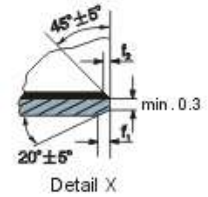
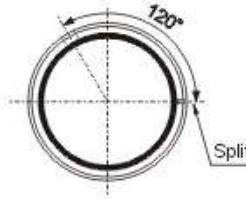
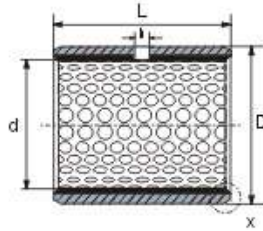


### PVB020X Metric Cylindrical Bushing



| Axle h8              | Housing H7           | OD tolerance         | ID after fixed | Wall thickness | Oil hole      | f <sub>1</sub> | f <sub>2</sub> | L <sup>0-0.40</sup> |      |      |               |      |      |     |               |      |      |     |               |      |      |      |               |      |      |      |     |      |      |      |      |      |      |      |      |      |      |      |  |  |
|----------------------|----------------------|----------------------|----------------|----------------|---------------|----------------|----------------|---------------------|------|------|---------------|------|------|-----|---------------|------|------|-----|---------------|------|------|------|---------------|------|------|------|-----|------|------|------|------|------|------|------|------|------|------|------|--|--|
|                      |                      |                      |                |                |               |                |                | 10                  | 15   | 20   | 25            | 30   | 35   | 40  | 45            | 50   | 60   |     |               |      |      |      |               |      |      |      |     |      |      |      |      |      |      |      |      |      |      |      |  |  |
| 10 <sub>-0.022</sub> | 12 <sup>+0.018</sup> | 12 <sup>+0.065</sup> | 10.04          | 0.955<br>0.98  | 4             | 0.6            | 0.3            |                     |      |      |               |      |      |     |               |      |      |     |               |      |      |      |               |      |      |      |     |      |      |      |      |      |      |      |      |      |      |      |  |  |
|                      |                      | +0.030               | 10.108         |                |               |                |                | 1010                | 1015 | 1020 |               |      |      |     |               |      |      |     |               |      |      |      |               |      |      |      |     |      |      |      |      |      |      |      |      |      |      |      |  |  |
| 12 <sub>-0.027</sub> | 14 <sup>+0.018</sup> | 14 <sup>+0.065</sup> | 12.04          | 1.445<br>1.475 |               |                |                | 6                   | 1.2  | 0.4  |               |      |      |     |               |      |      |     |               |      |      |      |               |      |      |      |     |      |      |      |      |      |      |      |      |      |      |      |  |  |
|                      |                      | +0.030               | 12.108         |                |               |                |                |                     |      |      | 1210          | 1215 | 1220 |     |               |      |      |     |               |      |      |      |               |      |      |      |     |      |      |      |      |      |      |      |      |      |      |      |  |  |
| 14 <sub>-0.027</sub> | 16 <sup>+0.018</sup> | 16 <sup>+0.065</sup> | 14.04          |                |               |                |                |                     |      |      | 1.935<br>1.97 | 8    | 1.8  | 0.6 |               |      |      |     |               |      |      |      |               |      |      |      |     |      |      |      |      |      |      |      |      |      |      |      |  |  |
|                      |                      | +0.030               | 14.108         |                |               |                |                |                     |      |      |               |      |      |     |               | 1415 | 1420 |     |               |      |      |      |               |      |      |      |     |      |      |      |      |      |      |      |      |      |      |      |  |  |
| 15 <sub>-0.027</sub> | 17 <sup>+0.018</sup> | 17 <sup>+0.065</sup> | 15.04          |                |               |                |                |                     |      |      |               |      |      |     | 2.415<br>2.46 | 8    | 1.8  | 0.6 |               |      |      |      |               |      |      |      |     |      |      |      |      |      |      |      |      |      |      |      |  |  |
|                      |                      | +0.030               | 15.108         |                |               |                |                |                     |      |      |               |      |      |     |               |      |      |     |               | 1515 | 1520 | 1525 |               |      |      |      |     |      |      |      |      |      |      |      |      |      |      |      |  |  |
| 16 <sub>-0.027</sub> | 18 <sup>+0.018</sup> | 18 <sup>+0.065</sup> | 16.04          |                |               |                |                |                     |      |      |               |      |      |     |               |      |      |     | 2.415<br>2.46 | 8    | 1.8  | 0.6  |               |      |      |      |     |      |      |      |      |      |      |      |      |      |      |      |  |  |
|                      |                      | +0.030               | 16.108         |                |               |                |                |                     |      |      |               |      |      |     |               |      |      |     |               |      |      |      |               | 1615 | 1620 | 1625 |     |      |      |      |      |      |      |      |      |      |      |      |  |  |
| 18 <sub>-0.027</sub> | 20 <sup>+0.021</sup> | 20 <sup>+0.075</sup> | 18.04          |                |               |                |                |                     |      |      |               |      |      |     |               |      |      |     |               |      |      |      | 2.415<br>2.46 | 8    | 1.8  | 0.6  |     |      |      |      |      |      |      |      |      |      |      |      |  |  |
|                      |                      | +0.035               | 18.111         |                |               |                |                |                     |      |      |               |      |      |     |               |      |      |     |               |      |      |      |               |      |      |      |     | 1815 | 1820 | 1825 |      |      |      |      |      |      |      |      |  |  |
| 20 <sub>-0.033</sub> | 23 <sup>+0.021</sup> | 23 <sup>+0.075</sup> | 20.05          |                | 2.415<br>2.46 | 8              | 1.8            |                     |      |      |               |      |      |     |               |      |      |     |               |      |      |      |               |      |      |      | 0.6 |      |      |      |      |      |      |      |      |      |      |      |  |  |
|                      |                      | +0.035               | 20.131         |                |               |                |                |                     |      |      |               |      |      |     |               |      |      |     |               |      |      |      |               |      |      |      |     |      | 2015 | 2020 | 2025 | 2030 |      |      |      |      |      |      |  |  |
| 22 <sub>-0.033</sub> | 25 <sup>+0.021</sup> | 25 <sup>+0.075</sup> | 22.05          | 2.415<br>2.46  |               |                |                | 8                   | 1.8  | 0.6  |               |      |      |     |               |      |      |     |               |      |      |      |               |      |      |      |     |      |      |      |      |      |      |      |      |      |      |      |  |  |
|                      |                      | +0.035               | 22.131         |                |               |                |                |                     |      |      |               |      |      |     |               |      |      |     |               |      |      |      |               |      |      |      |     |      | 2215 |      | 2225 |      |      |      |      |      |      |      |  |  |
| 25 <sub>-0.033</sub> | 28 <sup>+0.021</sup> | 28 <sup>+0.075</sup> | 25.05          |                |               |                |                |                     |      |      | 2.415<br>2.46 | 8    | 1.8  | 0.6 |               |      |      |     |               |      |      |      |               |      |      |      |     |      |      |      |      |      |      |      |      |      |      |      |  |  |
|                      |                      | +0.035               | 25.131         |                |               |                |                |                     |      |      |               |      |      |     |               |      |      |     |               |      |      |      |               |      |      |      |     |      | 2515 | 2520 | 2525 | 2530 |      |      |      |      |      |      |  |  |
| 28 <sub>-0.033</sub> | 32 <sup>+0.025</sup> | 32 <sup>+0.085</sup> | 28.06          |                |               |                |                |                     |      |      |               |      |      |     | 2.415<br>2.46 | 8    | 1.8  | 0.6 |               |      |      |      |               |      |      |      |     |      |      |      |      |      |      |      |      |      |      |      |  |  |
|                      |                      | +0.045               | 28.155         |                |               |                |                |                     |      |      |               |      |      |     |               |      |      |     |               |      |      |      |               |      |      |      |     |      |      | 2820 |      | 2830 |      |      |      |      |      |      |  |  |
| 30 <sub>-0.033</sub> | 34 <sup>+0.025</sup> | 34 <sup>+0.085</sup> | 30.06          |                |               |                |                |                     |      |      |               |      |      |     |               |      |      |     | 2.415<br>2.46 | 8    | 1.8  | 0.6  |               |      |      |      |     |      |      |      |      |      |      |      |      |      |      |      |  |  |
|                      |                      | +0.045               | 30.155         |                |               |                |                |                     |      |      |               |      |      |     |               |      |      |     |               |      |      |      |               |      |      |      |     |      |      | 3020 | 3025 | 3030 |      | 3040 |      |      |      |      |  |  |
| 35 <sub>-0.039</sub> | 39 <sup>+0.025</sup> | 39 <sup>+0.085</sup> | 35.06          |                |               |                |                |                     |      |      |               |      |      |     |               |      |      |     |               |      |      |      | 2.415<br>2.46 | 8    | 1.8  | 0.6  |     |      |      |      |      |      |      |      |      |      |      |      |  |  |
|                      |                      | +0.045               | 35.155         |                |               |                |                |                     |      |      |               |      |      |     |               |      |      |     |               |      |      |      |               |      |      |      |     |      |      | 3520 |      | 3530 | 3830 | 3540 |      |      |      |      |  |  |
| 40 <sub>-0.039</sub> | 44 <sup>+0.025</sup> | 44 <sup>+0.085</sup> | 40.06          |                | 2.415<br>2.46 | 8              | 1.8            |                     |      |      |               |      |      |     |               |      |      |     |               |      |      |      |               |      |      |      | 0.6 |      |      |      |      |      |      |      |      |      |      |      |  |  |
|                      |                      | +0.045               | 40.155         |                |               |                |                |                     |      |      |               |      |      |     |               |      |      |     |               |      |      |      |               |      |      |      |     |      |      | 4020 |      | 4030 |      | 4040 |      |      |      | 4050 |  |  |
| 45 <sub>-0.039</sub> | 50 <sup>+0.025</sup> | 50 <sup>+0.085</sup> | 45.08          | 2.415<br>2.46  |               |                |                | 8                   | 1.8  | 0.6  |               |      |      |     |               |      |      |     |               |      |      |      |               |      |      |      |     |      |      |      |      |      |      |      |      |      |      |      |  |  |
|                      |                      | +0.045               | 45.195         |                |               |                |                |                     |      |      |               |      |      |     |               |      |      |     |               |      |      |      |               |      |      |      |     |      |      | 4520 |      | 4530 |      | 4540 | 4545 | 4550 |      |      |  |  |
| 50 <sub>-0.039</sub> | 55 <sup>+0.030</sup> | 55 <sup>+0.100</sup> | 50.08          |                |               |                |                |                     |      |      | 2.415<br>2.46 | 8    | 1.8  | 0.6 |               |      |      |     |               |      |      |      |               |      |      |      |     |      |      |      |      |      |      |      |      |      |      |      |  |  |
|                      |                      | +0.055               | 50.2           |                |               |                |                |                     |      |      |               |      |      |     |               |      |      |     |               |      |      |      |               |      |      |      |     |      |      |      |      | 5030 |      | 5040 |      | 5050 | 5060 |      |  |  |
| 55 <sub>-0.046</sub> | 60 <sup>+0.030</sup> | 60 <sup>+0.100</sup> | 55.08          |                |               |                |                |                     |      |      |               |      |      |     | 2.415<br>2.46 | 8    | 1.8  | 0.6 |               |      |      |      |               |      |      |      |     |      |      |      |      |      |      |      |      |      |      |      |  |  |
|                      |                      | +0.055               | 55.2           |                |               |                |                |                     |      |      |               |      |      |     |               |      |      |     |               |      |      |      |               |      |      |      |     |      |      |      |      | 5530 |      | 5540 |      | 5550 | 5560 |      |  |  |
| 60 <sub>-0.046</sub> | 65 <sup>+0.030</sup> | 65 <sup>+0.100</sup> | 60.08          |                |               |                |                |                     |      |      |               |      |      |     |               |      |      |     | 2.415<br>2.46 | 8    | 1.8  | 0.6  |               |      |      |      |     |      |      |      |      |      |      |      |      |      |      |      |  |  |
|                      |                      | +0.055               | 60.2           |                |               |                |                |                     |      |      |               |      |      |     |               |      |      |     |               |      |      |      |               |      |      |      |     |      |      |      |      | 6030 |      | 6040 |      | 6050 | 6060 |      |  |  |

| Axle h8               | Housing H7            | OD tolerance                    | ID after fixed    | Wall thickness | Oil hole | f <sub>1</sub> | f <sub>2</sub> | L <sup>0</sup> <sub>-0.40</sub> |       |       |       |       |        |       |        |        |        |        |  |  |
|-----------------------|-----------------------|---------------------------------|-------------------|----------------|----------|----------------|----------------|---------------------------------|-------|-------|-------|-------|--------|-------|--------|--------|--------|--------|--|--|
|                       |                       |                                 |                   |                |          |                |                | 40                              | 50    | 60    | 80    | 90    | 95     | 100   | 110    | 120    |        |        |  |  |
| 65 <sub>-0.046</sub>  | 70 <sup>+0.030</sup>  | 70 <sup>+0.100</sup><br>+0.055  | 65.08<br>65.2     | 2.415<br>2.46  |          | 1.8            | 0.6            | 6540                            |       | 6560  |       |       |        |       |        |        |        |        |  |  |
| 70 <sub>-0.046</sub>  | 75 <sup>+0.030</sup>  | 75 <sup>+0.100</sup><br>+0.055  | 70.08<br>70.2     |                |          |                |                | 8                               | 8     | 7040  | 7050  |       | 7080   |       |        |        |        |        |  |  |
| 75 <sub>-0.046</sub>  | 80 <sup>+0.030</sup>  | 80 <sup>+0.100</sup><br>+0.055  | 75.08<br>75.2     |                |          |                |                | 7540                            |       | 7560  | 7580  |       |        |       |        |        |        |        |  |  |
| 80 <sub>-0.046</sub>  | 85 <sup>+0.035</sup>  | 85 <sup>+0.120</sup><br>+0.070  | 80.1<br>80.265    | 2.385<br>2.45  |          | 1.8            | 0.6            | 8040                            |       | 8060  | 8080  |       |        |       |        |        |        |        |  |  |
| 85 <sub>-0.054</sub>  | 90 <sup>+0.035</sup>  | 90 <sup>+0.120</sup><br>+0.070  | 85.1<br>85.265    |                |          |                |                | 8540                            |       | 8560  | 8580  |       |        |       |        |        |        |        |  |  |
| 90 <sub>-0.054</sub>  | 95 <sup>+0.035</sup>  | 95 <sup>+0.120</sup><br>+0.070  | 90.1<br>90.265    |                |          |                |                | 9040                            |       | 9060  | 9080  | 9090  |        |       |        |        |        |        |  |  |
| 100 <sub>-0.054</sub> | 105 <sup>+0.035</sup> | 105 <sup>+0.120</sup><br>+0.070 | 100.1<br>100.265  |                |          | 1.8            | 0.6            |                                 | 10050 |       | 10080 |       | 10095  |       |        |        |        |        |  |  |
| 105 <sub>-0.054</sub> | 110 <sup>+0.035</sup> | 110 <sup>+0.120</sup><br>+0.070 | 105.11<br>105.265 |                |          |                |                |                                 |       | 10560 | 10580 |       | 10595  |       | 105110 |        |        |        |  |  |
| 110 <sub>-0.054</sub> | 115 <sup>+0.035</sup> | 115 <sup>+0.120</sup><br>+0.070 | 110.11<br>110.265 |                |          |                |                | 9.5                             | 9.5   |       | 11060 | 11080 |        | 11095 |        | 110110 |        |        |  |  |
| 120 <sub>-0.054</sub> | 125 <sup>+0.040</sup> | 125 <sup>+0.170</sup><br>+0.100 | 120.11<br>120.27  |                |          | 1.8            | 0.6            |                                 |       | 12060 | 12080 |       |        |       |        | 120110 |        |        |  |  |
| 125 <sub>-0.063</sub> | 130 <sup>+0.040</sup> | 130 <sup>+0.170</sup><br>+0.100 | 125.11<br>125.27  |                |          |                |                |                                 |       |       | 12560 |       |        |       |        | 125110 |        |        |  |  |
| 130 <sub>-0.063</sub> | 135 <sup>+0.040</sup> | 135 <sup>+0.170</sup><br>+0.100 | 130.11<br>130.27  |                |          |                |                |                                 |       |       | 13050 | 13060 | 13080  |       |        | 130100 |        |        |  |  |
| 140 <sub>-0.063</sub> | 145 <sup>+0.040</sup> | 145 <sup>+0.170</sup><br>+0.100 | 140.11<br>140.27  |                |          | 1.8            | 0.6            |                                 |       | 14050 | 14060 | 14080 |        |       | 140100 |        |        |        |  |  |
| 150 <sub>-0.063</sub> | 155 <sup>+0.040</sup> | 155 <sup>+0.170</sup><br>+0.100 | 150.11<br>150.27  |                |          |                |                |                                 |       |       | 15050 | 15060 | 15080  |       |        | 150100 |        |        |  |  |
| 160 <sub>-0.063</sub> | 165 <sup>+0.040</sup> | 165 <sup>+0.170</sup><br>+0.100 | 160.11<br>160.27  |                |          |                |                |                                 |       |       | 16050 | 16060 | 16080  |       |        | 160100 |        |        |  |  |
| 170 <sub>-0.063</sub> | 175 <sup>+0.040</sup> | 175 <sup>+0.170</sup><br>+0.100 | 170.11<br>170.27  |                |          | 1.8            | 0.6            |                                 |       | 17050 |       | 17080 |        |       | 170100 |        |        |        |  |  |
| 180 <sub>-0.063</sub> | 185 <sup>+0.046</sup> | 185 <sup>+0.210</sup><br>+0.130 | 180.11<br>180.276 |                |          |                |                |                                 |       |       | 18050 | 18060 | 18080  |       |        | 180100 |        |        |  |  |
| 190 <sub>-0.072</sub> | 195 <sup>+0.046</sup> | 195 <sup>+0.210</sup><br>+0.130 | 190.11<br>190.276 |                |          |                |                |                                 |       |       | 19050 | 19060 | 19080  |       |        | 190100 |        | 190120 |  |  |
| 200 <sub>-0.072</sub> | 205 <sup>+0.046</sup> | 205 <sup>+0.210</sup><br>+0.130 | 200.11<br>200.276 |                |          | 1.8            | 0.6            |                                 |       | 20050 | 20060 | 20080 |        |       | 200100 |        | 200120 |        |  |  |
| 220 <sub>-0.072</sub> | 225 <sup>+0.046</sup> | 225 <sup>+0.210</sup><br>+0.130 | 220.11<br>220.276 |                |          |                |                |                                 |       |       | 22050 | 22060 | 22080  |       |        | 220100 |        | 220120 |  |  |
| 240 <sub>-0.072</sub> | 245 <sup>+0.046</sup> | 245 <sup>+0.210</sup><br>+0.130 | 240.11<br>240.276 |                |          |                |                |                                 |       |       | 24050 | 24060 | 24080  |       |        | 240100 |        | 240120 |  |  |
| 250 <sub>-0.072</sub> | 255 <sup>+0.052</sup> | 255 <sup>+0.260</sup><br>+0.170 | 250.11<br>250.282 |                |          | 1.8            | 0.6            |                                 |       | 25050 | 25060 | 25080 |        |       | 250100 |        | 250120 |        |  |  |
| 260 <sub>-0.081</sub> | 265 <sup>+0.052</sup> | 265 <sup>+0.260</sup><br>+0.170 | 260.11<br>260.282 |                |          |                |                |                                 |       |       | 26050 | 26060 | 26080  |       |        | 260100 |        | 260120 |  |  |
| 280 <sub>-0.081</sub> | 285 <sup>+0.052</sup> | 285 <sup>+0.260</sup><br>+0.170 | 280.11<br>280.282 |                |          |                |                |                                 |       |       | 28050 | 28060 | 28080  |       |        | 280100 |        | 280120 |  |  |
| 300 <sub>-0.081</sub> | 305 <sup>+0.052</sup> | 305 <sup>+0.260</sup><br>+0.170 | 300.11<br>300.282 |                |          |                |                | 30050                           | 30060 | 30080 |       |       | 300100 |       | 300120 |        |        |        |  |  |