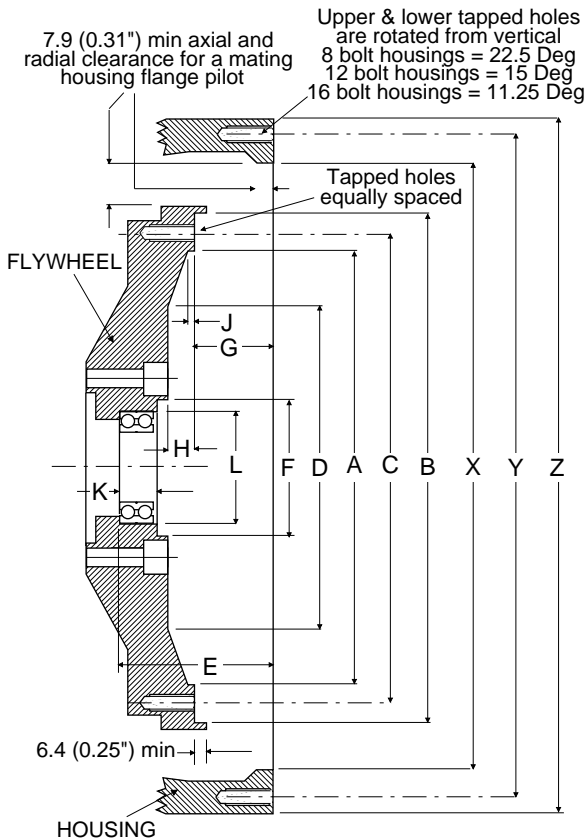


# DIESEL ENGINE FLYWHEEL AND ENGINE HOUSING INDUSTRY STANDARDS.

EXTRACTS FROM SAE J620D FOR ENGINE FLYWHEELS AND SAE J617C FOR ENGINE FLYWHEEL HOUSINGS  
 Flywheels to J620D are in common use on diesel engines supplied for industrial and marine applications. Engines supplied for the truck market are usually fitted with automotive type flywheels which do not conform to standard J620D. Also some engines from Europe and Japan have variations away from standard such as metric threads in flywheel or housing or non standard machining.



The appropriate standards list tolerances for machined surfaces, threads bore eccentricity and face deviation. Should any of this detail be required please consult our sales staff for a copy of the complete SAE standard. Flywheel shown with pilot bearing installed for reference only. Pilot bearing is required only when using over centre clutches or torque converters. If fitting a flywheel drive plate for hydraulic pump drives, the bearing should be removed.

Flywheel No.	A		B		C		D	
	mm	inch	mm	inch	mm	inch	mm	inch
6 1/2	184.2	7.25	215.90	8.500	200.02	7.875	127.0	5.00
7 1/2	206.2	8.12	241.30	9.500	222.25	8.750	—	—
8	225.6	8.88	263.52	10.375	244.48	9.625	—	—
10	276.4	10.88	314.32	12.375	295.28	11.625	196.8	7.75
11 1/2	314.5	12.38	352.42	13.875	333.38	13.125	203.2	8.00
14	409.4	16.12	466.72	18.375	438.15	17.250	222.2	8.75
16	460.2	18.12	517.52	20.375	488.95	19.250	254.0	10.00

Flywheel No.	E		F		G		H	
	mm	inch	mm	inch	mm	inch	mm	inch
6 1/2	71.4	2.81	63.5	2.50	30.2	1.19	12.7	0.50
7 1/2	71.4	2.81	63.5	2.50	30.2	1.19	12.7	0.50
8	100.1	3.94	76.2	3.00	62.0	2.44	12.7	0.50
10	100.1	3.94	76.2	3.00	53.8	2.12	15.7	0.62
11 1/2	100.1	3.94	—	—	39.6	1.56	28.4	1.12
14	100.1	3.94	101.6	4.00	25.4	1.00	28.4	1.12
16	100.1	3.94	104.6	4.12	15.7	0.62	28.4	1.12

Flywheel No.	J		K		L		Tapped holes	
	mm	inch	mm	inch	mm	inch	No	Size
6 1/2	9.7	0.38	17.5	0.69	52.0	2.047	6	5/16"-18
7 1/2	12.7	0.50	17.5	0.69	52.0	2.047	8	5/16"-18
8	12.7	0.50	19.0	0.75	62.0	2.441	6	3/8"-16
10	12.7	0.50	28.4	1.12	72.0	2.834	8	3/8"-16
11 1/2	22.4	0.88	31.8	1.25	72.0	2.834	8	3/8"-16
14	22.4	0.88	38.1	1.50	80.0	3.149	8	1/2"-13
16	22.4	0.88	44.4	1.75	100.0	3.937	8	1/2"-13

Housing SAE-No.	X		Y		Z		Tapped holes	
	mm	inch	mm	inch	mm	inch	No	Size
6	266.70	10.500	285.75	11.250	307.8	12.12	8	3/8"-16
5	314.32	12.375	333.38	13.125	355.6	14.00	8	3/8"-16
4	361.95	14.250	381.00	15.000	403.4	15.88	12	3/8"-16
3	409.58	16.125	428.62	16.875	450.8	17.75	12	3/8"-16
2	447.68	17.625	466.72	18.375	489.0	19.25	12	3/8"-16
1	511.18	20.125	530.22	20.875	552.4	21.75	12	7/16"-14
1/2	584.20	23.000	619.12	24.375	647.7	25.50	12	1/2"-13

NO RESPONSIBILITY IS ACCEPTED FOR OMISSIONS VARIATIONS OR ERRORS

# HYDRAULIC PUMP & MOTOR MOUNT FLANGE & SHAFT INDUSTRY STANDARDS

EXTRACTS FROM SAE J744C ANSI STANDARD FOR FLUID POWER PUMPS AND MOTORS

The SAE standard J744C was originally developed for off road vehicle use in USA. Not all pumps and motors are built to this standard.

### STRAIGHT SHAFT TYPES

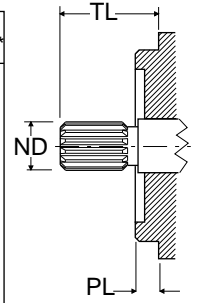
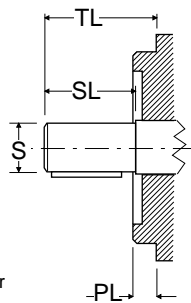
S	Torque in-lbs	HP at 1000	SL#	TL#	Key Width	OEM Code
0.500"	260	4.25	0.750"	1.062"	0.125"	78
0.625"	517	8.25	0.937"	1.250"	0.156"	12
0.750"	1,129	17.9	0.937"	1.250"	0.187"	13
0.875"	1,852	29.3	1.312"	1.625"	0.250"	14
1.000"	2,987	47.5	1.500"	1.812"	0.250"	15
1.250"	5,677	90	1.875"	2.187"	0.312"	24
1.500"	10,777	171	2.125"	2.437"	0.375"	60
1.750"	15,057	239	2.625"	2.937"	0.437"	61

#Lengths shown are for the common short shaft types for long shaft series see Standard SAE J744C. HP at 1000 RPM. Torque and HP requirements noted are typical (based on shaft St of 25000 PSI) and should be considered as a guide only.

### 30 Deg INVOLUTE SPLINE TYPES

Spline Details	Torque in-lbs	HP at 1000	ND	TL	SAE Code	OEM Code*
9T 20/40 DP	260	4.25	1/2"	1.062"	AA	91
9T 16/32 DP	517	8.25	5/8"	1.250"	AA	01
11T 16/32 DP	1,129	17.9	3/4"	1.250"	AH	02
13T 16/32 DP	1,852	29.3	7/8"	1.625"	BB	03
15T 16/32 DP	2,987	47.5	1"	1.812"	BB	04
14T 12/24 DP	5,677	90	1 1/4"	2.187"	C	06
21T 16/32 DP	6,839	108	1 3/8"	2.187"	CS	07
17T 12/24 DP	10,777	171	1 1/2"	2.437"	CC	32
13T 8/16 DP	15,057	239	1 3/4"	2.937"	D	08
13T 8/16 DP	15,057	239	1 3/4"	2.937"	E	08
15T 8/16 DP	24,245	285	2"	3.437"	F	37

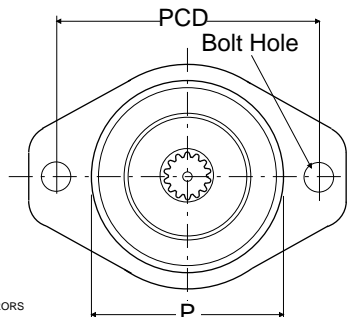
HP at 1000 RPM. Torque and HP requirements noted are typical (based on shaft St of 25000 PSI) and should be considered as a guide only. Torsional stress is calculated at spline undercut.



\* OEM Code. Unique code for ID of shaft or bore sizes. Appears as last two numbers in all Part Numbers for Splined Hubs, Splined Couplings, Splined Shafts, Flexilock Hubs, Clamplock Components, Over Hung Load Adaptors or Gearboxes shown in this catalogue.

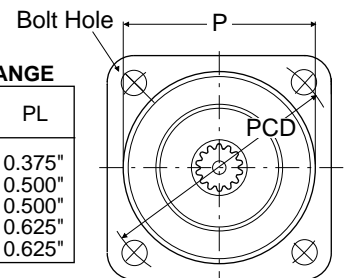
### TWO BOLT MOUNTING FLANGE

SAE Code	Bolt PCD	Bolt Hole	P	PL
AA	3.250"	0.406"	2.00"	0.250"
A	4.187"	0.437"	3.25"	0.250"
B	5.750"	0.562"	4.00"	0.375"
C	7.125"	0.687"	5.00"	0.500"
D	9.000"	0.812"	6.00"	0.500"
E	12.500"	1.062"	6.50"	0.625"
F	13.781"	1.062"	7.00"	0.625"



### FOUR BOLT MOUNTING FLANGE

SAE Code	PCD	Bolt Hole	P	PL
B	5.000"	0.562"	4.00"	0.375"
C	6.375"	0.562"	5.00"	0.500"
D	9.000"	0.812"	6.00"	0.500"
E	12.500"	0.812"	6.50"	0.625"
F	13.781"	1.062"	7.00"	0.625"



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