CAMERON

TECHNO Multipurpose Check Valves

Lightweight and compact check valves designed to fit a variety of industry applications

TECHNOLOGY

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TECHNO MULTIPURPOSE CHECK VALVES

TECHNO Multipurpose Check Valves

Oklahoma City, Okla., USA

Cameron is a leading provider of valves, valve automation and measurement systems to the oil and gas industry. Our products are primarily used to control, direct and measure the flow of oil and gas as it is moved to refineries, petrochemical plants and industrial centers for processing.

We provide valve products that are sold through distributor networks worldwide for use in both oil and gas and industrial applications, and include widely recognized brands such as DEMCO®, NAVCO®, NEWCO®, NUTRON®, THORNHILL CRAVER®, TECHNO™, TOM WHEATLEY®, WHEATLEY® and WKM®.

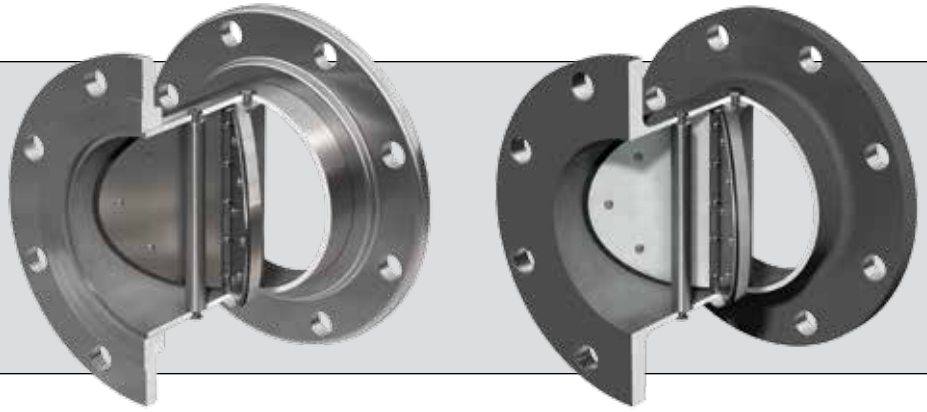
The design features of Cameron's TECHNO elastomer-hinged and metal-hinged check valve include a tight shut-off feature and the ability to be mounted in almost any position. TECHNO check valves are known for their ease of maintenance and exceptional flow characteristics. Cameron provides economical and dependable TECHNO multipurpose check valves for use within a wide range of service conditions.

ELASTOMER HINGE TYPES

Full Flanged

Classes 125#, 150# and 300#

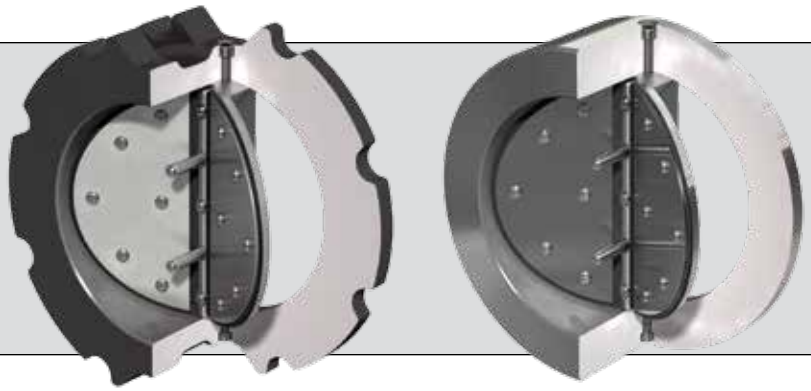
Sizes 1" to 36"



Short-Form (SF) Wafer

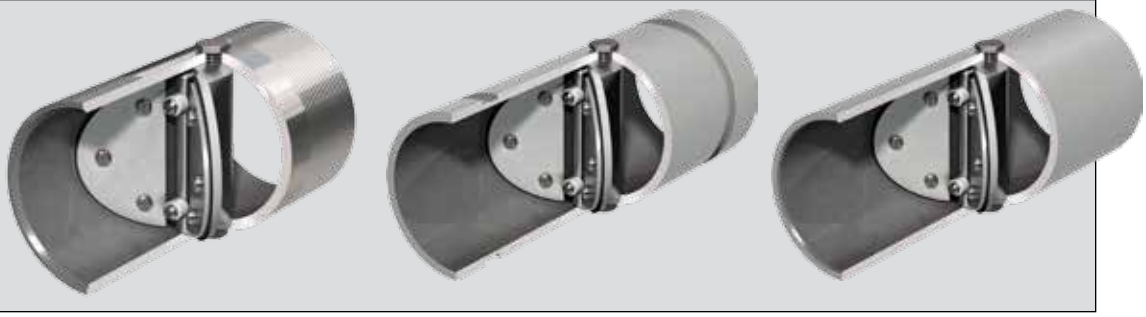
Ideal design for air service, light duty and liquid applications.

Sizes 1" to 36"



Male Threaded Ends, Grooved Ends and Plain Ends

Sizes 1" to 12"

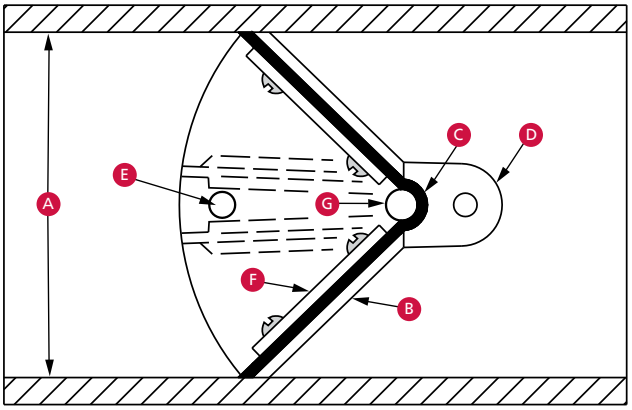


Deep Well

Female threaded valve designed for deep well applications to 1000 ft (304.8 m). Equivalent to 450 psi max. operating pressure.

Sizes 1" to 12"

ELASTOMER HINGE DESIGN



A Full Port
Provides maximum flow with minimum pressure loss.

B Valve Plates
Offer metal support and minimum travel.

C Sealing Member
Provides tight shutoff and prolonged life cycle.

D Hinge Post
Precision air foil design offers streamlined flow.

E Travel Stop
Prevents over-travel of plates. Location is size dependent; smaller valves have stops attached to hinge clamp.

F Clamp Plate
Provides added support.

G Hinge Clamp
Remains stationary with no metal components around hinge post rotation.

Design Features

Unrestricted full port seatless design

- Maximum flow area
- Minimum pressure drop

Elimination of metal-to-metal rotating parts

- No pins to wear
- No seats to wear
- No spring to break

Non-slam quick-closure feature

- Minimum travel of valve plates from fully open to fully closed position reduces closing time
- Elimination of spring restricts slamming action

Tight shut-off feature

- Flexible elastomer provides complete seal
- Seals tightly at extremely low backpressure

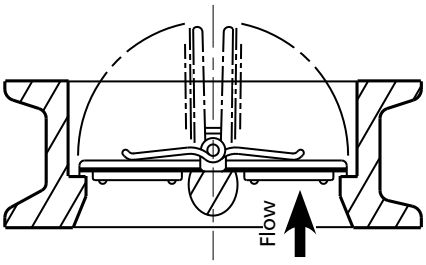
Standard Materials and Configuration

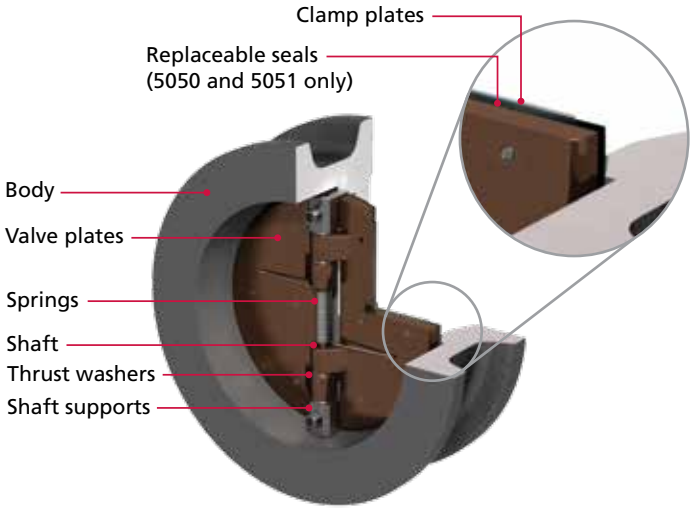
Body	Internals	Elastomer Materials		Body Configuration
		Materials	Temperature Range*	
Aluminum	Aluminum	Buna-N	-60° F to 225° F (-51° C to 107° C)	Male Threaded Ends
Brass	Brass	EPDM	-40° F to 225° F (-40° C to 107° C)	Female Threaded Ends
Cast Iron	316 Stainless Steel	FKM (Viton®)	-20° F to 400° F (-29° C to 204° C)	Plain Ends
Carbon Steel		Silicone	-100° F to 500° F (-73° C to 260° C)	Grooved Ends
316 Stainless Steel				Flanged Ends
				Wafer Style

* Temperature range is for general guidance. The figures may vary with application and body/internal materials. Consult Cameron for materials, sizes and pressure ratings not shown as standard.

METAL-HINGED DESIGN

The ease of maintenance, exceptional flow characteristics and increased safety by elimination of body leakage allows this check valve to be a valve of choice industrywide.





Standard Models and Materials of Construction

Style	Body	Valve Plates	Seals	Springs	Trim*	ASME Class
5050	Cast Iron	Bronze	EPDM	316 Stainless Steel	316 Stainless Steel	125
5051	Carbon Steel	Carbon Steel ++	Buna-N	316 Stainless Steel	316 Stainless Steel	150
5051-316	316 Stainless Steel	316 Stainless Steel	Buna-N	316 Stainless Steel	316 Stainless Steel	150
5053	Carbon Steel	Carbon Steel ++	Metal/Metal**	316 Stainless Steel	316 Stainless Steel	300
5053-316	316 Stainless Steel	316 Stainless Steel	Metal/Metal**	316 Stainless Steel	316 Stainless Steel	300
5056	Carbon Steel	Carbon Steel ++	Metal/Metal**	316 Stainless Steel	316 Stainless Steel	600
5056-316	316 Stainless Steel	316 Stainless Steel	Metal/Metal**	316 Stainless Steel	316 Stainless Steel	600

* Trim items include shaft supports, clamp plates and fasteners. Teflon® thrust washers are standard through 12" size.
++ 316 stainless steel valve plates are standard on 2" to 6" sizes.
** Class 300 valve is available with elastomer seats upon request. Class 600 valve is available with Teflon seats only.

Spring Data	
Materials	**Temperature Range****
INCONEL® 600	Up to 750° F (399° C)
INCONEL X-750	Up to 1000° F (538° C)
Seal Data	
Materials	**Temperature Range****
Buna-N	-60° F to 225° F (-51° C to 107° C)
EPDM	-40° F to 300° F (-40° C to 149° C)
Viton	-20° F to 400° F (-29° C to 204° C)
Teflon	-20° F to 450° F (-29° C to 232° C)
Silicone	-90° F to 500° F (-68° C to 260° C)
Metal-to-Metal +	-400° F to 1000° F (-240° C to 538° C)

** This temperature is for general guidance. The figures may vary with application and body/internal materials.
\+ 316 stainless steel thrust washers are standard with metal-to-metal seal option.

HOW TO ORDER

Size
1.0 = 1″
1.3 = 1-1/4″
1.5 = 1-1/2″
2.0 = 2″
2.5 = 2-1/2″
3.0 = 3″
4.0 = 4″
5.0 = 5″
6.0 = 6″
8.0 = 8″
10.0 = 10″
12.0 = 12″
Through
36.0 = 36″
XXX = Other**

Valve Series
DPW = Dual-Plate Wafer Check, ASME Rated 5050, 5051, 5053, 5056
EHF = Elastomer-Hinged Flanged 5003, 5004, 5102, 5107
EHW = Elastomer-Hinged Short-Form Wafer 5118, 5296, 5355, 5412
EHT = Elastomer-Hinged Threaded Valve (5002)
EHV = Elastomer-Hinged Victaulic®-Grooved Valve (5103)
EHP = Elastomer-Hinged Plain End Valve (5104)

Body Material
AL = Aluminum
BR = Brass 5002 Only
CI = Cast Iron 5050 Only
CS = Carbon Steel
WC = Cast Steel, A216 Grade WCB
36 = 316 Stainless Steel

Internal Material
AL = Aluminum
BR = Brass 5002 Only
BZ = Bronze (DPW)
CS = Carbon Steel
WC = Cast Steel, A216 Grade WCB
36 = 316 Stainless Steel
XX = Other**

Size	Valve Series	Body Material	Internal Material
☐☐☐	☐☐☐	☐☐	☐☐

SAMPLE:

6.0	EHT	CS	AL

HOW TO ORDER

Seal Material
B = Buna-N
U = EPDM
M = Metal (Metal-Hinged Valves Only)
S = Silicone
T = Teflon (Metal-Hinged Valves Only)
V = Viton A
XX = Other**

Spring Material
32 = 302 SS
36 = 316 SS
60 = INCONEL 600
75 = INCONEL X-750
NS = No Spring
XX = Other**

Valve Rating
A12 = ASME 125
A15 = ASME 150
A60 = ASME 600
030 = 30 psi-cwp
050 = 50 psi-cwp
100 = 100 psi-cwp
125 = 125 psi-cwp
150 = 150 psi-cwp
300 = 300 psi-cwp
450 = 450 psi-cwp
XXX = Other**

End Connections
RF = Raised Face
FF = Flat Face
MP = Male Threaded Ends
FP = Female Threaded Ends
VC = Victaulic Grooved
PE = Plain Ends
XX = Other**

Options*
Consult Cameron for options such as:
Epoxy Coat
Drain Holes
Bypass Holes
Special Ports
Special Paint
Fasteners
Etc.

* Cameron assigns option suffix numbers to identify special valves. Once an option number is assigned to specify the special valve, that number can then be used to reorder an identical valve. Consult Cameron for options.

** Other: "X", "XX" or "XXX" indicates a choice other than standards shown.
Note: Certain combinations are not available.

Seal Material	Spring Material		Valve Rating			End Connections		Options		
SAMPLE:										
B	3	2	1	5	0	M	P	1	4	5

CAMSERV™ Services for Valves and Actuation

WE BUILD IT. WE BACK IT.

Global Network and Local Support

Cameron is well-positioned to deliver total aftermarket support, quickly and efficiently, with unmatched OEM expertise. Our highly skilled engineers and technicians are available around the clock, seven days a week, to respond to customer queries, troubleshoot problems and offer reliable solutions.

Easily Accessible Parts and Spare Valves

- OEM spare valves, actuators and parts (including non-Cameron brands)
- Handling, storage, packaging and delivery
- Dedicated stocking program

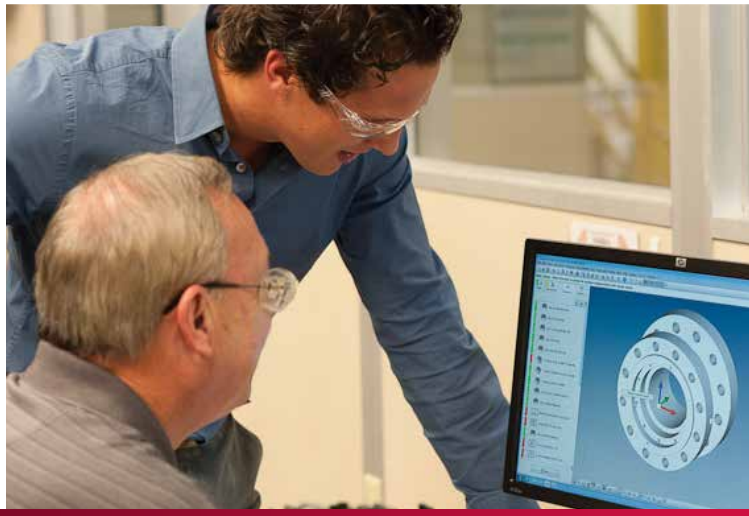
Comprehensive Aftermarket Services Portfolio

- Parts and spare valves
- Repair
- Field services
- Preventative maintenance
- Equipment testing and diagnostics
- Remanufacturing
- Asset preservation
- Customer property management
- Training and recertification services
- Warranty

Customized Total Valve Care℠ (TVC) Programs

Customized asset management plans that optimize uptime, availability and dedicated services.

- Engineering consultancy
- Site management
- Flange management
- Startup and commissioning
- Spare parts and asset management
- Operational support



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Registered Trademark	Owner
INCONEL	INCO Alloys International, Inc.
Teflon	E.I. DuPont De Nemours & Company
Viton	E.I. DuPont De Nemours & Company

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HSE Policy Statement
At Cameron, we are committed ethically, financially and personally to a working environment where no one gets hurt and nothing gets harmed.