

# Valves



*Premium quality, high cycle life.*

**TESCOM™**

  
**EMERSON™**  
Process Management

## Our high cycle life valves will keep your system running!

TESCOM™ makes an extensive line of highly reliable valves, setting new standards in the number of on-off cycles achieved.

- We never use castings. Our entire valve line is precision machined from bar stock.
- Extra features like a balanced main valve and seat-saving metal stops make TESCOM valves extremely durable in the most demanding applications.
- Our VA valve was named “Breakthrough Product of the Year” by a leading trade publication.
- In an independent application test, one of our standard valves achieved over 250,000 cycles: 128 times the life of the big-name brand used originally (details on file).



## Standard, modification or custom – we'll find the solution!



- TESCOM will do what it takes to find a fit for your application.
- We *truly* thrive on custom solutions. No order is too small!
- Our wide range of standard models allow almost limitless modification - materials, porting, actuation, seals, etc.
- Besides Stainless Steel, we can make any valve in brass, Monel, Hastelloy® or other material.
- Actuation methods available include: multi-turn, solenoid, air, lever and electronic controller.
- Several TESCOM valves can be used at very wide ranges – some at 0-20,000 psi / 0-1375 bar.
- Ask us about a drop-in replacement for your existing valve.



## TESCOM standard valves are only a starting point...



VA ON/OFF Valve



VG ON/OFF Valve  
(solenoid option shown)



VT 3-Way Valve

Product Series/Features	Operating Pressure	Flow Capacity (maximum)	Body Material
<b>VA &amp; VG Series: Air Operated ON/OFF Valves</b>			
<ul style="list-style-type: none"> <li>• Normally open or normally closed</li> <li>• Very high cycle life</li> <li>• Balanced main valve - reduces required actuation pressure (30-60 psig/2-4 bar)</li> <li>• Oxygen tested models available</li> <li>• Toggle actuator optional</li> <li>• Compact package</li> </ul>	6000, 10,000, 15,000, 20,000 psig 414, 690, 1035, 1380 bar	VA: $C_v = .75$ VG: $C_v = 2.0$	Brass or 316 SST
<b>VT Series: 3-Way Valve</b>			
<ul style="list-style-type: none"> <li>• High cycle life in a compact design</li> <li>• Balanced main valve</li> <li>• 3 way, 2 position</li> <li>• Universal operation</li> <li>• Solenoid valve optional</li> <li>• Pneumatic &amp; hydraulic applications</li> </ul>	10,000, 6000, 3500 psig 690, 414, 241 bar	$C_v = .75$	Brass or 316 SST
<b>30 Series: Shutoff Valves</b>			
<ul style="list-style-type: none"> <li>• Globe or angle Pattern</li> <li>• Built-in metallic stop prevents over-torquing - reduces seat wear</li> <li>• 30-1100 Series: available with metering capability (long stem optional)</li> <li>• Bi-directional flow (all models)</li> </ul>	10,000 psig 690 bar	30-1100 globe: $C_v = .28$ 30-1100 angle: $C_v = .49$ 30-1300 globe: $C_v = 1.57$ 30-1300 angle: $C_v = 2.30$ 30-1200 globe: $C_v = 8.0$ 30-1200 angle: $C_v = 10.0$ 30-1400 globe: $C_v = 20.0$	300 SST

30 Series Shutoff Valves



**Don't see what you need?** Call our application engineers at 800-447-1250. We may already have the exact modification you're looking for... or we'll create one to suit your needs!



# The possibilities are endless!



VJ Bi-directional Valve



VK Block and Bleed



VN Y-Pattern Valve



VU 3-Way Valve



CC Metering Valve



30 Series Cartridge Valve

Product Series/Features	Operating Pressure (maximum)	Flow Capacity	Body Material
<b>VJ Series: Low Flow/Bi-directional</b>			
<ul style="list-style-type: none"> <li>Versatile bi-directional flow</li> <li>High pressure, low flow valve</li> <li>Built-in metallic stop</li> <li>Designed to be O<sub>2</sub> compatible</li> </ul>	6000, 10,000 psig 414, 690 bar	C <sub>V</sub> = .49 (angle) C <sub>V</sub> = .28 (globe)	Brass or 316 SST
<b>VK Series: Block and Bleed</b>			
<ul style="list-style-type: none"> <li>Allows construction or repair along a pressurized line</li> <li>Allows residual downstream pressure to bleed to zero</li> <li>Low operating torque</li> <li>High cycle life</li> </ul>	10,000, 6000 psig 690, 414 bar	C <sub>V</sub> = .28	Brass or 316 SST
<b>VN Series: Y-Pattern</b>			
<ul style="list-style-type: none"> <li>Optimal full path</li> <li>Low torque handknob</li> <li>Replaceable soft seats</li> <li>Grayloc® hub connections available</li> </ul>	10,000 psig 690 bar	C <sub>V</sub> = 20.0	316 SST
<b>VU Series: 3-Way Valve</b>			
<ul style="list-style-type: none"> <li>High cycle life in a compact design</li> <li>Balanced main valve</li> <li>3 way, 2 position</li> <li>Universal operation</li> <li>Solenoid valve optional</li> <li>Pneumatic &amp; hydraulic applications</li> </ul>	10,000, 6000, 3500 psig 690, 414, 241 bar	C <sub>V</sub> = 2.0	Brass or 316 SST
<b>CC Series: Metering Valves</b>			
<ul style="list-style-type: none"> <li>Precise control at very low flows</li> <li>For liquid or gas applications</li> <li>20+ turns from shutoff to full open</li> <li>Non-rotating stem reduces seat wear</li> </ul>	Full vacuum to 10,000 psig 690 bar	C <sub>V</sub> = .00005 C <sub>V</sub> = .00125	316 SST
<b>Cartridge Valves</b>			
<ul style="list-style-type: none"> <li>Externally threaded and designed to be easily installed in a manifold block</li> <li>Reduces piping and eliminates connections</li> <li>Reduces space requirements and makes servicing easier</li> <li>Can be furnished in a wide variety of valve styles</li> <li>Contact factory for application assistance</li> </ul>			



VA Series Cartridge Valve



VA Cartridge Valve (toggle style) in typical manifold



## Custom Assemblies, Manifolds & Systems

TESCOM is an experienced provider of high quality manifolds, custom assemblies and systems for control of pressure and flow. We can simplify your existing system or create a new one to meet your needs.

TESCOM provides:

- The know-how and experience to integrate components manufactured by others. Get one-on-one engineering support to find the best solution!
- An extremely large selection of existing valves, regulators and flow components: pressure ranges from vacuum to 30,000 psig / 2070 bar.
- A wide array of dome and air-loaded regulators combined with electronic pressure controllers to automate pressure routines and data acquisition.
- Integrated electronics and custom software.



*High pressure valve manifold used to calibrate transducers*



*Made-to-spec valve & regulator hydraulic control panel*

*Panel used in a fueling application includes valves, regulators & integrated electronics*



*Aircraft charging cart manifold panel incorporates VA cartridge style valves with lever actuation*



## An innovator in pressure control for over forty years!

TESCOM serves many industrial markets. Distributor support centers are located in major cities worldwide, providing application assistance and quality TESCO product.

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### Emerson Process Management Regulator Technologies, Inc.

#### Americas

##### Worldwide Headquarters

310 East University Drive  
McKinney, Texas 75069-1872 USA  
T: +1 800 558 5853  
T: +1 972 548 3574  
F: +1 972 542 6433

#### TESCOM Corporation

12616 Industrial Boulevard  
Elk River, Minnesota 55330-2445 USA  
T: +1 800 447 1250  
T: +1 763 241 3238  
F: +1 763 241 3224

### Emerson Process Management Regulator Technologies, Inc.

#### Europe

Natural Gas: T: +39 051 4190611  
Industrial: T: +39 051 4190606  
LP-Gas: T: +420 2 710 35 607  
TESCOM: T: +49 38823 31-0

### Emerson Process Management Regulator Technologies, Inc.

#### Asia Pacific

T: +65 6770 8337

#### Middle East

T: +971 4811 8100

For further information visit [www.emersonprocess.com/regulators](http://www.emersonprocess.com/regulators) or email us at [na.tescom@emerson.com](mailto:na.tescom@emerson.com)

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