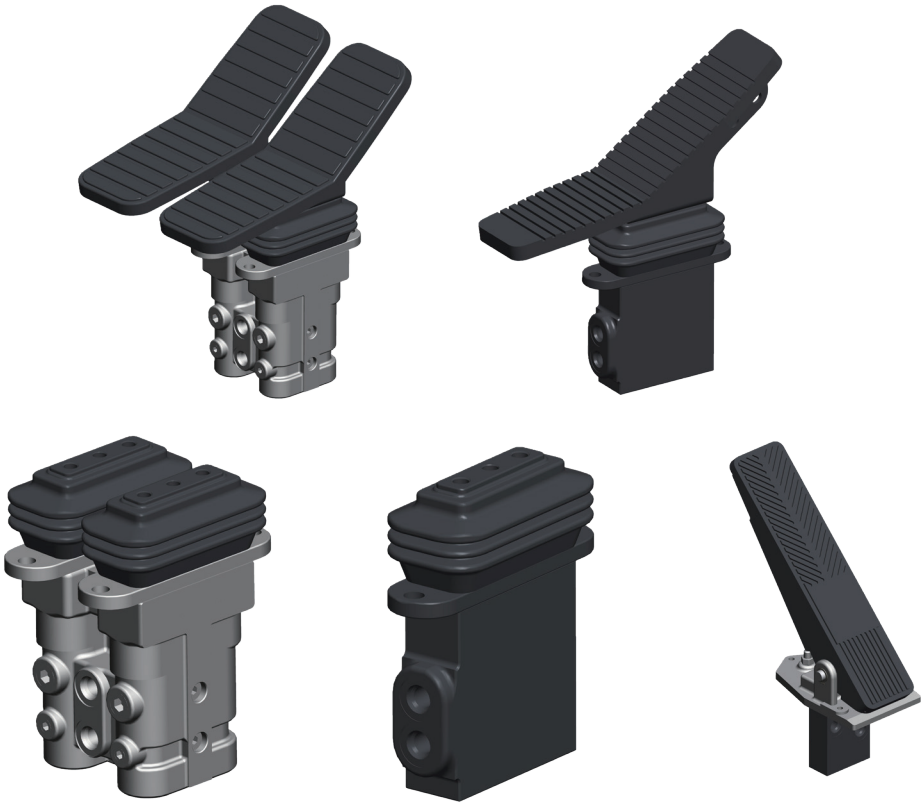
ENGINEERING
TOMORROW

Technical Information

DHRCP

Hydraulic Foot Pedals



DHRCP is part of D-HRC series.

D-HRC means Danfoss Hydraulic Remote Control valves which include:

DHRCJ — — Hydraulic Joystick
DHRCD — — Hydraulic Pilot Sectional Valve
DHRCP — — Hydraulic Foot Pedals

Excavator
Crane
Loader
AWP
Forklift
Drilling machine
Special vehicles

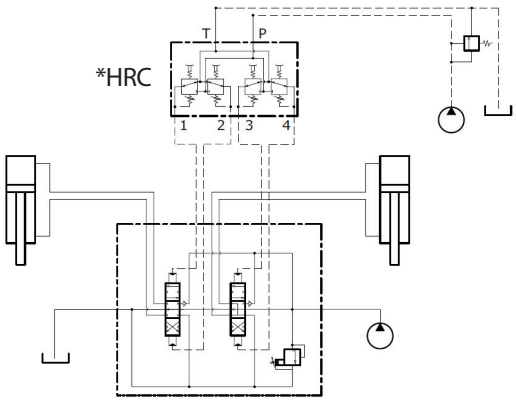
BC482581277887en-000101

Contents

DHRCP General Description

Description

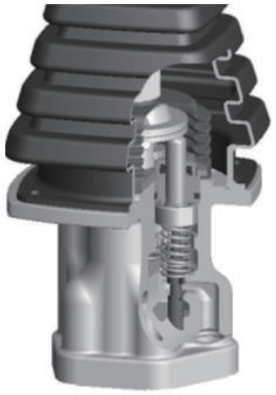
Hydraulic Remote Controls (HRCs) are used to activate and control directional valves or pumps from a remote and single operating station. HRCs come in hand, foot and mechanically operated versions, like the DHRCP series, provides dual pedal, single pedal, or push-only pedals providing pilot control of multiple or individual actions. It is mostly used to control travel actions, accessories, or acceleration throttle. Suitable for various applications such as excavators, drilling rigs, loaders, etc. Flexible configuration with multiple valve bodies, handles, and special functions. It has excellent handling performance, sturdy and durable design, and reliable quality.



*Schematic exemplification can be either one of the DHRC products.

Operation

HRCs are fed a constant input pressure, from which they create reduced output pressures that vary proportionally with lever or pedal stroke. When the HRC is operated, output pilot pressure flows to the main directional control valves, precisely controlling main spool position and direction.

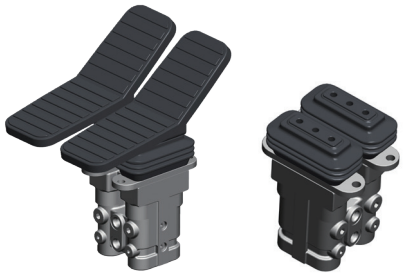


D-HRC Features

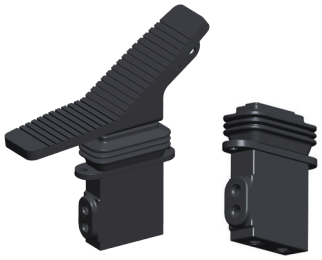
- **Market leader** with over 30 years of industry experience.
- **Precision control** with less leakage, close to flat hysteresis and excellent linearity.
- **Reliability and Quality.**
- **Ergonomic efficiency and customization capabilities** provide unparalleled flexibility.

DHRCP General specification

DHRCP-Double



DHRCP-Single



DHRCP-Push only

Hydraulic specification:

	DHRCP-Double	DHRCP-Single	DHRCP-Push only	DHRCP-Mini
Max. inlet pressure (bar)	70	70	50	70
Max. back pressure (bar)	3			
Rated flow (LPM)	20	10	10	20
Output pressure (bar)	0~30			
Fluid type	Mineral oil			
Fluid temperature	-20ºC to 90ºC			
Ambient temperature	-40ºC to 60ºC			
Viscosity	12~400 mm^2/s			
Max level of fluid contamination	18/16/13 –ISO 4406			

Mechanical specification:

		DHRCP1/2/3-Double	DHRCP4/5/6-Single	DHRCP7-Push only	DHRCP8-Mini
Weight for refer (Kg)	Foot plate	3.6~4.4	2~2.5	1~1.4	-
	Body Assy	4.8~9	0.7~6	1.1	6.4
	Total	4.8~13.4	0.7~8.5	1.1~2.5	6.4
Operation angle range (°)		12.4	12	20~30	12
Operation torque range (Nm)		4.55	0.77~6.99	0.16~0.77	4.34
Lifecycle	>1,000,000 cycles				

Note: Detailed operating angle and torque are provided on the drawings.

Electric specification:

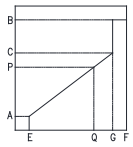
Push button	IP40	AC 125V 5A
	IP69K (Only for D,E grip front button)	AC 125V 3A
	IP67 (Only for D,E grip rear button)	AC 125V 3A
Roller	IP40	Signal 5V
	IP69K	Signal 5V
FNR	IP40	AC 125V 3A
FR	IP40	AC 125V 3A
Electric Detent	DC 12V/24V	

DHRCP Configuration

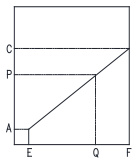
Model code example:	DHRCP	2	1	1	1	A01	A02
Model code position in catalogue:	1.2.3.4.5	6	7	10	12	13.14.15	16.17.18
Description:	Series	Body type	Port	damping	Foot plate	Output pressure for port1&3	Output pressure for port2&4

000 Not applicable
A## A type pressure curve
B## B type pressure curve
C## C type pressure curve
Note: See curve table

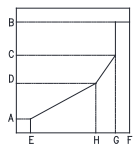
A curve



B curve



C curve



1. Damping dual pedal mono type cast iron
2. Damping dual pedal mono type aluminum alloy*
3. Damping dual pedal split type from top to bottom
4. Single pedal cast iron*
5. Single pedal with additional inlet cover
6. Single pedal alluminum alloy*
7. Uni-directional (push only) single pedal*
8. Damping dual mini pedal

1. BSPP G1/4 O-ring sealing
2. UNF 9/16 (ISO 11926-1) O-ring sealing
3. BSPP G1/4 O-ring sealing and BSPT R1/8 on port 5

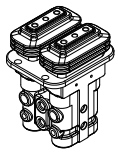
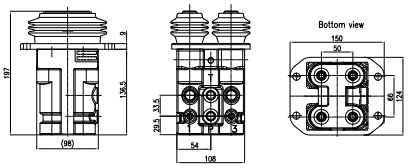
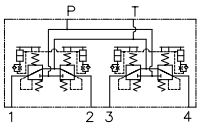
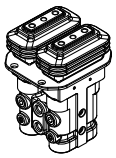
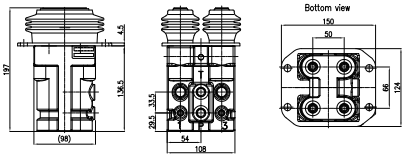
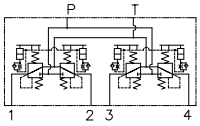
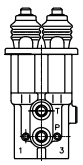
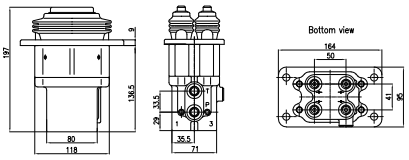
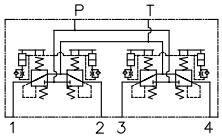
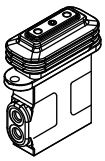
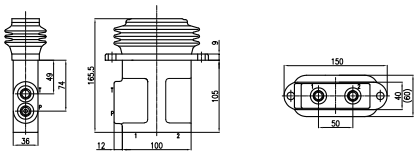
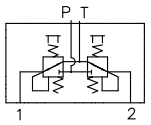
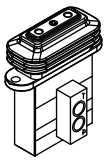
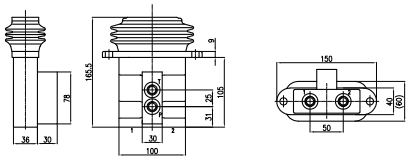
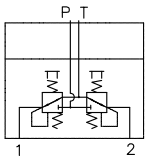
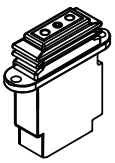
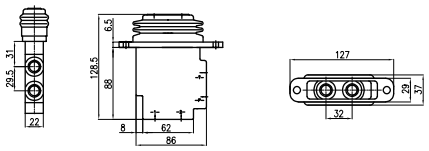
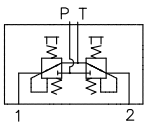
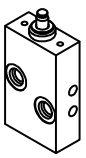
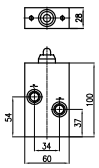
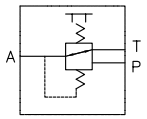
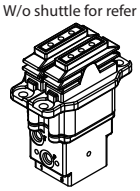
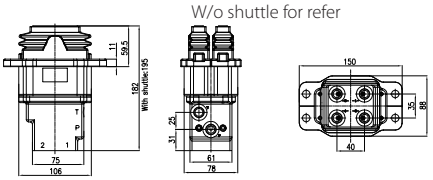
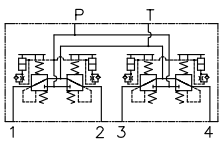
1. No damping
2. Standard speed with orifice 0.9[0.035]*
3. Standard speed with orifice 0.7[0.027] on inlet line
4. Special orifice 1.7[0.067]

0. No foot plate
1. Standard double pedal*
2. Wide double pedal
3. Standard single pedal*
4. Single un-directional pedal
5. Wide single un-directional pedal
6. Steel plate single pedal without rubber cover
7. Single un-directional small pedal

Note:
Above is simple version of model code, only focus on main requirement information. If have more requirement or need more information, please find details in catalogue.
"*" means most recommend option.

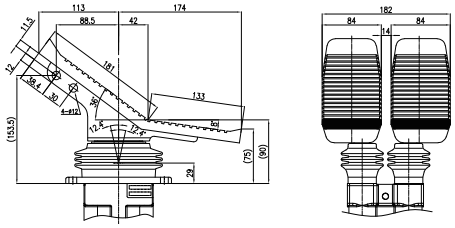
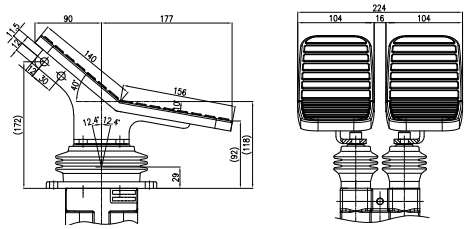
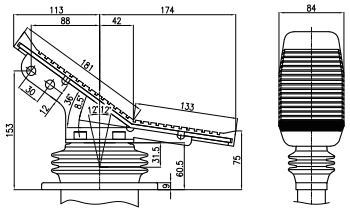
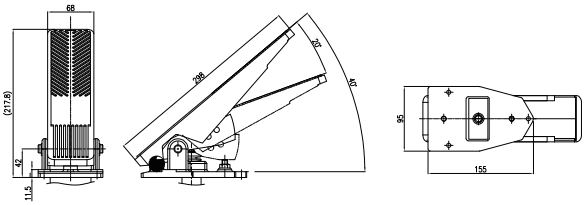
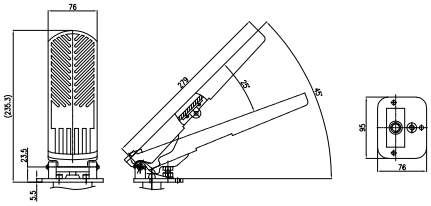
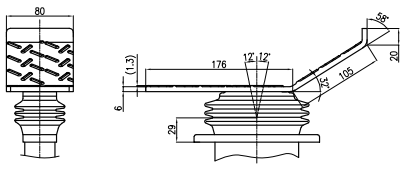
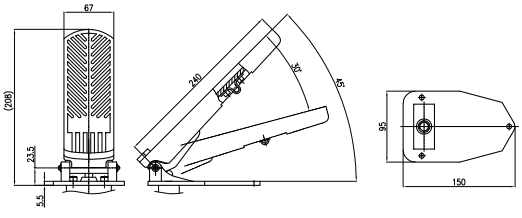
DHRCP Options

Body type – Model code position 6

Model code position 6	Description	3D diagram	2D diagram	Schematic
1	Damping dual pedal mono type cast iron			
2	Damping dual pedal mono type aluminum alloy			
3	Damping dual pedal split type from top to bottom cast iron			
4	Single pedal cast iron			
5	Single pedal cast iron with additional inlet cover			
6	Single pedal alluminum alloy			
7	Uni-directional (push only) single pedal cast iron			
8	Damping dual mini pedal with shuttle cast iron	W/o shuttle for refer 	W/o shuttle for refer  Note: For body with shuttle, length increase, detail can refer dimension reference page.	

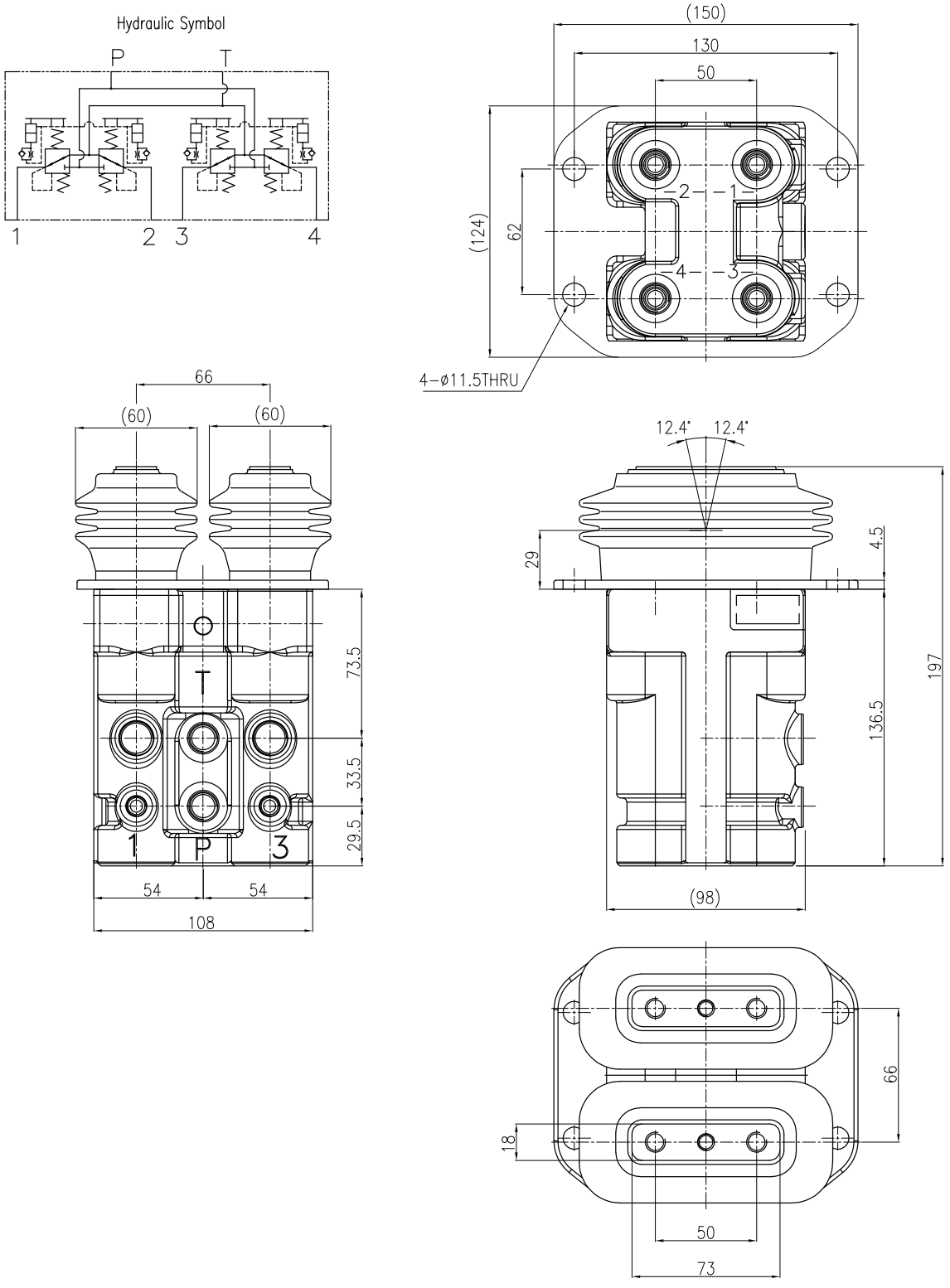
DHRCP Options

Foot plate - – Model code position 12

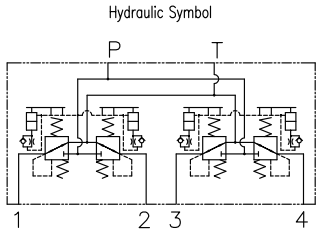
Model code position 12	Description	Diagram
0	No foot plate	
1	Standard double pedal	
2	Wide double pedal	
3	Standard single pedal	
4	Single uni-directional pedal	
5	Wide single uni-directional pedal	
6	Steelplate single pedal without rubber cover	
7	Single uni-directional small pedal	

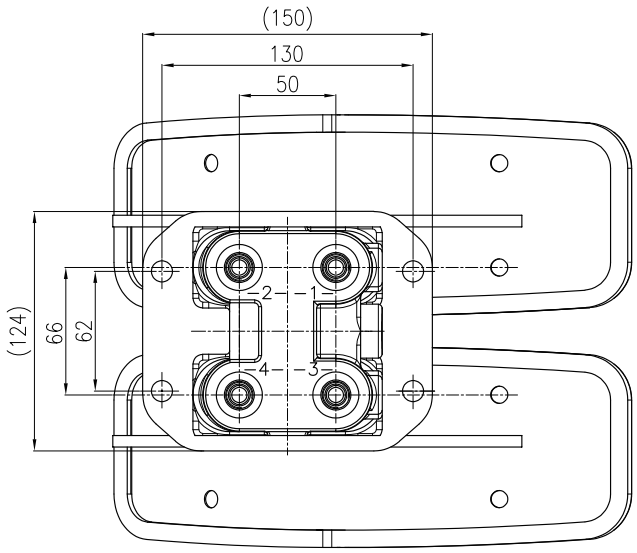
DHRCP Dimensions

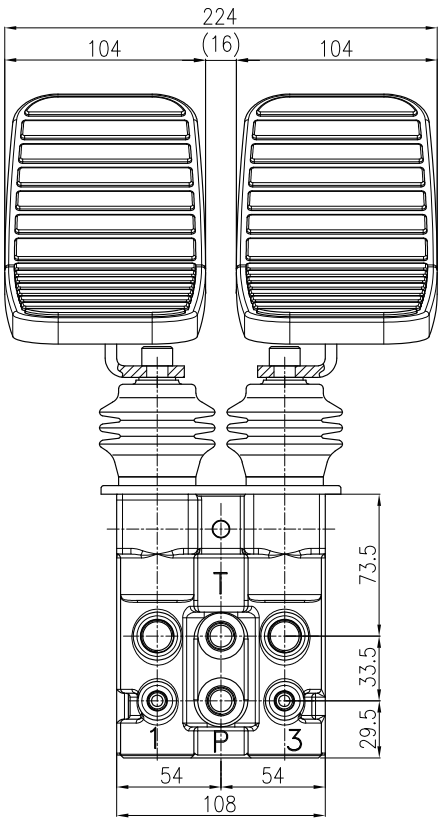
Damping dual pedal aluminum without foot plate

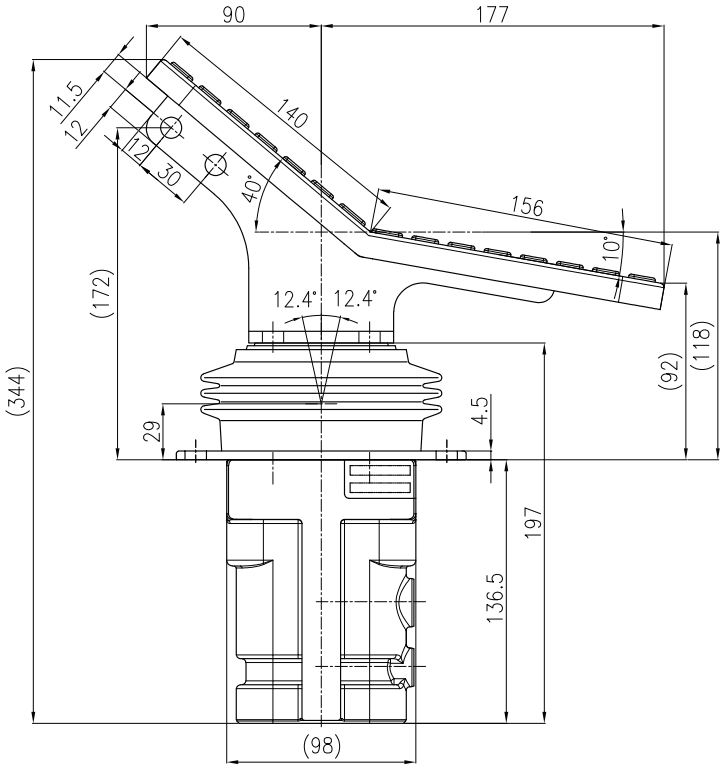


Damping dual pedal aluminum with foot plate

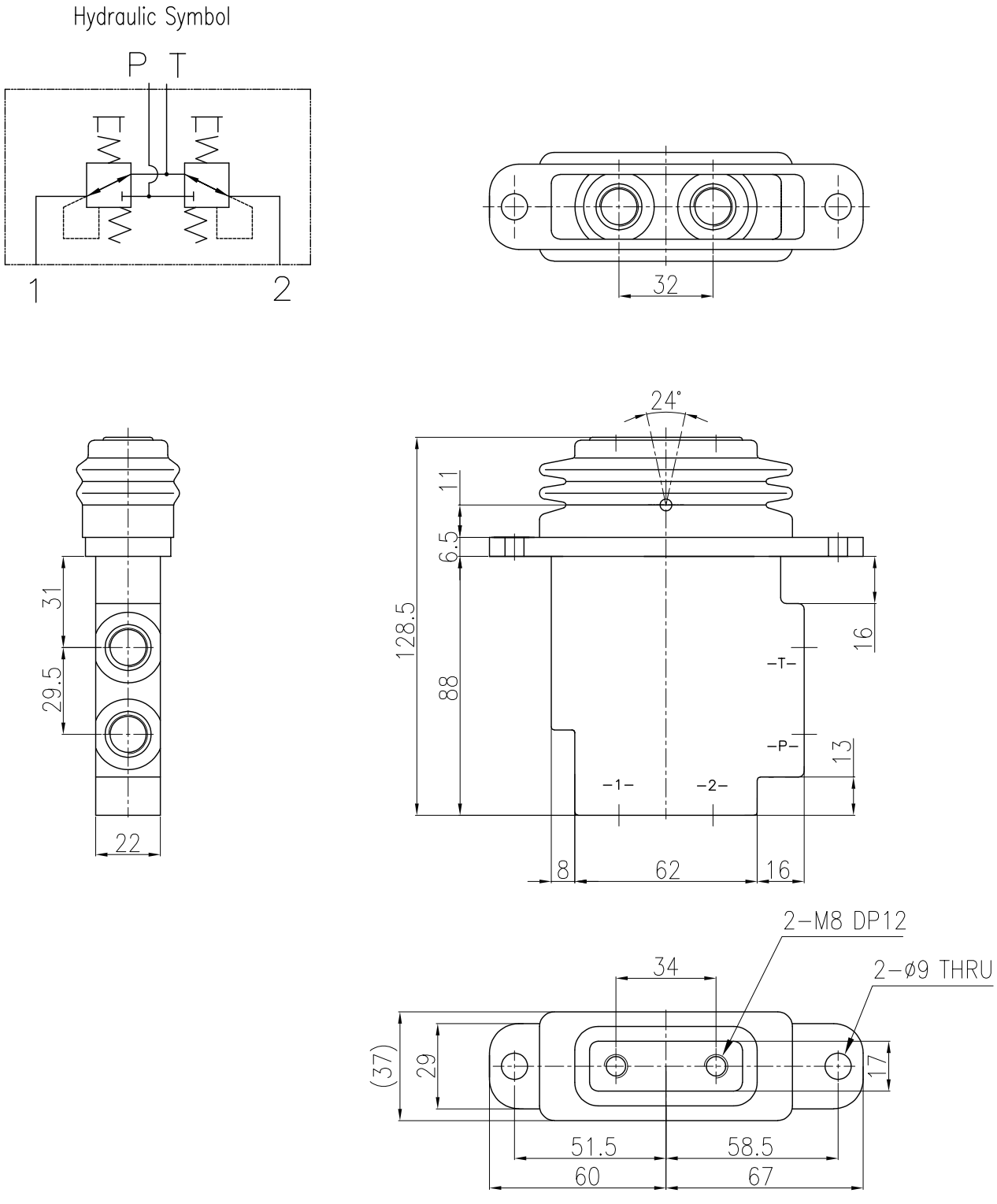






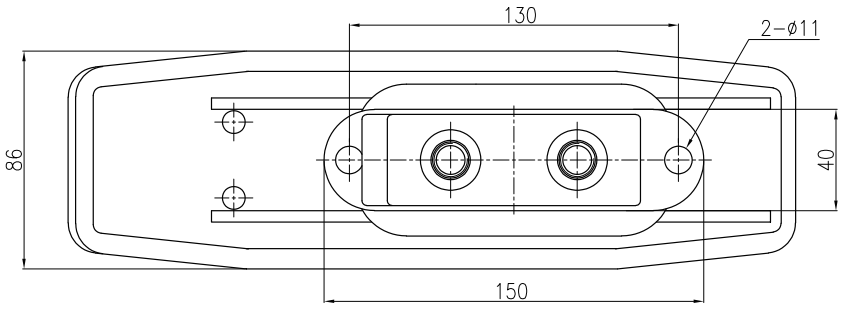


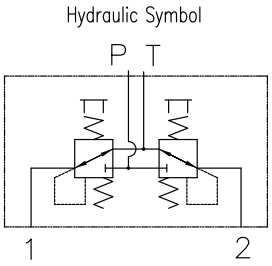
Single pedal aluminum without foot plate

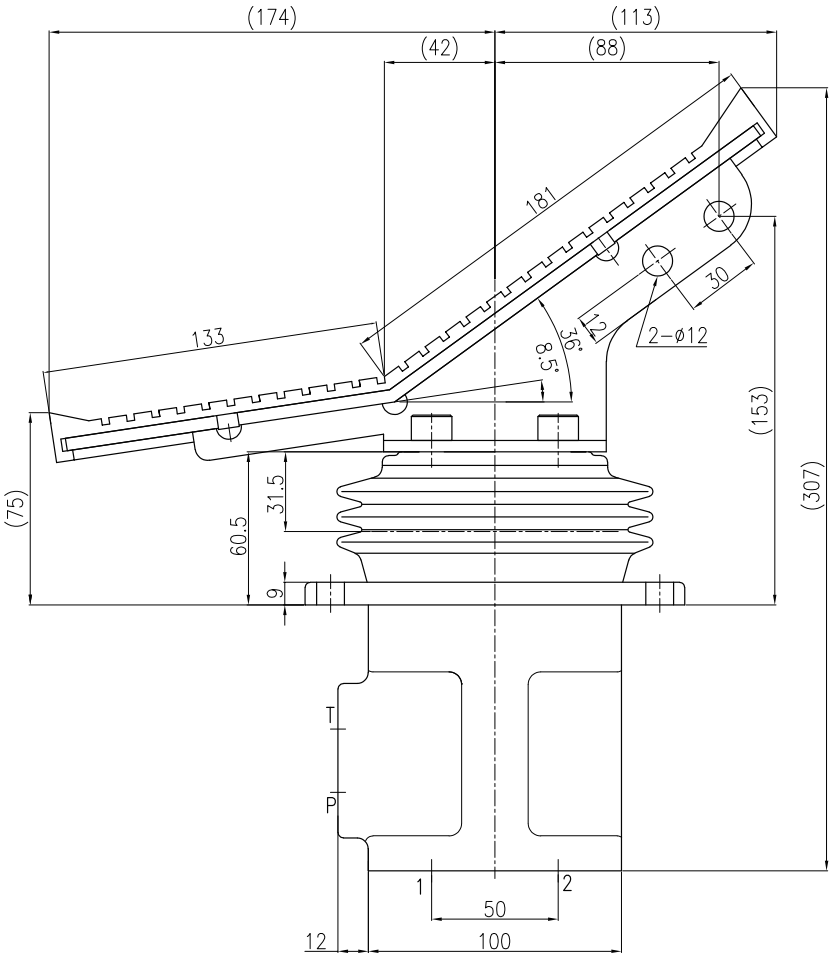


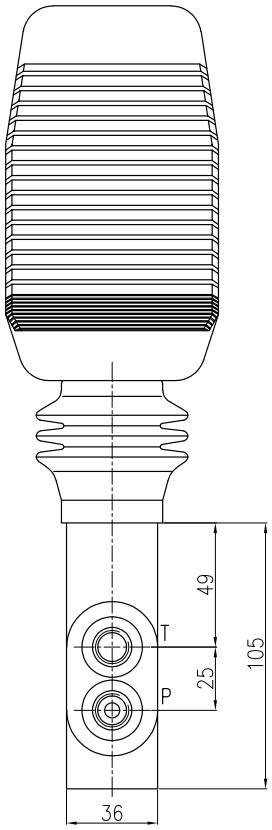
DHRCP Dimensions

Single pedal casting iron with foot plate



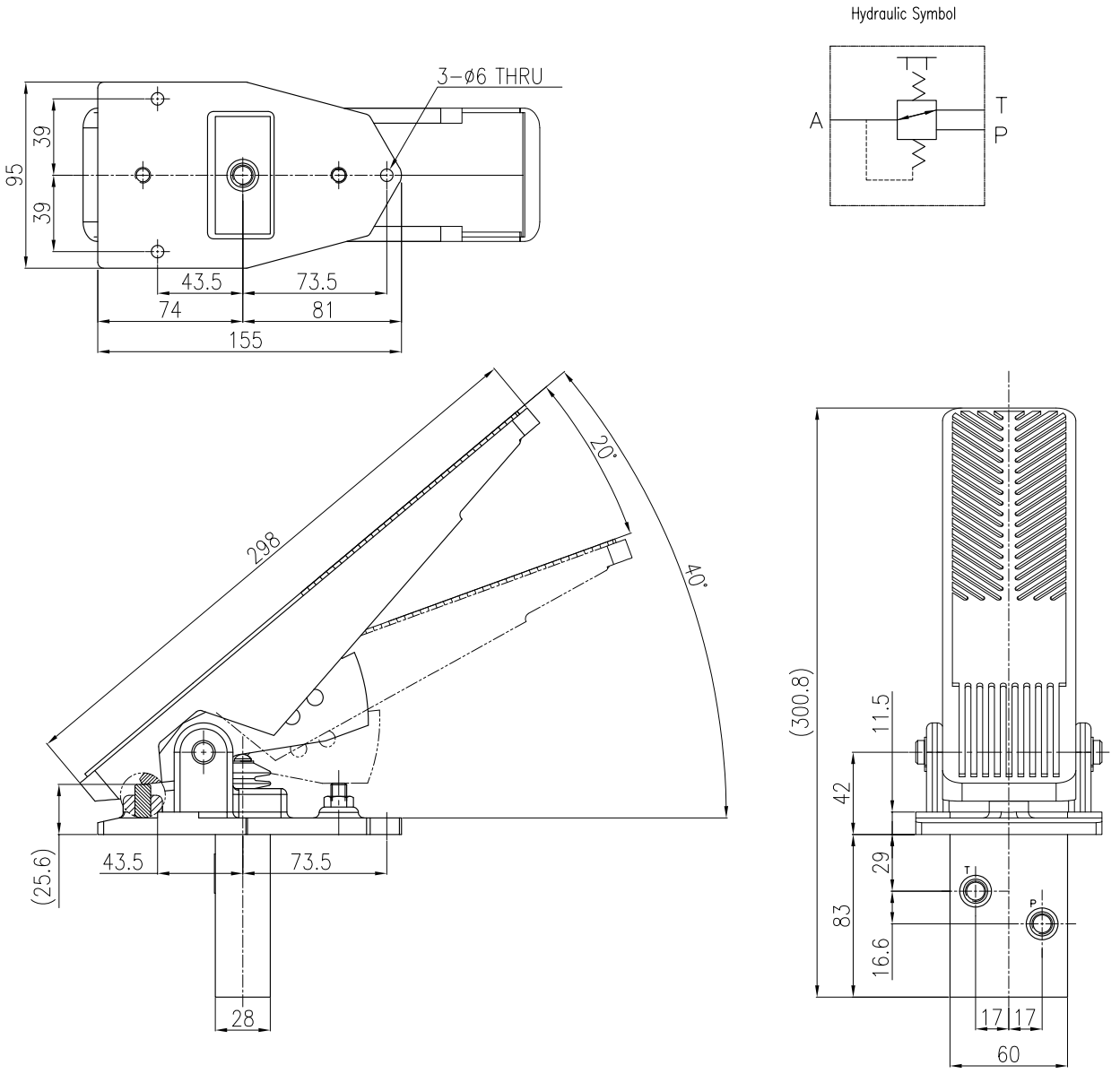




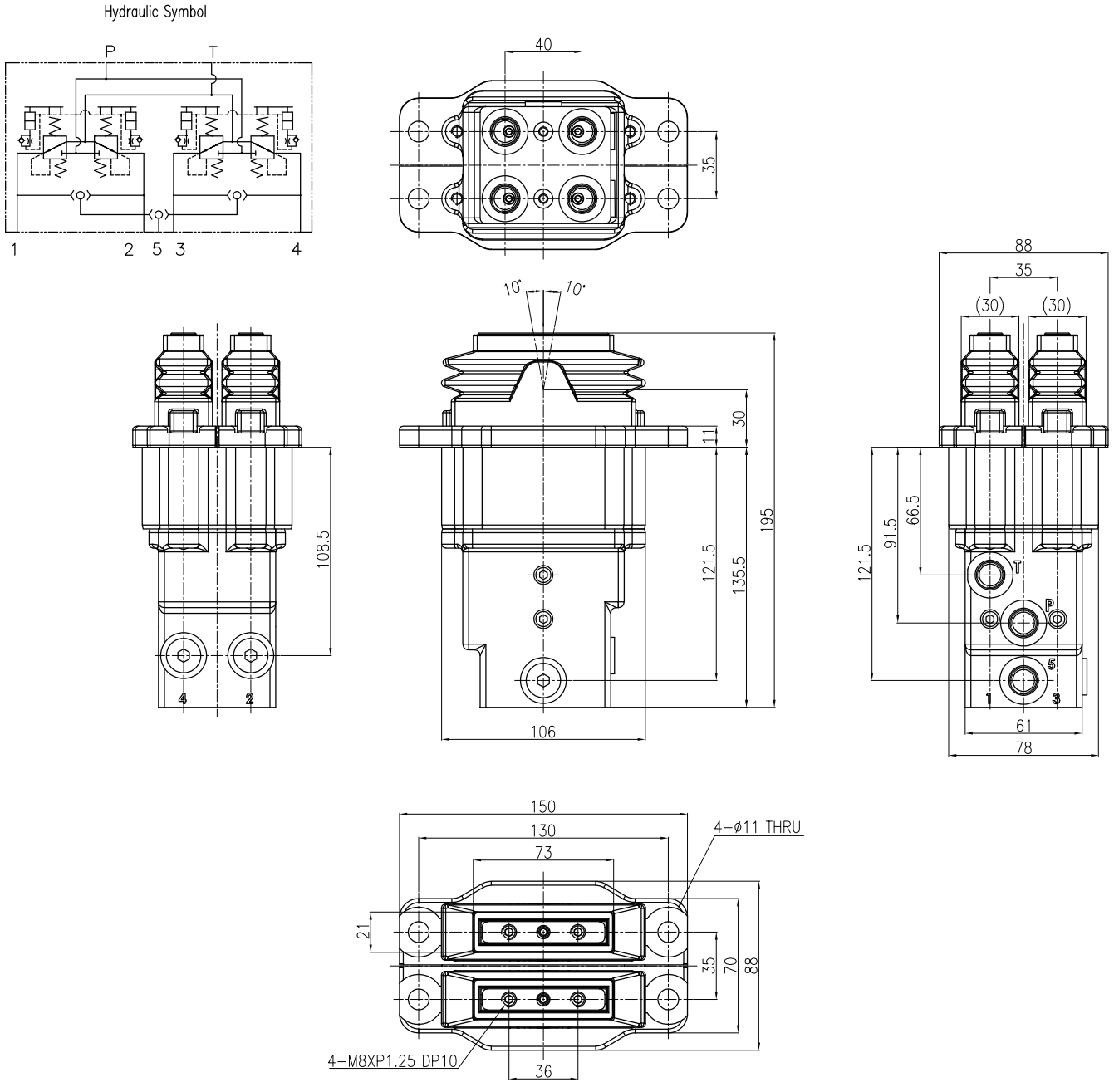


DHRCP Dimensions

Push only pedal with foot plate



Damping dual mini pedal with shuttle without foot plate



Revision history

Date	Changed	Rev
March 2024	New created	A

ENGINEERING
TOMORROW

Products we offer:

- Cartridge valves
- DCV directional control valves
- Electric converters
- Electric machines
- Electric motors
- Fluid Conveyance
- Gear motors
- Gear pumps
- Hydraulic integrated circuits (HICs)
- Hydrostatic motors
- Hydrostatic pumps
- Industrial hydraulics
- Orbital motors
- PLUS+1® controllers
- PLUS+1® displays
- PLUS+1® joysticks and pedals
- PLUS+1® operator interfaces
- PLUS+1® sensors
- PLUS+1® software
- PLUS+1® software services, support and training
- Position controls and sensors
- PVG proportional valves
- Steering components and systems
- Telematics

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