

KANTHAL® FLOW HEATER 40 kW

HEATING GASES UP TO 1100°C

TECHNICAL SPECIFICATION

KANTHAL®

Part of Sandvik Group

FLOW HEATER 40 kW BASIC VERSIONS

The Flow Heater 40 kW can be supplied in different basic versions with power connection cables included. There are additional accessories for insulation, mounting and temperature control.

1A. FLOW HEATER 40 KW WITHOUT NOZZLE

BASIC DATA

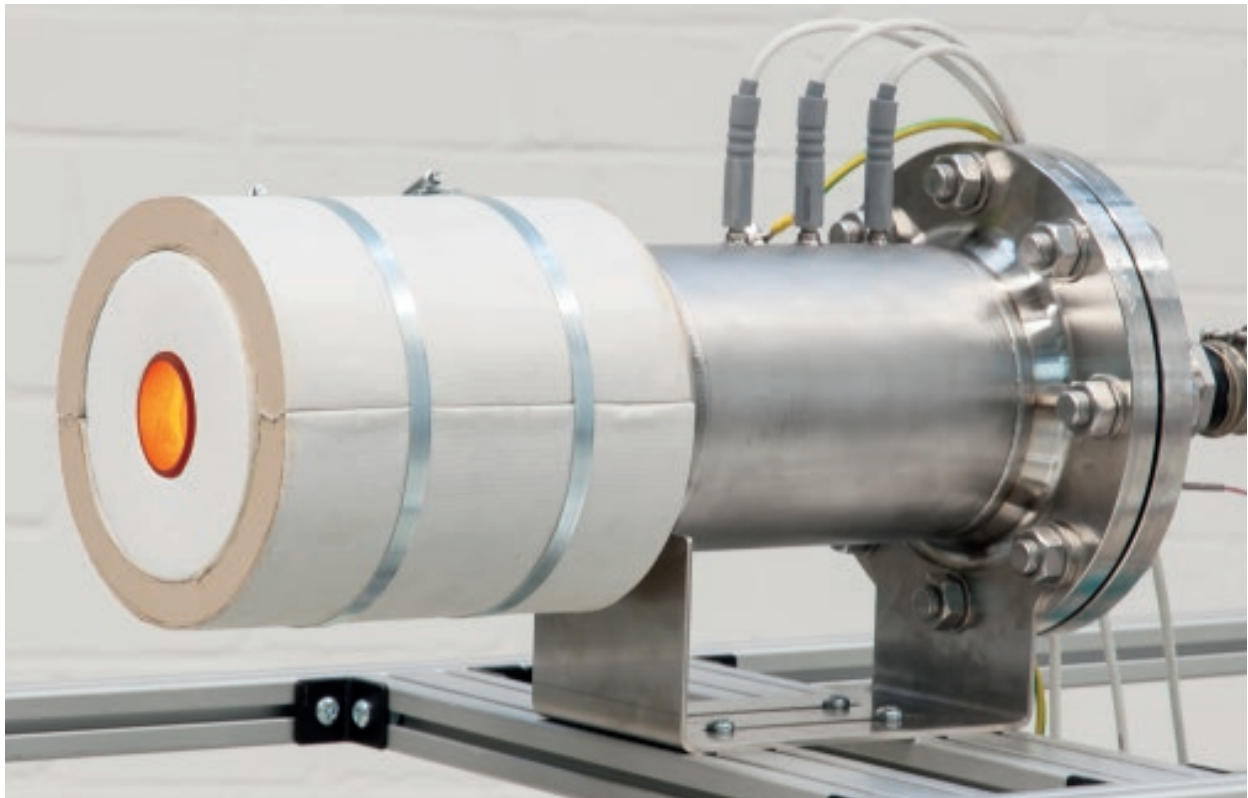
Article No.	DFH100402
Inlet connection	welding nipple DN 50 (2") outer Ø 60.3 mm in 1.4541 (321)
Outlet connection	6" tube outer Ø 168.3 mm in 1.4835 (253 MA)
Total length	589 mm
Weight	40.91 kg



1B. FLOW HEATER 40 KW WITH NOZZLE

BASIC DATA

Article No.	DFH100404
Inlet connection	welding nipple DN 50 (2") outer Ø 60.3 mm in 1.4541 (321)
Outlet connection	2" tube outer Ø 60.3 mm in 1.4835 (253 MA)
Total length	624 mm
Weight	42.9 kg



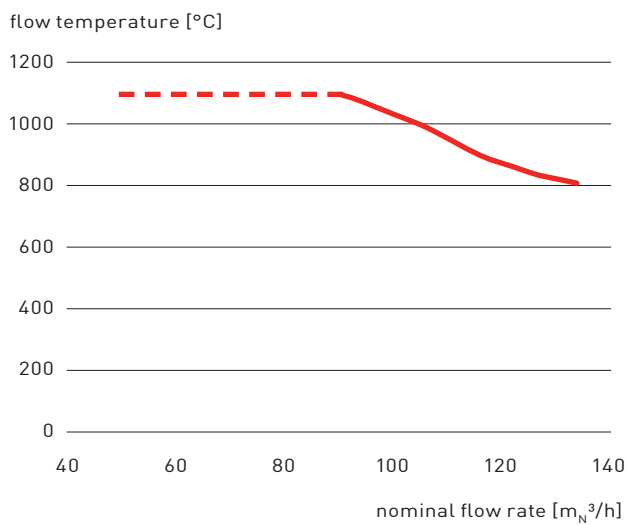
SPECIFICATIONS

OPERATING DATA (Valid for all basic versions fully equipped)

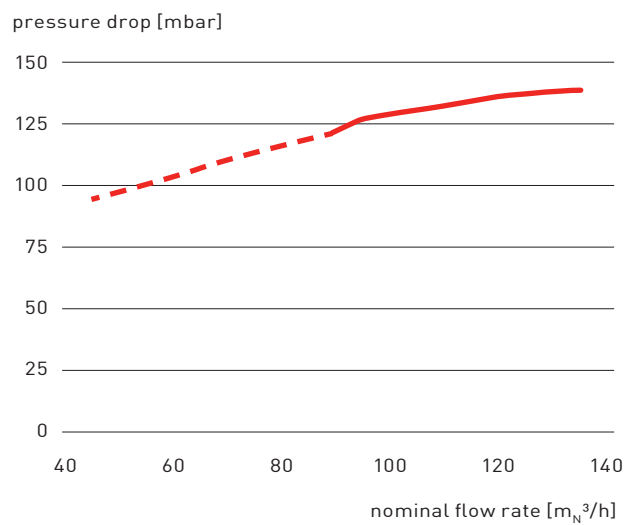
Fluid	air, N ₂ , O ₂ , CO ₂ *	
Nominal volume flow (air)	45 – 135 m _N ³ /h	26.49 – 79.46 cfm
	750 – 2250 l _N /min	
Mass flow (air)	58.2 – 174.5 kg/h	
Operating pressure	< 1.5* bar absolute	< 22 PSI absolute
Max. pressure drop	140 mbar	2.03 PSI
Inlet temperature	< 100°C	< 212°F
Max. outlet temperature (air)	1100°C*	2012°F
Ambient temperature	< 40°C	< 104°F
Installation	horizontal	
Tube material	1.4835 (253 MA)	

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

FLOW TEMPERATURE IN CLEAN AIR



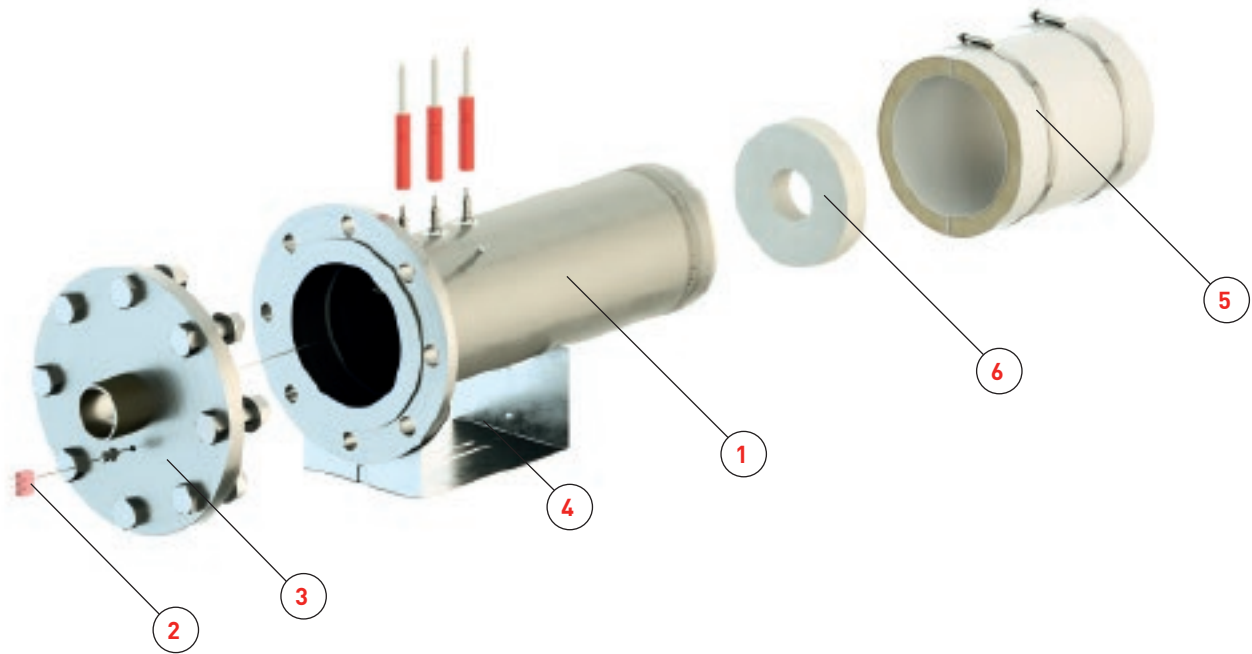
PRESSURE DROP IN CLEAN AIR



ELECTRICAL DATA

Power	40 kW
Voltage	400 V / 3 - phase
including 3 electrical connectors with 2 m cable (8 AWG) and plugs	

ACCESSORIES



POS.	DESCRIPTION	ARTICLE NO.	WEIGHT [KG]
1	Flow Heater 40 kW Basic Version	See page 2	-
2	Internal thermocouple with ferrule fitting	DFH120010	0.05
3	Flange adaptor (incl. Thermocouple and welding nipple)	DFH120005	12.05
4	Mounting bracket	DH500402	1.85
5	Microporous insulation with clamps	DFH400007	1.52
6	Fibrothal nozzle insulation	DFH400009	0.13
7	Control Cabinet (CE) 40 kW	DFH126003	64.0
8	Control Cabinet (UL) 40 kW	DFH126002	64.0

2. THERMOCOUPLE WITH FERRULE FITTING

TECHNICAL DATA

Article No.	DFH120010
Type	T/C type N in Inconel sheath with plug (3 pins with ground sheath)
Dimensions	Ø 1.5 mm, L = 600 mm
Fitting connection	M8 x 1 thread with sealing



3. FLANGE ADAPTOR

TECHNICAL DATA

Article No.	DFH120005
Flange	PN 16 DN 150 (6") outer Ø 285 mm in 1.4571 (316 Ti)
Inlet	welding nipple DN 50 (2") outer Ø 60.3 mm in 1.4541 (321)
Thermocouple	T/C type N in Inconel sheath for over temperature protection inside the heater



4. MOUNTING BRACKET

TECHNICAL DATA

Article No.	DH500402
Material	1.4404 (316L)
Dimensions (WxHxD)	462 mm x 140 mm x 4 mm



5. MICROPOROUS INSULATION WITH CLAMPS

TECHNICAL DATA

Article No.	DFH400007
Material	Microporous half shells
Dimensions	Outer Ø 218 mm, L = 250 mm
Attachment	Pair of clamps



6. FIBROTHAL NOZZLE INSULATION

TECHNICAL DATA

Article No.	DFH400009
Material	Fibrothal F17/LS
Dimensions	Outer Ø 168 mm, L = 35 mm



7. CONTROL CABINET (CE) 40 kW

TECHNICAL DATA

Article No.	DFH126003
Control	PID control
Connection	63 A CEE plug with 5 m cable
Dimensions (WxHxD)	800 mm x 600 mm x 250 mm



8. CONTROL CABINET (UL) 40 kW

TECHNICAL DATA

Article No.	DFH126002
Control	PID control
Connection	63 A CEE plug with 5 m cable
Dimensions (WxHxD)	800 mm x 600 mm x 250 mm



