



Hydraulic Remote Control Valves



**PV48 Joystick
Pilot Valves**



**RCV Foot Controlled
Pilot Valves**

PV48 JOYSTICK PILOT VALVES



The Kawasaki range of hydraulic components and systems are widely used in industrial machinery and vehicles throughout the world and the introduction of the PV48 represents a further valuable addition to the product offering.

Designed especially for use on construction vehicles and machinery, the PV48 is the most advanced pilot valve of its type, boasting a number of unique features that maximize its ease of operation and handling.

Ease of use and comfort are important features of the PV48. The PV48 differential area control spool design minimizes the pressure induced force that is transmitted through the handle to the operator. This results in low operating torques which minimizes operator fatigue. Additionally, large return and control flow galleries ensure minimal restriction, making the PV48 extremely responsive.



Specifications	Joystick Pilot Valve		
	Dual Axis		Single Axis
	PV48K	PV48M	PV6P
Maximum Inlet Pressure (psi)	1000	1000	1000
Outlet Pressure Range (psi)	0~430	0~430	0~430
Maximum Back Pressure (psi)	40	40	40
Maximum Continuous Flow (gpm)	5.3	4.0	2.6
Fluid Temperature Range (F)	-4~190	-4~190	-4~190
Fluid Viscosity Range (cSt)	10~2000	10~2000	10~2000
Lever Angle			
-Single Operating	+/-19°	+/-19°	+/-15°
-Double Operating	+/-25°	+/-25°	-
Actuation Torque Range (lb-ft)	0.7~3.0	0.7~3.0	1.4~6.5
Weight Without Handle (lb)	4.2	3.5	2.1

RCV FOOT CONTROLLED PILOT VALVES



With its number of unique features, the RCV foot operated remote control valve brings a new meaning to the controllability of mobile machinery.

The RCVD series incorporates a unique internal dampening mechanism, which greatly increases controllability and stability, particularly over rough terrain.

Both the PV48 and RCV series are available with custom output pressure curves, which make them suitable for a wide variety of machine applications. Various operating torque options are also available.

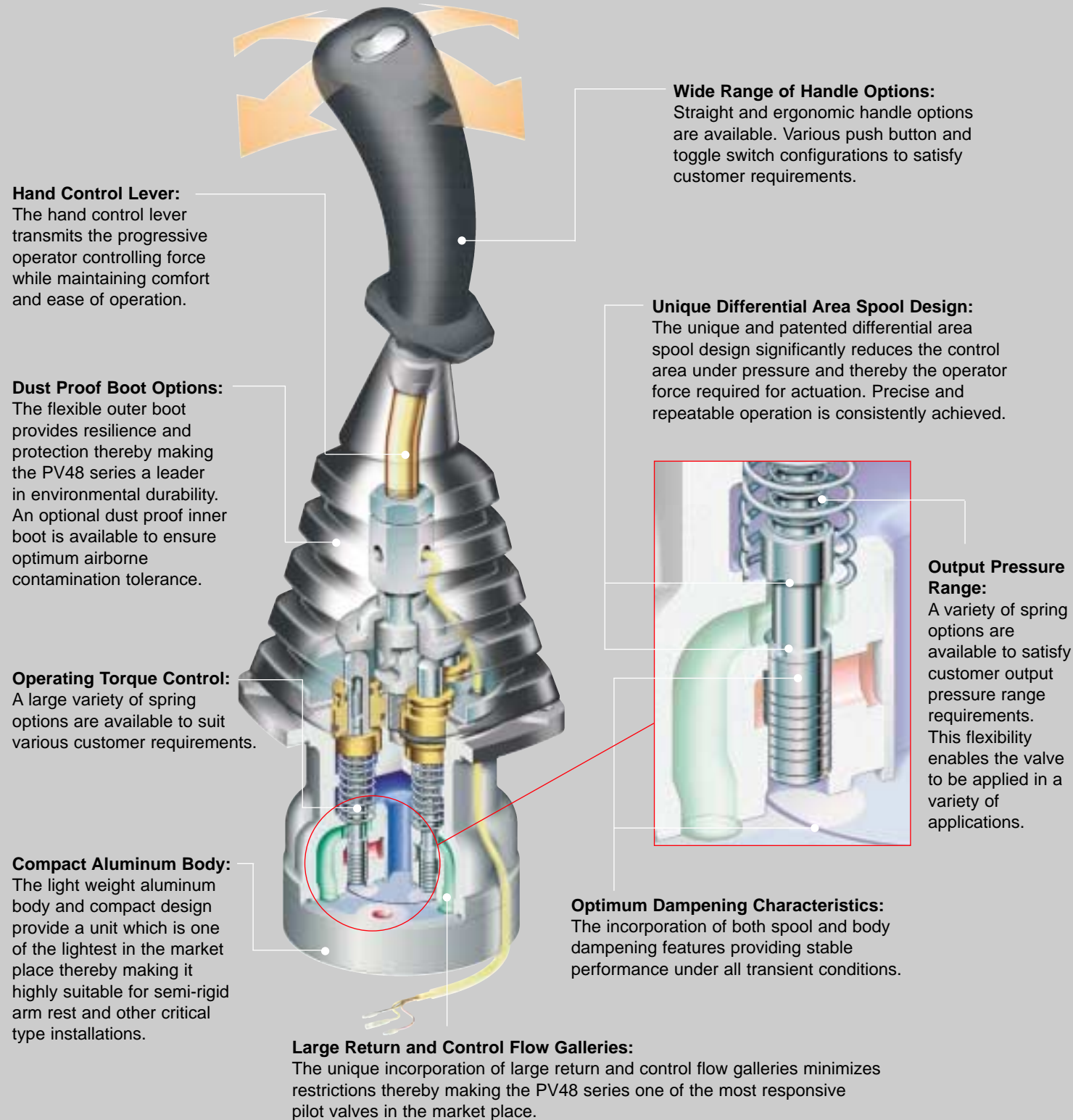


Specifications	Foot Controlled Pilot Valve			
	Single Section	Dual Section		Single Axis
	RCV8C1	RCV8C2	RCVD8C4	PV6P
Maximum Inlet Pressure (psi)	1400	1400	1400	1000
Outlet Pressure Range (psi)	0~640	0~640	0~640	0~430
Maximum Back Pressure (psi)	40	40	40	40
Maximum Continuous Flow (gpm)	2.6	2.6	2.6	2.6
Fluid Temperature Range (F)	-4~190	-4~190	-4~190	-4~190
Fluid Viscosity Range (cSt)	10~2000	10~2000	10~2000	10~2000
Lever Angle				
-Single Operating	+/-12.4°	+/-12.4°	+/-12.4°	+/-15°
Actuation Torque Range (lb-ft)	3.5~12.0	3.5~12.0	3.5~12.0	1.4~6.5
Weight Without Pedal (lb)	7.1	17.0	17.2	2.1
Damping Feature	N/A	N/A	STD	N/A



PV48 JOYSTICK PILOT VALVE

PV48 Joysticks have a range of features and product options available. These include left and right hand variants, different spring options to suit application requirements, a dust proof inner boot to maximize airborne contamination tolerance, and a variety of handle mounted electrical switching options.



Hand Control Lever:
The hand control lever transmits the progressive operator controlling force while maintaining comfort and ease of operation.

Dust Proof Boot Options:
The flexible outer boot provides resilience and protection thereby making the PV48 series a leader in environmental durability. An optional dust proof inner boot is available to ensure optimum airborne contamination tolerance.

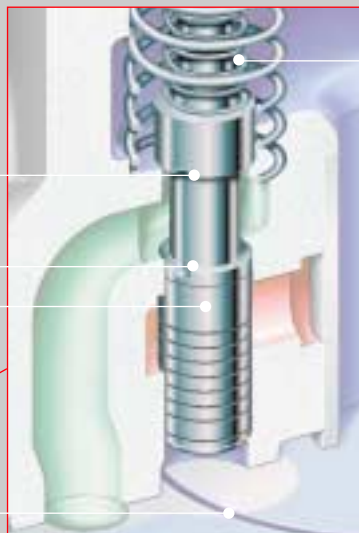
Operating Torque Control:
A large variety of spring options are available to suit various customer requirements.

Compact Aluminum Body:
The light weight aluminum body and compact design provide a unit which is one of the lightest in the market place thereby making it highly suitable for semi-rigid arm rest and other critical type installations.

Large Return and Control Flow Galleries:
The unique incorporation of large return and control flow galleries minimizes restrictions thereby making the PV48 series one of the most responsive pilot valves in the market place.

Wide Range of Handle Options:
Straight and ergonomic handle options are available. Various push button and toggle switch configurations to satisfy customer requirements.

Unique Differential Area Spool Design:
The unique and patented differential area spool design significantly reduces the control area under pressure and thereby the operator force required for actuation. Precise and repeatable operation is consistently achieved.



Output Pressure Range:
A variety of spring options are available to satisfy customer output pressure range requirements. This flexibility enables the valve to be applied in a variety of applications.

Optimum Dampening Characteristics:
The incorporation of both spool and body dampening features providing stable performance under all transient conditions.

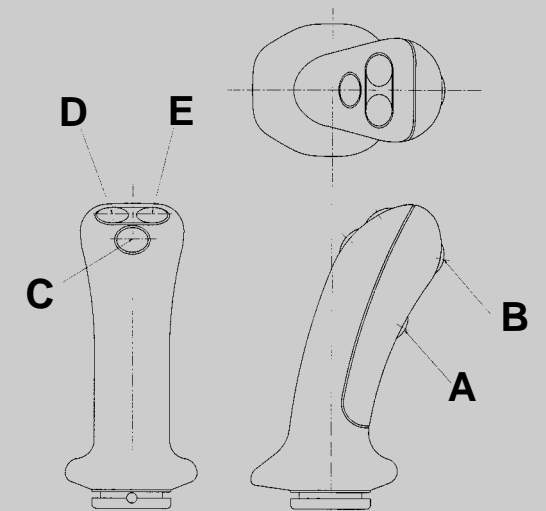
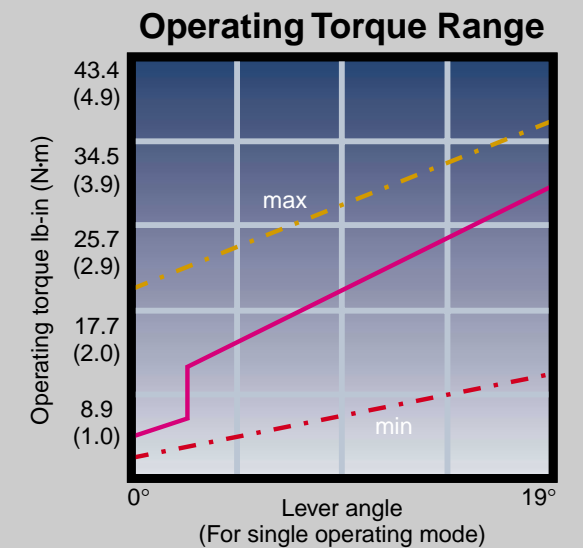
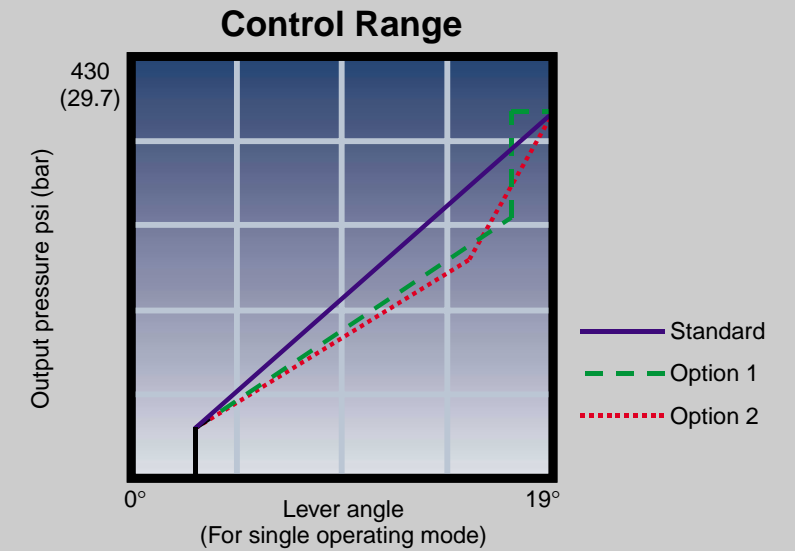
BENEFITS

- Aluminum housing construction, resulting in low weight.
- Dual Area spool design enables light operation force.
- Ergonomic handle provides operator comfort.
- Smooth response is achieved by internal dampening.
- Low hysteresis due to precise machining.
- High Durability.
- Maintenance free.
- Handle wiring can be fitted with various electrical connectors.

ELECTRIC SWITCH

Electric Switches – a maximum of five single switches or three single switches plus one thumb actuated rocker switch is available with the ergonomic handle option. The standard handle is available with a single or rocker switch at the thumb location (D/E). Please see the illustration.

An optional sliding switch handle with proportional (pulse width modulation) output is available. Please consult Kawasaki.



Single switches at locations: A,B,C,D or E
Rocker Switch at locations: D & E

RCVD FOOT CONTROLLED PILOT VALVE

Integral Dampening Chamber:

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

Multiple Options:

Many combinations of pedal or lever types are available. Optional shuttle valves are available

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 pressure drop and high response characteristics. The RCVD is a market leader combining high performance with progressive dampening.

Unique Dampening Mechanism:

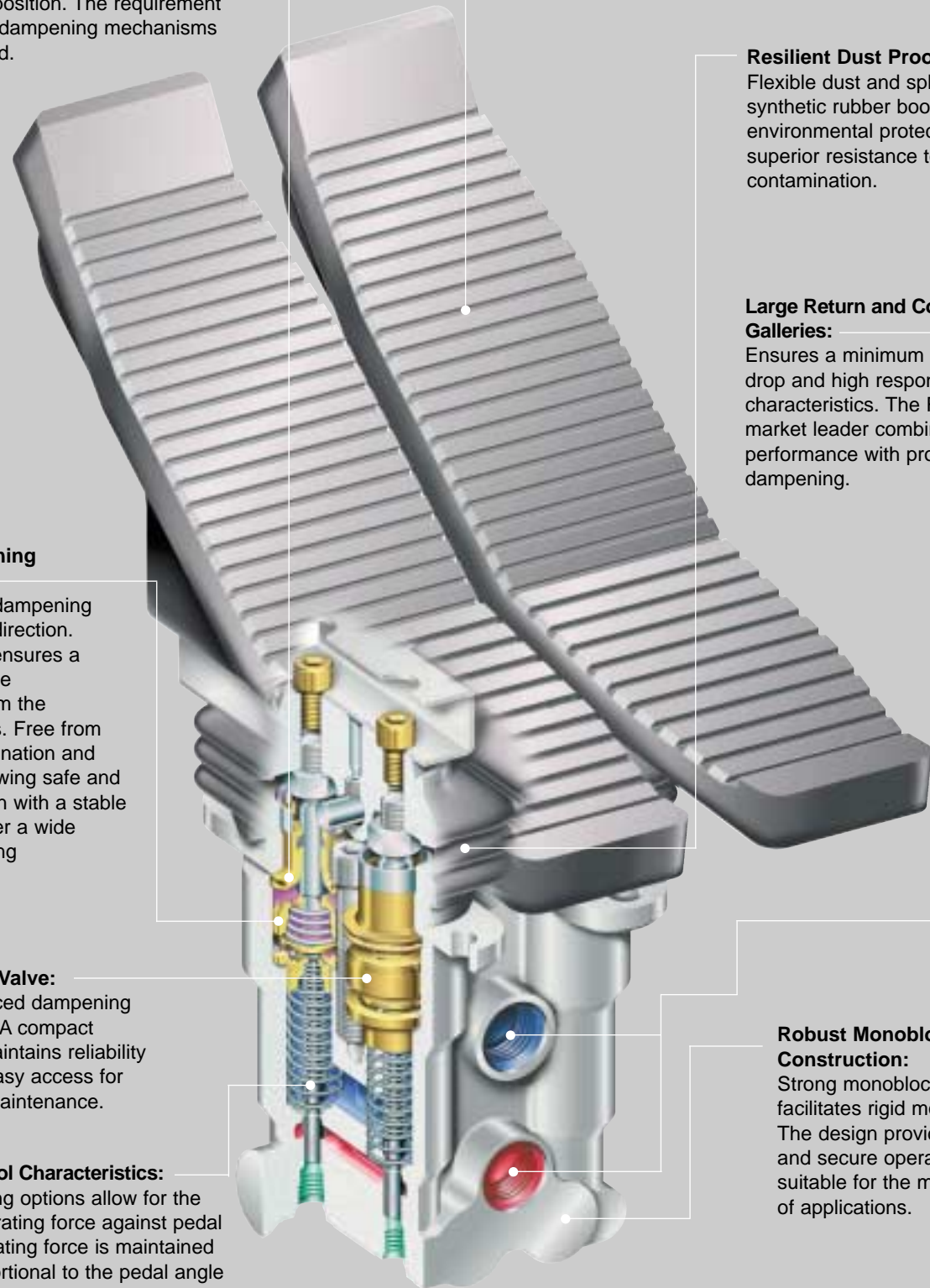
Provides equal dampening forces in either direction. Integral design ensures a reduction in noise transmission from the machine chassis. Free from external contamination and obstruction. Allowing safe and reliable operation with a stable performance over a wide range of operating temperatures.

Integral Check Valve:

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

Variety of Control Characteristics:

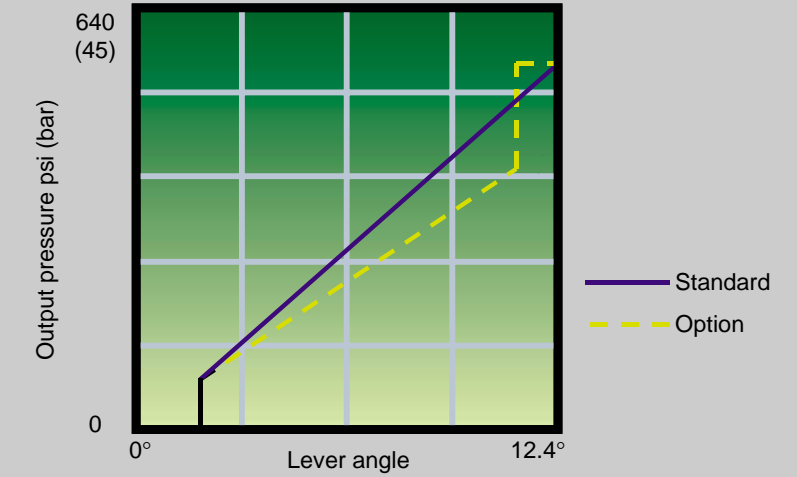
A variety of spring options allow for the selection of operating force against pedal angle. The operating force is maintained as directly proportional to the pedal angle throughout the operating range thereby providing optimum feel and control.



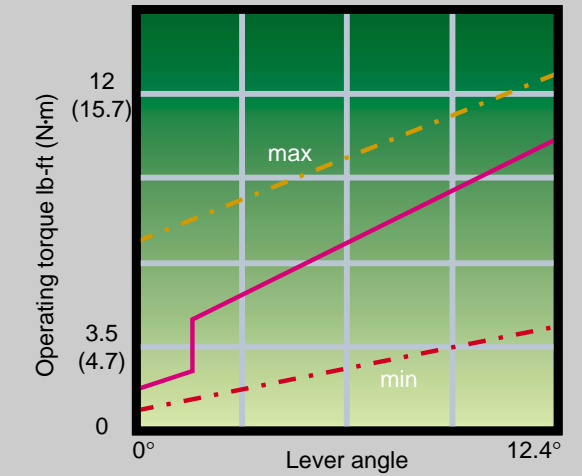
BENEFITS

- Sensitive control allows low operating forces resulting in ease of operation.
- No external linkages.
- Increase in fine control range.
- Secondary pressure closely follows the movement of the operating pedal.
- Built in dampening mechanism on RCVD8C.
- High durability.
- Maintenance free.

Control Range

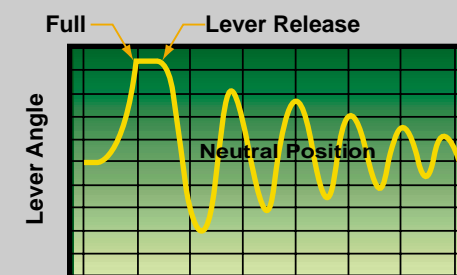
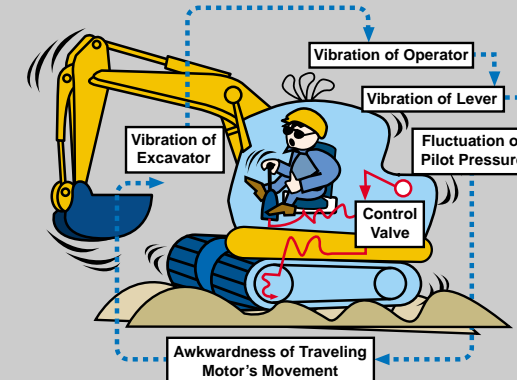


Operating Torque Range



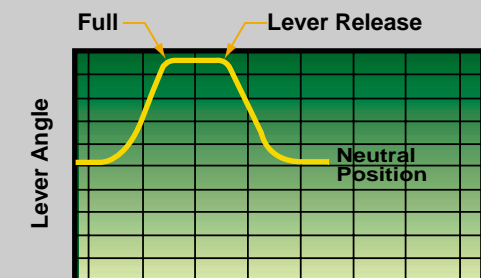
RCVD DAMPER PERFOR -

Without Damper



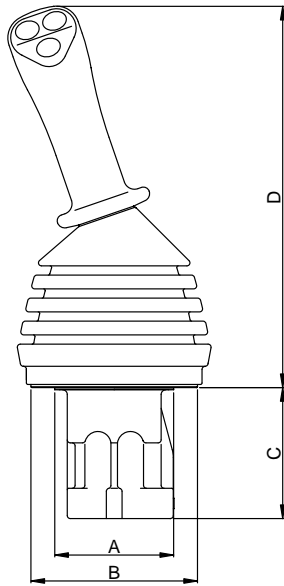
With Damper

250 milliseconds from full lever Angle to Neutral with no oscillations, resulting in smoother machine operation.



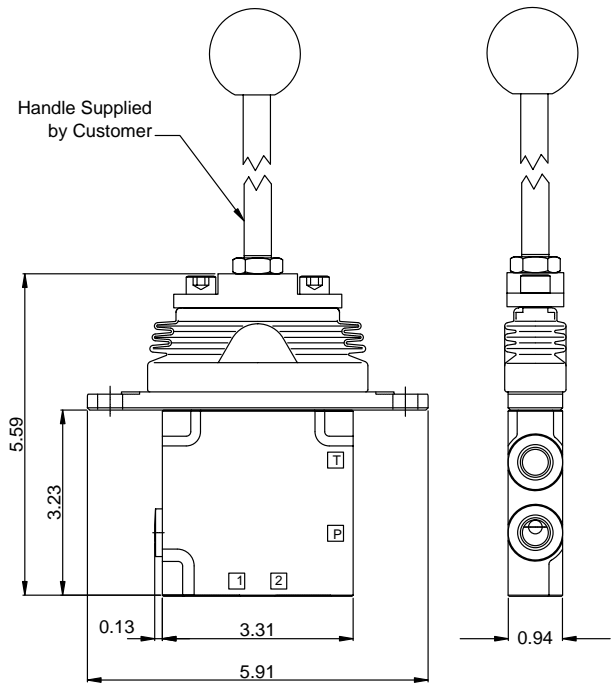
PILOT VALVE INSTALLATION ENVELOPE

PV48M / PV48K

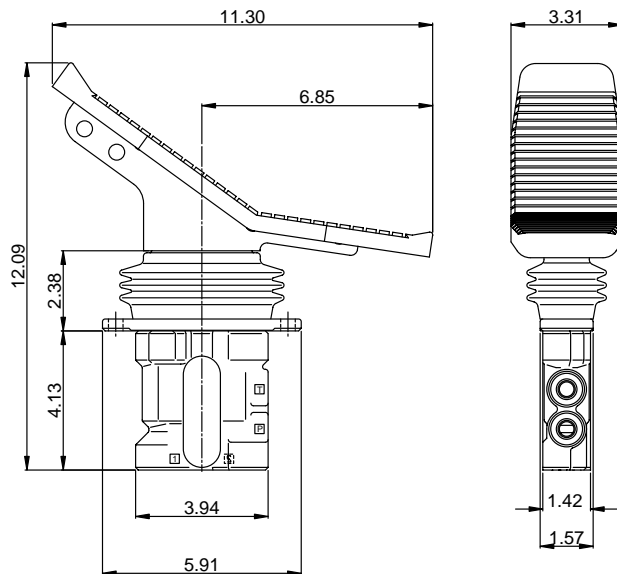


	A	B	C	D
PV48M	3.09	4.33	3.41	9.92
PV48K	3.66	5.12	3.54	10.28

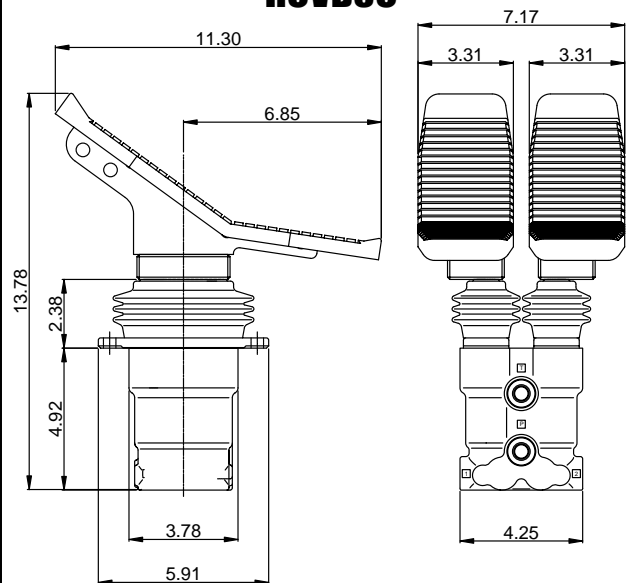
PV6P



RCV8C



RCVD8C



Kawasaki Precision Machinery of America
Division of Kawasaki Motors Corp., U.S.A.

5080 36th Street S.E., Grand Rapids, MI 49512 • USA
(616) 949-6500 • Fax (616) 975-3103

www.kawasakipmd.com

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