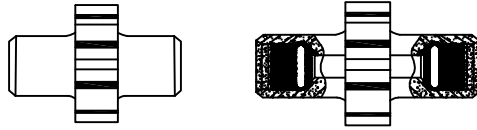


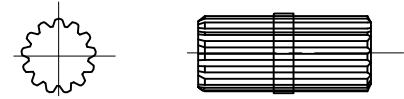
# IFP IP3100/IP5100/IP7600 MATCHED GEAR SETS&SHAFTS



## MATCHED GEAR SET



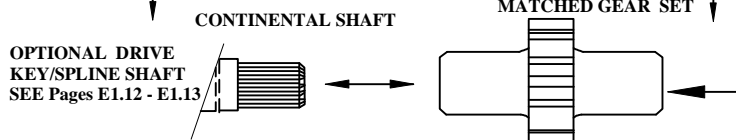
## CODE 1 CONNECTING SHAFT



GEAR WIDTH CODE	GEAR WIDTH INCHES	IP3100	IP5100	IP7600
		SHAFT & GEAR PART NUMBER	SHAFT & GEAR PART NUMBER	MATCHED GEAR SET PART NUMBER
05	1/2"	312-2805-000N	//	//
07	3/4"	312-2807-000N	313-2807-000N	316-2807-000N
10	1"	312-2810-000N	313-2810-000N	316-2810-000N
12	1 1/4"	312-2812-000N	313-2812-000N	316-2812-000N
15	1 1/2"	312-2815-000N	313-2815-000N	316-2815-000N
17	1 3/4"	312-2817-000N	313-2817-000N	316-2817-000N
20	2"	312-2820-000N	313-2820-000N	316-2820-000N
22	2 1/4"		313-2822-000N	316-2822-000N
25	2 1/2"		313-2825-000N	316-2825-000N
27	2 3/4"			316-2827-000N
30	3"			316-2830-000N

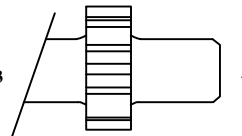
IP 3100 CONNECTING SHAFT	312 - 1133 - 001N
IP 5100 CONNECTING SHAFT	313 - 1133 - 001N
IP 7600 CONNECTING SHAFT	316 - 1133 - 001N

### TWO PIECE SHAFT & GEAR ASSEMBLY

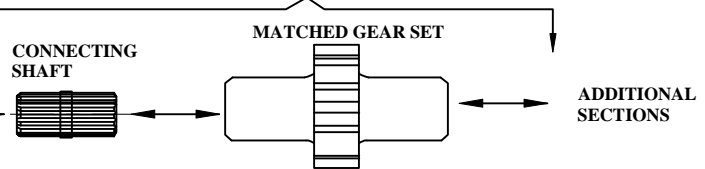


### ONE PIECE SHAFT & GEAR ASSEMBLY

OPTIONAL DRIVE KEY/SPLINE SHAFT  
SEE Pages E1.12 - E1.13



### ADDER FOR MULTIPLE SECTION PUMPS



### SHAFT & GEAR PART NUMBER NOMENCLATURE

31\* - 29\*\* - xxx N

312-IP3100 SERIES  
313-IP5100 SERIES  
316-IP7600 SERIES

GEAR WIDTH CODE	GEAR WIDTH INCHES	GEAR WIDTH CODE	GEAR WIDTH INCHES
05	1/2"	20	2"
07	3/4"	22	2 1/4"
10	1"	25	2 1/2"
12	1 1/4"	27	2 3/4"
15	1 1/2"	30	3"
17	1 3/4"		

DRIVE SHAFT CODE	
122	5/8" Ø - 9TH SPLINE
230	7/8" Ø - 13TH SPLINE
250	1 1/4" Ø - 14TH SPLINE
730	7/8" Ø - 1/4" KEYED
740	1" Ø - 1/4" KEYED
750	1 1/4" Ø - 5/16" KEYED

### MATCHED GEAR PART NUMBER NOMENCLATURE

31\* - 28\*\* - 000 N

312-IP3100 SERIES  
313-IP5100 SERIES  
316-IP7600 SERIES

GEAR WIDTH CODE	GEAR WIDTH INCHES	GEAR WIDTH CODE	GEAR WIDTH INCHES
05	1/2"	20	2"
07	3/4"	22	2 1/4"
10	1"	25	2 1/2"
12	1 1/4"	27	2 3/4"
15	1 1/2"	30	3"
17	1 3/4"		

### PL CHART

SHAFT STYLE	INTEGRAL SHAFT&GEAR	TWO PIECE STYLE
IP30 / 31		
SAE "A" SPLINE	2,600	2,600
SAE "B" SPLINE	7,900	5,850
SAE "B" KEY	4,800	4,850
SAE "BB" SPLINE	12,150	
SAE "BB" KEY	5,850	5,850
SAE "C" SPLINE	--	8,850
CONNECTING SHAFT	--	5,850
IP50 / 51		
SAE "B" SPLINE	6,100	6,100
SAE "B-B" SPLINE	9,400	--
SAE "B-B" KEY	5,600	5,600
SAE "C" SPLINE	12,900	8,500
SAE "C" KEY	10,900	8,500
CONNECTING SHAFT	--	8,500
IP75 / 76		
SAE "C" SINGLE	8,000	8,000
SAE "C" TANDEM	12,500	--
SAE "C" KEY	7,500	7,500
CONNECTING SHAFT	--	10,000

### PL FACTOR

Each section of a multiple pump or motor should be regarded as a single unit with corresponding delivery and power input requirements. Since the entire input horsepower is fed through a common drive shaft, the power delivered to or from the unit is limited by the physical strength of the shaft. This limit is defined as a "PL" factor; "P" being the operating pressure and "L" the summation of gear widths.

In multiple units the "PL" must be calculated for the first connecting shaft as well as the drive shaft. Each style or type of shaft has a unique "PL" factor as noted in the table below.

Pressure X total gear width = PL

PL must not exceed number shown in Chart for appropriate shaft