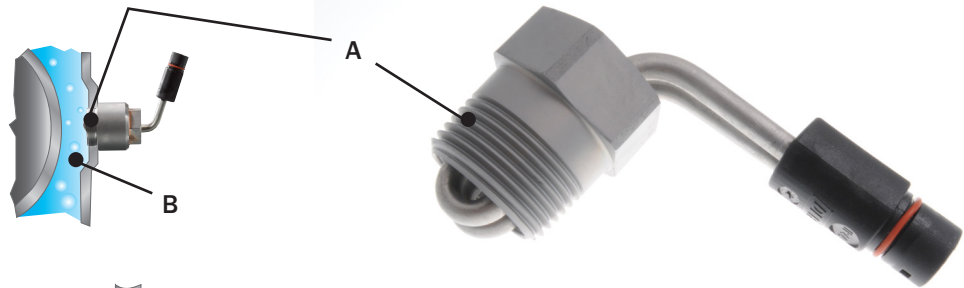
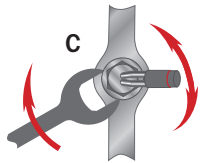




120V~60Hz



Different types of 200 series heaters incl connecting kit



DEFA SafeStart 200 Series

Characteristics: Threaded flange

This heaters are made to be used in threaded (A) core plugs in the engines water jacket (B). The active heater element has to be surrounded with coolant in the water jacket (B).

A seal is formed between the flange and engine block walls with conical threads, an O-ring and a gasket or packing compound. In most cases, the flange is also designed so that the heating element is locked in position while the flange is rotated (C). The heater flanges within this series are disc shaped or head shaped.

DEFA AS is conforming to the requirements of both ISO 9001-2008, ISO 14001:2004 and OHSAS 18001:2007. In addition to this, our engine heaters and cables are conforming to the requirements of ISO/TS 16949:2002.

Part of

Engine pre-heaters are supplied separately because of special adapted solutions for a variety of engines and vehicles.

Installation

Install the heater according to the enclosed installation guide.
ONLY Install the heater on vehicles listed in the installation guide.

Use

Normal usage - DEFA engine heaters is dimensioned for "normal usage". DEFA defines "normal usage" as; 3 connections for 3 hours pr. 24 hour based upon 150 users days a year (5 months a year).

Professional usage - It is necessary to perform an annual function control and if necessary install a new heater to obtain necessary extent of service on emergency vehicles or power supplies where the heater is connected more or less 24/7. This yearly service cost will not be covered by DEFA AS.

Pulse power - Some car parking areas are using interval (pulse) power timers turning the power On and Off several times per hour. Using DEFA engine heater in suchlike parking facilities will not be considered as "Normal use" and claims will be declined.

Technical specifications

Voltage [V]	120
Power [W]	400
IP rating [IP]	44
Testing & acceptance	Electric Heating Appliances, UL 499, Thirteenth Edition, dated November 17, 2005, with revisions through and including April 11, 2012 & Engine Heaters and Battery Warmers, CAN/CSA-C22.2 No. 191-M89, Issue: 1989/09/01, General Instruction No. 1-3, (Reaffirmed 2009)