

RESISTENZE MINTUBOLARI per UGELLI
COILED HEATERS for NOZZLES
RESISTANCES MINTUBULAIRES pour BUSES

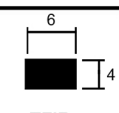
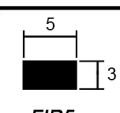
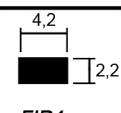
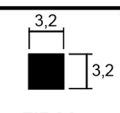
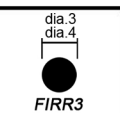


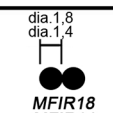


I riscaldatori minitubolari FEPA sono fabbricati secondo le più moderne tecniche costruttive al fine di assicurare elevate prestazioni, flessibilità di applicazione, standard di sicurezza elevati. La vasta gamma di articoli in termini di lunghezze standard, potenze, sezioni, permette ai nostri clienti di trovare la soluzione migliore per le loro applicazioni all'interno del nostro range di prodotti. Riscaldatori speciali sono realizzati per soddisfare i progetti innovativi provenienti dai reparti di ricerca dei nostri clienti.

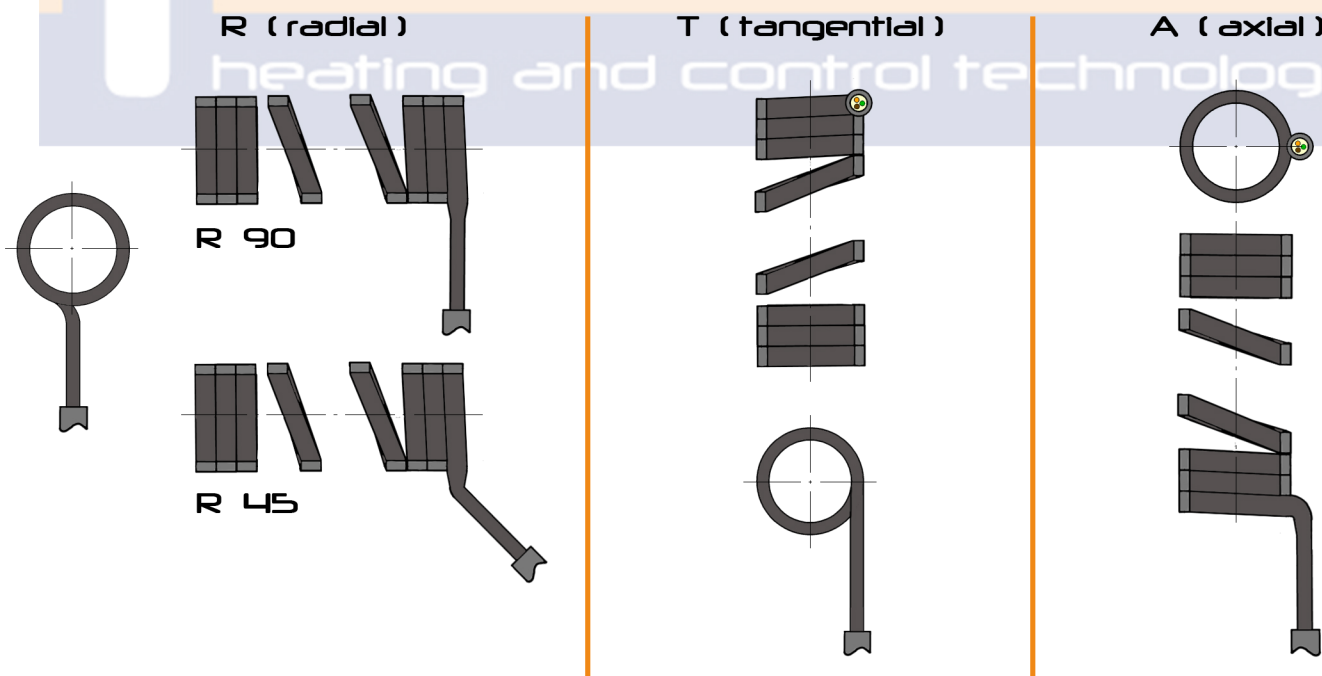
FEPA minitubular heaters are manufactured according to the most advanced constructive technology in order to assure high performances, application flexibility, perfect safety standard. The large range of items in terms of standard lengths, wattages, cross sections, allows our customers to find the best solution for their applications within FEPA products. Special heaters are manufactured to satisfy new innovative projects coming from our customers design departments.

Les resistances minitubulaires FEPA sont fabriquées selon la technologie de construction la plus avancée afin d'assurer des performances élevées, une flexibilité d'application, et normes de sécurité parfaites. La large gamme d'articles en termes de longueurs standard, puissances, sections, permettent à nos clients de trouver la meilleure solution dans les produits FEPA pour leurs applications. Resistances spéciaux sont fabriqués pour satisfaire de nouveaux projets innovants demandés par les bureaux d'études et développements de nos clients.

PROFILI - PROFILES - PROFILS STANDARD

	 TFIR	 FIR5	 FIR4	 FIRQ3	 FIRR3 FIRR4	 FIR3	 FIR2	 MFIR18 MFIR14
LUNGHEZZA MASSIMA MAXIMUM LENGTH LONGEUR MAXIMALE	2500 mm	1600	2000 mm	2500 mm	2000 mm	1200 mm	1200 mm	1500 mm
DIA. INTERNO MINIMO MIN. INTERNAL DIAMETER DIA. INTERIEUR MINIMUM	24	18	12	12	8	8	6	6
AMPERE MAX. @ 230V	10	7	6	6	6	3	1,5	2,6

TIPI DI USCITE - COLD END EXITS - SORTIES



GUAINA PROTETTIVA - PROTECTION SLEEVES - GAINES DE PROTECTION



VETRO - SILICONE
FIBERGLASS - SILICON
SOIE DE VERRE - SILICON



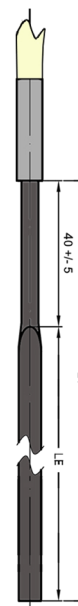
ARMATURA METALLICA
METAL BRAIDED
TRESSE METALLIQUE

FIRECOIL 4,2 x 2,2

4,2 x 2,2 WITHOUT TC			4,2 x 2,2 WITH TC		
CODE	WATT	LE (mm)	CODE	WATT	LE (mm)
FIR4200	200	210	FIR4200T	200	210
FIR4225	225	260	FIR4225T	225	260
FIR4250	250	310	FIR4250T	250	310
FIR4290	290	360	FIR4290T	290	360
FIR4330	330	410	FIR4330T	330	410
FIR4400	400	460	FIR4400T	400	460
FIR4470	470	560	FIR4470T	470	560
FIR4550	550	660	FIR4550T	550	660
FIR4620	620	760	FIR4620T	620	760
FIR4700	700	860	FIR4700T	700	860
FIR4800	800	960	FIR4800T	800	960
FIR4950	950	1160	FIR4950T	950	1160
FIR41100	1100	1360	FIR41100T	1100	1360
FIR41200	1200	1560	FIR41200T	1200	1560

QUBE FIRECOIL 3,2 x 3,2

3,2 x 3,2 WITHOUT TC			3,2 x 3,2 WITH TC		
CODE	WATT	LE (mm)	CODE	WATT	LE (mm)
FIRQ3175	175	210	FIRQ3175T	175	210
FIRQ3200	200	260	FIRQ3200T	200	260
FIRQ3225	225	310	FIRQ3225T	225	310
FIRQ3250	250	360	FIRQ3250T	250	360
FIRQ3290	290	410	FIRQ3290T	290	410
FIRQ3330	330	460	FIRQ3330T	330	460
FIRQ3400	400	560	FIRQ3400T	400	560
FIRQ3470	470	660	FIRQ3470T	470	660
FIRQ3550	550	760	FIRQ3550T	550	760
FIRQ3620	620	860	FIRQ3620T	620	860
FIRQ3700	700	960	FIRQ3700T	700	960
FIRQ3850	850	1160	FIRQ3850T	850	1160
FIRQ3950	950	1360	FIRQ3950T	950	1360
FIRQ31100	1100	1560	FIRQ31100T	1100	1560
FIRQ31200	1200	1760	FIRQ31200T	1200	1760

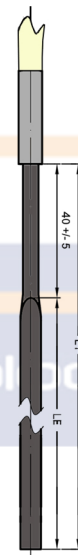


MINI FIRECOIL 3,2 x 1,8

3,2 x 1,8 WITHOUT TC			3,2 x 1,8 WITH TC		
CODE	WATT	LE (mm)	CODE	WATT	LE (mm)
FIR3150	150	160	FIR3150T	150	160
FIR3175	175	210	FIR3175T	175	210
FIR3200	200	260	FIR3200T	200	260
FIR3225	225	310	FIR3225T	225	310
FIR3250	250	360	FIR3250T	250	360
FIR3290	290	410	FIR3290T	290	410
FIR3330	330	460	FIR3330T	330	460
FIR3400	400	560	FIR3400T	400	560
FIR3470	470	660	FIR3470T	470	660
FIR3550	550	760	FIR3550T	550	760
FIR3620	620	860	FIR3620T	620	860
FIR3700	700	960	FIR3700T	700	960

THIN FIRECOIL 2,4 x 1,4

2,4 x 1,4 WITHOUT TC		
CODE	WATT	LE (mm)
FIR2080	80	80
FIR2100	100	110
FIR2125	125	160
FIR2150	150	210
FIR2175	175	260
FIR2200	200	310
FIR2225	225	360
FIR2250	250	410
FIR2275	275	460



PICO FIRECOIL Ø 1,8

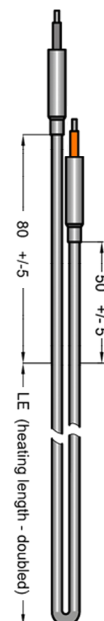
dia. 1,8 WITHOUT TC			
CODE	WATT	LE (mm)	LT* (mm)
MFIR18125	125	135	400
MFIR18150	150	160	450
MFIR18175	175	185	500
MFIR18200	200	235	600
MFIR18250	250	285	700
MFIR18300	300	335	800
MFIR18350	350	385	900
MFIR18400	400	435	1000
MFIR18500	500	535	1200
MFIR18600	600	685	1500

PICO FIRECOIL Ø 1,4

dia. 1,4 WITHOUT TC			
CODE	WATT	LE (mm)	LT* (mm)
MFIR14100	100	135	400
MFIR14120	120	160	450
MFIR14140	140	185	500
MFIR14160	160	235	600
MFIR14200	200	285	700
MFIR14240	240	335	800
MFIR14280	280	385	900
MFIR14320	320	435	1000
MFIR14400	400	535	1200

PICO FIRECOIL 2,3 x 1,3

2,3 x 1,3 WITHOUT TC		
CODE	WATT	LE (mm)
MFIR13125	125	135
MFIR13150	150	160
MFIR13175	175	185
MFIR13200	200	235
MFIR13250	250	285
MFIR13300	300	335
MFIR13350	350	385
MFIR13400	400	435
MFIR13500	500	535
MFIR13600	600	685



*LT = lunghezza totale elemento dritto - straight heating element length - longueur totale resistance droit

TERAFIRECOIL 6 x 4

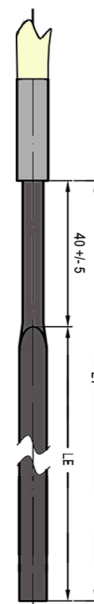
FIRE5 5 x 3

6 x 4 WITHOUT TC		
CODE	WATT	LE (mm)
TFIR800	800	760
TFIR1000	1000	960
TFIR1200	1200	1210
TFIR1400	1400	1460
TFIR1600	1600	1710
TFIR1800	1800	1960
TFIR2000	2000	2210
TFIR2200	2200	2460

6 x 4 WITH TC		
CODE	WATT	LE (mm)
TFIR800T	800	760
TFIR1000T	1000	960
TFIR1200T	1200	1210
TFIR1400T	1400	1460
TFIR1600T	1600	1710
TFIR1800T	1800	1960
TFIR2000T	2000	2210
TFIR2200T	2200	2460

5,0 x 3,0 WITHOUT TC		
CODE	WATT	LE (mm)
FIR5700	700	760
FIR5800	800	860
FIR5900	900	960
FIR51050	1050	1160
FIR51200	1200	1360
FIR51300	1300	1560
FIR51400	1400	1760
FIR51500	1500	1960
FIR51600	1600	2160

5,0 x 3,0 WITH TC		
CODE	WATT	LE (mm)
FIR5700T	700	760
FIR5800T	800	860
FIR5900T	900	960
FIR51050T	1050	1160
FIR51200T	1200	1360
FIR51300T	1300	1560
FIR51400T	1400	1760
FIR51500T	1500	1960
FIR51600T	1600	2160



ROUND FIRECOIL Ø 4

ROUND FIRECOIL Ø 3

dia. 4 WITHOUT TC		
CODE	WATT	LE (mm)
FIRR4175	175	210
FIRR4200	200	260
FIRR4225	225	310
FIRR4250	250	360
FIRR4290	290	410
FIRR4330	330	460
FIRR4400	400	560
FIRR4470	470	660
FIRR4550	550	760
FIRR4620	620	860
FIRR4700	700	960
FIRR4850	850	1160
FIRR4950	950	1360
FIRR41100	1100	1560
FIRR41200	1200	1760

dia. 4 WITH TC		
CODE	WATT	LE (mm)
FIRR4175T	175	210
FIRR4200T	200	260
FIRR4225T	225	310
FIRR4250T	250	360
FIRR4290T	290	410
FIRR4330T	330	460
FIRR4400T	400	560
FIRR4470T	470	660
FIRR4550T	550	760
FIRR4620T	620	860
FIRR4700T	700	960
FIRR4850T	850	1160
FIRR4950T	950	1360
FIRR41100T	1100	1560
FIRR41200T	1200	1760

dia. 3 WITHOUT TC		
CODE	WATT	LE (mm)
FIRR3150	150	160
FIRR3175	175	210
FIRR3200	200	260
FIRR3225	225	310
FIRR3250	250	360
FIRR3290	290	410
FIRR3330	330	460
FIRR3400	400	560
FIRR3470	470	660
FIRR3550	550	760
FIRR3620	620	860
FIRR3700	700	960

dia. 3 WITH TC		
CODE	WATT	LE (mm)
FIRR3150T	150	160
FIRR3175T	175	210
FIRR3200T	200	260
FIRR3225T	225	310
FIRR3250T	250	360
FIRR3290T	290	410
FIRR3330T	330	460
FIRR3400T	400	560
FIRR3470T	470	660
FIRR3550T	550	760
FIRR3620T	620	860
FIRR3700T	700	960



**CARATTERISTICHE TECNICHE
TECHNICAL FEATURES
CARACTERISTIQUES TECHNIQUES**

POTENZA - WATTAGE - PUISSANCE @230V (tolerance)

A RICHIESTA - UPON REQUEST - SUR DEMANDE

LUNGHEZZA - LENGTH - LONGEUR (tolerance)

A RICHIESTA - UPON REQUEST - SUR DEMANDE

GUAINA - SHEATH - GAINE

RIGIDITA' DIELETTRICA - DIELECTRIC STRENGTH - RIGIDITE' DIELECTRIQUE

RESISTENZA D'ISOLAMENTO - INSULATION RES. - RES. D'ISOLEMENT (500VDC)

CORRENTE DI FUGA - LEAKAGE CURRENT - COURANT DE FUITE

TEMP. MAX SU GUAINA - MAX TEMP. ON SHEATH - TEMP. MAX. SUR LA GAINE

CAVI - LEADS - CABLES

ISOLAMENTO CAVI - LEADS INSULATION - ISOLEMENT CABLES

LUNGHEZZA CAVI STANDARD - STANDARD LEADS LENGTH - LONGEUR CABLES STANDARD

+/- -10%

+/- 5%

+/- 5%

+/- 2%

AISI 321

800V

>10 MOhm

< 0,1 mA

750°C

NICKEL

PTFE

1000mm

RESISTENZE PER PET NHAC
NHAC PET HEATERS
NHAC RESISTANCES POUR PET



Le resistenze **NHAC** sono riscaldatori Picofirecoil con sezione 1,3 x 2,3 mm con una fascia di serraggio in acciaio inox che comprime la resistenza sul corpo ugello.

L'applicazione tipica per questo tipo di resistenze è il riscaldamento di ugelli per iniettare PET.

NHAC nozzle heaters are Picofirecoil elements with cross sect. 1,3 x 2,3 mm fitted with a stainless steel axial clamp band which tightens the heater on the nozzle body.

Typical application is to heat nozzles for PET applications.

Les éléments chauffants pour buses NHAC sont résistances Picofirecoil de section 1,3 x 2,3 mm, avec un collier de serrage en acier inoxydable qui presse la résistance sur le corps de buse.

L'application typique de ce type de résistances est le chauffage de buses pour injecter PET.

CARATTERISTICHE TECNICHE - TECHNICAL FEATURES

TOLL. POTENZA (WATTAGE TOLERANCE – TOLERANCE DE PUISSANCE)	+5% / -10%
TOLL. RESISTENZA (RESISTANCE TOLERANCE – TOLERANCE DE RESISTANCE)	+5% / -10%
RIGIDITA' DIELETTRICA (DIELECTRIC STRENGTH)	500 V
RESISTENZA DI ISOLAMENTO (INSULATION RESISTANCE – RESISTANCE D'ISOLEMENT)	>5 MΩ
DISPERSIONE (LEAKAGE CURRENT – COURANT DE FUITE)	<0.1 mA
TENSIONE D'ALIMENTAZIONE (SUPPLY VOLTAGE – TENSION D'EMPLOI)	230V
DIMENSIONI STANDARD (STANDARD DIMENSIONS - DIMENSIONS STANDARD)	19,05 x 30,5 mm

RESISTENZE PER UGELLO SRT

SRT NOZZLE HEATERS

SRT RESISTANCES POUR BUSES



Le resistenze **SRT** sono riscaldatori Firecoil – Minifirecoil – Picofirecoil (scelte in base alle dimensioni richieste nell'applicazione) avvolti da un tubo riflettente in acciaio inox, che ha una funzione meccanica di proteggere la resistenza ed una termodinamica di aumentare il risparmio energetico diminuendo la dispersione del calore.

SRT nozzle heaters are Firecoil – Minifirecoil – Picofirecoil elements (depends on overall dimensions) fitted with stainless steel reflection tube.

Les éléments chauffants SRT sont résistances Firecoil – Minifirecoil – Picofirecoil (choisis en fonction des dimensions requises dans l'application) avec un collier de serrage en acier inoxydable avec fonction de protection de la résistance et d'augmenter l'économies d'énergie.

CARATTERISTICHE TECNICHE - TECHNICAL FEATURES

TOLL. POTENZA (WATTAGE TOLERANCE – TOLERANCE DE PUISSANCE)	+5% / -10%
TOLL. RESISTENZA (RESISTANCE TOLERANCE – TOLERANCE DE RESISTANCE)	+5% / -10%
RIGIDITA' DIELETTRICA (DIELECTRIC STRENGTH)	500 V
RESISTENZA DI ISOLAMENTO (INSULATION RESISTANCE – RESISTANCE D'ISOLEMENT)	>5 MΩ
DISPERSIONE (LEAKAGE CURRENT – COURANT DE FUITE)	<0.1 mA
TENSIONE D'ALIMENTAZIONE (SUPPLY VOLTAGE – TENSION D'EMPLOI)	230V
MINIMO DIAMETRO D. (MINIMUM DIAMETER – DIAMETRE MINIMUM)	9mm

RESISTENZE PER UGELLO CBFIR
CBFIR NOZZLE HEATERS
CBFIR RESISTANCES POUR BUSES



Le resistenze **CBFIR** sono riscaldatori Firecoil – Minifirecoil (scelte in base all'applicazione) corredati di una fascia di chiusura in acciaio per serrare la resistenza al corpo ugello in modo da ottenere un perfetto scambio termico. La fascia di chiusura svolge anche la funzione di riflessione dell'emissione IR prodotta dalla resistenza ed in tal modo recupera energia a beneficio di un rendimento termico decisamente più positivo.

La distribuzione della potenza è customizzabile in base all'applicazione richiesta.

Le dimensioni delle resistenze **CBFIR** sono a richiesta. L'utilizzo dei **FIRECOIL** standard rende i tempi di consegna molto rapidi.

CBFIR nozzle heaters are Firecoil – Minifirecoil elements (depending on application) fitted with a steel clamp band to tighten the heater to the nozzle body so that a perfect heat exchange is obtained. The clamp band also has the function of reflecting the IR emission produced by the heater thus recovering energy for an improved thermal efficiency.

Different Watt density sections available to fit every application.

CBFIR nozzle heaters dimensions are customized. The installation of standard FIRECOILS makes delivery time very short.

Les éléments chauffants CBFIR sont résistances Firecoil – Minifirecoil (choisis en fonction de l'application) avec un collier de serrage pour serrer la résistance sur le corps du buse afin d'obtenir un échange thermique parfait. Le collier de serrage exerce également les fonctions de réflexion de l'émission infrarouge produite par la résistance et ils récupère ainsi l'énergie pour le bénéfice d'un rendement thermique nettement plus positive.

La distribution de puissance est personnalisable en fonction de l'application.

Les dimensions des résistances CBFIR sont sur demande. Les résistances FIRECOIL standard sont utilisé pour obtenir un livraison très rapide.

CARATTERISTICHE TECNICHE - TECHNICAL FEATURES

TOLL. POTENZA (WATTAGE TOLERANCE – TOLERANCE DE PUISSANCE)	+5% / -10%
TOLL. RESISTENZA (RESISTANCE TOLERANCE – TOLERANCE DE RESISTANCE)	+5% / -10%
RIGIDITA' DIELETTRICA (DIELECTRIC STRENGTH)	500 V
RESISTENZA DI ISOLAMENTO (INSULATION RESISTANCE – RESISTANCE D'ISOLEMENT)	>5 MΩ
DISPERSIONE (LEAKAGE CURRENT – COURANT DE FUITE)	<0.1 mA
TENSIONE D'ALIMENTAZIONE (SUPPLY VOLTAGE – TENSION D'EMPLOI)	230V
MINIMO DIAMETRO D. (MINIMUM DIAMETER – DIAMETRE MINIMUM)	9mm



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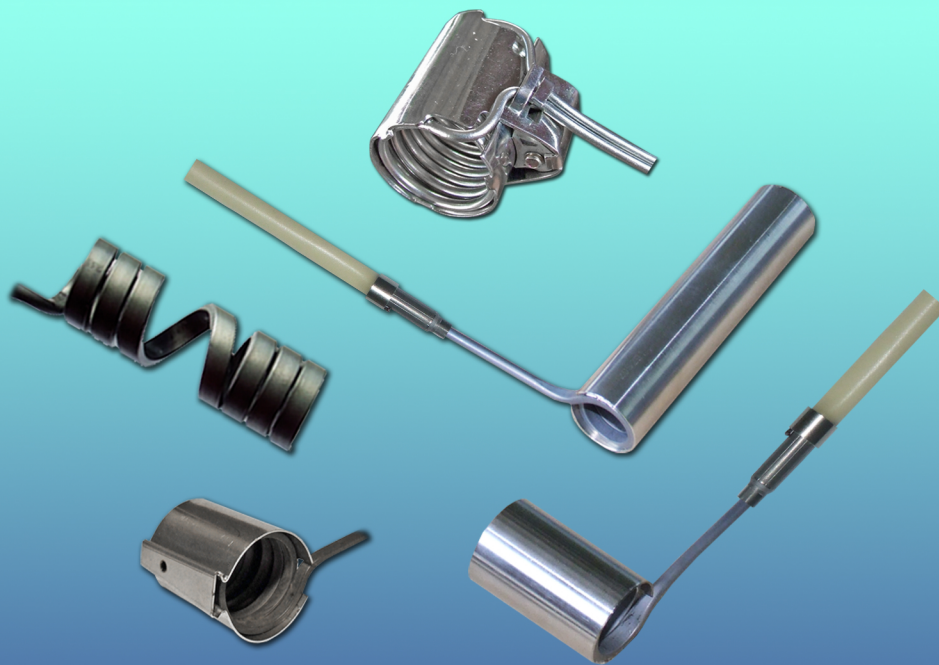
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