

# Dorchester DR-SE Range

## Permanent Pilot, Single-tube Direct Gas Fired Water Heaters



The Dorchester DR-SE range is the permanent pilot version, based on the DR-SA, and consists of two models with continuous outputs of 309 litres/hour and 352 litres/hour, based on a 44°C temperature rise. Storage capacities are 278 litres and 372 litres respectively. Two or more water heaters can be installed in a modular configuration where there is demand for larger loads.

The DR-SE is fitted with an atmospheric burner with permanent pilot ignition suitable for firing natural gas or LPG. DR-SE water heaters do not require a power supply when supplied as a basic unit, however, a power supply will be required for electrical anode protection, recirculation kit and time clock control options.

### Options

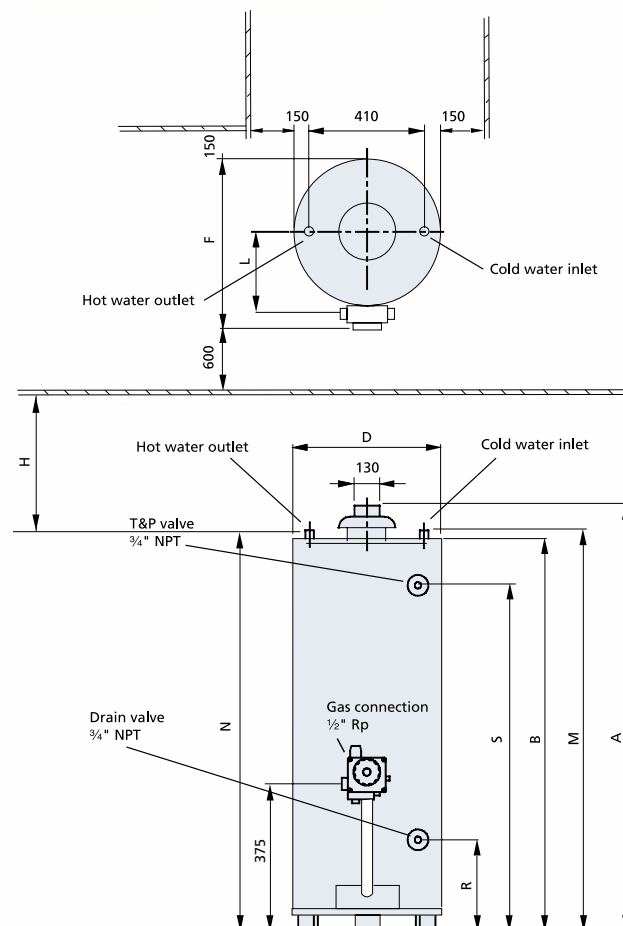
- Natural gas or LPG
- Time clock control kit
- Unvented supply kit
- Electrical anode protection
- Top to bottom recirculation kit
- Flexible magnesium sacrificial anodes

All Dorchester water heaters are constructed with high grade carbon steel and utilise a vitreous enamel lining. Additional tank protection is provided by a magnesium sacrificial anode. In plant rooms with insufficient headroom clearance for fixed anodes, flexible magnesium sacrificial anodes may be specified as an option. The cylinder is covered with a 50mm layer of CFC free foam insulation to ensure that standing losses are kept to a minimum.

The Dorchester range is designed to meet the latest HSC requirements for the control of Legionellosis. A large inspection door provides access for servicing and suitable tappings are included to facilitate top to bottom recirculation.

The DR-SE is suitable for open vented or unvented systems. An optional unvented supply kit contains all of the additional parts required to satisfy the Water Supply (water fittings) Regulations 1999.

Where optional electrical anode protection is fitted, a permanent 230 volt 50Hz single phase power supply will be required, to ensure the water heater has 24 hour protection.



Model		DR-SE 16	DR-SE 19
Continuous output with 44°C Δt (80°F)	l/h	370	393
	UK gal/h	81	86
Storage capacity	litres	278	372
	UK gal	61	82
Time to recover storage 44°C Δt (80°F)	mins	55	60
Heater output	kW	18.9	20.1
Maximum water pressure (open vented)	bar	8	
	Psig	116	
Gas input rate natural gas (G20)	m <sup>3</sup> /h	2.4	2.5
	ft <sup>3</sup> /h	84.7	88.3
Propane input gas rate at 37m bar (14.85 l/wg) standard inlet pressure	m <sup>3</sup> /h	1.0	1.1
	ft <sup>3</sup> /h	35.3	38.8
Water flow and inlet connection	in	1" NPT	1 1/4" NPT
Gas connections	in	1/2" Rp	
Drain connection (hose connection) & Recirculation connection	in	3/4" - NPT	
Draught diverter spigot ID	mm	130	
	in	5	

Dimensions in mm		DR-SE 16	DR-SE 19
Overall height	A	1585	1780
Cylinder height	B	1450	1640
Cylinder diameter	D	645	675
Width including gas train	F	730	765
Gas connection	L	375	385
Cold water inlet	M	1505	1685
Hot water outlet	N	1505	1685
Drain connection	R	285	285
T&P valve	S	1280	1460
Anode clearance	H	1000	1300

## Standard Features

- Permanent pilot ignition
- Single tube heat exchanger
- Control thermostat range 40°C to 81°C
- Magnesium sacrificial anodes
- Inspection door
- Combustion products discharge safety device
- Draught diverter