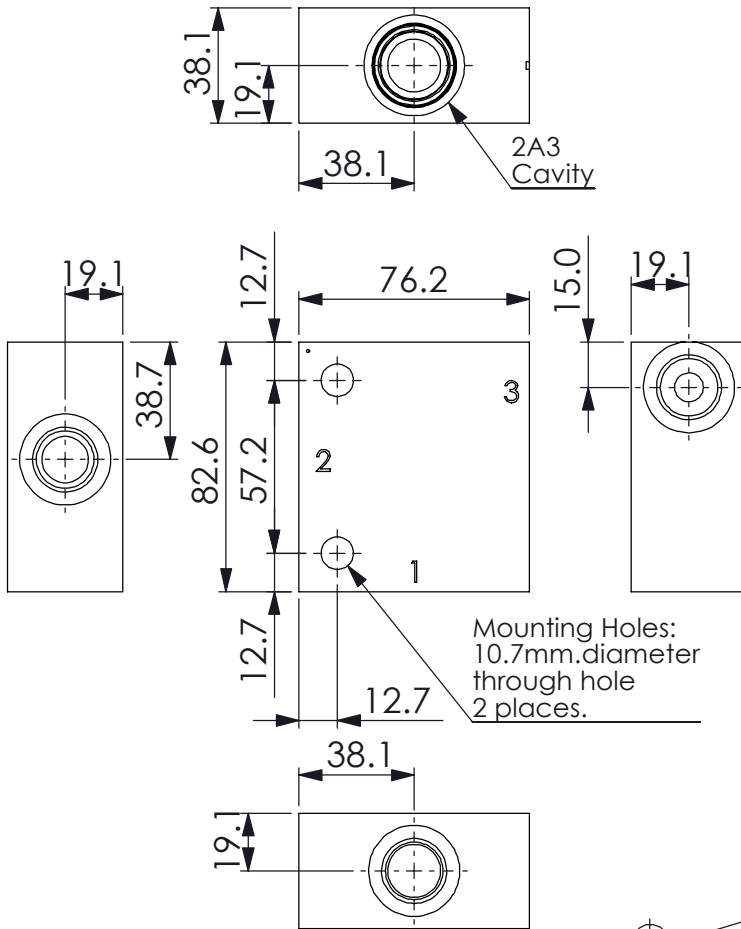
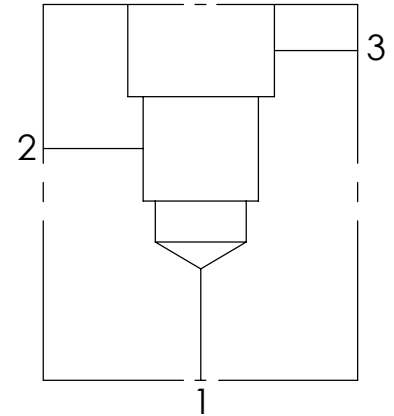


# BLOKI PRZYŁĄCZENIOWE DO ZAWORÓW CIŚNIENIOWYCH

Ordering Code: **ML-2A3-X-Y 01-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron  
Body Pressure Rating: 350 bar

Cavity:

Refer to 2A3

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.53 kg(WITHOUT VALVES)
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Ductile Iron	1.4 kg(WITHOUT VALVES)
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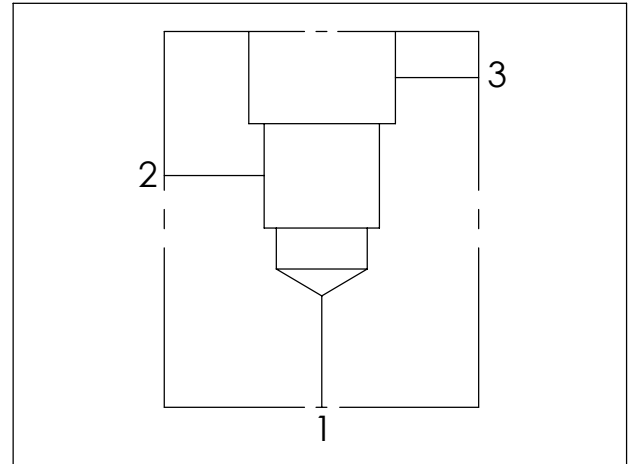
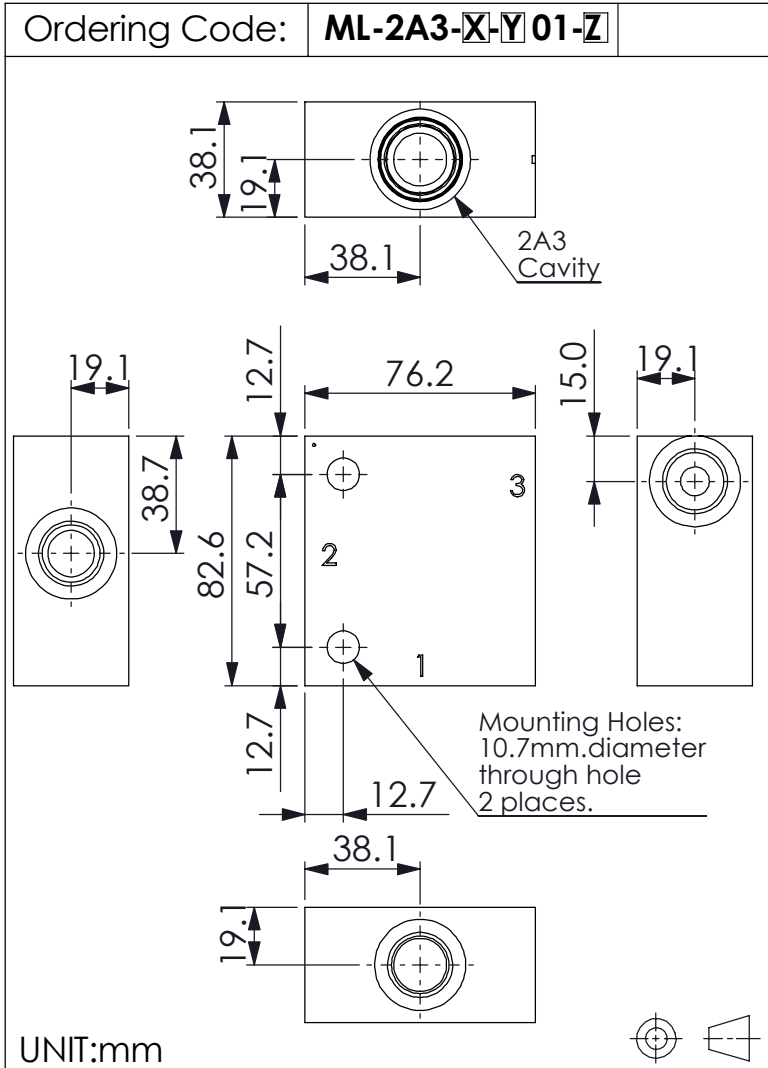
\* If you need the special specification.  
Please contact us.

X	PORT SIZE		
	PORTS	PORT	
	1,2	3	
<b>G04A</b>	G 1/2"	G 1/4"	
<b>G06A</b>	G 3/4"	G 1/4"	

Y	BODY MATERIAL	
<b>A</b>	<b>HIGH-STRENGTH ALUMINUM</b>	
<b>S</b>	<b>DUCTILE IRON</b>	

Z	CARTRIDGE VALVES SELECTION	
	WITHOUT VALVE	
<b>RV3A</b>	RV2A30AL (120LPM,7-210bar)	
<b>CB3H</b>	CB2A33HL (3:1 , 7-280bar)	
<b>CO03</b>	CO2A3003N (120LPM ,0.3bar)	

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 2A3

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.53 kg(WITHOUT VALVES)
Ductile Iron	1.4 kg(WITHOUT VALVES)

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

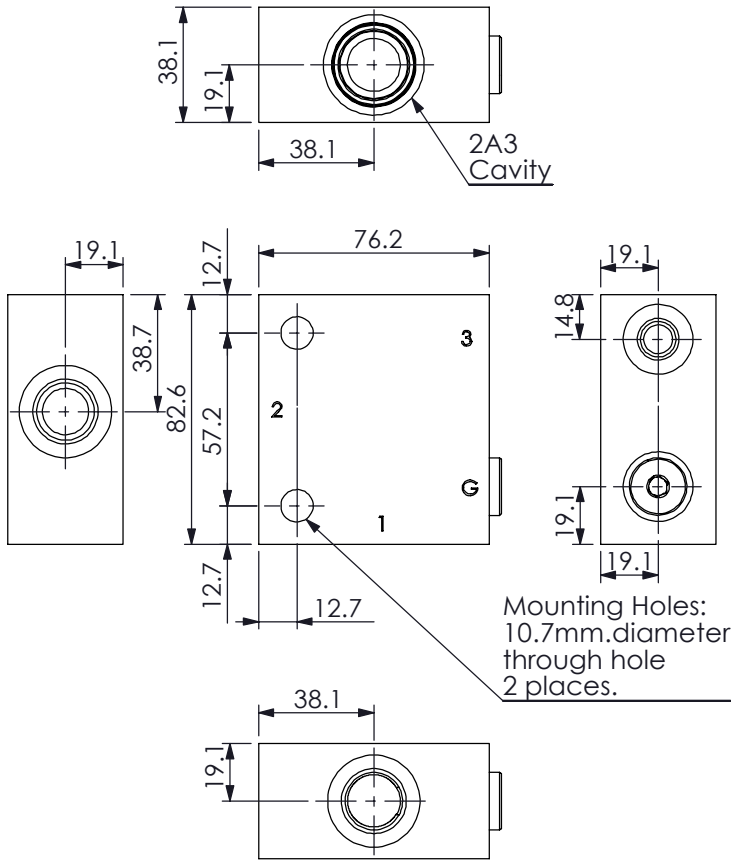
X	PORT SIZE		
	PORTS	PORT	
	1,2	3	
<b>G04</b>	G 1/2"	G 1/2"	
<b>G06B</b>	G 3/4"	G 1/2"	
<b>P03</b>	3/8"PT	3/8"PT	
<b>P04</b>	1/2"PT	1/2"PT	

Y	BODY MATERIAL	
<b>A</b>	<b>HIGH-STRENGTH ALUMINUM</b>	
<b>S</b>	<b>DUCTILE IRON</b>	

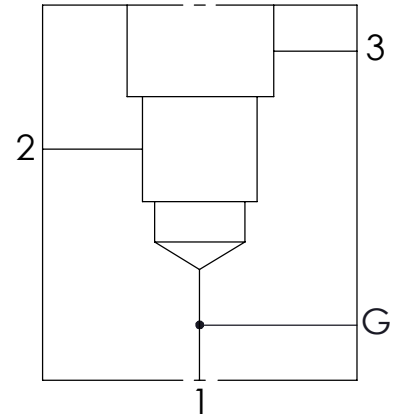
Z	CARTRIDGE VALVES SELECTION	
	WITHOUT VALVE	
<b>PP0A</b>	PP2A30AL (80LPM,7-210bar)	
<b>PDOA</b>	PD2A30AL (80LPM,50-210bar)	

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

Ordering Code: **ML-2A3-X-Y 02-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 2A3

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.53 kg(WITHOUT VALVES)
Ductile Iron	1.4 kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORTS	PORT	PORT	
	1,2	3	G	
G04AG	G 1/2"	G 1/4"	G 1/4"	

### Y BODY MATERIAL

**A** HIGH-STRENGTH ALUMINUM

**S** DUCTILE IRON

### Z CARTRIDGE VALVES SELECTION

WITHOUT VALVE

**RV30** RV2A30AL (120LPM,7-210bar)

**CB3H** CB2A33HL (3:1 , 7-280bar)

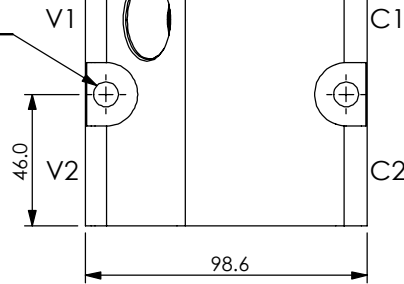
**CO03** CO2A3003N (120LPM ,0.3bar)

**SP0A** SP2A30AL (120LPM,7-210bar)

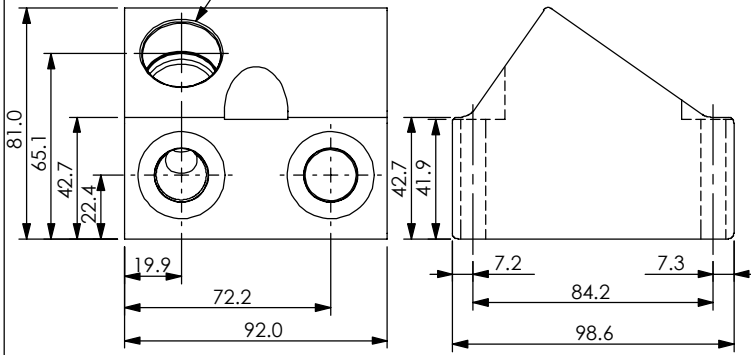
The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

Ordering Code: **ML-2A3-X-Y 41-Z**

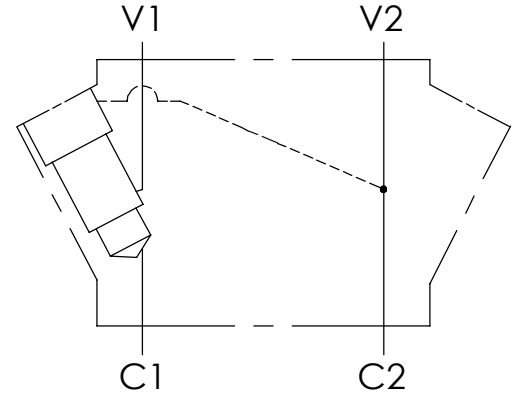
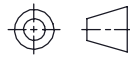
Mounting Holes:  
Ø8.7mm. diameter  
through hole.  
2 places.



2A3 Cavity  
Locating Shoulder  
Depth 18.3 mm.



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron  
Body Pressure Rating: 350 bar

Cavity:

Refer to 2A3

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	1.25 kg(WITHOUT VALVES)
Ductile Iron	3.5 kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORTS	PORTS	
	V1,V2	C1,C2	
G04	G 1/2"	G 1/2"	

### Y BODY MATERIAL

**A** HIGH-STRENGTH ALUMINUM

**S** DUCTILE IRON

### Z CARTRIDGE VALVES SELECTION

WITHOUT VALVE

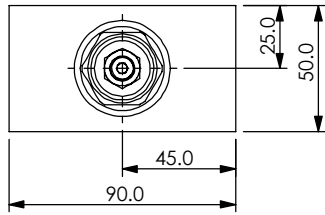
**CB3H** CB2A33HL (3:1 , 7-280bar)

**CO03** CO2A3003N (120LPM ,0.3bar)

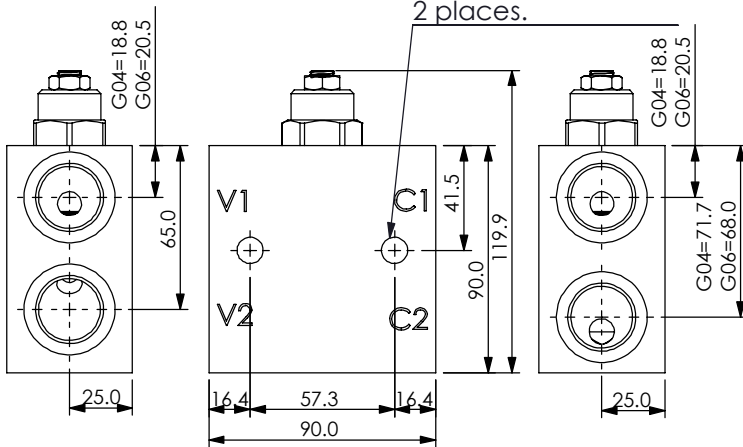
The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow , pressure , ... etc.)

Ordering Code: **ML-2A3-X-Y 02-Z**

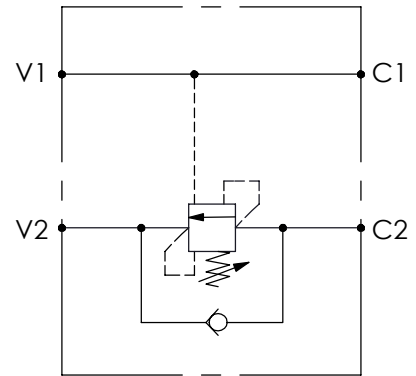
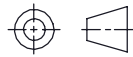
Stack Height : 50.0mm



Mounting Holes:  
Ø10.4mm. diameter  
through hole  
2 places.



UNIT:mm



### TECHNICAL DATA

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

Rated flow: 120 l/min

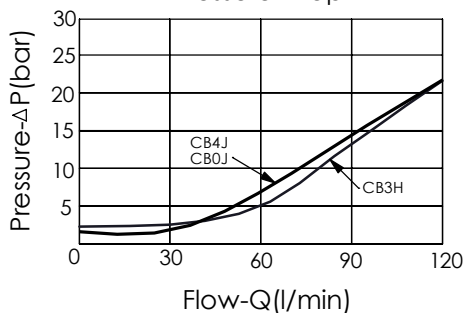
Cartridge Valve:  
Refer to **CB2A-X-Y-Z**

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.83 kg(WITHOUT VALVES)
	1.23 kg(INCLUDE VALVES)
Ductile Iron	2.31 kg(WITHOUT VALVES)
	2.71 kg(INCLUDE VALVES)

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

Free Flow or Piloted Open  
Pressure Drop



### PORT SIZE

X	PORTS	PORTS	
	V1,V2	C1,C2	
<b>G04</b>	G 1/2"	G 1/2"	
<b>G06</b>	G 3/4"	G 3/4"	

### Y BODY MATERIAL

**A** HIGH-STRENGTH ALUMINUM

**S** DUCTILE IRON

### Z CARTRIDGE VALVES SELECTION

WITHOUT VALVE

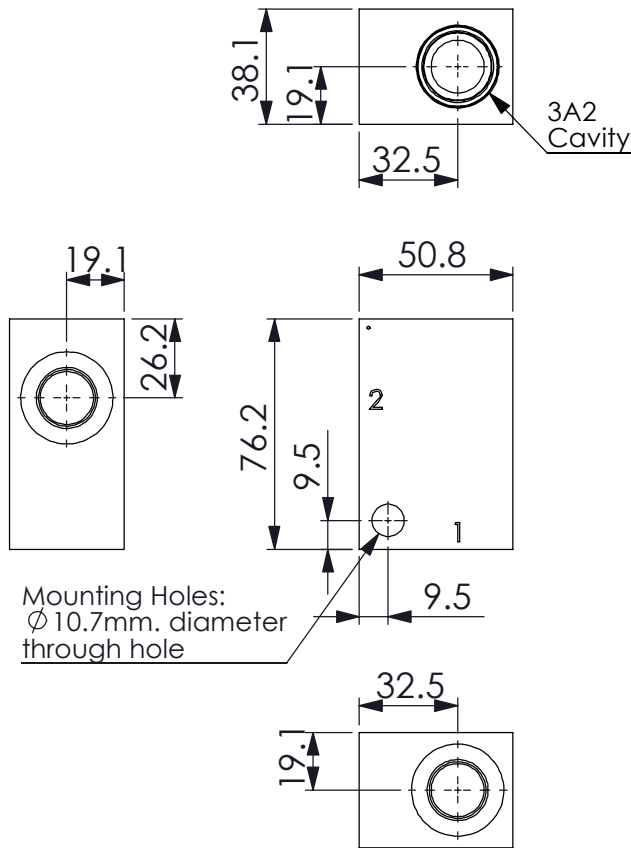
**CB3H** CB2A33HL (3:1 , 280bar)

**CB4J** CB2A34JL (4.5:1 , 350bar)

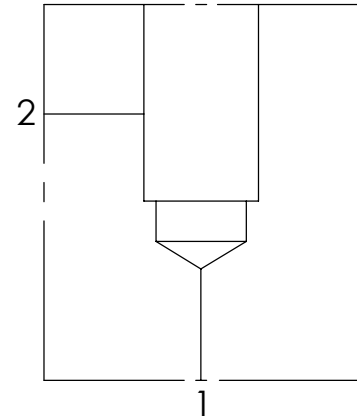
**CB0J** CB2A30JL (10:1 , 350bar)

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

Ordering Code: **ML-3A2-X-Y 01-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 3A2

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.35 kg(WITHOUT VALVES)
Ductile Iron	0.90 kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORT		
	1	2	
<b>G03</b>	G 3/8"	G 3/8"	
<b>G04</b>	G 1/2"	G 1/2"	
<b>G06</b>	G 3/4"	G 3/4"	
<b>P03</b>	3/8"PT	3/8"PT	

### Y BODY MATERIAL

**A** HIGH-STRENGTH ALUMINUM

**S** DUCTILE IRON

### Z CARTRIDGE VALVES SELECTION

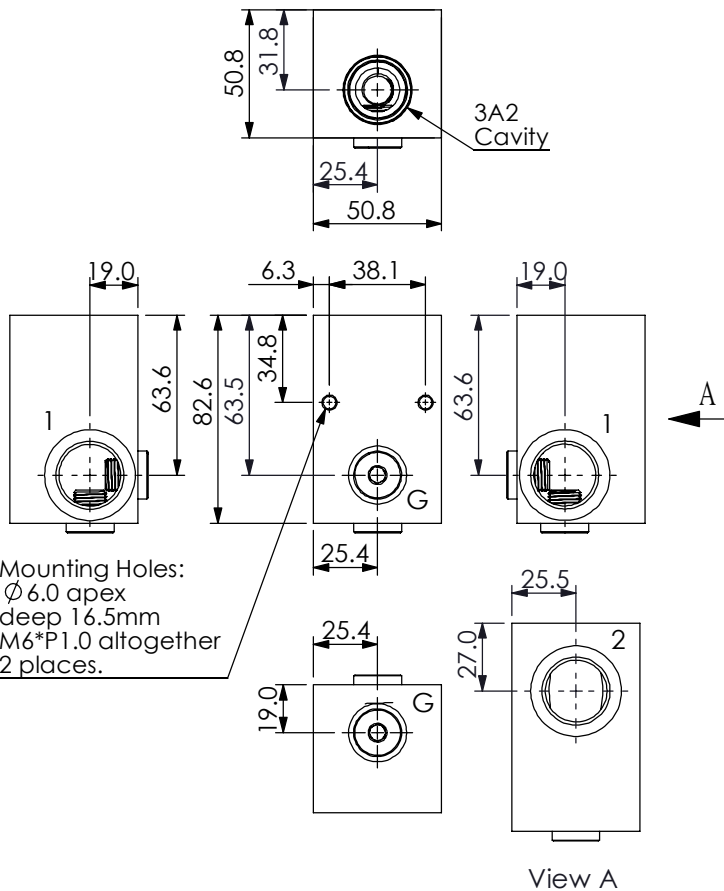
WITHOUT VALVE

**RP0A** RP3A20AL(200 LPM,7~210 bar)

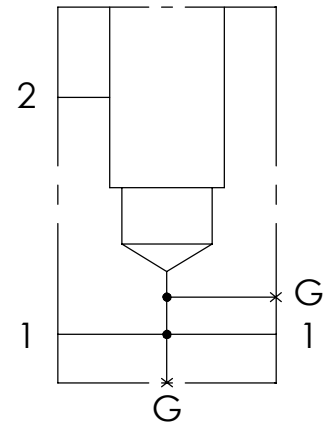
**RD5A** RD3A25AL(200 LPM,35~210 bar)

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

Ordering Code: **ML-3A2-X-Y 02-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 3A2

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.42 kg(WITHOUT VALVES)
Ductile Iron	1.32 kg(WITHOUT VALVES)

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

X	PORT SIZE		
	PORTS	PORT	
	1,2	G	
<b>G06G</b>	G 3/4"	G 1/4"	

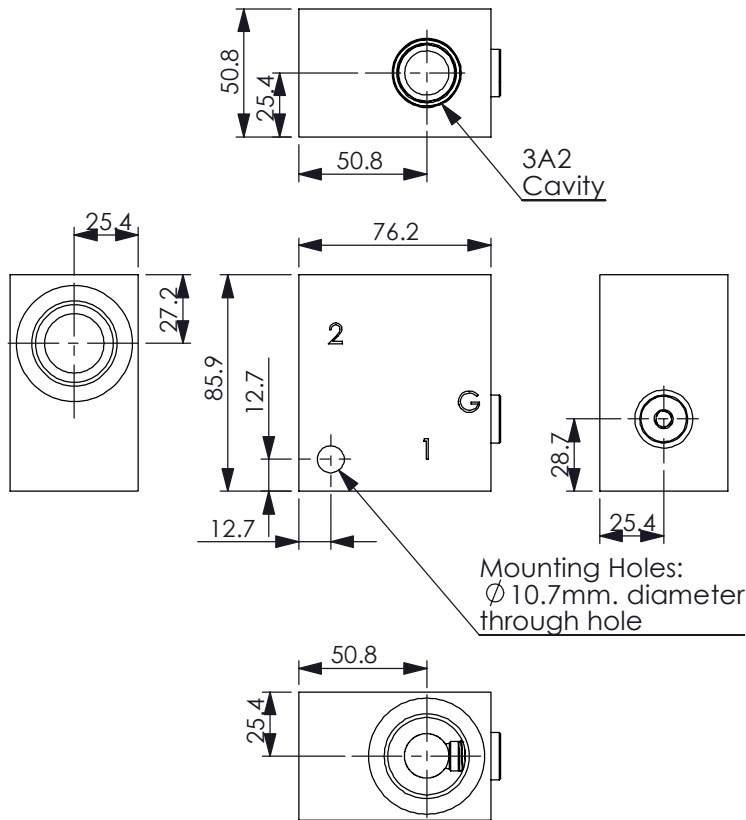
Y	BODY MATERIAL	
<b>A</b>	HIGH-STRENGTH ALUMINUM	
<b>S</b>	DUCTILE IRON	

Z	CARTRIDGE VALVES SELECTION	
	WITHOUT VALVE	
<b>RP0A</b>	RP3A20AL(200 LPM,7~210 bar)	
<b>RD5A</b>	RD3A25AL(200 LPM,35~210 bar)	

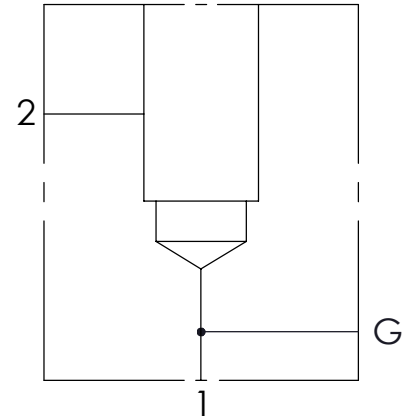
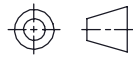
The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)



Ordering Code: **ML-3A2-X-Y 03-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron  
Body Pressure Rating: 350 bar

Cavity:

Refer to 3A2

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.7	kg(WITHOUT VALVES)
Ductile Iron	2.0	kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORTS	PORT	
	1,2	G	
G08G	G 1"	G 1/4"	

### Y BODY MATERIAL

**A** HIGH-STRENGTH ALUMINUM

**S** DUCTILE IRON

### Z CARTRIDGE VALVES SELECTION

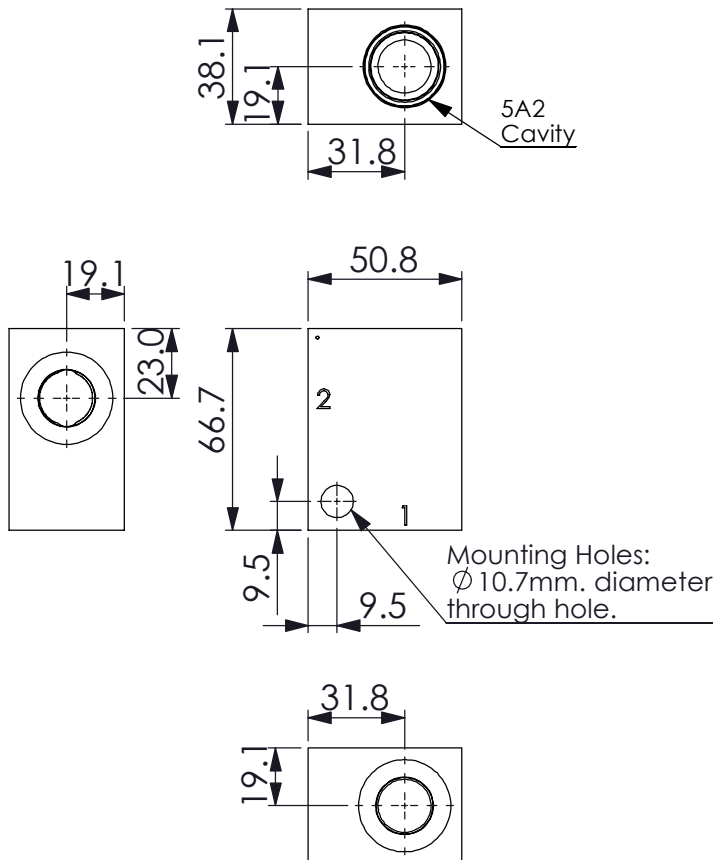
WITHOUT VALVE

**RP0A** RP3A20AL(200 LPM,7~210 bar)

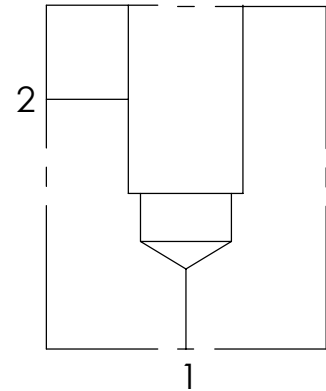
**RD5A** RD3A25AL(200 LPM,35~210 bar)

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

Ordering Code: **ML-5A2-X-Y 01-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
 Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 5A2

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.25 kg(WITHOUT VALVES)
Ductile Iron	0.75 kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORT		
	1	2	
G03	G 3/8"	G 3/8"	
G04	G 1/2"	G 1/2"	

### Y BODY MATERIAL

**A** HIGH-STRENGTH ALUMINUM

**S** DUCTILE IRON

### Z CARTRIDGE VALVES SELECTION

WITHOUT VALVE

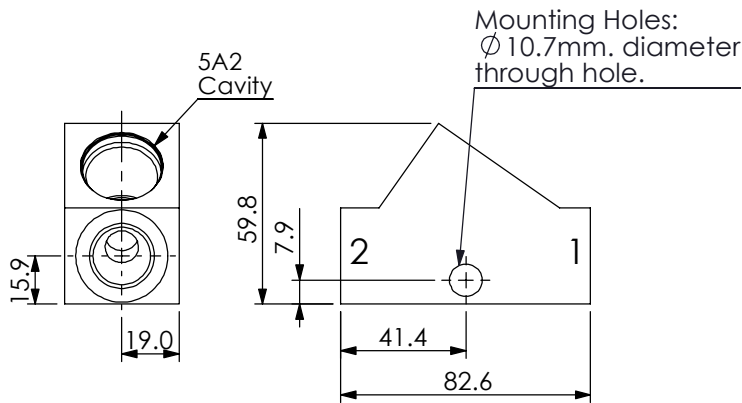
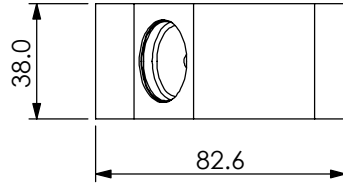
**CV03** CV5A2003N(160LPM,0.3bar)

**FR0A** FR5A20AL(45LPM,350bar)

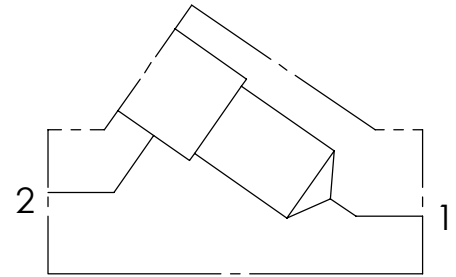
**NV33** NV5A2033L(350bar)

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

Ordering Code: **ML-5A2-X-Y 41-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 5A2

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.25 kg(WITHOUT VALVES)
Ductile Iron	0.69 kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORT		
	1	2	
<b>G04</b>	G 1/2"	G 1/2"	

### Y BODY MATERIAL

**A HIGH-STRENGTH ALUMINUM**

**S DUCTILE IRON**

### Z CARTRIDGE VALVES SELECTION

WITHOUT VALVE

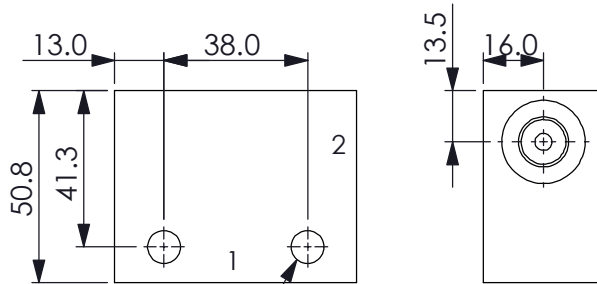
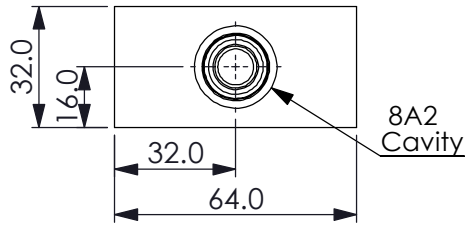
**CV03** CV5A2003N(160LPM,0.3bar)

**NV33** NV5A2033L (350bar)

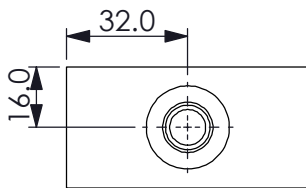
**FR0A** FR5A20AL (45LPM,350bar)

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow \ pressure \ ... etc.)

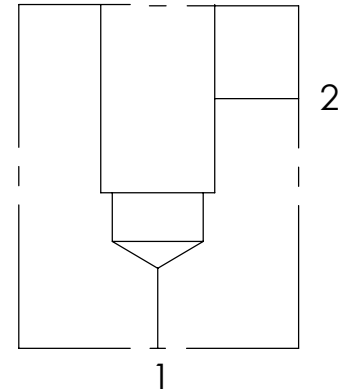
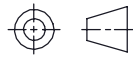
Ordering Code: **ML-8A2-X-Y 01-Z**



Mounting Holes:  
Ø8.7mm. diameter  
through hole  
2 places.



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron  
Body Pressure Rating: 350 bar

Cavity:

Refer to 8A2

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.25 kg(WITHOUT VALVES)
Ductile Iron	0.7 kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORT		
	1	2	
G02	G 1/4"	G 1/4"	

### Y BODY MATERIAL

**A** HIGH-STRENGTH ALUMINUM

**S** DUCTILE IRON

### Z CARTRIDGE VALVES SELECTION

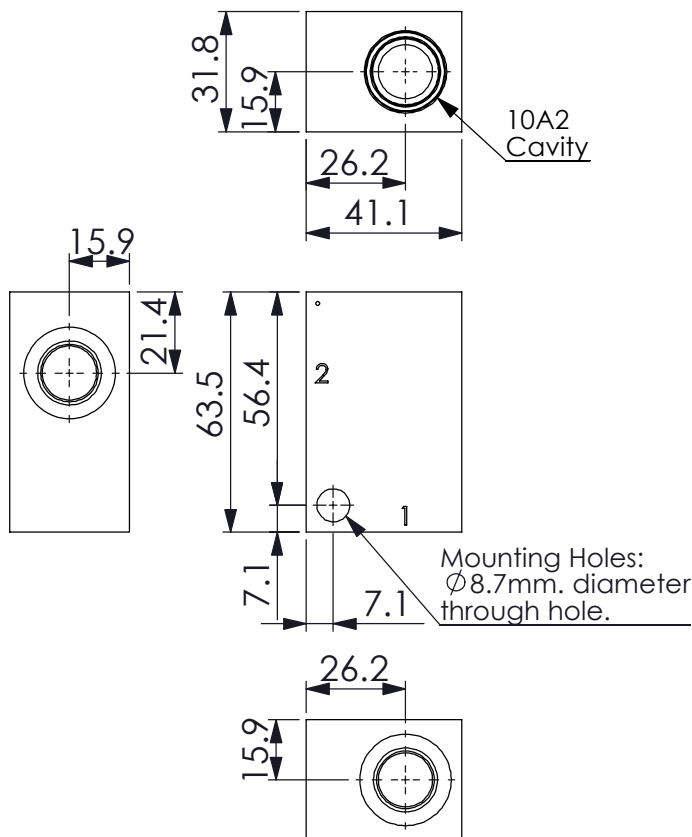
WITHOUT VALVE

**RB0A** RB8A20AL(10 LPM,1.7~210 bar)

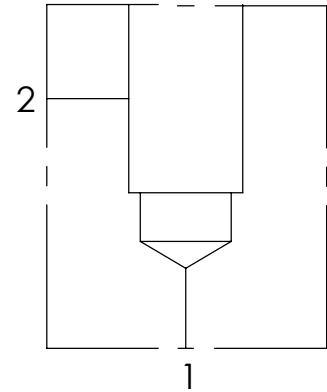
**PRBDA** PRB8A2DAN(1 LPM,20~210 bar)

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

Ordering Code: **ML-10A2-X-Y 01-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron  
Body Pressure Rating: 350 bar

Cavity:

Refer to 10A2

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.2 kg(WITHOUT VALVES)
Ductile Iron	0.5 kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORT SIZE		
	PORT 1	PORT 2	
<b>G02</b>	G 1/4"	G 1/4"	
<b>G03</b>	G 3/8"	G 3/8"	
<b>P03</b>	3/8"PT	3/8"PT	

### Y BODY MATERIAL

**A** HIGH-STRENGTH ALUMINUM

**S** DUCTILE IRON

### Z CARTRIDGE VALVES SELECTION

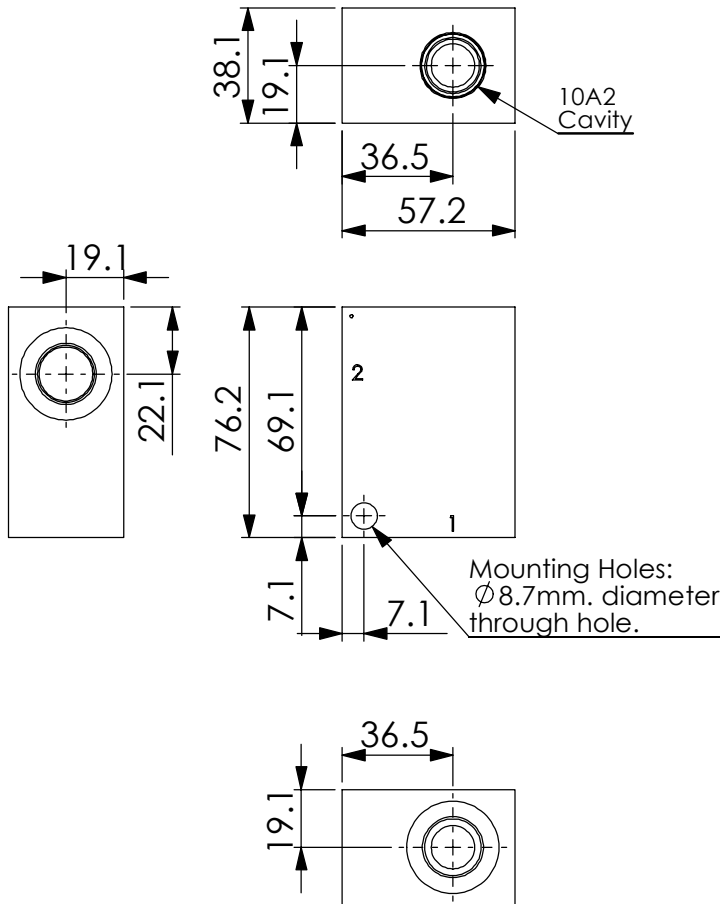
WITHOUT VALVE

**RP0A** RP10A20AL(95 LPM,7~210 bar)

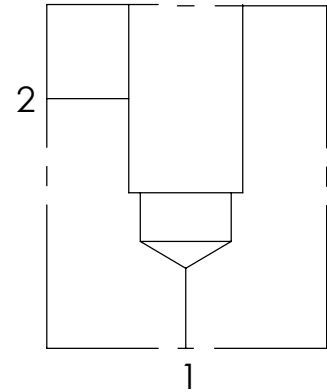
**RD5A** RD10A25AL(95 LPM,35~210 bar)

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

Ordering Code: **ML-10A2-X-Y 01-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron  
Body Pressure Rating: 350 bar

Cavity:

Refer to 10A2

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.4	kg(WITHOUT VALVES)
Ductile Iron	1.1	kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORT	PORT	
	1	2	
<b>G04</b>	G 1/2"	G 1/2"	

### Y BODY MATERIAL

**A** HIGH-STRENGTH ALUMINUM

**S** DUCTILE IRON

### Z CARTRIDGE VALVES SELECTION

WITHOUT VALVE

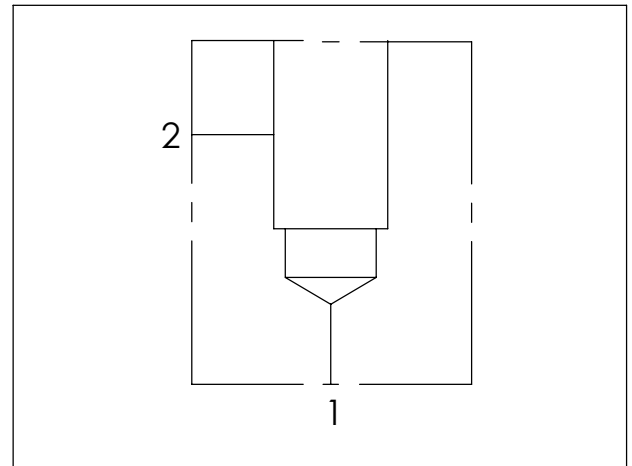
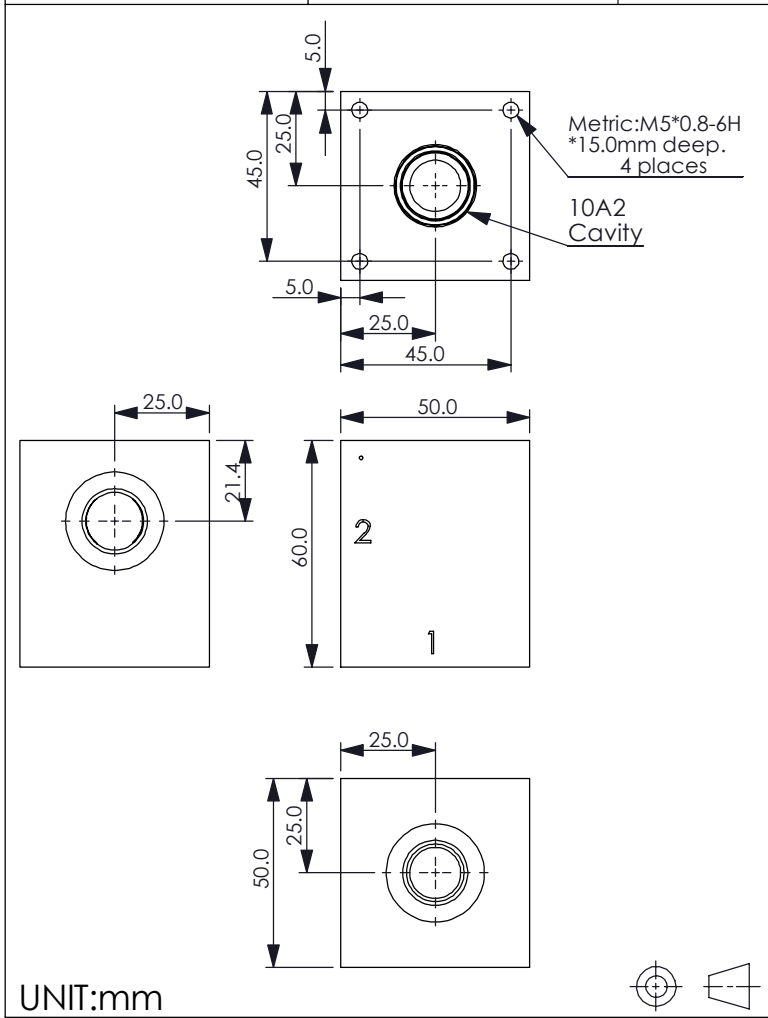
**RP0A** RP10A20AL(95 LPM,7~210 bar)

**RD5A** RD10A25AL(95 LPM,35~210 bar)

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)



Ordering Code: **ML-10A2-X-Y 61-Z**



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

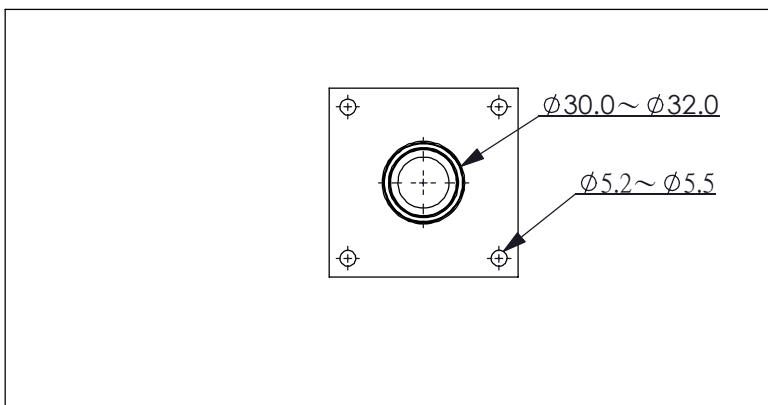
Cavity:

Refer to 10A2

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.37 kg(WITHOUT VALVES)

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



X	PORT SIZE		
	PORT	PORT	
	1	2	
G03	G 3/8"	G 3/8"	

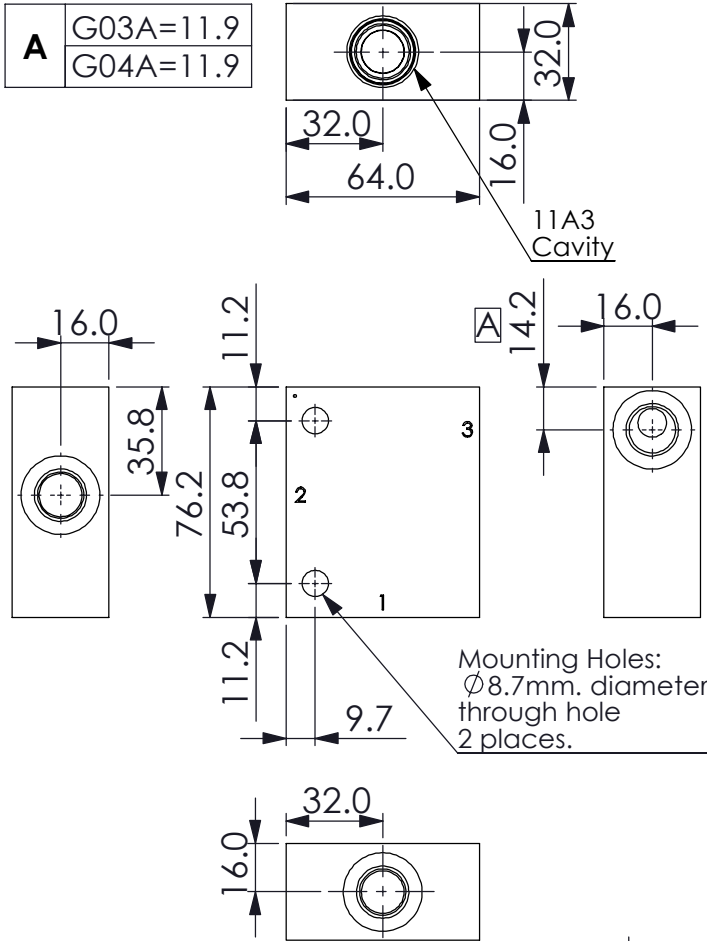
Y	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	

Z	CARTRIDGE VALVES SELECTION	
	WITHOUT VALVE	
RP0A	RP10A20AL(95 LPM,7~210 bar)	
RD5A	RD10A25AL(95 LPM,35~210 bar)	

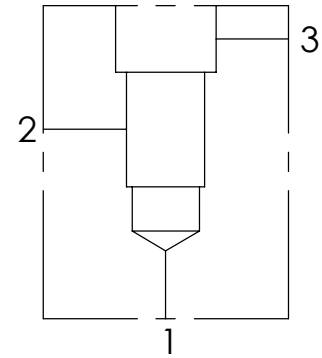
The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)



Ordering Code: **ML-11A3-X-Y 01-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron  
Body Pressure Rating: 350 bar

Cavity:

Refer to 11A3

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.35 kg(WITHOUT VALVES)
Ductile Iron	0.95 kg(WITHOUT VALVES)

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

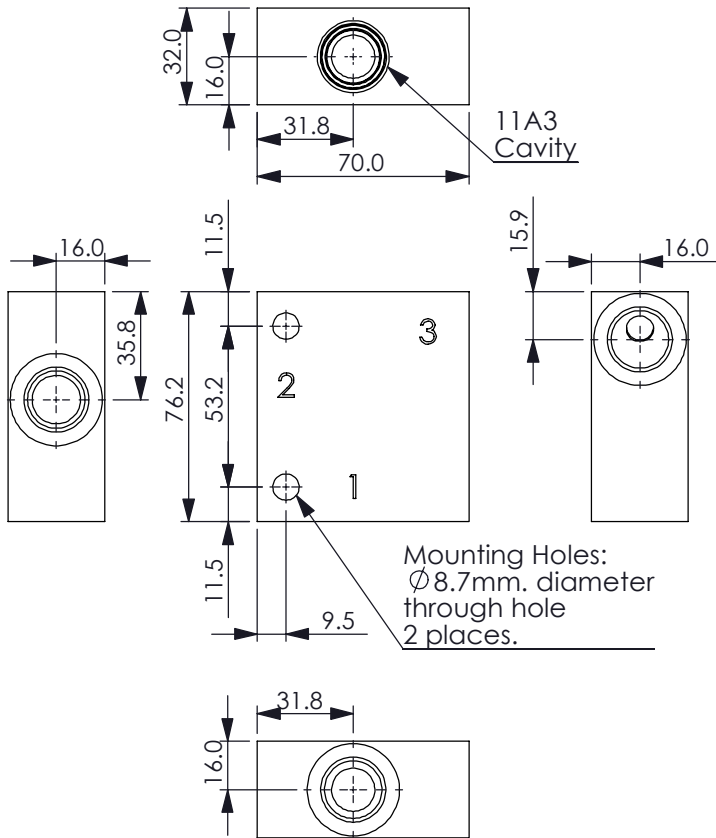
X	PORT SIZE		
	PORTS	PORT	
	1,2	3	
<b>G02</b>	G 1/4"	G 1/4"	
<b>G03</b>	G 3/8"	G 3/8"	
<b>G03A</b>	G 3/8"	G 1/4"	
<b>G04A</b>	G 1/2"	G 1/4"	
<b>G04B</b>	G 1/2"	G 3/8"	
<b>P03</b>	3/8"PT	3/8"PT	

Y	BODY MATERIAL	
<b>A</b>	HIGH-STRENGTH ALUMINUM	
<b>S</b>	DUCTILE IRON	

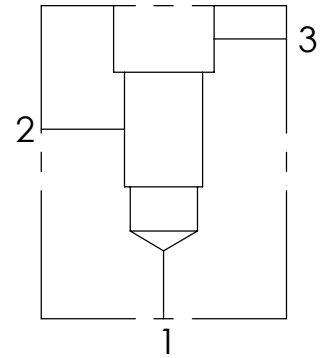
Z	CARTRIDGE VALVES SELECTION	
	WITHOUT VALVE	
<b>RV0A</b>	RV11A30AL (60LPM,7-210bar)	
<b>CB3H</b>	CB11A33HL (60LPM,70-280bar)	
<b>CO20</b>	CO11A3020N (60LPM,2.0bar)	
<b>CC20</b>	CC11A3020N (60LPM,2.0bar)	
<b>SPOA</b>	SP11A30AL (60LPM,7-210bar)	

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

Ordering Code: **ML-11A3-X-Y 01-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
 Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 11A3

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.37 kg(WITHOUT VALVES)
Ductile Iron	0.97 kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORTS		
	1,2	3	
G04	G 1/2"	G 1/2"	

### Y BODY MATERIAL

**A** HIGH-STRENGTH ALUMINUM

**S** DUCTILE IRON

### Z CARTRIDGE VALVES SELECTION

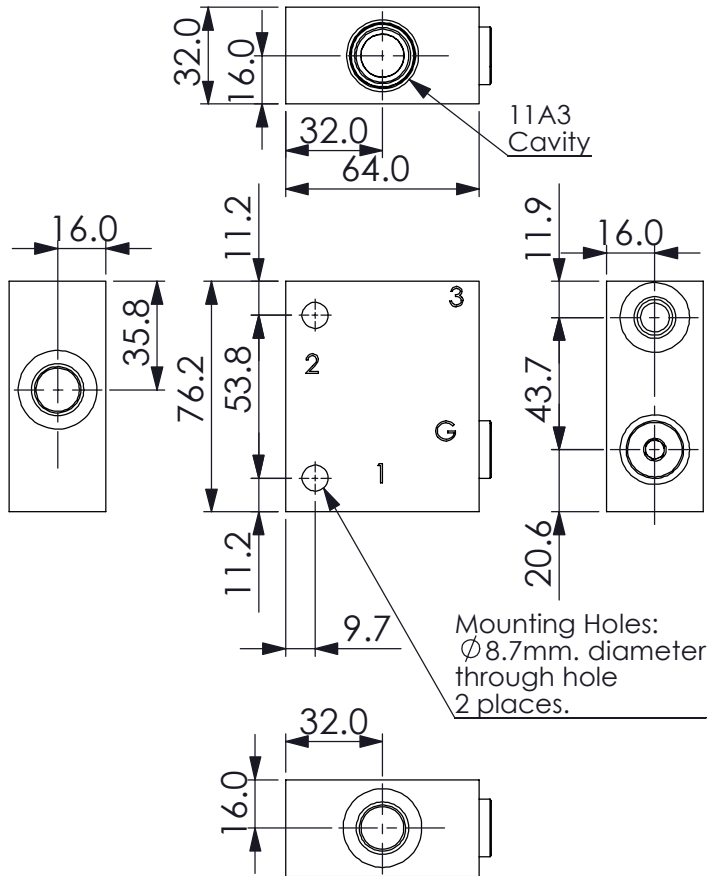
WITHOUT VALVE

**PPOA** PP11A30AL (40LPM,7-210bar)

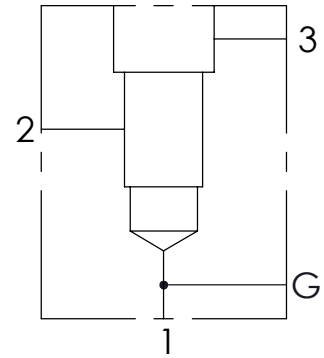
**PDOA** PD11A30AL (40LPM,35-210bar)

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

Ordering Code: **ML-11A3-X-Y 02-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron  
Body Pressure Rating: 350 bar

Cavity:

Refer to 11A3

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.35 kg(WITHOUT VALVES)
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Ductile Iron	0.97 kg(WITHOUT VALVES)
--------------	-------------------------

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

X	PORT SIZE		
	PORTS 1,2	PORT 3	PORT G
<b>G03AG</b>	G 3/8"	G 1/4"	G 1/4"

Z	CARTRIDGE VALVES SELECTION	
	WITHOUT VALVE	
<b>RV0A</b>	RV11A30AL(60LPM,7-210bar)	
<b>CB3H</b>	CB11A33HL (60LPM,70-280bar)	
<b>CO20</b>	CO11A3020N (60LPM,2.0bar)	
<b>CC20</b>	CC11A3020N (60LPM,2.0bar)	
<b>SP0A</b>	SP11A30AL (60LPM,7-210bar)	
<b>PB0A</b>	PB11A30AL (40LPM,7-210bar)	

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

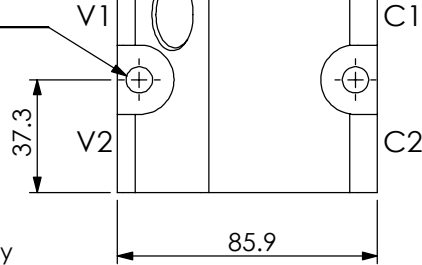
### Y BODY MATERIAL

**A HIGH-STRENGTH ALUMINUM**

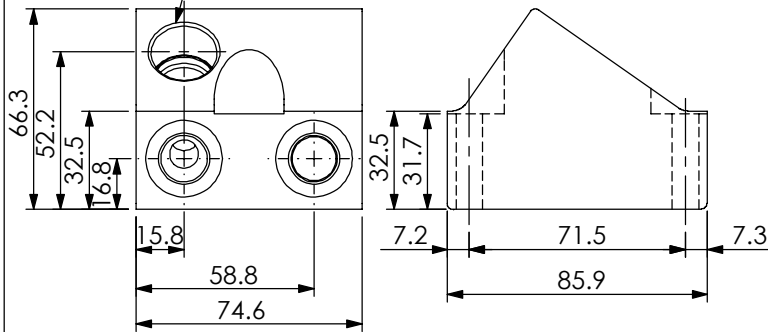
**S DUCTILE IRON**

Ordering Code: **ML-11A3-X-Y 41-Z**

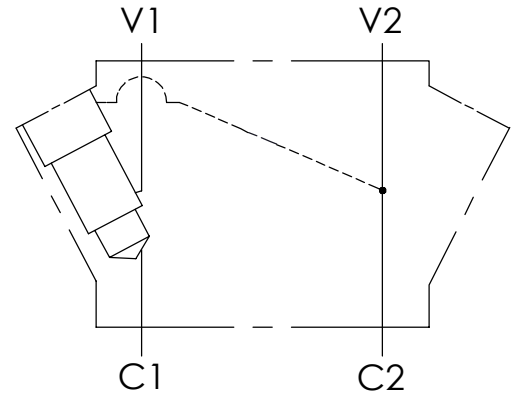
Mounting Holes:  
Ø8.7mm. diameter  
through hole.  
2 places.



11A3 Cavity  
Locating Shoulder  
Depth 17.5 mm.



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron  
Body Pressure Rating: 350 bar

Cavity:

Refer to 11A3

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.68 kg(WITHOUT VALVES)
Ductile Iron	1.96 kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORTS	PORTS	
	V1,V2	C1,C2	
G03	G 3/8"	G 3/8"	

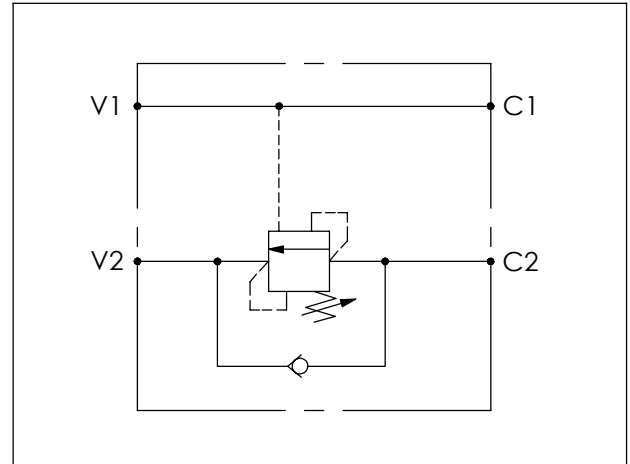
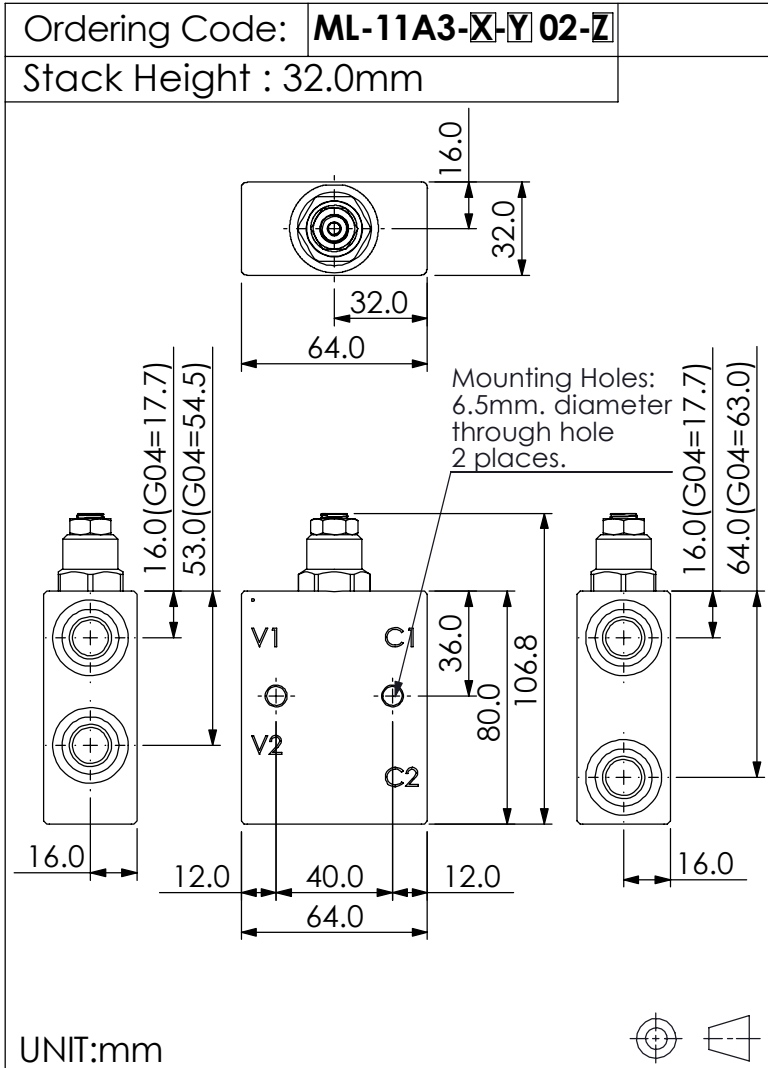
### Y BODY MATERIAL

A	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

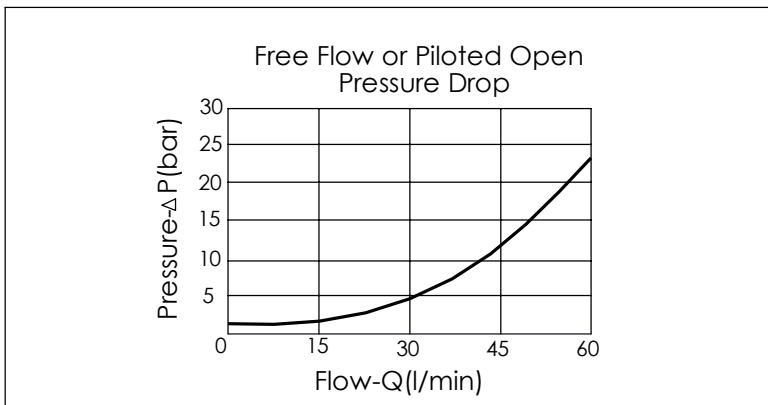
### Z CARTRIDGE VALVES SELECTION

	WITHOUT VALVE	
CB3H	CB11A33HL (3:1,70-280bar)	
CO03	CO11A3003N (0.3bar)	

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow \ pressure \ ... etc.)



TECHNICAL DATA	
Aluminum Body Pressure Rating:	250 bar
Ductile Iron Body Pressure Rating:	350 bar
Rated flow:	60 l/min
Cartridge Valve: Refer to CB11A-X-Y-Z * Refer to Winner Cartridge Valves Catalog.	
Aluminum	0.35 kg(WITHOUT VALVES) 0.55 kg(INCLUDE VALVES)
* If you need the special specification. Please contact us.	

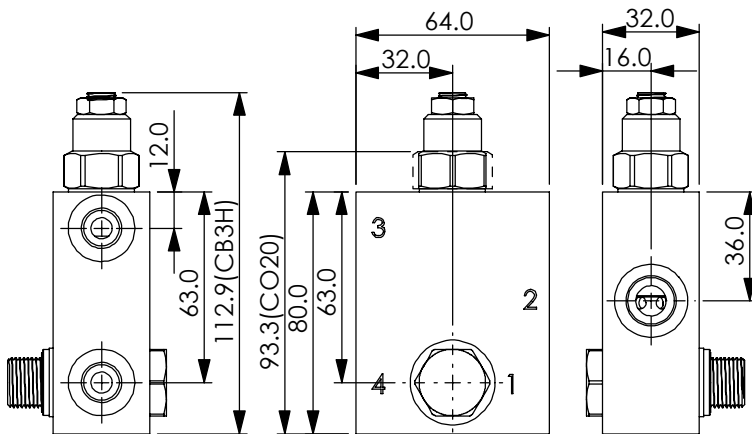
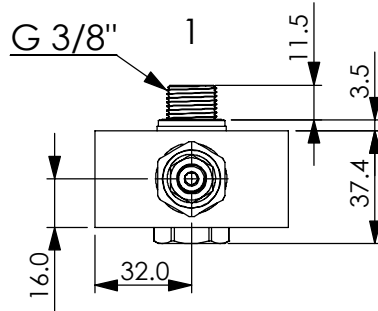


X	PORT SIZE	
	PORTS V1,V2	PORTS C1,C2
G02	G 1/4"	G 1/4"
G03	G 3/8"	G 3/8"
G04	G 1/2"	G 1/2"

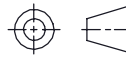
Y	BODY MATERIAL
A	HIGH-STRENGTH ALUMINUM

Z	CARTRIDGE VALVES SELECTION
	WITHOUT VALVE
CB3H	CB11A33HL (3:1 , 280bar)
CB4J	CB11A34JL (4.5:1 , 350bar)
CB0J	CB11A30JL (10:1 , 350bar)
The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)	

Ordering Code: **ML-11A3-X-Y 05-Z**



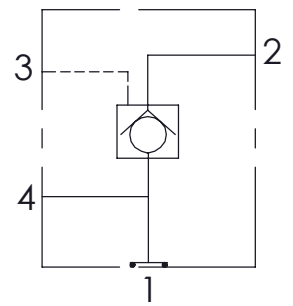
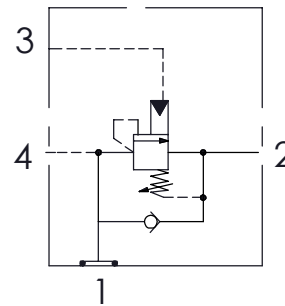
UNIT:mm



Ordering Code:

**ML-11A3-G03-A01-CB3H**

**ML-11A3-G03-A01-CO20**



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

Cavity:

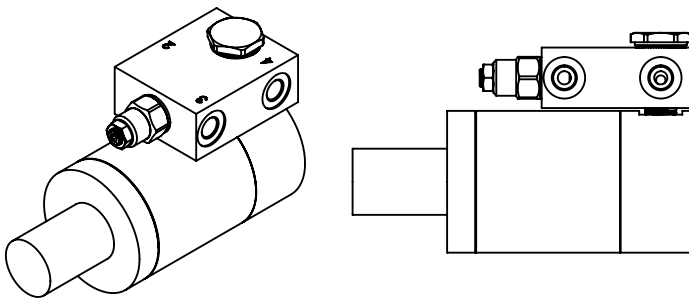
Refer to 11A3

\* Refer to Winner Cartridge Valves Catalog.

Aluminum 0.45 kg(WITHOUT VALVES)

Ductile Iron 1.04 kg(WITHOUT VALVES)

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



### PORT SIZE

X	PORTS		
	1,2	3,4	
<b>G03A</b>	G 3/8"	G 1/4"	

### Y BODY MATERIAL

**A** HIGH-STRENGTH ALUMINUM

**S** DUCTILE IRON

### Z CARTRIDGE VALVES SELECTION

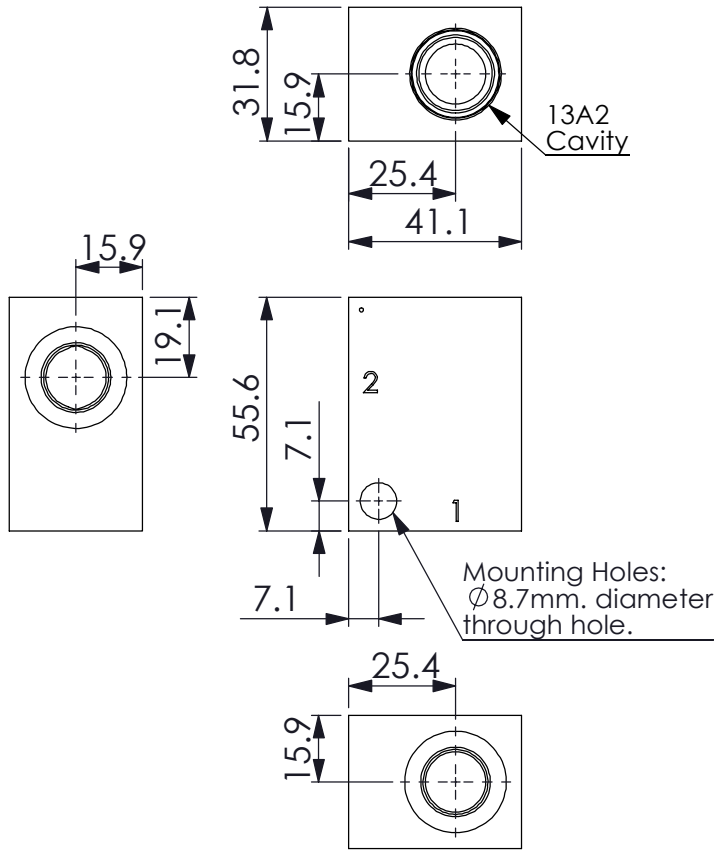
WITHOUT VALVE

**CB3H** CB11A33HL (3:1 , 280bar)

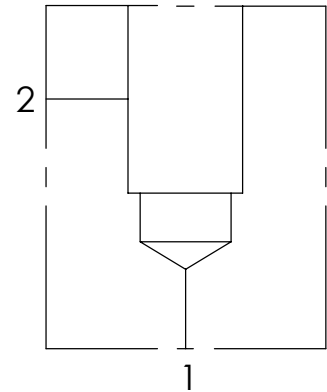
**CO20** CO11A3020N (60LPM , 2.0bar)

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

Ordering Code: **ML-13A2-X-Y 01-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 13A2

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.17 kg(WITHOUT VALVES)
Ductile Iron	0.38 kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORT		
	1	2	
G03	G 3/8"	G 3/8"	

### Z CARTRIDGE VALVES SELECTION

WITHOUT VALVE

<b>CV03</b>	CV13A2003N (80LPM,0.3bar)	
<b>NV48</b>	NV13A2048L (350bar)	
<b>NCBA</b>	NC13A21BAL (350bar)	
<b>FR0A</b>	FR13A20AL (0.4-23LPM,350bar)	
<b>LS0G</b>	LS13A20NG04 (10LPM)	

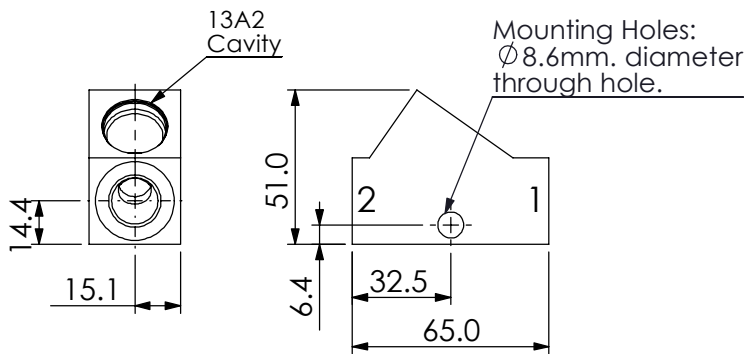
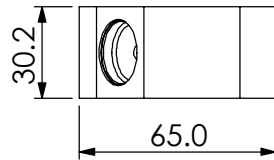
The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow \ pressure \ ... etc.)

### Y BODY MATERIAL

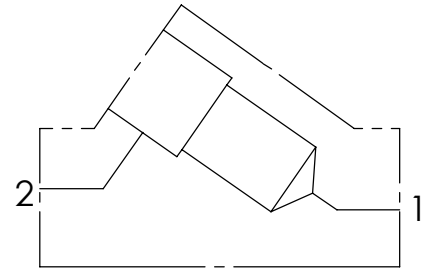
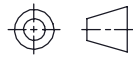
**A HIGH-STRENGTH ALUMINUM**

**S DUCTILE IRON**

Ordering Code: **ML-13A2-X-Y 41-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 13A2

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.14 kg(WITHOUT VALVES)
Ductile Iron	0.42 kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORT		
	1	2	
G03	G 3/8"	G 3/8"	

### Y BODY MATERIAL

**A** HIGH-STRENGTH ALUMINUM

**S** DUCTILE IRON

### Z CARTRIDGE VALVES SELECTION

WITHOUT VALVE

**CV03** CV13A2003N(80LPM,0.3bar)

**NV48** NV13A2048L (350bar)

**NCBA** NC13A21BAL (0.3bar)

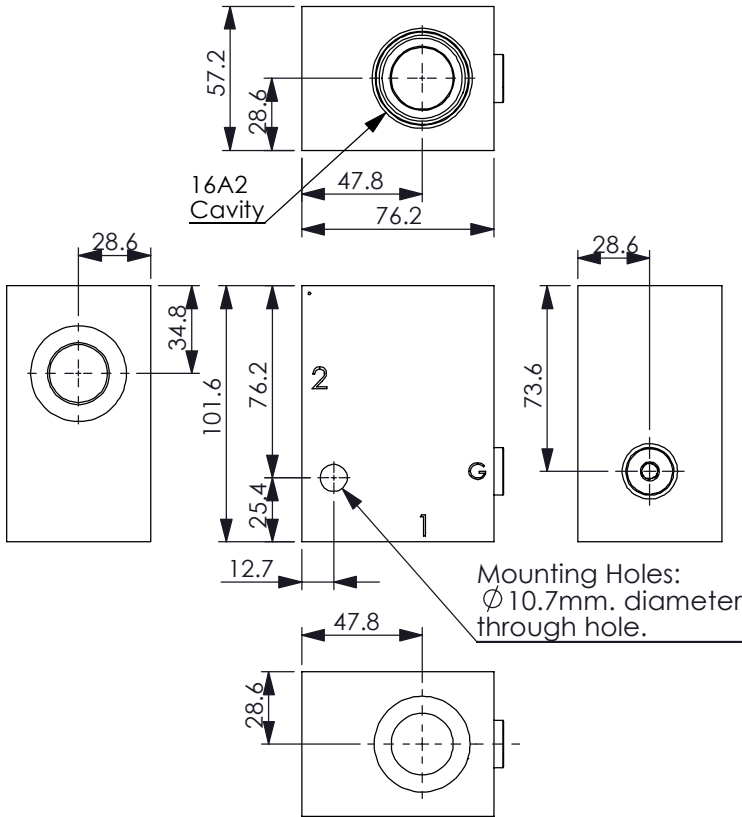
**FR0A** FR13A20AL (23LPM,350bar)

**LS0G** LS13A20NG04 (10LPM)

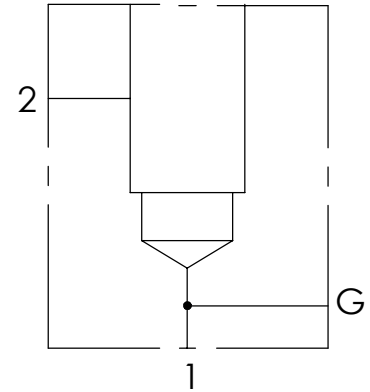
The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)



Ordering Code: **ML-16A2-X-Y 01-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 16A2

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.97 kg(WITHOUT VALVES)
Ductile Iron	2.58 kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORTS		
	1,2	G	
<b>G06G</b>	G 3/4"	G 1/4"	
<b>G08G</b>	G 1"	G 1/4"	
<b>G10G</b>	G 1-1/4"	G 1/4"	

### Y BODY MATERIAL

**A** HIGH-STRENGTH ALUMINUM

**S** DUCTILE IRON

### Z CARTRIDGE VALVES SELECTION

WITHOUT VALVE

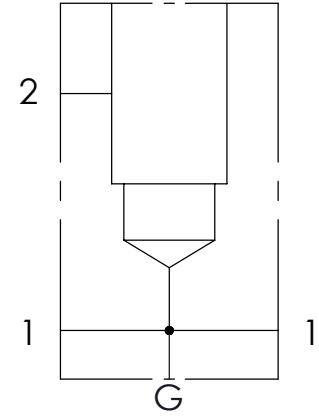
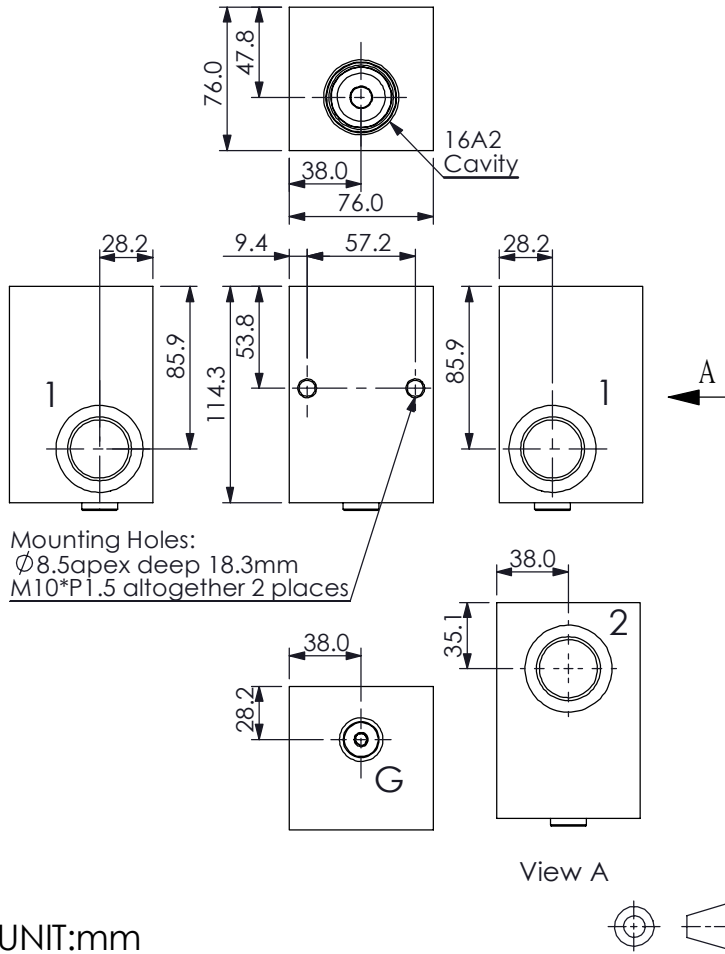
**RP0A** RP16A20AL(380 LPM,7~210 bar)

**CV03** CV16A2003N (320LPM,0.3bar)

**FR0A** FR16A20AL (0.8-95LPM)

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow · pressure · ... etc.)

Ordering Code: **ML-16A2-X-Y 02-Z**



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
 Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 16A2

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	1.40 kg(WITHOUT VALVES)
Ductile Iron	3.90 kg(WITHOUT VALVES)

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

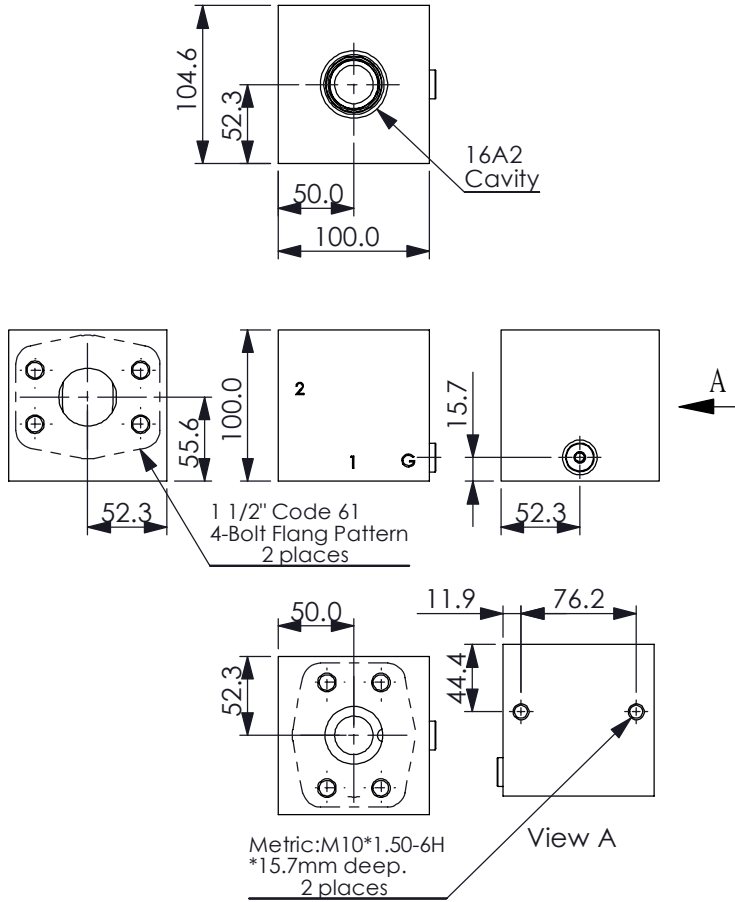
X	PORT SIZE		
	PORTS	PORT	
	<b>1,2</b>	<b>G</b>	
<b>G06G</b>	G 3/4"	G 1/4"	
<b>G08G</b>	G 1"	G 1/4"	
<b>G10G</b>	G 1-1/4"	G 1/4"	

Y	BODY MATERIAL	
<b>A</b>	HIGH-STRENGTH ALUMINUM	
<b>S</b>	DUCTILE IRON	

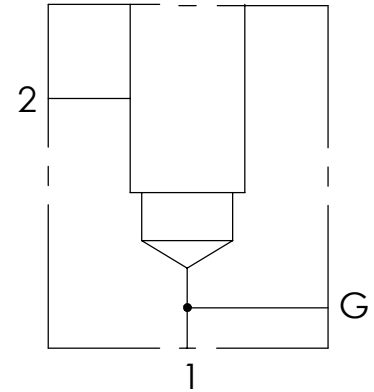
Z	CARTRIDGE VALVES SELECTION	
	WITHOUT VALVE	
<b>RPOA</b>	RP16A20AL(380 LPM,7~210 bar)	

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

Ordering Code: **ML-16A2-X-Y 03-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 16A2

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	2.4 kg(WITHOUT VALVES)
Ductile Iron	6.8 kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORTS	PORT	
	1,2	G	
<b>F30G</b>	1 1/2" Code 61 4-Bolt Flang Pattern	G 1/4"	

### Y BODY MATERIAL

**A HIGH-STRENGTH ALUMINUM**

**S DUCTILE IRON**

### Z CARTRIDGE VALVES SELECTION

WITHOUT VALVE

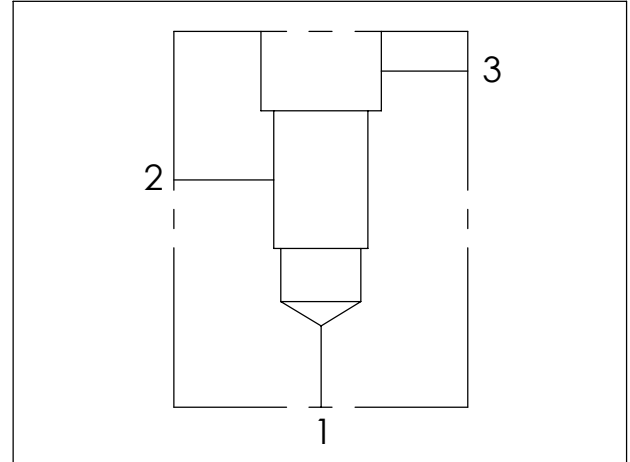
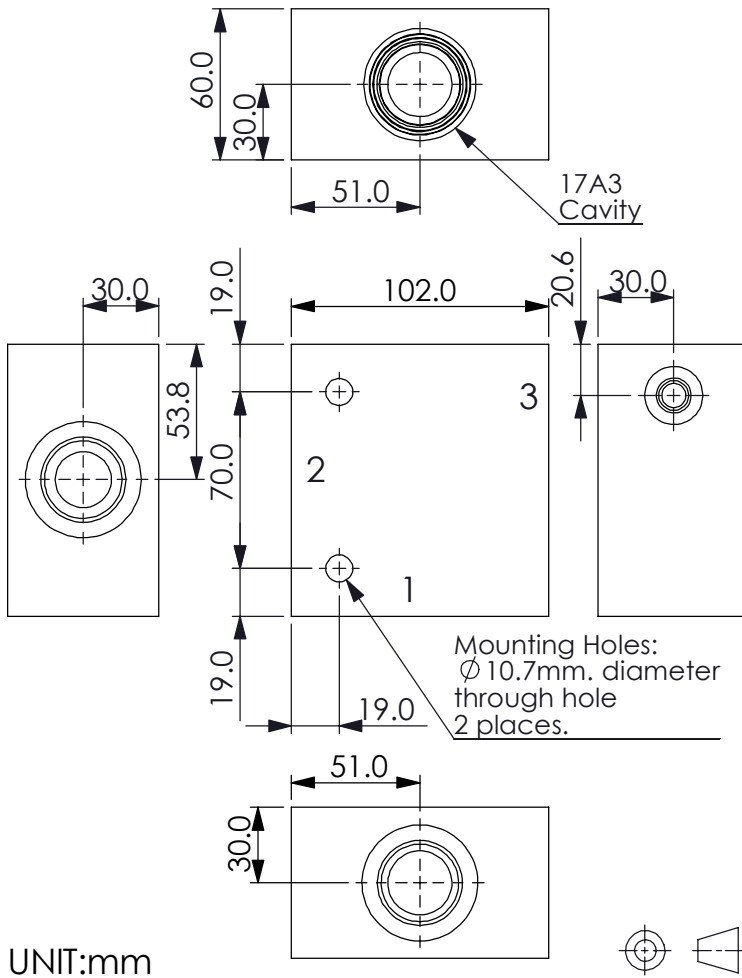
**RP0A** RP16A20AL(380 LPM,7~210 bar)

**CV03** CV16A2003N (320LPM,0.3bar)

**FR0A** FR16A20AL (0.8-95LPM)

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

Ordering Code: **ML-17A3-X-Y 01-Z**



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 17A3

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	1.5 kg(WITHOUT VALVES)
Ductile Iron	4.2 kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORTS		
	1,2	3	
<b>G08A</b>	G 1"	G 1/4"	
<b>G10A</b>	G 1-1/4"	G 1/4"	
<b>S16A</b>	SAE 16	SAE 6	
<b>P03</b>	3/8"PT	3/8"PT	

### Z CARTRIDGE VALVES SELECTION

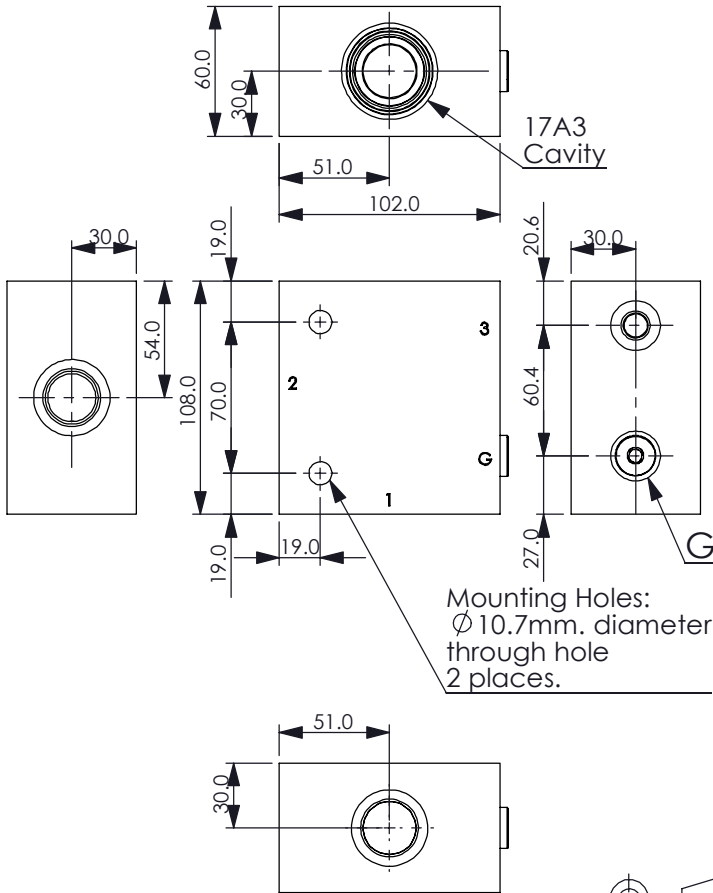
WITHOUT VALVE		
<b>RV0A</b>	RV17A30AL (240LPM,7-210bar)	
<b>CB3H</b>	CB17A33HL (3:1,70-280bar)	
<b>CO20</b>	CO17A3020N (240LPM,2.0bar)	
<b>CC20</b>	CC17A3020N (320LPM,2.0bar)	
<b>PBOA</b>	PB17A30AL (160LPM,7-210bar)	
<b>SPOA</b>	SP17A30AL (240LPM,7-210bar)	

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

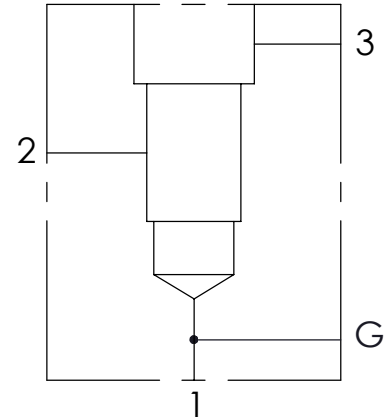
### Y BODY MATERIAL

<b>A</b>	<b>HIGH-STRENGTH ALUMINUM</b>
<b>S</b>	<b>DUCTILE IRON</b>

Ordering Code: **ML-17A3-X-Y 02-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron  
Body Pressure Rating: 350 bar

Cavity:

Refer to 17A3

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	1.5 kg(WITHOUT VALVES)
Ductile Iron	4.2 kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORTS	PORT	PORT
	1,2	3	G
G06AG	G 3/4"	G1/4"	G1/4"

### Y BODY MATERIAL

**A** HIGH-STRENGTH ALUMINUM

**S** DUCTILE IRON

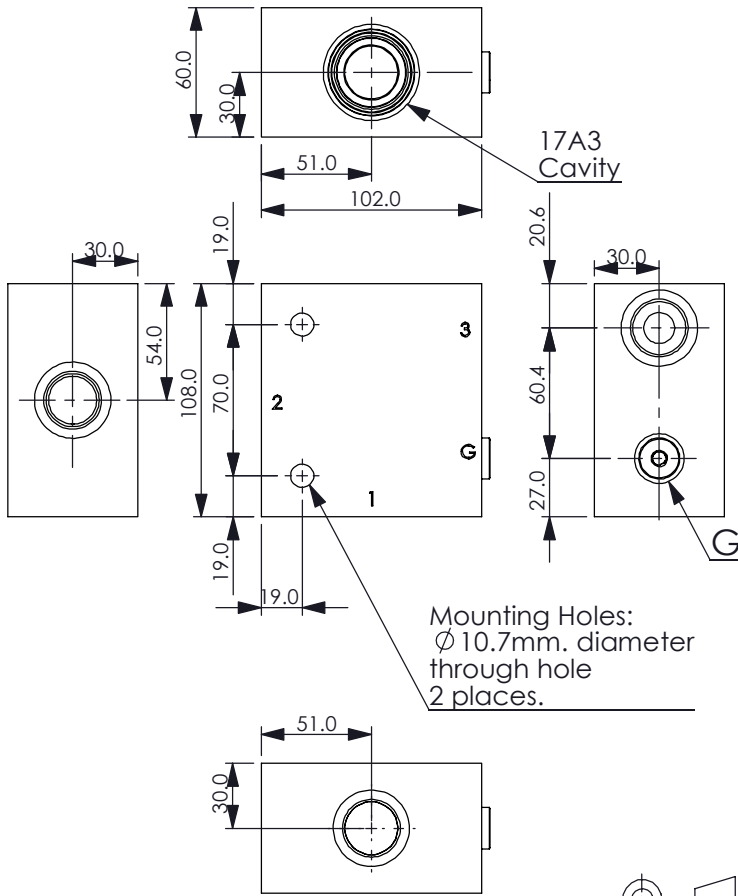
### Z CARTRIDGE VALVES SELECTION

WITHOUT VALVE

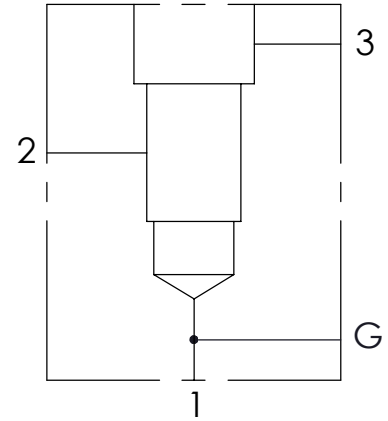
<b>RV0A</b>	RV17A30AL (240LPM,7-210bar)
<b>CB3H</b>	CB17A33HL (3:1,70-280bar)
<b>CO20</b>	CO17A3020N (240LPM,2.0bar)
<b>CC20</b>	CC17A3020N (320LPM,2.0bar)
<b>PB0A</b>	PB17A30AL (160LPM,7-210bar)

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

Ordering Code: **ML-17A3-X-Y 02-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron  
Body Pressure Rating: 350 bar

Cavity:

Refer to 17A3

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	1.5 kg(WITHOUT VALVES)
Ductile Iron	4.0 kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORTS	PORT	PORT	
	1,2	3	G	
G06G	G 3/4"	G 3/4"	G 1/4"	

### Y BODY MATERIAL

**A** HIGH-STRENGTH ALUMINUM

**S** DUCTILE IRON

### Z CARTRIDGE VALVES SELECTION

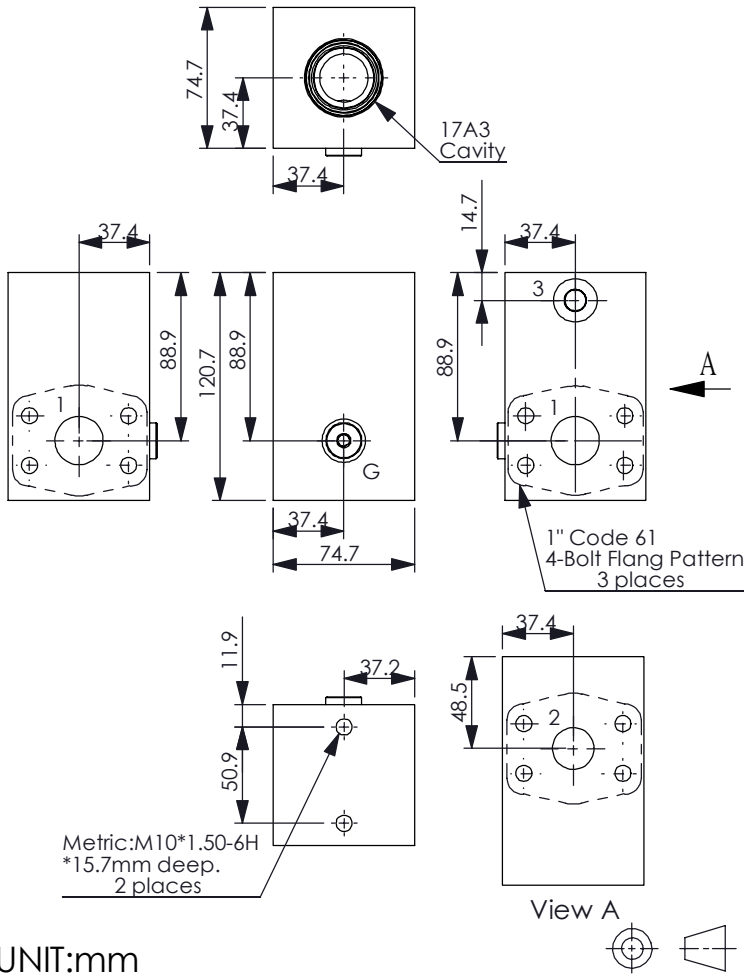
WITHOUT VALVE

**PPOA** PP17A30AL (160LPM,7-210bar)

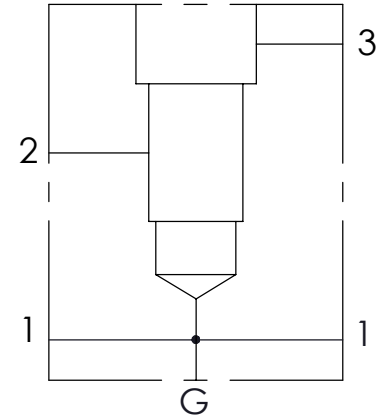
**PDOA** PD17A30AL (160LPM,50-210bar)

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

Ordering Code: **ML-17A3-X-Y 03-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 17A3

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	1.5 kg(WITHOUT VALVES)
Ductile Iron	4.2 kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORTS	PORT	PORT	
	1,2	3	G	
F50G	1" Code 61 4-Bolt Flang Pattern	G1/4"	G 1/4"	

### Y BODY MATERIAL

**A** HIGH-STRENGTH ALUMINUM

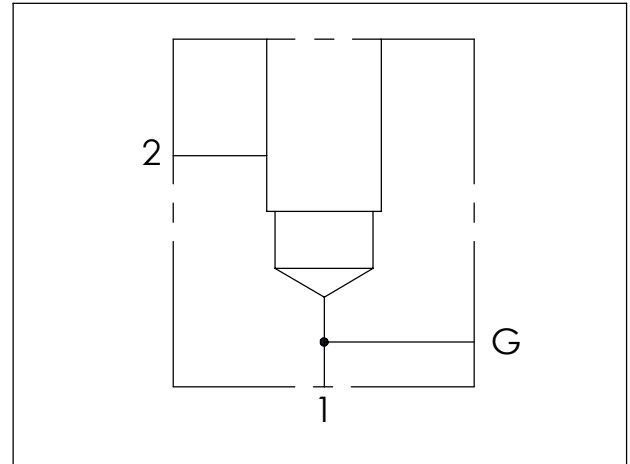
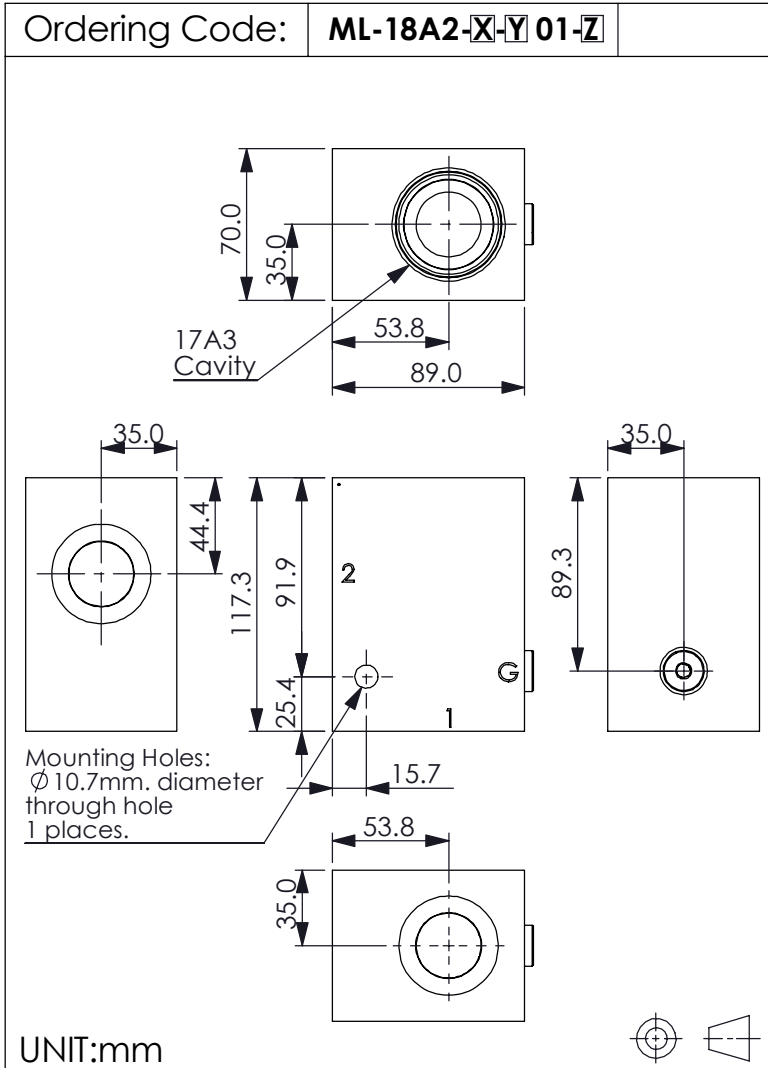
**S** DUCTILE IRON

### Z CARTRIDGE VALVES SELECTION

WITHOUT VALVE

**RVOA** RV17A30AL (240LPM,7-210bar)

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron  
Body Pressure Rating: 350 bar

Cavity:

Refer to 18A2

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	1.45 kg(WITHOUT VALVES)
Ductile Iron	4.1 kg(WITHOUT VALVES)

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

X	PORT SIZE		
	PORTS	PORT	
	1,2	G	
<b>G08G</b>	G 1"	G 1/4"	
<b>G10G</b>	G 1-1/4"	G 1/4"	

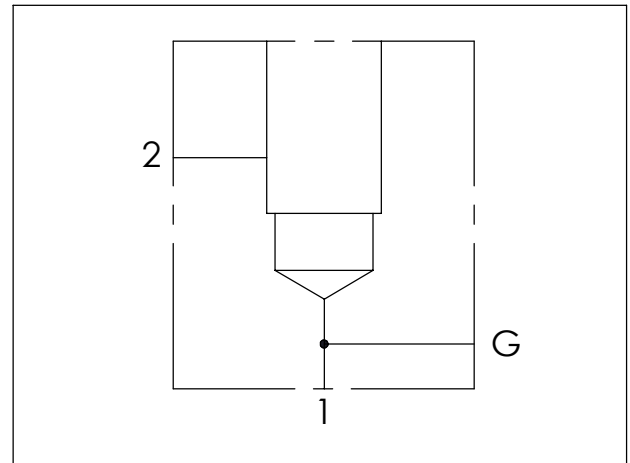
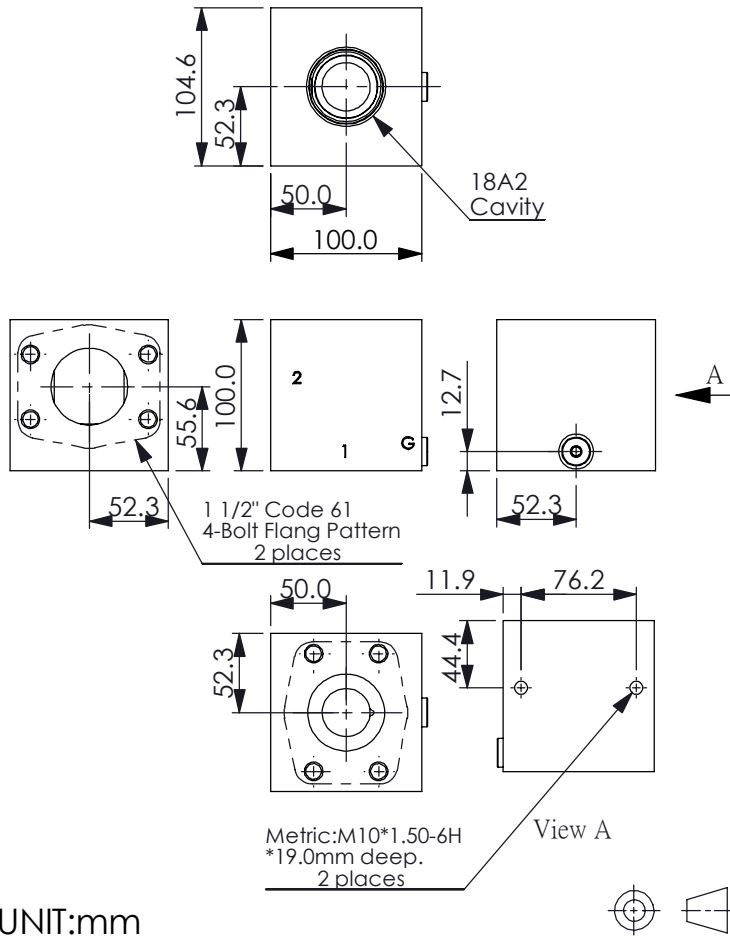
Y	BODY MATERIAL	
<b>A</b>	<b>HIGH-STRENGTH ALUMINUM</b>	
<b>S</b>	<b>DUCTILE IRON</b>	

Z	CARTRIDGE VALVES SELECTION	
	WITHOUT VALVE	
<b>RP0A</b>	RP18A20AL (760LPM,7-210bar)	
<b>CV03</b>	CV18A2003N (640LPM,0.3bar)	
<b>FR0A</b>	FR18A20AL (1.0 to 200LPM)	

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)



Ordering Code: **ML-18A2-X-Y 02-Z**



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 18A2

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	2.4	kg(WITHOUT VALVES)
Ductile Iron	6.2	kg(WITHOUT VALVES)

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

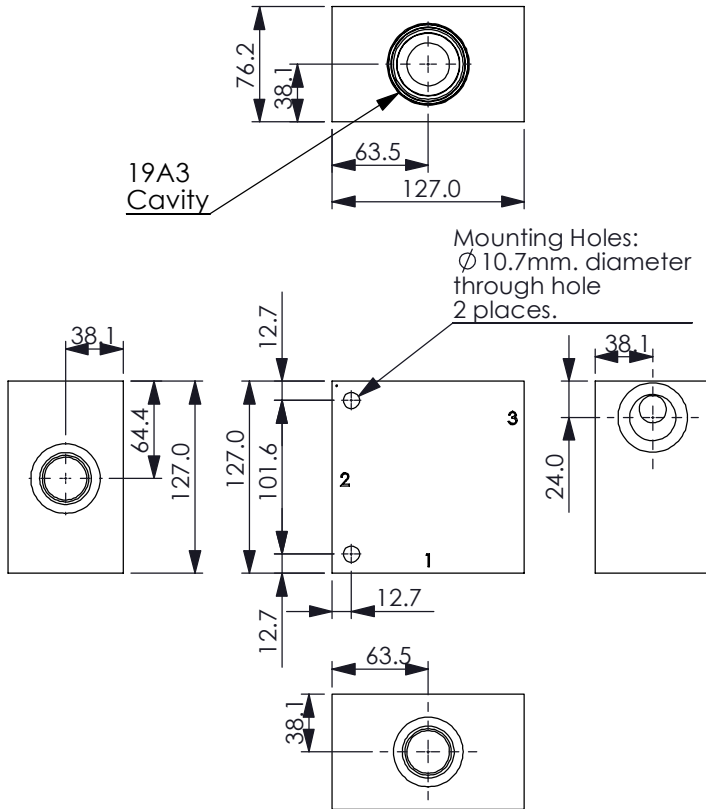
X	PORT SIZE		
	PORTS	PORT	
	1,2	G	
<b>F30G</b>	1 1/2" Code 61 4-Bolt Flang Pattern	G 1/4"	

Y	BODY MATERIAL	
<b>A</b>	HIGH-STRENGTH ALUMINUM	
<b>S</b>	DUCTILE IRON	

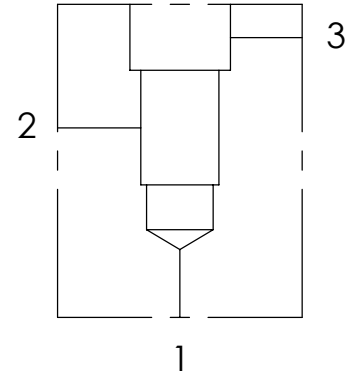
Z	CARTRIDGE VALVES SELECTION	
	WITHOUT VALVE	
<b>RP0A</b>	RP18A20AL (760LPM,7-210bar)	
<b>CV03</b>	CV18A2003N (640LPM,0.3bar)	
<b>FR0A</b>	FR18A20AL (1.0 to 200LPM)	

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow \ pressure \ ... etc.)

Ordering Code: **ML-19A3-X-Y 01-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron  
Body Pressure Rating: 350 bar

Cavity:

Refer to 19A3

\* Refer to Winner Cartridge Valve Catalog.

Aluminum	2.61 kg(WITHOUT VALVES)
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\* If you need the special specification.  
Please contact us.

### PORT SIZE

X	PORTS	PORT	
	1,2	3	
G08	G 1"	G 1"	

### Z CARTRIDGE VALVES SELECTION

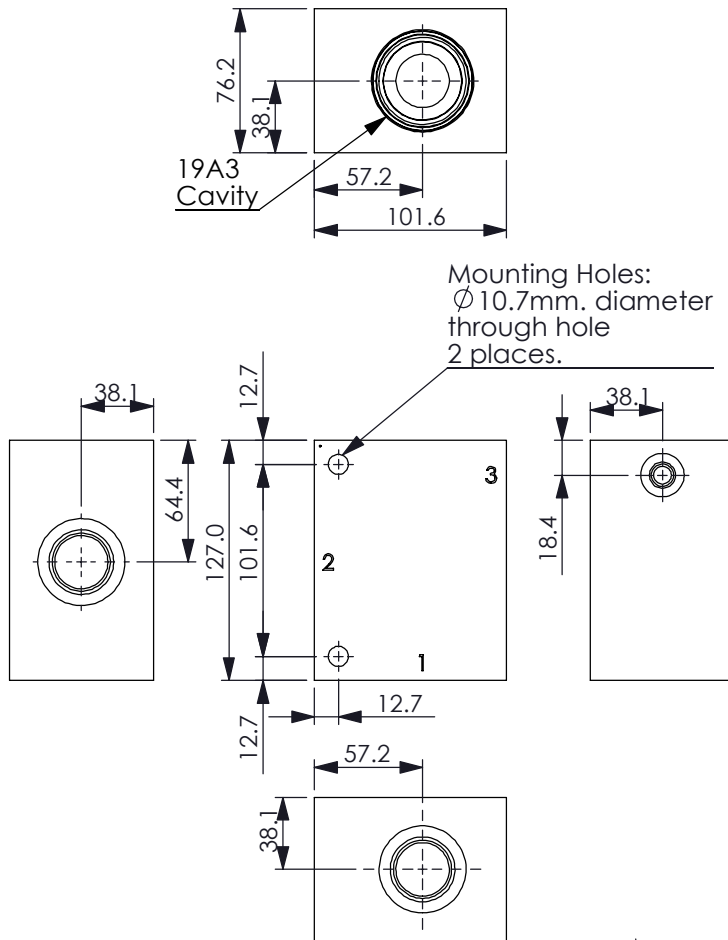
	WITHOUT VALVE	
PPOA	PP19A30AL (320LPM,7-210bar)	
PDOA	PD19A30AL (320LPM,50-210bar)	

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow \ pressure \ ... etc.)

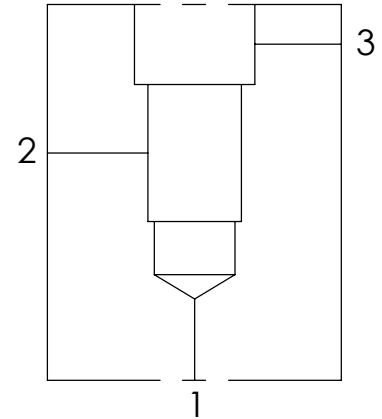
### Y BODY MATERIAL

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

Ordering Code: **ML-19A3-X-Y 02-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
 Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 19A3

\* Refer to Winner Cartridge Valve Catalog.

Aluminum	2.05 kg(WITHOUT VALVES)
Ductile Iron	5.65 kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORTS		
	1,2	3	
<b>G08A</b>	G 1"	G 1/4"	
<b>G10A</b>	G 1-1/4"	G 1/4"	

### Y BODY MATERIAL

**A** HIGH-STRENGTH ALUMINUM

**S** DUCTILE IRON

### Z CARTRIDGE VALVES SELECTION

WITHOUT VALVE

**RV0A** RV19A30AL (480LPM,7-210bar)

**CB3H** CB19A33HL (3:1,70-280bar)

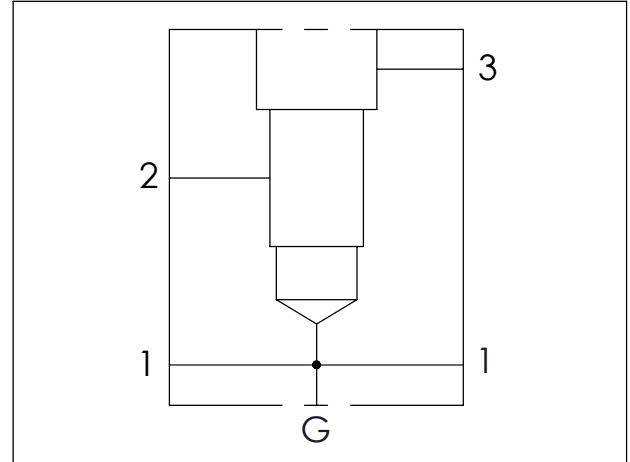
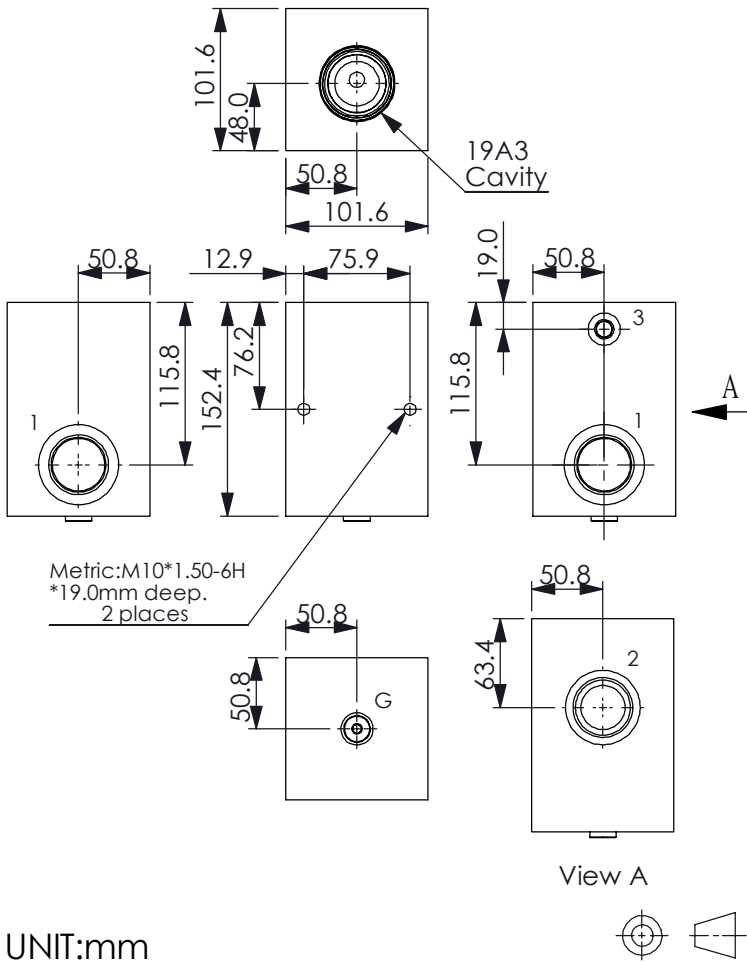
**CO20** CO19A3020N (480LPM,2.0bar)

**CC20** CC19A3020N (640LPM,2.0bar)

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)



Ordering Code: **ML-19A3-X-Y 04-Z**



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
 Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 19A3

\* Refer to Winner Cartridge Valve Catalog.

Aluminum	3.33 kg(WITHOUT VALVES)
Ductile Iron	9.3 kg(WITHOUT VALVES)

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



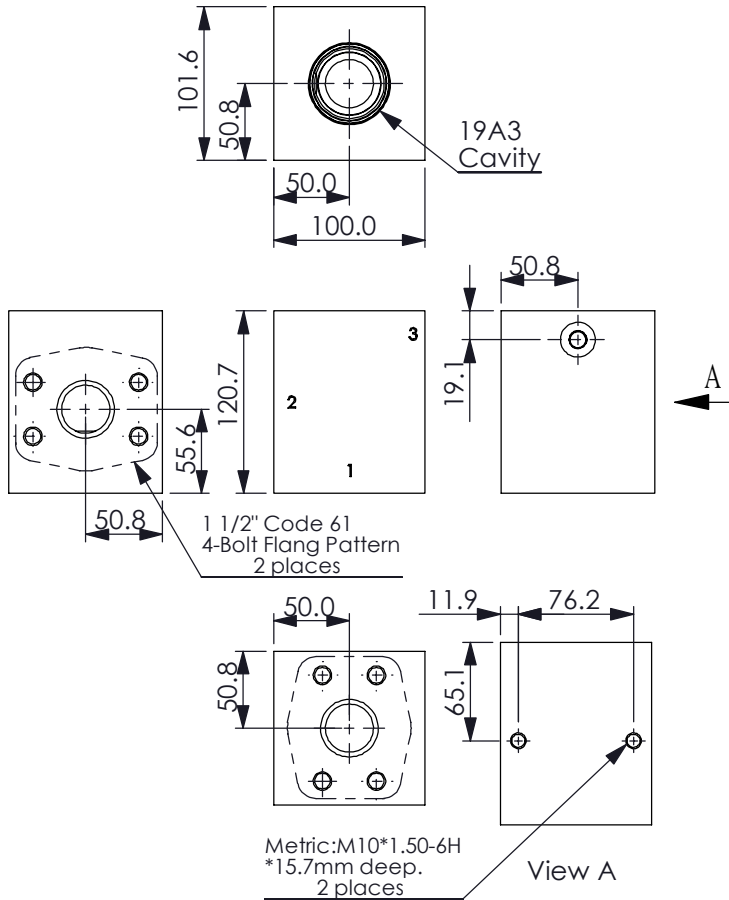
X	PORT SIZE		
	PORTS	PORT	PORT
	1,2	3	G
G10AG	G 1-1/4"	G 1/4"	G 1/4"

Y	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

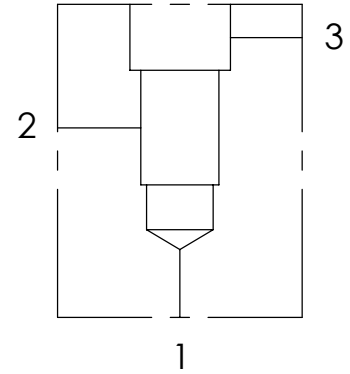
Z	CARTRIDGE VALVES SELECTION	
	WITHOUT VALVE	
RVOA	RV19A30AL (480LPM,7-210bar)	

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

Ordering Code: **ML-19A3-X-Y 05-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 19A3

\* Refer to Winner Cartridge Valve Catalog.

Aluminum	2.7	kg(WITHOUT VALVES)
Ductile Iron	7.5	kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORTS	PORT	
	1,2	3	
F30	1 1/2" Code 61 4-Bolt Flang Pattern	G 1/4"	

### Y BODY MATERIAL

**A HIGH-STRENGTH ALUMINUM**

**S DUCTILE IRON**

### Z CARTRIDGE VALVES SELECTION

WITHOUT VALVE

**RV0A** RV19A30AL (480LPM,7-210bar)

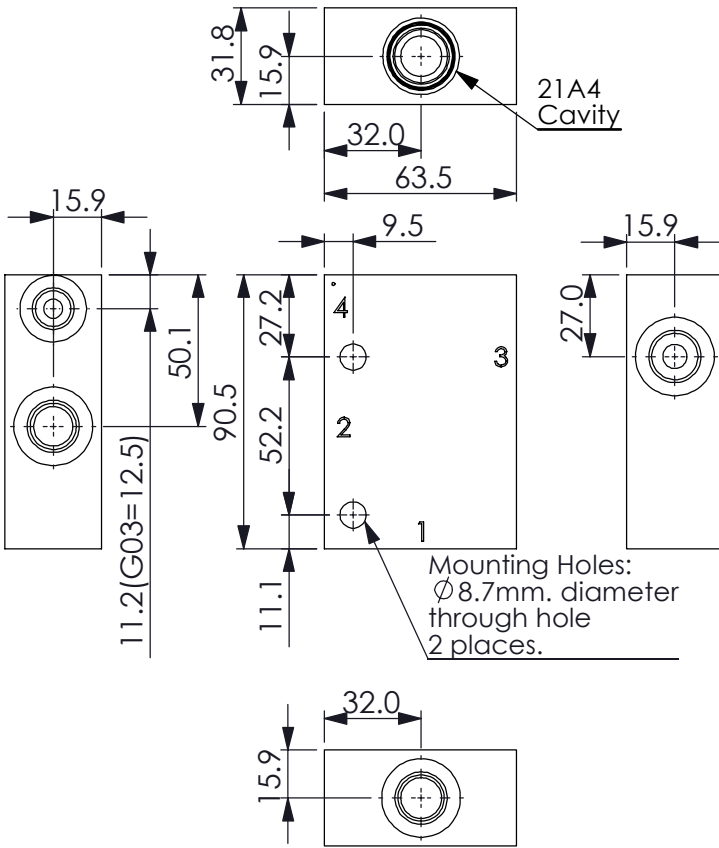
**CB3H** CB19A33HL (3:1,70-280bar)

**CO20** CO19A3020N (480LPM,2.0bar)

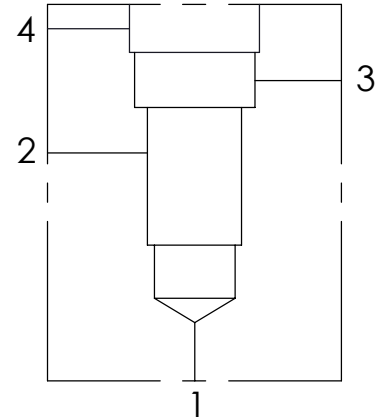
**CC20** CC19A3020N (640LPM,2.0bar)

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

Ordering Code: **ML-21A4-X-Y 01-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 21A4

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.38 kg(WITHOUT VALVES)
Ductile Iron	1.02 kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORTS	PORT	PORT	
	1,2	3	4	
G03	G 3/8"	G 3/8"	G 3/8"	
G03A	G 3/8"	G 3/8"	G 1/4"	
P03	3/8"PT	3/8"PT	3/8"PT	

### Y BODY MATERIAL

**A** HIGH-STRENGTH ALUMINUM

**S** DUCTILE IRON

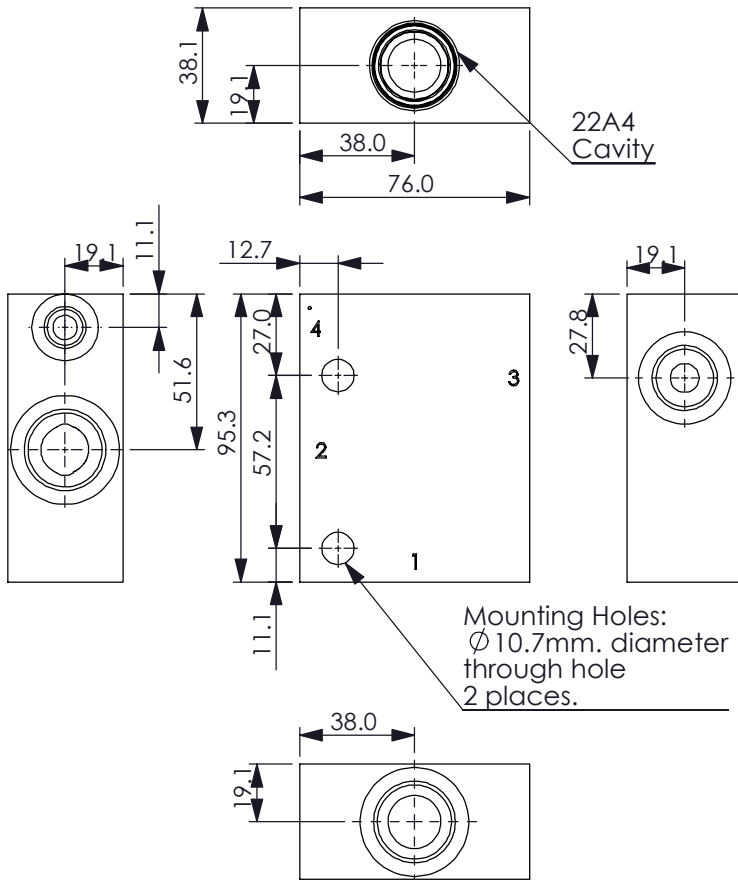
### Z CARTRIDGE VALVES SELECTION

WITHOUT VALVE

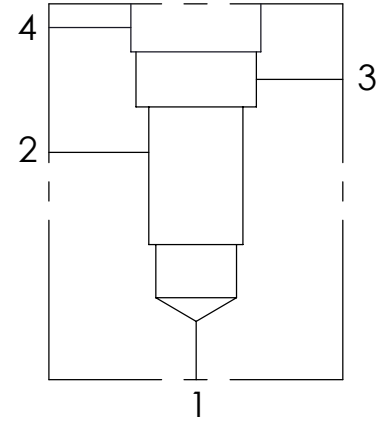
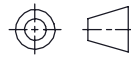
**PVOA** PV21A40AL (40LPM,7-210bar)

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow \ pressure \ ... etc.)

Ordering Code: **ML-22A4-X-Y 01-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 22A4

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.56 kg(WITHOUT VALVES)
Ductile Iron	1.52 kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORTS		
	1,2	3	4
<b>G03A</b>	G 3/8"	G 3/8"	G 1/4"
<b>G04A</b>	G 1/2"	G 1/2"	G 1/4"
<b>G06CA</b>	G 3/4"	G 1/2"	G 1/4"

### Y BODY MATERIAL

**A** HIGH-STRENGTH ALUMINUM

**S** DUCTILE IRON

### Z CARTRIDGE VALVES SELECTION

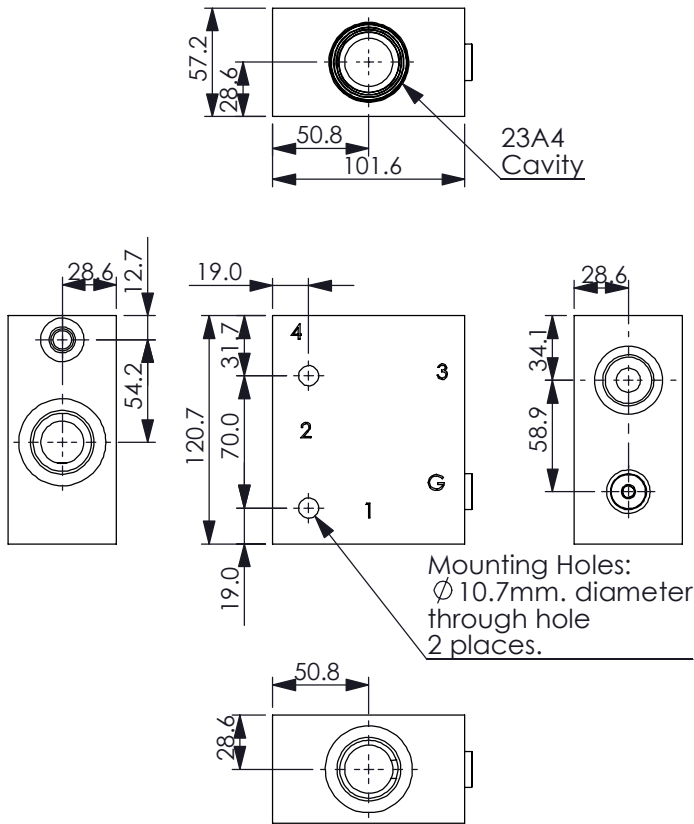
WITHOUT VALVE

**PV0A** PV22A40AL (80LPM,7-210bar)

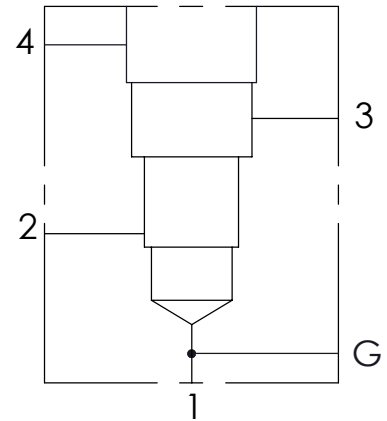
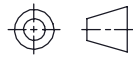
The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)



Ordering Code: **ML-23A4-X-Y 01-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

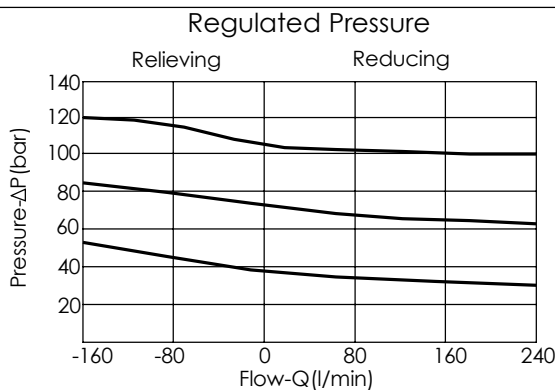
Cavity:

Refer to 23A4

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	1.44 kg(WITHOUT VALVES)
Ductile Iron	3.76 kg(WITHOUT VALVES)

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



### PORT SIZE

X	PORTS			
	1,2	3	4	G
<b>G06AG</b>	G3/4"	G3/4"	G1/4"	G1/4"
<b>G08AG</b>	G 1"	G3/4"	G1/4"	G1/4"
<b>G10AG</b>	G 1-1/4"	G3/4"	G1/4"	G1/4"

### Y BODY MATERIAL

**A HIGH-STRENGTH ALUMINUM**

**S DUCTILE IRON**

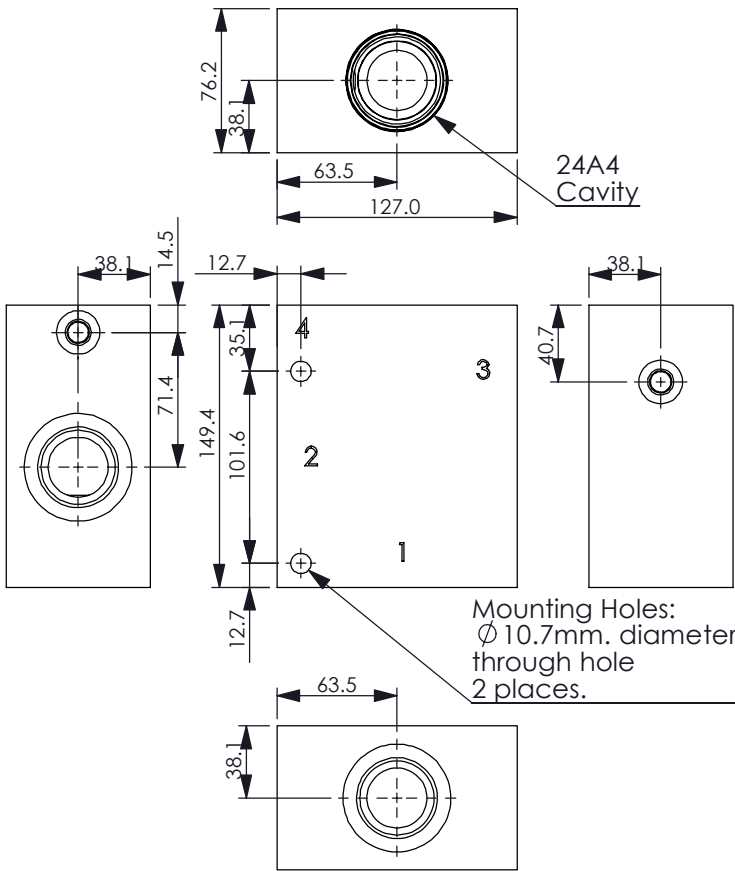
### Z CARTRIDGE VALVES SELECTION

WITHOUT VALVE

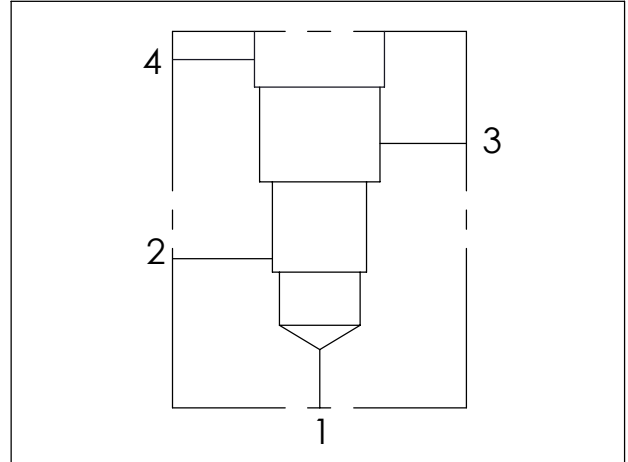
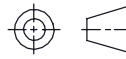
**PV0A** PV23A40AL (160LPM,7-210bar)

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

Ordering Code: **ML-24A4-X-Y 01-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

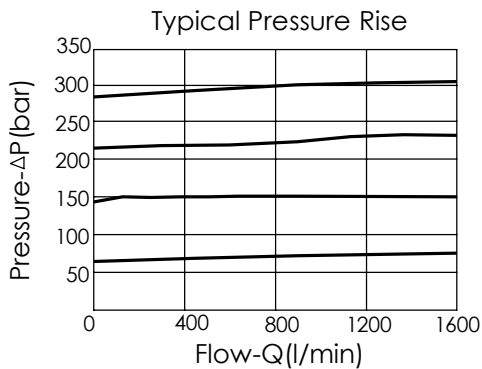
Cavity:

Refer to 24A4

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	3.2	kg(WITHOUT VALVES)
Ductile Iron	8.7	kg(WITHOUT VALVES)

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



### PORT SIZE

X	PORTS		
	1,2	3,4	
G08A	G1"	G1/4"	
G10A	G1-1/4"	G1/4"	

### Y BODY MATERIAL

**A** HIGH-STRENGTH ALUMINUM

**S** DUCTILE IRON

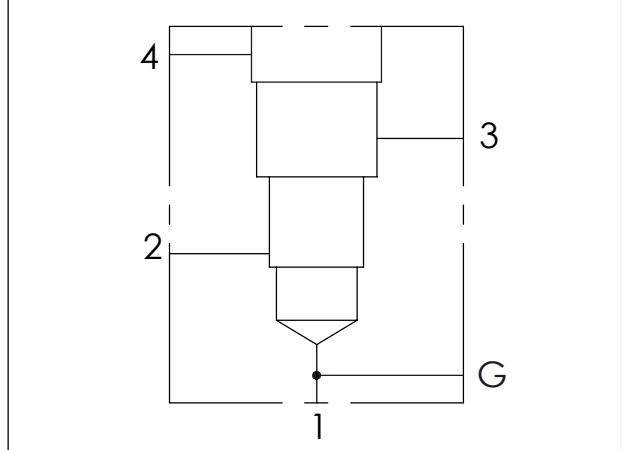
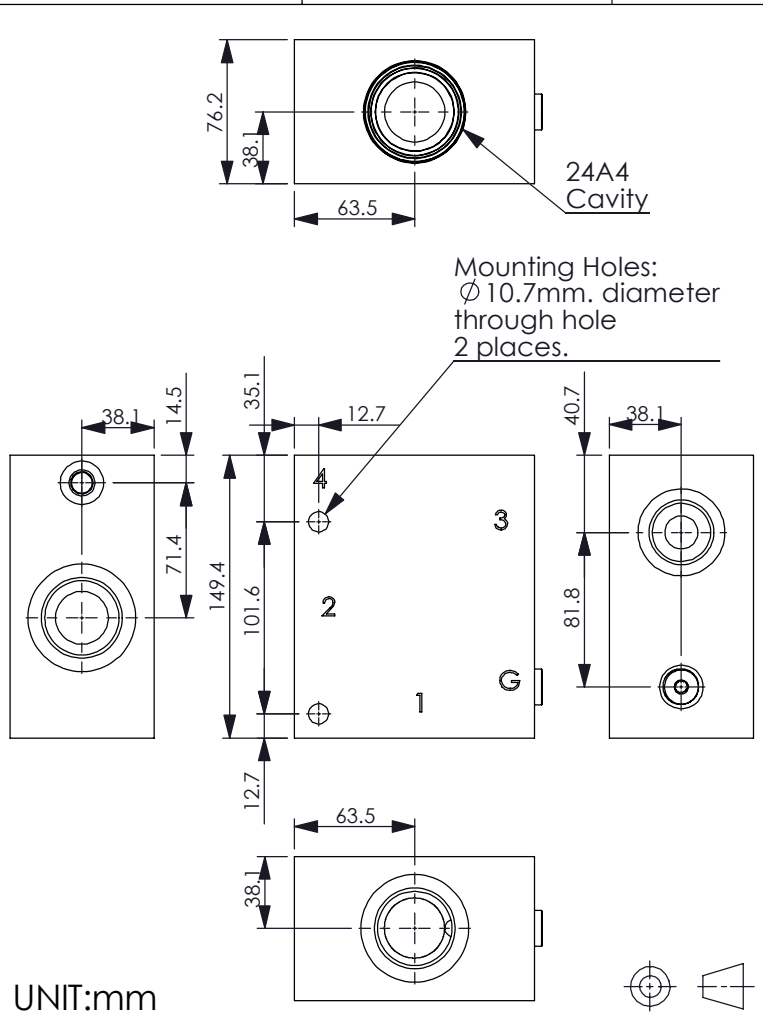
### Z CARTRIDGE VALVES SELECTION

WITHOUT VALVE

**CWAH** CW24A4AHL (1:1,70-280bar)

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow \ pressure \ ... etc.)

Ordering Code: **ML-24A4-X-Y 01-Z**



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

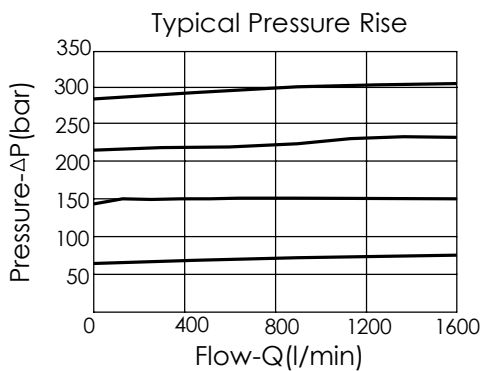
Cavity:

Refer to 24A4

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	3.1	kg(WITHOUT VALVES)
Ductile Iron	8.5	kg(WITHOUT VALVES)

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



### PORT SIZE

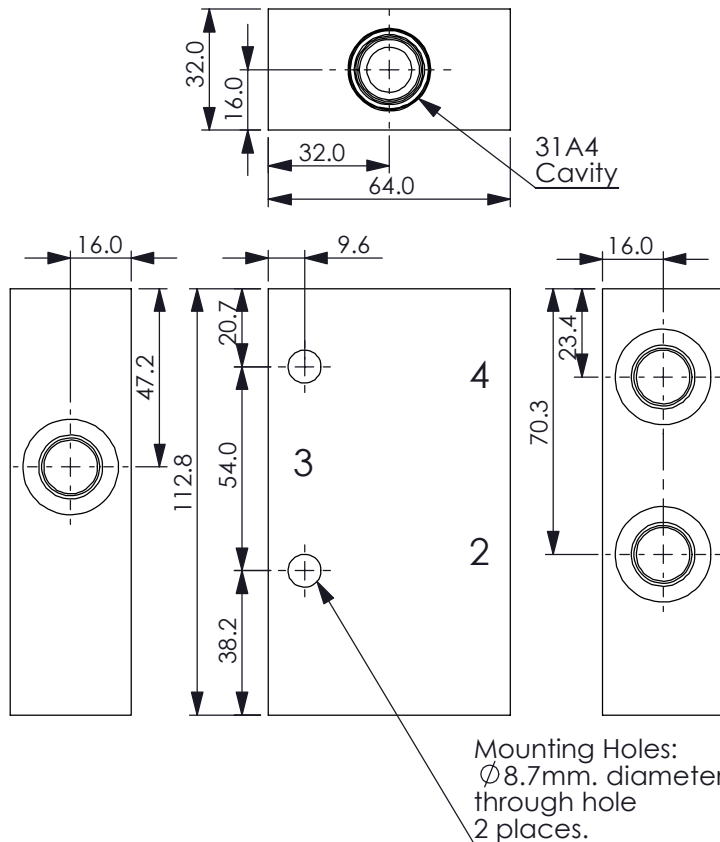
X	PORTS			
	1,2	3	4	G
G08AG	G1"	G1"	G1/4"	G1/4"
G10AG	G1-1/4"	G1"	G1/4"	G1/4"

Y	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

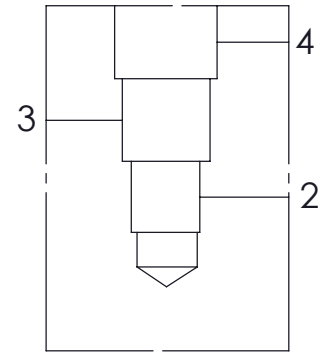
Z	CARTRIDGE VALVES SELECTION	
	WITHOUT VALVE	
PVOA	PV24A40AL (320LPM,7-210bar)	

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

Ordering Code: **ML-31A4-X-Y 11-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 31A4

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.55 kg(WITHOUT VALVES)
Ductile Iron	1.45 kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORT	PORTS	
	3	2,4	
<b>G03</b>	G 3/8"	G 3/8"	
<b>G04</b>	G 1/2"	G 1/2"	
<b>G04A</b>	G 1/2"	G 3/8"	

### Y BODY MATERIAL

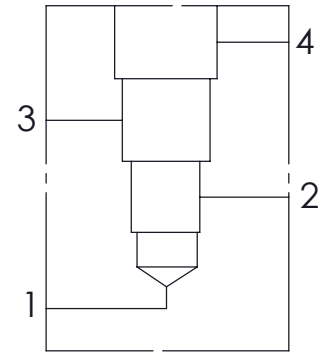
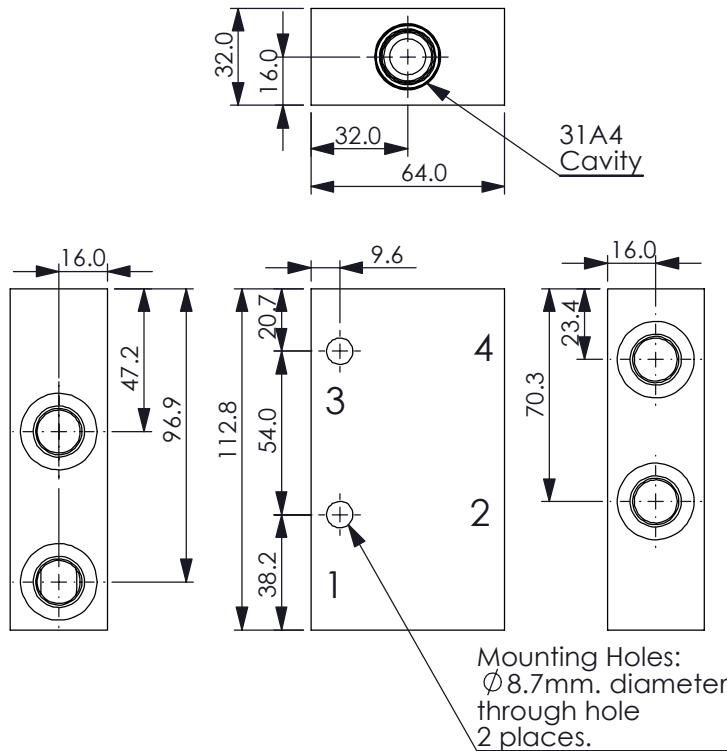
<b>A</b>	<b>HIGH-STRENGTH ALUMINUM</b>	
<b>S</b>	<b>DUCTILE IRON</b>	

### Z CARTRIDGE VALVES SELECTION

	WITHOUT VALVE	
<b>FD0A</b>	FD31A4206A(1~6LPM,50%-50%)	

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

Ordering Code: **ML-31A4-X-Y 01-Z**



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
 Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 31A4

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.55 kg(WITHOUT VALVES)
Ductile Iron	1.45 kg(WITHOUT VALVES)

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

UNIT:mm



### PORT SIZE

X	PORTS		
	1,2	3,4	
G03	G 3/8"	G 3/8"	
G04	G 1/2"	G 1/2"	

### Y BODY MATERIAL

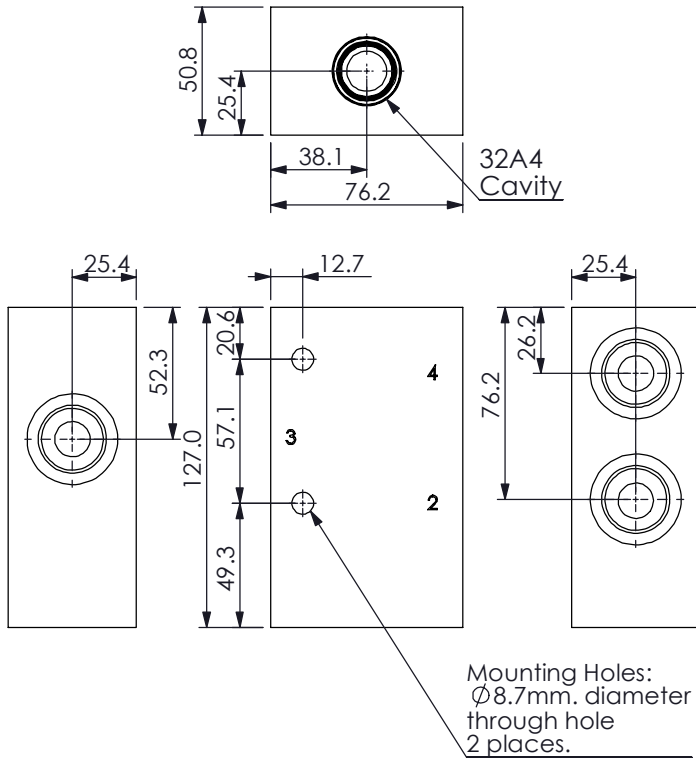
**A** HIGH-STRENGTH ALUMINUM

**S** DUCTILE IRON

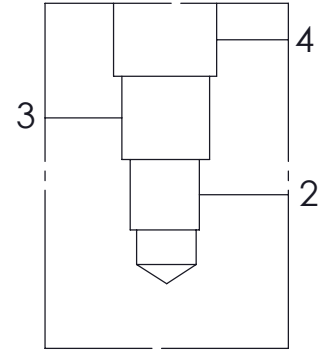
### Z CARTRIDGE VALVES SELECTION

WITHOUT VALVE

Ordering Code: **ML-32A4-X-Y 11-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron  
Body Pressure Rating: 350 bar

Cavity:

Refer to 32A4

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	1.1 kg(WITHOUT VALVES)
Ductile Iron	3.05 kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORT	PORTS	
	3	2,4	
G06	G 3/4"	G 3/4"	

### Y BODY MATERIAL

**A** HIGH-STRENGTH ALUMINUM

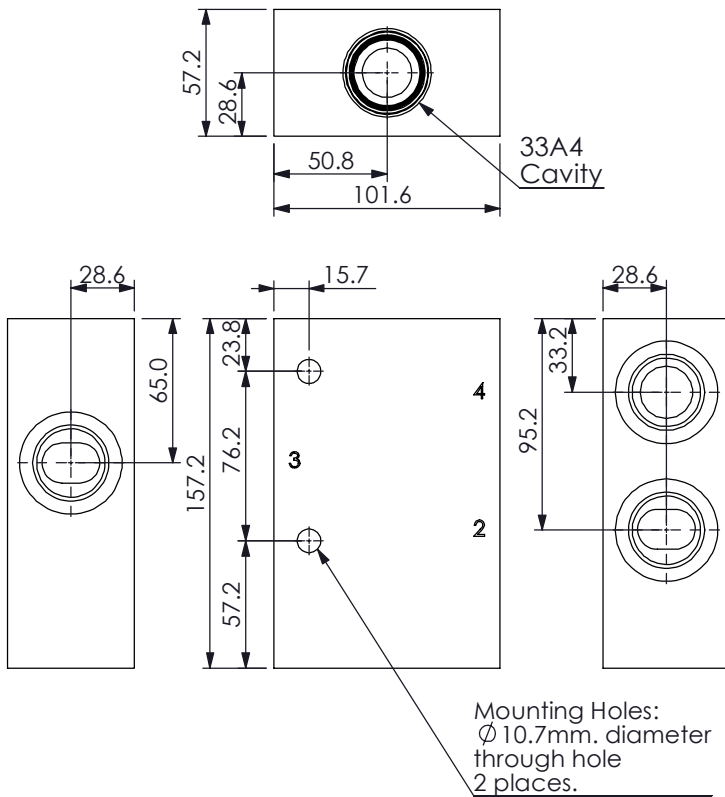
**S** DUCTILE IRON

### Z CARTRIDGE VALVES SELECTION

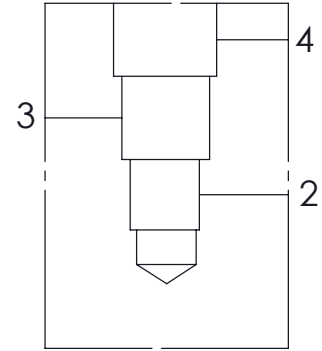
WITHOUT VALVE



Ordering Code: **ML-33A4-X-Y 11-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron  
Body Pressure Rating: 350 bar

Cavity:

Refer to 33A4

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	1.95 kg(WITHOUT VALVES)
Ductile Iron	5.4 kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORT	PORTS	
	<b>3</b>	<b>2,4</b>	
<b>G08</b>	G 1"	G 1"	

### Y BODY MATERIAL

**A** HIGH-STRENGTH ALUMINUM

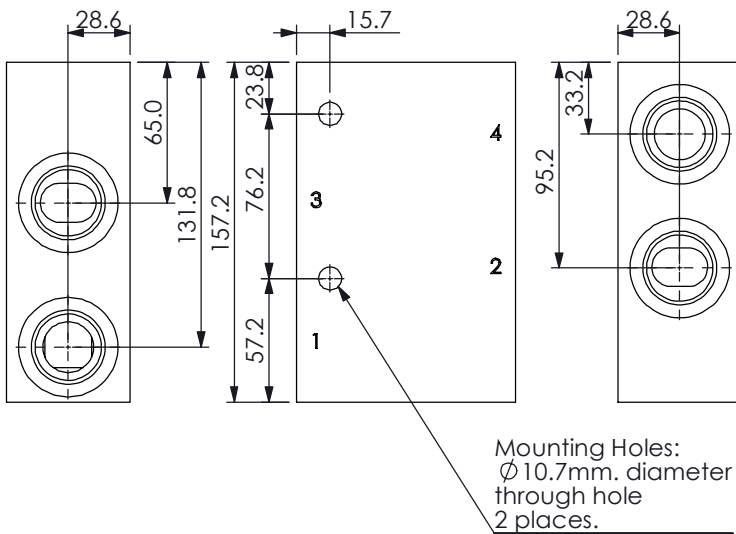
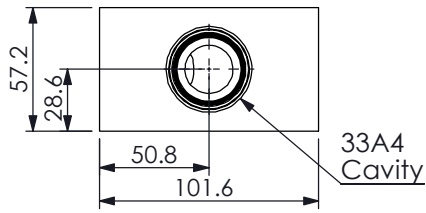
**S** DUCTILE IRON

### Z CARTRIDGE VALVES SELECTION

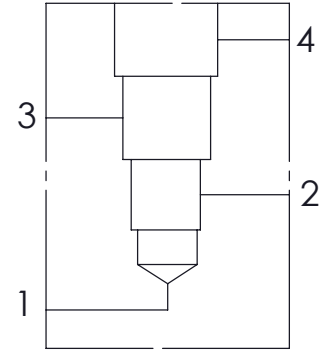
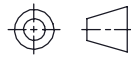
WITHOUT VALVE



Ordering Code: **ML-33A4-X-Y 01-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron  
Body Pressure Rating: 350 bar

Cavity:

Refer to 33A4

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	1.95 kg(WITHOUT VALVES)
Ductile Iron	5.4 kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORTS	PORTS	
	1,2	3,4	
G08	G 1"	G 1"	

### Y BODY MATERIAL

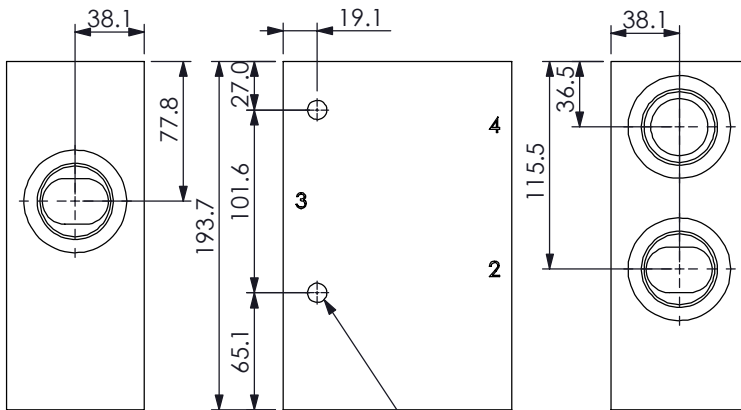
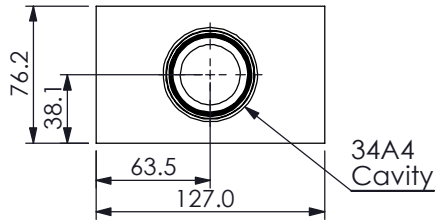
**A** HIGH-STRENGTH ALUMINUM

**S** DUCTILE IRON

### Z CARTRIDGE VALVES SELECTION

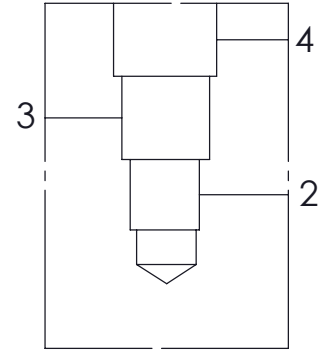
WITHOUT VALVE

Ordering Code: **ML-34A4-X-Y 11-Z**



Mounting Holes:  
Ø10.7mm. diameter  
through hole  
2 places.

UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron  
Body Pressure Rating: 350 bar

Cavity:

Refer to 34A4

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	4.0 kg(WITHOUT VALVES)
Ductile Iron	11.0 kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORT	PORTS	
	<b>3</b>	<b>2,4</b>	
<b>G10</b>	G 1-1/4"	G 1-1/4"	

### Y BODY MATERIAL

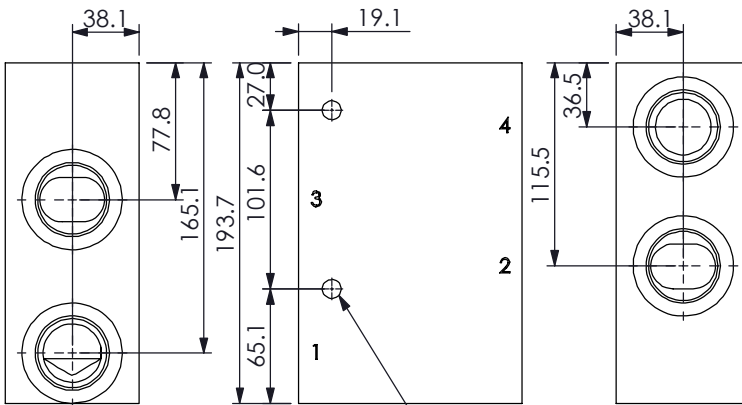
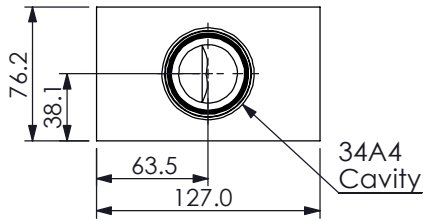
**A** HIGH-STRENGTH ALUMINUM

**S** DUCTILE IRON

### Z CARTRIDGE VALVES SELECTION

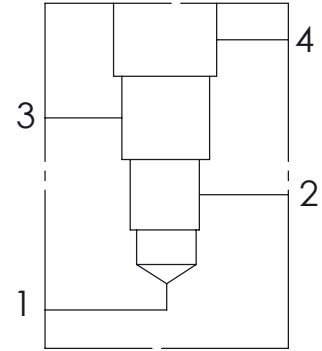
WITHOUT VALVE

Ordering Code: **ML-34A4-X-Y 01-Z**



Mounting Holes:  
Ø10.7mm. diameter  
through hole  
2 places.

UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron  
Body Pressure Rating: 350 bar

Cavity:

Refer to 34A4

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	3.8 kg(WITHOUT VALVES)
Ductile Iron	10.6 kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORTS	PORTS	
	1,2	3,4	
G10	G 1-1/4"	G 1-1/4"	

### Y BODY MATERIAL

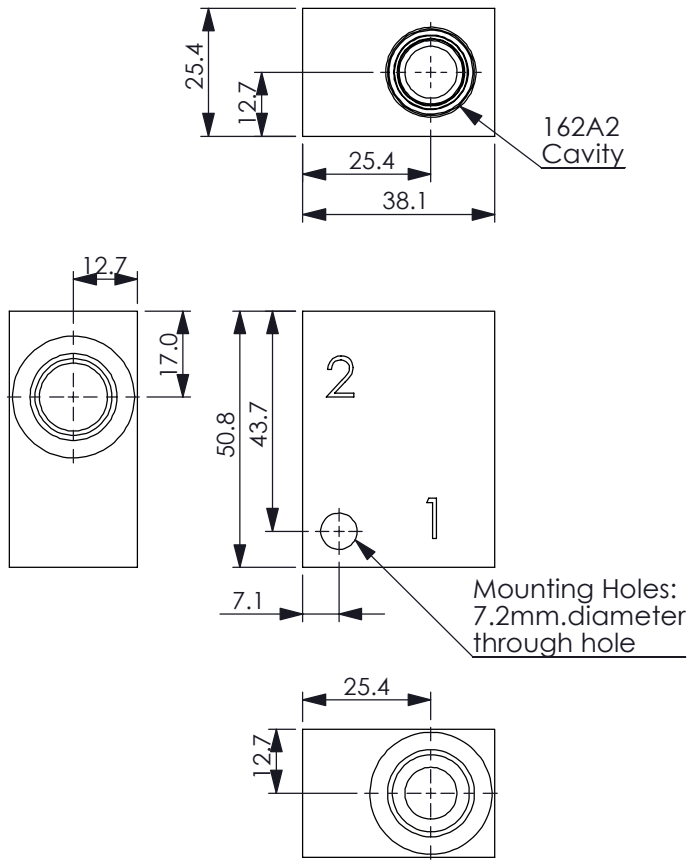
**A** HIGH-STRENGTH ALUMINUM

**S** DUCTILE IRON

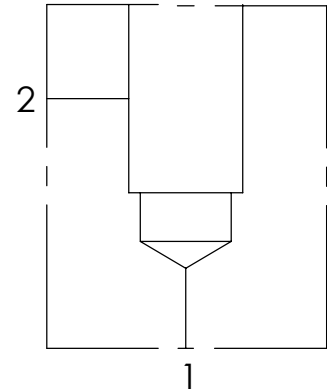
### Z CARTRIDGE VALVES SELECTION

WITHOUT VALVE

Ordering Code: **ML-162A2-X-Y 01-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 162A2

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.12 kg(WITHOUT VALVES)
Ductile Iron	0.35 kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORT SIZE		
	PORT 1	PORT 2	
G02	G1/4"	G1/4"	
G03	G3/8"	G3/8"	

### Y BODY MATERIAL

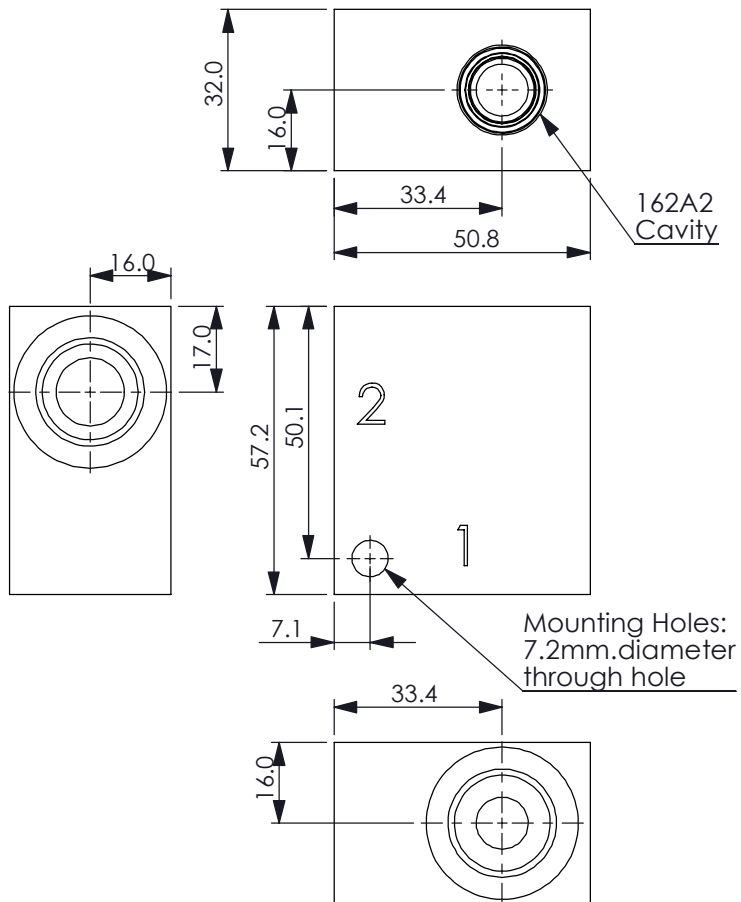
**A** HIGH-STRENGTH ALUMINUM

**S** DUCTILE IRON

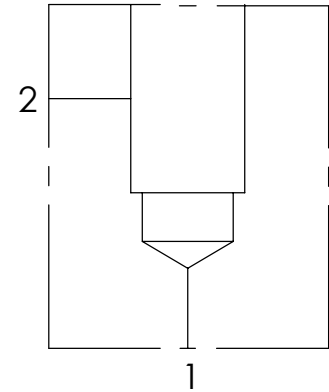
### Z CARTRIDGE VALVES SELECTION

WITHOUT VALVE

Ordering Code: **ML-162A2-X-Y 01-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 162A2

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.21 kg(WITHOUT VALVES)
Ductile Iron	0.63 kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORT	PORT	
	1	2	
G04	G1/2"	G1/2"	

### Y BODY MATERIAL

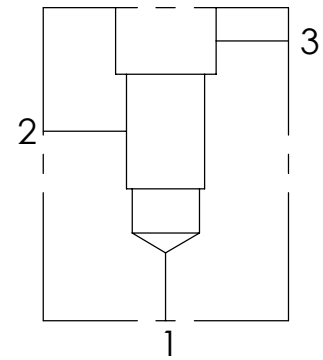
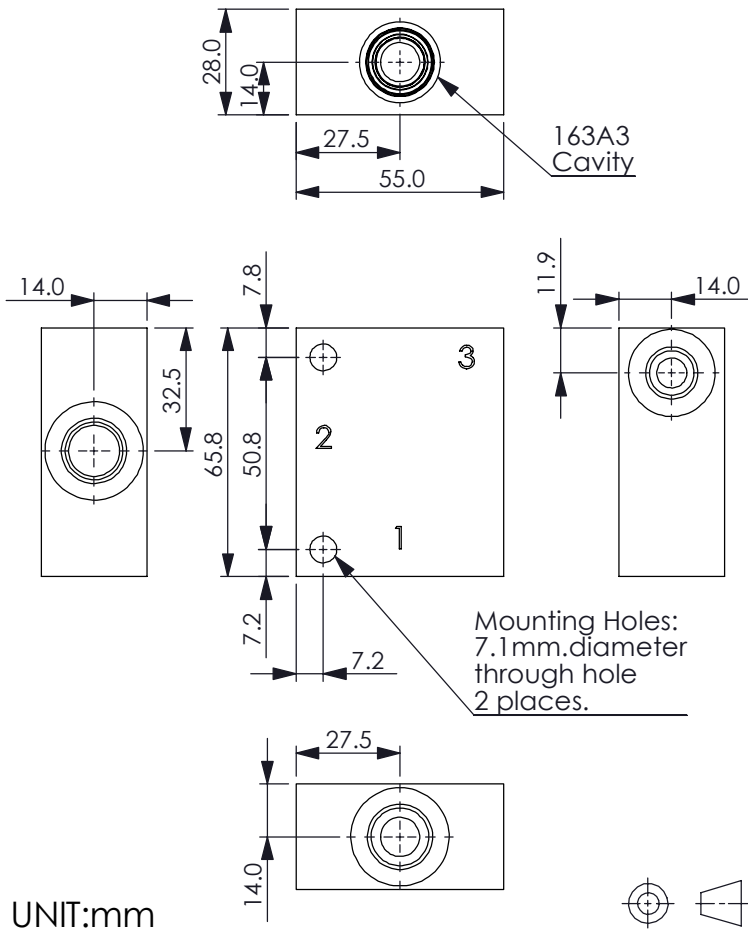
**A** HIGH-STRENGTH ALUMINUM

**S** DUCTILE IRON

### Z CARTRIDGE VALVES SELECTION

WITHOUT VALVE

Ordering Code: **ML-163A3-X-Y 01-Z**



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 163A3

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.24 kg(WITHOUT VALVES)
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Ductile Iron	0.72 kg(WITHOUT VALVES)
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\* If you need the special specification.  
Please contact us.

### PORT SIZE

X	PORTS	PORT	
	1,2	3	
G03A	G 3/8"	G 1/4"	

### Y BODY MATERIAL

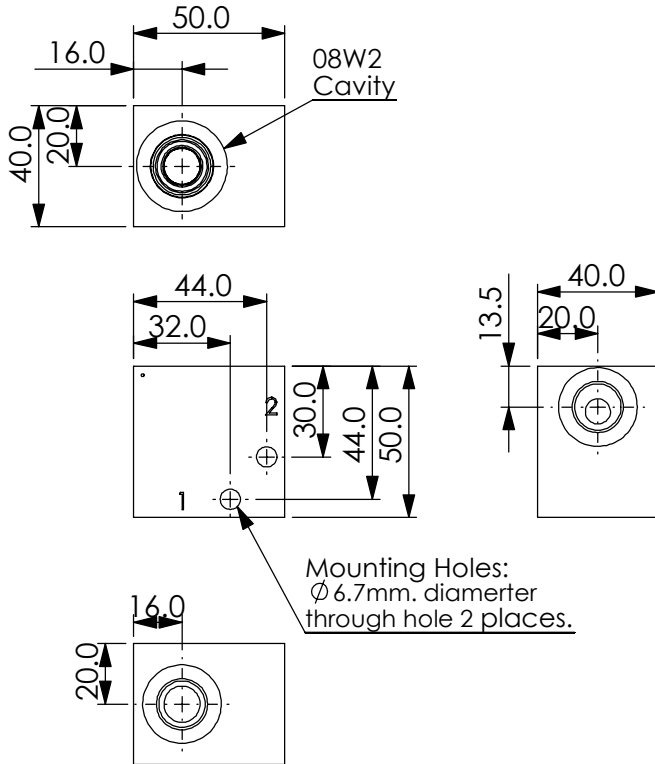
**A** HIGH-STRENGTH ALUMINUM

**S** DUCTILE IRON

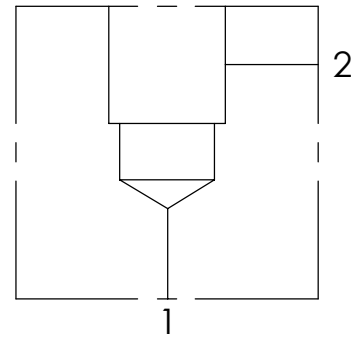
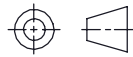
### Z CARTRIDGE VALVES SELECTION

WITHOUT VALVE

Ordering Code: **ML-08W2-X-Y 01-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 08W2

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.22 kg(WITHOUT VALVES)
Ductile Iron	0.68 kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORT		
	1	2	
<b>G03</b>	G 3/8"	G 3/8"	
<b>P02</b>	1/4"PT	1/4"PT	

### Z CARTRIDGE VALVES SELECTION

WITHOUT VALVE

<b>RD0A</b>	RD08W20AL (20LPM, 80-210bar)	
<b>CV03</b>	CV08W2003N (30LPM, 0.3bar)	
<b>NV0N</b>	NV08W20NL (350bar)	
<b>NC0N</b>	NC08W20NL (350bar)	
<b>EP01</b>	EP08W2A01N05, 40LPM, 350bar (NORMALLY CLOSED, WITHOUT COIL)	
<b>EP02</b>	EP08W2A02N05, 40LPM, 350bar (NORMALLY OPEN, WITHOUT COIL)	

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

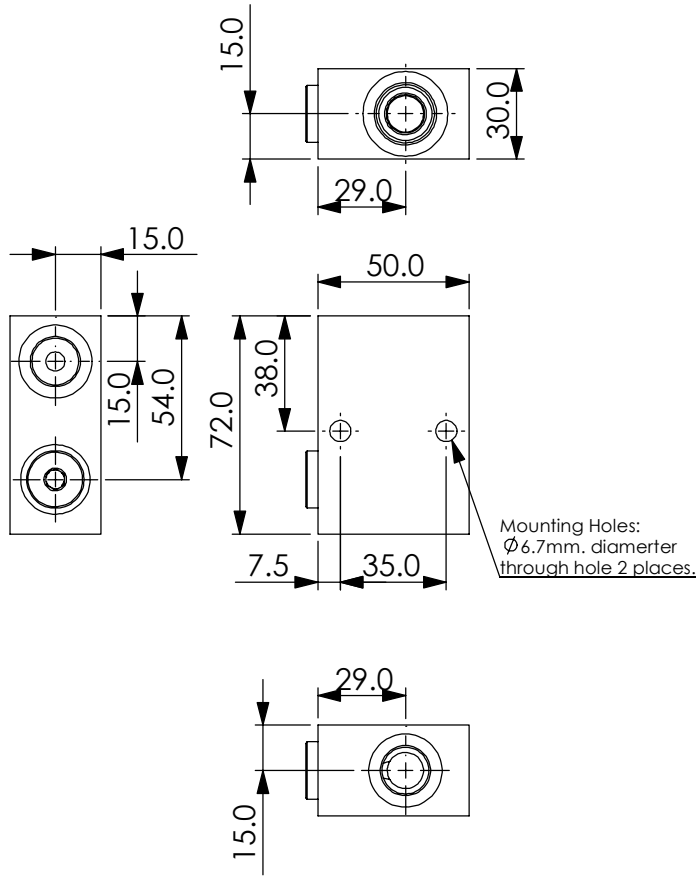
The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

### Y BODY MATERIAL

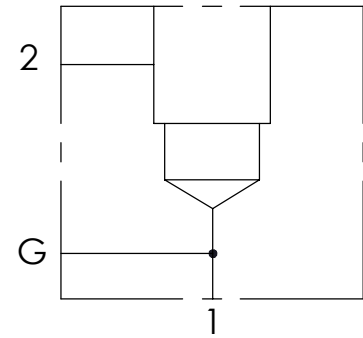
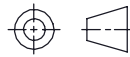
**A HIGH-STRENGTH ALUMINUM**

**S DUCTILE IRON**

Ordering Code: **ML-08W2-X-Y 01-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 08W2

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.25 kg(WITHOUT VALVES)
----------	-------------------------

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



Y	BODY MATERIAL
A	HIGH-STRENGTH ALUMINUM

X	PORT SIZE	
	PORTS	PORT
	1,2	G
G03G	G 3/8"	G 1/4"

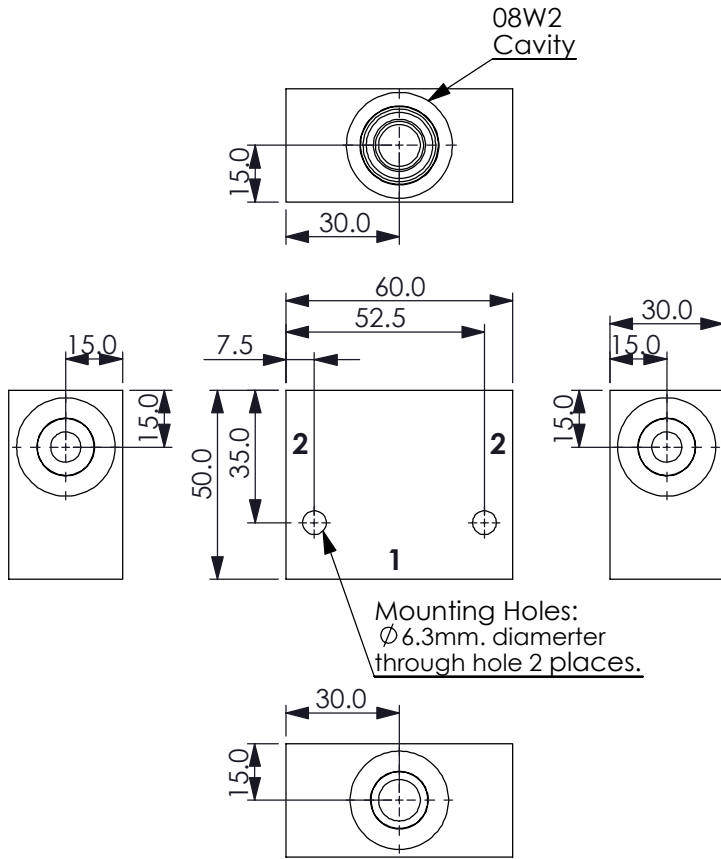
Z	CARTRIDGE VALVES SELECTION
	WITHOUT VALVE
RD0A	RD08W20AL (20LPM, 80-210bar)
CV03	CV08W2003N (30LPM, 0.3bar)
NV0N	NV08W20NL (350bar)
NC0N	NC08W20NL (350bar)
EP01	EP08W2A01N05, 40LPM, 350bar (NORMALLY CLOSED, WITHOUT COIL)
EP02	EP08W2A02N05, 40LPM, 350bar (NORMALLY OPEN, WITHOUT COIL)

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

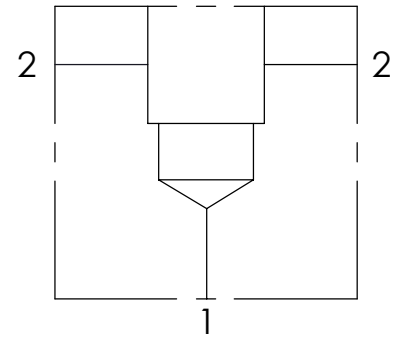
The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)



Ordering Code: **ML-08W2-X-Y 02-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 08W2

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.22 kg(WITHOUT VALVES)
Ductile Iron	0.55 kg(WITHOUT VALVES)

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



Y	BODY MATERIAL
A	HIGH-STRENGTH ALUMINUM

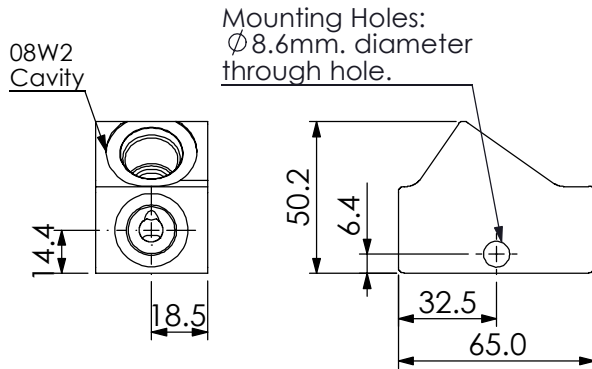
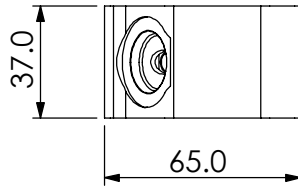
X	PORT SIZE	
	PORT 1	PORT 2
	G03	G 3/8"

Z	CARTRIDGE VALVES SELECTION
	WITHOUT VALVE
RD0A	RD08W20AL(20LPM,80-210bar)
EP01	EP08W2A01N05, 40LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)
EP02	EP08W2A02N05, 40LPM,350bar (NORMALLY OPEN,WITHOUT COIL)

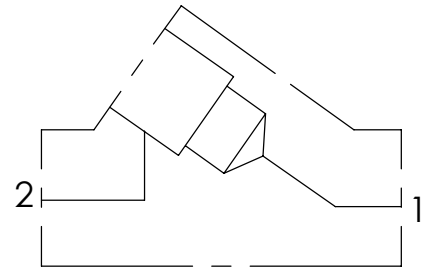
COIL MUST BE ORDERED SEPARATELY (REFER TO EC-04W-X-Y-Z)

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

Ordering Code: **ML-08W2-X-Y 41-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 08W2

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.19 kg(WITHOUT VALVES)
----------	-------------------------

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

### PORT SIZE

X	PORT	PORT	
	1	2	
G03	G 3/8"	G 3/8"	

### Z CARTRIDGE VALVES SELECTION

WITHOUT VALVE	
<b>RD0A</b>	RD08W20AL (20LPM,80-210bar)
<b>CV03</b>	CV08W2003N (30LPM,0.3bar)
<b>NV0N</b>	NV08W20NL (350bar)
<b>NC0N</b>	NC08W20NL (350bar)
<b>EP01</b>	EP08W2A01N05 , 40LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)
<b>EP02</b>	EP08W2A02N05 , 40LPM,350bar (NORMALLY OPEN,WITHOUT COIL)

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

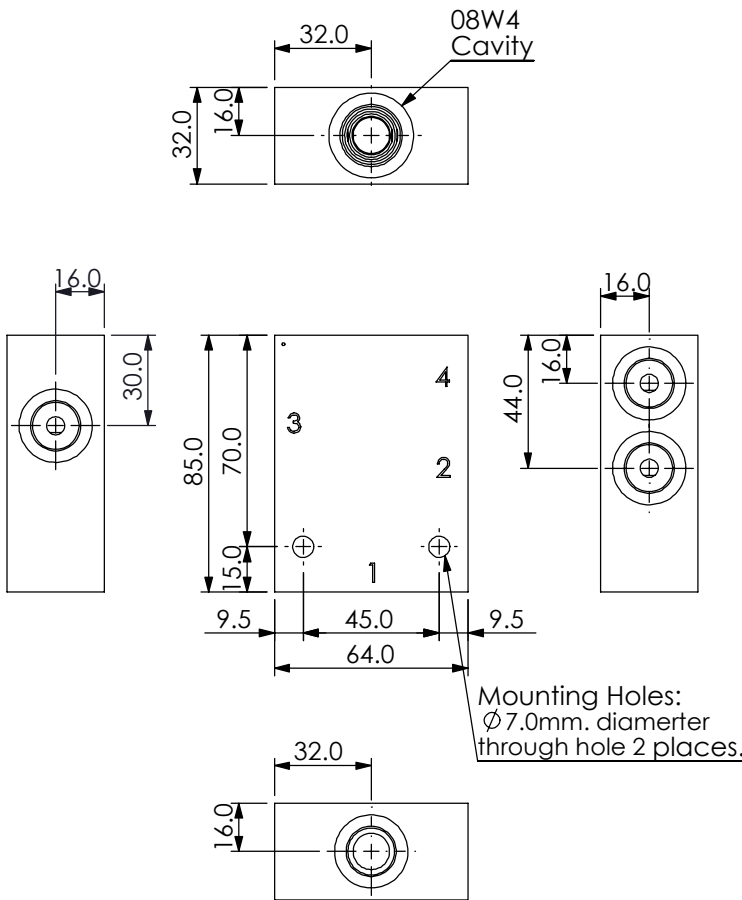
The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

### Y BODY MATERIAL

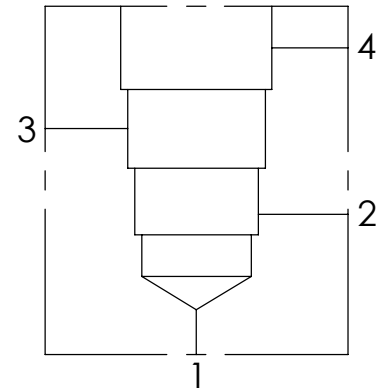
**A HIGH-STRENGTH ALUMINUM**



Ordering Code: **ML-08W4-X-Y 01-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 08W4

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.4 kg(WITHOUT VALVES)
----------	------------------------

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

### PORT SIZE

X	PORTS	PORT	
	1,2,3	4	
G03	G 3/8"	G 3/8"	

### Y BODY MATERIAL

**A HIGH-STRENGTH ALUMINUM**

### Z CARTRIDGE VALVES SELECTION

WITHOUT VALVE

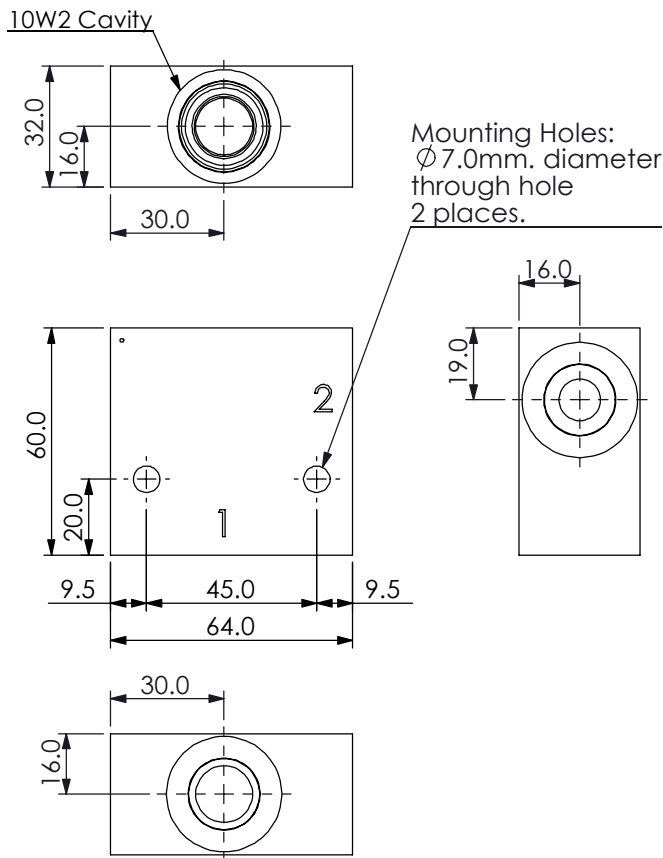
**ES10** ES08W4A10N04 (12LPM,210bar)  
(NORMALLY CLOSED,WITHOUT COIL)

**ES11** ES08W4A11N04 (15LPM,210bar)  
(NORMALLY OPEN,WITHOUT COIL)

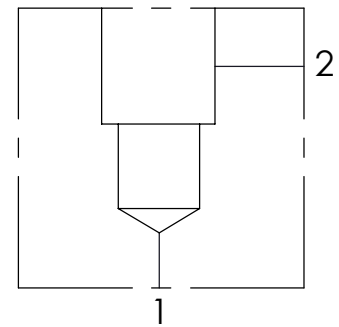
COIL MUST BE ORDERED SEPARATELY  
(REFER TO EC-04W-X-Y-Z)

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

Ordering Code: **ML-10W2-X-Y 01-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 10W2

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.26 kg(WITHOUT VALVES)
Ductile Iron	0.73 kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORT	PORT	
	1	2	
<b>G04</b>	G 1/2"	G 1/2"	

### Z CARTRIDGE VALVES SELECTION

Z	WITHOUT VALVE	
<b>RP0A</b>	RP10W20AL(95LPM,7-210bar)	
<b>CR0A</b>	CR10W20AL (60LPM,240bar)	
<b>CV03</b>	CV10W2003N (0.3bar)	
<b>NV0N</b>	NV10W20NL (350bar)	
<b>FR18</b>	FR10W2018N (1.8LPM,240bar)	
<b>EP01</b>	EP10W2A01N05 , 70LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	
<b>EP02</b>	EP10W2A02N05 , 70LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	

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

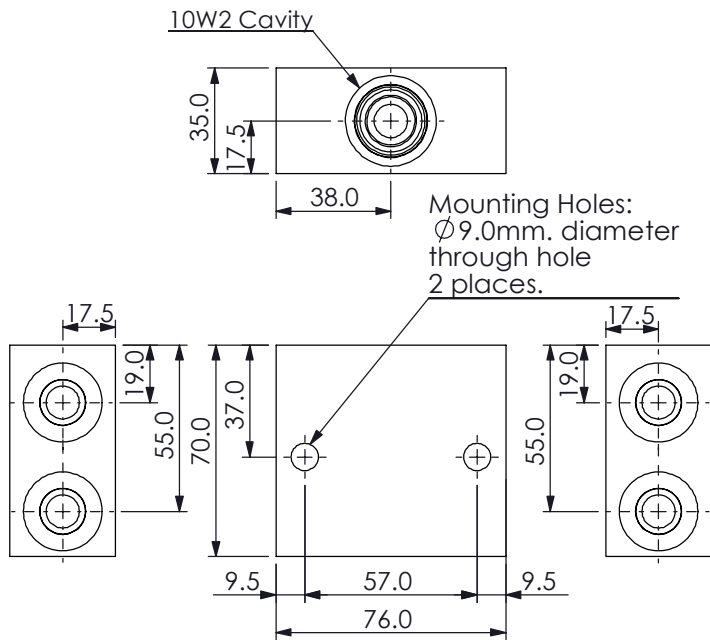
The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

### Y BODY MATERIAL

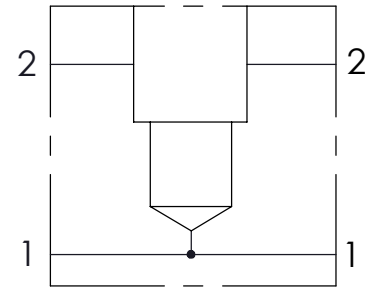
**A HIGH-STRENGTH ALUMINUM**

**S DUCTILE IRON**

Ordering Code: **ML-10W2-X-Y 02-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron  
Body Pressure Rating: 350 bar

Cavity:

Refer to 10W2

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.45 kg(WITHOUT VALVES)
----------	-------------------------

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

### PORT SIZE

X	PORT	PORT	
	1	2	
G03	G 3/8"	G 3/8"	

### Z CARTRIDGE VALVES SELECTION

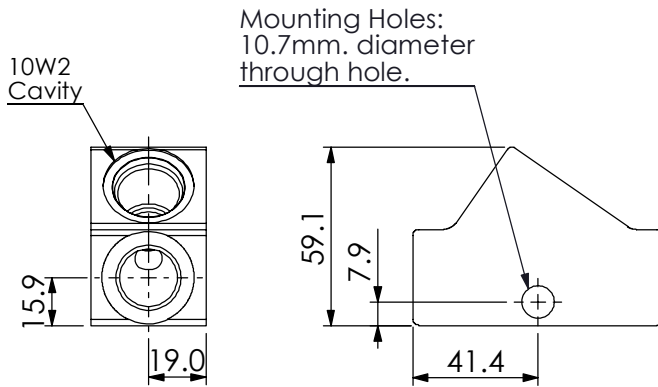
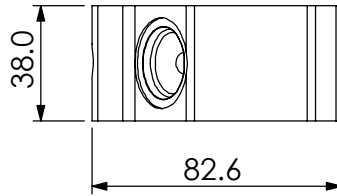
Z	WITHOUT VALVE	
RPOA	RP10W20AL(95LPM,7-210bar)	
CROA	CR10W20AL (60LPM,240bar)	
CV03	CV10W2003N (0.3bar)	
NV0N	NV10W20NL (350bar)	
FR18	FR10W2018N (1.8LPM,240bar)	
EP01	EP10W2A01N05 , 70LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	
EP02	EP10W2A02N05 , 70LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	

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

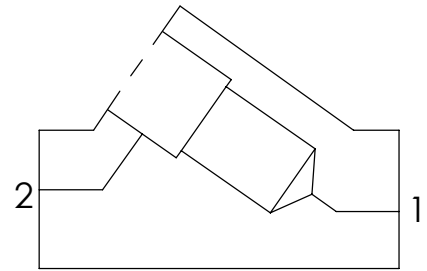
The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

Y	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	

Ordering Code: **ML-10W2-X-Y 41-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
 Ductile Iron Body Pressure Rating: 350 bar

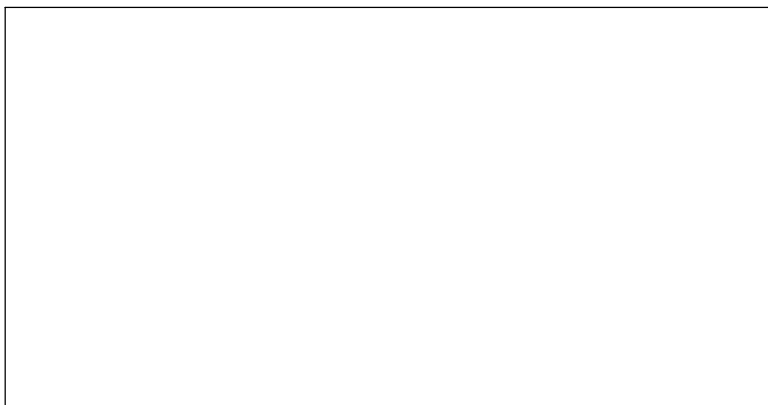
Cavity:

Refer to 10W2

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.28 kg(WITHOUT VALVES)

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



Y	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	

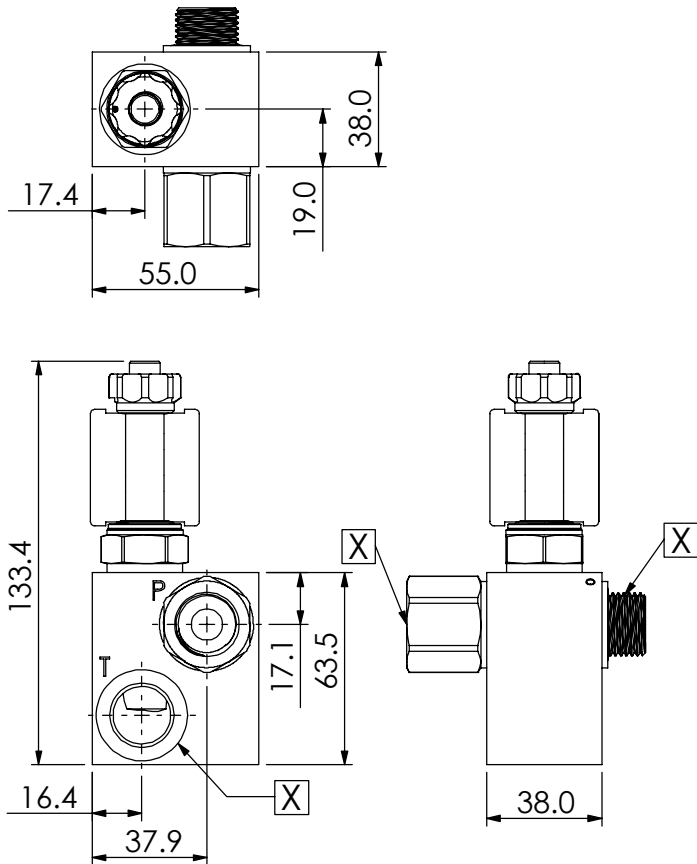
X	PORT SIZE		
	PORT	PORT	
	1	2	
G03	G 3/8"	G 3/8"	
G04	G 1/2"	G 1/2"	

Z	CARTRIDGE VALVES SELECTION	
	WITHOUT VALVE	
RPOA	RP10W20AL(95LPM,7-210bar)	
CROA	CR10W20AL (60LPM,240bar)	
CV03	CV10W2003N (0.3bar)	
NV0N	NV10W20NL (350bar)	
FR18	FR10W2018N (1.8LPM,240bar)	
EP01	EP10W2A01N05 , 70LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	
EP02	EP10W2A02N05 , 70LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	

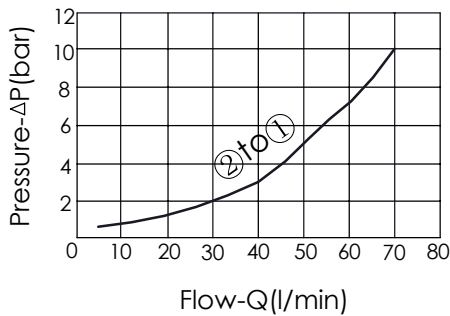
COIL MUST BE ORDERED SEPARATELY  
(REFER TO EC-04W-X-Y-Z)

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

Ordering Code: **ML-10W2-X-Y 51-Z**



UNIT:mm

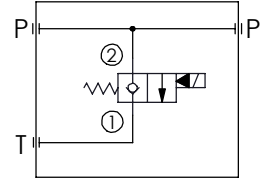
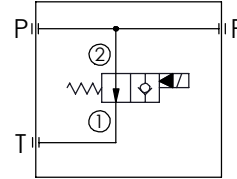


Y	BODY MATERIAL
A	HIGH-STRENGTH ALUMINUM

(Poppet 2-Way Normally -Open Cartridge Style) (Poppet 2-Way Normally -Closed Cartridge Style)

**X=EP02(P)**

**X=EP01(M)**



### TECHNICAL DATA

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

Rated flow: 70 l/min

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

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.44 kg (WITHOUT VALVES) 0.60 kg (INCLUDE VALVES , WITHOUT COILS)
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\* If you need the special specification.  
Please contact us.

X	PORT SIZE	
	PORT P	PORT T
G03	G 3/8"	G 3/8"
G04	G 1/2"	G 1/2"

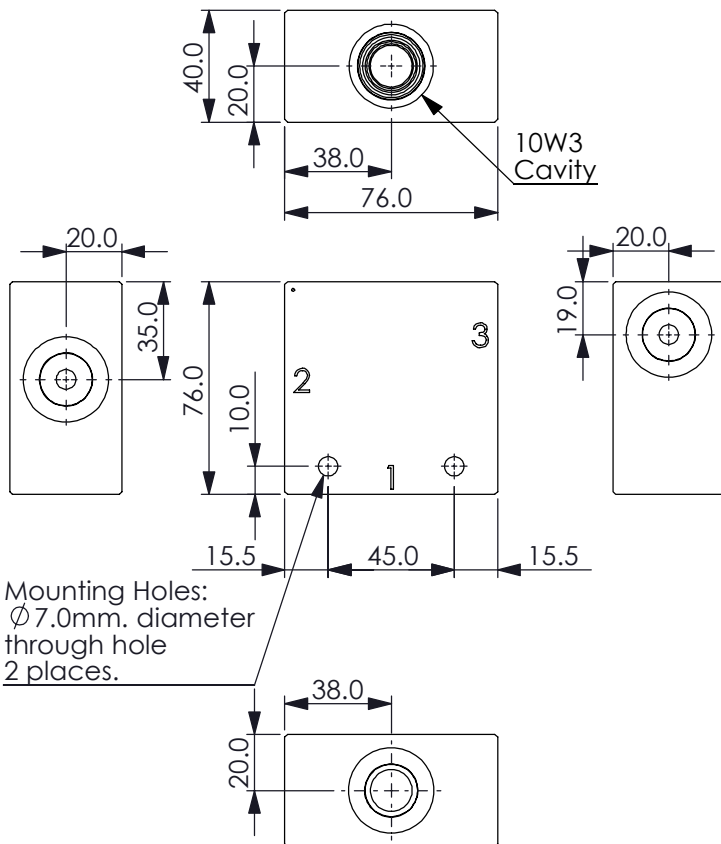
Z	SELECTION FOR SOLENOID VALVES (REFER TO EP10W-X-Y-Z)
	WITHOUT VALVE
EP01	EP10W2A01N05, 70LPM, 350bar (NORMALLY CLOSED, WITHOUT COIL)
EP02	EP10W2A02N05, 70LPM, 350bar (NORMALLY CLOSED, WITHOUT COIL)
EP01M	EP10W2A01M05, 70LPM, 350bar (NORMALLY CLOSED WITH KNOB STYLE MANUAL OVERRIDE, WITHOUT COIL)
EP02P	EP10W2A02P05, 70LPM, 350bar (NORMALLY OPEN WITH PUSH STYLE MANUAL OVERRIDE, WITHOUT COIL)

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

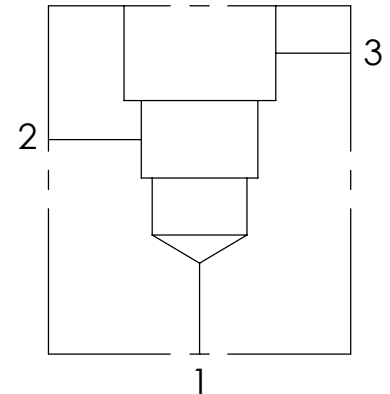
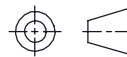
The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)



Ordering Code: **ML-10W3-X-Y 01-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 10W3

\* Refer to Winner Cartridge Valve Catalog.

Aluminum	0.52 kg(WITHOUT VALVES)

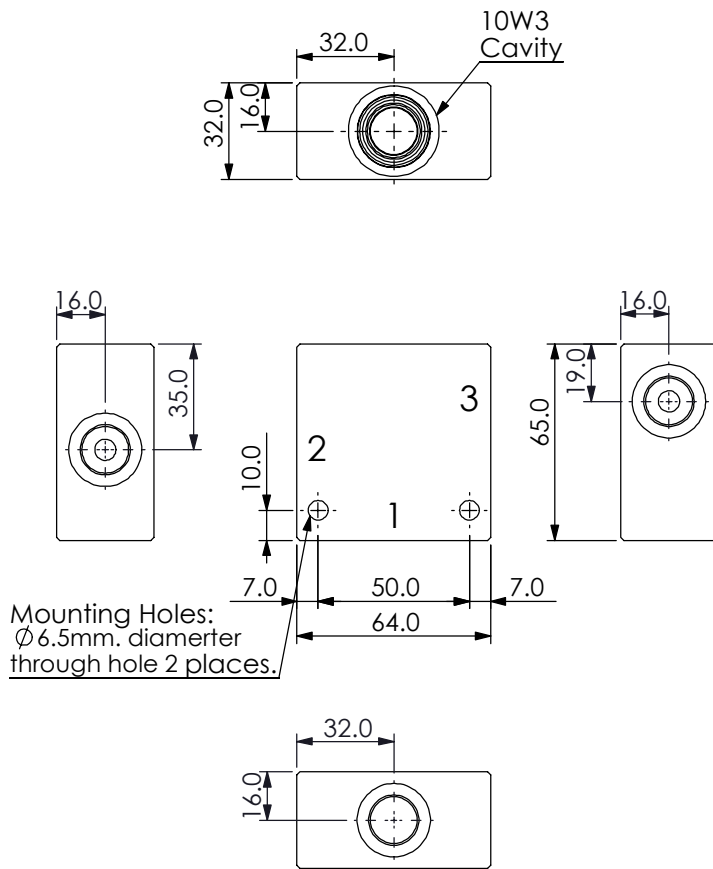
\* If you need the special specification. Please contact us.

X	PORT SIZE		
	PORTS	PORT	
	1,2	3	
<b>G04</b>	G 1/2"	G 1/2"	

Y	BODY MATERIAL	
<b>A</b>	HIGH-STRENGTH ALUMINUM	

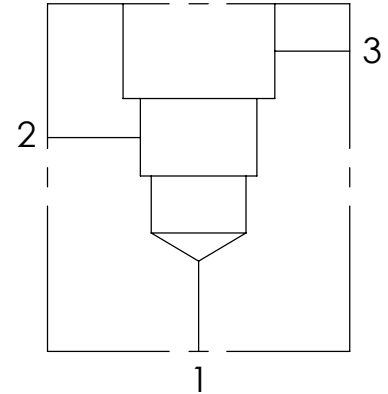
Z	CARTRIDGE VALVES SELECTION	
	WITHOUT VALVE	
<b>FR3L</b>	FR10W33NL(38LPM,240bar)	
<b>FR1L</b>	FR10W31NL(13LPM,240bar)	
The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow \ pressure \ ... etc.)		

Ordering Code: **ML-10W3-X-Y 01-Z**



Mounting Holes:  
Ø6.5mm. diameter  
through hole 2 places.

UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar

Cavity:

Refer to 10W3

\* Refer to Winner Cartridge Valve Catalog.

Aluminum	0.3 kg(WITHOUT VALVES)
Ductile Iron	0.92 kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORTS		
	1,2	3	
G03	G 3/8"	G 3/8"	
P03	3/8" PT	3/8" PT	

### Y BODY MATERIAL

**A** HIGH-STRENGTH ALUMINUM

**S** DUCTILE IRON

### Z CARTRIDGE VALVES SELECTION

WITHOUT VALVE

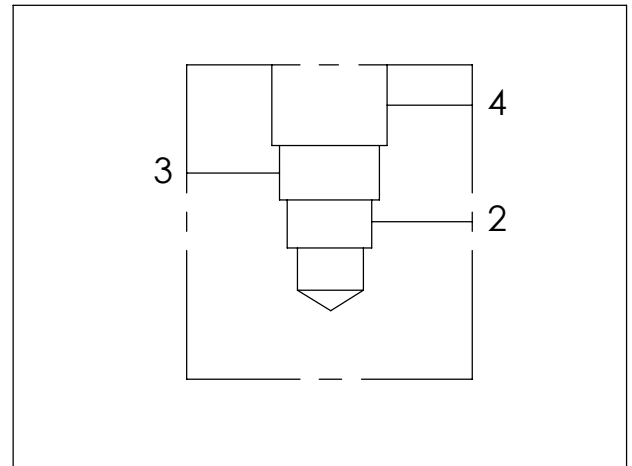
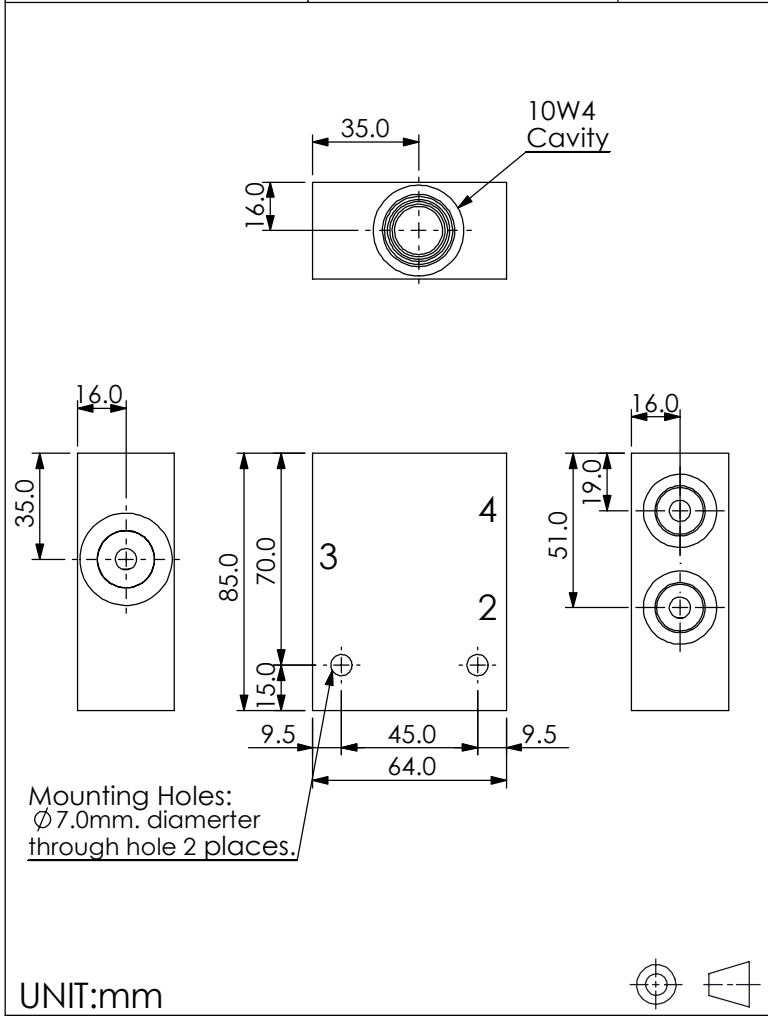
**FR3L** FR10W33NL(38LPM,240bar)

**FR1L** FR10W31NL(13LPM,240bar)

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)



Ordering Code: **ML-10W4-X-Y 11-Z**



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 10W4

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.37 kg(WITHOUT VALVES)

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



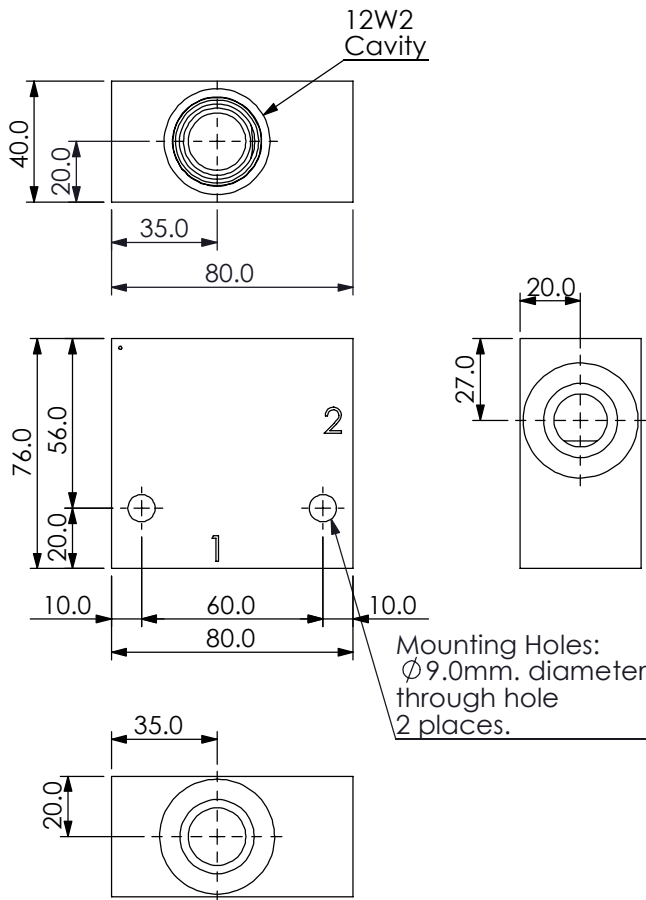
X	PORT SIZE		
	PORT	PORTS	
	<b>3</b>	<b>2,4</b>	
<b>G03</b>	G 3/8"	G 3/8"	
<b>G04</b>	G 1/2"	G 3/8"	

Y	BODY MATERIAL	
<b>A</b>	<b>HIGH-STRENGTH ALUMINUM</b>	

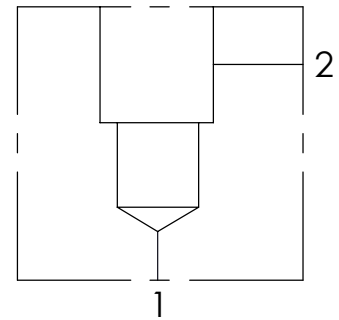
Z	CARTRIDGE VALVES SELECTION	
	WITHOUT VALVE	
<b>FD4003</b>	FD10W4003N (1.2-3 LPM , Ratio 50:50)	
<b>FD4137</b>	FD10W4137N (15-37 LPM , Ratio 50:50)	
<b>FD4244</b>	FD10W4244N (18-44 LPM ,Ratio 50:50)	

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

Ordering Code: **ML-12W2-X-Y 01-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

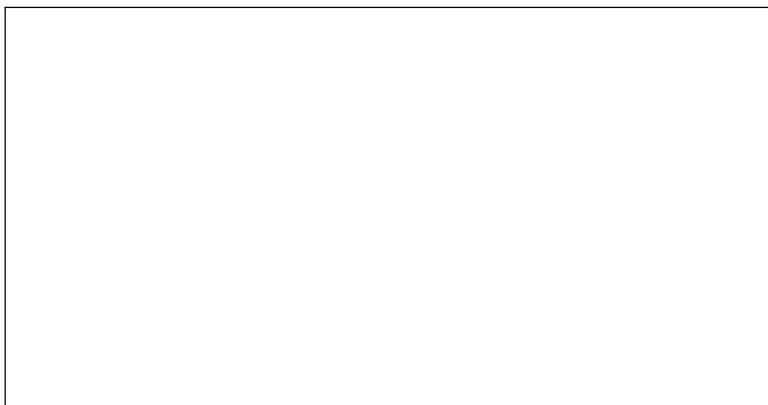
Cavity:

Refer to 12W2

\* Refer to Winner Cartridge Valve Catalog.

Aluminum	0.51 kg(WITHOUT VALVES)
Ductile Iron	1.50 kg(WITHOUT VALVES)

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

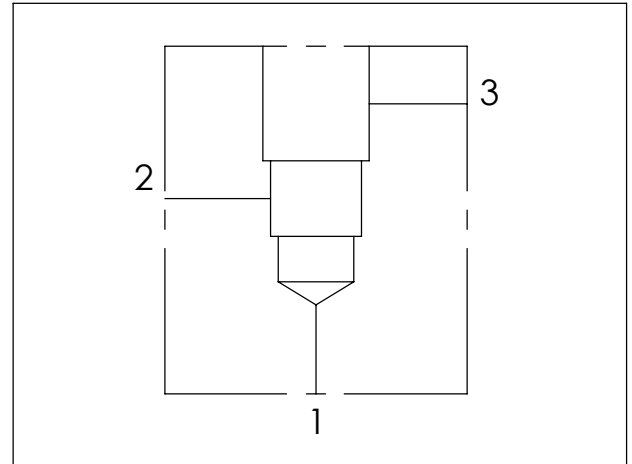
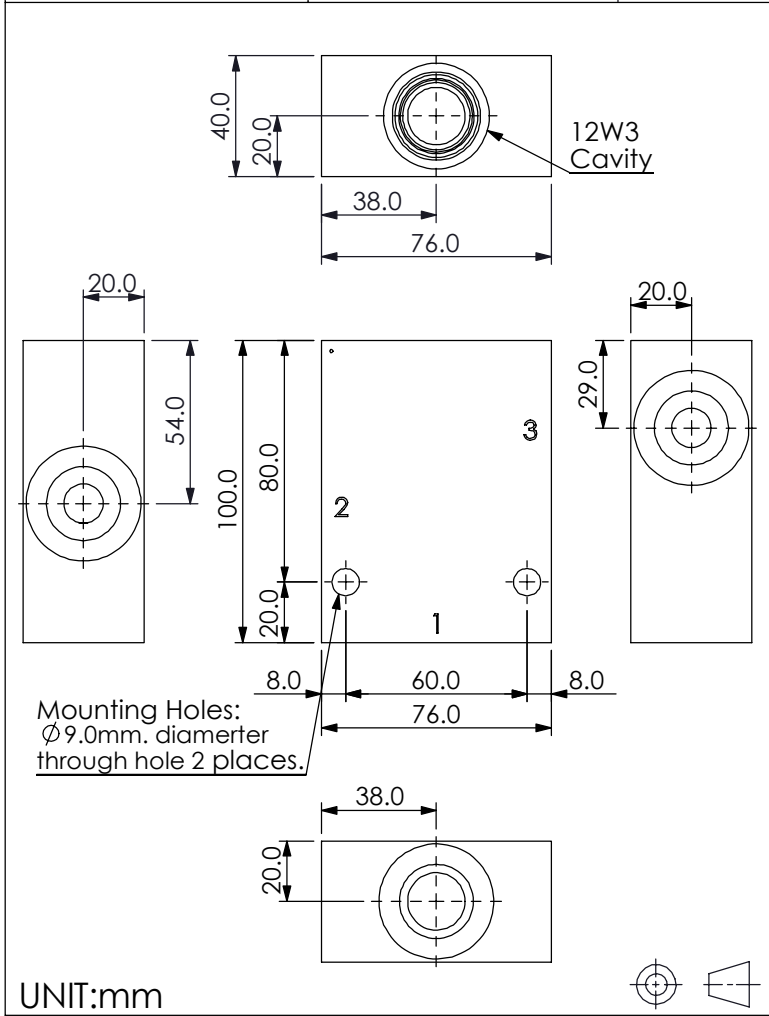


Y	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

X	PORT SIZE		
	PORT	PORT	
	1	2	
G06	G 3/4"	G 3/4"	

Z	CARTRIDGE VALVES SELECTION	
	WITHOUT VALVE	
CV03	CV12A2003N (90LPM,0.3bar)	
NV0N	NV12W20NL (350bar)	
EP01	EP12W2A01N05 , 150LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	
EP02	EP12W2A02N05 , 150LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	
COIL MUST BE ORDERED SEPARATELY (REFER TO EC-04W-X-Y-Z)		
The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)		

Ordering Code: **ML-12W3-X-Y 01-Z**



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron  
Body Pressure Rating: 350 bar

Cavity:

Refer to 12W3

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.62 kg(WITHOUT VALVES)

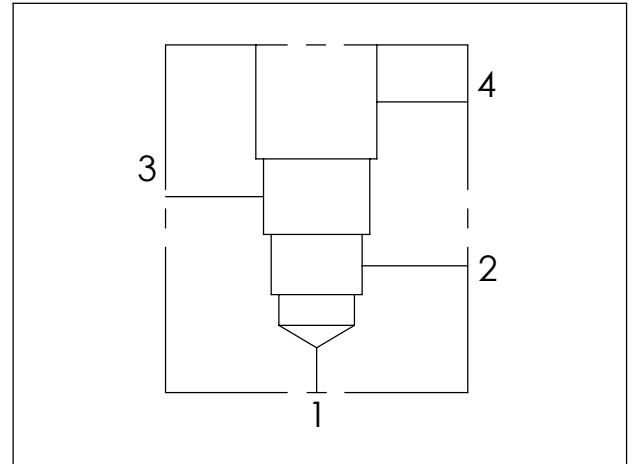
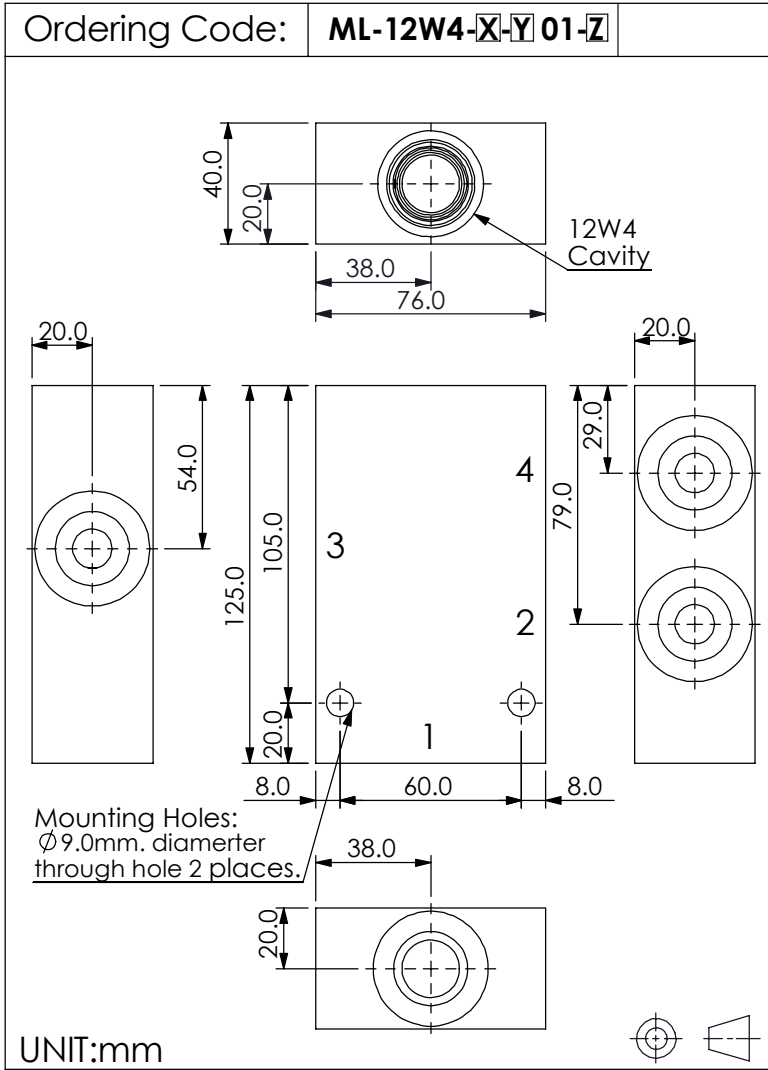
\* If you need the special specification.  
Please contact us.



X	PORT SIZE		
	PORTS	PORT	
	1,2	3	
G06	G 3/4"	G 3/4"	

Y	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	

Z	CARTRIDGE VALVES SELECTION	
	WITHOUT VALVE	



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
 Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 12W4

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.76 kg(WITHOUT VALVES)

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

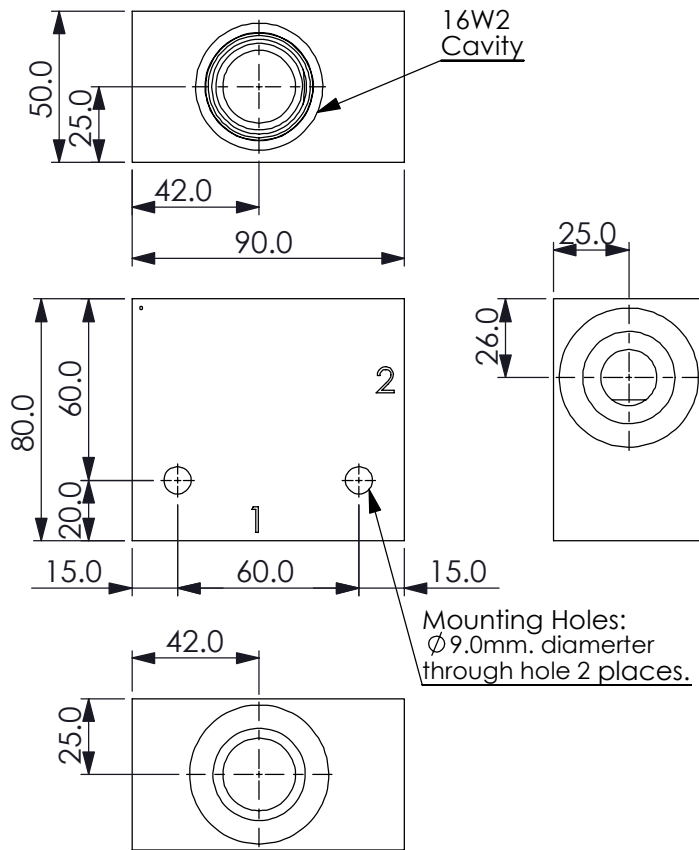
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X	PORT SIZE		
	PORTS	PORT	
	1,2,3	4	
G06	G 3/4"	G 3/4"	

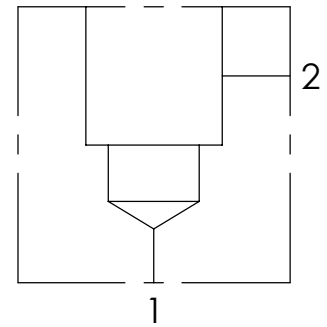
Y	BODY MATERIAL
A	HIGH-STRENGTH ALUMINUM

Z	CARTRIDGE VALVES SELECTION
	WITHOUT VALVE

Ordering Code: **ML-16W2-X-Y 01-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 16W2

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.73 kg(WITHOUT VALVES)
Ductile Iron	2.18 kg(WITHOUT VALVES)

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



Y	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	
S	DUCTILE IRON	

X	PORT SIZE		
	PORT	PORT	
	1	2	
G08	G 1"	G 1"	

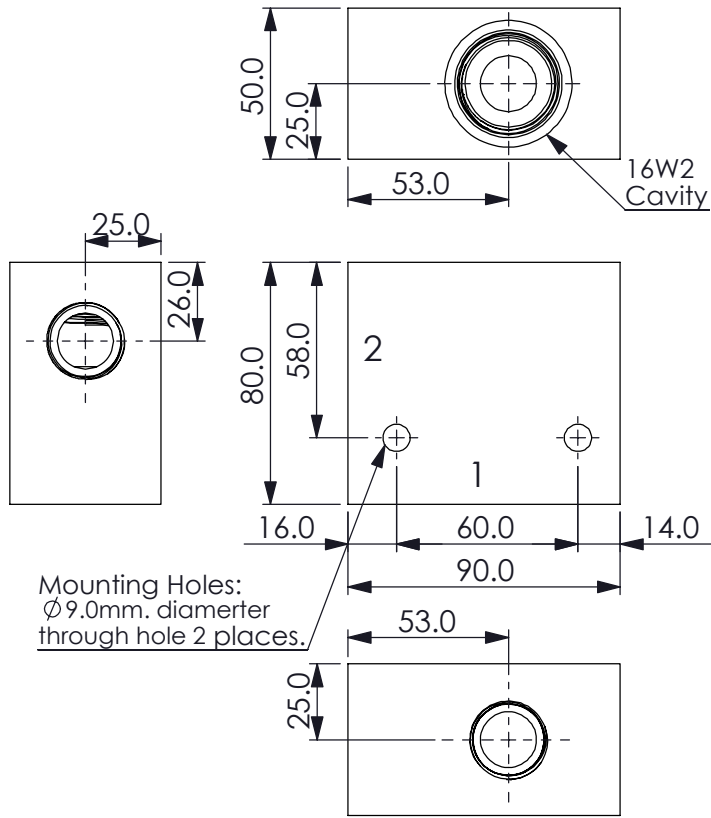
Z	CARTRIDGE VALVES SELECTION	
	WITHOUT VALVE	
CV03	CV16W2003N (90LPM , 240bar)	
NV0N	NV16W20NL (350bar)	
EP01	EP16W2A01N05 , 150LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	
EP02	EP16W2A02N05 , 150LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	

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

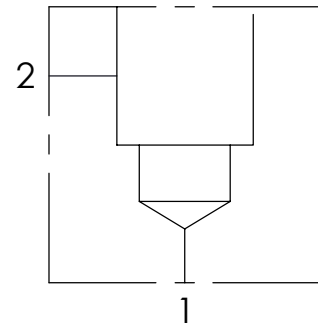
The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow · pressure · ... etc.)



Ordering Code: **ML-16W2-X-Y 01-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 16W2

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.78 kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORT		
	1	2	
P06	3/4"PT	3/4"PT	
P08	1"PT	1"PT	

### Z CARTRIDGE VALVES SELECTION

Z	CARTRIDGE VALVES SELECTION	
	WITHOUT VALVE	
CV03	CV16W2003N (90LPM , 240bar)	
NV0N	NV16W20NL (350bar)	
EP01	EP16W2A01N05 , 150LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	
EP02	EP16W2A02N05 , 150LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	

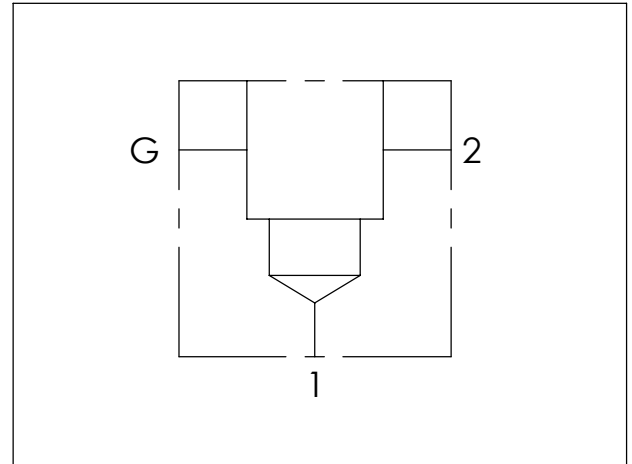
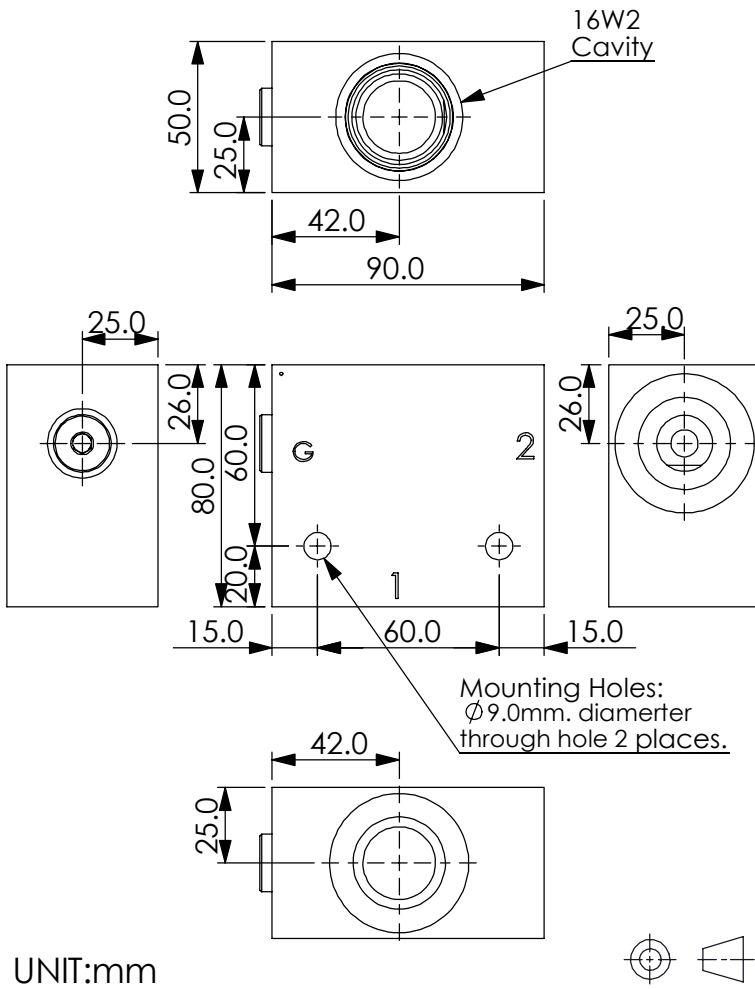
COIL MUST BE ORDERED SEPARATELY  
(REFER TO EC-04W-X-Y-Z)

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

### Y BODY MATERIAL

**A HIGH-STRENGTH ALUMINUM**

Ordering Code: **ML-16W2-X-Y 01-Z**



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 16W2

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.72 kg(WITHOUT VALVES)
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\* If you need the special specification. Please contact us.



X	PORT SIZE		
	PORTS	PORT	
	1,2	G	
G08G	G 1"	G 1/4"	

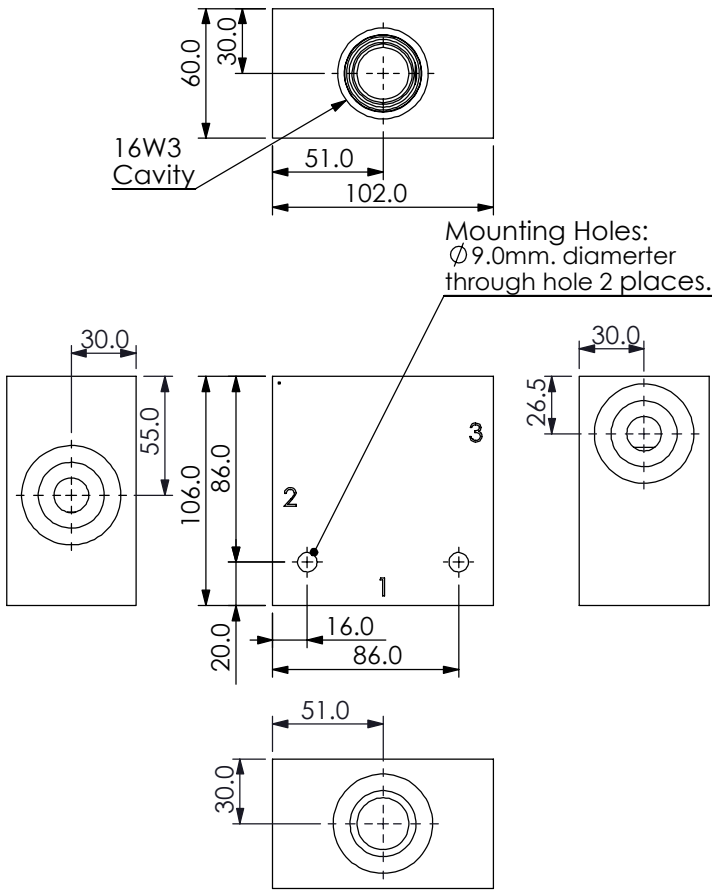
Z	CARTRIDGE VALVES SELECTION	
	WITHOUT VALVE	
CV03	CV16W2003N (90LPM , 240bar)	
NV0N	NV16W20NL (350bar)	
EP01	EP16W2A01N05 , 150LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	
EP02	EP16W2A02N05 , 150LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	

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

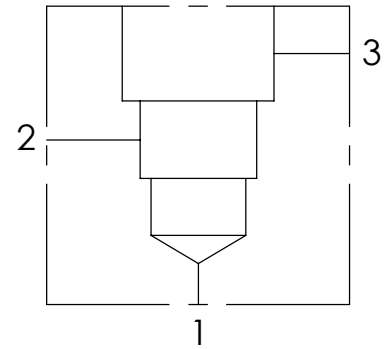
The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

Y	BODY MATERIAL	
A	HIGH-STRENGTH ALUMINUM	

Ordering Code: **ML-16W3-X-Y 01-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
 Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 16W3

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	1.4 kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORTS	PORT	
	1,2	3	
G08	G 1"	G 1"	

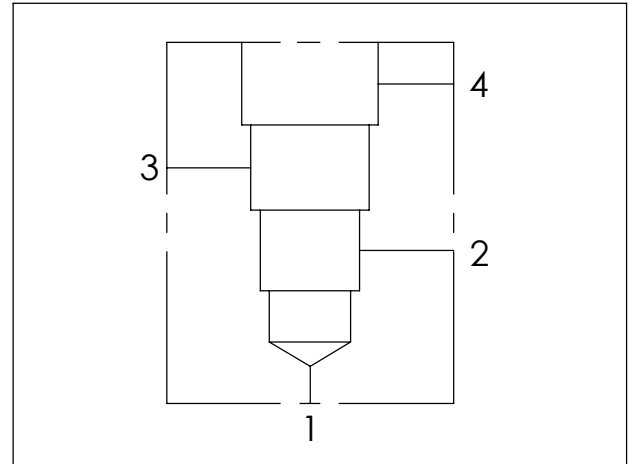
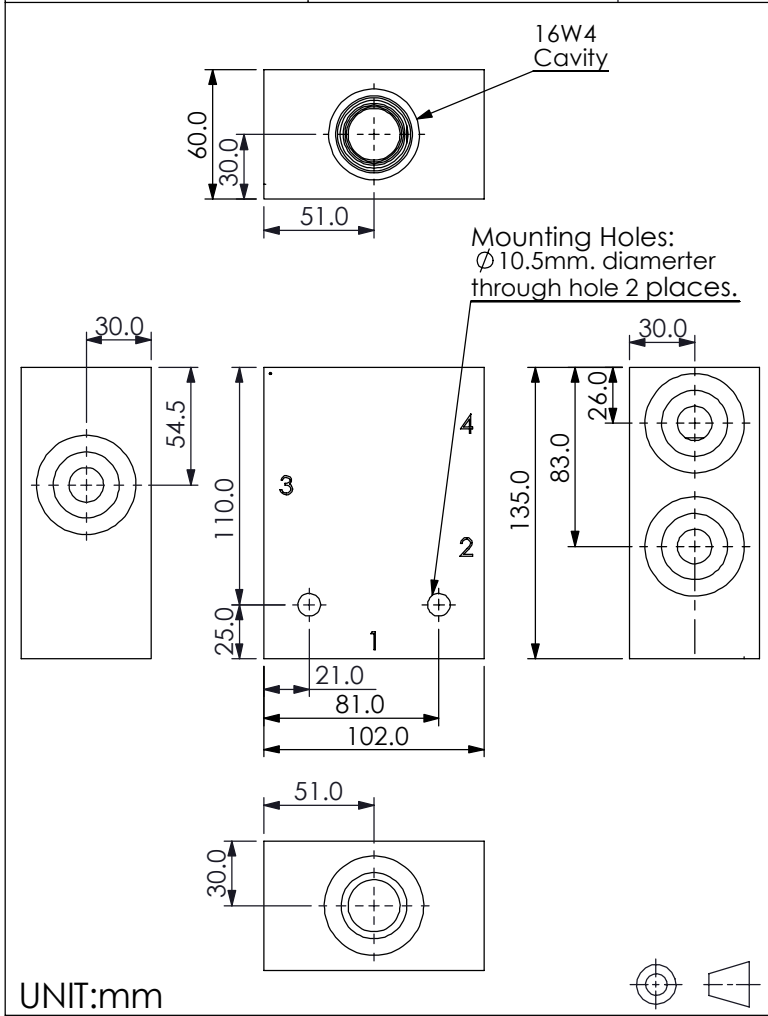
### Y BODY MATERIAL

**A** HIGH-STRENGTH ALUMINUM

### Z CARTRIDGE VALVES SELECTION

WITHOUT VALVE

Ordering Code: **ML-16W4-X-Y 01-Z**



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 16W4

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	1.78 kg(WITHOUT VALVES)

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

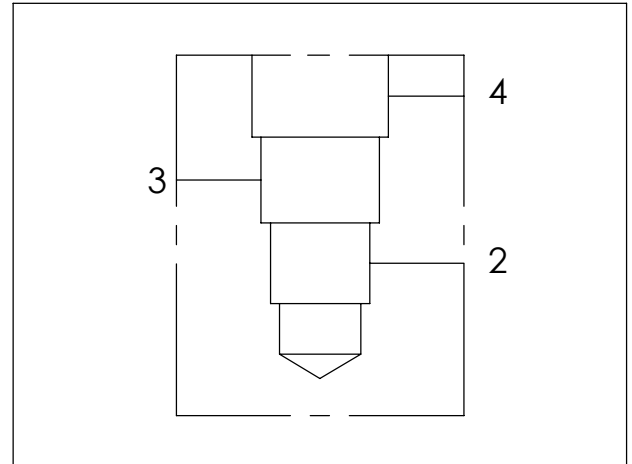
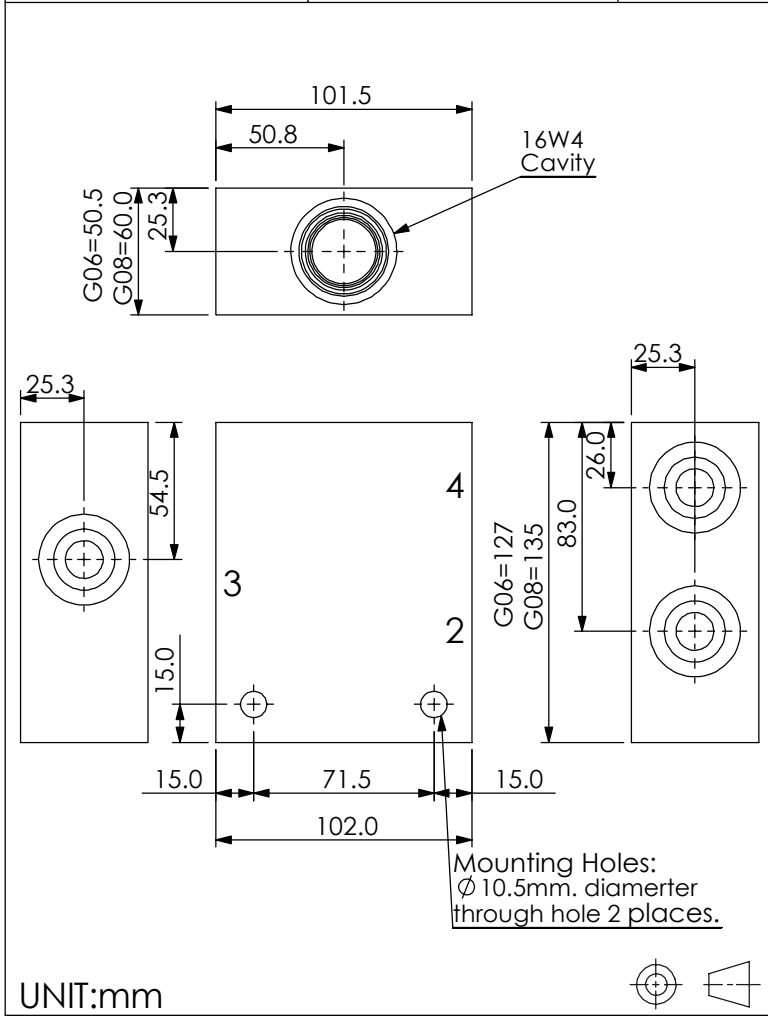
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X	PORT SIZE		
	PORTS	PORT	
	1,2,3	4	
G08	G 1"	G 1"	

Y	BODY MATERIAL
A	HIGH-STRENGTH ALUMINUM

Z	CARTRIDGE VALVES SELECTION
	WITHOUT VALVE

Ordering Code: **ML-16W4-X-Y 11-Z**



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
 Ductile Iron Body Pressure Rating: 350 bar

Cavity:  
 Refer to 16W4  
 \* Refer to Winner Cartridge Valves Catalog.

Aluminum	1.42 kg(WITHOUT VALVES)

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



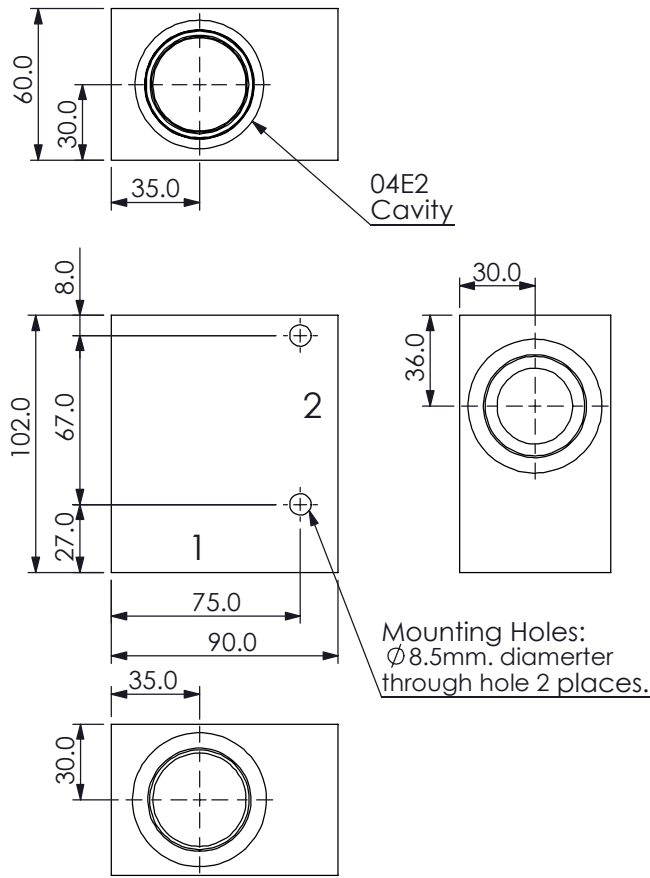
X	PORT SIZE		
	PORTS	PORT	
	<b>2,3</b>	<b>4</b>	
<b>G06</b>	G 3/4"	G 3/4"	
<b>G08</b>	G 1"	G 1"	

Y	BODY MATERIAL	
<b>A</b>	<b>HIGH-STRENGTH ALUMINUM</b>	
<b>S</b>	<b>DUCTILE IRON</b>	

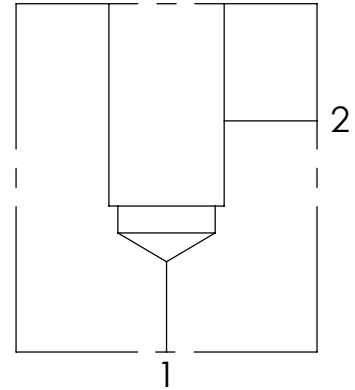
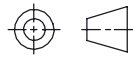
Z	CARTRIDGE VALVES SELECTION	
	<b>WITHOUT VALVE</b>	
<b>FD90</b>	FD16W4090N(30-90LPM,10-350bar ,RATIO 50:50)	

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow \ pressure \ ... etc.)

Ordering Code: **ML-04E2-X-Y 01-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 04E2

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.85 kg(WITHOUT VALVES)
Ductile Iron	2.90 kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORT		
	1	2	
<b>G08</b>	G 1"	G 1"	
<b>G10</b>	G1-1/4"	G1-1/4"	

### Z CARTRIDGE VALVES SELECTION

WITHOUT VALVE		
<b>EP01</b>	EP04E2A03N05 , 260LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	
<b>EP02</b>	EP04E2A04N05 , 260LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	
<b>EP01M</b>	EP04E2A03M05 , 260LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	
<b>EP02P</b>	EP04E2A04P05 , 260LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	

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

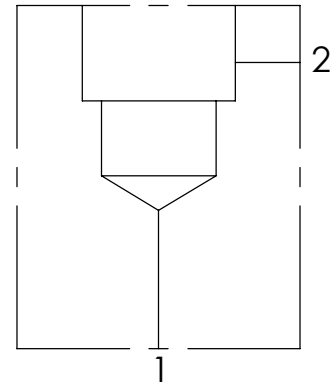
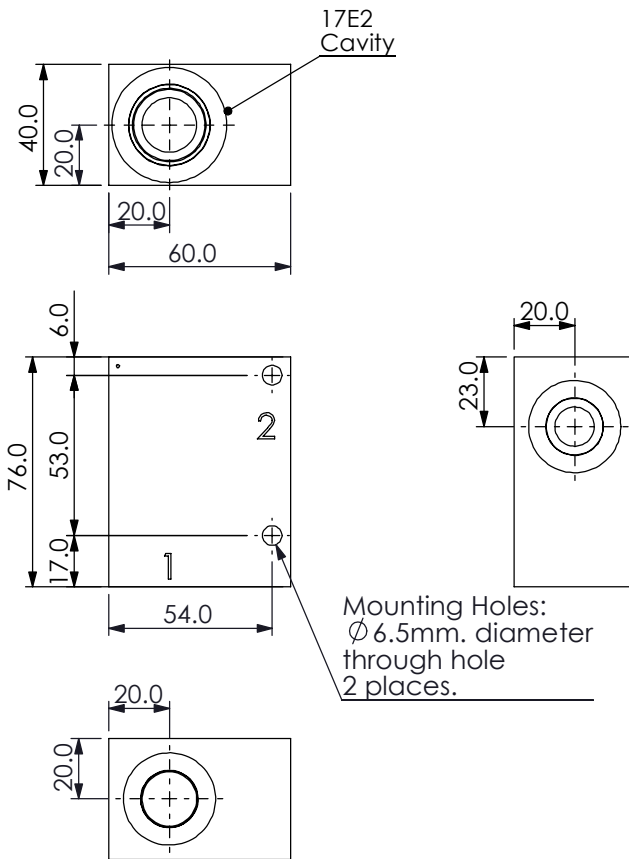
The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

### Y BODY MATERIAL

**A HIGH-STRENGTH ALUMINUM**

**S DUCTILE IRON**

Ordering Code: **ML-17E2-X-Y 01-Z**



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 17E2

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.38 kg(WITHOUT VALVES)
Ductile Iron	1.15 kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORT	PORT	
	1	2	
<b>G04</b>	G 1/2"	G 1/2"	
<b>G06</b>	G 3/4"	G 3/4"	
<b>G06C</b>	G 3/4"	G 1/2"	
<b>P04</b>	1/2"PT	1/2"PT	
<b>P06</b>	3/4"PT	3/4"PT	

### Y BODY MATERIAL

**A HIGH-STRENGTH ALUMINUM**

**S DUCTILE IRON**

### Z CARTRIDGE VALVES SELECTION

WITHOUT VALVE

**CV03** CV17E2203N(60LPM,0.3bar)

**NV0N** NV17E20NL(350bar)

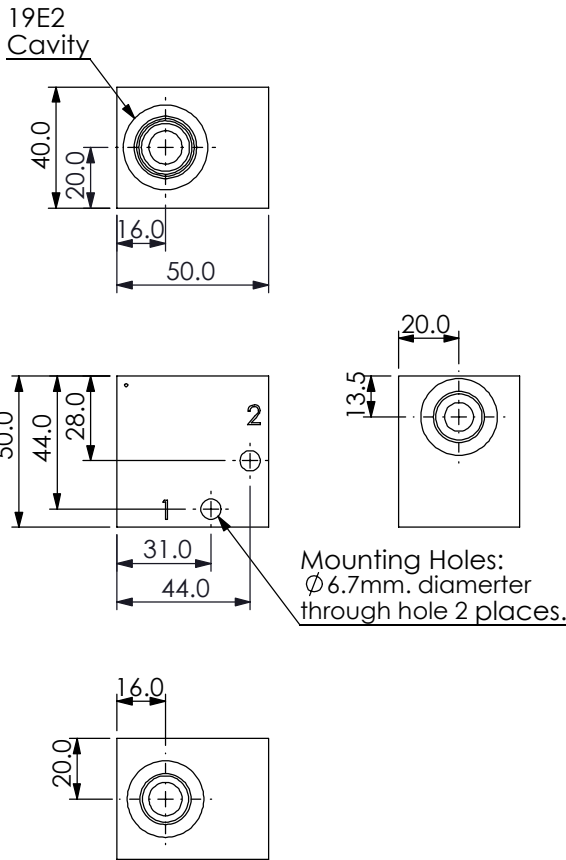
**EP01** EP17E2A01N05 , 70LPM,350bar  
(NORMALLY CLOSED,WITHOUT COIL)

**EP02** EP17E2A02N05 , 70LPM,350bar  
(NORMALLY CLOSED,WITHOUT COIL)

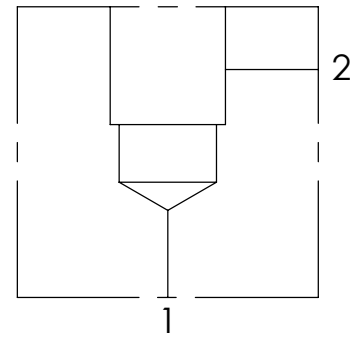
COIL MUST BE ORDERED SEPARATELY  
(REFER TO EC-04W-X-Y-Z)

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

Ordering Code: **ML-19E2-X-Y 01-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 19E2

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.22 kg(WITHOUT VALVES)
----------	-------------------------

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

### PORT SIZE

X	PORT		
	1	2	
G03	G 3/8"	G 3/8"	

### Z CARTRIDGE VALVES SELECTION

WITHOUT VALVE		
EP11	EP19E2A11N05, 40LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	
EP12	EP19E2A12N05, 40LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	
EP11M	EP19E2A11M05, 40LPM,350bar(NORMALLY CLOSED WITH KNOB STYLE MANUAL OVERRIDE,WITHOUT COIL)	
EP12P	EP19E2A12P05, 40LPM,350bar(NORMALLY OPEN WITH PUSH STYLE MANUAL OVERRIDE, WITHOUT COIL)	

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

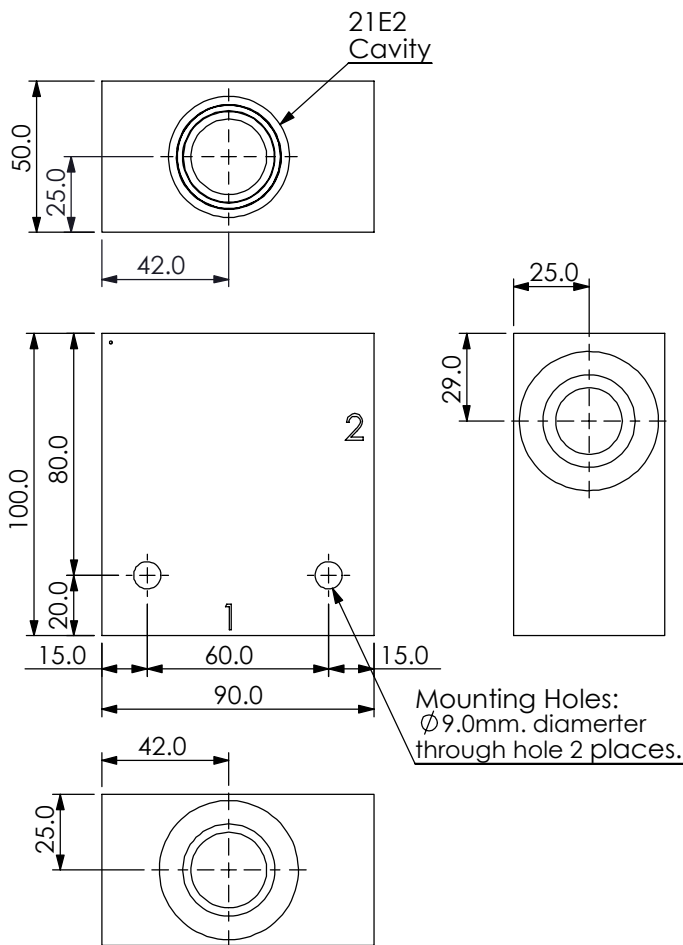
The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

### Y BODY MATERIAL

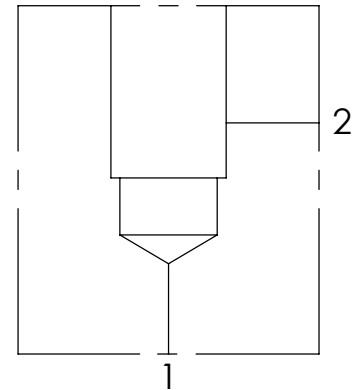
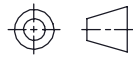
**A HIGH-STRENGTH ALUMINUM**



Ordering Code: **ML-21E2-X-Y 01-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 21E2

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.95 kg(WITHOUT VALVES)
Ductile Iron	2.65 kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORT		
	1	2	
G08	G 1"	G 1"	

### Z CARTRIDGE VALVES SELECTION

WITHOUT VALVE		
CV10	CV21E2210N(100LPM,1.0bar)	
NV0N	NV21E20NL(350bar)	
EP01	EP21E2A01N05 , 150LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)	
EP02	EP21E2A02N05 , 150LPM,350bar (NORMALLY OPEN,WITHOUT COIL)	

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

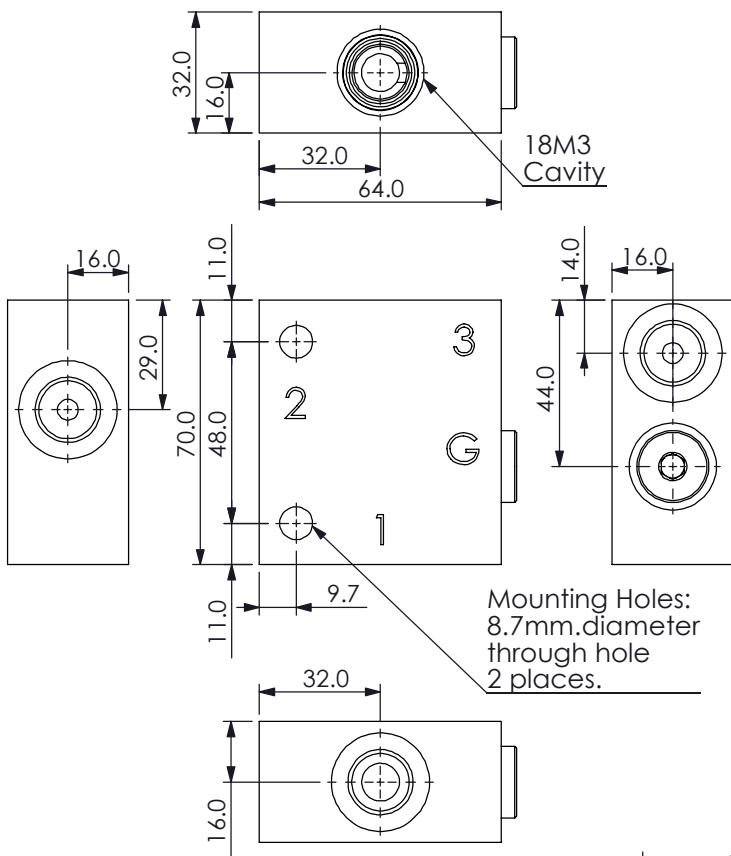
The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

### Y BODY MATERIAL

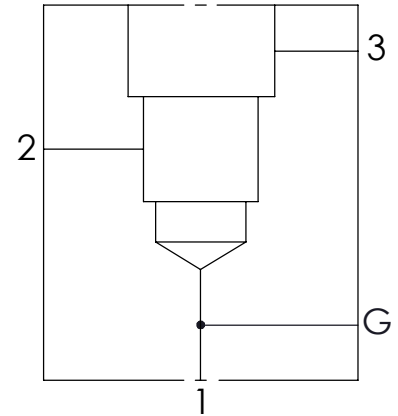
**A HIGH-STRENGTH ALUMINUM**

**S DUCTILE IRON**

Ordering Code: **ML-18M3-X-Y 01-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron  
Body Pressure Rating: 350 bar

Cavity:

Refer to 18M3

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.35 kg(WITHOUT VALVES)
Ductile Iron	0.9 kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORTS	PORT	PORT
	1,2	3	G
G03G	G 3/8"	G 3/8"	G 1/4"

### Y BODY MATERIAL

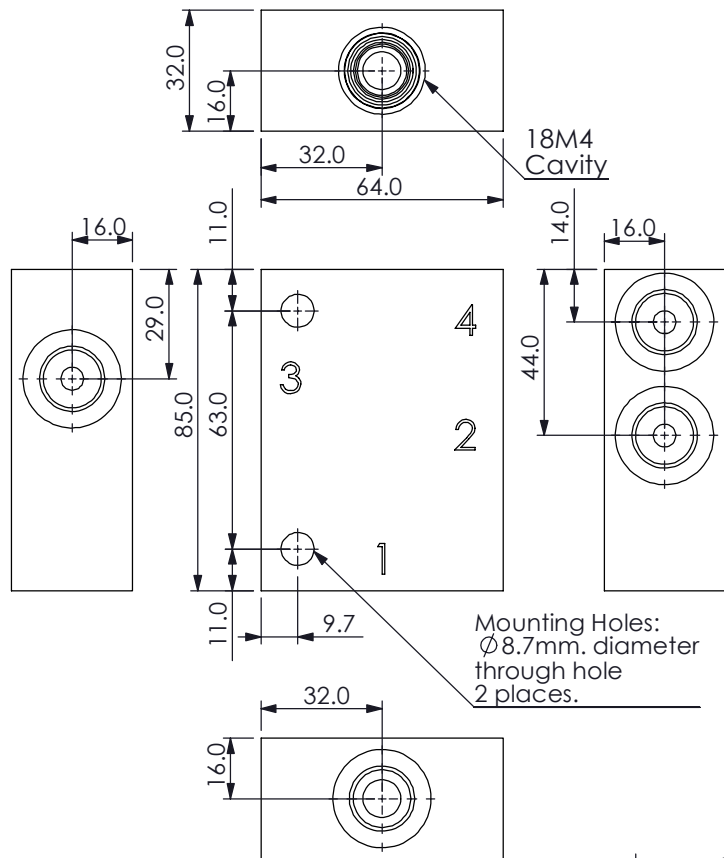
**A** HIGH-STRENGTH ALUMINUM

**S** DUCTILE IRON

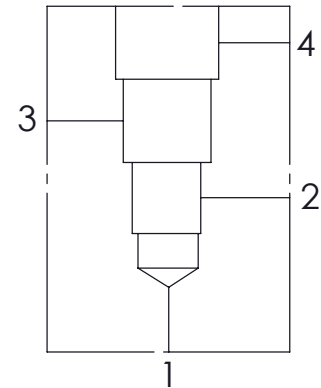
### Z CARTRIDGE VALVES SELECTION

WITHOUT VALVE

Ordering Code: **ML-18M4-X-Y 01-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron  
Body Pressure Rating: 350 bar

Cavity:

Refer to 18M4

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.4 kg(WITHOUT VALVES)
Ductile Iron	1.1 kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORTS	PORTS	
	1,2	3,4	
G03	G 3/8"	G 3/8"	

### Y BODY MATERIAL

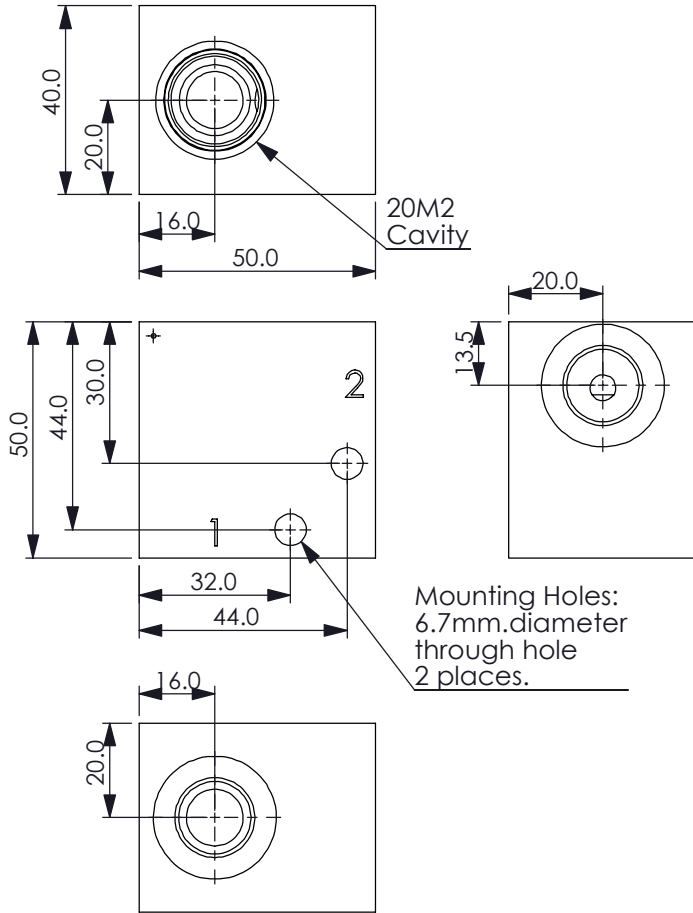
**A** HIGH-STRENGTH ALUMINUM

**S** DUCTILE IRON

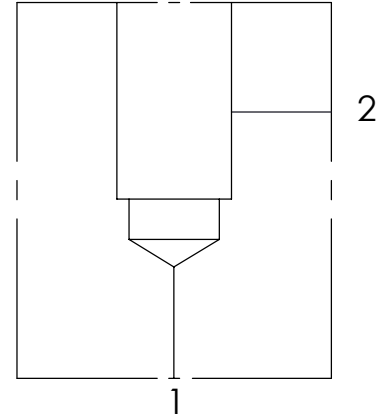
### Z CARTRIDGE VALVES SELECTION

WITHOUT VALVE

Ordering Code: **ML-20M2-X-Y01-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 20M2

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.25 kg(WITHOUT VALVES)
Ductile Iron	0.65 kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORT		
	1	2	
G03	G 3/8"	G 3/8"	

### Y BODY MATERIAL

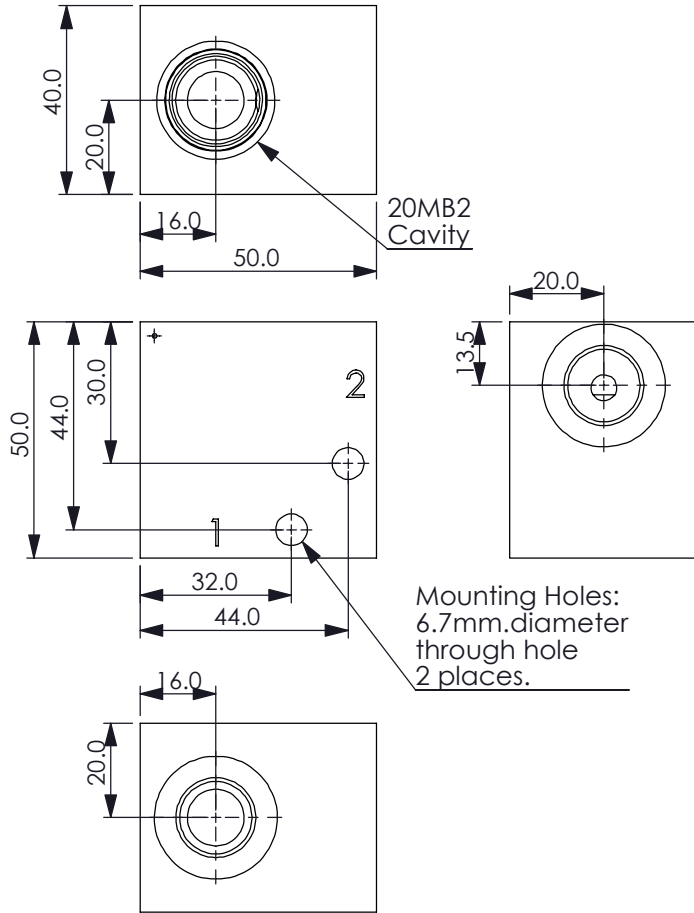
**A** HIGH-STRENGTH ALUMINUM

**S** DUCTILE IRON

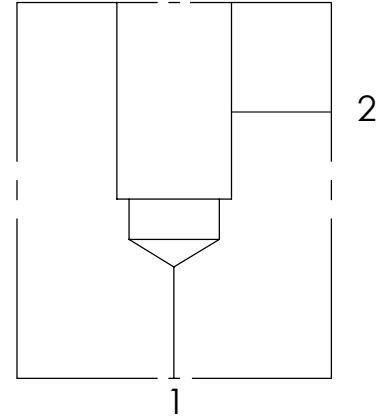
### Z CARTRIDGE VALVES SELECTION

WITHOUT VALVE

Ordering Code: **ML-20MB2-X-Y 01-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
 Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 20MB2

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.25 kg(WITHOUT VALVES)
Ductile Iron	0.65 kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORT		
	1	2	
G03	G 3/8"	G 3/8"	

### Y BODY MATERIAL

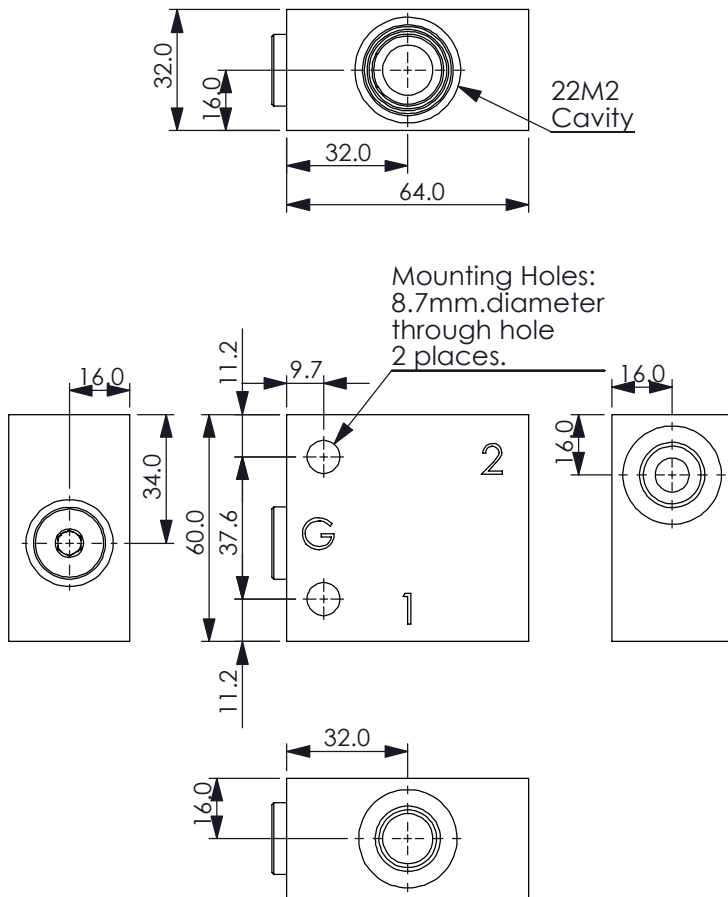
**A** HIGH-STRENGTH ALUMINUM

**S** DUCTILE IRON

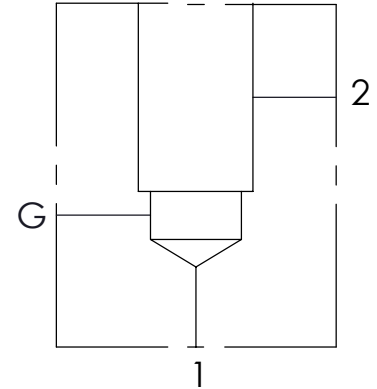
### Z CARTRIDGE VALVES SELECTION

WITHOUT VALVE

Ordering Code: **ML-22M2-X-Y 01-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

Cavity:

Refer to 22M2

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.3	kg(WITHOUT VALVES)
Ductile Iron	0.75	kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORTS	PORT	
	1,2	G	
G03G	G 3/8"	G 1/4"	

### Y BODY MATERIAL

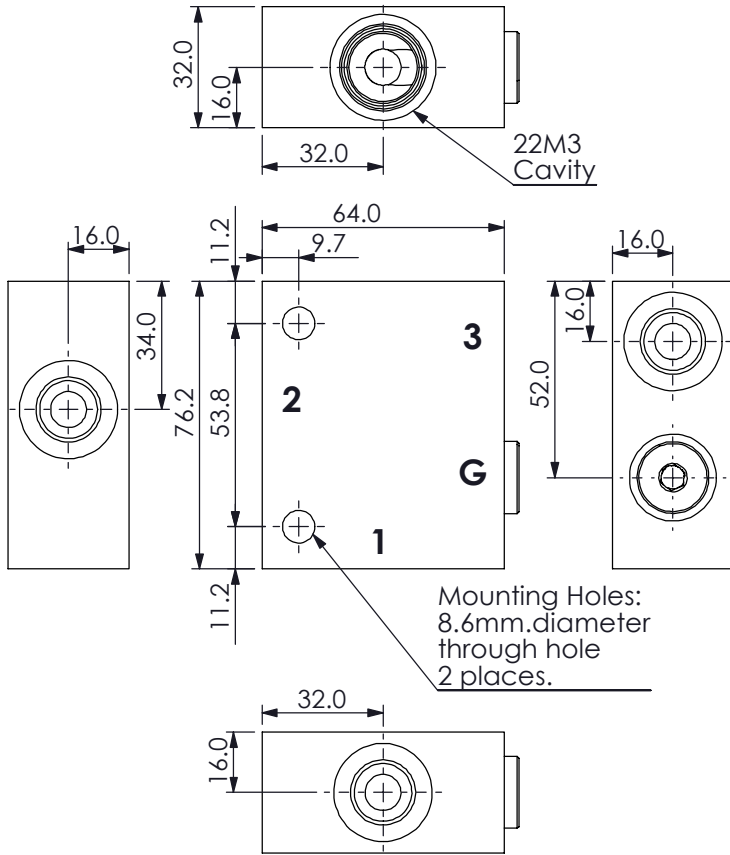
**A** HIGH-STRENGTH ALUMINUM

**S** DUCTILE IRON

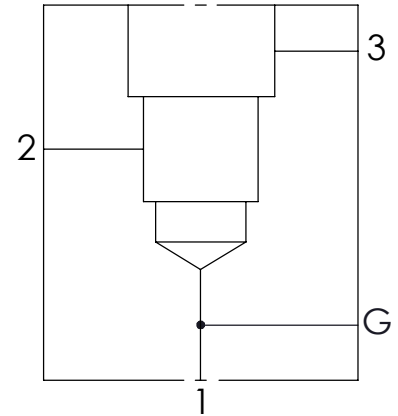
### Z CARTRIDGE VALVES SELECTION

WITHOUT VALVE

Ordering Code: **ML-22M3-X-Y 01-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar

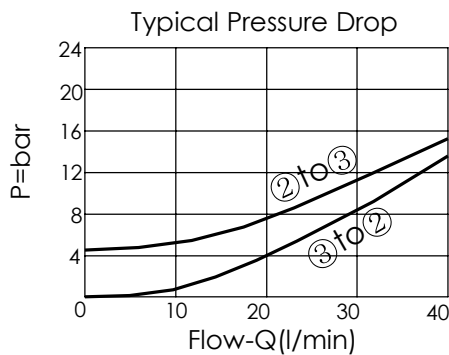
Cavity:

Refer to 22M3

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.35 kg(WITHOUT VALVES)
----------	-------------------------

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



### PORT SIZE

X	PORTS		
	1,2	3	G
G03G	G 3/8"	G 3/8"	G 1/4"

### Y BODY MATERIAL

**A HIGH-STRENGTH ALUMINUM**

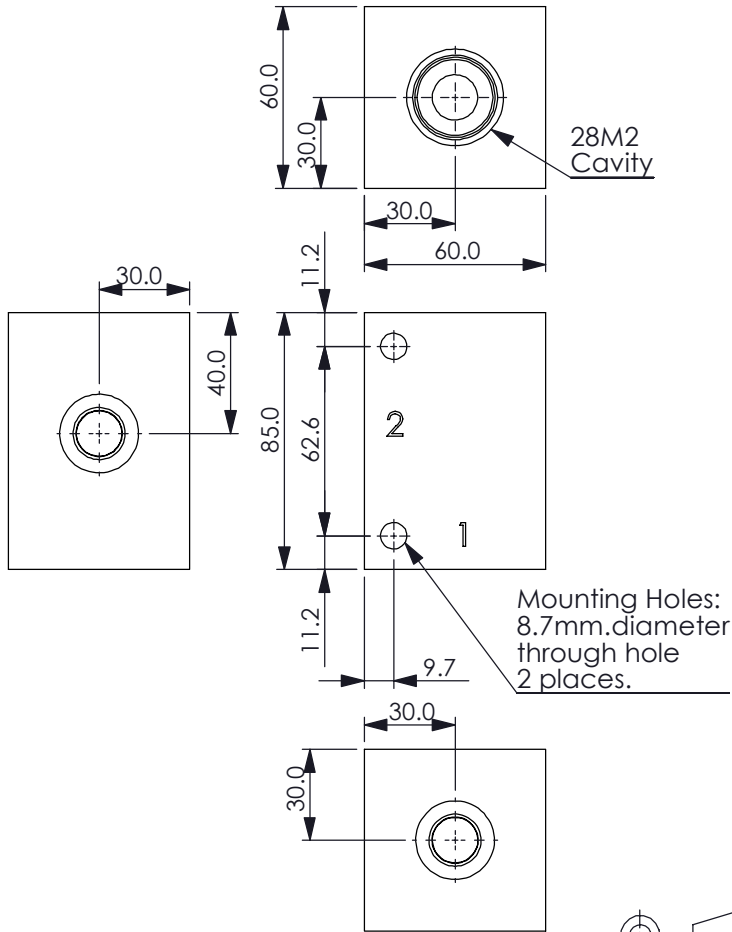
### Z CARTRIDGE VALVES SELECTION

WITHOUT VALVE

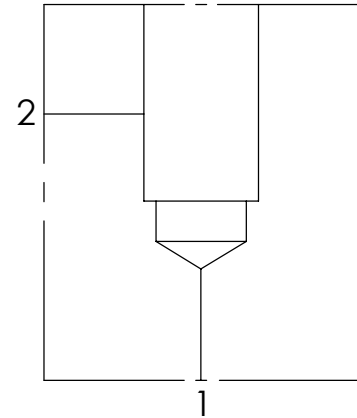
**CO50** CO22M3C50N(30LPM,5.0bar)

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

Ordering Code: **ML-28M2-X-Y01-Z**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron  
Body Pressure Rating: 350 bar

Cavity:

Refer to 28M2

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.71 kg(WITHOUT VALVES)
Ductile Iron	2.15 kg(WITHOUT VALVES)

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

### PORT SIZE

X	PORT	PORT	
	1	2	
G03	G 3/8"	G 3/8"	

### Y BODY MATERIAL

**A** HIGH-STRENGTH ALUMINUM

**S** DUCTILE IRON

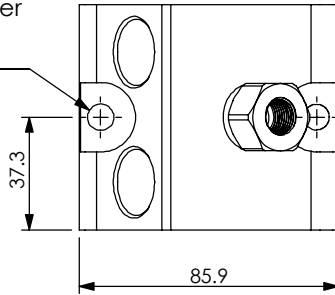
### Z CARTRIDGE VALVES SELECTION

WITHOUT VALVE



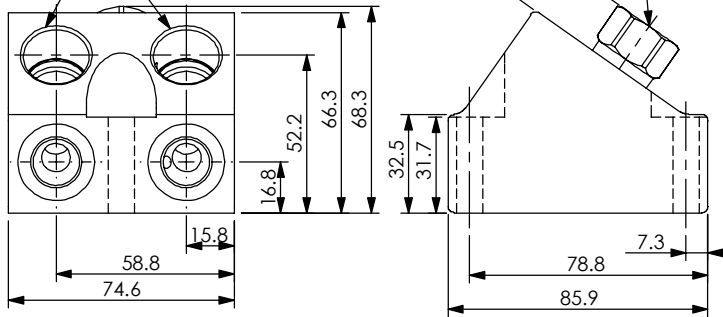
Ordering Code: **ML-60-CDK-X-Y-Z-A41**

Mounting Holes:  
Ø8.7mm. diameter  
through hole.  
2 places.

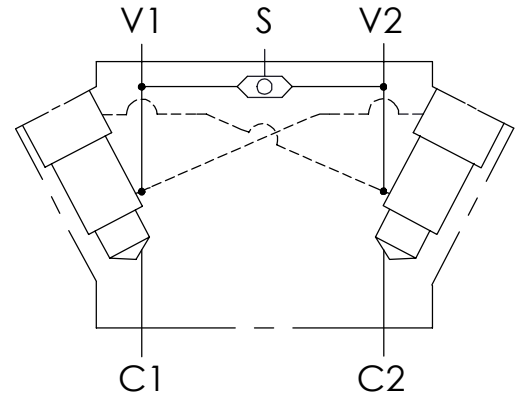
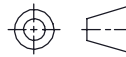


11A3 Cavity  
Locating Shoulder  
Depth 17.5 mm.  
2 places.

Shuttle port "S"  
in end of hex.



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron  
Body Pressure Rating: 350 bar

Cavity:  
Refer to 11A3

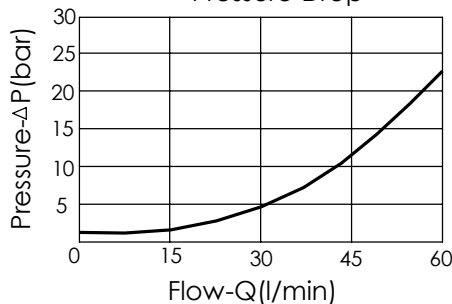
Shuttle valve:  
Refer to LS13A20NG02

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.72 kg(WITHOUT CONTERBALAN VALVE) (WITH SHUTTLE VALVE)
----------	--

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

Free Flow or Piloted Open  
Pressure Drop



### X CARTRIDGE VALVES SELECTION

<b>11A3</b>	WITHOUT VALVE	
<b>CB0J</b>	CB11A30JL , 10:1 , 350bar	
<b>CB4J</b>	CB11A34JL , 4.5:1 , 350bar	

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

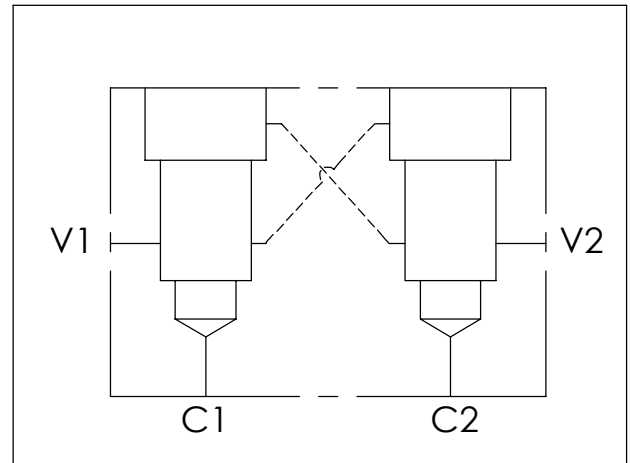
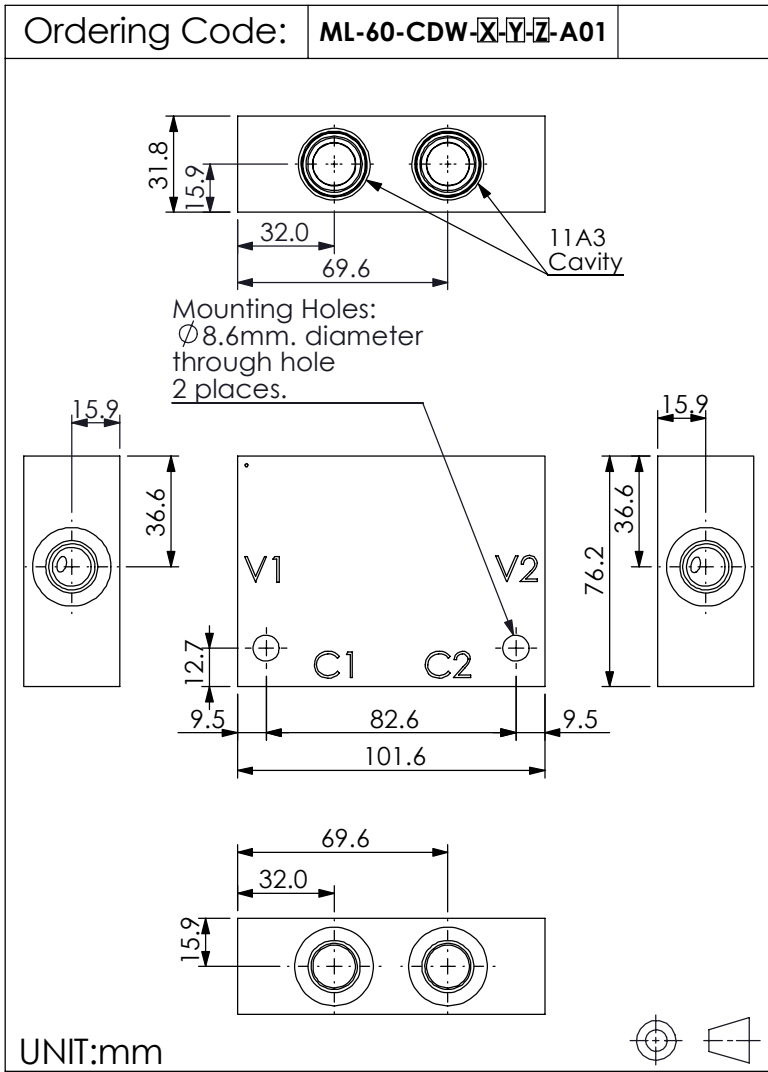
### Y CARTRIDGE VALVES SELECTION

<b>11A3</b>	WITHOUT VALVE	
<b>CB0J</b>	CB11A30JL , 10:1 , 350bar	
<b>CB4J</b>	CB11A34JL , 4.5:1 , 350bar	

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

### Z PORT SIZE

<b>Z</b>	<b>PORT</b>	<b>PORT</b>	<b>PORT</b>	
	<b>1</b>	<b>2</b>	<b>S</b>	
<b>G03</b>	G 3/8"	G 3/8"	G 1/4"	



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron  
Body Pressure Rating: 350 bar

Cavity:

Refer to 11A3

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.69 kg(WITHOUT VALVES)

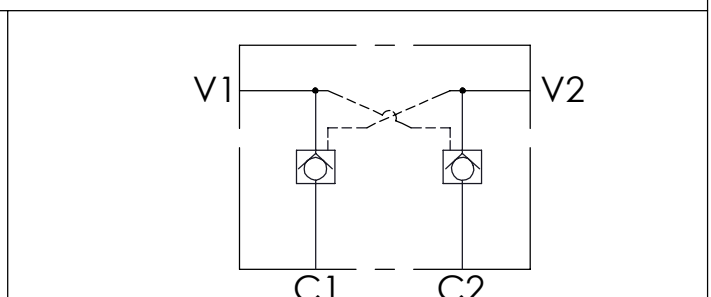
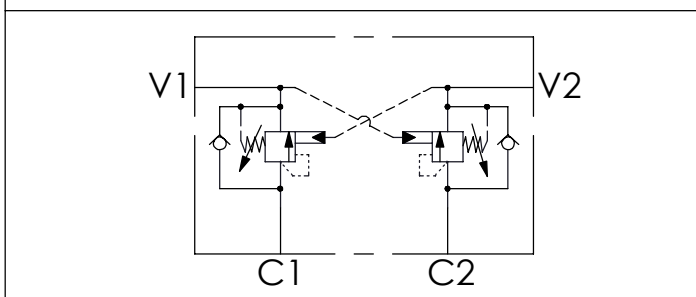
\* If you need the special specification.  
Please contact us.

X	SELECTION FOR V1 PORT CONTROL	
<b>11A3</b>	CAVITY ONLY(WITHOUT VALVE)	
<b>CB3H</b>	CB11A33HL (3:1 , 280bar)	
<b>CO20</b>	CO11A3020N (2.0bar)	

Y	SELECTION FOR V2 PORT CONTROL	
<b>11A3</b>	CAVITY ONLY(WITHOUT VALVE)	
<b>CB3H</b>	CB11A33HL (3:1 , 280bar)	
<b>CO20</b>	CO11A3020N (2.0bar)	
The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)		

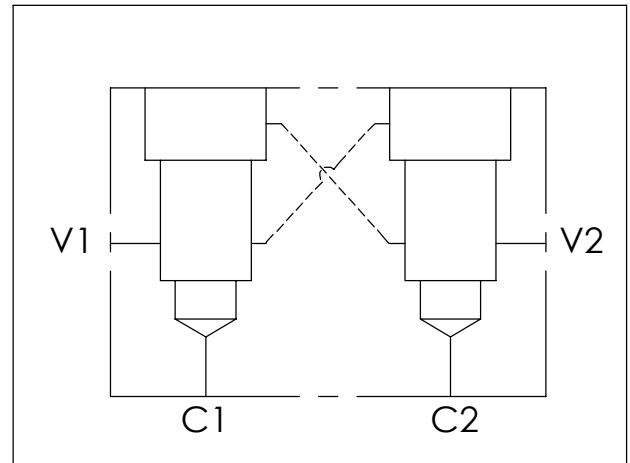
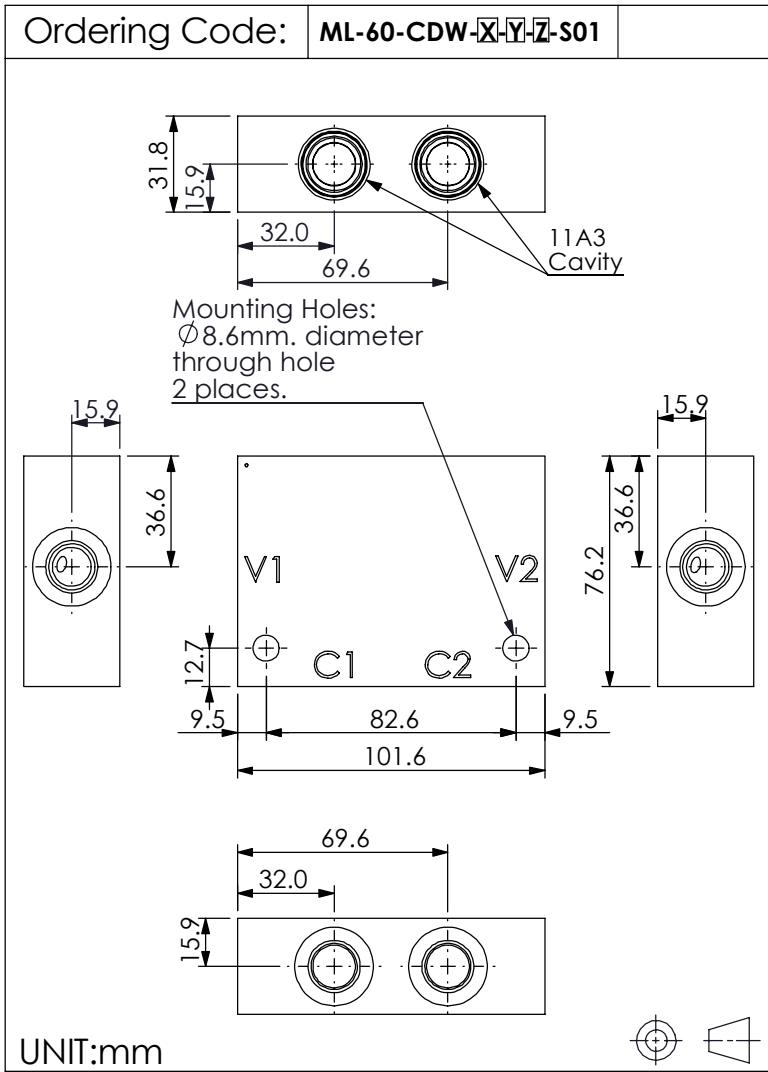
Z	PORT SIZE	
	PORTS V1,V2	PORTS C1,C2
<b>G02</b>	G 1/4"	G 1/4"
<b>G03</b>	G 3/8"	G 3/8"
<b>G04</b>	G 1/2"	G 1/2"

### HYDRAULIC CIRCUITS(WITH VALVES)



Ordering Code: **ML-60-CDW-CB3H-CB3H-A01**

Ordering Code: **ML-60-CDW-CO20-CO20-A01**



TECHNICAL DATA	
Aluminum Body Pressure Rating:	210 bar
Ductile Iron Body Pressure Rating:	350 bar
Cavity:	Refer to 11A3
* Refer to Winner Cartridge Valves Catalog.	
Ductile Iron	2.11 kg(WITHOUT VALVES)
* If you need the special specification. Please contact us.	

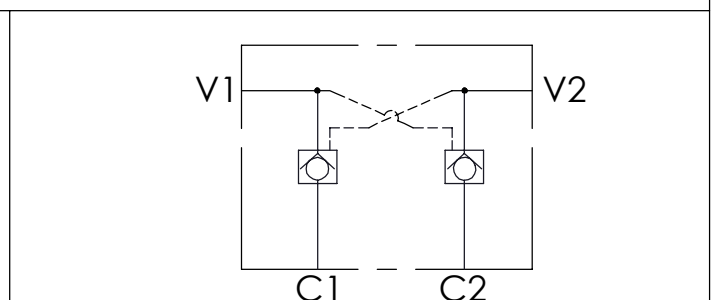
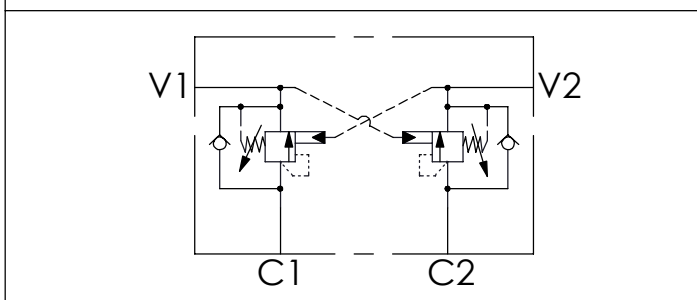
X	SELECTION FOR V1 PORT CONTROL	
<b>11A3</b>	CAVITY ONLY(WITHOUT VALVE)	
<b>CB3H</b>	CB11A33HL (3:1 , 280bar)	
<b>CO20</b>	CO11A3020N (2.0bar)	

Y	SELECTION FOR V2 PORT CONTROL	
<b>11A3</b>	CAVITY ONLY(WITHOUT VALVE)	
<b>CB3H</b>	CB11A33HL (3:1 , 280bar)	
<b>CO20</b>	CO11A3020N (2.0bar)	

Z	PORT SIZE	
	PORTS V1,V2	PORTS C1,C2
<b>G02</b>	G 1/4"	G 1/4"
<b>G03</b>	G 3/8"	G 3/8"
<b>G04</b>	G 1/2"	G 1/2"

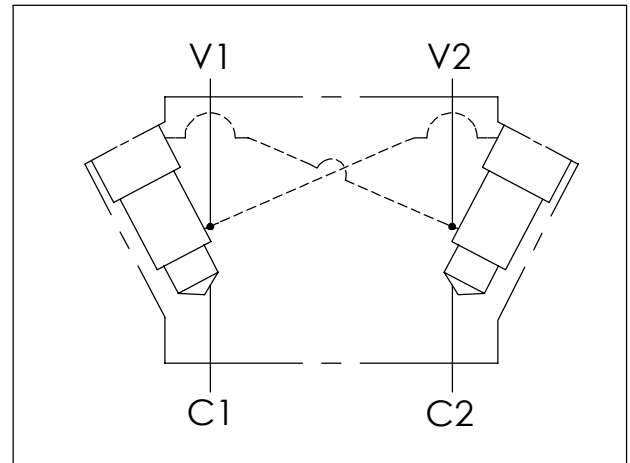
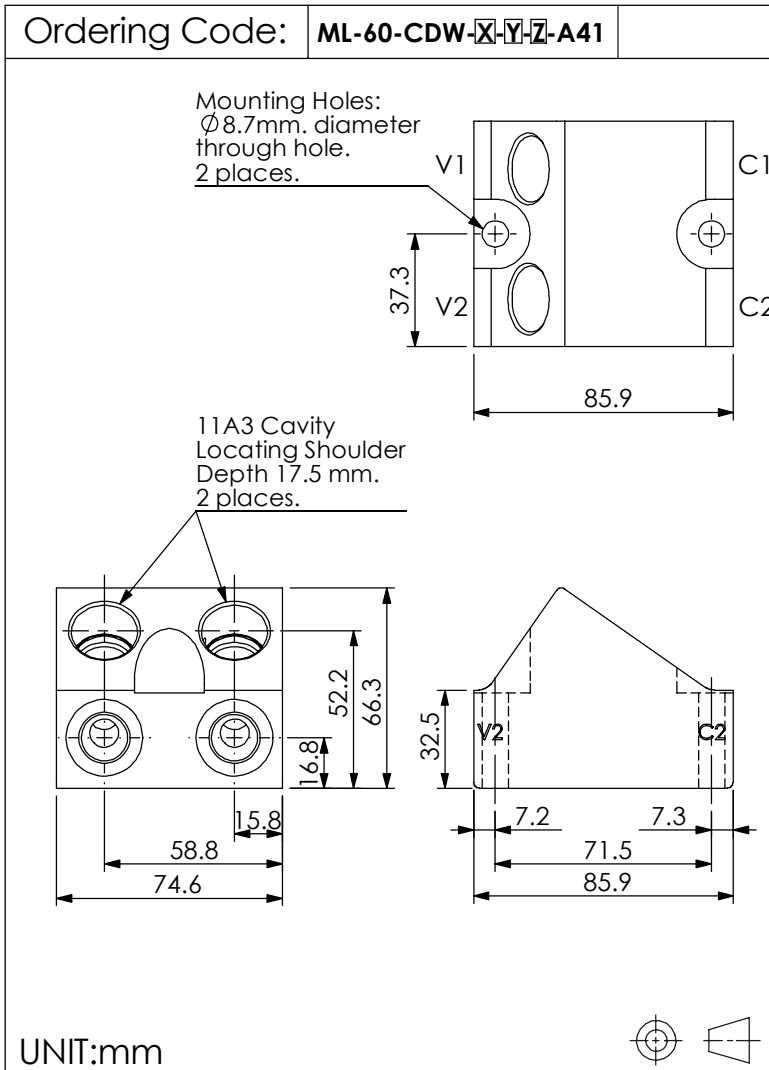
The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

### HYDRAULIC CIRCUITS(WITH VALVES)



Ordering Code: **ML-60-CDW-CB3H-CB3H-S01**

Ordering Code: **ML-60-CDW-CO20-CO20-S01**



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron  
Body Pressure Rating: 350 bar

Cavity:  
Refer to 11A3

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.65 kg(WITHOUT VALVES)

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

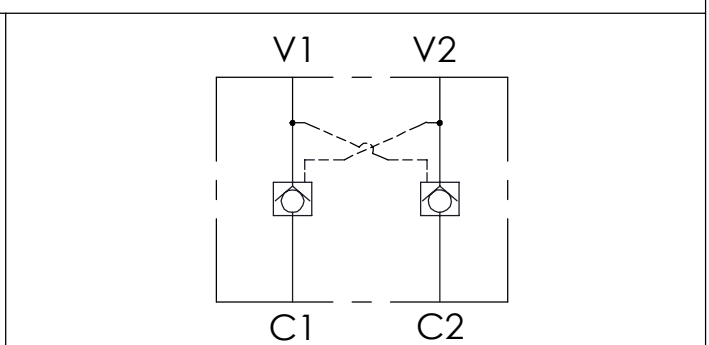
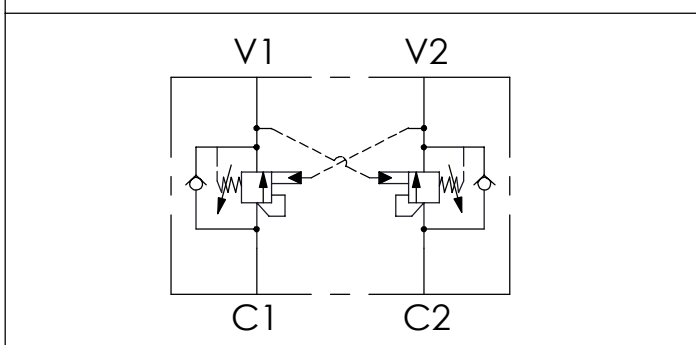
Y	SELECTION FOR V2 PORT CONTROL	
<b>11A3</b>	CAVITY ONLY(WITHOUT VALVE)	
<b>CB3H</b>	CB11A33HL (3:1 , 280bar)	
<b>CO20</b>	CO11A3020N (2.0bar)	

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

X	SELECTION FOR V1 PORT CONTROL	
<b>11A3</b>	CAVITY ONLY(WITHOUT VALVE)	
<b>CB3H</b>	CB11A33HL (3:1 , 280bar)	
<b>CO20</b>	CO11A3020N (2.0bar)	

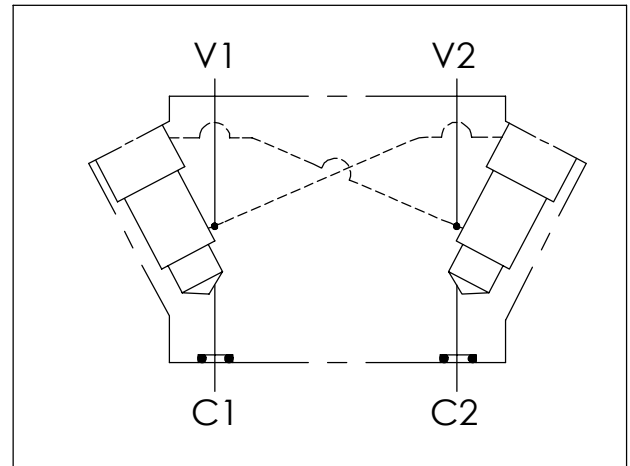
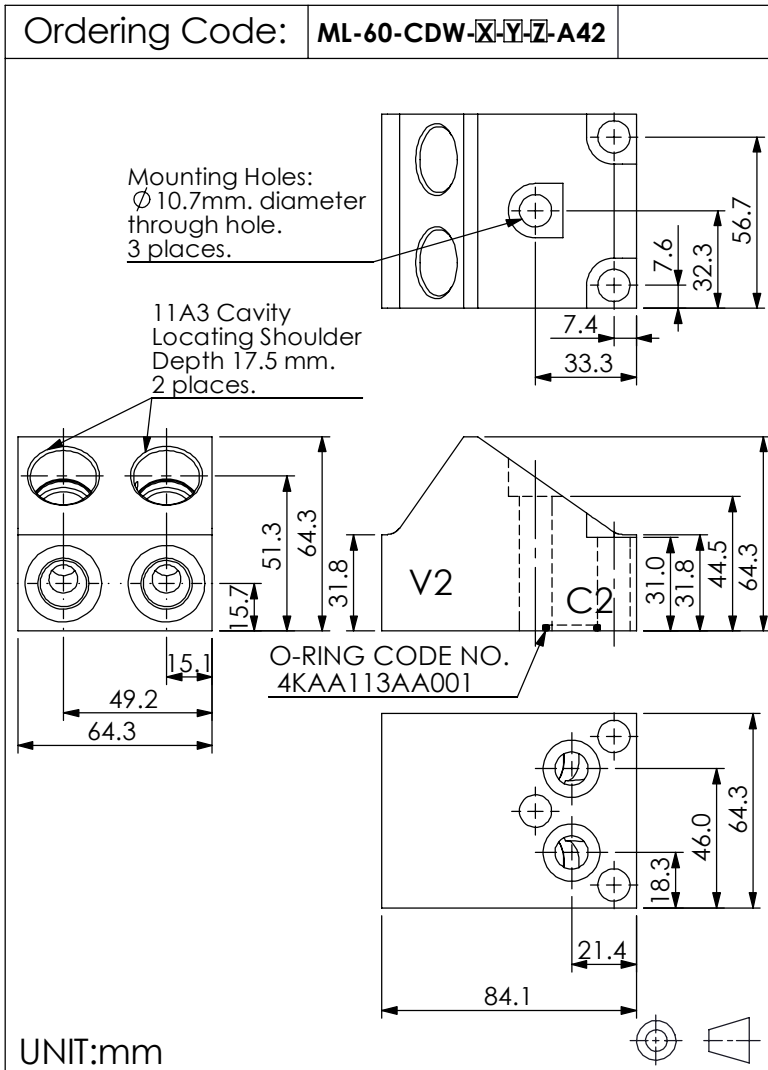
Z	PORT SIZE	
	PORTS V1,V2	PORTS C1,C2
<b>G03</b>	G 3/8"	G 3/8"
<b>G04</b>	G 1/2"	G 1/2"

### HYDRAULIC CIRCUITS(WITH VALVES)



Ordering Code: **ML-60-CDW-CB3H-CB3H-A41**

Ordering Code: **ML-60-CDW-CO20-CO20-A41**



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

Cavity:  
Refer to 11A3

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.52 kg(WITHOUT VALVES)

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

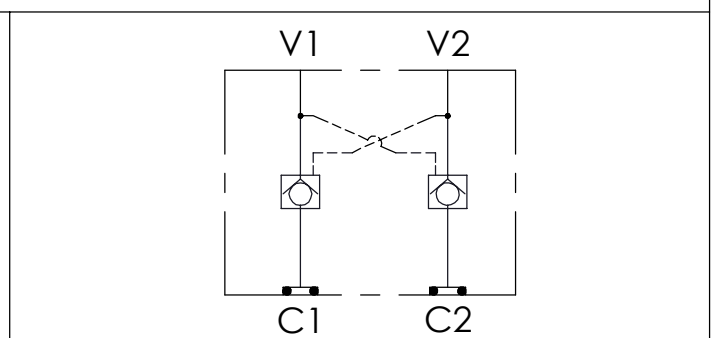
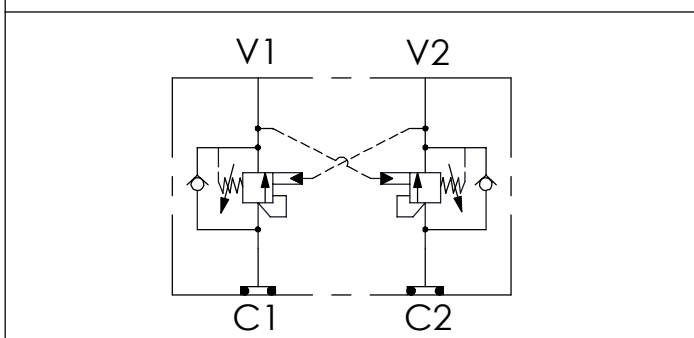
Y	SELECTION FOR V2 PORT CONTROL
<b>11A3</b>	CAVITY ONLY(WITHOUT VALVE)
<b>CB3H</b>	CB11A33HL (3:1 , 280bar)
<b>CB4J</b>	CB11A34JL (4.5:1 , 350bar)
<b>CO20</b>	CO11A3020N (2.0bar)

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

X	SELECTION FOR V1 PORT CONTROL
<b>11A3</b>	CAVITY ONLY(WITHOUT VALVE)
<b>CB3H</b>	CB11A33HL (3:1 , 280bar)
<b>CB4J</b>	CB11A34JL (4.5:1 , 350bar)
<b>CO20</b>	CO11A3020N (2.0bar)

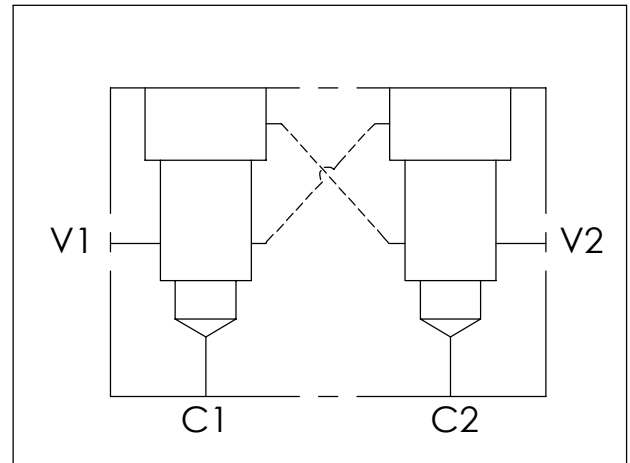
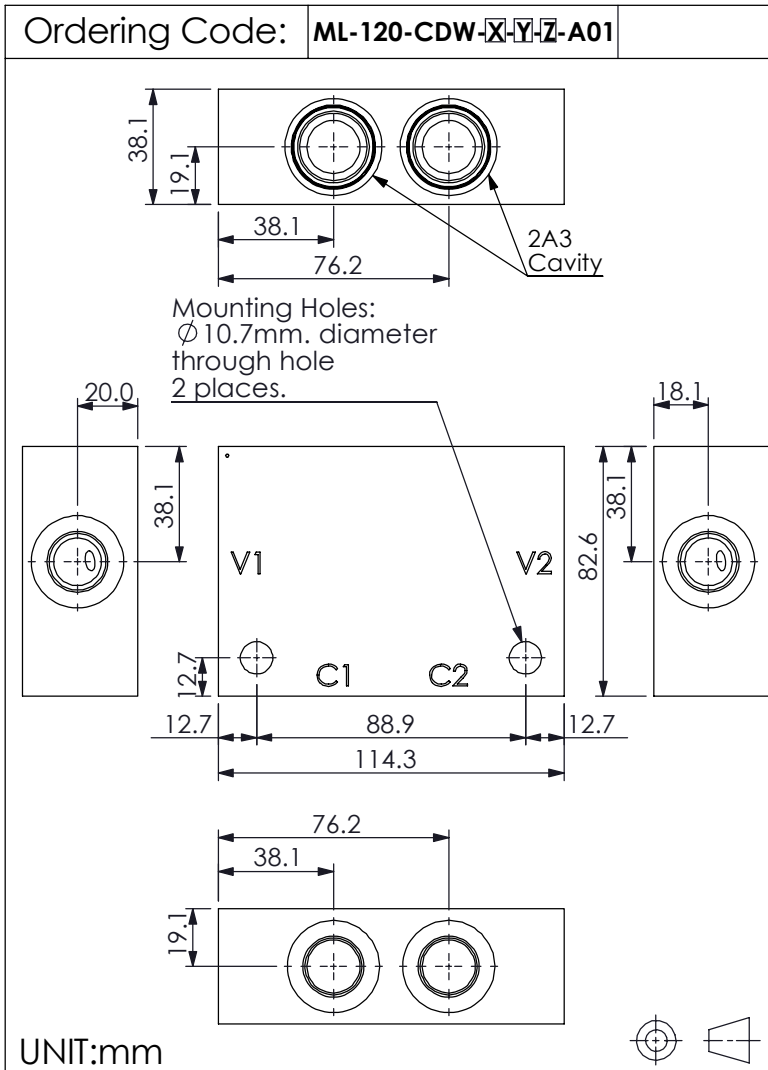
Z	PORT SIZE
	PORTS
	V1,V2
<b>G03</b>	G 3/8"

### HYDRAULIC CIRCUITS(WITH VALVES)



Ordering Code: **ML-60-CDW-CB3H-CB3H-A42**

Ordering Code: **ML-60-CDW-CO20-CO20-A42**



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
 Ductile Iron  
 Body Pressure Rating: 350 bar

Cavity:  
 Refer to 2A3

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.72 kg(WITHOUT VALVES)

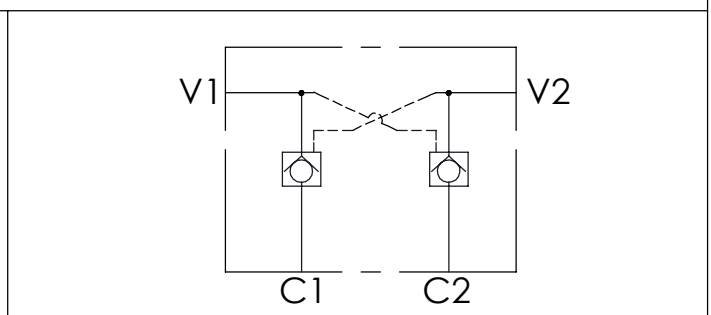
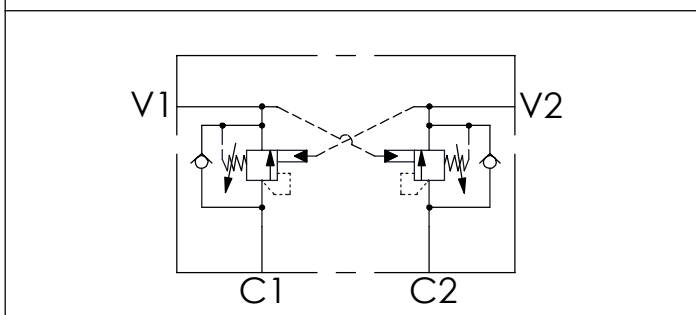
\* If you need the special specification.  
 Please contact us.

X	SELECTION FOR V1 PORT CONTROL	
<b>2A3</b>	CAVITY ONLY(WITHOUT VALVE)	
<b>CB3H</b>	CB2A33HL (3:1 , 280bar)	
<b>CO20</b>	CO2A3020N (2.0bar)	

Y	SELECTION FOR V2 PORT CONTROL	
<b>2A3</b>	CAVITY ONLY(WITHOUT VALVE)	
<b>CB3H</b>	CB2A33HL (3:1 , 280bar)	
<b>CO20</b>	CO2A3020N (2.0bar)	
The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)		

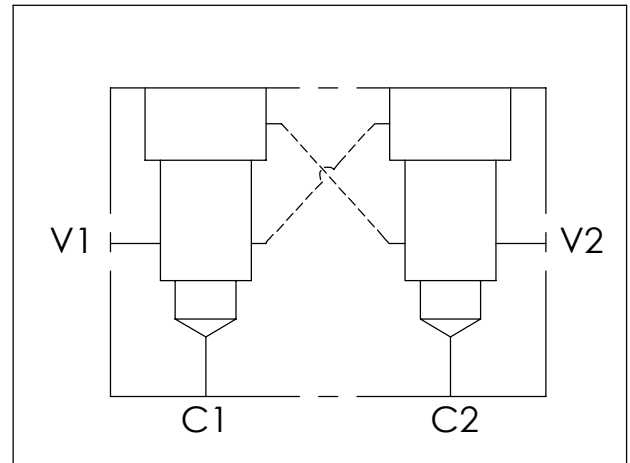
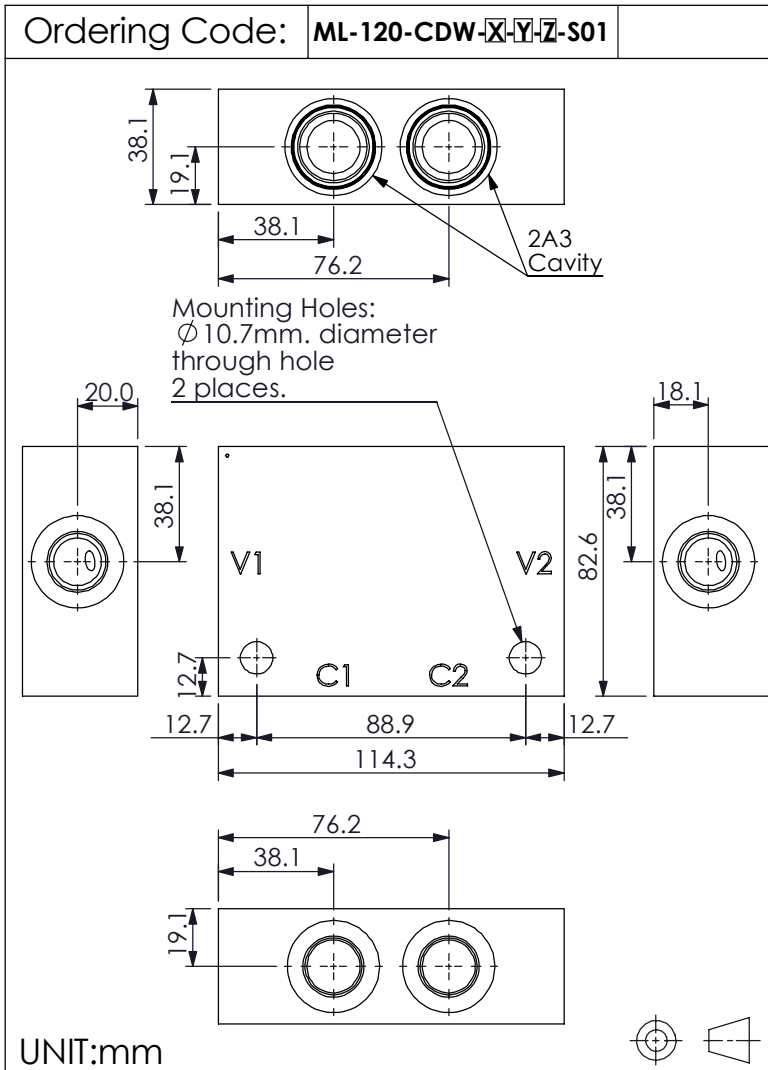
Z	PORT SIZE	
	PORTS V1,V2	PORTS C1,C2
<b>G03</b>	G 3/8"	G 3/8"
<b>G04</b>	G 1/2"	G 1/2"

### HYDRAULIC CIRCUITS(WITH VALVES)



Ordering Code: **ML-120-CDW-CB3H-CB3H-A01**

Ordering Code: **ML-120-CDW-CO20-CO20-A01**



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
 Ductile Iron  
 Body Pressure Rating: 350 bar

Cavity:  
 Refer to 2A3

\* Refer to Winner Cartridge Valves Catalog.

Ductile Iron	2.21 kg(WITHOUT VALVES)
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\* If you need the special specification.  
 Please contact us.

### X SELECTION FOR V1 PORT CONTROL

<b>2A3</b>	CAVITY ONLY(WITHOUT VALVE)	
<b>CB3H</b>	CB2A33HL (3:1 , 280bar)	
<b>CO20</b>	CO2A3020N (2.0bar)	

### Z PORT SIZE

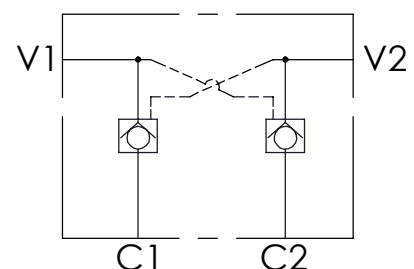
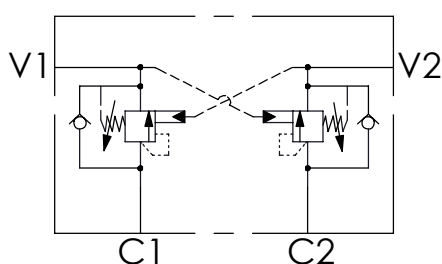
Z	PORTS	PORTS
	V1,V2	C1,C2
<b>G03</b>	G 3/8"	G 3/8"
<b>G04</b>	G 1/2"	G 1/2"

### Y SELECTION FOR V2 PORT CONTROL

<b>2A3</b>	CAVITY ONLY(WITHOUT VALVE)	
<b>CB3H</b>	CB2A33HL (3:1 , 280bar)	
<b>CO20</b>	CO2A3020N (2.0bar)	

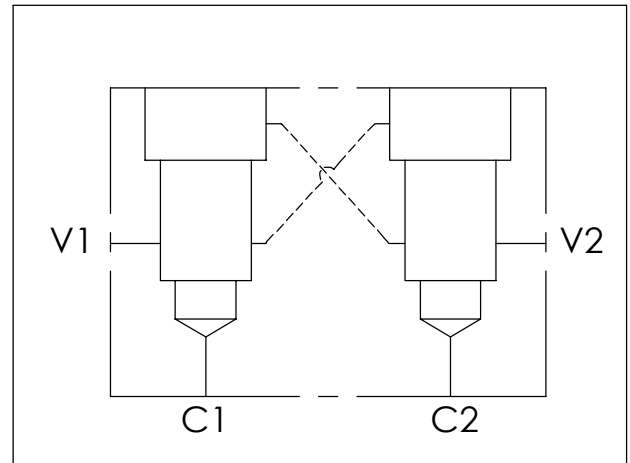
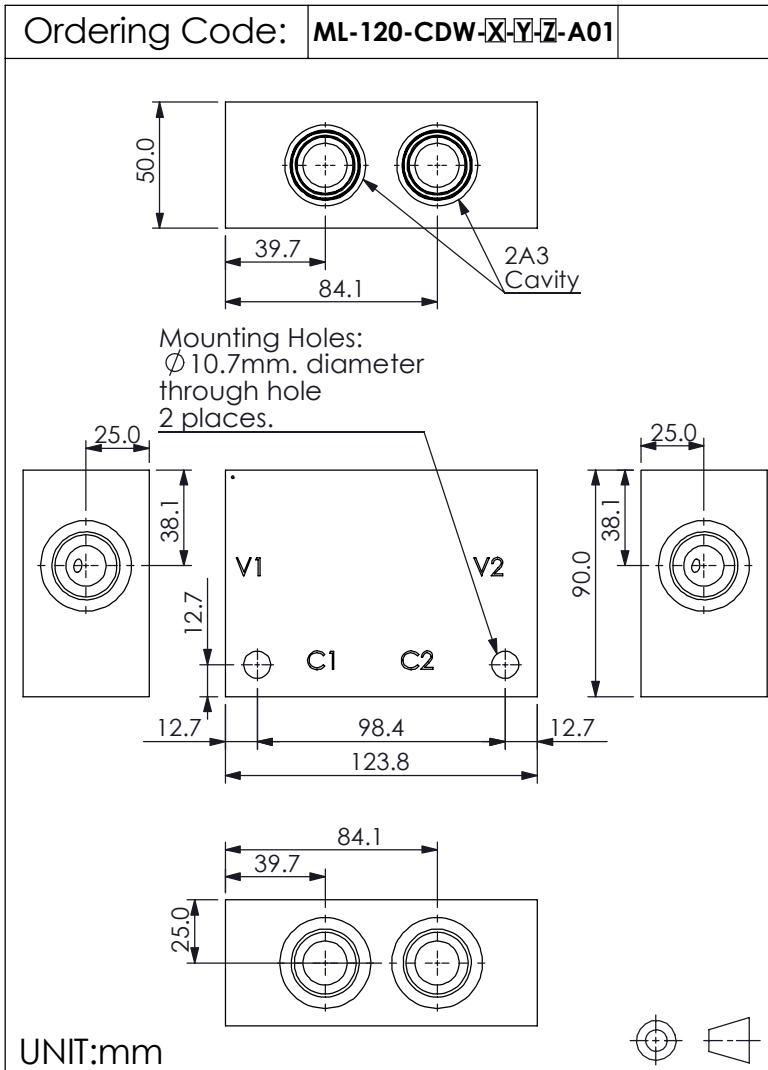
The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

### HYDRAULIC CIRCUITS(WITH VALVES)



Ordering Code: **ML-120-CDW-CB3H-CB3H-S01**

Ordering Code: **ML-120-CDW-CO20-CO20-S01**



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
 Ductile Iron  
 Body Pressure Rating: 350 bar

Cavity:  
 Refer to 2A3

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	1.21 kg(WITHOUT VALVES)

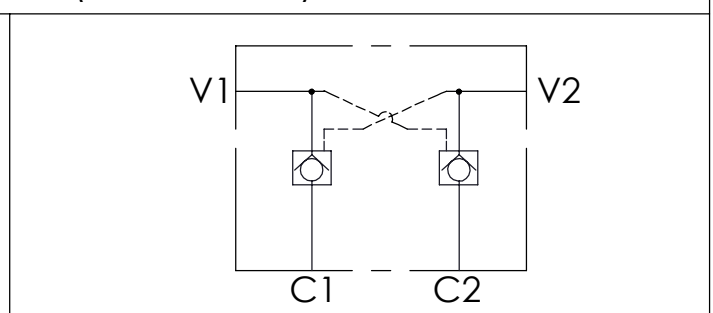
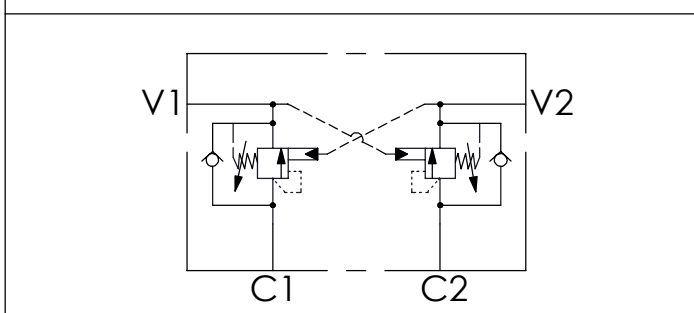
\* If you need the special specification.  
 Please contact us.

Y	SELECTION FOR V2 PORT CONTROL	
<b>2A3</b>	CAVITY ONLY (WITHOUT VALVE)	
<b>CB3H</b>	CB2A33HL (3:1 , 280bar)	
<b>CO20</b>	CO2A3020N (2.0bar)	
The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)		

X	SELECTION FOR V1 PORT CONTROL	
<b>2A3</b>	CAVITY ONLY (WITHOUT VALVE)	
<b>CB3H</b>	CB2A33HL (3:1 , 280bar)	
<b>CO20</b>	CO2A3020N (2.0bar)	

Z	PORT SIZE	
	PORTS V1,V2	PORTS C1,C2
<b>G06</b>	G 3/4"	G 3/4"

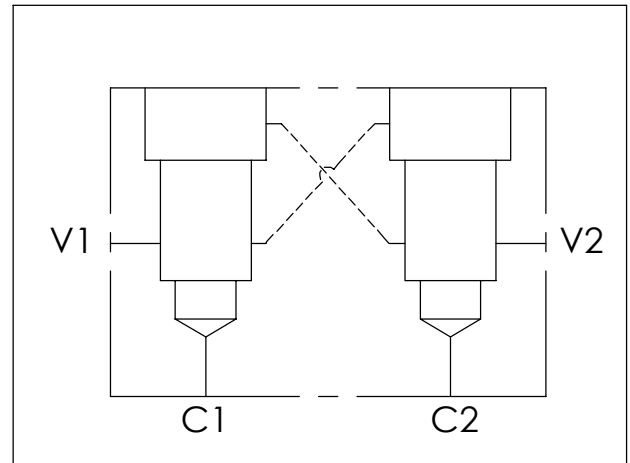
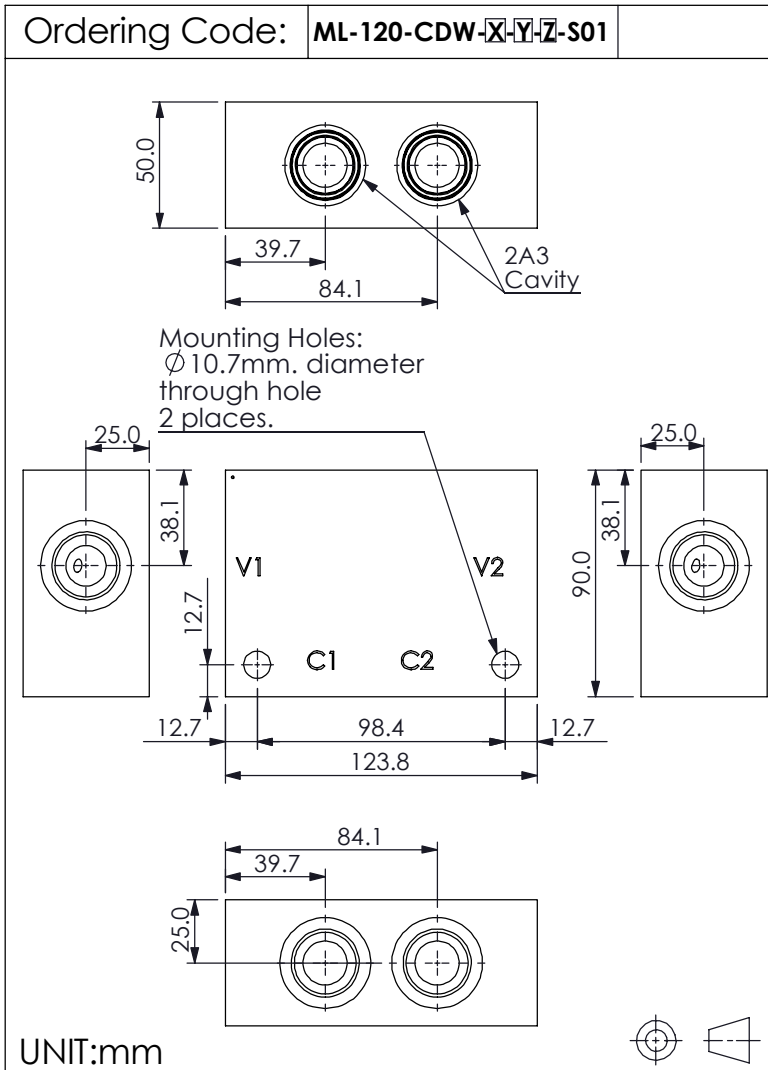
### HYDRAULIC CIRCUITS(WITH VALVES)



Ordering Code: **ML-120-CDW-CB3H-CB3H-A01**

Ordering Code: **ML-120-CDW-CO20-CO20-A01**





### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

Cavity:  
Refer to 2A3

\* Refer to Winner Cartridge Valves Catalog.

Ductile Iron	3.32 kg(WITHOUT VALVES)
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\* If you need the special specification.  
Please contact us.

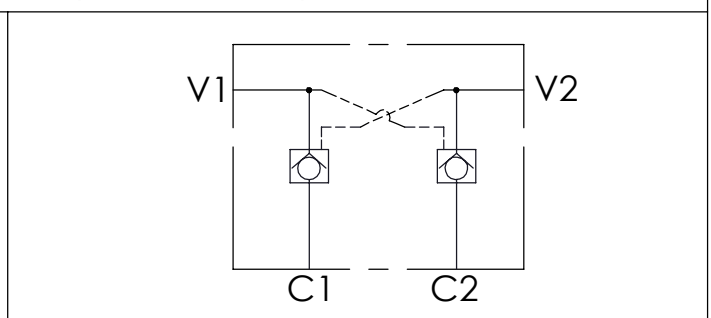
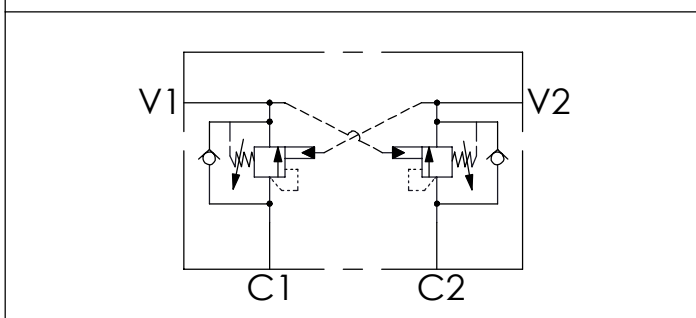
Y	SELECTION FOR V2 PORT CONTROL
<b>2A3</b>	CAVITY ONLY (WITHOUT VALVE)
<b>CB3H</b>	CB2A33HL (3:1 , 280bar)
<b>CO20</b>	CO2A3020N (2.0bar)

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

X	SELECTION FOR V1 PORT CONTROL
<b>2A3</b>	CAVITY ONLY (WITHOUT VALVE)
<b>CB3H</b>	CB2A33HL (3:1 , 280bar)
<b>CO20</b>	CO2A3020N (2.0bar)

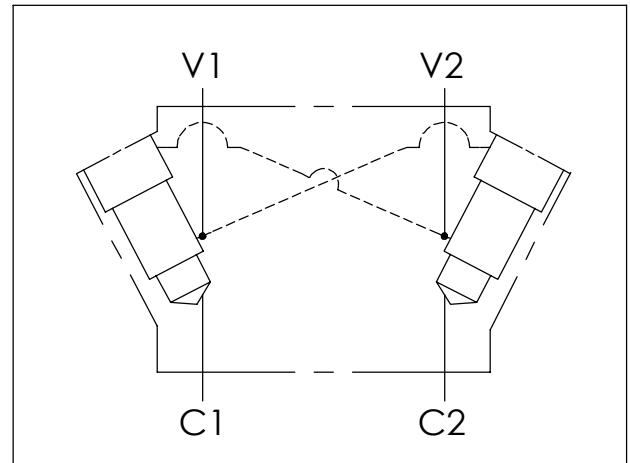
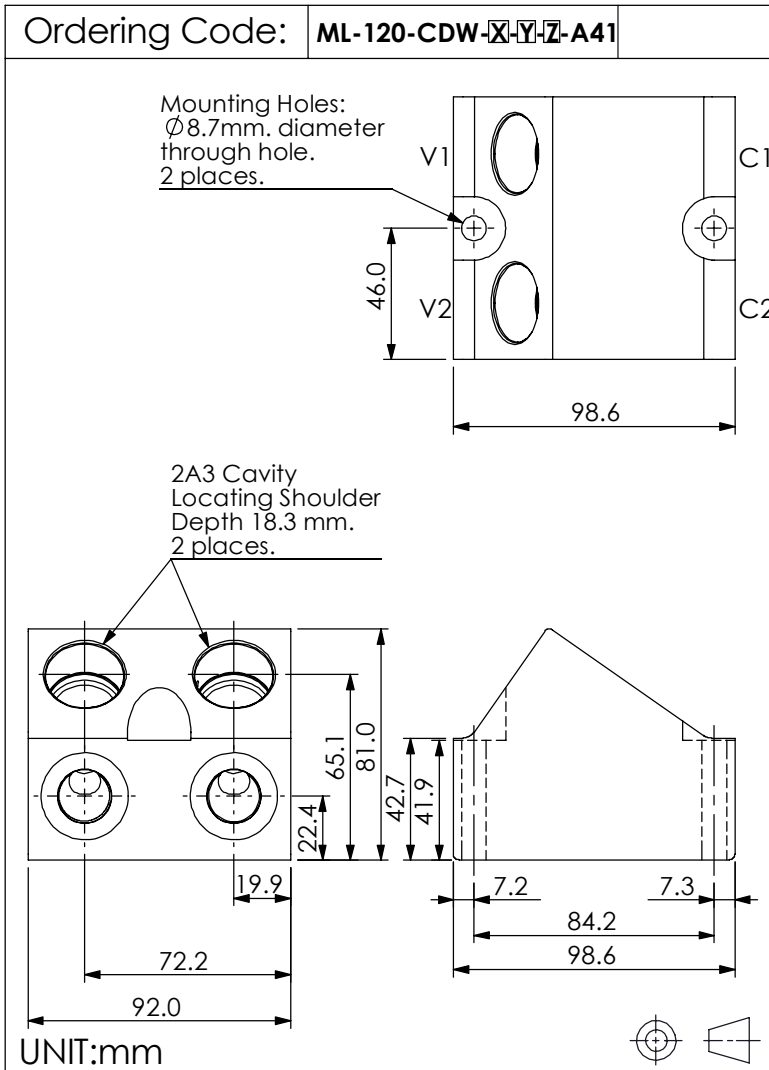
Z	PORT SIZE	
	PORTS V1,V2	PORTS C1,C2
<b>G06</b>	G 3/4"	G 3/4"

### HYDRAULIC CIRCUITS (WITH VALVES)



Ordering Code: **ML-120-CDW-CB3H-CB3H-S01**

Ordering Code: **ML-120-CDW-CO20-CO20-S01**



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron  
Body Pressure Rating: 350 bar

Cavity:  
Refer to 2A3

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	1.18 kg(WITHOUT VALVES)

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

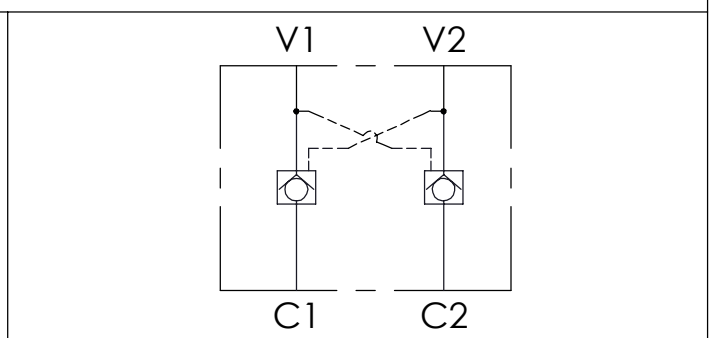
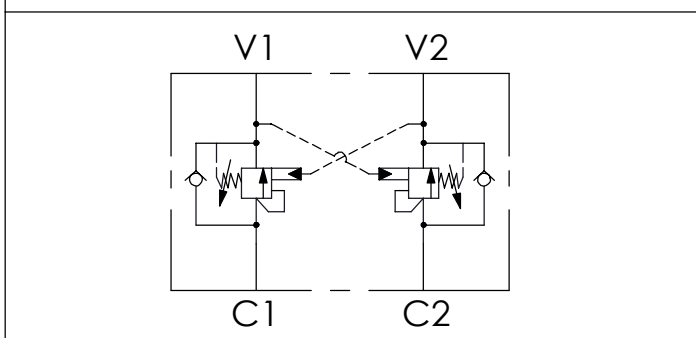
Y	SELECTION FOR V2 PORT CONTROL	
<b>2A3</b>	CAVITY ONLY(WITHOUT VALVE)	
<b>CB3H</b>	CB2A33HL (3:1 , 280bar)	
<b>CO20</b>	CO2A3020N (2.0bar)	

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

X	SELECTION FOR V1 PORT CONTROL	
<b>2A3</b>	CAVITY ONLY(WITHOUT VALVE)	
<b>CB3H</b>	CB2A33HL (3:1 , 280bar)	
<b>CO20</b>	CO2A3020N (2.0bar)	

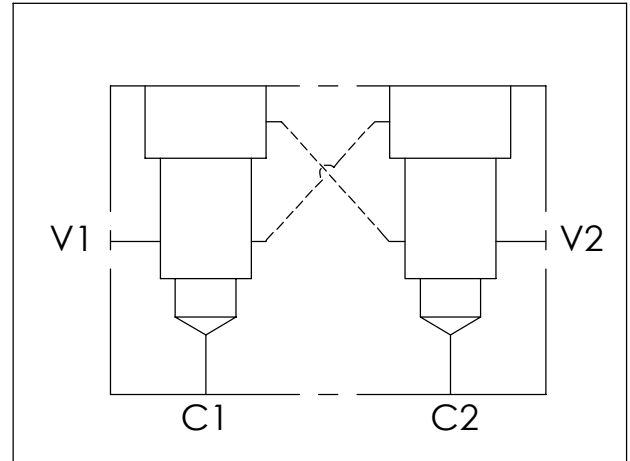
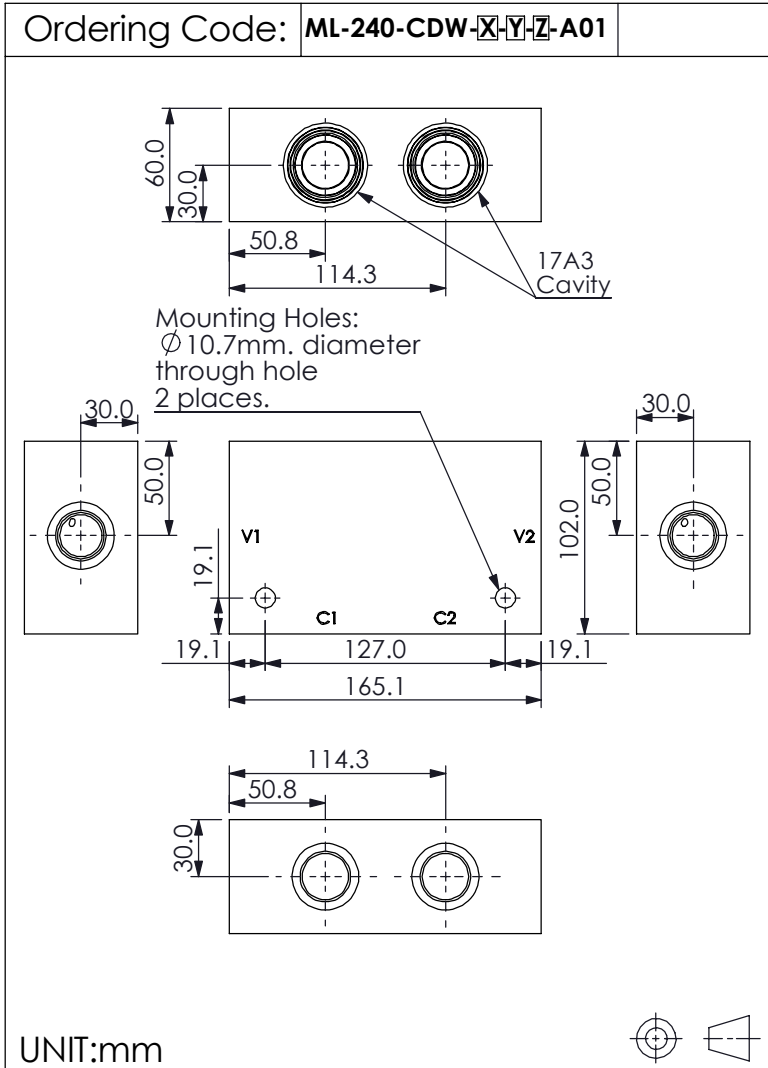
Z	PORT SIZE	
	PORTS V1,V2	PORTS C1,C2
<b>G04</b>	G 1/2"	G 1/2"
<b>G06</b>	G 3/4"	G 3/4"

### HYDRAULIC CIRCUITS(WITH VALVES)



Ordering Code: **ML-120-CDW-CB3H-CB3H-A41**

Ordering Code: **ML-120-CDW-CO20-CO20-A41**



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron  
Body Pressure Rating: 350 bar

Cavity:

Refer to 17A3

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	2.2 kg(WITHOUT VALVES)

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

X	SELECTION FOR V1 PORT CONTROL	
<b>17A3</b>	CAVITY ONLY(WITHOUT VALVE)	
<b>CB3H</b>	CB17A33HL (3:1 , 280bar)	
<b>CO20</b>	CO17A3020N (2.0bar)	

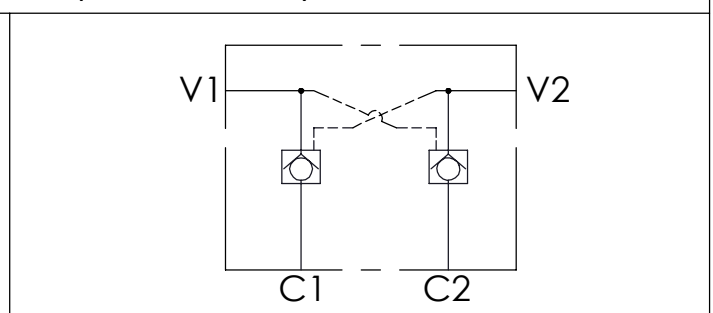
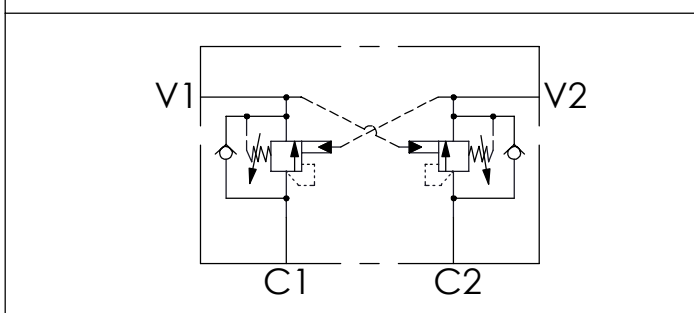
  

Z	PORT SIZE	
	PORTS V1,V2	PORTS C1,C2
<b>G06</b>	G 3/4"	G 3/4"
<b>G08</b>	G1"	G1"
<b>G10</b>	G1-1/4"	G1-1/4"

Y	SELECTION FOR V2 PORT CONTROL	
<b>17A3</b>	CAVITY ONLY(WITHOUT VALVE)	
<b>CB3H</b>	CB17A33HL (3:1 , 280bar)	
<b>CO20</b>	CO17A3020N (2.0bar)	

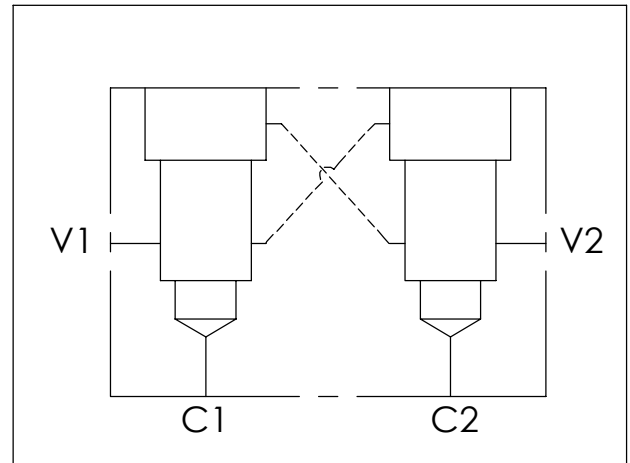
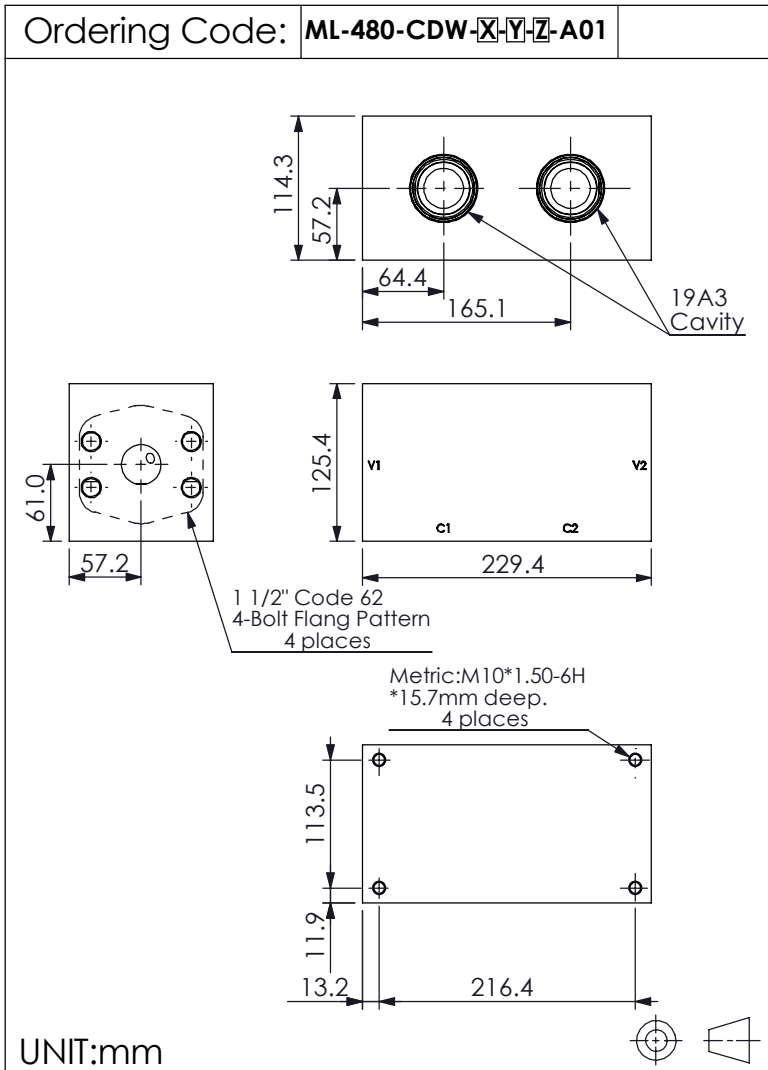
The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

### HYDRAULIC CIRCUITS(WITH VALVES)



Ordering Code: **ML-240-CDW-CB3H-CB3H-A01**

Ordering Code: **ML-240-CDW-CO20-CO20-A01**



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

Cavity:  
Refer to 19A3

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	7.29 kg(WITHOUT VALVES)

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

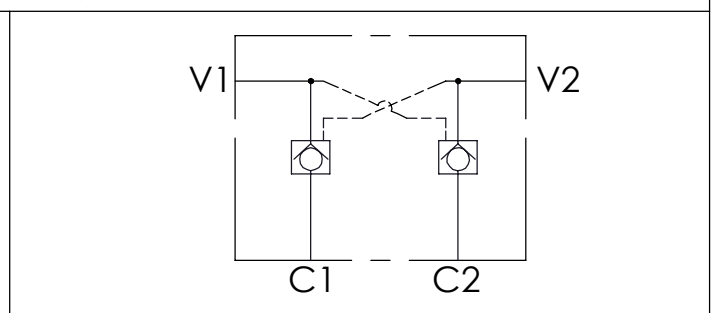
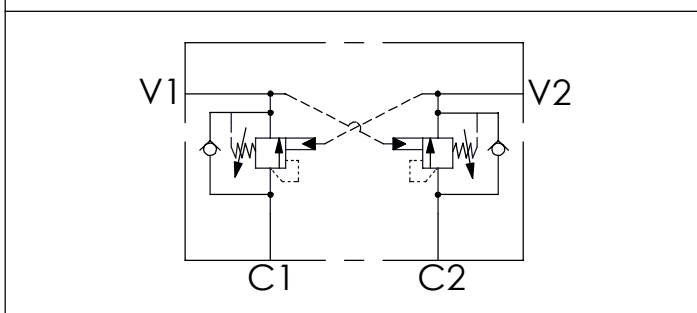
Y	SELECTION FOR V2 PORT CONTROL
<b>19A3</b>	CAVITY ONLY (WITHOUT VALVE)
<b>CB3H</b>	CB19A33HL (3:1 , 280bar)
<b>CO20</b>	CO19A3020N (2.0bar)
The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)	

X	SELECTION FOR V1 PORT CONTROL
<b>19A3</b>	CAVITY ONLY (WITHOUT VALVE)
<b>CB3H</b>	CB19A33HL (3:1 , 280bar)
<b>CO20</b>	CO19A3020N (2.0bar)

Z	PORT SIZE	
	PORTS V1,V2	PORTS C1,C2
<b>F60</b>	1 1/2" Code 62 4-Bolt Flang Pattern	1 1/2" Code 62 4-Bolt Flang Pattern

### HYDRAULIC CIRCUITS (WITH VALVES)



Ordering Code: **ML-480-CDW-CB3H-CB3H-A01**

Ordering Code: **ML-480-CDW-CO20-CO20-A01**

Ordering Code: **ML-60-FRW-X-Y-Z-A01**

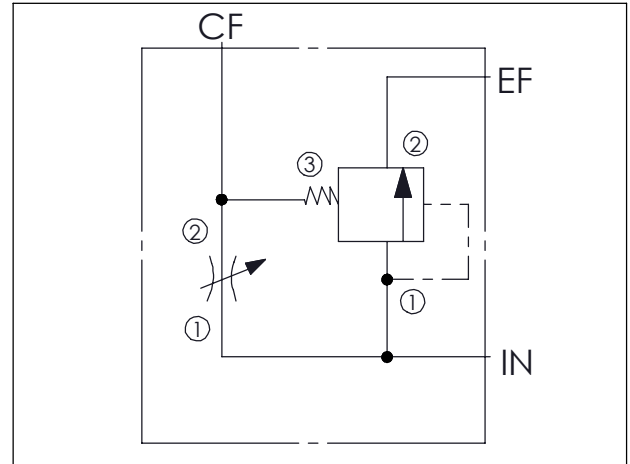
Metric: M8\*1.25-6H  
\*13.0mm deep  
2 places.

LR11A

NV13A

Mounting Holes:  
Ø8.7mm. diameter  
through hole  
2 places.

UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar

Ductile Iron  
Body Pressure Rating: 350 bar

Rated flow: 60 LPM

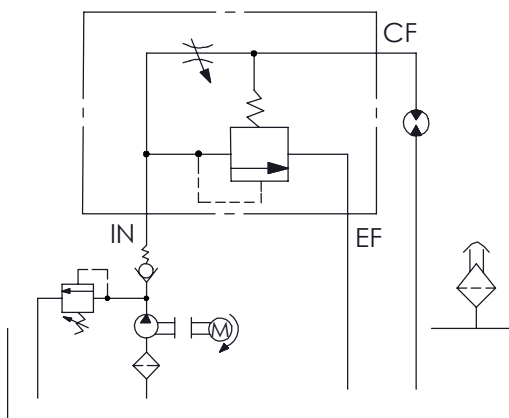
Cavity:  
Refer to 13A2  
11A3

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.88 kg(INCLUDE VALVES)
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\* If you need the special specification.  
Please contact us.

TYPICAL CIRCUIT:  
(WITHOUT RELIEF FUNCTION)



### X NEEDLE VALVES

<b>13A2</b>	WITHOUT VALVE	
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<b>NV84</b>	NV13A2884L	
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The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

### PORT SIZE

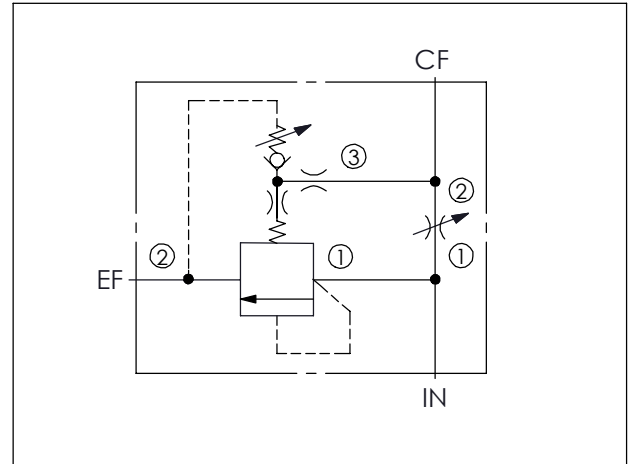
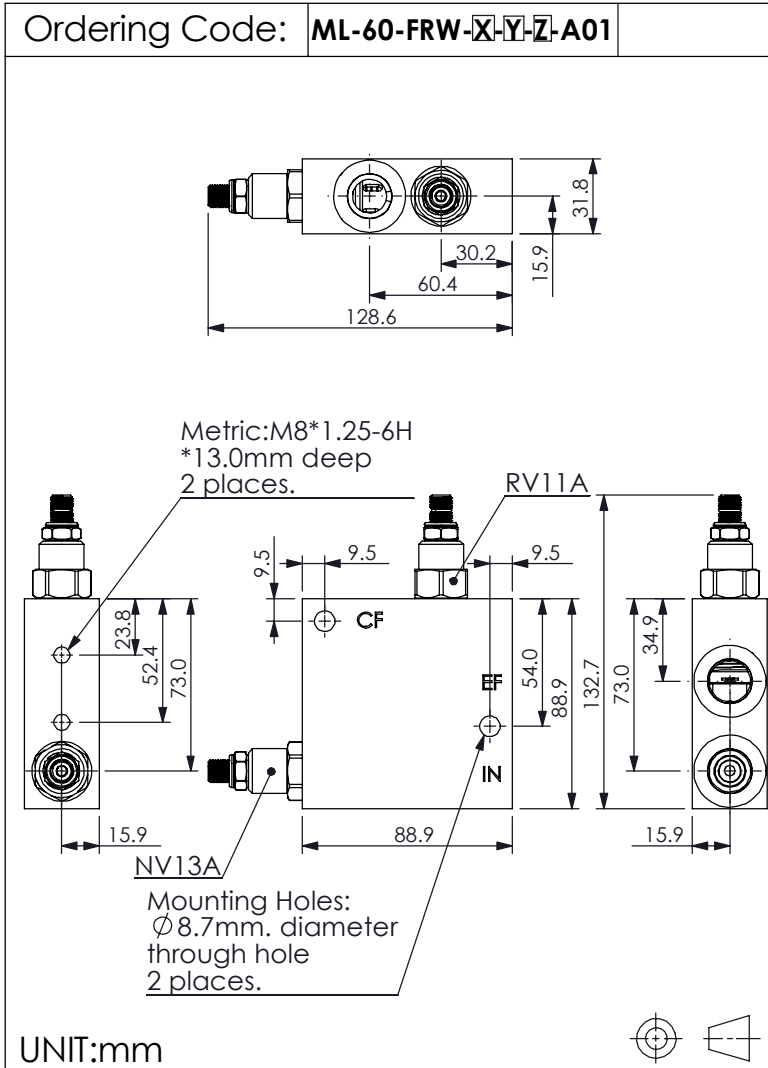
Z	PORTS	PORT	
	IN,EF	CF	
<b>G04</b>	G 1/2"	G 1/2"	

### Y BYPASS COMPENSATOR

<b>11A3</b>	WITHOUT VALVE	
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<b>LR140</b>	LR11A30140N(60LPM, ΔP=14bar)	
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The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar

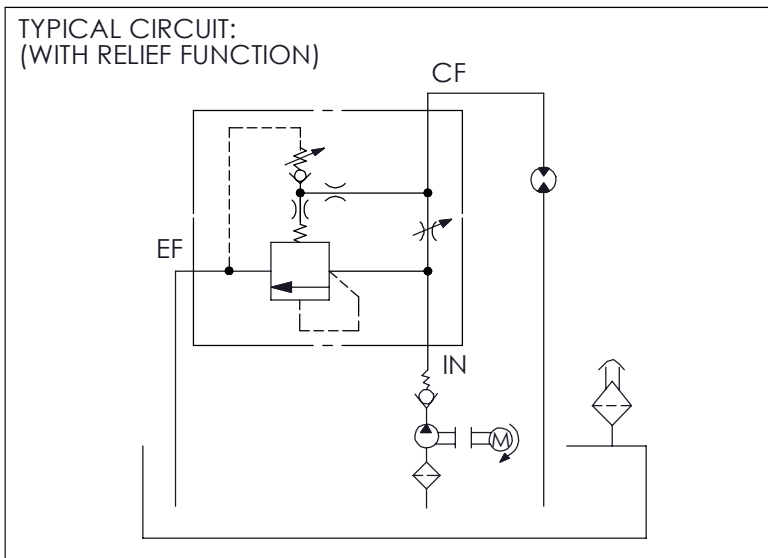
Ductile Iron  
Body Pressure Rating: 350 bar

Rated flow: 60 LPM

Cavity:  
Refer to 13A2  
11A3  
\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.88 kg(INCLUDE VALVES)
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\* If you need the special specification.  
Please contact us.



### X NEEDLE VALVES

<b>13A2</b>	WITHOUT VALVE	
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<b>NV84</b>	NV13A2884L	
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The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

### PORT SIZE

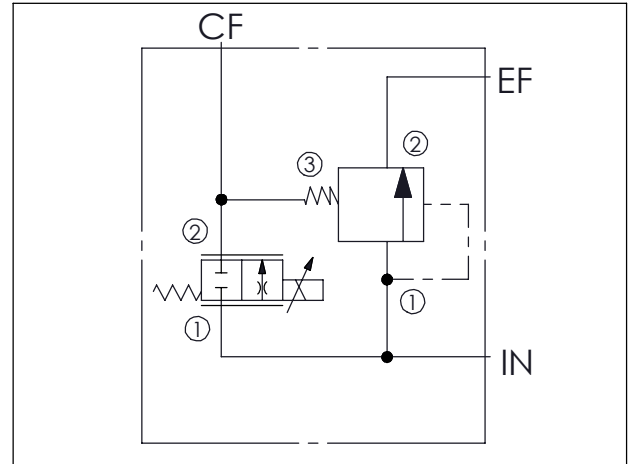
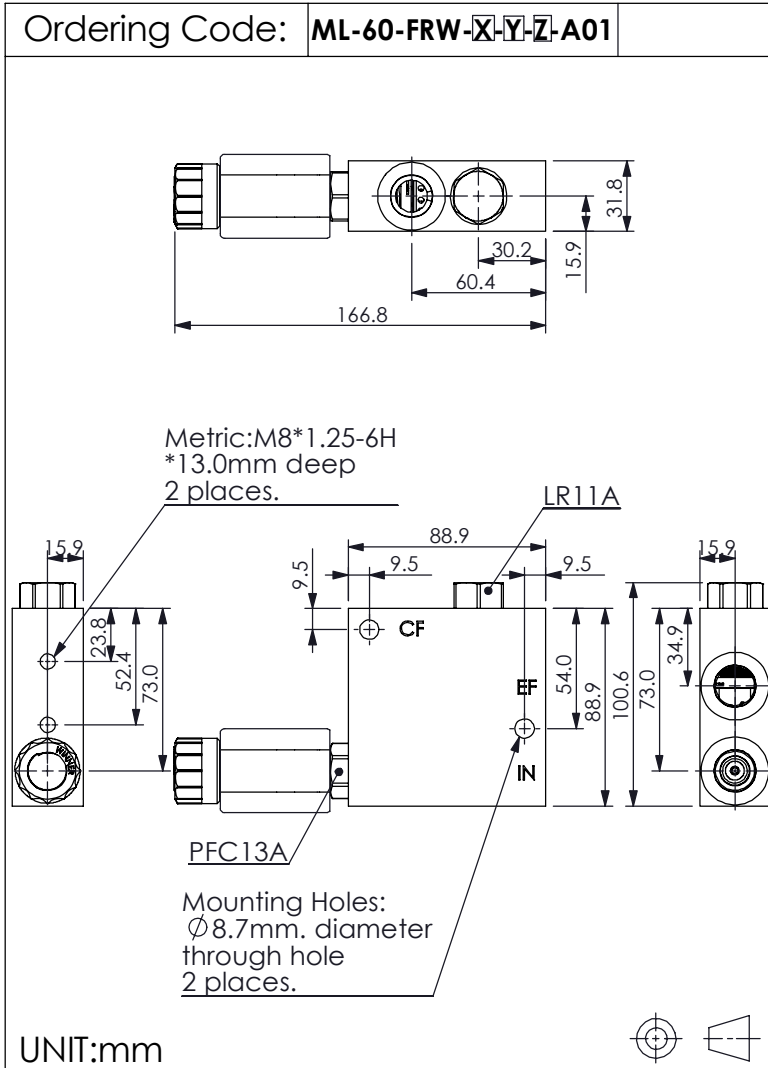
<b>Z</b>	<b>PORTS</b>	<b>PORT</b>	
	<b>IN,EF</b>	<b>CF</b>	
<b>G04</b>	G 1/2"	G 1/2"	

### Y BYPASS COMPENSATOR

<b>11A3</b>	WITHOUT VALVE	
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<b>RV0A</b>	RV11A3BAL(40LPM, ΔP=7bar)	
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The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar

Ductile Iron  
Body Pressure Rating: 350 bar

Rated flow: 40 LPM

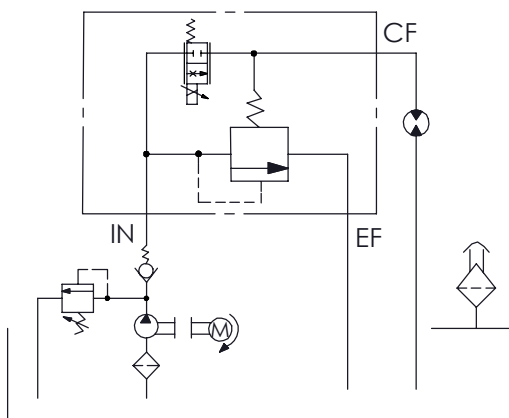
Cavity:  
Refer to 13A2  
11A3

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	1.1 kg(INCLUDE VALVES)

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

TYPICAL CIRCUIT:  
(WITHOUT RELIEF FUNCTION)



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

<b>13A2</b>	CAVITY ONLY(WITHOUT VALVE)
<b>PFC06</b>	PFC13A2D0060N(0.4~6LPM)
<b>PFC14</b>	PFC13A2D0140N(0.6~14LPM)
<b>PFC28</b>	PFC13A2D0280N(0.8~28LPM)
<b>PFC40</b>	PFC13A2D0400N(1.0~40LPM)

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

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

<b>Y</b>	<b>BYPASS COMPENSATOR</b>
<b>11A3</b>	WITHOUT VALVE
<b>LR140</b>	LR11A30140N(60LPM, ΔP=14bar)

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

<b>Z</b>	<b>PORT SIZE</b>	
	<b>PORTS</b>	<b>PORT</b>
	<b>IN,EF</b>	<b>CF</b>
<b>G04</b>	G 1/2"	G 1/2"

Ordering Code: **ML-120-FRW-X-Y-Z-A01**

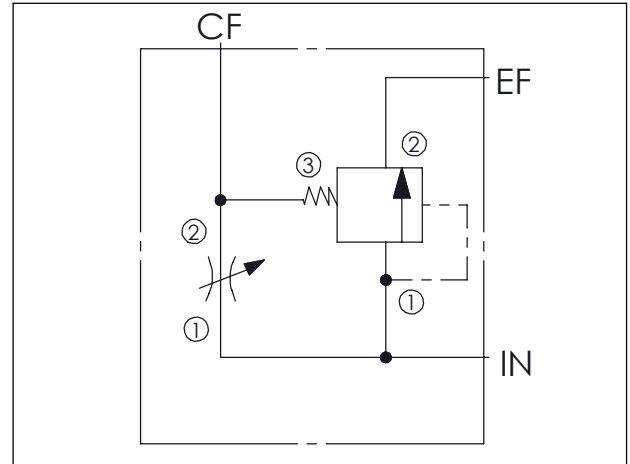
Metric: M10\*1.50-6H  
\*16.0mm deep  
2 places.

LR2A

NV5A

Mounting Holes:  
Ø8.7mm. diameter  
through hole  
2 places.

UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar

Ductile Iron  
Body Pressure Rating: 350 bar

Rated flow: 120 LPM

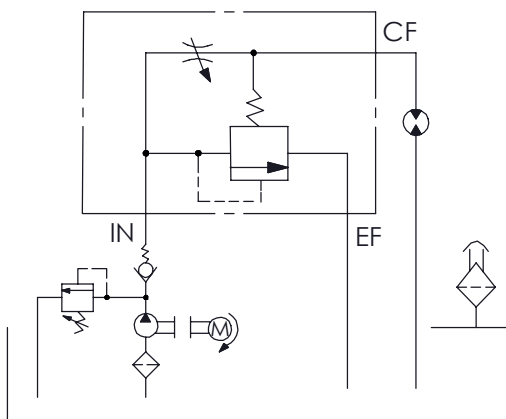
Cavity:  
Refer to 5A2  
2A3

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	1.8 kg(INCLUDE VALVES)

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

TYPICAL CIRCUIT:  
(WITHOUT RELIEF FUNCTION)



### X NEEDLE VALVES

<b>5A2</b>	WITHOUT VALVE	
<b>NV127</b>	NV5A28127L	

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow · pressure · ... etc.)

### PORT SIZE

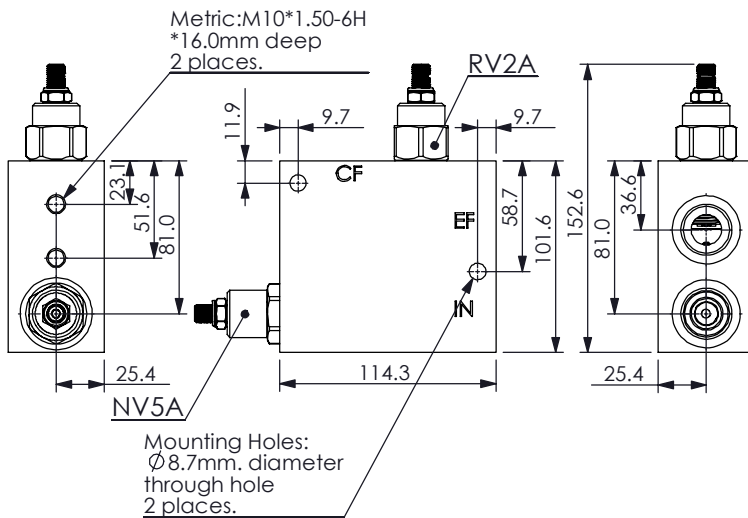
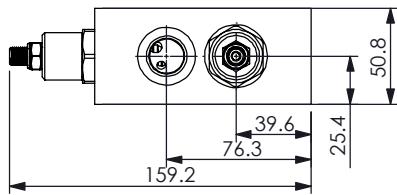
<b>Z</b>	<b>PORTS</b>	<b>PORT</b>	
	<b>IN,EF</b>	<b>CF</b>	
<b>G06</b>	G 3/4"	G 1/2"	

<b>Y</b>	<b>BYPASS COMPENSATOR</b>	
<b>2A3</b>	WITHOUT VALVE	
<b>LR140</b>	LR2A30140N(120LPM, ΔP=14bar)	

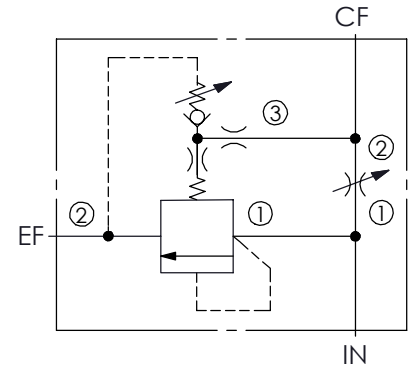
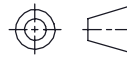
The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow · pressure · ... etc.)



Ordering Code: **ML-120-FRW-X-Y-Z-A01**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar

Ductile Iron Body Pressure Rating: 350 bar

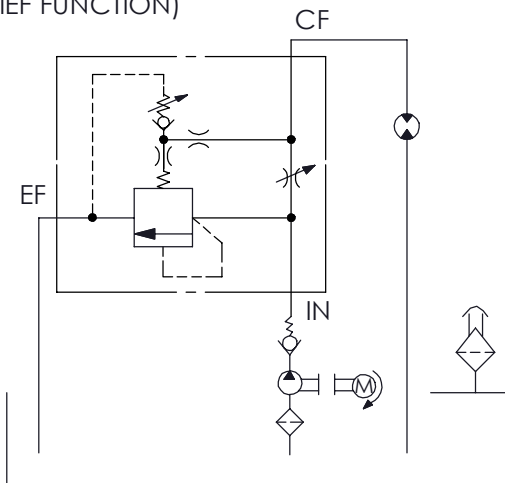
Rated flow: 120 LPM

Cavity:  
Refer to 5A2  
2A3  
\* Refer to Winner Cartridge Valves Catalog.

Aluminum	1.8 kg(INCLUDE VALVES)

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

TYPICAL CIRCUIT:  
(WITH RELIEF FUNCTION)



### X NEEDLE VALVES

<b>5A2</b>	WITHOUT VALVE	
<b>NV127</b>	NV5A28127L	

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

### PORT SIZE

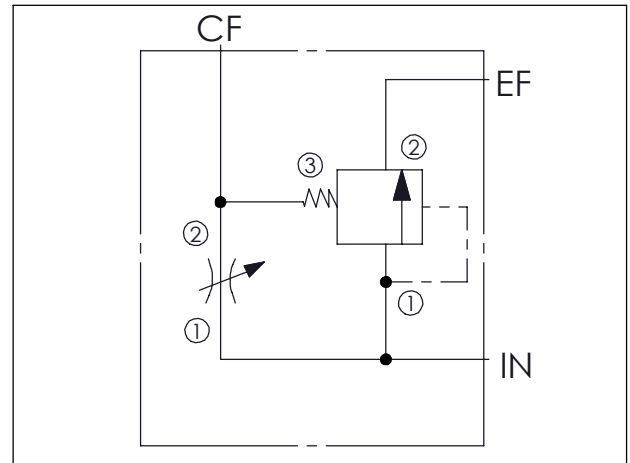
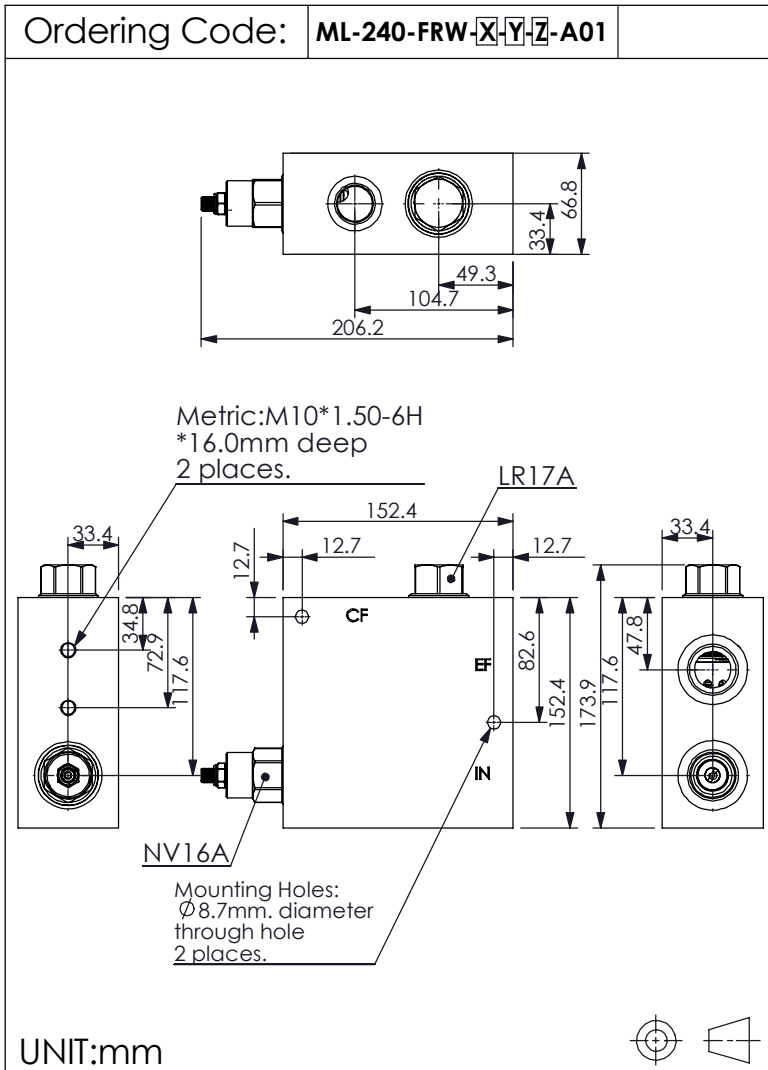
<b>Z</b>	<b>PORTS</b>	<b>PORT</b>	
	<b>IN,EF</b>	<b>CF</b>	
<b>G06</b>	G 3/4"	G 1/2"	

### Y BYPASS COMPENSATOR

**2A3** WITHOUT VALVE

**RV0A** RV2A3BAL(80LPM,  $\Delta P=8\text{bar}$ )

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar

Ductile Iron  
Body Pressure Rating: 350 bar

Rated flow: 240 LPM

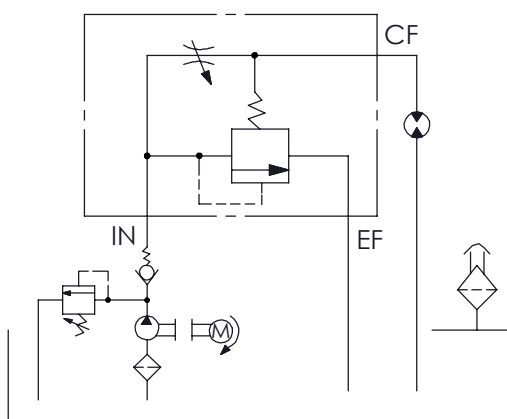
Cavity:  
Refer to 16A2  
17A3

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	4.6 kg(INCLUDE VALVES)

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

TYPICAL CIRCUIT:  
(WITHOUT RELIEF FUNCTION)



### X NEEDLE VALVES

**16A2** WITHOUT VALVE

**NV175** NV16A28175L

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

### PORT SIZE

**Z**

PORTS	PORT
IN,EF	CF

**G08** G 1" G 3/4"

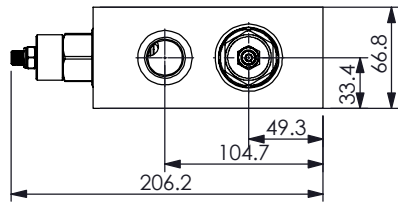
### Y BYPASS COMPENSATOR

**17A3** WITHOUT VALVE

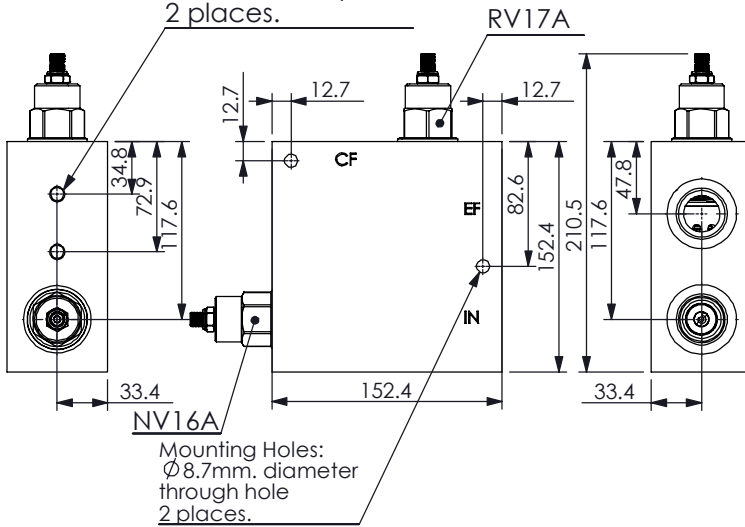
**LR140** LR17A30140N(240LPM, ΔP=14bar)

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

Ordering Code: **ML-240-FRW-X-Y-Z-A01**

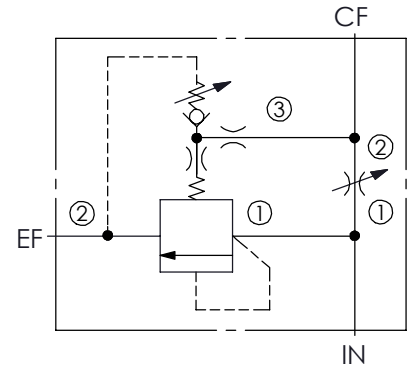
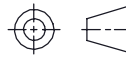


Metric: M10\*1.50-6H  
\*16.0mm deep  
2 places.



Mounting Holes:  
Ø8.7mm. diameter  
through hole  
2 places.

UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar

Ductile Iron  
Body Pressure Rating: 350 bar

Rated flow: 240 LPM

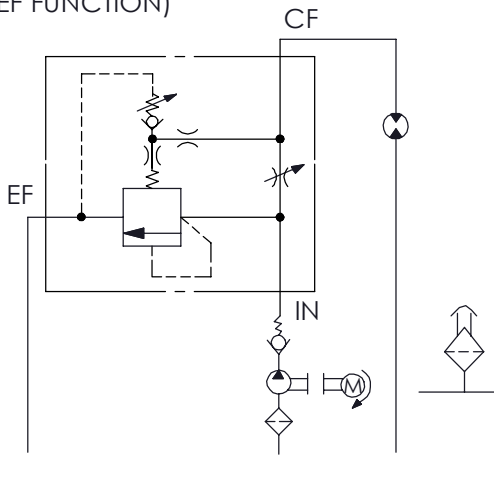
Cavity:  
Refer to 16A2  
17A3

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	4.6 kg(INCLUDE VALVES)
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\* If you need the special specification.  
Please contact us.

TYPICAL CIRCUIT:  
(WITH RELIEF FUNCTION)



**X**

### NEEDLE VALVES

<b>16A2</b>	WITHOUT VALVE	
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<b>NV175</b>	NV16A28175L	
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The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

**Z**

### PORT SIZE

PORTS	PORT
IN,EF	CF

<b>G08</b>	G 1"	G 3/4"
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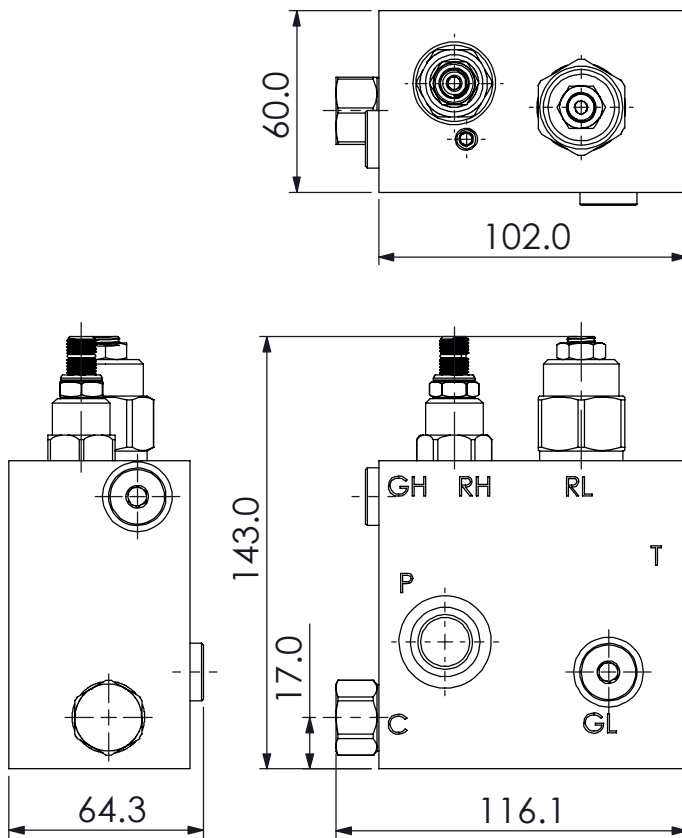
**Y** BYPASS COMPENSATOR

<b>17A3</b>	WITHOUT VALVE
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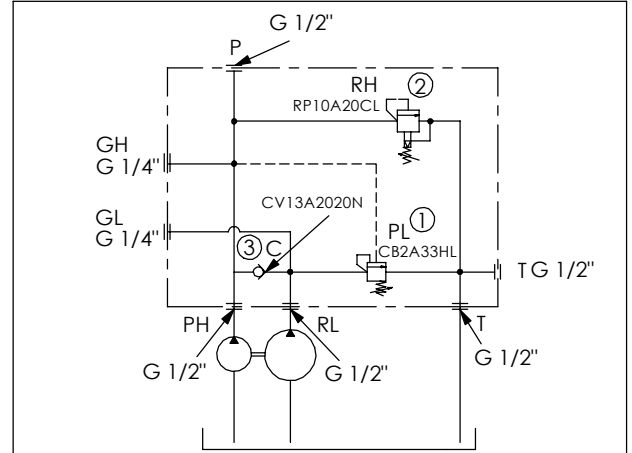
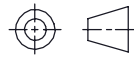
<b>RV0A</b>	RV17A3BAL(160LPM, ΔP=8bar)
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The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

Ordering Code: **ML-60-HLP-G04-X01**



UNIT:mm



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar

Cavity:  
Refer to CB2A33HL  
CV13A2020N  
RP10A20CL  
\* Refer to Winner Cartridge Valve Catalog.

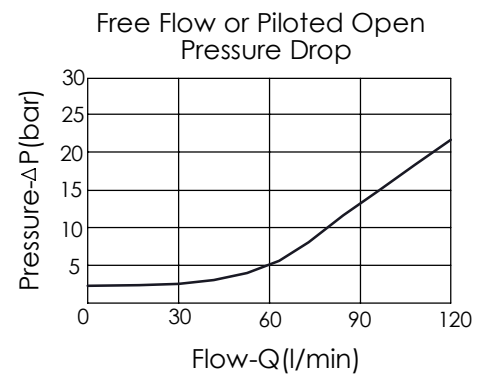
Aluminum	1.36 kg(WITHOUT VALVES) 1.9 kg(INCLUDE VALVES)
Ductile Iron	5.5 kg(WITHOUT VALVES) 6.04 kg(INCLUDE VALVES)

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

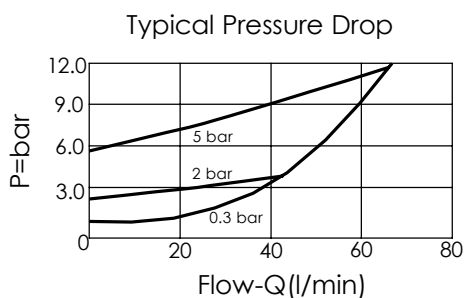
### X BODY MATERIAL

**A HIGH-STRENGTH ALUMINUM**

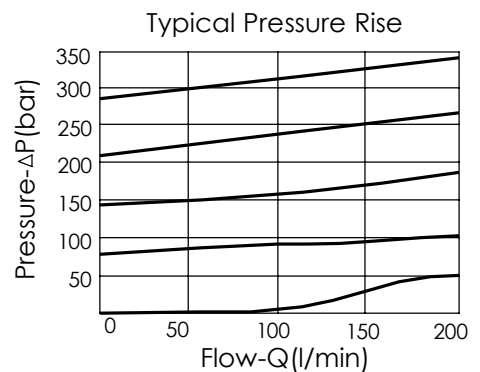
**S DUCTILE IRON**



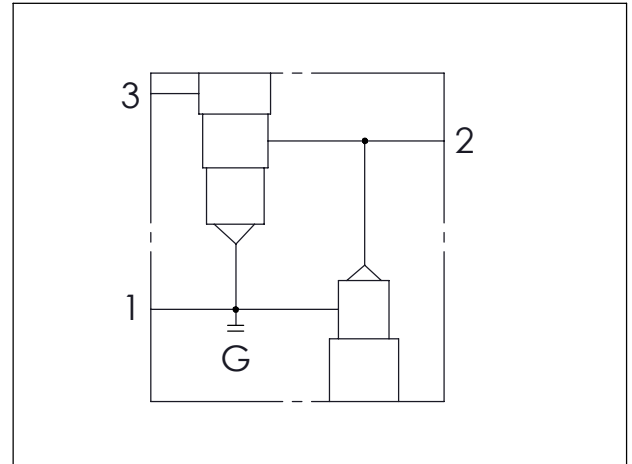
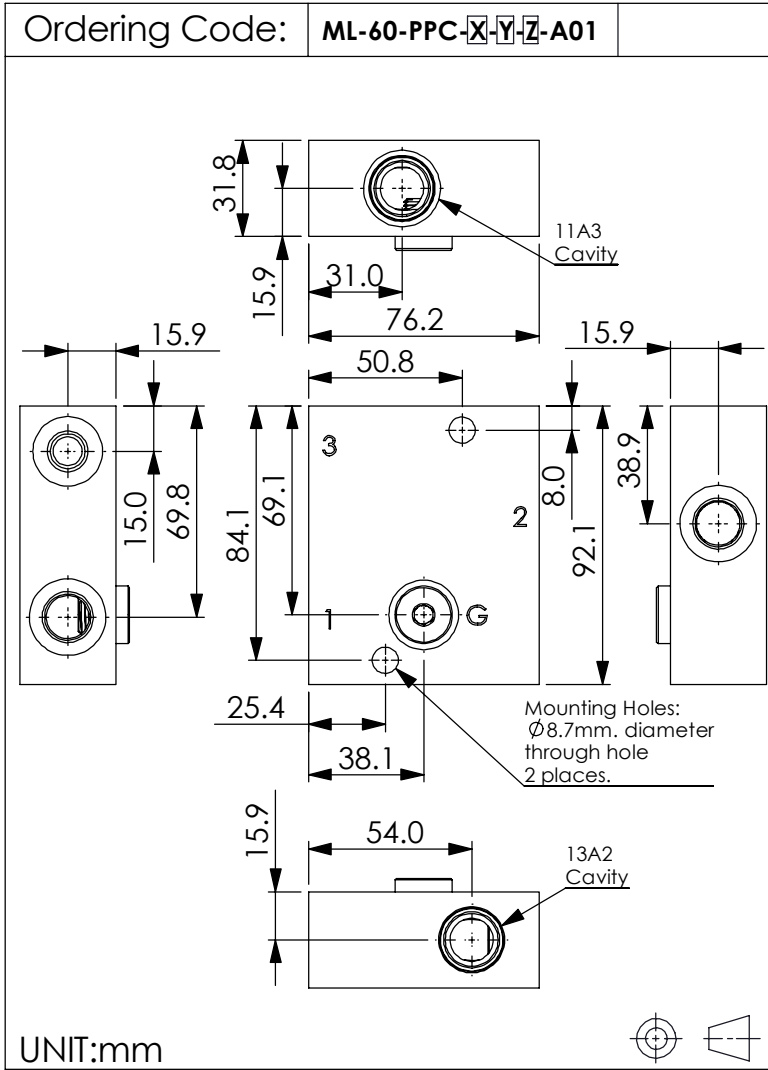
COUNTERBALANCE VALVE:CB2A33HL



CHECK VALVE:CV13A2020N



RELIEF VALVE:RP10A20CL



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

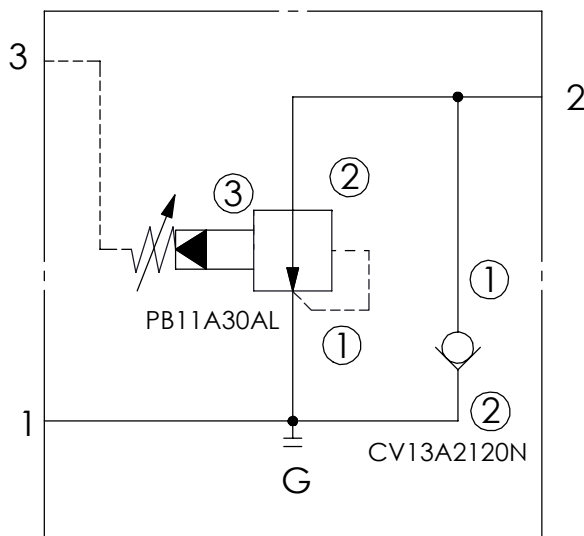
Cavity:  
Refer to 11A3  
13A2

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.5 kg(WITHOUT VALVES)

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

### TYPICAL CIRCUIT:



### X CARTRIDGE VALVES SELECTION

**11A3** CAVITY ONLY(WITHOUT VALVE)

**PB0A** PB11A30AL (40LPM, 7-210bar)

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow, pressure, ... etc.)

### Y SELECTION FOR SOLENOID VALVES (REFER TO CV13A-X-Y-Z)

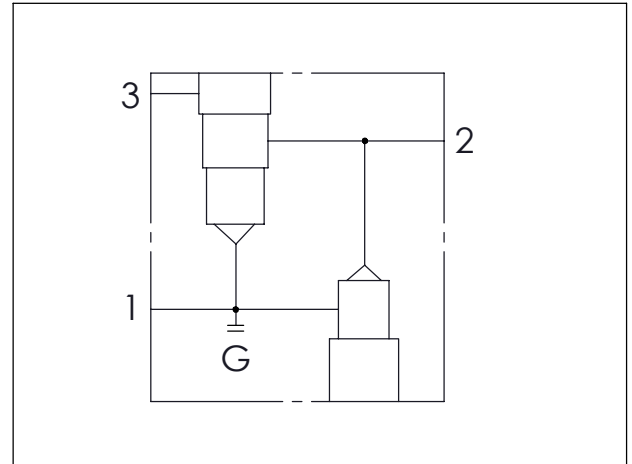
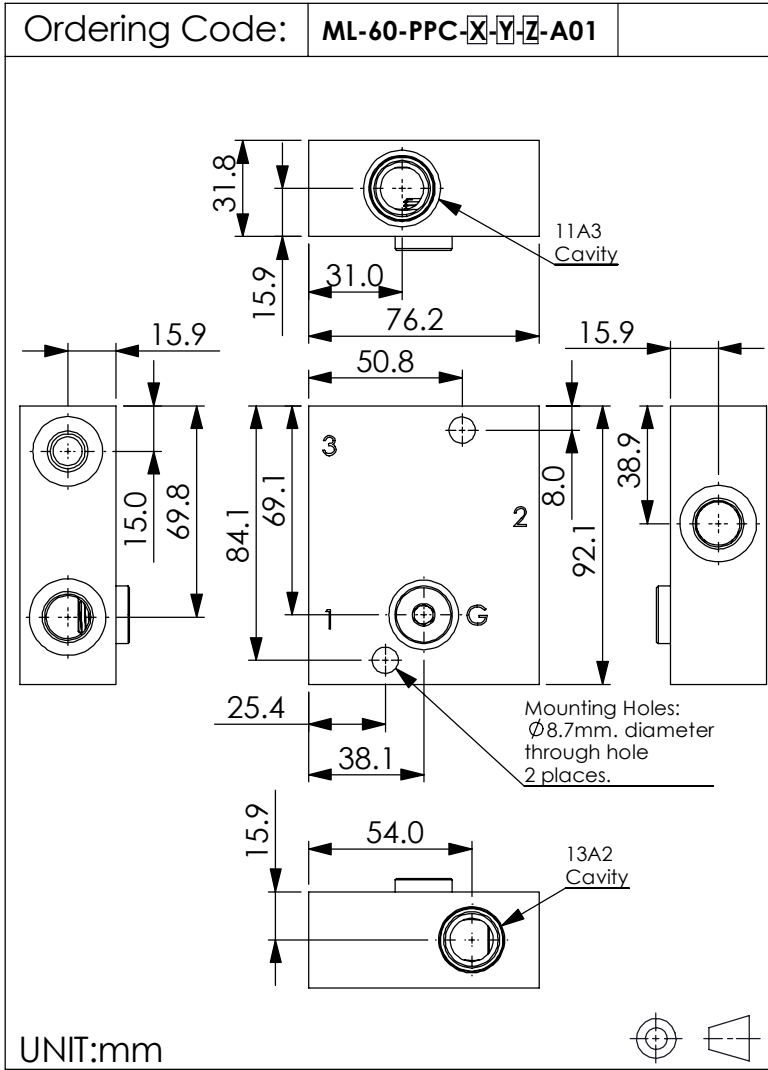
**13A2** CAVITY ONLY(WITHOUT VALVE)

**CV20** CV13A2120N(60LPM, 2.0bar)

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow, pressure, ... etc.)

### PORT SIZE

Z	PORTS		
	PORT 1,2	PORT 3	PORT G
<b>G03</b>	G 3/8"	G 1/4"	G 1/4"



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

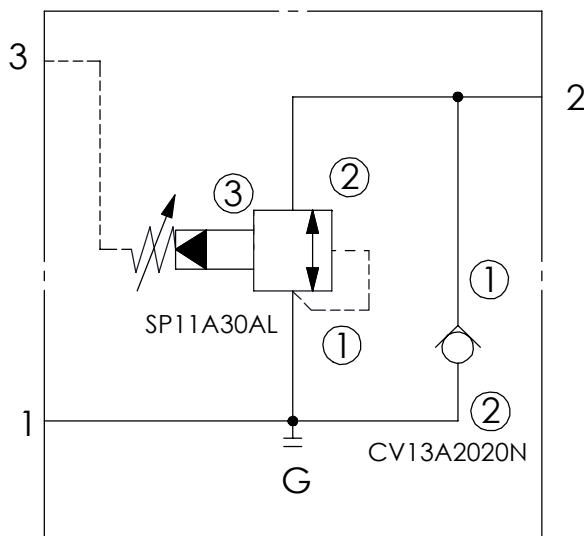
Cavity:  
Refer to 11A3  
13A2

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.5 kg(WITHOUT VALVES)

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

### TYPICAL CIRCUIT:



### X CARTRIDGE VALVES SELECTION

**11A3** CAVITY ONLY(WITHOUT VALVE)

**SP0A** SP11A30AL (60LPM, 7-210bar)

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow, pressure, ... etc.)

### Y SELECTION FOR SOLENOID VALVES (REFER TO CV13A-X-Y-Z)

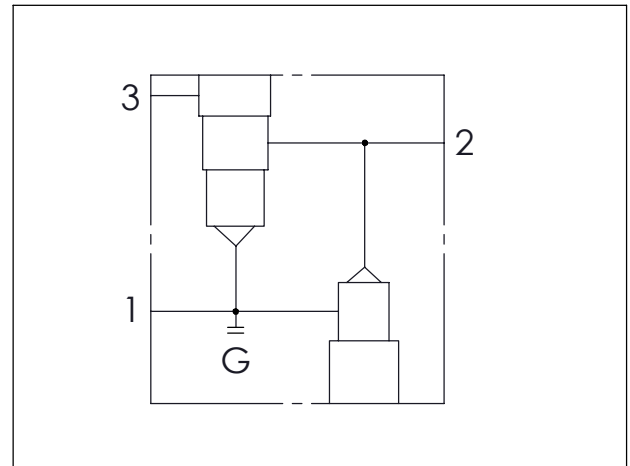
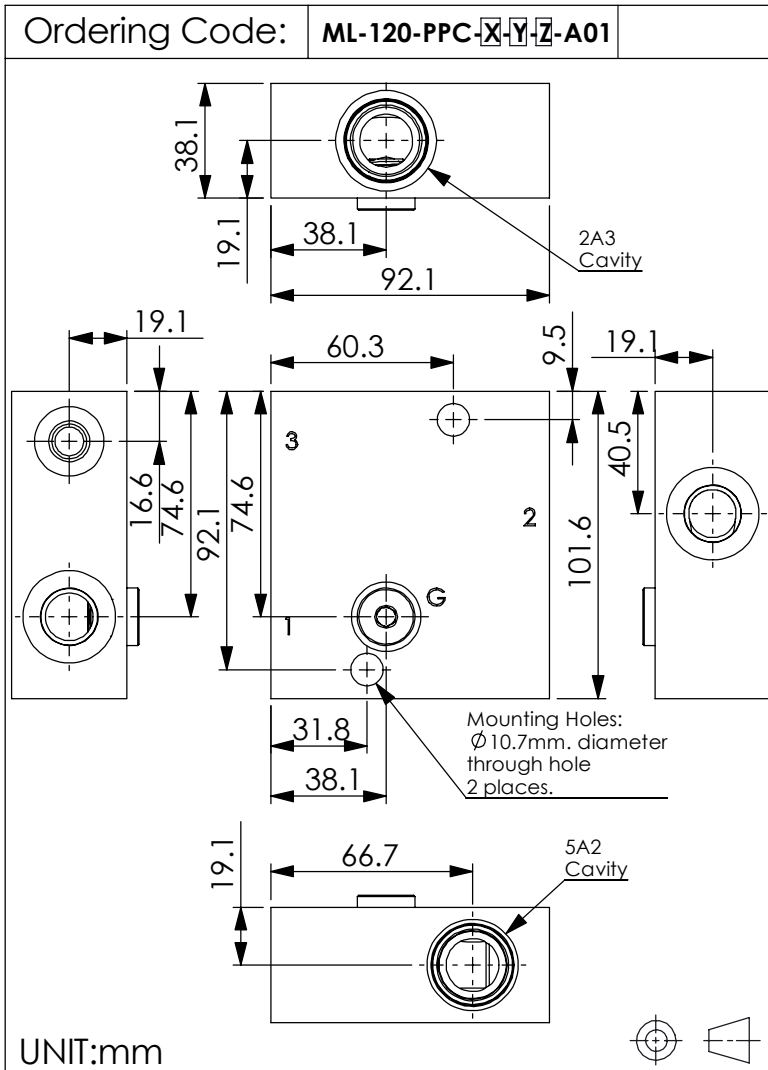
**13A2** CAVITY ONLY(WITHOUT VALVE)

**CV20** CV13A2020N(80LPM, 2.0bar)

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow, pressure, ... etc.)

### PORT SIZE

Z	PORTS		
	PORT 1,2	PORT 3	PORT G
<b>G03</b>	G 3/8"	G 1/4"	G 1/4"



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

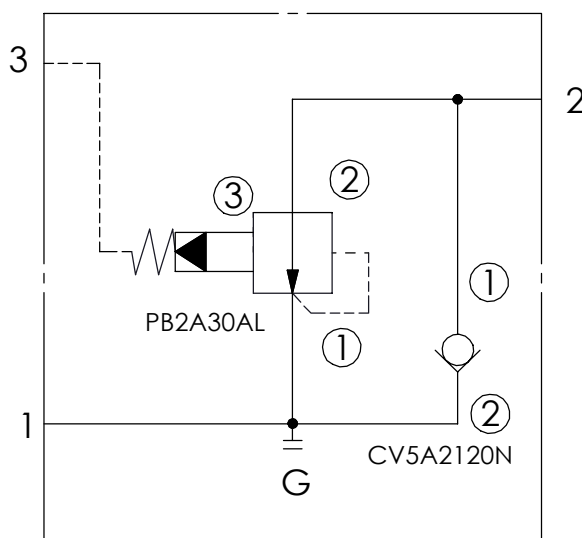
Cavity:  
Refer to 2A3  
5A2

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.8 kg(WITHOUT VALVES)

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

### TYPICAL CIRCUIT:



### X CARTRIDGE VALVES SELECTION

**2A3** CAVITY ONLY(WITHOUT VALVE)

**PB0A** PB2A30AL (80LPM , 7-210bar)

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

### Y SELECTION FOR SOLENOID VALVES (REFER TO CV5A-X-Y-Z)

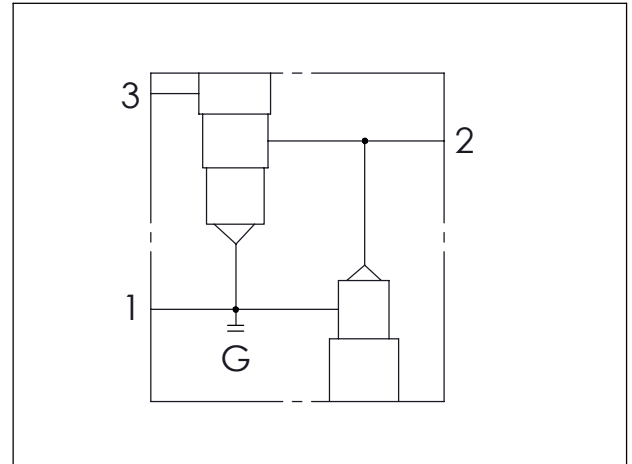
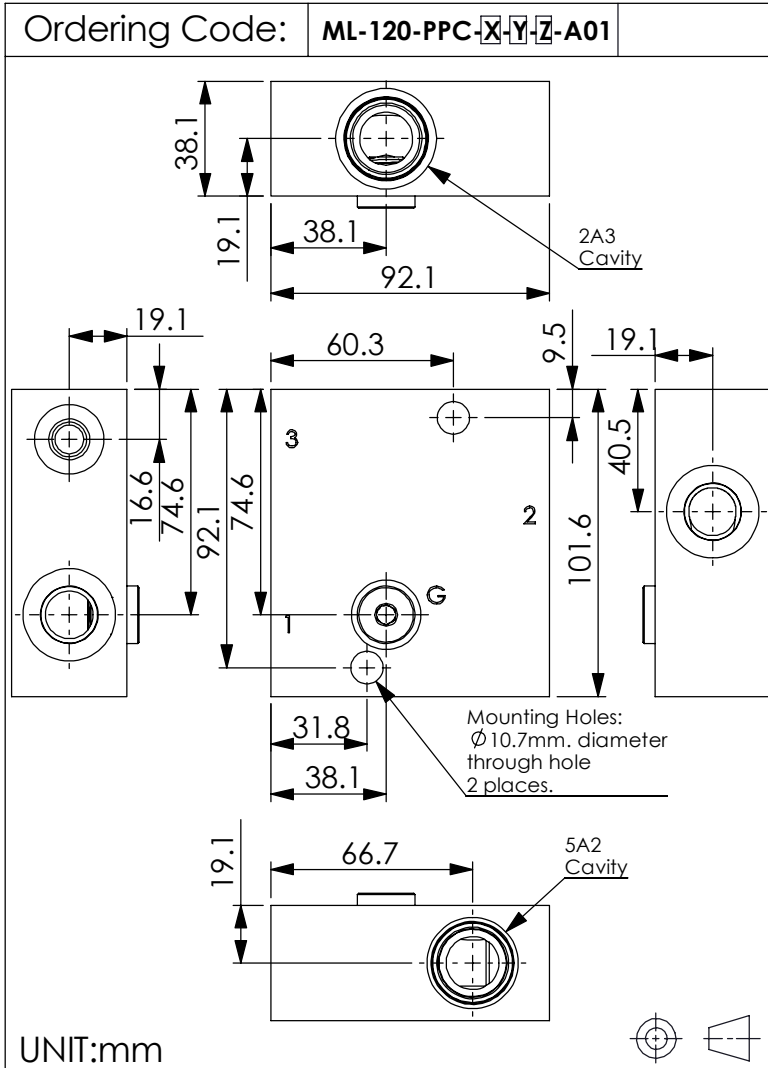
**5A2** CAVITY ONLY(WITHOUT VALVE)

**CV20** CV5A2120N(120LPM,2.0bar)

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

### PORT SIZE

Z	PORTS		
	1,2	3	G
<b>G04</b>	G 1/2"	G 1/4"	G 1/4"



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
 Ductile Iron Body Pressure Rating: 350 bar

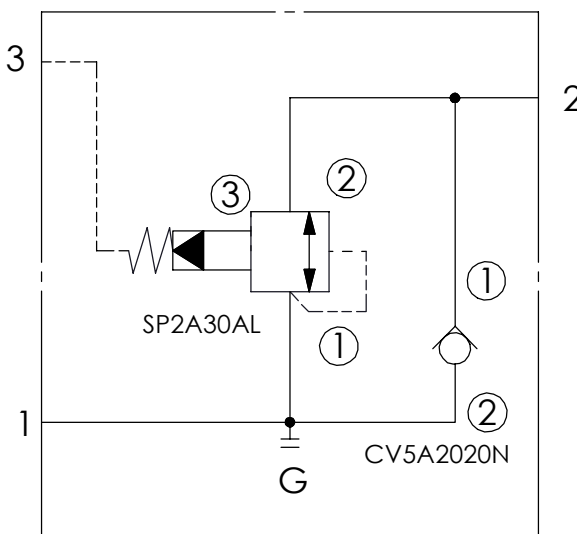
Cavity:  
 Refer to 2A3  
 5A2

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.8 kg(WITHOUT VALVES)

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

### TYPICAL CIRCUIT:



### X CARTRIDGE VALVES SELECTION

**2A3** CAVITY ONLY(WITHOUT VALVE)

**SP0A** SP2A30AL (120LPM , 7-210bar)

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

### Y SELECTION FOR SOLENOID VALVES (REFER TO CV5A-X-Y-Z)

**5A2** CAVITY ONLY(WITHOUT VALVE)

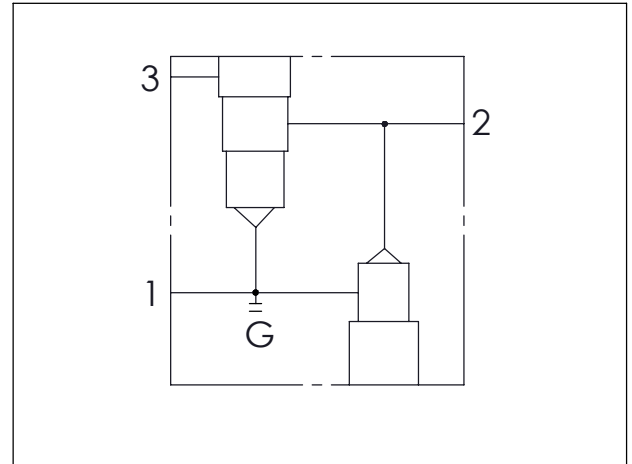
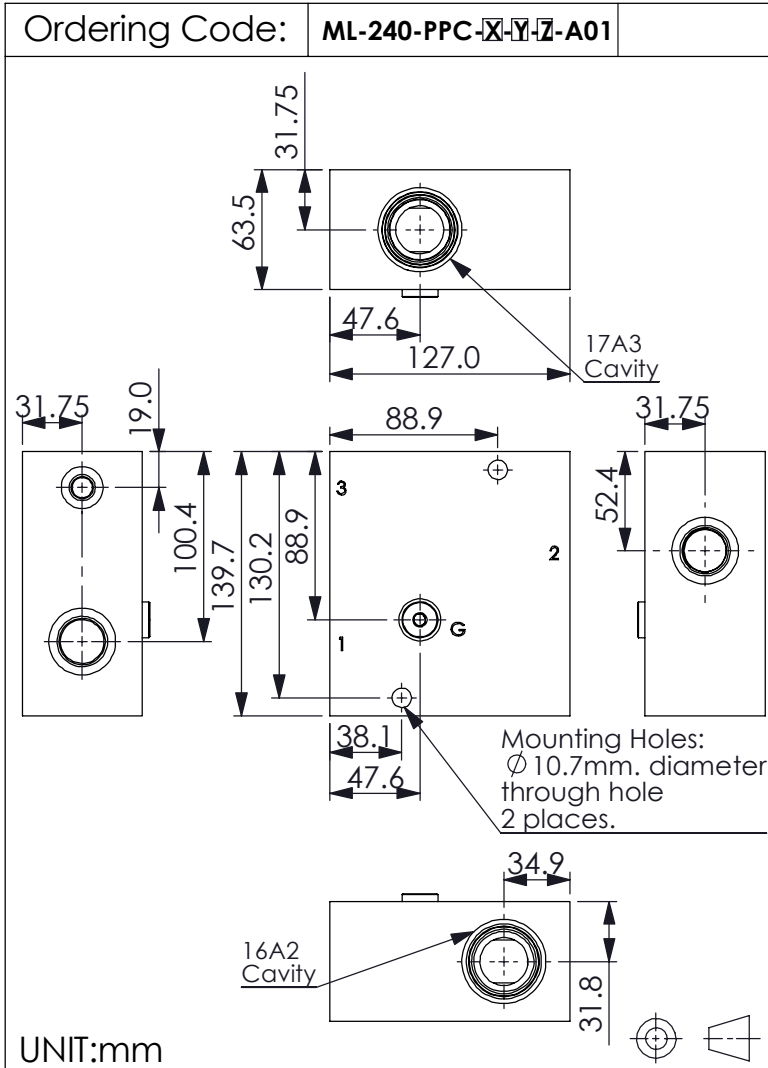
**CV20** CV5A2020N(160LPM,2.0bar)

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

### PORT SIZE

Z	PORTS		
	1,2	3	G
<b>G04</b>	G 1/2"	G 1/4"	G 1/4"





### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

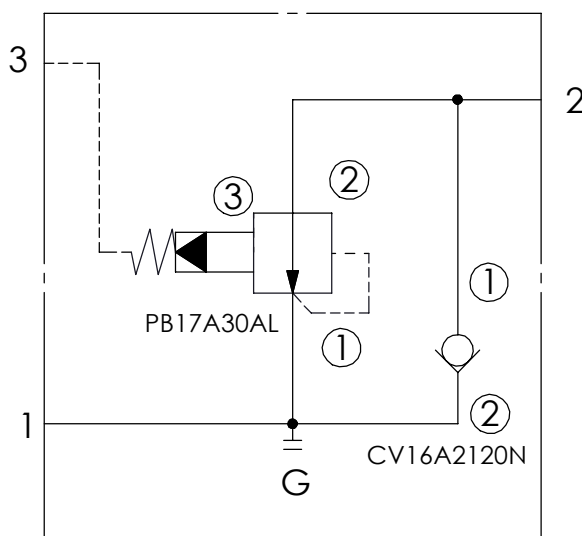
Cavity:  
Refer to 17A3  
16A2

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	1.1 kg(WITHOUT VALVES)
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\* If you need the special specification. Please contact us.

### TYPICAL CIRCUIT:



### X CARTRIDGE VALVES SELECTION

<b>17A3</b>	CAVITY ONLY(WITHOUT VALVE)
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<b>PBOA</b>	PB17A30AL (160LPM , 7-210bar)
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The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

### Y SELECTION FOR SOLENOID VALVES (REFER TO CV16A-X-Y-Z)

<b>16A2</b>	CAVITY ONLY(WITHOUT VALVE)
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<b>CV20</b>	CV16A2120N(240LPM,2.0bar)
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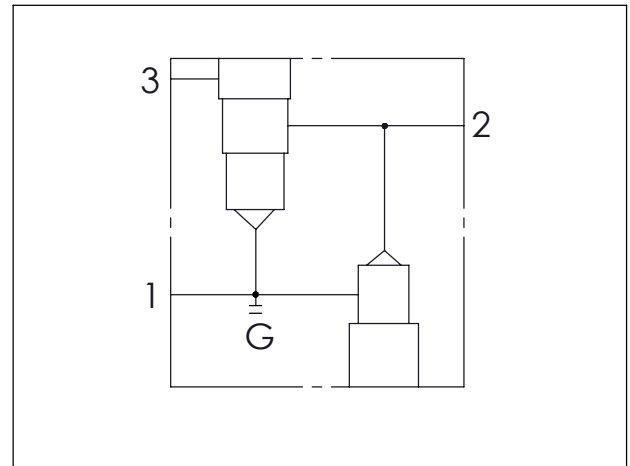
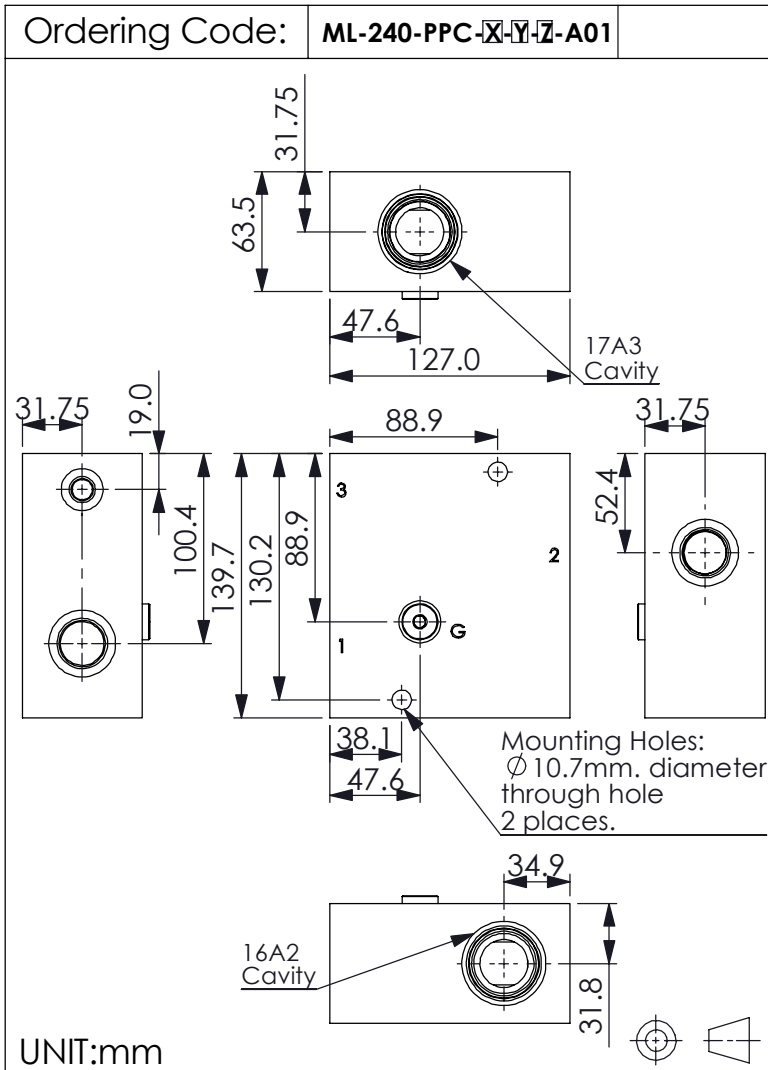
The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

### PORT SIZE

Z	PORTS	PORT	PORT
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	1,2	3	G
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<b>G06</b>	G 3/4"	G 1/4"	G 1/4"
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### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
 Ductile Iron Body Pressure Rating: 350 bar

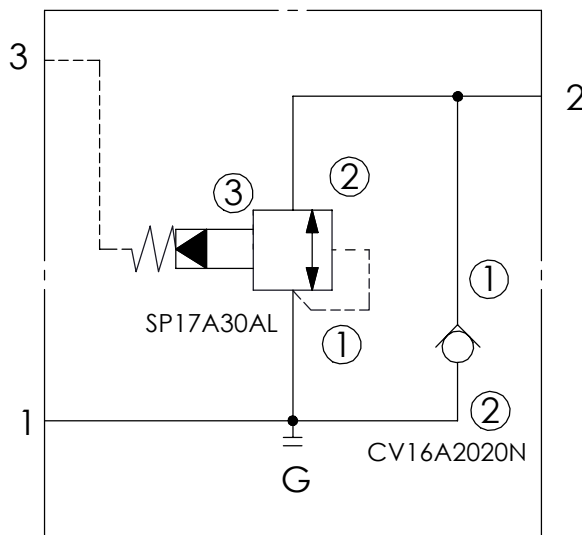
Cavity:  
 Refer to 17A3  
 16A2

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	1.1 kg(WITHOUT VALVES)

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

### TYPICAL CIRCUIT:



### X CARTRIDGE VALVES SELECTION

**17A3** CAVITY ONLY(WITHOUT VALVE)

**SP0A** SP17A30AL (240LPM , 7-210bar)

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

### Y SELECTION FOR SOLENOID VALVES (REFER TO CV16A-X-Y-Z)

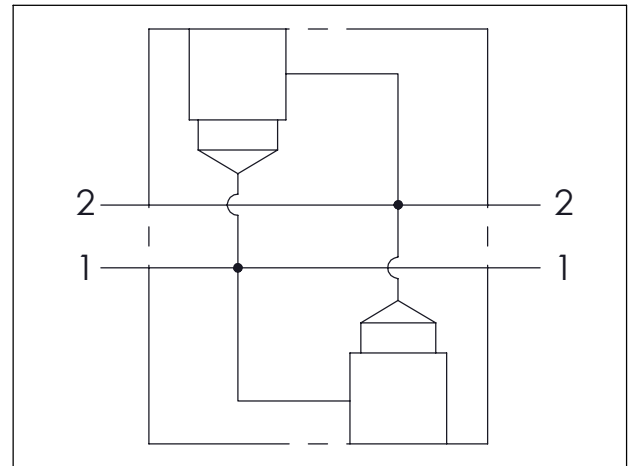
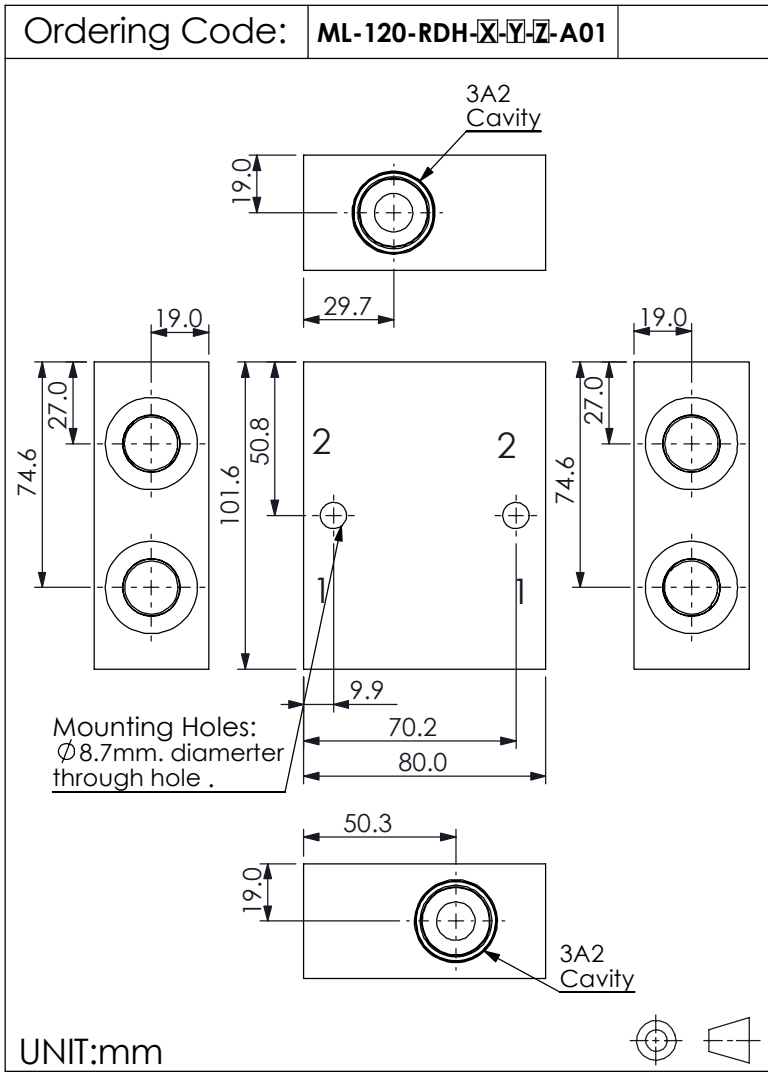
**16A2** CAVITY ONLY(WITHOUT VALVE)

**CV20** CV16A2020N(320LPM,2.0bar)

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

### PORT SIZE

Z	PORTS	PORT	PORT
	1,2	3	G
<b>G06</b>	G 3/4"	G 1/4"	G 1/4"



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
Ductile Iron Body Pressure Rating: 350 bar

Cavity:  
Refer to 3A2

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	0.61 kg(WITHOUT VALVES)

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

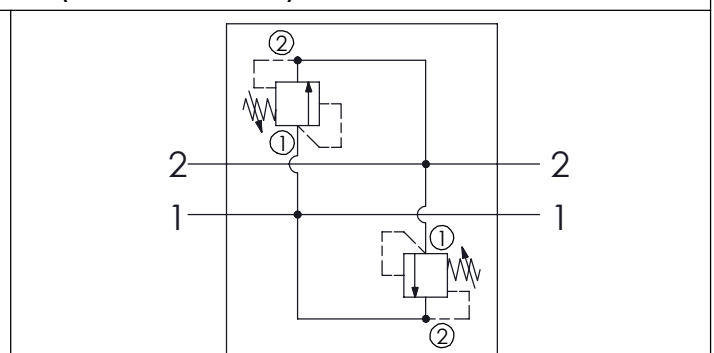
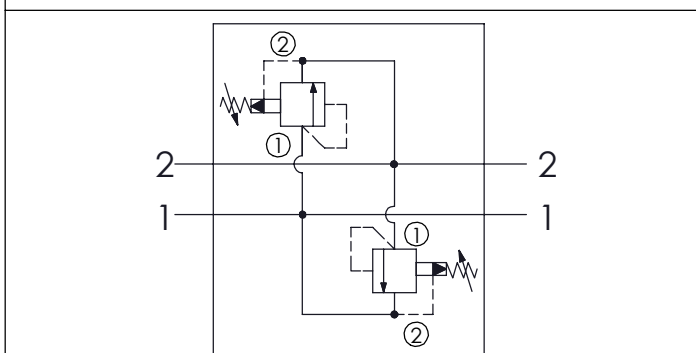
Y	SELECTION FOR V2 PORT CONTROL
<b>3A2</b>	CAVITY ONLY(WITHOUT VALVE)
<b>RP0A</b>	RP3A20AL (200LPM , 70-280bar)
<b>RD5A</b>	RD3A25AL (200LPM,35-210bar)

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

X	SELECTION FOR V1 PORT CONTROL
<b>3A2</b>	CAVITY ONLY(WITHOUT VALVE)
<b>RP0A</b>	RP3A20AL (200LPM , 70-280bar)
<b>RD5A</b>	RD3A25AL (200LPM,35-210bar)

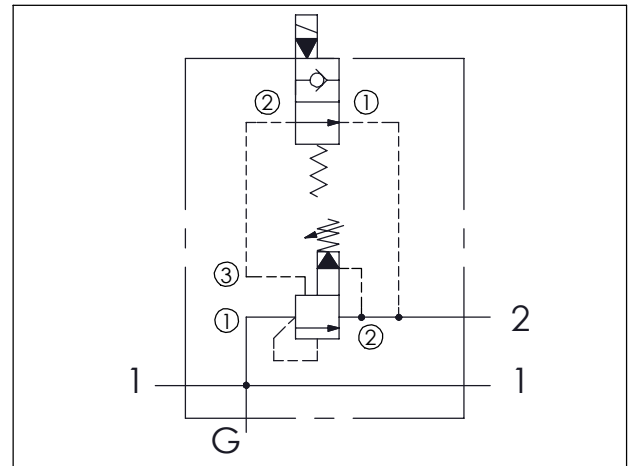
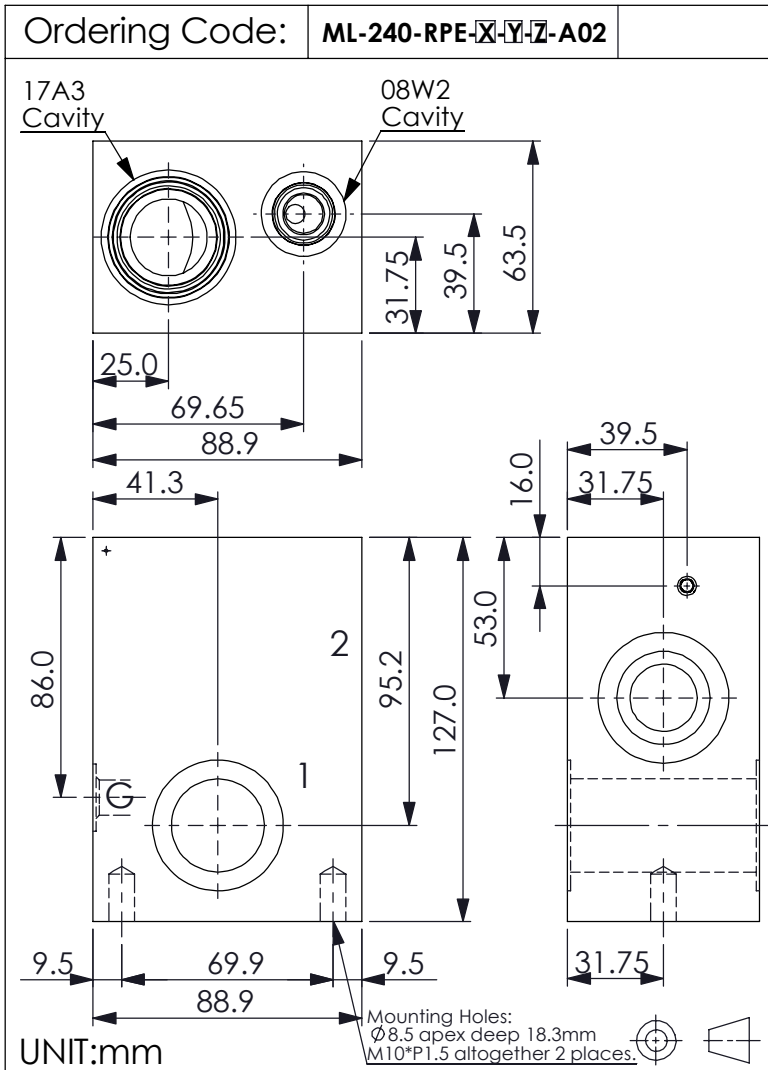
Z	PORT SIZE	
	PORT 1	PORT 2
<b>G04</b>	G 1/2"	G 1/2"

### HYDRAULIC CIRCUITS(WITH VALVES)



Ordering Code: **ML-120-RDH-RP0A-RP0A-G04-A01**

Ordering Code: **ML-120-RDH-RD5A-RD5A-G04-A01**



### TECHNICAL DATA

Aluminum Body Pressure Rating: 210 bar  
 Ductile Iron Body Pressure Rating: 350 bar

Cavity:  
 Refer to 17A3  
 08W2

\* Refer to Winner Cartridge Valves Catalog.

Aluminum	1.45 kg(WITHOUT VALVES)
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\* If you need the special specification. Please contact us.

### X CARTRIDGE VALVES SELECTION

<b>17A3</b>	CAVITY ONLY(WITHOUT VALVE)
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<b>RV0A</b>	RV17A30AL (240LPM , 7-210bar)
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The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

### Y SELECTION FOR SOLENOID VALVES (REFER TO EP08W-X-Y-Z)

<b>08W2</b>	CAVITY ONLY(WITHOUT VALVE)
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<b>EP02</b>	EP08W2A02N04 , 30LPM,350bar (NORMALLY CLOSED,WITHOUT COIL)
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COIL MUST BE ORDERED SEPARATELY  
(REFER TO EC-04W-X-Y-Z)

The selection is only example. Please refer to Winner Cartridge Program and to select the appropriate valves and manifolds assembly in accordance with request function (flow 、 pressure 、 ... etc.)

### Z PORT SIZE

<b>Z</b>	<b>PORTS</b>	<b>PORT</b>
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	<b>1,2</b>	<b>G</b>
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<b>G08</b>	G 1"	G 1/4"
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## **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](mailto:elblag@hydropress.pl)



[www.hydropress.pl](http://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