

2 A / B / C

# CENTER BLOCK

Center block Diagram					
Code	1	3	5	7	9
Diagram					
Applicable Center block	M, X series & QH, SH	M, X series & QH, SH	M, X series & QH, SH	M, X series & SH, QH	M, X series & QH
Code	2	4	6	8	0
Diagram					
Applicable Center block	M, X series & QH, SH	M, X series & QH, SH	M, X series & QH, SH	M, X series & SH, QH	M, X series & QH

### M Series center block

#### MO Center block

This MO center block is available only for ONE GROUP Gear pump

C.V = CHECK VALVE  
 R.V = RELIEF VALVE  
 S.V = SOLENOID VALVE  
 F.C.T.V = FIXED COMPENSATED THROTTLE VALVE  
 GA = PRESSURE COMPENSATED ADJUSTABLE THROTTLE VALVE  
 P,T port = PF3/8"  
 P2 port = PT1/4"

#### MH Center block

This MH center block is available only for HALF GROUP gear pump.

#### Micro S/W lever type (MXXX)

Please refer ⑥ 'BUILT-IN VALVE' for this item.

#### Contactor S/W lever type (CXXX)

Please refer ⑥ 'BUILT-IN VALVE' for this item.

## X Series center block

### XO Center block

This XO center block is available only for ONE GROUP Gear pump

C.V = CHECK VALVE  
 R.V = RELIEF VALVE  
 S.V = SOLENOID VALVE  
 F.C.T.V = FIXED COMPENSATED THROTTLE VALVE  
 GA = PRESSURE COMPENSATED ADJUSTABLE THROTTLE VALVE  
 P,T port = PF3/8" (PF1/4")  
 P2 port = PT1/4"

### XH Center block

This XH center block is available only for HALF GROUP gear pump.

#### Micro S/W lever type (MXXX)

Please refer ⑥ 'BUILT-IN VALVE' for this item.

#### Contactor S/W lever type (CXXX)

Please refer ⑥ 'BUILT-IN VALVE' for this item.

### QH center block

This QH center block is available only for HALF GROUP Gear pump

C.V = CHECK VALVE  
 R.V = RELIEF VALVE  
 S.V = SOLENOID VALVE  
 F.C.T.V = FIXED COMPENSATED THROTTLE VALVE  
 GA = PRESSURE COMPENSATED ADJUSTABLE THROTTLE VALVE  
 P,T port = PF1/4"

#### Micro S/W lever type (MXXX)

Please refer ⑥ 'BUILT-IN VALVE' for this item.

#### Contactor S/W lever type (CXXX)

Please refer ⑥ 'BUILT-IN VALVE' for this item.

**SH center block**

This SH center block is available only for HALF GROUP Gear pump

C.V = CHECK VALVE  
R.V = RELIEF VALVE  
S.V = SOLENOID VALVE  
F.C.T.V = FIXED COMPENSATED THROTTLE VALVE  
P,P1 port = PF1/4"

**QD center block**

This QD center block is available only for bi-direction gear pump  
Only for bi-direction power pack

P1,P2 port = PF 1/4"  
P.C.V = PILOT CHECK VALVE  
R.V = RELIEF VALVE

**SD center block**

This SD center block is available only for bi-direction gear pump  
Only for bi-direction power pack

P1,P2 port = PF 1/4"  
P.C.V = PILOT CHECK VALVE  
R.V = RELIEF VALVE

**Relief valve pressure range**

Code	L	A	B	C
Pressure range	3 ~ 10 BAR	5 ~ 50 BAR	30 ~ 120 BAR	80 ~ 250 BAR

**3** A / B / C - X X **Maker** X is only for maker's use **Pump**

<b>A</b>	Code	<b>G</b>	<b>D</b>
	Pump type	Gear pump	Bi-direction pump
<b>B</b>	Code	<b>H</b>	<b>O</b>
	Group	Half group	One group

**Gear pump G**

B	C	Specification							A
		Displacement (cc/rev)	Flow (Liter/min @2500 RPM) DC	Flow (Liter/min @1700 RPM) AC	Max. operating pressure (bar)	Max. peak pressure (bar)	Max. speed (rpm)		
<b>H</b>	<b>02</b>	0.2	0.5	0.3	190	230	7000	54	
<b>H</b>	<b>03</b>	0.3	0.7	0.5	190	230	7000	56	
<b>H</b>	<b>05</b>	0.5	1.2	0.8	190	230	7000	59	
<b>H</b>	<b>07</b>	0.7	1.7	1.1	190	230	7000	64	
<b>H</b>	<b>11</b>	1.1	2.7	1.8	190	230	7000	67	

Applicable center block : MH, XH, QH, SH, PMU

Half group gear pump is CCW

**Gear pump G**

B	C	Specification							A
		Displacement (cc/rev)	Flow (Liter/min @2500 RPM) DC	Flow (Liter/min @1700 RPM) AC	Max. operating pressure (bar)	Max. peak pressure (bar)	Max. speed (rpm)		
<b>O</b>	<b>11</b>	1.1	2.7	1.8	230	270	6000	74	
<b>O</b>	<b>16</b>	1.6	4.0	2.7	230	270	6000	76	
<b>O</b>	<b>21</b>	2.1	5.2	3.5	230	270	6000	78	
<b>O</b>	<b>23</b>	2.3	5.7	3.9	230	270	6000	79	
<b>O</b>	<b>27</b>	2.7	6.7	4.6	230	270	6000	80	
<b>O</b>	<b>32</b>	3.2	8.0	5.4	210	250	5000	82	
<b>O</b>	<b>37</b>	3.7	9.2	6.2	210	250	4500	84	
<b>O</b>	<b>42</b>	4.2	10.5	7.1	210	250	4000	86	
<b>O</b>	<b>48</b>	4.8	12.0	8.1	190	230	3500	88	
<b>O</b>	<b>58</b>	5.8	14.5	9.8	190	230	3000	92	
<b>O</b>	<b>70</b>	7.0	17.5	11.9	190	230	3000	97.5	
<b>O</b>	<b>80</b>	8.0	20.0	13.6	160	200	2100	100	
<b>O</b>	<b>98</b>	9.8	24.5	16.6	120	160	2100	102	

Applicable center block : MO, XO, DL, PMU

One group gear pump is CCW

**Bi-direction Gear pump D**

B	C	Specification							A
		Displacement (cc/rev)	Flow (Liter/min @2500 RPM) DC	Flow (Liter/min @1700 RPM) AC	Max. operating pressure (bar)	Max. peak pressure (bar)	Max. speed (rpm)		
<b>H</b>	<b>02</b>	0.2	0.5	0.3	190	230	7000	61.5	
<b>H</b>	<b>03</b>	0.3	0.7	0.5	190	230	7000	63.5	
<b>H</b>	<b>05</b>	0.5	1.2	0.8	190	230	7000	66.5	
<b>H</b>	<b>07</b>	0.7	1.7	1.1	190	230	7000	68.5	
<b>H</b>	<b>11</b>	1.1	2.7	1.8	190	230	7000	74.5	

Applicable center block : QD, SD

**Note** Please contact Hydro-Tek for Group 2 and Group 3 pumps.