



KANTHAL® FLOW HEATER 3.5 kW HEATING GASES UP TO 1100°C

TECHNICAL SPECIFICATION

KANTHAL®

Part of Sandvik Group

FLOW HEATER 3.5 kW BASIC VERSIONS

The Flow Heater 3.5 kW can be supplied in different basic versions with power connection cables included. There are additional accessories for insulation, temperature monitoring, and gas connection.

1A. FLOW HEATER 3.5 kW

BASIC DATA

Article No.	DFH100101
Inlet connection	flange PN 16 DN 50 (EN1092-1)
Outlet connection	without nozzle
Total length	362 mm
Weight	5.1 kg



1B. FLOW HEATER 3.5 kW WITH FLANGE ADAPTOR

BASIC DATA

Article No.	DFH100102
Inlet connection	1.4571 Swagelok Ø 12 mm (tube)
Outlet connection	without nozzle
Total length	428 mm
Weight	8.52 kg



1C. FLOW HEATER 3.5 kW WITH NOZZLE Ø 26.67 MM

BASIC DATA

Article No.	DFH100103
Inlet connection	flange PN 16 DN 50 (EN1092-1)
Outlet connection	with nozzle
Total length	397 mm
Weight	5.41 kg



1D. FLOW HEATER 3.5 kW WITH NOZZLE Ø 26.67 MM AND FLANGE ADAPTOR

BASIC DATA

Article No.	DFH100104
Inlet connection	1.4571 Swagelok Ø 12 mm (tube)
Outlet connection	with nozzle
Total length	420 mm
Weight	8.83 kg



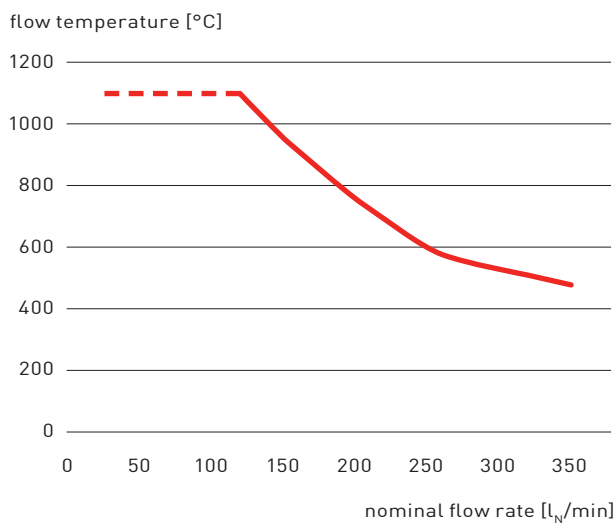
SPECIFICATIONS

OPERATING DATA (Valid for all 4 basic versions fully equipped)

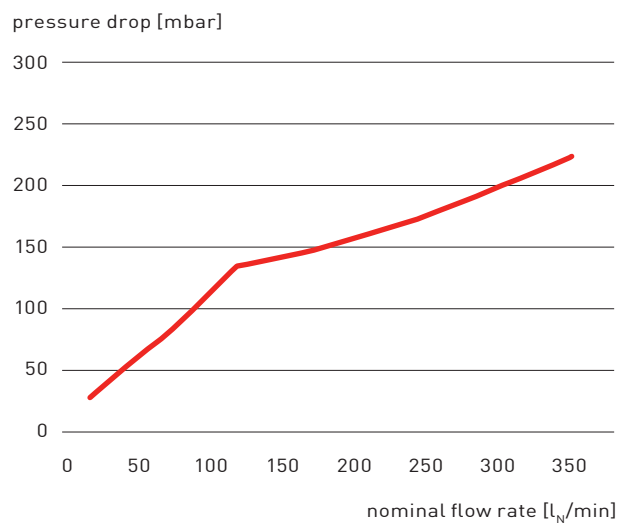
Fluid	air, N ₂ , O ₂ , CO ₂ *	
Nominal volume flow (air)	1.2 – 21 m _N ³ /h	0.71 – 12.4 cfm
	20 – 350 l _N /min	
Mass flow (air)	1.4 – 27.1 kg/h	
Operating pressure	< 1.5* bar absolute	< 22 PSI absolute
Max. pressure drop	350 mbar	5.1 PSI
Inlet temperature	< 100°C	< 212°F
Max. outlet temperature (air)	1100°C*	2012°F
Ambient temperature	< 40°C	< 104°F
Installation	horizontal/vertical	
Tube material	1.4835	

* for higher temperatures, higher pressure or other gas, please contact your Kanthal sales representative.

FLOW TEMPERATURE IN CLEAN AIR



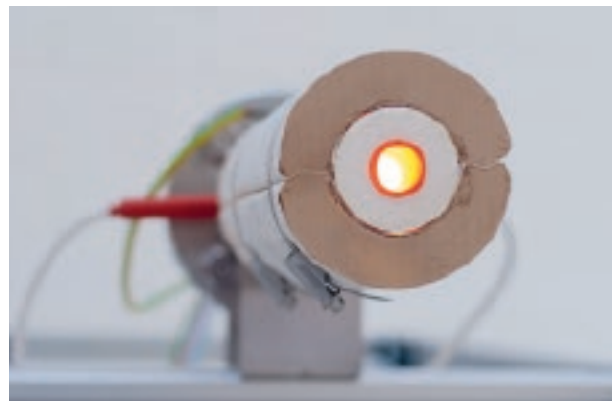
PRESSURE DROP IN CLEAN AIR



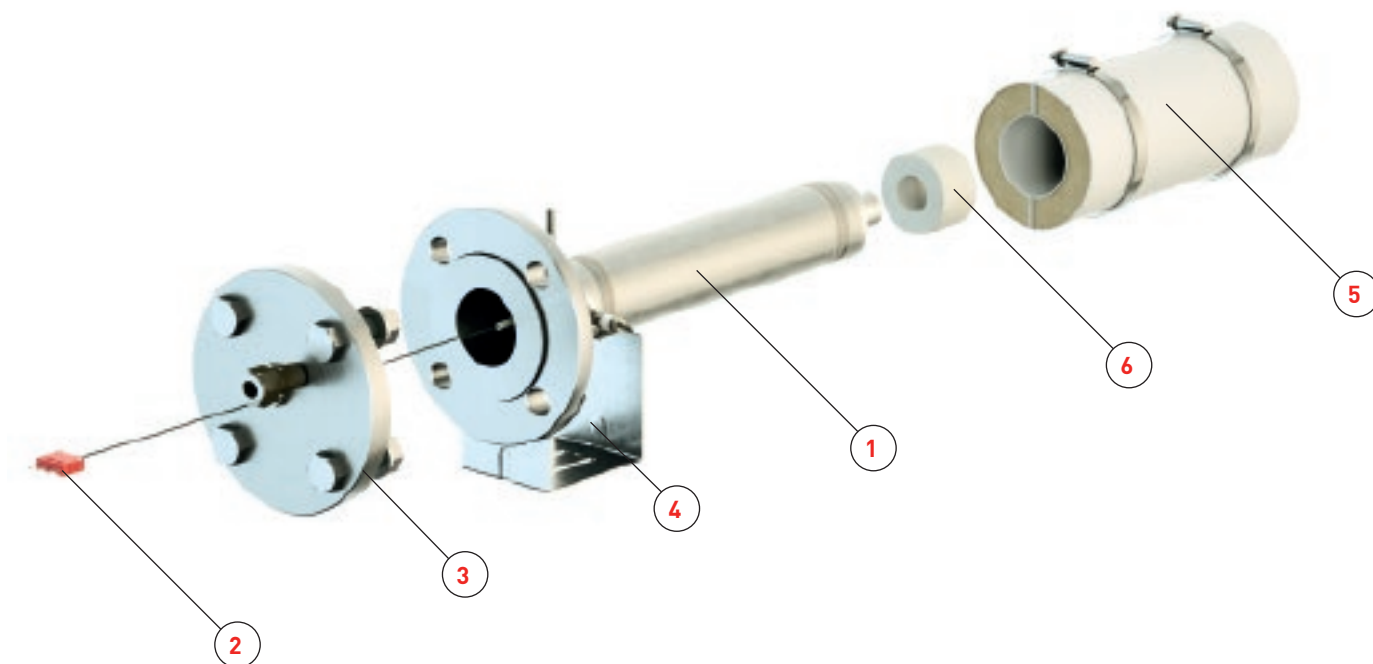
ELECTRICAL DATA

Power	3.5 kW
Voltage	1 x 230 V

including 2 electrical connectors with 2 m cable and plugs



ACCESSORIES



POS.	DESCRIPTION	ARTICLE NO.	WEIGHT [KG]
1	Flow Heater 3.5 kW Basic Version	See page 2	-
2	Internal thermocouple with ferrule fitting	DFH120002	0.03
3	Flange adaptor (incl. Thermocouple and Swagelock Ø 12 mm)	DFH120001	3.42
4	Mounting bracket	DA101664	0.33
5	Microporous insulation with clamps	DFH400003	0.66
6	Fibrothal nozzle insulation	DFH400002	0.02
7	Control Cabinet 3.5 kW	DFH126001	15

2. THERMOCOUPLE WITH FERRULE FITTING

TECHNICAL DATA

Article No.	DFH120002
Type	T/C type N in Inconel sheath with plug (3 pins with ground sheath)
Dimensions	Ø 1.5 mm, L = 500 mm
Fitting connection	M8 x 1 thread with sealing



3. FLANGE ADAPTOR

TECHNICAL DATA

Article No.	DFH120001
Flange	1.4571 PN 16 DN50 outer Ø 165 mm
Inlet	1.4571 Swagelok Ø 12 mm (tube)
Thermocouple	T/C type N in Inconel sheath for over temperature protection inside the heater



4. MOUNTING BRACKET

TECHNICAL DATA

Article No.	DH500400
Material	1.4404
Dimensions (WxHxD)	200 mm x 80 mm x 2 mm



5. MICROPOROUS INSULATION WITH CLAMPS

TECHNICAL DATA

Article-No.	DFH400003
Material	Microporous half shells
Dimensions	Outer Ø 112 mm, L = 250 mm
Attachment	Pair of clamps



6. FIBROTHAL NOZZLE INSULATION

TECHNICAL DATA

Article No.	DFH400002
Material	Fibrothal F17/LS
Dimensions	Outer Ø 78 mm, L = 35 mm



7. CONTROL CABINET 3.5 kW

TECHNICAL DATA

Article No.	DFH126001
Dimensions (WxHxD)	400 mm x 300 mm x 210 mm



