

ISE, Inc.

QUICKSHIP® STOCKING PROGRAM



"A Guaranteed Delivery Program"

fast  ***heat***

BANDS • CARTRIDGES • STRIP • THERMOCOUPLES • DIN CONTROLLERS

ORDERING INFORMATION

Ordering Options

1. Call (440) 237-3200 to place an order.
2. Fax (440) 237-1744 for instant ordering.
3. Email your order to orders@instserv.com

Ordering Information

Please have the following information ready to place your order:

1. Account number or company name
2. Purchase order number
3. Shipping instructions
4. Part number (depending on lead configuration and length, you may receive an updated catalog number).
5. Product Description
6. Quantity

Custom Stocking

If we don't have the item you're looking for in stock, ask about our Custom-Stocking Program. Depending on how many you order and the frequency of orders, we may be able to stock it for you!

Competitive Pledge

Can't find what you need? If we don't stock a particular item that you can find in stock in a competitor's catalog, we'll make it for you through our Fast Track program and waive the premium charge. That's our commitment to customer satisfaction!

Warranty

All QuickShip products have a minimum of one year warranty from date of shipment from factory.

Terms and Conditions

For terms and conditions of sale, consult our full General Product Catalog, or call Customer Service at (440) 237-3200.

Delivery Express Programs

QuickShip®

Same Day!

Stocking Program

If you place your order of a QuickShip stock item before 3:00 p.m. EST, we will ship it that same day

Fast Track®

2 to 5 Day

"Rush" Made-to-Order

Fast Track is a short lead-time program, providing special variations of Hi-Temp & Standard Cartridges, Mica Bands, Mica and Ceramic Strip heaters for customers in immediate need of parts shipped within 2 to 5 days. Special premium charges apply, based on a percentage of the net price of items ordered. If we miss the quoted ship date, the Fast Track charges do not apply.

Rapid Delivery

10 Day

Made-to-Order

Our Rapid Delivery program provides many custom products, manufactured in 10 days, including a wide variety of Hi-Temp & Standard Cartridges, Mica Bands, Mica and Ceramic Strips.

Call Fast Heat customer service for more information on specific products.

TABLE OF CONTENTS

<u>PRODUCT</u>	<u>PAGE</u>
<i>Cartridge Heaters</i>	
.....	
<i>Hi-Temp Cartridges (high density)</i>	4-11
.....	
<i>Band Heaters</i>	
.....	
<i>Better Bands (mineral insulated)</i>	12-17
.....	
<i>Sealed Better Bands (mineral insulated)</i>	18-20
.....	
<i>Value Bands (nozzle bands)</i>	21
.....	
<i>Mica Bands (mica insulated)</i>	22-25
.....	
<i>Band Heater Ordering Guide</i>	25
.....	
<i>Heater Accessories</i>	26
.....	
<i>Strip Heaters</i>	
.....	
<i>Fast Strip 38</i>	27
.....	
<i>Maestro® (DIN)-Temperature Controls</i>	28-29
.....	
<i>Thermocouples</i>	30-31
.....	
<i>Order Form</i>	32
.....	

The QuickShip® Worldwide Guarantee

Fast Heat's commitment to meeting customer expectations has led to the design and manufacture of one of the most extensive offerings of heating elements, thermocouples and temperature controls available today. In addition, the Fast Heat program offers more ordering options than any other program.

QuickShip® orders placed **before 3:00 p.m.** EST will be ready for shipment the same day

Note: Weekends and holidays are excluded from the QuickShip® guarantee and quantities are limited to availability at time of the order.

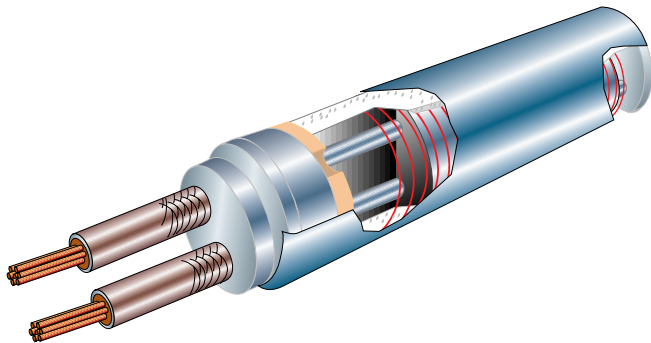
Fast Heat... "A Guaranteed Delivery Program."

Hi-Temp Cartridge



Internally Connected Leads

Flexible Leads



Hi-Temp Cartridge Heater with Internally Connected (flexible) leads

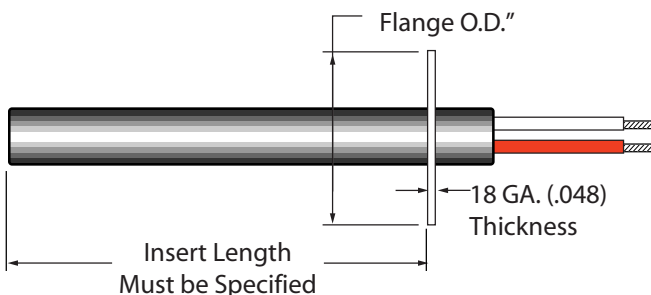
Heater Ordering Instructions:

1. Choose heater type – flexible leads or (non-flexible) pins
2. Choose termination options.
3. Choose size and specifications from stock list. (flexible leads pgs. 5-9; pins pg. 11)
4. Determine lead length – (10" std., otherwise specify).
5. Fill out the order form (back page), then call or fax in order.

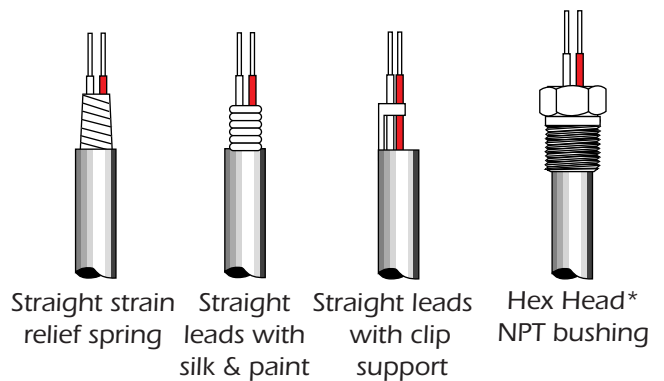
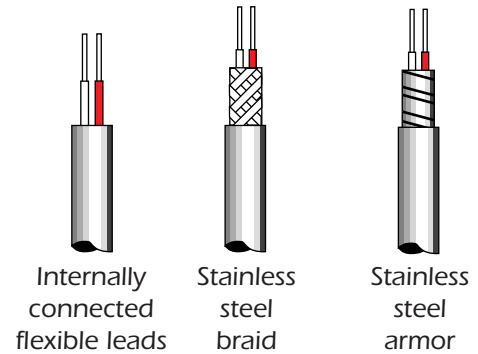
Note: Other sizes and options are available.

Flange Options

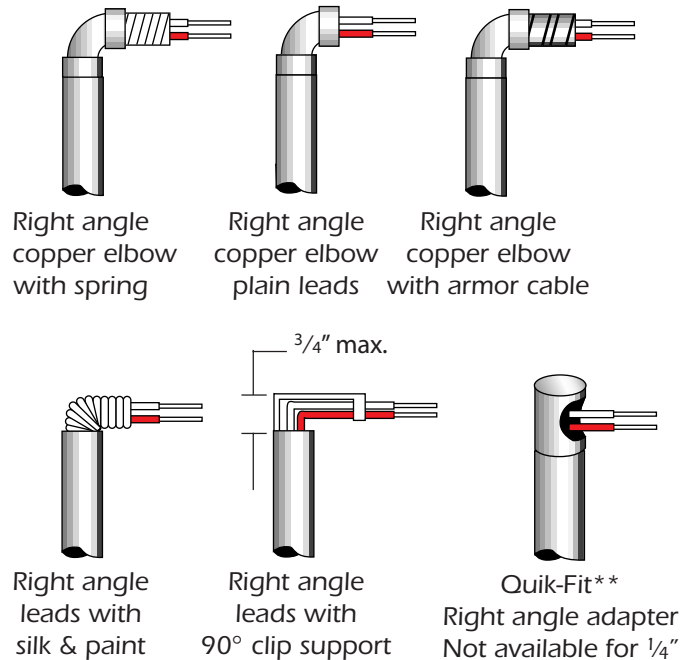
Heater O.D."	Flange O.D."
1/4	1/2
3/8	5/8
1/2	3/4 or 1
5/8	7/8 or 1
3/4	1



Lead Termination Options



*Insert length is reduced depending upon the diameter of heater. Call the factory for details.



** Quik-Fit cap length equals heater diameter. Overall length is increased by diameter of the heater. Call factory for details.



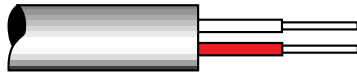
See page 26 for Plug options.



Refer to page 4 for termination options.

Internally Connected Leads

10" Flexible Leads



O.D." x L."	W	V	W/in2	Part No.
1/4 x 1	100	120	255	CH020146
1/4 x 1 1/4	100	120	170	CH020149
1/4 x 1 1/4	150	120	255	CH020150
1/4 x 1 1/4	225	240	382	CH020242
1/4 x 1 1/2	100	120	127	CH020152
1/4 x 1 1/2	175	120	223	CH020154
1/4 x 1 1/2	200	120	255	CH020155
1/4 x 1 1/2	200	240	255	CH020244
1/4 x 1 1/2	250	240	318	CH020245
1/4 x 2	100	120	102	CH020157
1/4 x 2	125	240	127	CH020246
1/4 x 2	200	120	204	CH020159
1/4 x 2	200	240	204	CH020247
1/4 x 2	250	240	255	CH020248
1/4 x 2	300	240	306	CH020249
1/4 x 2 1/2	250	120	182	CH029578
1/4 x 2 1/2	250	240	182	CH029265
1/4 x 3	100	120	57	CH024528
1/4 x 3	200	120	113	CH020163
1/4 x 3	200	240	113	CH020251
1/4 x 3	300	120	170	CH020164
1/4 x 3	300	240	170	CH020012
1/4 x 4	300	120	118	CH020061
1/4 x 4	300	240	118	CH020253
1/4 x 4 1/2	200	120	68	CH022380
1/4 x 5	350	240	105	CH020254
1/4 x 6	400	240	97	CH020255

10" Flexible Leads



O.D." x L."	W	V	W/in2	Part No.
3/8 x 1 1/2	250	120	212	CH020176
3/8 x 1 1/2	250	240	212	CH020260
3/8 x 1 3/4	175	120	119	CH020177
3/8 x 1 3/4	250	120	170	CH020178
3/8 x 1 3/4	250	240	170	CH020261
3/8 x 2	100	120	68	CH020179
3/8 x 2	100	240	68	CH020262
3/8 x 2	150	120	102	CH020180
3/8 x 2	150	240	102	CH020263
3/8 x 2	200	120	136	CH020181
3/8 x 2	200	240	136	CH020264
3/8 x 2	250	120	170	CH020182
3/8 x 2	250	240	170	CH020265
3/8 x 2	300	120	204	CH020183
3/8 x 2	300	240	204	CH020266
3/8 x 2	400	120	272	CH020184
3/8 x 2	400	240	272	CH020267
3/8 x 2 1/4	175	120	99	CH020186
3/8 x 2 1/4	250	120	141	CH020187
3/8 x 2 1/4	250	240	141	CH020269
3/8 x 2 1/4	300	120	169	CH020188
3/8 x 2 1/4	300	240	169	CH020270
3/8 x 2 1/4	350	120	198	CH020189
3/8 x 2 1/4	350	240	198	CH020271
3/8 x 2 1/2	200	120	97	CH022232
3/8 x 2 1/2	250	120	121	CH020190
3/8 x 2 1/2	250	240	121	CH020272
3/8 x 2 1/2	400	120	194	CH020191
3/8 x 2 1/2	400	240	194	CH020273
3/8 x 2 1/2	500	120	243	CH020192
3/8 x 2 1/2	500	240	243	CH020274
3/8 x 3	100	120	38	CH022401
3/8 x 3	150	120	57	CH020193
3/8 x 3	200	120	75	CH020194
3/8 x 3	200	240	75	CH020096
3/8 x 3	250	120	94	CH020195
3/8 x 3	250	240	94	CH020275
3/8 x 3	300	120	113	CH020143
3/8 x 3	300	240	113	CH020008

3/8 x 1	100	120	170	CH020168
3/8 x 1	150	120	255	CH020169
3/8 x 1	200	240	340	CH020256
3/8 x 1 1/4	200	120	226	CH025893
3/8 x 1 1/4	200	240	226	CH020257
3/8 x 1 1/2	75	120	64	CH024580
3/8 x 1 1/2	100	120	85	CH020808
3/8 x 1 1/2	100	240	85	CH020258
3/8 x 1 1/2	150	120	127	CH020174
3/8 x 1 1/2	200	120	170	CH020175
3/8 x 1 1/2	200	240	170	CH020259

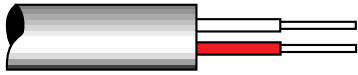
Hi-Temp Cartridge



Refer to page 4 for termination options.

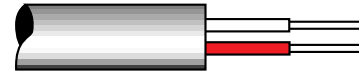
Internally Connected Leads

10" Flexible Leads



O.D." x L."	W	V	W/in2	Part No.
3/8 x 3	400	120	151	CH020196
3/8 x 3	400	240	151	CH020276
3/8 x 3	500	120	189	CH020197
3/8 x 3	500	240	189	CH020277
3/8 x 3	600	240	226	CH020278
3/8 x 3 1/2	250	120	77	CH022320
3/8 x 3 1/2	250	240	77	CH020281
3/8 x 3 1/2	300	240	93	CH020279
3/8 x 3 1/2	500	120	154	CH020199
3/8 x 3 1/2	500	240	154	CH020280
3/8 x 4	150	120	39	CH020200
3/8 x 4	250	120	65	CH020201
3/8 x 4	250	240	65	CH020081
3/8 x 4	350	240	91	CH020287
3/8 x 4	400	120	104	CH020203
3/8 x 4	400	240	104	CH020288
3/8 x 4	425	240	111	CH020289
3/8 x 4	500	120	131	CH020204
3/8 x 4	500	240	131	CH020285
3/8 x 4 1/2	300	120	68	CH020205
3/8 x 4 1/2	300	240	68	CH020286
3/8 x 4 1/2	500	120	113	CH020664
3/8 x 4 1/2	500	240	113	CH020857
3/8 x 5	150	120	30	CH022425
3/8 x 5	150	240	30	CH023193
3/8 x 5	300	120	60	CH020206
3/8 x 5	300	240	60	CH022241
3/8 x 5	500	120	100	CH020207
3/8 x 5	500	240	100	CH020290
3/8 x 5	550	240	110	CH020291
3/8 x 5	750	240	150	CH020292
3/8 x 5	1000	240	200	CH020293
3/8 x 5 1/2	600	240	107	CH020294
3/8 x 5 1/2	1000	240	179	CH020295
3/8 x 6	200	120	32	CH025490
3/8 x 6	250	120	40	CH020208
3/8 x 6	250	240	40	CH020296
3/8 x 6	400	120	65	CH020209
3/8 x 6	400	240	65	CH020297

10" Flexible Leads

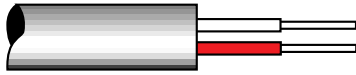


O.D." x L."	W	V	W/in2	Part No.
3/8 x 6	500	240	81	CH020128
3/8 x 6	600	120	97	CH020210
3/8 x 6	600	240	97	CH020298
3/8 x 6	675	240	109	CH020299
3/8 x 6	750	240	121	CH020300
3/8 x 6	1000	240	162	CH020301
3/8 x 6 1/2	1000	240	148	CH020303
3/8 x 7	250	240	34	CH022477
3/8 x 7	500	240	68	CH022156
3/8 x 7	600	120	181	CH020211
3/8 x 7	600	240	81	CH020304
3/8 x 7	675	240	92	CH020305
3/8 x 7	775	240	105	CH020306
3/8 x 7 1/2	600	240	75	CH020307
3/8 x 7 1/2	850	240	107	CH020308
3/8 x 7 1/2	1000	240	126	CH020309
3/8 x 8	300	120	35	CH025625
3/8 x 8	300	240	35	CH029582
3/8 x 8	400	120	47	CH029583
3/8 x 8	500	120	59	CH020070
3/8 x 8	500	240	59	CH020310
3/8 x 8	900	240	105	CH020311
3/8 x 8	1000	240	117	CH020312
3/8 x 10	400	120	37	CH029584
3/8 x 10	600	120	55	CH027479
3/8 x 10	700	240	64	CH020313
3/8 x 10	1125	240	103	CH020314
.....				
1/2 x 2 1/2	100	120	36	CH023836
1/2 x 2 1/2	100	240	36	CH029585
1/2 x 2 1/2	250	120	91	CH020212
1/2 x 2 1/2	250	240	91	CH020315
1/2 x 2 1/2	400	120	146	CH020213
1/2 x 2 1/2	400	240	146	CH020316
1/2 x 2 1/2	500	120	182	CH020214
1/2 x 2 1/2	500	240	182	CH020317
1/2 x 3	125	240	35	CH027782
1/2 x 3	250	120	71	CH020215
1/2 x 3	300	120	85	CH020216



Refer to page 4 for termination options.

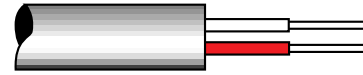
10" Flexible Leads



O.D." x L."	W	V	W/in2	Part No.
1/2 x 3	300	240	85	CH020318
1/2 x 3	400	240	113	CH020319
1/2 x 3	500	120	141	CH020217
1/2 x 3	500	240	141	CH020320
1/2 x 3	600	120	170	CH020218
1/2 x 3	600	240	170	CH020083
1/2 x 3	750	120	212	CH020219
1/2 x 3	750	240	212	CH020321
1/2 x 3 1/2	250	120	58	CH024252
1/2 x 3 1/2	250	240	58	CH029587
1/2 x 3 1/2	350	240	81	CH029189
1/2 x 3 1/2	500	120	116	CH022196
1/2 x 3 1/2	500	240	116	CH021868
1/2 x 3 1/2	750	240	174	CH021869
1/2 x 4	150	120	29	CH029596
1/2 x 4	150	240	29	CH029597
1/2 x 4	250	120	49	CH021870
1/2 x 4	250	240	49	CH021874
1/2 x 4	300	120	59	CH021871
1/2 x 4	300	240	59	CH021875
1/2 x 4	350	240	69	CH021876
1/2 x 4	400	120	78	CH022017
1/2 x 4	400	240	78	CH021877
1/2 x 4	500	120	98	CH021872
1/2 x 4	500	240	98	CH021878
1/2 x 4	550	240	108	CH020645
1/2 x 4	750	120	147	CH021873
1/2 x 4	750	240	147	CH021879
1/2 x 4	1000	240	196	CH021880
1/2 x 4 1/2	500	120	85	CH021881
1/2 x 4 1/2	500	240	85	CH021883
1/2 x 4 1/2	750	120	127	CH021882
1/2 x 4 1/2	750	240	127	CH021884
1/2 x 5	350	120	52	CH021885
1/2 x 5	350	240	52	CH021888
1/2 x 5	500	120	75	CH021886
1/2 x 5	500	240	75	CH021889
1/2 x 5	550	240	82	CH021890
1/2 x 5	750	120	112	CH021887

Internally Connected Leads

10" Flexible Leads



O.D." x L."	W	V	W/in2	Part No.
1/2 x 5	750	240	112	CH021891
1/2 x 5	1000	240	150	CH021892
1/2 x 5 1/2	500	120	67	CH021893
1/2 x 5 1/2	500	240	67	CH021895
1/2 x 5 1/2	750	120	101	CH021894
1/2 x 5 1/2	750	240	101	CH021896
1/2 x 6	500	120	61	CH021897
1/2 x 6	500	240	61	CH021899
1/2 x 6	600	240	73	CH021900
1/2 x 6	750	240	91	CH021901
1/2 x 6	875	240	106	CH021902
1/2 x 6	1000	120	121	CH021898
1/2 x 6	1000	240	121	CH021903
1/2 x 6 1/2	500	120	55	CH021904
1/2 x 6 1/2	500	240	55	CH021905
1/2 x 6 1/2	1000	240	111	CH021906
1/2 x 7	250	120	25	CH021907
1/2 x 7	500	240	51	CH021910
1/2 x 7	600	120	61	CH021909
1/2 x 7	600	240	61	CH021911
1/2 x 7	1000	240	102	CH021912
1/2 x 7 1/2	500	240	57	CH021913
1/2 x 7 1/2	1000	240	94	CH021914
1/2 x 8	500	120	44	CH021915
1/2 x 8	500	240	44	CH021917
1/2 x 8	800	240	70	CH021918
1/2 x 8	1000	120	88	CH021916
1/2 x 8	1000	240	88	CH021919
1/2 x 8	1175	240	103	CH021920
1/2 x 8	1500	240	132	CH021921
1/2 x 8	2000	240	176	CH021923
1/2 x 8 1/2	500	240	41	CH021924
1/2 x 8 1/2	1000	240	82	CH021925
1/2 x 9	500	240	39	CH021926
1/2 x 9	1000	240	77	CH021927
1/2 x 9	1325	240	102	CH021928
1/2 x 9 1/2	1000	240	73	CH021930
1/2 x 10	1000	120	69	CH021931
1/2 x 10	1000	240	69	CH021932

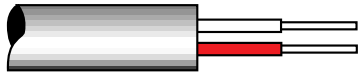
Hi-Temp Cartridge



Refer to page 4 for termination options.

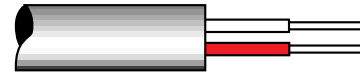
Internally Connected Leads

10" Flexible Leads



O.D." x L."	W	V	W/in2	Part No.
1/2 x 10	1100	240	76	CH021933
1/2 x 10	1500	240	103	CH021934
1/2 x 10	2000	240	138	CH021935
1/2 x 11	1000	240	62	CH021936
1/2 x 12	1000	120	57	CH021937
1/2 x 12	1000	240	57	CH021938
1/2 x 12	1100	240	62	CH021939
1/2 x 12	1500	240	85	CH021940
1/2 x 12	2000	240	113	CH021941
1/2 x 14	1000	240	48	CH029612
1/2 x 14	2300	240	111	CH029613
1/2 x 15	1500	240	67	CH029614
1/2 x 16	1000	240	42	CH029615
1/2 x 17	1000	240	43	CH030758
1/2 x 18	1000	240	40	CH030757
1/2 x 18	1500	240	55	CH029616
5/8 x 3	150	120	34	CH029589
5/8 x 3	250	120	57	CH020237
5/8 x 3	250	240	57	CH020364
5/8 x 3	500	240	113	CH020365
5/8 x 3	750	240	170	CH020366
5/8 x 3 3/4	525	120	89	CH021948
5/8 x 3 3/4	525	240	89	CH021949
5/8 x 4	250	120	39	CH029618
5/8 x 4	250	240	39	CH029619
5/8 x 4	400	240	63	CH021950
5/8 x 4	500	240	78	CH021951
5/8 x 4	600	240	94	CH021952
5/8 x 4	750	240	118	CH021953
5/8 x 4	1000	240	157	CH021954
5/8 x 5	250	120	30	CH029620
5/8 x 5	250	240	30	CH029621
5/8 x 5	500	240	60	CH021955
5/8 x 5	750	240	90	CH021956
5/8 x 5	875	240	105	CH021957
5/8 x 5	1000	240	120	CH021958
5/8 x 5 1/2	800	120	86	CH021959
5/8 x 5 1/2	800	240	86	CH021960
5/8 x 6	300	120	29	CH029622

10" Flexible Leads

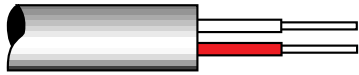


O.D." x L."	W	V	W/in2	Part No.
5/8 x 6	300	240	29	CH029623
5/8 x 6	500	240	49	CH021961
5/8 x 6	750	240	73	CH021962
5/8 x 6	1000	240	97	CH021963
5/8 x 6	1500	240	146	CH021964
5/8 x 6 1/2	500	120	44	CH021965
5/8 x 6 1/2	500	240	44	CH021966
5/8 x 7	500	120	41	CH029624
5/8 x 7	500	240	41	CH029625
5/8 x 7	1000	240	81	CH029626
5/8 x 7	1500	240	122	CH029627
5/8 x 8	500	120	35	CH021967
5/8 x 8	500	240	35	CH021968
5/8 x 8	850	240	60	CH021969
5/8 x 8	1000	240	70	CH021970
5/8 x 8	1500	240	105	CH021971
5/8 x 8	2000	240	140	CH021972
5/8 x 8 1/2	875	240	58	CH021973
5/8 x 9 1/2	975	240	57	CH021974
5/8 x 10	500	120	28	CH029628
5/8 x 10	500	240	28	CH029629
5/8 x 10	750	240	41	CH029630
5/8 x 10	1000	240	55	CH021975
5/8 x 10	1500	240	83	CH021976
5/8 x 10	2000	240	110	CH021977
5/8 x 12	500	120	23	CH029631
5/8 x 12	500	240	23	CH029632
5/8 x 12	900	240	41	CH029633
5/8 x 12	1000	120	45	CH021978
5/8 x 12	1000	240	45	CH021979
5/8 x 12	1500	240	68	CH021980
5/8 x 12	2000	240	91	CH021981
5/8 x 13	1000	240	45	CH029528
5/8 x 14	1000	240	42	CH030586
5/8 x 14	3700	240	142	CH029634
5/8 x 15	1000	240	40	CH030587
5/8 x 15	2400	240	86	CH029635
5/8 x 16	1000	240	36	CH030588
5/8 x 17	1000	240	34	CH030589



Refer to page 4 for termination options.

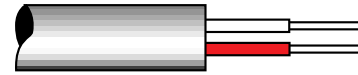
10" Flexible Leads



O.D." x L."	W	V	W/in2	Part No.
5/8 x 18	1000	240	32	CH030590
5/8 x 18	3000	240	89	CH029637
5/8 x 19	1000	240	30	CH030591
5/8 x 20	1000	240	28	CH030592
5/8 x 20	3500	240	93	CH029638
5/8 x 24	1000	240	23	CH031164
5/8 x 24	2000	240	47	CH031165
.....				
3/4 x 3 1/2	250	120	39	CH021984
3/4 x 3 1/2	250	240	39	CH021986
3/4 x 3 1/2	500	120	77	CH021985
3/4 x 4	250	120	33	CH021988
3/4 x 4	500	240	65	CH021989
3/4 x 4	1000	240	131	CH021990
3/4 x 5	500	240	50	CH021992
3/4 x 5	1000	240	100	CH021993
3/4 x 6	500	120	40	CH021994
3/4 x 6	500	240	40	CH021995
3/4 x 6	1000	240	81	CH021996
3/4 x 7	500	120	34	CH021997
3/4 x 7	500	240	34	CH021998
3/4 x 7	1000	240	68	CH021999
3/4 x 8	500	120	29	CH022000
3/4 x 8	500	240	29	CH022018
3/4 x 8	1000	240	59	CH022001
3/4 x 8	2000	240	117	CH022002
3/4 x 9	1200	240	62	CH022003
3/4 x 10	1000	240	52	CH030747
3/4 x 10	1200	240	55	CH022004
3/4 x 10	2000	240	92	CH022005
3/4 x 11	1000	240	46	CH030748
3/4 x 12	1000	240	38	CH022006
3/4 x 12	1200	240	45	CH022007
3/4 x 12	2000	240	75	CH022008
3/4 x 14	1000	240	35	CH030750
3/4 x 14	1250	240	40	CH029639
3/4 x 14	2500	240	80	CH029640
3/4 x 15	1000	240	32	CH030751
3/4 x 16	1000	240	31	CH030752

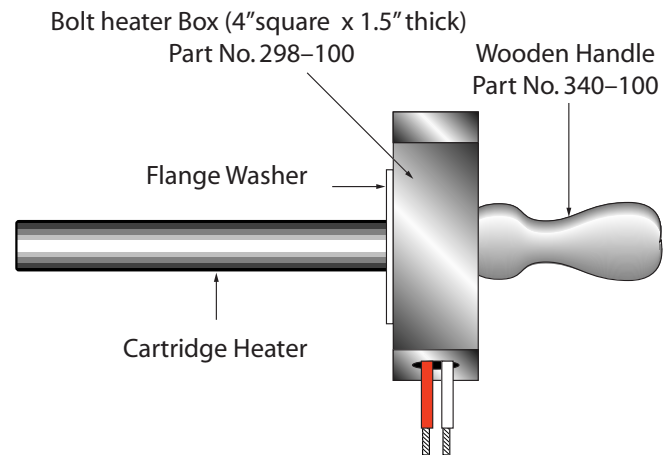
Internally Connected Leads

10" Flexible Leads



O.D." x L."	W	V	W/in2	Part No.
3/4 x 16	1800	240	50	CH029642
3/4 x 16	4700	240	131	CH029643
3/4 x 17	1000	240	29	CH030753
3/4 x 18	1000	240	27	CH030754
3/4 x 18	2000	240	49	CH029644
3/4 x 18	5000	240	123	CH029645
3/4 x 19	1000	240	25	CH030755
3/4 x 20	1000	240	24	CH030756
3/4 x 20	1050	240	45	CH029647
3/4 x 24	1000	240	20	CH031166
3/4 x 24	2000	240	40	CH031167

Special Application - Bolt Heater



Bolt Heater Ordering Instructions:

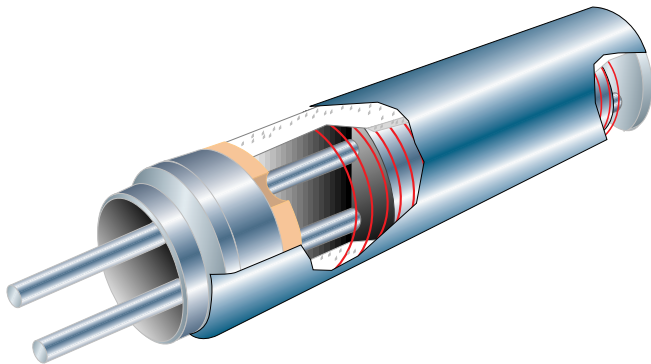
1. Choose heater type – flexible leads or (non-flexible) pins
2. Choose size and specifications from stock list. Select appropriate size flange for heater. Heaters available in 1/2", 5/8", 3/4" diameters only. (flexible leads pgs. 5-9; pins pg. 11)
3. Use the part #'s above to order the box and handle.
4. Fill out the order form (back page), then call or fax in order.

Hi-Temp Cartridge



Externally Connected Leads

Pins



Hi-Temp Cartridge Heater with Externally Connected (non-flexible) pins

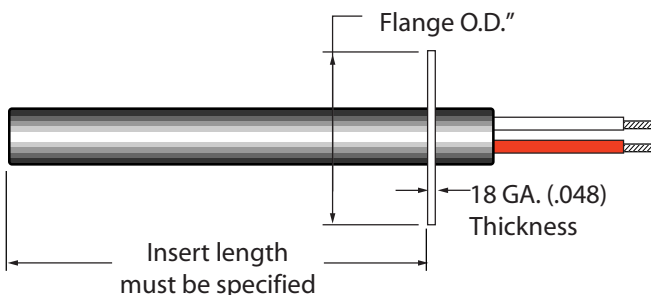
Heater Ordering Instructions:

1. Choose heater type – flexible leads or (non-flexible) pins
2. Choose termination options.
3. Choose size and specifications from stock list. (flexible leads pgs. 5-9; pins pg. 11)
4. Determine lead length – (10" std., otherwise specify).
5. Fill out the order form (back page), then call or fax in order.

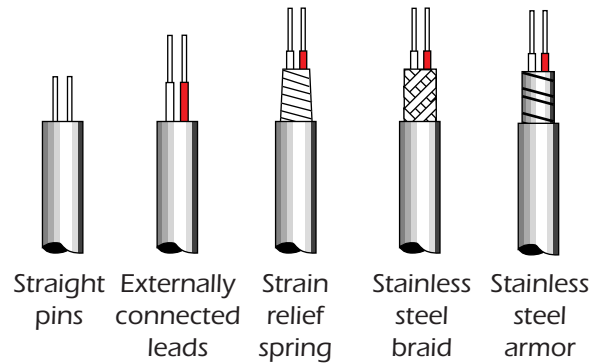
Note: Other sizes and options are available.

Flange Options

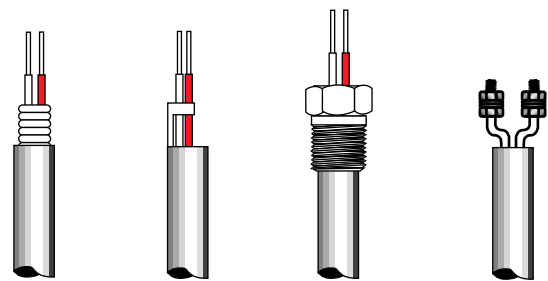
Heater O.D."	Flange O.D."
1/4	1/2
3/8	5/8
1/2	3/4 or 1
5/8	7/8 or 1
3/4	1



Lead Termination Options

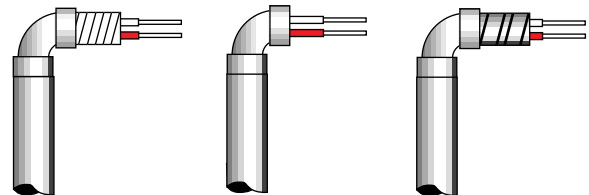


Straight pins Externally connected leads Strain relief spring Stainless steel braid Stainless steel armor

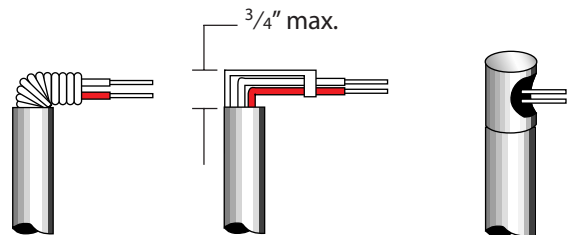


Straight leads with silk & paint Straight leads with clip support Hex Head* NPT bushing Screw terminals

*Insert length is reduced depending upon the diameter of heater. Call the factory for details.



Right angle copper elbow with spring Right angle copper elbow plain leads Right angle copper elbow with armor cable



Right angle leads with silk & paint Right angle leads with 90° clip support Quik-Fit* Right angle adapter Not available for 1/4"

** Quik-Fit length equals heater diameter. Overall length is increased by diameter of the heater. Call factory for details.



See page 26 for Plug options.



Refer to page 10 for termination options.

Externally Connected Leads

Pins



O.D." x L."	W	V	W/in2	Part No.
1/4 x 1	100	120	255	CH021653
1/4 x 1	150	120	382	CH021654
1/4 x 1 1/4	100	120	170	CH021655
1/4 x 1 1/4	150	120	255	CH021659
1/4 x 1 1/4	225	240	382	CH021661
1/4 x 1 1/2	100	120	127	CH021662
1/4 x 1 1/2	150	120	191	CH021663
1/4 x 1 1/2	175	240	223	CH021666
1/4 x 1 1/2	200	240	255	CH021667
1/4 x 2	100	120	85	CH021671
1/4 x 2	125	240	106	CH021675
1/4 x 2	200	120	170	CH021672
1/4 x 2	200	240	170	CH021674
1/4 x 2	250	120	212	CH021673
1/4 x 2	300	240	255	CH021678
1/4 x 3	125	240	64	CH021683
1/4 x 4	175	120	64	CH021684
1/4 x 4	175	240	64	CH021686
.....				
3/8 x 1	100	120	170	CH021690
3/8 x 1	150	120	255	CH021692
3/8 x 1	200	240	340	CH021693
3/8 x 1 1/4	200	120	226	CH021695
3/8 x 1 1/4	200	240	226	CH021696
3/8 x 1 1/2	100	240	85	CH021705
3/8 x 1 1/2	150	120	127	CH021700
3/8 x 1 1/2	200	120	170	CH021701
3/8 x 1 1/2	250	120	212	CH021703
3/8 x 1 1/2	250	240	212	CH021710
3/8 x 1 3/4	250	120	170	CH021712
3/8 x 1 3/4	250	240	170	CH021713
3/8 x 2	100	120	57	CH021714
3/8 x 2	150	120	85	CH021716
3/8 x 2	150	240	85	CH021726
3/8 x 2	200	120	113	CH021718
3/8 x 2	200	240	113	CH021729
3/8 x 2	250	120	141	CH021720
3/8 x 2	300	120	170	CH021722
3/8 x 2	300	240	170	CH021733

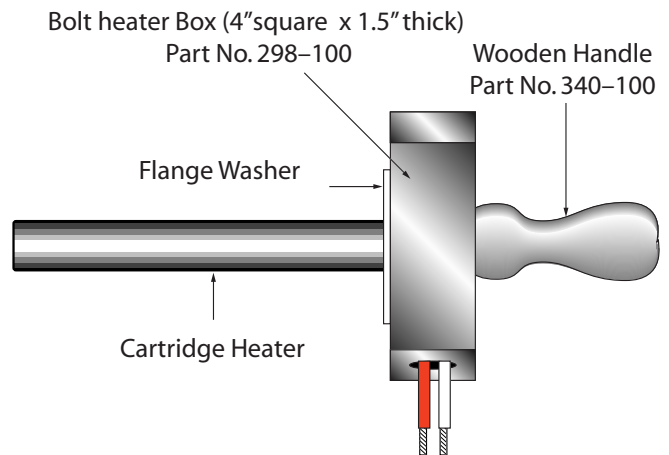
Pins



O.D." x L."	W	V	W/in2	Part No.
3/8 x 2	400	120	226	CH021723
3/8 x 2	400	240	226	CH021734
3/8 x 2 1/4	175	120	99	CH021736
3/8 x 3	200	120	68	CH021761
3/8 x 3	250	120	85	CH021763
3/8 x 3	250	240	85	CH021770
3/8 x 3	300	240	102	CH021772
3/8 x 3	500	240	170	CH021776
3/8 x 4	250	240	61	CH021792
3/8 x 4	350	120	85	CH021789
3/8 x 4	500	240	121	CH021797
3/8 x 5	300	240	57	CH021807
3/8 x 5	500	240	94	CH021809
3/8 x 6	675	240	104	CH021825
3/8 x 7	675	240	88	CH021835
3/8 x 8	1000	240	113	CH021844
3/8 x 10	1125	240	101	CH021847
.....				
1/2 x 2 1/2	250	240	80	CH021849
1/2 x 2 1/2	400	120	127	CH022029
1/2 x 2 1/2	500	240	159	CH021852
1/2 x 3	300	240	76	CH021860
1/2 x 3	500	240	127	CH021863

Special Application - Bolt Heater

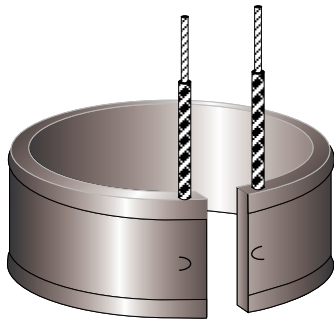
For ordering instructions see page 9.



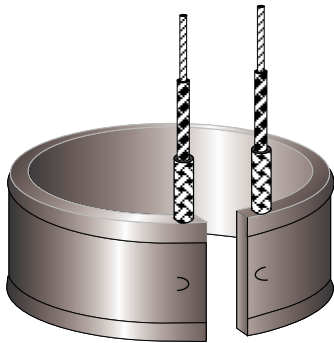


Mineral Insulated

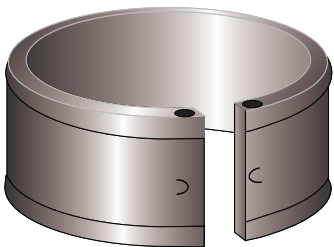
Termination Options



10" leads



12" leads with
St. Steel braid



Unfinished -
Leads any length

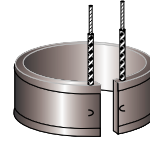
Note: All leads exit on the thickness of the band.



Heater Ordering Instructions:

1. See "Choosing the correct Band Heater" page 25.
Band Types: Better, Sealed Better, Value, Mica
2. Choose your termination option (above).
3. If unfinished, choose lead length.
4. If unfinished, choose lead protection.
(Standard leads, sleeving or braid)
5. Select your size and specifications from stock list.
(finished pgs. 12-14; unfinished pgs. 14-15)
6. Fill out the order form (back page) , then call or fax
in order.

10" Leads

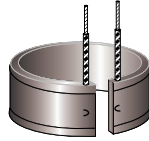


I.D." x Width"	W	V	W/in2	Part No.
3/4 x 1	125	120	88	BB010000
3/4 x 1	125	240	88	BB010182
3/4 x 1 1/2	150	120	70	BB010045
3/4 x 1 1/2	150	240	70	BB010229
.....				
7/8 x 1 1/2	175	240	64	BB010230
.....				
1 x 1	150	120	68	BB010002
1 x 1	150	240	68	BB010184
1 x 1 1/2	200	120	60	BB010047
1 x 1 1/2	200	240	60	BB010231
1 x 2	275	120	70	BB010093
1 x 2	275	240	70	BB010277
1 x 2 1/2	350	120	71	BB020762
1 x 2 1/2	350	240	71	BB020192
.....				
1 1/4 x 1	200	120	66	BB010003
1 1/4 x 1	200	240	66	BB010185
1 1/4 x 1 1/2	300	120	66	BB010048
1 1/4 x 1 1/2	300	240	66	BB010232
1 1/4 x 2	350	240	63	BB010278
1 1/4 x 2 1/2	450	240	65	BB010323
.....				
1 1/2 x 1	225	120	59	BB010004
1 1/2 x 1	225	240	59	BB010186
1 1/2 x 1 1/2	350	120	61	BB010049
1 1/2 x 1 1/2	350	240	61	BB010233
1 1/2 x 2	400	120	56	BB010095
1 1/2 x 2	400	240	56	BB010279
1 1/2 x 2 1/2	525	120	59	BB010138
1 1/2 x 2 1/2	525	240	59	BB010324
.....				
1 3/4 x 1	275	120	61	BB010005
1 3/4 x 1	275	240	61	BB010187
1 3/4 x 1 1/2	375	120	55	BB010050
1 3/4 x 1 1/2	375	240	55	BB010234
1 3/4 x 2	500	120	58	BB020763
1 3/4 x 2	500	240	58	BB010280
1 3/4 x 2 1/2	600	240	56	BB010325



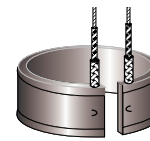
Mineral Insulated

10" Leads



I.D." x Width"	W	V	W/in2	Part No.
1 7/8 x 1	300	120	61	BB010006
1 7/8 x 1	300	240	61	BB010188
1 7/8 x 1 1/2	400	240	54	BB010235
1 7/8 x 2	525	240	56	BB010281
.....				
2 x 1	325	240	61	BB010189
2 x 1 1/2	425	240	53	BB010236
2 x 2	550	240	54	BB010282
2 x 2 1/2	700	240	55	BB010327
.....				
2 1/4 x 1	350	240	57	BB010190
2 1/4 x 1 1/2	525	240	57	BB010237
2 1/4 x 2	625	240	53	BB010283
2 1/4 x 2 1/2	775	240	53	BB010328
.....				
2 1/2 x 1	400	240	43	BB010191
2 1/2 x 1 1/2	525	240	51	BB010238
2 1/2 x 2	700	240	52	BB010284
2 1/2 x 2 1/2	875	240	52	BB010330
.....				
2 3/4 x 1	425	240	56	BB010192
2 3/4 x 1 1/2	575	240	50	BB010239
2 3/4 x 2	775	240	52	BB010285
2 3/4 x 2 1/2	950	240	51	BB020550
.....				
3 x 1	475	240	56	BB010193
3 x 1 1/2	625	240	49	BB010240
.....				
3 1/4 x 1	500	240	54	BB010194
3 1/4 x 2	900	240	50	BB010287
3 1/4 x 2 1/2	1125	240	50	BB010333
3 1/2 x 1	525	240	52	BB010195
3 1/2 x 1 1/2	725	240	48	BB010242
3 1/2 x 2	950	240	49	BB010288
.....				
3 3/4 x 2	1025	240	48	BB010289
3 3/4 x 2 1/2	1300	240	49	BB010336

12" Leads With Braid



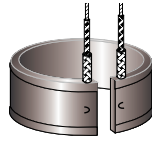
I.D." x Width"	W	V	W/in2	Part No.
3/4 x 1	125	240	88	BB020595
3/4 x 1 1/2	150	240	70	BB020614
.....				
7/8 x 1	150	240	82	BB020343
.....				
1 x 1	150	240	68	BB020309
1 x 1 1/2	200	240	60	BB020207
1 x 2	275	240	70	BB020629
1 x 2 1/2	350	240	71	BB020192
.....				
1 1/4 x 1	200	240	66	BB020127
1 1/4 x 1 1/2	300	240	66	BB020637
1 1/4 x 2	350	240	63	BB020564
1 1/4 x 2 1/2	450	240	65	BB020643
.....				
1 1/2 x 1	225	240	59	BB020037
1 1/2 x 1 1/2	350	240	61	BB020270
1 1/2 x 2	400	240	56	BB020271
1 1/2 x 2 1/2	525	240	59	BB020652
.....				
1 3/4 x 1	275	240	61	BB020655
1 3/4 x 1 1/2	375	240	55	BB020658
1 3/4 x 2	500	240	58	BB020662
1 3/4 x 2 1/2	600	240	56	BB020665
.....				
1 7/8 x 1	300	240	61	BB020668
.....				
2 x 1	325	240	61	BB020678
2 x 1 1/2	425	240	53	BB020414
2 x 2	550	240	54	BB020681
2 x 2 1/2	700	240	55	BB020685
.....				
2 1/4 x 1	350	240	57	BB020687
2 1/4 x 1 1/2	525	240	57	BB020689
2 1/4 x 2	625	240	53	BB020691
2 1/4 x 2 1/2	775	240	53	BB020693
.....				
2 1/2 x 1	400	240	58	BB020150
2 1/2 x 1 1/2	525	240	51	BB020696



Refer to page 12 for termination options.

Mineral Insulated

12" Leads With Braid



I.D." x Width"	W	V	W/in2	Part No.
2 1/2 x 2	700	240	52	BB020698
2 1/2 x 2 1/2	875	240	52	BB020700
.....				
2 3/4 x 1	425	240	56	BB020703
2 3/4 x 2	775	240	52	BB020493
2 3/4 x 2 1/2	950	240	51	BB020470
.....				
3 x 1	475	240	56	BB020033
3 x 1 1/2	625	240	49	BB020710
3 x 2	825	240	50	BB020712
.....				
3 1/4 x 1	500	240	54	BB020459
3 1/4 x 2	900	240	50	BB020719
.....				
3 1/2 x 1 1/2	725	240	48	BB020724
3 1/2 x 2	950	240	49	BB020727
3 1/2 x 2 1/2	1200	240	49	BB020729
.....				
3 3/4 x 1	575	240	53	BB020731
3 3/4 x 1 1/2	775	240	48	BB020733
3 3/4 x 2	1025	240	48	BB020735
3 3/4 x 2 1/2	1300	240	49	BB020737

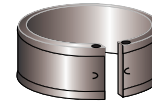
Applications

The Better Band will consistently out-perform other bands in virtually any application. Its ability to withstand extremely high temperatures makes it the best choice for the plastics industry, especially when processing engineering-grade resins. Additional uses include: heating pipes, chemical processing and drum heating. In addition, Better Band heaters can be modified to meet the demands of virtually any special application.



See page 26 for Plug options.

Unfinished – Leads Any Length

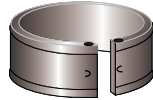


I.D." x Width"	W	V	W/in2	Part No.
3/4 x 1	125	120	88	BB020610
3/4 x 1 1/2	150	120	70	BB020612
.....				
7/8 x 1	150	240	82	BB020617
.....				
1 x 1	100	120	45	BB023553
1 x 1	100	240	45	BB023554
1 x 1	125	120	56	BB023555
1 x 1	125	240	56	BB023556
1 x 1	150	120	68	BB020623
1 x 1	150	240	68	BB020624
1 x 1 1/2	150	120	45	BB023557
1 x 1 1/2	200	120	60	BB020625
1 x 1 1/2	200	240	60	BB020626
1 x 2	275	120	70	BB020627
1 x 2	275	240	70	BB020628
1 x 2 1/2	350	120	71	BB020630
1 x 2 1/2	350	240	71	BB020632
.....				
1 1/4 x 1	200	120	66	BB020633
1 1/4 x 1	200	240	66	BB020634
1 1/4 x 1 1/4	125	120	33	BB023559
1 1/4 x 1 1/2	300	120	66	BB020635
1 1/4 x 1 1/2	300	240	66	BB020636
1 1/4 x 2	350	240	63	BB020639
1 1/4 x 2 1/2	450	240	65	BB020641
1 1/4 x 3	300	240	36	BB023563
.....				
1 1/2 x 1	200	120	52	BB023569
1 1/2 x 1	200	240	52	BB023570
1 1/2 x 1	225	120	59	BB020644
1 1/2 x 1	225	240	59	BB020645
1 1/2 x 1 1/4	250	240	52	BB023571
1 1/2 x 1 1/2	250	240	44	BB023579
1 1/2 x 1 1/2	300	120	52	BB023575
1 1/2 x 1 1/2	300	240	52	BB023576
1 1/2 x 1 1/2	350	120	61	BB020646
1 1/2 x 1 1/2	350	240	61	BB020647
1 1/2 x 2	300	240	42	BB023577

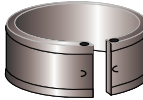


Refer to page 12 for termination options.

Unfinished – Leads Any Length



I.D." x Width"	W	V	W/in ²	Part No.
1 1/2 x 2	400	120	56	BB020648
1 1/2 x 2	400	240	56	BB020649
1 1/2 x 2 1/2	525	240	59	BB020651
1 1/2 x 3	350	240	33	BB023578
1 1/2 x 3	500	240	47	BB023580
1 1/2 x 3	800	240	75	BB023581
.....				
1 3/4 x 1	275	120	61	BB020653
1 3/4 x 1	275	240	61	BB020654
1 3/4 x 1 1/2	375	120	55	BB020656
1 3/4 x 1 1/2	375	240	55	BB020657
1 3/4 x 2	500	240	58	BB020661
1 3/4 x 2 1/2	600	120	56	BB020663
1 3/4 x 2 1/2	600	240	56	BB020664
.....				
2 x 1	325	240	61	BB020677
2 x 1 1/2	425	240	53	BB020679
2 x 2	550	240	54	BB020680
2 x 2 1/2	700	240	55	BB020684
.....				
2 1/4 x 1	350	240	57	BB020686
2 1/4 x 1 1/2	525	240	57	BB020688
2 1/4 x 2	625	240	53	BB020690
2 1/2 x 1	400	240	58	BB020694
2 1/2 x 1 1/2	525	240	51	BB020695
2 1/2 x 2 1/2	875	240	52	BB020699
.....				
3 x 1	250	240	29	BB023551
3 x 1	475	240	56	BB020708
3 x 1 1/2	625	240	49	BB020709
3 x 2	825	240	50	BB020711
3 x 2 1/2	1025	240	50	BB020713
.....				
3 1/4 x 1	500	240	54	BB020715
3 1/4 x 1 1/2	700	240	51	BB020716
3 1/4 x 2 1/2	1125	240	50	BB020720
.....				
3 1/2 x 1	525	240	52	BB020722
3 1/2 x 1 1/2	725	240	48	BB020723



Mineral Insulated Unfinished – Leads Any Length

I.D." x Width"	W	V	W/in ²	Part No.
3 1/2 x 2	950	240	49	BB020725
3 1/2 x 2 1/2	1200	240	49	BB020728
3 3/4 x 1	575	240	53	BB020730
3 3/4 x 1 1/2	775	240	48	BB020732
3 3/4 x 2 1/2	1300	240	49	BB020736

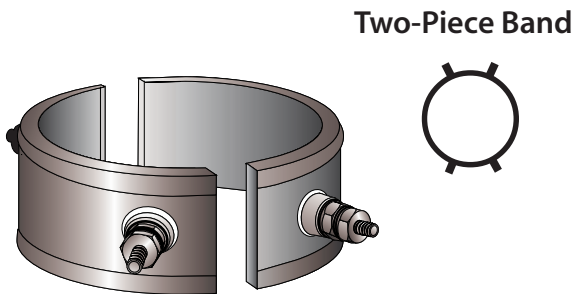
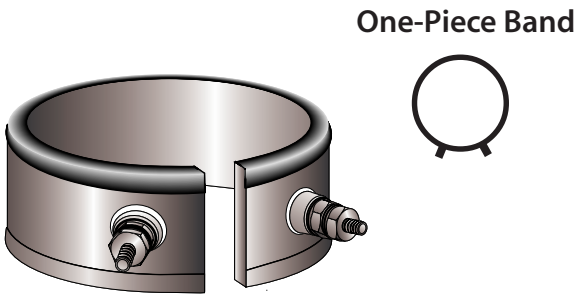
Features & Benefits

- Maximum watt densities; far in excess of any other type of band (Max. 100 w/in²)
- Highest application temperatures available up to 1400° F (760° C)
- Best possible clamping resulting in improved efficiency
- Longest life available for any application and reduction of equipment downtime
- High heat transfer rates resulting in fast response
- Rapid heat-up capabilities and no fear of heater failure
- Reduced number and physical size of heaters required per application
- Cost-effective performance



Mineral Insulated

Screw Terminals



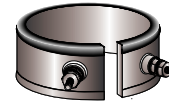
Heater Ordering Instructions:

1. See "Choosing the correct Band Heater" page 25. Band Types: Better, Sealed Better, Value, Mica
2. Choose One-piece or Two-piece band.
3. Select your size and specifications from stock list. (One-piece pg. 16; Two-piece pg. 17)
4. Fill out the order form (back cover), then call or fax in order.

Applications

The Better Band will consistently out-perform other bands in virtually any application. Its ability to withstand extremely high temperatures makes it the best choice for the plastics industry, especially when processing engineering-grade resins. Additional uses include: heating pipes, chemical processing and drum heating. In addition, Better Band heaters can be modified to meet the demands of virtually any special application.

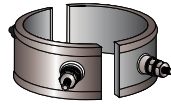
One-Piece Band



I.D." x Width"	W	V	W/in ²	Part No.
3 x 1	400	240	47	BB023464
3 x 1 1/2	500	240	39	BB023166
.....				
4 x 1	625	240	54	BB010197
4 x 1 1/2	750	240	43	BB020807
4 x 1 1/2	825	240	47	BB010244
4 x 2	550	240	23	BB023469
4 x 2	800	240	34	BB020938
4 x 2	1100	240	47	BB010290
4 x 2 1/2	1375	240	47	BB010337
.....				
4 1/4 x 1	650	240	50	BB010198
4 1/4 x 1 1/2	875	240	47	BB010245
4 1/4 x 2	1175	240	47	BB010291
4 1/4 x 2 1/2	1475	240	48	BB010338
.....				
4 1/2 x 1	700	240	53	BB010199
4 1/2 x 1 1/2	750	240	38	BB023472
4 1/2 x 1 1/2	950	240	48	BB010246
4 1/2 x 2	1250	240	47	BB010292
4 1/2 x 2 1/2	1550	240	47	BB010339
.....				
4 3/4 x 1	725	240	58	BB010200
4 3/4 x 1 1/2	1000	240	53	BB010247
4 3/4 x 2	1325	240	53	BB010293
4 3/4 x 2 1/2	1650	240	53	BB010340
.....				
5 x 1 1/2	900	240	45	BB023475
.....				
5 1/4 x 1 1/2	600	240	28	BB020829
.....				
5 1/2 x 1 1/2	1000	240	45	BB022065
.....				
6 x 1 1/2	1000	240	41	BB021922
.....				
6 1/2 x 1 1/2	1000	240	37	BB022926
.....				
6 3/4 x 1 1/2	1000	240	35	BB023483



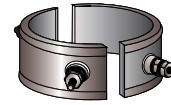
Two-Piece Band



I.D." x Width"	W	V	W/in2	Part No.
5 x 1	700 tot.	240	51	BB020738
5 x 1 1/2	1000 tot.	240	46	BB020190
5 x 2	1300 tot.	240	47	BB020739
5 x 2 1/2	1650 tot.	240	48	BB020128
.....				
5 1/4 x 1 1/2	600 tot.	240	27	BB023476
5 1/4 x 1 1/2	1000 tot.	240	46	BB022176
.....				
5 1/2 x 1	750 tot.	240	49	BB020467
5 1/2 x 1 1/2	1100 tot.	240	48	BB020258
5 1/2 x 2	1450 tot.	240	47	BB020295
5 1/2 x 2 1/2	1800 tot.	240	47	BB020743
.....				
6 x 1	850 tot.	240	50	BB020744
6 x 1 1/2	600 tot.	240	23	BB023478
6 x 1 1/2	1000 tot.	240	39	BB023479
6 x 1 1/2	1200 tot.	240	47	BB020322
6 x 2	1550 tot.	240	46	BB020767
6 x 2 1/2	1950 tot.	240	46	BB020747
.....				
6 1/2 x 1 1/2	900 tot.	240	32	BB023480
6 1/2 x 1 1/2	1250 tot.	240	45	BB023481
.....				
6 3/4 x 2	1300 tot.	240	34	BB023484
.....				
7 x 1 1/2	1000 tot.	240	33	BB023485
7 x 1 1/2	1200 tot.	240	40	BB023486
.....				
7 1/2 x 1 1/2	1200 tot.	240	40	BB023487
7 1/2 x 1 1/2	1500 tot.	240	50	BB023488
.....				
8 x 1 1/2	1250 tot.	240	36	BB023490
8 x 1 1/2	1550 tot.	240	44	BB020750
8 x 2	2100 tot.	240	45	BB020751
.....				
8 1/2 x 1 1/2	1200 tot.	240	34	BB023491
8 1/2 x 1 1/2	1650 tot.	240	47	BB020117
8 1/2 x 2	2250 tot.	240	48	BB020752

Mineral Insulated

Two-Piece Band



I.D." x Width"	W	V	W/in2	Part No.
9 x 1 1/2	1500 tot.	240	38	BB020433
.....				
10 x 1 1/2	1400 tot.	240	35	BB023493

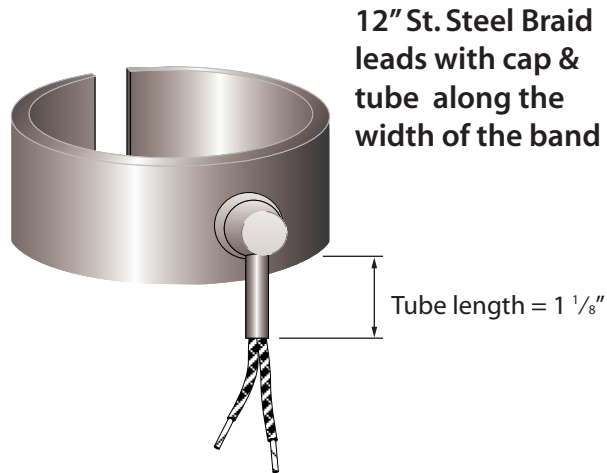
Features & Benefits

- Maximum watt densities; far in excess of any other type of band (Max. 100 w/in²)
- Highest application temperatures available up to 1400° F (760° C)
- Best possible clamping resulting in improved efficiency
- Longest life available for any application and reduction of equipment downtime
- High heat transfer rates resulting in fast response
- Rapid heat-up capabilities and no fear of heater failure
- Reduced number and physical size of heaters required per application
- Cost-effective performance
- Two-piece construction



Mineral Insulated

Finished Band

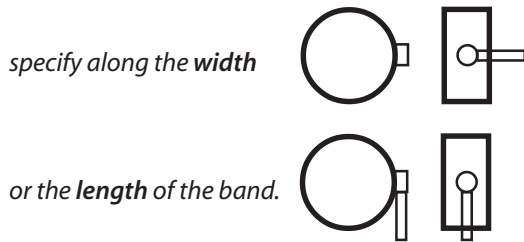


Note: All leads exit opposite the gap.

Heater Ordering Instructions:

1. See "Choosing the correct Band Heater" page 25. Band Types: Better, Sealed Better, Value, Mica
2. Choose a finished (above) or unfinished band (right).
3. If unfinished, choose your termination option.

For an unfinished band with cap & tube,



Note: Along the width is standard.

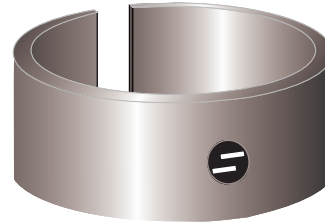
4. If unfinished, choose lead length.
5. If unfinished, choose lead protection. (Standard leads, sleeving, armor or braid)
6. Select your size and specifications from stock list. (finished pg. 19; unfinished pg. 20)
7. Fill out the order form (back page), then call or fax in order.



See page 26 for Plug options.

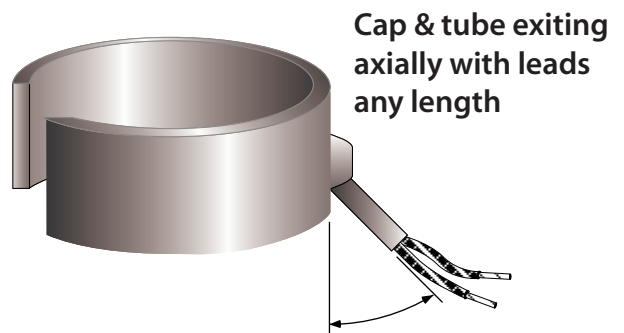
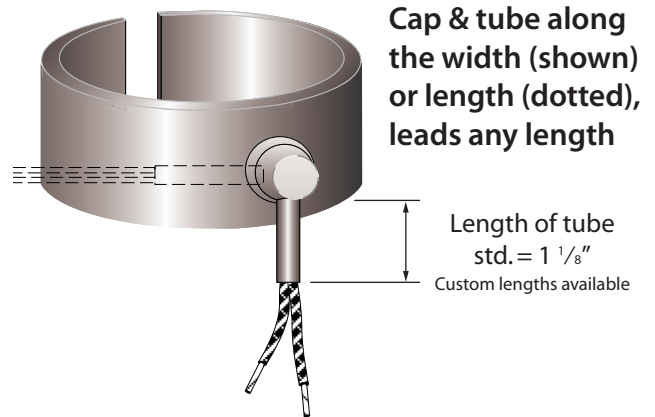
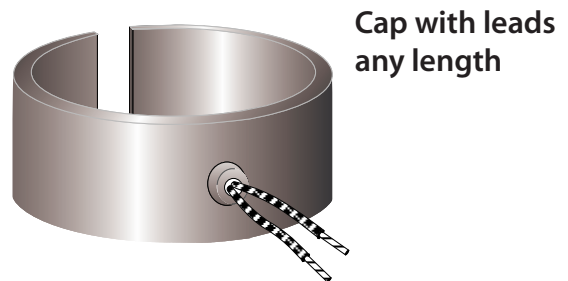
Unfinished Band

Unfinished



Note: All leads exit opposite the gap.

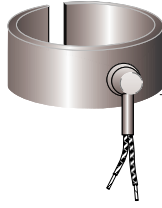
Unfinished - Termination Options



Available in 15°, 30° and 45°



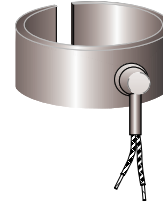
12" Braided Leads, Cap & Tube



I.D." x Width"	W	V	W/in2	Part No.
1 x 3/4	100	120	64	BS020071
1 x 1 1/2	200	240	64	BS020084
.....				
1 1/4 x 3/4	150	120	70	BS020094
1 1/4 x 3/4	150	240	70	BS020096
1 1/4 x 2	350	120	61	BS020110
.....				
1 1/2 x 3/4	175	240	64	BS020120
1 1/2 x 1 1/2	325	120	59	BS020130
1 1/2 x 2	425	120	58	BS020133
1 1/2 x 2	425	240	58	BS020135
1 1/2 x 2 1/2	525	240	58	BS020139
.....				
1 3/4 x 3/4	200	120	61	BS020141
1 3/4 x 3/4	200	240	61	BS020143
1 3/4 x 1	275	240	63	BS020147
1 3/4 x 1 5/16	325	240	57	BS020150
1 3/4 x 1 1/2	375	240	57	BS020154
1 3/4 x 2	475	240	54	BS020158
.....				
2 x 3/4	225	120	58	BS020164
2 x 3/4	225	240	58	BS020166
2 x 1	300	120	58	BS020168
2 x 1 5/16	375	240	55	BS020173
2 x 2	550	120	53	BS020179
2 x 2 1/2	700	120	54	BS020183
.....				
2 1/4 x 3/4	250	240	56	BS020189
2 1/4 x 1	350	240	59	BS020193
2 1/4 x 1 1/2	475	240	53	BS020200
2 1/4 x 2 1/2	775	240	52	BS020208
2 1/2 x 3/4	275	120	54	BS020210
2 1/2 x 3/4	275	240	54	BS020212
2 1/2 x 1	375	240	56	BS020216
2 1/2 x 1 5/16	475	240	54	BS020220
2 1/2 x 1 1/2	525	240	52	BS020224
2 1/2 x 2	700	120	52	BS020226

Mineral Insulated

12" Braided Leads, Cap & Tube



I.D." x Width"	W	V	W/in2	Part No.
2 3/4 x 1	425	120	57	BS020278
2 3/4 x 1	425	240	57	BS020279
2 3/4 x 1 1/2	575	240	51	BS020248
2 3/4 x 2	750	240	50	BS020287
2 3/4 x 2 1/2	950	120	51	BS020282
2 3/4 x 2 1/2	950	240	51	BS020283
.....				
3 x 3/4	350	240	57	BS020252
3 x 1	450	120	55	BS020254
3 x 1	450	240	55	BS020256
3 x 1 5/16	575	120	53	BS020258
3 x 1 1/2	625	240	51	BS020264
3 x 2	800	240	49	BS020268

Applications

The Sealed Better Band offers the longest heater life in the most severe band heater applications. The contamination resistant construction, coupled with the high watt density capabilities, makes the Sealed Better Band the obvious choice for the plastics industry. With its stainless steel seamless sheath and welded ends, the Sealed Better Band will not allow contaminants to enter the heater from points normally experienced in general band heater construction. To be completely contamination proof, this design may have leak proof convoluted armor attached over the leads. This prevents contamination through the lead area.



Refer to page 18 for termination options.

Mineral Insulated

Unfinished Band



I.D." x Width"	W	V	W/in2	Part No.
1 x 3/4	100	120	64	BS020070
1 x 3/4	100	240	64	BS020072
1 x 1	150	120	72	BS020073
1 x 1 5/16	175	120	64	BS020077
1 x 1 5/16	175	240	64	BS020079
1 x 2	275	240	67	BS020087
.....				
1 1/4 x 3/4	150	120	70	BS020093
1 1/4 x 3/4	150	240	70	BS020095
1 1/4 x 1 5/16	325	240	76	BS020103
1 1/4 x 1 1/2	325	240	76	BS020106
.....				
1 1/2 x 3/4	175	240	64	BS020119
1 1/2 x 1 5/16	275	240	57	BS020127
1 1/2 x 2	425	120	58	BS020132
1 1/2 x 2	425	240	58	BS020134
1 1/2 x 2 1/2	525	240	58	BS020138
.....				
1 3/4 x 3/4	200	120	61	BS020140
1 3/4 x 1	275	120	63	BS020144
1 3/4 x 1	275	240	63	BS020146
1 3/4 x 1 1/2	375	240	57	BS020153
1 3/4 x 2	475	120	54	BS020155
1 3/4 x 2	475	240	54	BS020157
1 3/4 x 2 1/2	600	240	55	BS020161
.....				
2 x 3/4	225	120	58	BS020163
2 x 3/4	225	240	58	BS020165
2 x 2	550	120	53	BS020178
2 x 2 1/2	700	240	54	BS020184
.....				
2 1/4 x 1	350	240	59	BS020192
2 1/4 x 2 1/2	775	240	52	BS020207
2 1/2 x 3/4	275	120	54	BS020209
2 1/2 x 3/4	275	240	54	BS020211
2 1/2 x 1	375	120	56	BS020213
2 1/2 x 1 1/2	525	120	52	BS020221
2 1/2 x 1 1/2	525	240	52	BS020223
2 1/2 x 2	700	120	52	BS020225

Unfinished Band



I.D." x Width"	W	V	W/in2	Part No.
2 1/2 x 2	700	240	52	BS020227
.....				
2 3/4 x 3/4	325	240	58	BS020235
2 3/4 x 1	425	120	57	BS020280
2 3/4 x 1	425	240	57	BS020281
2 3/4 x 1 1/2	575	240	51	BS020247
2 3/4 x 2	750	120	50	BS020288
2 3/4 x 2	750	240	50	BS020289
.....				
3 x 3/4	350	240	57	BS020251
3 x 1	450	120	55	BS020253
3 x 1	450	240	55	BS020255
3 x 1 5/16	575	120	53	BS020257
3 x 1 5/16	575	240	53	BS020259
3 x 2	800	240	49	BS020267
3 x 2 1/2	1000	120	49	BS020269
3 x 2 1/2	1000	240	49	BS020271

Features & Benefits

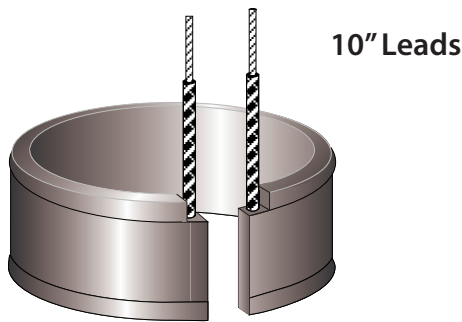
- Sealed for the longest life available for any application
- Compact ceramic insulation
- Rugged sealed lead protection
- Longest life available for any application and reduction of equipment downtime
- Maximum watt densities; far in excess of any other type of band
- Highest application temperatures available
- Best possible clamping resulting in improved efficiency
- High heat transfer rates resulting in fast response
- Rapid heat-up capabilities and no fear of heater failure
- Reduced number and physical size of heaters required per application



Nozzle Band

10" Leads

Finished Band



10" Leads

Note: All leads exit on the thickness of the band.

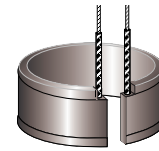


Heater Ordering Instructions:

1. See "Choosing the correct Band Heater" page 25.
Band Types: Better, Sealed Better, Value, Mica
2. Select your size and specifications from stock list.
3. Fill out the order form (back cover), then call or fax in order.

Features & Benefits

- Capable of temperatures up to 900° F (482° C)
- Leads are specially constructed so that they can be bent 90° allowing the heaters to be butted against one another in multiple band applications. The lead areas have also been reinforced to make them more durable and resistant to pull.
- Corrosion resistant sheath minimizes oxidation



I.D." x Width"	W	V	W/in2	Part No.
1 x 1	100	120	34	BN010000
1 x 1	100	240	34	BN010001
1 x 1½	150	120	34	BN010002
1 x 1½	150	240	34	BN010003
1 x 2	200	120	34	BN010004
1 x 2	200	240	34	BN010005
.....				
1½ x 1	150	120	33	BN015000
1½ x 1	150	240	33	BN015001
1½ x 1½	300	120	44	BN015002
1½ x 1½	300	240	44	BN015003
1½ x 1½	275	120	41	BN015004
1½ x 1½	275	240	41	BN015005
1½ x 2	300	120	33	BN015006
1½ x 2	300	240	33	BN015007
1½ x 3	400	120	44	BN015008
1½ x 3	400	240	44	BN015009
.....				
1¾ x 1½	300	120	38	BN017500
1¾ x 1½	300	240	38	BN017501
.....				
2 x 1½	300	120	33	BN020000
2 x 1½	300	240	33	BN020001
.....				
2½ x 1½	350	120	30	BN025002
2½ x 1½	350	240	30	BN025003

Product Description

The Value Band is a low-cost, dependable nozzle band that can be used in many different applications. In order to expedite the manufacturing process and keep the cost down, the Value Band is offered in a single termination style: 10" of fiberglass-insulated lead wire. The Value Band is CSA approved.

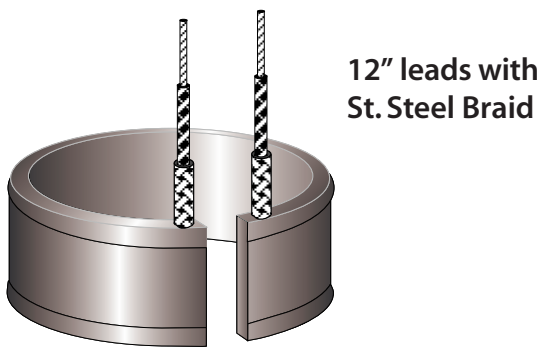
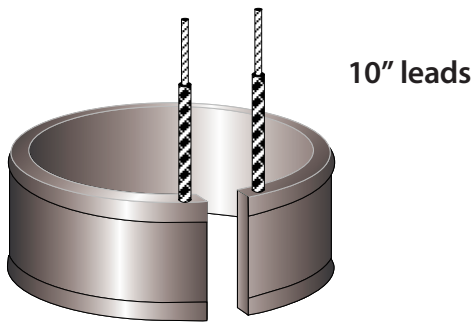


See page 26 for Plug options.



Mica Insulated

Finished Bands



Note: All leads exit on the thickness of the band.



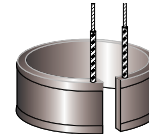
Heater Ordering Instructions:

1. See "Choosing the correct Band Heater" page 25.
Band Types: Better, Sealed Better, Value, Mica
2. Select either 10" leads or 12" leads with St. Steel braid.
3. Select your size and specifications from stock list.
(10" leads pgs. 22-23; 12" leads pg. 23)
4. Fill out the order form (back page) , then call or fax
in order.

Applications

Ideally suited for plastics industry applications, the Mica Band can be used for heating commodity resins in injection molding machines, extruders and blow molding machines. Other applications can be found in the food and pharmaceutical industries or any situation in which efficient band heating is required. In addition, Mica Bands can be modified to meet the demands of virtually any special application.

10" Leads

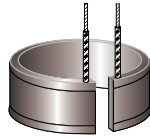


I.D." x Width"	W	V	W/in2	Part No.
3/4 x 1	100	120	70	BM010000
3/4 x 1	100	240	70	BM010415
.....				
1 x 1	125	120	56	BM010004
1 x 1 1/2	200	120	60	BM010087
1 x 1 1/2	200	240	60	BM020408
1 x 2	275	120	62	BM010180
1 x 2	275	240	62	BM010596
.....				
1 1/4 x 1	125	120	41	BM010006
1 1/4 x 1	125	240	41	BM010421
1 1/4 x 1 1/4	250	240	66	BM020886
1 1/4 x 1 1/2	200	120	44	BM010089
1 1/4 x 1 1/2	200	240	44	BM010502
1 1/4 x 3	300	240	33	BM020890
.....				
1 1/2 x 1	200	120	52	BM010008
1 1/2 x 1	200	240	52	BM010423
1 1/2 x 1 1/4	250	240	52	BM025516
1 1/2 x 1 1/2	200	240	35	BM010503
1 1/2 x 1 1/2	250	240	44	BM020140
1 1/2 x 2 1/2	400	120	42	BM020935
1 1/2 x 2 1/2	400	240	42	BM020896
1 1/2 x 3	350	240	30	BM020183
1 1/2 x 3	500	120	44	BM010284
1 1/2 x 3	500	240	44	BM010754
1 1/2 x 3 1/2	500	120	37	BM020393
1 1/2 x 3 1/2	500	240	37	BM020901
.....				
1 3/4 x 1 1/2	200	240	29	BM025522
1 3/4 x 1 1/2	250	240	37	BM025526
1 3/4 x 3	500	120	37	BM010286
1 3/4 x 3	500	240	37	BM010756
.....				
2 x 1	200	120	37	BM010014
2 x 1	200	240	37	BM010429
2 1/4 x 1	250	120	41	BM010016
2 1/4 x 1	250	240	41	BM010431



Mica Insulated

10" Leads



I.D." x Width"	W	V	W/in2	Part No.
2 1/2 x 1	300	120	43	BM010018
2 1/2 x 1	300	240	43	BM010433
.....				
3 x 1	250	240	29	BM010436
3 x 1	400	120	47	BM010024
3 x 1	400	240	47	BM010437
3 x 1 1/2	600	120	47	BM020913
3 x 1 1/2	600	240	47	BM020049
3 x 2	600	240	35	BM020831
.....				
3 1/4 x 1 1/2	400	240	29	BM020914
.....				
3 1/2 x 1 1/2	500	240	33	BM020099

12" Leads With Braid



I.D." x Width"	W	V	W/in2	Part No.
1 x 1	125	240	56	BM020415
.....				
1 1/4 x 1 1/4	250	240	66	BM020887
1 1/4 x 1 1/2	200	240	44	BM020888
.....				
1 1/2 x 3/4	125	240	44	BM020895
1 1/2 x 1	150	240	39	BM021801
1 1/2 x 1	200	240	52	BM021607
1 1/2 x 1 1/2	200	240	35	BM021958
1 1/2 x 1 1/2	250	240	44	BM021203
1 1/2 x 1 1/2	275	240	48	BM020135
1 1/2 x 2	300	240	39	BM020365
1 1/2 x 2 1/2	400	240	42	BM020897
1 1/2 x 3	500	240	44	BM020179
1 1/2 x 3 1/2	500	240	37	BM020902
.....				
2 x 1	200	240	37	BM020905
2 x 1 1/2	300	240	37	BM020907
.....				
2 1/2 x 1	300	240	43	BM020912
2 1/2 x 1 1/2	350	240	34	BM020182
.....				
3 1/2 x 1 1/2	500	240	33	BM020916
.....				
3 3/4 x 1	350	240	32	BM020917

Features & Benefits

- Capable of temperatures up to 900° F (482° C)
- Excellent value for price and quality
- Thin construction for effective heat transfer
- Available for partial band applications
- Reverse bands for applications into rolls, heating from the inside out
- Unique design offers maximum resistor coverage
- Folded-in lips protect against contamination
- All bands are accurately rolled to the specified diameter for optimum contact

Product Description

Fast Heat's reliable, inexpensive Mica Band heaters are best suited for uses involving low to moderate temperatures. Mica Bands also offer a variety of termination and clamping options. The Mica Band features thin construction and high quality insulation for effective heat transfer and excellent dielectric qualities.



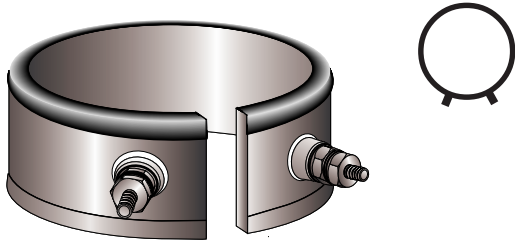
See page 26 for Plug options.



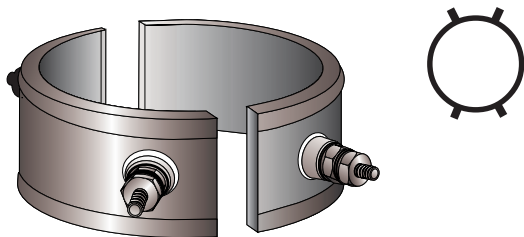
Mica Insulated

Screw Terminals

One-Piece Band



Two-Piece Band



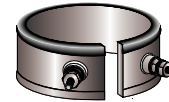
Heater Ordering Instructions:

1. See "Choosing the correct Band Heater" page 25. Band Types: Better, Sealed Better, Value, Mica
2. Choose One-piece or Two-piece band.
3. Select your size and specifications from stock list. (One-piece pg. 24; Two-piece pg. 25)
4. Fill out the order form (back cover), then call or fax in order.

Applications

Ideally suited for plastics industry applications, the Mica Band can be used for heating commodity resins in injection molding machines, extruders and blow molding machines. Other applications can be found in the food and pharmaceutical industries or any situation in which efficient band heating is required. In addition, Mica Bands can be modified to meet the demands of virtually any special application.

One-Piece Band



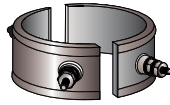
I.D." x Width"	W	V	W/in ²	Part No.
4 x 1 1/2	750	120	43	BM010111
4 x 1 1/2	750	240	43	BM010527
4 x 2	800	240	34	BM010618
.....				
4 1/2 x 1 1/2	750	240	38	BM010531
.....				
5 x 1 1/2	900	240	45	BM010535
.....				
5 1/4 x 1 1/2	600	240	28	BM020059
.....				
6 x 1 1/2	1000	240	41	BM020258
.....				
6 1/2 x 1 1/2	1000	240	37	BM020498
.....				
6 3/4 x 1 1/2	1000	240	36	BM020249

Features & Benefits

- Capable of temperatures up to 900° F (482° C)
- Screw terminals are specified when the user wants to provide their own wiring harness
- Replacement and serviceability is easier
- Junction boxes can be placed over the terminals for protection
- Excellent value for price and quality
- Thin construction for effective heat transfer
- Available for partial band applications
- Unique design offers maximum resistor coverage
- Folded-in lips protect against contamination
- Two-piece construction



Two-Piece Band



I.D." x Width"	W	V	W/in ²	Part No.
4 x 1 1/2	750 tot.	240	47	BM020394
4 1/2 x 1 1/2	750 tot.	240	41	BM020918
5 1/2 x 1 1/2	800 tot.	240	35	BM020277
6 x 1 1/2	600 tot.	240	24	BM020920
6 x 1 1/2	1000 tot.	240	40	BM020921
7 x 1 1/2	1000 tot.	240	33	BM020639
7 7/8 x 1 1/2	1000 tot.	240	29	BM020923
8 x 1 1/2	950 tot.	240	27	BM020937
8 1/2 x 1 1/2	1200 tot.	240	32	BM020925
9 x 1 1/2	1500 tot.	240	38	BM020926
9 1/2 x 2	1800 tot.	240	32	BM020629
10 x 1 1/2	1400 tot.	240	35	BM020927
11 x 1 1/2	1600 tot.	240	36	BM020928

Two-Piece Heater Tips

- For easy installation/removal specify where projections or tandem positioned heaters are in use.
- When using two-piece heaters, each half is designed with half of the total watt requirement. This offers the capability of being connected in series or in parallel for 240 volts.

Band Heater Ordering Guide

Choosing the Correct Band Heater

Prior to selecting a band heater style for an application, the following items need to be considered:

- Type of Application
- Operating Temperature
 - Better/Sealed Better – Up to 1400° F (760° C)
 - Mica/Value – Up to 900° F (482° C)
- Watt Density Required
 - Better/Sealed Better – Max. 100 w/in²
 - Mica/Value – Max. 45 w/in²

All band heaters have their own physical and operational characteristics and limitations which should be reviewed prior to making a selection.

It is important to know the maximum watts/sq.in. of the heater. Holes, notches, two-piece heaters and special gaps all reduce the effective heating surface of a heater and must be taken into account when estimating the heated surface used to calculate the watts/sq.in.

Band Heater Tips

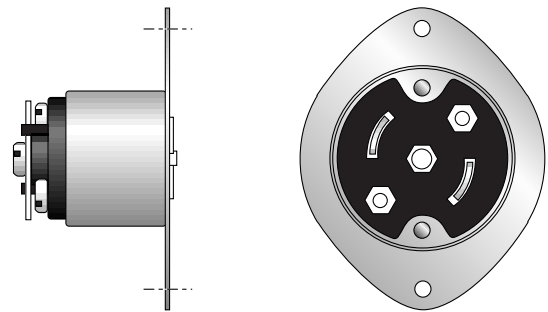
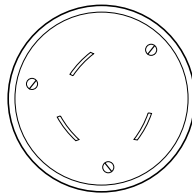
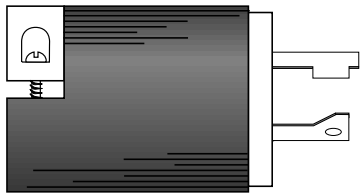
- Use several narrow band heaters rather than one wide band to obtain the most trouble-free operation. Lab tests have shown the narrow band design to be the most efficient and reliable design.
- Heater I.D. must conform to your cylinder diameter for the best possible fit. Poor fit results in decreased operating efficiency and heater life.
- Tighten heater clamps for the best heat transfer to the cylinder. Poor clamping causes decreased heater life and increased heat loss.
- Use one-piece heaters only when they can be slipped over the end of the cylinder. If opening the heater is an installation necessity, use a two-piece heater.
- Do not allow carbonizing materials such as plastic and oil to collect on the heater. Avoid contamination since it can lead to internal electrical shorts.
- Ensure that your cylinder is smooth and free of foreign material for best clamping and operating results.
- Use special care in selection of leads and terminals when physical abuse cannot be avoided. If special lead arrangements are required, contact Fast Heat.



Plug Options – Band & Cartridge Heaters

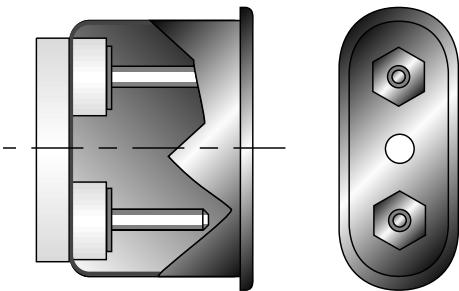
Description	Rating	Manufacturer's Part #	Fast Heat Part #
German male plug	25A, 380V		700-200
German female plug	25A, 380V		700-201
Cinch Jones Plug	10A, 125V	P304-CCT	700-303
4 wire twist lock plug, 3" diameter	20A, 250V	Hubbell # 2421	724-210
3 wire twist lock plug	30A, 250V	Hubbell # 2621	726-210
3 wire twist lock plug, flanged inlet	30A, 250V	Hubbell # 2623	726-230
3 wire twist lock plug, flanged inlet	30A, 250V	Hubbell # 2625	726-250
4 wire twist lock plug, flanged inlet, 3" diameter	30A, 250V	Hubbell # 2725	727-250
3 wire twist lock plug, dead front	15A, 250V	Hubbell # 4570-C	745-701
3 wire twist lock plug	15A, 125V	Hubbell # 4720-C	747-201
3 wire twist lock nylon angle plug	15A, 125V	Hubbell # 4720-CA	747-204
3 wire twist lock plug	15A, 277V	Hubbell # 4770-C	747-701
3 wire straight blade plug	15A, 250V	Hubbell # 5666C	756-661
3 wire straight blade plug, dead front	15A, 250V	Hubbell # 5965-VY	759-658
2 wire twist lock plug	20A, 250V	Hubbell # 7102-C	771-021
3 wire midget twist lock plug	15A, 125/250V	Hubbell # 7485	774-850
3 wire midget twist lock plug, flanged inlet	15A, 125/250V	Hubbell # 7486	774-860
3 wire midget twist lock plug	15A, 125V	Hubbell # 7594	775-940

Note: Other plugs options are available, consult the factory.

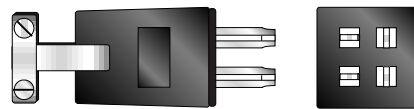


3 Wire Twist Lock Plug

3 Wire Midget Twist Lock Plug, Flanged Inlet



German Male Plug



Cinch Plug



Ceramic Strip Heater

FAST STRIP 38

The Fast Strip 38, strip heater is $\frac{3}{8}$ " thick, $1\frac{1}{2}$ " wide and comes configured for type M (diagonal terminals). These items are in stock and ready for QuickShip.

The Fast Strip 38 (Strip Heater) comes configured for either:

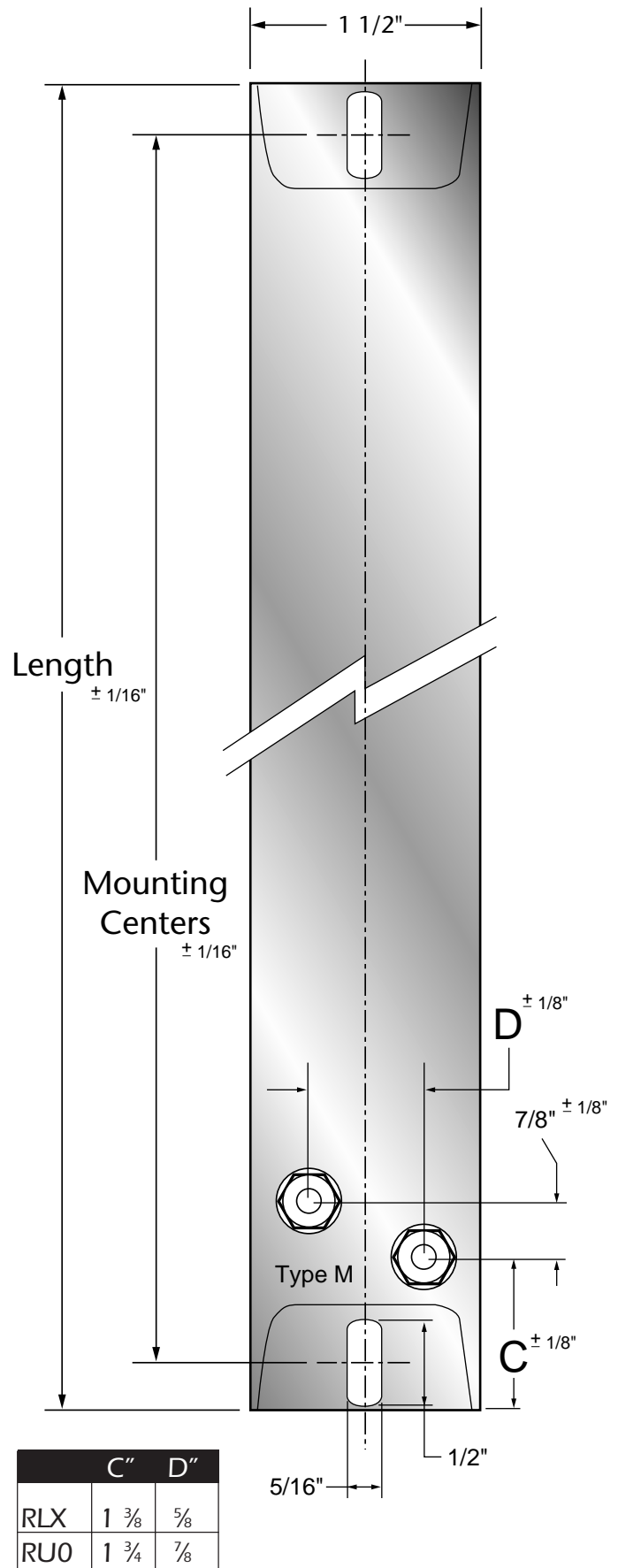
- Low Density – RLX part number.
- High Density – RU0 part number.

W x L	Mounting Centers	Mounting		Chromalox		Fast Heat	
		W	V	Part #	Part #	Part #	Part #
1 1/2 x 8	7 1/8"	200	240	OT817	RLX10705		
1 1/2 x 8	7 1/8"	400	240	OT804	RU020092		
1 1/2 x 10 1/2	9 5/8"	250	240	OT1025	RLX10706		
1 1/2 x 10 1/2	9 5/8"	400	240	OT1004	RU020722		
1 1/2 x 12	11 1/8"	250	240	OT1225	RLX10707		
1 1/2 x 12	11 1/8"	500	240	OT1205	RU020242		
1 1/2 x 14	13 1/8"	300	240	OT1430	RLX10708		
1 1/2 x 14	13 1/8"	500	240	OT1405	RU020487		
1 1/2 x 15 1/4	14 5/8"	325	240	OT1532	RLX10709		
1 1/2 x 15 1/4	14 5/8"	500	240	OT1505	RU020723		
1 1/2 x 17 7/8	17"	375	240	OT1837	RLX10710		
1 1/2 x 17 7/8	17"	750	240	OT1807	RU020724		
1 1/2 x 17 7/8	17"	1000	240	OT1801	RU020725		
1 1/2 x 19 1/2	18 5/8"	500	240	OT1950	RLX10711		
1 1/2 x 19 1/2	18 5/8"	1000	240	OT1901	RU020726		
1 1/2 x 21	20 1/8"	500	240	OT2150	RLX10712		
1 1/2 x 21	20 1/8"	750	240	OT2107	RU020113		
1 1/2 x 23 3/4	22 7/8"	750	240	OT2475	RLX10713		
1 1/2 x 23 3/4	22 7/8"	1000	240	OT2401	RU020727		
1 1/2 x 23 3/4	22 7/8"	1500	240	OT2415	RU020728		
1 1/2 x 25 1/2	24 5/8"	750	240	OT2575	RLX10715		
1 1/2 x 25 1/2	24 5/8"	1000	240	OT2501	RU020732		

NOTE: Other sizes are available within 13 to 15 business days, consult the factory.

Applications

Fast Strip 38, ceramic strip heaters, provide a dependable, versatile and efficient heat source for a wide range of applications, such as: injection and extrusion dies, food tables and platens.



QuickShip® Fax Ordering Form

To: _____

New Account? Yes No

From: _____

Account Number (if known): _____

Date: / /

Purchase Order Number: _____

Ship to:

Bill to:

Company Name: _____

Company Name: _____

Address: _____

Address: _____

City: _____ State: _____

City: _____ State: _____

Zip Code: _____

Zip Code: _____

Contact Name: _____

Phone Number: _____

Fax Number: _____

Shipping Instructions:

UPS®: UPS Next Day UPS 2nd Day UPS Sat. Del. UPS Regular

Federal Express®: Priority Overnight Standard Overnight

(account no. required) _____

Other: _____

Product Type	Qty.	Watts	Volts	Lead Length	Description
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Authorized Signature: _____ Print Name: _____

fastheat
http://instserv.com

ISE, Inc.
10100 Royalton Rd. - Cleveland, OH 44133

Fax in order (440) 237-1744
Call in order (440) 237-3200