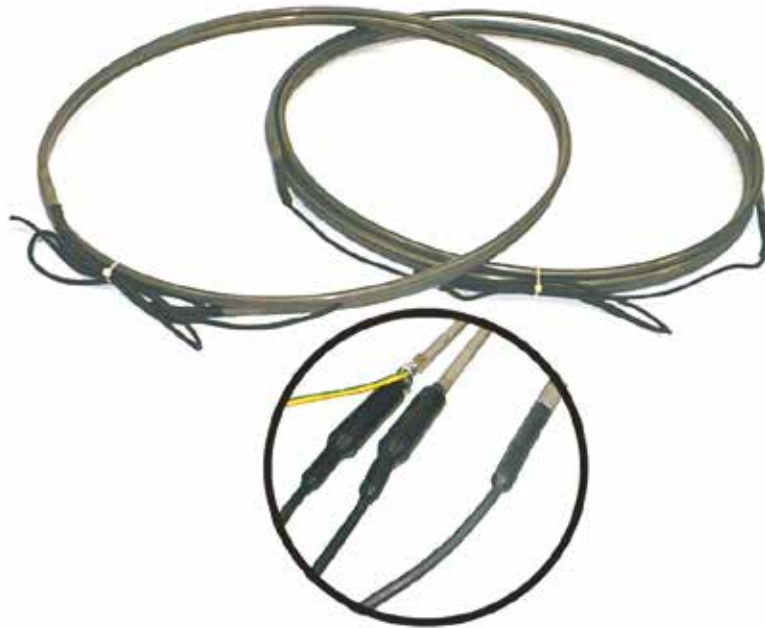


Defrosting

Flexible Heating Elements

DEFA, DEFB, DEFC range



Straight annealed elements adaptable for evaporators or tray defrosting, **DEFA range**
page 2

Straight annealed elements for evaporators or tray defrosting, **DEFB range**
page 4

Flexible annealed copper heating elements for drain pipe defrosting, **DEFC range**
page 5

Straight annealed elements adaptable for evaporators or tray defrosting, **DEFA range**

Technical data DEFA range

- Stainless steel tube AISI 321 or AISI 304L annealed of Ø8 mm
- Vulcanized hoods Ø 8.7 mm
- Degree protection against moisture IP67
- Connection cable HAR H05S-K 1.5 mm² with 500 mm length
- Standard voltage: ~230 V

Particular characteristics DEFA3_9E model

- Stainless steel tube AISI 321 not annealed of Ø8 mm
- Minimum inner radius of bending 35 mm. See NOTE (1)
- Vulcanized hoods Ø12 mm
- Degree protection against moisture IP67
- Connection cable HAR H05S-K 1.5 mm² with 500 mm length + earth connection
- Standard voltage: ~230 V

Usual applications

- Industrial cooling
- Evaporators
- Melting of snow and ice on rinks
- Cold-storage chambers
- Display cases
- Freezer chambers
- Defrosting of cold-storage chambers (joints, doors, trays, drain pipes, demisting, glass, etc.)
- Maintenance of heat in the piping of sanitary hot water installations
- Fluidization of high viscosity liquids
- Heating of pipes and tanks

Code	Dimension A (mm)	Watts	W/cm ²	Weight (Kg)
DEFA1	1000	350	1.6	0.25
DEFA1_25	1250	450	1.5	0.31
DEFA1_5	1500	525	1.6	0.37
DEFA1_75	1750	625	1.5	0.43
DEFA2	2000	700	1.5	0.5
DEFA2_25	2250	800	1.5	0.56
DEFA2_5	2500	875	1.5	0.62
DEFA2_75	2750	950	1.5	0.68
DEFA3	3000	1000	1.5	0.74
DEFA3_25	3250	1125	1.4	0.8
DEFA3_5	3500	1250	1.5	0.86
DEFA3_9E	3907	1675	1.77	0.96
DEFA4	4000	1400	1.5	0.98
DEFA4_5	4500	1600	1.5	1.1
DEFA5	5000	1750	1.4	1.2
DEFA5_5	5500	1900	1.4	1.3
DEFA6	6000	2100	1.4	1.5
DEFA6_5	6500	2300	1.4	1.6

(Minimum Temperature -40°C; Max. temperature under regular use 250°C, maximum temperature under peak 280°C)

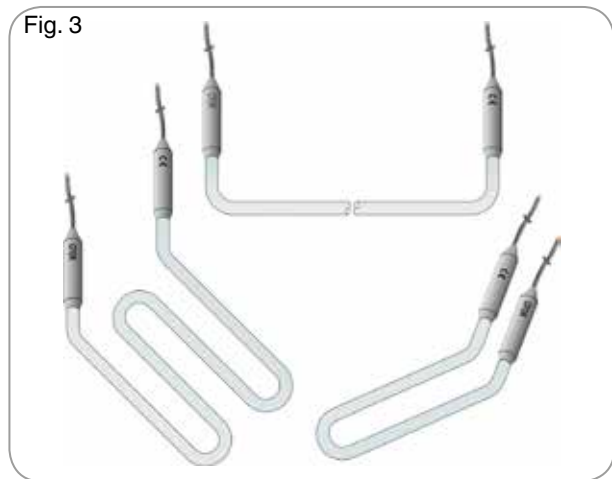
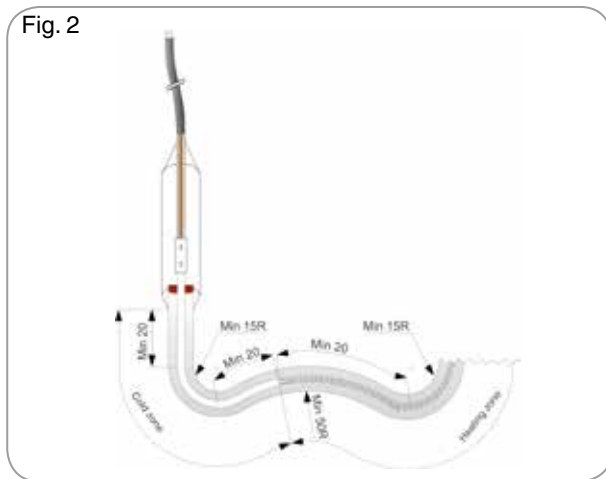
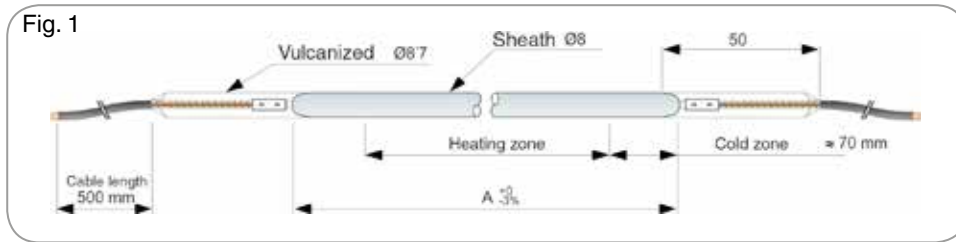
This product is supplied in rolls of 0.55 m in diameter to simplify transport, except for models DEFA1, DEFA1_25, DEFA1_5, DEFA1_75 and DEFA3_9E.

Note: These resistors may be bent to a radius of 15 mm, with the exception of the RRF13_9E model with minimum inner radius of bending 35 mm.

Important: The two ends of the heating area should be kept at a distance of 20 mm from any bend with a radius under 50 mm as indicated in Fig. 1.

BEND AT ENDS: A length of at least 20 mm should be left free of bends at both ends.

The straight elements manufactured in annealed tube may be bent to obtain the element appropriate to your requirements. Bending can be performed directly at the factory or else you can do it yourself, bearing in mind the limitations stipulated in Fig. 2.



Straight annealed elements for evaporators or tray defrosting, **DEFB range**

Technical data DEFB range

- Stainless steel tube AISI 321 or Incoloy®-825 NOT ANNEALED of Ø8 mm.
- Vulcanized hoods Ø12 mm.
- Degree protection against moisture IP67.
- Connection cable HAR H05S-K 1,5 mm² with 500 mm length + earth connection.
- Standard voltage: ~230 V

Usual applications

- Industrial cooling
- Evaporators
- Cold-storage chambers
- Display cases
- Freezer chambers
- Defrosting of cold-storage chambers

Code	Watts	W/cm ²	Tube	Shape	N°	Dimensions (mm)		Weight (Kg)
						L	B	
DEFB1_67U	1675	1.77	AISI321	U (Fig. 5A)	1	1929	--	1.14
DEFB1_8U	1800	1.65	AISI321	U (Fig. 5A)	1	2224	--	1.31
DEFB0_7RAC	700	1.1	AISI321	Straight with elbowed ends (Fig. 5B)	2	2338	174	0.79
DEFB1_05RAC	1050	1.1	AISI321		2	3588	174	1.16
DEFB1_67RAC	1675	1.77	AISI321		2	3588	174	1.16
DEFB0_5UAC	500	1.77	Incoloy®-825	U elbowed (Fig. 6)	3	498	144	0.38
DEFB0_7UAC	700	1.1	AISI321	U elbowed (Fig. 6)	3	1155	174	0.78
DEFB1_05UAC	1050	1.1	AISI321	U elbowed (Fig. 6)	3	1780	174	1.15
DEFB1_67UAC	1675	1.77	AISI321	U elbowed (Fig. 6)	3	1780	174	1.15
DEFB1_8UAC	1800	1.65	AISI321	U elbowed (Fig. 6)	3	2063	187	1.33

(Minimum Temperature -40°C; Max. temperature under regular use 150°C, maximum temperature under peak 170°C)

Note: These elements may be bent to a radius of 35 mm.

Important: The two ends of the heating area should be kept at a distance of 20 mm from any bend with a radius under 50 mm as indicated Fig. 2

BENT AT ENDS: A length of at least 20 mm should be left free of bends at both ends.

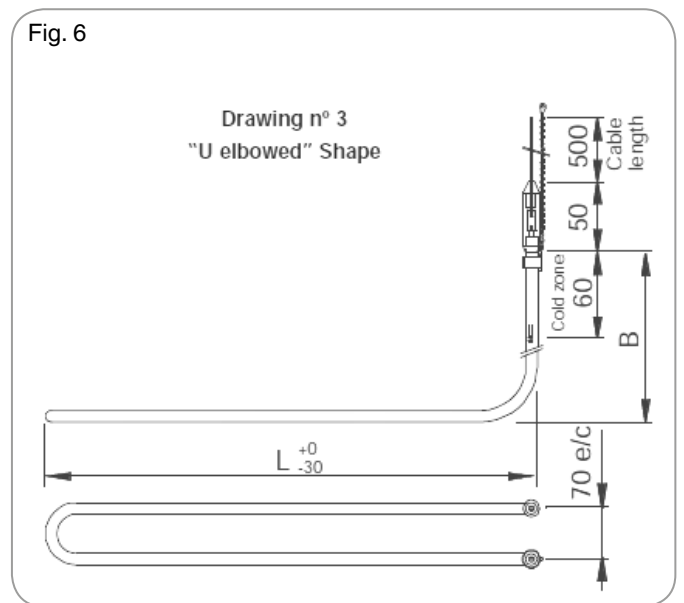
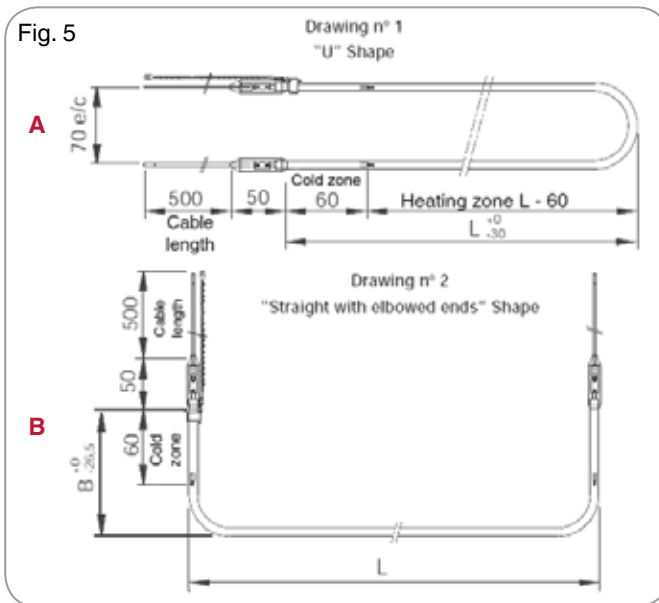
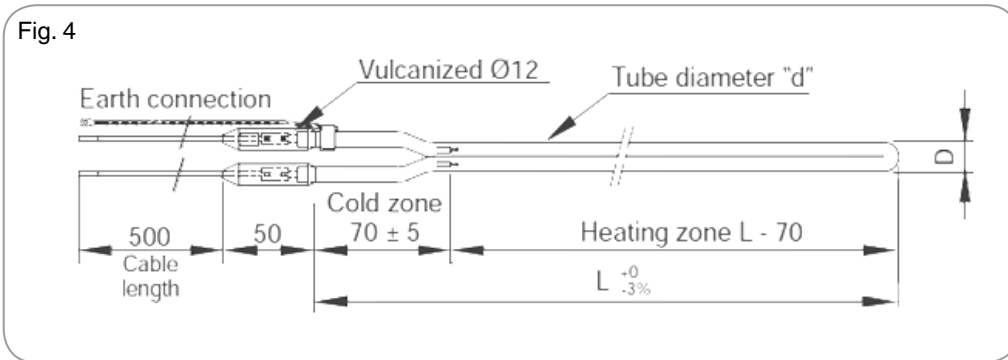
Flexible annealed copper heating elements for drain pipe defrosting, **DEFC** range

General characteristics

- Copper tube annealed of Ø 6.4 or Ø8 mm according to models
- Vulcanized hoods Ø12 mm
- Degree protection against moisture IP67
- Connection cable HAR H05S-K 1.5 mm² with 500 mm length + earth connection
- Standard voltage: ~230 V

Code	Watts	W/cm ²	Dimensions (mm)			Weight (Kg)
			L	Tube diameter «d»	D	
DEFC1	120	0.3	990	6.4	13	0.37
DEFC1_5	180	0.3	1490	6.4	13	0.53
DEFC2	350	0.4	1990	6.4	13	0.68
DEFC2_2	400	0.4	2190	8	16	1.1
DEFC2_8	500	0.4	2840	8	16	1.4

(Minimum Temperature -40°C ; Max temperature under regular use 150°C, maximum temperature under peak 170°C)



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Rev 1.2

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Screw plug immersion heaters



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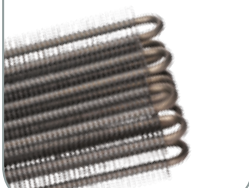
Formed elements



Cast elements



Ribbed heaters



Anti-condensation heating elements



Bolt heaters



Power control panels – Standard range

