

> 熱澆道系列
Hot Runner Systems



uCloud

專業化熱澆道系統

Specializing in
Hot Runner Systems



- 熱澆道系統銷售・設計規劃・專業諮詢服務。
- 熱澆道系統特殊尺寸之訂製、配合。
- 備各種規格各廠牌零件，提供完善的售後服務。
- 備各種不同規格之加熱器、感溫線、插座，庫存齊全，現貨供應。
- PID微電腦精密控制之溫控。
- 專業模流分析服務。

- Hot runner systems sale, design and consultation.
- Accepting special dimension order.
- Providing different brands of accessories to meet customer's requirement and complete after sales services system.
- All range of different specifications for heater, thermocouple, connector, etc. and complete stocks available.
- PID type of control algorithm for temperature controller.
- Professional molding simulation analysis service available.

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企業簡介 Company Introduction

契益有限公司是一家專業化熱澆道系統生產企業，目前員工人數約100人，公司創辦人陳仲樂先生於1991年開始從事於熱澆道系統銷售與服務行業，於1997年與陳雅模先生一同成立契益有限公司，全力投入熱澆道系統的研發、生產與經營，公司產品隨客戶模具銷售至世界各地。於2003年因業務的拓展及長遠企業經營規劃，於大陸深圳設廠投資成立模實科技(深圳)有限公司，自創 **M**® MOLDPOWER品牌並徵尋世界各地之代理合作夥伴，開拓市場之經營服務範圍，更於2017年台灣新廠落成擴充增添歐、日、台等先進精密加工機械設備制定了一套嚴格的品質管理體系及售後服務體系，確保對客戶交貨時間、交貨品質及售後服務之迅速與完善，以提高客戶在模型行業中的競爭力為使命做貢獻。

M® 熱澆道系統以其優異的性能，為越來越多的大型塑膠廠及模具廠所採用，高階加熱系統全部採用歐洲進口加熱器，使用壽命長、溫度精確、加熱效果好。配合本公司專屬熱澆道專用PID控制器，具有控溫精度高及性能穩定等特點。

本公司擁有專業的技術服務隊伍，客戶只需提供產品及塑膠料等基本資料，我們可為客戶提供從熱澆道系統設計、模流分析、安裝試模及量產時保固與維修。熱誠歡迎各相關廠商與我們建立合作關係，我們將竭誠為您提供一流的服務！

Mold Power Co., Ltd. is a professional hot runner system enterprise. Currently there are 100 employees in this company. The company's founder Chung Le Chen start to get into the hot runner system's selling & service business from 1991. And establish the Mold Power Co., Ltd. with Ya Mo Chen in 1997, which dedicate on the research, production & the business administration of the hot runner system. Company product accompany with customer's mold worldwide. Base on business growing & long term business plan, we have established a Mold Power Technology (Shen Zhen) Co., Ltd. in Shen Zhen, China and register the **M**® trademark & seeking distributors worldwide to extend the market share. Furthermore we have move to the new plant with latest precisioning machines which bought from Europe, Japan, Taiwan to castigate a quality control system & after sale service plan to ensure the product delivery time, quality control & quick feedback to customer in order to get more competitiveness in the plastic & mold business.

More & more large plastic & mold companies are using Mold Power's high quality product because of its long lifeness, accurate temperature control, heating elements effectiveness with our temperature controller for hot runner system.

Mold Power Co., Ltd. is a professional technical-based service team, customer will only provide the product & material used information, then Mold Power Co., Ltd. can provide the services which from hot runner system design, mold flow analysis to tooling for production's maintenance & guarantee. We will extend a warm welcome to our esteemed customers to co-operate each other and provide the best service to you.

亞洲區銷售與服務 Asia Locations Sale & Support



TAIWAN 台灣

台南 總公司
台北 代理商
台中 代理商

CHINA 中國

東莞 分公司
昆山 代理商

VIETNAM 越南

胡志明 分公司
河內 代理商

THAILAND 泰國

曼谷 代理商

MALAYSIA 馬來西亞

檳城 代理商
怡保 代理商

PHILIPPINES 菲律賓

馬尼拉 代理商

INDONESIA 印尼

雅加達 代理商
泗水 代理商

INDIA 印度

新德里 代理商

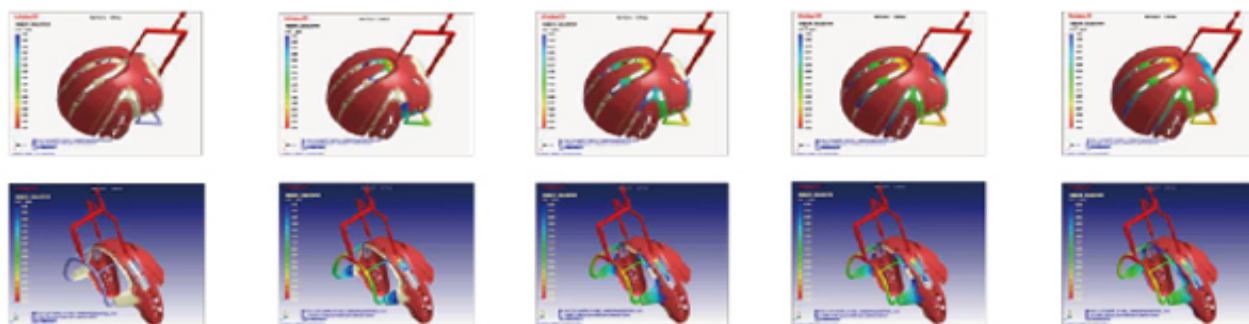
生產產品及產品運用 / Manufacturing product and product application

契益有限公司的專業製作熱流道系統，已被模具廠廣泛應用於家電生活用品、辦公用品、汽車零件、電子資訊產品、手機、運動用品、及醫療用品等模具上，成為最有效之自動化成型生產系統。

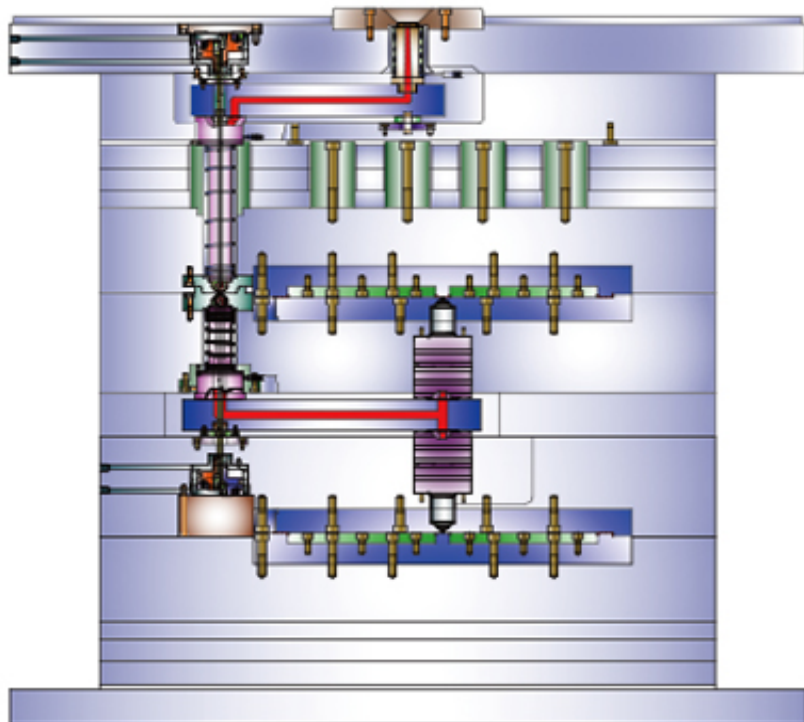
Mold Power Co., Ltd.'s professional hot runner system has been adopted in many fields like HA, OA, automobile, computer, mobile phone & medical instrument's mold and has complementary on its automatic forming production system.



塑膠模流分析簡介 / Plastic injection Moldex3D software system



1&1 疊模實例 / IKEA 1&1 Stack mold example



熱澆道系統的構成及名稱

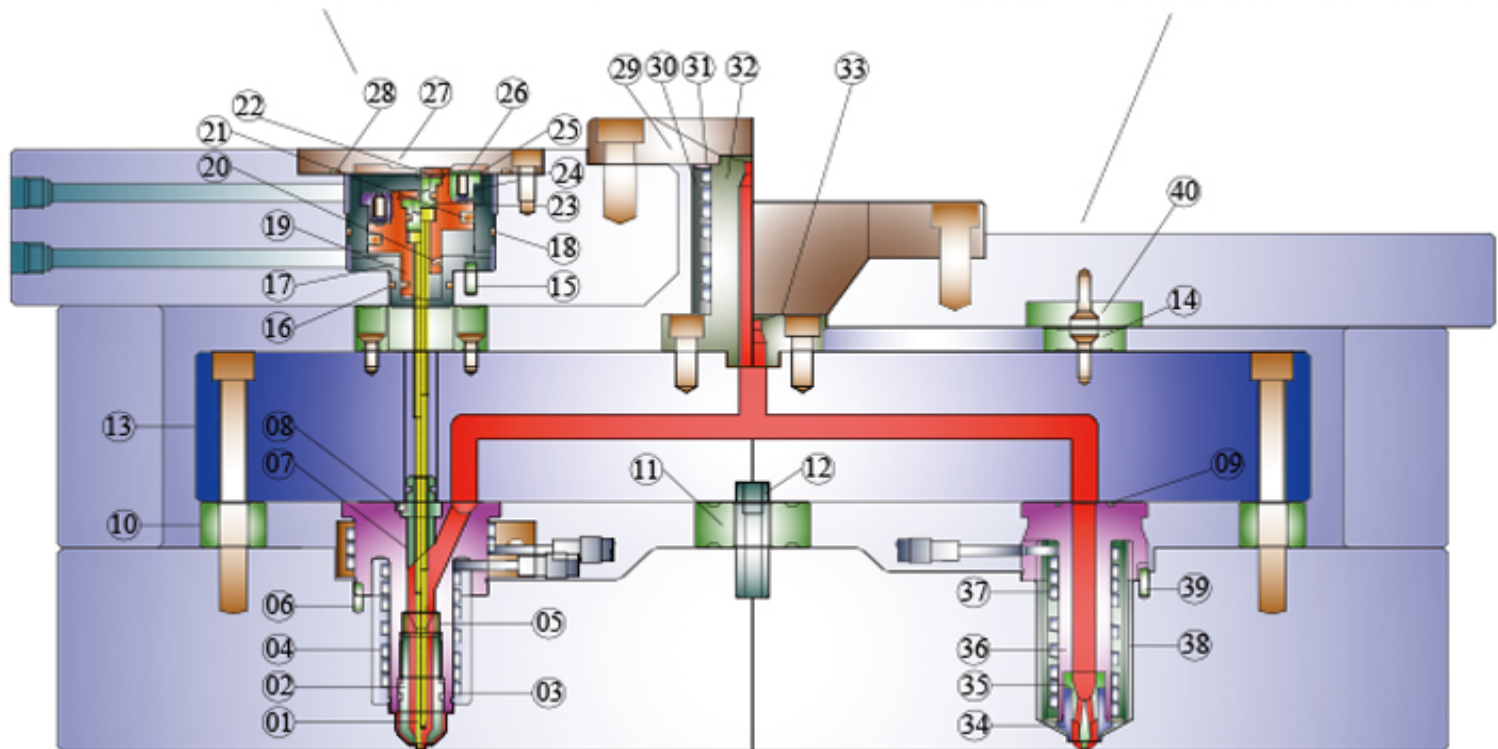
Title and Construction of MP Hot Runner Systems

針閥式熱嘴

VALVE GATE NOZZLE SYSTEM

針點式熱嘴

PINPOINT GATE NOZZLE SYSTEM



序號 Item	部件名稱	Parts Name
01	閥針	VALVE PIN
02	鉍銅頭	BeCu PROBE
03	熱嘴本體	NOZZLE BODY
04	加熱線圈	COIL HEATER
05	閥針支撐環	VALVE SUPPORT RING
06	本體定位銷	BODY DOWEL PIN
07	閥針引導器	VALVE PIN DRIVE BUSHING
08	引導器定位銷	PIN GUIDE
09	O型環	"O" RING-aluminum
	鋁	"O" RING-stainless steel
10	下墊塊	LOW SUPPORT PAD
11	中心墊塊	CENTRAL LOCATOR
12	定位銷	DOWEL PIN
13	熱流板	MANIFOLD
14	上墊塊	UPPER SUPPORT PAD
15	氣缸本體定位銷	CYLINDER TUBE DOWEL PIN
16	O型環	"O" RING
17	氣缸	標準型 STANDARD CYLINDER TUBE
	本體	定位型 LOCATING CYLINDER TUBE
18	O型環	"O" RING
19	活塞	可調式 FLEXIBLE PISTON
	本體	固定式 BUILD-IN PISTON

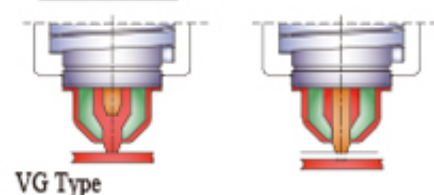
序號 Item	部件名稱	Parts Name
20	O型環	"O" RING
21	O型環	"O" RING
22	扣環	RETAINING RING
23	閥針塞	VALVE-NEEDLE PLUG
24	活塞本體調整環	PISTON ADJUSTER RING
25	活塞本體定位銷	PISTON DOWEL PIN
26	彈簧	SPRING
27	氣缸後蓋	CYLINDER END CAP
28	O型環	"O" RING
29	定位環	LOCATING RING
30	保護蓋	PROTECTION CAP
31	墊片	WASHER
32	加長延長頭	INJECTION BUSHING
33	延長頭	INJECTION BUSHING
34	熱嘴小頭	NOZZLE CAP
35	嘴針	NOZZLE TIP
36	熱嘴本體	NOZZLE BODY
37	線圈式電熱	COIL HEATER
	銅套式電熱	CASTING TYPE HEATER
38	外殼	NOZZLE HOUSING
39	本體定位銷	BODY DOWEL PIN
40	耐壓塊	PRESSURE BLOCK

型號 / Type

說明 / Attention

使用優點及應用 / Advantage of use

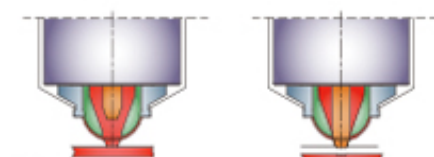
○ 針閥澆口 VALVE GATE



VG Type

- * 氣動針閥式澆口
- * 澆口區域由客戶加工
- * VG nozzle is pneumatic operated shut off valve gate

- * 產品澆口較為美觀，但較不易換色。
- * 適用於交通器材如保險杆、車門板或車燈成型、食品容器以及產品需要分段射出，設定時間關閉澆口，並能夠控制結合線等條件。
- * Good & smooth gate vestige on part surface but bad color change ability.
- * Highly applicable to automobile molding such as bumper, internal panel, lamp cover and food container as well as products demanding shot segment, setting time to switch on/off gate, capable to control weld line, etc.

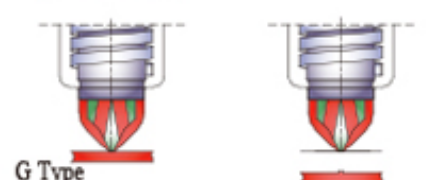


VLC Type

- * 氣動針閥式澆口
- * 澆口區域由客戶加工
- * VLC nozzle is pneumatic operated shut off valve gate

- * 產品澆口較為美觀、易換色。
- * 適用於車燈成型、3C產品、TV外殼、運動用品以及產品需要分段射出，設定時間關閉澆口，並能夠控制結合線等條件。
- * Good & smooth gate vestige on part surface with good color change ability.
- * Highly applicable to automobile, lamp cover and 3C products, TV casing, sporting goods as well as products demanding shot segment, setting time to switch on/off gate, capable to control weld line, etc.

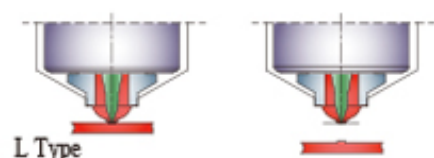
○ 針點澆口 PINPOINT GATE



G Type

- * 針點式澆口開放熱嘴（帶換色套的可換色）
- * 澆口區域由客戶加工
- * G nozzle equipped with torpedo tip

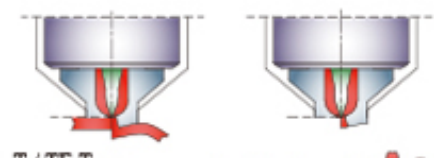
- * 產品澆口痕跡小。
- * 射點間距小，適合多穴同時進膠
- * 換色時需配合換色套，以縮短換色時間。
- * Small gate vestige on part surface.
- * Good material flow ability for direct gating.
- * Minimum distance between tips, excellent choice for multi cavity.
- * Highly applicable to general plastics.
- * Low color change capability can be compensate by insulation insert.



L Type

- * 針點式澆口開放熱嘴
- * 澆口區域由客戶加工
- * L nozzle equipped with torpedo tip

- * 產品澆口痕跡小。
- * 灌嘴的優點與G系列相同且無換色問題。
- * 灌嘴尺寸與流道尺寸比G系列的選擇多且適合泛用塑膠使用。
- * Small gate vestige on part surface.
- * The merits for this gate type are similar to G series.
- * More dimensions and flow channel size availability.

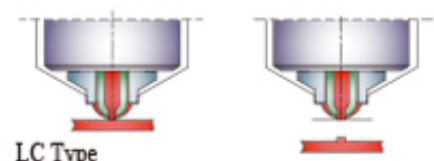


T / TE Type

- * 有襯套頭之針點澆口
- * T/TE nozzle equipped with torpedo bush

- * 襯套頭可依模穴形狀加工。
- * 澆口磨耗容易替換。
- * 模穴加工容易。
- * Bush end can be machined to suit most cavity curve.
- * Stopping drooling.
- * No cavity gate wear occurs and make gate replacement easier.
- * Good color change ability.
- * Nozzle seat machining easy.
- * The cooling ability around the gate is critical.

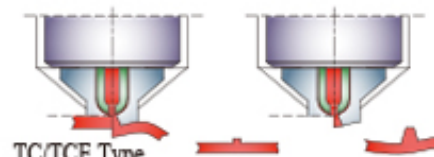
○ 直心澆口 OPEN GATE



LC Type

- * 直心澆口的開放熱嘴
- * 可換色
- * 澆口區域由客戶加工
- * LC nozzle equipped with open tip

- * 塑料在流道內流動能力佳，換色容易。
- * 熱傳導性良好，避免澆口失溫封阻。
- * 澆口痕跡優於針點澆口。
- * Excellent material flow ability and good color changeability.
- * Good thermo conductivity, the open tip avoids the gate freeze up.
- * Eliminates flow lines from nozzle.
- * Minimum mark
- * Highly applicable to general plastics.

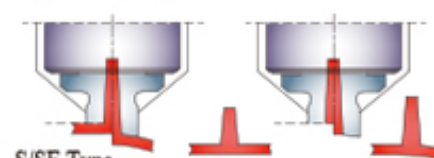


TC/TCE Type

- * 有襯套頭之直心澆口
- * TC/TCE nozzle equipped with open bush

- * 模穴加工容易。
- * 須注重澆口旁的冷卻水路。
- * The merits for this gate type are similar to T and LC series.
- * Good thermo conductivity.
- * Highly applicable to general plastics.
- * Nozzle seat machining easy.
- * The cooling ability around the gate is critical.

○ 豎澆口 SPRUE GATE



S/SE Type

- * 有襯套頭之豎澆口
- * S/SE nozzle equipped with SPRUE GATE

- * 適合大型成品件。
- * 適合含添加劑塑料且較無殘留應力問題。
- * 襯套頭可依模具形狀加工。
- * 注重澆口旁的冷卻水路。
- * Suitable for large part.
- * Suitable for difficult filling material without residual stress on parts.
- * Bush end can be machined to suit most cavity curve.
- * The cooling ability around the gate is critical.

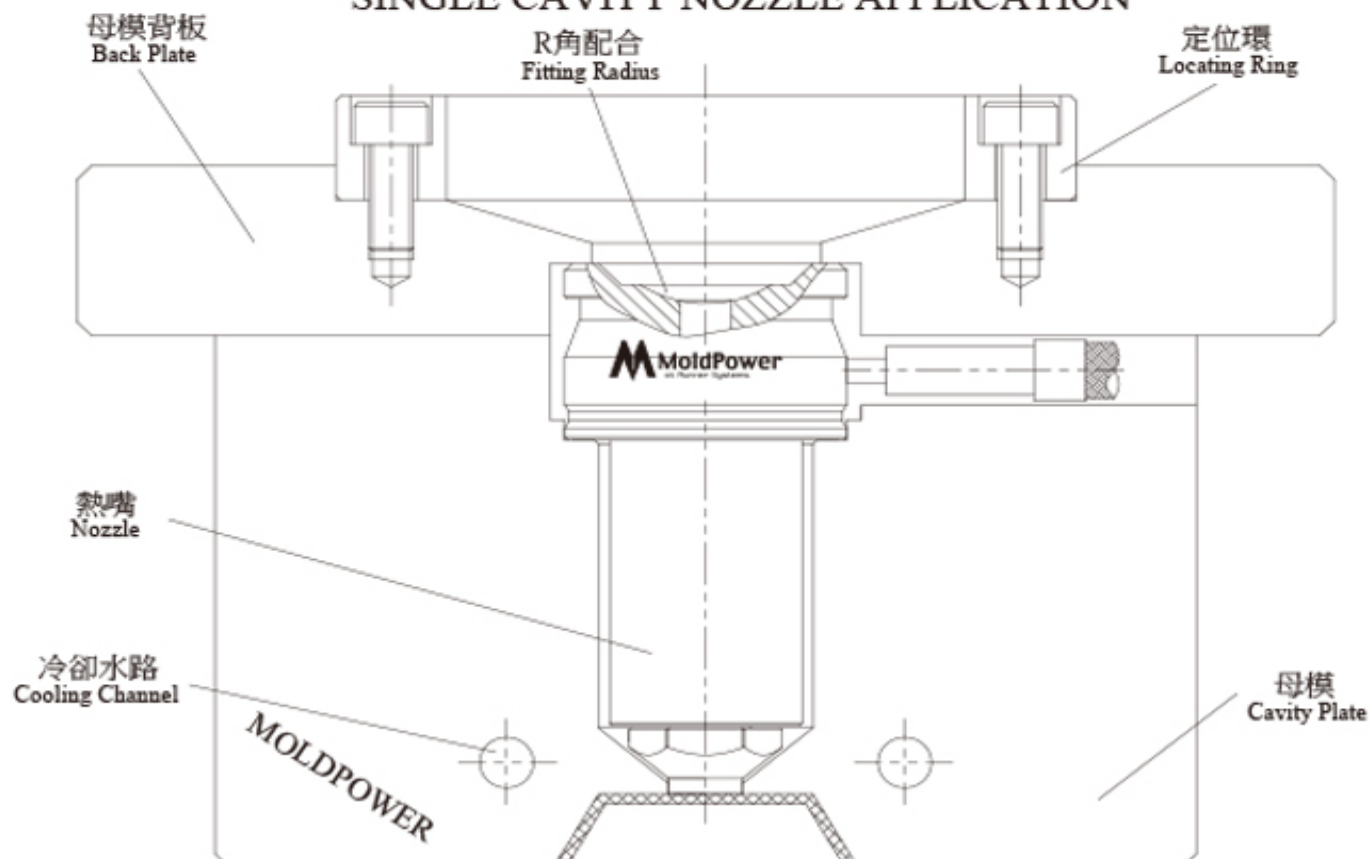
熱澆道系統目錄 TABLE OF CONTENTS

公司及產品之簡介 / Company and Product Introduction	PAGE 1~4
熱澆道系統目錄頁次說明 / Table of contents	PAGE 5
熱澆道使用及維修時治具之應用 Hot runner system's maintenance & repair tool	PAGE 6~8
各種熱澆道規格、型式選用表 / 計算澆口直徑曲線圖 Nozzle Selection Table / Graph to calculate gate diameter	PAGE 9~10
技術問卷調查表 / Quotation Worksheet	PAGE 11
CAE模流分析問卷調查表 / CAE Analysis Worksheet	PAGE 12
熱澆道之應用、研發及業務範圍說明 Hot runner application, R&D and business scope introduction	PAGE 13
單穴熱嘴大頭保溫模具加工尺寸圖 / L型系列嘴頭加工尺寸選擇參考圖 Single cavity nozzle bottomend heater's seat machining drawing / L type nozzle seat machining selection table	PAGE 14
線圈式加熱器規格編號說明 / 銅套式加熱器規格編號說明 Coil heater's P/N specification / Casting heater's P/N specification	PAGE 15
C系列各式熱嘴規格及加工尺寸說明 C series with various specifications of nozzles and nozzle seat machining drawing	PAGE 16~20
H系列單穴閥澆口VLC/VTC/VTCE規格及加工尺寸說明 H series Single Valve Gate VLC/VTC/VTCE dimension and nozzle seat machining drawing	PAGE 21~22
S系列單穴閥澆口VL規格及加工尺寸說明 S series Single Valve Gate VL dimension and nozzle seat machining drawing	PAGE 23~24
C系列VG/VLC/VTC/VTCE規格及加工尺寸說明 C series with VG/VLC/VTE/VTCE dimension and nozzle seat machining drawing	PAGE 25~31
C系列G/GC規格及加工尺寸說明 C series with G/GC dimension and nozzle seat machining drawing	PAGE 32~34
熱流板規格選擇表 / 分流板零配件 Manifold specification & Table / Manifold Accessories	PAGE 35~40
電熱棒及管狀加熱器規格表 Cartridge heater and Tubular heater specification	PAGE 41
感溫線規格表 / 熱澆道系統配線圖 Thermocouple specification / Manifold heat required formula	PAGE 42



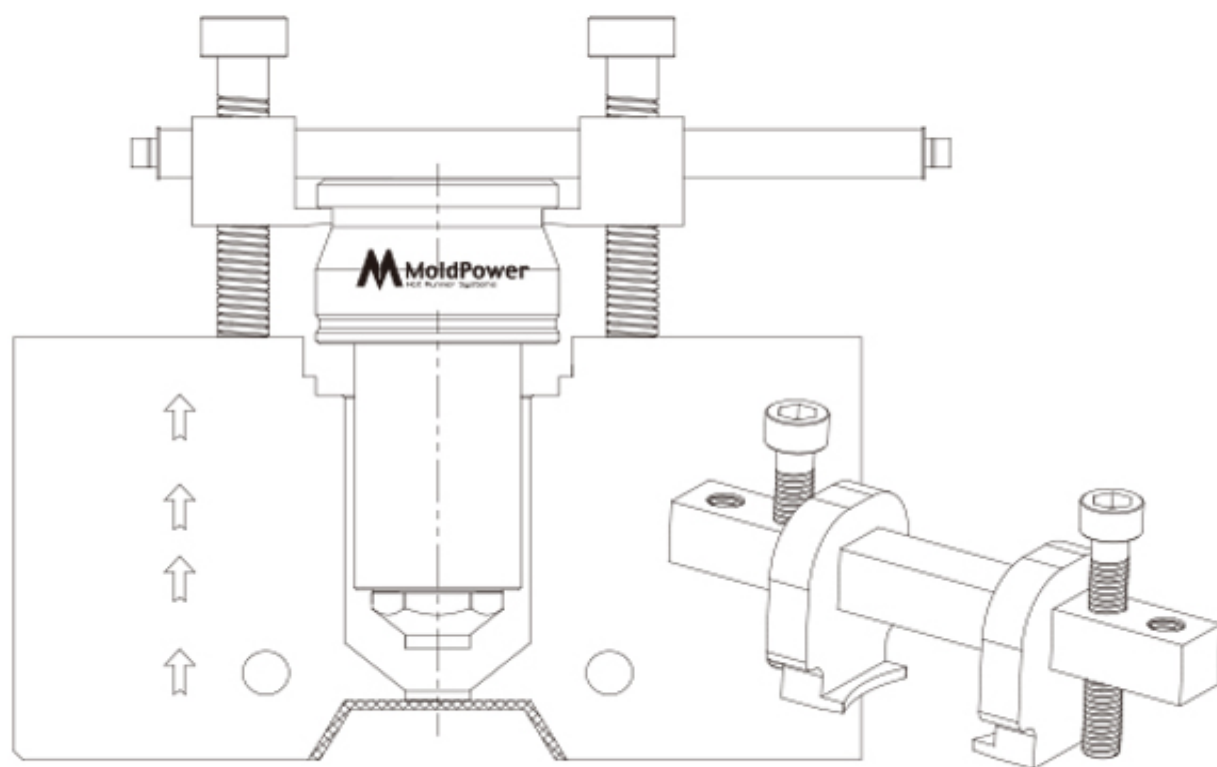
單穴熱嘴應用

SINGLE CAVITY NOZZLE APPLICATION

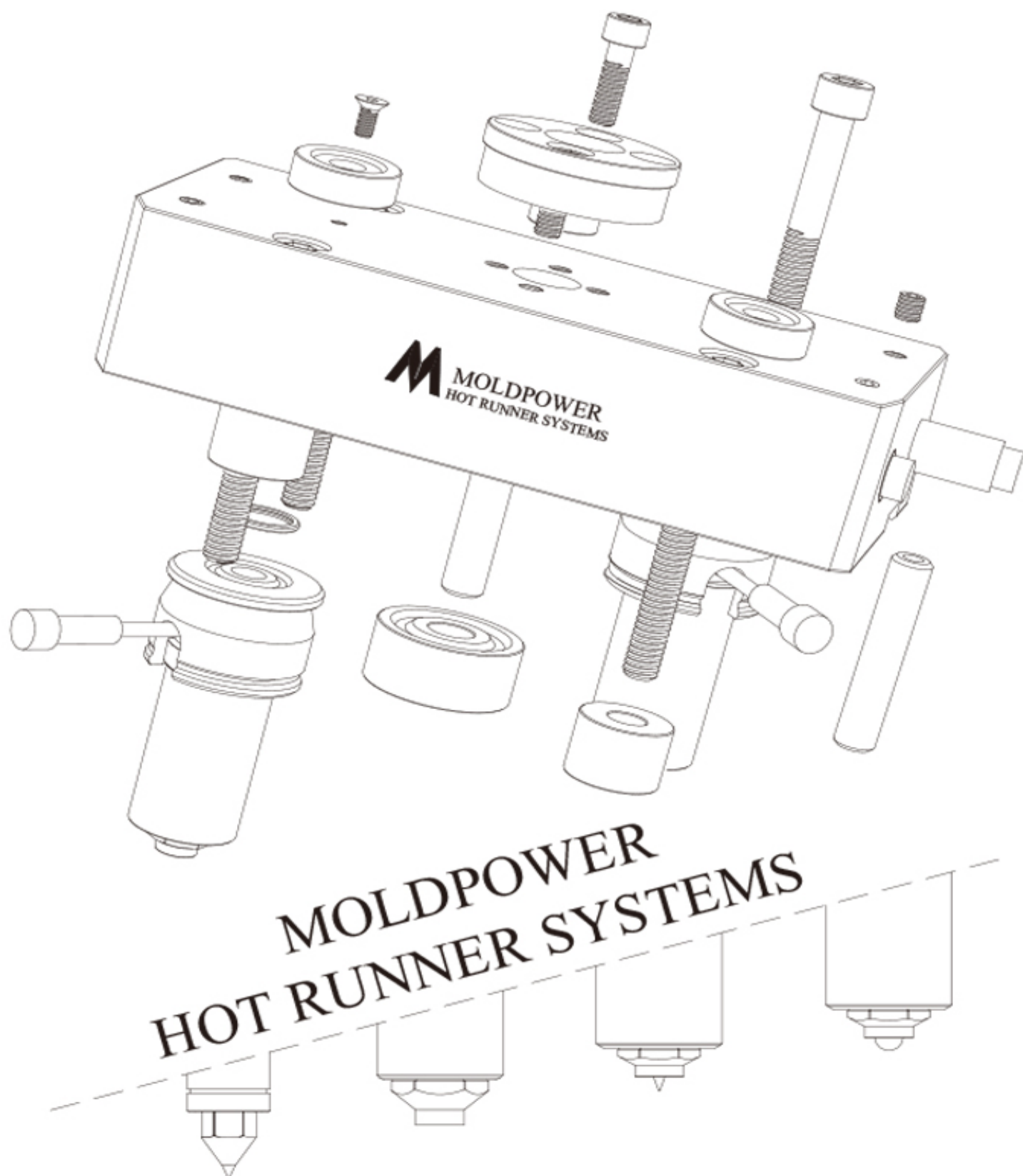


熱澆道治具應用

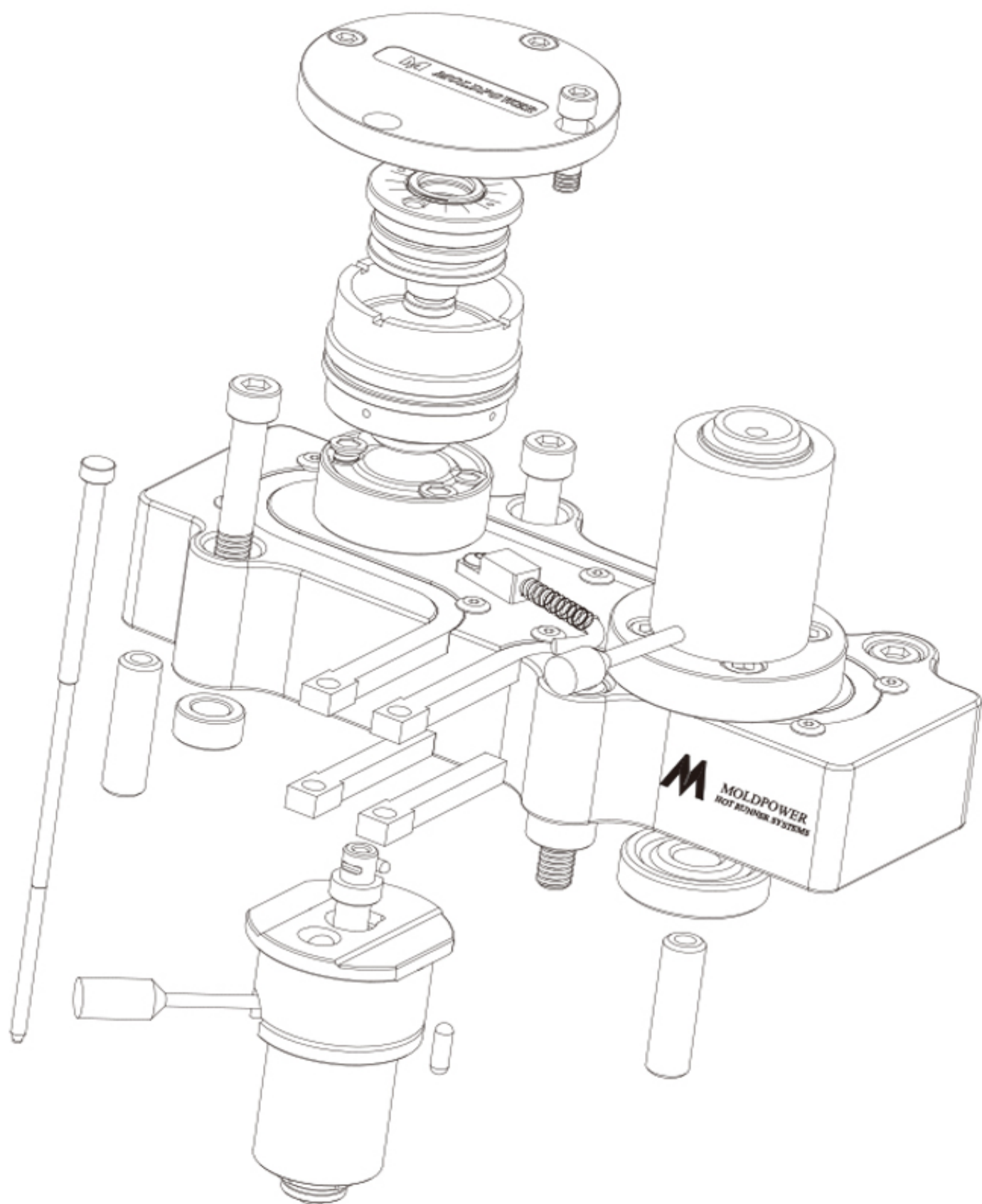
FIXTURE APPLICATION



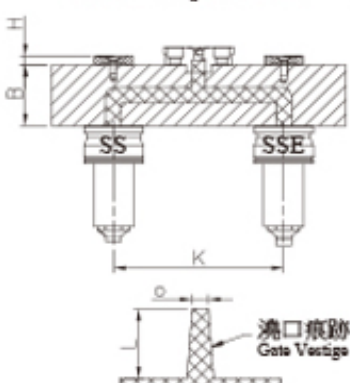
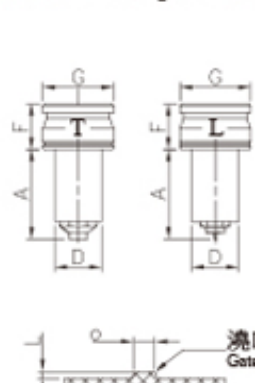
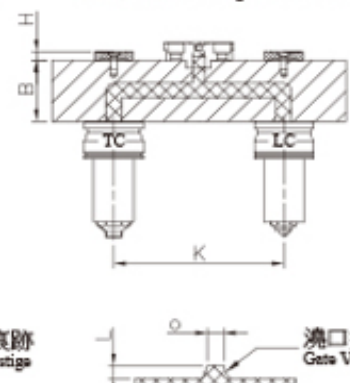
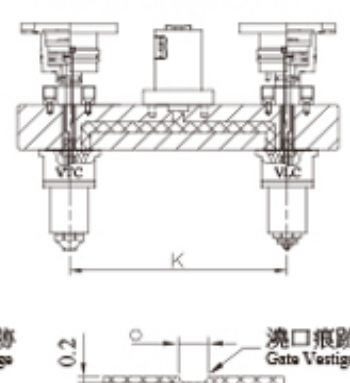
多穴熱嘴應用
MULTI-CAVITY NOZZLE APPLICATION



針閥式熱嘴應用 VALVE GATE NOZZLE APPLICATION



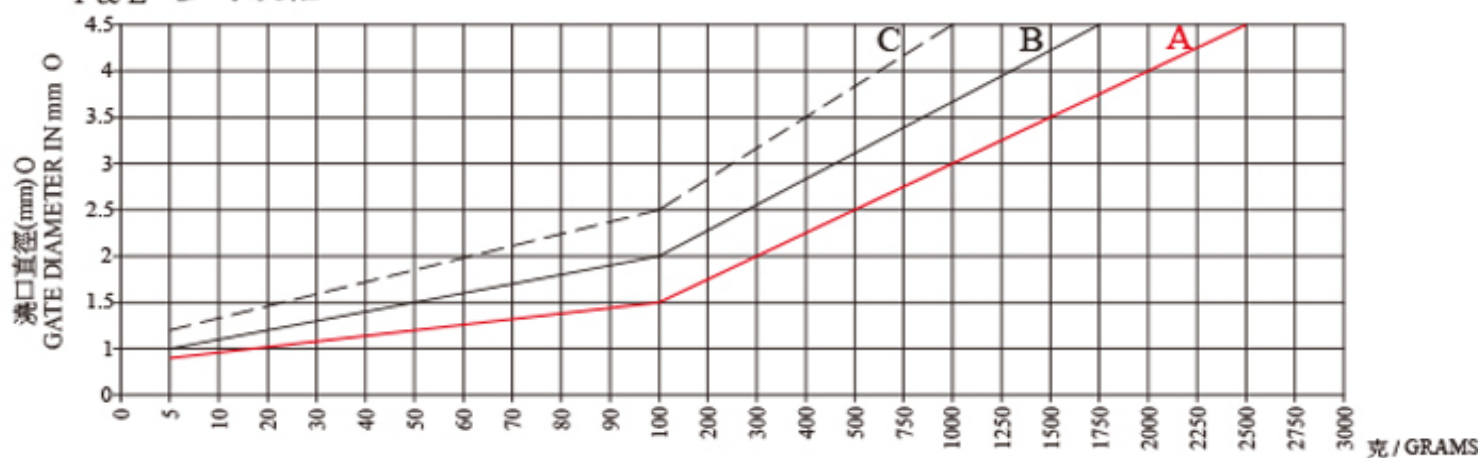
各型式熱嘴選擇參考表 / NOZZLE SELECTION TABLE

		豎澆口 / Sprue Gates					針點澆口 / Pinpoint Gates					直心澆口 / Open Gates					閥澆口 / Valve Gates							
																								
☆☆☆☆ ☆☆☆☆ ☆☆ ☆		極優 / Excellent 優 / Very Good 好 / Good 不推薦 / Not Recommended					CMS/CMM - SS					CMS/CMM - T+L					CMS/CMM - TC+LC					CMM - VLC+VTC		
		26	32	38	50	60	26	32	38	50	60	26	32	38	50	60	40	50	60					
最大射出量(公克) Injectable Volumes (gram)	低黏度 / Low Viscosity (PS . PE . PP)	160	400	700	2400	4500	100	250	500	1500	3000	150	350	600	2000	4000	400	1000	2000					
	中黏度 / Medium Viscosity (ABS . POM . PMMA)	80	250	450	1200	3000	50	150	300	800	2000	70	200	400	1000	2500	100	500	1000					
	高黏度 / High Viscosity (PC . PETG . PEI)	45	200	300	800	1600	30	80	200	500	1000	40	100	250	700	1500	50	200	400					
塑膠種類 Plastic types	低黏度 / Low Viscosity	☆☆☆☆					☆☆☆☆					☆☆☆☆					☆☆☆☆							
	中黏度 / Medium Viscosity	☆☆☆					☆☆☆					☆☆☆					☆☆☆							
	高黏度 / High Viscosity	☆☆☆					☆☆					☆☆☆					☆☆☆							
	發泡劑 / Foaming Agent	☆					☆					☆					☆							
	玻璃纖維 / Glass Fiber	☆☆☆					☆					☆					☆							
	耐燃劑 / Flame Retardant	☆☆					☆					☆					☆							
	硬質 PVC / Harden PVC	☆☆☆					☆					☆					☆							
熱嘴性質 Nozzle Types	澆口美觀性 / Gate Vestige	SS/ST/STC = ☆					T/L = ☆☆☆					LC / TC = ☆☆					VLC / VTC = ☆☆☆							
	加熱型式 / Melt Heating	外熱式 / External Heated					外熱式 / External Heated					外熱式 / External Heated					外熱式 / External Heated							
相關位置配合參考尺寸表 Nozzle dimensions	O < Ø >	1.5	2	2	3	4	參考澆口大小選擇表 / Gate Diameters *O: Varied with gate diameter 依 O 直徑尺寸決定										min Ø1.5	min Ø2.0	min Ø3.5					
	L	10	12	12	15	18											max Ø2.5	max Ø3.0	max Ø4.5					
	G < Ø >	26	32	38	50	60	26	32	38	50	60	26	32	38	50	60	40	50	60					
	F	15	20	25	30	35	15	20	25	30	35	15	20	25	30	35	30	35	40					
	D < Ø >	17	22	25.5	34	44	17	22	25.5	34	44	17	22	25.5	34	44	30	37	45					
	A < 最小 / Min >	45	45	50	55	65	45	45	50	50	65	45	45	50	55	65	50	55	65					
	A < 最大 / Max >	請參考第 18-20 頁 Please refer to page 18- 20																						
	B (use for tubular heater only)	35	35	38	40	40	35	35	38	40	40	35	35	38	40	40	35	38	40					
	H (for std.)	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	15	15	15					
	K < 最小 / Min >	27	33	40	52	63	27	33	40	52	63	27	33	40	52	63	65	77	85					

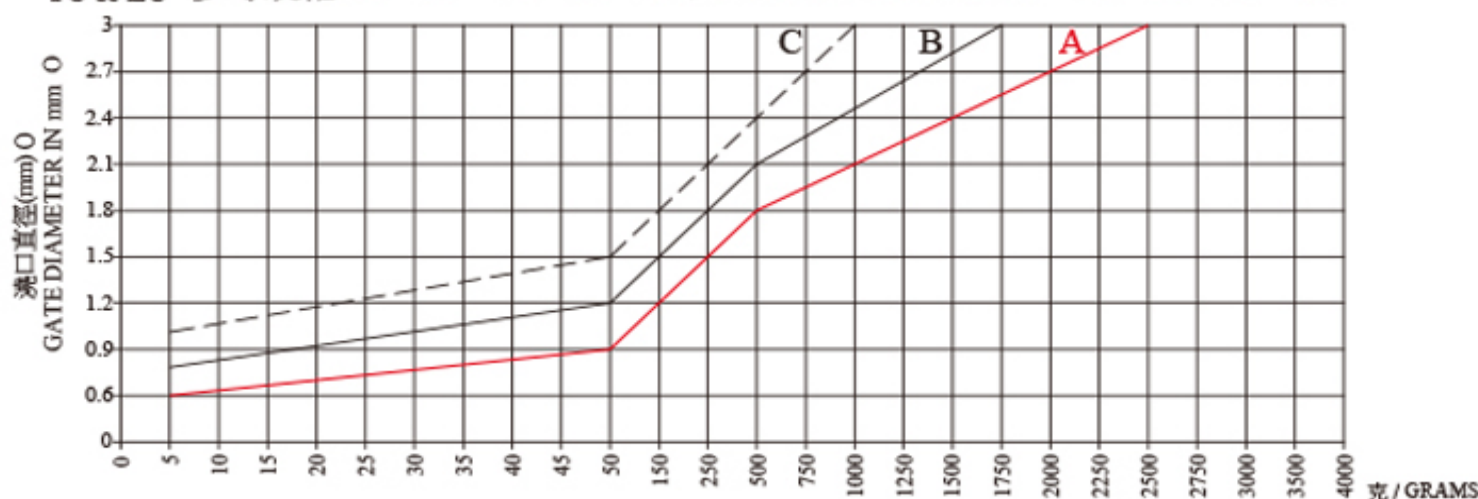


計算澆口直徑曲線圖 / GRAPH TO CALCULATE GATE DIAMETER

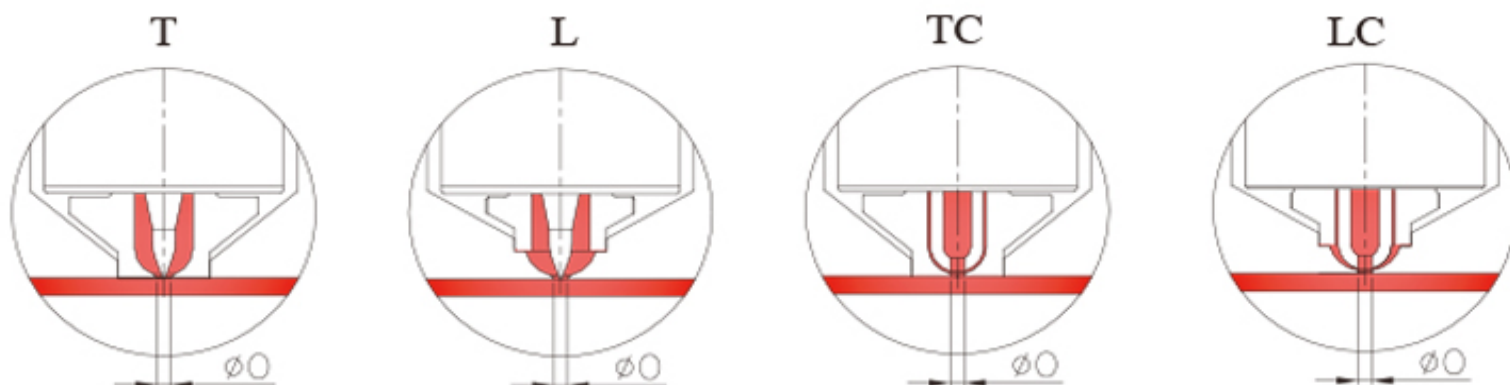
T & L 參考規格 26、32、38、50、60 / NOZZLE RANGE 26、32、38、50、60



TC & LC 參考規格 26、32、38、50、60 / NOZZLE RANGE 26、32、38、50、60



- A — 低黏性材料 / Material of low viscosity : PE - PP - PS - SB
 B — 中黏性材料 / Material of medium viscosity : PA - POM - ABS - PMMA
 C — 高黏性材料 / Material of high viscosity : PC - PPS - PEI



注：此圖僅供參考，除射膠量影響澆口大小外，還需考慮到產品形狀、厚度、注射壓力、注射速度、模具溫度、澆口處溫度分佈、澆口處冷卻狀況等。

Note : The chart is for reference only, except plastic injection material quantities determined by gate size, shape of product, product thickness, injection pressure, injection speed, temperature of mold, temperature profile of the gate and cooling at gate point.

技術問卷調查表

QUOTATION WORKSHEET

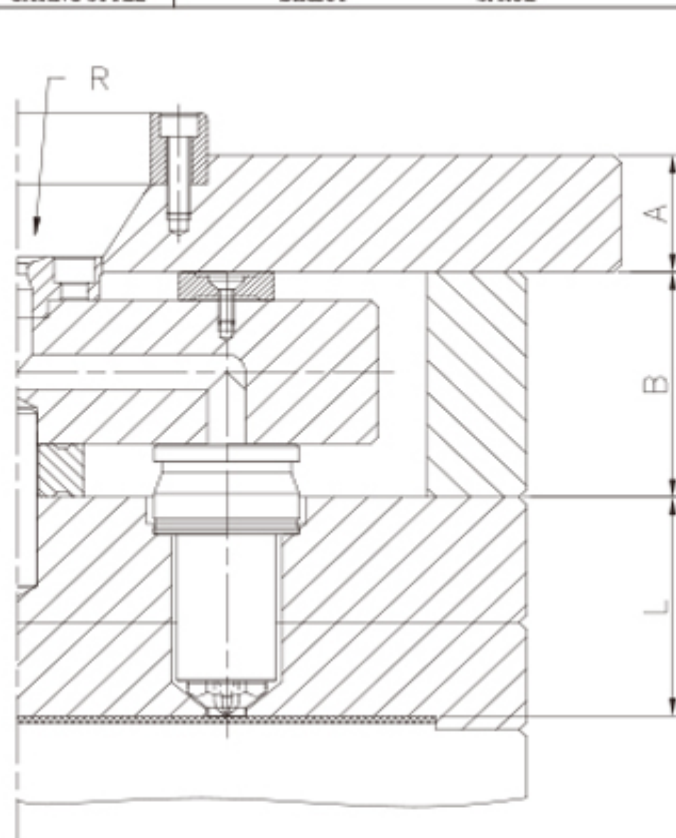
 日期： 年 月 日
 DATE

客戶名稱 CLIENT NAME		圖名編號 DRAWING NO	
模具編號 MOLD SERIAL NO		交貨期需求 LEAD TIME REQUEST	
聯繫電話 TELEPHONE		傳真 FAX	
聯繫人 CONTACT PERSON		E-mail	

成品資料:

PART DESCRIPTION

成品名稱 PART NAME		成品尺寸 PART SIZE		平均肉厚 MEDIUM THICKNESS	
成品重量 PART WEIGHT		塑膠材質 PART MATERIAL		澆口處肉厚 GATING THICKNESS	
成品數量 NO OF CAVITIES		熱澆道穴數 NO. OF NOZZLES		換色 COLOR CHANGE	☐ YES ☐ NO
澆口大小 GATE DIAMETER		進澆方式 INJECTION DIRECTION	☐ 公模 CORE PLATE ☐ 母模 CAVITY PLATE	模組型式 MOLD SITUATION	☐ 新模 NEW ☐ 舊模 OLD
澆口位置 GATING STYLE	☐ 成品上 DIRECT ☐ 流道上 SPRUE		其它 MEMO		



出澆數量 GATE NO	長度 LENGTH L	座標 COORDINATE X	座標 COORDINATE Y
G1			
G2			
G3			
G4			
G5			
G6			
G7			
G8			
A	mm	B	mm
L	mm	R	mm

 進澆座標值:
 REFERENCE POSITION

(UL)	Y	(UR)
	(0,0)	X
(DL)		(DR)

其它資料:

OTHER INFORMATION

 客戶簽名: _____
 CLIENT CONFIRMATION

CAE模流分析問卷調查表

CAE ANALYSIS WORKSHEET

 日期: 年 月 日
 DATE

客戶名稱 CLIENT NAME		圖名編號 DRAWING NO	
模具編號 MOLD SERIAL NO		交貨期需求 LEAD TIME REQUEST	
聯繫電話 TELEPHONE		傳真 FAX	
聯繫人 CONTACT PERSON		E-mail	

成品資料: PART DESCRIPTION

成品名稱 PART NAME		成品尺寸 PART SIZE		平均肉厚 MEDIUM THICKNESS	
成品重量 PART WEIGHT		塑膠材質 PART MATERIAL		澆口處肉厚 GATING THICKNESS	
成品數量 NO OF CAVITIES		熱澆道穴數 NO. OF NOZZLES		模組型式 MOLD SITUATION	☐ 新模 ☐ 舊模 NEW OLD
澆口大小 GATE DIAMETER		進澆方式 INJECTION DIRECTION	☐ 公模 ☐ 母模 CORE PLATE CAVITY PLATE	其它 OTHERS	
澆口位置 GATING STYLE	☐ 成品上 DIRECT ☐ 流道上 SPRUE				

射出機資料: MACHINE DETAILS

射出機廠牌 NAMEPLATE		射出機型號 MACHINE GRADE		射出機噸數 CLAMPING FORCE	
塑膠材質 PART MATERIAL		塑膠MFI質 PART MATERIAL MFI VALUE		塑膠材質型號 PART MATERIAL TYPE	

簡圖: SKETCH:

其它資料:

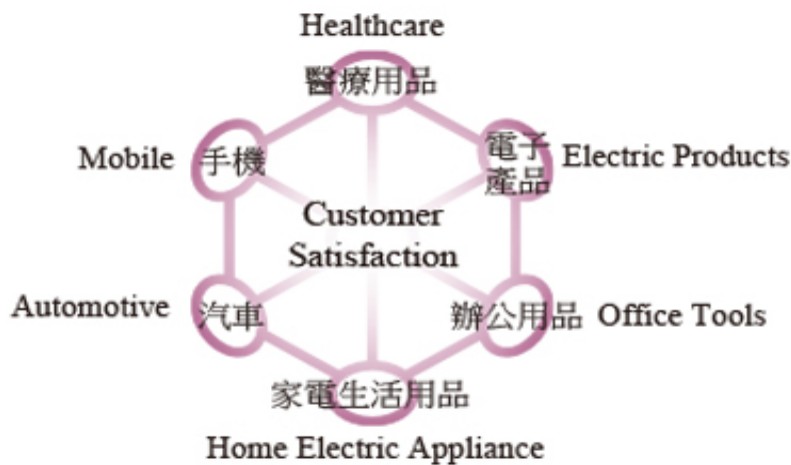
OTHER INFORMATION:

PS.模流分析需要客戶提供成品3D檔(*.IGS或STEP)並請附上2D模具圖(*DWG),
含澆口位置及水路配置,一般模流分析需要7個工作天,如果特殊需求請註明.

PS: PLEASE PROVIDE 3D FINISHED PARTS DWG. (*.IGS OR STEP) & 2D MOULD DWG (*.DWG)
WITH SPECIFIED GATE DIAMETER & COOLING CHANNEL.
CAE ANALYSIS COMPLETE WITHIN 7 WORKING DAYS.PLEASE SPECIFIED FOR SPECIAL ORDER.

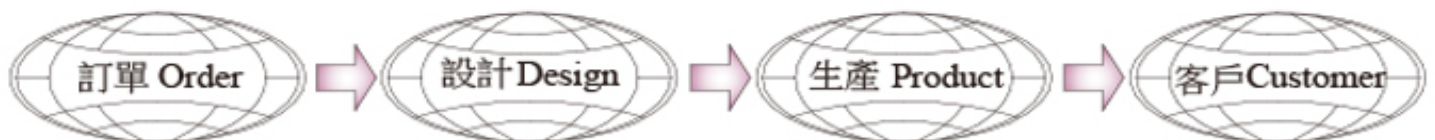
客戶簽名: _____

CLIENT CONFIRMATION

應用範圍
 Application Range

 研發範圍
 Research & Developing Range

- 半熱流道 Semi Hot Runner
- 斜模進膠 Side Gate
- 工程塑料應用 Practical Engineering Plastics
- 小型熱嘴 Small Nozzle

快速交貨系統 Quick delivery system


 交貨期
 The time of customers receive our products

標準零件

Standard Part

標準系統

Standard System

特製系統

Special System

CAE模流分析

CAE Analysis

1-3天

one-three days

7天

Seven days

14天

Fourteen days

1-7天

one-seven days

業務範圍: Business scope

◎ 提供整套熱流道系統製造。

Provide the complete set of the hot runner system.

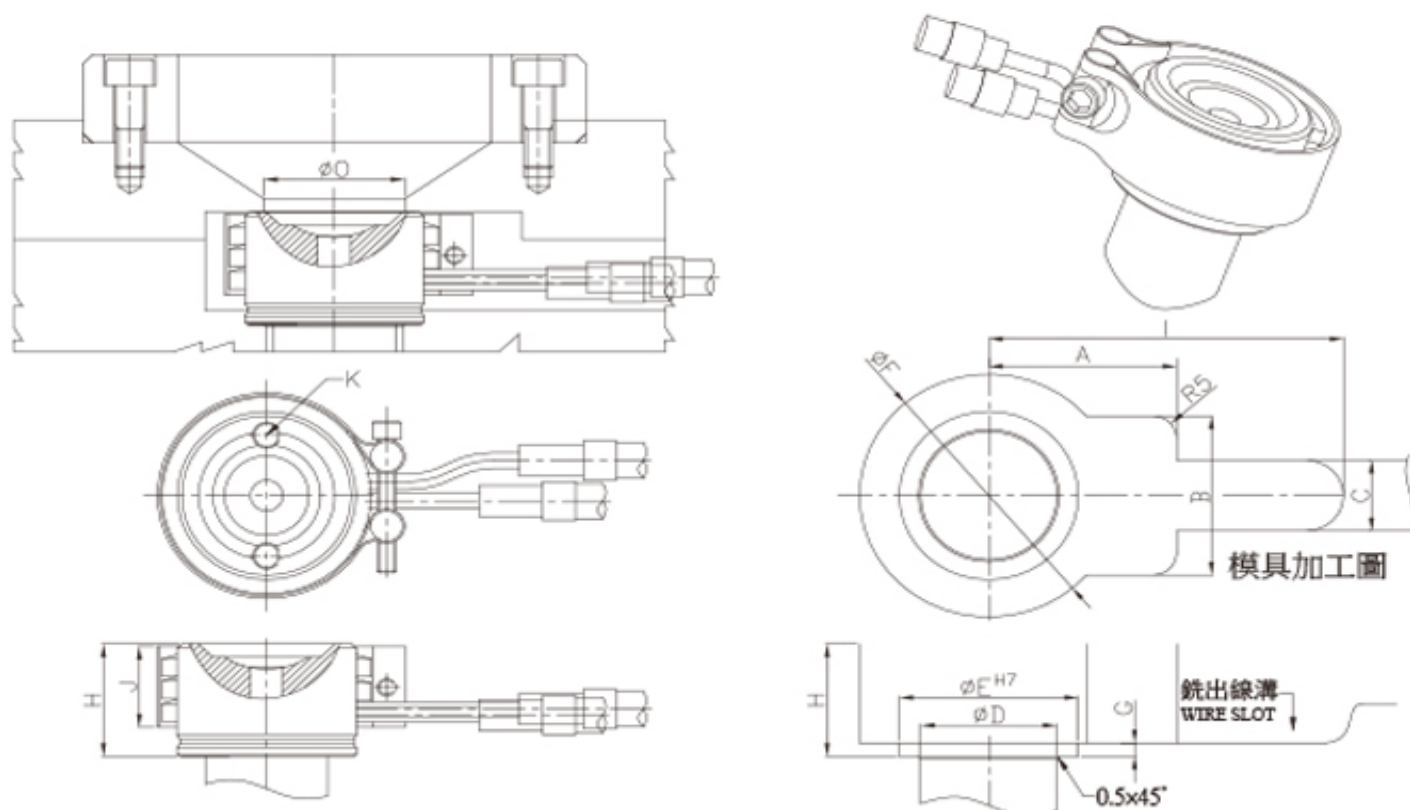
 〉 提供系統中各型配件，如本體、小頭、小針，各型發熱圈電熱、感溫線、加熱棒、溫控器、接插件及系統上其他配件。
 Provide the accessories for the system like the main unit, small nozzles, small pins, coil heaters, thermocouples, cartridge heaters, temperature controllers, connectors and other accessories.

 〉 提供前後工程設計指導，包括設計、圖面報告、電腦輔助工程模流分析、製造、安裝、測試、維修及保修等服務。
 Provide the guidelines for the pre & post engineering design which including the design, illustration, professional CAE for injection molding, manufacturing, installation, testing, repairing and maintenance.

 〉 提供深孔加工服務，加工範圍：模具、水孔頂針孔、機械零件、電熱管孔。
 Provide the deep hole drilling application which used in mold, channel, machine components and tubular heaters.

CMS-38/50/60單穴熱嘴大頭保溫模具加工尺寸圖

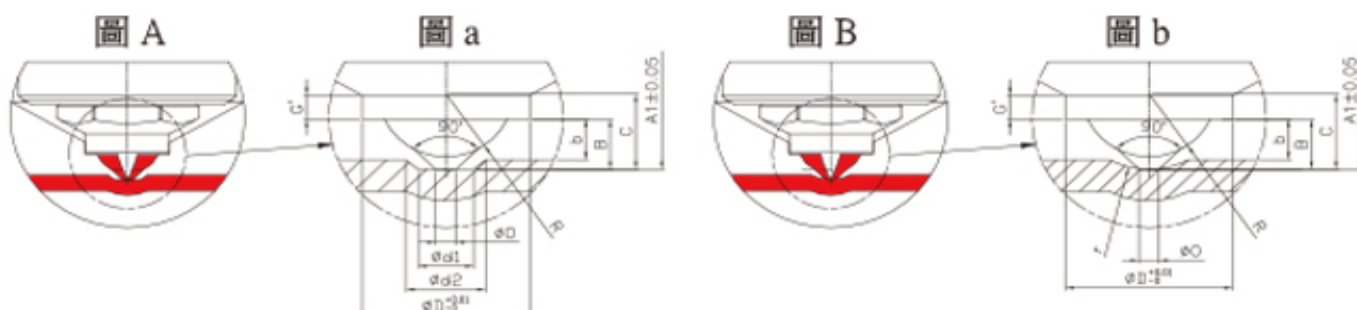
Single cavity nozzle bottomend heater's seat machining drawing



熱嘴型號	A	B	C	ØD	ØE	ØF	G	H	I	J	K	ØO	瓦特數W
CMS-38	40	40	22	Ø28	Ø38	Ø55	3	25	85	18	M5	Ø33	290W
CMS-50	45	40	22	Ø38	Ø50	Ø65	3	30	90	20	M5	Ø45	400W
CMS-60	50	45	25	Ø48	Ø60	Ø75	4	35	100	25	M6	Ø55	470W

CMS/CMM-26/32/38/50/60-L 型系列嘴頭加工尺寸選擇參考圖

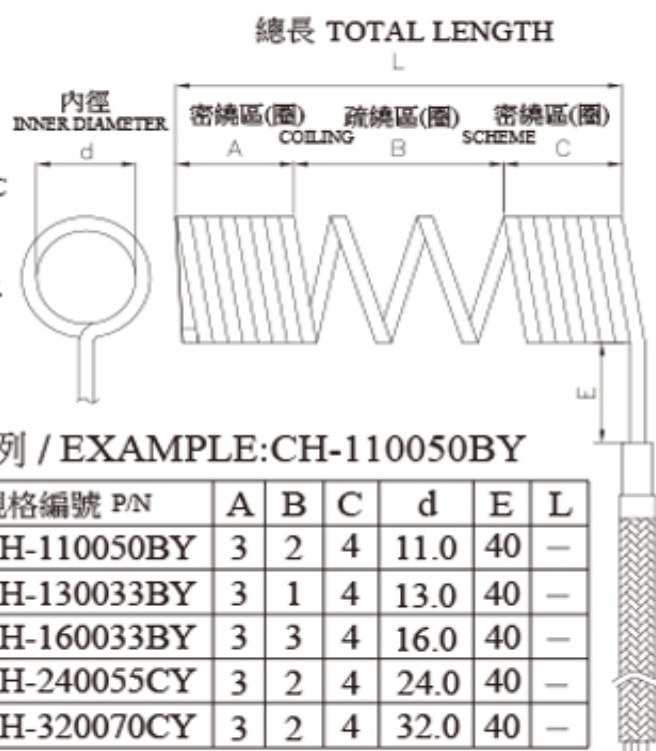
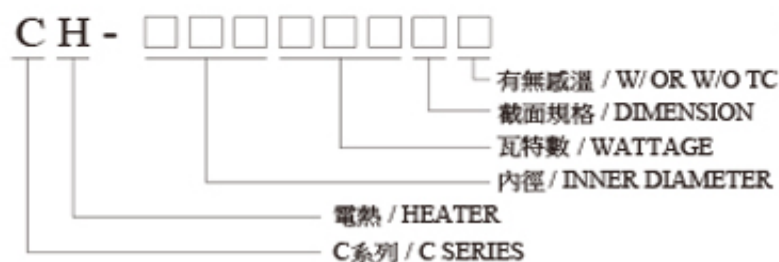
L type nozzle seat machining selection table, please refer as below:



熱嘴型號	B	b	C	R	r (min)	G'	ØD	Ød1(min)	Ød2(min)	(min) ØO (max)
CMM-26-L	3	2.5	3.6	3.1	4	1.5	8	2.5	3.7	0.6~1.2
CMS/CMM-32-L	4	3.4	4.1	3.5	5	1.8	9	3	4.5	0.8~1.5
CMS/CMM-38-L	4	3.4	5.5	4.7	5	2	12	4	5.5	1.0~1.8
CMS/CMM-50-L	6	5.2	9	7.6	8	3	18	5	7	1.5~2.5
CMS/CMM-60-L	8	7.2	13	11.2	12	4	26	6	8	2.5~3.5

線圈式加熱器規格編號說明

Nozzle coil heater's specification & part number



電熱截面規格及有無感溫標示說明

Coil heater dimension and with or without their mocouple's indication

截面規格 DIMENSION	有無感溫 W/ OR W/O TC
3.2x3.2  — C	無感溫 — N W/O TC
4.3x2.2  — B	有感溫 — Y W/ TC

銅套式加熱器規格編號說明

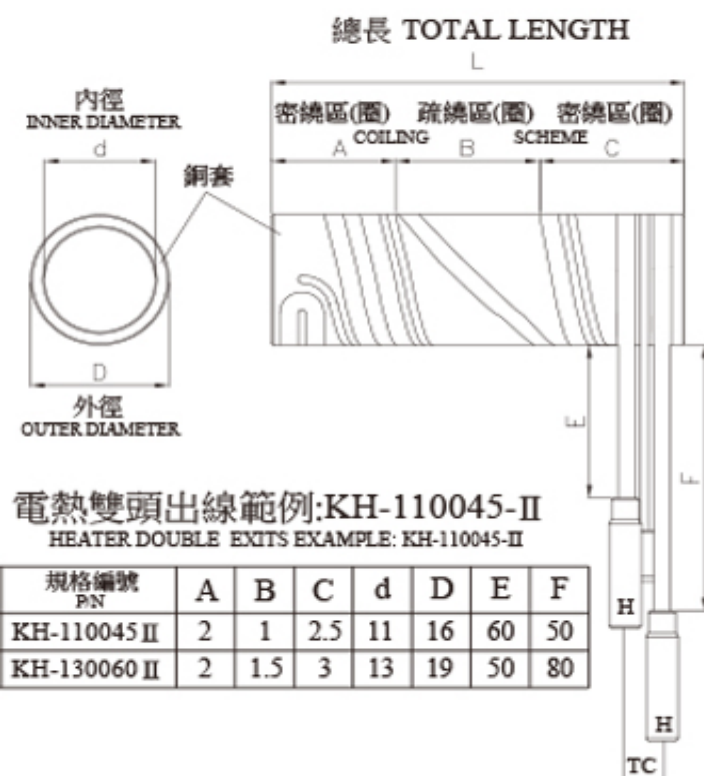
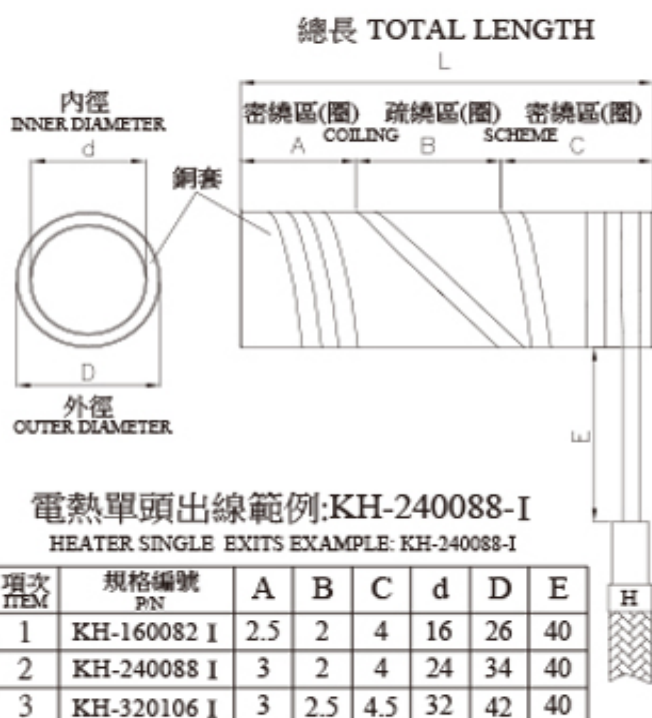
Nozzle Casting heater's specification & part number



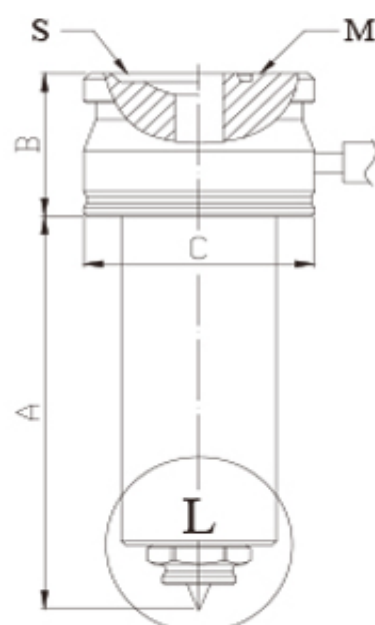
電熱單或雙頭出線標示說明

Heater single or double exits indication

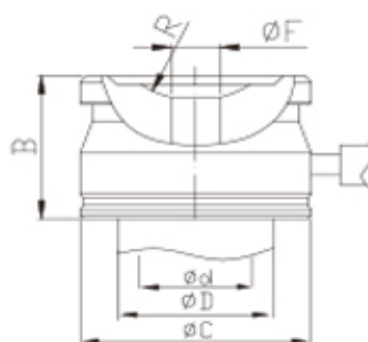
電熱單頭出線 HEATER SINGLE EXITS	I
電熱雙頭出線 HEATER DOUBLE EXITS	II



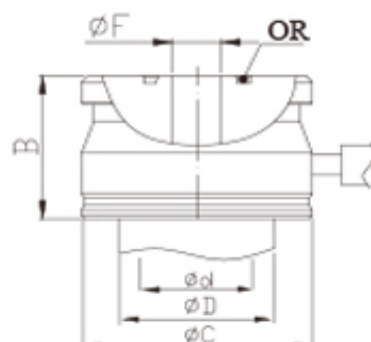
各式熱嘴規格 Various specifications of nozzles



單穴用 S
S FOR
SINGLE CAVITY



多穴用 M
M FOR
MULTI CAVITY



SERIES	CODE	B	ØC	ØD	ØF	Ød	OR
CMM 26		15	26	17	5	11	608
CMS/M 32		20	32	22	6.5	13	610
CMS/M 38		25	38	25.5	8	16	620
CMS/M 50		30	50	34	12	24	635
CMS/M 60		35	60	44	18	32	650



E=加長



E=加長



E=加長



E=加長



E=加長



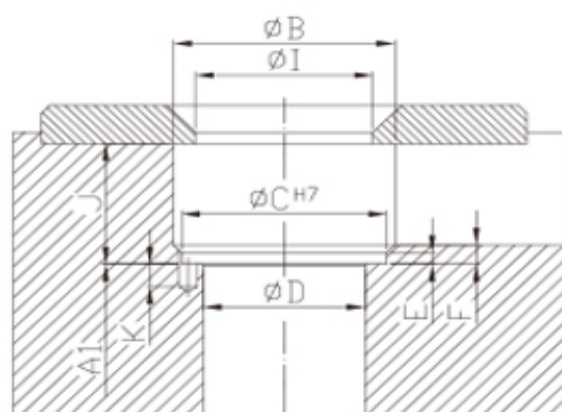
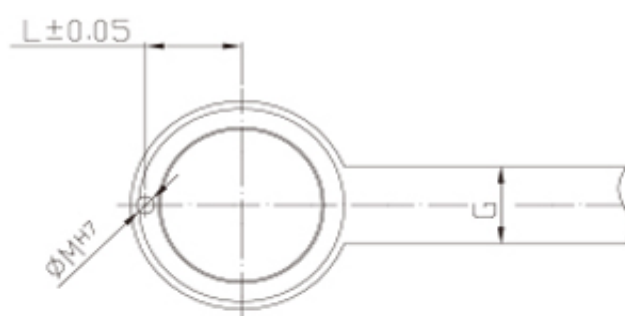
	A mm	CMS	R	CMM	緊固扭矩 1N/m=10.1972kgf/cm
CMM26	45	----	---	26045	L / T type 135kgf · cm
	55	----	---	26055	S type 160kgf · cm
	65	----	---	26065	
	75	----	---	26075	
CMS/M32	45	32045	16	32045	L / T type 250kgf · cm
	60	32060	16	32060	S type 280kgf · cm
	75	32075	16	32075	
	90	32090	16	32090	
CMS/M38	50	38050	16	38050	L / T type 360kgf · cm
	65	38065	16	38065	S type 400kgf · cm
	80	38080	16	38080	
	95	38095	16	38095	
CMS/M50	55	50055	21	50055	L / T type 880kgf · cm
	70	50070	21	50070	S type 1600kgf · cm
	85	50085	21	50085	
	100	50100	21	50100	
CMS/M60	65	60065	21	60065	L / T type 1100kgf · cm
	85	60085	21	60085	S type 1900kgf · cm
	105	60105	21	60105	
	125	60125	21	60125	

* 以上各規格最大A尺寸長度請參考第18-20頁表格 *

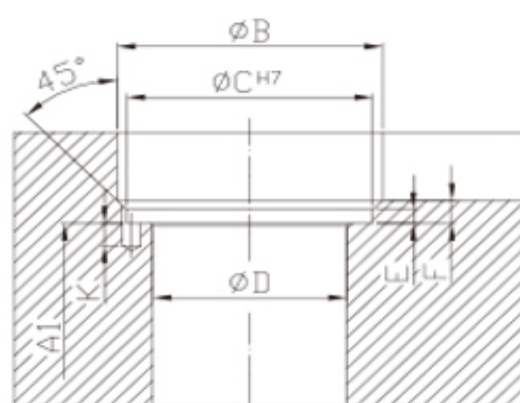
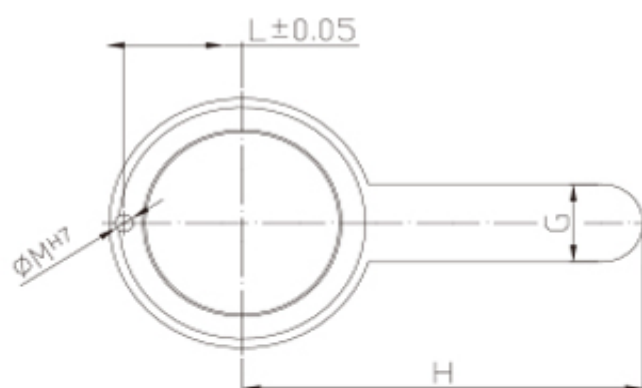
* For max. length A refer to the table from page 18-20 *

CMS/M 26-32-38-50-60 TYPE

單 穴 SINGLE CAVITY



多 穴 MULTI CAVITY



Series	Code	ØB	ØC	ØD	E	F	G	H	ØI	J	K	L	ØM
CM 26		29	26	19	2.5	4	10	85	---	15	5	12	3
CM 32		35	32	24	2.5	4	12	85	27	20	5	15	3
CM 38		41	38	28	3	4.5	12	85	33	25	5	18	3
CM 50		54	50	38	3	5	12	90	45	30	6	24	5
CM 60		64	60	48	4	6	16	100	55	35	6	29	5

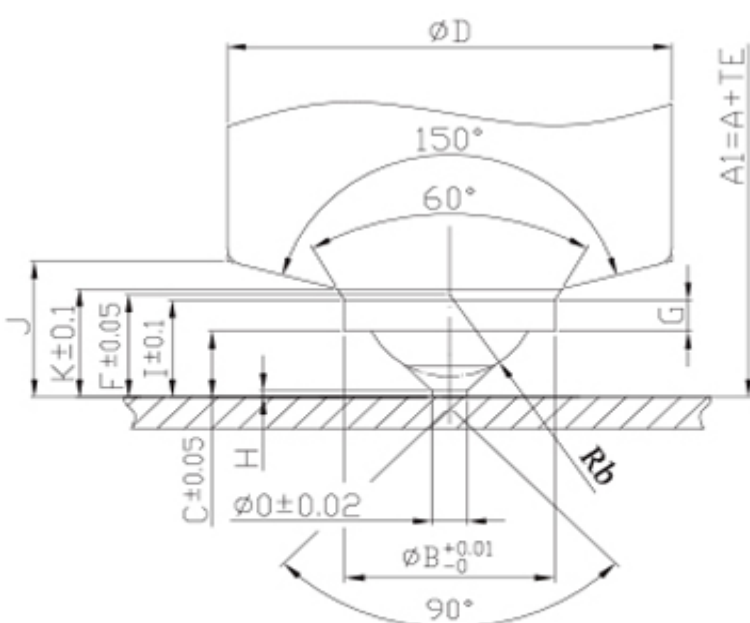
熱膨脹量參考
Nozzle thermo expansion length table

熱嘴加熱至所需溫度(TE)熱膨脹量計算 THERMAL EXPANSION CALCULATION	
$A1 = A + TE$ $TE = A \times T \times Z$ $Z = 13.2 \times 10^{-6}$	
說明: TE=膨脹量 THERMAL EXPANSION (mm) T=熱嘴溫度 NOZZLE TEMP - 模具溫度 MOLD TEMP (°C) Z=膨脹係數 EXPANSION COEFFICIENT	

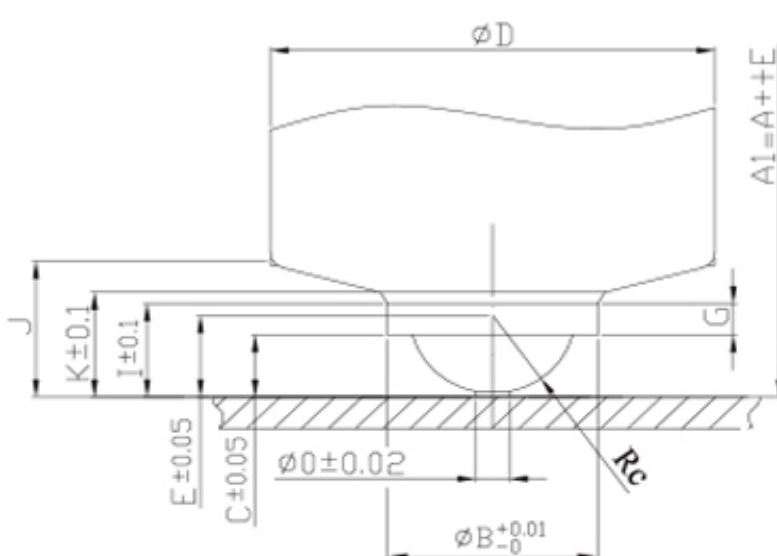
T=200°C		T=250°C	
熱嘴長度 NOZZLE LENGTH	膨脹長度 EXPANSION LENGTH	熱嘴長度 NOZZLE LENGTH	膨脹長度 EXPANSION LENGTH
A=50mm	0.13mm	A=50mm	0.16mm
A=65mm	0.17mm	A=65mm	0.21mm
A=80mm	0.21mm	A=80mm	0.26mm
A=95mm	0.25mm	A=95mm	0.31mm
A=110mm	0.29mm	A=110mm	0.36mm

L/LC TYPE

L



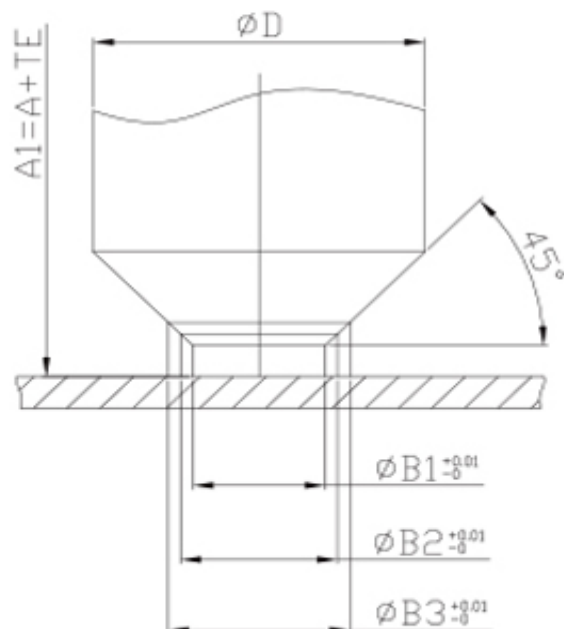
LC



Code Series	ØB	C	ØD	E	F	G	H	I	J	K	Rb	Rc
CM 26	8 MAX.A=150	3	19	3.35	3.6	1.5	0.03	4.5	6.4	5	3.1	3.1
CM 32	9 MAX.A=175	4	24	4.3	4.1	1.8	0.03	5.8	8.4	6.5	3.5	4
CM 38	12 MAX.A=200	4	28	5	5.5	2	0.03	6	9	7	4.7	4.7
CM 50	18 MAX.A=300	6	38	7.95	9	3	0.05	9	12.5	10	7.6	7.6
CM 60	26 MAX.A=400	8	48	11.6	13	4	0.05	12	16.2	13.5	11.2	11.2

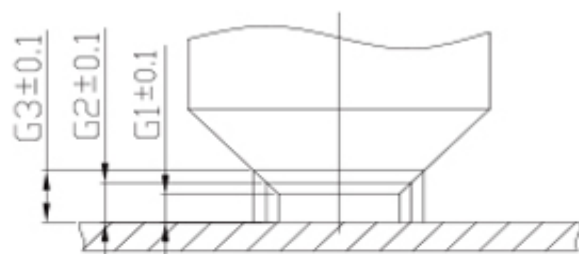
各式澆口 尺寸參考表	TIP Type Series	L	LC	T	TE	TC	TCE	S	SE
	CM 26	min.0.6 max.1.5	min.0.4 max.1.3	min.0.8 max.1.4	min.1.0 max.1.4	min.0.8 max.1.3	min.1.0 max.1.3	min.1.3 max.1.8	min.1.3 max.1.8
	CM 32	min.0.8 max.2.0	min.1.5 max.2.2	min.0.9 max.1.9	min.1.2 max.1.9	min.0.9 max.1.5	min.1.2 max.1.6	min.1.4 max.2.2	min.1.4 max.2.2
	CM 38	min.1.0 max.2.5	min.0.6 max.2.0	min.1.0 max.2.4	min.1.5 max.2.4	min.1.0 max.1.8	min.1.5 max.1.8	min.1.5 max.2.5	min.1.5 max.2.5
	CM 50	min.1.5 max.4.0	min.1.0 max.2.5	min.1.5 max.3.5	min.2.0 max.3.5	min.1.5 max.2.6	min.2.0 max.2.6	min.2.0 max.4.0	min.2.0 max.4.0
	CM 60	min.2.5 max.6.0	min.1.5 max.2.5	min.2.5 max.5.4	min.3.0 max.5.4	min.2.5 max.3.6	min.3.0 max.3.6	min.3.0 max.6.0	min.3.0 max.6.0

T/TE/TC/TCE TYPE

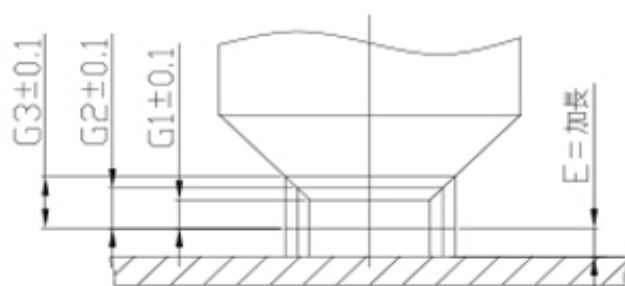


Series	ØB1	ØB2	ØB3	G1	G2	G3	ØD
CM 26	8 MAX. A=100	9 MAX. A=150	10 MAX. A=200	1	1.5	2	19
CM 32	9 MAX. A=100	10 MAX. A=150	11 MAX. A=200	1	1.5	2	24

Series	ØB1	ØB2	ØB3	G1	G2	G3	ØD
CM 38	10 MAX. A=100	12 MAX. A=200	14 MAX. A=300	1	2	3	28
CM 50	14 MAX. A=100	18 MAX. A=300	22 MAX. A=500	1	3	5	38
CM 60	20 MAX. A=200	24 MAX. A=400	28 MAX. A=600	2	4	6	48



T/TC



TE/TCE

各式澆口 ØB 尺寸參考表	Code	T	TC	TE	TCE
	Series				
	CM 26	min. 8 max. 10	min. 8 max. 10	min. 8 max. 10	min. 8 max. 10
	CM 32	min. 10 max. 11	min. 10 max. 11	min. 10 max. 11	min. 10 max. 11
	CM 38	min. 10 max. 14	min. 12 max. 14	min. 12 max. 14	min. 12 max. 14
	CM 50	min. 14 max. 22	min. 18 max. 22	min. 18 max. 22	min. 18 max. 22
	CM 60	min. 20 max. 28	min. 24 max. 28	min. 24 max. 28	min. 24 max. 28

訂單範例

Order examples :

CMM26045L CMM26055T

CMM32045T CMS32060TC

CMM38050LC CMS38080L

CMM50055TE CMS50100TCE

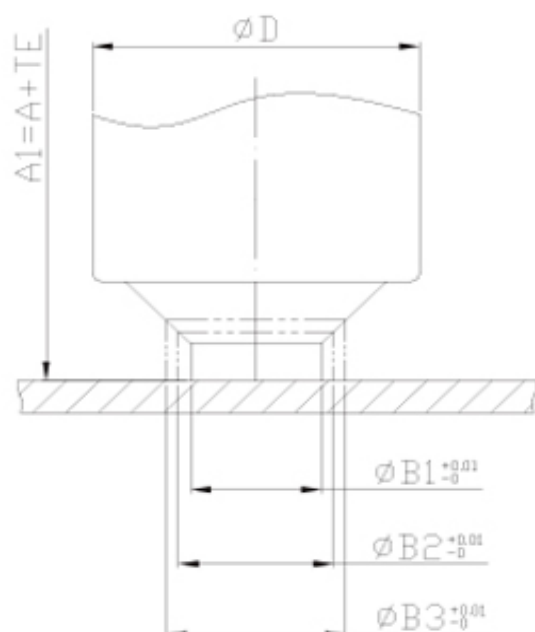
CMM: 標準式線圈加熱器

CMM: standard type coil heater

KMM: 銅套式線圈加熱器

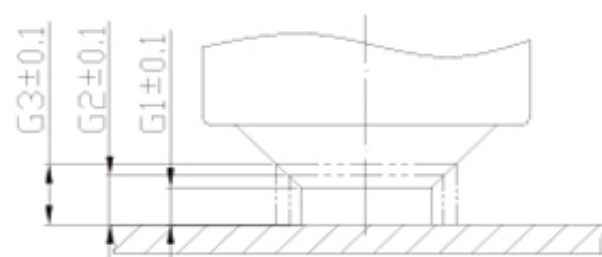
KMM: Casting type heater

SS/SSE/ST/STE/STC/STCE TYPE

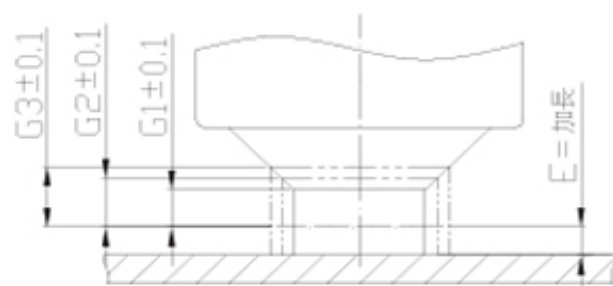


Series	ØB1	ØB2	ØB3	G1	G2	G3	ØD
CM 26	8 MAX. A=100	9 MAX. A=150	10 MAX. A=200	2.5	3	3.5	19
CM 32	9 MAX. A=100	10 MAX. A=150	11 MAX. A=200	3	3.5	4	24

Series	ØB1	ØB2	ØB3	G1	G2	G3	ØD
CM 38	10 MAX. A=100	12 MAX. A=200	14 MAX. A=300	3	4	5	28
CM 50	14 MAX. A=100	18 MAX. A=300	22 MAX. A=500	3.5	5.5	7.5	38
CM 60	20 MAX. A=200	24 MAX. A=400	28 MAX. A=600	6	8	10	48



SS/ST/STC



SSE/STE/STCE

各式澆口 ØB 尺寸參考表	Code	SS	SSE	ST	STE	STC	STCE
	Series						
	CM 26	min. 8 max. 10	min. 8 max. 10	min. 8 max. 10	min. 8 max. 10	min. 8 max. 10	min. 8 max. 10
	CM 32	min. 9 max. 11	min. 9 max. 11	min. 9 max. 11	min. 9 max. 11	min. 9 max. 11	min. 9 max. 11
	CM 38	min. 10 max. 14	min. 10 max. 14	min. 10 max. 14	min. 10 max. 14	min. 10 max. 14	min. 10 max. 14
	CM 50	min. 14 max. 22	min. 14 max. 22	min. 14 max. 22	min. 14 max. 22	min. 14 max. 22	min. 14 max. 22
	CM 60	min. 20 max. 28	min. 20 max. 28	min. 20 max. 28	min. 20 max. 28	min. 20 max. 28	min. 20 max. 28

訂單範例

Order examples :

CMM26045SS CMM26055SSE
 CMM32045ST CMS32060STC
 CMM38050SS CMS38080STCE
 CMM50055STE CMS50100STCE
 CMM60085SS CMS60125SSE

CMM: 標準式線圈加熱器

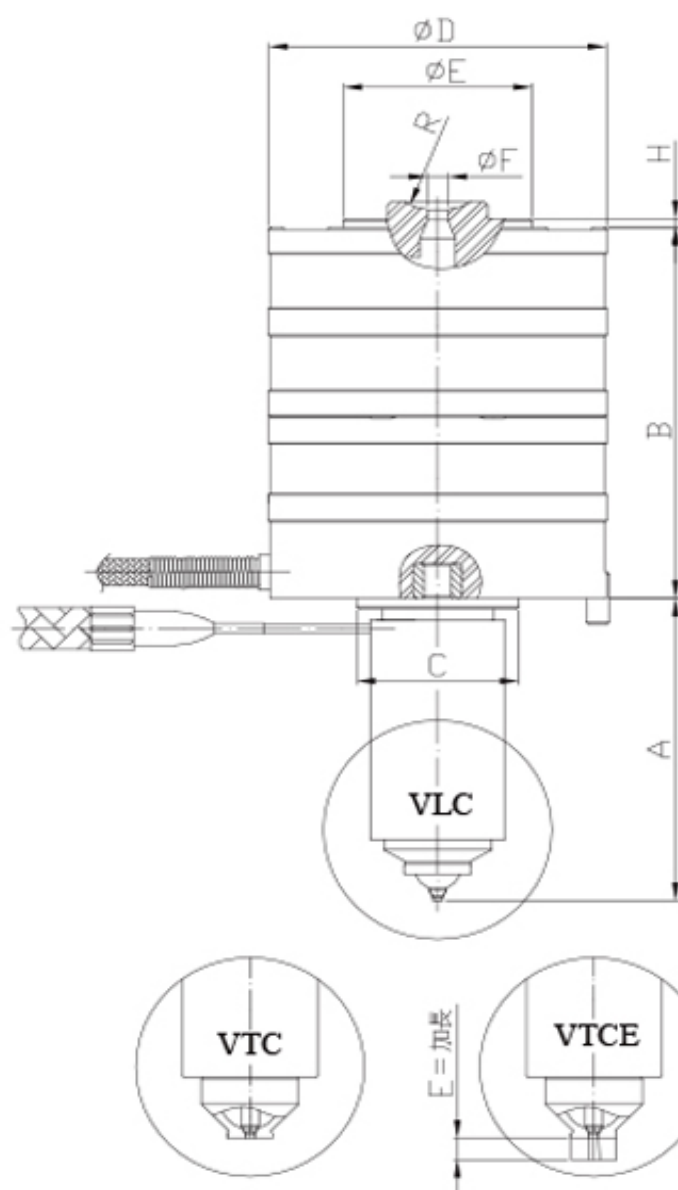
CMM: standard type coil heater

KMM: 銅套式線圈加熱器

KMM: Casting type heater

H系列單穴閥澆口 H series Single Valve Gate

075 VLC/VTC/VTCE TYPE



SERIES	CODE	B	ØC	ØD	ØE	ØF	H
HMS-075		86	36	75	42	4	2
HMS-100		117	50	100	65	6	3

備註:

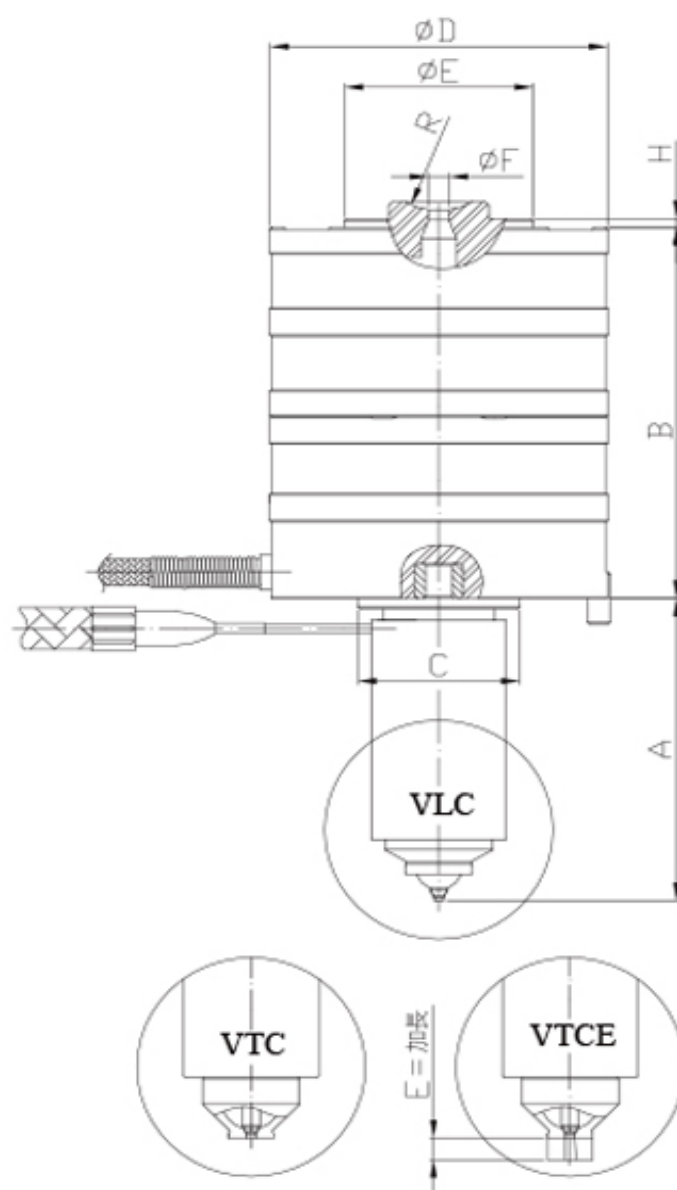
HMS-075 汽缸體加熱器與感溫線規格
 Ø10x50Lx500Wx3PCS

嵌入式4x6x1PC

HMS-100 汽缸體加熱器與感溫線規格
 Ø12.7x4"Lx630Wx4PCS

嵌入式4x6x1PC

100 VLC/VTC/VTCE TYPE



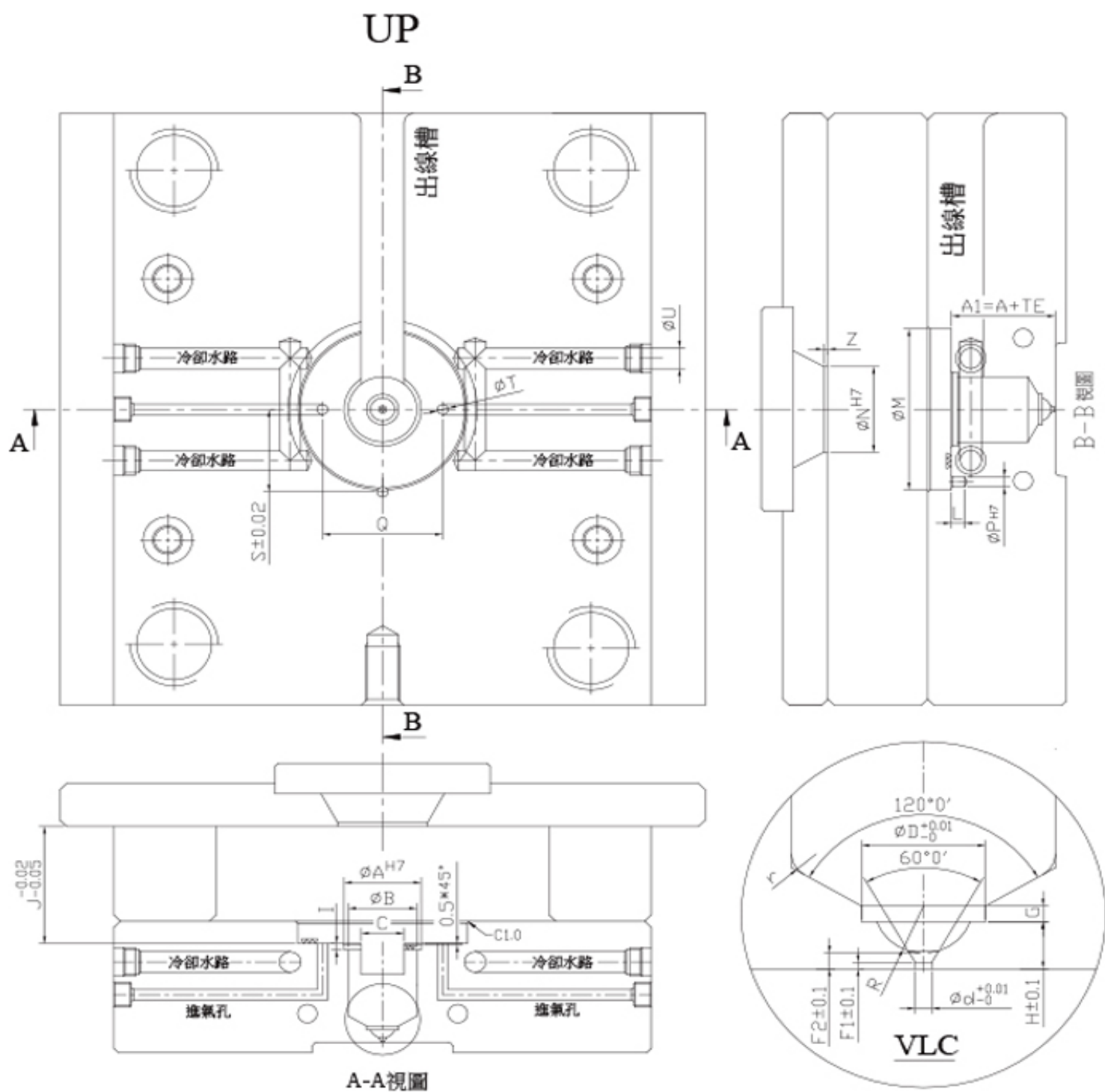
	A mm	HMS	R	緊固扭矩 IN/m=10.1972kgf/cm
HMS-075	55	075055	16	VLC / VTC / VTCE type 700kgf · cm
	70	075070	16	
	85	075085	16	
	100	075100	16	
HMS-100	60	100060	21	VLC / VTC / VTCE type 1600kgf · cm
	80	100080	21	
	100	100100	21	
	120	100120	21	

訂單範例

Order examples :

HMS-075055VLC HMS-075070VTC

HMS-100060VLC HMS-100080VTC



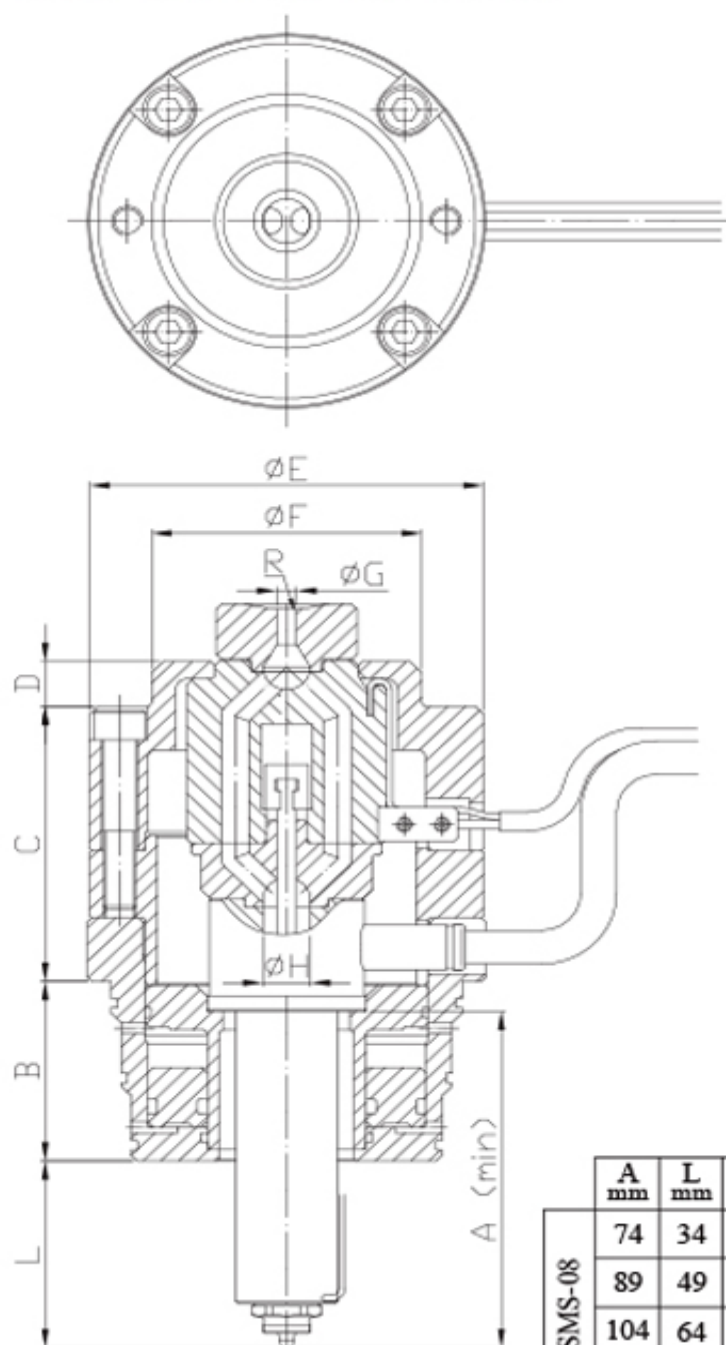
SERIES	CODE	ØA	ØB	C	Ød _{±0.01}	ØD	F1	F2	G	H
HMS-075		36	32	20	2 3.5	15	0.8	2	2.4	5.8
HMS-100		50	46	20	3 5.5	25	0.8	2	3.4	9.6

SERIES	CODE	I	J	L	ØM	ØN	ØP	Q	r	R
HMS-075		3	86	6	79	42	5	56	3	6
HMS-100		4	117	6	105	65	5	66	3	10

SERIES	CODE	S	ØT	ØU	ØV	ØW	X	Y
HMS-075		35.5	5	10	10	14	1	3
HMS-100		47	6	10	14	18	1	3

S系列單穴閥澆口 S series Single Valve Gate

SMS-08/12/16-VL TYPE



SERIES \ CODE	A	B	C	D	ØE	ØF	ØG	ØH
SMS-08	74	45	75.5	6	89	60	4	8
SMS-12	90	48	73.5	12	99	68	5	12
SMS-16	94	55	94.5	12	114	82	6	16

訂單範例

Order examples :

SMS-08074VL

SMS-12090VL

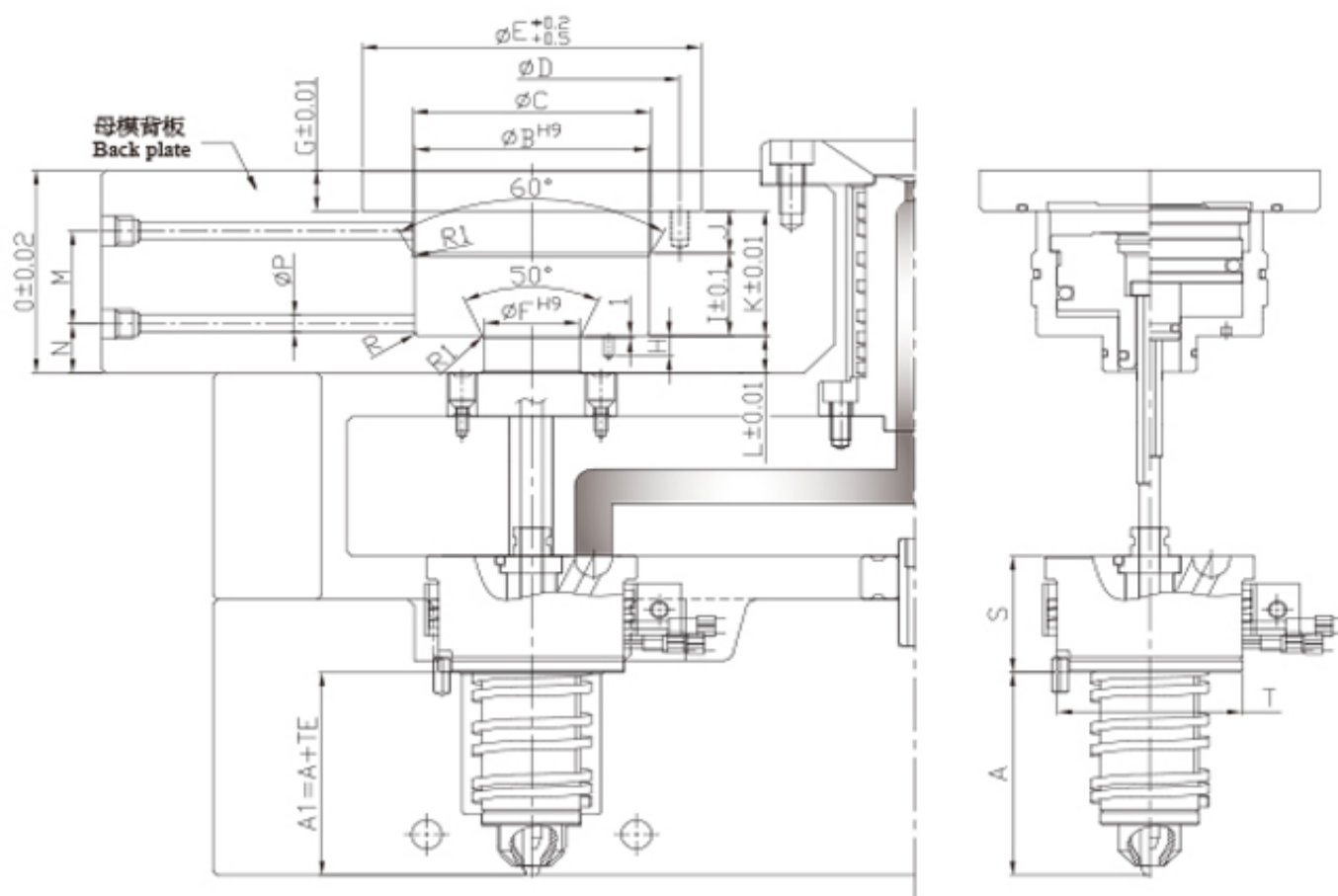
SMS-16094VL

	A mm	L mm	SMS	R	緊固扭距 1N/m=10.1972kgf·cm
SMS-08	74	34	08074	16	08-VL type 245kgf·cm
	89	49	08089	16	
	104	64	08104	16	
	119	79	08119	16	
SMS-12	90	50	12090	21	12-VL type 350kgf·cm
	110	70	12110	21	
	130	90	12130	21	
	150	110	12150	21	
SMS-16	94	47	16094	21	16-VL type 660kgf·cm
	119	72	16119	21	
	144	97	16144	21	
	169	122	16169	21	



CODE SERIES	ØM	ØN	ØP	ØQ	ØR	ØS	ØT	U
SMS-08	94	78.2	73.2	68.2	22	35	60	6
SMS-12	104	88.2	83.2	78.2	32	38	68	12
SMS-16	119	103.2	98.2	93.2	42	51	82	12

VALVE GATE 40/50/60VG TYPE



Series	ØB	ØC	ØD	ØE	ØF	G	H	I	J	K	L	M	N	O	ØP	R	S	T
CMM 40	45	46	64	74	19	8	6.5	18.5	12.5	31	11	21	15	50	6	1	30	40
CMM 50	63	64	84	98	30	10	6.5	23.5	14.5	38	12	26	17	60	6	1	35	50
CMM 60	63	64	84	98	30	10	6.5	23.5	14.5	38	17	26	22	65	6	1	40	60

A mm	CMM
50	40050VG
70	40070VG
90	40090VG
110	40110VG
130	40130VG

A mm	CMM
55	50055VG
75	50075VG
95	50095VG
115	50115VG
135	50135VG

A mm	CMM
65	60065VG
85	60085VG
105	60105VG
125	60125VG
145	60145VG

訂單範例 Order examples : CMM40070VG CMM50075VG CMM60085VG

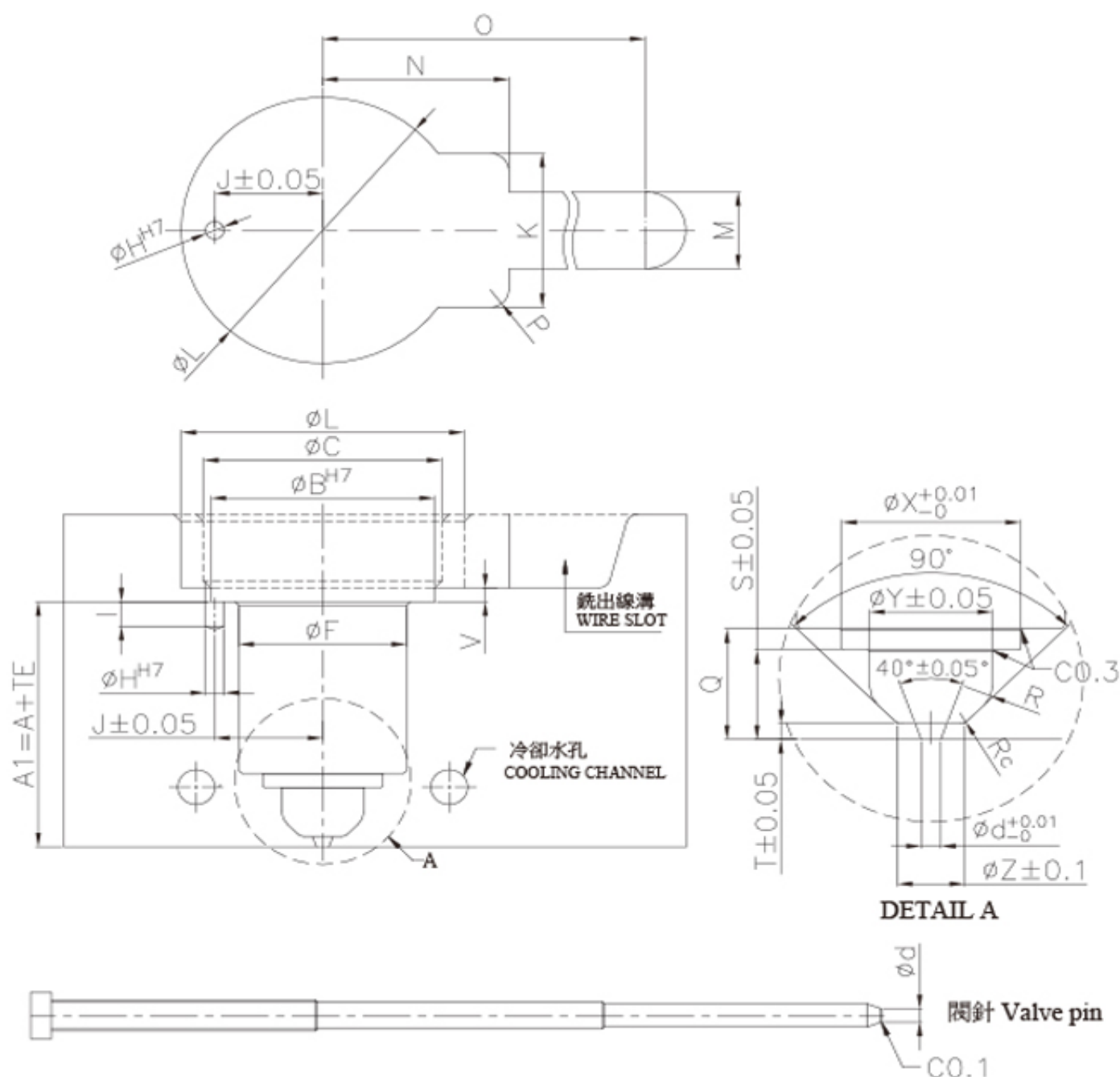


使用壓縮空氣之設定與注意事項。
 空氣壓力設定: 最小壓力6kg/cm², 最大壓力10kg/cm²
 壓縮空氣需要過濾與乾燥機脫水(相對濕度小於20%)以確保壓縮
 空氣無其他異物與水氣, 活塞才能運作正常及延長汽缸使用壽命。



Compressed air setting and caution:
 - Air pressure setting: min. 6kg/cm² & max. 10kg/cm²
 - Compressed air needs to filter out and dehydrate
 (humidity < 20%) to assured the air packing pressure
 have no miscellaneous articles and steam.
 The piston can operate in normal and extend the cylinder
 service life.

VALVE GATE 40/50/60VG TYPE

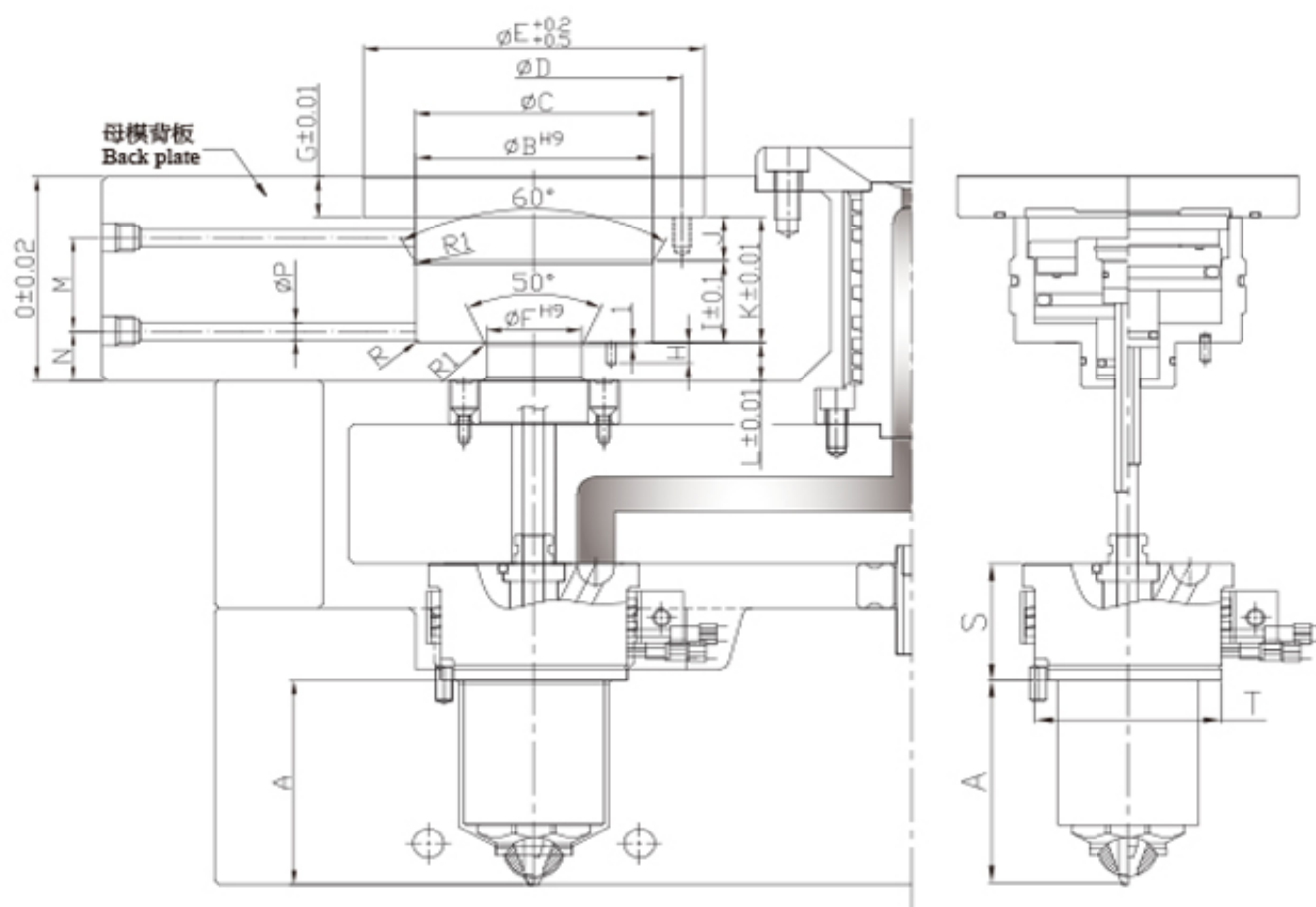


Series	ØB	ØC	ØF	ØH	I	J	K	ØL	M	N	O	P	Q
CMM 40	40	44	30	3	5	19	42	55	16	40	100	5	15
CMM 50	50	54	38	5	6	24	42	65	22	45	100	5	17.5
CMM 60	60	64	45	5	6	29	45	75	22	50	100	5	21

Series	R	S	T	V	Rc	ØX	ØY	ØZ	Ød min. max.
CMM 40	3	12	2	3	1	19	15	7.5	1.5 2.5
CMM 50	3	14.5	2.5	4	1	25	18	9	2.0 3.0
CMM 60	5	17	3	4	2	32	22	12	3.5 4.5

熱噴加熱至所需溫度(TE)熱膨脹量計算 THERMAL EXPANSION CALCULATION	
$A1=A+TE$ $TE=A \times T \times Z$ $Z=13.2 \times 10^{-6}$	
說明: TE=膨脹量 THERMAL EXPANSION (mm) T=熱噴溫度 NOZZLE TEMP- 模具溫度 MOLD TEMP (C) Z=膨脹係數 EXPANSION COEFFICIENT	

VALVE GATE 40/50/60VLC TYPE



Series	ØB	ØC	ØD	ØE	ØF	G	H	I	J	K	L	M	N	O	ØP	R	S	T
CMM 40	45	46	64	74	19	8	6.5	18.5	12.5	31	11	21	15	50	6	1	30	40
CMM 50	63	64	84	98	30	10	6.5	23.5	14.5	38	12	26	17	60	6	1	35	50
CMM 60	63	64	84	98	30	10	6.5	23.5	14.5	38	17	26	22	65	6	1	40	60

	A mm	CMM
CMM 40	50	40050VLC
	70	40070VLC
	90	40090VLC
	110	40110VLC
	130	40130VLC

	A mm	CMM
CMM 50	55	50055VLC
	75	50075VLC
	95	50095VLC
	115	50115VLC
	135	50135VLC

	A mm	CMM
CMM 60	65	60065VLC
	85	60085VLC
	105	60105VLC
	125	60125VLC
	145	60145VLC

訂單範例 Order examples : CMM40070VLC CMM50075VLC CMM60085VLC

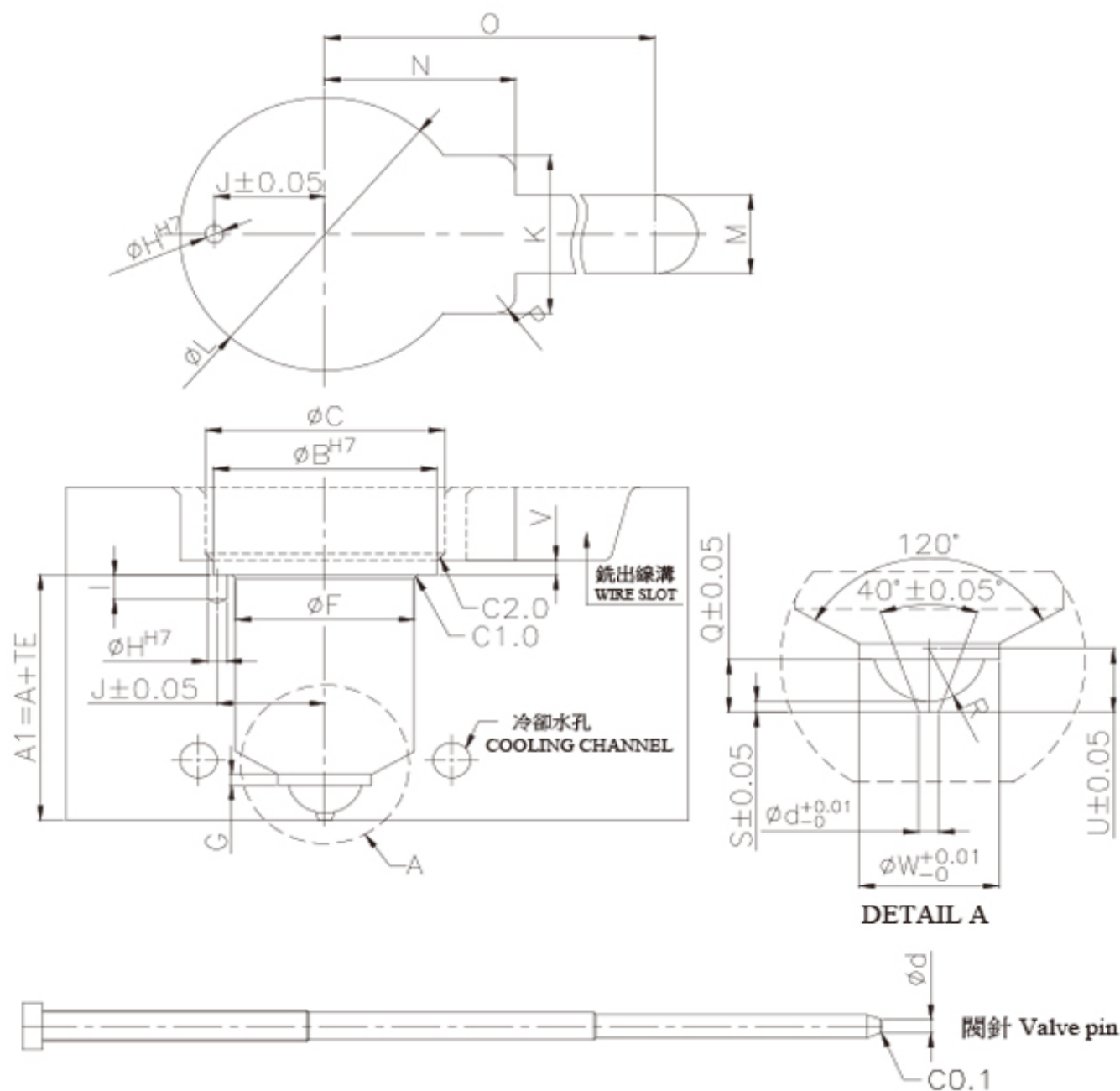


使用壓縮空氣之設定與注意事項。
 空氣壓力設定: 最小壓力 6kg/cm², 最大壓力 10kg/cm²
 壓縮空氣需要過濾與乾燥機脫水(相對濕度小於 20%) 以確保壓縮空氣無其他異物與水氣, 活塞才能運作正常及延長汽缸使用壽命。



Compressed air setting and caution:
 - Air pressure setting: min. 6kg/cm² & max. 10kg/cm²
 - Compressed air needs to filter out and dehydrate (humidity < 20%) to assured the air packing pressure have no miscellaneous articles and steam.
 The piston can operate in normal and extend the cylinder service life.

VALVE GATE 40/50/60VLC TYPE

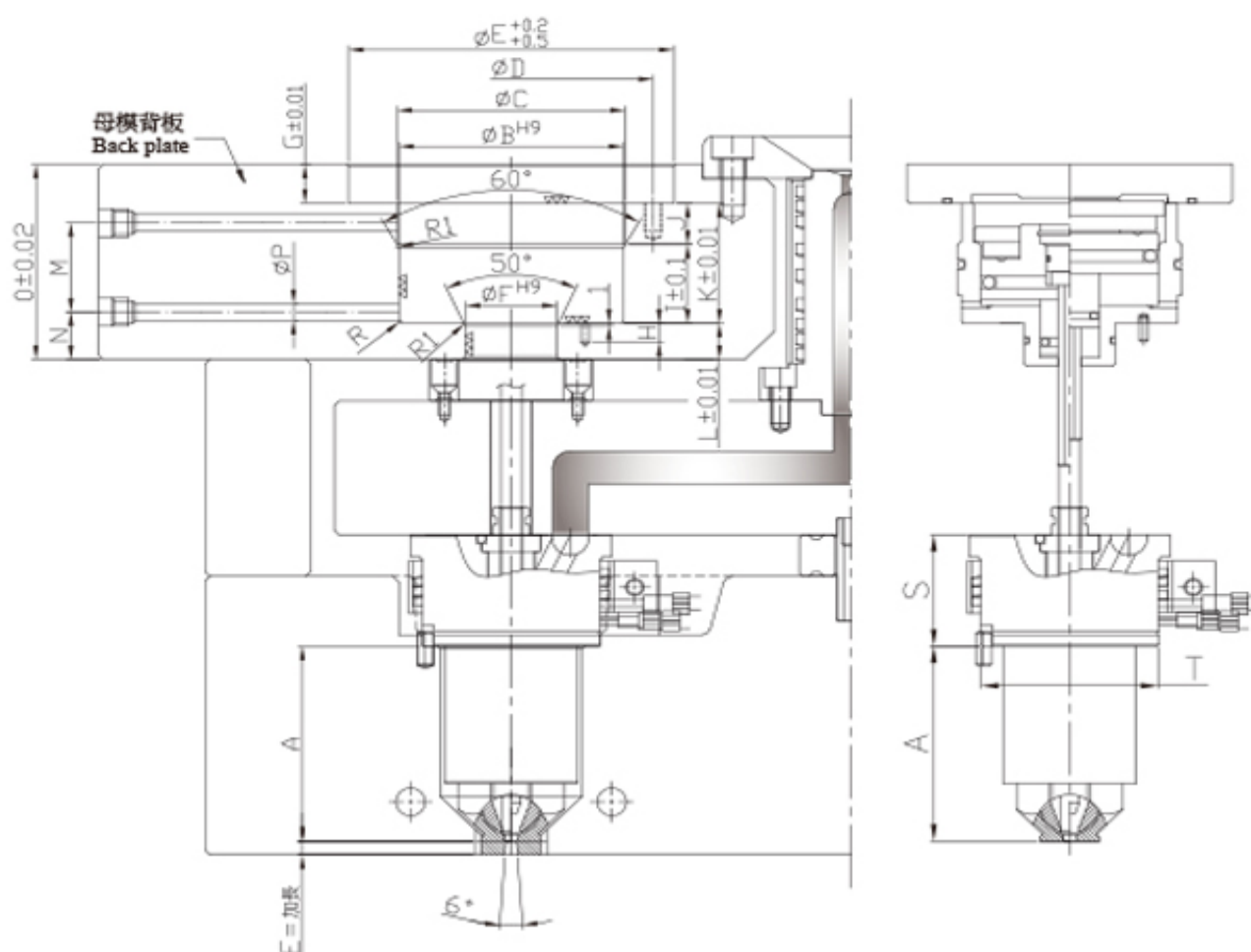


Series	ØB	ØC	ØF	G	ØH	I	J	K	ØL	M	N	O	P
CMM 40	40	44	32	2.2	3	5	19	42	55	16	40	100	5
CMM 50	50	54	40	2.5	5	6	24	42	65	22	45	100	5
CMM 60	60	64	48	3	5	6	29	45	75	22	50	100	5

Series	Q	R	S	U	V	W	Ød mm
CMM 40	5.2	6	1.2	7.2	3	15 Max.A=200	1.5 2.5
CMM 50	7.6	8	1.6	9.6	4	20 Max.A=250	2.0 3.0
CMM 60	9.6	10	2	12	4	25 Max.A=300	3.5 4.5

熱噴加熱至所需溫度(TE)熱膨脹量計算 THERMAL EXPANSION CALCULATION	
$A1=A+TE$ $TE=A \times T \times Z$ $Z=13.2 \times 10^{-6}$	
說明: TE=膨脹量 THERMAL EXPANSION (mm) T=熱噴溫度 NOZZLE TEMP (°C) 模溫溫度 MOLD TEMP (°C) Z=膨脹係數 EXPANSION COEFFICIENT	

VALVE GATE 40/50/60VTC/VTCE TYPE



Series	ØB	ØC	ØD	ØE	ØF	G	H	I	J	K	L	M	N	O	ØP	R	S	T
CMM 40	45	46	64	74	19	8	7.5	18.5	12.5	31	11	21	15	50	6	1	30	40
CMM 50	63	64	84	98	30	10	7.5	23	15	38	12	26	17	60	6	1	35	50
CMM 60	76	77	96	110	31	14	7.5	28	15	43	13	32	17	70	6	1	40	60

A mm	CMM
50	40050VTC/VTCE
70	40070VTC/VTCE
90	40090VTC/VTCE
110	40110VTC/VTCE
130	40130VTC/VTCE

A mm	CMM
55	50055VTC/VTCE
75	50075VTC/VTCE
95	50095VTC/VTCE
115	50115VTC/VTCE
135	50135VTC/VTCE

A mm	CMM
65	60065VTC/VTCE
85	60085VTC/VTCE
105	60105VTC/VTCE
125	60125VTC/VTCE
145	60145VTC/VTCE

訂單範例 Order examples : CMM40070VTC CMM50095VTC CMM60085VTCE

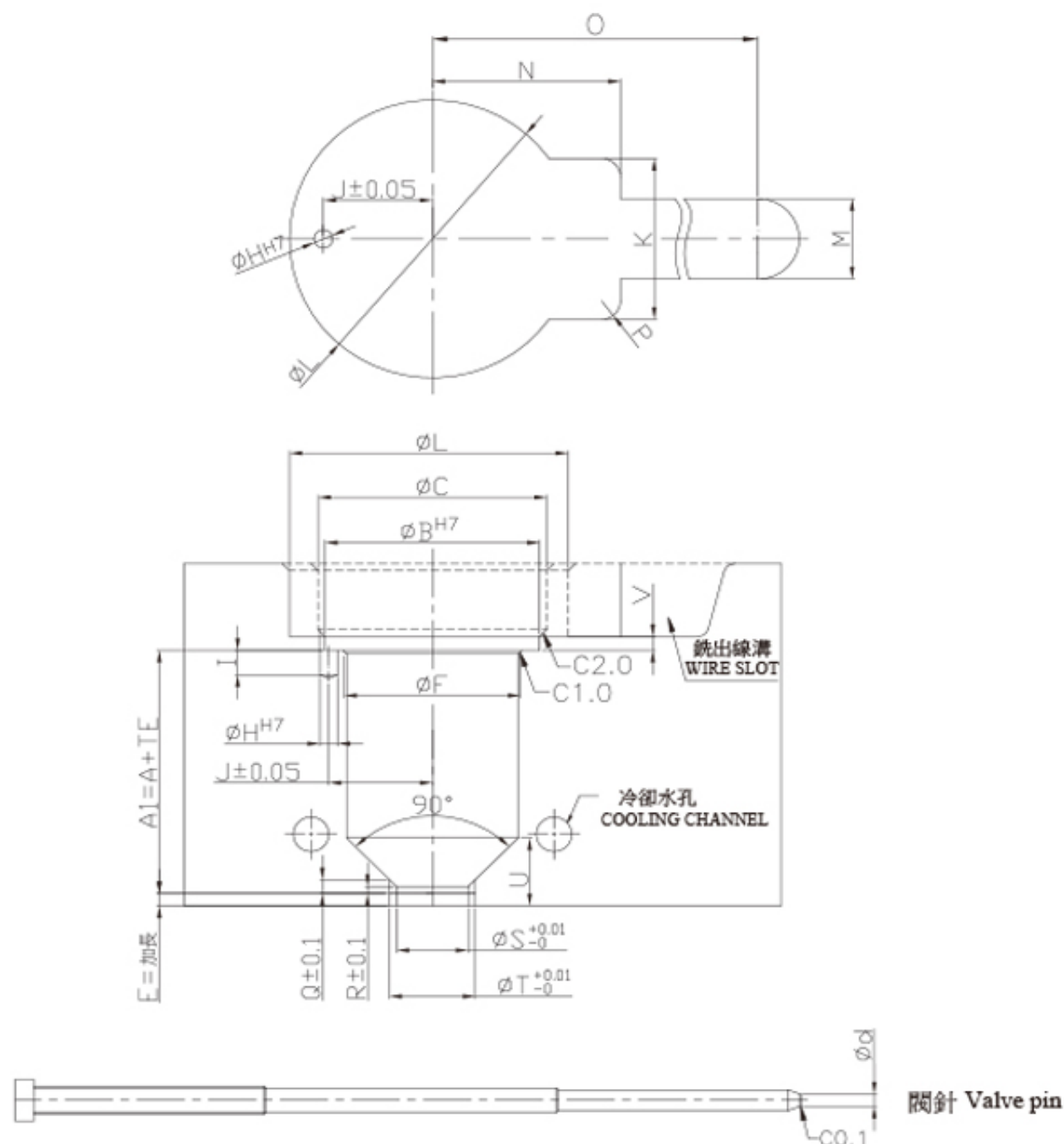


使用壓縮空氣之設定與注意事項。
 空氣壓力設定: 最小壓力6kg/cm², 最大壓力10kg/cm²
 壓縮空氣需要過濾與乾燥機脫水(相對濕度小於20%以下)以確保壓縮空氣無其他異物與水氣, 活塞才能運作正常及延長汽缸使用壽命。



Compressed air setting and caution:
 - Air pressure setting: min. 6kg/cm² & max. 10kg/cm²
 - Compressed air needs to filter out and dehydrate (humidity < 20%) to assured the air packing pressure have no miscellaneous articles and steam.
 The piston can operate in normal and extend the cylinder service life.

VALVE GATE 40/50/60VTC/VTCE TYPE



Series	ØB	ØC	ØF	ØH	I	J	K	ØL	M	N	O	P
CMM 40	40	44	32	3	5	19	42	55	16	40	100	5
CMM 50	50	54	40	5	6	24	42	65	22	45	100	5
CMM 60	60	64	48	5	6	29	45	75	22	50	100	5

Series	R	ØS	Q	ØT	U	V	Ød
CMM 40	1	10 MAX.A=100	2	12 MAX.A=200	12	3	1.5 2.5
CMM 50	1	14 MAX.A=150	3	18 MAX.A=300	14	4	2.0 3.0
CMM 60	2	20 MAX.A=200	4	24 MAX.A=400	16	4	3.5 4.5

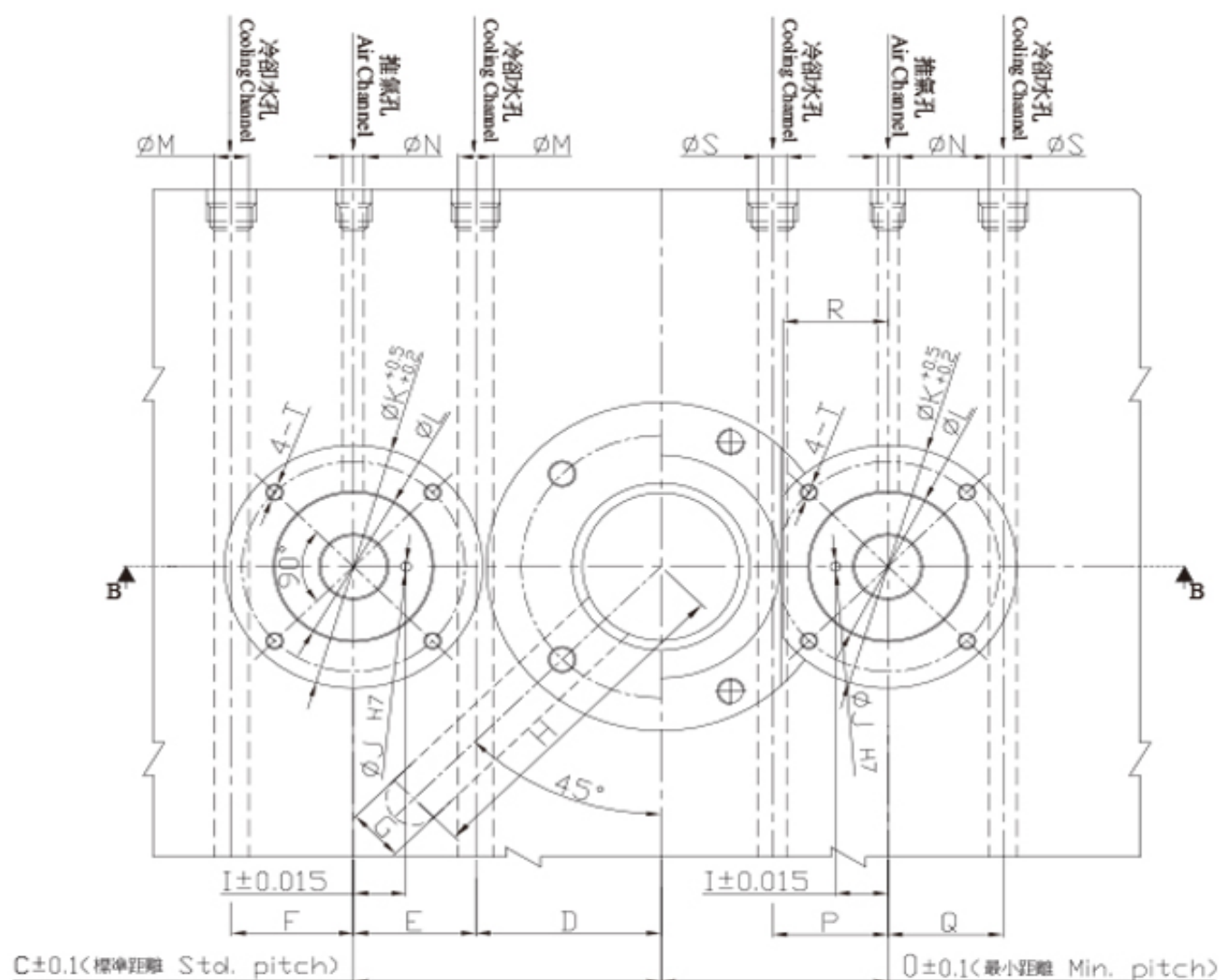
熱噴加熟至所需溫度(TE)熱膨脹量計算
 THERMAL EXPANSION CALCULATION

$$A1=A+TE \quad TE=A \times T \times Z \quad Z=13.2 \times 10^{-6}$$

說明:

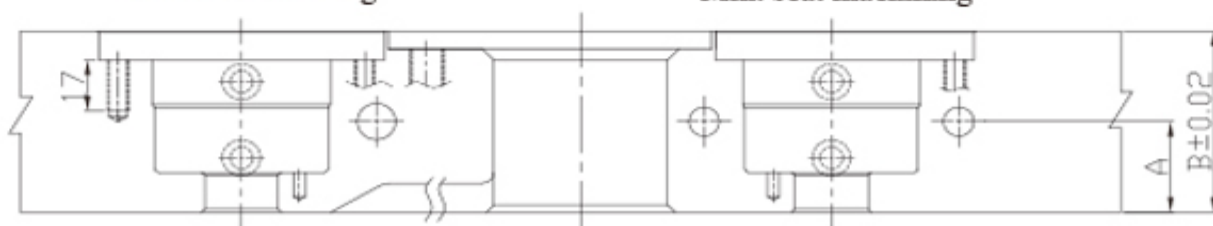
TE=膨脹量 THERMAL EXPANSION (mm)
 T=噴嘴溫度 NOZZLE TEMP -
 模具溫度 MOLD TEMP (°C)
 Z=膨脹係數 EXPANSION COEFFICIENT

VALVE GATE 40/50/60VG/VLC/VTC/VTCE TYPE



標準尺寸加工
Std. seat machining

最小尺寸加工
Min. seat machining

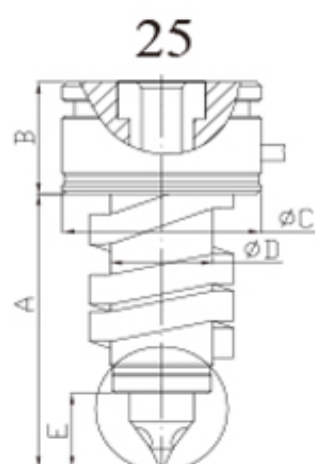


SECTION B-B

Series	A	B	C	D	E	F	G	H	I	ØJ	ØK	ØL	ØM	ØN	O
CMM 40	25	50	88	53	35	35	16	100	15	3	74	46	10	6	65
CMM 50	30	60	100	57	43	43	16	100	22	3	98	64	10	6	77
CMM 60	35	65	100	53	43	43	16	100	22	3	98	64	10	6	77

Series	P	Q	R	ØS	T
CMM 40	33	33	30	8	M5
CMM 50	43	43	40	10	M6
CMM 60	43	43	40	10	M6

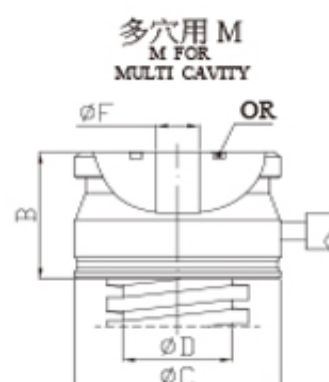
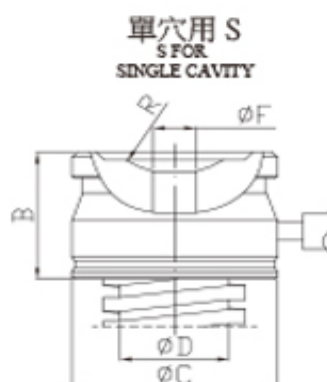
G/GC TYPE



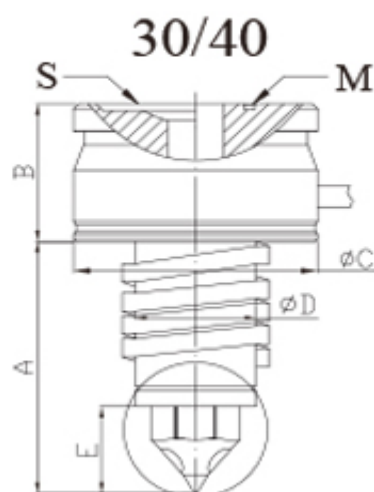
G TYPE



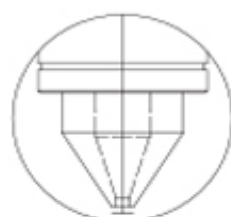
GC TYPE



Code Series	B	C	D	E	F	OR
CM 25	15	25	13	10	5	—
CM 30	20	30	16	12	7	610
CM 40	25	40	19	16	8	610



G TYPE



GC TYPE

	A mm	CMS	R	CMM	緊固扭矩 1N/m=0.1972kgf/cm
CMM25	40	-----	---	25040G/GC	
	55	-----	---	25055G/GC	
	70	-----	---	25070G/GC	
	85	-----	---	25085G/GC	
CMS/M30	45	30045G/GC	16	30045G/GC	300~400 kgf · cm
	60	30060G/GC	16	30060G/GC	
	75	30075G/GC	16	30075G/GC	
	90	30090G/GC	16	30090G/GC	
CMS/M40	50	40050G/GC	16	40050G/GC	900kgf · cm
	65	40065G/GC	16	40065G/GC	
	80	40080G/GC	16	40080G/GC	
	95	40095G/GC	16	40095G/GC	
	110	40110G/GC	16	40110G/GC	

* 以上各規格最大A尺寸長度請參考第34頁表格*

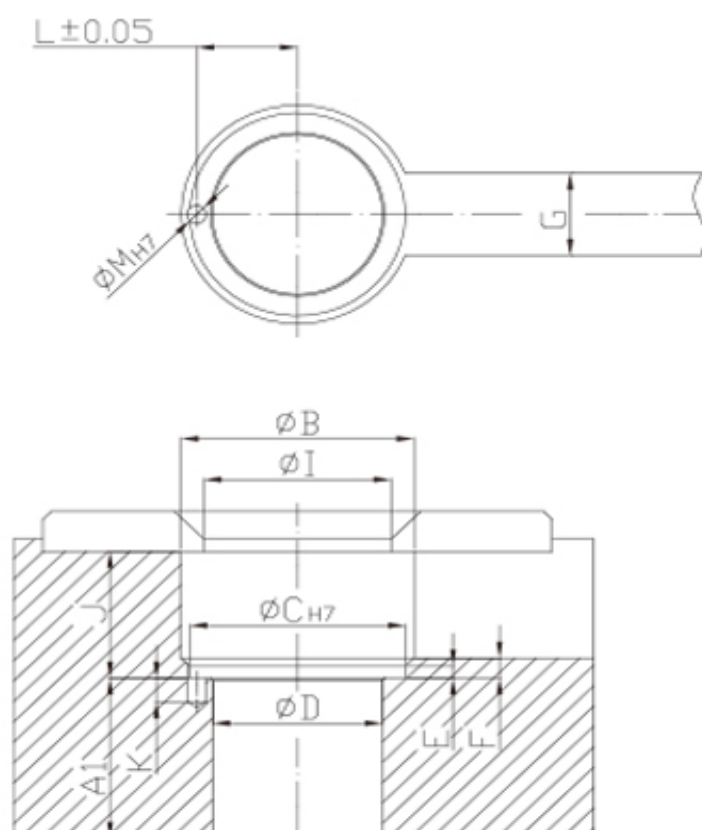
* For max. length A refer to the table from page 34 *

訂單範例 Order examples:

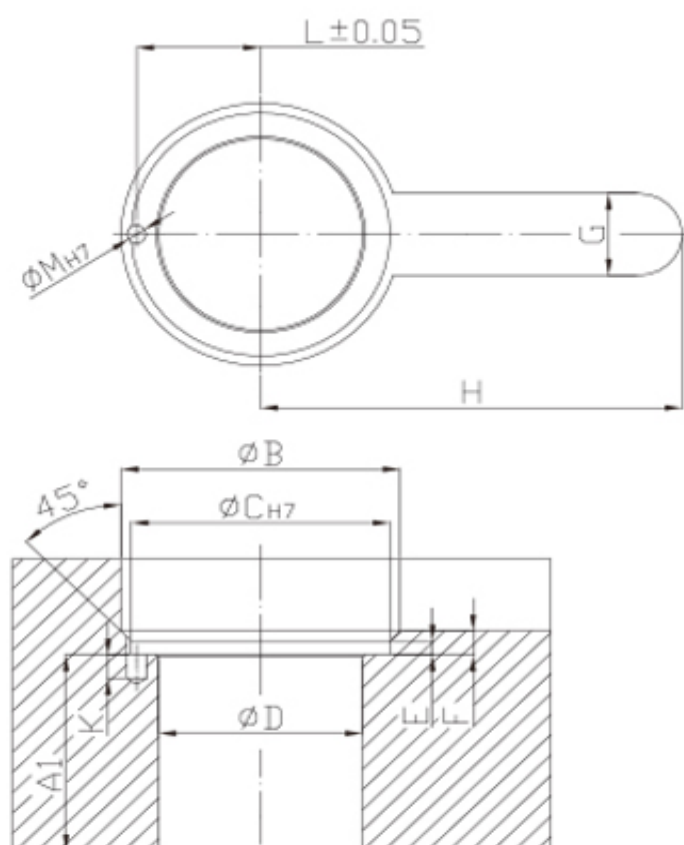
CMM25040G · CMS30060GC · CMM40110G

G/GC TYPE

單穴 SINGLE CAVITY



多穴 MULTI CAVITY



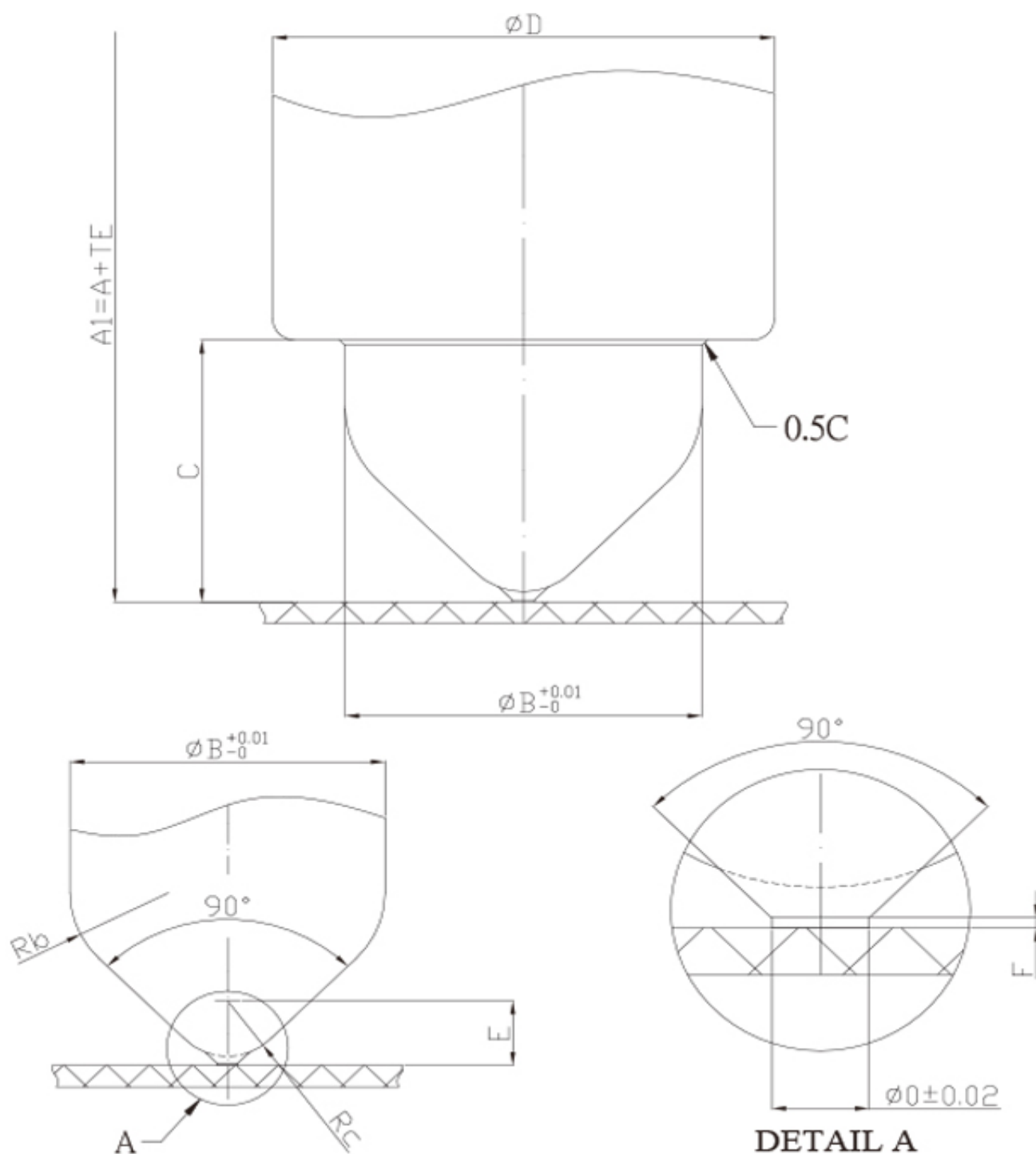
Code	Series	ØB	ØC	ØD	E	F	G	H	ØI	J	K	L	ØM
CM 25		28	25	20	2.5	4	10	85	—	15	5	12	3
CM 30		33	30	24	2.5	4	12	85	26	20	5	14.5	3
CM 40		44	40	30	3	5	12	85	35	25	5	19	3

熱嘴熱膨脹量參考表
Nozzle thermo expansion length table

熱嘴加熱至所需溫度(TE)膨脹量之計算 THERMAL EXPANSION CALCULATION			
$A1 = A + TE$ $TE = A \times T \times Z$ $Z = 13.2 \times 10^{-6}$			
說明:			
TE=膨脹量	THERMAL EXPANSION (mm)		
T=熱嘴溫度	NOZZLE TEMP (°C)		
模具溫度	MOLD TEMP (°C)		
Z=膨脹係數	EXPANSION COEFFICIENT		

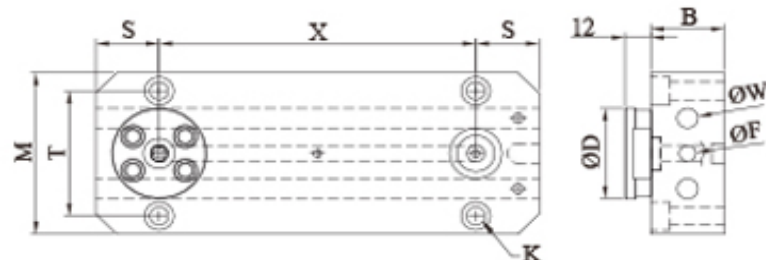
T=200°C		T=250°C	
熱嘴道長度 NOZZLE LENGTH	膨脹長度 EXPANSION LENGTH	熱嘴道長度 NOZZLE LENGTH	膨脹長度 EXPANSION LENGTH
A=50mm	0.13mm	A=50mm	0.16mm
A=65mm	0.17mm	A=65mm	0.21mm
A=80mm	0.21mm	A=80mm	0.26mm
A=95mm	0.25mm	A=95mm	0.31mm
A=110mm	0.29mm	A=110mm	0.36mm

G/GC TYPE



Code Series	$\varnothing B$	C	$\varnothing D$	E	F	R_b	R_c	$\varnothing O$ (G) min. max.	$\varnothing O$ (GC) min. max.
CM 25	12.5 MAX.A=150	12.5	20	4.1	---	5	3.5	0.8 1.5	0.6 1.2
CM 30	16 MAX.A=200	14.5	24	4.6	0.1	8	4	1.2 1.8	0.8 1.5
CM 40	19 MAX.A=250	19	30	5.8	0.1	10	5	1.5 2.5	1.0 2.0

熱流板規格選擇表 / Manifold specification & Table

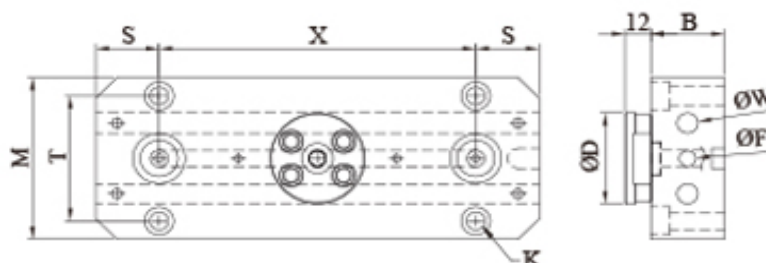


一穴偏心

1 drop offset

單位：mm

SERIES	M	T	S	B	K	ØD	ØF	ØW	X
CMI-080	80	60	40	35	M8	45	6/8	10	---
CMI-090	90	70	40	40	M8	45	10/12	12.7	---
CMI-100	100	80	50	45	M8	50	16/18	12.7	---

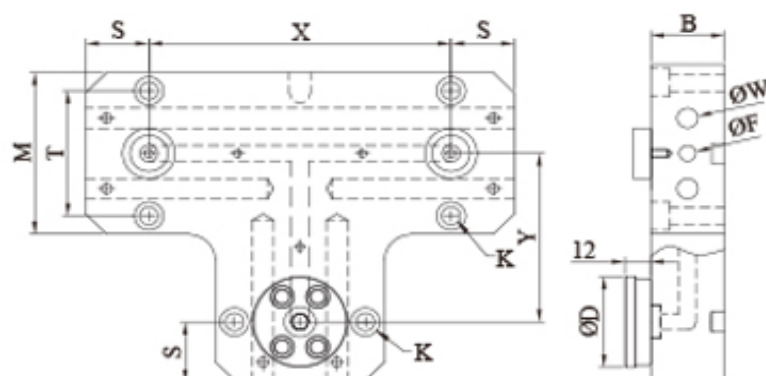


兩穴"一"形

2 drop-Inline

單位：mm

SERIES	M	T	S	B	K	ØD	ØF	ØW	X
CMI-080	80	60	40	35	M8	45	6/8	10	---
CMI-090	90	70	40	40	M8	45	10/12	12.7	---
CMI-100	100	80	50	45	M8	50	16/18	12.7	---



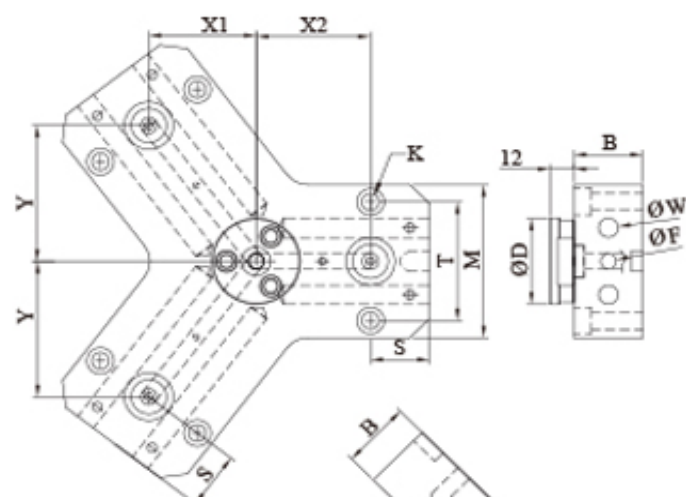
兩穴"T"形

2 drop-(T)

單位：mm

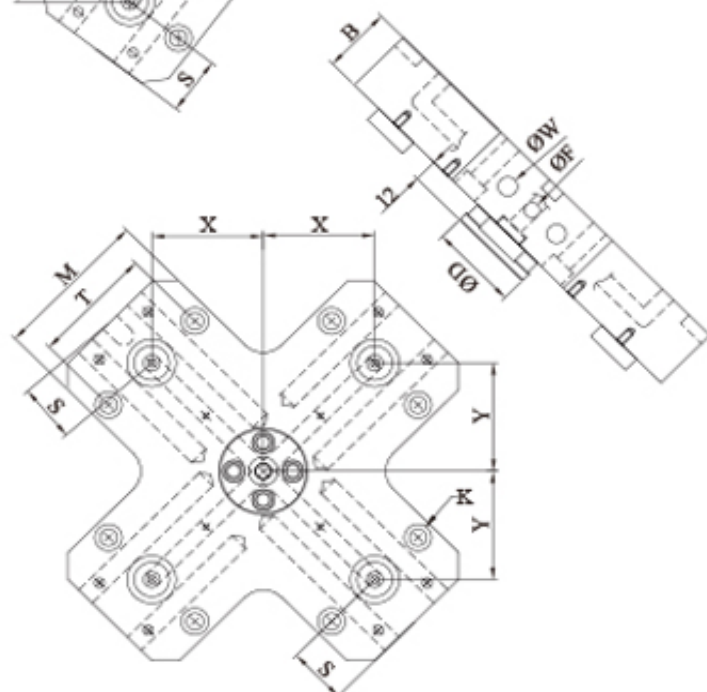
SERIES	M	T	S	B	K	ØD	ØF	ØW	X	Y
CMT-080	80	60	40	35	M8	45	6/8	10	---	---
CMT-090	90	70	40	40	M8	45	10/12	12.7	---	---
CMT-100	100	80	50	45	M8	50	16/18	12.7	---	---

熱流板規格選擇表 / Manifold specification & Table


 三穴"Y"形
 3 drop-(Y)

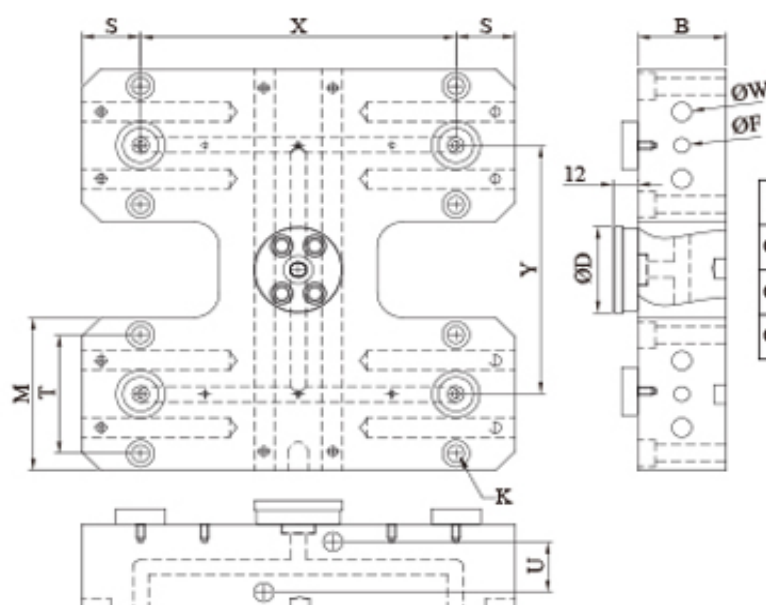
單位：mm

SERIES	M	T	S	B	K	ØD	ØF	ØW	X1	X2	Y
CMY-080	80	60	40	35	M8	45	6/8	10	---	---	---
CMY-090	90	70	40	40	M8	45	10/12	12.7	---	---	---
CMY-100	100	80	50	45	M8	50	16/18	12.7	---	---	---


 四穴"X"形
 4 drop-(X)

單位：mm

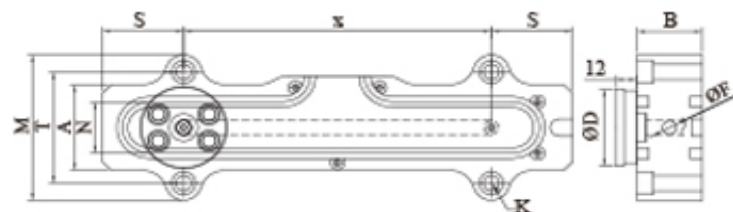
SERIES	M	T	S	B	K	ØD	ØF	ØW	X	Y
CMX-080	80	60	40	35	M8	45	6/8	10	---	---
CMX-090	90	70	40	40	M8	45	10/12	12.7	---	---
CMX-100	100	80	50	45	M8	50	16/18	12.7	---	---


 四穴"H"形
 4 drop-(H)

單位：mm

SERIES	M	T	S	B	K	ØD	ØF	ØW	U	X	Y
CMH-080	80	60	40	40	M8	45	6/8	10	26	---	---
CMH-090	90	70	40	50	M8	45	10/12	12.7	31	---	---
CMH-100	100	80	50	55	M8	50	16/18	12.7	36	---	---

熱流板規格選擇表 / Manifold specification & Table

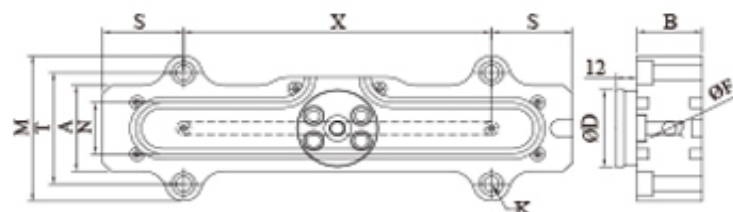


一穴偏心

1 drop offset

單位：mm

SERIES	M	T	A	N	S	B	K	OD	OF	X
HMI-080	80	60	50	30	40	35	M8	45	6/8	---
HMI-090	90	70	60	40	40	38	M8	45	10/12	---
HMI-100	100	80	70	50	50	40	M8	50	16/18	---

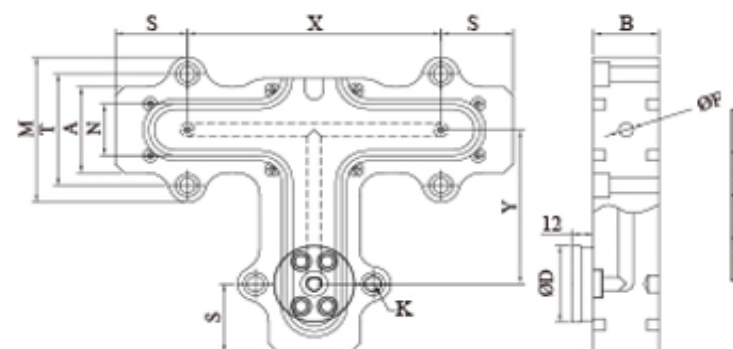


兩穴"一"形

2 drop-Inline

單位：mm

SERIES	M	T	A	N	S	B	K	OD	OF	X
HMI-080	80	60	50	30	40	35	M8	45	6/8	---
HMI-090	90	70	60	40	40	38	M8	45	10/12	---
HMI-100	100	80	70	50	50	40	M8	50	16/18	---

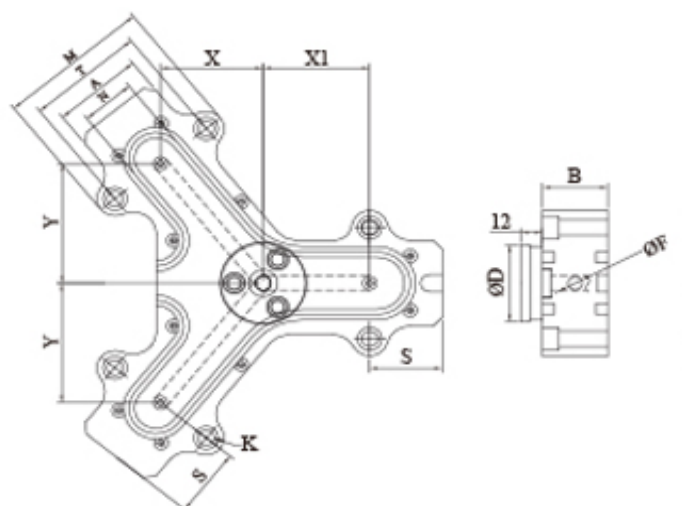


兩穴"T"形

2 drop-(T)

單位：mm

SERIES	M	T	A	N	S	B	K	OD	OF	X	Y
HMT-080	80	60	50	30	40	35	M8	45	6/8	---	---
HMT-090	90	70	60	40	40	38	M8	45	10/12	---	---
HMT-100	100	80	70	50	50	40	M8	50	16/18	---	---



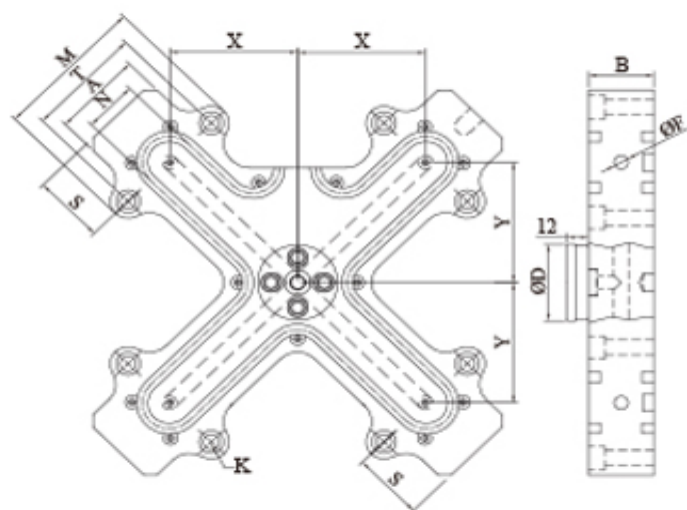
三穴"Y"形

3 drop-(Y)

單位：mm

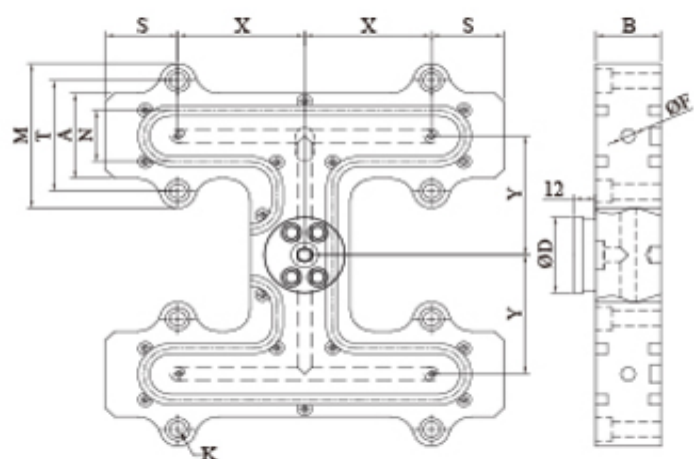
SERIES	M	T	A	N	S	B	K	OD	OF	X	X1	Y
HMY-080	80	60	50	30	40	35	M8	45	6/8	---	---	---
HMY-090	90	70	60	40	40	38	M8	45	10/12	---	---	---
HMY-100	100	80	70	50	50	40	M8	50	16/18	---	---	---

熱流板規格選擇表 / Manifold specification & Table


 四穴"X"形
 4 drop-(X)

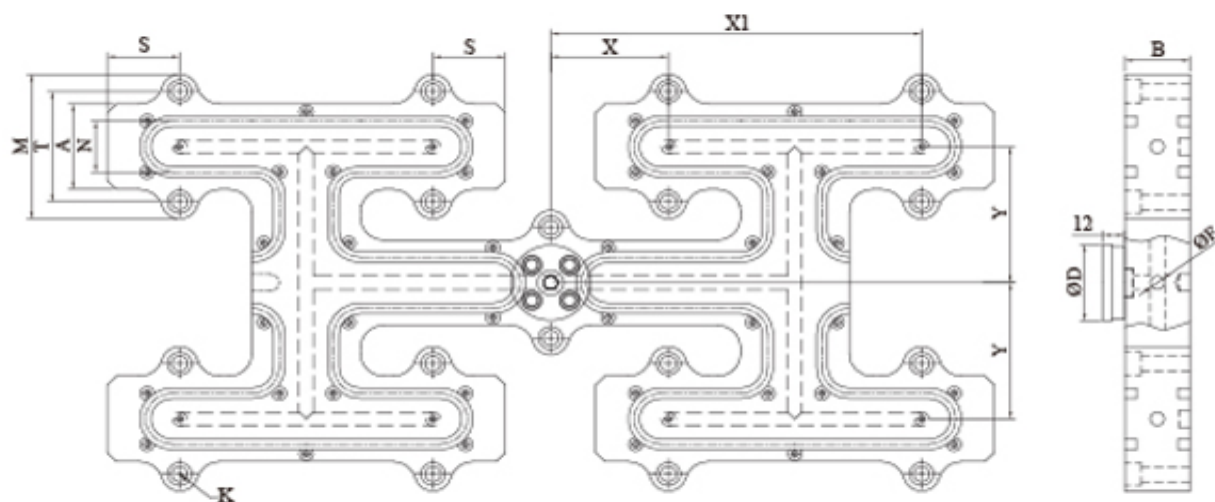
單位: mm

SERIES	M	T	A	N	S	B	K	ØD	ØF	X	Y
HMX-080	80	60	50	30	40	35	M8	45	6/8	---	---
HMX-090	90	70	60	40	40	38	M8	45	10/12	---	---
HMX-100	100	80	70	50	50	40	M8	50	16/18	---	---


 四穴"H"形
 4 drop-(H)

單位: mm

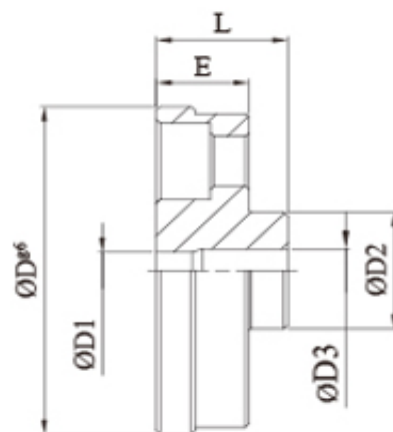
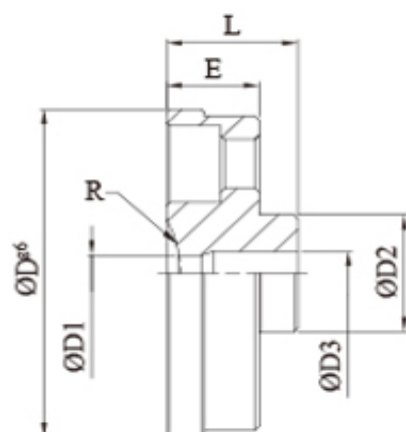
SERIES	M	T	A	N	S	B	K	ØD	ØF	X	Y
HMH-080	80	60	50	30	40	35	M8	45	6/8	---	---
HMH-090	90	70	60	40	40	38	M8	45	10/12	---	---
HMH-100	100	80	70	50	50	40	M8	50	16/18	---	---


 八穴"H2"形
 8 drop-(HH)

單位: mm

SERIES	M	T	A	N	S	B	K	ØD	ØF	X	X1	Y
HMH2-080	80	60	50	30	40	35	M8	45	6/8	---	---	---
HMH2-090	90	70	60	40	40	38	M8	45	10/12	---	---	---
HMH2-100	100	80	70	50	50	40	M8	50	16/18	---	---	---

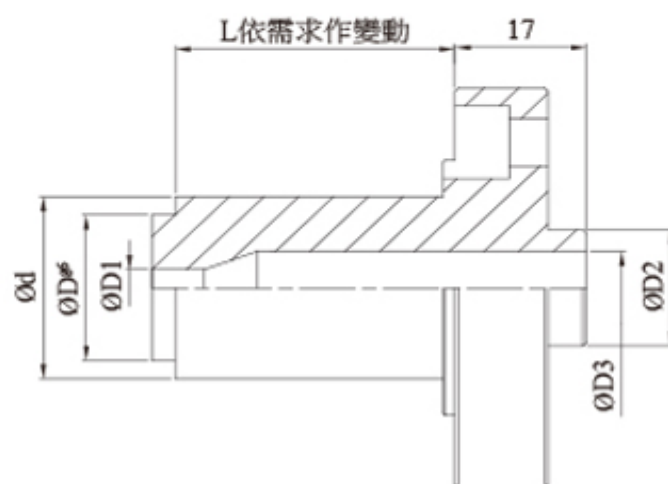
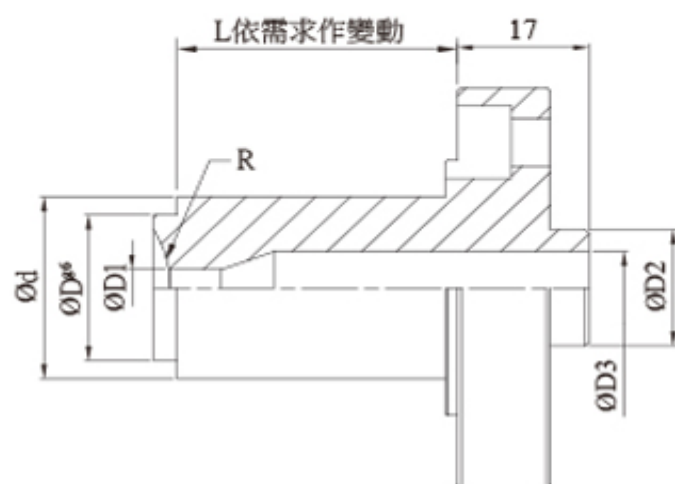
分流板中央灌嘴 / Manifold Injection Bushing



E=12/15/20 L=17/20/25

型號	ØD	ØD1	ØD2	ØD3	R
TE-R-4506	45.00	5.00	16.00	6.00	16.00
TE-R-4508	45.00	5.00	16.00	8.00	16.00
TE-R-4510	45.00	5.00	16.00	10.00	16.00
TE-R-5012	50.00	6.00	16.00	12.00	20.00
TE-R-5014	50.00	6.00	25.00	14.00	20.00
TE-R-5018	50.00	8.00	25.00	18.00	20.00

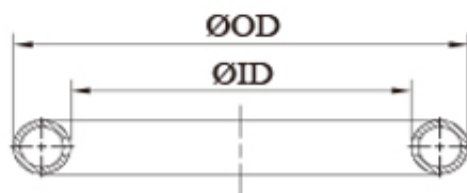
型號	ØD	ØD1	ØD2	ØD3
TE-F-4506	45.00	5.00	16.00	6.00
TE-F-4508	45.00	5.00	16.00	8.00
TE-F-4510	45.00	5.00	16.00	10.00
TE-F-5012	50.00	6.00	16.00	12.00
TE-F-5014	50.00	6.00	25.00	14.00
TE-F-5018	50.00	8.00	25.00	18.00



型號	Ød	ØD	ØD1	ØD2	ØD3	R
TE-R-2506	25.00	20.00	5.00	16.00	6.00	16.00
TE-R-2508	25.00	20.00	5.00	16.00	8.00	16.00
TE-R-2510	25.00	20.00	5.00	16.00	10.00	16.00
TE-R-2512	25.00	20.00	5.00	16.00	12.00	21.00
TE-R-3208	32.00	26.00	6.00	20.00	8.00	16.00
TE-R-3210	32.00	26.00	6.00	20.00	10.00	16.00
TE-R-3212	32.00	26.00	6.00	20.00	12.00	21.00

型號	Ød	ØD	ØD1	ØD2	ØD3
TE-F-2506	25.00	20.00	5.00	16.00	6.00
TE-F-2508	25.00	20.00	5.00	16.00	8.00
TE-F-2510	25.00	20.00	5.00	16.00	10.00
TE-F-2512	25.00	20.00	5.00	16.00	12.00
TE-F-3208	32.00	26.00	6.00	20.00	8.00
TE-F-3210	32.00	26.00	6.00	20.00	10.00
TE-F-3212	32.00	26.00	6.00	20.00	12.00

分流板零配件 / Manifold Accessories



(不銹鋼 O 型環)
Stainless steel O-ring

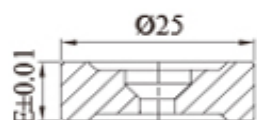


(鋁 O 型環)
Aluminium O-ring

(不銹鋼 O 型環) Stainless steel O-ring			
"O"RING NO.	"O"RING BORE DIM.	INNER DIA.	OUTER DIA.
007	12.80	9.53	12.75
008	14.40	11.10	14.27
010	17.60	14.27	17.45
020	20.88	17.45	20.65
030	22.38	19.05	22.23
040	27.13	23.80	26.97
050	30.33	26.97	30.18

(鋁合金 O 型環) Aluminium O-ring		
"O"RING NO.	INNER DIA.	OUTER DIA.
607	9.50	12.60
608	11.10	14.25
610	14.30	17.45
620	17.50	20.65
635	21.00	24.15
650	26.90	30.15

① 上墊塊-AB
Upper supporter pad

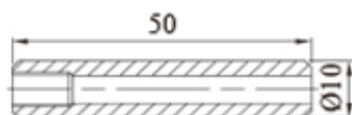


② 上墊塊-AB
Upper supporter pad

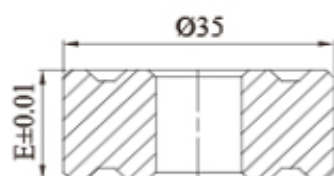


E=8/10

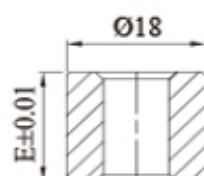
③ 定位銷-AP
Dowel pin



④ 中心墊塊-AC
Center supporter pad



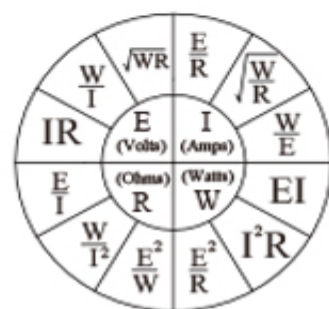
⑤ 下墊塊-AD
Lower supporter pad



E=10/15/20

電壓、電流、電阻、瓦特數換算表
Voltage, Current, Resistance and Wattage calculation

Ohm's Law



Wattage varies directly as ratio of voltages squared

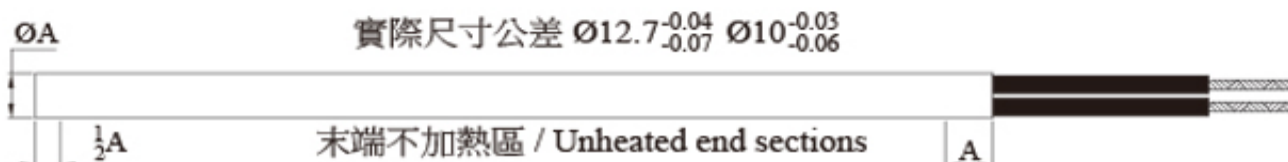
$$W_2 = W_1 \times \left(\frac{E_2}{E_1}\right)^2$$

$$3 \text{ Phase Amperes} = \frac{\text{Total Watts}}{\text{Volts} \times \sqrt{3}}$$

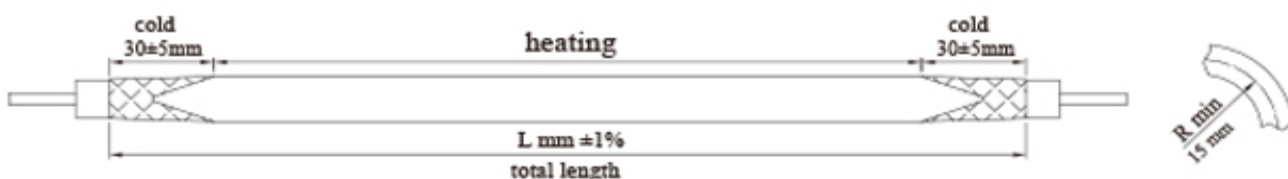
備註：
 Volts=E=電壓
 Ohms=R=電阻
 Amperes=I=電流
 Watts=W=瓦特數

電熱棒及管狀加熱器規格表

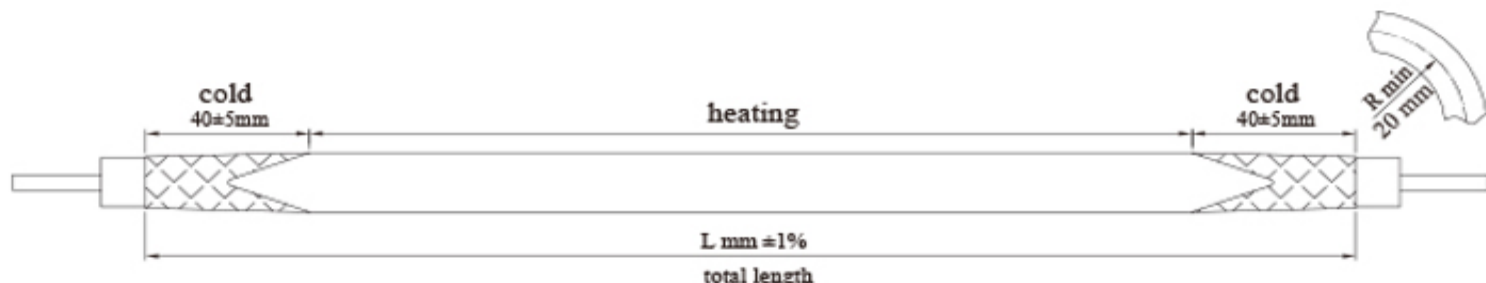
Cartridge heater and Tubular heater stock table



產品編號 CODE	規格 Diameter & Length	瓦特數 W/230V Watt W/230V	產品編號 CODE	規格 Diameter & Length	瓦特數 W/230V Watt W/230V	產品編號 CODE	規格 Diameter & Length	瓦特數 W/230V Watt W/230V
CA-127050SN	CA- $\varnothing 12.7 \times 50.8\text{mm}$	315Wx2"	CA-127203SN	CA- $\varnothing 12.7 \times 203.2\text{mm}$	1100Wx8"	BA-100090SN	BA- $\varnothing 10 \times 90\text{mm}$	500W
CA-127063SN	CA- $\varnothing 12.7 \times 63.5\text{mm}$	315Wx2.5"	CA-127215SN	CA- $\varnothing 12.7 \times 215.9\text{mm}$	1200Wx8.5"	BA-100100SN	BA- $\varnothing 10 \times 100\text{mm}$	500W
CA-127076SN	CA- $\varnothing 12.7 \times 76.2\text{mm}$	400Wx3"	CA-127228SN	CA- $\varnothing 12.7 \times 228.6\text{mm}$	1300Wx9"	BA-100120SN	BA- $\varnothing 10 \times 120\text{mm}$	600W
CA-127088SN	CA- $\varnothing 12.7 \times 88.9\text{mm}$	500Wx3.5"	CA-127241SN	CA- $\varnothing 12.7 \times 241.3\text{mm}$	1400Wx9.5"	BA-100140SN	BA- $\varnothing 10 \times 140\text{mm}$	700W
CA-127101SN	CA- $\varnothing 12.7 \times 101.6\text{mm}$	630Wx4"	CA-127254SN	CA- $\varnothing 12.7 \times 254.0\text{mm}$	1600Wx10"	BA-100160SN	BA- $\varnothing 10 \times 160\text{mm}$	800W
CA-127114SN	CA- $\varnothing 12.7 \times 114.3\text{mm}$	630Wx4.5"	CA-127279SN	CA- $\varnothing 12.7 \times 279.4\text{mm}$	1800Wx11"	BA-100180SN	BA- $\varnothing 10 \times 180\text{mm}$	900W
CA-127127SN	CA- $\varnothing 12.7 \times 127.0\text{mm}$	700Wx5"	CA-127304SN	CA- $\varnothing 12.7 \times 304.8\text{mm}$	1800Wx12"	BA-100200SN	BA- $\varnothing 10 \times 200\text{mm}$	1000W
CA-127139SN	CA- $\varnothing 12.7 \times 139.7\text{mm}$	700Wx5.5"	CA-127330SN	CA- $\varnothing 12.7 \times 330.2\text{mm}$	1800Wx13"	BA-100220SN	BA- $\varnothing 10 \times 220\text{mm}$	1100W
CA-127152SN	CA- $\varnothing 12.7 \times 152.4\text{mm}$	800Wx6"	BA-100050SN	BA- $\varnothing 10 \times 50\text{mm}$	315W	BA-100240SN	BA- $\varnothing 10 \times 240\text{mm}$	1150W
CA-127165SN	CA- $\varnothing 12.7 \times 165.1\text{mm}$	800Wx6.5"	BA-100060SN	BA- $\varnothing 10 \times 60\text{mm}$	315W	BA-100260SN	BA- $\varnothing 10 \times 260\text{mm}$	1250W
CA-127177SN	CA- $\varnothing 12.7 \times 177.8\text{mm}$	900Wx7"	BA-100070SN	BA- $\varnothing 10 \times 70\text{mm}$	400W	BA-100280SN	BA- $\varnothing 10 \times 280\text{mm}$	1400W
CA-127190SN	CA- $\varnothing 12.7 \times 190.5\text{mm}$	1000Wx7.5"	BA-100080SN	BA- $\varnothing 10 \times 80\text{mm}$	400W	BA-100300SN	BA- $\varnothing 10 \times 300\text{mm}$	1500W



產品編號 CODE	規格 Diameter & Length	瓦特數 W/230V Watt W/230V	產品編號 CODE	規格 Diameter & Length	瓦特數 W/230V Watt W/230V	產品編號 CODE	規格 Diameter & Length	瓦特數 W/230V Watt W/230V
CB-060035N	CB- $6 \times 6 \times 350\text{mm}$	550W	CB-060060N	CB- $6 \times 6 \times 600\text{mm}$	1000W	CB-060085N	CB- $6 \times 6 \times 850\text{mm}$	1450W
CB-060040N	CB- $6 \times 6 \times 400\text{mm}$	650W	CB-060065N	CB- $6 \times 6 \times 650\text{mm}$	1100W	CB-060090N	CB- $6 \times 6 \times 900\text{mm}$	1550W
CB-060045N	CB- $6 \times 6 \times 450\text{mm}$	750W	CB-060070N	CB- $6 \times 6 \times 700\text{mm}$	1200W	CB-060095N	CB- $6 \times 6 \times 950\text{mm}$	1650W
CB-060050N	CB- $6 \times 6 \times 500\text{mm}$	800W	CB-060075N	CB- $6 \times 6 \times 750\text{mm}$	1300W	CB-060100N	CB- $6 \times 6 \times 1000\text{mm}$	1750W
CB-060055N	CB- $6 \times 6 \times 550\text{mm}$	900W	CB-060080N	CB- $6 \times 6 \times 800\text{mm}$	1350W	CB-060105N	CB- $6 \times 6 \times 1050\text{mm}$	1850W

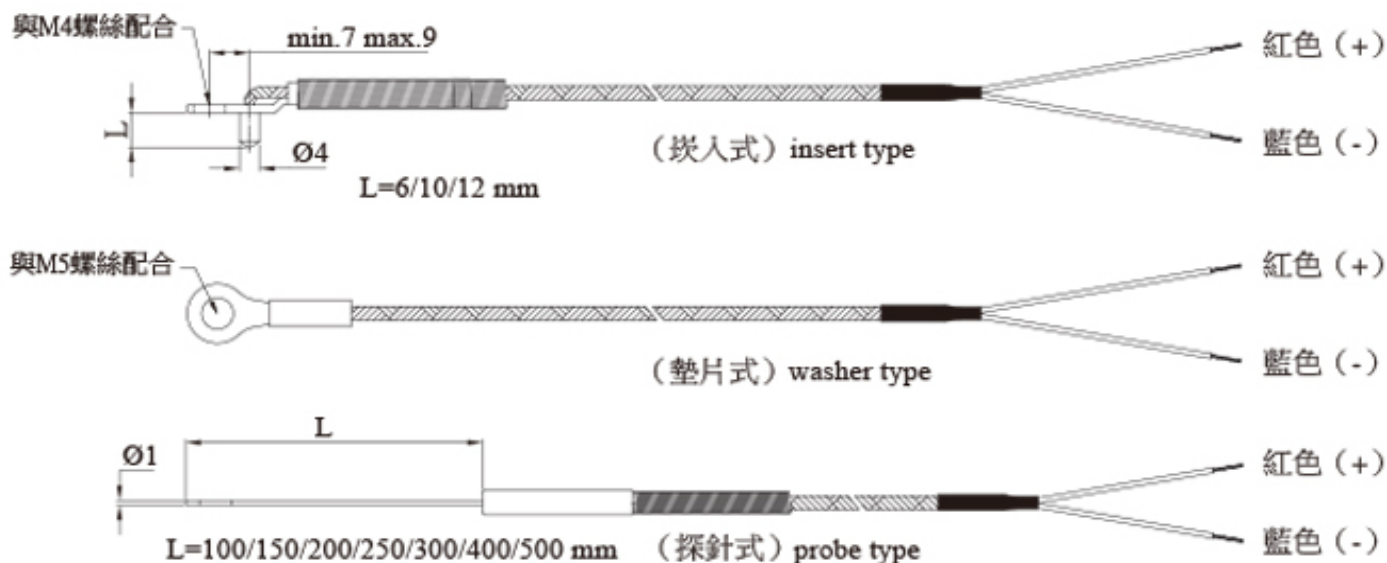


產品編號 CODE	規格 Diameter & Length	瓦特數 W/230V Watt W/230V	產品編號 CODE	規格 Diameter & Length	瓦特數 W/230V Watt W/230V	產品編號 CODE	規格 Diameter & Length	瓦特數 W/230V Watt W/230V
CB-080040N	CB- $8 \times 8 \times 400\text{mm}$	1000W	CB-080065N	CB- $8 \times 8 \times 650\text{mm}$	1500W	CB-080090N	CB- $8 \times 8 \times 900\text{mm}$	1800W
CB-080045N	CB- $8 \times 8 \times 450\text{mm}$	1100W	CB-080070N	CB- $8 \times 8 \times 700\text{mm}$	1600W	CB-080095N	CB- $8 \times 8 \times 950\text{mm}$	1850W
CB-080050N	CB- $8 \times 8 \times 500\text{mm}$	1200W	CB-080075N	CB- $8 \times 8 \times 750\text{mm}$	1650W			
CB-080055N	CB- $8 \times 8 \times 550\text{mm}$	1300W	CB-080080N	CB- $8 \times 8 \times 800\text{mm}$	1700W			
CB-080060N	CB- $8 \times 8 \times 600\text{mm}$	1400W	CB-080085N	CB- $8 \times 8 \times 850\text{mm}$	1750W			

備註: 非標準尺寸可訂做 / Note: non-standard order is acceptable

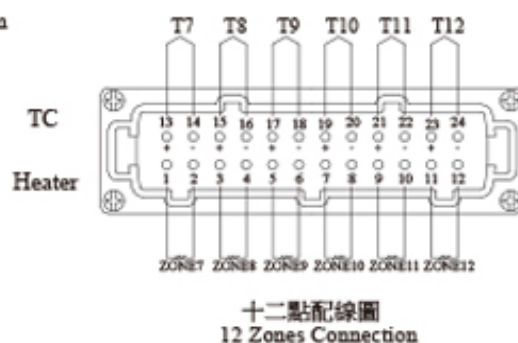
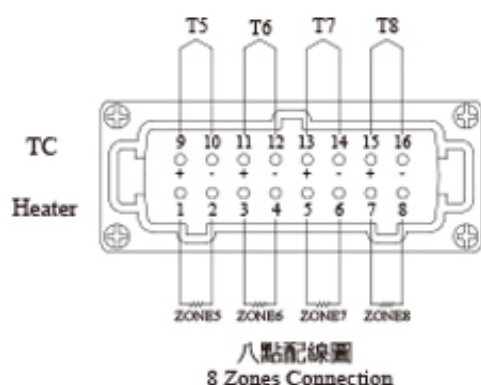
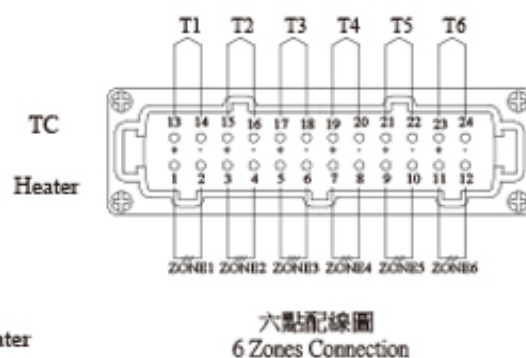
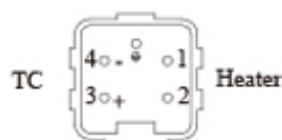
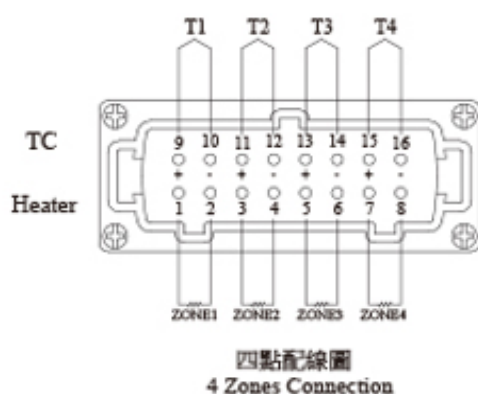
感溫線 (J-TYPE)

標準線長1000mm, 可提供更長尺寸 / Standard length: 1000mm, different length available upon request.



J Type: 歐規 紅(+) 藍(-), 美規 白(+) 紅(-) EUROPE TYPE RED (+) BLUE (-), US TYPE WHITE (+) RED (-)

標準配線方式 Standard Electrical Wiring



溫控器至模具上電熱感溫纜線及插座盒規格

Temperature controller accessories



模具梯型固定座規格 / Set dimensions for connectors (on mold side) 單位: mm									
項目 NO.	產品型號 PRODUCT CODE	適用插座 CONNECTION	插座編號 CONNECTION CODE	固定座 SET	固定座編號 SET PRODUCT CODE	長 LENGTH	寬 WIDTH	高 HEIGHT	固定座孔距 PITCH BETWEEN SCREW HOLES
1	D: CBA-5	5PIN側掛勾公接線盒	CN-5AN1	5PIN集線盒	CB1-5	69	35	25	57(M6 x 2孔)
2	D: CBC-16R/S	16PIN有蓋公接線盒	CN-16BN1	16-24PIN集線盒	CB-16240106 R/S	166.2	58.2	50	X:44 Y:152
	D: CBC-24R/S	24PIN有蓋公接線盒	CN-24BN1	16-24PIN集線盒	CB-16240106 R/S	166.2	58.2	50	X:44 Y:152



模具方型固定座規格 / Set dimensions for connectors (on mold side) 單位: mm									
項目 NO.	產品型號 PRODUCT CODE	適用插座 CONNECTION	插座編號 CONNECTION CODE	固定座 SET	固定座編號 SET PRODUCT CODE	長 LENGTH	寬 WIDTH	高 HEIGHT	固定座孔距 PITCH BETWEEN SCREW HOLES
3	D: CBC-1610	16PIN有蓋公接線盒	CN-16BN1	16-24PIN 集線盒	CB-16240110	164	61	104	38.5 153
	D: CBC-2410	24PIN有蓋公接線盒	CN-24BN1	16-24PIN 集線盒	CB-16240110	164	61	104	38.5 153
4	D: CBD-5	10PIN側掛勾公接線盒 25PIN側掛勾公接線盒	CN-10AN1 CN-25AN1	10-25PIN 集線盒	CB-102502	220	61	104	38.5 208
	D: CBD-8	16PIN側掛勾公接線盒 25PIN側掛勾公接線盒	CN-16AN1 CN-25AN1	16-25PIN 集線盒	CB-162502	240	61	104	38.5 228
	D: CBD-12	24PIN側掛勾公接線盒 25PIN側掛勾公接線盒	CN-24AN1 CN-25AN1	24-25PIN 集線盒	CB-242502	267	61	104	38.5 255

訂購溫控器時，需注意、註明：

1. 使用地區之電力系統，電壓相數及線數。
2. 控點數及每區電熱容量。
3. 感溫線型式 (J型或K型)，標準規格: J型。
4. 輸出線線長度。
5. 插座及插座盒規格。
6. 選用配備。

Please specify the following questions when order temperature controller

1. What power source you provide.
2. How many control zones are needed? Specify the power and amperage for each zone.
3. Thermocouple type: J or K? Standard stock is J type.
4. Specify cables length and connectors.
5. Connectors and housings.
6. Choose optional accessories.

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