

MADE IN THE

USA



**BEARINGS, INC.**



## America rolls on KD quality made in the U.S.A.

### **KD Bearings, Inc. | Auburn, Alabama**

KD Bearings is a leading producer of semi-precision ball bearings and wheels for powered and gravity-type conveyors and wheel goods applications such as lawn equipment and hand carts. Available in galvanized steel, aluminum, nylon or plastic in a variety of basic configurations based on weight and speed specifications that meet industry standards, KD also offers custom modifications including special lengths, offsets, custom bores, and plating for improved performance and streamlined assembly.

KD Bearings prides itself on its dedication to delivering quality parts on time, all the time. With competitively-priced products, customer-focused service and reliable delivery, the company lives up to its reputation every day – *America rolls on quality KD bearings made in the U.S.A.*



## Quality Bearings Made in the USA

For more than three decades KD Bearings, Inc. has been a leader in manufacturing dependable, semi-precision ball bearings. Our bearings are widely used in lawn equipment, shopping carts, hand trucks and in both powered and gravity-conveyor systems.

### **Bearing Types**

The KD line includes bearings designed for light and heavy duty applications. They have the capability to maintain a speed of 1200 rpms with a sustained dynamic load of up to 425 lbs./unit. KD has the capability to meet each customer's cost and performance requirements by using a multifaceted assembly process along with various metals and a variety of seal configurations.

### **Added Value**

While the basic internal construction of KD's bearings has been proven in thousands of applications, external design modifications help our customers enjoy improved performance and reductions in assembly and maintenance costs. Special lengths, offsets, bores, plating, pre-lubrication and other modifications can be easily accommodated.

### **Contact KD**

For more information and custom quotes, please call us at (334) 887-8886, fax your specifications to (334) 887-7714, or email [sales@kdbearings.com](mailto:sales@kdbearings.com).

MADE IN THE



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- 12-13 Sealed Wheel Conveyor Bearings  
Medium Duty FSR/FSRN CS Series



### How To Order

It's simple as 1, 2, 3. For additional product information or to get a custom quote:

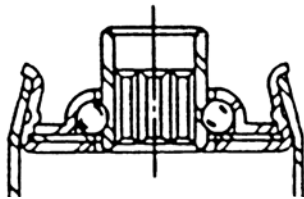
**1. Phone** 334-887-8886

**2. Fax** 334-887-7714

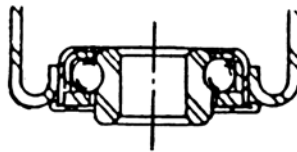
**3. Online** E-mail us [sales@kdbearings.com](mailto:sales@kdbearings.com) or visit our website at [www.kdbearings.com](http://www.kdbearings.com).

## Tube Conveyor Selection Guide

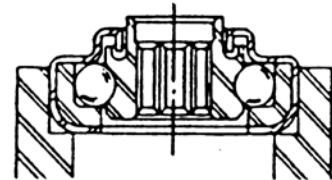
The KD tube conveyor bearing product line includes a complete range of bearings with dynamic load capabilities from 21 to 180 lbs. The selection guide below should be used to determine the bearing series that matches your application. For complete part numbers, load capacity, and dimensions, please refer to the appropriate bearing data sheet.



A - SWAGED END



C - COUNTER-BORED FIT



D - PRESS FIT

## Tube Conveyor Selection Guide

Tubing O.D.	Gauge	Wall Thickness	Nominal Inside Dia.	RECOMMENDED BEARINGS		
				Light duty	Medium Duty	Tubing End
0.75	22	0.028	0.694	BF-689 Series		A
0.75	20	0.035	0.68	BF-689 Series		C
0.875	13	0.095	0.685	BF-689 Series		A
1	18	0.049	0.902	BF-908 Series		D
1.0625	14	0.083	0.896	BF-908 Series		C
1.25	16	0.065	1.12	BF-1127 Series	FSR-1127 Series	D
1.3125	13	0.095	1.122	BF-1127 Series	FSR-1127 Series	D
1.375	18	0.049	1.277	BFC-1283 Series		A
1.5	16	0.065	1.37	BFN-1377 Series	FSRN-1377 Series	D
1.875	16	0.065	1.745	BFC-1725 Series		A
1.9	16	0.065	1.77	BFC-1777 Series		A
1.9	14	0.083	1.734	BFC-1725 Series		A
2	16	0.065	1.87	BFC-1877 Series		A
2	12	0.109	1.782	BRC-1777 Series		A



LIGHT DUTY  
BWES-1937-257



HEAVY DUTY  
BWHS-1937-255-2



PLASTIC - BLACK  
BWP-1937-255-NPE



PLASTIC - WHITE  
BWP-1937-255-NPE-1

## Gravity Type Conveyor Wheels

### BW Series

Steel, Aluminum and Nylon Skate Wheels for Gravity Conveyors

### Advantages of BW Series Conveyor Wheels

The BW Series Conveyor Wheel inner races are machined and burnished rolled steel. Labyrinth-constructed to keep dirt out and lubrication in, wheels feature galvanized outer steel surfaces to resist rust. All KD anti-friction bearings include precision hardened, load bearing surfaces and ground carbon steel balls.

### BWHS Series – Heavy Duty Zinc-Plated Steel Skate Wheel Bearings

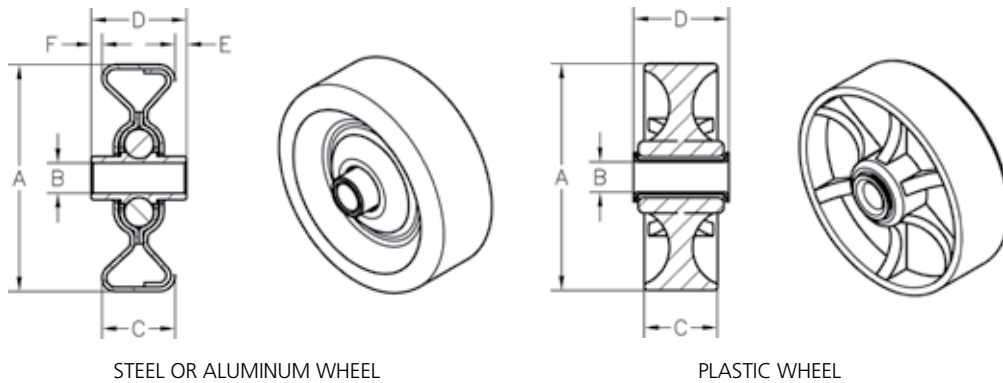
These feature extra-heavy outer housings and heavy duty raceways. They are designed to take exceptional abuse in pallet-rack-type conveyors or single-track-type conveyors.

### Plastic Skate Wheel Bearings

KD plastic skate wheel bearings with injection-molded Nylon 6/6 wheels feature special lubricated material for rollability, a large contact surface for a longer service life and a spoke design for stronger durability. These rugged units operate in temperatures from -40°F to 250°F. With their high strength and light weight, they are an economical solution for most applications.

### Specialty Skate Wheel Bearings

Plastic skate wheels may be molded from special compounds to resist extreme temperatures for extended periods, impact loading and certain chemical compounds. Custom plastic colors are also possible. For assistance with special applications, contact KD for more information.



STEEL OR ALUMINUM WHEEL

PLASTIC WHEEL

## Conveyor Skate Wheel Bearings

	A	B	C	D	E	F	G	H	I
Part Numbers	Outside Diameter	Bore	Body Width	Overall Length	REF	REF	Number of Balls	Diameter of Balls	Dynamic Load Limit
<b>Light-Duty Steel Housing Skate Wheel Bearings for 1/4" Round Shaft</b>									
BWES-1937-257	1.9375	.255/.260	0.59375	0.8125	0.078125	0.078125	7	0.25	50
<b>Standard Steel Housing Skate Wheel Bearings for 1/4" Round Shaft</b>									
BWSN-1937-257	1.9375	.255/.260	0.625	0.8125	0.078125	0.078125	7	0.25	75
BWSN-1937-257-2	1.9375	.255/.260	0.625	0.9375	0.140625	0.140625	7	0.25	75
<b>Standard Aluminum Housing Skate Wheel Bearings for 1/4" Round Shaft</b>									
BWAN-1937-257	1.9375	.255/.260	0.625	0.8125	0.078125	0.078125	7	0.25	75
BWAN-1937-257-2	1.9375	.255/.260	0.625	0.9375	0.140625	0.140625	7	0.25	75
<b>Medium Duty Steel Housing Skate Wheel</b>									
BWMS-1937-267	1.9375	.263/.268	0.65625	0.8125	0.078125	0.078125	7	0.25	75
BWMS-1937-267-2	1.9375	.263/.268	0.65625	0.9375	0.140625	0.140625	7	0.25	75
<b>Steel Heavy Duty Housing Skate Wheel Bearings for 1/4" or 5/16"* Round Shaft</b>									
BWHS-1937-255-2	1.9375	.252/.258	0.5625	0.875	0.15625	0.15625	8	0.25	100
BWHS-1937-316	1.9375	.314/.319	0.5625	0.875	0.15625	0.15625	8	0.25	100
BWHS-1937-255-3	1.9375	.252/.258	0.5625	0.8125	0.125	0.125	8	0.25	100
<b>Standard Plastic Wheel - 1/4" Round Shaft</b>									
BWP-1937-255-NPE	1-15/16 (1.9375)		BLACK	5/8 (.625)					
BWP-1937-255-NPE-1	1-15/16 (1.9375)		WHITE	5/8 (.625)					

\* Special Order





SEALED  
HEX BORE  
*BFC-1877-446-HDS*



LABYRINTH  
HEX BORE  
*BFC-1777-446*



OPEN  
HEX BORE  
*BFC-1283-317-H*



LABYRINTH  
ROUND BORE  
*BFC-1777-257-L*

## Standard Duty BFC Series Roller Conveyor Bearings

### **KD Roller Conveyor Bearing Capability**

BFC Series bearings are the economical choice for standard-duty gravity roller conveyors and low-RPM driven rollers.

In addition to these BFC bearings that have a dynamic load rating of 60 to 100 lbs., KD manufactures a complete line of light-to-heavy duty conveyor wheel bearings with load limits ranging from 21 to 180 lbs.

### **KD Standard-Duty Roller Conveyor Bearing Advantages**

BFC series bearings feature machined inner races with burnished and hardened raceways and heat-treated stamped outer races for long-wearing guidance of hardened steel balls.

The soft flanged outer housing facilitates swaging with the tube or roller ends. Swaging may begin no further down the tube than 50% of the "E" dimension, measured from the tube end. Recommended curl depth is .050 inch maximum per side to prevent the bearing from "walking out" of the tube.

Standard features include: hex or round bores, labyrinth or sealed construction, zinc plating, and pre-lubrication are available as indicated on the page 7.

The BFC Series of roller conveyor bearings is a basic economical design with few load limit options.

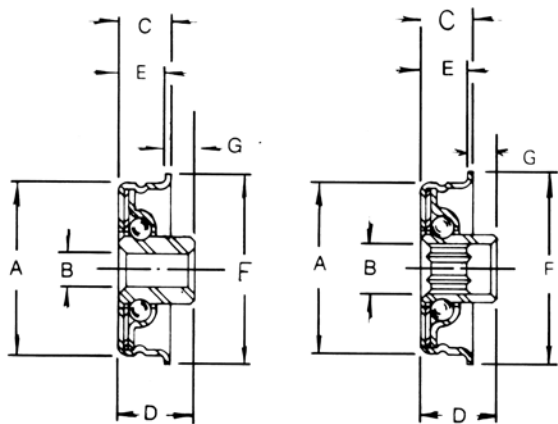


## BFC Conveyor Bearing Sizes

(The letter "H" in the part number denotes a hexagonal bearing bore)

Part Numbers	A Outside Diameter	B Bore	C Body Width	D Overall Length	E REF	F REF	G REF	H No. of Balls	I Dia. of Balls	J Dynamic Load Limit
BFC-1283-252	1.275 / 1.285	.250/.255	25/64	9/16	11/32	1-3/8	7/32	11	0.15625	60
BFC-1283-257	1.275 / 1.285	.255/.260	25/64	9/16	11/32	1-3/8	7/32	11	0.15625	60
BFC-1283-317	1.275 / 1.285	.315/.319	25/64	9/16	11/32	1-3/8	7/32	11	0.15625	60
BFC-1283-317-H	1.275 / 1.285	.315/.319	25/64	9/16	11/32	1-3/8	7/32	11	0.15625	60
BFC-1283-328-H	1.275 / 1.285	.327/.330	25/64	9/16	11/32	1-3/8	7/32	11	0.15625	60

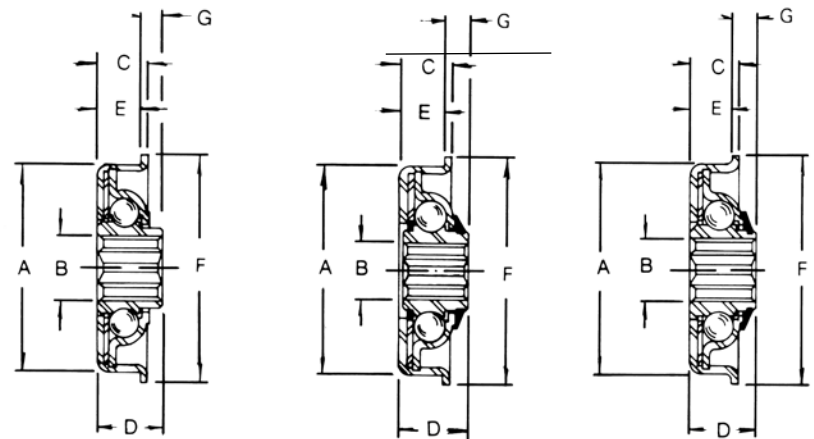
OPEN BFC BEARINGS



Round Bore

H Hex Bore

LABYRINTH AND SEALED BFC BEARINGS



HL Hex Bore  
Labyrinth Only

HDS Hex Bore  
Front and Back Seal

HGS Hex Bore  
Front Seal Only

## Labyrinth and Sealed BFC Bearings

(The letter "H" in the part number denotes a hexagonal bearing bore)

Part Numbers	A Outside Diameter	B Bore	C Body Width	D Overall Length	E REF	F REF	G REF	H No. of Balls	I Dia. of Balls	J Dynamic Load Limit
BFC-1777-257-L	1.775/1.785	.255/.260	0.421875	0.53125	0.359375	1.921875	0.171875	11	0.25	100
BFC-1777-446-HDS	1.775/1.786	.446/.451	0.421875	0.625	0.359375	1.921875	0.265625	11	0.25	100
BFC-1777-446-HGS	1.775/1.787	.446/.452	0.421875	0.545	0.359375	1.921875	0.1875	11	0.25	100
BFC-1777-446-HL	1.775/1.788	.446/.453	0.421875	0.545	0.359375	1.921875	0.1875	11	0.25	100
BFC-1877-446-HDS	1.875/1.880	.444/.448	0.484375	0.625	0.421875	2	0.203125	11	0.25	100
BFC-1877-446-HL	1.875/1.881	.446/.451	0.484375	0.59375	0.421875	2	0.171875	11	0.25	100



## Light-to-Medium Duty Wheel and Conveyor Bearings

### BF/BFN "Narrow" Series

BF Series bearings offer economical, efficient performance for low-RPM applications where a light-to-medium weight capacity is required.

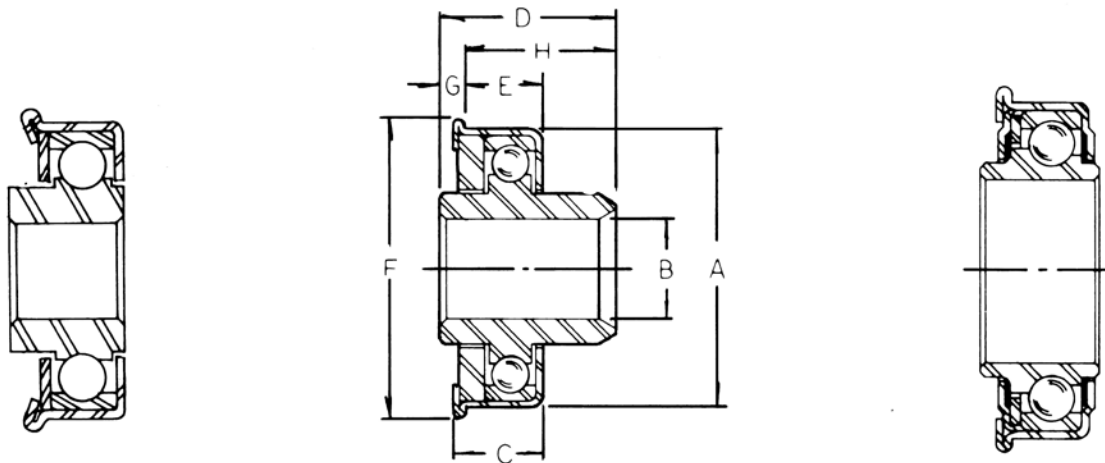
These bearings are flanged bearings with dynamic load ratings from 21-58 lbs. Balls are manufactured of hardened, precision-ground carbon steel. Inner races are machined with burnished, furnace-hardened ball tracks. Most sizes are available with labyrinth construction for enhanced dirt resistance and lubrication retention.

All BF Series Wheel and Conveyor Bearings are available in galvanized material, and with grease or oil lubrication.

### Specialty BF Series

While the basic internal design and load capacity of BF Series bearings are fixed by the internal design, the bore size, front extension ("G") and the rear extension, ("H") can be modified to fit individual applications in most cases.

25,000 minimum required for custom orders.



### Light-to-Medium-Duty BF and BFN Wheel and Conveyor Bearing Sizes

(The letter "H" in the part number denotes a hexagonal bearing bore)

Bearing Part Number	A Outside Diameter	B Bore	C Body Width	D Overall Length	E Ref	F Ref	G Ref	H No. of Balls	I Dia. of Balls	J Dynamic Load Limit
BF-689-252	.687/.691	.250/.254	0.25	0.3125	0.1875	0.75	N/A	11	0.125	21
BF-908-253	.905/.911	.252/.256	0.3125	0.375	0.25	.985/.995	N/A	12	0.15625	30
BF-908-253-A-1	.905/.912	.251/.255	0.3125	0.5	0.25	.985/.996	N/A	12	0.15625	30
BF-908-315-H	.905/.913	.315/.319	0.3125	0.375	0.25	.985/.997	N/A	12	0.15625	30
BF-908-332-H-A	.905/.914	.327/.330	.332/.338	0.5	0.25	.985/.998	N/A	12	0.15625	30
BF-908-378	.905/.915	.376/.380	0.3125	0.375	0.25	.985/.999	N/A	12	0.15625	30
BF-1127-252	1.126/1.132	.250/.254	0.375	0.4375	0.3125	1.25	0.3125	13	0.1875	43
BF-1127-255-H	1.126/1.132	.253/.257	0.375	0.4375	0.3125	1.25	N/A	13	0.1875	43
BF-1127-315	1.126/1.132	.313/.318	0.375	0.4375	0.3125	1.25	N/A	13	0.1875	43
BF-1127-315-A	1.126/1.132	.313/.317	0.375	0.8125	0.3125	1.25	0.65625	13	0.1875	43
BF-1127-316	1.126/1.132	.314/.318	0.375	.814/.822	0.3125	1.25	0.625	13	0.1875	43
BF-1127-317-HA	1.126/1.132	.315/.319	0.375	0.5625	0.3125	1.25	N/A	13	0.1875	43
BF-1127-330-A	1.126/1.132	.328/.332	0.375	0.5625	0.3125	1.25	0.4375	13	0.1875	43
BF-1127-382	1.126/1.132	.380/.385	0.375	0.4375	0.3125	1.25	0.3125	13	0.1875	43
BF-1127-384-H	1.126/1.132	.382/.386	0.375	0.4375	0.3125	1.25	0.3125	13	0.1875	43
BF-1127-441	1.126/1.132	.439/.443	0.375	0.4375	0.3125	1.25	0.3125	13	0.1875	43
BF-1127-441-B	1.126/1.132	0.438	0.375	0.8125	0.3125	1.25	0.6875	13	0.1875	43
BF-1127-502-A	1.126/1.132	0.443	0.375	0.4375	0.3125	1.25	0.3125	13	0.1875	43
BF-1377-253	1.375/1.380	.502/.506	0.46875	0.515625	0.390625	1.53125	N/A	12	0.25	58
BF-1377-378	1.375/1.380	.251/.253	0.46875	0.515625	0.390625	1.53125	N/A	12	0.25	58
BF-1377-441	1.375/1.380	.376/.380	0.46875	0.515625	0.390625	1.53125	N/A	12	0.25	58
BF-1377-441-H	1.375/1.380	.439/.443	0.46875	0.515625	0.390625	1.53125	N/A	12	0.25	58
BF-1377-503	1.375/1.380	.440/.444	0.46875	0.515625	0.390625	1.53125	N/A	12	0.25	58
BFN-1382-628-B	1.380/1.385	.627/.631	0.46875	.524/.532	0.390625	1.53125	N/A	12	0.25	58



STANDARD 1-1/8" O.D. WHEEL BEARINGS FSR SERIES  
FSR-1127-315B

## Medium/Heavy-Duty Wheel and Conveyor Bearings

### FSR/FSRN Series

FSR/FSRN Series wheel and conveyor flanged bearing assemblies deliver efficient, dependable service in medium duty wheel goods and conveyor tube applications. In addition to these bearings which have a dynamic load ratings from 125 to 180 lbs., KD also manufactures a complete line of light-to-medium duty BF style bearings covering a range of dynamic loads from 21 to 58 lbs.

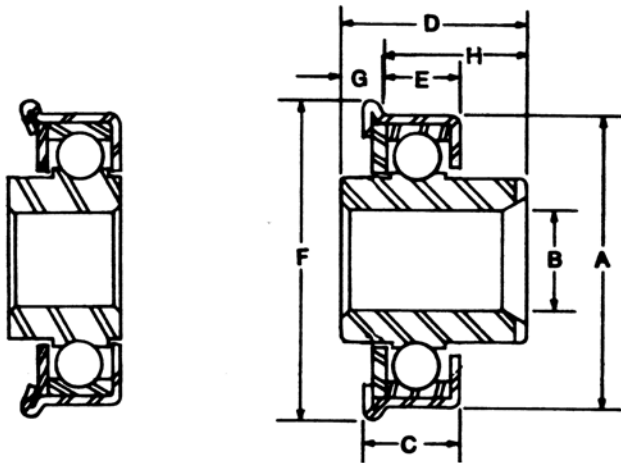
### KD Medium-to-Heavy-Duty Bearing Advantages

FSR/FSRN bearings offer longer life under heavier loads. This broad selection of KD-quality bearings features a split-ring outer raceway design that offers greater dimensional control with truer running under heavier loads.

The split ring is manufactured from a special high-carbon, roll-formed wire to KD's exact specifications. Greater control over internal clearances assures improved bearing performance by reducing face run out and accommodating location thrust loads in either direction.

The split race incorporates the addition of a front seal in the 1-1/8" and 1-3/8" flanged bearings without additional costs to our customers. Available front seal material include polypropylene, polyethylene, nylon, and teflon. Rear seals of nylon and teflon are also available.

These bearings are supplied galvanized plated, oil or grease lubricated. A re-greasable feature is available on most sizes without a substantial increase in cost. All bearings feature labyrinth construction.



### Range of FSR/FSRN Bearing Sizes

Outside diameters under the flange start at 1.126" through 1.385", with round and hex bores dimensions ranging from .251" to .756". Front and rear extensions are also available.

### Standard 1-1/8 O.D. Wheel Bearings FSR Series

FSR Bearing Number	A Outside Diameter	B Bore	C Body Width	D Overall Length	E Ref	F Ref	G Front Extension	H Back Extension	No. of Balls	Dia. of Balls	Dynamic Load Lmt
FSR-1127-253	1.126/1.132	.251/.255	3/8	.425/.433	5/16	1-1/4	1/8	.312	13	3/16	125
FSR-1127-315	1.126/1.132	.313/.318	3/8	.584/.592	5/16	1-1/4	1/8	.475	13	3/16	125
FSR-1127-315B	1.126/1.132	.317/.320	3/8	.822/.832	5/16	1-1/4	1/8	.703	13	3/16	125
FSR-1127-316	1.126/1.132	.313/.318	3/8	.435/.445	5/16	1-1/4	1/8	.312	13	3/16	125
FSR-1127-317	1.126/1.132	.315/.320	3/8	.570/.580	5/16	1-1/4	1/8	.450	13	3/16	125
FSR-1127-318	1.126/1.132	.317/.320	3/8	.791/.801	5/16	1-1/4	9/64	.650	13	3/16	125
FSR-1127-377A	1.126/1.132	.376/.380	3/8	.570/.578	5/16	1-1/4	3/16	.567	13	3/16	125
FSR-1127-378	1.126/1.132	.376/.380	3/8	.435/.443	5/16	1-1/4	1/8	.312	13	3/16	125
FSR-1127-379	1.126/1.132	.377/.381	3/8	.487/.497	5/16	1-1/4	5/32	.312	13	3/16	125
FSR-1127-502	1.126/1.132	.501/.505	3/8	.425/.433	5/16	1-1/4	1/8	.312	13	3/16	125

### Standard Economical Narrow Body 1-3/8" Wheel Bearings FSRN Series

FSR Bearing Number	A Outside Diameter	B Bore	C Body Width	D Overall Length	E Ref	F Ref	G Front Extension	H Back Extension	No. of Balls	Dia. of Balls	Dynamic Load Lmt
FSRN-1377-502	1.375/1.380	.502/.506	25/64	.435/.445	5/16	1-1/2	1/8	.313	17	3/16	180
FSRN-1377-628	1.375/1.380	.627/.631	25/64	.435/.445	5/16	1-1/2	1/8	.313	17	3/16	180
FSRN-1377-754	1.375/1.380	.752/.756	25/64	.435/.445	5/16	1-1/2	1/8	.313	17	3/16	180
FSRN-1382-502	1.380/1.385	.502/.506	25/64	.435/.445	5/16	1-1/2	1/8	.313	17	3/16	180
FSRN-1377-628	1.380/1.385	.627/.631	25/64	.435/.445	5/16	1-1/2	1/8	.313	17	3/16	180
FSRN-1377-754	1.380/1.385	.752/.756	25/64	.435/.445	5/16	1-1/2	1/8	.313	17	3/16	180



SEALED FSR SERIES  
*FSR-1127-320CS*



SEALED FSR SERIES  
*FSR-1127-502CS*

## Sealed Wheel Conveyor Bearings Medium Duty FSR/FSRN Series

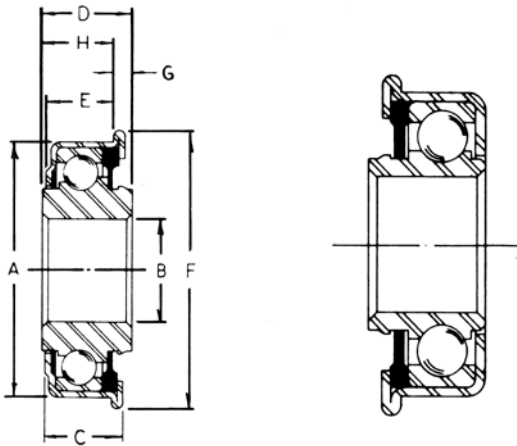
Outside diameters under the flange start at 1.126" through 1.382" with round and hex bore dimensions ranging from .251" through .754". Front and rear extensions are also available.

### **FSR/FSRN-CS Series Flanged Sealed Bearings with Front Cover**

The FSR/FSRN CS Series incorporate the same features as our standard FSR/FSRN line, and adds the dimension of sealed protection with a nylon front cover, also available with a bottom Teflon or nylon seal. The sealed bearings carrying the CS suffix should not be used in an application with excessive horizontal thrust.

### **Standard 1-1/8 O.D. Wheel Bearings FSR Series**

Outside diameters under the flange start at 1.126" through 1.382" with round and hex bore dimensions ranging from .251" through .754". Front and rear extensions are also available.



	A	B	C	D	E	F	G	H			
FSR Bearing Number	Outside Diameter	Bore	Body Width	Overall Length	Ref	Ref	Front Extension	Back Extension	No. of Balls	Dia. of Balls	Dynamic Load Lmt
FSR-1127-315CS	1.126/1.1322	.313/.317	3/8	.812	5/16	1-1/4	1/4	.570	13	3/16	120
FSR-1127-319CS	1.126/1.1322	.317/.320	3/8	.827	5/16	1-1/4	1/8	.693/.713	13	3/16	120
FSR-1127-320CS	1.126/1.1322	.317/.320	3/8	.562	5/16	1-1/4	1/8	.427/.447	13	3/16	120
FSR-1127-377CS	1.126/1.1322	.376/.380	3/8	.750	5/16	1-1/4	3/16	.567	13	3/16	120
FSR-1127-380CS	1.126/1.1322	.376/.380	3/8	.812	5/16	1-1/4	1/4	.570	13	3/16	120
FSR-1127-502CS	1.126/1.1322	.501/.505	3/8	.490/.510	5/16	1-1/4	1/8	.302/.322	13	3/16	120
FSR-1127-628DS	1.375/1.380	.626/.630	25/64	.493/.483	21/64	1-1/2	1/8	.357	17	3/16	180
FSR-1127-752-DS	1.375/1.380	.750/.754	25/64	.493/.483	21/64	1-1/2	1/8	.357	17	3/16	180
FSR-1127-754S	1.380/1.385	.751/.754	25/64	.493/.483	21/64	1-1/2	1/8	.357	17	3/16	180
FSR-1127-563CS	1.375/1.380	.563/.567	25/64	.474/.494	5/16	1-1/2	1/8	.357	17	3/16	180





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