

NTN

NTN corporation

HEAVY DUTY BLOCKS

SPAW, SPW and SFCW TYPE



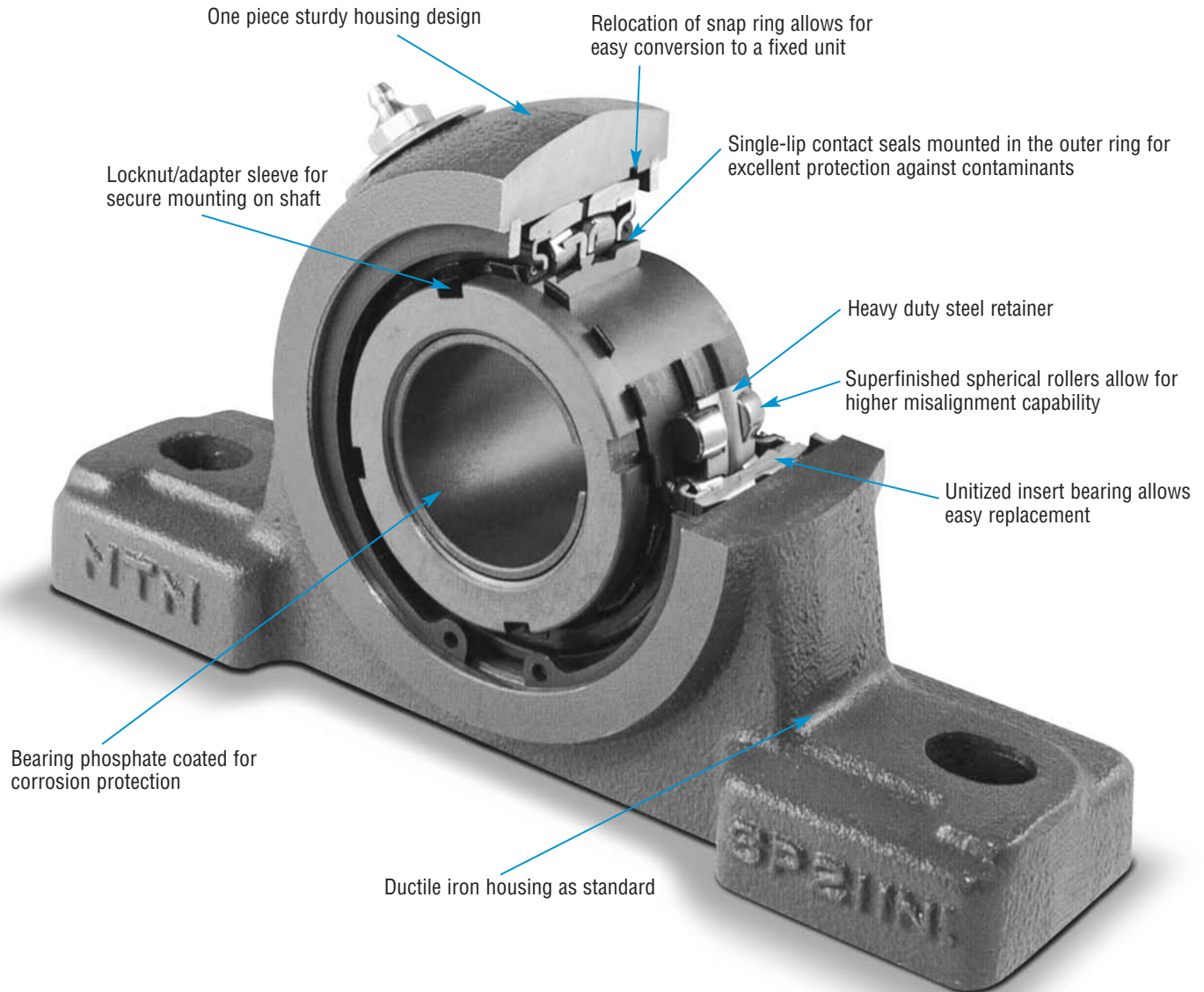
CAT. No. C-2600-IV

Features and Benefits

Comparison SPAW & SPW over SAF & SN Spherical Roller Bearing Mounted Units

| FEATURES | SPAW & SPW UNITS | SAF & SN UNITS | BENEFITS TO USER |
|---|---|----------------|--|
| Unit is completely assembled and consists of a one-piece pillow block or flanged housing and a unitized insert bearing, completely assembled, sealed and lubricated in clean factory environments |  | | <ul style="list-style-type: none"> • Saves time in mounting and dismounting • Consistent sealing performance |
| Single lip contact seals mounted in the outer ring of the bearing |  | | <ul style="list-style-type: none"> • Superior sealing under contaminated conditions • Higher misalignment capability |
| Rotating the lock nut to a specified angle automatically gives required clearance |  | | <ul style="list-style-type: none"> • Improves life due to more accurate bearing clearance • Reduces time for adjusting clearance • Eliminates the need for feeler gages |
| One-piece sturdy housing |  | | <ul style="list-style-type: none"> • Saves time in mounting and dismounting unit |
| Through-bored housing makes it easier to slide the insert out of the unit |  | | <ul style="list-style-type: none"> • Saves time in mounting and dismounting unit • Does not require the shaft to be lifted during replacement |
| Phosphate coated insert bearing |  | | <ul style="list-style-type: none"> • Provides excellent corrosion protection |
| Easy relocation of the snap ring (provided with the unit) converts it from the floating to fixed unit |  | | <ul style="list-style-type: none"> • Provides flexibility |

Proven through years of performance and user satisfaction.



- **Designed and developed for demanding North American environments.**
- **Available with taconite service seals for the most severe applications.**
- **Allows for quick replacement of our bearing insert.**
- **Reduces downtime and increases productivity.**

SPA/SPW/SFCW INSTALLATION INSTRUCTIONS

The following is the recommended procedure for mounting the SPW, SPAW and SFCW 2200 series heavy duty bearing units.

1. Adjust the position of the sleeve so that the tapered part comes to about the centre of the bearing. The sleeve should be positioned so that the nut is easily accessible (see Fig. 1).
2. The SPW/SPA/WSFCW bearing unit can be adapted to either the fixed or floating configuration. Units are supplied in the floating configuration unless otherwise specified upon ordering.

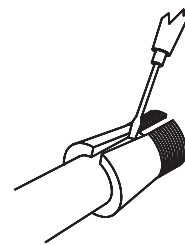


Figure 1

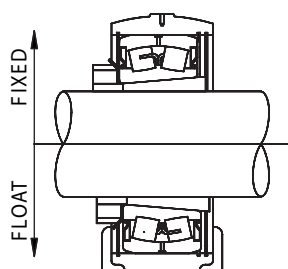


Figure 2

FIXED CONFIGURATION: Using appropriate size snap ring pliers, position the snap ring in the innermost groove of the housing.

FLOATING CONFIGURATION: Using appropriate size snap ring pliers, position the snap ring in the outermost groove of the housing.

3. Install the unit on the shaft by sliding the bearing onto the adapter sleeve. Adjust the entire assembly as needed until the final bearing location is achieved. For floating configuration, ensure the bearing is centered in the housing before performing final adjustments (as in Figure 2).

Appropriate eye protection should be worn when handling snap rings.

4. It is very important that positive contact is established between the shaft, adapter sleeve and the bearing. Tap the wide end of the adapter sleeve lightly over its entire circumference. A cylindrical sleeve may be placed against the inner ring of the bearing to ensure it remains centered for floating configuration (see Figure 3). Install the lockwasher and hand tighten the locknut. Verify that positive contact is made by tapping the groove on the back side of the adapter sleeve. If the sleeve rotates, positive contact has not been established and step 4 will need to be repeated.

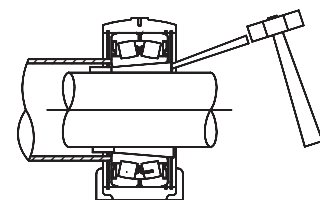


Figure 3

Relieving the weight of the shaft on the bearing will help achieve positive contact.

5. Tighten the locknut according to the following table. A hook spanner or a hammer and punch are commonly used.

| Shaft diameter range | | GUIDELINES FOR MOUNTING ① | | | | | | |
|----------------------|---------|---------------------------|-----------------|--------------------|-------|------------------------------|--------------------|------|
| over | Inch | Metric | Bearing Number | Axial displacement | | Recommended Locknut Rotation | Hydraulic Pressure | |
| | | | | min. | max. | | min. | max. |
| | 1 15/16 | 50 mm | MX-W22211BLLKC3 | 0.018 | 0.024 | 90° | 1700 | 2250 |
| 1 15/16 | 2 | | MX-W22211BLLKC3 | 0.018 | 0.024 | 130° ② | 1700 | 2250 |
| 2 | 2 3/8 | 60 mm | MX-W22213BLLKC3 | 0.018 | 0.024 | 90° | 1750 | 2350 |
| 2 3/8 | 2 1/2 | 65 mm | MX-W22215BLLKC3 | 0.024 | 0.030 | 120° | 1800 | 2250 |
| 2 1/2 | 3 | 75 mm | MX-W22217BLLKC3 | 0.028 | 0.035 | 150° | 2050 | 2700 |
| 3 | 3 1/2 | 90 mm | MX-W22220BLLKC3 | 0.028 | 0.035 | 150° | 2250 | 3000 |
| 3 1/2 | 4 | 100 mm | MX-W22222BLLKC3 | 0.030 | 0.043 | 180° | 2650 | 3700 |
| 4 | 4 1/4 | 110 mm | MX-W22224BLLKC3 | 0.030 | 0.043 | 180° | 2750 | 3850 |
| 4 1/4 | 4 1/2 | 115 mm | MX-W22226BLLKC3 | 0.043 | 0.055 | 210° | 3250 | 4500 |
| 4 1/2 | 5 | 125 mm | MX-W22228BLLKC3 | 0.043 | 0.055 | 210° | 3300 | 4550 |
| 5 | 5 1/2 | 140 mm | MX-W22232BLLKC3 | 0.047 | 0.063 | 150° ③ | 3950 | 5250 |

① Values apply to solid shafts and normal loads after positive contact is achieved. For hollow shafts, heavy loads ($Pr > 0.12Cr$), or other special circumstances, please consult NTN Engineering.

② Value reflects a decrease in adapter sleeve thread pitch (2 inch shaft only).

③ Value reflects an increase in adapter sleeve thread pitch.

6. Bend one of the tabs on the circumference of the lockwasher into the nearest notch on the rim of the locknut. If no tabs line up, tighten the locknut slightly. The locknut should not be loosened in order to align the tab with a notch.

7. Reposition the housing and mount the unit securely to the machine.

Excessive misalignment can cause the bearing seals to become unseated. Seals can only be re-installed if unit has not been run for any length of time, if no contamination of the bearing has occurred, and if even pressure can be applied around the periphery of the seal to prevent bending.

Bearings come pre-lubricated with Shell Alvania #3 and require no lubrication upon initial installation.

For extremely contaminated environments, external covers are available.

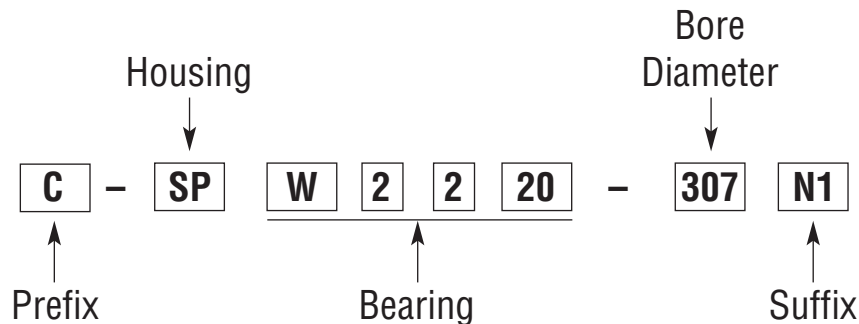
REMOVAL INSTRUCTIONS

1. To remove the unit from the shaft, raise the bent lockwasher tab, loosen the locknut two or three turns, then tap the nut over its entire circumference with a hammer and punch. Ensure sufficient threads remain engaged as to not damage them. Continue tapping until the adapter sleeve can be moved.

2. To remove the bearing insert from the housing, remove one of the snap rings and slide the bearing out.

Appropriate eye protection should be worn when handling snap rings.

HEAVY DUTY BLOCK NUMBERING SYSTEM



1. PREFIX

- No symbol: Standard unit with sealed spherical roller bearing insert
- C: With additional taconite seal covers (SFC housing with one seal only)
- CM: With additional taconite seal and end cover (SFC housing with end cover only)

2. HOUSING

- SP: Pillow block unit to SN housing dimensions
- SPA: Pillow block unit to SAF housing dimensions (SP and SPA only) Ductile iron
- FSPA: Pillow block unit to SAF housing dimensions ^❶ Ductile iron, 4 bolt
- SFC: 4 bolt piloted circular flange block for two or four bolt arrangement

^❶ New series, consult your local NTN branch for availability.

3. BEARING

- W22xx: MX-W222xx series sealed spherical roller bearing

4. BORE DIAMETER (-Xnn)

- No value: Metric bore sizing (see tables)
- X: Number of inches
- nn: Number of 1/16 inches
eg.: -307 indicates a 3 7/16" bore

5. SUFFIX

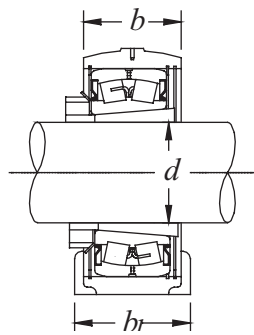
- N1: Ductile iron housing (Standard)
- FN1: (SP and SPA only) Ductile iron housing with solid base and indents for two or four bolt arrangement

CANADIAN PATENT NUMBER: 1307311

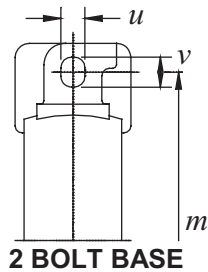
U.S. PATENT NUMBER: 4916750

SPW

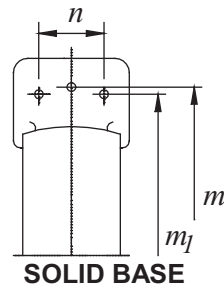
Pillow Blocks



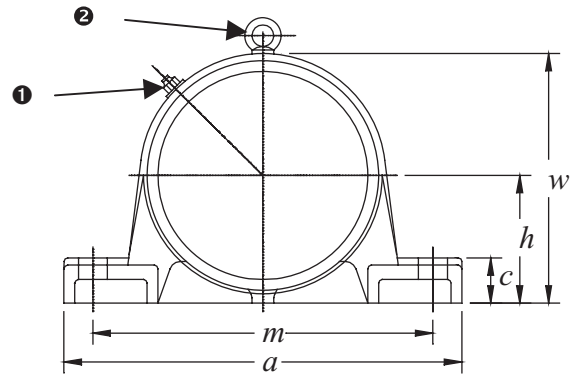
SPW22...



2 BOLT BASE



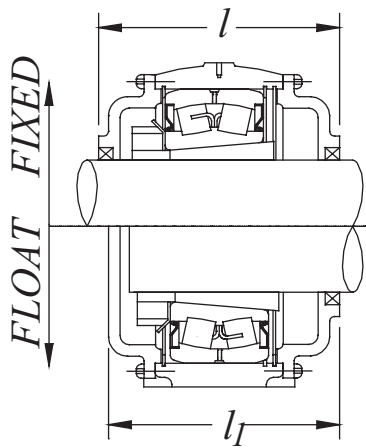
SOLID BASE



| Shaft diameter d inches | Complete Pillow Block Number | Pillow Block Housing | PILLOW BLOCK COMPONENT NUMBERS | | | Adapter Locknut and Lockwasher | Weight (lbs) |
|-------------------------------|---------------------------------|----------------------------|--------------------------------|-----------------------------|--------------|---|-----------------|
| | | | Bearing Number | Basic Load Ratings (lbs) | | | |
| | | | | Dynamic C | Static Co | | |
| 1 15/16 | SPW2211-115N1 | SP211N1 | MX-W22211BLLKC3 | 21 000 | 24 700 | HA2311M1 | 13 |
| 50mm | SPW2211N1 | SP211N1 | MX-W22211BLLKC3 | 21 000 | 24 700 | H2311XM1 | 13 |
| 2 | SPW2211-200N1 | SP211N1 | MX-W22211BLLKC3 | 21 000 | 24 700 | HE2311XYM1 | 13 |
| 2 3/16 | SPW2213-203N1 | SP213N1 | MX-W22213BLLKC3 | 32 000 | 40 000 | HA2313M1 | 18 |
| 2 1/4 | SPW2213-204N1 | SP213N1 | MX-W22213BLLKC3 | 32 000 | 40 000 | HE2313XM1 | 18 |
| 60mm | SPW2213N1 | SP213N1 | MX-W22213BLLKC3 | 32 000 | 40 000 | H2313XM1 | 18 |
| 2 3/8 | SPW2213-206N1 | SP213N1 | MX-W22213BLLKC3 | 32 000 | 40 000 | HS2313XM1 | 18 |
| 2 7/16 | SPW2215-207N1 | SP215N1 | MX-W22215BLLKC3 | 37 500 | 50 000 | HA2315M1 | 20 |
| 2 1/2 | SPW2215-208N1 | SP215N1 | MX-W22215BLLKC3 | 37 500 | 50 000 | HE2315XM1 | 20 |
| 65mm | SPW2215N1 | SP215N1 | MX-W22215BLLKC3 | 37 500 | 50 000 | H2315XM1 | 20 |
| 2 15/16 | SPW2217-215N1 | SP217N1 | MX-W22217BLLKC3 | 46 500 | 61 000 | HA2317XM1 | 31 |
| 75mm | SPW2217N1 | SP217N1 | MX-W22217BLLKC3 | 46 500 | 61 000 | H2317XM1 | 31 |
| 3 | SPW2217-300N1 | SP217N1 | MX-W22217BLLKC3 | 46 500 | 61 000 | HE2317XM1 | 31 |
| 3 7/16 | SPW2220-307N1 | SP220N1 | MX-W22220BLLKC3 | 69 500 | 92 000 | HA2320M1 | 54 |
| 3 1/2 | SPW2220-308N1 | SP220N1 | MX-W22220BLLKC3 | 69 500 | 92 000 | HE2320XM1 | 54 |
| 90mm | SPW2220N1 | SP220N1 | MX-W22220BLLKC3 | 69 500 | 92 000 | H2320XM1 | 54 |
| 100mm | SPW2222N1 | SP222N1 | MX-W22222BLLKC3 | 92 000 | 128 000 | H2322XM1 | 71 |
| 3 15/16 | SPW2222-315N1 | SP222N1 | MX-W22222BLLKC3 | 92 000 | 128 000 | HA2322XM1 | 71 |
| 4 | SPW2222-400N1 | SP222N1 | MX-W22222BLLKC3 | 92 000 | 128 000 | HE2322XM1 | 71 |
| 4 3/16 | SPW2224-403N1 | SP224N1 | MX-W22224BLLKC3 | 109 000 | 157 000 | HA2324M1 | 84 |
| 4 1/4 | SPW2224-404N1 | SP224N1 | MX-W22224BLLKC3 | 109 000 | 157 000 | HE2324M1 | 84 |
| 110mm | SPW2224N1 | SP224N1 | MX-W22224BLLKC3 | 109 000 | 157 000 | H2324XM1 | 84 |
| 4 7/16 | SPW2226-407N1 | SP226N1 | MX-W22226BLLKC3 | 127 000 | 176 000 | HA2326M1 | 101 |
| 4 1/2 | SPW2226-408N1 | SP226N1 | MX-W22226BLLKC3 | 127 000 | 176 000 | HE2326M1 | 101 |
| 115mm | SPW2226N1 | SP226N1 | MX-W22226BLLKC3 | 127 000 | 176 000 | H2326M1 | 101 |
| 125mm | SPW2228N1 | SP228N1 | MX-W22228BLLKC3 | 153 000 | 218 000 | H2328M1 | 118 |
| 4 15/16 | SPW2228-415N1 | SP228N1 | MX-W22228BLLKC3 | 153 000 | 218 000 | HA2328M1 | 118 |
| 5 | SPW2228-500N1 | SP228N1 | MX-W22228BLLKC3 | 153 000 | 218 000 | HE2328M1 | 118 |
| 5 7/16 | SPW2232-507N1 | SP232N1 | MX-W22232BLLKC3 | 196 000 | 290 000 | HA2332M1 | 171 |
| 5 1/2 | SPW2232-508N1 | SP232N1 | MX-W22232BLLKC3 | 196 000 | 290 000 | HE2332M1 | 171 |
| 140mm | SPW2232N1 | SP232N1 | MX-W22232BLLKC3 | 196 000 | 290 000 | H2332M1 | 171 |

Pillow Blocks

SPW



C(M)-SPW22...

HOW TO ORDER

Example: When you order one SPW2220N1, you will receive an assembly consisting of one SP220N1 Pillow Block Housing, one MX-W22220BLLKC3 Bearing, and one H2320XM1 Adapter.

To order a solid base housing, add suffix F to the part number (example: SPW2220FN1).

When C-SPW2220N1 or CM-SPW2220N1 are specified, external covers will be supplied with the unit.

Example: "C" prefix – 2 taconite service seals (dimension l)

"CM" prefix – 1 taconite service seal, 1 end cover (dimension l_1)

Notes: Taconite service seals for which dimensions are shown are standard. All units are supplied in float arrangement and may be converted to fixed by relocation of a snap ring.

All bearing inserts are supplied prelubricated with Shell Alvania™ 3 grease.

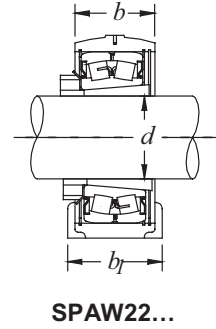
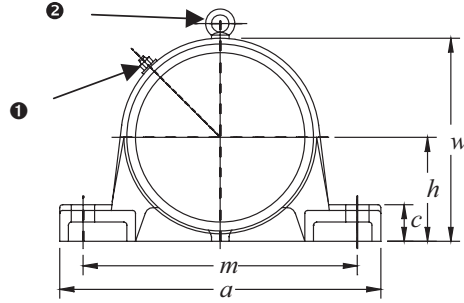
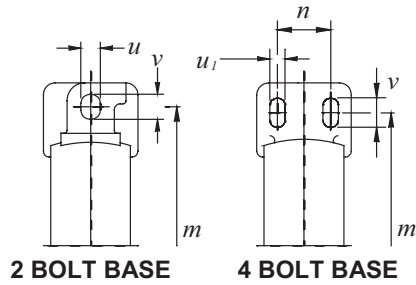
Solid base housings may be drilled for 2 or 4 bolt arrangement.

① Grease fittings are provided with all units.

② An eye bolt is provided on housings SP228N1 and SP232N1.

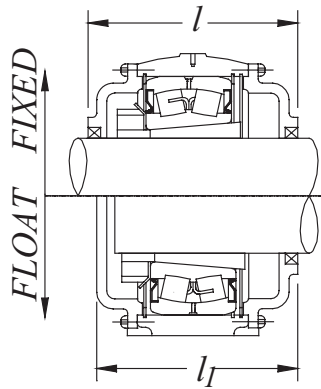
| Complete Pillow Block Number | Dimensions (Millimeters) | | | | | | | | | | | | | Set Bolts | |
|------------------------------|--------------------------|-----|-----|----------------|----|-----|----------------|----|-----|-----|----------------|----|----|-----------|-----------|
| | h | a | b | b ₁ | c | m | m ₁ | n | w | l | l ₁ | u | v | (2 req'd) | (4 req'd) |
| SPW2211-115N1 | 70 | 255 | 62 | 70 | 28 | 210 | 200 | 40 | 136 | 120 | 114 | 18 | 23 | M16 | M12 |
| SPW2211N1 | 70 | 255 | 62 | 70 | 28 | 210 | 200 | 40 | 136 | 120 | 114 | 18 | 23 | M16 | M12 |
| SPW2211-200N1 | 70 | 255 | 62 | 70 | 28 | 210 | 200 | 40 | 136 | 120 | 114 | 18 | 23 | M16 | M12 |
| SPW2213-203N1 | 80 | 275 | 70 | 80 | 30 | 230 | 220 | 48 | 157 | 138 | 126 | 18 | 23 | M16 | M12 |
| SPW2213-204N1 | 80 | 275 | 70 | 80 | 30 | 230 | 220 | 48 | 157 | 138 | 126 | 18 | 23 | M16 | M12 |
| SPW2213N1 | 80 | 275 | 70 | 80 | 30 | 230 | 220 | 48 | 157 | 138 | 126 | 18 | 23 | M16 | M12 |
| SPW2213-206N1 | 80 | 275 | 70 | 80 | 30 | 230 | 220 | 48 | 157 | 138 | 126 | 18 | 23 | M16 | M12 |
| SPW2215-207N1 | 80 | 280 | 72 | 80 | 30 | 230 | 220 | 48 | 163 | 132 | 123 | 18 | 23 | M16 | M12 |
| SPW2215-208N1 | 80 | 280 | 72 | 80 | 30 | 230 | 220 | 48 | 163 | 132 | 123 | 18 | 23 | M16 | M12 |
| SPW2215N1 | 80 | 280 | 72 | 80 | 30 | 230 | 220 | 48 | 163 | 132 | 123 | 18 | 23 | M16 | M12 |
| SPW2217-215N1 | 95 | 320 | 80 | 90 | 32 | 260 | 252 | 52 | 192 | 156 | 146 | 22 | 27 | M20 | M16 |
| SPW2217N1 | 95 | 320 | 80 | 90 | 32 | 260 | 252 | 52 | 192 | 156 | 146 | 22 | 27 | M20 | M16 |
| SPW2217-300N1 | 95 | 320 | 80 | 90 | 32 | 260 | 252 | 52 | 192 | 156 | 146 | 22 | 27 | M20 | M16 |
| SPW2220-307N1 | 112 | 380 | 95 | 110 | 40 | 320 | 300 | 66 | 226 | 185 | 175 | 26 | 32 | M24 | M16 |
| SPW2220-308N1 | 112 | 380 | 95 | 110 | 40 | 320 | 300 | 66 | 226 | 185 | 175 | 26 | 32 | M24 | M16 |
| SPW2220N1 | 112 | 380 | 95 | 110 | 40 | 320 | 300 | 66 | 226 | 185 | 175 | 26 | 32 | M24 | M16 |
| SPW2222N1 | 125 | 410 | 100 | 120 | 45 | 350 | 320 | 74 | 252 | 198 | 185 | 26 | 32 | M24 | M16 |
| SPW2222-315N1 | 125 | 410 | 100 | 120 | 45 | 350 | 320 | 74 | 252 | 198 | 185 | 26 | 32 | M24 | M16 |
| SPW2222-400N1 | 125 | 410 | 100 | 120 | 45 | 350 | 320 | 74 | 252 | 198 | 185 | 26 | 32 | M24 | M16 |
| SPW2224-403N1 | 140 | 410 | 105 | 120 | 45 | 350 | 330 | 74 | 274 | 203 | 190 | 26 | 32 | M24 | M16 |
| SPW2224-404N1 | 140 | 410 | 105 | 120 | 45 | 350 | 330 | 74 | 274 | 203 | 190 | 26 | 32 | M24 | M16 |
| SPW2224N1 | 140 | 410 | 105 | 120 | 45 | 350 | 330 | 74 | 274 | 203 | 190 | 26 | 32 | M24 | M16 |
| SPW2226-407N1 | 150 | 445 | 115 | 130 | 50 | 380 | 370 | 80 | 293 | 219 | 206 | 28 | 36 | M24 | M20 |
| SPW2226-408N1 | 150 | 445 | 115 | 130 | 50 | 380 | 370 | 80 | 293 | 219 | 206 | 28 | 36 | M24 | M20 |
| SPW2226N1 | 150 | 445 | 115 | 130 | 50 | 380 | 370 | 80 | 293 | 219 | 206 | 28 | 36 | M24 | M20 |
| SPW2228N1 | 150 | 500 | 120 | 150 | 50 | 420 | 400 | 80 | 305 | 232 | 219 | 33 | 42 | M30 | M24 |
| SPW2228-415N1 | 150 | 500 | 120 | 150 | 50 | 420 | 400 | 80 | 305 | 232 | 219 | 33 | 42 | M30 | M24 |
| SPW2228-500N1 | 150 | 500 | 120 | 150 | 50 | 420 | 400 | 80 | 305 | 232 | 219 | 33 | 42 | M30 | M24 |
| SPW2232-507N1 | 170 | 550 | 135 | 160 | 60 | 470 | 450 | 90 | 340 | 260 | 247 | 33 | 42 | M30 | M24 |
| SPW2232-508N1 | 170 | 550 | 135 | 160 | 60 | 470 | 450 | 90 | 340 | 260 | 247 | 33 | 42 | M30 | M24 |
| SPW2232N1 | 170 | 550 | 135 | 160 | 60 | 470 | 450 | 90 | 340 | 260 | 247 | 33 | 42 | M30 | M24 |

SPAW Pillow Blocks



| Shaft diameter d inches | Complete Pillow Block Number | Pillow Block Housing | PILLOW BLOCK COMPONENT NUMBERS | | Adapter Locknut and Lockwasher | Weight (lbs) | |
|-------------------------------|---------------------------------|----------------------------|--------------------------------|---|---|-----------------|-----|
| | | | Bearing Number | Basic Load Ratings (lbs) Dynamic C Static Co | | | |
| 1 15/16 | SPA2211-115N1 | SPA211N1 | MX-W22211BLLKC3 | 21 000 | 24 700 | HA2311M1 | 13 |
| 50mm | SPA2211N1 | SPA211N1 | MX-W22211BLLKC3 | 21 000 | 24 700 | H2311XM1 | 13 |
| 2 | SPA2211-200N1 | SPA211N1 | MX-W22211BLLKC3 | 21 000 | 24 700 | HE2311XYM1 | 13 |
| 2 3/16 | SPA2213-203N1 | SPA213N1 | MX-W22213BLLKC3 | 32 000 | 40 000 | HA2313M1 | 18 |
| | FSPA2213-203N1 | FSPA213N1 | MX-W22213BLLKC3 | 32 000 | 40 000 | HA2313M1 | 18 |
| 2 1/4 | SPA2213-204N1 | SPA213N1 | MX-W22213BLLKC3 | 32 000 | 40 000 | HE2313XM1 | 18 |
| | FSPA2213-204N1 | FSPA213N1 | MX-W22213BLLKC3 | 32 000 | 40 000 | HE2313XM1 | 18 |
| 60mm | SPA2213N1 | SPA213N1 | MX-W22213BLLKC3 | 32 000 | 40 000 | H2313XM1 | 18 |
| | FSPA2213N1 | FSPA213N1 | MX-W22213BLLKC3 | 32 000 | 40 000 | H2313XM1 | 18 |
| 2 3/8 | SPA2213-206N1 | SPA213N1 | MX-W22213BLLKC3 | 32 000 | 40 000 | HS2313XM1 | 18 |
| | FSPA2213-206N1 | FSPA213N1 | MX-W22213BLLKC3 | 32 000 | 40 000 | HS2313XM1 | 18 |
| 2 7/16 | SPA2215-207N1 | SPA215N1 | MX-W22215BLLKC3 | 37 500 | 50 000 | HA2315M1 | 20 |
| | FSPA2215-207N1 | FSPA215N1 | MX-W22215BLLKC3 | 37 500 | 50 000 | HA2315M1 | 20 |
| 2 1/2 | SPA2215-208N1 | SPA215N1 | MX-W22215BLLKC3 | 37 500 | 50 000 | HE2315XM1 | 20 |
| | FSPA2215-208N1 | FSPA215N1 | MX-W22215BLLKC3 | 37 500 | 50 000 | HE2315XM1 | 20 |
| 65mm | SPA2215N1 | SPA215N1 | MX-W22215BLLKC3 | 37 500 | 50 000 | H2315XM1 | 20 |
| | FSPA2215N1 | FSPA215N1 | MX-W22215BLLKC3 | 37 500 | 50 000 | H2315XM1 | 20 |
| 2 15/16 | SPA2217-215N1 | SPA217N1 | MX-W22217BLLKC3 | 46 500 | 61 000 | HA2317XM1 | 31 |
| | FSPA2217-215N1 | FSPA217N1 | MX-W22217BLLKC3 | 46 500 | 61 000 | HA2317XM1 | 31 |
| 75mm | SPA2217N1 | SPA217N1 | MX-W22217BLLKC3 | 46 500 | 61 000 | H2317XM1 | 31 |
| | FSPA2217N1 | FSPA217N1 | MX-W22217BLLKC3 | 46 500 | 61 000 | H2317XM1 | 31 |
| 3 | SPA2217-300N1 | SPA217N1 | MX-W22217BLLKC3 | 46 500 | 61 000 | HE2317XM1 | 31 |
| | FSPA2217-300N1 | FSPA217N1 | MX-W22217BLLKC3 | 46 500 | 61 000 | HE2317XM1 | 31 |
| 3 7/16 | SPA2220-307N1 | SPA220N1 | MX-W22220BLLKC3 | 69 500 | 92 000 | HA2320M1 | 54 |
| | FSPA2220-307N1 | FSPA220N1 | MX-W22220BLLKC3 | 69 500 | 92 000 | HA2320M1 | 54 |
| 3 1/2 | SPA2220-308N1 | SPA220N1 | MX-W22220BLLKC3 | 69 500 | 92 000 | HE2320XM1 | 54 |
| | FSPA2220-308N1 | FSPA220N1 | MX-W22220BLLKC3 | 69 500 | 92 000 | HE2320XM1 | 54 |
| 90mm | SPA2220N1 | SPA220N1 | MX-W22220BLLKC3 | 69 500 | 92 000 | H2320XM1 | 54 |
| | FSPA2220N1 | FSPA220N1 | MX-W22220BLLKC3 | 69 500 | 92 000 | H2320XM1 | 54 |
| 100mm | SPA2222N1 | SPA222N1 | MX-W22222BLLKC3 | 92 000 | 128 000 | H2322XM1 | 71 |
| 3 15/16 | SPA2222-315N1 | SPA222N1 | MX-W22222BLLKC3 | 92 000 | 128 000 | HA2322XM1 | 71 |
| 4 | SPA2222-400N1 | SPA222N1 | MX-W22222BLLKC3 | 92 000 | 128 000 | HE2322XM1 | 71 |
| 4 3/16 | SPA2224-403N1 | SPA224N1 | MX-W22224BLLKC3 | 109 000 | 157 000 | HA2324M1 | 84 |
| 4 1/4 | SPA2224-404N1 | SPA224N1 | MX-W22224BLLKC3 | 109 000 | 157 000 | HE2324M1 | 84 |
| 110mm | SPA2224N1 | SPA224N1 | MX-W22224BLLKC3 | 109 000 | 157 000 | H2324XM1 | 84 |
| 4 7/16 | SPA2226-407N1 | SPA226N1 | MX-W22226BLLKC3 | 127 000 | 176 000 | HA2326M1 | 101 |
| 4 1/2 | SPA2226-408N1 | SPA226N1 | MX-W22226BLLKC3 | 127 000 | 176 000 | HE2326M1 | 101 |
| 115mm | SPA2226N1 | SPA226N1 | MX-W22226BLLKC3 | 127 000 | 176 000 | H2326M1 | 101 |
| 125mm | SPA2228N1 | SPA228N1 | MX-W22228BLLKC3 | 153 000 | 218 000 | H2328M1 | 118 |
| 4 15/16 | SPA2228-415N1 | SPA228N1 | MX-W22228BLLKC3 | 153 000 | 218 000 | HA2328M1 | 118 |
| 5 | SPA2228-500N1 | SPA228N1 | MX-W22228BLLKC3 | 153 000 | 218 000 | HE2328M1 | 118 |
| 5 7/16 | SPA2232-507N1 | SPA232N1 | MX-W22232BLLKC3 | 196 000 | 290 000 | HA2332M1 | 171 |
| 5 1/2 | SPA2232-508N1 | SPA232N1 | MX-W22232BLLKC3 | 196 000 | 290 000 | HE2332M1 | 171 |
| 140mm | SPA2232N1 | SPA232N1 | MX-W22232BLLKC3 | 196 000 | 290 000 | H2332M1 | 171 |

Pillow Blocks SPAW



C(M)-SPAW22...

HOW TO ORDER

Example: When you order one SPAW2220-307N1, you will receive an assembly consisting of one SPA220N1 Pillow Block Housing, one MX-W2220BLLKC3 Bearing, and one HA2320M1 Adapter. All units are supplied in float arrangement, and may be converted to fixed by relocation of a snap ring.

When C-SPAW2220N1 or CM-SPAW2220N1 are specified, external covers will be supplied with the unit.

Example: "C" prefix – 2 taconite service seals (dimension l)

"CM" prefix – 1 taconite service seal, 1 end cover (dimension l1)

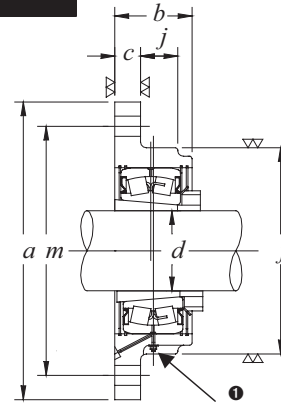
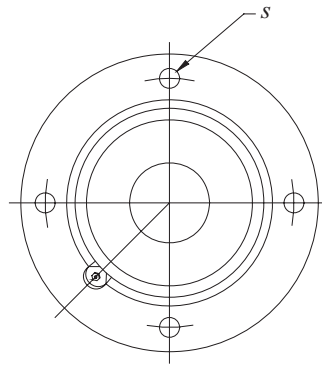
Notes: Taconite service seals for which dimensions are shown are standard. All units are supplied in float arrangement and may be converted to fixed by relocation of a snap ring. All bearing inserts are supplied prelubricated with Shell Alvania™ 3 grease.

① Grease fittings are provided with all units.

② An eye bolt is provided on housings SPA28N1 and SPA32N1

| Complete Pillow Block Number | Dimensions (Inches) | | | | | | | | | | | | | Set Bolts | |
|------------------------------|---------------------|--------|-------|----------------|-------|---------|-------|--------|--------|----------------|-------|----------------|---------|-----------|-----|
| | h | a | b | b ₁ | c | m | n | w | l | l ₁ | u | u ₁ | v | Size | No. |
| SPAW2211-115N1 | 2 3/4 | 9.606 | 2.441 | 2.756 | 1.102 | 7 5/8 | – | 5.354 | 4.724 | 4.488 | 0.709 | – | 7/8 | 5/8 | 2 |
| SPAW2211N1 | 2 3/4 | 9.606 | 2.441 | 2.756 | 1.102 | 7 5/8 | – | 5.354 | 4.724 | 4.488 | 0.709 | – | 7/8 | 5/8 | 2 |
| SPAW2211-200N1 | 2 3/4 | 9.606 | 2.441 | 2.756 | 1.102 | 7 5/8 | – | 5.354 | 4.724 | 4.488 | 0.709 | – | 7/8 | 5/8 | 2 |
| SPAW2213-203N1 | 3 | 10.827 | 2.756 | 3.110 | 1.024 | 8 13/16 | 2 | 6.024 | 5.433 | 4.961 | 0.709 | – | 1 5/16 | 5/8 | 2 |
| FSPAW2213-203N1 | 3 | 10.827 | 2.756 | 3.110 | 1.024 | 8 13/16 | 2 | 6.024 | 5.433 | 4.961 | – | 0.591 | 1 5/16 | 1/2 | 4 |
| SPAW2213-204N1 | 3 | 10.827 | 2.756 | 3.110 | 1.024 | 8 13/16 | 2 | 6.024 | 5.433 | 4.961 | 0.709 | – | 1 5/16 | 5/8 | 2 |
| FSPAW2213-204N1 | 3 | 10.827 | 2.756 | 3.110 | 1.024 | 8 13/16 | 2 | 6.024 | 5.433 | 4.961 | – | 0.591 | 1 5/16 | 1/2 | 4 |
| SPAW2213N1 | 3 | 10.827 | 2.756 | 3.110 | 1.024 | 8 13/16 | 2 | 6.024 | 5.433 | 4.961 | 0.709 | – | 1 5/16 | 5/8 | 2 |
| FSPAW2213N1 | 3 | 10.827 | 2.756 | 3.110 | 1.024 | 8 13/16 | 2 | 6.024 | 5.433 | 4.961 | – | 0.591 | 1 5/16 | 1/2 | 4 |
| SPAW2213-206N1 | 3 | 10.827 | 2.756 | 3.110 | 1.024 | 8 13/16 | 2 | 6.024 | 5.433 | 4.961 | 0.709 | – | 1 5/16 | 5/8 | 2 |
| FSPAW2213-206N1 | 3 | 10.827 | 2.756 | 3.110 | 1.024 | 8 13/16 | 2 | 6.024 | 5.433 | 4.961 | – | 0.591 | 1 5/16 | 1/2 | 4 |
| SPAW2215-207N1 | 3 1/4 | 11.024 | 2.835 | 3.110 | 1.299 | 9 1/8 | 1 7/8 | 6.535 | 5.197 | 4.843 | 0.709 | – | 1 1/8 | 5/8 | 2 |
| FSPAW2215-207N1 | 3 1/4 | 11.024 | 2.835 | 3.110 | 1.299 | 9 1/8 | 1 7/8 | 6.535 | 5.197 | 4.843 | – | 0.591 | 1 1/8 | 1/2 | 4 |
| SPAW2215-208N1 | 3 1/4 | 11.024 | 2.835 | 3.110 | 1.299 | 9 1/8 | 1 7/8 | 6.535 | 5.197 | 4.843 | 0.709 | – | 1 1/8 | 5/8 | 2 |
| FSPAW2215-208N1 | 3 1/4 | 11.024 | 2.835 | 3.110 | 1.299 | 9 1/8 | 1 7/8 | 6.535 | 5.197 | 4.843 | – | 0.591 | 1 1/8 | 1/2 | 4 |
| SPAW2215N1 | 3 1/4 | 11.024 | 2.835 | 3.110 | 1.299 | 9 1/8 | 1 7/8 | 6.535 | 5.197 | 4.843 | 0.709 | – | 1 1/8 | 5/8 | 2 |
| FSPAW2215N | 3 1/4 | 11.024 | 2.835 | 3.110 | 1.299 | 9 1/8 | 1 7/8 | 6.535 | 5.197 | 4.843 | – | 0.591 | 1 1/8 | 1/2 | 4 |
| SPAW2217-215N1 | 3 3/4 | 12.598 | 3.150 | 3.504 | 1.260 | 10 7/16 | 2 1/8 | 7.559 | 6.142 | 5.748 | 0.866 | – | 1 5/16 | 3/4 | 2 |
| FSPAW2217-215N1 | 3 3/4 | 12.598 | 3.150 | 3.504 | 1.260 | 10 7/16 | 2 1/8 | 7.559 | 6.142 | 5.748 | – | 0.709 | 1 5/16 | 5/8 | 4 |
| SPAW2217N1 | 3 3/4 | 12.598 | 3.150 | 3.504 | 1.260 | 10 7/16 | 2 1/8 | 7.559 | 6.142 | 5.748 | 0.866 | – | 1 5/16 | 3/4 | 2 |
| FSPAW2217N1 | 3 3/4 | 12.598 | 3.150 | 3.504 | 1.260 | 10 7/16 | 2 1/8 | 7.559 | 6.142 | 5.748 | – | 0.709 | 1 5/16 | 5/8 | 4 |
| SPAW2217-300N1 | 3 3/4 | 12.598 | 3.150 | 3.504 | 1.260 | 10 7/16 | 2 1/8 | 7.559 | 6.142 | 5.748 | 0.866 | – | 1 5/16 | 3/4 | 2 |
| FSPAW2217-300N1 | 3 3/4 | 12.598 | 3.150 | 3.504 | 1.260 | 10 7/16 | 2 1/8 | 7.559 | 6.142 | 5.748 | – | 0.709 | 1 5/16 | 5/8 | 4 |
| SPAW2220-307N1 | 4 1/2 | 14.961 | 3.740 | 4.331 | 1.654 | 12 3/8 | 2 3/8 | 8.976 | 7.283 | 6.890 | 1.024 | – | 1 5/8 | 7/8 | 2 |
| FSPAW2220-307N1 | 4 1/2 | 14.961 | 3.740 | 4.331 | 1.654 | 12 3/8 | 2 3/8 | 8.976 | 7.283 | 6.890 | – | 0.866 | 1 5/8 | 3/4 | 4 |
| SPAW2220-308N1 | 4 1/2 | 14.961 | 3.740 | 4.331 | 1.654 | 12 3/8 | 2 3/8 | 8.976 | 7.283 | 6.890 | 1.024 | – | 1 5/8 | 7/8 | 2 |
| FSPAW2220-308N1 | 4 1/2 | 14.961 | 3.740 | 4.331 | 1.654 | 12 3/8 | 2 3/8 | 8.976 | 7.283 | 6.890 | – | 0.866 | 1 5/8 | 3/4 | 4 |
| SPAW2220N1 | 4 1/2 | 14.961 | 3.740 | 4.331 | 1.654 | 12 3/8 | 2 3/8 | 8.976 | 7.283 | 6.890 | 1.024 | – | 1 5/8 | 7/8 | 2 |
| FSPAW2220N1 | 4 1/2 | 14.961 | 3.740 | 4.331 | 1.654 | 12 3/8 | 2 3/8 | 8.976 | 7.283 | 6.890 | – | 0.866 | 1 5/8 | 3/4 | 4 |
| SPAW2222N1 | 4 15/16 | 16.496 | 3.937 | 4.764 | 1.772 | 13 9/16 | 2 3/4 | 10.315 | 7.795 | 7.283 | – | 0.866 | 1 11/16 | 3/4 | 4 |
| SPAW2222-315N1 | 4 15/16 | 16.496 | 3.937 | 4.764 | 1.772 | 13 9/16 | 2 3/4 | 10.315 | 7.795 | 7.283 | – | 0.866 | 1 11/16 | 3/4 | 4 |
| SPAW2222-400N1 | 4 15/16 | 16.496 | 3.937 | 4.764 | 1.772 | 13 9/16 | 2 3/4 | 10.315 | 7.795 | 7.283 | – | 0.866 | 1 11/16 | 3/4 | 4 |
| SPAW2224-403N1 | 5 1/4 | 16.496 | 4.134 | 4.764 | 1.496 | 13 7/8 | 2 3/4 | 10.512 | 7.992 | 7.480 | – | 0.866 | 1 3/8 | 3/4 | 4 |
| SPAW2224-404N1 | 5 1/4 | 16.496 | 4.134 | 4.764 | 1.496 | 13 7/8 | 2 3/4 | 10.512 | 7.992 | 7.480 | – | 0.866 | 1 3/8 | 3/4 | 4 |
| SPAW2224N1 | 5 1/4 | 16.496 | 4.134 | 4.764 | 1.496 | 13 7/8 | 2 3/4 | 10.512 | 7.992 | 7.480 | – | 0.866 | 1 3/8 | 3/4 | 4 |
| SPAW2226-407N1 | 6 | 18.386 | 4.528 | 5.118 | 2.047 | 15 5/16 | 3 1/4 | 11.614 | 8.622 | 8.110 | – | 0.945 | 1 9/16 | 7/8 | 4 |
| SPAW2226-408N1 | 6 | 18.386 | 4.528 | 5.118 | 2.047 | 15 5/16 | 3 1/4 | 11.614 | 8.622 | 8.110 | – | 0.945 | 1 9/16 | 7/8 | 4 |
| SPAW2226N1 | 6 | 18.386 | 4.528 | 5.118 | 2.047 | 15 5/16 | 3 1/4 | 11.614 | 8.622 | 8.110 | – | 0.945 | 1 9/16 | 7/8 | 4 |
| SPAW2228N1 | 6 | 20.118 | 4.724 | 5.866 | 2.047 | 16 9/16 | 3 3/8 | 12.087 | 9.134 | 8.622 | – | 1.024 | 1 9/16 | 1 | 4 |
| SPAW2228-415N1 | 6 | 20.118 | 4.724 | 5.866 | 2.047 | 16 9/16 | 3 3/8 | 12.087 | 9.134 | 8.622 | – | 1.024 | 1 9/16 | 1 | 4 |
| SPAW2228-500N1 | 6 | 20.118 | 4.724 | 5.866 | 2.047 | 16 9/16 | 3 3/8 | 12.087 | 9.134 | 8.622 | – | 1.024 | 1 9/16 | 1 | 4 |
| SPAW2232-507N1 | 6 11/16 | 22.008 | 5.315 | 6.260 | 2.362 | 18 5/16 | 3 3/4 | 13.386 | 10.236 | 9.724 | – | 1.024 | 1 15/16 | 1 | 4 |
| SPAW2232-508N1 | 6 11/16 | 22.008 | 5.315 | 6.260 | 2.362 | 18 5/16 | 3 3/4 | 13.386 | 10.236 | 9.724 | – | 1.024 | 1 15/16 | 1 | 4 |
| SPAW2232N1 | 6 11/16 | 22.008 | 5.315 | 6.260 | 2.362 | 18 5/16 | 3 3/4 | 13.386 | 10.236 | 9.724 | – | 1.024 | 1 15/16 | 1 | 4 |

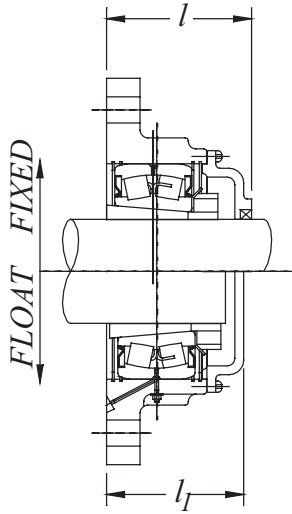
SFCW Flange Blocks



SFCW22..

| Shaft diameter d inches | Complete Flange Block Number | Flange Block Housing | FLANGE BLOCK COMPONENT NUMBERS | | | Adapter Locknut and Lockwasher | Weight (lbs) |
|-------------------------------|---------------------------------|----------------------------|--------------------------------|-----------------------------|--------------|---|-----------------|
| | | | Bearing Number | Basic Load Ratings (lbs) | | | |
| | | | | Dynamic C | Static Co | | |
| 1 15/16 | SPW2211-115N1 | SP211N1 | MX-W22211BLLKC3 | 21 000 | 24 700 | HA2311M1 | 13 |
| 50mm | SFCW2211N1 | SFC211N1 | MX-W22211BLLKC3 | 21 000 | 24 700 | H2311XM1 | 19 |
| 2 | SFCW2211-200N1 | SFC211N1 | MX-W22211BLLKC3 | 21 000 | 24 700 | HE2311XYM1 | 19 |
| 2 3/16 | SFCW2213-203N1 | SFC213N1 | MX-W22213BLLKC3 | 32 000 | 40 000 | HA2313M1 | 23 |
| 2 1/4 | SFCW2213-204N1 | SFC213N1 | MX-W22213BLLKC3 | 32 000 | 40 000 | HE2313XM1 | 23 |
| 60mm | SFCW2213N1 | SFC213N1 | MX-W22213BLLKC3 | 32 000 | 40 000 | H2313XM1 | 23 |
| 2 3/8 | SFCW2213-206N1 | SFC213N1 | MX-W22213BLLKC3 | 32 000 | 40 000 | HS2313XM1 | 23 |
| 2 7/16 | SFCW2215-207N1 | SFC215N1 | MX-W22215BLLKC3 | 37 500 | 50 000 | HA2315M1 | 27 |
| 2 1/2 | SFCW2215-208N1 | SFC215N1 | MX-W22215BLLKC3 | 37 500 | 50 000 | HE2315XM1 | 27 |
| 65mm | SFCW2215N1 | SFC215N1 | MX-W22215BLLKC3 | 37 500 | 50 000 | H2315XM1 | 27 |
| 2 15/16 | SFCW2217-215N1 | SFC217N1 | MX-W22217BLLKC3 | 46 500 | 61 000 | HA2317XM1 | 34 |
| 75mm | SFCW2217N1 | SFC217N1 | MX-W22217BLLKC3 | 46 500 | 61 000 | H2317XM1 | 34 |
| 3 | SFCW2217-300N1 | SFC217N1 | MX-W22217BLLKC3 | 46 500 | 61 000 | HE2317XM1 | 34 |
| 3 7/16 | SFCW2220-307N1 | SFC220N1 | MX-W22220BLLKC3 | 69 500 | 92 000 | HA2320M1 | 61 |
| 3 1/2 | SFCW2220-308N1 | SFC220N1 | MX-W22220BLLKC3 | 69 500 | 92 000 | HE2320XM1 | 61 |
| 90mm | SFCW2220N1 | SFC220N1 | MX-W22220BLLKC3 | 69 500 | 92 000 | H2320XM1 | 61 |
| 100mm | SFCW2222N1 | SFC222N1 | MX-W22222BLLKC3 | 92 000 | 128 000 | H2322XM1 | 82 |
| 3 15/16 | SFCW2222-315N1 | SFC222N1 | MX-W22222BLLKC3 | 92 000 | 128 000 | HA2322XM1 | 82 |
| 4 | SFCW2222-400N1 | SFC222N1 | MX-W22222BLLKC3 | 92 000 | 128 000 | HE2322XM1 | 82 |
| 4 3/16 | SFCW2224-403N1 | SFC224N1 | MX-W22224BLLKC3 | 109 000 | 157 000 | HA2324M1 | - |
| 4 1/4 | SFCW2224-404N1 | SFC224N1 | MX-W22224BLLKC3 | 109 000 | 157 000 | HE2324M1 | - |
| 110mm | SFCW2224N1 | SFC224N1 | MX-W22224BLLKC3 | 109 000 | 157 000 | H2324XM1 | - |
| 4 7/16 | SFCW2226-407N1 | SFC226N1 | MX-W22226BLLKC3 | 127 000 | 176 000 | HA2326M1 | 112 |
| 4 1/2 | SFCW2226-408N1 | SFC226N1 | MX-W22226BLLKC3 | 127 000 | 176 000 | HE2326M1 | 112 |
| 115mm | SFCW2226N1 | SFC226N1 | MX-W22226BLLKC3 | 127 000 | 176 000 | H2326M1 | 112 |
| 125mm | SFCW2228N1 | SFC228N1 | MX-W22228BLLKC3 | 153 000 | 218 000 | H2328M1 | - |
| 4 15/16 | SFCW2228-415N1 | SFC228N1 | MX-W22228BLLKC3 | 153 000 | 218 000 | HA2328M1 | - |
| 5 | SFCW2228-500N1 | SFC228N1 | MX-W22228BLLKC3 | 153 000 | 218 000 | HE2328M1 | - |
| 5 7/16 | SFCW2232-507N1 | SFC232N1 | MX-W22232BLLKC3 | 196 000 | 290 000 | HA2332M1 | - |
| 5 1/2 | SFCW2232-508N1 | SFC232N1 | MX-W22232BLLKC3 | 196 000 | 290 000 | HE2332M1 | - |
| 140mm | SFCW2232N1 | SFC232N1 | MX-W22232BLLKC3 | 196 000 | 290 000 | H2332M1 | - |

Flange Blocks SFCW



C(M)-SFCW22...

HOW TO ORDER

Example: When you order one SFCW2220N1, you will receive an assembly consisting of one SFC220N1 Flange Block Housing, one MX-W22220BLLKC3 Bearing, and one H2320XM1 Adapter.

When C-SFCW2220N1 or CM-SFCW2220N1 are specified, an external cover will be supplied with the unit.

Example: "C" prefix – 1 taconite service seal (dimension l)

"CM" prefix – 1 closed end cover (dimension l1)

Notes: Taconite service seals for which dimensions are shown are standard. For dimensions and availability of non-standard taconite service seals, consult NTN Engineering.

All units are supplied in the float arrangement and may be converted to fixed by relocation of a snap ring.

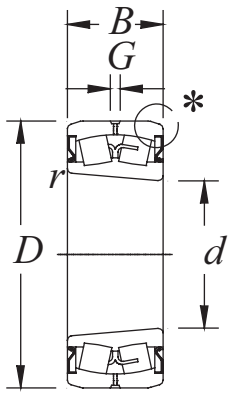
All units are assembled for flush mounting; for spigot mounting, the bearing insert must be reversed.

All bearing inserts are supplied prelubricated with Shell Alvania™ 3 grease.

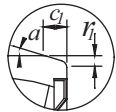
① Grease fittings are provided with all units.

| Complete Flange Block Number | Dimensions (Millimeters) | | | | | | | | |
|------------------------------|--------------------------|-----|----|-----|-----|----|-----|----------------|----|
| | a | b | c | m | f | j | l | l ₁ | s |
| SFCW2211-115N1 | 200 | 62 | 19 | 165 | 130 | 25 | 91 | 85 | 14 |
| SFCW2211N1 | 200 | 62 | 19 | 165 | 130 | 25 | 91 | 85 | 14 |
| SFCW2211-200N1 | 200 | 62 | 19 | 165 | 130 | 25 | 91 | 85 | 14 |
| SFCW2213-203N1 | 240 | 70 | 24 | 190 | 155 | 25 | 104 | 92 | 14 |
| SFCW2213-204N1 | 240 | 70 | 24 | 190 | 155 | 25 | 104 | 92 | 14 |
| SFCW2213N1 | 240 | 70 | 24 | 190 | 155 | 25 | 104 | 92 | 14 |
| SFCW2213-206N1 | 240 | 70 | 24 | 190 | 155 | 25 | 104 | 92 | 14 |
| SFCW2215-207N1 | 255 | 72 | 24 | 215 | 170 | 32 | 102 | 93 | 17 |
| SFCW2215-208N1 | 255 | 72 | 24 | 215 | 170 | 32 | 102 | 93 | 17 |
| SFCW2215N1 | 255 | 72 | 24 | 215 | 170 | 32 | 102 | 93 | 17 |
| SFCW2217-215N1 | 270 | 80 | 27 | 240 | 190 | 32 | 118 | 108 | 17 |
| SFCW2217N1 | 270 | 80 | 27 | 240 | 190 | 32 | 118 | 108 | 17 |
| SFCW2217-300N1 | 270 | 80 | 27 | 240 | 190 | 32 | 118 | 108 | 17 |
| SFCW2220-307N1 | 330 | 95 | 29 | 280 | 230 | 38 | 140 | 130 | 20 |
| SFCW2220-308N1 | 330 | 95 | 29 | 280 | 230 | 38 | 140 | 130 | 20 |
| SFCW2220N1 | 330 | 95 | 29 | 280 | 230 | 38 | 140 | 130 | 20 |
| SFCW2222N1 | 365 | 100 | 32 | 310 | 255 | 42 | 149 | 136 | 20 |
| SFCW2222-315N1 | 365 | 100 | 32 | 310 | 255 | 42 | 149 | 136 | 20 |
| SFCW2222-400N1 | 365 | 100 | 32 | 310 | 255 | 42 | 149 | 136 | 20 |
| SFCW2224-403N1 | 400 | 105 | 32 | 330 | 275 | 42 | 154 | 141 | 23 |
| SFCW2224-404N1 | 400 | 105 | 32 | 330 | 275 | 42 | 154 | 141 | 23 |
| SFCW2224N1 | 400 | 105 | 32 | 330 | 275 | 42 | 154 | 141 | 23 |
| SFCW2226-407N1 | 416 | 115 | 32 | 355 | 290 | 42 | 167 | 154 | 23 |
| SFCW2226-408N1 | 416 | 115 | 32 | 355 | 290 | 42 | 167 | 154 | 23 |
| SFCW2226N1 | 416 | 115 | 32 | 355 | 290 | 42 | 167 | 154 | 23 |
| SFCW2228N1 | 450 | 120 | 45 | 385 | 310 | 56 | 174 | 163 | 35 |
| SFCW2228-415N1 | 450 | 120 | 45 | 385 | 310 | 56 | 174 | 163 | 35 |
| SFCW2228-500N1 | 450 | 120 | 45 | 385 | 310 | 56 | 174 | 163 | 35 |
| SFCW2232-507N1 | 520 | 135 | 45 | 435 | 360 | 65 | 195 | 185 | 35 |
| SFCW2232-508N1 | 520 | 135 | 45 | 435 | 360 | 65 | 195 | 185 | 35 |
| SFCW2232N1 | 520 | 135 | 45 | 435 | 360 | 65 | 195 | 185 | 35 |

SEALED SPHERICAL ROLLER BEARING INSERTS



MX-W222K
Taper 1:12



* Detail: ❶

| Bearing No. | Bore d | Dimensions (Inch/mm) | | | Oil Groove Width G | Basic Load Rating (lbs/N) | | Limiting Speed (rpm) nmax | Weight (lbs) |
|-----------------|---------------|----------------------|----------------|--------------------|-----------------------|---------------------------|----------------------|------------------------------|--------------|
| | | O.D. D | Width B | Fillet Radius r | | Dynamic C | Static Co | | |
| MX-W22211BLLKC3 | 2.1654 55 | 3.9370 100 | 1.5748 40 | 0.0394 1.0 | 0.2362 6 | 21 000 93 500 | 24 700 110 000 | 2 700 | 2.6 |
| MX-W22213BLLKC3 | 2.5591 65 | 4.7244 120 | 1.8307 46.5 | 0.0394 1.0 | 0.2756 7 | 32 000 143 000 | 40 000 179 000 | 2 300 | 4.2 |
| MX-W22215BLLKC3 | 2.9528 75 | 5.1181 130 | 1.8307 46.5 | 0.0394 1.0 | 0.2756 7 | 37 500 166 000 | 50 000 223 000 | 2 000 | 4.6 |
| MX-W22217BLLKC3 | 3.3465 85 | 5.9055 150 | 2.0276 51.5 | 0.0394 1.0 | 0.2756 7 | 46 500 206 000 | 61 000 272 000 | 1 800 | 6.2 |
| MX-W22220BLLKC3 | 3.9370 100 | 7.0866 180 | 2.5394 64.5 | 0.0591 1.5 | 0.3543 9 | 69 500 310 000 | 92 000 410 000 | 1 500 | 13.0 |
| MX-W22222BLLKC3 | 4.3307 110 | 7.8740 200 | 2.7953 71 | 0.0591 1.5 | 0.3543 9 | 92 000 410 000 | 128 000 570 000 | 1 400 | 18.7 |
| MX-W22224BLLKC3 | 4.7244 120 | 8.4646 215 | 2.9921 76 | 0.0591 1.5 | 0.3543 9 | 109 000 485 000 | 157 000 700 000 | 1 300 | 24.0 |
| MX-W22226BLLKC3 | 5.1181 130 | 9.0551 230 | 3.3071 84 | 0.0591 1.5 | 0.4331 11 | 127 000 565 000 | 176 000 785 000 | 1 200 | 28.4 |
| MX-W22228BLLKC3 | 5.5118 140 | 9.8425 250 | 3.4627 88 | 0.0591 1.5 | 0.4331 11 | 153 000 680 000 | 218 000 970 000 | 1 100 | 36.2 |
| MX-W22232BLLKC3 | 6.2992 160 | 11.4173 290 | 4.0945 104 | 0.0591 1.5 | 0.4331 11 | 196 000 870 000 | 290 000 1 290 000 | 1 000 | 59.5 |

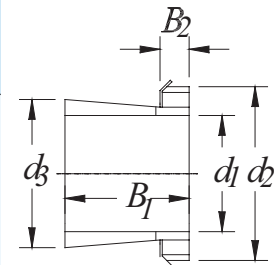
Notes:

- All bearing inserts are supplied prelubricated with Shell Alvania™ 3 grease.
- Outer ring lubrication holes and oil groove provided as standard.
- Limiting speeds listed may not apply under conditions of greater than normal load and/or temperature.

❶ For outside diameter chamfer dimensions, please contact NTN Engineering.

ADAPTERS FOR BEARINGS SERIES MX-W222K

| Complete Adapter No. | Adapter Sleeve No. | Lock-Nut No. | Lock-washer No. | Shaft (Bore) Dia. d_1 | Dimensions (Inch/mm) | | | | Thread | Weight (lbs) |
|----------------------|--------------------|--------------|-----------------|---------------------------------|----------------------|-----------|-------|-------|---------|--------------|
| | | | | | d_2 max | d_3 max | B_1 | B_2 | | |
| HA2311M1 | AA2311M1 | AN11M1 | AW11 | 1 ¹⁵ / ₁₆ | 2.953 | 2.322 | 2.323 | 0.472 | M55X2 | 1.0 |
| H2311XM1 | A2311XM1 | AN11M1 | AW11X | 50mm | 2.953 | 2.322 | 2.323 | 0.472 | M55X2 | 0.9 |
| HE2311XYM1 | AE2311XYM1 | AN11YM1 | AW11X | 2 | 2.953 | 2.322 | 2.323 | 0.472 | M55X1.5 | 0.9 |
| HA2313M1 | AA2313M1 | AN13M1 | AW13 | 2 ³ / ₁₆ | 3.346 | 2.729 | 2.559 | 0.551 | M65X2 | 1.7 |
| HE2313XM1 | AE2313XM1 | AN13M1 | AW13X | 2 ¹ / ₄ | 3.346 | 2.729 | 2.559 | 0.551 | M65X2 | 1.5 |
| H2313XM1 | A2313XM1 | AN13M1 | AW13X | 60mm | 3.346 | 2.729 | 2.559 | 0.551 | M65X2 | 1.2 |
| HS2313XM1 | AS2313XM1 | AN13M1 | AW13X | 2 ³ / ₈ | 3.346 | 2.729 | 2.559 | 0.551 | M65X2 | 1.2 |
| HA2315M1 | AA2315M1 | AN15M1 | AW15 | 2 ⁷ / ₁₆ | 3.858 | 3.145 | 2.874 | 0.591 | M75X2 | 2.3 |
| HE2315XM1 | AE2315XM1 | AN15M1 | AW15X | 2 ¹ / ₂ | 3.858 | 3.145 | 2.874 | 0.591 | M75X2 | 2.5 |
| H2315XM1 | A2315XM1 | AN15M1 | AW15X | 65mm | 3.858 | 3.145 | 2.874 | 0.591 | M75X2 | 2.3 |
| HA2317XM1 | AA2317XM1 | AN17M1 | AW17X | 2 ¹⁵ / ₁₆ | 4.331 | 3.559 | 3.228 | 0.709 | M85X2 | 3.2 |
| H2317XM1 | A2317XM1 | AN17M1 | AW17X | 75mm | 4.331 | 3.559 | 3.228 | 0.709 | M85X2 | 3.2 |
| HE2317XM1 | AE2317XM1 | AN17M1 | AW17X | 3 | 4.331 | 3.559 | 3.228 | 0.709 | M85X2 | 3.0 |
| HA2320M1 | AA2320M1 | AN20M1 | AW20 | 3 ⁷ / ₁₆ | 5.118 | 4.192 | 3.819 | 0.787 | M100X2 | 5.3 |
| HE2320XM1 | AE2320XM1 | AN20M1 | AW20X | 3 ¹ / ₂ | 5.118 | 4.192 | 3.819 | 0.787 | M100X2 | 5.0 |
| H2320XM1 | A2320XM1 | AN20M1 | AW20X | 90mm | 5.118 | 4.192 | 3.819 | 0.787 | M100X2 | 4.7 |
| H2322XM1 | A2322XM1 | AN22M1 | AW22X | 100mm | 5.709 | 4.609 | 4.134 | 0.827 | M110X2 | 6.0 |
| HA2322XM1 | AA2322XM1 | AN22M1 | AW22X | 3 ¹⁵ / ₁₆ | 5.709 | 4.609 | 4.134 | 0.827 | M110X2 | 6.0 |
| HE2322XM1 | AE2322XM1 | AN22M1 | AW22X | 4 | 5.709 | 4.609 | 4.134 | 0.827 | M110X2 | 5.6 |
| HA2324M1 | AA2324M1 | AN24M1 | AW24 | 4 ³ / ₁₆ | 6.102 | 5.022 | 4.409 | 0.866 | M120X2 | 8.2 |
| HE2324M1 | AE2324M1 | AN24M1 | AW24 | 4 ¹ / ₄ | 6.102 | 5.022 | 4.409 | 0.866 | M120X2 | 7.7 |
| H2324XM1 | A2324XM1 | AN24M1 | AW24X | 110mm | 6.102 | 5.022 | 4.409 | 0.866 | M120X2 | 7.0 |
| HA2326M1 | AA2326M1 | AN26M1 | AW26 | 4 ⁷ / ₁₆ | 6.496 | 5.443 | 4.764 | 0.906 | M130X2 | 10.1 |
| HE2326M1 | AE2326M1 | AN26M1 | AW26 | 4 ¹ / ₂ | 6.496 | 5.443 | 4.764 | 0.906 | M130X2 | 10.1 |
| H2326M1 | A2326M1 | AN26M1 | AW26 | 115mm | 6.496 | 5.443 | 4.764 | 0.906 | M130X2 | 10.1 |
| H2328M1 | A2328M1 | AN28M1 | AW28 | 125mm | 7.087 | 5.866 | 5.157 | 0.945 | M140X2 | 12.2 |
| HA2328M1 | AA2328M1 | AN28M1 | AW28 | 4 ¹⁵ / ₁₆ | 7.087 | 5.866 | 5.157 | 0.945 | M140X2 | 12.1 |
| HE2328M1 | AE2328M1 | AN28M1 | AW28 | 5 | 7.087 | 5.866 | 5.157 | 0.945 | M140X2 | 11.3 |
| HA2332M1 | AA2332M1 | AN32M1 | AW32 | 5 ⁷ / ₁₆ | 8.268 | 6.693 | 5.787 | 1.102 | M160X3 | 21.2 |
| HE2332M1 | AE2332M1 | AN32M1 | AW32 | 5 ¹ / ₂ | 8.268 | 6.693 | 5.787 | 1.102 | M160X3 | 20.3 |
| H2332M1 | A2332M1 | AN32M1 | AW32 | 140mm | 8.268 | 6.693 | 5.787 | 1.102 | M160X3 | 20.2 |

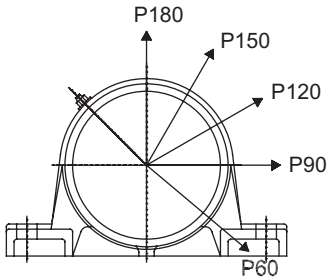


H23...M1

Notes:

- The adapter number denotes the complete assembly consisting of adapter sleeve, locknut and lockwasher.
- Suffix X denotes the narrow slot type of adapter sleeve.
- The straight inner tab type of lockwasher (also denoted by X) should be used with this sleeve.
- Suffix Y denotes a non-standard thread.

SPAW/SPW PILLOW BLOCK HOUSING ALLOWABLE LOADS



| Housing | Allowable Load (lbs) ❶ | | | | |
|----------|------------------------|--------|--------|--------|--------|
| | P60 | P90 | P120 | P150 | P180 |
| SP211N1 | 12 500 | 7 500 | 5 500 | 5 000 | 6 000 |
| SP211FN1 | 27 500 | 16 500 | 12 000 | 11 000 | 14 000 |
| SP213N1 | 18 500 | 11 500 | 8 500 | 7 500 | 9 500 |
| SP213FN1 | 34 500 | 21 000 | 15 500 | 14 000 | 17 500 |
| SP2215N1 | 21 500 | 13 000 | 10 000 | 9 000 | 11 000 |
| SP215FN1 | 40 000 | 25 000 | 18 000 | 16 000 | 20 000 |
| SP217N1 | 28 500 | 17 000 | 12 500 | 11 500 | 14 500 |
| SP217FN1 | 47 000 | 28 000 | 21 000 | 18 500 | 23 000 |
| SP220N1 | 38 500 | 23 000 | 17 000 | 15 500 | 19 500 |
| SP220FN1 | 52 500 | 31 500 | 27 000 | 21 000 | 26 500 |
| SP222N1 | 47 500 | 28 500 | 21 000 | 18 500 | 23 500 |
| SP222FN1 | 61 500 | 37 500 | 27 500 | 25 000 | 31 000 |
| SP224N1 | 71 500 | 45 000 | 24 500 | 22 000 | 24 500 |
| SP224FN1 | 93 500 | 58 500 | 35 500 | 31 000 | 35 500 |
| SP226N1 | 77 000 | 48 500 | 26 500 | 24 000 | 26 500 |
| SP226FN1 | 104 500 | 66 000 | 37 500 | 33 000 | 37 500 |
| SP228N1 | 82 500 | 52 000 | 27 500 | 25 500 | 27 500 |
| SP228FN1 | 119 000 | 75 000 | 40 000 | 36 500 | 40 000 |
| SP232N1 | 100 500 | 63 000 | 34 000 | 31 000 | 34 000 |
| SP232FN1 | 143 500 | 90 500 | 48 500 | 44 000 | 48 500 |

Notes:

Allowable thrust loads for complete assemblies mounted on straight shafts depend on the fit between adapter sleeve and shaft. Please consult NTN Engineering.

❶ Values include a safety factor of 2. For more severe conditions, higher safety factors must be applied.

**HEAVY DUTY
BLOCKS
SPAW, SPW
and SFCW TYPE**



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