



V Axial piston pump

V Series axial piston pump

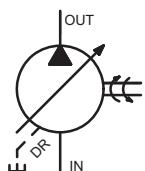
A

1

V Axial piston pump



- 1.V Series pump,new design for changeable angle of swash plate,wide applications.
- 2.Special design,low noise level during full pressure time.
- 3.Modular control,easy to design system,advantages are:power saving,small size,low cost.
- 4.Low power consuming,low oil temperature rising,suitable application for assembling small power units.



nominal(rated) pressure : 175 bar
 max. pressure : 250 bar / 6ms
 1000 ms = 1 sec.

Specifications

Size	Model	Displacement at (7 bar) 100 PSI						Pressure Adj. kgf/cm ²	Speed		Weight KG (LB)
		cm ³ /rev	in ³ /rev	1500 RPM LPM	U.S. GPM	1800 RPM LPM	U.S. GPM		Max. RPM	Min. RPM	
1	V 8	8.0	0.48	12.0	3.17	14.4	3.8	1: 8~70 2: 15~140 3: 20~210 4: 20~250	1800	500	13 (28.6)
	V10	10.0	0.61	15.0	3.90	18.0	4.76				13 (28.6)
	V12	12.0	0.73	18.0	4.76	21.6	5.73				13 (28.6)
	V15	15.0	0.90	22.5	5.78	27.0	7.05				13 (28.6)
	V18	17.8	1.09	26.7	7.05	32.0	8.45				13 (28.6)
2	V23	23.0	1.40	35.4	9.11	41.4	10.94				22 (48.4)
	V25	25.0	1.52	37.5	9.66	45.0	11.60				22 (48.4)
3	V38	37.8	2.31	56.7	14.98	68.0	17.96				26 (57.2)
	V42	42.0	2.56	63.0	16.23	76.0	19.58				26 (57.2)
4	V50	51.5	3.14	77.2	20.37	92.7	24.48				56 (123.2)
	V70	69.7	4.25	104.5	27.6	125.4	33.10				56 (123.2)

- 1.Install outlet on top,the pipe pressure needs less than 2bar.
- 2.Using at max pressure,please undre 6 seconds for per-cycle time.
- 3.Hydraulic oil clean,please following YEOSHE instruction manual.
- 4.YEOSHE supply combinable pumps with different series,standard with Metric / SAE size.



Type code for standard program

A

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V Axial piston pump

V	15	A	3	R			-							
1	2	3	4	5	6	7		8	9	10	11	12	13	14
Series	Size and displacement	Control device	Pressure adjusting	Rotation	Direction of pipe connections	Shaft type		Voltage	Threads type	Thru drive & 2nd pump	Special spec.	Mounting	Seals	Design No.

Series

1	Axial piston pump variable displacement high pressure version	nominal pressure: 175 bar max. pressure: 280 bar / 6ms 1000 ms = 1 sec.	V
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Size and displacement

2	Code		8	10	12	15	18	23	25	38	42	50	70
	Size		1					2		3		4	
	Displacement	cm ³ /rev	8	10	12	15	18	23.0	25.0	37.8	42.0	51.5	69.7
ln ³ /rev		0.48	0.61	0.73	0.90	1.1	1.40	1.52	2.31	2.56	3.14	4.25	

Control device

3	Standard pressure control	A	※
	Remote pressure control	G	
	Load-sensing control	HL	
	Pressure		
	△ A Low : 7KG		
	B Mid : 14KG		
	C High : 21KG		
	Muti-stage flow & Single-stage pressure control (with cylinder)	B	
	2-stage pressure & Flow control	C	
	2-stage pressure & Flow control + Remote	CG	
	2-stage pressure & Flow control + Low tension unloading	CR	
	Low tension unloading + Pressure control	D	
	Low tension unloading + Pressure control + Remote	DG	
	Electric 2-stage pressure control	E	
	Electric 2-stage pressure control + Remote	EG	
	Electric 2-stage pressure control & Flow control	F	
	Electric 2-stage pressure control & Flow control + Remote	FG	
	Remote pressure compensator with NG6 interface	GM	
	Remote pressure compensator + Proportional pressure valve	GJ	
	Remote pressure compensator + Electrical unloading	GR	
	Remote pressure compensator + 2-stage pressure control	GB	
	Remote pressure compensator + Electrical unloading + 2-stage pressure control	GC	
	Load-sensing compensator + Proportional flow valve + Relief valve	HQ	
	Pressure		
	A Low : 7KG		
	B Mid : 14KG		
	C High : 21KG		
	Load-sensing compensator + Proportional pressure valve + Proportional flow valve	HK	
	Pressure		
	A Low : 7KG		
	B Mid : 14KG		
	C High : 21KG		

■ = available - = on request ※ = standard type △ = custom made

Type code for standard program

V	15	A	3	R			-								
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Pressure adjusting

4	8~70 bar (0.8~6.9 Mpa)	1
	15~140 bar (1.5~13.7 Mpa)	2
	20~210 bar (2.0~20.6 Mpa)	3
	20~250 bar (2.0~24.5 Mpa)	4

Rotation

5	 Clockwise	R
	 Counter clockwise	L

Direction of pipe connections

		8	10	12	15	18	23	25	38	42	50	70	
6	None: Side port (Flange)	■	■	■	■	■	■	■	■	■	■	■	※
	Rear port (Flange)	-	-	-	-	-	■	■	■	■	■	■	B
	Side port + Rear port (Flange)	-	-	-	-	-	■	■	■	■	-	-	B2

Shaft type

7	Displacement	Code		
	None	Key:		
	V15,V18	Splind shaft: S 13T 16/32 DP	S1 9T 16/32 DP	S2 11T 16/32 DP
	V23,V25	Splind shaft: S 13T 16/32 DP	S1 15T 16/32 DP	S3 13T 16/32 DP longer
	V38,V42	Splind shaft: S 13T 16/32 DP	S1 15T 16/32 DP	S3 13T 16/32 DP longer
	V50,V70	Splind shaft: S 14T 12/24 DP	S1 17T 12/24 DP	

Voltage

8	None	
	AC100V (50/60HZ)	A
	AC110V (60HZ)	B
	AC220V (50/60HZ)	C
	AC220V (60HZ)	D
	DC 12V	E
	DC 24V	F ※

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Type code for standard program

A

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1	2	3	4	5	6	7		8	9	10	11	12	13	14
Series	Size and displacement	Control device	Pressure adjusting	Rotation	Direction of pipe connections	Shaft type		Voltage	Threads type	Thru drive & 2nd pump	Special spec.	Mounting	Seals	Design No.

Threads

9	PT (RC)	■	■	■	■	■	■	■	■	■	■	■	10	※
	BSPP (G)	■	■	■	■	■	■	■	■	■	■	■	40	※
	NPT	△	△	△	△	△	△	△	△	△	△	△	50	
	UNF (SAE o-ring)	■	■	■	■	■	■	■	■	■	■	■	60	
	Metric	△	△	△	△	△	△	△	△	△	△	△	70	

Thre drive & 2nd pump

10	without thru drive	
	Ø 50.8 mm SAE AA	C
	Ø 82.55 mm SAE A	D
	Ø101.6 mm SAE B	E
	Ø 127 mm	F
	Ø 63 mm	I
	Ø 80 mm	J
	Ø 100 mm	K
	Ø 125 mm	L

(Plesae contact YEOSHE,if other size required.)

Special specification

11	Standard type	X	※
	Low Pressure type	X1	
	Deahead pressure relief type	Z	

Mounting

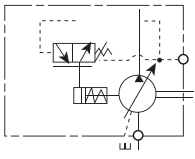
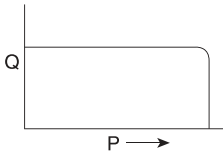
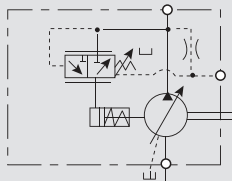
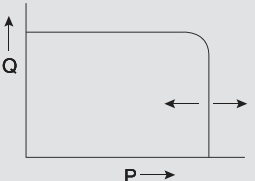
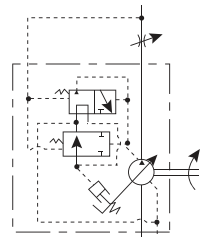
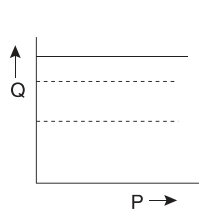
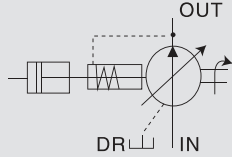
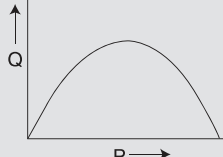
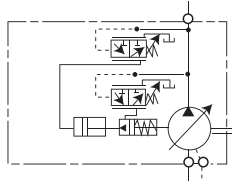
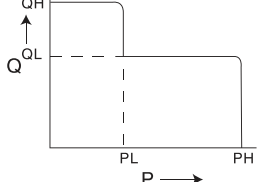
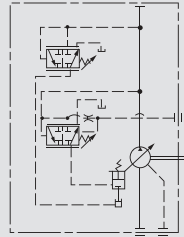
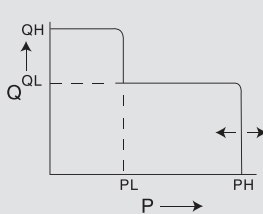
12	For V15, V18 only code "A" (SAE A 2 bolt type) is available, V23~70 displacement only "None: standard" is available	None	
		SAE A 2 bolt	A

Seals

13	NBR		※
	VITON	V	

■ = available - = on request ※ = standard type △ = custom made

Control type

Controls	Symbol	Characteristic	Specifications
A type: Standard pressure control			1. When system pressure increase and reach present pressure the flow decrease automatically and pressure to be constant. 2. Pressure and flow can be adjusted manually.
G type: Remote pressure control			1. The same function of "A" control type. 2. Pressure can be adjusted remotely by the remote control valve.
HL type: Load-sensing control			1. HL valve with 2 different pressure, control displacement. 2. The flow can be changed by HL valve, the sensing feedback can reach low oil temperature and energy saving.
B type: Muti-stage flow & Singe-stage pressure control (with cylinder)			1. Flow can be adjusted from 0 to maximum and pressure can be maintaining at preset pressure. 2. Absorbing impact and vibration which are produced by up down motions. It is suitable for lifting equipment etc.
C type: 2-stage pressure & Flow control			1. 2-stage pressure to adjust PL to QH and : PH to QL. 2. When pressure increase and reach preset pressure "PH", flow is reduced to "QL". 3. Adapt for long dead head and short pressurizing machines, speedy and energy saving. 4. Pressure "PH", "PL", and flow "QH", "QL" can be adjusted optionally.
CG type: 2-stage pressure & Flow control + Remote			1. The same function of "C" control type. 2. The pressure and the range can be adjusted by remote control valve. 3. Install YEOSHE solenoid control valve to reach good performance.



Control type

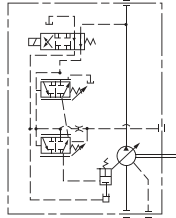
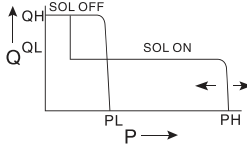
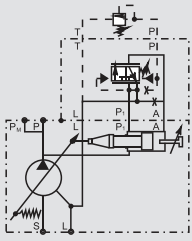
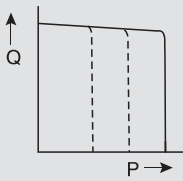
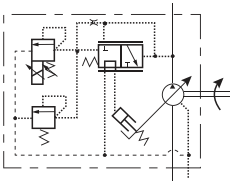
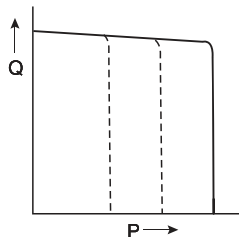
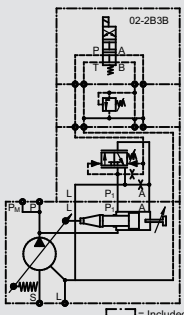
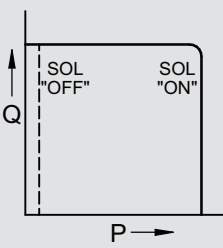
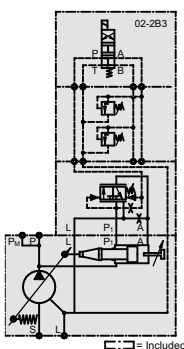
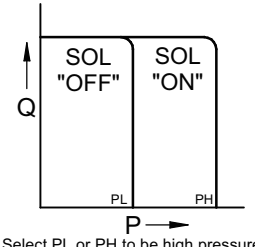
A

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V Axial piston pump

Controls	Symbol	Characteristic	Specifications
CR type: 2-stage pressure & Flow control + Low tension unloading			1. Install YEOSHE solenoid valve, control 2-stage pressure. 2. It is suitable for constant speed lifting equipments, and setting 2-stage working pressure. 3. PL and PH, two options can be PH. SOL OFF: Low tension unloading SOL ON: 2-stage pressure&flow
D type: Low tension unloading + Pressure control			1. Same as type A and with low tension unloading. 2. It is adapt for long unloading operation. 3. When the system stops, oil temperature and noise maintain low level while being through the unloading.
DG type: Low tension unloading + Pressure control + Remote			1. The same function of "D" control type. 2. The pressure and the range can be adjusted by remote control valve. 3. Install YEOSHE solenoid control valve to reach good performance.
E type: Electric 2-stage pressure control			1. 2-stage pressure is controlled by solenoid control valve. 2. Adapt for constant speed lifting equipments, and setting 2-stage working pressure. 3. PL and PH, two options can be PH.
EG type: Electric 2-stage pressure control + Remote			1. The same function of "E" control type. 2. The pressure and the range can be adjusted by remote control valve. 3. Install YEOSHE solenoid control valve to reach good performance.
F type: Electric 2-stage pressure control & Flow control			1. Electric 2-stage pressure & flow control to adjust PL to QH, PH to QL. 2. Pressure "PL", "PH" and flow "QH" can be adjusted optionally.

Control type

Controls	Symbol	Characteristic	Specifications
FG type: Electric 2-stage pressure control & Flow control + Remote			1. Electric 2-stage pressure & flow control to adjust PL to QH, PH to QL. 2. Pressure can be adjusted by remote control valve. 3. Pressure "PL", "PH" and flow "QH" can be adjusted optionally.
GM type: Remote pressure compensator with NG6 interface			1. GM Remote pressure compensator with NG6 interface. 2. Speedy reactions, stable pressure supply. 3. Adapt for manual or electric control.
GJ type: Remote pressure compensator + Proportional pressure valve			1. Same as type "GM" and with proportional pressure valve. 2. The proportional valve is installed on the NG6 interface to reach proportional electric control to save energy.
GR type: Remote pressure compensator + Electrical unloading			1. By adding a relief valve and solenoid control valve on the compensator makes pump have both function. 2. GR control is for long unloading situations. When the system stops, oil temperature and noise maintain low level while being through the unloading.
GB type: Remote pressure compensator + 2-stage pressure control			1. By adding a relief valve and solenoid control valve on the compensator makes pump have both function. 2. GB control is for Z-stage working pressure under the constant cylinder speed.



Control type

A

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V Axial piston pump

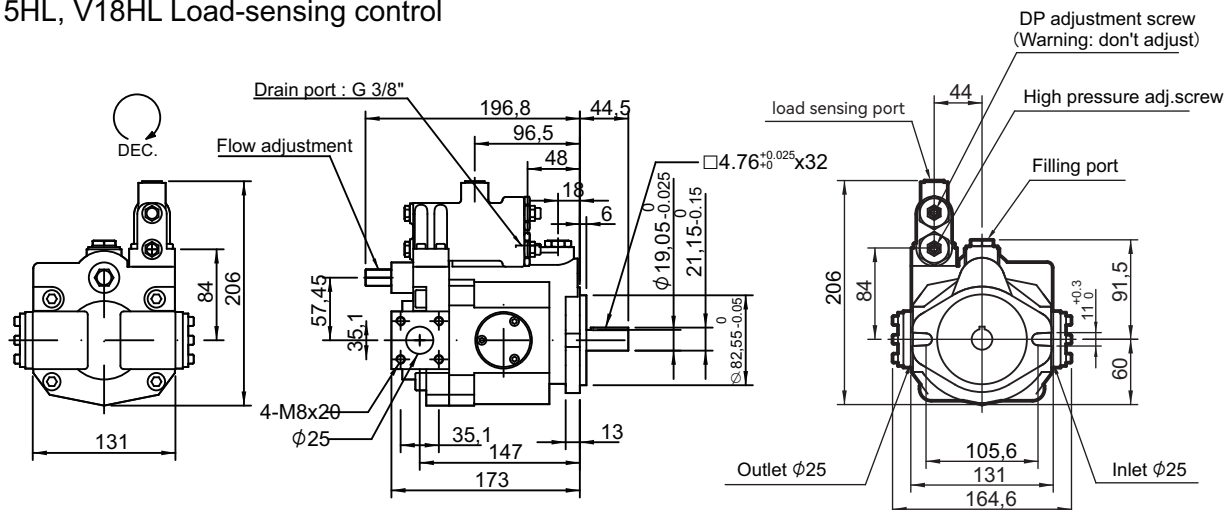
Controls	Symbol	Characteristic	Specifications
GC type: Remote pressure compensator + Electrical unloading + 2-stage pressure control			1. Control two different-stage limited pressure by adding solenoid valve and unloading function. 2. When the system stops, oil temperature and noise maintain low level by unloading function. 3. Adapt for stable cylinder speed, 2-stage pressure, and long unloading situation.
HQ type: Load-sensing compensator + Proportional flow valve + Relief valve			1. HQ control with load-sensing and proportional flow control. 2. By electric input signal to adjust pump displacement, and the flow is controlled by electric modular control.
HK type: Load-sensing compensator + Proportional pressure valve + Proportional flow valve			1. HK offers the smallest pressure and flow according to different requirement. 2. The displacement is nearly zero when the system stands by, and the motor output is also nearly zero to saving energy. 3. When the system reaches setting pressure, the pump displacement will reduce by itself. It only needs to add the system required flow, and the pressure remains the same which control the oil temperature. 4. Compared with vane pump, gear pump+PQ valve can save 30-50% energy.

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V Axial piston pump

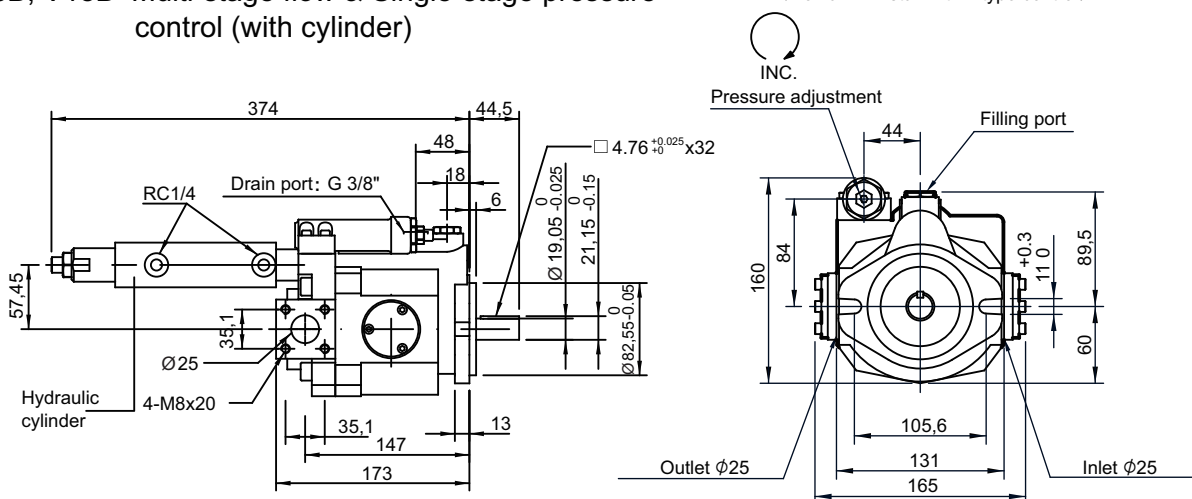
Dimension

V15HL, V18HL Load-sensing control

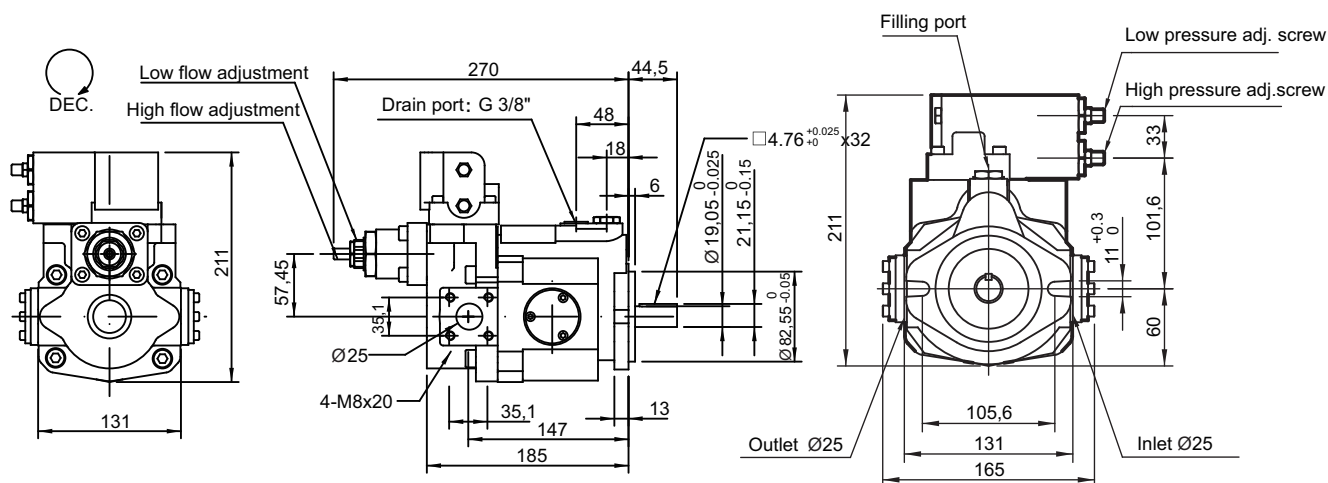


V15B, V18B Multi-stage flow & Single-stage pressure control (with cylinder)

(Remark : Install with A type control)

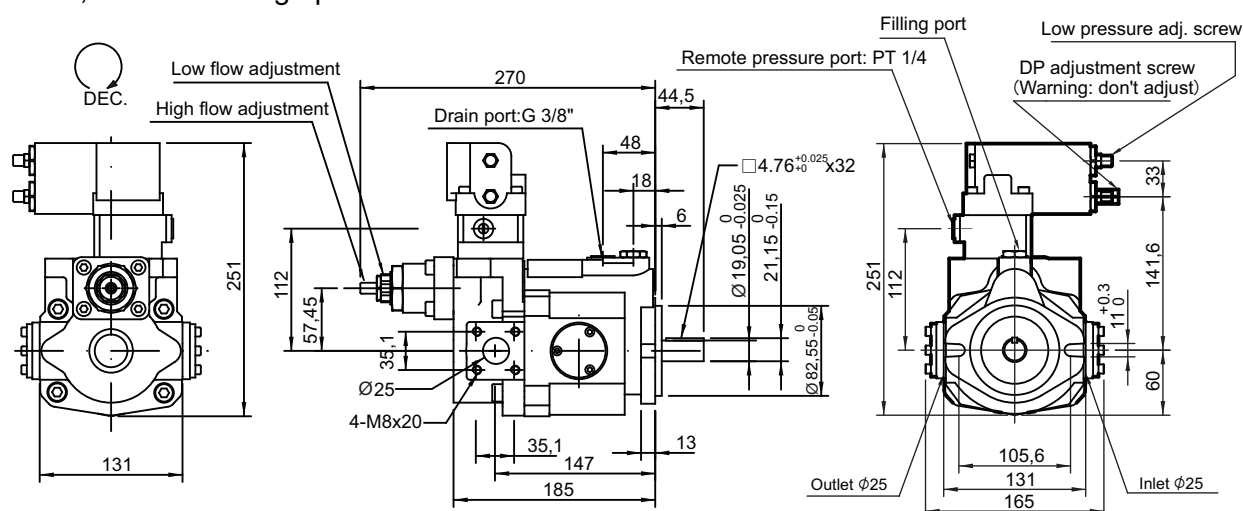


V15C, V18C 2-stage pressure & Flow control

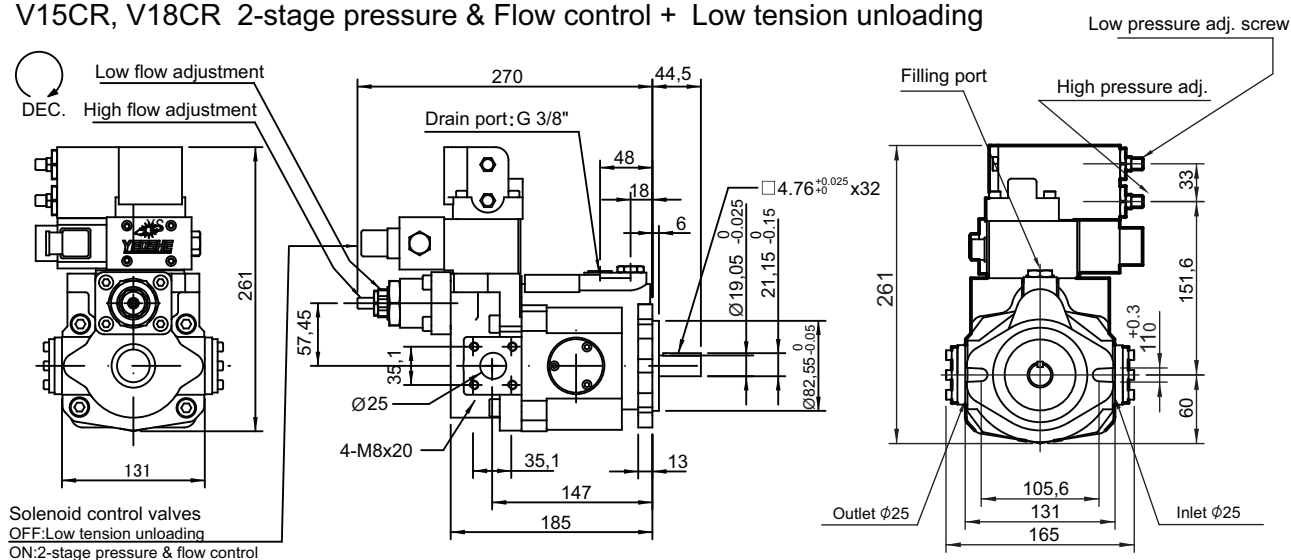


Dimension

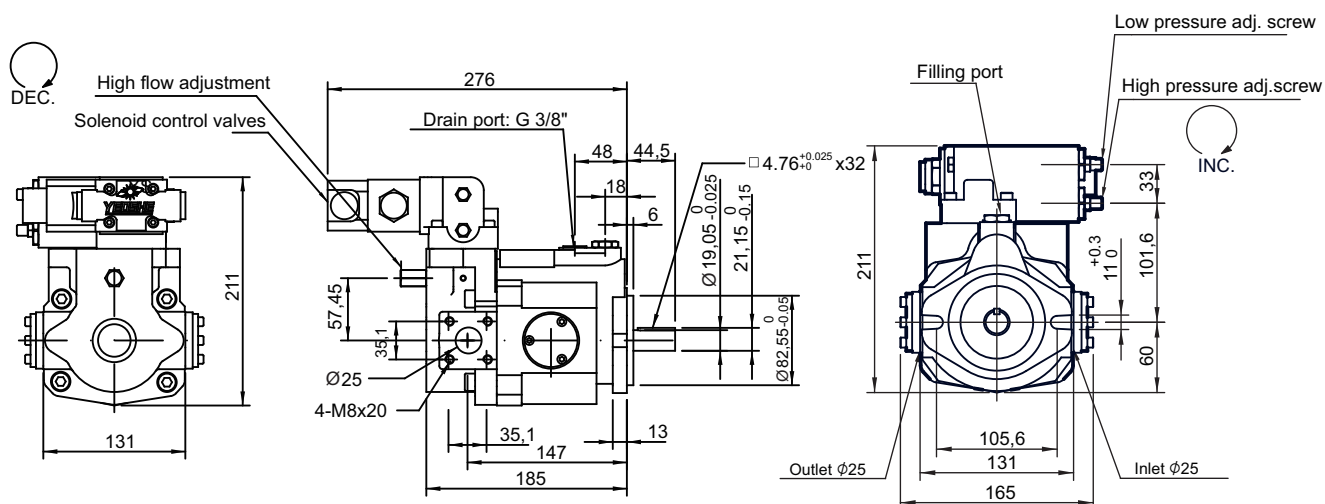
V15CG, V18CG 2-stage pressure & Flow control + Remote



V15CR, V18CR 2-stage pressure & Flow control + Low tension unloading



V15D, V18D Low tension unloading + Pressure control





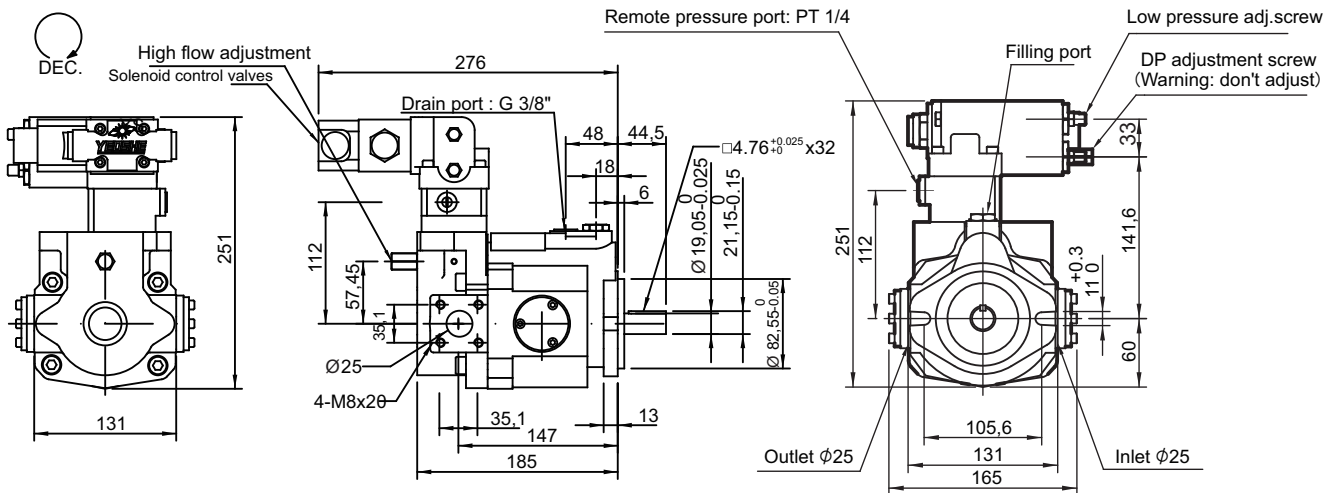
Dimension

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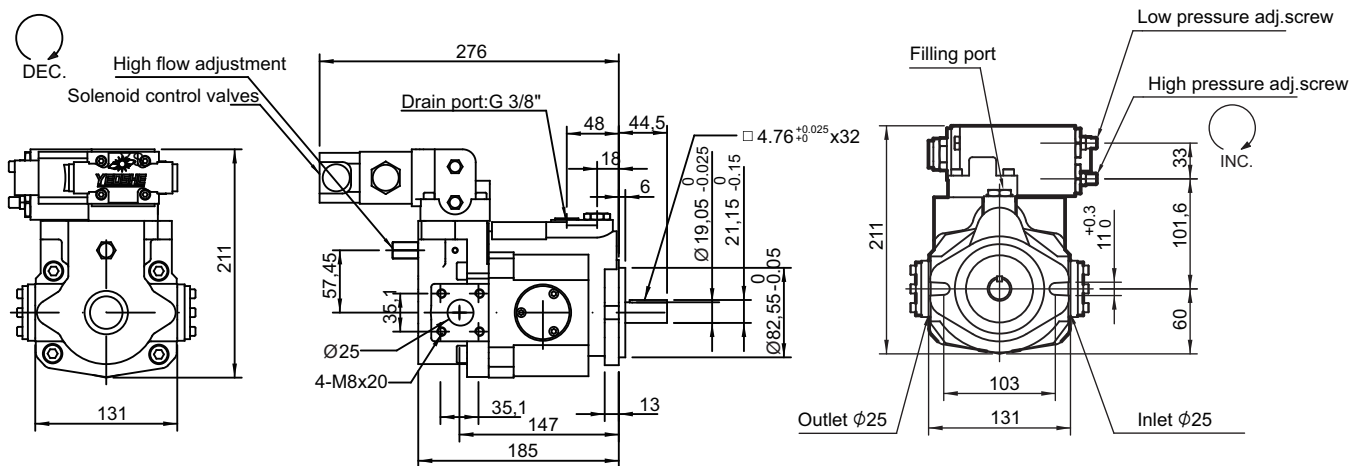
12

V Axial piston pump

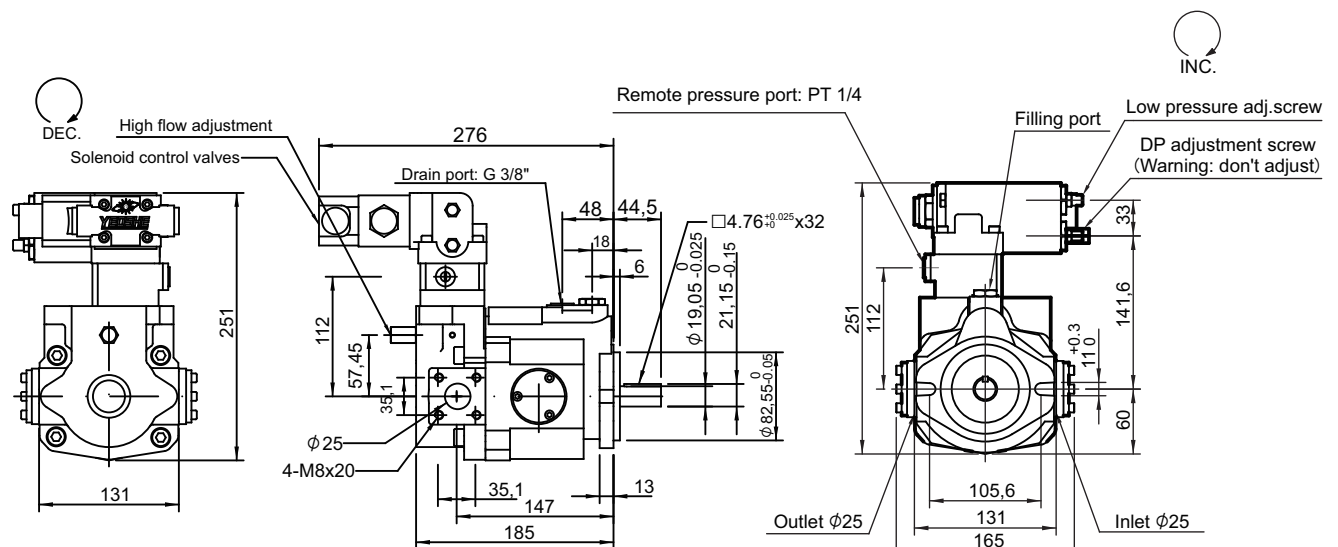
V15DG, V18DG Low tension unloading + Pressure control + Remote



V15E, V18E Electric 2-stage pressure control

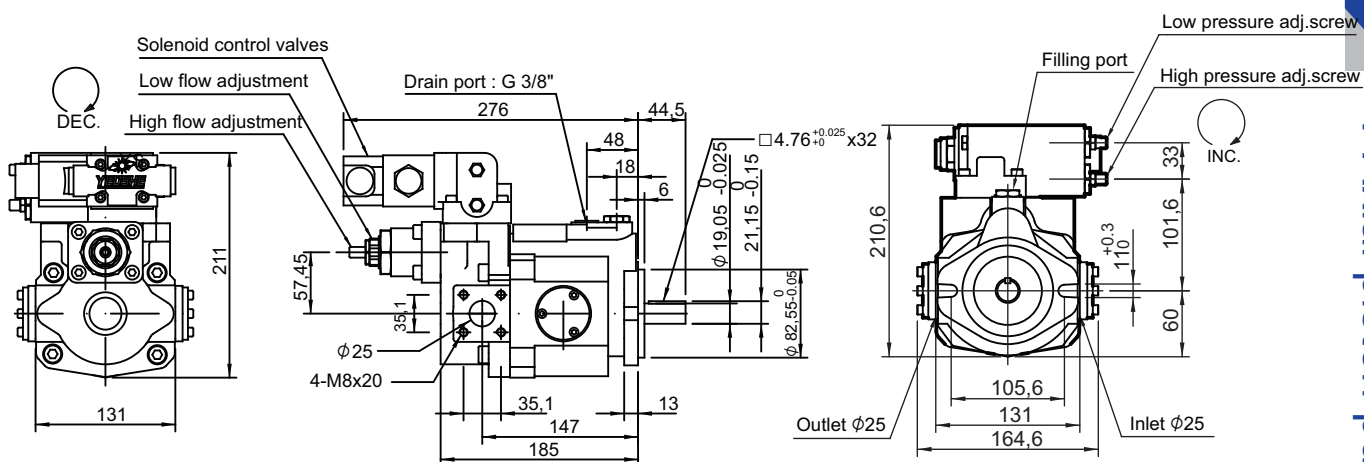


V15EG, V18EG Electric 2-stage pressure control + Remote

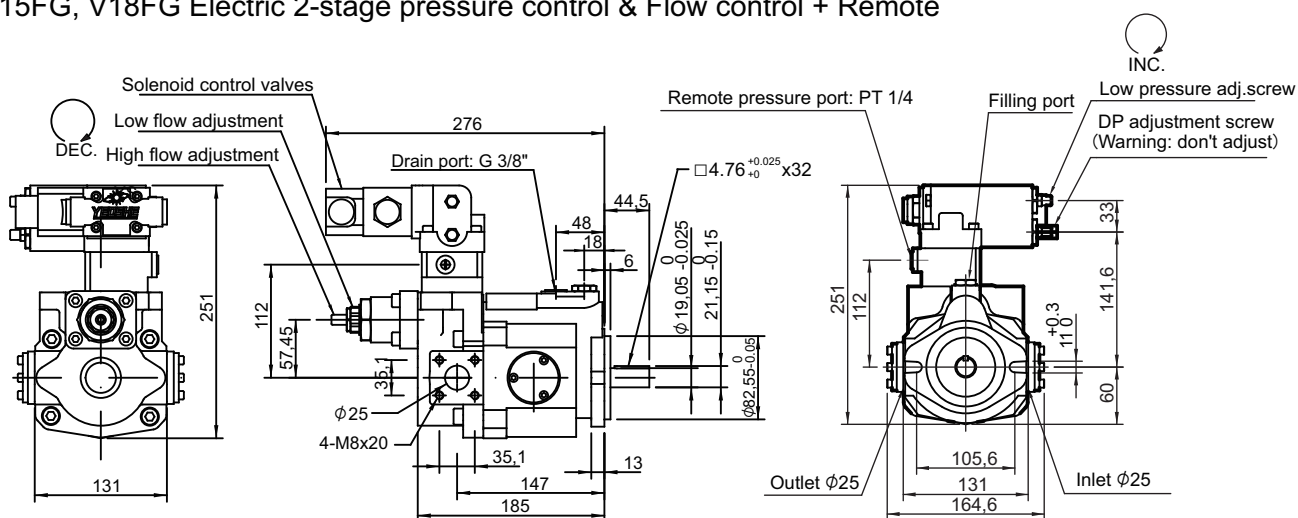


Dimension

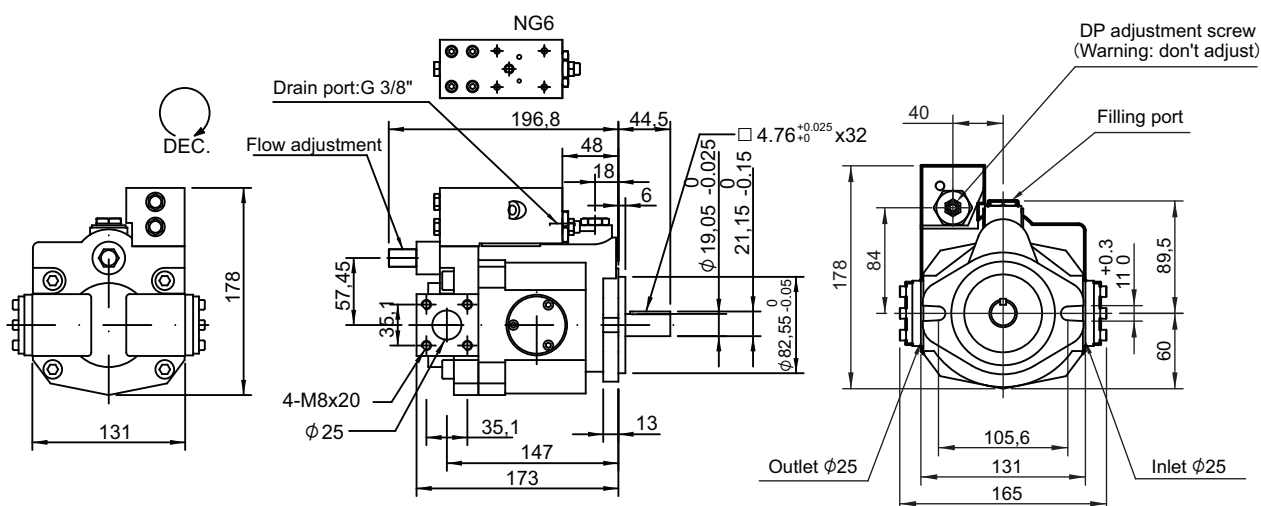
V15F, V18F Electric 2-stage pressure control & Flow control



V15FG, V18FG Electric 2-stage pressure control & Flow control + Remote



V15GM, V18GM Remote pressure compensator with NG6 interface



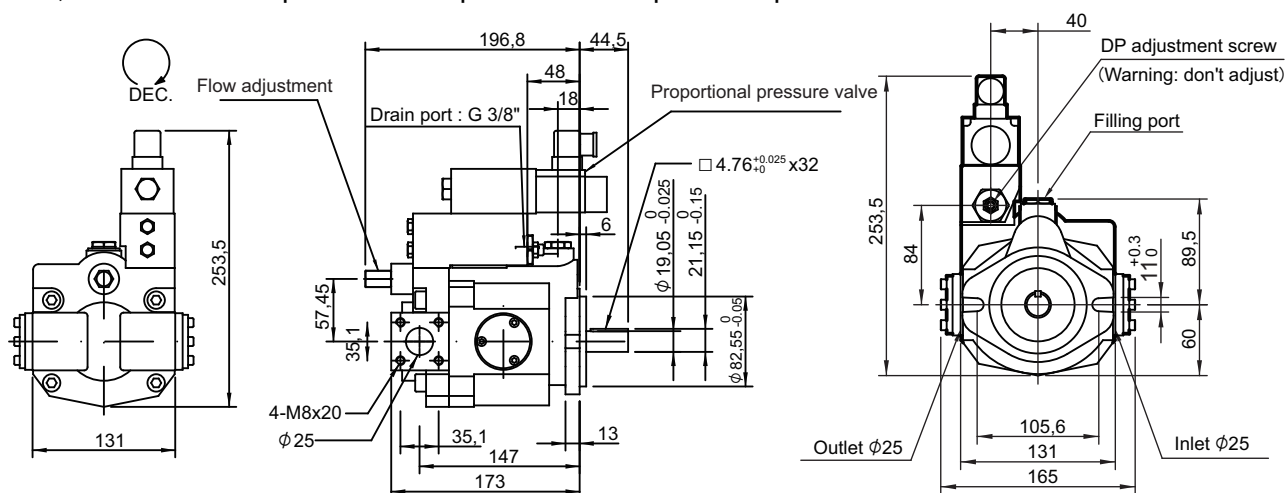
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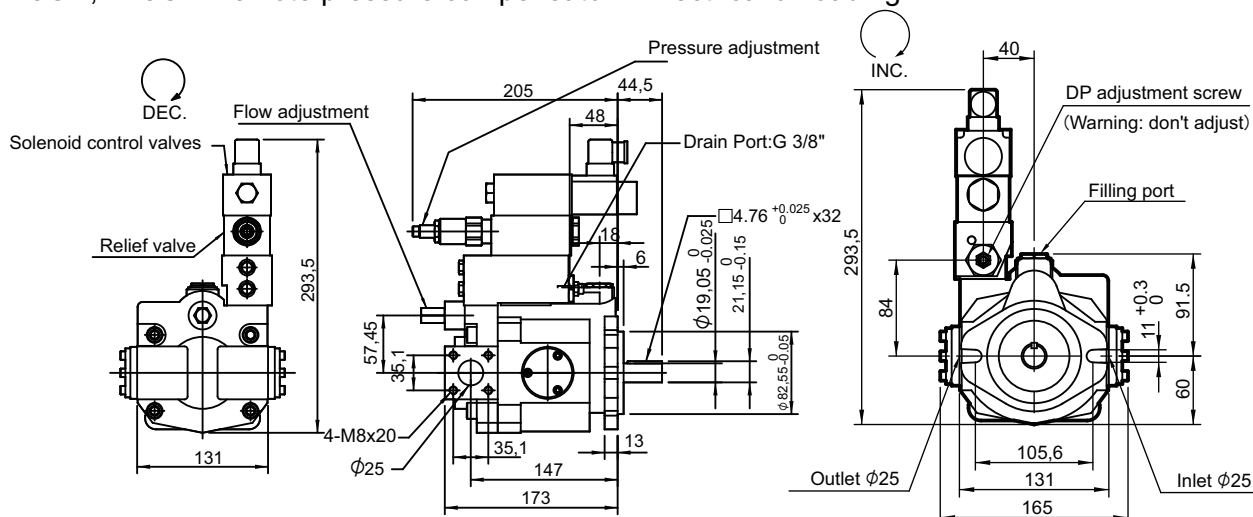
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V Axial piston pump

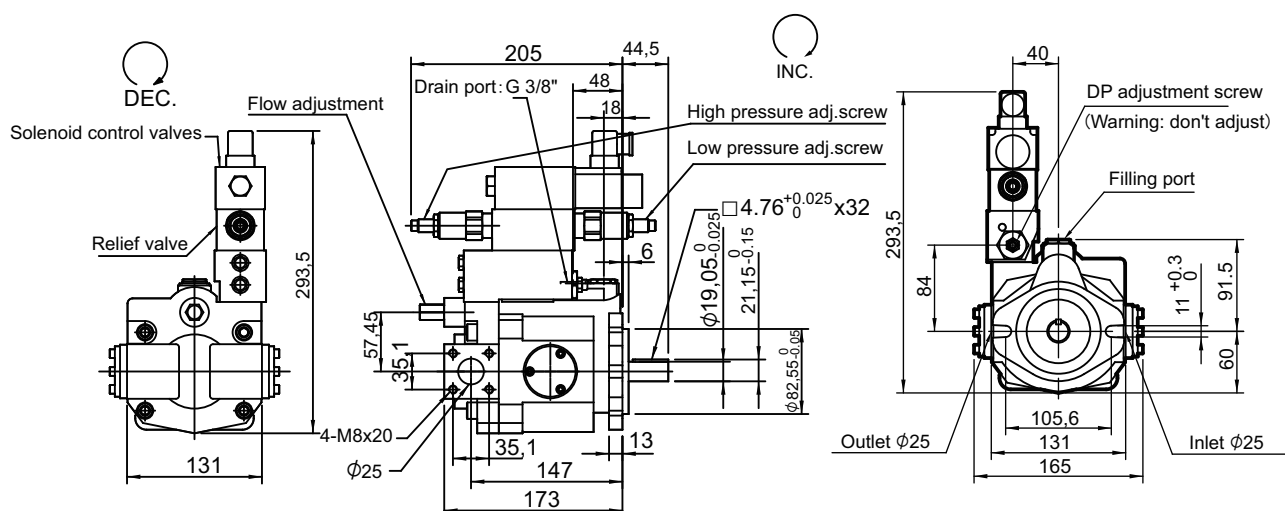
V15GJ, V18GJ Remote pressure compensator + Proportional pressure valve



V15GR, V18GR Remote pressure compensator + Electrical unloading

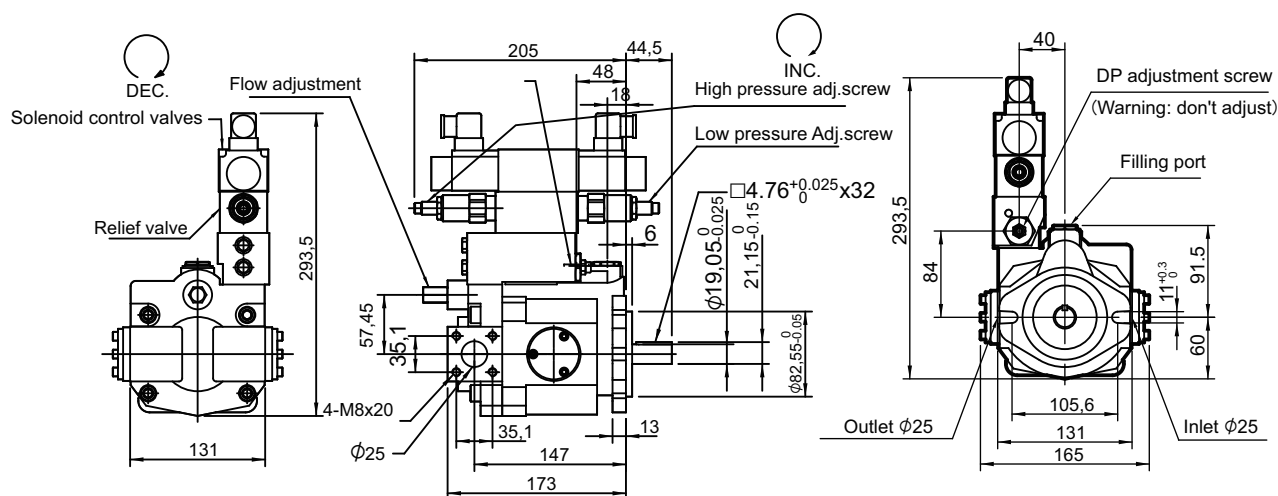


V15GB, V18GB Remote pressure compensator + 2-stage pressure control

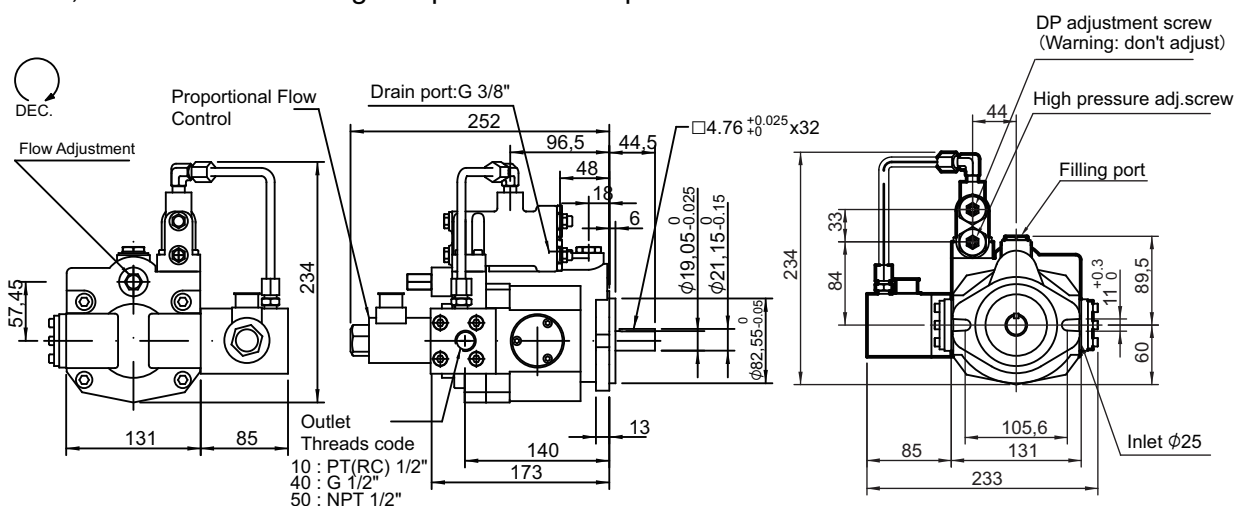


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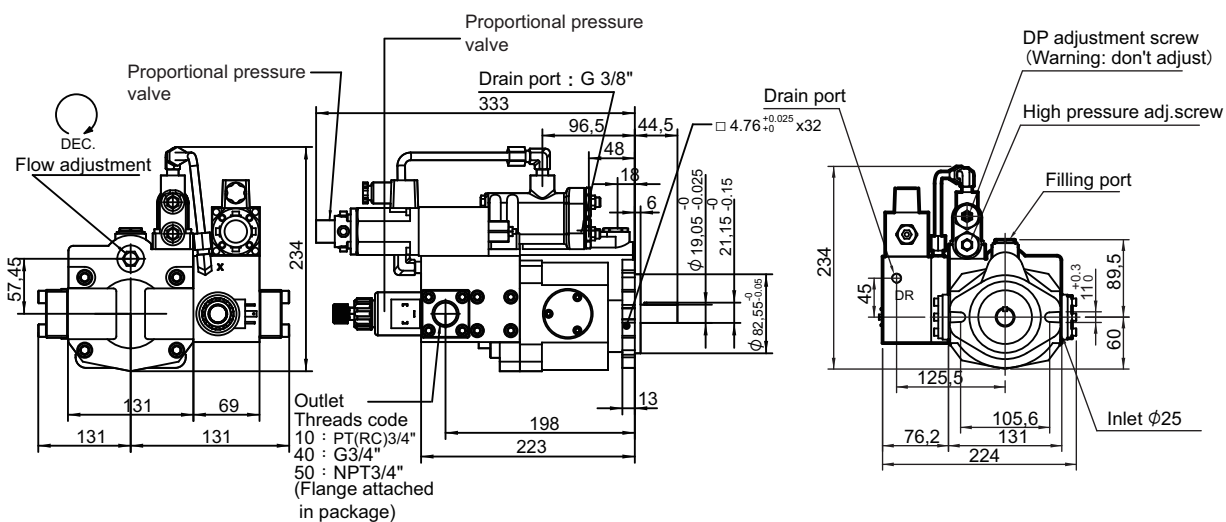
V15GC, V18GC Remote pressure compensator + Electrical unloading + 2-stage pressure control



V15HQ, V18HQ Load-sensing compensator + Proportional flow valve+ Relief valve



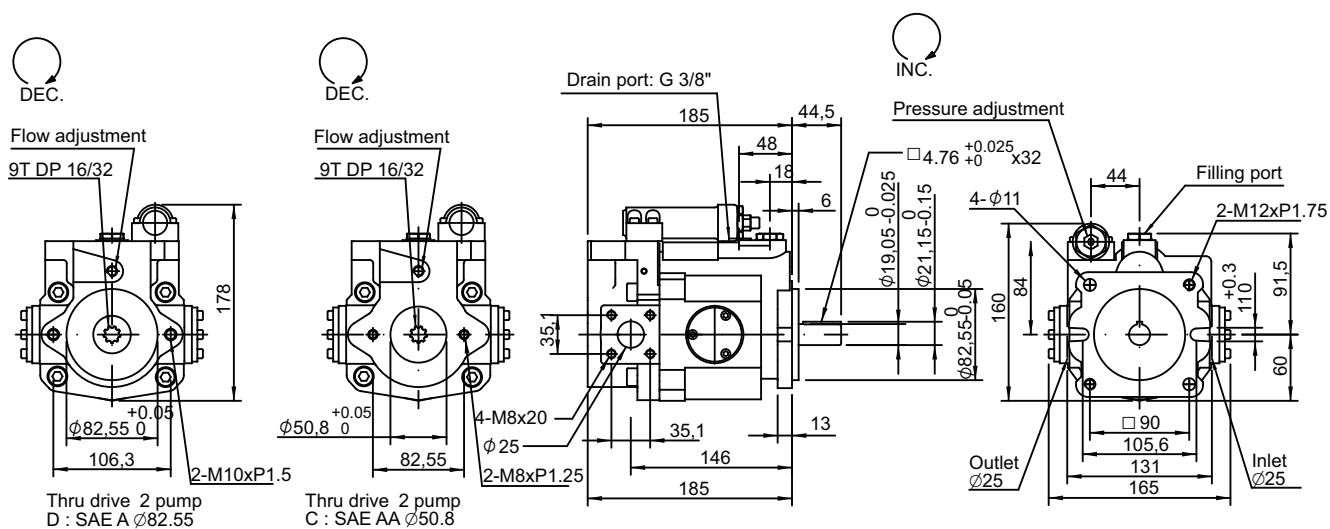
V15HK, V18HK Load-sensing compensator + Proportional pressure valve+ Proportional flow valve



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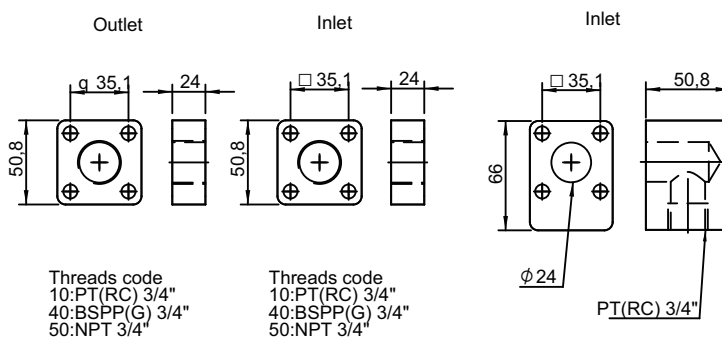
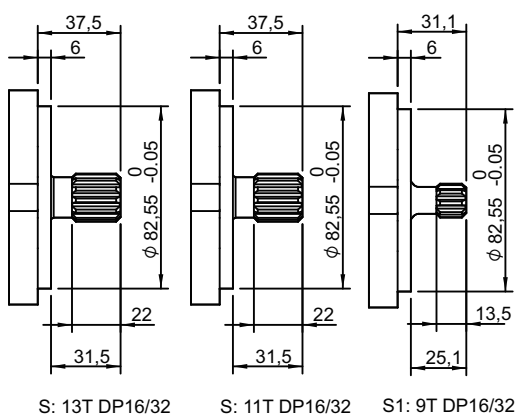
V Axial piston pump

V	15						—			C		
V	15						—			D		



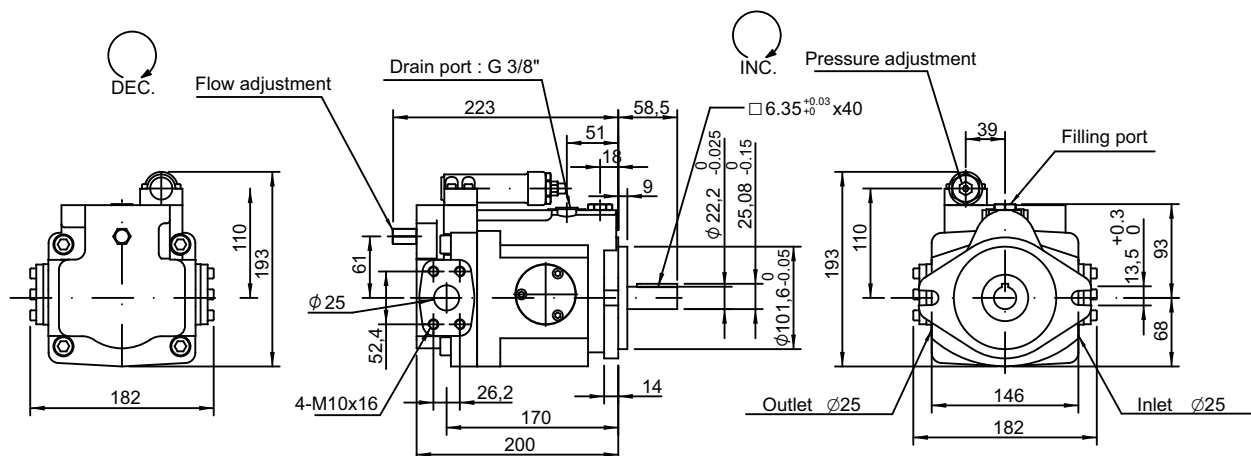
Type	A	B	C	CG	CR	D	DG	E	EG	F	FG	G	GJ	GM	HL	HK	HQ
○ Thru drive option	○					○	○	○	○			○	○	○	○	○	○

V15, V18 Inlet / Outlet

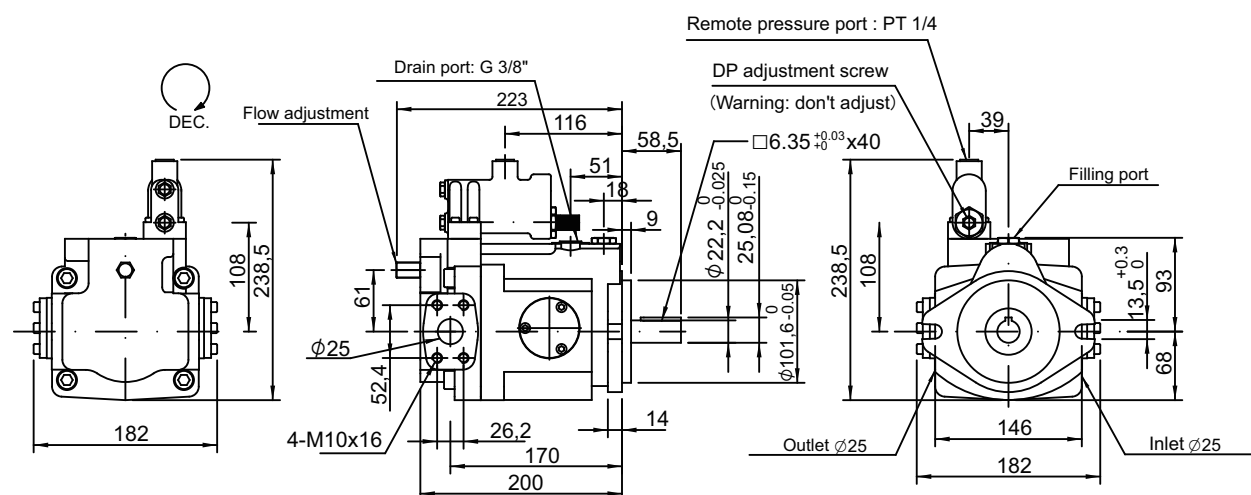


Dimension

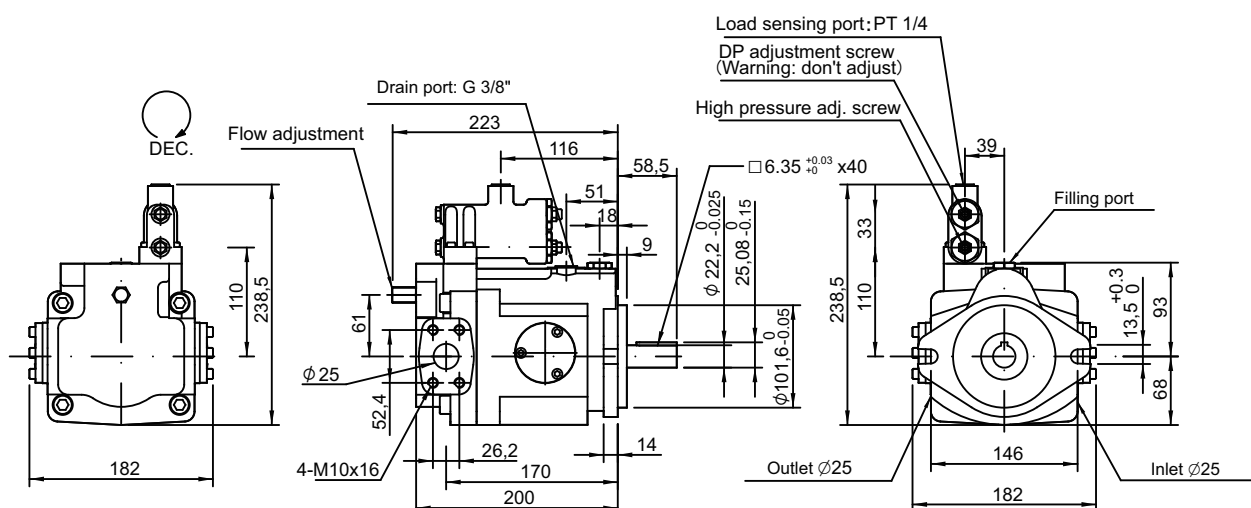
V23A, V25A Standard pressure control



V23G, V25G Remote pressure control



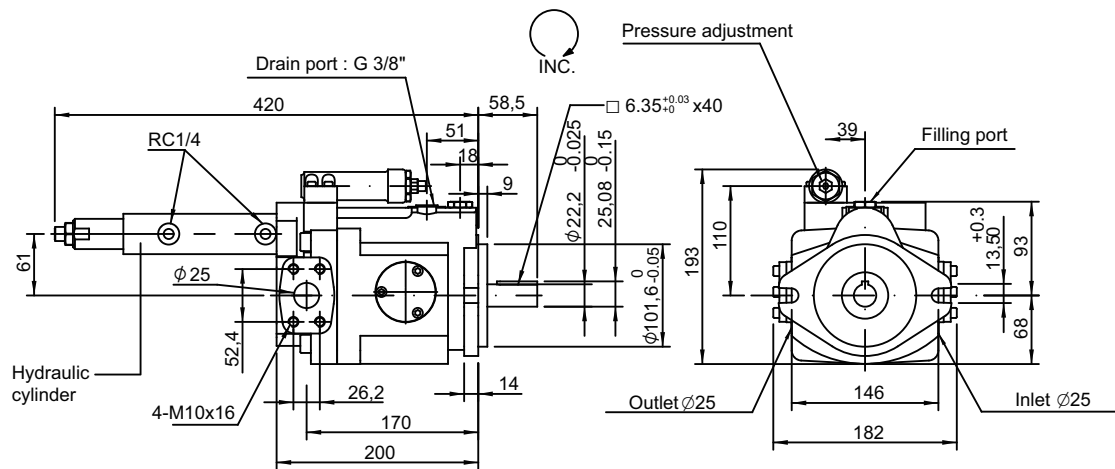
V23HL, V25HL Load-sensing control



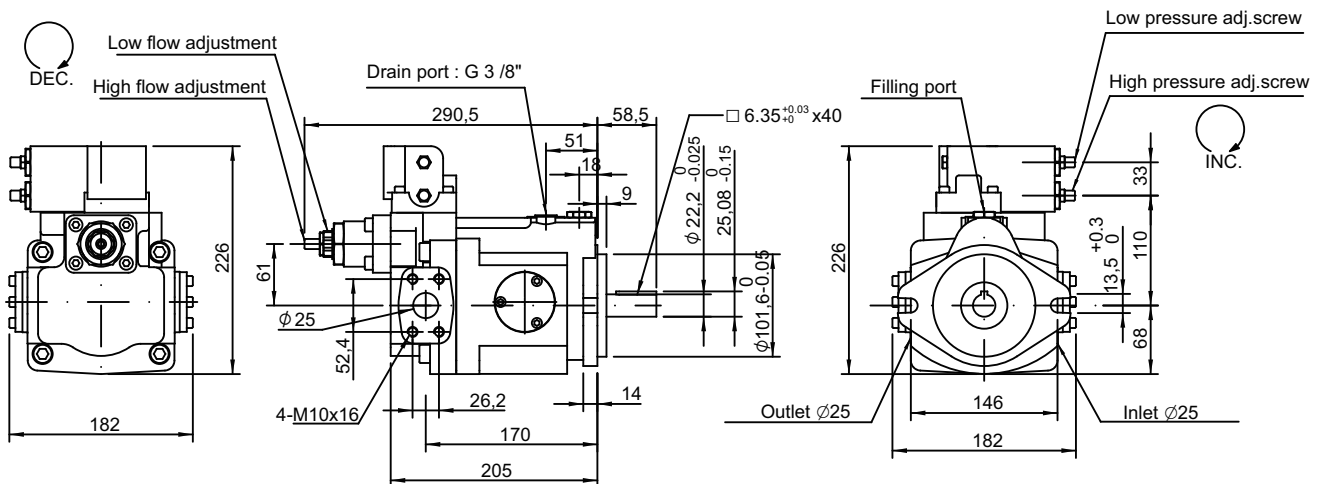


Dimension

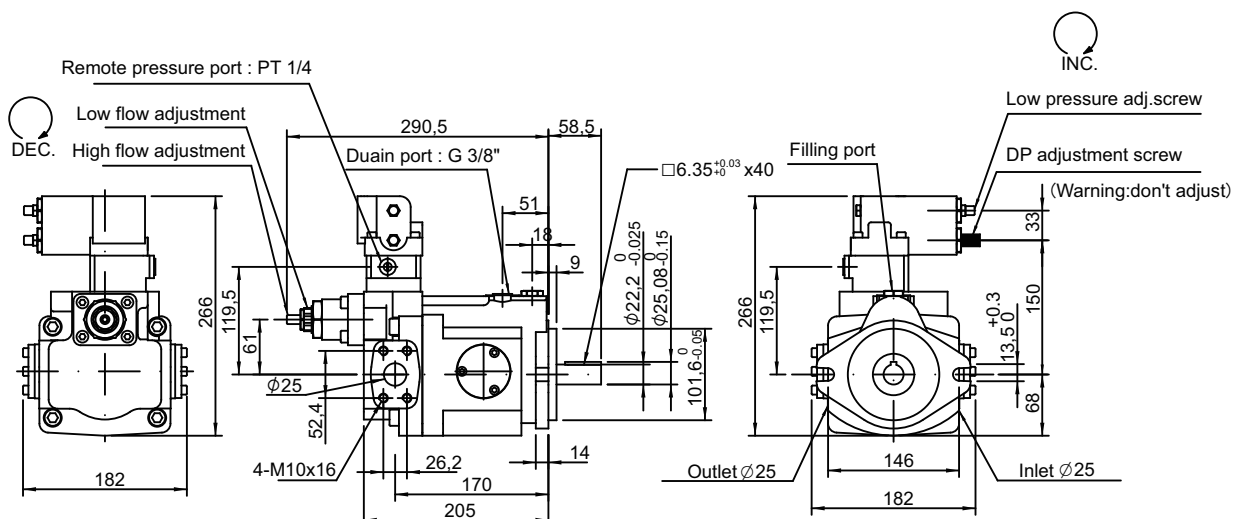
V23B, V25B Multi-stage flow & Single-stage pressure control (with cylinder)



V23C, V25C 2-stage pressure & Flow control

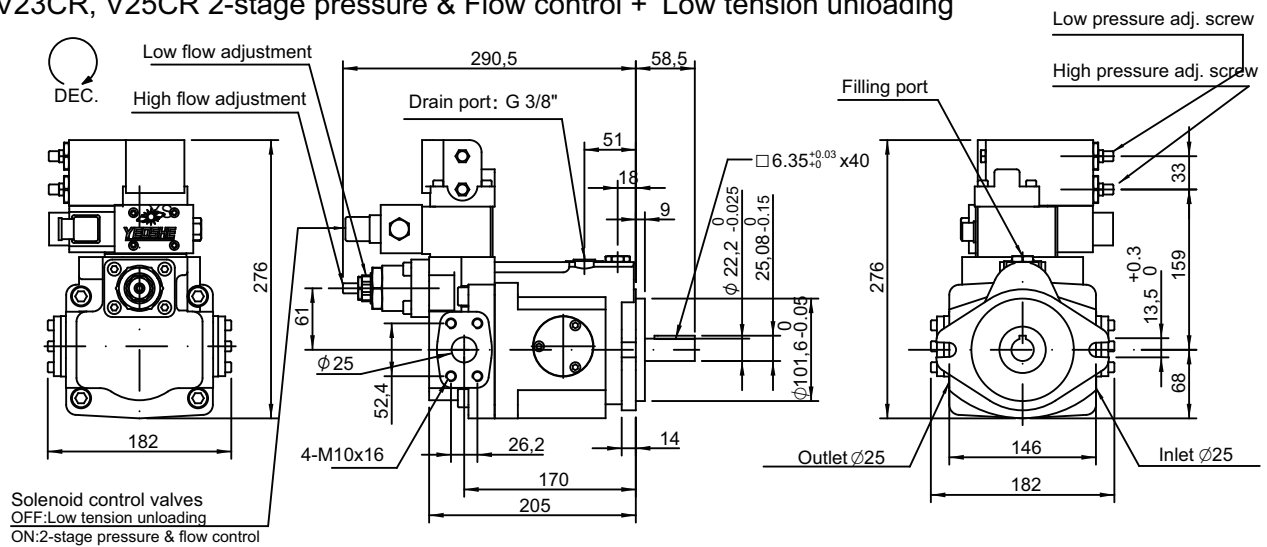


V23CG, V25CG 2-stage pressure & Flow control + Remote

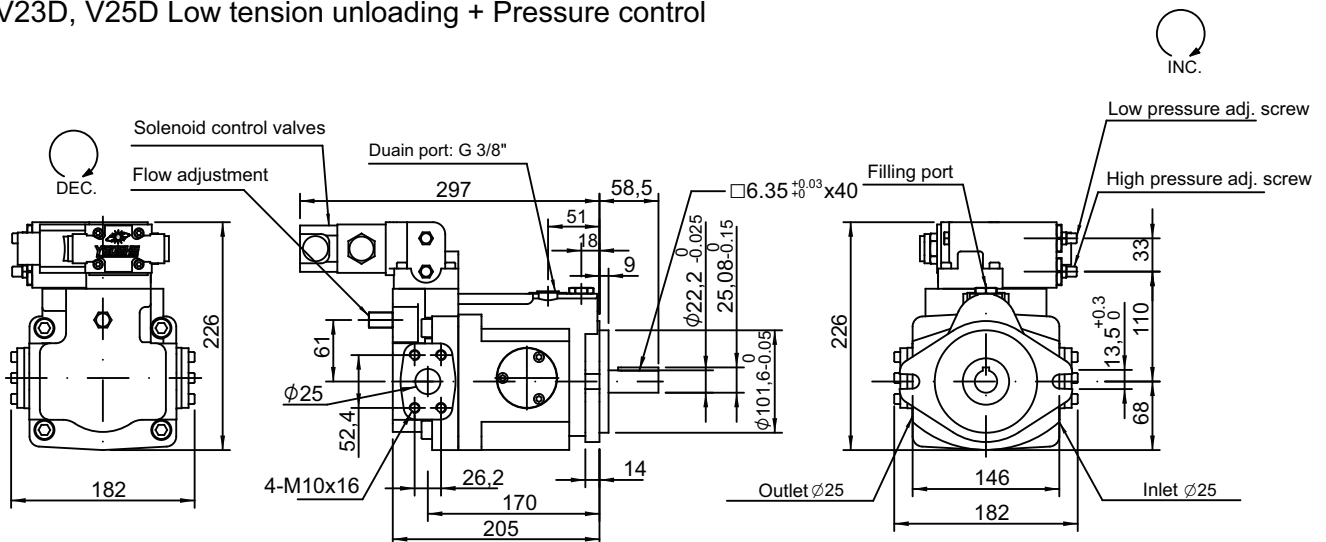


Dimension

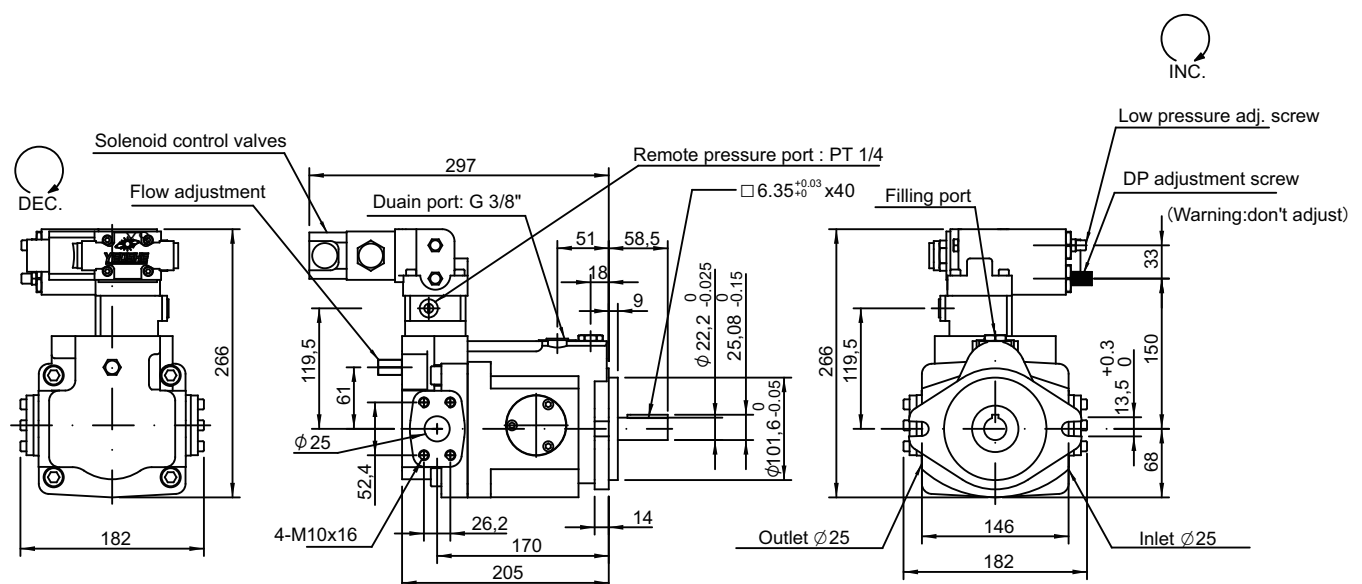
V23CR, V25CR 2-stage pressure & Flow control + Low tension unloading



V23D, V25D Low tension unloading + Pressure control



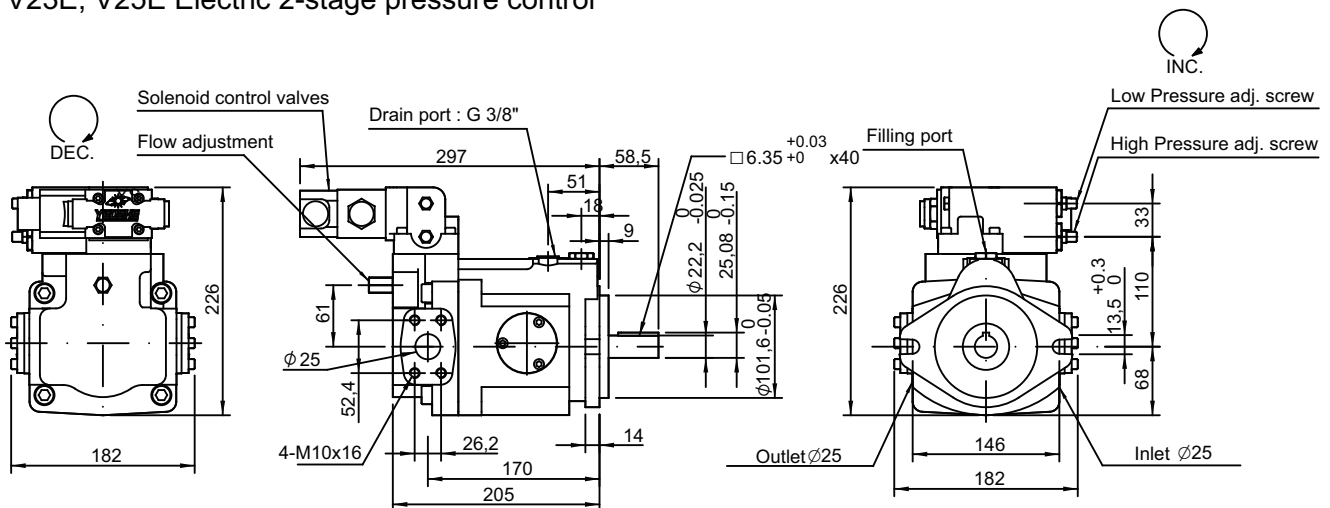
V23DG, V25DG Low tension unloading + Pressure control + Remote



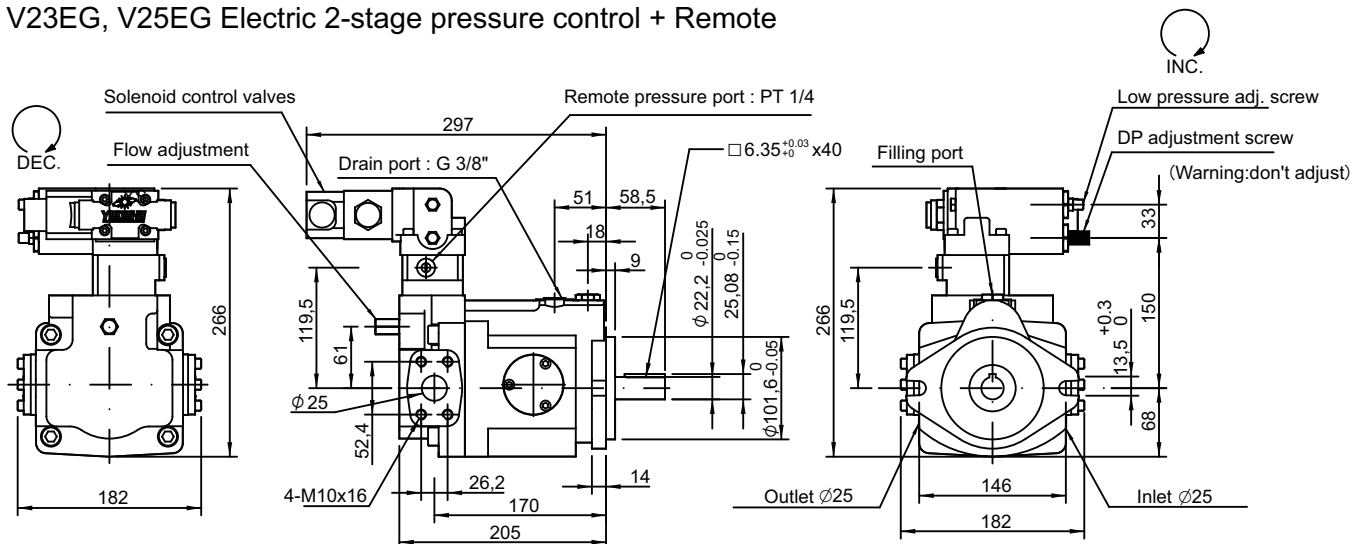


Dimension

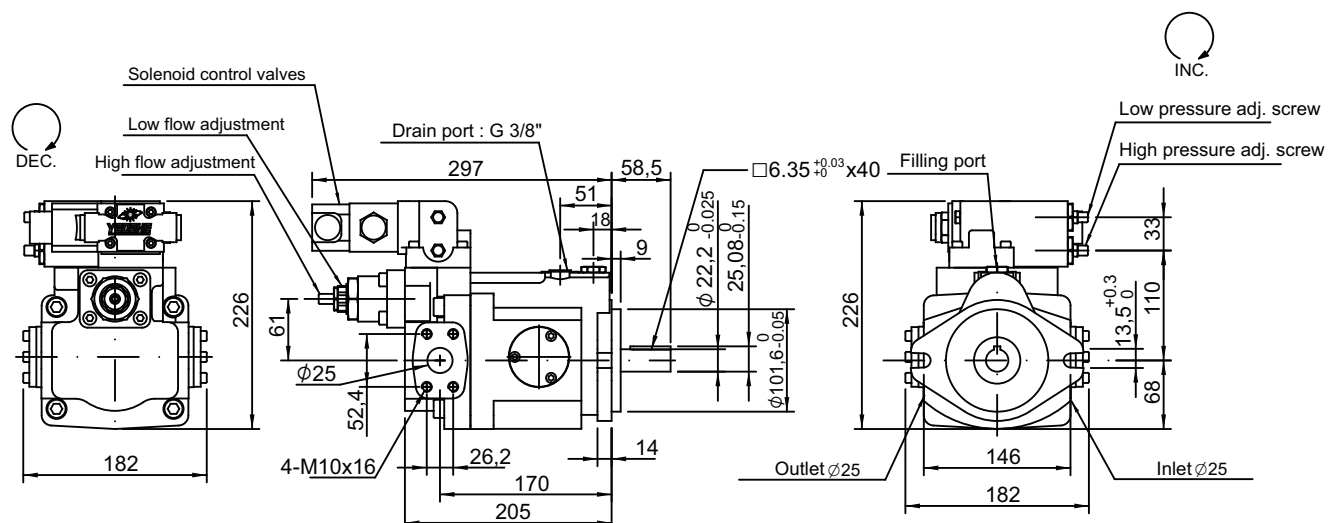
V23E, V25E Electric 2-stage pressure control



V23EG, V25EG Electric 2-stage pressure control + Remote

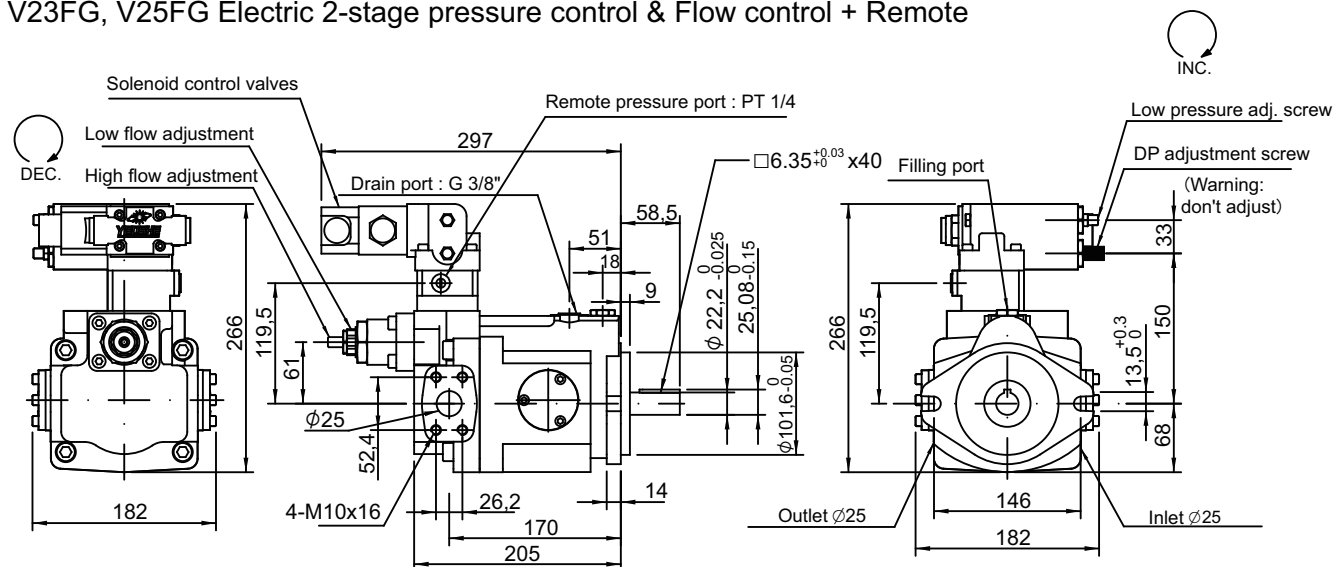


V23F, V25F Electric 2-stage pressure control & Flow control

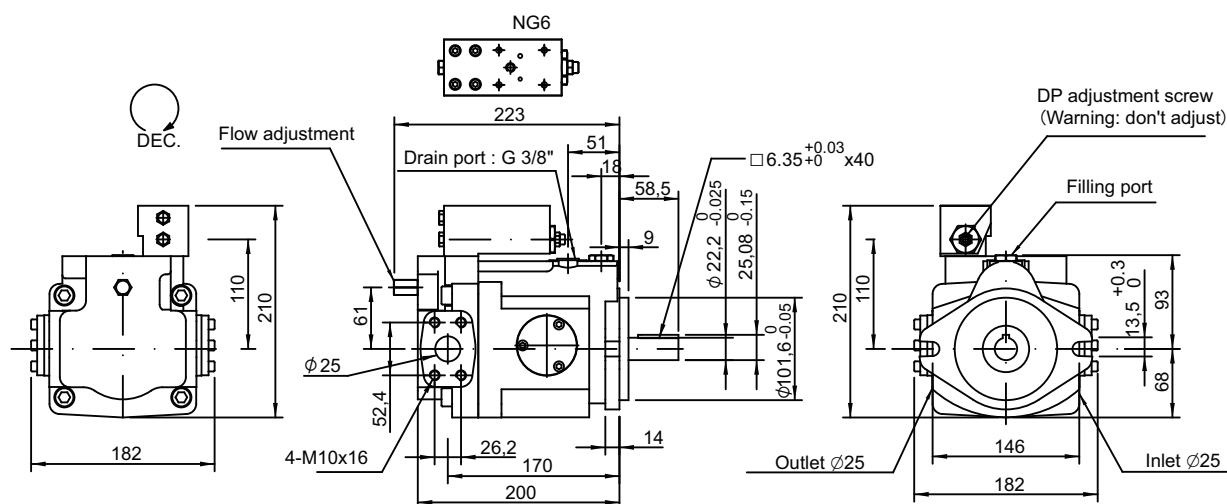


Dimension

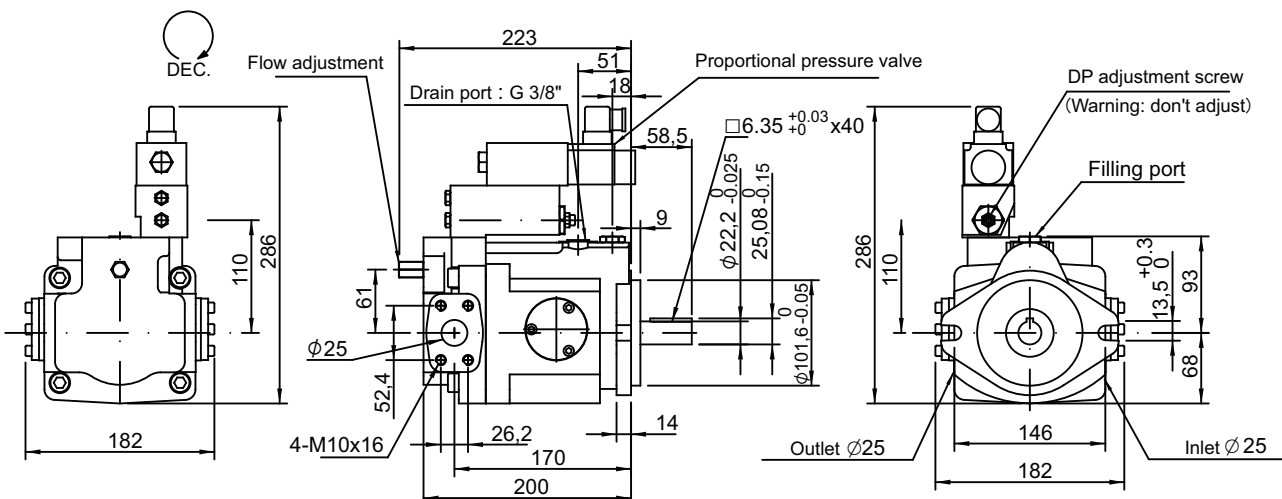
V23FG, V25FG Electric 2-stage pressure control & Flow control + Remote



V23GM, V25GM Remote pressure compensator with NG6 interface

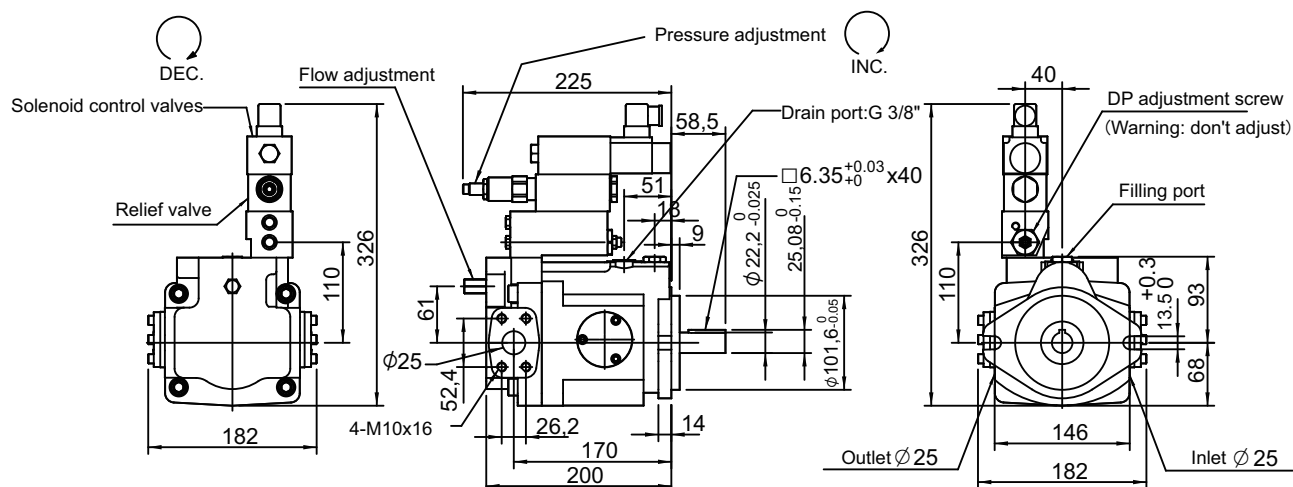


V23GJ, V25GJ Remote pressure compensator + Proportional pressure valve

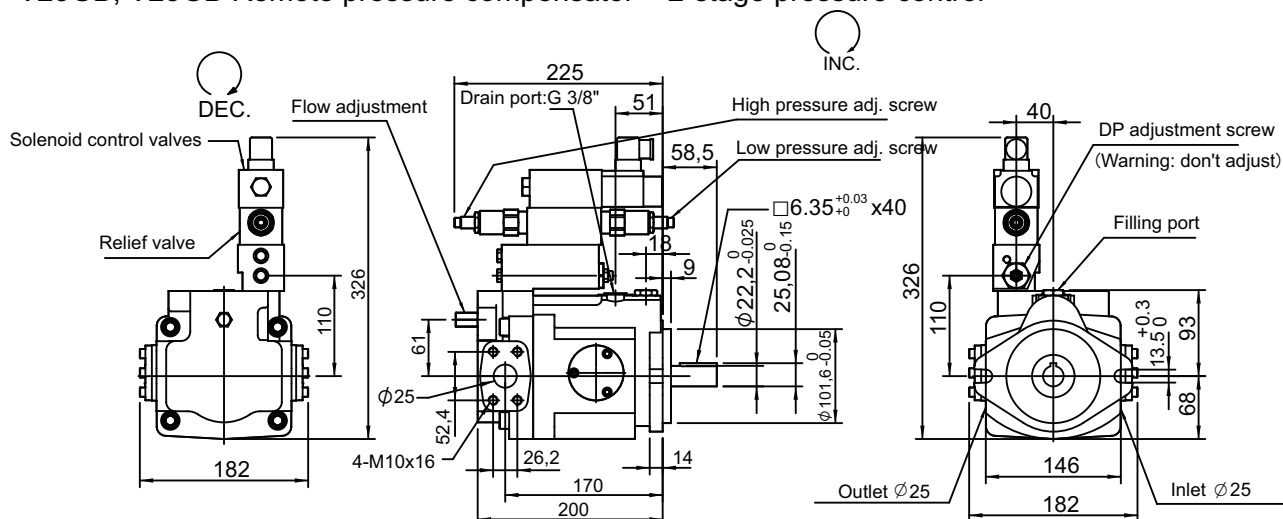


Dimension

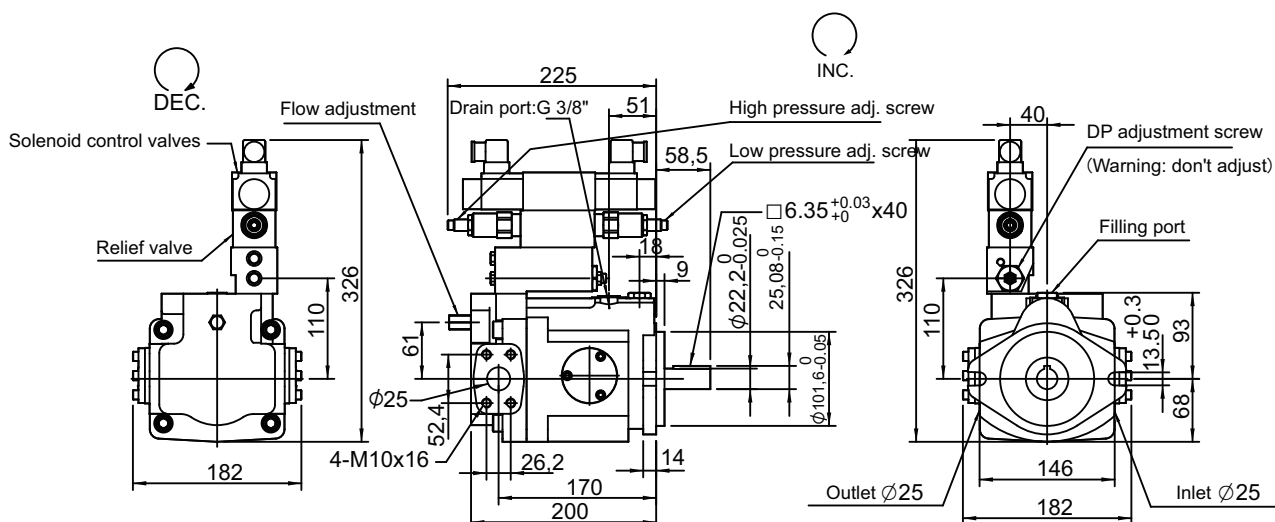
V23GR, V25GR Remote pressure compensator + Electrical unloading



V23GB, V25GB Remote pressure compensator + 2-stage pressure control



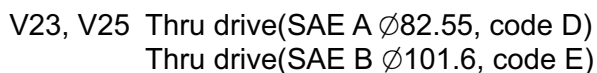
V23GC, V25GC Remote pressure compensator + Electrical unloading + 2-stage pressure control



A

V Axial piston pump

DP adjustment screw
(Warning: don't adjust)

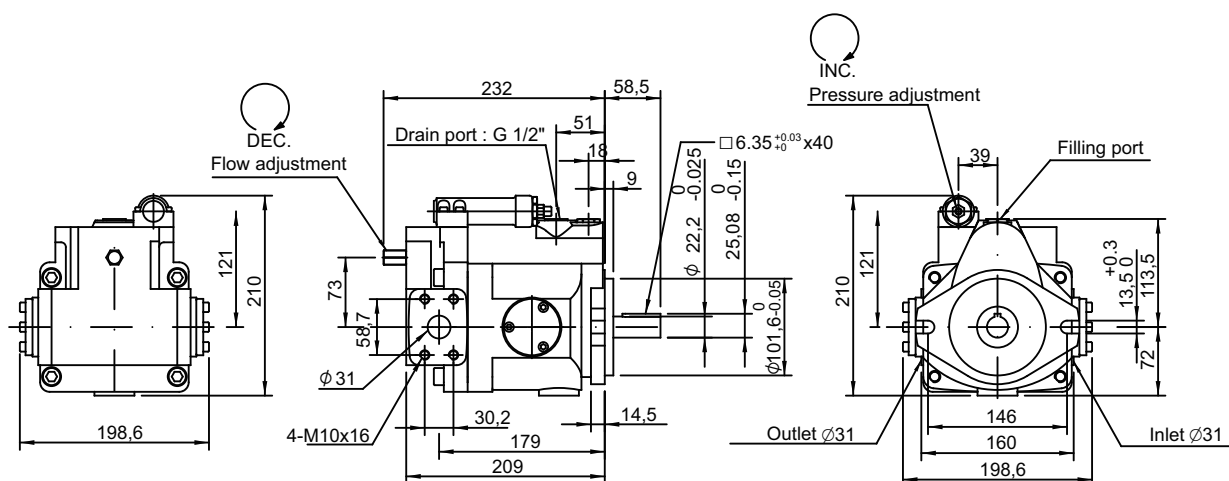


Type	A	B	C	CG	CR	D	DG	E	EG	F	FG	G	GJ	GM	HL	HK	HO
○ Thru drive option	○					○	○	○	○			○	○	○	○	○	○

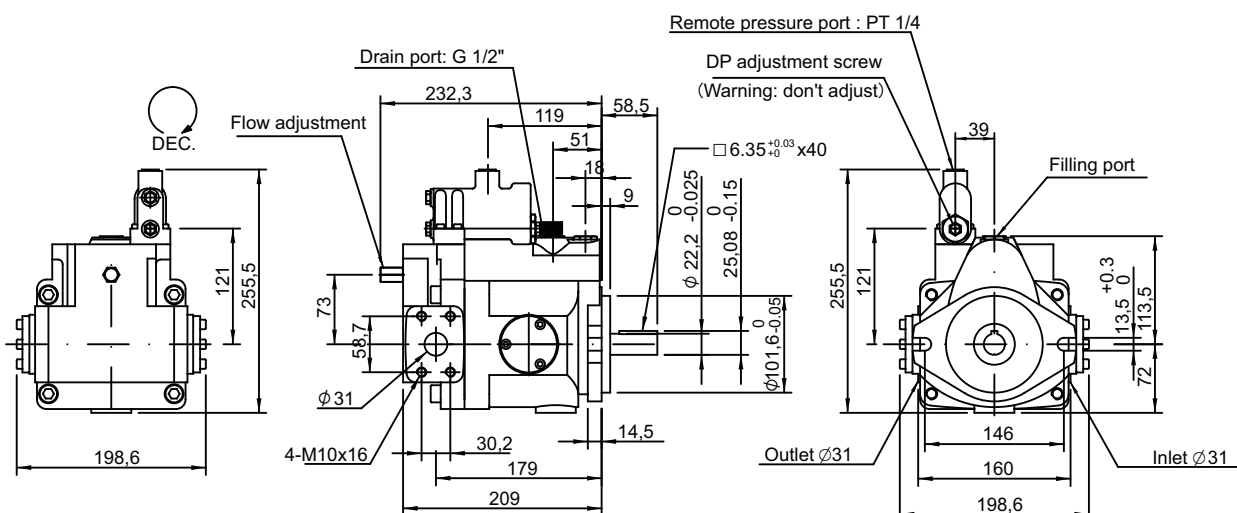


Dimension

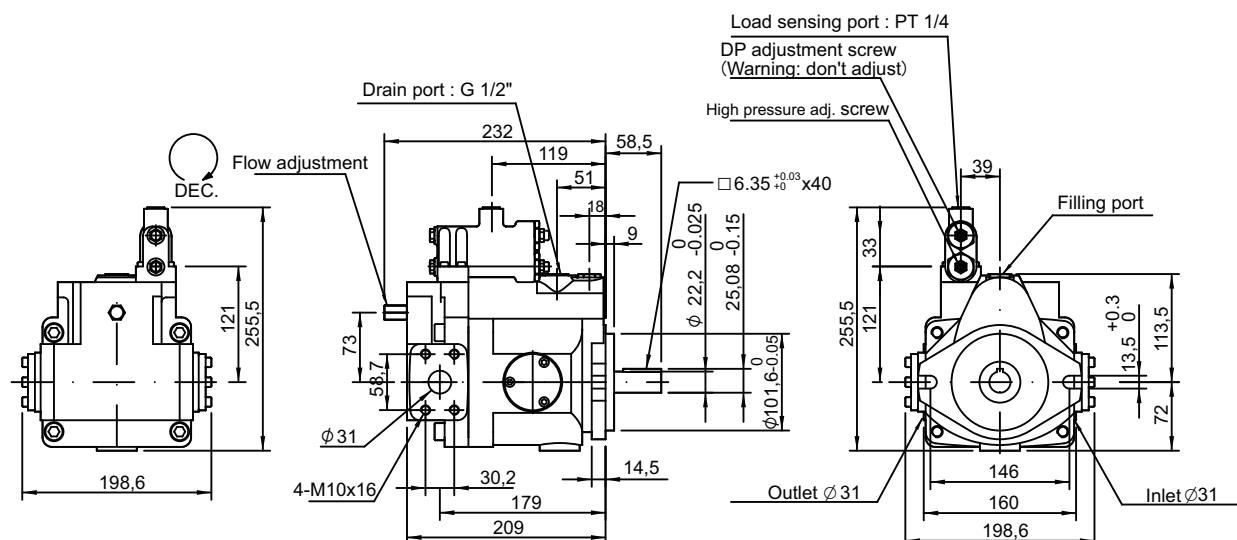
V38A, V42A Standard pressure control



V38G, V42G Remote pressure control



V38HL, V42HL Load-sensing control



A

25

V Axial piston pump



Dimension

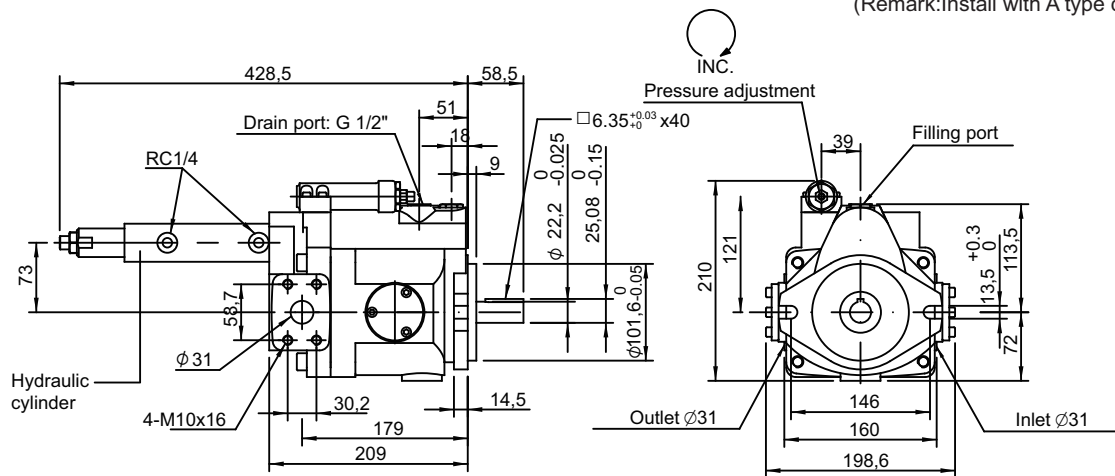
A

26

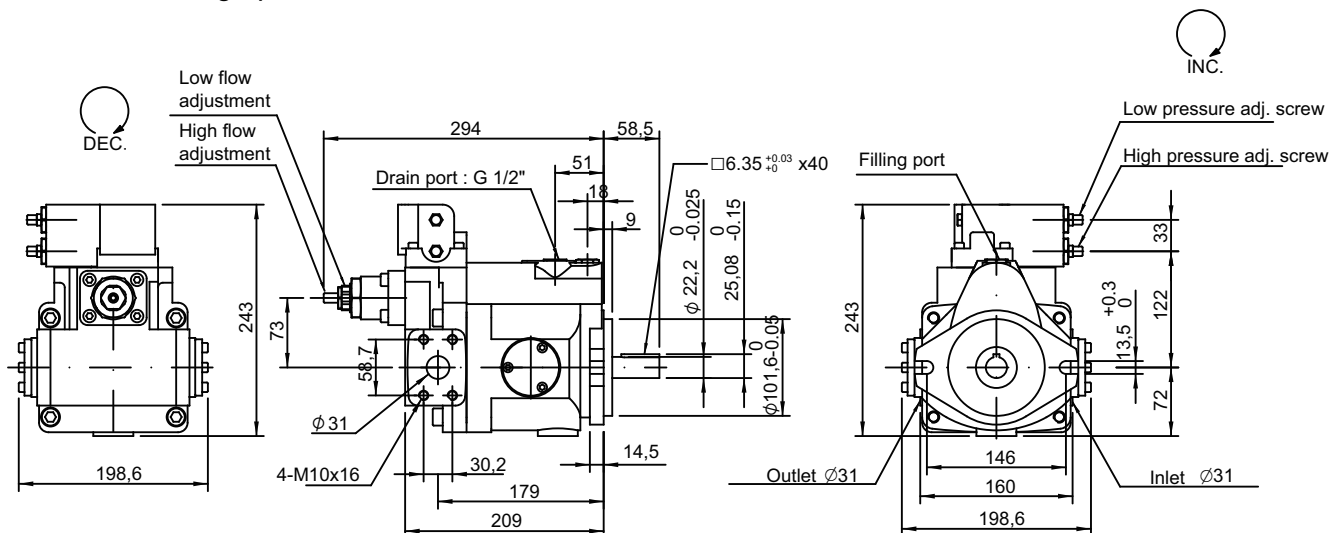
V Axial piston pump

V38B, V42B Multi-stage flow & Single-stage pressure control (with cylinder)

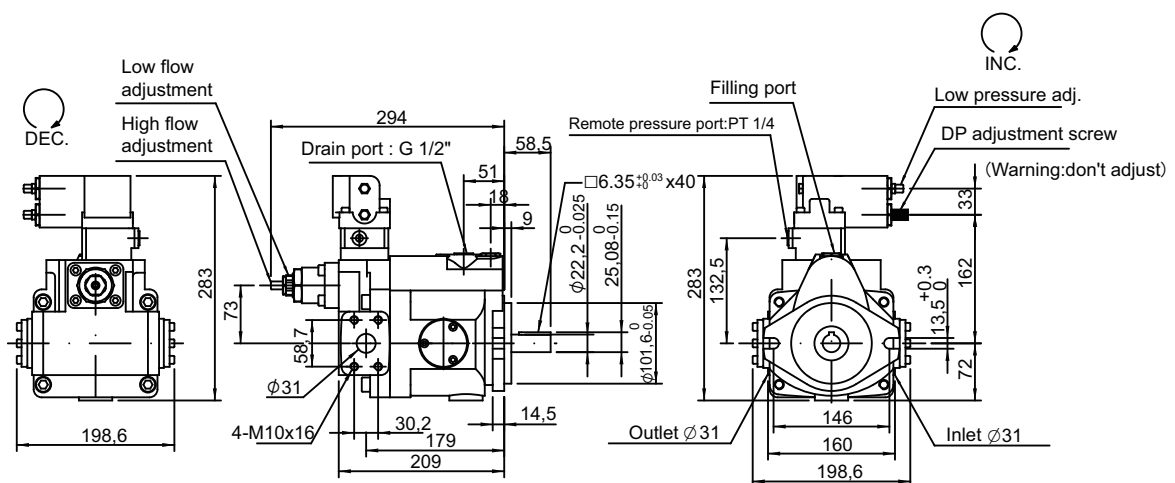
(Remark: Install with A type control)



V38C, V42C 2-stage pressure & Flow control

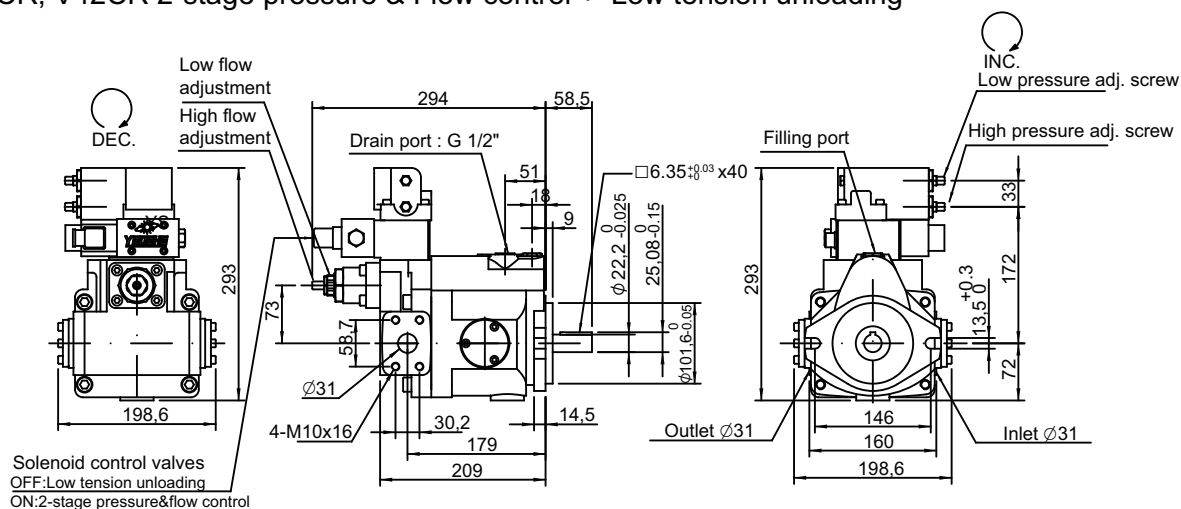


V38CG, V42CG 2-stage pressure & Flow control + Remote

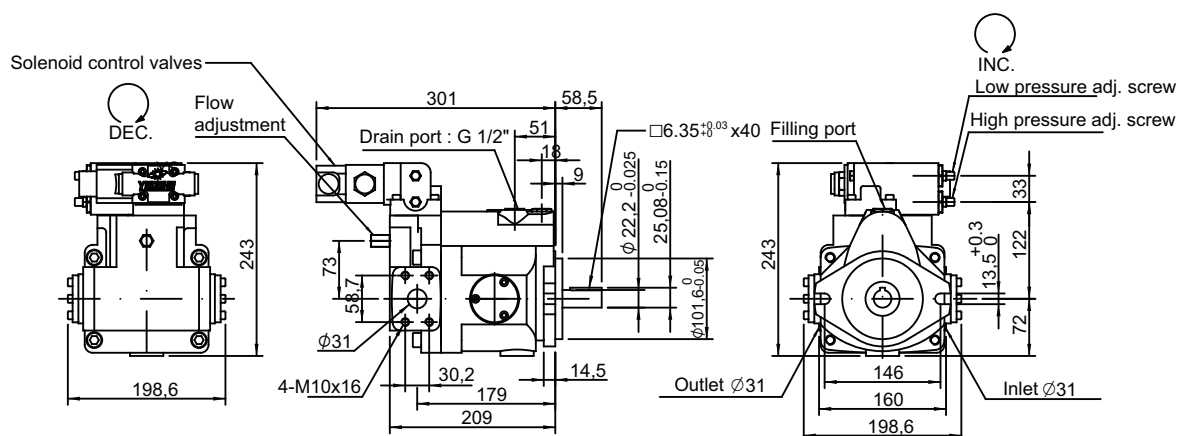


Dimension

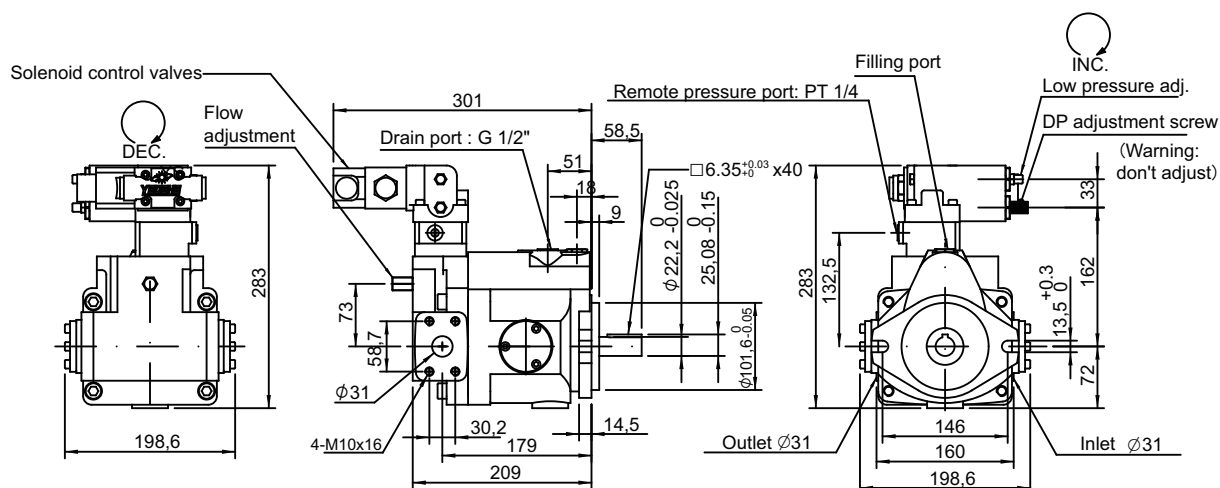
V38CR, V42CR 2-stage pressure & Flow control + Low tension unloading



V38D, V42D Low tension unloading + Pressure control



V38DG, V42DG Low tension unloading + Pressure control + Remote





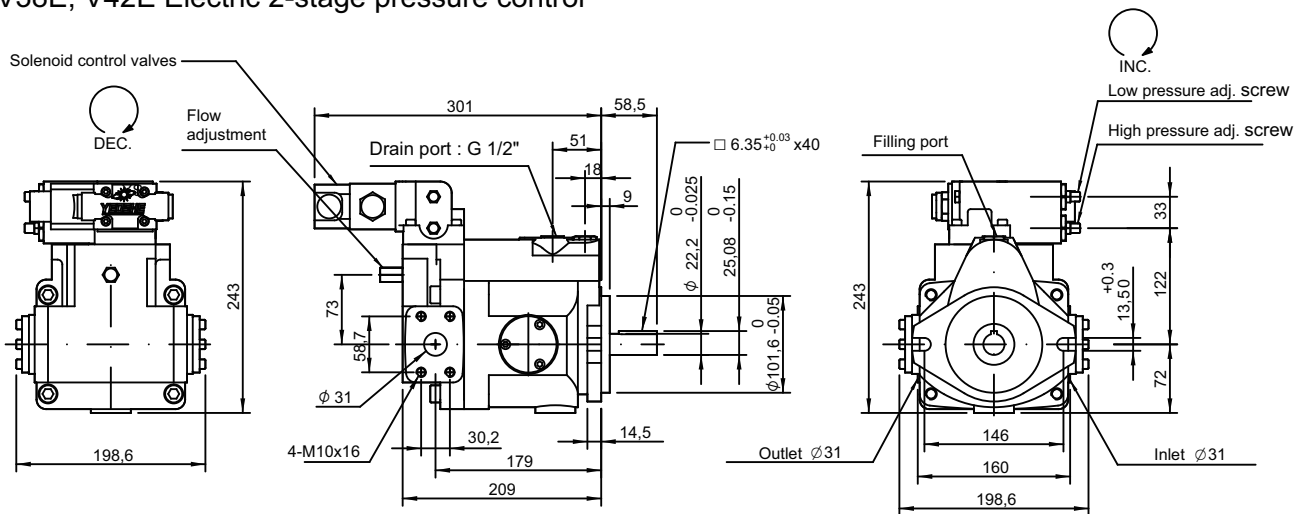
Dimension

A

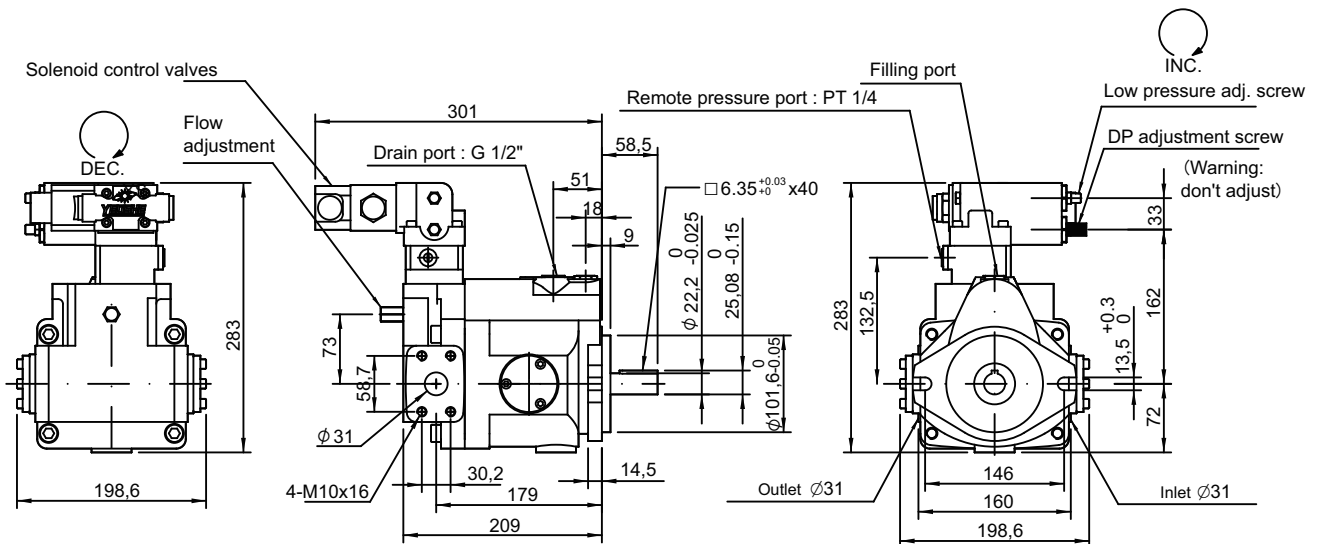
28

V Axial piston pump

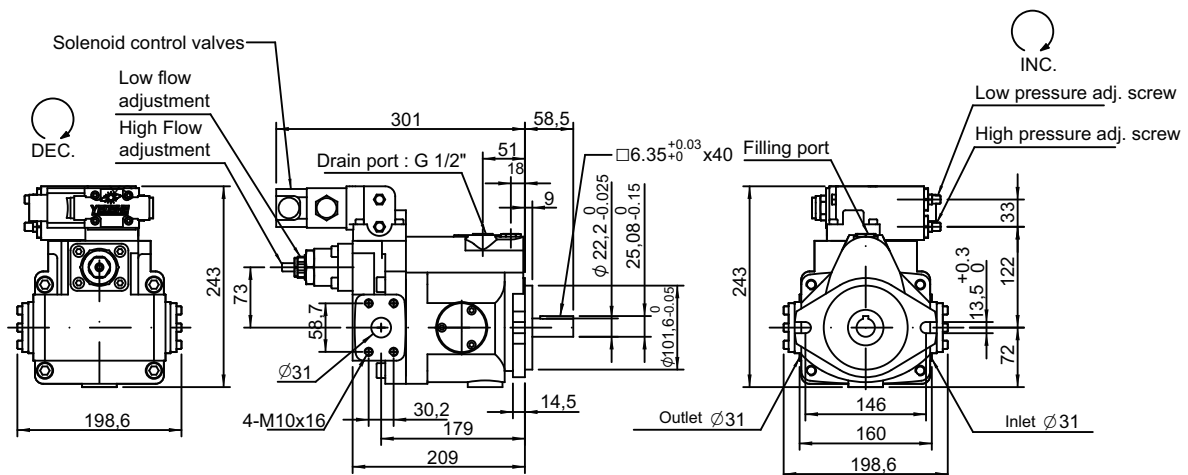
V38E, V42E Electric 2-stage pressure control



V38EG, V42EG Electric 2-stage pressure control + Remote

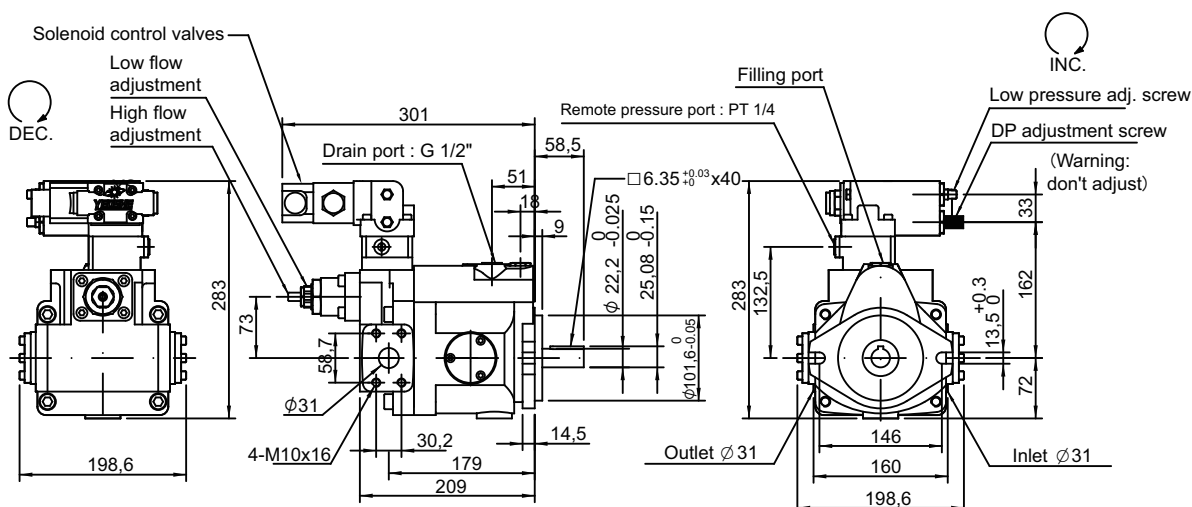


V38F, V42F Electric 2-stage pressure control & Flow control

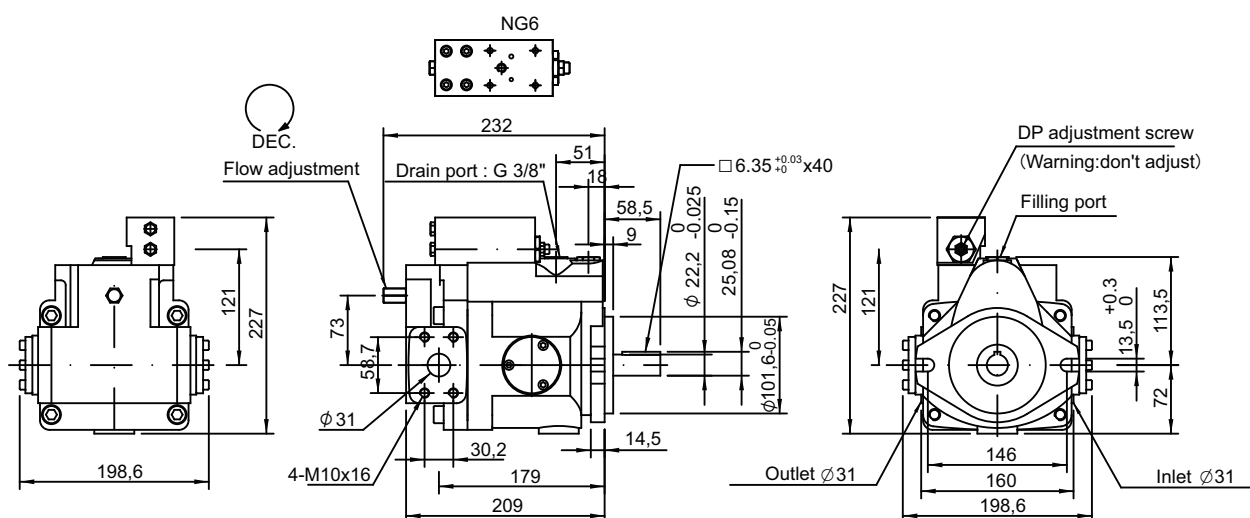


Dimension

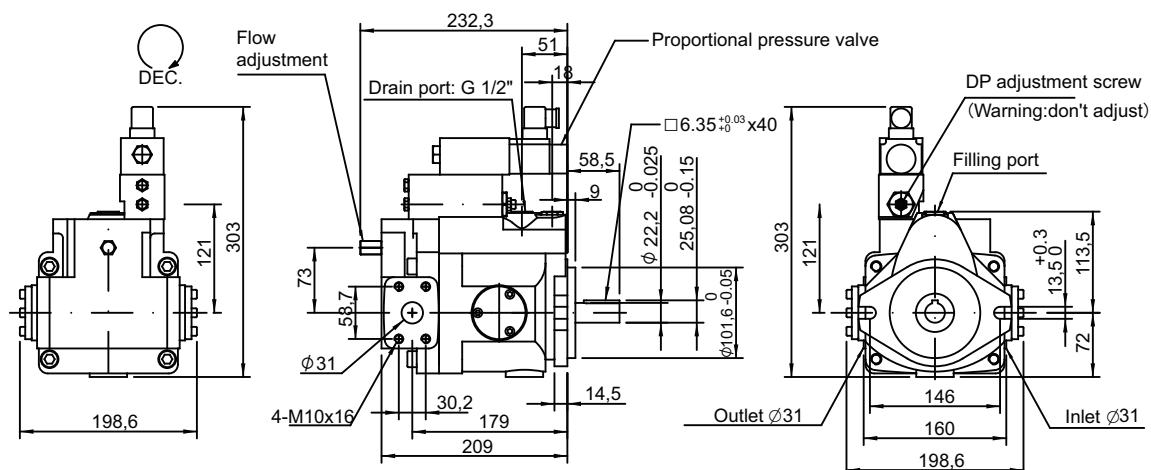
V38FG, V42FG Electric 2-stage pressure control & Flow control + Remote



V38GM, V42GM Remote pressure compensator with NG6 interface



V38GJ, V42GJ Remote pressure compensator + Proportional pressure valve



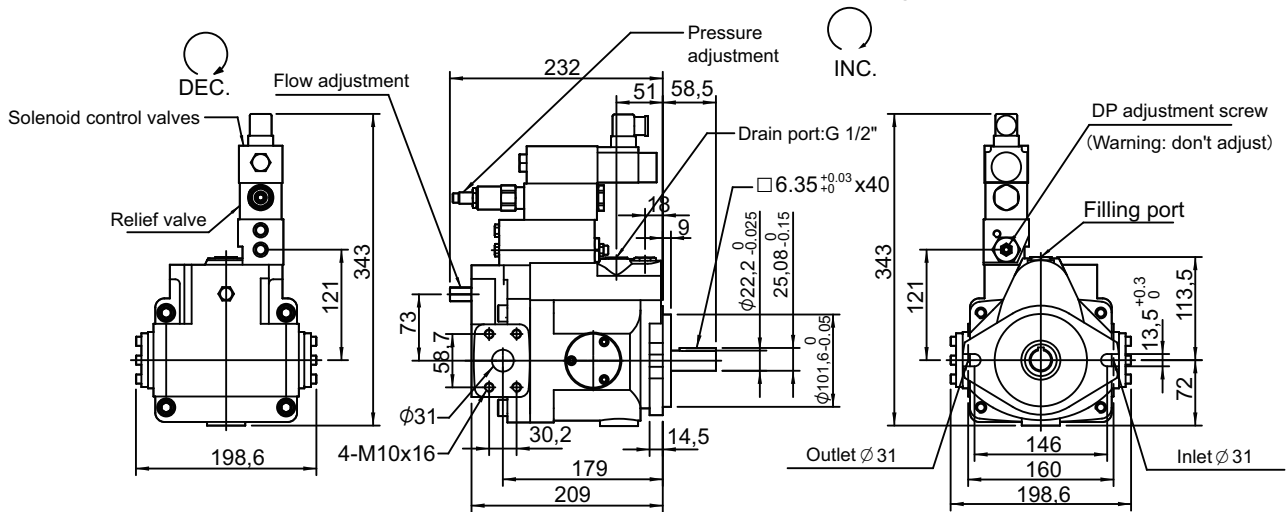
Dimension

A

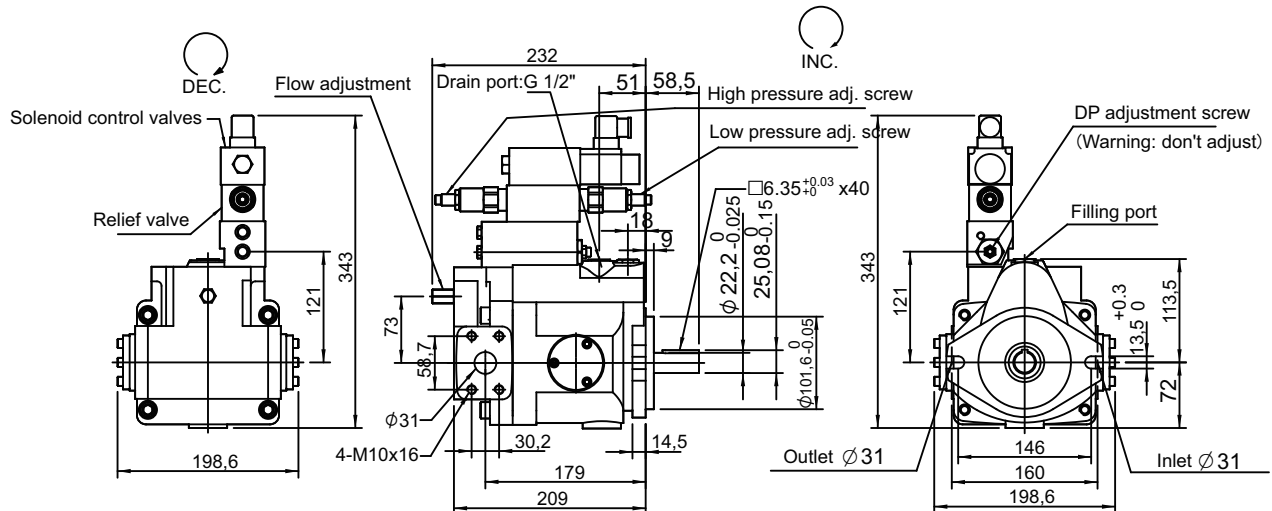
30

V Axial piston pump

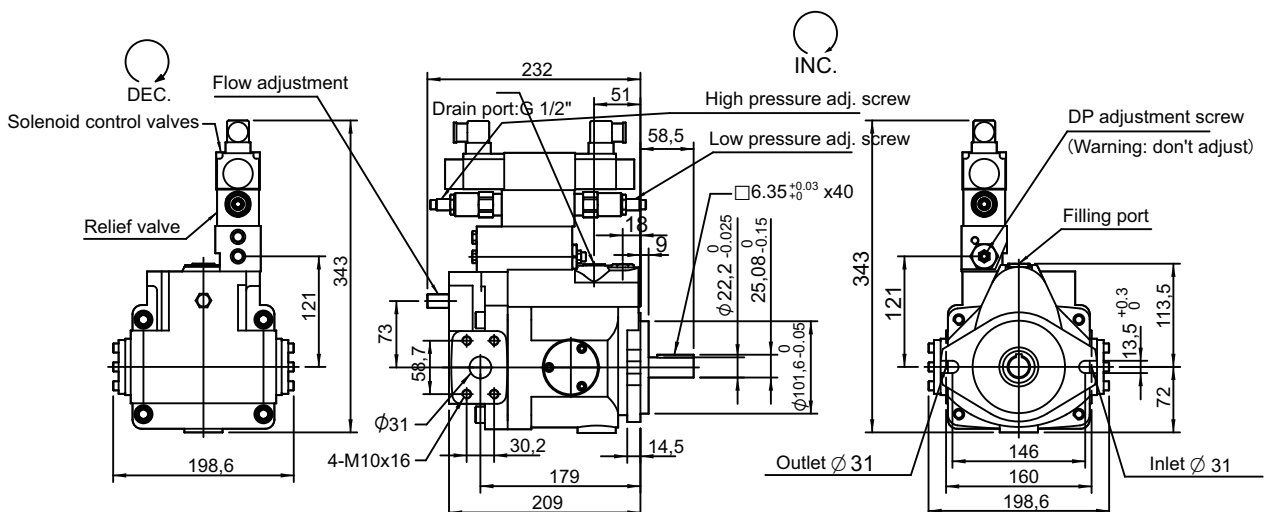
V38GR, V42GR Remote pressure compensator + Electrical unloading



V38GB, V42GB Remote pressure compensator + 2-stage pressure control



V38GC, V42GC Remote pressure compensator + Electrical unloading + 2-stage pressure control



A

V Axial piston pump

31



31



31

3131

Dimension

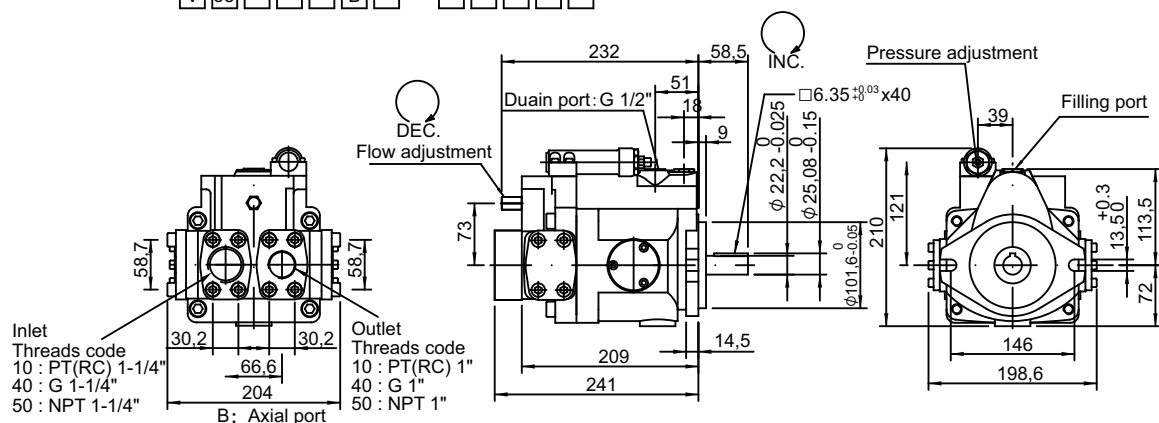
A

32

V Axial piston pump

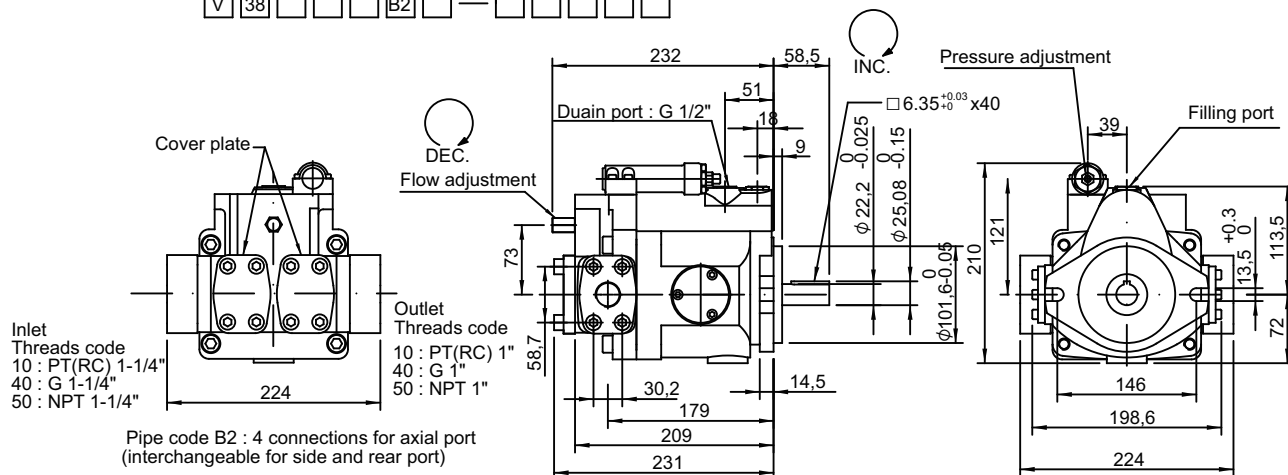
V38, V42 Rear port (Please following order code no.6,add"B")

V 38 □ □ □ □ B □ — □ □ □ □ □



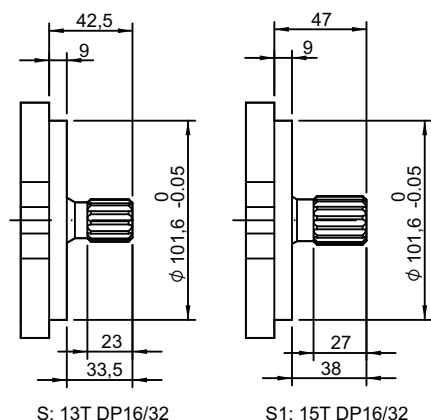
V38, V42 4 connections for rear port (Please following order code no.6,add"B2")

V 38 □ □ □ □ B2 □ — □ □ □ □ □

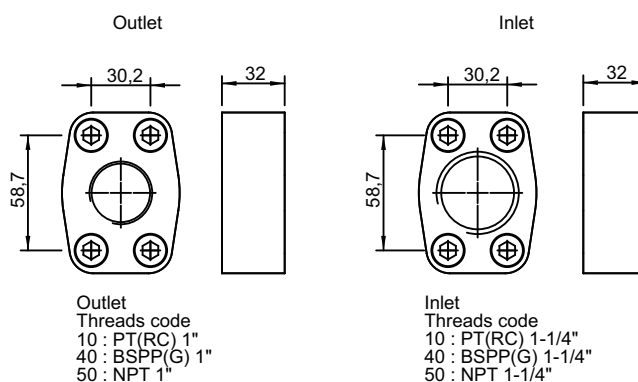


Type	A	B	C	CG	D	DG	E	EG	F	FG	G	GJ	GM	HL	HK	HQ
○ Axial port option	○	○	○	○					○	○	○	○	○	○		

V38, V42 Splined shaft type



V38, V42 Inlet / Outlet



Technical drawing of the V70A standard pressure control valve, showing three views: front, side, and top.

Front View Dimensions:

- Overall width: 261.5
- Overall height: 233.5
- Central port diameter: $\phi 38$

Side View Dimensions:

- Overall width: 306
- Overall height: 119
- Drain port: G 3/4"
- Pressure adjustment screw (INC. Pressure adjustment)
- Filling port
- Outlet $\phi 38$
- Inlet $\phi 38$

Top View Dimensions:

- Overall width: 261.5
- Overall height: 233.5
- Outlet $\phi 38$
- Inlet $\phi 38$

Other Dimensions:

- 83
- 73
- 57
- 33
- 10
- $\phi 31.75^{+0.025}_0$
- $35.35^{+0.03}_{-0.2}$
- $\phi 127^{+0.05}_0$
- 69.9
- 35.7
- 256.5
- 300
- 24
- 74
- 119
- 181
- 208
- 261.5
- 133.5
- 100
- 18.0
- $\phi 115$

Technical drawing of the 300 series hydraulic pump, showing three views: front, side, and top.

Front View Dimensions:

- Overall width: 261.5
- Overall height: 293.5
- Mounting flange diameter: $\phi 38$
- Mounting holes: 4-M12x25

Side View Dimensions:

- Overall length: 300
- Overall height: 293.5
- Drain port: G 3/4"
- Flow adjustment screw
- DP adjustment screw (Warning: don't adjust)
- Remote pressure port: PT 1/4
- Filling port
- Outlet $\phi 38$
- Inlet $\phi 38$

Top View Dimensions:

- Overall width: 261.5
- Overall height: 133.5
- Mounting flange diameter: $\phi 38$
- Mounting holes: 4-M12x25

Key Features and Dimensions:

- Flow adjustment screw
- Drain port: G 3/4"
- DP adjustment screw (Warning: don't adjust)
- Remote pressure port: PT 1/4
- Filling port
- Outlet $\phi 38$
- Inlet $\phi 38$
- Mounting flange diameter: $\phi 38$
- Mounting holes: 4-M12x25
- Dimensions: 306, 180.5, 57, 73, 33, 10, 83, 68.9, 35.7, 256.5, 24, 300, 293.5, 119, 261.5, 181, 208, 261.5, 133.5, 100, 18.0, 0.3, 115, 7.94^{+0.03}/₊₀ x45, $\phi 31.75 \pm 0.025$, 35.35 ± 0.2 , $\phi 127 \pm 0.05$

Technical drawings of the 300 series hydraulic pump, showing front, side, and rear views with dimensions and labels.

Front View (Left):

- Overall width: 261.5
- Overall height: 293.5
- Mounting flange height: 119
- Flange thickness: 39

Side View (Middle):

- Overall width: 300
- Overall height: 293.5
- Mounting flange height: 119
- Flange thickness: 39
- Drain port: G 3/4"
- Flow adjustment screw
- High pressure adj. screw (Warning: don't adjust)
- Load sensing port: PT 1/4
- Filling port
- Outlet $\varnothing 38$
- Inlet $\varnothing 38$
- Dimensions: 306, 180.5, 57, 73, 33, 10, 83, 69.9, $\varnothing 38$, 4-M12x25, 35.7, 256.5, 24, 7.94^{+0.03}₋₀ x45, $\varnothing 31.75-0.025$, 35.35-0.2, $\varnothing 127-0.05$

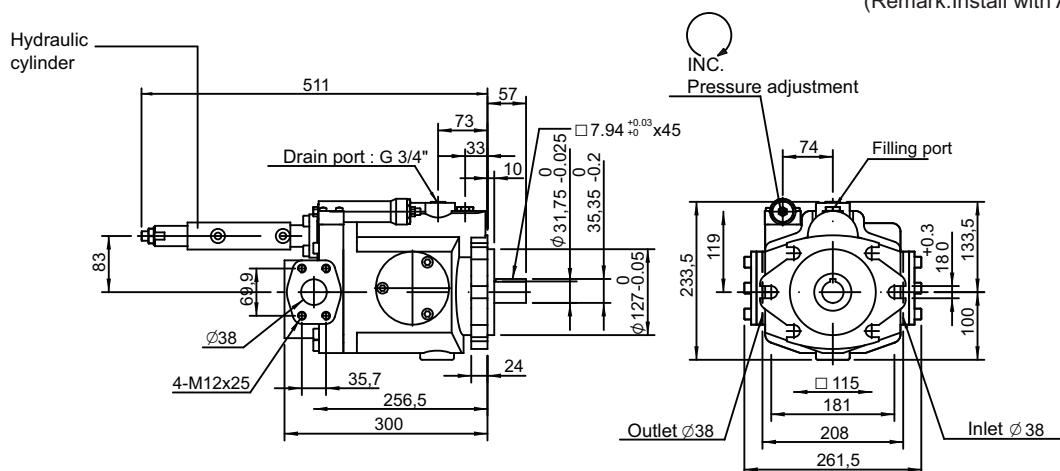
Rear View (Right):

- Overall width: 261.5
- Overall height: 293.5
- Mounting flange height: 119
- Flange thickness: 39
- Dimensions: 115, 181, 208, 133.5, 100, 18.0, ± 0.3

A

V Axial piston pump

(Remark: Install with A type control)



Technical drawings of the 2-stage pressure control valve, showing front, side, and rear views with dimensions and labels.

Front View (Left):

- Overall width: 261.5
- Overall height: 353.8
- Port diameter: $\phi 38$
- Mounting holes: 4-M12x25
- Labels: Low flow adjustment, High flow adjustment, DEC. (Decompression)

Side View (Middle):

- Overall length: 300
- Overall height: 256.5
- Drain port: G 3/4"
- Port diameter: $\phi 38$
- Mounting holes: 4-M12x25
- Labels: Drain port : G 3/4", DEC. (Decompression)

Rear View (Right):

- Overall width: 261.5
- Overall height: 193.8
- Port diameter: $\phi 38$
- Mounting holes: 4-M12x25
- Labels: Low pressure adj. screw, High pressure adj. screw, Filling port, Inlet $\phi 38$, Outlet $\phi 38$

Dimensions and Tolerances:

- 73, 33, 10, 35.7, 24, 83, 63.9, 409.4, 57, 7.94 $^{+0.03}_{-0}$ x45, $\phi 31.75^{-0.025}_{+0}$, 35.35 $^{-0.2}_{+0}$, $\phi 127^{-0.05}_{+0}$, 193.8, 40, 133.5, 181, 208, 261.5, 100, 100, 180, ± 0.3

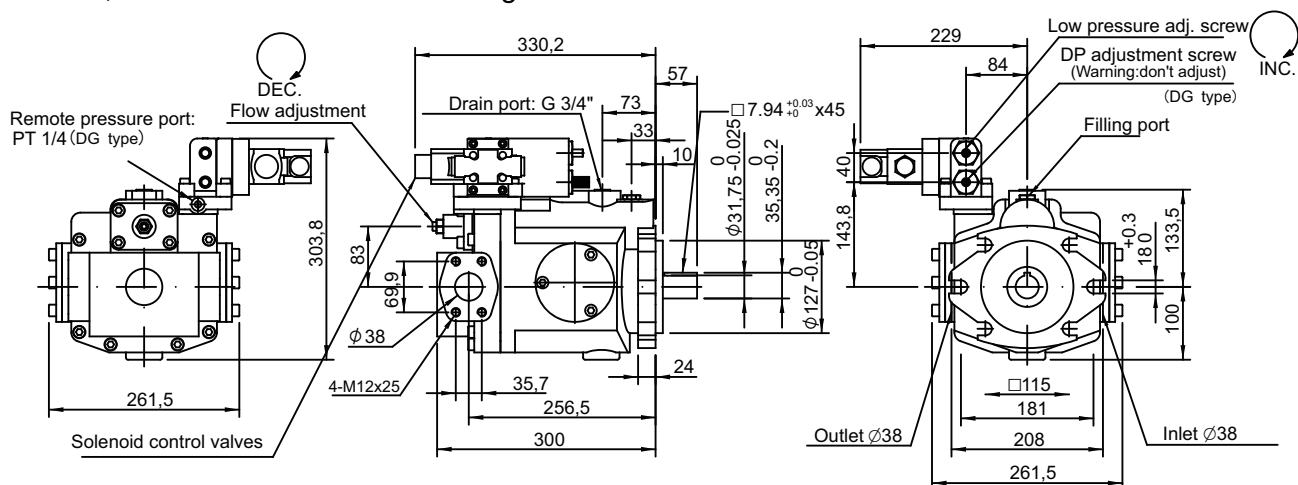
Solenoid control valves:

- OFF: Low tension unloading
- ON: 2-stage pressure & flow control

Dimension

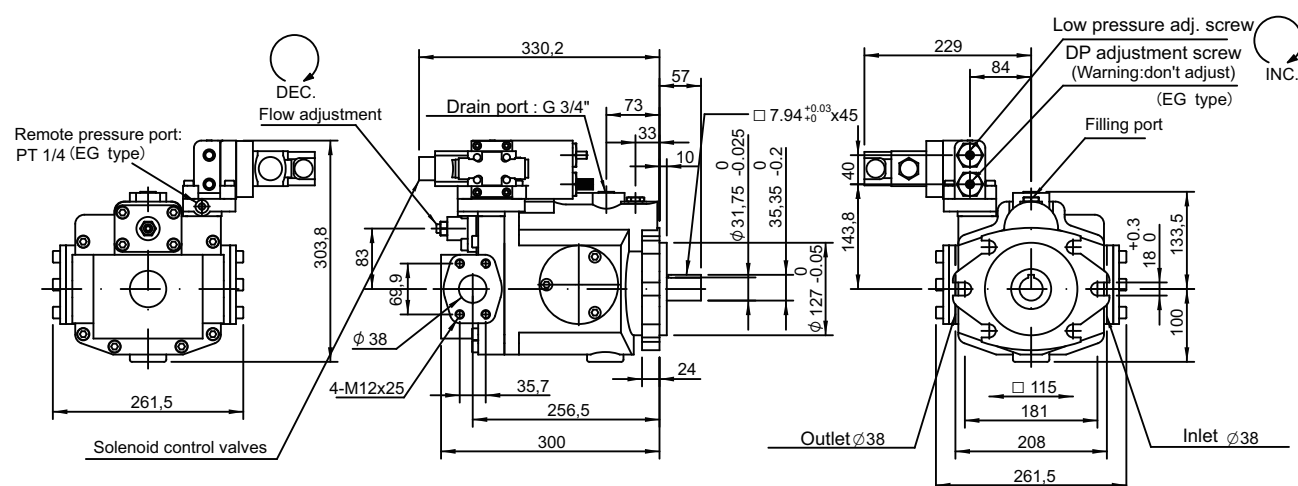
V50D, V70D Low tension unloading + Pressure control

V50DG, V70DG Low tension unloading + Pressure control + Remote



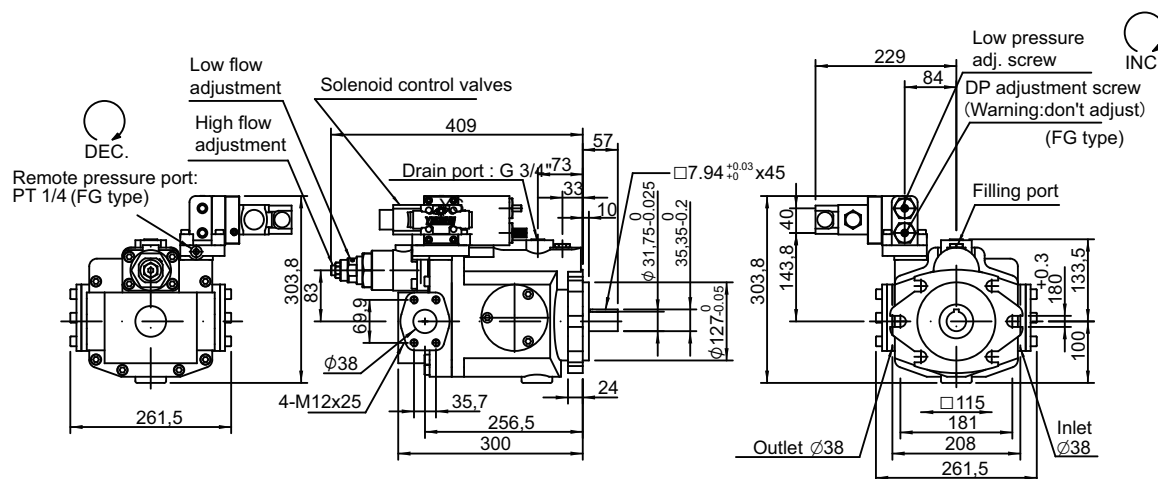
V50E, V70E Electric 2-stage pressure control

V50EG, V70 EG Electric 2-stage pressure control + Remote



V50F, V70F Electric 2-stage pressure control & Flow control

V50FG, V70 Electric 2-stage pressure control & Flow control + Remote



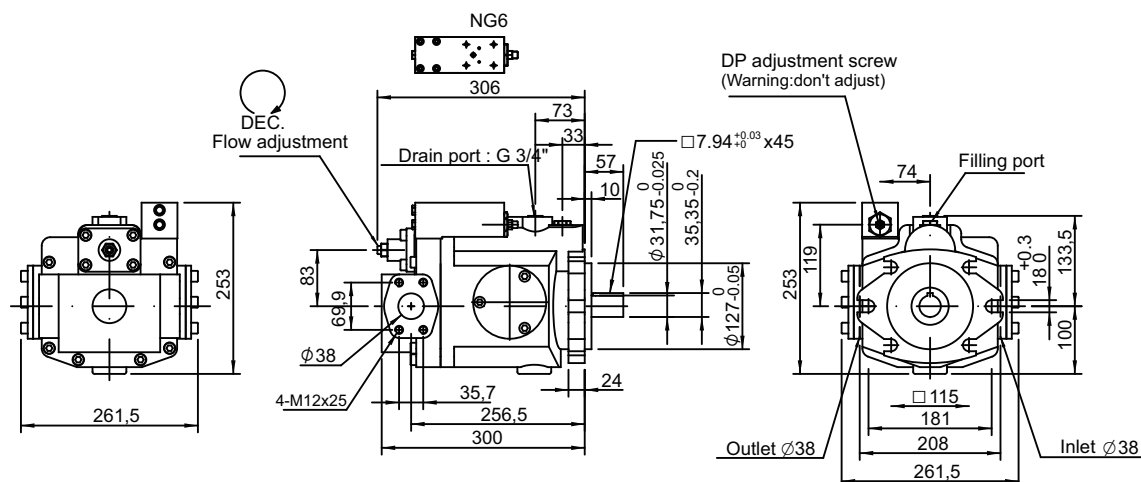
Dimension

A

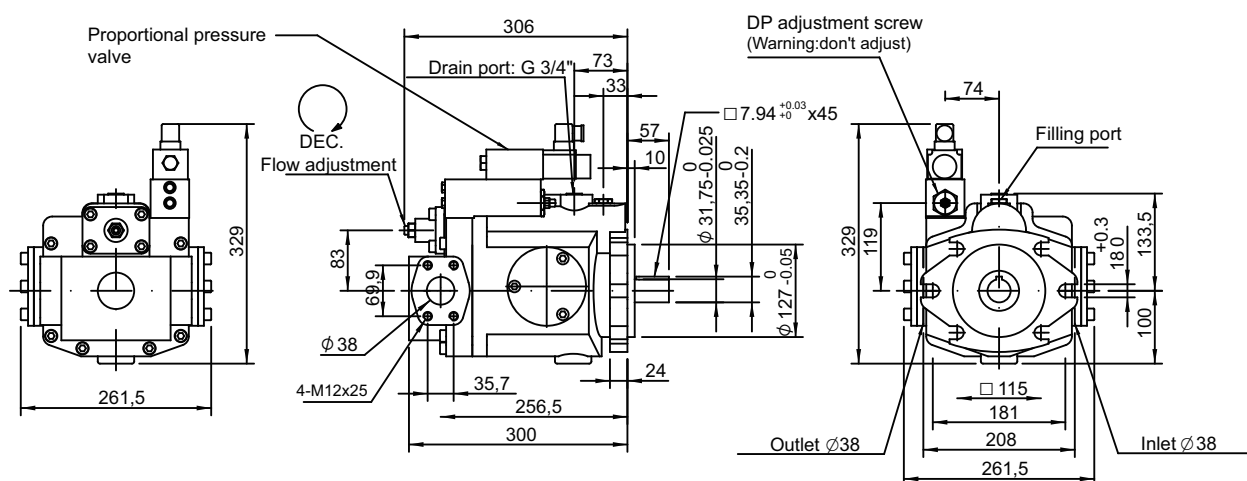
36

V Axial piston pump

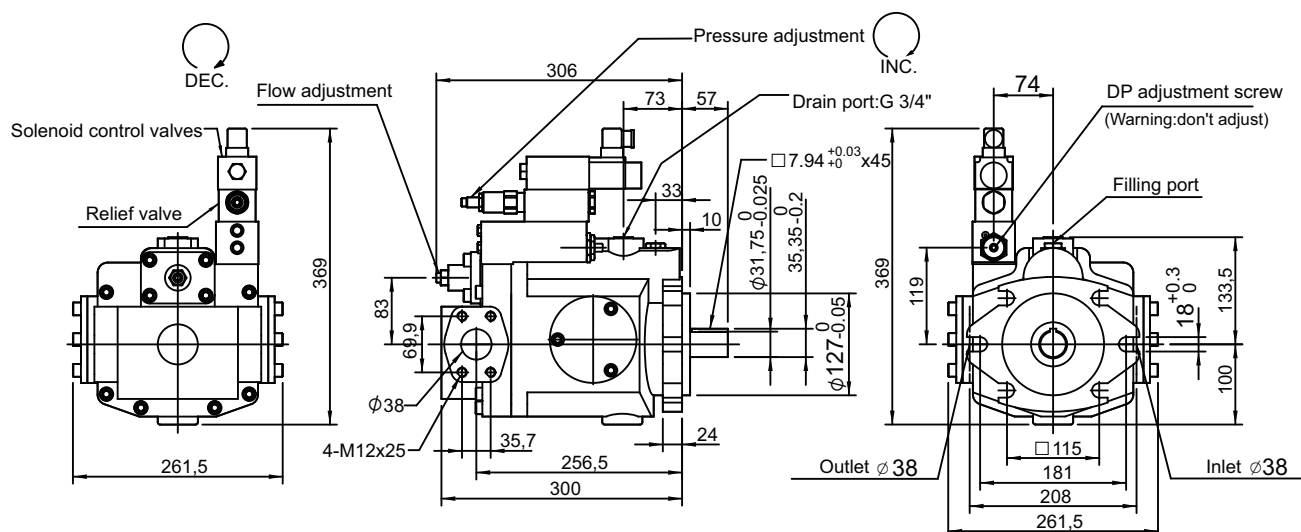
V50GM, V70GM Remote pressure compensator with NG6 interface



V50GJ, V70GJ Remote pressure compensator + Proportional pressure valve



V50GR, V70GR Remote pressure compensator + Electrical unloading



A

V Axial piston pump

Technical drawings of the 300 series solenoid control valves, showing front, side, and top views with dimensions and labels.

Front View (Left):

- DEC. (Decrease) symbol
- Solenoid control valves
- Relief valve
- Flow adjustment
- Dimensions: 261.5 (width), 369 (height)

Side View (Middle):

- High pressure adj. screw
- INC. (Increase) symbol
- Low pressure adj. screw
- Drain port: G 3/4"
- Dimensions: 306 (top width), 73 (top offset), 33 (top offset), 57 (top offset), 10 (top offset), 7.94^{+0.03}/₊₀ x 45 (top offset), 35.75^{+0.025}/₀ (top offset), 35.35^{+0.02}/₀ (top offset), 300 (bottom width), 256.5 (bottom offset), 24 (bottom offset), 35.7 (bottom offset), 83 (bottom offset), 69.9 (bottom offset), $\phi 38$ (bottom port), 4-M12x25 (bottom port)

Top View (Right):

- DP adjustment screw (Warning: don't adjust)
- Filling port
- Outlet $\phi 38$
- Inlet $\phi 38$
- Dimensions: 74 (top width), 369 (top height), 119 (top offset), 181 (top offset), 208 (top offset), 261.5 (top width), 133.5 (top offset), 100 (top offset), 18.0 (top offset), $\phi 115$ (top port), 18.0 (top offset), 100 (top offset), 133.5 (top offset)

Technical drawing of the 300 series hydraulic pump, showing three views: front view (left), side view (middle), and rear view (right). The drawing includes dimensions in millimeters and labels for various components.

Front View (Left):

- DEC. (Decrease) symbol.
- Solenoid control valves.
- Relief valve.
- Flow adjustment.
- Dimensions: 261,5 (width), 369 (height).

Side View (Middle):

- Drain port: G 3/4".
- High pressure adj. screw.
- Low pressure adj. screw.
- Dimensions: 306 (width), 73 (height), 33 (height), 57 (height), 10 (height), 35,7 (width), 256,5 (width), 300 (width), 24 (height), 83 (height), 69,9 (height), $\phi 38$ (inlet/outlet diameter), 4-M12x25 (mounting holes).

Rear View (Right):

- INC. (Increase) symbol.
- DP adjustment screw (Warning: don't adjust).
- Filling port.
- Outlet $\phi 38$.
- Inlet $\phi 38$.
- Dimensions: 74 (height), 369 (height), 119 (height), 133,5 (height), 100 (height), 181 (width), 208 (width), 261,5 (width), 115 (width), 18,0 (height), $\pm 0,3$ (tolerance).

DEC.
Flow adjustment

83

104

314,8

39

119

322

Drain port : G 3/4"

421

180,5

57

73

33

10

0

$\square 7.94^{+0.03}_{+0} \times 45$

$\phi 31.75^{-0.025}_0$

$35.35^{-0.2}_0$

$\phi 127^{-0.05}_0$

24

300

321,4

Outlet
Threads code
10 : PT(RC) 1-1/4"
40 : G 1-1/4"
50 : NPT 1-1/4"

Proportional pressure valve

INC.

DP adjustment screw
(Warning: don't adjust)

High pressure
adj. screw

184

39

119

322

Filling port

$\square 115$

181

208

314,8

± 0.3

180

100

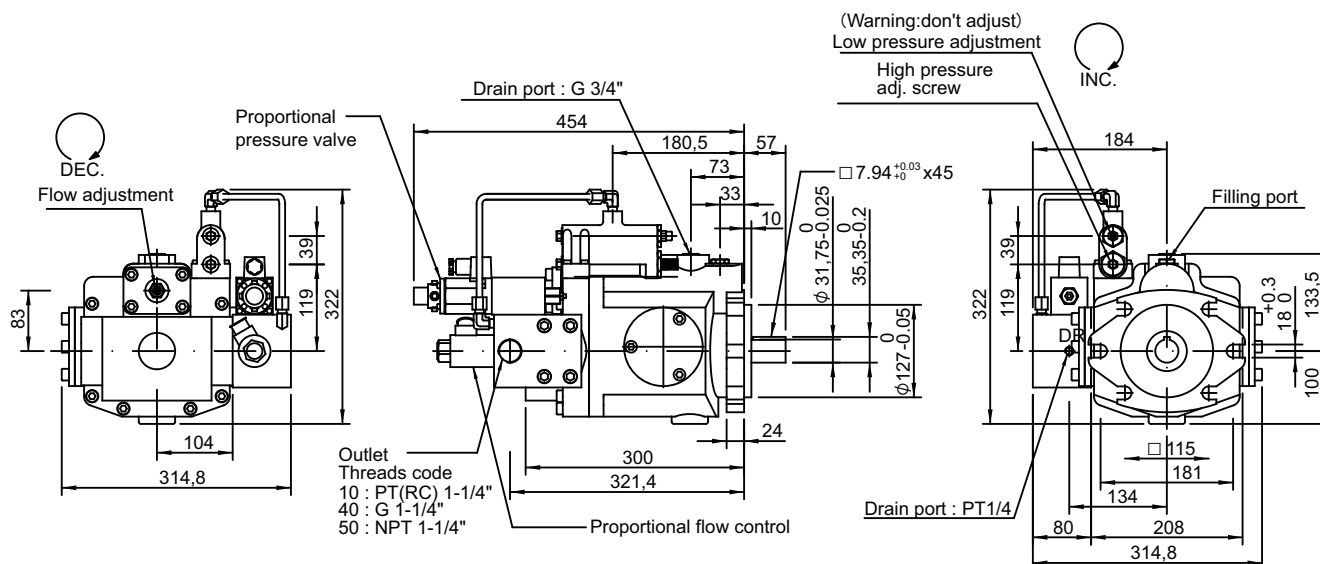
133.5

Dimension

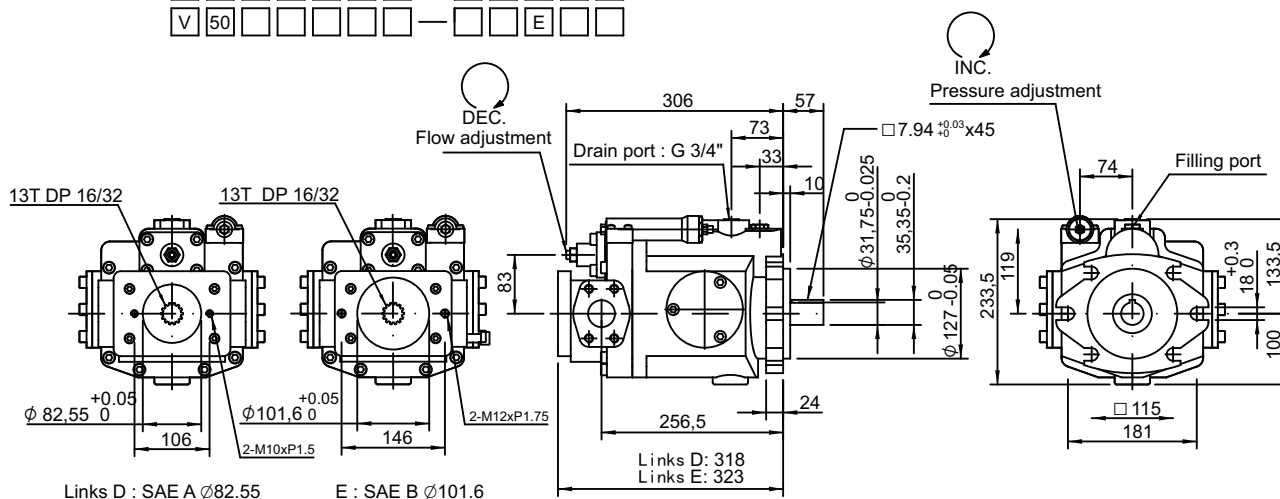
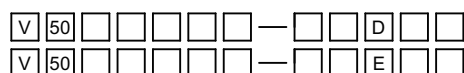
A

V Axial piston pump

V50HK, V70HK Load-sensing compensator + Proportional pressure valve + Proportional flow valve



V50, V70 Thru drive (SAE A $\varnothing 82.55$, SAE B $\varnothing 101.6$, code D or E)

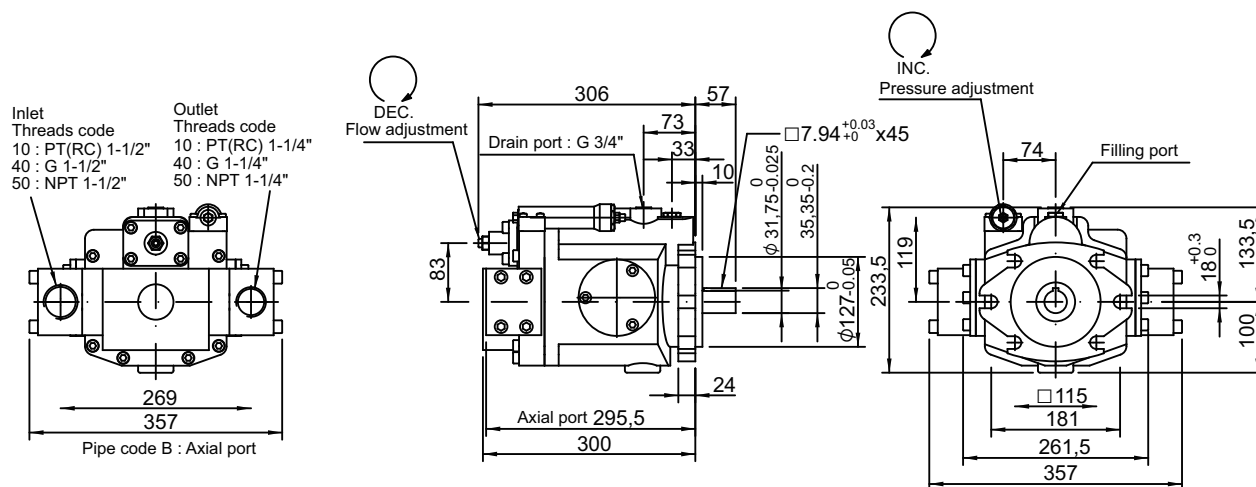


Type	A	B	C	CR	CG	D	DG	E	EG	F	FG	G	GJ	GM	HL	HK	HQ
○ Thru drive option	○					○	○	○	○			○	○	○	○	○	○

Dimension

V50, V70 Rear port (Please following order code no.6 add "B")

V 50 B —



A

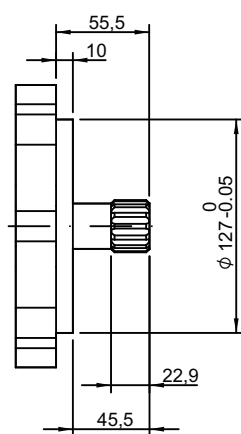
39

V Axial piston pump

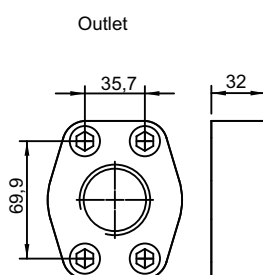
Type	A	B	C	CR	CG	D	DG	E	EG	F	FG	G	GJ	GM	HL	HK	HQ
○ Thru drive option	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		

V50, V70 Splined shaft type

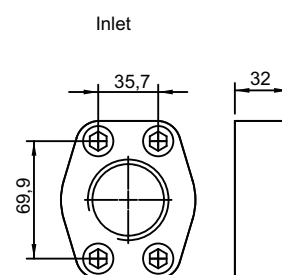
V50, V70 Inlet / outlet



S: 14T DP12/24



Threads code
10 : PT(RC) 1-1/4"
40 : G 1-1/4"
50 : NPT 1-1/4"
60 : SAE-20 (1-5/8"-12UN)



Threads code
10 : PT(RC) 1-1/2"
40 : G 1-1/2"
50 : NPT 1-1/2"



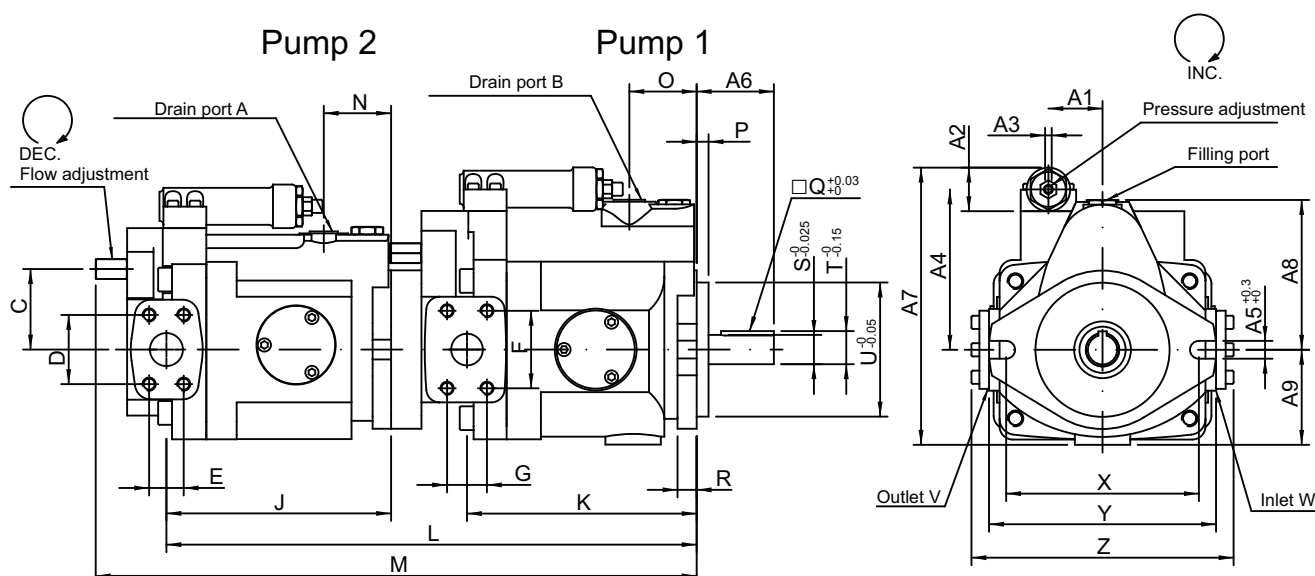
Pump combination

A

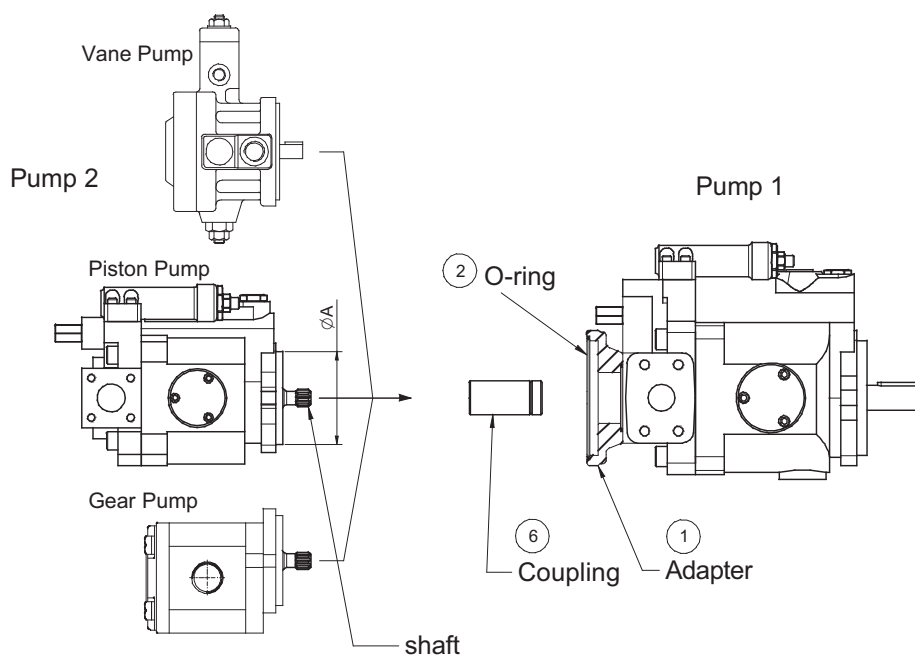
40

V Axial piston pump

Pump 1	V15 (V18)	V23 (V25)	V23 (V25)	V38 (V42)	V38 (V42)	V38 (V42)	V50 (V70)	V50 (V70)	V50 (V70)
Pump 2	V15 (V18)	V15 (V18)	V23 (V25)	V15 (V18)	V23 (V25)	V38 (V42)	V15 (V18)	V23 (V25)	V38 (V42)
A	G 3/8"	G 3/8"	G 3/8"	G 3/8"	G 3/8"	G 1/2"	G 3/8"	G 3/8"	G 1/2"
B	G 3/8"	G 3/8"	G 3/8"	G 1/2"	G 1/2"	G 1/2"	G 3/4"	G 3/4"	G 3/4"
C	57.45	57.45	61	57.45	61	73	57.45	61	73
D	35.1	35.1	52.4	35.1	52.4	58.7	35.1	52.4	58.7
E	35.1	35.1	26.2	35.1	26.2	30.2	35.1	26.2	30.2
F	35.1	52.4	52.4	58.7	58.7	58.7	69.9	69.9	69.9
G	35.1	26.2	26.2	30.2	30.2	30.2	35.7	35.7	35.7
H	M8x20	M8x20	M10x16	M8x20	M10x16	M10x16	M8x20	M10x16	M10x16
I	M8x20	M10x16	M10x16	M10x16	M10x16	M10x16	M12x25	M12x25	M12x25
J	147	147	170	147	170	179	147	170	179
K	147	170	170	179	179	179	256.5	256.5	256.5
L	332	369	402	378	401	410	464	493	502
M	382	419	455	428	454	465	515	546	555
N	48	48	51	48		51	48	51	51
O	48	51	51	51	51	51	73	73	73
P	6	9	9	9	9	9	10	10	10
Q	4.76x32	6.35x40	6.35x40	6.35x40	6.35x40	6.35x40	7.94x45	7.94x45	7.94x45
R	13	14	14	14.5	14.5	14.5	24	24	24
S	Ø19.05	Ø22.22	Ø22.22	Ø22.22	Ø22.22	Ø22.22	Ø31.75	Ø31.75	Ø31.75
T	21.15	25.08	25.08	25.08	25.08	25.08	35.35	35.35	35.35
U	Ø82.55	Ø101.6	Ø101.6	Ø101.6	Ø101.6	Ø101.6	Ø127	Ø127	Ø127
V	Ø25	Ø25	Ø25	Ø31	Ø31	Ø31	Ø38	Ø38	Ø38
W	Ø25	Ø25	Ø25	Ø31	Ø31	Ø31	Ø38	Ø38	Ø38
X	106	146	146	146	146	146	181	181	181
Y	131	146	146	160	160	160	208	208	208
Z	165	182	182	198.6	198.6	198.6	261.5	261.5	261.5
A1	44	39	39	39	39	39	74	74	74
A2	31.2	31.2	31.2	31.2	31.2	31.2	40	40	40
A3	5	5	5	5	5	5	8	8	8
A4	84	110	110	121	121	121	119	119	119
A5	11	13.5	13.5	13.5	13.5	13.5	18	18	18
A6	44.5	58.5	58.5	58.5	58.5	58.5	57	57	57
A7	160	193	193	210	210	210	233.5	233.5	233.5
A8	91.5	93	93	113.5	113.5	113.5	133.5	133.5	133.5
A9	60	68	68	72	72	72	100	100	100



Pump combination - coupling



A

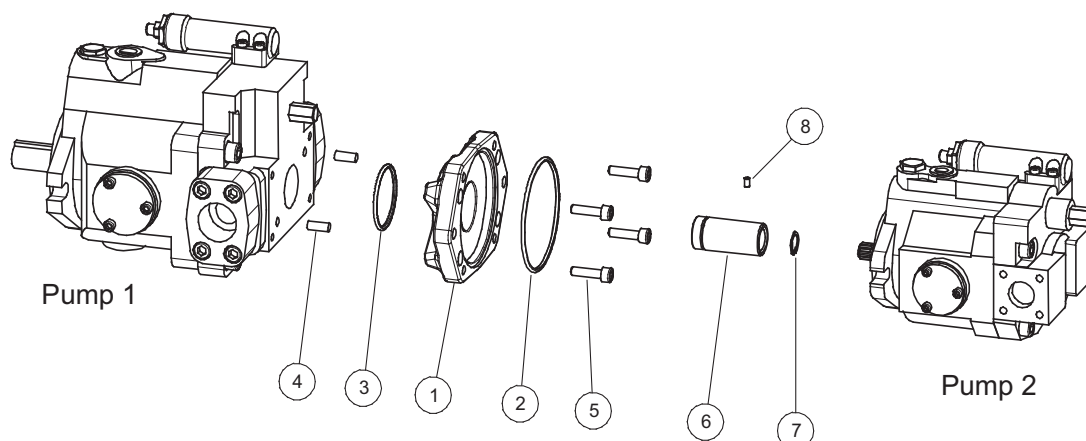
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V Axial piston pump

No	Pump 1	Pump 2			⑥Coupling
	Model	Model	Ø A	Shaft	
15-1	V15,V18	Piston pump: V15~18, AR16~22 Gear pump: HGP-3A	SAE Ø 82.55	9T 16/32 DP	COUP-V15+15
23-1	V23, V25	Piston pump: V15~18, AR16~22 Gear pump: HGP-3A	SAE A Ø82.559T Vane pump Ø95.02	9T 16/32 DP	COUP-V23-1
23-3A		Vane: F30,F40,PV2R1		13T 16/32 DP	COUP-V23-3
23-5				Cylindric Ø19.05*4.76	COUP-V23-5
23-6		Piston pump: V23~25 Vane pump: T6C	SAE B Ø101.6 Metric Ø100	Cylindric Ø22.22*6.35	COUP-V23-6
23-3B				Cylindric Ø22.22*4.76	
38-1		Vane pump: T6C	SAE A Ø82.55 Vane pump Ø95.02	13T 16/32 DP	COUP-V23-3
38-3A		Gear pump: HGP-3A		9T 16/32 DP	COUP-V38-1
38-5		Piston pump: F30,F40,PV2R1		13T 16/32 DP	COUP-V38-3
38-6	V38, V42	Piston pump: V23~25, V38~V42 Vane pump: T6C	SAE B Ø101.6 Metric Ø100	Cylindric Ø19.05*4.76	COUP-V38-5
38-7		Piston pump: PV016~023 Vane pump: PV2R2		Cylindric Ø22.22*6.35	COUP-V38-6
38-3B			SAE A Ø82.55 Vane pump Ø95.02	Cylindric Ø22.22*4.76	
38-4				Cylindric Ø25.4*6.35	COUP-V38-7
70-1	V50, V70	Piston pump: V15~18, AR16~22 Gear pump: HGP-3A Vane pump: F30,F40,PV2R1	SAE B Ø101.6 Metric Ø100	13T 16/32 DP	COUP-V38-3
70-3A				15T 16/32 DP	COUP-V38-4
70-5				Cylindric Ø19.05*4.76	COUP-V70-5
70-6		Piston pump: V23~25, V38~V42 Vane pump: T6C	SAE A Ø82.55 Vane pump Ø95.02	Cylindric Ø22.22*6.35	COUP-V70-6
70-7		Piston pump: PV016~023 Vane pump: PV2R2		Cylindric Ø22.22*4.76	
70-3B				Cylindric Ø25.4*6.35	COUP-V70-7
70-4				13T 16/32 DP	COUP-V70-3
				15T 16/32 DP	COUP-V70-4

Ø A	① Adapter	② O-ring
SAE A Ø82.55	23A-83-D	G80
Vane pump Ø95.02	23A-83-G	G95
SAE B Ø101.6	23A-83-E	G100
Metric Ø100	23A-83-J	G100

Pump combination - coupling

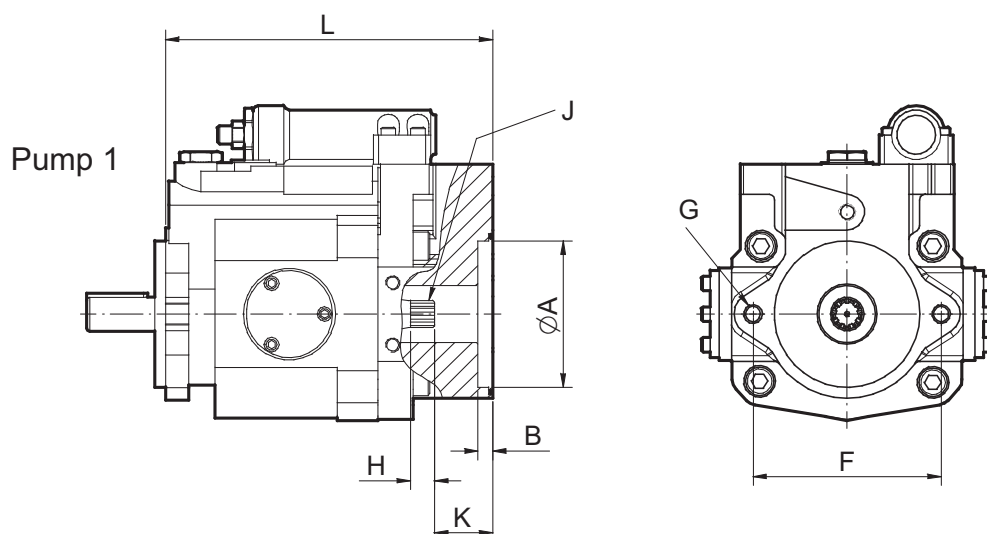


⑥Coupling	⑦ Snap ring	Depending 2nd pump to use snap ring or not (● : With snap ring)			⑧Screw
		Piston pump: V15~18, AR16	Gear pump: HGP- 3A	Vane pump: F30, F40	
COUP-V15+15	R13	●	●	●	--
COUP-V23-1	R13	●	●		--
COUP-V23-3	R20	●			--
COUP-V23-5	R20			●	M5 x8
COUP-V23-6	--				M5 x8
COUP-V38-1	R13	●	●		--
COUP-V38-3	R20	●			--
COUP-V38-4	--				--
COUP-V38-5	R20			●	M5 x8
COUP-V38-6	--				M5 x8
COUP-V38-7	--				M5 x8
COUP-V70-1	R13	●	●		--
COUP-V70-3	R20	●			--
COUP-V70-4	--				--
COUP-V70-5	R20			●	M5 x8
COUP-V70-6	--				M5 x8
COUP-V70-7	--				M5 x8

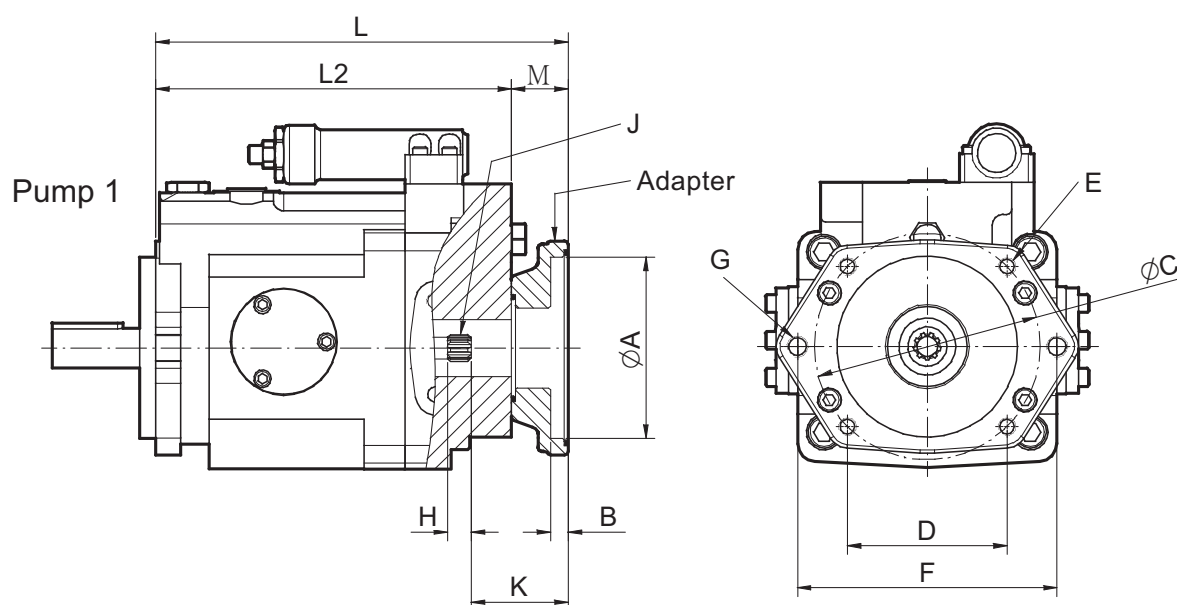
③ O-ring	G55
④Pin	ø8x16 x2 nos
⑤Screw	M8x30 x4 nos

Pump combination - thru drive dimesion

V15,V18



V23~V70



Model	2nd Pump	ØA	B	ØC	D	E	F	G
V15,V18	SAE A	Ø82.55	8.35	--	--	--	106.3	M10xP1.5
	SAE A	Ø82.55	8.35	Ø127	89.8	M10xP1.5	106.3	M10xP1.5
V23~V70	SAE A	Ø101.6	10	Ø127	89.8	M10xP1.5	146	M12xP1.75
	Metric	Ø100	10	Ø125	88.39	M10xP1.5	140	M12xP1.75
	Vane Pump	Ø95.02	8.35	--	90	M10xP1.5	--	--

Model	K	H	J	M	L	L2		
V15,V18	33	13.5	9T 16/32 DP	--	185	--		
V23,V25	59	13.5	9T 16/32 DP	32	237	205		
V38,V42	66	20	14T M1.25	32	241	209		
V50,V70	64.4	22	13T 16/32DP	32	332	300		

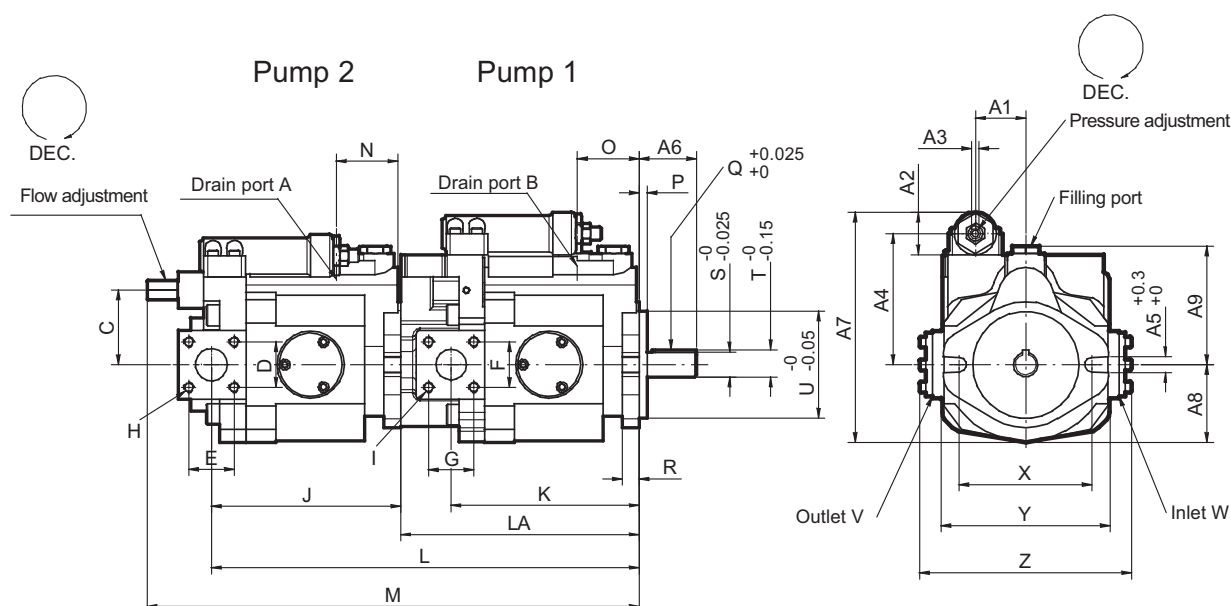
YEOSHE product specifications are subject to change with prior notice.

Pump combination - thru drive dimesion

A

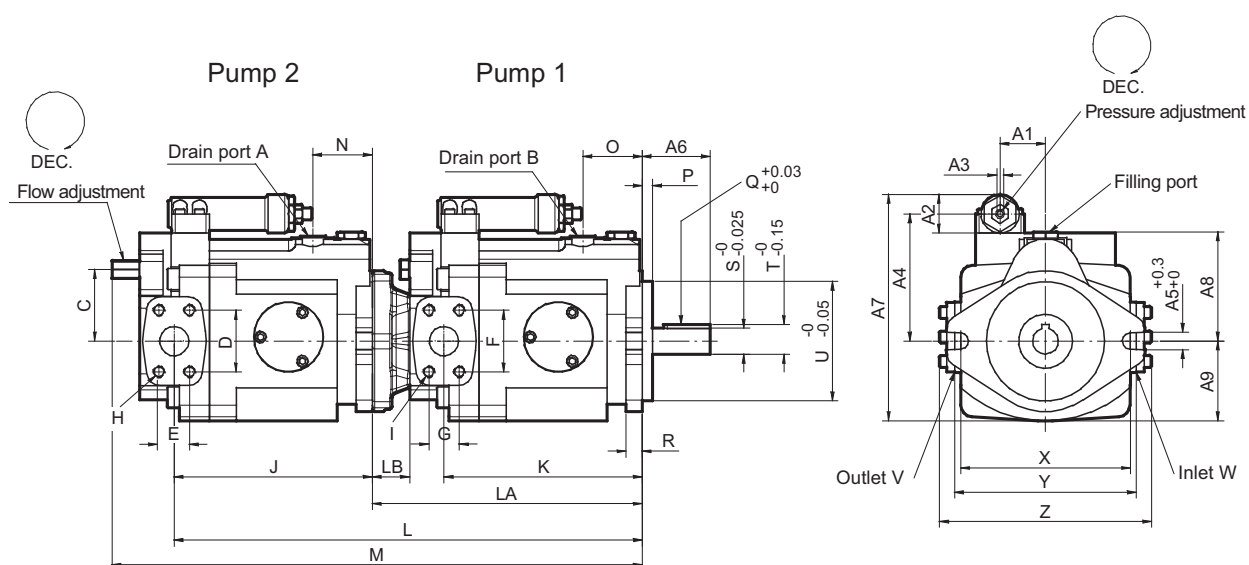
View A

Pump 1 V15, Pump 2 V15



View B

Pump1 V23~V70, Pump 2 V15~V38



Pump combination - thru drive dimesion

Pump 1	Pump 2	A	B	C	D	E	F	G	H	I
V15,V18	V15,V18	G 3/8" (RC 3/8")	G 3/8" (RC 3/8")	57.45	35.1	35.1	35.1	35.1	M8xP1.25x20	M8xP1.25x20
V23,V25	V15,V18	G 3/8" (RC 3/8")	G 3/8" (RC 3/8")	57.45	35.1	35.1	52.4	26.2	M8xP1.25x20	M10xP1.5x16
V23,V25	V23,V25	G 3/8" (RC 3/8")	G 3/8" (RC 3/8")	61	52.4	26.2	52.4	26.2	M10xP1.5x16	M10xP1.5x16
V38,V42	V15,V18	G 3/8" (RC 3/8")	G 1/2" (RC 1/2")	57.45	35.1	35.1	58.7	30.2	M8xP1.25x20	M10xP1.5x16
V38,V42	V23,V25	G 3/8" (RC 3/8")	G 1/2" (RC 1/2")	61	52.4	26.2	58.7	30.2	M10xP1.5x16	M10xP1.5x16
V38,V42	V38,V42	G 1/2" (RC 1/2")	G 1/2" (RC 1/2")	73	58.7	30.2	58.7	30.2	M10xP1.5x16	M10xP1.5x16
V50,V70	V15,V18	G 3/8" (RC 3/8")	G 3/4" (RC 3/4")	57.45	35.1	35.1	69.9	35.7	M8xP1.25x20	M12xP1.75x25
V50,V70	V23,V25	G 3/8" (RC 3/8")	G 3/4" (RC 3/4")	61	52.4	26.2	69.9	35.7	M10xP1.5x16	M12xP1.75x25
V50,V70	V38,V42	G 1/2" (RC 1/2")	G 3/4" (RC 3/4")	73	58.7	30.2	69.9	35.7	M10xP1.5x16	M12xP1.75x25

Pump 1	Pump 2	J	K	L	LA	LB	M	N	O	P	Q	R	S	T	U
V15,V18	V15,V18	147	147	332	185	--	382	48	48	6	4.76x32	13	Ø19.05	21.15	Ø82.55
V23,V25	V15,V18	147	170	384	237	32	411	48	51	9	6.35x40	14	Ø22.22	25.08	Ø101.6
V23,V25	V23,V25	170	170	407	237	32	455	51	51	9	6.35x40	14	Ø22.22	25.08	Ø101.6
V38,V42	V15,V18	147	179	388	241	32	438	48	51	9	6.35x40	14.5	Ø22.22	25.08	Ø101.6
V38,V42	V23,V25	170	179	411	241	32	464	51	51	9	6.35x40	14.5	Ø22.22	25.08	Ø101.6
V38,V42	V38,V42	179	179	420	241	32	473	51	51	9	6.35x40	14.5	Ø22.22	25.08	Ø101.6
V50,V70	V15,V18	147	256.5	479	332	32	529	48	73	10	7.94x45	24	Ø31.75	35.35	Ø127
V50,V70	V23,V25	170	256.5	502	332	32	555	51	73	10	7.94x45	24	Ø31.75	35.35	Ø127
V50,V70	V38,V42	179	256.5	511	332	32	564	51	73	10	7.94x45	24	Ø31.75	35.35	Ø127

Pump 1	Pump 2	V	W	X	Y	Z	A1	A2	A3	A4	A5	A6	A7	A8	A9
V15,V18	V15,V18	Ø25	Ø25	106	131	165	44	31.2	5	84	11	44.5	160	91.5	60
V23,V25	V15,V18	Ø25	Ø25	146	146	182	39	31.2	5	110	13.5	58.5	193	93	68
V23,V25	V23,V25	Ø25	Ø25	146	146	182	39	31.2	5	110	13.5	58.5	193	93	68
V38,V42	V15,V18	Ø31	Ø31	146	160	198.6	39	31.2	5	121	13.5	58.5	210	113.5	72
V38,V42	V23,V25	Ø31	Ø31	146	160	198.6	39	31.2	5	121	13.5	58.5	210	113.5	72
V38,V42	V38,V42	Ø31	Ø31	146	160	198.6	39	31.2	5	121	13.5	58.5	210	113.5	72
V50,V70	V15,V18	Ø38	Ø38	181	208	261.5	74	40	8	119	18	57	233.5	133.5	100
V50,V70	V23,V25	Ø38	Ø38	181	208	261.5	74	40	8	119	18	57	233.5	133.5	100
V50,V70	V38,V42	Ø38	Ø38	181	208	261.5	74	40	8	119	18	57	233.5	133.5	100