

# FYH<sup>®</sup>

# SN HOUSINGS

BETTER PROTECTION & EASIER INSTALLATION



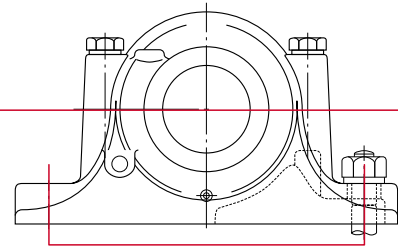
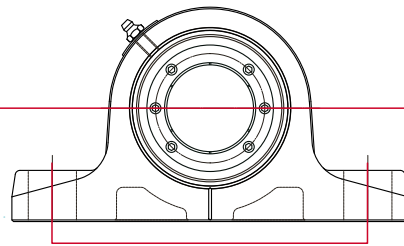
**ABEG<sup>®</sup>**  
Advanced Bearing Expert Group



**FYH patented Z LOCK and set screw lock spherical roller bearing units now have SN style housings for the replacement of SN plumber blocks.**

**COMPARISON OF FYH SN UNITS AND SN PLUMMER BLOCK UNITS**

**SAME CENTER HEIGHT  
AND MOUNTING PITCH**



	FYH SN UNITS	SN PLUMMER BLOCK UNITS
<b>HOUSING</b>	ONE PIECE DUCTILE IRON	SPLIT GRAY CAST IRON
<b>LOCKING</b>	Z LOCK OR SET SCREW	ADAPTER SLEEVE
<b>SEAL</b>	ORIGINAL ALIGNED TRIPLE LIP ON INNER RING	SINGLE LIP SEAL ON SHAFT
<b>LUBRICATION</b>	CALCIUM SULFONATE SYNTHETIC GREASE	NONE
<b>INSTALLATION</b>	LESS THAN 10 MINUTES	MORE THAN 45 MINUTES

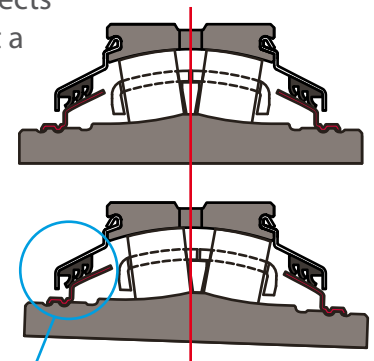


**The patented Z-Lock is the first ever tapered bore locking collar system.** Just tighten the cap screws properly and the specialized tapered bore collar provides extreme holding power on the shaft without causing any damage. This is a true 360 degree locking mechanism. Disassembly is easily accomplished with two threaded holes in the collar for standard withdrawal dismounting.



**FYH ORIGINAL TRIPLE LIP SEAL**

**The triple-lip seal maintains positive contact with a special sealing ring at virtually any of shaft mis-alignment.** Our new patented sealing design protects the bearing against a variety of wet and dry contaminants and dramatically improves bearing life. The ability to accommodate shaft expansion is also available.



Positive seal contact is maintained during mis-alignment at any angle.

Contamination is the single biggest problem that bearings face in applications such as aggregate, mining, forestry, pulp and paper and steel mills. Split plumber block units have single lip rubber seals that contact and wear on the shafting. **FYH's original triple lip seals contact on the inner ring and can handle  $\pm 2$  degrees of shaft misalignment, plumber block seals are not designed for this amount of misalignment.** Adapter sleeves used in a split plumber blocks require time and skill to install correctly, incorrect installation can allow them to be too tight or too loose. FYH's true concentric Z Lock can be installed much faster and easier than adaptor sleeve locks. **The installation of Z Lock bearings should be able to be completed in less than ten minutes and saves cost in both time and manpower.**

**ZS2SN , XS2SN**  
**Cylindrical bore**  
**(with Z-Lock)**  
**(with set screw collar lock)**  
*d* 1 3/8 ~ 4 inch  
 40 ~ 100 mm

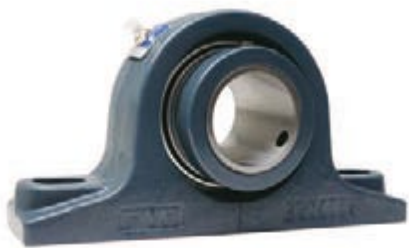
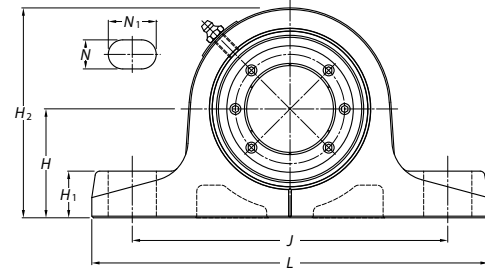
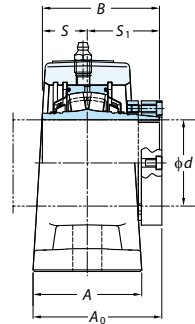
Variations of tolerance of distance from mounting bottom to center of cylindrical bore ( $\Delta H_s$ )

Unit: mm

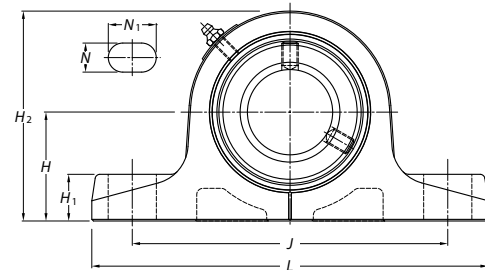
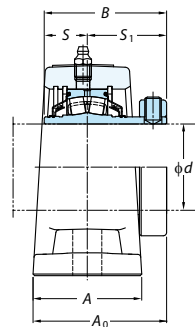
Housing No.	$\Delta H_s$
2SN408 ~ 2SN409	±0.15
2SN410 ~ 2SN420	±0.16



**ZS2SN**



**XS2SN**

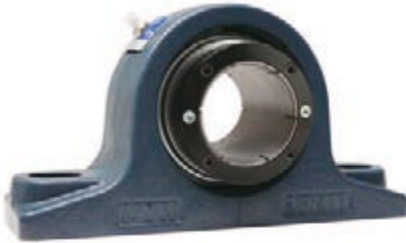


Shaft Dia. inch mm <i>d</i>	Dimensions												Unit No.	Bearing No.	Unit No.	Bearing No.	Bolt Size inch mm
	<i>H</i>	<i>L</i>	<i>A</i>	<i>J</i>	<i>N</i>	<i>N</i> <sub>1</sub>	<i>H</i> <sub>1</sub>	<i>H</i> <sub>2</sub>	<i>A</i> <sub>0</sub>	<i>B</i>	<i>S</i>	<i>S</i> <sub>1</sub>					
1 3/8 1 7/16 1 1/2 40	2 3/8	8 1/16	2 3/8	6 1/2	19/32	31/32	31/32	4 13/32	2 23/32	2.531	1	1.531	ZS2SN408-22 ZS2SN408-23 ZS2SN408-24 ZS2SN408	ZS408-22 ZS408-23 ZS408-24 ZS408	XS2SN408-22 XS2SN408-23 XS2SN408-24 XS2SN408	XS408-22 XS408-23 XS408-24 XS408	M12
1 11/16 1 3/4 45	2 3/8	8 1/16	2 3/8	6 19/32	19/32	7/8	31/32	4 17/32	2 27/32	2.657	1	1.657	ZS2SN409-27 ZS2SN409-28 ZS2SN409	ZS409-27 ZS409-28 ZS409	XS2SN409-27 XS2SN409-28 XS2SN409	XS409-27 XS409-28 XS409	M12
1 15/16 2 50	2 3/4	10 1/32	2 3/4	8	25/32	1 7/32	1 3/32	5 1/8	3 7/32	2.843	1	1.843	ZS2SN410-31 ZS2SN410 ZS2SN410-32	ZS410-31 ZS410 ZS410-32	XS2SN410-31 XS2SN410 XS2SN410-32	XS410-31 XS410 XS410-32	M16
55 2 3/16 2 1/4	2 3/4	10 1/32	2 3/4	8	25/32	1 7/32	1 3/16	5 5/16	3 3/16	2.937	1.126	1.811	ZS2SN411 ZS2SN411-35 ZS2SN411-36	ZS411 ZS411-35 ZS411-36	XS2SN411 XS2SN411-35 XS2SN411-36	XS411 XS411-35 XS411-36	M16
60 2 7/16 2 1/2 65	3 5/32	11 1/32	3 5/32	8 11/16	25/32	1 5/16	1 3/16	6 3/32	3 17/32	3.205	1.252	1.953	ZS2SN412 ZS2SN413-39 ZS2SN413-40 ZS2SN413	ZS412 ZS413-39 ZS413-40 ZS413	XS2SN412 XS2SN413-39 XS2SN413-40 XS2SN413	XS412 XS413-39 XS413-40 XS413	M16
70 2 11/16 2 3/4 2 15/16 75 3	3 3/4	12 7/16	3 17/32	10 3/32	31/32	1 11/32	1 1/4	6 15/16	4 1/8	3.594	1.252	2.343	ZS2SN414 ZS2SN415-43 ZS2SN415-44 ZS2SN415-47 ZS2SN415 ZS2SN415-48	ZS414 ZS415-43 ZS415-44 ZS415-47 ZS415 ZS415-48	XS2SN414 XS2SN415-43 XS2SN415-44 XS2SN415-47 XS2SN415 XS2SN415-48	XS414 XS415-43 XS415-44 XS415-47 XS415 XS415-48	M22
80 100 345 100 281.8 25 34 35 198 115.1 103.6 38.5 65.1	3 15/16	13 19/32	3 15/16	11 3/32	31/32	1 11/32	1 3/8	7 25/32	4 17/32	4.079	1.516	2.563	ZS2SN416	ZS416	XS2SN416	XS416	M22
3 1/4 85 112 345 100 280.2 25 38 35 210 115.1 103.6 38.5 65.1	4 13/32	13 19/32	3 15/16	11 1/32	31/32	1 1/2	1 3/8	8 9/32	4 17/32	4.079	1.516	2.563	ZS2SN417-52 ZS2SN417	ZS417-52 ZS417	XS2SN417-52 XS2SN417	XS417-52 XS417	M22
3 7/16 3 1/2 90 112 380 110 309.9 29 43.1 40 218 120.1 103.6 38.5 65.1	4 13/32	14 31/32	4 11/32	12 3/16	1 5/32	1 11/16	1 9/16	8 19/32	4 23/32	4.079	1.516	2.563	ZS2SN418-55 ZS2SN418-56 ZS2SN418	ZS418-55 ZS418-56 ZS418	XS2SN418-55 XS2SN418-56 XS2SN418	XS418-55 XS418-56 XS418	M27
100 3 15/16 4 125 410 120 335.2 29 46.8 45 239 132.6 113.9 41.3 72.6	4 29/32	16 5/32	4 23/32	13 3/16	1 5/32	1 27/32	1 25/32	9 13/32	5 7/32	4.484	1.626	2.858	ZS2SN420 ZS2SN420-63 ZS2SN420-64	ZS420 ZS420-63 ZS420-64	XS2SN420 XS2SN420-63 XS2SN420-64	XS420 XS420-63 XS420-64	M27

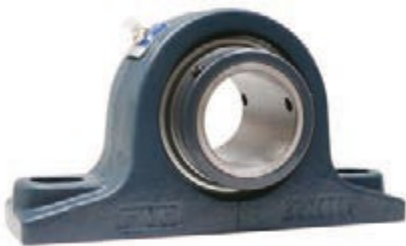
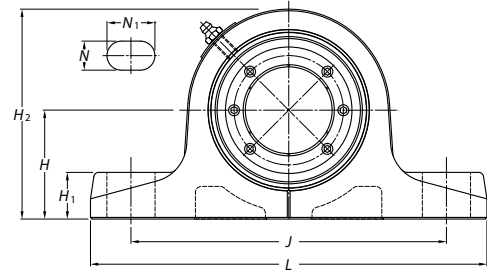
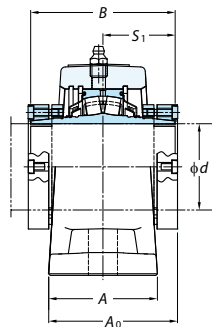
**ZDS2SN , XDS2SN**  
**Cylindrical bore**  
**(with Z-Lock (both))**  
**(with set screw collar lock (both))**  
 $d \ 2\frac{7}{16} \sim 4 \text{ inch}$   
 $60 \sim 100 \text{ mm}$

Variations of tolerance of distance from mounting bottom to center of cylindrical bore ( $\Delta H_s$ )

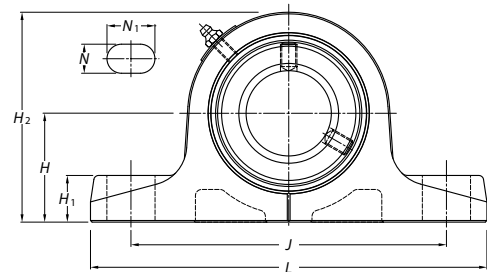
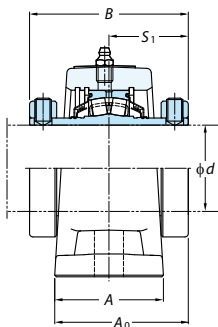
Unit: mm	
Housing No.	$\Delta H_s$
2SN412 ~ 2SN420	$\pm 0.16$



**ZDS2SN**



**XDS2SN**



Shaft Dia. inch mm $d$	Dimensions inch mm											Unit No.	Bearing No.	Unit No.	Bearing No.	Bolt Size inch mm
	H	L	A	J	N	$N_1$	$H_1$	$H_2$	$A_0$	B	$S_1$					
<b>60</b> $2\frac{7}{16}$ $2\frac{1}{2}$	$3\frac{5}{32}$ 80	$11\frac{1}{32}$ 280	$3\frac{5}{32}$ 80	$8\frac{11}{16}$ 220.5	$\frac{25}{32}$ 20	$1\frac{5}{16}$ 33.5	$1\frac{3}{16}$ 30	$6\frac{3}{32}$ 155	$3\frac{17}{32}$ 89.6	3.906	1.953	<b>ZDS2SN412</b> <b>ZDS2SN413-39</b> <b>ZDS2SN413-40</b> <b>ZDS2SN413</b>	ZDS412 ZDS413-39 ZDS413-40 ZDS413	<b>XDS2SN412</b> <b>XDS2SN413-39</b> <b>XDS2SN413-40</b> <b>XDS2SN413</b>	XDS412 XDS413-39 XDS413-40 XDS413	$\frac{5}{8}$ M16
<b>70</b> $2\frac{11}{16}$ $2\frac{3}{4}$ $2\frac{15}{16}$ 3	$3\frac{3}{4}$ 95	$12\frac{7}{16}$ 316	$3\frac{17}{32}$ 90	$10\frac{3}{32}$ 256.4	$\frac{31}{32}$ 25	$1\frac{11}{32}$ 34.1	$1\frac{1}{4}$ 32	$6\frac{15}{16}$ 176	$4\frac{1}{8}$ 104.5	4.686	2.343	<b>ZDS2SN414</b> <b>ZDS2SN415-43</b> <b>ZDS2SN415-44</b> <b>ZDS2SN415-47</b> <b>ZDS2SN415</b> <b>ZDS2SN415-48</b>	ZDS414 ZDS415-43 ZDS415-44 ZDS415-47 ZDS415 ZDS415-48	<b>XDS2SN414</b> <b>XDS2SN415-43</b> <b>XDS2SN415-44</b> <b>XDS2SN415-47</b> <b>XDS2SN415</b> <b>XDS2SN415-48</b>	XDS414 XDS415-43 XDS415-44 XDS415-47 XDS415 XDS415-48	$\frac{7}{8}$ M22
<b>80</b> $3\frac{1}{4}$	$3\frac{15}{16}$ 100	$13\frac{19}{32}$ 345	$3\frac{15}{16}$ 100	$11\frac{3}{32}$ 281.8	$\frac{31}{32}$ 25	$1\frac{11}{32}$ 34	$1\frac{3}{8}$ 35	$7\frac{25}{32}$ 198	$4\frac{17}{32}$ 115.1	5.126	2.563	<b>ZDS2SN416</b>	ZDS416	<b>XDS2SN416</b>	XDS416	$\frac{7}{8}$ M22
<b>85</b> $3\frac{1}{4}$	$4\frac{13}{32}$ 112	$13\frac{19}{32}$ 345	$3\frac{15}{16}$ 100	$11\frac{1}{32}$ 280.2	$\frac{31}{32}$ 25	$1\frac{1}{2}$ 38	$1\frac{3}{8}$ 35	$8\frac{9}{32}$ 210	$4\frac{17}{32}$ 115.1	5.126	2.563	<b>ZDS2SN417-52</b> <b>ZDS2SN417</b>	ZDS417-52 ZDS417	<b>XDS2SN417-52</b> <b>XDS2SN417</b>	XDS417-52 XDS417	$\frac{7}{8}$ M22
<b>90</b> $3\frac{7}{16}$ $3\frac{1}{2}$	$4\frac{13}{32}$ 112	$14\frac{31}{32}$ 380	$4\frac{11}{32}$ 110	$12\frac{3}{16}$ 309.9	$1\frac{5}{32}$ 29	$1\frac{11}{16}$ 43.1	$1\frac{9}{16}$ 40	$8\frac{19}{32}$ 218	$4\frac{23}{32}$ 120.1	5.126	2.563	<b>ZDS2SN418-55</b> <b>ZDS2SN418-56</b> <b>ZDS2SN418</b>	ZDS418-55 ZDS418-56 ZDS418	<b>XDS2SN418-55</b> <b>XDS2SN418-56</b> <b>XDS2SN418</b>	XDS418-55 XDS418-56 XDS418	1 M27
<b>100</b> $3\frac{15}{16}$ 4	$4\frac{29}{32}$ 125	$16\frac{5}{32}$ 410	$4\frac{23}{32}$ 120	$13\frac{3}{16}$ 335.2	$1\frac{5}{32}$ 29	$1\frac{27}{32}$ 46.8	$1\frac{25}{32}$ 45	$9\frac{13}{32}$ 239	$5\frac{7}{32}$ 132.6	5.716	2.858	<b>ZDS2SN420</b> <b>ZDS2SN420-63</b> <b>ZDS2SN420-64</b>	ZDS420 ZDS420-63 ZDS420-64	<b>XDS2SN420</b> <b>XDS2SN420-63</b> <b>XDS2SN420-64</b>	XDS420 XDS420-63 XDS420-64	1 M27