

added  
competence

## Spring preloaded FAG non-locating bearing units



# **Spring preloaded FAG non-locating bearing units**



added  
competence



FAG

## “added competence” for your success

With its forward-looking high precision bearing solutions for feed spindles, main spindles, rotary tables and linear guidance units in machine tools, Schaeffler Group Industrial with its brands INA and FAG has been at the forefront of the world market for decades.

FAG high precision bearings for main spindles stand for very high precision and absolute operational security. Through their use, standards in relation to speed, accuracy and life are continually increasing. For the main spindle system and the overall machine tool system to be successful, however, bearing components alone are no longer sufficient. Significant increases in performance and the creation of unique selling propositions for the customer are now achieved when the bearing manufacturer offers advice and carries out development work on the basis of wide-ranging system knowledge as well as being able to provide support through a range of service functions. It is through close partnership with the manufacturers of spindles and machine tool manufacturers and through shared knowledge, founded on experience, of the requirements of end users and their customers that the potential now lies for achieving a leading role in the market.

The FAG spring preloaded non-locating bearing units (-SPP-) presented here are representative of this progress in increasing performance on the basis of expanded system knowledge and highly advanced application know-how. The FAG spindle bearing units thus integrate numerous additional functions in a single component, thus reducing the number of interfaces, shortening mounting times, increasing accuracy and helping to reduce the costs of the complete system. FAG spring preloaded non-locating bearing units (-SPP-) are, in principle, available in all spindle bearing design variants. They are even – with the exception of the double width outer ring – composed of standard spindle bearing components, ensuring the necessary availability in the marketplace.

As an addition to the already sophisticated range of FAG spindle bearings for main spindles, the new ready-to-fit non-locating bearing units (-SPP-) are a further example of the innovative strength resulting from the active partnership of the Schaeffler Group with its partners in the market. This approach towards “higher speed, improved accuracy, longer life and greater cost-efficiency” in both the subsystem and the complete system is offered by the Schaeffler Sector Management Production Machinery as “added competence”.

# High precision bearings for machine tool spindles

Spring preloaded FAG non-locating bearing units (-SPP-)



1: Spring preloaded non-locating bearing units

## Demands on the non-locating bearing position

In the main spindles of machine tools, a non-locating bearing position must be provided in order to compensate thermal elongations of the shaft.

This non-locating bearing arrangement must reliably perform the following functions:

- absolute operational security of the non-locating bearing function
- very high speed capability
- consistently high accuracy
- a design solution giving savings on design space
- cost-efficiency.

If angular contact ball bearings are used as a non-locating bearing, the sliding seat must function reliably in order to achieve the non-locating bearing action.

In practice, assembled solutions are often found in which the large number of individual components and interfaces with the relevant adjacent parts lead to risks for the operational security and system accuracy (Figure 2, Figure 3). Furthermore, such solutions often involve considerable outlay on mounting and require both unusually high skill levels from the mounting personnel as well as very high mounting precision.

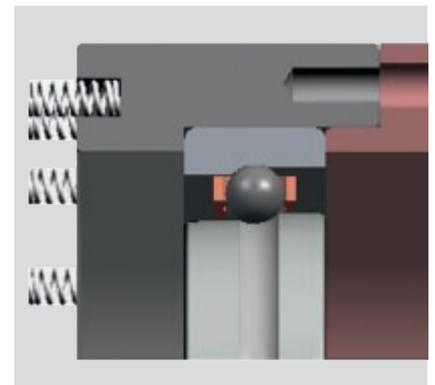
## Non-locating bearing units SPP

Spring preloaded non-locating bearing units ("Spring Preloaded" ..SPP) are very cost-effective, ready-to-fit units with an integral sliding seat function, Figure 1, Figure 4. They comprise a standard spindle bearing with a double width outer ring.

All the tolerances of these bearings correspond to P4S. In addition, the outer ring has locating holes for the spiral springs and an anti-rotation device, giving a ready-to-fit, spring preloaded unit. The spring preload can be individually adjusted by means of the position and number of the springs. The outer ring has a thin layer chromium plating as standard. This ensures a good, reliable sliding function in the housing which is further supported by the double bearing width of the outer ring.



2: In-house solution with numerous components and interfaces



3: In-house solution with numerous interfaces: spindle bearing with adjacent components

The compact spindle bearing units combine many advantages:

- very high functional security
- reduction in the number of interfaces and parts
- higher accuracy
- improved heat transfer
- lower coefficient of friction and reduced frictional forces
- adjustment of preload by means of the quantity and position of springs
- simplification of mounting due to the ready-to-fit unit
- cost savings.

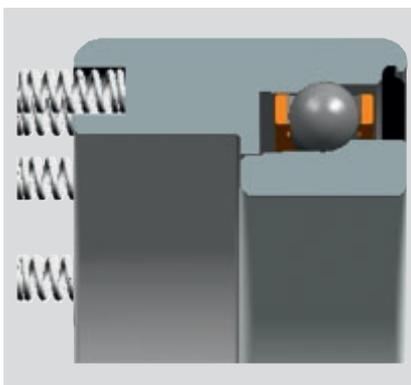
## Designs

Since FAG spring preloaded non-locating bearing units are essentially FAG standard spindle bearings, they are available in all the designs intended for spindle bearings (with a selection of contact angles, hybrid version, rings made from Cronidur 30, in a Direct Lube design, sealed on both sides, with TX cage etc.), Figure 5. The part designation of the non-locating bearing unit includes the ordering designation SPP after the notation for the contact angle.

Example of an ordering designation:  
**HCB7014-E-SPP-2RSD-T-P4S**

## Catalogue Super Precision Bearings

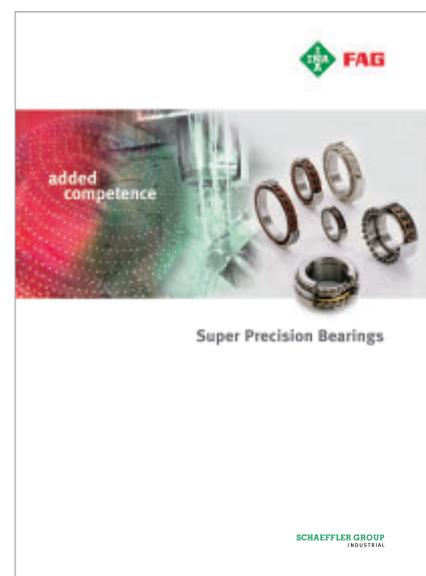
An overview of FAG spindle bearings including tolerance data, requirements for adjacent parts, engineering guidelines and detailed recommended on application and mounting is given in the catalogue “Super Precision Bearings” (SP 1), Figure 6.



4: Compact, ready-to-fit unit: FAG spindle bearing (-SPP)



5: Spring preloaded non-locating bearing units in various designs



6: SP 1 GB-D

# Bearing designation of spring preloaded FAG non-locating bearing unit

**XCB70 14-E-SPP -DLR -T-P4S**  
**B71918-E-SPP -2RSD-T-P4S**  
**HCS70 14-E-SPP -T-P4S**  
**HS70 14-E-SPP -T-P4S-L075**

## Type

<b>B</b>	Standard Steel balls
<b>HCB</b>	Hybrid Standard Ceramic balls
<b>XCB</b>	Cronidur Standard Ceramic balls
<b>HS</b>	High speed bearing Steel balls
<b>HSS</b>	High speed bearing Steel balls, sealed
<b>HC</b>	High speed bearing Ceramic balls
<b>HCS</b>	High speed bearing Ceramic balls, sealed
<b>XC</b>	Cronidur High speed bearing
<b>XCS</b>	Ceramic balls only in DLR Cronidur High speed bearing Ceramic balls, sealed

## Dimension series

<b>719</b>	Light series
<b>70</b>	Medium series

## Bore code

<b>00</b>	10 mm
<b>01</b>	12 mm
<b>02</b>	15 mm
<b>03</b>	17 mm
<b>04</b>	4 · 5 = 20 mm
<b>05</b>	5 · 5 = 25 mm

## Contact angle

<b>C</b>	15°
<b>E</b>	25°

## Spring preloaded non-locating bearing unit

<b>-SPP</b>	<b>S</b> pring <b>P</b> reloaded Non-locating bearing unit with holes in one end face of outer ring to accommodate the supplied pressure springs
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## Grease filling at manufacturing plant

<b>L075</b>	The standard grease for the non-locating bearing units is FAG Arcanol L075 and this is therefore not indicated. DLR bearings are not greased
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## Accuracy

<b>P4S</b>	FAG Standard Better than P4 to DIN 620
<b>P4S-K5</b>	P4S but with medium sorting of bore and outside diameter

## Cage

<b>T</b>	Laminated fabric, guidance on outer ring
<b>TX</b>	Laminated fabric, guidance on outer ring with modified lubricant feed

## Sealing

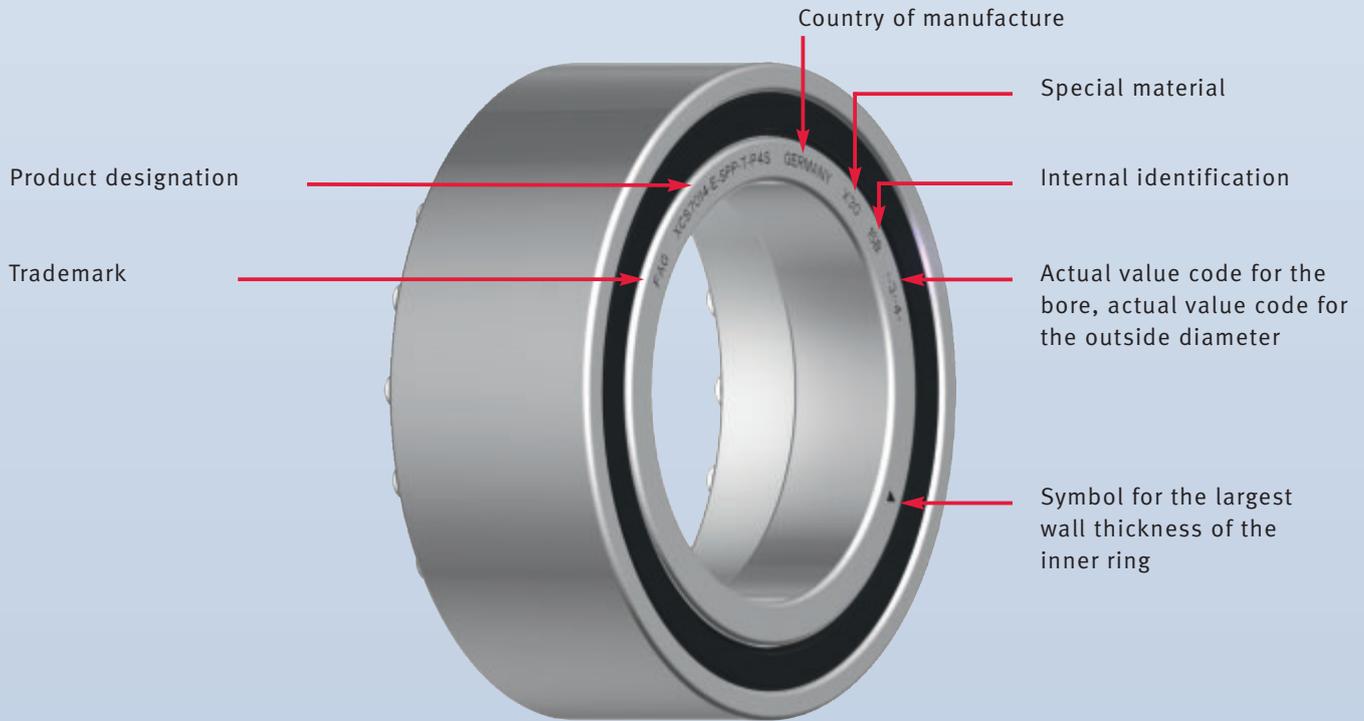
<b>-2RSD</b>	Sealed on both sides and greased only in the case of B, HCB, XCB In the high speed bearings, sealing is described in the prefix, e.g.: <b>HSS</b> , <b>HCS</b>
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## Outer geometry

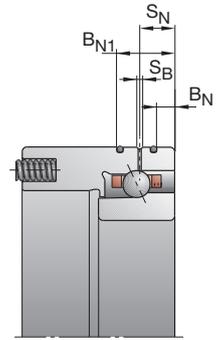
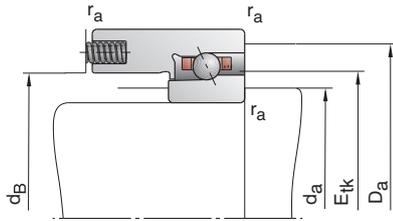
<b>-DLR</b>	Direct Lube Direct lubrication with inserted O rings
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# Bearing marking of spring preloaded FAG non-locating bearing unit

## Spring preloaded FAG non-locating bearing units in sealed design



# Spring preloaded FAG non-locating bearing units



Designation	Dimensions					Mounting dimensions				DLR dimensions				Basic load ratings		
	d	D	B <sub>i</sub>	B	r <sub>smin</sub>	d <sub>a</sub> h12	D <sub>a</sub> H12	r <sub>a</sub> max	d <sub>B</sub>	B <sub>N</sub>	B <sub>N1</sub>	S <sub>N</sub>	S <sub>B</sub>	E <sub>tk</sub> nom.	C <sub>dyn</sub>	C <sub>0stat</sub>
FAG	mm														kN	
B71900-C-SPP-T-P4S	10	22	6	12	0,30	13	19,5	0,3	14,6					15,2	3,00	1,53
B71900-E-SPP-T-P4S	10	22	6	12	0,30	13	19,5	0,3	14,6					15,2	2,90	1,46
HCB71900-C-SPP-T-P4S	10	22	6	12	0,30	13	19,5	0,3	14,6					15,2	2,08	1,06
HCB71900-E-SPP-T-P4S	10	22	6	12	0,30	13	19,5	0,3	14,6					15,2	2,00	1,00
XCB71900-C-SPP-T-P4S	10	22	6	12	0,30	13	19,5	0,3	14,6					15,2	4,65	1,06
XCB71900-E-SPP-T-P4S	10	22	6	12	0,30	13	19,5	0,3	14,6					15,2	4,50	1,00
HS71900-C-SPP-T-P4S	10	22	6	12	0,30	13	19,5	0,3	14,7					15,0	1,96	1,10
HS71900-E-SPP-T-P4S	10	22	6	12	0,30	13	19,5	0,3	14,7					15,0	1,86	1,04
HC71900-C-SPP-T-P4S	10	22	6	12	0,30	13	19,5	0,3	14,7					15,0	1,37	0,77
HC71900-E-SPP-T-P4S	10	22	6	12	0,30	13	19,5	0,3	14,7					15,0	1,29	0,72
XC71900-C-SPP-T-P4S	10	22	6	12	0,30	13	19,5	0,3	14,7					15,0	3,05	0,77
XC71900-E-SPP-T-P4S	10	22	6	12	0,30	13	19,5	0,3	14,7					15,0	2,90	0,72
B7000-C-SPP-T-P4S	10	26	8	16	0,30	14	22	0,3	16,0					16,4	4,25	2,08
B7000-E-SPP-T-P4S	10	26	8	16	0,30	14	22	0,3	16,0					16,4	4,05	2,00
HCB7000-C-SPP-T-P4S	10	26	8	16	0,30	14	22	0,3	16,0					16,4	2,90	1,43
HCB7000-E-SPP-T-P4S	10	26	8	16	0,30	14	22	0,3	16,0					16,4	2,80	1,40
XCB7000-C-SPP-T-P4S	10	26	8	16	0,30	14	22	0,3	16,0					16,4	6,40	1,43
XCB7000-E-SPP-T-P4S	10	26	8	16	0,30	14	22	0,3	16,0					16,4	6,30	1,40
HS7000-C-SPP-T-P4S	10	26	8	16	0,30	14	22	0,3	16,5					16,8	2,75	1,60
HS7000-E-SPP-T-P4S	10	26	8	16	0,30	14	22	0,3	16,5					16,8	2,60	1,50
HC7000-C-SPP-T-P4S	10	26	8	16	0,30	14	22	0,3	16,5					16,8	1,90	1,10
HC7000-E-SPP-T-P4S	10	26	8	16	0,30	14	22	0,3	16,5					16,8	1,80	1,06
XC7000-C-SPP-T-P4S	10	26	8	16	0,30	14	22	0,3	16,5					16,8	4,30	1,10
XC7000-E-SPP-T-P4S	10	26	8	16	0,30	14	22	0,3	16,5					16,8	4,00	1,06

\* • = selectable as an option

## Example designations

### Sealed design

B71900-C-SPP-2RSD-T-P4S  
HSS7000-E-SPP-T-P4S

### Hybrid ceramic design

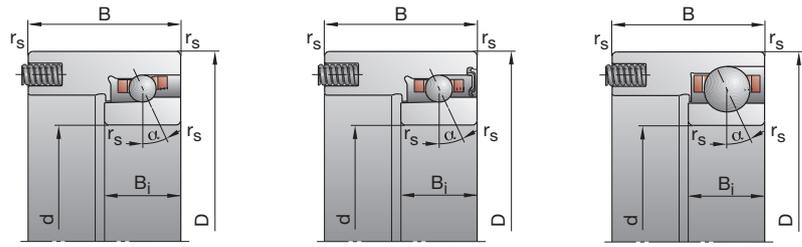
HCB7000-C-SPP-T-P4S

### Direct Lube design

HS7000-E-SPP-DLR-T-P4S

# B719..C/E, B70 HS719..C/E, HS70

C: Contact angle  $\alpha = 15^\circ$   
E: Contact angle  $\alpha = 25^\circ$

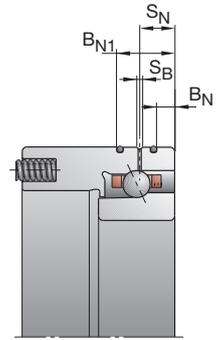
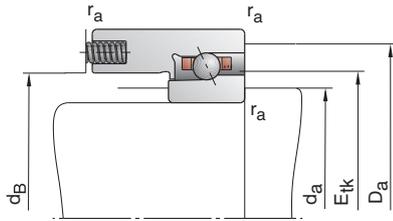


Achievable speed	Oil min.	Recommended preload force	Achievable preload force of the complete pressure spring set	Sealed design*	Mass	Designation
Grease		$F_V$	max. $F_{vF}$		kg	FAG
$\text{min}^{-1}$		N				
70 000	110 000	114	140	•	0,02	B71900-C-SPP-T-P4S
63 000	95 000	149	140	•	0,02	B71900-E-SPP-T-P4S
90 000	150 000	74	140	•	0,02	HCB71900-C-SPP-T-P4S
75 000	120 000	105	140	•	0,02	HCB71900-E-SPP-T-P4S
110 000	180 000	74	140	•	0,02	XCB71900-C-SPP-T-P4S
100 000	170 000	105	140	•	0,02	XCB71900-E-SPP-T-P4S
90 000	150 000	39	90	•	0,02	HS71900-C-SPP-T-P4S
75 000	120 000	64	90	•	0,02	HS71900-E-SPP-T-P4S
100 000	170 000	41	90	•	0,02	HC71900-C-SPP-T-P4S
90 000	140 000	66	90	•	0,02	HC71900-E-SPP-T-P4S
130 000	200 000	41	90	•	0,02	XC71900-C-SPP-T-P4S
110 000	180 000	66	90	•	0,02	XC71900-E-SPP-T-P4S
60 000	90 000	145	225	•	0,05	B7000-C-SPP-T-P4S
56 000	85 000	224	225	•	0,05	B7000-E-SPP-T-P4S
80 000	130 000	110	225	•	0,04	HCB7000-C-SPP-T-P4S
67 000	100 000	165	225	•	0,04	HCB7000-E-SPP-T-P4S
100 000	170 000	110	225	•	0,04	XCB7000-C-SPP-T-P4S
85 000	140 000	165	225	•	0,04	XCB7000-E-SPP-T-P4S
80 000	130 000	55	125	•	0,04	HS7000-C-SPP-T-P4S
67 000	100 000	89	125	•	0,04	HS7000-E-SPP-T-P4S
90 000	150 000	57	125	•	0,04	HC7000-C-SPP-T-P4S
80 000	120 000	93	125	•	0,04	HC7000-E-SPP-T-P4S
120 000	190 000	57	125	•	0,04	XC7000-C-SPP-T-P4S
100 000	170 000	93	125	•	0,04	XC7000-E-SPP-T-P4S

**X-life ultra design**  
XCS7000-E-SPP-T-P4S

**TX design**  
B71900-E-SPP-TX-P4S

# Spring preloaded FAG non-locating bearing units



Designation	Dimensions					Mounting dimensions				DLR dimensions				Basic load ratings		
	d	D	B <sub>i</sub>	B	r <sub>smin</sub>	d <sub>a</sub> h12	D <sub>a</sub> H12	r <sub>a</sub> max	d <sub>b</sub>	B <sub>N</sub>	B <sub>N1</sub>	S <sub>N</sub>	S <sub>B</sub>	E <sub>tk</sub> nom.	C <sub>dyn</sub>	C <sub>0stat</sub>
FAG	mm														kN	
B71901-C-SPP-T-P4S	12	24	6	12	0,30	15	21,5	0,3	16,6					17,2	3,35	1,86
B71901-E-SPP-T-P4S	12	24	6	12	0,30	15	21,5	0,3	16,6					17,2	3,20	1,76
HCB71901-C-SPP-T-P4S	12	24	6	12	0,30	15	21,5	0,3	16,6					17,2	2,32	1,29
HCB71901-E-SPP-T-P4S	12	24	6	12	0,30	15	21,5	0,3	16,6					17,2	2,20	1,22
XCB71901-C-SPP-T-P4S	12	24	6	12	0,30	15	21,5	0,3	16,6					17,2	5,20	1,29
XCB71901-E-SPP-T-P4S	12	24	6	12	0,30	15	21,5	0,3	16,6					17,2	5,00	1,22
HS71901-C-SPP-T-P4S	12	24	6	12	0,30	15	21,5	0,3	16,7					17,0	2,04	1,20
HS71901-E-SPP-T-P4S	12	24	6	12	0,30	15	21,5	0,3	16,7					17,0	1,93	1,14
HC71901-C-SPP-T-P4S	12	24	6	12	0,30	15	21,5	0,3	16,7					17,0	1,40	0,83
HC71901-E-SPP-T-P4S	12	24	6	12	0,30	15	21,5	0,3	16,7					17,0	1,34	0,80
XC71901-C-SPP-T-P4S	12	24	6	12	0,30	15	21,5	0,3	16,7					17,0	3,15	0,83
XC71901-E-SPP-T-P4S	12	24	6	12	0,30	15	21,5	0,3	16,7					17,0	3,00	0,80
B7001-C-SPP-T-P4S	12	28	8	16	0,30	16,5	24,5	0,3	18,1					18,6	4,75	2,60
B7001-E-SPP-T-P4S	12	28	8	16	0,30	16,5	24,5	0,3	18,1					18,6	4,55	2,50
HCB7001-C-SPP-T-P4S	12	28	8	16	0,30	16,5	24,5	0,3	18,1					18,6	3,25	1,80
HCB7001-E-SPP-T-P4S	12	28	8	16	0,30	16,5	24,5	0,3	18,1					18,6	3,15	1,73
XCB7001-C-SPP-T-P4S	12	28	8	16	0,30	16,5	24,5	0,3	18,1					18,6	7,20	1,73
XCB7001-E-SPP-T-P4S	12	28	8	16	0,30	16,5	24,5	0,3	18,1					18,6	7,10	1,73
HS7001-C-SPP-T-P4S	12	28	8	16	0,30	16,5	24,5	0,3	18,5					18,8	2,70	1,63
HS7001-E-SPP-T-P4S	12	28	8	16	0,30	16,5	24,5	0,3	18,5					18,8	2,55	1,53
HC7001-C-SPP-T-P4S	12	28	8	16	0,30	16,5	24,5	0,3	18,5					18,8	1,86	1,12
HC7001-E-SPP-T-P4S	12	28	8	16	0,30	16,5	24,5	0,3	18,5					18,8	1,76	1,08
XC7001-C-SPP-T-P4S	12	28	8	16	0,30	16,5	24,5	0,3	18,5					18,8	4,15	1,12
XC7001-E-SPP-T-P4S	12	28	8	16	0,30	16,5	24,5	0,3	18,5					18,8	3,90	1,08

\* • = selectable as an option

## Example designations

### Sealed design

B71901-C-SPP-2RSD-T-P4S  
HSS7001-E-SPP-T-P4S

### Hybrid ceramic design

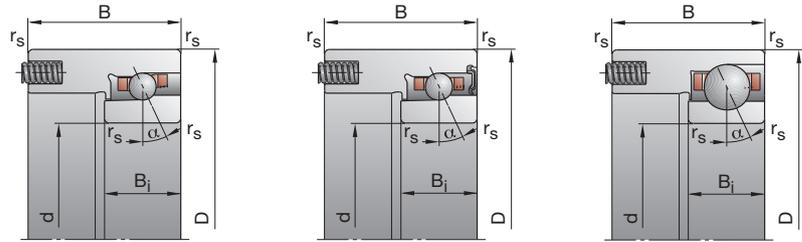
HCB7001-C-SPP-T-P4S

### Direct Lube design

HS7001-E-SPP-DLR-T-P4S

# B719..C/E, B70 HS719..C/E, HS70

C: Contact angle  $\alpha = 15^\circ$   
E: Contact angle  $\alpha = 25^\circ$

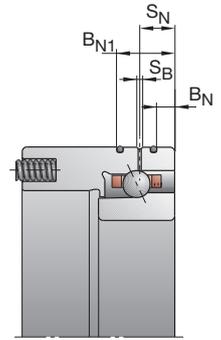
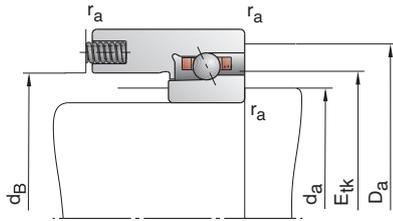


Achievable speed	Oil min.	Recommended preload force	Achievable preload force of the complete pressure spring set	Sealed design*	Mass	Designation
Grease		$F_V$	max. $F_{vF}$		kg	FAG
$\text{min}^{-1}$		N				
60 000	90 000	126	165	•	0,02	B71901-C-SPP-T-P4S
56 000	85 000	162	165	•	0,02	B71901-E-SPP-T-P4S
80 000	130 000	81	165	•	0,02	HCB71901-C-SPP-T-P4S
67 000	100 000	113	165	•	0,02	HCB71901-E-SPP-T-P4S
100 000	170 000	81	165	•	0,02	XCB71901-C-SPP-T-P4S
85 000	140 000	113	165	•	0,02	XCB71901-E-SPP-T-P4S
80 000	130 000	41	95	•	0,03	HS71901-C-SPP-T-P4S
67 000	100 000	66	95	•	0,03	HS71901-E-SPP-T-P4S
90 000	150 000	42	95	•	0,02	HC71901-C-SPP-T-P4S
85 000	130 000	69	95	•	0,02	HC71901-E-SPP-T-P4S
120 000	190 000	42	95	•	0,02	XC71901-C-SPP-T-P4S
100 000	170 000	69	95	•	0,02	XC71901-E-SPP-T-P4S
56 000	85 000	161	295	•	0,05	B7001-C-SPP-T-P4S
50 000	75 000	250	295	•	0,05	B7001-E-SPP-T-P4S
70 000	110 000	149	295	•	0,05	HCB7001-C-SPP-T-P4S
60 000	90 000	221	295	•	0,05	HCB7001-E-SPP-T-P4S
90 000	150 000	149	295	•	0,05	XCB7001-C-SPP-T-P4S
75 000	120 000	221	295	•	0,05	XCB7001-E-SPP-T-P4S
70 000	110 000	54	125	•	0,05	HS7001-C-SPP-T-P4S
60 000	90 000	87	125	•	0,05	HS7001-E-SPP-T-P4S
80 000	130 000	57	125	•	0,04	HC7001-C-SPP-T-P4S
75 000	110 000	92	125	•	0,04	HC7001-E-SPP-T-P4S
100 000	170 000	57	125	•	0,04	XC7001-C-SPP-T-P4S
90 000	150 000	92	125	•	0,04	XC7001-E-SPP-T-P4S

**X-life ultra design**  
XCS7001-E-SPP-T-P4S

**TX design**  
B71901-E-SPP-TX-P4S

# Spring preloaded FAG non-locating bearing units



Designation	Dimensions					Mounting dimensions				DLR dimensions				Basic load ratings		
	d	D	B <sub>i</sub>	B	r <sub>smin</sub>	d <sub>a</sub> h12	D <sub>a</sub> H12	r <sub>a</sub> max	d <sub>B</sub>	B <sub>N</sub>	B <sub>N1</sub>	S <sub>N</sub>	S <sub>B</sub>	E <sub>tk</sub> nom.	C <sub>dyn</sub>	C <sub>0stat</sub>
FAG	mm														kN	
B71902-C-SPP-T-P4S	15	28	7	14	0,30	18	25,5	0,3	20,0					20,9	5,00	2,90
B71902-E-SPP-T-P4S	15	28	7	14	0,30	18	25,5	0,3	20,0					20,9	4,80	2,75
HCB71902-C-SPP-T-P4S	15	28	7	14	0,30	18	25,5	0,3	20,0					20,9	3,45	2,00
HCB71902-E-SPP-T-P4S	15	28	7	14	0,30	18	25,5	0,3	20,0					20,9	3,35	1,93
XCB71902-C-SPP-T-P4S	15	28	7	14	0,30	18	25,5	0,3	20,0					20,9	6,70	2,00
XCB71902-E-SPP-T-P4S	15	28	7	14	0,30	18	25,5	0,3	20,0					20,9	7,50	1,93
HS71902-C-SPP-T-P4S	15	28	7	14	0,30	18	25,5	0,3	20,0					20,3	2,80	1,76
HS71902-E-SPP-T-P4S	15	28	7	14	0,30	18	25,5	0,3	20,0					20,3	2,65	1,66
HC71902-C-SPP-T-P4S	15	28	7	14	0,30	18	25,5	0,3	20,0					20,3	1,93	1,22
HC71902-E-SPP-T-P4S	15	28	7	14	0,30	18	25,5	0,3	20,0					20,3	1,83	1,16
XC71902-C-SPP-T-P4S	15	28	7	14	0,30	18	25,5	0,3	20,0					20,3	4,30	1,22
XC71902-E-SPP-T-P4S	15	28	7	14	0,30	18	25,5	0,3	20,0					20,3	4,05	1,16
B7002-C-SPP-T-P4S	15	32	9	18	0,30	19	29	0,3	21,6					22,3	6,20	3,40
B7002-E-SPP-T-P4S	15	32	9	18	0,30	19	29	0,3	21,6					22,3	6,00	3,25
HCB7002-C-SPP-T-P4S	15	32	9	18	0,30	19	29	0,3	21,6					22,3	4,30	2,36
HCB7002-E-SPP-T-P4S	15	32	9	18	0,30	19	29	0,3	21,6					22,3	4,15	2,24
XCB7002-C-SPP-T-P4S	15	32	9	18	0,30	19	29	0,3	21,6					22,3	9,65	2,36
XCB7002-E-SPP-T-P4S	15	32	9	18	0,30	19	29	0,3	21,6					22,3	9,30	2,24
HS7002-C-SPP-T-P4S	15	32	9	18	0,30	19	29	0,3	22,0					22,2	3,75	2,45
HS7002-E-SPP-T-P4S	15	32	9	18	0,30	19	29	0,3	22,0					22,2	3,55	2,32
HC7002-C-SPP-T-P4S	15	32	9	18	0,30	19	29	0,3	22,0					22,2	2,60	1,70
HC7002-E-SPP-T-P4S	15	32	9	18	0,30	19	29	0,3	22,0					22,2	2,45	1,60
XC7002-C-SPP-T-P4S	15	32	9	18	0,30	19	29	0,3	22,0					22,2	5,85	1,70
XC7002-E-SPP-T-P4S	15	32	9	18	0,30	19	29	0,3	22,0					22,2	5,50	1,60

\* • = selectable as an option

## Example designations

### Sealed design

B71902-C-SPP-2RSD-T-P4S  
HSS7002-E-SPP-T-P4S

### Hybrid ceramic design

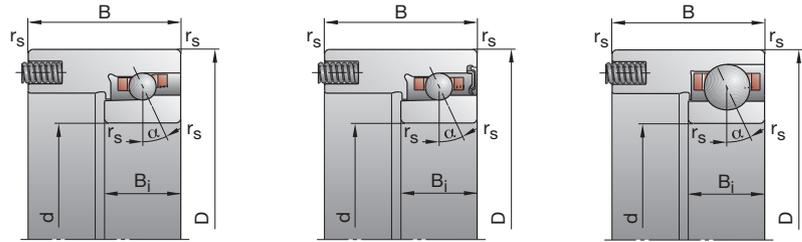
HCB7002-C-SPP-T-P4S

### Direct Lube design

HS7002-E-SPP-DLR-T-P4S

# B719..C/E, B70 HS719..C/E, HS70

C: Contact angle  $\alpha = 15^\circ$   
E: Contact angle  $\alpha = 25^\circ$

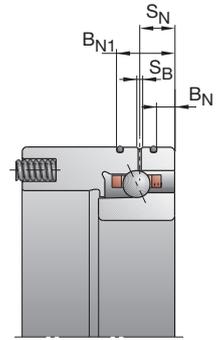
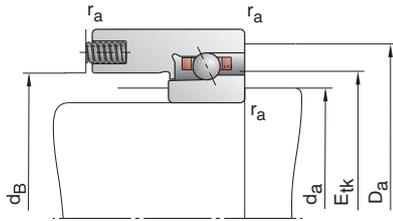


Achievable speed		Recommended preload force	Achievable preload force of the complete pressure spring set max. $F_{vF}$	Sealed design*	Mass	Designation
Grease	Oil min.					
min <sup>-1</sup>		$F_v$ N			kg	FAG
50 000	75 000	167	260	•	0,03	B71902-C-SPP-T-P4S
48 000	70 000	259	260	•	0,03	B71902-E-SPP-T-P4S
67 000	100 000	131	260	•	0,03	HCB71902-C-SPP-T-P4S
56 000	85 000	188	260	•	0,03	HCB71902-E-SPP-T-P4S
85 000	140 000	131	260	•	0,03	XCB71902-C-SPP-T-P4S
70 000	110 000	188	260	•	0,03	XCB71902-E-SPP-T-P4S
67 000	100 000	56	130	•	0,04	HS71902-C-SPP-T-P4S
56 000	85 000	92	130	•	0,04	HS71902-E-SPP-T-P4S
75 000	120 000	57	130	•	0,04	HC71902-C-SPP-T-P4S
67 000	95 000	95	130	•	0,04	HC71902-E-SPP-T-P4S
100 000	160 000	57	130	•	0,04	XC71902-C-SPP-T-P4S
85 000	140 000	95	130	•	0,04	XC71902-E-SPP-T-P4S
48 000	70 000	216	345	•	0,07	B7002-C-SPP-T-P4S
43 000	63 000	344	345	•	0,07	B7002-E-SPP-T-P4S
60 000	90 000	171	345	•	0,06	HCB7002-C-SPP-T-P4S
50 000	75 000	249	345	•	0,06	HCB7002-E-SPP-T-P4S
75 000	120 000	171	345	•	0,06	XCB7002-C-SPP-T-P4S
67 000	100 000	249	345	•	0,06	XCB7002-E-SPP-T-P4S
60 000	90 000	75	170	•	0,06	HS7002-C-SPP-T-P4S
50 000	75 000	122	170	•	0,06	HS7002-E-SPP-T-P4S
70 000	110 000	78	170	•	0,06	HC7002-C-SPP-T-P4S
63 000	90 000	126	170	•	0,06	HC7002-E-SPP-T-P4S
90 000	150 000	78	170	•	0,06	XC7002-C-SPP-T-P4S
80 000	130 000	126	170	•	0,06	XC7002-E-SPP-T-P4S

**X-life ultra design**  
XCS7002-E-SPP-T-P4S

**TX design**  
B71902-E-SPP-TX-P4S

# Spring preloaded FAG non-locating bearing units



Designation	Dimensions					Mounting dimensions				DLR dimensions				Basic load ratings		
	d	D	B <sub>i</sub>	B	r <sub>smin</sub>	d <sub>a</sub> h12	D <sub>a</sub> H12	r <sub>a</sub> max	d <sub>B</sub>	B <sub>N</sub>	B <sub>N1</sub>	S <sub>N</sub>	S <sub>B</sub>	E <sub>tk</sub> nom.	C <sub>dyn</sub>	C <sub>0stat</sub>
FAG	mm														kN	
B71903-C-SPP-T-P4S	17	30	7	14	0,30	20	27,5	0,3	22,0					22,2	5,30	3,15
B71903-E-SPP-T-P4S	17	30	7	14	0,30	20	27,5	0,3	22,0					22,2	5,00	3,00
HCB71903-C-SPP-T-P4S	17	30	7	14	0,30	20	27,5	0,3	22,0					22,2	3,65	2,20
HCB71903-E-SPP-T-P4S	17	30	7	14	0,30	20	27,5	0,3	22,0					22,2	3,45	2,08
XCB71903-C-SPP-T-P4S	17	30	7	14	0,30	20	27,5	0,3	22,0					22,2	8,15	2,20
XCB71903-E-SPP-T-P4S	17	30	7	14	0,30	20	27,5	0,3	22,0					22,2	7,65	2,08
HS71903-C-SPP-T-P4S	17	30	7	14	0,30	20	27,5	0,3	22,3					22,3	2,90	1,90
HS71903-E-SPP-T-P4S	17	30	7	14	0,30	20	27,5	0,3	22,3					22,3	2,70	1,80
HC71903-C-SPP-T-P4S	17	30	7	14	0,30	20	27,5	0,3	22,3					22,3	2,00	1,34
HC71903-E-SPP-T-P4S	17	30	7	14	0,30	20	27,5	0,3	22,3					22,3	1,90	1,27
XC71903-C-SPP-T-P4S	17	30	7	14	0,30	20	27,5	0,3	22,3					22,3	4,50	1,34
XC71903-E-SPP-T-P4S	17	30	7	14	0,30	20	27,5	0,3	22,3					22,3	4,25	1,27
B7003-C-SPP-T-P4S	17	35	10	20	0,30	21	32	0,3	23,8					24,1	8,65	4,90
B7003-E-SPP-T-P4S	17	35	10	20	0,30	21	32	0,3	23,8					24,1	8,30	4,75
HCB7003-C-SPP-T-P4S	17	35	10	20	0,30	21	32	0,3	23,8					24,1	6,00	3,45
HCB7003-E-SPP-T-P4S	17	35	10	20	0,30	21	32	0,3	23,8					24,1	5,70	3,25
XCB7003-C-SPP-T-P4S	17	35	10	20	0,30	21	32	0,3	23,8					24,1	13,40	3,45
XCB7003-E-SPP-T-P4S	17	35	10	20	0,30	21	32	0,3	23,8					24,1	12,70	3,25
HS7003-C-SPP-T-P4S	17	35	10	20	0,30	21	32	0,3	24,5					24,7	3,80	2,65
HS7003-E-SPP-T-P4S	17	35	10	20	0,30	21	32	0,3	24,5					24,7	3,65	2,50
HC7003-C-SPP-T-P4S	17	35	10	20	0,30	21	32	0,3	24,5					24,7	2,65	1,83
HC7003-E-SPP-T-P4S	17	35	10	20	0,30	21	32	0,3	24,5					24,7	2,50	1,73
XC7003-C-SPP-T-P4S	17	35	10	20	0,30	21	32	0,3	24,5					24,7	5,85	1,83
XC7003-E-SPP-T-P4S	17	35	10	20	0,30	21	32	0,3	24,5					24,7	5,60	1,73

\* • = selectable as an option

## Example designations

### Sealed design

B71903-C-SPP-2RSD-T-P4S  
HSS7003-E-SPP-T-P4S

### Hybrid ceramic design

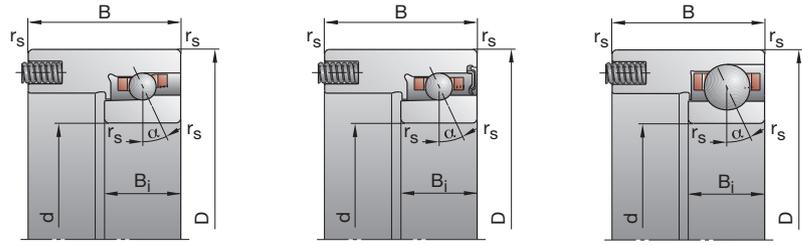
HCB7003-C-SPP-T-P4S

### Direct Lube design

HS7003-E-SPP-DLR-T-P4S

# B719..C/E, B70 HS719..C/E, HS70

C: Contact angle  $\alpha = 15^\circ$   
E: Contact angle  $\alpha = 25^\circ$

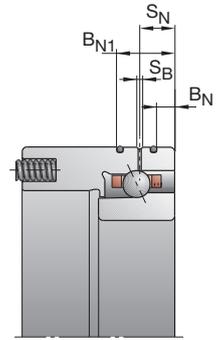
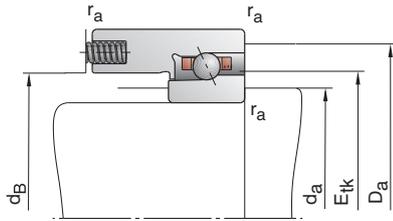


Achievable speed		Recommended preload force	Achievable preload force of the complete pressure spring set	Sealed design*	Mass	Designation
Grease	Oil min.					
min <sup>-1</sup>		F <sub>v</sub> N	max. F <sub>vF</sub>		kg	FAG
48 000	70 000	176	270	•	0,04	B71903-C-SPP-T-P4S
43 000	63 000	268	270	•	0,04	B71903-E-SPP-T-P4S
60 000	90 000	137	270	•	0,03	HCB71903-C-SPP-T-P4S
50 000	75 000	198	270	•	0,03	HCB71903-E-SPP-T-P4S
75 000	120 000	137	270	•	0,03	XCB71903-C-SPP-T-P4S
67 000	100 000	198	270	•	0,03	XCB71903-E-SPP-T-P4S
60 000	90 000	58	130	•	0,04	HS71903-C-SPP-T-P4S
50 000	75 000	94	130	•	0,04	HS71903-E-SPP-T-P4S
70 000	110 000	60	130	•	0,04	HC71903-C-SPP-T-P4S
63 000	90 000	96	130	•	0,04	HC71903-E-SPP-T-P4S
90 000	150 000	60	130	•	0,04	XC71903-C-SPP-T-P4S
75 000	120 000	96	130	•	0,04	XC71903-E-SPP-T-P4S
43 000	63 000	308	500	•	0,09	B7003-C-SPP-T-P4S
38 000	56 000	487	500	•	0,09	B7003-E-SPP-T-P4S
53 000	80 000	245	500	•	0,07	HCB7003-C-SPP-T-P4S
45 000	67 000	374	500	•	0,07	HCB7003-E-SPP-T-P4S
70 000	110 000	245	500	•	0,07	XCB7003-C-SPP-T-P4S
60 000	90 000	374	500	•	0,07	XCB7003-E-SPP-T-P4S
53 000	80 000	76	175	•	0,08	HS7003-C-SPP-T-P4S
45 000	67 000	124	175	•	0,08	HS7003-E-SPP-T-P4S
63 000	95 000	80	175	•	0,08	HC7003-C-SPP-T-P4S
56 000	80 000	129	175	•	0,08	HC7003-E-SPP-T-P4S
80 000	130 000	80	175	•	0,08	XC7003-C-SPP-T-P4S
70 000	100 000	129	175	•	0,08	XC7003-E-SPP-T-P4S

**X-life ultra design**  
XCS7003-E-SPP-T-P4S

**TX design**  
B71903-E-SPP-TX-P4S

# Spring preloaded FAG non-locating bearing units



Designation	Dimensions					Mounting dimensions				DLR dimensions				Basic load ratings		
	d	D	B <sub>i</sub>	B	r <sub>smin</sub>	d <sub>a</sub> h12	D <sub>a</sub> H12	r <sub>a</sub> max	d <sub>B</sub>	B <sub>N</sub>	B <sub>N1</sub>	S <sub>N</sub>	S <sub>B</sub>	E <sub>tk</sub> nom.	C <sub>dyn</sub>	C <sub>0stat</sub>
FAG	mm														kN	
B71904-C-SPP-T-P4S	20	37	9	18	0,30	24	33,5	0,3	26,5					26,8	7,35	4,55
B71904-E-SPP-T-P4S	20	37	9	18	0,30	24	33,5	0,3	26,5					26,8	6,95	4,40
HCB71904-C-SPP-T-P4S	20	37	9	18	0,30	24	33,5	0,3	26,5					26,8	5,00	3,20
HCB71904-E-SPP-T-P4S	20	37	9	18	0,30	24	33,5	0,3	26,5					26,8	4,80	3,05
XCB71904-C-SPP-T-P4S	20	37	9	18	0,30	24	33,5	0,3	26,5					26,8	11,20	3,20
XCB71904-E-SPP-T-P4S	20	37	9	18	0,30	24	33,5	0,3	26,5					26,8	10,80	3,05
HS71904-C-SPP-T-P4S	20	37	9	18	0,30	24	33,5	0,3	27,0					27,2	3,90	2,85
HS71904-E-SPP-T-P4S	20	37	9	18	0,30	24	33,5	0,3	27,0					27,2	3,75	2,70
HC71904-C-SPP-T-P4S	20	37	9	18	0,30	24	33,5	0,3	27,0					27,2	2,70	1,96
HC71904-E-SPP-T-P4S	20	37	9	18	0,30	24	33,5	0,3	27,0					27,2	2,55	1,86
XC71904-C-SPP-T-P4S	20	37	9	18	0,30	24	33,5	0,3	27,0					27,2	6,00	1,96
XC71904-E-SPP-T-P4S	20	37	9	18	0,30	24	33,5	0,3	27,0					27,2	5,70	1,86
B7004-C-SPP-T-P4S	20	42	12	24	0,60	25	37	0,6	28,3					28,8	10,40	6,00
B7004-E-SPP-T-P4S	20	42	12	24	0,60	25	37	0,6	28,3					28,8	10,00	5,70
HCB7004-C-SPP-T-P4S	20	42	12	24	0,60	25	37	0,6	28,3	2,2	9,8	5,4	1,4	28,8	7,20	4,15
HCB7004-E-SPP-T-P4S	20	42	12	24	0,60	25	37	0,6	28,3	2,2	9,8	5,4	1,4	28,8	6,95	4,00
XCB7004-C-SPP-T-P4S	20	42	12	24	0,60	25	37	0,6	28,3	2,2	9,8	5,4	1,4	28,8	16,00	4,15
XCB7004-E-SPP-T-P4S	20	42	12	24	0,60	25	37	0,6	28,3	2,2	9,8	5,4	1,4	28,8	15,60	4,00
HS7004-C-SPP-T-P4S	20	42	12	24	0,60	25	37	0,6	29,0					29,3	6,20	4,55
HS7004-E-SPP-T-P4S	20	42	12	24	0,60	25	37	0,6	29,0					29,3	5,85	4,30
HC7004-C-SPP-T-P4S	20	42	12	24	0,60	25	37	0,6	29,0	2,2	9,8	5,4	1,4	29,3	4,30	3,20
HC7004-E-SPP-T-P4S	20	42	12	24	0,60	25	37	0,6	29,0	2,2	9,8	5,4	1,4	29,3	4,05	3,00
XC7004-C-SPP-T-P4S	20	42	12	24	0,60	25	37	0,6	29,0	2,2	9,8	5,4	1,4	29,3	9,50	3,20
XC7004-E-SPP-T-P4S	20	42	12	24	0,60	25	37	0,6	29,0	2,2	9,8	5,4	1,4	29,3	9,00	3,00

\* • = selectable as an option

## Example designations

### Sealed design

B71904-C-SPP-2RSD-T-P4S  
HSS7004-E-SPP-T-P4S

### Hybrid ceramic design

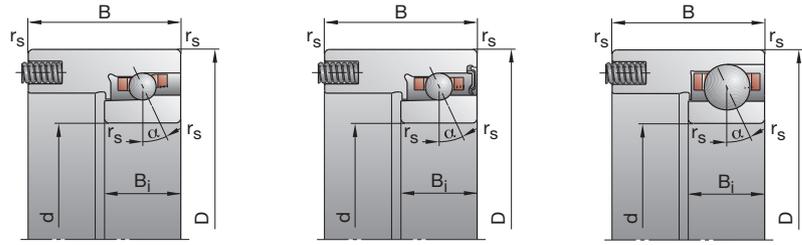
HCB7004-C-SPP-T-P4S

### Direct Lube design

HS7004-E-SPP-DLR-T-P4S

# B719..C/E, B70 HS719..C/E, HS70

C: Contact angle  $\alpha = 15^\circ$   
E: Contact angle  $\alpha = 25^\circ$

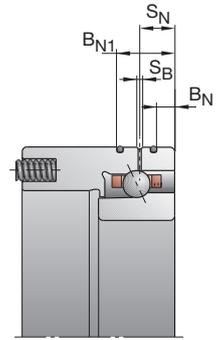
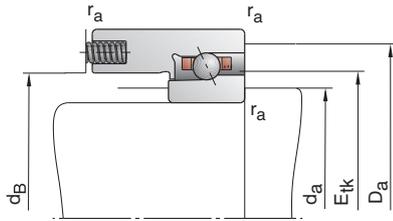


Achievable speed		Recommended preload force	Achievable preload force of the complete pressure spring set	Sealed design*	Mass	Designation
Grease	Oil min.	$F_V$	max. $F_{vF}$		kg	FAG
$\text{min}^{-1}$		N				
38 000	56 000	297	390	•	0,07	B71904-C-SPP-T-P4S
36 000	53 000	390	390	•	0,07	B71904-E-SPP-T-P4S
50 000	75 000	198	390	•	0,07	HCB71904-C-SPP-T-P4S
43 000	63 000	290	390	•	0,07	HCB71904-E-SPP-T-P4S
63 000	95 000	198	390	•	0,07	XCB71904-C-SPP-T-P4S
56 000	85 000	290	390	•	0,07	XCB71904-E-SPP-T-P4S
50 000	75 000	78	180	•	0,09	HS71904-C-SPP-T-P4S
43 000	63 000	127	180	•	0,09	HS71904-E-SPP-T-P4S
56 000	85 000	83	180	•	0,09	HC71904-C-SPP-T-P4S
50 000	70 000	134	180	•	0,09	HC71904-E-SPP-T-P4S
75 000	120 000	83	180	•	0,09	XC71904-C-SPP-T-P4S
63 000	95 000	134	180	•	0,09	XC71904-E-SPP-T-P4S
36 000	53 000	377	610	•	0,15	B7004-C-SPP-T-P4S
32 000	48 000	598	610	•	0,15	B7004-E-SPP-T-P4S
45 000	67 000	305	610	•	0,14	HCB7004-C-SPP-T-P4S
38 000	56 000	458	610	•	0,14	HCB7004-E-SPP-T-P4S
60 000	90 000	305	610	•	0,14	XCB7004-C-SPP-T-P4S
50 000	75 000	458	610	•	0,14	XCB7004-E-SPP-T-P4S
45 000	67 000	125	280	•	0,15	HS7004-C-SPP-T-P4S
38 000	56 000	202	280	•	0,15	HS7004-E-SPP-T-P4S
53 000	80 000	131	280	•	0,14	HC7004-C-SPP-T-P4S
48 000	67 000	210	280	•	0,14	HC7004-E-SPP-T-P4S
67 000	100 000	131	280	•	0,14	XC7004-C-SPP-T-P4S
56 000	85 000	210	280	•	0,14	XC7004-E-SPP-T-P4S

**X-life ultra design**  
XCS7004-E-SPP-T-P4S

**TX design**  
B71904-E-SPP-TX-P4S

# Spring preloaded FAG non-locating bearing units



Designation	Dimensions					Mounting dimensions				DLR dimensions				Basic load ratings		
	d	D	B <sub>i</sub>	B	r <sub>smin</sub>	d <sub>a</sub> h12	D <sub>a</sub> H12	r <sub>a</sub> max	d <sub>B</sub>	B <sub>N</sub>	B <sub>N1</sub>	S <sub>N</sub>	S <sub>B</sub>	E <sub>tk</sub> nom.	C <sub>dyn</sub>	C <sub>0stat</sub>
FAG	mm														kN	
B71905-C-SPP-T-P4S	25	42	9	18	0,30	29	38,5	0,3	31,5					31,8	8,15	5,70
B71905-E-SPP-T-P4S	25	42	9	18	0,30	29	38,5	0,3	31,5					31,8	7,80	5,50
HCB71905-C-SPP-T-P4S	25	42	9	18	0,30	29	38,5	0,3	31,5					31,8	5,60	4,00
HCB71905-E-SPP-T-P4S	25	42	9	18	0,30	29	38,5	0,3	31,5					31,8	5,30	3,80
XCB71905-C-SPP-T-P4S	25	42	9	18	0,30	29	38,5	0,3	31,5					31,8	12,50	4,00
XCB71905-E-SPP-T-P4S	25	42	9	18	0,30	29	38,5	0,3	31,5					31,8	11,80	3,80
HS71905-C-SPP-T-P4S	25	42	9	18	0,30	29	38,5	0,3	32,0					32,2	4,25	3,35
HS71905-E-SPP-T-P4S	25	42	9	18	0,30	29	38,5	0,3	32,0					32,2	4,00	3,15
HC71905-C-SPP-T-P4S	25	42	9	18	0,30	29	38,5	0,3	32,0					32,2	2,90	2,36
HC71905-E-SPP-T-P4S	25	42	9	18	0,30	29	38,5	0,3	32,0					32,2	2,75	2,20
XC71905-C-SPP-T-P4S	25	42	9	18	0,30	29	38,5	0,3	32,0					32,2	6,40	2,36
XC71905-E-SPP-T-P4S	25	42	9	18	0,30	29	38,5	0,3	32,0					32,2	6,10	2,20
B7005-C-SPP-T-P4S	25	47	12	24	0,60	30	42	0,6	33,0					33,5	14,60	9,15
B7005-E-SPP-T-P4S	25	47	12	24	0,60	30	42	0,6	33,0					33,5	13,70	8,65
HCB7005-C-SPP-T-P4S	25	47	12	24	0,60	30	42	0,6	33,0	2,2	9,8	5,4	1,4	33,5	10,00	6,30
HCB7005-E-SPP-T-P4S	25	47	12	24	0,60	30	42	0,6	33,0	2,2	9,8	5,4	1,4	33,5	9,50	6,00
XCB7005-C-SPP-T-P4S	25	47	12	24	0,60	30	42	0,6	33,0	2,2	9,8	5,4	1,4	33,5	22,40	6,30
XCB7005-E-SPP-T-P4S	25	47	12	24	0,60	30	42	0,6	33,0	2,2	9,8	5,4	1,4	33,5	21,20	6,00
HS7005-C-SPP-T-P4S	25	47	12	24	0,60	30	42	0,6	34,0					34,3	6,30	4,90
HS7005-E-SPP-T-P4S	25	47	12	24	0,60	30	42	0,6	34,0					34,3	6,00	4,65
HC7005-C-SPP-T-P4S	25	47	12	24	0,60	30	42	0,6	34,0	2,2	9,8	5,4	1,4	34,3	4,30	3,45
HC7005-E-SPP-T-P4S	25	47	12	24	0,60	30	42	0,6	34,0	2,2	9,8	5,4	1,4	34,3	4,05	3,25
XC7005-C-SPP-T-P4S	25	47	12	24	0,60	30	42	0,6	34,0	2,2	9,8	5,4	1,4	34,3	9,65	3,45
XC7005-E-SPP-T-P4S	25	47	12	24	0,60	30	42	0,6	34,0	2,2	9,8	5,4	1,4	34,3	9,00	3,25

\* • = selectable as an option

## Example designations

### Sealed design

B71905-C-SPP-2RSD-T-P4S  
HSS7005-E-SPP-T-P4S

### Hybrid ceramic design

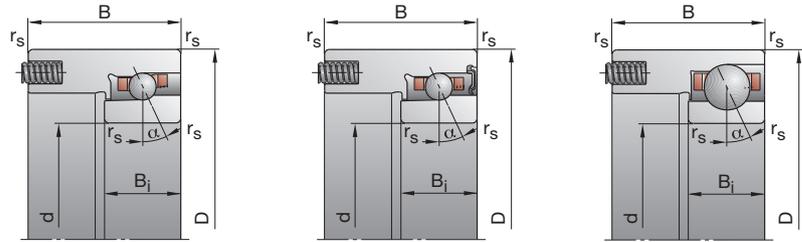
HCB7005-C-SPP-T-P4S

### Direct Lube design

HS7005-E-SPP-DLR-T-P4S

# B719..C/E, B70 HS719..C/E, HS70

C: Contact angle  $\alpha = 15^\circ$   
E: Contact angle  $\alpha = 25^\circ$



Achievable speed		Recommended preload force	Achievable preload force of the complete pressure spring set	Sealed design*	Mass	Designation
Grease	Oil min.	$F_V$	max. $F_{vF}$		kg	FAG
min <sup>-1</sup>		N				
32 000	48 000	326	430	•	0,09	B71905-C-SPP-T-P4S
30 000	45 000	430	430	•	0,09	B71905-E-SPP-T-P4S
43 000	63 000	221	430	•	0,08	HCB71905-C-SPP-T-P4S
36 000	53 000	321	430	•	0,08	HCB71905-E-SPP-T-P4S
53 000	80 000	221	430	•	0,08	XCB71905-C-SPP-T-P4S
48 000	70 000	321	430	•	0,08	XCB71905-E-SPP-T-P4S
43 000	63 000	84	190	•	0,11	HS71905-C-SPP-T-P4S
36 000	53 000	138	190	•	0,11	HS71905-E-SPP-T-P4S
48 000	70 000	87	190	•	0,11	HC71905-C-SPP-T-P4S
43 000	60 000	141	190	•	0,11	HC71905-E-SPP-T-P4S
63 000	95 000	87	190	•	0,11	XC71905-C-SPP-T-P4S
53 000	80 000	141	190	•	0,11	XC71905-E-SPP-T-P4S
30 000	45 000	533	865	•	0,16	B7005-C-SPP-T-P4S
28 000	43 000	828	865	•	0,16	B7005-E-SPP-T-P4S
38 000	56 000	422	865	•	0,15	HCB7005-C-SPP-T-P4S
34 000	50 000	647	865	•	0,15	HCB7005-E-SPP-T-P4S
50 000	75 000	422	865	•	0,15	XCB7005-C-SPP-T-P4S
43 000	63 000	647	865	•	0,15	XCB7005-E-SPP-T-P4S
38 000	56 000	127	290	•	0,17	HS7005-C-SPP-T-P4S
34 000	50 000	207	290	•	0,17	HS7005-E-SPP-T-P4S
45 000	67 000	131	290	•	0,16	HC7005-C-SPP-T-P4S
40 000	56 000	215	290	•	0,16	HC7005-E-SPP-T-P4S
60 000	90 000	131	290	•	0,16	XC7005-C-SPP-T-P4S
50 000	75 000	215	290	•	0,16	XC7005-E-SPP-T-P4S

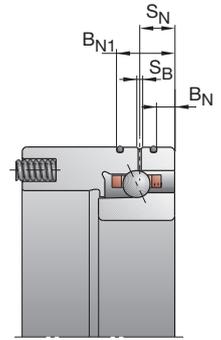
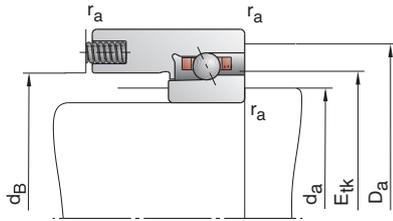
## X-life ultra design

XCS7005-E-SPP-T-P4S

## TX design

B71905-E-SPP-TX-P4S

# Spring preloaded FAG non-locating bearing units



Designation	Dimensions					Mounting dimensions				DLR dimensions				Basic load ratings		
	d	D	B <sub>i</sub>	B	r <sub>smin</sub>	d <sub>a</sub> h12	D <sub>a</sub> H12	r <sub>a</sub> max	d <sub>B</sub>	B <sub>N</sub>	B <sub>N1</sub>	S <sub>N</sub>	S <sub>B</sub>	E <sub>tk</sub> nom.	C <sub>dyn</sub>	C <sub>0stat</sub>
FAG	mm														kN	
B71906-C-SPP-T-P4S	30	47	9	18	0,30	34	43,5	0,3	37,0					36,8	8,65	6,55
B71906-E-SPP-T-P4S	30	47	9	18	0,30	34	43,5	0,3	37,0					36,8	8,15	6,30
HCB71906-C-SPP-T-P4S	30	47	9	18	0,30	34	43,5	0,3	37,0	1,1	7,9	3,7	1,4	36,8	6,00	4,65
HCB71906-E-SPP-T-P4S	30	47	9	18	0,30	34	43,5	0,3	37,0	1,1	7,9	3,7	1,4	36,8	5,60	4,40
XCB71906-C-SPP-T-P4S	30	47	9	18	0,30	34	43,5	0,3	37,0	1,1	7,9	3,7	1,4	36,8	13,40	4,65
XCB71906-E-SPP-T-P4S	30	47	9	18	0,30	34	43,5	0,3	37,0	1,1	7,9	3,7	1,4	36,8	12,50	4,40
HS71906-C-SPP-T-P4S	30	47	9	18	0,30	34	43,5	0,3	37,0					36,8	6,40	5,20
HS71906-E-SPP-T-P4S	30	47	9	18	0,30	34	43,5	0,3	37,0					36,8	6,00	4,90
HC71906-C-SPP-T-P4S	30	47	9	18	0,30	34	43,5	0,3	37,0	1,1	7,9	3,7	1,4	36,8	4,40	3,65
HC71906-E-SPP-T-P4S	30	47	9	18	0,30	34	43,5	0,3	37,0	1,1	7,9	3,7	1,4	36,8	4,15	3,45
XC71906-C-SPP-T-P4S	30	47	9	18	0,30	34	43,5	0,3	37,0	1,1	7,9	3,7	1,4	36,8	9,80	3,65
XC71906-E-SPP-T-P4S	30	47	9	18	0,30	34	43,5	0,3	37,0	1,1	7,9	3,7	1,4	36,8	9,30	3,45
B7006-C-SPP-T-P4S	30	55	13	26	1,00	36	49	1,0	40,4					40,4	15,00	10,20
B7006-E-SPP-T-P4S	30	55	13	26	1,00	36	49	1,0	40,4					40,4	14,30	9,80
HCB7006-C-SPP-T-P4S	30	55	13	26	1,00	36	49	1,0	40,4	2,8	10,2	5,8	1,4	40,4	10,40	7,20
HCB7006-E-SPP-T-P4S	30	55	13	26	1,00	36	49	1,0	40,4	2,8	10,2	5,8	1,4	40,4	10,00	6,80
XCB7006-C-SPP-T-P4S	30	55	13	26	1,00	36	49	1,0	40,4	2,8	10,2	5,8	1,4	40,4	23,20	7,20
XCB7006-E-SPP-T-P4S	30	55	13	26	1,00	36	49	1,0	40,4	2,8	10,2	5,8	1,4	40,4	22,40	6,80
HS7006-C-SPP-T-P4S	30	55	13	26	1,00	36	49	1,0	40,5					40,5	8,80	7,10
HS7006-E-SPP-T-P4S	30	55	13	26	1,00	36	49	1,0	40,5					40,5	8,30	6,70
HC7006-C-SPP-T-P4S	30	55	13	26	1,00	36	49	1,0	40,5	2,8	10,2	5,8	1,4	40,5	6,00	4,90
HC7006-E-SPP-T-P4S	30	55	13	26	1,00	36	49	1,0	40,5	2,8	10,2	5,8	1,4	40,5	5,70	4,65
XC7006-C-SPP-T-P4S	30	55	13	26	1,00	36	49	1,0	40,5	2,8	10,2	5,8	1,4	40,5	13,40	4,90
XC7006-E-SPP-T-P4S	30	55	13	26	1,00	36	49	1,0	40,5	2,8	10,2	5,8	1,4	40,5	12,70	4,65

\* • = selectable as an option

## Example designations

### Sealed design

B71906-C-SPP-2RSD-T-P4S  
HSS7006-E-SPP-T-P4S

### Hybrid ceramic design

HCB7006-C-SPP-T-P4S

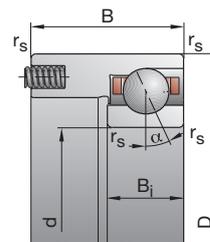
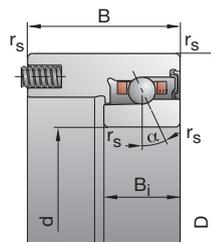
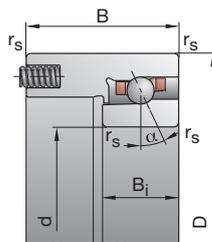
### Direct Lube design

HS7006-E-SPP-DLR-T-P4S

# B719..C/E, B70 HS719..C/E, HS70

C: Contact angle  $\alpha = 15^\circ$

E: Contact angle  $\alpha = 25^\circ$



Achievable speed		Recommended preload force	Achievable preload force of the complete pressure spring set max. $F_{vF}$	Sealed design*	Mass	Designation
Grease	Oil min.					
min <sup>-1</sup>		$F_v$ N			kg	FAG
28 000	43 000	345	450	•	0,10	B71906-C-SPP-T-P4S
26 000	40 000	445	450	•	0,10	B71906-E-SPP-T-P4S
36 000	53 000	230	450	•	0,09	HCB71906-C-SPP-T-P4S
32 000	48 000	335	450	•	0,09	HCB71906-E-SPP-T-P4S
48 000	70 000	230	450	•	0,09	XCB71906-C-SPP-T-P4S
40 000	60 000	335	450	•	0,09	XCB71906-E-SPP-T-P4S
36 000	53 000	129	290	•	0,12	HS71906-C-SPP-T-P4S
32 000	48 000	209	290	•	0,12	HS71906-E-SPP-T-P4S
43 000	63 000	135	290	•	0,11	HC71906-C-SPP-T-P4S
38 000	53 000	218	290	•	0,11	HC71906-E-SPP-T-P4S
53 000	80 000	135	290	•	0,11	XC71906-C-SPP-T-P4S
48 000	70 000	218	290	•	0,11	XC71906-E-SPP-T-P4S
26 000	40 000	545	895	•	0,25	B7006-C-SPP-T-P4S
24 000	38 000	861	895	•	0,25	B7006-E-SPP-T-P4S
32 000	48 000	446	895	•	0,24	HCB7006-C-SPP-T-P4S
28 000	43 000	669	895	•	0,24	HCB7006-E-SPP-T-P4S
43 000	60 000	446	895	•	0,24	XCB7006-C-SPP-T-P4S
36 000	53 000	669	895	•	0,24	XCB7006-E-SPP-T-P4S
32 000	48 000	176	400	•	0,24	HS7006-C-SPP-T-P4S
28 000	43 000	285	400	•	0,24	HS7006-E-SPP-T-P4S
38 000	56 000	183	400	•	0,23	HC7006-C-SPP-T-P4S
34 000	48 000	297	400	•	0,23	HC7006-E-SPP-T-P4S
50 000	75 000	183	400	•	0,23	XC7006-C-SPP-T-P4S
40 000	60 000	297	400	•	0,23	XC7006-E-SPP-T-P4S

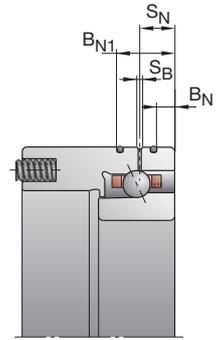
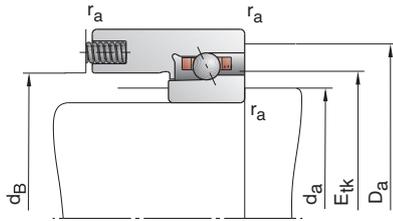
## X-life ultra design

XCS7006-E-SPP-T-P4S

## TX design

B71906-E-SPP-TX-P4S

# Spring preloaded FAG non-locating bearing units



Designation	Dimensions					Mounting dimensions				DLR dimensions				Basic load ratings		
	d	D	B <sub>i</sub>	B	r <sub>smin</sub>	d <sub>a</sub> h12	D <sub>a</sub> H12	r <sub>a</sub> max	d <sub>B</sub>	B <sub>N</sub>	B <sub>N1</sub>	S <sub>N</sub>	S <sub>B</sub>	E <sub>tk</sub> nom.	C <sub>dyn</sub>	C <sub>0stat</sub>
FAG	mm														kN	
B71907-C-SPP-T-P4S	35	55	10	20	0,60	40	51,5	0,6	43,6					44,0	11,80	9,50
B71907-E-SPP-T-P4S	35	55	10	20	0,60	40	51,5	0,6	43,6					44,0	11,00	9,00
HCB71907-C-SPP-T-P4S	35	55	10	20	0,60	40	51,5	0,6	43,6	1,6	8,4	4,2	1,4	44,0	8,15	6,55
HCB71907-E-SPP-T-P4S	35	55	10	20	0,60	40	51,5	0,6	43,6	1,6	8,4	4,2	1,4	44,0	7,65	6,30
XCB71907-C-SPP-T-P4S	35	55	10	20	0,60	40	51,5	0,6	43,6	1,6	8,4	4,2	1,4	44,0	18,00	6,55
XCB71907-E-SPP-T-P4S	35	55	10	20	0,60	40	51,5	0,6	43,6	1,6	8,4	4,2	1,4	44,0	17,00	6,30
HS71907-C-SPP-T-P4S	35	55	10	20	0,60	40	51,5	0,6	43,5					43,3	6,95	6,20
HS71907-E-SPP-T-P4S	35	55	10	20	0,60	40	51,5	0,6	43,5					43,3	6,55	5,85
HC71907-C-SPP-T-P4S	35	55	10	20	0,60	40	51,5	0,6	43,5	1,6	8,4	4,2	1,4	43,3	4,80	4,40
HC71907-E-SPP-T-P4S	35	55	10	20	0,60	40	51,5	0,6	43,5	1,6	8,4	4,2	1,4	43,3	4,50	4,05
XC71907-C-SPP-T-P4S	35	55	10	20	0,60	40	51,5	0,6	43,5	1,6	8,4	4,2	1,4	43,3	10,80	4,40
XC71907-E-SPP-T-P4S	35	55	10	20	0,60	40	51,5	0,6	43,5	1,6	8,4	4,2	1,4	43,3	10,00	4,05
B7007-C-SPP-T-P4S	35	62	14	28	1,00	41	56	1,0	45,5					45,6	19,00	13,70
B7007-E-SPP-T-P4S	35	62	14	28	1,00	41	56	1,0	45,5					45,6	18,30	12,90
HCB7007-C-SPP-T-P4S	35	62	14	28	1,00	41	56	1,0	45,5	2,8	11,2	6,0	1,4	45,6	13,20	9,50
HCB7007-E-SPP-T-P4S	35	62	14	28	1,00	41	56	1,0	45,5	2,8	11,2	6,0	1,4	45,6	12,50	9,00
XCB7007-C-SPP-T-P4S	35	62	14	28	1,00	41	56	1,0	45,5	2,8	11,2	6,0	1,4	45,6	29,00	9,50
XCB7007-E-SPP-T-P4S	35	62	14	28	1,00	41	56	1,0	45,5	2,8	11,2	6,0	1,4	45,6	28,00	9,00
HS7007-C-SPP-T-P4S	35	62	14	28	1,00	41	56	1,0	46,5					46,5	9,30	8,30
HS7007-E-SPP-T-P4S	35	62	14	28	1,00	41	56	1,0	46,5					46,5	8,80	7,80
HC7007-C-SPP-T-P4S	35	62	14	28	1,00	41	56	1,0	46,5	2,8	11,2	6,0	1,4	46,5	6,40	5,85
HC7007-E-SPP-T-P4S	35	62	14	28	1,00	41	56	1,0	46,5	2,8	11,2	6,0	1,4	46,5	6,10	5,40
XC7007-C-SPP-T-P4S	35	62	14	28	1,00	41	56	1,0	46,5	2,8	11,2	6,0	1,4	46,5	14,30	5,85
XC7007-E-SPP-T-P4S	35	62	14	28	1,00	41	56	1,0	46,5	2,8	11,2	6,0	1,4	46,5	13,70	5,40

\* • = selectable as an option

## Example designations

### Sealed design

B71907-C-SPP-2RSD-T-P4S  
HSS7007-E-SPP-T-P4S

### Hybrid ceramic design

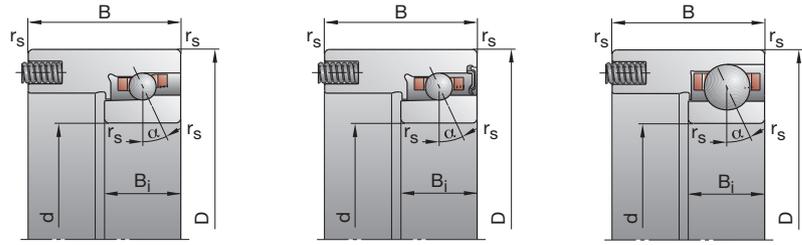
HCB7007-C-SPP-T-P4S

### Direct Lube design

HS7007-E-SPP-DLR-T-P4S

# B719..C/E, B70 HS719..C/E, HS70

C: Contact angle  $\alpha = 15^\circ$   
E: Contact angle  $\alpha = 25^\circ$

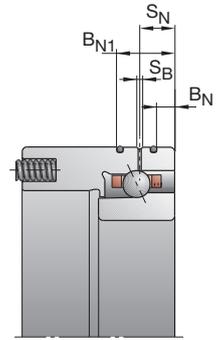
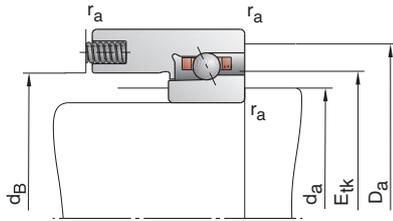


Achievable speed		Recommended preload force	Achievable preload force of the complete pressure spring set	Sealed design*	Mass	Designation
Grease	Oil min.	$F_V$	max. $F_{vF}$		kg	FAG
$\text{min}^{-1}$		N				
24 000	38 000	481	635	•	0,15	B71907-C-SPP-T-P4S
22 000	36 000	619	635	•	0,15	B71907-E-SPP-T-P4S
32 000	48 000	326	635	•	0,13	HCB71907-C-SPP-T-P4S
26 000	40 000	474	635	•	0,13	HCB71907-E-SPP-T-P4S
40 000	60 000	326	635	•	0,13	XCB71907-C-SPP-T-P4S
34 000	50 000	474	635	•	0,13	XCB71907-E-SPP-T-P4S
32 000	48 000	142	320	•	0,19	HS71907-C-SPP-T-P4S
26 000	40 000	230	320	•	0,19	HS71907-E-SPP-T-P4S
36 000	53 000	147	320	•	0,18	HC71907-C-SPP-T-P4S
32 000	45 000	239	320	•	0,18	HC71907-E-SPP-T-P4S
48 000	70 000	147	320	•	0,18	XC71907-C-SPP-T-P4S
40 000	60 000	239	320	•	0,18	XC71907-E-SPP-T-P4S
22 000	36 000	697	1 165	•	0,35	B7007-C-SPP-T-P4S
20 000	34 000	1 116	1 165	•	0,35	B7007-E-SPP-T-P4S
28 000	43 000	573	1 165	•	0,31	HCB7007-C-SPP-T-P4S
24 000	38 000	872	1 165	•	0,31	HCB7007-E-SPP-T-P4S
38 000	56 000	573	1 165	•	0,31	XCB7007-C-SPP-T-P4S
32 000	48 000	872	1 165	•	0,31	XCB7007-E-SPP-T-P4S
28 000	43 000	190	430	•	0,33	HS7007-C-SPP-T-P4S
24 000	38 000	308	430	•	0,33	HS7007-E-SPP-T-P4S
34 000	50 000	197	430	•	0,32	HC7007-C-SPP-T-P4S
30 000	43 000	321	430	•	0,32	HC7007-E-SPP-T-P4S
43 000	63 000	197	430	•	0,32	XC7007-C-SPP-T-P4S
36 000	53 000	321	430	•	0,32	XC7007-E-SPP-T-P4S

**X-life ultra design**  
XCS7007-E-SPP-T-P4S

**TX design**  
B71907-E-SPP-TX-P4S

# Spring preloaded FAG non-locating bearing units



Designation	Dimensions					Mounting dimensions				DLR dimensions				Basic load ratings		
	d	D	B <sub>i</sub>	B	r <sub>smin</sub>	d <sub>a</sub> h12	D <sub>a</sub> H12	r <sub>a</sub> max	d <sub>B</sub>	B <sub>N</sub>	B <sub>N1</sub>	S <sub>N</sub>	S <sub>B</sub>	E <sub>tk</sub> nom.	C <sub>dyn</sub>	C <sub>0stat</sub>
FAG	mm														kN	
B71908-C-SPP-T-P4S	40	62	12	24	0,60	45	58,5	0,6	48,3					49,1	17,60	13,70
B71908-E-SPP-T-P4S	40	62	12	24	0,60	45	58,5	0,6	48,3					49,1	16,60	13,20
HCB71908-C-SPP-T-P4S	40	62	12	24	0,60	45	58,5	0,6	48,3	2,2	9,8	5,4	1,4	49,1	12,20	9,65
HCB71908-E-SPP-T-P4S	40	62	12	24	0,60	45	58,5	0,6	48,3	2,2	9,8	5,4	1,4	49,1	11,40	9,15
XCB71908-C-SPP-T-P4S	40	62	12	24	0,60	45	58,5	0,6	48,3	2,2	9,8	5,4	1,4	49,1	27,00	9,65
XCB71908-E-SPP-T-P4S	40	62	12	24	0,60	45	58,5	0,6	48,3	2,2	9,8	5,4	1,4	49,1	25,50	9,15
HS71908-C-SPP-T-P4S	40	62	12	24	0,60	45	58,5	0,6	49,5					49,3	7,20	6,95
HS71908-E-SPP-T-P4S	40	62	12	24	0,60	45	58,5	0,6	49,5					49,3	6,80	6,40
HC71908-C-SPP-T-P4S	40	62	12	24	0,60	45	58,5	0,6	49,5	2,2	9,8	5,4	1,4	49,3	5,00	4,80
HC71908-E-SPP-T-P4S	40	62	12	24	0,60	45	58,5	0,6	49,5	2,2	9,8	5,4	1,4	49,3	4,75	4,50
XC71908-C-SPP-T-P4S	40	62	12	24	0,60	45	58,5	0,6	49,5	2,2	9,8	5,4	1,4	49,3	11,20	4,80
XC71908-E-SPP-T-P4S	40	62	12	24	0,60	45	58,5	0,6	49,5	2,2	9,8	5,4	1,4	49,3	10,60	4,50
B7008-C-SPP-T-P4S	40	68	15	30	1,00	46	62	1,0	50,3					50,8	20,40	16,00
B7008-E-SPP-T-P4S	40	68	15	30	1,00	46	62	1,0	50,3					50,8	19,60	15,00
HCB7008-C-SPP-T-P4S	40	68	15	30	1,00	46	62	1,0	50,3	2,8	12,2	6,5	1,4	50,8	14,30	11,00
HCB7008-E-SPP-T-P4S	40	68	15	30	1,00	46	62	1,0	50,3	2,8	12,2	6,5	1,4	50,8	13,40	10,60
XCB7008-C-SPP-T-P4S	40	68	15	30	1,00	46	62	1,0	50,3	2,8	12,2	6,5	1,4	50,8	32,00	11,00
XCB7008-E-SPP-T-P4S	40	68	15	30	1,00	46	62	1,0	50,3	2,8	12,2	6,5	1,4	50,8	30,00	10,60
HS7008-C-SPP-T-P4S	40	68	15	30	1,00	46	62	1,0	52,0					52,0	10,00	9,30
HS7008-E-SPP-T-P4S	40	68	15	30	1,00	46	62	1,0	52,0					52,0	9,30	8,65
HC7008-C-SPP-T-P4S	40	68	15	30	1,00	46	62	1,0	52,0	2,8	12,2	6,5	1,4	52,0	6,80	6,55
HC7008-E-SPP-T-P4S	40	68	15	30	1,00	46	62	1,0	52,0	2,8	12,2	6,5	1,4	52,0	6,40	6,10
XC7008-C-SPP-T-P4S	40	68	15	30	1,00	46	62	1,0	52,0	2,8	12,2	6,5	1,4	52,0	15,30	6,55
XC7008-E-SPP-T-P4S	40	68	15	30	1,00	46	62	1,0	52,0	2,8	12,2	6,5	1,4	52,0	14,30	6,10

\* • = selectable as an option

## Example designations

### Sealed design

B71908-C-SPP-2RSD-T-P4S  
HSS7008-E-SPP-T-P4S

### Hybrid ceramic design

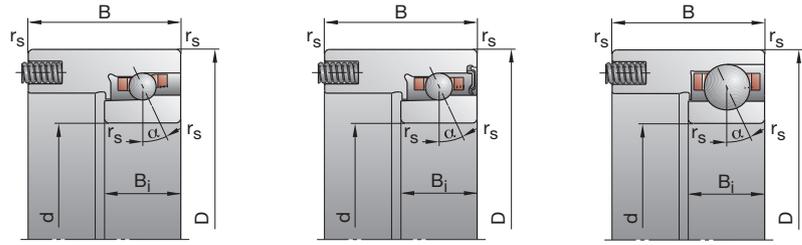
HCB7008-C-SPP-T-P4S

### Direct Lube design

HS7008-E-SPP-DLR-T-P4S

# B719..C/E, B70 HS719..C/E, HS70

C: Contact angle  $\alpha = 15^\circ$   
E: Contact angle  $\alpha = 25^\circ$

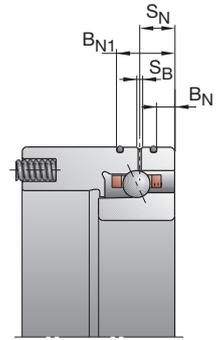
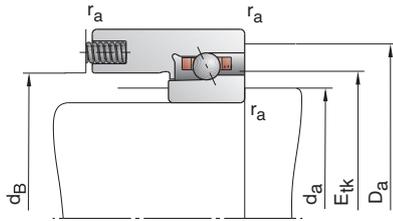


Achievable speed		Recommended preload force	Achievable preload force of the complete pressure spring set	Sealed design*	Mass	Designation
Grease	Oil min.	$F_V$	max. $F_{vF}$		kg	FAG
$\text{min}^{-1}$		N				
22 000	36 000	633	1 040	•	0,20	B71908-C-SPP-T-P4S
20 000	34 000	984	1 040	•	0,20	B71908-E-SPP-T-P4S
28 000	43 000	512	1 040	•	0,19	HCB71908-C-SPP-T-P4S
24 000	38 000	779	1 040	•	0,19	HCB71908-E-SPP-T-P4S
36 000	53 000	512	1 040	•	0,19	XCB71908-C-SPP-T-P4S
30 000	45 000	779	1 040	•	0,19	XCB71908-E-SPP-T-P4S
28 000	43 000	147	335	•	0,29	HS71908-C-SPP-T-P4S
24 000	38 000	239	335	•	0,29	HS71908-E-SPP-T-P4S
32 000	48 000	153	335	•	0,28	HC71908-C-SPP-T-P4S
30 000	43 000	249	335	•	0,28	HC71908-E-SPP-T-P4S
40 000	60 000	153	335	•	0,28	XC71908-C-SPP-T-P4S
36 000	53 000	249	335	•	0,28	XC71908-E-SPP-T-P4S
20 000	34 000	743	1 235	•	0,43	B7008-C-SPP-T-P4S
19 000	32 000	1 180	1 235	•	0,43	B7008-E-SPP-T-P4S
26 000	40 000	609	1 235	•	0,39	HCB7008-C-SPP-T-P4S
22 000	36 000	926	1 235	•	0,39	HCB7008-E-SPP-T-P4S
34 000	50 000	609	1 235	•	0,39	XCB7008-C-SPP-T-P4S
28 000	43 000	926	1 235	•	0,39	XCB7008-E-SPP-T-P4S
26 000	40 000	201	450	•	0,41	HS7008-C-SPP-T-P4S
22 000	36 000	327	450	•	0,41	HS7008-E-SPP-T-P4S
30 000	45 000	209	450	•	0,40	HC7008-C-SPP-T-P4S
28 000	40 000	338	450	•	0,40	HC7008-E-SPP-T-P4S
38 000	56 000	209	450	•	0,40	XC7008-C-SPP-T-P4S
34 000	50 000	338	450	•	0,40	XC7008-E-SPP-T-P4S

**X-life ultra design**  
XCS7008-E-SPP-T-P4S

**TX design**  
B71908-E-SPP-TX-P4S

# Spring preloaded FAG non-locating bearing units



Designation	Dimensions					Mounting dimensions				DLR dimensions				Basic load ratings		
	d	D	B <sub>i</sub>	B	r <sub>smin</sub>	d <sub>a</sub> h12	D <sub>a</sub> H12	r <sub>a</sub> max	d <sub>B</sub>	B <sub>N</sub>	B <sub>N1</sub>	S <sub>N</sub>	S <sub>B</sub>	E <sub>tk</sub> nom.	C <sub>dyn</sub>	C <sub>0stat</sub>
FAG	mm														kN	
B71909-C-SPP-T-P4S	45	68	12	24	0,60	50	63,5	0,6	53,3					54,4	18,60	15,60
B71909-E-SPP-T-P4S	45	68	12	24	0,60	50	63,5	0,6	53,3					54,4	17,60	15,00
HCB71909-C-SPP-T-P4S	45	68	12	24	0,60	50	63,5	0,6	53,3	2,2	9,8	5,4	1,4	54,4	12,90	10,80
HCB71909-E-SPP-T-P4S	45	68	12	24	0,60	50	63,5	0,6	53,3	2,2	9,8	5,4	1,4	54,4	12,20	10,40
XCB71909-C-SPP-T-P4S	45	68	12	24	0,60	50	63,5	0,6	53,3	2,2	9,8	5,4	1,4	54,4	29,00	10,80
XCB71909-E-SPP-T-P4S	45	68	12	24	0,60	50	63,5	0,6	53,3	2,2	9,8	5,4	1,4	54,4	27,00	10,40
HS71909-C-SPP-T-P4S	45	68	12	24	0,60	50	63,5	0,6	54,5					54,5	10,00	9,65
HS71909-E-SPP-T-P4S	45	68	12	24	0,60	50	63,5	0,6	54,5					54,5	9,50	9,00
HC71909-C-SPP-T-P4S	45	68	12	24	0,60	50	63,5	0,6	54,5	2,2	9,8	5,4	1,4	54,5	6,95	6,70
HC71909-E-SPP-T-P4S	45	68	12	24	0,60	50	63,5	0,6	54,5	2,2	9,8	5,4	1,4	54,5	6,55	6,30
XC71909-C-SPP-T-P4S	45	68	12	24	0,60	50	63,5	0,6	54,5	2,2	9,8	5,4	1,4	54,5	15,60	6,70
XC71909-E-SPP-T-P4S	45	68	12	24	0,60	50	63,5	0,6	54,5	2,2	9,8	5,4	1,4	54,5	14,60	6,30
B7009-C-SPP-T-P4S	45	75	16	32	1,00	51	69	1,0	55,3					56,2	27,50	21,20
B7009-E-SPP-T-P4S	45	75	16	32	1,00	51	69	1,0	55,3					56,2	26,50	20,00
HCB7009-C-SPP-T-P4S	45	75	16	32	1,00	51	69	1,0	55,3	3,4	12,6	6,7	1,4	56,2	19,00	14,60
HCB7009-E-SPP-T-P4S	45	75	16	32	1,00	51	69	1,0	55,3	3,4	12,6	6,7	1,4	56,2	18,00	14,00
XCB7009-C-SPP-T-P4S	45	75	16	32	1,00	51	69	1,0	55,3	3,4	12,6	6,7	1,4	56,2	42,50	14,60
XCB7009-E-SPP-T-P4S	45	75	16	32	1,00	51	69	1,0	55,3	3,4	12,6	6,7	1,4	56,2	40,00	14,00
HS7009-C-SPP-T-P4S	45	75	16	32	1,00	51	69	1,0	57,4					57,7	12,90	12,20
HS7009-E-SPP-T-P4S	45	75	16	32	1,00	51	69	1,0	57,4					57,7	12,20	11,40
HC7009-C-SPP-T-P4S	45	75	16	32	1,00	51	69	1,0	57,4	3,4	12,6	6,7	1,4	57,7	8,80	8,50
HC7009-E-SPP-T-P4S	45	75	16	32	1,00	51	69	1,0	57,4	3,4	12,6	6,7	1,4	57,7	8,30	8,00
XC7009-C-SPP-T-P4S	45	75	16	32	1,00	51	69	1,0	57,4	3,4	12,6	6,7	1,4	57,7	19,60	8,50
XC7009-E-SPP-T-P4S	45	75	16	32	1,00	51	69	1,0	57,4	3,4	12,6	6,7	1,4	57,7	18,60	8,00

\* • = selectable as an option

## Example designations

### Sealed design

B71909-C-SPP-2RSD-T-P4S  
HSS7009-E-SPP-T-P4S

### Hybrid ceramic design

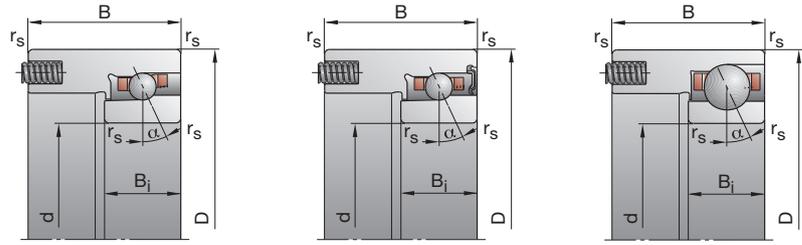
HCB7009-C-SPP-T-P4S

### Direct Lube design

HS7009-E-SPP-DLR-T-P4S

# B719..C/E, B70 HS719..C/E, HS70

C: Contact angle  $\alpha = 15^\circ$   
E: Contact angle  $\alpha = 25^\circ$

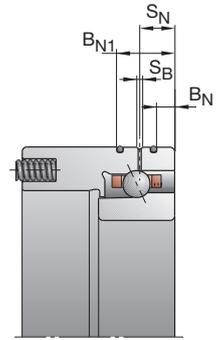
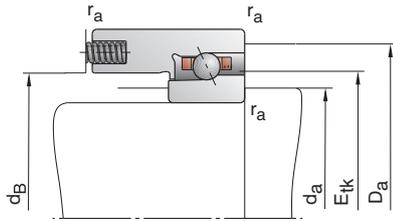


Achievable speed		Recommended preload force	Achievable preload force of the complete pressure spring set	Sealed design*	Mass	Designation
Grease	Oil min.					
min <sup>-1</sup>		F <sub>V</sub> N	max. F <sub>vF</sub>		kg	FAG
19 000	32 000	667	1 085	•	0,23	B71909-C-SPP-T-P4S
18 000	30 000	1 038	1 085	•	0,23	B71909-E-SPP-T-P4S
24 000	38 000	540	1 085	•	0,22	HCB71909-C-SPP-T-P4S
22 000	36 000	812	1 085	•	0,22	HCB71909-E-SPP-T-P4S
32 000	48 000	540	1 085	•	0,22	XCB71909-C-SPP-T-P4S
28 000	43 000	812	1 085	•	0,22	XCB71909-E-SPP-T-P4S
24 000	38 000	205	460	•	0,32	HS71909-C-SPP-T-P4S
22 000	36 000	331	460	•	0,32	HS71909-E-SPP-T-P4S
28 000	43 000	213	460	•	0,30	HC71909-C-SPP-T-P4S
26 000	38 000	345	460	•	0,30	HC71909-E-SPP-T-P4S
38 000	56 000	213	460	•	0,30	XC71909-C-SPP-T-P4S
32 000	48 000	345	460	•	0,30	XC71909-E-SPP-T-P4S
18 000	30 000	1 019	1 755	•	0,55	B7009-C-SPP-T-P4S
17 000	28 000	1 638	1 755	•	0,55	B7009-E-SPP-T-P4S
24 000	38 000	843	1 755	•	0,45	HCB7009-C-SPP-T-P4S
20 000	34 000	1 314	1 755	•	0,45	HCB7009-E-SPP-T-P4S
30 000	45 000	843	1 755	•	0,45	XCB7009-C-SPP-T-P4S
26 000	40 000	1 314	1 755	•	0,45	XCB7009-E-SPP-T-P4S
24 000	38 000	263	590	•	0,51	HS7009-C-SPP-T-P4S
20 000	34 000	428	590	•	0,51	HS7009-E-SPP-T-P4S
26 000	40 000	273	590	•	0,48	HC7009-C-SPP-T-P4S
26 000	38 000	441	590	•	0,48	HC7009-E-SPP-T-P4S
34 000	50 000	273	590	•	0,48	XC7009-C-SPP-T-P4S
30 000	45 000	441	590	•	0,48	XC7009-E-SPP-T-P4S

**X-life ultra design**  
XCS7009-E-SPP-T-P4S

**TX design**  
B71909-E-SPP-TX-P4S

# Spring preloaded FAG non-locating bearing units



Designation	Dimensions					Mounting dimensions				DLR dimensions				Basic load ratings		
	d	D	B <sub>i</sub>	B	r <sub>smin</sub>	d <sub>a</sub> h12	D <sub>a</sub> H12	r <sub>a</sub> max	d <sub>B</sub>	B <sub>N</sub>	B <sub>N1</sub>	S <sub>N</sub>	S <sub>B</sub>	E <sub>tk</sub> nom.	C <sub>dyn</sub>	C <sub>0stat</sub>
FAG	mm														kN	
B71910-C-SPP-T-P4S	50	72	12	24	0,60	55	67,5	0,6	57,8					58,9	19,00	16,60
B71910-E-SPP-T-P4S	50	72	12	24	0,60	55	67,5	0,6	57,8					58,9	18,00	15,60
HCB71910-C-SPP-T-P4S	50	72	12	24	0,60	55	67,5	0,6	57,8	2,2	9,8	5,4	1,4	58,9	13,20	11,60
HCB71910-E-SPP-T-P4S	50	72	12	24	0,60	55	67,5	0,6	57,8	2,2	9,8	5,4	1,4	58,9	12,20	11,00
XCB71910-C-SPP-T-P4S	50	72	12	24	0,60	55	67,5	0,6	57,8	2,2	9,8	5,4	1,4	58,9	29,00	11,60
XCB71910-E-SPP-T-P4S	50	72	12	24	0,60	55	67,5	0,6	57,8	2,2	9,8	5,4	1,4	58,9	27,00	11,00
HS71910-C-SPP-T-P4S	50	72	12	24	0,60	55	67,5	0,6	59,0					59,0	10,40	10,20
HS71910-E-SPP-T-P4S	50	72	12	24	0,60	55	67,5	0,6	59,0					59,0	9,80	9,65
HC71910-C-SPP-T-P4S	50	72	12	24	0,60	55	67,5	0,6	59,0	2,2	9,8	5,4	1,4	59,0	7,10	7,20
HC71910-E-SPP-T-P4S	50	72	12	24	0,60	55	67,5	0,6	59,0	2,2	9,8	5,4	1,4	59,0	6,70	6,70
XC71910-C-SPP-T-P4S	50	72	12	24	0,60	55	67,5	0,6	59,0	2,2	9,8	5,4	1,4	59,0	16,00	7,20
XC71910-E-SPP-T-P4S	50	72	12	24	0,60	55	67,5	0,6	59,0	2,2	9,8	5,4	1,4	59,0	15,00	6,70
B7010-C-SPP-T-P4S	50	80	16	32	1,00	56	74	1,0	60,3					61,2	28,50	22,80
B7010-E-SPP-T-P4S	50	80	16	32	1,00	56	74	1,0	60,3					61,2	27,00	21,60
HCB7010-C-SPP-T-P4S	50	80	16	32	1,00	56	74	1,0	60,3	3,4	12,6	6,7	1,4	61,2	19,60	16,00
HCB7010-E-SPP-T-P4S	50	80	16	32	1,00	56	74	1,0	60,3	3,4	12,6	6,7	1,4	61,2	18,60	15,30
XCB7010-C-SPP-T-P4S	50	80	16	32	1,00	56	74	1,0	60,3	3,4	12,6	6,7	1,4	61,2	44,00	16,00
XCB7010-E-SPP-T-P4S	50	80	16	32	1,00	56	74	1,0	60,3	3,4	12,6	6,7	1,4	61,2	41,50	15,30
HS7010-C-SPP-T-P4S	50	80	16	32	1,00	56	74	1,0	62,4					62,7	13,40	13,20
HS7010-E-SPP-T-P4S	50	80	16	32	1,00	56	74	1,0	62,4					62,7	12,50	12,20
HC7010-C-SPP-T-P4S	50	80	16	32	1,00	56	74	1,0	62,4	3,4	12,6	6,7	1,4	62,7	9,15	9,15
HC7010-E-SPP-T-P4S	50	80	16	32	1,00	56	74	1,0	62,4	3,4	12,6	6,7	1,4	62,7	8,65	8,50
XC7010-C-SPP-T-P4S	50	80	16	32	1,00	56	74	1,0	62,4	3,4	12,6	6,7	1,4	62,7	20,40	9,15
XC7010-E-SPP-T-P4S	50	80	16	32	1,00	56	74	1,0	62,4	3,4	12,6	6,7	1,4	62,7	19,30	8,50

\* • = selectable as an option

## Example designations

### Sealed design

B71910-C-SPP-2RSD-T-P4S  
HSS7010-E-SPP-T-P4S

### Hybrid ceramic design

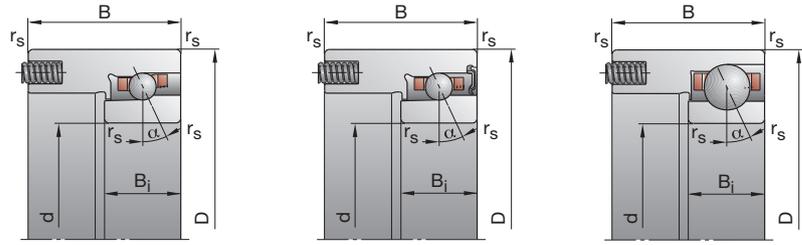
HCB7010-C-SPP-T-P4S

### Direct Lube design

HS7010-E-SPP-DLR-T-P4S

# B719..C/E, B70 HS719..C/E, HS70

C: Contact angle  $\alpha = 15^\circ$   
E: Contact angle  $\alpha = 25^\circ$

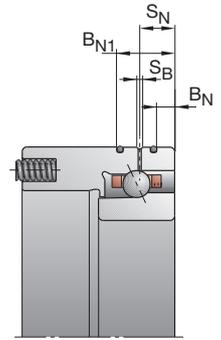
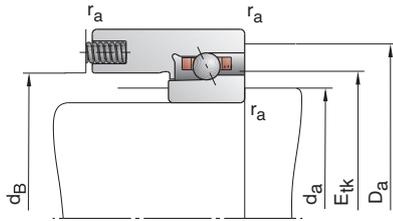


Achievable speed		Recommended preload force	Achievable preload force of the complete pressure spring set max. $F_{vF}$	Sealed design*	Mass	Designation
Grease	Oil min.					
min <sup>-1</sup>		$F_v$ N			kg	FAG
18 000	30 000	679	1 100	•	0,23	B71910-C-SPP-T-P4S
16 000	26 000	1 059	1 100	•	0,23	B71910-E-SPP-T-P4S
22 000	36 000	549	1 100	•	0,22	HCB71910-C-SPP-T-P4S
20 000	34 000	824	1 100	•	0,22	HCB71910-E-SPP-T-P4S
30 000	43 000	549	1 100	•	0,22	XCB71910-C-SPP-T-P4S
26 000	40 000	824	1 100	•	0,22	XCB71910-E-SPP-T-P4S
22 000	36 000	209	470	•	0,32	HS71910-C-SPP-T-P4S
20 000	34 000	345	470	•	0,32	HS71910-E-SPP-T-P4S
26 000	40 000	218	470	•	0,31	HC71910-C-SPP-T-P4S
24 000	36 000	353	470	•	0,31	HC71910-E-SPP-T-P4S
34 000	50 000	218	470	•	0,31	XC71910-C-SPP-T-P4S
30 000	45 000	353	470	•	0,31	XC71910-E-SPP-T-P4S
17 000	28 000	1 054	1 780	•	0,59	B7010-C-SPP-T-P4S
15 000	24 000	1 663	1 780	•	0,59	B7010-E-SPP-T-P4S
22 000	36 000	879	1 780	•	0,49	HCB7010-C-SPP-T-P4S
18 000	30 000	1 334	1 780	•	0,49	HCB7010-E-SPP-T-P4S
28 000	43 000	879	1 780	•	0,49	XCB7010-C-SPP-T-P4S
24 000	38 000	1 334	1 780	•	0,49	XCB7010-E-SPP-T-P4S
22 000	36 000	273	620	•	0,55	HS7010-C-SPP-T-P4S
18 000	30 000	444	620	•	0,55	HS7010-E-SPP-T-P4S
24 000	38 000	285	620	•	0,53	HC7010-C-SPP-T-P4S
24 000	36 000	462	620	•	0,53	HC7010-E-SPP-T-P4S
32 000	48 000	285	620	•	0,53	XC7010-C-SPP-T-P4S
28 000	43 000	462	620	•	0,53	XC7010-E-SPP-T-P4S

**X-life ultra design**  
XCS7010-E-SPP-T-P4S

**TX design**  
B71910-E-SPP-TX-P4S

# Spring preloaded FAG non-locating bearing units



Designation	Dimensions					Mounting dimensions				DLR dimensions				Basic load ratings		
	d	D	B <sub>i</sub>	B	r <sub>smin</sub>	d <sub>a</sub> h12	D <sub>a</sub> H12	r <sub>a</sub> max	d <sub>B</sub>	B <sub>N</sub>	B <sub>N1</sub>	S <sub>N</sub>	S <sub>B</sub>	E <sub>tk</sub> nom.	C <sub>dyn</sub>	C <sub>0stat</sub>
FAG	mm														kN	
B71911-C-SPP-T-P4S	55	80	13	26	1,00	60	75,5	0,6	63,8					65,1	22,80	20,40
B71911-E-SPP-T-P4S	55	80	13	26	1,00	60	75,5	0,6	63,8					65,1	21,60	19,30
HCB71911-C-SPP-T-P4S	55	80	13	26	1,00	60	75,5	0,6	63,8	2,8	10,2	5,8	1,4	65,1	16,00	14,30
HCB71911-E-SPP-T-P4S	55	80	13	26	1,00	60	75,5	0,6	63,8	2,8	10,2	5,8	1,4	65,1	15,00	13,40
XCB71911-C-SPP-T-P4S	55	80	13	26	1,00	60	75,5	0,6	63,8	2,8	10,2	5,8	1,4	65,1	35,50	14,30
XCB71911-E-SPP-T-P4S	55	80	13	26	1,00	60	75,5	0,6	63,8	2,8	10,2	5,8	1,4	65,1	33,50	13,40
HS71911-C-SPP-T-P4S	55	80	13	26	1,00	60	75,5	0,6	65,0					65,2	13,40	13,70
HS71911-E-SPP-T-P4S	55	80	13	26	1,00	60	75,5	0,6	65,0					65,2	12,70	12,70
HC71911-C-SPP-T-P4S	55	80	13	26	1,00	60	75,5	0,6	65,0	2,8	10,2	5,8	1,4	65,2	9,30	9,50
HC71911-E-SPP-T-P4S	55	80	13	26	1,00	60	75,5	0,6	65,0	2,8	10,2	5,8	1,4	65,2	8,80	8,80
XC71911-C-SPP-T-P4S	55	80	13	26	1,00	60	75,5	0,6	65,0	2,8	10,2	5,8	1,4	65,2	20,80	9,50
XC71911-E-SPP-T-P4S	55	80	13	26	1,00	60	75,5	0,6	65,0	2,8	10,2	5,8	1,4	65,2	19,60	8,80
B7011-C-SPP-T-P4S	55	90	18	36	1,10	62	83	1,0	67,0					68,1	38,00	31,00
B7011-E-SPP-T-P4S	55	90	18	36	1,10	62	83	1,0	67,0					68,1	36,00	29,00
HCB7011-C-SPP-T-P4S	55	90	18	36	1,10	62	83	1,0	67,0	4,3	13,7	8,3	1,4	68,1	26,00	21,60
HCB7011-E-SPP-T-P4S	55	90	18	36	1,10	62	83	1,0	67,0	4,3	13,7	8,3	1,4	68,1	25,00	20,40
XCB7011-C-SPP-T-P4S	55	90	18	36	1,10	62	83	1,0	67,0	4,3	13,7	8,3	1,4	68,1	58,50	21,60
XCB7011-E-SPP-T-P4S	55	90	18	36	1,10	62	83	1,0	67,0	4,3	13,7	8,3	1,4	68,1	56,00	20,40
HS7011-C-SPP-T-P4S	55	90	18	36	1,10	62	83	1,0	69,2					69,7	18,60	19,00
HS7011-E-SPP-T-P4S	55	90	18	36	1,10	62	83	1,0	69,2					69,7	17,60	17,60
HC7011-C-SPP-T-P4S	55	90	18	36	1,10	62	83	1,0	69,2	4,3	13,7	8,3	1,4	69,7	12,90	13,20
HC7011-E-SPP-T-P4S	55	90	18	36	1,10	62	83	1,0	69,2	4,3	13,7	8,3	1,4	69,7	12,20	12,20
XC7011-C-SPP-T-P4S	55	90	18	36	1,10	62	83	1,0	69,2	4,3	13,7	8,3	1,4	69,7	29,00	13,20
XC7011-E-SPP-T-P4S	55	90	18	36	1,10	62	83	1,0	69,2	4,3	13,7	8,3	1,4	69,7	27,00	12,20

\* • = selectable as an option

## Example designations

### Sealed design

B71911-C-SPP-2RSD-T-P4S  
HSS7011-E-SPP-T-P4S

### Hybrid ceramic design

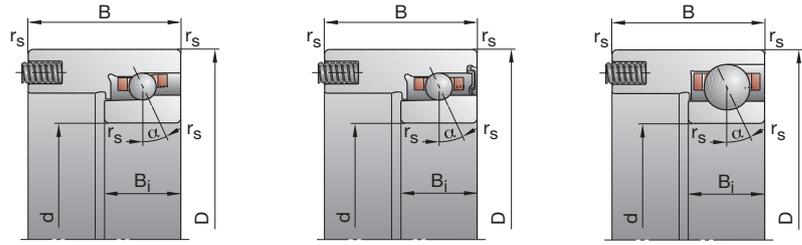
HCB7011-C-SPP-T-P4S

### Direct Lube design

HS7011-E-SPP-DLR-T-P4S

# B719..C/E, B70 HS719..C/E, HS70

C: Contact angle  $\alpha = 15^\circ$   
E: Contact angle  $\alpha = 25^\circ$

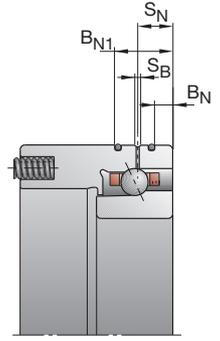
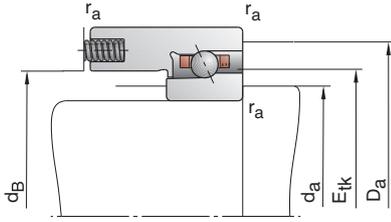


Achievable speed		Recommended preload force	Achievable preload force of the complete pressure spring set	Sealed design*	Mass	Designation
Grease	Oil min.	$F_V$	max. $F_{vF}$		kg	FAG
$\text{min}^{-1}$		N				
16 000	26 000	825	1 390	•	0,35	B71911-C-SPP-T-P4S
15 000	24 000	1 287	1 390	•	0,35	B71911-E-SPP-T-P4S
20 000	34 000	666	1 390	•	0,30	HCB71911-C-SPP-T-P4S
18 000	30 000	1 040	1 390	•	0,30	HCB71911-E-SPP-T-P4S
26 000	40 000	666	1 390	•	0,30	XCB71911-C-SPP-T-P4S
24 000	38 000	1 040	1 390	•	0,30	XCB71911-E-SPP-T-P4S
20 000	34 000	279	630	•	0,44	HS71911-C-SPP-T-P4S
18 000	30 000	451	630	•	0,44	HS71911-E-SPP-T-P4S
24 000	38 000	290	630	•	0,40	HC71911-C-SPP-T-P4S
22 000	34 000	470	630	•	0,40	HC71911-E-SPP-T-P4S
32 000	48 000	290	630	•	0,40	XC71911-C-SPP-T-P4S
26 000	40 000	470	630	•	0,40	XC71911-E-SPP-T-P4S
15 000	24 000	1 424	2 440	•	0,87	B7011-C-SPP-T-P4S
14 000	22 000	2 257	2 440	•	0,87	B7011-E-SPP-T-P4S
19 000	32 000	1 184	2 440	•	0,72	HCB7011-C-SPP-T-P4S
17 000	28 000	1 829	2 440	•	0,72	HCB7011-E-SPP-T-P4S
26 000	40 000	1 184	2 440	•	0,72	XCB7011-C-SPP-T-P4S
22 000	36 000	1 829	2 440	•	0,72	XCB7011-E-SPP-T-P4S
19 000	32 000	383	875	•	0,79	HS7011-C-SPP-T-P4S
17 000	28 000	630	875	•	0,79	HS7011-E-SPP-T-P4S
22 000	36 000	402	875	•	0,75	HC7011-C-SPP-T-P4S
20 000	32 000	656	875	•	0,75	HC7011-E-SPP-T-P4S
28 000	43 000	402	875	•	0,75	XC7011-C-SPP-T-P4S
24 000	38 000	656	875	•	0,75	XC7011-E-SPP-T-P4S

**X-life ultra design**  
XCS7011-E-SPP-T-P4S

**TX design**  
B71911-E-SPP-TX-P4S

# Spring preloaded FAG non-locating bearing units



Designation	Dimensions					Mounting dimensions				DLR dimensions				Basic load ratings			
	d	D	B <sub>i</sub>	B	r <sub>smin</sub>	d <sub>a</sub> h12	D <sub>a</sub> H12	r <sub>a</sub> max	d <sub>B</sub>	B <sub>N</sub>	B <sub>N1</sub>	S <sub>N</sub>	S <sub>B</sub>	E <sub>tk</sub> nom.	C <sub>dyn</sub>	C <sub>0stat</sub>	
FAG	mm															kN	
B71912-C-SPP-T-P4S	60	85	13	26	1,00	65	80,5	0,6	68,8					70,1	24,00	22,80	
B71912-E-SPP-T-P4S	60	85	13	26	1,00	65	80,5	0,6	68,8					70,1	22,80	21,60	
HCB71912-C-SPP-T-P4S	60	85	13	26	1,00	65	80,5	0,6	68,8	2,8	10,2	5,8	1,4	70,1	16,60	16,00	
HCB71912-E-SPP-T-P4S	60	85	13	26	1,00	65	80,5	0,6	68,8	2,8	10,2	5,8	1,4	70,1	15,60	15,00	
XCB71912-C-SPP-T-P4S	60	85	13	26	1,00	65	80,5	0,6	68,8	2,8	10,2	5,8	1,4	70,1	37,50	16,00	
XCB71912-E-SPP-T-P4S	60	85	13	26	1,00	65	80,5	0,6	68,8	2,8	10,2	5,8	1,4	70,1	34,50	15,00	
HS71912-C-SPP-T-P4S	60	85	13	26	1,00	65	80,5	0,6	70,0					70,2	14,00	14,60	
HS71912-E-SPP-T-P4S	60	85	13	26	1,00	65	80,5	0,6	70,0					70,2	13,20	13,40	
HC71912-C-SPP-T-P4S	60	85	13	26	1,00	65	80,5	0,6	70,0	2,8	10,2	5,8	1,4	70,2	9,65	10,00	
HC71912-E-SPP-T-P4S	60	85	13	26	1,00	65	80,5	0,6	70,0	2,8	10,2	5,8	1,4	70,2	9,00	9,50	
XC71912-C-SPP-T-P4S	60	85	13	26	1,00	65	80,5	0,6	70,0	2,8	10,2	5,8	1,4	70,2	21,60	10,00	
XC71912-E-SPP-T-P4S	60	85	13	26	1,00	65	80,5	0,6	70,0	2,8	10,2	5,8	1,4	70,2	20,00	9,50	
B7012-C-SPP-T-P4S	60	95	18	36	1,10	67	88	1,0	72,0					73,1	39,00	33,50	
B7012-E-SPP-T-P4S	60	95	18	36	1,10	67	88	1,0	72,0					73,1	36,50	31,50	
HCB7012-C-SPP-T-P4S	60	95	18	36	1,10	67	88	1,0	72,0	4,3	13,7	8,3	1,4	73,1	27,00	23,20	
HCB7012-E-SPP-T-P4S	60	95	18	36	1,10	67	88	1,0	72,0	4,3	13,7	8,3	1,4	73,1	25,50	22,00	
XCB7012-C-SPP-T-P4S	60	95	18	36	1,10	67	88	1,0	72,0	4,3	13,7	8,3	1,4	73,1	60,00	23,20	
XCB7012-E-SPP-T-P4S	60	95	18	36	1,10	67	88	1,0	71,9	4,3	13,7	8,3	1,4	73,1	57,00	22,00	
HS7012-C-SPP-T-P4S	60	95	18	36	1,10	67	88	1,0	74,2					74,7	19,30	20,00	
HS7012-E-SPP-T-P4S	60	95	18	36	1,10	67	88	1,0	74,2					74,7	18,30	19,00	
HC7012-C-SPP-T-P4S	60	95	18	36	1,10	67	88	1,0	74,2	4,3	13,7	8,3	1,4	74,7	13,40	14,00	
HC7012-E-SPP-T-P4S	60	95	18	36	1,10	67	88	1,0	74,2	4,3	13,7	8,3	1,4	74,7	12,70	13,20	
XC7012-C-SPP-T-P4S	60	95	18	36	1,10	67	88	1,0	74,2	4,3	13,7	8,3	1,4	74,7	30,00	14,00	
XC7012-E-SPP-T-P4S	60	95	18	36	1,10	67	88	1,0	74,2	4,3	13,7	8,3	1,4	74,7	28,50	13,20	

\* • = selectable as an option

## Example designations

### Sealed design

B71912-C-SPP-2RSD-T-P4S  
HSS7012-E-SPP-T-P4S

### Hybrid ceramic design

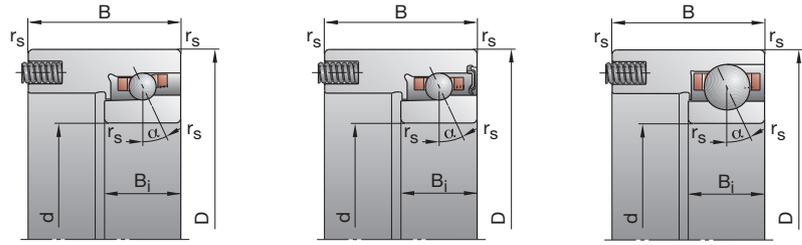
HCB7012-C-SPP-T-P4S

### Direct Lube design

HS7012-E-SPP-DLR-T-P4S

# B719..C/E, B70 HS719..C/E, HS70

C: Contact angle  $\alpha = 15^\circ$   
E: Contact angle  $\alpha = 25^\circ$

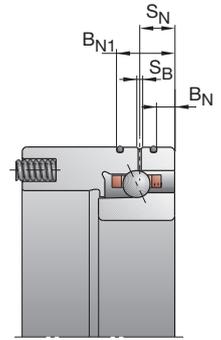
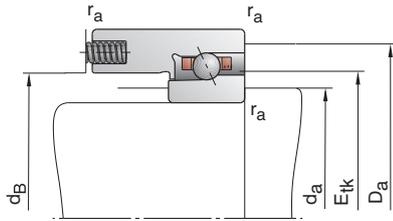


Achievable speed		Recommended preload force	Achievable preload force of the complete pressure spring set	Sealed design*	Mass	Designation
Grease	Oil min.					
min <sup>-1</sup>		F <sub>V</sub> N	max. F <sub>vF</sub>		kg	FAG
15 000	24 000	866	1 415	•	0,38	B71912-C-SPP-T-P4S
14 000	22 000	1 353	1 415	•	0,38	B71912-E-SPP-T-P4S
19 000	32 000	705	1 415	•	0,32	HCB71912-C-SPP-T-P4S
17 000	28 000	1 061	1 415	•	0,32	HCB71912-E-SPP-T-P4S
26 000	40 000	705	1 415	•	0,32	XCB71912-C-SPP-T-P4S
22 000	36 000	1 061	1 415	•	0,32	XCB71912-E-SPP-T-P4S
19 000	32 000	289	640	•	0,47	HS71912-C-SPP-T-P4S
17 000	28 000	469	640	•	0,47	HS71912-E-SPP-T-P4S
22 000	36 000	302	640	•	0,43	HC71912-C-SPP-T-P4S
20 000	32 000	480	640	•	0,43	HC71912-E-SPP-T-P4S
28 000	43 000	302	640	•	0,43	XC71912-C-SPP-T-P4S
24 000	38 000	480	640	•	0,43	XC71912-E-SPP-T-P4S
14 000	22 000	1 459	2 530	•	0,92	B7012-C-SPP-T-P4S
13 000	20 000	2 281	2 530	•	0,92	B7012-E-SPP-T-P4S
18 000	30 000	1 202	2 530	•	0,77	HCB7012-C-SPP-T-P4S
15 000	24 000	1 895	2 530	•	0,77	HCB7012-E-SPP-T-P4S
24 000	38 000	1 202	2 530	•	0,77	XCB7012-C-SPP-T-P4S
20 000	34 000	1 895	2 530	•	0,77	XCB7012-E-SPP-T-P4S
18 000	30 000	402	905	•	0,84	HS7012-C-SPP-T-P4S
15 000	24 000	644	905	•	0,84	HS7012-E-SPP-T-P4S
20 000	34 000	419	905	•	0,80	HC7012-C-SPP-T-P4S
19 000	30 000	677	905	•	0,80	HC7012-E-SPP-T-P4S
28 000	43 000	419	905	•	0,80	XC7012-C-SPP-T-P4S
24 000	38 000	677	905	•	0,80	XC7012-E-SPP-T-P4S

**X-life ultra design**  
XCS7012-E-SPP-T-P4S

**TX design**  
B71912-E-SPP-TX-P4S

# Spring preloaded FAG non-locating bearing units



Designation	Dimensions					Mounting dimensions				DLR dimensions				Basic load ratings		
	d	D	B <sub>i</sub>	B	r <sub>smin</sub>	d <sub>a</sub> h12	D <sub>a</sub> H12	r <sub>a</sub> max	d <sub>B</sub>	B <sub>N</sub>	B <sub>N1</sub>	S <sub>N</sub>	S <sub>B</sub>	E <sub>tk</sub> nom.	C <sub>dyn</sub>	C <sub>0stat</sub>
FAG	mm														kN	
B71913-C-SPP-T-P4S	65	90	13	26	1,00	70	85,5	0,6	73,8					75,1	24,50	24,00
B71913-E-SPP-T-P4S	65	90	13	26	1,00	70	85,5	0,6	73,8					75,1	22,80	22,40
HCB71913-C-SPP-T-P4S	65	90	13	26	1,00	70	85,5	0,6	73,8	2,8	10,2	5,8	1,4	75,1	17,00	16,60
HCB71913-E-SPP-T-P4S	65	90	13	26	1,00	70	85,5	0,6	73,8	2,8	10,2	5,8	1,4	75,1	16,00	16,00
XCB71913-C-SPP-T-P4S	65	90	13	26	1,00	70	85,5	0,6	73,8	2,8	10,2	5,8	1,4	75,1	38,00	16,60
XCB71913-E-SPP-T-P4S	65	90	13	26	1,00	70	85,5	0,6	73,8	2,8	10,2	5,8	1,4	75,1	35,50	16,00
HS71913-C-SPP-T-P4S	65	90	13	26	1,00	70	85,5	0,6	75,0					75,2	14,30	15,30
HS71913-E-SPP-T-P4S	65	90	13	26	1,00	70	85,5	0,6	75,0					75,2	13,40	14,30
HC71913-C-SPP-T-P4S	65	90	13	26	1,00	70	85,5	0,6	75,0	2,8	10,2	5,8	1,4	75,2	9,80	10,80
HC71913-E-SPP-T-P4S	65	90	13	26	1,00	70	85,5	0,6	75,0	2,8	10,2	5,8	1,4	75,2	9,30	10,00
XC71913-C-SPP-T-P4S	65	90	13	26	1,00	70	85,5	0,6	75,0	2,8	10,2	5,8	1,4	75,2	22,00	10,80
XC71913-E-SPP-T-P4S	65	90	13	26	1,00	70	85,5	0,6	75,0	2,8	10,2	5,8	1,4	75,2	20,80	10,00
B7013-C-SPP-T-P4S	65	100	18	36	1,10	72	93	1,0	77,0					78,1	40,00	35,50
B7013-E-SPP-T-P4S	65	100	18	36	1,10	72	93	1,0	77,0					78,1	38,00	33,50
HCB7013-C-SPP-T-P4S	65	100	18	36	1,10	72	93	1,0	77,0	4,0	14,0	7,6	1,4	78,1	27,50	24,50
HCB7013-E-SPP-T-P4S	65	100	18	36	1,10	72	93	1,0	77,0	4,0	14,0	7,6	1,4	78,1	26,00	23,60
XCB7013-C-SPP-T-P4S	65	100	18	36	1,10	72	93	1,0	77,0	4,0	14,0	7,6	1,4	78,1	61,00	24,50
XCB7013-E-SPP-T-P4S	65	100	18	36	1,10	72	93	1,0	77,0	4,0	14,0	7,6	1,4	78,1	58,50	23,60
HS7013-C-SPP-T-P4S	65	100	18	36	1,10	72	93	1,0	79,2					79,7	20,00	21,60
HS7013-E-SPP-T-P4S	65	100	18	36	1,10	72	93	1,0	79,2					79,7	19,00	20,00
HC7013-C-SPP-T-P4S	65	100	18	36	1,10	72	93	1,0	79,2	4,0	14,0	7,6	1,4	79,7	13,70	15,00
HC7013-E-SPP-T-P4S	65	100	18	36	1,10	72	93	1,0	79,2	4,0	14,0	7,6	1,4	79,7	12,90	14,00
XC7013-C-SPP-T-P4S	65	100	18	36	1,10	72	93	1,0	79,2	4,0	14,0	7,6	1,4	79,7	30,50	15,00
XC7013-E-SPP-T-P4S	65	100	18	36	1,10	72	93	1,0	79,2	4,0	14,0	7,6	1,4	79,7	28,50	14,00

\* • = selectable as an option

## Example designations

### Sealed design

B71913-C-SPP-2RSD-T-P4S  
HSS7013-E-SPP-T-P4S

### Hybrid ceramic design

HCB7013-C-SPP-T-P4S

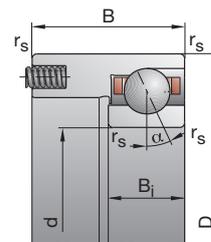
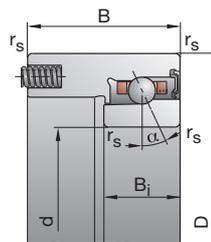
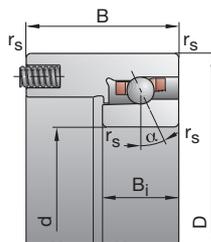
### Direct Lube design

HS7013-E-SPP-DLR-T-P4S

# B719..C/E, B70 HS719..C/E, HS70

C: Contact angle  $\alpha = 15^\circ$

E: Contact angle  $\alpha = 25^\circ$



Achievable speed		Recommended preload force	Achievable preload force of the complete pressure spring set	Sealed design*	Mass	Designation
Grease	Oil min.					
min <sup>-1</sup>		F <sub>V</sub> N	max. F <sub>vF</sub>		kg	FAG
14 000	22 000	883	1 445	•	0,40	B71913-C-SPP-T-P4S
13 000	20 000	1 348	1 445	•	0,40	B71913-E-SPP-T-P4S
18 000	30 000	719	1 445	•	0,34	HCB71913-C-SPP-T-P4S
15 000	24 000	1 082	1 445	•	0,34	HCB71913-E-SPP-T-P4S
24 000	38 000	719	1 445	•	0,34	XCB71913-C-SPP-T-P4S
20 000	34 000	1 082	1 445	•	0,34	XCB71913-E-SPP-T-P4S
18 000	30 000	295	665	•	0,50	HS71913-C-SPP-T-P4S
15 000	24 000	478	665	•	0,50	HS71913-E-SPP-T-P4S
20 000	34 000	308	665	•	0,46	HC71913-C-SPP-T-P4S
18 000	30 000	497	665	•	0,46	HC71913-E-SPP-T-P4S
26 000	43 000	308	665	•	0,46	XC71913-C-SPP-T-P4S
24 000	38 000	497	665	•	0,46	XC71913-E-SPP-T-P4S
13 000	20 000	1 495	2 565	•	0,98	B7013-C-SPP-T-P4S
12 000	19 000	2 372	2 565	•	0,98	B7013-E-SPP-T-P4S
17 000	28 000	1 245	2 565	•	0,82	HCB7013-C-SPP-T-P4S
15 000	24 000	1 922	2 565	•	0,82	HCB7013-E-SPP-T-P4S
22 000	36 000	1 245	2 565	•	0,82	XCB7013-C-SPP-T-P4S
19 000	32 000	1 922	2 565	•	0,82	XCB7013-E-SPP-T-P4S
17 000	28 000	418	920	•	0,90	HS7013-C-SPP-T-P4S
15 000	24 000	672	920	•	0,90	HS7013-E-SPP-T-P4S
20 000	34 000	426	920	•	0,86	HC7013-C-SPP-T-P4S
18 000	28 000	690	920	•	0,86	HC7013-E-SPP-T-P4S
26 000	40 000	426	920	•	0,86	XC7013-C-SPP-T-P4S
22 000	36 000	690	920	•	0,86	XC7013-E-SPP-T-P4S

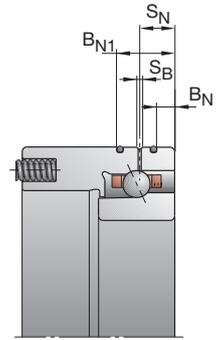
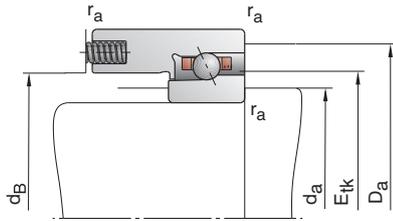
## X-life ultra design

XCS7013-E-SPP-T-P4S

## TX design

B71913-E-SPP-TX-P4S

# Spring preloaded FAG non-locating bearing units



Designation	Dimensions					Mounting dimensions				DLR dimensions				Basic load ratings		
	d	D	B <sub>i</sub>	B	r <sub>smin</sub>	d <sub>a</sub> h12	D <sub>a</sub> H12	r <sub>a</sub> max	d <sub>B</sub>	B <sub>N</sub>	B <sub>N1</sub>	S <sub>N</sub>	S <sub>B</sub>	E <sub>tk</sub> nom.	C <sub>dyn</sub>	C <sub>0stat</sub>
FAG	mm														kN	
B71914-C-SPP-T-P4S	70	100	16	32	1,00	76	94,5	0,6	80,3					82,2	33,50	32,50
B71914-E-SPP-T-P4S	70	100	16	32	1,00	76	94,5	0,6	80,3					82,2	31,50	31,00
HCB71914-C-SPP-T-P4S	70	100	16	32	1,00	76	94,5	0,6	80,3	3,1	12,9	6,7	1,4	82,2	23,20	22,80
HCB71914-E-SPP-T-P4S	70	100	16	32	1,00	76	94,5	0,6	80,3	3,1	12,9	6,7	1,4	82,2	22,00	21,60
XCB71914-C-SPP-T-P4S	70	100	16	32	1,00	76	94,5	0,6	80,3	3,1	12,9	6,7	1,4	82,2	52,00	22,80
XCB71914-E-SPP-T-P4S	70	100	16	32	1,00	76	94,5	0,6	80,3	3,1	12,9	6,7	1,4	82,2	49,00	21,60
HS71914-C-SPP-T-P4S	70	100	16	32	1,00	76	94,5	0,6	82,0					82,3	18,30	20,00
HS71914-E-SPP-T-P4S	70	100	16	32	1,00	76	94,5	0,6	82,0					82,3	17,30	18,60
HC71914-C-SPP-T-P4S	70	100	16	32	1,00	76	94,5	0,6	82,0	3,1	12,9	6,7	1,4	82,3	12,70	14,00
HC71914-E-SPP-T-P4S	70	100	16	32	1,00	76	94,5	0,6	82,0	3,1	12,9	6,7	1,4	82,3	12,00	13,20
XC71914-C-SPP-T-P4S	70	100	16	32	1,00	76	94,5	0,6	82,0	3,1	12,9	6,7	1,4	82,3	28,50	14,00
XC71914-E-SPP-T-P4S	70	100	16	32	1,00	76	94,5	0,6	82,0	3,1	12,9	6,7	1,4	82,3	27,00	13,20
B7014-C-SPP-T-P4S	70	110	20	40	1,10	77	102	1,0	83,5					85,0	50,00	43,00
B7014-E-SPP-T-P4S	70	110	20	40	1,10	77	102	1,0	83,5					85,0	46,50	41,50
HCB7014-C-SPP-T-P4S	70	110	20	40	1,10	77	102	1,0	83,5	4,0	16,0	8,4	1,4	85,0	34,00	30,00
HCB7014-E-SPP-T-P4S	70	110	20	40	1,10	77	102	1,0	83,5	4,0	16,0	8,4	1,4	85,0	32,50	29,00
XCB7014-C-SPP-T-P4S	70	110	20	40	1,10	77	102	1,0	83,5	4,0	16,0	8,4	1,4	85,0	76,50	30,00
XCB7014-E-SPP-T-P4S	70	110	20	40	1,10	77	102	1,0	83,5	4,0	16,0	8,4	1,4	85,0	72,00	29,00
HS7014-C-SPP-T-P4S	70	110	20	40	1,10	77	102	1,0	86,0					86,7	26,00	28,00
HS7014-E-SPP-T-P4S	70	110	20	40	1,10	77	102	1,0	86,0					86,7	24,50	26,00
HC7014-C-SPP-T-P4S	70	110	20	40	1,10	77	102	1,0	86,0	4,0	16,0	8,4	1,4	86,7	18,00	19,60
HC7014-E-SPP-T-P4S	70	110	20	40	1,10	77	102	1,0	86,0	4,0	16,0	8,4	1,4	86,7	17,00	18,30
XC7014-C-SPP-T-P4S	70	110	20	40	1,10	77	102	1,0	86,0	4,0	16,0	8,4	1,4	86,7	40,00	19,60
XC7014-E-SPP-T-P4S	70	110	20	40	1,10	77	102	1,0	86,0	4,0	16,0	8,4	1,4	86,7	38,00	18,30

\* • = selectable as an option

## Example designations

### Sealed design

B71914-C-SPP-2RSD-T-P4S  
HSS7014-E-SPP-T-P4S

### Hybrid ceramic design

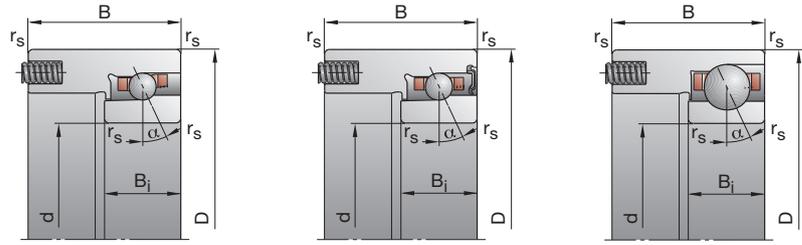
HCB7014-C-SPP-T-P4S

### Direct Lube design

HS7014-E-SPP-DLR-T-P4S

# B719..C/E, B70 HS719..C/E, HS70

C: Contact angle  $\alpha = 15^\circ$   
E: Contact angle  $\alpha = 25^\circ$

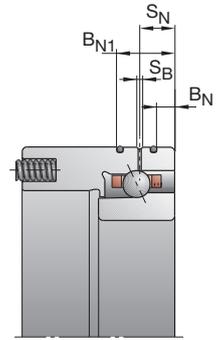
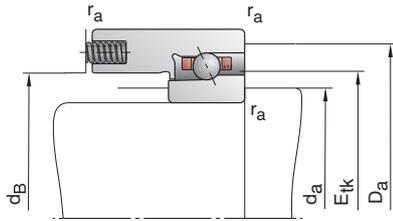


Achievable speed		Recommended preload force	Achievable preload force of the complete pressure spring set	Sealed design*	Mass	Designation
Grease	Oil min.	$F_V$	max. $F_{vF}$		kg	FAG
min <sup>-1</sup>		N				
13 000	20 000	1 230	2 055	•	0,68	B71914-C-SPP-T-P4S
12 000	19 000	1 917	2 055	•	0,68	B71914-E-SPP-T-P4S
16 000	26 000	1 007	2 055	•	0,56	HCB71914-C-SPP-T-P4S
14 000	22 000	1 539	2 055	•	0,56	HCB71914-E-SPP-T-P4S
22 000	36 000	1 007	2 055	•	0,56	XCB71914-C-SPP-T-P4S
18 000	30 000	1 539	2 055	•	0,56	XCB71914-E-SPP-T-P4S
16 000	26 000	383	860	•	0,83	HS71914-C-SPP-T-P4S
14 000	22 000	616	860	•	0,83	HS71914-E-SPP-T-P4S
19 000	32 000	395	860	•	0,79	HC71914-C-SPP-T-P4S
17 000	26 000	642	860	•	0,79	HC71914-E-SPP-T-P4S
24 000	40 000	395	860	•	0,79	XC71914-C-SPP-T-P4S
22 000	36 000	642	860	•	0,79	XC71914-E-SPP-T-P4S
12 000	19 000	1 888	3 220	•	1,33	B7014-C-SPP-T-P4S
11 000	18 000	2 945	3 220	•	1,33	B7014-E-SPP-T-P4S
16 000	26 000	1 554	3 220	•	1,14	HCB7014-C-SPP-T-P4S
13 000	20 000	2 414	3 220	•	1,14	HCB7014-E-SPP-T-P4S
20 000	34 000	1 554	3 220	•	1,14	XCB7014-C-SPP-T-P4S
17 000	28 000	2 414	3 220	•	1,14	XCB7014-E-SPP-T-P4S
16 000	26 000	536	1 215	•	1,25	HS7014-C-SPP-T-P4S
13 000	20 000	874	1 215	•	1,25	HS7014-E-SPP-T-P4S
18 000	30 000	563	1 215	•	1,19	HC7014-C-SPP-T-P4S
16 000	24 000	911	1 215	•	1,19	HC7014-E-SPP-T-P4S
24 000	38 000	563	1 215	•	1,19	XC7014-C-SPP-T-P4S
20 000	34 000	911	1 215	•	1,19	XC7014-E-SPP-T-P4S

**X-life ultra design**  
XCS7014-E-SPP-T-P4S

**TX design**  
B71914-E-SPP-TX-P4S

# Spring preloaded FAG non-locating bearing units



Designation	Dimensions					Mounting dimensions				DLR dimensions				Basic load ratings		
	d	D	B <sub>i</sub>	B	r <sub>smin</sub>	d <sub>a</sub> h12	D <sub>a</sub> H12	r <sub>a</sub> max	d <sub>B</sub>	B <sub>N</sub>	B <sub>N1</sub>	S <sub>N</sub>	S <sub>B</sub>	E <sub>tk</sub> nom.	C <sub>dyn</sub>	C <sub>0stat</sub>
FAG	mm														kN	
B71915-C-SPP-T-P4S	75	105	16	32	1,00	81	99,5	0,6	85,3					87,2	34,00	34,50
B71915-E-SPP-T-P4S	75	105	16	32	1,00	81	99,5	0,6	85,3					87,2	32,00	32,50
HCB71915-C-SPP-T-P4S	75	105	16	32	1,00	81	99,5	0,6	85,3	3,1	12,9	6,7	1,4	87,2	23,60	24,00
HCB71915-E-SPP-T-P4S	75	105	16	32	1,00	81	99,5	0,6	85,3	3,1	12,9	6,7	1,4	87,2	22,00	22,80
XCB71915-C-SPP-T-P4S	75	105	16	32	1,00	81	99,5	0,6	85,3	3,1	12,9	6,7	1,4	87,2	53,00	24,00
XCB71915-E-SPP-T-P4S	75	105	16	32	1,00	81	99,5	0,6	85,3	3,1	12,9	6,7	1,4	87,2	49,00	22,80
HS71915-C-SPP-T-P4S	75	105	16	32	1,00	81	99,5	0,6	87,0					87,3	19,00	21,20
HS71915-E-SPP-T-P4S	75	105	16	32	1,00	81	99,5	0,6	87,0					87,3	17,60	20,00
HC71915-C-SPP-T-P4S	75	105	16	32	1,00	81	99,5	0,6	87,0	3,1	12,9	6,7	1,4	87,3	12,90	15,00
HC71915-E-SPP-T-P4S	75	105	16	32	1,00	81	99,5	0,6	87,0	3,1	12,9	6,7	1,4	87,3	12,20	13,70
XC71915-C-SPP-T-P4S	75	105	16	32	1,00	81	99,5	0,6	87,0	3,1	12,9	6,7	1,4	87,3	29,00	15,00
XC71915-E-SPP-T-P4S	75	105	16	32	1,00	81	99,5	0,6	87,0	3,1	12,9	6,7	1,4	87,3	27,00	13,70
B7015-C-SPP-T-P4S	75	115	20	40	1,10	82	107	1,0	88,5					90,0	51,00	46,50
B7015-E-SPP-T-P4S	75	115	20	40	1,10	82	107	1,0	88,5					90,0	48,00	44,00
HCB7015-C-SPP-T-P4S	75	115	20	40	1,10	82	107	1,0	88,5	4,0	16,0	8,4	1,4	90,0	35,50	32,50
HCB7015-E-SPP-T-P4S	75	115	20	40	1,10	82	107	1,0	88,5	4,0	16,0	8,4	1,4	90,0	33,50	30,50
XCB7015-C-SPP-T-P4S	75	115	20	40	1,10	82	107	1,0	88,5	4,0	16,0	8,4	1,4	90,0	80,00	32,50
XCB7015-E-SPP-T-P4S	75	115	20	40	1,10	82	107	1,0	88,5	4,0	16,0	8,4	1,4	90,0	75,00	30,50
HS7015-C-SPP-T-P4S	75	115	20	40	1,10	82	107	1,0	91,0					91,7	26,50	29,00
HS7015-E-SPP-T-P4S	75	115	20	40	1,10	82	107	1,0	91,0					91,7	25,00	27,00
HC7015-C-SPP-T-P4S	75	115	20	40	1,10	82	107	1,0	91,0	4,0	16,0	8,4	1,4	91,7	18,30	20,00
HC7015-E-SPP-T-P4S	75	115	20	40	1,10	82	107	1,0	91,0	4,0	16,0	8,4	1,4	91,7	17,30	18,60
XC7015-C-SPP-T-P4S	75	115	20	40	1,10	82	107	1,0	91,0	4,0	16,0	8,4	1,4	91,7	40,50	20,00
XC7015-E-SPP-T-P4S	75	115	20	40	1,10	82	107	1,0	91,0	4,0	16,0	8,4	1,4	91,7	38,00	18,60

\* • = selectable as an option

## Example designations

### Sealed design

B71915-C-SPP-2RSD-T-P4S  
HSS7015-E-SPP-T-P4S

### Hybrid ceramic design

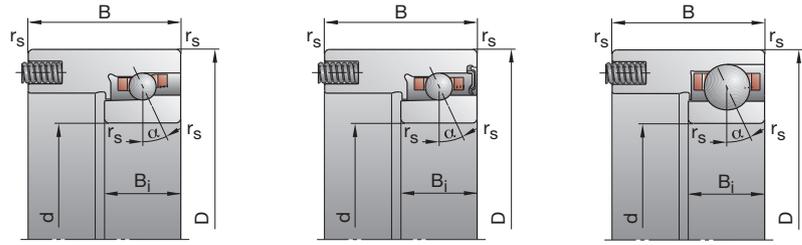
HCB7015-C-SPP-T-P4S

### Direct Lube design

HS7015-E-SPP-DLR-T-P4S

# B719..C/E, B70 HS719..C/E, HS70

C: Contact angle  $\alpha = 15^\circ$   
E: Contact angle  $\alpha = 25^\circ$

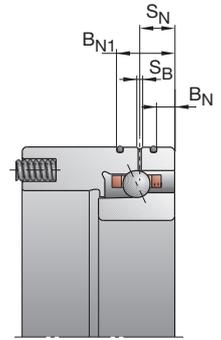
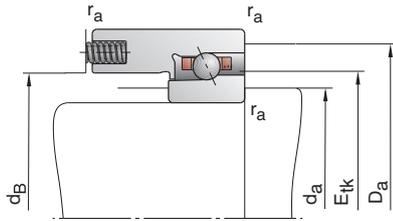


Achievable speed		Recommended preload force	Achievable preload force of the complete pressure spring set	Sealed design*	Mass	Designation
Grease	Oil min.	$F_V$	max. $F_{VF}$		kg	FAG
$\text{min}^{-1}$		N				
12 000	19 000	1 246	2 080	•	0,72	B71915-C-SPP-T-P4S
11 000	18 000	1 943	2 080	•	0,72	B71915-E-SPP-T-P4S
16 000	26 000	1 037	2 080	•	0,60	HCB71915-C-SPP-T-P4S
13 000	20 000	1 559	2 080	•	0,60	HCB71915-E-SPP-T-P4S
20 000	34 000	1 037	2 080	•	0,60	XCB71915-C-SPP-T-P4S
17 000	28 000	1 559	2 080	•	0,60	XCB71915-E-SPP-T-P4S
16 000	26 000	391	875	•	0,88	HS71915-C-SPP-T-P4S
13 000	20 000	630	875	•	0,88	HS71915-E-SPP-T-P4S
18 000	30 000	402	875	•	0,83	HC71915-C-SPP-T-P4S
16 000	24 000	656	875	•	0,83	HC71915-E-SPP-T-P4S
23 000	40 000	402	875	•	0,83	XC71915-C-SPP-T-P4S
19 000	32 000	656	875	•	0,83	XC71915-E-SPP-T-P4S
12 000	19 000	1 923	3 335	•	1,40	B7015-C-SPP-T-P4S
11 000	18 000	3 027	3 335	•	1,40	B7015-E-SPP-T-P4S
15 000	24 000	1 607	3 335	•	1,20	HCB7015-C-SPP-T-P4S
13 000	20 000	2 501	3 335	•	1,20	HCB7015-E-SPP-T-P4S
19 000	32 000	1 607	3 335	•	1,20	XCB7015-C-SPP-T-P4S
16 000	26 000	2 501	3 335	•	1,20	XCB7015-E-SPP-T-P4S
15 000	24 000	547	1 215	•	1,32	HS7015-C-SPP-T-P4S
13 000	20 000	888	1 215	•	1,32	HS7015-E-SPP-T-P4S
17 000	28 000	563	1 215	•	1,26	HC7015-C-SPP-T-P4S
16 000	24 000	911	1 215	•	1,26	HC7015-E-SPP-T-P4S
22 000	36 000	563	1 215	•	1,26	XC7015-C-SPP-T-P4S
19 000	32 000	911	1 215	•	1,26	XC7015-E-SPP-T-P4S

**X-life ultra design**  
XCS7015-E-SPP-T-P4S

**TX design**  
B71915-E-SPP-TX-P4S

# Spring preloaded FAG non-locating bearing units



Designation	Dimensions					Mounting dimensions				DLR dimensions				Basic load ratings		
	d	D	B <sub>i</sub>	B	r <sub>smin</sub>	d <sub>a</sub> h12	D <sub>a</sub> H12	r <sub>a</sub> max	d <sub>B</sub>	B <sub>N</sub>	B <sub>N1</sub>	S <sub>N</sub>	S <sub>B</sub>	E <sub>tk</sub> nom.	C <sub>dyn</sub>	C <sub>0stat</sub>
FAG	mm														kN	
B71916-C-SPP-T-P4S	80	110	16	32	1,00	86	104	0,6	90,3					92,2	34,50	36,00
B71916-E-SPP-T-P4S	80	110	16	32	1,00	86	104	0,6	90,3					92,2	32,50	34,00
HCB71916-C-SPP-T-P4S	80	110	16	32	1,00	86	104	0,6	90,3	3,1	12,9	6,7	1,4	92,2	24,00	25,00
HCB71916-E-SPP-T-P4S	80	110	16	32	1,00	86	104	0,6	90,3	3,1	12,9	6,7	1,4	92,2	22,40	23,60
XCB71916-C-SPP-T-P4S	80	110	16	32	1,00	86	104	0,6	90,3	3,1	12,9	6,7	1,4	92,2	54,00	25,00
XCB71916-E-SPP-T-P4S	80	110	16	32	1,00	86	104	0,6	90,3	3,1	12,9	6,7	1,4	92,2	50,00	23,60
HS71916-C-SPP-T-P4S	80	110	16	32	1,00	86	104	0,6	91,7					92,2	21,20	24,00
HS71916-E-SPP-T-P4S	80	110	16	32	1,00	86	104	0,6	91,7					92,2	19,60	22,40
HC71916-C-SPP-T-P4S	80	110	16	32	1,00	86	104	0,6	91,7	3,1	12,9	6,7	1,4	92,2	14,60	16,60
HC71916-E-SPP-T-P4S	80	110	16	32	1,00	86	104	0,6	91,7	3,1	12,9	6,7	1,4	92,2	13,70	15,60
XC71916-C-SPP-T-P4S	80	110	16	32	1,00	86	104	0,6	91,7	3,1	12,9	6,7	1,4	92,2	32,50	16,60
XC71916-E-SPP-T-P4S	80	110	16	32	1,00	86	104	0,6	91,7	3,1	12,9	6,7	1,4	92,2	30,50	15,60
B7016-C-SPP-T-P4S	80	125	22	44	1,10	88	117	1,0	95,0					96,8	63,00	58,50
B7016-E-SPP-T-P4S	80	125	22	44	1,10	88	117	1,0	95,0					96,8	60,00	55,00
HCB7016-C-SPP-T-P4S	80	125	22	44	1,10	88	117	1,0	95,0	4,7	17,3	9,8	2,2	96,8	44,00	40,50
HCB7016-E-SPP-T-P4S	80	125	22	44	1,10	88	117	1,0	95,0	4,7	17,3	9,8	2,2	96,8	41,50	39,00
XCB7016-C-SPP-T-P4S	80	125	22	44	1,10	88	117	1,0	95,0	4,7	17,3	9,8	2,2	96,8	98,00	40,50
XCB7016-E-SPP-T-P4S	80	125	22	44	1,10	88	117	1,0	95,0	4,7	17,3	9,8	2,2	96,8	93,00	39,00
HS7016-C-SPP-T-P4S	80	125	22	44	1,10	88	117	1,0	98,0					98,9	31,50	34,50
HS7016-E-SPP-T-P4S	80	125	22	44	1,10	88	117	1,0	98,0					98,9	30,00	32,50
HC7016-C-SPP-T-P4S	80	125	22	44	1,10	88	117	1,0	98,0	4,7	17,3	9,8	2,2	98,9	21,60	24,50
HC7016-E-SPP-T-P4S	80	125	22	44	1,10	88	117	1,0	98,0	4,7	17,3	9,8	2,2	98,9	20,40	22,80
XC7016-C-SPP-T-P4S	80	125	22	44	1,10	88	117	1,0	98,0	4,7	17,3	9,8	2,2	98,9	48,00	24,50
XC7016-E-SPP-T-P4S	80	125	22	44	1,10	88	117	1,0	98,0	4,7	17,3	9,8	2,2	98,9	45,50	22,80

\* • = selectable as an option

## Example designations

### Sealed design

B71916-C-SPP-2RSD-T-P4S  
HSS7016-E-SPP-T-P4S

### Hybrid ceramic design

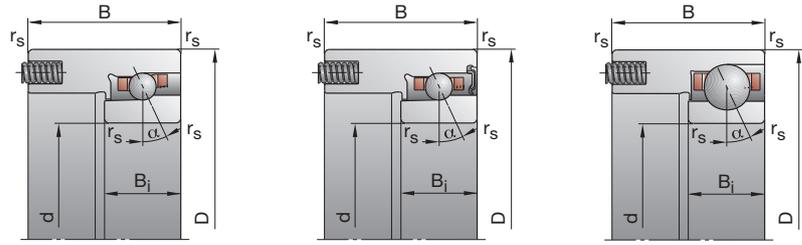
HCB7016-C-SPP-T-P4S

### Direct Lube design

HS7016-E-SPP-DLR-T-P4S

# B719..C/E, B70 HS719..C/E, HS70

C: Contact angle  $\alpha = 15^\circ$   
E: Contact angle  $\alpha = 25^\circ$

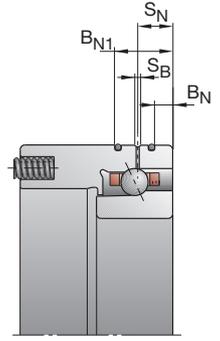
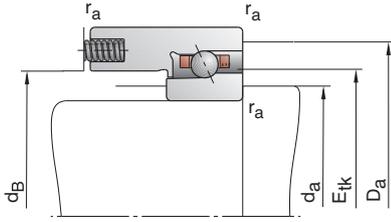


Achievable speed		Recommended preload force	Achievable preload force of the complete pressure spring set	Sealed design*	Mass	Designation
Grease	Oil min.	$F_V$	max. $F_{vF}$		kg	FAG
$\text{min}^{-1}$		N				
12 000	19 000	1 262	2 105	•	0,75	B71916-C-SPP-T-P4S
11 000	18 000	1 969	2 105	•	0,75	B71916-E-SPP-T-P4S
15 000	24 000	1 034	2 105	•	0,63	HCB71916-C-SPP-T-P4S
13 000	20 000	1 578	2 105	•	0,63	HCB71916-E-SPP-T-P4S
19 000	32 000	1 034	2 105	•	0,63	XCB71916-C-SPP-T-P4S
16 000	26 000	1 578	2 105	•	0,63	XCB71916-E-SPP-T-P4S
15 000	24 000	437	980	•	0,89	HS71916-C-SPP-T-P4S
13 000	20 000	704	980	•	0,89	HS71916-E-SPP-T-P4S
17 000	28 000	450	980	•	0,83	HC71916-C-SPP-T-P4S
16 000	24 000	732	980	•	0,83	HC71916-E-SPP-T-P4S
22 000	36 000	450	980	•	0,83	XC71916-C-SPP-T-P4S
19 000	32 000	732	980	•	0,83	XC71916-E-SPP-T-P4S
11 000	18 000	2 391	4 180	•	1,93	B7016-C-SPP-T-P4S
9 500	16 000	3 825	4 180	•	1,93	B7016-E-SPP-T-P4S
14 000	22 000	2 018	4 180	•	1,61	HCB7016-C-SPP-T-P4S
12 000	19 000	3 134	4 180	•	1,61	HCB7016-E-SPP-T-P4S
18 000	30 000	2 018	4 180	•	1,61	XCB7016-C-SPP-T-P4S
15 000	24 000	3 134	4 180	•	1,61	XCB7016-E-SPP-T-P4S
14 000	22 000	657	1 475	•	1,80	HS7016-C-SPP-T-P4S
12 000	19 000	1 049	1 475	•	1,80	HS7016-E-SPP-T-P4S
16 000	26 000	668	1 475	•	1,70	HC7016-C-SPP-T-P4S
14 000	20 000	1 104	1 475	•	1,70	HC7016-E-SPP-T-P4S
20 000	34 000	668	1 475	•	1,70	XC7016-C-SPP-T-P4S
17 000	28 000	1 104	1 475	•	1,70	XC7016-E-SPP-T-P4S

**X-life ultra design**  
XCS7016-E-SPP-T-P4S

**TX design**  
B71916-E-SPP-TX-P4S

# Spring preloaded FAG non-locating bearing units



Designation	Dimensions					Mounting dimensions				DLR dimensions				Basic load ratings		
	d	D	B <sub>i</sub>	B	r <sub>smin</sub>	d <sub>a</sub> h12	D <sub>a</sub> H12	r <sub>a</sub> max	d <sub>B</sub>	B <sub>N</sub>	B <sub>N1</sub>	S <sub>N</sub>	S <sub>B</sub>	E <sub>tk</sub> nom.	C <sub>dyn</sub>	C <sub>0stat</sub>
FAG	mm														kN	
B71917-C-SPP-T-P4S	85	120	18	36	1,10	92	114	0,6	97,0					99,2	45,00	46,50
B71917-E-SPP-T-P4S	85	120	18	36	1,10	92	114	0,6	97,0					99,2	42,50	44,00
HCB71917-C-SPP-T-P4S	85	120	18	36	1,10	92	114	0,6	97,0	4,0	14,0	7,6	2,2	99,2	31,00	32,50
HCB71917-E-SPP-T-P4S	85	120	18	36	1,10	92	114	0,6	97,0	4,0	14,0	7,6	2,2	99,2	29,00	30,50
XCB71917-C-SPP-T-P4S	85	120	18	36	1,10	92	114	0,6	97,0	4,0	14,0	7,6	2,2	99,2	69,50	32,50
XCB71917-E-SPP-T-P4S	85	120	18	36	1,10	92	114	0,6	97,0	4,0	14,0	7,6	2,2	99,2	64,00	30,50
HS71917-C-SPP-T-P4S	85	120	18	36	1,10	92	114	0,6	99,0					99,7	22,00	26,00
HS71917-E-SPP-T-P4S	85	120	18	36	1,10	92	114	0,6	99,0					99,7	20,40	24,50
HC71917-C-SPP-T-P4S	85	120	18	36	1,10	92	114	0,6	99,0	4,0	14,0	7,6	2,2	99,7	15,00	18,00
HC71917-E-SPP-T-P4S	85	120	18	36	1,10	92	114	0,6	99,0	4,0	14,0	7,6	2,2	99,7	14,30	17,00
XC71917-C-SPP-T-P4S	85	120	18	36	1,10	92	114	0,6	99,0	4,0	14,0	7,6	2,2	99,7	33,50	18,00
XC71917-E-SPP-T-P4S	85	120	18	36	1,10	92	114	0,6	99,0	4,0	14,0	7,6	2,2	99,7	32,00	17,00
B7017-C-SPP-T-P4S	85	130	22	44	1,10	93	122	1,0	100,0					101,8	65,50	62,00
B7017-E-SPP-T-P4S	85	130	22	44	1,10	93	122	1,0	100,0					101,8	62,00	58,50
HCB7017-C-SPP-T-P4S	85	130	22	44	1,10	93	122	1,0	100,0	4,7	17,3	9,8	2,2	101,8	45,00	43,00
HCB7017-E-SPP-T-P4S	85	130	22	44	1,10	93	122	1,0	100,0	4,7	17,3	9,8	2,2	101,8	42,50	40,50
XCB7017-C-SPP-T-P4S	85	130	22	44	1,10	93	122	1,0	100,0	4,7	17,3	9,8	2,2	101,8	100,00	43,00
XCB7017-E-SPP-T-P4S	85	130	22	44	1,10	93	122	1,0	100,0	4,7	17,3	9,8	2,2	101,8	95,00	40,50
HS7017-C-SPP-T-P4S	85	130	22	44	1,10	93	122	1,0	103,0					103,9	32,00	36,00
HS7017-E-SPP-T-P4S	85	130	22	44	1,10	93	122	1,0	103,0					103,9	30,00	33,50
HC7017-C-SPP-T-P4S	85	130	22	44	1,10	93	122	1,0	103,0	4,7	17,3	9,8	2,2	103,9	22,00	25,00
HC7017-E-SPP-T-P4S	85	130	22	44	1,10	93	122	1,0	103,0	4,7	17,3	9,8	2,2	103,9	20,80	23,20
XC7017-C-SPP-T-P4S	85	130	22	44	1,10	93	122	1,0	103,0	4,7	17,3	9,8	2,2	103,9	49,00	25,00
XC7017-E-SPP-T-P4S	85	130	22	44	1,10	93	122	1,0	103,0	4,7	17,3	9,8	2,2	103,9	46,50	23,20

\* • = selectable as an option

## Example designations

### Sealed design

B71917-C-SPP-2RSD-T-P4S  
HSS7017-E-SPP-T-P4S

### Hybrid ceramic design

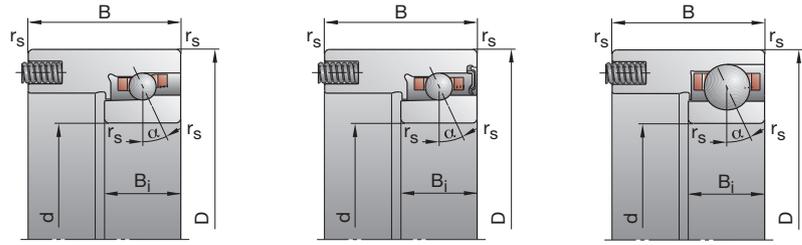
HCB7017-C-SPP-T-P4S

### Direct Lube design

HS7017-E-SPP-DLR-T-P4S

# B719..C/E, B70 HS719..C/E, HS70

C: Contact angle  $\alpha = 15^\circ$   
E: Contact angle  $\alpha = 25^\circ$

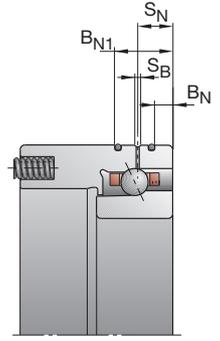
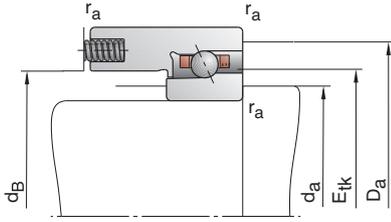


Achievable speed		Recommended preload force	Achievable preload force of the complete pressure spring set	Sealed design*	Mass	Designation
Grease	Oil min.	$F_V$	max. $F_{vF}$		kg	FAG
min <sup>-1</sup>		N				
11 000	18 000	1 672	2 875	•	1,07	B71917-C-SPP-T-P4S
9 500	16 000	2 631	2 875	•	1,07	B71917-E-SPP-T-P4S
13 000	20 000	1 401	2 875	•	0,88	HCB71917-C-SPP-T-P4S
12 000	19 000	2 154	2 875	•	0,88	HCB71917-E-SPP-T-P4S
18 000	30 000	1 401	2 875	•	0,88	XCB71917-C-SPP-T-P4S
15 000	24 000	2 154	2 875	•	0,88	XCB71917-E-SPP-T-P4S
14 000	22 000	456	1 015	•	1,34	HS71917-C-SPP-T-P4S
12 000	19 000	736	1 015	•	1,34	HS71917-E-SPP-T-P4S
16 000	26 000	474	1 015	•	1,28	HC71917-C-SPP-T-P4S
14 000	20 000	759	1 015	•	1,28	HC71917-E-SPP-T-P4S
20 000	34 000	474	1 015	•	1,28	XC71917-C-SPP-T-P4S
17 000	28 000	759	1 015	•	1,28	XC71917-E-SPP-T-P4S
10 000	17 000	2 484	4 360	•	2,02	B7017-C-SPP-T-P4S
9 000	15 000	3 949	4 360	•	2,02	B7017-E-SPP-T-P4S
13 000	20 000	2 102	4 360	•	1,69	HCB7017-C-SPP-T-P4S
11 000	18 000	3 269	4 360	•	1,69	HCB7017-E-SPP-T-P4S
17 000	28 000	2 102	4 360	•	1,69	XCB7017-C-SPP-T-P4S
14 000	22 000	3 269	4 360	•	1,69	XCB7017-E-SPP-T-P4S
13 000	20 000	657	1 475	•	1,89	HS7017-C-SPP-T-P4S
11 000	18 000	1 067	1 475	•	1,89	HS7017-E-SPP-T-P4S
15 000	24 000	684	1 475	•	1,78	HC7017-C-SPP-T-P4S
14 000	20 000	1 104	1 475	•	1,78	HC7017-E-SPP-T-P4S
19 000	32 000	684	1 475	•	1,78	XC7017-C-SPP-T-P4S
16 000	26 000	1 104	1 475	•	1,78	XC7017-E-SPP-T-P4S

**X-life ultra design**  
XCS7017-E-SPP-T-P4S

**TX design**  
B71917-E-SPP-TX-P4S

# Spring preloaded FAG non-locating bearing units



Designation	Dimensions					Mounting dimensions				DLR dimensions				Basic load ratings		
	d	D	B <sub>i</sub>	B	r <sub>smin</sub>	d <sub>a</sub> h12	D <sub>a</sub> H12	r <sub>a</sub> max	d <sub>B</sub>	B <sub>N</sub>	B <sub>N1</sub>	S <sub>N</sub>	S <sub>B</sub>	E <sub>tk</sub> nom.	C <sub>dyn</sub>	C <sub>0stat</sub>
FAG	mm														kN	
B71918-C-SPP-T-P4S	90	125	18	36	1,10	97	119	0,6	102,0					104,2	45,50	49,00
B71918-E-SPP-T-P4S	90	125	18	36	1,10	97	119	0,6	102,0					104,2	43,00	46,50
HCB71918-C-SPP-T-P4S	90	125	18	36	1,10	97	119	0,6	102,0	4,0	14,0	7,6	2,2	104,2	31,50	34,00
HCB71918-E-SPP-T-P4S	90	125	18	36	1,10	97	119	0,6	102,0	4,0	14,0	7,6	2,2	104,2	30,00	32,00
XCB71918-C-SPP-T-P4S	90	125	18	36	1,10	97	119	0,6	102,0	4,0	14,0	7,6	2,2	104,2	71,00	34,00
XCB71918-E-SPP-T-P4S	90	125	18	36	1,10	97	119	0,6	102,0	4,0	14,0	7,6	2,2	104,2	67,00	32,00
HS71918-C-SPP-T-P4S	90	125	18	36	1,10	97	119	0,6	104,0					104,5	23,60	28,50
HS71918-E-SPP-T-P4S	90	125	18	36	1,10	97	119	0,6	104,0					104,5	22,40	26,50
HC71918-C-SPP-T-P4S	90	125	18	36	1,10	97	119	0,6	104,0	4,0	14,0	7,6	2,2	104,5	16,30	19,60
HC71918-E-SPP-T-P4S	90	125	18	36	1,10	97	119	0,6	104,0	4,0	14,0	7,6	2,2	104,5	15,60	18,60
XC71918-C-SPP-T-P4S	90	125	18	36	1,10	97	119	0,6	104,0	4,0	14,0	7,6	2,2	104,5	36,50	19,60
XC71918-E-SPP-T-P4S	90	125	18	36	1,10	97	119	0,6	104,0	4,0	14,0	7,6	2,2	104,5	34,50	18,60
B7018-C-SPP-T-P4S	90	140	24	48	1,50	100	131	1,5	106,5					108,6	76,50	72,00
B7018-E-SPP-T-P4S	90	140	24	48	1,50	100	131	1,5	106,5					108,6	72,00	68,00
HCB7018-C-SPP-T-P4S	90	140	24	48	1,50	100	131	1,5	106,5	5,5	18,5	9,5	2,2	108,6	53,00	50,00
HCB7018-E-SPP-T-P4S	90	140	24	48	1,50	100	131	1,5	106,5	5,5	18,5	9,5	2,2	108,6	50,00	47,50
XCB7018-C-SPP-T-P4S	90	140	24	48	1,50	100	131	1,5	106,5	5,5	18,5	9,5	2,2	108,6	118,00	50,00
XCB7018-E-SPP-T-P4S	90	140	24	48	1,50	100	131	1,5	106,5	5,5	18,5	9,5	2,2	108,6	112,00	47,50
HS7018-C-SPP-T-P4S	90	140	24	48	1,50	100	131	1,5	110,0					111,0	37,50	43,00
HS7018-E-SPP-T-P4S	90	140	24	48	1,50	100	131	1,5	110,0					111,0	35,50	40,00
HC7018-C-SPP-T-P4S	90	140	24	48	1,50	100	131	1,5	110,0	5,5	18,5	9,5	2,2	111,0	26,00	30,00
HC7018-E-SPP-T-P4S	90	140	24	48	1,50	100	131	1,5	110,0	5,5	18,5	9,5	2,2	111,0	24,50	28,00
XC7018-C-SPP-T-P4S	90	140	24	48	1,50	100	131	1,5	110,0	5,5	18,5	9,5	2,2	111,0	58,50	30,00
XC7018-E-SPP-T-P4S	90	140	24	48	1,50	100	131	1,5	110,0	5,5	18,5	9,5	2,2	111,0	55,00	28,00

\* • = selectable as an option

## Example designations

### Sealed design

B71918-C-SPP-2RSD-T-P4S  
HSS7018-E-SPP-T-P4S

### Hybrid ceramic design

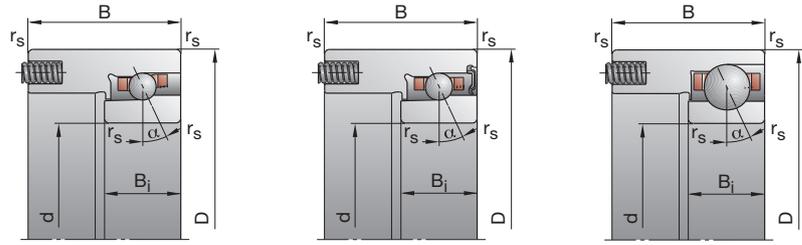
HCB7018-C-SPP-T-P4S

### Direct Lube design

HS7018-E-SPP-DLR-T-P4S

# B719..C/E, B70 HS719..C/E, HS70

C: Contact angle  $\alpha = 15^\circ$   
E: Contact angle  $\alpha = 25^\circ$



Achievable speed		Recommended preload force	Achievable preload force of the complete pressure spring set	Sealed design*	Mass	Designation
Grease	Oil min.	$F_V$	max. $F_{vF}$		kg	FAG
$\text{min}^{-1}$		N				
10000	17000	1688	2925	•	1,12	B71918-C-SPP-T-P4S
9000	15000	2655	2925	•	1,12	B71918-E-SPP-T-P4S
13000	20000	1425	2925	•	0,93	HCB71918-C-SPP-T-P4S
11000	18000	2192	2925	•	0,93	HCB71918-E-SPP-T-P4S
17000	28000	1425	2925	•	0,93	XCB71918-C-SPP-T-P4S
14000	22000	2192	2925	•	0,93	XCB71918-E-SPP-T-P4S
13000	20000	498	1105	•	1,36	HS71918-C-SPP-T-P4S
11000	18000	796	1105	•	1,36	HS71918-E-SPP-T-P4S
15000	24000	510	1105	•	1,33	HC71918-C-SPP-T-P4S
14000	20000	828	1105	•	1,33	HC71918-E-SPP-T-P4S
19000	32000	510	1105	•	1,33	XC71918-C-SPP-T-P4S
16000	26000	828	1105	•	1,33	XC71918-E-SPP-T-P4S
9500	16000	2925	5170	•	2,61	B7018-C-SPP-T-P4S
8500	14000	4623	5170	•	2,61	B7018-E-SPP-T-P4S
12000	19000	2433	5170	•	2,20	HCB7018-C-SPP-T-P4S
10000	17000	3878	5170	•	2,20	HCB7018-E-SPP-T-P4S
15000	24000	2433	5170	•	2,20	XCB7018-C-SPP-T-P4S
13000	20000	3878	5170	•	2,20	XCB7018-E-SPP-T-P4S
12000	19000	777	1750	•	2,47	HS7018-C-SPP-T-P4S
10000	17000	1242	1750	•	2,47	HS7018-E-SPP-T-P4S
14000	22000	804	1750	•	2,32	HC7018-C-SPP-T-P4S
13000	19000	1311	1750	•	2,32	HC7018-E-SPP-T-P4S
18000	30000	804	1750	•	2,32	XC7018-C-SPP-T-P4S
15000	24000	1311	1750	•	2,32	XC7018-E-SPP-T-P4S

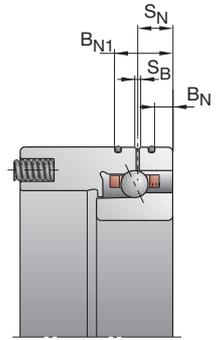
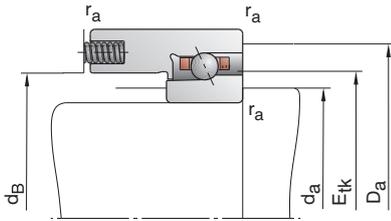
## X-life ultra design

XCS7018-E-SPP-T-P4S

## TX design

B71918-E-SPP-TX-P4S

# Spring preloaded FAG non-locating bearing units



Designation	Dimensions					Mounting dimensions				DLR dimensions				Basic load ratings		
	d	D	B <sub>i</sub>	B	r <sub>smin</sub>	d <sub>a</sub> h12	D <sub>a</sub> H12	r <sub>a</sub> max	d <sub>B</sub>	B <sub>N</sub>	B <sub>N1</sub>	S <sub>N</sub>	S <sub>B</sub>	E <sub>tk</sub> nom.	C <sub>dyn</sub>	C <sub>0stat</sub>
FAG	mm														kN	
B71919-C-SPP-T-P4S	95	130	18	36	1,10	102	124	0,6	107,0					109,2	46,50	51,00
B71919-E-SPP-T-P4S	95	130	18	36	1,10	102	124	0,6	107,0					109,2	44,00	48,00
HCB71919-C-SPP-T-P4S	95	130	18	36	1,10	102	124	0,6	107,0	4,0	14,0	7,6	2,2	109,2	32,00	35,50
HCB71919-E-SPP-T-P4S	95	130	18	36	1,10	102	124	0,6	107,0	4,0	14,0	7,6	2,2	109,2	30,50	33,50
XCB71919-C-SPP-T-P4S	95	130	18	36	1,10	102	124	0,6	107,0	4,0	14,0	7,6	2,2	109,2	71,00	35,50
XCB71919-E-SPP-T-P4S	95	130	18	36	1,10	102	124	0,6	107,0	4,0	14,0	7,6	2,2	109,2	68,00	33,50
HS71919-C-SPP-T-P4S	95	130	18	36	1,10	102	124	0,6	109,0					109,5	24,50	30,00
HS71919-E-SPP-T-P4S	95	130	18	36	1,10	102	124	0,6	109,0					109,5	22,80	28,00
HC71919-C-SPP-T-P4S	95	130	18	36	1,10	102	124	0,6	109,0	4,0	14,0	7,6	2,2	109,5	17,00	20,80
HC71919-E-SPP-T-P4S	95	130	18	36	1,10	102	124	0,6	109,0	4,0	14,0	7,6	2,2	109,5	16,00	19,30
XC71919-C-SPP-T-P4S	95	130	18	36	1,10	102	124	0,6	109,0	4,0	14,0	7,6	2,2	109,5	38,00	20,80
XC71919-E-SPP-T-P4S	95	130	18	36	1,10	102	124	0,6	109,0	4,0	14,0	7,6	2,2	109,5	35,50	19,30
B7019-C-SPP-T-P4S	95	145	24	48	1,50	105	136	1,5	111,5					113,6	78,00	76,50
B7019-E-SPP-T-P4S	95	145	24	48	1,50	105	136	1,5	111,5					113,6	75,00	72,00
HCB7019-C-SPP-T-P4S	95	145	24	48	1,50	105	136	1,5	111,5	5,5	18,5	9,5	2,2	113,6	54,00	53,00
HCB7019-E-SPP-T-P4S	95	145	24	48	1,50	105	136	1,5	111,5	5,5	18,5	9,5	2,2	113,6	51,00	51,00
XCB7019-C-SPP-T-P4S	95	145	24	48	1,50	105	136	1,5	111,5	5,5	18,5	9,5	2,2	113,6	120,00	53,00
XCB7019-E-SPP-T-P4S	95	145	24	48	1,50	105	136	1,5	111,5	5,5	18,5	9,5	2,2	113,6	114,00	51,00
HS7019-C-SPP-T-P4S	95	145	24	48	1,50	105	136	1,5	115,0					116,0	38,00	44,00
HS7019-E-SPP-T-P4S	95	145	24	48	1,50	105	136	1,5	115,0					116,0	35,50	41,50
HC7019-C-SPP-T-P4S	95	145	24	48	1,50	105	136	1,5	115,0	5,5	18,5	9,5	2,2	116,0	26,00	31,00
HC7019-E-SPP-T-P4S	95	145	24	48	1,50	105	136	1,5	115,0	5,5	18,5	9,5	2,2	116,0	24,50	28,50
XC7019-C-SPP-T-P4S	95	145	24	48	1,50	105	136	1,5	115,0	5,5	18,5	9,5	2,2	116,0	58,50	31,00
XC7019-E-SPP-T-P4S	95	145	24	48	1,50	105	136	1,5	115,0	5,5	18,5	9,5	2,2	116,0	55,00	28,50

\* • = selectable as an option

## Example designations

### Sealed design

B71919-C-SPP-2RSD-T-P4S  
HSS7019-E-SPP-T-P4S

### Hybrid ceramic design

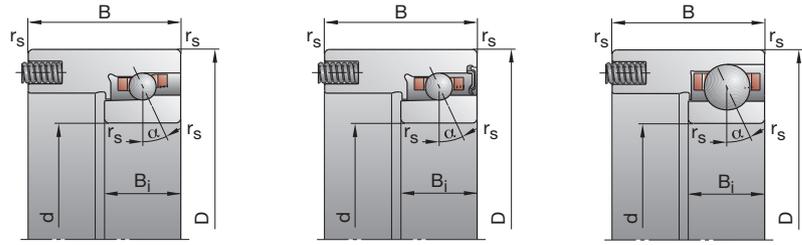
HCB7019-C-SPP-T-P4S

### Direct Lube design

HS7019-E-SPP-DLR-T-P4S

# B719..C/E, B70 HS719..C/E, HS70

C: Contact angle  $\alpha = 15^\circ$   
E: Contact angle  $\alpha = 25^\circ$

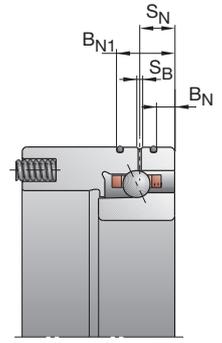
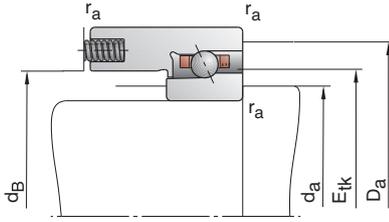


Achievable speed		Recommended preload force	Achievable preload force of the complete pressure spring set	Sealed design*	Mass	Designation
Grease	Oil min.	$F_V$	max. $F_{vF}$		kg	FAG
min <sup>-1</sup>		N				
9 500	16 000	1 724	2 975	•	1,17	B71919-C-SPP-T-P4S
8 500	14 000	2 713	2 975	•	1,17	B71919-E-SPP-T-P4S
12 000	19 000	1 421	2 975	•	0,97	HCB71919-C-SPP-T-P4S
10 000	17 000	2 231	2 975	•	0,97	HCB71919-E-SPP-T-P4S
16 000	26 000	1 421	2 975	•	0,97	XCB71919-C-SPP-T-P4S
14 000	22 000	2 231	2 975	•	0,97	XCB71919-E-SPP-T-P4S
12 000	19 000	509	1 150	•	1,42	HS71919-C-SPP-T-P4S
10 000	17 000	828	1 150	•	1,42	HS71919-E-SPP-T-P4S
14 000	22 000	531	1 150	•	1,39	HC71919-C-SPP-T-P4S
13 000	19 000	863	1 150	•	1,39	HC71919-E-SPP-T-P4S
18 000	30 000	531	1 150	•	1,39	XC71919-C-SPP-T-P4S
16 000	26 000	863	1 150	•	1,39	XC71919-E-SPP-T-P4S
9 000	15 000	2 980	5 285	•	2,73	B7019-C-SPP-T-P4S
8 000	13 000	4 813	5 285	•	2,73	B7019-E-SPP-T-P4S
11 000	18 000	2 538	5 285	•	2,30	HCB7019-C-SPP-T-P4S
9 500	16 000	3 962	5 285	•	2,30	HCB7019-E-SPP-T-P4S
15 000	24 000	2 538	5 285	•	2,30	XCB7019-C-SPP-T-P4S
13 000	20 000	3 962	5 285	•	2,30	XCB7019-E-SPP-T-P4S
11 000	18 000	777	1 750	•	2,58	HS7019-C-SPP-T-P4S
9 500	16 000	1 265	1 750	•	2,58	HS7019-E-SPP-T-P4S
13 000	20 000	804	1 750	•	2,42	HC7019-C-SPP-T-P4S
12 000	18 000	1 311	1 750	•	2,42	HC7019-E-SPP-T-P4S
17 000	28 000	804	1 750	•	2,42	XC7019-C-SPP-T-P4S
14 000	22 000	1 311	1 750	•	2,42	XC7019-E-SPP-T-P4S

**X-life ultra design**  
XCS7019-E-SPP-T-P4S

**TX design**  
B71919-E-SPP-TX-P4S

# Spring preloaded FAG non-locating bearing units



Designation	Dimensions					Mounting dimensions				DLR dimensions				Basic load ratings		
	d	D	B <sub>i</sub>	B	r <sub>smin</sub>	d <sub>a</sub> h12	D <sub>a</sub> H12	r <sub>a</sub> max	d <sub>b</sub>	B <sub>N</sub>	B <sub>N1</sub>	S <sub>N</sub>	S <sub>B</sub>	E <sub>tk</sub> nom.	C <sub>dyn</sub>	C <sub>0stat</sub>
FAG	mm														kN	
B71920-C-SPP-T-P4S	100	140	20	40	1,10	107	133	0,6	114,5					117,2	58,50	64,00
B71920-E-SPP-T-P4S	100	140	20	40	1,10	107	133	0,6	114,5					117,2	55,00	60,00
HCB71920-C-SPP-T-P4S	100	140	20	40	1,10	107	133	0,6	114,5	4,0	16,0	8,0	2,2	117,2	40,50	44,00
HCB71920-E-SPP-T-P4S	100	140	20	40	1,10	107	133	0,6	114,5	4,0	16,0	8,0	2,2	117,2	38,00	42,50
XCB71920-C-SPP-T-P4S	100	140	20	40	1,10	107	133	0,6	114,5	4,0	16,0	8,0	2,2	117,2	90,00	44,00
XCB71920-E-SPP-T-P4S	100	140	20	40	1,10	107	133	0,6	114,5	4,0	16,0	8,0	2,2	117,2	85,00	42,50
HS71920-C-SPP-T-P4S	100	140	20	40	1,10	107	133	0,6	116,0					116,7	29,00	36,00
HS71920-E-SPP-T-P4S	100	140	20	40	1,10	107	133	0,6	116,0					116,7	27,50	33,50
HC71920-C-SPP-T-P4S	100	140	20	40	1,10	107	133	0,6	116,0	4,0	16,0	8,0	2,2	116,7	20,40	25,00
HC71920-E-SPP-T-P4S	100	140	20	40	1,10	107	133	0,6	116,0	4,0	16,0	8,0	2,2	116,7	19,00	23,60
XC71920-C-SPP-T-P4S	100	140	20	40	1,10	107	133	0,6	116,0	4,0	16,0	8,0	2,2	116,7	45,50	25,00
XC71920-E-SPP-T-P4S	100	140	20	40	1,10	107	133	0,6	116,0	4,0	16,0	8,0	2,2	116,7	42,50	23,60
B7020-C-SPP-T-P4S	100	150	24	48	1,50	110	141	1,5	116,5					118,6	81,50	81,50
B7020-E-SPP-T-P4S	100	150	24	48	1,50	110	141	1,5	116,5					118,6	76,50	76,50
HCB7020-C-SPP-T-P4S	100	150	24	48	1,50	110	141	1,5	116,5	5,5	18,5	9,5	2,2	118,6	56,00	56,00
HCB7020-E-SPP-T-P4S	100	150	24	48	1,50	110	141	1,5	116,5	5,5	18,5	9,5	2,2	118,6	53,00	53,00
XCB7020-C-SPP-T-P4S	100	150	24	48	1,50	110	141	1,5	116,5	5,5	18,5	9,5	2,2	118,6	125,00	56,00
XCB7020-E-SPP-T-P4S	100	150	24	48	1,50	110	141	1,5	116,5	5,5	18,5	9,5	2,2	118,6	118,00	53,00
HS7020-C-SPP-T-P4S	100	150	24	48	1,50	110	141	1,5	120,0					121,0	38,00	45,50
HS7020-E-SPP-T-P4S	100	150	24	48	1,50	110	141	1,5	120,0					121,0	36,00	42,50
HC7020-C-SPP-T-P4S	100	150	24	48	1,50	110	141	1,5	120,0	5,5	18,5	9,5	2,2	121,0	26,50	31,50
HC7020-E-SPP-T-P4S	100	150	24	48	1,50	110	141	1,5	120,0	5,5	18,5	9,5	2,2	121,0	25,00	30,00
XC7020-C-SPP-T-P4S	100	150	24	48	1,50	110	141	1,5	120,0	5,5	18,5	9,5	2,2	121,0	58,50	31,50
XC7020-E-SPP-T-P4S	100	150	24	48	1,50	110	141	1,5	120,0	5,5	18,5	9,5	2,2	121,0	56,00	30,00

\* • = selectable as an option

## Example designations

### Sealed design

B71920-C-SPP-2RSD-T-P4S  
HSS7020-E-SPP-T-P4S

### Hybrid ceramic design

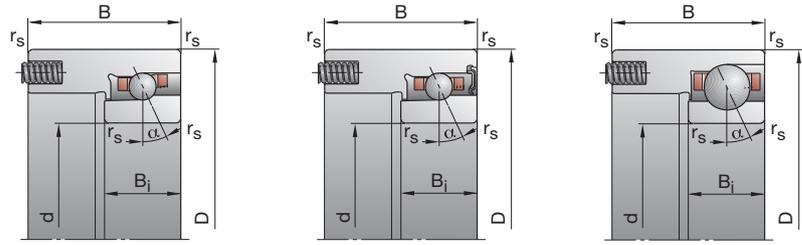
HCB7020-C-SPP-T-P4S

### Direct Lube design

HS7020-E-SPP-DLR-T-P4S

# B719..C/E, B70 HS719..C/E, HS70

C: Contact angle  $\alpha = 15^\circ$   
E: Contact angle  $\alpha = 25^\circ$

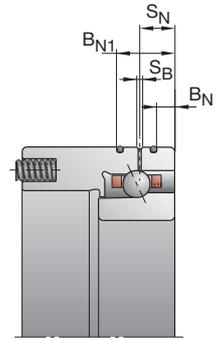
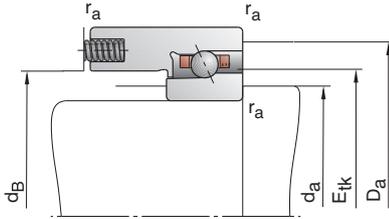


Achievable speed		Recommended preload force	Achievable preload force of the complete pressure spring set	Sealed design*	Mass	Designation
Grease	Oil min.	$F_V$	max. $F_{vF}$		kg	FAG
min <sup>-1</sup>		N				
9 000	15 000	2 194	3 765	•	1,55	B71920-C-SPP-T-P4S
8 000	13 000	3 437	3 765	•	1,55	B71920-E-SPP-T-P4S
11 000	18 000	1 830	3 765	•	1,32	HCB71920-C-SPP-T-P4S
9 500	16 000	2 822	3 765	•	1,32	HCB71920-E-SPP-T-P4S
15 000	24 000	1 830	3 765	•	1,32	XCB71920-C-SPP-T-P4S
12 000	19 000	2 822	3 765	•	1,32	XCB71920-E-SPP-T-P4S
11 000	18 000	611	1 380	•	2,02	HS71920-C-SPP-T-P4S
9 500	16 000	994	1 380	•	2,02	HS71920-E-SPP-T-P4S
13 000	20 000	627	1 380	•	1,92	HC71920-C-SPP-T-P4S
12 000	18 000	1 035	1 380	•	1,92	HC71920-E-SPP-T-P4S
17 000	28 000	627	1 380	•	1,92	XC71920-C-SPP-T-P4S
14 000	22 000	1 035	1 380	•	1,92	XC71920-E-SPP-T-P4S
8 500	14 000	3 112	5 465	•	2,86	B7020-C-SPP-T-P4S
7 500	12 000	4 902	5 465	•	2,86	B7020-E-SPP-T-P4S
11 000	18 000	2 561	5 465	•	2,40	HCB7020-C-SPP-T-P4S
9 000	15 000	4 097	5 465	•	2,40	HCB7020-E-SPP-T-P4S
14 000	22 000	2 561	5 465	•	2,40	XCB7020-C-SPP-T-P4S
12 000	19 000	4 097	5 465	•	2,40	XCB7020-E-SPP-T-P4S
11 000	18 000	804	1 780	•	2,68	HS7020-C-SPP-T-P4S
9 000	15 000	1 288	1 780	•	2,68	HS7020-E-SPP-T-P4S
12 000	19 000	821	1 780	•	2,52	HC7020-C-SPP-T-P4S
12 000	18 000	1 332	1 780	•	2,52	HC7020-E-SPP-T-P4S
16 000	26 000	821	1 780	•	2,52	XC7020-C-SPP-T-P4S
14 000	22 000	1 332	1 780	•	2,52	XC7020-E-SPP-T-P4S

**X-life ultra design**  
XCS7020-E-SPP-T-P4S

**TX design**  
B71920-E-SPP-TX-P4S

# Spring preloaded FAG non-locating bearing units



Designation	Dimensions					Mounting dimensions				DLR dimensions				Basic load ratings		
	d	D	B <sub>i</sub>	B	r <sub>smin</sub>	d <sub>a</sub> h12	D <sub>a</sub> H12	r <sub>a</sub> max	d <sub>b</sub>	B <sub>N</sub>	B <sub>N1</sub>	S <sub>N</sub>	S <sub>B</sub>	E <sub>tk</sub> nom.	C <sub>dyn</sub>	C <sub>0stat</sub>
FAG	mm														kN	
B71921-C-SPP-T-P4S	105	145	20	40	1,10	112	138	0,6	118,5					121,2	58,50	64,00
B71921-E-SPP-T-P4S	105	145	20	40	1,10	112	138	0,6	118,5					121,2	55,00	60,00
HCB71921-C-SPP-T-P4S	105	145	20	40	1,10	112	138	0,6	118,5	4,0	16,0	8,0	2,2	121,2	40,00	45,00
HCB71921-E-SPP-T-P4S	105	145	20	40	1,10	112	138	0,6	118,5	4,0	16,0	8,0	2,2	121,2	38,00	42,50
XCB71921-C-SPP-T-P4S	105	145	20	40	1,10	112	138	0,6	118,5	4,0	16,0	8,0	2,2	121,2	90,00	45,00
XCB71921-E-SPP-T-P4S	105	145	20	40	1,10	112	138	0,6	118,5	4,0	16,0	8,0	2,2	121,2	85,00	42,50
HS71921-C-SPP-T-P4S	105	145	20	40	1,10	112	138	0,6	122,0					121,7	30,00	38,00
HS71921-E-SPP-T-P4S	105	145	20	40	1,10	112	138	0,6	122,0					121,7	28,00	35,50
HC71921-C-SPP-T-P4S	105	145	20	40	1,10	112	138	0,6	122,0	4,0	16,0	8,0	2,2	121,7	20,80	26,50
HC71921-E-SPP-T-P4S	105	145	20	40	1,10	112	138	0,6	122,0	4,0	16,0	8,0	2,2	121,7	19,60	24,50
XC71921-C-SPP-T-P4S	105	145	20	40	1,10	112	138	0,6	122,0	4,0	16,0	8,0	2,2	121,7	46,50	26,50
XC71921-E-SPP-T-P4S	105	145	20	40	1,10	112	138	0,6	122,0	4,0	16,0	8,0	2,2	121,7	44,00	24,50
B7021-C-SPP-T-P4S	105	160	26	52	2,00	116	150	2,0	124,0					125,8	106,00	102,00
B7021-E-SPP-T-P4S	105	160	26	52	2,00	116	150	2,0	124,0					125,8	102,00	98,00
CB7021-C-SPP-T-P4S	105	160	26	52	2,00	116	150	2,0	124,0	6,0	20,0	10,8	2,2	125,8	73,50	72,00
HCB7021-E-SPP-T-P4S	105	160	26	52	2,00	116	150	2,0	124,0	6,0	20,0	10,8	2,2	125,8	69,50	68,00
XCB7021-C-SPP-T-P4S	105	160	26	52	2,00	116	150	2,0	124,0	6,0	20,0	10,8	2,2	125,8	163,00	72,00
XCB7021-E-SPP-T-P4S	105	160	26	52	2,00	116	150	2,0	124,0	6,0	20,0	10,8	2,2	125,8	156,00	68,00
HS7021-C-SPP-T-P4S	105	160	26	52	2,00	116	150	2,0	126,5					127,9	49,00	58,50
HS7021-E-SPP-T-P4S	105	160	26	52	2,00	116	150	2,0	126,5					127,9	46,50	54,00
HC7021-C-SPP-T-P4S	105	160	26	52	2,00	116	150	2,0	126,5	6,0	20,0	10,8	2,2	127,9	34,00	40,50
HC7021-E-SPP-T-P4S	105	160	26	52	2,00	116	150	2,0	126,5	6,0	20,0	10,8	2,2	127,9	32,00	38,00
XC7021-C-SPP-T-P4S	105	160	26	52	2,00	116	150	2,0	126,5	6,0	20,0	10,8	2,2	127,9	76,50	40,50
XC7021-E-SPP-T-P4S	105	160	26	52	2,00	116	150	2,0	126,5	6,0	20,0	10,8	2,2	127,9	71,00	38,00

\* • = selectable as an option

### Example designations

#### Sealed design

B71921-C-SPP-2RSD-T-P4S  
HSS7021-E-SPP-T-P4S

#### Hybrid ceramic design

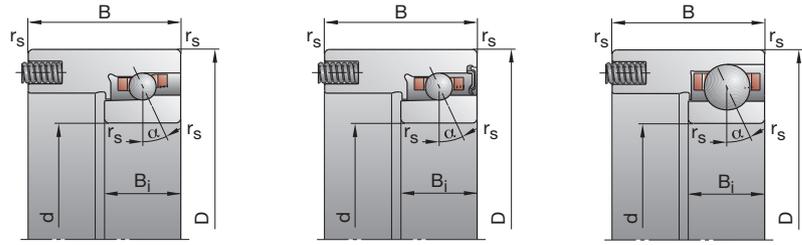
HCB7021-C-SPP-T-P4S

#### Direct Lube design

HS7021-E-SPP-DLR-T-P4S

# B719..C/E, B70 HS719..C/E, HS70

C: Contact angle  $\alpha = 15^\circ$   
E: Contact angle  $\alpha = 25^\circ$

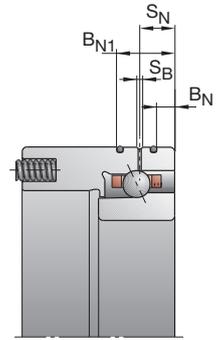
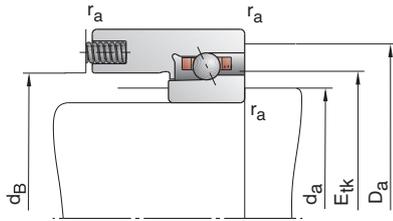


Achievable speed		Recommended preload force	Achievable preload force of the complete pressure spring set	Sealed design*	Mass	Designation
Grease	Oil min.	$F_V$	max. $F_{vF}$		kg	<b>FAG</b>
$\text{min}^{-1}$		N				
8 500	14 000	2 194	3 765	•	1,61	B71921-C-SPP-T-P4S
7 500	12 000	3 437	3 765	•	1,61	B71921-E-SPP-T-P4S
11 000	18 000	1 830	3 765	•	1,38	HCB71921-C-SPP-T-P4S
9 000	15 000	2 822	3 765	•	1,38	HCB71921-E-SPP-T-P4S
14 000	22 000	1 830	3 765	•	1,38	XCB71921-C-SPP-T-P4S
12 000	19 000	2 822	3 765	•	1,38	XCB71921-E-SPP-T-P4S
11 000	18 000	622	1 410	•	2,09	HS71921-C-SPP-T-P4S
9 000	15 000	1 012	1 410	•	2,09	HS71921-E-SPP-T-P4S
12 000	19 000	644	1 410	•	1,99	HC71921-C-SPP-T-P4S
12 000	18 000	1 056	1 410	•	1,99	HC71921-E-SPP-T-P4S
16 000	26 000	644	1 410	•	1,99	XC71921-C-SPP-T-P4S
14 000	22 000	1 056	1 410	•	1,99	XC71921-E-SPP-T-P4S
8 000	13 000	4 083	7 240	•	3,70	B7021-C-SPP-T-P4S
7 000	11 000	6 639	7 240	•	3,70	B7021-E-SPP-T-P4S
10 000	17 000	3 492	7 240	•	3,22	HCB7021-C-SPP-T-P4S
8 500	14 000	5 427	7 240	•	3,22	HCB7021-E-SPP-T-P4S
13 000	20 000	3 492	7 240	•	3,22	XCB7021-C-SPP-T-P4S
11 000	18 000	5 427	7 240	•	3,22	XCB7021-E-SPP-T-P4S
10 000	17 000	1 018	2 300	•	3,32	HS7021-C-SPP-T-P4S
8 500	14 000	1 656	2 300	•	3,32	HS7021-E-SPP-T-P4S
12 000	19 000	1 065	2 300	•	3,10	HC7021-C-SPP-T-P4S
11 000	17 000	1 725	2 300	•	3,10	HC7021-E-SPP-T-P4S
15 000	24 000	1 065	2 300	•	3,10	XC7021-C-SPP-T-P4S
13 000	21 000	1 725	2 300	•	3,10	XC7021-E-SPP-T-P4S

**X-life ultra design**  
XCS7021-E-SPP-T-P4S

**TX design**  
B71921-E-SPP-TX-P4S

# Spring preloaded FAG non-locating bearing units



Designation	Dimensions					Mounting dimensions				DLR dimensions				Basic load ratings			
	d	D	B <sub>i</sub>	B	r <sub>smin</sub>	d <sub>a</sub>	D <sub>a</sub>	r <sub>a</sub>	d <sub>B</sub>	B <sub>N</sub>	B <sub>N1</sub>	S <sub>N</sub>	S <sub>B</sub>	E <sub>tk</sub>	C <sub>dyn</sub>	C <sub>0stat</sub>	
FAG	mm															kN	
B71922-C-SPP-T-P4S	110	150	20	40	1,10	117	143	0,6	123,5					126,2	58,50	67,00	
B71922-E-SPP-T-P4S	110	150	20	40	1,10	117	143	0,6	123,5					126,2	56,00	63,00	
HCB71922-C-SPP-T-P4S	110	150	20	40	1,10	117	143	0,6	123,5	4,0	16,0	8,0	2,2	126,2	40,50	46,50	
HCB71922-E-SPP-T-P4S	110	150	20	40	1,10	117	143	0,6	123,5	4,0	16,0	8,0	2,2	126,2	39,00	44,00	
XCB71922-C-SPP-T-P4S	110	150	20	40	1,10	117	143	0,6	123,5	4,0	16,0	8,0	2,2	126,2	90,00	46,50	
XCB71922-E-SPP-T-P4S	110	150	20	40	1,10	117	143	0,6	123,5	4,0	16,0	8,0	2,2	126,2	86,50	44,00	
HS71922-C-SPP-T-P4S	110	150	20	40	1,10	117	143	0,6	125,5					126,4	34,50	44,00	
HS71922-E-SPP-T-P4S	110	150	20	40	1,10	117	143	0,6	125,5					126,4	32,50	40,50	
HC71922-C-SPP-T-P4S	110	150	20	40	1,10	117	143	0,6	125,5	4,0	16,0	8,0	2,2	126,4	24,00	30,50	
HC71922-E-SPP-T-P4S	110	150	20	40	1,10	117	143	0,6	125,5	4,0	16,0	8,0	2,2	126,4	22,80	28,50	
XC71922-C-SPP-T-P4S	110	150	20	40	1,10	117	143	0,6	125,5	4,0	16,0	8,0	2,2	126,4	54,00	30,50	
XC71922-E-SPP-T-P4S	110	150	20	40	1,10	117	143	0,6	125,5	4,0	16,0	8,0	2,2	126,4	51,00	28,50	
B7022-C-SPP-T-P4S	110	170	28	56	2,00	121	159	2,0	129,5					133,3	110,00	110,00	
B7022-E-SPP-T-P4S	110	170	28	56	2,00	121	159	2,0	129,5					133,3	104,00	104,00	
HCB7022-C-SPP-T-P4S	110	170	28	56	2,00	121	159	2,0	129,5	6,0	22,0	11,8	2,2	133,3	75,00	76,50	
HCB7022-E-SPP-T-P4S	110	170	28	56	2,00	121	159	2,0	129,5	6,0	22,0	11,8	2,2	133,3	72,00	72,00	
XCB7022-C-SPP-T-P4S	110	170	28	56	2,00	121	159	2,0	129,5	6,0	22,0	11,8	2,2	133,3	166,00	76,50	
XCB7022-E-SPP-T-P4S	110	170	28	56	2,00	121	159	2,0	129,5	6,0	22,0	11,8	2,2	133,3	160,00	72,00	
HS7022-C-SPP-T-P4S	110	170	28	56	2,00	121	159	2,0	134,0					135,4	50,00	60,00	
HS7022-E-SPP-T-P4S	110	170	28	56	2,00	121	159	2,0	134,0					135,4	46,50	56,00	
HC7022-C-SPP-T-P4S	110	170	28	56	2,00	121	159	2,0	134,0	6,0	22,0	11,8	2,2	135,4	34,50	41,50	
HC7022-E-SPP-T-P4S	110	170	28	56	2,00	121	159	2,0	134,0	6,0	22,0	11,8	2,2	135,4	32,50	39,00	
XC7022-C-SPP-T-P4S	110	170	28	56	2,00	121	159	2,0	134,0	6,0	22,0	11,8	2,2	135,4	76,50	41,50	
XC7022-E-SPP-T-P4S	110	170	28	56	2,00	121	159	2,0	134,0	6,0	22,0	11,8	2,2	135,4	72,00	39,00	

\* • = selectable as an option

## Example designations

### Sealed design

B71922-C-SPP-2RSD-T-P4S  
HSS7022-E-SPP-T-P4S

### Hybrid ceramic design

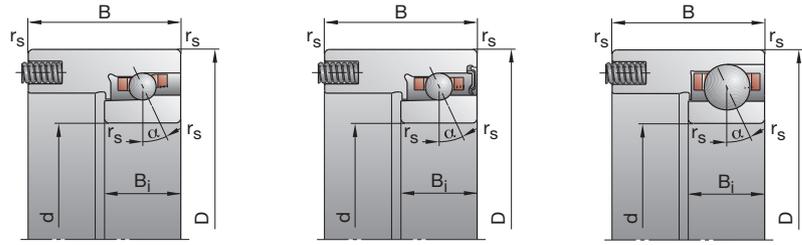
HCB7022-C-SPP-T-P4S

### Direct Lube design

HS7022-E-SPP-DLR-T-P4S

# B719..C/E, B70 HS719..C/E, HS70

C: Contact angle  $\alpha = 15^\circ$   
E: Contact angle  $\alpha = 25^\circ$

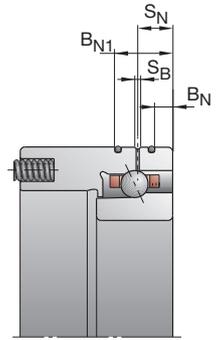
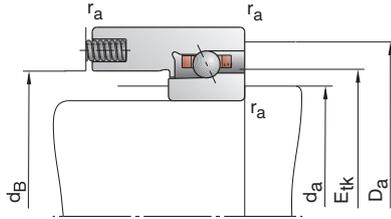


Achievable speed		Recommended preload force	Achievable preload force of the complete pressure spring set	Sealed design*	Mass	Designation
Grease	Oil min.	$F_V$	max. $F_{vF}$		kg	FAG
min <sup>-1</sup>		N				
8000	13000	2191	3810	•	1,67	B71922-C-SPP-T-P4S
7500	12000	3495	3810	•	1,67	B71922-E-SPP-T-P4S
10000	17000	1854	3810	•	1,43	HCB71922-C-SPP-T-P4S
9000	15000	2858	3810	•	1,43	HCB71922-E-SPP-T-P4S
13000	20000	1854	3810	•	1,43	XCB71922-C-SPP-T-P4S
11000	18000	2858	3810	•	1,43	XCB71922-E-SPP-T-P4S
10000	17000	724	1620	•	2,15	HS71922-C-SPP-T-P4S
8500	14000	1173	1620	•	2,15	HS71922-E-SPP-T-P4S
12000	19000	747	1620	•	1,98	HC71922-C-SPP-T-P4S
11000	17000	1215	1620	•	1,98	HC71922-E-SPP-T-P4S
15000	24000	747	1620	•	1,98	XC71922-C-SPP-T-P4S
13000	20000	1215	1620	•	1,98	XC71922-E-SPP-T-P4S
7500	12000	4235	7415	•	4,50	B7022-C-SPP-T-P4S
6700	10000	6760	7415	•	4,50	B7022-E-SPP-T-P4S
9500	16000	3545	7415	•	3,74	HCB7022-C-SPP-T-P4S
8000	13000	5561	7415	•	3,74	HCB7022-E-SPP-T-P4S
12000	19000	3545	7415	•	3,74	XCB7022-C-SPP-T-P4S
10000	17000	5561	7415	•	3,74	XCB7022-E-SPP-T-P4S
9500	16000	1045	2300	•	4,23	HS7022-C-SPP-T-P4S
8000	13000	1679	2300	•	4,23	HS7022-E-SPP-T-P4S
11000	18000	1065	2300	•	4,00	HC7022-C-SPP-T-P4S
9500	15000	1725	2300	•	4,00	HC7022-E-SPP-T-P4S
14000	22000	1065	2300	•	4,00	XC7022-C-SPP-T-P4S
12000	19000	1725	2300	•	4,00	XC7022-E-SPP-T-P4S

**X-life ultra design**  
XCS7022-E-SPP-T-P4S

**TX design**  
B71922-E-SPP-TX-P4S

# Spring preloaded FAG non-locating bearing units



Designation	Dimensions					Mounting dimensions				DLR dimensions				Basic load ratings		
	d	D	B <sub>i</sub>	B	r <sub>smin</sub>	d <sub>a</sub> h12	D <sub>a</sub> H12	r <sub>a</sub> max	d <sub>B</sub>	B <sub>N</sub>	B <sub>N1</sub>	S <sub>N</sub>	S <sub>B</sub>	E <sub>tk</sub> nom.	C <sub>dyn</sub>	C <sub>0stat</sub>
FAG	mm														kN	
B71924-C-SPP-T-P4S	120	165	22	44	1,10	128	157	0,6	135,0					138,2	73,50	85,00
B71924-E-SPP-T-P4S	120	165	22	44	1,10	128	157	0,6	135,0					138,2	69,50	80,00
HCB71924-C-SPP-T-P4S	120	165	22	44	1,10	128	157	0,6	135,0					138,2	51,00	58,50
HCB71924-E-SPP-T-P4S	120	165	22	44	1,10	128	157	0,6	135,0					138,2	48,00	55,00
XCB71924-C-SPP-T-P4S	120	165	22	44	1,10	128	157	0,6	135,0					138,2	114,00	58,50
XCB71924-E-SPP-T-P4S	120	165	22	44	1,10	128	157	0,6	135,0					138,2	108,00	55,00
HS71924-C-SPP-T-P4S	120	165	22	44	1,10	128	157	0,6	138,0					138,9	36,50	48,00
HS71924-E-SPP-T-P4S	120	165	22	44	1,10	128	157	0,6	138,0					138,9	34,00	45,00
HC71924-C-SPP-T-P4S	120	165	22	44	1,10	128	157	0,6	138,0					138,9	25,00	33,50
HC71924-E-SPP-T-P4S	120	165	22	44	1,10	128	157	0,6	138,0					138,9	23,60	31,00
XC71924-C-SPP-T-P4S	120	165	22	44	1,10	128	157	0,6	138,0					138,9	56,00	33,50
XC71924-E-SPP-T-P4S	120	165	22	44	1,10	128	157	0,6	138,0					138,9	53,00	31,00
B7024-C-SPP-T-P4S	120	180	28	56	2,00	131	169	2,0	139,5					143,3	112,00	116,00
B7024-E-SPP-T-P4S	120	180	28	56	2,00	131	169	2,0	139,5					143,3	106,00	110,00
HCB7024-C-SPP-T-P4S	120	180	28	56	2,00	131	169	2,0	139,5					143,3	78,00	81,50
HCB7024-E-SPP-T-P4S	120	180	28	56	2,00	131	169	2,0	139,5					143,3	73,50	76,50
XCB7024-C-SPP-T-P4S	120	180	28	56	2,00	131	169	2,0	139,5					143,3	173,00	81,50
XCB7024-E-SPP-T-P4S	120	180	28	56	2,00	131	169	2,0	139,5					143,3	163,00	76,50
HS7024-C-SPP-T-P4S	120	180	28	56	2,00	131	169	2,0	144,0					145,4	51,00	63,00
HS7024-E-SPP-T-P4S	120	180	28	56	2,00	131	169	2,0	144,0					145,4	48,00	58,50
HC7024-C-SPP-T-P4S	120	180	28	56	2,00	131	169	2,0	144,0					145,4	35,50	44,00
HC7024-E-SPP-T-P4S	120	180	28	56	2,00	131	169	2,0	144,0					145,4	33,50	41,50
XC7024-C-SPP-T-P4S	120	180	28	56	2,00	131	169	2,0	144,0					145,4	80,00	44,00
XC7024-E-SPP-T-P4S	120	180	28	56	2,00	131	169	2,0	144,0					145,4	75,00	41,50

\* • = selectable as an option

## Example designations

### Sealed design

B71924-C-SPP-2RSD-T-P4S  
HSS7024-E-SPP-T-P4S

### Hybrid ceramic design

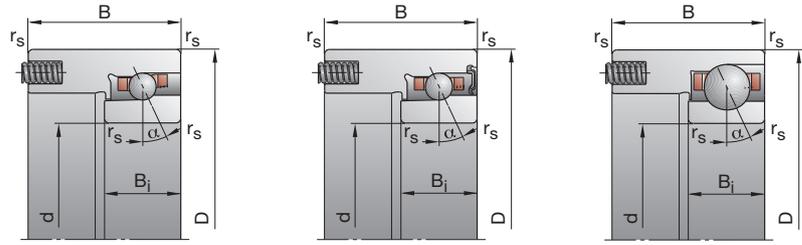
HCB7024-C-SPP-T-P4S

### Direct Lube design

HS7024-E-SPP-DLR-T-P4S

# B719..C/E, B70 HS719..C/E, HS70

C: Contact angle  $\alpha = 15^\circ$   
E: Contact angle  $\alpha = 25^\circ$



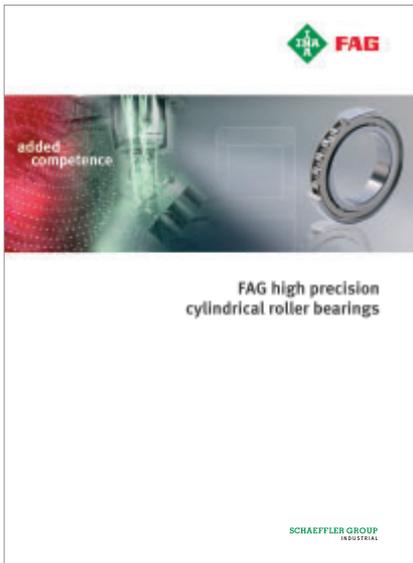
Achievable speed	Oil min.	Recommended preload force	Achievable preload force of the complete pressure spring set	Sealed design*	Mass	Designation
Grease		$F_V$	max. $F_{vF}$		kg	FAG
min <sup>-1</sup>		N				
7 000	11 000	2 773	4 845	•	2,32	B71924-C-SPP-T-P4S
6 700	10 000	4 388	4 845	•	2,32	B71924-E-SPP-T-P4S
9 000	15 000	2 349	4 845	•	1,95	HCB71924-C-SPP-T-P4S
8 000	13 000	3 632	4 845	•	1,95	HCB71924-E-SPP-T-P4S
12 000	19 000	2 349	4 845	•	1,95	XCB71924-C-SPP-T-P4S
10 000	17 000	3 632	4 845	•	1,95	XCB71924-E-SPP-T-P4S
9 000	15 000	764	1 715	•	3,03	HS71924-C-SPP-T-P4S
8 000	13 000	1 242	1 715	•	3,03	HS71924-E-SPP-T-P4S
11 000	18 000	788	1 715	•	2,85	HC71924-C-SPP-T-P4S
9 500	15 000	1 284	1 715	•	2,85	HC71924-E-SPP-T-P4S
14 000	22 000	788	1 715	•	2,85	XC71924-C-SPP-T-P4S
12 000	19 000	1 284	1 715	•	2,85	XC71924-E-SPP-T-P4S
6 700	10 000	4 308	7 590	•	4,80	B7024-C-SPP-T-P4S
6 300	9 500	6 881	7 590	•	4,80	B7024-E-SPP-T-P4S
8 500	14 000	3 656	7 590	•	4,00	HCB7024-C-SPP-T-P4S
7 500	12 000	5 693	7 590	•	4,00	HCB7024-E-SPP-T-P4S
11 000	18 000	3 656	7 590	•	4,00	XCB7024-C-SPP-T-P4S
9 500	16 000	5 693	7 590	•	4,00	XCB7024-E-SPP-T-P4S
8 500	14 000	1 072	2 395	•	4,53	HS7024-C-SPP-T-P4S
7 500	12 000	1 725	2 395	•	4,53	HS7024-E-SPP-T-P4S
10 000	17 000	1 106	2 395	•	4,29	HC7024-C-SPP-T-P4S
9 000	14 000	1 794	2 395	•	4,29	HC7024-E-SPP-T-P4S
13 000	20 000	1 106	2 395	•	4,29	XC7024-C-SPP-T-P4S
11 000	18 000	1 794	2 395	•	4,29	XC7024-E-SPP-T-P4S

**X-life ultra design**  
XCS7024-E-SPP-T-P4S

**TX design**  
B71924-E-SPP-TX-P4S

# Other products

The world of high precision bearings



7: Publication FAG High precision cylindrical roller bearings

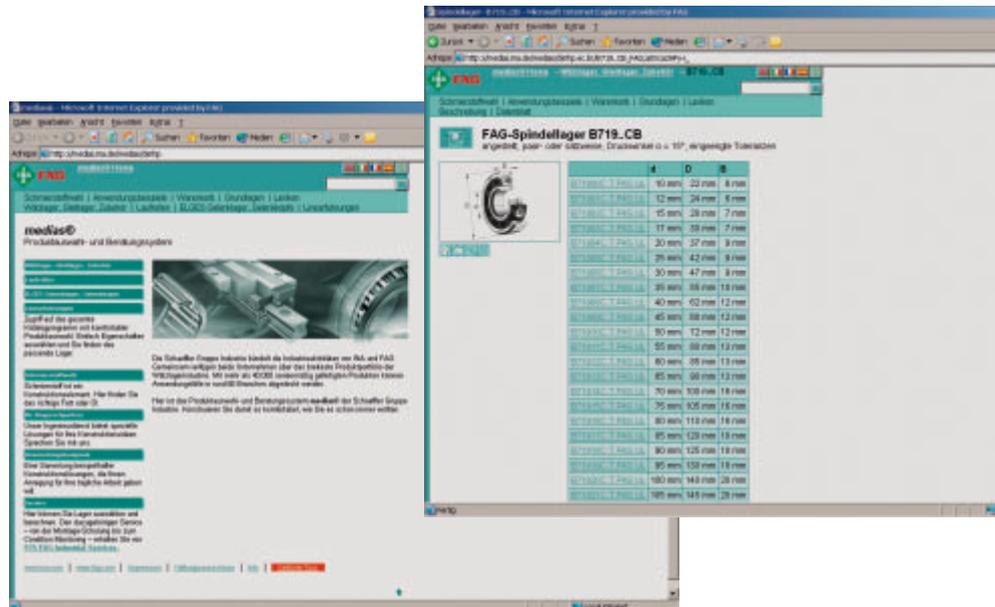
Other high precision bearing products are included in the catalogue “Super Precision Bearings”, see page 5. For the non-locating bearing position, see also the publications “FAG High precision cylindrical roller bearings” (SSD 6) and “FAG Floating Displacement bearings” (SSD 5). You can find all these publications on the Internet at: [www.fag.de](http://www.fag.de) or [www.ina.de](http://www.ina.de) or order them directly from Schaeffler Technologies GmbH & Co. KG.

An overview of the product range of Schaeffler Group Industrial is given in the catalogue “Rolling Bearings” from Schaeffler Group Industrial (HR 1 or WL 41 700), Figure 8.



8: Catalogue “Rolling Bearings” from Schaeffler Group Industrial (HR 1)

At [www.fag.de](http://www.fag.de) and [www.ina.de](http://www.ina.de) respectively, you can find FAG and INA products for user-friendly calculation, preparation of drawings etc. You can also access other services such as the library of rolling bearing information, regional support and many others. The electronic medium medias<sup>®</sup> contains the entire range of rolling bearings, plain bearings and linear systems available from Schaeffler Technologies GmbH & Co. KG.



9: [www.fag.com](http://www.fag.com) – Bearing data and calculation functionality using medias<sup>®</sup>





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