

CYLINDRICAL ROLLER BEARINGS

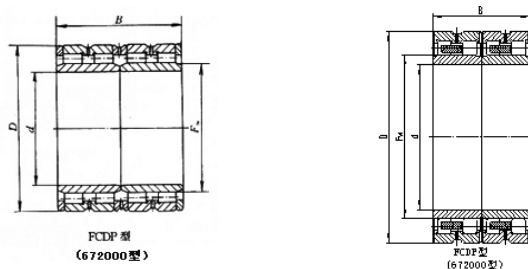
Cylindrical roller bearings belong to the separate type bearings, whose roller and raceway is linear contact and whose radial load capacity is greater applying to heavy load and shock load and high speed conditions. the mounting and dismounting of such bearing is more convenient, when the requirements of inner and outer ring interference fit, its advantages are demonstrated. this bearing can be classified into single-row, double-row, four-row cylindrical roller bearings according to the rows of rollers. In addition, there are Cylindrical roller bearings with a full complement of rollers and other arrangements, one of which is the most widely used --single row cylindrical roller bearing with cage.

Four-row cylindrical roller bearing has the advantages of larger radial carrying capacity, high precision of rotating, convenience of mounting and dismounting, but it can not withstand axial load. because of the inner ring without ribs, inner and outer ring components can be installed (with full sets of rollers and cages). This bearing can be classified into FC type, FCD type and FCDP type, mainly used in the heavy machinery (hot and cold roller mill, bloomers and other heavy machineries) as working roll and backup roll.

cylindrical roller bearings with Full complement of rollers have two types: single-row (NCF) and double-row (NNCF) full complement of roller cylindrical roller bearings because such bearings have no cage and have larger number of rollers, their carrying capacity is large, but the high speed performance is poor, generally used in low speed and heavy load application.

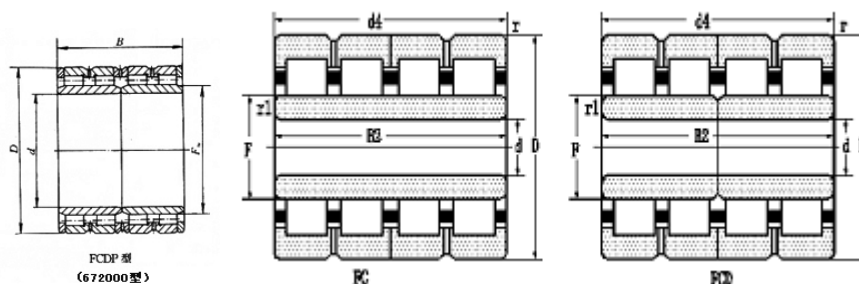
The cage of cylindrical roller bearing, when its outer diameter $D \leq 400\text{mm}$, generally use pressed steel plate (or belt) cage, when $D > 400\text{mm}$, use steel or brass machined solid cage; four-row cylindrical roller bearings use brass cage or pin column cage.

FOUR ROW CYLINDRIACAL ROLLER BEARINGS d150-180mm



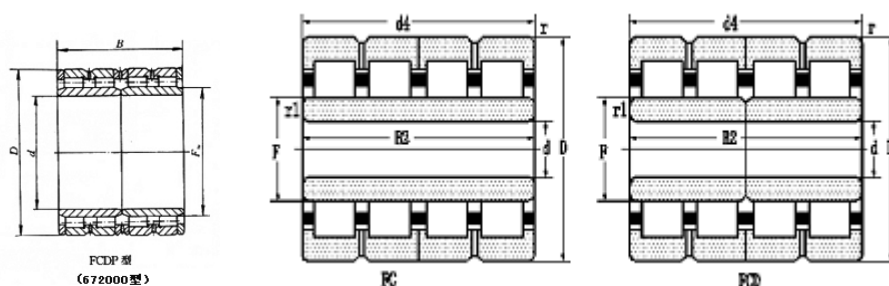
Principle dimensions	Basic load ratings				Speed ratings	Old spec.	Designations	Weight			
	d	D	B	r _{1smin}					r _{2min}	Dyc	Stc
	mm				KN		r/min				kg
150	230	156	174	2	815	1660	2000	2600	672730	FC3046156	23.5
	230	156	174	2	910	1900	2000	2600		SFC3046156	23.2
160	225	168	183	2	1950	2300	2000	2600		FC3245168	-
	230	130	180	2.1	640	1610	2000	2600		FC3246130	18.7
	230	130	180	2.1	720	1500	2000	2600		SFC3246130	18.5
	230	168	180	3	820	2220	2000	2600	672832	-	24.2
	230	168	179	2.1	890	2270	2000	2600		FC3246168	22.2
	230	168	180	2.1	910	2070	2000	2600		SFC3246168	22
	240	124	183	2.1	670	1500	1900	2400	672732k	FC3248124	20.6
	240	124	183	2.1	780	1800	1900	2400		SFC3248124	20.6
	240	168	183	2.1	955	2330	1900	2400	672732	FC3248168	27.6
	240	168	183	2.1	955	2330	1900	2400		FCD3248168	26
	260	168	183	2.1	955	2330	1800	2300		FC3252168	38.2
170	230	130	188.5	2.1	680	1700	1900	2400		FC3446130	16.3
	230	180	186	2	700	2000	1900	2400		FC3446180	22.7
	240	130	190	2	830	1800	1800	2300		FC3448130	-
	250	170	192	2	1000	2400	1800	2200	672734	FC3450170	29.9
	250	170	192	2.1	1050	2700	1800	2200		SFC3450170	29.5
	260	120	195	2.1	880	1770	1800	2200	672734k	FC3452120	24.2
	260	120	195	2.1	870	1770	1800	2200		FC3452120	-
	260	150	195	2.1	860	1900	1800	2200	672834	FC3452150	30.2
	260	170	196	2.1	1080	2460	1800	2200		FC3452170	34.9
	260	170	196	2.1	1050	2300	1800	2200		SFC3452170	-
	260	225	196	2.1	1270	3350	1800	2200		FC3452225	-
180	250	120	200	2.1	600	1580	1800	2200		FC3650120	19
	250	130	200	2.1	740	1750	1800	2200		FC3650130	20.7
	250	156	200	2.1	710	1900	1800	2200		FC3650156	24.7
	250	156	200	2.1	900	2400	1800	2200		SFC3050156	24.5
	260	120	202	2.1	690	860	1800	2200	672836	FC3652120	20
	260	124	202	2.1	720	1650	1800	2200		FC3652124	22.6

FOUR ROW CYLINDRICAL ROLLER BEARINGS d180-200mm



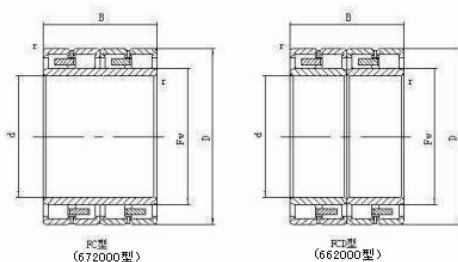
Principle dimensions	Basic load ratings		Speed ratings		Old spec.	Designations	Weight					
	d	D	B	F _w				r _{2min}	Dyc Cr	Stc Cor	Grease	oil
mm					KN		r/min			kg		
180	260	124	202	2.1	875	1900	1800	2200	672736	SFC3652124	22.3	
	260	154	202	2.1	980	2200	1800	2200		FC3652154	28.2	
	260	160	202	2.1	900	2200	1800	2200		FC3652160	29.2	
	260	168	202	2.1	1100	2500	1800	2200		SFC3652168	30.5	
	260	168	202	2.1	985	2500	1800	2200		FC3652168	30.7	
	260	168	202	2.1	985	2500	1800	2200		FCD3652168	30	
	260	180	202	2.1	1100	2560	1800	2200		FC3652180	32.9	
	260	180	202	2.1	1000	2600	1800	2200		SFC3652180	32.6	
	280	180	207	2.1	1220	2580	1700	2000		FC3656180	43.4	
	280	180	207	2.1	1200	2760	1700	2000		SFC3656180	43	
190	260	168	212	2.1	880	2560	1700	2000	1572838K	FC3852168	27.9	
	265	124	213	2.1	820	1900	1700	2000		FC3853124	22.1	
	270	124	212	2.1	820	1900	1700	2000		FC3854124	24.2	
	270	168	212	2.1	1000	2450	1700	2000		-	32.7	
	270	168	212	2.1	1050	2700	1700	2000		FC3854168	32	
	270	170	213	2.1	890	2400	1700	2000		FC3854170	33	
	270	200	212	2.1	950	2400	1700	2000		672738	FC3854200	38
	270	200	212	2.1	1300	3150	1700	2000			SFC3854200	38.2
	280	200	214	2.1	1500	3350	1700	2000		FC3856200	-	
	200	270	120	222	2.1	615	1600	1600		1900	672940	FC4054120
270		170	222	2.1	830	2350	1600	1900	FC4054170	29.5		
280		170	222	2.1	1000	2700	1600	1900	FC4056170	31.5		
280		188	222	2.1	1140	3100	1600	1900	FC4056188	35		
280		200	222	2.1	1020	2690	1600	1900	FC4056200	39.9		
280		200	224	2.1	1150	2770	1600	1900	-	39.9		
290		130	226	2.1	840	1950	1600	1900	672740	FC4058130		29.9
290		192	226	2.1	1073	2950	1600	1900		FC4058192		41.7
290		192	226	2.1	1240	3250	1600	1900	FCD4058192	41.4		
290		202	226	2.1	1250	3250	1600	1900	FC4058202	43.5		
320		216	233	2.1	1580	3600	1500	1800	FC4064216	66		

FOUR ROW CYLINDRICAL ROLLER BEARINGS d210-250mm



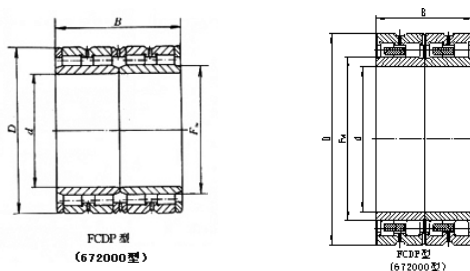
Principle dimensions	Basic load ratings		Speed ratings		Old spec.	Designations	Weight					
	d	D	B	F _w				r _{2min}	Dyc Cr	Stc Cor	Grease	oil
mm					KN		r/min				kg	
210	290	192	234	2.1	1035	3000	1500	1800	672742	FC4258192	40.6	
	300	170	234	2.1	1035	2800	1500	1800		FC4260170	41.4	
	300	210	234	2.1	1300	3000	1500	1800		SFC4260210	50.3	
	300	210	234	2.1	1400	3400	1500	1800		FCD4260210	50.5	
	300	210	234	2.1	1300	3000	1500	1800		FCD4260210	50	
220	300	192	242	2.1	1085	3300	1400	1700	672944	FC4460192	41.5	
	310	157	246	2.1	935	2500	1400	1700		FC4462157	39.7	
	310	157	246	2.1	1135	2630	1400	1700		SFC4462157	39.5	
	310	190	246	2.1	1285	3500	1400	1700		FC4462190	47.2	
	310	192	246	2.1	1345	3200	1400	1700		SFC4462192	48.5	
	310	192	246	2.1	1105	3100	1400	1700		672744	FC4462192	48.6
	310	225	245	2.1	1470	4100	1400	1700			FC4462225	52.5
	320	210	248	2.1	1320	3500	1400	1700		FC4464210	59.8	
	330	230	249	2.1	1720	4300	1300	1600		FC4466230	67.5	
	340	192	246	2.1	1600	3440	1300	1600		672844	-	65.6
340	192	246	2.1	1820	3600	1300	1600	SFC4468192	65.5			
230	330	170	260	2.1	1145	2900	1300	1600	672746	FC4666170	50.2	
	330	206	260	2.1	1410	3800	1300	1600		FC4666206	60.8	
	340	260	261	2.1	1920	5300	1300	1600		FC4668260	81	
	340	260	261	2.1	1920	5300	1300	1600		FCD466826	80	
	365	250	266	3	2400	4900	1300	1600		FC4673250	-	
240	330	220	246	2.1	1840	4890	1300	1600	672748	FC4866220	58.4	
	330	220	246	2.1	1840	4890	1300	1600	FCD4866220	58		
	340	192	266	2.1	1220	3150	1300	1600	672748k	-	58	
	340	192	266	2.1	1220	3150	1300	1600		FC4868192	58	
	350	220	270	2.1	1630	4200	1300	1600	FCD4870220	70		
	360	220	272	2.5	1800	4600	1200	1500	FC4872220	83		
250	340	170	274	3	1145	3280	1200	1500		FC5068170	47.9	
	340	170	274	3	1145	3280	1200	1500		FCD5068170	47	

FOUR ROW CYLINDRICAL ROLLER BEARINGS d250-280mm



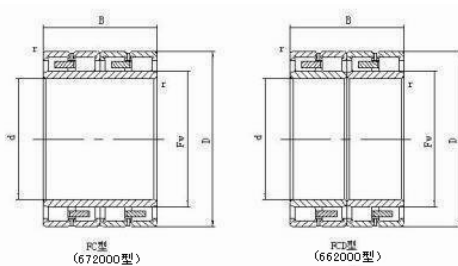
Principle dimensions	Basic load ratings		Speed ratings		Old spec.	Designations	Weight				
	d	D	B	F _w				r _{2min}	Dyc	Stc	Grease
mm					KN		r/min			kg	
250	350	220	278	3	1740	4400	1200	1500	672750	SFC5070220	69.5
	350	220	278	3	1350	3800	1200	1500		FC5070220	727
	350	220	278	3	1350	3800	1200	1500		FCD5070220	72
	350	230	278	3	1350	3800	1200	1500		FC5070230	74
	360	160	282	3	1080	2780	1100	1400		FC5072160	57
	360	220	282	3	1500	4200	1100	1400	672750K	FC5072220	78.5
	360	220	282	3	1800	4600	1100	1400		SFC5072220	78.5
260	360	192	288	3	1275	3450	1100	1400		FC5272192	62.3
	360	192	288	3	1500	3750	1100	1400		SFC5272192	62
	360	200	288	3	1485	4200	1100	1400		FC5272200	64.9
	370	200	292	3	1410	4050	1100	1400	672752K	FC5274200	74.2
	370	220	292	3	1520	4350	1100	1400		672752	FC5274220
	370	220	292	3	1900	4900	1100	1400		SFC5274220	73.5
	370	230	292	3	1550	4380	1100	1400		FC5274230	78.6
	380	220	292	3	1520	4350	1100	1400	672752Y	FC5276220	91.2
	380	280	294	3	2300	6600	1100	1400		FCD5276280	107
	380	280	295	3	1970	5700	1100	1400	672852	-	114.5
	400	200	296	4	1800	4050	1000	1300		FC5280200	956
	400	290	296	4	2710	7100	1000	1300		FCD5280290	95.4
270	380	230	298	3	2080	5170	1000	1300		SFC5476230	85
	380	230	298	3	1725	4550	1000	1300	672754	FC5476230	85.3
	380	275	298	3	2240	6400	1000	1300		FC5476275	96
	390	220	306	3	1840	5000	1000	1300		FC5478220	86
	390	240	298	3	2150	5450	1000	1300		FC5478240	91.5
	390	240	298	3	2410	5680	1000	1300		FC5478240	-
	400	220	305	3	1835	4570	1000	1300		FC5480220	100
280	375	200	307	3	1480	4300	1000	1300	672956	FC5675200	65.1
	380	192	310	3	1430	4100	1000	1300		FC5676192	61.5
	380	290	308	3	1890	5830	1000	1300		FC5676290	100
	380	290	308	3	1890	5830	1000	1300		FCD5676290	100

FOUR ROW CYLINDRIACAL ROLLER BEARINGS d280-320mm



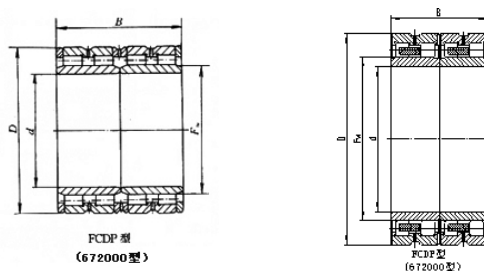
Principle dimensions					Basic load ratings		Speed ratings		Old spec.	Designations	Weight
d	D	B	F _w	r _{2min}	Dyc Cr	Stc Cor	Grease	oil			
mm					KN		r/min				kg
280	390	220	312	3	1800	5350	1000	1300	672756	FC5678220	85.1
	390	220	312	3	1800	5350	1000	1300		FCD5678220	85
	390	240	312	3	1765	5200	1000	1300		FC5678240	93.4
	390	275	312	3	2240	6500	1000	1300		FC5678275	101
	390	275	308	3	2250	6500	1000	1300		FCD5678275A	105.1
	420	280	318	3	2430	6350	950	1200		FCD5684280	143.4
290	400	180	320	4	1460	4000	950	1200	672758	FC5880180	67
	410	240	320	4	2100	5670	950	1200		FC5882240	105
	410	240	320	4	2100	5670	950	1200		FCD5882240	105
	410	240	320	4	2300	6200	950	1200		SFC5882240	104
	420	300	327	4	2840	8200	950	1200		FCD5884300	137
300	420	218	332	4	1940	5280	900	1100	672760	FC6084218	91.5
	420	240	332	4	2060	5650	900	1100		FC6084240	107.8
	420	240	332	4	2225	5750	900	1100		FCD6084240	107.5
	420	300	332	4	2310	6565	900	1100		FCD6084300	134.7
	420	300	332	4	2310	6565	900	1100		FCDF6084300	134.7
310	430	240	344.5	4	2150	6300	900	1100		FCD6286240	106
320	440	240	351	4	2120	3100	850	1000		FC6488240	113.9
	440	240	351	4	2120	3100	850	1000		FCD6488240	113.9
	440	300	352	3	2530	7660	850	1000		FCD6488300	142.3
	450	240	355	3	2145	5860	850	1000		FC6490240	125.3
	450	240	355	3	2145	5860	850	1000		FCD6490240	125
	460	280	357	4	2450	6500	800	1000		FC6492280	159
	460	300	357	4	2800	8000	800	1000		FCD6492300	164
	460	340	357	4	2900	8100	800	1000		FCD6492340	193.1
	480	290	364	4	3170	8350	800	1000		FCD6496290	185
	480	350	364	4	3710	10200	800	1000		FCD6496350	224
480	350	364	4	3710	10200	800	1000		FCDF6496350	224	

FOUR ROW CYLINDRIACAL ROLLER BEARINGS d330-410mm



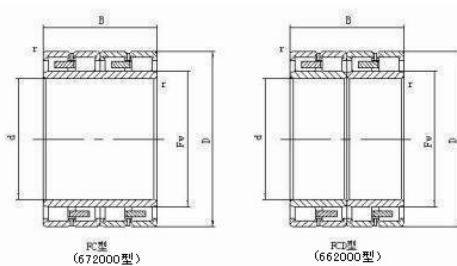
Principle dimensions	Basic load ratings		Speed ratings		Old spec.	Designations	Weight				
	d	D	B	F _w				r _{2min}	Dyc	Stc	Grease
mm					KN		r/min			Kg	
330	460	340	365	4	2790	8260	800	1000		FCD6692340	182
	460	340	365	4	3190	9800	800	1000		FCDP6692340	182
340	450	250	366	4	2165	6300	800	1000		FC6890250	113
	450	250	369	4	2045	6130	800	1000		FCD6890250A	112.6
	460	260	370	4	2135	5950	800	1000		FC6892260	128.2
	460	260	370	4	2135	5950	800	1000		FCD6892260	128
	480	280	374	4	2840	7800	750	950		FCD6896280	159
	480	350	378	4	3270	9480	750	950		FCD6896350	207
	480	350	378	4	3270	9480	750	950		FCDP6896350	207
350	500	380	389	5	3800	11400	700	900		FCD70100380	242
	520	300	401	5	3300	9000	700	900		FCD70104300	223
360	500	250	394	4	2480	6730	700	900		FCD72100250	146
	510	370	397	4	3760	5650	700	900		FCD72102370A	240
	510	380	399	4	4020	12070	700	900		FCD72102380	247
	520	380	405	4	4120	12520	700	900		FCD72104380	271
370	520	380	409	1.5	4160	12300	670	830		FCDP74104380	260.5
	540	400	416	4	3970	11200	670	830		FCD74108400	322.4
380	540	380	422	4	3770	10930	630	800		FCD76108380	291
	540	400	422	4	4100	12000	630	800		FCD76108400	-
	540	400	422	2	4490	14000	630	800	672772	FCDP76108400	-
390	540	320	431	2	4065	12200	-	-		FCDP78108320	-
	550	310	430	4	3940	11200	-	-		FCDP8110310	-
400	560	410	445	2	4825	15600	-	-		FCDP80112410	-
	590	440	450	5	5570	16600	-	-		FCD80118440	-
410	560	400	450	2	4950	16000	-	-		FCDP82112400	-
	600	440	460	2	5900	17300	-	-		FCDP82120440	-

FOUR ROW CYLINDRICAL ROLLER BEARINGS d420-530mm



Principle dimensions	dimensions				Basic load ratings		Speed ratings		Old spec.	Designations	Weight
	d	D	B	F _w	r _{2min}	Dyc Cr	Stc Cor	Grease oil			
mm					KN		r/min				kg
420	580	260	468	4	2880	9650	-	-	-	FCD84116260	-
	580	320	463	4	3600	10800	-	-	-	FCD84116320	-
	600	440	470	2	5550	17600	-	-	-	FCDP84120440	-
	620	400	473	4	5330	15600	-	-	-	FCD84124400	-
440	620	450	487	2	6000	19600	-	-	-	FCDP88124450	-
	650	355	494	4	5200	14000	-	-	-	FCDP88130355	-
450	590	300	490	4	3000	12000	-	-	-	FCDP90118300	-
460	650	424	510	3	6000	18300	-	-	-	FCDP92130424	-
	650	470	509	3	6770	22400	-	-	-	FCDP2130470	-
480	650	450	525	2	6350	21200	-	-	-	FCDP96130450	-
	680	420	528	3	6400	19300	-	-	-	FCDP96136420	-
	680	500	532	3	7325	22400	-	-	-	FCDP96136500	-
500	650	260	542	5	-	-	-	-	-	FCD100130260	-
	670	450	540	5	5345	17500	470	580	580	FCDP100134450	463
	680	405	550	5	5495	16500	470	580	580	FCD100136405	453
	680	450	550	2	6350	22000	-	-	-	FCDP100136450	-
	710	480	558	5	6160	21600	-	-	-	FCD100142480	-
	720	400	558	5	6100	17600	-	-	-	FCD100144400	-
	720	530	568	5	6200	19850	440	540	540	FCD100144530	756
510	680	500	560	5	6900	26000	-	-	-	FCDP102136500	-
	730	520	569	6	7300	22000	-	-	-	FCD102146520	-
	760	550	570	3	9300	26500	-	-	-	FCDP102152550	-
530	760	520	587	5	9000	28500	-	-	-	FCD106152520	-
	780	500	591	6	7200	20400	-	-	-	FCD16156500	-
	780	570	601	3	9850	32500	-	-	-	FCDP106156570	-

FOUR ROW CYLINDRIACAL ROLLER BEARINGS d550-730mm



Principle dimensions	Basic load ratings		Speed ratings		Old spec.	Designations	Weight				
	d	D	B	F _w				r _{2min}	Dyc	Stc	Grease
mm					KN		r/min			kg	
550	740	510	600	2	7800	27000	-	-		FDDP110148510	-
	800	520	612	6	9000	26500	-	-		FCDP110160520	-
	800	560	610	6	9300	28000	-	-		FC110160560	-
570	750	530	622	5	6750	25200	390	480	6727/570	-	663
600	820	575	600	4	10000	26000	-	-		FCDP120164575	-
	870	540	672	4	10150	31500	-	-		FCDP120174540	-
	870	640	672	4	12000	40000	-	-		FCDP120174640	-
610	820	430	665	3	7200	23600	-	-		FCDP122164430	-
650	900	650	704	7.5	13230	41500	-	-		FCDP130180650	-
	920	670	723	4	13230	46500	-	-		FCDP130184670	-
660	820	440	702	4	5745	22800	-	-		FCD132164440	-
	880	450	727	6	5550	23600	-	-		FCD132176450	-
680	940	600	743	4	16900	53400	-	-		FCDP136188600	-
	980	640	760	4	13250	41800	-	-		FCDP136196640	-
690	980	715	767.5	4	15230	51300	-	-		FCDP138196715	-
	980	750	766	5	17000	53000	-	-		FCDP138196750	-
700	930	620	763	3	11600	40850	-	-		FCDP140186620	-
	980	700	774	6	17800	48200	-	-		FCDP14019670C	-
710	1000	715	787.5	4	15400	53200	-	-		FCDP142200715	-
730	940	500	780	3	10150	42500	-	-		FCDP146188500	-
	960	620	790	3	11800	48750	-	-		FCD146192620	-
	1030	750	809	6	1600	55500	-	-		FCDP146206750	-

