

# Conversion Factors

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### Length

1 in.	= 25.4 mm = 0.0254 m	1 μm	= .00004 in.
1 ft.	= 304.8 mm = 0.3048 m	1 m	= 39.37 in.
		1 m	= 3.28 ft.

### Area

1 in. <sup>2</sup>	= 6.4516x10 <sup>-4</sup> m <sup>2</sup>	1 m <sup>2</sup>	= 1550 in. <sup>2</sup>
1 ft. <sup>2</sup>	= 9.29x10 <sup>-2</sup> m <sup>2</sup>	1 m <sup>2</sup>	= 10.764 ft. <sup>2</sup>

### Volume

1 in. <sup>3</sup>	= 1.639x10 <sup>-5</sup> m <sup>3</sup>	1 m <sup>3</sup>	= 61023 in. <sup>3</sup>
1 ft. <sup>3</sup>	= 2.832x10 <sup>-2</sup> m <sup>3</sup>	1 m <sup>3</sup>	= 35.315 ft. <sup>3</sup>
1 gal (US)	= 3.7854 l	1 l	= 0.2642 gal (US)

### Mass

1 lb. s <sup>2</sup> .ft. <sup>-1</sup>	= 14.6 kg	1 kg	= 6.85x10 <sup>-2</sup> lb. s <sup>2</sup> .ft. <sup>-1</sup>
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### Force

1 lb.	= 445 g	1 kg	= 2.2 lb.
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### Pressure

1 lb.in. <sup>-2</sup>	= 6.895x10 <sup>-3</sup> Nmm <sup>-2</sup>	1 Nmm <sup>-2</sup>	= 145 lb.in. <sup>-2</sup>
(pai)	= 6.895x10 <sup>3</sup> Nm <sup>-2</sup>	1 bar	= 14.2 lb.in. <sup>-2</sup>

### Torque

1 lb.in.	= 0.113 Nm	1 Nm	= 8.85 lb.in.
1 lb.ft.	= 1.36 Nm	1 Nm	= 0.738 lb.ft.

### Work

1 Btu	= 778 lb.ft.	1 kJ	= 0.948 Btu
1 Btu	= 1055 J = 1.055 kJ	1 kWh	= 3410 Btu
1 Btu	= 2.93x10 <sup>-4</sup> kWh		

### Power

1 HP	= 746 W = 0.746 kW	1 kW	= 1.34 HP
1 HP	= 1.014 CV	1 CV	= 0.986 HP

### Moment of Inertia

1 lb.ft. <sup>2</sup>	= 0.04214 kgm <sup>2</sup>	1 kgm <sup>2</sup>	= 23.73 lb.ft. <sup>2</sup>
1 lb.in. <sup>2</sup>	= 2.93x10 <sup>-4</sup> kgm <sup>2</sup>	1 kgm <sup>2</sup>	= 3417.17 lb.in. <sup>2</sup>
1 lb.ft. s <sup>2</sup>	= 1.3847 kgm <sup>2</sup>	1 kgm <sup>2</sup>	= 0.738 lb.ft. s <sup>2</sup>
1 lb.in. s <sup>2</sup>	= 0.1129 kgm <sup>2</sup>	1 kgm <sup>2</sup>	= 8.8507 lb. in. s <sup>2</sup>

### Mass/Volume

1 lb.ft. <sup>-3</sup>	= 16.018 kgm <sup>-3</sup>	1 kgm <sup>-3</sup>	= 6.24x10 <sup>-2</sup> lb.ft. <sup>-3</sup>
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### Temperature

°F	= (1.8x°C) + 32	°C	= 5/9x(°F-32)
°F	= 1.8x(K-273) + 32		
K	= 5/9x(°F-32) + 273		

## Warranty

Formsprag LLC warrants that it will repair or replace (whichever in its sole discretion it deems advisable) any product it manufactured and sold which proves to be defective in material or workmanship within a period of one (1) year from date of original purchase for consumer, commercial or industrial use. This warranty extends only to the original purchaser and is not transferable or assignable without Formsprag LLC's prior consent.

This warranty covers normal use and does not cover damage or defect which results from alterations, accident, neglect, disassembly, or improper installation, operation, or maintenance.

Formsprag LLC's obligation under this warranty is limited to the repair or replacement of the defective product. In no event shall Formsprag LLC be liable for consequential, indirect or incidental damages of any kind incurred by reason of manufacture, sale or use of any defective product. Formsprag LLC neither assumes nor authorizes any other person to give any other warranty or to assume any other obligation or liability on its behalf.

## Performance Assurance

Rated torque and speeds of Formsprag Clutch products are provided in current catalogs to assist the buyer in selecting the proper Formsprag Clutch product. In addition, application assistance is offered by Formsprag Clutch for guidance to the buyer in selection of a catalog product and application of custom designed products. Since the actual performance characteristics of all Formsprag Clutch products in the buyer's application is the responsibility of the buyer, performance assurance is usually accomplished through manufacture of a prototype by Formsprag Clutch, and a test or qualification program on the part of the buyer.

## Rotating Equipment

Rotating equipment is potentially dangerous and should be properly guarded. The user should check for all applicable safety codes (in local area) and provide a suitable guard. Formsprag clutches and backstops have surfaces which wear with use over time and as a result will need to be replaced. The decision for time of replacement must be made by the operator of the equipment based upon the specific application and performance of the clutch or backstop.

## Catalog Changes

The contents of this catalog are subject to change without notice or obligation.