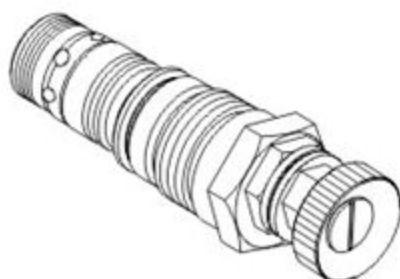


PRESSURE CONTROL VALVES 壓力控制閥

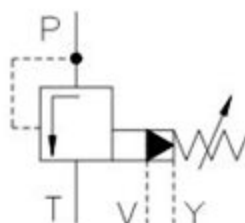
DBK SERIES CARTRIDGE TYPE RELIEF VALVES DBK 系列插入式調壓閥

◆ **MODEL** 型 式

DBK-20



◆ **CONTROL PORT(S)** 動作形式



◆ **SPECIFICATIONS** 規 格

Model Number 型式號碼	Maximum Pressure 最大壓力 bar	Maximum Flow 最大流量 lpm	Weight 重量 Kg
DBK-20	350 (5076 psi)	300 (79.25 gpm)	0.4 (0.88 lbs)
Fluid Type 液體型式		ISO VG 32, 46, 68	
Viscosity 黏性 cSt		10~400 (59~1854 SSU)	
Operating Temperature 操作溫度 °C		-15~70 (-5~158°F)	
Contamination Level 污染標準		ISO4406. 21/19/16 NAS1638,10	

◆ **HOW TO ORDER** 編號說明

1	2	3	4
DBK	20	*	*

1 VALVE SERIES 系列名稱

DBK= Cartridge Type Relief Valves
插入式調壓閥

2 PORTING 開口

06=3/4"(19mm)
ISO CETOP8
DIN NG 25
NFPA D08

※ This product in normal situation is to drain the oil outside.
本產品正常狀況都是為外部洩油

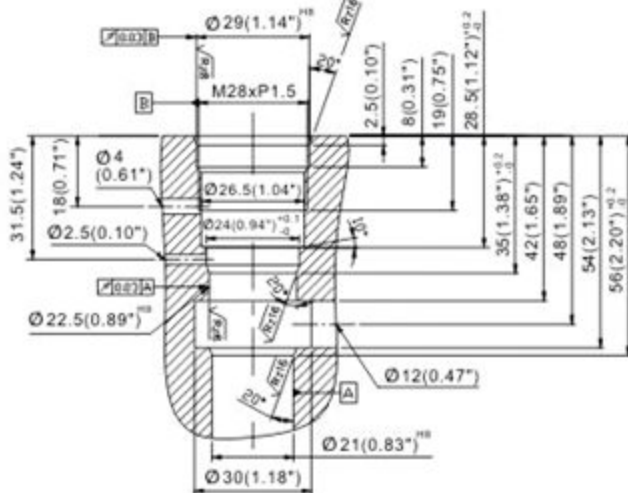
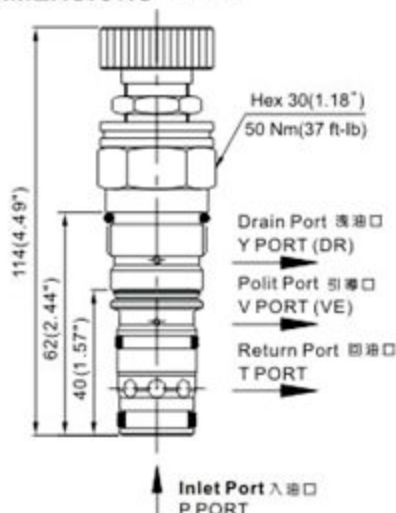
3 ADJUSTMENT PRESSURE 壓力調整範圍

Order 編號	Adjustment pressure 壓力調整範圍
1	0 ~ 100 (bar)
3	20 ~ 350 (bar)

4 PILOT WAY 引導方式

V: OUTER Y: 外部引導 (VE)
NONE: STANDARD 無標準型 (內部 VE)

◆ **DIMENSIONS** 外型尺寸圖

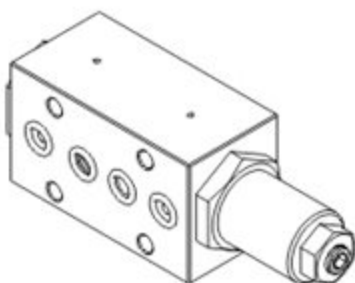


UNLOADING VALVES 卸載閥

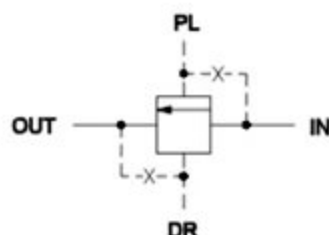
SQ SERIES SQ 系列

◆ MODEL 型 式

SQ-01G



◆ CONTROL PORT(S) 動作形式



◆ SPECIFICATIONS 規 格

Model Number 型式號碼	Operating Pressure 操作壓力 bar	Flow 流量 lpm	Adjustment Pressure 壓力調整範圍 bar	Weight 重量 Kg
SQ-01G	250 (3625 psi)	35 (8.81 gpm)	L: 10~70 (bar) H: 50~140 (bar)	1.4(3.09 lps)
Fluid Type 液體型式		ISO VG 32, 46, 68		
Viscosity 黏性 cSt		10~400 (59~1854 SSU)		
Operating Temperature 操作溫度 °C		-15~70 (-5~158 °F)		
Contamination Level 污染標準		$\beta_{10} \geq 75$, Under NAS Class 12, 25 μ		

◆ HOW TO ORDER 編號說明

1	2	3	4	5	6
SQ	—	01	G	—	* — * — *

1 VALVE SERIES 系列名稱
SQ= Unloading Valves 卸載閥

2 PORTING 開口
1/4

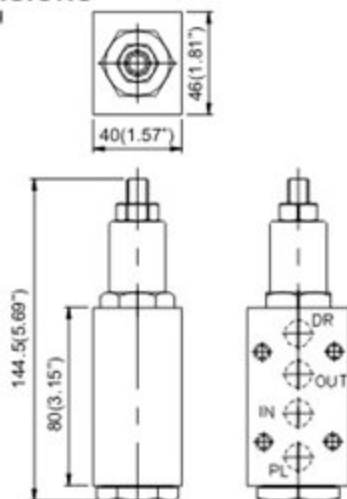
3 CONNECTING TYPE 連接型式
G:TYPE:BASEPLATE MOUNTING TYPE (板式連接)

4 ADJUSTMENT PRESSURE 壓力調整範圍
L: 10~70 (bar)
H: 50~140 (bar)

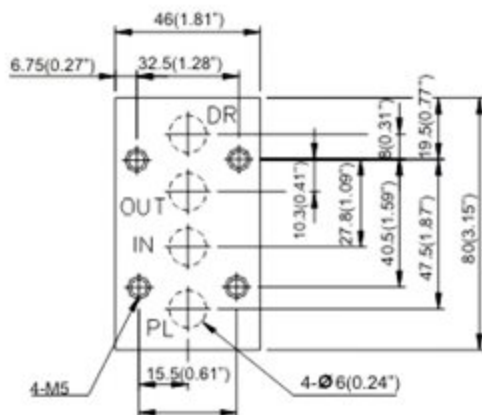
5 POLIT OPERATED WAY 引導壓方式
INNER: PT OUTER: PE
內部: PT 外部: PE

6 RELEASE WAY 排洩方式
INNER: DI OUTER: DE
內部: DI 外部: DE

◆ DIMENSIONS 外型尺寸圖



◆ Mounting Interface 基座尺寸圖



PRESSURE CONTROL VALVES 壓力控制閥

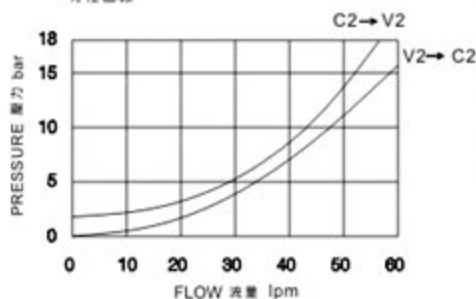
VBCL SERIES SINGLE DIRECTION COUNTER BALANCE VALVES VBCL 系列單向平衡閥

◆ MODEL 型 式

VBCL-T120



◆ PERFORMANCE (Cartridge Only) 特性曲線



◆ SPECIFICATIONS 規 格

Model Number 型 式 號 碼	Maximum Pressure 最大壓力 bar	Pilot Ratio 引導比例	Adjustment Pressure 壓力調整範圍 bar	Maximum Flow 最大流量 Lpm	Weight 重量 Kg
VBCL-T120	350 (5076 psi)	8:1 / 3:1	* ~ 350	60 (15.85 gpm)	3.6 (7.94 lbs)
Fluid Type 液體型號			ISO VG 32,46,68		
Viscosity 黏性 cSt			10~400 (59~1854SSU)		
Operating Temperature 操作溫度 °C			-15~70 (-5~158°F)		
Contamination Level 污染標準			ISO4406. 21/19/16 NAS1638,10		

◆ HOW TO ORDER 編號說明

1	2	3	4
VBCL	T120	— 35	— 3A

1 VALVE SERIES 系列名稱

VBCL=SINGLE DIRECTION COUNTER BALANCE VALVES

單向平衡閥

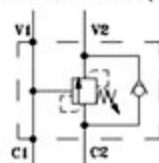
2 SUBPLATE MOUNTING SIZE 稱呼口徑

Size:T120=G1/2"

3 ADJUSTMENT PRESSURE 壓力調整範圍

Order 編號	Adjustment pressure 壓力調整範圍	Pilot ratio 引導比例
20	70 ~ 210 (bar)	3:1
35	140 ~ 350 (bar)	8:1

◆ CONTROL PORT(S) 動作形式

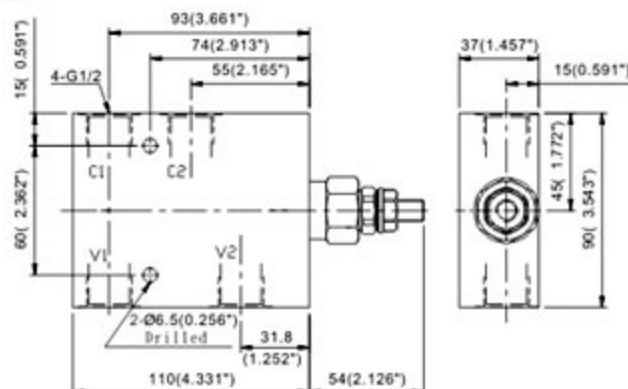


4 PILOT RATIO 引導比例

3A: 3:1

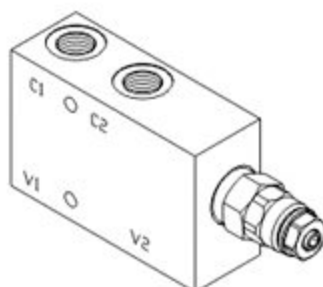
8A: 8:1

◆ DIMENSIONS 外型尺寸圖



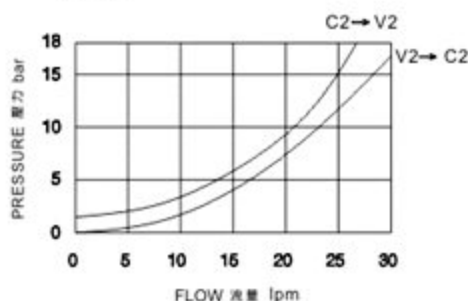
◆ **MODEL 型 式**

VBCL-T380



◆ **PERFORMANCE (Cartridge Only)**

特性曲線



◆ **SPECIFICATIONS 規 格**

Model Number 型 號 編 號	Maximum Pressure 最大壓力 bar	Pilot Ratio 引導比例	Adjustment Pressure 壓力調整範圍 bar	Maximum Flow 最大流量 Lpm	Weight 重 量 Kg
VBCL-T380	350 (5076 psi)	4:1	* ~ 350	30 (7.93gpm)	2.5 (5.51 lbs)
Fluid Type 流體型式			ISO VG 32,46,68		
Viscosity 黏性 cSt			10~400 (59~1854SSU)		
Operating Temperature 操作溫度 °C			-15~70 (-5~158°F)		
Contamination Level 污染標準			ISO4406. 21/19/16 NAS1638,10		

◆ **HOW TO ORDER 編號說明**

1	2	3	4
VBCL	T380	— 20 —	4A

1 VALVE SERIES 系列名稱

VBCL=SINGLE DIRECTION COUNTER BALANCE VALVES

單向平衡閥

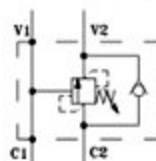
2 SUBPLATE MOUNTING SIZE 板接口徑

Size:T380=G3/8"

3 ADJUSTMENT PRESSURE 壓力調整範圍

Order 編號	Adjustment pressure 壓力調整範圍	Pilot ratio 引導比例
20	100 ~ 210 (bar)	4:1
35	200 ~ 350 (bar)	

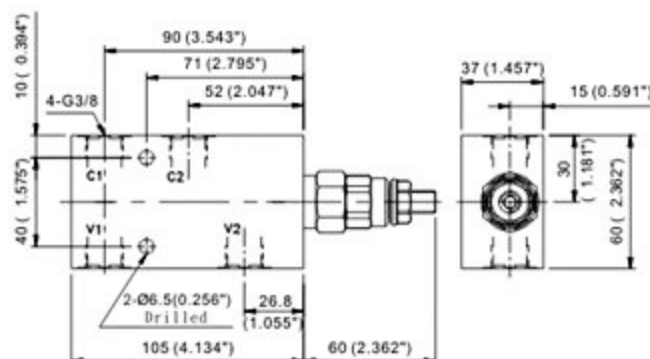
◆ **CONTROL PORT(S) 動作形式**



4 PILOT RATIO 引導比例

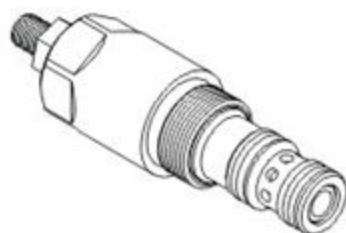
4A : 4:1

◆ **DIMENSIONS 外型尺寸圖**



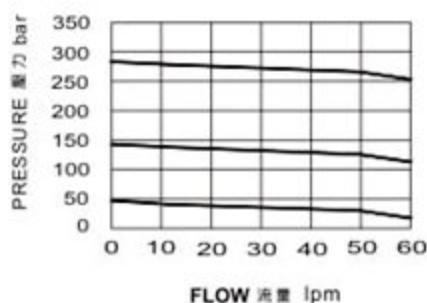
◆ **MODEL 型 式**

VBP-10



◆ **PERFORMANCE (Cartridge Only)**

特性曲線



◆ **SPECIFICATIONS 規 格**

Model Number 型式號碼	Operating Pressure 操作壓力 bar	Flow 流量 lpm	Weight 重量 Kg
VBP-10	350 (5076 psi)	60 (15.85gpm)	0.22 (0.49 lbs)
Fluid Type 液體型式		ISO VG 32, 46, 68	
Viscosity 黏性 cSt		10~400 (59~1854 SSU)	
Operating Temperature 操作溫度 °C		-15~70 (-5~158 °F)	
Contamination Level 污染標準		ISO4406, 21/19/16 NAS1638,10	

◆ **HOW TO ORDER 編號說明**

1	2	3	4	5
VBP	10	*	*	*

1 VALVE SERIES 系列名稱

VBP = CARTRIDGE TYPE REDUCING VALVES
(PILOT OPERATED TYPE)
插入式減壓閥(導壓式)

2 SUBPLATE MOUNTING SIZE 插板口徑

Size : 10
Cavity 孔口: CS10-3N
See Page Appendixes-A_002
見附錄A_002 頁面

3 ADJUSTMENT PRESSURE 壓力調整範圍

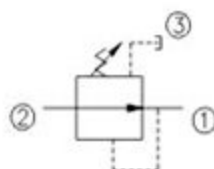
Order 編號	Adjustment pressure 壓力調整範圍
07	6 ~ 70 (bar)
14	10 ~ 140 (bar)
28	70 ~ 280 (bar)
35	140 ~ 350 (bar)

4 ADJUSTMENT OPTION 調整選擇

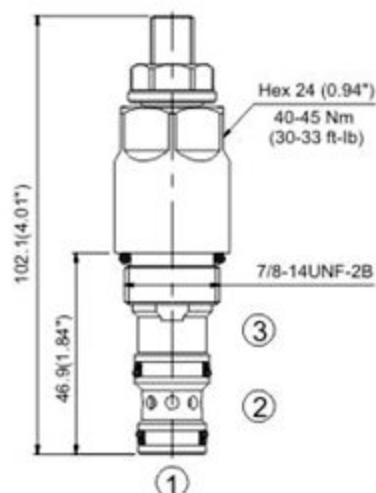
NONE: TOOL ADJUST 無: 工具調整式

5 DESIGN NO 設計編號

◆ **CONTROL PORT(S) 動作形式**



◆ **DIMENSIONS 外型尺寸圖**

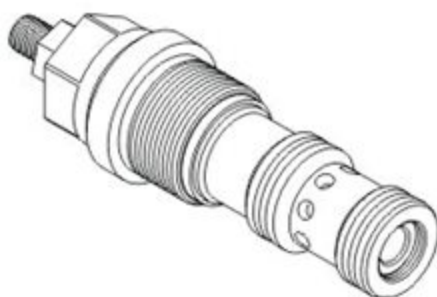


PRESSURE CONTROL VALVES 壓力控制閥

VBP SERIES CARTRIDGE REDUCING VALVES (PILOT OPERATED TYPE) VBP 系列插入式減壓閥(導壓式)

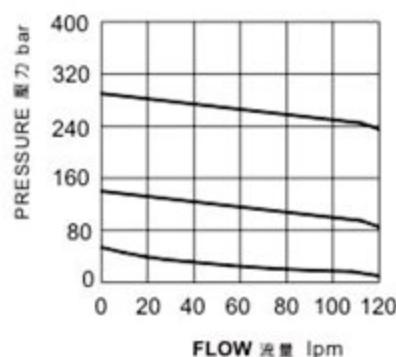
◆ MODEL 型 式

VBP-12



◆ PERFORMANCE (Cartridge Only)

特性曲線



◆ SPECIFICATIONS 規 格

Model Number 型式號碼	Maximum Pressure 最大壓力 bar	Adjustment Pressure 壓力調整範圍 bar	Maximum Flow 最大流量 Lpm	Weight 重量 Kg
VBP-12	350 (5076 psi)	* ~ 350	120 (31.70 gpm)	0.29 (0.64 lbs)
Fluid Type 液體型式		ISO VG 32,46,68		
Viscosity 黏性 cSt		10~400 (59~1854SSU)		
Operating Temperature 操作溫度 °C		-15~70 (-5~158°F)		
Contamination Level 污染標準		ISO4406, 21/19/16 NAS1638,10		

◆ HOW TO ORDER 編號說明

1	2	3	4	5
VBP	12	— 35	— *	— *

1 VALVE SERIES 系列名稱

VBP = CARTRIDGE TYPE REDUCING VALVES
(PILOT OPERATED TYPE)
插入式減壓閥(導壓式)

2 SUBPLATE MOUNTING SIZE 輔助口徑

Size : 12
Cavity 孔口: CS12-3N
See Page Appendixes-A_002
見附錄A_002 頁數

3 ADJUSTMENT PRESSURE 壓力調整範圍

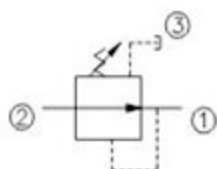
Order 編號	Adjustment pressure 壓力調整範圍
07	6 ~ 70 (bar)
14	10 ~ 140 (bar)
28	70 ~ 280 (bar)
35	140 ~ 350 (bar)

4 ADJUSTMENT OPTION 調整選擇

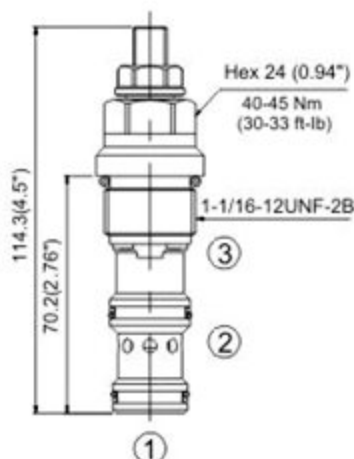
NONE=TOOL ADJUST 無工具調整型

5 DESIGN NO 設計編號

◆ CONTROL PORT(S) 動作形式



◆ DIMENSIONS 外型尺寸圖

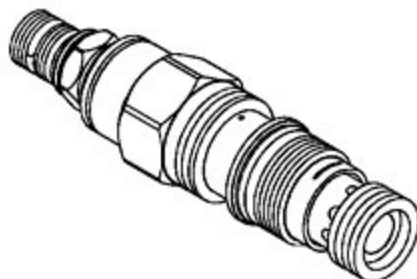


PRESSURE CONTROL VALVES 壓力控制閥

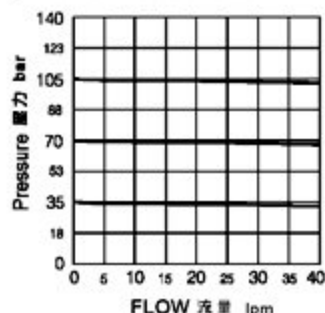
VBR SERIES CARTRIDGE REDUCING VALVES (PILOT OPERATED TYPE) VBR 系列插入式減壓閥(導壓式)

◆ **MODEL** 型 式

VBR-02



◆ **PERFORMANCE** 特性曲線



◆ **SPECIFICATIONS** 規 格

Model Number 型式號碼	Maximum Pressure 最大壓力 bar	Maximum Flow 最大流量 Lpm	Weight 重量 Kg
VBR-02	350 (5076 psi)	40 (10.57 gpm)	0.2 (0.44 lbs)
Fluid Type 液體型式		ISO VG 32,46,68	
Viscosity 黏性 cSt		10~400 (59~1854SSU)	
Operating Temperature 操作溫度 °C		-15~70 (-5~158°F)	
Contamination Level 污染標準		ISO4406, 21/19/16 NAS1638,10	

◆ **HOW TO ORDER** 編號說明

1	2	3	4
VBR	02	*	*

1 VALVE SERIES 系列名稱

VBR= CARTRIDGE REDUCING VALVES
(PILOT OPERATED TYPE)
插入式減壓閥(導壓式)

2 SUBPLATE MOUNTING SIZE 插口口徑

02: T-11A
Cavity 孔口: CST-11A
See Page Appendixes-A_006
見附錄A_006 頁面

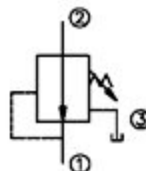
3 ADJUSTMENT PRESSURE 壓力調整範圍

Order 編號	Adjustment pressure 壓力調整範圍
02	4 ~ 20 (bar)
04	4 ~ 60 (bar)
09	4 ~ 100 (bar)
20	7 ~ 210 (bar)

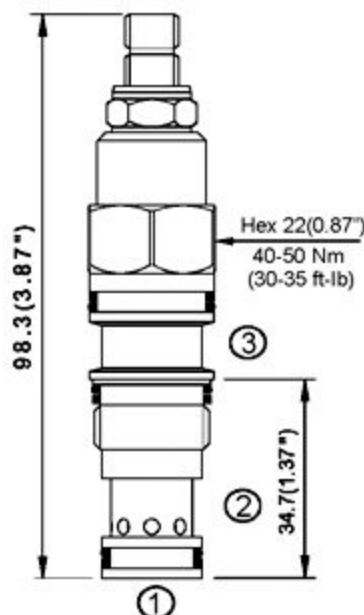
4 ADJUSTMENT OPTION 調整選擇

NONE	NONE: TOOL ADJUST 無工具調整式	
K	K: HAND-BAR ADJUST K: 手把調整式	

◆ **CONTROL PORT(S)** 動作形式

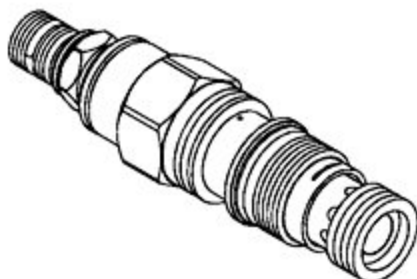


◆ **DIMENSIONS** 外型尺寸圖

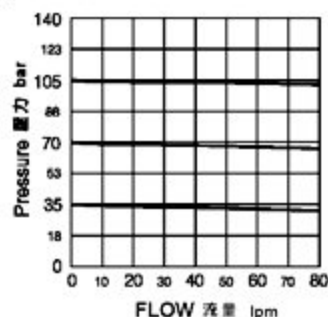


◆ **MODEL 型 式**

VBR-03



◆ **PERFORMANCE 特性曲線**



◆ **SPECIFICATIONS 規 格**

Model Number 型 式 號 碼	Maximum Pressure 最大壓力 bar	Maximum Flow 最大流量 Lpm	Weight 重 量 Kg
VBR-03	350 (5076 psi)	80 (21.13 gpm)	0.33 (0.73 lbs)
Fluid Type 液體型式		ISO VG 32,46,68	
Viscosity 黏 性 cSt		10~400 (59~1854 SSU)	
Operating Temperature 操作溫度 °C		-15~70 (-5~158°F)	
Contamination Level 污染標準		ISO4406: 21/19/16 NAS1638,10	

◆ **HOW TO ORDER 編號說明**

1	2	3	4
VBR	03	— *	— *

1 VALVE SERIES 系列名稱

VBR= CARTRIDGE REDUCING VALVES
(PILOT OPERATED TYPE)
插入式減壓閥(導壓式)

2 SUBPLATE MOUNTING SIZE 插口口徑

03: T-2A
Cavity 孔口: CST-2A
See Page Appendixes-A_006
見附錄A_006 頁面

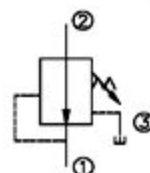
3 ADJUSTMENT PRESSURE 壓力調整範圍

Order 編號	Adjustment pressure 壓力調整範圍
02	4 ~ 20 (bar)
04	4 ~ 60 (bar)
08	4 ~ 100 (bar)
20	7 ~ 210 (bar)

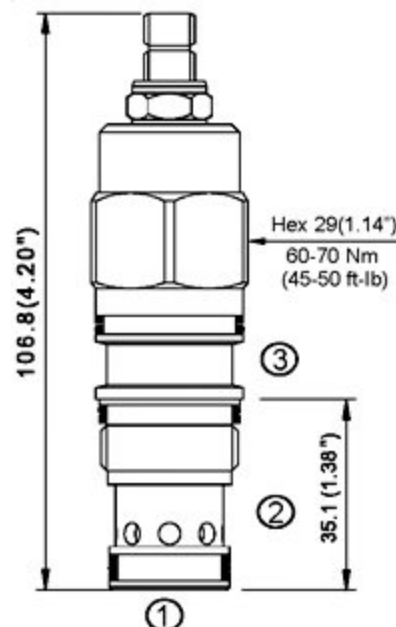
4 ADJUSTMENT OPTION 調整選擇

NONE	NONE TOOL ADJUST 無工具調整式	
K	K-HAND-BAR ADJUST K 手把調整式	

◆ **CONTROL PORT(S) 動作形式**



◆ **DIMENSIONS 外型尺寸圖**

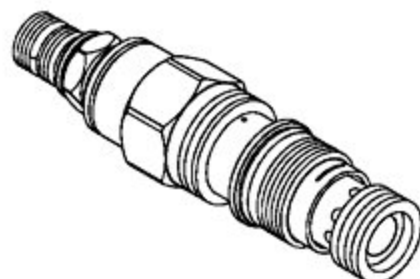


PRESSURE CONTROL VALVES 壓力控制閥

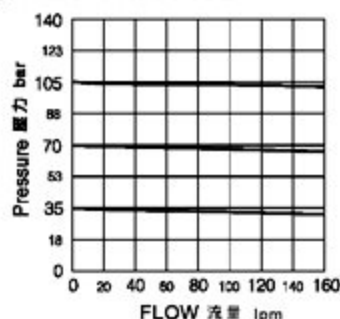
VBR SERIES CARTRIDGE REDUCING VALVES (PILOT OPERATED TYPE) VBR 系列插入式減壓閥(導壓式)

◆ **MODEL** 型 式

VBR-06



◆ **PERFORMANCE** 特性曲線



◆ **SPECIFICATIONS** 規 格

Model Number 型式號碼	Maximum Pressure 最大壓力 bar	Maximum Flow 最大流量 Lpm	Weight 重量 Kg
VBR-06	350 (5076 psi)	160 (42.27 gpm)	0.61 (1.35 lbs)
Fluid Type 液體型式		ISO VG 32, 46, 68	
Viscosity 黏性 cSt		10~400 (59~1854 SSU)	
Operating Temperature 操作溫度 °C		-15~70 (-5~158°F)	
Contamination Level 污染標準		ISO4406, 21/19/16 NAS1638, 10	

◆ **HOW TO ORDER** 編號說明

1	2	3	4
VBR	06	*	*

1 VALVE SERIES 系列名稱

VBR= CARTRIDGE REDUCING VALVES
(PILOT OPERATED TYPE)
插入式減壓閥(導壓式)

2 SUBPLATE MOUNTING SIZE 插口口徑

06: T-17A
Cavity 孔口: CST-17A
See Page Appendixes-A_007
見附錄A_007 頁面

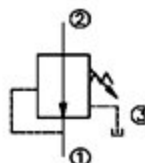
3 ADJUSTMENT PRESSURE 壓力調整範圍

Order 編號	Adjustment pressure 壓力調整範圍
02	4 ~ 20 (bar)
04	4 ~ 60 (bar)
06	4 ~ 100 (bar)
20	7 ~ 210 (bar)
31	10 ~ 315 (bar)

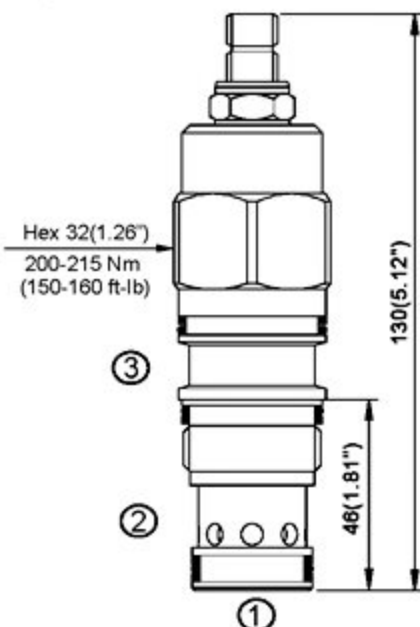
4 ADJUSTMENT OPTION 調整選擇

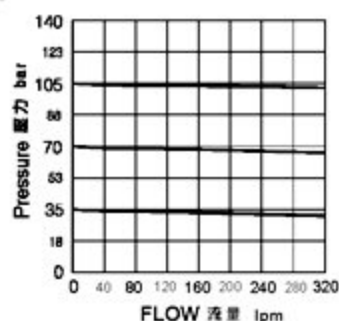
NONE	NONE: TOOL ADJUST 無, 工具調整式	
K	K: HAND-BAR ADJUST K: 手把調整式	

◆ **CONTROL PORT(S)** 動作形式



◆ **DIMENSIONS** 外型尺寸圖



◆ **MODEL 型 式****VBR-10**◆ **PERFORMANCE 特性曲線**◆ **SPECIFICATIONS 規 格**

Model Number 型 號	Maximum Pressure 最大壓力 bar	Maximum Flow 最大流量 Lpm	Weight 重量 Kg
VBR-10	350 (5076 psi)	320 (84.53 gpm)	1.3 (2.87 lbs)
Fluid Type 液體型式		ISO VG 32, 46, 68	
Viscosity 黏性 cSt		10~400 (59~1854SSU)	
Operating Temperature 操作溫度 °C		-15~70 (-5~158°F)	
Contamination Level 污染標準		ISO4406: 21/19/16 NAS1638,10	

◆ **HOW TO ORDER 編號說明**

1	2	3	4
VBR	10	*	*

1 VALVE SERIES 系列名稱

VBR= CARTRIDGE REDUCING VALVES
(PILOT OPERATED TYPE)
插入式減壓閥(導壓式)

2 SUBPLATE MOUNTING SIZE 端接口徑

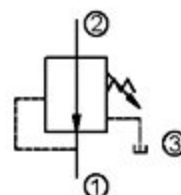
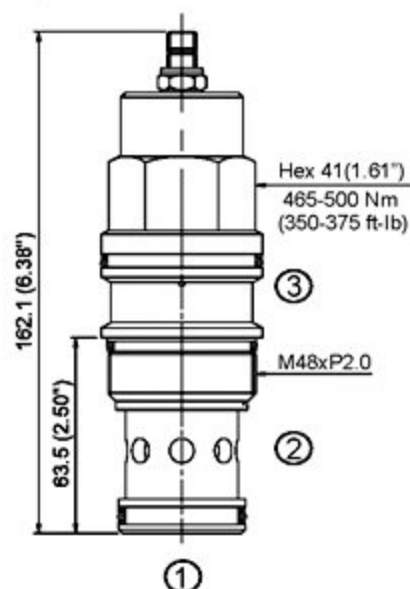
10: T-19A
Cavity 孔口: CST-19A
See Page Appendixes-A_007
見附錄A_007頁函

3 ADJUSTMENT PRESSURE 壓力調整範圍

Order 編號	Adjustment pressure 壓力調整範圍
04	4 ~ 60 (bar)
09	4 ~ 100 (bar)
20	7 ~ 210 (bar)
31	10 ~ 315 (bar)

4 ADJUSTMENT OPTION 調整選擇

NONE	NONE: TOOL ADJUST 無: 工具調整式	
K	K: HAND-BAR ADJUST K: 手把調整式	

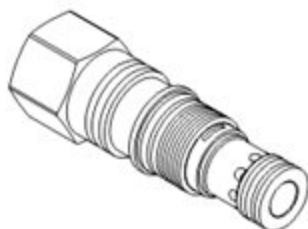
◆ **CONTROL PORT(S) 動作形式**◆ **DIMENSIONS 外型尺寸圖**

PRESSURE CONTROL VALVES 壓力控制閥

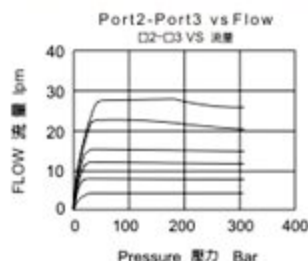
VBRO SERIES CARTRIDGE CONSTANT-PRESSURE TYPE REDUCING VALVES VBRO 系列插入式定壓型減壓閥

◆ MODEL 型 式

VBRO-01



◆ PERFORMANCE 特性曲線



◆ DESCRIPTION 說明

VE-Internal Pilot :

These normally open modulating elements with an internal orifice between port 1 and port 3 can be used as a main-stage reducing valve. The valve can be controlled remotely using a pilot relief or pilot solenoid valve.

External Pilot :

Normally open modulating elements without an internal orifice act as a restrictive compensator to maintain a constant pressure drop across an orifice, regardless of variations in upstream or downstream pressure.

VE- 內部導壓：此閥為常開並在口1到口3之間內置節流孔的調節元件。此閥可作主級減壓閥，並可用先導溢流閥或電磁閥來遠程控制。

外部導壓：此閥為無內置節流孔的常開調節單元，用來作為限流壓力補償器以確保通過節流孔的壓降保持恆定，不受進出口壓力變化影響。

◆ SPECIFICATIONS 規 格

Model Number 型式號碼	Maximum Pressure 最大壓力 bar	Maximum Flow 最大流量 lpm	Weight 重量 Kg
VBRO-01	350 (5076 psi)	30 (7.93 gpm)	0.1 (0.22lbs)
Fluid Type 液體型式		ISO VG 32, 46, 68	
Viscosity 黏性 cSt		10~400 (59~1854 SSU)	
Operating Temperature 操作溫度 °C		-15~70 (-5~158°F)	
Contamination Level 污染標準		ISO4406: 21/19/16 NAS1638,10	

◆ HOW TO ORDER 編號說明

1	2	3	4
VBRO	01	*	*

1 VALVE SERIES 系列名稱

VBRO = CARTRIDGE TYPE
CONSTANT-PRESSURE TYPE REDUCING VALVES
插入式定壓型減壓閥

2 SUBPLATE MOUNTING SIZE 稱呼口徑

01 : T-163A
Cavity 孔口: CST-163A
See Page Appendixes-A_008
見附錄A_008頁面

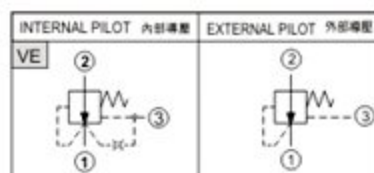
3 VERSION 形式

VE : INTERNAL PILOT VE : 內部導壓
NONE : EXTERNAL PILOT 無 : 外部導壓

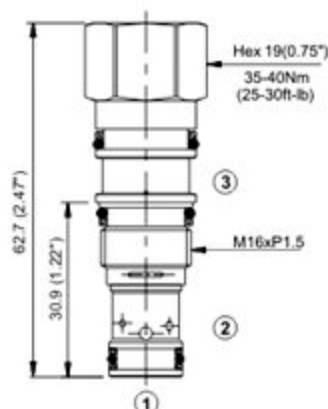
4 CRACKING PRESSURE 彈簧壓力

35	3.5 bar (50psi)
70	7.0 bar (100psi)
14	14.0 bar (200psi)

◆ CONTROL PORT(S) 動作形式

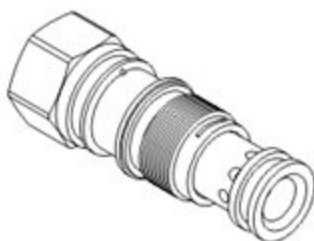
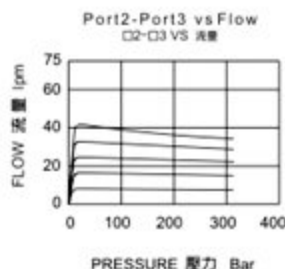


◆ DIMENSIONS 外型尺寸圖



◆ **MODEL 型 式**

VBRO-02

◆ **PERFORMANCE 特性曲線**◆ **DESCRIPTION 說明****VE-Internal Pilot :**

These normally open modulating elements with an internal orifice between port 1 and port 3 can be used as a main-stage reducing valve. The valve can be controlled remotely using a pilot relief or pilot solenoid valve.

External Pilot :

Normally open modulating elements without an internal orifice act as a restrictive compensator to maintain a constant pressure drop across an orifice, regardless of variations in upstream or downstream pressure.

VE- 內部導壓 : 此閥為常開並在口1到口3之間內置節流孔的調節元件,此閥可作主級減壓閥,並可用先導溢流閥或電磁閥來遠程控制。

外部導壓 : 此閥為無內置節流孔的常開調節單元,用來作為限流壓力補償器以確保流過節流孔的壓降保持恆定,不受進出口壓力變化影響。

◆ **SPECIFICATIONS 規格**

Model Number 型式號碼	Maximum Pressure 最大壓力 bar	Maximum Flow 最大流量 lpm	Weight 重量 Kg
VBRO-02	350 (5076 psi)	60 (15.85 gpm)	0.15 (0.33lbs)
Fluid Type 液體型式		ISO VG 32, 46, 68	
Viscosity 黏性 cSt		10~400 (59~1854 SSU)	
Operating Temperature 操作溫度 °C		-15~70 (-5~158°F)	
Contamination Level 污染標準		ISO4406, 21/19/16 NAS1638,10	

◆ **HOW TO ORDER 編號說明**

1	2	3	4
VBRO	02	— *	— *

1 VALVE SERIES 系列名稱

VBRO = CARTRIDGE TYPE CONSTANT-PRESSURE TYPE
REDUCING VALVES
插入式定壓型減壓閥

2 SUBPLATE MOUNTING SIZE 稱呼口徑

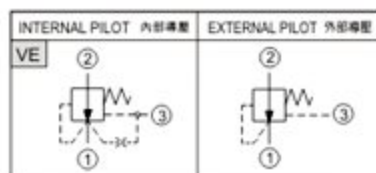
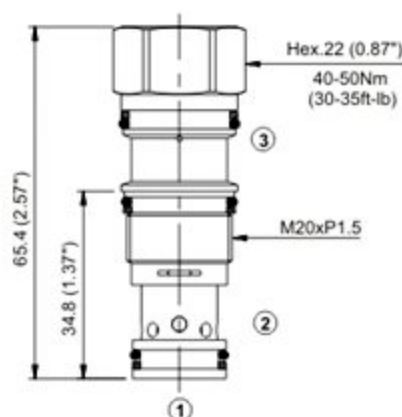
02 : T-11A
Cavity 孔口: CST-11A
See Page Appendixes-A_006
見附錄A_006頁面

3 VERSION 形式

VE : INTERNAL PILOT VE : 內部導壓
NONE : EXTERNAL PILOT 無 : 外部導壓

4 CRACKING PRESSURE 彈簧壓力

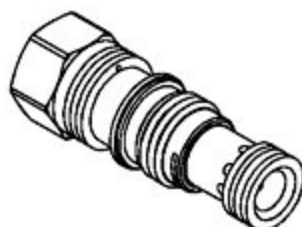
35	3.5 bar (50psi)
70	7.0 bar (100psi)

◆ **CONTROL PORT(S) 動作形式**◆ **DIMENSIONS 外型尺寸圖**

PRESSURE CONTROL VALVES 壓力控制閥

VBRP SERIES CARTRIDGE REDUCING VALVES (PILOT CONTROL VALVES) VBRP系列插入式減壓閥(導壓閥)

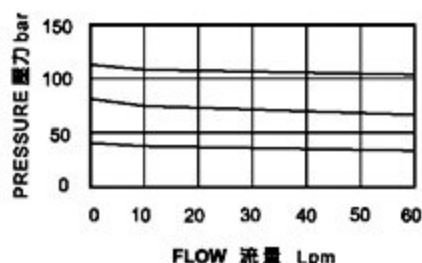
◆ MODEL 型 式 VBRP-02



◆ DESCRIPTION 說明

The-8 control option allows a pilot control valve to be incorporated directly into the end of the modulating element via the T-8A cavity. These pilot control cartridges are sold separately and include electro-proportional. Hydraulic pilot operation. T-8A控制是用導壓級控制閥直接插在減壓閥六角頭上的T-8A插孔中,導壓級控制閥需單獨訂購包括比例閥、液導。

◆ PERFORMANCE 特性曲線



◆ SPECIFICATIONS 規格

Model Number 型式號碼	Operating Pressure 操作壓力 bar	Flow 流量 lpm	Weight 重量 Kg
VBRP-02	350 (5076 psi)	40 (10.57 gpm)	0.15 (0.33 lbs)
Fluid Type 液體型式		ISO VG 32, 46, 68	
Viscosity 黏性 cSt		10~400 (59~1854 SSU)	
Operating Temperature 操作溫度 °C		-15~70 (-5~158 °F)	
Contamination Level 污染程度		ISO4406. 21/19/16 NAS1638,10	

◆ HOW TO ORDER 編號說明

1	2
VBRP	02

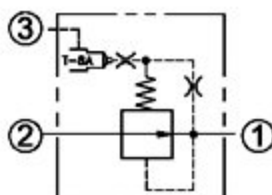
1 VALVE SERIES 系列名稱

VBRP= CARTRIDGE TYPE REDUCING VALVES (PILOT CONTROL VALVES)
插入式減壓閥(導壓閥)

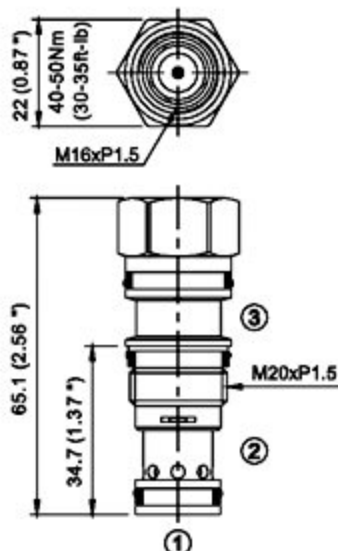
2 SUBPLATE MOUNTING SIZE 板穿口徑

02 :T-11A
Cavity 孔口:CST-11A
See Page Appendix-A_006
見附錄A_006頁面

◆ CONTROL PORT(S) 動作形式

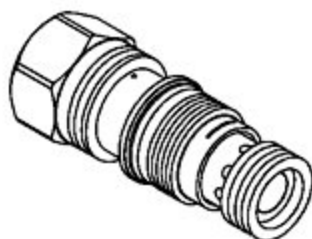


◆ DIMENSIONS 外型尺寸圖



◆ MODEL 型 式

VBRP-03

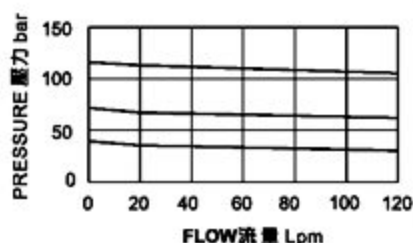


◆ DESCRIPTION 說明

The -8 control option allows a pilot control valve to be incorporated directly into the end of the modulating element via the T-8A cavity. These pilot control cartridges are sold separately and include electro-proportional. Hydraulic pilot operation.

T-8A控制是用導壓級控制閥直接插在減壓閥六角頭上的T-8A插孔中,導壓級控制閥需單獨訂購包括比例閥,液導。

◆ PERFORMANCE 特性曲線



◆ SPECIFICATIONS 規 格

Model Number 型 號	Operating Pressure 操作壓力 bar	Flow 流量 lpm	Weight 重量 Kg
VBRP-03	350 (5076 psi)	80 (21.13 gpm)	0.27 (0.59 lbs)
Fluid Type 液體型式		ISO VG 32, 46, 68	
Viscosity 黏性 cSt		10~400 (59~1854 SSU)	
Operating Temperature 操作溫度 °C		-15~70 (-5~158 °F)	
Contamination Level 污染標準		ISO4406, 21/19/16 NAS1638,10	

◆ HOW TO ORDER 圖號說明

1	2
VBRP	03

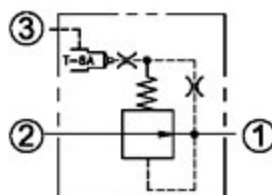
1 VALVE SERIES 系列名稱

VBRP= CARTRIDGE TYPE REDUCING VALVES
(PILOT CONTROL VALVES)
插入式減壓閥(導壓級)

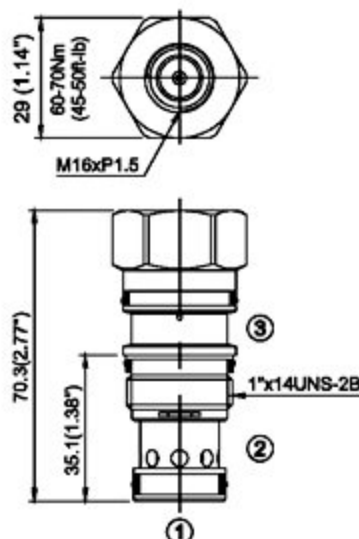
2 SUBPLATE MOUNTING SIZE 安裝口徑

03 : T-2A
Cavity 孔口: CST-2A
See Page Appendixes-A_006
見附錄A_006圖面

◆ CONTROL PORT(S) 動作形式



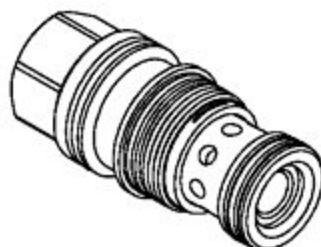
◆ DIMENSIONS 外型尺寸



PRESSURE CONTROL VALVES 壓力控制閥

VBRP SERIES CARTRIDGE REDUCING VALVES (PILOT CONTROL VALVES) VBRP系列插入式減壓閥(導壓閥)

◆ **MODEL 型 式** **VBRP-06**

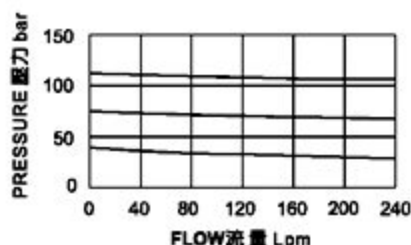


◆ **DESCRIPTION 說明**

The-8 control option allows a pilot control valve to be incorporated directly into the end of the modulating element via the T-8A cavity. These pilot control cartridges are sold separately and include electro-proportional, Hydraulic pilot operation.

T-8A控制是用導壓級控制閥直接插在減壓閥六角頭上的T-8A插孔中,導壓級控制閥需要單獨訂購包括比例閥,液導。

◆ **PERFORMANCE 特性曲線**



◆ **SPECIFICATIONS 規格**

Model Number 型式號碼	Operating Pressure 操作壓力 bar	Flow 流量 lpm	Weight 重量 Kg
VBRP-06	350 (5076 psi)	160 (42.27 gpm)	0.50 (1.10 lbs)
Fluid Type 液體型式		ISO VG 32, 46, 68	
Viscosity 黏性 cSt		10~400 (59~1854 SSU)	
Operating Temperature 操作溫度 °C		-15~70 (-5~158 °F)	
Contamination Level 污染程度		ISO4406. 21/19/16 NAS1638,10	

◆ **HOW TO ORDER 編號說明**

1	2
VBRP	06

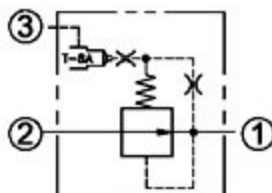
1 VALVE SERIES 系列名稱

VBRP= CARTRIDGE TYPE REDUCING VALVES
(PILOT CONTROL VALVES)
插入式減壓閥(導壓閥)

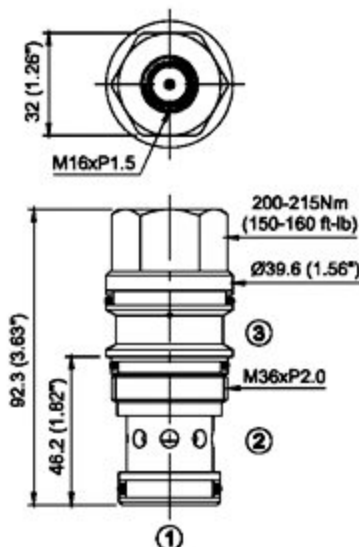
2 SUBPLATE MOUNTING SIZE 接口口徑

06 :T-17A
Cavity 孔口:CST-17A
See Page Appendix-A_007
見附錄A_007頁圖

◆ **CONTROL PORT(S) 動作形式**

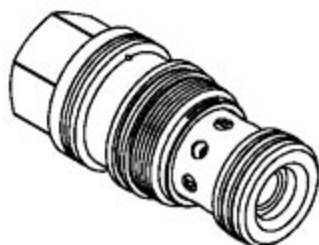


◆ **DIMENSIONS 外型尺寸圖**



◆ MODEL 型 式

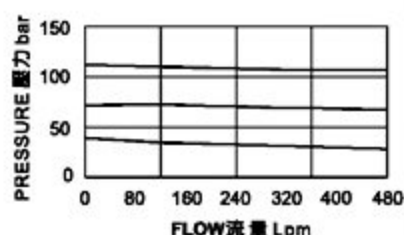
VBRP-10



◆ DESCRIPTION 說明

The-8 control option allows a pilot control valve to be incorporated directly into the end of the modulating element via the T-8A cavity. These pilot control cartridges are sold separately and include electro-proportional. Hydraulic pilot operation. T-8A控制是用導壓級控制閥直接插在減壓閥六角頭上的T-8A插孔中,導壓級控制閥需單獨訂購包括比例閥、液導。

◆ PERFORMANCE 特性曲線



◆ SPECIFICATIONS 規格

Model Number 型式號碼	Operating Pressure 操作壓力 bar	Flow 流量 lpm	Weight 重量 Kg
VBRP-10	350 (5076 psi)	320 (84.54 gpm)	1.08 (2.38 lbs)
Fluid Type 液體型式		ISO VG 32, 46, 68	
Viscosity 黏性 cSt		10~400 (59~1854 SSU)	
Operating Temperature 操作溫度 °C		-15~70 (-5~158 °F)	
Contamination Level 污染度等級		ISO4406, 21/19/16 NAS1638,10	

◆ HOW TO ORDER 編號說明

1	2
VBRP	10

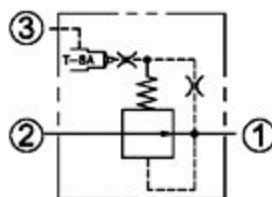
1 VALVE SERIES 系列名稱

VBRP= CARTRIDGE TYPE REDUCING VALVES
(PILOT CONTROL VALVES)
插入式減壓閥(導壓級)

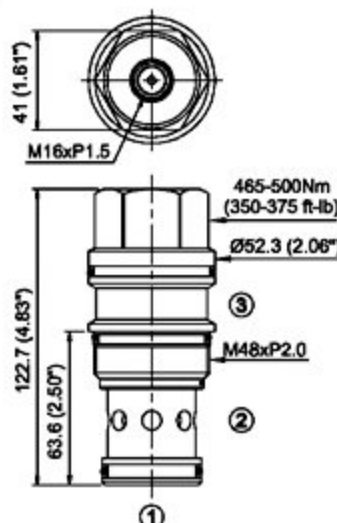
2 SUBPLATE MOUNTING SIZE 安裝口徑

10 :T-19A
Cavity 孔口:CST-19A
See Page Appendixes-A_007
見附錄A_007頁圖

◆ CONTROL PORT(S) 操作形式



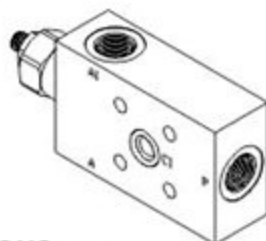
◆ DIMENSIONS 外型尺寸圖



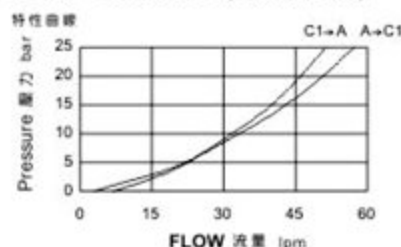
壓力控制閥 **PRESSURE CONTROL VALVES**

VBSE 系列插入式抗衝閥 VBSE SERIES CARTRIDGE TYPE COUNTER BALANCE VALVES

◆ MODEL 型 式 VBSE-03G



◆ PERFORMANCE (Cartridge Only)



◆ SPECIFICATIONS 規 格

Model Number 型式號碼	Maximum Pressure 最大壓力 bar	Adjustment Pressure 壓力調整範圍 bar	Maximum Flow 最大流量 lpm	Pilot Ratio 引導比例	Weight 重量 Kg
VBSE-03G	500 (7252 psi)	100~350	45 (11.89 gpm)	4.3 : 1	1.3 (2.87 lbs)
VBSE-04G			60 (15.85 gpm)		1.3 (2.87 lbs)
Fluid Type 液體型式		ISO VG 32 , 46 , 68			
Viscosity 黏性 cSt		10~400 (59~1854 SSU)			
Operating Temperature 操作溫度 °C		-15~70 (-5~158 °F)			
Contamination Level 污染標準		ISO4406, 21/19/16 NAS1638,10			

◆ HOW TO ORDER 編號說明

1	2	3	4	5
VBSE	03G	— *	— *	— *

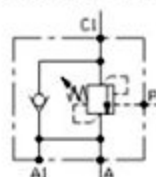
1 VALVE SERIES 系列名稱
VBSE= COUNTER BALANCE VALVES
抗衝閥

2 SUBPLATE MOUNTING SIZE 插口尺寸
03G : G3/8
04G : G1/2

3 ADJUSTMENT PRESSURE 壓力調整範圍

Order 編號	Adjustment pressure 壓力調整範圍
35	100 ~ 350 (bar)

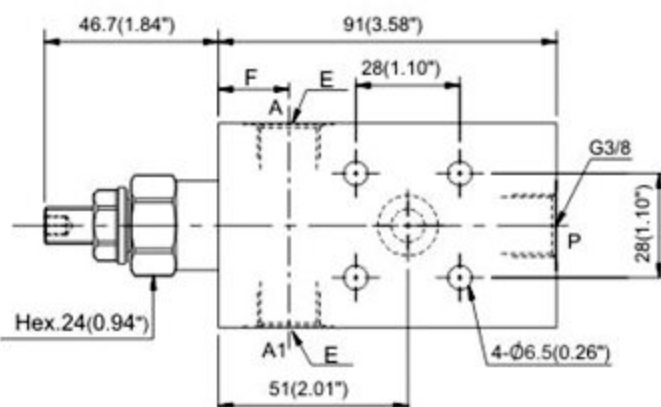
◆ CONTROL PORT(S) 動作形式



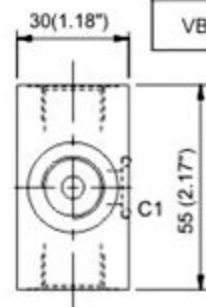
4 THREADED TYPE 螺紋規格
1P : PT 3G : PF(G) 5B : BSP
2N : NPT 4A : SAE

5 PILOT RATIO 引導比例
4A : 4.3:1

◆ DIMENSIONS 外型尺寸圖



Model 型式	Size 尺寸	E	F
VBSE-03G	G3/8	20 (0.79'')	
VBSE-04G	G1/2	19.5 (0.77'')	

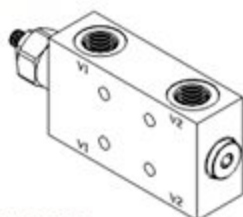


PRESSURE CONTROL VALVES 壓力控制閥

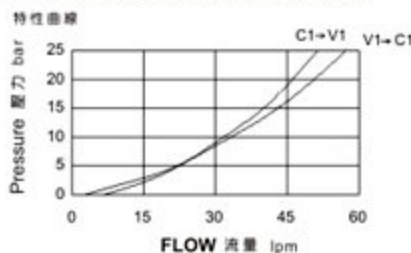
VBSE SERIES CARTRIDGE TYPE COUNTER BALANCE VALVES VBSE 系列插入式抗衝閥

◆ MODEL 型 式

VBSE-102G/103G/104G



◆ PERFORMANCE (Cartridge Only)



◆ SPECIFICATIONS 規 格

Model Number 型 式 號 碼	Maximum Pressure 最大壓力 bar	Adjustment Pressure 壓力調整範圍 bar	Maximum Flow 最大流量 lpm	Pilot Ratio 引導比例	Weight 重 量 Kg
VBSE-102G	500 (7252 psi)	100~350	20 (5.28 gpm)	4.3 : 1	1.8 (3.97 lbs)
VBSE-103G			45 (11.89 gpm)		1.8 (3.97 lbs)
VBSE-104G			60 (15.85 gpm)		2.0 (4.41 lbs)
Fluid Type 流體型式		ISO VG 32 , 46-, 68			
Viscosity 黏性 cSt		10~400 (59~1854 SSU)			
Operating Temperature 操作溫度 °C		-15~70 (-5~158 F)			
Contamination Level 污染標準		ISO4406. 21/19/16 NAS1638.10			

◆ HOW TO ORDER 編號說明

1	2	3	4
VBSE	103G	*	*

1 VALVE SERIES 系列名稱

VBSE= COUNTER BALANCE VALVES
抗衝閥

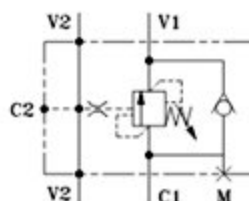
2 SUBPLATE MOUNTING SIZE 稱呼口徑

102G : G1/4 104G : G1/2
103G : G3/8

3 ADJUSTMENT PRESSURE 壓力調整範圍

Order 編號	Adjustment pressure 壓力調整範圍
35	100 ~ 350 (bar)

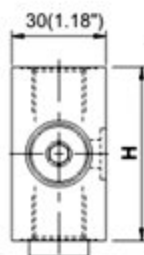
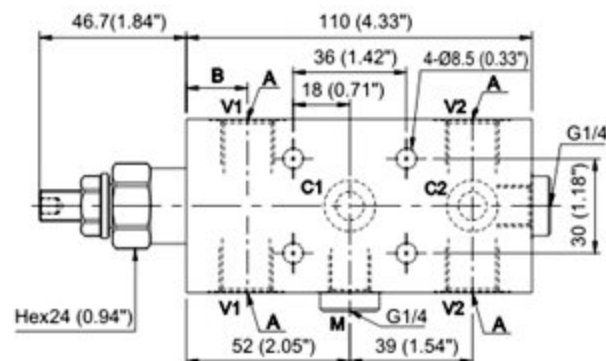
◆ CONTROL PORT(S) 動作形式



4 PILOT RATIO 引導比例

4A : 4.3:1

◆ DIMENSIONS 外型尺寸圖



Model 型 號	Size 尺寸	A	B	H
VBSE-102G	G1/4	19.5 (0.77")	55 (2.16")	
VBSE-103G	G3/8	19.5 (0.77")	55 (2.16")	
VBSE-104G	G1/2	18 (0.71")	65 (2.56")	

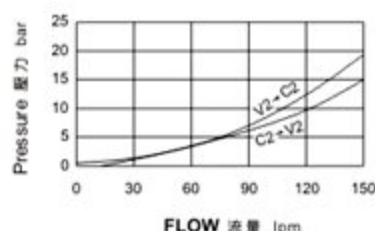
◆ **MODEL 型 式**

VBSE-104F



◆ **PERFORMANCE (Cartridge Only)**

特性曲線



◆ **SPECIFICATIONS 規 格**

Model Number 型式號碼	Maximum Pressure 最大壓力 bar	Adjustment Pressure 壓力調整範圍 bar	Maximum Flow 最大流量 lpm	Pilot Ratio 引導比例	Weight 重量 Kg
VBSE-104F	500 (7252 psi)	100~350	150 (39.63 gpm)	4 : 1	2.5 (5.51 lbs)
Fluid Type 液體型式		ISO VG 32, 46, 68			
Viscosity 黏性 cSt		10~400 (59~1854 SSU)			
Operating Temperature 操作溫度 °C		-15~70 (-5~158 °F)			
Contamination Level 污染標準		ISO4406: 21/19/16 NAS1638,10			

◆ **HOW TO ORDER 編號說明**

1	2	3	4
VBSE	104F	— *	— *

1 **VALVE SERIES 系列名稱**

VBSE=COUNTER BALANCE VALVES
抗衝閥

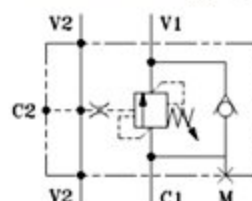
2 **SUBPLATE MOUNTING SIZE 端接口徑**

104F : G1/2"

3 **ADJUSTMENT PRESSURE 壓力調整範圍**

Order 編號	Adjustment pressure 壓力調整範圍
35	100 ~ 350 (bar)

◆ **CONTROL PORT(S) 動作形式**

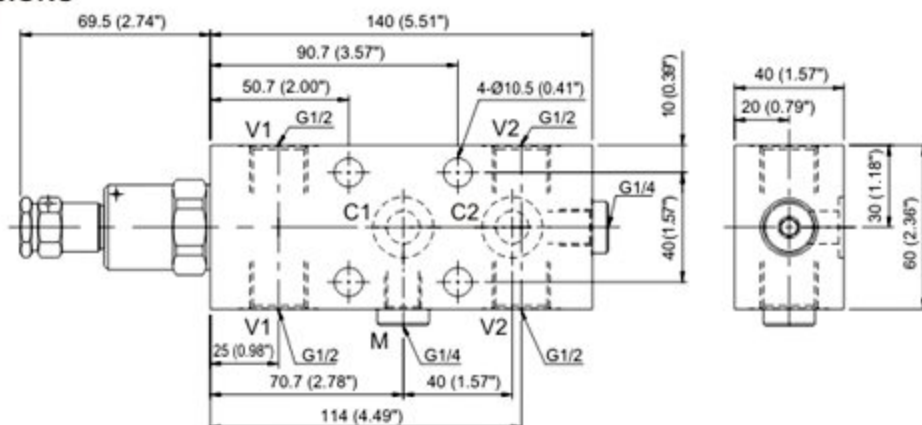


4 **THREADED TYPE 螺紋規格**

1P : PT 3G : PF(G) 5B : BSP
2N : NPT 4A : SAE

◆ **DIMENSIONS**

外型尺寸圖

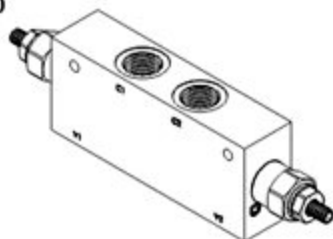


PRESSURE CONTROL VALVES 壓力控制閥

VBSE SERIES CARTRIDGE TYPE COUNTER BALANCE VALVES VBSE 系列插入式平衡閥

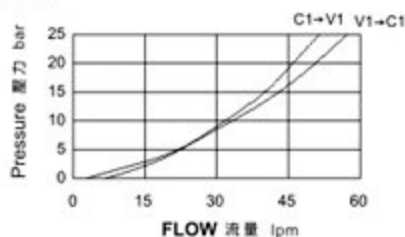
◆ MODEL 型 式

VBSE-120



◆ PERFORMANCE (Cartridge Only)

特性曲線



◆ SPECIFICATIONS 規 格

Model Number 型式號碼	Maximum Pressure 最大壓力 bar	Adjustment Pressure 壓力調整範圍 bar	Maximum Flow 最大流量 lpm	Pilot Ratio 引導比例	Weight 重量 Kg
VBSE-120	500 (7252 psi)	100~350	60 (15.85 gpm)	4.3 : 1	2.6 (5.73 lbs)
VBSE-380	500 (7252 psi)	100~350	45 (11.89 gpm)	4.3 : 1	2.6 (5.73 lbs)
Fluid Type 液體型式		ISO VG 32, 46, 68			
Viscosity 黏性 cSt		10~400 (59~1854 SSU)			
Operating Temperature 操作溫度 °C		-15~70 (-5~158 °F)			
Contamination Level 污染標準		ISO4406, 21/19/16 NAS1638,10			

◆ HOW TO ORDER 編號說明

1	2	3	4	5
VBSE	120	— *	— *	— *

1 VALVE SERIES 系列名稱

VBSE= COUNTER BALANCE VALVES
平衡閥

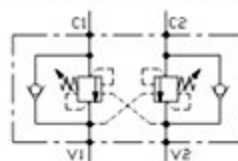
2 SUBPLATE MOUNTING SIZE 端接口徑

120: 1/2"
380: 3/8"

3 ADJUSTMENT PRESSURE 壓力調整範圍

Order 編號	Adjustment pressure 壓力調整範圍
35	100 ~ 350 (bar)

◆ CONTROL PORT(S) 動作形式



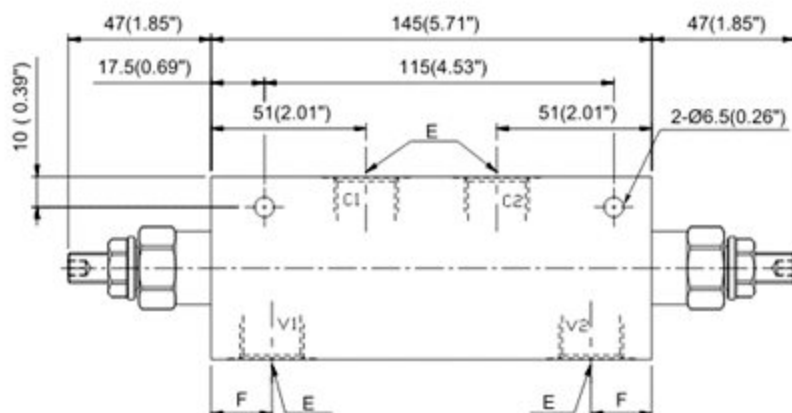
4 THREADED TYPE 螺紋規格

1P : PT 3G : PF(G) 5B : BSP
2N : NPT 4A : SAE

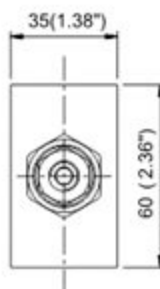
5 PILOT RATIO 引導比例

4A : 4.3:1

◆ DIMENSIONS 外型尺寸圖



Model 型式	Size 尺寸	E	F
VBSE-380	G3/8	20 (0.79")	
VBSE-120	G1/2	19 (0.75")	



◆ **MODEL 型 式**

VBSE-340



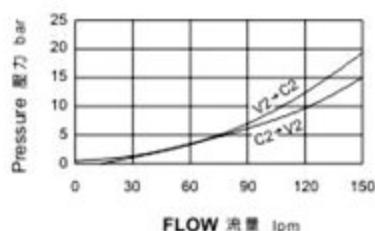
◆ **DESCRIPTION 說明**

Single overcenter valves, to be connected as shown.
The oil flow from the screw side, is added to the pump flow, to speed the cylinder extension with low load.
The function of counterbalance and relief are affected, when the pilot pressure exceed a preset value.

單一抗衝閥，連接如所示，來自螺桿側的流量，加上泵流量來加速油壓缸，在低承載時的速度，當引導壓力超過設定值時，此閥就有抗衝及洩荷的功能。

◆ **PERFORMANCE (Cartridge Only)**

特性曲線



◆ **SPECIFICATIONS 規 格**

Model Number 型式號碼	Maximum Pressure 最大壓力 bar	Adjustment Pressure 壓力調整範圍 bar	Maximum Flow 最大流量 lpm	Pilot Ratio 引導比例	Weight 重量 Kg
VBSE-340	500 (7252 psi)	100~350	150 (39.63 gpm)	4 : 1	3.6 (7.94 lbs)
Fluid Type 液體型式		ISO VG 32, 46, 68			
Viscosity 黏性 cSt		10~400 (59~1854 SSU)			
Operating Temperature 操作溫度 °C		-15~70 (-5~158 °F)			
Contamination Level 污染標準		ISO4406, 21/19/16 NAS1638,10			

◆ **HOW TO ORDER 編號說明**

1	2	3	4
VBSE	340	— *	— *

1 VALVE SERIES 系列名稱

VBSE=COUNTER BALANCE VALVES
抗衝閥

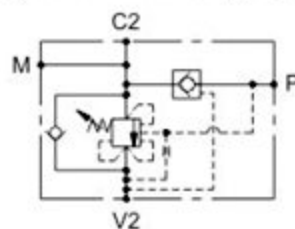
2 SUBPLATE MOUNTING SIZE 插板口徑

340 : G3/4"

3 ADJUSTMENT PRESSURE 壓力調整範圍

Order 編號	Adjustment pressure 壓力調整範圍
35	100 ~ 350 (bar)

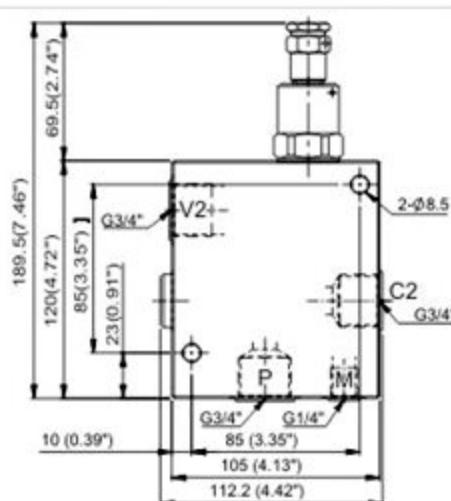
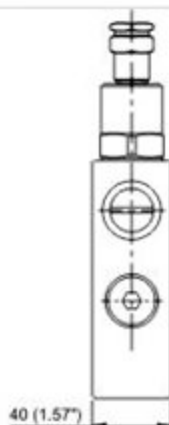
◆ **CONTROL PORT(S) 動作形式**



4 THREADED TYPE 螺紋規格

1P : PT 3G : PF(G) 5B : BSP
2N : NPT 4A : SAE

◆ **DIMENSIONS 外型尺寸圖**

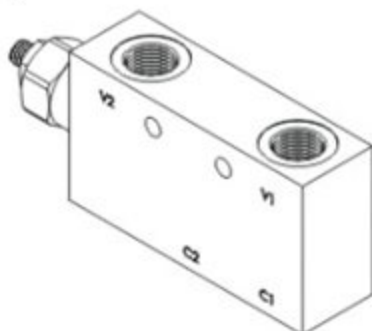


PRESSURE CONTROL VALVES 壓力控制閥

VBSO SERIES CARTRIDGE TYPE COUNTER BALANCE VALVES VBSO 系列插入式減壓閥

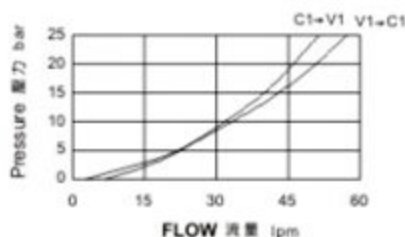
◆ MODEL 型 式

VBSO-03T



◆ PERFORMANCE (Cartridge Only)

特性曲線



◆ SPECIFICATIONS 規格

Model Number 型式號碼	Maximum Pressure 最大壓力 bar	Pilot Ratio 引壓比例	Adjustment Pressure 壓力調整範圍 bar	Maximum Flow 最大流量 Lpm	Weight 重量 Kg
VBSO-03T	350 (5076 psi)	4.3 : 1	100~350	45 (11.89 gpm)	1.38 (3.04 lbs)
Fluid Type 液體型式			ISO VG 32,46,68		
Viscosity 黏性 cSt			10~400 (59~1854SSU)		
Operating Temperature 操作溫度 °C			-15~70 (-5~158°F)		
Contamination Level 污染標準			ISO4406, 21/19/16 NAS1638,10		

◆ HOW TO ORDER 編號說明

1	2	3
VBSO	03T	*

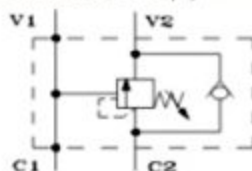
- 1 VALVE SERIES** 系列名稱
VBSO=COUNTER BALANCE VALVES
減壓閥

- 2 SUBPLATE MOUNTING SIZE** 板厚口徑
03= 3/8"

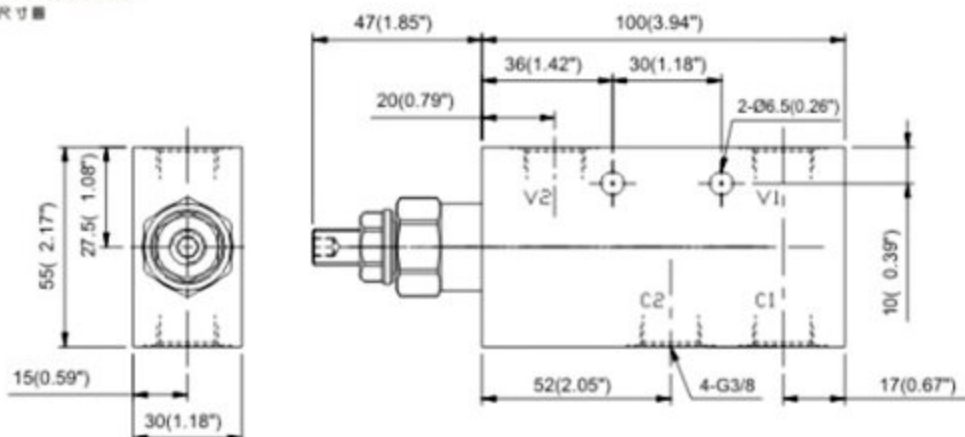
- 3 ADJUSTMENT PRESSURE** 壓力調整範圍

Order 編號	Adjustment pressure 壓力調整範圍
3	100 ~ 350 (bar)

◆ CONTROL PORT(S) 動作形式

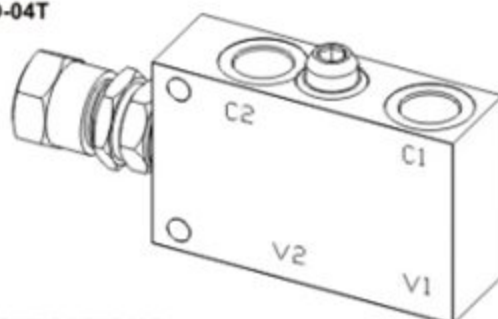


◆ DIMENSIONS 外型尺寸圖



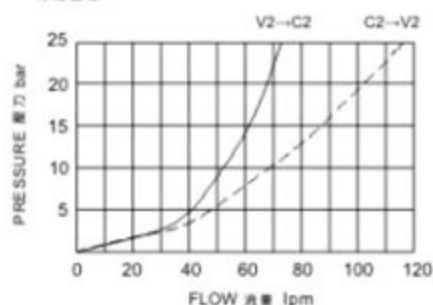
◆ **MODEL 型 式**

VBSO-04T



◆ **PERFORMANCE (Cartridge Only)**

特性曲線



◆ **SPECIFICATIONS 規 格**

Model Number 型 式 號 碼	Maximum Pressure 最大壓力 bar	Pilot Ratio 引導比例	Adjustment Pressure 壓力調整範圍 bar	Maximum Flow 最大流量 Lpm	Weight 重量 Kg
VBSO-04T	350 (5076 psi)	3.2:1 / 8:1	100~350	120 (31.70 gpm)	0.91 (2.00 lbs)
Fluid Type 液體型式			ISO VG 32,46,68		
Viscosity 黏性 cSt			10~400 (59~1854SSU)		
Operating Temperature 操作溫度 °C			-15~70 (-5~158°F)		
Contamination Level 污染標準			ISO4406, 21/19/16 NAS1638,10		

◆ **HOW TO ORDER 編號說明**

1	2	3	4
VBSO	04T	*	*

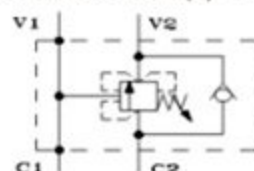
1 VALVE SERIES 系列名稱
VBSO=COUNTER BALANCE VALVES
平衡閥

2 SUBPLATE MOUNTING SIZE 插接口徑
04= 1/2"

3 ADJUSTMENT PRESSURE 壓力調整範圍

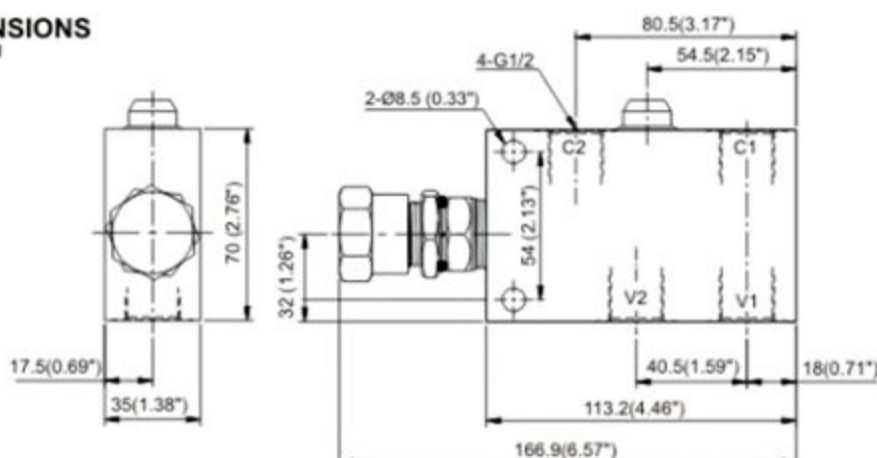
Order 編號	Adjustment pressure 壓力調整範圍
3	100 ~ 350 (bar)

◆ **CONTROL PORT(S) 動作形式**



4 PILOT RATIO 引導比例
3A: 3.2:1
8A: 8:1

◆ **DIMENSIONS 外型尺寸圖**

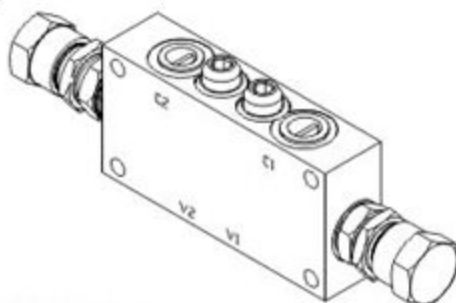


PRESSURE CONTROL VALVES 壓力控制閥

VBSO SERIES CARTRIDGE TYPE COUNTER BALANCE VALVES VBSO 系列插入式控制閥

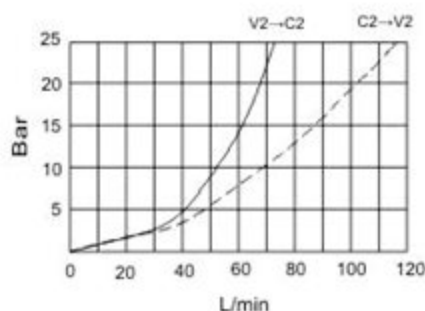
◆ **MODEL 型 式**

VBSO-04-W



◆ **PERFORMANCE (Cartridge Only)**

動作形式



◆ **SPECIFICATIONS 規格**

Model Number 型式號碼	Maximum Pressure 最大壓力 bar	Pilot Ratio 引導比例	Adjustment Pressure 壓力調整範圍 bar	Maximum Flow 最大流量 Lpm	Weight 重量 Kg
VBSO-04-W	350 (5076psi)	3.2:1 / 8:1	*~350	120 (31.70 gpm)	1.3 (2.87bs)
Fluid Type 液體型式			ISO VG 32,46,68		
Viscosity 黏性 cSt			10~400 (59~1854SSU)		
Operating Temperature 操作溫度 °C			-15~70 (-5~158°F)		
Contamination Level 污染標準			ISO4406, 21/19/16 NAS1638,10		

◆ **HOW TO ORDER 編號說明**

1	2	3	4
VBSO	04W	3	*

1 VALVE SERIES 系列名稱

VBSO = TWO-WAY COUNTER BALANCE VALVES
雙向平衡閥

2 SUBPLATE MOUNTING SIZE 插接口徑

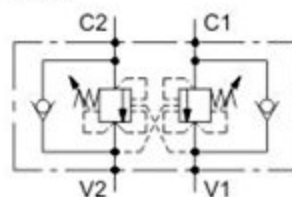
04W = 1/2"

3 ADJUSTMENT PRESSURE 壓力調整範圍

Order 編號	Adjustment pressure 壓力調整範圍
3	100 ~ 350 (bar)

◆ **CONTROL PORT(S)**

動作形式

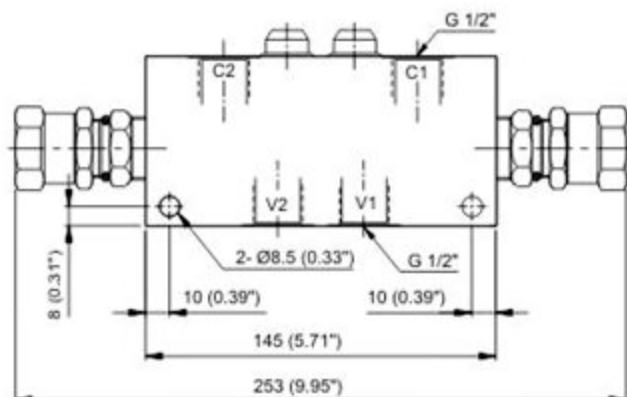
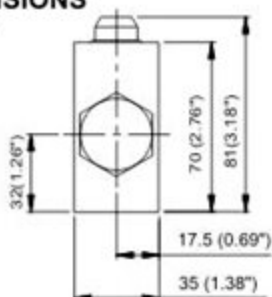


4 PILOT RATIO 引導比例

3A : 3.2:1
8A : 8:1

◆ **DIMENSIONS**

外型尺寸圖



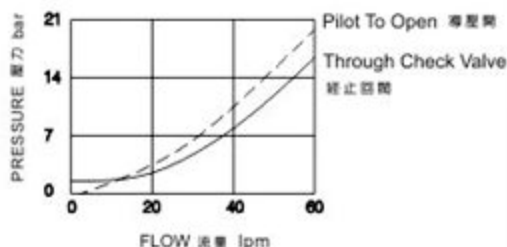
PRESSURE CONTROL VALVES 壓力控制閥

VCB SERIES CARTRIDGE TYPE COUNTER BALANCE VALVES VCB 系列插入式平衡閥

◆ **MODEL 型 式** VCB-02



◆ **PERFORMANCE (Cartridge Only) 特性曲線**



◆ **SPECIFICATIONS 規 格**

Model Number 型式號碼	Maximum Pressure 最大壓力 bar	Pilot Ratio 引導比例	Adjustment Pressure 壓力調整範圍 bar	Maximum Flow 最大流量 lpm	Weight 重量 Kg
VCB-02	350 (5076 psi)	1.5:1 / 3:1 / 4.5:1 / 10:1	* ~ 350	60 (15.85 gpm)	0.2 (0.44 lbs)
Fluid Type 液體型式			ISO VG 32, 46, 68		
Viscosity 黏性 cSt			10~400 (59~1854 SSU)		
Operating Temperature 操作溫度 °C			-15~70 (-5~158 °F)		
Contamination Level 污染標準			ISO4406 21/19/16 NAS1638,10		

◆ **HOW TO ORDER 編號說明**

1	2	3	4
VCB	02	— 10 —	3A

1 VALVE SERIES 系列名稱

VCB = Overcentre Valve Pilot Assisted Relief With Check
引導式抗衝洩載閥

2 PORTING 端口

02:T-11A
Cavity 孔口: CST-11A
See Page Appendixes-A_006
見附錄A_006 頁面

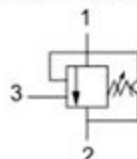
3 ADJUSTMENT PRESSURE 壓力調整範圍

Check Spring Pressure 1.8bar 止逆閥彈簧壓力 1.8bar			Check Spring Pressure 0.3bar 止逆閥彈簧壓力 0.3bar		
Order 編號	Adjustment pressure 壓力調整範圍	Pilot ratio 引導比例	Order 編號	Adjustment pressure 壓力調整範圍	Pilot ratio 引導比例
10	25 ~ 105 (bar)	1.5:1	25	25 ~ 105 (bar)	1.5:1
28	70 ~ 280 (bar)	3:1	70	70 ~ 280 (bar)	3:1
17	70 ~ 175 (bar)	10:1	80	70 ~ 175 (bar)	10:1
35	140 ~ 350 (bar)	4.5:1	14	140 ~ 350 (bar)	4.5:1

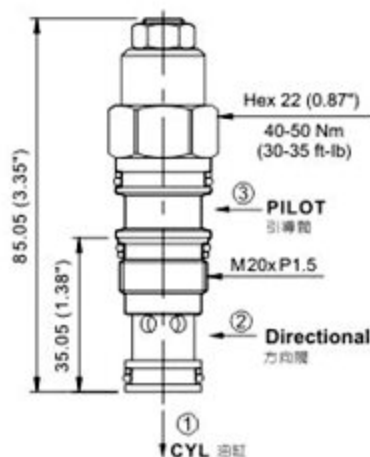
4 PILOT RATIO 引導比例

1.5A : 1.5:1
3A : 3:1
4A : 4.5:1
10A : 10:1

◆ **CONTROL PORT(S) 動作形式**



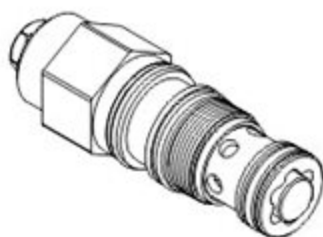
◆ **DIMENSIONS 外型尺寸圖**



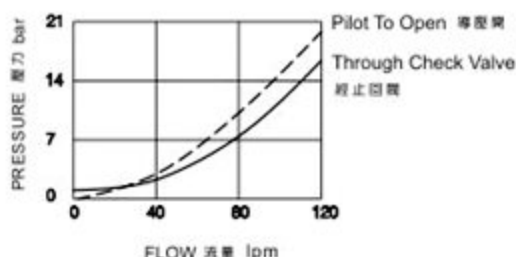
壓力控制閥 **PRESSURE CONTROL VALVES**

VCB 系列插入式抗衝擊 VCB SERIES CARTRIDGE TYPE COUNTER BALANCE VALVES

◆ MODEL 型 式 VCB-03



◆ PERFORMANCE (Cartridge Only) 特性曲線



◆ SPECIFICATIONS 規 格

Model Number 型式號碼	Maximum Pressure 最大壓力 bar	Pilot Ratio 引導比例	Adjustment Pressure 壓力調整範圍 bar	Maximum Flow 最大流量 lpm	Weight 重量 Kg
VCB-03	350 (5076 psi)	1.5:1 / 3:1 / 4.5:1 / 10:1	* ~ 350	120 (31.70 gpm)	0.3 (0.68 lbs)
Fluid Type 液體型式			ISO VG 32, 46, 68		
Viscosity 黏性 cSt			10~400 (59~1854 SSU)		
Operating Temperature 操作溫度 °C			-15~70 (-5~158 °F)		
Contamination Level 污染標準			ISO4406. 21/19/16 NAS1638,10		

◆ HOW TO ORDER 編號說明

1	2	3	4
VCB	03	— 10	— 3A

- 1 VALVE SERIES 系列名稱**
VCB = Overcentre Valve Pilot Assisted Relief With Check
引導式抗衝擊液壓閥

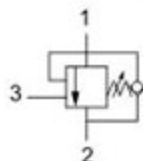
- 2 PORTING 端口**
03:T-2A
Cavity 孔口: CST-2A
See Page Appendixes-A_006
規格表A_006 頁面

- 3 ADJUSTMENT PRESSURE 壓力調整範圍**

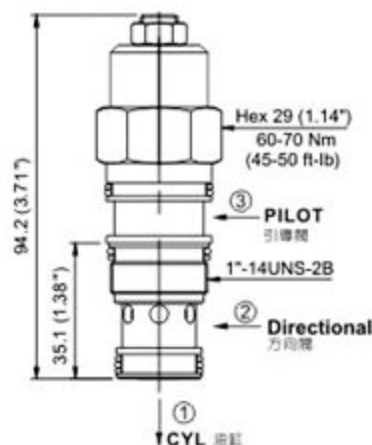
Check Spring Pressure 1.8bar 止回閥彈簧壓力 1.8bar			Check Spring Pressure 0.3bar 止回閥彈簧壓力 0.3bar		
Order 編號	Adjustment pressure 壓力調整範圍	Pilot ratio 引導比例	Order 編號	Adjustment pressure 壓力調整範圍	Pilot ratio 引導比例
10	25 ~ 105 (bar)	1.5:1	25	25 ~ 105 (bar)	1.5:1
28	70 ~ 280 (bar)	3:1	70	70 ~ 280 (bar)	3:1
17	70 ~ 175 (bar)	10:1	80	70 ~ 175 (bar)	10:1
35	140 ~ 350 (bar)	4.5:1	14	140 ~ 350 (bar)	4.5:1

- 4 PILOT RATIO 引導比例**
1.5A : 1.5:1
3A : 3:1
4A : 4.5:1
10A : 10:1

◆ CONTROL PORT(S) 動作形式



◆ DIMENSIONS 外型尺寸圖



PRESSURE CONTROL VALVES 壓力控制閥

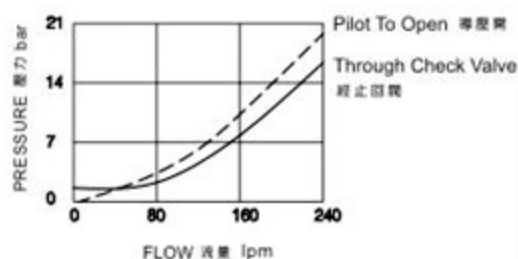
VCB SERIES CARTRIDGE TYPE COUNTER BALANCE VALVES VCB 系列插入式抗衝閥

◆ **MODEL** 型 式

VCB-06



◆ **PERFORMANCE**(Cartridge Only) 特性曲線



◆ **SPECIFICATIONS** 規 格

Model Number 型 式 號	Maximum Pressure 最大壓力 bar	Pilot Ratio 引導比例	Adjustment Pressure 壓力調整範圍 bar	Maximum Flow 最大流量 lpm	Weight 重量 Kg
VCB-06	350 (5076 psi)	1.5:1 / 3:1 / 4.5:1 / 10:1	* ~ 350	240 (63.40 gpm)	0.61 (1.35 lbs)
Fluid Type 液體型式			ISO VG 32 , 46 , 68		
Viscosity 黏 性 cSt			10~400 (59~1854 SSU)		
Operating Temperature 操作溫度 °C			-15~70 (-5~158 °F)		
Contamination Level 污染標準			ISO4406: 21/19/16 NAS1638,10		

◆ **HOW TO ORDER** 編號說明

1	2	3	4
VCB	06	10	3A

1 VALVE SERIES 系列名稱

VCB = Overcentre Valve Pilot Assisted Relief With Check
引導式抗衝洩載閥

2 PORTING 端口

06:T-17A
Cavity 孔口: CST-17A
See Page Appendixes-A_007
見附錄A_007 頁數

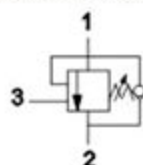
3 ADJUSTMENT PRESSURE 壓力調整範圍

Check Spring Pressure 1.8bar 止逆閥彈簧壓力 1.8bar			Check Spring Pressure 0.3bar 止逆閥彈簧壓力 0.3bar		
Order 編號	Adjustment pressure 壓力調整範圍	Pilot ratio 引導比例	Order 編號	Adjustment pressure 壓力調整範圍	Pilot ratio 引導比例
10	25 ~ 105 (bar)	1.5:1	25	25 ~ 105 (bar)	1.5:1
28	70 ~ 280 (bar)	3:1	70	70 ~ 280 (bar)	3:1
17	70 ~ 175 (bar)	10:1	80	70 ~ 175 (bar)	10:1
35	140 ~ 350 (bar)	4.5:1	14	140 ~ 350 (bar)	4.5:1

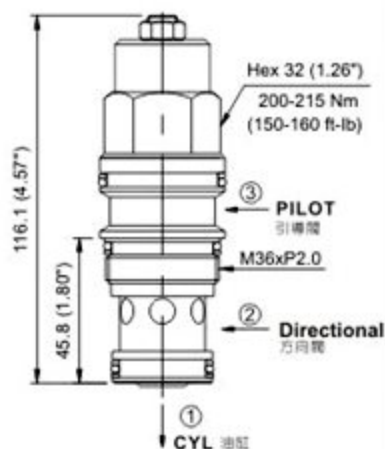
4 PILOT RATIO 引導比例

1.5A : 1.5:1
3A : 3:1
4A : 4.5:1
10A : 10:1

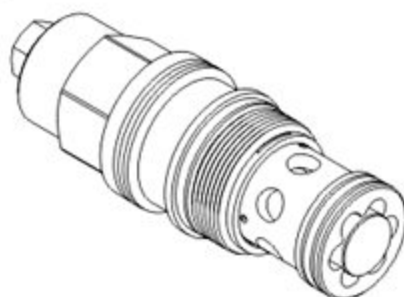
◆ **CONTROL PORT(S)** 動作形式



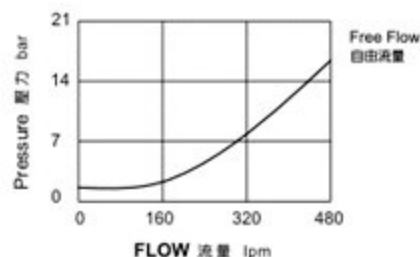
◆ **DIMENSIONS** 外型尺寸圖



◆ **MODEL 型 式**
VCB-10



◆ **PERFORMANCE (Cartridge Only)**
特性曲線



◆ **SPECIFICATIONS 規 格**

Model Number 型 式 號	Maximum Pressure 最大壓力 bar	Pilot Ratio 引導比例	Adjustment Pressure 壓力調整範圍 Bar	Maximum Flow 最大流量 lpm	Weight 重量 Kg
VCB-10	350 (5076 psi)	1.5:1 / 3:1 / 4.5:1 / 10:1	* ~ 350	480 (105.58 gpm)	1.6 (3.53 lbs)
Fluid Type 流體型式			ISO VG 32, 46, 68		
Viscosity 黏性 cSt			10~400 (59~1854 SSU)		
Operating Temperature 操作溫度 °C			-15~70 (-5~158°F)		
Contamination Level 污染標準			ISO4406, 21/19/16 NAS1638,10		

◆ **HOW TO ORDER 編號說明**

1	2	3	4
VCB	10	10	3A

1 VALVE SERIES 系列名稱

VCB = OVERCENTRE VALVE PILOT ASSISTED
RELIEF WITH CHECK
引導式抗衝洩載閥

2 SUBPLATE MOUNTING SIZE 稱呼口徑

10 : T-19A
Cavity 孔口: CST-19A
See Page Appendixes-A_007
見附錄 A_007 頁面

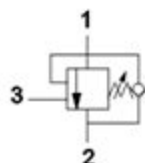
3 ADJUSTMENT PRESSURE 壓力調整範圍

Check Spring Pressure 1.8bar 止逆閥彈簧壓力 1.8bar			Check Spring Pressure 0.3bar 止逆閥彈簧壓力 0.3bar		
Order 編號	Adjustment pressure 壓力調整範圍	Pilot ratio 引導比例	Order 編號	Adjustment pressure 壓力調整範圍	Pilot ratio 引導比例
10	25 ~ 105 (bar)	1.5:1	25	25 ~ 105 (bar)	1.5:1
28	70 ~ 280 (bar)	3:1	70	70 ~ 280 (bar)	3:1
17	70 ~ 175 (bar)	10:1	80	70 ~ 175 (bar)	10:1
35	140 ~ 350 (bar)	4.5:1	14	140 ~ 350 (bar)	4.5:1

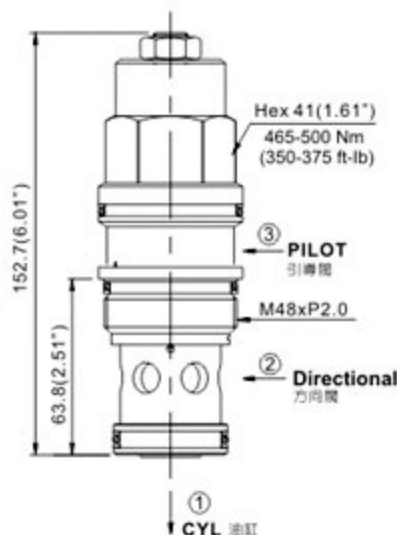
4 PILOT RATIO 引導比例

1.5A : 1.5:1
3A : 3:1
4A : 4.5:1
10A : 10:1

◆ **CONTROL PORT(S) 動作形式**



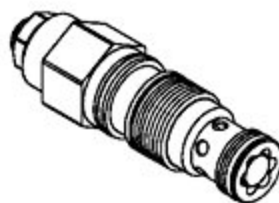
◆ **DIMENSIONS 外型尺寸圖**



PRESSURE CONTROL VALVES 壓力控制閥

VCBA SERIES CARTRIDGE TYPE COUNTER BALANCE VALVES (RESTRICTIVE) VCBA 系列嵌入式流量限制平衡閥

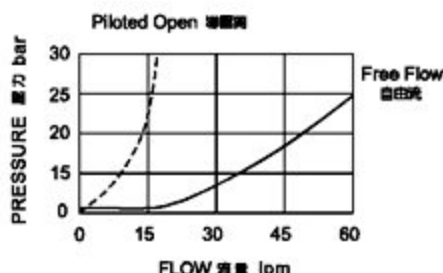
MODEL 型 式 **VCBA-02**



DESCRIPTION 說明

Counterbalance valves with pilot assist are meant to control an overrunning load. The check valve allows free flow from the directional valve (port 2) to the load (port 1). While a direct-acting, pilot-assisted relief valve controls flow from port 1 to port 2. Pilot assist at port 3 lowers the effective setting of the relief valve at a rate determined by the pilot ratio. Other names for this valve include motion control valve and over center valve. 帶先導協助閥的平衡閥是用來控制過載負載。它允許從液壓方向閥(口2)到負載口(口1)單向自由流動,同時溢流式,先導協助溢流閥功能可以控制從口1到口2的溢流。口3的先導油壓以先導比率的作用來降低溢流閥的有效設定值。此閥常被稱為運動控制閥或者越中心閥。

PERFORMANCE (Cartridge Only) 特性曲線



SPECIFICATIONS 規格

Model Number 型式號碼	Maximum Pressure 最大壓力 bar	Pilot Ratio 引導比例	Adjustment Pressure 壓力調整範圍 bar	Maximum Flow 最大流量 lpm	Weight 重量 Kg
VCBA-02	350 (5076 psi)	3:1 / 4.5:1 / 10:1	* ~ 350	20 (5.28 gpm)	0.2 (0.44 lbs)
Fluid Type 液體類型			ISO VG 32, 46, 68		
Viscosity 黏性 cSt			10-400 (59-1854 SSU)		
Operating Temperature 操作溫度 °C			-15~70 (-5~158°F)		
Contamination Level 污染標準			ISO4406: 21/19/16 NAS1638,10		

HOW TO ORDER 編號說明

1	2	3	4
VCBA	02	10	3A

1 VALVE SERIES 系列名稱

VCBA = Overcentre Valve Pilot Assisted Relief With Check (Restrictive) 引導式抗衝溢流閥 (流量限制)

2 PORTING 端口

02-T-11A
Cavity 孔口: CST-11A
See Page Appendixes-A_006
見附錄A_006 頁面

3 ADJUSTMENT PRESSURE 壓力調整範圍

Check Spring Pressure 1.8bar 止逆閥彈簧壓力 1.8bar			Check Spring Pressure 0.3bar 止逆閥彈簧壓力 0.3bar		
Order 編號	Adjustment pressure 壓力調整範圍	Pilot ratio 引導比例	Order 編號	Adjustment pressure 壓力調整範圍	Pilot ratio 引導比例
10	25 ~ 105 (bar)	3:1	25	25 ~ 105 (bar)	3:1
28	70 ~ 280 (bar)		70	70 ~ 280 (bar)	
17	70 ~ 175 (bar)	4.5:1	80	70 ~ 175 (bar)	4.5:1
35	140 ~ 350 (bar)		14	140 ~ 350 (bar)	

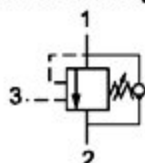
4 PILOT RATIO 引導比例

3A : 3:1 10A : 10:1
4A : 4.5:1

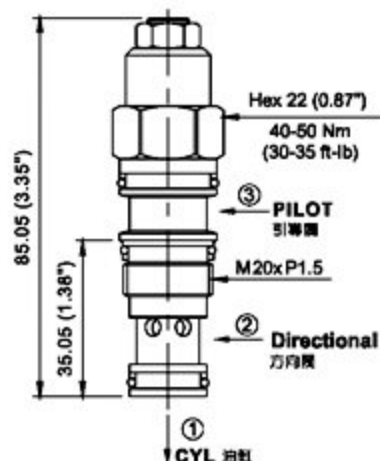
TECHNICAL FEATURES 技術特性

- Counterbalance valves should be set at least 1.3 time the maximum load induced pressure.
平衡閥的設定值應該至少為負載壓力值的1.3倍。
- Restrictive valves have no relief capacity other than as a thermal relief.
流量限制閥除了作為熱釋放外,沒有其他溢流能力。
- Reset exceeds 85% of set pressure when the valve is standard set. Settings lower than the standard set pressure may result in lower reset percentages.
標準設定下,閥的復位壓力僅高於設定值的85%。當設定值小於標準設定值,復位壓力值的百分比將相對變小。
- This valve has positive seals between all ports.
此閥在所有端口之間都有完全密封。

CONTROL PORT(S) 操作形式



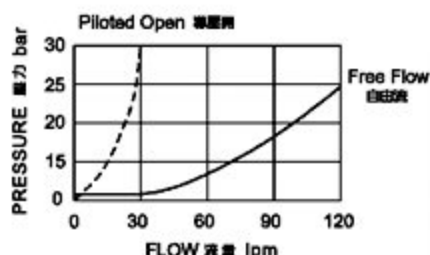
DIMENSIONS 外型尺寸圖



◆ **MODEL 型 式**
VCBA-03◆ **DESCRIPTION 說明**

Counterbalance valves with pilot assist are meant to control an overrunning load. The check valve allows free flow from the directional valve (port 2) to the load (port 1). While a direct-acting, pilot-assisted relief valve controls flow from port 1 to port 2. Pilot assist at port 3 lowers the effective setting of the relief valve at a rate determined by the pilot ratio.

Other names for this valve include motion control valve and over center valve. 帶先導協助卸壓的平衡閥是用來控制過載負載。它允許油液從方向閥(口2)到負載口(口1)單向自由流動。同時直動式、先導協助卸壓功能可以控制從口1到口2的流動。口3的先導協助以先導比率的作用來降低卸壓功能的有效設定值。此閥通常被稱為運動控制閥或者越過中心閥。

◆ **PERFORMANCE (Cartridge Only) 特性曲線**◆ **SPECIFICATIONS 規格**

Model Number 型式號碼	Maximum Pressure 最大壓力 bar	Pilot Ratio 引導比例	Adjustment Pressure 壓力調整範圍 bar	Maximum Flow 最大流量 lpm	Weight 重量 Kg
VCBA-03	350 (5076 psi)	3:1 / 4.5:1	※ ~ 350	30 (7.93 gpm)	0.3 (0.68 lbs)
Fluid Type 液體型式			ISO VG 32, 46, 68		
Viscosity 黏性 cSt			10~400 (59~1854 SSU)		
Operating Temperature 操作溫度 °C			-15~70 (-5~158°F)		
Contamination Level 污染標準			ISO4406: 21/19/16 NAS1638,10		

◆ **HOW TO ORDER 編號說明**

1	2	3	4
VCBA	03	10	3A

◆ **1 VALVE SERIES 系列名稱**

VCBA = Overcentre Valve Pilot Assisted Relief With Check (Restrictive) 引導式抗衝洩壓閥 (全阻滯型)

◆ **2 PORTING 端口**

03:T-2A

Cavity 3口: CST-2A

See Page Appendixes-A_006

見附錄A_006 頁面

◆ **3 ADJUSTMENT PRESSURE 壓力調整範圍**

Check Spring Pressure 1.8bar 止逆閥彈簧壓力 1.8bar			Check Spring Pressure 0.3bar 止逆閥彈簧壓力 0.3bar		
Order 廠號	Adjustment pressure 壓力調整範圍	Pilot ratio 引導比例	Order 廠號	Adjustment pressure 壓力調整範圍	Pilot ratio 引導比例
10	25 ~ 105 (bar)	3:1	25	25 ~ 105 (bar)	3:1
28	70 ~ 280 (bar)		70	70 ~ 280 (bar)	
17	70 ~ 175 (bar)	4.5:1	60	70 ~ 175 (bar)	4.5:1
35	140 ~ 350 (bar)		14	140 ~ 350 (bar)	

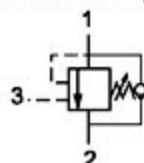
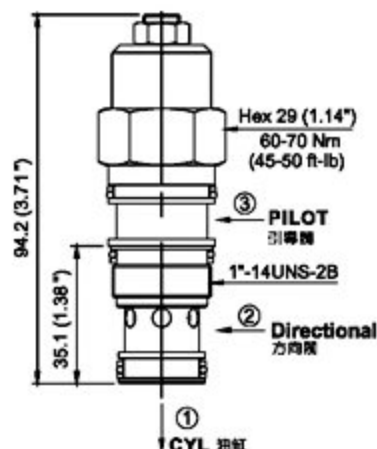
◆ **PILOT RATIO 引導比例**

3A : 3:1

4A : 4.5:1

◆ **TECHNICAL FEATURES 技術特性**

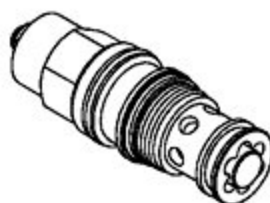
- Counterbalance valves should be set at least 1.3 time the maximum load induced pressure.
平衡閥的設定值應至少為負載壓力值的1.3倍。
- Restrictive valves have no relief capacity other than as a thermal relief.
全阻滯閥僅能靠熱膨脹來泄壓。
- Reset exceeds 85% of set pressure when the valve is standard set.
Settings lower than the standard set pressure may result in lower reset percentages.
標準設定下, 閥的復位壓力僅高於設定值的85%。設定值低於標準設定值, 復位壓力值的百分比將相對變小。
- This valve has positive seals between all ports.
此閥在所有端口之間都有完全密封。

◆ **CONTROL PORT(S) 操作形式**◆ **DIMENSIONS 外型尺寸圖**

PRESSURE CONTROL VALVES 壓力控制閥

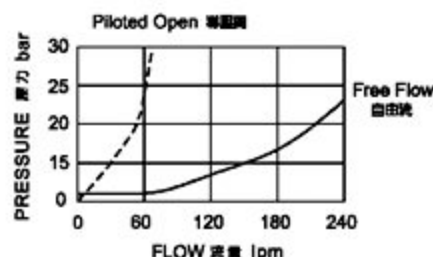
VCBA SERIES CARTRIDGE TYPE COUNTER BALANCE VALVES (RESTRICTIVE) VCBA 系列嵌入式減壓閥(全額定)

MODEL 型 式 **VCBA-06**



DESCRIPTION 說明
Counterbalance valves with pilot assist are meant to control an overrunning load. The check valve allows free flow from the directional valve (port 2) to the load (port 1). While a direct-acting, pilot-assisted relief valve controls flow from port 1 to port 2. Pilot assist at port 3 lowers the effective setting of the relief valve at a rate determined by the pilot ratio. Other names for this valve include motion control valve and over center valve. 帶先導協助閥的平衡閥是用來控制過載負載。它允許從液壓方向閥(口2)到負載口(口1)單向自由流動,同時液壓式,先導協助減壓閥功能可以控制從口1到口2的流動。口3的先導油壓以先導比率的作用來降低減壓閥的有效設定值。此閥通常被稱為運動控制閥或者越過中心閥。

PERFORMANCE (Cartridge Only) 特性曲線



SPECIFICATIONS 規格

Model Number 型式號碼	Maximum Pressure 最大壓力 bar	Pilot Ratio 引導比例	Adjustment Pressure 壓力調整範圍 bar	Maximum Flow 最大流量 lpm	Weight 重量 Kg
VCBA-06	350 (5076 psi)	3:1 / 4.5:1	* ~ 350	60 (15.85 gpm)	0.61 (1.35 lbs)
Fluid Type 液體類型			ISO VG 32, 46, 68		
Viscosity 黏性 cSt			10-400 (59-1854 SSU)		
Operating Temperature 操作溫度 °C			-15~70 (-5~158°F)		
Contamination Level 污染標準			ISO4406: 21/19/16 NAS1638,10		

HOW TO ORDER 編號說明

1	2	3	4
VCBA	06	10	3A

1 VALVE SERIES 系列名稱
VCBA = Overcentre Valve Pilot Assisted Relief With Check (Restrictive) 引導式抗衝洩壓閥 (全額定)

2 PORTING 端口
06:T-17A
Cavity 孔口: CST-17A
See Page Appendixes-A_007
見附錄A_007 頁面

3 ADJUSTMENT PRESSURE 壓力調整範圍

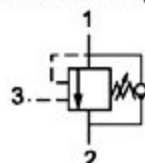
Check Spring Pressure 1.8bar 止逆閥彈簧壓力 1.8bar			Check Spring Pressure 0.3bar 止逆閥彈簧壓力 0.3bar		
Order 編號	Adjustment pressure 壓力調整範圍	Pilot ratio 引導比例	Order 編號	Adjustment pressure 壓力調整範圍	Pilot ratio 引導比例
10	25 ~ 105 (bar)	3:1	25	25 ~ 105 (bar)	3:1
28	70 ~ 280 (bar)		70	70 ~ 280 (bar)	
17	70 ~ 175 (bar)	4.5:1	80	70 ~ 175 (bar)	4.5:1
35	140 ~ 350 (bar)		14	140 ~ 350 (bar)	

4 PILOT RATIO 引導比例
3A : 3:1
4A : 4.5:1

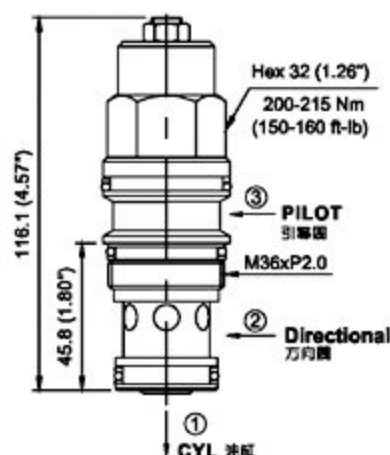
TECHNICAL FEATURES 技術特性

- Counterbalance valves should be set at least 1.3 time the maximum load induced pressure.
平衡閥的設定值應至少為負載壓力值的1.3倍。
- Restrictive valves have no relief capacity other than as a thermal relief.
全額定閥僅能作為熱洩壓功能。
- Reset exceeds 85% of set pressure when the valve is standard set. Settings lower than the standard set pressure may result in lower reset percentages.
標準設定下,閥的復位壓力應高於設定值的85%。當設定值小於標準設定值,復位壓力值的百分比將相對變小。
- This valve has positive seals between all ports.
此閥在所有的口之間都完全密封。

CONTROL PORT(S) 動作形式



DIMENSIONS 外型尺寸圖

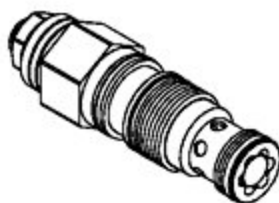


壓力控制閥 **PRESSURE CONTROL VALVES**

VCBB 系列插入式控制閥(無輔助導壓) **VCBB SERIES CARTRIDGE TYPE COUNTER BALANCE VALVES (WITHOUT PILOT ASSIST)**

◆ MODEL 型 式

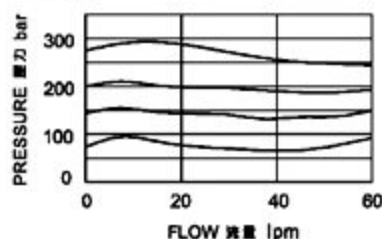
VCBB-02



◆ DESCRIPTION 說明

Counterbalance valves without pilot assist are meant to control an overrunning load. The check valve allows free flow from the directional valve (port 2) to the load (port 1). While a direct-acting relief valve controls flow from port 1 to port 2. Lower pilot ratios (pilot gain) promote machine stability. This valve has a pilot ratio of zero. Stability is gained at the expense of efficiency. 不帶先導輔助閥的平衡閥是用來控制過載負載。它允許流體從方向閥(口2)到負載口(口1)自由流動。同時直動式溢流閥功能可以控制從口1到口2的流體。低先導比(先導增益)使系統更穩定。這款閥的先導比為0。穩定是以犧牲效率為代價的。

◆ PERFORMANCE (Cartridge Only) 特性曲線



◆ SPECIFICATIONS 規 格

Model Number 型式號碼	Maximum Pressure 最大壓力 bar	Adjustment Pressure 壓力調整範圍 bar	Maximum Flow 最大流量 lpm	Weight 重量 Kg
VCBB-02	350 (5076 psi)	* ~ 350	60 (15.85 gpm)	0.2 (0.44 lbs)
Fluid Type 液體型式			ISO VG 32, 46, 68	
Viscosity 黏性 cSt			10~400 (59~1854 SSU)	
Operating Temperature 操作溫度 °C			-15~70 (-5~158°F)	
Contamination Level 污染標準			ISO4406: 21/19/16 NAS1638,10	

◆ HOW TO ORDER 編號說明

1	2	3
VCBB	02	10

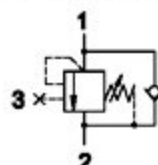
- 1 VALVE SERIES 系列名稱**
VCBB = Cartridge Type Counter Balance Valves (Without Pilot Assist)
插入式控制閥(無輔助導壓)

- 2 PORTING 端口**
02-T-11A
Cavity 孔口: CST-11A
See Page Appendixes-A_006
見附錄A_006 頁面

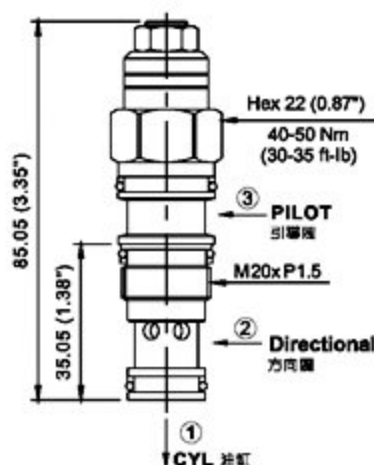
3 ADJUSTMENT PRESSURE 壓力調整範圍

Check Spring Pressure 1.8bar 止逆閥彈簧壓力 1.8bar		Check Spring Pressure 0.3bar 止逆閥彈簧壓力 0.3bar	
Order 編號	Adjustment pressure 壓力調整範圍	Order 編號	Adjustment pressure 壓力調整範圍
10	25 ~ 105 (bar)	25	25 ~ 105 (bar)
20	70 ~ 280 (bar)	70	70 ~ 280 (bar)

◆ CONTROL PORT(S) 操作形式



◆ DIMENSIONS 外型尺寸圖

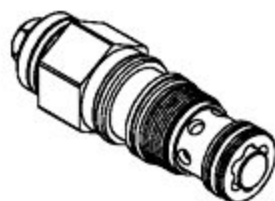


PRESSURE CONTROL VALVES 壓力控制閥

VCBB SERIES CARTRIDGE TYPE COUNTER BALANCE VALVES (WITHOUT PILOT ASSIST) VCBB 系列插入式平衡閥(無輔助導壓)

◆ MODEL 型 式

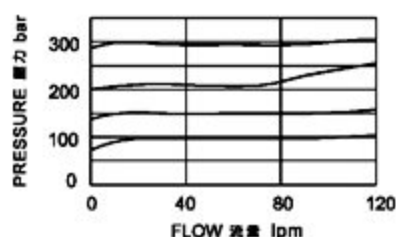
VCBB-03



◆ DESCRIPTION 說明

Counterbalance valves without pilot assist are meant to control an overrunning load. The check valve allows free flow from the directional valve (port 2) to the load (port 1). While a direct-acting relief valve controls flow from port 1 to port 2. Lower pilot ratios (pilot gain) promote machine stability. This valve has a pilot ratio of zero. Stability is gained at the expense of efficiency. 不受先導協助的平衡閥是用來控制超載負載。它允許流體從方向閥(口2)到負載口(口1)自由流動,同時直動式溢流閥功能可以控制從口1到口2的溢流。低先導比(先導增益)使系統更穩定,這是以犧牲效率為代價的。

◆ PERFORMANCE (Cartridge Only) 特性曲線



◆ SPECIFICATIONS 規 格

Model Number 型式號碼	Maximum Pressure 最大壓力 bar	Adjustment Pressure 壓力調整範圍 bar	Maximum Flow 最大流量 lpm	Weight 重量 Kg
VCBB-03	350 (5076 psi)	* ~ 350	120 (31.70 gpm)	0.3 (0.68 lbs)
Fluid Type 液體類型		ISO VG 32, 46, 68		
Viscosity 黏性 cSt		10~400 (59~1854 SSU)		
Operating Temperature 操作溫度 °C		-15~70 (-5~158 °F)		
Contamination Level 污染標準		ISO4406: 21/19/16 NAS1638,10		

◆ HOW TO ORDER 編號說明

1	2	3
VCBB	03	10

1 VALVE SERIES 系列名稱

VCBB = Cartridge Type Counter Balance Valves
(Without Pilot Assist)
插入式平衡閥(無輔助導壓)

2 PORTING 端口

03:T-2A

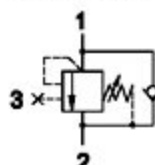
Cavity 孔口: CST-2A

See Page Appendixes-A_006
見附錄A_006 頁面

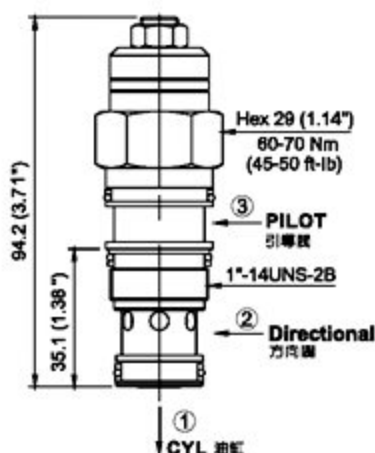
3 ADJUSTMENT PRESSURE 壓力調整範圍

Check Spring Pressure 1.8bar 止逆閥彈簧壓力 1.8bar		Check Spring Pressure 0.3bar 止逆閥彈簧壓力 0.3bar	
Order 編號	Adjustment pressure 壓力調整範圍	Order 編號	Adjustment pressure 壓力調整範圍
10	25 ~ 105 (bar)	25	25 ~ 105 (bar)
25	70 ~ 280 (bar)	70	70 ~ 280 (bar)

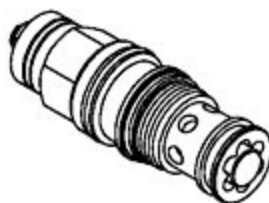
◆ CONTROL PORT(S) 操作形式



◆ DIMENSIONS 外型尺寸圖



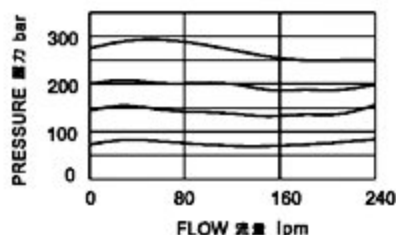
◆ **MODEL 型 式**
VCBB-06



◆ **DESCRIPTION 說明**

Counterbalance valves without pilot assist are meant to control an overrunning load. The check valve allows free flow from the directional valve (port 2) to the load (port 1) while a direct-acting relief valve controls flow from port 1 to port 2. Lower pilot ratios (pilot gain) promote machine stability. This valve has a pilot ratio of zero. Stability is gained at the expense of efficiency. 不需先導協助的平衡閥是用來控制過載負載。它允許油液從方向閥(口2)到負載口(口1)單向自由流動,同時直動式溢流閥功能可以控制從口1到口2的溢流。低先導比(先導增益)使系統更穩定。這款閥的先導比為0。穩定是以犧牲效率為代價的。

◆ **PERFORMANCE (Cartridge Only)**
特性曲線



◆ **SPECIFICATIONS 規格**

Model Number 型式號碼	Maximum Pressure 最大壓力 bar	Adjustment Pressure 壓力調整範圍 bar	Maximum Flow 最大流量 lpm	Weight 重量 Kg
VCBB-06	350 (5076 psi)	* ~ 350	240 (63.40 gpm)	0.61 (1.35 lbs)
Fluid Type 液體型式			ISO VG 32, 46, 68	
Viscosity 黏性 cSt			10~400 (59~1854 SSU)	
Operating Temperature 操作溫度 °C			-15~70 (-5~158°F)	
Contamination Level 污染標準			ISO4406: 21/19/16 NAS1638,10	

◆ **HOW TO ORDER 編號說明**

1	2	3
VCBB	06	10

- 1 VALVE SERIES 系列名稱**
VCBB = Cartridge Type Counter Balance Valves
(Without Pilot Assist)
插入式式平衡閥(無輔助導閥)

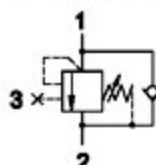
2 PORTING 端口

06:T-17A
Cavity 孔口: CST-17A
See Page Appendixes-A_007
見附錄A_007 頁面

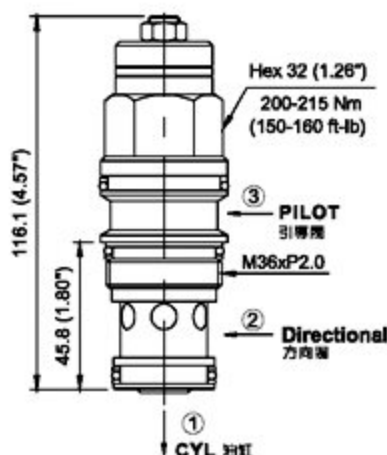
3 ADJUSTMENT PRESSURE 壓力調整範圍

Check Spring Pressure 1.8bar 止逆閥彈簧壓力 1.8bar		Check Spring Pressure 0.3bar 止逆閥彈簧壓力 0.3bar	
Order 編號	Adjustment pressure 壓力調整範圍	Order 編號	Adjustment pressure 壓力調整範圍
10	25 ~ 105 (bar)	25	25 ~ 105 (bar)
20	70 ~ 280 (bar)	70	70 ~ 280 (bar)

◆ **CONTROL PORT(S) 操作形式**



◆ **DIMENSIONS 外型尺寸圖**

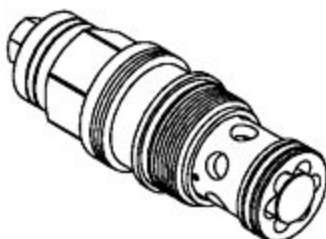


PRESSURE CONTROL VALVES 壓力控制閥

VCBB SERIES CARTRIDGE TYPE COUNTER BALANCE VALVES (WITHOUT PILOT ASSIST) VCBB 系列插入式抗載閥(無輔助導壓)

MODEL 型 式

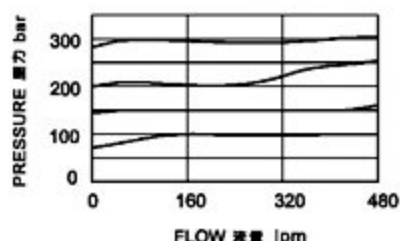
VCBB-10



DESCRIPTION 說明

Counterbalance valves without pilot assist are meant to control an overrunning load. The check valve allows free flow from the directional valve (port 2) to the load (port 1) while a direct-acting relief valve controls flow from port 1 to port 2. Lower pilot ratios (pilot gain) promote machine stability. This valve has a pilot ratio of zero. Stability is gained at the expense of efficiency. 不帶先導輔助閥的平衡閥是用來控制過載負載。它允許液流從方向閥(口2)到負載口(口1)自由流動,同時直動式溢流閥功能可以控制從口1到口2的液流。低先導比(先導增益)使系統更穩定,這取決於先導比為0,穩定是以犧牲效率為代價的。

PERFORMANCE (Cartridge Only) 特性曲線



SPECIFICATIONS 規 格

Model Number 型式號碼	Maximum Pressure 最大壓力 bar	Adjustment Pressure 壓力調整範圍 bar	Maximum Flow 最大流量 lpm	Weight 重量 Kg
VCBB-10	350 (5076 psi)	* ~ 350	480 (105.58 gpm)	1.6 (3.53 lbs)
Fluid Type 液體型式		ISO VG 32, 46, 68		
Viscosity 黏性 cSt		10~400 (59~1854 SSU)		
Operating Temperature 操作溫度 °C		-15~70 (-5~158°F)		
Contamination Level 污染標準		ISO4406, 21/19/16 NAS1638,10		

HOW TO ORDER 編號說明

1	2	3
VCBB	10	10

1 VALVE SERIES 系列名稱

VCBB = Cartridge Type Counter Balance Valves
(Without Pilot Assist)
插入式抗載閥(無輔助導壓)

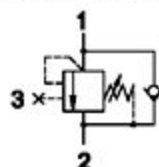
2 PORTING 接口

10:T-19A
Cavity 孔口:CST-19A
See Page Appendixes-A_007
見附圖A_007 頁面

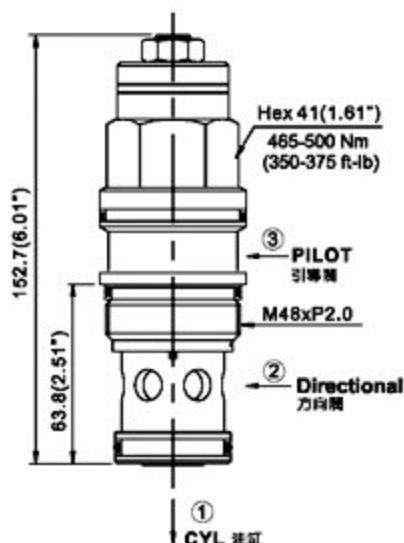
3 ADJUSTMENT PRESSURE 壓力調整範圍

Check Spring Pressure 1.8bar 止逆閥彈簧壓力 1.8bar		Check Spring Pressure 0.3bar 止逆閥彈簧壓力 0.3bar	
Order 編號	Adjustment pressure 壓力調整範圍	Order 編號	Adjustment pressure 壓力調整範圍
10	25 ~ 105 (bar)	25	25 ~ 105 (bar)
28	70 ~ 280 (bar)	70	70 ~ 280 (bar)

CONTROL PORT(S) 操作形式



DIMENSIONS 外型尺寸圖

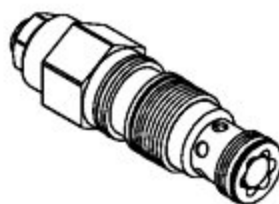


壓力控制閥 **PRESSURE CONTROL VALVES**

VCBC 系列帶入式平衡閥(半阻式)

VCBC SERIES CARTRIDGE TYPE COUNTER BALANCE VALVES (SEMI-RESTRICTIVE)

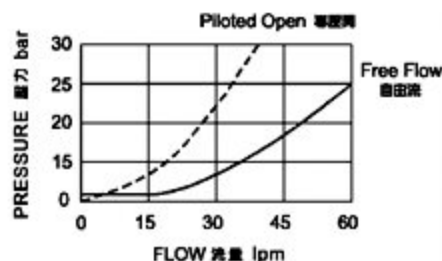
◆ MODEL 型 式 VCBC-02



◆ DESCRIPTION 說明

Counterbalance valves with pilot assist are meant to control an overrunning load. The check valve allows free flow from the directional valve (port 2) to the load (port 1). While a direct-acting, pilot-assisted relief valve controls flow from port 1 to port 2. Pilot assist at port 3 lowers the effective setting of the relief valve at a rate determined by the pilot ratio. Other names for this valve include motion control valve and over center valve. 帶先導輔助功能的平衡閥是為控制制動負載。它允許油液從方向閥(口2)流向負載(口1)。同時直動式,先導輔助溢流功能可以控制從口1到口2的流量。口3的先導輔助以先導比率的率而減低了溢流功能的有效設定值。此類平衡閥為運動控制閥或過中心閥。

◆ PERFORMANCE (Cartridge Only) 特性曲線



◆ SPECIFICATIONS 規格

Model Number 型式號碼	Maximum Pressure 最大壓力 bar	Pilot Ratio 引導比例	Adjustment Pressure 壓力調整範圍 bar	Maximum Flow 最大流量 lpm	Weight 重量 Kg
VCBC-02	350 (5076 psi)	3:1 / 4.5:1	* ~ 350	40 (10.57 gpm)	0.2 (0.44 lbs)
Fluid Type 液體型式			ISO VG 32, 46, 68		
Viscosity 黏性 cSt			10~400 (59~1854 SSU)		
Operating Temperature 操作溫度 °C			-15~70 (-5~158°F)		
Contamination Level 污染標準			ISO4406, 21/19/16 NAS1638,10		

◆ HOW TO ORDER 編號說明

1	2	3	4
VCBC	02	10	3A

1 VALVE SERIES 系列名稱

VCBC = Overcentre Valve Pilot Assisted Relief With Check (Semi-Restrictive) 引導式抗衝溢流閥(半阻式)

2 PORTING 接口

02-T-11A

Cavity 孔口: CST-11A

See Page Appendixes-A_006

見附錄A_006 頁碼

3 ADJUSTMENT PRESSURE 壓力調整範圍

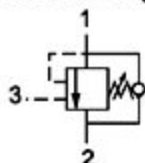
Check Spring Pressure 1.8bar 止逆閥彈簧壓力 1.8bar			Check Spring Pressure 0.3bar 止逆閥彈簧壓力 0.3bar		
Order 編號	Adjustment pressure 壓力調整範圍	Pilot ratio 引導比例	Order 編號	Adjustment pressure 壓力調整範圍	Pilot ratio 引導比例
10	25 ~ 105 (bar)	3:1	25	25 ~ 105 (bar)	3:1
28	70 ~ 280 (bar)		70	70 ~ 280 (bar)	
17	70 ~ 175 (bar)	4.5:1	80	70 ~ 175 (bar)	4.5:1
35	140 ~ 350 (bar)		14	140 ~ 350 (bar)	

4 PILOT RATIO 引導比例

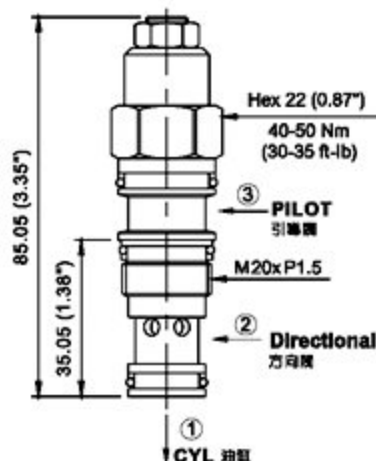
3A : 3:1

4A : 4.5:1

◆ CONTROL PORT(S) 操作形式



◆ DIMENSIONS 外型尺寸圖



◆ TECHNICAL FEATURES 技術特性

- Counterbalance valves should be set at least 1.3 time the maximum load induced pressure. 平衡閥的設定值應至少為負載壓力值的1.3倍。
- Two check valve cracking pressures are available. Use the 25 psi (1.7 bar) check unless actuator cavitation is a concern. 有兩種單向閥開啟壓力可選。不過只是在防止執行器氣穴現象的時候,推薦使用25 psi (1.7 bar)的單向閥壓力。
- This valve has positive seals between all ports. 這閥在所有的口之間都完全密封。

PRESSURE CONTROL VALVES 壓力控制閥

VCBC SERIES CARTRIDGE TYPE COUNTER BALANCE VALVES (SEMI-RESTRICTIVE) VCBC 系列嵌入式平衡閥(半阻式)

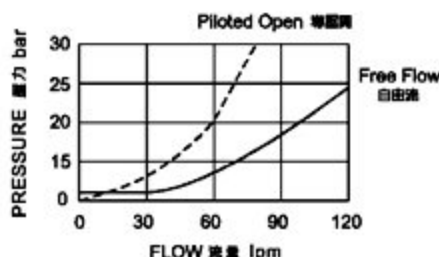
MODEL 型 式 VCBC-03



DESCRIPTION 說明

Counterbalance valves with pilot assist are meant to control an overrunning load. The check valve allows free flow from the directional valve (port 2) to the load (port 1). While a direct-acting, pilot-assisted relief valve controls flow from port 1 to port 2. Pilot assist at port 3 lowers the effective setting of the relief valve at a rate determined by the pilot ratio. Other names for this valve include motion control valve and over center valve. 帶先導協助功能的平衡閥是用來控制越跑負載。它允許液流從方向閥(口2)到負載(口1)自由流動。同時溢流式、先導協助溢流功能可以控制從口1到口2的液流。口3的先導協助以先導比率的比率減低了溢流功能的有效設定值。此閥常被稱為運動控制閥或者越過中心閥。

PERFORMANCE (Cartridge Only) 特性曲線



SPECIFICATIONS 規格

Model Number 型式號碼	Maximum Pressure 最大壓力 bar	Pilot Ratio 引導比例	Adjustment Pressure 壓力調整範圍 bar	Maximum Flow 最大流量 lpm	Weight 重量 Kg
VCBC-03	350 (5076 psi)	3:1 / 4.5:1	* ~ 350	80 (21.13 gpm)	0.3 (0.68 lbs)
Fluid Type 液體型式			ISO VG 32, 46, 68		
Viscosity 黏性 cSt			10~400 (59~1854 SSU)		
Operating Temperature 操作溫度 °C			-15~70 (-5~158°F)		
Contamination Level 污染標準			ISO4406: 21/19/16 NAS1638,10		

HOW TO ORDER 圖號說明

1	2	3	4
VCBC	03	10	3A

1 VALVE SERIES 系列名稱

VCBC = Overcentre Valve Pilot Assisted Relief With Check (Semi-Restrictive) 引導式抗倒流溢流閥 (半阻式)

2 PORTING 接口

03:T-2A

Cavity 孔口: CST-2A

See Page Appendixes-A_006

見附圖A_006 頁面

3 ADJUSTMENT PRESSURE 壓力調整範圍

Check Spring Pressure 1.8bar 止逆彈簧壓力 1.8bar			Check Spring Pressure 0.3bar 止逆彈簧壓力 0.3bar		
Order 編號	Adjustment pressure 壓力調整範圍	Pilot ratio 引導比例	Order 編號	Adjustment pressure 壓力調整範圍	Pilot ratio 引導比例
10	25 ~ 105 (bar)	3:1	25	25 ~ 105 (bar)	3:1
28	70 ~ 280 (bar)		70	70 ~ 280 (bar)	
17	70 ~ 175 (bar)	4.5:1	80	70 ~ 175 (bar)	4.5:1
35	140 ~ 350 (bar)		14	140 ~ 350 (bar)	

4 PILOT RATIO 引導比例

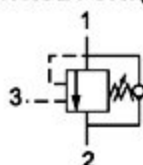
3A : 3:1

4A : 4.5:1

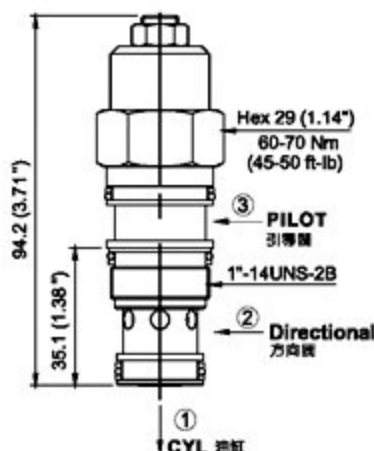
TECHNICAL FEATURES 技術特性

- Counterbalance valves should be set at least 1.3 time the maximum load induced pressure.
平衡閥的設定值應至少為負載壓力值的1.3倍。
- Two check valve cracking pressures are available. Use the 25 psi (1.7 bar) check unless actuator cavitation is a concern.
有兩種單向閥開啟壓力可選。不過只是在防止執行器氣穴現象的時候，推薦使用25 psi (1.7 bar)的單向閥開啟壓力。
- This valve has positive seals between all ports.
此閥在所有之口之間都完全密封。

CONTROL PORT(S) 動作形式



DIMENSIONS 外型尺寸圖

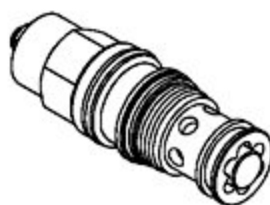


壓力控制閥 **PRESSURE CONTROL VALVES**

VCBC 系列帶入式平衡閥(半阻式)

VCBC SERIES CARTRIDGE TYPE COUNTER BALANCE VALVES (SEMI-RESTRICTIVE)

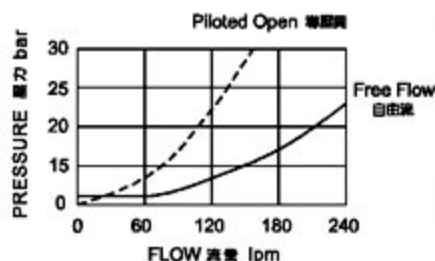
◆ MODEL 型 式 VCBC-06



◆ DESCRIPTION 說明

Counterbalance valves with pilot assist are meant to control an overrunning load. The check valve allows free flow from the directional valve (port 2) to the load (port 1). While a direct-acting, pilot-assisted relief valve controls flow from port 1 to port 2. Pilot assist at port 3 lowers the effective setting of the relief valve at a rate determined by the pilot ratio. Other names for this valve include motion control valve and over center valve. 帶先導協助功能的平衡閥是用來控制超載負載。它允許油液從方向閥(口2)流向負載(口1)。同時直動式,先導協助功能可以控制從口1到口2的流量。口3的先導協助以先導比率的率來降低溢流閥的有效設定值。此平衡閥為運動控制閥或者過中心閥。

◆ PERFORMANCE (Cartridge Only) 特性曲線



◆ SPECIFICATIONS 規格

Model Number 型式號碼	Maximum Pressure 最大壓力 bar	Pilot Ratio 引導比例	Adjustment Pressure 壓力調整範圍 bar	Maximum Flow 最大流量 lpm	Weight 重量 Kg
VCBC-06	350 (5076 psi)	3:1 / 4.5:1	※ ~ 350	160 (42.27 gpm)	0.61 (1.35 lbs)
Fluid Type 液體型式			ISO VG 32, 46, 68		
Viscosity 黏性 cSt			10~400 (59~1854 SSU)		
Operating Temperature 操作溫度 °C			-15~70 (-5~158°F)		
Contamination Level 污染標準			ISO4406, 21/19/16 NAS1638,10		

◆ HOW TO ORDER 編號說明

1	2	3	4
VCBC	06	10	3A

1 VALVE SERIES 系列名稱

VCBC = Overcentre Valve Pilot Assisted Relief With Check (Semi-Restrictive) 引導式抗衝溢流閥(半阻式)

2 PORTING 接口

06-T-17A

Cavity 孔口: CST-17A

See Page Appendixes-A_007

見附錄A_007 頁碼

3 ADJUSTMENT PRESSURE 壓力調整範圍

Check Spring Pressure 1.8bar 止逆閥彈簧壓力 1.8bar			Check Spring Pressure 0.3bar 止逆閥彈簧壓力 0.3bar		
Order 編號	Adjustment pressure 壓力調整範圍	Pilot ratio 引導比例	Order 編號	Adjustment pressure 壓力調整範圍	Pilot ratio 引導比例
10	25 ~ 105 (bar)	3:1	25	25 ~ 105 (bar)	3:1
28	70 ~ 280 (bar)		70	70 ~ 280 (bar)	
17	70 ~ 175 (bar)	4.5:1	80	70 ~ 175 (bar)	4.5:1
35	140 ~ 350 (bar)		14	140 ~ 350 (bar)	

4 PILOT RATIO 引導比例

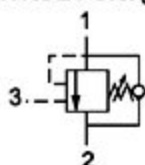
3A : 3:1

4A : 4.5:1

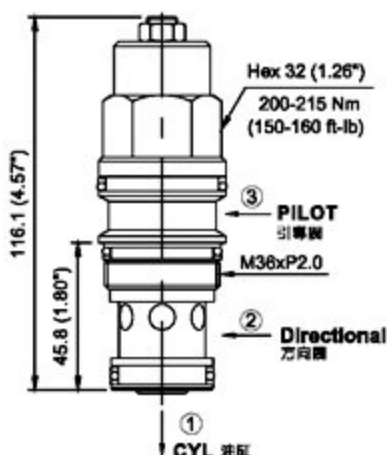
◆ TECHNICAL FEATURES 技術特性

- Counterbalance valves should be set at least 1.3 time the maximum load induced pressure.
平衡閥的設定值應至少為負載壓力值的1.3倍。
- Two check valve cracking pressures are available. Use the 25 psi (1.7 bar) check unless actuator cavitation is a concern.
有兩種單向閥開啟壓力可選。不過只是在防止執行器氣穴現象的時候,推薦使用25 psi (1.7 bar)的單向閥壓力。
- This valve has positive seals between all ports.
這閥在所有的口之間都完全密封。

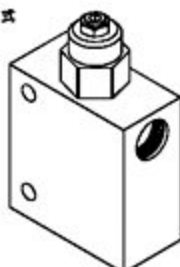
◆ CONTROL PORT(S) 操作形式



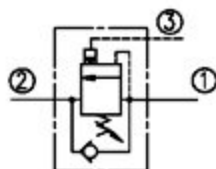
◆ DIMENSIONS 外型尺寸圖



◆ **MODEL 型 式**
VCBD-02



◆ **CONTROL PORT(S)**
動作形式



Body Material 閥體材質	Maximum Pressure 最大壓力 bar	Weight 重量 Kg
Aluminum (standard) 鋁 (標準)	240 (3481 psi)	0.83 (1.38 lbs)
Nodular Ductile-Iron 球墨鑄鐵	350 (5076 psi)	1.35 (2.98 lbs)
Steel 鋼	350 (5076 psi)	1.35 (2.98 lbs)

◆ **SPECIFICATIONS 規 格**

Model Number 型式號碼	Maximum Pressure 最大壓力 bar	Adjustment Pressure 壓力調整範圍 bar	Maximum Flow 最大流量 lpm	Pilot Ratio 引導比例	Weight 重量 Kg
VCBD-02	350 (5076 psi)	* ~350	60 (15.85 gpm)	1.5:1 / 3:1 / 4.5:1 / 10:1	1.35 (2.98 lbs)
Fluid Type 液體型式		ISO VG 32, 46, 68			
Viscosity 黏性 cSt		10~400 (59~1854 SSU)			
Operating Temperature 操作溫度 °C		-15~70 (-5~158 °F)			
Contamination Level 污染標準		ISO4406, 21/19/16 NAS1638,10			

◆ **HOW TO ORDER 編號說明**

1		2		3		4		5		6		7
VCBD		02	—	28	—	*	—	*	—	*	—	*

1 **VALVE SERIES 系列名稱**

VCBD= Overcentre Valves Pilot Assisted Relief With Check
引導式折衝洩漏閥

2 **SUBPLATE MOUNTING SIZE 導口徑**
02

3 **ADJUSTMENT PRESSURE 壓力調整範圍**

Check Spring Pressure 1.8bar 止逆閥彈簧壓力 1.8bar			Check Spring Pressure 0.3bar 止逆閥彈簧壓力 0.3bar		
Order 編號	Adjustment pressure 壓力調整範圍	Pilot ratio 引導比例	Order 編號	Adjustment pressure 壓力調整範圍	Pilot ratio 引導比例
10	25 ~ 105 (bar)	1.5:1	25	25 ~ 105 (bar)	1.5:1
28	70 ~ 280 (bar)	3:1	70	70 ~ 280 (bar)	3:1
17	70 ~ 175 (bar)	10:1	80	70 ~ 175 (bar)	10:1
35	140 ~ 350 (bar)	4.5:1	14	140 ~ 350 (bar)	4.5:1

4 **PORTS DIMENSIONS 導口尺寸**

A: 1/4 B: 3/8

5 **THREADED TYPE 螺紋規格**

1P: PT 3G: PF(G) 5B: BSP
2N: NPT 4A: SAE

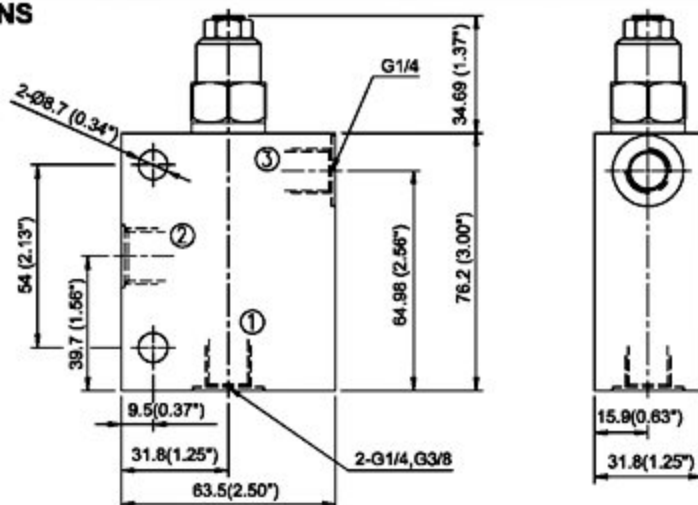
6 **PILOT RATIO 引導比例**

1.5A: 1.5:1 4A: 4.5:1
3A: 3:1 10A: 10:1

7 **BODY MATERIAL 閥體材質**

NONE (Standard): Aluminum-alloy
無 (標準): 鋁合金
D: Nodular Ductile-Iron 球墨鑄鐵
S: Steel 鋼

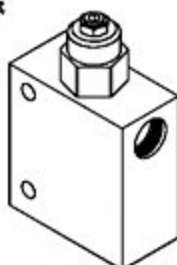
◆ **DIMENSIONS 外型尺寸圖**



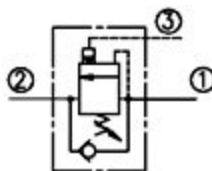
PRESSURE CONTROL VALVES 壓力控制閥

VCBD SERIES CARTRIDGE TYPE COUNTER BALANCE VALVES VCB系列插入式平衡閥

◆ **MODEL 型 式** VCBD-03



◆ **CONTROL PORT(S)** 動作形式



Body Material 閥體材質	Maximum Pressure 最大壓力 bar	Weight 重量 Kg
Aluminum (standard) 鋁 (標準)	240 (3481 psi)	0.93 (2.14 lbs)
Nodular Ductile-Iron 球墨鑄鐵	350 (5076 psi)	2.10 (4.63 lbs)
Steel 鋼	350 (5076 psi)	2.10 (4.63 lbs)

◆ **SPECIFICATIONS 規格**

Model Number 型式號碼	Maximum Pressure 最大壓力 bar	Adjustment Pressure 壓力調整範圍 bar	Maximum Flow 最大流量 lpm	Pilot Ratio 引導比例	Weight 重量 Kg
VCBD-03	350 (5076 psi)	* ~350	120 (31.70 gpm)	1.5:1 / 3:1 / 4.5:1 / 10:1	2.10 (4.63 lbs)
Fluid Type 液體型式		ISO VG 32, 46, 68			
Viscosity 黏性 cSt		10~400 (59~1854 SSU)			
Operating Temperature 操作溫度 °C		-15~70 (-5~158 °F)			
Contamination Level 污染程度		ISO4406. 21/19/16 NAS1638,10			

◆ **HOW TO ORDER 編號說明**

1	2	3	4	5	6	7
VCBD	03	-	28	-	*	-
					*	-
					*	-
					*	-

- 1 VALVE SERIES 系列名稱**
VCBD= Overcentre Valves Pilot Assisted Relief With Check
引導式抗衝洩漏閥

- 2 SUBPLATE MOUNTING SIZE 板接口徑**
03

- 3 ADJUSTMENT PRESSURE 壓力調整範圍**

Check Spring Pressure 1.8bar 止逆閥彈簧壓力 1.8bar			Check Spring Pressure 0.3bar 止逆閥彈簧壓力 0.3bar		
Order 編號	Adjustment pressure 壓力調整範圍 bar	Pilot ratio 引導比例	Order 編號	Adjustment pressure 壓力調整範圍 bar	Pilot ratio 引導比例
10	25 ~ 105 (bar)	1.5:1	25	25 ~ 105 (bar)	1.5:1
28	70 ~ 260 (bar)	3:1	70	70 ~ 260 (bar)	3:1
17	70 ~ 175 (bar)	10:1	80	70 ~ 175 (bar)	10:1
35	140 ~ 350 (bar)	4.5:1	14	140 ~ 350 (bar)	4.5:1

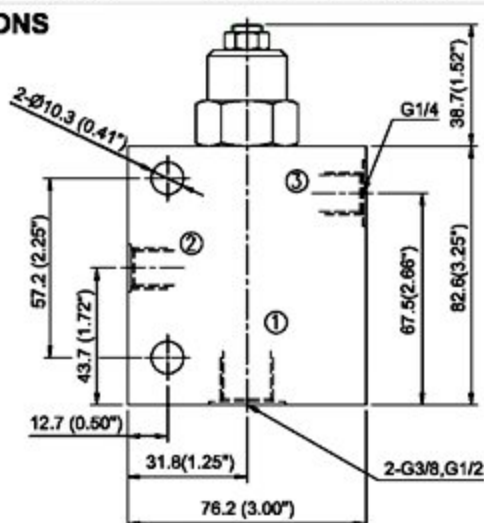
- 4 PORTS DIMENSIONS 接口尺寸**
A: 3/8 B: 1/2

- 5 THREADED TYPE 螺紋規格**
1P: PT 3G: PF(G) 5B: BSP
2N: NPT 4A: SAE

- 6 PILOT RATIO 引導比例**
1.5A: 1.5:1 4A: 4.5:1
3A: 3:1 10A: 10:1

- 7 BODY MATERIAL 閥體材質**
NONE (Standard): Aluminum-alloy
無 (標準): 鋁合金
D: Nodular Ductile-Iron 球墨鑄鐵
S: Steel 鋼

◆ **DIMENSIONS 外型尺寸圖**

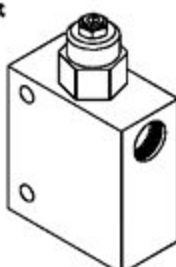


壓力控制閥 **PRESSURE CONTROL VALVES**

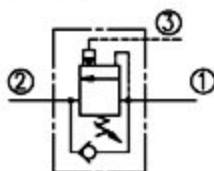
VCBD 系列直入式減壓閥 **VCBD SERIES CARTRIDGE TYPE COUNTER BALANCE VALVES**

◆ MODEL 型 式

VCBD-06



◆ CONTROL PORT(S) 動作形式



Body Material 閥體材質	Maximum Pressure 最大壓力 bar	Weight 重量 Kg
Aluminum (standard) 鋁 (標準)	240 (3481 psi)	2.37 (5.22 lbs)
Nodular Ductile-Iron 球墨鑄鐵	350 (5078 psi)	5.32 (11.73 lbs)
Steel 鋼	350 (5078 psi)	5.32 (11.73 lbs)

◆ SPECIFICATIONS 規格

Model Number 型式號碼	Maximum Pressure 最大壓力 bar	Adjustment Pressure 壓力調整範圍 bar	Maximum Flow 最大流量 lpm	Pilot Ratio 引導比例	Weight 重量 Kg
VCBD-06	350 (5078 psi)	* ~350	240 (63.40 gpm)	1.5:1 / 3:1 / 4.5:1 / 10:1	5.32 (11.73 lbs)
Fluid Type 液體型式			ISO VG 32, 46, 68		
Viscosity 黏性 cSt			10~400 (59~1854 SSU)		
Operating Temperature 操作溫度 °C			-15~70 (-5~158 °F)		
Contamination Level 污染標準			ISO4406, 21/19/16 NAS1638,10		

◆ HOW TO ORDER 編碼說明

1		2		3		4		5		6		7
VCBD		06	—	28	—	*	—	*	—	*	—	*

1 VALVE SERIES 系列名稱

VCBD= Overcentre Valves Pilot Assisted Relief With Check
引導式折衝洩壓閥

2 SUBPLATE MOUNTING SIZE 安裝口徑

06

3 ADJUSTMENT PRESSURE 壓力調整範圍

Check Spring Pressure 1.8bar 止逆閥彈簧壓力 1.8bar			Check Spring Pressure 0.3bar 止逆閥彈簧壓力 0.3bar		
Order 編號	Adjustment pressure 壓力調整範圍	Pilot ratio 引導比例	Order 編號	Adjustment pressure 壓力調整範圍	Pilot ratio 引導比例
10	25 ~ 105 (bar)	1.5:1	25	25 ~ 105 (bar)	1.5:1
28	70 ~ 280 (bar)	3:1	70	70 ~ 280 (bar)	3:1
17	70 ~ 175 (bar)	10:1	80	70 ~ 175 (bar)	10:1
35	140 ~ 350 (bar)	4.5:1	14	140 ~ 350 (bar)	4.5:1

4 PORTS DIMENSIONS 接口尺寸

A: 3/4 B: 1

5 THREADED TYPE 螺紋規格

1P: PT 3G: PF(G) 5B: BSP
2N: NPT 4A: SAE

6 PILOT RATIO 引導比例

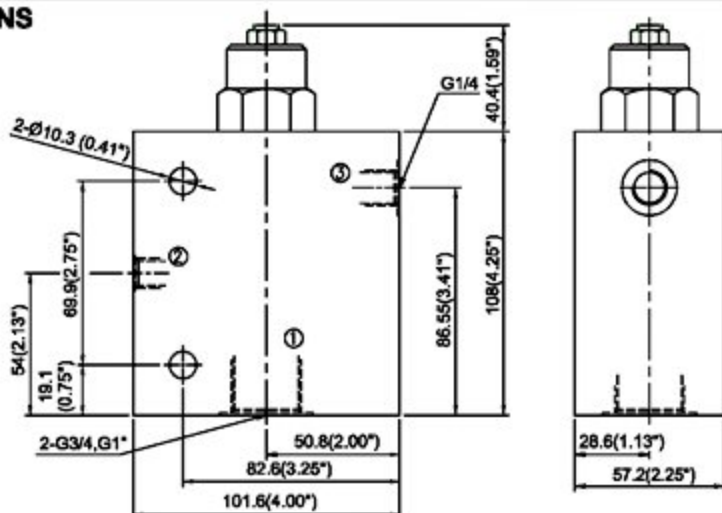
1.5A: 1.5:1 4A: 4.5:1
3A: 3:1 10A: 10:1

7 BODY MATERIAL 閥體材質

NONE (Standard): Aluminum-alloy
無 (標準): 鋁合金
D: Nodular Ductile-Iron 球墨鑄鐵
S: Steel 鋼

◆ DIMENSIONS 外型尺寸圖

外型尺寸圖



PRESSURE CONTROL VALVES 壓力控制閥

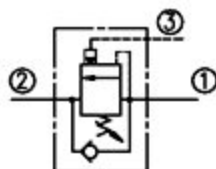
VCBD SERIES CARTRIDGE TYPE COUNTER BALANCE VALVES VCBD系列插入式平衡閥

◆ **MODEL 型 式**

VCBD-10



◆ **CONTROL PORT(S) 動作形式**



Body Material 閥體材質	Maximum Pressure 最大壓力 bar	Weight 重量 Kg	
		Flange type 法蘭型	Threaded type 螺紋型
Aluminum (standard) 鋁 (標準)	240 (3481 psi)	5 (11.02 lbs)	4 (8.82 lbs)
Nodular Ductile-Iron 球墨鑄鐵	350 (5076 psi)	10 (22.05 lbs)	7.5 (16.53 lbs)
Steel 鋼	350 (5076 psi)	10 (22.05 lbs)	7.5 (16.53 lbs)

◆ **SPECIFICATIONS 規格**

Model Number 型式號碼	Maximum Pressure 最大壓力 bar	Adjustment Pressure 壓力調整範圍 bar	Maximum Flow 最大流量 lpm	Pilot Ratio 引導比例	Weight 重量 Kg
VCBD-10	350 (5076 psi)	* ~350	480 (126.80 gpm)	1.5:1 / 3:1 / 4.5:1 / 10:1	10 (22.05 lbs)
Fluid Type 液體型式			ISO VG 32, 46, 68		
Viscosity 黏性 cSt			10~400 (59~1854 SSU)		
Operating Temperature 操作溫度 °C			-15~70 (-5~158 °F)		
Contamination Level 污染標準			ISO4406: 21/19/16 NAS1638,10		

◆ **HOW TO ORDER 訂貨說明**

1	2	3	4	5	6	7
VCBD	10	—	28	—	A	— * — * — *

1 VALVE SERIES 系列名稱

VCBD= Overcentre Valves Pilot Assisted Relief With Check
引導式抗衝洩壓閥

2 SUBPLATE MOUNTING SIZE 機座口徑

10

3 ADJUSTMENT PRESSURE 壓力調整範圍

Check Spring Pressure 1.8bar 止定閥彈簧壓力 1.8bar			Check Spring Pressure 0.3bar 止定閥彈簧壓力 0.3bar		
Order 編號	Adjustment pressure 壓力調整範圍	Pilot ratio 引導比例	Order 編號	Adjustment pressure 壓力調整範圍	Pilot ratio 引導比例
10	25 ~ 105 (bar)	1.5:1	28	25 ~ 105 (bar)	1.5:1
28	70 ~ 280 (bar)	3:1	70	70 ~ 280 (bar)	3:1
17	70 ~ 175 (bar)	10:1	80	70 ~ 175 (bar)	10:1
35	140 ~ 350 (bar)	4.5:1	14	140 ~ 350 (bar)	4.5:1

4 PORTS DIMENSIONS 接口尺寸

A: 1 1/2" (Flange type port, Dimensions of flange
please contact with us.)
(此為法蘭型接口, 法蘭尺寸請與我們聯絡)
B: 1 1/4" (Threaded type only) (僅限螺紋型)

5 PORTS CONNECTING TYPE 接口連接型式

-Flange type 法蘭型
NONE (Standard) : Flange type 無(標準): 法蘭型
-Threaded type 螺紋型
1P: PT 3G: PF(G) 5B: BSP
2N: NPT 4A: SAE

6 PILOT RATIO 引導比例

1.5A: 1.5:1 4A: 4.5:1
3A: 3:1 10A: 10:1

7 BODY MATERIAL 閥體材質

NONE (Standard): Aluminum-alloy
無(標準): 鋁合金
D: Nodular Ductile-Iron 球墨鑄鐵
S: Steel 鋼

◆ **DIMENSIONS 外觀尺寸圖**

Note: Dimensions of Threaded type
Please contact us.
螺紋型尺寸請與我們聯絡。

