

BLOKI CETOP BLOKI PRZYŁĄCZENIOWE CETOP 03 - NG6





	"MH" Sandw	ich Ma	nifolds		
SYMBOL SO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page
P T A B	мн03вDT- <mark>X</mark> -Y- <b>Z</b> 01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	75
SYMBOL  S to P (B to A) , Regenerative	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page
P T A B O O O O O O O O O O O O O O O O O O	MH03BRG-X-Y-Z01	40	250 (Aluminum)  350 (Ductile Iron)	44.5	76
PI TI AI BI SYMBOL		Flow	Pressure	Stack Height	
SO 03 SANDWICH MANIFOLD	Main Code	l/min	bar	mm	Page
P T A B	МН03САW- <mark>⊠-</mark> Ÿ- <b>Z</b> 01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	77
Pl Tl Al Bl					
SYMBOL SO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page
P T A B	МН03CAW- <mark>X-</mark> Y- <u>Z</u> 01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	78
P1 T1 A1 B1					
SYMBOL SO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page
	МН03CAW- <mark>X-</mark> Y- <b>Z</b> 01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	79
P1 T1 A1 B1					



"MH" Sandwich Manifolds								
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page			
P A B	MH03CAW-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	80			
SYMBOL  ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page			
P T A B	мн03Свw-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	81			
G P1 T1 A1 B1								
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page			
P T A B	мн03Свw-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	82			
G P1 T1 A1 B1								
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page			
P T A B	MH03CBW-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	83			
G P1 T1 A1 B1								
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page			
P T A B	MH03CBW-X-Y-Z01	40	250 (Aluminum)  350 (Ductile Iron)	44.5	84			
G P1 T1 A1 B1								



	"MH" Sandw	ich Ma	nifolds		
SYMBOL	Main Code	Flow	Pressure	Stack Height	Page
ISO 03 SANDWICH MANIFOLD		l/min	bar	mm	
P T A B	MH03CDC-X-Y-Z03	40	250 (Aluminum)  350 (Ductile Iron)	63.0	85
P1 T1 A1 B1					
SYMBOL	Main Code	Flow	Pressure	Stack Height	Page
SO 03 SANDWICH MANIFOLD	1120111 0000	l/min	bar	mm	
P T A B	MH03CDC-X-Y-Z03	40	250 (Aluminum)  350 (Ductile Iron)	63.0	86
P1 T1 A1 B1					
SYMBOL SO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	<b>Pressure</b> bar	Stack Height mm	Page
P T A B	MH03CDS-X-Y-Z01	30	250 (Aluminum) 350 (Ductile Iron)	44.5	87
9 9					
P1 T1 A1 B1					
SYMBOL		Flow	Pressure	Stack Height	
	Main Code	l/min	bar	mm	Page
SO 03 SANDWICH MANIFOLD P T A B			250 (Aluminum)		
	MH03CDS-ဩ-ဩ-ᡚ02	30	350 (Ductile Iron)	40.0	88
P1 T1 A1 B1					
SYMBOL	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page
SO 03 SANDWICH MANIFOLD P T A B		1/ 111111		111111	
ŤŤŤŤ	мн03CDT-X-Y-Z01	40	250 (Aluminum) 350	44.5	89
P1 T1 A1 B1			(Ductile Iron)		



"MH" Sandwich Manifolds							
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page		
P T A B	MH03CDW-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	90		
0 0							
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	<b>Pressure</b> bar	Stack Height mm	Page		
P T A B	MH03CDW-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	91		
0 0							
PI TI AI BI		Flow	Duogganno	Stools Height			
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	1/min	Pressure bar	Stack Height mm	Page		
P T A B	MH03CDW-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	92		
<u> </u>							
SYMBOL	Main Code	Flow 1/min	Pressure bar	Stack Height	Page		
ISO 03 SANDWICH MANIFOLD  P T A B	MH03CDW-X-Y-Z01	40	250 (Aluminum)  350 (Ductile Iron)	44.5	93		
P1 T1 A1 B1		TO TO		G. 1 TT 1			
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page		
P T A B	MH03CDW-X-Y-Z02	40	250 (Aluminum) 350 (Ductile Iron)	40.0	94		
P1 T1 A1 B1							



	"MH" Sandw	ich Ma	nifolds		
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
P T A B	MH03CDW-X-Y-Z02	40	250 (Aluminum) 350 (Ductile Iron)	40.0	95
P1 T1 A1 B1					
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page
P T A B	MH03CDW-X-Y-Z02	40	250 (Aluminum) 350 (Ductile Iron)	40.0	96
Pì Tì Aì Bì					
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page
	MH03CFW-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	97
P1 T1 A1 B1					
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page
P T A B	MH03DBE-X-Y-Z02	15	250 (Aluminum) 350	40.0	98
(a)			(Ductile Iron)		
P1 T1 A1 B1					
SYMBOL	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page
P T A B	MH03DPE-X-Y-Z01	25	250 (Aluminum) 350 (Ductile Iron)	44.5	99
P1 T1 A1 B1					



"MH" Sandwich Manifolds								
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page			
P T A B	мнозевw-\(\overline{\P}\)-\(\overline{\P}\)	40	250 (Aluminum) 350 (Ductile Iron)	44.5	100			
P1 T1 A1 B1  SYMBOL  ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page			
P T A B	MH03EBW-X-Y-Z02	40	250 (Aluminum) 350 (Ductile Iron)	40.0	101			
Pl Tl Al Bl  SYMBOL	Main Code	Flow	Pressure	Stack Height	Dago			
ISO 03 SANDWICH MANIFOLD	Wiam Code	1/min	bar	mm	Page			
P T A B	MH03EDT-X-Y-Z01	40	250 (Aluminum)  350 (Ductile Iron)	44.5	102			
P1 T1 A1 B1								
SYMBOL  ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page			
P T A B	MH03EDT-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	103			
P1 T1 A1 B1								
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page			
P T A B	MH03EDT-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	104			
PI TI AI BI								



"MH" Sandwich Manifolds									
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page				
P T A B	MH03EDT-X-Y-Z01	30	250 (Aluminum) 350 (Ductile Iron)	44.5	105				
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page				
P T A B	MH03EDT-X-Y-Z02	40	250 (Aluminum) 350 (Ductile Iron)	40.0	106				
\$									
P1 T1 A1 B1  SYMBOL  ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page				
P T A B	MH03EDT-X-Y-Z02	30	250 (Aluminum)  350 (Ductile Iron)	40.0	107				
P1 T1 A1 B1									
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page				
P T A B	MH03EDW-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	108				
P1 T1 A1 B1									
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page				
P T A B	MH03EDW-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	109				
P1 T1 A1 B1									



"MH" Sandwich Manifolds								
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page			
P T A B	мнозеdw-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	110			
P1 T1 A1 B1  SYMBOL  SO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page			
P T A B	MH03EDW-X-Y-Z02	40	250 (Aluminum) 350 (Ductile Iron)	40.0	111			
PI TI AI BI  SYMBOL  SO 03 SANDWICH MANIFOLD	- Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page			
P T A B	MH03EFB-X-Y-Z02	30	250 (Aluminum) 350 (Ductile Iron)	40.0	112			
P1 T1 A1 B1  SYMBOL  SO 03 SANDWICH MANIFOLD	. Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page			
P T A B	MH03EPP-X-Y-Z03	40	250 (Aluminum) 350 (Ductile Iron)	63.0	113			
P1 T1 A1 B1  SYMBOL	Main Code	Flow	Pressure	Stack Height	Page			
P T A B	MH03EPP-X-Y-Z03	1/min 40	250 (Aluminum) 350 (Ductile Iron)	63.0	114			
P1 T1 A1 B1								



"MH" Sandwich Manifolds								
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page			
P T A B	мнозерw-\(\overline{\text{Y}}\)-\(\overline{\text{Z}}\)01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	115			
P1 T1 A1 B1  SYMBOL	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page			
SO 03 SANDWICH MANIFOLD  P T A B  T T A B  T T T T T T T T T T T T T T T T T T	MH03ERW-X-Y-Z03	40	250 (Aluminum) 350 (Ductile Iron)	63.0	116			
P1 T1 A1 B1  SYMBOL	Main Code	Flow	Pressure	Stack Height	Page			
SO 03 SANDWICH MANIFOLD  P	MH03ERW-X-Y-Z03	1/min 40	bar  250 (Aluminum)  350 (Ductile Iron)	63.0	117			
P1 T1 A1 B1  SYMBOL	Main Code	Flow 1/min	Pressure bar	Stack Height	Page			
SO 03 SANDWICH MANIFOLD  P	MH03ETP-X-Y-Z03	40	250 (Aluminum) 350 (Ductile Iron)	63.0	118			
P1 T1 A1 B1  SYMBOL	W. G.	Flow	Pressure	Stack Height				
SO 03 SANDWICH MANIFOLD	Main Code	l/min	bar	mm	Page			
P T A B	MH03FAB-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	119			
P1 T1 A1 B1								



"MH" Sandwich Manifolds							
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page		
P T A B	MH03FAE-X-Y-Z01	23 Pressure Compensated	250 (Aluminum) 350 (Ductile Iron)	44.5	120		
P1 T1 A1 B1  SYMBOL  ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page		
P T A B	MH03FAE-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	121		
PI II AI BI  SYMBOL	. Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page		
ISO 03 SANDWICH MANIFOLD  P T A B  O O	MH03FAO-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	122		
P1 T1 A1 B1  SYMBOL  ISO 03 SANDWICH MANIFOLD	- Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page		
P T A B	MH03FAO-X-Y-Z01	23 Pressure Compensated	250 (Aluminum) 350 (Ductile Iron)	44.5	123		
P1 T1 A1 B1  SYMBOL  ISO 03 SANDWICH MANIFOLD	- Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page		
P T A B	MH03FAO-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	124		
P1 T1 A1 B1							



"MH" Sandwich Manifolds								
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page			
P T A B	MH03FBB-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	125			
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height	Page			
P T A B	MH03FBE-X-Y-Z01	23 Pressure Compensated	250 (Aluminum) 350 (Ductile Iron)	44.5	126			
P1 T1 A1 B1  SYMBOL  ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page			
P T A B	MH03FBE-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	127			
P1 T1 A1 B1								
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	<b>Pressure</b> bar	Stack Height mm	Page			
P T A B	MH03FBI-X-Y-Z01	23 Pressure Compensated	250 (Aluminum) 350 (Ductile Iron)	44.5	128			
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page			
P T A B	MH03FBO-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	129			
P1 T1 A1 B1								



"MH" Sandwich Manifolds							
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height	Page		
P T A B	MH03FBO-X-Y-Z01	23 Pressure Compensated	250 (Aluminum) 350 (Ductile Iron)	44.5	130		
P1 T1 A1 B1  SYMBOL  ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page		
P T A B	MH03FBO-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	131		
P1 T1 A1 B1  SYMBOL  ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height	Page		
P T A B	MH03FDB-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	132		
P1 T1 A1 B1  SYMBOL	Main Code	Flow	Pressure	Stack Height	Page		
ISO 03 SANDWICH MANIFOLD P T A B	Wain Code	l/min	bar	mm	1 age		
\(\sigma\)	мн03FDH-Х-Ү-Z01	40 Pressure Compensated	250 (Aluminum) 350 (Ductile Iron)	44.5	133		
Pl II Al Bl		Flow	Pressure	Stook Height			
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	l/min	bar	Stack Height mm	Page		
P T A B	мн03FDI- <mark>Х-</mark> Ч-Д01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	134		
P1 T1 A1 B1							



	"MH" Sandwich Manifolds								
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page				
P T A B	мнозғdі-⊠- <u></u> Т- <u>2</u> 01	23 Pressure Compensated	250 (Aluminum) 350 (Ductile Iron)	44.5	135				
Pi Ti Ai Bi  SYMBOL		Flow	Pressure	Stack Height					
ISO 03 SANDWICH MANIFOLD	Main Code	l/min	bar	mm	Page				
P T A B  O O  H H	MH03FDI-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	136				
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page				
P I A B	MH03FDJ-X-Y-Z01	40 Pressure Compensated	250 (Aluminum) 350 (Ductile Iron)	44.5	137				
SYMBOL  ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page				
P T A B	MH03FDO-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	138				
PI TI AI BI		171	Duog	Ctools II-2-1-4					
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	<b>Pressure</b> bar	Stack Height mm	Page				
P T A B	MH03FDO-X-Y-Z01	23 Pressure Compensated	250 (Aluminum) 350 (Ductile Iron)	44.5	139				
P1 T1 A1 B1									



"MH" Sandwich Manifolds							
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page		
P T A B	MH03FDO-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	140		
P1 T1 A1 B1  SYMBOL  ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page		
P T A B	MH03FDO-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	141		
P1 T1 A1 B1  SYMBOL  ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height	Page		
P T A B	мнозFDT-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	142		
SYMBOL  ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page		
P T A B	мн03FDT-⊠-∑-01	23 Pressure Compensated	250 (Aluminum) 350 (Ductile Iron)	44.5	143		
P1 T1 A1 B1  SYMBOL	Main Code	Flow 1/min	Pressure bar	Stack Height	Page		
P T A B	MH03FDT-X-Y-Z01	40	250 (Aluminum)  350 (Ductile Iron)	44.5	144		
P1 T1 A1 B1							



	"MH" Sandw	ich Mai	nifolds		
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page
P T A B	MH03FPB-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	145
P) TI AI BI  SYMBOL  ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page
P T A B	MH03FPE-X-Y-201	23 Pressure Compensated	250 (Aluminum) 350 (Ductile Iron)	44.5	146
P1 T1 A1 B1  SYMBOL  ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page
P T A B	MH03FPE-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	147
P1 T1 A1 B1  SYMBOL  SO 03 SANDWICH MANIFOLD	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
P T A B	мн03FPW-X-Y-Z01	23 Pressure Compensated	250 (Aluminum) 350 (Ductile Iron)	44.5	148
P1 T1 A1 B1  SYMBOL	Main Code	Flow	Pressure	Stack Height	Page
SO 03 SANDWICH MANIFOLD  P T A B  O D D D D D D D D D D D D D D D D D D	мнозгрw-X-Y-Z01	1/min 40	250 (Aluminum) 350 (Ductile Iron)	mm 44.5	149
P1 T1 A1 B1					



	"MH" Sandw	ich Mai	nifolds		
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page
P T A B	MH03FPW-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	150
P1 T1 A1 B1  SYMBOL  ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page
P T A B	MH03FTE-X-Y-Z01	23 Pressure Compensated	250 (Aluminum) 350 (Ductile Iron)	44.5	151
P1 T1 A1 B1  SYMBOL	Main Code	Flow	Pressure	Stack Height	Page
P T A B	MH03FTE-X-Y-Z01	1/min 40	250 (Aluminum) 350 (Ductile Iron)	44.5	152
P1 T1 A1 B1  SYMBOL  ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page
P T A B	мнозгтн-Х <u>-</u> Ү-До1	40 Pressure Compensated	250 (Aluminum) 350 (Ductile Iron)	44.5	153
P1 T1 A1 B1  SYMBOL	Main Code	Flow 1/min	Pressure bar	Stack Height	Page
ISO 03 SANDWICH MANIFOLD  P T A B	MH03FTW-X-Y-Z01	23 Pressure Compensated	250 (Aluminum)  350 (Ductile Iron)	44.5	154
P1 T1 A1 B1					



"MH" Sandwich Manifolds								
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page			
P T A B	мнозгтw- <u>X-Y</u> - <u>Z</u> 01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	155			
P1 T1 A1 B1								
SYMBOL  B to A, Regenerative	Main Code	Flow 1/min	<b>Pressure</b> bar	Stack Height mm	Page			
P T A B	MH03GBE-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	156			
Pl Tl Al Bl								
SYMBOL  B to A, Regenerative	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page			
P A B	MH03GBW-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	157			
PÎ TÎ AÎ BÎ				g. 1.77.1.1.				
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow l/min	<b>Pressure</b> bar	Stack Height mm	Page			
P T A B	MH03KPB-X-Y-Z03	40	250 (Aluminum) 350 (Ductile Iron)	63.0	158			
P1 T1 A1 B1								
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page			
P T A B	MH03KPR-X-Y-Z03	40	250 (Aluminum) 350 (Ductile Iron)	63.0	159			
P1 T1 A1 B1								



"MH" Sandwich Manifolds								
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page			
P T A B	MH03PAC-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	160			
P1 T1 A1 B1								
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	<b>Pressure</b> bar	Stack Height mm	Page			
P T A B	MH03PAC-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	161			
P1 T1 A1 B1								
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page			
P T A B	MH03PAC-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	162			
P1 T1 A1 B1								
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page			
P T A B	MH03PAP-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	163			
P1 T1 A1 B1								
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page			
P T A B	МН03РВС-Х-Y-Z01	40	250 (Aluminum)  350 (Ductile Iron)	44.5	164			
P1 T1 A1 B1								



"MH" Sandwich Manifolds								
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page			
P T A B	мн03РВС-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	165			
P1 T1 A1 B1		Flow	Pressure	Stack Height				
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	l/min	bar	mm	Page			
P T A B	мн03PBC-X-Y-Z01	40	250 (Aluminum)  350 (Ductile Iron)	44.5	166			
P1 T1 A1 B1								
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page			
P T A B	мн03РВЕ-Х-У-Д01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	167			
P1 T1 A1 B1								
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	<b>Flow</b> l/min	<b>Pressure</b> bar	Stack Height mm	Page			
P T A B	MH03PBP-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	168			
P1 T1 A1 B1								
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page			
P T A B	MH03PPE-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	169			
P1 T1 A1 B1								



"MH" Sandwich Manifolds								
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page			
P T A B	MH03PPE-X-Y-Z11	40	250 (Aluminum) 350 (Ductile Iron)	44.5	170			
P1 T1 A1 B1  SYMBOL  ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page			
P T A B	MH03PPE-X-Y-Z12	40	250 (Aluminum) 350 (Ductile Iron)	44.5	171			
P1 T1 A1 B1  SYMBOL  ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page			
P T A B	MH03PPW-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	172			
P1 T1 A1 B1  SYMBOL  ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height	Page			
P T A B	MH03PPW-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	173			
P1 T1 A1 B1  SYMBOL  ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page			
P T A B	MH03PPW-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	174			
P1 T1 A1 B1								



	"MH" Sandw	ich Ma	nifolds		
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page
P T A B	MH03PPW-X-Y-Z02	40	250 (Aluminum) 350 (Ductile Iron)	40.0	175
P1 T1 A1 B1  SYMBOL	Main Code	Flow	Pressure	Stack Height	Page
ISO 03 SANDWICH MANIFOLD  P T A B  G	MH03PPW-X-Y-Z02	1/min 40	250 (Aluminum) 350 (Ductile Iron)	mm 40.0	176
P1 T1 A1 B1  SYMBOL	Main Code	Flow	Pressure	Stack Height	Page
ISO 03 SANDWICH MANIFOLD  P T A B  G  G  G  G  G  G  G  G  G  G  G  G  G	MH03PPW-X-Y-Z02	1/min 40	250 (Aluminum) 350 (Ductile Iron)	40.0	177
P1 T1 A1 B1  SYMBOL	Main Code	Flow 1/min	Pressure bar	Stack Height	Page
P T A B	MH03RAB-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	mm 44.5	178
P1 T1 A1 B1  SYMBOL	Main Calla	Flow	Pressure	Stack Height	D
ISO 03 SANDWICH MANIFOLD	Main Code	l/min	bar	mm	Page
P T A B	MH03RAB-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	179
P1 T1 A1 B1					



"MH" Sandwich Manifolds							
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page		
P T A B	MH03RAE-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	180		
P1 T1 A1 B1  SYMBOL	Main Code	Flow	Pressure	Stack Height	Page		
ISO 03 SANDWICH MANIFOLD	Wani Couc	l/min	bar	mm	1 age		
P T A B	мн03RAH-Х-Ү-Д01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	181		
P1 T1 A1 B1							
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	<b>Pressure</b> bar	Stack Height mm	Page		
P T A B	MH03RAH-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	182		
P1 T1 A1 B1							
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page		
P T A B	MH03RBA-X-Y-Z01	40	250 (Aluminum)  350 (Ductile Iron)	44.5	183		
P1 T1 A1 B1							
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page		
P T A B	MH03RBA-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	184		
P1 T1 A1 B1							



	"MH" Sandw	rich Ma	nifolds		
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page
P T A B	мн03RBH- <mark>⊠-</mark> У- <b>Д</b> 01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	185
P1 T1 A1 B1  SYMBOL	Main Code	Flow 1/min	Pressure bar	Stack Height	Page
ISO 03 SANDWICH MANIFOLD  P T A B  G	мн03RBH-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	mm 44.5	186
P1 T1 A1 B1  SYMBOL	Main Code	Flow 1/min	Pressure bar	Stack Height	Page
ISO 03 SANDWICH MANIFOLD  P T A B  O T O T O T O T O T O T O T O T O T O	мнозrdн- <u>х-</u> у- <u>2</u> 01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	187
P1 T1 A1 B1  SYMBOL	Main Code	Flow 1/min	Pressure bar	Stack Height	Page
SO 03 SANDWICH MANIFOLD  P	мн03RDS-ဩ- <u>Ү</u> -Д02	20	250 (Aluminum) 350 (Ductile Iron)	40.0	188
P1 T1 A1 B1  SYMBOL  ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page
P T A B	мн03RDT- <mark>X</mark> -Y- <b>Z</b> 01	40	250 (Aluminum)  350 (Ductile Iron)	44.5	189
P1 T1 A1 B1					



"MH" Sandwich Manifolds							
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page		
P T A B	MH03RDT-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	190		
P1 T1 A1 B1  SYMBOL		Flow	Pressure	Stack Height			
ISO 03 SANDWICH MANIFOLD	Main Code	l/min	bar	mm	Page		
P T A B	MH03RDW-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	191		
P1 T1 A1 B1							
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page		
P T A B	MH03RPD-X-Y-Z01	20	250 (Aluminum) 350 (Ductile Iron)	44.5	192		
P1 T1 A1 B1							
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page		
P T A B	MH03RPD-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	193		
			(Duetne Holl)				
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page		
P A B	MH03RPD-X-Y-Z01	20	250 (Aluminum) 350 (Ductile Iron)	44.5	194		
© 1 0							



1	"MH" Sandw	ich Ma	nifolds		
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page
P T A B	MH03RPH-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	195
P1 T1 A1 B1  SYMBOL  ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page
P T A B	MH03RPH-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	196
P1 T1 A1 B1  SYMBOL	Main Code	Flow 1/min	Pressure bar	Stack Height	Page
ISO 03 SANDWICH MANIFOLD  P T A B	мн03RPJ-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	197
SYMBOL  ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page
P T A B	MH03RPW-X-Y-Z01	20	250 (Aluminum) 350 (Ductile Iron)	44.5	198
P1 T1 A1 B1					
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page
P T A B	мн03RTH-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	199
P1 T1 A1 B1					

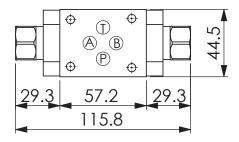


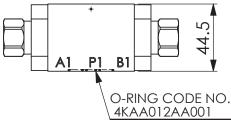
	"MH" Sandw	ich Ma	nifolds		
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page
P T A B	мнозктн- <u>х</u> -у- <u>г</u> 01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	200
P1 T1 A1 B1  SYMBOL		Flow	Pressure	Stack Height	
ISO 03 SANDWICH MANIFOLD	Main Code	l/min	bar	mm	Page
P I A B	MH03SAI-X-Y-Z01	40	250 (Aluminum)	44.5	201
			350 (Ductile Iron)		
SYMBOL  ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height	Page
P I A B	MH03SBI-X-Y-Z01	40	250 (Aluminum)  350 (Ductile Iron)	44.5	202
P1 T1 A1 B1					
SYMBOL ISO 03 SANDWICH MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page
P T A B	MH03SPW-X-Y-Z01	40	250 (Aluminum)  350 (Ductile Iron)	44.5	203
P1 T1 A1 B1					

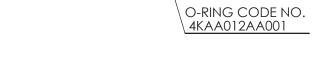


### ISO 03 SANDWICH MANIFOLD



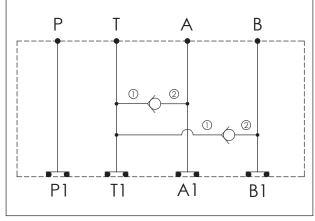






**UNIT:mm** 





### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 40 1/min

Cartridge Valve:
Refer to CV13A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.33 0.53	kg(WITHOUT VALVES) kg(INCLUDE VALVES)

<sup>\*</sup> If you need the special specification. Please contact us.

Typical Pressure Drop
12.0
9.0
5 bar 2 bar
3.0 2 bdr
0 20 40 60 80
Flow-Q(I/min)

X	SELECTION FOR A PORT CONTRO	L
13A2	CAVITY ONLY (WITHOUT VALVE)	
CV03	CV13A2003N (80LPM,0.3bar)	

Y	SELECTION FOR B PORT CONTROL
13A2	CAVITY ONLY (WITHOUT VALVE)
CV03	CV13A2003N (80LPM,0.3bar)

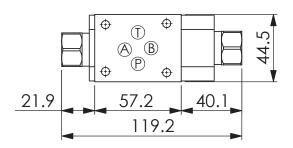
Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		

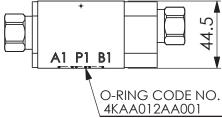
Rev.150521 M.BDT.301

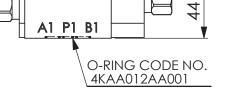


### ISO 03 SANDWICH MANIFOLD









### B to P (B to A), Regenerative В 1 2 Ρ1 Τ1 Α1 В1

### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

350 bar Body Pressure Rating:

Rated flow: 40 I/min

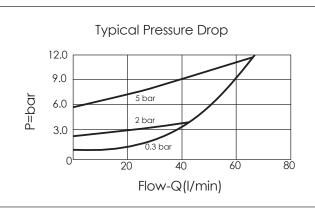
Cartridge Valve: Refer to CV13A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.35 0.55	kg(WITHOUT VALVES) kg(INCLUDE VALVES)

<sup>\*</sup> If you need the special specification. Pléase contact us.

### **UNIT:mm**



X	SELECTION FOR CHECK VALV (PORT 102, NEAR "A" PORT SIL	
13A2	CAVITY ONLY(WITHOUT VALVE)	
CV20	CV13A2020N (80LPM,2.0bar)	

Y	SELECTION FOR B PORT CONTROL
13A2	CAVITY ONLY (WITHOUT VALVE)
CV20	CV13A2020N (80LPM,2.0bar)

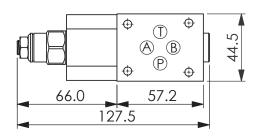
Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		

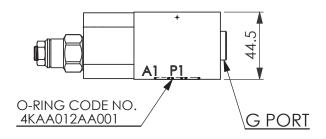
M.BRG.301 Rev.150521



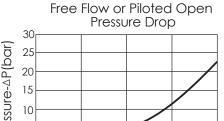


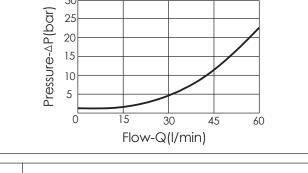
Stack Height: 44.5mm





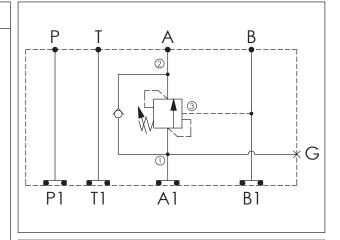
#### **UNIT:mm**





Y	SELECTION FOR G PORT		
G02	G 1/4"(Metric)		
N02	NPT 1/4"(U.S. Units)		

### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

350 bar Body Pressure Rating:

Rated flow: 40 I/min

#### Cartridge Valve: Refer to CB11A-X-Y-Z

\* Refer to Winner Cartridge Valve Catalog.

Aluminum	0.4 kg(WITHOUT VALVE) 0.6 kg(INCLUDE VALVE)
Ductile Iron	1.1 kg(WITHOUT VALVE) 1.3 kg(INCLUDE VALVE)

<sup>\*</sup> If you need the special specification. Pléase contact us.

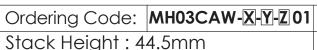
X	SELECTION FOR A PORT	CONTROL
11A3	CAVITY ONLY (WITHOUT VALVE)	
CB3H	CB11A33HL (3:1 , 280bar)	
CB4J	CB11A34JL (4.5:1 , 350bar)	
CB0J	CB11A30JL (10:1, 350bar)	

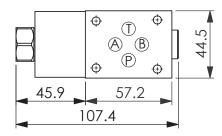
Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

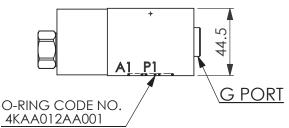
Rev.130305 M.CAW.301



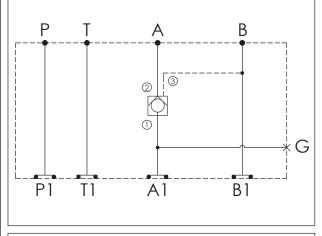
### ISO 03 SANDWICH MANIFOLD











### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

350 bar Body Pressure Rating:

Rated flow: 40 I/min

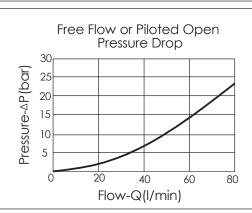
Cartridge Valve:
Refer to CO11A-X-Y-Z

\* Refer to Winner Cartridge Valve Catalog.

Aluminum	0.4 0.5	kg(WITHOUT VALVE) kg(INCLUDE VALVE)
Ductile Iron	1.1 1.2	kg(WITHOUT VALVE) kg(INCLUDE VALVE)

<sup>\*</sup> If you need the special specification. Pléase contact us.

### **UNIT:mm**



X	SELECTION FOR A PORT	CONTROL
11A3	CAVITY ONLY (WITHOUT VALVE)	
CO20	CO11A3020N (60LPM,2.0bar)	
CO03	CO11A3003N (60LPM,0.3bar)	
CO50	CO11A3050N (60LPM,5.0bar)	

Υ	SELECTION FOR G PORT	
G02	G 1/4"(Metric)	
N02	NPT 1/4"(U.S. Units)	

Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

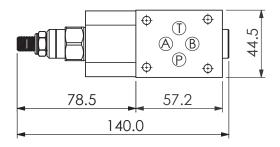
M.CAW.302 Rev.130305

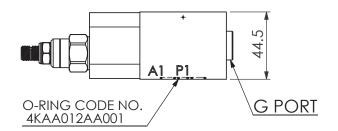




### Ordering Code: MH03CAW-X-Y-Z01

Stack Height: 44.5mm

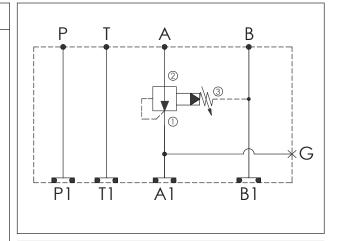




#### **UNIT:mm**







### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating:

350 bar

Rated flow: 40 I/min

Cartridge Valve: Refer to PB11A-X-Y-Z

\* Refer to Winner Cartridge Valve Catalog.

Aluminum	0.4 0.56	kg(WITHOUT VALVE) kg(INCLUDE VALVE)
Ductile Iron	1.1 1.3	kg(WITHOUT VALVE) kg(INCLUDE VALVE)

<sup>\*</sup> If you need the special specification. Pléase contact us.

150	Re	gulated	d Pressu	ıre
Jr.)				
9 100				
_				
Pressure-∆P(bar)				
essi 9				
Pr				
O		0 2 Flow-Q		3O 4O

X	SELECTION FOR A PORT	CONTROL
11A3	CAVITY ONLY (WITHOUT VALVE)	
PB0A	PB11A30AL (40LPM ,7-210bar)	

Υ	SELECTION FOR G PORT	
G02	G 1/4"(Metric)	
N02	NPT 1/4"(U.S. Units)	

Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	
S		

M.CAW.303 Rev.130305

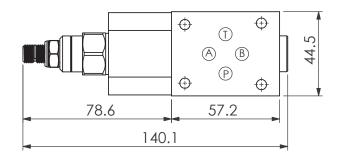
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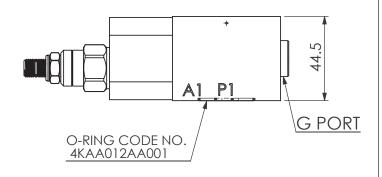






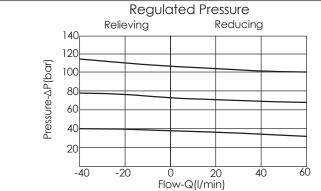
Stack Height: 44.5mm





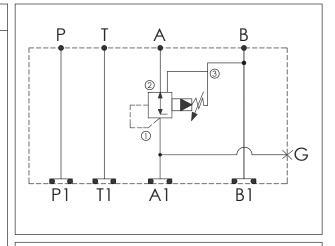
**UNIT:mm** 





Y	SELECTION FOR G PORT		
G02	G 1/4"(Metric)		
N02	NPT 1/4"(U.S. Units)		

### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating:

350 bar

Rated flow:

40 I/min

Cartridge Valve: Refer to PP11A-X-Y-Z

\* Refer to Winner Cartridge Valve Catalog.

Aluminum	0.4 0.56	kg(WITHOUT VALVE) kg(INCLUDE VALVE)
Ductile Iron	1.1 1.3	kg(WITHOUT VALVE) kg(INCLUDE VALVE)

<sup>\*</sup> If you need the special specification. Pléase contact us.

X	SELECTION FOR A PORT CONTROL		
11A3	CAVITY ONLY (WITHOUT VALVE)		
PP0A	PP11A30AL(40LPM,7.0~210bar) (Pilot Operated Reducing/Relieving)		

Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		
S	DUCTILE IRON		

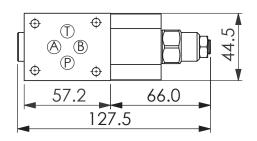
M.CAW.304 Rev.130305

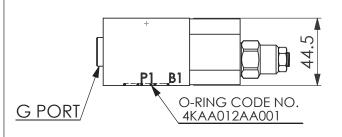






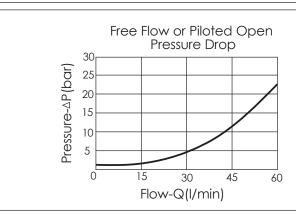
Stack Height: 44.5mm



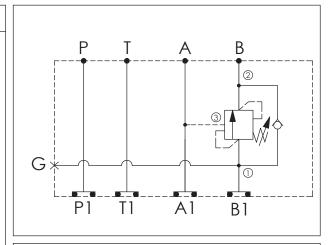


### **UNIT:mm**





<b>ISO 03</b>	SAND	WICH	MAI	<b>NIFO</b>	LD
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### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 40 1/min

# Cartridge Valve: Refer to CB11A-X-Y-Z

\* Refer to Winner Cartridge Valve Catalog.

Aluminum	0.4 kg(WITHOUT VALVE) 0.6 kg(INCLUDE VALVE)
Ductile Iron	1.1 kg(WITHOUT VALVE) 1.3 kg(INCLUDE VALVE)

<sup>\*</sup> If you need the special specification. Please contact us.

X	SELECTION FOR G PORT		
G02	G 1/4"(Metric)		
N02	NPT 1/4"(U.S. Units)		

Υ	SELECTION FOR B PORT CONTROL	Z	
11A3	CAVITY ONLY(WITHOUT VALVE)	Α	HIGI
СВЗН	CB11A33HL (3:1 , 280bar)	S	DU
CB4J	CB11A34JL (4.5:1 , 350bar)		
CB0J	CB11A30JL (10:1 , 350bar)		

Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		
S	DUCTILE IRON		

Rev.130305 M.CBW.301





В

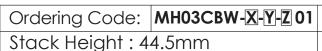
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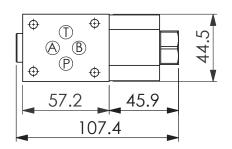
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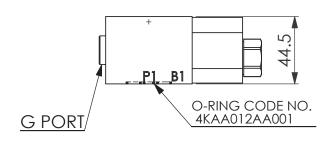
3||2

### ISO 03 SANDWICH MANIFOLD

Α







# TECHNICAL DATA

**A**1

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating:

Ρ1

Ρ

G>

350 bar

I/min

40

Rated flow:

Τ1

### Cartridge Valve:

Refer to CO11A-X-Y-Z

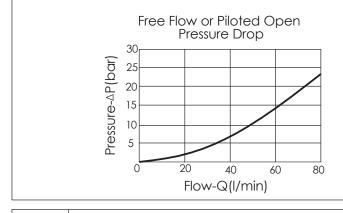
\* Refer to Winner Cartridge Valve Catalog.

Aluminum	0.4 kg(WITHOUT VALVE) 0.5 kg(INCLUDE VALVE)
Ductile Iron	1.1 kg(WITHOUT VALVE) 1.2 kg(INCLUDE VALVE)

<sup>\*</sup> If you need the special specification.
Please contact us.

### UNIT:mm





X	SELECTION FOR G PORT
G02	G 1/4"(Metric)
N02	NPT 1/4"(U.S. Units)

Y	SELECTION FOR B PORT CONTROL		
11A3	CAVITY ONLY (WITHOUT VALVE)		
CO20	CO11A3020N (60LPM,2.0bar)		
CO03	CO11A3003N (60LPM,0.3bar)		
CO50	CO11A3050N (60LPM,5.0bar)		

Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	
S		

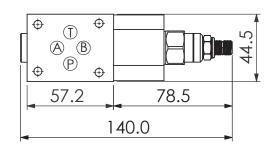
Rev.130305 M.CBW.302

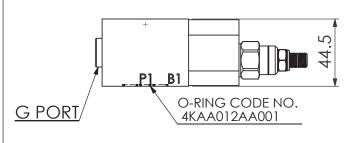






Stack Height: 44.5mm

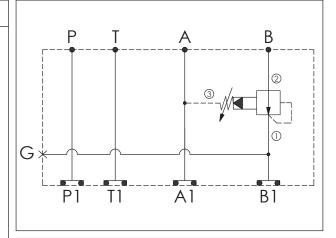




#### **UNIT:mm**







### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating:

350 bar

Rated flow: 40 I/min

Cartridge Valve: Refer to PB11A-X-Y-Z

\* Refer to Winner Cartridge Valve Catalog.

Aluminum	0.4 0.56	kg(WITHOUT VALVE) kg(INCLUDE VALVE)
Ductile Iron	1.1 1.3	kg(WITHOUT VALVE) kg(INCLUDE VALVE)

<sup>\*</sup> If you need the special specification. Please contact us.

150	Regulated Pressure				
( <del>)</del>					
9 100					
4 100					
Pressure-∆P(bar)					
ess					
0	-			0 40	
		Flow-Q	(I/min)		

X	SELECTION FOR G PORT	
G02	G 1/4"(Metric)	
N02	NPT 1/4"(U.S. Units)	

Y	SELECTION FOR B PORT CONTROL		
11A3	CAVITY ONLY (WITHOUT VALVE)		
PB0A	PB11A30AL (40LPM , 7-210bar)		

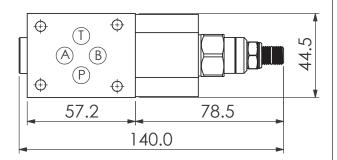
Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		
S	DUCTILE IRON		

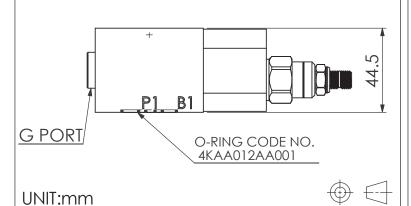
Rev.130305 M.CBW.303

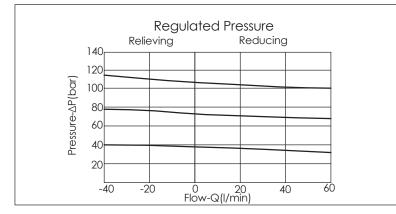




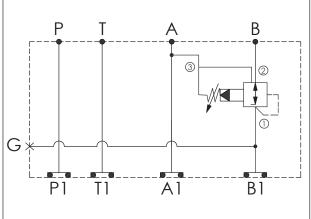








#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating:

350 bar

Rated flow: 40 1/min

Cartridge Valve: Refer to PP11A-X-Y-Z

\* Refer to Winner Cartridge Valve Catalog.

Aluminum	0.4 0.56	kg(WITHOUT VALVE) kg(INCLUDE VALVE)
Ductile Iron	1.1 1.3	kg(WITHOUT VALVE) kg(INCLUDE VALVE)

<sup>\*</sup> If you need the special specification. Please contact us.

X	SELECTION FOR G PORT		
G02	G 1/4"(Metric)		
N02	NPT 1/4"(U.S. Units)		

Y	SELECTION FOR B PORT CONTROL
11A3	CAVITY ONLY (WITHOUT VALVE)
PPOA	PP11A30AL(40LPM,7.0~210bar) (Pilot Operated Reducing/Relieving)

Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		
S	DUCTILE IRON		

Rev.130418 M.CBW.304

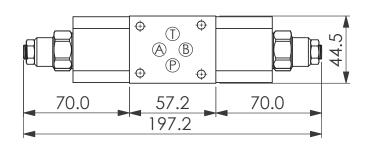


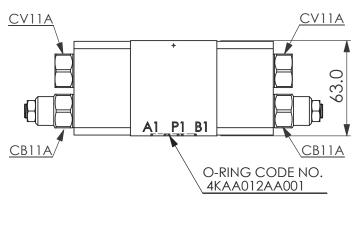


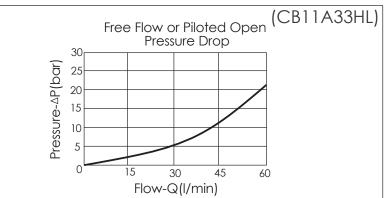


Stack Height: 63.0mm

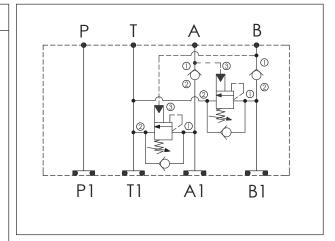
**UNIT:mm** 







#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 40 1/min

Cartridge Valve:
Refer to CV11A2020N
CB11A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.75 kg(WITHOUT VALVES 1.35 kg(INCLUDE VALVES	

\* If you need the special specification. Please contact us.

X	SELECTION FOR A PORT	CONTROL
11A3	CAVITY ONLY (WITHOUT VALVE)	
CB3H	CB11A33HL(60LPM, 70-280bar)	

Υ	SELECTION FOR B PORT CON	TROL
11A3	CAVITY ONLY (WITHOUT VALVE)	
СВЗН	CB11A33HL (60LPM , 70-280bar)	

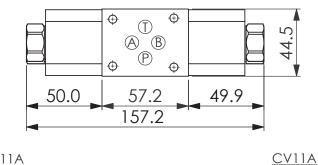
Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		

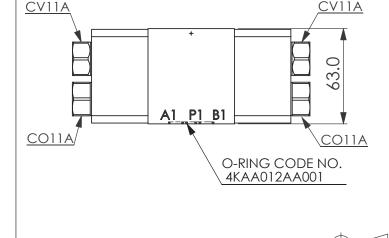
Rev.120813 M.CDC.371

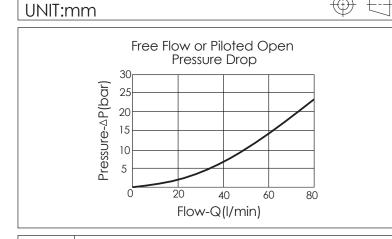


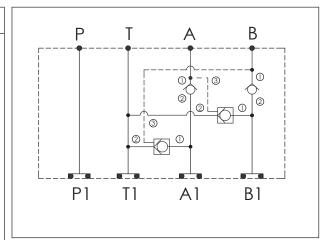












#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 40 1/min

Cartridge Valve:
Refer to CV11A2020N
CO11A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.75 kg(WITHOUT VALVES) 1.35 kg(INCLUDE VALVES)

\* If you need the special specification. Please contact us.

X	SELECTION FOR A PORT	CONTROL
11A3	CAVITY ONLY (WITHOUT VALVE)	
CO20	CO11A3020N (60LPM,2.0bar)	

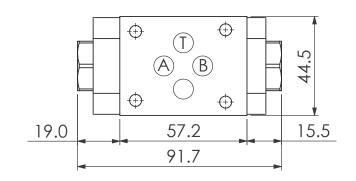
Y	SELECTION FOR B PORT CONTROL		
11A3	CAVITY ONLY (WITHOUT VALVE)		
CO20	CO11A3020N (60LPM,2.0bar)		

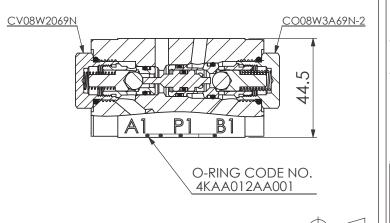
Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		

Rev.120813 M.CDC.372





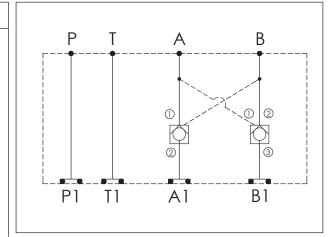




**UNIT:mm** 



#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

350 bar Body Pressure Rating:

CO08W-X-Y-Z

Rated flow: 30 I/min

Cartridge Valve: Refer to CV08W-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.35 0.5	kg(WITHOUT VALVES) kg(INCLUDE VALVES)

\* If you need the special specification. Pléase contact us.

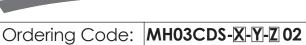
X	SELECTION FOR A PORT	CONTROL
08W2	CAVITY ONLY (WITHOUT VALVE)	
CV69	CV08W2069N (30LPM,6.9bar)	
		_

Y	SELECTION FOR B PORT CON	NTROL
08W3	CAVITY ONLY (WITHOUT VALVE)	
CO69	CO08W3A69N-2 (30LPM,6.9bar)	

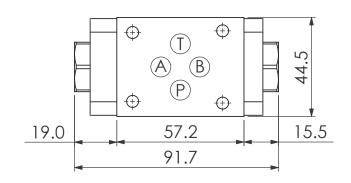
Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		

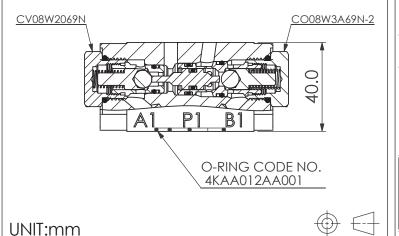
Rev.130305 M.CDS.301



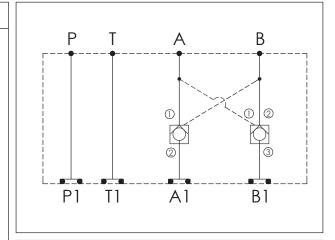


Stack Height: 40.0mm





#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 30 I/min

Cartridge Valve:

Refer to CV08W-X-Y-Z

CO08W-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.35 0.5	kg(WITHOUT VALVES) kg(INCLUDE VALVES)

<sup>\*</sup> If you need the special specification. Please contact us.

X	SELECTION FOR A PORT	CONTROL
08W2	CAVITY ONLY (WITHOUT VALVE)	
CV69	CV08W2069N (30LPM,6.9bar)	

Y	SELECTION FOR B PORT CONTROL		
08W3	CAVITY ONLY (WITHOUT VALVE)		
CO69	CO08W3A69N-2 (30LPM,6.9bar)		

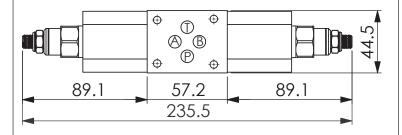
Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		

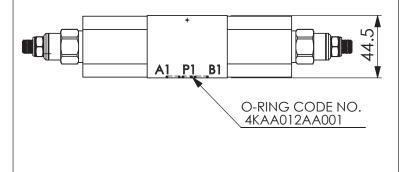
Rev.130305 M.CDS.341



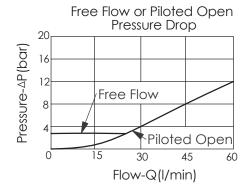






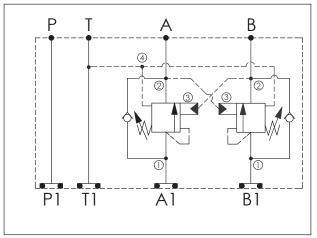


#### **UNIT:mm**



Flow-Q(I/min)			
Y	SELECTION FOR B PORT CONTROL		
21A4	CAVITY ONLY (WITHOUT VALVE)		
CWAI	CW21A4AIL (1:1 , 105bar)		
CWBF	CW21A4BFL (2:1 , 175bar)		
CWCH	CW21A4CHL (3:1 , 280bar)		
CWEF	CW21A4EFL (5:1 , 175bar)		

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating:

350 bar

Rated flow:

40 I/min

Cartridge Valve: Refer to CW21A-X-Y-Z

\* Refer to Winner Cartridge Valve Catalog.

Aluminum	0.6 1.0	kg(WITHOUT VALVES) kg(INCLUDE VALVES)
Ductile Iron	1.7 2.1	kg(WITHOUT VALVES) kg(INCLUDE VALVES)

<sup>\*</sup> If you need the special specification. Pléase contact us.

X	SELECTION FOR A PORT	CONTROL
21A4	CAVITY ONLY (WITHOUT VALVE)	
CWAI	CW21A4AIL (1:1 , 105bar)	
CWBF	CW21A4BFL (2:1 , 175bar)	
CWCH	CW21A4CHL (3:1 , 280bar)	
CWEF	CW21A4EFL (5:1 , 175bar)	

Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		
S	DUCTILE IRON		

Rev.130418 M.CDT.301

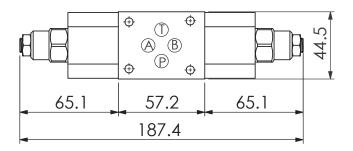
£-+

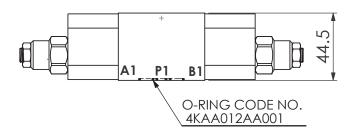




#### Ordering Code: MH03CDW-X-Y-Z01

Stack Height: 44.5mm

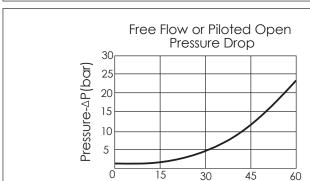




#### **UNIT:mm**



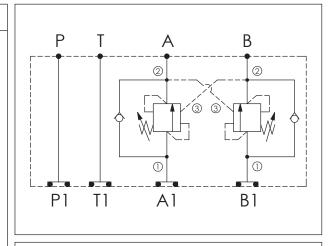
€--



Y	SELECTION FOR B PORT CONTROL		
11A3	CAVITY ONLY (WITHOUT VALVE)		
СВЗН	CB11A33HL (3:1 , 280bar)		
CB4J	CB11A34JL (4.5:1, 350bar)		
CB0J	CB11A30JL (10:1 , 350bar)		

Flow-Q(I/min)

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

350 bar Body Pressure Rating:

Rated flow: 40 I/min

# Cartridge Valve: Refer to CB11A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.5 kg(WITHOUT VALVES) 0.9 kg(INCLUDE VALVES)
Ductile Iron	1.3 kg(WITHOUT VALVES) 1.7 kg(INCLUDE VALVES)

<sup>\*</sup> If you need the special specification. Pléase contact us.

X	SELECTION FOR A PORT CONTROL		
11A3	CAVITY ONLY (WITHOUT VALVE)		
CB3H	CB11A33HL (3:1, 280bar)		
CB4J	CB11A34JL (4.5:1 , 350bar)		
CB0J	CB11A30JL (10:1, 350bar)		

Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		
S	DUCTILE IRON		

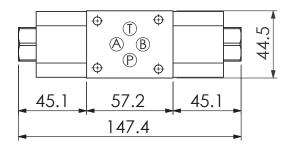
Rev.130305 M.CDW.301

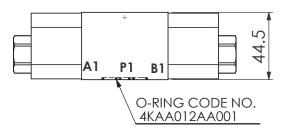




#### Ordering Code: MH03CDW-X-Y-Z01

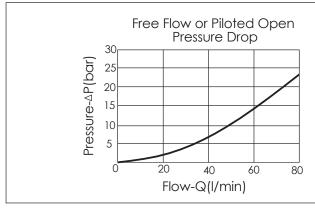
Stack Height: 44.5mm





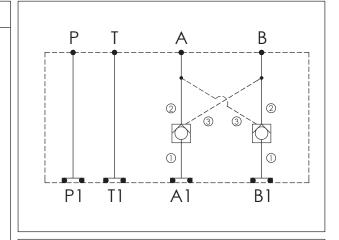
#### **UNIT:mm**





Y	SELECTION FOR B PORT CONTROL		
11A3	CAVITY ONLY (WITHOUT VALVE)		
CO20	CO11A3020N ( 60LPM,2.0bar)		
CO03	CO11A3003N (60LPM,0.3bar)		
CO50	CO11A3050N (60LPM,5.0bar)		

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

350 bar Body Pressure Rating:

I/min

Rated flow: 40

# Cartridge Valve: Refer to CO11A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.5 kg(WITHOUT VALVES) 0.8 kg(INCLUDE VALVES)
Ductile Iron	1.3 kg(WITHOUT VALVES) 1.6 kg(INCLUDE VALVES)

<sup>\*</sup> If you need the special specification. Pléase contact us.

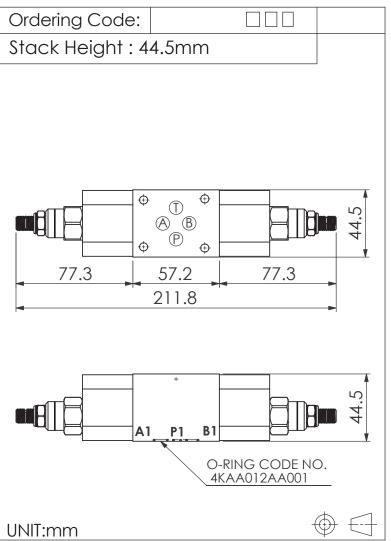
X	SELECTION FOR A PORT CONTROL		
11A3	CAVITY ONLY (WITHOUT VALVE)		
CO20	CO11A3020N ( 60LPM,2.0bar)		
CO03	CO11A3003N (60LPM,0.3bar)		
CO50	CO11A3050N (60LPM,5.0bar)		

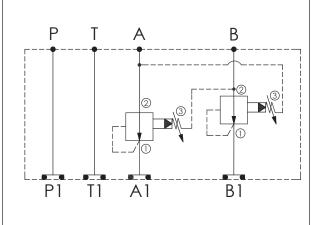
Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		
S			

Rev.130305 M.CDW.302









#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 40 1/min

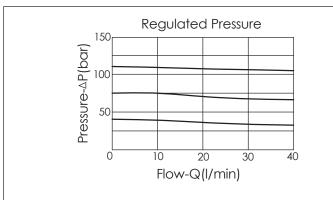
#### Cartridge Valve:

Refer to PB11A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.5 0.85	kg(WITHOUT VALVES) kg(INCLUDE VALVES)
Ductile Iron	1.3 1.65	kg(WITHOUT VALVES) kg(INCLUDE VALVES)

<sup>\*</sup> If you need the special specification. Please contact us.



X	SELECTION FOR A PORT	CONTROL
11A3	CAVITY ONLY (WITHOUT VALVE)	
PB0A	PB11A30AL (40LPM ,7-210bar)	

Υ	SELECTION FOR B PORT CONTROL		
11A3	CAVITY ONLY (WITHOUT VALVE)		
PB0A	PB11A30AL (40LPM ,7-210bar)		

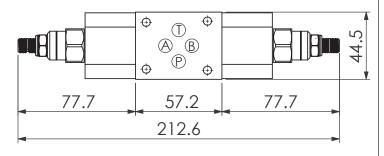
Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		
S			

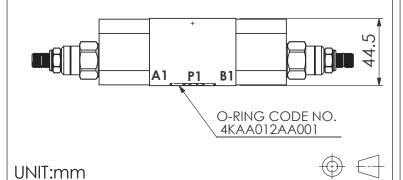
Rev.130418 M.CDW.303

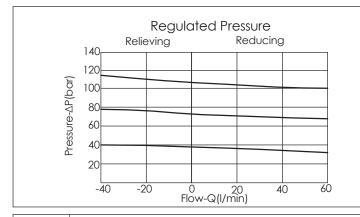






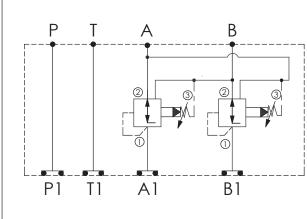






Y	SELECTION FOR B PORT CONTROL			
11A3	CAVITY ONLY (WITHOUT VALVE)			
PPOA PP11A30AL(40LPM,7.0~210bar) (Pilot Operated Reducing/Relieving)				

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 40 I/min

#### Cartridge Valve:

Refer to PP11A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.5 0.85	kg(WITHOUT VALVES) kg(INCLUDE VALVES)
Ductile Iron	1.3 1.65	kg(WITHOUT VALVES) kg(INCLUDE VALVES)

<sup>\*</sup> If you need the special specification. Please contact us.

X	SELECTION FOR A PORT	CONTROL
11A3	CAVITY ONLY (WITHOUT VALVE)	
PP0A	PP11A30AL(40LPM,7.0~210bar) (Pilot Operated Reducing/Relieving)	

Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		
S	DUCTILE IRON		

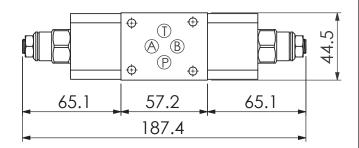
Rev.130305 M.CDW.304

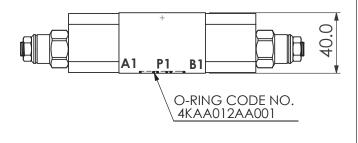






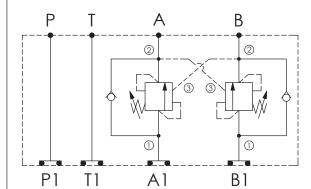
Stack Height: 40.0mm





**UNIT:mm** 





ISO 03 SANDWICH MANIFOLD

#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 40 1/min

Cartridge Valve: Refer to CB11A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.45 0.85	kg(WITHOUT VALVES) kg(INCLUDE VALVES)
Ductile Iron	1.3 1.7	kg(WITHOUT VALVES) kg(INCLUDE VALVES)

<sup>\*</sup> If you need the special specification. Please contact us.

30_	Free Flow or Piloted Open Pressure Drop
Pressure-AP(bar)	15 30 45 60 Flow-Q(I/min)

X	SELECTION FOR A PORT	CONTROL
11A3	CAVITY ONLY (WITHOUT VALVE)	
СВЗН	CB11A33HL (3:1, 280bar)	
CB4J	CB11A34JL (4.5:1, 350bar)	
CB0J	CB11A30JL (10:1, 350bar)	

Y	SELECTION FOR B PORT CONTROL			
11A3	CAVITY ONLY(WITHOUT VALVE)			
СВЗН	CB11A33HL (3:1 , 280bar)			
CB4J	CB11A34JL (4.5:1 , 350bar)			
CB0J	CB11A30JL (10:1 , 350bar)			

Z	BODY MATERIAL			
Α	HIGH-STRENGTH ALUMINUM			
S	DUCTILE IRON			

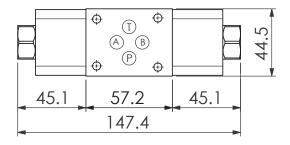
Rev.150519 M.CDW.341

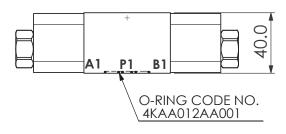




#### Ordering Code: MH03CDW-X-Y-Z02

Stack Height: 40.0mm

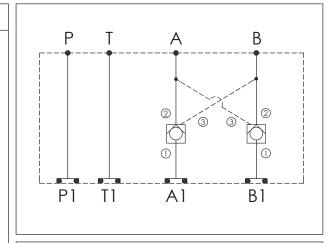




**UNIT:mm** 



#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 40 1/min

Cartridge Valve:

Refer to CO11A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.45 0.71	kg(WITHOUT VALVES) kg(INCLUDE VALVES)
Ductile Iron	1.3 1.56	kg(WITHOUT VALVES) kg(INCLUDE VALVES)

<sup>\*</sup> If you need the special specification. Please contact us.

30_	Free Flow or Piloted Open Pressure Drop				
Pressure-△P(bar)					
ф 15					
JNSS 10					
Pr 5		/			
	2			0 80	
	Flow-Q(I/min)				

X	SELECTION FOR A PORT	CONTROL
11A3	CAVITY ONLY (WITHOUT VALVE)	
CO20	CO11A3020N ( 60LPM,2.0bar)	
CO03	CO11A3003N (60LPM,0.3bar)	
CO50	CO11A3050N (60LPM,5.0bar)	

Y	SELECTION FOR B PORT CONTROL		
11A3	CAVITY ONLY (WITHOUT VALVE)		
CO20	CO11A3020N ( 60LPM,2.0bar)		
CO03	CO11A3003N (60LPM,0.3bar)		
CO50	CO11A3050N (60LPM,5.0bar)		

Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		
S	DUCTILE IRON		

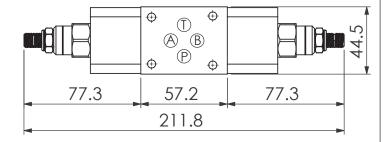
Rev.150519 M.CDW.342

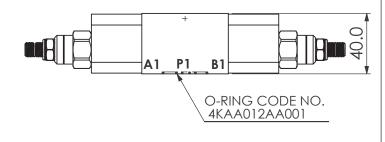




#### Ordering Code: MH03CDW-X-Y-Z02

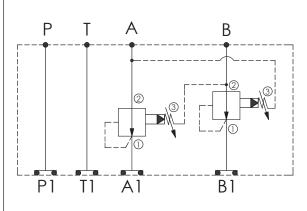
Stack Height: 40.0mm





**UNIT:mm** 





ISO 03 SANDWICH MANIFOLD

#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 40 1/min

Cartridge Valve: Refer to PB11A-XHY-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.45 0.8	kg(WITHOUT VALVES) kg(INCLUDE VALVES)
Ductile Iron	1.3 1.65	kg(WITHOUT VALVES) kg(INCLUDE VALVES)

<sup>\*</sup> If you need the special specification. Please contact us.

150 <sub>r</sub>	Regulated Pressure			
(JD)				
<u>ğ</u> 100				
4 100				
Pressure-AP(bar)				
ess ess				
0				30 40
		Flow-Q	(I/min)	

X	SELECTION FOR A PORT	CONTROL
11A3	CAVITY ONLY (WITHOUT VALVE)	
PB0A	PB11A30AL (40LPM ,7-210bar)	

Y	SELECTION FOR B PORT CONTROL		
11A3	CAVITY ONLY (WITHOUT VALVE)		
PB0A	PB11A30AL (40LPM ,7-210bar)		

Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		
S	DUCTILE IRON		

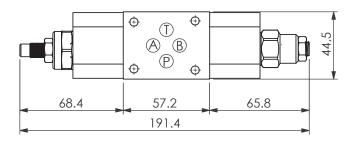
Rev.150519 M.CDW.343

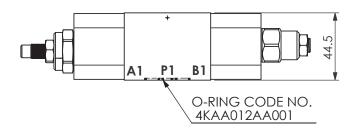




Ordering Code: MH03CFW-X-Y-Z01

Stack Height: 44.5mm



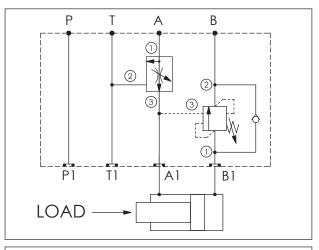


UNIT:mm



Y	SELECTION FOR B PORT CONTROL
11A3	CAVITY ONLY (WITHOUT VALVE)
CB3H	CB11A33HL ( 3:1 , 280bar)
CB4J	CB11A34JL (4.5:1 , 350bar)
CB0J	CB11A30JL (10:1 , 350bar)

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating:

350 bar

Rated flow:

40 I/min

Cartridge Valve:
Refer to FR10W-X-Y-Z
CB11A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.5 0.8	kg(WITHOUT VALVES) kg(INCLUDE VALVES)

\* If you need the special specification. Please contact us.

X	SELECTION FOR A PORT	CONTROL
10W3	CAVITY ONLY (WITHOUT VALVE)	
FR3L	FR10W33NL (38LPM,240bar)	

Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		

Ordering Code:	FR10W33NL	Ordering Code:	CB11A33HL
when 1 to 3	50 40 40 30 30 30 10 30 10 30 10 10 20 10 10 20 30 10 10 20 30 40 40 40 40 40 40 40 40 40 4	Pressure-AP(bar) 20 12 12 25 26 27 27 28 29 20 20 20 20 20 20 20 20 20 20 20 20 20	Flow or Piloted Open Pressure Drop

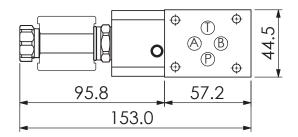
Rev.130418

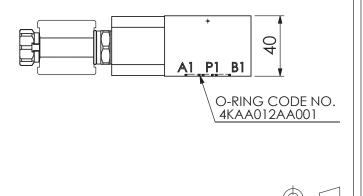
M.CFW.301

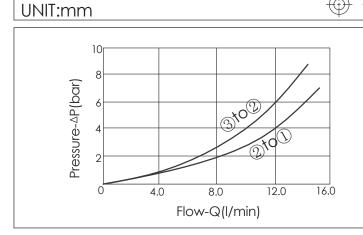












Υ	SELECTION FOR B PORT CONTROL (REFER TO ES08W-X-Y-Z)		
08W3	CAVITY ONLY (WITHOUT VALVE)		
EP10	ES08W3A10N04 , 15LPM,210bar (SPOOL 3-WAY,WITHOUT COIL)		
EP10M	ES08W3A10M04 , 15LPM,210bar(NORMALLY CLOSED WITH KNOB STYLE MANUAL OVERRIDE, WITHOUT COIL)		
COIL MUST BE ORDERED SEPARATELY			

(REFER TO EC-04W-X-Y-Z)

P T A B

3 0

NTV
2

P1 T1 A1 B1

#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 15 1/min

Cartridge Valve: Refer to ES08W-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.4 0.53	kg(WITHOUT VALVES) kg(INCLUDE VALVES ,WITHOUT COIL)

<sup>\*</sup> If you need the special specification. Please contact us.

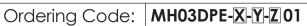
x	SELECTION FOR A PORT CONTROL		
N	WITHOUT PORT		

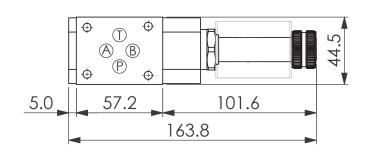
Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		

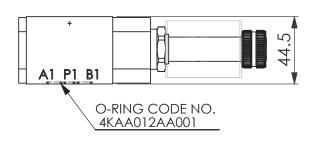
Rev.130305 M.DBE.341



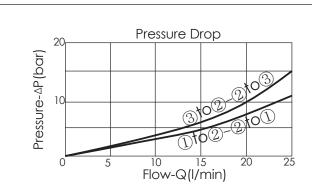






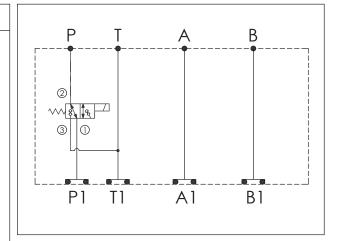


#### **UNIT:mm**



Y	SELECTION FOR G PORT	Г
N	WITHOUT PORT	

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

350 bar Body Pressure Rating:

Rated flow: 25 I/min

# Cartridge Valve: Refer to EP10W-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.4 kg(WITHOUT VALVES) 0.6 kg(INCLUDE VALVES ,WITHOUT COIL)

<sup>\*</sup> If you need the special specification. Please contact us.

X	SELECTION FOR P PORT CONTROL (REFER TO EP10W-X-Y-Z)			
10W3	CAVITY ONLY (WITHOUT VALVE)			
EP53	EP10W3C53N04 , 25LPM,250bar (WITHOUT COIL)			
EP53P	EP10W3C53P04 , 25LPM,250bar(WITH PUSH STYLE MANUAL OVERRIDE,WITHOUT COIL)			

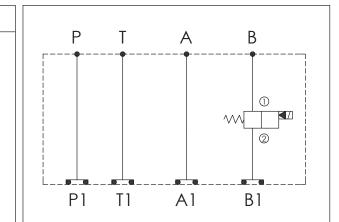
#### COIL MUST BE ORDERED SEPARATELY (REFER TO EC-16B-X-Y-Z)

Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		

Rev.121121 M.DPE.301







#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

350 bar Body Pressure Rating:

Rated flow: 40 I/min

# Cartridge Valve: Refer to EP08W-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.3 0.43	kg(WITHOUT VALVES) kg(INCLUDE VALVES ,WITHOUT COIL)

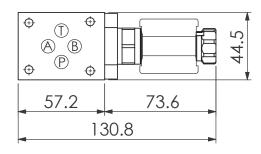
<sup>\*</sup> If you need the special specification. Please contact us.

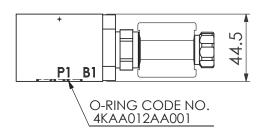
SELECTION FOR A PORT CONTROL		
WITHOUT PORT		
	WITHOUT PORT	

Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		

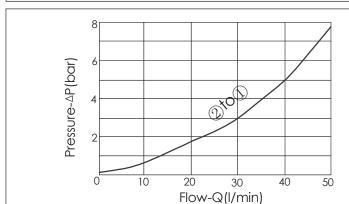
MH03EBW-X-Y-Z01 Ordering Code:

Stack Height: 44.5mm





**UNIT:mm** 



Y	SELECTION FOR B PORT CONT (REFER TO EP08W-X-Y-Z)	<b>IROL</b>
08W2	CAVITY ONLY(WITHOUT VALVE)	
EP01	EP08W2A01N05 , 40LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	
EP02	EP08W2A02N05 , 40LPM,350bar (NORMALLY OPEN,WITHOUT COIL)	
EP01M	EP08W2A01M05 , 40LPM,350bar(NORMALLY CLOSED WITH KNOB STYLE MANUAL OVERRIDE, WITHOUT COIL)	
EP02P	EP08W2A02P05 , 40LPM,350bar(NORMALLY OPEN WITH PUSH STYLE MANUAL OVERRIDE,WITHOUT COIL)	
COIL MUST BE ORDERED SEPARATELY		

(REFER TO EC-04W-X-Y-Z)

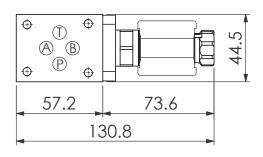
Rev.101215 M.EBW.301

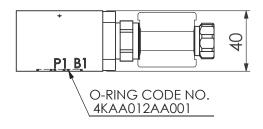




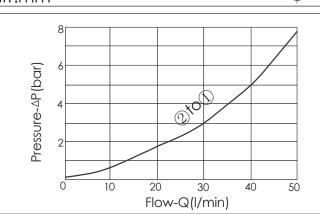
Ordering Code: MH03EBW-X-Y-Z02

Stack Height: 40.0mm



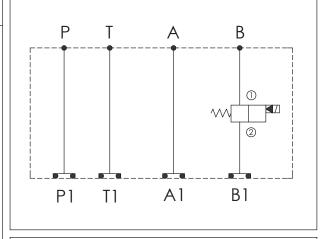


**UNIT:mm** 



Y	SELECTION FOR B PORT CONT (REFER TO EP08W-X-Y-Z)	<b>TROL</b>
08W2	CAVITY ONLY (WITHOUT VALVE)	
EP01	EP08W2A01N05 , 40LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	
EP02	EP08W2A02N05 , 40LPM,350bar (NORMALLY OPEN,WITHOUT COIL)	
EP01M	EP08W2A01M05 , 40LPM,350bar(normally closed with knob style manual override, without coil)	
EPO2P	EP08W2A02P05 , 40LPM,350bar(NORMALLY OPEN WITH PUSH STYLE MANUAL OVERRIDE,WITHOUT COIL)	
COIL MUST BE ORDERED SEPARATELY (REFER TO EC-04W-X-Y-Y-Z)		

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating: 350 bar

Rated flow: 40 1/min

Cartridge Valve: Refer to EP08W-XHYHZ

\* Refer to Winner Cartridge Valve Catalog.

Aluminum	0.27 kg(WITHOUT VALVES) 0.4 kg(INCLUDE VALVES ,WITHOUT COIL)

<sup>\*</sup> If you need the special specification. Please contact us.

x	SELECTION FOR A PORT CONTROL	
N	WITHOUT PORT	

Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		

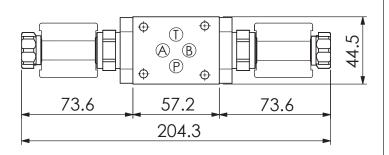
Rev.101215 M.EBW.341

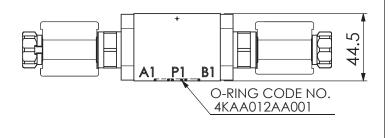




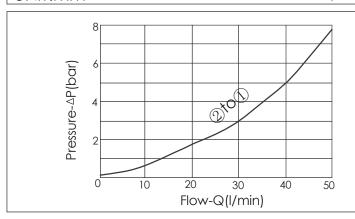
### Ordering Code: MH03EDT-X-Y-Z01 \$ 53.80

Stack Height: 44.5mm





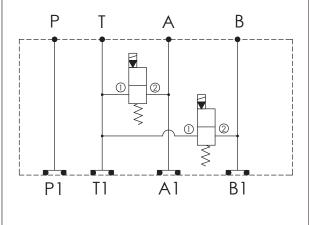
#### **UNIT:mm**



Υ	SELECTION FOR B PORT CONT (REFER TO EP08W-X-Y-Z)	<b>TROL</b>
08W2	CAVITY ONLY (WITHOUT VALVE)	
EPO1	EP08W2A01N05 , 40LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	
EP02	EP08W2A02N05 , 40LPM,350bar (NORMALLY OPEN,WITHOUT COIL)	
EP01M	EP08W2A01M05 , 40LPM,350bar(NORMALLY CLOSED WITH KNOB STYLE MANUAL OVERRIDE, WITHOUT COIL)	
EP02P	EP08W2A02P05 , 40LPM,350bar(NORMALLY OPEN WITH PUSH STYLE MANUAL OVERRIDE,WITHOUT COIL)	
COIL MUST BE ORDERED SEPARATELY		

(REFER TO EC-04W-X-Y-Z)

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 40 I/min

Cartridge Valve:

Refer to EP08W-XI-YI-ZI
EP08W-XI-YI-ZI

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.33 0.6	kg(WITHOUT VALVES) kg(INCLUDE VALVES ,WITHOUT COIL)
Ductile Iron	0.94 1.2	kg(WITHOUT VALVES) kg(INCLUDE VALVES ,WITHOUT COIL)

<sup>\*</sup> If you need the special specification. Please contact us.

X	SELECTION FOR A PORT CONTROL (REFER TO EP08W-X-Y-Z)		
08W2	CAVITY ONLY (WITHOUT VALVE)		
EP01	EP08W2A01N05 , 40LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)		
EP02	EP08W2A02N05 , 40LPM,350bar (NORMALLY OPEN,WITHOUT COIL)		
EP01M	EP08W2A01M05 , 40LPM,350bar(NORMALLY CLOSED WITH KNOB STYLE MANUAL OVERRIDE,WITHOUT COIL)		
EP02P	EP08W2A02P05 , 40LPM,350bar(NORMALLY OPEN WITH PUSH STYLE MANUAL OVERRIDE,WITHOUT COIL)		

## COIL MUST BE ORDERED SEPARATELY (REFER TO EC-04W-X-Y-Z)

Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

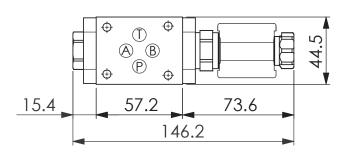
Rev.150306 M.EDT.301

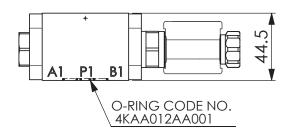
£-+



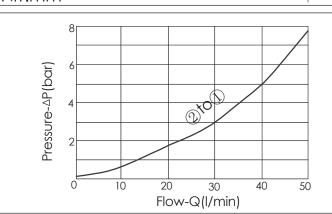






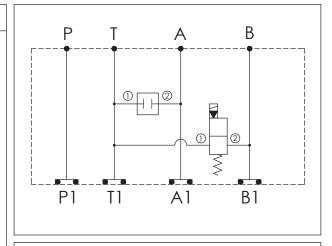


#### **UNIT:mm**



Y	SELECTION FOR B PORT CONT (REFER TO EP08W-X-Y-Z)	<b>TROL</b>
08W2	CAVITY ONLY (WITHOUT VALVE)	
EP01	EP08W2A01N05 , 40LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	
EP02	EP08W2A02N05 , 40LPM,350bar (NORMALLY OPEN,WITHOUT COIL)	
EP01M	EP08W2A01M05 , 40LPM,350bar(normally closed with knob style manual override, without coil)	
EP02P	EP08W2A02P05 , 40LPM,350bar(NORMALLY OPEN WITH PUSH STYLE MANUAL OVERRIDE,WITHOUT COIL)	
COIL MUST BE ORDERED SEPARATELY (REFER TO EC-04W-X-Y-Z)		

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

350 bar Body Pressure Rating:

Rated flow: 40 I/min

Cartridge Valve: Refer to CP08W-Y-Z

EP08W-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.33 kg(WITHOUT VALVES) 0.52 kg(INCLUDE VALVES ,WITHOUT COIL)
Ductile Iron	0.94 kg(WITHOUT VALVES) 1.13 kg(INCLUDE VALVES ,WITHOUT COIL)

<sup>\*</sup> If you need the special specification. Pléase contact us.

X	SELECTION FOR A PORT CONTROL		
08W2	CAVITY ONLY (WITHOUT VALVE)		
CP00	CP08W2H00NN(3/4"-16UNF-2B , All Ports Blocked)		

Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

Rev.150306 M.EDT.302

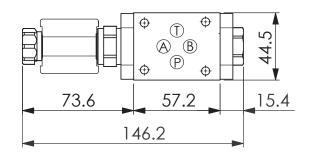
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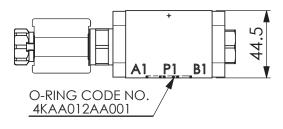




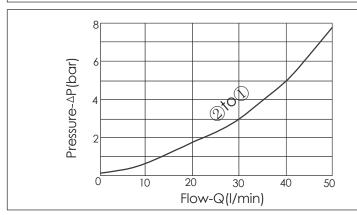
### Ordering Code: MH03EDT-X-Y-Z01

Stack Height: 44.5mm



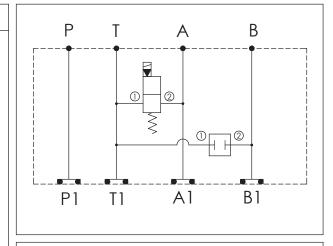


#### **UNIT:mm**



Y	SELECTION FOR B PORT CONTROL	
08W2	CAVITY ONLY (WITHOUT VALVE)	
CP00	CP08W2H00NN(3/4"-16UNF-2B , All Ports Blocked)	

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating: 350 bar

Rated flow: 40 1/min

Cartridge Valve: Refer to EP08W-X-Y-Z CP08W-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.33 kg(WITHOUT VALVES) 0.52 kg(INCLUDE VALVES ,WITHOUT COIL)
Ductile Iron	0.94 kg(WITHOUT VALVES) 1.13 kg(INCLUDE VALVES ,WITHOUT COIL)

\* If you need the special specification.
Please contact us.

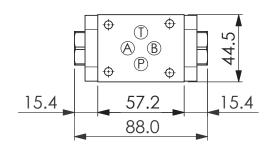
X	SELECTION FOR A PORT CONTROL (REFER TO EP08W-X-Y-Z)	
08W2	CAVITY ONLY (WITHOUT VALVE)	
EP01	EP08W2A01N05 , 40LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	
EP02	EP08W2A02N05 , 40LPM,350bar (NORMALLY OPEN,WITHOUT COIL)	
EP01M	EP08W2A01M05 , 40LPM,350bar(NORMALLY CLOSED WITH KNOB STYLE MANUAL OVERRIDE,WITHOUT COIL)	
EPO2P	EP08W2A02P05 , 40LPM,350bar(NORMALLY OPEN WITH PUSH STYLE MANUAL OVERRIDE,WITHOUT COIL)	

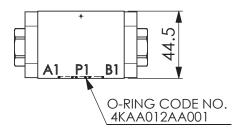
Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

Rev.150306 M.EDT.303



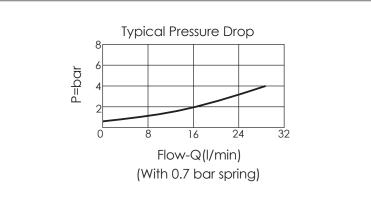






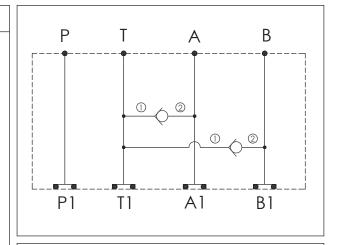
#### **UNIT:mm**





Y	SELECTION FOR B PORT CONTROL	
08W2	CAVITY ONLY (WITHOUT VALVE)	
CV03	CV08W2003N (30LPM,0.3bar)	

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 30 1/min

Cartridge Valve: Refer to CV08W-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.33 kg(WITHOUT VALVES) 0.45 kg(INCLUDE VALVES)
Ductile Iron	0.94 kg(WITHOUT VALVES) 1.06 kg(INCLUDE VALVES ,WITHOUT COIL)

<sup>\*</sup> If you need the special specification. Please contact us.

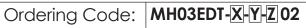
X	SELECTION FOR A PORT CONTROL	
08W2	CAVITY ONLY (WITHOUT VALVE)	
CV03	CV08W2003N (30LPM,0.3bar)	

Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

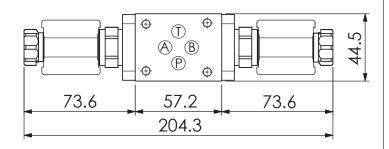
Rev.150306 M.EDT.304

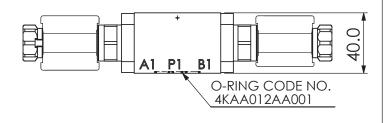




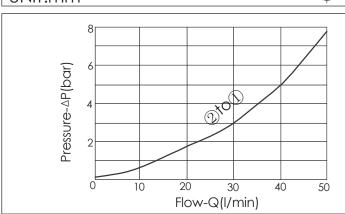


Stack Height: 40.0mm





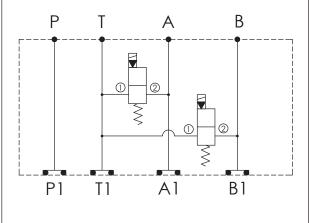
#### **UNIT:mm**



Y	SELECTION FOR B PORT CONT (REFER TO EP08W-X-Y-Z)	<b>IROL</b>
08W2	CAVITY ONLY(WITHOUT VALVE)	
EP01	EP08W2A01N05 , 40LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	
EP02	EP08W2A02N05 , 40LPM,350bar (NORMALLY OPÉN,WITHOUT COIL)	
EP01M	EP08W2A01M05 , 40LPM,350bar(normally closed with knob style manual override, without coil)	
EP02P	EP08W2A02P05 , 40LPM,350bar(NORMALLY OPEN WITH PUSH STYLE MANUAL OVERRIDE,WITHOUT COIL)	
COIL MUST BE ORDERED SEPARATELY		

(REFER TO EC-04W-X-Y-Z)

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating:

350 bar

Rated flow:

40 l/min

Cartridge Valve:

Refer to EP08W-X-Y-Z

EP08W-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.29 kg(WITHOUT VALVES) 0.56 kg(INCLUDE VALVES ,WITHOUT COIL)

\* If you need the special specification.
Please contact us.

X	SELECTION FOR A PORT CONTROL (REFER TO EP08W-X-Y-Z)	
08W2	CAVITY ONLY (WITHOUT VALVE)	
EPO1	EP08W2A01N05 , 40LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	
EP02	EP08W2A02N05 , 40LPM,350bar (NORMALLY OPEN,WITHOUT COIL)	
EP01M	EP08W2A01M05 , 40LPM,350bar(NORMALLY CLOSED WITH KNOB STYLE MANUAL OVERRIDE,WITHOUT COIL)	
EP02P	EP08W2A02P05 , 40LPM,350bar(NORMALLY OPEN WITH PUSH STYLE MANUAL OVERRIDE,WITHOUT COIL)	

COIL MUST BE ORDERED SEPARATELY (REFER TO EC-04W-ݣ무건)

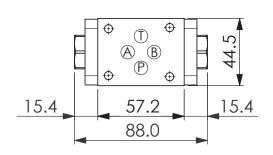
Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	

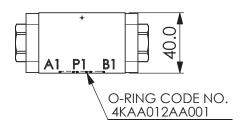
Rev.1300305 M.EDT.341



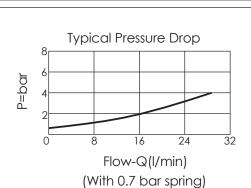
## Ordering Code: MH03EDT-X-Y-Z02

Stack Height: 40.0mm



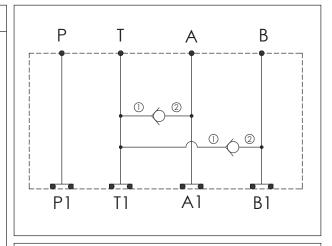


#### **UNIT:mm**



Y	SELECTION FOR B PORT CONTROL	
08W2	CAVITY ONLY (WITHOUT VALVE)	
CV03	CV08W2003N (30LPM,0.3bar)	

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow:

30 l/min

Cartridge Valve: Refer to CV08W-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.29 kg(WITHOUT VALVES) 0.4 kg(INCLUDE VALVES)

\* If you need the special specification. Please contact us.

X	SELECTION FOR A PORT CONTROL	
08W2	CAVITY ONLY (WITHOUT VALVE)	
CV03	CV08W2003N (30LPM,0.3bar)	

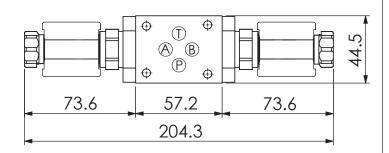
Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	

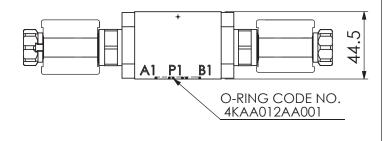
Rev.130418 M.EDT.344



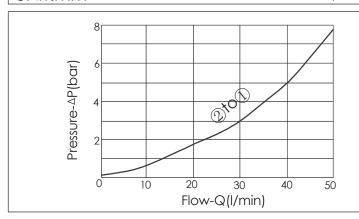








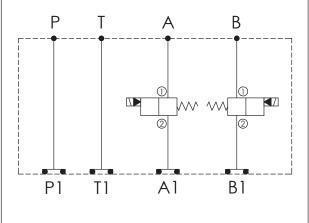
#### **UNIT:mm**



Y	SELECTION FOR B PORT CONTROL (REFER TO EP08W-X-Y-Z)	
08W2	CAVITY ONLY (WITHOUT VALVE)	
EPO1	EP08W2A01N05 , 40LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	
EP02	EP08W2A02N05 , 40LPM,350bar (NORMALLY OPEN,WITHOUT COIL)	
EP01M	EP08W2A01M05 , 40LPM,350bar(NORMALLY CLOSED WITH KNOB STYLE MANUAL OVERRIDE, WITHOUT COIL)	
EP02P	EP08W2A02P05 , 40LPM,350bar(NORMALLY OPEN WITH PUSH STYLE MANUAL OVERRIDE,WITHOUT COIL)	
COIL MUST BE ORDERED SEPARATELY		

(REFER TO EC-04W-X-Y-Z)

#### ISO 03 SANDWICH MANIFOLD



#### TECHNICAL DATA

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 40 I/min

Cartridge Valve: Refer to EP08W-X-Y-Z

Refer to EP08W-XI-YI-ZI EP08W-XI-YI-ZI

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.35 kg(WITHOUT VALVES) 0.61 kg(INCLUDE VALVES ,WITHOUT COIL)
Ductile Iron	0.95 kg(WITHOUT VALVES) 1.21 kg(INCLUDE VALVES ,WITHOUT COIL)

<sup>\*</sup> If you need the special specification. Please contact us.

X	SELECTION FOR A PORT CONTROL (REFER TO EP08W-X-Y-Z)	
08W2	CAVITY ONLY (WITHOUT VALVE)	
EPO1	EP08W2A01N05 , 40LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	
EP02	EP08W2A02N05 , 40LPM,350bar (NORMALLY OPEN,WITHOUT COIL)	
EP01M	EP08W2A01M05 , 40LPM,350bar(NORMALLY CLOSED WITH KNOB STYLE MANUAL OVERRIDE,WITHOUT COIL)	
EPO2P	EP08W2A02P05 , 40LPM,350bar(NORMALLY OPEN WITH PUSH STYLE MANUAL OVERRIDE,WITHOUT COIL)	

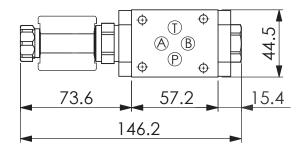
## COIL MUST BE ORDERED SEPARATELY (REFER TO EC-04W-公子区)

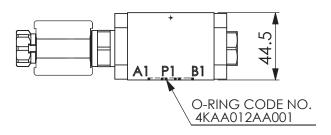
Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

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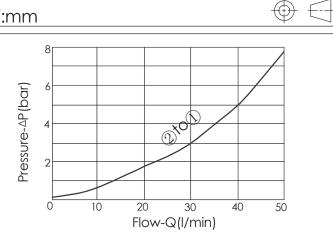






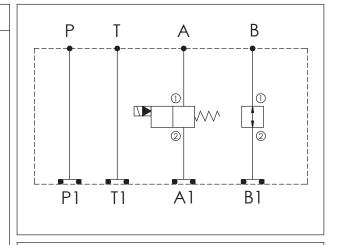


#### **UNIT:mm**



Y	SELECTION FOR B PORT CONTROL	
08W2	CAVITY ONLY (WITHOUT VALVE)	
CP12	CP08W2H12(3/4"-16UNF-2B , PORTS 1 AND 2 OPEN)	

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

350 bar Body Pressure Rating:

Rated flow:

40 I/min

Cartridge Valve:

Refer to EP08W-X-Y-Z CP08W-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.35 kg(WITHOUT VALVES) 0.54 kg(INCLUDE VALVES ,WITHOUT COIL)
Ductile Iron	0.95 kg(WITHOUT VALVES) 1.14 kg(INCLUDE VALVES ,WITHOUT COIL)

<sup>\*</sup> If you need the special specification. Please contact us.

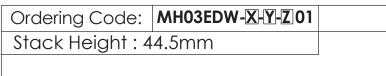
X	SELECTION FOR A PORT CONTROL (REFER TO EP08W-X-Y-Z)	
08W2	CAVITY ONLY (WITHOUT VALVE)	
EPO1	EP08W2A01N05 , 40LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	
EP02	EP08W2A02N05 , 40LPM,350bar (NORMALLY OPEN,WITHOUT COIL)	
EP01M	EP08W2A01M05 , 40LPM,350bar(NORMALLY CLOSED WITH KNOB STYLE MANUAL OVERRIDE, WITHOUT COIL)	
EP02P	EP08W2A02P05 , 40LPM,350bar(NORMALLY OPEN WITH PUSH STYLE MANUAL OVERRIDE,WITHOUT COIL)	

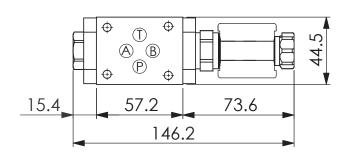
#### COIL MUST BE ORDERED SEPARATELY (REFER TO EC-04W-X-Y-Z)

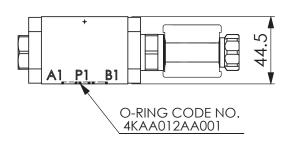
Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

Rev.130305 M.EDW.302



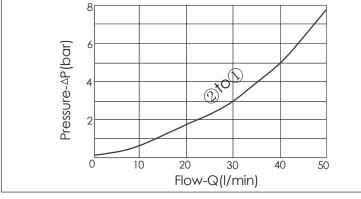






**UNIT:mm** 





Y	SELECTION FOR B PORT CONT (REFER TO EP08W-X-Y-Z)	<b>IROL</b>
08W2	CAVITY ONLY(WITHOUT VALVE)	
EP01	EP08W2A01N05 , 40LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	
EP02	EP08W2A02N05 , 40LPM,350bar (NORMALLY OPEN,WITHOUT COIL)	
EP01M	EP08W2A01M05 , 40LPM,350bar(normally closed with knob style manual override, without coil)	
EP02P	EP08W2A02P05 , 40LPM,350bar(NORMALLY OPEN WITH PUSH STYLE MANUAL OVERRIDE,WITHOUT COIL)	
COII	MUST BE ORDERED SEPARATEL	Υ

(REFER TO EC-04W-X-Y-Z)

Ρ Α В  $\blacksquare$ / Ρ1 T1 A1 B1

#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating:

350 bar

Rated flow:

40 I/min

Cartridge Valve: Refer to CP08W-Y-Z EP08W-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.35 kg(WITHOUT VALVES) 0.54 kg(INCLUDE VALVES ,WITHOUT COIL)
Ductile Iron	0.95 kg(WITHOUT VALVES) 1.14 kg(INCLUDE VALVES ,WITHOUT COIL)

<sup>\*</sup> If you need the special specification. Please contact us.

X	SELECTION FOR A PORT CONTROL	
08W2	CAVITY ONLY (WITHOUT VALVE)	
CP12	CP08W2H12(3/4"-16UNF-2B , PORTS 1 AND 2OPEN)	

Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

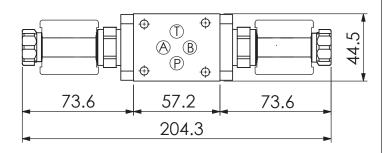
M.EDW.303 Rev.130305

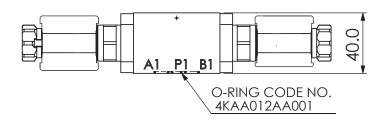




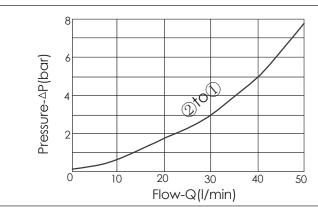


Stack Height: 40.0mm





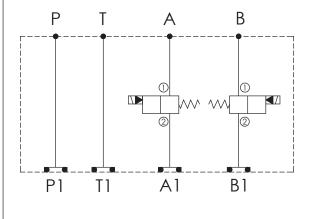
#### **UNIT:mm**



Y	SELECTION FOR B PORT CONT (REFER TO EP08W-X-Y-Z)	<b>IROL</b>
08W2	CAVITY ONLY (WITHOUT VALVE)	
EP01	EP08W2A01N05 , 40LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	
EP02	EP08W2A02N05 , 40LPM,350bar (NORMALLY OPEN,WITHOUT COIL)	
EP01M	EP08W2A01M05 , 40LPM,350bar(NORMALLY CLOSED WITH KNOB STYLE MANUAL OVERRIDE, WITHOUT COIL)	
EP02P	EP08W2A02P05 , 40LPM,350bar(NORMALLY OPEN WITH PUSH STYLE MANUAL OVERRIDE,WITHOUT COIL)	
COIL MUST BE ORDERED SEPARATELY		

(REFER TO EC-04W-X-Y-Z)

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating:

350 bar

Rated flow:

40 l/min

Cartridge Valve:

Refer to EP08W-X-Y-Z EP08W-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.29 kg(WITHOUT VALVES) 0.55 kg(INCLUDE VALVES ,WITHOUT COIL)

\* If you need the special specification. Please contact us.

X	SELECTION FOR A PORT CONTROL (REFER TO EP08W-X-Y-Z)	
08W2	CAVITY ONLY (WITHOUT VALVE)	
EP01	EP08W2A01N05 , 40LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	
EP02	EP08W2A02N05 , 40LPM,350bar (NORMALLY OPEN,WITHOUT COIL)	
EP01M	EP08W2A01M05 , 40LPM,350bar(NORMALLY CLOSED WITH KNOB STYLE MANUAL OVERRIDE,WITHOUT COIL)	
EP02P	EP08W2A02P05 , 40LPM,350bar(NORMALLY OPEN WITH PUSH STYLE MANUAL OVERRIDE, WITHOUT COIL)	

COIL MUST BE ORDERED SEPARATELY (REFER TO EC-04W-Ⅺ-) ☐

Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	

Rev.130305 M.EDW.341

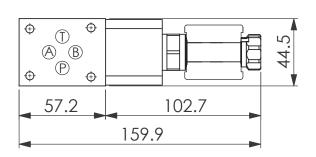
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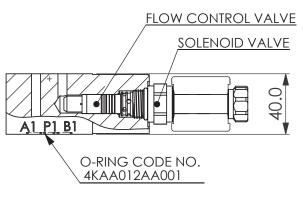




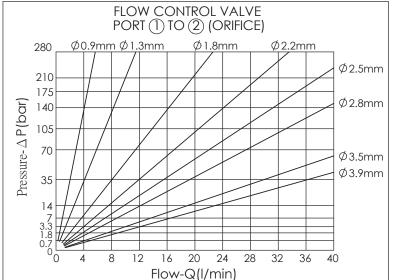


Stack Height: 40.0mm





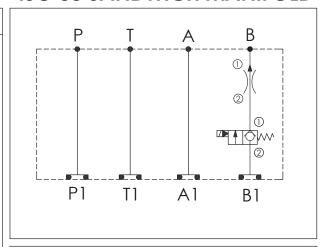
#### **UNIT:mm**



Y	SELECTION FOR SOLENOID V (REFER TO EP08W-X-Y-Z	ALVE
08W2	CAVITY ONLY (WITHOUT VALVE)	
EP01	EP08W2A01N05 , 40LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	
EP01M	EP08W2A01M05 , 40LPM,350bar (NORMALLY CLOSEDWITH KNOB STYLE MANUAL OVERRIDE,WITHOUT COIL)	
COIL MUST BE ORDERED SEPARATELY		

COIL MUST BE ORDERED SEPARATELY (REFER TO EC-04W-X-Y-Z)

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 30 1/min

Cartridge Valve:

Refer to EP08W-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

11010110	THINIO Carmage Taires Caralog
Aluminum	0.4 kg(WITHOUT VALVES) 0.55 kg(INCLUDE VALVES ,WITHOUT COIL)

<sup>\*</sup> If you need the special specification. Please contact us.

X	SELECTION FOR FLOW CONTROL VALVE		
	PORT (2	2) TO (1) PRESSURE CO	MPENSATED
N	CAVITY C (WITHOUT	ONLY FLOW CONTROL VALVE)	
0100	1 LPM	PORT (1) TO (2) ORIFICE Ø 0.9mm	
0200	2 LPM	PORT (1) TO (2) ORIFICE Ø 1.3mm	
0400	4 LPM	PORT (1) TO (2) ORIFICE Ø 1.8mm	
0600	6 LPM	PORT (1) TO (2) ORIFICE Ø2.2mm	
0800	8 LPM	PORT (1) TO (2) ORIFICE Ø2.5mm	
1000	10 LPM	PORT (1) TO (2) ORIFICE Ø2.8mm	
1600	16 LPM	PORT (1) TO (2) ORIFICE Ø3.5mm	
2000	20 LPM	PORT (1) TO (2) ORIFICE Ø3.9mm	

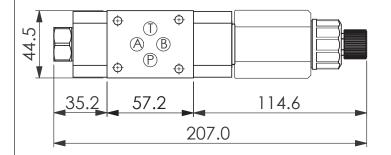
Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	

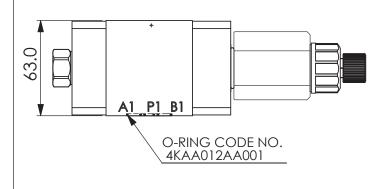
Rev.130305 M.EFB.341





Stack Height: 63.0mm



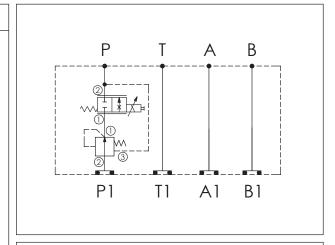


# Flow vs Command at 14 bar Differential PFC17E2G0700M PFC17E2G0350M 0 20 40 60 80 100 % Command

**UNIT:mm** 

Y	SELECTION FOR FLOW CONTRO (REFER TO PFC17E-X-Y-Z)	OL VALVE
17E2	CAVITY ONLY (WITHOUT VALVE)	
PFC35	PFC17E2G0350M(35LPM)	
PFC70	PFC17E2G0700M(70LPM)	
COIL MUST BE ORDERED SEPARATELY (REFER TO EC-23C-X-Y-Z)		

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 40 1/min

Cartridge Valve: Refer to LP11A-X-Y-Z PFC17E-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.63 kg(WITHOUT VALVES) 1.2 kg(INCLUDE VALVES ,WITHOUT COIL)

\* If you need the special specification. Please contact us.

X	SELECTION FOR COMPENSATOR	
11A3	CAVITY ONLY (WITHOUT VALVE)	
LP140	LP11A30140N(60LPM,14.0bar)	

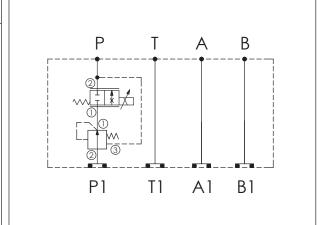
Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	

Rev.130305 M.EPP.371









Aluminum Body Pressure Rating: 250 bar

**TECHNICAL DATA** 

Ductile Iron

350 bar Body Pressure Rating:

Rated flow: 40 I/min

Cartridge Valve: Refer to LP11A-X-Y-Z PFC13A-X-Y-Z

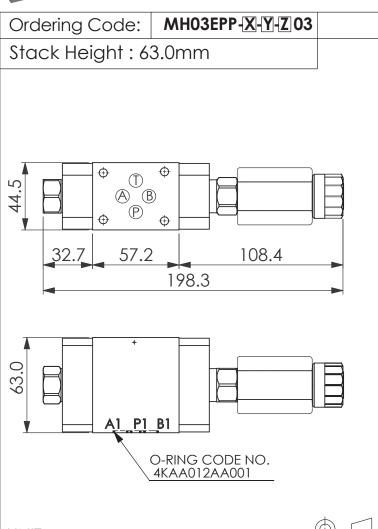
\* Refer to Winner Cartridge Valves Catalog.

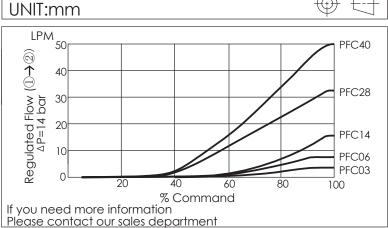
Aluminum	0.63 kg(WITHOUT VALVES) 1.2 kg(INCLUDE VALVES ,WITHOUT COIL)

\* If you need the special specification. Pléase contact us.

X	SELECTION FOR COMPENSATOR	
11A3	CAVITY ONLY (WITHOUT VALVE)	
LP140	LP11A30140N(60LPM,14.0bar)	

Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	





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Y	SELECTION FOR FLOW CONTRO (REFER TO PFC13A-X-Y-Z)	L VALVE
13A2	CAVITY ONLY (WITHOUT VALVE)	
PFC03	PFC13A2D0030N(0.3~3LPM)	
PFC06	PFC13A2D0060N(0.4~6LPM)	
PFC14	PFC13A2D0140N(0.6~14LPM)	
PFC28	PFC13A2D0280N(0.8~28LPM)	
PFC40	PFC13A2D0400N(1.0~40LPM)	
COIL MUST BE ORDERED SEPARATELY		

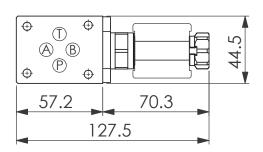
(REFER TO EC-19A-XHYHZ)

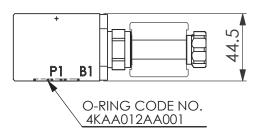
M.EPP.372 Rev.130305



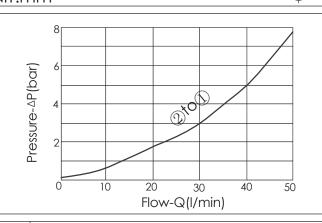






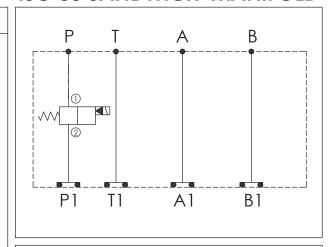


#### **UNIT:mm**



Y	SELECTION FOR G PORT	
N	WITHOUT PORT	

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating:

350 bar

Rated flow: 40 1/min

Cartridge Valve: Refer to EP08W-XI-YI-ZI

\* Refer to Winner Cartridge Valve Catalog.

Aluminum	0.28 kg(WITHOUT VALVES) 0.42 kg(INCLUDE VALVES ,WITHOUT COIL)

<sup>\*</sup> If you need the special specification. Please contact us.

X	SELECTION FOR P PORT CONTROL (REFER TO EP08W-X-Y-Z)	
08W2	CAVITY ONLY (WITHOUT VALVE)	
EP01	EP08W2A01N05 , 40LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	
EP02	EP08W2A02N05 , 40LPM,350bar (NORMALLY OPEN,WITHOUT COIL)	
EP01M	EP08W2A01M05 , 40LPM,350bar[NORMALLY CLOSED WITH KNOB STYLE MANUAL OVERRIDE,WITHOUT COIL)	
EPO2P	EP08W2A02P05 , 40LPM,350bar(NORMALLY OPEN WITH PUSH STYLE MANUAL OVERRIDE,WITHOUT COIL)	

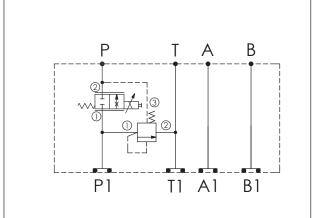
## COIL MUST BE ORDERED SEPARATELY (REFER TO EC-04W-X-Y-Z)

Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	

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## **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating:

350 bar

Rated flow: 40 I/min

Cartridge Valve: Refer to LR11A-X-Y-Z PFC17E-X-Y-Z

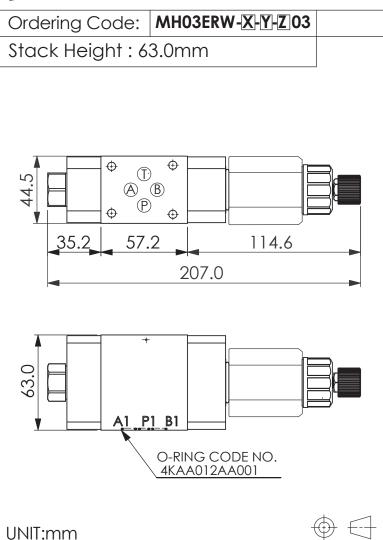
\* Refer to Winner Cartridge Valves Catalog.

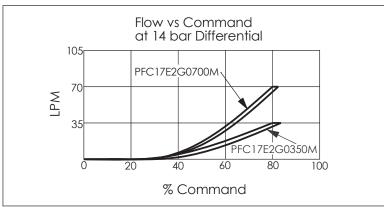
Aluminum	kg(WITHOUT VALVES) kg(INCLUDE VALVES ,WITHOUT COIL)

\* If you need the special specification. Pléase contact us.

X	SELECTION FOR COMPE	NSATOR
11A3	CAVITY ONLY (WITHOUT VALVE)	
LR140	LR11A30140N(60LPM,14.0bar)	

Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	



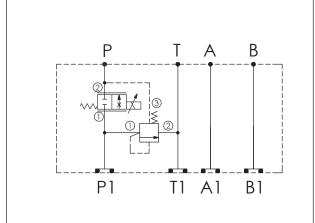


Y	SELECTION FOR FLOW CONTRO (REFER TO PFC17E-X-Y-Z)	OL VALVE
17E2	CAVITY ONLY (WITHOUT VALVE)	
PFC35	PFC17E2G0350M(35LPM)	
PFC70	PFC17E2G0700M(70LPM)	
COIL MUST BE ORDERED SEPARATELY (REFER TO EC-23C-X-Y-Z)		

M.ERW.371 Rev.130418







#### TECHNICAL DATA

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating:

350 bar

Rated flow:

40 I/min

Cartridge Valve:

Refer to LR11A-X-Y-Z PFC13A-X-Y-Z

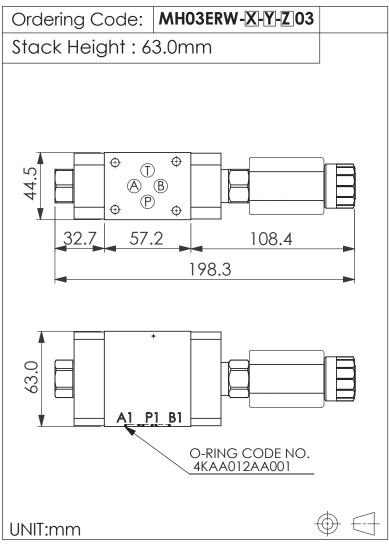
\* Refer to Winner Cartridge Valves Catalog.

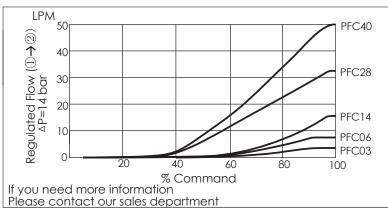
Aluminum	0.63 kg(WITHOUT VALVES) 1.2 kg(INCLUDE VALVES ,WITHOUT COIL)

\* If you need the special specification. Please contact us.

X	SELECTION FOR COMPENSATOR		
11A3	CAVITY ONLY (WITHOUT VALVE)		
LR140	LR11A30140N(60LPM,14.0bar)		

Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		



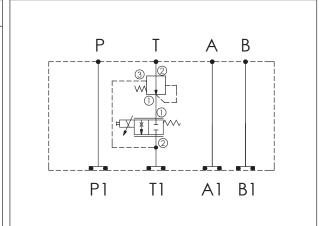


Please confact our sales department			
Υ	SELECTION FOR FLOW CONTROL VALVE (REFER TO PFC13A-X-Y-Z)		
13A2	CAVITY ONLY (WITHOUT VALVE)		
PFC03	PFC13A2D0030N(0.3~3LPM)		
PFC06	PFC13A2D0060N(0.4~6LPM)		
PFC14	PFC13A2D0140N(0.6~14LPM)		
PFC28	PFC13A2D0280N(0.8~28LPM)		
PFC40	PFC13A2D0400N(1.0~40LPM)		
COIL MUST BE ORDERED SEPARATELY			

COIL MUST BE ORDERED SEPARATELY (REFER TO EC-19A-X-Y-Z)

Rev.130418 M.ERW.372





#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

350 bar Body Pressure Rating:

Rated flow: 40 I/min

Cartridge Valve: Refer to LP11A-X-Y-Z PFC17E-X-Y-Z

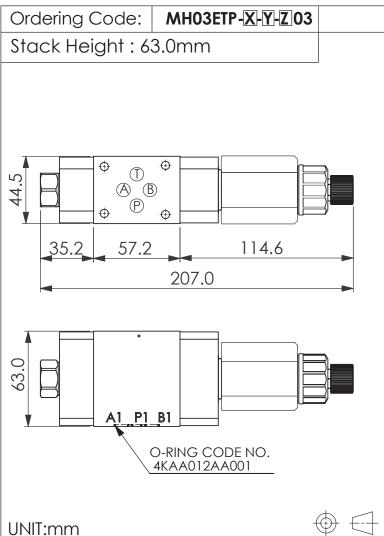
\* Refer to Winner Cartridge Valves Catalog.

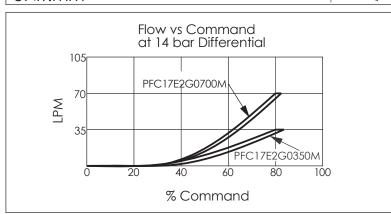
Aluminum	kg(WITHOUT VALVES) kg(INCLUDE VALVES ,WITHOUT COIL)

\* If you need the special specification. Pléase contact us.

X	SELECTION FOR COMPENSATOR		
11A3	CAVITY ONLY (WITHOUT VALVE)		
LP140	LP11A30140N(60LPM,14.0bar)		

Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	





Y	SELECTION FOR FLOW CONTRO (REFER TO PFC17E-X-Y-Z)	OL VALVE
17E2	CAVITY ONLY (WITHOUT VALVE)	
PFC35	PFC17E2G0350M(35LPM)	
PFC70	PFC17E2G0700M(70LPM)	
COIL MUST BE ORDERED SEPARATELY (REFER TO EC-23C-X-Y-7)		

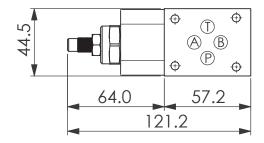
(REFER TO EC-23C-X-Y-V-Z)

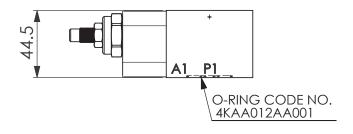
Rev.130305 M.ETP.371





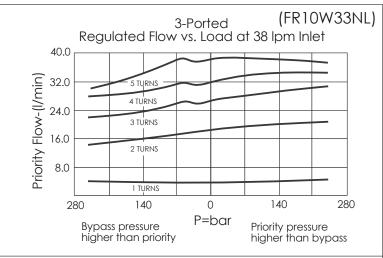


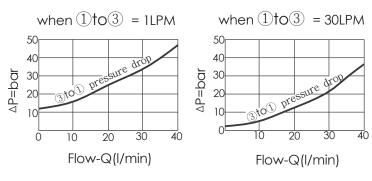


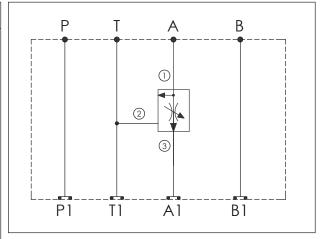


**UNIT:mm** 









#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 40 1/min

Cartridge Valve: Refer to FR10W-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

	0	
Aluminum	0.38 kg(WITHOUT VALVE) 0.52 kg(INCLUDE VALVE)	

<sup>\*</sup> If you need the special specification. Please contact us.

X	SELECTION FOR A PORT	CONTROL
10W3	CAVITY ONLY (WITHOUT VALVE)	
FR3L	FR10W33NL (38LPM,240bar)	

Y	SELECTION FOR G PORT	
N	WITHOUT PORT	

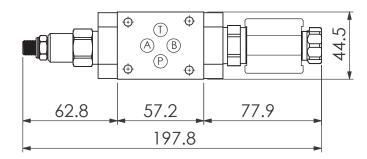
Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	

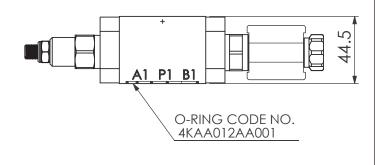
Rev.130418 M.FAB.301



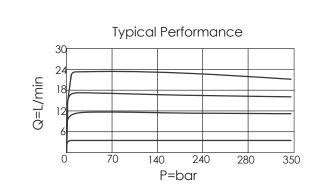








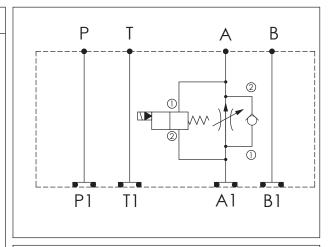
#### **UNIT:mm**



Υ	SELECTION FOR SOLENOID VA (REFER TO EP08W-X-Y-Z)	ALVES
08W2	CAVITY ONLY (WITHOUT VALVE)	
EP01	EP08W2A01N05 , 40LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	
EP02	EP08W2A02N05 , 40LPM,350bar (NORMALLY OPEN,WITHOUT COIL)	
EP01M	EP08W2A01M05 , 40LPM,350bar(normally closed with knob style manual override, without coil)	
EPO2P	EP08W2A02P05 , 40LPM,350bar(NORMALLY OPEN WITH PUSH STYLE MANUAL OVERRIDE,WITHOUT COIL)	
COIL MUST BE ORDERED SEPARATELY		

(REFER TO EC-04W-X-Y-Z)

ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

350 bar Body Pressure Rating:

Rated flow: 23 I/min

(Pressure Compensated)

Cartridge Valve:
Refer to FR13A-X-Y-Z EP08W-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.35 kg(WITHOUT VALVES) 0.58 kg(INCLUDE VALVES ,WITHOUT COIL)

\* If you need the special specification. Pléase contact us.

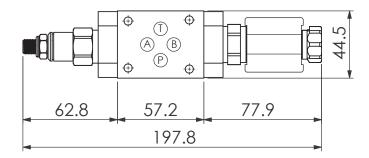
X	SELECTION FOR FLOW	CONTROL
13A2	CAVITY ONLY (WITHOUT VALVE)	
FROA	FR13A20AL(23LPM,350bar)	

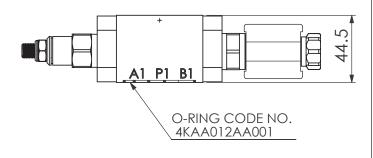
Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		

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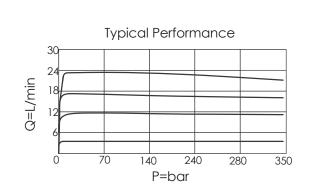








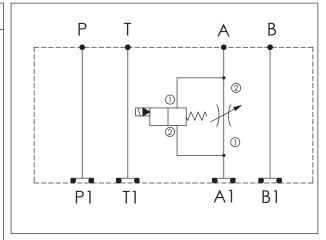
#### UNIT:mm



# Y SELECTION FOR SOLENOID VALVES (REFER TO EP08W-X-Y-Z) 08W2 CAVITY ONLY (WITHOUT VALVE) EP01 EP08W2A01N05 , 40LPM,350bar (NORMALLY CLOSED, WITHOUT COIL) EP02 EP08W2A02N05 , 40LPM,350bar (NORMALLY OPEN, WITHOUT COIL) EP01M EP08W2A01M05 , 40LPM,350bar (NORMALLY CLOSED WITH KNOB STYLE MANUAL OVERRIDE, WITHOUT COIL) EP02P EP08W2A02P05 , 40LPM,350bar (NORMALLY OPEN WITH PUSH STYLE MANUAL OVERRIDE, WITHOUT COIL) COIL MUST BE ORDERED SEPARATELY

(REFER TO EC-04W-X-Y-Z)

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 40 I/min

Cartridge Valve: Refer to NV13A-X-Y-Z EP08W-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.35 kg(WITHOUT VALVES) 0.58 kg(INCLUDE VALVES ,WITHOUT COIL)

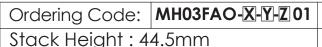
\* If you need the special specification. Please contact us.

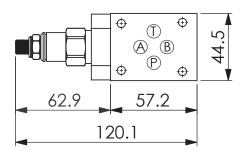
X	SELECTION FOR FLOW CONTROL	
13A2	CAVITY ONLY (WITHOUT VALVE)	
NV48	NV13A2048L(350bar)	

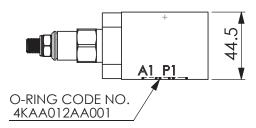
Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	

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# P T A B ② P1 T1 A1 B1

#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating:

350 bar

Rated flow: 40 1/min

#### Cartridge Valve:

Refer to NC13A-X-Y-Z

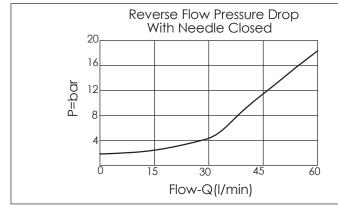
\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.35 0.5	kg(WITHOUT VALVE) kg(INCLUDE VALVE)

<sup>\*</sup> If you need the special specification. Please contact us.

#### **UNIT:mm**





X	SELECTION FOR A PORT	CONTROL
13A2	CAVITY ONLY (WITHOUT VALVE)	
NCBA	NC13A21BAL (20LPM,0.3bar)	
NCBC	NC13A21BCL (20LPM,2.0bar)	

Y	SELECTION FOR B PORT CONTROL	
N	WITHOUT PORT	

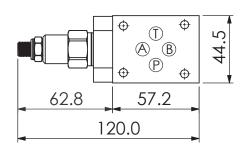
Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	

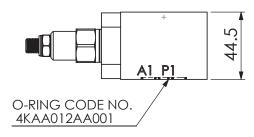
Rev.150521 M.FAO.301



### Ordering Code: MH03FAO-X-Y-Z01

Stack Height: 44.5mm

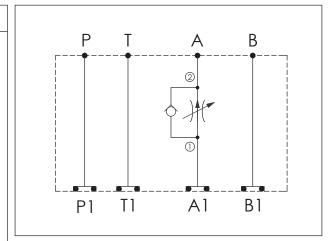




#### **UNIT:mm**







#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating:

350 bar

Rated flow:

23 I/min

(Pressure Compensated)

Cartridge Valve:

Refer to FR13A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.35 0.5	kg(WITHOUT VALVE) kg(INCLUDE VALVE)

<sup>\*</sup> If you need the special specification. Please contact us.

	Typical Performance
⊋=L/min	30 24 18
Ö	0 70 140 240 280 350 P=bar

x	SELECTION FOR A PORT	CONTROL
13A2	CAVITY ONLY (WITHOUT VALVE)	
FROA	FR13A20AL (23LPM,350bar)	

Y	SELECTION FOR B PORT CONTROL	
N	WITHOUT PORT	

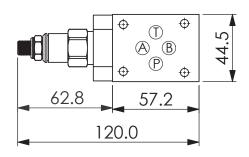
Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	

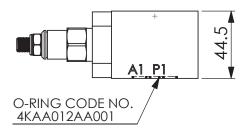
Rev.130305 M.FAO.302





Stack Height: 44.5mm





### Α В 2 1 Ρ1 T1 **A**1 **B**1

#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating:

350 bar

Rated flow: 40 I/min

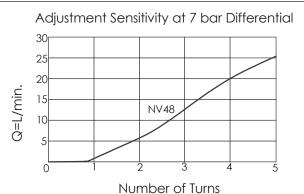
Cartridge Valve:
Refer to NV13A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.35 0.5	kg(WITHOUT VALVE) kg(INCLUDE VALVE)

\* If you need the special specification. Please contact us.

#### **UNIT:mm**



X	SELECTION FOR A PORT	CONTROL
13A2	CAVITY ONLY (WITHOUT VALVE)	
NV48	NV13A2048L (350bar)	

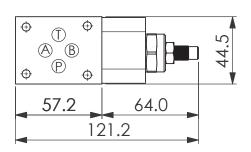
Y	SELECTION FOR B PORT CONTROL	
N	WITHOUT PORT	
		_

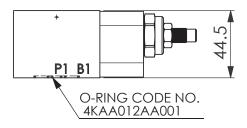
Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	

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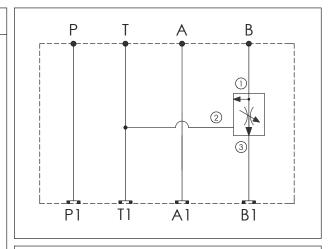




**UNIT:mm** 







#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 40 1/min

Cartridge Valve:

Refer to FR10W-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.38 0.52	kg(WITHOUT VALVE) kg(INCLUDE VALVE)

<sup>\*</sup> If you need the special specification. Please contact us.

	(FR10W33NL)
when 1to3 = 1LPM	when $1103 = 30$ LPM
50 40 40 30 10 10 10 10 10 10 10 10 10 1	50 40 30 30 10 10 10 10 10 10 10 10 20 10 20 10 20 30 40 40 40 40 40 40 40 40 40 4
Flow-Q(I/min)	Flow-Q(I/min)

X	SELECTION FOR A PORT	CONTROL
N	WITHOUT PORT	

Y	SELECTION FOR B PORT CONTROL		
10W3	CAVITY ONLY (WITHOUT VALVE)		
FR3L	FR10W33NL (38LPM,240bar)		

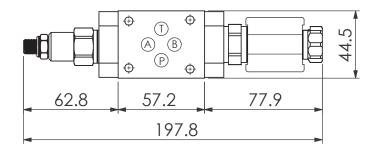
Z	BODY MATERIAL					
Α	HIGH-STRENGTH ALUMINUM	GH-STRENGTH ALUMINUM				
·						

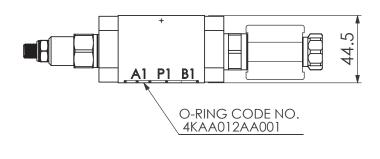
Rev.130418 M.FBB.301



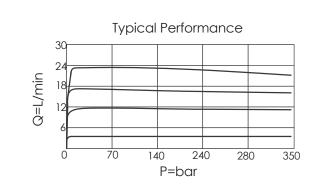








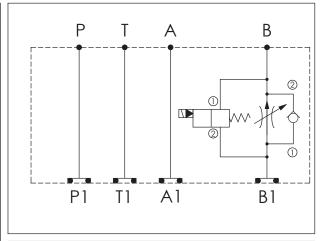
#### **UNIT:mm**



# Y SELECTION FOR SOLENOID VALVES (REFER TO EP08W-X-Y-Z) 08W2 CAVITY ONLY (WITHOUT VALVE) EP01 EP08W2A01N05, 40LPM,350bar (NORMALLY CLOSED,WITHOUT COIL) EP02 EP08W2A02N05, 40LPM,350bar (NORMALLY OPEN,WITHOUT COIL) EP01M EP08W2A01M05, 40LPM,350bar (NORMALLY CLOSED WITH KNOB STYLE MANUAL OVERRIDE,WITHOUT COIL) EP02P EP08W2A02P05, 40LPM,350bar (NORMALLY OPEN WITH PUSH STYLE MANUAL OVERRIDE,WITHOUT COIL) COIL MUST BE ORDERED SEPARATELY

# COIL MUST BE ORDERED SEPARATELY (REFER TO EC-04W-X-Y-Z)

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow:

23 I/min

(Pressure Compensated)

Cartridge Valve:

Refer to FR13A-X-Y-Z EP08W-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.35 kg(WITHOUT VALVES) 0.58 kg(INCLUDE VALVES ,WITHOUT COIL)

\* If you need the special specification. Please contact us.

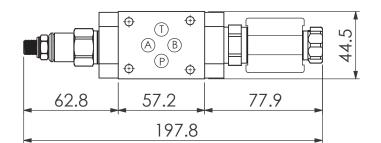
X	SELECTION FOR FLOW CONTROL			
13A2	CAVITY ONLY (WITHOUT VALVE)			
FROA	FR13A20AL(23LPM,350bar)			

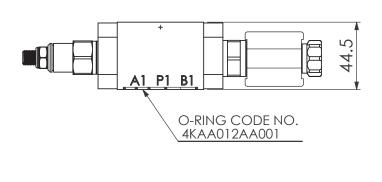
Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		

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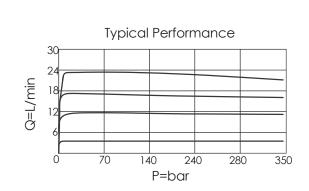






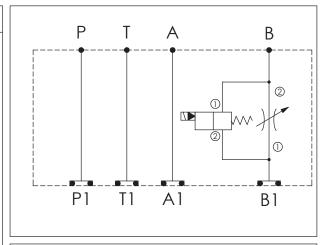


#### UNIT:mm



#### SELECTION FOR SOLENOID VALVES (REFER TO EP08W-X-Y-Z) Y 08W2 CAVITY ONLY (WITHOUT VALVE) EP08W2A01N05, 40LPM,350bar **EP01** (NORMALLY CLOSED, WITHOUT COIL) EP08W2A02N05, 40LPM,350bar **EP02** (NORMALLY OPEN, WITHOUT COIL) EP08W2A01M05 , 40LPM,350bar(NORMALLY CLOSED WITH KNOB STYLE MANUAL OVERRIDE, WITHOUT COIL) EP01M EP08W2A02P05 , 40LPM,350bar(NORMALLY OPEN WITH PUSH STYLE MANUAL OVERRIDE, WITHOUT COIL) EP02P COIL MUST BE ORDERED SEPARATELY (REFER TO EC-04W-X-Y-Z)

#### **ISO 03 SANDWICH MANIFOLD**



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 40 1/min

Cartridge Valve:
Refer to NV13A-X-M-Z
EP08W-X-M-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum 0.35 kg(WITHOUT VALVES) 0.58 kg(INCLUDE VALVES ,WITHOUT COIL)

\* If you need the special specification. Please contact us.

X	SELECTION FOR FLOW CONTROL			
13A2	CAVITY ONLY (WITHOUT VALVE)			
NV48	NV13A2048L(350bar)			

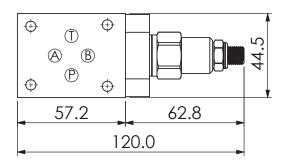
Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		

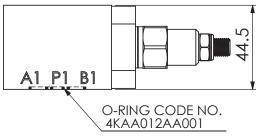
Rev.150521 M.FBE.302

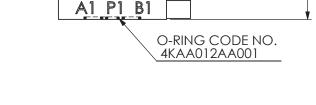




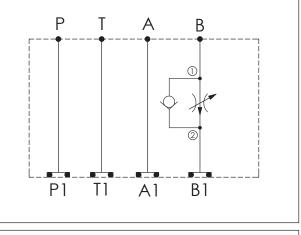












#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

350 bar Body Pressure Rating:

Rated flow: 23 I/min

(Pressure Compensated)

Cartridge Valve:

Refer to FR13A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.35 0.5	kg(WITHOUT VALVE) kg(INCLUDE VALVE)

<sup>\*</sup> If you need the special specification. Pléase contact us.

Typical Performance						
nin	30 24 18					
Q=L/min	12					
	0	70	140 P=k	240 Dar	280	350

**UNIT:mm** 

X	SELECTION FOR A PORT CONTROL
N	WITHOUT PORT

Y	SELECTION FOR B PORT CONTROL				
13A2	CAVITY ONLY (WITHOUT VALVE)				
FROA	FR13A20AL (23LPM,350bar)				

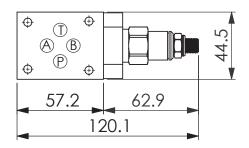
Z	BODY MATERIAL				
Α	HIGH-STRENGTH ALUMINUM				

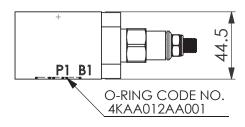
Rev 130305 M FRI 301





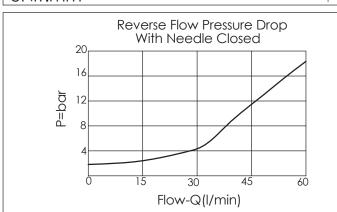
Stack Height: 44.5mm





# UNIT:mm





	P ]	Γ <i>/</i>	λ <u>Ε</u>	3
			2	
			1	
Р	1 T	1 A	\1 B	1

#### TECHNICAL DATA

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 40 1/min

Cartridge Valve: Refer to NC13A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.35 0.5	kg(WITHOUT VALVE) kg(INCLUDE VALVE)
Ductile Iron	1.0 1.15	kg(WITHOUT VALVE) kg(INCLUDE VALVE)

<sup>\*</sup> If you need the special specification. Please contact us.

X	SELECTION FOR A PORT CONTROL
N	WITHOUT PORT

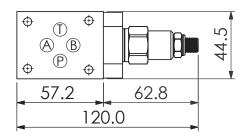
Y	SELECTION FOR B PORT CONTR	ROL
13A2	CAVITY ONLY (WITHOUT VALVE)	
NCBA	NC13A21BAL(20LPM,0.3bar)	
NCBC	NC13A21BCL(20LPM,2.0bar)	

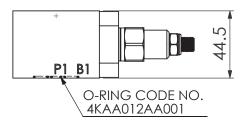
Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		
S	DUCTILE IRON		

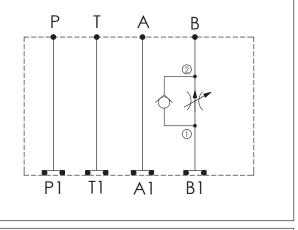
Rev.150521 M.FBO.301











#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

350 bar Body Pressure Rating:

Rated flow: 23 I/min

(Pressure Compensated)

Cartridge Valve:

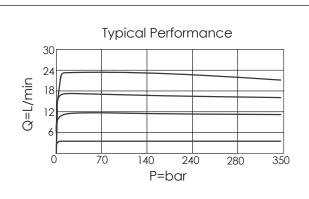
Refer to FR13A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.35 0.5	kg(WITHOUT VALVE) kg(INCLUDE VALVE)
Ductile Iron	1.0 1.15	kg(WITHOUT VALVE) kg(INCLUDE VALVE)

<sup>\*</sup> If you need the special specification. Pléase contact us.

#### **UNIT:mm**



x	SELECTION FOR A PORT CONTROL
N	WITHOUT PORT

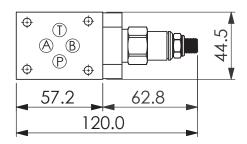
Y	SELECTION FOR B PORT CONTROL			
13A2	CAVITY ONLY (WITHOUT VALVE)			
FROA	FR13A20AL (23LPM,350bar)			

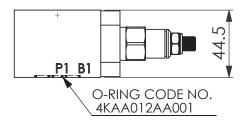
Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		
S	DUCTILE IRON		

Rev.130305 M.FBO.302





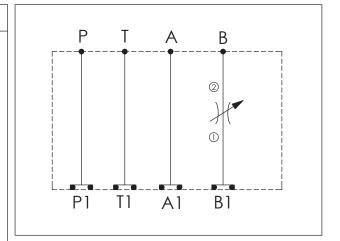




#### **UNIT:mm**







#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

350 bar Body Pressure Rating:

Rated flow: 40 I/min

Cartridge Valve: Refer to NV13A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.35 0.5	kg(WITHOUT VALVE) kg(INCLUDE VALVE)
Ductile Iron	1.0 1.15	kg(WITHOUT VALVE) kg(INCLUDE VALVE)

<sup>\*</sup> If you need the special specification. Please contact us.

	Adjustment Sensitivity at 7 bar Differential
ii.	30 25 20 15
Q=L/min.	10 NV48 5
	Number of Turns

X	SELECTION FOR A PORT CONTROL
N	WITHOUT PORT

Y	SELECTION FOR B PORT CON	ITROL
13A2	CAVITY ONLY (WITHOUT VALVE)	
NV48	NV13A2048L (350bar)	

Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

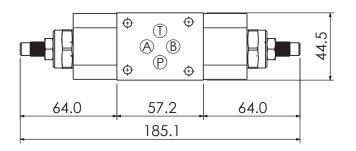
M.FBO.303 Rev.150521

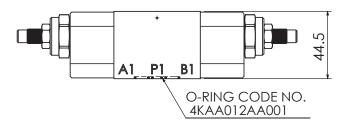




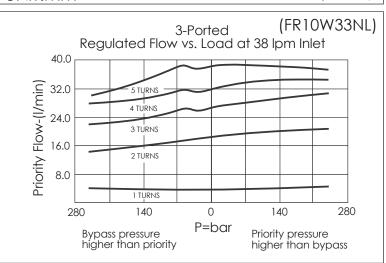
#### Ordering Code: MH03FDB-X-Y-Z 01

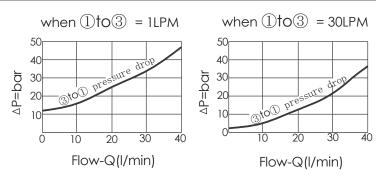
Stack Height: 44.5mm



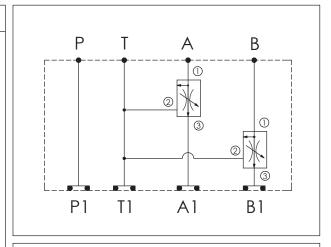


#### **UNIT:mm**





#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 40 I/min

Cartridge Valve: Refer to FR10W-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.47 kg(WITHOUT VALVES) 0.75 kg(INCLUDE VALVES)

<sup>\*</sup> If you need the special specification.
Please contact us.

X	SELECTION FOR A PORT	CONTROL
10W3	CAVITY ONLY (WITHOUT VALVE)	
FR1L	FR10W31NL(13LPM,240bar)	
FR3L	FR10W33NL(38LPM,240bar)	

Y	SELECTION FOR B PORT	CONTROL
10W3	CAVITY ONLY (WITHOUT VALVE)	
FR1L	FR10W31NL(13LPM,240bar)	
FR3L	FR10W33NL(38LPM,240bar)	

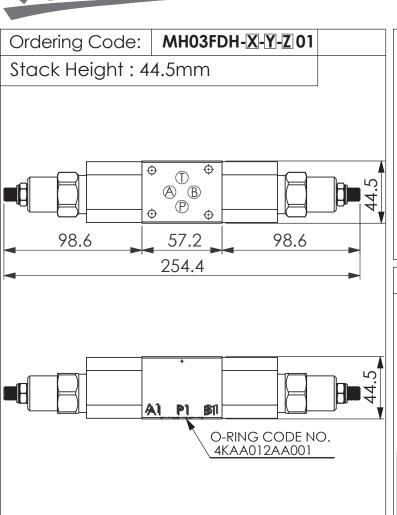
Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	

Rev.130418 M.FDB.301

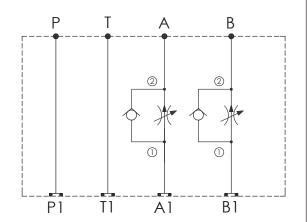


**UNIT:mm** 





#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 40 1/min

(Pressure Compensated)

Cartridge Valve:

Refer to FR5A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.53 1.07	kg(WITHOUT VALVES) kg(INCLUDE VALVES)
Ductile Iron	1.53 2.07	kg(WITHOUT VALVES) kg(INCLUDE VALVES)

\* If you need the special specification. Please contact us.

Q=L/min	Typical Performance
]=Ø	20
	0 70 140 210 280 350 P=bar

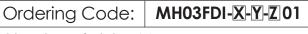
X	SELECTION FOR A PORT	CONTROL
5A2	CAVITY ONLY (WITHOUT VALVE)	
FROA	FR5A20AL(0.4-45LPM)	

Y		
5A2	CAVITY ONLY (WITHOUT VALVE)	
FROA	FR5A20AL(0.4-45LPM)	

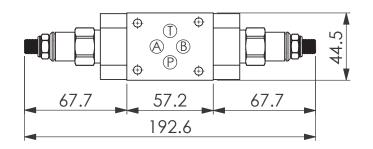
Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

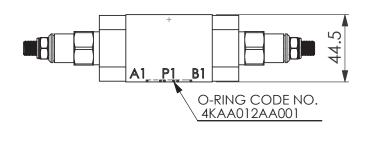
Rev.141001 M.FDH.301





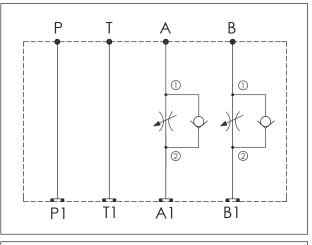
Stack Height: 44.5mm





#### UNIT:mm





#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 40 1/min

#### Cartridge Valve: Refer to NC13A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.4 kg(WITHOUT VALVES) 0.7 kg(INCLUDE VALVES)
Ductile Iron	1.15 kg(WITHOUT VALVES) 1.45 kg(INCLUDE VALVES)

<sup>\*</sup> If you need the special specification. Please contact us.

# Reverse Flow Pressure Drop With Needle Closed 20 16 12 12 18 4 15 12 15 10 15 30 45 60 Flow-Q(I/min)

X	SELECTION FOR A PORT	CONTROL
13A2	CAVITY ONLY (WITHOUT VALVE)	
NCBA	NC13A21BAL (20LPM,0.3bar)	
NCBC	NC13A21BCL (20LPM,2.0bar)	

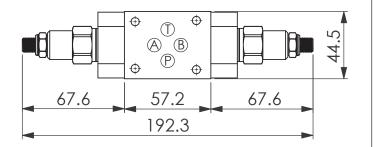
Y	SELECTION FOR B PORT CONTROL	
13A2	CAVITY ONLY (WITHOUT VALVE)	
NCBA	NC13A21BAL (20LPM,0.3bar)	
NCBC	NC13A21BCL (20LPM,2.0bar)	

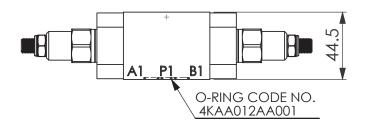
Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

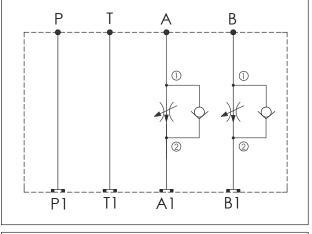
Rev.150521 M.FDI.301











#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 23 1/min

(Pressure Compensated)

Cartridge Valve:

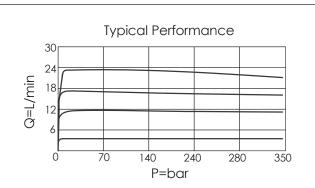
Refer to FR13A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.4 kg(WITHOUT VALVES) 0.7 kg(INCLUDE VALVES)
Ductile Iron	1.15 kg(WITHOUT VALVES) 1.45 kg(INCLUDE VALVES)

<sup>\*</sup> If you need the special specification.
Please contact us.

#### **UNIT:mm**



X	SELECTION FOR A PORT	CONTROL
13A2	CAVITY ONLY (WITHOUT VALVE)	
FROA	FR13A20AL(0.4-23LPM,350bar)	
FR0C	FR13A20CL(0.4-4LPM,350bar)	

Υ	SELECTION FOR B PORT CONTROL	
13A2	CAVITY ONLY (WITHOUT VALVE)	
FROA	FR13A20AL(0.4-23LPM,350bar)	
FROC	FR13A20CL(0.4-4LPM,350bar)	

Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

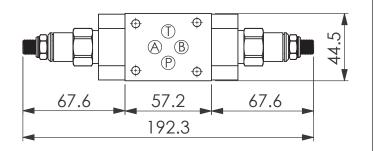
Rev.141007 M.FDI.302

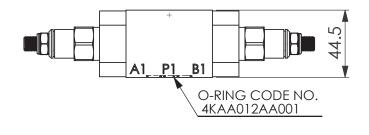
 $\leftarrow$ 





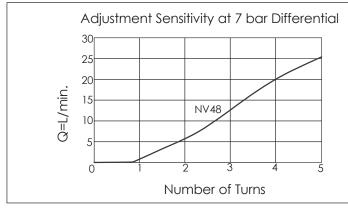






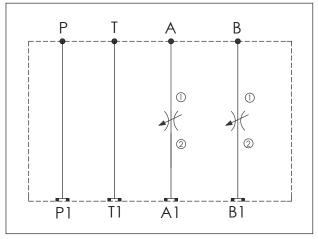
#### **UNIT:mm**





Υ	SELECTION FOR B PORT CONTROL	
13A2	CAVITY ONLY (WITHOUT VALVE)	
<b>NV48</b> NV13A2048L (350bar)		

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 40 I/min

Cartridge Valve: Refer to NV13A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.4 kg(WITHOUT VALVES) 0.7 kg(INCLUDE VALVES)
Ductile Iron	1.15 kg(WITHOUT VALVES) 1.45 kg(INCLUDE VALVES)

<sup>\*</sup> If you need the special specification. Please contact us.

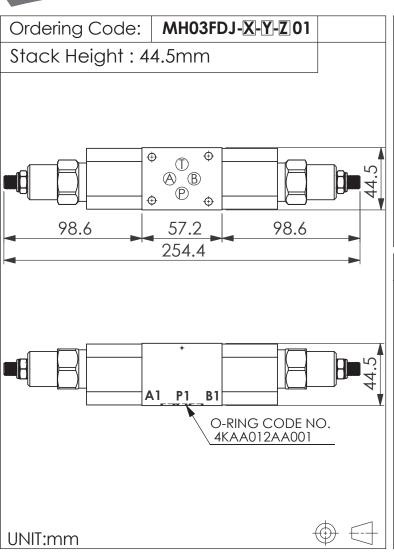
X	SELECTION FOR A PORT CONTROL
13A2	CAVITY ONLY (WITHOUT VALVE)
NV48	NV13A2048L (350bar)

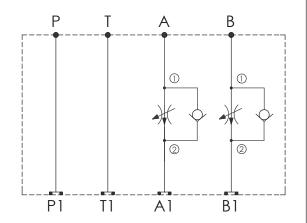
Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

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#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 40 I/min

(Pressure Compensated)

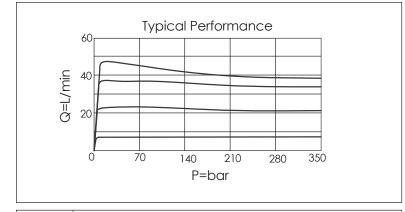
Cartridge Valve:

Refer to FR5A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.53 1.07	kg(WITHOUT VALVES) kg(INCLUDE VALVES)
Ductile Iron	1.53 2.07	kg(WITHOUT VALVES) kg(INCLUDE VALVES)

<sup>\*</sup> If you need the special specification. Please contact us.



X	SELECTION FOR A PORT CONTROL	
5A2	CAVITY ONLY (WITHOUT VALVE)	
FROA	FR5A20AL(0.4-45LPM)	

Y	SELECTION FOR B PORT CON	TROL
5A2	CAVITY ONLY (WITHOUT VALVE)	
FROA	FR5A20AL(0.4-45LPM)	

Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		
S	DUCTILE IRON		

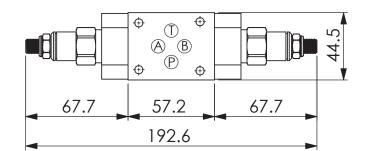
Rev.141001 M.FDJ.301

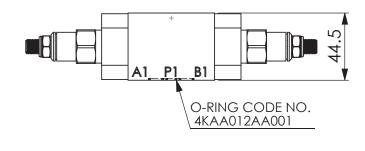






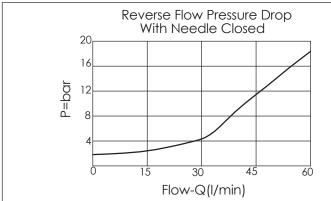






UNIT:mm





Flow-Q(I/min)			
Υ	SELECTION FOR B PORT CONTROL		
13A2	CAVITY ONLY(WITHOUT VALVE)		
NCBA	NC13A21BAL (20LPM,0.3bar)		
NCBC	NC13A21BCL (20LPM,2.0bar)		

P	T	A	В	
		② ①		Γ
P1	T1	A1	B1	

#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 40 I/min

#### Cartridge Valve: Refer to NC13A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.4 kg(WITHOUT VALVES) 0.7 kg(INCLUDE VALVES)
Ductile Iron	1.15 kg(WITHOUT VALVES) 1.45 kg(INCLUDE VALVES)

<sup>\*</sup> If you need the special specification. Please contact us.

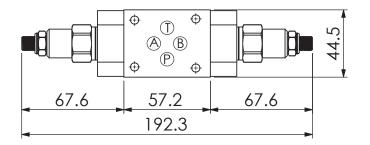
X	SELECTION FOR A PORT	CONTROL
13A2	CAVITY ONLY (WITHOUT VALVE)	
NCBA	NC13A21BAL (20LPM,0.3bar)	
NCBC	NC13A21BCL (20LPM,2.0bar)	

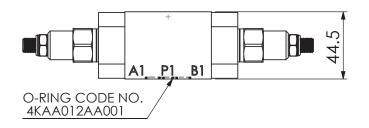
Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		
S	DUCTILE IRON		

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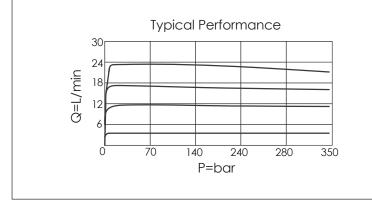




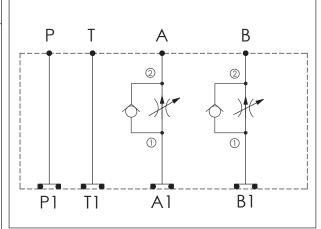


#### **UNIT:mm**





120	03	SAN	1DA	VICH	MAN	MIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

350 bar Body Pressure Rating:

Rated flow: 23 I/min

(Pressure Compensated)

Cartridge Valve:

Refer to FR13A-X-Y-Z
\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.4 kg(WITHOUT VALVES) 0.7 kg(INCLUDE VALVES)
Ductile Iron	1.15 kg(WITHOUT VALVES) 1.45 kg(INCLUDE VALVES)

<sup>\*</sup> If you need the special specification. Pléase contact us.

X	SELECTION FOR A PORT CONTROL				
13A2	CAVITY ONLY (WITHOUT VALVE)				
FROA	FR13A20AL(0.4-23LPM,350bar)				
FROC	FR13A20CL(0.4-4LPM,350bar)				

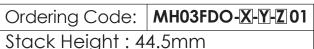
Υ	Y SELECTION FOR B PORT CONTROL		
13A2	CAVITY ONLY (WITHOUT VALVE)		Α
FROA	FR13A20AL (0.4-23LPM,350bar)		S
FROC	FR13A20CL(0.4-4LPM,350bar)		

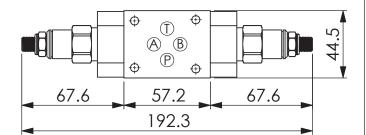
Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		
S	DUCTILE IRON		

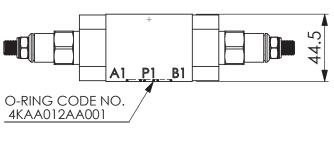
Rev.141007 M.FDO.302



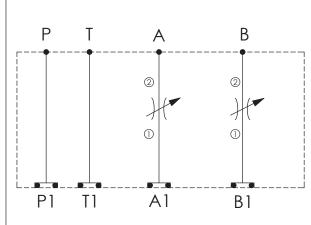








**UNIT:mm** 



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 40 I/min

# Cartridge Valve: Refer to NV13A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.4 kg(WITHOUT VALVES) 0.7 kg(INCLUDE VALVES)
Ductile Iron	1.15 kg(WITHOUT VALVES) 1.45 kg(INCLUDE VALVES)

<sup>\*</sup> If you need the special specification. Pléase contact us.

	Adjustment Sensitivity at 7 bar Differential
	30
	25
· -	20
Q=L/min.	15 NV48
\Q	10
	Number of Turns

X	SELECTION FOR A PORT CONTRO	
13A2	CAVITY ONLY (WITHOUT VALVE)	
NV48	NV13A2048L (350bar)	

Y	SELECTION FOR B PORT CONTROL		
13A2	CAVITY ONLY (WITHOUT VALVE)		
NV48	NV13A2048L (350bar)		

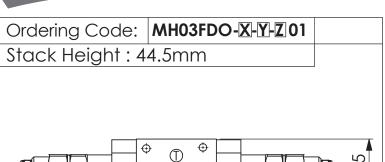
Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		
S	DUCTILE IRON		

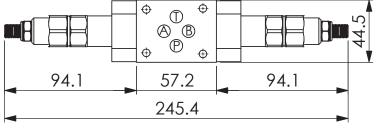
Rev.150521 M.FDO.303

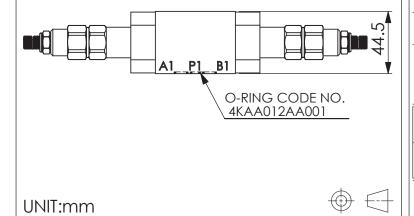


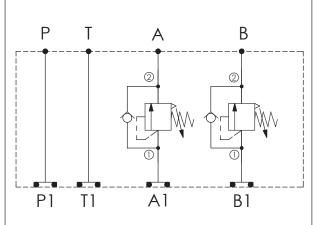












#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 40 I/min

# Cartridge Valve: Refer to SC13A-XHY-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.4 0.85	kg(WITHOUT VALVES) kg(INCLUDE VALVES)
Ductile Iron	1.15 1.45	kg(WITHOUT VALVES) kg(INCLUDE VALVES)

\* If you need the special specification. Please contact us.

15 Q 10 0 15 30 45 60 Flow-Q(I/min)	200	Reverse Free Flow
	H Dar	10 00 10

X	SELECTION FOR A PORT CONTRO	
13A2	CAVITY ONLY (WITHOUT VALVE)	
SC0A	SC13A20AL (60LPM,35-210bar)	

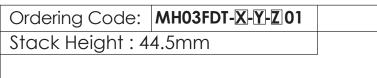
Y	SELECTION FOR B PORT CONTROL		
13A2	CAVITY ONLY(WITHOUT VALVE)		
SC0A	SC13A20AL (60LPM,35-210bar)		

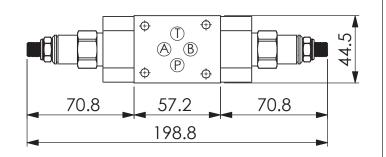
Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		
S	DUCTILE IRON		

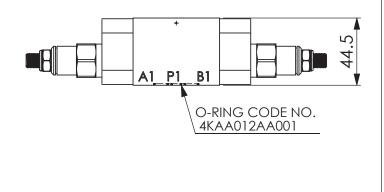
Rev.140902 M.FDO.304

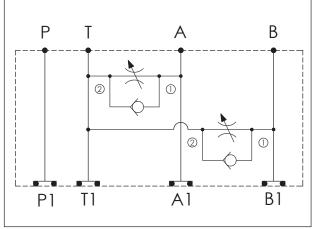












# TECHNICAL DATA

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 40 1/min

# Cartridge Valve: Refer to NC13A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.45 0.75	kg(WITHOUT VALVES) kg(INCLUDE VALVES)
Ductile Iron	1.2 1.5	kg(WITHOUT VALVES) kg(INCLUDE VALVES)

<sup>\*</sup> If you need the special specification. Please contact us.

20,	Reverse Flow Pressure Drop With Needle Closed
16	
Ö 12 Q II L 8	
4	
0	15 30 45 60
	Flow-Q(I/min)

**UNIT:mm** 

X	SELECTION FOR A PORT	CONTROL
13A2	CAVITY ONLY (WITHOUT VALVE)	
NCBA	NC13A21BAL (20LPM,0.3bar)	
NCBC	NC13A21BCL (20LPM,2.0bar)	

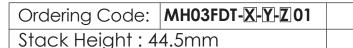
Y	SELECTION FOR B PORT CONTROL				
13A2	CAVITY ONLY (WITHOUT VALVE)				
NCBA	NC13A21BAL (20LPM,0.3bar)				
NCBC	NC13A21BCL (20LPM,2.0bar)				

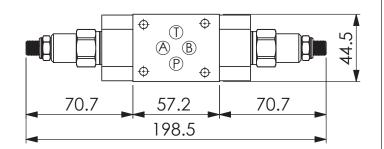
Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		
S	DUCTILE IRON		

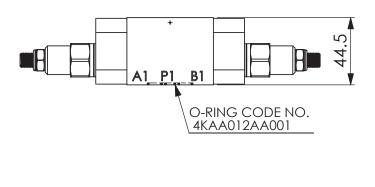
Rev 150521 M FDT 301

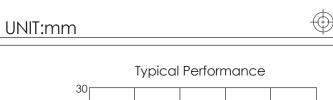


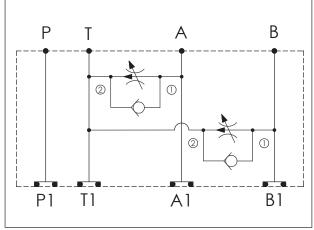












#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 23 1/min

(Pressure Compensated)

Cartridge Valve:

Refer to FR13A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.45 0.75	kg(WITHOUT VALVES) kg(INCLUDE VALVES)
Ductile Iron	1.2 1.5	kg(WITHOUT VALVES) kg(INCLUDE VALVES)

<sup>\*</sup> If you need the special specification. Please contact us.

		Турі	cal Pe	rformar	nce	
	30 24 18					
Q=L/min	12					
	0	70	140 P=l	240 oar	280	350

X	SELECTION FOR A PORT CONTROL				
13A2	CAVITY ONLY (WITHOUT VALVE)				
FROA	FR13A20AL(0.4-23LPM,350bar)				
FROC	FR13A20CL(0.4-4LPM,350bar)				

Y	SELECTION FOR B PORT CONTROL			
13A2	CAVITY ONLY (WITHOUT VALVE)			
FROA	FR13A20AL (0.4-23LPM,350bar)			
FROC	FR13A20CL(0.4-4LPM,350bar)			

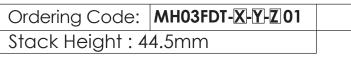
Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		
S	DUCTILE IRON		

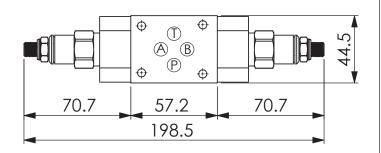
Rev.141007 M.FDT.302

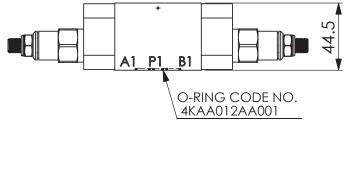
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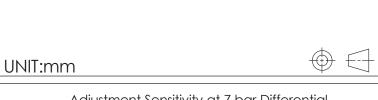


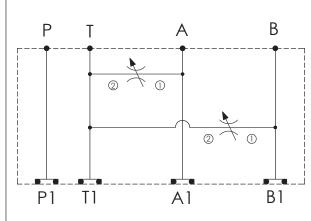












#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 40 I/min

Cartridge Valve:
Refer to NV13A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.45 0.75	kg(WITHOUT VALVES) kg(INCLUDE VALVES)
Ductile Iron	1.2 1.5	kg(WITHOUT VALVES) kg(INCLUDE VALVES)

<sup>\*</sup> If you need the special specification. Please contact us.

	Adjustment Sensitivity at 7 bar Differentia
Q=L/min.	30 25 20 15 10 5 0 1 2 3 4 5
	Number of Turns

X	SELECTION FOR A PORT	CONTROL
13A2	CAVITY ONLY (WITHOUT VALVE)	
NV48	NV13A2048L (350bar)	

Y	SELECTION FOR B PORT CONTROL			
13A2	CAVITY ONLY (WITHOUT VALVE)			
NV48	NV13A2048L (350bar)			

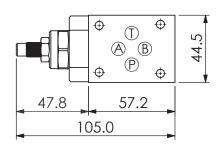
Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

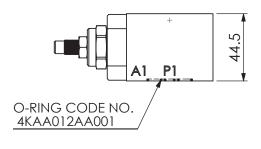
Rev 150521 M FDT 303



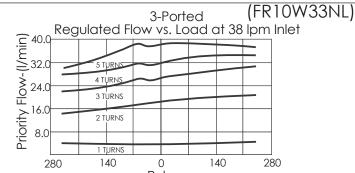






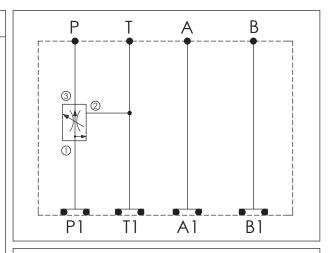


#### **UNIT:mm**



	Bypass pressure P=bar Priority pressure higher than priority higher than bypass
Υ	SELECTION FOR G PORT
N	WITHOUT PORT

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 40 I/min

## Cartridge Valve:

Refer to FR10W-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.31 kg(WITHOUT VALVE) 0.45 kg(INCLUDE VALVE)

<sup>\*</sup> If you need the special specification. Please contact us.

X	SELECTION FOR P PORT CONTROL	
10W3	CAVITY ONLY (WITHOUT VALVE)	
FR1L	FR10W31NL(13LPM,240bar)	
FR3L	FR10W33NL(38LPM,240bar)	

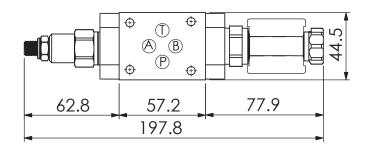
Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	

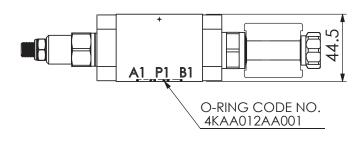
Rev.130305 M.FPB.301



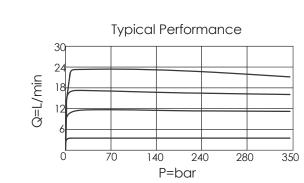






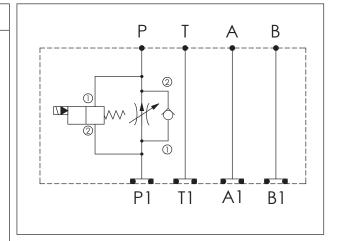


UNIT:mm



#### 

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 23 1/min

(Pressure Compensated)

Cartridge Valve: Refer to FR13A-X-Y-Z

Refer to FR13A-<u>X-HY-L</u> EP08W-X-HY-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.35 kg(WITHOUT VALVES) 0.58 kg(INCLUDE VALVES ,WITHOUT COIL)
Ductile Iron	1.00 kg(WITHOUT VALVES) 1.23 kg(INCLUDE VALVES ,WITHOUT COIL)

<sup>\*</sup> If you need the special specification. Please contact us.

X	SELECTION FOR FLOW	CONTROL
13A2	CAVITY ONLY (WITHOUT VALVE)	
FROA	FR13A20AL(23LPM,350bar)	

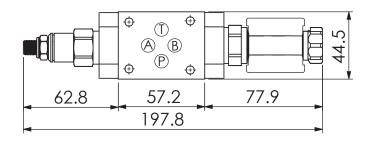
Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

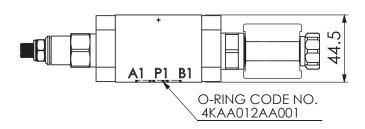
Rev.150306 M.FPE.301



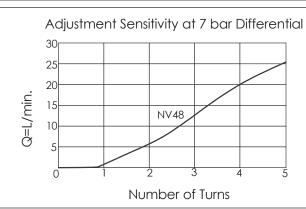






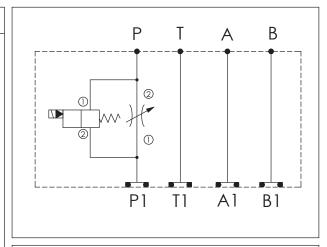


#### UNIT:mm



Y	SELECTION FOR SOLENOID VA (REFER TO EP08W-X-Y-Z)	ALVES
08W2	CAVITY ONLY (WITHOUT VALVE)	
EP01	EP08W2A01N05 , 40LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	
EP02	EP08W2A02N05 , 40LPM,350bar (NORMALLY OPEN,WITHOUT COIL)	
EP01M	EP08W2A01M05 , 40LPM,350bar(normally closed with knob style manual override, without coil)	
EP02P	EP08W2A02P05 , 40LPM,350bar(NORMALLY OPEN WITH PUSH STYLE MANUAL OVERRIDE,WITHOUT COIL)	
COIL MUST BE ORDERED SEPARATELY (REFER TO EC-04W-XI-YI-Z)		

#### **ISO 03 SANDWICH MANIFOLD**



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 40 I/min

Cartridge Valve: Refer to NV13A-X-Y-Z EP08W-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.35 kg(WITHOUT VALVES) 0.58 kg(INCLUDE VALVES ,WITHOUT COIL)
Ductile Iron	1.00 kg(WITHOUT VALVES) 1.23 kg(INCLUDE VALVES ,WITHOUT COIL)

\* If you need the special specification. Please contact us.

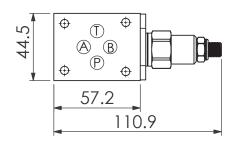
X	SELECTION FOR FLOW CONTROL	
13A2	CAVITY ONLY (WITHOUT VALVE)	
NV48	NV13A2048L (350bar)	

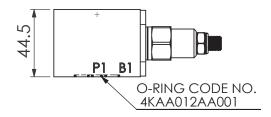
Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

Rev.150521 M.FPE.302

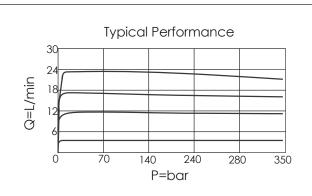




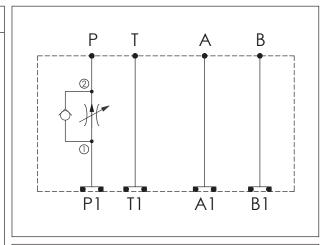




#### **UNIT:mm**



#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 23 I/min (Pressure Compensated)

Cartridge Valve: Refer to FR13A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.27 k 0.45 k	g(WITHOUT VALVE) g(INCLUDE VALVE)
Ductile Iron	0.77 k 0.95 k	(g(WITHOUT VALVE) (g(INCLUDE VALVE)

<sup>\*</sup> If you need the special specification. Please contact us.

X	SELECTION FOR P PORT	CONTROL
13A2	CAVITY ONLY (WITHOUT VALVE)	
FROA	FR13A20AL (23LPM,350bar)	

Υ	SELECTION FOR G PORT		
N	WITHOUT PORT		

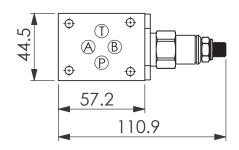
BODY MATERIAL			
HIGH-STRENGTH ALUMINUM			
DUCTILE IRON			
	HIGH-STRENGTH ALUMINUM		

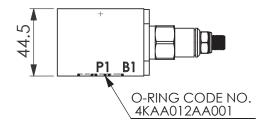
Rev.130625 M.FPW.301



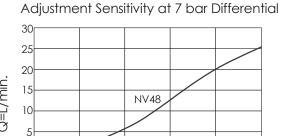
# Ordering Code: MH03FPW-X-Y-Z01

Stack Height: 44.5mm



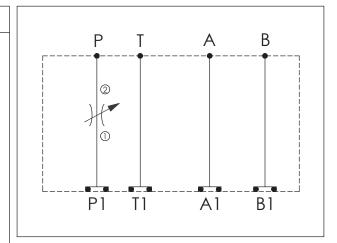


#### **UNIT:mm**



Number of Turns

#### ISO 03 SANDWICH MANIFOLD



#### TECHNICAL DATA

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating:

350 bar

Rated flow: 40 I/min

Cartridge Valve: Refer to NV13A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.27 kg(WITHOUT VALVE) 0.45 kg(INCLUDE VALVE)	
Ductile Iron	0.77 kg(WITHOUT VALVE) 0.95 kg(INCLUDE VALVE)	

<sup>\*</sup> If you need the special specification. Please contact us.

X	SELECTION FOR P PORT CONTROL
13A2	CAVITY ONLY(WITHOUT VALVE)
NV48	NV13A2048L (350bar)

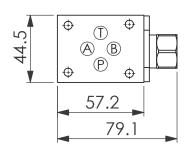
Y	SELECTION FOR G PORT			
N	WITHOUT PORT			

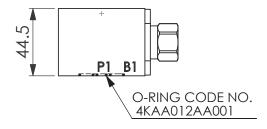
Z	BODY MATERIAL			
Α	HIGH-STRENGTH ALUMINUM			
S	DUCTILE IRON			



#### Ordering Code: MH03FPW-X-Y-Z01

Stack Height: 44.5mm

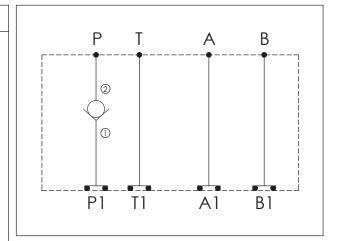




#### **UNIT:mm**







#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

350 bar Body Pressure Rating:

Rated flow: 40 I/min

Cartridge Valve: Refer to CV13A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Alum	ninum	0.27 0.37	kg(WITHOUT VALVE) kg(INCLUDE VALVE)
Ducti	le Iron	0.77 0.87	kg(WITHOUT VALVE) kg(INCLUDE VALVE)

<sup>\*</sup> If you need the special specification. Pléase contact us.

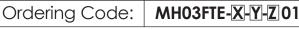
	Typical Pressure Drop
P=bar	12.0 9.0 6.0 3.0 2 bar 20 40 60 80 Flow-Q(I/min)

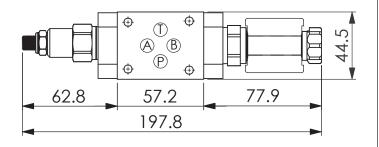
X	SELECTION FOR P PORT CONTROL	_
13A2	CAVITY ONLY (WITHOUT VALVE)	
CV20	CV13A2020N (80LPM,2.0bar)	

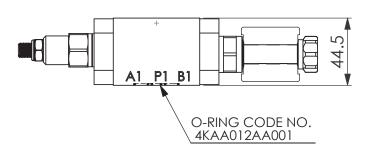
SELECTION FOR G PORT		
WITHOUT PORT		

Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

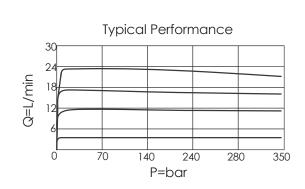






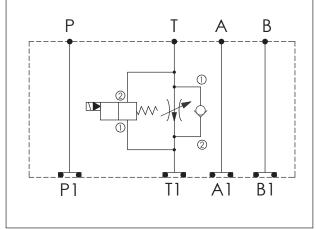


#### **UNIT:mm**



# Y SELECTION FOR SOLENOID VALVES (REFER TO EP08W-X-Y-Y-Z) 08W2 CAVITY ONLY (WITHOUT VALVE) EP01 EP08W2A01N05, 40LPM,350bar (NORMALLY CLOSED,WITHOUT COIL) EP02 EP08W2A02N05, 40LPM,350bar (NORMALLY OPEN,WITHOUT COIL) EP01M EP08W2A01M05, 40LPM,350bar (NORMALLY CLOSED WITH KNOB STYLE MANUAL OVERRIDE,WITHOUT COIL) EP02P EP08W2A02P05, 40LPM,350bar (NORMALLY OPEN WITH PUSH STYLE MANUAL OVERRIDE,WITHOUT COIL) COIL MUST BE ORDERED SEPARATELY (REFER TO EC-04W-X-Y-Y-Z)

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron 350

Body Pressure Rating: 350 bar

Rated flow: 23 1/min

(Pressure Compensated)

Cartridge Valve: Refer to FR13A-X-Y-Z

Refer to FR13A-X-Y-Z EP08W-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.35 kg(WITHOUT VALV 0.58 kg(INCLUDE VALVI ,WITHOUT CC	ES

\* If you need the special specification. Please contact us.

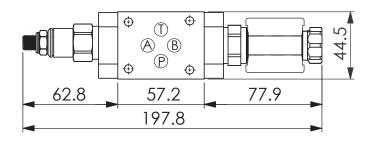
X	SELECTION FOR FLOW CONTROL		
13A2	CAVITY ONLY (WITHOUT VALVE)		
FROA	FR13A20AL(23LPM,350bar)		

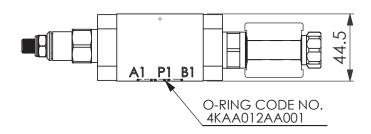
Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	



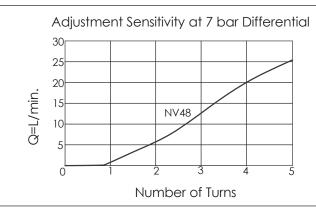
#### Ordering Code: MH03FTE-X-Y-Z01

Stack Height: 44.5mm

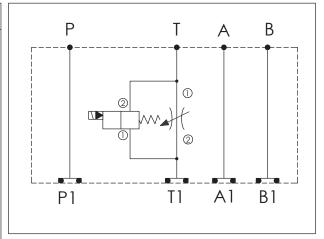




#### **UNIT:mm**



#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 40 1/min

Cartridge Valve: Refer to NV13A-X-Y-Z EP08W-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.35 kg(WITHOUT VALVES) 0.58 kg(INCLUDE VALVES ,WITHOUT COIL)

<sup>\*</sup> If you need the special specification. Please contact us.

X	SELECTION FOR FLOW	CONTROL
13A2	CAVITY ONLY (WITHOUT VALVE)	
NV48	NV13A2048L (350bar)	

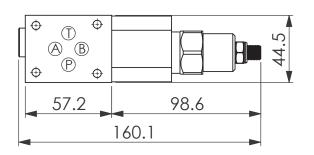
Y	SELECTION FOR SOLENOID VA (REFER TO EP08W-X-Y-Z)	ALVES
08W2	CAVITY ONLY (WITHOUT VALVE)	
EP01	EP08W2A01N05 , 40LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	
EP02	EP08W2A02N05 , 40LPM,350bar (NORMALLY OPEN,WITHOUT COIL)	
EP01M	EP08W2A01M05 , 40LPM,350bar(normally closed with knob style manual override, without coil)	
EP02P	EP08W2A02P05 , 40LPM,350bar(NORMALLY OPEN WITH PUSH STYLE MANUAL OVERRIDE,WITHOUT COIL)	
COIL MUST BE ORDERED SEPARATELY (REFER TO EC-04W-X-Y-Z)		

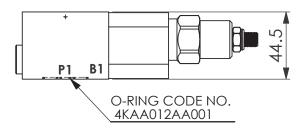
Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	



### Ordering Code: MH03FTH-X-Y-Z01

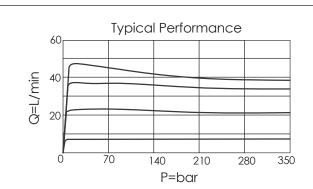
Stack Height: 44.5mm





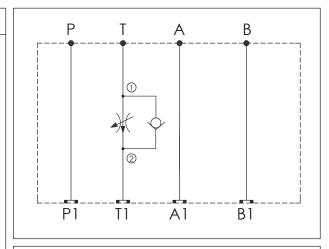
#### **UNIT:mm**





Y	SELECTION FOR T PORT CON	TROL
5A2	CAVITY ONLY (WITHOUT VALVE)	
FROA	FR5A20AL(0.4-45LPM)	

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating: 350 bar

Rated flow: 40 1/min

(Pressure Compensated)

Cartridge Valve:

Refer to FR5A-X-Y-Z

\* Refer to Winner Cartridge Valve Catalog.

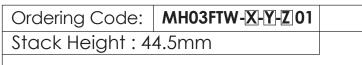
		kg(WITHOUT VALVE) kg(INCLUDE VALVE)
Ductile Iron	1.15 1.42	kg(WITHOUT VALVE) kg(INCLUDE VALVE)

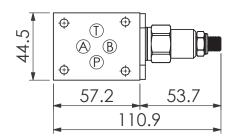
<sup>\*</sup> If you need the special specification. Please contact us.

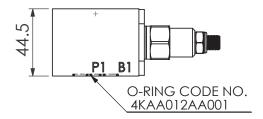
X	SELECTION FOR G PORT	
G02	G 1/4"(Metric)	

Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	









#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating: 350 bar

Rated flow: 23 I/min

(Pressure Compensated)

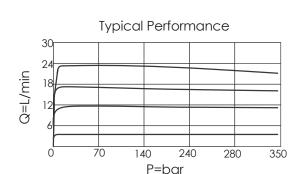
Cartridge Valve: Refer to FR13A-X-Y-Z

\* Refer to Winner Cartridge Valve Catalog.

Aluminum	0.27 0.45	kg(WITHOUT VALVE) kg(INCLUDE VALVE)

\* If you need the special specification. Please contact us.

#### **UNIT:mm**



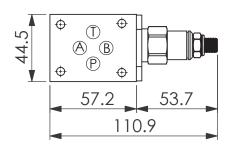
X	SELECTION FOR T PORT CONTROL			
13A2	CAVITY ONLY (WITHOUT VALVE)			
FROA	FR13A20AL(23LPM,350bar)			

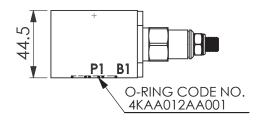
Y	SELECTION FOR G PORT		
N	WITHOUT PORT		

Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		



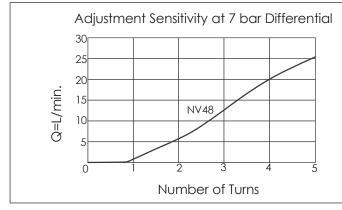




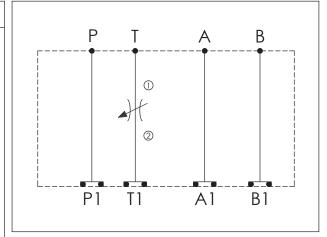


#### **UNIT:mm**





### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating:

350 bar

Rated flow:

40 I/min

# Cartridge Valve: Refer to NV13A-X-Y-Z

\* Refer to Winner Cartridge Valve Catalog.

Aluminum	0.27 0.45	kg(WITHOUT VALVE) kg(INCLUDE VALVE)

<sup>\*</sup> If you need the special specification. Pléase contact us.

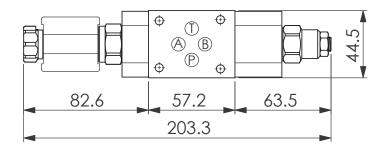
X	SELECTION FOR T PORT CONTROL
13A2	CAVITY ONLY (WITHOUT VALVE)
NV48	NV13A2048L (350bar)

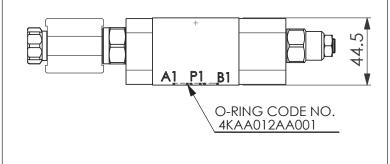
Y	SELECTION FOR G PORT		
N	WITHOUT PORT		

Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		







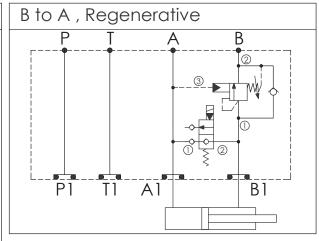


# Free Flow or Piloted Open (CB11A33HL) Pressure Drop 15 30 45 60

Flow-Q(I/min)

Y	SELECTION FOR COUNTERBALANCE VALVE			
11A3	CAVITY ONLY (WITHOUT VALVE)			
СВЗН	CB11A33HL (60LPM , 70-280bar)			

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 40 1/min

Cartridge Valve:
Refer to EP19E-X-Y-Z

CB11A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.43 kg(WITHOUT VALVES) 0.72 kg(INCLUDE VALVES ,WITHOUT COIL)

\* If you need the special specification. Please contact us.

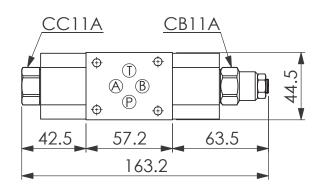
X	SELECTION FOR SOLENOLD VALVES (REFER TO EP19E-X-Y-Z)				
19E2	CAVITY ONLY (WITHOUT VALVE)				
EP11	EP19E2A11N05 , 40LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)				
EP11M	EP19E2A11M05 , 40LPM,350bar(NORMALLY CLOSED WITH KNOB STYLE MANUAL OVERRIDE,WITHOUT COIL)				

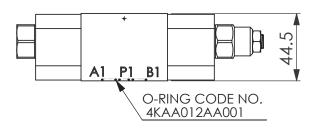
COIL MUST BE ORDERED SEPARATELY (REFER TO EC-04W-X-Y-Z)

Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		

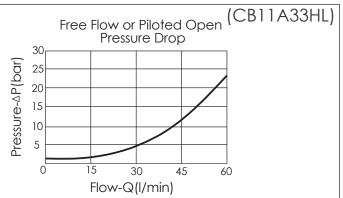




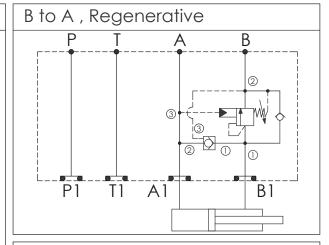




#### **UNIT:mm**



#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

350 bar Body Pressure Rating:

Rated flow: 40 I/min

Cartridge Valve:
Refer to CC11A-X-Y-Z CB11A-X-Y-Z

Aluminum	0.5 0.9	kg(WITHOUT VALVES) kg(INCLUDE VALVES)
Ductile Iron	1.35 1.75	kg(WITHOUT VALVES) kg(INCLUDE VALVES)

<sup>\*</sup> If you need the special specification. Pléase contact us.

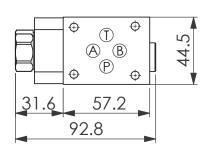
X	SELECTION FOR PILOT-TO-CLOSE VALVE				
11A3	CAVITY ONLY (WITHOUT VALVE)				
CC50	CC11A3050N (80LPM , 5.0bar)				

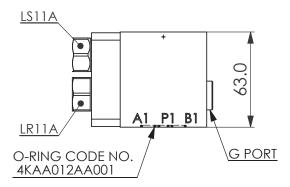
Υ	SELECTION FOR COUNTERBALANCE VALV	Έ	Z	BODY MATER	IAL
11A3	CAVITY ONLY (WITHOUT VALVE)		Α	HIGH-STRENGTH ALUMINUM	
СВЗН	CB11A33HL (60LPM , 70-280bar)		S	DUCTILE IRON	





Stack Height: 63.0mm



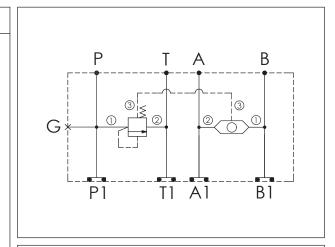


#### **UNIT:mm**



# Y SELECTION FOR SHUTTLE VALVE 11A3 CAVITY ONLY (WITHOUT VALVE) LS3N LS11A33NN (10LPM,350bar)

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 40 I/min

Cartridge Valve:
Refer to LR11A-X-Y-Z
LS11A-X-Y-Z

Aluminum	0.45 0.75	kg(WITHOUT VALVES) kg(INCLUDE VALVES)
Ductile Iron	1.3 1.7	kg(WITHOUT VALVES) kg(INCLUDE VALVES)

<sup>\*</sup> If you need the special specification. Please contact us.

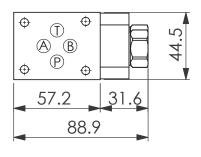
X	SELECTION FOR LOGIC	ELEMENT
11A3	CAVITY ONLY (WITHOUT VALVE)	
LR35	LR11A3035N(60LPM,3.5bar)	
LR70	LR11A3070N(60LPM,7.0bar)	
LR100	LR11A30100N(60LPM,10.0bar)	
LR140	LR11A30140N(60LPM,14.0bar)	

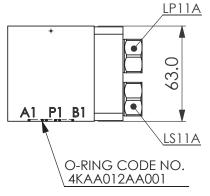
Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		
S			



## Ordering Code: MH03KPR-X-Y-Z 03

Stack Height: 63.0mm



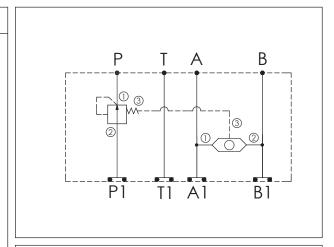


#### **UNIT:mm**



# Y SELECTION FOR SHUTTLE VALVE 11A3 CAVITY ONLY (WITHOUT VALVE) LS3N LS11A33NN (10LPM,350bar)

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 40 I/min

Cartridge Valve:

Refer to LP11A-X-Y-Z LS11A-X-Y-Z

Aluminum	0.45 0.75	kg(WITHOUT VALVES) kg(INCLUDE VALVES)
Ductile Iron	1.3 1.6	kg(WITHOUT VALVES) kg(INCLUDE VALVES)

<sup>\*</sup> If you need the special specification. Please contact us.

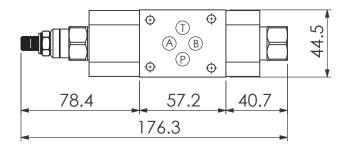
X	SELECTION FOR LOGIC	ELEMENT
11A3	CAVITY ONLY (WITHOUT VALVE)	
LP35	LP11A3035N(60LPM,3.5bar)	
LP70	LP11A3070N(60LPM,7.0bar)	
LP100	LP11A30100N(60LPM,10.0bar)	
LP140	LP11A30140N(60LPM,14.0bar)	

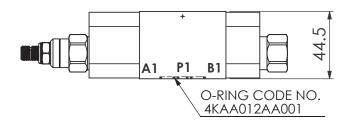
Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	



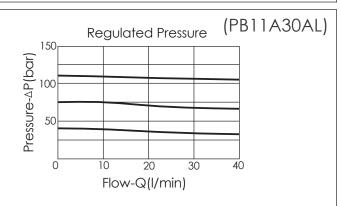
## Ordering Code: MH03PAC-X-Y-Z01

Stack Height: 44.5mm

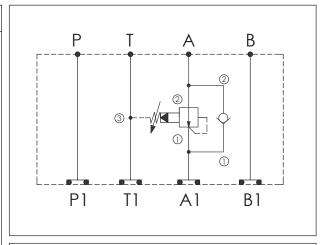




#### **UNIT:mm**



#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 40 I/min

Cartridge Valve:
Refer to PB11A-X-Y-Z

CV13A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.46 kg(WITHOUT VALVES) 0.71 kg(INCLUDE VALVES)	

\* If you need the special specification. Please contact us.

X	SELECTION FOR A PORT	CONTROL
11A3	CAVITY ONLY (WITHOUT VALVE)	
PB0A	PB11A30AL (40LPM , 7-210bar)	

Y	SELECTION FOR CHECK VALVE	
13A2	CAVITY ONLY (WITHOUT VALVE)	
CP00	CP13A2H00N (PLUG ONLY)	
CV20	CV13A2020N (80LPM , 2.0bar)	

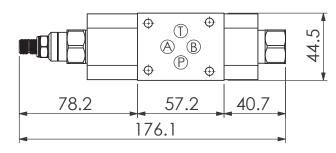
Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	

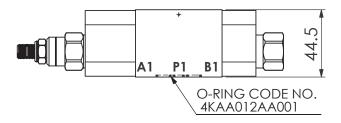




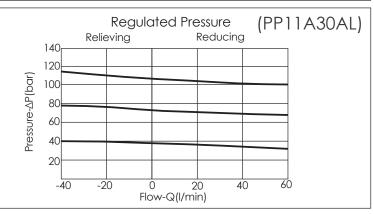
### Ordering Code: MH03PAC-X-Y-Z01

Stack Height: 44.5mm

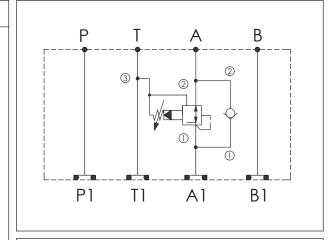




#### **UNIT:mm**



#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

350 bar Body Pressure Rating:

Rated flow: 40 I/min

Cartridge Valve: Refer to PP11A-X-Y-Z CV13A-X-Y-Z

Aluminum	0.46 kg(WITHOUT VALVES) 0.71 kg(INCLUDE VALVES)

<sup>\*</sup> If you need the special specification. Pléase contact us.

X	SELECTION FOR A PORT	CONTROL
11A3	CAVITY ONLY (WITHOUT VALVE)	
PP0A	PP11A30AL (40LPM , 7-210bar)	

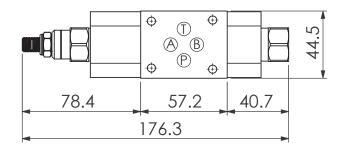
Y	SELECTION FOR CHECK VALVE	
13A2	CAVITY ONLY (WITHOUT VALVE)	
CP00	CP13A2H00N (PLUG ONLY)	
CV20	CV13A2020N (80LPM, 2.0bar)	

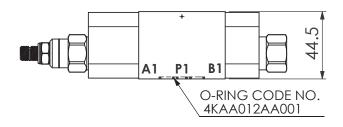
Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM	H-STRENGTH ALUMINUM	



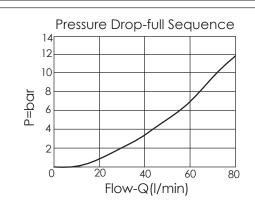
## Ordering Code: MH03PAC-X-Y-Z01

Stack Height: 44.5mm

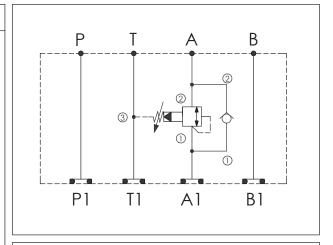




#### **UNIT:mm**



#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

350 bar Body Pressure Rating:

Rated flow: 40 I/min

Cartridge Valve: Refer to SP11A-X-Y-Z CV13A-XI-YI-ZI

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.46 kg(WITHOUT VALVES) 0.71 kg(INCLUDE VALVES)

\* If you need the special specification. Pléase contact us.

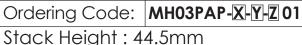
X	SELECTION FOR A PORT	CONTROL
11A3	CAVITY ONLY (WITHOUT VALVE)	
SPOA	SP11A30AL (60LPM , 7-210bar)	

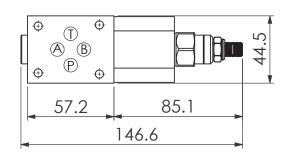
Υ	SELECTION FOR CHECK VALVE	
13A2	CAVITY ONLY (WITHOUT VALVE)	
CV20	CV13A2120N (60LPM, 2.0bar)	

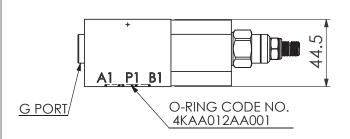
Z	BODY MATER	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM			



# ISO 03 SANDWICH MANIFOLD

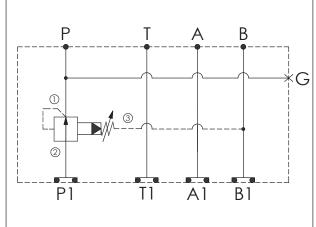






UNIT:mm





#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar Ductile Iron

Body Pressure Rating:

350 bar

Rated flow: 40 I/min

Cartridge Valve: Refer to PB11A-X-Y-Z

Aluminum	0.45 0.6	kg(WITHOUT VALVE) kg(INCLUDE VALVE)
Ductile Iron	1.2 1.35	kg(WITHOUT VALVE) kg(INCLUDE VALVE)

<sup>\*</sup> If you need the special specification. Please contact us.

150 <sub>r</sub>	Re	gulated	d Pressu	ire
Jr.)				
Pressure-∆P(bar)				
N				
9.70 50-				
ress				
<u> </u>	1	0 2		0 40
0		0 2 Flow-Q(		0 40

x	SELECTION FOR A PORT	CONTROL
11A3	CAVITY ONLY (WITHOUT VALVE)	
PB0A	PB11A30AL (40LPM ,7-210bar)	

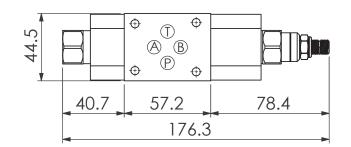
SELECTION FOR G PORT		
G 1/4"(Metric)		
NPT 1/4"(U.S. Units)		
	G 1/4"(Metric)	

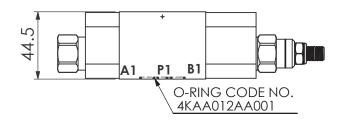
Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	



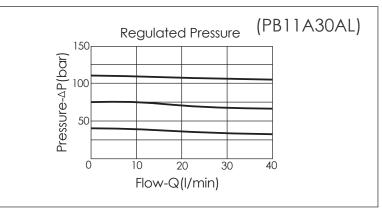
#### Ordering Code: MH03PBC-X-Y-Z01

Stack Height: 44.5mm

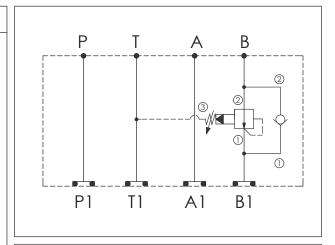




#### **UNIT:mm**



#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

350 bar Body Pressure Rating:

Rated flow: 40 I/min

Cartridge Valve:
Refer to CV13A-X-Y-Z PB11A-X-Y-Z

Aluminum	0.46 kg(WITHOUT VALVES) 0.71 kg(INCLUDE VALVES)

<sup>\*</sup> If you need the special specification. Please contact us.

X	SELECTION FOR CHECK VALVE		
13A2	CAVITY ONLY (WITHOUT VALVE)		
CP00	CP13A2H00N (PLUG ONLY)		
CV20	CV13A2020N (80LPM , 2.0bar)		

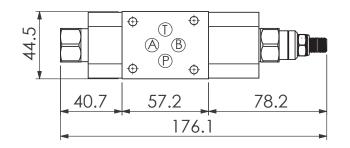
Y	SELECTION FOR B PORT CONTROL		
11A3	CAVITY ONLY (WITHOUT VALVE)		
PB0A	PB11A30AL (40LPM , 7-210bar)		

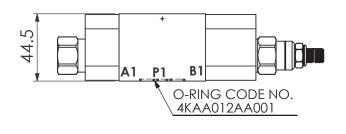
Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		



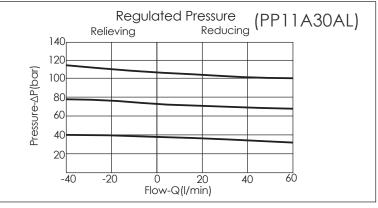
## Ordering Code: MH03PBC-X-Y-Z01

Stack Height: 44.5mm

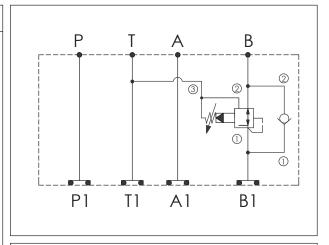




#### **UNIT:mm**



#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

350 bar Body Pressure Rating:

I/min

Rated flow: 40

Cartridge Valve: Refer to CV13A-X-Y-Z PP11A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.46 kg(WITHOUT VALVES) 0.71 kg(INCLUDE VALVES)

\* If you need the special specification. Please contact us.

X	SELECTION FOR CHECK VALVE		
13A2	CAVITY ONLY (WITHOUT VALVE)		
CP00	CP13A2H00N (PLUG ONLY)		
CV20	CV13A2020N (80LPM , 2.0bar)		

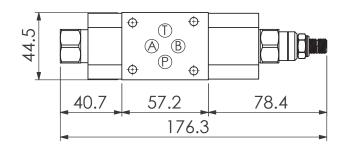
Y	SELECTION FOR B PORT CON	TROL
11A3	CAVITY ONLY (WITHOUT VALVE)	
PPOA	PP11A30AL (40LPM , 7-210bar)	

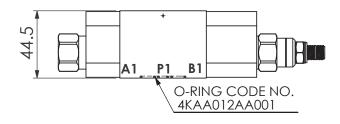
Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	



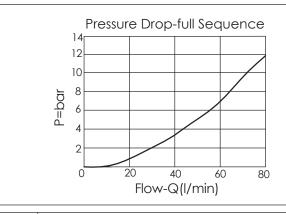
## Ordering Code: MH03PBC-X-Y-Z01

Stack Height: 44.5mm

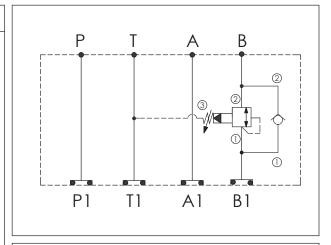




#### **UNIT:mm**



#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 40 1/min

Cartridge Valve: Refer to CV13A-X-Y-Z SP11A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.46 kg(WITHOUT VALVES) 0.71 kg(INCLUDE VALVES)

\* If you need the special specification. Please contact us.

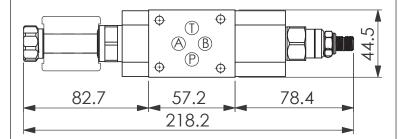
X	SELECTION FOR CHEC	K VALVE
13A2	CAVITY ONLY (WITHOUT VALVE)	
CV20	CV13A2120N (60LPM , 2.0bar)	

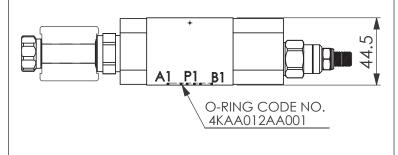
Y	SELECTION FOR B PORT CON	TROL
11A3	CAVITY ONLY (WITHOUT VALVE)	
SPOA	SP11A30AL (60LPM , 7-210bar)	

Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	

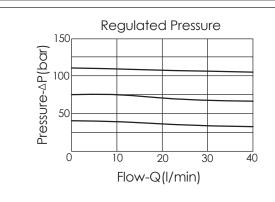






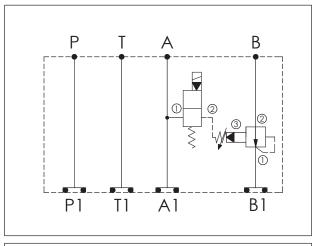


#### **UNIT:mm**



Y	SELECTION FOR B PORT CON	TROL
11A3	CAVITY ONLY (WITHOUT VALVE)	
PBOA	PB11A30AL (40LPM , 7-210bar)	

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating:

350 bar

Rated flow: 40 1/min

Cartridge Valve:

Refer to EP08W-X-Y-Z

\* Refer to Winner Cartridge Valve Catalog.

Aluminum	0.45 kg(WITHOUT VALVES) 0.75 kg(INCLUDE VALVES ,WITHOUT COIL)
DUCTILE IRON	1.32 kg(WITHOUT VALVES) 1.62 kg(INCLUDE VALVES ,WITHOUT COIL)

<sup>\*</sup> If you need the special specification. Please contact us.

X	SELECTION FOR SOLENO (REFER TO EP08W-X-	ID VALVES Y-Z)
08W2	CAVITY ONLY (WITHOUT VALVE)	
EPO1	EP08W2A01N05 , 40LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	
EP02	EP08W2A02N05 , 40LPM,350bar (NORMALLY OPEN,WITHOUT COIL)	
EP01M	EP08W2A01M05 , 40LPM,350bar(NORMALLY CLOSED WITH KNOB STYLE MANUAL OVERRIDE,WITHOUT COIL)	
EPO2P	EP08W2A02P05 , 40LPM,350bar(NORMALLY OPEN WITH PUSH STYLE MANUAL OVERRIDE,WITHOUT COIL)	

# COIL MUST BE ORDERED SEPARATELY (REFER TO EC-04W-X-Y-Z)

Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	



В

В1

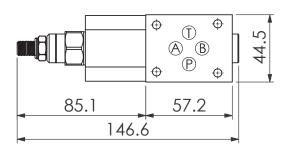
ķС

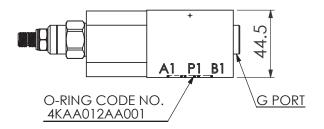
Α

**A**1

## ISO 03 SANDWICH MANIFOLD

Ordering Code: MH03PBP-X-Y-Z 01 Stack Height: 44.5mm





#### **TECHNICAL DATA**

T1

Aluminum Body Pressure Rating: 250 bar Ductile Iron

Body Pressure Rating:

Ρ

350 bar

I/min

Rated flow: 40

Cartridge Valve: Refer to PB11A-X-Y-Z

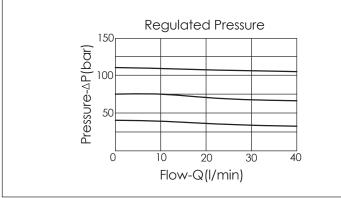
\* Refer to Winner Cartridge Valve Catalog.

Aluminum	0.45 0.6	kg(WITHOUT VALVE) kg(INCLUDE VALVE)
Ductile Iron	1.2 1.35	kg(WITHOUT VALVE) kg(INCLUDE VALVE)

\* If you need the special specification. Please contact us.

#### UNIT:mm





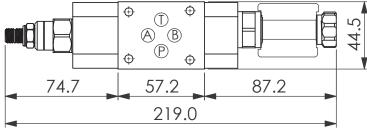
X	SELECTION FOR G PORT	
G02	G 1/4"(Metric)	
N02	NPT 1/4"(U.S. Units)	

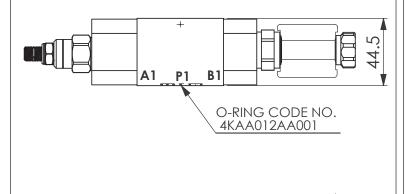
Y	SELECTION FOR B PORT CONTROL	
11A3	CAVITY ONLY(WITHOUT VALVE)	
PB0A	PB11A30AL (40LPM , 7-210bar)	

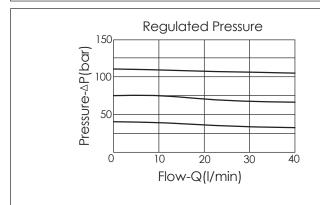
Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	







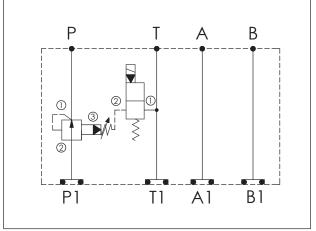




**UNIT:mm** 

Y	SELECTION FOR SOLENOID (REFER TO EP08W-X-Y-Z	_
08W2	CAVITY ONLY (WITHOUT VALVE)	
EP01	EP08W2A01N05 , 40LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	
EP02	EP08W2A02N05 , 40LPM,350bar (NORMALLY OPEN,WITHOUT COIL)	
EP01M	EP08W2A01M05 , 40LPM,350bar(NORMALLY CLOSED WITH KNOB STYLE MANUAL OVERRIDE,WITHOUT COIL)	
EP02P	EP08W2A02P05 , 40LPM,350bar(NORMALLY OPEN WITH PUSH STYLE MANUAL OVERRIDE,WITHOUT COIL)	
COIL MUST BE ORDERED SEPARATELY (REFER TO EC-04W-X-Y-Z)		

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating:

350 bar

Rated flow: 40 I/min

Cartridge Valve:

Refer to PB11A-X-Y-Z

\* Refer to Winner Cartridge Valve Catalog.

Aluminum	0.45 kg(WITHOUT VALVES) 0.75 kg(INCLUDE VALVES ,WITHOUT COIL)		
DUCTILE IRON	1.32 kg(WITHOUT VALVES) 1.62 kg(INCLUDE VALVES ,WITHOUT COIL)		

\* If you need the special specification. Please contact us.

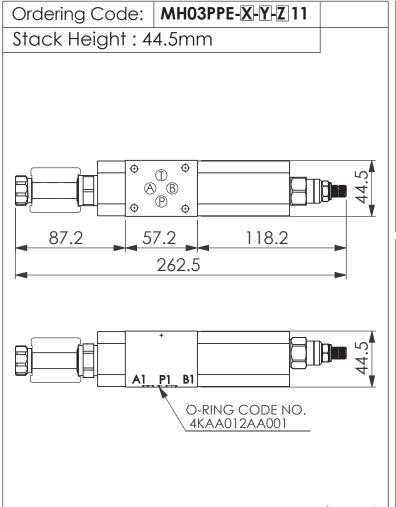
x	SELECTION FOR P PORT CONTROL	
11A3	CAVITY ONLY (WITHOUT VALVE)	
PB0A	PB11A30AL (40 LPM , 7-210bar)	

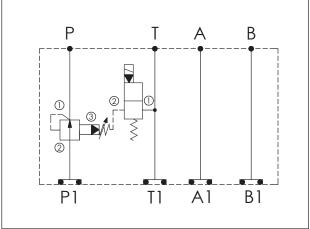
Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	





#### ISO 03 SANDWICH MANIFOLD





#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating:

350 bar

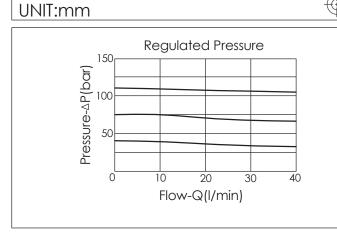
Rated flow:

40 I/min

Cartridge Valve: Refer to PB11A-X-Y-Z

Aluminum	0.65 kg(WITHOUT VALVES) 0.95 kg(INCLUDE VALVES ,WITHOUT COIL)

<sup>\*</sup> If you need the special specification. Please contact us.



X	SELECTION FOR P PORT CONTROL	
11A3	CAVITY ONLY (WITHOUT VALVE)	
PB0A	PB11A30AL (40 LPM , 7-210bar)	

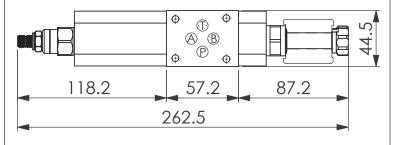
Y	SELECTION FOR SOLENOID (REFER TO EP08W-X-Y-Z	
08W2	CAVITY ONLY(WITHOUT VALVE)	
EPO1	EP08W2A01N05 , 40LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	
EP02	EP08W2A02N05 , 40LPM,350bar (NORMALLY OPÉN,WITHOUT COIL)	
EP01M	EP08W2A01M05 , 40LPM,350bar(NORMALLY CLOSED WITH KNOB STYLE MANUAL OVERRIDE,WITHOUT COIL)	
EPO2P	EP08W2A02P05 , 40LPM,350bar(NORMALLY OPEN WITH PUSH STYLE MANUAL OVERRIDE,WITHOUT COIL)	
COIL MUST BE ORDERED SEPARATELY (REFER TO EC-04W-X-Y-Z)		

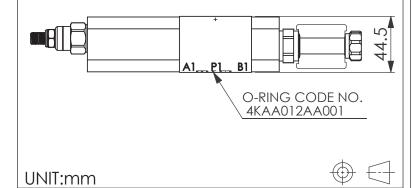
Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	

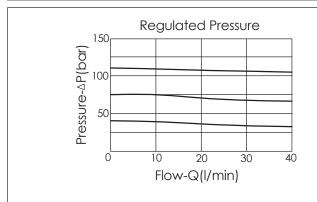






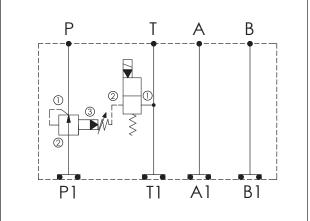






#### SELECTION FOR SOLENOID VALVES (REFER TO EP08W-X-Y-Z) Y **08W2** CAVITY ONLY (WITHOUT VALVE) EP08W2A01N05 , 40LPM,350bar (NORMALLY CLOSED,WITHOUT COIL) **EP01** EP08W2A02N05 , 40LPM,350bar (NORMALLY OPEN,WITHOUT COIL) **EP02** EP08W2A01M05 , 40LPM,350bar(NORMALLY CLOSED WITH KNOB STYLE MANUAL OVERRIDE, WITHOUT COIL) EP01M EP08W2A02P05 , 40LPM,350bar(NORMALLY OPEN WITH PUSH STYLE MANUAL OVERRIDE,WITHOUT COIL) EP02P COIL MUST BE ORDERED SEPARATELY (REFER TO EC-04W-X-Y-Z)

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating:

350 bar

Rated flow: 40 I/min

Cartridge Valve:

Refer to PB11A-X-Y-Z

\* Refer to Winner Cartridge Valve Catalog.

Aluminum	0.65 kg(WITHOUT VALVES) 0.95 kg(INCLUDE VALVES ,WITHOUT COIL)

\* If you need the special specification. Please contact us.

X	SELECTION FOR P PORT CONTROL	
11A3	CAVITY ONLY (WITHOUT VALVE)	
PB0A	PB11A30AL (40 LPM , 7-210bar)	

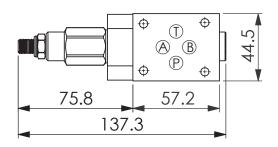
Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	

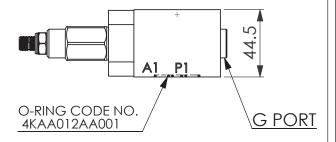


#### ISO 03 SANDWICH MANIFOLD



Stack Height: 44.5mm





# P T A B G P1 T1 A1 B1

#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating:

350 bar

Rated flow: 40 1/min

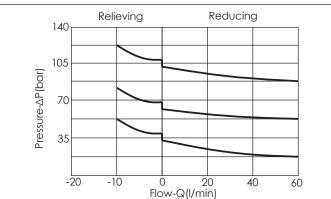
#### Cartridge Valve: Refer to PD11A-X-Y-Z

\* Refer to Winner Cartridge Valve Catalog.

Aluminum	0.32 0.5	kg(WITHOUT VALVE) kg(INCLUDE VALVE)
Ductile Iron	0.9 1.08	kg(WITHOUT VALVE) kg(INCLUDE VALVE)

\* If you need the special specification. Please contact us.

#### UNIT:mm



X	SELECTION FOR P PORT	CONTROL
11A3	CAVITY ONLY (WITHOUT VALVE)	
PD0A	PD11A30AL(40LPM,35-210bar) (Direct Acting)	
PD0B	PD11A30BL(40LPM,3.5-105bar) (Direct Acting)	
PD0D	PD11A30DL(40LPM,1.7-55bar) (Direct Acting)	
PD0E	PD11A30EL(40LPM,1.7-28bar) (Direct Acting)	

Y	Y SELECTION FOR G PORT	
G02	G 1/4"(Metric)	
N02	NPT 1/4"(U.S. Units)	

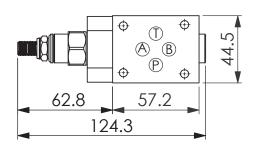
Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

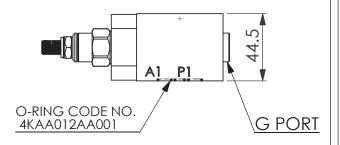


В

#### ISO 03 SANDWICH MANIFOLD







P1 В1 T1 Α1

#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating:

350 bar

G

Rated flow: 40 I/min

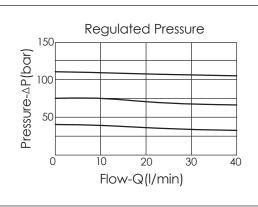
Cartridge Valve: Refer to PB11A-X-Y-Z

\* Refer to Winner Cartridge Valve Catalog.

Aluminum	0.32 0.48	kg(WITHOUT VALVE) kg(INCLUDE VALVE)
Ductile Iron	0.9 1.06	kg(WITHOUT VALVE) kg(INCLUDE VALVE)

\* If you need the special specification. Pléase contact us.

#### **UNIT:mm**



X	SELECTION FOR P PORT	CONTROL
11A3	CAVITY ONLY (WITHOUT VALVE)	
PB0A	PB11A30AL(40LPM,7-210bar) (Pilot Operated Reducing)	
PBOB	PB11A30BL(40LPM,3.5-105bar) (Pilot Operated Reducing)	

Y	SELECTION FOR G PORT	
G02	G 1/4"(Metric)	
N02	NPT 1/4"(U.S. Units)	

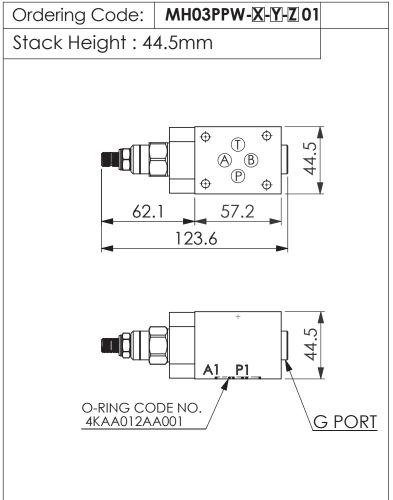
Z	BODY MATERIAL			
Α	HIGH-STRENGTH ALUMINUM			
S	DUCTILE IRON			

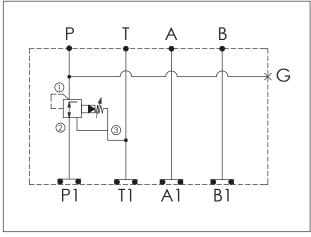


**UNIT:mm** 



#### ISO 03 SANDWICH MANIFOLD





# Aluminum Body Pressure Rating: 250 bar Ductile Iron 350 bar

Body Pressure Rating:

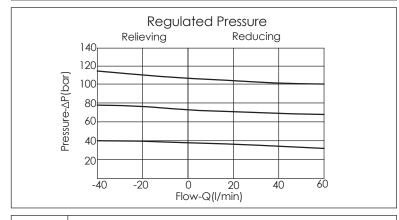
350 bar

Rated flow: 40 I/min

# Cartridge Valve: Refer to PP11A-X-Y-Z

Aluminum	0.32 0.47	kg(WITHOUT VALVE) kg(INCLUDE VALVE)
Ductile Iron	0.9 1.05	kg(WITHOUT VALVE) kg(INCLUDE VALVE)

<sup>\*</sup> If you need the special specification. Please contact us.



X	SELECTION FOR P PORT CONTROL
11A3	CAVITY ONLY(WITHOUT VALVE)
PP0A	PP11A30AL(40LPM,7.0~210bar) (Pilot Operated Reducing/Relieving)
PPOB	PP11A30BL(40LPM,3.5~105bar) (Pilot Operated Reducing/Relieving)

Υ	SELECTION FOR G PORT		
G02	G 1/4"(Metric)		
N02	NPT 1/4"(U.S. Units)		

Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		
S	DUCTILE IRON		



В

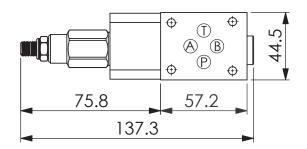
В1

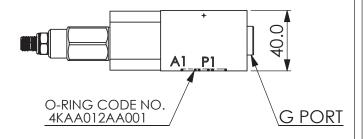
G

#### ISO 03 SANDWICH MANIFOLD



Stack Height: 40.0mm





**TECHNICAL DATA** Aluminum Body Pressure Rating: 250 bar

T1

Ductile Iron

Ρ1

350 bar Body Pressure Rating:

Α1

Rated flow: 40 I/min

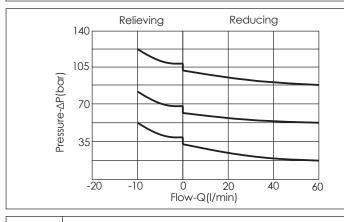
Cartridge Valve:
Refer to PD11A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.34 0.52	kg(WITHOUT VALVE) kg(INCLUDE VALVE)
Ductile Iron	1.0 1.18	kg(WITHOUT VALVE) kg(INCLUDE VALVE)

\* If you need the special specification. Please contact us.

### **UNIT:mm**



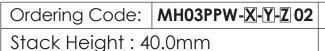
X	SELECTION FOR P PORT	CONTROL
11A3	CAVITY ONLY (WITHOUT VALVE)	
PD0A	PD11A30AL(40LPM,35-210bar) (Direct Acting)	
PD0B	PD11A30BL(40LPM,3.5-105bar) (Direct Acting)	
PD0D	PD11A30DL(40LPM,1.7-55bar) (Direct Acting)	
PD0E	PD11A30EL(40LPM,1.7-28bar) (Direct Acting)	

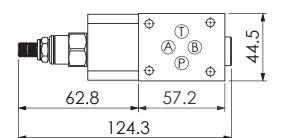
Y	SELECTION FOR G PORT		
G02	G 1/4"(Metric)		
N02	NPT 1/4"(U.S. Units)		

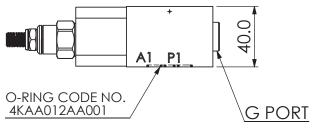
Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		
S	DUCTILE IRON		



#### ISO 03 SANDWICH MANIFOLD

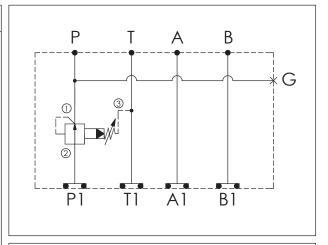






**UNIT:mm** 





#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

350 bar

Rated flow:

40 I/min

# Cartridge Valve: Refer to PB11A-X-Y-Z

Body Pressure Rating:

L			
	Aluminum	0.34 0.5	kg(WITHOUT VALVE) kg(INCLUDE VALVE)
	Ductile Iron	1.0 1.16	kg(WITHOUT VALVE) kg(INCLUDE VALVE)

<sup>\*</sup> If you need the special specification. Please contact us.

150	Re	gulated	d Pressu	ıre	
Pressure-AP(bar)					
0	11	0 2 Flow-Q		80 40	0

X	SELECTION FOR P PORT C	ONTROL
11A3	CAVITY ONLY (WITHOUT VALVE)	
PB0A	PB11A30AL(40LPM,7-210bar) (Pilot Operated Reducing)	
PBOB	PB11A30BL(40LPM,3.5-105bar) (Pilot Operated Reducing)	

Υ	SELECTION FOR G PORT		
G02	G 1/4"(Metric)		
N02	NPT 1/4"(U.S. Units)		

Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		
S	DUCTILE IRON		



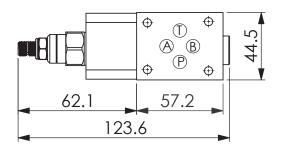
В

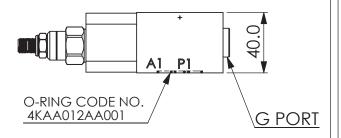
В1

#### ISO 03 SANDWICH MANIFOLD



Stack Height: 40.0mm





#### **TECHNICAL DATA**

Α1

T1

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating:

Ρ1

350 bar

G

Rated flow: 40 1/min

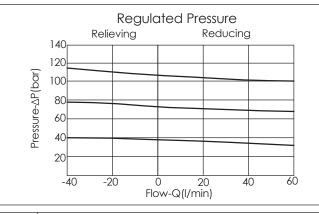
# Cartridge Valve: Refer to PP11A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

	_	_
Aluminum	0.34 kg(WITHOUT VALVE 0.5 kg(INCLUDE VALVE	)
Ductile Iron	1.0 kg(WITHOUT VALVE 1.16 kg(INCLUDE VALVE	)

\* If you need the special specification. Please contact us.

#### UNIT:mm



X	SELECTION FOR P PORT	CONTROL
11A3	CAVITY ONLY (WITHOUT VALVE)	
PP0A	PP11A30AL(40LPM,7.0~210bar) (Pilot Operated Reducing/Relieving)	
PPOB	PP11A30BL(40LPM,3.5~105bar) (Pilot Operated Reducing/Relieving)	

Y	SELECTION FOR G PORT	
G02	G 1/4"(Metric)	
N02	NPT 1/4"(U.S. Units)	

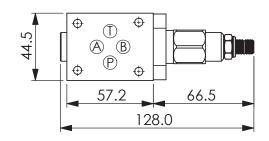
Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

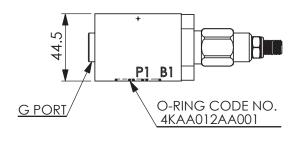




#### ISO 03 SANDWICH MANIFOLD

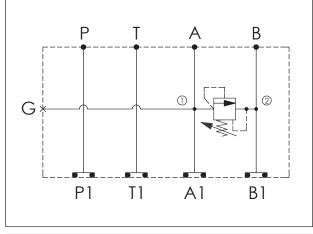






**UNIT:mm** 





#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar Ductile Iron

Body Pressure Rating:

350 bar

Rated flow: 40 I/min

Cartridge Valve: Refer to RD10A-X-Y-Z

Aluminum	0.28 kg(WITHOUT VALVE) 0.45 kg(INCLUDE VALVE)
DUCTILE IRON	1.51 kg(WITHOUT VALVE) 1.68 kg(INCLUDE VALVE)

<sup>\*</sup> If you need the special specification. Please contact us.

	Typical Pressure Rise	)
	350	
ar)	300	
<u>a</u>	250	
_	200	
Pressure-∆P(bar)	150	
9 SS	100	
Pr	50	
	0 25 50 75	100
	Flow-Q(I/min)	

X	SELECTION FOR A PORT	CONTROL
10A2	CAVITY ONLY (WITHOUT VALVE)	
RD5A	RD10A25AL(95LPM,35-210bar)	

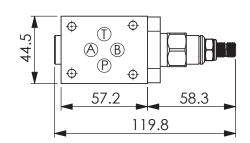
Y	SELECTION FOR G PORT
G02	G 1/4"(Metric)
N02	NPT 1/4"(U.S. Units)

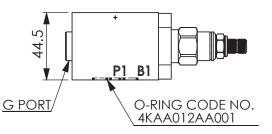
Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	



## Ordering Code: MH03RAB-X-Y-Z01

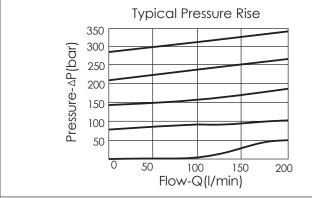
Stack Height: 44.5mm





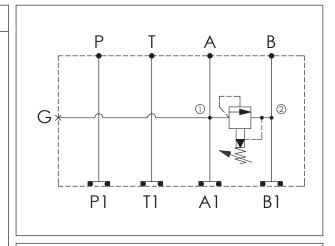
#### **UNIT:mm**





Y	SELECTION FOR G PORT	
G02	G 1/4"(Metric)	
N02	NPT 1/4"(U.S. Units)	

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating:

350 bar

Rated flow: 40 1/min

#### Cartridge Valve: Refer to RP10A-X-Y-Z

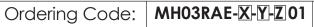
Aluminum	0.28 0.45	kg(WITHOUT VALVE) kg(INCLUDE VALVE)	
DUCTILE IRON	1.51 1.68	kg(WITHOUT VALVE) kg(INCLUDE VALVE)	

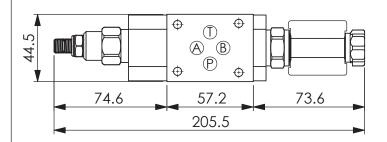
<sup>\*</sup> If you need the special specification. Please contact us.

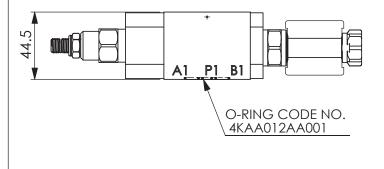
X	SELECTION FOR A PORT	CONTROL
10A2	CAVITY ONLY (WITHOUT VALVE)	
RPOA	RP10A20AL(95LPM,7-210bar)	

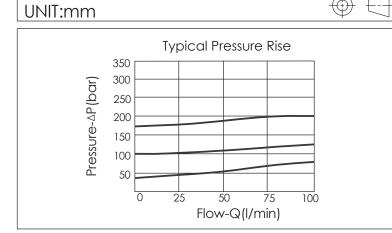
Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	



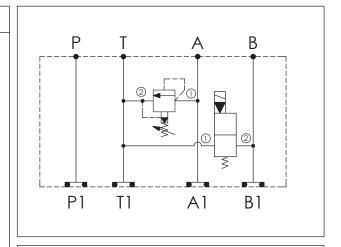








#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating:

350 bar

Rated flow: 40 I/min

Cartridge Valve: Refer to RP10A-X-Y-Z

EP08W-X-Y-Z

Aluminum	0.38 kg(WITHOUT VALVES) 0.58 kg(INCLUDE VALVES ,WITHOUT COIL)

<sup>\*</sup> If you need the special specification. Please contact us.

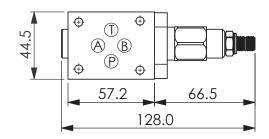
X	SELECTION FOR A PORT	CONTROL
10A2	CAVITY ONLY (WITHOUT VALVE)	
RPOA	RP10A20AL(95LPM,7-210bar)	

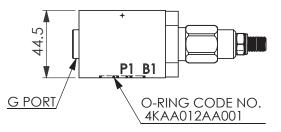
Y	SELECTION FOR B PORT CONTROL		
08W2	CAVITY ONLY(WITHOUT VALVE)		
EPO1	EP08W2A01N05 , 40LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)		
EP01M	EP08W2A01M05 , 40LPM,350bar(NORMALLY CLOSED WITH KNOB STYLE MANUAL OVERRIDE, WITHOUT COIL)		
EP31	EP08W2A31N05 , 40LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)		
EP31M	EP08W2A31M05 , 40LPM,350bar(NORMALLY CLOSED WITH KNOB STYLE MANUAL OVERRIDE, WITHOUT COIL)		

Z	BODY MATERIAL			
Α	HIGH-STRENGTH ALUMINUM	HIGH-STRENGTH ALUMINUM		







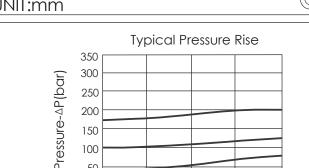


#### **UNIT:mm**



100

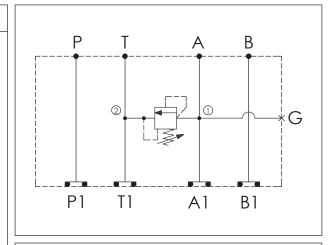
75



50

Flow-Q(I/min)			
Y SELECTION FOR G PORT			
G02	G 1/4"(Metric)		
N02	NPT 1/4"(U.S. Units)		

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

350 bar

Body Pressure Rating:

Rated flow:

40 I/min

Cartridge Valve: Refer to RD10A-X-Y-Z

Aluminum	0.28 0.45	kg(WITHOUT VALVE) kg(INCLUDE VALVE)
DUCTILE IRON	1.51 1.68	kg(WITHOUT VALVE) kg(INCLUDE VALVE)

<sup>\*</sup> If you need the special specification. Pléase contact us.

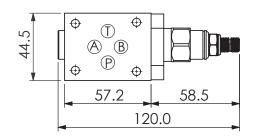
X	SELECTION FOR A PORT	CONTROL
10A2	CAVITY ONLY (WITHOUT VALVE)	
RD5A	RD10A25AL(95LPM,35-210bar)	

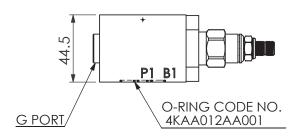
Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		
S	DUCTILE IRON		



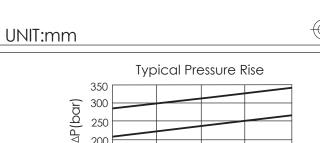
#### MH03RAH-X-Y-Z01 Ordering Code:

Stack Height: 44.5mm



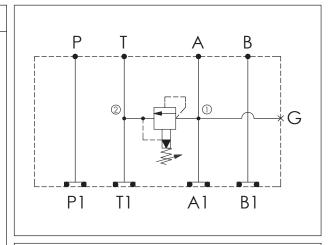






Y	SELECTION FOR G PORT		
G02	G 1/4"(Metric)		
N02	NPT 1/4"(U.S. Units)		

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating:

350 bar

Rated flow:

40 I/min

Cartridge Valve: Refer to RP10A-X-Y-Z

		kg(WITHOUT VALVE) kg(INCLUDE VALVE)
DUCTILE IRON	1.51 1.68	kg(WITHOUT VALVE) kg(INCLUDE VALVE)

<sup>\*</sup> If you need the special specification. Please contact us.

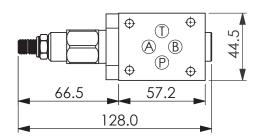
X	SELECTION FOR A PORT	CONTROL
10A2	CAVITY ONLY (WITHOUT VALVE)	
RPOA	RP10A20AL(95LPM,7-210bar)	

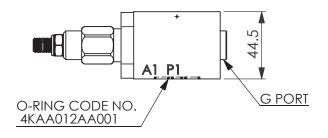
Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		
S	DUCTILE IRON		



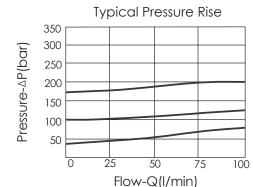
## Ordering Code: MH03RBA-X-Y-Z01

Stack Height: 44.5mm



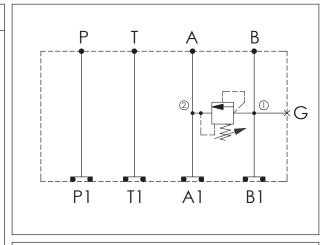


#### **UNIT:mm**



0 25 50 75 100 Flow-Q(I/min)				
Y SELECTION FOR B PORT CONTROL				
10A2	CAVITY ONLY (WITHOUT VALVE)			
RD5A	RD10A25AL (95LPM,35-210bar)			

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating:

350 bar

Rated flow:

40 I/min

## Cartridge Valve: Refer to RD10A-X-Y-Z

Aluminum	0.28 kg(WITHOUT VA 0.45 kg(INCLUDE VA	ALVE) ALVE)
DUCTILE IRON	1.51 kg(WITHOUT VA 1.68 kg(INCLUDE VA	ALVE) ALVE)

<sup>\*</sup> If you need the special specification. Please contact us.

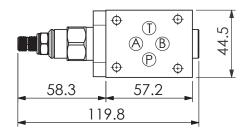
X	SELECTION FOR G PORT	
G02	G 1/4"(Metric)	
N02	NPT 1/4"(U.S. Units)	

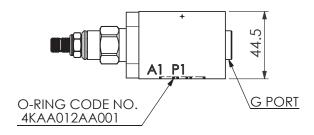
Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	



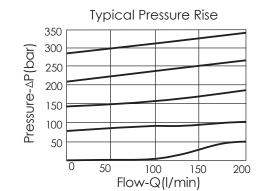
#### Ordering Code: MH03RBA-X-Y-Z01

Stack Height: 44.5mm



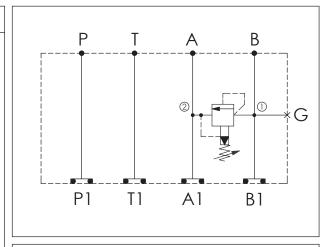


#### **UNIT:mm**



	Flow-Q(I/min)	
Y	SELECTION FOR B PORT CON	TROL
10A2	CAVITY ONLY (WITHOUT VALVE)	
<b>RPOA</b>	RP10A20AL(95LPM,7-210bar)	

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

350 bar Body Pressure Rating:

Rated flow: 40 I/min

#### Cartridge Valve: Refer to RP10A-X-Y-Z

Aluminum	0.28 k 0.45 k	g(WITHOUT VALVE) g(INCLUDE VALVE)
DUCTILE IRON	1.51 k 1.68 k	g(WITHOUT VALVE) g(INCLUDE VALVE)

<sup>\*</sup> If you need the special specification. Pléase contact us.

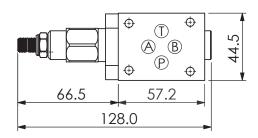
X	SELECTION FOR G PORT		
G02	G 1/4"(Metric)		
N02	NPT 1/4"(U.S. Units)		

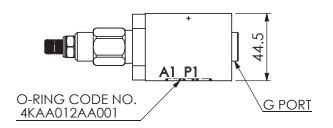
Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		
S	DUCTILE IRON		



### Ordering Code: | MH03RBH-X-Y-Z01

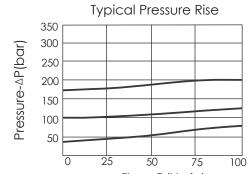
Stack Height: 44.5mm





#### **UNIT:mm**

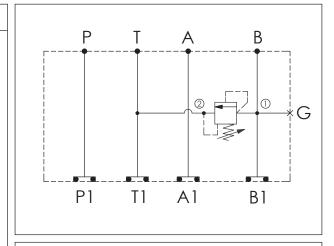
RD5A



	200 150 100 0 25 50 75 100 Flow-Q(I/min)	
Y SELECTION FOR B PORT CONTROL		
10A2	CAVITY ONLY (WITHOUT VALVE)	

RD10A25AL(95LPM,35-210bar)

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating:

350 bar

Rated flow:

40 I/min

## Cartridge Valve:

Refer to RD10A-X-Y-Z

Aluminum	0.28 0.45	kg(WITHOUT VALVE) kg(INCLUDE VALVE)
DUCTILE IRON	1.51 1.68	kg(WITHOUT VALVE) kg(INCLUDE VALVE)

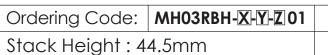
<sup>\*</sup> If you need the special specification. Pléase contact us.

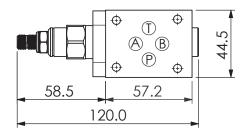
X	SELECTION FOR G PORT	
G02	G 1/4"(Metric)	
N02	NPT 1/4"(U.S. Units)	

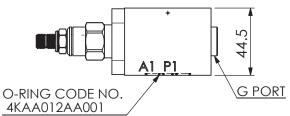
Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		
S			

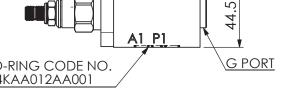


#### ISO 03 SANDWICH MANIFOLD









#### **UNIT:mm**

	Typical Pressure Rise
350 50 250 250	
Pressure-∆P(bar)	
Pr 20	
	0 50 100 150 200 Flow-Q(I/min)

Y	SELECTION FOR B PORT CON	TROL
10A2	CAVITY ONLY (WITHOUT VALVE)	
RPOA	RP10A20AL(95LPM,7-210bar)	

	Р	T	A	В
			2	*G
L	P1	T1	A1	B1

#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating:

350 bar

Rated flow:

40 I/min

Cartridge Valve: Refer to RP10A-X-Y-Z

Aluminum	0.28 kg(WITHOUT VALVE) 0.45 kg(INCLUDE VALVE)
DUCTILE IRON	1.51 kg(WITHOUT VALVE) 1.68 kg(INCLUDE VALVE)

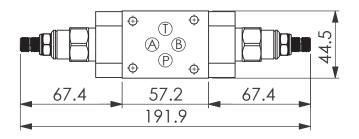
<sup>\*</sup> If you need the special specification. Pléase contact us.

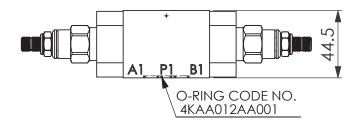
X	SELECTION FOR G PORT
G02	G 1/4"(Metric)
N02	NPT 1/4"(U.S. Units)

Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

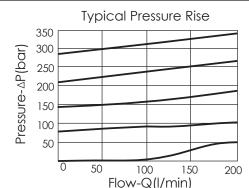






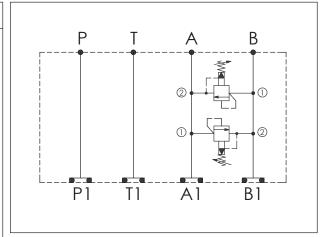


#### **UNIT:mm**



110W-Q (1/111111)		
SELECTION FOR B PORT CON	TROL	
CAVITY ONLY (WITHOUT VALVE)		
RP10A20AL(95LPM,7-210bar)		
	SELECTION FOR B PORT CON  CAVITY ONLY (WITHOUT VALVE)	

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating:

350 bar

Rated flow: 40 I/min

# Cartridge Valve: Refer to RP10A-X-Y-Z

Aluminum	0.38 0.66	kg(WITHOUT VALVES) kg(INCLUDE VALVES)
DUCTILE IRON	1.1 1.4	kg(WITHOUT VALVES) kg(INCLUDE VALVES)

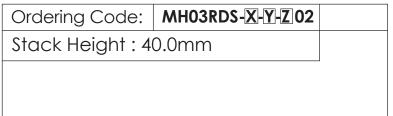
<sup>\*</sup> If you need the special specification. Please contact us.

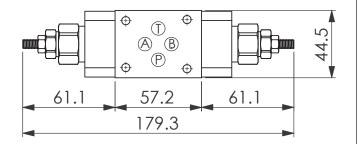
X	SELECTION FOR A PORT	CONTROL
10A2	CAVITY ONLY (WITHOUT VALVE)	
RPOA	RP10A20AL (95LPM,7-210bar)	

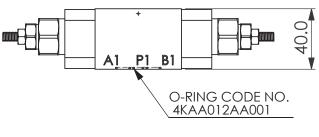
Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	



#### ISO 03 SANDWICH MANIFOLD

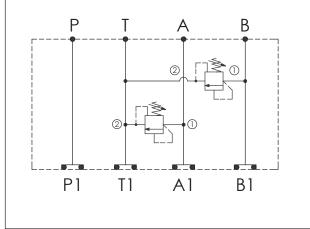






4KAA012AA001

UNIT:mm



#### TECHNICAL DATA

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 20 1/min

#### Cartridge Valve: Refer to RD08W-X-Y-Z

Aluminum	0.4 0.65	kg(WITHOUT VALVES) kg(INCLUDE VALVES)
Ductile Iron	1.1 1.35	kg(WITHOUT VALVES) ka(INCLUDE VALVES)

<sup>\*</sup> If you need the special specification. Please contact us.

	Typical Pressure Rise
420 350 280 280 210 140 70	4 8 12 16 20 Flow-Q(I/min)

X	SELECTION FOR A PORT	CONTROL
08W2	CAVITY ONLY (WITHOUT VALVE)	
RDOA	RD08W20AL (20LPM , 80-210bar)	

Υ	SELECTION FOR B PORT CONTROL	
08W2	CAVITY ONLY (WITHOUT VALVE)	
RDOA	RD08W20AL (20LPM , 80-210bar)	

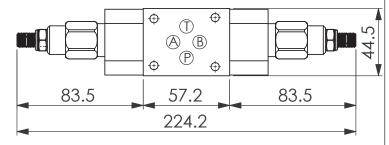
Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

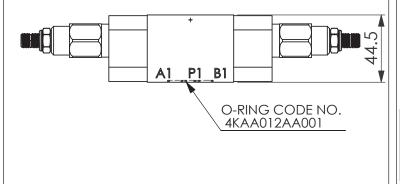




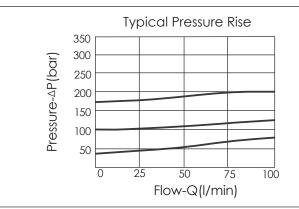
### Ordering Code: | MH03RDT-X-Y-Z01

Stack Height: 44.5mm

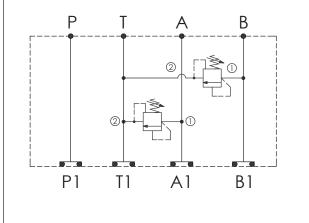




#### **UNIT:mm**



#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

350 bar Body Pressure Rating:

Rated flow: 40 I/min

# Cartridge Valve: Refer to RD10A-X-Y-Z

Aluminum	0.45 0.8	kg(WITHOUT VALVES) kg(INCLUDE VALVES)
Ductile Iron	1.3 1.65	kg(WITHOUT VALVES) kg(INCLUDE VALVES)

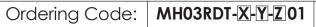
<sup>\*</sup> If you need the special specification. Pléase contact us.

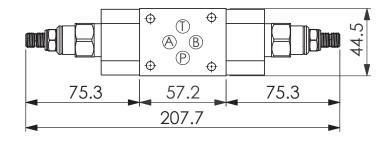
X	SELECTION FOR A PORT CONTROL	
10A2	CAVITY ONLY (WITHOUT VALVE)	
RD5A	RD10A25AL (95LPM , 35-210bar)	

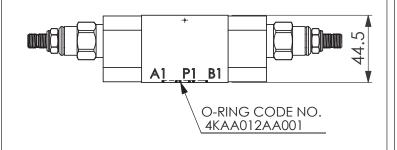
Y	SELECTION FOR B PORT CONTROL	
10A2	CAVITY ONLY (WITHOUT VALVE)	
RD5A	RD10A25AL (95LPM , 35-210bar)	

Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	



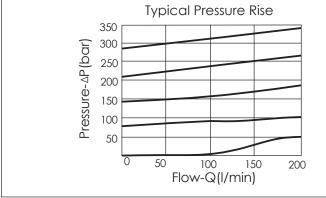






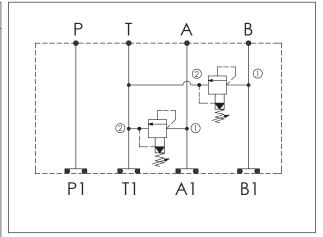
#### **UNIT:mm**





Υ	SELECTION FOR B PORT CON	TROL
10A2	CAVITY ONLY (WITHOUT VALVE)	
RPOA	RP10A20AL (95LPM , 7-210bar)	

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

350 bar Body Pressure Rating:

Rated flow: 40 I/min

# Cartridge Valve: Refer to RP10A-X-Y-Z

Aluminum	0.45 0.8	kg(WITHOUT VALVES) kg(INCLUDE VALVES)
Ductile Iron	1.3 1.65	kg(WITHOUT VALVES) kg(INCLUDE VALVES)

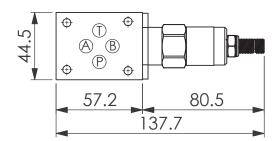
<sup>\*</sup> If you need the special specification. Pléase contact us.

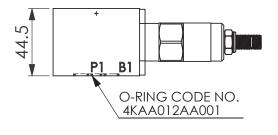
X	SELECTION FOR A PORT CONTROL	
10A2	CAVITY ONLY (WITHOUT VALVE)	
RPOA	RP10A20AL (95LPM , 7-210bar)	

Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	



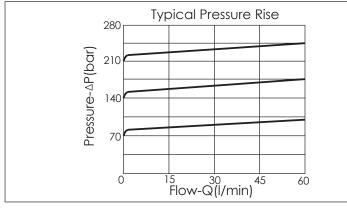






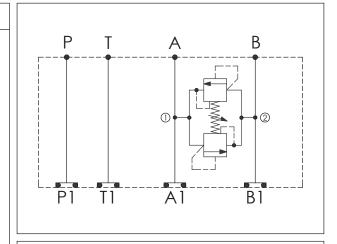
#### **UNIT:mm**





Y	SELECTION FOR G PORT	
N	WITHOUT PORT	

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating:

350 bar

Rated flow:

40 I/min

Cartridge Valve: Refer to CR10W-X-Y-Z

Aluminum	0.27 0.51	kg(WITHOUT VALVE) kg(INCLUDE VALVE)

<sup>\*</sup> If you need the special specification. Pléase contact us.

X	SELECTION FOR A AND B PORTS CONTROL		
10W2	CAVITY ONLY (WITHOUT VALVE)		
CROA	CR10W20AL (60LPM , 160-210bar)		

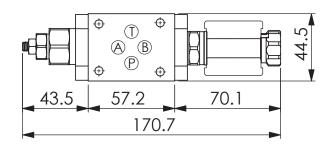
Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		

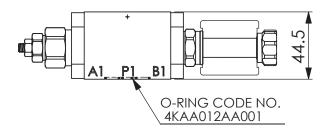




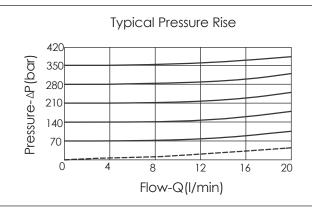


Stack Height: 44.5mm





#### **UNIT:mm**



REFER TO EPOSW-X-Y-Z)

08W2 CAVITY ONLY (WITHOUT VALVE)

EP08W2A01N05 , 40LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)

**EP01M** EP08W2A01M05 , 40LPM,350bar(NORMALLY CLOSED WITH KNOB STYLE MANUAL OVERRIDE,WITHOUT COIL)

EP08W2A02P05 , 40LPM,350bar(normally open with push style manual override,without coil)

COIL MUST BE ORDERED SEPARATELY

EP08W2A02N05 , 40LPM,350bar (NORMALLY OPEN,WITHOUT COIL)

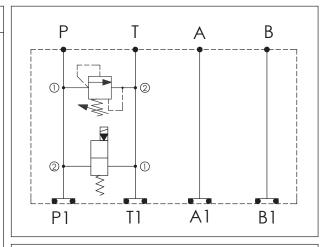
(PORT 2TO 1), NEAR "B" PORT SIDE,

(REFER TO EC-04W-X-Y-Z)

# **SELECTION FOR SOLENOID VALVES**

08W2	CAVITY ONLY (WITHOUT VALVE)	
RD0A	RD08W20AL (20LPM,80-210bar)	
Z	BODY MATER	IAL
Α	HIGH-STRENGTH ALUMINUM	

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating:

350 bar

Rated flow: 20 I/min

Cartridge Valve:

Refer to RD08W-X-Y-Z EP08W-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.31 kg(WITHOUT VALVES) 0.55 kg(INCLUDE VALVES ,WITHOUT COIL)

<sup>\*</sup> If you need the special specification. Pléase contact us.

X	SELECTION FOR RELIEF (PORT 102, NEAR "A" F	VALVE PORT SIDE)
08W2	CAVITY ONLY (WITHOUT VALVE)	
RD0A	RD08W20AL (20LPM,80-210bar)	

Y

**EP01** 

**EP02** 

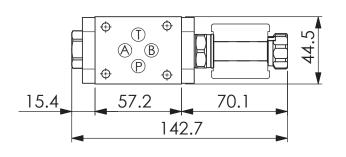
EPO2P

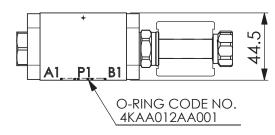




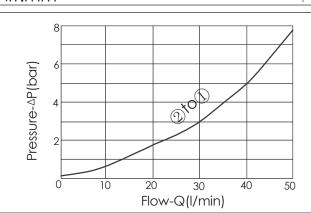


Stack Height: 44.5mm



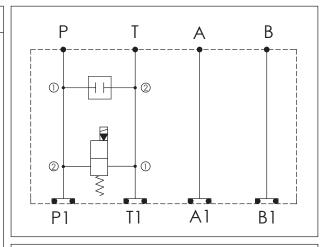


#### **UNIT:mm**



Y	SELECTION FOR SOLENOID VALVES (PORT ②TO①, NEAR "B" PORT SIDE, REFER TO EP08W-X-Y-Z)	
08W2	CAVITY ONLY (WITHOUT VALVE)	
EP01	EP08W2A01N05 , 40LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	
EP02	EP08W2A02N05 , 40LPM,350bar (NORMALLY OPEN,WITHOUT COIL)	
EP01M	EP08W2A01M05 , 40LPM,350bar(normally closed with knob style manual override, without coil)	
EP02P	EP08W2A02P05 , 40LPM,350bar(NORMALLY OPEN WITH PUSH STYLE MANUAL OVERRIDE,WITHOUT COIL)	
COIL MUST BE ORDERED SEPARATELY (REFER TO EC-04W-X-Y-Z)		

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 40 1/min

Cartridge Valve: Refer to CP-08W-Y-Z EP08W-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.31 kg(WITHOUT VALVES) 0.54 kg(INCLUDE VALVES ,WITHOUT COIL)

\* If you need the special specification. Please contact us.

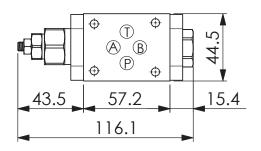
X	SELECTION FOR RELIEF (PORT①TO②,NEAR "A" F	
08W2	CAVITY ONLY (WITHOUT VALVE)	
CP00	CP08W2H00NN(3/4"-16UNF-2B , All Ports Blocked)	

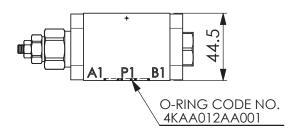
Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	



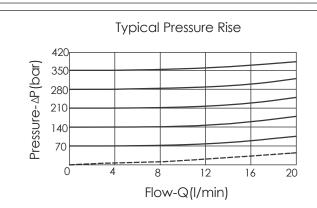
## Ordering Code: MH03RPD-X-Y-Z01

Stack Height: 44.5mm

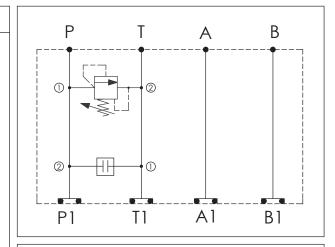




#### **UNIT:mm**



#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 20 1/min

Cartridge Valve: Refer to RD08W-X-Y-Z CP-08W-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.31 kg(WITHOUT VALVES) 0.52 kg(INCLUDE VALVES)

<sup>\*</sup> If you need the special specification. Please contact us.

X	SELECTION FOR RELIEF VALVE (PORT①TO②, NEAR "A" PORT SIDE)	
08W2	CAVITY ONLY (WITHOUT VALVE)	
RD0A	RD08W20AL(20LPM,80-210bar)	

Υ	SELECTION FOR SOLENOID VALVES (PORT 2TO 1), NEAR "B" PORT SIDE )	
08W2	CAVITY ONLY(WITHOUT VALVE)	
CP00	CP08W2H00NN(3/4"-16UNF-2B , All Ports Blocked)	

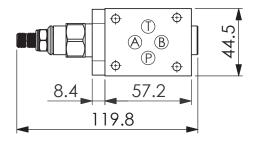
Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	

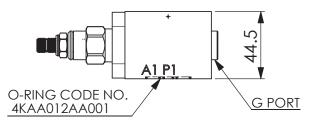






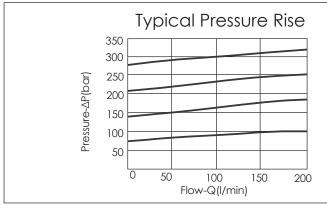
Stack Height: 44.5mm





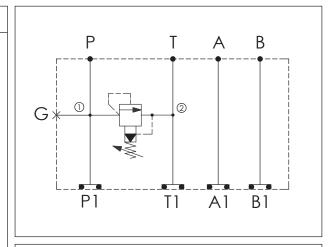
#### **UNIT:mm**





Y	SELECTION FOR G PORT	
G02	G 1/4"(Metric)	
N02	NPT 1/4"(U.S. Units)	

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating:

350 bar

Rated flow: 40 1/min

#### Cartridge Valve: Refer to RP10A-X-Y-Z

\* Refer to Winner Cartridge Valve Catalog.

Aluminum	0.28 0.43	kg(WITHOUT VALVE) kg(INCLUDE VALVE)
Ductile Iron	0.8 0.95	kg(WITHOUT VALVE) kg(INCLUDE VALVE)

<sup>\*</sup> If you need the special specification. Please contact us.

X	SELECTION FOR P PORT CONTROL
10A2	CAVITY ONLY (WITHOUT VALVE)
RPOA	RP10A20AL (95LPM,7~210bar)

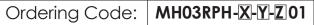
Z	BODY MATER	IAL
Α	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

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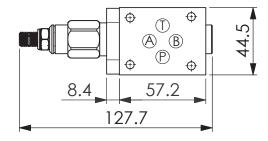


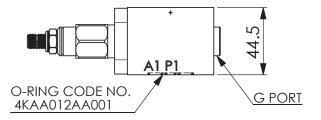


350 bar



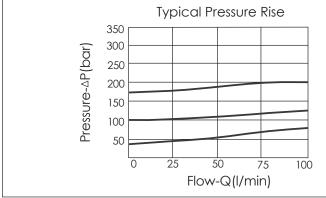
Stack Height: 44.5mm





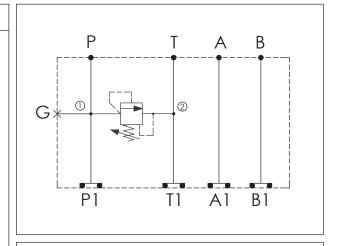
#### **UNIT:mm**





Y	SELECTION FOR G PORT
G02	G 1/4"(Metric)
N02	NPT 1/4"(U.S. Units)

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating:

Rated flow: 40 1/min

#### Cartridge Valve: Refer to RD10A-X-Y-Z

\* Refer to Winner Cartridge Valve Catalog.

Aluminum	0.28 0.45	kg(WITHOUT VALVE) kg(INCLUDE VALVE)
Ductile Iron	0.8 1.0	kg(WITHOUT VALVE) kg(INCLUDE VALVE)

<sup>\*</sup> If you need the special specification. Please contact us.

X	SELECTION FOR P PORT	CONTROL
10A2	CAVITY ONLY (WITHOUT VALVE)	
RD5A	RD10A25AL (95LPM,35~210bar)	
		_

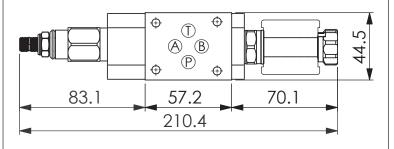
Z	BODY MATERIAL		
Α	HIGH-STRENGTH ALUMINUM		
S	DUCTILE IRON		

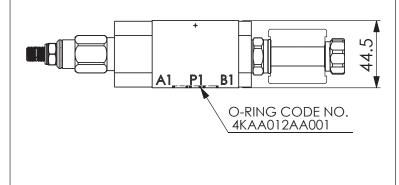
Rev.150521 M.RPH.302

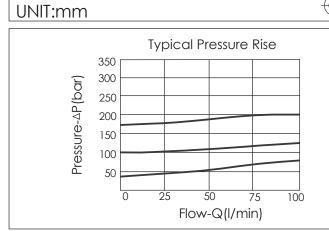






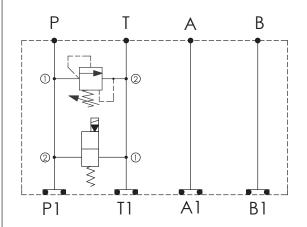






Y	SELECTION FOR SOLENOID V (PORT ② TO ① , NEAR "B" PORT REFER TO EP08W-X-Y-Z)	
08W2	CAVITY ONLY (WITHOUT VALVE)	
EP01	EP08W2A01N05 , 40LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	
EP02	EP08W2A02N05 , 40LPM,350bar (NORMALLY OPEN,WITHOUT COIL)	
EP01M	EP08W2A01M05 , 40LPM,350bar(normally closed with knob style manual override, without coil)	
EP02P	EP08W2A02P05 , 40LPM,350bar(NORMALLY OPEN WITH PUSH STYLE MANUAL OVERRIDE,WITHOUT COIL)	
COIL MUST BE ORDERED SEPARATELY (REFER TO EC-04W-X-Y-Z)		

## **ISO 03 SANDWICH MANIFOLD**



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 40 1/min

Cartridge Valve:
Refer to RD10A-X-Y-Z
EP08W-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.4 kg(WITHOUT VALVES) 0.7 kg(INCLUDE VALVES ,WITHOUT COIL)

\* If you need the special specification. Please contact us.

X	SELECTION FOR RELIEI (PORT①TO②,NEAR "A" F	VALVE PORT SIDE)
10A2	CAVITY ONLY (WITHOUT VALVE)	
RD5A	RD10A25AL (95LPM,35-210bar)	

Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	

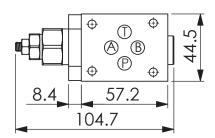
Rev.150521 M.RPJ.301

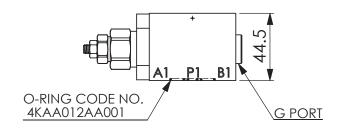




## Ordering Code: MH03RPW-X-Y-Z 01

Stack Height: 44.5mm

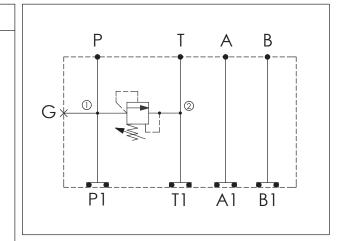




#### **UNIT:mm**







#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating:

350 bar

Rated flow: 20 1/min

Cartridge Valve: Refer to RD08W-X-Y-Z

\* Refer to Winner Cartridge Valve Catalog.

Aluminum	0.3 0.51	kg(WITHOUT VALVE) kg(INCLUDE VALVE)

<sup>\*</sup> If you need the special specification. Please contact us.

	Typical Pressure Rise
420 <sub>r</sub>	
ਰ 350	
280	
√ 210	
(bg) 350 280 210- 210- 140- 70-	
18S 140	
<u>a</u> 70	
0	4 8 12 16 20
	Flow-Q(I/min)

X	SELECTION FOR P PORT CONTROL	
08W2	CAVITY ONLY (WITHOUT VALVE)	
RD0A	RD08W20AL(20LPM,80~210bar)	

Y	SELECTION FOR G PORT	
G02	G 1/4"(Metric)	
N02	NPT 1/4"(U.S. Units)	

Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	

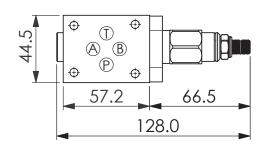
Rev.130311 M.RPW.301

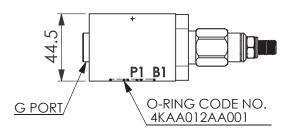






Stack Height: 44.5mm





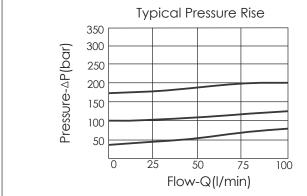
UNIT:mm

Y

**G02** 

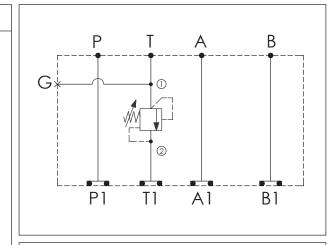
**N02** 





SELECTION FOR G POR	Г	
G 1/4"(Metric)		
NPT 1/4"(U.S. Units)		

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating:

350 bar

Rated flow:

40 I/min

### Cartridge Valve:

Refer to RD10A-X-Y-Z

\* Refer to Winner Cartridge Valve Catalog.

Aluminum	0.28 kg(WITHOUT VALVE) 0.42 kg(INCLUDE VALVE)
DUCTILE IRON	1.51 kg(WITHOUT VALVE) 1.68 kg(INCLUDE VALVE)

<sup>\*</sup> If you need the special specification. Pléase contact us.

X	SELECTION FOR T PORT CONTROL	
10A2	CAVITY ONLY (WITHOUT VALVE)	
RD5A	RD10A25AL(95LPM,35-210bar)	

Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

M.RTH.301 Rev.150722

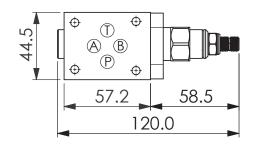


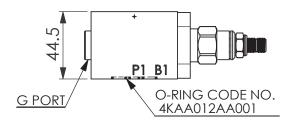


#### ISO 03 SANDWICH MANIFOLD

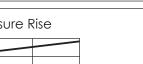


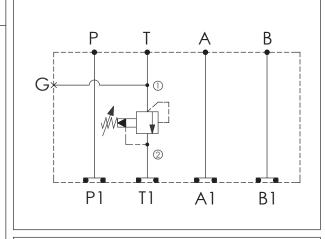






#### **UNIT:mm**





#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating:

350 bar

Rated flow: 40 I/min

#### Cartridge Valve: Refer to RP10A-X-Y-Z

\* Refer to Winner Cartridge Valve Catalog.

Aluminum	0.28 kg(WITHOUT VALVE) 0.42 kg(INCLUDE VALVE)
DUCTILE IRON	1.51 kg(WITHOUT VALVE) 1.68 kg(INCLUDE VALVE)

<sup>\*</sup> If you need the special specification. Please contact us.

	Typical Pressure Rise
350	
<del>=</del> 300	
<u>0</u> 250	
Pressure-△P(bar)	
ψ 150	
OSS 130	
§ 100	
₾ 50	
	0 50 100 150 200 Flow-Q(I/min)

X	SELECTION FOR T PORT CONTROL	
10A2	CAVITY ONLY (WITHOUT VALVE)	
RPOA	RP10A20AL(95LPM,7-210bar)	

Y	SELECTION FOR G PORT	
G02	G 1/4"(Metric)	
N02	NPT 1/4"(U.S. Units)	

Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

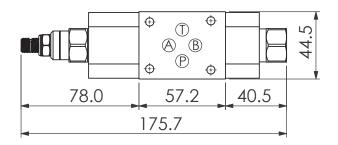
Rev.150722 M.RTH.302

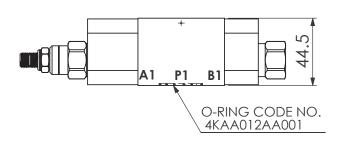




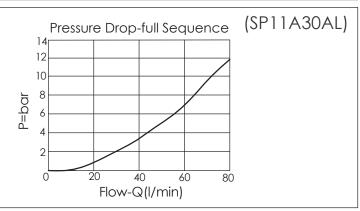
## Ordering Code: MH03SAI-X-Y-Z01

Stack Height: 44.5mm

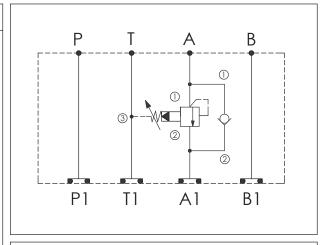




#### **UNIT:mm**







#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 40 1/min

Cartridge Valve:

Refer to SP11A-X-Y-Z CV13A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.46 kg(WITHOUT VALVES) 0.71 kg(INCLUDE VALVES)

\* If you need the special specification. Please contact us.

X	SELECTION FOR A PORT	CONTROL
11A3	CAVITY ONLY (WITHOUT VALVE)	
SPOA	SP11A30AL (60LPM , 7-210bar)	

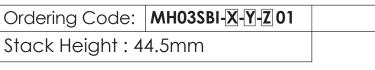
Y	SELECTION FOR CHECK VALVE	
13A2	CAVITY ONLY (WITHOUT VALVE)	
CV20	CV13A2120N (60LPM, 2.0bar)	
-		

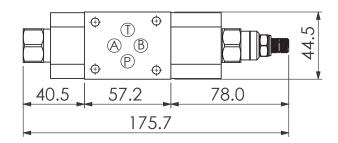
Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	

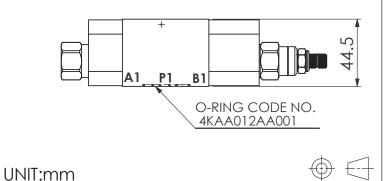
Rev.150521 M.SAI.301

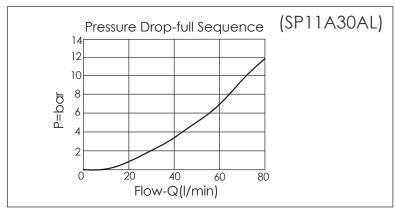


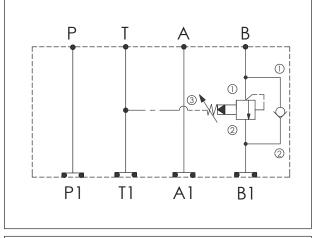
#### ISO 03 SANDWICH MANIFOLD











#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 40 1/min

Cartridge Valve:

Refer to CV13A-XI-YI-ZI SP11A-XI-YI-ZI

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.46 kg(WITHOUT VALVES) 0.71 kg(INCLUDE VALVES)

\* If you need the special specification. Please contact us.

X	SELECTION FOR CHECK VALVE	
13A2	CAVITY ONLY (WITHOUT VALVE)	
CV20	CV13A2120N (60LPM , 2.0bar)	

Y	SELECTION FOR B PORT CONT	ROL
11A3	CAVITY ONLY (WITHOUT VALVE)	
SPOA	SP11A30AL (60LPM , 7-210bar)	

Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	

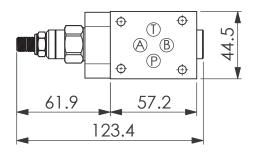
Rev.150521 M.SBI.301

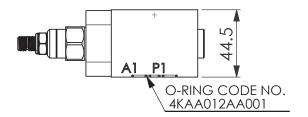




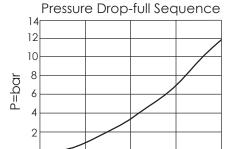
## Ordering Code: MH03SPW-X-Y-Z01

Stack Height: 44.5mm





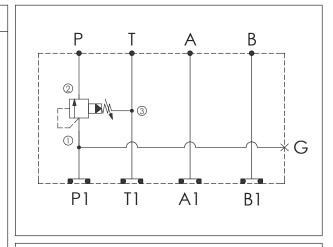
#### **UNIT:mm**



Y SELECTION FOR G PORT			
2 0 20 40 60 80 Flow-Q(I/min)			

Y	SELECTION FOR G PORT	
G02	G 1/4"(Metric)	
N02	NPT 1/4"(U.S. Units)	

#### ISO 03 SANDWICH MANIFOLD



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating:

350 bar

Rated flow:

40 I/min

# Cartridge Valve: Refer to SP11A-X-Y-Z

\* Refer to Winner Cartridge Valve Catalog.

Aluminum	0.3 0.45	kg(WITHOUT VALVE) kg(INCLUDE VALVE)
DUCTILE IRON	0.9 1.05	kg(WITHOUT VALVE) kg(INCLUDE VALVE)

<sup>\*</sup> If you need the special specification. Pléase contact us.

X	SELECTION FOR P PORT	CONTROL
11A3	CAVITY ONLY (WITHOUT VALVE)	
SPOA	SP11A30AL (60LPM,7-210bar)	

Z	BODY MATER	BODY MATERIAL			
Α	HIGH-STRENGTH ALUMINUM				
S					

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# PRODUCTS SELECTION GUIDE

SYMBOL	ISO 03 COVER MANIFOLD	Main Code	Flow	Pressure	C4 LIII L4	
ISO 03 COVER MANIFOLD		Transmit Cour				Page
MK03DDN-X-Y-Z03   34   (Aluminum)   61.3   290	(C1//"\(C1//"\		l/min	bar	mm	- age
MK03DDN-XFT-Z03   34   350 (Ductile Iron)   350 (Aluminum)   350 (Ductile Iron)   350 (Duct	(G1/4)					
SYMBOL   Sign   Stack Height   Sign   Symbol   Sign   Symbol   Symbol   Sign   Symbol   Sign   Symbol   S		MK03DDN-X-Y-Z03	34	(Aluminum)	61.3	290
Nain Code   Flow   Pressure   Stack Height   Page	[					
SYMBOL   Main Code   Flow   Pressure   bar   mm   Page	3 3 +			(Ductile Iron)		
SYMBOL   Main Code   Flow   Pressure   bar   mm   Page						
ISO 03 COVER MANIFOLD			171	D	C4l- II-:-l-4	
LS (G1/4")   MK03EPX-X-Y-Z03   40   250 (Aluminum)   63.0   291		Main Code		1	_	Page
MK03EPX-X-Y-Z03   40   (Aluminum)   63.0   291			1/ 111111		111111	
MR03EPX-XFIF 203   40   350   350   Ductile Iron						
SYMBOL ISO 03 COVER MANIFOLD LS (G1/4")  Main Code  Flow   Pressure   bar   mm   Page   mm   mm   Page   mm   Page		MK03EPX-X-Y-Z03	40		63.0	291
P1 T1 A1 B1  SYMBOL ISO 03 COVER MANIFOLD LS (G1/4")  Main Code   Flow   Pressure   bar   mm   Page   mm   250	WITH I					
SYMBOL ISO 03 COVER MANIFOLD  LS (G1/4")  Main Code  Flow   Pressure   bar   mm  Page						
SYMBOL ISO 03 COVER MANIFOLD  LS (G1/4")  Main Code Flow   Pressure   Stack Height   mm  Page						
ISO 03 COVER MANIFOLD  LS (G1/4")  bar mm  rage  250	- ' '	M. C. I	Flow	Pressure	Stack Height	
LS (G1/4") 250		Main Code				Page
				250		
MK03EPX-X-Y-Z03 40 (Aluminum) 63.0 292		MK03FPX-X-V-703	40		63.0	292
350	w <u>it</u>	WIKOSEI X-K-LI-K-DS	10	350	03.0	272
(Ductile Iron)				(Ductile Iron)		
P1 T1 A1 B1						
SYMBOL  Main Code  Flow Pressure Stack Height Page		Main Code				Page
ISO 03 COVER MANIFOLD 1/min bar mm	ISO 03 COVER MANIFOLD		l/mın	bar	mm	
250						
MK03ERX-X-Y-A03-Z 40 (Aluminum) 63.0 293		MK03ERX-X-Y-A03-Z	40	,	63.0	293
350 (Ductile Iron)						
(Duettic Holl)				(Ductile Holl)		
P1 T1 A1 B1	P1 T1 A1 B1					
SYMBOL Flow Pressure Stack Height Page	SVMPOI		Flow	Prossure	Stack Height	
SYNIBOL   Main Code   Flow   Fressure   Stack Height   Page   I/min   bar   mm   Page		Main Code		1	_	Page
150 05 CO VERCIMINATORE	100 03 CO VER MANITOLD					
250 (Aluminum) (2.0		MIZOSEDN RUKU AOS FU	40		(2.0	20.4
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		MK03ERX-X-Y-A03-Z	40		63.0	294
(Ductile Iron)	(a) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c			1 300	l l	
P1 T1 A1 B1						

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# PRODUCTS SELECTION GUIDE

	"MK" Cover Manifolds				
SYMBOL COVER MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page
	MK99FPX-X-Y-Z61	40	250 (Aluminum)  350 (Ductile Iron)	50.0	295
SYMBOL ISO 03 COVER MANIFOLD	- Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page
	MK03RPE-X-Y-Z01	1	250 (Aluminum) 350 (Ductile Iron)	44.5	296
P1 T1 A1 B1					
SYMBOL ISO 03 COVER MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page
	MK03RPW-X-Y-Z01	1	250 (Aluminum) 350 (Ductile Iron)	44.5	297
P1 T1 A1 B1					

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## PRODUCTS SELECTION GUIDE

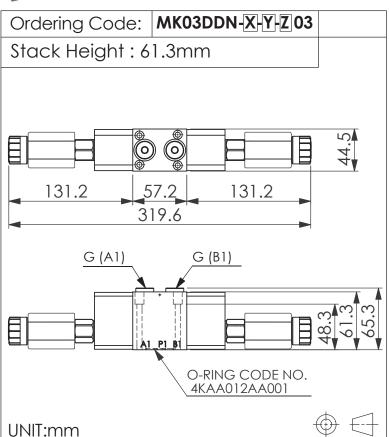
	"MK" Cover I	Manifo	olds		
SYMBOL ISO 05COVER MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page
LS (G1/4")	MK05EPX-X-Y-Z01	40	250 (Aluminum) 350 (Ductile Iron)	49.5	298
P1 T1 A1 B1  SYMBOL  ISO 05 COVER MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page
LS (G1/4")	MK05EPX-X-Y-Z03	70	250 (Aluminum) 350 (Ductile Iron)	63.0	299
P1 T1 A1 B1  SYMBOL	Main Code	Flow 1/min	Pressure bar	Stack Height	Page
LS (G1/4")	MK05EPX-X-Y-Z03	40	250 (Aluminum) 350 (Ductile Iron)	63.0	300
P1 T1 A1 B1  SYMBOL  ISO 05 COVER MANIFOLD	Main Code	Flow 1/min	Pressure bar	Stack Height mm	Page
	MK05EPX-X-Y-A03-Z	70	250 (Aluminum) 350 (Ductile Iron)	63.0	301
P1 T1 A1 B1  SYMBOL		Flow	Pressure	Stack Height	
ISO 05 COVER MANIFOLD	Main Code	l/min	bar	mm	Page
TO US COVER WHITH CEB	MK05ERX-X-Y-A03-Z	40	250 (Aluminum) 350 (Ductile Iron)	63.0	302
P1 T1 A1 B1					

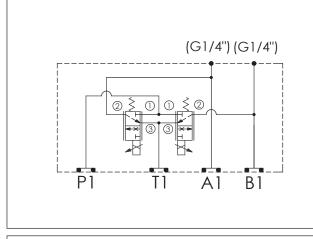
Rev.130425 A.201.147



TYPICAL CIRCUIT:

#### ISO 03 COVER MANIFOLD





#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 34 1/min

Cartridge Valve:
Refer to PFA11A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

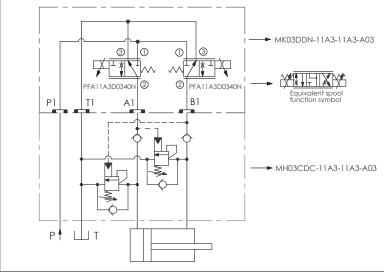
Aluminum	0.85 1.6	kg(WITHOUT VALVES) kg(INCLUDE VALVES ,WITHOUT COIL)

\* If you need the special specification. Please contact us.

X	SELECTION FOR A PORT (REFER TO PFA11A-		
11A3	CAVITY ONLY (WITHOUT VALVE)		
PFA34	PFA11A3D0340N(0.4~34LPM)		
COIL MUST BE ORDERED SEPARATELY			

# Z BODY MATERIAL A HIGH-STRENGTH ALUMINUM

(REFER TO EC-19A-☒-শৄ-ℤ)



Y	SELECTION FOR B PORT CONT (REFER TO PFA11A-X-Y-Z)	ROL
11A3	CAVITY ONLY (WITHOUT VALVE)	
PFA34	PFA11A3D0340N(0.4~34LPM)	

COIL MUST BE ORDERED SEPARATELY (REFER TO EC-19A-X-Y-Z)

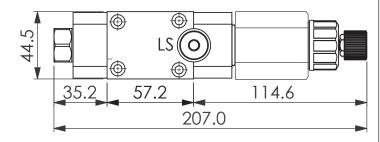
Rev.130422 M.DDN.371

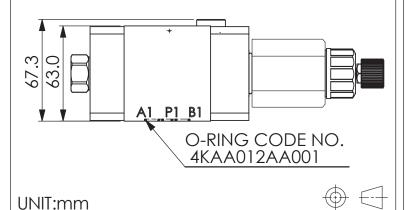


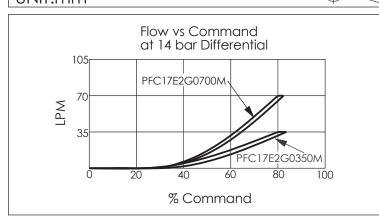




Stack Height: 63.0mm

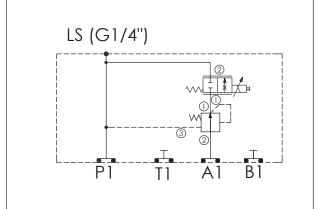






Y	SELECTION FOR FLOW CONTRO (REFER TO PFC17E-X-Y-Z)	OL VALVE	
17E2	CAVITY ONLY (WITHOUT VALVE)		
PFC35	PFC17E2G0350M(35LPM)		
PFC70	PFC17E2G0700M(70LPM)		
COIL MUST BE ORDERED SEPARATELY (REFER TO EC-23C-X-Y-Z)			

**ISO 03 COVER MANIFOLD** 



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 40 1/min

Cartridge Valve:
Refer to LP11A-X-Y-Z
PFC17E-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.63 kg(WITHOUT VALVES) 1.2 kg(INCLUDE VALVES ,WITHOUT COIL)

\* If you need the special specification. Please contact us.

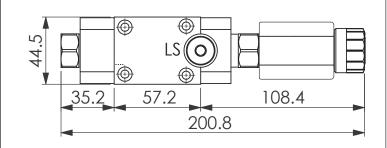
X	SELECTION FOR COMPE	NSATOR
11A3	CAVITY ONLY (WITHOUT VALVE)	
LP140	LP11A30140N(60LPM,14.0bar)	

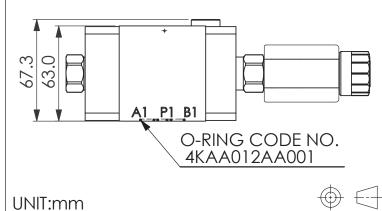
Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	

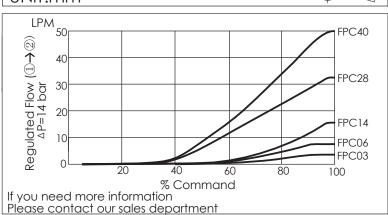












Υ	SELECTION FOR FLOW CONTROL VALVE (REFER TO PFC13A-X-Y-Z)	
13A2	CAVITY ONLY (WITHOUT VALVE)	
PFC03	PFC13A2D0030N(0.3~3LPM)	
PFC06	PFC13A2D0060N(0.4~6LPM)	
PFC14	PFC13A2D0140N(0.6~14LPM)	
PFC28	PFC13A2D0280N(0.8~28LPM)	
PFC40	PFC13A2D0400N(1.0~40LPM)	
COIL MUST BE ORDERED SEPARATELY (REFER TO EC-19A-X-Y-Z)		

LS (G1/4")

P1 T1 A1 B1

#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 40 1/min

Cartridge Valve:
Refer to LP11A-X-Y-Z
PFC13A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.63 1.2	kg(WITHOUT VALVES) kg(INCLUDE VALVES ,WITHOUT COIL)

\* If you need the special specification. Please contact us.

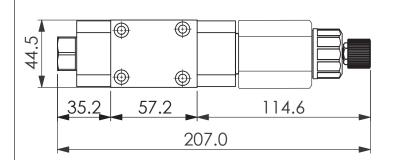
X	SELECTION FOR COMPENSATOR	
11A3	CAVITY ONLY (WITHOUT VALVE)	
LP140	LP11A30140N(60LPM,14.0bar)	

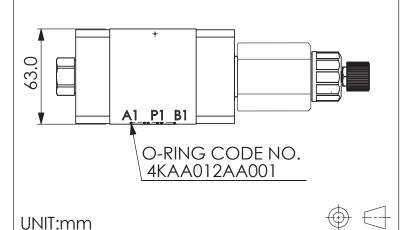
Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	

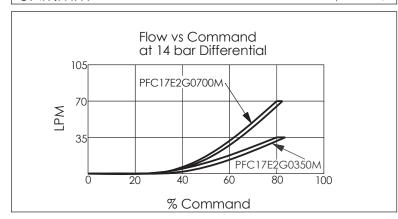






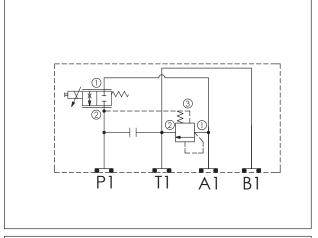






Y	SELECTION FOR FLOW CONTRO (REFER TO PFC17E-X-Y-Z)	OL VALVE	
17E2	CAVITY ONLY (WITHOUT VALVE)		
PFC35	PFC17E2G0350M(35LPM)		
PFC70	PFC17E2G0700M(70LPM)		
C	COIL MUST BE ORDERED SEPARATELY		

(REFER TO EC-23C-X-Y-Z)



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating:

350 bar

Rated flow:

40 l/min

Cartridge Valve: Refer to LR11A-X-Y-Z PFC17E-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.63 kg(WITHOUT VALVES) 1.2 kg(INCLUDE VALVES ,WITHOUT COIL)

\* If you need the special specification. Please contact us.

X	SELECTION FOR COMPENSATOR	
11A3	CAVITY ONLY (WITHOUT VALVE)	
LR140	LR11A30140N(60LPM,14.0bar)	

Z	ORIFICE DIAMETER (mm)	
	no orifice	
05	0.5	
07	0.7	

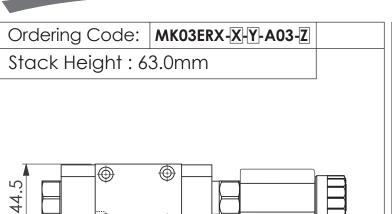


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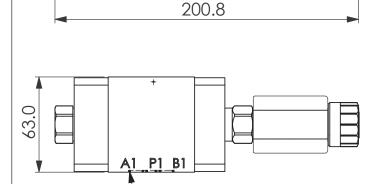
35.2



#### ISO 03 COVER MANIFOLD



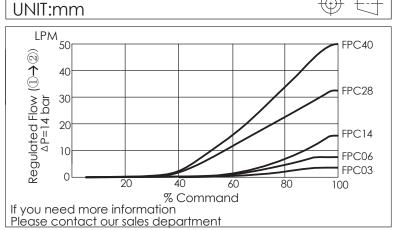
108.4



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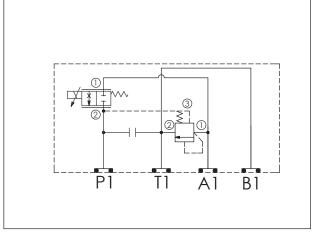
57.2

O-RING CODE NO. 4KAA012AA001



Υ	SELECTION FOR FLOW CONTRO (REFER TO PFC13A-X-Y-Z)	L VALVE
13A2	CAVITY ONLY (WITHOUT VALVE)	
PFC03	PFC13A2D0030N(0.3~3LPM)	
PFC06	PFC13A2D0060N(0.4~6LPM)	
PFC14	PFC13A2D0140N(0.6~14LPM)	
PFC28	PFC13A2D0280N(0.8~28LPM)	
PFC40	PFC13A2D0400N(1.0~40LPM)	
COIL MUST BE ORDERED SEPARATELY		

COIL MUST BE ORDERED SEPARATELY (REFER TO EC-19A-X-Y-Z)



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating:

350 bar

I/min

Rated flow: 40

Cartridge Valve: Refer to LR11A-X-Y-Z PFC13A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.63 kg(WITHOUT VALVES) 1.2 kg(INCLUDE VALVES ,WITHOUT COIL)

\* If you need the special specification. Please contact us.

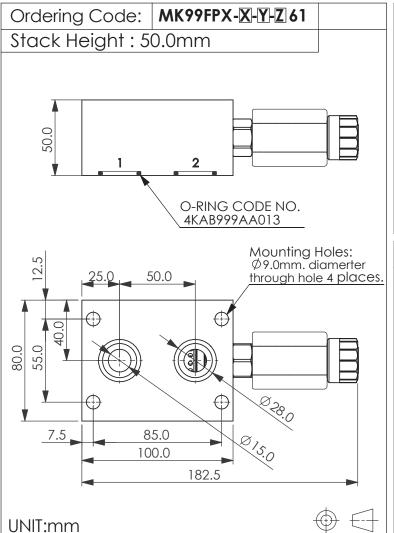
X	SELECTION FOR COMPENSATOR	
11A3	CAVITY ONLY (WITHOUT VALVE)	
LR140	LR11A30140N(60LPM,14.0bar)	

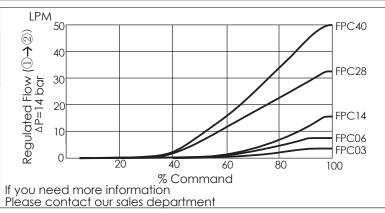
Z	ORIFICE DIAMETER (mm)	
	no orifice	
05	0.5	
07	0.7	





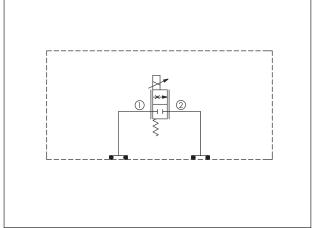
#### **COVER MANIFOLD**





Υ	SELECTION FOR FLOW CONTROL VALVE (REFER TO PFC13A-X-Y-Z)	
13A2	CAVITY ONLY (WITHOUT VALVE)	
PFC03	PFC13A2D0030N(0.3~3LPM)	
PFC06	PFC13A2D0060N(0.4~6LPM)	
PFC14	PFC13A2D0140N(0.6~14LPM)	
PFC28	PFC13A2D0280N(0.8~28LPM)	
PFC40	PFC13A2D0400N(1.0~40LPM)	
COIL MUST BE ORDERED SEPARATELY (REFER TO EC-19A-X-17)		

Rev 130403



**TECHNICAL DATA** Aluminum Body Pressure Rating: 250 bar

Ductile Iron 350 bar Body Pressure Rating:

Rated flow: 40 I/min

Cartridge Valve: Refer to PFC13A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	1.0 kg(WITHOUT VALVES) 1.3 kg(INCLUDE VALVES ,WITHOUT COIL)

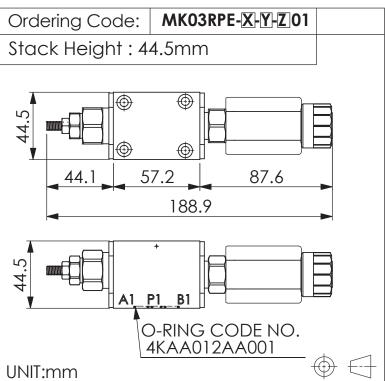
\* If you need the special specification. Pléase contact us.

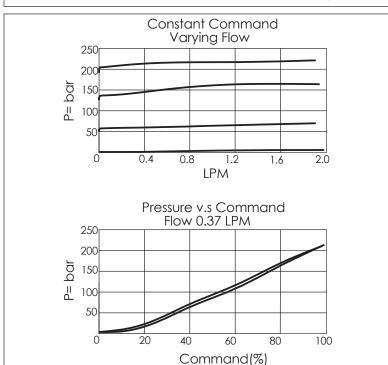
X	SELECTION FOR COMPENSATOR	
N	WITHOUT PORT	

Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	

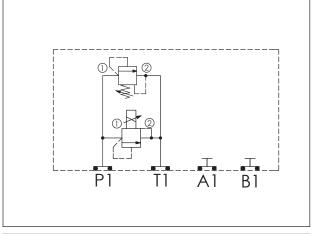
M FPX 301











#### TECHNICAL DATA

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 1 1/min

Cartridge Valve: Refer to RD08W-X-Y-Z PRB8A-X-Y-Y

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.3 kg(WITHOUT VALVES) 0.56 kg(INCLUDE VALVES ,WITHOUT COIL)

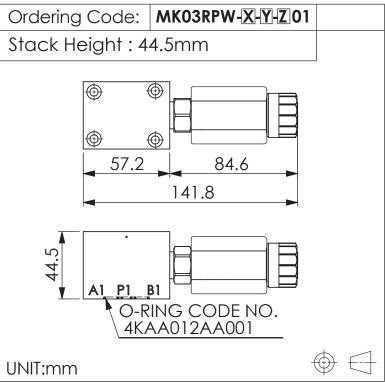
\* If you need the special specification. Please contact us.

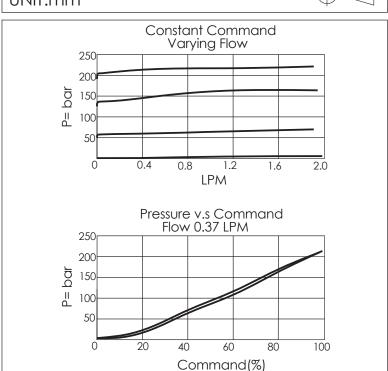
X	SELECTION FOR RELIEF VALVE (PORT 102, NEAR "A" PORT SIDE)	
08W2	CAVITY ONLY (WITHOUT VALVE)	
RD3A	RD08W23AL(3LPM,35-210bar)	

Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	

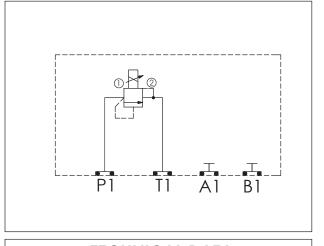
Rev 130403 M.RPE.301







Υ	SELECTION FOR ELECTRO-PROPORTIONAL PILO (PORT ① TO ② ,NEAR "B" POR	
8A2	CAVITY ONLY (WITHOUT VALVE)	
PRBDA	PRB8A2DAN(1LPM,20~210bar)	
COIL MUST BE ORDERED SEPARATELY (REFER TO EC-19A-X-Y-Z)		



### TECHNICAL DATA

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 1 1/min

#### Cartridge Valve: Refer to PRB8A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.28 kg(WITHOUT VALVES) 0.44 kg(INCLUDE VALVES ,WITHOUT COIL)

\* If you need the special specification. Please contact us.

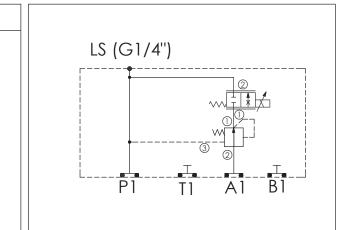
X	SELECTION FOR A PORT CONTROL	
N	WITHOUT PORT	

Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	

Rev.130403 M.RPW.301

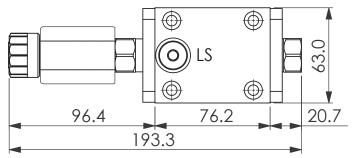


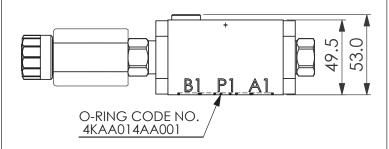




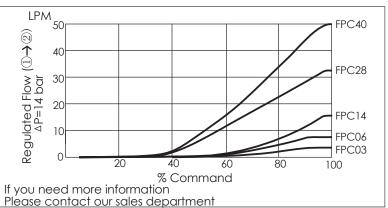
# Ordering Code: MK05EPX-X-Y-Z01

Stack Height: 49.5mm





# UNIT:mm



Y	SELECTION FOR FLOW CONTRO (REFER TO PFC13A-X-Y-Z)	L VALVE
13A2	CAVITY ONLY (WITHOUT VALVE)	
PFC03	PFC13A2D0030N(0.3~3LPM)	
PFC06	PFC13A2D0060N(0.4~6LPM)	
PFC14	PFC13A2D0140N(0.6~14LPM)	
PFC28	PFC13A2D0280N(0.8~28LPM)	
PFC40	PFC13A2D0400N(1.0~40LPM)	
С	OIL MUST BE ORDERED SEPARAT	ELY

(REFER TO EC-19A-X-Y-Z)

TECHNICAL DATA

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 40 1/min

Cartridge Valve:
Refer to LP11A-X-Y-Z
PFC13A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.65 kg(WITHOUT VALVES) 1.2 kg(INCLUDE VALVES ,WITHOUT COIL)	

<sup>\*</sup> If you need the special specification. Please contact us.

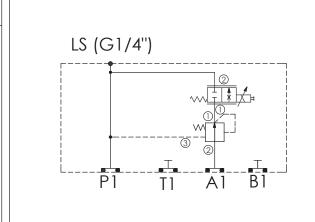
X	SELECTION FOR COMPENSATOR	
11A3	CAVITY ONLY (WITHOUT VALVE)	
LP140	LP11A30140N(60LPM,14.0bar)	

Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	

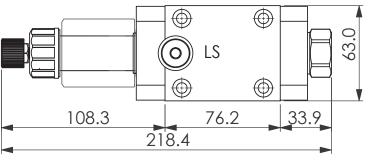


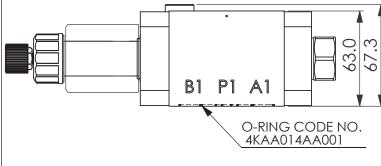




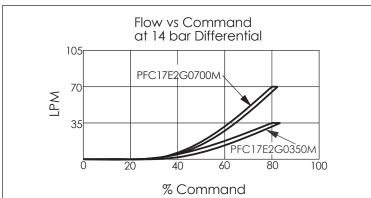


# Ordering Code: MK05EPX-X-Y-Z03 Stack Height: 63.0mm





# UNIT:mm $\oplus$



Y	SELECTION FOR FLOW CONTRO (REFER TO PFC17E-X-Y-Z)	OL VALVE
17E2	CAVITY ONLY (WITHOUT VALVE)	
PFC35	PFC17E2G0350M(35LPM)	
PFC70	PFC17E2G0700M(70LPM)	
COIL MUST BE ORDERED SEPARATELY (REFER TO EC-23C-X-Y-Z)		

#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating:

350 bar

Rated flow:

70 I/min

Cartridge Valve:
Refer to LP2A-X-Y-Z
PFC17E-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.95 kg(WITHOUT VALVES) 1.6 kg(INCLUDE VALVES ,WITHOUT COIL)

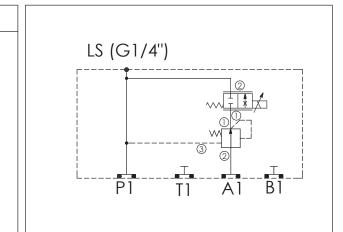
<sup>\*</sup> If you need the special specification. Please contact us.

SELECTION FOR COMPENSATOR	
CAVITY ONLY (WITHOUT VALVE)	
LP2A30140N(120LPM,14.0bar)	
	CAVITY ONLY (WITHOUT VALVE)

Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	



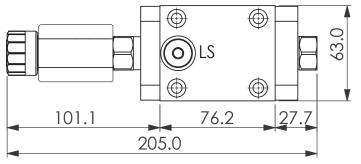


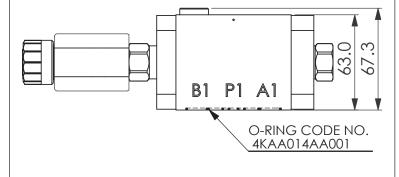


# Ordering Code: MK05EPX-X-Y-Z 03

Stack Height: 63.0mm

**UNIT:mm** 





#### 

Pléase contact our sales department

Υ	SELECTION FOR FLOW CONTRO (REFER TO PFC13A-X-Y-Z)	L VALVE
13A2	CAVITY ONLY (WITHOUT VALVE)	
PFC03	PFC13A2D0030N(0.3~3LPM)	
PFC06	PFC13A2D0060N(0.4~6LPM)	
PFC14	PFC13A2D0140N(0.6~14LPM)	
PFC28	PFC13A2D0280N(0.8~28LPM)	
PFC40	PFC13A2D0400N(1.0~40LPM)	
С	OIL MUST BE ORDERED SEPARAT	ELY

COIL MUST BE ORDERED SEPARATELY (REFER TO EC-19A-X-Y-Z)

**TECHNICAL DATA** 

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 40 1/min

Cartridge Valve:
Refer to LP11A-X-Y-Z
PFC13A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.95 kg(WITHOUT VALVES) 1.5 kg(INCLUDE VALVES ,WITHOUT COIL)

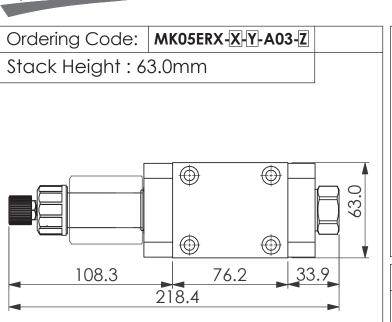
\* If you need the special specification. Please contact us.

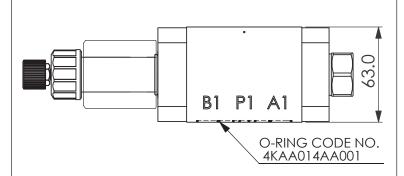
SELECTION FOR COMPENSATOR	
CAVITY ONLY (WITHOUT VALVE)	
LP11A30140N(60LPM,14.0bar)	
	CAVITY ONLY (WITHOUT VALVE)

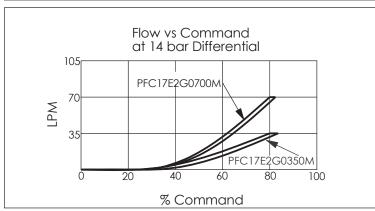
Z	BODY MATERIAL	
Α	HIGH-STRENGTH ALUMINUM	





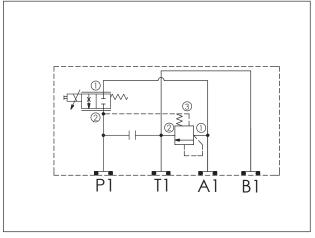






**UNIT:mm** 

Y	SELECTION FOR FLOW CONTRO (REFER TO PFC17E-X-Y-Z)	OL VALVE
17E2	CAVITY ONLY (WITHOUT VALVE)	
PFC35	PFC17E2G0350M(35LPM)	
PFC70	PFC17E2G0700M(70LPM)	
COIL MUST BE ORDERED SEPARATELY (REFER TO EC-23C-X-Y-Z)		



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

I/min

Rated flow: 70

Cartridge Valve:
Refer to LR2A-X-Y-Z
PFC17E-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.95 kg(WITHOUT VALVES) 1.6 kg(INCLUDE VALVES ,WITHOUT COIL)
	•

\* If you need the special specification. Please contact us.

X	SELECTION FOR COMPENSATOR	
2A3	CAVITY ONLY (WITHOUT VALVE)	
LR140	LR2A30140N(120LPM,14.0bar)	

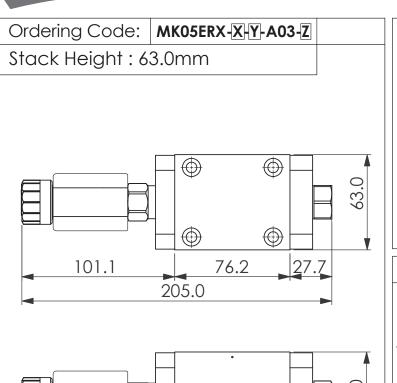
Z	ORIFICE DIAMETER (mm)	
	no orifice	
05	0.5	
07	0.7	

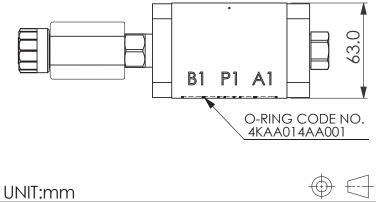
Rev.130403 M.ERX.571

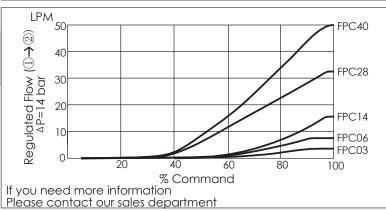
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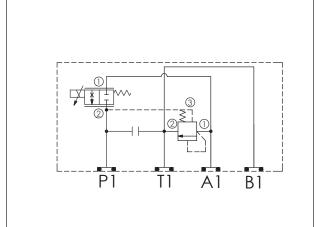






Y	SELECTION FOR FLOW CONTRO (REFER TO PFC13A-X-Y-Z)	L VALVE
13A2	CAVITY ONLY (WITHOUT VALVE)	
PFC03	PFC13A2D0030N(0.3~3LPM)	
PFC06	PFC13A2D0060N(0.4~6LPM)	
PFC14	PFC13A2D0140N(0.6~14LPM)	
PFC28	PFC13A2D0280N(0.8~28LPM)	
PFC40	PFC13A2D0400N(1.0~40LPM)	
COIL MUST BE ORDERED SEPARATELY		

(REFER TO EC-19A-X-Y-Z)



#### **TECHNICAL DATA**

Aluminum Body Pressure Rating: 250 bar

Ductile Iron

Body Pressure Rating: 350 bar

Rated flow: 40 1/min

Cartridge Valve:
Refer to LR11A-X-Y-Z
PFC13A-X-Y-Z

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.95 kg(WITHOUT VALVES) 1.5 kg(INCLUDE VALVES ,WITHOUT COIL)

\* If you need the special specification. Please contact us.

X	SELECTION FOR COMPENSATOR	
11A3	CAVITY ONLY (WITHOUT VALVE)	
LR140	LR11A30140N(60LPM,14.0bar)	

Z	ORIFICE DIAMETER (mm)	
	no orifice	
05	0.5	
07	0.7	



## CENTRALA ELBLĄG

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