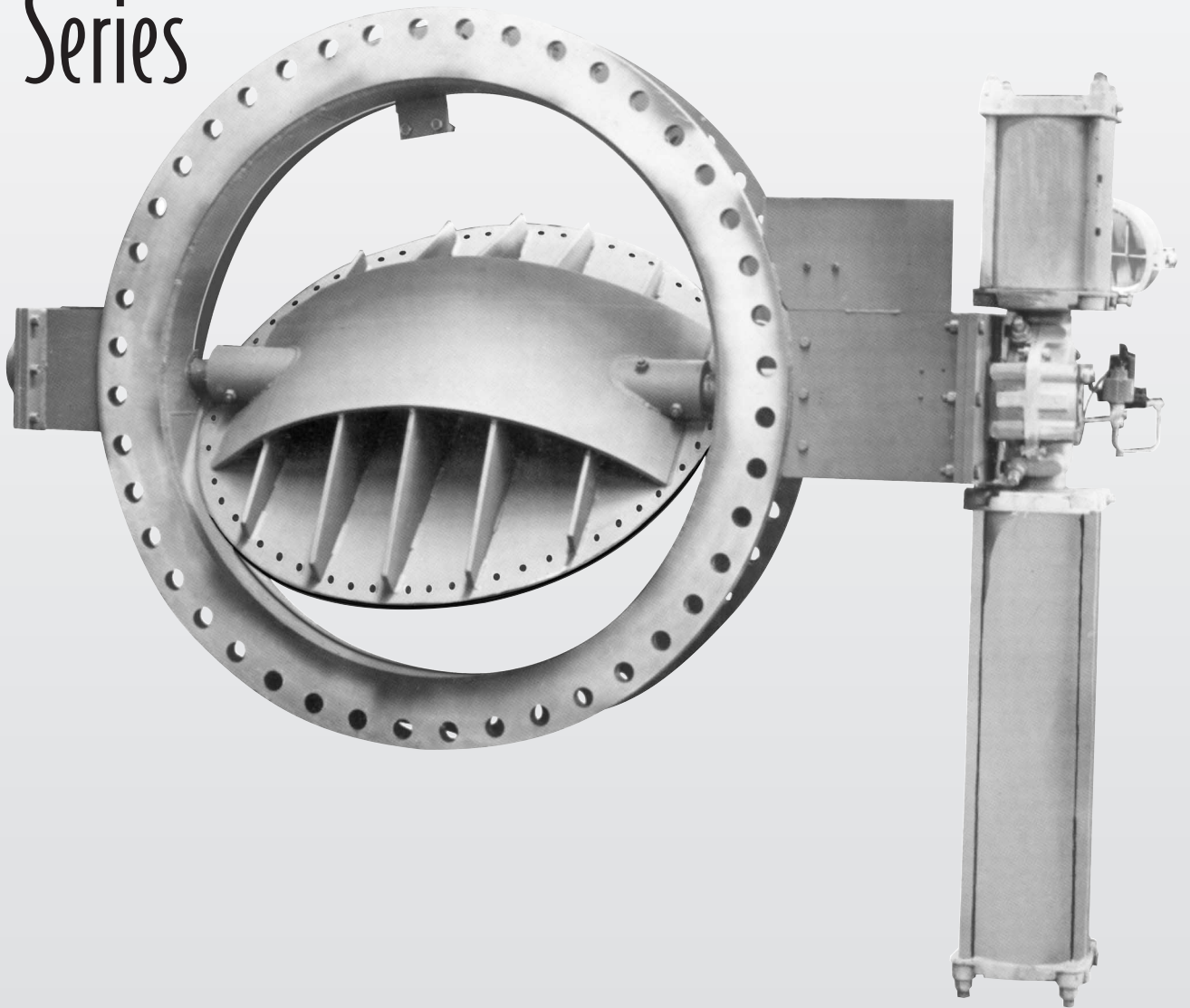


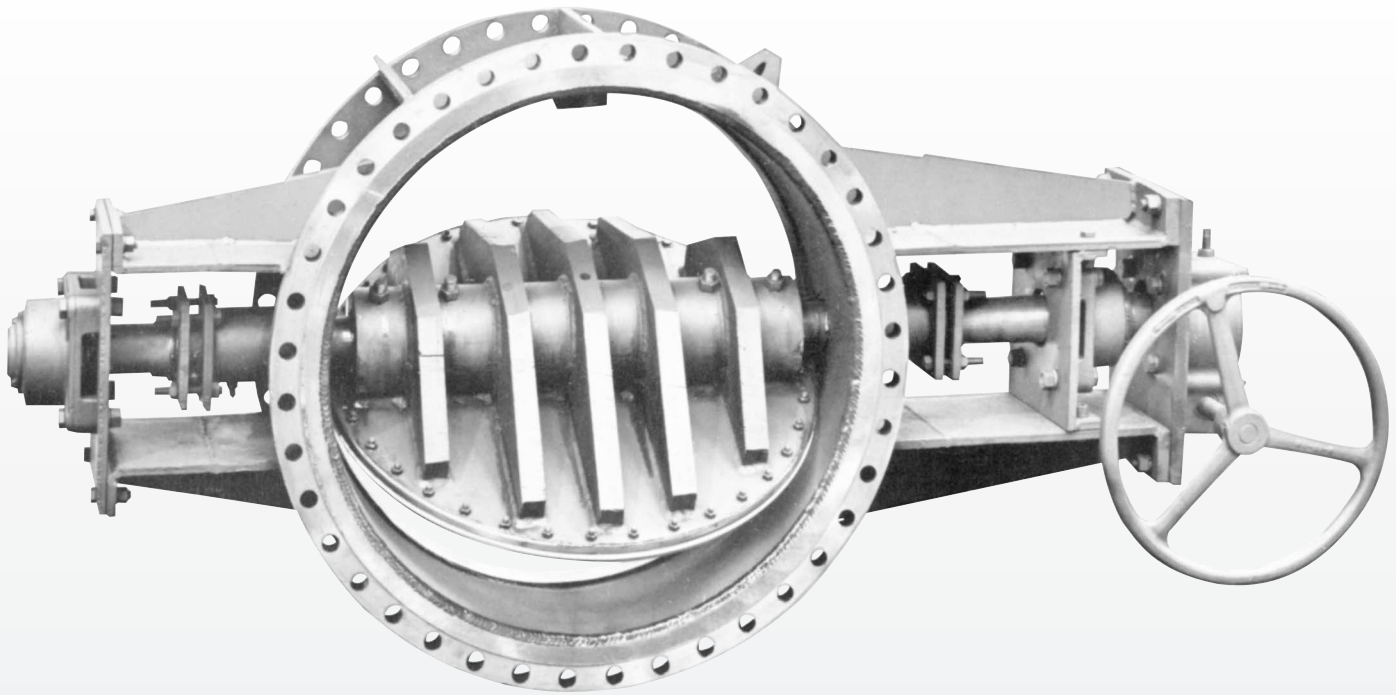
SHAN-ROD

fabricated butterfly valves and dampers

BULLETIN 4100

Shan-Rod Fabricated **Butterfly Valves** 4100 Series





28" Type 4170 Ev-O-Seal Butterfly Valve with AP1-605 R.F. drilling, teflon O-ring seal, outboard roller bearings both ends, stainless steel inboard bushings, manual worm gear actuator.

THE SHAN-ROD VALVE

Shan-Rod valves are designed to give long, trouble free service in all applications. The versatility of the fabricated Ev-O-Seal allows Shan-Rod to design to your specifications as required by your systems. The materials of construction can be carbon steels, stainless steels, aluminum, titanium, inconels, etc.

SERVICE CONDITIONS

Service conditions can either be gas or fluids with pressures of vacuum to 125 PSIG WOG; temperature limits of Ev-O-Seal valves -40 °F. and +500 °F.

DESCRIPTION

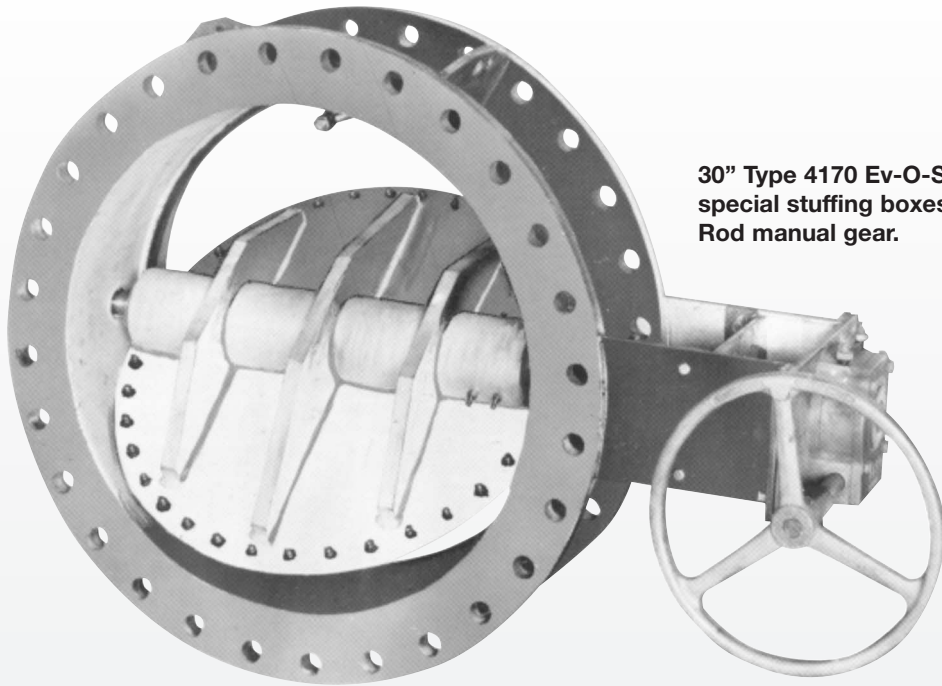
The basic damper consists of a fabricated carbon steel body with machined stainless steel seat, carbon steel reinforced disc with machined O-ring groove and retainer, carbon steel flanges, 304 stainless stub shaft, stainless steel taper pins, stainless packing follower, graphitar or carbon inboard bushings, graphite packing and lantern gland, lubricated and bolted stuffing boxes with alemite purge fittings and standard O-ring. Flanges can be supplied with Shan-Rod standard drilling for ductwork or plate flanges that conform to 125/150 ANSI drilling or 125/150 ANSI flanges.

CONSTRUCTION AND MATERIALS

Construction	Standard	Optional
Flanges Body, Disc	Carbon steel	Corten, Al. Br., Aluminum 304, 316, 317, 309, 310 & RA 330 SS. Carpenter 20, Titanium, Tantalum, and any weldable alloy.
Shaft	304 SS	Alum., Al.-Br., 300 Series SS, 309, 310 RA-330 SS, Carp. 20, Titanium & Tantalum.
Bushings	Graphite Bronze Graphitar	17-4 Ph, 300 Series SS, Stellite, Glass TFE filled.
Bearings (Outboard ball)	Standard Power End	Ball & roller - all sizes
Packing Follower	304	Same alloys as body.
Lantern Gland	Carbon	Same alloys as body.
O-Ring	E.P.D.M.	Neoprene, Teflon, Silicone, Viton, Buna 'N'

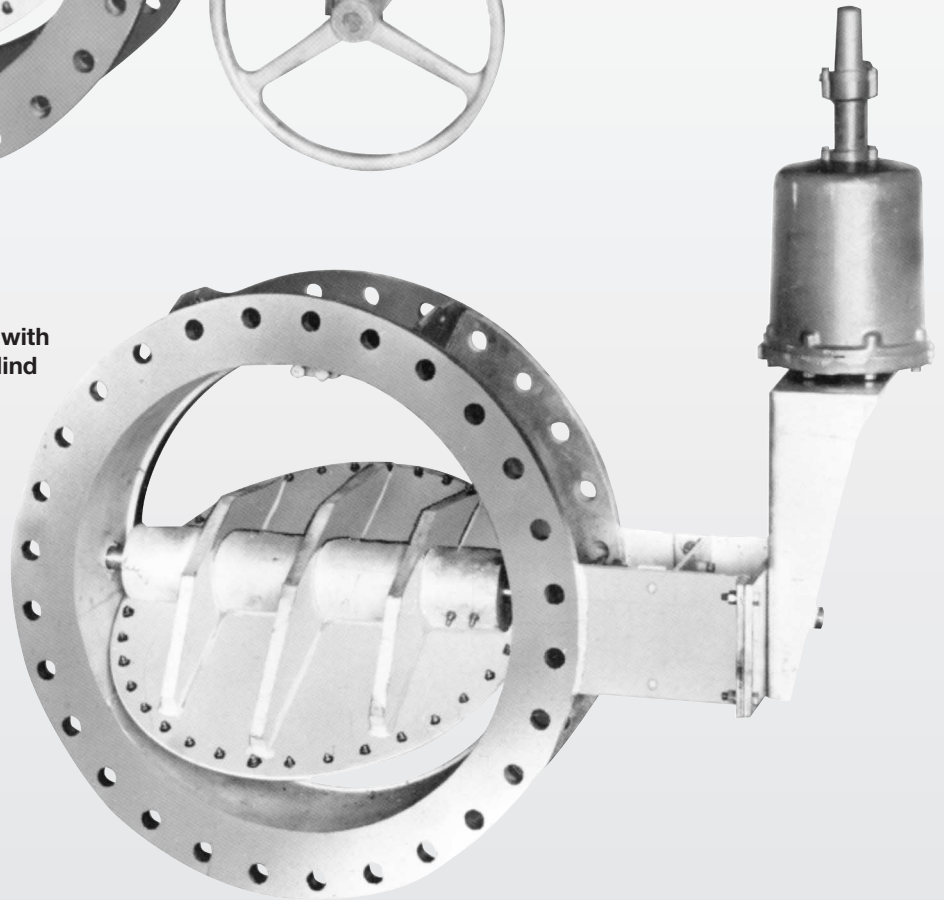
OPERATING CONDITIONS

	Std.	Optional
Temp. °F.	300	500
Max. Static Press. (psig)	50	600
Shut-off Press. Drop (psi)	25	50



30" Type 4170 Ev-O-Seal with 125/150# ANSI drilling, special stuffing boxes, Viton O-ring, 1/4 turn Shan-Rod manual gear.

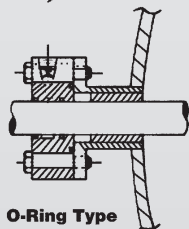
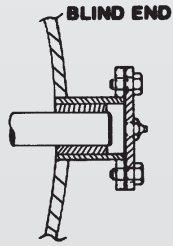
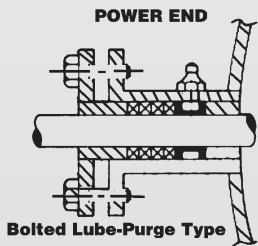
30" Type 4110 Ev-O-Seal Butterfly Valve with 125/150# drilling, Viton O-ring, special blind end stuffing box, stainless steel inboard bushings, Fisher 481 piston actuator.



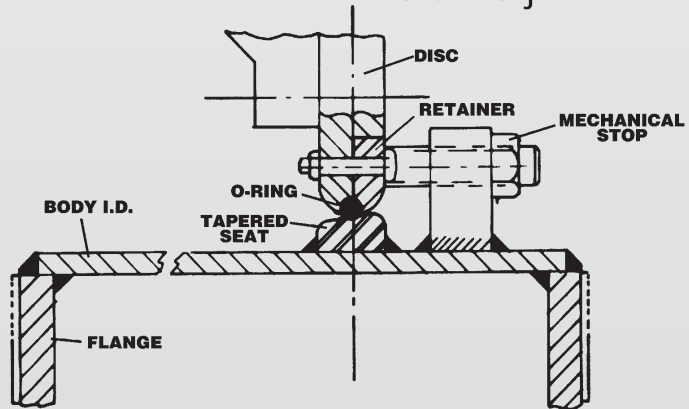
Stuffing Box

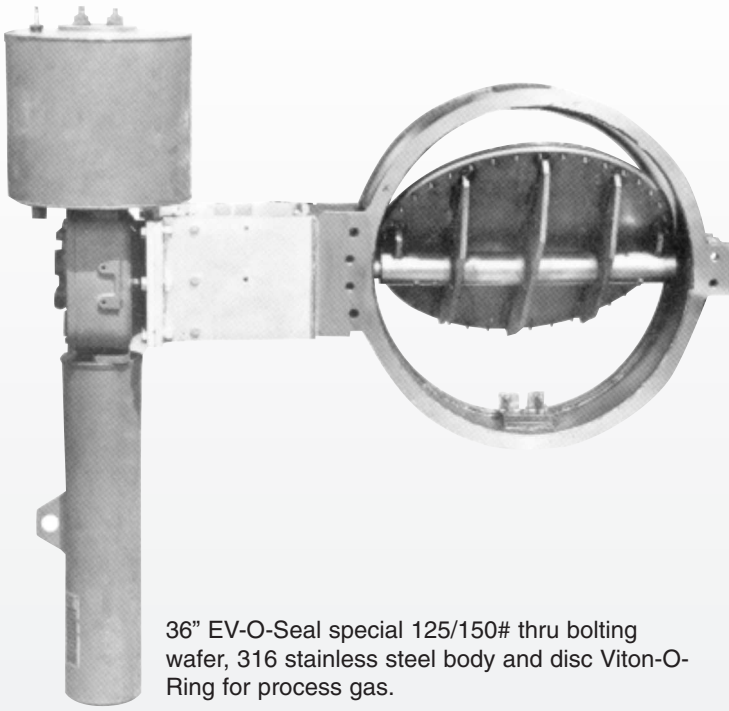
Power End - Standard with graphite bronze or carbon bushing requiring no lubrication for trouble-free operation. Packing can be replaced without the removal of lever or actuator

Blind End - Same as Power End except with no packing.

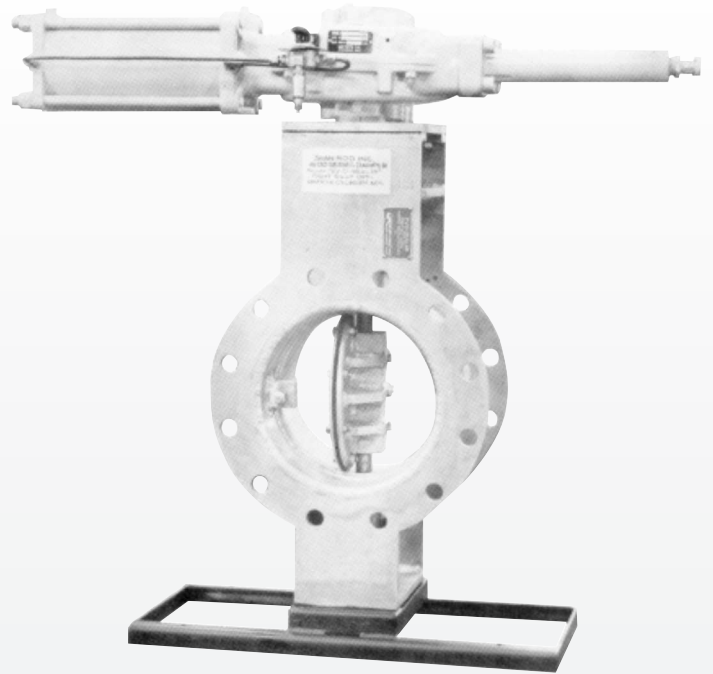


Seat Design





36" EV-O-Seal special 125/150# thru bolting wafer, 316 stainless steel body and disc Viton-O-Ring for process gas.



8" type 4170 EV-O-Seal aluminum body and disc, 125/150# ANSI flange drilling piston actuator.

SPECIFICATION GUIDE

When ordering specify: size, type of fluid, specific gravity, temperature, maximum pressure, maximum flow differential pressure at shut-off, valve action (fail open or fail closed), flange ratings, accessories, pipe run.

Other standard sizes available in increments of two inches, or valves can be custom made to customer specifications.

Shaft may be vertical, if end of valve opposite power end is down (vertical thrust bearing or washer required).

MAINTENANCE

Shan-Rod valves require a minimum of maintenance, depending on service conditions. Stub shaft taper pinned to disc allows easy shaft and disc removal. Inboard bushings do not require lubrication, thereby saving time. If service is dirty or corrosive, use of optional teflon bushings or outboard bearings is recommended. Lubricated and/or purged stuffing boxes should also be employed. All parts are easily replaced in field and, if required, are available from local sources since materials of construction are standard.

FEATURES

1. Double disc for redundant bubble tight (optional) shut-off (in event of seal damage).
2. Airfoil reinforced disc (optional).
3. Easy replacement of seal on sizes 48" and larger without removing valve from the line.
4. Positive system isolation in positive or negative pressure systems.
5. Actuation available: Pneumatic, Electric, Hydraulic, Manual, etc.
6. Engineered to suit system requirements in configuration, size, face-to-face dimension, etc.
7. Nuclear safety and non-safety related applications for bubble tight shut-off.

As we are continually developing our products, the design of Shan-Rod valves is subject to change without notice.

Sales Representative: