Proportional Throttle Valves
Series TDP and TPQ
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
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
parker.australia@parker.com

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 2501

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.hu@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