



BLOKI CETOP

BLOKI PRZYŁĄCZENIOWE

CETOP 03 - NG6

“MH” Sandwich Manifolds

SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03BDT- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum)	44.5	75
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
B to P (B to A) , Regenerative					
	MH03BRG- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum)	44.5	76
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03CAW- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum)	44.5	77
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03CAW- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum)	44.5	78
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03CAW- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum)	44.5	79
			350 (Ductile Iron)		

“MH” Sandwich Manifolds

SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03CAW- <input type="checkbox"/> X- <input type="checkbox"/> Y- <input type="checkbox"/> Z01	40	250 (Aluminum)	44.5	80
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03CBW- <input type="checkbox"/> X- <input type="checkbox"/> Y- <input type="checkbox"/> Z01	40	250 (Aluminum)	44.5	81
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03CBW- <input type="checkbox"/> X- <input type="checkbox"/> Y- <input type="checkbox"/> Z01	40	250 (Aluminum)	44.5	82
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03CBW- <input type="checkbox"/> X- <input type="checkbox"/> Y- <input type="checkbox"/> Z01	40	250 (Aluminum)	44.5	83
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03CBW- <input type="checkbox"/> X- <input type="checkbox"/> Y- <input type="checkbox"/> Z01	40	250 (Aluminum)	44.5	84
			350 (Ductile Iron)		

“MH” Sandwich Manifolds

SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03CDC- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 03	40	250 (Aluminum)	63.0	85
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03CDC- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 03	40	250 (Aluminum)	63.0	86
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03CDS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	30	250 (Aluminum)	44.5	87
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03CDS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 02	30	250 (Aluminum)	40.0	88
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03CDT- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum)	44.5	89
			350 (Ductile Iron)		

“MH” Sandwich Manifolds

SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03CDW- <input type="checkbox"/> X- <input type="checkbox"/> Y- <input type="checkbox"/> Z01	40	250 (Aluminum)	44.5	90
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03CDW- <input type="checkbox"/> X- <input type="checkbox"/> Y- <input type="checkbox"/> Z01	40	250 (Aluminum)	44.5	91
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03CDW- <input type="checkbox"/> X- <input type="checkbox"/> Y- <input type="checkbox"/> Z01	40	250 (Aluminum)	44.5	92
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03CDW- <input type="checkbox"/> X- <input type="checkbox"/> Y- <input type="checkbox"/> Z01	40	250 (Aluminum)	44.5	93
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03CDW- <input type="checkbox"/> X- <input type="checkbox"/> Y- <input type="checkbox"/> Z02	40	250 (Aluminum)	40.0	94
			350 (Ductile Iron)		

“MH” Sandwich Manifolds

SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03CDW- <input checked="" type="checkbox"/> - <input checked="" type="checkbox"/> - <input checked="" type="checkbox"/> 02	40	250 (Aluminum)	40.0	95
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03CDW- <input checked="" type="checkbox"/> - <input checked="" type="checkbox"/> - <input checked="" type="checkbox"/> 02	40	250 (Aluminum)	40.0	96
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03CFW- <input checked="" type="checkbox"/> - <input checked="" type="checkbox"/> - <input checked="" type="checkbox"/> 01	40	250 (Aluminum)	44.5	97
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03DBE- <input checked="" type="checkbox"/> - <input checked="" type="checkbox"/> - <input checked="" type="checkbox"/> 02	15	250 (Aluminum)	40.0	98
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03DPE- <input checked="" type="checkbox"/> - <input checked="" type="checkbox"/> - <input checked="" type="checkbox"/> 01	25	250 (Aluminum)	44.5	99
			350 (Ductile Iron)		

“MH” Sandwich Manifolds

SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03EBW- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum)	44.5	100
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03EBW- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 02	40	250 (Aluminum)	40.0	101
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03EDT- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum)	44.5	102
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03EDT- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum)	44.5	103
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03EDT- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum)	44.5	104
			350 (Ductile Iron)		

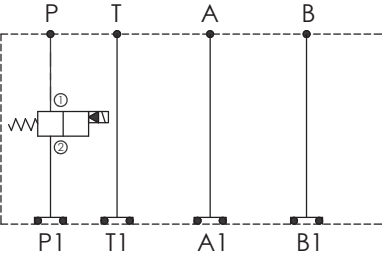
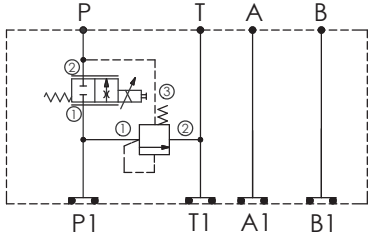
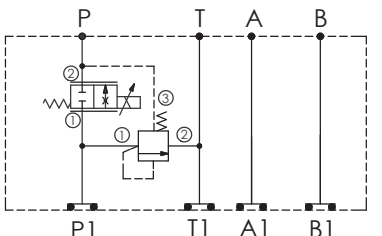
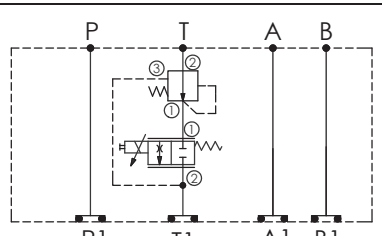
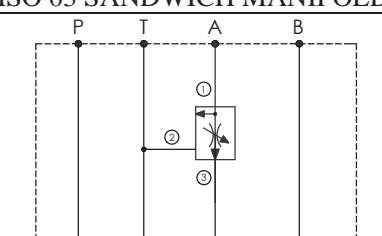
“MH” Sandwich Manifolds

“MH” Sandwich Manifolds					
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03EDT-X-Y-Z01	30	250 (Aluminum)	44.5	105
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03EDT-X-Y-Z02	40	250 (Aluminum)	40.0	106
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03EDT-X-Y-Z02	30	250 (Aluminum)	40.0	107
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03EDW-X-Y-Z01	40	250 (Aluminum)	44.5	108
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03EDW-X-Y-Z01	40	250 (Aluminum)	44.5	109
			350 (Ductile Iron)		

“MH” Sandwich Manifolds

SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03EDW- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum)	44.5	110
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03EDW- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 02	40	250 (Aluminum)	40.0	111
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03EFB- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 02	30	250 (Aluminum)	40.0	112
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03EPP- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 03	40	250 (Aluminum)	63.0	113
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03EPP- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 03	40	250 (Aluminum)	63.0	114
			350 (Ductile Iron)		

“MH” Sandwich Manifolds

SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03EPW- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum)	44.5	115
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03ERW- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 03	40	250 (Aluminum)	63.0	116
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03ERW- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 03	40	250 (Aluminum)	63.0	117
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03ETP- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 03	40	250 (Aluminum)	63.0	118
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03FAB- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum)	44.5	119
			350 (Ductile Iron)		

“MH” Sandwich Manifolds

SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03FAE- <input type="checkbox"/> X- <input type="checkbox"/> Y- <input type="checkbox"/> Z01	23 Pressure Compensated	250 (Aluminum) 350 (Ductile Iron)	44.5	120
ISO 03 SANDWICH MANIFOLD					
	MH03FAE- <input type="checkbox"/> X- <input type="checkbox"/> Y- <input type="checkbox"/> Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	121
ISO 03 SANDWICH MANIFOLD					
	MH03FAO- <input type="checkbox"/> X- <input type="checkbox"/> Y- <input type="checkbox"/> Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	122
ISO 03 SANDWICH MANIFOLD					
	MH03FAO- <input type="checkbox"/> X- <input type="checkbox"/> Y- <input type="checkbox"/> Z01	23 Pressure Compensated	250 (Aluminum) 350 (Ductile Iron)	44.5	123
ISO 03 SANDWICH MANIFOLD					
	MH03FAO- <input type="checkbox"/> X- <input type="checkbox"/> Y- <input type="checkbox"/> Z01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	124

“MH” Sandwich Manifolds

SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03FBB- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	125
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03FBE- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	23 Pressure Compensated	250 (Aluminum) 350 (Ductile Iron)	44.5	126
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03FBE- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	127
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03FBI- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	23 Pressure Compensated	250 (Aluminum) 350 (Ductile Iron)	44.5	128
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03FBO- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	129

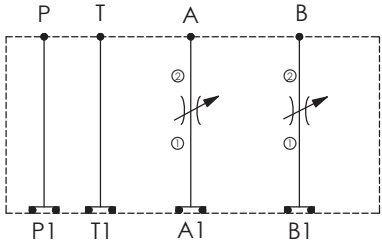
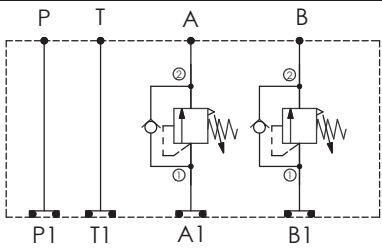
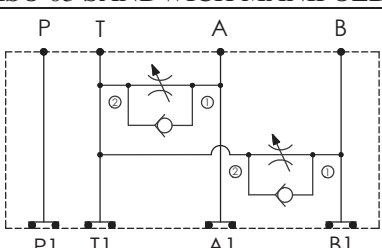
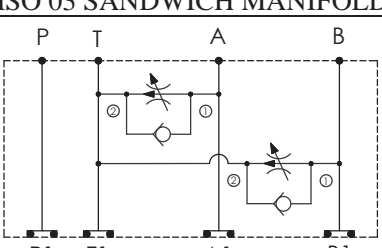
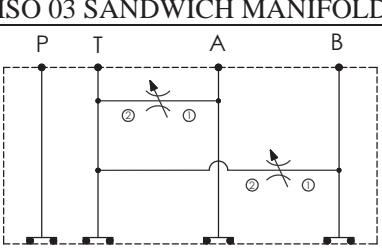
“MH” Sandwich Manifolds

SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03FBO- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	23 Pressure Compensated	250 (Aluminum) 350 (Ductile Iron)	44.5	130
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03FBO- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	131
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03FDB- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	132
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03FDH- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40 Pressure Compensated	250 (Aluminum) 350 (Ductile Iron)	44.5	133
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03FDI- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	134

“MH” Sandwich Manifolds

SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03FDI- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	23 Pressure Compensated	250 (Aluminum) 350 (Ductile Iron)	44.5	135
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03FDI- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	136
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03FDJ- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40 Pressure Compensated	250 (Aluminum) 350 (Ductile Iron)	44.5	137
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03FDO- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	138
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03FDO- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	23 Pressure Compensated	250 (Aluminum) 350 (Ductile Iron)	44.5	139

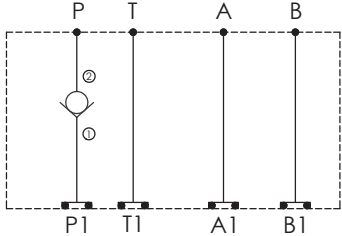
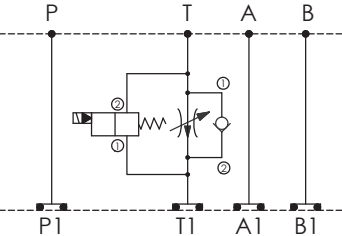
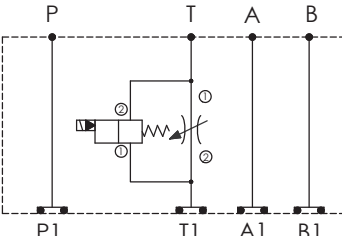
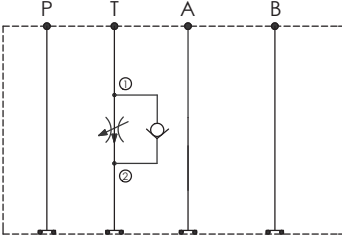
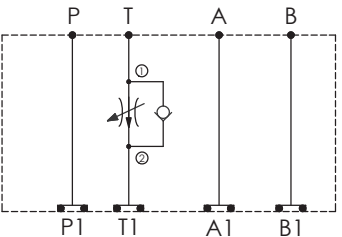
“MH” Sandwich Manifolds

SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03FDO- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum)	44.5	140
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03FDO- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum)	44.5	141
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03FDT- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum)	44.5	142
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03FDT- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	23 Pressure Compensated	250 (Aluminum)	44.5	143
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03FDT- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum)	44.5	144
			350 (Ductile Iron)		

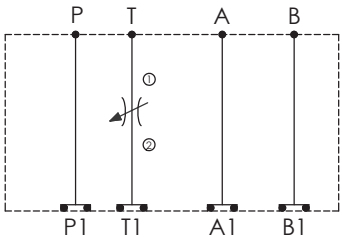
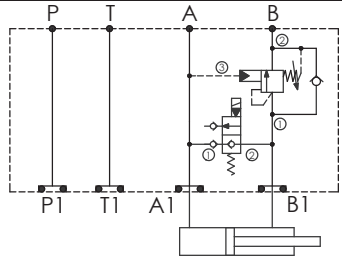
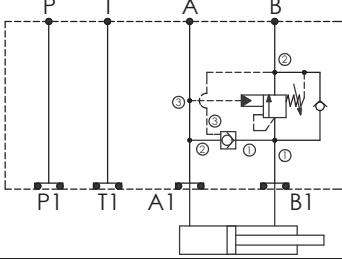
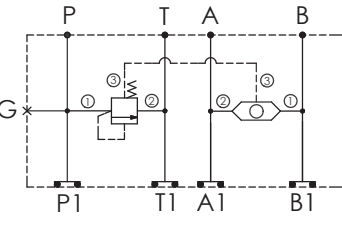
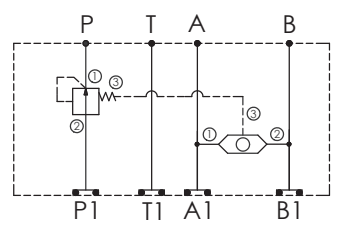
“MH” Sandwich Manifolds

SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03FPB- <input checked="" type="checkbox"/> - <input checked="" type="checkbox"/> - <input checked="" type="checkbox"/> 01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	145
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03FPE- <input checked="" type="checkbox"/> - <input checked="" type="checkbox"/> - <input checked="" type="checkbox"/> 01	23 Pressure Compensated	250 (Aluminum) 350 (Ductile Iron)	44.5	146
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03FPE- <input checked="" type="checkbox"/> - <input checked="" type="checkbox"/> - <input checked="" type="checkbox"/> 01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	147
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03FPW- <input checked="" type="checkbox"/> - <input checked="" type="checkbox"/> - <input checked="" type="checkbox"/> 01	23 Pressure Compensated	250 (Aluminum) 350 (Ductile Iron)	44.5	148
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03FPW- <input checked="" type="checkbox"/> - <input checked="" type="checkbox"/> - <input checked="" type="checkbox"/> 01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	149

“MH” Sandwich Manifolds

SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03FPW- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	150
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03FTE- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	23 Pressure Compensated	250 (Aluminum) 350 (Ductile Iron)	44.5	151
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03FTE- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	152
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03FTH- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40 Pressure Compensated	250 (Aluminum) 350 (Ductile Iron)	44.5	153
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03FTW- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	23 Pressure Compensated	250 (Aluminum) 350 (Ductile Iron)	44.5	154

“MH” Sandwich Manifolds

SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03FTW- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum)	44.5	155
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
B to A, Regenerative					
	MH03GBE- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum)	44.5	156
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
B to A, Regenerative					
	MH03GBW- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum)	44.5	157
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03KPB- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 03	40	250 (Aluminum)	63.0	158
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03KPR- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 03	40	250 (Aluminum)	63.0	159
			350 (Ductile Iron)		

“MH” Sandwich Manifolds

SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03PAC- <input type="checkbox"/> X- <input type="checkbox"/> Y- <input type="checkbox"/> Z01	40	250 (Aluminum)	44.5	160
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03PAC- <input type="checkbox"/> X- <input type="checkbox"/> Y- <input type="checkbox"/> Z01	40	250 (Aluminum)	44.5	161
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03PAC- <input type="checkbox"/> X- <input type="checkbox"/> Y- <input type="checkbox"/> Z01	40	250 (Aluminum)	44.5	162
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03PAP- <input type="checkbox"/> X- <input type="checkbox"/> Y- <input type="checkbox"/> Z01	40	250 (Aluminum)	44.5	163
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03PBC- <input type="checkbox"/> X- <input type="checkbox"/> Y- <input type="checkbox"/> Z01	40	250 (Aluminum)	44.5	164
			350 (Ductile Iron)		

“MH” Sandwich Manifolds

SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03PBC- <input type="checkbox"/> X- <input type="checkbox"/> Y- <input type="checkbox"/> Z01	40	250 (Aluminum)	44.5	165
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03PBC- <input type="checkbox"/> X- <input type="checkbox"/> Y- <input type="checkbox"/> Z01	40	250 (Aluminum)	44.5	166
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03PBE- <input type="checkbox"/> X- <input type="checkbox"/> Y- <input type="checkbox"/> Z01	40	250 (Aluminum)	44.5	167
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03PBP- <input type="checkbox"/> X- <input type="checkbox"/> Y- <input type="checkbox"/> Z01	40	250 (Aluminum)	44.5	168
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03PPE- <input type="checkbox"/> X- <input type="checkbox"/> Y- <input type="checkbox"/> Z01	40	250 (Aluminum)	44.5	169
			350 (Ductile Iron)		

“MH” Sandwich Manifolds

SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03PPE- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 11	40	250 (Aluminum)	44.5	170
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03PPE- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 12	40	250 (Aluminum)	44.5	171
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03PPW- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum)	44.5	172
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03PPW- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum)	44.5	173
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03PPW- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum)	44.5	174
			350 (Ductile Iron)		

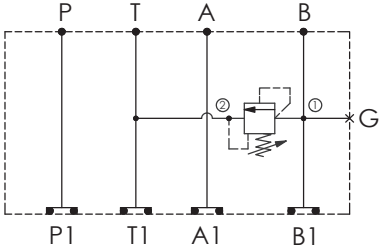
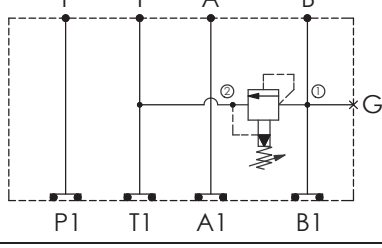
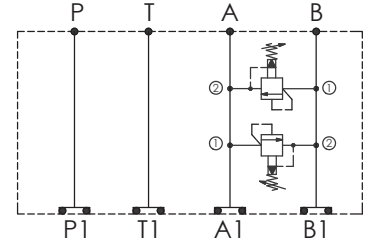
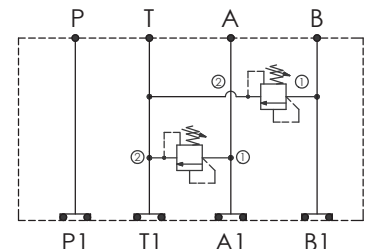
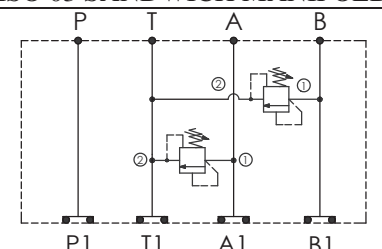
“MH” Sandwich Manifolds

SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03PPW- <input type="checkbox"/> X- <input type="checkbox"/> Y- <input type="checkbox"/> Z02	40	250 (Aluminum)	40.0	175
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03PPW- <input type="checkbox"/> X- <input type="checkbox"/> Y- <input type="checkbox"/> Z02	40	250 (Aluminum)	40.0	176
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03PPW- <input type="checkbox"/> X- <input type="checkbox"/> Y- <input type="checkbox"/> Z02	40	250 (Aluminum)	40.0	177
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03RAB- <input type="checkbox"/> X- <input type="checkbox"/> Y- <input type="checkbox"/> Z01	40	250 (Aluminum)	44.5	178
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03RAB- <input type="checkbox"/> X- <input type="checkbox"/> Y- <input type="checkbox"/> Z01	40	250 (Aluminum)	44.5	179
			350 (Ductile Iron)		

“MH” Sandwich Manifolds

SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03RAE- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum)	44.5	180
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03RAH- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum)	44.5	181
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03RAH- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum)	44.5	182
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03RBA- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum)	44.5	183
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03RBA- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum)	44.5	184
			350 (Ductile Iron)		

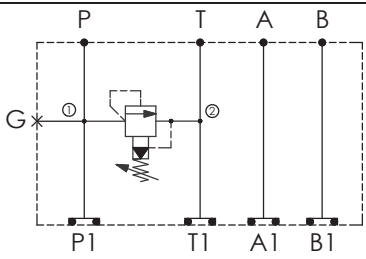
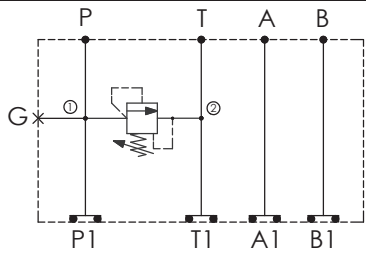
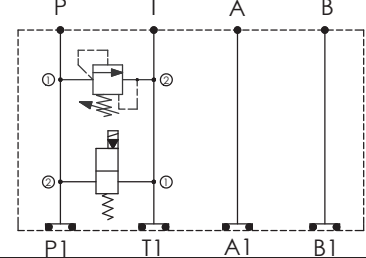
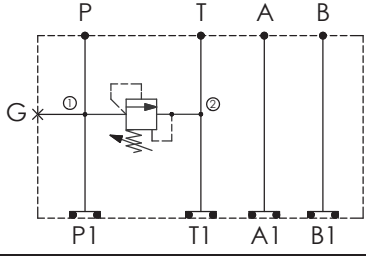
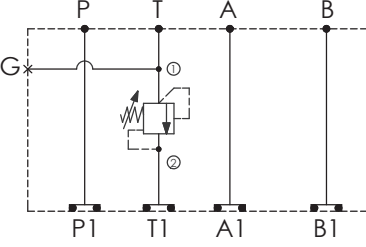
“MH” Sandwich Manifolds

“MH” Sandwich Manifolds					
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03RBH- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum)	44.5	185
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03RBH- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum)	44.5	186
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03RDH- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum)	44.5	187
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03RDS- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 02	20	250 (Aluminum)	40.0	188
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03RDT- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum)	44.5	189
			350 (Ductile Iron)		

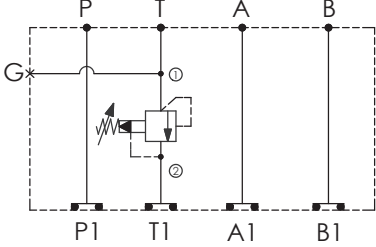
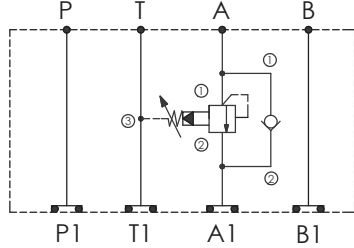
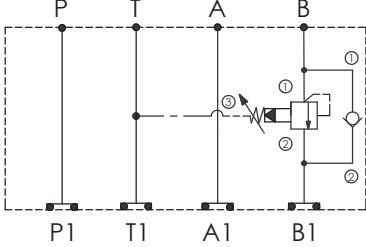
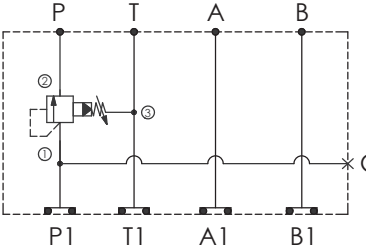
“MH” Sandwich Manifolds

SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03RDT- <input type="checkbox"/> X- <input type="checkbox"/> Y- <input type="checkbox"/> Z01	40	250 (Aluminum)	44.5	190
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03RDW- <input type="checkbox"/> X- <input type="checkbox"/> Y- <input type="checkbox"/> Z01	40	250 (Aluminum)	44.5	191
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03RPD- <input type="checkbox"/> X- <input type="checkbox"/> Y- <input type="checkbox"/> Z01	20	250 (Aluminum)	44.5	192
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03RPD- <input type="checkbox"/> X- <input type="checkbox"/> Y- <input type="checkbox"/> Z01	40	250 (Aluminum)	44.5	193
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03RPD- <input type="checkbox"/> X- <input type="checkbox"/> Y- <input type="checkbox"/> Z01	20	250 (Aluminum)	44.5	194
			350 (Ductile Iron)		

“MH” Sandwich Manifolds

SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03RPH- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum)	44.5	195
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03RPH- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum)	44.5	196
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03RPJ- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum)	44.5	197
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03RPW- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	20	250 (Aluminum)	44.5	198
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03RTH- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum)	44.5	199
			350 (Ductile Iron)		

“MH” Sandwich Manifolds

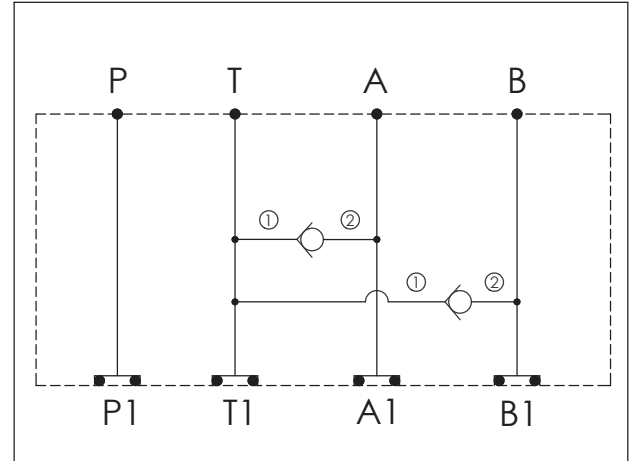
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03RTH- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	200
ISO 03 SANDWICH MANIFOLD					
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03SAI- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	201
ISO 03 SANDWICH MANIFOLD					
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03SBI- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	202
ISO 03 SANDWICH MANIFOLD					
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 SANDWICH MANIFOLD					
	MH03SPW- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum) 350 (Ductile Iron)	44.5	203
ISO 03 SANDWICH MANIFOLD					

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03BDT-X-Y-Z 01**

Stack Height : 44.5mm

UNIT:mm



TECHNICAL DATA

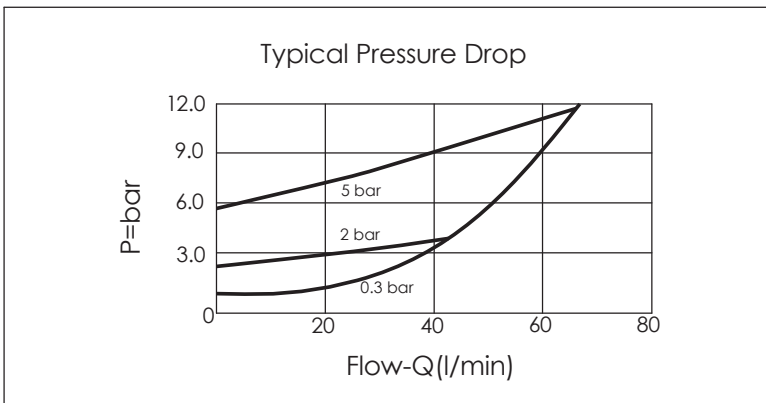
Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar

Rated flow: 40 l/min

Cartridge Valve:
 Refer to CV13A-X-Y-Z
 * Refer to Winner Cartridge Valves Catalog.

Aluminum	0.33 kg(WITHOUT VALVES) 0.53 kg(INCLUDE VALVES)
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* If you need the special specification. Please contact us.



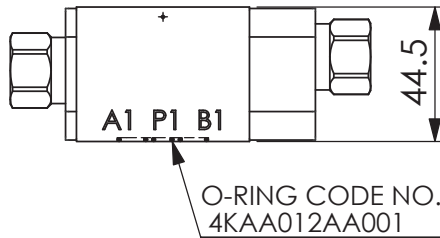
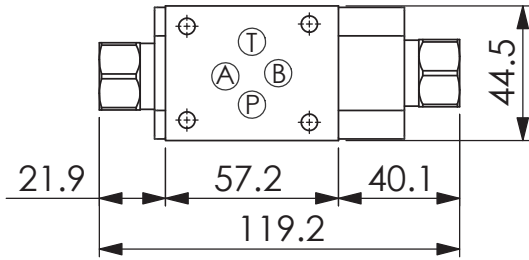
X	SELECTION FOR A PORT CONTROL	
13A2	CAVITY ONLY(WITHOUT VALVE)	
CV03	CV13A2003N (80LPM,0.3bar)	

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

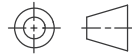
Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	

ISO 03 SANDWICH MANIFOLD

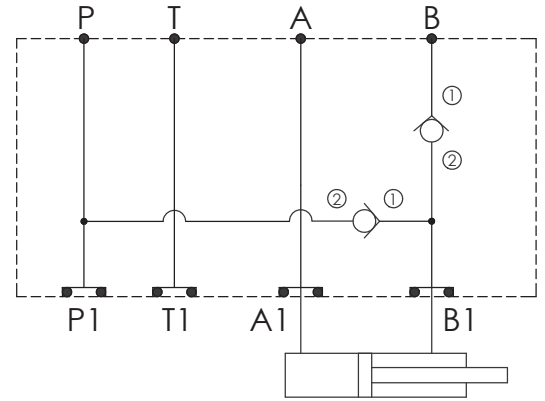
Ordering Code: **MH03BRG-X-Y-Z 01**
 Stack Height : 44.5mm



UNIT:mm



B to P (B to A) , Regenerative



TECHNICAL DATA

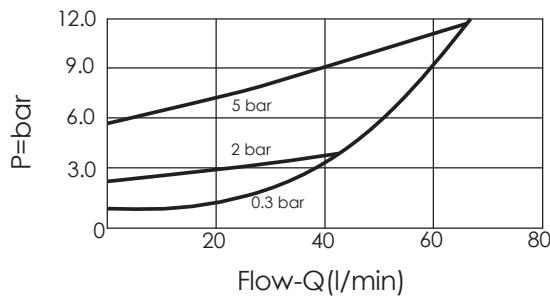
Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 40 l/min

Cartridge Valve:
 Refer to CV13A-X-Y-Z
 * Refer to Winner Cartridge Valves Catalog.

Aluminum	0.35 kg(WITHOUT VALVES) 0.55 kg(INCLUDE VALVES)
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* If you need the special specification. Please contact us.

Typical Pressure Drop



X SELECTION FOR CHECK VALVE (PORT ① TO ②, NEAR "A" PORT SIDE)

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

A	HIGH-STRENGTH ALUMINUM
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ISO 03 SANDWICH MANIFOLD

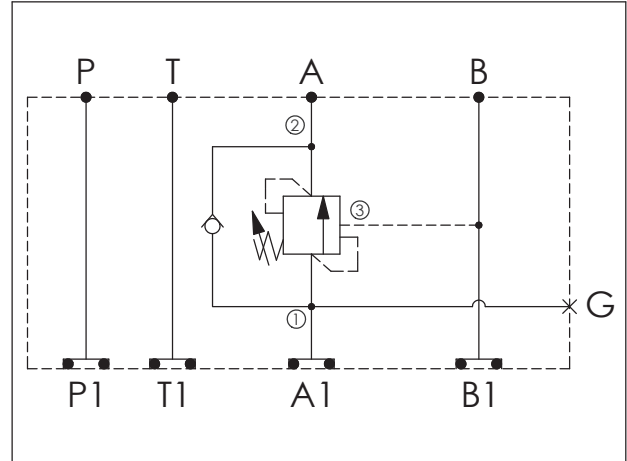
Ordering Code: **MH03CAW-X-Y-Z 01**

Stack Height : 44.5mm

O-RING CODE NO.
4KAA012AA001

G PORT

UNIT:mm



TECHNICAL DATA

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

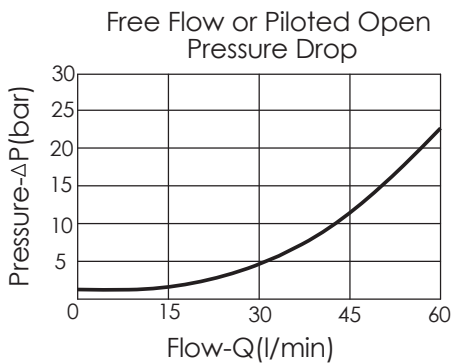
Rated flow: 40 l/min

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)

* If you need the special specification.
 Please 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)

Y SELECTION FOR G PORT

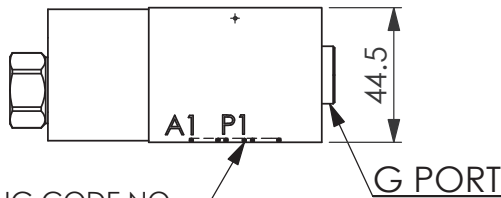
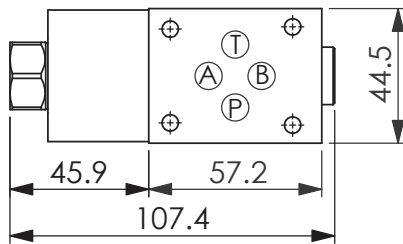
G02	G 1/4"(Metric)
N02	NPT 1/4"(U.S. Units)

Z BODY MATERIAL

A	HIGH-STRENGTH ALUMINUM
S	DUCTILE IRON

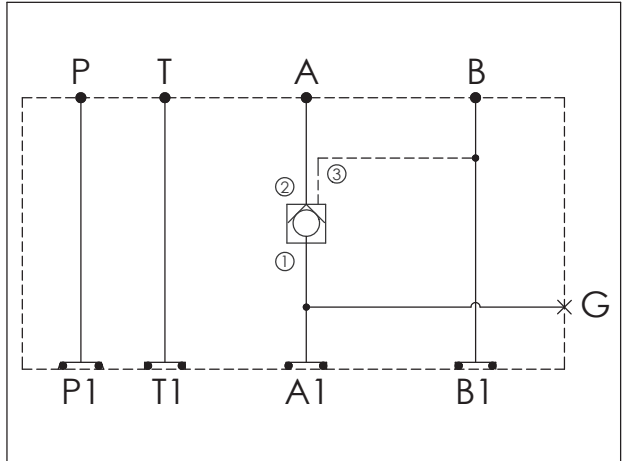
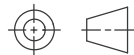
ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03CAW-X-Y-Z 01**
 Stack Height : 44.5mm



O-RING CODE NO.
4KAA012AA001

UNIT:mm



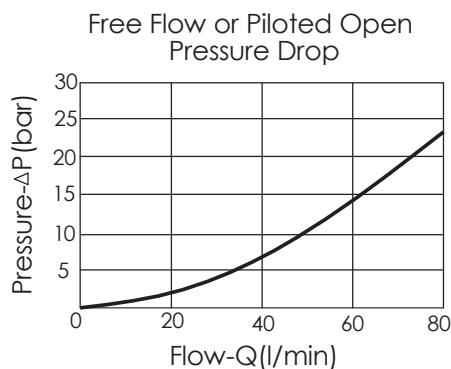
TECHNICAL DATA

Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 40 l/min

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)

* 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)
CO03	CO11A3003N (60LPM,0.3bar)
CO50	CO11A3050N (60LPM,5.0bar)

Y SELECTION FOR G PORT

G02	G 1/4"(Metric)
N02	NPT 1/4"(U.S. Units)

Z BODY MATERIAL

A	HIGH-STRENGTH ALUMINUM
S	DUCTILE IRON

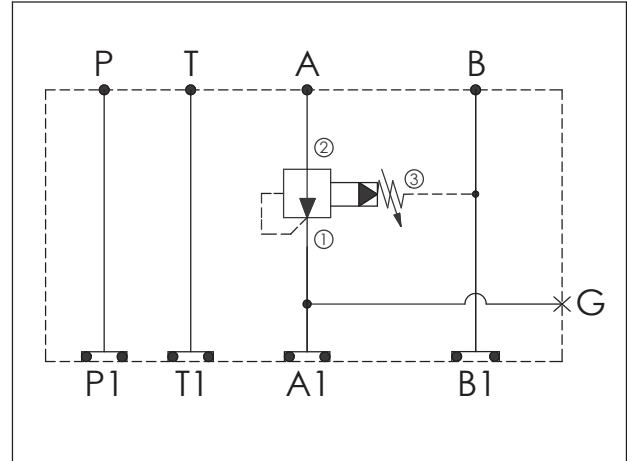
ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03CAW-X-Y-Z 01**

Stack Height : 44.5mm

O-RING CODE NO. 4KAA012AA001

UNIT:mm



TECHNICAL DATA

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

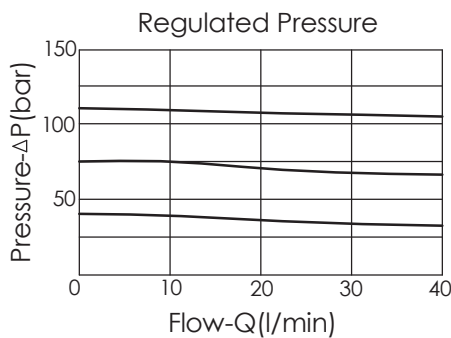
Rated flow: 40 l/min

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

* Refer to Winner Cartridge Valve Catalog.

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

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



X SELECTION FOR A PORT CONTROL

11A3	CAVITY ONLY(WITHOUT VALVE)
PBOA	PB11A30AL (40LPM ,7-210bar)

Y SELECTION FOR G PORT

G02	G 1/4"(Metric)
N02	NPT 1/4"(U.S. Units)

Z BODY MATERIAL

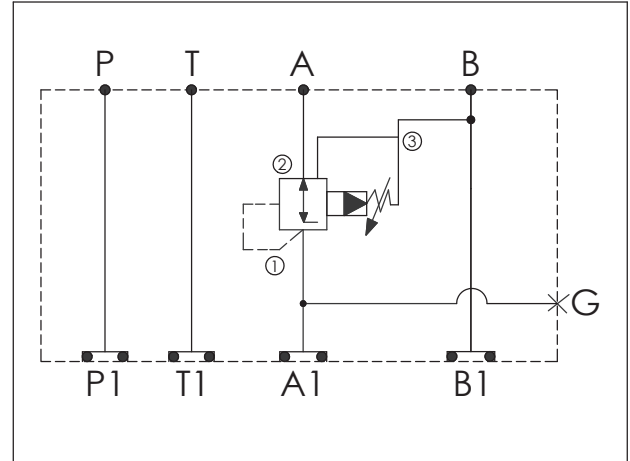
A	HIGH-STRENGTH ALUMINUM
S	

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03CAW-X-Y-Z01**
 Stack Height : 44.5mm

O-RING CODE NO. 4KAA012AA001

UNIT:mm



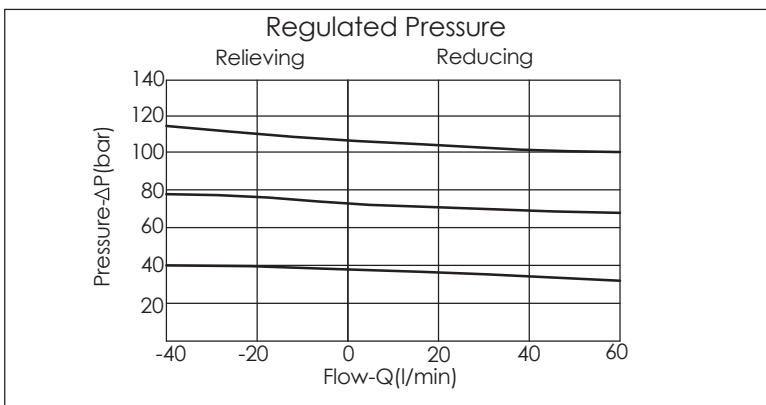
TECHNICAL DATA

Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 40 l/min

Cartridge Valve:
 Refer to PP11A-X-Y-Z
 * Refer to Winner Cartridge Valve Catalog.

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

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



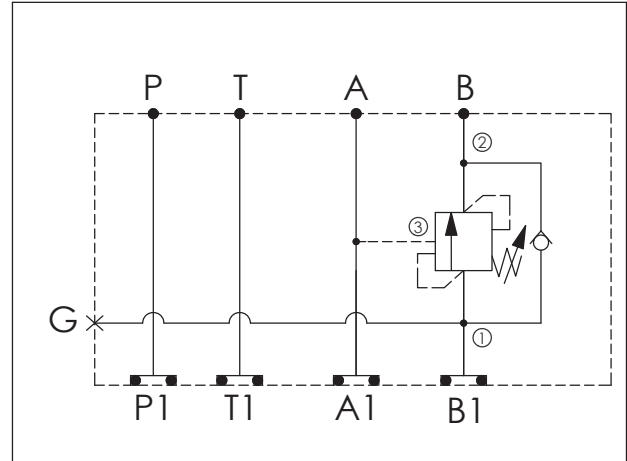
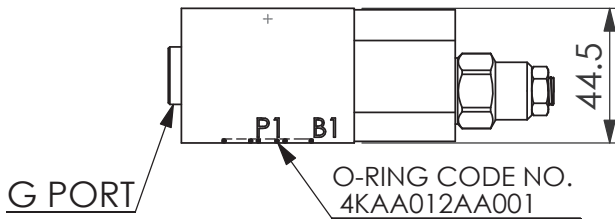
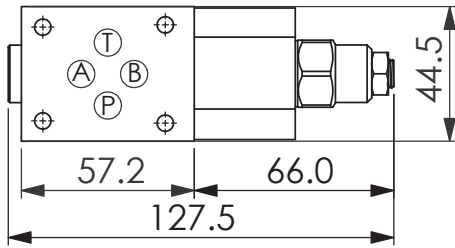
X	SELECTION FOR A PORT CONTROL	
11A3	CAVITY ONLY (WITHOUT VALVE)	
PPOA	PP11A30AL(40LPM,7.0~210bar) (Pilot Operated Reducing/Relieving)	

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

Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03CBW-X-Y-Z 01**
 Stack Height : 44.5mm



TECHNICAL DATA

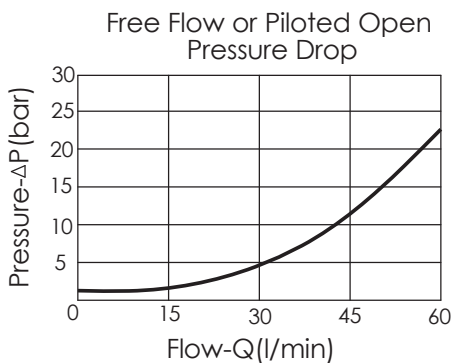
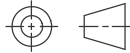
Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 40 l/min

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)

* 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

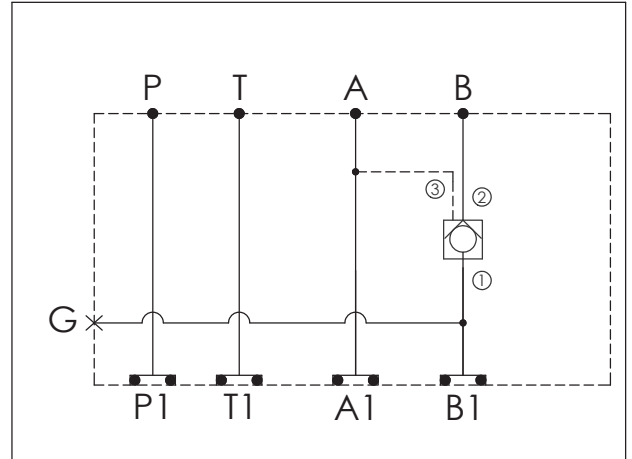
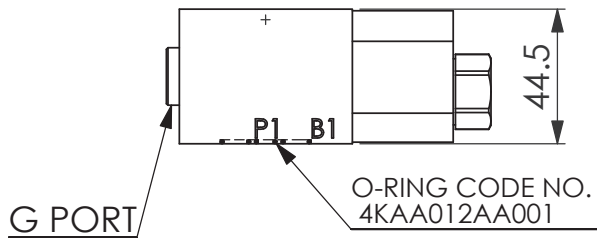
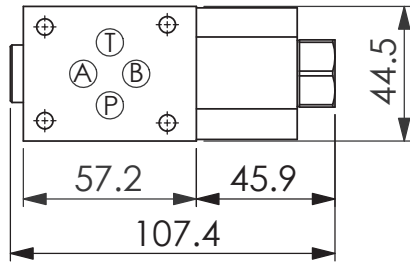
11A3	CAVITY ONLY(WITHOUT VALVE)	
CB3H	CB11A33HL (3:1 , 280bar)	
CB4J	CB11A34JL (4.5:1 , 350bar)	
CB0J	CB11A30JL (10:1 , 350bar)	

Z BODY MATERIAL

A	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03CBW-X-Y-Z 01**
 Stack Height : 44.5mm



TECHNICAL DATA

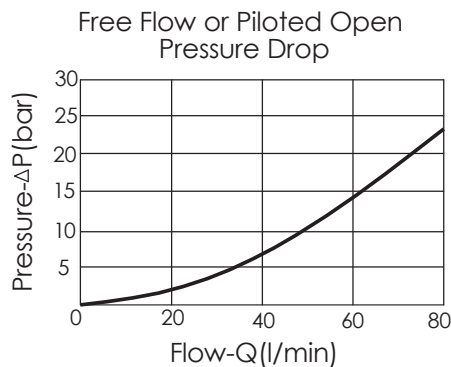
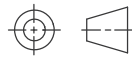
Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 40 l/min

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)

* 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)	

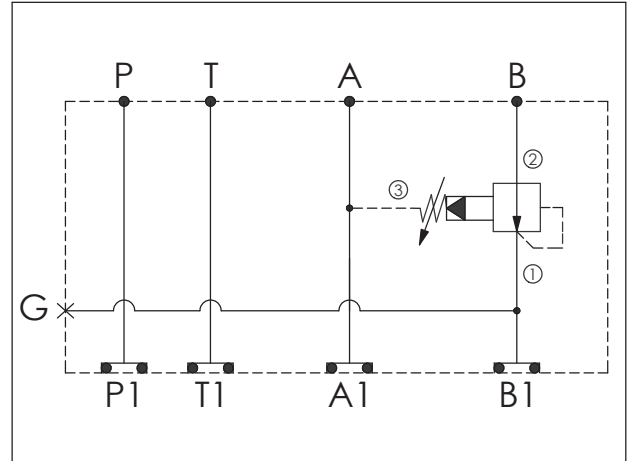
Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	
S		

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03CBW-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

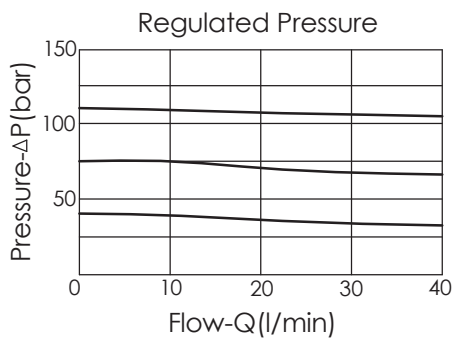
Rated flow: 40 l/min

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

* Refer to Winner Cartridge Valve Catalog.

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

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



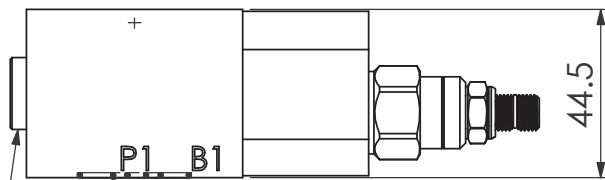
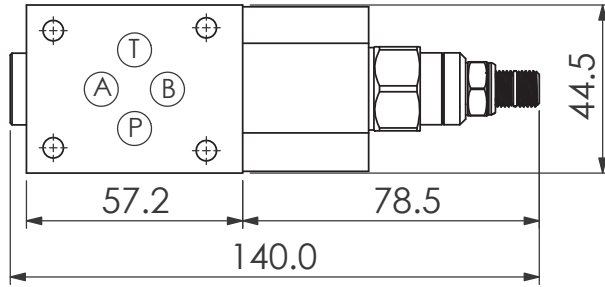
X	SELECTION FOR G PORT	
G02	G 1/4"(Metric)	
N02	NPT 1/4"(U.S. Units)	

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

Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

ISO 03 SANDWICH MANIFOLD

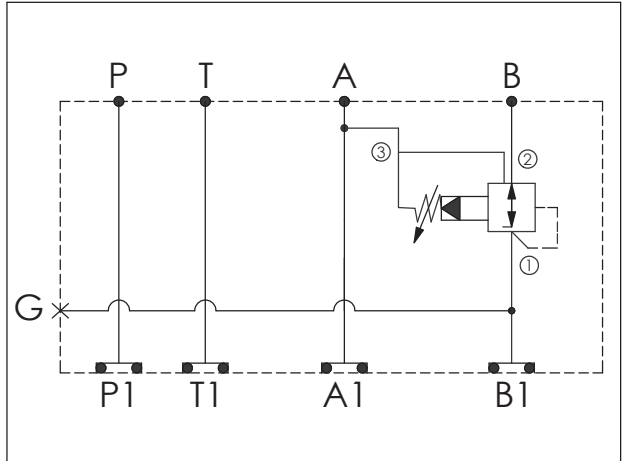
Ordering Code: **MH03CBW-X-Y-Z 01** \$ 49.80
 Stack Height : 44.5mm



G PORT

O-RING CODE NO.
4KAA012AA001

UNIT:mm



TECHNICAL DATA

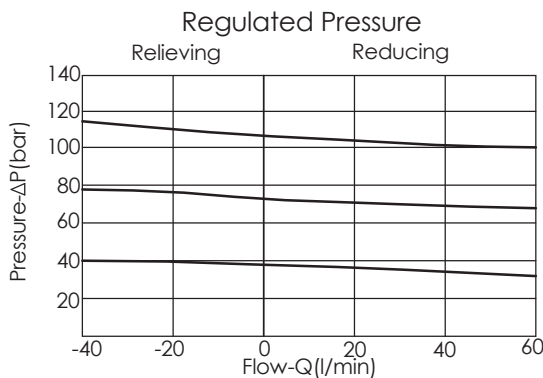
Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar

Rated flow: 40 l/min

Cartridge Valve:
 Refer to PP11A-X-Y-Z
 * Refer to Winner Cartridge Valve Catalog.

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

* 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)
PP0A	PP11A30AL(40LPM,7.0~210bar) (Pilot Operated Reducing/Relieving)

Z BODY MATERIAL

A	HIGH-STRENGTH ALUMINUM
S	DUCTILE IRON

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03CDC-X-Y-Z03**

Stack Height : 63.0mm

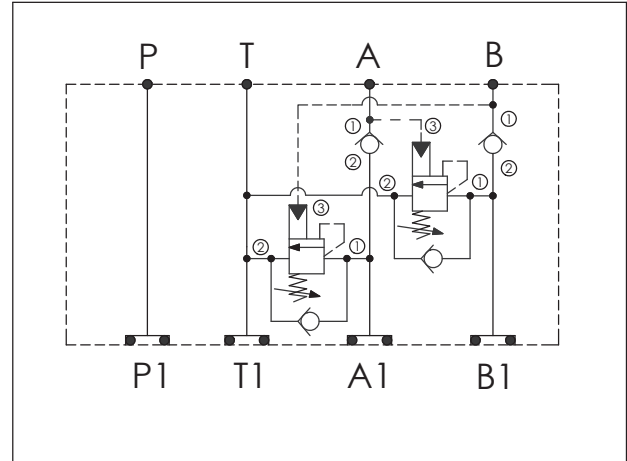
Dimensions: 70.0, 57.2, 70.0, 197.2, 44.5, 63.0

Ports: P, T, A, B, P1, T1, A1, B1

Cartridge Valves: CV11A, CB11A

O-RING CODE NO. 4KAA012AA001

UNIT:mm



TECHNICAL DATA

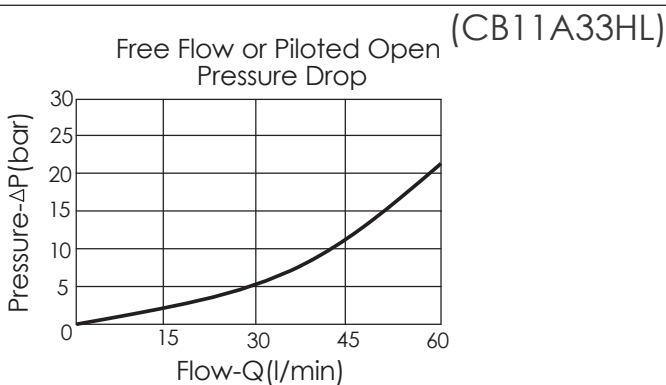
Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 40 l/min

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.



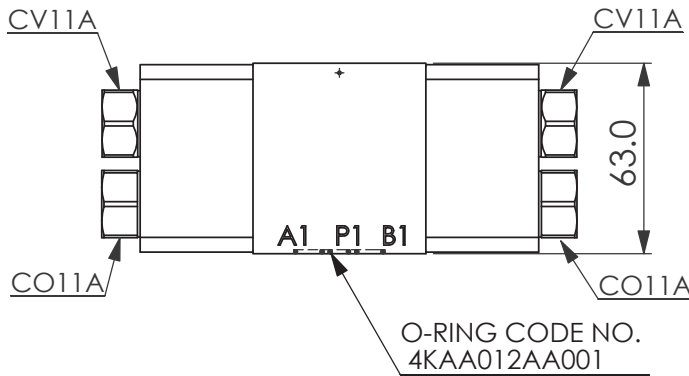
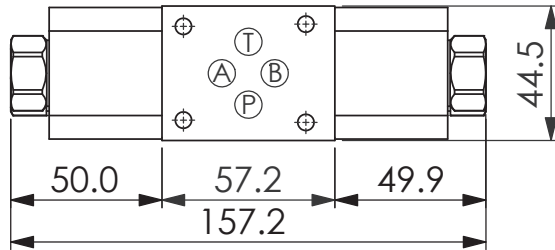
X	SELECTION FOR A PORT CONTROL	
11A3	CAVITY ONLY(WITHOUT VALVE)	
CB3H	CB11A33HL(60LPM , 70-280bar)	

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

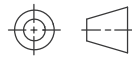
Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	

ISO 03 SANDWICH MANIFOLD

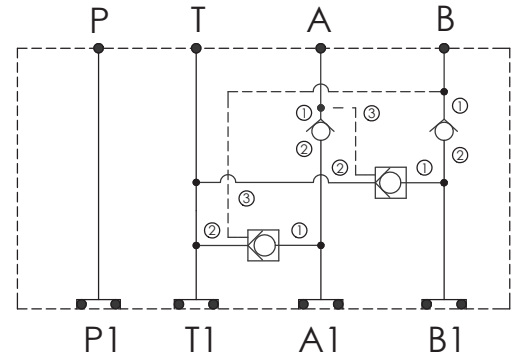
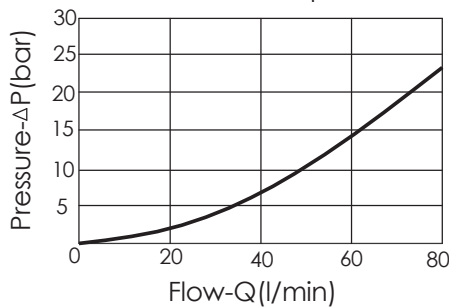
Ordering Code: MH03CDC-X-Y-Z 03
Stack Height : 63.0mm



UNIT:mm



Free Flow or Piloted Open Pressure Drop



TECHNICAL DATA

Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 40 l/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

A HIGH-STRENGTH ALUMINUM

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03CDS-X-Y-Z 01**

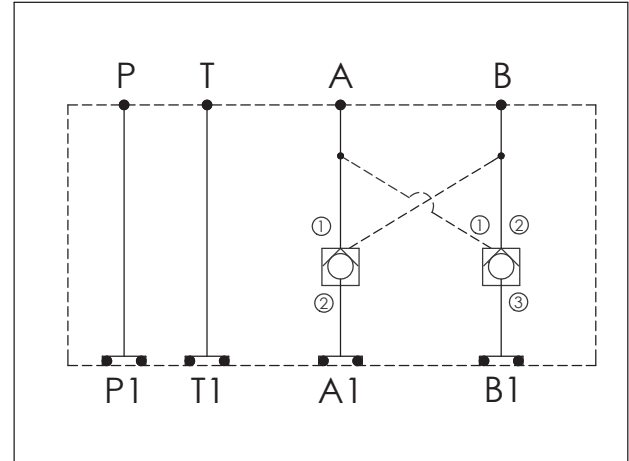
Stack Height : 44.5mm

Dimensions: 19.0, 57.2, 15.5, 44.5, 91.7

Part Numbers: CV08W2069N, CO08W3A69N-2

O-RING CODE NO. 4KAA012AA001

UNIT:mm



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
 CO08W-X-Y-Z

* Refer to Winner Cartridge Valves Catalog.

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

* 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	
A	HIGH-STRENGTH ALUMINUM	

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03CDS-X-Y-Z 02**

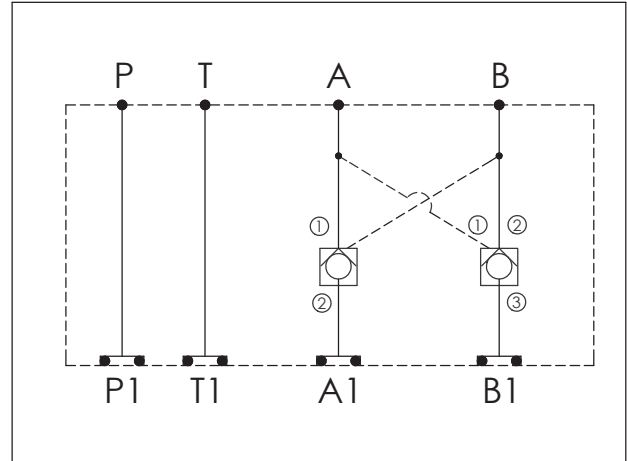
Stack Height : 40.0mm

Top View Dimensions: 19.0, 57.2, 15.5, 44.5, 91.7

Side View Dimensions: 40.0

Labels: CV08W2069N, CO08W3A69N-2, A1, P1, B1, O-RING CODE NO. 4KAA012AA001

UNIT:mm



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
 CO08W-X-Y-Z

* Refer to Winner Cartridge Valves Catalog.

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

* 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	
A	HIGH-STRENGTH ALUMINUM	

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03CDT-X-Y-Z01**

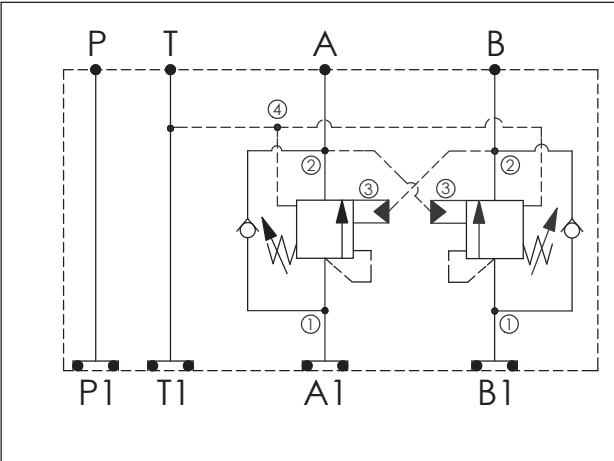
Stack Height : 44.5mm

Dimensions: 89.1, 57.2, 89.1, 235.5, 44.5

Ports: A1, P1, B1

O-RING CODE NO. 4KAA012AA001

UNIT:mm



TECHNICAL DATA

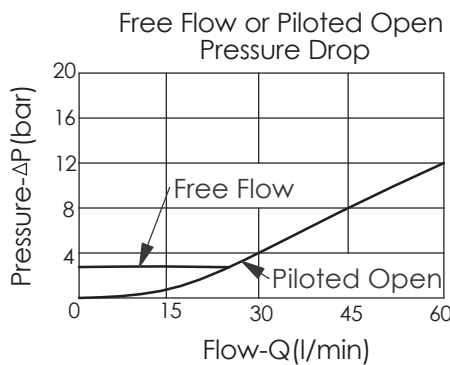
Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar

Rated flow: 40 l/min

Cartridge Valve:
 Refer to CW21A-X-Y-Z
 * Refer to Winner Cartridge Valve Catalog.

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

* If you need the special specification. Please 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)

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)

Z BODY MATERIAL

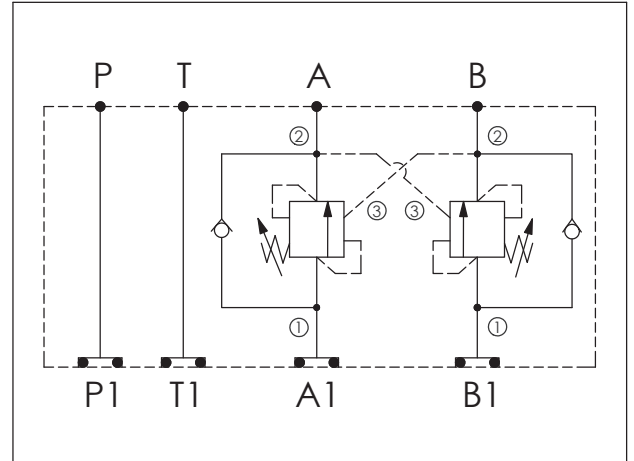
A	HIGH-STRENGTH ALUMINUM
S	DUCTILE IRON

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03CDW-X-Y-Z 01**

Stack Height : 44.5mm

UNIT:mm



TECHNICAL DATA

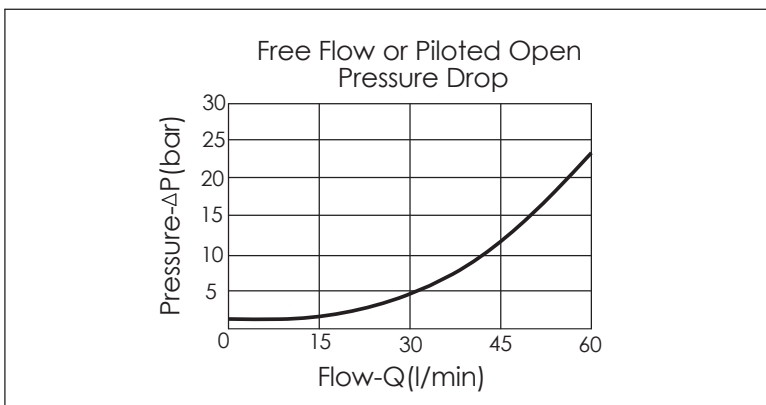
Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar

Rated flow: 40 l/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)

* If you need the special specification. Please 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)

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)

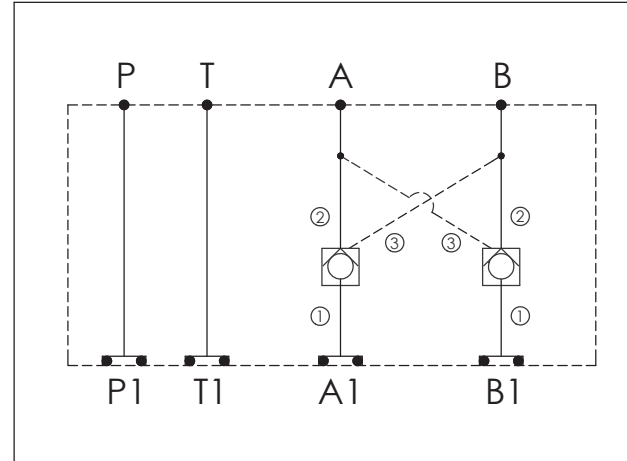
Z	BODY MATERIAL
A	HIGH-STRENGTH ALUMINUM
S	DUCTILE IRON

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03CDW-X-Y-Z 01**

Stack Height : 44.5mm

UNIT:mm



TECHNICAL DATA

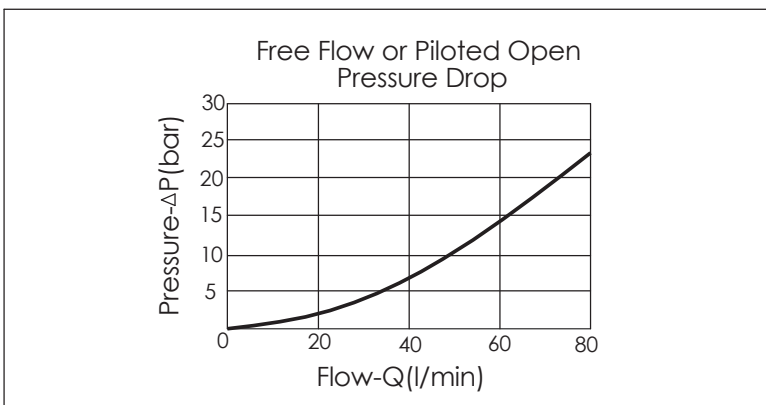
Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar

Rated flow: 40 l/min

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)

* 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)
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

A	HIGH-STRENGTH ALUMINUM
S	

ISO 03 SANDWICH MANIFOLD

Ordering Code:

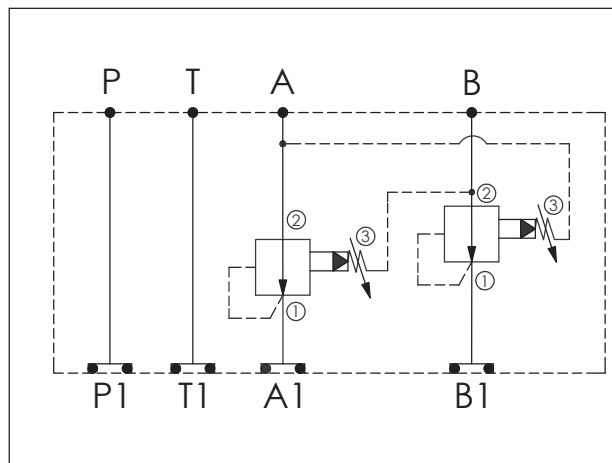
Stack Height : 44.5mm

Dimensions: 77.3, 57.2, 77.3, 211.8, 44.5

Ports: P, T, A, B, P1, T1, A1, B1

O-RING CODE NO. 4KAA012AA001

UNIT:mm



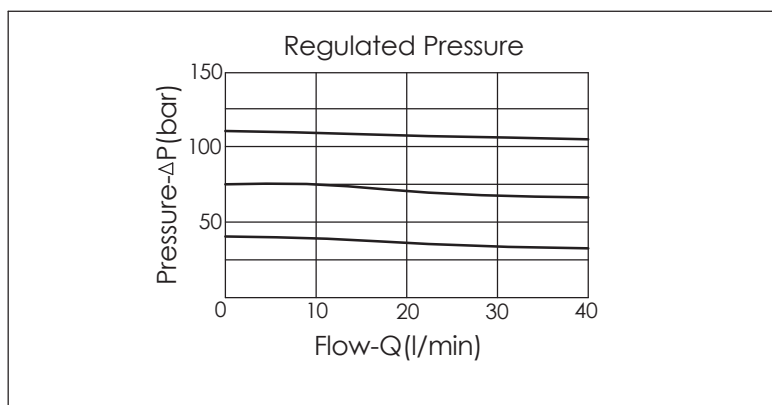
TECHNICAL DATA

Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 40 l/min

Cartridge Valve:
 Refer to PB11A-X-Y-Z
 * Refer to Winner Cartridge Valves Catalog.

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

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



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

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

Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	
S		

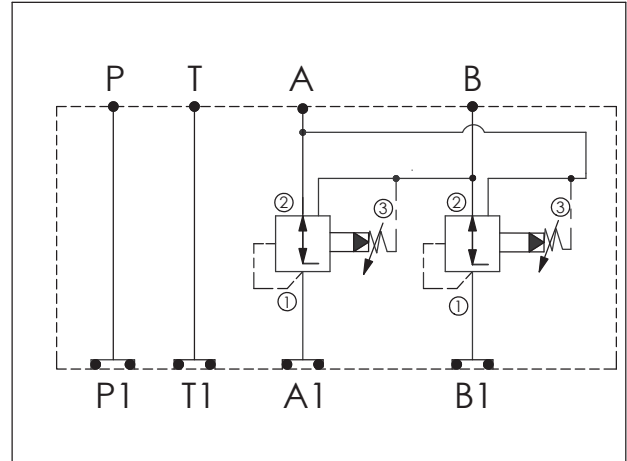
ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03CDW-X-Y-Z 01**

Stack Height : 44.5mm

O-RING CODE NO. 4KAA012AA001

UNIT:mm



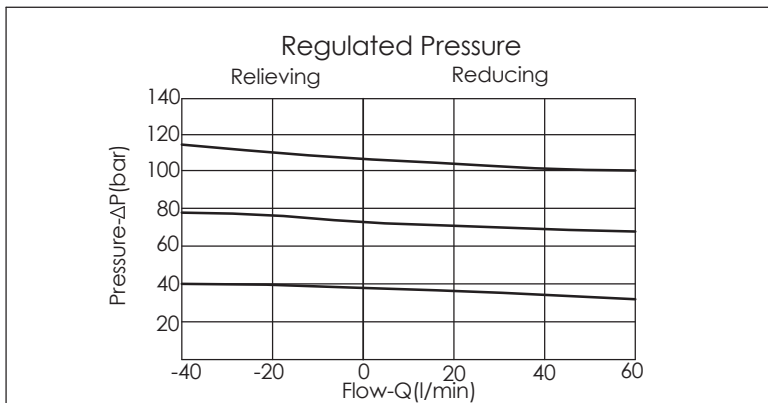
TECHNICAL DATA

Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 40 l/min

Cartridge Valve:
 Refer to PP11A-X-Y-Z
 * Refer to Winner Cartridge Valves Catalog.

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

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



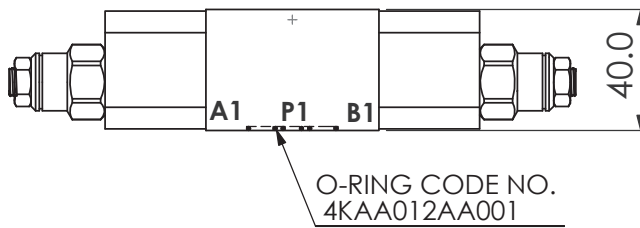
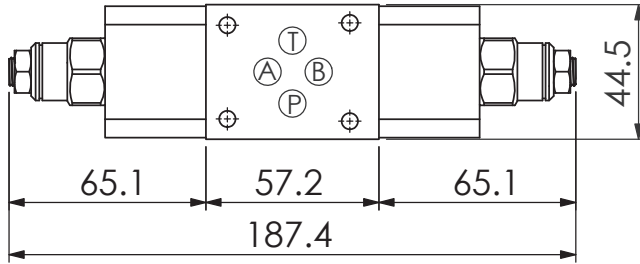
X	SELECTION FOR A PORT CONTROL	
11A3	CAVITY ONLY(WITHOUT VALVE)	
PP0A	PP11A30AL(40LPM,7.0~210bar) (Pilot Operated Reducing/Relieving)	

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

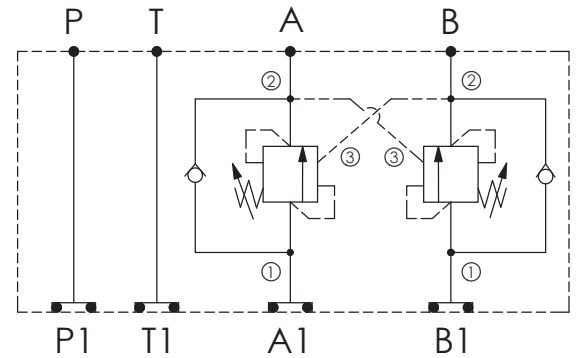
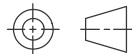
Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03CDW-X-Y-Z 02**
 Stack Height : 40.0mm



UNIT:mm



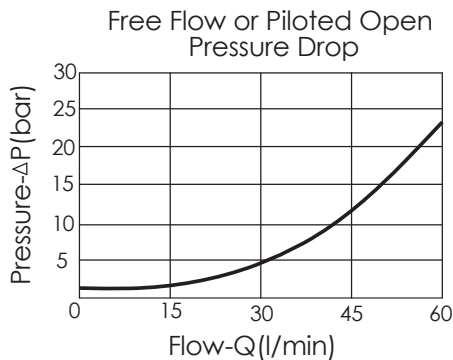
TECHNICAL DATA

Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 40 l/min

Cartridge Valve:
 Refer to CB11A-X-Y-Z
 * Refer to Winner Cartridge Valves Catalog.

Aluminum	0.45 kg(WITHOUT VALVES) 0.85 kg(INCLUDE VALVES)
Ductile Iron	1.3 kg(WITHOUT VALVES) 1.7 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 (3:1 , 280bar)
CB4J	CB11A34JL (4.5:1 , 350bar)
CB0J	CB11A30JL (10:1 , 350bar)

Y SELECTION FOR B PORT CONTROL

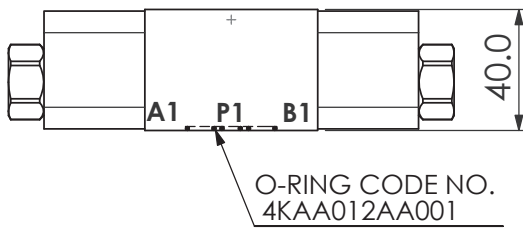
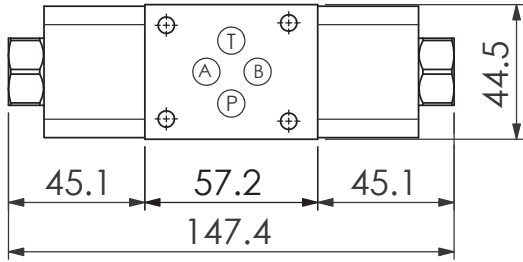
11A3	CAVITY ONLY(WITHOUT VALVE)
CB3H	CB11A33HL (3:1 , 280bar)
CB4J	CB11A34JL (4.5:1 , 350bar)
CB0J	CB11A30JL (10:1 , 350bar)

Z BODY MATERIAL

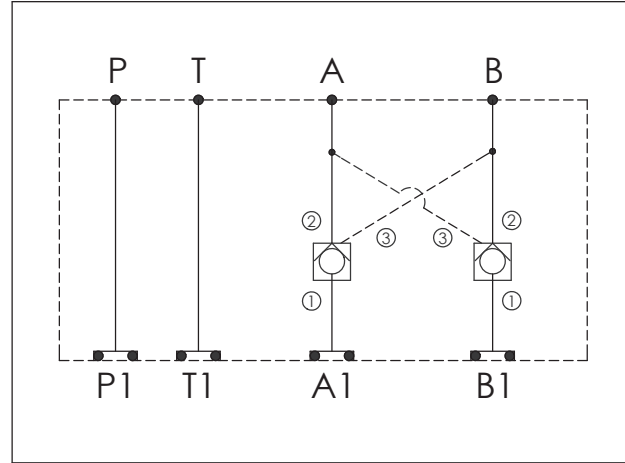
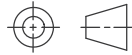
A	HIGH-STRENGTH ALUMINUM
S	DUCTILE IRON

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03CDW-X-Y-Z 02**
 Stack Height : 40.0mm



UNIT:mm



TECHNICAL DATA

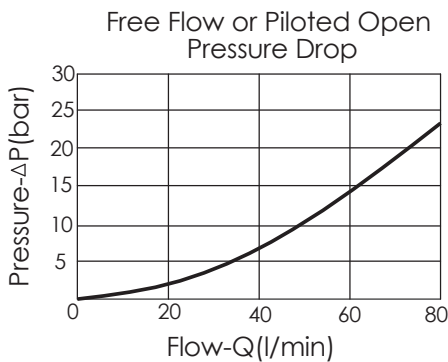
Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar

Rated flow: 40 l/min

Cartridge Valve:
 Refer to CO11A-X-Y-Z
 * Refer to Winner Cartridge Valves Catalog.

Aluminum	0.45 kg(WITHOUT VALVES) 0.71 kg(INCLUDE VALVES)
Ductile Iron	1.3 kg(WITHOUT VALVES) 1.56 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)
CO03	CO11A3003N (60LPM,0.3bar)
CO50	CO11A3050N (60LPM,5.0bar)

Y SELECTION FOR B PORT CONTROL

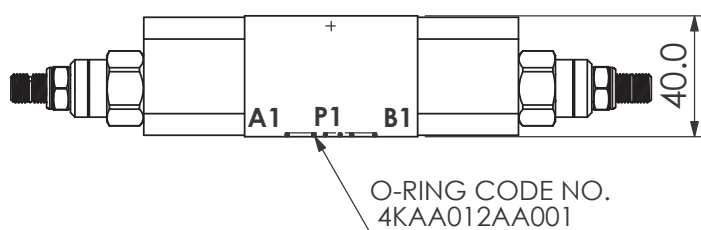
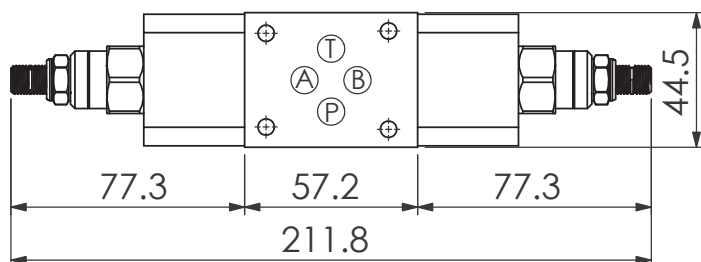
11A3	CAVITY ONLY(WITHOUT VALVE)
CO20	CO11A3020N (60LPM,2.0bar)
CO03	CO11A3003N (60LPM,0.3bar)
CO50	CO11A3050N (60LPM,5.0bar)

Z BODY MATERIAL

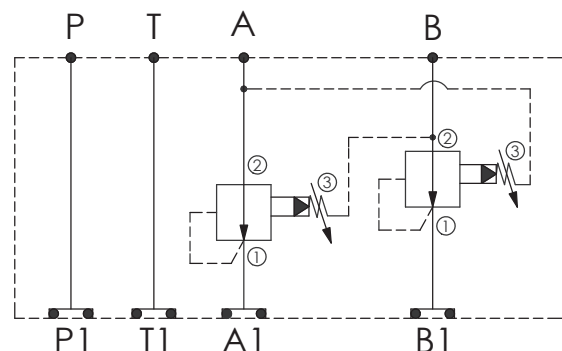
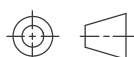
A	HIGH-STRENGTH ALUMINUM
S	DUCTILE IRON

ISO 03 SANDWICH MANIFOLD

Ordering Code: MH03CDW-X-Y-Z 02
Stack Height : 40.0mm



UNIT:mm



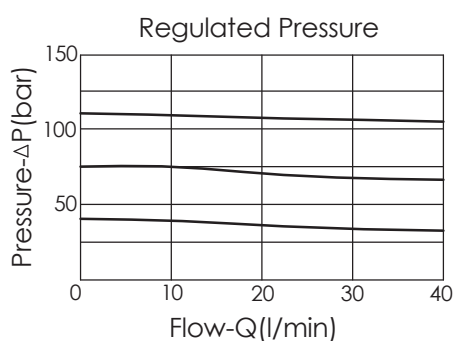
TECHNICAL DATA

Aluminum Body Pressure Rating:	250 bar
Ductile Iron Body Pressure Rating:	350 bar
Rated flow:	40 l/min

Cartridge Valve:
Refer to PB11A-X-Y-Z
* Refer to Winner Cartridge Valves Catalog.

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

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



X SELECTION FOR A PORT CONTROL

11A3	CAVITY ONLY(WITHOUT VALVE)
PBOA	PB11A30AL (40LPM ,7-210bar)

Y SELECTION FOR B PORT CONTROL

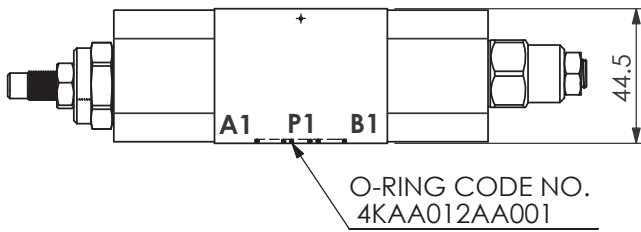
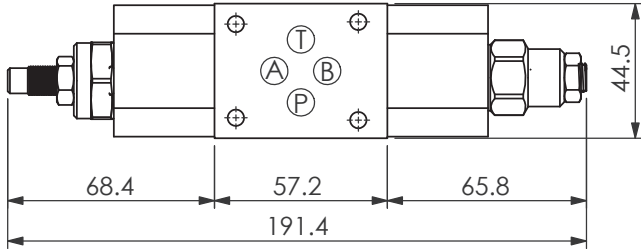
11A3	CAVITY ONLY(WITHOUT VALVE)
PBOA	PB11A30AL (40LPM ,7-210bar)

Z BODY MATERIAL

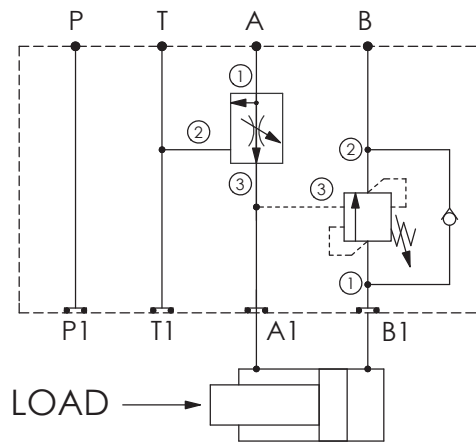
A	HIGH-STRENGTH ALUMINUM
S	DUCTILE IRON

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03CFW-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 l/min
 Cartridge Valve:
 Refer to FR10W-X-Y-Z
 CB11A-X-Y-Z
 * Refer to Winner Cartridge Valves Catalog.

Aluminum	0.5 kg(WITHOUT VALVES) 0.8 kg(INCLUDE VALVES)
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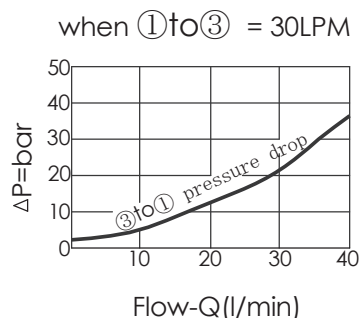
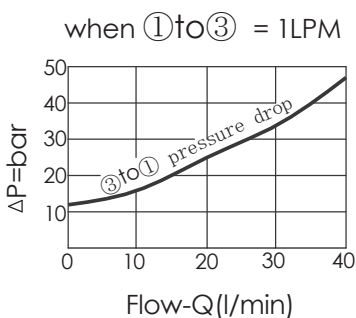
* If you need the special specification. Please contact us.

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)

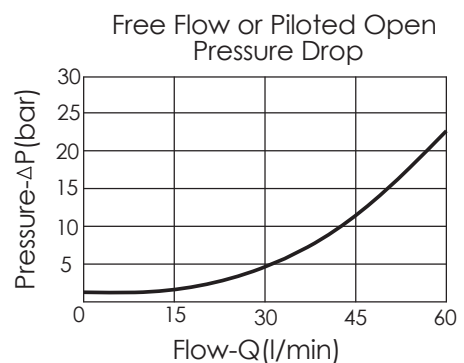
X	SELECTION FOR A PORT CONTROL
10W3	CAVITY ONLY(WITHOUT VALVE)
FR3L	FR10W33NL (38LPM,240bar)

Z	BODY MATERIAL
A	HIGH-STRENGTH ALUMINUM

Ordering Code: **FR10W33NL**

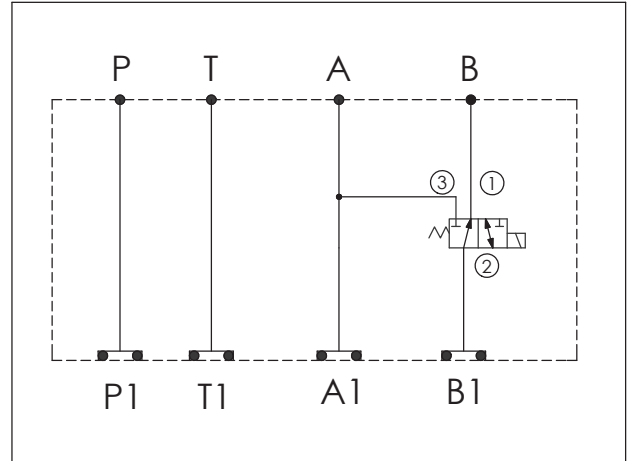
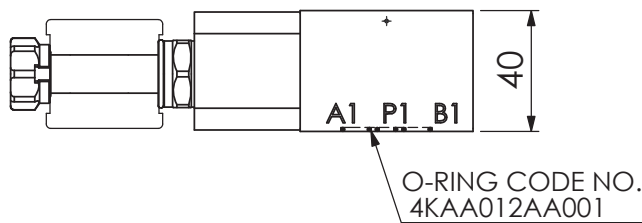
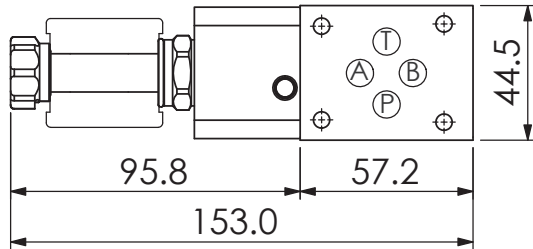


Ordering Code: **CB11A33HL**



ISO 03 SANDWICH MANIFOLD

Ordering Code: MH03DBE-X-Y-Z 02
Stack Height : 40.0mm



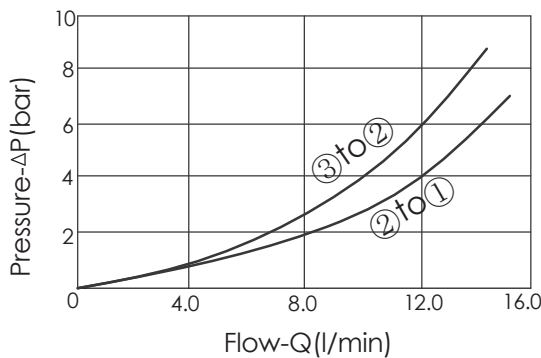
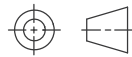
TECHNICAL DATA

Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 15 l/min

Cartridge Valve:
 Refer to ES08W-X-Y-Z
 * Refer to Winner Cartridge Valves Catalog.

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

UNIT:mm



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

X	SELECTION FOR A PORT CONTROL
N	WITHOUT PORT

Y	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)

Z	BODY MATERIAL
A	HIGH-STRENGTH ALUMINUM

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

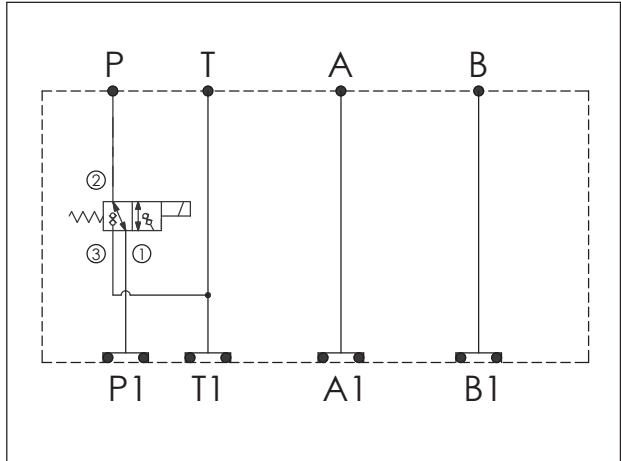
ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03DPE-X-Y-Z 01**

Stack Height : 44.5mm

O-RING CODE NO.
4KAA012AA001

UNIT:mm



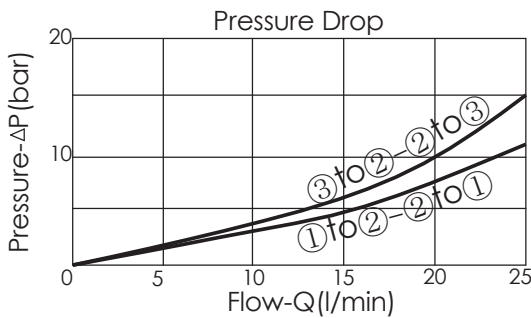
TECHNICAL DATA

Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 25 l/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)

* 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)	

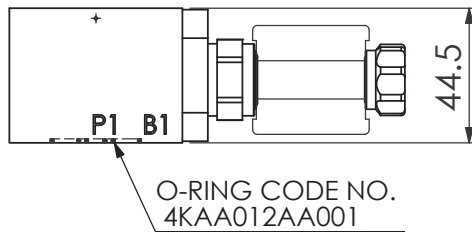
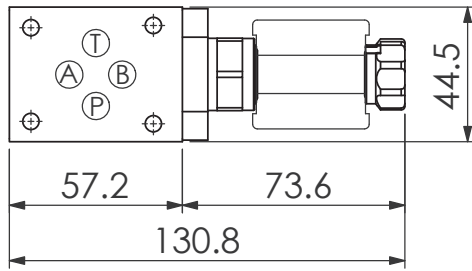
COIL MUST BE ORDERED SEPARATELY (REFER TO EC-16B-X-Y-Z)

Y	SELECTION FOR G PORT	
N	WITHOUT PORT	

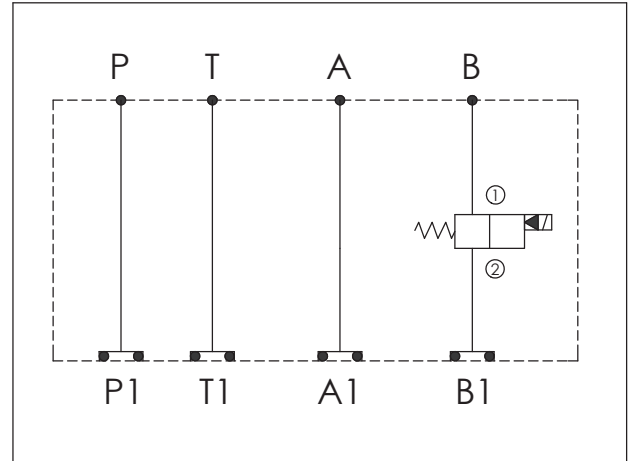
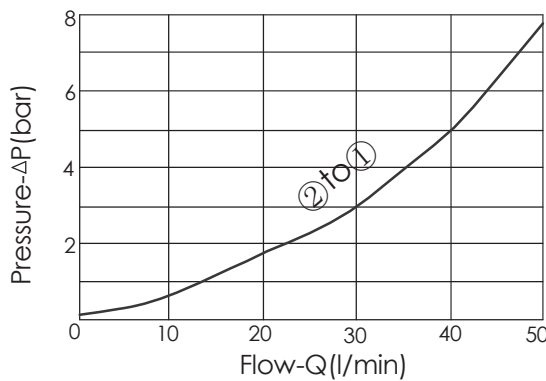
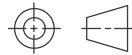
Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03EBW-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: 40 l/min

Cartridge Valve:
 Refer to EP08W-X-Y-Z
 * Refer to Winner Cartridge Valves Catalog.

Aluminum	0.3 kg(WITHOUT VALVES) 0.43 kg(INCLUDE VALVES, WITHOUT COIL)
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* If you need the special specification. Please contact us.

X	SELECTION FOR A PORT CONTROL	
N	WITHOUT PORT	

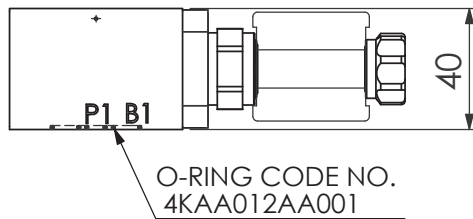
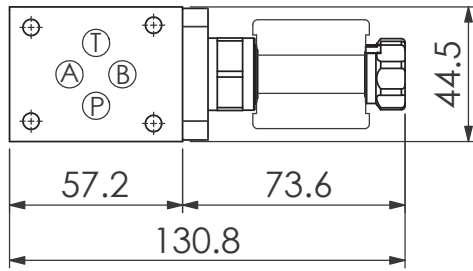
Y	SELECTION FOR B PORT CONTROL (REFER TO EP08W-X-Y-Z)	
08W2	CAVITY ONLY(WITHOUT VALVE)	
EP01	EP08W2A01N05 , 40LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	
EP02	EP08W2A02N05 , 40LPM,350bar (NORMALLY OPEN,WITHOUT COIL)	
EP01M	EP08W2A01M05 , 40LPM,350bar(NORMALLY CLOSED WITH KNOB STYLE MANUAL OVERRIDE,WITHOUT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

Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	

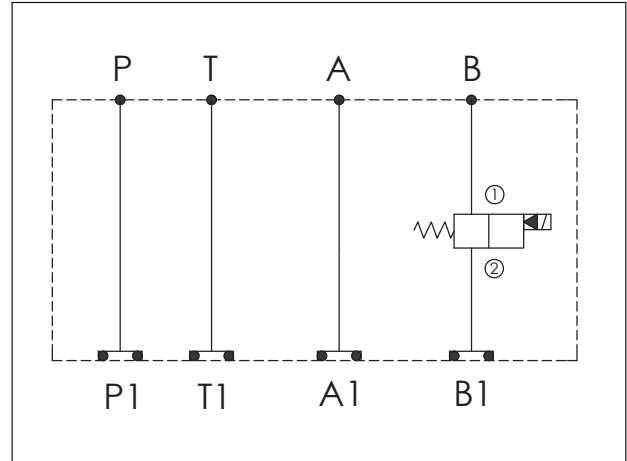
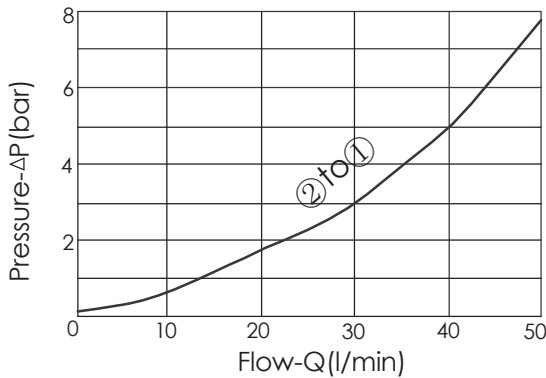
COIL MUST BE ORDERED SEPARATELY (REFER TO EC-04W-X-Y-Z)

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03EBW-X-Y-Z 02**
 Stack Height : 40.0mm



UNIT:mm



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
 * Refer to Winner Cartridge Valve Catalog.

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

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

X	SELECTION FOR A PORT CONTROL	
N	WITHOUT PORT	

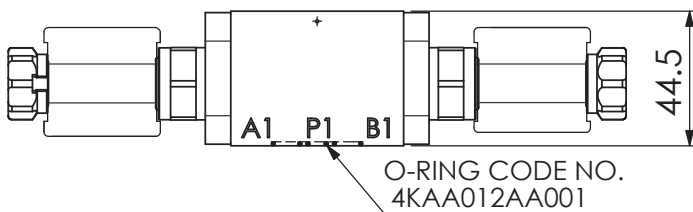
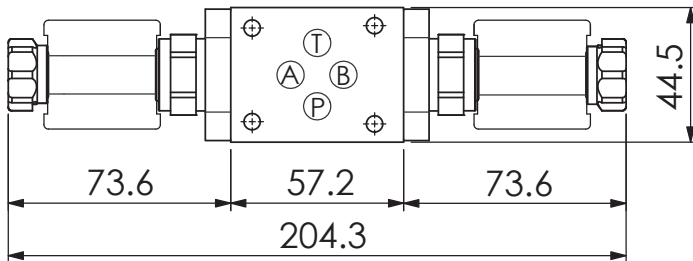
Y	SELECTION FOR B PORT CONTROL (REFER TO EP08W-X-Y-Z)	
08W2	CAVITY ONLY(WITHOUT VALVE)	
EP01	EP08W2A01N05 , 40LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	
EP02	EP08W2A02N05 , 40LPM,350bar (NORMALLY OPEN,WITHOUT COIL)	
EP01M	EP08W2A01M05 , 40LPM,350bar(NORMALLY CLOSED WITH KNOB STYLE MANUAL OVERRIDE,WITHOUT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

Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	

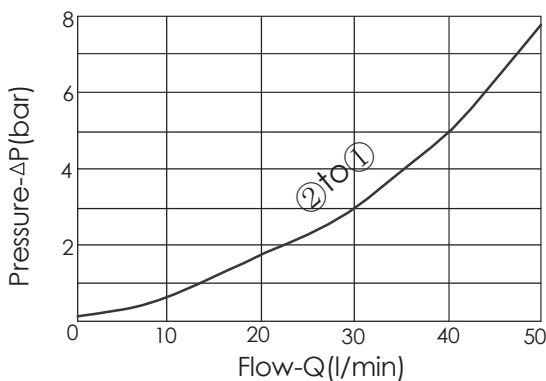
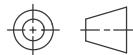
COIL MUST BE ORDERED SEPARATELY (REFER TO EC-04W-X-Y-Z)

ISO 03 SANDWICH MANIFOLD

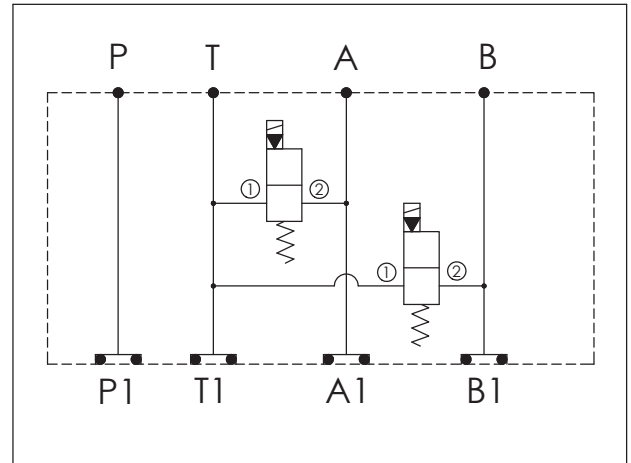
Ordering Code: **MH03EDT-X-Y-Z 01** \$ 53.80
 Stack Height : 44.5mm



UNIT:mm



Y	SELECTION FOR B 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)		



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	0.33 kg(WITHOUT VALVES) 0.6 kg(INCLUDE VALVES ,WITHOUT COIL)
Ductile Iron	0.94 kg(WITHOUT VALVES) 1.2 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-X-Y-Z)

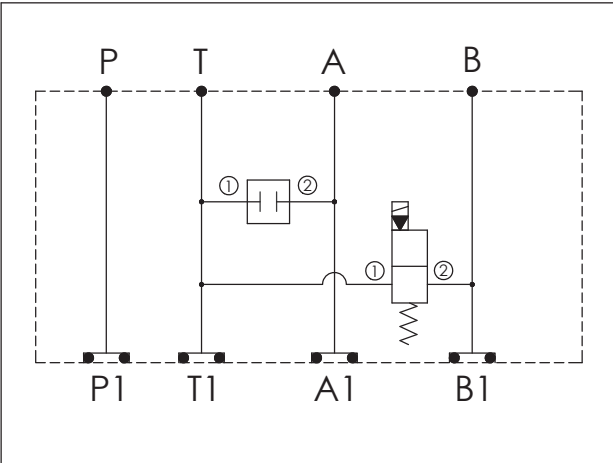
Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

ISO 03 SANDWICH MANIFOLD

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

Stack Height : 44.5mm

UNIT:mm

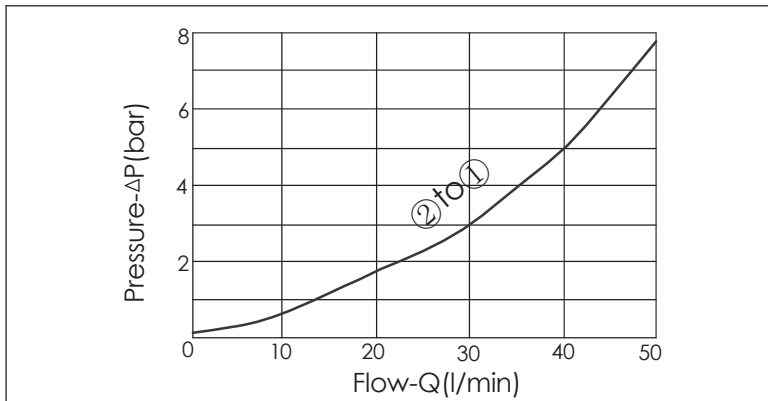


TECHNICAL DATA

Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 40 l/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)

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



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

Y	SELECTION FOR B 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)

Z	BODY MATERIAL
A	HIGH-STRENGTH ALUMINUM
S	DUCTILE IRON

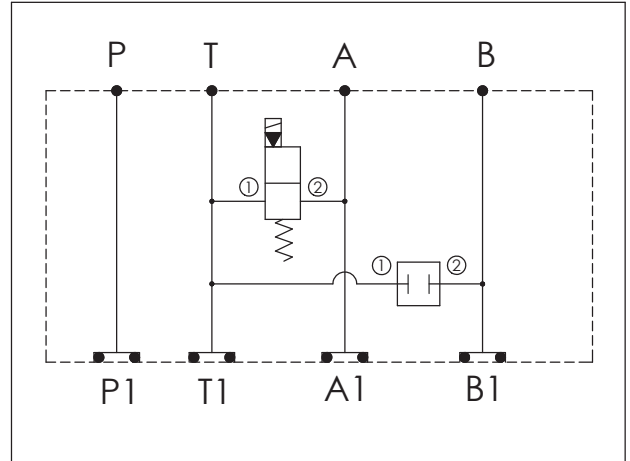
COIL MUST BE ORDERED SEPARATELY (REFER TO EC-04W-X-Y-Z)

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03EDT-X-Y-Z 01**
 Stack Height : 44.5mm

O-RING CODE NO.
4KAA012AA001

UNIT:mm

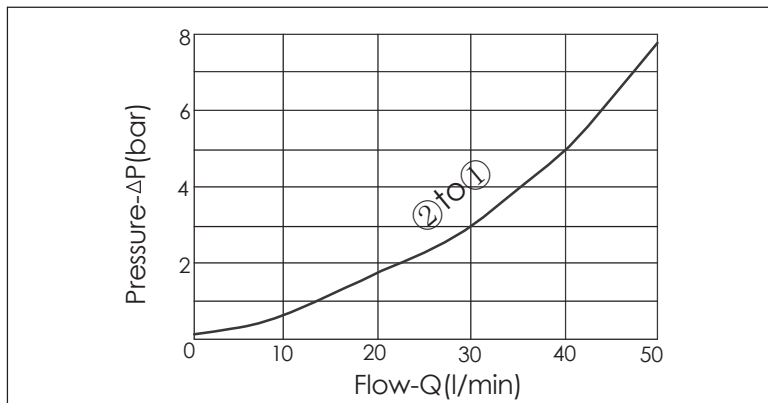


TECHNICAL DATA

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
 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.



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

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)	

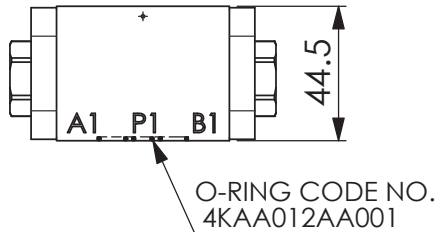
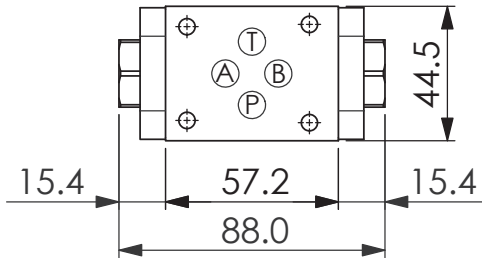
COIL MUST BE ORDERED SEPARATELY (REFER TO EC-04W-X-Y-Z)

Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

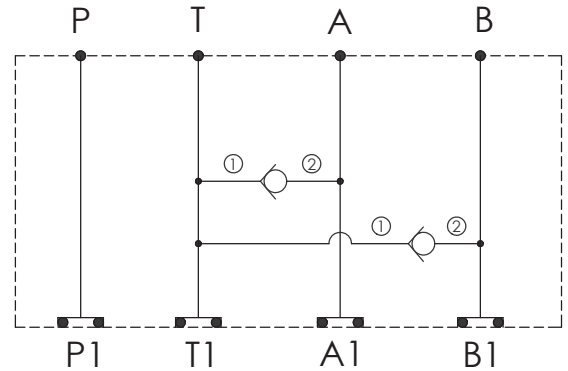
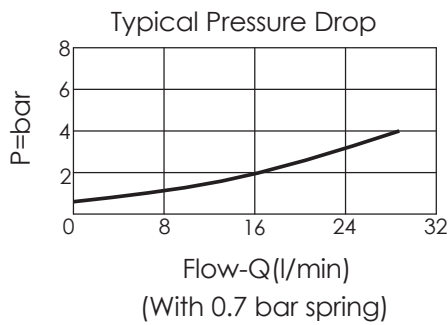
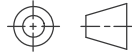
ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03EDT-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: 30 l/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)

* 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)

Y SELECTION FOR B PORT CONTROL

08W2	CAVITY ONLY(WITHOUT VALVE)
CV03	CV08W2003N (30LPM,0.3bar)

Z BODY MATERIAL

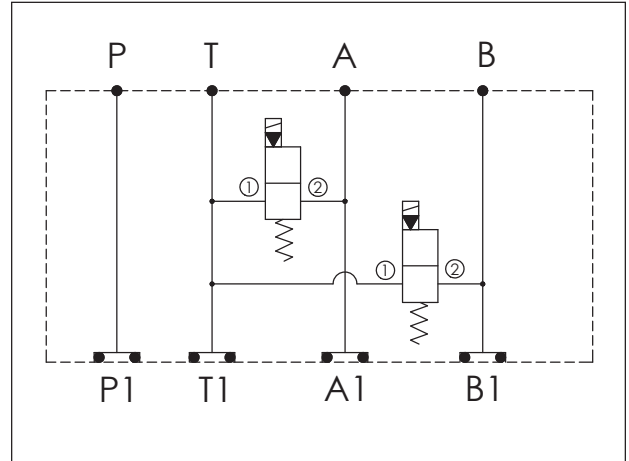
A	HIGH-STRENGTH ALUMINUM
S	DUCTILE IRON

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03EDT-X-Y-Z 02**

Stack Height : 40.0mm

UNIT:mm

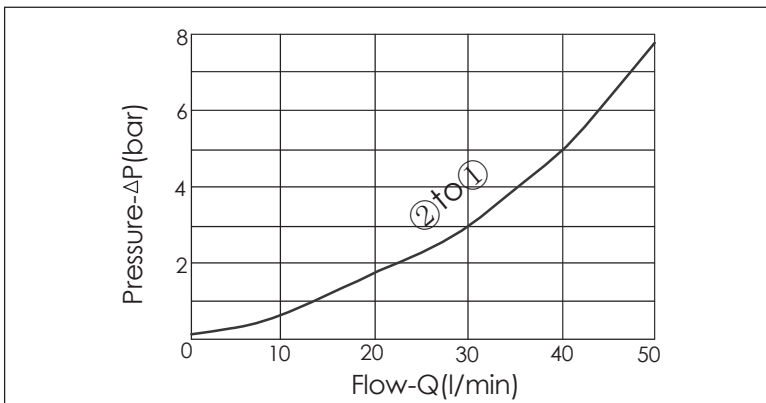


TECHNICAL DATA

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.



Y	SELECTION FOR B PORT CONTROL (REFER TO EP08W-X-Y-Z)
08W2	CAVITY ONLY(WITHOUT VALVE)
EP01	EP08W2A01M05 , 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)

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)

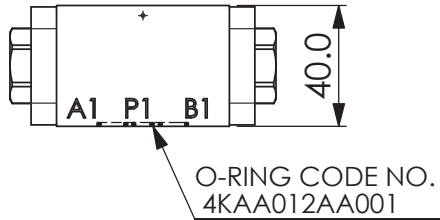
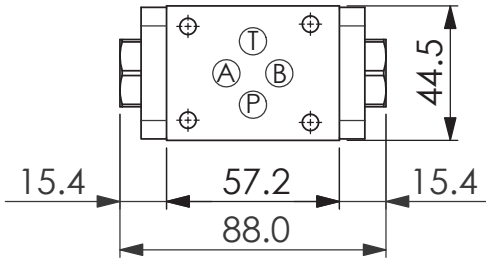
COIL MUST BE ORDERED SEPARATELY (REFER TO EC-04W-X-Y-Z)

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

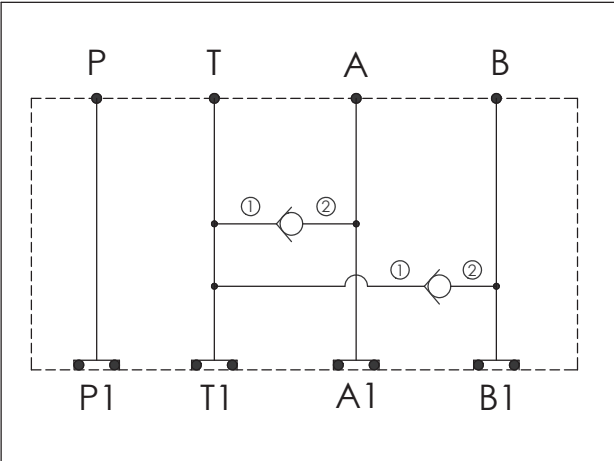
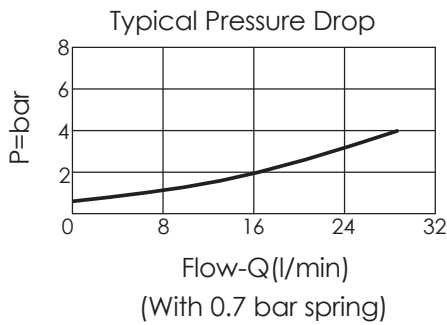
Z	BODY MATERIAL
A	HIGH-STRENGTH ALUMINUM

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03EDT-X-Y-Z 02**
 Stack Height : 40.0mm



UNIT:mm



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.

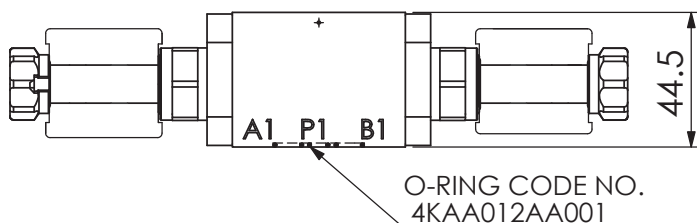
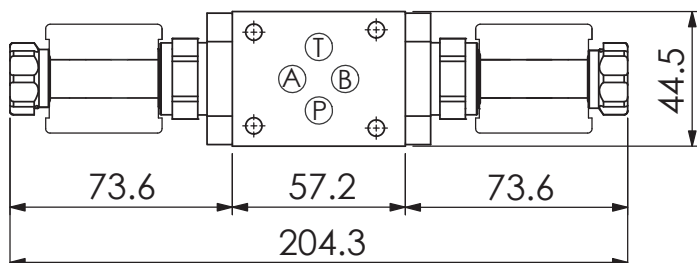
Y	SELECTION FOR B PORT CONTROL	
08W2	CAVITY ONLY(WITHOUT VALVE)	
CV03	CV08W2003N (30LPM,0.3bar)	

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

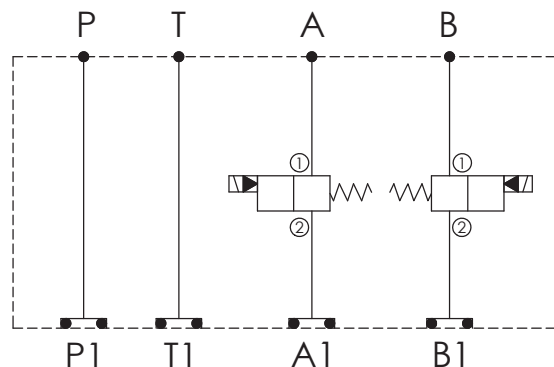
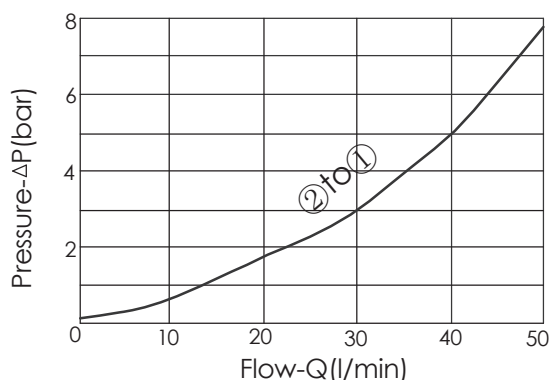
Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03EDW-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: 40 l/min

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

* 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)

* 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)

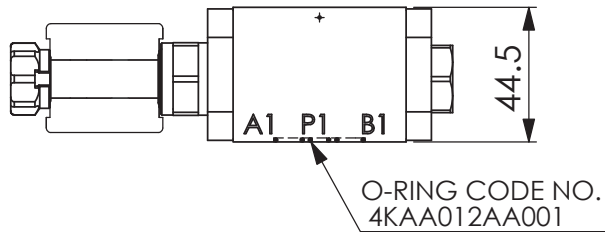
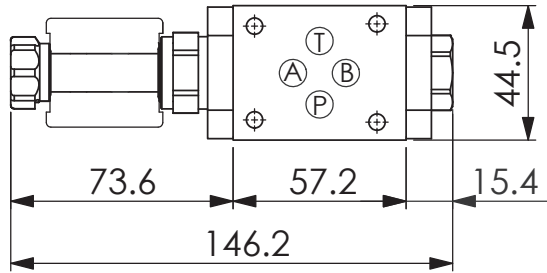
Y	SELECTION FOR B PORT CONTROL (REFER TO EP08W-X-Y-Z)	
08W2	CAVITY ONLY(WITHOUT VALVE)	
EP01	EP08W2A01N05 , 40LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	
EP02	EP08W2A02N05 , 40LPM,350bar (NORMALLY OPEN,WITHOUT COIL)	
EP01M	EP08W2A01M05 , 40LPM,350bar(NORMALLY CLOSED WITH KNOB STYLE MANUAL OVERRIDE,WITHOUT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

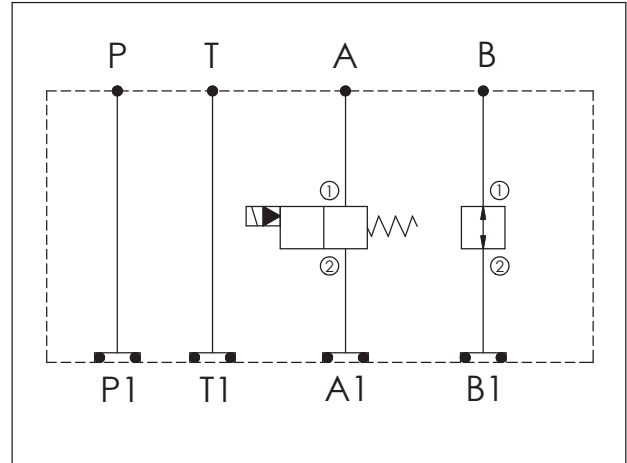
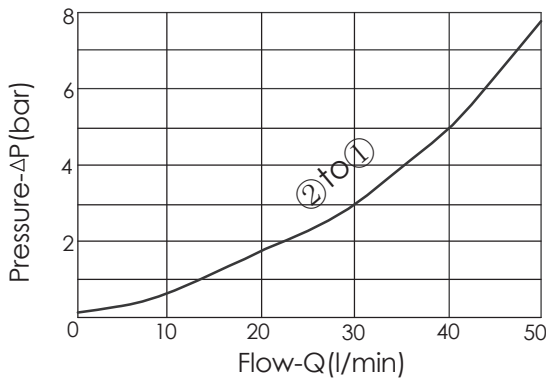
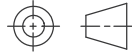
Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03EDW-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 l/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)

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

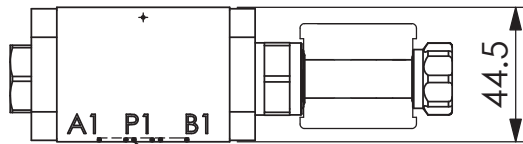
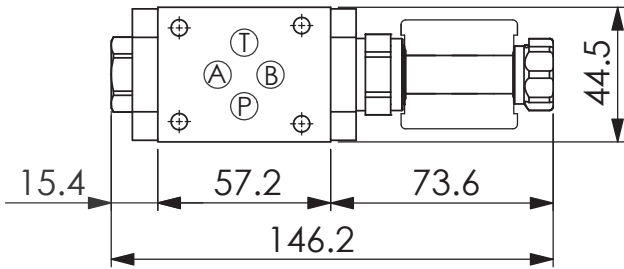
X	SELECTION FOR A PORT CONTROL (REFER TO EP08W-X-Y-Z)	
08W2	CAVITY ONLY(WITHOUT VALVE)	
EP01	EP08W2A01N05 , 40LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	
EP02	EP08W2A02N05 , 40LPM,350bar (NORMALLY OPEN,WITHOUT COIL)	
EP01M	EP08W2A01M05 , 40LPM,350bar(NORMALLY CLOSED WITH KNOB STYLE MANUAL OVERRIDE,WITHOUT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

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

Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

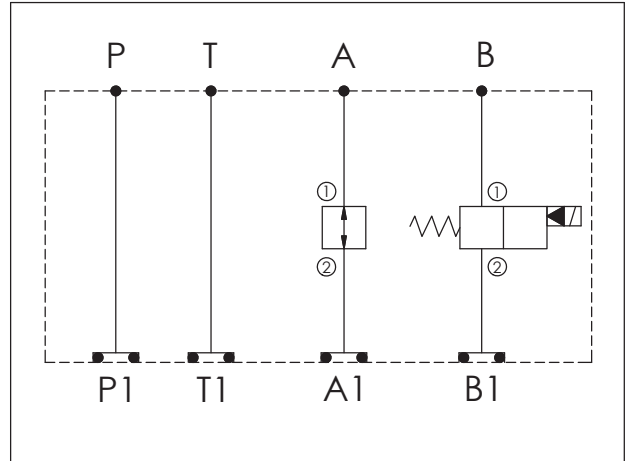
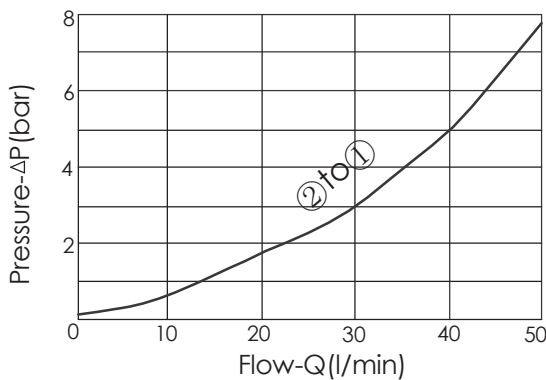
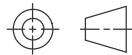
ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03EDW-X-Y-Z01**
 Stack Height : 44.5mm



O-RING CODE NO.
4KAA012AA001

UNIT:mm



TECHNICAL DATA

Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 40 l/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)

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

Y	SELECTION FOR B 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)

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

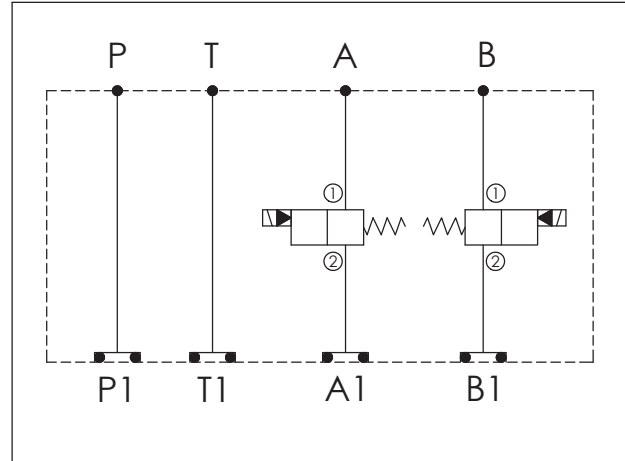
Z	BODY MATERIAL
A	HIGH-STRENGTH ALUMINUM
S	DUCTILE IRON

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03EDW-X-Y-Z02**

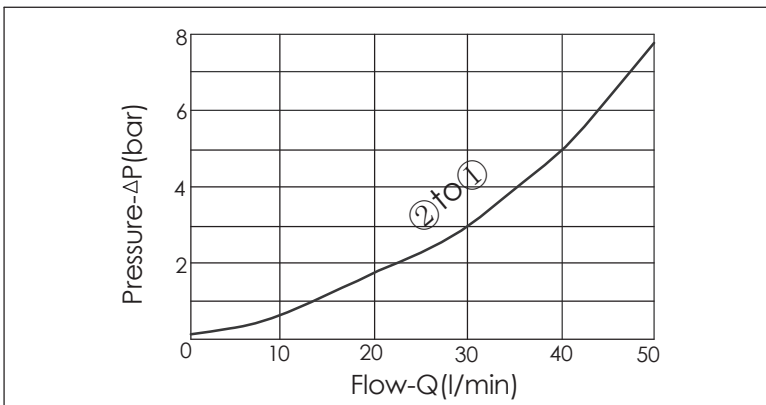
Stack Height : 40.0mm

UNIT:mm



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.



Y	SELECTION FOR B 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)		

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	
A	HIGH-STRENGTH ALUMINUM	

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03EFB-X-Y-Z02**

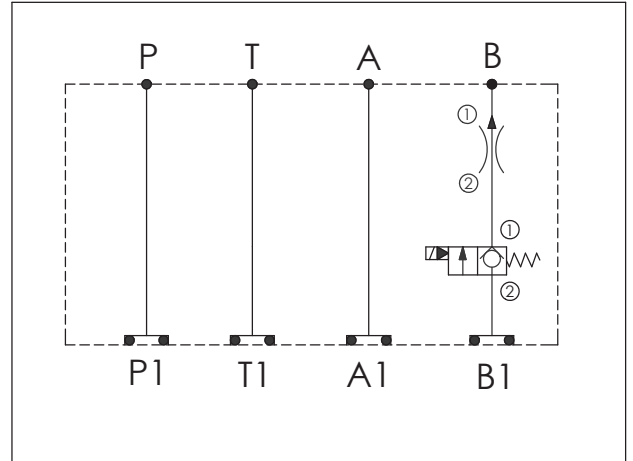
Stack Height : 40.0mm

Dimensions: 57.2, 102.7, 159.9, 44.5

Ports: P, T, A, B (top view); P1, T1, A1, B1 (bottom view)

Labels: FLOW CONTROL VALVE, SOLENOID VALVE, O-RING CODE NO. 4KAA012AA001

UNIT:mm



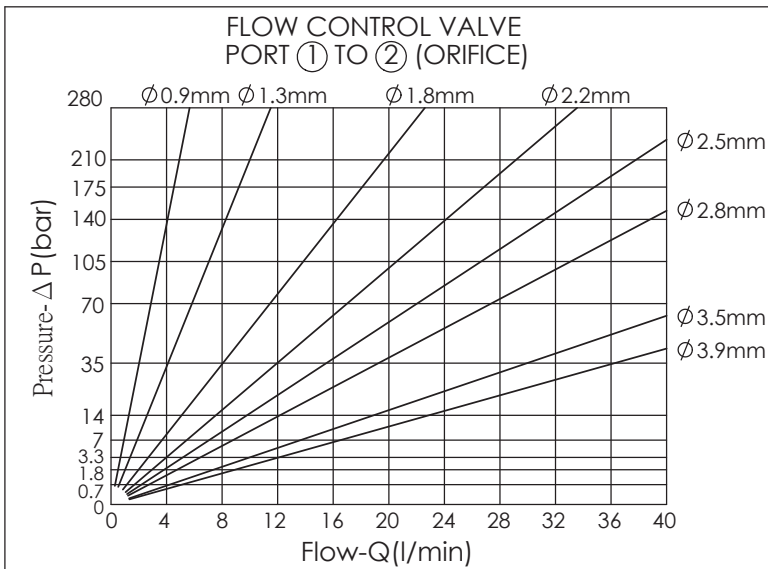
TECHNICAL DATA

Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 30 l/min

Cartridge Valve:
 Refer to EP08W-X-Y-Z
 * Refer to Winner Cartridge Valves Catalog.

Aluminum	0.4 kg(WITHOUT VALVES) 0.55 kg(INCLUDE VALVES, WITHOUT COIL)
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* If you need the special specification. Please contact us.



Y	SELECTION FOR SOLENOID VALVE (REFER TO EP08W-X-Y-Z)	
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 (REFER TO EC-04W-X-Y-Z)		

X	SELECTION FOR FLOW CONTROL VALVE PORT ② TO ① PRESSURE COMPENSATED		
N	CAVITY ONLY (WITHOUT FLOW CONTROL VALVE)		
0100	1 LPM	PORT ① TO ② ORIFICE Ø0.9mm	
0200	2 LPM	PORT ① TO ② ORIFICE Ø1.3mm	
0400	4 LPM	PORT ① TO ② ORIFICE Ø1.8mm	
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	
A	HIGH-STRENGTH ALUMINUM	

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03EPP-X-Y-Z 03**

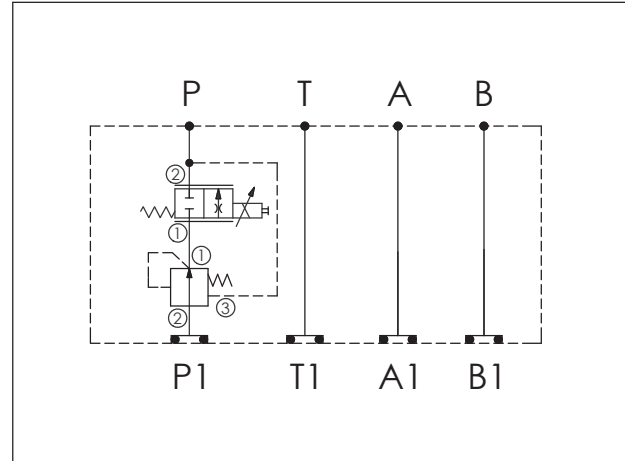
Stack Height : 63.0mm

Dimensions: 44.5mm height, 35.2mm, 57.2mm, 114.6mm, and 207.0mm total length.

Ports: P, T, A, B (top view); P1, T1, A1, B1 (bottom view).

O-RING CODE NO. 4KAA012AA001

UNIT:mm



TECHNICAL DATA

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

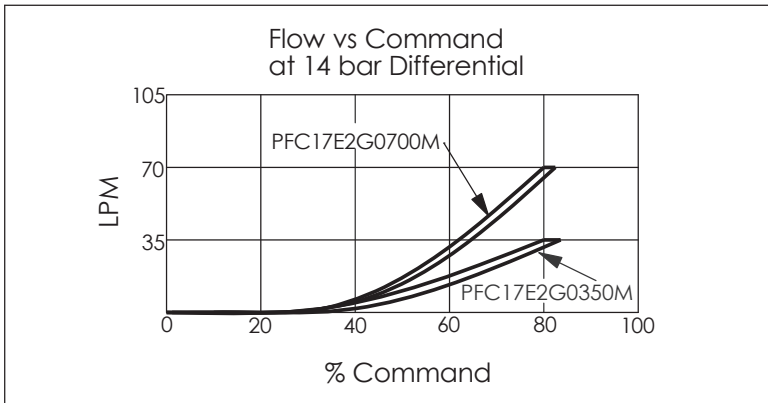
Rated flow: 40 l/min

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



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

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

Z	BODY MATERIAL
A	HIGH-STRENGTH ALUMINUM

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03EPP-X-Y-Z 03**

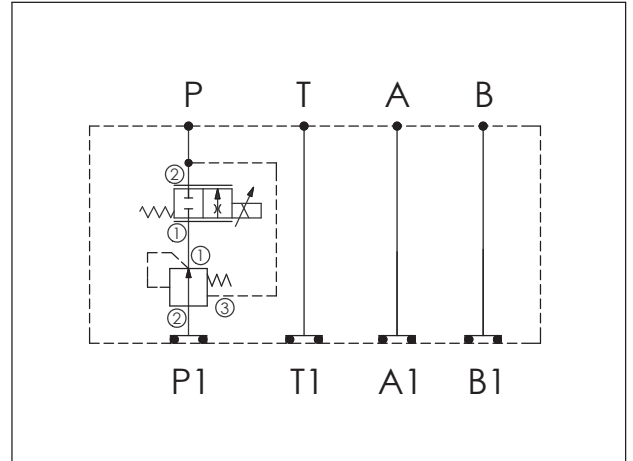
Stack Height : 63.0mm

Dimensions: 44.5mm height, 32.7mm, 57.2mm, 108.4mm, and 198.3mm total length.

Ports: P, T, A, B (top view); P1, T1, A1, B1 (bottom view).

O-RING CODE NO. 4KAA012AA001

UNIT:mm



TECHNICAL DATA

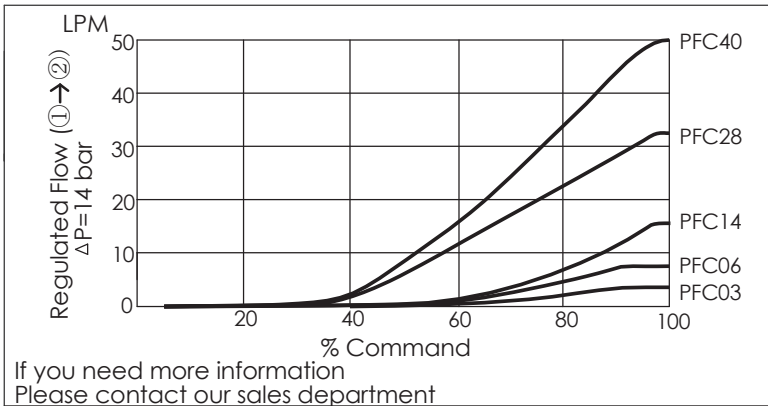
Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 40 l/min

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



Y	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)

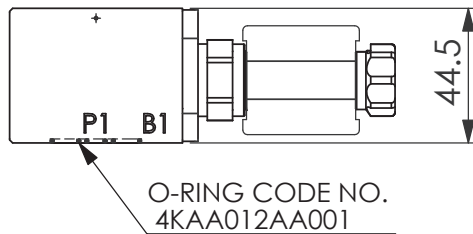
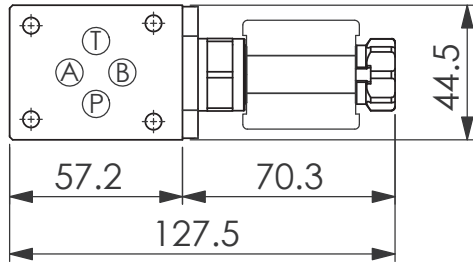
COIL MUST BE ORDERED SEPARATELY (REFER TO EC-19A-X-Y-Z)

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

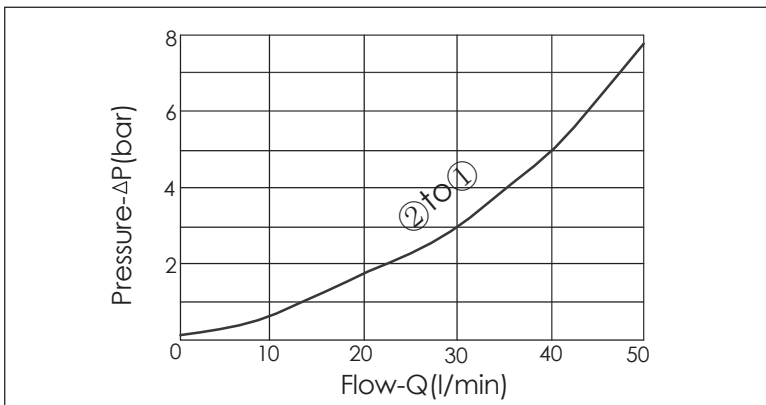
Z	BODY MATERIAL
A	HIGH-STRENGTH ALUMINUM

ISO 03 SANDWICH MANIFOLD

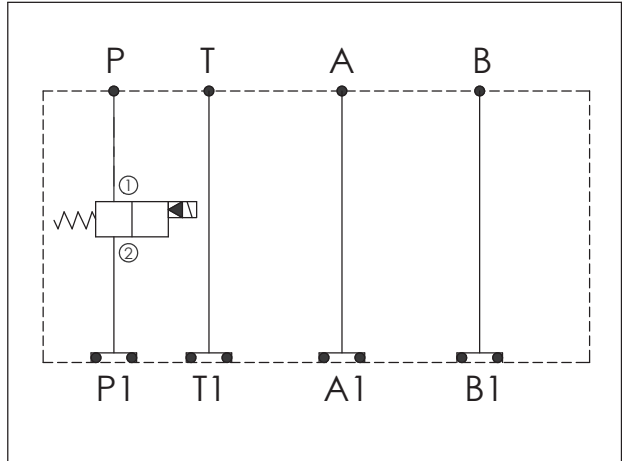
Ordering Code: **MH03EPW-X-Y-Z 01**
 Stack Height : 44.5mm



UNIT:mm



Y	SELECTION FOR G PORT	
N	WITHOUT PORT	



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
 * Refer to Winner Cartridge Valve Catalog.

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

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

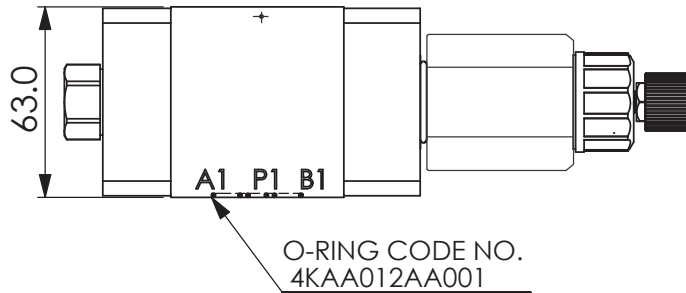
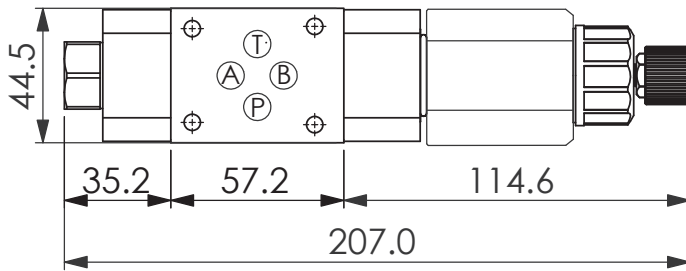
X	SELECTION FOR P PORT CONTROL (REFER TO EP08W-X-Y-Z)	
08W2	CAVITY ONLY(WITHOUT VALVE)	
EP01	EP08W2A01N05 , 40LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	
EP02	EP08W2A02N05 , 40LPM,350bar (NORMALLY OPEN,WITHOUT COIL)	
EP01M	EP08W2A01M05 , 40LPM,350bar(NORMALLY CLOSED WITH KNOB STYLE MANUAL OVERRIDE,WITHOUT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

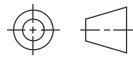
Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	

ISO 03 SANDWICH MANIFOLD

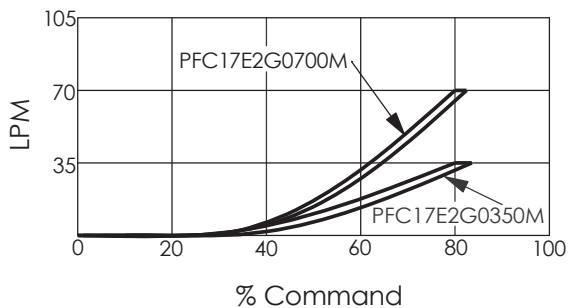
Ordering Code: **MH03ERW-X-Y-Z 03**
 Stack Height : 63.0mm



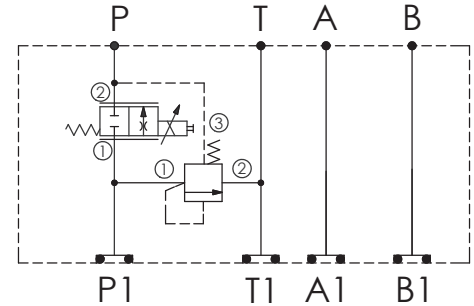
UNIT:mm



Flow vs Command at 14 bar Differential



Y	SELECTION FOR FLOW CONTROL VALVE (REFER TO PFC17E-X-Y-Z)
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: 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	BODY MATERIAL
A	HIGH-STRENGTH ALUMINUM

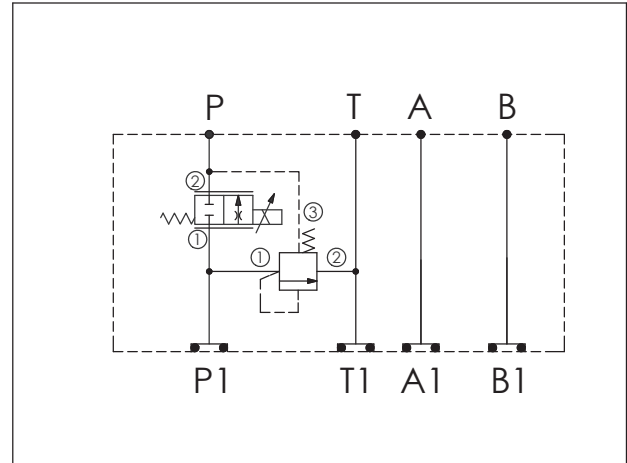
ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03ERW-X-Y-Z03**

Stack Height : 63.0mm

O-RING CODE NO.
4KAA012AA001

UNIT:mm



TECHNICAL DATA

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

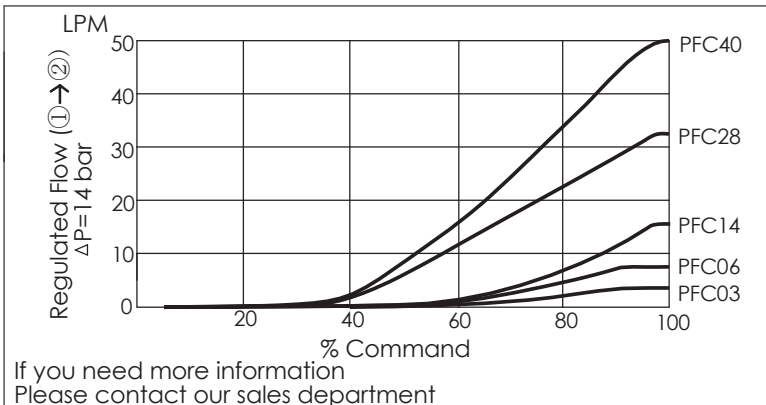
Rated flow: 40 l/min

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

* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.63 kg(WITHOUT VALVES) 1.2 kg(INCLUDE VALVES ,WITHOUT COIL)
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* If you need the special specification. Please contact us.



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

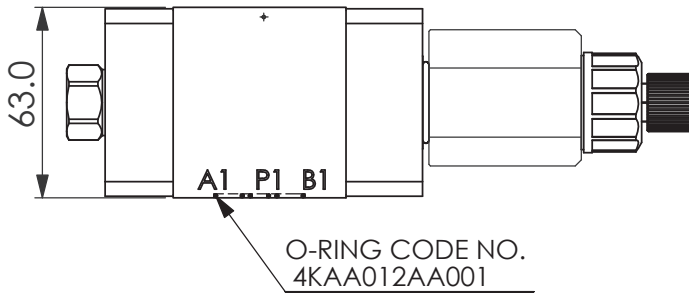
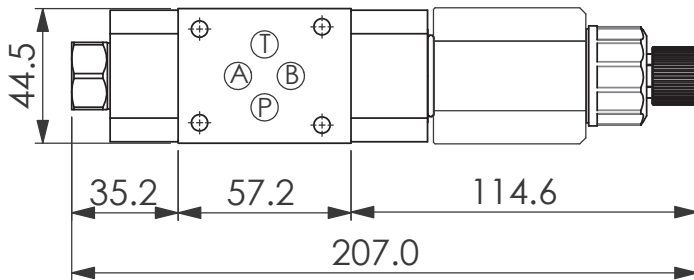
Y	SELECTION FOR FLOW CONTROL VALVE (REFER TO PFC13A-X-Y-Z)	
13A2	CAVITY ONLY(WITHOUT VALVE)	
PFC03	PFC13A2D0030N(0.3~3LPM)	
PFC06	PFC13A2D0060N(0.4~6LPM)	
PFC14	PFC13A2D0140N(0.6~14LPM)	
PFC28	PFC13A2D0280N(0.8~28LPM)	
PFC40	PFC13A2D0400N(1.0~40LPM)	

Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	

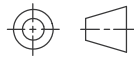
COIL MUST BE ORDERED SEPARATELY (REFER TO EC-19A-X-Y-Z)

ISO 03 SANDWICH MANIFOLD

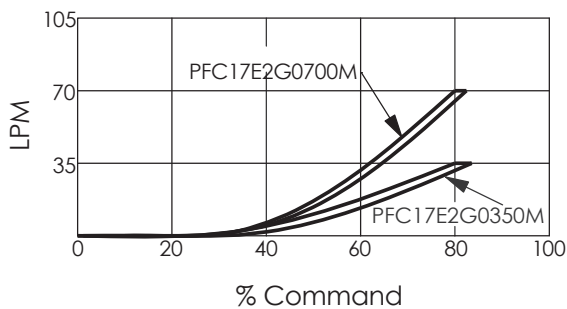
Ordering Code:	MH03ETP-X-Y-Z 03
Stack Height :	63.0mm



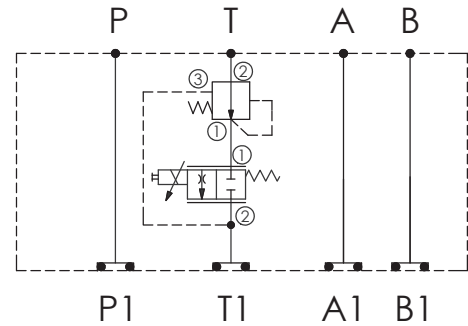
UNIT:mm



Flow vs Command at 14 bar Differential



Y	SELECTION FOR FLOW CONTROL VALVE (REFER TO PFC17E-X-Y-Z)
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:	40 l/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

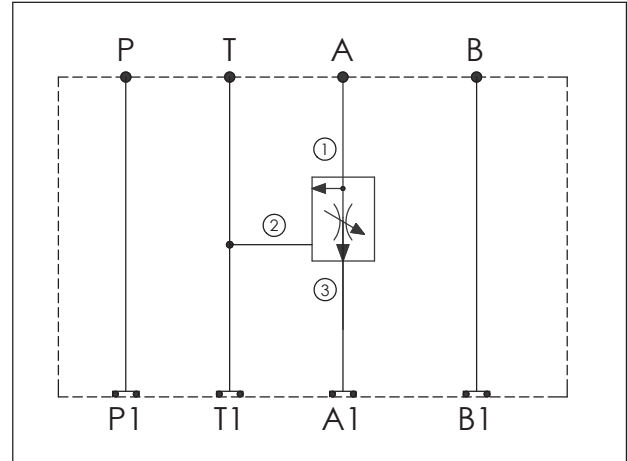
A HIGH-STRENGTH ALUMINUM

ISO 03 SANDWICH MANIFOLD

Ordering Code:

Stack Height : 44.5mm

UNIT:mm



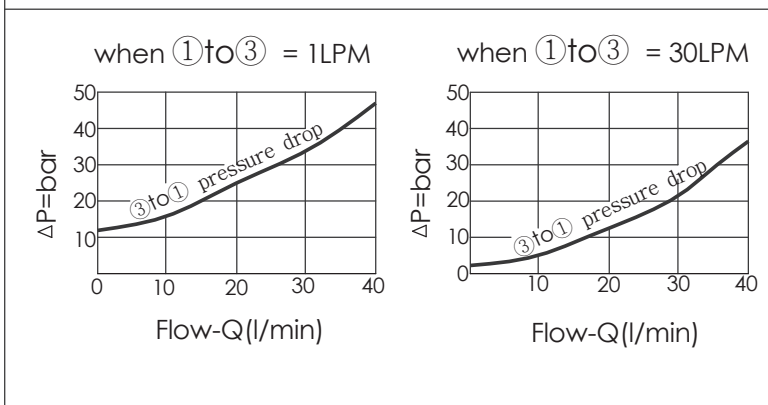
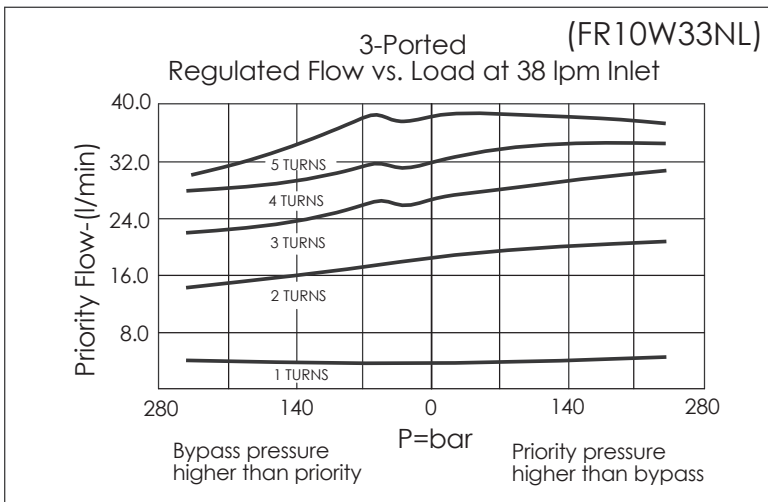
TECHNICAL DATA

Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 40 l/min

Cartridge Valve:
 Refer to FR10W-X-Y-Z
 * Refer to Winner Cartridge Valves Catalog.

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

* 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	

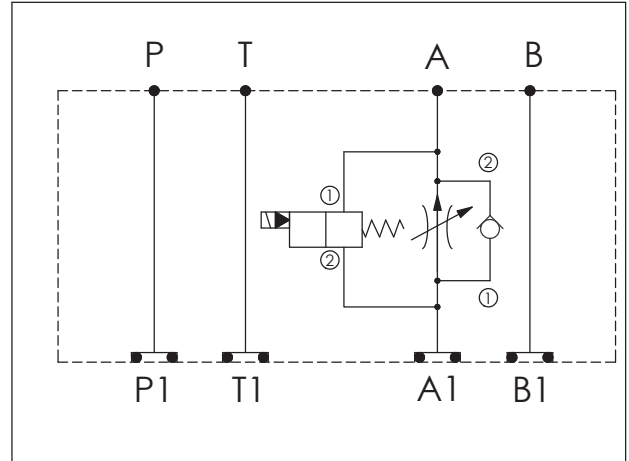
Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	

ISO 03 SANDWICH MANIFOLD

Ordering Code:	MH03FAE-X-Y-Z 01
Stack Height :	44.5mm

O-RING CODE NO.
4KAA012AA001

UNIT:mm



TECHNICAL DATA

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

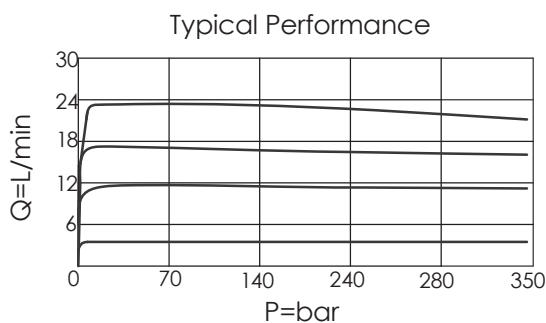
Rated flow: 23 l/min
 (Pressure Compensated)

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



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

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)	

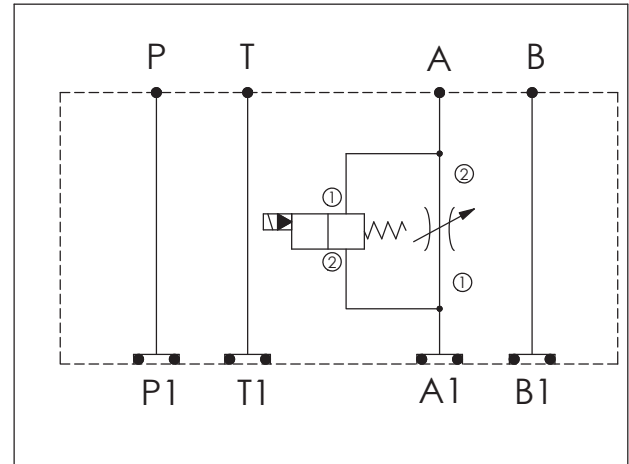
Z	BODY MATERIAL
A	HIGH-STRENGTH ALUMINUM

ISO 03 SANDWICH MANIFOLD

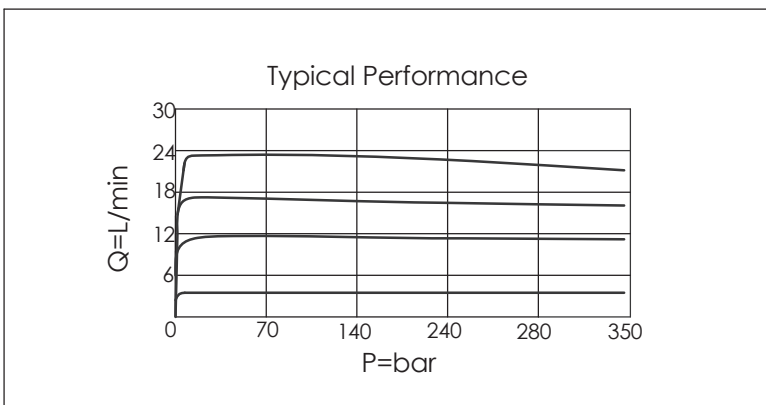
Ordering Code:	MH03FAE-X-Y-Z 01
Stack Height :	44.5mm

O-RING CODE NO.
4KAA012AA001

UNIT:mm



TECHNICAL DATA	
Aluminum Body Pressure Rating:	250 bar
Ductile Iron Body Pressure Rating:	350 bar
Rated flow:	40 l/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.	



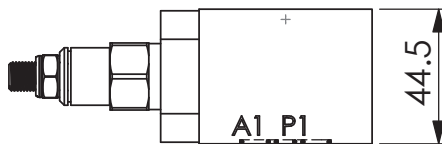
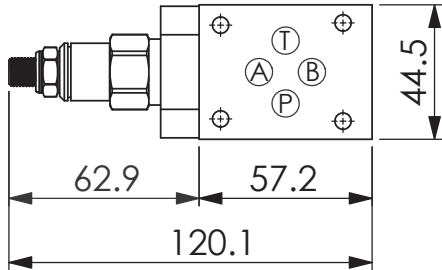
X	SELECTION FOR FLOW CONTROL	
13A2	CAVITY ONLY(WITHOUT VALVE)	
NV48	NV13A2048L(350bar)	

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)		

Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	

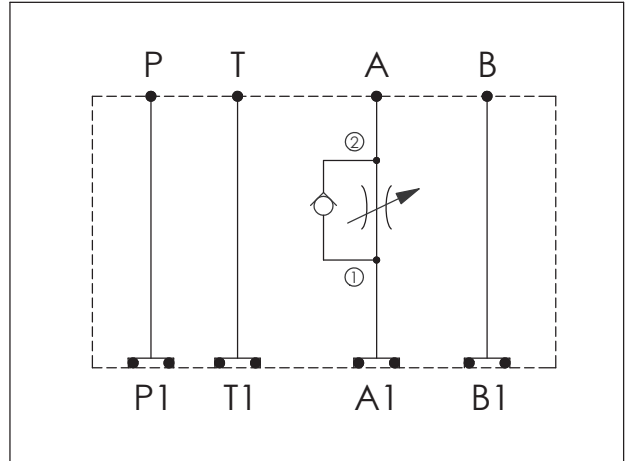
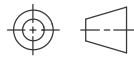
ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03FAO-X-Y-Z 01**
 Stack Height : 44.5mm



O-RING CODE NO.
4KAA012AA001

UNIT:mm



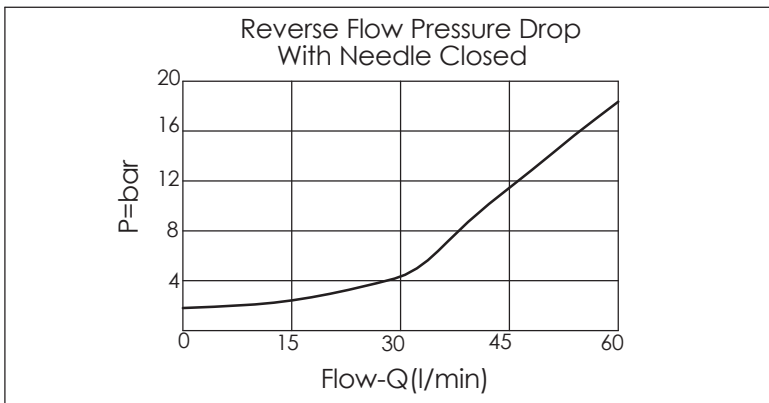
TECHNICAL DATA

Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 40 l/min

Cartridge Valve:
 Refer to NC13A-X-Y-Z
 * Refer to Winner Cartridge Valves Catalog.

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

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



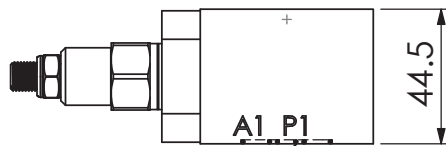
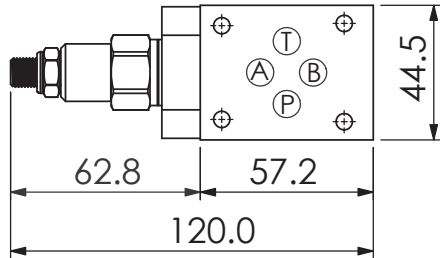
X	SELECTION FOR A PORT CONTROL	
13A2	CAVITY ONLY (WITHOUT VALVE)	
NCBA	NC13A21BAL (20LPM,0.3bar)	
NCBC	NC13A21BCL (20LPM,2.0bar)	

Y	SELECTION FOR B PORT CONTROL	
N	WITHOUT PORT	

Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	

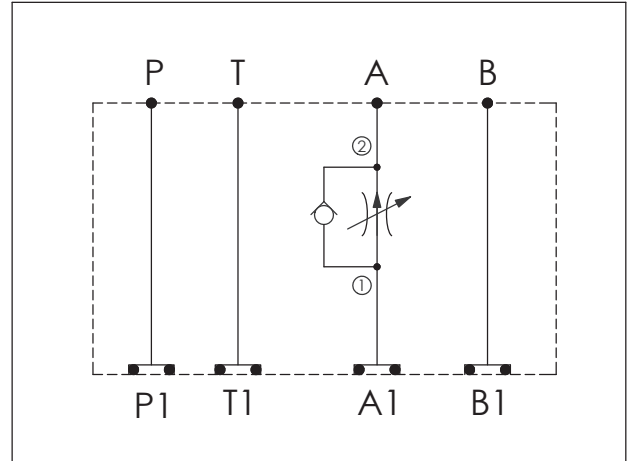
ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03FAO-X-Y-Z01**
 Stack Height : 44.5mm



O-RING CODE NO.
4KAA012AA001

UNIT:mm



TECHNICAL DATA

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating: 350 bar

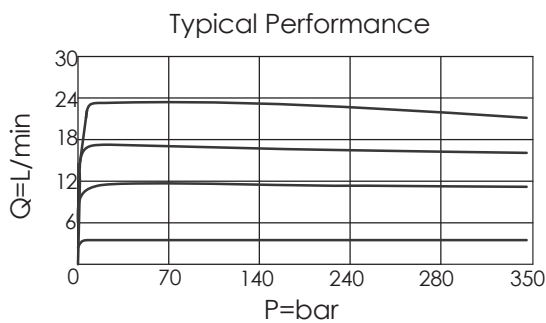
Rated flow: 23 l/min
(Pressure Compensated)

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

* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.35 kg(WITHOUT VALVE) 0.5 kg(INCLUDE VALVE)
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* If you need the special specification.
Please contact us.



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

A HIGH-STRENGTH ALUMINUM

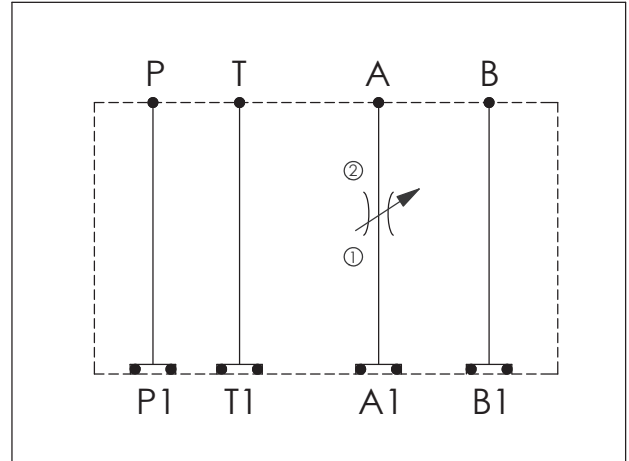
ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03FAO-X-Y-Z 01**

Stack Height : 44.5mm

O-RING CODE NO.
4KAA012AA001

UNIT:mm



TECHNICAL DATA

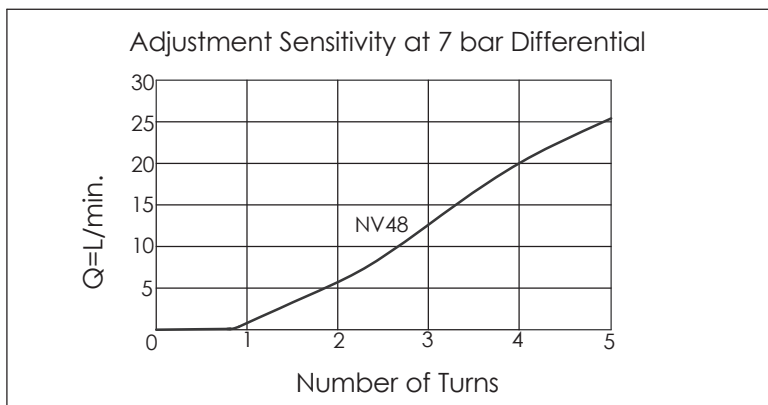
Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar

Rated flow: 40 l/min

Cartridge Valve:
 Refer to NV13A-X-Y-Z
 * Refer to Winner Cartridge Valves Catalog.

Aluminum	0.35 kg(WITHOUT VALVE) 0.5 kg(INCLUDE VALVE)
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* If you need the special specification. Please contact us.



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

Y	SELECTION FOR B PORT CONTROL	
N	WITHOUT PORT	

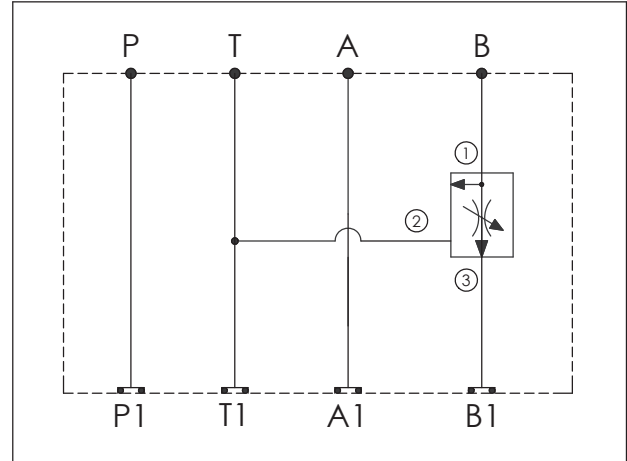
Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03FBB-X-Y-Z01**

Stack Height : 44.5mm

UNIT:mm



TECHNICAL DATA

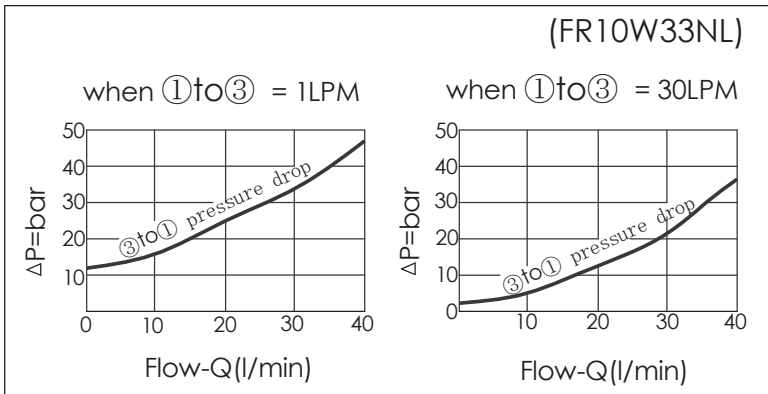
Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar

Rated flow: 40 l/min

Cartridge Valve:
 Refer to FR10W-X-Y-Z
 * Refer to Winner Cartridge Valves Catalog.

Aluminum	0.38 kg(WITHOUT VALVE) 0.52 kg(INCLUDE VALVE)
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* If you need the special specification. Please contact us.



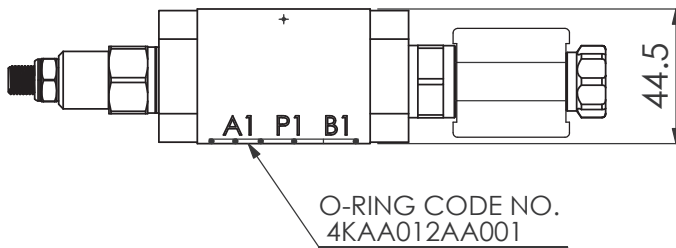
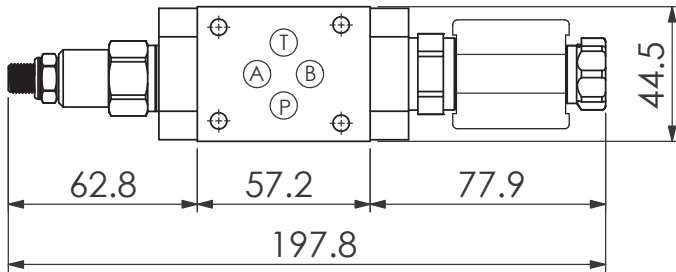
Y	SELECTION FOR B PORT CONTROL
10W3	CAVITY ONLY(WITHOUT VALVE)
FR3L	FR10W33NL (38LPM,240bar)

X	SELECTION FOR A PORT CONTROL
N	WITHOUT PORT

Z	BODY MATERIAL
A	HIGH-STRENGTH ALUMINUM

ISO 03 SANDWICH MANIFOLD

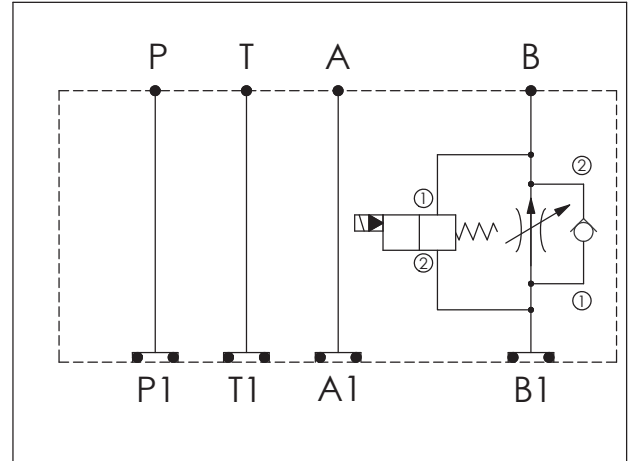
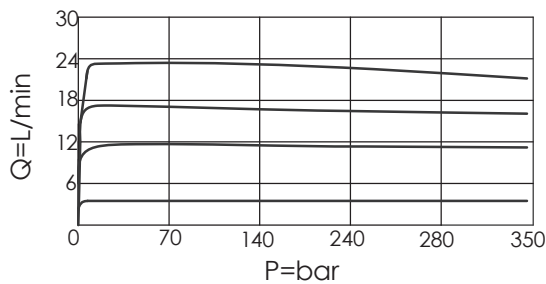
Ordering Code: MH03FBE-X-Y-Z01
Stack Height : 44.5mm



UNIT:mm



Typical Performance



TECHNICAL DATA

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating: 350 bar

Rated flow: 23 l/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)	

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)

Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	

ISO 03 SANDWICH MANIFOLD

Ordering Code:	MH03FBE-X-Y-Z01
Stack Height :	44.5mm

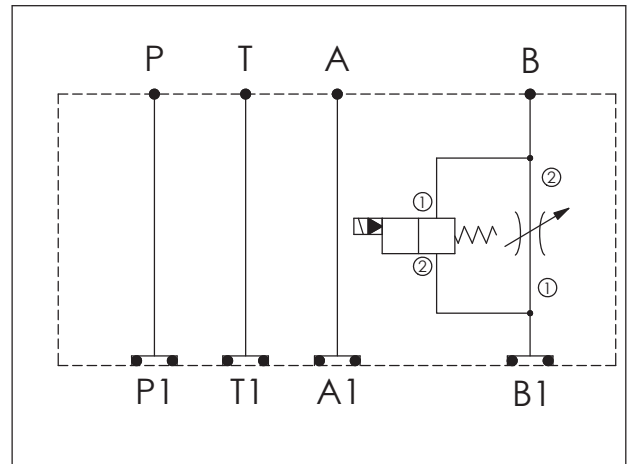
Dimensions: 62.8, 57.2, 77.9, 197.8, 44.5

Ports: P, T, A, B

Bottom view labels: A1, P1, B1

O-RING CODE NO. 4KAA012AA001

UNIT:mm



TECHNICAL DATA

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

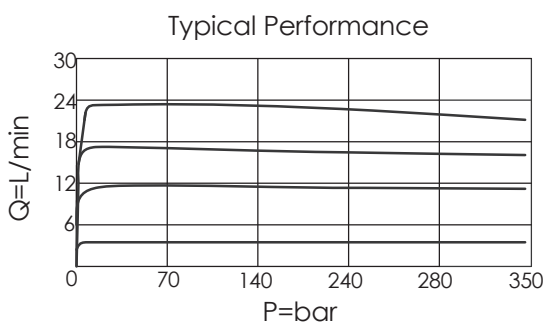
Rated flow: 40 l/min

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



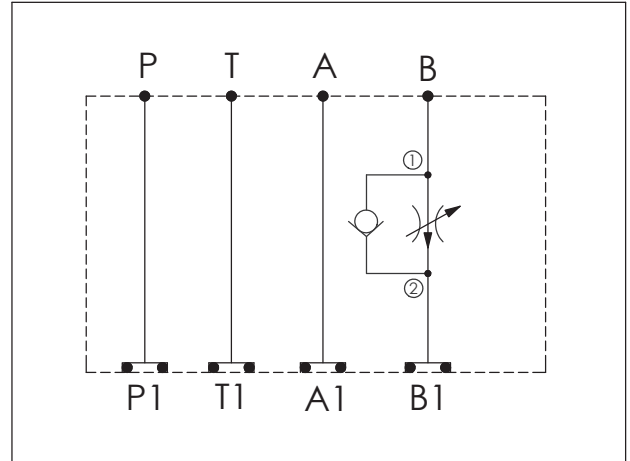
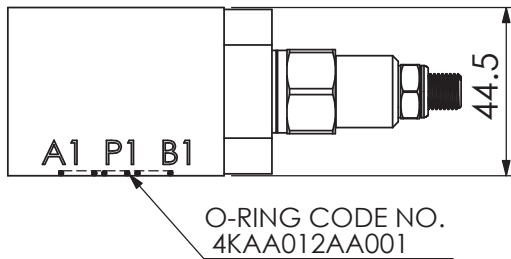
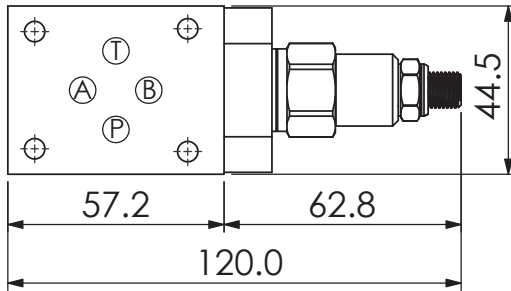
X	SELECTION FOR FLOW CONTROL	
13A2	CAVITY ONLY(WITHOUT VALVE)	
NV48	NV13A2048L(350bar)	

Y	SELECTION FOR SOLENOID 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)		

Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	

ISO 03 SANDWICH MANIFOLD

Ordering Code: MH03FBI-X-Y-Z 01
Stack Height : 44.5mm



TECHNICAL DATA

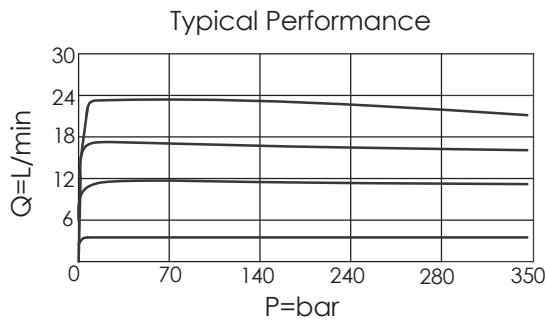
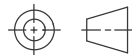
Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 23 l/min (Pressure Compensated)

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

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

* If you need the special specification. Please 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)	

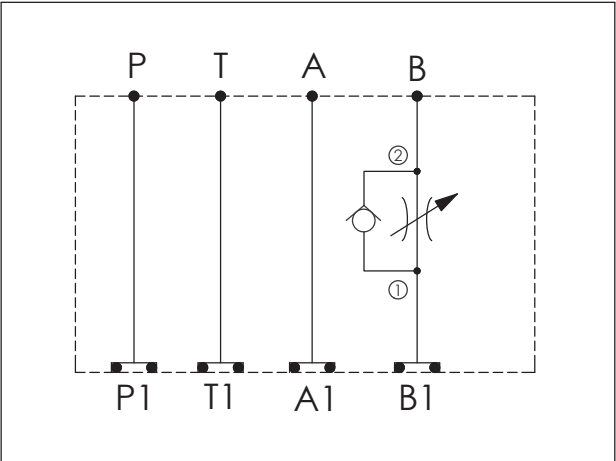
Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03FBO-X-Y-Z 01**

Stack Height : 44.5mm

UNIT:mm



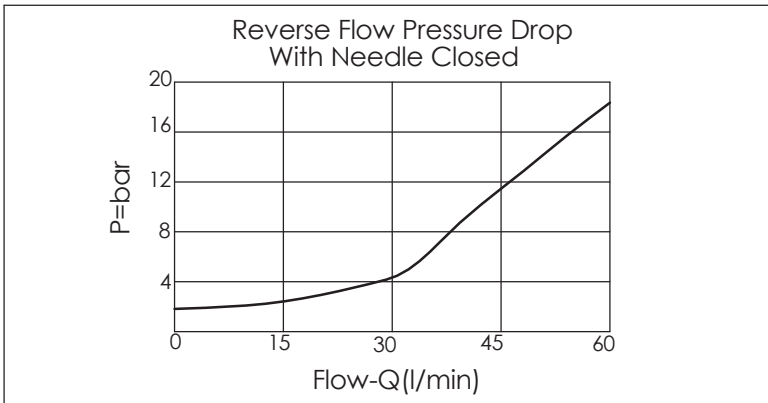
TECHNICAL DATA

Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 40 l/min

Cartridge Valve:
 Refer to NC13A-X-Y-Z
 * Refer to Winner Cartridge Valves Catalog.

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

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



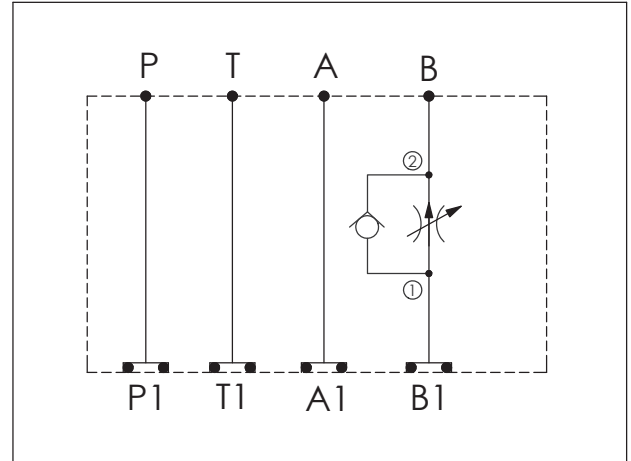
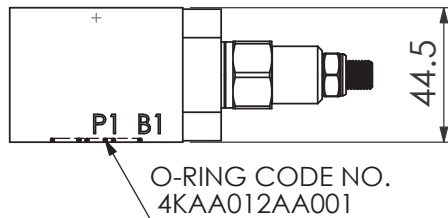
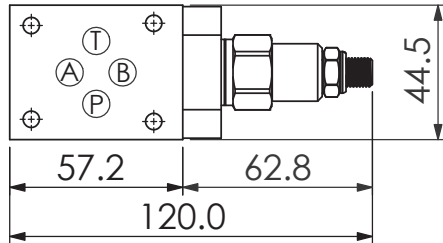
X	SELECTION FOR A PORT CONTROL
N	WITHOUT PORT

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

Z	BODY MATERIAL
A	HIGH-STRENGTH ALUMINUM
S	DUCTILE IRON

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03FBO-X-Y-Z01**
 Stack Height : 44.5mm



TECHNICAL DATA

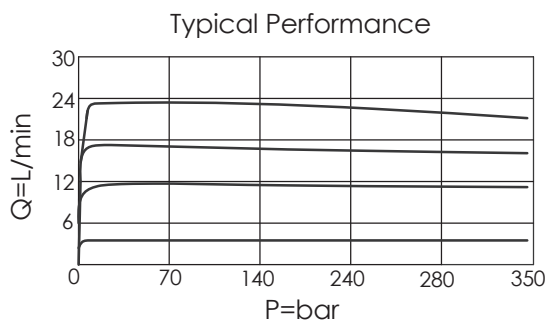
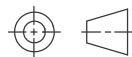
Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 23 l/min (Pressure Compensated)

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

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

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

UNIT:mm



X	SELECTION FOR A PORT CONTROL
N	WITHOUT PORT

Y	SELECTION FOR B PORT CONTROL
13A2	CAVITY ONLY(WITHOUT VALVE)
FR0A	FR13A20AL (23LPM,350bar)

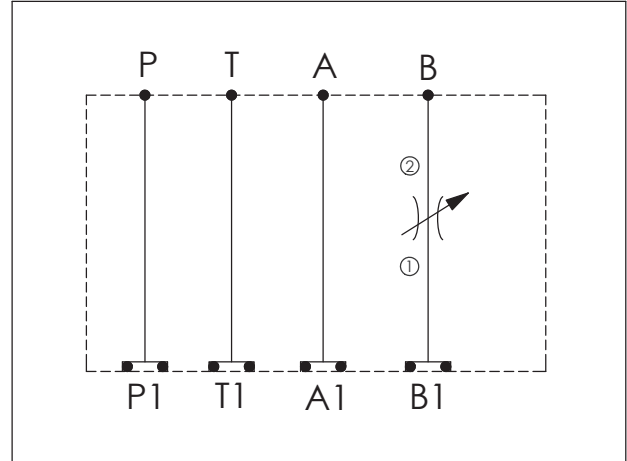
Z	BODY MATERIAL
A	HIGH-STRENGTH ALUMINUM
S	DUCTILE IRON

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03FBO-X-Y-Z 01**

Stack Height : 44.5mm

UNIT:mm



TECHNICAL DATA

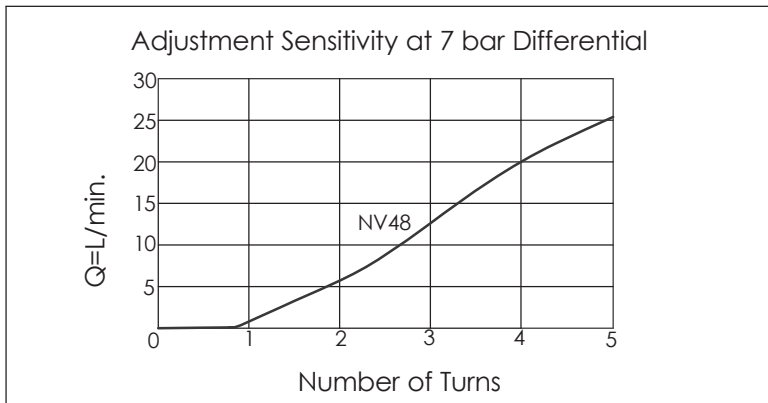
Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar

Rated flow: 40 l/min

Cartridge Valve:
 Refer to NV13A-X-Y-Z
 * Refer to Winner Cartridge Valves Catalog.

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

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



X	SELECTION FOR A PORT CONTROL
N	WITHOUT PORT

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

Z	BODY MATERIAL
A	HIGH-STRENGTH ALUMINUM
S	DUCTILE IRON

ISO 03 SANDWICH MANIFOLD

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

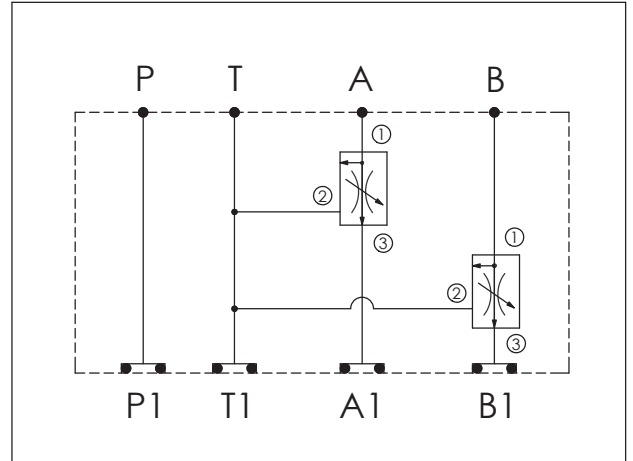
Stack Height : 44.5mm

Dimensions: 64.0, 57.2, 64.0, 185.1, 44.5

Ports: A, B, P, T, P1, T1, A1, B1

O-RING CODE NO. 4KAA012AA001

UNIT:mm

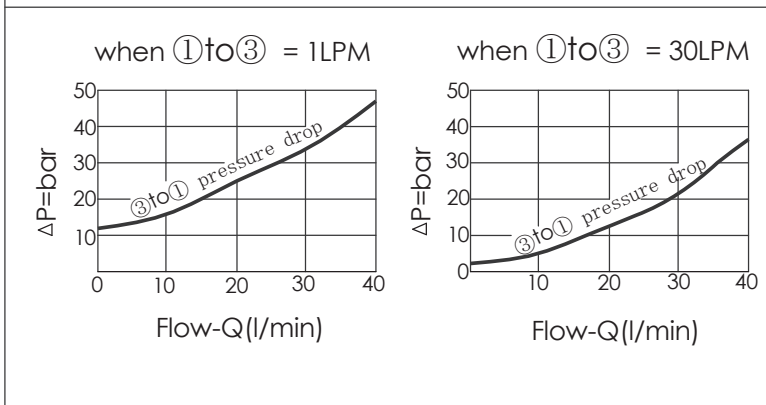
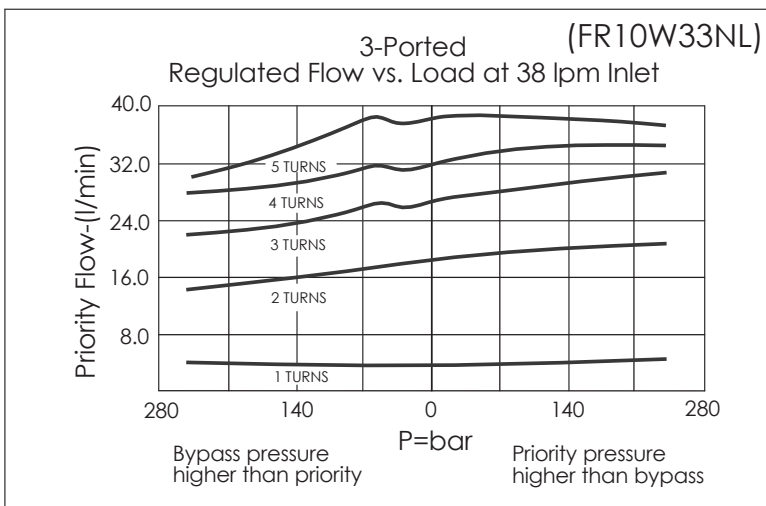


TECHNICAL DATA

Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 40 l/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)
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* 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)	

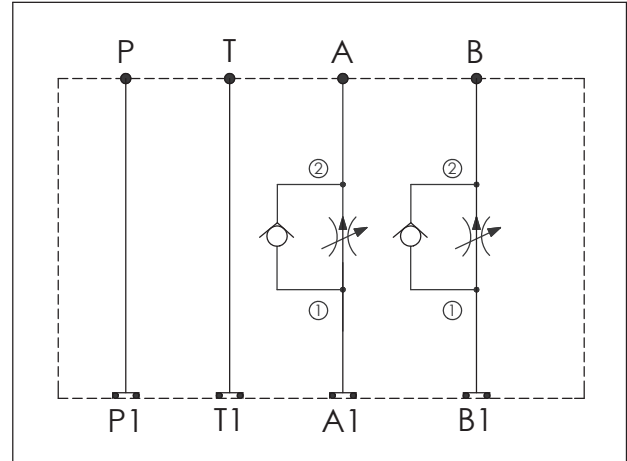
Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03FDH-X-Y-Z01**

Stack Height : 44.5mm

UNIT:mm

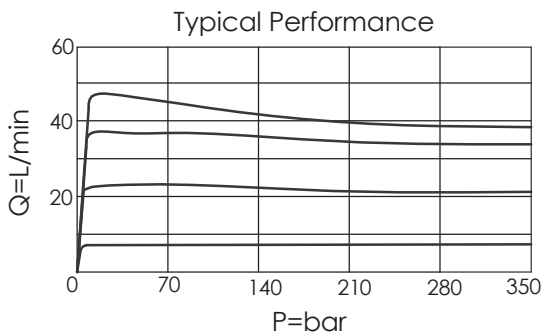


TECHNICAL DATA

Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 40 l/min (Pressure Compensated)
 Cartridge Valve: Refer to FR5A-X-Y-Z
 * Refer to Winner Cartridge Valves Catalog.

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

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



X SELECTION FOR A PORT CONTROL

5A2 CAVITY ONLY(WITHOUT VALVE)

FR0A FR5A20AL(0.4-45LPM)

Y

5A2 CAVITY ONLY(WITHOUT VALVE)

FR0A FR5A20AL(0.4-45LPM)

Z

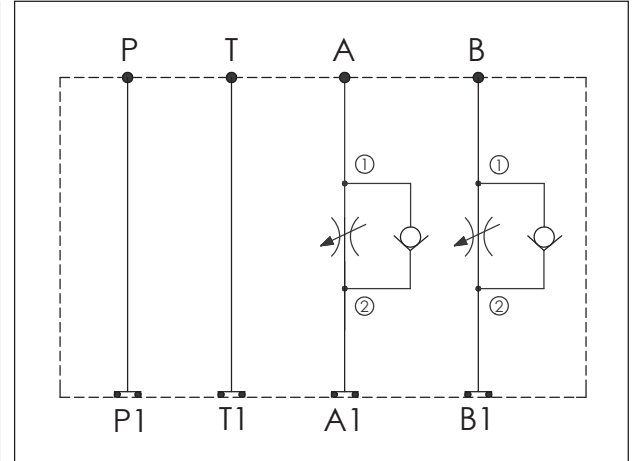
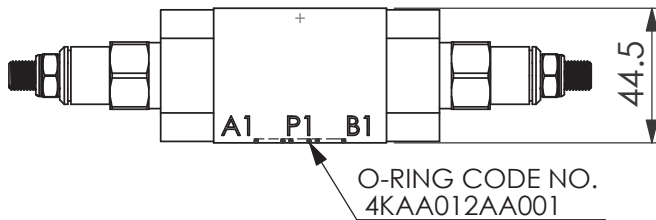
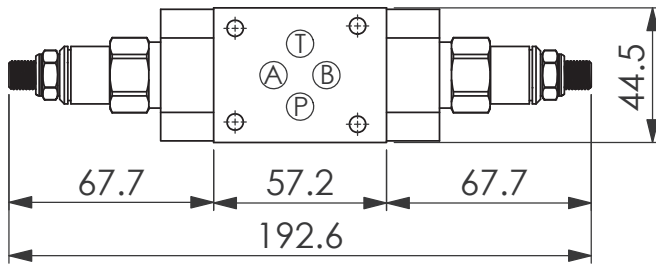
BODY MATERIAL

A HIGH-STRENGTH ALUMINUM

S DUCTILE IRON

ISO 03 SANDWICH MANIFOLD

Ordering Code:	MH03FDI-X-Y-Z 01
Stack Height :	44.5mm



TECHNICAL DATA

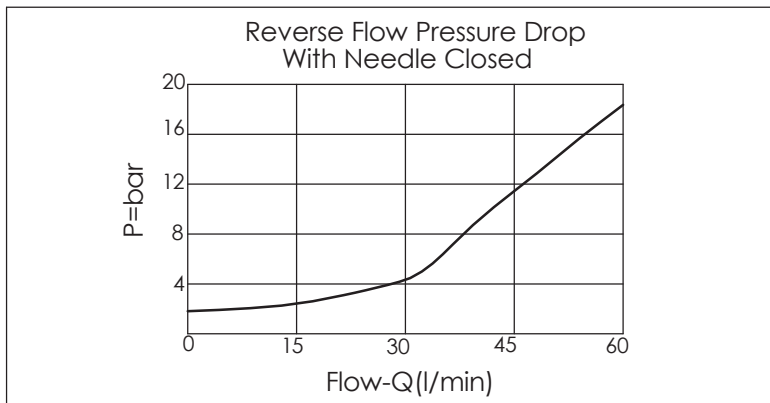
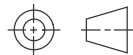
Aluminum Body Pressure Rating:	250 bar
Ductile Iron Body Pressure Rating:	350 bar
Rated flow:	40 l/min

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)

* 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	
13A2	CAVITY ONLY (WITHOUT VALVE)	
NCBA	NC13A21BAL (20LPM,0.3bar)	
NCBC	NC13A21BCL (20LPM,2.0bar)	

Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03FDI-X-Y-Z 01**

Stack Height : 44.5mm

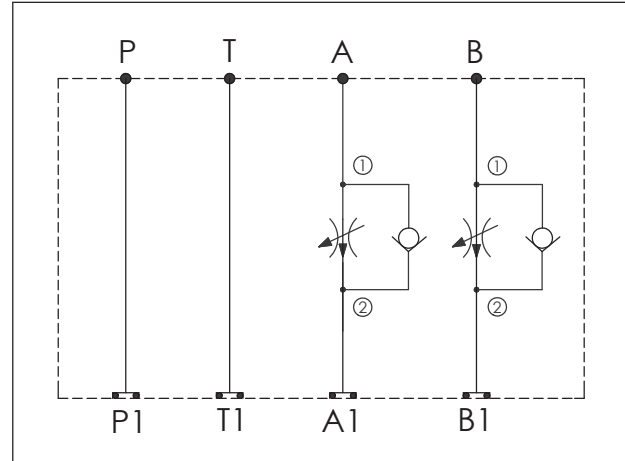
Dimensions: 67.6, 57.2, 67.6, 192.3, 44.5

Ports: A, B, P, T

Bottom view labels: A1, P1, B1

O-RING CODE NO. 4KAA012AA001

UNIT:mm

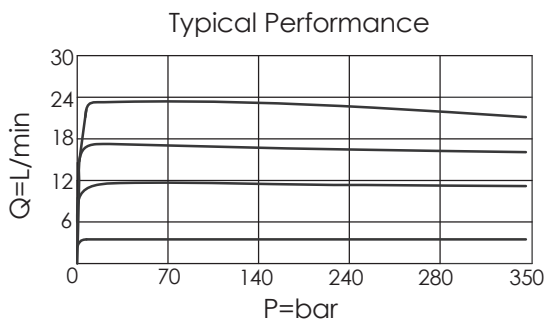


TECHNICAL DATA

Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 23 l/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)

* If you need the special specification. Please 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)

Y SELECTION FOR B PORT CONTROL

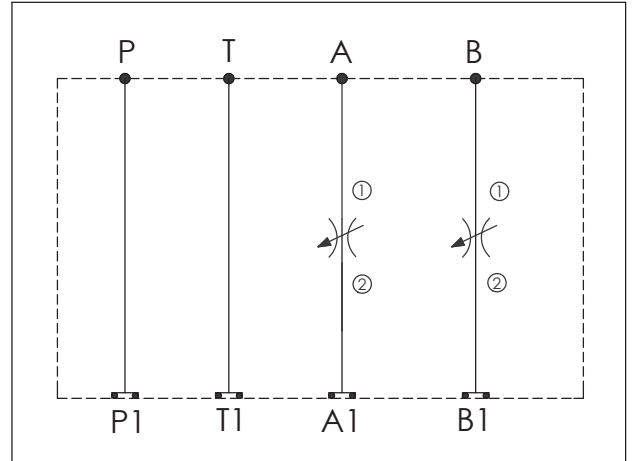
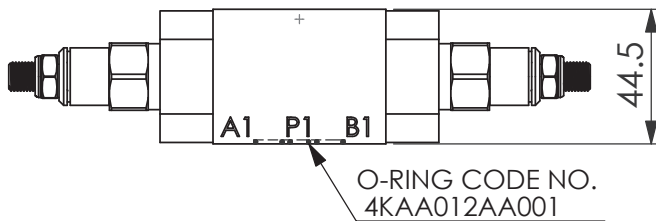
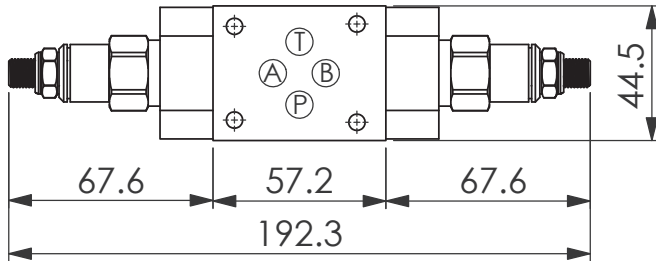
13A2	CAVITY ONLY(WITHOUT VALVE)
FROA	FR13A20AL(0.4-23LPM,350bar)
FROC	FR13A20CL(0.4-4LPM,350bar)

Z BODY MATERIAL

A	HIGH-STRENGTH ALUMINUM
S	DUCTILE IRON

ISO 03 SANDWICH MANIFOLD

Ordering Code: MH03FDI-X-Y-Z01
Stack Height : 44.5mm



TECHNICAL DATA

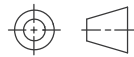
Aluminum Body Pressure Rating:	250 bar
Ductile Iron Body Pressure Rating:	350 bar
Rated flow:	40 l/min

Cartridge Valve:
Refer to NV13A-X-Y-Z
* Refer to Winner Cartridge Valves Catalog.

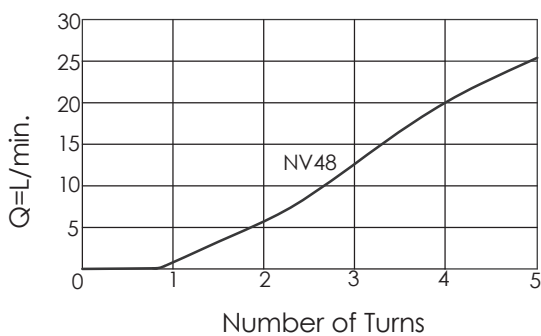
Aluminum	0.4 kg(WITHOUT VALVES) 0.7 kg(INCLUDE VALVES)
Ductile Iron	1.15 kg(WITHOUT VALVES) 1.45 kg(INCLUDE VALVES)

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

UNIT:mm



Adjustment Sensitivity at 7 bar Differential



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

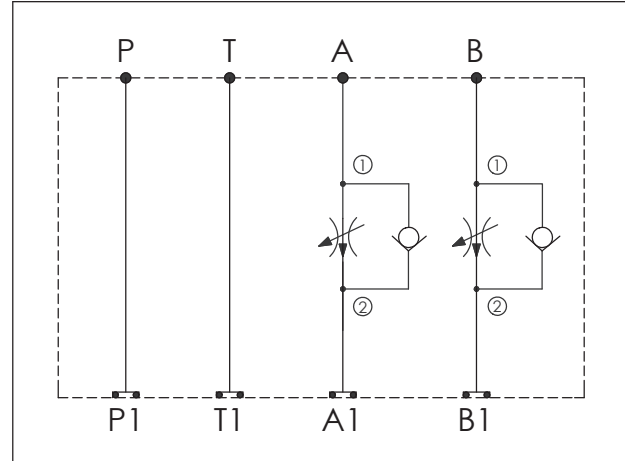
A	HIGH-STRENGTH ALUMINUM
S	DUCTILE IRON

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03FDJ-X-Y-Z01**

Stack Height : 44.5mm

UNIT:mm



TECHNICAL DATA

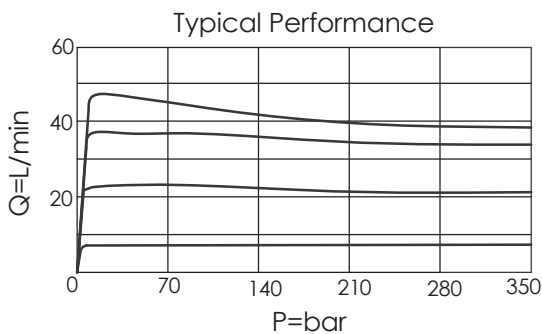
Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar

Rated flow: 40 l/min
 (Pressure Compensated)

Cartridge Valve:
 Refer to FR5A-X-Y-Z
 * Refer to Winner Cartridge Valves Catalog.

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

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



X SELECTION FOR A PORT CONTROL

5A2	CAVITY ONLY(WITHOUT VALVE)
FR0A	FR5A20AL(0.4-45LPM)

Y SELECTION FOR B PORT CONTROL

5A2	CAVITY ONLY(WITHOUT VALVE)
FR0A	FR5A20AL(0.4-45LPM)

Z BODY MATERIAL

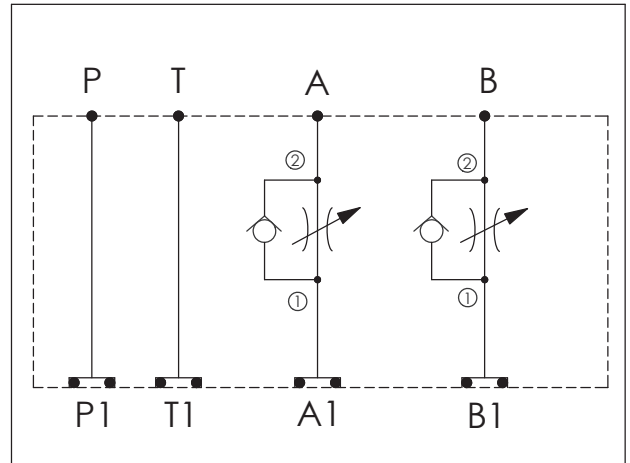
A	HIGH-STRENGTH ALUMINUM
S	DUCTILE IRON

ISO 03 SANDWICH MANIFOLD

Ordering Code:	MH03FDO-X-Y-Z01
Stack Height :	44.5mm

Technical drawing showing dimensions: 67.7, 57.2, 67.7, 192.6, and 44.5mm. Port locations are labeled A, B, P, T, A1, P1, B1. O-RING CODE NO. 4KAA012AA001 is indicated.

UNIT:mm



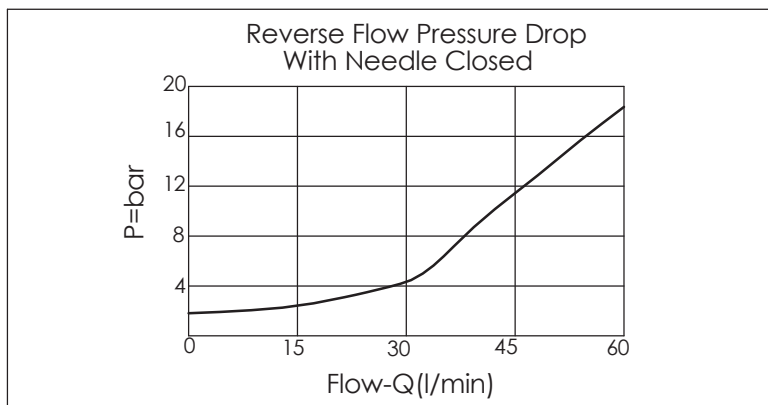
TECHNICAL DATA

Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 40 l/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)

* 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)	

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

Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

ISO 03 SANDWICH MANIFOLD

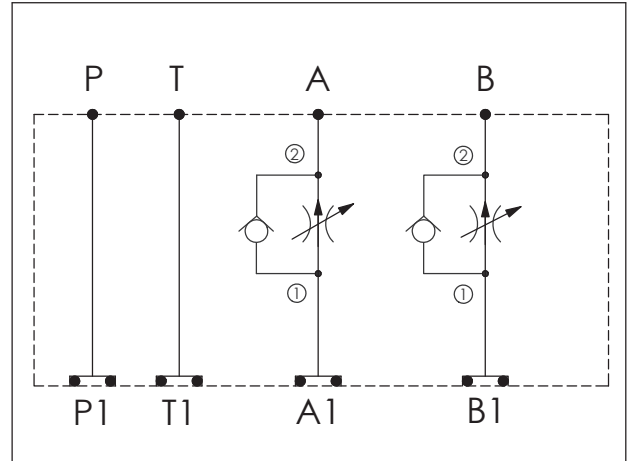
Ordering Code: **MH03FDO-X-Y-Z 01**

Stack Height : 44.5mm

Dimensions: 67.6, 57.2, 67.6, 192.3, 44.5

O-RING CODE NO. 4KAA012AA001

UNIT:mm



TECHNICAL DATA

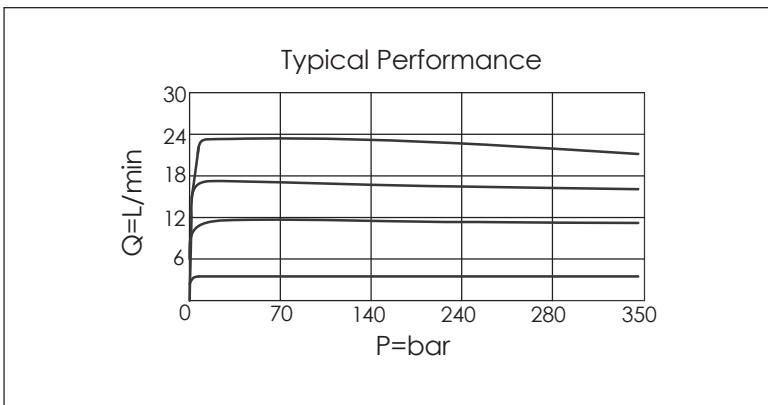
Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar

Rated flow: 23 l/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)

* If you need the special specification. Please 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)

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

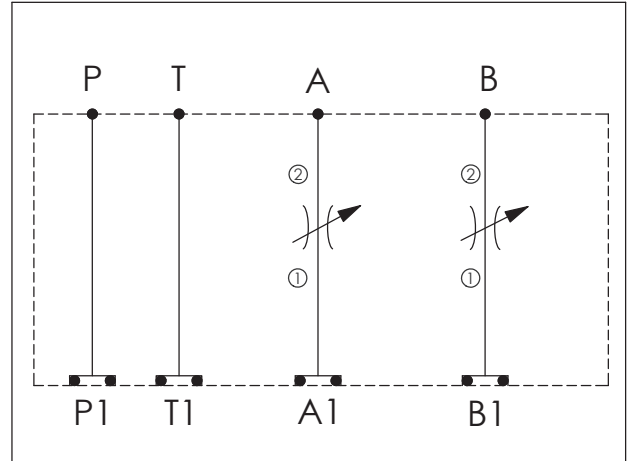
Z	BODY MATERIAL
A	HIGH-STRENGTH ALUMINUM
S	DUCTILE IRON

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03FDO-X-Y-Z 01**

Stack Height : 44.5mm

UNIT:mm



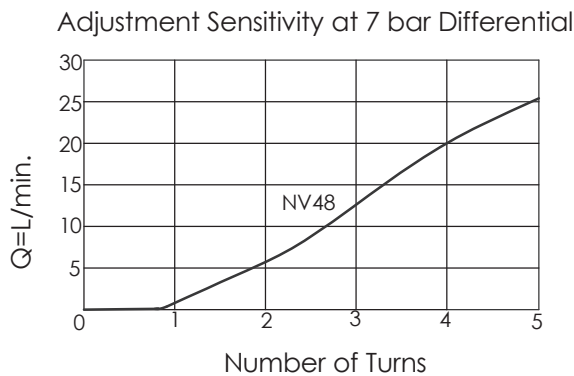
TECHNICAL DATA

Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 40 l/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)

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



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)	

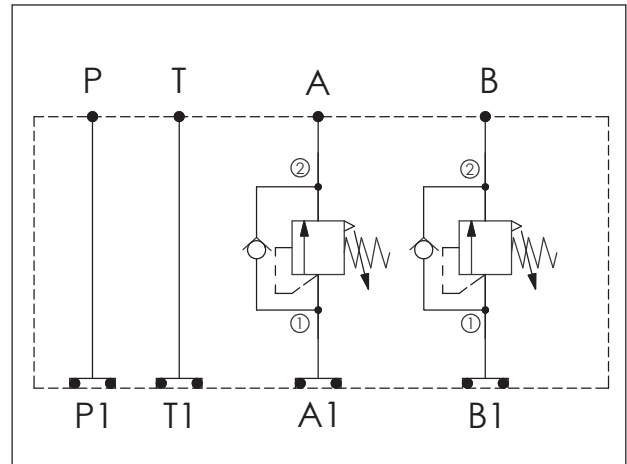
Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

ISO 03 SANDWICH MANIFOLD

Ordering Code:	MH03FDO-X-Y-Z 01
Stack Height :	44.5mm

O-RING CODE NO. 4KAA012AA001

UNIT:mm



TECHNICAL DATA

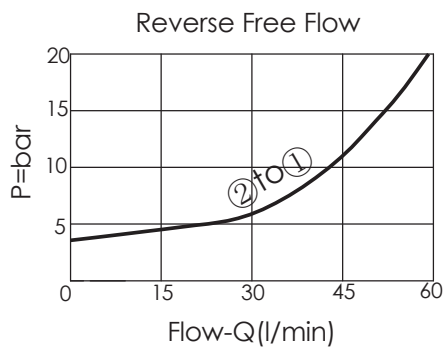
Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 40 l/min

Cartridge Valve:
 Refer to SC13A-X-Y-Z

* Refer to Winner Cartridge Valves Catalog.

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

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



X SELECTION FOR A PORT CONTROL

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

A	HIGH-STRENGTH ALUMINUM
S	DUCTILE IRON

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03FDT-X-Y-Z01**

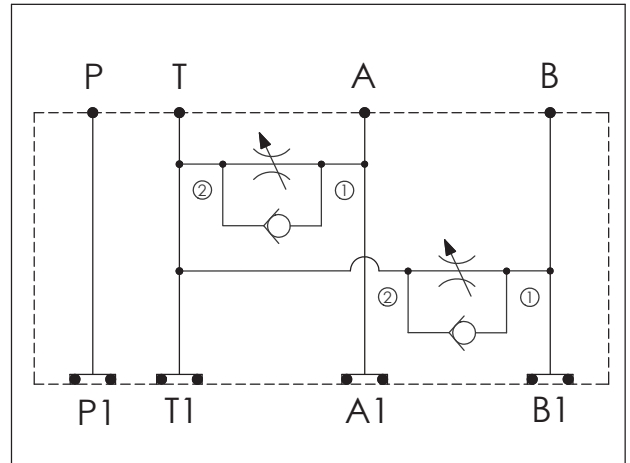
Stack Height : 44.5mm

Dimensions: 70.8, 57.2, 70.8, 198.8, 44.5

Ports: A, B, P, T, A1, P1, B1

O-RING CODE NO. 4KAA012AA001

UNIT:mm



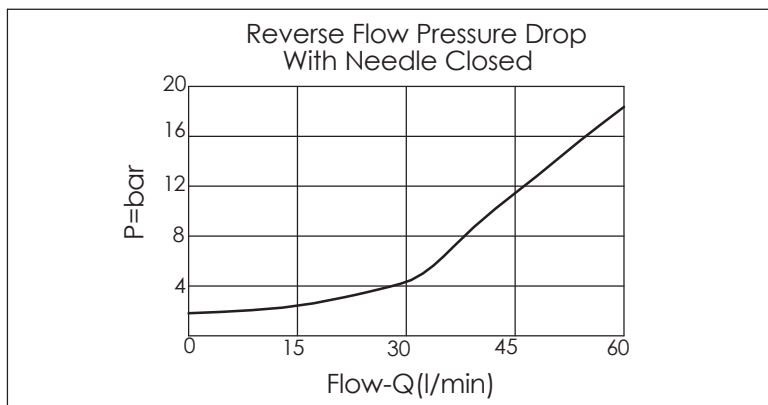
TECHNICAL DATA

Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 40 l/min

Cartridge Valve:
 Refer to NC13A-X-Y-Z
 * Refer to Winner Cartridge Valves Catalog.

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

* 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)	

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

Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03FDT-X-Y-Z01**

Stack Height : 44.5mm

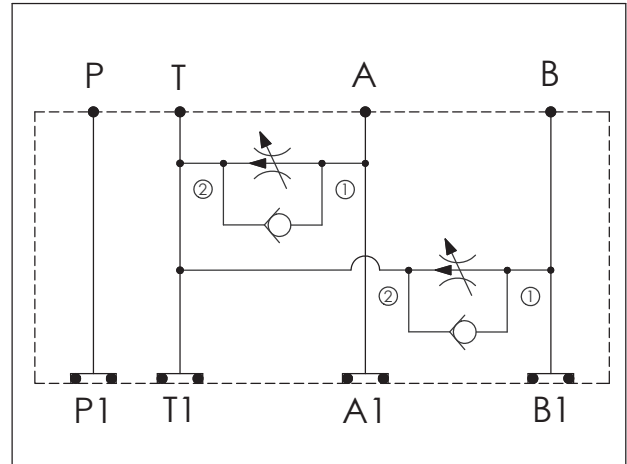
Dimensions: 70.7, 57.2, 70.7, 198.5, 44.5

Ports: A, B, T, P

Bottom view labels: A1, P1, B1

O-RING CODE NO. 4KAA012AA001

UNIT:mm



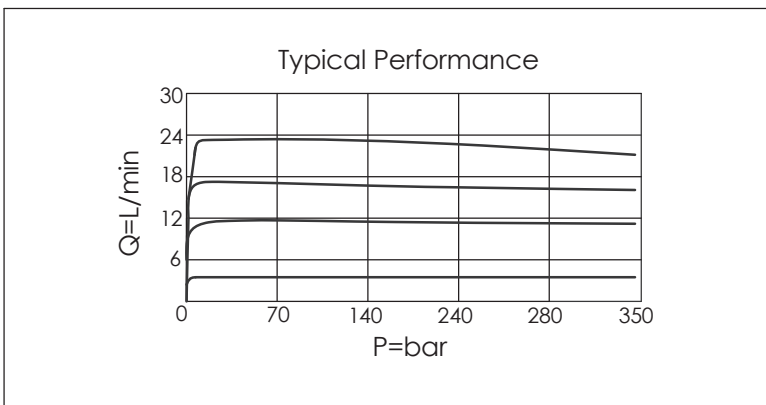
TECHNICAL DATA

Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 23 l/min (Pressure Compensated)

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

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

* If you need the special specification. Please 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)

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
A	HIGH-STRENGTH ALUMINUM
S	DUCTILE IRON

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03FDT-X-Y-Z01**

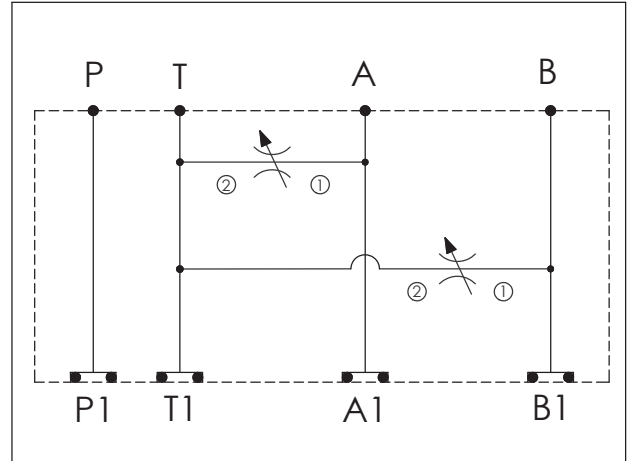
Stack Height : 44.5mm

Dimensions: 70.7, 57.2, 70.7, 198.5, 44.5

Ports: P, T, A, B, P1, T1, A1, B1

O-RING CODE NO. 4KAA012AA001

UNIT:mm

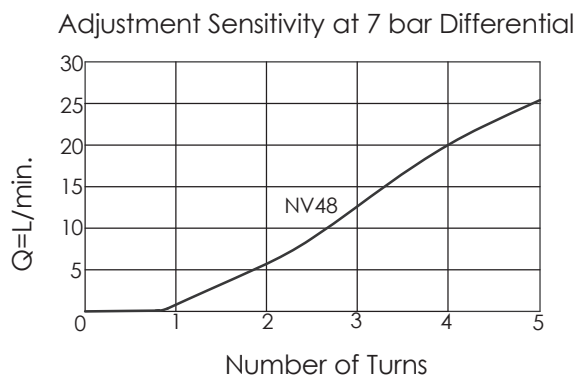


TECHNICAL DATA

Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 40 l/min
 Cartridge Valve: Refer to NV13A-X-Y-Z
 * Refer to Winner Cartridge Valves Catalog.

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

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



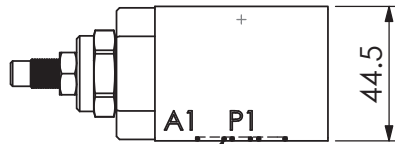
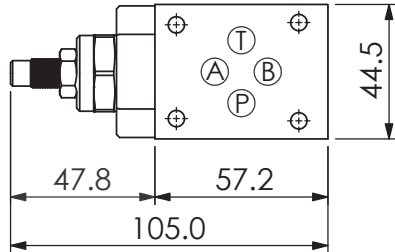
X	SELECTION FOR A PORT CONTROL	
13A2	CAVITY ONLY(WITHOUT VALVE)	
NV48	NV13A2048L (350bar)	

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

Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

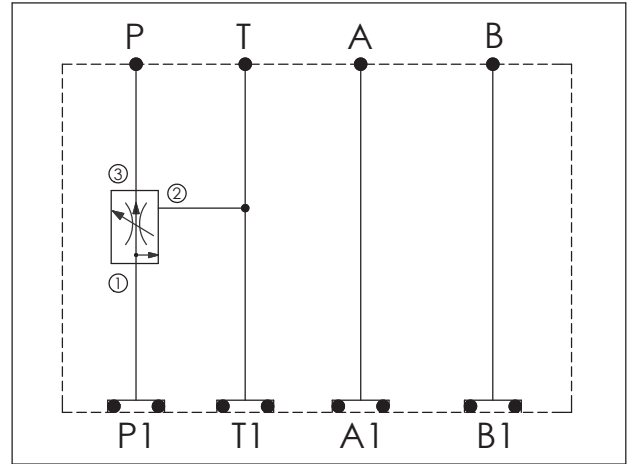
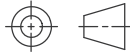
ISO 03 SANDWICH MANIFOLD

Ordering Code: MH03FPB-X-Y-Z01
Stack Height : 44.5mm



O-RING CODE NO.
4KAA012AA001

UNIT:mm



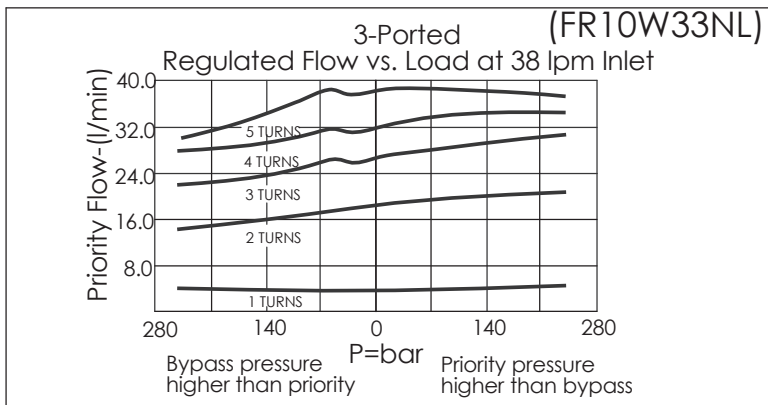
TECHNICAL DATA

Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 40 l/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)

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



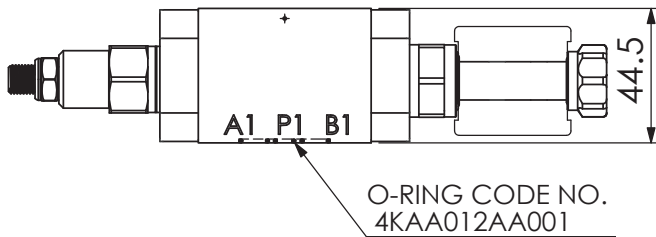
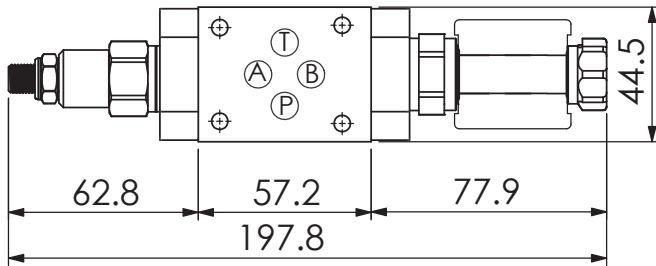
X	SELECTION FOR P PORT CONTROL	
10W3	CAVITY ONLY(WITHOUT VALVE)	
FR1L	FR10W31NL(13LPM,240bar)	
FR3L	FR10W33NL(38LPM,240bar)	

Y	SELECTION FOR G PORT	
N	WITHOUT PORT	

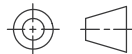
Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	

ISO 03 SANDWICH MANIFOLD

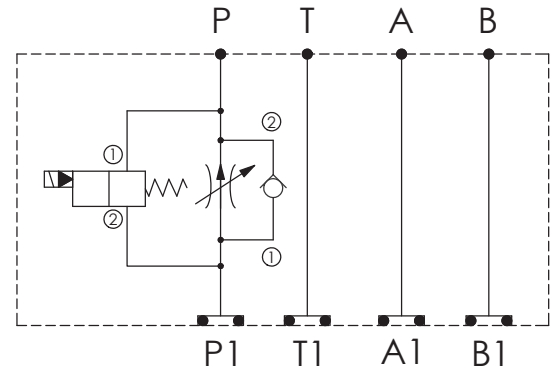
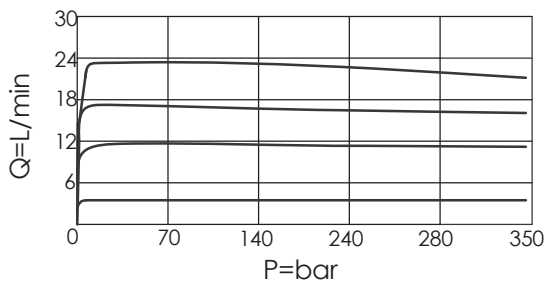
Ordering Code: **MH03FPE-X-Y-Z01**
 Stack Height : 44.5mm



UNIT:mm



Typical Performance



TECHNICAL DATA

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

Rated flow: 23 l/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)
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)
FROA	FR13A20AL(23LPM,350bar)

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)

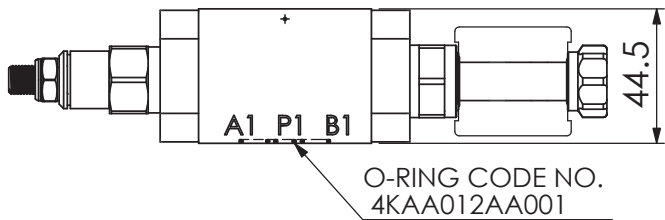
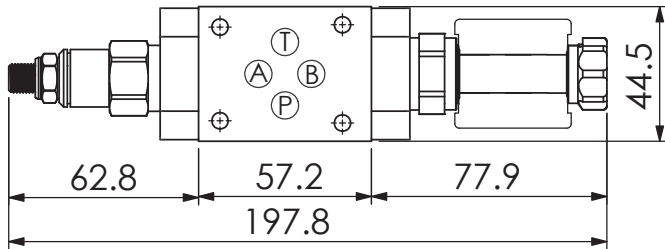
COIL MUST BE ORDERED SEPARATELY
 (REFER TO EC-04W-X-Y-Z)

Z BODY MATERIAL

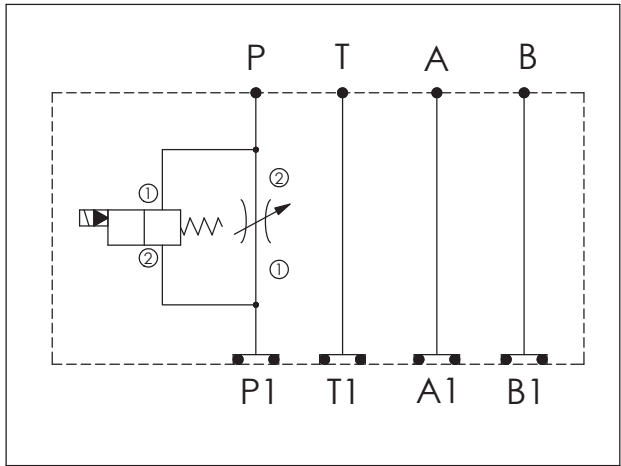
A	HIGH-STRENGTH ALUMINUM
S	DUCTILE IRON

ISO 03 SANDWICH MANIFOLD

Ordering Code: MH03FPE-X-Y-Z01
Stack Height : 44.5mm



UNIT:mm



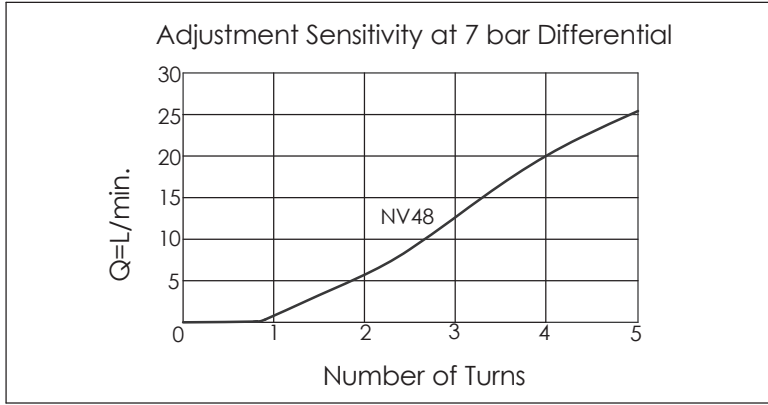
TECHNICAL DATA

Aluminum Body Pressure Rating:	250 bar
Ductile Iron Body Pressure Rating:	350 bar
Rated flow:	40 l/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)

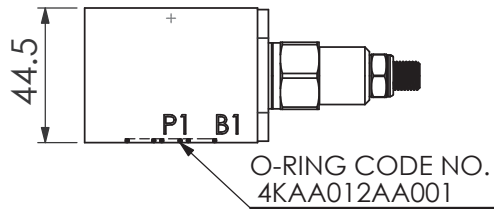
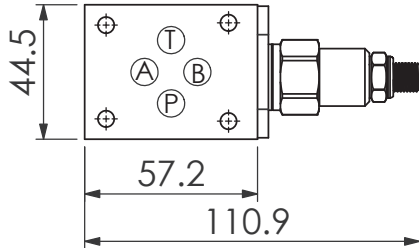
Y	SELECTION FOR SOLENOID VALVES (REFER TO EP08W-X-Y-Z)
08W2	CAVITY ONLY(WITHOUT VALVE)
EP01	EP08W2A01N05 , 40LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)
EP02	EP08W2A02N05 , 40LPM,350bar (NORMALLY OPEN,WITHOUT COIL)
EP01M	EP08W2A01M05 , 40LPM,350bar(NORMALLY CLOSED WITH KNOB STYLE MANUAL OVERRIDE,WITHOUT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

Z	BODY MATERIAL
A	HIGH-STRENGTH ALUMINUM
S	DUCTILE IRON

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

Ordering Code: **MH03FPW-X-Y-Z 01**

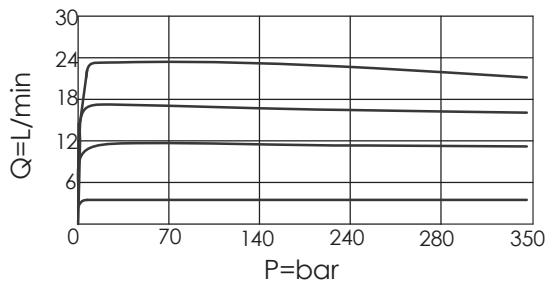
Stack Height : 44.5mm



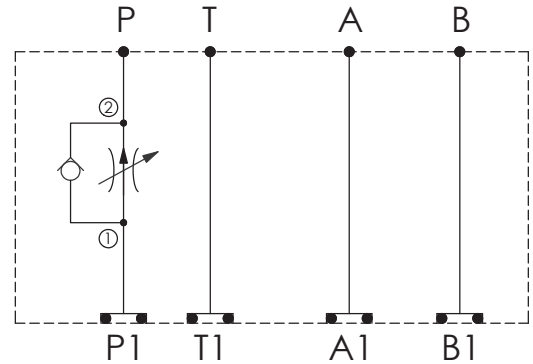
UNIT:mm



Typical Performance



ISO 03 SANDWICH MANIFOLD



TECHNICAL DATA

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating: 350 bar

Rated flow: 23 l/min
(Pressure Compensated)

Cartridge Valve:
Refer to FR13A-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)

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

X SELECTION FOR P PORT CONTROL

13A2	CAVITY ONLY(WITHOUT VALVE)
FROA	FR13A20AL (23LPM,350bar)

Y SELECTION FOR G PORT

N WITHOUT PORT

Z BODY MATERIAL

A HIGH-STRENGTH ALUMINUM

S DUCTILE IRON

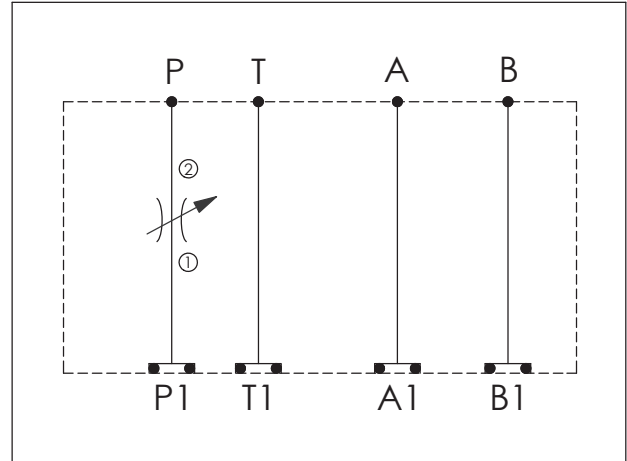
ISO 03 SANDWICH MANIFOLD

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

Stack Height : 44.5mm

O-RING CODE NO.
4KAA012AA001

UNIT:mm



TECHNICAL DATA

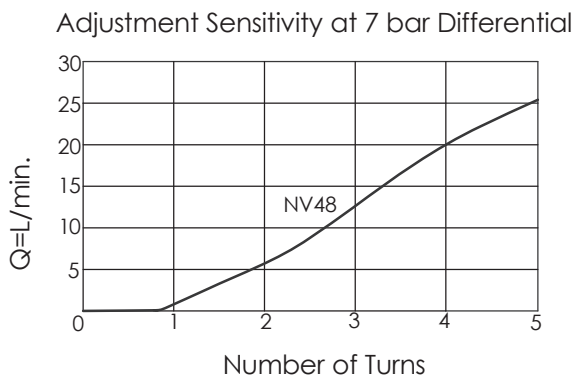
Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 40 l/min

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)

* 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

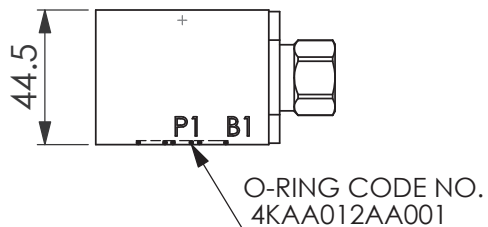
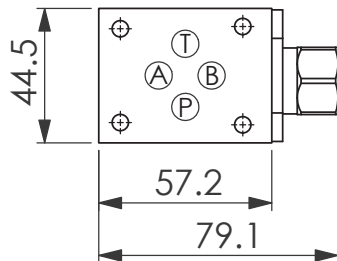
Z BODY MATERIAL

A HIGH-STRENGTH ALUMINUM

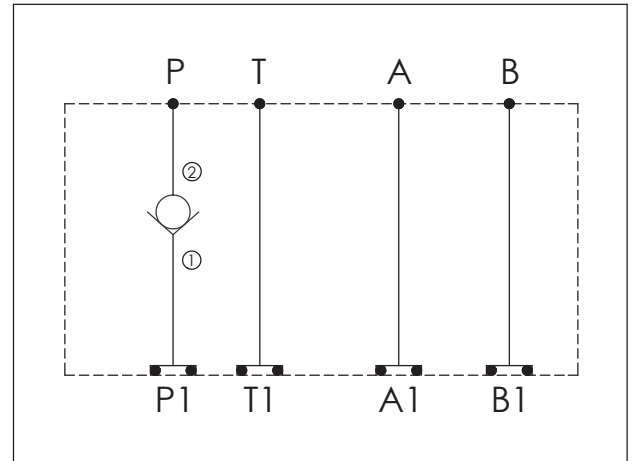
S DUCTILE IRON

ISO 03 SANDWICH MANIFOLD

Ordering Code: MH03FPW-X-Y-Z01
Stack Height : 44.5mm



UNIT:mm



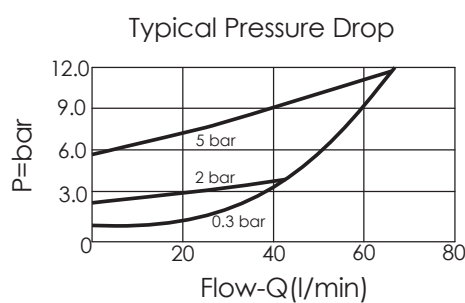
TECHNICAL DATA

Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 40 l/min

Cartridge Valve:
 Refer to CV13A-X-Y-Z
 * Refer to Winner Cartridge Valves Catalog.

Aluminum	0.27 kg(WITHOUT VALVE) 0.37 kg(INCLUDE VALVE)
Ductile Iron	0.77 kg(WITHOUT VALVE) 0.87 kg(INCLUDE VALVE)

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



X SELECTION FOR P PORT CONTROL

13A2	CAVITY ONLY(WITHOUT VALVE)	
CV20	CV13A2020N (80LPM,2.0bar)	

Y SELECTION FOR G PORT

N	WITHOUT PORT	

Z BODY MATERIAL

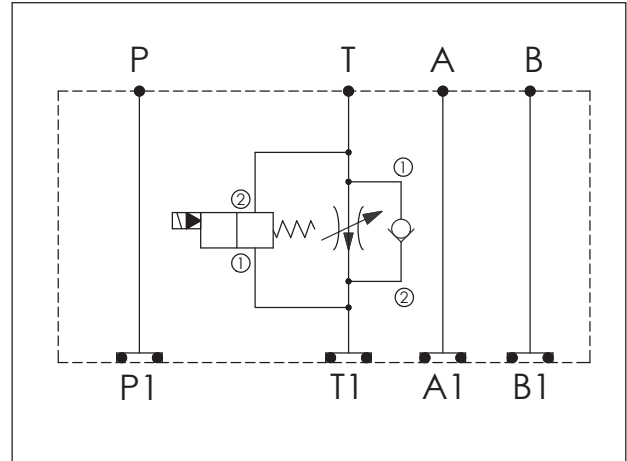
A	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03FTE-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: 23 l/min
(Pressure Compensated)

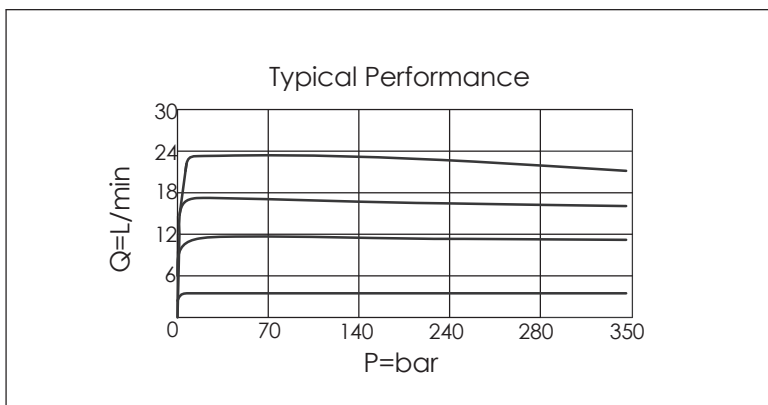
Cartridge Valve:
Refer to FR13A-X-Y-Z
EP08W-X-Y-Z

* 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.

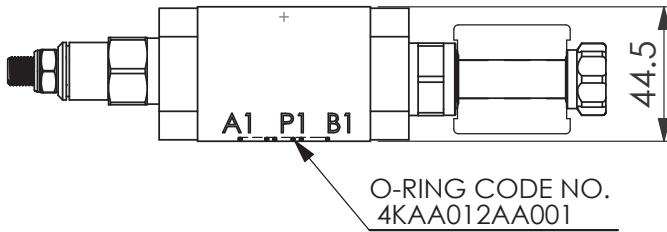
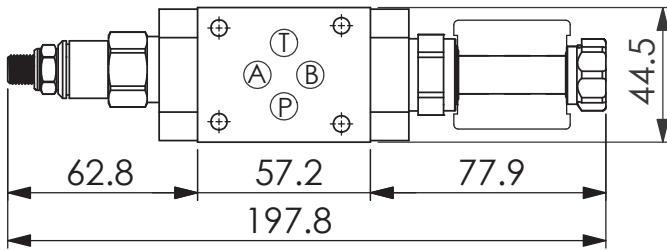
X	SELECTION FOR FLOW CONTROL
13A2	CAVITY ONLY(WITHOUT VALVE)
FR0A	FR13A20AL(23LPM,350bar)



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)	

Z	BODY MATERIAL
A	HIGH-STRENGTH ALUMINUM

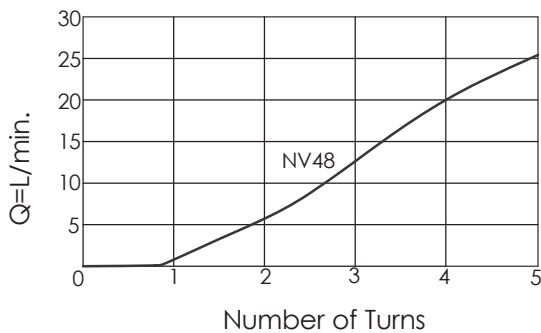
Ordering Code: MH03FTE-X-Y-Z 01
Stack Height : 44.5mm



UNIT:mm

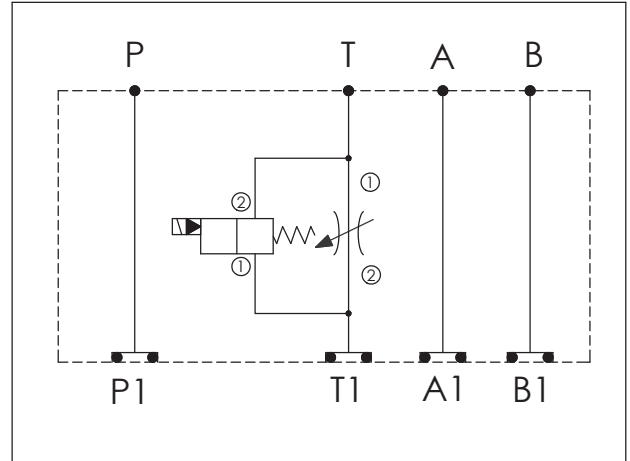


Adjustment Sensitivity at 7 bar Differential



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 l/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)
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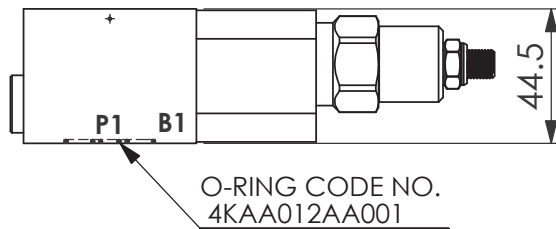
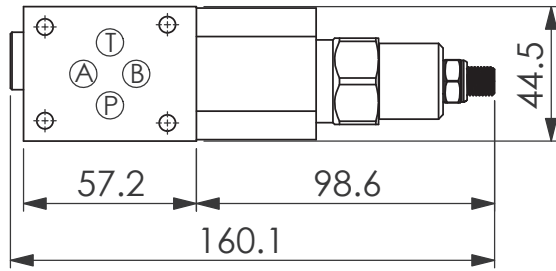
* If you need the special specification.
Please contact us.

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

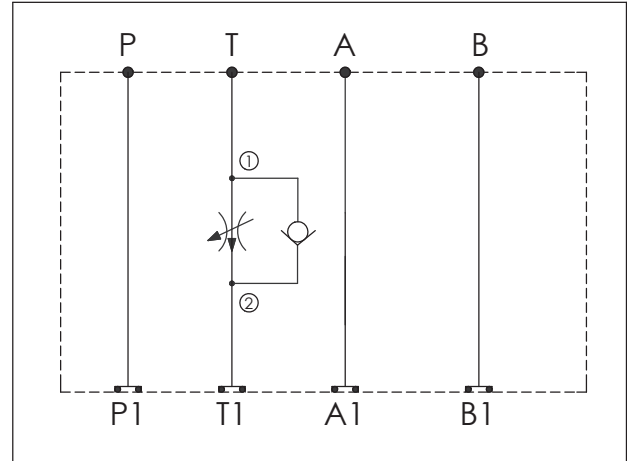
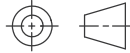
Z	BODY MATERIAL
A	HIGH-STRENGTH ALUMINUM

ISO 03 SANDWICH MANIFOLD

Ordering Code:	MH03FTH-X-Y-Z01
Stack Height :	44.5mm



UNIT:mm



TECHNICAL DATA

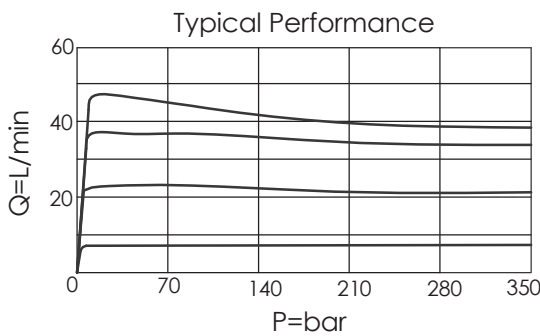
Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 40 l/min
 (Pressure Compensated)

Cartridge Valve:
 Refer to FR5A-X-Y-Z

* Refer to Winner Cartridge Valve Catalog.

Aluminum	0.4 kg(WITHOUT VALVE)
	0.67 kg(INCLUDE VALVE)
Ductile Iron	1.15 kg(WITHOUT VALVE)
	1.42 kg(INCLUDE VALVE)

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



X

SELECTION FOR G PORT

G02

G 1/4"(Metric)

Y

SELECTION FOR T PORT CONTROL

5A2

CAVITY ONLY(WITHOUT VALVE)

FR0A

FR5A20AL(0.4-45LPM)

Z

BODY MATERIAL

A

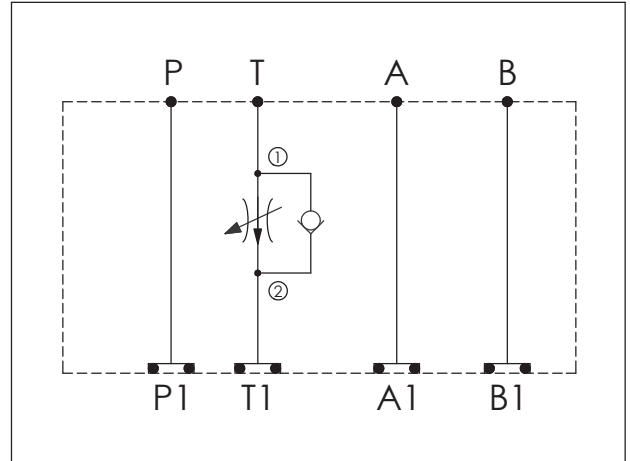
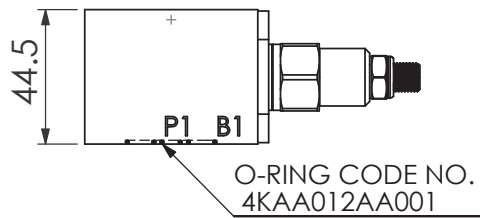
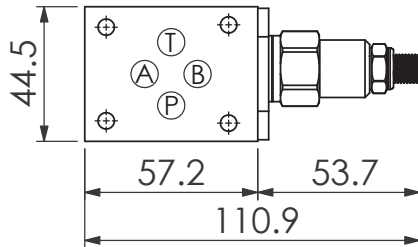
HIGH-STRENGTH ALUMINUM

S

DUCTILE IRON

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03FTW-X-Y-Z01**
 Stack Height : 44.5mm



TECHNICAL DATA

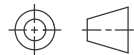
Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 23 l/min (Pressure Compensated)

Cartridge Valve:
 Refer to FR13A-X-Y-Z
 * Refer to Winner Cartridge Valve Catalog.

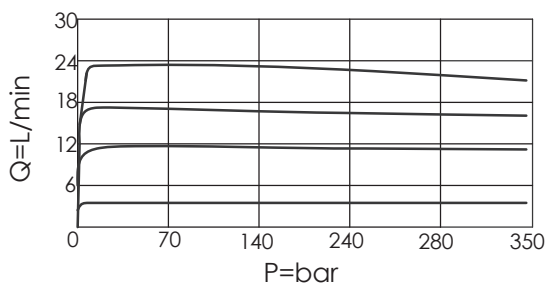
Aluminum	0.27 kg(WITHOUT VALVE) 0.45 kg(INCLUDE VALVE)

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

UNIT:mm



Typical Performance



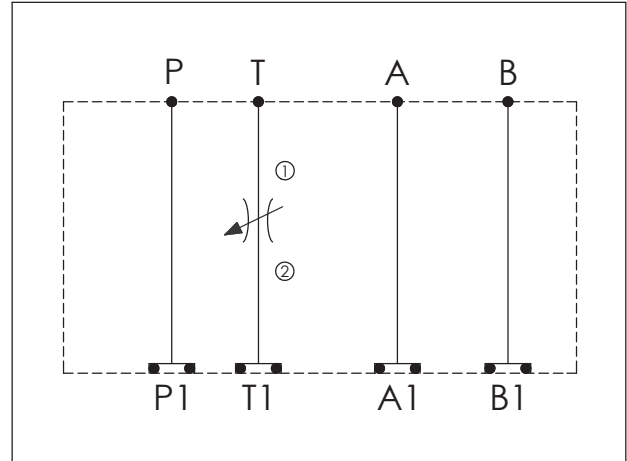
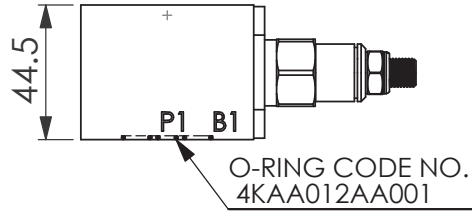
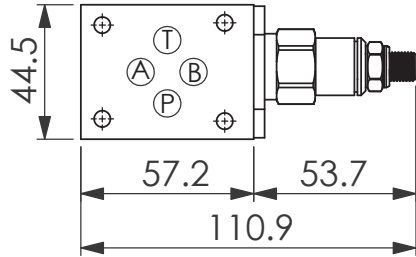
X	SELECTION FOR T PORT CONTROL	
13A2	CAVITY ONLY(WITHOUT VALVE)	
FR0A	FR13A20AL(23LPM,350bar)	

Y	SELECTION FOR G PORT	
N	WITHOUT PORT	

Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03FTW-X-Y-Z01**
 Stack Height : 44.5mm



TECHNICAL DATA

Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 40 l/min

Cartridge Valve:
 Refer to NV13A-X-Y-Z
 * Refer to Winner Cartridge Valve Catalog.

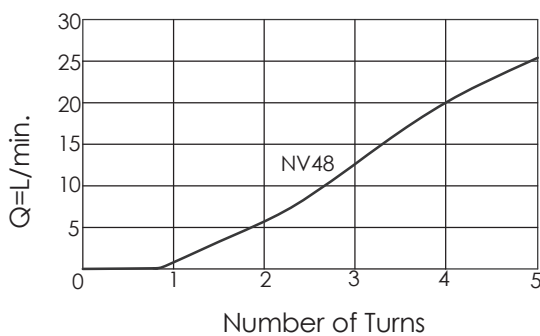
Aluminum	0.27 kg(WITHOUT VALVE) 0.45 kg(INCLUDE VALVE)

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

UNIT:mm



Adjustment Sensitivity at 7 bar Differential



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

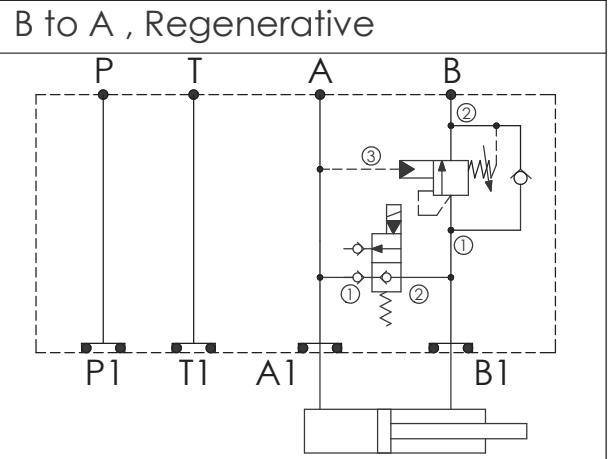
A	HIGH-STRENGTH ALUMINUM	

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03GBE-X-Y-Z01**

Stack Height : 44.5mm

UNIT:mm



TECHNICAL DATA

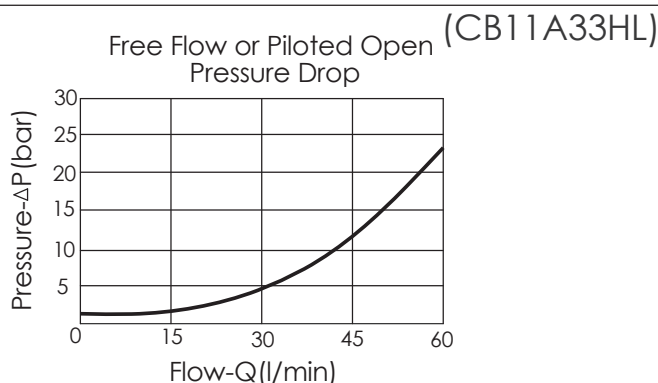
Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 40 l/min

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



Y	SELECTION FOR COUNTERBALANCE VALVE
11A3	CAVITY ONLY(WITHOUT VALVE)
CB3H	CB11A33HL (60LPM , 70-280bar)

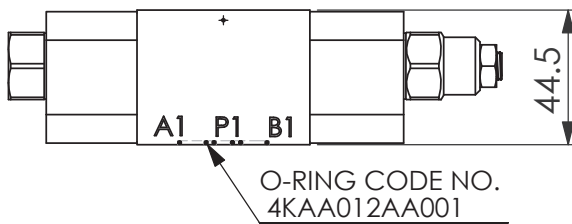
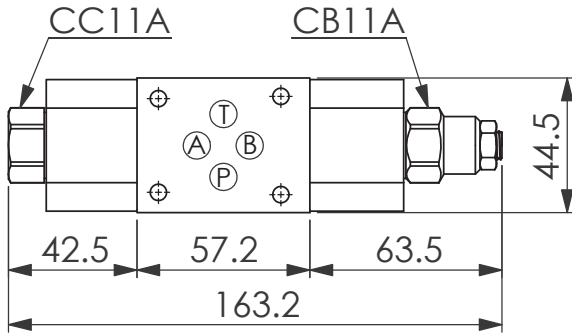
X	SELECTION FOR SOLENOID VALVES (REFER TO EP19E-X-Y-Z)
19E2	CAVITY ONLY(WITHOUT VALVE)
EP11	EP19E2A11N05 , 40LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)
EP11M	EP19E2A11M05 , 40LPM,350bar(NORMALLY CLOSED WITH KNOB STYLE MANUAL OVERRIDE,WITHOUT COIL)

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

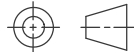
Z	BODY MATERIAL
A	HIGH-STRENGTH ALUMINUM

ISO 03 SANDWICH MANIFOLD

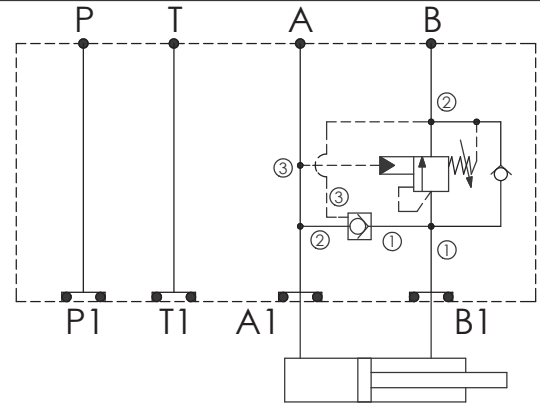
Ordering Code: **MH03GBW-X-Y-Z01**
 Stack Height : 44.5mm



UNIT:mm



B to A , Regenerative



TECHNICAL DATA

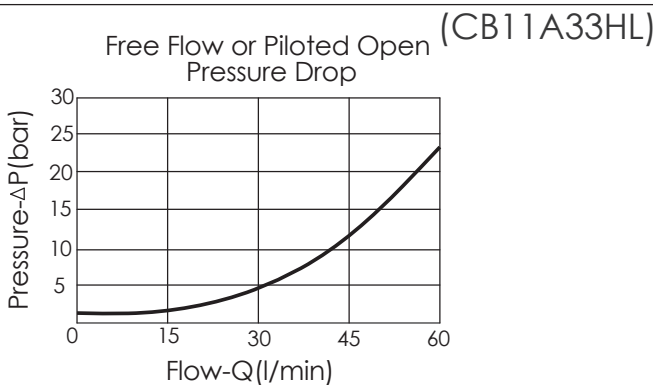
Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 40 l/min

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

* Refer to Winner Cartridge Valves Catalog.

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

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



X

SELECTION FOR PILOT-TO-CLOSE VALVE

11A3	CAVITY ONLY(WITHOUT VALVE)
CC50	CC11A3050N (80LPM , 5.0bar)

Y

SELECTION FOR COUNTERBALANCE VALVE

11A3	CAVITY ONLY(WITHOUT VALVE)
CB3H	CB11A33HL (60LPM , 70-280bar)

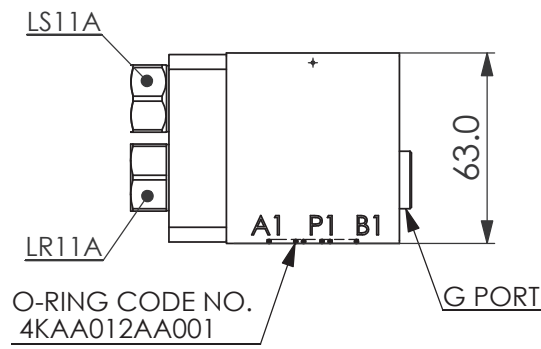
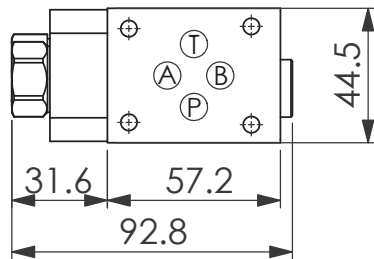
Z

BODY MATERIAL

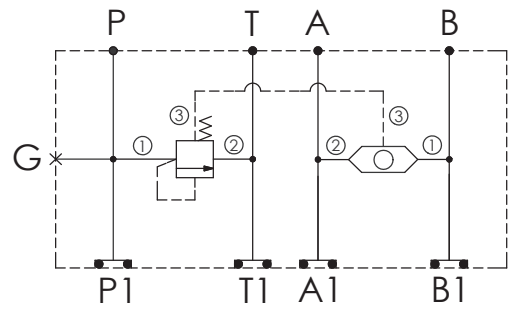
A	HIGH-STRENGTH ALUMINUM
S	DUCTILE IRON

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03KPB-X-Y-Z 03**
 Stack Height : 63.0mm



UNIT:mm



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
 LS11A-X-Y-Z

* Refer to Winner Cartridge Valves Catalog.

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

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

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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)	

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

Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	
S		

ISO 03 SANDWICH MANIFOLD

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

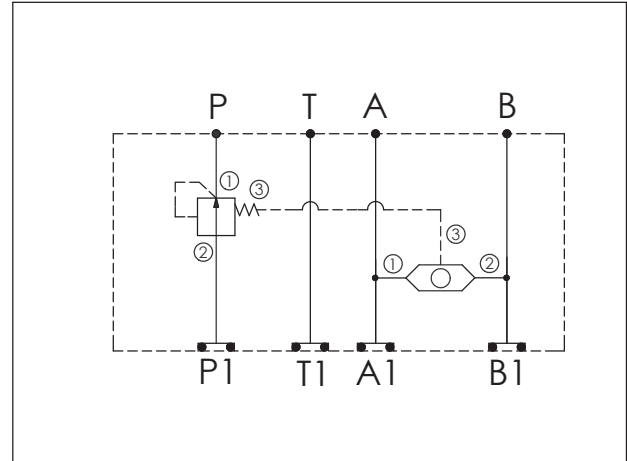
Stack Height : 63.0mm

Top View Dimensions:
 Total width: 88.9
 Distance from left edge to center of P: 57.2
 Distance from center of P to center of T: 31.6
 Height: 44.5

Side View Dimensions:
 Total height: 63.0
 Labels: LP11A, LS11A, A1, P1, B1

O-RING CODE NO. 4KAA012AA001

UNIT:mm



TECHNICAL DATA

Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 40 l/min

Cartridge Valve:
 Refer to LP11A-X-Y-Z
 LS11A-X-Y-Z

* Refer to Winner Cartridge Valves Catalog.

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

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

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

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)

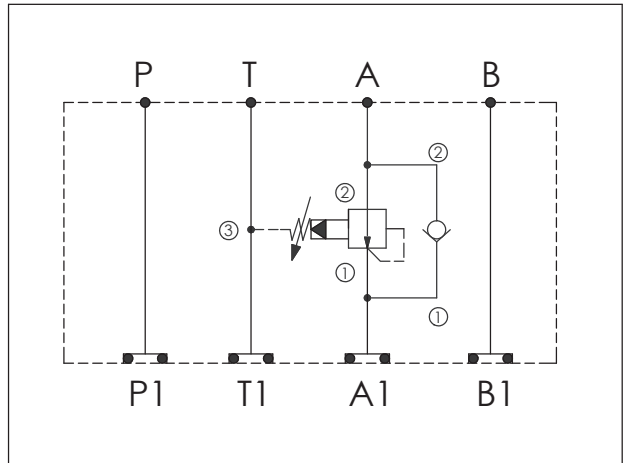
Z	BODY MATERIAL
A	HIGH-STRENGTH ALUMINUM
S	DUCTILE IRON

ISO 03 SANDWICH MANIFOLD

Ordering Code:	MH03PAC-X-Y-Z 01
Stack Height :	44.5mm

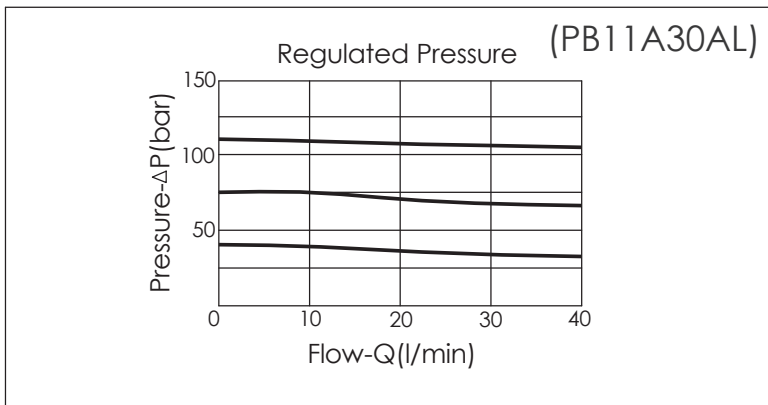
O-RING CODE NO.
4KAA012AA001

UNIT:mm



TECHNICAL DATA	
Aluminum Body Pressure Rating:	250 bar
Ductile Iron Body Pressure Rating:	350 bar
Rated flow:	40 l/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.



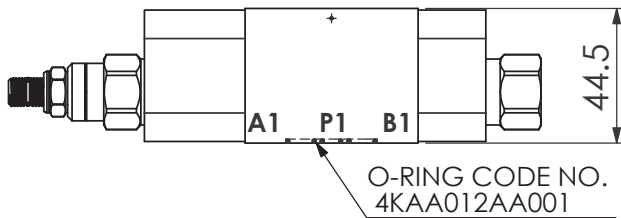
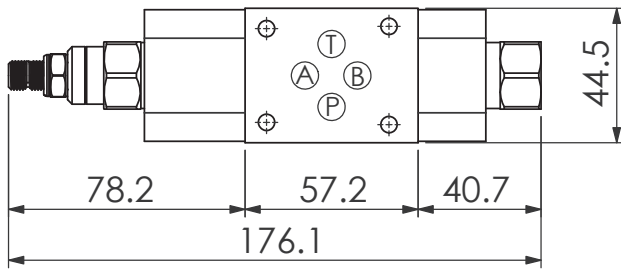
X	SELECTION FOR A PORT CONTROL
11A3	CAVITY ONLY (WITHOUT VALVE)
PB0A	PB11A30AL (40LPM , 7-210bar)

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

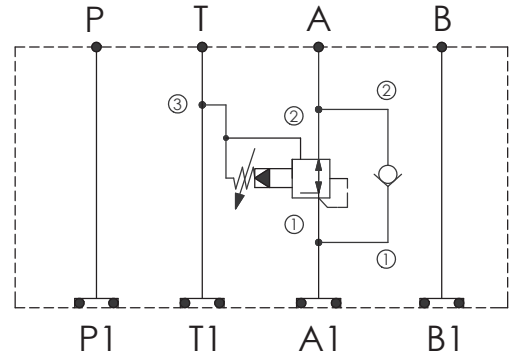
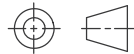
Z	BODY MATERIAL
A	HIGH-STRENGTH ALUMINUM

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03PAC-X-Y-Z01**
 Stack Height : 44.5mm



UNIT:mm

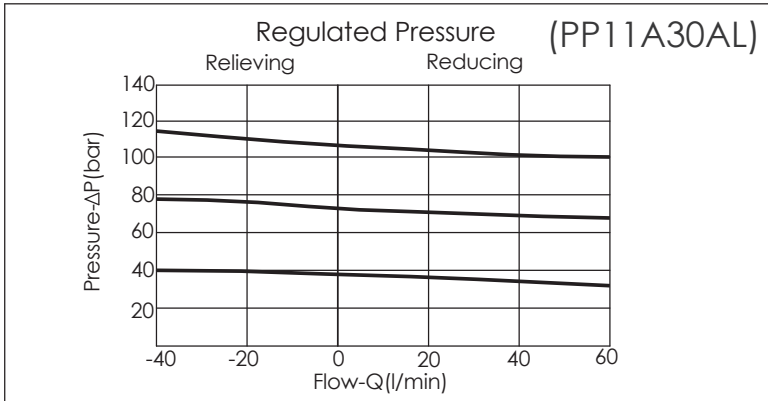


TECHNICAL DATA

Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 40 l/min
 Cartridge Valve:
 Refer to PP11A-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.



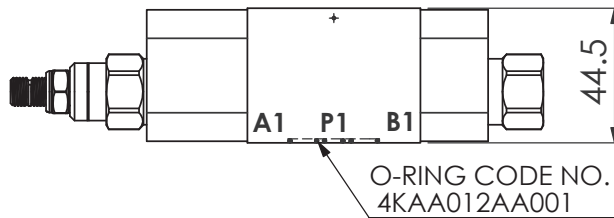
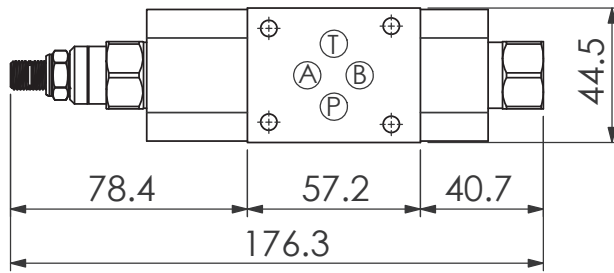
X	SELECTION FOR A PORT CONTROL	
11A3	CAVITY ONLY(WITHOUT VALVE)	
PP0A	PP11A30AL (40LPM , 7-210bar)	

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

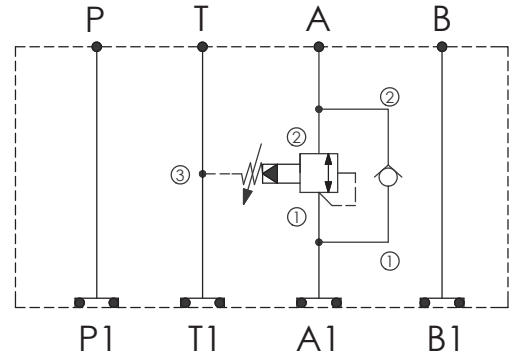
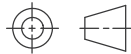
Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	

ISO 03 SANDWICH MANIFOLD

Ordering Code: MH03PAC-X-Y-Z01
Stack Height : 44.5mm



UNIT:mm



TECHNICAL DATA

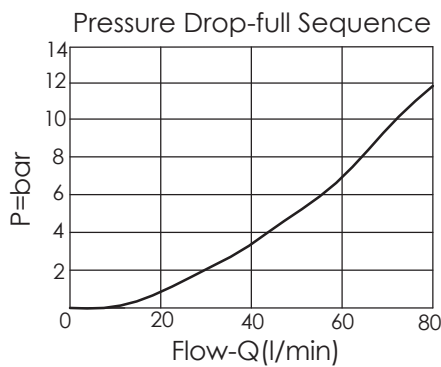
Aluminum Body Pressure Rating:	250 bar
Ductile Iron Body Pressure Rating:	350 bar
Rated flow:	40 l/min

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

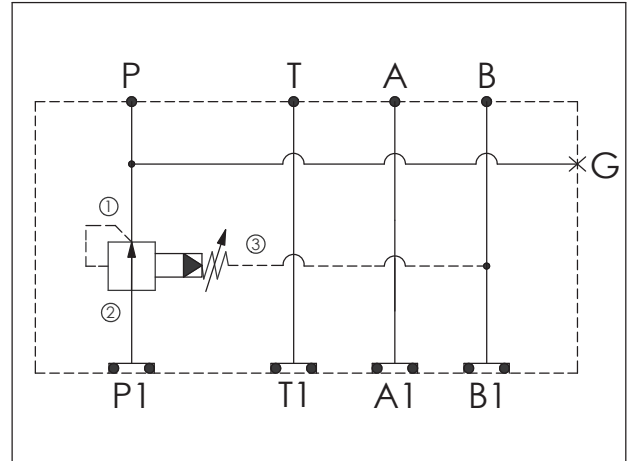
A	HIGH-STRENGTH ALUMINUM
----------	------------------------

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03PAP-X-Y-Z 01**

Stack Height : 44.5mm

UNIT:mm



TECHNICAL DATA

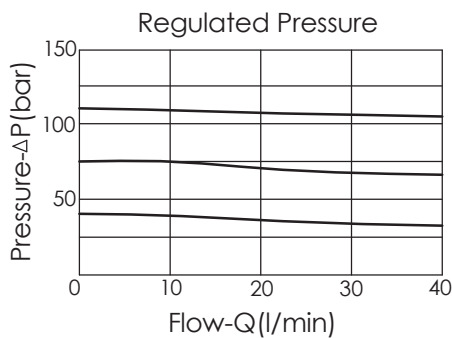
Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar

Rated flow: 40 l/min

Cartridge Valve:
 Refer to PB11A-X-Y-Z
 * Refer to Winner Cartridge Valve Catalog.

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

* 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 G PORT

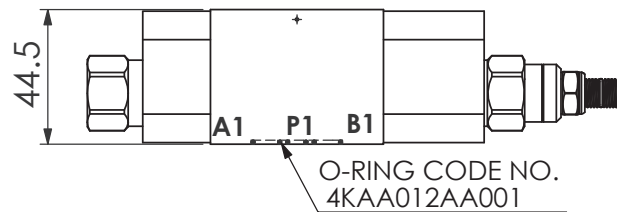
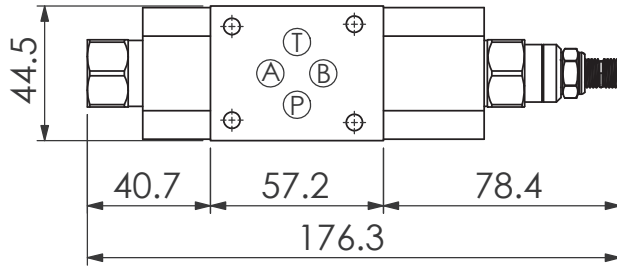
G02	G 1/4"(Metric)
N02	NPT 1/4"(U.S. Units)

Z BODY MATERIAL

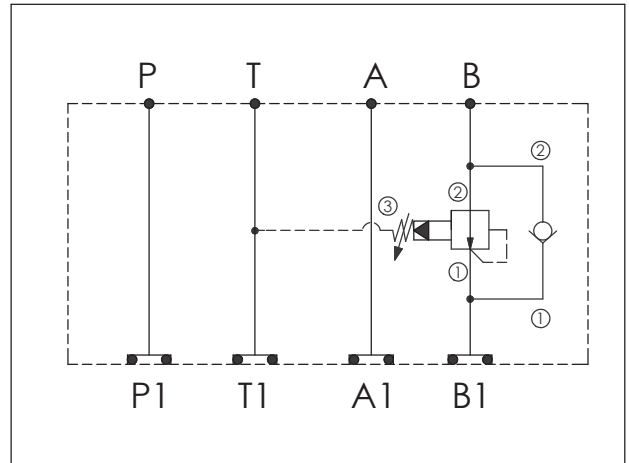
A	HIGH-STRENGTH ALUMINUM
S	DUCTILE IRON

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03PBC-X-Y-Z01**
 Stack Height : 44.5mm



UNIT:mm



TECHNICAL DATA

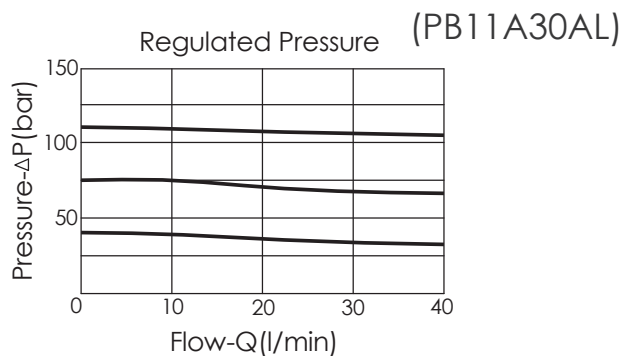
Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 40 l/min

Cartridge Valve:
 Refer to CV13A-X-Y-Z
 PB11A-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 CONTROL	
11A3	CAVITY ONLY(WITHOUT VALVE)	
PB0A	PB11A30AL (40LPM , 7-210bar)	

Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	

ISO 03 SANDWICH MANIFOLD

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

Stack Height : 44.5mm

44.5

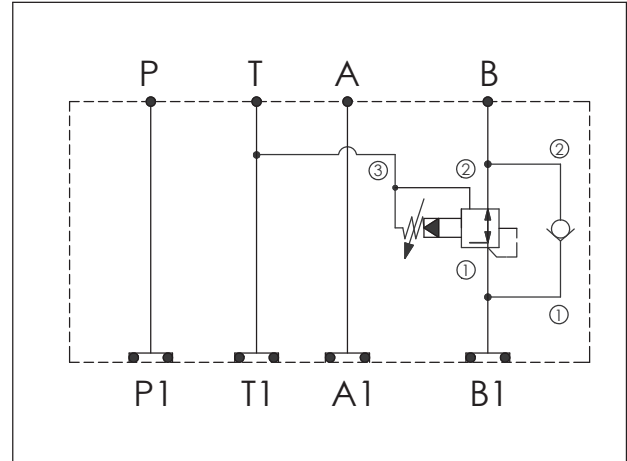
40.7 57.2 78.2 176.1

44.5

A1 P1 B1

O-RING CODE NO.
4KAA012AA001

UNIT:mm



TECHNICAL DATA

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

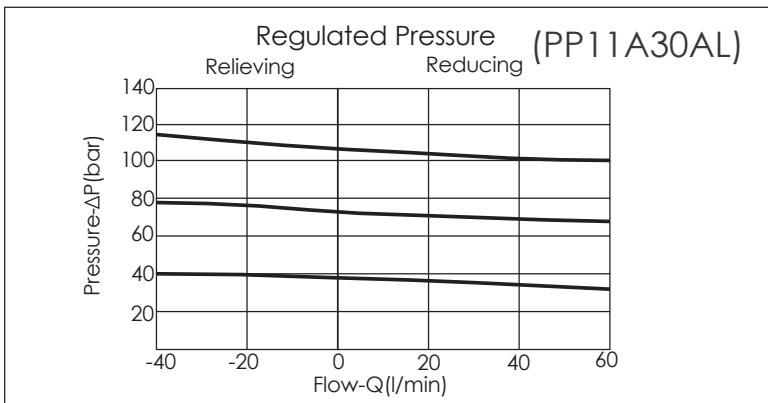
Rated flow: 40 l/min

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.



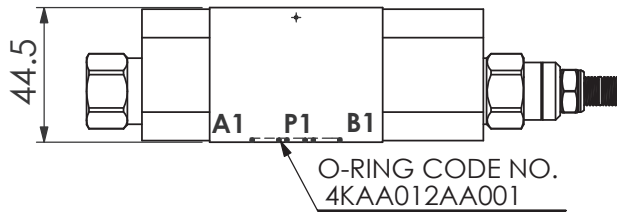
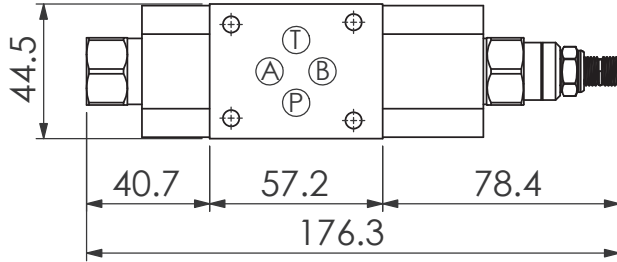
X	SELECTION FOR CHECK VALVE	
13A2	CAVITY ONLY(WITHOUT VALVE)	
CP00	CP13A2H00N (PLUG ONLY)	
CV20	CV13A2020N (80LPM , 2.0bar)	

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

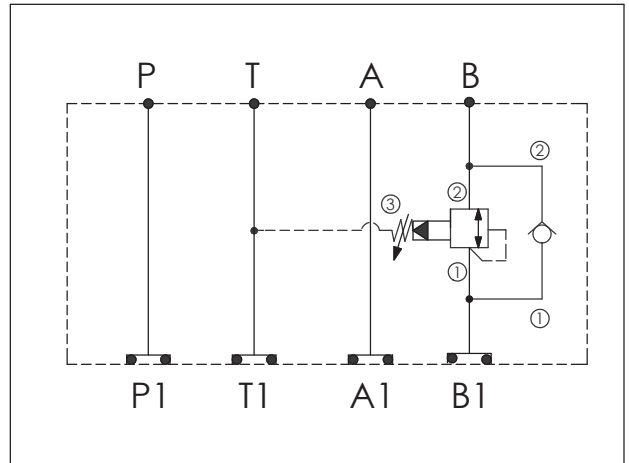
Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	

ISO 03 SANDWICH MANIFOLD

Ordering Code: MH03PBC-X-Y-Z01
Stack Height : 44.5mm



UNIT:mm



TECHNICAL DATA

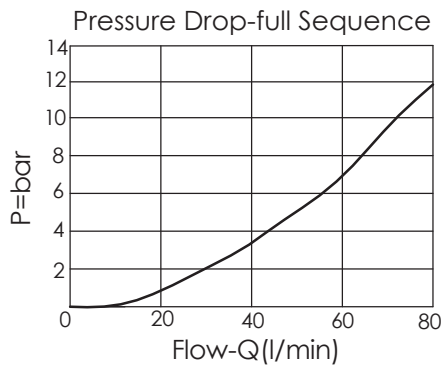
Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 40 l/min

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

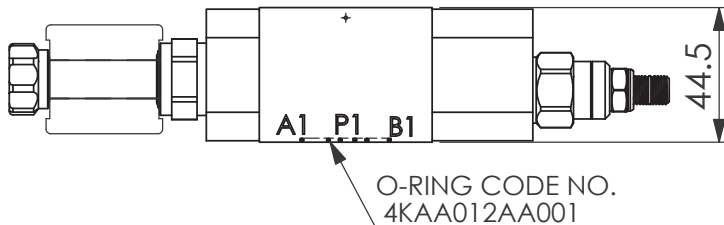
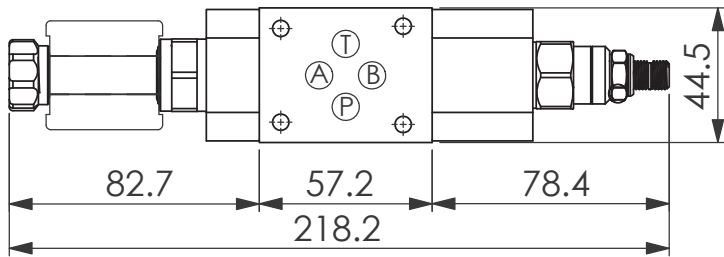
Y	SELECTION FOR B PORT CONTROL	
11A3	CAVITY ONLY(WITHOUT VALVE)	
SPOA	SP11A30AL (60LPM , 7-210bar)	

Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	

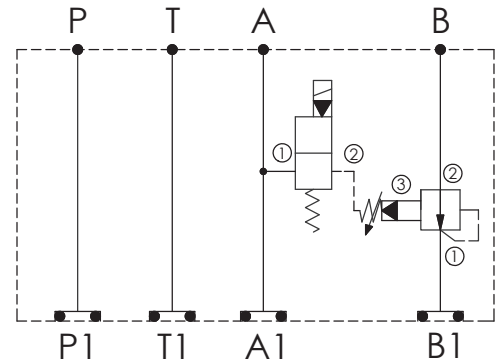
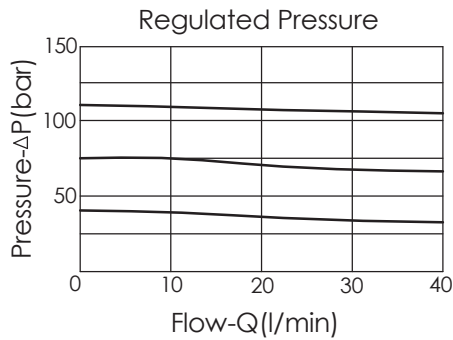
ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03PBE-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: 40 l/min

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

Y SELECTION FOR B PORT CONTROL

11A3	CAVITY ONLY(WITHOUT VALVE)
PB0A	PB11A30AL (40LPM , 7-210bar)

Z BODY MATERIAL

A	HIGH-STRENGTH ALUMINUM
S	DUCTILE IRON

ISO 03 SANDWICH MANIFOLD

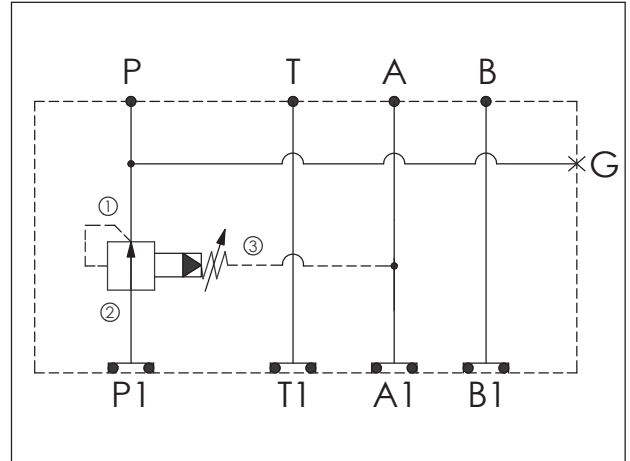
Ordering Code: **MH03PBP-X-Y-Z 01**

Stack Height : 44.5mm

O-RING CODE NO. 4KAA012AA001

G PORT

UNIT:mm



TECHNICAL DATA

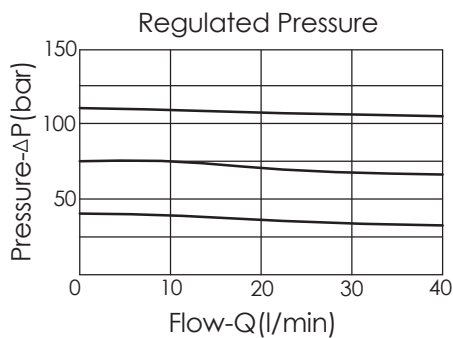
Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar

Rated flow: 40 l/min

Cartridge Valve:
 Refer to PB11A-X-Y-Z
 * Refer to Winner Cartridge Valve Catalog.

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

* 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)	

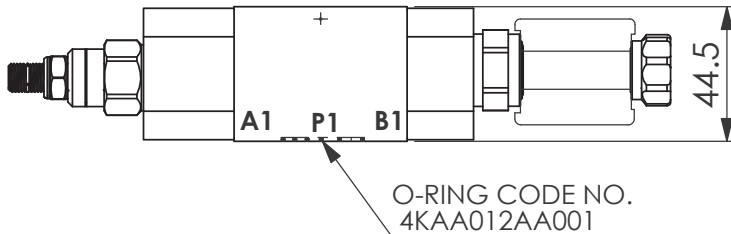
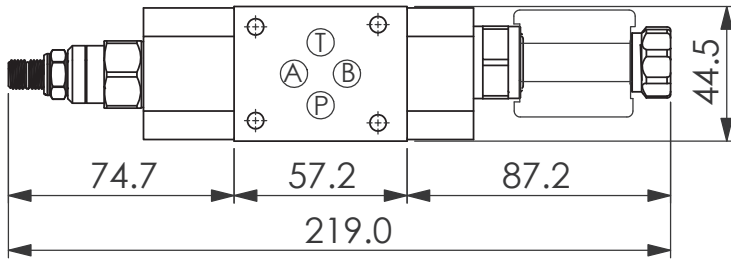
Y	SELECTION FOR B PORT CONTROL	
11A3	CAVITY ONLY(WITHOUT VALVE)	
PB0A	PB11A30AL (40LPM , 7-210bar)	

Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

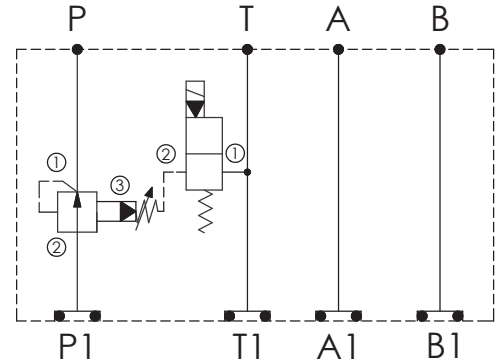
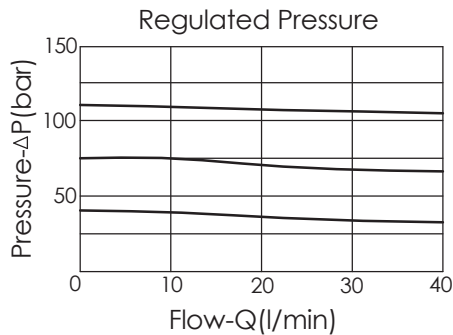
ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03PPE-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 l/min

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

* 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 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)

Z BODY MATERIAL

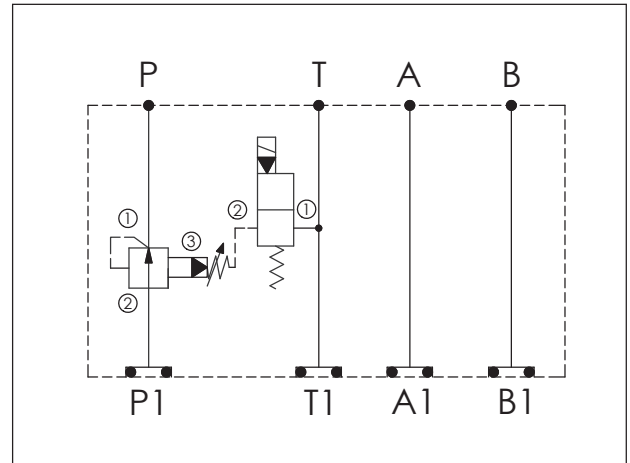
A	HIGH-STRENGTH ALUMINUM
S	DUCTILE IRON

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03PPE-X-Y-Z 11**

Stack Height : 44.5mm

UNIT:mm



TECHNICAL DATA

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

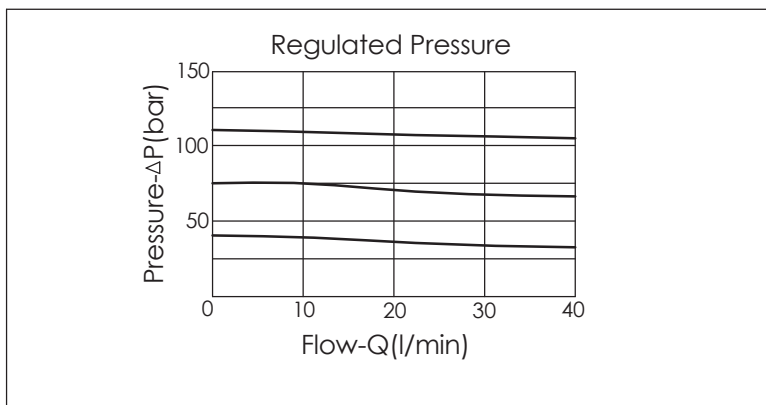
Rated flow: 40 l/min

Cartridge Valve:
 Refer to PB11A-X-Y-Z
 EP08W-X-Y-Z

* Refer to Winner Cartridge Valve Catalog.

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

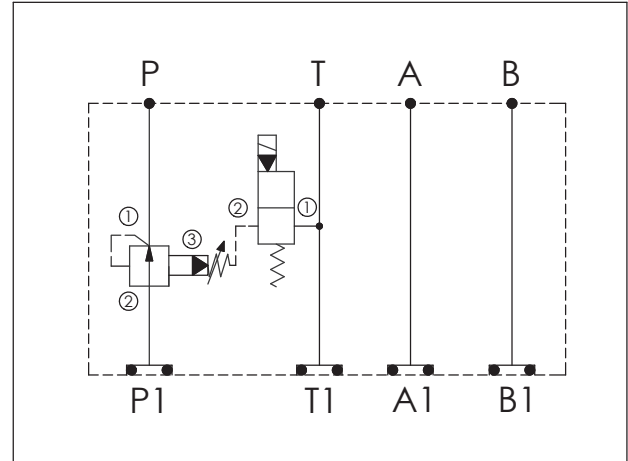
Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03PPE-X-Y-Z 12**

Stack Height : 44.5mm

UNIT:mm



TECHNICAL DATA

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

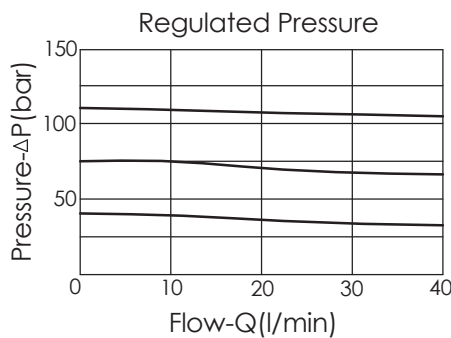
Rated flow: 40 l/min

Cartridge Valve:
 Refer to PB11A-X-Y-Z
 EP08W-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)

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)

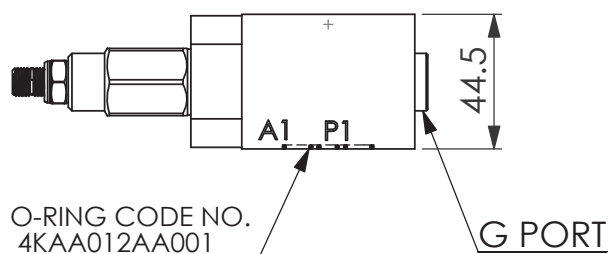
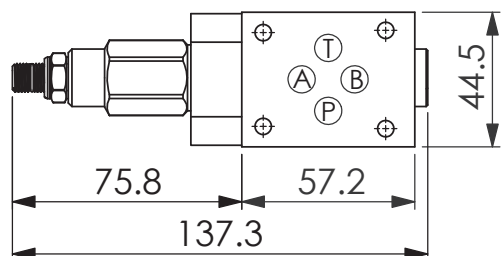
Z BODY MATERIAL

A	HIGH-STRENGTH ALUMINUM
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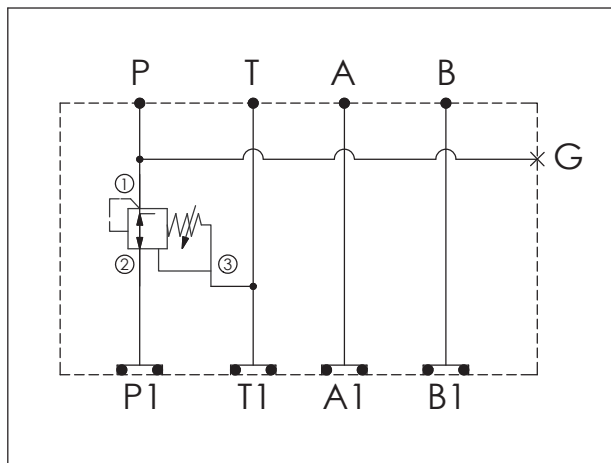
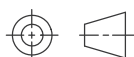
ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03PPW-X-Y-Z 01**

Stack Height : 44.5mm



UNIT:mm



TECHNICAL DATA

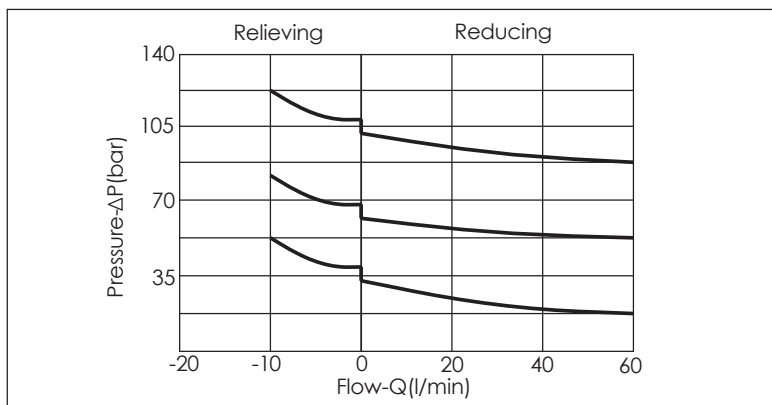
Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar

Rated flow: 40 l/min

Cartridge Valve:
 Refer to PD11A-X-Y-Z
 * Refer to Winner Cartridge Valve Catalog.

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

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



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	
A	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

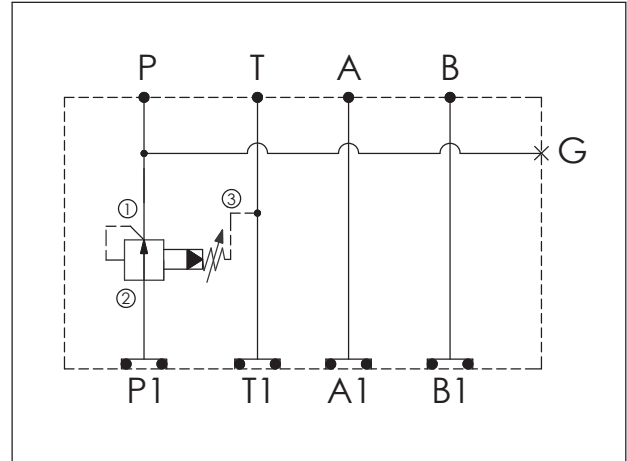
ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03PPW-X-Y-Z 01**

Stack Height : 44.5mm

O-RING CODE NO. 4KAA012AA001

UNIT:mm



TECHNICAL DATA

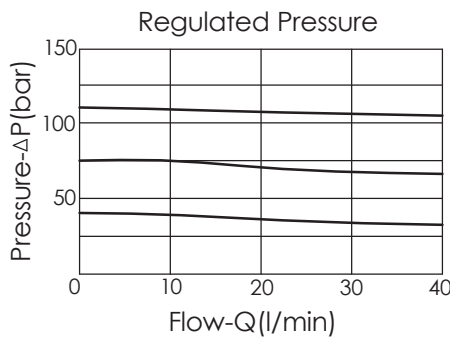
Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar

Rated flow: 40 l/min

Cartridge Valve:
 Refer to PB11A-X-Y-Z
 * Refer to Winner Cartridge Valve Catalog.

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

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



X SELECTION FOR P PORT CONTROL

11A3	CAVITY ONLY(WITHOUT VALVE)
PB0A	PB11A30AL(40LPM,7-210bar) (Pilot Operated Reducing)
PB0B	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

A	HIGH-STRENGTH ALUMINUM
S	DUCTILE IRON

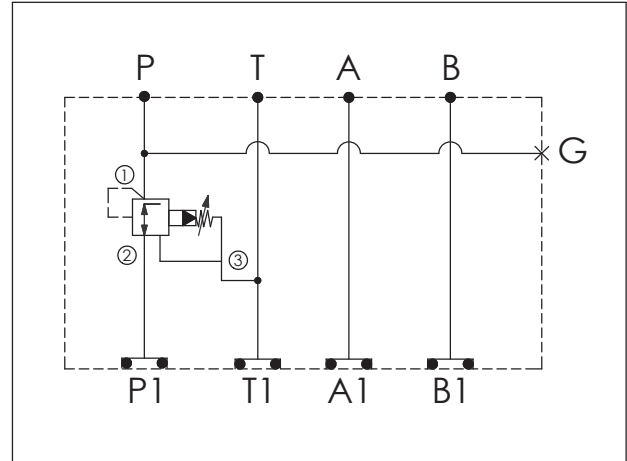
ISO 03 SANDWICH MANIFOLD

Ordering Code:	MH03PPW-X-Y-Z 01
Stack Height :	44.5mm

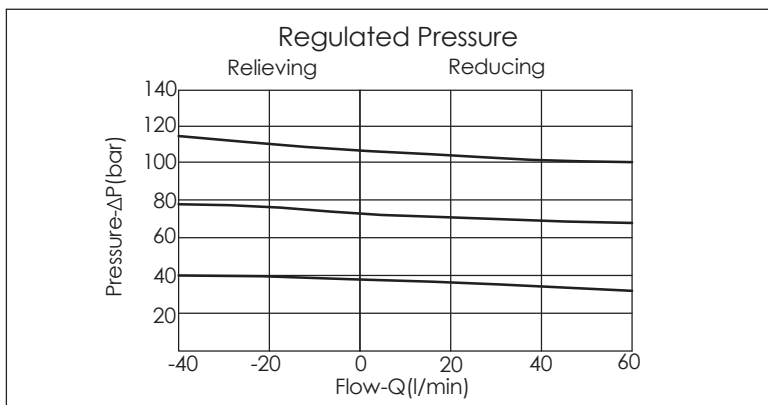
O-RING CODE NO. 4KAA012AA001

G PORT

UNIT:mm



TECHNICAL DATA	
Aluminum Body Pressure Rating:	250 bar
Ductile Iron Body Pressure Rating:	350 bar
Rated flow:	40 l/min
Cartridge Valve:	Refer to PP11A-X-Y-Z
* Refer to Winner Cartridge Valve Catalog.	
Aluminum	0.32 kg(WITHOUT VALVE) 0.47 kg(INCLUDE VALVE)
Ductile Iron	0.9 kg(WITHOUT VALVE) 1.05 kg(INCLUDE VALVE)
* If you need the special specification. Please contact us.	



X	SELECTION FOR P PORT CONTROL
11A3	CAVITY ONLY(WITHOUT VALVE)
PPOA	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
A	HIGH-STRENGTH ALUMINUM
S	DUCTILE IRON

ISO 03 SANDWICH MANIFOLD

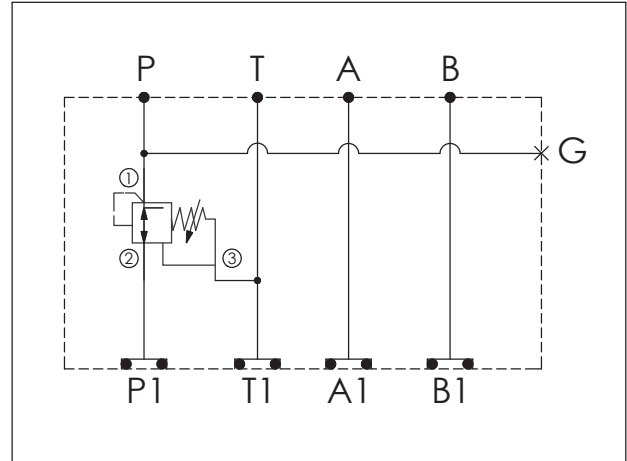
Ordering Code: **MH03PPW-X-Y-Z 02**

Stack Height : 40.0mm

O-RING CODE NO. 4KAA012AA001

G PORT

UNIT:mm



TECHNICAL DATA

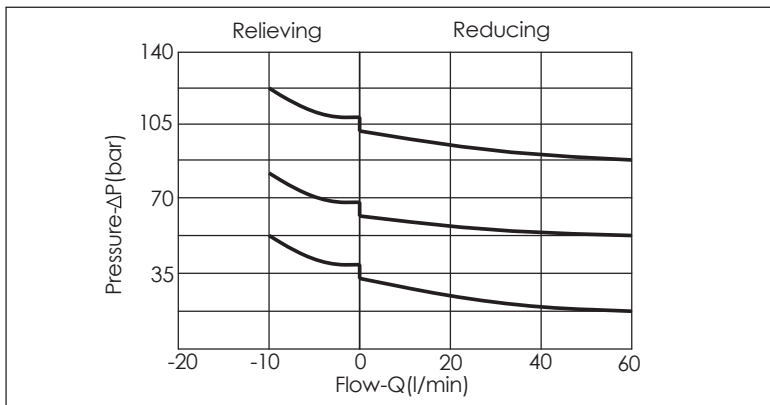
Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar

Rated flow: 40 l/min

Cartridge Valve:
 Refer to PD11A-X-Y-Z
 * Refer to Winner Cartridge Valves Catalog.

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

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



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	
A	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

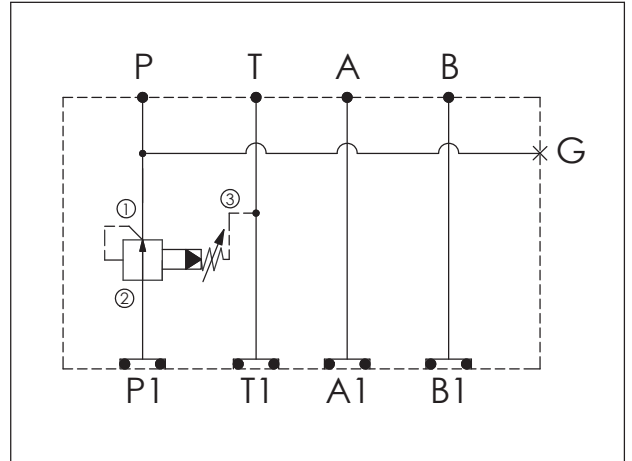
ISO 03 SANDWICH MANIFOLD

Ordering Code:	MH03PPW-X-Y-Z 02
Stack Height :	40.0mm

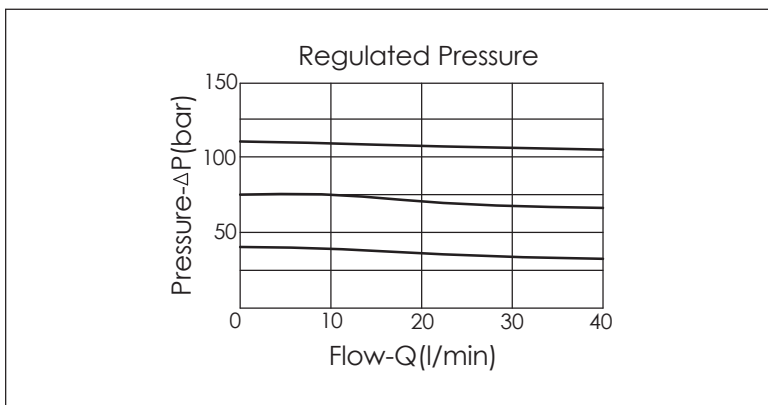
O-RING CODE NO.
4KAA012AA001

G PORT

UNIT:mm



TECHNICAL DATA	
Aluminum Body Pressure Rating:	250 bar
Ductile Iron Body Pressure Rating:	350 bar
Rated flow:	40 l/min
Cartridge Valve:	Refer to PB11A-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.	



X	SELECTION FOR P PORT CONTROL	
11A3	CAVITY ONLY(WITHOUT VALVE)	
PBOA	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	
A	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

ISO 03 SANDWICH MANIFOLD

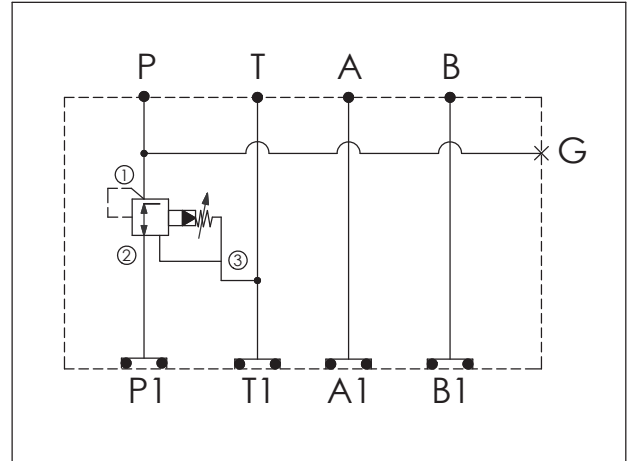
Ordering Code: **MH03PPW-X-Y-Z 02**

Stack Height : 40.0mm

O-RING CODE NO. 4KAA012AA001

G PORT

UNIT:mm



TECHNICAL DATA

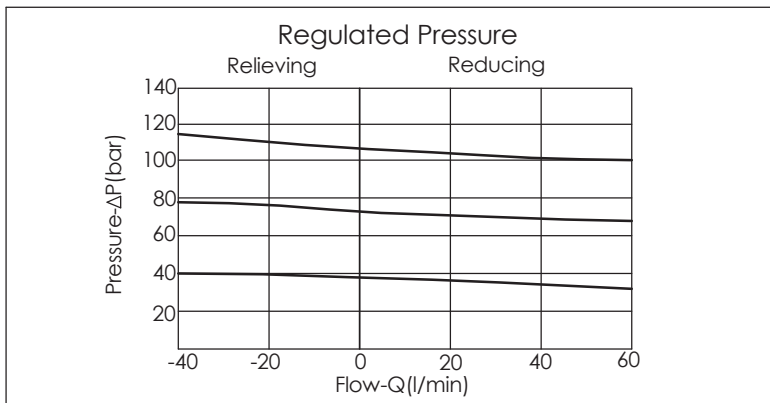
Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar

Rated flow: 40 l/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.



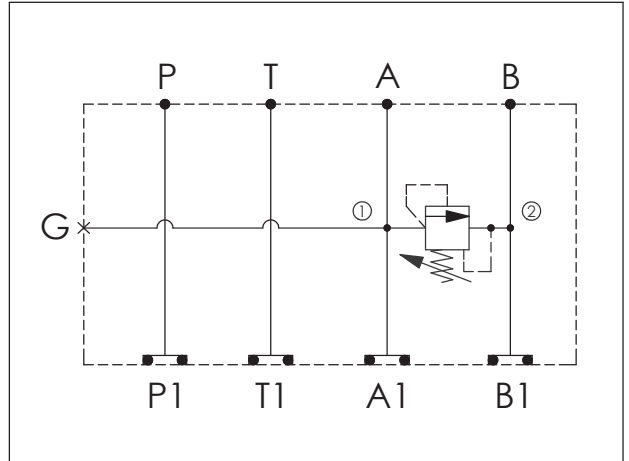
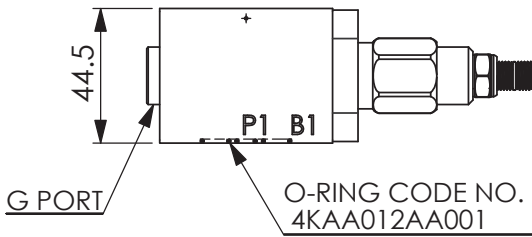
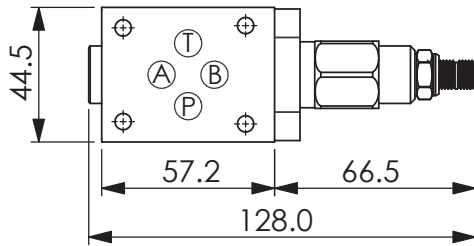
X	SELECTION FOR P PORT CONTROL	
11A3	CAVITY ONLY(WITHOUT VALVE)	
PP0A	PP11A30AL(40LPM,7.0~210bar) (Pilot Operated Reducing/Relieving)	
PP0B	PP11A30BL(40LPM,3.5~105bar) (Pilot Operated Reducing/Relieving)	

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

Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03RAB-X-Y-Z01**
 Stack Height : 44.5mm



TECHNICAL DATA

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

Rated flow: 40 l/min

Cartridge Valve:
 Refer to RD10A-X-Y-Z
 * Refer to Winner Cartridge Valve Catalog.

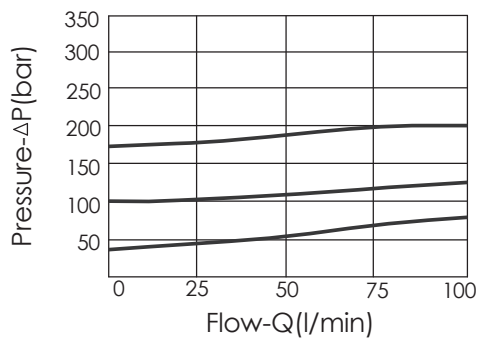
Aluminum	0.28 kg(WITHOUT VALVE) 0.45 kg(INCLUDE VALVE)
DUCTILE IRON	1.51 kg(WITHOUT VALVE) 1.68 kg(INCLUDE VALVE)

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

UNIT:mm



Typical Pressure Rise



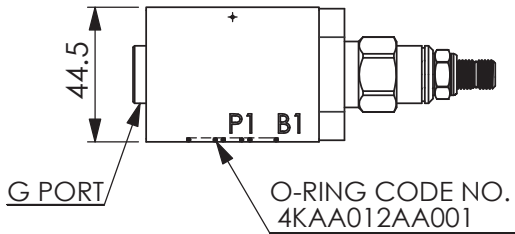
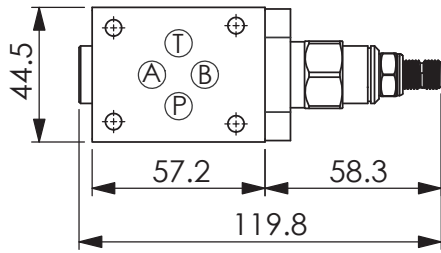
X	SELECTION FOR A PORT CONTROL	
10A2	CAVITY ONLY(WITHOUT VALVE)	
RD5A	RD10A25AL(95LPM,35-210bar)	

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

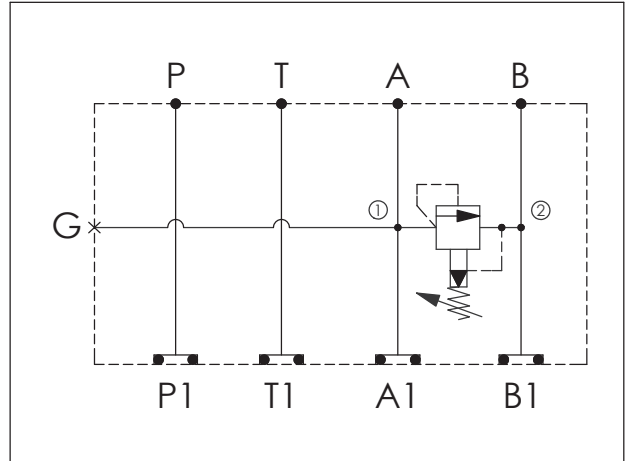
Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03RAB-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 l/min

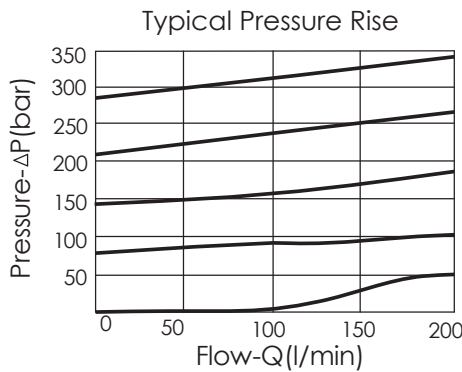
Cartridge Valve:

Refer to RP10A-X-Y-Z

* Refer to Winner Cartridge Valve Catalog.

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

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



X SELECTION FOR A PORT CONTROL

10A2 CAVITY ONLY(WITHOUT VALVE)

RP0A RP10A20AL(95LPM,7-210bar)

Y SELECTION FOR G PORT

G02 G 1/4"(Metric)

N02 NPT 1/4"(U.S. Units)

Z BODY MATERIAL

A HIGH-STRENGTH ALUMINUM

S DUCTILE IRON

ISO 03 SANDWICH MANIFOLD

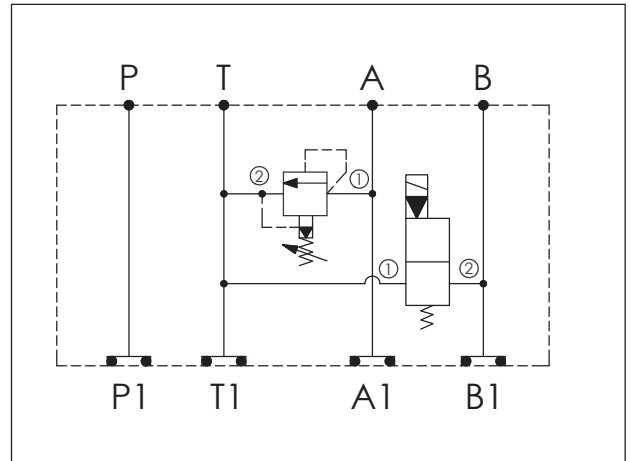
Ordering Code:	MH03RAE-X-Y-Z01
Stack Height :	44.5mm

Dimensions: 44.5 (height), 74.6 (port offset), 57.2 (manifold width), 73.6 (port offset), 205.5 (total length).

Ports: P, T, A, B (top); P1, T1, A1, B1 (bottom).

O-RING CODE NO. 4KAA012AA001

UNIT:mm



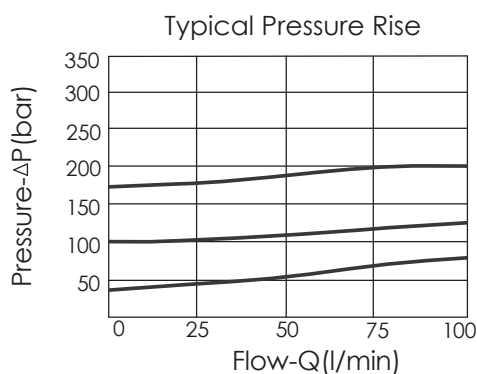
TECHNICAL DATA

Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 40 l/min

Cartridge Valve:
 Refer to RP10A-X-Y-Z
 EP08W-X-Y-Z
 * Refer to Winner Cartridge Valve Catalog.

Aluminum	0.38 kg(WITHOUT VALVES) 0.58 kg(INCLUDE VALVES , WITHOUT COIL)
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* 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)
EP01	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

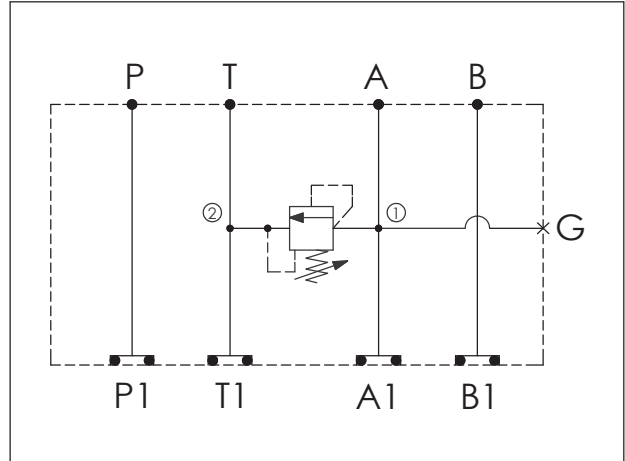
A	HIGH-STRENGTH ALUMINUM
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ISO 03 SANDWICH MANIFOLD

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

Stack Height : 44.5mm

UNIT:mm



TECHNICAL DATA

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

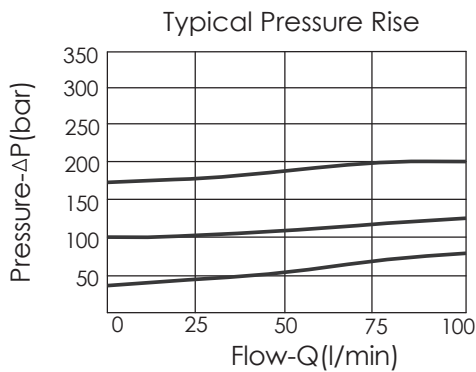
Rated flow: 40 l/min

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

* Refer to Winner Cartridge Valve Catalog.

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

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



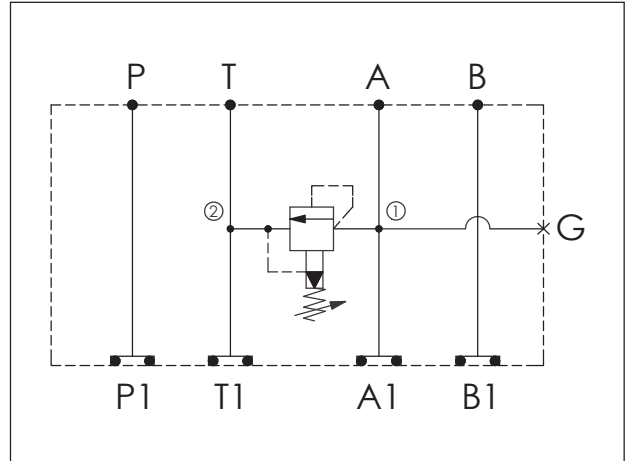
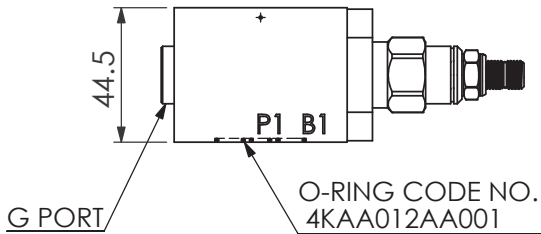
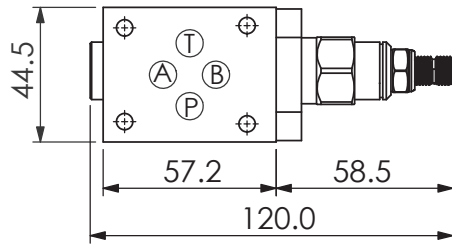
X	SELECTION FOR A PORT CONTROL	
10A2	CAVITY ONLY(WITHOUT VALVE)	
RD5A	RD10A25AL(95LPM,35-210bar)	

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

Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03RAH-X-Y-Z01**
 Stack Height : 44.5mm



TECHNICAL DATA

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

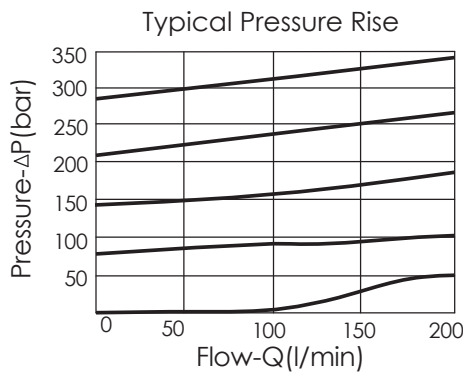
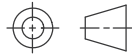
Rated flow: 40 l/min

Cartridge Valve:
 Refer to RP10A-X-Y-Z
 * Refer to Winner Cartridge Valve Catalog.

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

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

UNIT:mm



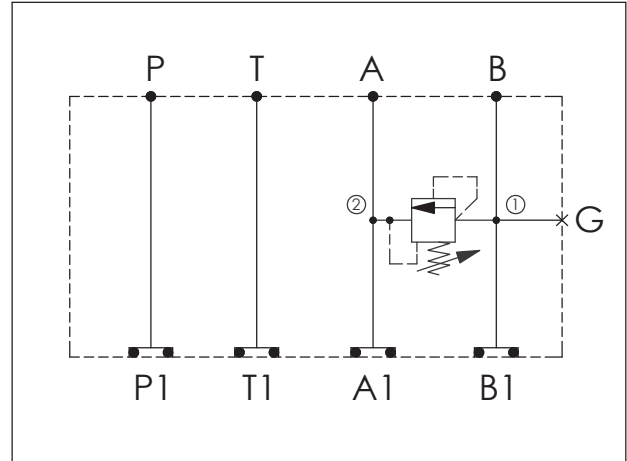
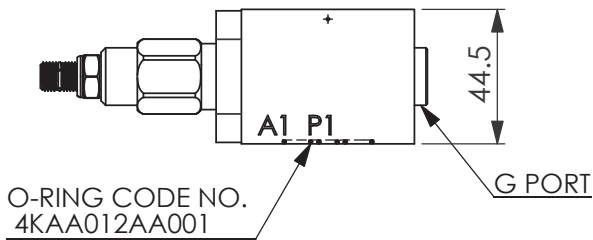
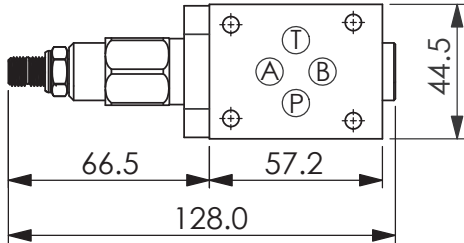
X	SELECTION FOR A PORT CONTROL	
10A2	CAVITY ONLY(WITHOUT VALVE)	
RPOA	RP10A20AL(95LPM,7-210bar)	

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

Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03RBA-X-Y-Z01**
 Stack Height : 44.5mm



TECHNICAL DATA

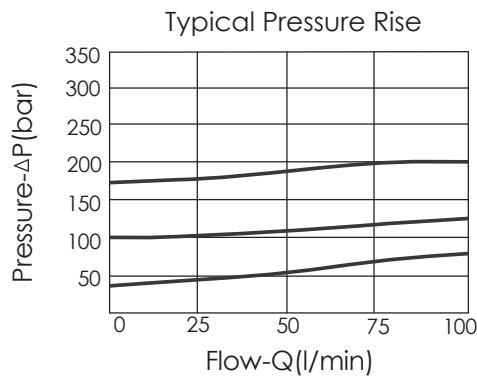
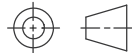
Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 40 l/min

Cartridge Valve:
 Refer to RD10A-X-Y-Z
 * Refer to Winner Cartridge Valve Catalog.

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

10A2	CAVITY ONLY(WITHOUT VALVE)
RD5A	RD10A25AL (95LPM,35-210bar)

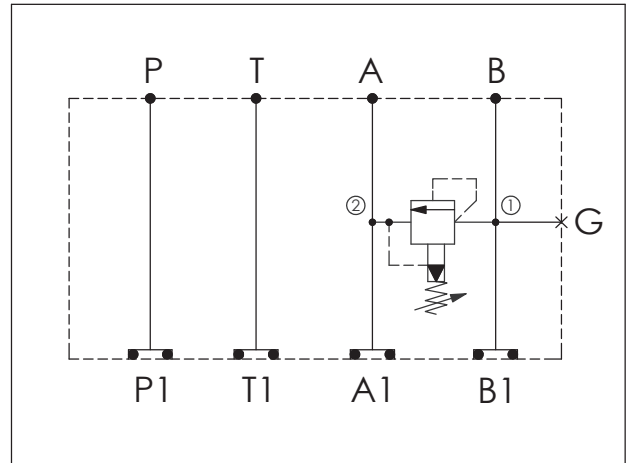
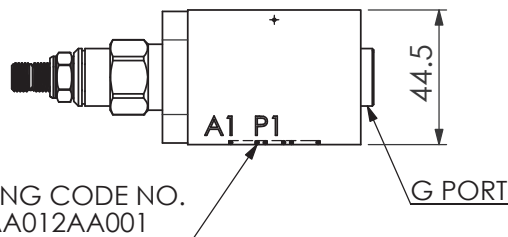
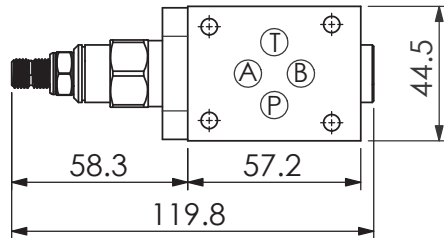
Z

BODY MATERIAL

A	HIGH-STRENGTH ALUMINUM
S	DUCTILE IRON

ISO 03 SANDWICH MANIFOLD

Ordering Code: MH03RBA-X-Y-Z01
Stack Height : 44.5mm



TECHNICAL DATA

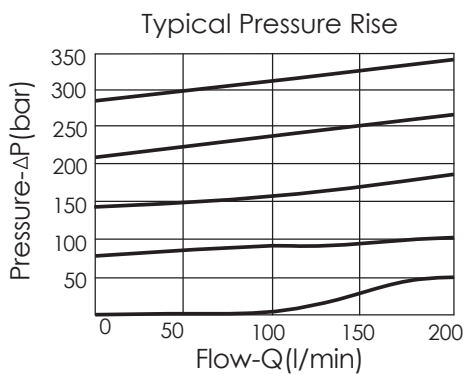
Aluminum Body Pressure Rating:	250 bar
Ductile Iron Body Pressure Rating:	350 bar
Rated flow:	40 l/min

Cartridge Valve:
Refer to RP10A-X-Y-Z
* Refer to Winner Cartridge Valve Catalog.

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

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

UNIT:mm



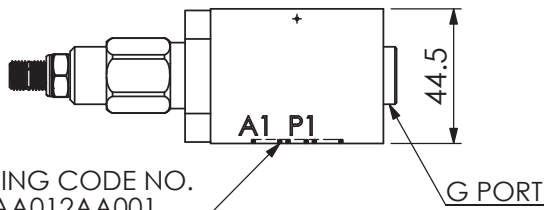
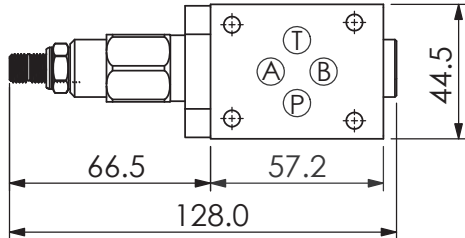
X	SELECTION FOR G PORT	
G02	G 1/4"(Metric)	
N02	NPT 1/4"(U.S. Units)	

Y	SELECTION FOR B PORT CONTROL	
10A2	CAVITY ONLY(WITHOUT VALVE)	
RP0A	RP10A20AL(95LPM,7-210bar)	

Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

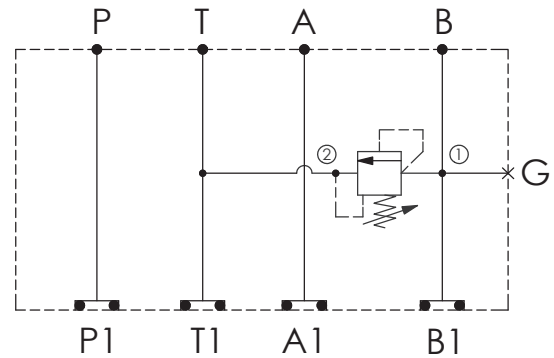
ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03RBH-X-Y-Z01**
 Stack Height : 44.5mm



O-RING CODE NO.
4KAA012AA001

UNIT:mm



TECHNICAL DATA

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

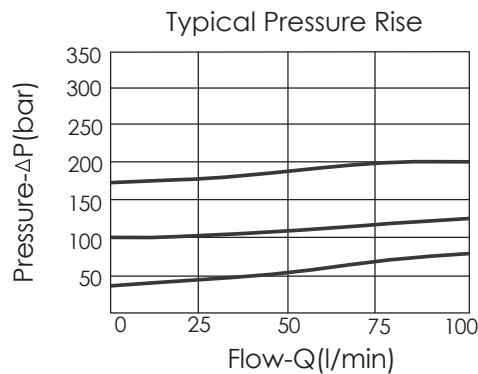
Rated flow: 40 l/min

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

* Refer to Winner Cartridge Valve Catalog.

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

* 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

10A2	CAVITY ONLY(WITHOUT VALVE)
RD5A	RD10A25AL(95LPM,35-210bar)

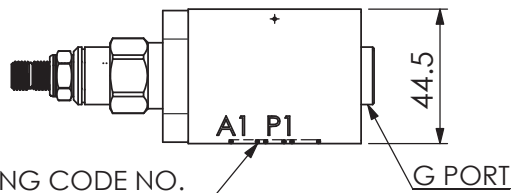
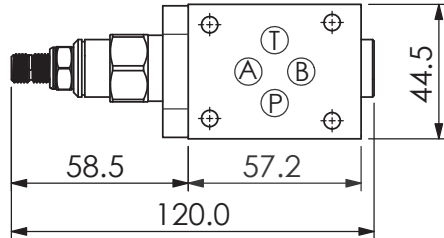
Z

BODY MATERIAL

A	HIGH-STRENGTH ALUMINUM
S	

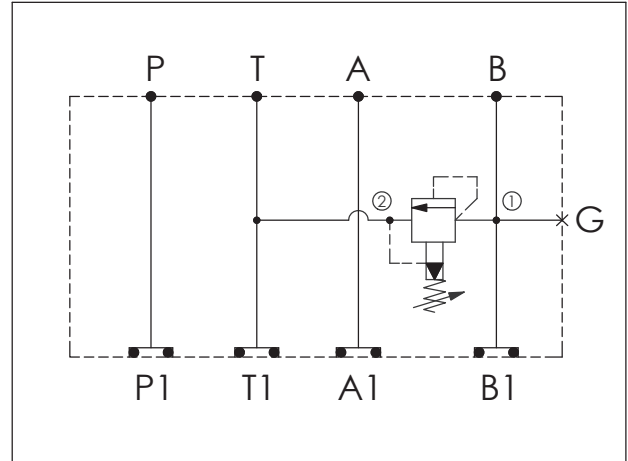
ISO 03 SANDWICH MANIFOLD

Ordering Code: MH03RBH-X-Y-Z 01
Stack Height : 44.5mm



O-RING CODE NO.
4KAA012AA001

UNIT:mm



TECHNICAL DATA

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

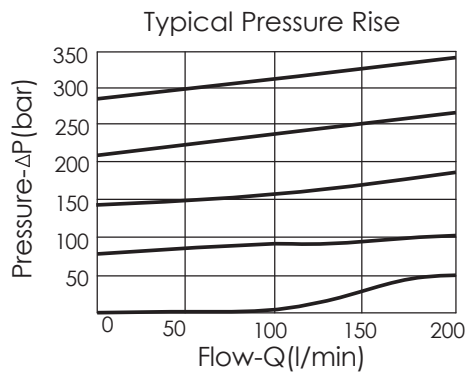
Rated flow: 40 l/min

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

* Refer to Winner Cartridge Valve Catalog.

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

* 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	
10A2	CAVITY ONLY(WITHOUT VALVE)	
RPOA	RP10A20AL(95LPM,7-210bar)	

Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03RDH-X-Y-Z01**

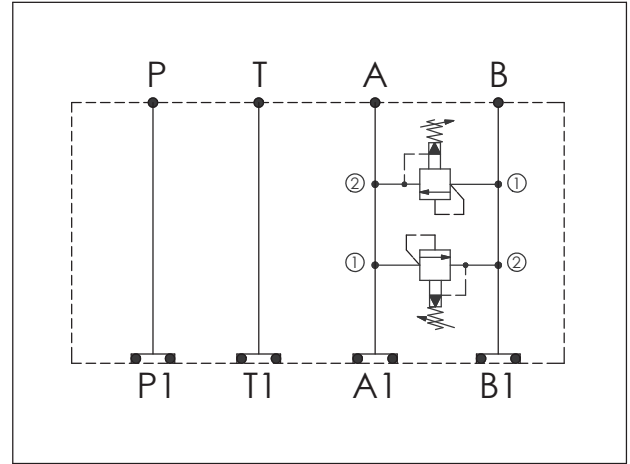
Stack Height : 44.5mm

Dimensions: 67.4, 57.2, 67.4, 191.9, 44.5

Ports: A, B, P, T, A1, P1, B1

O-RING CODE NO. 4KAA012AA001

UNIT:mm



TECHNICAL DATA

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

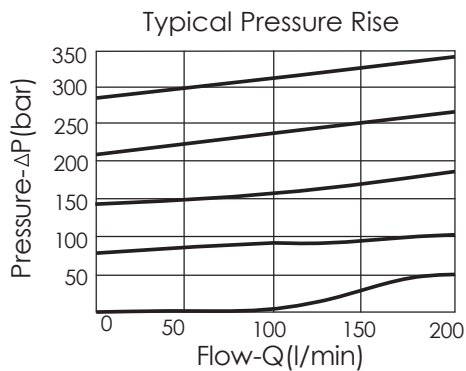
Rated flow: 40 l/min

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

* Refer to Winner Cartridge Valve Catalog.

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

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



X	SELECTION FOR A PORT CONTROL	
10A2	CAVITY ONLY(WITHOUT VALVE)	
RP0A	RP10A20AL (95LPM,7-210bar)	

Y	SELECTION FOR B PORT CONTROL	
10A2	CAVITY ONLY(WITHOUT VALVE)	
RP0A	RP10A20AL(95LPM,7-210bar)	

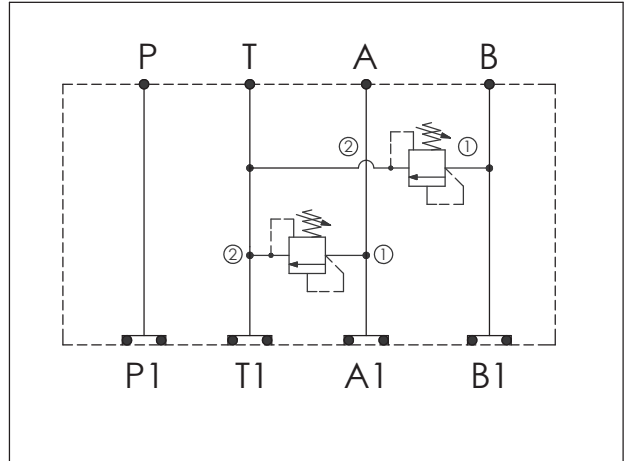
Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

ISO 03 SANDWICH MANIFOLD

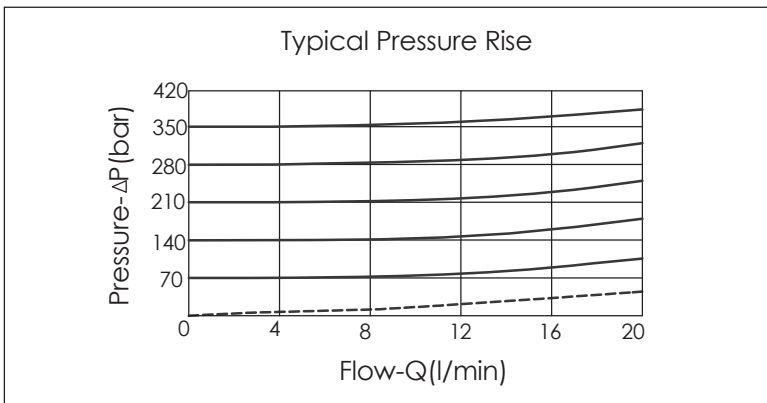
Ordering Code:	MH03RDS-X-Y-Z02
Stack Height :	40.0mm

O-RING CODE NO.
4KAA012AA001

UNIT:mm



TECHNICAL DATA	
Aluminum Body Pressure Rating:	250 bar
Ductile Iron Body Pressure Rating:	350 bar
Rated flow:	20 l/min
Cartridge Valve: Refer to RD08W-X-Y-Z	
* Refer to Winner Cartridge Valves Catalog.	
Aluminum	0.4 kg(WITHOUT VALVES) 0.65 kg(INCLUDE VALVES)
Ductile Iron	1.1 kg(WITHOUT VALVES) 1.35 kg(INCLUDE VALVES)
* If you need the special specification. Please contact us.	



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

Y	SELECTION FOR B PORT CONTROL
08W2	CAVITY ONLY(WITHOUT VALVE)
RD0A	RD08W20AL (20LPM , 80-210bar)

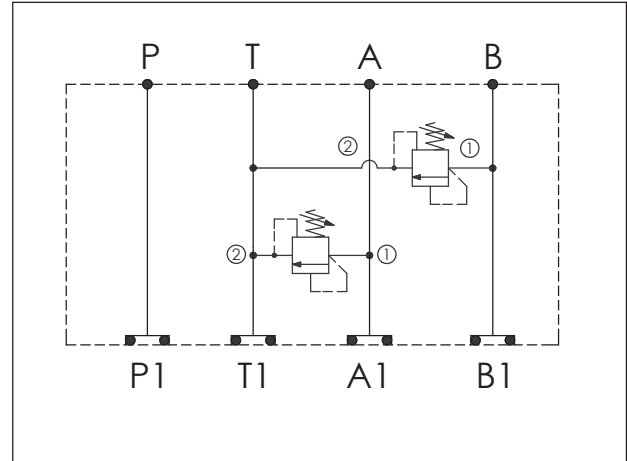
Z	BODY MATERIAL
A	HIGH-STRENGTH ALUMINUM
S	DUCTILE IRON

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03RDT-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 l/min

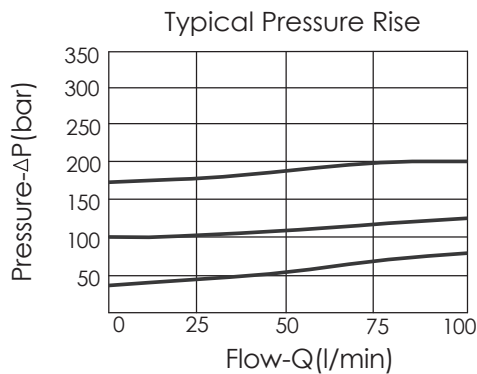
Cartridge Valve:

Refer to RD10A-X-Y-Z

* Refer to Winner Cartridge Valves Catalog.

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

* If you need the special specification. Please 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

A HIGH-STRENGTH ALUMINUM

S DUCTILE IRON

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03RDT-X-Y-Z01**

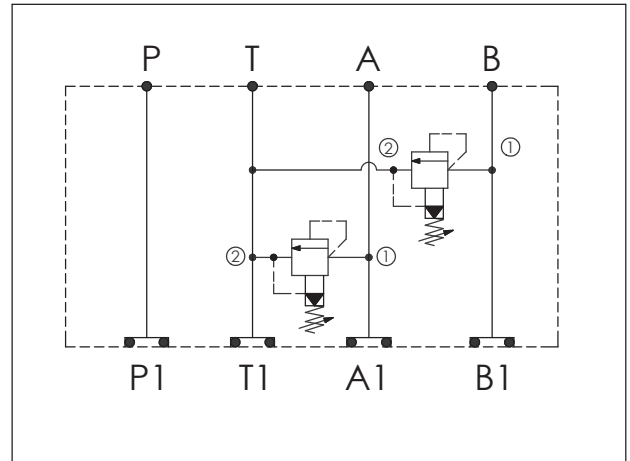
Stack Height : 44.5mm

Dimensions: 75.3, 57.2, 75.3, 207.7, 44.5

Ports: P, T, A, B, P1, T1, A1, B1

O-RING CODE NO. 4KAA012AA001

UNIT:mm



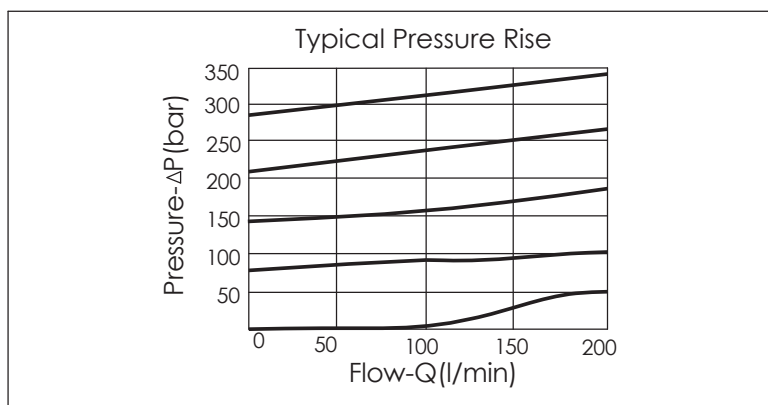
TECHNICAL DATA

Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 40 l/min

Cartridge Valve:
 Refer to RP10A-X-Y-Z
 * Refer to Winner Cartridge Valves Catalog.

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

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



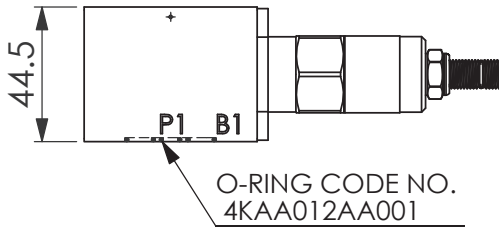
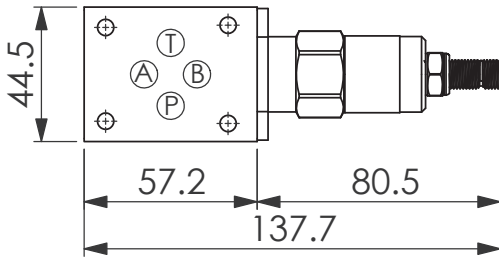
X	SELECTION FOR A PORT CONTROL	
10A2	CAVITY ONLY(WITHOUT VALVE)	
RPOA	RP10A20AL (95LPM , 7-210bar)	

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

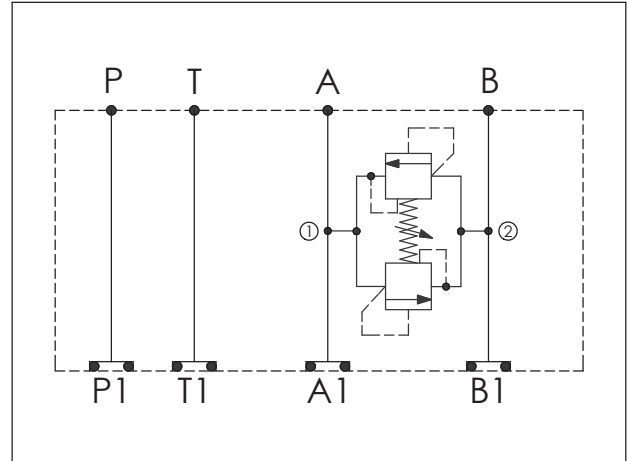
Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03RDW-X-Y-Z01**
 Stack Height : 44.5mm



UNIT:mm



TECHNICAL DATA

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

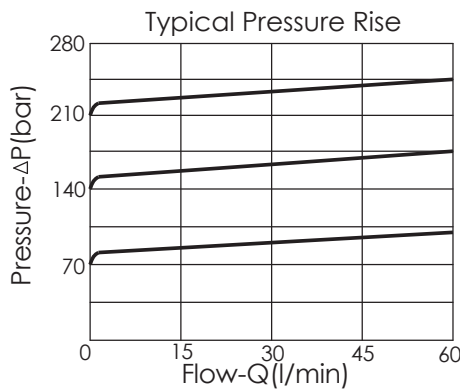
Rated flow: 40 l/min

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

* Refer to Winner Cartridge Valve Catalog.

Aluminum	0.27 kg(WITHOUT VALVE) 0.51 kg(INCLUDE VALVE)
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* If you need the special specification. Please contact us.



X SELECTION FOR A AND B PORTS CONTROL

10W2	CAVITY ONLY(WITHOUT VALVE)
CR0A	CR10W20AL (60LPM , 160-210bar)

Y SELECTION FOR G PORT

N WITHOUT PORT

Z BODY MATERIAL

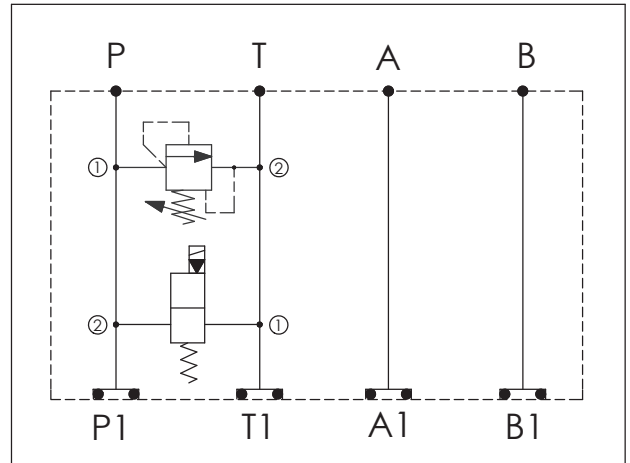
A HIGH-STRENGTH ALUMINUM

ISO 03 SANDWICH MANIFOLD

Ordering Code:	MH03RPD-X-Y-Z 01
Stack Height :	44.5mm

O-RING CODE NO. 4KAA012AA001

UNIT:mm



TECHNICAL DATA

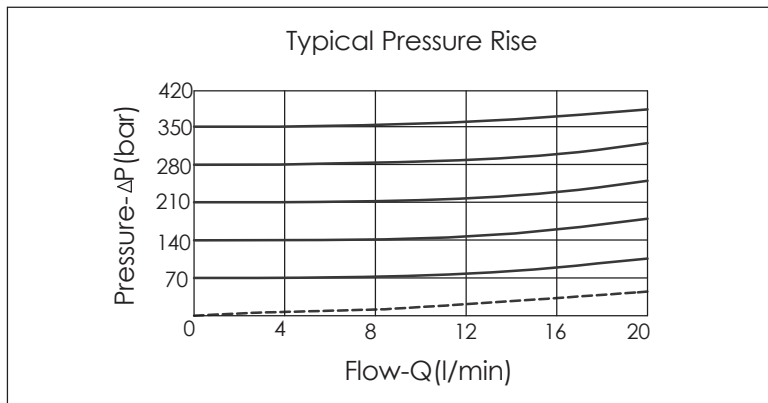
Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 20 l/min

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



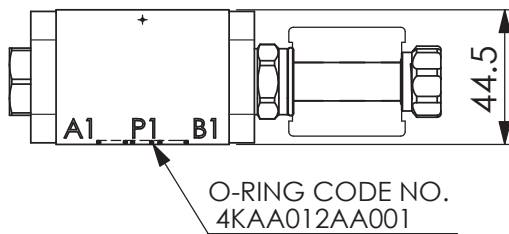
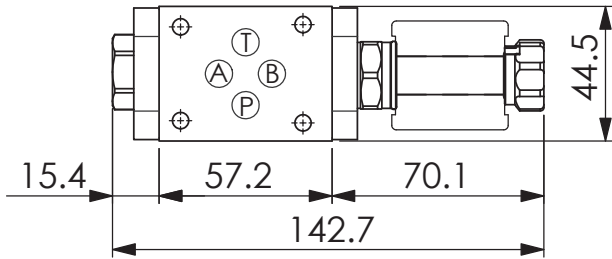
X	SELECTION FOR RELIEF VALVE (PORT ① TO ②, NEAR "A" PORT SIDE)	
08W2	CAVITY ONLY (WITHOUT VALVE)	
RD0A	RD08W20AL (20LPM, 80-210bar)	

Y	SELECTION FOR SOLENOID VALVES (PORT ② TO ①, 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)		

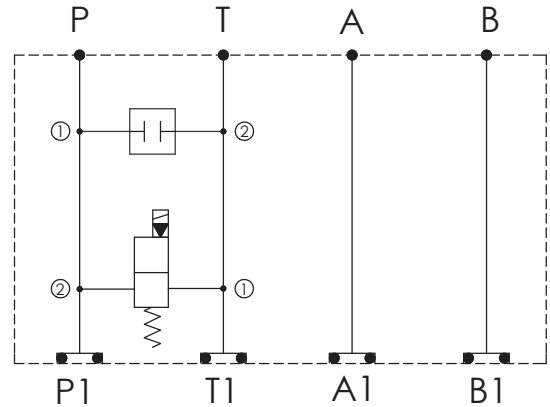
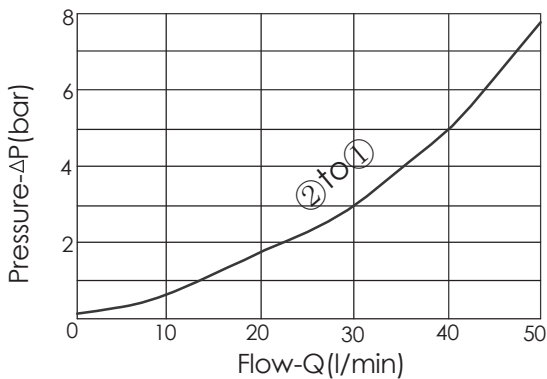
Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	

ISO 03 SANDWICH MANIFOLD

Ordering Code: MH03RPD-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 l/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)
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* If you need the special specification. Please contact us.

X SELECTION FOR RELIEF VALVE (PORT ① TO ②, NEAR "A" PORT SIDE)

08W2 CAVITY ONLY(WITHOUT VALVE)

CP00 CP08W2H00NN(3/4"-16UNF-2B , All Ports Blocked)

Y SELECTION FOR SOLENOID VALVES (PORT ② TO ①, 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)

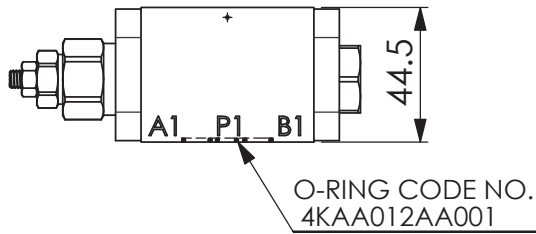
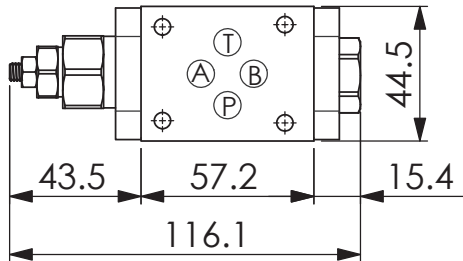
COIL MUST BE ORDERED SEPARATELY (REFER TO EC-04W-X-Y-Z)

Z BODY MATERIAL

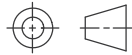
A HIGH-STRENGTH ALUMINUM

ISO 03 SANDWICH MANIFOLD

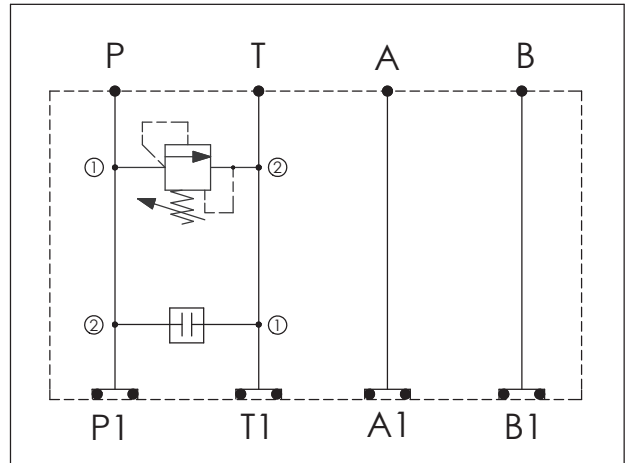
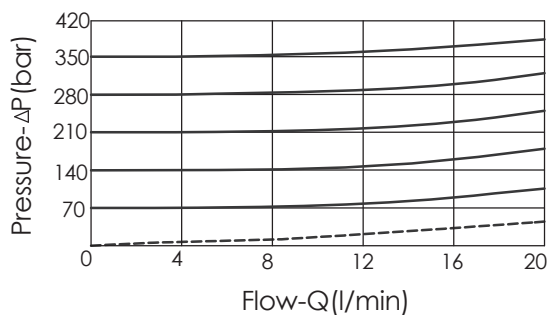
Ordering Code: MH03RPD-X-Y-Z 01
Stack Height : 44.5mm



UNIT:mm



Typical Pressure Rise



TECHNICAL DATA

Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 20 l/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)

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

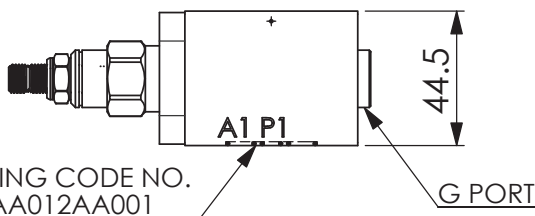
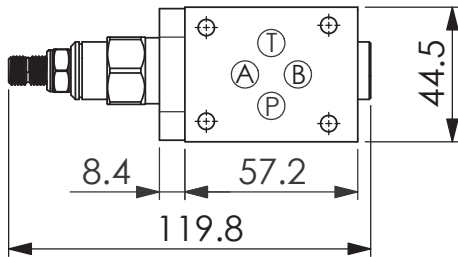
X	SELECTION FOR RELIEF VALVE (PORT ① TO ②, NEAR "A" PORT SIDE)
08W2	CAVITY ONLY (WITHOUT VALVE)
RDOA	RD08W20AL (20LPM, 80-210bar)

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

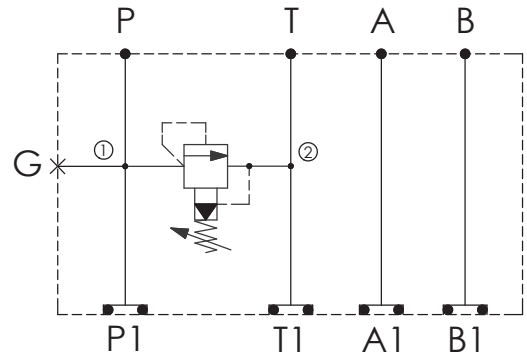
Z	BODY MATERIAL
A	HIGH-STRENGTH ALUMINUM

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03RPH-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 l/min

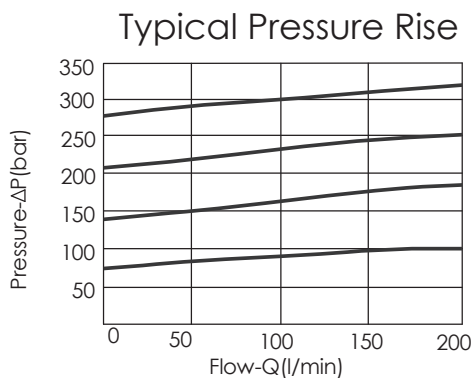
Cartridge Valve:

Refer to RP10A-X-Y-Z

* Refer to Winner Cartridge Valve Catalog.

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

* 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)

Y SELECTION FOR G PORT

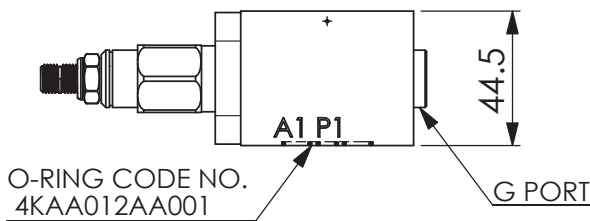
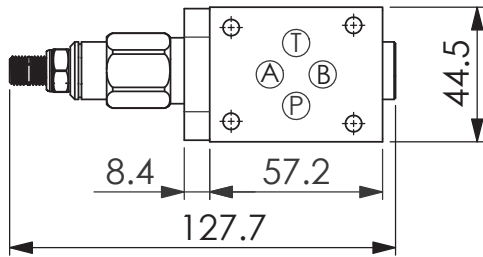
G02	G 1/4"(Metric)
N02	NPT 1/4"(U.S. Units)

Z BODY MATERIAL

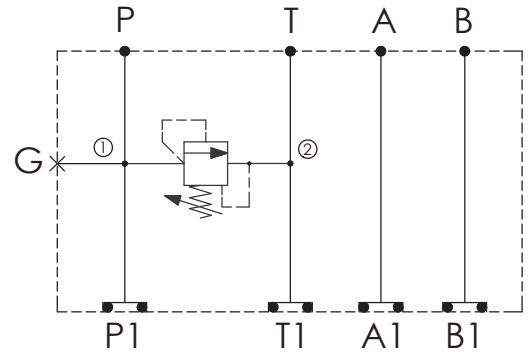
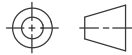
A	HIGH-STRENGTH ALUMINUM
S	DUCTILE IRON

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03RPH-X-Y-Z01**
 Stack Height : 44.5mm



UNIT:mm



TECHNICAL DATA

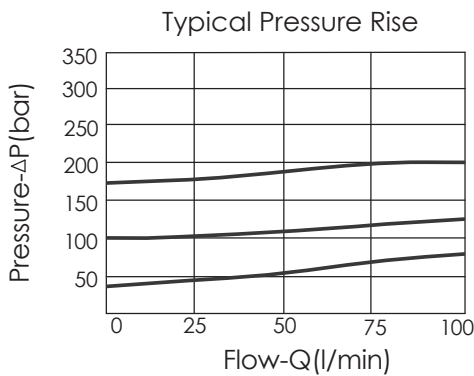
Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar

Rated flow: 40 l/min

Cartridge Valve:
 Refer to RD10A-X-Y-Z
 * Refer to Winner Cartridge Valve Catalog.

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

* 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)

Y SELECTION FOR G PORT

G02	G 1/4"(Metric)
N02	NPT 1/4"(U.S. Units)

Z BODY MATERIAL

A	HIGH-STRENGTH ALUMINUM
S	DUCTILE IRON

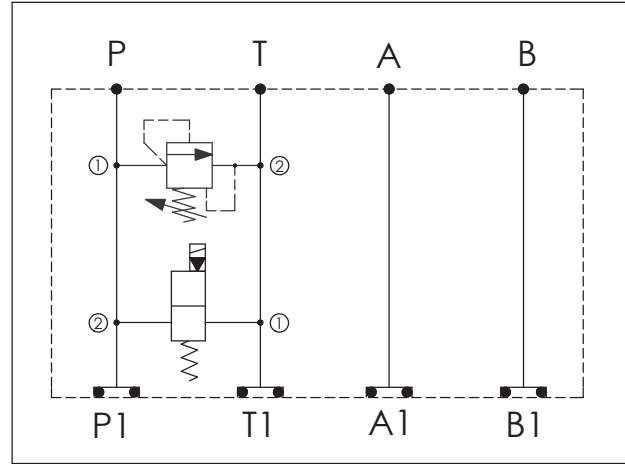
ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03RPJ-X-Y-Z01**

Stack Height : 44.5mm

O-RING CODE NO. 4KAA012AA001

UNIT:mm



TECHNICAL DATA

Aluminum Body Pressure Rating: 250 bar

Ductile Iron Body Pressure Rating: 350 bar

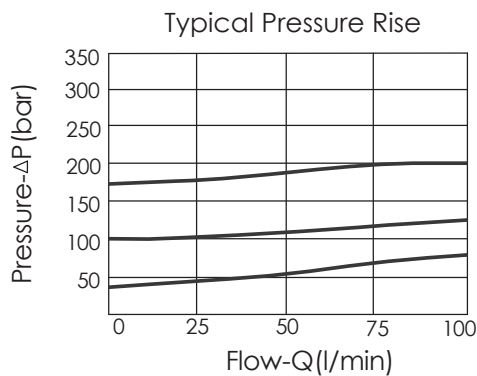
Rated flow: 40 l/min

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



X SELECTION FOR RELIEF VALVE (PORT ① TO ②, NEAR "A" PORT SIDE)

10A2	CAVITY ONLY (WITHOUT VALVE)
RD5A	RD10A25AL (95LPM, 35-210bar)

Y SELECTION FOR SOLENOID VALVES (PORT ② TO ①, 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)

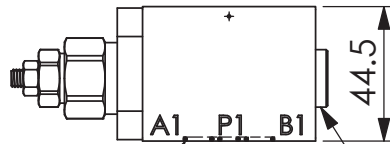
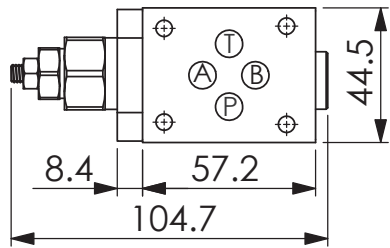
COIL MUST BE ORDERED SEPARATELY (REFER TO EC-04W-X-Y-Z)

Z BODY MATERIAL

A HIGH-STRENGTH ALUMINUM

ISO 03 SANDWICH MANIFOLD

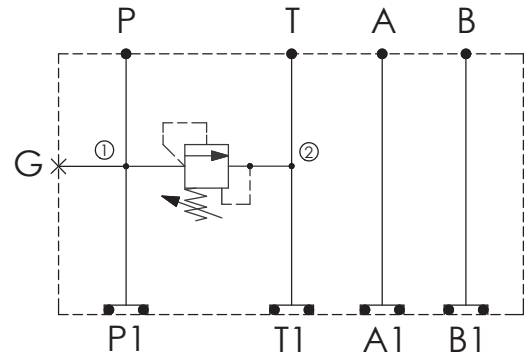
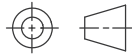
Ordering Code: MH03RPW-X-Y-Z 01
Stack Height : 44.5mm



O-RING CODE NO.
4KAA012AA001

G PORT

UNIT:mm



TECHNICAL DATA

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

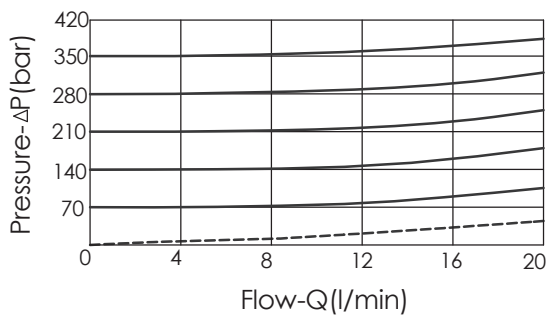
Rated flow: 20 l/min

Cartridge Valve:
 Refer to RD08W-X-Y-Z
 * Refer to Winner Cartridge Valve Catalog.

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

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

Typical Pressure Rise



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

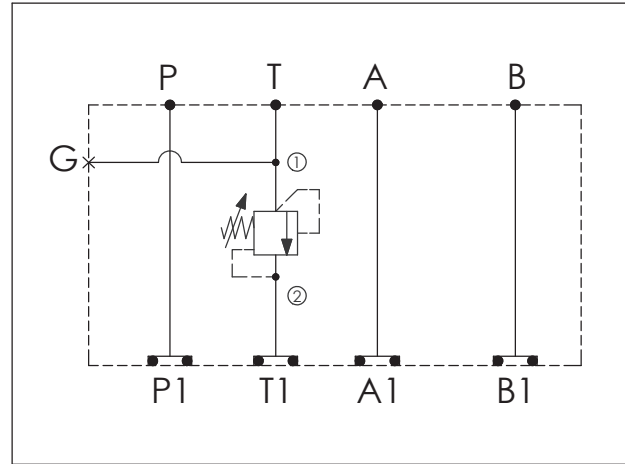
A HIGH-STRENGTH ALUMINUM

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03RTH-X-Y-Z01**

Stack Height : 44.5mm

UNIT:mm



TECHNICAL DATA

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

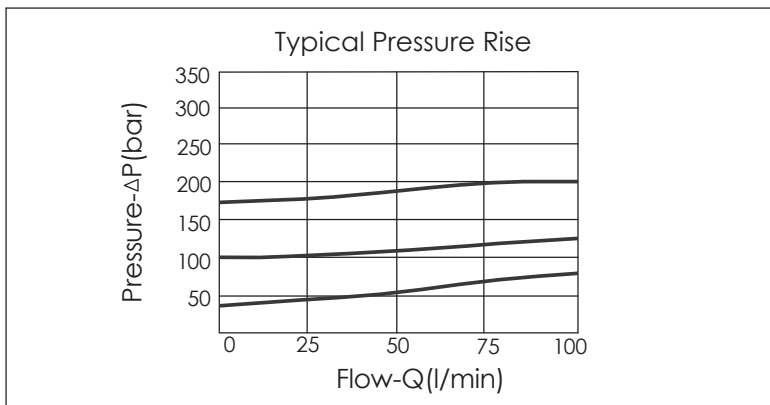
Rated flow: 40 l/min

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)

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



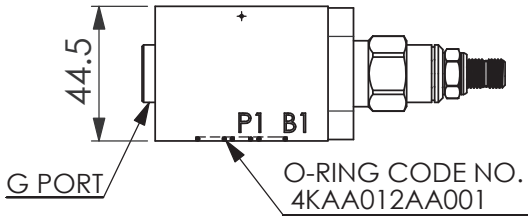
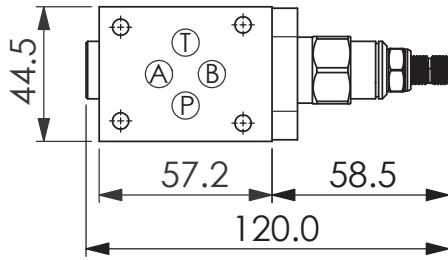
X	SELECTION FOR T PORT CONTROL	
10A2	CAVITY ONLY(WITHOUT VALVE)	
RD5A	RD10A25AL(95LPM,35-210bar)	

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

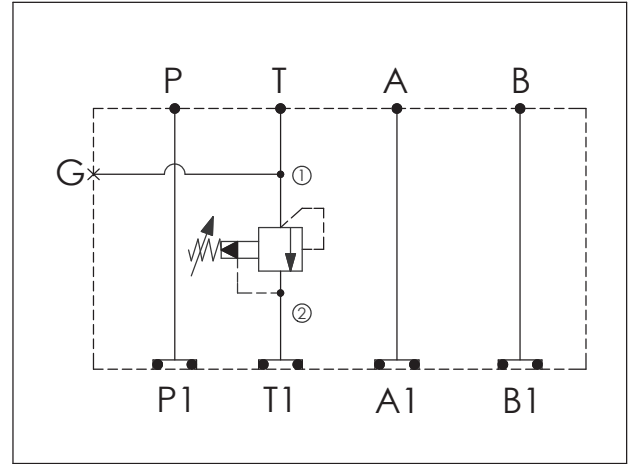
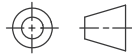
Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

ISO 03 SANDWICH MANIFOLD

Ordering Code: MH03RTH-X-Y-Z 01
Stack Height : 44.5mm



UNIT:mm



TECHNICAL DATA

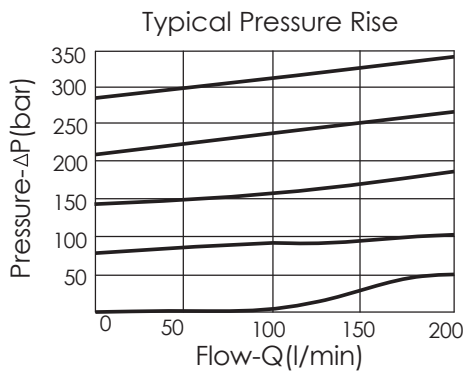
Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar

Rated flow: 40 l/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)

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



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

A	HIGH-STRENGTH ALUMINUM
S	DUCTILE IRON

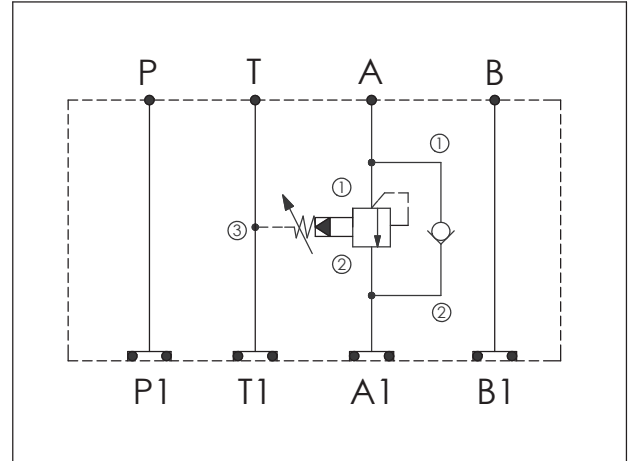
ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03SAI-X-Y-Z 01**

Stack Height : 44.5mm

O-RING CODE NO. 4KAA012AA001

UNIT:mm



TECHNICAL DATA

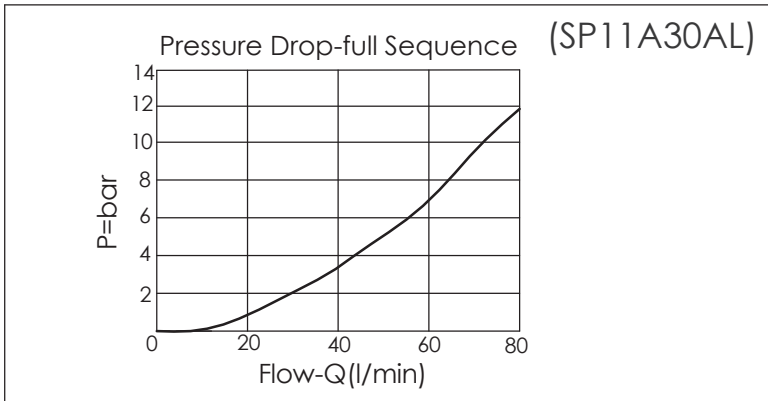
Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 40 l/min

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.



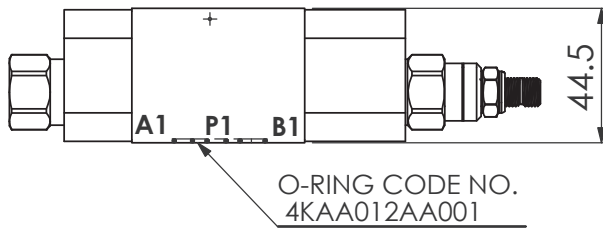
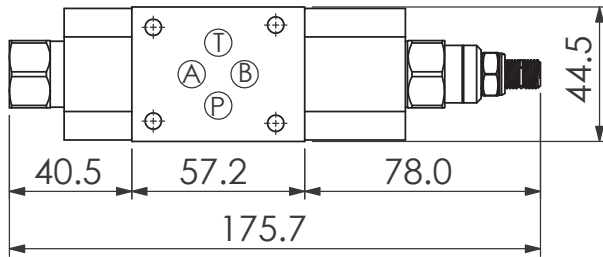
X	SELECTION FOR A PORT CONTROL	
11A3	CAVITY ONLY(WITHOUT VALVE)	
SP0A	SP11A30AL (60LPM , 7-210bar)	

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

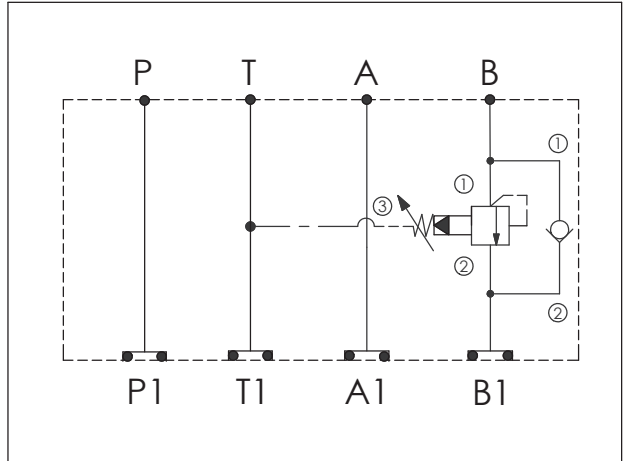
Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	

ISO 03 SANDWICH MANIFOLD

Ordering Code: MH03SBI-X-Y-Z 01
Stack Height : 44.5mm



UNIT:mm



TECHNICAL DATA

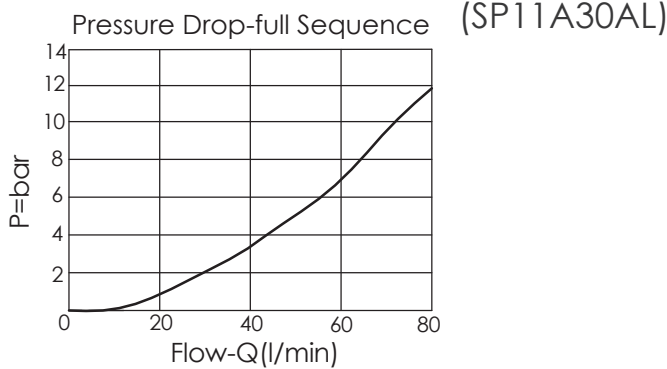
Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 40 l/min

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.



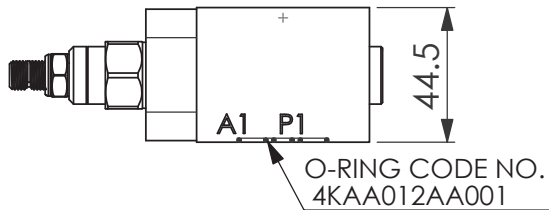
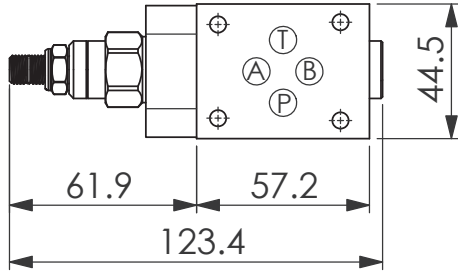
X	SELECTION FOR CHECK VALVE	
13A2	CAVITY ONLY(WITHOUT VALVE)	
CV20	CV13A2120N (60LPM , 2.0bar)	

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

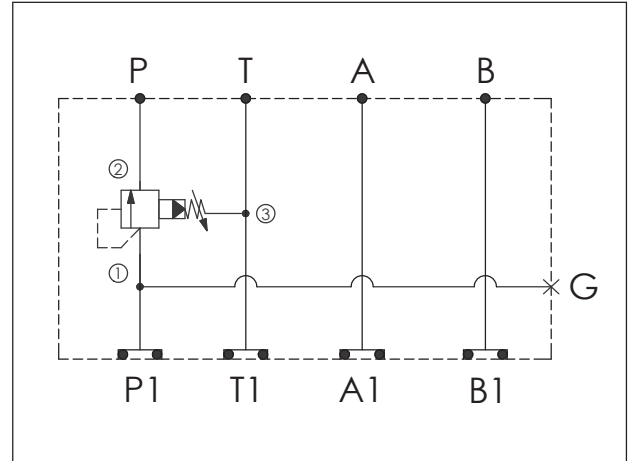
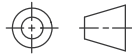
Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	

ISO 03 SANDWICH MANIFOLD

Ordering Code: **MH03SPW-X-Y-Z01**
 Stack Height : 44.5mm



UNIT:mm



TECHNICAL DATA

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

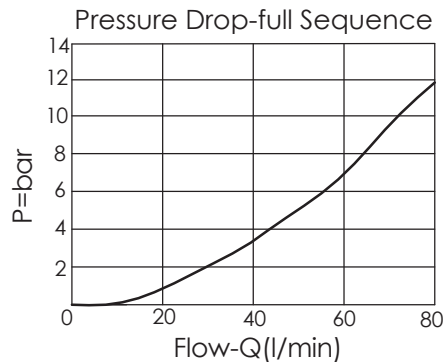
Rated flow: 40 l/min

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

* Refer to Winner Cartridge Valve Catalog.

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

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



X SELECTION FOR P PORT CONTROL

11A3	CAVITY ONLY(WITHOUT VALVE)
SP0A	SP11A.30AL (60LPM,7-210bar)

Y SELECTION FOR G PORT

G02	G 1/4"(Metric)
N02	NPT 1/4"(U.S. Units)

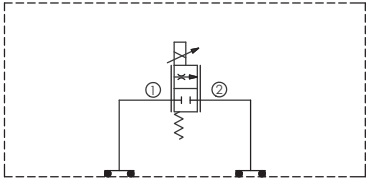
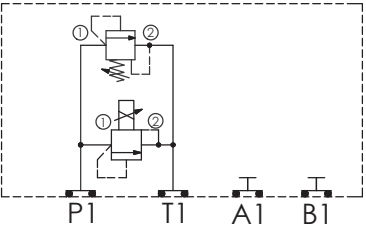
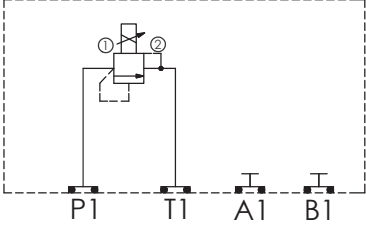
Z BODY MATERIAL

A	HIGH-STRENGTH ALUMINUM
S	

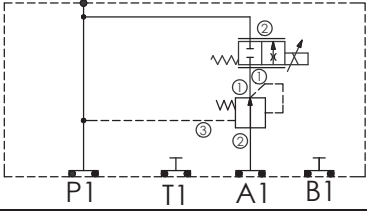
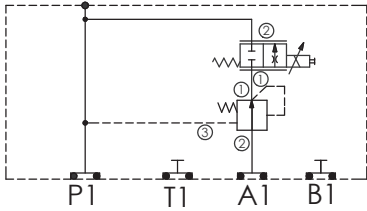
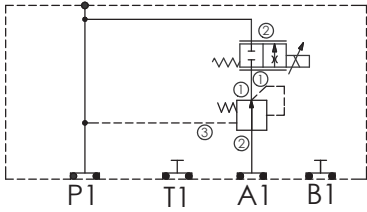
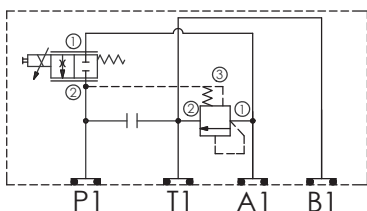
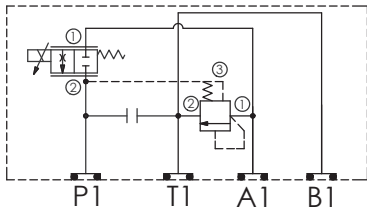
“MK” Cover Manifolds

SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 COVER MANIFOLD					
(G1/4") (G1/4") 	MK03DDN- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 03	34	250 (Aluminum) 350 (Ductile Iron)	61.3	290
SYMBOL					
ISO 03 COVER MANIFOLD					
LS (G1/4") 	MK03EPX- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 03	40	250 (Aluminum) 350 (Ductile Iron)	63.0	291
SYMBOL					
ISO 03 COVER MANIFOLD					
LS (G1/4") 	MK03EPX- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 03	40	250 (Aluminum) 350 (Ductile Iron)	63.0	292
SYMBOL					
ISO 03 COVER MANIFOLD					
	MK03ERX- <input type="checkbox"/> - <input type="checkbox"/> -A03- <input type="checkbox"/>	40	250 (Aluminum) 350 (Ductile Iron)	63.0	293
SYMBOL					
ISO 03 COVER MANIFOLD					
	MK03ERX- <input type="checkbox"/> - <input type="checkbox"/> -A03- <input type="checkbox"/>	40	250 (Aluminum) 350 (Ductile Iron)	63.0	294

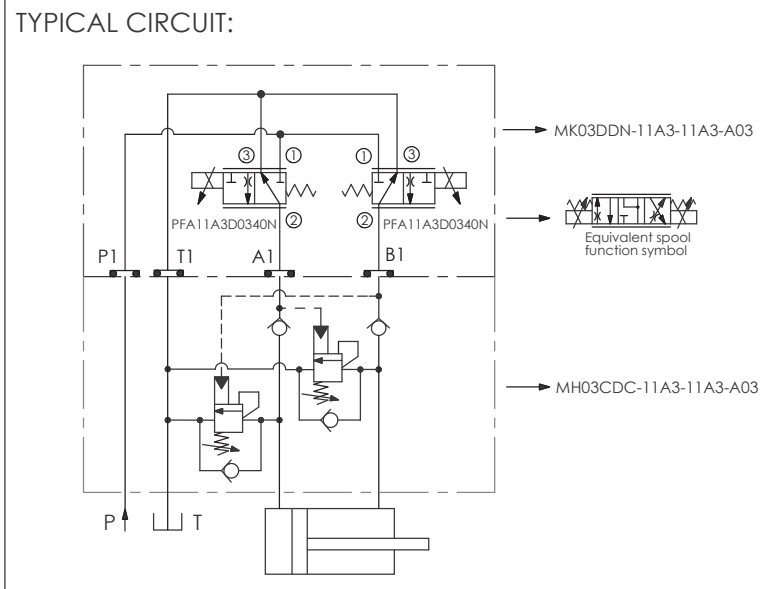
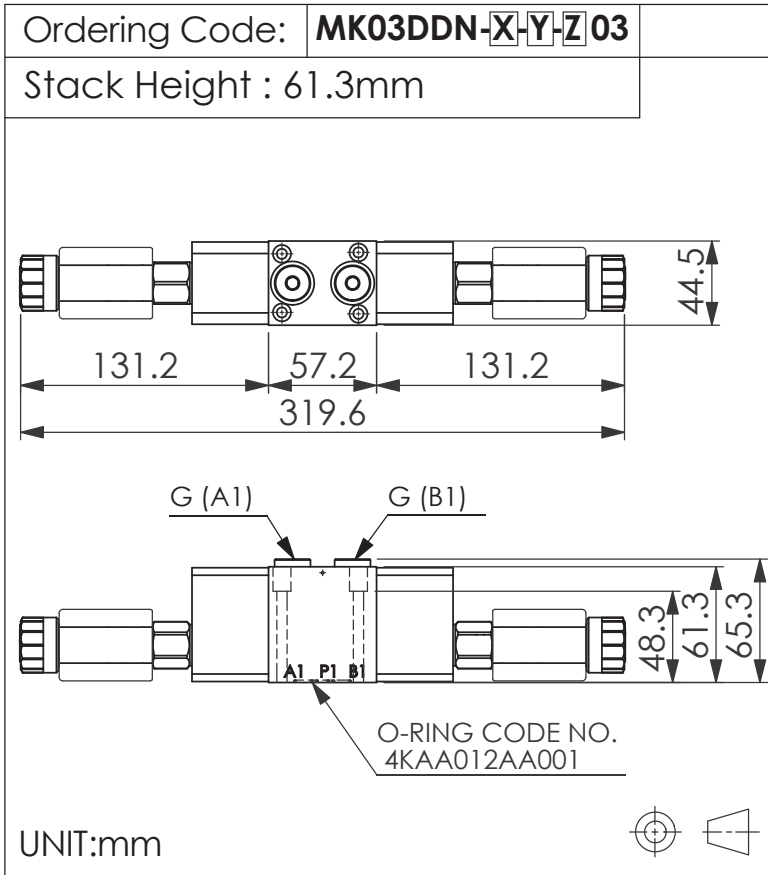
“MK” Cover Manifolds

SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
COVER MANIFOLD					
	MK99FPX- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 61	40	250 (Aluminum)	50.0	295
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 COVER MANIFOLD					
	MK03RPE- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	1	250 (Aluminum)	44.5	296
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 03 COVER MANIFOLD					
	MK03RPW- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	1	250 (Aluminum)	44.5	297
			350 (Ductile Iron)		

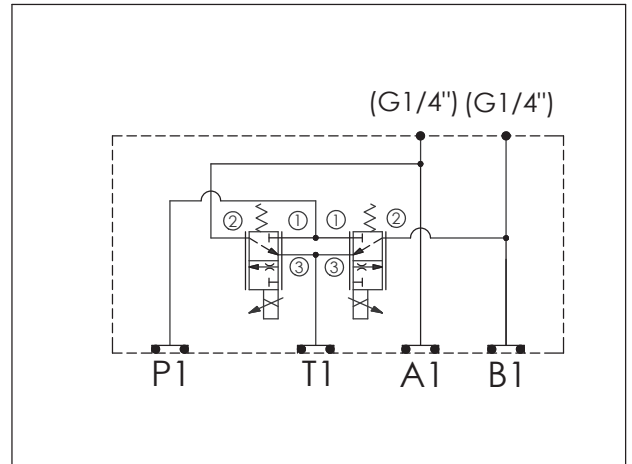
“MK” Cover Manifolds

SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 05 COVER MANIFOLD					
LS (G1/4")					
	MK05EPX- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 01	40	250 (Aluminum)	49.5	298
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 05 COVER MANIFOLD					
LS (G1/4")					
	MK05EPX- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 03	70	250 (Aluminum)	63.0	299
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 05 COVER MANIFOLD					
LS (G1/4")					
	MK05EPX- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> 03	40	250 (Aluminum)	63.0	300
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 05 COVER MANIFOLD					
	MK05EPX- <input type="checkbox"/> - <input type="checkbox"/> -A03- <input type="checkbox"/>	70	250 (Aluminum)	63.0	301
			350 (Ductile Iron)		
SYMBOL	Main Code	Flow l/min	Pressure bar	Stack Height mm	Page
ISO 05 COVER MANIFOLD					
	MK05ERX- <input type="checkbox"/> - <input type="checkbox"/> -A03- <input type="checkbox"/>	40	250 (Aluminum)	63.0	302
			350 (Ductile Iron)		

ISO 03 COVER MANIFOLD



Y	SELECTION FOR B PORT CONTROL (REFER TO PFA11A-X-Y-Z)	
11A3	CAVITY ONLY(WITHOUT VALVE)	
PFA34	PFA11A3D0340N(0.4~34LPM)	
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:	34 l/min
Cartridge Valve: Refer to PFA11A-X-Y-Z	
* Refer to Winner Cartridge Valves Catalog.	
Aluminum	0.85 kg(WITHOUT VALVES) 1.6 kg(INCLUDE VALVES ,WITHOUT COIL)
* If you need the special specification. Please contact us.	

X	SELECTION FOR A PORT CONTROL (REFER TO PFA11A-X-Y-Z)	
11A3	CAVITY ONLY(WITHOUT VALVE)	
PFA34	PFA11A3D0340N(0.4~34LPM)	
COIL MUST BE ORDERED SEPARATELY (REFER TO EC-19A-X-Y-Z)		

Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	

ISO 03 COVER MANIFOLD

Ordering Code: **MK03EPX-X-Y-Z 03**

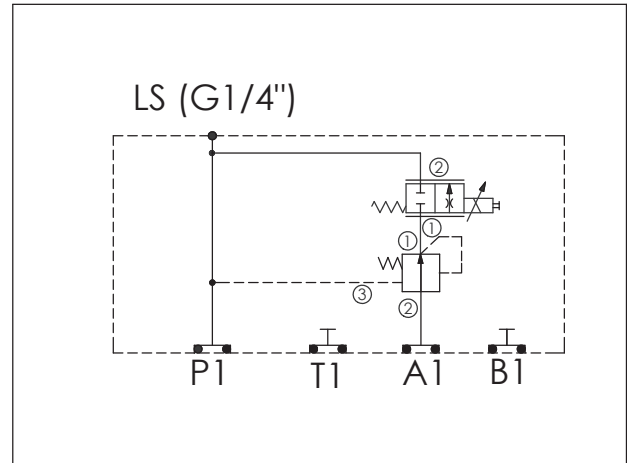
Stack Height : 63.0mm

Dimensions: 44.5 (height), 35.2 (port offset), 57.2 (port offset), 114.6 (total length), 207.0 (total length).

Port locations: A1, P1, B1

O-RING CODE NO. 4KAA012AA001

UNIT:mm



TECHNICAL DATA

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

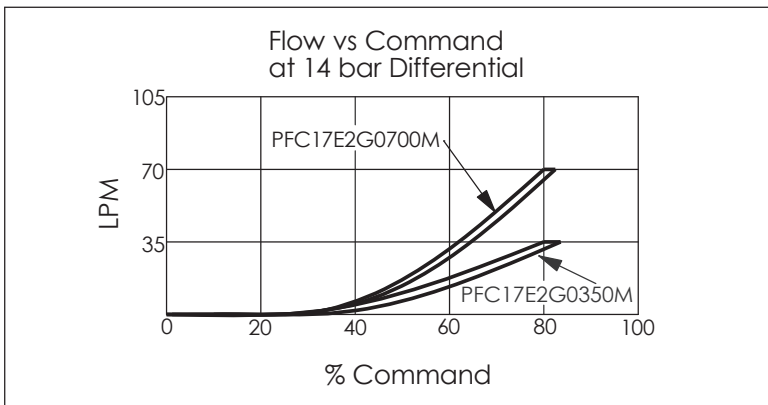
Rated flow: 40 l/min

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



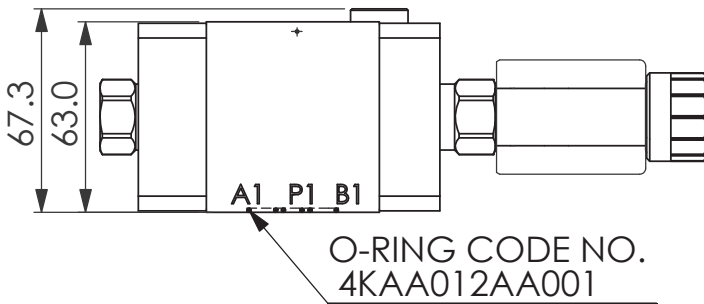
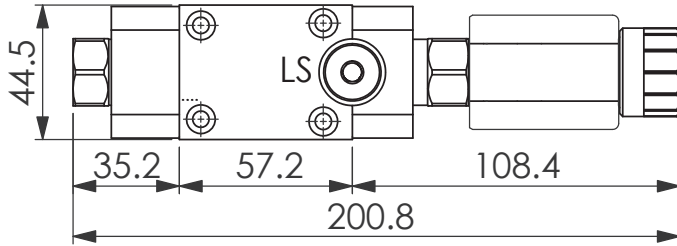
Y	SELECTION FOR FLOW CONTROL VALVE (REFER TO PFC17E-X-Y-Z)
17E2	CAVITY ONLY(WITHOUT VALVE)
PFC35	PFC17E2G0350M(35LPM)
PFC70	PFC17E2G0700M(70LPM)
COIL MUST BE ORDERED SEPARATELY (REFER TO EC-23C-X-Y-Z)	

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

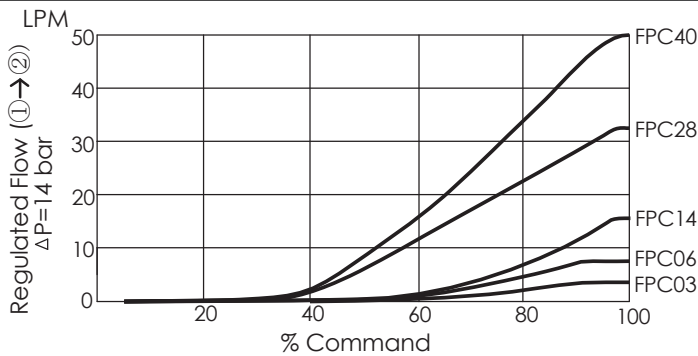
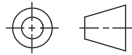
Z	BODY MATERIAL
A	HIGH-STRENGTH ALUMINUM

ISO 03 COVER MANIFOLD

Ordering Code: **MK03EPX-X-Y-Z 03**
 Stack Height : 63.0mm



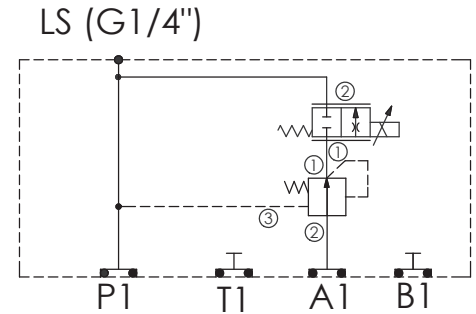
UNIT:mm



If you need more information
Please contact our sales department

Y	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)



TECHNICAL DATA

Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 40 l/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)
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* If you need the special specification.
Please contact us.

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

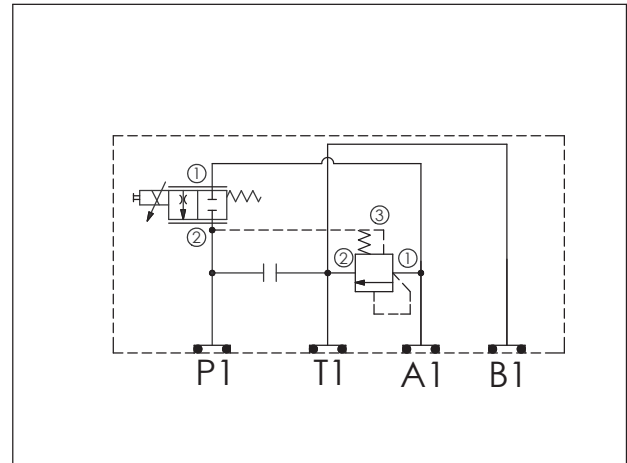
Z	BODY MATERIAL
A	HIGH-STRENGTH ALUMINUM

ISO 03 COVER MANIFOLD

Ordering Code: **MK03ERX-X-Y-A03-Z**

Stack Height : 63.0mm

UNIT:mm



TECHNICAL DATA

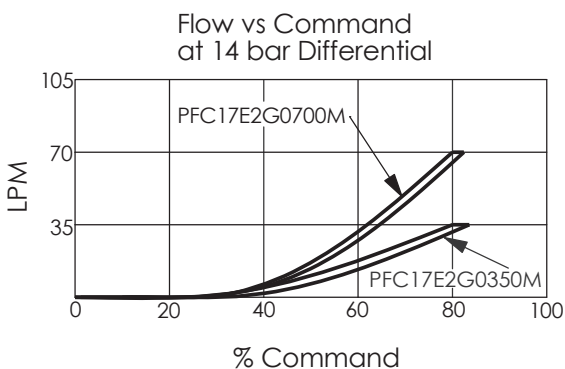
Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 40 l/min

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)	

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

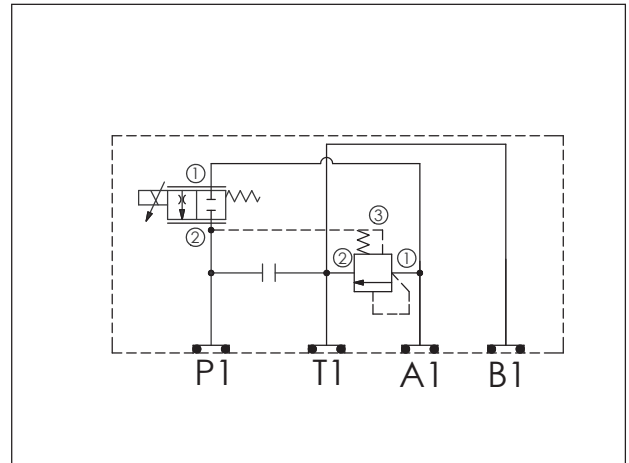
Z	ORIFICE DIAMETER (mm)	
	no orifice	
05	0.5	
07	0.7	

ISO 03 COVER MANIFOLD

Ordering Code: **MK03ERX-X-Y-A03-Z**

Stack Height : 63.0mm

UNIT:mm



TECHNICAL DATA

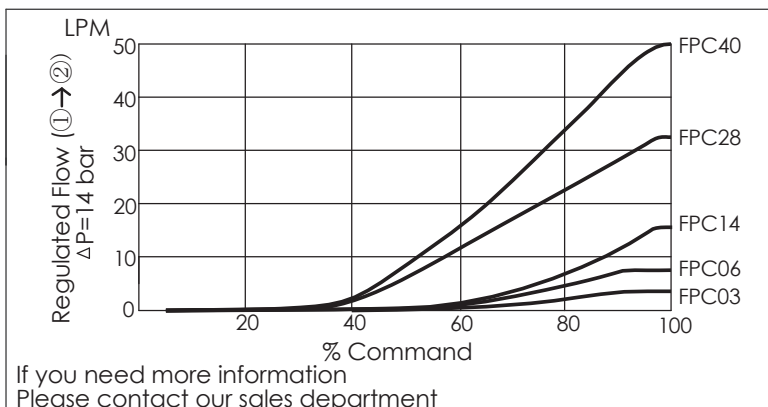
Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 40 l/min

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

* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.63 kg(WITHOUT VALVES) 1.2 kg(INCLUDE VALVES ,WITHOUT COIL)
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* If you need the special specification. Please contact us.



Y	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)

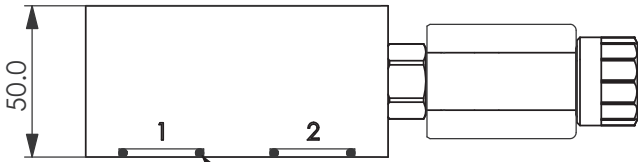
COIL MUST BE ORDERED SEPARATELY (REFER TO EC-19A-X-Y-Z)

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

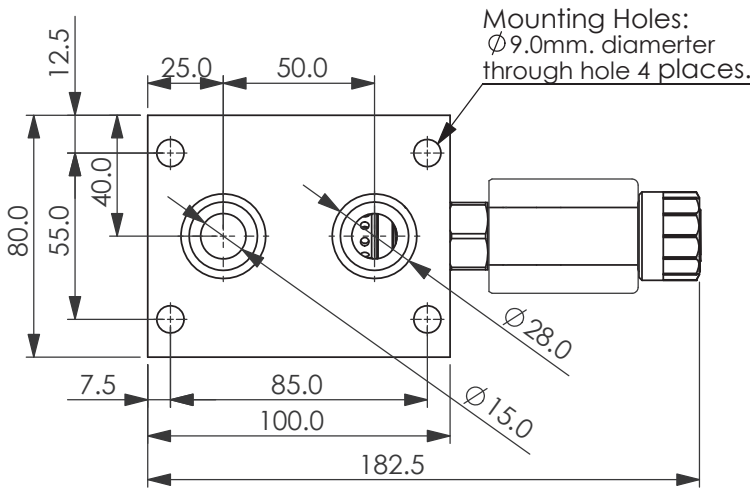
Z	ORIFICE DIAMETER (mm)
	no orifice
05	0.5
07	0.7

COVER MANIFOLD

Ordering Code:	MK99FPX-X-Y-Z 61
Stack Height :	50.0mm

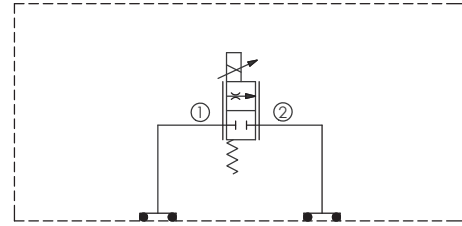


O-RING CODE NO.
4KAB999AA013



Mounting Holes:
Ø9.0mm. diameter
through hole 4 places.

UNIT:mm



TECHNICAL DATA

Aluminum Body Pressure Rating:	250 bar
Ductile Iron Body Pressure Rating:	350 bar
Rated flow:	40 l/min

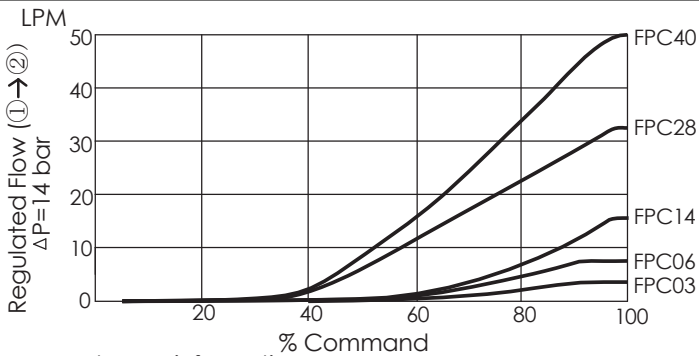
Cartridge Valve:

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



If you need more information
Please contact our sales department

X SELECTION FOR COMPENSATOR

N WITHOUT PORT

Z BODY MATERIAL

A HIGH-STRENGTH ALUMINUM

Y SELECTION FOR FLOW CONTROL VALVE (REFER TO PFC13A-X-Y-Z)

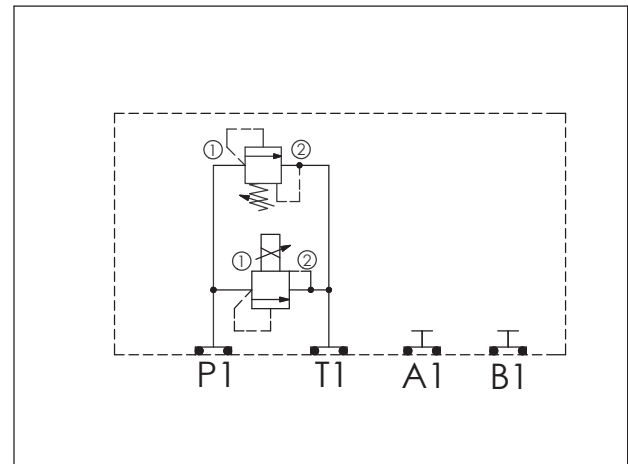
13A2	CAVITY ONLY(WITHOUT VALVE)
PFC03	PFC13A2D0030N(0.3~3LPM)
PFC06	PFC13A2D0060N(0.4~6LPM)
PFC14	PFC13A2D0140N(0.6~14LPM)
PFC28	PFC13A2D0280N(0.8~28LPM)
PFC40	PFC13A2D0400N(1.0~40LPM)

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

ISO 03 COVER MANIFOLD

Ordering Code:	MK03RPE-X-Y-Z01
Stack Height :	44.5mm

UNIT:mm



TECHNICAL DATA

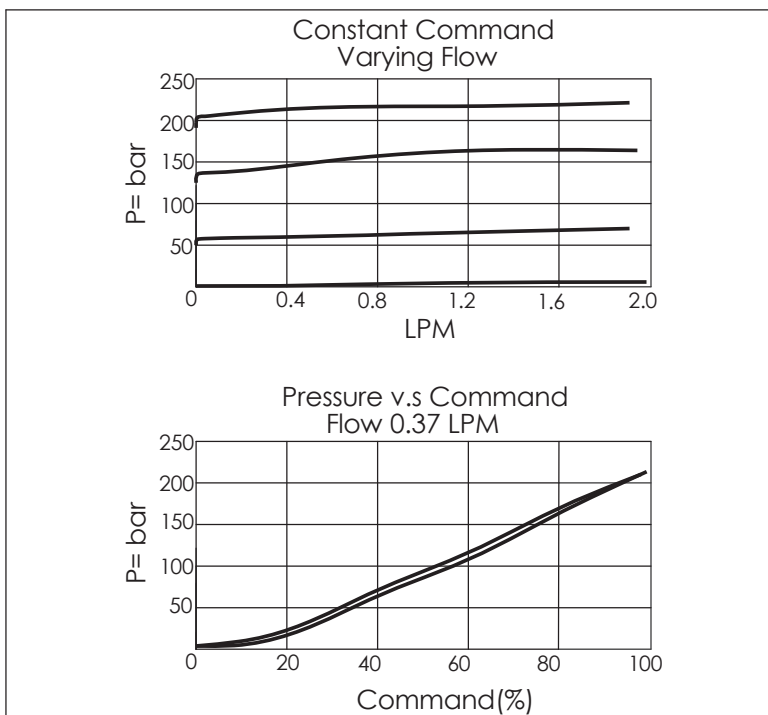
Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 1 l/min

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

* 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.



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

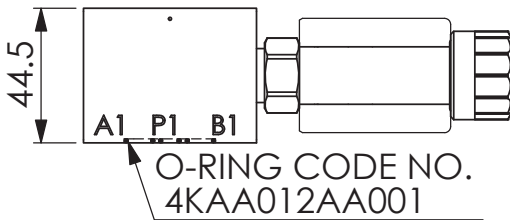
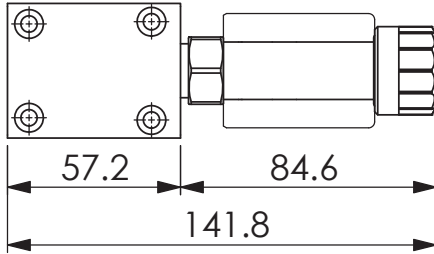
X	SELECTION FOR RELIEF VALVE (PORT ① TO ②, NEAR "A" PORT SIDE)	
08W2	CAVITY ONLY (WITHOUT VALVE)	
RD3A	RD08W23AL (3LPM, 35-210bar)	

Z	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	

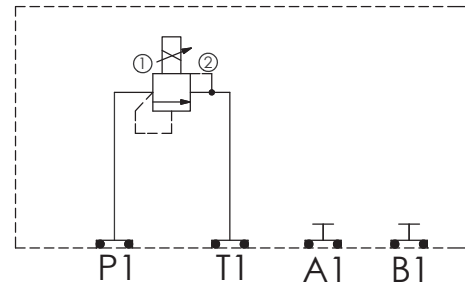
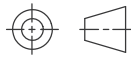
ISO 03 COVER MANIFOLD

Ordering Code: **MK03RPW-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: 1 l/min

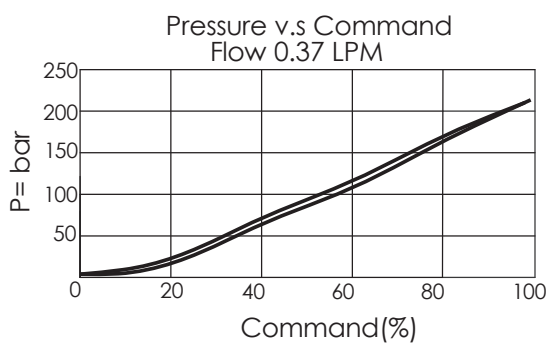
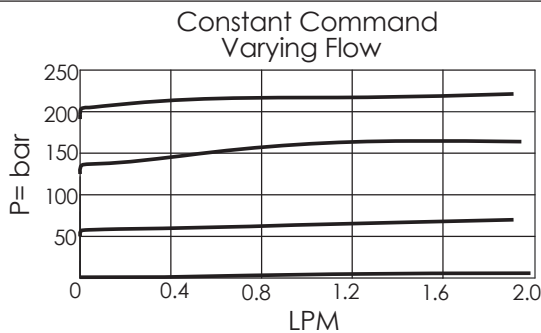
Cartridge Valve:

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

Y SELECTION FOR ELECTRO-PROPORTIONAL PILOT RELIEF (PORT ① TO ② ,NEAR "B" PORT SIDE)

8A2 CAVITY ONLY(WITHOUT VALVE)

PRBDA PRB8A2DAN(1LPM,20~210bar)

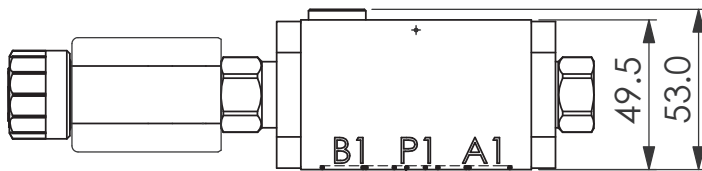
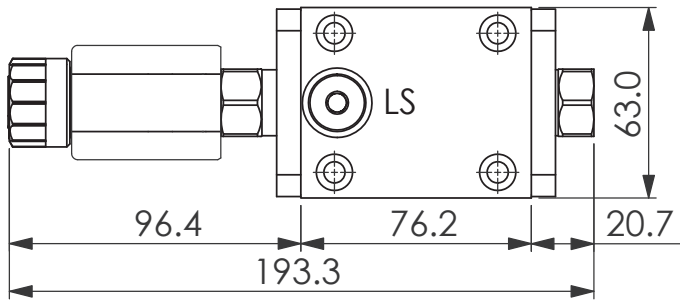
Z BODY MATERIAL

A HIGH-STRENGTH ALUMINUM

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

ISO 05 COVER MANIFOLD

Ordering Code:	MK05EPX-X-Y-Z01
Stack Height :	49.5mm

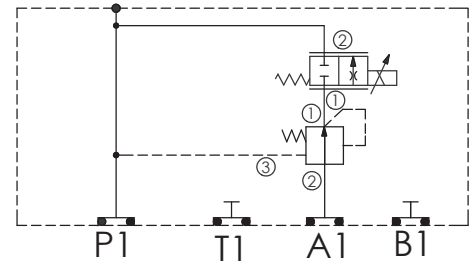


O-RING CODE NO.
4KAA014AA001

UNIT:mm



LS (G1/4")



TECHNICAL DATA

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

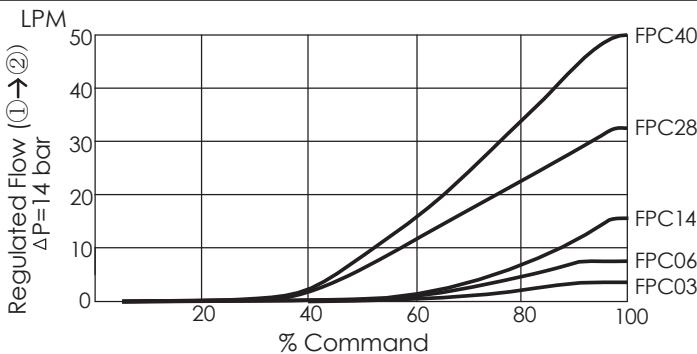
Rated flow: 40 l/min

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



If you need more information
Please contact our sales department

Y	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)

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

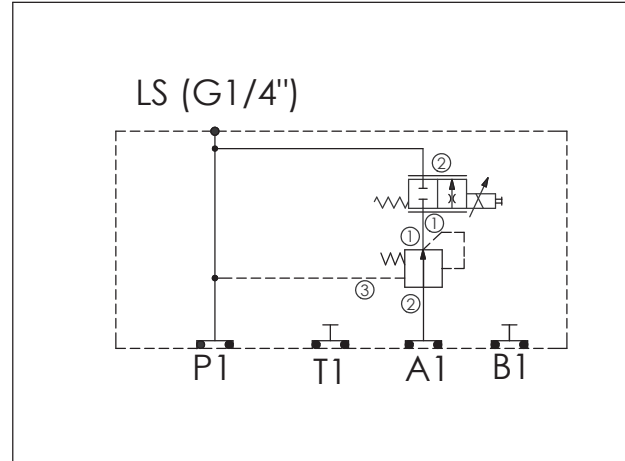
Z	BODY MATERIAL
A	HIGH-STRENGTH ALUMINUM

ISO 05 COVER MANIFOLD

Ordering Code: **MK05EPX-X-Y-Z03**

Stack Height : 63.0mm

UNIT:mm



TECHNICAL DATA

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

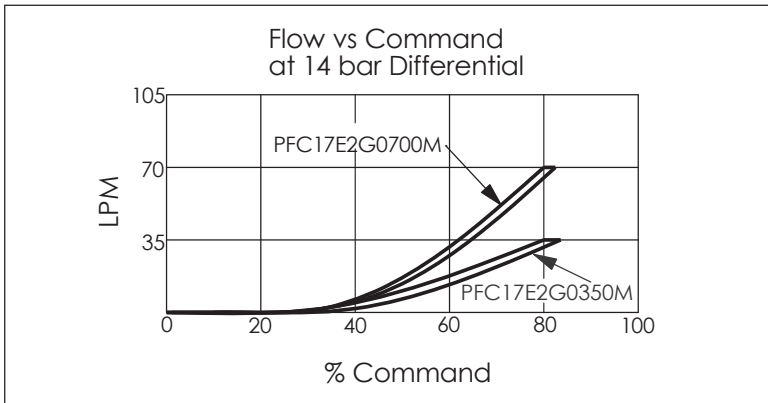
Rated flow: 70 l/min

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



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

X	SELECTION FOR COMPENSATOR
2A3	CAVITY ONLY(WITHOUT VALVE)
LP140	LP2A30140N(120LPM,14.0bar)

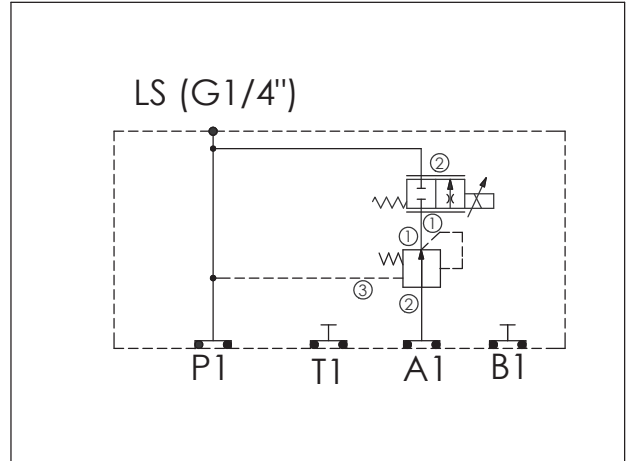
Z	BODY MATERIAL
A	HIGH-STRENGTH ALUMINUM

ISO 05 COVER MANIFOLD

Ordering Code:	MK05EPX-X-Y-Z 03
Stack Height :	63.0mm

O-RING CODE NO.
4KAA014AA001

UNIT:mm



TECHNICAL DATA

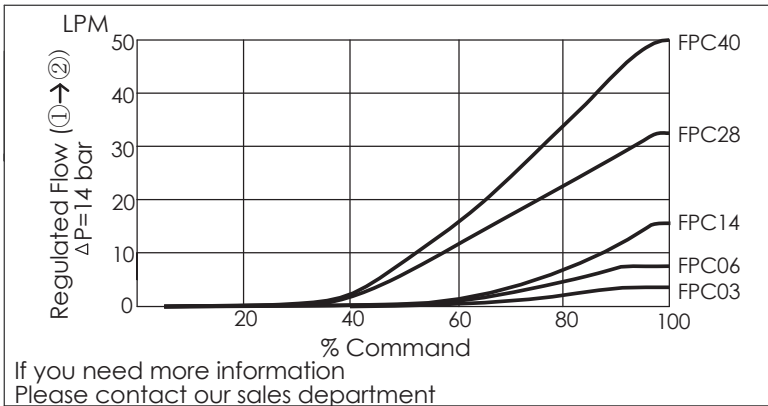
Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 40 l/min

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



Y	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)

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

Z	BODY MATERIAL
A	HIGH-STRENGTH ALUMINUM

ISO 05 COVER MANIFOLD

Ordering Code: **MK05ERX-X-Y-A03-Z**

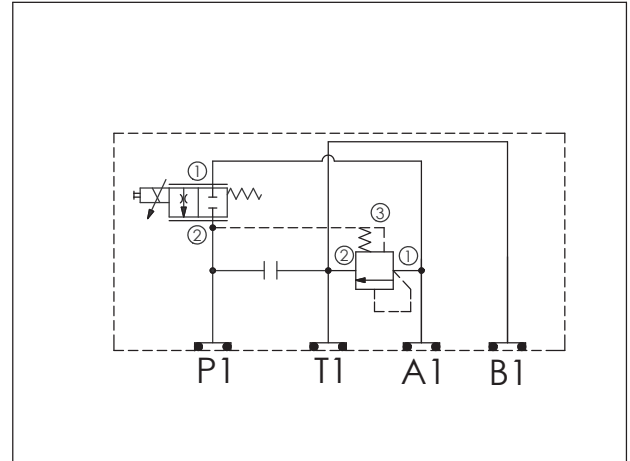
Stack Height : 63.0mm

Dimensions: 108.3, 218.4, 76.2, 33.9, 63.0

Ports: B1, P1, A1

O-RING CODE NO. 4KAA014AA001

UNIT:mm



TECHNICAL DATA

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

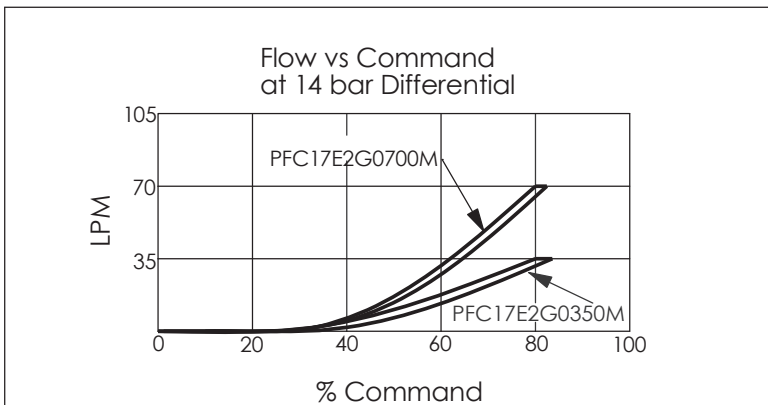
Rated flow: 70 l/min

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



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

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

ISO 05 COVER MANIFOLD

Ordering Code: **MK05ERX-X-Y-A03-Z**

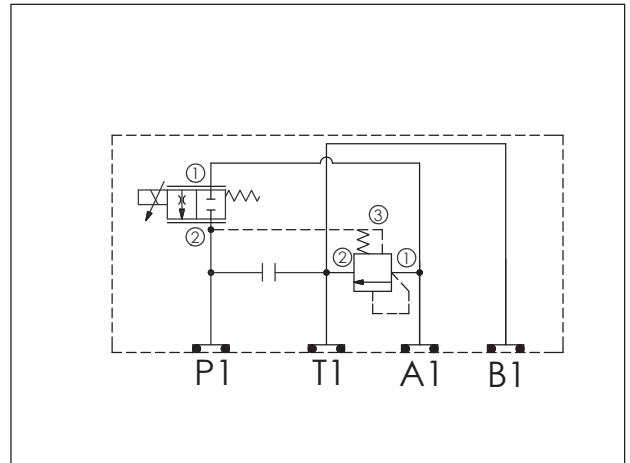
Stack Height : 63.0mm

Dimensions: 101.1, 205.0, 76.2, 27.7, 63.0

Ports: B1, P1, A1

O-RING CODE NO. 4KAA014AA001

UNIT:mm



TECHNICAL DATA

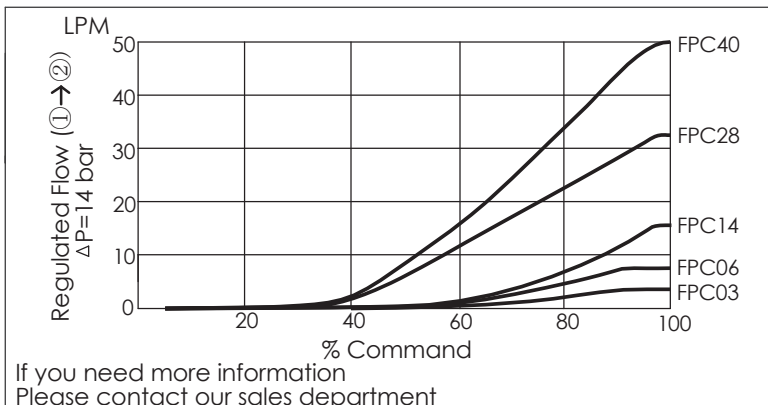
Aluminum Body Pressure Rating: 250 bar
 Ductile Iron Body Pressure Rating: 350 bar
 Rated flow: 40 l/min

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



Y	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)

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

Ul. Rawska 19B
82-300 Elbląg

tel. /+48/ 55 625 51 00

fax /+48/ 55 625 51 01

Dział Handlowy

tel. /+48/ 55 625 51 51

elblag@hydropress.pl



www.hydropress.pl

ODDZIAŁ GDAŃSK

tel. /+48/ 55 625 51 21

fax /+48/ 55 625 51 22

ODDZIAŁ RUMIA

tel. /+48/ 58 679 34 15

fax /+48/ 55 625 51 25

ODDZIAŁ TYCHY

tel. /+48/ 32 787 52 88

fax /+48/ 55 625 51 38

ODDZIAŁ OLSZTYN

tel. /+48/ 89 532 01 05

fax /+48/ 89 715 21 42

ODDZIAŁ WARSZAWA

tel. /+48/ 22 468 86 97

fax /+48/ 55 625 51 32

BIURO WE WROCŁAWIU

tel. /+48/ 782 838 000

fax /+48/ 55 625 51 35

BIURO W KIELCACH

tel. /+48/ 885 995 501

fax /+48/ 55 625 51 01

BIURO W KRAKOWIE

tel. /+48/ 885 995 019

fax /+48/ 55 625 51 01

BIURO W OPOLU

tel. /+48/ 885 995 011

fax /+48/ 55 625 51 01

BIURO W BYDGOSZCZY

tel. /+48/ 790 222 771

fax /+48/ 55 625 51 01

BIURO W BIAŁYMSTOKU

tel. /+48/ 89 532 01 05

fax /+48/ 89 715 21 42

BIURO W ŁODZI

tel. /+48/ 609 221 421

fax /+48/ 89 715 21 42