

HENFEL

bearing HOUSINGS



Our Vision

RINGFEDER POWER TRANSMISSION is the global market leader in niche markets in the power transmission industry, strongly preferred for its customised, need-based solutions that provide customers with outstanding and worry-free operation.

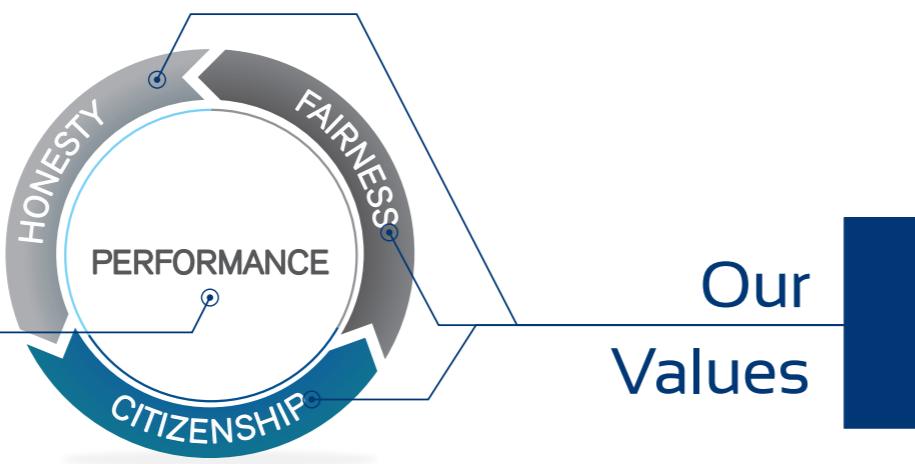


Our Mission

With all our energy we pursue the target to establish RINGFEDER POWER TRANSMISSION as the best solution on the market - wherever something is turning, moving or shaking.



Our Core



Our Slogan

Partner for Performance



www.henfel.com.br | www.ringfeder.com

INDEX

1 About Us	2
2 Technical Information	3
2.1 Materials	3
2.2 Seals	4
2.3 Housing Types and Features	8
2.4 Loadability	15
2.5 Constructive Forms	19
2.6 Circumferential Velocity	20
2.7 Specification of Henfel Bearing Housings	21
3 Dimensional Tables	22
3.1 HSBM	22
3.2 HSBP	24
3.3 HSBM 30K	26
3.4 HSBP 30K	28
3.5 SBPC	30
3.6 SD-31	31
3.7 SD 500-600	32
3.8 SN 30	33
3.9 SNAH 200	34
3.10 SNAH 300	35
3.11 SNAH 500	36
3.12 SNAH 600	37
3.13 SAF 200-300	38
3.14 SAF 500	39
3.15 SAF 600	40
3.16 SOFN 200-300	41
3.17 SOFN 500-600	42
3.18 STM	43
3.19 SAI	44
3.20 F-500 - 722500	46
3.21 HSPA	48
3.2 HFR	49
3.24 HEC/HF	50



ABOUT US

Henfel develops and manufactures mechanical products for power transmission, such as flexible couplings, constant and variable speed hydrodynamic couplings, besides a complete line of bearing housings. The company serves the strictest industrial segments, such as mining, steel, cement, sugar and ethanol, pulp and paper, oil and gas, among others.

The company is a division of RINGFEDER Power Transmission division, which with its premium brands RINGFEDER and GERWAH, is one of the world leaders when it comes to locking assemblies, shrink discs, friction springs and industrial couplings and their applications.

The synergies that result of this alliance adds many competences to the group and it is an important step towards serving customers with a complete range of solutions for power transmission drive systems and braking systems.

1

2.1 MATERIALS

HENFEL bearing housings are manufactured out of three different types of materials, depending of the work which they are intended for.

- Grey Cast Iron DIN EN 1561
- Nodular Cast Iron DIN EN 1563
- ASTM A 148 - Gt. 80-40 or ASTM A 216 Gr. WCB

TECHNICAL INFORMATION

2



The description of Henfel bearing housings suffers alteration according to the specified material, being enough to add the letter in the nomenclature of the bearing, according to table below:

MATERIAL	SAI	HSBM	HSBP	SBPC	STM	HSPA	HSBM30K	HSBP30K	SD	HFR	SAF	F500	SOFN	SN30	SNAH	HEC	HF
Grey	*	*	*	*	**	**	*	*	*	*	*	*	*	*	*	*	*
Nod	N	N	N	N	*	*	N	N	N	N	N	N	N	N	S	N	N
Steel	S	S	S	S	S	S	S	S	S	S	***	S	S	S	**	S	S

* Normal standard manufacture.;

** These materials are not common for these series

*** Series SAF; requests for housings made of cast steel should add the suffix "S" (instead of a prefix) to the designation. Ex.: SAFS-522

Ex.: NSAI (Housing SAI made of nodular cast iron); SHSBP (Housing SBP made of cast steel); SSNAHD (Housings of the SNAH series with solid base, made of nodular cast iron).

TOLERANCES

HENFEL bearing housings are manufactured in accordance with the most stringent market norms and therefore are in line with existing application standards:

- Casting dimensions in conformity with norm (DIN 1686-GTB-17) where machining is absent;
- Housing height from base to center in conformity with norm (ISO Adjustment h-11);
- Machining of bearings track in conformity with norm (ISO Adjustment H-7);
- All other machined dimensions in conformity with norm (DIN 7168 - medium grade).



- All the contained dimensions in this catalog may be changed without previous warning due to technological evolution.
- Some series can bear split bearings. Please consult our Engineering Department.
- Housings with special tolerances can be made upon request.

2.2 SEALS

The seals' main function is to protect the bearing and internal components against contamination, thus avoiding early failures and enabling the bearing to reach its lifespan. Therefore, it has a direct impact on operational performance, productivity and cost reduction with undesired and unpredicted maintenance stops. Besides, they also prevent lubricant leakage. There are 03 classes of seals available in Henfel's standard lines:

Contact seals

The seal elements are in contact with the shaft: this system has limited application due to the circumferential velocity of the shaft. It is recommended for low rotations and temperatures.

Dinamic seals

The sealing elements are fastened on the shaft, thus they are dinamic. Therefore, they have practically no attrition on the shaft's surface, which enables them for applications in high rotations and temperatures.

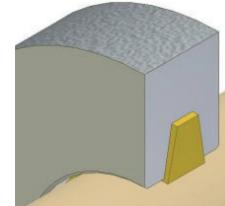
Combined seals

Two or more combined seals ensure better protection against penetration of external contaminants and lubricant leaks. This system is recommended for application in critical and contaminated environment; the combined seals are indicated for low or high rotations and temperatures, depending on the combination used.



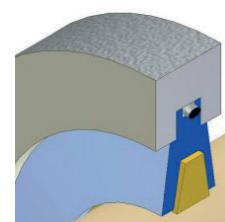
The original total width of the housings can be altered when alternate seals are used instead of the standard. Please refer to the tables in this catalog for original housing width dimensions with standard seals. We recommend that our engineering division be consulted prior to any request for seals not listed on the dimensional tables.

CONTACT SEALS



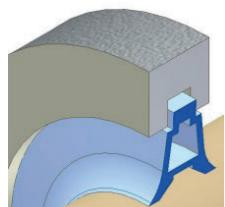
TC

- Description: Felt strips indicated for operation in non-aggressive environments.
- Lubrication: Grease.
- Circumferential velocity: Up to 4m/s.
- Operation temperature: Between -40 to 100°C.
- Tolerable misalignment: 0,5°.
- Special characteristics: Before being set, the felt strips should be soaked in oil heated to the temperature of 80 to 85°C. It is important that the seat of the felt strips on the housings and the felt classification be within the recommended specifications. The specifications can be supplied by our engineering department upon request



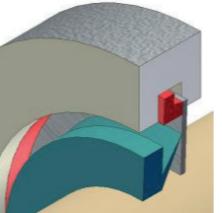
TC (TSNA-C)

- Description: Felt strips indicated for operation in non-aggressive environments.
- Lubrication: Grease.
- Circumferential velocity: Up to 4m/s.
- Operation temperature: Between -40 to 100°C.
- Tolerable misalignment: 0,5°.
- Special characteristics: Before being set, the felt strips should be soaked in oil heated to the temperature of 80 to 85°C. It is important that the seat of the felt strips on the housings and the felt classification be within the recommended specifications. The specifications can be supplied by our engineering department upon request



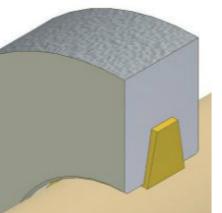
TG

- Description: Split nitrile or polyurethane rubber retainers with double lips.
- Lubrication: Grease.
- Circumferential velocity: Up to 8m/s.
- Operation temperature: Between -40°C to 100°C.
- Tolerable misalignment: 1°.
- Special characteristics: Upon mounting, the spaces between the contact lips should be filled with grease. This type of seal is specific for bearing housings of the SNAH series.



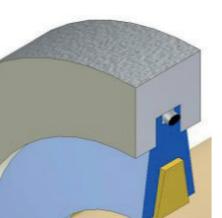
TA

- Description: One piece V-type ring with a lip that seals axially on a metal plate, or directly on an axial surface of the bearing housing itself. This contact surface should be machined.
- Lubrication: Grease or oil.
- Circumferential velocity: Up to 12 m/s, but at speeds of 7 m/s or higher they must be axially blocked on the shaft.
- Operation temperature: Between -40°C to 100°C.
- Tolerable misalignment: 1°.
- Special characteristics: These retainers are designed exclusively for bearing housings of the SNAH series.



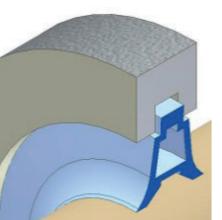
GS

- Description: Nitrile GS rubber retainer.
- Lubrication: Grease.
- Circumferential velocity: Up to 8m/s.
- Operation temperature: Between -40°C a 100°C.
- Tolerable misalignment: 1°.



ZF

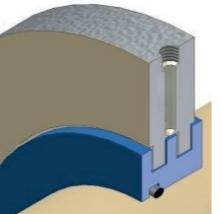
- Description: Nitrile ZF rubber retainer.
- Lubrication: Grease.
- Circumferential velocity: Up to 8m/s.
- Operation temperature: Between -40°C a 100°C.
- Tolerable misalignment: 1°.



R

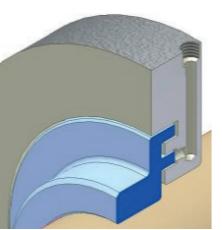
- Description: One piece nitrile rubber retainer with spring.
- Lubrication: Grease or oil.
- Circumferential velocity: Up to 8 m/s; the surface of the contact shaft must be grounded. Operating speed can be increased up to 20 m/s, but the contact surface should be hardened and grounded.
- Operation temperature: Between -40°C a 100°C.
- Tolerable misalignment: 1°.
- Special characteristics: The retainer should be mounted with its lip facing toward the outside of the housing in order to avoid penetration of contaminants, but to avoid lubricant leaks, the retainer may be fitted inversely when a valve to relieve pressure is being used.

DINAMIC SEALS



TS

- Description: Metal ring with radial tears, which after assembled on the bearing housing, form grooves resembling a labyrinth.
- Lubrication: Grease.
- Circumferential velocity: Suited for high rotations.
- Operation temperature: Suited for high temperatures.
- Tolerable misalignment: 0,25°.
- Special characteristics: The spaces between grooves should be filled with grease. They can only be installed on split housings or lids. An o'ring as part of the labyrinth seal is fitted on the shaft.

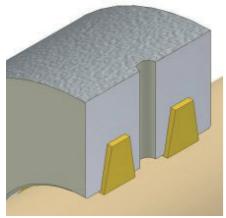


AS

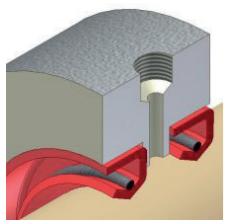
- Description: Metal ring with axial tears, which after assembled on the bearing housing, form grooves resembling a labyrinth.
- Lubrication: Grease.
- Circumferential velocity: Suited for high rotations.
- Operation temperature: Suited for high temperatures.
- Tolerable misalignment: 0,25°.
- Special characteristics: The spaces between grooves should be filled with grease. On request, these seals can be supplied with greasing nipple, for elimination of possible contaminants that may pass through the seal grooves. The labyrinth has an o'ring in contact with the shaft.

COMBINED SEALS

FF

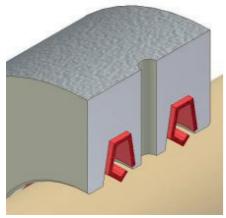


- Description: Two felt strips, suited for not very contaminated environments.
- Lubrication: Grease.
- Circumferential velocity: Up to 4m/s.
- Operation temperature: Between -40°C to 100°C.
- Tolerable misalignment: 0,5°.
- Special characteristics: The felt strips should be soaked in heated oil at the temperature of 80 to 85°C before mounting. It is important that the seat of the felt strips on the housings and the felt classification be within the recommended specifications. In case of need we shall gladly supply the specifications.



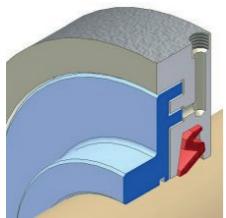
RR

- Description: A pair of one piece retainers with spring and greasing nipple for intermediate lubrication.
- Lubrication: Grease or oil.
- Circumferential velocity: Up to 8 m/s; the contact shaft surface must be ground. Operating speed of up to 20 m/s can be obtained if the contact surface is hardened and ground.
- Operation temperature: Between -40°C to 100°C.
- Tolerable misalignment: 1°.
- Special characteristics: The retainers should be fitted with their lips facing the external part of the bearing, so as to avoid penetration of contaminants. They can be fitted inversely if a valve to relieve pressure is used.



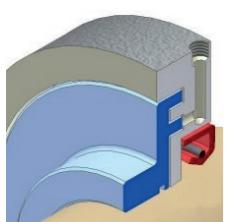
GSGS

- Description: Two nitrile rubber GS retainers.
- Lubrication: Grease.
- Circumferential velocity: Up to 8 m/s.
- Operation temperature: Between -40°C to 100°C.
- Tolerable misalignment: 1°.



ASZF

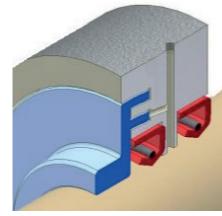
- Description: Axial labyrinth and ZF retainer, with greasing nipple for grease injection in between, eliminating impurities to the external part of the assembly.
- Lubrication: Grease.
- Circumferential velocity: Up to 8m/s.
- Operation temperature: Between -40°C to 100°C.
- Tolerable misalignment: 0,25°.
- Special characteristics: The retainer should be mounted with its lip facing toward the outside of the housing in order to avoid penetration of contaminants.



ASR

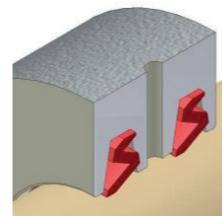
- Description: Axial labyrinth, one piece retainer with spring and greasing nipple for grease injection in between, eliminating impurities to the external part of the assembly.
- Lubrication: Grease.
- Circumferential velocity: Up to 8 m/s; the contact shaft surface must be ground. Speeds of up to 20 m/s are possible if the contact surface is hardened and ground.
- Operation temperature: Between -40°C to 100°C.
- Tolerable misalignment: 0,25°.
- Special characteristics: The retainer should be mounted with its lip facing toward the outside of the housing in order to avoid penetration of contaminants.

ASRR

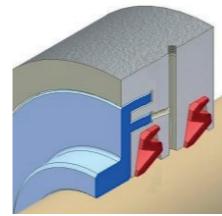


- Description: Axial labyrinth, a pair of one piece retainers with spring and greasing nipple for injection of grease in between, eliminating the impurities to the external part of the assembly.
- Lubrication: Grease.
- Circumferential velocity: Up to 8 m/s; the contact shaft surface must be ground. Operating speed of up to 20 m/s can be obtained if the contact surface is hardened and ground.
- Operation temperature: Between -40°C to 100°C.
- Tolerable misalignment: 0,25°.
- Special characteristics: The retainers should be fitted with their lips facing the external part of the housing to avoid penetration of contaminants. They can be fitted inversely if a valve to relieve pressure is used.

ZFZF

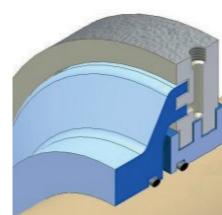


- Description: Two nitrile rubber ZF retainers.
- Lubrication: Grease.
- Circumferential velocity: Up to 8m/s.
- Tolerable misalignment: Between -40°C to 100°C.
- Special characteristics: 1°.



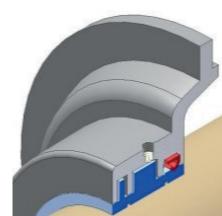
ASZZF

- Description: Axial labyrinth, a pair of one piece retainers with spring and greasing nipple for injection of grease in between, eliminating the impurities to the external part of the assembly.
- Lubrication: Grease.
- Circumferential velocity: Up to 8 m/s; the contact shaft surface must be ground. Operating speed of up to 20 m/s can be obtained if the contact surface is hardened and ground.
- Operation temperature: Between -40°C to 100°C.
- Tolerable misalignment: 0,25°.
- Special characteristics: The retainers should be fitted with their lips facing the external part of the housing to avoid penetration of contaminants. They can be fitted inversely if a valve to relieve pressure is used.



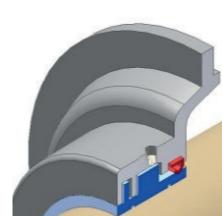
TAS

- Description: Two metal rings of which one radial and the other axial which when assembled form grooves resembling a labyrinth.
- Lubrication: Grease or oil.
- Circumferential velocity: Suited for high rotations.
- Operation temperature: Suited for high temperatures.
- Tolerable misalignment: 0,25°.
- Special characteristics: The spaces between grooves should be filled with grease.



TSGS

- Description: Composed of a radial labyrinth and a GS nitrile retainer.
- Lubrication: Grease.
- Circumferential velocity: Up to 8m/s. Above this velocity, the labyrinth must be hardened.
- Operation temperature: Up to 100°C.
- Tolerable misalignment: 0,5°.
- Special characteristics: Split radial labyrinth made of GGG50 ductile cast iron set directly on the shaft as a sacrifice sleeve since the retainer is applied on the surface of the labyrinth. Therefore, it preserves the shaft from wearing. Excellent performance and protection for internal components.



TSR

- Description: Composed of a radial labyrinth and a retainer.
- Lubrication: Grease.
- Circumferential velocity: Up to 8m/s. Above this velocity, the labyrinth must be hardened.
- Operation temperature: Up to 100°C.
- Tolerable misalignment: 0,5°.
- Special characteristics: Split radial labyrinth made of GGG50 ductile cast iron set directly on the shaft as a sacrifice sleeve since the retainer is applied on the surface of the labyrinth. Therefore, it preserves the shaft from wearing. Excellent performance and protection for internal components.

2.3 HOUSING TYPES AND FEATURES

HENFEL produces many housing types for the most diverse uses. The table below contains some of their basic features which will help you with the specifications.

SPLIT HOUSINGS

HSBM/FHSM

- Features: Split, for shafts measuring between 35 and 470 mm. Shaft measurements in inches or millimeters. Appropriate for seating self-compensating roller bearings of the 222-K and 231-K series with adapter sleeves. They can seat split bearings, however, the designation must be changed by adding the prefix B. Please contact our engineering department in case you need to use different bearing series. It has split lateral lids and two holes on the base up to size 32 (inclusively). It can be supplied with O4 holes on the base by simply adding the prefix "F" to the reference. Beyond size 32 it has four holes on the base. Main dimensions are derived from series SN, SNA, SNH-500 and SD-31. Up to size 56, the blocked constructive form is obtained through locating rings. Above this size it is provided by the side covers.
- Application: General purpose, when rigidity of the unit must be combined with easy assembling, which is guaranteed by the split housing characteristics and adapter sleeves. They are widely used in belt conveyor pulleys.
- Lubrication: Grease.
- Standard seal: ASR.
- Admissible seals: AS, R, ZF, GS, TC, RR, GSGS, ZFZF, ASZF, ASZFF, ASRR, TSGS, TSR.
- Dimensional: See pages 22 and 23.

HSBP/HSBP-D

- Features: Split, for shafts measuring between 40 and 470 mm. Shaft measurements in inches or millimeters. Appropriate for seating self-compensating roller bearing of the 222-K and 230-K series with adapter sleeves. They can seat split bearings, however, the designation must be changed by adding the prefix B. Please contact our engineering department in case you need to use different bearing series. It has split lateral lids and four holes on the base. Up to size 20 inclusively, it can be supplied with 2 holes on the base by simply adding the suffix "D" to the reference. Main dimensions are derived from series SAF-500. Up to size 56, the blocked constructive form is obtained through locating rings. Above this size it is provided by the side covers.
- Application: General purpose, when rigidity of the unit must be combined with easy assembling, which is guaranteed by the split housing characteristics and adapter sleeves. They are widely used in belt conveyor pulleys.
- Lubrication: Grease.
- Standard seal: ASR.
- Admissible seals: AS, R, ZF, GS, TC, RR, GSGS, ZFZF, ASZF, ASZFF, ASRR, TSGS, TSR.
- Dimensional: See pages 24 and 25.

HSBM 30K

- Features: Split at 30° in respect to the base, for shafts measuring between 35 and 360 mm. Shaft measurements in inches or millimeters. Appropriate for seating self-compensating roller bearings of the 222-K and 231-K series with adapter sleeves. They can seat split bearings, however, the designation must be changed by adding the prefix B. For parallel bearings, the suffix "C" must be added to the housing reference. Please contact our engineering department in case you need to use different bearing series. It has split lateral lids and four holes on the base. Main dimensions are derived from series SN, SNA, SNH-500 and SD-31. Up to size 56, the blocked constructive form is obtained through locating rings. Above this size it is provided by the side covers.
- Application: General purpose, when rigidity of the unit must be combined with easy assembling, which is guaranteed by the split housing characteristics and adapter sleeves. Loadability is higher when load is not directed to the base. Due to the inclination of the split, they are applied in cases where the load is strongly directed at the lateral of the housing. In situations where they are installed on a inclined or vertical plan (45° to 90°), they make the access to the bearing during the maintenance much easier.
- Lubrication: Grease.
- Standard seal: ASR.
- Admissible seals: AS, R, ZF, GS, TC, RR, GSGS, ZFZF, ASZF, ASZFF, ASRR, TSGS, TSR.
- Dimensional: See pages 26 and 27.

HSBP 30K

- Features: Split at 30° in respect to the base, for shafts measuring between 40 and 360 mm. Shaft measurements in inches or millimeters. Appropriate for seating self-compensating roller bearing of the 222-K and 230-K series with adapter sleeves. They can seat split bearings, however, the designation must be changed by adding the prefix B. For parallel bearings, the suffix "C" must be added to the housing designation. Please contact our engineering department in case you need to use different bearing series. They have split lateral lids and four holes on the base. Main dimensions are derived from series SAF-500. Up to size 56 the blocked constructive form is obtained through locating rings. Above this size it is provided by the side covers.
- Application: General purpose, when rigidity of the unit must be combined with easy assembling, which is guaranteed by the split housing characteristics and adapter sleeves. Loadability is higher when load is not directed to the base. Due to the inclination of the split, they are applied in cases where the load is strongly directed at the lateral of the housing. In situations where they are installed on a inclined or vertical plan (45° to 90°), they make the access to the bearing during the maintenance much easier.
- Lubrication: Grease.
- Standard seal: ASR.
- Admissible seals: AS, R, ZF, GS, TC, RR, GSGS, ZFZF, ASZF, ASZFF, ASRR, TSGS, TSR.
- Dimensional: See pages 28 and 29.

SBPC / SBPC-D

- Features: Split, for shafts measuring from (54 / 42,9) to (330,2 / 292,1) mm. Appropriate for seating self-compensating roller bearings of the series 222-C and 230-C, without adapter sleeves. Please contact our engineering department for use of different bearing series. Side covers provide the desired constructive forms. It has 4 holes on the base, but up to and including size 20 it can be supplied with 2 holes, which is done by simply adding the suffix "D" to the housing designation. Its main dimensions are derived from the SAF-600 series.
- Application: General purpose, but with restricted use due to the fact that it requires special shafts which increase the cost of the equipment. Special accessories for assembling are required.
- Lubrication: Grease.
- Standard seal: AS.
- Admissible seals: ASR, R, ZF, TC, GS, RR, GSGS.
- Dimensional: See page 30.

SD-31

- Features: Split, for shafts measuring between 150 and 320 mm. Shaft measurements in inches or millimeters. Appropriate for seating bearings of the series 231-K, with adapter sleeves. The desired constructive form is provided by locating rings and side covers.
- Application: Suited for very heavy loads, e.g: ball mills, choppers, shredders.
- Standard lubrication: Oil.
- Admissible: Grease.
- Standard seal: TS.
- Dimensional: See page 31.

SD-500

- Features: Split, for shafts measuring between 135 and 300 mm. Shaft measurements in inches or millimeters. Appropriate for seating 222-K bearings, with adapter sleeves. Please contact our engineering department in case you need to use different bearing series. These housings are already manufactured with the desired constructive form and therefore, do not include any resources for later modification.
- Application: Suited for applications with heavy loads, e.g: ball mills, choppers, shredders.
- Lubrication: Grease.
- Standard seal: FF.
- Admissible seals: RR, TS, GSGS.
- Dimensional: See page 32.

SD-600

- Features: Split, for shafts measuring between 135 and 260 mm. Shaft measurements in inches or millimeters. Appropriate for seating 223-K bearings, with adapter sleeves. Please contact our engineering department in case you need to use different bearing series. These housings are already manufactured with the desired constructive form and therefore, do not include any resources for later modification.
- Application: Suited for applications with heavy loads, e.g: ball mills, choppers, shredders
- Lubrication: Grease.
- Standard seal: FF.
- Admissible seals: RR, TS, GSGS.
- Dimensional: See page 32.

SN-30

- Features: Split, for shafts measuring between 110 and 260 mm. Shaft measurements in inches or millimeters. Appropriate for seating 230-K bearings, with adapter sleeves. Please contact our engineering department in case you need to use different bearing series. The desired constructive form is provided by locating rings and side covers.
- Application: Applications for medium and small loads, passing perpendicularly through the base.
- Lubrication: Grease.
- Standard seal: TC.
- Admissible seals: ZF, GS, TS.
- Dimensional: See page 33.

SNAH-200

- Features: Split, for shafts measuring between 25 and 160 mm. Please consult our engineering department for shafts in inches. Appropriate for seating self-compensating ball bearings of the series 12-C and 22-C, and self-compensating roller bearings of the series 222-C or 232-C, without adapter sleeves. Please contact our engineering department in case you need to use different bearing series. The desired constructive form is provided by locating rings and lateral side covers. Alternatively, this housing type can be ordered in nodular cast iron and with solid base by simply adding the prefix "S" and the suffix "D" to the housing reference. For 2 holes on the base the suffix "MS 1" should be added, and the suffix "MS 2" indicates 4 holes.
- Application: For general purposes, light to normal loads. Special care should be taken when selecting bearings and seals for each specific application.
- Standard lubrication: Grease.
- Standard seal: TC (tsna-c).
- Admissible seals: TG (tsna-g), TA (tsna-a), TS.
- Dimensional: See page 34.

SNAH-300

- Features: Split, for shafts measuring between 25 and 100 mm. Please consult our engineering department for shafts in inches. Appropriate for seating self-compensating ball bearings of the series 13-C and 23-C, and self-compensating roller bearings of the series 213-C or 223-C, without adapter sleeves. Please contact our engineering department in case you need to use different bearing series. The desired constructive form is provided by locating rings and side covers. Alternatively, this housing type can be ordered in nodular cast iron and with solid base by simply adding the prefix "S" and the suffix "D" to the housing reference. For 2 holes on the base the suffix "MS 1" should be added, and the suffix "MS 2" indicates 4 holes.
- Application: For general purposes, light to normal loads. Special care should be taken when selecting bearings and seals for each specific application.
- Standard lubrication: Grease.
- Standard seal: TC (tsna-c).
- Admissible seals: TG (tsna-g), TA (tsna-a), TS.
- Dimensional: See page 35.

SNAH-500

- Features: Split, for shafts measuring between 20 and 140 mm. Please consult our engineering department for shafts in inches. Appropriate for seating self-compensating ball bearings of the series 12-K and 22-K, and self-compensating roller bearings of the series 222-K and 232-K, with adapter sleeves. Please contact our engineering department in case you need to use different bearing series. The desired constructive form is provided by locating rings and side covers. Alternatively, this housing type can be ordered in nodular cast iron and with solid base, by simply adding the prefix "S" and the suffix "D" to the housing designation. For 2 holes on the base the suffix "MS 1" should be added, and the suffix "MS 2" indicates 4 holes.
- Application: For general purposes, light to normal loads. Special care should be taken when selecting bearings and seals for each specific application.
- Standard lubrication: Grease.
- Standard seal: TC (tsna-c).
- Admissible seals: TG (tsna-g), TA (tsna-a), TS.
- Dimensional: See page 36.

SNAH-600

- Features: Split, for shafts measuring between 20 and 90 mm. Please consult our engineering department for shafts in inches. Appropriate for seating self-compensating ball bearings of the series 13-K and 23-K, and self-compensating roller bearings of the series 213-K or 223-K, without adapter sleeves. Please contact our engineering department in case you need to use different bearing series. The desired constructive form is provided by locating rings and side covers. Alternatively, this housing type can be ordered in nodular cast iron and with solid base, by simply adding the prefix "S" and the suffix "D" to the housing designation. For 2 holes on the base the suffix "MS 1" should be added, and the suffix "MS 2" indicates 4 holes.
- Application: For general purposes, light to normal loads. Special care should be taken when selecting bearings and seals for each specific application.
- Standard lubrication: Grease.
- Standard seal: TC (tsna-c).
- Admissible seals: TG (tsna-g), TA (tsna-a), TS.
- Dimensional: See page 37.

SAF-200 / FSAF-200

- Features: Split, for shafts measuring between (3.5/8"-3") to (9.9/16" - 8.5/16"). Shaft measurements in inches. Appropriate for seating bearings of the series 222-C, without adapter sleeves. With 2 holes on the base for housings up to and including size SAF-220; if 4 holes are required please add the prefix "F" to the bearing reference. Please contact our engineering department in case you need to use different bearing series. The desired constructive form is provided by locating rings and side covers.
- Application: The ideal bearings for applications with medium to high loads and high rotation. They are usually used on fans and exhausters.
- Standard lubrication: Oil.
- Admissible lubrication: Grease.
- Standard seal: TS.
- Admissible seal: TAS.
- Dimensional: See page 38.

SAF-300 / FSAF-300

- Features: Split, for shafts measuring between (3.5/8"-3") to (9.9/16" - 8.5/16"). Shaft measurements in inches. Appropriate for seating bearings of the series 222-C, without adapter sleeves. With 2 holes on the base for housings up to and including size SAF-220; if 4 holes are required please add the prefix "F" to the bearing reference. Please contact our engineering department in case you need to use different bearing series. The desired constructive form is provided by locating rings and side covers.
- Application: The ideal bearings for applications with medium to high loads and high rotation. They are usually used on fans and exhausters.
- Standard lubrication: Oil.
- Admissible lubrication: Grease.
- Standard seal: TS.
- Admissible seal: TAS.
- Dimensional: See page 38.

SAF-500 / FSAF-500

- Features: Split, for shafts measuring between 40 and 200 mm. Shaft measurements can be in inches or millimeters. Appropriate for seating roller bearings of the series 222-K, 202-K, 232-K, and self-compensating ball bearings of the series 12-K, 22-K, with their respective adapter sleeves. With 2 holes on the base for housings up to and including size SAF-520; if 4 holes are required please add the prefix "F" to the housing reference (only for housings up to size SAF-520). Please contact our engineering department in case you need to use different bearing series. The desired constructive form is provided by locating rings and side covers.
- Application: The ideal bearings for applications with medium to high loads and high rotation. They are usually used on fans and exhausters.
- Standard lubrication: Oil.
- Admissible lubrication: Grease.
- Standard seal: TS.
- admissible seal: TAS.
- Dimensional: See page 39.

SAF-600 / FSAF-600

- Features: Split, for shafts measuring between 40 and 170 mm. Shaft measurements in inches or millimeters. Appropriate for seating roller bearings of the series 223-K, with adapter sleeves. With 2 holes on the base for housings up to and including size SAF-617; if 4 holes are required please add the prefix "F" to the housing reference. Please contact our engineering department in case you need to use different bearing series. The desired constructive form is provided by locating rings and side covers.
- Application: The ideal bearings for applications with medium to high loads and high rotation. They are usually used on fans and exhausters.
- Standard lubrication: Oil.
- Admissible lubrication: Grease.
- Standard seal: TS.
- Admissible seal: TAS.
- Dimensional: See page 40.

SOFN-200

- Features: Split, for shafts measuring between 85 and 240 mm. Please contact our engineering department for shafts in inches. Appropriate for seating self-compensating roller bearings of the series 222-C, without adapter sleeves. Please contact our engineering department in case you need to use different bearing series. Two lateral side covers provide the desired constructive form. With lubricating ring and socket type oil sight glass. Refrigeration chamber and temperature sensor can be supplied on request.
- Application: Suited for high rotations and temperatures. Indicated for loads perpendicular to the base. They are usually applied on fans and exhausters.
- Lubrication: Oil.
- Seal: Specific labyrinth ring as shown on the dimension table.
- Dimensional: See page 41.

SOFN-300

- Features: Split, for shafts measuring between 50 and 180 mm. Please contact our engineering department for shafts in inches. Appropriate for seating self-compensating roller bearings of the series 223-C, without adapter sleeves. Please contact our engineering department in case you need to use different bearing series. Two side covers provide the desired constructive form. With lubricating ring and socket type oil sight glass. Refrigeration chamber and temperature sensor can be supplied on request.
- Application: Suited for high rotations and temperatures. Indicated for loads perpendicular to the base. They are usually applied on fans and exhausters.
- Lubrication: Oil.
- Seal: Specific labyrinth ring as shown on the dimension table.
- Dimensional: See page 41.

SOFN-600

- Features: Split, for shafts measuring between 45 and 160 mm. Please contact our engineering department for shafts in inches. Appropriate for seating self-compensating roller bearings of the series 223-K, with adapter sleeves for securing. Please contact our engineering department in case you need to use different bearing series. Two side covers provide the desired constructive form. With lubricating ring and socket type oil sight glass. Refrigeration chamber and temperature sensor can be supplied on request.
- Application: Suited for high rotations and temperatures. Indicated for loads perpendicular to the base. They are usually applied on fans and exhausters.
- Lubrication: Oil.
- Seal: Specific labyrinth ring as shown on the dimension table.
- Dimensional: See page 42.

ONE PIECE HOUSING

SAI

- Features: One piece housing, for shafts of 40 to 300 mm. Shaft measurements in inches or millimeters. Appropriate for seating self-compensating roller bearings of the series 222-K, with adapter sleeves. Please contact our engineering department in case you need to use different bearing series. Up to size 32 (inclusively) they have locating rings, and above, the side covers provide the constructive forms.
- Application: General purpose, to impart greater rigidity to mounted unit. Good strength when loads are not directed to the base.
- Lubrication: Grease.
- Standard seal: AS.
- Admissible seals: ASZF, ASR, R, ZF, TC, GS, RR, GSGS.
- Dimensional: See pages 44 and 45.

TAKE-UP HOUSINGS

STM

- Features: One piece take-up housing, for shafts measuring from 35 to 135 mm. Shaft measurements in inches or millimeters. Appropriate for seating bearings of the series 222-K, with adapter sleeves. Please contact our engineering department in case you need to use different bearing series. Locating rings and side covers provide the desired constructive forms.
- Application: Suited for applications where tensioning of the unit is desired. Examples: elevators, conveyor.
- Lubrication: Grease.
- Standard seal: AS.
- Admissible seals: ASR, R, ZF, TC, GS, RR, GSGS, ASRR, ASZFZF.
- Dimensional: See page 43.

HSPA

- Features: One piece, take up housing, from shafts measuring from 125 to 360 mm. Shaft measurements in inches or millimeters. Appropriate for seating bearings of the series 222-K, 230K, 231K and 232K with adapter sleeves. Please contact our engineering department in case you need to use different bearing series. Locating rings and side covers provide the desired constructive forms.
- Application: Suited for applications where tensioning of the unit is desired. Examples: elevators, conveyors, etc.
- Lubrication: Grease.
- Standard seal: AS.
- Admissible seals: ASR, R, ZF, TC, GS, RR, GSGS, ASRR, ASZFZF.
- Dimensional: See page 48.

ONE PIECE FLANGED HOUSINGS

F-500 OU 722500

- Features: One piece flanged housing, for shafts measuring between 20 and 100 mm. Appropriate for seating ball bearings of the series 12-K and 22-K, or roller bearings of the series 222-K, with adapter sleeves. Please contact our engineering department in case you need to use different bearing series. For shaft diameters of up to and including 60 mm these housings are triangular, with three holes for securing; for larger shaft diameters the housings are square, with 4 holes for securing, with one lateral side covers. The constructive form is obtained through locating rings or ZW rings.
- Application: Suited for operation on structure surfaces with no special supports required. It saves space.
- Lubrication: Grease.
- Standard seal: TC.
- Admissible seals: ZF, GS.
- Dimensional: See pages 46 and 47.

HFR

- Features: One piece and flanged, for shafts measuring between 20 and 100 mm. Shaft measurements in inches or millimeters. Appropriate for seating ball bearings of the series 22-K, or roller bearings of the series 222-K, all with adapter sleeves. Please contact our engineering department in case you need to use different bearing series. Square shape for entire series, side covers provide the desired constructive form.
- Application: Suited for operating on structure faces, no special supports required; space saving. Excellent performance in humid environments.
- Lubrication: Grease.
- Standard seal: R.
- Dimensional: See page 49.

BRONZE BUSHING HOUSINGS

HEC

- Features: Split, for shafts measuring between 76,2 and 254mm, shaft measurements in millimeters only. It houses a split SAE 67 bronze bushing. For stepped shaft applications, the diameter of the lateral side covers must be informed.
- Application: Commonly applied to equipments used at sugar and alcohol plants which demand high load capacity, such as drag conveyors, feeding tables, cane conveyors, among others.
- Lubrication: Grease.
- Standard seal: TC.
- Admissible seal: R.
- Dimensional: See page 50.

HF

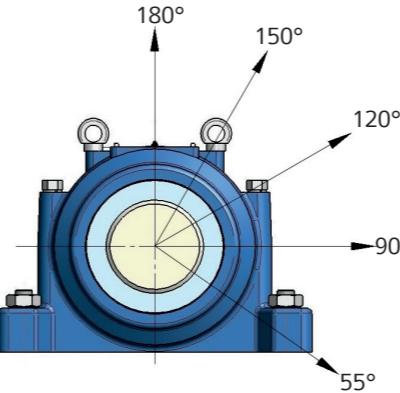
- Features: One piece take up bronze bushing housing, for shafts measuring between 38,1 and 190,5. Made of steel sheets, it houses a one piece SAE 67 bronze bushing.
- Application: Commonly applied to equipments used at sugar and alcohol plants which demand high load capacity and tensioning of the unit, such as drag conveyors, feeding tables, cane conveyors, among others.
- Lubrication: Grease.
- Dimensional: See page 50.

2.4 LOADABILITY

Capacities shown on the tables below refer to housings made of grey cast iron. For housings made of nodular cast iron and cast steel increase displayed values by 80%.

CAPACITIES OF SD-31 HOUSINGS

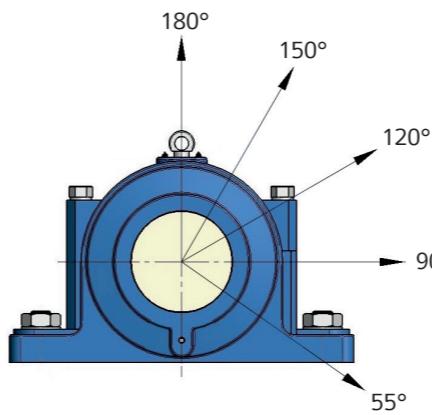
(Coupling bolts class 8.8)



Housing size	Breaking load kN						Flow limit of bolts		
	55°	90°	120°	150°	180°	120°	150°	180°	
3134	2100	1000	760	680	850	1500	830	750	
3136	2400	1150	850	760	950	1500	830	750	
3138	2700	1300	1000	880	1100	2000	1100	1000	
3140	3200	1600	1150	1050	1300	2000	1100	1000	
3144	4000	1900	1400	1300	1600	2000	1100	1000	
3148	4200	2000	1500	1400	1700	3200	1800	1600	
3152	4700	2300	1700	1500	1900	3200	1800	1600	
3156	5000	2400	1800	1600	2000	3200	1800	1600	
3160	6000	2900	2200	1900	2400	3200	1800	1600	
3164	7000	3400	2500	2200	2800	3200	1800	1600	
3168	7500	3650	2650	2400	3000	3200	1800	1600	

CAPACITIES OF SN-30 HOUSINGS

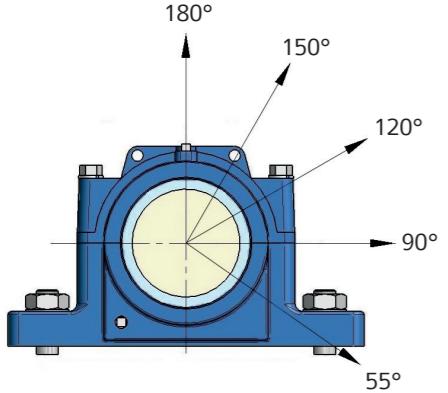
(Coupling bolts class 8.8)



Housing size	Breaking load kN						Flow limit of bolts		
	55°	90°	120°	150°	180°	120°	150°	180°	
3024	520	310	230	210	260	260	150	130	
3026	620	370	280	250	310	260	150	130	
3028	700	420	310	280	350	260	150	130	
3030	780	470	350	310	390	260	150	130	
3032	840	500	380	340	420	260	150	130	
3034	1000	600	450	400	500	380	220	190	
3036	1160	700	520	460	580	380	220	190	
3038	1300	780	580	520	650	380	220	190	
3040	1480	890	670	590	740	380	220	190	
3044	1700	1020	760	680	850	630	360	310	
3048	1880	1130	850	750	940	630	360	310	
3052	2120	1270	950	850	1060	800	460	400	
3056	2240	1340	1000	900	1120	800	460	400	

CAPACITIES OF SAF HOUSINGS

(Coupling bolts class 8.8)

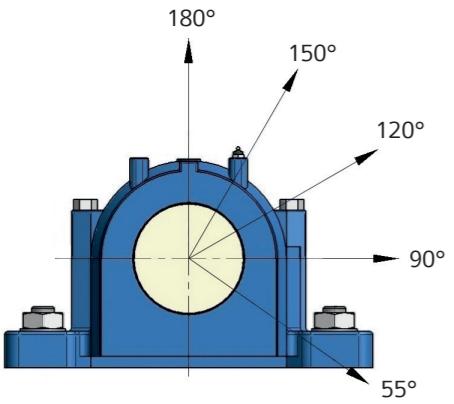


Housing size	Breaking load kN					Flow limit of bolts		
	55°	90°	120°	150°	180°	120°	150°	180°
- - 509	-	160	96	72	64	80	160	88
- 308 510	-	190	114	85	76	95	160	80
- 309 511 609	220	132	99	88	110	240	132	120
- 310 513 610	260	156	117	104	130	240	132	120
311 312 515 611	280	168	126	112	140	240	132	120
216 313 516 613	320	192	144	128	160	440	242	220
217 314 517 -	360	216	162	144	180	440	242	220
218 315 518 615	380	228	171	152	190	440	242	220
- 316 - 616	420	252	189	168	210	440	242	220
220 317 520 617	480	288	216	192	240	600	330	300
222 318 522 618	620	372	279	248	310	600	330	300
224 320 524 620	760	456	342	304	380	600	330	300
226 322 526 622	920	552	414	368	460	1100	605	550
228 - 528 -	1100	660	495	440	550	1100	605	550
230 324 530 624	1300	780	585	520	650	1100	605	550
232 326 532 626	1600	960	720	640	800	1100	605	550
234 328 534 628	1700	1020	765	680	850	1500	825	750
236 330 536 630	1900	1140	855	760	950	1500	825	750
238 332 538 632	2200	1320	990	880	1100	2000	1100	1000
240 334 540 634	2600	1560	1170	1040	1300	2000	1100	1000
244 338 544 638	3200	1920	1440	1280	1600	2000	1100	1000

CAPACITIES OF SNAH AND SSNAHD HOUSINGS

(Coupling bolts class 8.8)

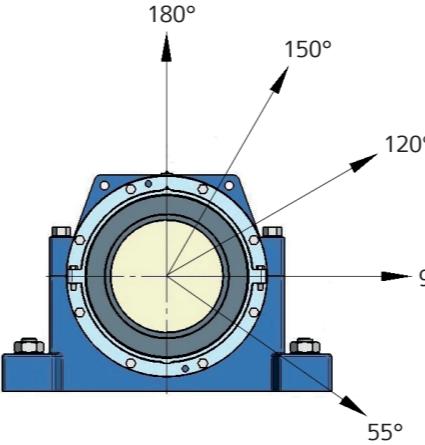
In case of need for greater capacity, request a quote.



ATTENTION The SNAH 200 housings have the same resistance as the SNAH 500 housings, and the SNAH 300 housings have the same resistance as the SNAH 600 housings

CAPACITIES OF HSBP AND SBPC HOUSINGS

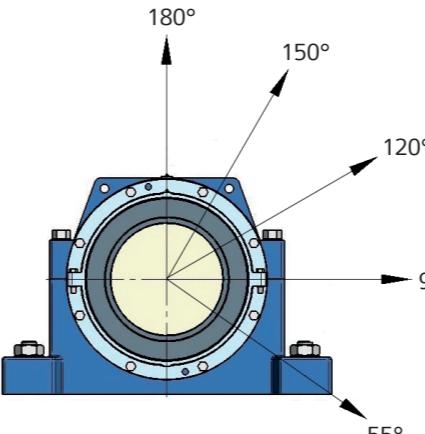
(Coupling bolts class 8.8)



Housing size	Breaking load kN						Flow limit of bolts		
	55°	90°	120°	150°	180°	120°	150°	180°	120°
9	160	96	72	64	80	160	88	80	160
10	190	114	85	76	95	160	88	80	160
11	220	132	99	88	110	240	132	120	240
13	260	156	117	104	130	240	132	120	240
15	280	168	126	112	140	240	132	120	240
16	320	192	144	128	160	440	240	220	440
17	360	216	162	144	180	440	242	220	440
18	380	228	171	152	190	440	242	220	440
20	480	288	216	192	240	600	330	300	600
22	620	372	279	248	310	600	330	300	600
24	760	456	342	304	380	1000	550	500	1000
26	920	552	414	368	460	1100	605	550	1100
28	1100	660	495	440	550	1100	605	550	1100
30	1300	780	585	520	650	1100	605	550	1100
32	1600	960	720	640	800	1100	605	550	1100
34	1700	1020	765	680	850	1500	825	750	1500
36	1900	1140	855	760	950	1500	825	750	1500
38	2200	1320	990	880	1100	2000	1100	1000	2000
40	2600	1560	1170	1040	1300	2000	1100	1000	2000
44	3200	1920	1440	1280	1600	2000	1100	1000	2000
48	3400	2040	1530	1360	1700	2000	1100	1000	2000
52	3800	2280	1710	1520	1900	2000	1100	1000	2000
56	4000	2400	1800	1600	2000	3200	1760	1600	3200
60	4800	2880	2160	1920	2400	3200	1760	1600	3200
64	5600	3360	2560	2240	2800	3200	1760	1600	3200
68	6000	3600	2700	2400	3000	3200	1760	1600	3200
72	6400	3840	2880	2560	3200	3200	1760	1600	3200
76	6800	4080	3060	2720	3400	3200	1760	1600	3200
80	7650	4590	3440	3060	3825	3200	1760	1600	3200
84	8700	5220	3915	3480	4350	4400	2520	2200	2520
88	9600	5760	4320	3840	4800	4400	2520	2200	2520
92	10400	6240	4680	4160	5200	4400	2520	2200	2520
96	11000	6600	4950	4400	5500	4400	2520	2200	2520
500	12500	7500	5625	5000	6250	4400	2520	2200	2520

CAPACITIES OF HSBM HOUSINGS

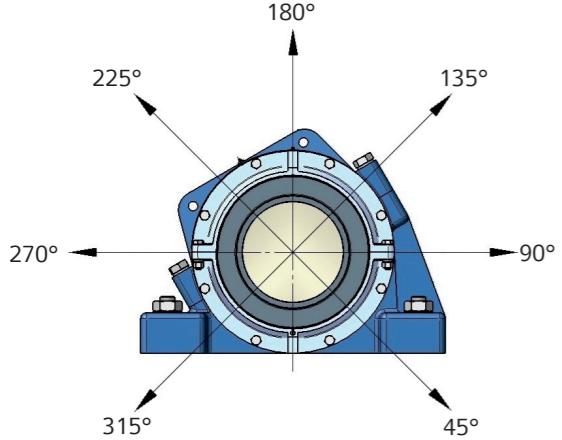
(Coupling bolts class 8.8)



Housing size	Breaking load kN						Flow limit of bolts		
	55°	90°	120°	150°	180°	120°	150°	180°	120°
8	150	90	67	60	75	160	88	80	160
9	160	96	72	64	80	160	88	80	160
10	190	114	85	76	95	160	88	80	160
11	220	132	99	88	110	240	132	120	240
12	240	144	108	96	120	240	132	120	240
13	260	156	117	104	130	240	132	120	240
15	280	168	126	112	140	240	132		

CAPACITIES OF HSBP 30K HOUSINGS

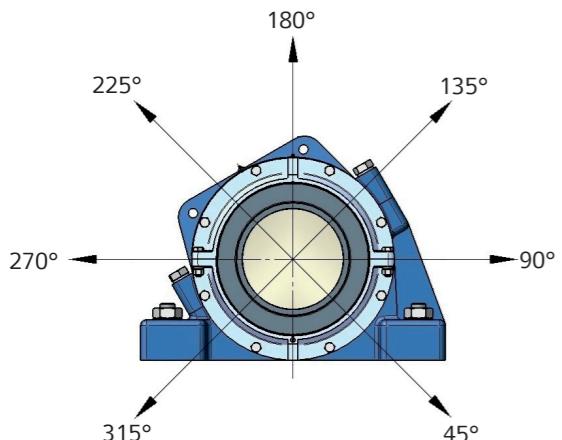
(Coupling bolts class 8.8)



Housing size	Breaking load kN						
	45°	90°	135°	180°	225°	270°	315°
9	442	238	130	120	89	125	180
10	464	251	140	133	92	138	185
11	476	264	149	135	96	140	192
13	500	280	157	139	98	149	198
15	521	315	468	141	100	156	206
16	535	335	176	149	103	159	215
17	616	349	187	154	108	168	219
18	672	371	201	162	113	176	225
20	722	394	211	167	117	185	235
22	862	511	239	195	139	212	273
24	973	628	273	223	162	250	305
26	1115	759	330	258	184	290	369
28	1500	908	392	313	218	346	432
30	1670	1073	443	336	246	380	498
32	1835	1320	492	392	292	436	555
34	2139	1403	560	448	324	493	644
36	2420	1540	672	504	375	560	728
38	2420	1781	784	532	375	700	896
40	2750	2106	896	560	430	700	896
44	3424	2593	1000	670	470	784	1000
48	3638	2500	1280	750	478	896	1280
52	4066	3000	1400	840	588	1000	1560
56	4280	3240	1560	950	700	1230	1790
60	5136	3888	1790	1170	810	1450	1950
64	5992	4535	2128	1230	896	1680	2180
68	6420	4900	2680	1400	950	1730	2680
72	6670	5600	3240	1512	1030	2070	3240
76	7780	6250	3500	1600	1100	2100	3500
80	8900	7000	4200	1800	1280	2400	4480
84	10000	7625	5000	2100	1400	2700	5300
88	11150	8375	5300	2100	1400	2700	5600
92	12250	9000	5600	2300	1600	2800	5800
96	12800	9375	5800	2400	1800	3200	6100
500	14500	9750	6400	3000	2000	3580	6400

CAPACITIES OF HSBM 30K HOUSINGS

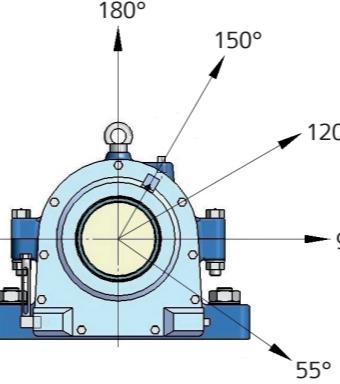
(Coupling bolts class 8.8)



Housing size	Breaking load kN						
	45°	90°	135°	180°	225°	270°	315°
8	414	223	120	110	80	180	260
9	442	238	130	120	89	125	180
10	464	251	140	133	92	138	185
11	476	264	149	135	96	140	192
12	488	270	153	139	98	142	194
13	500	280	157	139	98	149	198
15	521	315	468	141	100	156	206
16	535	335	176	149	103	159	215
17	616	349	187	154	108	168	219
18	672	371	201	162	113	176	225
19	700	382	208	165	114	180	230
20	722	394	211	167	117	185	235
22	862	511	239	195	139	212	273
24	973	628	273	223	162	250	305
26	1115	759	330	258	184	290	369
28	1500	908	392	313	218	346	432
30	1670	1073	443	336	246	380	498
32	1835	1320	492	392	292	436	555
34	2139	1320	560	448	324	493	644
36	2541	1617	706	529	394	588	764
38	2673	1967	866	588	414	773	990
40	2750	2106	896	560	430	700	896
44	3424	2593	1000	670	470	784	1000
48	5007	3441	1762	1032	658	1233	1762
52	5360	3955	1845	1107	775	1318	2056
56	5731	4338	2089	1272	937	1647	2397
60	6473	4900	2256	1475	1021	1828	2458
64	8164	6179	2899	1676	1221	2289	2970
68	8689	6632	3627	1895	1286	2341	3627
72	9040	7589	4391	2049	1396	2805	4391
76	10661	8565	4796	2193	1507	2878	4796
80	11413	8976	5386	2308	1641	3078	5745
84	13700	10446	6850	2877	1918	3699	7261
88	15010	11274	7135	2827	1885	3635	7538
92	16857	12385	7706	3165	2202	3853	7981
96	17879	13095	8102	3352	2514	4470	8521
500	21035	14144	9285	4352	2901	5194	9285

CAPACITIES OF SOFN HOUSINGS

(Coupling bolts class 8.8)



Housing size	Breaking load kN						Flow limit of bolts		
	55°	90°	120°	150°	180°	120°	150°	180°	
610	390	160	110	100	130	100	60	50	
611	390	160	110	100	130	100	60	50	
612	450	180	120	110	150	100	60	50	
517 - 614	690	260	190	180	230	100	60	50	
518	900	350	250	230	300	160	90	80	
519 - 616	990	390	270	250	330	160	90	80	
520	1080	450	300	280	360	160	90	80	
522	1260	500	350	320	420	160	90	80	
618	1500	600	420	380	500	340	200	170	
524 - 620	2100	780	580	540	700	340	200	170	
526	25								

2.6 CIRCUMFERENTIAL VELOCITY

CALCULATION OF THE CIRCUMFERENTIAL VELOCITY FOR SEAL SELECTION

In order to select a contact seal, it is necessary to first know the circumferential velocity of the shaft, which is in contact with the seal. Circumferential velocity is determined as per formula below. Permissible speed for each contact seal is as shown on pages 04 to 07.

$$V = \frac{52 \times N \times d}{1.000.000}$$

Example:
d = 200 mm
N = 1200 rpm

$$V = \frac{52 \times 1200 \times 200}{1.000.000}$$

V = Circumferential velocity, in meters per second (m/s)
N = Shaft rotation, in rotations per minute (rpm)
d = Shaft diameter, in millimeters (mm)

$$V = 12,48 \text{ m/s}$$

As it can be seen on the example above, contact seals are not appropriate; we recommend the use of no-contact seals (radial or axial labyrinth).

LUBRICATION

The purpose of a lubricant is to reduce friction between the moving elements of a bearing and seal and the static elements of the housing, thus reducing internal wear.

The best known and most frequently used lubricants are grease and mineral oil. For each specific application there is an ideal lubricant. For the correct selection of a lubricant various factors should be considered, such as: temperature, environment, operating rotation, bearing type used, etc. The advantages and inconveniences of using grease or oil as well as a practical system for lubricating the bearings inside the housings are given below:

Lubricant	Advantages	Inconveniences
Grease	Ease warehousing and transporting Easy handling and application No need for checking grease level Smaller risk of leaking Simple seals Sealing effect	The bearing has to be opened for a change of grease Lower rotation limit as compared to oil
Oil	Higher rotation limit as compared to grease Various lubrication methods Cooling effect on the system Easy change through drain plugs	Difficulty warehousing and transporting Difficulty to handle and application Need for checking oil level Greater leaking risk More complex seals

METHOD TO DETERMINE THE GREASE VOLUME

The grease volume applied to the empty spaces of the housing should take into consideration the rotation limit of the given bearing, as indicated on the table below:

Fill in all empty spaces of the bearing.

Rotation	Amount of grease
Low rotation	100%
Less than 80% of the limit	50% a 80%
More than 50% of the limit	30% a 50%

Recommendations

- As a rule, all grease inside the housing should be replaced every six months.
- Quantity of grease to be added during relubrication must be in accordance with the results of the formula: $(G) = 0,005 \times D \times B$

Onde: G = quantity of grease in grams

D = external diameter of bearing in mm

B = total width of bearing in mm

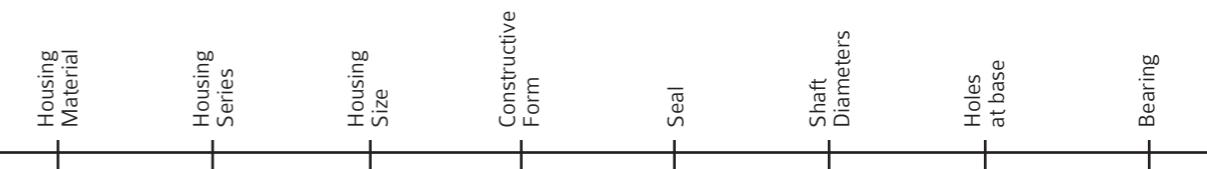
Ex.: Bearing 22.222 K - (110 x 200 x 53)

G=0,005 X 200 X 53

G=53

2.7 SPECIFICATIONS FOR HENFEL HOUSINGS

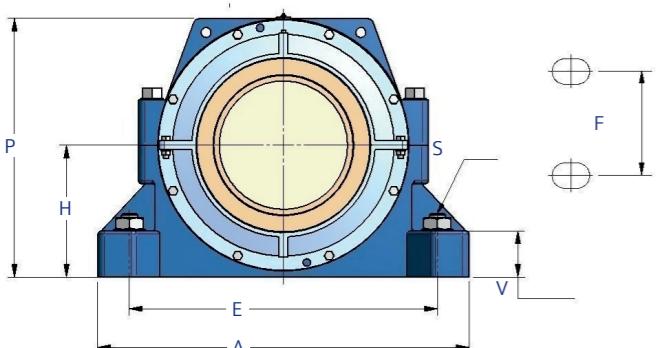
The specification for housings should be objective, stating as clearly as possible all the manufacturing data. It should contain information of the material used for the housing, type and size of housing, constructive form, seal type, bearing type, shaft diameter, quantity of holes on the base and reference of manufacturer, as per sequence below:



Material used for the housing	Cast steel - Prefix "S" (except for the SNAH series, which the prefix S stands for nodular cast iron). Nodular cast iron - Prefix "N" (except for the STM and HSPA series, since their standard material is nodular cast iron). Grey cast iron - Prefix omitted.
Housing series	As dimensional tables from page 22 on. Ex: HSBP 30K, HSBM, etc.
Housing size	As dimensional tables from page 22 on.
Constructive form	It refers to the bearing arrangement within the housing and the type of shaft (passing or blind), which will determine the types of lateral side covers that will configure the housing (both lids opened, or one lid opened and one closed). See page 19. BP - Locating bearing, with passing shaft; LP - Non-locating bearing, with passing shaft; BC - Locating bearing, with blind shaft; LC - Non-locating bearing, with blind shaft.
Seal	The seal type to be used should always be indicated. In this catalog we show various seal types for housings. The most common ones are listed below: ASR Axial labyrinth and retainer with spring; TC Felt strips for housings SN, SNA; AS Axial labyrinth; TS Radial labyrinth; TSGS Radial labyrinth and GS nitrile retainer; TSR Radial labyrinth and split spring retainer; ASZF Axial labyrinth and retainer ZF; R Retainer; TAS Axial and radial labyrinth; ASRR Axial labyrinth and two retainers with spring.
Shaft diameters	Shaft diameters or the adapter sleeve used for any housing series should always be specified, especially for housings with contact seals, such as: retainers, labyrinth and others, seeing that each shaft diameter requires its specific seal.
Holes on the base	The bearing houses type HSBP up to size 20/208/207 can be manufactured with two holes on the base, by means of adding the suffix "D" to the designation: Ex. HSBP-D-16. The bearing houses type HSBM series and SAF-520 up to size 327/328/32 are manufactured with two holes on the base, but they can be manufactured with four as long as the prefix "F" is added to the reference. Ex: FHSBM-16. The opposite is true for housings type SAF. Up to size 520/220/317/617 they are made with 2 holes on the base. When four holes are needed, the prefix "F" must be added. Ex: F-SAF-516. The specification of the number of holes on the base can be added to any housing series.
Bearings	Even if the scope of delivery excludes the bearings, their exact identification should always be given in order to dimension the locating rings or lateral side covers.

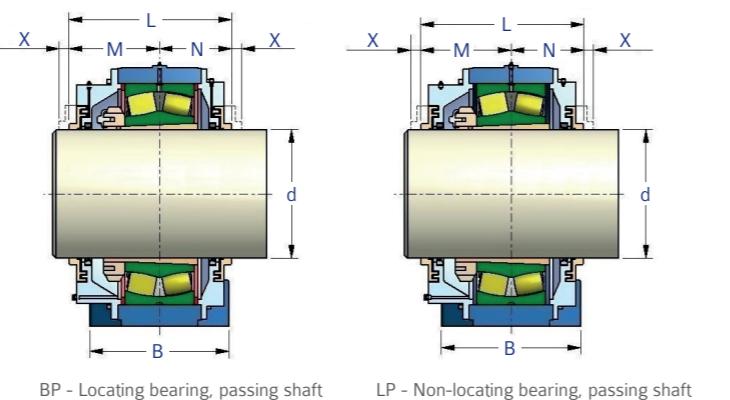
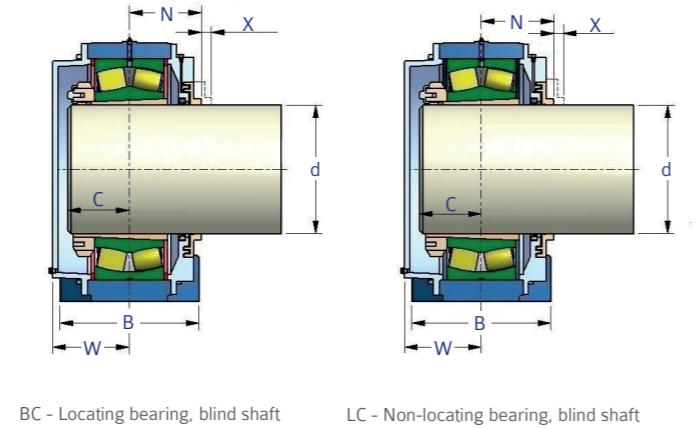


When no specific requests are made, the housings will be manufactured in accordance to their standard, as shown on the dimensional tables of this catalog, i.e. shafts in millimeters, constructive form LP (non-locating bearing, passing shaft), Standard seal and material of the series.

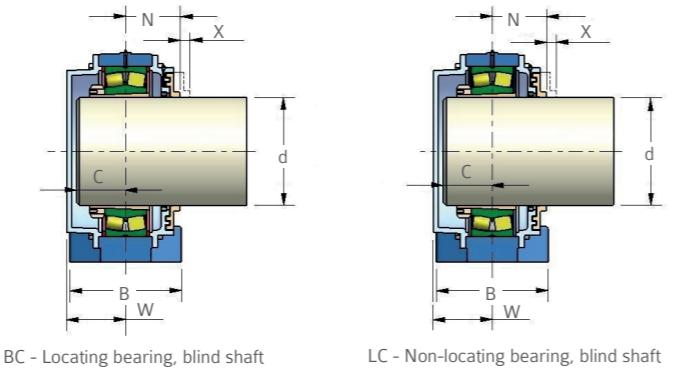
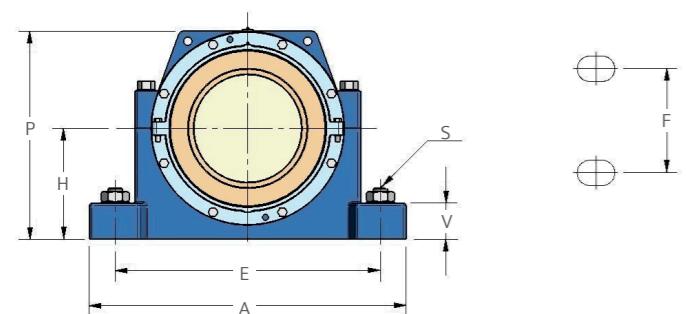


- See page 08 for technical features.
- Standard seal "ASR" - "taconite" labyrinth seal with retainer, see page 06 (reference). For seal types ASZF, AS, R, ZF, TC and GS the dimensions are maintained. Should a different type of seal be requested, the dimensions of the columns "L", "N" and "M" on the table can be modified, but our engineering department should be consulted for more information.
- They can seat split bearings, however, the designation must be changed by adding the prefix B. For application of other bearing series, please consult our Engineering Department.
- Up to size 56 (inclusively) the bearing's axial movement is blocked by locating rings, for bigger sizes the bearing's axial movement is blocked by the side covers.
- Specification example: HSBM-157-BP-ASZF= HSBM housing, size 157, made of grey cast iron, with 2 holes on the base, prepared for 22215-K bearing and HA-315 adapter sleeve, for locating bearing and passing shaft, with taconite seal composed of AS axial labyrinth and ZF retainer.
- FNHSBM-15-LC-ASR= FNHSBM housing, size 15, made of nodular cast iron with 4 holes on the base, prepared for 22234-K bearing and H-3134 adapter sleeve, for non-locating bearing and blind shaft, with taconite proof seal composed of AS axial labyrinth and R retainer.
- These housings are standardized with two holes on their base up to size 32, but they can be supplied with 04 holes on the base by simply adding the prefix "F" on the housing reference (Ex. FHSBM-15BP-ASZF). Beyond size 32 they have four holes on the base. The fixing screw dimensions for two holes on the base, are located in the column "S" in parenthesis.

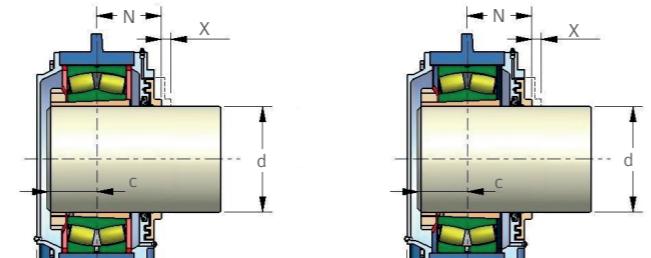
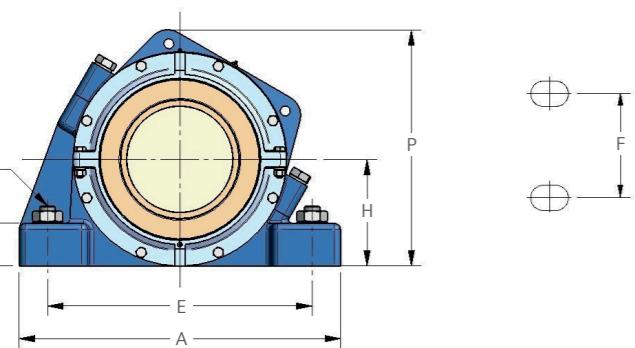
Housing	Shaft diameter		Bearing	Adapter sleeve (complete)	Dimensions (mm)													Weight (kg)		
	mm	inches			H	E	A	B	C	F	L	M	N	P	S	V	W	X		
HSBM 084		1.1/4"		HE 308																
HSBM 086		1.3/8"		22208K	HS 308	60	170	205	60	26	30	99	53	46	113,5	3/8" (1/2")	25	41	8	
HSBM 08	35				HS 308														3,5	
HSBM 097		1.7/16"			HA 309															
HSBM 098		1.1/2"			HE 309	60	170	205	60	28	30	106,5	56,5	50	119,5	3/8" (1/2")	25	44	8	4
HSBM 09	40				H 309															
HSBM 100		1.5/8"			HS 310															
HSBM 101		1.11/16"			HA 310	60	170	205	60	28	30	114	57	57	122	3/8" (1/2")	25	43	8	4,5
HSBM 102		1.3/4"			HE 310															
HSBM 10	45				H 310															
HSBM 114		1.7/8"			HS 311															
HSBM 115		1.15/16"			HA 311	70	210	255	70	30	35	116	58	58	137	1/2" (5/8")	28	45	9	5,5
HSBM 11		2"			H 311															
HSBM 110					HE 311															
HSBM 122		2.1/8"			HS 312	70	210	255	70	34	35	116,5	61,5	55	140	1/2" (5/8")	30	50	9	6
HSBM 12	55				H 312															
HSBM 133		2.3/16"			HA 313															
HSBM 134		2.1/4"			HE 313	80	230	275	80	36	40	116,5	63,5	53	157	1/2" (5/8")	30	54	9	7,5
HSBM 13					H 313															
HSBM 136		2.3/8"			HS 313															
HSBM 157		2.7/16"			HA 315															
HSBM 158		2.1/2"			HE 315	80	230	280	80	38	45	120,5	65,5	55	162	1/2" (5/8")	30	56	11	9
HSBM 15	65				H 315															
HSBM 161		2.11/16"			HA 316															
HSBM 162		2.3/4"			HE 316	95	260	315	90	42	55	141	70,5	70,5	183	1/2" (3/4")	32	60	12	14,5
HSBM 16	70				H 316															
HSBM 175		2.15/16"			HA 317															
HSBM 17	75	3"			HE 317	95	260	320	90	44	55	146	73	73	189	5/8" (3/4")	32	62	12	14,5
HSBM 16					H 317															



Housing	Shaft diameter mm inches	Bearing	Adapter sleeve (complete)	Dimensions (mm)													Weight (kg)		
				H	E	A	B	C	F	L	M	N	P	S	V	W	X		
HSBM 18	80	3.3/16"	22218K	HA 318	100	290	345	100	46	55	148	74	74	200	5/8" (3/4")	35	64	11	15
HSBM 183		3.1/4"		HE 318	112	290	345	100	50	55	155,5	81,5	74	215	5/8" (3/4")	35	68	12	17,5
HSBM 184		3.1/4"	22219K	HE 319															
HSBM 194		3.1/4"	22219K	HE 319															
HSBM 19	85																		
HSBM 207		3.7/16"	22220K	HA 320	112	320	380	110	54	60	162	81	81	223	7/8" (7/8")	40	72	13	22
HSBM 208		3.1/2"	22220K	HE 320															
HSBM 20	90																		
HSBM 221		3.11/16"	22222K	HS 322															
HSBM 22	100	3.15/16"	22222K	H 322	125	350	410	120	58	70	157	86	71	249	7/8" (7/8")	45	76	13	30
HSBM 225		4"		HA 322															
HSBM 220				HE 322															
HSBM 243		4.3/16"	22224K	HA 324	140	350	410	120	60	70	182	91	91	272	7/8" (7/8")	45	79	14	31
HSBM 244		4.1/4"		HE 324															
HSBM 24	110			H 324															
HSBM 267		4.7/16"	22226K	HA 326	150	380	445	1											

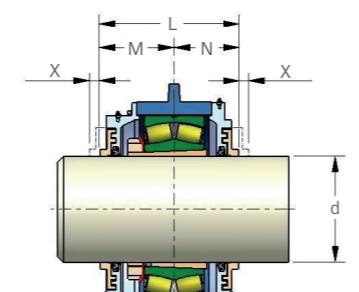
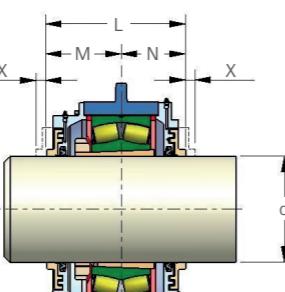


- See page 08 for technical features.
 - Standard seal "ASR" - "taconite" labyrinth seal with retainer, see page 06 (reference). For seal types ASZF, AS, R, ZF, TC and GS the dimensions are maintained. Should a different type of seal be requested, the dimensions of the columns "L", "N" and "M" on the table can be modified, but our engineering department should be consulted for more information.
 - These housings are standardized with four holes on their base, but up to size 20 they can be supplied with two holes on the base by simply adding the suffix "D" to the housing's reference (Ex. HSBPD-15-BP-ASZF). The bolt dimensions for housings with two holes on the base are located in the column "S", in brackets.
 - They can seat split bearings, however, the designation must be changed by adding the prefix B. For application of other bearing series, please consult our Engineering Department.
 - Up to size 56 (inclusively) the bearing's axial movement is blocked by locating rings, for bigger sizes the bearing's axial movement is blocked by the side covers.
 - Specification example: HSBP-157-BP-ASZF = HSBP housing, size 157, made of gray cast iron, with four holes on the base, appropriate for seating 22215-K bearing + HA-315 adapter sleeve, for locating bearing and passing shaft, with taconite seal composed of AS axial labyrinth and ZF retainer.



BC - Locating bearing, blind shaft

LC - Non-locating bearing, blind shaft



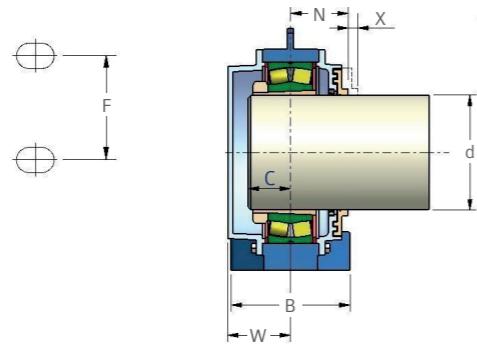
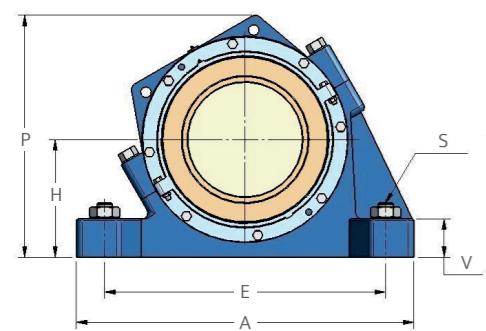
BP - Locating bearing, passing shaft

LP - Non-locating bearing, passing shaft

- See page 08 for technical features.
 - Standard seal "ASR" - "taconite" labyrinth seal with retainer, see page 06 (reference).
 - For seal types ASZF, AS, R, ZF, TC and GS, the dimensions are maintained. Should a different type of seal be requested, the dimensions of the columns "L", "N" and "M" on the table can be modified, but our engineering department should be consulted for more information.
 - They can seat split bearings, however, the designation must be changed by adding the prefix B. For application of other bearing series, please consult our Engineering Department.
 - These housing are standardized with four holes on the base.
 - Up to size 56 (inclusively) the bearing's axial movement is blocked by locating rings, for bigger sizes the bearing's axial movement is blocked by the housing's side covers.
 - Specification example: HSBM30K-157-BP-ASZF = HSBM30K housing, size 157, made of gray cast iron, with four holes on the base, appropriate for seating 22215-K bearing + HA-315 adapter sleeve, for locating bearing and passing shaft, with taconite seal composed of AS axial labyrinth and ZF retainer.

3.3 | HSBM 30K

DIMENSIONALS 3



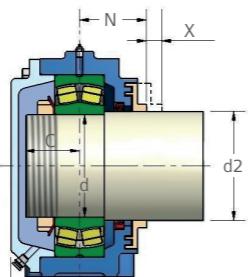
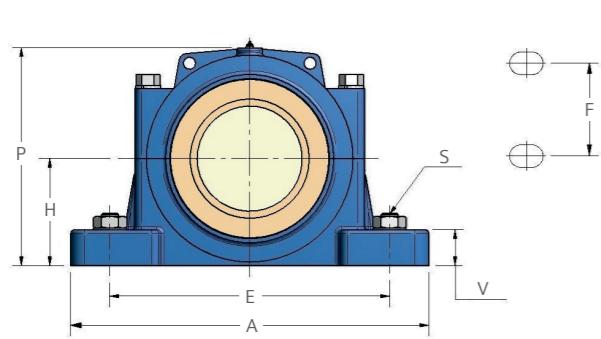
- See page 09 for technical features.
- Standard seal ASR - "taconite" labyrinth seal with retainer - see page 06 (reference). For seal types ASZF, AS, R, ZF, TC and GS, the dimensions are maintained. Should a different type of seal be requested, the dimensions of the columns "L", "N" and "M" of the table can be modified, but our engineering department should be consulted for more information.
- These housings are standardized with four holes on their base.
- They can seat split bearings, however, the designation must be changed by adding the prefix B. For application of other bearing series, please consult our Engineering Department.
- Up to size 56 (inclusively) the bearing's axial movement is blocked by locating rings, for bigger sizes the bearing's axial movement is blocked by the housing's side covers.
- Specification example: HSBP30K-157-BP-ASZF = HSBP30K housing, size 157, made of gray cast iron, with four holes on the base, appropriate for seating 22215-K bearing + HA-315 adapter sleeve, for locating bearing and passing shaft, with taconite seal composed of AS axial labyrinth and ZF retainer.
- NHSBP30K15-LC-ASR= NSBP30K housing , size 15, made of ductile cast iron, appropriate for seating 22215-K bearing + H-315 adapter sleeve, for non locating bearing and blind shaft, with taconite proof seal composed of AS axial labyrinth and R retainer.

3.4 | HSBP 30K

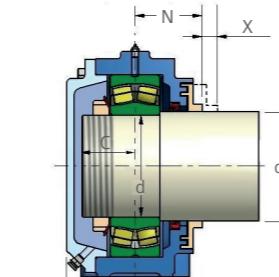
DIMENSIONALS 3

3 DIMENSIONALS

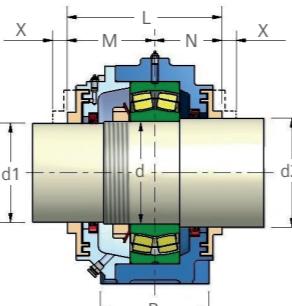
3.5 | SBPC



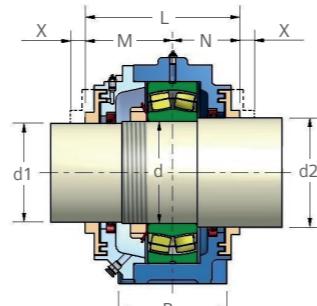
BC - Locating bearing, blind shaft



LC - Non-locating bearing, blind shaft



BP - Locating bearing, passing shaft

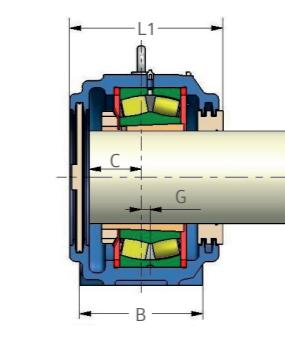
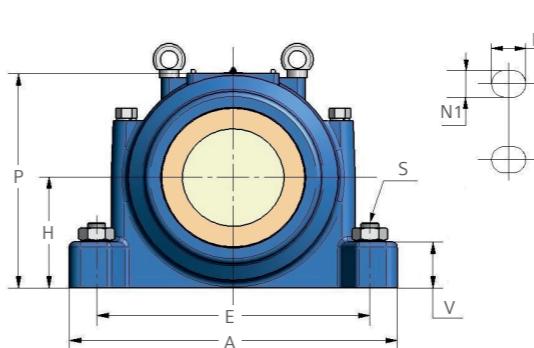


LP - Non-locating bearing, passing shaft

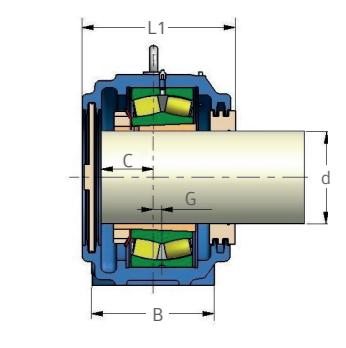
- See page 09 for technical features.
- Standard seal "AS" – axial labyrinth, see page 05. For seal types R, ZF, GS and TC, the dimensions are maintained. Should a different type of seal be requested, the dimensions of the columns "L", "N" and "M" on the table can be modified, but our engineering department should be consulted for more information
- For applications with other bearing series or other shaft diameters, please consult our Engineering Department.
- Up to size 18 these housings can be supplied with two holes on the base by simply adding the suffix "D" to the housing designation (Ex. SBPCD-18-BP-AS). The dimensions of the set bolts for two holes on the base can be found in the column "S", between brackets.
- Specification example: SBPC-15-BP-AS = SBPC housing, size 15, made of grey cast iron, with 4 holes on the base, prepared for 22215-C bearing, for locating bearing and passing shaft, with AS axial labyrinth seal.
- NSBPC-D-15-LC-ASR = NSBPC-D housing, size 15, made of nodular cast iron, with 2 holes on the base, prepared for 22215-C bearing, for non-locating bearing and blind shaft, with taconite seal composed of AS axial labyrinth and retainer.

Housing	Bearing	Shaft diameter (Inches)		Shaft diameter (mm)			Dimensions (mm)													Weight (kg)	
		d1	d2	d	d1	d2	H	E	A	B	C	F	L	M	N	P	S	V	W	X	
SBPC 09	22209C	1.11/16"	2.1/8"	45 m5	42,9	54	57,1	168	210	60	28	30,2	108	56	52	119	3/8" (1/2")	22	38	10	3,6
SBPC 10	22210C	1.7/8"	2.3/8"	50 m5	47,6	60,3	63,5	171	210	60	28	30,2	109	57	52	127	3/8" (1/2")	25	39	13	4
SBPC 11	22211C	2.1/16"	2.9/16"	55 m5	52,4	65,1	69,8	194	244	70	30	35	115	59	56	142	1/2" (5/8")	25	41	13	5,7
SBPC 13	22213C	2.7/16"	3.1/16"	65 m5	61,9	77,8	76,2	224	279	79	36	39,7	120	64	56	158	1/2" (5/8")	25	48	13	7,6
SBPC 15	22215C	2.13/16"	3.7/16"	75 m6	71,4	87,3	82,6	232	286	79	38	47,6	128	67	61	171	1/2" (5/8")	29	50	13	8,3
SBPC 16	22216C	3"	3.5/8"	80 m6	76,2	92,1	88,9	262	330	89	42	54	144	76	68	188	5/8" (7/8")	32	55	14	12,2
SBPC 17	22217C	3.3/16"	3.15/16"	85 m6	81	100	95,2	265	330	89	44	54	149	79	70	198	5/8" (7/8")	32	57	14	13,3
SBPC 18	22218C	3.3/8"	4.1/8"	90 m6	85,7	104,8	101,6	279	349	98	46	54	155	83	72	209	5/8" (7/8")	35	59	15	15,9
SBPC 20	22220C	3.13/16"	4.1/2"	100 m6	96,8	114,3	114,3	314	387	111	54	60,3	170	93	77	232	3/4"	38	67	16	22
SBPC 22	22222C	4.3/16"	4.7/8"	110 n6	106,4	123,8	125,4	344	419	121	58	69,8	180	99	81	258	3/4"	41	71	16	29
SBPC 24	22224C	4.9/16"	5.5/16"	120 n6	115,9	134,9	133,3	352	419	121	60	69,8	193	104	89	273	3/4"	44	74	18	33
SBPC 26	22226C	4.15/16"	5.7/8"	130 n6	125,4	149,2	152,4	389	467	140	64	82,6	211	115	96	305	7/8"	48	79	21	45
SBPC 28	22228C	5.5/16"	6.1/4"	140 n6	134,9	158,7	152,4	421	511	149	68	85,7	222	121	101	310	1"	51	84	21	49
SBPC 30	22230C	5.3/4"	6.5/8"	150 p6	146	168,3	160,3	448	540	159	74	95,2	239	127	112	328	1"	51	92	21	57
SBPC 32	22232C	6.1/16"	7"	160 p6	154	177,8	169,9	465	559	159	76	95,2	253	136	117	346	1"	51	99	23	67
SBPC 34	22234C	6.7/16"	7.7/16"	170 p6	163,5	188,9	179,4	521	629	171	79	107,9	261	143	118	370	1"	54	102	23	81
SBPC 36	22236C	6.7/8"	7.13/16"	180 p6	174,6	198,4	190,5	565	679	181	79	117,5	266	146	120	390	1"	54	102	23	95
SBPC 38	22238C	7.1/4"	8.3/8"	190 p6	184,1	212,7	200	584	711	190	86	114,3	279	152	127	410	1.1/4"	60	107	23	110
SBPC 40	22240C	7.5/8"	8.3/4"	200 p6	193,7	222,2	209,6	603	749	203	89	127	291	159	132	430	1.1/4"	60	111	23	123
SBPC 44	22244C	8.5/16"	9.9/16"	220 p6	211,1	242,9	241,3	668	832	222	95	133,3	309	170	139	485	1.1/2"	70	120	26	176
SBPC 48	23048C	9.3/16"	10.1/2"	240 p6	233,4	266,7	209,6	603	749	203	92	127	291	166	125	430	1.1/4"	60	122	26	113
SBPC 52	23052C	9.15/16"	11.1/4"	260 p6	252,4	285,7	241,3	668	832	222	98	133,3	305	173	132	485	1.1/2"	70	130	26	158
SBPC 56	23056C	10.3/4"	12"	280 p6	273	304,8	241,3	668	832	222	105	133,3	314	179	135	495	1.1/2"	70	137	26	159
SBPC 60	23060C	11.1/2"	13"	300 r6	292,1	330,2	304,8	841	972	375	111	228,6	346	197	149	588	1.5/8"	86	144	29	273

3.6 | SD-31



BC - Locating bearing, blind shaft



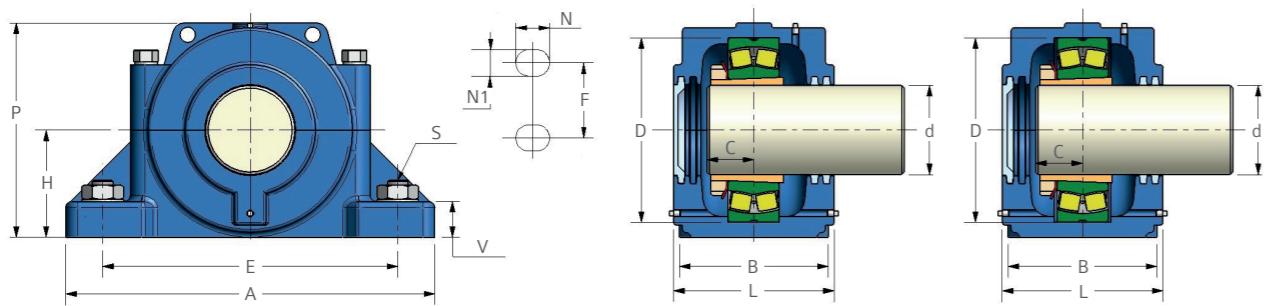
LC - Non-locating bearing, blind shaft

- See page 09 for technical features.
- Standard seal "TS" – radial labyrinth, see page 05.
- For applications with different bearing series please consult our Engineering Department.
- Specification example: SD-3136-BP = SD-31 housing, size 3136, made of grey cast iron with 4 holes on the base, prepared for 23136-K bearing and H-3136 adapter sleeve, for locating bearing and passing shaft, with TS radial labyrinth seal.
- N-SD-3138-BC = SD-31 housing, size 3138, made of nodular cast iron with 4 holes on the base, prepared for 23138-K bearing and H-3138 adapter sleeve, for locating bearing and blind shaft, with TS radial labyrinth seal.
- The type of lubrication must be informed on the purchase order.

Housing	d	Bearing	Adapter sleeve (complete)	H	E	A	B	F	L	L1	P	N	NI	S	G	C	V	Ring dim.	FRB Qt
---------	---	---------	---------------------------	---	---	---	---	---	---	----	---	---	----	---	---	---	---	-----------	--------

3 DIMENSIONALS

3.7 | SD 500-600

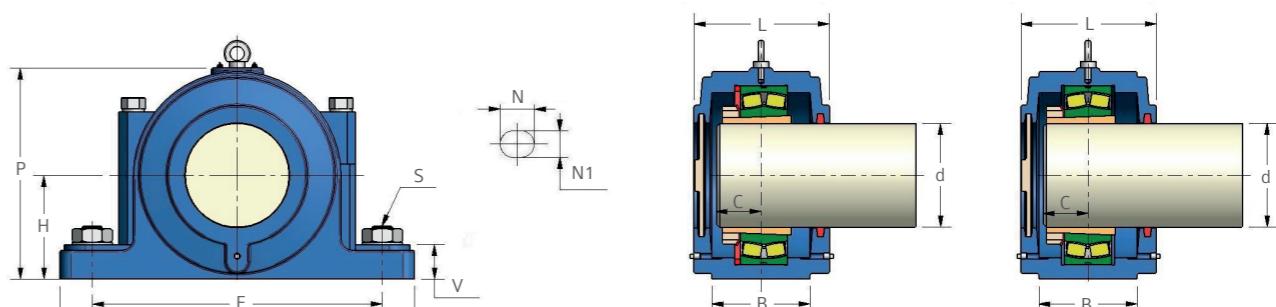


- See page 09 and 10 for technical features.
- Standard seal "FF" – pair of felt strips, see page 06.
- For applications with different bearing series please consult our Engineering Department. As a standard, these housings are manufactured for shafts in millimeters. Should it be manufactured for shafts in inches, please specify on your reference.
- Specification example: SD-3136-BP = SD-31 housing, size 3136, made of grey cast iron with 4 holes on the base, prepared for 23136-K bearing and H-3136 adapter sleeve, for locating bearing and passing shaft, with TS radial labyrinth seal.
- N-SD-3138-BC = SD-31 housing, size 3138, made of nodular cast iron with 4 holes on the base, prepared for 23138-K bearing and H-3138 adapter sleeve, for locating bearing and blind shaft, with TS radial labyrinth seal.
- The type of lubrication must be informed on the purchase order.

SD 500 Series																					
Housing	Shaft diameter						Bearing	H	E	A	B	C	D	F	L	N	NI	P	S	V	Peso (kg)
	mm	adapter sleeve	Inches	adapter sleeve	Inches	adapter sleeve															
SD 530	135	H3130	5.3/16"	HA3130	5.1/4"	HE3130	22230 K	160	450	550	220	74	270	120	240	45	33	320	1"	55	78
SD 532	140	H3132	5.7/16"	HA3132	5.1/2"	HE3132	22232 K	170	480	580	230	76	290	130	250	45	33	340	1"	55	89
SD 534	150	H3134	5.15/16"	HA3134	6"	HE3134	22234 K	180	510	620	250	79	310	140	270	50	36	360	1.1/8"	60	108
SD 536	160	H3136	6.7/16"	HA3136	6.1/2"	HE3136	22236 K	190	540	650	260	79	320	150	280	50	36	380	1.1/8"	60	122
SD 538	170	H3138	6.15/16"	HA3138	6.3/4"	HE3138	22238 K	200	570	700	280	86	340	160	290	55	40	400	1.1/4"	65	140
SD 540	180	H3140	7.3/16"	HA3140	7"	HE3140	22240 K	210	610	740	290	89	360	170	300	55	40	420	1.1/4"	65	192
SD 544	200	H3144	7.15/16"	HA3144	7.1/2"	HE3144	22244 K	240	680	820	320	95	400	190	330	62	42	475	1.3/8"	70	235
SD 548	220	H3148	8.7/16"	HA3148	8.1/2"	HE3148	22248 K	260	740	880	330	102	440	200	340	65	45	515	1.1/2"	85	274
SD 552	240	H3152	9.7/16"	HA3152	9.1/2"	HE3152	22252 K	280	790	940	360	110	480	210	370	65	45	555	1.1/2"	85	343
SD 556	260	H3156	9.15/16"	HA3156	10"	HE3156	22256 K	300	830	990	380	112	500	230	390	77	52	590	1.3/4"	100	428
SD 560	280	H3160	10.15/16"	HA3160	11"	HE3160	22260 K	325	890	1060	400	124	540	250	410	77	52	640	1.3/4"	100	508
SD 564	300	H3164	11.7/16"	HA3164	11.1/2"	HE3164	22264 K	355	930	1110	430	130	580	270	440	85	56	690	2"	110	641

SD 600 Series																					
Housing	Shaft diameter						Bearing	H	E	A	B	C	D	F	L	N	NI	P	S	V	Peso (kg)
	mm	adapter sleeve	Inches	adapter sleeve	Inches	adapter sleeve															
SD 630	135	H2330	5.3/16"	HA2330	5.1/4"	HE2330	22330 K	190	540	650	260	85	320	150	280	50	36	380	1.1/8"	60	118
SD 632	140	H2332	5.7/16"	HA2332	5.1/2"	HE2332	22332 K	200	570	700	280	88	340	160	290	55	40	400	1.1/4"	65	136
SD 634	150	H2334	5.15/16"	HA2334	6"	HE2334	22334 K	210	610	740	290	92	360	170	300	55	40	420	1.1/4"	65	159
SD 636	160	H2336	6.7/16"	HA2336	6.1/2"	HE2336	22336 K	225	640	780	310	100	380	180	320	62	42	450	1.3/8"	70	194
SD 638	170	H2338	6.15/16"	HA2338	6.3/4"	HE2338	22338 K	240	680	820	320	105	400	190	330	62	42	475	1.3/8"	70	216
SD 640	180	H2340	7.3/16"	HA2340	7"	HE2340	22340 K	250	710	860	340	110	420	200	350	65	45	500	1.1/2"	85	256
SD 644	200	H2344	7.15/16"	HA2344	7.1/2"	HE2344	22344 K	280	770	920	350	115	460	210	360	65	45	550	1.1/2"	85	323
SD 648	220	H2348	8.7/16"	HA2348	8.1/2"	HE2348	22348 K	300	830	990	380	120	500	230	390	77	52	590	1.3/4"	100	404
SD 652	240	H2352	9.7/16"	HA2352	9.1/2"	HE2352	22352 K	325	890	1060	400	125	540	250	410	77	52	640	1.3/4"	100	480
SD 656	260	H2356	9.15/16"	HA2356	10"	HE2356	22356 K	355	930	1110	430	135	580	270	440	85	56	690	2"	110	605

3.8 | SN 30



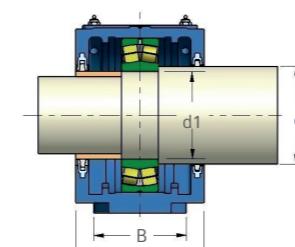
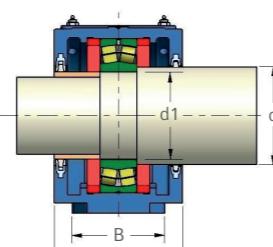
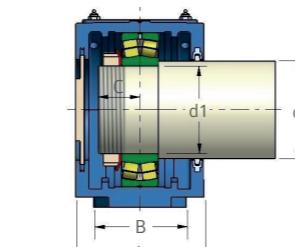
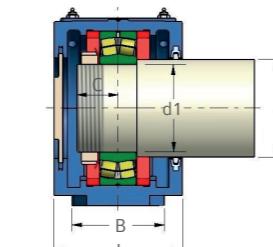
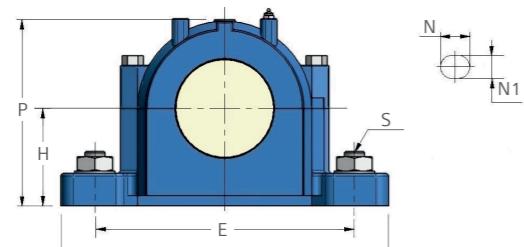
- See page 10 for technical features.
- Standard seal "TC" – felt strip, see page 04.
- For applications with different bearing series please consult our Engineering Department. As a standard, these housings are manufactured for shafts in millimeters. Should it be manufactured for shafts in inches, please specify on your reference.
- Specification example: SN-3024-BP = SN-30 housing, size 3024, made of grey cast iron, with 2 holes on the base, prepared for 23024-K bearing and H-3024 adapter sleeve, for locating bearing and passing shaft, with TC felt strip seal.
- N-SN-3036-LC = SN-30 housing, size 3036, made of nodular cast iron, with 2 holes on the base, prepared for 23036-K bearing and H-3036 adapter sleeve, for non-locating bearing and blind shaft, with TC felt strip seal.

Housing	d	Bearing	Adapter sleeve	H	E	A	B
---------	---	---------	----------------	---	---	---	---

3 DIMENSIONALS

3.9 | SNAH 200

- See page 10 for technical features
- Standard seal "TC" – felt strip, see page 04. For seal types TA and TG, the dimensions are maintained. Should a different type of seal be requested, the dimensions of the columns "L", "N" and "M" on the table can be modified, but our engineering department should be consulted for more information.
- For applications with different bearing types and different shaft diameters please consult our Engineering Department.
- Specification example: SNAH-216-BP-TG, for 22216-C bearing = SNAH housing, size 216, made of grey cast iron with 2 holes on the base, prepared for 22216 C bearing, for locating bearing and passing shaft, with TG split nitrile or polyurethane rubber retainer with double lips seal.
- This bearing series can be supplied with solid base in nodular cast iron, with 2 or 4 holes on the base. These housings are identified by the prefix SSNAHD. Use suffix MS1 for two holes on the base and suffix MS2 for four holes on the base. Example: SSNAHD-216-LC-TG-MS2. Please consult our Engineering Department for dimensions and location of the holes.

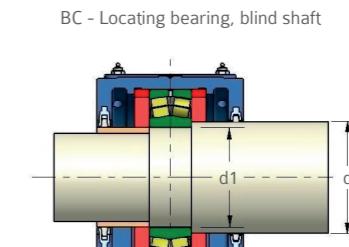
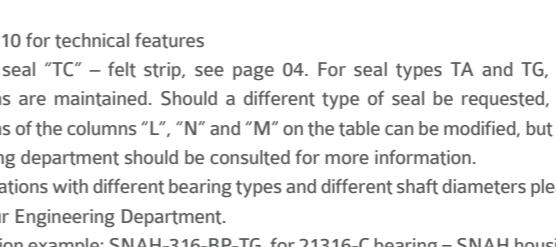
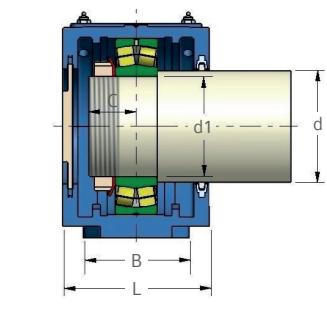
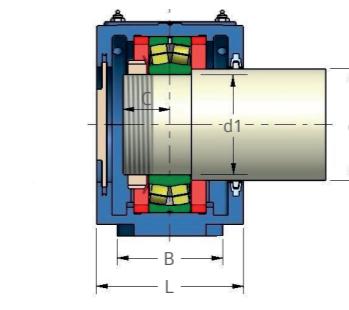
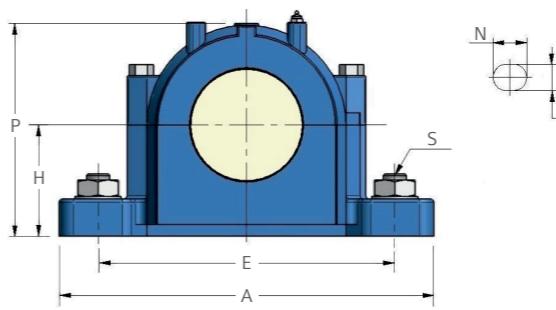


Housing	dl	d	Bearing	Washer	Nut	Dimensions (mm)										Ring Dim.	FRB Qtt.	Weight (kg)	
						H	E	A	B	C	L	N	NI	P	S	V			
SNAH 205	25	30	1205C 2205C 22205C	MB 5	KM 5	40	130	165	46	18	67	20	15	74	12	19	5/52 3,5/52 3,5/52 8/62 6/62 6/62	2 2 2 2 2 2	1,40
SNAH 206	30	35	1206C 2206C 22206C	MB 6	KM 6	50	150	185	52	19	77	20	15	89	12	22	8,5/72 5,5/72 5,5/72 10,5/80 8/80 8/80	2 2 2 2 2 2	1,90
SNAH 207	35	45	1207C 2207C 22207C	MB 7	KM 7	50	150	185	52	21	82	20	15	93	12	22	5,5/72 5,5/72 5,5/72 10,5/80 8/80 8/80	2 2 2 2 2 2	2,10
SNAH 208	40	50	1208C 2208C	MB 8	KM 8	60	170	205	60	22	85	20	15	107	12	25	5,5/85 3,5/85 3,5/85 10,5/90 9/90 9/90	2 2 2 2 2 2	2,75
SNAH 209	45	55	1209C 2209C 22209C	MB 9	KM 9	60	170	205	60	23	85	20	15	109	12	25	5,5/85 3,5/85 3,5/85 10,5/90 9/90 9/90	2 2 2 2 2 2	3
SNAH 210	50	60	1210C 2210C 22210C	MB 10	KM 10	60	170	205	60	24	90	20	15	113	12	25	11,5/100 9,5/100 9,5/100 13/110 10/110 10/110	2 2 2 2 2 2	3
SNAH 211	55	65	1211C 2211C 22211C	MB 11	KM 11	70	210	255	70	26	95	24	18	127	16	28	11,5/100 9,5/100 9,5/100 13/110 10/110 10/110	2 2 2 2 2 2	4,20
SNAH 212	60	70	1212C 2212C 22212C	MB 12	KM 12	70	210	255	70	28	105	24	18	133	16	30	14/120 10/120 10/120	2 2 2	4,75
SNAH 213	65	75	1213C 2213C 22213C	MB 13	KM 13	80	230	275	80	31	110	24	18	148	16	30	14/120 10/120 10/120	2 2 2	6,10
SNAH 215	75	85	1215C 2215C 22215C	MB 15	KM 15	80	230	280	80	32	115	24	18	154	16	30	15,5/130 12,5/130 12,5/130	2 2 2	6,60
SNAH 216	80	90	1216C 2216C 22216C	MB 16	KM 16	95	260	315	90	35	120	28	22	175	20	32	16/140 12,5/140 12,5/140	2 2 2	9
SNAH 217	85	95	1217C 2217C 22217C	MB 17	KM 17	95	260	320	90	37	125	28	22	183	20	32	12,5/150 12,5/150 12,5/150	2 2 2	9,50
SNAH 218	90	100	1218C 2218C 22218C	MB 18	KM 18	100	290	345	100	46	140	28	22	193	20	35	17,5/160 12,5/160 12,5/160 6,25/160	2 2 2 2	11,80
SNAH 219	95	110	1219C 2219C 22219C	MB 19	KM 19	112	290	345	100	42	145	28	22	210	20	35	18/170 12,5/170 12,5/170	2 2 2	13,70
SNAH 220	100	115	1220C 2220C 22220C	MB 20	KM 20	112	320	380	110	50	160	32	26	215	24	40	18/180 12/180 12/180 4,85/180	2 2 2 2	17,60
SNAH 222	110	125	1222C 2222C 22222C	MB 22	KM 22	125	350	410	120	58	175	32	26	239	24	45	21/200 13,5/200 13,5/200 5,1/200	2 2 2 2	22
SNAH 224	120	135	1224C 2224C 2224C	MB 24	KM 24	140	350	410	120	62	185	32	26	271	24	45	14/215 5/215	2 2	26
SNAH 226	130	145	1226C 2226C 2226C	MB 26	KM 26	150	380	445	130	65	190	35	28	290	24	50	13/230 5/230	2 2	33
SNAH 228	140	155	1228C 2228C 2228C	MB 28	KM 28	150	420	500	150	70	205	42	35	302	30	50	15/250 5/250	2 2	40
SNAH 230	150	165	12230C 22230C	MB 30	KM 30	160	450	530	160	76	220	42	35	323	30	60	16,5/270 5/270	2 2	49
SNAH 232	160	175	12232C 22232C 22232C	MB 32	KM 32	170	470	550	160	82	235	42	35	344	30	60	17/290 5/290	2 2	55

3.9 | SNAH 200

3.10 | SNAH 300

DIMENSIONALS 3



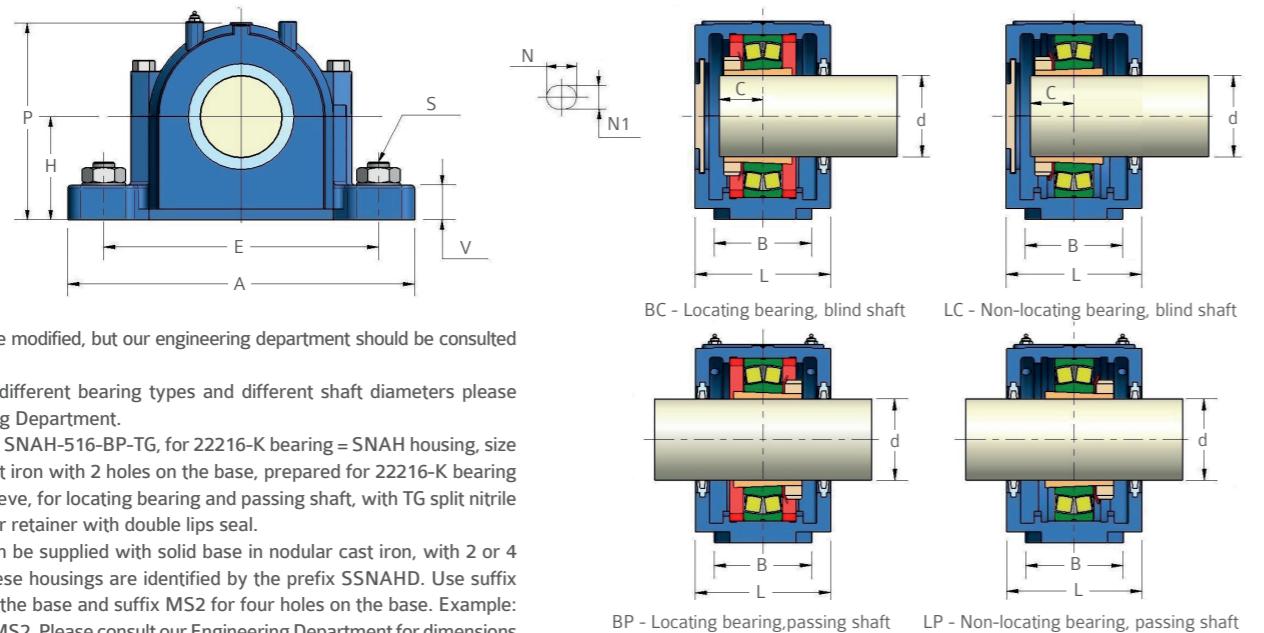
- See page 10 for technical features
- Standard seal "TC" – felt strip, see page 04. For seal types TA and TG, the dimensions are maintained. Should a different type of seal be requested, the dimensions of the columns "L", "N" and "M" on the table can be modified, but our engineering department should be consulted for more information.
- For applications with different bearing types and different shaft diameters please consult our Engineering Department.
- Specification example: SNAH-316-BP-TG, for 21316-C bearing = SNAH housing, size 316, made of grey cast iron with 2 holes on the base, prepared for 21316 C bearing, for locating bearing and passing shaft, with TG split nitrile or polyurethane rubber retainer with double lips seal.
- This bearing series can be supplied with solid base in nodular cast iron, with 2 or 4 holes on the base. These housings are identified by the prefix SSNAHD. Use suffix MS1 for two holes on the base and suffix MS2 for four holes on the base. Example: SSNAHD-316-LC-TG-MS2. Please consult our Engineering Department for dimensions and location of the holes.

Housing	dl	d	Bearing	Washer	Nut	Dimensions (mm)										Ring Dim.	FRB Qtt.	Weight (kg)	
						H	E	A	B	C	L	N	NI	P	S	V			
SNAH 305	25	30	1305 C 2305 C	MB 5	KM 5	50	150	185	52	22	77	20	15	89	12	22	7,5/62 4/62	2	1,90
SNAH 306	30	35	1306 C 2306 C	MB 6	KM 6	50	150	185	52	22	82	20	15						

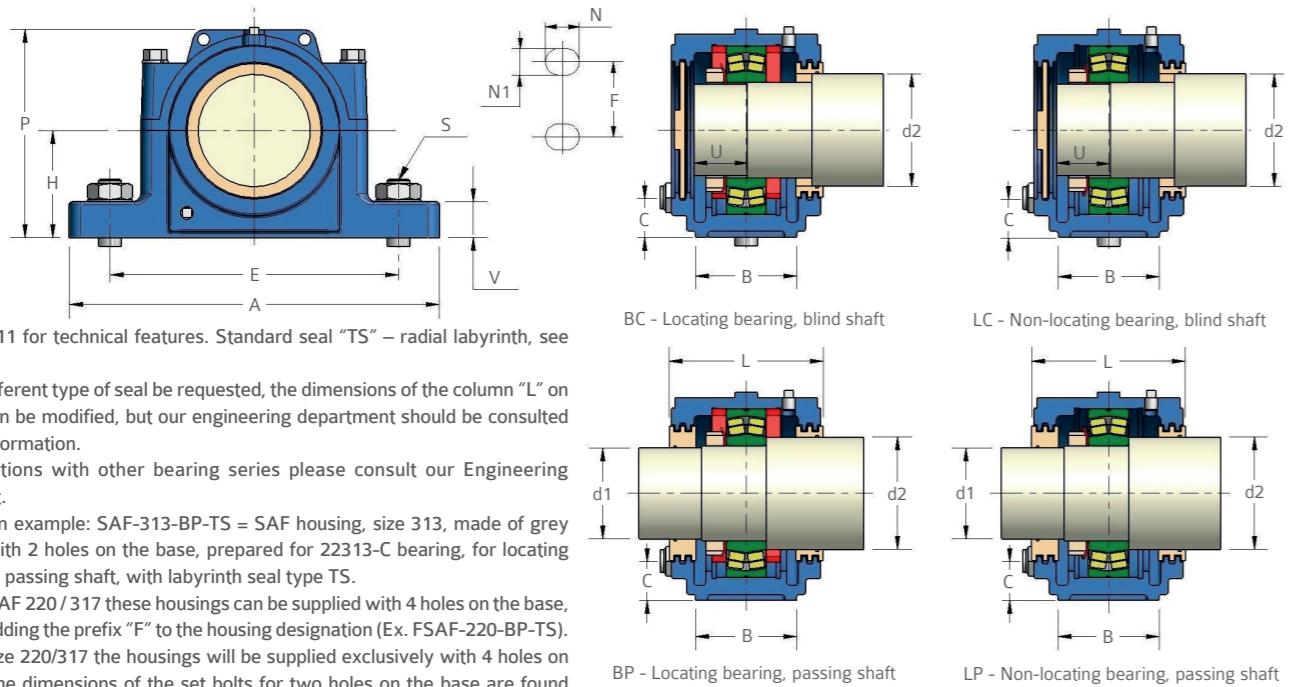
3 DIMENSIONALS

3.11 | SNAH 500

- See page 11 for technical features
- Standard seal "TC" – felt strip, see page 04. For seal types TA and TG, the dimensions are maintained. Should a different type of seal be requested, the dimensions of the columns "L", "N" and "M" on the table can be modified, but our engineering department should be consulted for more information.
- For applications with different bearing types and different shaft diameters please consult our Engineering Department.
- Specification example: SNAH-516-BP-TG, for 22216-K bearing = SNAH housing, size 516, made of grey cast iron with 2 holes on the base, prepared for 22216-K bearing and H-316 adapter sleeve, for locating bearing and passing shaft, with TG split nitrile or polyurethane rubber retainer with double lips seal.
- This bearing series can be supplied with solid base in nodular cast iron, with 2 or 4 holes on the base. These housings are identified by the prefix SSNAHD. Use suffix MS1 for two holes on the base and suffix MS2 for four holes on the base. Example: SSNAHD-516-LC-TG-MS2. Please consult our Engineering Department for dimensions and location of the holes.



Housing	d	Bearing	Adapter sleeve	Dimensions (mm)										Ring Dim.	FRB Qtd	Weight (kg)	
				H	E	A	B	C	L	N	NI	P	S	V			
SNAH 505	20	1205K	H 205	40	130	165	46	18	67	20	15	74	12	19	5/52	2	1,5
		2205K	H 305												3,5/52	2	
		H 305													3,5/52	2	
SNAH 506	25	1206K	H 206	50	150	185	52	19	77	20	15	89	12	22	8/62	2	
		2206K	H 306												6/62	2	2
		H 306													6/62	2	
SNAH 507	30	1207K	H 207	50	150	185	52	21	82	20	15	93	12	22	8,5/72	2	
		2207K	H 307												5,5/72	2	2,2
		H 307													5,5/72	2	
SNAH 508	35	1208K	H 208	60	170	205	60	22	85	20	15	107	12	25	10,5/80	2	
		2208K	H 308												8/80	2	2,9
		H 308													8/80	2	
SNAH 509	40	1209K	H 209	60	170	205	60	23	85	20	15	109	12	25	5,5/85	2	
		2209K	H 309												3,5/85	2	2,9
		H 309													3,5/85	2	
SNAH 510	45	1210K	H 210	60	170	205	60	24	90	20	15	113	12	25	10,5/90	2	
		2210K	H 310												9/90	2	3,2
		H 310													9/90	2	
SNAH 511	50	1211K	H 211	70	210	255	70	26	95	24	18	127	16	28	11,5/100	2	
		22211K	H 311												9,5/100	2	4,4
		H 311													9,5/100	2	
SNAH 512	55	1212K	H 212	70	210	255	70	28	105	24	18	133	16	30	13/110	2	
		22212K	H 312												10/110	2	5,1
		H 312													10/110	2	
SNAH 513	60	1213K	H 213	80	230	275	80	31	110	24	18	148	16	30	14/120	2	
		22213K	H 313												10/120	2	6,5
		H 313													10/120	2	
SNAH 515	65	1215K	H 215	80	230	280	80	32	115	24	18	154	16	30	15,5/130	2	
		22215K	H 315												12,5/130	2	7
		H 315													12,5/130	2	
SNAH 516	70	1216K	H 216	95	260	315	90	35	120	28	22	175	20	32	16/140	2	
		22216K	H 316												12,5/140	2	9,5
		H 316													12,5/140	2	
SNAH 517	75	1217K	H 217	95	260	320	90	37	125	28	22	183	20	32	16,5/150	2	
		22217K	H 317												12,5/150	2	10
		H 317													17,5/160	2	
SNAH 518	80	1218K	H 218	100	290	345	100	46	140	28	22	193	20	35	12,5/160	2	
		22218K	H 318												6,25/160	2	12,5
		H 318													18/170	2	
SNAH 519	85	1219K	H 219	112	290	345	100	42	145	28	22	210	20	35	12,5/170	2	
		22219K	H 319												12,5/170	2	13,7
		H 319													12,5/170	2	
SNAH 520	90	1220K	H 220	112	320	380	110	50	160	32	26	215	24	40	21/200	2	
		22220K	H 320												13/180	2	
		H 320													12/180	2	
SNAH 522	100	1222K	H 222	125	350	410	120	58	175	32	26	239	24	45	13/230	2	
		22222K	H 322												5/230	2	22
		H 322													22/215	2	
SNAH 524	110	1224K	H 324	140	350	410	120	62	185	32	26	271	24	45	14/215	2	26
		22224K	H 324												5/215	2	
		H 324													14/215	2	
SNAH 526	115	1226K	H 326	150	380	445	130	65	190	35	28	290	24	50	13/230	2	
		2															



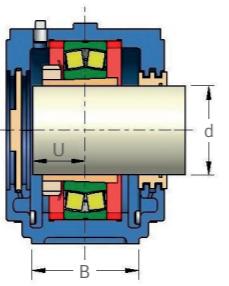
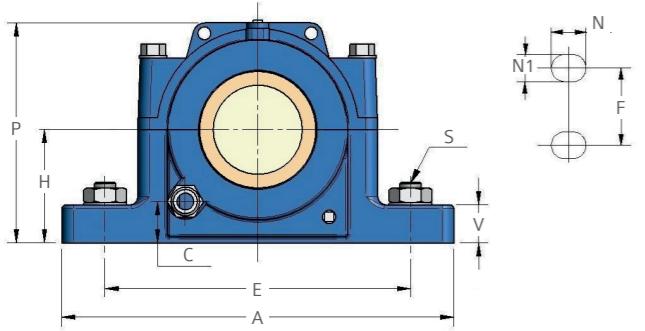
- See pages 11 for technical features. Standard seal "TS" – radial labyrinth, see page 05.
- Should a different type of seal be requested, the dimensions of the column "L" on the table can be modified, but our engineering department should be consulted for more information.
- For applications with other bearing series please consult our Engineering Department.
- Specification example: SAF-313-BP-TS = SAF housing, size 313, made of grey cast iron, with 2 holes on the base, prepared for 22313-C bearing, for locating bearing and passing shaft, with labyrinth seal type TS.
- Up to size SAF 220 / 317 these housings can be supplied with 4 holes on the base, by simply adding the prefix "F" to the housing designation (Ex. FSAF-220-BP-TS). As of the size 220/317 the housings will be supplied exclusively with 4 holes on the base. The dimensions of the set bolts for two holes on the base are found on column "S", between brackets. When not specified, the housings up to and including SAF 317/220 will be supplied with 2 holes on the base.

SAF 200 Series																					
Housing	d1	d2	Nut	Washer	Bearing	H	E	A	B	C	F	L	N	NI	P	S	U	V	Ring dim.	FRB Qty.	Weight (kg)
SAF 216	3"	3.5/8"	KM 16	MB 16	22216C	88,9	262	330	89	36	54	137	32	22	177	5/8" (3/4")	42	32	12,5/140	2	12
SAF 217	3.3/16"	3.15/16"	KM 17	MB 17	22217C	95,25	265	330	89	37	54	137	32	22	188	5/8" (3/4")	44	32	12,5/150	2	14
SAF 218	3.3/8"	4.1/8"	KM 18	MB 18	22218C	101,6	279,5	350	99	40	54	159	32	22	199	5/8" (3/4")	46	34	12,5/160	2	17
SAF 220	3.13/16"	4.1/2"	KM 20	MB 20	22220C	114,3	314	388	112	44	60	162	38	22	222	5/8" (3/4")	54	45	12/180	2	24
SAF 222	4.3/16"	4.7/8"	KM 22	MB 22	22222C	125,41	344,5	420	121	45	70	165	38	22	245	3/4"	58	51	10/200	1	26
SAF 224	4.9/16"	5.5/16"	KM 24	MB 24	22224C	133,35	352,5	420	121	50	70	188	38	22	261	3/4"	60	54	12,5/215	2	35
SAF 226	4.15/16"	5.7/8"	KM 26	MB 26	22226C	152,4	390	467	130	60	83	203	41	26	292	7/8"	64	60	13/230	2	49
SAF 228	5.5/16"	6.1/4"	KM 28	MB 28	22228C	152,4	421	512	150	52	86	194	44	28	299	1"	68	60	10/250	1	60
SAF 230	5.3/4"	6.5/8"	KM 30	MB 30	22230C	160,34	447,5	540	159	52	95	222	44	28	318	1"	74	64	11,5/270	2	73
SAF 232	6.1/16"	7"	KM 32	MB 32	22232C	169,86	465	559	159	52	95	222	50	28	338	1"	76	67	11,5/290	2	86
SAF 234	6.7/16"	7.7/16"	KM 34	MB 34	22234C	179,39	521	629	172	55	108	245	57	28	360	1"	79	70	13/310	2	93
SAF 236	6.7/8"	7.13/16"	KM 36	MB 36	22236C	190,5	565	680	181	67	118	254	65	28	378	1"	85	77	16/320	2	126
SAF 238	7.1/4"	8.3/8"	KM 38	MB 38	22238C	200,03	584	712	191	68	114	273	70	35	399	1.1/4"	88	80	16/340	2	146
SAF 240	7.5/8"	8.3/4"	KM 40	MB 40	22240C	209,55	603,5	750	203	70	127	286	70	35	420	1.1/4"	92	86	16/360	2	193
SAF 244	8.5/16"	9.9/16"	KM 44	MB 44	22244C	241,3	668,5	832	223	86	133	305	80	42	473	1.1/2"	98	96	17/400	2	225

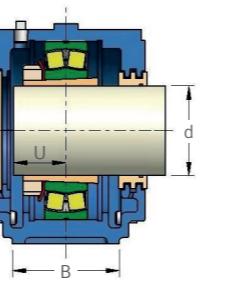
SAF 300 Series																					
Housing	d1	d2	Nut	Washer	Bearing	H	E	A	B	C	F	L	N	NI	P	S	U	V	Ring dim.	FRB Qty.	Weight (kg)
SAF 308	1.7/16"	1.15/16"	KM 08	MB 08	22308C	63,5	171,5	210	60	30	—	95	20	15	122	(1/2")	30	25	10/90	1	5,2
SAF 309	1.11/16"	2.1/8"	KM 09	MB 09	22309C	69,85	193,5	245	70	33	—	101	25	18	135	(5/8")	32	25	10,5/100	1	6
SAF 310	1.7/8"	2.3/8"	KM 10	MB 10	22310C	76,2	212,5	270	70	35	—	115	25	18	148	(5/8")	35	29	11,5/110	1	6,1
SAF 311	2.1/16"	2.9/16"	KM 11	MB 11	22311C	82,55	223,5	280	80	37	51	121	25	18	157	1/2"(5/8")	37	31	12/120	1	7,5
SAF 312	2.1/4"	2.7/8"	KM 12	MB 12	22312C	82,55	232	286	80	33	48	128	25	18	162	1/2"(5/8")	39	31	10/130	1	10,5
SAF 313	2.7/16"	3.1/16"	KM 13	MB 13	22313C	88,9	262	330	89	36	54	137	32	22	177	5/8"(3/4")	42	32	10/140	1	12
SAF 314	2.5/8"	3.1/4"	KM 14	MB 14	22314C	95,25	265	330	89	37	54	137	32	22	188	5/8"(3/4")	44	32	10/150	1	14
SAF 315	2.13/16"	3.7/16"	KM 15	MB 15	22315C	101,6	279,5	350	99	40	54	159	32	22	199	5/8"(3/4")	46	34	10/160	1	17
SAF 316	3"	3.5/8"	KM 16	MB 16	22316C	107,95	295	362	99	43	54	159	34	22	210	5/8"(3/4")	50	34	10/170	1	18,5
SAF 317	3.3/16"	3.15/16"	KM 17	MB 17	22317C	114,3	314	388	112	44	60	162	38	22	223	5/8"(3/4")	54	45	10/180	1	24
SAF 318	3.3/8"	4.1/8"	KM 18	MB 18	22318C	120,65	324	394	112	48	57	175	38	22	234	3/4"	54	51	10/190	1	30
SAF 320	3.13/16"	4.1/2"	KM 20	MB 20	22320C	133,35	352,4	420	121	50	70	188	38	22	261	3/4"	60	54	10/215	1	35
SAF 322	4.3/16"	4.7/8"	KM 22	MB 22	22322C	152,4	390	467	130	61	83	203	41	26	292	7/8"	65	61	10/240	1	46
SAF 324	4.9/16"	5.5/16"	KM 24	MB 24	22324C	160,34	447,5	540	159	60	95	222	44	28	318	1"	69	64	10/260	1	62
SAF 326	4.15/16"	5.7/8"	KM 26	MB 26	22326C	169,86	465,5	559	159	62	95	222	50	28	338	1"	74	67	10/280	1	73
SAF 328																					

3 DIMENSIONALS

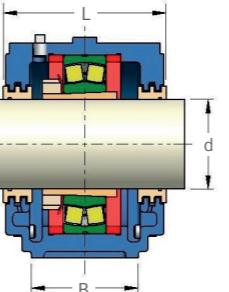
3.15 | SAF 600



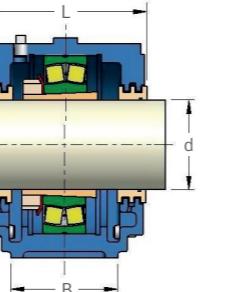
BC - Locating bearing, blind shaft



LC - Non-locating bearing, blind shaft



BP - Locating bearing, passing shaft



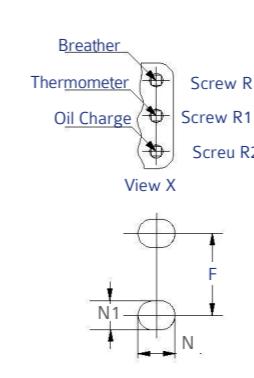
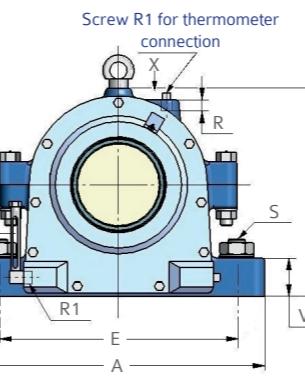
LP - Non-locating bearing, passing shaft

- See page 12 for technical features. Standard seal "TS" – radial labyrinth, see page 05.
- Should a different type of seal be requested, the dimensions of the column "L" on the table can be modified, but our engineering department should be consulted for more information.
- For applications with other bearing series or other shaft diameters, please consult our Engineering Department.
- Specification example: SAF-616-Ø2.11/16"-BP-TS = SAF housing, size 616, made of grey cast iron with 2 holes on the base, prepared for 22316-K bearing and HA-2316 adapter sleeve, for locating bearing and passing shaft, with labyrinth seal type TS.
- Up to size SAF 617 these housings can be supplied with 4 holes on the base, by simply adding the prefix "F" to the housing designation (Ex. FSAF-617-BP-TS). As of the size 617 the housings will be supplied exclusively with 4 holes on the base. The dimensions of the set bolts for two holes on the base are found on column "S", between brackets. When not specified, the housings up to and including SAF 617 will be supplied with 2 holes on the base.

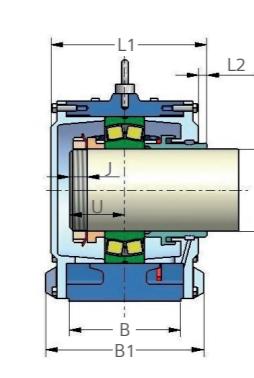
Housing	d	Bearing	Adapter sleeve (complete)	H	E	A	B	C	F	L	N	NI	P	S	U	V	Ring dim.	FRB Qtd.	Weight (kg)
SAF 609	1.7/16"	22309K	HA 2309	69.85	193.5	245	70	33	—	101	25	18	135	(5/8")	32	25	10.5/100	1	6
	1.1/2"		HE 2309																
SAF 610	1.11/16"	22310K	HA 2310	76.2	212.5	270	70	35	—	115	25	18	148	(5/8")	35	29	11.5/110	1	6.1
	1.3/4"		HE 2310																
SAF 611	45 mm	22311K	HA 2311	82.55	223.5	279	79	37	51	121	25	18	157	1/2" (5/8")	37	30	12/120	1	7.5
	50 mm		HE 2311																
SAF 613	2.11/16"	22313K	HA 2313	88.9	262	330	89	36	54	137	32	22	177	5/8" (3/4")	41	32	10/140	1	12
	2.1/4"		HE 2313																
SAF 615	60 mm	22315K	HA 2315	101.6	279.5	350	99	40	54	159	32	22	199	5/8" (3/4")	46	34	10/160	1	17
	65 mm		HE 2315																
SAF 616	70 mm	22316K	HA 2316	107.95	295	362	99	43	54	159	34	22	210	5/8" (3/4")	50	34	10/170	1	18.5
	75 mm		HE 2316																
SAF 617	3"	22317K	HA 2317	114.2	314	388	111	44	60	172	38	22	222	5/8" (3/4")	52	45	10/180	1	24
	80mm		HE 2317																
SAF 618	3.1/4"	22318K	HA 2318	120.65	324	394	112	48	57	175	38	22	234	3/4"	54	51	10/190	1	30
	3.1/4"		HE 2318																
SAF 620	90 mm	22320K	HA 2320	133.35	352.4	420	121	50	70	188	38	22	261	3/4"	60	54	10/215	1	35
	100 mm		HE 2320																
SAF 622	3.15/16"	22322K	HS 2322	152.4	389	467	130	61	83	203	41	26	292	7/8"	65	60	10/240	1	49
	4"		HE 2322																
SAF 624	4.1/4"	22324K	HA 2324	160.34	447.5	540	159	60	95	222	44	28	318	1"	69	64	10/260	1	62
	110 mm		HE 2324																
SAF 626	115 mm	22326K	HA 2326	169.86	465.5	559	159	62	95	222	50	28	338	1"	74	67	10/280	1	73
	125 mm		HE 2326																
SAF 628	4.15/16"	22328K	HA 2328	179.39	521	629	172	65	108	245	57	28	360	1"	79	70	10/300	1	95
	5"		HE 2328																
SAF 630	5.1/4"	22330K	HA 2330	190.5	565	680	181	67	117	254	65	28	378	1"	85	76	10/320	1	126
	135 mm		HE 2330																
SAF 632	5.1/2"	22332K	HA 2332	200.03	584	712	191	68	114	273	70	35	399	1.1/4"	88	80	10/340	1	146
	140 mm		HE 2332																
SAF 634	5.15/16"	22334K	HA 2334	209.55	603.5	750	203	70	127	286	70	35	419	1.1/4"	92	86	10/360	1	193
	6"		HE 2334																
SAF 638	6.3/4"	22338K	HA 2338	241.3	668.5	832	222	86	133	305	80	42	473	1.1/2"	98	96	10/400	1	225
	6.15/16"		HE 2338																

SAF 600

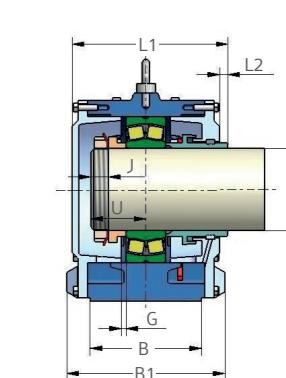
3.16 | SOFN 200-300



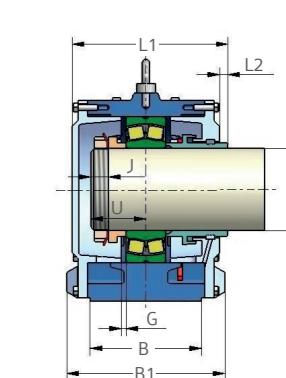
BC - Locating bearing, blind shaft



LC - Non-locating bearing, blind shaft



BP - Locating bearing, passing shaft



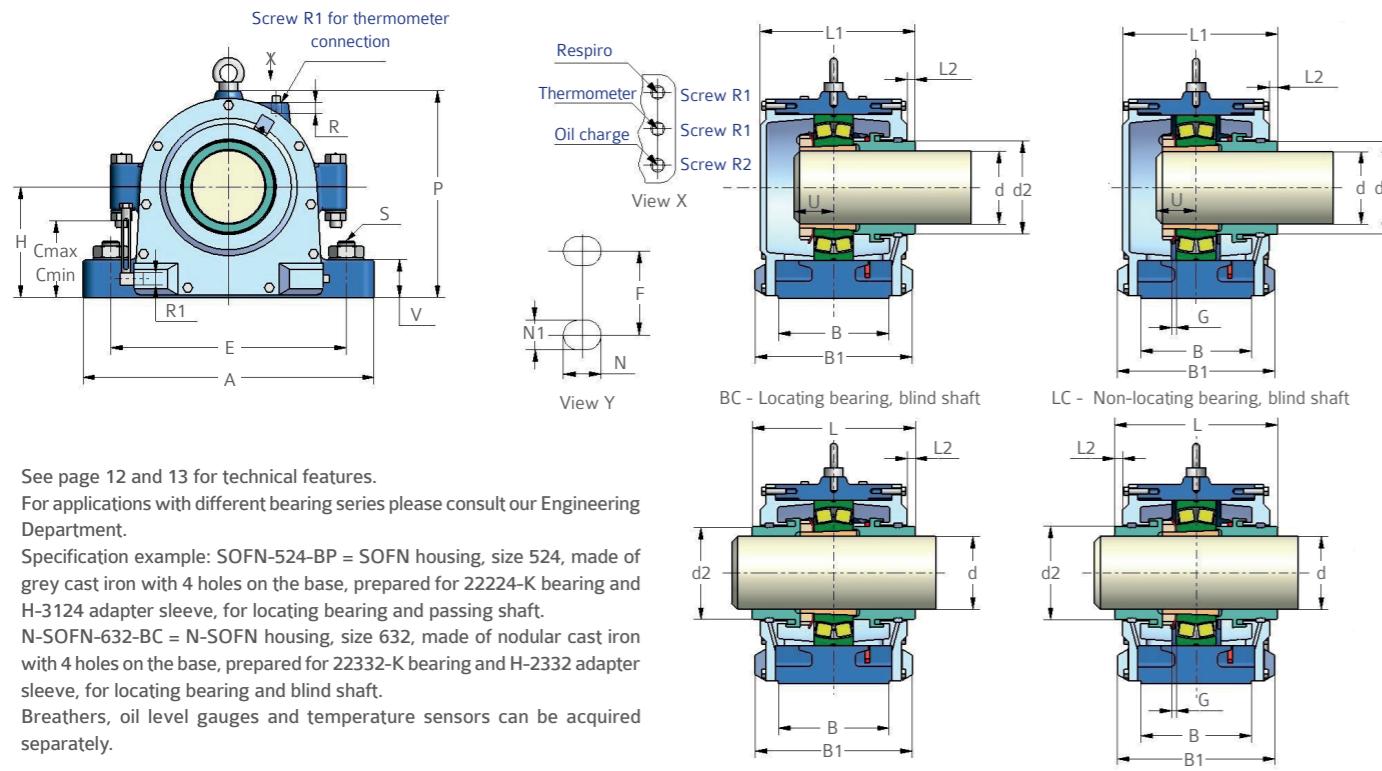
LP - Non-locating bearing, passing shaft

- See page 12 for technical features.
- For applications with different bearing series please consult our Engineering Department.
- Specification example: SOFN-224-BP = SOFN housing, size 224, made of grey cast iron with 4 holes on the base, prepared for 22224-C bearing, for locating bearing and passing shaft.
- N-SOFN-232-BC = N-SOFN housing, size 232, made of nodular cast iron with 4 holes on the base, prepared for 22232-C bearing, for locating bearing and blind shaft.
- Breathers, oil level gauges and temperature sensors can be acquired separately.

SOFN 200 Series																				C (mm) min		C (mm) max		Weight (kg)
Housing	d	d1	Nut																					

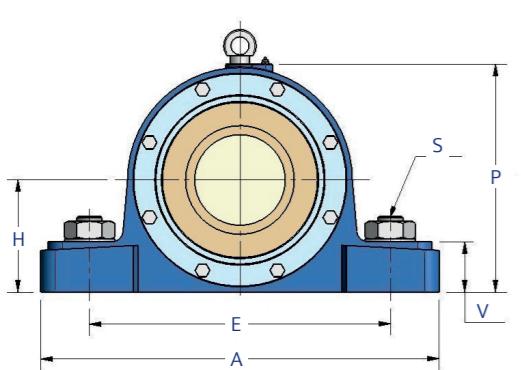
3 DIMENSIONALS

3.17 | SOFN 500-600

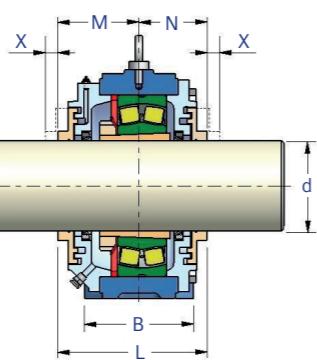


- See page 12 and 13 for technical features.
- For applications with different bearing series please consult our Engineering Department.
- Specification example: SOFN-524-BP = SOFN housing, size 524, made of grey cast iron with 4 holes on the base, prepared for 22224-K bearing and H-3124 adapter sleeve, for locating bearing and passing shaft.
- N-SOFN-632-BC = N-SOFN housing, size 632, made of nodular cast iron with 4 holes on the base, prepared for 22332-K bearing and H-2332 adapter sleeve, for locating bearing and blind shaft.
- Breathers, oil level gauges and temperature sensors can be acquired separately.

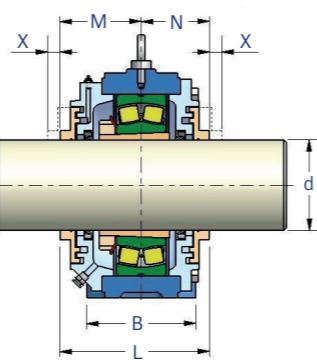
		BP - Locating bearing, passing shaft				LP - Non-locating bearing, passing shaft																				
		SOFN 500 Series																								
Housing	d _l	Bearing	Adapter sleeve (complete)	H	E	A	B	B ₁	D ₂	F	G	L	L ₁	L ₂	N	N ₁	P	R	R ₁	R ₂	S	U	V	C (mm)	Weight (kg)	
SOFN 517	75	22217K	H 317	125	260	330	110	182	96	60	5	180	172	8	40	24	230	27	1/2"	3/8"	M20	44	35	60	65	34
SOFN 518	80	22218K	H 318	135	290	360	120	190	100	70	5	190	180	10	40	24	245	27	1/2"	3/8"	M20	46	45	67	72	38
SOFN 519	85	22219K	H 319	140	290	360	135	210	105	80	5	200	192	8	40	24	255	27	1/2"	3/8"	M20	50	40	68	76	41
SOFN 520	90	22220K	H 320	145	320	400	130	205	110	75	5	206	196	10	45	28	270	27	1/2"	1/2"	M24	54	50	65	73	46
SOFN 522	100	22222K	H 322	160	347	420	145	216	120	75	5	229	216	13	45	28	290	27	1/2"	1/2"	M24	58	50	73	81	58
SOFN 524	110	22224K	H 3124	170	347	420	170	245	135	90	8	276	258	18	45	28	315	27	1/2"	1/2"	M24	60	55	76	86	73
SOFN 526	115	22226K	H 3126	180	377	450	180	260	145	100	8	270	255	15	45	28	335	32	1/2"	1/2"	M24	64	60	80	90	88
SOFN 528	125	22228K	H 3128	190	415	500	190	265	160	100	8	280	265	15	45	35	355	33	1/2"	3/4"	M30	68	65	84	94	112
SOFN 530	135	22230K	H 3130	200	450	540	190	265	170	115	8	280	265	15	50	35	375	44	1/2"	3/4"	M30	74	65	84	94	113
SOFN 532	140	22232K	H 3132	215	470	560	205	280	178	120	10	316	298	18	50	35	405	38	1/2"	3/4"	M30	76	65	93	103	160
SOFN 534	150	22234K	H 3134	235	515	610	230	310	195	130	10	350	330	20	55	35	440	46	1/2"	3/4"	M30	79	70	103	113	197
SOFN 536	160	22236K	H 3136	245	545	650	240	320	205	150	10	360	340	20	65	35	455	44	1/2"	3/4"	M30	79	85	108	118	215
SOFN 538	170	22238K	H 3138	260	590	720	250	335	220	150	12	370	350	20	70	42	480	50	1/2"	3/4"	M36	86	85	115	125	246
SOFN 540	180	22240K	H 3140	275	600	730	260	350	227	160	12	378	358	20	70	42	510	44	1/2"	3/4"	M36	89	85	122	132	285
SOFN 544	200	22244K	H 3144	305	670	820	280	370	255	180	12	404	385	20	80	42	565	48	1/2"	3/4"	M36	95	95	136	151	382
SOFN 548	220	22248K	H 3148	340	740	900	290	380	270	190	12	420	400	20	80	42	625	56	1/2"	3/4"	M36	102	100	153	168	453
SOFN 600 Series																										
Housing	d _l	Bearing	Adapter sleeve (complete)	H	E	A	B	B ₁	D ₂	F	G	L	L ₁	L ₂	N	N ₁	P	R	R ₁	R ₂	S	U	V	C (mm)	Weight (kg)	
SOFN 610	45	22310K	H 2310	95	210	270	92	145	58	50	3	150	142	8	27	1/4"	3/8"	30	19	168	M16	35	30	50	55	23
SOFN 611	50	22311K	H 2311	100	233	290	95	148	65	50	3	155	147	8	27	1/4"	3/8"	33	19	180	M16	37	30	51	56	24
SOFN 612	55	22312K	H 2312	110	230	290	100	152	70	55	5	170	162	8	27	1/4"	3/8"	34	19	198	M16	39	30	57	62	26
SOFN 614	60	22314K	H 2314	125	260	330	110	182	80	60	5	180	172	8	27	1/2"	3/8"	40	24	230	M20	43	35	63	71	33
SOFN 616	70	22316K	H 2316	140	290	360	135	210	95	80	5	214	199	8	27	1/2"	3/8"	40	24	255	M20	50	40	70	78	40
SOFN 618	80	22318K	H 2318	155	317	400	165	246	104	95	5	240	225	15	32	1/2"	1/2"	45	28	280	M24	54	50	75	85	53
SOFN 620	90	22320K	H 2320	170	347	420	170	246	115	90	8	270	255	15	27	1/2"	1/2"	45	28	315	M24	61	55	79	89	72
SOFN 622	100	22322K	H 2322	190	415	500	190	265	130	100	8	290	270	20	33	1/2"	3/4"	45	35	355	M30	65	65	90	105	109
SOFN 624	110	22324K	H 2324	200	450	540	190	286	140	115	8	306	285	20	44	1/2"	3/4"	50	35	375	M30	69	65	92	107	126
SOFN 626	115	22326K	H 2326	215	470	560	205	286	150	120	8	320	300	20	38	1/2"	3/4"	50	35	405	M30	74	65	98	113	156
SOFN 628	125	22328K	H 2328	230	510	630	22																			



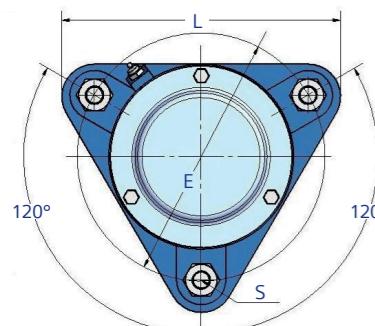
- See page 13 for technical features.
 - Standard seal "AS" – axial labyrinth, see page 05. For seal types ASR, R, ZF, TC, GS, the dimensions are maintained. Should a different type of seal be requested, the dimensions of the columns "L", "N" and "M" on the table can be modified, but our engineering department should be consulted for more information.
 - For applications with other bearing series please consult our Engineering Department.
 - Up to and including sizes 327/328/32 are supplied with only two holes on the base; for 4 holes please consult our Engineering Department.
 - Specification example: SAI-157-BP-AS = SAI housing, size 157, made of grey cast iron, with 2 holes on the base, prepared for 22215-K bearing and HA-315 adapter sleeve, for locating bearing and passing shaft, with taconite proof labyrinth seal type AS.
 - NSAI-34-LC-ASR = NSAI housing, size 34, made of nodular cast iron with 4 holes on the base, prepared for 22234-K bearing and H-3134 adapter sleeve, for non-locating bearing and blind shaft, with taconite proof seal composed of AS axial labyrinth and R retainer.



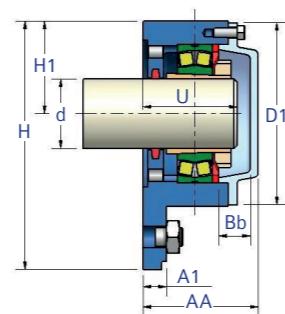
BP - Locating bearing, passing shaft



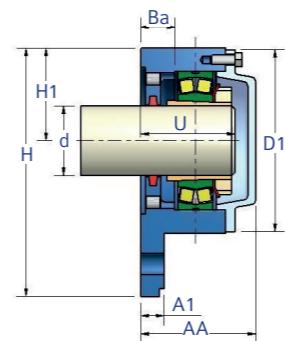
L-P - Non-locating bearing, passing shaft



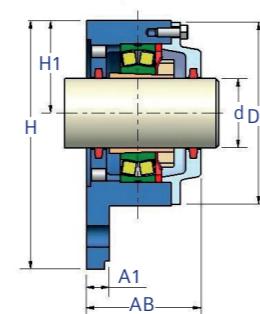
- See page 14 for technical features.
- Standard seal "TC" – felt strip, see page 04.
- Specification example: F-515-BC + 1 FRB-10/130 = F-500 housing, size 515, made of grey cast iron, for locating bearing and blind shaft, for bearings type 2215-K or 22215-K.
- When ordering, always indicate the bearings or locating rings used.
- For shafts with diameters in inches please contact our engineering department and specify on order form, otherwise it shall be manufactured in millimeters, as it is the standard measure for this series.
- One felt strip for housing type A and two felt strips for housing type B should be used.



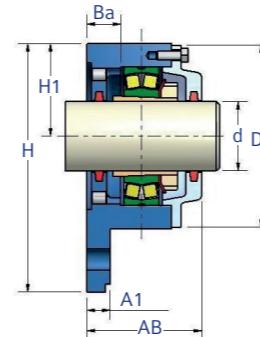
BC - Locating bearing, blind shaft



LC -Non-locating bearing, blind shaft

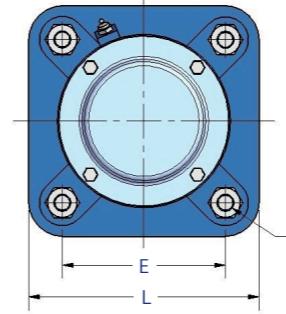


BP - Locating bearing, passing shaft



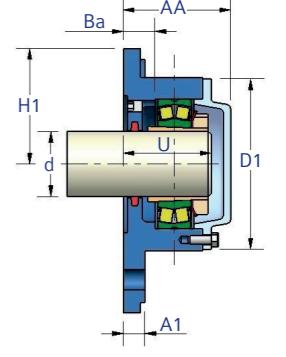
LP - Non-locating bearing, passing shaft

3.20 | F-500 - 722500



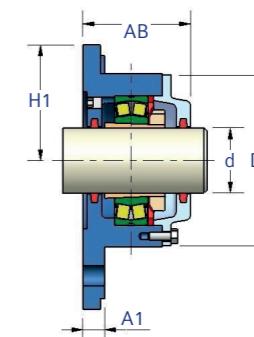
The technical drawing illustrates a cross-sectional view of a mechanical component. Key dimensions are indicated: **AA** is the total height of the upper part; **d** is the width of the central shaft; **H1** is the height of the lower cylindrical section; **U** is the gap between the top of the lower section and the bottom of the upper section; **A1** is the width of the base; and **E** is the distance from the centerline to the outer edge of the base.

BC - Locating bearing, blind shaft

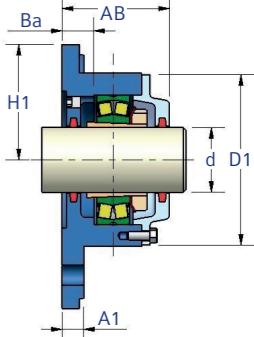


LC - Non-locating bearing, blind shaft

- See page 14 for technical features.
 - Standard seal "TC" – felt strip, see page 04.
 - Specification example: F-515-BC + 1 FRB-10/130 = F-500 housing, size 515, made of grey cast iron, for locating bearing and blind shaft, for bearings type 2215-K or 22215-K.
 - When ordering, always indicate the bearings or locating rings used.
 - For shafts with diameters in inches please contact our engineering department and specify on order form, otherwise it shall be manufactured in millimeters, as it is the standard measure for this series.
 - One felt strip for housing type A and two felt strips for housing type B should be used.



BP - Locating bearing, passing shaft



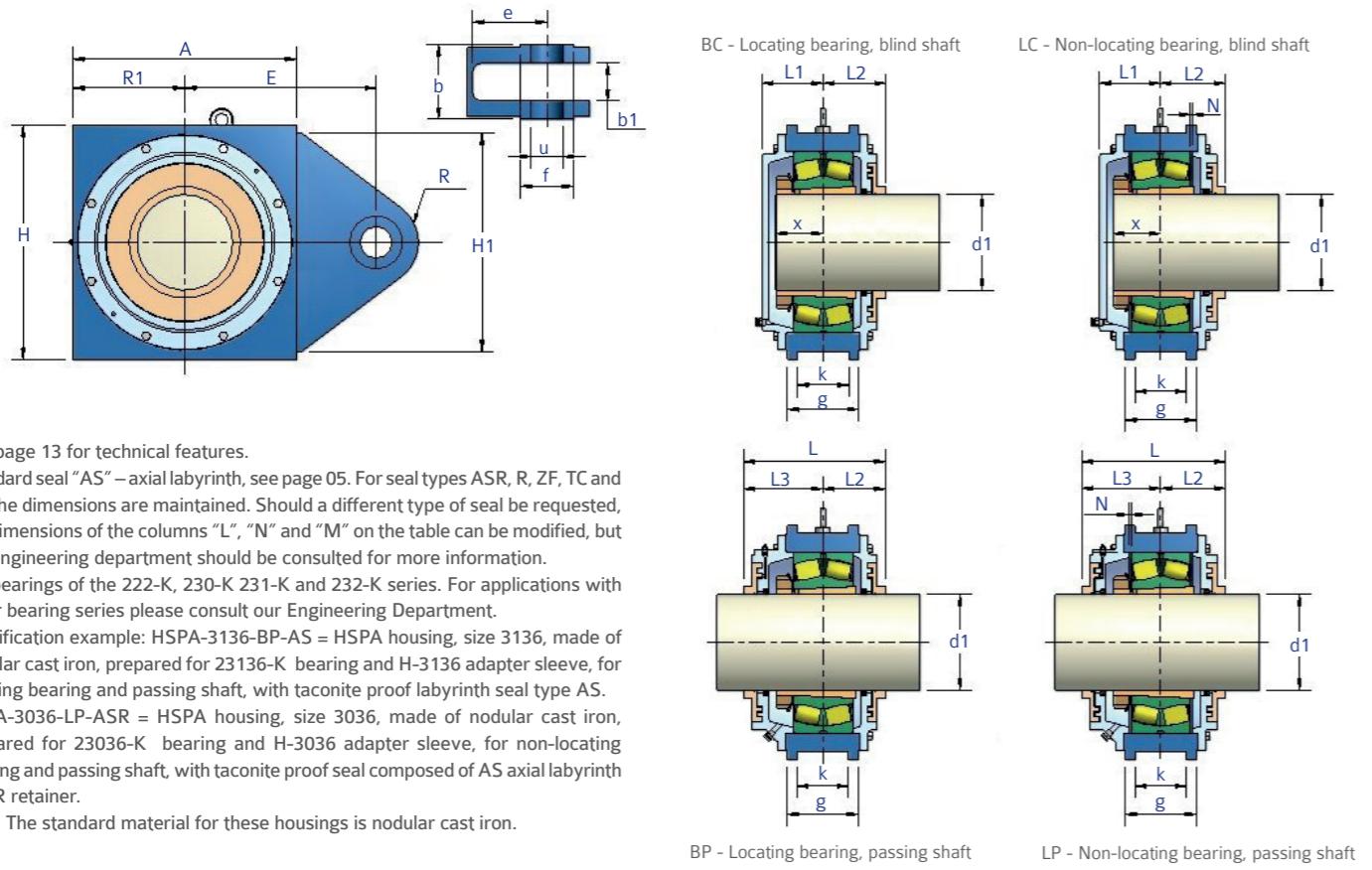
LP - Non-locating bearing, passing shaft

Housing	Shaft d	Bearing designation	Adapter sleeve	Lock ring		Dimensions (mm)											Felt	Weight (kg)	
				Qty.	Specification	AA	AB	AI	Ba	Bb	DI	H	HI	E	L	S	U		
F-505	20	1205K	H 205	1	FRB 5/52													FS110	1,1
		2205K	H 305	1	ZW 42x52	51,5	56,5	10	15	12,5	75	100	38	96	110	10	45		
		22205K	H 305	1	ZW 42x52														
F-506	25	1206K	H 206	1	FRB 6/62													FS190	1,5
		2206K	H 306	1	ZW 50x62	57	59,5	12	16	15	86	117	44	116	130	10	49		
		22206K	H 306	1	ZW 50x62														
F-507	30	1207K	H 207	1	FRB 8/72													FS190	1,8
		2207K	H 307	1	ZW 65x72	59,5	63,5	12	16	14,5	97	130	48,5	130	145	12	52		
		22207K	H 307	1	ZW 65x72														
F-508	35	1208K	H 208	1	FRB 7/80													FS190	2,9
		2208K	H 308	1	ZW 70x80	64	65,5	12	17	18	108	143	54	140	160	12	53,5		
		22208K	H 308	1	ZW 70x80														
F-509	40	1209K	H 209	1	FRB 6/85													FS190	3,1
		2209K	H 309	1	ZW 75x85	64,5	69,5	12	19	16,5	113	160	60	160	180	12	56		
		22209K	H 309	1	ZW 75x85														
F-510	45	1210K	H 210	1	FRB 5/90													FS190	3,8
		2210K	H 310	1	ZW 80x90	68,5	73	15	22	17,5	118	160	60	160	180	12	61		
		22210K	H 310	1	ZW 80x90														
F-511	50	1211K	H 211	1	FRB 6/100													FS260	4
		2211K	H 311	1	ZW 85x100	75,5	81,5	15	24	19,5	128	172	65	170	192	12	66		
		22211K	H 311	1	ZW 85x100														
F-512	55	1212K	H 212	1	FRB 8/110													FS260	4,6
		2212K	H 312	1	ZW 90x110	77	82	15	23	19	142	189	72	180	210	12	68		
		22212K	H 312	1	ZW 90x110														
F-513	60	1213K	H 213	1	FRB 10/120													FS260	6
		2213K	H 313	1	FRB 2/120	80	86	15	22	20	152	203	78	190	225	12	71		
		22213K	H 313	1	FRB 2/120														

Housing	Shaft d	Bearing designation	Adapter sleeve	Lock ring		Dimensions (mm)										Felt	Weight (kg)	
				Qty	Specification.	AA	AB	AI	Ba	Bb	DI	HI	E	L	S	U		
F-515	65	1215K	H 215	2	FRB 8/130												FS260	10
		2215K	H 315	1	FRB 10/130	104	104	25	30	27	168	95	152	190	16	93		
		22215K	H 315	1	FRB 10/130													
F-516	70	1216K	H 216	2	FRB 8,5/140												FS330	10,3
		2216K	H 316	1	FRB 10/140	110	110	25	31	30	176	98	152	196	16	96		
		22216K	H 316	1	FRB 10/140													
F-517	75	1217K	H 217	2	FRB 9/150												FS330	12,6
		2217K	H 317	1	FRB 10/150	114	114	25	31	30	188	105	170	210	16	72		
		22217K	H 317	1	FRB 10/150													
F-518	80	1218K	H 218	2	FRB 10/160												FS330	13
		2218K	H 318	1	FRB 10/160	118	118	25	30	31	198	105	170	210	16	105		
		22218K	H 318	1	FRB 10/160													
F-520	90	1220K	H 220	2	FRB 11/180												FS370	20
		2220K	H 320	1	FRB 10/180	127	127	30	30	33	224	125	198	250	20	113		
		22220K	H 320	1	FRB 10/180													
F-522	100	1222K	H 222	2	FRB 12,5/200												FS460	22
		2222K	H 322	1	FRB 10/200	137	137	30	30	38	246	135	219	270	20	123		
		22222K	H 322	1	FRB 10/200													

3 DIMENSIONALS

3.21 | HSPA

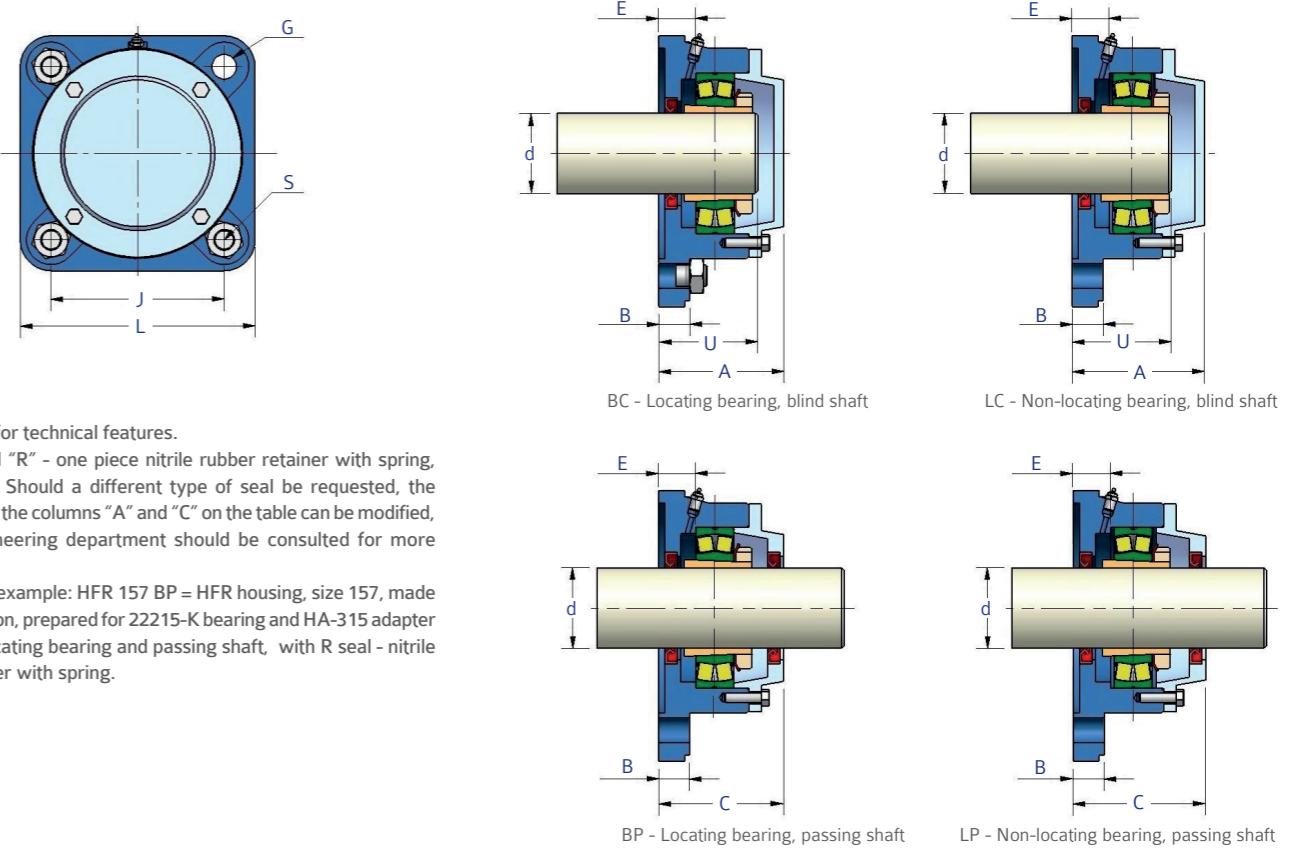


- See page 13 for technical features.
- Standard seal "AS" – axial labyrinth, see page 05. For seal types ASR, R, ZF, TC and GS, the dimensions are maintained. Should a different type of seal be requested, the dimensions of the columns "L", "N" and "M" on the table can be modified, but our engineering department should be consulted for more information.
- For bearings of the 222-K, 230-K 231-K and 232-K series. For applications with other bearing series please consult our Engineering Department.
- Specification example: HSPA-3136-BP-AS = HSPA housing, size 3136, made of nodular cast iron, prepared for 23136-K bearing and H-3136 adapter sleeve, for locating bearing and passing shaft, with taconite proof labyrinth seal type AS.
- HSPA-3036-LP-ASR = HSPA housing, size 3036, made of nodular cast iron, prepared for 23036-K bearing and H-3036 adapter sleeve, for non-locating bearing and passing shaft, with taconite proof seal composed of AS axial labyrinth and R retainer.
- Obs.: The standard material for these housings is nodular cast iron.

Housing	Bearing	Adapter sleeve	dl	A	R1	H	H1	E	e	f	u	b	bl	L	L1	L2	L3	g	h	X	N	R	Weight (kg)
HSPA 2228	22228K	H 3128	125	315	155	330	300	230	70	70	40	76	40	226	78	113	113	83	53	65	3	45	43
HSPA 3028	23028K	H 3028	125	260	130	300	270	225	90	90	50	150	60	156	68	68	88	70	45	55	3	70	50
HSPA 3030	23030K	H 3030	135	280	140	320	290	235	90	90	50	150	60	194	82	82	112	85	45	60	2	70	60
HSPA 3132	23132K	H 3132	140	370	185	370	340	350	160	100	61	132	62	229	108	108	121	116	65	78	3	90	125
HSPA 3034	23034K	H 3034	150	325	162,5	360	330	260	90	90	50	150	60	201	88	88	113	102	65	68	2	70	87
HSPA 3134	23134K	H 3134	150	375	187,5	400	370	395	180	100	60	132	62	249	113	113	136	120	65	80	3	90	150
HSPA 2236	22236K	H 3136	160	420	210	440	410	380	170	140	80	135	65	255	95	120	135	114	60	80	3	100	200
HSPA 3036	23036K	H 3036	160	350	175	390	360	275	90	90	50	150	60	201	88	88	113	100	65	72	3	70	105
HSPA 3136	23136K	H 3136	160	400	200	440	410	360	158	140	80	135	65	248	105	113	135	120	60	80	3	100	180
HSPA 3236	23236K	H 2336	160	420	210	450	410	300	90	140	80	140	70	285	110	135	150	140	93	90	3	90	230
HSPA 3038	23038K	H 3038	170	375	180	440	400	290	90	90	50	150	60	211	88	93	118	105	65	72	3	70	135
HSPA 3040	23040K	H 3040	180	390	200	430	400	275	85	120	70	125	62	240	108	107	133	125	83	78	3	80	160
HSPA 3140	23140K	H 3140	180	420	210	440	410	360	140	100	60	140	70	270	115	120	150	140	100	95	2	80	175
HSPA 3044	23044K	H 3044	200	430	210	480	440	325	100	100	60	200	70	241	103	103	138	120	65	80	3	80	185
HSPA 3144	23144K	H 3144	200	470	235	510	480	530	260	140	100	144	74	295	125	135	160	150	65	95	4	120	265
HSPA 3148	23148K	H 3148	220	520	260	540	500	515	250	250	100	215	123	328	129	149	179	152	65	110	4	150	310
HSPA 3052	23052K	H 3052	240	500	245	540	500	515	250	250	100	215	123	261	113	113	148	135	65	94	4	150	240
HSPA 3152	23152K	H 3152	240	550	275	570	540	565	270	250	100	225	135	336	140,5	150,5	185,5	175	80	115	4	150	330
HSPA 3252	23252K	H 2352	240	596	298	610	570	615	300	240	100	240	173	375	157,5	167,5	207,5	205	103	130	3	150	420
HSPA 3156	23156K	H 3156	260	600	300	610	570	615	300	240	100	225	135	351	148	158	193	205	103	120	4	150	360
HSPA 3160	23160K	H 3160	280	630	315	650	610	650	310	200	100	270	170	385	155	170	215	190	130	130	4	150	440
HSPA 22260	22260K	H 3160	280	660	330	680	640	630	280	200	105	220	150	370	160,5	174,5	195,5	177	80	120	4	170	530
HSPA 3260	23260K	H 3260	280	680	340	690	650	680	310	260	100	270	190	404	187	182	222	230	115	145	4	180	625
HSPA 3164	23164K	H 3164	300	680	340	700	660	680	340	240	110	300	180	395	192	180	215	210	140	135	4	180	580
HSPA 3168	23168K	H 3168	320	740	370	740	700	720	310	240	120	300	180	445	200	200	245	220	150	160	4	200	640
HSPA 3268	23268K	H 3268	320	735	385	740	700	750	310	240	110	300	213	475	238	203	272	265	123	210	5	200	650
HSPA 3272	23272K	H 3272	340	800	400	830	790	765	310	280	130	330	213	509	222	227	282	275	123	190	5	225	890
HSPA 3176	23176K	H 3176	360	750	375	780	740	750	320	230	110	300	200	459	202	202	257	230	120	170	5	200	720
HSPA 3276	23276K	H 3276	360	810	405	820	780	780	305	240	110	300	213	529	257	232	297	295	123	220	5	200	910

HSPA

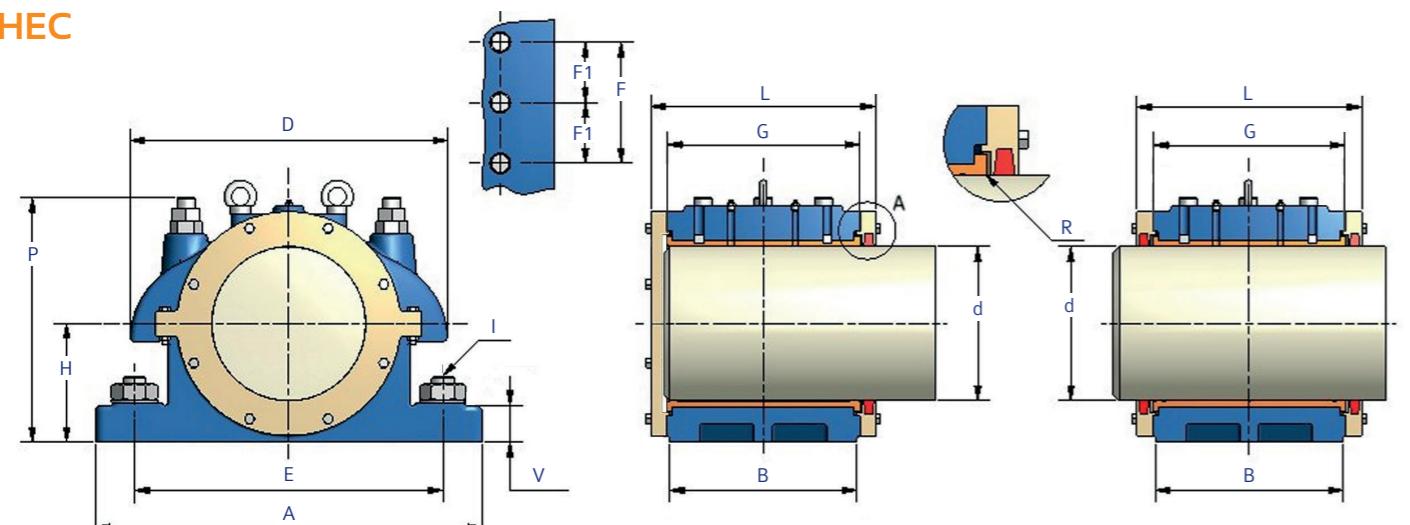
3.22 | HFR



DIMENSIONALS 3

HFR

HEC

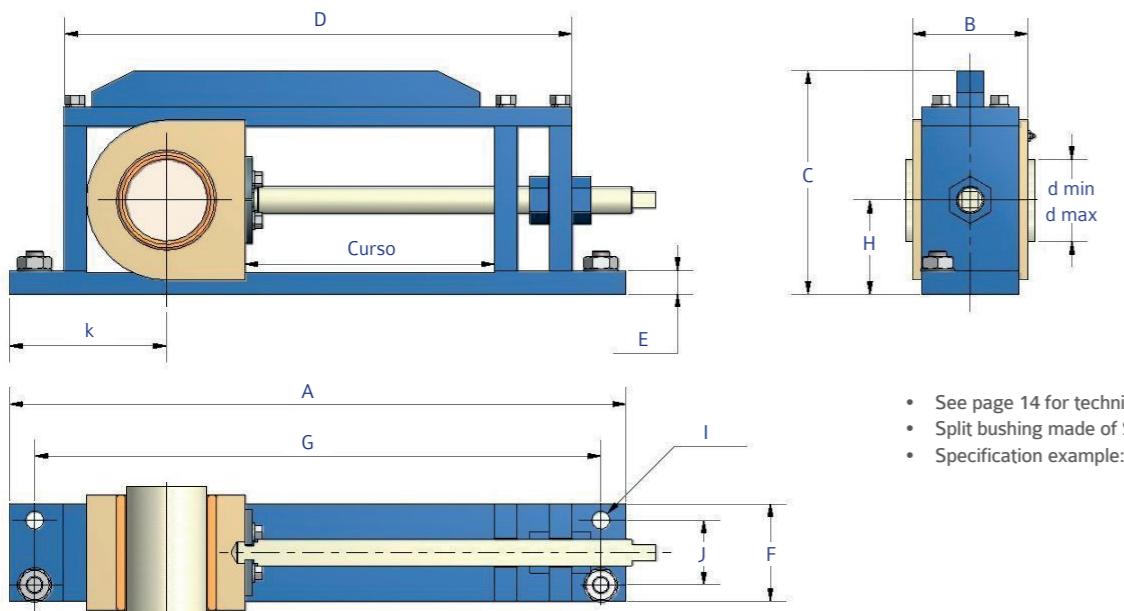


- See page 14 for technical features.
- Standard seal "TC" – felt strip, see page 04.
- Split bushing made of SAE 67 bronze.
- Specification example: HEC I 135mm, 135mm side covers, for passing shaft.

Obs: If the shaft has a different radius than those displayed on column R of the table below.

Housing	H	E	A	B	F	F1	L	P	I	D	G	V	R	Shaft (d)	
														min	max
HEC-0	94	305	360	130	80	*	192	190	22	255	140	38	4	76,2	114,3
HEC-1	128	400	470	180	100	*	252	253	28,6	313	200	55	6	127	152,4
HEC-2	170	410	530	240	160	*	302	365	31,7	435	250	70	8	165,1	190,5
HEC-3	195	510	640	310	200	100	372	405	38,1	525	320	65	8	203,2	254

HF



- See page 14 for technical features.
- Split bushing made of SAE 67 bronze.
- Specification example: HF I 63,5mm.

Housing	A	B	C	D	E	F	G	H	I	J	K	Shaft (d)		Travel
												min	max	
HF-1	590	80	186	450	19	59	520	73	17,5	.	155,2	38,1	63,5	200
HF-2	775	127	256	633	25	100	725	102	20,6	60	185,4	76,2	101,6	300
HF-3	855	200	312	705	33,1	160	785	131	25,4	90	218,3	114,3	139,7	320
HF-4	1000	230	400	814	38,1	170	920	170	28,6	110	285	165,1	190,5	328



Metal Disc Couplings



Elastic Couplings with Axial Pin



Highly Flexible Couplings



Gear Couplings



Flange Couplings



Barrel Couplings



Elastic Couplings



Split Elastic Couplings



Hydrodynamic Couplings



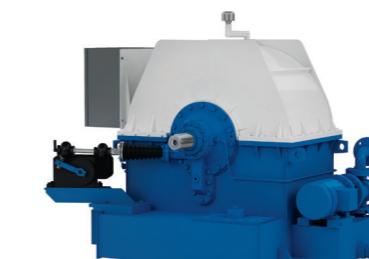
Shrink Discs



Locking Assemblies



Friction Springs



Variable Speed Hydrodynamic Couplings



Bearing Housings

Partner for Performance

HSBP, HSBM, HSBP 30K AND HSBM 30K

These series are versatile and robust, therefore, they present many advantages that should be considered:

- Easy to assemble the seal;
- Flexibility: the seal can be easily changed or replaced by acquiring new side covers with the desired seal;
- Sealing elements (labyrinth, gasket, retainers) are interchangeable between these series;
- Up to size 32 (22208K to 22232K), the same side cover is used;
- The constructive form is easily changed by replacing the side covers and/or locking rings;
- Enables safety stock reduction;
- Easily adapted to house split bearings by changing the lateral covers.



Partner for Performance



www.henfel.com.br | www.ringfeder.com

Henfel Indústria Metalúrgica LTDA.

Address:

Av. Major Hilário Tavares Pinheiro, 3447
CEP 14871-300 • Jaboticabal - SP

Phone: +55 16 3209.3422
vendas@henfel.com.br