

QCB[®] Thermoplastic Bearing Units



CAT TP 2017 E Ver1

NBC Group Ltd

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QCB® THERMOPLASTIC HOUSINGS

QCB® bearing housings are made of PBT high-grade glass-filled thermoplastic polyester and are completely interchangeable with conventional cast-iron housings, resulting in a maintenance free housing with excellent mechanical strength, stiffness and dimensional stability that will never rust or corrode.

Developed for use where high standards of cleanliness are important or a significant amount of liquid is present such as in the food and beverage industries. The smooth housing surfaces are much more hygienic than equivalent cast-iron units whose rough surfaces can harbour objectionable dirt, mould and bacteria.

NO PLATING OR COATING TO CHIP OR PEEL

Coated or plated cast-iron housings can scratch, chip and peel. The very act of installation can damage the finish to be removed around the edges of the bolts. Because QCB® Thermoplastic housings are solid PBT, coatings are not required for protection. And even if they are scratched or chipped there is no vulnerable cast-iron to be exposed.

QCB® THERMOPLASTIC HOUSINGS ARE DURABLE

With a tensile strength of 17 300 psi, and the ability to be pressure washed with hot water, QCB® Thermoplastic housings will stand up to the toughest applications.

ALL OTHER PARTS STAINLESS STEEL

To maximise corrosion resistance, not only is the bearing completely stainless, but so are the bolt inserts and grease nipples (suffix -N). Inserts are filled with a high-quality (FDA Approved) food-grade grease (suffix -6)

USED IN MANY INDUSTRIES

Because of their corrosion resistant and non-magnetic properties, QCB® Thermoplastic housings find application in a wide variety of industries including food processing; canning; bottling; pharmaceutical; chemical processing and other general industrial applications.

A COMPLETE RANGE

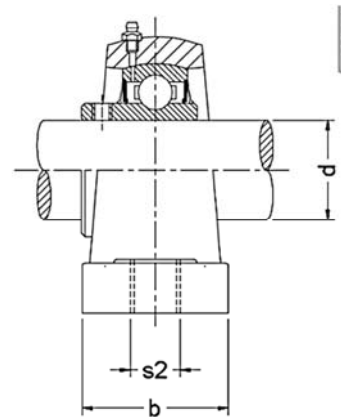
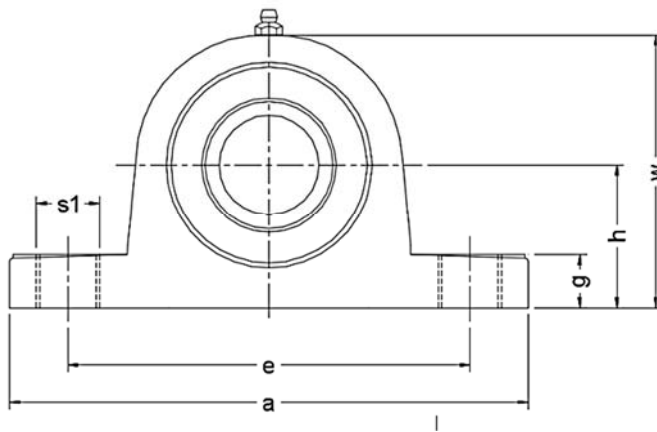
QCB® Thermoplastic bearings are available in a wide range of styles and sizes, with inch, metric or even **plastic inserts**. Snap-on **closed-end covers** are supplied as standard with **through shaft** style and **back seals** available as an optional extra (where applicable).



PPL 200 Series

Thermoplastic PBT pillow block housing

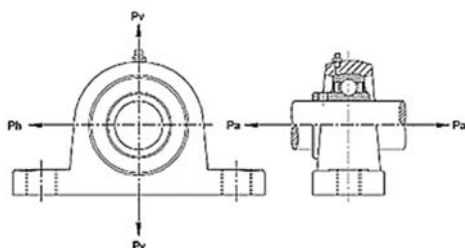
supplied standard with SUC insert and closed cover



| NBC ref | Bearing bore | | Dimensions | | | | | | | | Weight kg | Bolt size | Tightening torque Nm |
|---------------|--------------|------------------------------|------------|-------|-----|----|----|----|------|------|--------------|-----------|-------------------------|
| | mm | inch | h | a | e | b | s1 | s2 | g | w | | | |
| PPL 201 SS N6 | 12 | 1/2 | 33.3 | 127 | 95 | 38 | 14 | 11 | 14.2 | 65.5 | 0.12 | M10 | 18 |
| PPL 202 SS N6 | 15 | 9/16; 5/8 | | | | | | | | | | | |
| PPL 203 SS N6 | 17 | 11/16 | | | | | | | | | | | |
| PPL 204 SS N6 | 20 | 3/4 | | | | | | | | | | | |
| PPL 205 SS N6 | 25 | 13/16; 7/8; 15/16; 1 | 36.5 | 140.5 | 105 | 38 | 14 | 11 | 14.5 | 71 | 0.14 | M10 | 25 |
| PPL 206 SS N6 | 30 | 1.1/16; 1.1/8; 1.3/16; 1.1/4 | 42.9 | 163 | 119 | 46 | 18 | 14 | 17.8 | 84 | 0.20 | M12 | 30 |
| PPL 207 SS N6 | 35 | 1.1/4; 1.5/16; 1.3/8; 1.7/16 | 47.6 | 168 | 127 | 48 | 18 | 14 | 18 | 94.5 | 0.25 | M12 | 35 |
| PPL 208 SS N6 | 40 | 1.1/2; 1.9/16 | 49.2 | 184 | 137 | 54 | 18 | 14 | 19.5 | 99 | 0.36 | M12 | 45 |
| PPL 209 SS N6 | 45 | 1.5/8; 1.11/16; 1.3/4 | 54 | 192 | 146 | 54 | 20 | 17 | 23 | 106 | 0.45 | M16 | 50 |
| PPL 210 SS N6 | 50 | 1.13/16; 1.7/8; 1.15/16; 2 | 57.2 | 206 | 159 | 60 | 20 | 17 | 23 | 114 | 0.55 | M16 | 55 |

Ordering information: PPL 204-12 SS N6 supplied standard with closed cover

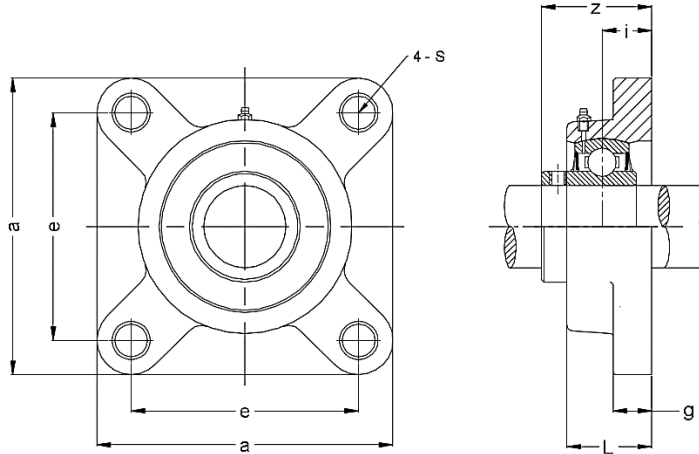
- Optional SSB insert and back seal for additional protection (*Suffix -A*)
- Optional open cover (*Order insert size -OPN*)



| Load mode | Breaking load of housings (KN) | | | | | | |
|----------------|--------------------------------|------|-------|-------|------|-------|-------|
| | 204 | 205 | 206 | 207 | 208 | 209 | 210 |
| P _h | 8.8 | 13.7 | 12.65 | 12.75 | 13.1 | 13.36 | 13.85 |
| P _v | 7.7 | 10 | 10.6 | 10.8 | 11.1 | 11.4 | 11.75 |
| P _a | 5 | 8.1 | 5.75 | 7.5 | 8.5 | 8.95 | 9.55 |

FPL 200 Series

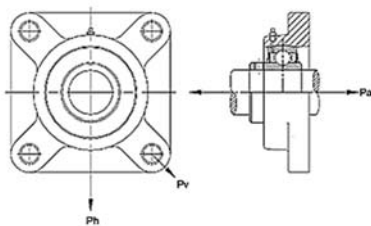
Thermoplastic PBT 4 Bolt flange housing
 # supplied standard with SUC insert and closed cover



| NBC ref | Bearing bore | | Dimensions | | | | | | | Weight kg | Bolt size | Tightening torque Nm |
|---------------|--------------|------------------------------|------------|------|------|------|----|------|------|--------------|-----------|----------------------------|
| | mm | inch | a | e | g | l | s | z | i | | | |
| FPL 201 SS N6 | 12 | 1/2 | 86 | 63.5 | 13.4 | 27.8 | 11 | 36.3 | 18 | 0.12 | M10 | 18 |
| FPL 202 SS N6 | 15 | 9/16; 5/8 | 86 | 63.5 | 13.4 | 27.8 | 11 | 36.3 | 18 | 0.12 | M10 | 18 |
| FPL 203 SS N6 | 17 | 11/16 | 86 | 63.5 | 13.4 | 27.8 | 11 | 36.3 | 18 | 0.12 | M10 | 18 |
| FPL 204 SS N6 | 20 | 3/4 | 86 | 63.5 | 13.4 | 27.8 | 11 | 36.3 | 18 | 0.12 | M10 | 18 |
| FPL 205 SS N6 | 25 | 13/16; 7/8; 15/16; 1 | 95 | 70 | 14 | 28 | 11 | 36.7 | 17 | 0.15 | M10 | 25 |
| FPL 206 SS N6 | 30 | 1.1/16; 1.1/8; 1.3/16; 1.1/4 | 107 | 83 | 14.3 | 31.5 | 11 | 41.4 | 19.2 | 0.18 | M10 | 30 |
| FPL 207 SS N6 | 35 | 1.1/4; 1.5/16; 1.3/8; 1.7/16 | 118 | 92 | 15.5 | 34.8 | 13 | 46.9 | 21.5 | 0.26 | M12 | 35 |
| FPL 208 SS N6 | 40 | 1.1/2; 1.9/16 | 130 | 102 | 17 | 37.5 | 14 | 53.2 | 23 | 0.33 | M12 | 40 |
| FPL 209 SS N6 | 45 | 1.5/8; 1.11/16; 1.3/4 | 137 | 105 | 19 | 41 | 17 | 54.2 | 24 | 0.42 | M16 | 45 |
| FPL 210 SS N6 | 50 | 1.13/16; 1.7/8; 1.15/16; 2 | 143 | 111 | 21 | 43 | 17 | 57.6 | 25 | 0.51 | M16 | 50 |

Ordering information: FPL 204-12 SS N6 supplied standard with closed cover

- Optional SSB insert and back seal for additional protection (*Suffix -A*)
- Optional open cover (*Order insert size -OPN*)

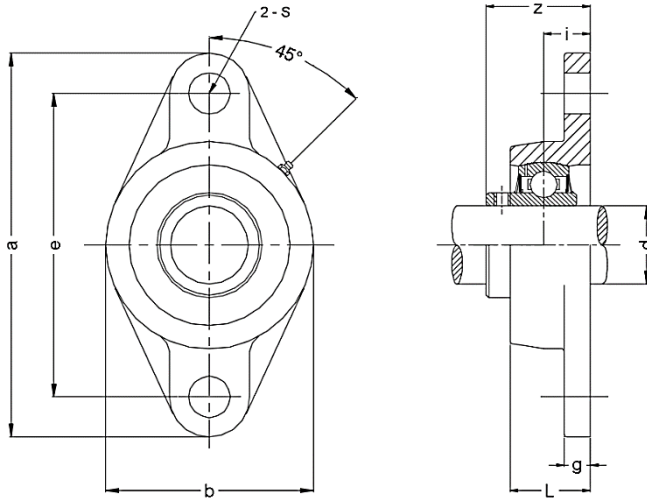


| Load mode | Breaking load of housings (KN) | | | | | | |
|----------------------|--------------------------------|-------|------|------|-------|-------|-------|
| | 204 | 205 | 206 | 207 | 208 | 209 | 210 |
| P_h | 15.95 | 13 | 18 | 18.5 | 19.1 | 19.35 | 19.65 |
| P_v | 10.25 | 12.15 | 17.7 | 18.5 | 19.25 | 19.35 | 19.62 |
| P_a | 3.65 | 3.35 | 3.35 | 3.52 | 3.79 | 3.85 | 3.99 |

NFL 200 Series

Thermoplastic 2 Bolt flange housing

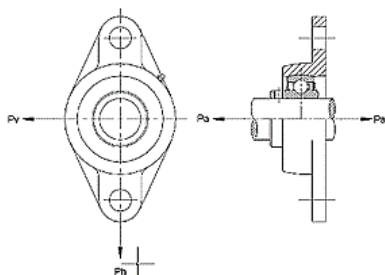
supplied standard with SUC insert and closed cover



| NBC ref | Bearing bore | | Dimensions | | | | | | | | Weight kg | Bolt size | Tightening torque Nm |
|---------|--------------|------------------------------|------------|-------|------|------|------|----|------|------|--------------|-----------|----------------------------|
| | mm | inch | a | e | b | g | l | s | z | i | | | |
| | mm | inch | mm | mm | mm | mm | mm | mm | mm | mm | | | |
| NFL-201 | 12 | 1/2 | 113 | 90 | 65 | 11.4 | 26.5 | 11 | 33.7 | 15.4 | 0.08 | M10 | 18 |
| NFL-202 | 15 | 9/16; 5/8 | 113 | 90 | 65 | 11.4 | 26.5 | 11 | 33.7 | 15.4 | 0.08 | M10 | 18 |
| NFL-203 | 17 | 11/16 | 113 | 90 | 65 | 11.4 | 26.5 | 11 | 33.7 | 15.4 | 0.08 | M10 | 18 |
| NFL-204 | 20 | 3/4 | 113 | 90 | 65 | 11.4 | 26.5 | 11 | 33.7 | 15.4 | 0.08 | M10 | 18 |
| NFL-205 | 25 | 13/16; 7/8; 15/16; 1 | 131 | 99 | 69.5 | 13.5 | 29.1 | 11 | 36.7 | 17 | 0.1 | M10 | 25 |
| NFL-206 | 30 | 1.1/16; 1.1/8; 1.3/16; 1.1/4 | 148 | 117 | 80 | 13.3 | 30.5 | 11 | 41.2 | 19 | 0.13 | M10 | 30 |
| NFL-207 | 35 | 1.1/4; 1.5/16; 1.3/8; 1.7/16 | 164 | 130 | 90 | 16.1 | 32.8 | 13 | 43.4 | 18 | 0.16 | M12 | 35 |
| NFL-208 | 40 | 1.1/2; 1.9/16 | 176 | 144 | 100 | 20 | 37.5 | 14 | 51.7 | 21.5 | 0.24 | M12 | 40 |
| NFL-209 | 45 | 1.5/8; 1.11/16; 1.3/4 | 188.5 | 148.5 | 108 | 21 | 41 | 17 | 54.2 | 24 | 0.32 | M16 | 45 |
| NFL-210 | 50 | 1.13/16; 1.7/8; 1.15/16; 2 | 197 | 157 | 115 | 21 | 43 | 17 | 57.6 | 25 | 0.42 | M16 | 50 |

Ordering information: NFL 204-12 SS N6 supplied standard with closed cover

- Optional SSB insert and back seal for additional protection (*Suffix -A*)
- Optional open cover (*Order insert size -OPN*)

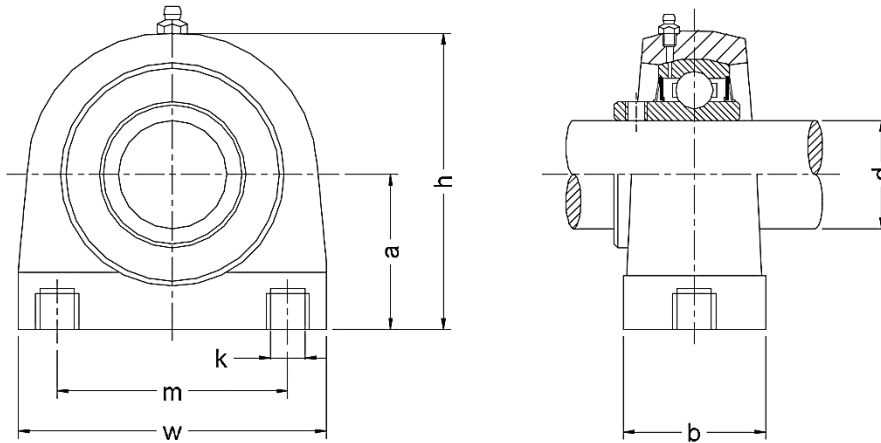


| Load mode | Breaking load of housings (KN) | | | | | | |
|-----------|--------------------------------|-------|-------|-------|-------|-------|-------|
| | 204 | 205 | 206 | 207 | 208 | 209 | 210 |
| Ph | 11.75 | 11.37 | 16.45 | 16.9 | 17.35 | 17.6 | 17.95 |
| Pv | 11 | 13.85 | 13.35 | 13.95 | 14.05 | 14.3 | 14.55 |
| Pa | 8.5 | 11.1 | 14.2 | 14.9 | 15.15 | 15.35 | 15.65 |

UCPL 200 Series

Thermoplastic short base pillow block housing

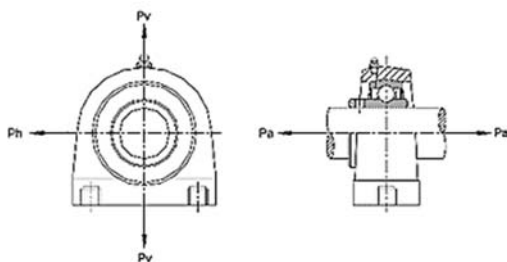
supplied standard with SUC insert and closed cover



| NBC ref | Bearing bore | | Dimensions | | | | | | | | Weight kg | Bolt size | Tightening torque Nm |
|---------|--------------|------------------------------|------------|-------|------|------|------|----|------|------|--------------|-----------|----------------------------|
| | mm | inch | a | e | b | g | l | s | z | i | | | |
| | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | | | |
| NFL-201 | 12 | 1/2 | 113 | 90 | 65 | 11.4 | 26.5 | 11 | 33.7 | 15.4 | 0.08 | M10 | 18 |
| NFL-202 | 15 | 9/16; 5/8 | 113 | 90 | 65 | 11.4 | 26.5 | 11 | 33.7 | 15.4 | 0.08 | M10 | 18 |
| NFL-203 | 17 | 11/16 | 113 | 90 | 65 | 11.4 | 26.5 | 11 | 33.7 | 15.4 | 0.08 | M10 | 18 |
| NFL-204 | 20 | 3/4 | 113 | 90 | 65 | 11.4 | 26.5 | 11 | 33.7 | 15.4 | 0.08 | M10 | 18 |
| NFL-205 | 25 | 13/16; 7/8; 15/16; 1 | 131 | 99 | 69.5 | 13.5 | 29.1 | 11 | 36.7 | 17 | 0.1 | M10 | 25 |
| NFL-206 | 30 | 1.1/16; 1.1/8; 1.3/16; 1.1/4 | 148 | 117 | 80 | 13.3 | 30.5 | 11 | 41.2 | 19 | 0.13 | M10 | 30 |
| NFL-207 | 35 | 1.1/4; 1.5/16; 1.3/8; 1.7/16 | 164 | 130 | 90 | 16.1 | 32.8 | 13 | 43.4 | 18 | 0.16 | M12 | 35 |
| NFL-208 | 40 | 1.1/2; 1.9/16 | 176 | 144 | 100 | 20 | 37.5 | 14 | 51.7 | 21.5 | 0.24 | M12 | 40 |
| NFL-209 | 45 | 1.5/8; 1.11/16; 1.3/4 | 188.5 | 148.5 | 108 | 21 | 41 | 17 | 54.2 | 24 | 0.32 | M16 | 45 |
| NFL-210 | 50 | 1.13/16; 1.7/8; 1.15/16; 2 | 197 | 157 | 115 | 21 | 43 | 17 | 57.6 | 25 | 0.42 | M16 | 50 |

Ordering information: UCPL 204-12 SS N6 supplied standard with closed cover

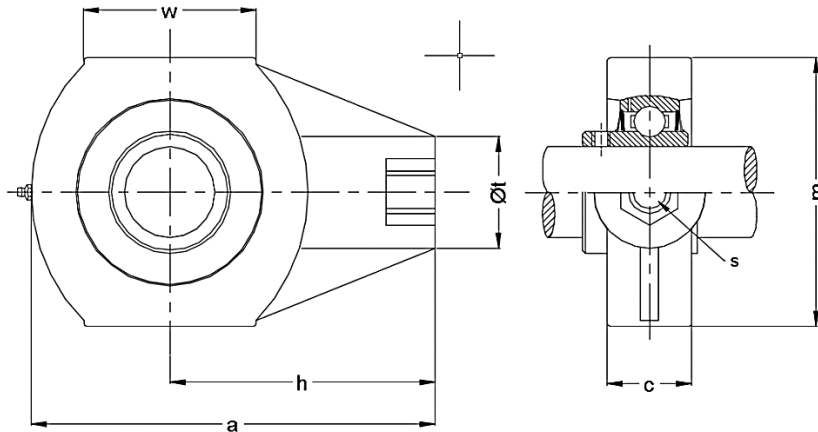
- Optional SSB insert and back seal for additional protection (*Suffix -A*)
- Optional open cover (*Order insert size -OPN*)



| Load mode | Breaking load of housings (N) | | | | | | |
|-----------|-------------------------------|------|-------|-------|------|------|-------|
| | 204 | 205 | 206 | 207 | 208 | 209 | 210 |
| Ph | 8.21 | 8.54 | 10.37 | 12.15 | 12.2 | 12.9 | 13.85 |
| Pv | 6.9 | 7 | 6.58 | 8.08 | 9.1 | 1.4 | 11.05 |
| Pa | 2.98 | 2.85 | 4.95 | 8.16 | 9.8 | 10.7 | 11.36 |

HPL 200 Series

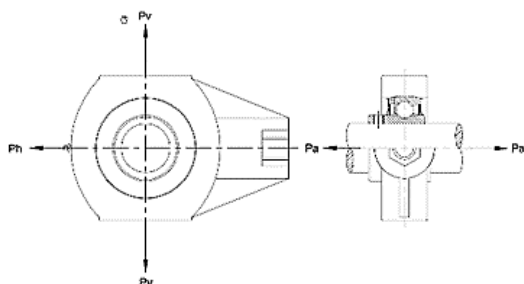
Thermoplastic hanger unit with AISI 440 Stainless steel SUC insert



| NBC ref | Bearing bore | | Dimensions | | | | | | | Weight kg |
|---------------|--------------|------------------------------|------------|------|------|-----|-----|----|----|--------------|
| | mm | inch | a | c | h | m | s | t | w | |
| | mm | inch | mm | mm | mm | mm | mm | mm | mm | |
| HPL 201 SS N6 | 12 | 1/2 | 99 | 27.5 | 63.5 | 65 | M16 | 36 | 47 | 0.15 |
| HPL 202 SS N6 | 15 | 9/16; 5/8 | 99 | 27.5 | 63.5 | 65 | M16 | 36 | 47 | 0.15 |
| HPL 203 SS N6 | 17 | 11/16 | 99 | 27.5 | 63.5 | 65 | M16 | 36 | 47 | 0.15 |
| HPL 204 SS N6 | 20 | 3/4 | 99 | 27.5 | 63.5 | 65 | M16 | 36 | 47 | 0.15 |
| HPL 205 SS N6 | 25 | 13/16; 7/8; 15/16; 1 | 99 | 27.5 | 63.5 | 74 | M16 | 36 | 47 | 0.16 |
| HPL 206 SS N6 | 30 | 1.1/16; 1.1/8; 1.3/16; 1.1/4 | 125 | 34.5 | 76 | 90 | M16 | 40 | 63 | 0.21 |
| HPL 207 SS N6 | 35 | 1.1/4; 1.5/16; 1.3/8; 1.7/16 | 125 | 34.5 | 76 | 90 | M16 | 40 | 63 | 0.25 |
| HPL 208 SS N6 | 40 | 1.1/2; 1.9/16 | 140 | 34.5 | 85 | 100 | M16 | 40 | 80 | 0.36 |
| HPL 209 SS N6 | 45 | 1.5/8; 1.11/16; 1.3/4 | 149 | 40 | 90 | 110 | M20 | 50 | 85 | 0.45 |
| HPL 210 SS N6 | 50 | 1.13/16; 1.7/8; 1.15/16; 2 | 149 | 40 | 90 | 110 | M20 | 50 | 85 | 0.49 |

Ordering information: HPL 204-12 SS N6 supplied standard with closed cover

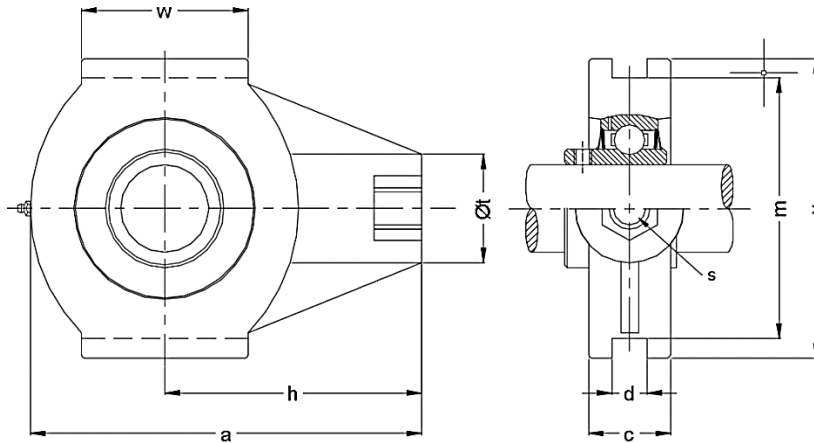
- Optional SSB insert and back seal for additional protection (*Suffix -A*)
- Optional open cover (*Order insert size -OPN*)



| Load mode | Breaking load of housings (KN) | | | | | | |
|-----------|--------------------------------|------|------|------|------|------|------|
| | 204 | 205 | 206 | 207 | 208 | 209 | 210 |
| Ph | 14.8 | 15.5 | 15.8 | 16.5 | 17.3 | 18.2 | 18.8 |
| Pv | 3.9 | 4.5 | 5.1 | 6.5 | 7.5 | 8.7 | 9.7 |
| Pa | 8.5 | 10.3 | 10.9 | 11.3 | 12.1 | 12.9 | 13.5 |

TPL 200 Series

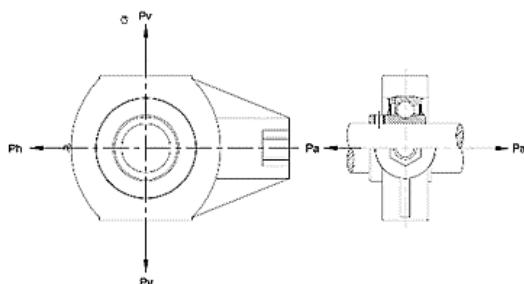
Thermoplastic take up unit with AISI 440 Stainless steel SUC insert



| NBC ref | Bearing bore | | Dimensions | | | | | | | | Weight kg | |
|---------------|--------------|------------------------------|------------|------|----|----|-----|-----|----|-----|--------------|------|
| | mm | inch | a | c | d | h | m | s | t | v | | w |
| | mm | inch | mm | mm | mm | mm | mm | mm | mm | mm | | mm |
| TPL 201 SS N6 | 12 | 1/2 | 99 | 27.5 | 12 | 64 | 76 | M16 | 36 | 88 | 47 | 0.16 |
| TPL 202 SS N6 | 15 | 9/16; 5/8 | 99 | 27.5 | 12 | 64 | 76 | M16 | 36 | 88 | 47 | 0.16 |
| TPL 203 SS N6 | 17 | 11/16 | 99 | 27.5 | 12 | 64 | 76 | M16 | 36 | 88 | 47 | 0.16 |
| TPL 204 SS N6 | 20 | 3/4 | 99 | 27.5 | 12 | 64 | 76 | M16 | 36 | 88 | 47 | 0.16 |
| TPL 205 SS N6 | 25 | 13/16; 7/8; 15/16; 1 | 99 | 27.5 | 12 | 64 | 76 | M16 | 36 | 88 | 47 | 0.17 |
| TPL 206 SS N6 | 30 | 1.1/16; 1.1/8; 1.3/16; 1.1/4 | 125 | 34.5 | 12 | 76 | 89 | M16 | 40 | 102 | 63 | 0.22 |
| TPL 207 SS N6 | 35 | 1.1/4; 1.5/16; 1.3/8; 1.7/16 | 125 | 34.5 | 12 | 76 | 89 | M16 | 40 | 102 | 63 | 0.26 |
| TPL 208 SS N6 | 40 | 1.1/2; 1.9/16 | 140 | 34.5 | 16 | 85 | 102 | M16 | 40 | 114 | 80 | 0.38 |
| TPL 209 SS N6 | 45 | 1.5/8; 1.11/16; 1.3/4 | 149 | 40 | 16 | 90 | 102 | M20 | 50 | 117 | 85 | 0.48 |
| TPL 210 SS N6 | 50 | 1.13/16; 1.7/8; 1.15/16; 2 | 149 | 40 | 16 | 90 | 102 | M20 | 50 | 117 | 85 | 0.52 |

Ordering information: TPL 204-12 SS N6 supplied standard with closed cover

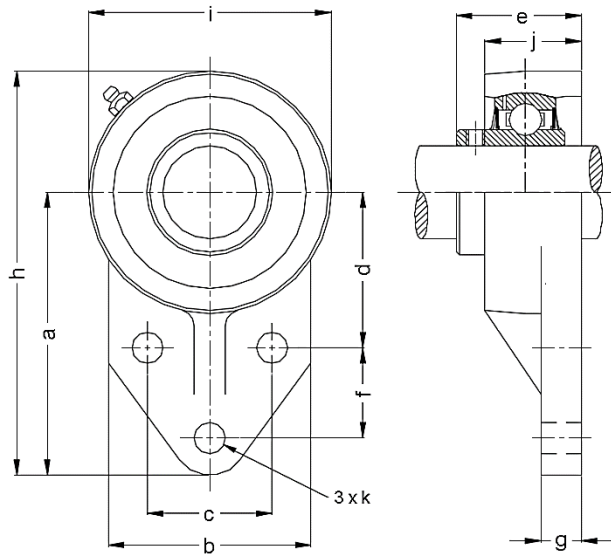
- Optional SSB insert and back seal for additional protection (*Suffix -A*)
- Optional open cover (*Order insert size -OPN*)



| Load mode | Breaking load of housings (kN) | | | | | | |
|----------------------|--------------------------------|------|------|------|------|------|------|
| | 204 | 205 | 206 | 207 | 208 | 209 | 210 |
| P_h | 14.8 | 15.5 | 15.8 | 16.5 | 17.3 | 18.2 | 18.8 |
| P_v | 3.9 | 4.5 | 5.1 | 6.5 | 7.5 | 8.7 | 9.7 |
| P_a | 8.5 | 10.3 | 10.9 | 11.3 | 12.1 | 12.9 | 13.5 |

FBL 200 Series

Thermoplastic flange bracket housing with AISI 440 Stainless steel SUC insert



| NBC ref | Bearing bore | | Dimensions | | | | | | | | | | | Weight | Max Torque | |
|---------------|--------------|----------------------------|------------|------|------|------|------|------|------|-------|------|------|------|--------|------------|-------------|
| | mm | inch | a | b | c | d | e | f | g | h | i | j | k | | kg | Bolt ϕ |
| | | | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | | | |
| FBL 201 SS N6 | 12 | 1/2 | 76.2 | 62 | 38.1 | 42.9 | 33.7 | 22.2 | 11.4 | 108 | 63.5 | 26.5 | 10.7 | 0.1 | M10 | 18 |
| FBL 202 SS N6 | 15 | 9/16; 5/8 | 76.2 | 62 | 38.1 | 42.9 | 33.7 | 22.2 | 11.4 | 108 | 63.5 | 26.5 | 10.7 | 0.1 | M10 | 18 |
| FBL 203 SS N6 | 17 | 11/16 | 76.2 | 62 | 38.1 | 42.9 | 33.7 | 22.2 | 11.4 | 108 | 63.5 | 26.5 | 10.7 | 0.1 | M10 | 18 |
| FBL 204 SS N6 | 20 | 3/4 | 76.2 | 62 | 38.1 | 42.9 | 33.7 | 22.2 | 11.4 | 108 | 63.5 | 26.5 | 10.7 | 0.1 | M10 | 18 |
| FBL 205 SS N6 | 25 | 13/16; 7/8; 15/16; 1 | 85.7 | 63.5 | 41.3 | 46 | 41.2 | 28.6 | 11.4 | 120.6 | 70 | 32 | 10.7 | 0.12 | M10 | 25 |
| FBL 206 SS N6 | 30 | 1/16; 1.1/8; 1.3/16; 1.1/2 | 96.5 | 76 | 47.6 | 52.4 | 41.5 | 31.8 | 13.3 | 138.5 | 83 | 34 | 10.7 | 0.16 | M10 | 30 |
| FBL 207 SS N6 | 35 | 1/4; 1.5/16; 1.3/8; 1.7/16 | 109.5 | 89 | 50.8 | 60.3 | 47.1 | 31.8 | 16.1 | 157 | 95 | 36.5 | 13.1 | 0.18 | M12 | 35 |

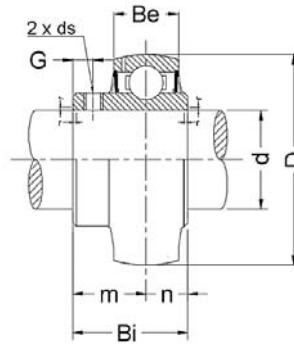
Ordering information: FBL 204-12 SS N6 supplied standard with closed cover

- Optional SSB insert and back seal for additional protection (*Suffix -A*)
- Optional open cover (*Order insert size -OPN*)

| Load mode | Breaking load of housings (KN) | | | |
|----------------|--------------------------------|------|------|------|
| | 204 | 205 | 206 | 207 |
| P _m | 7.2 | 9.1 | 12.2 | 12.9 |
| P _h | 9.2 | 11.1 | 11.8 | 11.9 |
| P _v | 2.6 | 2.8 | 2.9 | 3.1 |

SUC insert dimensions

Food grade grease standard

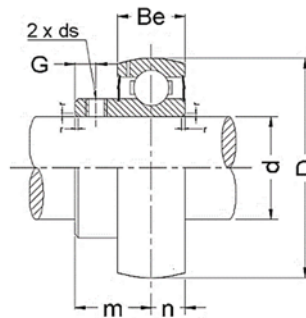


| NBC ref | Bearing bore | | Dimensions | | | | | | | | Dynamic C KN | Static Co KN | Weight kg |
|-----------|--------------|---------|------------|----------|----------|---------|---------|---------|---------|----------|--------------------|--------------------|--------------|
| | mm | inch | D mm | Bi mm | Be mm | r mm | n mm | m mm | G mm | ds mm | | | |
| SUC201-08 | | 1/2 | 47 | 31 | 17 | 1.5 | 12.7 | 18.3 | 5 | M6x0.75 | 10 | 6.3 | 0.21 |
| SUC201 | 12 | | 47 | 31 | 17 | 1.5 | 12.7 | 18.3 | 5 | | 10 | 6.3 | 0.21 |
| SUC202-09 | | 9/16 | 47 | 31 | 17 | 1.5 | 12.7 | 18.3 | 5 | | 10 | 6.3 | 0.2 |
| SUC202 | 15 | | 47 | 31 | 17 | 1.5 | 12.7 | 18.3 | 5 | | 10 | 6.3 | 0.2 |
| SUC202-10 | | 5/8 | 47 | 31 | 17 | 1.5 | 12.7 | 18.3 | 5 | | 10 | 6.3 | 0.2 |
| SUC203 | 17 | | 47 | 31 | 17 | 1.5 | 12.7 | 18.3 | 5 | | 10 | 6.3 | 0.18 |
| SUC203-11 | | 11/16 | 47 | 31 | 17 | 1.5 | 12.7 | 18.3 | 5 | | 10 | 6.3 | 0.18 |
| SUC204-12 | | 3/4 | 47 | 31 | 17 | 1.5 | 12.7 | 18.3 | 5 | | 10 | 6.3 | 0.17 |
| SUC204 | 20 | | 47 | 31 | 17 | 1.5 | 12.7 | 18.3 | 5 | | 10 | 6.3 | 0.17 |
| SUC205-13 | | 13/16 | 52 | 34.1 | 17 | 1.5 | 14.3 | 19.8 | 5 | | 11 | 7.1 | 0.23 |
| SUC205-14 | | 7/8 | 52 | 34.1 | 17 | 1.5 | 14.3 | 19.8 | 5 | | 11 | 7.1 | 0.23 |
| SUC205-15 | | 15/16 | 52 | 34.1 | 17 | 1.5 | 14.3 | 19.8 | 5 | | 11 | 7.1 | 0.23 |
| SUC205 | 25 | | 52 | 34.1 | 17 | 1.5 | 14.3 | 19.8 | 5 | | 11 | 7.1 | 0.23 |
| SUC205-16 | | 1 | 52 | 34.1 | 17 | 1.5 | 14.3 | 19.8 | 5 | | 11 | 7.1 | 0.23 |
| SUC206-17 | | 1.1/16 | 62 | 38.1 | 19 | 1.5 | 15.9 | 22.2 | 5 | | 15.2 | 10.2 | 0.34 |
| SUC206-18 | | 1.1/8 | 62 | 38.1 | 19 | 1.5 | 15.9 | 22.2 | 5 | | 15.2 | 10.2 | 0.34 |
| SUC206-19 | | 1.3/16 | 62 | 38.1 | 19 | 1.5 | 15.9 | 22.2 | 5 | 15.2 | 10.2 | 0.34 | |
| SUC206 | 30 | | 62 | 38.1 | 19 | 1.5 | 15.9 | 22.2 | 5 | 15.2 | 10.2 | 0.34 | |
| SUC206-20 | | 1.1/4 | 62 | 38.1 | 19 | 1.5 | 15.9 | 22.2 | 5 | 15.2 | 10.2 | 0.34 | |
| SUC207-20 | | 1.1/4 | 72 | 42.9 | 20 | 1.5 | 17.5 | 25.4 | 7 | M8x1 | 20.1 | 13.9 | 0.5 |
| SUC207-21 | | 1.5/16 | 72 | 42.9 | 20 | 1.5 | 17.5 | 25.4 | 7 | | 20.1 | 13.9 | 0.5 |
| SUC207-22 | | 1.3/8 | 72 | 42.9 | 20 | 1.5 | 17.5 | 25.4 | 7 | | 20.1 | 13.9 | 0.5 |
| SUC207 | 35 | | 72 | 42.9 | 20 | 1.5 | 17.5 | 25.4 | 7 | | 20.1 | 13.9 | 0.5 |
| SUC207-23 | | 1.7/16 | 72 | 42.9 | 20 | 1.5 | 17.5 | 25.4 | 7 | | 20.1 | 13.9 | 0.5 |
| SUC208-24 | | 1.1/2 | 80 | 49.2 | 22 | 2 | 19 | 30.2 | 8 | | 23 | 16 | 0.66 |
| SUC208-25 | | 1.9/16 | 80 | 49.2 | 22 | 2 | 19 | 30.2 | 8 | | 23 | 16 | 0.66 |
| SUC208 | 40 | | 80 | 49.2 | 22 | 2 | 19 | 30.2 | 8 | | 23 | 16 | 0.66 |
| SUC209-26 | | 1.5/8 | 85 | 49.2 | 22 | 2 | 19 | 30.2 | 8 | | 25.6 | 18.1 | 0.78 |
| SUC209-27 | | 1.11/16 | 85 | 49.2 | 22 | 2 | 19 | 30.2 | 8 | | 25.6 | 18.1 | 0.78 |
| SUC209-28 | | 1.3/4 | 85 | 49.2 | 22 | 2 | 19 | 30.2 | 8 | 25.6 | 18.1 | 0.78 | |
| SUC209 | 45 | | 85 | 49.2 | 22 | 2 | 19 | 30.2 | 8 | 25.6 | 18.1 | 0.78 | |
| SUC210-29 | | 1.13/16 | 90 | 51.6 | 24 | 2 | 19 | 32.6 | 10 | M10x1.25 | 27.5 | 20.2 | 0.91 |
| SUC210-30 | | 1.7/8 | 90 | 51.6 | 24 | 2 | 19 | 32.6 | 10 | | 27.5 | 20.2 | 0.91 |
| SUC210-31 | | 1.15/16 | 90 | 51.6 | 24 | 2 | 19 | 32.6 | 10 | | 27.5 | 20.2 | 0.91 |
| SUC210 | 50 | | 90 | 51.6 | 24 | 2 | 19 | 32.6 | 10 | | 27.5 | 20.2 | 0.91 |
| SUC210-32 | | 2 | 90 | 51.6 | 24 | 2 | 19 | 32.6 | 10 | | 27.5 | 20.2 | 0.91 |

SSB Flatback insert dimensions

Food grade grease standard

Used in conjunction with back seals



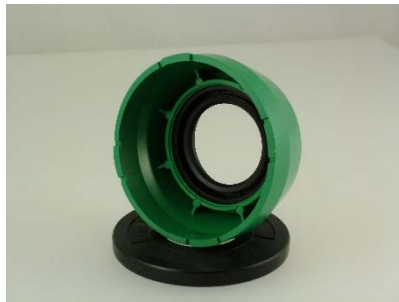
| NBC ref | Bearing bore | | Dimensions | | | | | | | | Dynamic C KN | Static Co KN | Weight kg | |
|-----------|--------------|---------|------------|----------|----------|---------|---------|---------|---------|----------|--------------------|--------------------|--------------|-----|
| | mm | inch | D mm | Bi mm | Be mm | r mm | n mm | m mm | G mm | ds mm | | | | |
| SSB201-08 | | 1/2 | 47 | 22 | 12 | 1 | 6 | 16 | 4 | M6x0.75 | 7.5 | 4.54 | 0.1 | |
| SSB201 | 12 | | 47 | 22 | 12 | 1 | 6 | 16 | 4 | | 7.5 | 4.54 | 0.09 | |
| SSB202-09 | | 9/16 | 47 | 22 | 12 | 1 | 6 | 16 | 4 | | 7.5 | 4.54 | 0.08 | |
| SSB202 | 15 | | 47 | 22 | 12 | 1 | 6 | 16 | 4 | | 7.5 | 4.54 | 0.08 | |
| SSB202-10 | | 5/8 | 47 | 22 | 12 | 1 | 6 | 16 | 4 | | 7.5 | 4.54 | 0.08 | |
| SSB203 | 17 | | 47 | 22 | 12 | 1 | 6 | 16 | 4 | | 7.5 | 4.54 | 0.08 | |
| SSB203-11 | | 11/16 | 47 | 22 | 12 | 1 | 6 | 16 | 4 | | 7.5 | 4.54 | 0.08 | |
| SSB204-12 | | 3/4 | 47 | 25 | 14 | 1.5 | 7 | 18 | 5 | | 10 | 6.3 | 0.13 | |
| SSB204 | 20 | 3/4 | 47 | 25 | 14 | 1.5 | 7 | 18 | 5 | | 10 | 6.3 | 0.13 | |
| SSB205-14 | | 7/8 | 52 | 27 | 15 | 1.5 | 7.5 | 19.5 | 5 | | 11 | 7.1 | 0.18 | |
| SSB205-15 | | 15/16 | 52 | 27 | 15 | 1.5 | 7.5 | 19.5 | 5 | | 11 | 7.1 | 0.17 | |
| SSB205 | 25 | | 52 | 27 | 15 | 1.5 | 7.5 | 19.5 | 5 | | 11 | 7.1 | 0.16 | |
| SSB205-16 | | 1 | 52 | 27 | 15 | 1.5 | 7.5 | 19.5 | 5 | | 11 | 7.1 | 0.16 | |
| SSB206-18 | | 1.1/8 | 62 | 30 | 16 | 1.5 | 8 | 22 | 6 | | 15.2 | 10.2 | 0.26 | |
| SSB206-19 | | 1.3/16 | 62 | 30 | 16 | 1.5 | 8 | 22 | 6 | | 15.2 | 10.2 | 0.26 | |
| SSB206 | 30 | | 62 | 30 | 16 | 1.5 | 8 | 22 | 6 | | 15.2 | 10.2 | 0.26 | |
| SSB206-20 | | 1.1/4 | 62 | 30 | 16 | 1.5 | 8 | 22 | 6 | | 15.2 | 10.2 | 0.26 | |
| SSB207-20 | | 1.1/4 | 72 | 32 | 17 | 2 | 8.5 | 23.5 | 7 | | M8x1 | 20.1 | 13.9 | 0.4 |
| SSB207-21 | | 1.5/16 | 72 | 32 | 17 | 2 | 8.5 | 23.5 | 7 | | | 20.1 | 13.9 | 0.4 |
| SSB207-22 | | 1.3/8 | 72 | 32 | 17 | 2 | 8.5 | 23.5 | 7 | | | 20.1 | 13.9 | 0.4 |
| SSB207 | 35 | | 72 | 32 | 17 | 2 | 8.5 | 23.5 | 7 | 20.1 | | 13.9 | 0.4 | |
| SSB207-23 | | 1.7/16 | 72 | 32 | 17 | 2 | 8.5 | 23.5 | 7 | 20.1 | | 13.9 | 0.4 | |
| SSB208-24 | | 1.1/2 | 80 | 34 | 18 | 2 | 9 | 25 | 8 | 23 | | 16 | 0.6 | |
| SSB208-25 | | 1.9/16 | 80 | 34 | 18 | 2 | 9 | 25 | 8 | 23 | | 16 | 0.6 | |
| SSB208 | 40 | | 80 | 34 | 18 | 2 | 9 | 25 | 8 | 23 | | 16 | 0.6 | |
| SSB209-26 | | 1.5/8 | 85 | 41.2 | 19 | 2 | 10.2 | 31 | 9 | 25.6 | | 18.1 | 0.8 | |
| SSB209-27 | | 1.11/16 | 85 | 41.2 | 19 | 2 | 10.2 | 31 | 9 | 25.6 | | 18.1 | 0.8 | |
| SSB209-28 | | 1.3/4 | 85 | 41.2 | 19 | 2 | 10.2 | 31 | 9 | 25.6 | | 18.1 | 0.8 | |
| SSB209 | 45 | | 85 | 41.2 | 19 | 2 | 10.2 | 31 | 9 | 25.6 | | 18.1 | 0.8 | |
| SSB210-30 | | 1.7/8 | 90 | 43.5 | 20 | 2 | 10.9 | 32.6 | 9 | M10x1.25 | 27.5 | 20.2 | 0.95 | |
| SSB210-31 | | 1.15/16 | 90 | 43.5 | 20 | 2 | 10.9 | 32.6 | 9 | | 27.5 | 20.2 | 0.95 | |
| SSB210 | 50 | | 90 | 43.5 | 20 | 2 | 10.9 | 32.6 | 9 | | 27.5 | 20.2 | 0.95 | |
| SSB210-32 | | 2 | 90 | 43.5 | 20 | 2 | 10.9 | 32.6 | 9 | | 27.5 | 20.2 | 0.95 | |

End covers & back seals

End covers in closed and open style are made in FDA approved SR50 plastic. Standard nitrile rubber seals with stainless steel springs allow through shaft access.



The covers are fitted by snapping them into the matching housing grooves. To remove a sharp object (such as a screwdriver) may be required. Frequent removal may result in damage.



| Bearing bore | | Dimensions | | | | | |
|--------------|------------------------------|------------|----|----|------|----|----|
| mm | inch | K | N | L | M | D | b |
| mm | inch | mm | mm | mm | mm | mm | mm |
| 12 | 1/2 | 32 | 7 | 23 | 50 | 52 | 6 |
| 15 | 9/16; 5/8 | 32 | 7 | 23 | 50 | 52 | 6 |
| 17 | 11/16 | 32 | 7 | 23 | 50 | 52 | 6 |
| 20 | 3/4 | 32 | 7 | 23 | 50 | 52 | 6 |
| 25 | 13/16; 7/8; 15/16; 1 | 37 | 7 | 25 | 55 | 62 | 6 |
| 30 | 1.1/16; 1.1/8; 1.3/16; 1.1/4 | 42 | 7 | 30 | 64 | 72 | 6 |
| 35 | 1.1/4; 1.5/16; 1.3/8; 1.7/16 | 47 | 7 | 32 | 74.5 | 82 | 6 |
| 40 | 1.1/2; 1.9/16 | 52 | 7 | 37 | 84 | 88 | 6 |
| 45 | 1.5/8; 1.11/16; 1.3/4 | 57 | 7 | 41 | 89 | 93 | 6 |
| 50 | 1.13/16; 1.7/8; 1.15/16; 2 | 62 | 7 | 47 | 94 | 98 | 6 |

Back seals need only to be pressed firmly into the machines groove in the housing.



| Brg | Seal dimensions | | |
|-----|-----------------|----|----|
| | d | b | D |
| | mm | mm | mm |
| 204 | 20 | 6 | 52 |
| 205 | 25 | 6 | 62 |
| 206 | 30 | 6 | 72 |
| 207 | 35 | 6 | 82 |
| 208 | 40 | 6 | 88 |
| 209 | 45 | 6 | 93 |
| 210 | 50 | 6 | 98 |

Setscrew tightening torque

The 2 setscrews should be tightened to the appropriate torque figure. Over-tightening may result in cracks developing in the inner ring. Should the axial load be high, a small dimple in the shaft may improve the locking effect. Consider mounting against a shoulder in the shaft.

| Size | Torque |
|------|--------|
| | Nm |
| M6 | 4 |
| M8 | 8 |
| M10 | 15 |

Insert limiting speeds

The limiting speed of any ball bearing insert is, for practical purposes, determined by the quality of fit between the inner ring and the shaft.

| NBC ref | Shaft tolerance | | | |
|---------|-----------------|------|------|------|
| | j7 | h7 | h8 | h9 |
| SUC201 | 6700 | 5300 | 3800 | 1400 |
| SUC202 | | | | |
| SUC203 | | | | |
| SUC204 | 6000 | 4800 | 3400 | 1200 |
| SUC205 | 5600 | 4000 | 3000 | 1000 |
| SUC206 | 4500 | 3400 | 2400 | 850 |
| SUC207 | 4000 | 3000 | 2000 | 750 |
| SUC208 | 3600 | 2600 | 1900 | 670 |
| SUC209 | 3200 | 2400 | 1700 | 600 |
| SUC210 | 3000 | 2200 | 1600 | 560 |
| SUC211 | 2600 | 2000 | 1400 | 500 |
| SUC212 | 2400 | 1800 | 1200 | 450 |
| SUC213 | 2200 | 1700 | 1100 | 430 |
| SUC214 | 2200 | 1600 | 1100 | 400 |
| SUC215 | 2000 | 1500 | 1000 | 380 |



PLASTIC BEARING INSERTS

A full range of plastic bearing inserts is stocked.

These can run at slow speed while completely immersed in liquid, but at restricted load carrying capacity.

BEARING HOUSING MATERIAL PROPERTIES

| Properties | Unit | Test method | |
|------------------------------|-------------------|-------------|-------|
| Mechanical | | | |
| Tensile strength at yield | MPa | ASTM D 638 | 12 |
| Elongation at yield | % | ASTM D 638 | 3 |
| Elongation at break | % | ASTM D 638 | 1125 |
| Tensile modulus | N/mm ² | ASTM D 638 | 8 000 |
| Flexural yield strength | MPa | ASTM D 790 | 29 |
| Flexural modulus | MPa | ASTM D 790 | 29 |
| Notched IZOD impact strength | J/m | ASTM D 256 | 100 |
| Hardness | H358/10 | DIN 53456 | 104 |
| | H358/60 | DIN 53456 | 101 |
| Rockwell | - | ASTM D 785 | L102 |

| Properties | Unit | Test method | |
|--------------------------------|--------------------|-------------|---------|
| Thermal | | | |
| Melting point | °C | | 225 |
| Oxygen index | % | ASTM D 2863 | 19 |
| UL flammability | - | UL 94 | HB |
| Heat resistance Vicat Method B | °C | ASTM D 1525 | 210-215 |
| Thermal conductivity | W/m ² C | ASTM C 177 | 0.19 |

| Properties | Unit | Test method | |
|-------------------------------|--------------------|-------------|------|
| Physical | | | |
| Density | gr/cm ³ | DIN 53479 | 1.53 |
| Water absorption 24hrs; 23 °C | % | ASTM D 570 | 0.5 |
| Mould shrinkage flow | % | | 0.4 |

| Properties | Unit | Test method | |
|------------------------------|--------|-------------|-------------------|
| Electrical | | | |
| Dielectric constant at 1 MHz | | IEC 250 | 3.8 |
| Dielectric strength | KV/mm | VDE 0303/2 | 34 |
| Volume resistivity | Ohm.cm | VDE 0303/2 | >10 ¹⁵ |
| Surface resistivity | Ohm | VDE 0303/3 | >10 ¹⁵ |

BEARING HOUSING CHEMICAL RESISTANCE

| Chemical | °C | Test duration (days) | % Retained strength |
|-----------------------------------|----|----------------------|---------------------|
| ACIDS | | | |
| 10% Hydrochloric acid | 23 | 30 | 89 |
| | 23 | 90 | 85 |
| | 23 | 180 | 82 |
| 10% Sulphuric acid | 23 | 30 | 97 |
| | 23 | 90 | 94 |
| | 23 | 180 | 90 |
| 36% Sulphuric (battery) acid | 23 | 30 | 97 |
| | 23 | 180 | 96 |
| | 66 | 30 | 84 |
| | 66 | 180 | 35 |
| 10% Acetic acid | 23 | 30 | 89 |
| | 23 | 180 | 88 |
| BASES | | | |
| 5% Potassium hydroxide | 23 | 30 | 88 |
| | 23 | 90 | 10 |
| 10% Sodium hydroxide | 23 | 30 | Brittle |
| | 23 | 90 | Brittle |
| 10% Ammonium hydroxide | 23 | 30 | 96 |
| | 23 | 90 | 87 |
| | 23 | 180 | 58 |
| Organic solvents | | | |
| Ethyl alcohol | 23 | 30 | 99 |
| | 23 | 90 | 96 |
| | 23 | 180 | 94 |
| Methyl alcohol | 23 | 30 | 91 |
| | 23 | 90 | 82 |
| | 23 | 180 | 76 |
| Isopropyl alcohol | 23 | 30 | 100 |
| | 23 | 180 | 100 |
| Isopropyl alcohol & water (50:50) | 23 | 30 | 98 |
| | 23 | 90 | 97 |
| | 23 | 180 | 93 |
| Turpentine | 23 | 30 | 92 |
| | 23 | 180 | 66 |
| Acetone | 23 | 30 | 90 |
| | 23 | 90 | 74 |
| | 23 | 180 | 63 |



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