

d mm	L mm	Permissible radial load		Permissible axial static load $C_a^3$	d mm	L mm	Permissible radial load		Permissible axial static load $C_a^3$	d mm	L mm	Permissible radial load		Permissible axial static load $C_a^3$
		Static $C_s^1$ in kN	Dynamic $C_{25}^2$ in kN				Static $C_s^1$ in kN	Dynamic $C_{25}^2$ in kN				Static $C_s^1$ in kN	Dynamic $C_{25}^2$ in kN	
6	6	7,5	3,0	12,9		12	80,4	32,2		25	308,5	123,4		
8	6	10,0	4,0	15,6	22	15	108,8	43,5	112,2	35	30	383,8	153,5	225,8
	8	16,9	6,8			20	156,1	62,4		35	459,0	183,6		
	6	12,5	5,0			22	175,0	70,0		20	266,6	106,6		
10	8	21,1	8,4	18,4		12	69,9	28,0		25	352,6	141,0		
	10	29,7	11,9			15	123,6	49,4		40	30	438,6	175,4	253
12	6	12,9	5,2	71,4	25	20	177,4	71,0	124,4	35	524,6	209,8		
	8	23,2	9,3			22	198,9	79,6		40	610,6	244,2		
	10	33,5	13,4			25	231,1	92,4		25	396,7	158,7		
	12	43,9	17,6			15	126,4	50,6		30	493,4	197,4		
	8	29,0	11,6			20	186,6	74,6		45	590,2	236,1	280,2	
15	10	41,9	16,8	83,6	28	22	210,7	84,3	187,7	40	686,9	274,8		
	12	54,8	21,9			25	246,8	98,5		45	783,7	313,5		
	15	74,2	29,7			28	282,9	113,0		25	440,8	176,3		
	8	31,0	12,4			15	135,5	54,2		30	548,3	219,3		
16	10	44,7	17,9	87,8	30	20	200,0	80,0	198,6	50	35	655,8	262,3	307,4
	12	58,5	23,4			22	225,8	90,3			40	763,3	305,3	
	15	79,1	31,6			25	264,5	105,8			45	870,8	348,3	
	16	86,0	34,3			30	329,0	131,6			50	978,3	391,3	
	10	58,3	20,1			15	144,5	57,8						
	12	65,8	26,3			20	213,3	85,3						
18	15	89,0	35,5	95,9	32	22	240,8	96,3	209,4					
	18	112,2	44,8			25	282,1	112,8						
	10	55,8	22,4			30	350,9	140,1						
20	12	73,1	29,2	104	35	32	378,1	151,1	225,8					
	15	98,9	39,6			20	233,3	93,3						
	20	141,2,9	56,8			22	263,4	105,4						

<sup>1</sup>  $C_s = 0,43 d (L-1,2-R \text{ max. } -E \text{ max.})$  kN - based on a unit pressure of 430 MPa. Values of  $r_1$  max. and  $l_2$  max. derived from the values of  $r_1$  and  $l_2$  given in table 1.

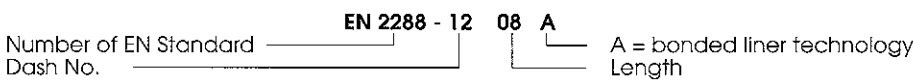
<sup>2</sup>  $C_{25} = \frac{C_s}{2,5}$  (kN)

<sup>3</sup>  $C_a = 0,34 ((A-1,5)^2 - (d+2,5)^2)$  kN

<sup>4</sup> Definitions for  $C_{25}$  and ultimate static loads, see of all loads are given in EN 2311.

### Designation

Each Journal bearing is designated as in the following example:



Procurement Specification EN 2311



# JOURNAL BEARINGS

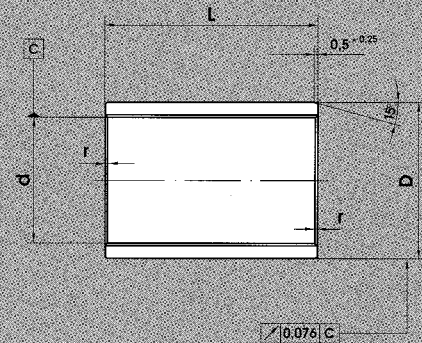
## FRASLIP lined.

**Series:** FBPA 1  
**Material:** EN 2136 (1.4044.6)  
**Liner:** FRASLIP

**Series:** NSA 8145  
**Material:** EN 2136 (1.4044.6)  
**Liner:** FRASLIP

**Series:** FBPA 2  
**Material:** EN 2086 (3.1924) anodised  
**Liner:** FRASLIP

**Series:** NSA 8146  
**Material:** EN 2086 (3.1924) anodised  
**Liner:** FRASLIP

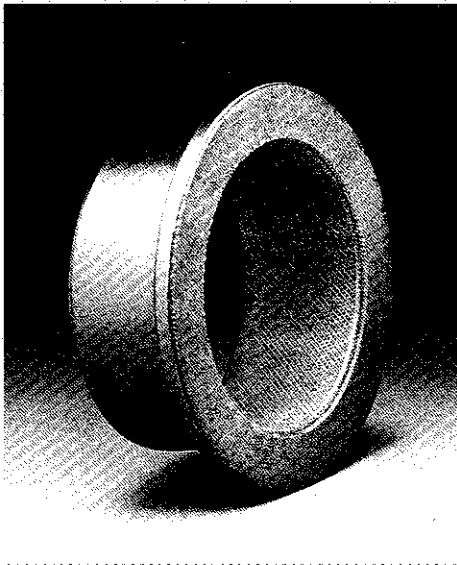


Dimensions in millimetres

Dash No.	Nominal Size				Length L -127 -381 µm																		
	mm	d	D	r	05	06	08	10	12	14	16	18	20	24	28	32	40	44	48	64	80	96	
04	6,35	6,380	9,550																				
		6,358	9,538																				
05	7,94	7,973	11,140																				
		7,950	11,128																				
06	9,52	9,563	12,730																				
		9,540	12,715																				
07	11,11	11,188	15,924																				
		11,164	15,900																				
08	12,70	12,741	17,496																				
		12,715	17,483																				
10	15,87	15,918	20,673																				
		15,893	20,660																				
12	19,05	19,101	23,848																				
		19,070	23,835																				
14	22,22	22,278	27,026																				
		22,248	27,013																				
16	25,40	25,456	30,201																				
		25,425	30,188																				
18	28,57	28,649	33,383																				
		28,608	33,368																				
20	31,75	31,821	38,148																				
		31,780	38,133																				
22	34,92	34,999	41,323																				
		34,958	41,308																				
24	38,10	38,174	44,498																				
		38,133	44,483																				
28	44,45	44,534	50,858																				
		44,493	50,841																				
32	50,80	50,889	57,208																				
		50,843	57,191																				







Procurement Specification MIL-B-8943

Load Ratings:

**for FBFA 1**

Static Radial Limit Load Rating  $C_s = 0,541 \cdot d \cdot (L-3,3)$  kN

Dynamic Radial Capacity  $C = 0,259 \cdot d \cdot (L-3,3)$  kN

Static Axial Limit Load Rating  $C_a = 0,34 \cdot ((A-1,5)^2 - (d+2,5)^2)$  kN

**for FBFA 2**

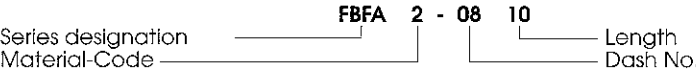
Static Radial Limit Load Rating  $C_s = 0,345 \cdot d \cdot (L-3,3)$  kN

Dynamic Radial Capacity  $C = 0,259 \cdot d \cdot (L-3,3)$  kN

Static Axial Limit Load Rating  $C_a = 0,16 \cdot ((A-1,5)^2 - (d+2,5)^2)$  kN

**Designation**

Each Journal bearing is designated as in the following example:

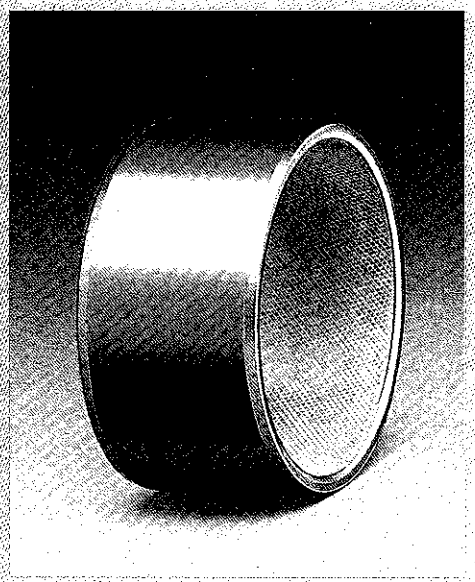
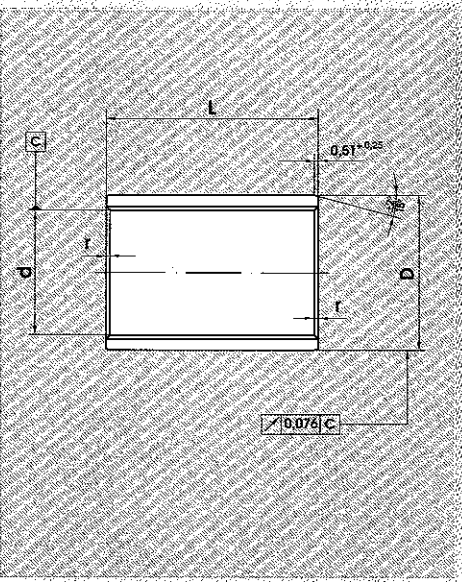


# JOURNAL BEARINGS

FRASLIP lined,  
according to MIL-B-81 934/1.

**Series:** FBPA...A...  
**Material:** 3.1354 anodised  
**Liner:** FRASLIP

**Series:** FBPA...C...  
**Material:** EN 2539 (1.4548.3)  
**Liner:** FRASLIP



Dash No.	Nominal Size	d	D	Δdmp μm	ΔDmp μm	ΔDmp μm	r	Length L <sup>0</sup> <sub>-250</sub> μm									
								005	006	008	009	010	011	012			
04	6,350	6,388	9,550														
05	7,930	7,975	11,140														
06	9,525	9,563	12,730														
07	11,112	11,150	14,320					3,96	4,75								
08	12,700	12,738	15,913														
09	14,287	14,325	17,505														
10	15,875	15,913	20,680														
11	17,462	17,500	22,268														
12	19,050	19,088	23,858														
14	22,225	22,263	27,038	-25													
16	25,400	25,438	30,221														
18	28,575	28,613	33,396														
20	31,750	31,788	36,571														
22	34,925	34,963	39,746														
24	38,100	38,138	44,508														
26	41,275	41,313	47,683														
28	44,450	44,488	50,858														
32	50,800	50,838	57,208														

Aluminium Alloy ± 12  
Corrosion Resistant Steel 0 -12



Load Ratings:

for FBPA...A...

Static Radial Limit Load Rating  $C_s = 0,345 \cdot d \cdot (L-2,54)$  kN

Dynamic Radial Capacity  $C = 0,259 \cdot d \cdot (L-2,54)$  kN

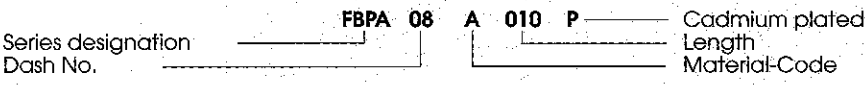
for FBPA...C...

Static Radial Limit Load Rating  $C_s = 0,541 \cdot d \cdot (L-2,54)$  kN

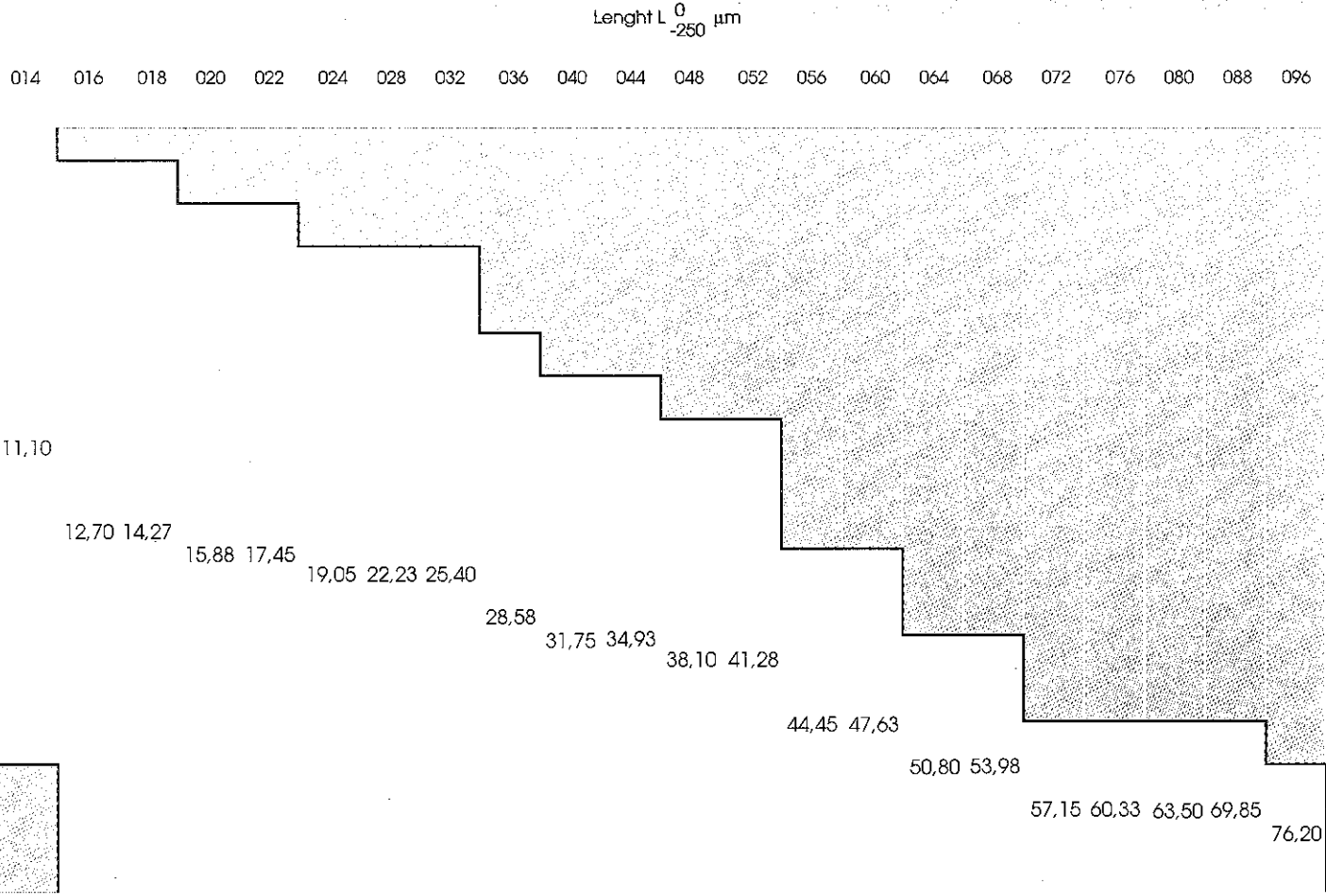
Dynamic Radial Capacity  $C = 0,259 \cdot d \cdot (L-2,54)$  kN

Designation

Each Journal bearing is designated as in the following example:



Dimensions in millimetres

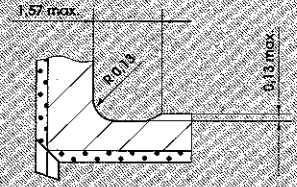
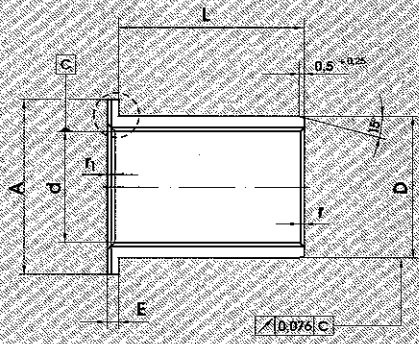


# JOURNAL BEARINGS

FRASLIP lined, flanged type,  
according to MIL-B- 81 934/2.

**Series:** FBFA...A...  
**Material Liner:** 3.1354 anodised FRASLIP

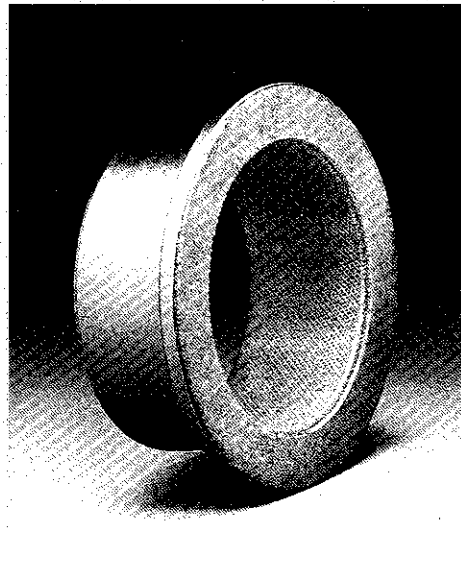
**Series:** FBFA...C...  
**Material Liner:** EN 2539 (1.4548.3) FRASLIP



Dash No.	Nominal Size		d	$\Delta$ dmp $\mu$ m	$r_1$	D	$\Delta$ Dmp $\mu$ m	$\Delta$ Dmp $\mu$ m	r	E	$\Delta$ Emp $\mu$ m	Length L $\mu$ m							
	A	mm										005	006	008	009	010	011	012	
04	6,350	19,050	6,388			9,550													
05	7,930	20,625	7,975			11,140													
06	9,525	22,225	9,563			12,730													
07	11,112	23,800	11,150			14,320					3,96	4,75							
08	12,700	25,400	12,738			15,913													
09	14,287	28,575	14,325			17,505				1,587			6,35	7,14			7,92	8,71	
10	15,875	31,750	15,913			20,680													
11	17,462	34,925	17,500			22,268													
12	19,050	38,100	19,088	0	1,40	23,858													9,53
14	22,225	41,275	22,263	-508	-25	max.	27,038		0,64		0								
16	25,400	44,450	25,438						max.		-127								
18	28,575	47,625	28,613																
20	31,750	50,800	31,788																
22	34,925	53,975	34,963																
24	38,100	57,150	38,138							2,380									
26	41,275	60,325	41,313																
28	44,450	63,500	44,488																
32	50,800	69,850	50,838																







Procurement Specification MIL-B-81 934/2

Load Ratings:

for **FBFA...A...**

Static Radial Limit Load Rating  $C_s = 0,345 \cdot d \cdot (L+E-3,3)$  kN

Dynamic Radial Capacity  $C = 0,259 \cdot d \cdot (L+E-3,3)$  kN

Static Axial Limit Load Rating  $C_a = 0,16 \cdot ((A-1,5)^2 - (d+2,5)^2)$  kN

for **FBFA...C...**

Static Radial Limit Load Rating  $C_s = 0,541 \cdot d \cdot (L+E-3,3)$  kN

Dynamic Radial Capacity  $C = 0,259 \cdot d \cdot (L+E-3,3)$  kN

Static Axial Limit Load Rating  $C_a = 0,34 \cdot ((A-1,5)^2 - (d+2,5)^2)$  kN

### Designation

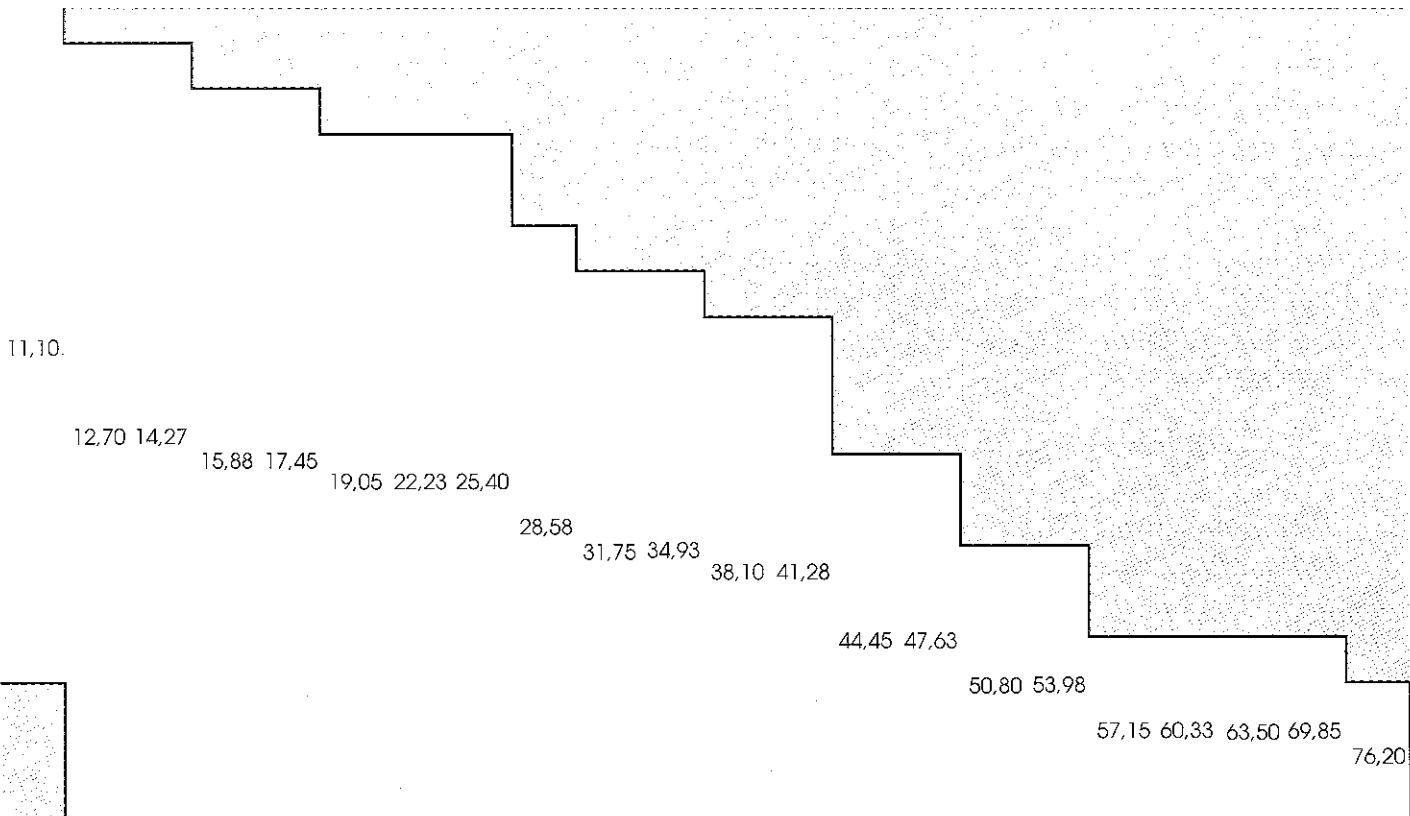
Each Journal bearing is designated as in the following example:

Series designation                      **FBFA 08** **A 010 P** – Cadmium plated  
 Dash No.                                                                Length Material-Code

Dimensions in millimetres

Length L  $\begin{matrix} 0 \\ -250 \end{matrix}$   $\mu\text{m}$

014 016 018 020 022 024 028 032 036 040 044 048 052 056 060 064 068 072 076 080 088 096





## Trading conditions

- 1. General**

All your quotations and deliveries are subject to the following conditions, even when the purchaser has prescribed other conditions. Any deviations or special arrangements made with our representatives are valid only when they are confirmed by our company in written. By accepting goods supplied by us, the purchaser is deemed to have accepted our conditions.
- 2. Acceptance of Order**

Orders are binding only after our written confirmation.  
Specials: Regarding specially manufactured bearings or bearing parts, we reserve the right to deliver a reasonable over-supply or under-supply of the quantity actually ordered.
- 3. Our Delivery Offers**

are to be considered only as approximate and without obligation. Even though fixed deliveries have been confirmed, no compensation can be claimed in the event of deliveries not being carried out as promised.
- 4. Prices**

are quoted without obligation. Invoices will be presented according to prices and discounts ruling at the date of delivery.
- 5. Packing**

will be charged.
- 6. Despatch**

The method of despatch is subject to special arrangements.
- 7. Settlement of Invoices**

Settlement must be effected at the latest upon receipt to our order confirmation. However, in each and every case, the purchaser must open with one of our bankers prior to delivery, an irrevocable and confirmed Letter of Credit.
- 8. Lien**

We reserve the right lien over the property of goods supplied until all our claims against the purchaser have been satisfied in the course of current business activities.
- 9. Guarantee**

For bearings supplied by us or by our Sales Organisation which fall within one year of being put into service or within 15 months after date of our despatch, whichever is the earliest, we give the following guarantee: Bearings must be proved to have failed or found faulty because of traceable material or production faults. In these cases we guarantee to furnish bearings partially or in the whole, or supply replacement bearings, free of charge. The method of satisfying a claim under guarantee remains with our discretion. We do not accept any claims for damage caused by unsuitable or improper application, faulty mounting or commissioning, neglect or faulty treatment or fair wear and tear. Regarding ancillary items not of our manufacture, or guarantee is limited to the assignment of our rights against the supplier. Any other claims outside the above guarantee are excluded.
- 10. Claims**

regarding quantity and condition of the cargo or faulty packing can be considered only within two weeks after receipt of the goods, otherwise the right to claim compensation is lost. We reserve the right for replacement/credit at our discretion in the event of justified and acknowledged claims.
- 11. Compensation, Replacement or Credit**

can be effected only after satisfactory determination of our liability by a detailed examination in our works, the purchaser being responsible for the costs of returning goods to our factory for this purpose. In emergencies replacements will be supplied and invoiced at the price ruling at the time of delivery and credit issued later only after determination of liability.
- 12. In the Event of Litigation**

of any nature, except where otherwise agreed by our company, the court in Neustadt/Aisch is mandatory. Providing nothing else has been arranged, German law prevails. It is at our discretion, however, to enter any claim or litigation at a court in the country of the purchaser.
- 13.**

the possible ineffectiveness of any single condition has no influence what so ever on the effectiveness of the other conditions.