



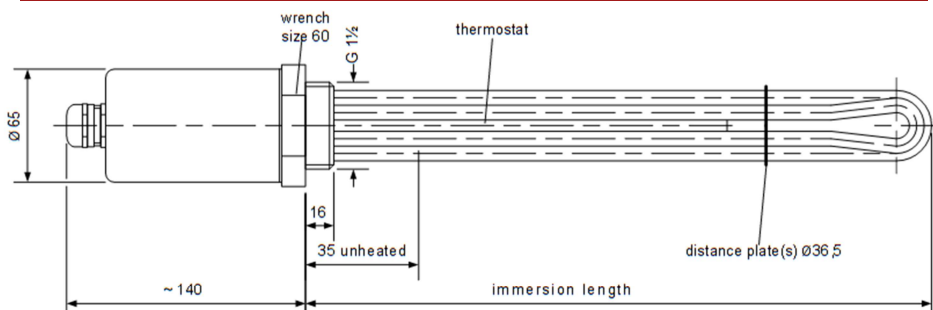
1.10 Screw-in heating element G1½



Photograph shows brass-screw cap for protection type IP 65

Model C/Th/RE/3/G 1½, with thermostat, internally regulated

Application	For heating up:	surface load:
	Fluids that do not attack steel.	
	Hydraulic fluids or similar	1.5 W/cm ²
	heat transfer oil, quenching oil	2.3 W/cm ²
	in case of doubt - ask your oil supplier for the max. surface load	
	fluids of similar viscosity to water	4.5 and 6.5 W/cm ²
Design	3 tubular heating elements made of steel 35 mm unheated, brass nipple G 1½, thermostat 0 to 120°C, differential gap 3 K, single-pole bright-galvanized steel-cap, IP 30 (see design and photo on page 1.2)	
Electrical Connection	up to 3 000 W at 230 V single-phase current, single-pole thermostat switches directly over 3 000 W at 230/400 V three-phase current, contactor necessary	



Special design Other lengths, unheated areas, powers, voltages, thread G 2, protection type IP65 and other materials: stainless-steel mat.-no. 1.4541 (AISI 321) (AISI 321), 1.4571 (AISI 316Ti), 1.4828 (AISI 309), 2.4858 (alloy 825) are available.

Immersion length [mm] approx.	Power [Watt] approx.	Weight [kg] approx.	Article-no.	Immersion length [mm] approx.	Power [Watt] approx.	Article-no.
surface load 1.5 W/cm²				surface load 2.3 W/cm²		
455	1000	1.2	0110 0011	240	750	0110 0111
680	1500	1.7	0110 0021	455	1500	0110 0121
880	2000	2.0	0110 0031	680	2250	0110 0131
1100	2500	2.3	0110 0041	880	3000	0110 0141
surface load 1.5 W/cm²				surface load 2.3 W/cm²		
240	1500	0.9	0110 0211	330	3000	0110 0311
455	3000	1.2	0110 0221	455	4500	0110 0321
680	4500	1.7	0110 0231	605	6000	0110 0331
880	6000	2.0	0110 0241	755	7500	0110 0341
1100	7500	2.3	0110 0251	880	9000	0110 0351

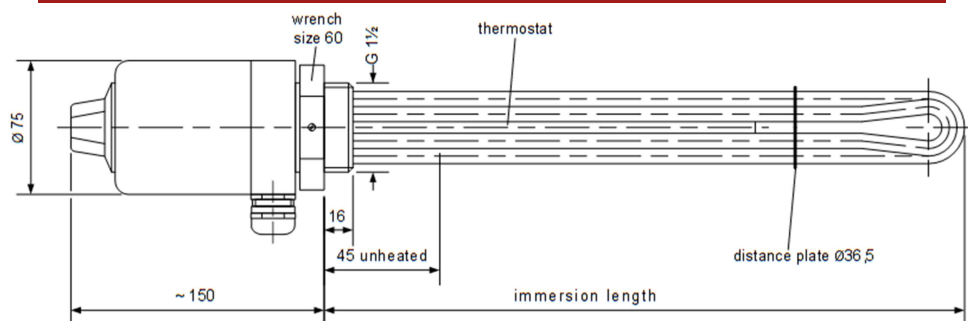
1.11 Screw-in heating element G1½



Photograph shows cap for protection type IP 65

Model C/Th/a/RE/3/G 1½, with thermostat, externally regulated

Application	For heating up:	surface load:
	Fluids that do not attack steel.	
Design	Hydraulic fluids or similar	1.5 W/cm ²
	heat transfer oil, quenching oil	2.3 W/cm ²
	in case of doubt - ask your oil supplier for the max. surface load	
	fluids of similar viscosity to water	4.5 and 6.5 W/cm ²
Electrical Connection up to 3 000 W at 230 V single-phase current, single-pole thermostat switches directly over 3 000 W at 230/400 V three-phase current, three-pole thermostat switches directly		



Special design Other lengths, unheated areas, powers, voltages, thread G 1¼ and G 2, protection type IP65, thermostat 0 to 85°C, thermostat 50 to 300°C and control light are available.

Immersion length [mm] approx.	Power [Watt] approx.	Weight [kg] approx.	Article-no.	Immersion length [mm] approx.	Power [Watt] approx.	Article-no.
surface load 1.5 W/cm²				surface load 2.3 W/cm²		
455	1000	1.2	0111 0011	240	750	0111 0111
680	1500	1.7	0111 0021	455	1500	0111 0121
880	2000	2.0	0111 0031	680	2250	0111 0131
1100	2500	2.3	0111 0041	880	3000	0111 0141
surface load 1.5 W/cm²				surface load 2.3 W/cm²		
240	1500	0.9	0111 0211	330	3000	0111 0311
455	3000	1.2	0111 0221	455	4500	0111 0321
680	4500	1.7	0111 0231	605	6000	0111 0331
880	6000	2.0	0111 0241	755	7500	0111 0341
1100	7500	2.3	0111 0251	880	9000	0111 0351

1.12 Screw-in heating element G 2

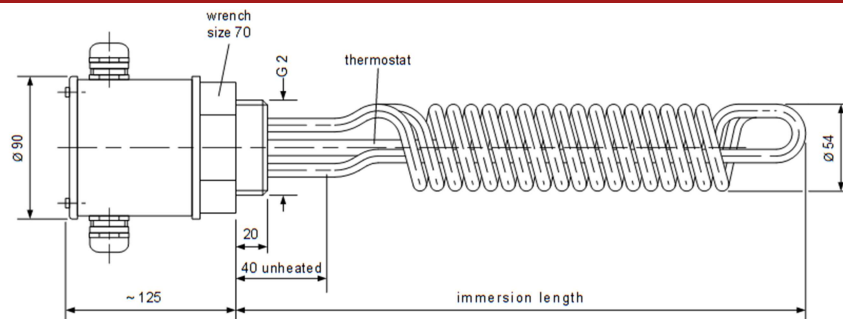


Model C/RE/ThO/2/G 2, with thermostat, internally regulated

Application	For heating up:	surface load:
	Fluids that do not attack steel.	
	Hydraulic fluids or similar	1.0 W/cm ²
	heat transfer oil, quenching oil	4.0 W/cm ²
	in case of doubt - ask your oil supplier for the max. surface load	

Design	2 tubular heating elements made of steel, coiled
	40 mm unheated,
	steel nipple G 2,
	thermostat 0 to 120°C, differential gap 3 K, single-pole
	steel-cap, IP 65

Electrical Connection	230 V single-phase current or 400 V (2~) two-phase current, single-pole thermostat switches directly
------------------------------	--



Special design	Other lengths, unheated areas, powers, voltages, and other materials for example: stainless-steel mat.-no. 1.4541 (AISI 321), 1.4571 (AISI 316Ti) and 1.4828 (AISI 309) are available.
-----------------------	--

thermostat 100 to 190°C, differential gap 5 K, single-pole is available

Immersion length [mm] approx.	Weight [kg] approx.	Voltage	Power [Watt]	Article-no.	Power [Watt]	Article-no.
			surface load 1 W/cm²		surface load 4 W/cm²	
290	2.1	230 V	700	0112 0011	2800	0112 0111
390	2.3	230 V	1000	0112 0021	4000	0112 0121
460	2.6	400 V (2~)	1250	0112 0031	5000	0112 0131
530	2.9	400 V (2~)	1500	0112 0041	6000	0112 0141