



UNIVERSAL SALES

TUF-SKIN VALVES

GREENLINE

*The green valves
that have served the
irrigation industry
for 50 years!*

**CATALOG
1-1-2025**

*Levers and
Lug style
valves!*



*Heavy duty
traveling nut
operators!*



*Worm Gear
Operators!*



*Check valves with
face to face
rubber seats!*



Valves now have a 5 year warranty!



*Electric actuated
valves compatible
with automation
systems!*



**Choose the ORIGINAL!
Choose the LONGEST LASTING!
Choose *TUF-SKIN* !**

**PH: 541-998-9999
SALES@UNIVERSALSALES.BIZ**



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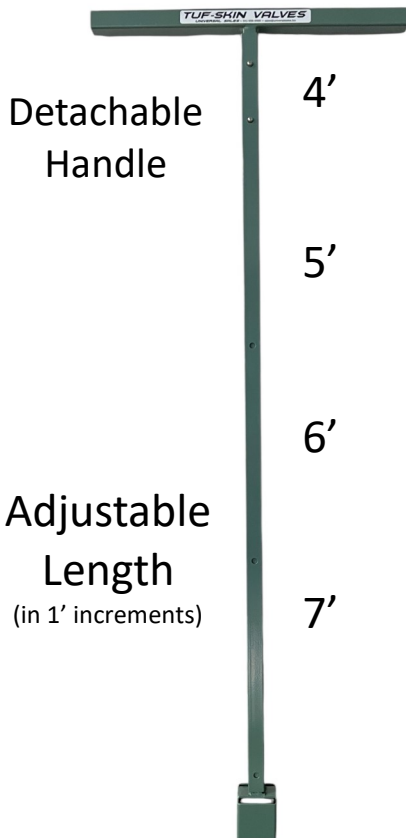
PRESSURE GAUGES

2.5" DIAMETER STAINLESS STEEL CASE LIQUID FILLED 1/4" NPT BOTTOM INLET



PART #	DESCRIPTION
250-030-SS	2.5" @ 0 – 30 PSI
250-060-SS	2.5" @ 0 – 60 PSI
250-100-SS	2.5" @ 0 – 100 PSI
250-160-SS	2.5" @ 0 – 160 PSI
250-200-SS	2.5" @ 0 – 200 PSI
250-300-SS	2.5" @ 0 – 300 PSI
250-400-SS	2.5" @ 0 – 400 PSI
250-1000-SS	2.5" @ 0 – 1000 PSI

2" Square Nut Wrench

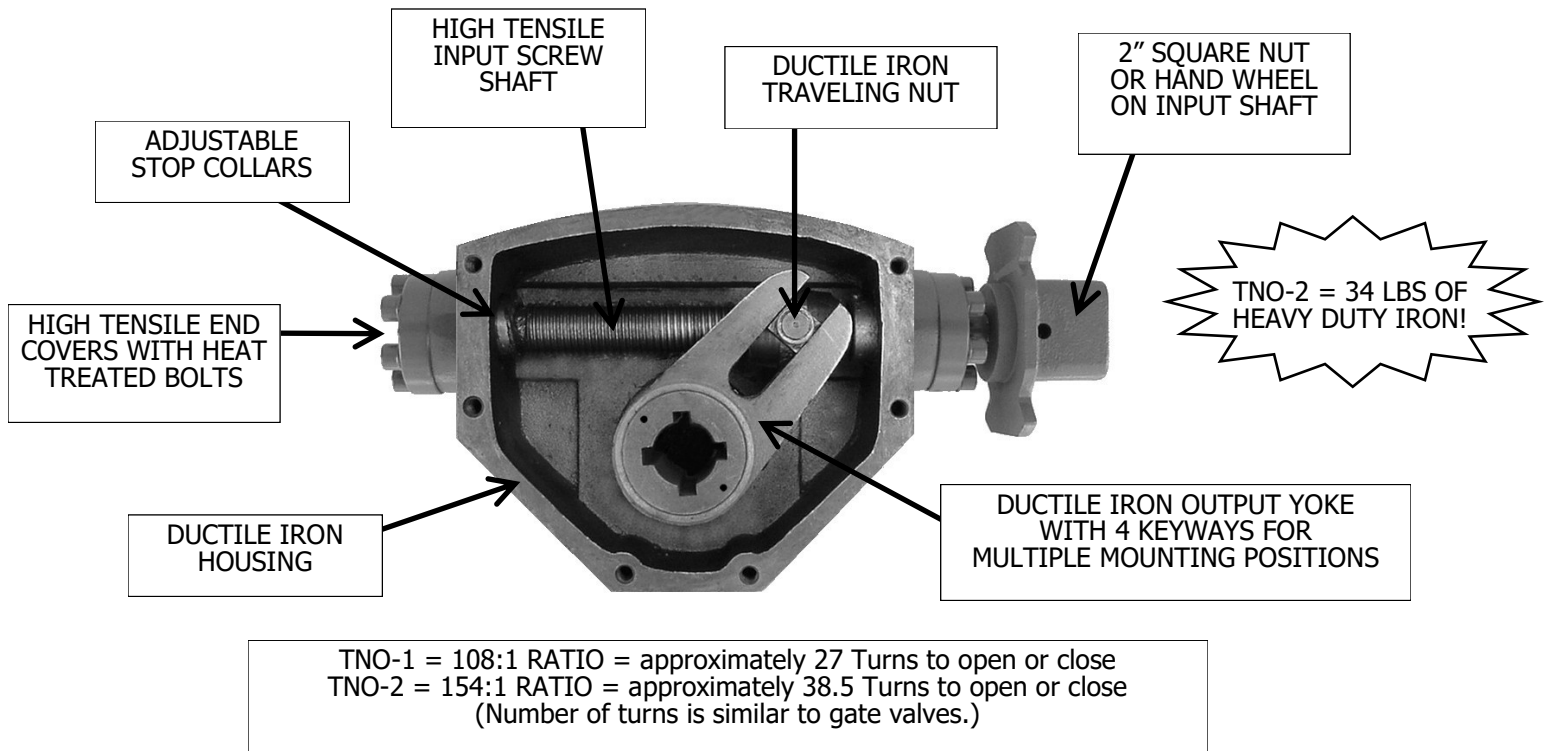


Part #	Description	Box Qty	List
SNW	2" square nut wrench, adjustable 4'-7'	2	130.00 each

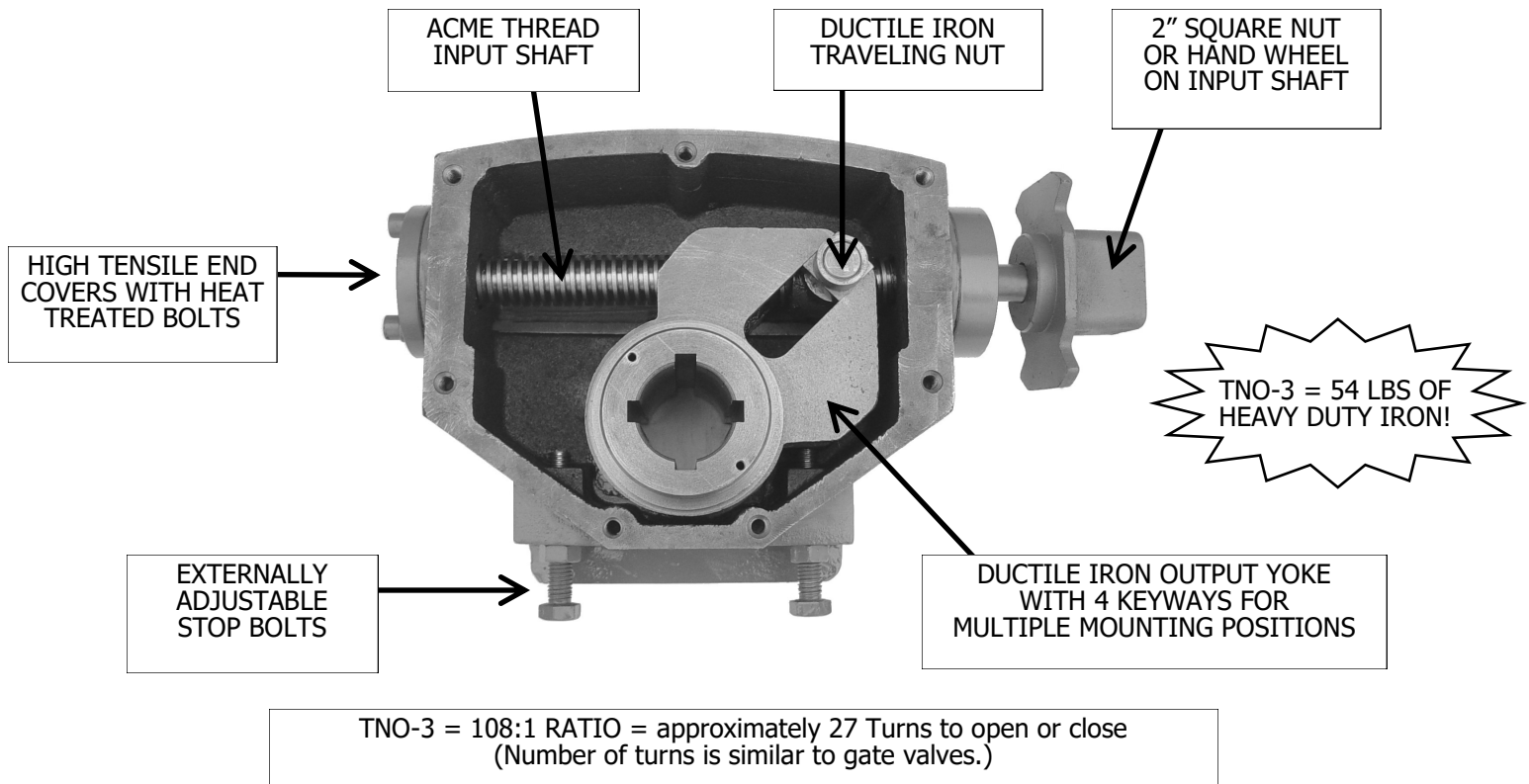
2 pack
ships in
48"x6"x4" box
16 pounds

TUF-SKIN Traveling Nut Operator

TNO-1 for 2"-5" valves
TNO-2 for 6"-14" valves



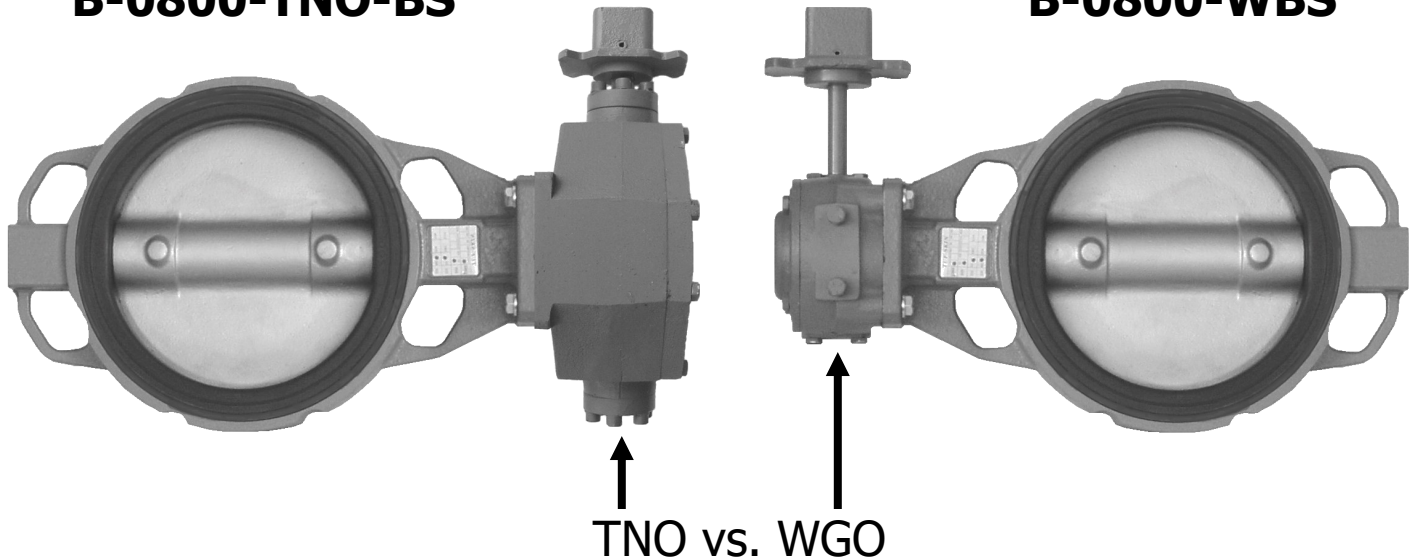
TNO-3 for 16"-18" valves



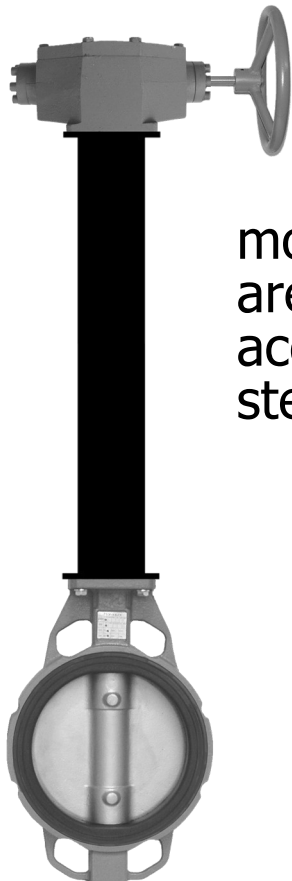
The traveling nut operator is designed for high torque conditions, to withstand the most severe applications.

B-0800-TNO-BS

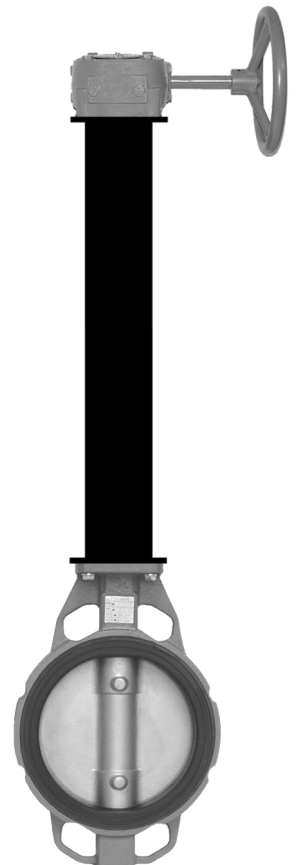
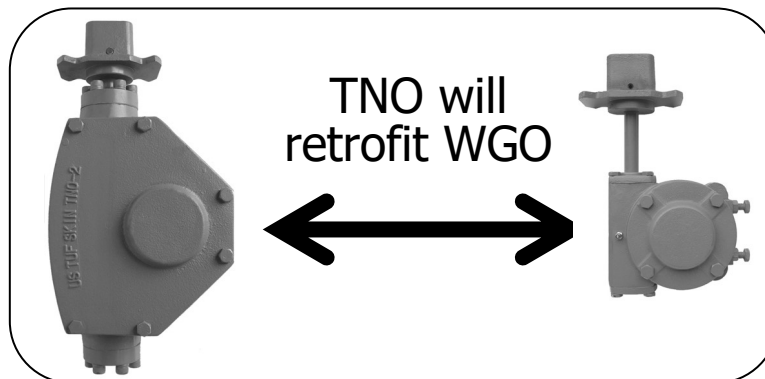
B-0800-WBS



The TNO is better suited than a worm gear for installations where high input torque may occur, such as buried service. Because of the TNO size, weight, material, and design, it can withstand more input torque than worm gears. The TNO exceeds the AWWA specification requiring 300 ft/lbs of input torque at the stops without damage.



The TNO have the same mounting patterns as the WGO and are compatible with all Tuf-Skin accessories such as the VSE (valve stem extensions).



PART #	DESCRIPTION	LBS.
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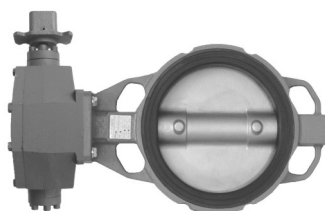
BUTTERFLY VALVES – Traveling Nut Operated with Hand Wheel



B-0200-TNO-HW	2" wafer BFV + TNO-1-02/05-HW	21
B-0250-TNO-HW	2.5" wafer BFV + TNO-1-02/05-HW	23
B-0300-TNO-HW	3" wafer BFV + TNO-1-02/05-HW	24
B-0400-TNO-HW	4" wafer BFV + TNO-1-02/05-HW	28
B-0500-TNO-HW	5" wafer BFV + TNO-1-02/05-HW	31
B-0600-TNO-HW	6" wafer BFV + TNO-2-06/08-HW	57
B-0800-TNO-HW	8" wafer BFV + TNO-2-06/08-HW	65
B-1000-TNO-HW	10" wafer BFV + TNO-2-10/12-HW	82
B-1200-TNO-HW	12" wafer BFV + TNO-2-10/12-HW	99
B-1400-TNO-HW	14" wafer BFV + TNO-2-14-HW	140
B-1600-TNO-HW	16" wafer BFV + TNO-3-16/18-HW	214
B-1800-TNO-HW	18" wafer BFV + TNO-3-16/18-HW	264

SEE PAGE 14 FOR VSE (VALVE STEM EXTENSIONS)

BUTTERFLY VALVES – Traveling Nut Operated Buried Service



B-0200-TNO-BS	2" wafer BFV + TNO-1-02/05-BS	22
B-0250-TNO-BS	2.5" wafer BFV + TNO-1-02/05-BS	24
B-0300-TNO-BS	3" wafer BFV + TNO-1-02/05-BS	25
B-0400-TNO-BS	4" wafer BFV + TNO-1-02/05-BS	29
B-0500-TNO-BS	5" wafer BFV + TNO-1-02/05-BS	33
B-0600-TNO-BS	6" wafer BFV + TNO-2-06/08-BS	55
B-0800-TNO-BS	8" wafer BFV + TNO-2-06/08-BS	64
B-1000-TNO-BS	10" wafer BFV + TNO-2-10/12-BS	82
B-1200-TNO-BS	12" wafer BFV + TNO-2-10/12-BS	99
B-1400-TNO-BS	14" wafer BFV + TNO-2-14-BS	139
B-1600-TNO-BS	16" wafer BFV + TNO-3-16/18-BS	214
B-1800-TNO-BS	18" wafer BFV + TNO-3-16/18-BS	264

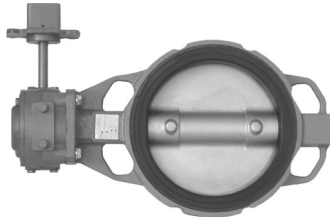
BUTTERFLY VALVES – WORM GEAR OPERATED with Hand Wheel



B-0200-W	2" BFV + WGO-0-02/05-HW	17
B-0250-W	2.5" BFV + WGO-0-02/05-HW	18
B-0300-W	3" BFV + WGO-0-02/05-HW	18
B-0400-W	4" BFV + WGO-0-02/05-HW	22
B-0500-W	5" BFV + WGO-0-02/05-HW	25
B-0600-W	6" BFV + WGO-1-06/08-HW	35
B-0800-W	8" BFV + WGO-1-06/08-HW	45
B-1000-W	10" BFV + WGO-1-10/12-HW	65
B-1200-W	12" BFV + WGO-1-10/12-HW	77
B-1400-W	14" BFV + WGO-2-14-HW	122
B-1600-W	16" BFV + WGO-3-16/18-HW	190
B-1800-W	18" BFV + WGO-3-16/18-HW	240
B-2000-W	20" BFV + WGO-4-20-HW	395
B-2400-W	24" BFV + WGO-4-24-HW	525
B-3000-W	30" BFV + WGO-30-HW	900
B-3600-W	36" BFV + WGO-36-HW	1400
UB-4200-W	42" U-Type BFV + WGO-42-HW	2900

SEE PAGE 14 FOR VSE (VALVE STEM EXTENSIONS)

PART#	DESCRIPTION	LBS.
BUTTERFLY VALVES – WORM GEAR OPERATED Buried Service		



B-0200-WBS	2"	BFV + WGO-0-02/05-BS	17
B-0250-WBS	2.5"	BFV + WGO-0-02/05-BS	18
B-0300-WBS	3"	BFV + WGO-0-02/05-BS	18
B-0400-WBS	4"	BFV + WGO-0-02/05-BS	22
B-0500-WBS	5"	BFV + WGO-0-02/05-BS	26
B-0600-WBS	6"	BFV + WGO-1-06/08-BS	37
B-0800-WBS	8"	BFV + WGO-1-06/08-BS	44
B-1000-WBS	10"	BFV + WGO-1-10/12-BS	62
B-1200-WBS	12"	BFV + WGO-1-10/12-BS	77
B-1400-WBS	14"	BFV + WGO-2-14-BS	122
B-1600-WBS	16"	BFV + WGO-3-16/18-BS	190
B-1800-WBS	18"	BFV + WGO-3-16/18-BS	240
B-2000-WBS	20"	BFV + WGO-4-20-BS	395
B-2400-WBS	24"	BFV + WGO-4-24-BS	525
B-3000-WBS	30"	BFV + WGO-30-BS	900
B-3600-WBS	36"	BFV + WGO-36-BS	1400
UB-4200-WBS	42"	U-Type BFV + WGO-42-BS	2900

BUTTERFLY VALVES – LEVER OPERATED



B-0200-L	2"	BFV + LHO-05 operator	8
B-0250-L	2.5"	BFV + LHO-05 operator	9
B-0300-L	3"	BFV + LHO-05 operator	10
B-0400-L	4"	BFV + LHO-10 operator	17
B-0500-L	5"	BFV + LHO-10 operator	21
B-0600-L	6"	BFV + LHO-15 operator	32
B-0800-L	8"	BFV + LHO-15 operator	40
B-1000-L	10"	BFV + LHO-15 operator	57
B-1200-L	12"	BFV + LHO-15 operator	73

BUTTERFLY VALVES – SQUARE NUT OPERATED



B-0200-SNO	2"	BFV + SNO-1 operator	11
B-0250-SNO	2.5"	BFV + SNO-1 operator	12
B-0300-SNO	3"	BFV + SNO-1 operator	14
B-0400-SNO	4"	BFV + SNO-1 operator	18
B-0500-SNO	5"	BFV + SNO-1 operator	23
B-0600-SNO	6"	BFV + SNO-2 operator	30
B-0800-SNO	8"	BFV + SNO-2 operator	37

BUTTERFLY VALVES – STUB END

B-0200-S	2"	BFV less operator	6
B-0250-S	2.5"	BFV less operator	7
B-0300-S	3"	BFV less operator	7
B-0400-S	4"	BFV less operator	13
B-0500-S	5"	BFV less operator	18
B-0600-S	6"	BFV less operator	24
B-0800-S	8"	BFV less operator	33
B-1000-S	10"	BFV less operator	50
B-1200-S	12"	BFV less operator	66
B-1400-S	14"	BFV less operator	100
B-1600-S	16"	BFV less operator	160
B-1800-S	18"	BFV less operator	210
B-2000-S	20"	BFV less operator	325
B-2400-S	24"	BFV less operator	455

TUF-SKIN VALVE

LUG STYLE BODY BUTTERFLY VALVE

Lug style is easier
and faster to install.

Perfect for end of line situations that
require future expansion.
There is no need to drain the existing
line. Simply bolt on the new line and
open the valve.

Available in 2" to 18" diameters.
150 PSI.

Same face to face dimension
as wafer style body.
(easy to retro-fit)

PART#	DESCRIPTION	LBS
<u>LUG STYLE VALVE – LEVER OPERATED</u>		
LB-0200-L	2" LUG VALVE + LHO-05	9
LB-0250-L	2.5" LUG VALVE + LHO-05	10
LB-0300-L	3" LUG VALVE + LHO-05	11
LB-0400-L	4" LUG VALVE + LHO-10	23
LB-0500-L	5" LUG VALVE + LHO-10	26
LB-0600-L	6" LUG VALVE + LHO-15	38
LB-0800-L	8" LUG VALVE + LHO-15	49
LB-1000-L	10" LUG VALVE + LHO-15	74
LB-1200-L	12" LUG VALVE + LHO-15	97
<u>LUG STYLE VALVE – Traveling Nut Operated with Hand Wheel</u>		
LB-0200-TNO-HW	2" LUG VALVE + TNO-1-02/05-HW	21
LB-0250-TNO-HW	2.5" LUG VALVE + TNO-1-02/05-HW	22
LB-0300-TNO-HW	3" LUG VALVE + TNO-1-02/05-HW	23
LB-0400-TNO-HW	4" LUG VALVE + TNO-1-02/05-HW	32
LB-0500-TNO-HW	5" LUG VALVE + TNO-1-02/05-HW	38
LB-0600-TNO-HW	6" LUG VALVE + TNO-2-06/08-HW	64
LB-0800-TNO-HW	8" LUG VALVE + TNO-2-06/08-HW	73
LB-1000-TNO-HW	10" LUG VALVE + TNO-2-10/12-HW	96
LB-1200-TNO-HW	12" LUG VALVE + TNO-2-10/12-HW	127
LB-1400-TNO-HW	14" LUG VALVE + TNO-2-14-HW	165
LB-1600-TNO-HW	16" LUG VALVE + TNO-3-16/18-HW	254
LB-1800-TNO-HW	18" LUG VALVE + TNO-3-16/18-HW	314



SEE PAGE 14 FOR VSE (VALVE STEM EXTENSIONS)

PART#	DESCRIPTION	LBS
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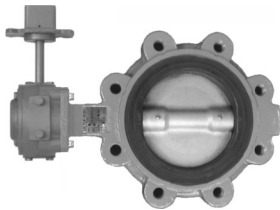
LUG STYLE VALVE – WORM GEAR OPERATED with Hand Wheel



LB-0200-W	2"	LUG VALVE + WGO-0-02/05-HW	18
LB-0250-W	2.5"	LUG VALVE + WGO-0-02/05-HW	19
LB-0300-W	3"	LUG VALVE + WGO-0-02/05-HW	20
LB-0400-W	4"	LUG VALVE + WGO-0-02/05-HW	26
LB-0500-W	5"	LUG VALVE + WGO-0-02/05-HW	32
LB-0600-W	6"	LUG VALVE + WGO-1-06/08-HW	42
LB-0800-W	8"	LUG VALVE + WGO-1-06/08-HW	53
LB-1000-W	10"	LUG VALVE + WGO-1-10/12-HW	79
LB-1200-W	12"	LUG VALVE + WGO-1-10/12-HW	105
LB-1400-W	14"	LUG VALVE + WGO-2-14-HW	147
LB-1600-W	16"	LUG VALVE + WGO-3-16/18-HW	230
LB-1800-W	18"	LUG VALVE + WGO-3-16/18-HW	290

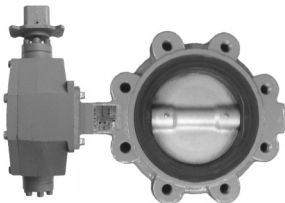
SEE PAGE 14 FOR VSE (VALVE STEM EXTENSIONS)

LUG STYLE VALVE – WORM GEAR OPERATED Buried Service



LB-0200-WBS	2"	LUG VALVE + WGO-0-02/05-BS	18
LB-0250-WBS	2.5"	LUG VALVE + WGO-0-02/05-BS	19
LB-0300-WBS	3"	LUG VALVE + WGO-0-02/05-BS	20
LB-0400-WBS	4"	LUG VALVE + WGO-0-02/05-BS	26
LB-0500-WBS	5"	LUG VALVE + WGO-0-02/05-BS	33
LB-0600-WBS	6"	LUG VALVE + WGO-1-06/08-BS	44
LB-0800-WBS	8"	LUG VALVE + WGO-1-06/08-BS	52
LB-1000-WBS	10"	LUG VALVE + WGO-1-10/12-BS	76
LB-1200-WBS	12"	LUG VALVE + WGO-1-10/12-BS	105
LB-1400-WBS	14"	LUG VALVE + WGO-2-14-BS	147
LB-1600-WBS	16"	LUG VALVE + WGO-3-16/18-BS	230
LB-1800-WBS	18"	LUG VALVE + WGO-3-16/18-BS	290

LUG STYLE VALVE – Traveling Nut Operated Buried Service



LB-0200-TNO-BS	2"	LUG VALVE + TNO-1-02/05-BS	22
LB-0250-TNO-BS	2.5"	LUG VALVE + TNO-1-02/05-BS	23
LB-0300-TNO-BS	3"	LUG VALVE + TNO-1-02/05-BS	24
LB-0400-TNO-BS	4"	LUG VALVE + TNO-1-02/05-BS	33
LB-0500-TNO-BS	5"	LUG VALVE + TNO-1-02/05-BS	40
LB-0600-TNO-BS	6"	LUG VALVE + TNO-2-06/08-BS	62
LB-0800-TNO-BS	8"	LUG VALVE + TNO-2-06/08-BS	72
LB-1000-TNO-BS	10"	LUG VALVE + TNO-2-10/12-BS	96
LB-1200-TNO-BS	12"	LUG VALVE + TNO-2-10/12-BS	127
LB-1400-TNO-BS	14"	LUG VALVE + TNO-2-14-BS	164
LB-1600-TNO-BS	16"	LUG VALVE + TNO-3-16/18-BS	254
LB-1800-TNO-BS	18"	LUG VALVE + TNO-3-16/18-BS	314

20"-48" U Body valves available in Flange and Lug style

Call us for more information and pricing!

OM series high quality electric actuators on **TUF-SKIN VALVES!**

We are stocking OM series actuators. Standard features include:
NEMA-4X enclosure, position indicator on top, clutch free manual override with hand wheel,
high alloy steel gear trains, and space heater with thermostat to prevent condensation.
Modulating controllers, local control units, and other options are available.

PART# DESCRIPTION BUTTERFLY VALVES + OM ELECTRIC ACTUATORS



				<u>sec to open</u>	<u>LBS</u>
B-0200-OM1	2"	WAFER BFV + 120VAC OM1	12	15	
B-0250-OM1	2.5"	WAFER BFV + 120VAC OM1	12	16	
B-0300-OM1	3"	WAFER BFV + 120VAC OM1	12	17	
B-0400-OM2	4"	WAFER BFV + 120VAC OM2	15	39	
B-0500-OM2	5"	WAFER BFV + 120VAC OM2	15	42	
B-0600-OM3	6"	WAFER BFV + 120VAC OM3	22	59	
B-0800-OM3	8"	WAFER BFV + 120VAC OM3	22	68	
B-1000-OM4	10"	WAFER BFV + 120VAC OM4	16	90	
B-1200-OM4	12"	WAFER BFV + 120VAC OM4	16	105	
B-1400-OM5	14"	WAFER BFV + 120VAC OM5	22	150	
B-1600-OM7	16"	WAFER BFV + 120VAC OM7	46	250	
B-1800-OM7	18"	WAFER BFV + 120VAC OM7	46	295	
B-2000-OM9	20"	WAFER BFV + 120VAC OM9	58	502	
B-2400-OM9	24"	WAFER BFV + 120VAC OM9	58	632	



LB-0200-OM1	2"	LUG BFV + 120VAC OM1	12	16	
LB-0250-OM1	2.5"	LUG BFV + 120VAC OM1	12	17	
LB-0300-OM1	3"	LUG BFV + 120VAC OM1	12	18	
LB-0400-OM2	4"	LUG BFV + 120VAC OM2	15	43	
LB-0500-OM2	5"	LUG BFV + 120VAC OM2	15	49	
LB-0600-OM3	6"	LUG BFV + 120VAC OM3	22	66	
LB-0800-OM3	8"	LUG BFV + 120VAC OM3	22	76	
LB-1000-OM4	10"	LUG BFV + 120VAC OM4	16	104	
LB-1200-OM4	12"	LUG BFV + 120VAC OM4	16	133	
LB-1400-OM5	14"	LUG BFV + 120VAC OM5	22	175	
LB-1600-OM7	16"	LUG BFV + 120VAC OM7	46	290	
LB-1800-OM7	18"	LUG BFV + 120VAC OM7	46	345	

SEE PAGE 11 FOR RELAYS

MOUNTING KIT FOR OM SERIES ACTUATORS



Includes:
Mounting Bracket
Shaft Adapter
Hardware

OM1-K2-3	Mounting kit only for OM1 on 2"-3"
OM2-K2-5	Mounting kit only for OM2/3 on 2"-5"
OM3-K6-8	Mounting kit only for OM3 on 6"-8"
OM4-K10-12	Mounting kit only for OM4/5 on 10"-12"
OM5-K14	Mounting kit only for OM5 on 14"
OM7-K16-18	Mounting kit only for OM7 on 16"-18"
OM9-K20	Mounting kit only for OM9 on 20"
OM9-K24	Mounting kit only for OM9 on 24"

OM SERIES ELECTRICAL ACTUATORS ONLY



		<u>amps @LR</u>	<u>sec to 90°</u>	<u>LBS</u>
OM1	FOR 2" - 3"	0.7	12	5
OM2	FOR 2" - 5"	1.6	15	25
OM3	FOR 6" - 8"	1.6	22	25
OM4	FOR 10" - 12"	3.6	16	45
OM5	FOR 14"	3.6	22	45
OM7	FOR 16"-18"	9.0	46	71
OM9	FOR 20"-24"	5.9	58	157

RELAYS & CONTROLS FOR OM & MAR ELECTRICAL ACTUATORS



RELAY-120VAC
RELAY-24VAC
RELAY-12VDC

120VAC RELAY FOR 120VAC RCS
24VAC RELAY FOR 120VAC RCS
12VDC RELAY FOR 120VAC RCS

Other relay voltages available.
Call for price & availability.

RELAY-KIT-OM

KIT ONLY TO INSTALL RELAY INSIDE OM SERIES

RELAY-KIT-MAR

KIT ONLY TO INSTALL RELAY INSIDE MAR SERIES

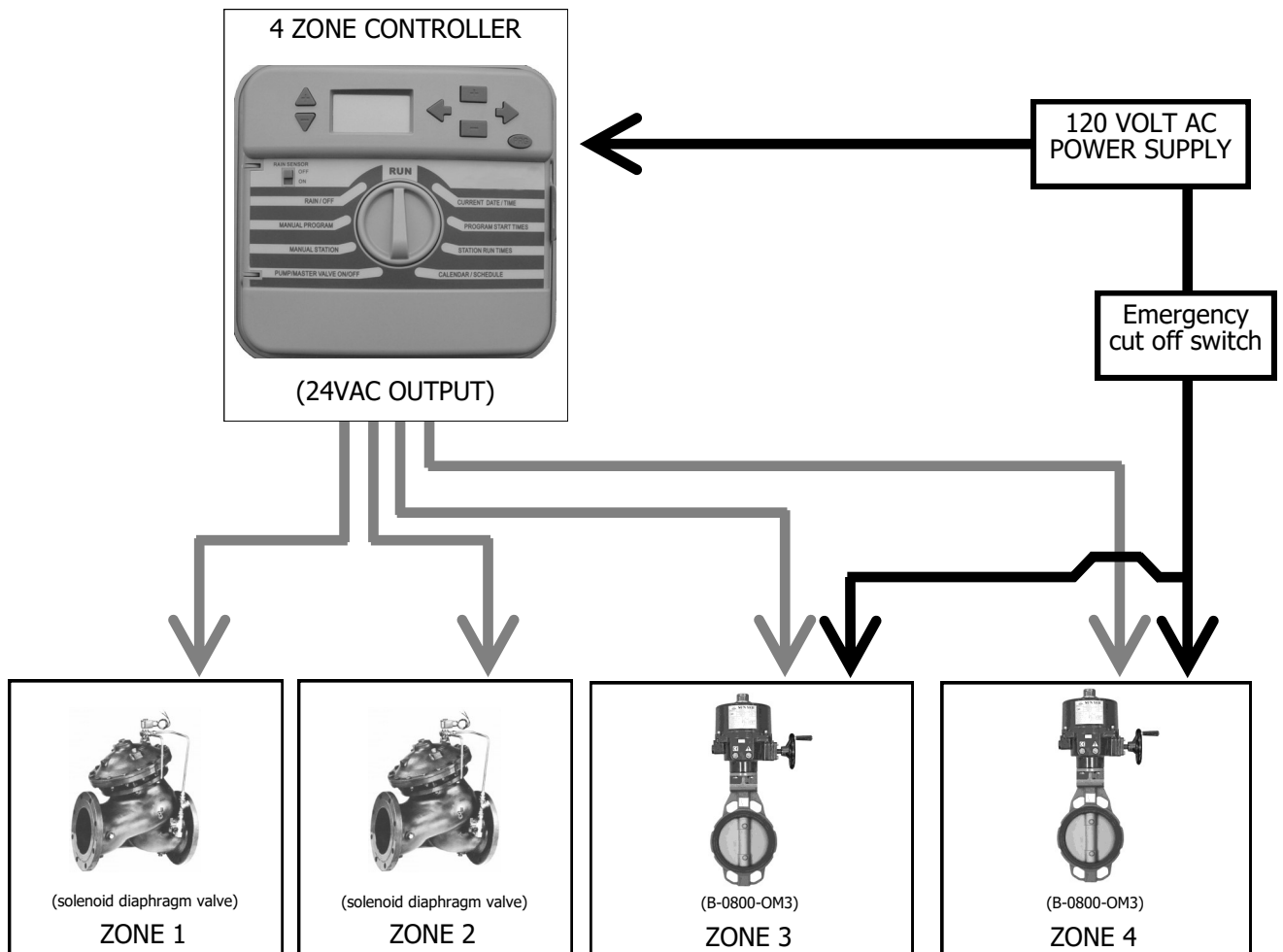
Mounts relay inside of actuator. Specify if valve is to be normally open or normally closed.

OMP-MC

MODULATING CONTROLLER FOR OM ACTUATORS
Input: 4-20mA, 1-5V, 2-10V
Output: 4-20mA, 2-10V

EXAMPLE FOR RELAY USE WITH ELECTRIC ACTUATORS

When a 24 Volt AC relay is installed inside the 120VAC actuator, the MGO butterfly valve can be controlled by a standard irrigation controller in the same manner as a solenoid valve. Note that in addition to the control voltage, you must also run the 120 Volt AC power supply to the actuator. The actuator can be set up for normally open or normally closed operation.



Please call for wiring diagrams or more information regarding use of relays.

Easytork Fail Safe pneumatic actuators on ***TUF-SKIN VALVES!***

This is a vane style pneumatic actuator that has an extra internal air reservoir to store pressurized air. If the air supply is lost, the actuator uses the stored air to return the valve to the fail safe position. The valve can be set for normally open or normally closed operation.

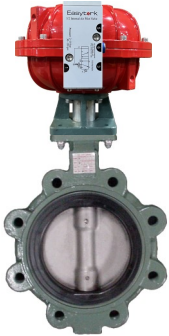
To see a video of how these operate, visit our website: www.universalsales.biz

PART#	DESCRIPTION
BUTTERFLY VALVES + EVA PNEUMATIC FAIL SAFE ACTUATORS	

All below are sized to function with 80psi of air supply to the pneumatic actuator.
Solenoid or Pilot Valve required (sold separately).



B-0200-EVA05	2" WAFER BFV + EVA05 PNEUMATIC FAIL SAFE
B-0250-EVA05	2.5" WAFER BFV + EVA05 PNEUMATIC FAIL SAFE
B-0300-EVA05	3" WAFER BFV + EVA05 PNEUMATIC FAIL SAFE
B-0400-EVA05	4" WAFER BFV + EVA05 PNEUMATIC FAIL SAFE
B-0500-EVA07	5" WAFER BFV + EVA07 PNEUMATIC FAIL SAFE
B-0600-EVA07	6" WAFER BFV + EVA07 PNEUMATIC FAIL SAFE
B-0800-EVA10	8" WAFER BFV + EVA10 PNEUMATIC FAIL SAFE
B-1000-EVA10	10" WAFER BFV + EVA10 PNEUMATIC FAIL SAFE
B-1200-EVA12	12" WAFER BFV + EVA12 PNEUMATIC FAIL SAFE
B-1400-EVA12	14" WAFER BFV + EVA12 PNEUMATIC FAIL SAFE



LB-0200-EVA05	2" LUG BFV + EVA05 PNEUMATIC FAIL SAFE
LB-0250-EVA05	2.5" LUG BFV + EVA05 PNEUMATIC FAIL SAFE
LB-0300-EVA05	3" LUG BFV + EVA05 PNEUMATIC FAIL SAFE
LB-0400-EVA05	4" LUG BFV + EVA05 PNEUMATIC FAIL SAFE
LB-0500-EVA07	5" LUG BFV + EVA07 PNEUMATIC FAIL SAFE
LB-0600-EVA07	6" LUG BFV + EVA07 PNEUMATIC FAIL SAFE
LB-0800-EVA10	8" LUG BFV + EVA10 PNEUMATIC FAIL SAFE
LB-1000-EVA10	10" LUG BFV + EVA10 PNEUMATIC FAIL SAFE
LB-1200-EVA12	12" LUG BFV + EVA12 PNEUMATIC FAIL SAFE
LB-1400-EVA12	14" LUG BFV + EVA12 PNEUMATIC FAIL SAFE

EVA ACCESSORIES



EVA PV	PILOT VALVE
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EVA SOL 110VAC	SOLENOID, 110VAC (other voltage options available)
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Tuf-Skin Valve operator, bushing, and VSE chart. Version 1-1-2024					
VALVE part number	OPERATOR part number	OPERATOR BUSHING	VSE MODEL	VSE STUB SHAFT	VSE BUSHING
B-0200-L	LHO-05		VSE-0	VSE-0-STUB-05 & LHO-10	BS-VSE-0-02
B-0200-SNO	SNO-1	BS-VSE-0-02			
B-0200-TNO-BS	TNO-1-02/05-BS	BS-WGO-0-02		VSE-0-STUB-05	
B-0200-TNO-HW	TNO-1-02/05-HW				
B-0200-W	WGO-0-02/05-HW				
B-0200-WBS	WGO-0-02/05-BS				
B-0250-L	LHO-05		VSE-0	VSE-0-STUB-05 & LHO-10	BS-VSE-0-02
B-0250-SNO	SNO-1	BS-VSE-0-02			
B-0250-TNO-BS	TNO-1-02/05-BS	BS-WGO-0-02		VSE-0-STUB-05	
B-0250-TNO-HW	TNO-1-02/05-HW				
B-0250-W	WGO-0-02/05-HW				
B-0250-WBS	WGO-0-02/05-BS				
B-0300-L	LHO-05		VSE-0	VSE-0-STUB-05 & LHO-10	BS-VSE-0-02
B-0300-SNO	SNO-1	BS-VSE-0-02			
B-0300-TNO-BS	TNO-1-02/05-BS	BS-WGO-0-02		VSE-0-STUB-05	
B-0300-TNO-HW	TNO-1-02/05-HW				
B-0300-W	WGO-0-02/05-HW				
B-0300-WBS	WGO-0-02/05-BS				
B-0400-L	LHO-10		VSE-0	VSE-0-STUB-05	
B-0400-SNO	SNO-1				
B-0400-TNO-BS	TNO-1-02/05-BS				
B-0400-TNO-HW	TNO-1-02/05-HW				
B-0400-W	WGO-0-02/05-HW				
B-0400-WBS	WGO-0-02/05-BS				
B-0500-L	LHO-10		VSE-0	VSE-0-STUB-05	
B-0500-SNO	SNO-1				
B-0500-TNO-BS	TNO-1-02/05-BS				
B-0500-TNO-HW	TNO-1-02/05-HW				
B-0500-W	WGO-0-02/05-HW				
B-0500-WBS	WGO-0-02/05-BS				
B-0600-L	LHO-15	BS-LHO-15-06	VSE-1	VSE-1-STUB-12	use operator bushing
B-0600-SNO	SNO-2				
B-0600-TNO-BS	TNO-2-06/08-BS	BS-WGO-1-06		VSE-1-STUB-08	BS-LHO-15-06
B-0600-TNO-HW	TNO-2-06/08-HW				
B-0600-W	WGO-1-06/08-HW				
B-0600-WBS	WGO-1-06/08-BS				
B-0800-L	LHO-15	BS-LHO-15-08	VSE-1	VSE-1-STUB-12	use operator bushing
B-0800-SNO	SNO-2				
B-0800-TNO-BS	TNO-2-06/08-BS			VSE-1-STUB-08	BS-LHO-15-08
B-0800-TNO-HW	TNO-2-06/08-HW				
B-0800-W	WGO-1-06/08-HW				
B-0800-WBS	WGO-1-06/08-BS				
B-1000-L	LHO-15	BS-LHO-15-10	VSE-1	VSE-1-STUB-12	use operator bushing
B-1000-TNO-BS	TNO-2-10/12-BS	BS-WGO-1-10			BS-LHO-15-10
B-1000-TNO-HW	TNO-2-10/12-HW				
B-1000-W	WGO-1-10/12-HW				
B-1000-WBS	WGO-1-10/12-BS				
B-1200-L	LHO-15		VSE-1	VSE-1-STUB-12	
B-1200-TNO-BS	TNO-2-10/12-BS				
B-1200-TNO-HW	TNO-2-10/12-HW				
B-1200-W	WGO-1-10/12-HW				
B-1200-WBS	WGO-1-10/12-BS				
14" and larger butterfly valves and VSE do not have any bushings.					

PART# VALVE STEM EXTENSIONS

DESCRIPTION

LBS.



VSE-0-24	24" Extension for 2"-5" BFV	7
VSE-0-36	36" Extension for 2"-5" BFV	10
VSE-0-48	48" Extension for 2"-5" BFV	13
VSE-0-60	60" Extension for 2"-5" BFV	16
VSE-0-72	72" Extension for 2"-5" BFV	19
VSE-1-12	12" Extension for 6"-12" BFV	7
VSE-1-24	24" Extension for 6"-12" BFV	10
VSE-1-36	36" Extension for 6"-12" BFV	13
VSE-1-48	48" Extension for 6"-12" BFV	16
VSE-1-60	60" Extension for 6"-12" BFV	20
VSE-1-72	72" Extension for 6"-12" BFV	24
VSE-2-24	24" Extension for 14" BFV	15
VSE-2-36	36" Extension for 14" BFV	20
VSE-2-48	48" Extension for 14" BFV	25
VSE-2-60	60" Extension for 14" BFV	30
VSE-2-72	72" Extension for 14" BFV	35
VSE-3-24	24" Extension for 16"-18" BFV	22
VSE-3-36	36" Extension for 16"-18" BFV	30
VSE-3-48	48" Extension for 16"-18" BFV	38
VSE-3-60	60" Extension for 16"-18" BFV	46
VSE-3-72	72" Extension for 16"-18" BFV	54
VSE-5-36	36" Extension for 20" BFV	40
VSE-5-48	48" Extension for 20" BFV	50
VSE-5-60	60" Extension for 20" BFV	60
VSE-5-72	72" Extension for 20" BFV	70
VSE-6-36	36" Extension for 24" BFV	50
VSE-6-48	48" Extension for 24" BFV	65
VSE-6-60	60" Extension for 24" BFV	80
VSE-6-72	72" Extension for 24" BFV	95
VSE-7	Extension for 30" BFV	
VSE-8	Extension for 36" BFV	
VSE-9	Extension for 42" BFV	

DESIGNATE VALVE SIZE & OPERATOR TYPE WHEN ORDERING.
BUSHINGS, KEYS, AND HARDWARE WILL BE INCLUDED.

EXTENSIONS ARE INSTALLED ON VALVES AT NO CHARGE.

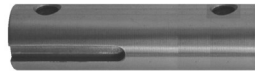
CUSTOM LENGTHS CAN BE MANUFACTURED
ON A PER ORDER BASIS.
CALL FOR PRICING AND AVAILABILITY.

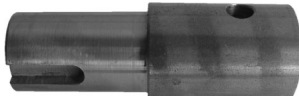
PART# VALVE STEM EXTENSION PARTS

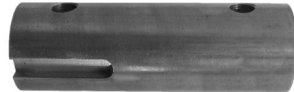
DESCRIPTION

	BS-VSE-0-02	Bushing for 2"-3" BFV (1/2" I.D. X 3/4" O.D.)
	BS-VSE-0-04	Bushing for old VSE-0 (3/4" I.D. X 7/8" O.D.)
	GP-10x45	Grooved Pin for VSE 1 (10mm x 45mm)

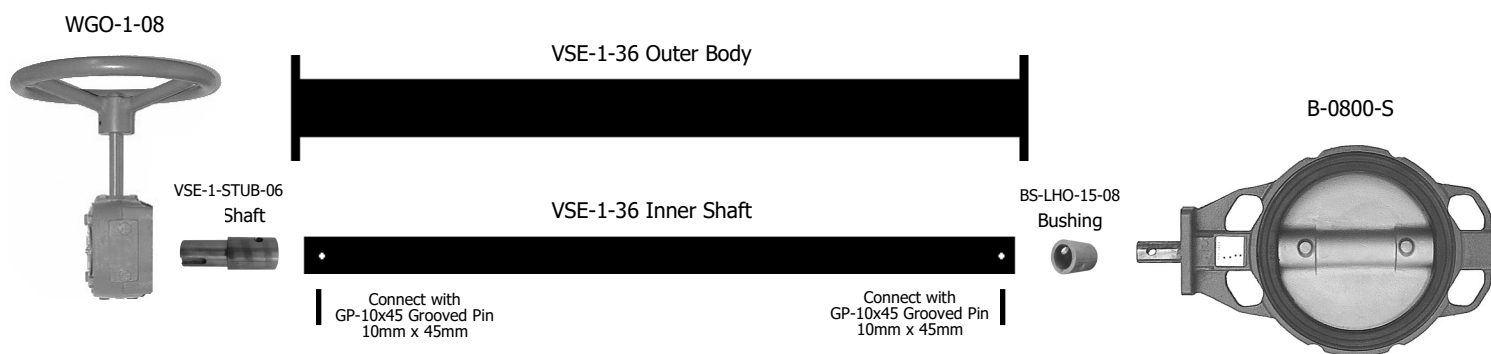
The VSE-0 inner shaft changed from 7/8" I.D. to 3/4" I.D. in 2019. The new 3/4" inner shaft uses the new 3/4" straight stub shaft below:

VSE-0-STUB-05		New style straight 3/4" x 3/4" shaft
3/4"		for 4"-5" LHO 10
		for 2"-5" WGO 0 (remove bushing in WGO & use BS-VSE-0-02 on 2"-3" valve stem)
		for 2"-5" TNO 1 (remove bushing in TNO & use BS-VSE-0-02 on 2"-3" valve stem)
(3/4" x 3/4" straight)		

VSE-1-STUB-08		for 6"	WGO 1	(remove bushing in WGO & use BS-LHO-15-06 on valve stem)
1 1/8"		for 6"	TNO 2	(remove bushing in TNO & use BS-LHO-15-06 on valve stem)
		for 8"	WGO 1	(use BS-LHO-15-08 on valve stem)
		for 8"	TNO 2	(use BS-LHO-15-08 on valve stem)
		(1-1/8" X 1-3/8" step down)		

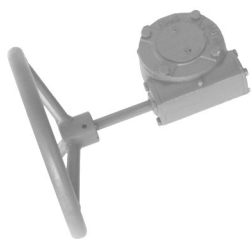
VSE-1-STUB-12		for 10" WGO 1	(remove bushing in WGO & use BS-LHO-15-10 on valve stem)
1 3/8"		for 10" TNO 2	(remove bushing in TNO & use BS-LHO-15-10 on valve stem)
		for 12" WGO 1	
		for 12" TNO 2	
		for 6" LHO 15	(use LHO bushing on valve stem)
		for 8" LHO 15	(use LHO bushing on valve stem)
		for 10" LHO 15	(use LHO bushing on valve stem)
		for 12" LHO 15	
(1-3/8" X 1-3/8" straight)			

Exploded view assembly example: VSE-1-36 on B-0800-W



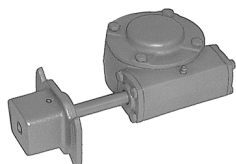
PART #	DESCRIPTION
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WORM GEAR OPERATORS – Above Ground with Hand Wheel



WGO-0-02/05-HW WGO-1-06/08-HW WGO-1-10/12-HW WGO-2-14-HW WGO-3-16/18-HW WGO-4-20-HW WGO-4-24-HW	WGO for 2"-5" with 6" HW WGO for 6"-8" with 8" HW WGO for 10"-12" with 12" HW WGO for 14" with 12" HW WGO for 16"-18" with 14" HW WGO for 20" with 18" HW WGO for 24" with 18" HW
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WORM GEAR OPERATORS – Buried Service



WGO-0-02/05-BS WGO-1-06/08-BS WGO-1-10/12-BS WGO-2-14-BS WGO-3-16/18-BS WGO-4-20-BS WGO-4-24-BS	WGO for 2" - 5" with 2" square nut WGO for 6" - 8" with 2" square nut WGO for 10" - 12" with 2" square nut WGO for 14" with 2" square nut WGO for 16" - 18" with 2" square nut WGO for 20" with 2" square nut WGO for 24" with 2" square nut
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TRAVELING NUT OPERATORS – with Hand Wheel and Indicator Plate



TNO-1-02/05-HW TNO-2-06/08-HW TNO-2-10/12-HW TNO-2-14-HW TNO-3-16/18-HW	TNO for 2"-5" with 6" HW TNO for 6" - 8" with 10" HW TNO for 10" - 12" with 12" HW TNO for 14" with 12" HW TNO for 16"-18" with 14" HW
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TRAVELING NUT OPERATORS – with Buried Service Plate and 2" Nut



TNO-1-02/05-BS TNO-2-06/08-BS TNO-2-10/12-BS TNO-2-14-BS TNO-3-16/18-BS	TNO for 2"-5" with 2" square nut TNO for 6" - 8" with 2" square nut TNO for 10" - 12" with 2" square nut TNO for 14" with 2" square nut TNO for 16"-18" with 2" square nut
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TRAVELING NUT OPERATOR PARTS - Buried Service



TNO-1-BSP TNO-2-BSP TNO-3-BSP	buried service plate for TNO-1 buried service plate for TNO-2 buried service plate for TNO-3
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SN-0 SN-2	2" square nut for TNO-1 2" square nut for TNO-2 & TNO-3
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TRAVELING NUT OPERATOR PARTS - Above Ground Service



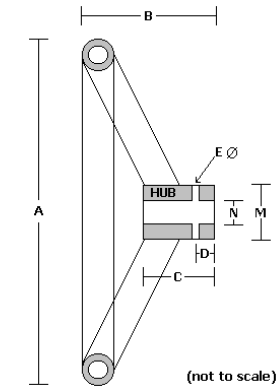
TNO-1-HC TNO-2-HC TNO-3-HC	housing cover with oil seal for TNO-1 housing cover with oil seal for TNO-2 housing cover with oil seal for TNO-3
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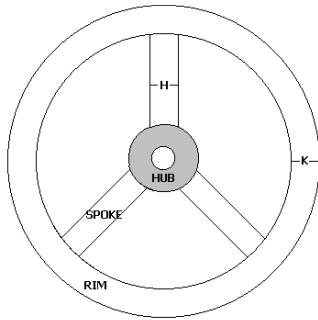
TNO-1-IP TNO-2-IP TNO-3-IP	indicator plate with screws for TNO-1 indicator plate with screws for TNO-2 indicator plate with screws for TNO-3
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PART# HAND WHEELS FOR WGO & TNO

DESCRIPTION

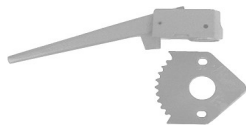


HW-06	6" for WGO-0 and TNO-1 on 2"-5"
HW-08	8" for WGO-1 on 6"-8"
HW-10	10" for TNO-2 on 6"-8"
HW-12	12" for WGO-1 and TNO-2 on 10"-12"
HW-12B	12" for WGO-2 on 14"
HW-14	14" for WGO-3 and TNO-3 on 16"-18"
HW-18	18" for WGO-4 on 20"-24"



PART #	A WHEEL DIAM	B TAPER LENGTH	C HUB LENGTH	D PIN HOLE POSITION	E PIN HOLE DIAM	H SPOKE TUBE DIAM	K RIM TUBE DIAM	M HUB OUTSIDE DIAM	N HUB INSIDE BORE DIAM	# NUMBER OF SPOKES
HW-06	6"	2.5	1.6	0.51	6mm	0.68	0.85	1.25	0.59	3
HW-08	8"	2.5	1.6	0.47	6mm	0.68	0.85	1.25	0.59	3
HW-10	10"	2.8	1.8	0.51	6mm	0.68	0.85	1.65	0.59	3
HW-12	12"	3.1	2.0	0.51	6mm	0.85	1.07	1.65	0.59	3
HW-12B	12"	3.1	2.0	0.63	8mm	0.85	1.07	1.65	0.75	3
HW-14	14"	3.1	2.0	0.63	8mm	0.85	1.07	1.65	0.75	3
HW-18	18"	3.1	2.0	0.63	8mm	0.85	1.07	2.25	1.02	3

LEVER HANDLE OPERATORS



LHO-05	Lever Handle Operator only for 2"-3"
LHO-10	Lever Handle Operator only for 4"-5"
LHO-15	Lever Handle Operator only for 6"-12"

LEVER HANDLE OPERATOR PARTS



BS-LHO-15-06	Lever Handle Operator Bushing for 6" BFV
BS-LHO-15-08	Lever Handle Operator Bushing for 8" BFV
BS-LHO-15-10	Lever Handle Operator Bushing for 10" BFV



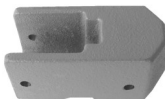
LHO-05-HANDLE	Handle for LHO-05 (built in pivot block)
LHO-10-HANDLE	Handle for LHO-10 (built in pivot block)



LHO-15-HANDLE	Rod Handle for LHO-15
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PB-LHO-15	Pivot Block for LHO-15
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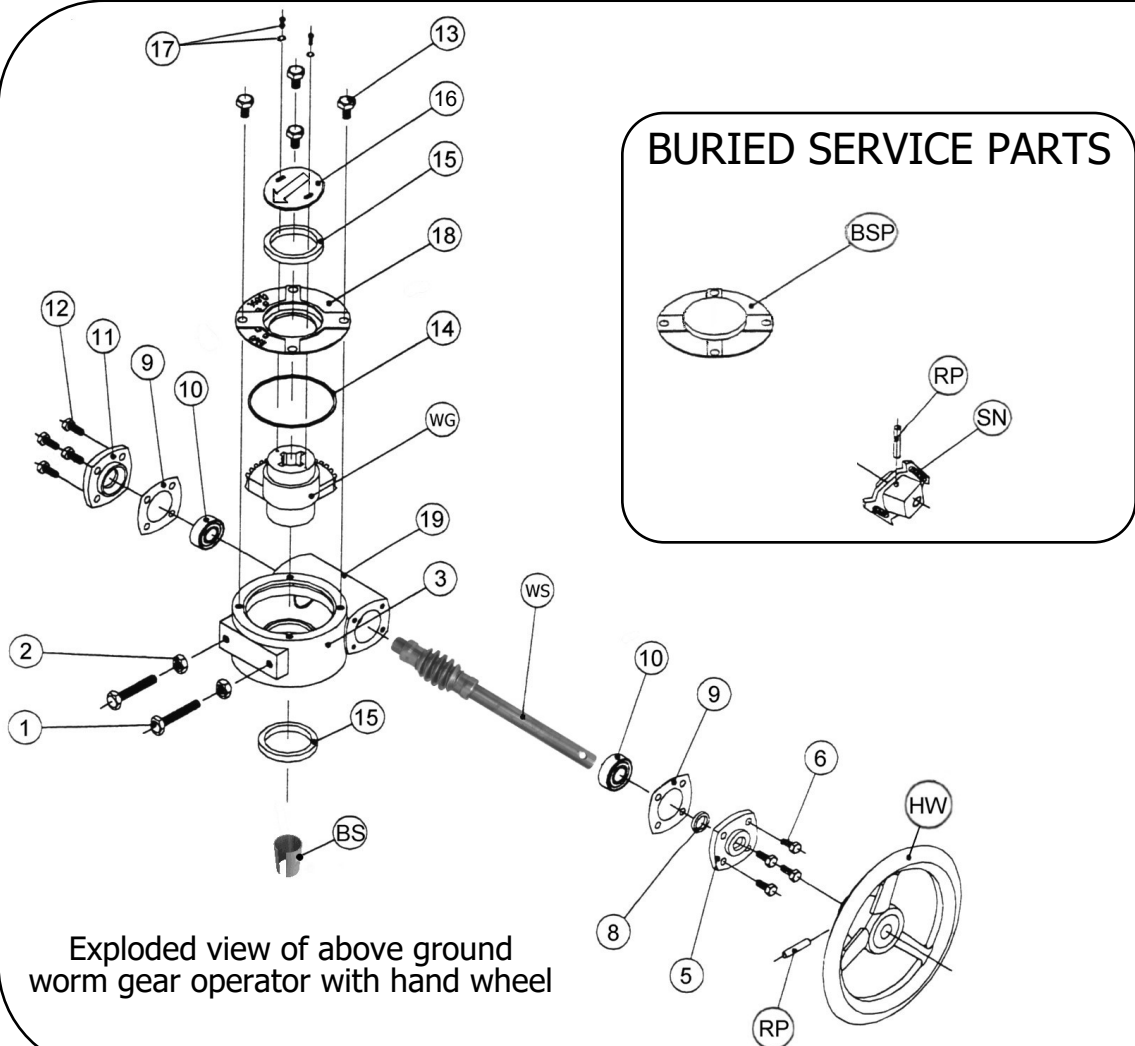
PBB-LHO-05	Pivot Block Body for LHO-05
PBB-LHO-10	Pivot Block Body for LHO-10
PBB-LHO-15	Pivot Block Body for LHO-15

SQUARE NUT OPERATORS



SNO-1	Square Nut Operator for 2"-5" BFV (SNO-1-NUT has 3/4" bore, 6mm pin)
SNO-2	Square Nut Operator for 6"-8" BFV (SNO-2-NUT has 1-3/8" bore, 10mm pin)

WORM GEAR OPERATOR REPLACEMENT PARTS



CONVERTING ABOVE GROUND WORM GEAR TO BURIED SERVICE

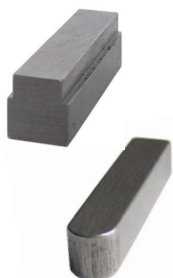
REMOVE:

Indicator Plate Screws (17)
Indicator Plate (16)
Oil Seal (15)
Housing Cover (18)
Hand Wheel (HW)

ADD:

BURIED SERVICE PLATE (BSP)
SQUARE NUT (SN)

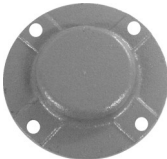
PART#	SIZE	DESCRIPTION
KEY STOCK FOR WORM GEAR OPERATORS		



KEY-03	3/16" to 1/8" step down	FOR WGO-0 (2"-3" BFV)
KEY-04	3/16" square	FOR WGO-0 (4"-5" BFV)
KEY-06	5/16" to 1/4" step down	FOR WGO-1 (6" BFV)
KEY-08	5/16" square	FOR WGO-1 (8" & 12" BFV)
KEY-10	5/16" x 3/8" rectangle	FOR WGO-1 (10" BFV)
KEY-14	3/8" square	FOR WGO-2 & WGO-3 (14"-18" BFV)
KEY-20	1/2" square	FOR WGO-4 (20"-24" BFV)

PART # DESCRIPTION

WORM GEAR OPERATOR REPLACEMENT PARTS

	BS-WGO-0-02	Bushing for WGO-0-02/05 (2" - 3" BFV)
	BS-WGO-1-06	Bushing for WGO-1-06/08 (6" BFV)
	BS-WGO-1-10	Bushing for WGO-1-10/12 (10" BFV)
	BSP-0	Buried Service Plate for WGO-0
	BSP-1	Buried Service Plate for WGO-1
	BSP-2	Buried Service Plate for WGO-2
	BSP-3	Buried Service Plate for WGO-3
	BSP-4	Buried Service Plate for WGO-4
	SN-0	2" Square Nut for WGO-0 & WGO-1 (19/32" bore, 6mm pin)
	SN-2	2" Square Nut for WGO-2 & WGO-3 (3/4" bore, 8mm pin)
	SN-4	2" Square Nut for WGO-4 (1" bore, 10mm pin)
	WG-0	Worm Gear segment for WGO-0 (2"-5" BFV) (3/4" bore)
	WG-1-08	Worm Gear segment for WGO-1 (6"-8" BFV) (1-1/8" bore)
	WG-1-12	Worm Gear segment for WGO-1 (10"-12" BFV) (1-3/8" bore)
	WG-2	Worm Gear segment for WGO-2 (14" BFV) (1-7/16" bore)
	WG-3	Worm Gear segment for WGO-3 (16"-18" BFV) (1-5/8" bore)
	WG-4-20	Worm Gear segment for WGO-4 (20" BFV) (2-1/2" bore)
	WG-4-24	Worm Gear segment for WGO-4 (24" BFV) (3" bore)
	WS-0	Worm Shaft for WGO-0
	WS-1	Worm Shaft for WGO-1
	WS-2	Worm Shaft for WGO-2
	WS-3	Worm Shaft for WGO-3
	WS-4	Worm Shaft for WGO-4

ITEM #	DESCRIPTION	PART # (replace X with WGO model#)	WORM GEAR MODEL NUMBER & TUF-SKIN VALVE SIZE				
			WGO-0 2"-5"	WGO-1 6"-12"	WGO-2 14"	WGO-3 16"-18"	WGO-4 20"-24"
01	ADJUSTING SCREW						
02	ADJUSTING SCREW LOCK NUT						
03	HOUSING						
05	INPUT SHAFT COVER						
06	INPUT SHAFT COVER SCREW						
08	OIL SEAL FOR WORM SHAFT						
09	GASKET						
10	BALL BEARING						
11	END COVER						
12	END COVER SCREW						
13	HOUSING COVER SCREW						
14	O-RING FOR HOUSING COVER						
15	OIL SEAL FOR WORM GEAR						
16	INDICATOR PLATE						
17	INDICATOR PLATE SCREW						
18	HOUSING COVER						
19	GREASE FITTING						
Part# example: TWGO-1-10 = BALL BEARING for WGO-1							

UNIVERSAL SALES TUF-SKIN VALVES

PART#	DESCRIPTION	LBS.
CHECK VALVES – Wafer Style		



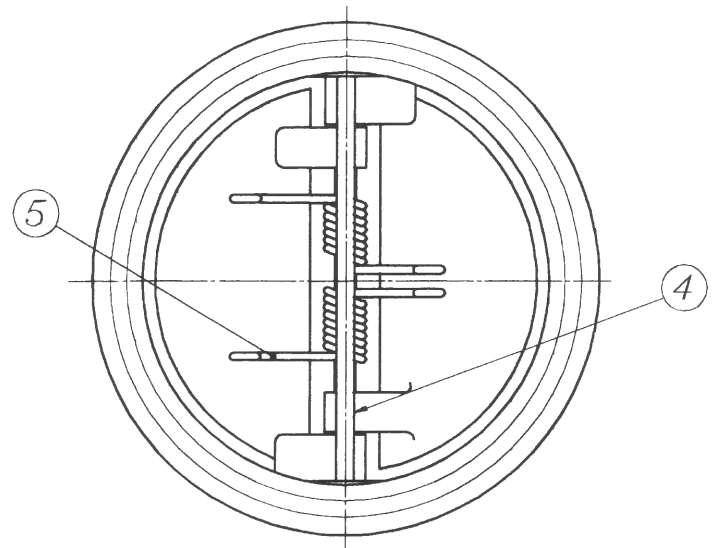
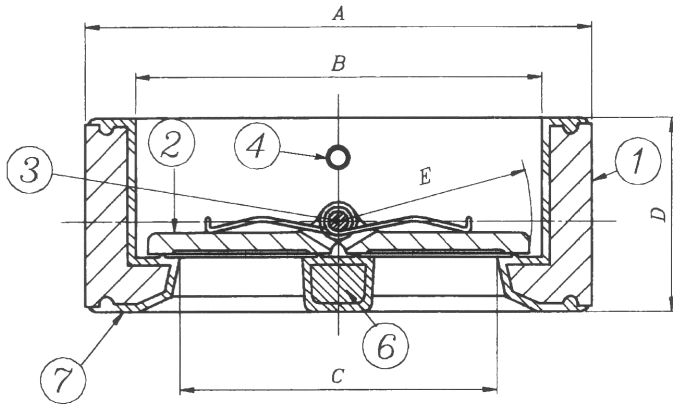
CV-0200	2" Non-Slam Wafer Check	3
CV-0250	2.5" Non-Slam Wafer Check	4
CV-0300	3" Non-Slam Wafer Check	6
CV-0400	4" Non-Slam Wafer Check	11
CV-0500	5" Non-Slam Wafer Check	14
CV-0600	6" Non-Slam Wafer Check	19
CV-0800	8" Non-Slam Wafer Check	32
CV-1000	10" Non-Slam Wafer Check	53
CV-1200	12" Non-Slam Wafer Check	96
CV-1400	14" Non-Slam Wafer Check	121
CV-1600	16" Non-Slam Wafer Check	200
CV-1800	18" Non-Slam Wafer Check	300
CV-2000	20" Non-Slam Wafer Check	400
CV-2400	24" Non-Slam Wafer Check	500

CHECK VALVE SPRING SETS



CV-0200-SP	Stainless Spring for 2" check valve
CV-0250-SP	Stainless Spring for 2.5" check valve
CV-0300-SP	Stainless Spring for 3" check valve
CV-0400-SP	Stainless Spring for 4" check valve
CV-0500-SP	Stainless Spring for 5" check valve
CV-0600-SP	Stainless Spring for 6" check valve
CV-0800-SP	Set of 2 Stainless Springs for 8" check valve
CV-1000-SP	Set of 2 Stainless Springs for 10" check valve
CV-1200-SP	Set of 2 Stainless Springs for 12" check valve
CV-1400-SP	Set of 2 Stainless Springs for 14" check valve
CV-1600-SP	Set of 2 Stainless Springs for 16" check valve
CV-1800-SP	Set of 2 Stainless Springs for 18" check valve
CV-2000-SP	Set of 2 Stainless Springs for 20" check valve
CV-2400-SP	Set of 3 Stainless Springs for 24" check valve

CHECK VALVE SPECIFICATIONS – Wafer Style



CHECK VALVE DIMENSIONS					
PART #	A	B	C	D	E
CV-0200	3.78	2.68	1.65	2.13	1.30
CV-0250	4.13	3.03	1.91	2.13	1.42
CV-0300	5.04	3.54	2.56	2.13	1.73
CV-0400	6.46	4.57	3.46	2.52	2.13
CV-0500	7.36	5.15	4.29	2.72	2.60
CV-0600	8.23	6.65	5.39	3.25	3.19
CV-0800	10.55	8.82	7.40	3.78	4.21
CV-1000	12.91	10.94	9.41	4.37	5.24
CV-1200	15.28	12.76	10.87	5.28	6.18
CV-1400	16.54	14.13	12.20	6.06	6.81
CV-1600	19.69	16.54	14.13	6.54	8.03
CV-1800	21.20	18.20	16.00	7.37	8.12
CV-2000	23.44	20.17	18.00	8.61	9.53
CV-2400	27.19	24.19	22.00	8.61	11.62

CHECK VALVE PARTS			
ITEM #	DESCRIPTION	MATERIAL	PART #
1	Body	EPOXY COATED IRON	CV-XXXX-BDY
2	Plate (set of 2)	STAINLESS STEEL	CV-XXXX-PLT
3	Hinge Pin	STAINLESS STEEL	CV-XXXX-HPN
4	Stop Pin	STAINLESS STEEL	CV-XXXX-SPN
	Rubber Sleeve	BUNA-N	CV-XXXX-RUB
5	Spring (set)	STAINLESS STEEL	CV-XXXX-SP
6	Stop Post (on body)	BUNA-N COATED IRON	(on body)
7	Seat (on body)	BUNA-N	(on body)
-	Washers on Hinge Pin	TEFLON	CV-XXXX-WSH
-	Pin Retainer Screws	STEEL	CV-XXXX-RTR
For part numbers, replace the XXXX with the CV model number.			
Example: CV-0600-PLT = set of plates for CV-0600			

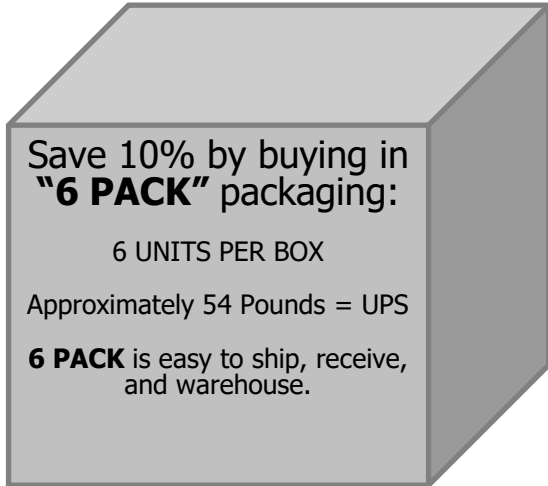
FEATURES

- WAFER DESIGN:** Shorter face to face dimension, lighter weight, easier installation, and greater strength than swing check valves. 150 PSI rating.
- SPRING CLOSING:** Quick & silent spring action closes plates before pressure reversal takes place, preventing slamming and water hammer. Tempered 316 stainless steel torsion springs are standard.
- STAINLESS PLATES:** Standard on all sizes.
- RESILIENT SEAT:** Buna-N elastomer bonded to valve body has high tensile strength, low compression set, and good resistance to aging. Seat design incorporates integral flange gasket and abrasion protection for stop post.

PRIME PUMPS - 6"

"Little Sucker"

Heavy duty aluminum alloy prime pump
with steel support molded into diaphragm.
Includes durable 1" male pipe thread ball check.



PART#

DESCRIPTION

TS6	Complete 6" diameter prime pump
TS6-6PACK	6 pack of TS6 prime pumps
TS6-1	Top casting for TS6
TS6-2	Bottom casting for TS6
TS6-3	Handle for TS6 (one piece with fulcrum)
TS6-4*	1" male pipe thread ball check for TS6/TS9
TS6-5	Diaphragm for TS6
TS6-6	Stem for TS6
TS6-7*	Exhaust valve for TS6/TS9
TS6-8*	Handle pins with nuts for TS6/TS9 (set of 2)
TS6-10*	Hardware for exhaust valve & housing (set)

* = Also compatible with TS9 prime pump.

BV-0100*

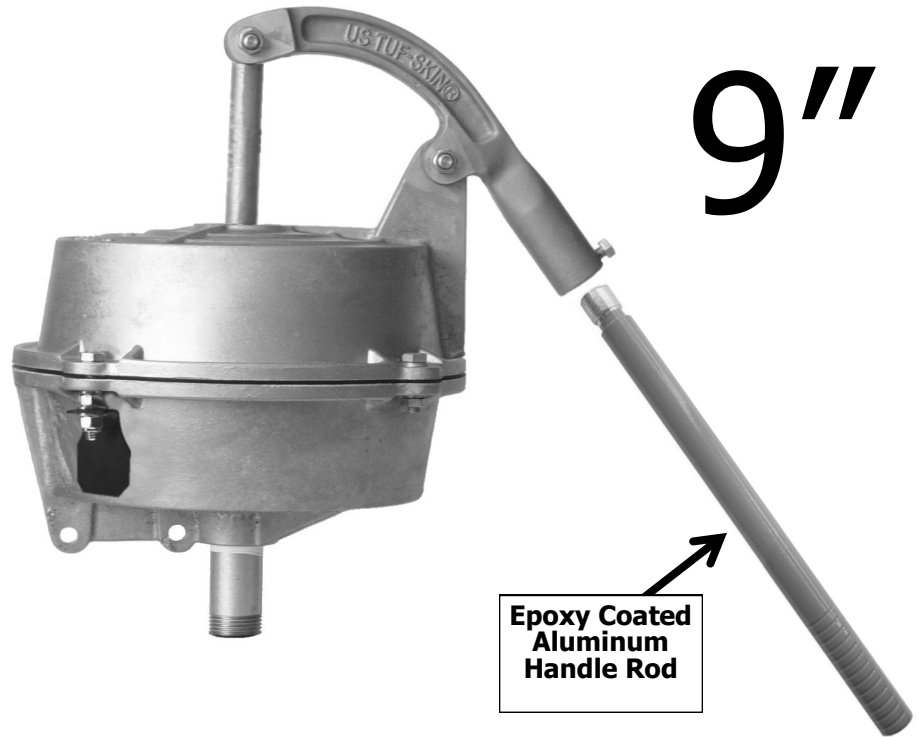
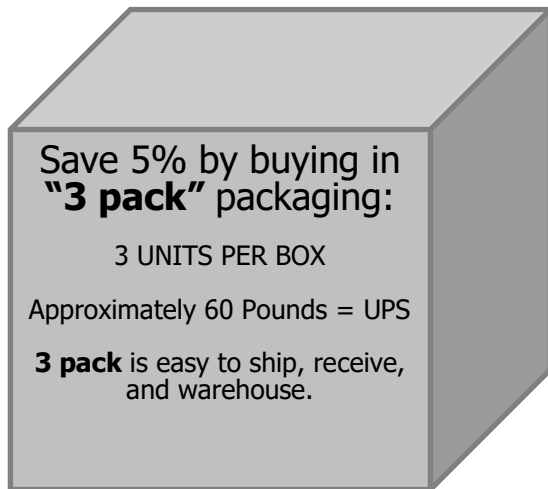
1" brass Ball Valve (install below ball check)



Tuf-Skin's unique
easy to install
diaphragm with
flanged o-ring lip



Same high quality and economical design as the 6" version,
with more volume for larger suction lines and faster priming.
125% larger diaphragm than 6" pumps!



PART#	DESCRIPTION
TS9	Complete 9" diameter prime pump
TS9-3PACK	3 pack of TS9 prime pumps
TS9-1	Top casting for TS9
TS9-2	Bottom casting for TS9
TS9-3	Fulcrum for TS9
TS9-9	Handle rod for TS9
TS6-4*	1" male pipe thread ball check for TS6/TS9
TS9-5	Diaphragm for TS9
TS9-6	Stem for TS9
TS6-7*	Exhaust valve for TS6/TS9
TS6-8*	Handle pins with nuts for TS6/TS9 (set of 2)
TS6-10*	Hardware for exhaust valve & housing (set)

* = Also compatible with TS6 prime pump.

BV-0100*



1" brass Ball Valve
(install below ball check)

1/2" PLATE FLANGES (O.D. TUBE SIZE)



PART #		I.D.	B.C.	# HOLES	BOLT	LBS
FLG 0200		2	4 3/4	4	5/8	3.5
FLG 0250		2 1/2	5 1/2	4	5/8	4.5
FLG 0300		3	6	4	5/8	5.3
FLG 0400		4	7 1/2	8	5/8	6.9
FLG 0500		5	8 1/2	8	3/4	8.0
FLG 0600		6	9 1/2	8	3/4	9.0
FLG 0800		8	11 3/4	8	3/4	12.6
FLG 1000		10	14 1/4	12	7/8	16.3
FLG 1200		12	17	12	7/8	22.5
FLG 1400		14	18 3/4	12	1	26.5
FLG 1600		16	21 1/4	16	1	31.0
FLG 1800		18	22 3/4	16	1	32.0

1/2" PLATE FLANGES (I.P.S. PIPE SIZE)



PART #		I.D.	B.C.	# HOLES	BOLT	LBS
FLG 0350		3 1/2	6	4	5/8	4.7
FLG 0450		4 1/2	7 1/2	8	5/8	6.4
FLG 0562		5 5/8	8 1/2	8	3/4	7.2
FLG 0662		6 5/8	9 1/2	8	3/4	8.4
FLG 0862		8 5/8	11 3/4	8	3/4	11.4
FLG 1075		10 3/4	14 1/4	12	7/8	14.6
FLG 1275		12 3/4	17	12	7/8	21.6

AWWA CLASS D PLATE FLANGES (I.P.S. PIPE SIZE)



PART #		THICK	I.D.	B.C.	# HOLES	BOLT	LBS
FLG 0350 D		5/8	3.57	6	4	5/8	5.9
FLG 0450 D		5/8	4.57	7 1/2	8	5/8	8.1
FLG 0562 D		5/8	5.66	8 1/2	8	3/4	9.1
FLG 0662 D		11/16	6.72	9 1/2	8	3/4	10.7
FLG 0862 D		11/16	8.72	11 3/4	8	3/4	15.7
FLG 1075 D		11/16	10.88	14 1/4	12	7/8	19.3
FLG 1275 D		13/16	12.88	17	12	7/8	33.9
FLG 1400 D		15/16	14.19	18 3/4	12	1	47.3
FLG 1600 D		1	16.19	21 1/4	16	1	60.8
FLG 1800 D		1 1/16	18.19	22 3/4	16	1 1/8	65.2
FLG 2000 D		1 1/8	20.19	25	20	1 1/8	81.2
FLG 2400 D		1 1/4	24.19	29 1/2	20	1 1/4	112.0
FLG 3000 D		1 3/8	30.19	36	28	1 1/4	169.0
FLG 3600 D		1 5/8	36.19	42 3/4	32	1 1/2	265.0

BLIND PLATE FLANGES (1/2" Thick)



PART #	I.D.	B.C.	# HOLES	BOLT	LBS
FLG 0200 B	blind	4 3/4	4	5/8	5.5
FLG 0250 B	blind	5 1/2	4	5/8	6.0
FLG 0300 B	blind	6	4	5/8	6.5
FLG 0400 B	blind	7 1/2	8	5/8	9.0
FLG 0500 B	blind	8 1/2	8	3/4	11.5
FLG 0600 B	blind	9 1/2	8	3/4	13.5
FLG 0800 B	blind	11 3/4	8	3/4	21.0
FLG 1000 B	blind	14 1/4	12	7/8	27.8
FLG 1200 B	blind	17	12	7/8	41.8
FLG 1400 B	blind	18 3/4	12	1	51.0
FLG 1600 B	blind	21 1/4	16	1	60.0
FLG 1800 B	blind	22 3/4	16	1 1/8	71.0
FLG 2000 B	blind	25	20	1 1/8	82.0

WELD ON THREADED FITTINGS

WELD ON HALF COUPLERS



Part#	Description	Length
WOHC 0025	0.25" FPT X Weld On	0.75"
WOHC 0050	0.50" FPT X Weld On	0.75"
WOHC 0075	0.75" FPT X Weld On	0.75"
WOHC 0100	1" FPT X Weld On	1"
WOHC 0125	1.25" FPT X Weld On	1"
WOHC 0150	1.5" FPT X Weld On	1"
WOHC 0200	2" FPT X Weld On	1.1"
WOHC 0250	2.5" FPT X Weld On	1.6"
WOHC 0300	3" FPT X Weld On	1.6"
WOHC 0400	4" FPT X Weld On	1.8"
WOHC 0500	5" FPT X Weld On	1.9"
WOHC 0600	6" FPT X Weld On	2"
WOHC 0800	8" FPT X Weld On	2.1"

WELD ON TOE NIPPLES



Part#	Description	Length
WOTN 0050	0.5" MPT X Weld On	2"
WOTN 0075	0.75" MPT X Weld On	2"
WOTN 0100	1" MPT X Weld On	2"
WOTN 0125	1.25" MPT X Weld On	2"
WOTN 0150	1.50" MPT X Weld On	2"
WOTN 0200	2" MPT X Weld On	2"
WOTN 0250	2.5" MPT X Weld On	2.5"
WOTN 0300	3" MPT X Weld On	3"
WOTN 0400	4" MPT X Weld On	3"
WOTN 0500	5" MPT X Weld On	3"
WOTN 0600	6" MPT X Weld On	3"
WOTN 0800	8" MPT X Weld On	4"

BOLT PACKS FOR WAFER STYLE BUTTERFLY VALVES

Part #	Valve Type	Valve Size	Flange Thickness	Bolt size	Bolt Length	Bolt Qty	FW Qty	Nut Qty	List
BP 0300	wafer bfv	2"-3"	1/2 -5/8	5/8	4	4	0	4	Please call for prices
BP 0400	wafer bfv	4"	1/2 -5/8	5/8	4.5	8	0	8	
BP 0800	wafer bfv	5"-8"	1/2	3/4	5	8	0	8	
BP 1200	wafer bfv	10"-12"	1/2	7/8	5.5	12	0	12	
BP 1400	wafer bfv	14"	1/2	1	6	12	0	12	
BP 1600	wafer bfv	16"	1/2	1	7	16	0	16	
BP 1800	wafer bfv	18"	1/2	1 1/8	8	16	0	16	
BP 2000	wafer bfv	20"	1/2	1 1/8	9	16	0	16	
					2	8	0	0	
BP 2400	wafer bfv	24"	1/2	1 1/4	10	16	0	16	
					2.5	8	0	0	
BP 0800 D	wafer bfv	5"	5/8	3/4	5.5	8	0	8	Please call for prices
		6"-8"	11/16						
BP 1200 D	wafer bfv	10"	11/16	7/8	6.5	12	0	12	
		12"	13/16						
BP 1400 D	wafer bfv	14"	15/16	1	6.5	12	0	12	
BP 1600 D	wafer bfv	16"	1	1	8	16	0	16	
BP 1800 D	wafer bfv	18"	1 1/16	1 1/8	9	16	0	16	
BP 2000 D	wafer bfv	20"	1 1/8	1 1/8	10	16	0	16	
					2.5	8	0	0	
BP 2400 D	wafer bfv	24"	1 1/4	1 1/4	12	16	0	16	
					3.5	8	0	0	
BP 0300 VS	wafer bfv	2"-3"	1	5/8	5	4	8	4	Please call for prices
BP 0400 VS	wafer bfv	4"	1.125	5/8	6	8	16	8	
BP 0500 VS	wafer bfv	5"	1.375	3/4	6	8	16	8	
BP 0800 VS	wafer bfv	6"	1.62	3/4	7	8	16	8	
		8"	1.72						
BP 1200 VS	wafer bfv	10"	1.82	7/8	8	12	24	12	
		12"	1.92						
BP 1400 VS	wafer bfv	14"	2	1	9	12	24	12	
BP 1600 VS	wafer bfv	16"	2	1	10	16	32	16	
BP 1800 VS	wafer bfv	18"	2	1 1/8	11	16	32	16	
BP 2000 VS	wafer bfv	20"	2	1 1/8	11	16	32	16	
					3.5	8	8	0	
BP 2400 VS	wafer bfv	24"	2	1 1/4	12	16	32	16	
					4	8	8	0	

Bolt packs are sized for Tuf-Skin valves with the indicated flange thickness.
For other types of flanges, consult dimensional charts or call for quote.

BOLT PACKS FOR LUG STYLE BUTTERFLY VALVES



Part #	Valve Type	Valve Size	Flange Thickness	Bolt size	Bolt Length	Bolt Qty	FW Qty	Nut Qty	List
BP 0300 LUG	lug bfv	2"-3"	1/2	5/8	1.25	8	0	0	Please call for prices
BP 0400 LUG	lug bfv	4"	1/2	5/8	1.5	16	8	0	
BP 0800 LUG	lug bfv	5"-8"	1/2	3/4	1.5	16	0	0	
BP 1200 LUG	lug bfv	10"-12"	1/2	7/8	2	24	24	0	
BP 1400 LUG	lug bfv	14"	1/2	1	2	24	12	0	
BP 0300 LUG D	lug bfv	2"-3"	5/8	5/8	1.5	8	4	0	Please call for prices
BP 0400 LUG D	lug bfv	4"	5/8	5/8	1.5	16	0	0	
BP 0800 LUG D	lug bfv	5"	5/8	3/4	1.75	16	8	0	
		6"-8"	11/16						
BP 1200 LUG D	lug bfv	10"	11/16	7/8	2	24	12	0	
		12"	13/16						
BP 1400 LUG D	lug bfv	14"	15/16	1	2.5	24	12	0	
BP 0300 LUG VS	lug bfv	2"-3"	1	5/8	2	8	8	0	Please call for prices
BP 0400 LUG VS	lug bfv	4"	1.125	5/8	2	16	16	0	
BP 0500 LUG VS	lug bfv	5"	1.375	3/4	2.5	16	16	0	
BP 0600 LUG VS	lug bfv	6"	1.62	3/4	2.75	16	16	0	
BP 0800 LUG VS	lug bfv	8"	1.72	3/4	3	16	16	0	
BP 1000 LUG VS	lug bfv	10"	1.82	7/8	3	24	24	0	
BP 1200 LUG VS	lug bfv	12"	1.92	7/8	3.5	24	24	0	
BP 1400 LUG VS	lug bfv	14"	2	1	3.5	24	24	0	

BOLT PACKS FOR TUF-SKIN CHECK VALVES

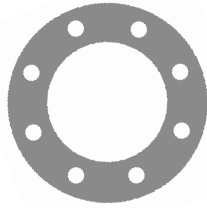


Part #	Valve Type	Valve Size	Flange Thickness	Bolt size	Bolt Length	Bolt Qty	FW Qty	Nut Qty	List
BP 0300 CV	wafer check	2"-3"	1/2 -5/8	5/8	5	4	0	4	Please call for prices
BP 0400 CV	wafer check	4"	1/2 -5/8	5/8	5	8	0	8	
BP 0800 CV	wafer check	5"-8"	1/2	3/4	6	8	0	8	
BP 1200 CV	wafer check	10"-12"	1/2	7/8	8	12	0	12	
BP 1400 CV	wafer check	14"	1/2	1	9	12	0	12	
BP 1600 CV	wafer check	16"	1/2	1	10	16	0	16	
BP 1800 CV	wafer check	18"	1/2	1 1/8	11	16	0	16	
BP 0800 CV D	wafer check	5"	5/8	3/4	7	8	0	8	Please call for prices
		6"-8"	11/16						
BP 1200 CV D	wafer check	10"	11/16	7/8	9	12	0	12	
		12"	13/16						
BP 1400 CV D	wafer check	14"	15/16	1	10	12	0	12	
BP 1600 CV D	wafer check	16"	1	1	11	16	0	16	
BP 1800 CV D	wafer check	18"	1 1/16	1 1/8	12	16	0	16	
BP 2000 CV D	wafer check	20"	1 1/8	1 1/8	14	20	0	20	
BP 2400 CV D	wafer check	24"	1 1/4	1 1/4	14	20	0	20	
BP 0300 CV VS	wafer check	2"-3"	1	5/8	6	4	8	4	Please call for prices
BP 0400 CV VS	wafer check	4"	1.125	5/8	7	8	16	8	
BP 0600 CV VS	wafer check	5"	1.375	3/4	8	8	16	8	
		6"	1.62						
BP 0800 CV VS	wafer check	8"	1.72	3/4	9	8	16	8	
BP 1200 CV VS	wafer check	10"	1.82	7/8	11	12	24	12	
		12"	1.92						
BP 1400 CV VS	wafer check	14"	2	1	12	12	24	12	
BP 1600 CV VS	wafer check	16"	2	1	13	16	32	16	
BP 1800 CV VS	wafer check	18"	2	1 1/8	14	16	32	16	
BP 2000 CV VS	wafer check	20"	2	1 1/8	16	20	40	20	
BP 2400 CV VS	wafer check	24"	2	1 1/4	15	20	40	20	

Bolt packs are sized for Tuf-Skin valves with the indicated flange thickness.
For other types of flanges, consult dimensional charts or call for quote.

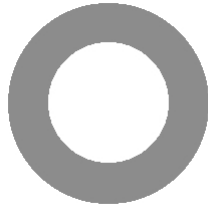
GASKETS FOR FLANGES (SBR red rubber 1/16" thick)

FULL FACE
GASKET



PART #	LIST EACH
FFG 0200	Please call for prices
FFG 0250	
FFG 0300	
FFG 0400	
FFG 0500	
FFG 0600	
FFG 0800	
FFG 1000	
FFG 1200	
FFG 1400	
FFG 1600	
FFG 1800	

RING
GASKET

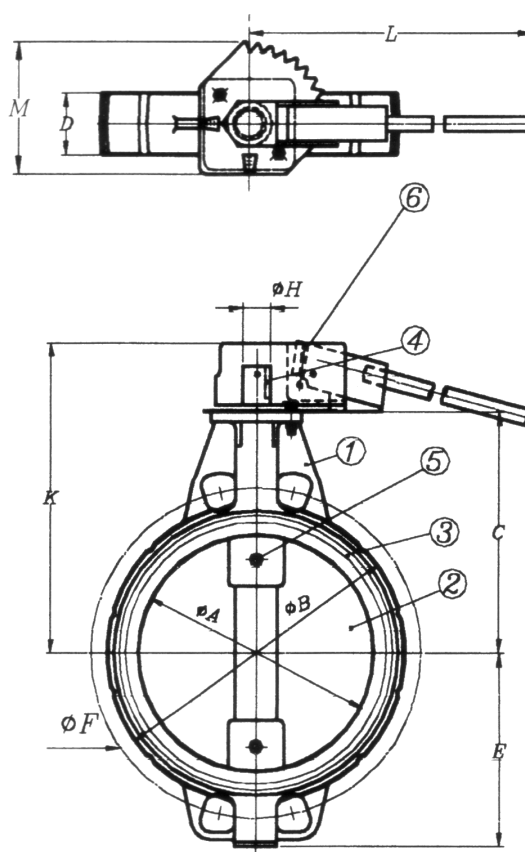
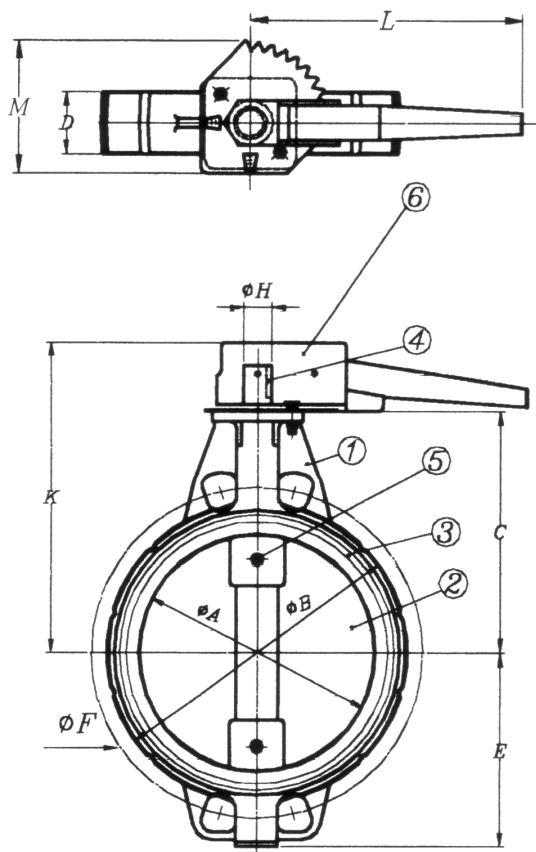


PART #	LIST EACH
RG 0200	Please call for prices
RG 0250	
RG 0300	
RG 0400	
RG 0500	
RG 0600	
RG 0800	
RG 1000	
RG 1200	
RG 1400	
RG 1600	
RG 1800	

BUTTERFLY VALVE SPECIFICATIONS – Lever Handle Operated

2" to 5"

6" to 12"



#	DESCRIPTION	MATERIAL
1	BODY	CAST IRON; EPOXY COATED
2	DISC 2" - 12"	STAINLESS STEEL
3	RUBBER SEAT	BUNA-N (Acrylonitrile Butadiene)
4	SHAFT	STAINLESS STEEL

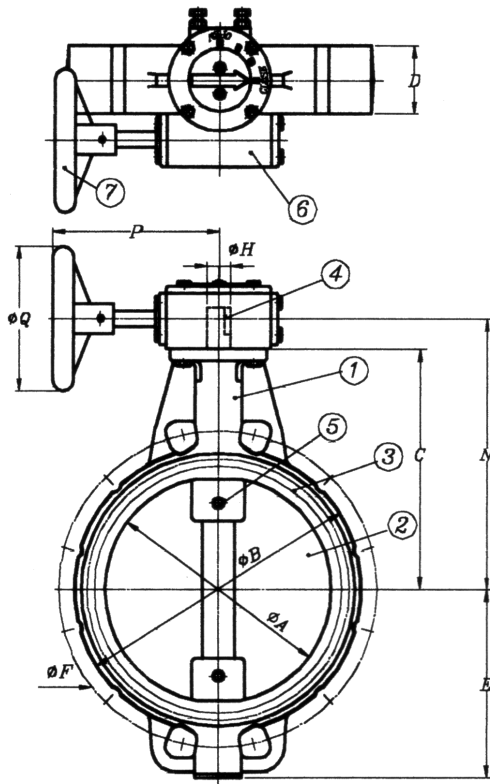
#	DESCRIPTION	MATERIAL
5	DISC PIN	STAINLESS STEEL
6	LEVER	CAST IRON
-	O-RINGS	BUNA-N
-	PRESSURE RATING = 150 PSI	

VALVE SIZE	A DIAM	B DIAM	C	D FACE TO FACE	E	F BOLT CIRCLE	H SHAFT DIAM	L	K	M	OPERATOR MODEL	REQUIRED BUSHING
2	2.0	3.9	4.6	1.7	2.2	4.75	1/2	7.1	6.1	4.7	LHO-05	
2 1/2	2.6	4.7	4.8	1.8	2.8	5.50	1/2	7.1	6.3	4.7	LHO-05	
3	3.0	5.1	5.1	1.8	3.0	6.00	1/2	7.1	6.6	4.7	LHO-05	
4	3.9	6.1	5.9	2.0	4.8	7.50	3/4	10.8	8.0	4.7	LHO-10	
5	4.9	7.3	6.4	2.2	5.5	8.50	3/4	10.8	8.5	4.7	LHO-10	
6	5.9	8.5	7.5	2.2	6.0	9.50	1	16.7	9.8	5.8	LHO-15	BS-LHO-15-06
8	8.0	10.5	8.5	2.4	7.4	11.75	1 1/8	16.7	11.9	5.8	LHO-15	BS-LHO-15-08
10	9.9	13.0	9.9	2.7	8.4	14.25	1 1/4	16.7	12.5	5.8	LHO-15	BS-LHO-15-10
12	11.7	14.7	11.8	3.1	9.4	17.00	1 3/8	16.7	14.4	5.8	LHO-15	

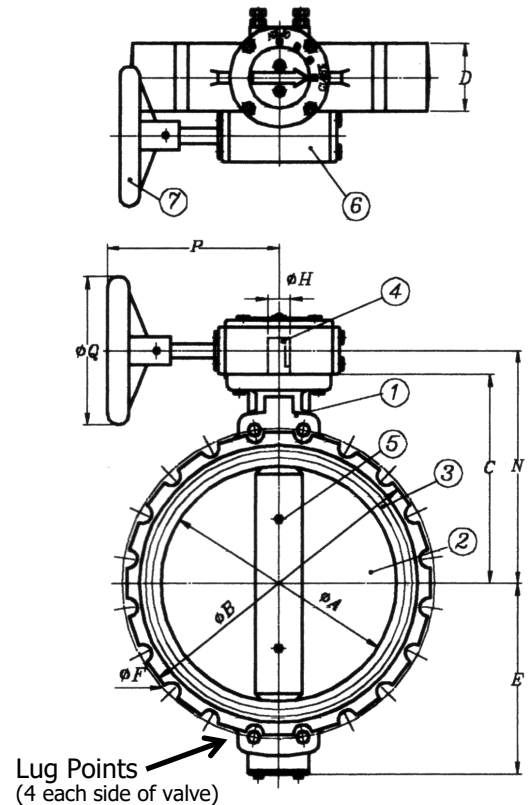
We reserve the right to make product changes without notice. We reserve the right to redesign, alter, or modify our products without incurring liability for customer's inventory or future compatibility.

BUTTERFLY VALVE SPECIFICATIONS – Worm Gear Operated

2" to 18"



20" to 24"



#	DESCRIPTION	MATERIAL
1	BODY	CAST IRON; EPOXY COATED
2	DISC 2" - 12"	STAINLESS STEEL
	DISC 14" - 24"	DUCTILE IRON; EPOXY COATED
3	RUBBER SEAT	BUNA-N (Acrylonitrile Butadiene)
4	SHAFT	STAINLESS STEEL

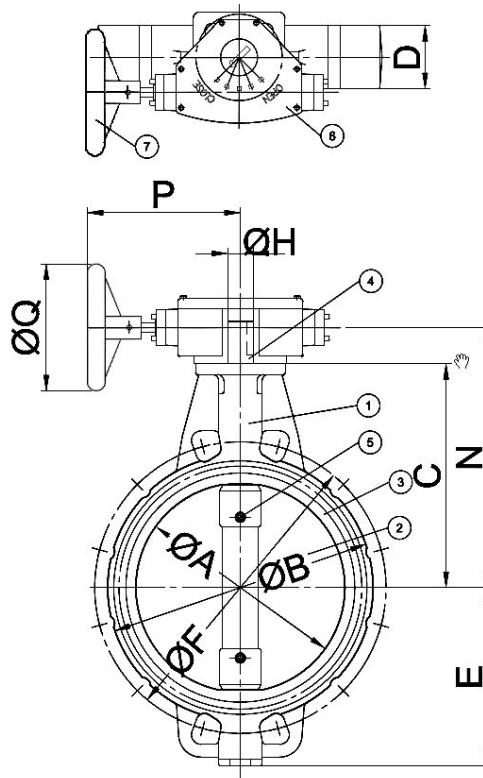
#	DESCRIPTION	MATERIAL
5	DISC PIN	STAINLESS STEEL
6	GEAR BOX	CAST IRON
7	HAND WHEEL	STEEL TUBING
-	O-RINGS	BUNA-N
-	PRESSURE RATING = 150 PSI	

VALVE SIZE	A DIAM	B DIAM	C	D FACE TO FACE	E	F BOLT CIRCLE	H SHAFT DIAM	N	P	Q	GEAR MODEL	# OF TURNS	REQUIRED BUSHING
2	2.0	3.9	4.6	1.7	2.2	4.75	1/2	5.7	6.3	6	WGO-0	5	BS-WGO-0-02
2 1/2	2.6	4.7	4.8	1.8	2.8	5.50	1/2	5.9	6.3	6	WGO-0	5	BS-WGO-0-02
3	3.0	5.1	5.1	1.8	3.0	6.00	1/2	6.3	6.3	6	WGO-0	5	BS-WGO-0-02
4	3.9	6.1	5.9	2.0	4.8	7.50	3/4	7.1	6.3	6	WGO-0	5	
5	4.9	7.3	6.4	2.2	5.5	8.50	3/4	7.5	6.3	6	WGO-0	5	
6	5.9	8.5	7.5	2.2	6.0	9.50	1	8.8	8.1	8	WGO-1	7.5	BS-WGO-1-06
8	8.0	10.5	8.5	2.4	7.4	11.75	1 1/8	9.8	8.4	8	WGO-1	7.5	
10	9.9	13.0	9.9	2.7	8.4	14.25	1 1/4	11.2	8.7	12	WGO-1	7.5	BS-WGO-1-10
12	11.7	14.7	11.8	3.1	9.4	17.00	1 3/8	13.2	8.7	12	WGO-1	7.5	
14	12.9	16.5	13.8	3.1	10.8	18.75	1 7/16	15.2	9.9	12	WGO-2	7.5	LUG POINTS (4 EACH SIDE) BOLT X DEPTH
16	15.0	19.1	14.2	4.0	12.3	21.25	1 5/8	15.7	10.0	14	WGO-3	12.5	
18	17.0	21.2	15.0	4.5	13.6	22.75	1 5/8	16.5	10.0	14	WGO-3	12.5	
20	19.3	24.5	16.9	5.0	15.3	25.00	2 1/2	19.2	11.0	18	WGO-4	20	
24	23.2	27.3	20.4	6.1	18.3	29.50	3	22.5	11.0	18	WGO-4	20	

We reserve the right to make product changes without notice. We reserve the right to redesign, alter, or modify our products without incurring liability for customer's inventory or future compatibility.

BUTTERFLY VALVE SPECIFICATIONS – Traveling Nut Operated

2" to 18"



#	DESCRIPTION	MATERIAL
1	BODY	CAST IRON; EPOXY COATED
2	DISC 2" - 12"	STAINLESS STEEL
	DISC 14" - 18"	DUCTILE IRON; EPOXY COATED
3	RUBBER SEAT	BUNA-N (Acrylonitrile Butadiene)
4	SHAFT	STAINLESS STEEL

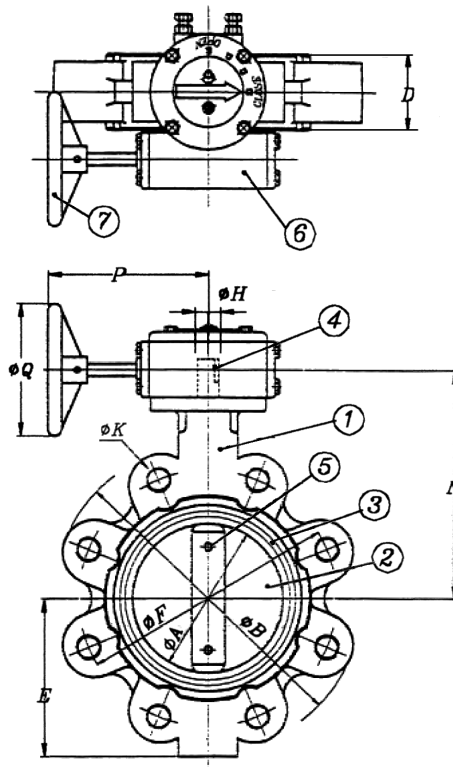
#	DESCRIPTION	MATERIAL
5	DISC PIN	STAINLESS STEEL
6	GEAR BOX	CAST IRON
7	HAND WHEEL	STEEL TUBING
-	O-RINGS	BUNA-N
-	PRESSURE RATING = 150 PSI	

VALVE SIZE	A DIAM	B DIAM	C	D FACE TO FACE	E	F BOLT CIRCLE	H SHAFT DIAM	N	P	Q	GEAR MODEL	# OF TURNS	REQUIRED BUSHING
2	2.0	3.9	4.6	1.7	2.2	4.75	1/2	7.0	7.3	6	TNO-1	27	BS-WGO-0-02
2 1/2	2.6	4.7	4.8	1.8	2.8	5.50	1/2	7.1	7.3	6	TNO-1	27	BS-WGO-0-02
3	3.0	5.1	5.1	1.8	3.0	6.00	1/2	7.5	7.3	6	TNO-1	27	BS-WGO-0-02
4	3.9	6.1	5.9	2.0	4.8	7.50	3/4	8.3	7.3	6	TNO-1	27	
5	4.9	7.3	6.4	2.2	5.5	8.50	3/4	8.8	7.3	6	TNO-1	27	
6	5.9	8.5	7.5	2.2	6.0	9.50	1	10.0	10.3	10	TNO-2	38.5	BS-WGO-1-06
8	8.0	10.5	8.5	2.4	7.4	11.75	1 1/8	11.0	10.3	10	TNO-2	38.5	
10	9.9	13.0	9.9	2.7	8.4	14.25	1 1/4	14.2	10.3	12	TNO-2	38.5	BS-WGO-1-10
12	11.7	14.7	11.8	3.1	9.4	17.00	1 3/8	14.4	10.3	12	TNO-2	38.5	
14	12.9	16.5	13.8	3.1	10.8	18.75	1 7/16	16.4	10.3	12	TNO-2	38.5	
16	15.0	19.1	14.2	4.0	12.3	21.25	1 5/8	17.0	10.0	14	TNO-3	27	
18	17.0	21.2	15.0	4.5	13.6	22.75	1 5/8	17.8	10.0	14	TNO-3	27	

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BUTTERFLY VALVE SPECIFICATIONS – LUG STYLE – WGO

2" to 18"



#	DESCRIPTION	MATERIAL
1	BODY	CAST IRON; EPOXY COATED
2	DISC 2" - 12"	STAINLESS STEEL
	DISC 14" - 18"	DUCTILE IRON; EPOXY COATED
3	RUBBER SEAT	BUNA-N (Acrylonitrile Butadiene)
4	SHAFT	STAINLESS STEEL

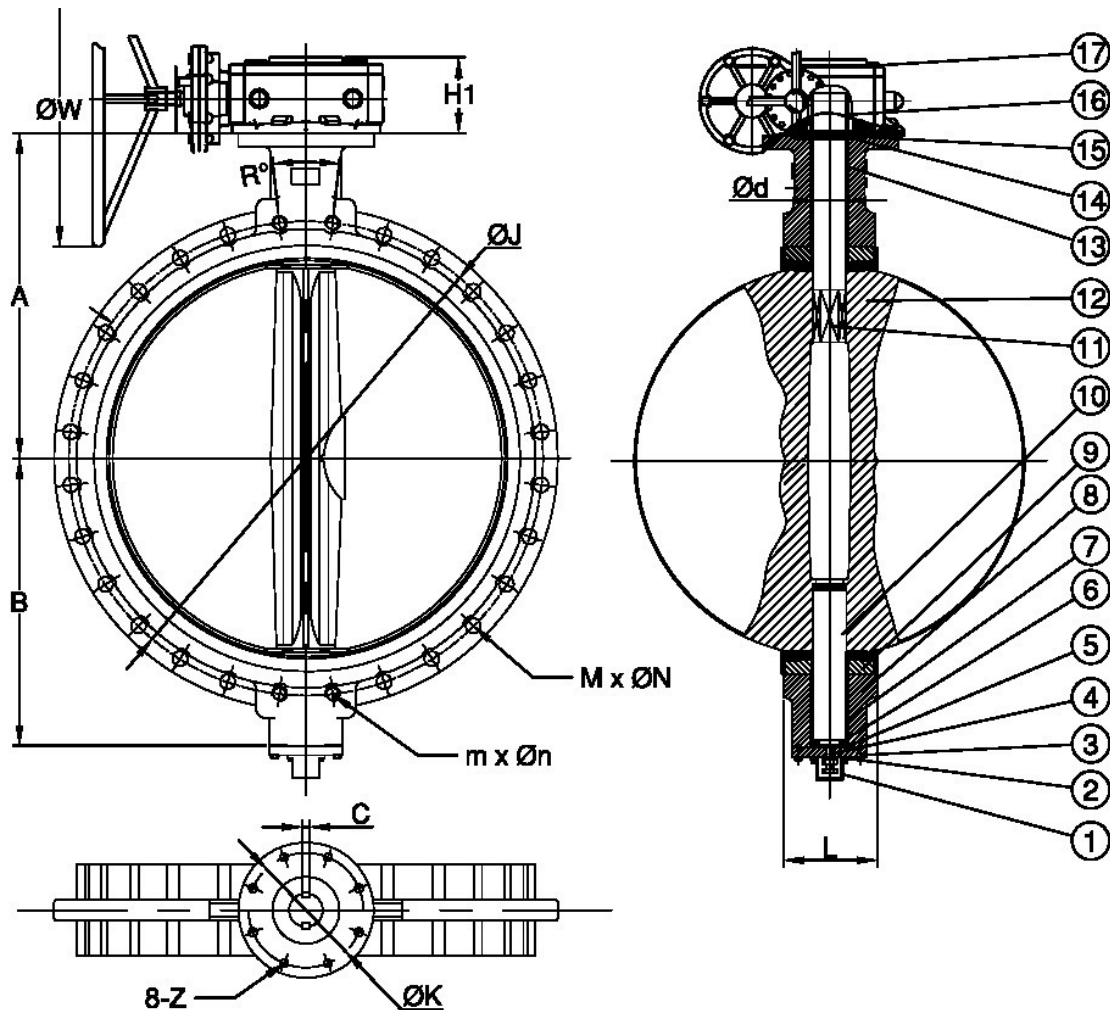
#	DESCRIPTION	MATERIAL
5	DISC PIN	STAINLESS STEEL
6	GEAR BOX	CAST IRON
7	HAND WHEEL	STEEL TUBING
-	O-RINGS	BUNA-N
-	PRESSURE RATING = 150 PSI	

VALVE SIZE	A DIAM	B DIAM	D FACE TO FACE	E	F BOLT CIRCLE	H SHAFT DIAM	N	P	Q	GEAR MODEL	# OF TURNS	REQUIRED BUSHING	K BOLT DIAM
2	2.0	6.5	1.7	2.5	4.75	1/2	5.7	6.3	6	WGO-0	5	BS-WGO-0-02	5/8
2 1/2	2.6	7.3	1.8	3.0	5.50	1/2	5.9	6.3	6	WGO-0	5	BS-WGO-0-02	5/8
3	3.0	7.5	1.8	3.5	6.00	1/2	6.3	6.3	6	WGO-0	5	BS-WGO-0-02	5/8
4	3.9	9.0	2.0	4.3	7.50	3/4	7.1	6.3	6	WGO-0	5		5/8
5	4.9	10.1	2.2	5.0	8.50	3/4	7.5	6.3	6	WGO-0	5		3/4
6	5.9	11.2	2.2	5.5	9.50	1	8.6	8.1	8	WGO-1	7.5	BS-WGO-1-06	3/4
8	8.0	13.5	2.4	6.9	11.75	1 1/8	9.8	8.4	8	WGO-1	7.5		3/4
10	9.9	16.0	2.7	8.0	14.25	1 1/4	11.2	8.7	12	WGO-1	7.5	BS-WGO-1-10	7/8
12	11.7	19.0	3.1	9.5	17.00	1 3/8	13.2	8.7	12	WGO-1	7.5		7/8
14	12.9	21.0	3.1	10.8	18.75	1 7/16	13.8	9.9	12	WGO-2	7.5		1
16	15.0	23.8	4.0	12.3	21.25	1 5/8	14.2	10.0	14	WGO-3	12.5		1
18	17.0	25.0	4.5	13.6	22.75	1 5/8	15.0	10.0	14	WGO-3	12.5		1 1/8

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BUTTERFLY VALVE SPECIFICATIONS – Worm Gear Operated

30" B-3000-W version: 2021-03-29



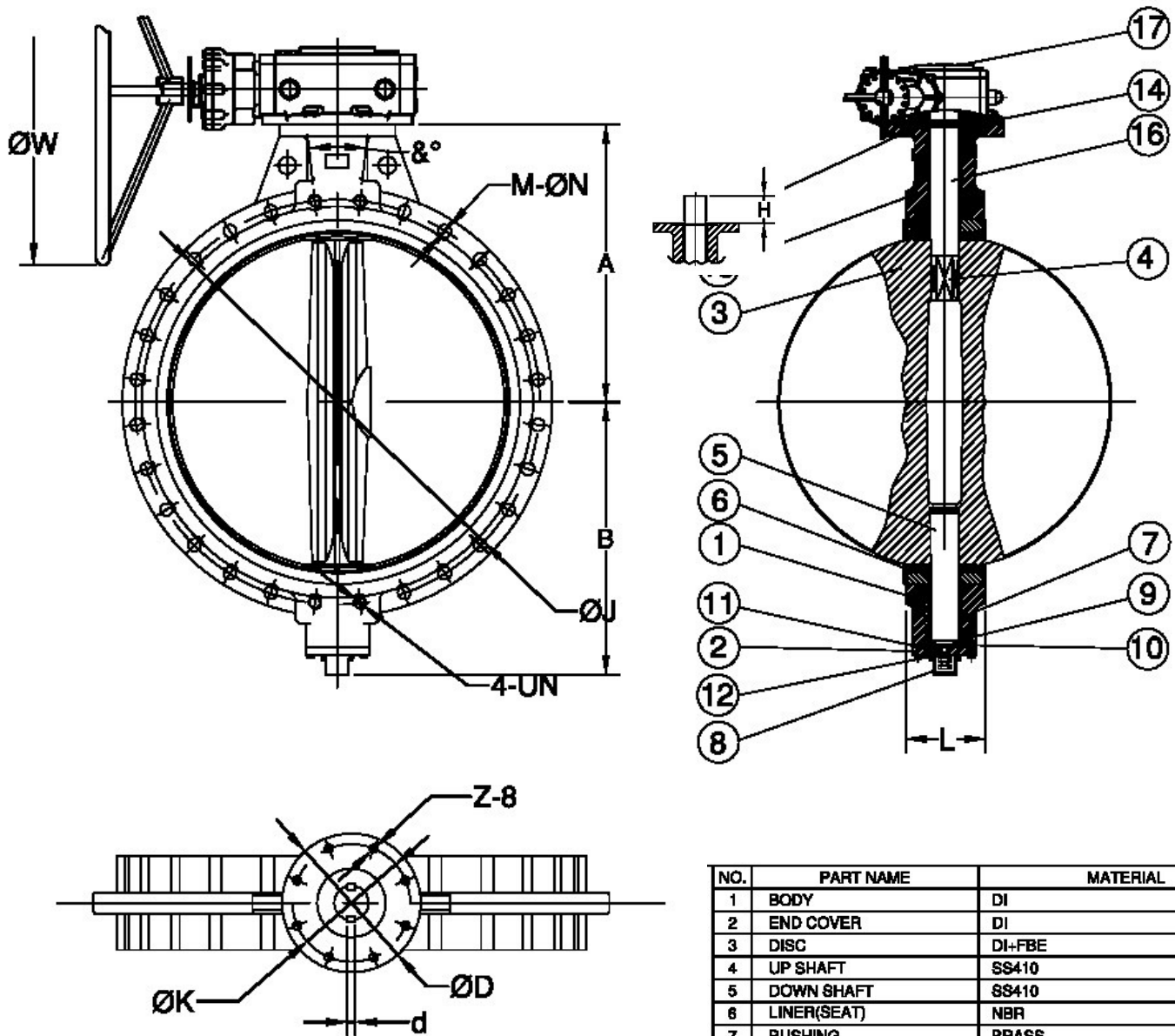
NO.	PART NAME	MATERIAL
1	PROTECT CAP	STAINLESS STEEL
2	O-RING	NBR
3	END COVER	D.I
4	ADJUST BOLT	A2
5	ADJUST HOUSE	STAINLESS STEEL
6	SINGLE SIDE THRUST BEARING	ASSEMBLY
7	BUSHING	BRASS
8	BODY	D.I
9	SEAT	NBR
10	DOWN SHAFT	SS410
11	UP SHAFT	SS410
12	DISC	D.I + FBE
13	SHORT BUSHING	BRASS
14	HALF RING	STAINLESS STEEL
15	GASKET	STAINLESS STEEL
16	KEY	CARBON STEEL
17	GEAR BOX	TGS300-BR5

DIMENSIONS -mm															
SIZE		L	A	B	H1	Ød	ØJ	M x ØN	m x Øn	C	ØK	8-Z	ØW	R°	*Tq
DN750	30"	165.0	663.0	546.0	154.0	63.35	914.4	24 - 36	4 - 1 1/4"-7UNC	18.0	254.0	18.0	600.0	12.85	7025

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BUTTERFLY VALVE SPECIFICATIONS – Worm Gear Operated

36" B-3600-W version: 2020-11-24



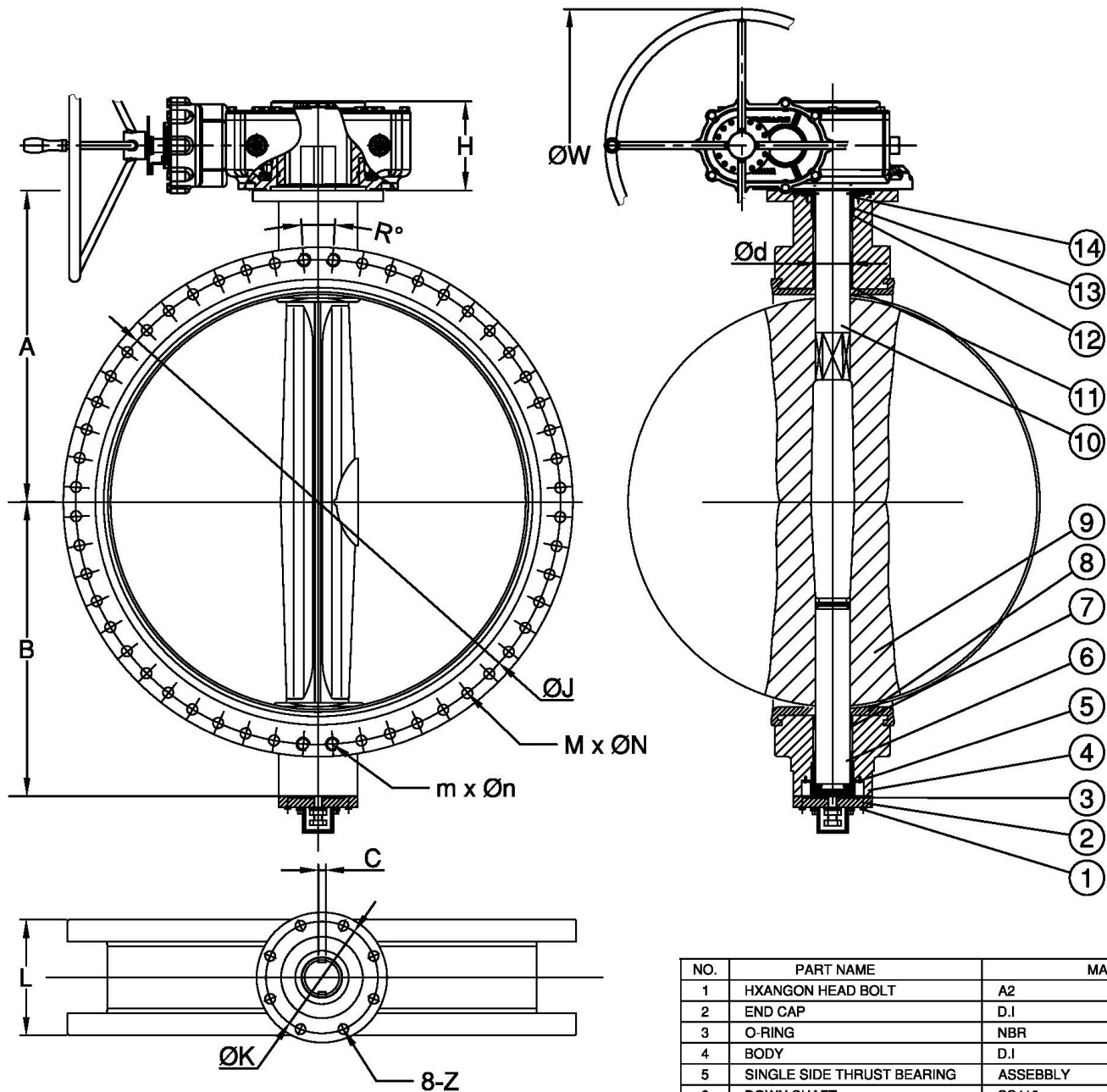
NO.	PART NAME	MATERIAL
1	BODY	DI
2	END COVER	DI
3	DISC	DI-FBE
4	UP SHAFT	SS410
5	DOWN SHAFT	SS410
6	LINER(SEAT)	NBR
7	BUSHING	BRASS
8	PROTECT CAP	SS304
9	SINGLE SIDE THRUST BEARING	ASSEMBLY
10	ADJUST HOUSE	SS304
11	ADJUST BOLT	A2
12	O-RING	NBR
13	SHORT BUSHING	BRASS
14	HAPE RING	SS304
15	GASKET	SS304
16	KEY	CARBON STEEL
17	GEAR BOX	ASSEMBLY

DIMENSIONS -mm																
SIZE	L	A	B	ØJ	M	ØN	ØD	ØK	Z-8	d	ISO5211	4-UN	&	ØW	H	
DN900 36"	200.0	720.0	633.0	1085.8	28	42.0	300.0	254.0	18.0	20.0	F25	11/2"-8UN-2B	11.25	600.0	110.0	

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BUTTERFLY VALVE SPECIFICATIONS – Worm Gear Operated

42" UB-4200-W version: 2021-03-02



NO.	PART NAME	MATERIAL
1	HXANGON HEAD BOLT	A2
2	END CAP	D.I
3	O-RING	NBR
4	BODY	D.I
5	SINGLE SIDE THRUST BEARING	ASSEMBLY
6	DOWN SHAFT	SS410
7	BUSHING	BRASS
8	SEAT	NBR
9	DISC	D.I+FBF
10	UP SHAFT	SS410
11	BUSHING	BRASS
12	GASKET	FRP
13	PACKING	NBR
14	PACKING GLAND	CARBON STEEL

DIMENSIONS -mm														
SIZE	L	A	B	H	ØJ	Ød	R°	M x ØN	m x Øn	ØK	8-Z	C	ØW	*Tq
DN1050 42"	251.0	858.0	758.0	193.0	1257.3	95.0	10	32 - 42	4 - 1 1/2"-8UN	298.0	22.0	25.0	110	17500

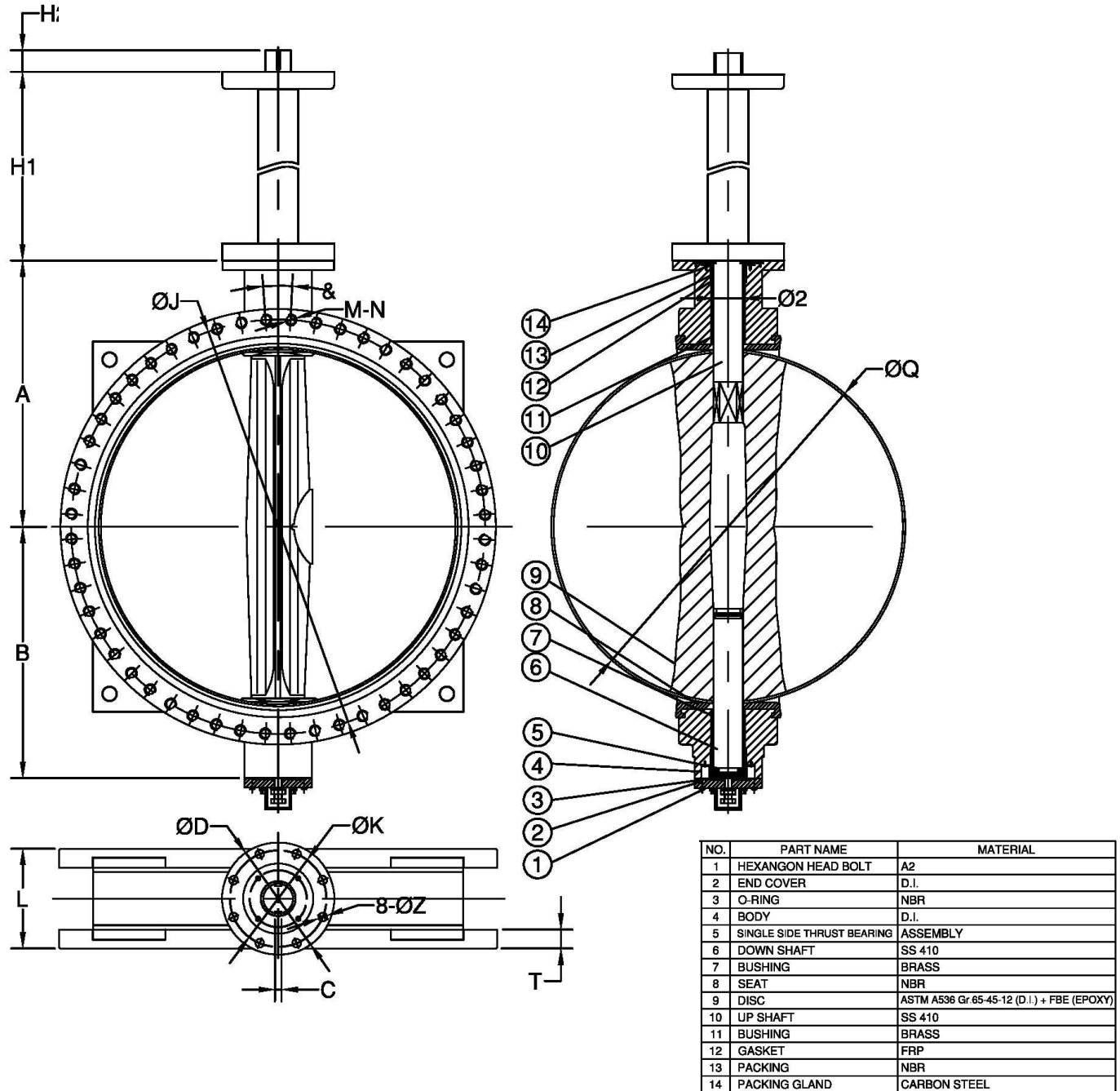
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BUTTERFLY VALVE SPECIFICATIONS – Worm Gear Operated

30"-42" ULB (U type Lug Butterfly) with VSE version: 2024-11-20

U Body valves available in Lug style and through bolt.

Call us for more information and pricing!

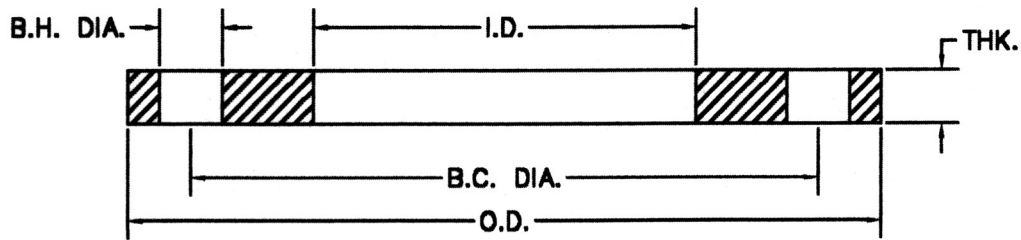


DIMENSIONS -mm

SIZE	L	A	B	ØJ	M	N	8°	C	ØD	ØK/ISO5211	ØZ	H1	H2	T	Ø2	±Q	Tn	
DN750	30"	165.0	650.0	510.0	914.4	28	1½"-7UNC-2B	12.85	18.0	300.0	254.0/F25	18.0	1524	110.0	54.0	63.35	753.0	6684.0
DN900	36"	200.0	720.0	636.0	1085.85	32	1½"-6UNC-2B	11.25	20.0	300.0	254.0/F25	18.0	1524	110.0	60.3	75.0	902.0	9945.0
DN1050	42"	251.0	858.0	758.0	1257.3	36	1½"-6UNC-2B	10.0	25.0	350.0	298.0/F30	22.0	1524	110.0	66.7	95.0	1055.0	17290.0

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FLANGE DIMENSIONS



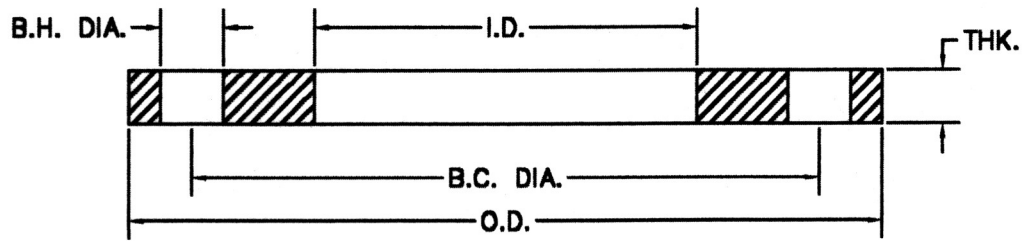
1/2" CARBON STEEL FLANGES

SIZE	PART #	O.D.	I.D.	B.C. DIAM	B.H. DIAM	NO. B.H.	THICK	LBS.
2"	FLG-0200	6.00	2.06	4.75	3/4	4	1/2	3.5
2.5"	FLG-0250	7.00	2.56	5.50	3/4	4	1/2	4.5
3" IPS	FLG-0350	7.50	3.57	6.00	3/4	4	1/2	4.7
3"	FLG-0300	7.50	3.06	6.00	3/4	4	1/2	5.3
4" IPS	FLG-0450	9.00	4.57	7.50	3/4	8	1/2	6.4
4"	FLG-0400	9.00	4.06	7.50	3/4	8	1/2	6.9
5" IPS	FLG-0562	10.00	5.66	8.50	7/8	8	1/2	7.2
5"	FLG-0500	10.00	5.06	8.50	7/8	8	1/2	8.0
6" IPS	FLG-0662	11.00	6.72	9.50	7/8	8	1/2	8.4
6"	FLG-0600	11.00	6.06	9.50	7/8	8	1/2	9.0
8" IPS	FLG-0862	13.50	8.72	11.75	7/8	8	1/2	11.4
8"	FLG-0800	13.50	8.06	11.75	7/8	8	1/2	12.6
10" IPS	FLG-1075	16.00	10.88	14.25	1	12	1/2	14.6
10"	FLG-1000	16.00	10.06	14.25	1	12	1/2	16.3
12" IPS	FLG-1275	19.00	12.88	17.00	1	12	1/2	21.6
12"	FLG-1200	19.00	12.06	17.00	1	12	1/2	22.5

1/2" CARBON STEEL BLIND FLANGES

2" BLIND	FLG-0200-B	6.00	BLIND	4.75	3/4	4	1/2	5.5
2.5" BLIND	FLG-0250-B	7.00	BLIND	5.50	3/4	4	1/2	6.0
3" BLIND	FLG-0300-B	7.50	BLIND	6.00	3/4	4	1/2	6.5
4" BLIND	FLG-0400-B	9.00	BLIND	7.50	3/4	8	1/2	9.0
5" BLIND	FLG-0500-B	10.00	BLIND	8.50	7/8	8	1/2	11.5
6" BLIND	FLG-0600-B	11.00	BLIND	9.50	7/8	8	1/2	13.5
8" BLIND	FLG-0800-B	13.50	BLIND	11.75	7/8	8	1/2	21.0
10" BLIND	FLG-1000-B	16.00	BLIND	14.25	1	12	1/2	27.8
12" BLIND	FLG-1200-B	19.00	BLIND	17.00	1	12	1/2	41.8
14" BLIND	FLG-1400-B	21.00	BLIND	18.75	1 1/8	12	1/2	51.0
16" BLIND	FLG-1600-B	23.50	BLIND	21.25	1 1/8	16	1/2	60.0
18" BLIND	FLG-1800-B	25.00	BLIND	22.75	1 1/4	16	1/2	71.0
20" BLIND	FLG-2000-B	27.50	BLIND	25.00	1 1/4	20	1/2	82.0

FLANGE DIMENSIONS



AWWA CLASS "D" CARBON STEEL FLANGES								
SIZE	PART #	O.D.	I.D.	B.C. DIAM	B.H. DIAM	NO. B.H.	THICK	LBS.
2" IPS	FLG-0225-D	6.00	2.44	4.75	3/4	4	5/8	4.1
2.5" IPS	FLG-0275-D	7.00	2.94	5.50	3/4	4	5/8	5.4
3" IPS	FLG-0350-D	7.50	3.57	6.00	3/4	4	5/8	5.9
4" IPS	FLG-0450-D	9.00	4.57	7.50	3/4	8	5/8	8.1
4"	FLG-0400-D	9.00	4.06	7.50	3/4	8	5/8	8.5
5" IPS	FLG-0562-D	10.00	5.66	8.50	7/8	8	5/8	9.1
5"	FLG-0500-D	10.00	5.06	8.50	7/8	8	5/8	9.6
6" IPS	FLG-0662-D	11.00	6.72	9.50	7/8	8	11/16	10.7
6"	FLG-0600-D	11.00	6.06	9.50	7/8	8	11/16	12.0
8" IPS	FLG-0862-D	13.50	8.72	11.75	7/8	8	11/16	15.7
8"	FLG-0800-D	13.50	8.06	11.75	7/8	8	11/16	17.1
10" IPS	FLG-1075-D	16.00	10.88	14.25	1	12	11/16	19.3
10"	FLG-1000-D	16.00	10.06	14.25	1	12	11/16	22.0
12" IPS	FLG-1275-D	19.00	12.88	17.00	1	12	13/16	33.9
12"	FLG-1200-D	19.00	12.06	17.00	1	12	13/16	37.9
14"	FLG-1400-D	21.00	14.19	18.75	1 1/8	12	15/16	47.3
16"	FLG-1600-D	23.50	16.19	21.25	1 1/8	16	1	60.8
18"	FLG-1800-D	25.00	18.19	22.75	1 1/4	16	1 1/16	65.2
20"	FLG-2000-D	27.50	20.19	25.00	1 1/4	20	1 1/8	81.2
22"	FLG-2200-D	29.50	22.19	27.25	1 3/8	20	1 3/16	90.8
24"	FLG-2400-D	32.00	24.19	29.50	1 3/8	20	1 1/4	112.0
26"	FLG-2600-D	34.25	26.19	31.75	1 3/8	24	1 5/16	132.0
28"	FLG-2800-D	36.50	28.19	34.00	1 3/8	28	1 5/16	148.0
30"	FLG-3000-D	38.75	30.19	36.00	1 3/8	28	1 3/8	169.0
36"	FLG-3600-D	46.00	36.19	42.75	1 5/8	32	1 5/8	265.0
42"	FLG-4200-D	53.00	42.19	49.50	1 5/8	36	1 3/4	401.0
48"	FLG-4800-D	59.50	48.19	56.00	1 5/8	44	1 7/8	474.0
54"	FLG-5400-D	66.25	54.19	62.75	1 7/8	44	2 1/8	627.0
60"	FLG-6000-D	73.00	60.19	69.25	1 7/8	52	2 1/4	760.0
SHADED ITEMS ARE NOT STOCKED = SPECIAL ORDER ONLY								



UNIVERSAL SALES

TUF-SKIN VALVES

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92311 Booth Street ~ Junction City, OR 97448 ~ PH (541) 998-9999 ~ FX (541) 998-9998

TERMS AND CONDITIONS

TERMS:

Net 10th of month following the invoice date. A 1 1/2% per month service charge will be added to all past due accounts.

CREDIT:

Credit approval for an open account and discount eligibility must be established prior to initial order. COD may be requested for accounts with credit applications in process. Shipments will be held on established accounts with an unsatisfactory payment status.

PRICES:

We reserve the right to change prices without notice. However, we will endeavor to announce price changes 30 days prior to the date of effectiveness. Unless noted otherwise on our sales acknowledgment, prices are those in effect at time of shipment.

SHORTAGES:

All claims such as pricing, shortages, returns, etc. must be made within 1 day from receipt of shipment in writing. All shortages should be identified by giving us the sales order or invoice number and date on which merchandise was received. Please take digital pictures of the shipment for us to review. No debit memo will be accepted until final disposition is determined and factory credit memo is issued.

PRODUCT DESIGN:

Manufacturer reserves the right to redesign, alter, or modify its products without incurring liability for customer's inventory or future repair problems.

DEFECTIVE MATERIALS:

Contact sales office for field inspection prior to any disposition of material. Take digital pictures and send them to us for review. No debit memos, freight charges, returns, etc. will be honored without corporate authorization.

MERCHANDISE RETURNED FOR CREDIT:

No merchandise will be accepted without prior approval from Universal Sales. All materials approved for return shall be returned freight prepaid and are subject to a 20% restocking charge.

DAMAGED FREIGHT:

Products are packaged and accepted by the freight forwarder in undamaged condition. Do not sign for damaged freight without noting damages on the waybill. Notify Universal Sales headquarters immediately for instructions on how to proceed. Take digital pictures and send them to us for review.