

RCVD

Remote Control Valve

Integral Damping Chamber

Pressure in the damping chamber provides a variable velocity dependent damping force. This damping facility is consistent at any operating lever position. The requirement for any external damping mechanisms is thus eliminated.

Unique Damping Mechanism

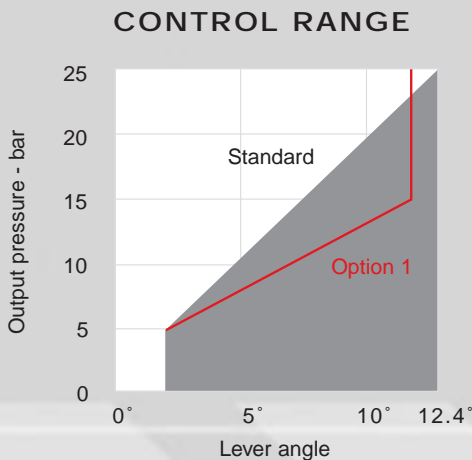
Provides equal damping forces in either direction. Integral design ensures a reduction in noise transmission from the machine chassis. Free from external contamination and obstruction. Allowing safe and reliable operation with a stable performance over a wide range of operating temperatures.

Integral Check Valve

Provides enhanced damping and cushioning. A compact design which maintains reliability and facilitates easy access for assembly and maintenance.

Variety of Control Characteristics

A variety of spring options allow for the selection of operating force against lever angle. The operating force is maintained as directly proportional to the lever angle throughout the operating range thereby providing optimum feel and control.



Multiple Options

Any combination of pedal or lever types are available with or without shuttle valves.

Resilient Dust Proof Boot

Flexible dust and splash proof synthetic rubber boot provides environmental protection and superior resistance to airborne contamination.

Large Return and Control Flow Galleries

Ensures a minimum of pressure drop and high response characteristics. The RCVD is a market leader combining high performance with progressive damping.

Robust Monobloc Construction

Strong monobloc construction facilitates rigid mounting. The design provides a solid and secure operation which is suitable for the most rigorous of applications.

RCVD PILOT VALVE TECHNICAL DATA*

Input pressure	98 bar (max.)
Output pressure	0-44 bar
Back pressure at port T	3 bar
Working fluid	Mineral oil, phosphate ester, fatty acid ester and water glycol.
Fluid temperature range	-20°C to +70°C
Viscosity range	10 to 2000 cSt
Rated flow	10 l/min
Lever angle	+12.4°
Weight	12.5 kg

*Please refer to full technical specifications prior to application

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up to 98 bar up to 10 L/min	Pilot Valve 1 Pedal, Double Acting For the remote control of valves, pumps & motors	Data Sheet Pilot valve GB
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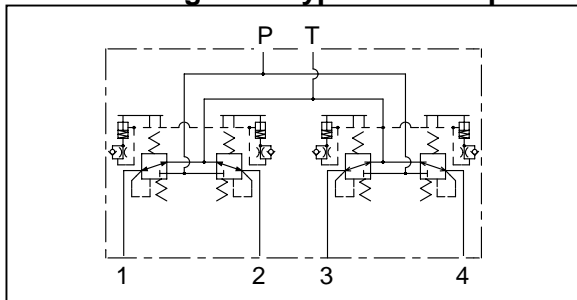
Features

- ◇ Sensitive control allows low operating forces resulting in ease of operation.
- ◇ Valve enables independent installation.
- ◇ No operating rods.
- ◇ Increase in fine control range.
- ◇ Secondary pressure closely follows the movement of the operating pedal.
- ◇ Built in damping mechanism on RCVD8C.
- ◇ High durability.
- ◇ Maintenance free.
- ◇ Electrical safety circuit options.
- ◇ All connections on the bottom of the unit.



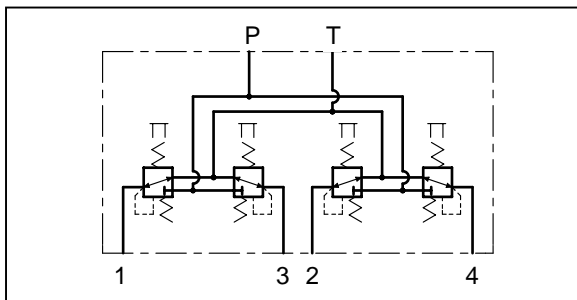
Hydraulic Symbol

4 reducing valve type with damper

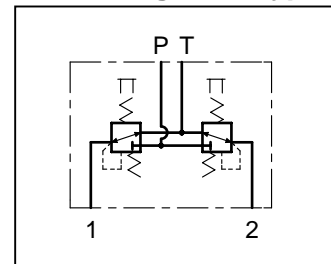



RCVD8C4 - Four reducing valve type with damper

4 reducing valve type without damper

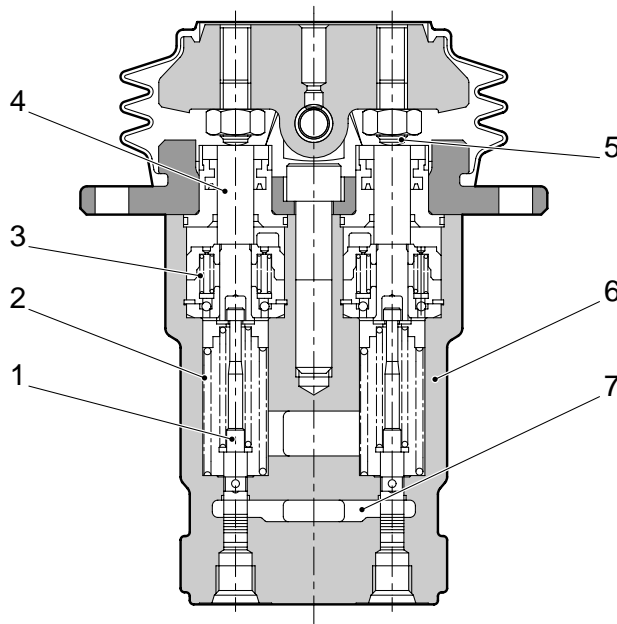


2 reducing valve type



Model RCV	Page 1.8	Data Sheet Pedal	
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Functional Description



Hydraulic pilot unit type RCV operates on the basis of direct operating, pressure reducing valves.

The main components are:

Pedal.

Valve cartridge and regulating spool (1).

Regulating spring (2).

Return spring for damping piston (3).

The plunger (4).

Stud (5).

The housing (6).

Inlet pressure bore (7).

Damping piston (8).

In the neutral position, the operating element is held in the zero position by the return spring (3).

When the pedal is operated, plunger (4) is pushed against return spring (3) via the stud (5). At the same time the regulating spool (1) is pushed through the regulating spring (2).

When the regulating stroke begins, there is a connection from the pressure port via bore (7) and ports 1 or 2 to the unit to be adjusted (valve, pump or motor). The adjustments are related to the pedal position and the regulating spring characteristic.

Only a small amount of effort is required on the foot pedal to control the valve.



Model
RCV

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Data Sheet
Pedal

Ordering Code – Double Acting Pedal

RCV D 8C (C) 1 * * *

Double Acting Pedal Valve

Circulation number

Damping
 D - With damping
 Blank - No damping

Valve Type
 1 - Single
 2 - Twin
 4 - Combined

Series number
 8C

Shuttle
 (C) - With Shuttle
 Blank - Without Shuttle

Model
 RCV

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Data Sheet
 Pedal



Technical Data

For applications outside the following parameters, please consult Kawasaki Precision Machinery (UK) Ltd.

Input Pressure	98 bar (max.)
Output Pressure	0 to 44 bar
Back pressure at port T	3 bar
Pressure Fluid	Mineral oil, phosphate ester, fatty acid ester and water glycol. Phosphate ester is only suitable for use with FPM seals.
Pressure Fluid Temperature Range	-20°C to +70°C
Viscosity Range	10 to 2000 cSt
Rated Flow	10 l/min.
Degree of Contamination	Maximum permissible degree of contamination of the fluid is to NAS 1638 class 9. Kawasaki recommend that a filter with a minimum retention rate of $\beta_{10} \geq 75$ is used.
Lever angle	$\pm 12.4^\circ$
Weight	12.5kg



Model
RCV

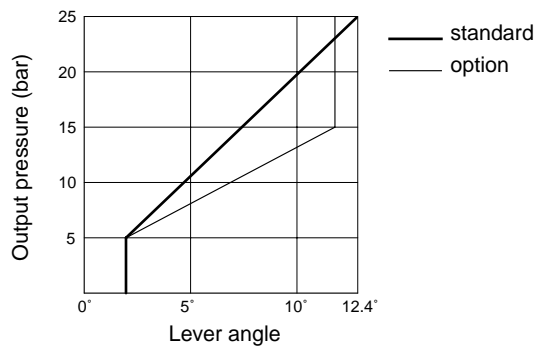
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Data Sheet
Pedal

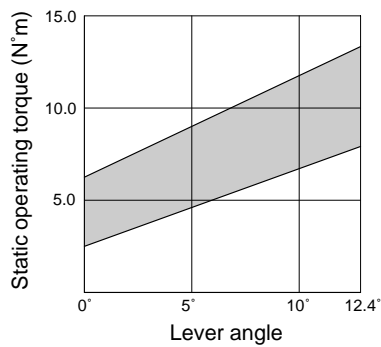
Characteristic Curves

Measured at $\leq 36\text{cSt}$ and $t = 50^\circ\text{C}$

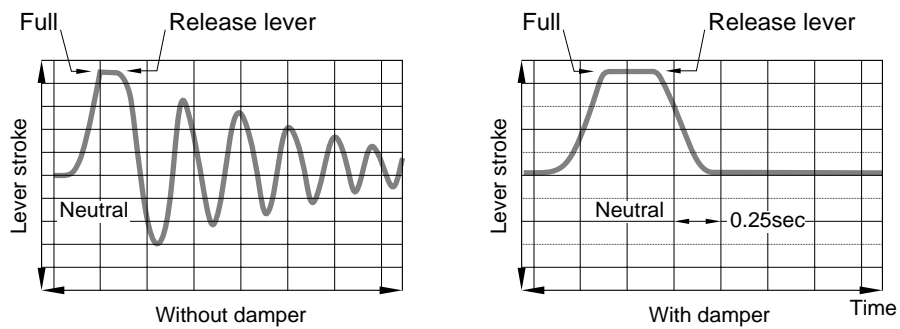
Control Range



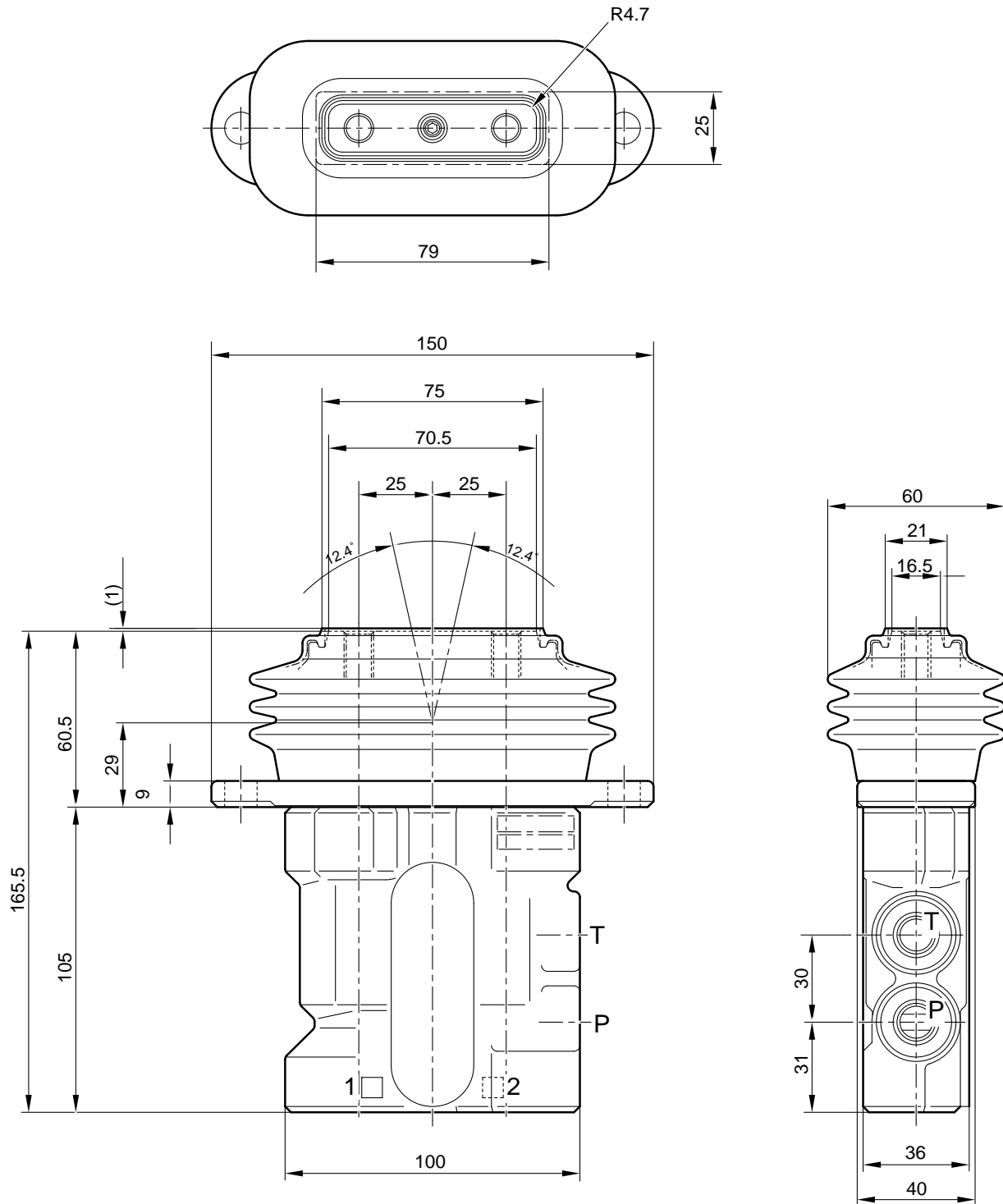
Static Operating Torque Range



Damper Performance



RCV8C Unit Dimensions (dimensions in mm)

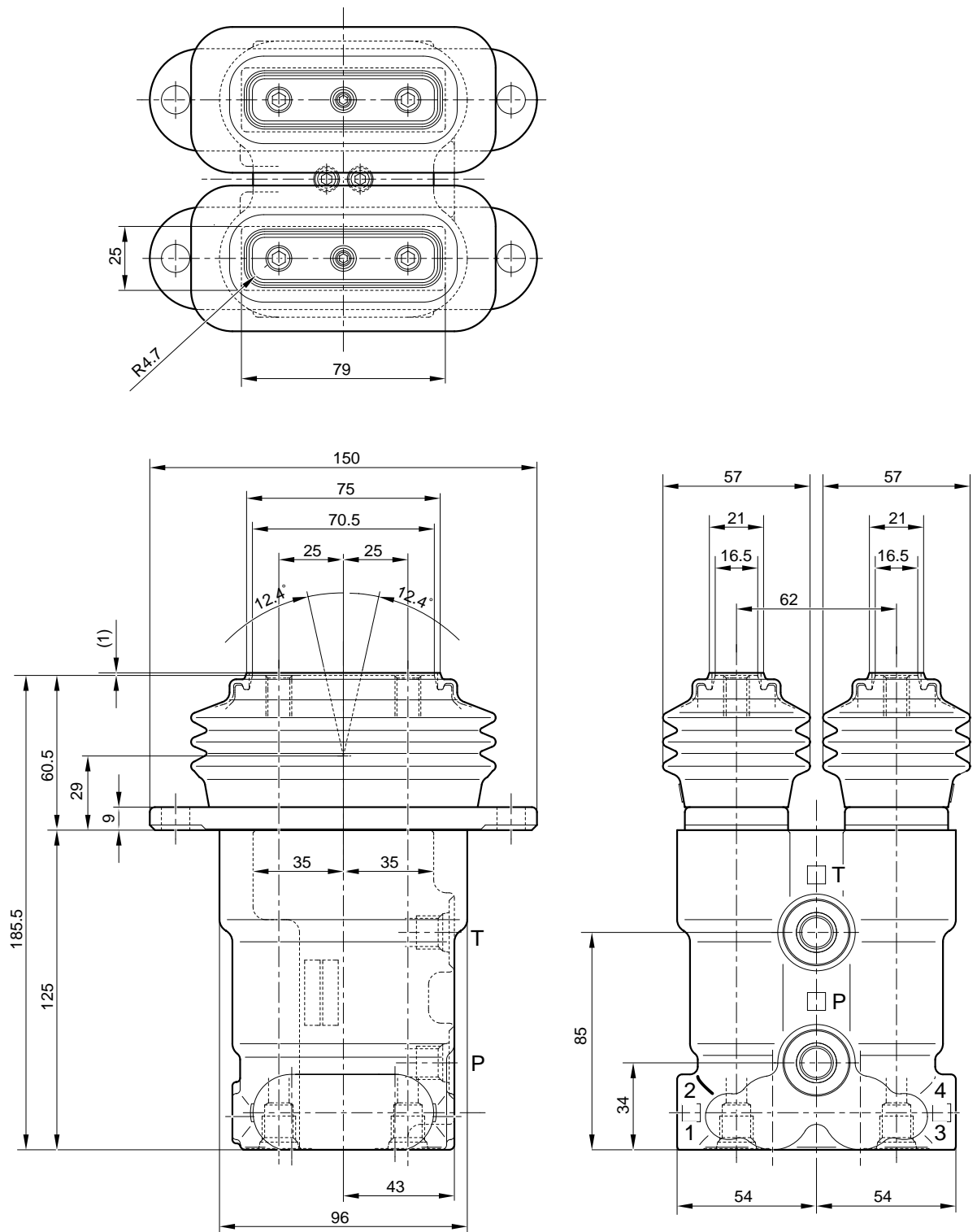


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Data Sheet
Pedal

RCVD8C4 Unit Dimensions (dimensions in mm)



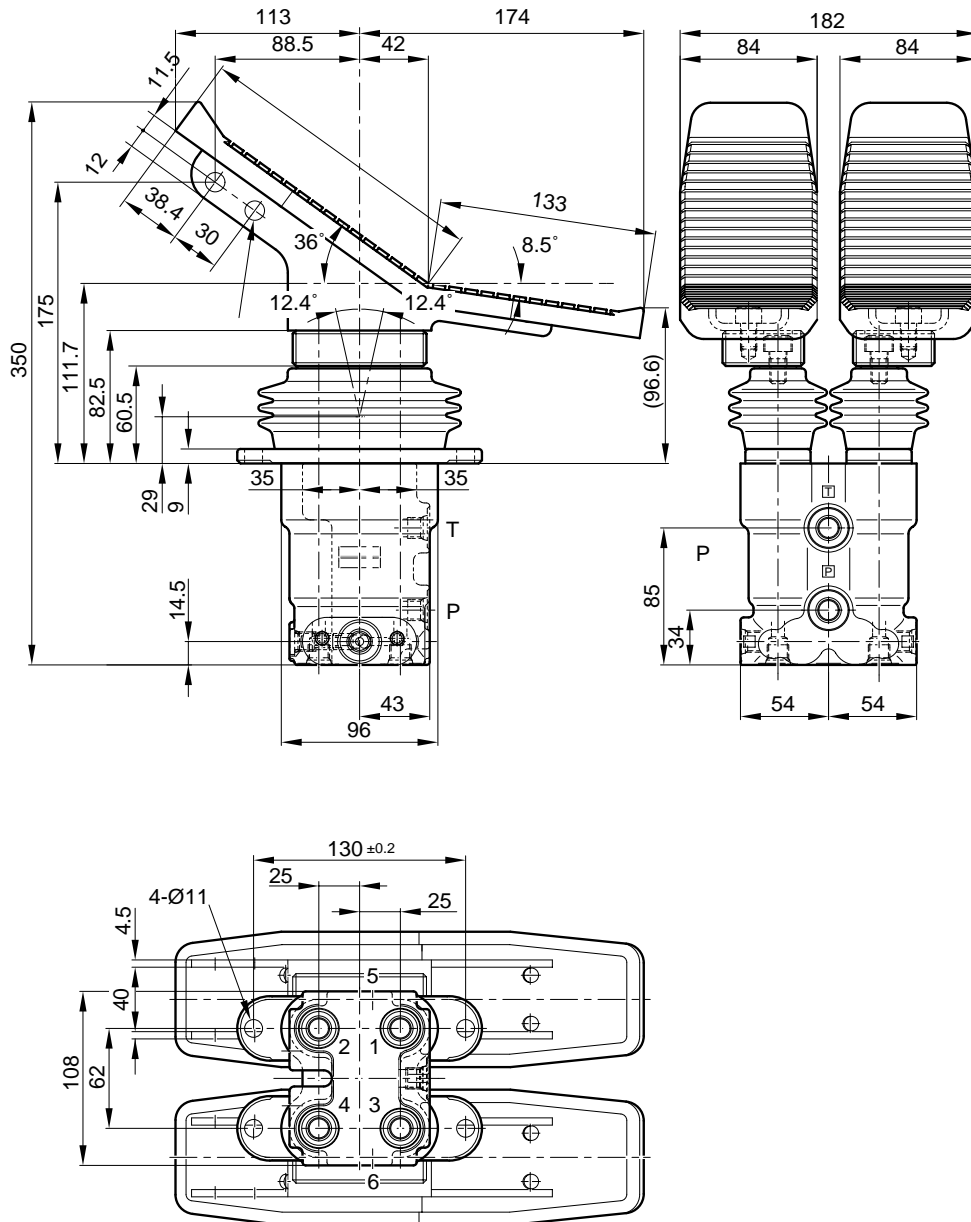
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Data Sheet
Pedal



RCVD8C4 (with footpedal) Unit Dimensions (dimensions in mm)



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Model
RCV

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Data Sheet
Pedal

