



A Product of the
Cooperative Engineering Program

SAE J621 APR89

**Industrial Power
Takeoffs with Driving
Ring-Type Overcenter
Clutches**

**SAE Standard
Revised April 1989**

SAENORM.COM : Click to view the full PDF of J621-198904

S. A. E.
LIBRARY

Submitted for Recognition as
an American National Standard

SAENORM.COM : Click to view the full PDF of j621_198904

No part of this publication may be reproduced in any form, in an electronic retrieval system or otherwise, without the prior written permission of the publisher.

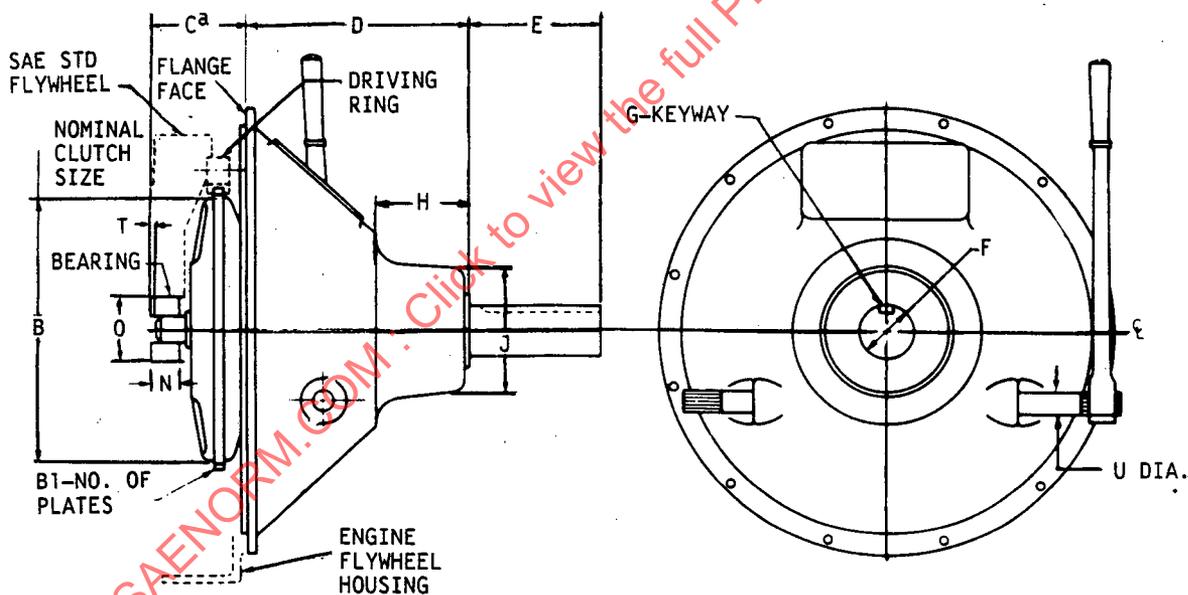
Copyright 1989 Society of Automotive Engineers, Inc.

INDUSTRIAL POWER TAKEOFFS WITH DRIVING RING-TYPE OVERCENTER CLUTCHES

1. SCOPE:

This SAE standard defines installation dimensions of industrial power takeoffs with driving ring-type overcenter clutches.

Table 1 and Fig. 1 give dimensions for power takeoffs. For dimensions and tolerances of power takeoff flanges and flywheels see SAE J617 and J620 respectively.



Ø FIGURE 1

The phi (Ø) symbol is for the convenience of the user in locating areas where technical revisions have been made to the previous issue of the report. If the symbol is next to the report title, it indicates a complete revision of the report.

SAE Technical Board Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user."

SAE reviews each technical report at least every five years at which time it may be reaffirmed, revised, or cancelled. SAE invites your written comments and suggestions.

Ø TABLE 1 - Dimensions for Industrial Power Takeoffs with Driving Ring-Type Overcenter Clutches mm (in)

B	B1	Ca	D	E	F +0.000 + (0.0000) -0.025 - (0.0010)	G	H	J
165 (6-1/2)	1	71.4 (2.81)	141.2 (5.56)	88.9 (3.50)	36.512 (1.4375)	(3/8 x 3/16)	22.4 (0.88)	114.3 (4.50)
190 (7-1/2)	1	71.4 (2.81)	141.2 (5.56)	88.9 (3.50)	36.512 (1.4375)	(3/8 x 3/16)	22.4 (0.88)	114.3 (4.50)
200 (8)	1	100.1 (3.94)	179.3 (7.06)	152.4 (6.00)	44.450 (1.7500)	(1/2 x 1/4)	58.7 (2.31)	127.0 (5.00)
255 (10)	1	100.1 (3.94)	218.9 (8.62)	139.7 (5.50)	57.150 (2.2500)	(5/8 x 5/16)	95.2 (3.75)	146.0 (5.75)
290 (11-1/2)	1	100.1 (3.94)	235.0 (9.25)	165.1 (6.50)	57.150 (2.2500)	(5/8 x 5/16)	95.2 (3.75)	146.0 (5.75)
290 (11-1/2)	2	100.1 (3.94)	244.3 (9.62)	165.1 (6.50)	63.500 (2.5000)	(5/8 x 5/16)	76.2 (3.00)	152.4 (6.00)
355 (14)	1	100.1 (3.94)	307.8 (12.12)	215.9 (8.50)	76.200 (3.0000)	(3/4 x 3/8)	95.2 (3.75)	168.1 (6.62)
355 (14)	2	100.1 (3.94)	349.2 (13.75)	254.0 (10.00)	88.900 (3.5000)	(7/8 x 7/16)	73.2 (2.88)	190.5 (7.50)
355 (14)	3	100.1 (3.94)	368.3 (14.50)	254.0 (10.00)	100.012 (3.9375)	(1 x 1/2)	73.2 (2.88)	190.5 (7.50)
405 (16)	2	100.1 (3.94)	374.6 (14.75)	254.0 (10.00)	100.012 (3.9375)	(1 x 1/2)	73.2 (2.88)	190.5 (7.50)
405 (16)	3	100.1 (3.94)	423.9 (16.69)	254.0 (10.00)	100.012 (3.9375)	(1 x 1/2)	73.2 (2.88)	190.5 (7.50)
460 (18)	1	100.1 (3.94)	374.6 (14.75)	254.0 (10.00)	100.012 (3.9375)	(1 x 1/2)	73.2 (2.88)	190.5 (7.50)
460 (18)	2	100.1 (3.94)	423.9 (16.69)	254.0 (10.00)	100.012 (3.9375)	(1 x 1/2)	73.2 (2.88)	190.5 (7.50)
460 (18)	3	100.1 (3.94)	463.6 (18.25)	254.0 (10.00)	114.300 (4.5000)	(1 x 1/2)	47.8 (1.88)	254.0 (10.00)
530 (21)	1	100.1 (3.94)	419.1 (16.50)	254.0 (10.00)	114.300 (4.5000)	(1 x 1/2)	73.2 (2.88)	241.3 (9.50)
530 (21)	2	100.1 (3.94)	457.2 (18.00)	254.0 (10.00)	120.650 (4.7500)	(1-1/4 x 5/8)	79.2 (3.12)	254.0 (10.00)
530 (21)	3	100.1 (3.94)	505.0 (19.88)	254.0 (10.00)	120.650 (4.7500)	(1-1/4 x 5/8)	69.8 (2.75)	279.4 (11.00)
610 (24)	1	100.1 (3.94) ^b	501.6 (19.75)	254.0 (10.00)	114.300 (4.5000)	(1 x 1/2)	73.2 (2.88)	241.3 (9.50)
610 (24)	2	100.1 (3.94) ^b	515.9 (20.31)	254.0 (10.00)	120.650 (4.7500)	(1-1/4 x 5/8)	79.2 (3.12)	254.0 (10.00)

SAENORM.COM Click to view the full PDF of J621-198904



B	B1	N	O	T	U	SAE No., Flywheel Housing												
						6	5	4	3	2	1	1/2	0	00				
165 (6-1/2)	1	15.00 (0.591)	52.000 (2.0472)	1.5 (0.06)	25.4 (1.00)	•	•	•	•	•	•	•	•	•	•	•	•	•
190 (7-1/2)	1	15.00 (0.591)	52.000 (2.0472)	1.5 (0.06)	25.4 (1.00)	•	•	•	•	•	•	•	•	•	•	•	•	•
200 (8)	1	17.00 (0.669)	62.000 (2.4409)	1.5 (0.06)	25.4 (1.00)	•	•	•	•	•	•	•	•	•	•	•	•	•
255 (10)	1	30.18 (1.188)	72.000 (2.8346)	1.5 (0.06)	25.4 (1.00)	•	•	•	•	•	•	•	•	•	•	•	•	•
290 (11-1/2)	1	30.18 (1.188)	72.000 (2.8346)	1.5 (0.06)	25.4 (1.00)	•	•	•	•	•	•	•	•	•	•	•	•	•
290 (11-1/2)	2	30.18 (1.188)	72.000 (2.8346)	1.5 (0.06)	25.4 (1.00)	•	•	•	•	•	•	•	•	•	•	•	•	•
355 (14)	1	34.92 (1.375)	80.000 (3.1496)	3.0 (0.12)	25.4 (1.00)	•	•	•	•	•	•	•	•	•	•	•	•	•
355 (14)	2	34.92 (1.375)	80.000 (3.1496)	3.0 (0.12)	25.4 (1.00)	•	•	•	•	•	•	•	•	•	•	•	•	•
355 (14)	3	39.67 (1.562) ^e	100.000 (3.9370) ^e	3.0 (0.12)	25.4 (1.00)	•	•	•	•	•	•	•	•	•	•	•	•	•
405 (16)	2	39.67 (1.562)	100.000 (3.9370)	3.0 (0.12)	25.4 (1.00)	•	•	•	•	•	•	•	•	•	•	•	•	•
405 (16)	3	39.67 (1.562)	100.000 (3.9370)	3.0 (0.12)	25.4 (1.00)	•	•	•	•	•	•	•	•	•	•	•	•	•
460 (18)	1	39.67 (1.562)	100.000 (3.9370)	3.0 (0.12)	25.4 (1.00)	•	•	•	•	•	•	•	•	•	•	•	•	•
460 (18)	2	39.67 (1.562)	100.000 (3.9370)	3.0 (0.12)	25.4 (1.00)	•	•	•	•	•	•	•	•	•	•	•	•	•
460 (18)	3	49.23 (1.938) ^e	120.000 (4.7244) ^e	3.0 (0.12)	31.8 (1.25)	•	•	•	•	•	•	•	•	•	•	•	•	•
530 (21)	1	53.98 (2.125)	130.000 (5.1181)	3.0 (0.12)	31.8 (1.25)	•	•	•	•	•	•	•	•	•	•	•	•	•
530 (21)	2	53.98 (2.125)	130.000 (5.1181)	3.0 (0.12)	31.8 (1.25)	•	•	•	•	•	•	•	•	•	•	•	•	•
530 (21)	3	53.98 (2.125)	130.000 (5.1181)	3.0 (0.12)	31.8 (1.25)	•	•	•	•	•	•	•	•	•	•	•	•	•
610 (24)	1	49.23 (1.938) ^e	120.000 (4.7244) ^e	3.0 (0.12)	31.8 (1.25)	•	•	•	•	•	•	•	•	•	•	•	•	•
610 (24)	2	53.98 (2.125)	130.000 (5.1181)	3.0 (0.12)	31.8 (1.25)	•	•	•	•	•	•	•	•	•	•	•	•	•

^aC is from face of flywheel housing to bottom of pilot bore in flywheel.

^b133.4 (5.25) optional—this will decrease D by 33.3 (1.31).

^cRequires a flywheel housing and flywheel to provide a 71.4 (2.81) E dimension per SAE J617.

^dRequires a flywheel housing and flywheel to provide a 100.1 (3.94) E dimension per SAE J617.

^eSizes to match flywheels per SAE J620 are also available.

