

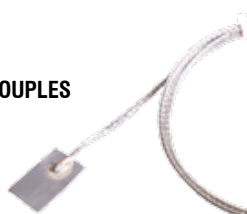







MOULDPRO

03.

TEMPERATURE CONTROL

<p>76</p> <p>03.1 HOT RUNNER CONTROLLER</p> 	<p>77</p> <p>03.2 HEATER BANDS</p> 	<p>79</p> <p>03.3 THERMOCOUPLES</p> 
<p>82</p> <p>03.4 CONNECTORS</p> 	<p>89</p> <p>03.5 CABLES</p> 	<p>90</p> <p>03.6 THERMOMETERS</p> 

HOT RUNNER CONTROLLERS

The advanced modules which include current monitoring as standard have the following features:

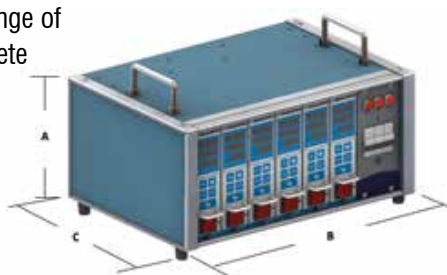
- Dehumidifying Soft Start
- Triple-line LED display
- Auto / Manual Output Function
- PID Auto Tune Temperature Control
- Max Current Output 15A
- Current Measurement Display
- Power Output Percentage Display
- Thermocouple J/K Type
- Temperature scale °F/°C Switchable
- Selectable Alarm Modes
- Phase Angle Output Mode
- Zero Cross output Mode
- Fuse Failure Indicator
- Heater Break Detection
- Power Frequency Auto-Detection (50/60Hz)
- Thermocouple Failure Detection
- Thermocouple Reverse Detection
- Current Monitoring Display
- Alarm Output Option
- RS485 Output Option



HOT RUNNER CONTROLLER UNITS

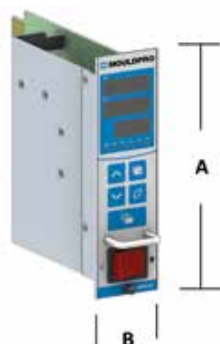
Modular Hot Runner Controllers comprising a range of robust steel mainframe cabinets supplied complete with Industry Standard control modules.

- 380-400VAC/3Phase/N/Earth
- CE Marked
- Supplied Complete with 3m Cable Set



Part No.	Number Zones	Cabinet Dimensions			Cable/Connector
		A	B	C	
HRC001	Single Zone	188	96	248	1 x 4 pin
HRC002	2 Zones	215	224	299	1 x 16 pin
HRC004	4 Zones	215	325	299	1 x 16 pin
HRC006	6 Zones	215	427	299	1 x 24 pin
HRC008	8 Zones	215	529	299	2 x 16 pin
HRC012	12 Zones	215	733	299	2 x 24 pin

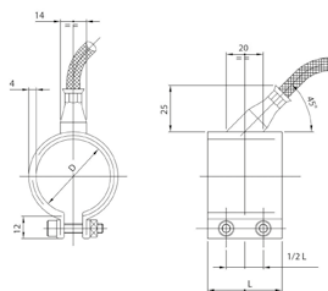
MODULE



Part No.	Number Zones	A	B
HRM15C	Single Zone	176	50

STAINLESS STEEL NOZZLE HEATERS

**STAINLESS
STEEL**



Part No.	Ø ID	Length	Watt
Z17025030	25	30	130
Z17030020	30	20	100
Z17030025	30	25	130
Z17030030	30	30	170
Z17030035	30	35	200
Z17030040	30	40	230
Z17035025	35	25	160
Z17035030	35	30	200
Z17035035	35	35	240
Z17035040	35	40	270
Z17035045	35	45	310
Z17040020	40	20	160
Z17040025	40	25	190
Z17040030	40	30	230
Z17040035	40	35	270
Z17040040	40	40	310
Z17040045	40	45	350
Z17045025	45	25	210
Z17045030	45	30	260
Z17045035	45	35	310
Z17045040	45	40	350
Z17045045	45	45	400
Z17045050	45	50	450
Z17045055	45	55	490
Z17050020	50	20	190
Z17050025	50	25	240
Z17050030	50	30	290
Z17050035	50	35	340
Z17050040	50	40	390
Z17050050	50	50	500
Z17050060	50	60	600
Z17055020	55	20	210
Z17055025	55	25	270
Z17055030	55	30	320
Z17055035	55	35	380
Z17055040	55	40	430
Z17055050	55	50	540
Z17060020	60	20	230
Z17060025	60	25	290
Z17060030	60	30	350
Z17060035	60	35	410
Z17060040	60	40	470
Z17060050	60	50	600
Z17060060	60	60	720
Z17065020	65	20	250
Z17065025	65	25	320
Z17065030	65	30	380
Z17065035	65	35	450
Z17065040	65	40	520
Z17065050	65	50	650

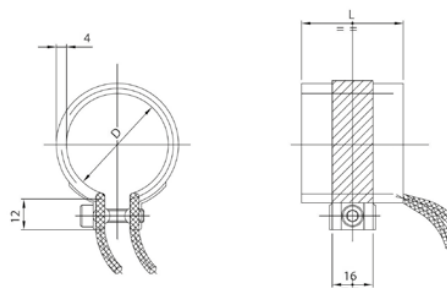
Part No.	Ø ID	Length	Watt
Z17070020	70	20	270
Z17070025	70	25	340
Z17070030	70	30	410
Z17070035	70	35	490
Z17070040	70	40	560
Z17070050	70	50	700
Z17070060	70	60	840
Z17075020	75	20	290
Z17075025	75	25	370
Z17075030	75	30	440
Z17075035	75	35	520
Z17075040	75	40	560
Z17075050	75	50	750
Z17075060	75	60	900
Z17080020	80	20	310
Z17080025	80	25	390
Z17080030	80	30	470
Z17080035	80	35	560
Z17080040	80	40	640
Z17080050	80	50	800
Z17080060	80	60	960
Z17085020	85	20	330
Z17085025	85	25	420
Z17085030	85	30	500
Z17085035	85	35	590
Z17085040	85	40	680
Z17085050	85	50	850
Z17085060	85	60	1020
Z17090020	90	20	350
Z17090025	90	25	440
Z17090030	90	30	540
Z17090035	90	35	630
Z17090040	90	40	720
Z17090050	90	50	900
Z17090060	90	60	1080
Z17095020	95	20	370
Z17095025	95	25	470
Z17095030	95	30	570
Z17095035	95	35	660
Z17095040	95	40	760
Z17095050	95	50	950
Z17095060	95	60	1150
Z17100020	100	20	380
Z17100025	100	25	500
Z17100030	100	30	600
Z17100035	100	35	700
Z17100040	100	40	800
Z17100050	100	50	1000
Z17100060	100	60	1200

Description:

Sealed nozzle heater high Wattage
Supplied with 1000 mm. Lead
230 V. Working Temperature max 380/400° C

NOZZLE HEATERS

MICA NOZZLE HEATERS



Part No.	Ø ID	Length	Watt
NHB25x25	25	25	120
NHB25x30	25	30	120
NHB25x32	25	32	120
NHB25x35	25	35	130
NHB25x38	25	38	140
NHB25x40	25	40	150
NHB25x45	25	45	165
NHB25x50	25	50	180
NHB30x25	30	25	120
NHB30x30	30	30	130
NHB30x32	30	32	140
NHB30x35	30	35	150
NHB30x38	30	38	160
NHB30x40	30	40	175
NHB30x45	30	45	200
NHB30x50	30	50	220
NHB32x25	32	25	115
NHB32x30	32	30	140
NHB32x32	32	32	150
NHB32x35	32	35	160
NHB32x38	32	38	175
NHB32x40	32	40	180
NHB32x45	32	45	200
NHB32x50	32	50	230
NHB35x25	35	25	130
NHB35x30	35	30	150
NHB35x32	35	32	160
NHB35x35	35	35	175
NHB35x38	35	38	190
NHB35x40	35	40	200
NHB35x45	35	45	225
NHB35x50	35	50	250

Part No.	Ø ID	Length	Watt
NHB38x25	38	25	140
NHB38x30	38	30	160
NHB38x32	38	32	170
NHB38x35	38	35	190
NHB38x38	38	38	200
NHB38x40	38	40	225
NHB38x45	38	45	270
NHB38x50	38	50	275
NHB40x25	40	25	140
NHB40x30	40	30	175
NHB40x32	40	32	180
NHB40x35	40	35	200
NHB40x38	40	38	220
NHB40x40	40	40	230
NHB40x45	40	45	250
NHB40x50	40	50	280
NHB45x25	45	25	160
NHB45x30	45	30	185
NHB45x32	45	32	200
NHB45x35	45	35	225
NHB45x38	45	38	200
NHB45x40	45	40	250
NHB45x45	45	45	275
NHB45x50	45	50	325
NHB50x25	50	25	180
NHB50x30	50	30	220
NHB50x32	50	32	235
NHB50x35	50	35	250
NHB50x38	50	38	280
NHB50x40	50	40	300
NHB50x45	50	45	325
NHB50x50	50	50	375

Description:

Mica insulated heater, Supplied with 1000 mm. Lead 230 V
Working Temperature max 350/370° C

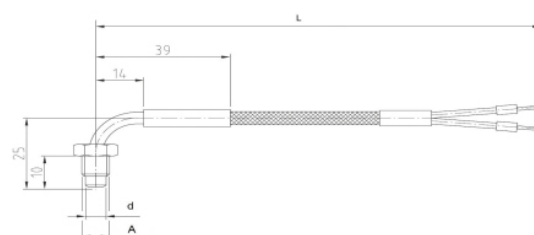
THERMOCOUPLE LEAF TYPE



Part No.	Length	Width	Type	Leads
TLC	20	10	J	1000 mm.

Description:
Thermocouple leaf type, ideal for nozzle bands.
Leads: 1000 mm.

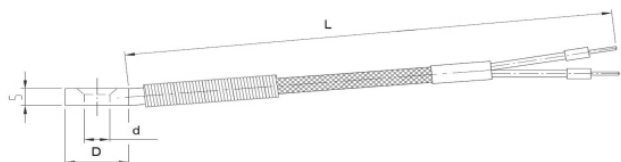
THREADED TYPE



Part No.	d	D	L
MTT602000	6	M8x1	2500

Description:
Fe-CuNi, Type J, max temperature 400° C

SURFACE WASHER TYPE

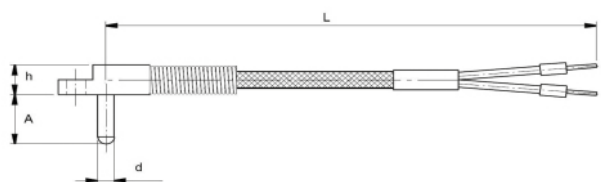


Part No.	d	D	L
MTS602000	6,5	16	2500

Description:
Fe-CuNi, Type J, max temperature 400° C

THERMOCOUPLES

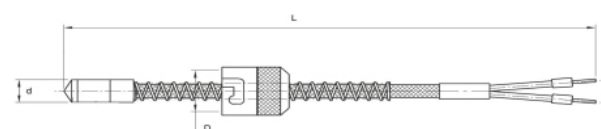
PIN TYPE



Part No.	d	A	h	L
MTP402000	4	12	8	2500

Description:
Fe-CuNi, Type J, max temperature 400° C

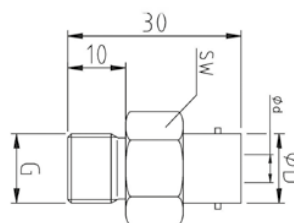
BAYONET - 2 PINS



Part No.	d	D	L
MTB48102000	4,8	11	2500
MTB60102000	6	11	2500
MTB60122000	6	12,8	2500
MTB60142000	6	15	2500
MTB80122000	8	12,8	2500
MTB80142000	8	15	2500

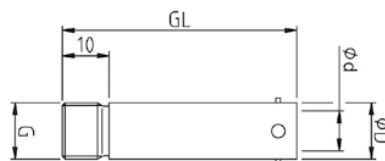
Description:
Fe-CuNi, Type J, max temperature 400° C

ADAPTORS



Part No.	ϕD	ϕd	SW	G
MTA12M10X1	12	7,1	17	M10x1
MTA12M12X1	12	8,2	16	M12x1
MTA12M12X1,75	12	8,2	16	M12x1,75
MTA12M14x1,5	12	8,2	16	M14x1,5
MTA12G3/8	12	8,2	17	G3/8
MTA14M10X1	14	7,1	17	M10x1
MTA14M12X1	14	8,2	17	M12x1
MTA14M12X1,75	14	8,2	17	M12x1,75
MTA14M14X1,5	14	8,2	17	M14x1,5
MTA14G1/4	14	8,2	17	G1/4
MTA14G3/8	14	8,2	17	G3/8

EXTENDED ADAPTORS



Part No.	ϕD	ϕd	G	GL
MTG10M10X1	10	7,1	M10x1	30
MTG10M10X1,5	10	7,1	M10x1,5	30
MTG10G1/8	11	6,3	G1/8	30
MTG12M10X1	12	7,1	M10x1	50
MTG12M10X1,5	12	7,1	M10x1,5	50
MTG12M12X1	12	8,2	M12x1	50
MTG12M12X1,75	12	8,2	M12x1,75	50
MTG12M14X1,5	12	8,2	M14x1,5	50
MTG14M12X1	14	9	M12X1	50
MTG14M14x1,5	14	9	M14x1,5	50

MULTIPOLE CONNECTORS

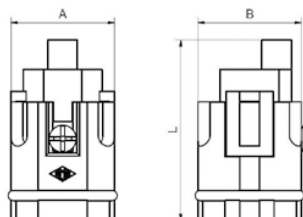
MULTIPOLE CONNECTORS



High quality connectors, compatible with Industry Standard
(equivalent products from other manufacturers)

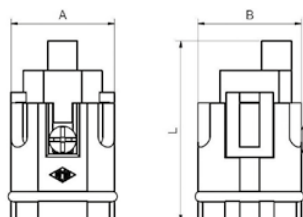
- CE marked
- UL/CSA approved
- Quality Screw terminals
- Cost efficient
- Full range
- Protection standard: IP20
- Seals: NBR
- Temperature range: 125° C (CK type only 100° C)

INSERTS MALE



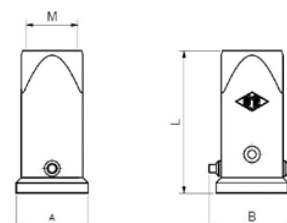
Part No.	# Poles	A	B	L
CKM03	3+E	21	21	30,5
CKM04	4+E	21	21	36,5

INSERTS FEMALE



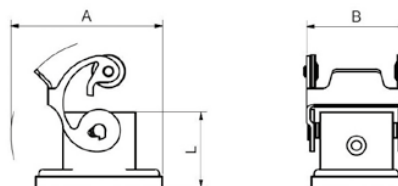
Part No.	# Poles	A	B	L
CKF03	3+E	21	21	30,5
CKF04	4+E	21	21	36,5

STRAIGHT HOOD



Part No.	# Poles	Levers	A	B	L	M
MKAV20	3/4+E	Single	28	33,5	60,5	M20

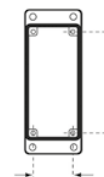
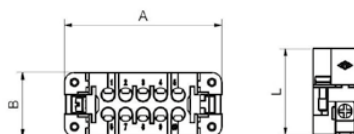
PANEL MOUNT BASE



Part No.	# Poles	Levers	A	B	L
CKAX03I	3/4+E	Single	57,5	32	24

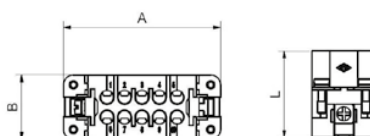
16A - 250 V NARROW CONNECTORS

INSERTS MALE, SCREW TERMINALS



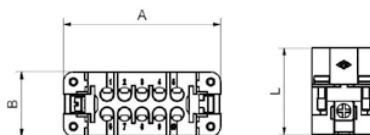
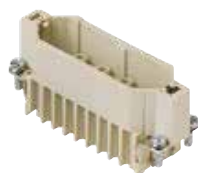
Part No.	# Poles	A	B	L	Size
CDAM10	10 Pole	56,5	23	31	49.16
CDAM16	16 Pole	73	23	31	66.16

INSERTS FEMALE, SCREW TERMINALS



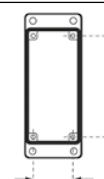
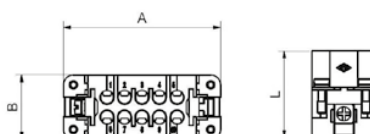
Part No.	# Poles	A	B	L	Size
CDAF10	10 Pole	56,5	23	31	49.16
CDAF16	16 Pole	73	23	31	66.16

INSERTS MALE, 3 ROW, HIGH DENSITY CRIMP TERMINAL



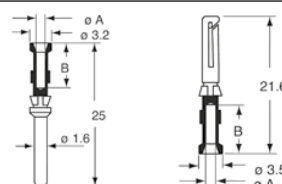
Part No.	# Poles	A	B	L	Size
CDM25	25 Pole	73	23	31	66.16

INSERTS FEMALE, 3 ROW, HIGH DENSITY CRIMP TERMINAL



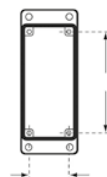
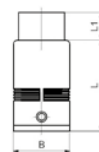
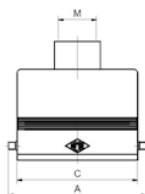
Part No.	# Poles	A	B	L	Size
CDF25	25 Pole	73	23	31	66.16

CRIMP PINS



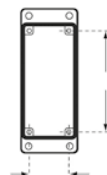
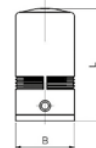
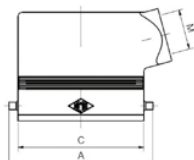
Part No.	Type	Wire Size	ø-A	ø-B
CDMA0.5	Male	0,5 mm ²	1,1	8
CDFA0.5	Female	0,5 mm ²	1,1	8
CDMA1.5	Male	1,5 mm ²	1,8	8
CDFA1.5	Female	1,5 mm ²	1,8	8

TOP ENTRY HOOD



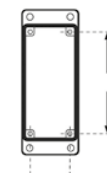
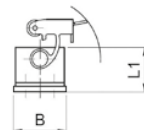
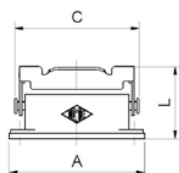
Part No.	# Poles	Levers	A	B	C	L	L1	M	Size
MZAV15L20	10 Pole	Single	72	36	63	64,5	14,5	M20	49.16
MZAV25L20	16/25 Pole	Single	88,5	36	79,5	70,5	14,5	M20	66.16
MZAV25L25	16/25 Pole	Single	88,5	36	79,5	70,5	14,5	M25	66.16

SIDE ENTRY HOOD



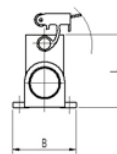
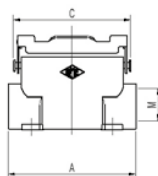
Part No.	# Poles	Levers	A	B	C	L	M	Size
MZO15L20	10 Pole	Single	72	29,4	63	55,9	M20	49.16
MZO25L25	16 Pole	Single	88,5	29,4	79,5	55,9	M25	66.16
MZA025L25	25 Pole	Single	88,5	29,4	79,5	70,5	M25	66.16

PANEL MOUNT HOUSING



Part No.	# Poles	Levers	A	B	C	L	Size
CZI15L	10 Pole	Single	83	32	76	44	49.16
CZI25L	16/25 Pole	Single	98	32	93	44	66.16

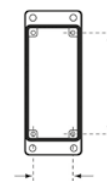
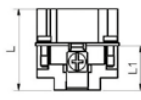
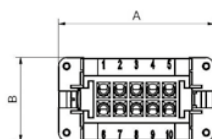
SURFACE MOUNT HOUSING



Part No.	# Poles	Levers	A	B	C	L	M	Size
MZP15L25	10 Pole	Single	85	50	76	52	M25	49.16
MZAP25L25	16/25 Pole	Single	101	50	93	57	M25	66.16

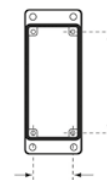
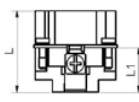
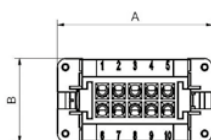
16A - 500 V STANDARD CONNECTORS

INSERTS MALE



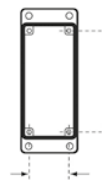
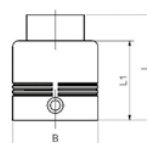
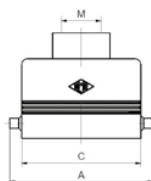
Part No.	# Poles	A	B	L	L1	Size
CNEM06T	6 Pole	50	34	33	18	44.27
CNEM10T	10 Pole	63,4	34	33	18	57.27
CNEM16T	16 Pole	83,5	34	33	18	77.27
CNEM24T	24 Pole	110,3	34	33	18	104.27

INSERTS FEMALE



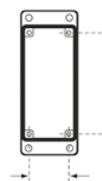
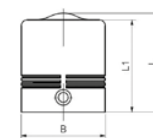
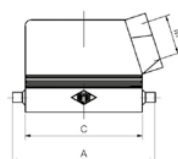
Part No.	# Poles	A	B	L	L1	Size
CNEF06T	6 Pole	50	34	33	18	44.27
CNEF10T	10 Pole	63,4	34	33	18	57.27
CNEF16T	16 Pole	83,5	34	33	18	77.27
CNEF24T	24 Pole	110,3	34	33	18	104.27

TOP ENTRY HOOD, SINGLE LEVER



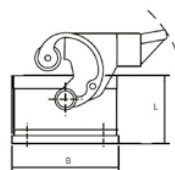
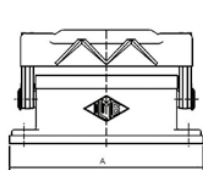
Part No.	# Poles	Levers	A	B	C	L	L1	M	Size
MHV06L20	6 Pole	Single	72	43	60	53	40	M20	44.27
MHV10L20	10 Pole	Single	87	43	73	58	45	M20	57.27
MHV16L25	16 Pole	Single	108	43	93,5	58	45	M25	77.27
MHV24L32	24 Pole	Single	135	43	120	68	55	M32	104.27

SIDE ENTRY HOOD, SINGLE LEVER



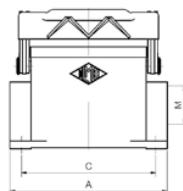
Part No.	# Poles	Levers	A	B	C	L	L1	M	Size
MHO06L20	6 Pole	Single	73	43	60	50,4	47	M20	44.27
MHO10L20	10 Pole	Single	87	43	73	52	49	M20	57.27
MHO16L25	16 Pole	Single	108	43	93,5	63	60	M25	77.27
MHO24L32	24 Pole	Single	135	43	120	63	60	M32	104.27

PANEL MOUNT BASE, SINGLE LEVER



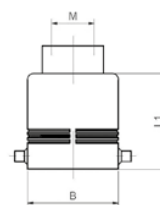
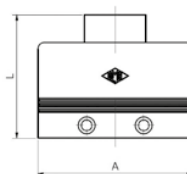
Part No.	# Poles	Levers	A	B	L	Size
CHI06L	6 Pole	Single	82,5	45,5	29	44.27
CHI10L	10 Pole	Single	95,5	45,5	29	57.27
CHI16L	16 Pole	Single	115,5	45,5	29	77.27
CHI24L	24 Pole	Single	142,5	45,5	29	104.27

SURFACE MOUNT BASE, SINGLE LEVER



Part No.	# Poles	Levers	A	B	C	L	M	Size
MHP06L20	6 Pole	Single	82	52	70	53	M20	44.27
MHP10L20	10 Pole	Single	93,5	52	82	57	M20	57.27
MHP16L25	16 Pole	Single	117	57	105	63	M25	77.27
MHP24L25	24 Pole	Single	144	57	132	63	M25	104.27

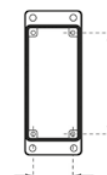
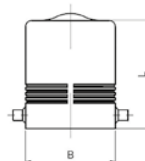
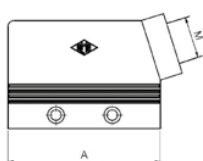
TOP ENTRY HOOD, DOUBLE LEVER



Part No.	# Poles	Levers	A	B	L	L1	M	Size
MHV10.20	10 Pole	Double	73	43	58	45	M20	57.27
MHV16.25	16 Pole	Double	93,5	43	58	45	M25	77.27
MHV24.32	24 Pole	Double	120	43	68	55	M32	104.27

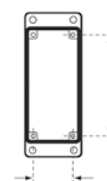
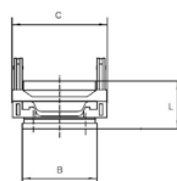
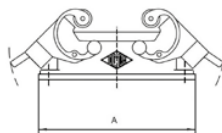
16A - 500 V STANDARD CONNECTORS

SIDE ENTRY HOOD, DOUBLE LEVER



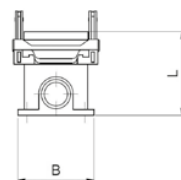
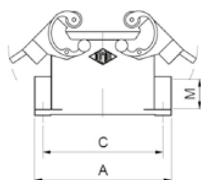
Part No.	# Poles	Levers	A	B	L	M	Size
MH010.20	10 Pole	Double	73	43	52	M20	57.27
MH016.25	16 Pole	Double	93,5	43	63	M25	77.27
MH024.32	24 Pole	Double	120	43	63	M32	104.27

PANEL MOUNT BASE, DOUBLE LEVER



Part No.	# Poles	Levers	A	B	C	L	Size
CHI10	10 Pole	Double	95,5	45,5	58	29	57.27
CHI16	16 Pole	Double	115,5	45,5	58	29	77.27
CHI24	24 Pole	Double	142,5	45,5	58	29	104.27

SURFACE MOUNT BASE, DOUBLE LEVER



Part No.	# Poles	Levers	A	B	C	L	M	Size
MHP10.20	10 Pole	Double	93,5	52	82	57	M20	57.27
MHP16.25	16 Pole	Double	117	57	105	63	M25	77.27
MHP24.25	24 Pole	Double	144	57	132	63	M25	104.27

CABLE GLANDS



Part No.	Thread
AGM20T	M20
AGM25T	M25
AGM32T	M32

POWERFLEX CABLE



Part No.	Zones	Cores	Coil Length
PF08	8	16 + E	20m
PF12	12	24 + E	20m

Description:

Multicore Power Cable
1.5mm² 16A Cable
Numbered Cores, Green/Yellow Earth

THERMOFLEX CABLE



Part No.	Zones	Cores	Coil Length
TF08	8	8 Pair + E	20m
TF12	12	12Pair + E	20m

Description:

Multi-core Thermocouple Cable
Type J Fe/Cu-Ni, Twisted Pairs
DIN Standard Colours (Black/White), Numbered Cores
Screen and Earth

MULTIFLEX CABLE



Part No.	Zones	Cores	Coil Length
MF06	6	12 + E PWR / 6 Pair T/C	20m

Description:

6 Zone Combination power and thermocouple cable
Extremely Flexible
1.5mm² 16A Power Cable
Type J Fe/Cu-Ni Thermocouple Cable, Twisted Pairs
DIN Standard Colours (Black/White), Numbered Cores
Screen and Earth

INFRA-RED KIT

THERMOMETER KIT



Part No.
826-32

Temperature range
-50° C to + 1300° C

Description:

Single Input K-Type thermometers offer high accuracy and fast response times; ideal for plastics processors
50° to 1300°
°C / °F Selectable
Resolution: 0.1°C / 0.1°F
Sampling rate of 2.5 times per second
Auto Power Off
Supplied with carry case, rubber holster & battery
Kit Includes: Thermometer (Single Input), Case, Needle Point Penetration Probe, Right Angle Surface probe, Case, Batteries

DELUXE THERMOMETER KIT



Part No.
826-33

Temperature range
-50° C to + 1300° C

Description:

Dual Input K-Type thermometers offer high accuracy and fast response times; ideal for plastics processors
50° to 1300°
°C / °F Selectable
Resolution: 0.1°C / 0.1°F
Sampling rate of 2.5 times per second
Auto Power Off
Supplied with carry case, rubber holster & battery
Kit Includes: Thermometer (Single Input), Case, Needle Point Penetration Probe, Right Angle Surface probe, Magnetic Surface Probe, Case, Batteries

THERMOMETER



Part No.
DT6101K
DT6102K

Input
Single
Dual

Temperature range
-50° C to + 1300° C
-50° C to + 1300° C

Description:

Single or Dual Input K-Type thermometers offer high accuracy and fast response times; ideal for plastics processors
50° to 1300°
°C / °F Selectable
Resolution: 0.1°C / 0.1°F
Sampling rate of 2.5 times per second
Auto Power Off
Supplied with carry case, rubber holster, bead probe & battery

INFRARED AND PROBE THERMOMETER KIT



Part No.	Temperature range
826-31	-60° C to + 500° C

Description:

Ideal for all temperature measurement requirements around the mouldshop this dual purpose infrared thermometer also has a Type K thermo-couple input socket.

The kit is supplied in a case complete with penetration probe and 90° ribbon surface probe. Ideal for measuring surface temperature of moulded parts, mould surface temperature or melt temperature.

Range (Infrared) -60°C to +500°C

Range (Thermocouple) -60°C to +500°C

Backlit LCD display

Laser Pointer

Auto power off (60 secs)

Adjustable Emissivity

HANDHELD 90 DEGREE RIBBON SURFACE PROBE



Part No.	Type	Max Temp	Lead Type
TCP-RS90-K	K	500°C	Flexible

HANDHELD PENTRATION PROBE



Part No.	Type	Max Temp	Lead Type
TCP-P-K	K	500°C	Flexible

MAGNETIC SURFACE PROBE



Part No.	Type	Max Temp	Lead Type
TCP-R-M	K	500°C	Flexible