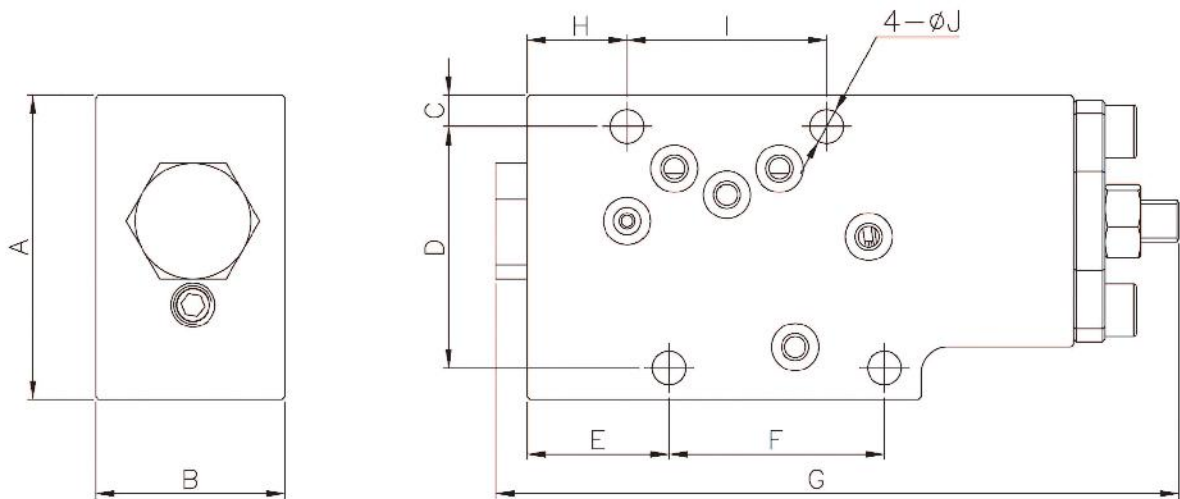
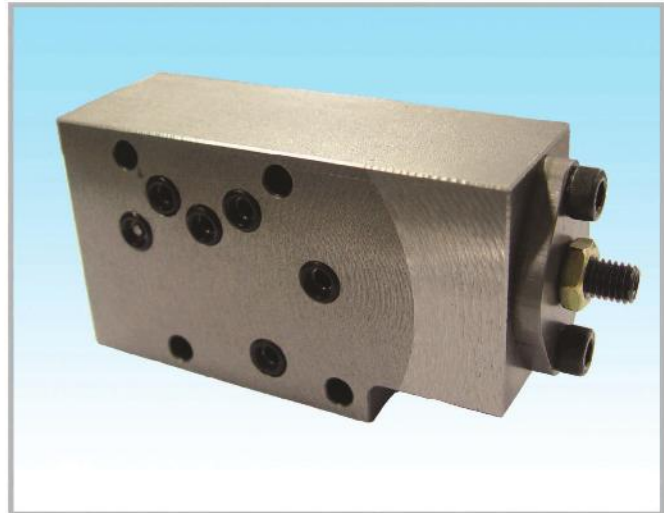
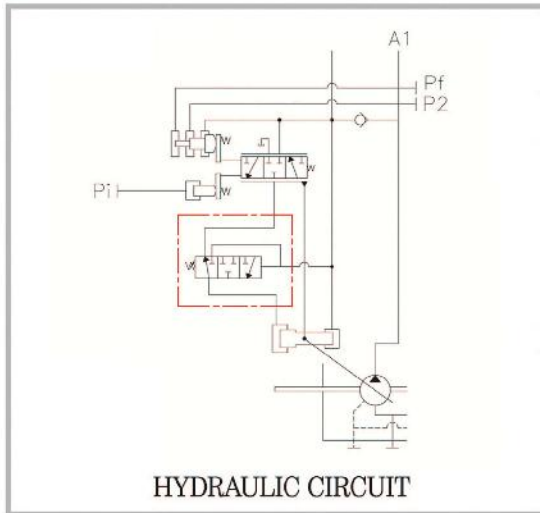


# CUT-OFF VALVE(H3V SERIES)



## DIMENSIONS

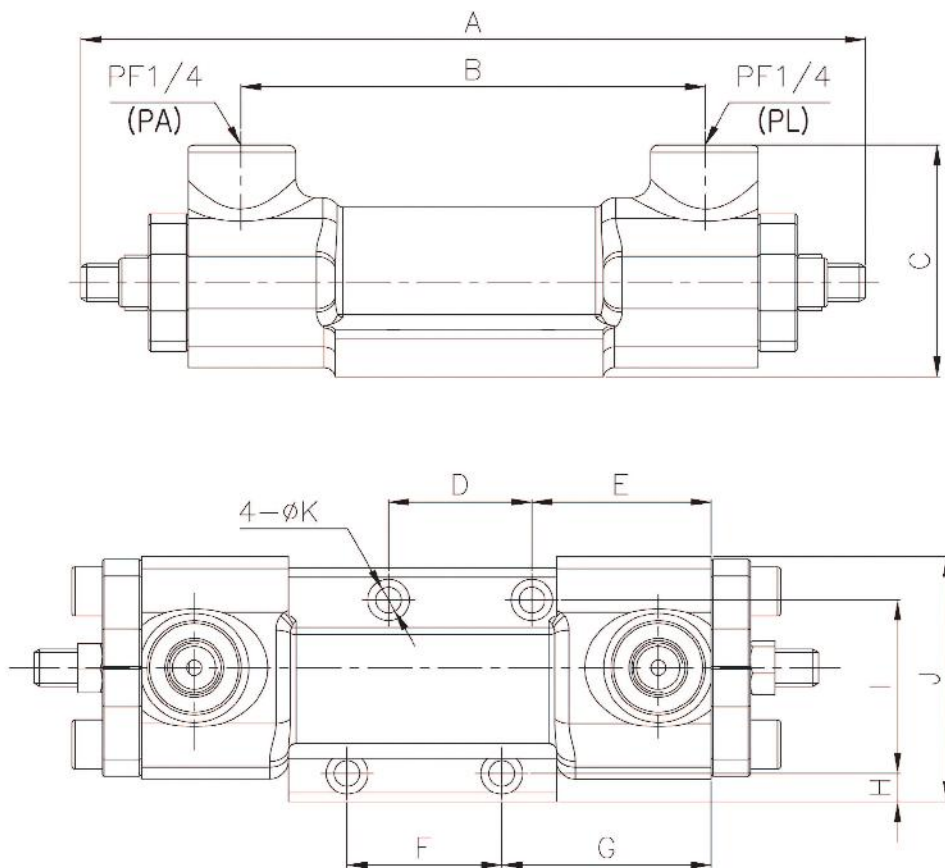
(mm)

| MODEL      | A  | B  | C | D  | E  | F  | G   | H  | I  | J   |
|------------|----|----|---|----|----|----|-----|----|----|-----|
| H3V SERIES | 58 | 36 | 6 | 46 | 27 | 41 | 130 | 19 | 38 | 6.4 |

# LOAD SENSING VALVE(HLOP TYPE)



HYDRAULIC CIRCUIT

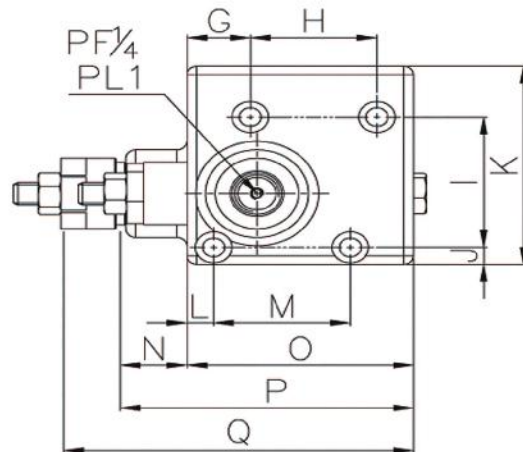
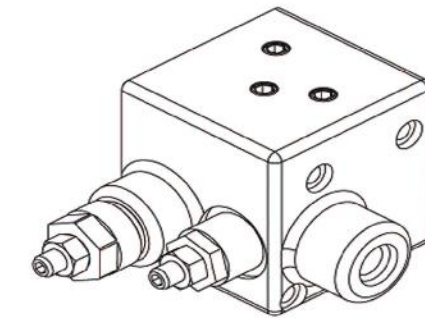
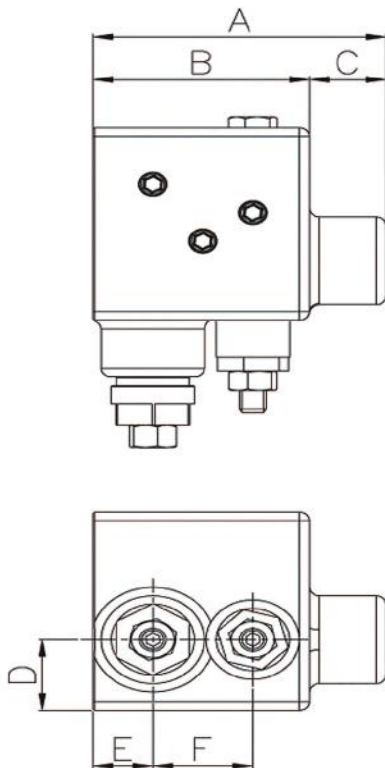
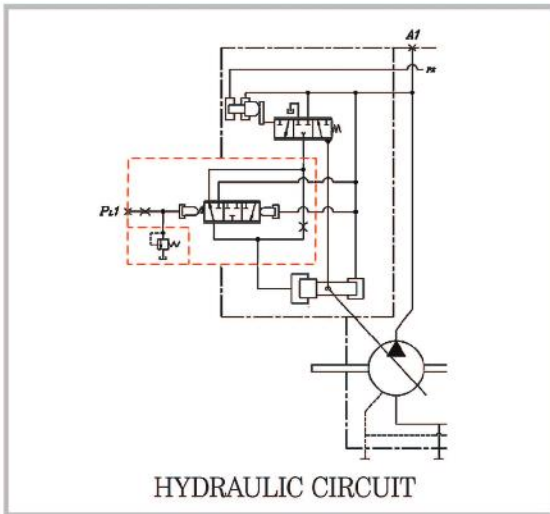


## DIMENSIONS

(mm)

| MODEL      | A   | B   | C    | D  | E    | F  | G    | H   | I  | J  | K   |
|------------|-----|-----|------|----|------|----|------|-----|----|----|-----|
| H3V SERIES | 210 | 123 | 61.5 | 38 | 47.5 | 41 | 55.5 | 7.5 | 46 | 65 | 6.2 |

# LOAD SENSING VALVE (5L00/7L00 TYPE) (H3V/H5V SERIES)

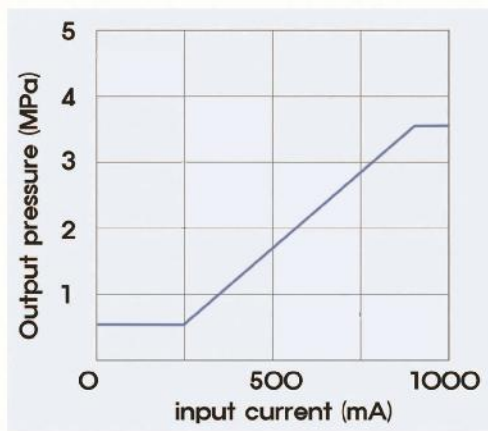
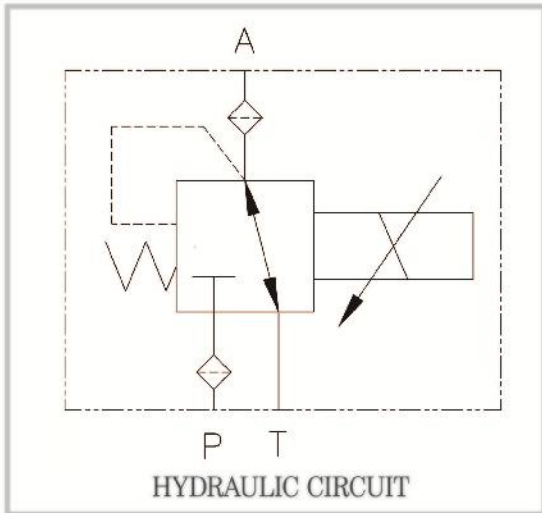


## DIMENSIONS

(mm)

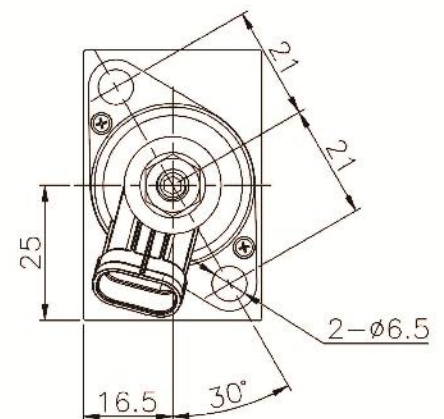
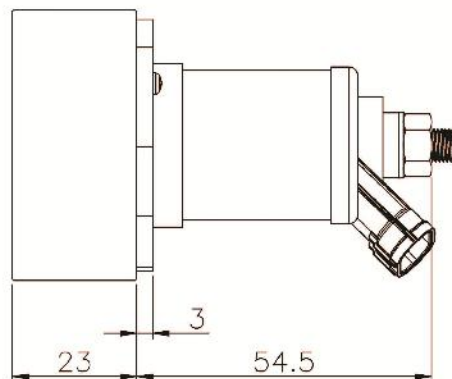
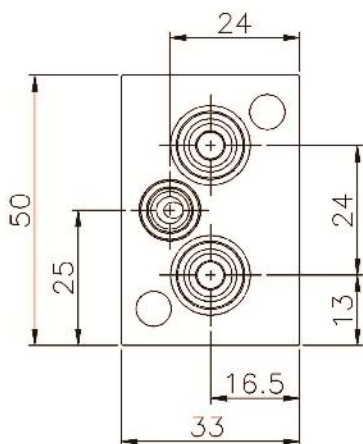
| MODEL     | A  | B  | C  | D  | E  | F  | G  | H  | I  | J | K  | L | M  | N  | O  | P  | Q   |
|-----------|----|----|----|----|----|----|----|----|----|---|----|---|----|----|----|----|-----|
| 5L00/7L00 | 88 | 65 | 23 | 25 | 18 | 30 | 19 | 38 | 46 | 6 | 70 | 8 | 41 | 20 | 68 | 88 | 105 |

# Proportional pressure reducing valve (HPR1D-40F-243)



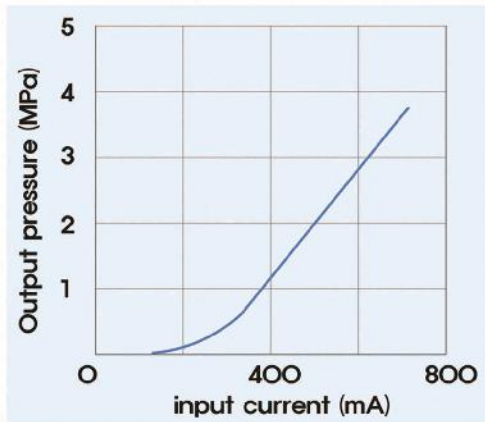
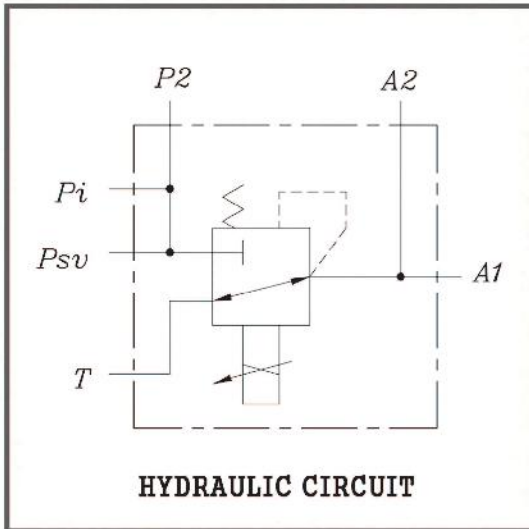
## SPECIFICATIONS

1. CONTROL SPECIFICATIONS : POSITIVE PROPORTIONAL
2. SECOND PRESSURE/MAX.SET PRESSURE : 40Kgf/cm<sup>2</sup>(3.9Mpa)
3. SOLENOID RATING : 0.9A FOR DC24V
4. COIL RESISTANCE( $\Omega$ ) : 5.5



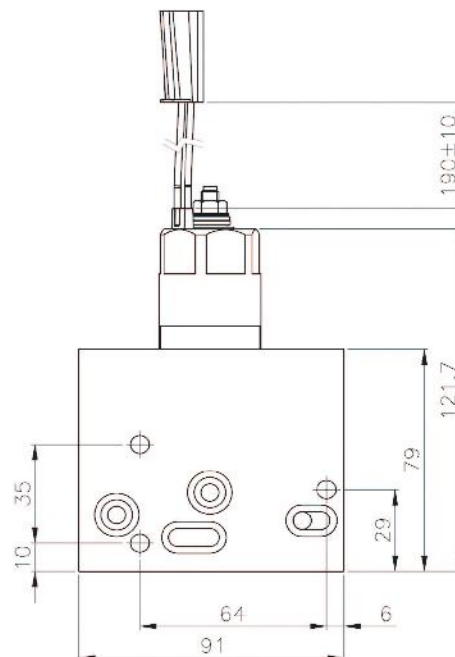
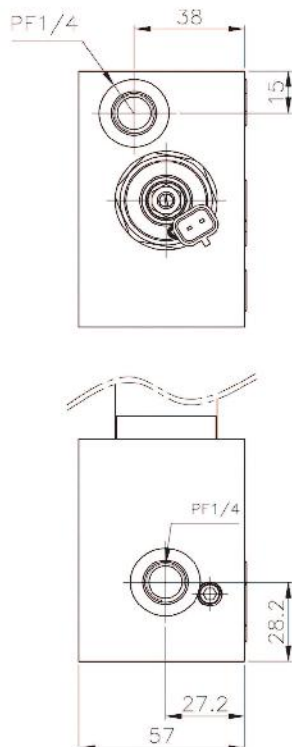


# Proportional pressure reducing valve (HPR3P-40B1-201-M0)

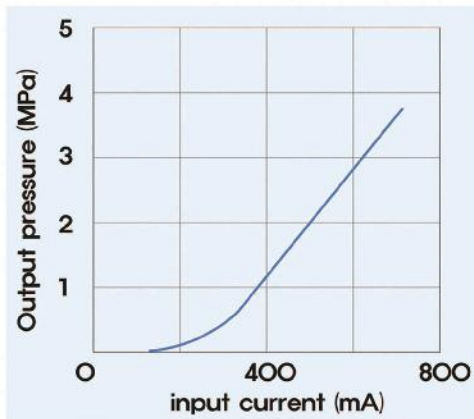
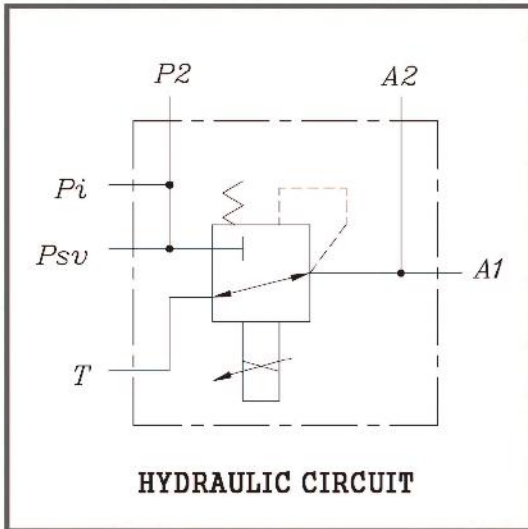


## SPECIFICATIONS

- CONTROL SPECIFICATION : POSITIVE PROPORTIONAL
- SECOND PRESSURE/MAX. SET PRESSURE : 40Kgf/cm<sup>2</sup> (3.9Mpa)
- SOLENOID RATING : 0.75A for DC24V
- COIL RESISTANCE(Ω) :13.5

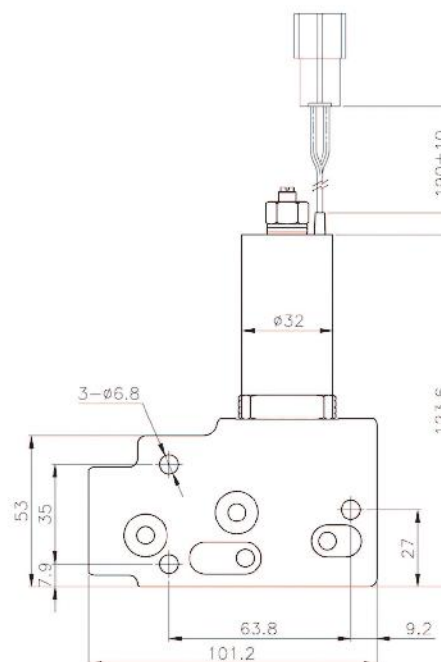
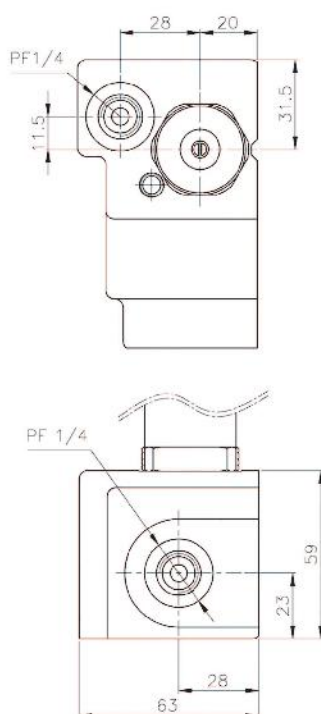


# Proportional pressure reducing valve (HPR3S-40A1-201-M3)

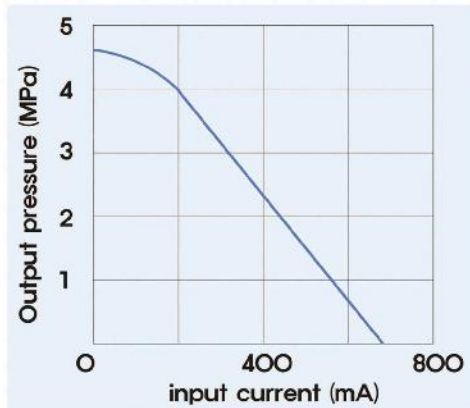
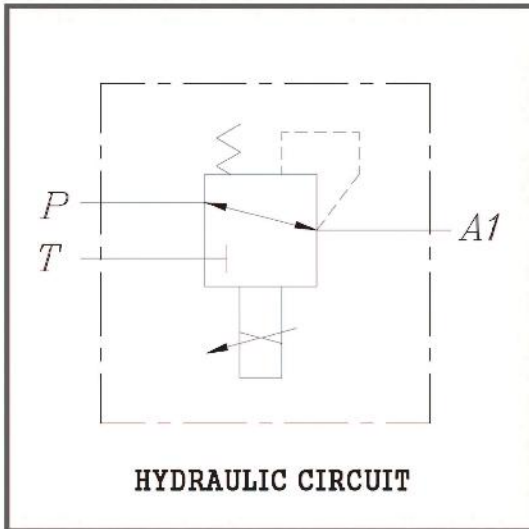


## SPECIFICATIONS

1. CONTROL SPECIFICATION : POSITIVE PROPORTIONAL
2. SECOND PRESSURE/MAX. SET PRESSURE : 40Kgf/cm<sup>2</sup> (3.9Mpa)
3. SOLENOID RATING : 0.75A for DC24V
4. COIL RESISTANCE(Ω) : 17.5

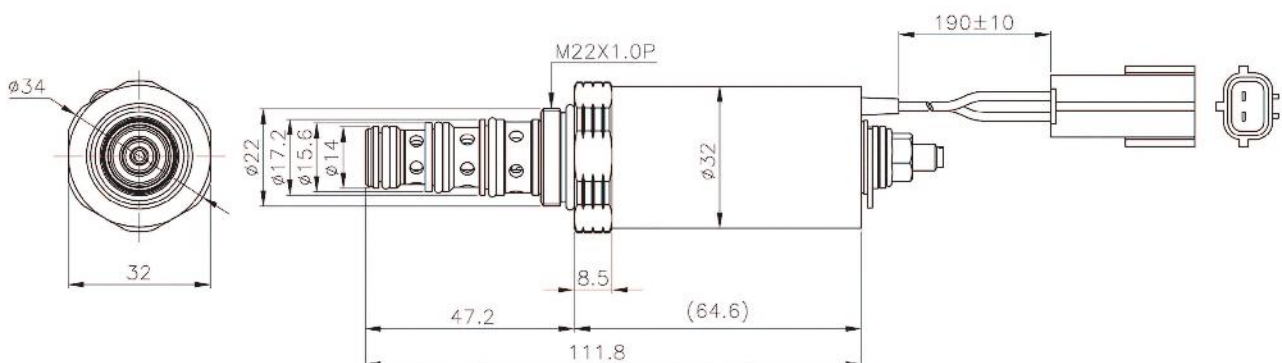


# Proportional pressure reducing valve (HPR3SN-40A1-221)

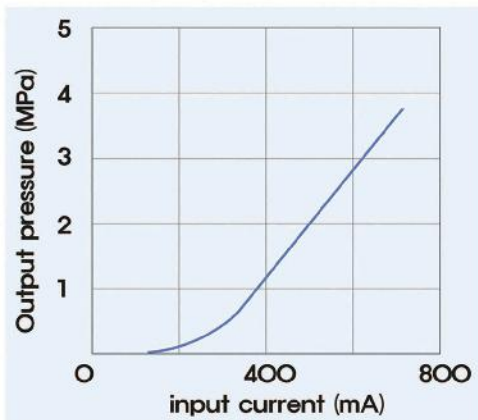
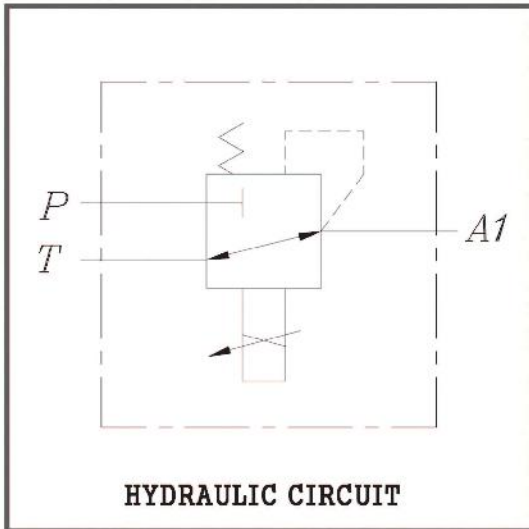


## SPECIFICATIONS

1. CONTROL SPECIFICATION : NEGATIVE PROPORTIONAL
2. SECOND PRESSURE/MAX. SET PRESSURE : 40Kgf/cm<sup>2</sup> (3.9Mpa)
3. SOLENOID RATING : 0.75A for DC24V
4. COIL RESISTANCE(Ω) :17.5

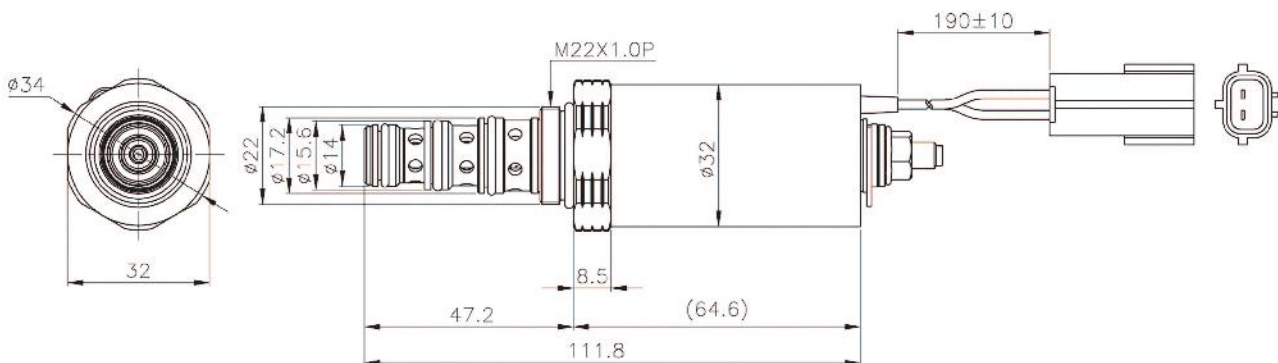


# Proportional pressure reducing valve (HPR3S-40A1-201)



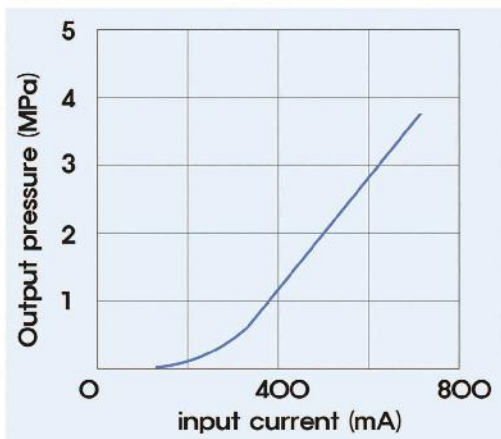
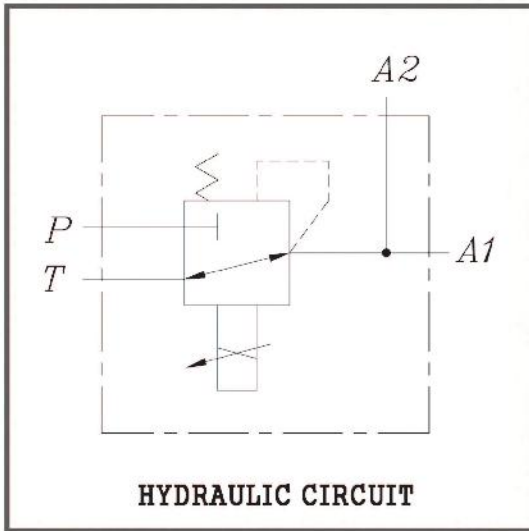
## SPECIFICATIONS

1. CONTROL SPECIFICATION : POSITIVE PROPORTIONAL
2. SECOND PRESSURE/MAX. SET PRESSURE : 40Kgf/cm<sup>2</sup> (3.9Mpa)
3. SOLENOID RATING : 0.75A for DC24V
4. COIL RESISTANCE(Ω) :17.5



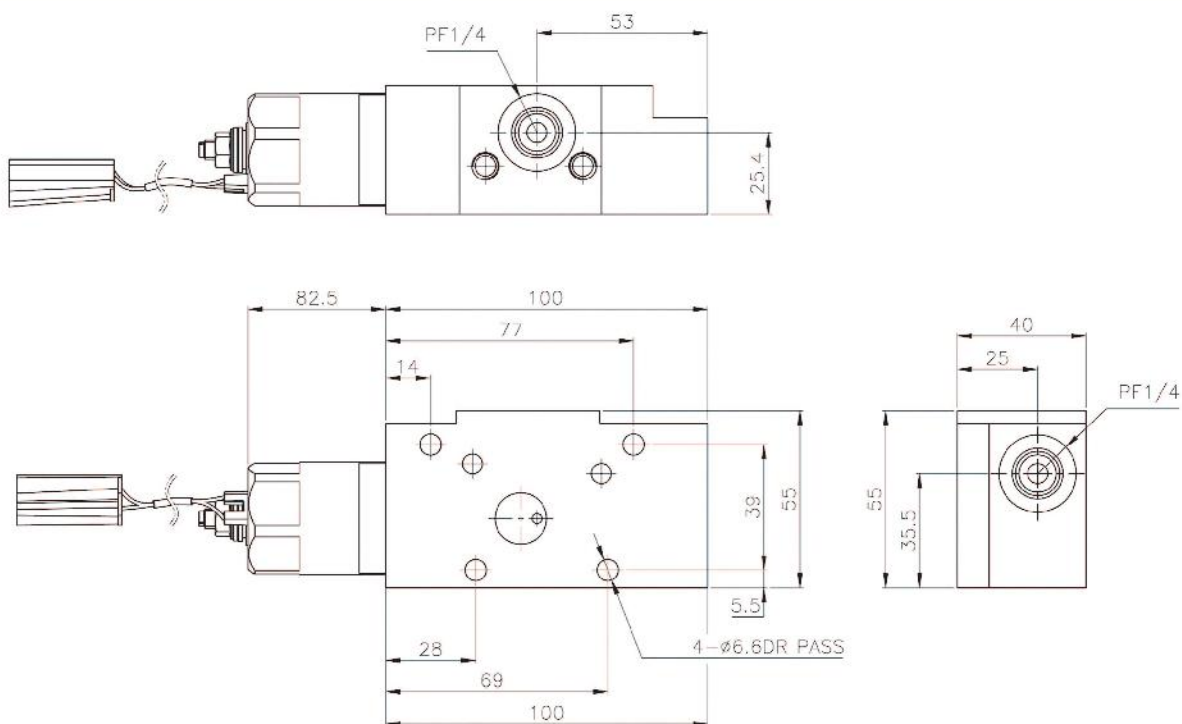


# Proportional pressure reducing valve (HPR2P-30A1-201-M5)

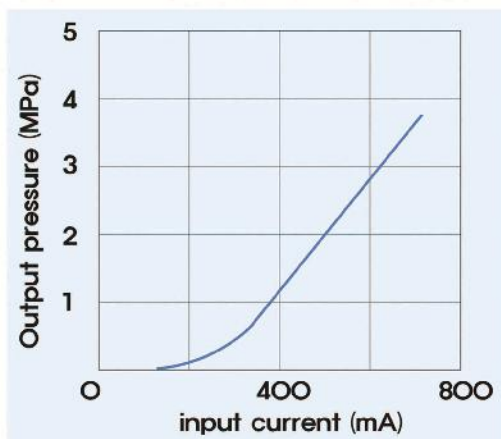
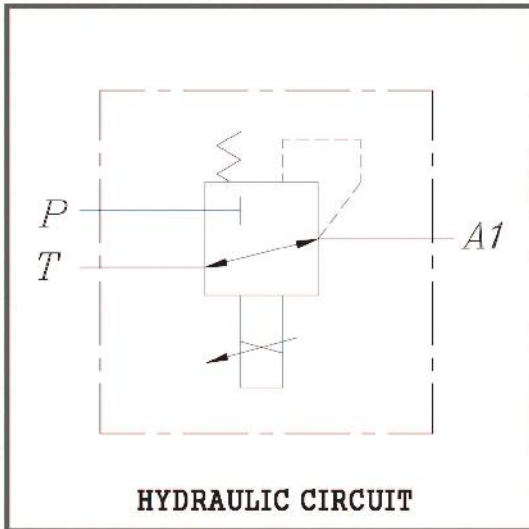


## SPECIFICATIONS

1. CONTROL SPECIFICATION : POSITIVE PROPORTIONAL
2. SECOND PRESSURE/MAX. SET PRESSURE : 30Kgf/cm<sup>2</sup> (2.9Mpa)
3. SOLENOID RATING : 0.75A for DC24V
4. COIL RESISTANCE( $\Omega$ ) :17.5

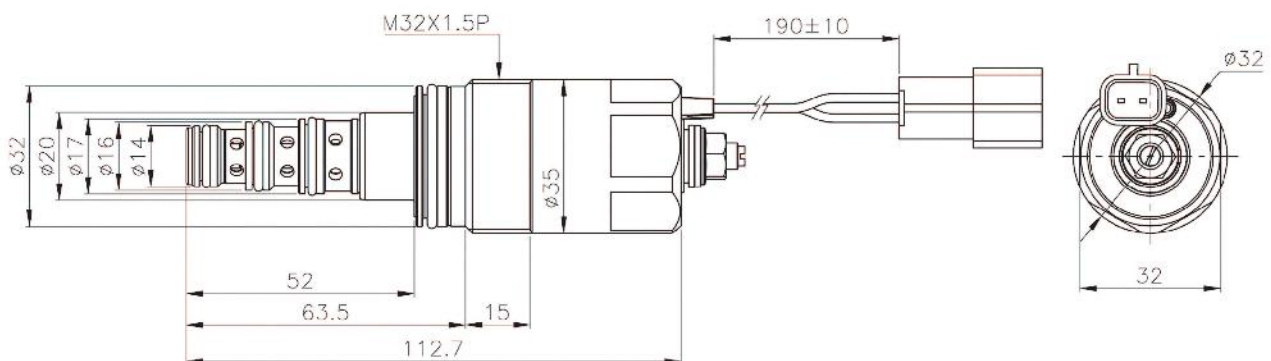


# Proportional pressure reducing valve (HPR2P-30A1-201)

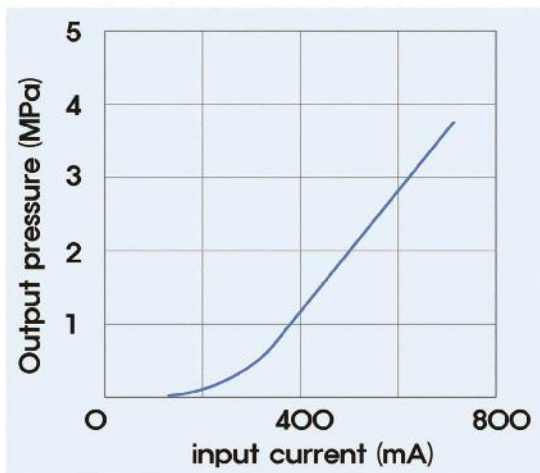
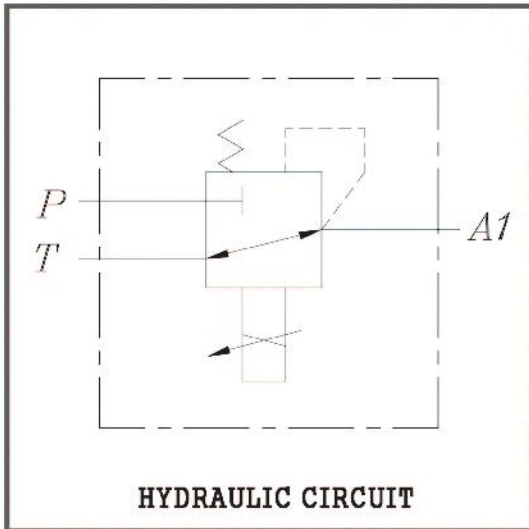


## SPECIFICATIONS

1. CONTROL SPECIFICATION : POSITIVE PROPORTIONAL
2. SECOND PRESSURE/MAX. SET PRESSURE : 30Kgf/cm<sup>2</sup> (2.9Mpa)
3. SOLENOID RATING : 0.75A for DC24V
4. COIL RESISTANCE( $\Omega$ ) :17.5

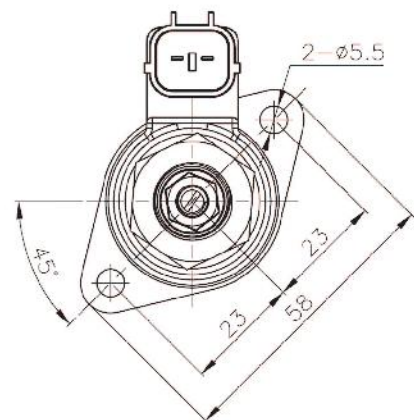
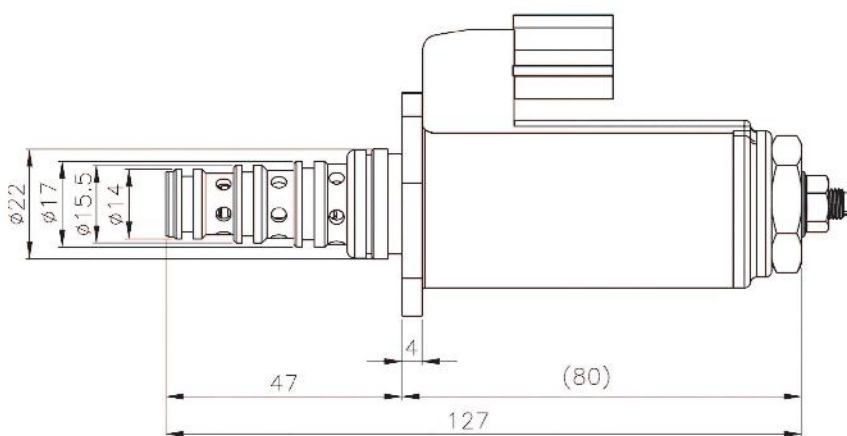


# Proportional pressure reducing valve (HPR3B-40F1-212-FOR SBS120/140)



## SPECIFICATIONS

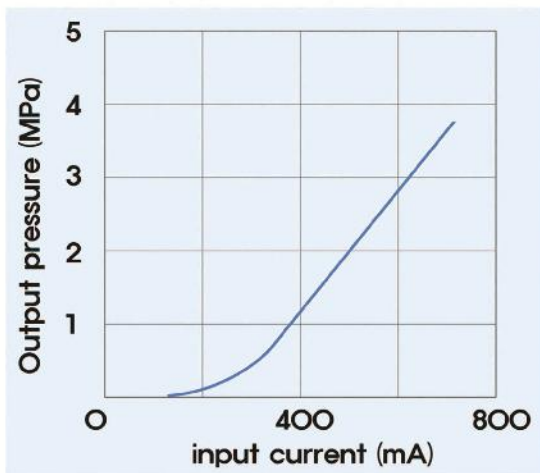
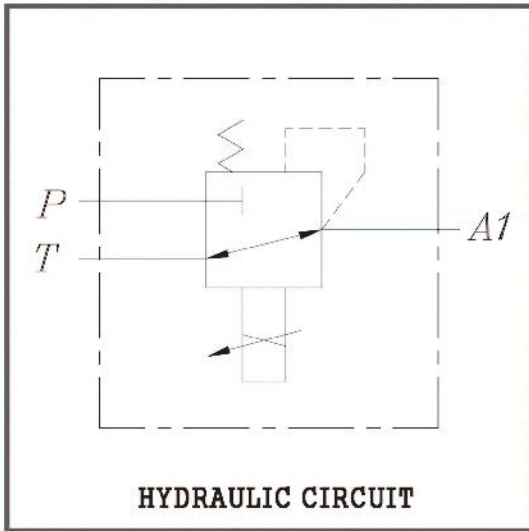
1. CONTROL SPECIFICATION : POSITIVE PROPORTIONAL
2. SECOND PRESSURE/MAX. SET PRESSURE : 40Kgf/cm<sup>2</sup> (3.9Mpa)
3. SOLENOID RATING : 0.75A for DC24V
4. COIL RESISTANCE(Ω) :12.5





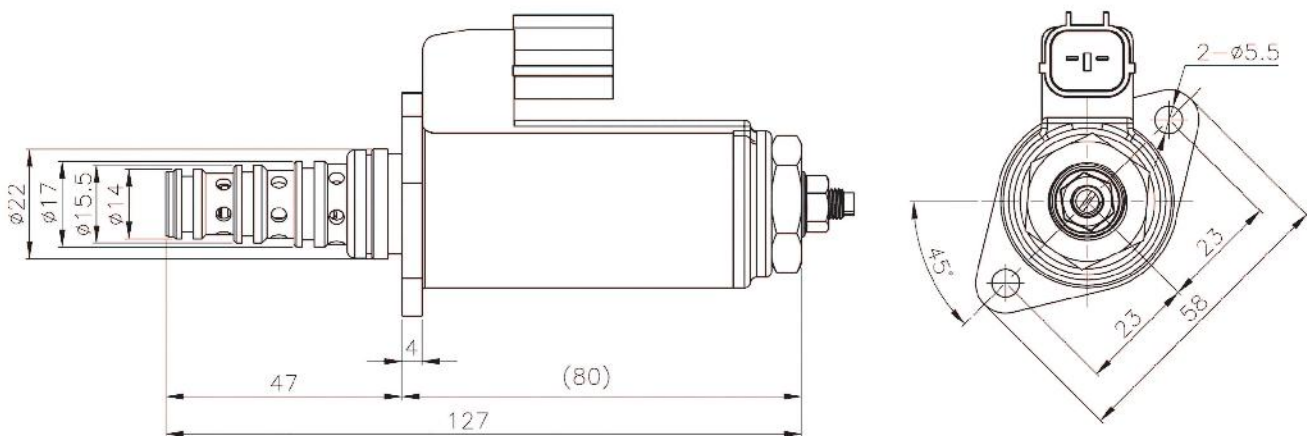


# Proportional pressure reducing valve (HPR3B-30A2-211)

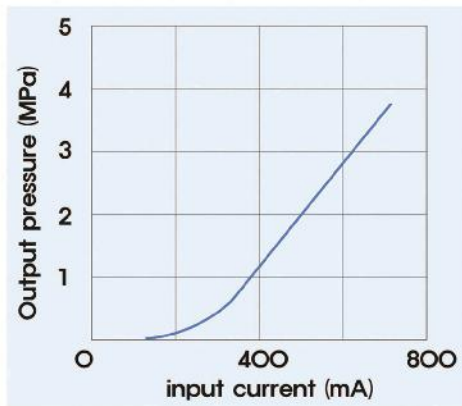
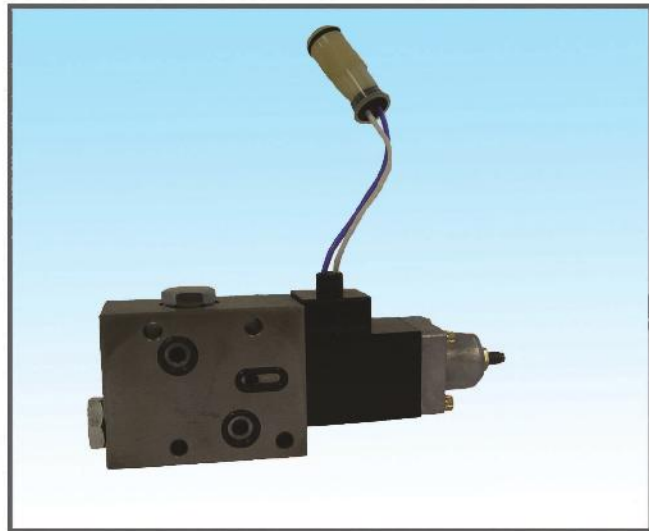
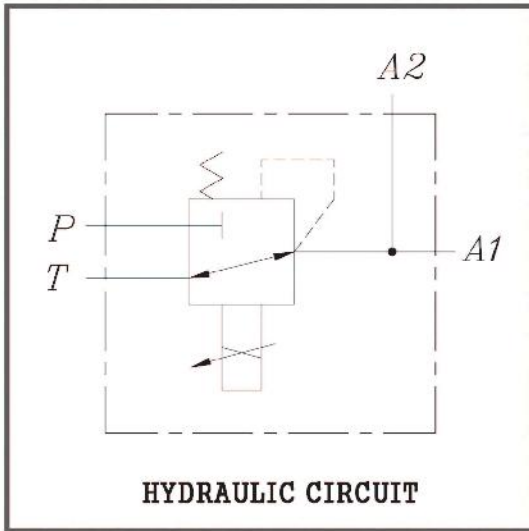


## SPECIFICATIONS

1. CONTROL SPECIFICATION : POSITIVE PROPORTIONAL
2. SECOND PRESSURE/MAX. SET PRESSURE : 30Kgf/cm<sup>2</sup> (2.9Mpa)
3. SOLENOID RATING : 0.75A for DC24V
4. COIL RESISTANCE(Ω) :17.5

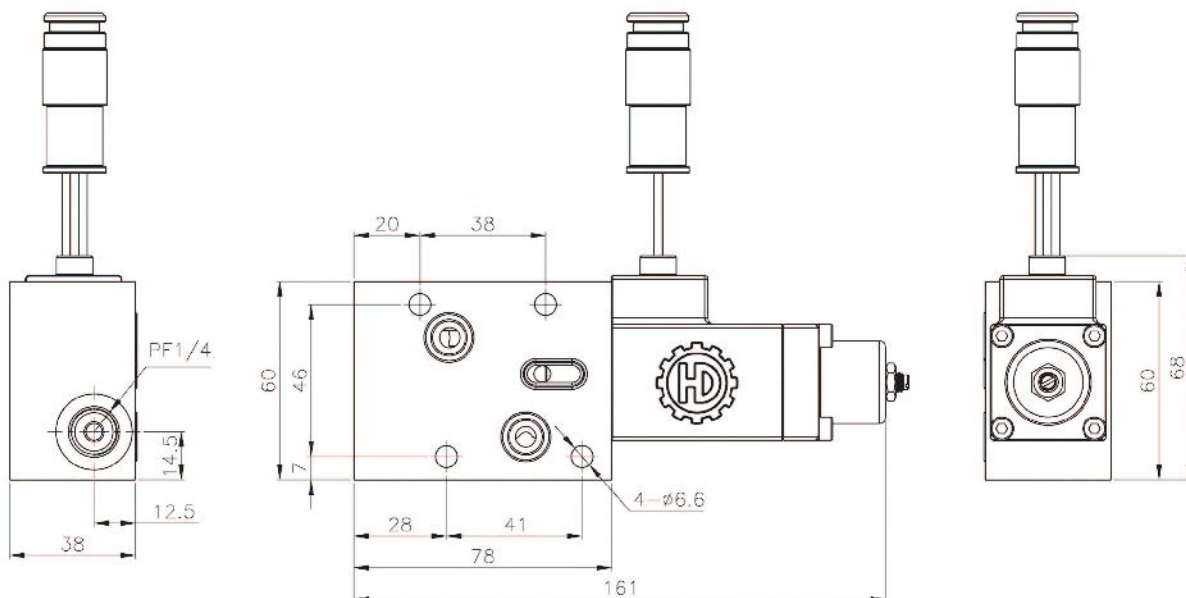


# Proportional pressure reducing valve (HPR3Q-40A1-201-M2)

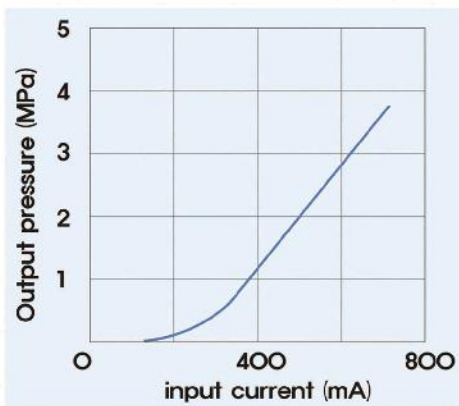
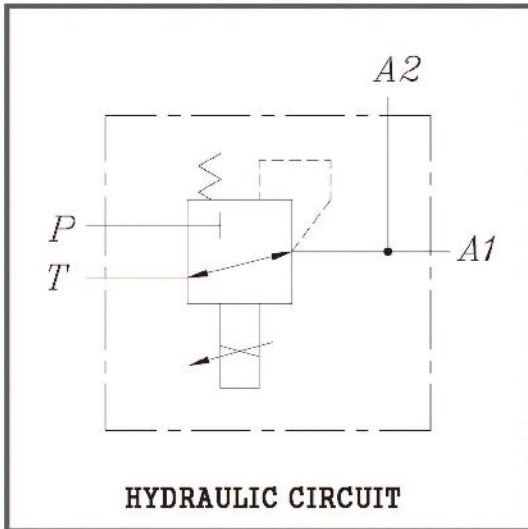


## SPECIFICATIONS

1. CONTROL SPECIFICATION : POSITIVE PROPORTIONAL
2. SECOND PRESSURE/MAX. SET PRESSURE : 40Kgf/cm<sup>2</sup> (3.9Mpa)
3. SOLENOID RATING : 0.75A for DC24V
4. COIL RESISTANCE( $\Omega$ ) : 17.5

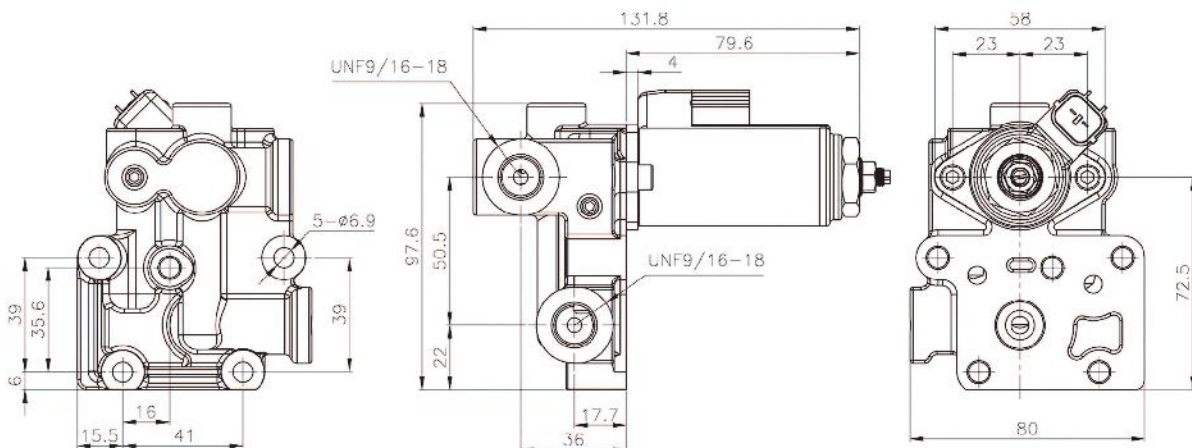


# Proportional pressure reducing valve (HPR3B-30A-211-M4)

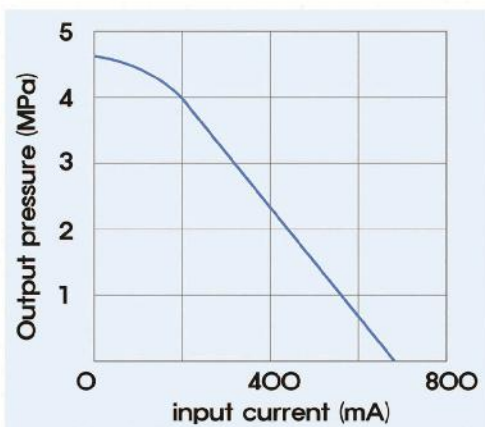
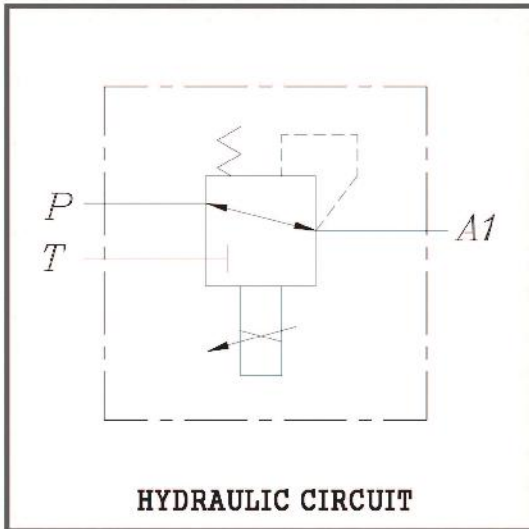


## SPECIFICATIONS

1. CONTROL SPECIFICATION : POSITIVE PROPORTIONAL
2. SECOND PRESSURE/MAX. SET PRESSURE : 30Kgf/cm<sup>2</sup> (2.9Mpa)
3. SOLENOID RATING : 0.75A for DC24V
4. COIL RESISTANCE(Ω) :17.5

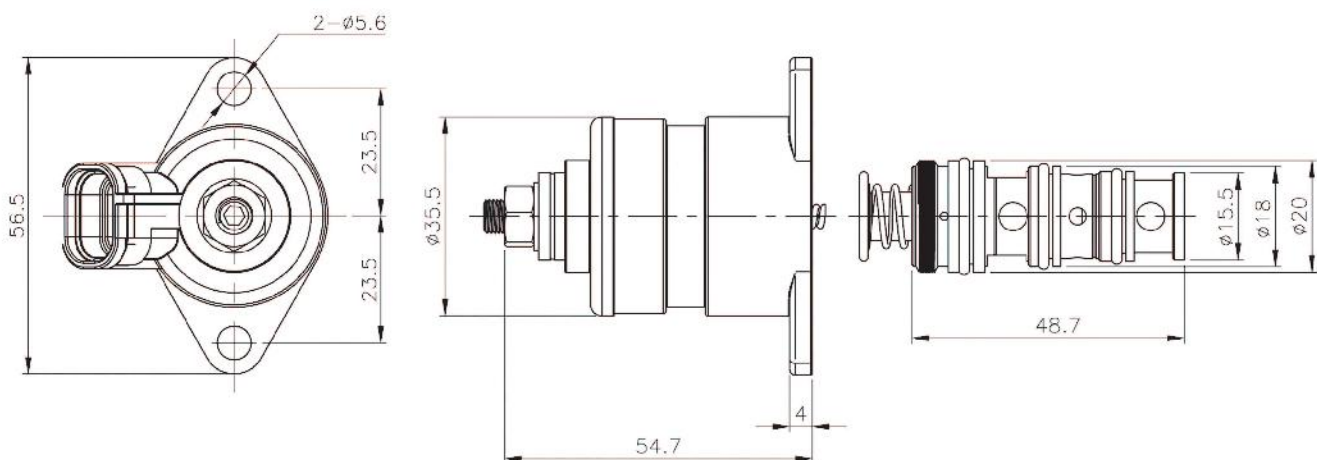


# Proportional pressure reducing valve (HPR2BN-40D1-241-FOR HPVO102/105 HITACHI TYPE)



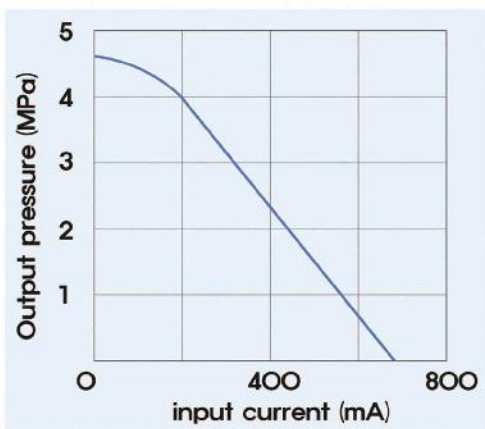
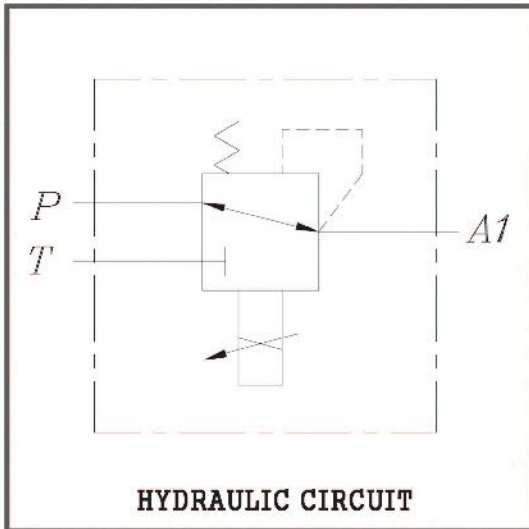
## SPECIFICATIONS

1. CONTROL SPECIFICATION :NEGATIVEPROPORTIONAL
2. SECOND PRESSURE/MAX. SET PRESSURE  
: 40Kgf/cm<sup>2</sup> (3.9Mpa)
3. SOLENOID RATING : 0.75A for DC24V
4. COIL RESISTANCE(Ω) : 24



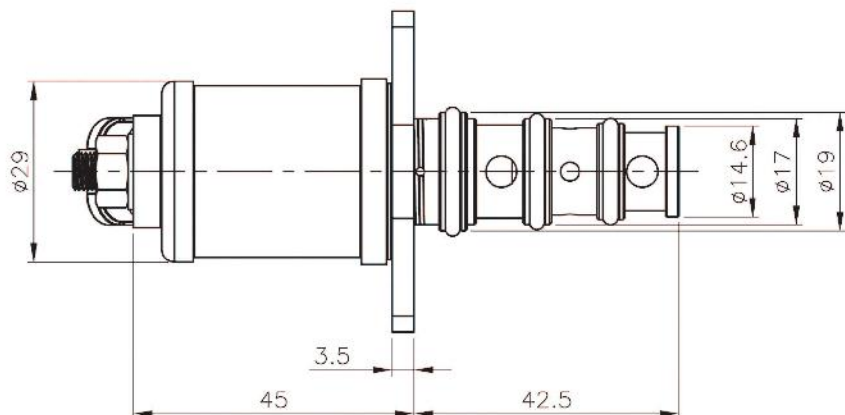
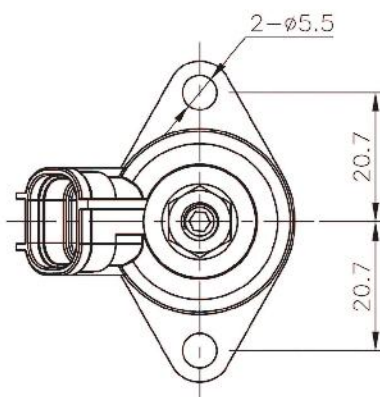


# Proportional pressure reducing valve (HPR2BN-40E2-242-FOR HPVO118 HITACHI TYPE)

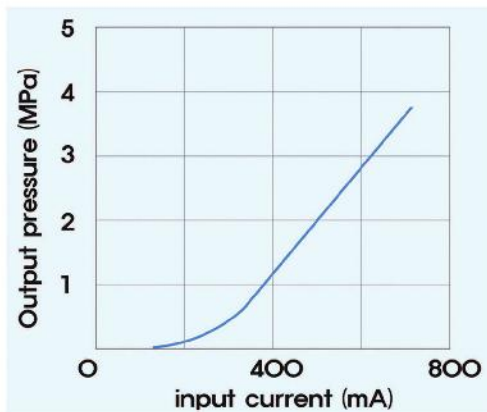
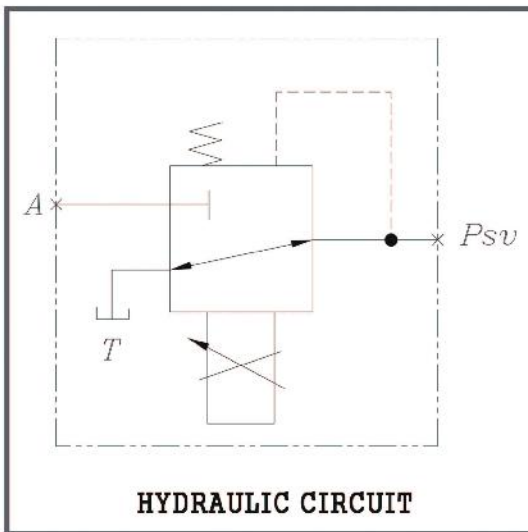


## SPECIFICATIONS

1. CONTROL SPECIFICATION : NEGATIVE PROPORTIONAL
2. SECOND PRESSURE/MAX. SET PRESSURE : 40Kgf/cm<sup>2</sup> (3.9Mpa)
3. SOLENOID RATING : 0.65A for DC24V
4. COIL RESISTANCE(Ω) : 20

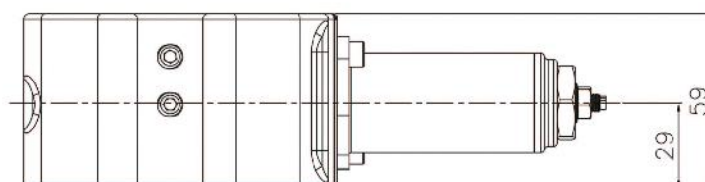
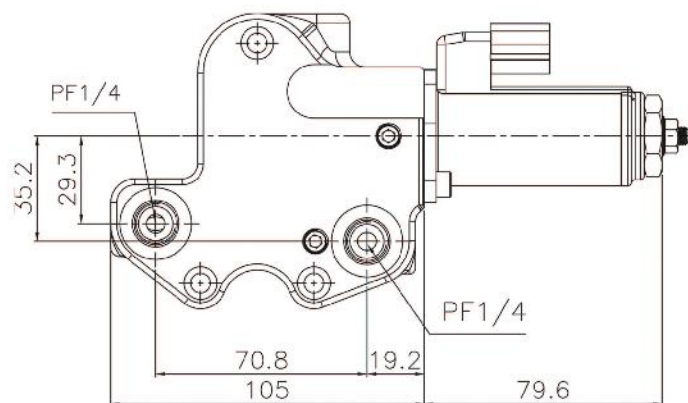


# Proportional pressure reducing valve (HPR3B-30A2-211-M6)

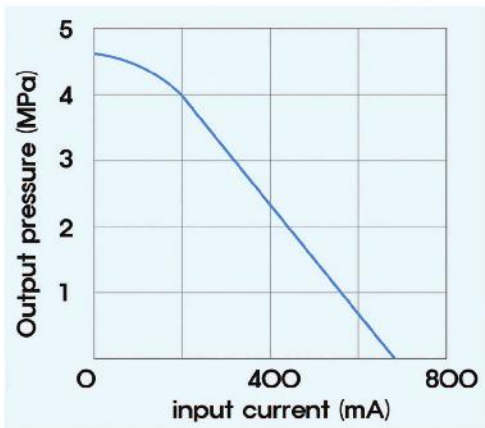
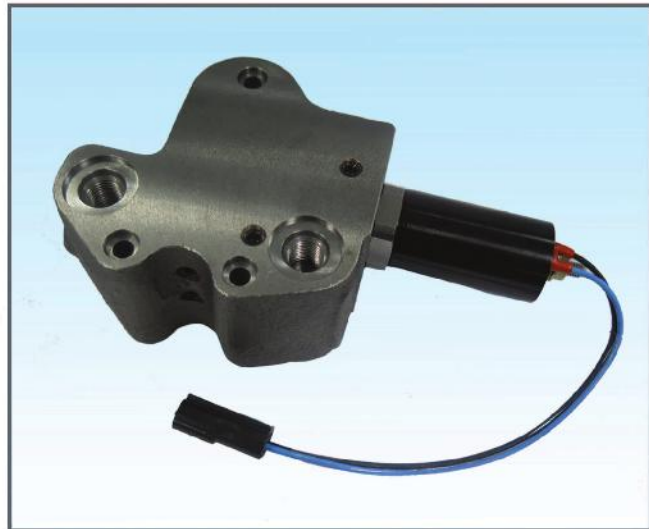
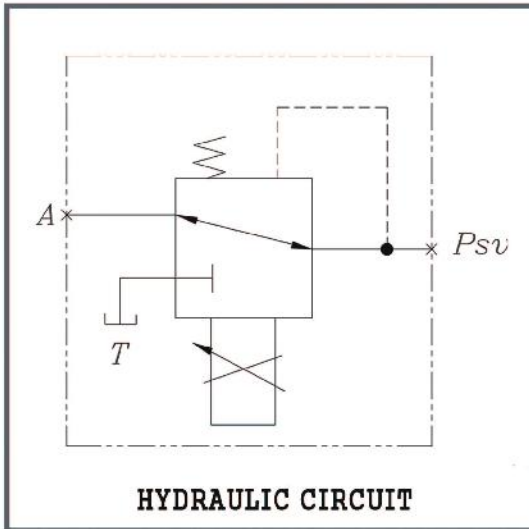


## SPECIFICATIONS

1. CONTROL SPECIFICATION : POSITIVE PROPORTIONAL
2. SECOND PRESSURE/MAX. SET PRESSURE  
: 30Kgf/cm<sup>2</sup> (2.9Mpa)
3. SOLENOID RATING : 0.75A for DC24V
4. COIL RESISTANCE(Ω) :17.5

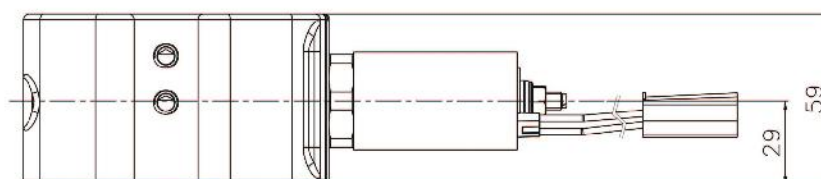
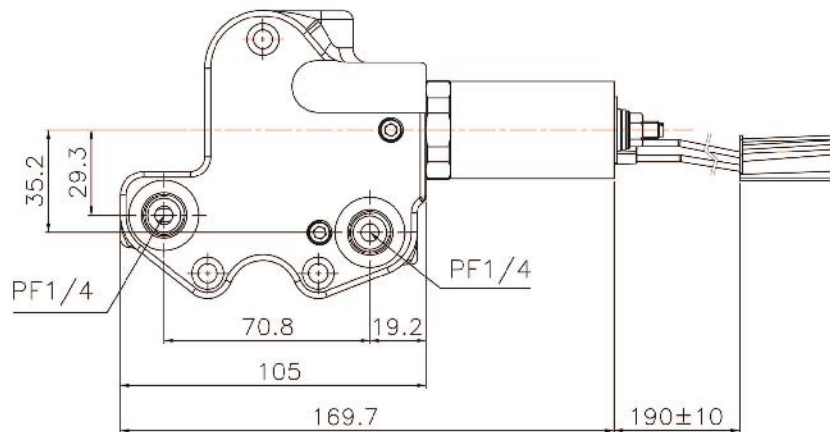


# Proportional pressure reducing valve (HPR3SN-40A1-221-M6)

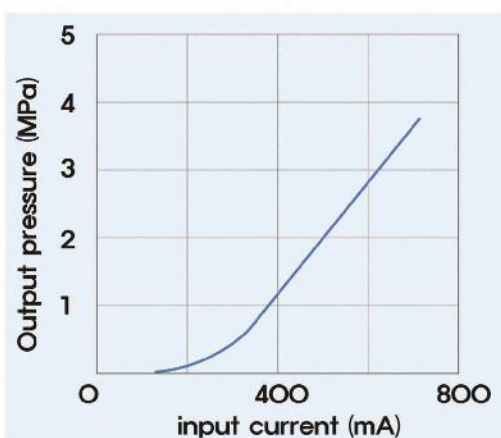
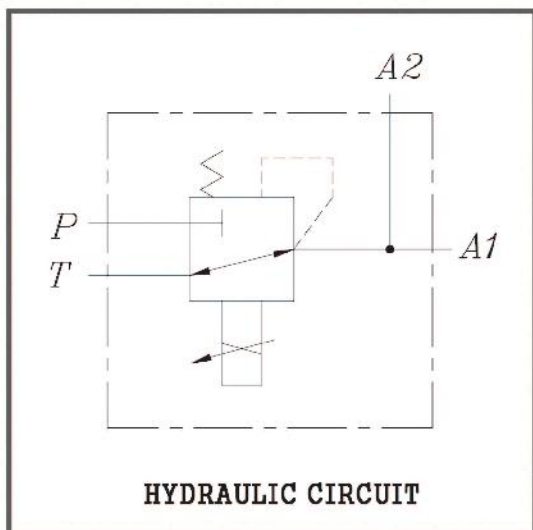


## SPECIFICATIONS

1. CONTROL SPECIFICATION : NEGATIVE PROPORTIONAL
2. SECOND PRESSURE/MAX. SET PRESSURE : 40Kgf/cm<sup>2</sup> (3.9Mpa)
3. SOLENOID RATING : 0.75A for DC24V
4. COIL RESISTANCE(Ω) : 17.5

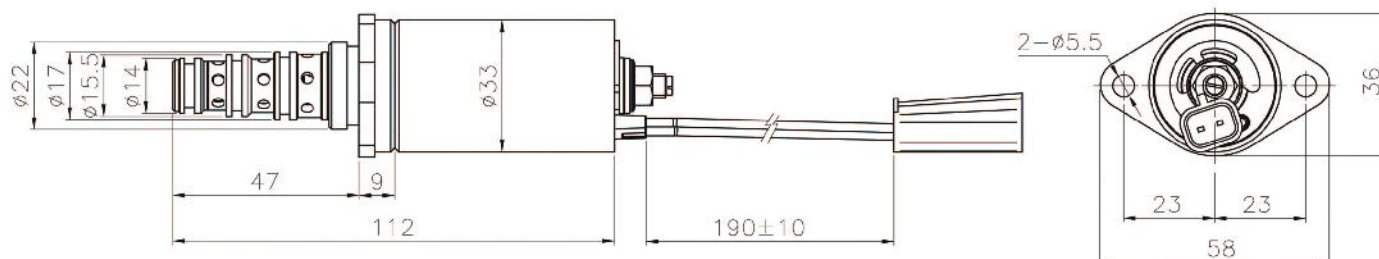


# Proportional pressure reducing valve (HPR3B-30A1-201)



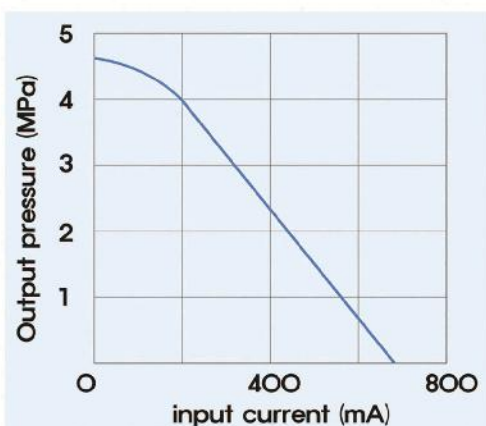
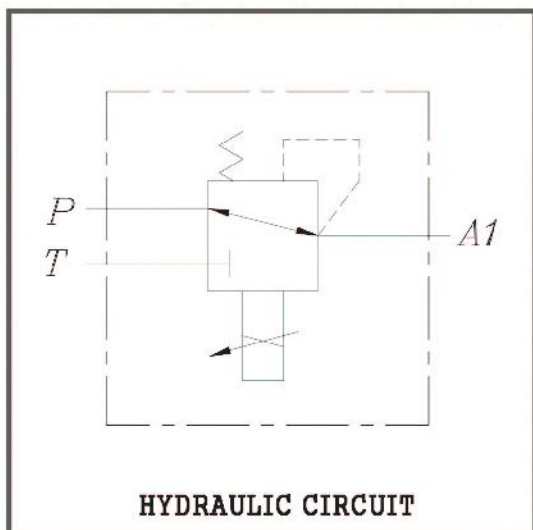
## SPECIFICATIONS

1. CONTROL SPECIFICATION : POSITIVE PROPORTIONAL
2. SECOND PRESSURE/MAX. SET PRESSURE : 30Kgf/cm<sup>2</sup> (2.9Mpa)
3. SOLENOID RATING : 0.75A for DC24V
4. COIL RESISTANCE( $\Omega$ ) :17.5



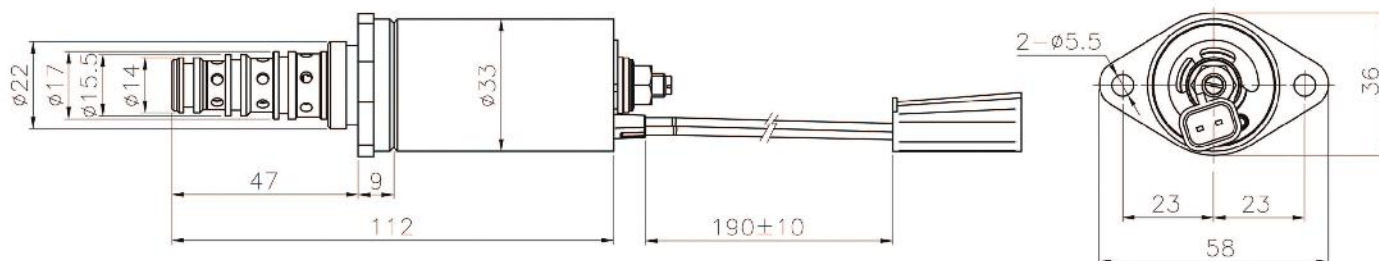


# Proportional pressure reducing valve (HPR3BN-30A1-201)

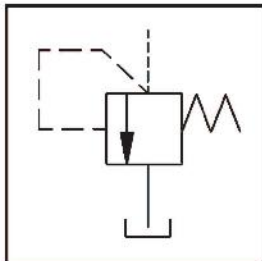


## SPECIFICATIONS

1. CONTROL SPECIFICATION : NEGATIVE PROPORTIONAL
2. SECOND PRESSURE/MAX. SET PRESSURE  
: 30Kgf/cm<sup>2</sup> (2.9Mpa)
3. SOLENOID RATING : 0.75A for DC24V
4. COIL RESISTANCE(Ω) :17.5

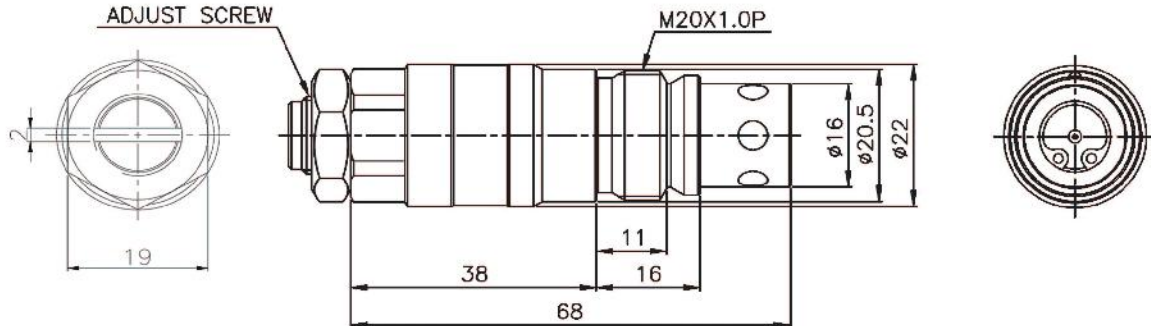


## HYDRAULIC CIRCUIT



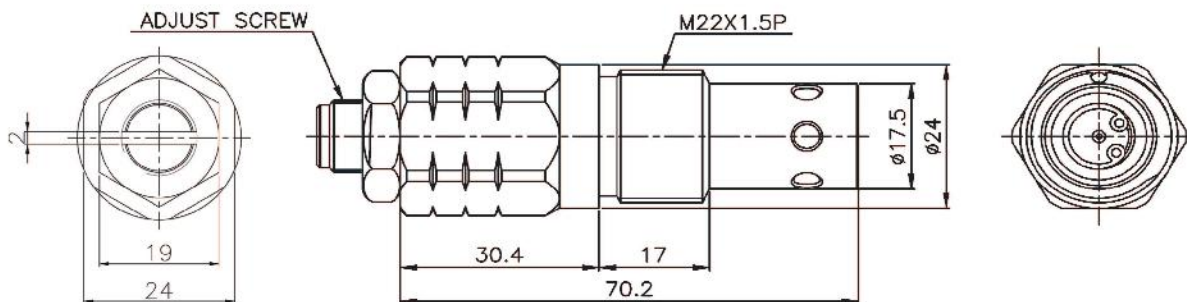
## UCHIDA SERIES

(A8V55 / A8V80 / A8V86 / A8V107 / A8V115 / A8V172 / A8V200)



## KAWASAKI SERIES

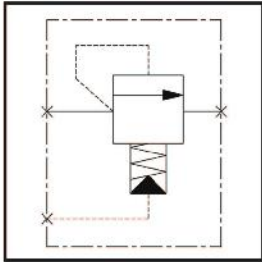
(H3V63 / H3V112 / H3V140 / H3V180)  
(H5V80 / H5V140 / H5V160 / H5V200)



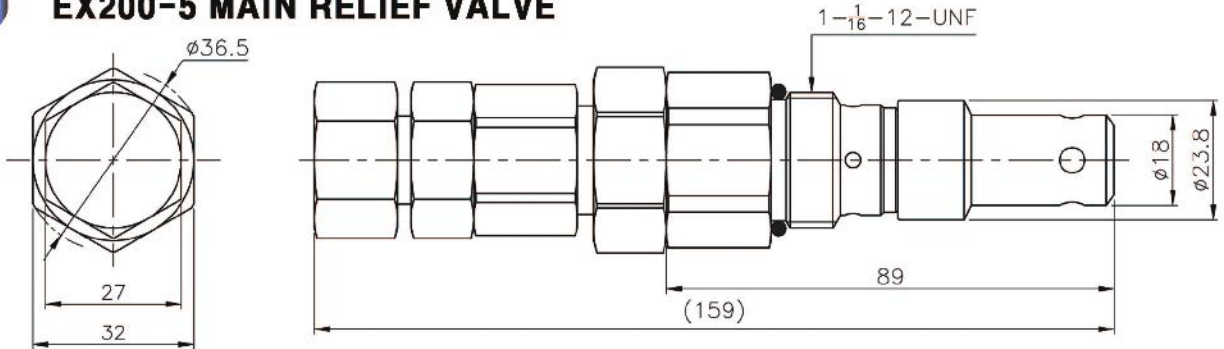
# MAIN RELIEF VALVE SERIES



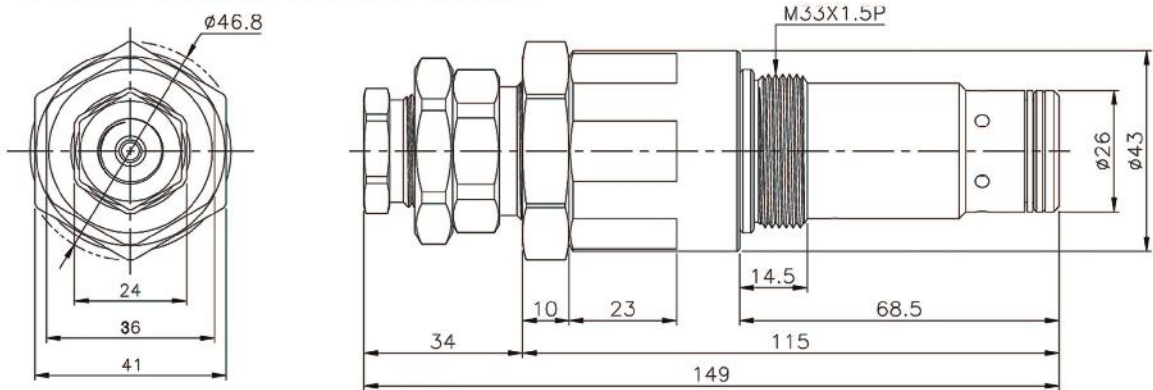
## HYDRAULIC CIRCUIT



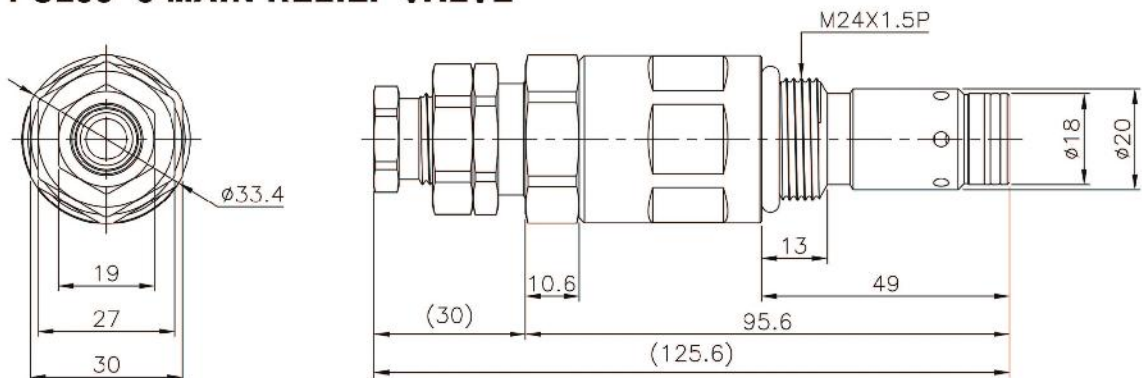
### EX200-5 MAIN RELIEF VALVE



### PC200-5 MAIN RELIEF VALVE

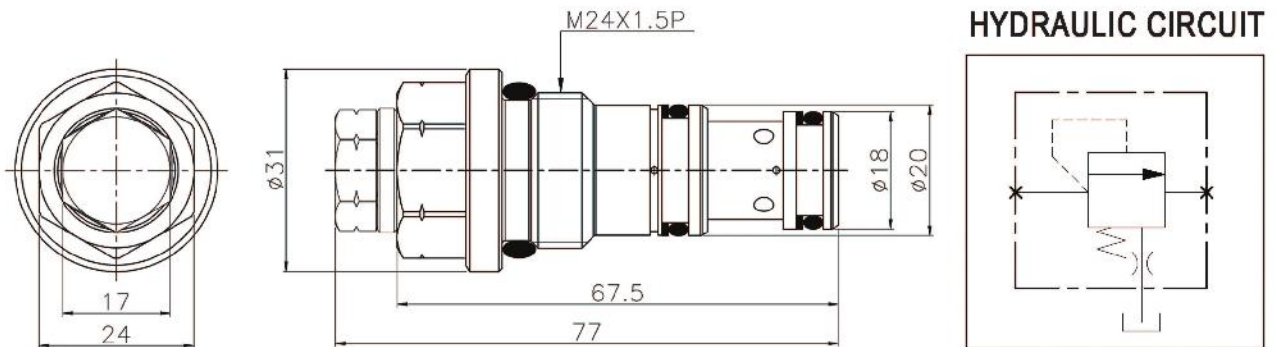


### PC200-6 MAIN RELIEF VALVE

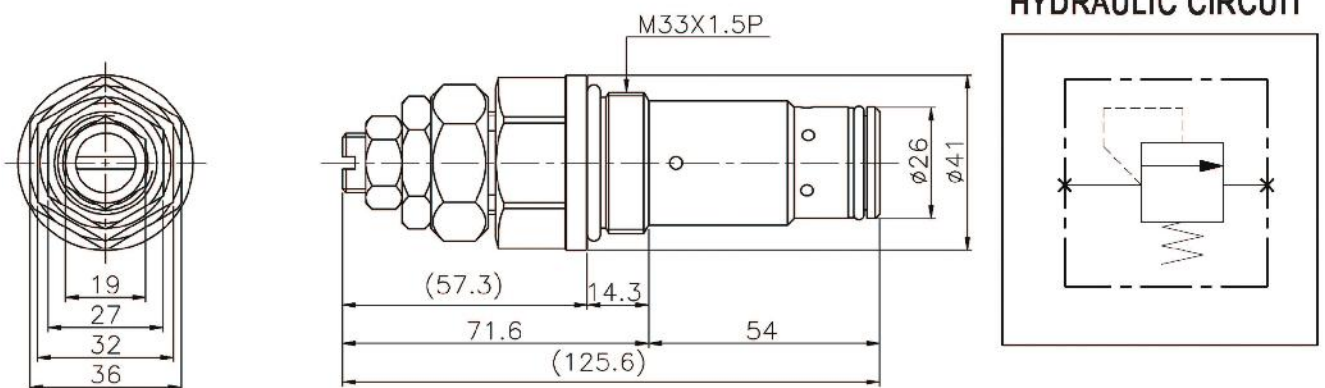




## PC200-7 UNLOAD VALVE

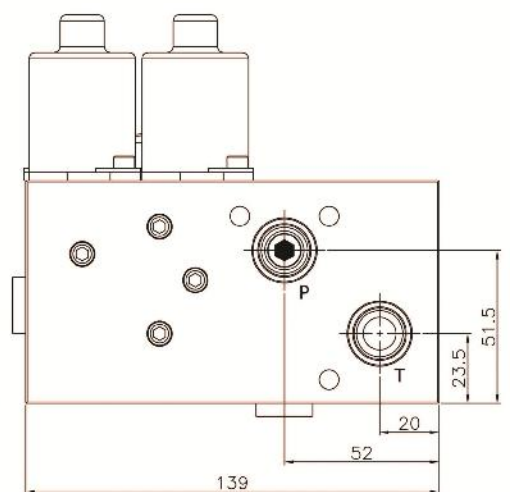
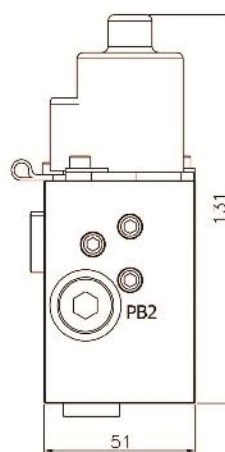
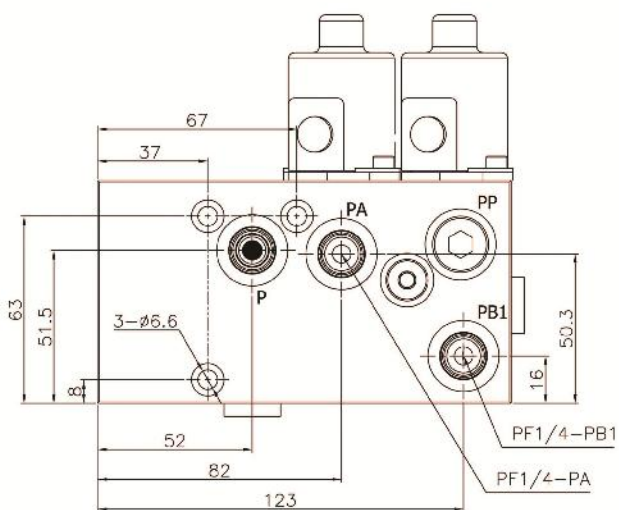
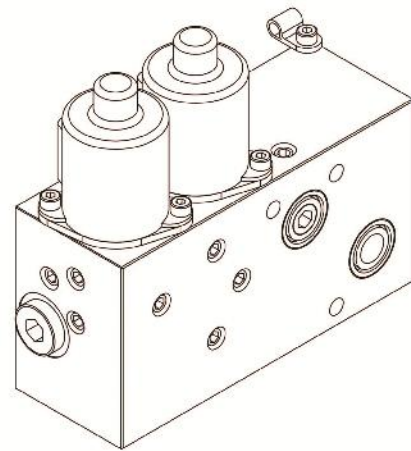
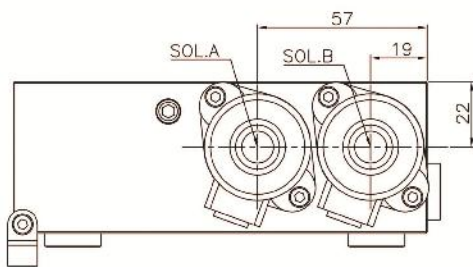
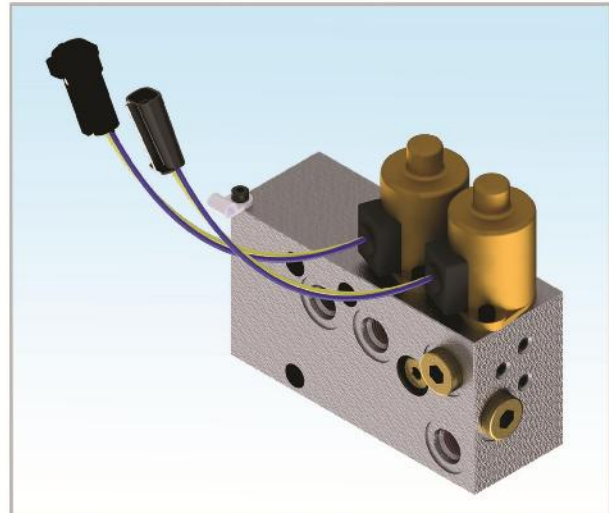
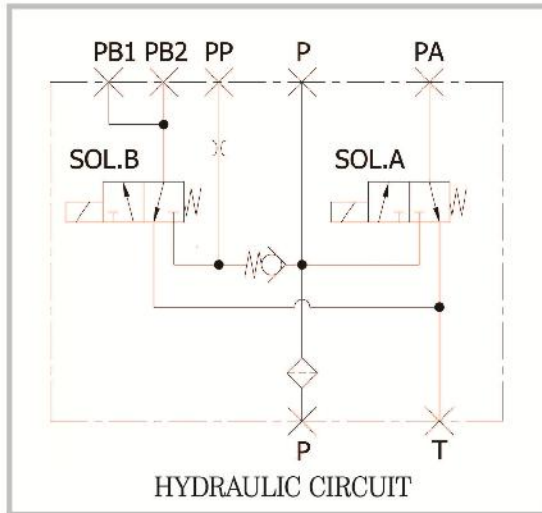


## PC200-3 MAIN RELIEF VALVE

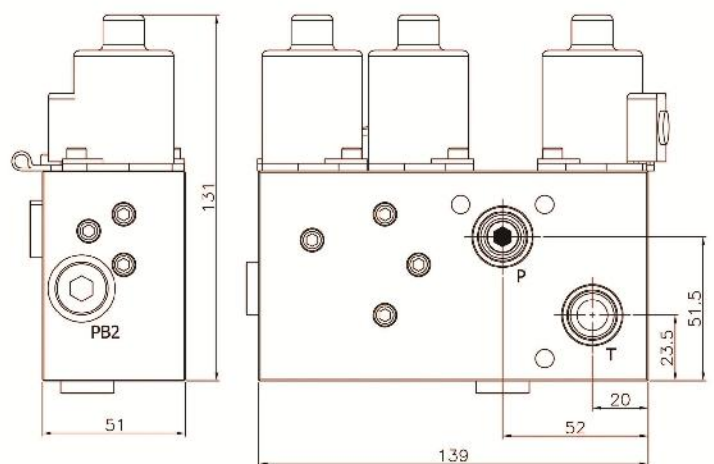
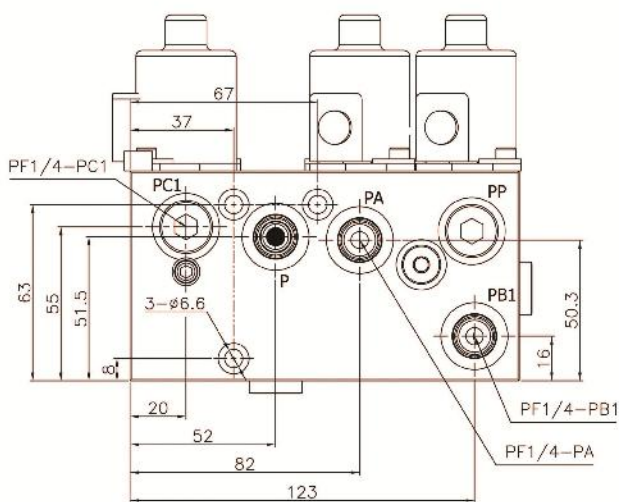
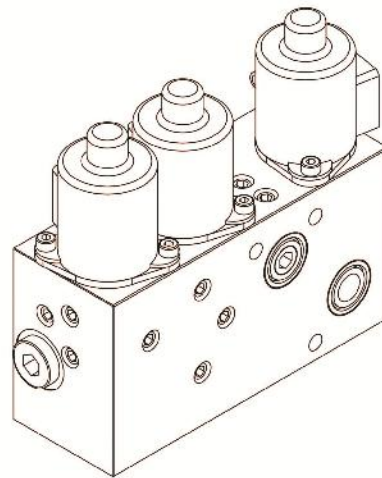
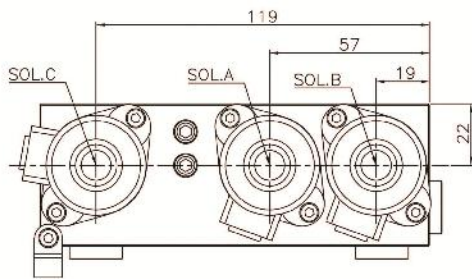
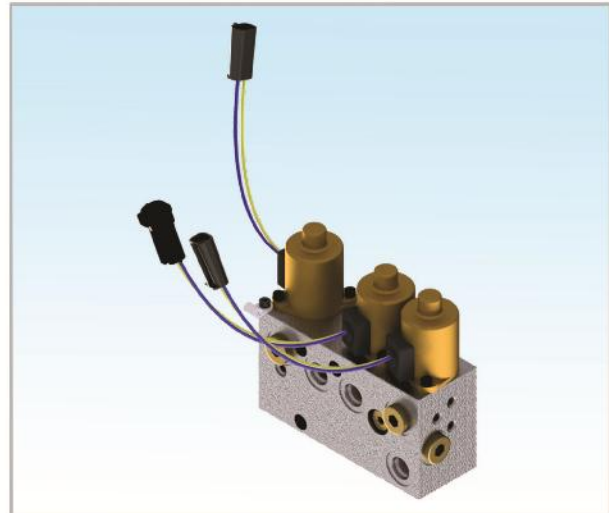
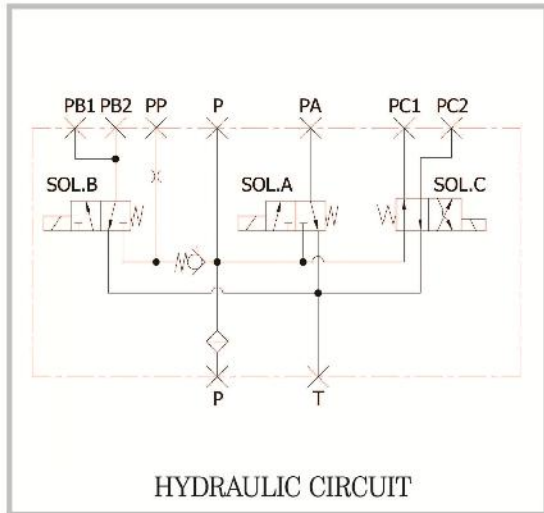




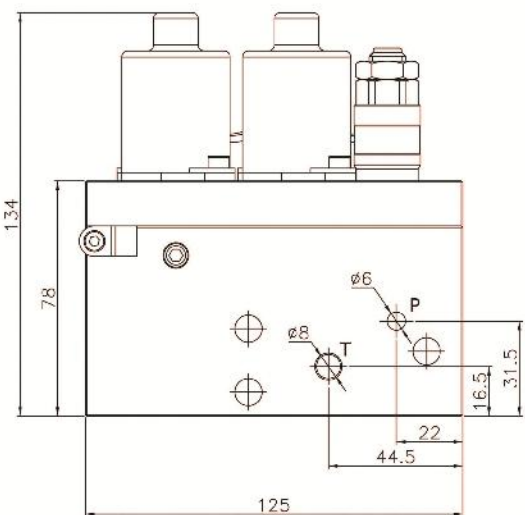
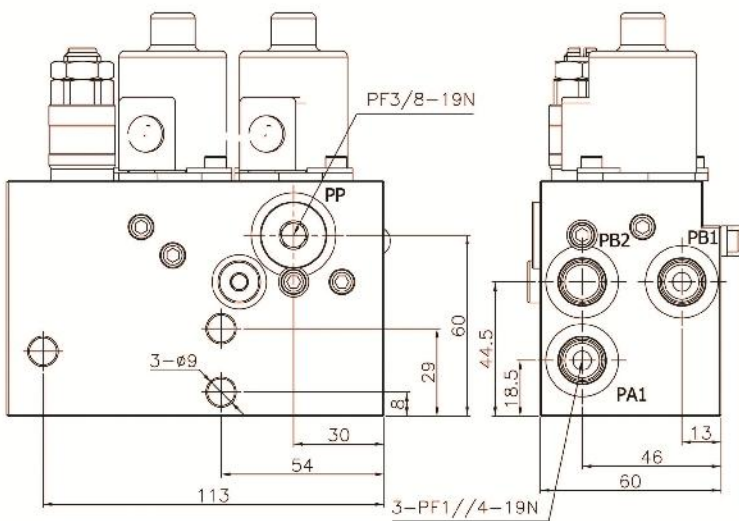
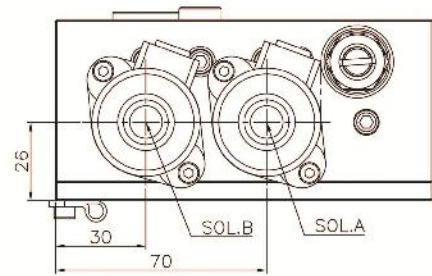
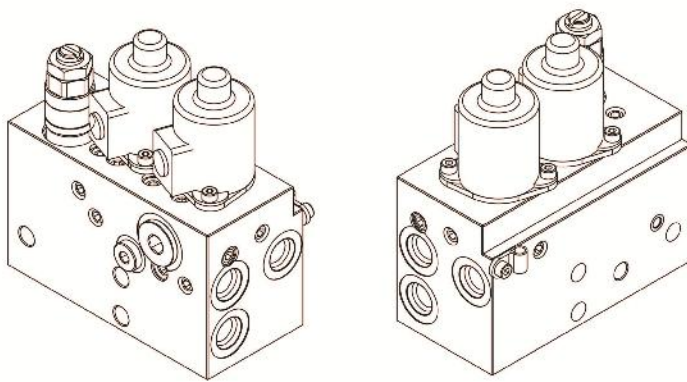
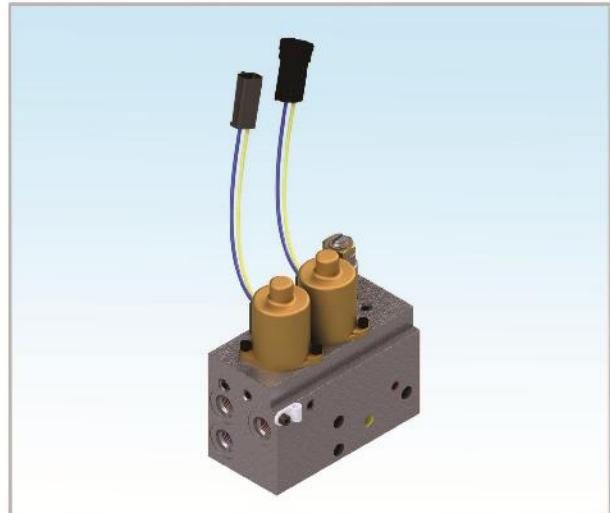
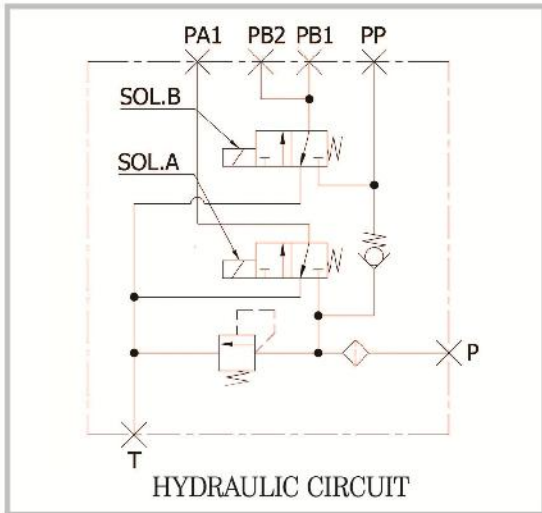
# SOLENOID VALVE(PSVD2 SERIES-2STAGE)



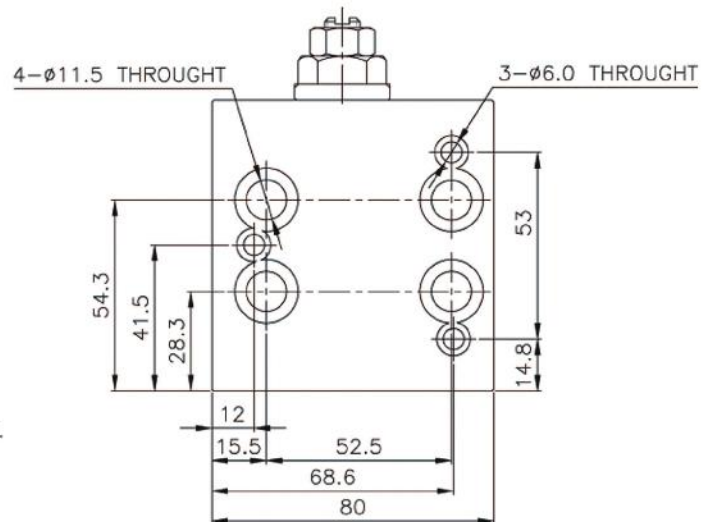
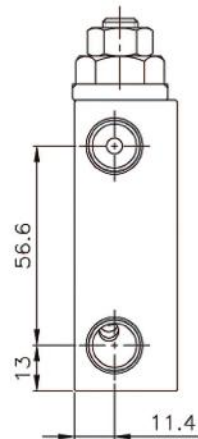
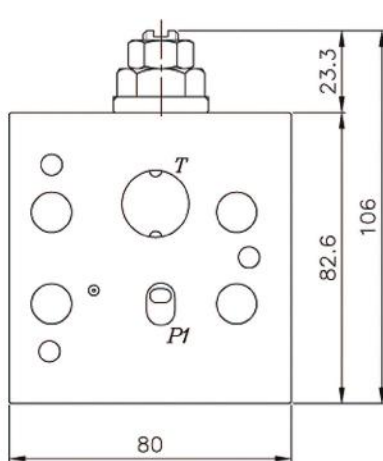
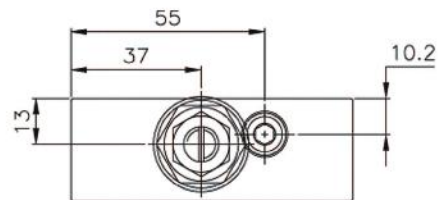
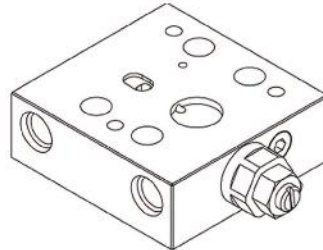
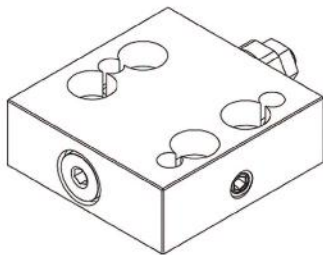
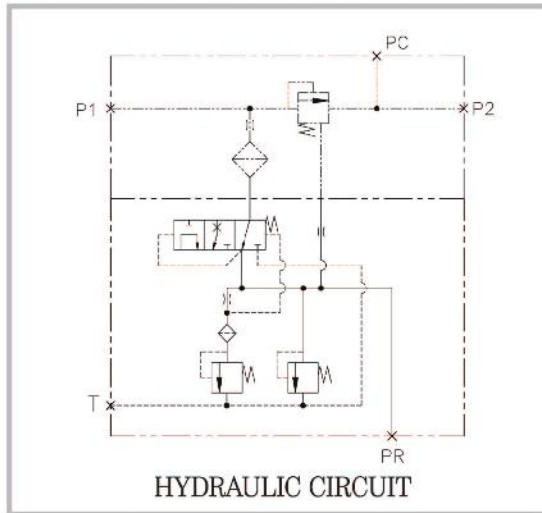
# SOLENOID VALVE(PDVD2 SERIES-3STAGE)



# SOLENOID VALVE(PVD SERIES-2STAGE)

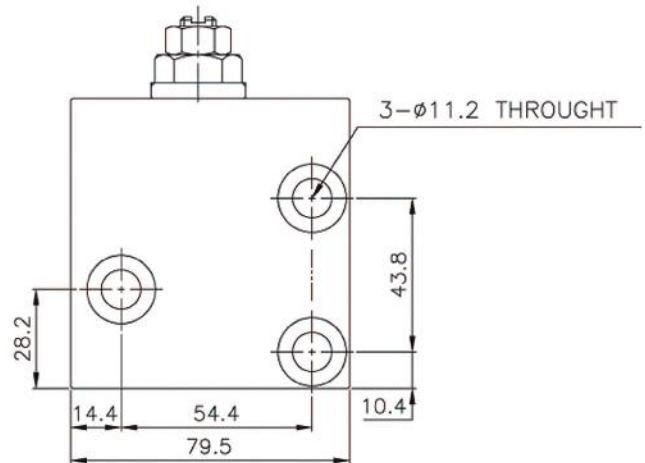
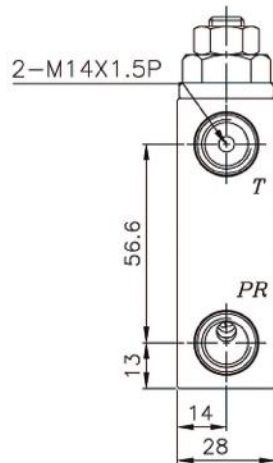
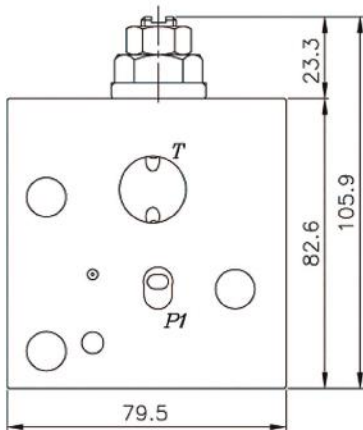
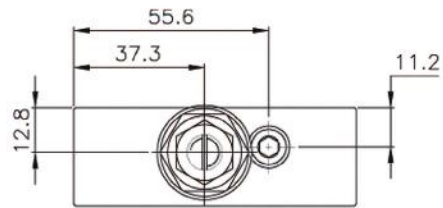
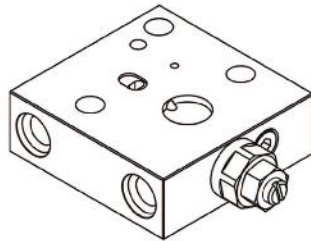
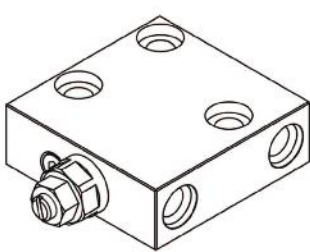
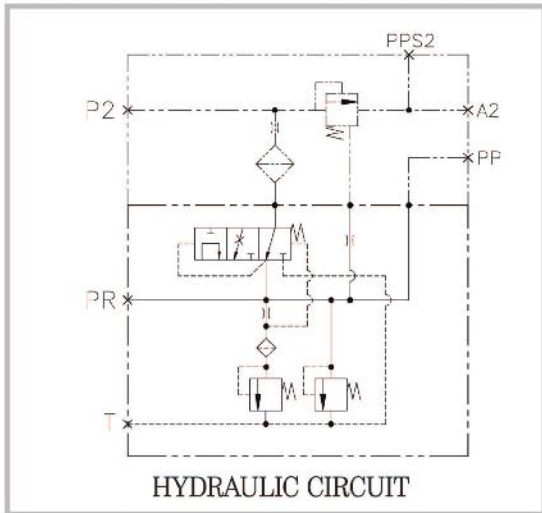


# SELF REDUCING VALVE FOR KOMATSU (4-BOLT TYPE)

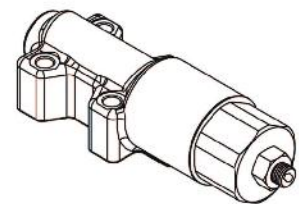
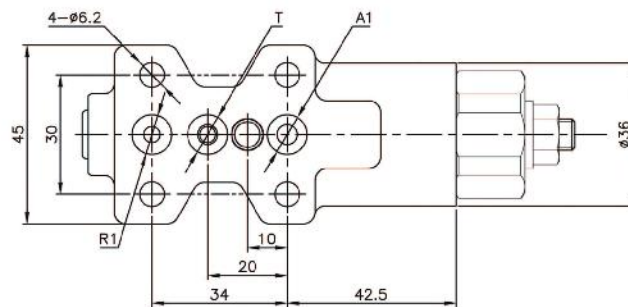
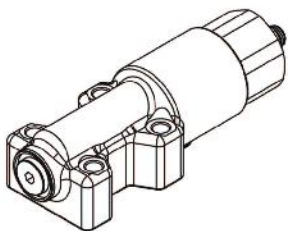
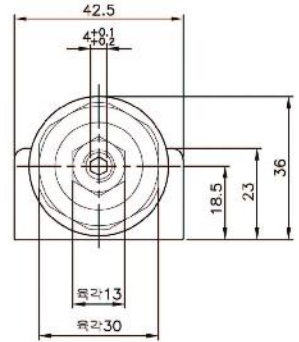
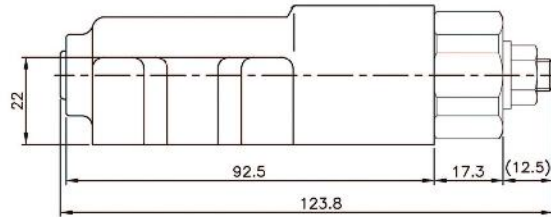
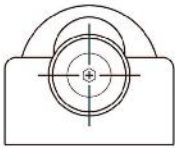
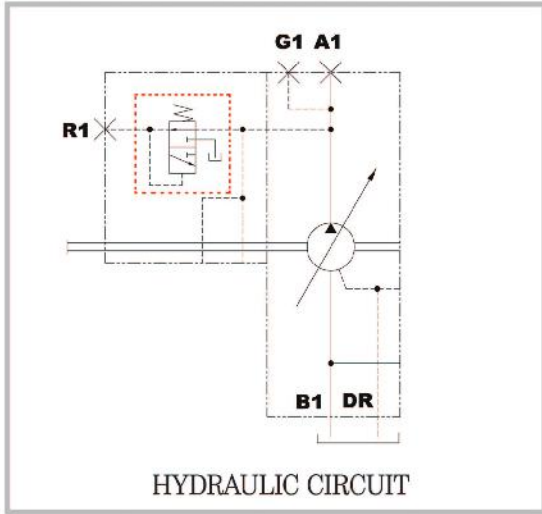




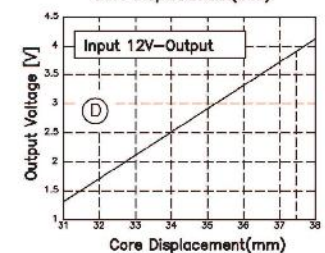
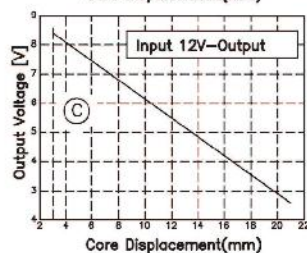
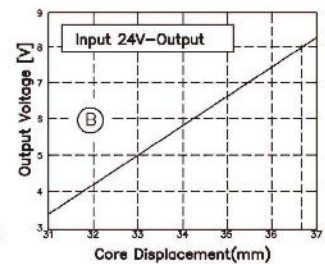
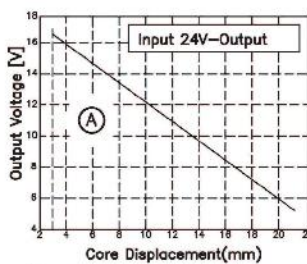
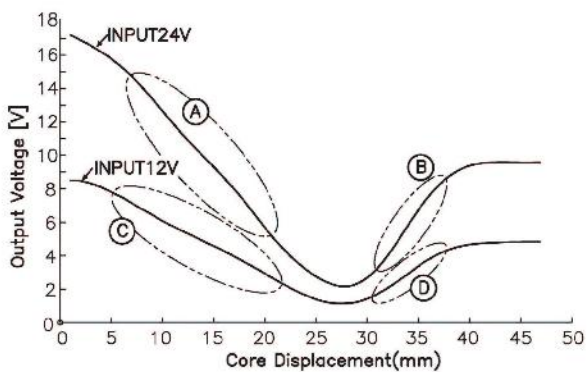
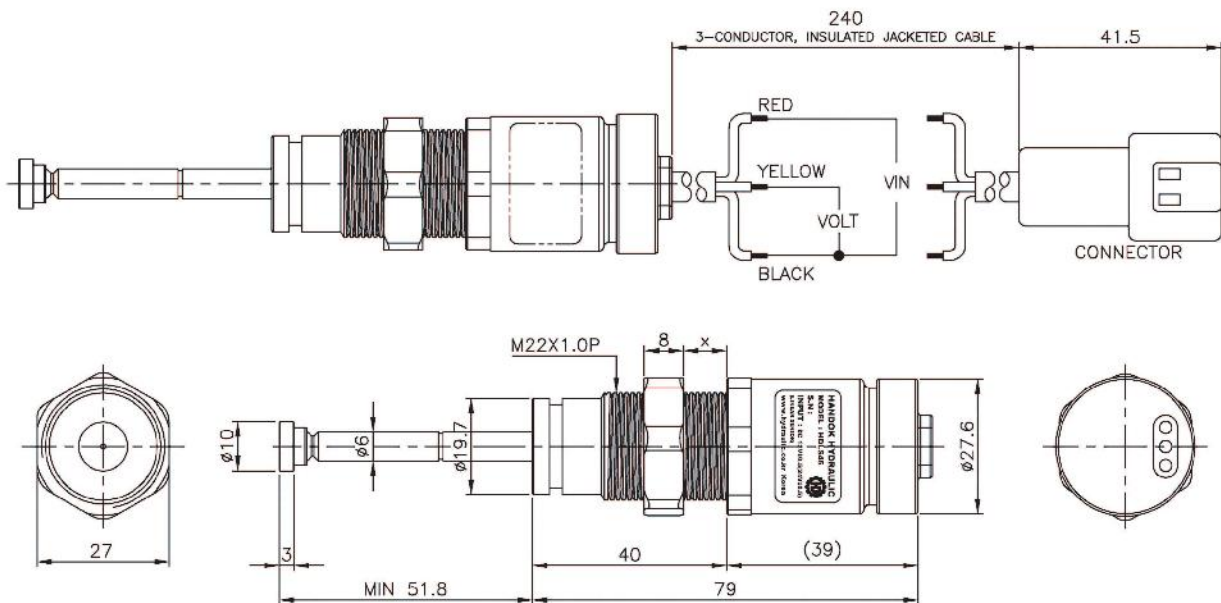
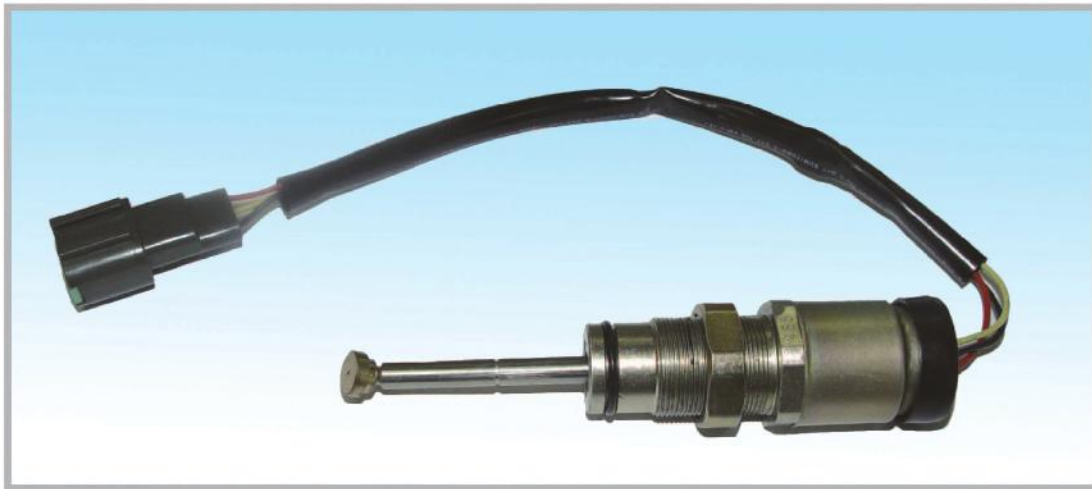
# SELF REDUCING VALVE FOR KOMATSU (3-BOLT TYPE)



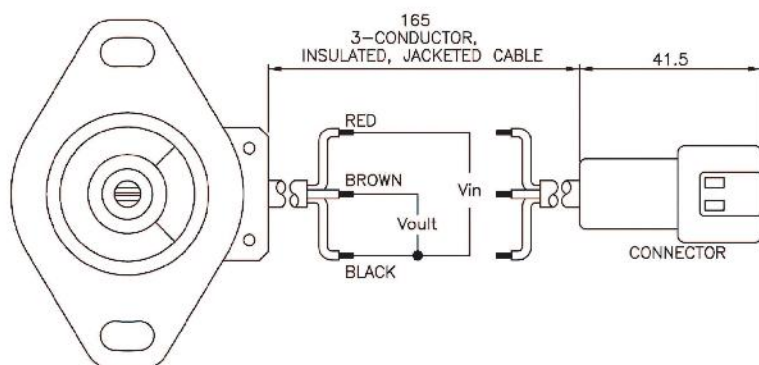
# REDUCING VALVE-A10VO28 FOR HITACHI



# LINEAR(LVDT) SENSOR FOR HITACHI



# ANGLE(RVDT) SENSOR FOR HITACHI



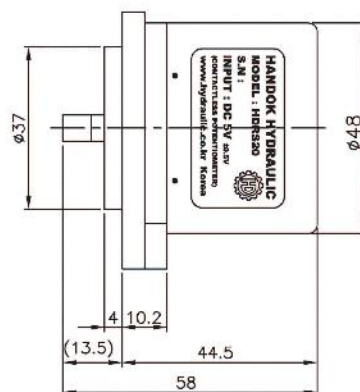
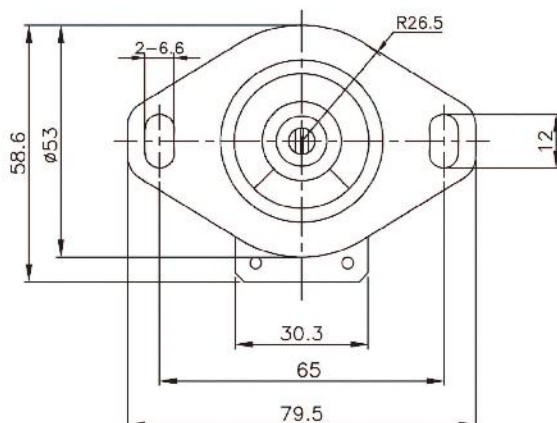
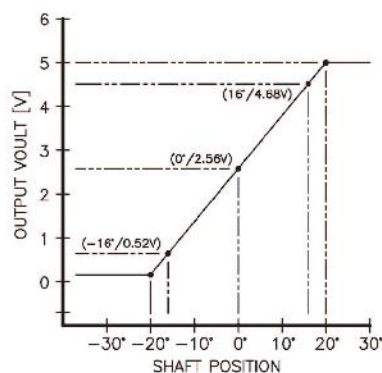
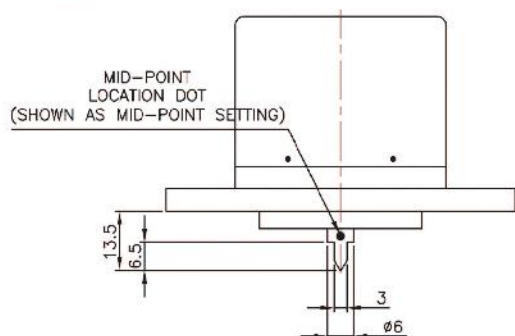
**ENVIRONMENTAL SPECIFICATIONS**

- OPERATING TEMPERATURE :  $-40^{\circ}\text{C} \sim +100^{\circ}\text{C}$
- VIBRATION: 10 Gs, 2,000 Hz
- SHOCK : 100 Gs, 11 mS

**ELECTRICAL SPECIFICATIONS**

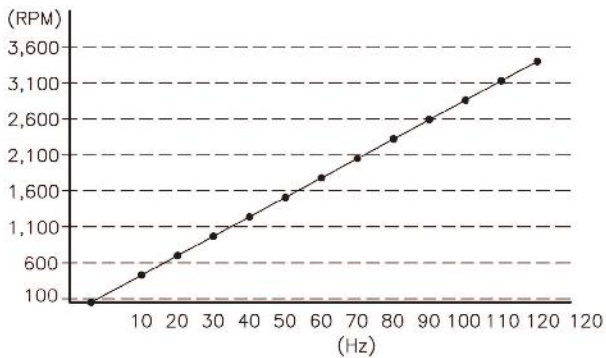
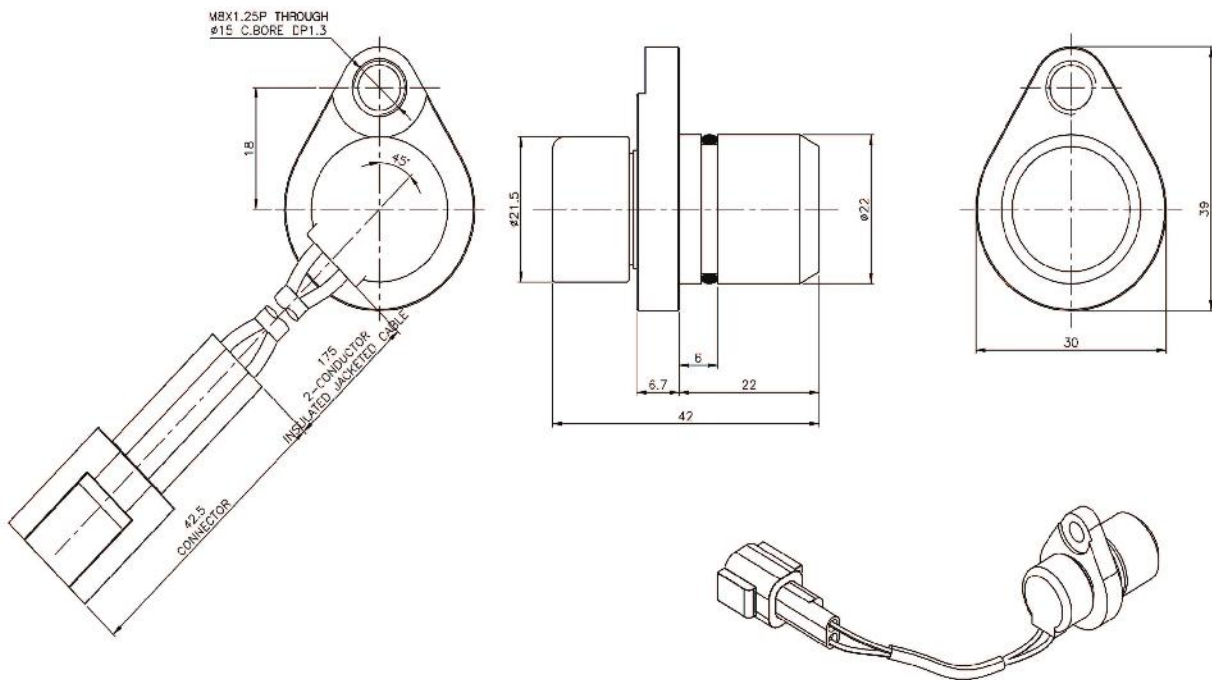
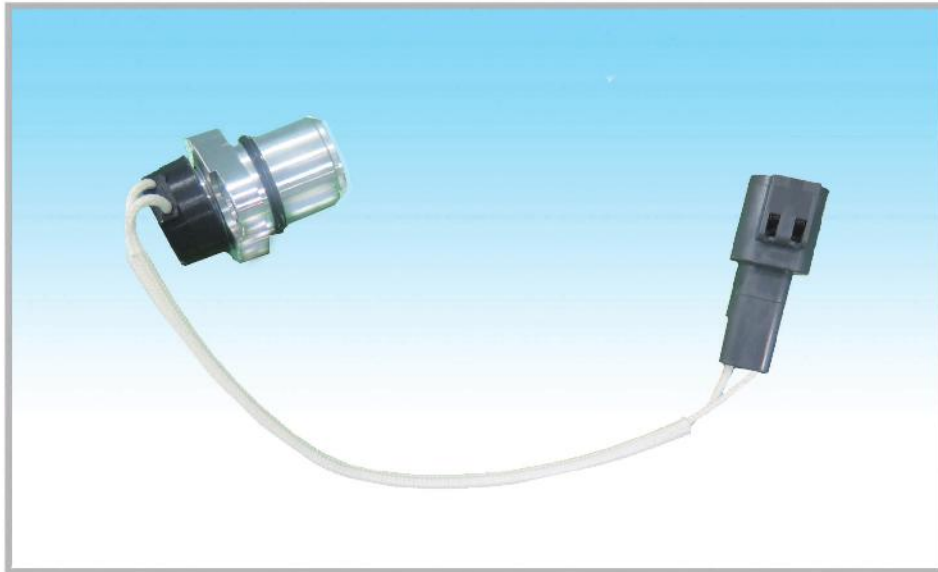
- ELECTRICAL ANGLE :  $\pm 20^{\circ}$  (  $27^{\circ}\text{C}$  )
- INPUT VOLTAGE (Vin) : DC5V  $\pm 0.5$
- SUPPLY CURRENT : 20 mA MAX.
- ACCURACY :  $\pm 1.7\%$  (  $27^{\circ}\text{C}$  )

**MECHANICAL ANGLE :  $360^{\circ}$  (ENDLESS)**





# RPM SENSOR FOR HITACHI



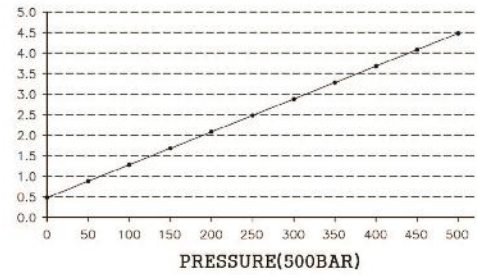
## ENVIRONMENTAL SPECIFICATIONS

- OPERATING TEMPERATURE : -20°C ~ +80°C
- MAXIMUM RPM : 5,400 RPM
- CAPACITY : 0.7~0.8Ω

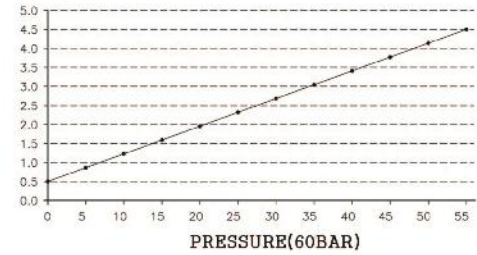
# PRESSURE SENSOR FOR FOR HITACHI



VOLTAGE



VOLTAGE

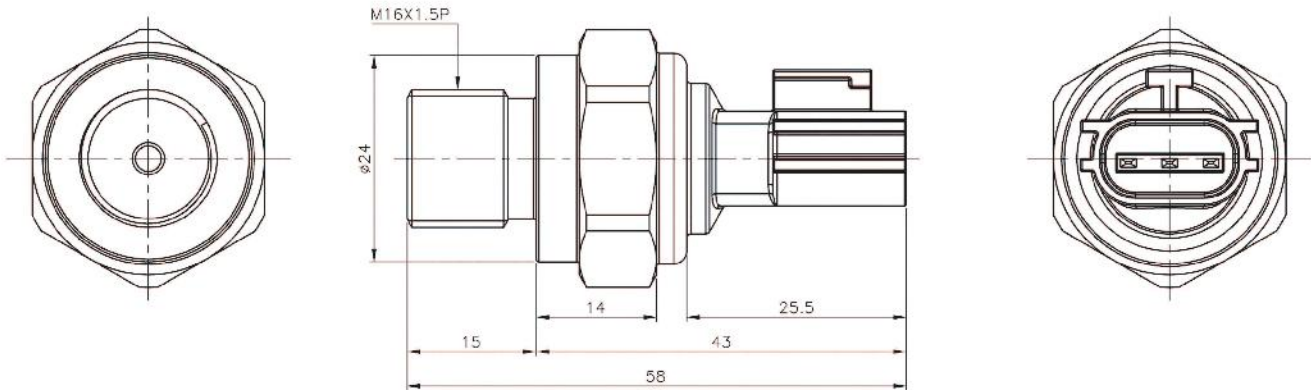


• **MAXIMUM PRESSURE : 60Bar**

ENVIRONMENTAL SPECIFICATIONS

OPERATING TEMPERATURE : -20° C ~ +80° C

INPUT VOLTAGE : DC 5V

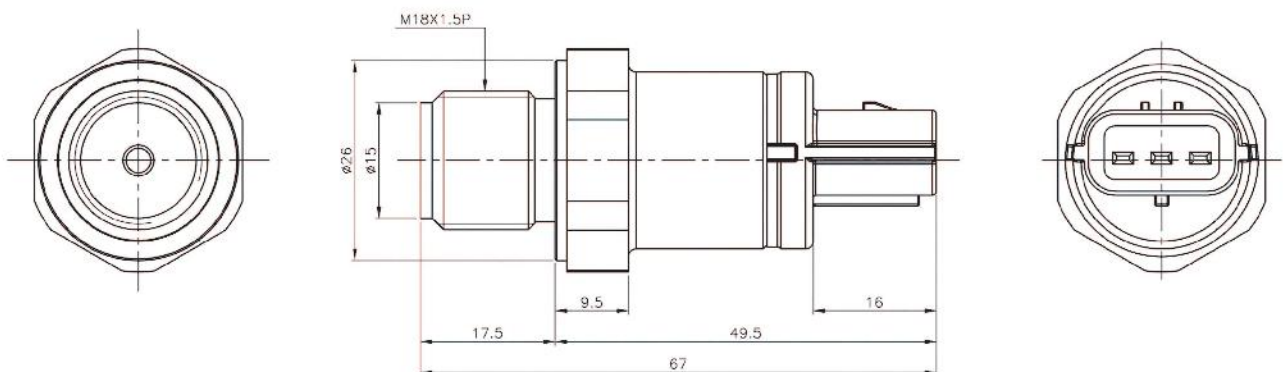


• **MAXIMUM PRESSURE : 500Bar**

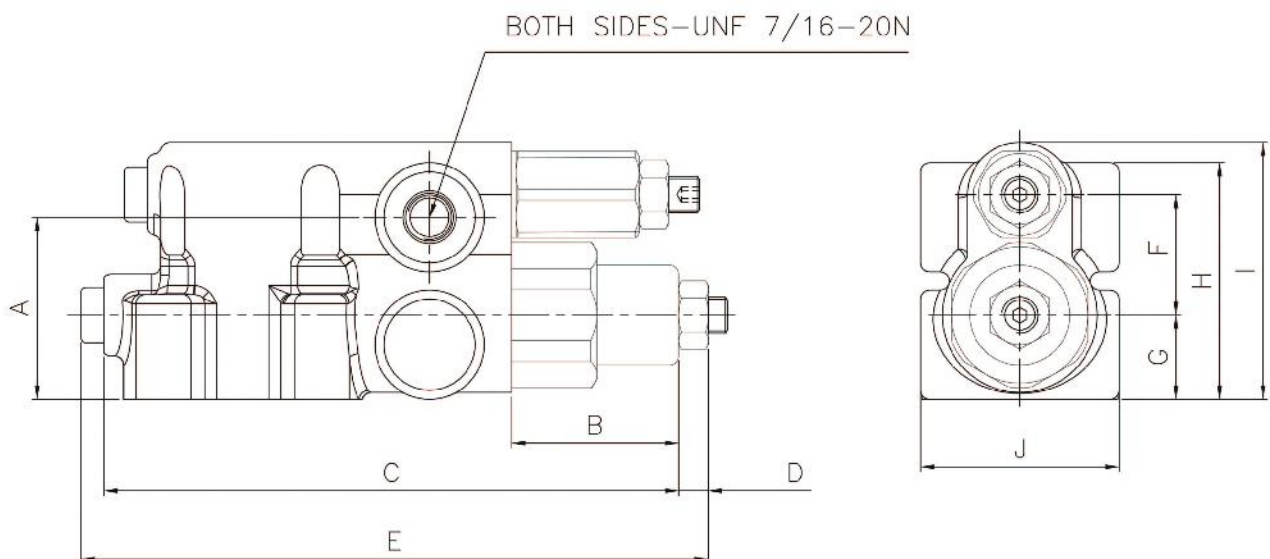
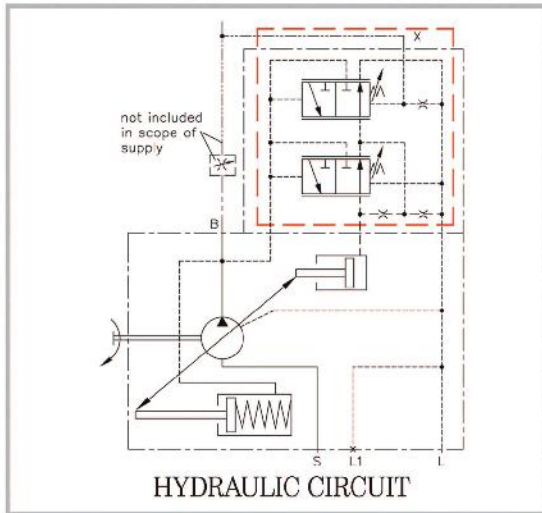
ENVIRONMENTAL SPECIFICATIONS

OPERATING TEMPERATURE : -20° C ~ +80° C

INPUT VOLTAGE : DC 5V



# CONTROL VALVE (A10VO SERIES-DFR TYPE)

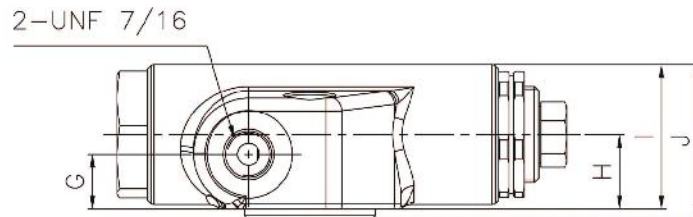
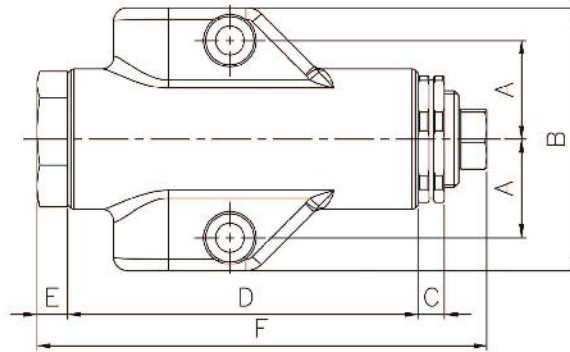
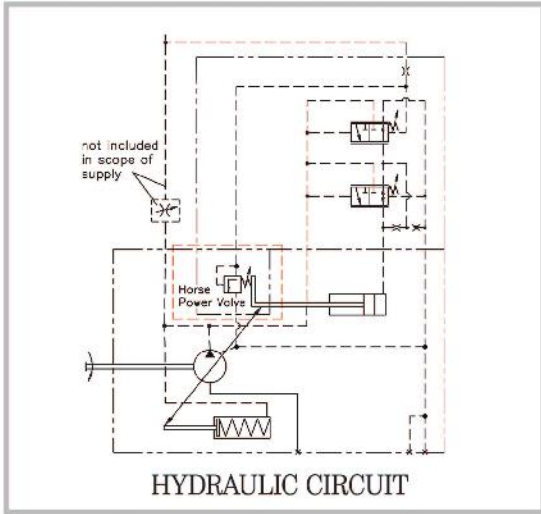


## DIMENSIONS

(mm)

| MODEL        | A  | B    | C     | D   | E     | F    | G    | H  | I    | J    |
|--------------|----|------|-------|-----|-------|------|------|----|------|------|
| A10VO SERIES | 40 | 36.7 | 126.2 | 6.5 | 137.7 | 26.5 | 18.5 | 52 | 56.5 | 43.6 |

# PILOT VALVE (A10VO SERIES)



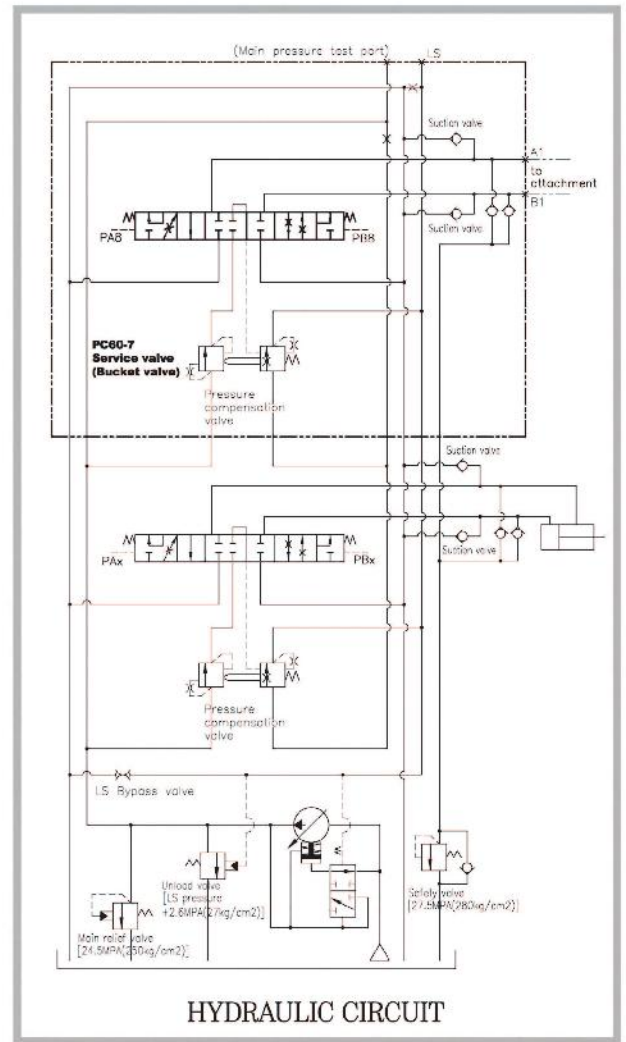
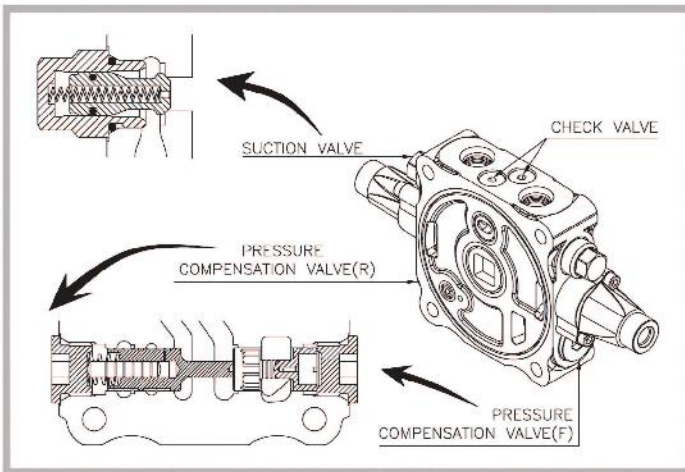
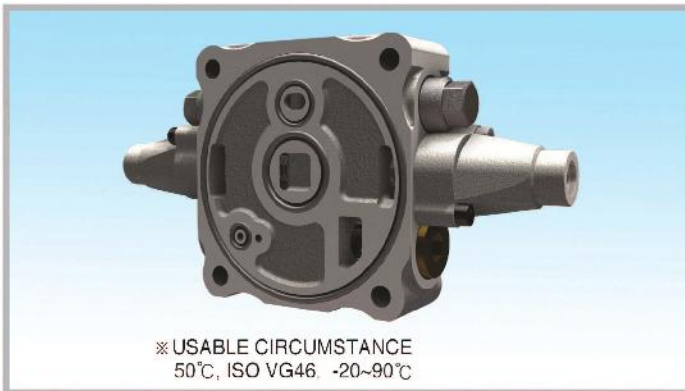
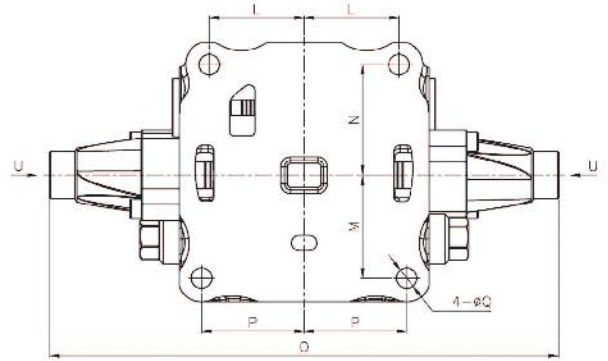
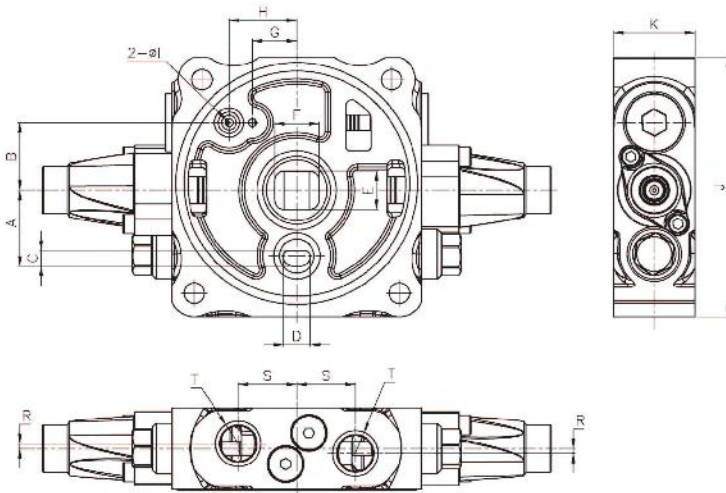
## DIMENSIONS

(mm)

| MODEL        | A    | B  | C | D  | E | F     | G    | H  | I  | J  |
|--------------|------|----|---|----|---|-------|------|----|----|----|
| A10VO SERIES | 22.5 | 60 | 6 | 80 | 7 | 102.7 | 12.5 | 17 | 33 | 35 |



# LOAD SENSING CONTROL VALVE FOR PC60-7



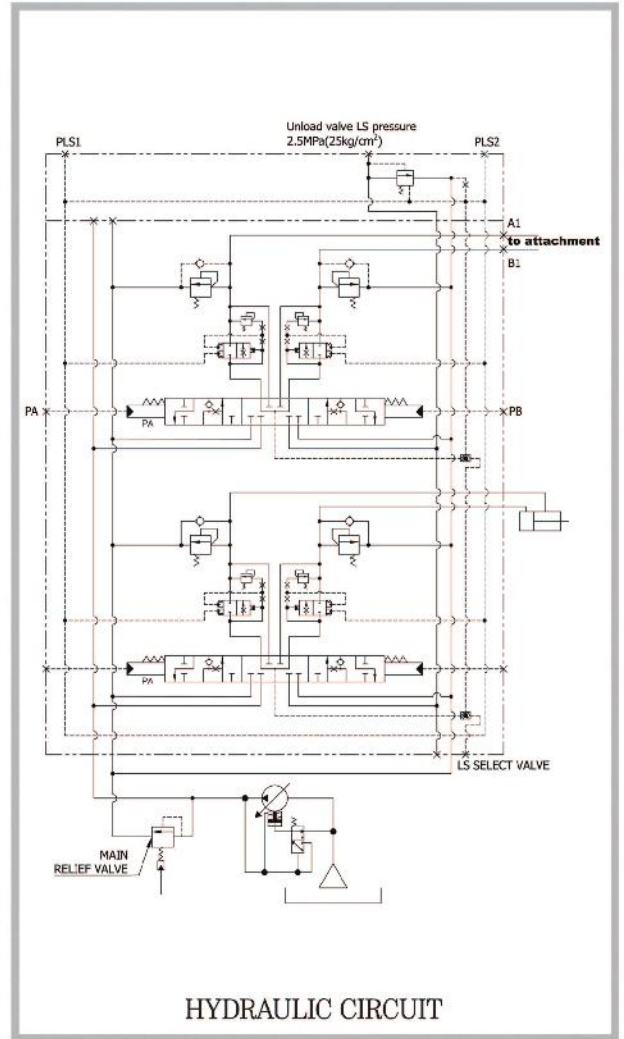
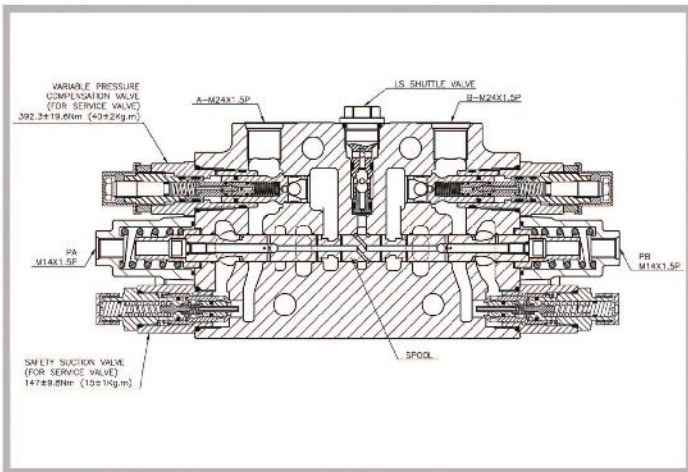
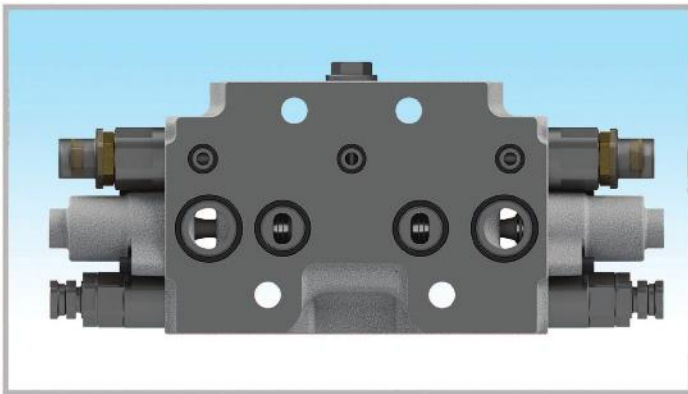
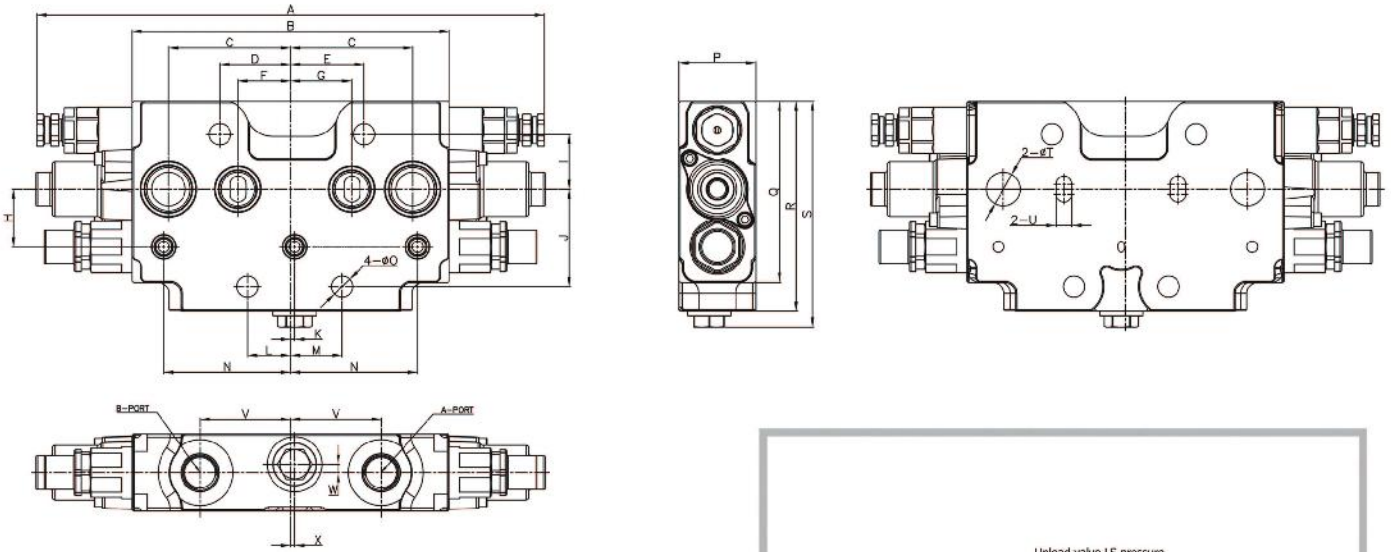
## DIMENSIONS

(mm)

| MODEL  | A  | B  | C | D  | E  | F  | G  | H  | I | J   | K  | L  |
|--------|----|----|---|----|----|----|----|----|---|-----|----|----|
| PC60-7 | 39 | 35 | 8 | 14 | 20 | 23 | 23 | 35 | 4 | 134 | 42 | 49 |

| MODEL  | M    | N    | O   | P  | Q    | R   | S    | T        | U        |
|--------|------|------|-----|----|------|-----|------|----------|----------|
| PC60-7 | 53.2 | 57.2 | 263 | 53 | 10.5 | 2.5 | 30.5 | M20X1.5P | M14X1.5P |

# LOAD SENSING CONTROL VALVE FOR PC100&120-6



## DIMENSIONS

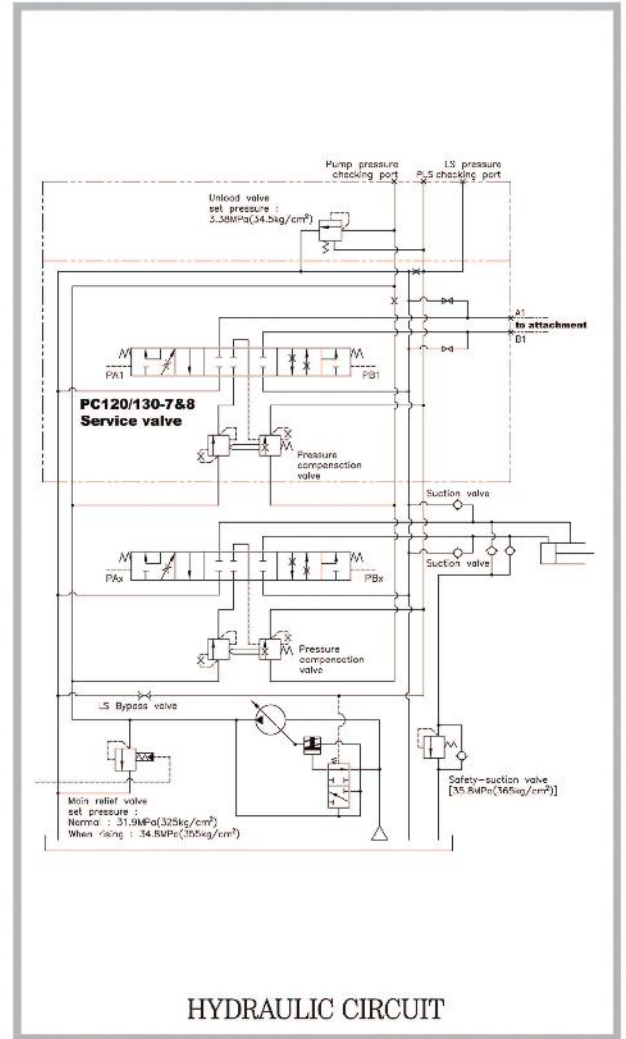
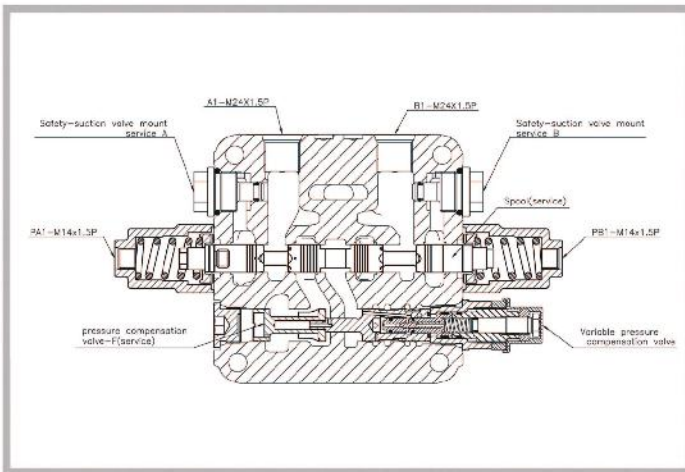
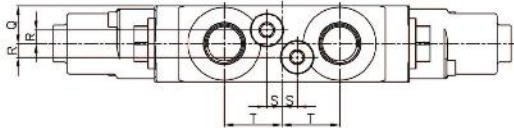
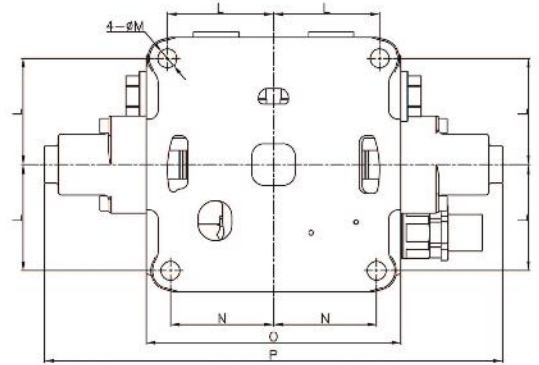
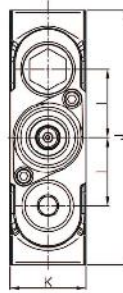
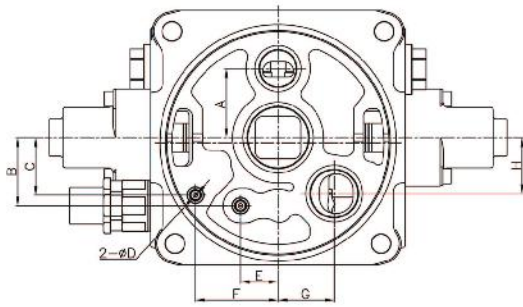
(mm)

| MODEL       | A   | B   | C  | D    | E    | F    | G    | H  | I  | J  | K | L    |
|-------------|-----|-----|----|------|------|------|------|----|----|----|---|------|
| PC100&120-6 | 370 | 231 | 89 | 51.5 | 53.5 | 38.5 | 44.5 | 42 | 40 | 71 | 3 | 31.5 |

| MODEL       | M    | N    | O    | P  | Q   | R   | S   | T    | U    | V  | W | X |
|-------------|------|------|------|----|-----|-----|-----|------|------|----|---|---|
| PC100&120-6 | 37.5 | 92.5 | 15.5 | 56 | 132 | 153 | 165 | 24.5 | 11.5 | 66 | 6 | 3 |



# LOAD SENSING CONTROL VALVE FOR PC120/130-7&8

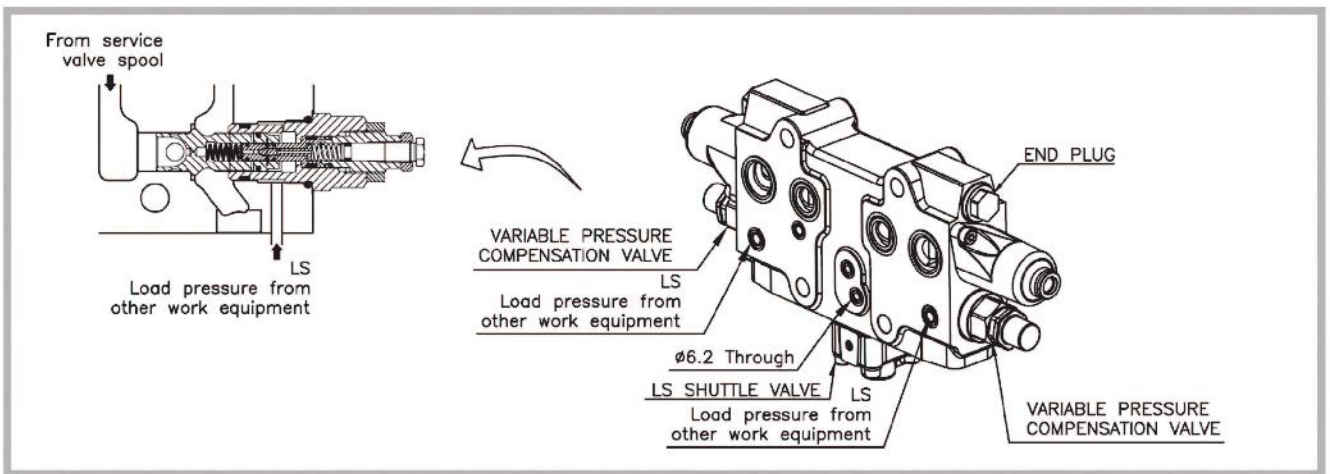
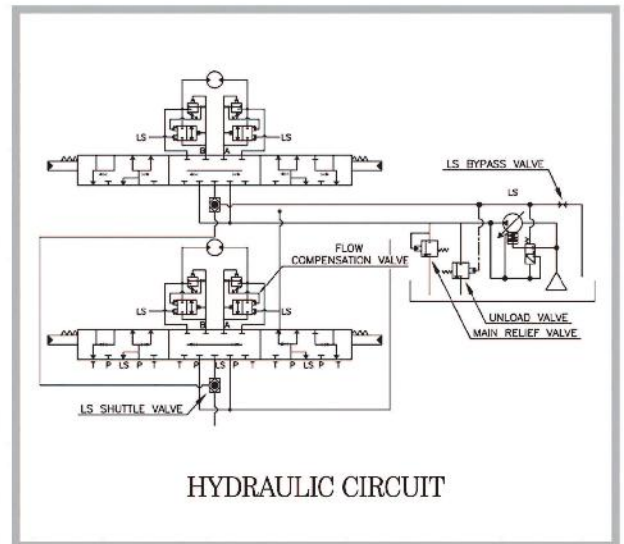
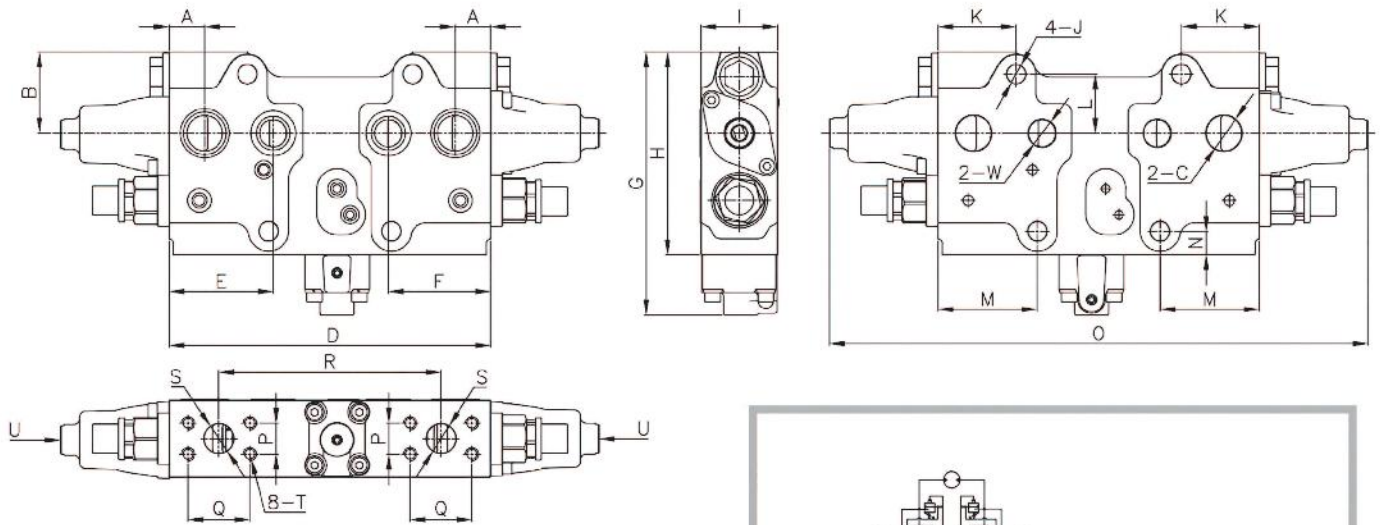


## DIMENSIONS

(mm)

| MODEL         | A    | B  | C  | D | E    | F    | G  | H  | I  | J   | K  | L  | M    | N  | O   | P   | Q  | R | S  | T  |
|---------------|------|----|----|---|------|------|----|----|----|-----|----|----|------|----|-----|-----|----|---|----|----|
| PC120/130-7&8 | 45.5 | 45 | 38 | 3 | 24.8 | 54.5 | 37 | 37 | 45 | 168 | 50 | 70 | 12.5 | 68 | 168 | 302 | 25 | 9 | 10 | 38 |

# LOAD SENSING CONTROL VALVE FOR PC200-6&PC300-6(SERVICE VALVE)



## DIMENSIONS

(mm)

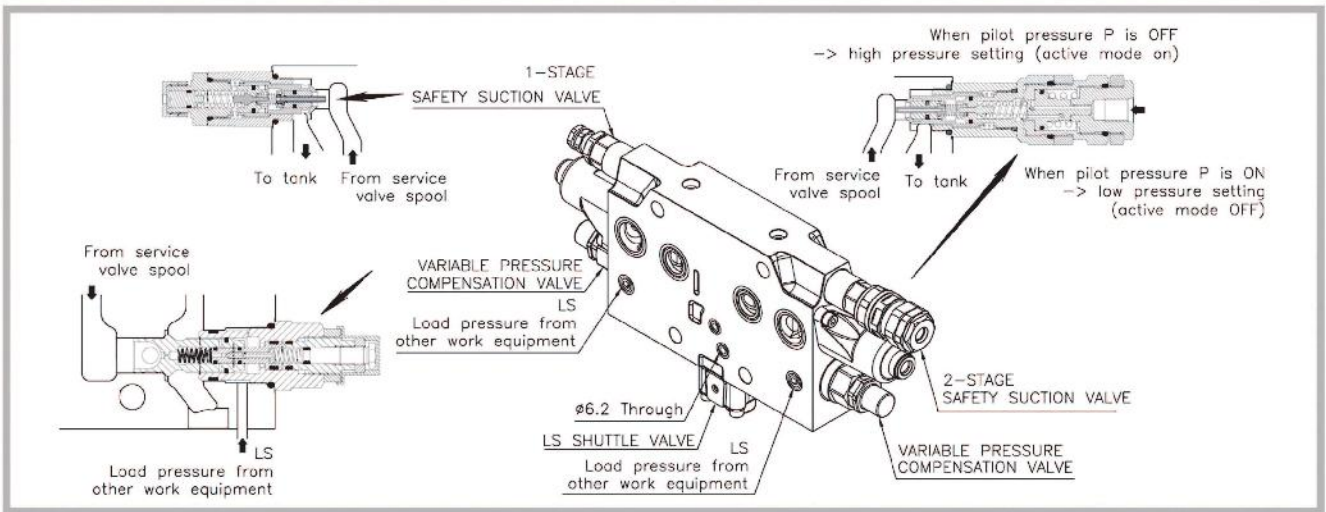
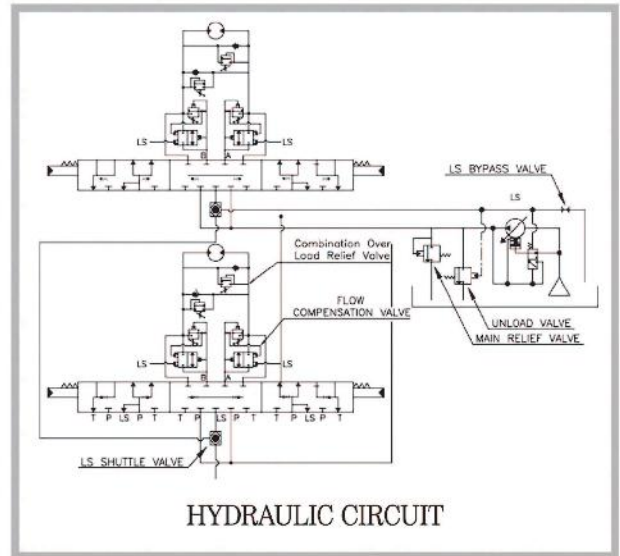
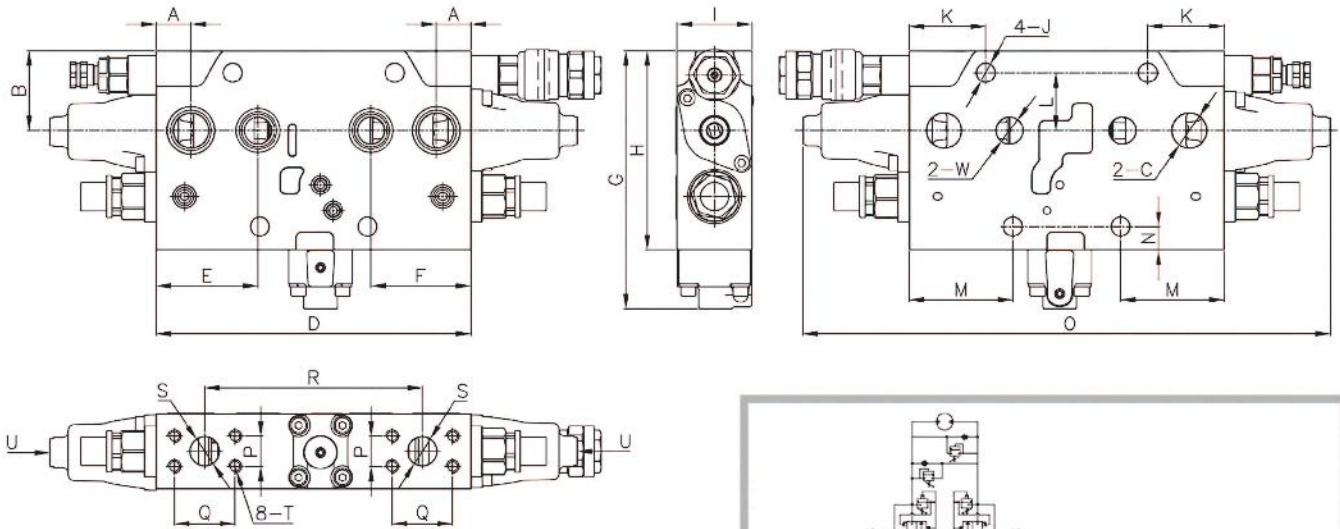
| MODEL              | A  | B  | C   | D   | E  | F    | G   | H   | I  | J   | K  | L  |
|--------------------|----|----|-----|-----|----|------|-----|-----|----|-----|----|----|
| PC200-6<br>PC300-6 | 30 | 69 | ø30 | 272 | 88 | 86.5 | 223 | 172 | 65 | ø16 | 66 | 50 |

| MODEL              | M  | N  | O   | P    | Q    | R   | S   | W   | T             | U        |
|--------------------|----|----|-----|------|------|-----|-----|-----|---------------|----------|
| PC200-6<br>PC300-6 | 84 | 20 | 456 | 26.2 | 52.4 | 188 | ø25 | ø23 | M10X1.5P Dp18 | M14X1.5P |



# LOAD SENSING CONTROL VALVE FOR PC200-7/8&PC300-7/8(SERVICE VALVE)



## DIMENSIONS

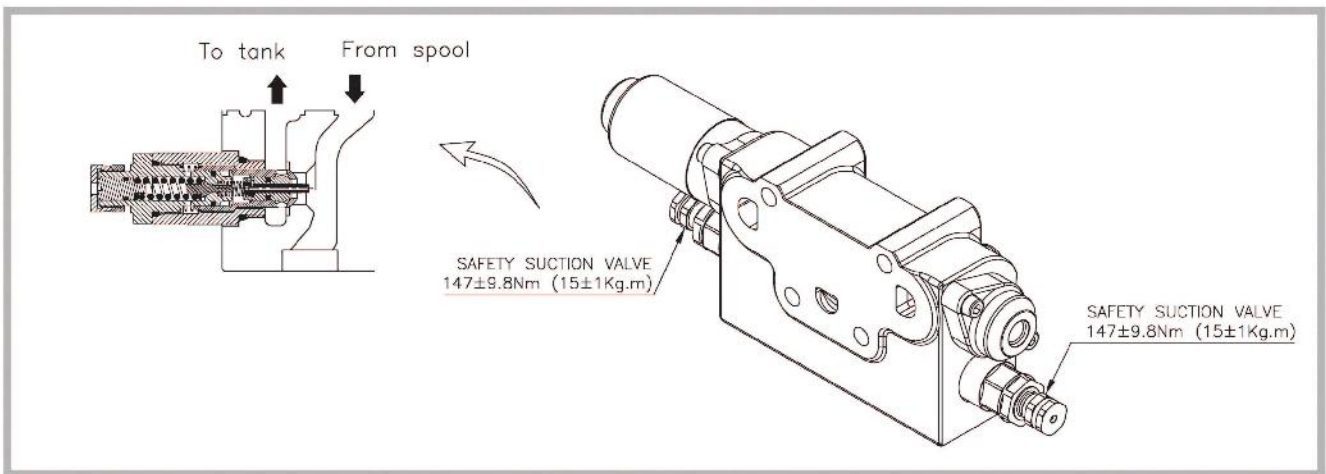
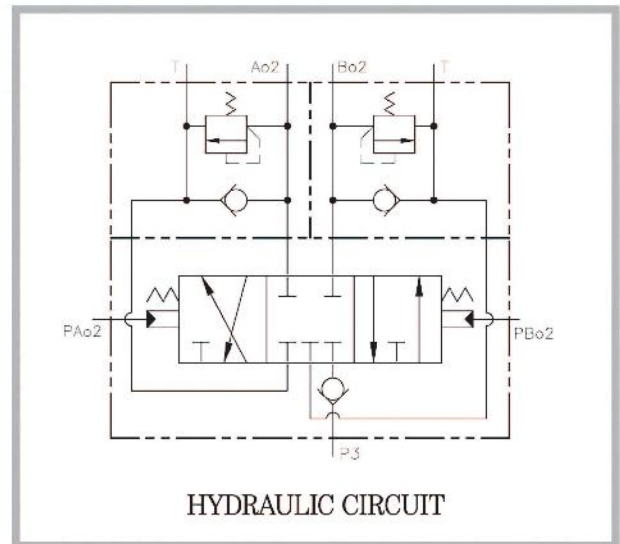
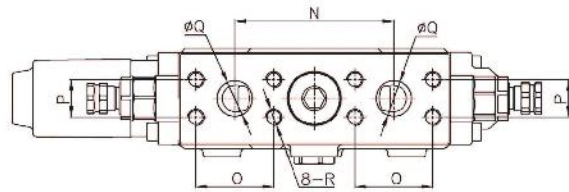
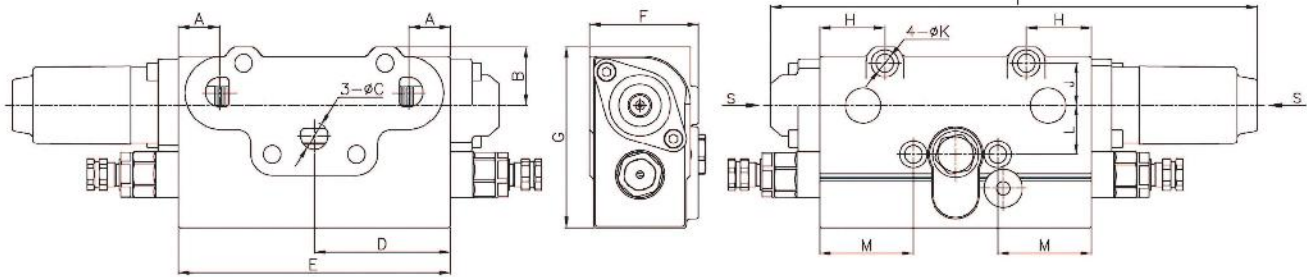
(mm)

| MODEL                  | A  | B  | C   | D   | E  | F    | G   | H   | I  | J   | K  | L  |
|------------------------|----|----|-----|-----|----|------|-----|-----|----|-----|----|----|
| PC200-7/8<br>PC300-7/8 | 30 | 69 | ∅30 | 272 | 88 | 86.5 | 223 | 172 | 65 | ∅16 | 66 | 50 |

| MODEL                  | M    | N  | O   | P    | Q    | R   | S   | W   | T             | U        |
|------------------------|------|----|-----|------|------|-----|-----|-----|---------------|----------|
| PC200-7/8<br>PC300-7/8 | 89.5 | 20 | 456 | 26.2 | 52.4 | 188 | ∅25 | ∅23 | M10X1.5P Dp18 | M14X1.5P |

# LOAD SENSING CONTROL VALVE FOR KOBELCO / NEW HOLLAND



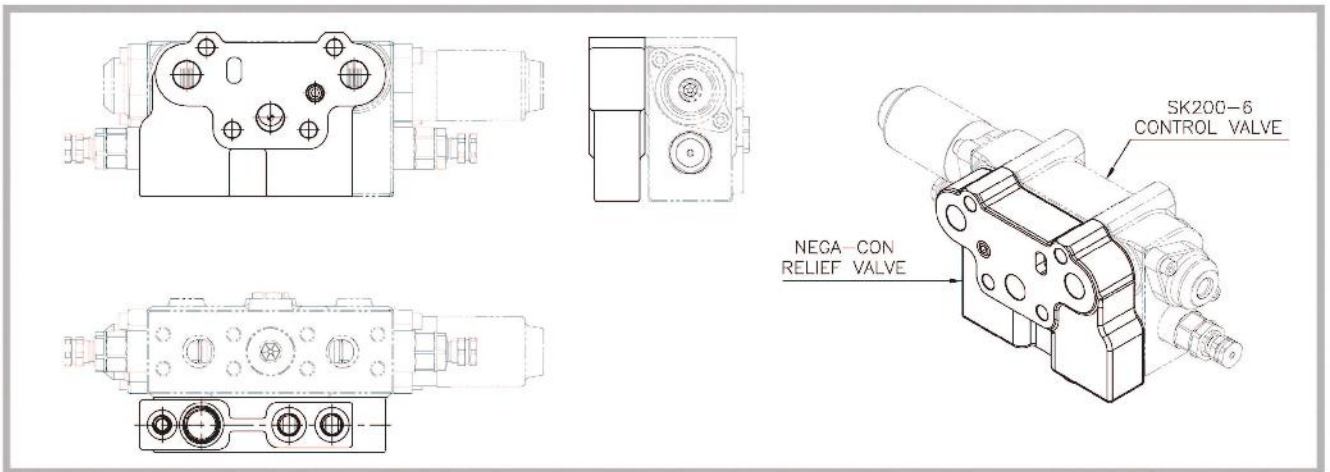
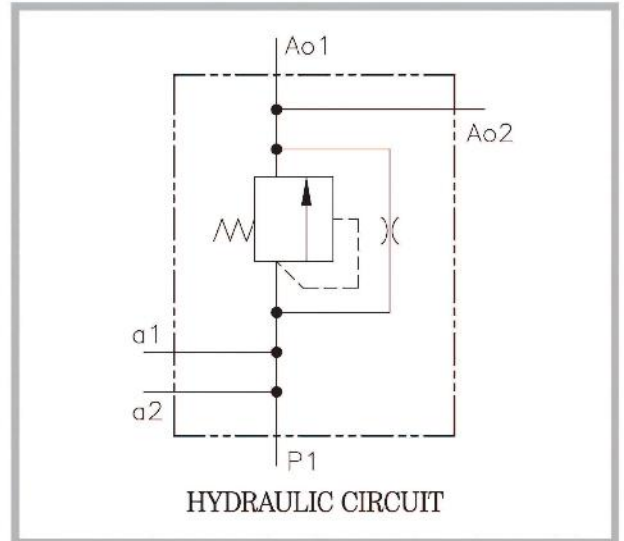
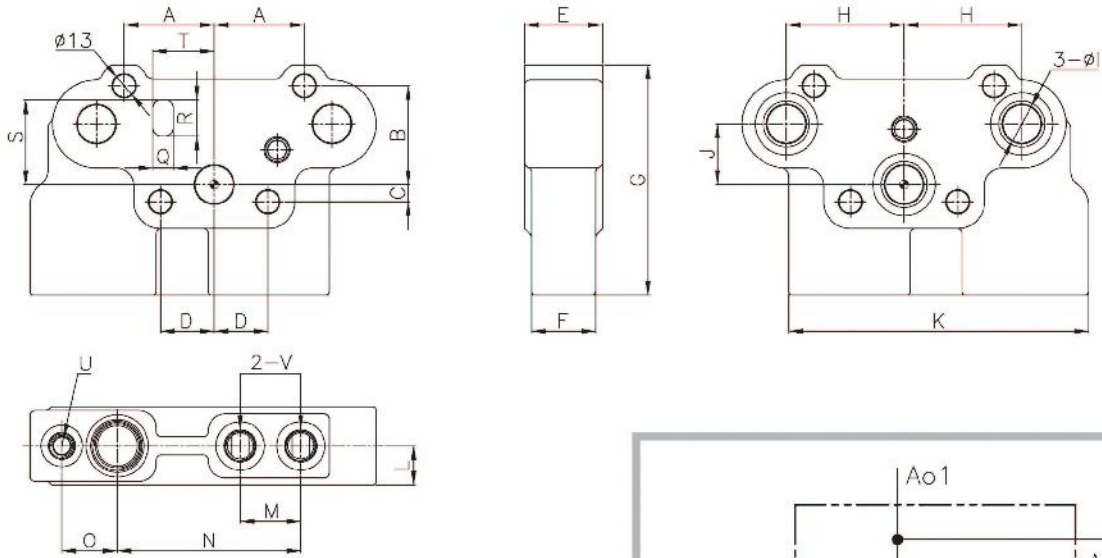
## DIMENSIONS

(mm)

| MODEL   | A  | B  | C  | D   | E    | F    | G   | H                 | I     | J  |
|---------|----|----|----|-----|------|------|-----|-------------------|-------|----|
| SK200-6 | 30 | 43 | 20 | 100 | 200  | 80   | 133 | 48                | 358   | 31 |
| MODEL   | K  | L  | M  | N   | O    | P    | Q   | R                 | S     |    |
| SK200-6 | 13 | 36 | 69 | 117 | 57.2 | 27.8 | 26  | M12X1.75P<br>DP20 | PF3/8 |    |



# NEGA-CON RELIEF VALVE FOR KOBELCO / NEW HOLLAND



## DIMENSIONS

(mm)

| MODEL   | A  | B   | C  | D  | E  | F  | G   | H    | I     | J     | K   | L    |
|---------|----|-----|----|----|----|----|-----|------|-------|-------|-----|------|
| SK200-7 | 52 | 57  | 10 | 31 | 45 | 37 | 133 | 68   | 22    | 35    | 173 | 22.5 |
| MODEL   | M  | N   | O  | P  | Q  | R  | S   | T    | U     | V     |     |      |
| SK200-7 | 35 | 106 | 32 | 13 | 12 | 21 | 49  | 35.5 | PF1/4 | PF3/8 |     |      |