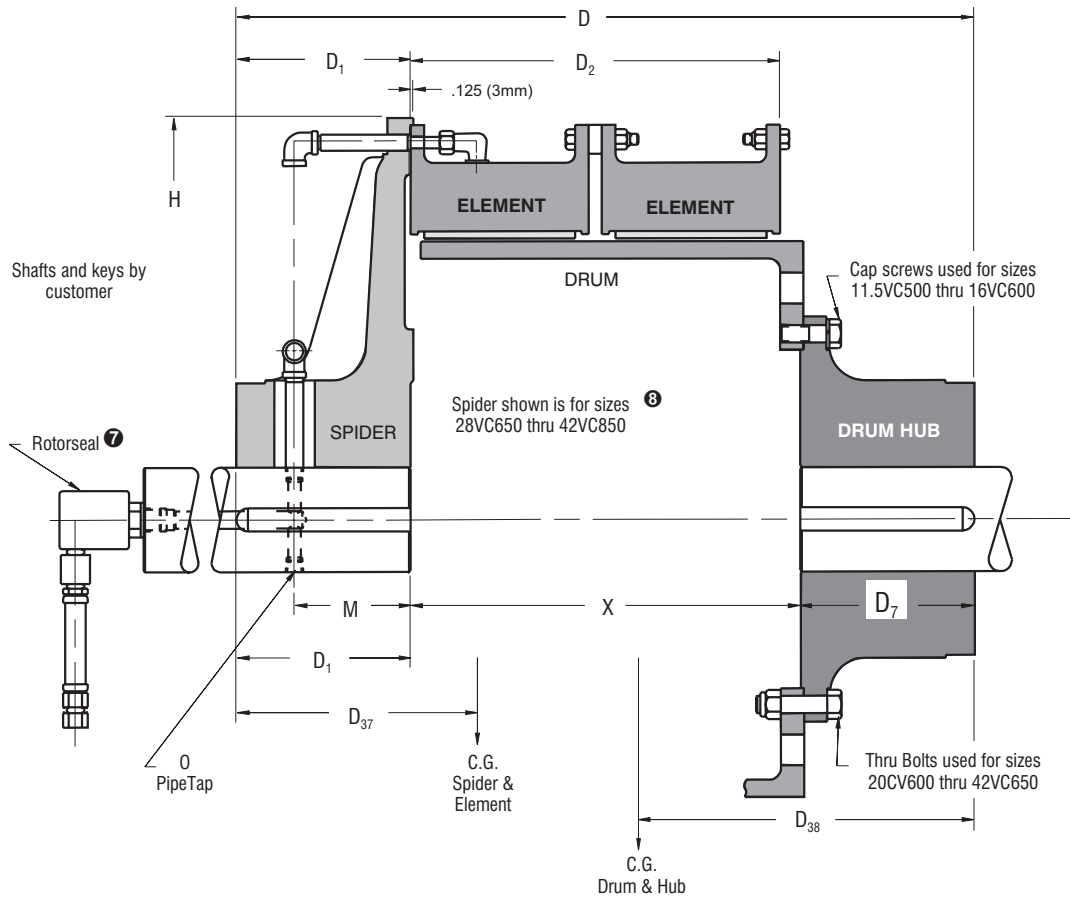
Airflex® VC Clutch Application

ARTEN Freios e Embreagens
Fone: 11 5594-8333



Form VC 508

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



| English | lb in @ 75 psi | lb Ⓞ | 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 | ④ | ⑥ | 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 | ① Part Number | ② M. Torque Rating | Rotorseal Size | Weight Mass | Min. | Max. | D | D ₁ | D ₂ | D ₇ | D ₃₇ | D ₃₈ | H | M | ⑤ O | X | |
| | | | | | Bore Range | | | | | | | | | | | | |
| | | | | | Min. | Max. | | | | | | | | | | | |
| 11.5VC500 | 104610 | 6100 | C2 | 178 | 76 | 102 | 641 | 123 | 324 | 178 | 224 | 239 | 508 | ④ | ⑥ | 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 | Nm @ 5,2 bar | | Kg Ⓞ | | Dimension in millimeters | | | | | | | | | | | | |

Form VC 509

Gap Mounted Arrangement – Technical Data
Wide Sizes 14 to 66

| English | lb | lb ft ² | lb | lb ft ² | lb | lb ft ² | lb | lb ft ² |
|----------|---------|--------------------|--------|--------------------|--------|--------------------|----------|--------------------|
| 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 | | Weight | | Weight | | Weight | |
| | 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 m ² | kg | kg m ² | kg | kg m ² | kg | kg m ² |

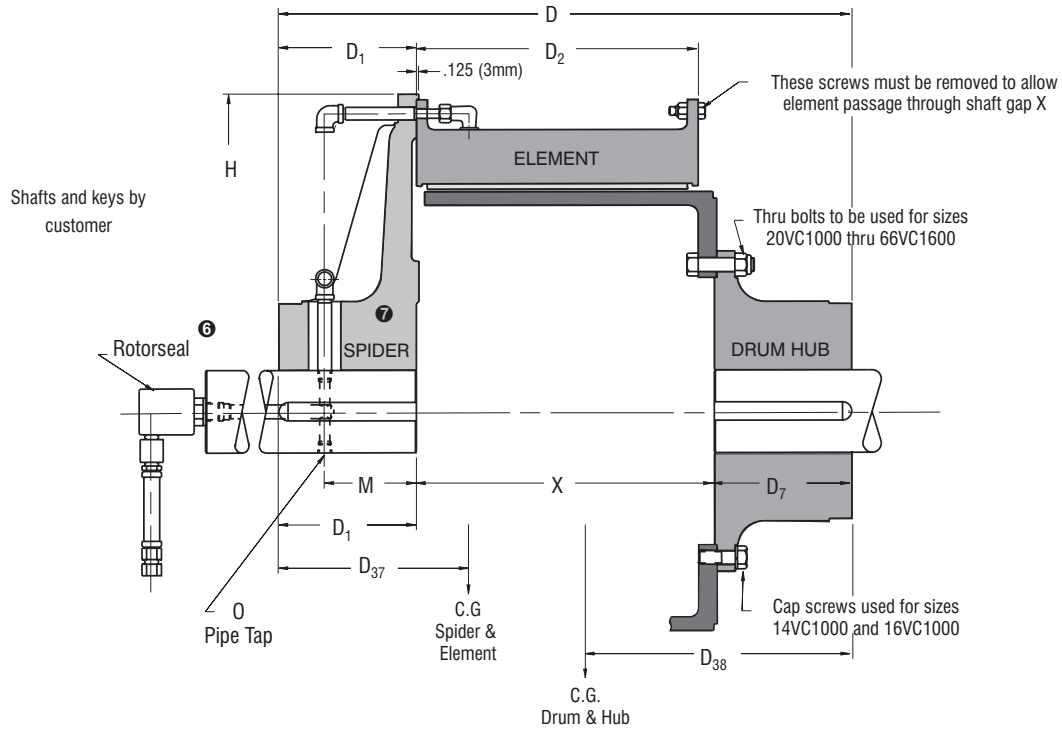
| Size | Part Numbers | | | |
|----------|--------------|--------|--------|----------|
| | Element | Spider | Drum | Drum Hub |
| 14VC1000 | 142838 | 508545 | 411111 | 411113 |
| 16VC1000 | 142821 | 505283 | 409506 | 407069 |
| 20VC1000 | 142832 | 509698 | 410087 | 407073 |
| 24VC1000 | 142675 | 509699 | 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:

- Refers to basic part number only and does not include the rotor seal and hose. When ordering, the number and type of element connections must be specified.
- Dynamic torque shown, static torque approximately 25% greater. Torque in each application is dependent upon air pressure and speed.
- Based upon minimum bores. Rotor seal and hose not included.
- American National Pipe Thread
- Spider is two piece construction consisting of a hub and adapter plate. D₁, length thru bore is 20 in (508 mm). D₂, length from hub face to element is 21.63 in (549 mm).
- Refer to Rotor Seal Section for mounting and dimension information.
- Spider shown used for the majority of element sizes. Refer to VC Spider Piping and Configuration catalog page.
- Based upon minimum bores.
- 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 ③ | 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 | ⑤ | 18.50 | 20.00 | 18.4 | 15.3 | 82.50 | 9.00 | 1-11 1/2 | 20.25 |
| Size | Part Number ① | M _t Torque Rating ② | Rotoseal Size | Weight Mass | Min. | Max. | D | D ₁ | D ₂ | D ₇ | D ₃₇ | D ₃₈ | H | M | ④ | X |
| | | | | | Bore Range | | | | | | | | | | O | |
| 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 | ⑤ | 470 | 508 | 467 | 389 | 2096 | 229 | 1-11 1/2 | 514 |
| SI | | N m @ 5,2 bar | | kg ③ | Dimensions in millimeters | | | | | | | | | | | |

Form VC 510

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

| English | lb | lb ft ² | lb | lb ft ² | lb | lb ft ² | lb | lb ft ² | lb | lb ft ² | | |
|----------|---------|--------------------|-----------------|--------------------|-----------|--------------------|-----------------|--------------------|----------|--------------------|-----------------|-------------------|
| 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 | | Wk ² | | Weight | | Wk ² | | Weight | | Wk ² | |
| | 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 m ² | kg | kg m ² | kg | kg m ² | kg | kg m ² | kg | kg m ² | kg | kg m ² |

| Size | Part Number | | | | |
|----------|-------------|----------|-----------|-------------|----------|
| | Element ③ | 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 ⑩ | 413727 | 413726 | 413725 |

Notes:

- ① Refers to basic part number only and does not include the rotor seal and hose. When ordering, the number and type of element connections must be specified.
- ② Dynamic torque shown, static torque approximately 25% greater. Torque in each application is dependent upon air pressure and speed.
- ③ Based upon minimum bores. Rotor seal and hose not included.
- ④ American National Pipe Thread
- ⑤ Spider is two piece construction consisting of a hub and adapter plate. D₁, length thru bore is 24 in. (610 mm). D₂, length from hub face to element is 25.38 in. (645 mm).
- ⑥ Refer to Rotor Seal Section for mounting and dimension information.
- ⑦ Spider shown used for the majority of element sizes. Refer to VC Spider Piping and Configuration catalog page.
- ⑧ Based upon minimum bores.
- ⑨ Refers to basic part number only. When ordering, the number of air inlets and type of connection must be specified.
- ⑩ Former two piece version of the spider consisted of hub 413724 and adapter 510767.

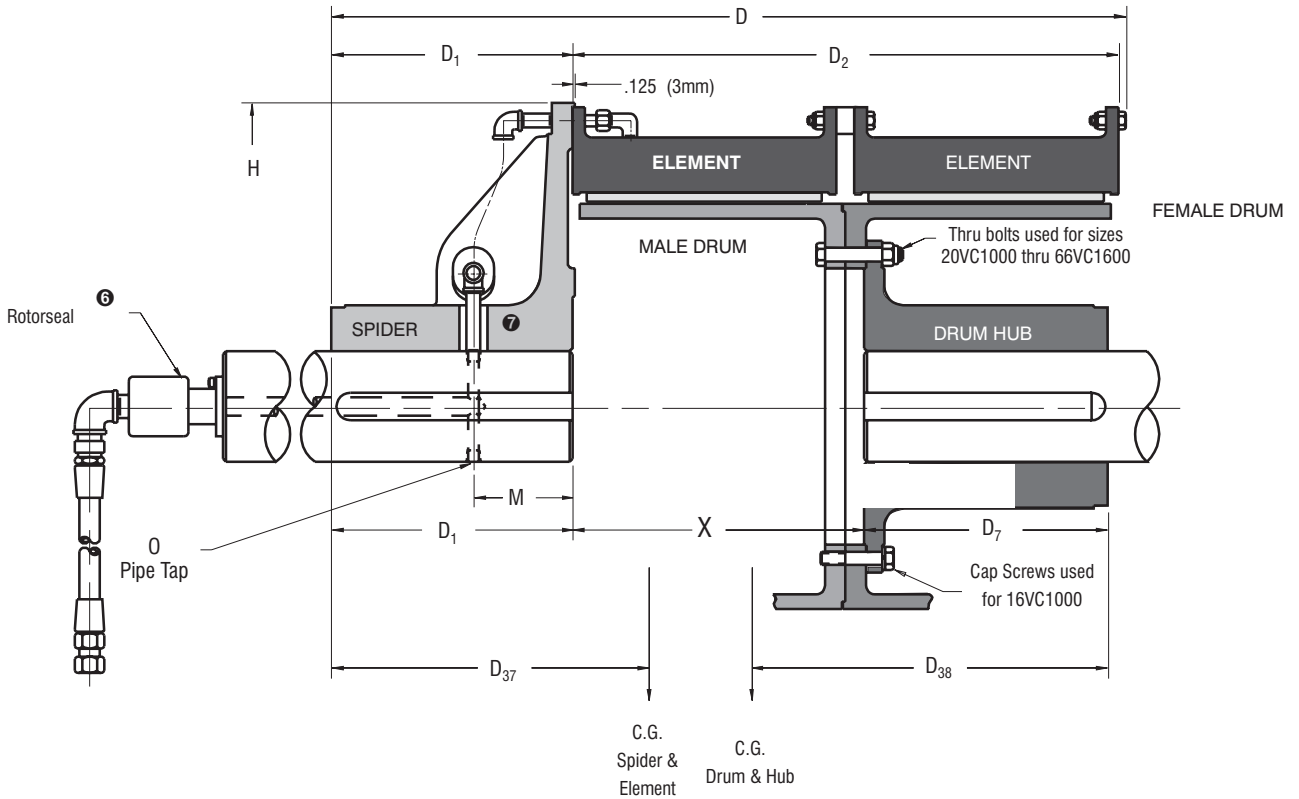
Airflex® VC Clutch Application

ARTEN Freios e Embreagens
Fone: 11 5594-8333



Form VC 510

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



| English | | lb in @ 75 psi | lb ③ | Dimensions in inches | | | | | | | | | | | | |
|----------|----------------|--------------------------|------------------|----------------------|---------------------------|-------|-------|----------------|----------------|----------------|-----------------|-----------------|-------|------|--------------|-------|
| Size | Part Number | M. ② Torque Rating | Rotoseal Size | Weight Mass | Min. | Max. | D | D ₁ | D ₂ | D ₇ | D ₃₇ | D ₃₈ | H | M | ④ O | X |
| | | | | | Min. | Max. | | | | | | | | | | |
| 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 | ⑤ | 37.00 | 30.00 | 31.5 | 22.0 | 82.50 | 9.00 | 1 1/4-11 1/2 | 22.00 |
| Size | Part Number | M. ② Torque Rating | Rotoseal Size | Weight Mass | Min. | Max. | D | D ₁ | D ₂ | D ₇ | D ₃₇ | D ₃₈ | H | M | ④ O | X |
| | | | | | Min. | Max. | | | | | | | | | | |
| 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 | ⑤ | 940 | 762 | 800 | 559 | 2096 | 229 | 1 1/4-11 1/2 | 559 |
| SI | | N m @ 5,2 bar | | kg ③ | Dimensions in millimeters | | | | | | | | | | | |

Form VC 529

Air Bridge Arrangement—Technical Data
Narrow Sizes 11.5 to 42

| English ④ | lb | lb ft ² | lb | lb ft ² | lb | lb ft ² | lb | lb ft ² |
|------------------|---------|--------------------|--------|--------------------|----------|--------------------|------------|--------------------|
| 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 | | Weight | | Weight | | Weight | |
| | 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 ④ | kg | kg m ² | kg | kg m ² | kg | kg m ² | kg | kg m ² |

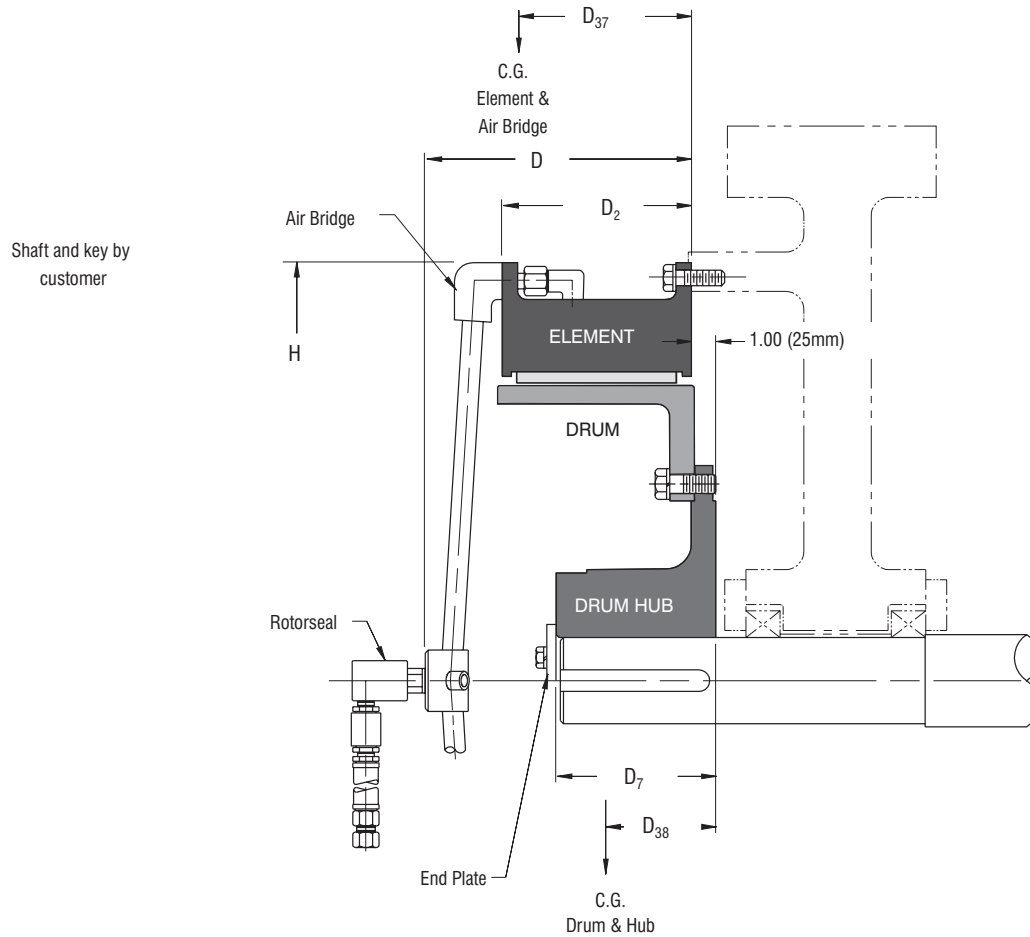
| Size | Part Numbers | | | |
|------------------|--------------|--------|--------|------------|
| | Element ⑤ | Drum | Hub | Air Bridge |
| 11.5VC500 | 142639 | 408290 | 406960 | 410546 |
| 14VC500 | 143829 | 408283 | 406962 | 408165 |
| 16VC600 | 142640 | 408292 | 406964 | 407294 |
| 20VC600 | 142641 | 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:

- ① Refers to basic part number only and does not include the rotor seal and hose. When ordering, the number and type of element connections must be specified.
- ② Dynamic torque shown, static torque approximately 25% greater. Torque in each application is dependent upon air pressure and speed.
- ③ Based upon minimum bores. Rotor seal and hose not included.
- ④ Based upon minimum bores.
- ⑤ 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



| English | | lb in @ 75 psi | Lb Ⓢ | 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 ① | M _t Torque Rating ② | Rotorseal Size | Weight Mass | Min. | Max. | D | D ₂ | D ₇ | D ₃₇ | D ₃₈ | H |
| | | | | | Bore Range | | | | | | | |
| | | | | | Min. | Max. | | | | | | |
| 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 | | Nm @ 5,2 bar | Kg Ⓢ | Dimensions in millimeters | | | | | | | | |

Form VC 532

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

| English ⑨ | lb | lb.ft ² | lb | lb.ft ² | lb | lb.ft ² | lb | lb.ft ² |
|------------------|---------|--------------------|-----------------|--------------------|--------|--------------------|-----------------|--------------------|
| 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 | | Wk ² | | Weight | | Wk ² | |
| | 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.m ² | kg | kg.m ² | kg | kg.m ² | kg | kg.m ² |

| 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:

- ① Refers to basic part number only and does not include the rotor seal and hose. When ordering, the number and type of element connections must be specified.
- ② Dynamic torque shown, static torque approximately 25% greater. Torque in each application is dependent upon air pressure and speed.
- ③ Based upon minimum bores. Rotor seal and hose not included.
- ④ $M \text{ (in)} = 0.268 \text{ (H/2 - radius of bore)} + 0.34$
 $M \text{ (mm)} = 0.268 \text{ (H/2 - radius of bore)} + 8,7$
- ⑤ American National Pipe Thread
- ⑥ Pipe tap not required. Thru hole diameter 0.44 in (11 mm).
- ⑦ Refer to Rotor Seal Section for mounting and dimension information.
- ⑧ Refer to VC Spider Piping and Configuration catalog page for other sizes.
- ⑨ Based upon minimum bores.
- ⑩ Refers to basic part number only. When ordering, the number of air inlets and type of connection must be specified.

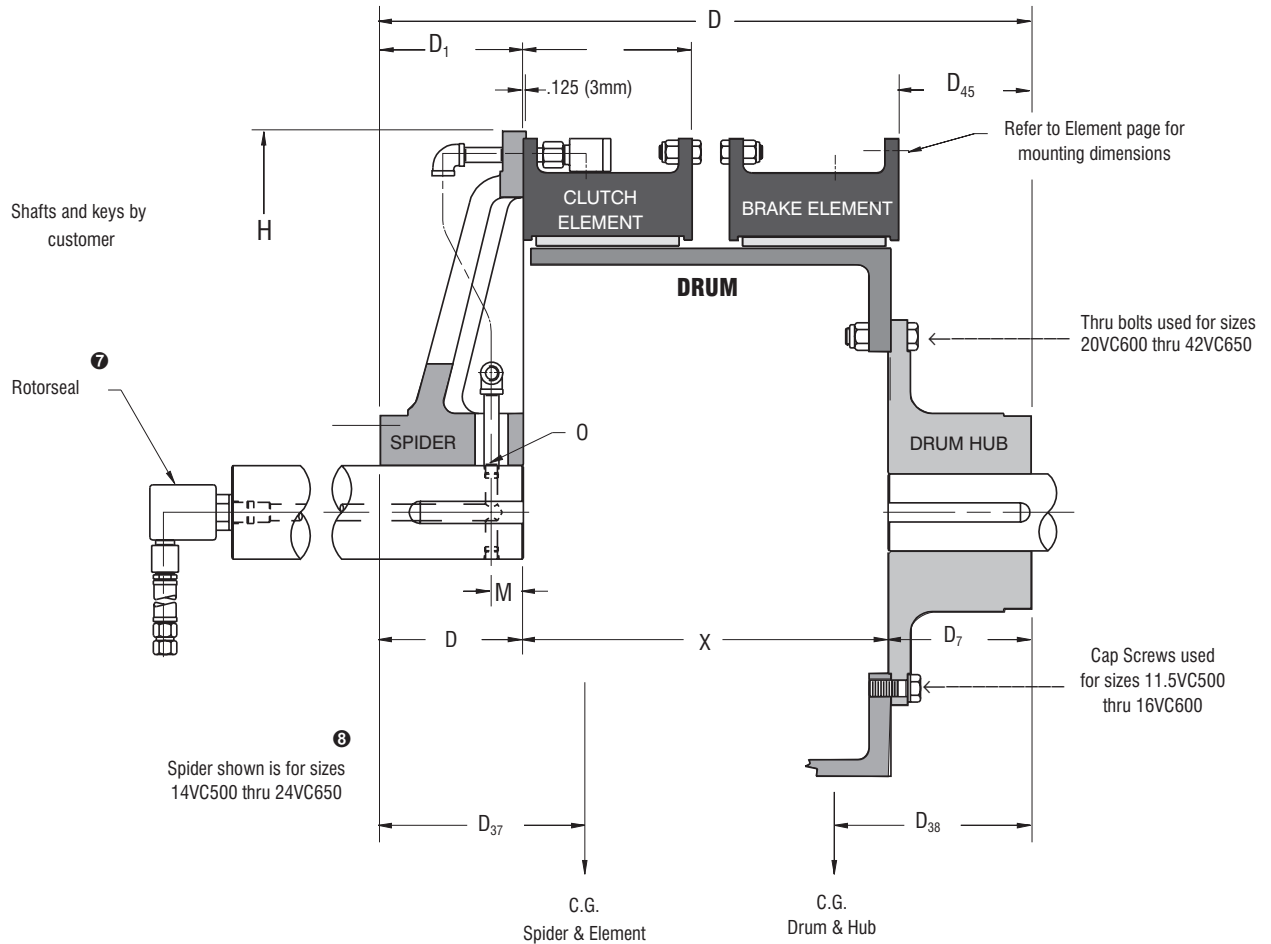
Airflex® VC Clutch/Brake Application

ARTEN Freios e Embreagens
Fone: 11 5594-8333



Form VC 532

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



| English | | lb in @ 75 psi | lb ③ | Dimensions in inches | | | | | | | | | | | | | |
|-----------|--------------------|-------------------|----------------|----------------------|-----------------|-----------------|----------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|-------|------|--------|-------|
| Part ① | M. Torque Rating ② | Rotorseal Size | Weight Mass | Min. Bore Range | Max. Bore Range | D | D ₁ | D ₂ | D ₇ | D ₃₇ | D ₃₈ | D ₄₅ | H | M | O | X | |
| 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 | ④ | ⑥ | 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 |
| SI | Part ① | Nm @ 5.2 bar ② | Rotorseal Size | Weight kg ③ | Min. Bore Range | Max. Bore Range | D | D ₁ | D ₂ | D ₇ | D ₃₇ | D ₃₈ | D ₄₅ | H | M | O | X |
| 11.5VC500 | 107594 | 3050 | B3 | 172 | 64 | 105 | 577 | 110 | 156 | 127 | 135 | 211 | 114 | 508 | ④ | ⑥ | 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 |

| English ③ | lb | lb | lb ft ² | lb | lb ft ² |
|------------------|---------|------|--------------------|----------|--------------------|
| 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 | | Wk ² | Weight | |
| | 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 ③ | kg | kg | kg m ² | kg | kg m ² |

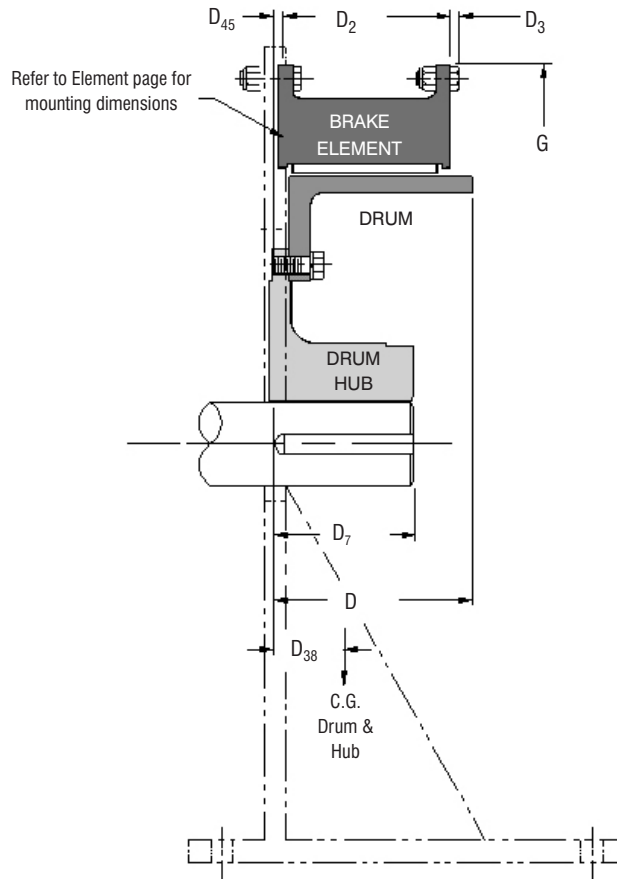
| Size | Part Numbers | | |
|------------------|--------------|--------|--------|
| | Element ① | Drum | Hub |
| 11.5VC500 | 142639 | 408290 | 406960 |
| 14VC500 | 143829 | 408283 | 406962 |
| 16VC600 | 142640 | 408292 | 406964 |
| 20VC600 | 142641 | 408294 | 406966 |
| 24VC650 | 142642 | 408296 | 415398 |
| 28VC650 | 142643 | 409479 | 406970 |
| 33VC650 | 142644 | 408300 | 406972 |
| 37VC650 | 142645 | 408302 | 406974 |
| 42VC650 | 142647 | 408304 | 407000 |

Notes:

- ① Refers to basic part number only. When ordering, the number of air inlets and type of connection must be specified.
- ② Dynamic torque shown, static torque approximately 25% greater. Torque in each application is dependent upon air pressure and speed.
- ③ Based upon minimum bores.
- ④ 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



Shaft and key by Customer

| English | | lb in @ 75 psi | lb Ⓢ | 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 Number | M _t ② Torque Rating | Weight Mass | Min. | Max. | D | D ₂ | D ₇ | D ₃₈ | D ₄₅ | G ④ |
| | | | | Bore Range | | | | | | | |
| | | | | Min | Max. | | | | | | |
| 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 | | Nm @ 5,2 bar | kg ③ | Dimensions in millimeters | | | | | | | |

| English ③ | lb | lb | lb ft ² | lb | lb ft ² |
|-----------|------|------|--------------------|------|--------------------|
| 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 | Wk ² | | Weight | | Wk ² | |
|----------|-----------------|------|----------|-----------------|-----------------|--|
| | Element | Drum | Drum Hub | Wk ² | Wk ² | |
| | J | Mass | Mass | J | 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 ③ | kg | kg | kg m ² | kg | kg m ² |
|------|----|----|-------------------|----|-------------------|
|------|----|----|-------------------|----|-------------------|

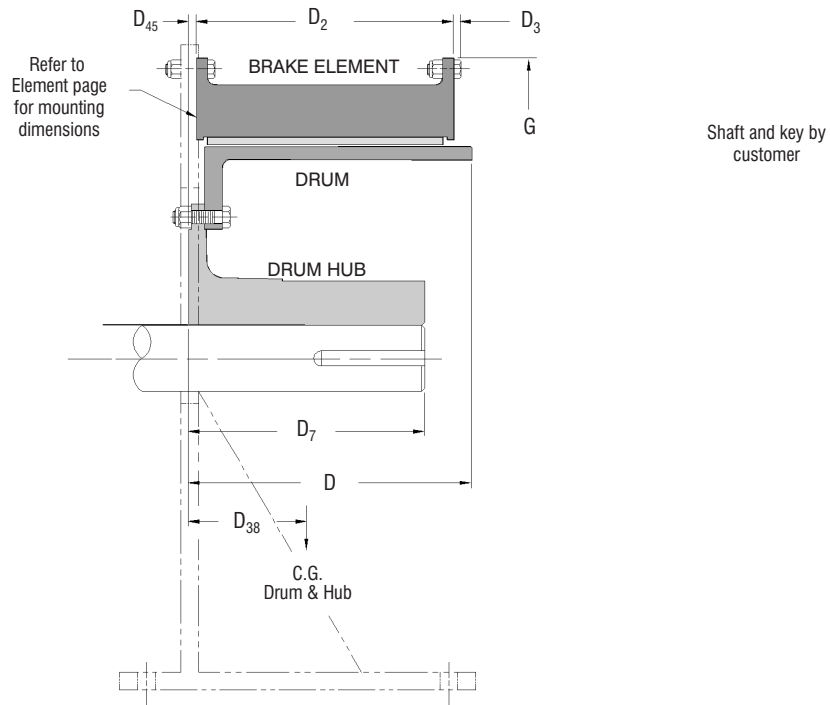
| Size | Part Numbers | | |
|----------|--------------|--------|----------|
| | Element ① | Drum | Drum Hub |
| 14VC1000 | 142838 | 411111 | 411113 |
| 16VC1000 | 142821 | 409506 | 407069 |
| 20VC1000 | 142832 | 410087 | 407073 |
| 24VC1000 | 142675 | 409794 | 405625 |
| 28VC1000 | 142674 | 409537 | 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:

- ① Refers to basic part number only. When ordering, the number of air inlets and type of connection must be specified.
- ② Dynamic torque shown, static torque approximately 25% greater. Torque in each application is dependent upon air pressure and speed.
- ③ Based upon minimum bores.
- ④ 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)

Form VC 538

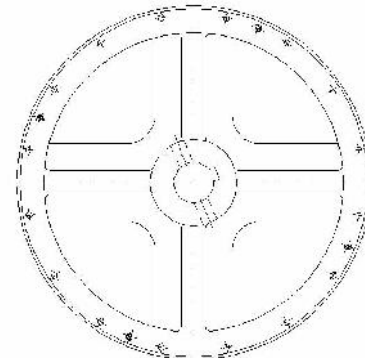
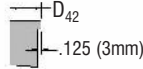
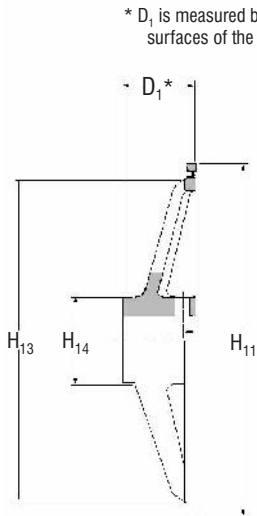
Dimensional Data - Wide Sizes - 14 to 66



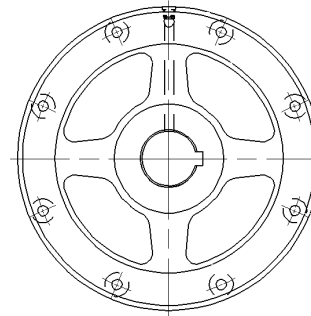
| English | | lb in @ 75 psi | lb ③ | Dimensions in inches | | | | | | | |
|-----------------|---------------|--------------------------------|-------------|---------------------------|-------|-------|----------------|----------------|-----------------|-----------------|--------|
| 14VC1000 | 107601 | 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 ① | M _r Torque Rating ② | Weight Mass | Min. | Max. | D | D ₂ | D ₇ | D ₃₈ | D ₄₅ | G ④ |
| | | | | Bore Range | | | | | | | |
| | | | | 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 ③ | Dimensions in millimeters | | | | | | | |

Form VC 521

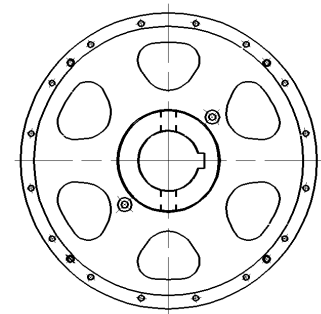
Spiders – Single Narrow Series – Dimensional and Technical Data



Sizes 14 thru 24



Size 11.5



Sizes 28 thru 42

Spider Web Configurations

Spider shown is for sizes 14 thru 24 ①

| English | | lb | lb ft ² | Dimensions in inches | | | | |
|------------------|-------------|----------|--------------------|---------------------------|----------|----------|----------|----------|
| 11.5VC500 | 408376 ② | 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 ③ | Wk ² | D_1 | D_{42} | H_{11} | H_{13} | H_{14} |
| | | Mass ③ | J | | | | | |
| 11.5VC500 | 408376 ② | 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 m ² | Dimensions in millimeters | | | | |

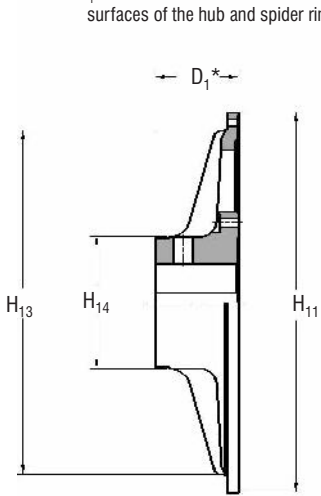
Notes:

- ① Refer to VC Spider Piping and Configuration catalog page for other sizes.
- ② Part number for two air passages. Part number for single air passage - 408375.
- ③ Based upon minimum bore.

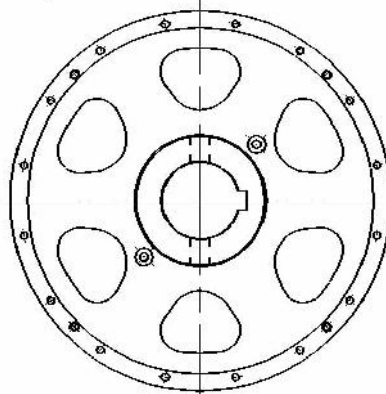
Form VC 52

Spiders – Dual Narrow Sizes – Dimensional and Technical Data

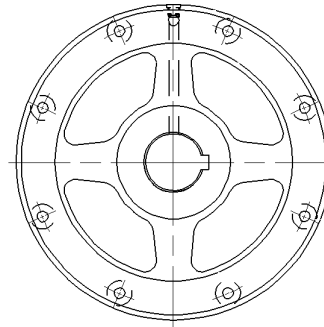
* D₁ is measured between the machined surfaces of the hub and spider rim.



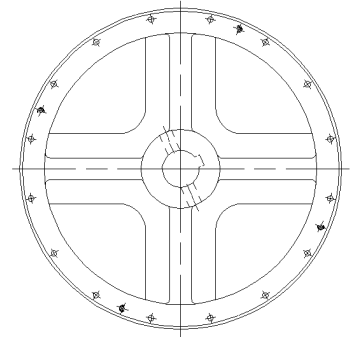
Spider shown is for sizes 20 and 24 ^①



Sizes 16 thru 42



Size 11.5



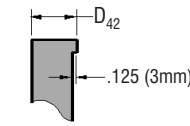
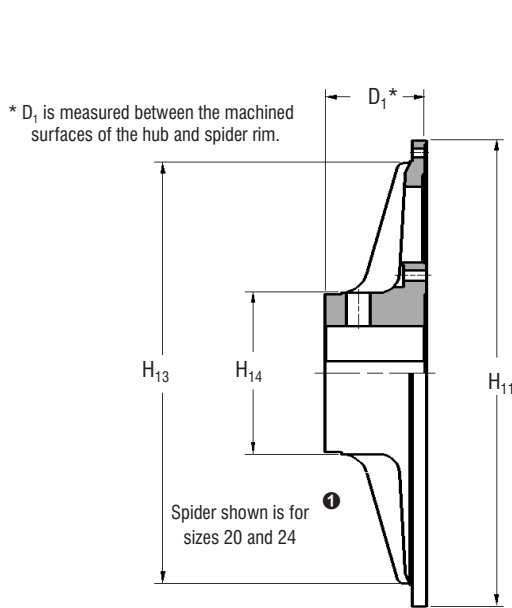
Size 14

Spider Web Configurations

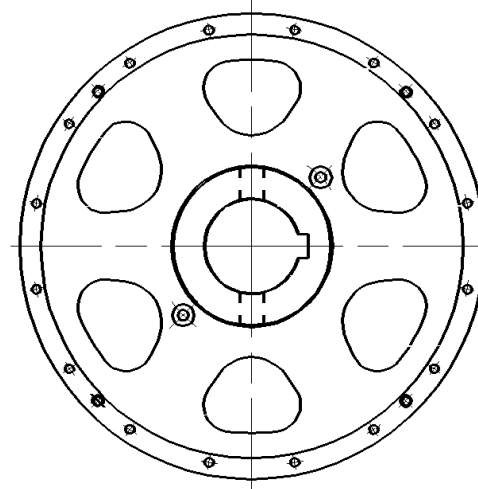
| English | | lb | lb ft ² | Dimensions in inches | | | | |
|------------------|-------------|---------------------|--------------------|---------------------------|-----------------|-----------------|-----------------|-----------------|
| 11.5VC500 | 410856 | 71 | 19 | 4.84 | 0.62 | 20.00 | N/A | 7.50 |
| 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 ^② | Wk ² | D ₁ | D ₄₂ | H ₁₁ | H ₁₃ | H ₁₄ |
| | | Mass ^② | J | | | | | |
| 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 m ² | Dimensions in millimeters | | | | |

Notes:

- ① Refer to VC Spider Piping and Configuration catalog page for other sizes.
- ② Based on minimum bore.



Web Casting Configuration shown is for all sizes



| English | | lb | lb ft ² | 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 ② Mass ② | Wk ² 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 m ² | Dimensions in millimeters | | | | |

Notes:

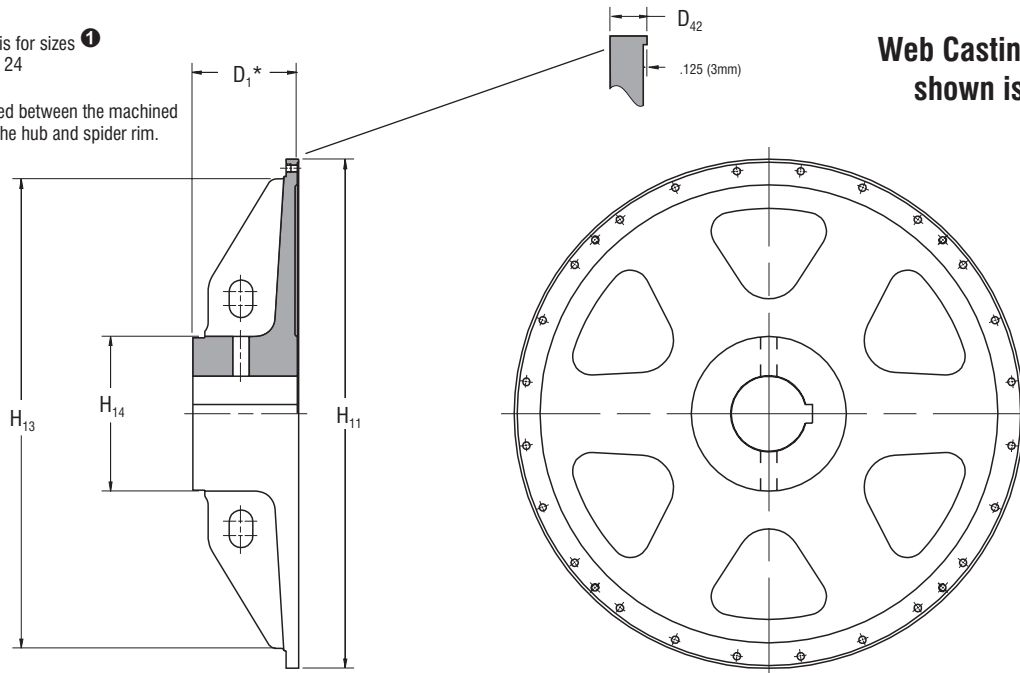
- ① Refer to VC Spider Piping and Configuration catalog page for other sizes.
- ② Based on minimum bore.

Form VC 524

Spiders – Dual Wide Sizes – Dimensional and Technical Data

Spider shown is for sizes ①
20 and 24

* D_1 is measured between the machined surfaces of the hub and spider rim.



Web Casting Configuration
shown is for all sizes

| English | | lb | lb ft ² | 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 Mass | Wk ² 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 m ² | Dimensions in millimeters | | | | |

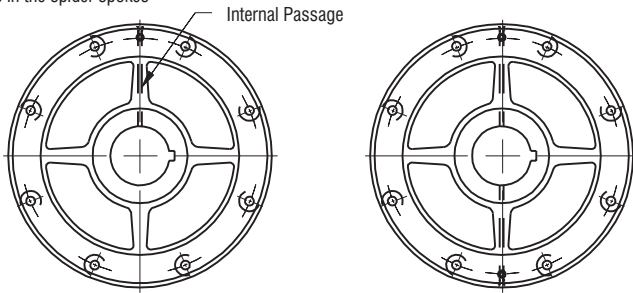
Notes:

- ① Refer to VC Spider Piping and Configuration catalog page for other sizes.
- ② Based on minimum bore.

Form VC 537

Shaft to Clutch Element Piping

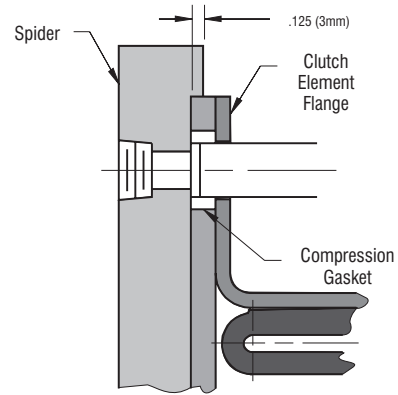
Spider for element 11.5VC500 has internal air passages in the spider spokes



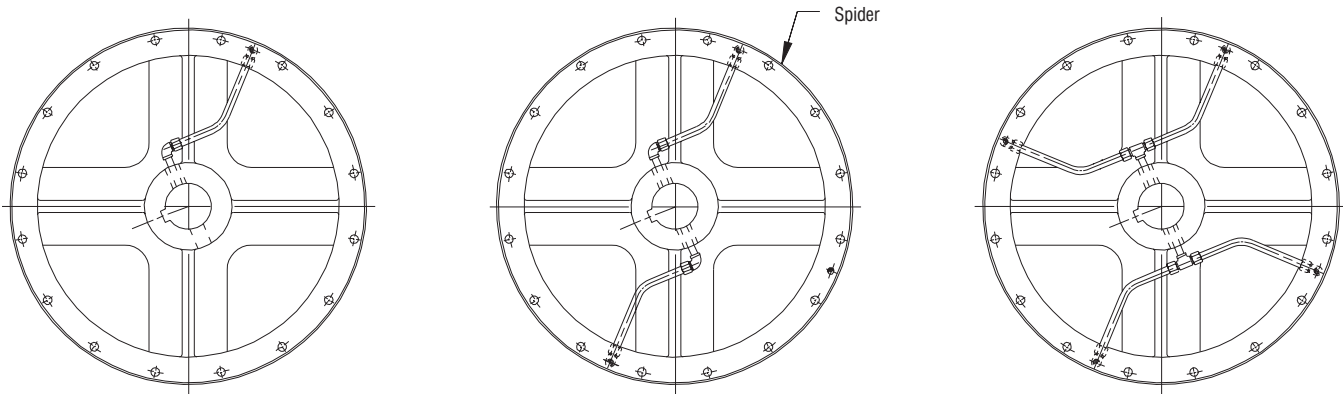
Single Connection

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

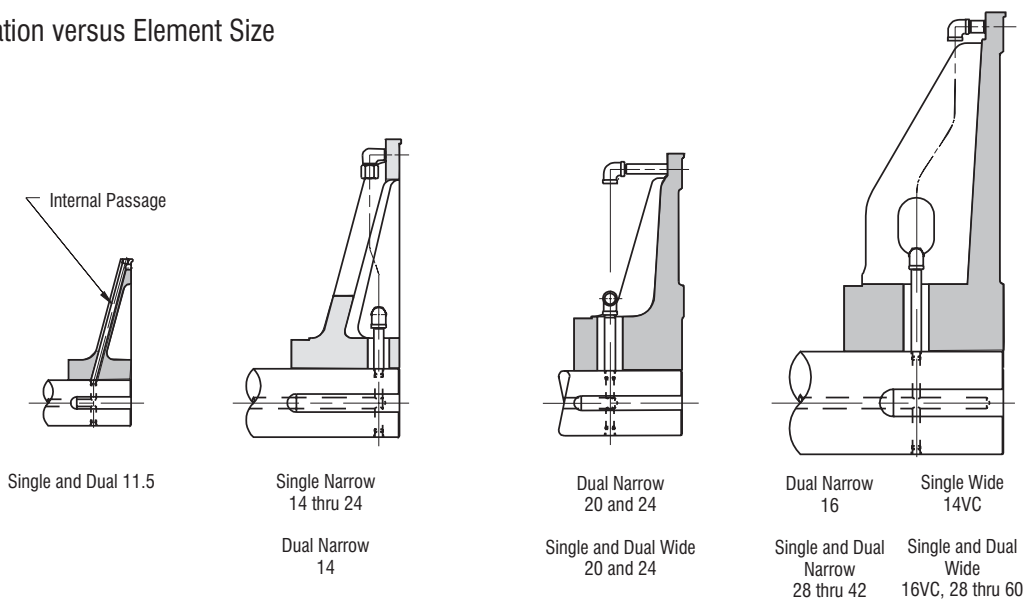


Single Connection

Two Connections

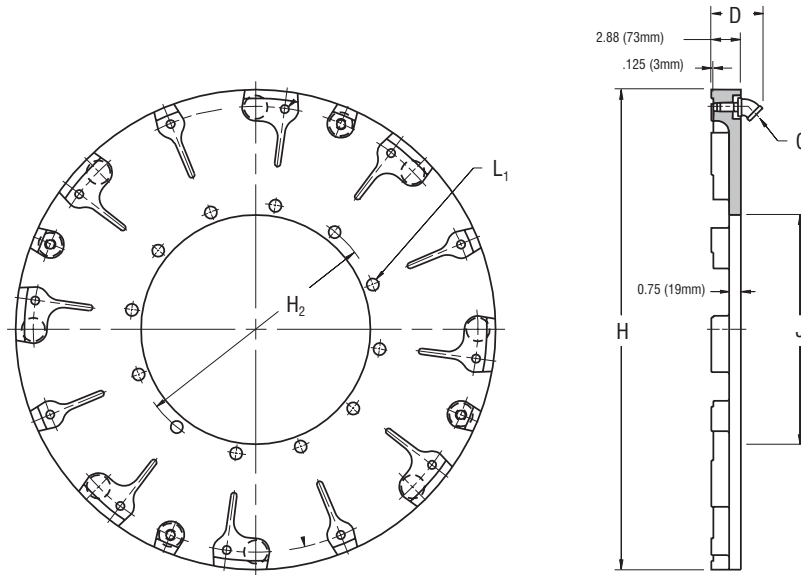
Four Connections

Spider Configuration versus Element Size



Form VC 511

Ventilated Adapters – Narrow Sizes – Dimensional and Technical Data



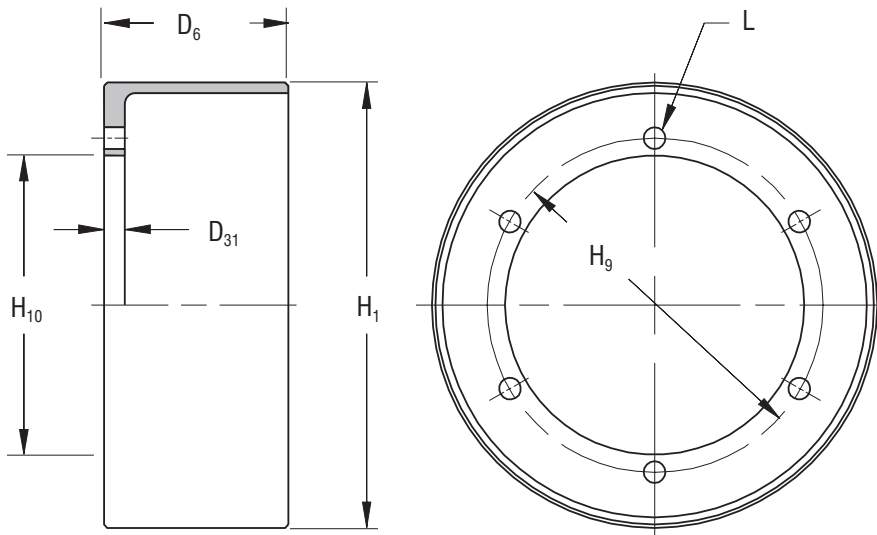
| English | | | lb | lb ft ² | lb | lb ft ² | Dimensions in inches | | | | | | |
|------------------|-----------------------------|---------------------------|------------------------|--------------------|------------------------|--------------------|---------------------------|-------|----------------|----------------|----------------|------|--------|
| 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 Wk ² | | Weight Wk ² | | D | H | H ₂ | J ₁ | Number Size | | O |
| | | | Single Adapter ① | | Dual Adapter ① | | | | | | L ₁ | | |
| | | | Mass | J | Mass | J | | | | | Number | 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 m ² | kg | kg m ² | Dimensions in millimeters | | | | | | |

Notes:

- ① Single adapter made of aluminum alloy, dual adapter made of cast iron.
- ② Tolerance +0.005/-0.000 in (+0,13/-0,00 mm)
- ③ 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-ft ² | in | lb | lb-ft ² | | | |
|------------------|---------------------------|------------------|----------------|-------------------|---------|----------|-----|----------------|-------------|--------------------|-----|----------------|--------------------|-----------------|------|---|
| 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 | ① H ₁ | H ₉ | ② H ₁₀ | Thru | Tapped ③ | No. | D ₆ | Weight | WK ² | No. | D ₆ | Weight | WK ² | | |
| | | | | | L Holes | | | | Single Drum | | | | Dual Drum | | | |
| | | | | | Thru | Tapped | | | Mass | | | | J | | 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-m ² | mm | kg | kg-m ² | | | |

Notes:

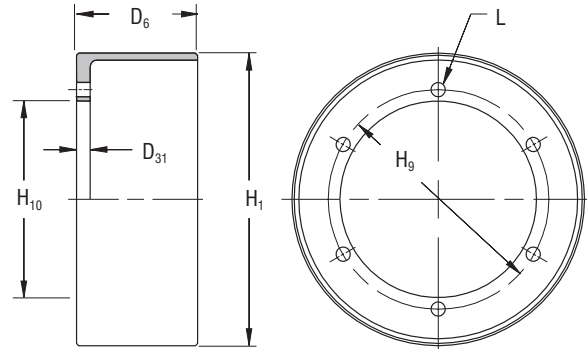
- ① Tolerance +0.000/-0.010 in (+0,00/-0,25 mm)
- ② Tolerance +0.003/-0.000 in (+0,08/-0,00 mm)
- ③ American National Standard for Unified Screw Threads.

Form VC 528

Internal Flange Drums – Wide Sizes – Dimensional and Technical Data

| Size | Drum Part Numbers Having: ⑩ | |
|----------|-----------------------------|-----------------|
| | Male Register | Female Register |
| 14VC1000 | 411111 ① | 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 ft ² | in | lb | lb ft ² |
|----------|----------------------|----|--------|--------|----|--------|------|--------------------|-------|------|--------------------|
| 14VC1000 | 11.50 | 14 | 9.250 | 8.250 | 12 | ⑨ | 0.88 | 122 | 35 | N/A | N/A |
| 16VC1000 | 11.50 | 16 | 11.500 | 10.000 | ⑤ | 0.78 ② | 1.00 | 98 | 38 | 0.88 | 94 |
| 20VC1000 | 11.50 | 20 | 15.000 | 13.500 | ⑤ | 0.78 | 1.00 | 169 | 112 | 0.88 | 164 |
| 24VC1000 | 11.50 | 24 | 16.000 | 14.625 | ⑤ | 0.78 | 1.00 | 225 | 192 | 0.88 | 215 |
| 28VC1000 | 11.50 | 28 | 20.000 | 18.500 | ⑤ | 0.78 | 1.00 | 295 | 350 | 0.88 | 282 |
| 32VC1000 | 11.50 | 32 | 21.000 | 19.000 | ⑥ | 0.78 | 1.00 | 371 | 559 | 0.88 | 352 |
| 38VC1200 | 13.63 | 38 | 27.000 | 25.000 | ⑦ | 0.78 | 1.00 | 552 | 1214 | 0.88 | 530 |
| 42VC1200 | 13.63 | 42 | 31.000 | 29.000 | ⑧ | 0.78 | 1.13 | 582 | 1567 | 1.00 | 550 |
| 46VC1200 | 13.63 | 46 | 34.500 | 32.500 | ⑦ | 1.03 | 1.25 | 729 | 2357 | 1.13 | 700 |
| 52VC1200 | 13.88 | 52 | 40.000 | 38.000 | ⑥ | 1.06 | 1.25 | 852 | 3552 | 1.13 | 820 |
| 51VC1600 | 18.13 | 51 | 40.000 | 38.000 | ⑥ | 1.06 | 1.25 | 890 | 4145 | 1.13 | 860 |
| 60VC1600 | 17.75 | 60 | 46.000 | 42.000 | 24 | 1.56 | 1.75 | 1640 | 8810 | 1.63 | 1590 |
| 66VC1600 | 18.25 | 66 | 48.000 | 44.000 | ⑧ | 1.56 | 1.75 | 1905 | 15070 | 1.50 | 1770 |

| Size | D ₆ | ③ H ₁ | H ₉ | ④ H ₁₀ | No. | | Weight | | | Weight | | |
|----------|----------------|------------------|----------------|-------------------|---------|------|----------------------|------|-------|------------------------|------|-------|
| | | | | | L Holes | | Male Register Drum ⑩ | | | Female Register Drum ⑩ | | |
| | | | | | No. | Size | D ₃₁ | Mass | J | D ₃₁ | Mass | J |
| 14VC1000 | 292 | 356 | 235,0 | 209,6 | 12 | ⑨ | 22 | 55 | 1,47 | N/A | N/A | N/A |
| 16VC1000 | 292 | 406 | 292,1 | 254,0 | ⑤ | 20 ② | 25 | 44 | 1,60 | 22 | 43 | 1,55 |
| 20VC1000 | 292 | 508 | 381,0 | 342,9 | ⑤ | 20 | 25 | 77 | 4,70 | 22 | 74 | 4,58 |
| 24VC1000 | 292 | 610 | 406,4 | 371,5 | ⑤ | 20 | 25 | 102 | 8,06 | 22 | 97 | 7,81 |
| 28VC1000 | 292 | 711 | 508,0 | 469,9 | ⑤ | 20 | 25 | 134 | 14,70 | 22 | 128 | 14,20 |
| 32VC1000 | 292 | 813 | 533,4 | 482,6 | ⑥ | 20 | 25 | 168 | 23,48 | 22 | 159 | 22,55 |
| 38VC1200 | 346 | 965 | 685,8 | 635,0 | ⑦ | 20 | 25 | 250 | 50,99 | 22 | 240 | 49,27 |
| 42VC1200 | 346 | 1067 | 787,4 | 736,6 | ⑧ | 20 | 29 | 264 | 65,81 | 25 | 249 | 63,42 |
| 46VC1200 | 346 | 1168 | 876,3 | 825,5 | ⑦ | 26 | 32 | 330 | 98,99 | 29 | 317 | 95,59 |
| 52VC1200 | 353 | 1321 | 1016,0 | 965,2 | ⑥ | 27 | 32 | 386 | 149,2 | 29 | 371 | 143,9 |
| 51VC1600 | 461 | 1295 | 1016,0 | 965,2 | ⑥ | 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 | ⑧ | 40 | 44 | 863 | 632,9 | 38 | 802 | 602,3 |

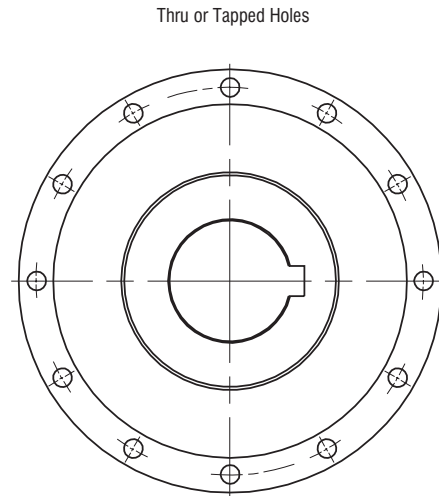
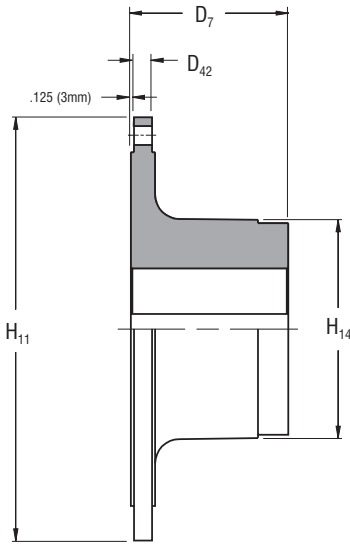
| SI | Dimensions in millimeters | | | | | kg | kg m ² | mm | kg | kg m ² |
|----|---------------------------|--|--|--|--|----|-------------------|----|----|-------------------|
|----|---------------------------|--|--|--|--|----|-------------------|----|----|-------------------|

Notes:

- ① Drum furnished without male register.
- ② Male drum has tapped holes. Female has drilled holes. See VC510.
- ③ Tolerance +0.000/-0.010 in (+0,00/-0,25 mm)
- ④ 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)
- ⑤ 14 Holes based upon a 16 hole pattern. Two holes 180° apart not used.
- ⑥ 22 Holes based upon a 24 hole pattern. Two holes 180° apart not used.
- ⑦ 30 Holes based upon a 32 hole pattern. Two holes 180° apart not used.
- ⑧ 34 Holes based upon a 36 hole pattern. Two holes 180° apart not used.
- ⑨ Furnished with tapped holes only. 1/2-13 American National Standards for Unified Screw Threads.
- ⑩ See form VC 510

Form VC 514

Drum Hubs – Narrow Sizes – Dimensional and Technical Data



| 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 ft ² | Dimensions in inches | | | lb | lb ft ² | 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 ① | | D ₇ | D ₄₂ | H ₁₄ | Weight ① | | D ₇ | D ₄₂ | H ₁₄ |
| | | Wk ² | J | | | | Wk ² | J | | | |
| | | For Single Elements | | | | | | For Dual Elements | | | |
| 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 m ² | Dimensions in millimeters | | | kg | kg m ² | Dimensions in millimeters | | |

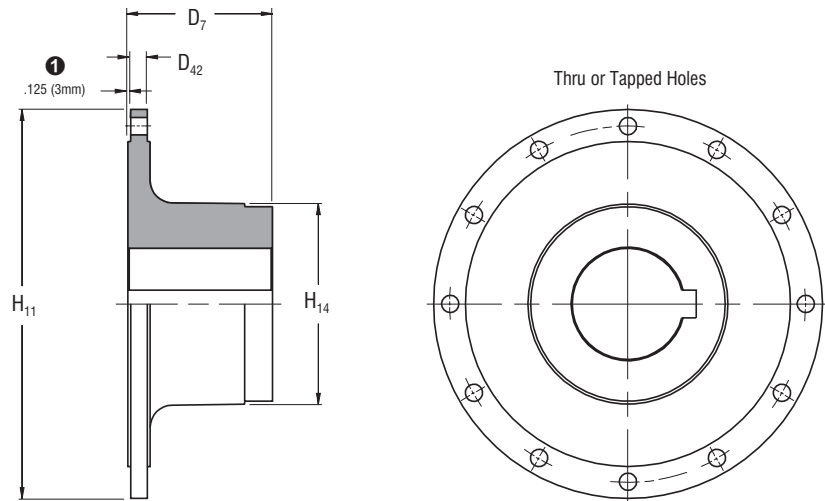
Notes:

① Based upon minimum bores.

Form VC 516

Drum Hubs – Wide Sizes – Dimensional and Technical Data

| 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-ft ² | inches | | lb | lb-ft ² | 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 ③ | 2.00 | 51.50 | 4940 | 6760 | 20.00 | 34.00 | 6450 | 7800 | 24.00 | 34.00 | | |
| Size | D ₄₂ | H ₁₁ | Weight ② | Wk ² | D ₇ | H ₁₄ | Weight ② | Wk ² | D ₇ | H ₁₄ | | |
| | | | For Single Element | | | | | For Dual Element | | | | |
| | | | Mass ② | J | D ₇ | H ₁₄ | Mass ② | 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 ③ | 51 | 1308 | 2238 | 283,9 | 508 | 864 | 2922 | 327,6 | 610 | 864 | | |
| SI | millimeters | | kg | kg·m ² | millimeters | | kg | kg·m ² | millimeters | | | |

Notes:

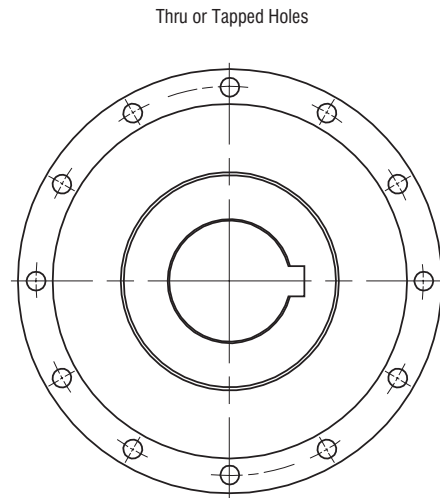
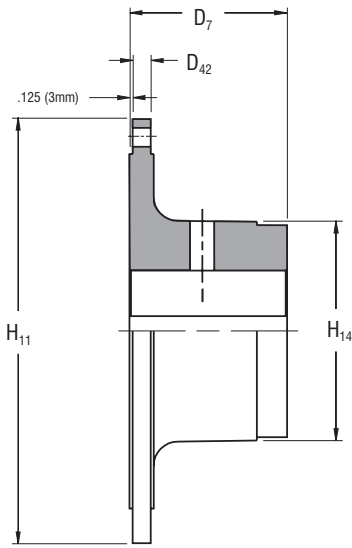
① 0.25 (6 mm) for size 66.

② Based upon minimum bores.

③ 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 | lbft ² | inches | | | lb | lbft ² | 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 ① | | D ₇ | D ₄₂ | H ₁₄ | Weight ① | | D ₇ | D ₄₂ | H ₁₄ |
| | | Wk ² | J | | | | Wk ² | J | | | |
| | | For Single Elements | | | | | | For Dual Elements | | | |
| 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 m ² | millimeters | | | kg | kg m ² | millimeters | | |

Notes:

① Based upon minimum bores.