

Parker Product Datasheet



Parker pilot operated pressure relief valves for subplate mounting series R4V/R6V provide an outstanding constant pressure behaviour. Series R4V/R6V Proportional enables a continuous pressure adjustment by the additional proportional unit.

PART NUMBER: 016-84114-0
SEAL MATERIAL: NBR
INPUT VOLTAGE: N/A
PORT CONNECTION: NG10 / CETOP 05
PRESSURE CONTROL RANGE: 350 bar
ADDITIONAL OPTIONS: N/A
PRESSURE ADJUSTMENT CONTROL TYPE: Hand knob
DRAIN OPTION: Drain line internal
MARKING: Standard
SWITCHING OPTION: N/A

PRODUCT OVERVIEW

Well known as excellent pressure relief valves, Parker's series R4V/R6V and R4V/R6V Proportional for subplate mounting work stable across the whole pressure range and thus contribute to a smooth-running operation. Additionally they provide a wide range of options and connections for a versatile use in various applications.

Pilot operated pressure relief valves series R4V (DIN 24340 Form D) and R6V (DIN 24340 Form E) consist of a manually or a proportionally adjusted pilot stage and a seated type main stage. A vent function with a solenoid operated directional valve is available for circulation at minimum pressure. The optimum performance of the proportional version can be achieved in combination

with the digital amplifier module PCD00A-400.

Markets:

- Industrial

Features/Benefits:

- Wide range of options – suitable for almost every application
- Outstanding constant pressure behavior – supports reliable operation
- Very good pressure/flow behavior – contributes to a high energy efficiency of the system
- Short delivery time – no warehousing necessary
- R4V/R6V Proportional: optimally suited to the digital amplifier module PCD00A-400
- Pilot operated with manual adjustment or with proportional solenoid
- 2 interfaces:
 - R4V Subplate ISO 6264 (DIN 24340 Form D) with VV01 vent valve
 - R6V Subplate ISO 6264 (DIN 24340 Form E) with CETOP 03 vent valve
- 3 pressure stages
- 3 adjustment modes:
 - hand knob
 - acorn nut with lead seal
 - cylinder lock
- Remote control via port X
- Mechanical maximum pressure adjustment (optional for R6V*P2)

Applications:

- Suitable for general hydraulic applications
- General presses
- Die cast

Function:

Series R4V/R6V

System pressure in port P is applied via the X gallery to the spring loaded cone in the pilot head. The pilot head controls the pressure in the Z area on top of the main cartridge which is additionally kept close by the main spring.

If the pilot pressure exceeds the setting pressure the pilot cone opens and thus limits the pilot pressure. When the system pressure exceeds the pilot pressure plus the spring force, the main cartridge opens to port T and limits the pressure in port P to the adjusted level.

Series R4V/R6V with vent function

Additionally to the relief function, a solenoid operated vent valve connects the Z area to tank. This allows oil circulation from P to T at minimum pressure drop. The vent valve can either be a

standard CETOP 03 valve (R6V) or a sandwich unit (R4V). For both types the vent position can be either at the energized or de-energized solenoid.

TECH SPECIFICATIONS

MAXIMUM OPERATING TEMPERATURE	60 °C
DIVISION	Hydraulic Valve Systems Division Europe
MAXIMUM OPERATING PRESSURE	30 bar Port B, Y
MAXIMUM OPERATING PRESSURE	350 bar Port A, X
FLOW RATE	90 L/min
MINIMUM OPERATING TEMPERATURE	-20 °C
FOR FLUID TYPE	Hydraulic Oil According to DIN 51524
BODY MATERIAL	Cast Iron
PRODUCT SERIES	Pressure Valve
SEAL MATERIAL	NBR
WEIGHT	2.7 kg
MAXIMUM FLOW RATE	n/a
MOUNTING TYPE	Subplate
ACTUATION TYPE	Manual
OPERATION TYPE	Pilot
PRESSURE CONTROL RANGE	350 bar