5. ALLOWABLE LOAD FOR FBJ HOUSINGS

It is important, not only the dynamic and static load capacity of a bearing insert, but also to consider destruction strength of the hosing, before you select the correct bearing for your application.

FBJ has done extensive research on this and present below tables to ease your problems. Please note that, allowable load varies depending on load direction and type of the housing.

5.1 ALLOWABLE LOAD FOR P TYPE CAST IRON HOUSINGS

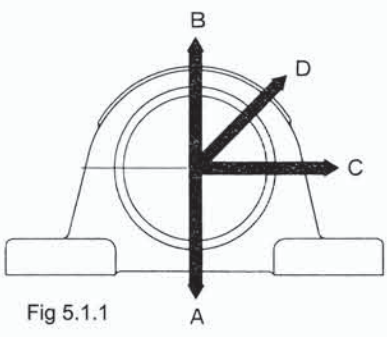

Fig 5.1.1

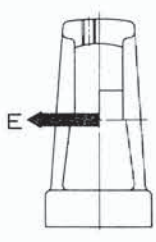

Fig 5.1.2

Table 5.1.1

Housing Number	Destruction Strength / (N) and Load Direction				
	A	B	C	D	E
P203	7100	3000	5000	2300	1100
P204	8100	3300	5600	2500	1700
P205	9400	3700	6100	2800	1800
P206	12000	5000	9000	3500	2200
P207	16000	6100	10000	4400	2400
P208	18000	6600	11000	4600	2500
P209	19000	7000	12000	4900	2600
P210	19000	7500	14000	5700	3200
P211	21000	8200	15000	6000	3400
P212	28000	11000	17000	7300	4400
P213	29000	12000	19000	8300	5100
P214	32000	12000	20000	8400	5600
P215	33000	13000	21000	9200	5800
P216	36000	15000	27000	11000	6600
P217	45000	17000	28000	12000	7500
P218	48000	19000	33000	13000	12000

Table 5.1.2

Housing Number	Destruction Strength / (N) and Load Direction				
	A	B	C	D	E
PX05	13000	5000	9000	3500	2300
PX06	17000	6200	10000	4500	3100
PX07	19000	6800	11000	4800	3400
PX08	20000	7500	13000	5300	3900
PX09	22000	8200	14000	5700	4200
PX10	25000	10000	16000	6900	5200
PX11	28000	11000	18000	7600	5600
PX12	30000	13000	20000	8800	6400
PX13	36000	13000	20000	9200	6700
PX14	37000	14000	23000	9800	7100
PX15	39000	18000	30000	13000	9200
PX16	43000	19000	31000	13000	9400
PX17	50000	21000	35000	15000	10000

Table 5.1.3

Housing Number	Destruction Strength / (N) and Load Direction				
	A	B	C	D	E
P305	15000	4500	7100	3400	2600
P306	18000	6100	8400	4200	3000
P307	20000	6300	11000	5400	3800
P308	22000	7500	12000	5700	4800
P309	27000	8500	15000	6800	6300
P310	34000	9800	16000	7100	7900
P311	36000	11000	23000	8000	8600
P312	32000	13000	24000	8900	9000
P313	37000	15000	25000	10000	9300
P314	40000	16000	27000	10000	9500
P315	43000	18000	30000	12000	11000
P316	47000	19000	35000	13000	12000
P317	49000	21000	36000	15000	13000
P318	55000	22000	38000	16000	13000
P319	60000	24000	42000	18000	14000
P320	68000	27000	56000	19000	17000

5.2 ALLOWABLE LOAD FOR FLANGE TYPE CAST IRON HOUSINGS

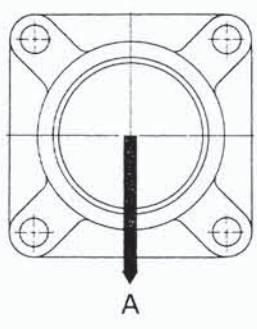

Fig 5.2.1

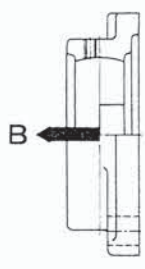

Fig 5.2.2

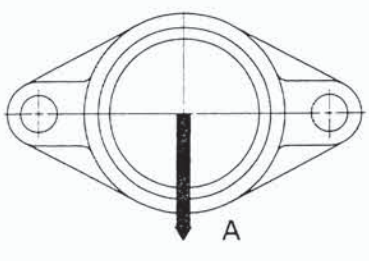

Fig 5.2.3

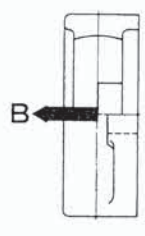

Fig 5.2.4

Table 5.2.1

Housing Number		Destruction Strength / (N) and Load Direction			
		F2		FL2	
		A	B	A	B
F204	FL204	4300	1800	2400	1200
F205	FL205	6700	2500	3800	1600
F206	FL206	6700	3000	3800	2000
F207	FL207	6500	3600	4100	2300
F208	FL208	7100	3900	4100	2700
F209	FL209	10000	4700	6200	3200
F210	FL210	10000	5000	6200	3900
F211	FL211	9200	5700	7400	4400
F212	FL212	9200	6200	8800	4800
F213	FL213	17000	6900	9800	6200
F214	FL214	19000	7600	10000	7000
F215	FL215	19000	8000	11000	7200
F216	FL216	17000	8600	13000	8600
F217	FL217	21000	9500	14000	9400
F218	FL218	25000	11000	14000	14000

Table 5.2.2

Housing Number		Destruction Strength / (N) and Load Direction			
		FX		FLX	
		A	B	A	B
FX05	FLX05	6700	3100	3100	2300
FX06	FLX06	5000	3800	2800	2900
FX07	FLX07	6600	4300	3000	3700
FX08	FLX08	7200	4800	3800	4100
FX09	FLX09	7200	5200	4100	5300
FX10	FLX10	10000	5800	5100	5700
FX11		10000	6600		
FX12		16000	7800		
FX13		16000	8000		
FX14		19000	8900		
FX15		21000	8500		
FX16		19000	10000		
FX17		19000	10000		

Table 5.2.3

Housing Number		Destruction Strength / (N) and Load Direction			
		F3		FL3	
		A	B	A	B
F305	FL305	7200	3500	3800	2100
F306	FL306	8300	4400	6800	2300
F307	FL307	10000	5100	6600	2800
F308	FL308	13000	6100	6400	3700
F309	FL309	11000	6600	9900	4000
F310	FL310	15000	7900	11000	5500
F311	FL311	17000	7800	11000	5900
F312	FL312	19000	9700	12000	6100
F313	FL313	17000	9000	12000	8300
F314	FL314	23000	9800	17000	8700
F315	FL315	27000	11000	15000	9500
F316	FL316	24000	12000	20000	11000
F317	FL317	27000	13000	20000	7500
F318	FL318	34000	14000	23000	14000
F319	FL319	32000	17000	27000	19000
F320	FL320	38000	18000	28000	20000

5.3 ALLOWABLE LOAD FOR TAKE UP UNIT CAST IRON HOUSINGS

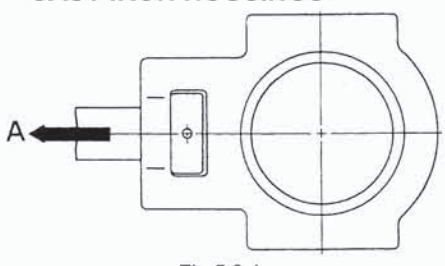

Fig 5.3.1

Table 5.3.1

Housing Number			Destruction Strength / (N) and Load Direction		
			T2	TX	T3
			A	A	A
T204			3400		
T205	TX05	T305	3800	4100	5300
T206	TX06	T306	4100	5700	6200
T207	TX07	T307	5800	7800	7100
T208	TX08	T308	8200	7800	8100
T209	TX09	T309	7800	8500	9300
T210	TX10	T310	8600	9400	11000
T211	TX11	T311	9700	11000	12000
T212	TX12	T312	10000	13000	13000
T213	TX13	T313	13000	13000	15000
T214	TX14	T314	13000	13000	17000
T215	TX15	T315	13000	13000	18000
T216	TX16	T316	14000	15000	20000
T217	TX17	T317	16000	16000	21000
		T318			25000
		T319			27000
		T320			32000

5.4 ALLOWABLE LOAD FOR PEDASTAL TYPE CAST IRON HOUSINGS

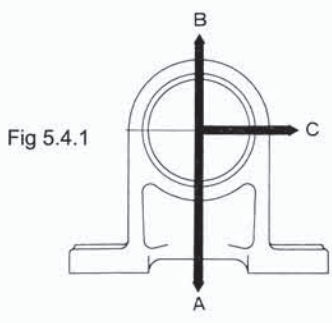

Fig 5.4.1

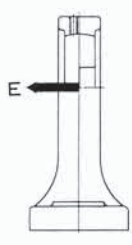

Fig 5.4.2

Table 5.4.1

Housing Number	Destruction Strength / (N) and Load Direction			
	A	B	C	E
PH204	8000	2700	1800	1700
PH205	9200	3000	2000	1800
PH206	11000	4100	2800	2200
PH207	15000	4900	3200	2400
PH208	17000	5300	3500	2500
PH209	18000	5700	3900	2600
PH210	19000	6100	4400	3200
PH211	20000	6500	5000	3600
PH212	21000	7000	5500	4000
PH213	22000	7700	6000	4600
PH214	24000	8300	6600	5200
PH215	26000	9000	7400	6000
PH216	28000	9800	8000	6600

5.5 ALLOWABLE LOAD FOR ALL PRESSED STEEL HOUSINGS

Load capacity of, every pressed steel type housing is to be as follows.

Load capacity of radial direction = Basic Dynamic Load / 6
Load capacity of thrust direction = Basic Dynamic Load / 18

5.6 ALLOWABLE LOAD FOR THERMO-PLASTIC HOUSINGS

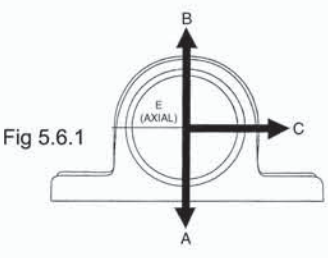

Fig 5.6.1

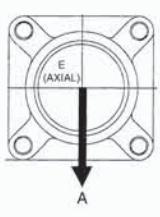

Fig 5.6.2

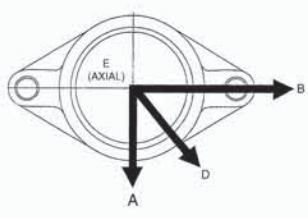

Fig 5.6.3

Table 5.6.1

Housing Number	DESTRUCTION STRENGTH / (N) and Load Direction									
	SPP				SPF		SPFL			
	A	B	C	E	A	E	A	B	D	E
204	16600	5600	7000	3000	14700	340	7400	5600	6600	3300
205	19600	5800	7400	3200	15700	340	7600	8000	8400	3300
206	28300	6000	8600	4000	17600	340	8500	10800	10300	3300
207	38300	6600	10300	5700	18100	350	10700	13800	12200	3400
208	44500	11100	12100	8500	18600	380	15100	17300	14000	3700
209	50000	11800	13800	9600	19600	420	18300	21000	16000	4100
210	54000	12400	15200	10900	21040	530	21000	24600	18500	4800
211	60000	13100	16300	11700	23500	670	25320	29200	21000	5300
212	68000	14000	17400	13400	27000	780	28400	33400	24000	6100