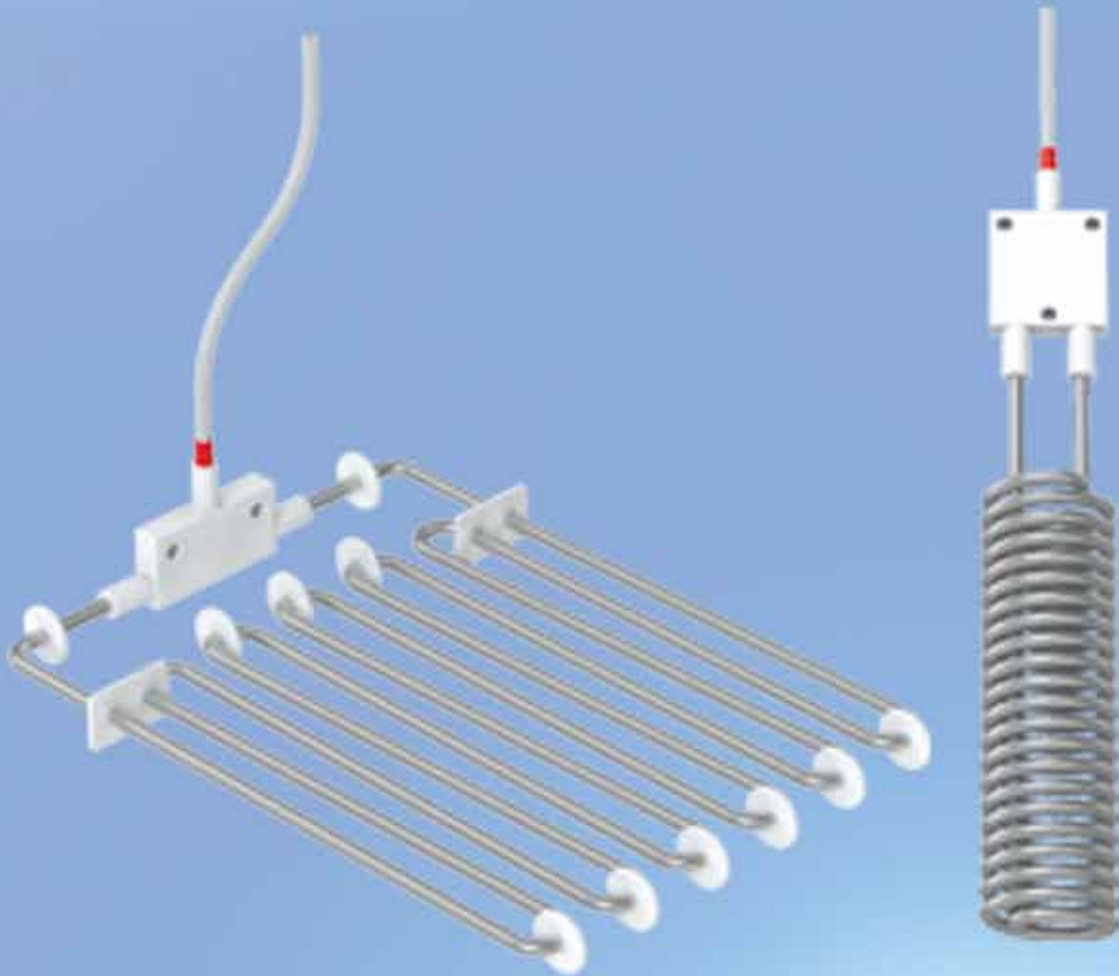


Electric Immersion Heaters

Versatile and Safe



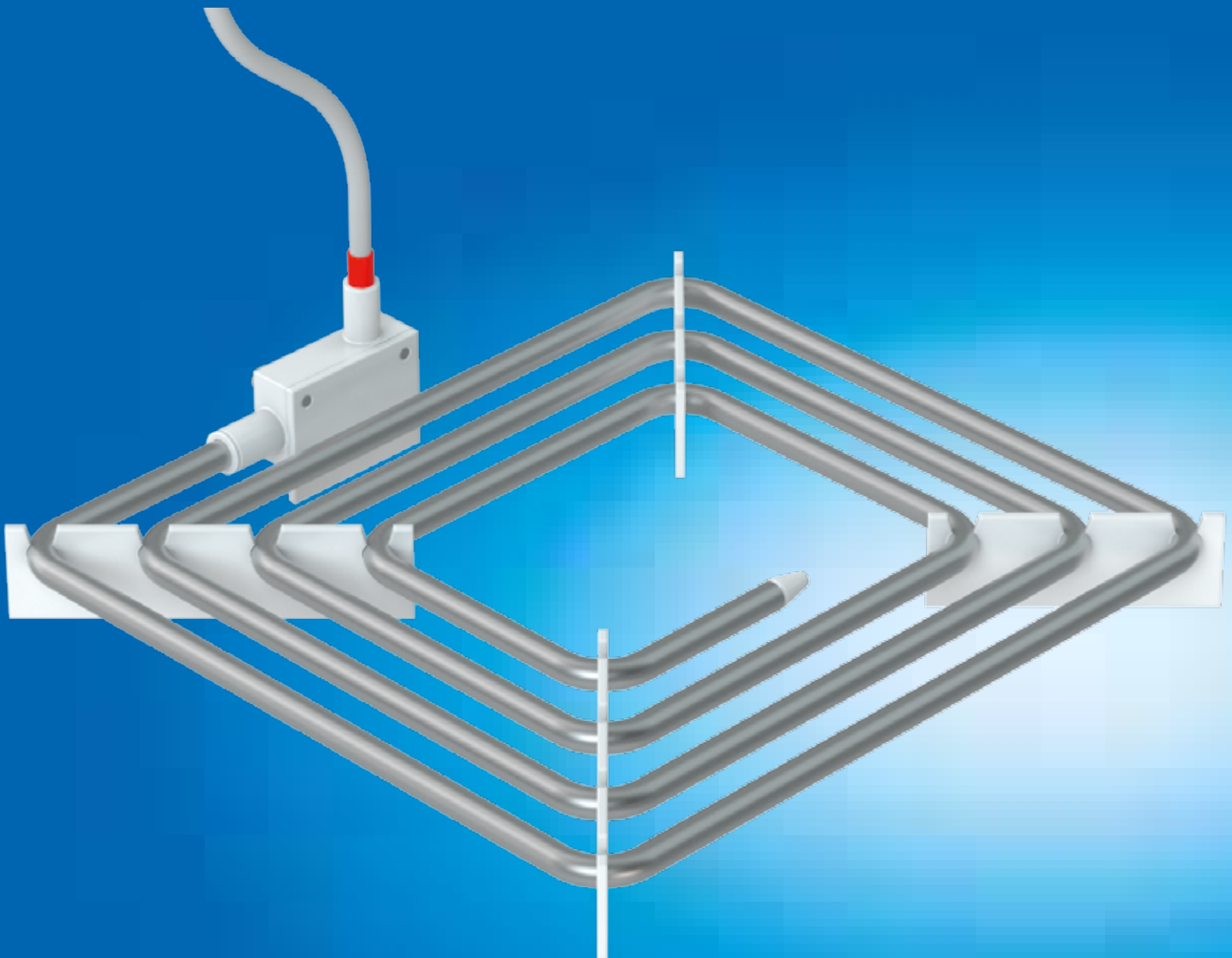
Electric Immersion Heaters for Heating Chemically Aggressive Process Fluids

Decisive Advantages:

- Almost universal chemical resistance to acids, bases, and electrolytic oxidation processes up to 90°C
- Fully welded, no mechanical connections
- Suitable for complete immersion in the medium
- Universal suitability for a wide range of fluid levels thanks to customized installation with special brackets
- Safety guaranteed through VDE testing, Protection Class I, and CE mark
- Permanently 'shrunk on' protective layer

Application Ranges:

- Electroplating
- Chemical industry
- Food industry
- Textile industry
- Environmental protection applications
- Medical technology
- Semiconductor industry
- Photovoltaics



Heat for Safe Processes

With the tried and tested immersion heaters in its PH series, ElringKlinger Engineered Plastics has produced both standardized solutions and customized, application specific designs for about five decades. Designed for controlled heating of chemically aggressive process fluids, immersion heaters in the PH series demonstrate their capabilities in many different industries worldwide.

Our electric immersion heaters consist of a stainless steel tubular heating element coated with Moldflon™-PFA. A special shrinking process prevents air from becoming trapped between the tubular heating element and coating. The connection cables consist of single strands that are insulated with Polytetraflon™-PTFE and then fully coated with Moldflon™-PFA. The connection head is machined from solid Polytetraflon™-PTFE without any mechanical connections.

The PTFE coated heating element, PTFE connection head and PFA coated connection cable are welded together to ensure a fluid tight connection. As a result, the heater satisfies the requirements of Protection Rating IP X8 and can be fully immersed in the process liquid. Thanks to the use of simple brackets, our immersion heaters can be mounted in any tank position and are therefore suitable for a wide range of fluid levels.

Some of our immersion heaters are also available with the option of thermal overload protection. This allows the internal temperature of the heating element to be monitored separately using a Pt100 resistance thermometer. In the event of overheating (e.g., dry running), the immersion heater can be switched off automatically to prevent serious damage.

Heating or Cooling Chemically Aggressive Process Fluids



Request our brochure Heat Exchangers Made From Moldflon™-Materials or find out more by visiting: www.elringklinger-kunststoff.de/english/products/heat-exchangers/

	<i>PH 1.00 Mini and PH 1.01 Mini</i>			<i>PH 1.00 and PH 1.01</i>			<i>PH 1.08 and PH 1.09</i>			<i>PH 8.01 and PH 8.02</i>			<i>PH 9.00 and PH 9.01</i>		
	Heat output	Surface loading	Voltage	Heat output	Surface loading	Voltage	Heat output	Surface loading	Voltage	Heat output	Surface loading	Voltage	Heat output	Surface loading	Voltage
	1,000 W	1.44 W/cm ²	230 V~2	1,000 W	1.0 W/cm ²	230 V~2/400 V~2/480 V~2	1,500 W	1.0 W/cm ²	230 V~2/400 V~2/480 V~2	2,000 W	1.5 W/cm ²	230 V~3/400 V~3/480 V~3	1,000 W	1.0 W/cm ²	230 V~2/400 V~2/480 V~2
				1,500 W	1.5 W/cm ²	230 V~2/400 V~2/480 V~2	2,000 W	1.5 W/cm ²	230 V~2/400 V~2/480 V~2	2,500 W	1.5 W/cm ²	230 V~3/400 V~3/480 V~3	2,000 W	1.5 W/cm ²	230 V~2/400 V~2/480 V~2
				2,000 W	2.2 W/cm ²	230 V~2/400 V~2/480 V~2	3,000 W	2.2 W/cm ²	230 V~2/400 V~2/480 V~2	3,000 W	2.2 W/cm ²	230 V~3/400 V~3/480 V~3	3,000 W	2.2 W/cm ²	230 V~2/400 V~2/480 V~2
										4,000 W	2.2 W/cm ²	230 V~3/400 V~3/480 V~3			
Dimensions (L × W)	320 × 320 mm		320 × 292 mm	490 × 370 mm		460 × 370 mm	515 × 360 mm		485 × 360 mm	455 × 450 mm		437 × 450 mm	505 × Ø 90 mm		390 × Ø 90 mm
Temperature monitoring	Optional Pt100			Optional Pt100			Optional Pt100			Optional Pt100			Optional Pt100		
Connection cable	2,000 mm—other lengths on request			2,000 mm—other lengths on request			2,000 mm—other lengths on request			2,000 mm—other lengths on request			2,000 mm—other lengths on request		
	PH 1.00 Mini = wall installation		PH 1.01 Mini = floor installation	PH 1.00 = wall installation		PH 1.01 = floor installation	PH 1.08 = wall installation		PH 1.09 = floor installation	PH 8.01 = wall installation		PH 8.02 = floor installation	PH 9.00 = wall installation		PH 9.01 = floor installation
Installation	Wall		Floor	Wall		Floor	Wall		Floor	Wall		Floor	Wall		Floor

On request, we are happy to provide customized, uniquely formed immersion heaters with higher energy densities for specific applications.



PH 1.00 Mini



PH 1.01 Mini



PH 1.00



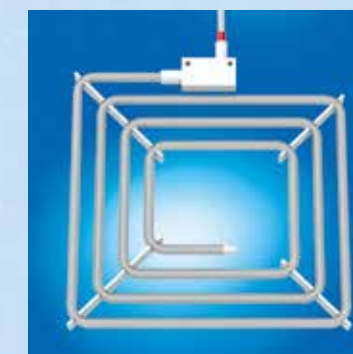
PH 1.01



PH 1.08



PH 1.09



PH 8.01



PH 8.02



PH 9.00



PH 9.01

Technical Sales/Production Electric Immersion Heaters

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DQS-certified according to IATF 16949:2016 (reg. no. 002504 IATF16) | DIN EN ISO 14001 (reg. no. 002504 UM)



DNV-GL-certified according to GMP for Equipment with Food Contact Surfaces (reg. no 201043-2016-FSMS-ITA-DNV)



DQS-MED-certified according to DIN EN ISO 13485:2012

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