

Parker Product Datasheet



The proven 2-way proportional throttle valves series TDA feature a precise control of large oil flows for an efficient, reliable operation.

PART NUMBER: TDA050EW09B2NXW

SEAL MATERIAL: NBR

INPUT VOLTAGE: 16 VDC

FLOW RATE: Nominal Flow

FUNCTION: Flow direction from B to A

PORT CONNECTION: NG50

PRODUCT OVERVIEW

Parker 2-way proportional throttle valves series TDA provide outstanding characteristics like high resolution and reproducibility as well as a favourable price/performance ratio for a reliable and cost-effective operation. The TDA valve is used to control large oil flows. In combination with the digital power amplifier PCD00A-400 the valve parameters can be saved, changed and duplicated.

Markets:

- Industrial
- Molding

Features/Benefits:

- Proven, very robust design with cavity and mounting pattern according to ISO 7368 - allows reliable operation
- 8 sizes NG16 up to NG100 - wide range of sizes, fits most hydraulic systems

- Requires less pilot oil - enables higher energy efficiency
- High resolution and reproducibility - for improved product accuracy
- Short delivery time - no warehousing necessary
- Fail-safe function at power failure
- Leak-free from port B to A
- Pressure differential up to 350 bar possible

Applications:

- General presses
- Die cast
- Injection molding

Technical functionality:

The TDA valve has a 3-stage design consisting of the first solenoid operated pilot stage with a spool in sleeve design, the second pilot stage with the control spring and the sequence spool and as main stage the poppet in the sleeve. The proportional solenoid operates the pilot spool against the feedback of the control spring and controls the position of the sequence spool. The main poppet follows the position of the sequence spool and provides an open area for flow from B to A (optional A to B) in proportion to the solenoid current. The poppet is positioned independently of the differential pressure, which can become as high as the maximum working pressure.

TECH SPECIFICATIONS

DIVISION	Hydraulic Valve Systems Division Europe
MOUNTING TYPE	Slip-in cartridge
BODY MATERIAL	Steel/Cast iron (cover)
OPERATION TYPE	Pilot
CONFIGURATION	N/A
MAXIMUM OPERATING TEMPERATURE	60 °C
MINIMUM OPERATING TEMPERATURE	-20 °C
FOR FLUID TYPE	Hydraulic oil according to DIN 51524
MAXIMUM FLOW RATE	2300 L/min

FLOW DIRECTION	B to A
MOUNTING POSITION	Unrestricted
SEAL MATERIAL	NBR
FUNCTION	2-way
MAXIMUM OPERATING PRESSURE	350 bar
FLOW RATE	Nominal Flow
PRODUCT SERIES	Throttle valve
ACTUATION TYPE	Proportional
WEIGHT	15 kg