

VBC/LBC Series ISO15552 Standard Cylinder



VBC/LBC Standard Cylinder



Specifications

| | | | | | | | | | | |
|---------------------------|-----------------------------|------|------|------|------|-----|-----|-----|-----|-----|
| Bore Size (mm) | 32 | 40 | 50 | 63 | 80 | 100 | 125 | 160 | 200 | 250 |
| Acting type | Double Acting | | | | | | | | | |
| Working medium | Clean Air(40 μm filtration) | | | | | | | | | |
| Working pressure (MPa) | 0.1~1.0 | | | | | | | | | |
| Guaranteed pressure (MPa) | 1.5 | | | | | | | | | |
| Working temperature (°C) | -20~80(No freezing) | | | | | | | | | |
| Speed range (mm/s) | 50~800 | | | | | | | | | |
| Cushion type | Air Cushion | | | | | | | | | |
| Cushion stroke (mm) | 27 | 30 | 36 | 34 | 35 | 42 | 50 | | | |
| Mounting type | LB FA FB CA CB CR | | | | | | | | | |
| Port size ① | G1/8 | G1/4 | G3/8 | G1/2 | G3/4 | G1 | | | | |

① PT, NPT port size is optional.

How to Order?

| Series No | Cushion Type | Type No. | Bore X | Stroke - Adjustable Stroke | Magnet No. | Seal Material | Mounting Type | Thread Type |
|--|---|--|------------------------------|---|------------------------------------|-----------------|--|-----------------------------|
| VB: Profile barrel LB: Round barrel | C: Air cushion Blank: Basic type D: Double shaft type J: Double shaft and adjustable stroke type | 32 40 50 63 80 ... 250 | 25 50 75 ... 100 | 10 20 30 40 50 75 100 | Blank: No magnet S: With magnet | Black: TPU seal | Blank: No CA CB J CR YJ LB YCJ FA BJ FB FD | Blank: G P: PT T: NPT |

Order Example:

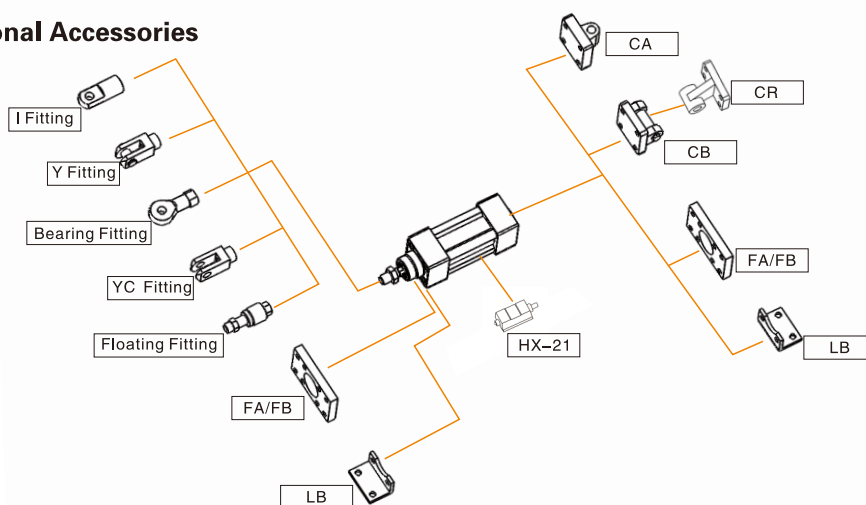
VBC series, double shaft air cylinder, Bore 40mm, stroke 50mm, with magnet, TPU seal material, CA mounting accessory, NPT thread.
ERP code is: VBCD 40X50-S-CA-T

Note:1. If cylinder with several different mounting accessories, please use this sequential coding: CA/CB/CR/LB/FA/FB/IJ/YJ/BJ/FD

2.VBC series, bore range: Φ32~Φ200;LBC series,bore range: Φ32~Φ250

3.No CR/LB option for Φ200

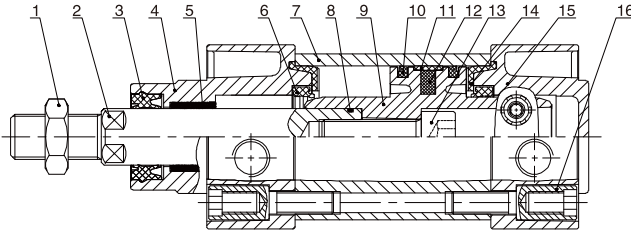
Optional Accessories



Stroke

| Bore (mm) | Standard Stroke (mm) | Max. Stroke (mm) |
|-----------|--|------------------|
| 32 | 25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 | 1900 |
| 40 | 25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 | 1900 |
| 50~250 | 25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000 | 1900 |

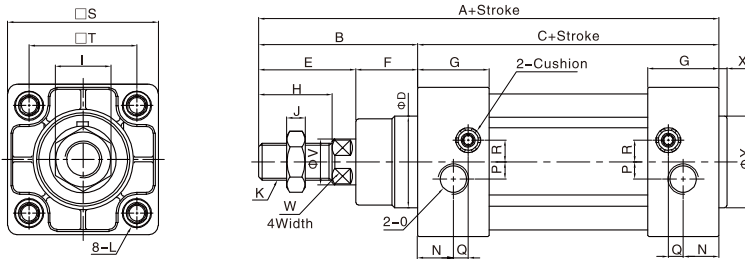
Internal Structure



| NO. | Part Name | Material |
|-----|--------------------------|-------------------------------|
| 1 | Nut | Carbon steel |
| 2 | Piston rod | S45C hard chrome carbon steel |
| 3 | Piston rod seal | TPU |
| 4 | Head cover | Aluminum alloy |
| 5 | Self lubricating bearing | Bronze powder |
| 6 | Cushion seal | TPU |
| 7 | Barrel | Aluminum alloy |
| 8 | O-ring | NBR |
| 9 | Piston | Aluminum alloy |
| 10 | Piston seal | TPU |
| 11 | Wear ring | PTFE |
| 12 | Magnet | Plastic |
| 13 | Hexagon screw | Carbon steel |
| 14 | Cushion pad | TPU |
| 15 | Rear cover | Aluminum alloy |
| 16 | Bolt | Carbon steel |

Main Dimension

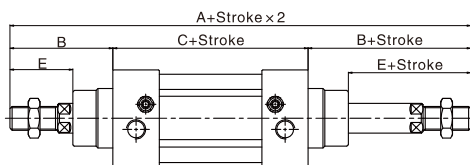
VBC



| Bore/Sign | A | B | C | D | E | F | G | H | I | J | K | L | N | O | P | Q | R | S | T | V | W | X | Y |
|-----------|-----|-----|-----|----|-----|----|------|----|----|------|----------|-------------|------|------|------|-----|------|-----|------|----|----|-----|----|
| 32 | 142 | 48 | 94 | 30 | 29 | 19 | 27.5 | 22 | 17 | 6 | M10x1.25 | M6 depth16 | 13 | 1/8" | 5.5 | 6 | 6 | 47 | 32.5 | 12 | 10 | 3 | 30 |
| 40 | 159 | 54 | 105 | 35 | 33 | 21 | 32 | 24 | 17 | 7 | M12x1.25 | M6 depth16 | 17 | 1/4" | 6 | 7.5 | 8.5 | 53 | 38 | 16 | 13 | 3.5 | 35 |
| 50 | 175 | 69 | 106 | 40 | 42 | 27 | 31 | 32 | 23 | 8 | M16x1.5 | M8 depth16 | 15.5 | 1/4" | 7.5 | 6.5 | 9.5 | 65 | 46.5 | 20 | 17 | 3.5 | 40 |
| 63 | 190 | 69 | 121 | 45 | 42 | 27 | 33 | 32 | 23 | 8 | M16x1.5 | M8 depth16 | 16.5 | 3/8" | 7.5 | 7.5 | 11.5 | 75 | 56.5 | 20 | 17 | 4 | 45 |
| 80 | 214 | 86 | 128 | 45 | 53 | 33 | 33 | 40 | 26 | 10 | M20x1.5 | M10 depth17 | 16.5 | 3/8" | 9 | 7.5 | 13.5 | 95 | 72 | 25 | 22 | 4 | 45 |
| 100 | 229 | 91 | 138 | 55 | 55 | 36 | 37 | 40 | 26 | 10 | M20x1.5 | M10 depth17 | 18.5 | 1/2" | 9.5 | 8.5 | 13.5 | 115 | 89 | 25 | 22 | 4 | 55 |
| 125 | 279 | 119 | 160 | 60 | 74 | 45 | 46 | 54 | 41 | 13.5 | M27x2.0 | M12 depth20 | 23 | 1/2" | 14 | 12 | 14 | 140 | 110 | 32 | 27 | - | - |
| 160 | 332 | 152 | 180 | 65 | 94 | 58 | 50 | 72 | 55 | 18 | M36x2.0 | M16 depth24 | 25 | 3/4" | 15 | 12 | 20 | 180 | 140 | 40 | 36 | - | - |
| 200 | 347 | 167 | 180 | 75 | 110 | 57 | 50 | 72 | 55 | 18 | M36x2.0 | M16 depth24 | 25 | 3/4" | - | - | - | 220 | 170 | 40 | 36 | - | - |
| 250 | 388 | 188 | 200 | 90 | 121 | 67 | 52 | 84 | 65 | 21 | M42x2.0 | M20 depth25 | 26.5 | 1" | 20.5 | 7.5 | 21 | 270 | 220 | 50 | 45 | 10 | 90 |

Note: With magnet and without magnet, the dimensions are same.

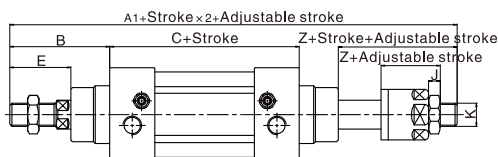
VBCD



| Bore/Sign | A | A1 | B | C | E | Z | J | K |
|-----------|-----|-------|-----|-----|-----|------|------|----------|
| 32 | 190 | 188 | 48 | 94 | 29 | 27 | 6 | M10x1.25 |
| 40 | 213 | 208 | 54 | 105 | 33 | 28 | 7 | M12x1.25 |
| 50 | 244 | 233 | 69 | 106 | 42 | 31 | 8 | M16x1.5 |
| 63 | 259 | 248 | 69 | 121 | 42 | 31 | 8 | M16x1.5 |
| 80 | 300 | 286 | 86 | 128 | 53 | 39 | 10 | M20x1.5 |
| 100 | 320 | 304 | 91 | 138 | 55 | 39 | 10 | M20x1.5 |
| 125 | 398 | 372.5 | 119 | 160 | 74 | 48.5 | 13.5 | M27x2.0 |
| 160 | 484 | 448 | 152 | 180 | 94 | 58 | 18 | M36x2.0 |
| 200 | 514 | 462 | 167 | 180 | 110 | 58 | 18 | M36x2.0 |
| 250 | 576 | 531 | 188 | 200 | 121 | 76 | 21 | M42x2.0 |

Note: 1. With magnet and no magnet, the dimensions are same.
 2. Not marked dimension is same as VBC standard type.
 3. LBC series dimensions are same as VBC.

VBCJ



VBC/LBC Series ISO15552 Standard Cylinder

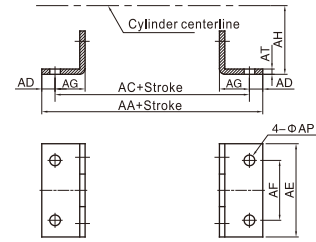


Dimension of Mounting Accessories

⊙LB



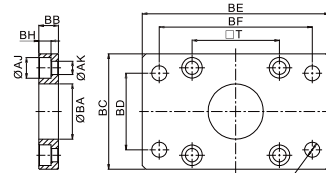
| Bore/Sign | AA | AC | AD | AE | AF | AG | AH | AP | AT |
|-------------|-----|-----|----|-----|-----|----|-----|------|----|
| FJ-VBC32LB | 158 | 142 | 8 | 47 | 32 | 24 | 32 | 7 | 4 |
| FJ-VBC40LB | 179 | 161 | 9 | 53 | 36 | 28 | 36 | 9 | 4 |
| FJ-VBC50LB | 190 | 170 | 10 | 65 | 45 | 32 | 45 | 9 | 5 |
| FJ-VBC63LB | 209 | 185 | 12 | 75 | 50 | 32 | 50 | 9 | 5 |
| FJ-VBC80LB | 248 | 210 | 19 | 95 | 63 | 41 | 63 | 12.5 | 6 |
| FJ-VBC100LB | 258 | 220 | 19 | 115 | 75 | 41 | 71 | 14.5 | 6 |
| FJ-VBC125LB | 290 | 250 | 20 | 140 | 90 | 45 | 90 | 16.5 | 8 |
| FJ-VBC160LB | 340 | 300 | 20 | 180 | 115 | 60 | 115 | 18.5 | 10 |
| FJ-VBC200LB | 380 | 320 | 30 | 220 | 135 | 70 | 135 | 24 | 12 |



⊙FA/FB



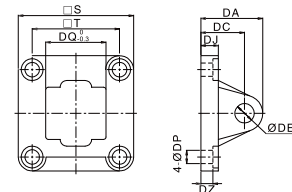
| Bore/Sign | AJ | AK | BA | BB | BC | BD | BE | BF | BH | BP | T |
|-------------|----|----|------|----|-----|-----|-----|-----|------|------|------|
| FJ-VBC32FA | 11 | 7 | 30.5 | 10 | 47 | 32 | 80 | 64 | 6 | 7 | 32.5 |
| FJ-VBC40FA | 11 | 7 | 35.5 | 10 | 53 | 36 | 90 | 72 | 6 | 9 | 38 |
| FJ-VBC50FA | 14 | 9 | 40.5 | 12 | 65 | 45 | 110 | 90 | 8 | 9 | 46.5 |
| FJ-VBC63FA | 14 | 9 | 45.5 | 12 | 75 | 50 | 125 | 100 | 8 | 9 | 56.5 |
| FJ-VBC80FA | 17 | 11 | 45.5 | 16 | 95 | 63 | 154 | 126 | 10 | 12.5 | 72 |
| FJ-VBC100FA | 17 | 11 | 55.5 | 16 | 115 | 75 | 186 | 150 | 10 | 14.5 | 89 |
| FJ-VBC125FA | 19 | 13 | 62 | 20 | 140 | 90 | 218 | 180 | 12.5 | 16.5 | 110 |
| FJ-VBC160FA | 26 | 18 | 72 | 20 | 180 | 115 | 278 | 230 | 14.5 | 18.5 | 140 |
| FJ-VBC200FA | 26 | 18 | 82 | 25 | 220 | 135 | 318 | 270 | 17 | 22 | 175 |



⊙CA



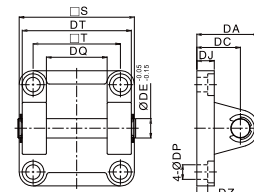
| Bore/Sign | DA | DC | DE | DJ | DP | DQ | DZ | S | T |
|-------------|------|----|----|------|----|------|-----|-----|------|
| FJ-VBC32CA | 31 | 22 | 10 | 9.5 | 7 | 25.8 | 5.5 | 47 | 32.5 |
| FJ-VBC40CA | 37 | 25 | 12 | 9.5 | 7 | 27.8 | 5.5 | 53 | 38 |
| FJ-VBC50CA | 39 | 27 | 12 | 10.5 | 9 | 31.8 | 6.5 | 65 | 46.5 |
| FJ-VBC63CA | 47 | 32 | 16 | 10.5 | 9 | 39.7 | 6.5 | 75 | 56.5 |
| FJ-VBC80CA | 51 | 36 | 16 | 14.5 | 11 | 49.7 | 10 | 95 | 72 |
| FJ-VBC100CA | 61 | 41 | 20 | 14.5 | 11 | 59.7 | 10 | 115 | 89 |
| FJ-VBC125CA | 75 | 50 | 25 | 17.5 | 13 | 69.7 | 10 | 140 | 110 |
| FJ-VBC160CA | 82.5 | 55 | 30 | 20 | 18 | 89.7 | 19 | 176 | 140 |
| FJ-VBC200CA | 88.5 | 60 | 30 | 25 | 18 | 89.7 | 24 | 218 | 175 |



⊙CB



| Bore/Sign | DA | DC | DE | DJ | DP | DQ | DT | DZ | S | T |
|-------------|------|----|----|------|----|----------------------------------|-------|-----|-------|------|
| FJ-VBC32CB | 31 | 22 | 10 | 9.5 | 7 | 26 ^{+0.52} ₀ | 45 | 5.5 | 47 | 32.5 |
| FJ-VBC40CB | 37 | 25 | 12 | 9.5 | 7 | 28 ^{+0.52} ₀ | 52 | 5.5 | 53 | 38 |
| FJ-VBC50CB | 39 | 27 | 12 | 10.5 | 9 | 32 ^{+0.62} ₀ | 60 | 6.5 | 65 | 46.5 |
| FJ-VBC63CB | 47 | 32 | 16 | 10.5 | 9 | 40 ^{+0.62} ₀ | 70 | 6.5 | 75 | 56.5 |
| FJ-VBC80CB | 51 | 36 | 16 | 14.5 | 11 | 50 ^{+0.62} ₀ | 90 | 10 | 95 | 72 |
| FJ-VBC100CB | 61 | 41 | 20 | 14.5 | 11 | 60 ^{+0.74} ₀ | 110 | 10 | 115 | 89 |
| FJ-VBC125CB | 75 | 50 | 25 | 17.5 | 13 | 70 ^{+0.74} ₀ | 130 | 10 | 140 | 110 |
| FJ-VBC160CB | 82 | 55 | 30 | 20 | 18 | 90 ⁺¹ ₀ | 163.5 | 19 | 176.5 | 140 |
| FJ-VBC200CB | 89.5 | 60 | 30 | 25 | 18 | 90 ⁺¹ ₀ | 175 | 24 | 218 | 175 |



⊙CR



| Bore/Sign | DC | DD | DE | DF | DJ | DQ | DM | DN | S | T |
|-------------|-----|------|----|-----|----|------|-----|----|-----|-----|
| FJ-VBC32CR | 32 | 10 | 10 | 21 | 8 | 25.8 | 31 | 18 | 51 | 38 |
| FJ-VBC40CR | 36 | 11 | 12 | 24 | 10 | 27.8 | 35 | 22 | 54 | 41 |
| FJ-VBC50CR | 45 | 13 | 12 | 33 | 12 | 31.8 | 45 | 30 | 65 | 50 |
| FJ-VBC63CR | 50 | 15 | 16 | 37 | 12 | 39.7 | 50 | 35 | 67 | 52 |
| FJ-VBC80CR | 63 | 15 | 16 | 47 | 14 | 49.7 | 60 | 40 | 86 | 66 |
| FJ-VBC100CR | 71 | 19 | 20 | 55 | 15 | 59.7 | 70 | 50 | 96 | 76 |
| FJ-VBC125CR | 90 | 22.5 | 25 | 70 | 20 | 69.7 | 90 | 60 | 124 | 94 |
| FJ-VBC160CR | 115 | 30 | 30 | 97 | 26 | 90 | 126 | 88 | 157 | 118 |
| FJ-VBC200CR | 135 | 30 | 30 | 105 | 31 | 90 | 130 | 90 | 162 | 122 |

