



# Proportional Throttle Valves

Series TDP and TPQ

aerospace  
climate control  
electromechanical  
filtration  
fluid & gas handling  
**hydraulics**  
pneumatics  
process control  
sealing & shielding



ENGINEERING YOUR SUCCESS.

# High Precision Meets High Flow

The control of large flows with high dynamics is one of the core competencies of Parker. The new series TDP and TPQ are the next performance generation of proportional throttle valves. The active cartridge design provides minimum response time as well as outstanding control of the main poppet, which is lifted and lowered actively by the pilot oil. The poppet is always hydraulically balanced and thus follows the command signal optimally - especially in closed-loop systems.

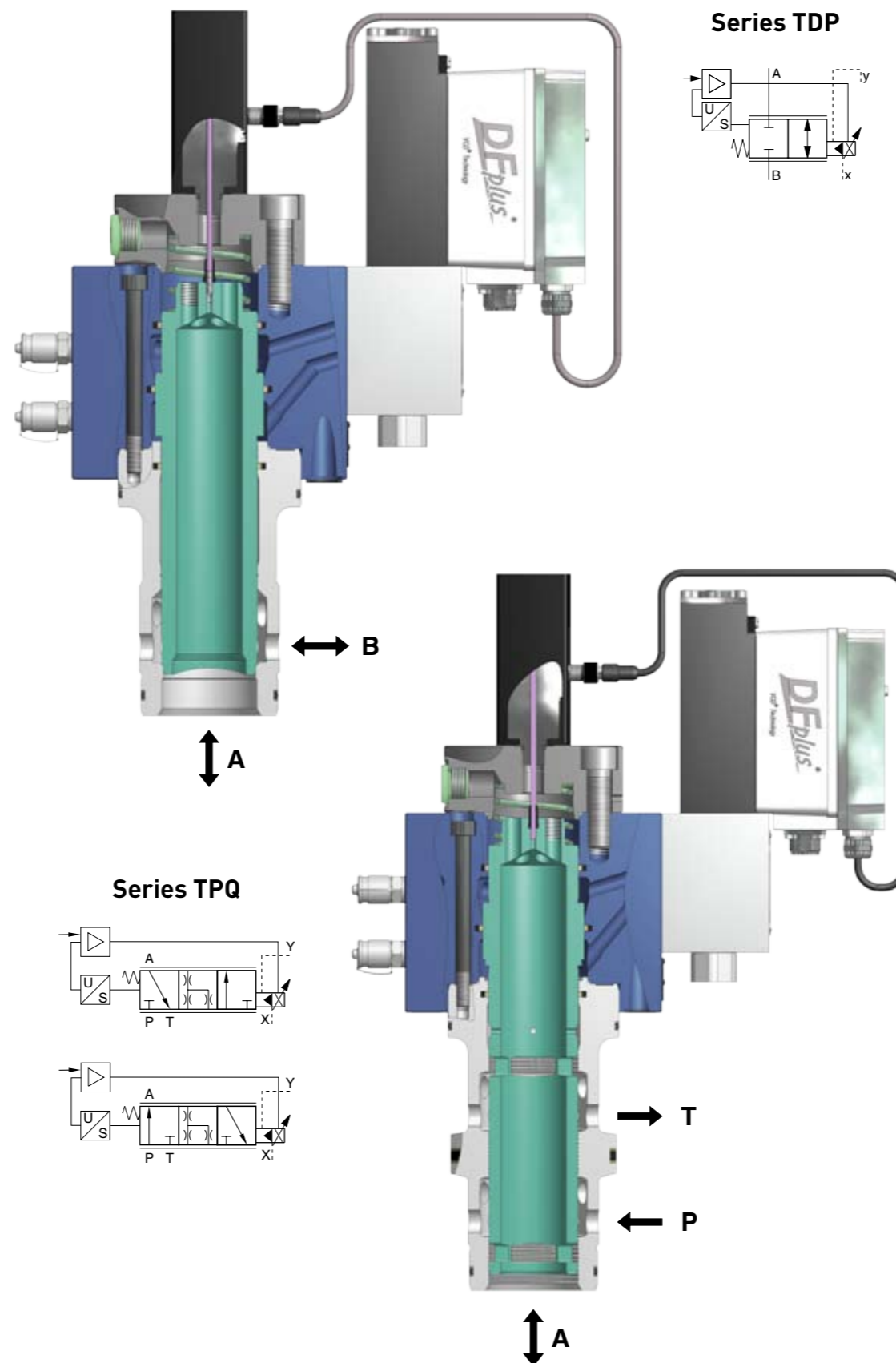
The DFplus® pilot valve for TDP and TPQ brings the advantages of the Parker Voice Coil Drive (VCD®) to the cartridges: highest precision and dynamics. Thereby TDP and TPQ valves show very robust design combined with servo performance. The available sizes cover the flow spectrum beyond subplate mounted valves:

NG32 up to NG100 for TDP and NG32 up to NG80 for TPQ

## VCD® Technology

With the VCD technology Parker has achieved a successful breakthrough in the drive technology for proportional directional control valves. In contrast to standard proportional solenoid drives, this technology actuates the spool by using a movable coil over a fixed permanent magnet. The coil is mechanically connected with the spool.

The friction-free actuator system moves the spool actively to the desired position. The direction of the movement depends on the given current direction. The actual position is sent back via a high resolution feedback system. In case of power failure a spring moves the spool to a defined position.



## Technical Features

- Active control pilot-operated 2/2 & 3/2-way throttle valve
- TDP mounting pattern and cavity according to ISO 7368
- TPQ mounting pattern according to ISO 7368, cavity according to Parker house norm
- Closed-loop control of flows
- Available nominal sizes: NG32 up to NG80 / NG 100
- Applicable for directional, speed, position, force and pressure controls
- Completely adapted unit with integrated electronics
- Fast step response 15...30 ms depending on size
- Flow up to 15000 l/min
- Shut-off in case of power failure (fail-safe)
- Typical applications: die casting machines, injection moulding and hydraulic presses

## More Efficiency

Enhanced process accuracy through high-precision production

Higher machine output thanks to shorter cycle times

## Lower Costs

Less downtime through very robust valve design

Short delivery times, no warehousing

## Advantages

- Highest dynamics
- Flow direction from A to B and B to A for TDP
- Flow direction from P to A and A to T for TPQ
- Excellent positioning accuracy
- Excellent reproducibility
- Low hysteresis
- Robust, durable and approved design

Your contact:

[valveshcd@parker.com](mailto:valveshcd@parker.com)

# Parker Worldwide

**AE – UAE, Dubai**  
Tel: +971 4 8127100  
parker.me@parker.com

**AR – Argentina, Buenos Aires**  
Tel: +54 3327 44 4129

**AT – Austria, Wiener Neustadt**  
Tel: +43 (0)2622 23501-0  
parker.austria@parker.com

**AT – Eastern Europe, Wiener Neustadt**  
Tel: +43 (0)2622 23501 900  
parker.easteurope@parker.com

**AU – Australia, Castle Hill**  
Tel: +61 (0)2-9634 7777

**AZ – Azerbaijan, Baku**  
Tel: +994 50 2233 458  
parker.azerbaijan@parker.com

**BE/LU – Belgium, Nivelles**  
Tel: +32 (0)67 280 900  
parker.belgium@parker.com

**BR – Brazil, Cachoeirinha RS**  
Tel: +55 51 3470 9144

**BY – Belarus, Minsk**  
Tel: +375 17 209 9399  
parker.belarus@parker.com

**CA – Canada, Milton, Ontario**  
Tel: +1 905 693 3000

**CH – Switzerland, Etoy**  
Tel: +41 (0) 21 821 02 30  
parker.switzerland@parker.com

**CN – China, Shanghai**  
Tel: +86 21 5031 2525

**CZ – Czech Republic, Klecany**  
Tel: +420 284 083 111  
parker.czechrepublic@parker.com

**DE – Germany, Kaarst**  
Tel: +49 (0)2131 4016 0  
parker.germany@parker.com

**DK – Denmark, Ballerup**  
Tel: +45 43 56 04 00  
parker.denmark@parker.com

**ES – Spain, Madrid**  
Tel: +34 902 33 00 01  
parker.spain@parker.com

**FI – Finland, Vantaa**  
Tel: +358 (0)20 753 2500  
parker.finland@parker.com

**FR – France, Contamine s/Arve**  
Tel: +33 (0)4 50 25 80 25  
parker.france@parker.com

**GR – Greece, Athens**  
Tel: +30 210 933 6450  
parker.greece@parker.com

**HK – Hong Kong**  
Tel: +852 2428 8008

**HU – Hungary, Budapest**  
Tel: +36 1 220 4155  
parker.hungary@parker.com

**IE – Ireland, Dublin**  
Tel: +353 (0)1 466 6370  
parker.ireland@parker.com

**IN – India, Mumbai**  
Tel: +91 22 6513 7081-85

**IT – Italy, Corsico (MI)**  
Tel: +39 02 45 19 21  
parker.italy@parker.com

**JP – Japan, Fujisawa**  
Tel: +(81) 4 6635 3050

**KR – South Korea, Seoul**  
Tel: +82 2 559 0400

**KZ – Kazakhstan, Almaty**  
Tel: +7 7272 505 800  
parker.easteurope@parker.com

**LV – Latvia, Riga**  
Tel: +371 6 745 2601  
parker.latvia@parker.com

**MX – Mexico, Apodaca**  
Tel: +52 81 8156 6000

**MY – Malaysia, Shah Alam**  
Tel: +60 3 7849 0800

**NL – The Netherlands, Oldenzaal**  
Tel: +31 (0)541 585 000  
parker.nl@parker.com

**NO – Norway, Ski**  
Tel: +47 64 91 10 00  
parker.norway@parker.com

**NZ – New Zealand, Mt Wellington**  
Tel: +64 9 574 1744

**PL – Poland, Warsaw**  
Tel: +48 (0)22 573 24 00  
parker.poland@parker.com

**PT – Portugal, Leca da Palmeira**  
Tel: +351 22 999 7360  
parker.portugal@parker.com

**RO – Romania, Bucharest**  
Tel: +40 21 252 1382  
parker.romania@parker.com

**RU – Russia, Moscow**  
Tel: +7 495 645-2156  
parker.russia@parker.com

**SE – Sweden, Spånga**  
Tel: +46 (0)8 59 79 50 00  
parker.sweden@parker.com

**SG – Singapore**  
Tel: +65 6887 6300

**SK – Slovakia, Banská Bystrica**  
Tel: +421 484 162 252  
parker.slovakia@parker.com

**SL – Slovenia, Novo Mesto**  
Tel: +386 7 337 6650  
parker.slovenia@parker.com

**TH – Thailand, Bangkok**  
Tel: +662 717 8140

**TR – Turkey, Istanbul**  
Tel: +90 216 4997081  
parker.turkey@parker.com

**TW – Taiwan, Taipei**  
Tel: +886 2 2298 8987

**UA – Ukraine, Kiev**  
Tel +380 44 494 2731  
parker.ukraine@parker.com

**UK – United Kingdom, Warwick**  
Tel: +44 (0)1926 317 878  
parker.uk@parker.com

**US – USA, Cleveland (industrial)**  
Tel: +1 216 896 3000

**US – USA, Lincolnshire (mobile)**  
Tel: +1 847 821 1500

**VE – Venezuela, Caracas**  
Tel: +58 212 238 5422

**ZA – South Africa, Kempton Park**  
Tel: +27 (0)11 961 0700  
parker.southafrica@parker.com

