

Parker Product Datasheet



Proportional pressure reducing valves series VMY in size NG10 and NG16 allow the variable adjustment of the reduced pressure from 0 bar up to the nominal pressure.

PART NUMBER: VMY160K06NV1P
MARKING: Standard
PILOT INLET / DRAIN LOCATIONS: 160 bar
PRESSURE CONTROL RANGE: Internal / external
PORT CONNECTION: NG06 / CETOP 03
SEAL MATERIAL: FPM

PRODUCT OVERVIEW

Working extremely precise, Parker's proportional pressure reducing valves of the series VMY in size NG10 or NG16 improve the process accuracy of hydraulic applications. They provide a variable adjustment of the reduced pressure from 0 bar up to the nominal pressure.

The valve consists of a spool type main stage and a proportionally operated pilot stage. The desired pressure can be variably set corresponding to the command signal specified on the amplifier. The proportional solenoid converts the current of the amplifier into force on the valve poppet of the pilot stage.

Typical applications are pressure systems, test equipment, or counterweight systems. The optimum performance can be achieved in combination with the digital amplifier module PCD00A-400 for open loop systems or with PWDXXA-40* for closed loop systems.

Markets:

- Industrial
- Machine tools

Features/Benefits:

- Works very precise - for high process accuracy
- High oscillation stability - preserves the material and improves the product quality
- 5 pressure stages - enables fine adjustment
- Short delivery time for most variations - no warehousing necessary

Applications:

- Suitable for general hydraulic applications
- Machine tools

Function VMY*K06:

With the proportional solenoids de-energized, the main spring forces the main spool into the neutral position. Port A is connected to port T. Thus the reduced pressure only depends on the back pressure in the external drain pipe and/or the tank pressure and can accordingly be reduced down to 0 bar. The pressure present in the P line delivers the pilot oil to the pilot stage via a flow control valve.

When the proportional solenoid is energized, the pilot pressure is increased in the pilot pressure area, and the main spool moves against the spring until the connection P - A opens. The regulation of the reduced pressure on connection A takes place by the constant comparison of the actual pressure and the reference pressure of the pilot stage.

Function VMY*K10:

The valve spool is designed so that the connection B-A is open in the neutral position and is closed in the working position.

TECH SPECIFICATIONS

WEIGHT	2.8 kg
MAXIMUM FLOW RATE	N/A
INDUSTRY	Industrial Manufacturing Equipment
MAXIMUM PRESSURE SETTING	160 bar
OPERATING TEMPERATURE	-20 to 50 °C

MINIMUM OPERATING TEMPERATURE	-20 °C
OPERATION TYPE	Pilot
MAXIMUM OPERATING PRESSURE	315 bar
FILTER EFFICIENCY RATING	ISO 4406; 18/16/13
TECHNOLOGY	Hydraulics
PRODUCT SERIES	Pressure valve
DIVISION	Industrial Systems Division Europe
MINIMUM AMBIENT TEMPERATURE	-25 °C
PORT CONNECTION	NG06 / CETOP 03
MEDIA	Hydraulic Oil
MOUNTING STYLE	ISO 5781
MAXIMUM AMBIENT TEMPERATURE	60 °C
BODY MATERIAL	Steel
MOUNTING POSITION	Unrestricted
BRAND	Parker
ACTUATION TYPE	Proportional
APPLICATION	Industrial Hydraulic
FOR FLUID TYPE	Hydraulic Oil
FUNCTION	Proportional
DIVISION	Hydraulic Valve Systems Division Europe
VALVE TYPE	Proportional pressure reducing valve
SPECIFICATIONS MET	ISO 7368
MOUNTING TYPE	Subplate mounting
MAXIMUM FLUID TEMPERATURE	70 °C
SEAL MATERIAL	FPM

MAXIMUM OPERATING TEMPERATURE	60 °C
MINIMUM FLUID TEMPERATURE	-20 °C
FLOW RATE	40 L/min