HVAC Butterfly Valve Gear Operator

DN 50–300 Non-Potable Water

Materials		
	DN 50-150	DN 200-350
Housing	Ductile Iron	Cast Iron
Cover	Cast Iron	Aluminium
Worm	Carbon Steel	Carbon Steel
Worm Gear	Ductile Iron	Ductile Iron
Shaft	Stainless Steel 304	Stainless Steel 304
Handwheel	Cast Iron	Cast Iron

Product Image

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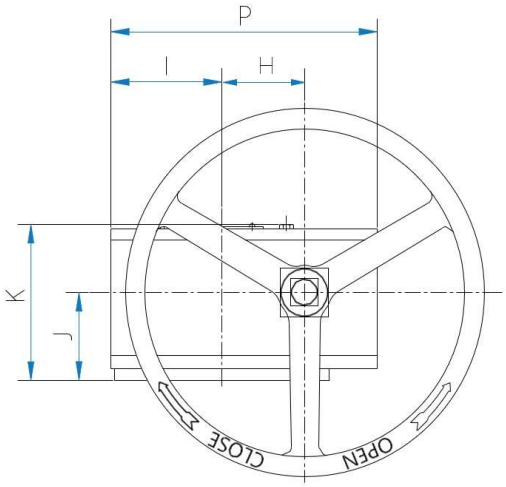
Dimensions

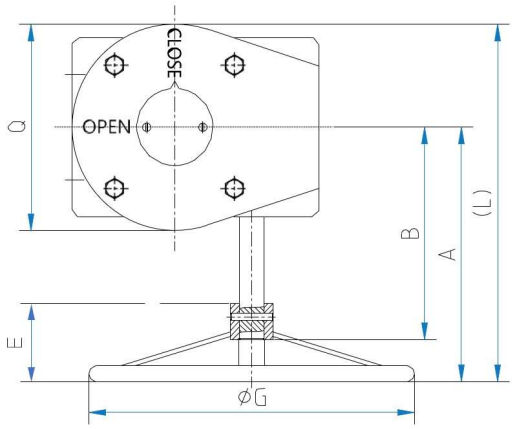
Code	*Description*	*Size DN*	*A mm*	*B mm*	*E mm*	*ØG mm*	*H mm*	*I mm*	*J mm*	*K mm*	*L mm*	*P mm*	*Q mm*
1103485	DURA IND GEARBOX SUIT B/FLY VALVE 50-80	50 - 80	139	110	54	135	44	48	28	58	187	116	96
1103486	DURA IND GEARBOX SUIT B/FLY VALVE 100	100	139	110	54	135	44	48	28	58	187	116	96
1103487	DURA IND GEARBOX SUIT B/FLY VALVE 125-150	125 - 150	139	110	54	135	44	48	28	58	187	116	96
1103488	DURA IND GEARBOX SUIT B/FLY VALVE 200	200	211	187	56	275	62	72.5	39 5	82	284	164	146
1103489	DURA IND GEARBOX SUIT B/FLY VALVE 250	250	211	187	56	275	62	72.5	39 5	82	284	164	146
1103490	DURA IND GEARBOX SUIT B/FLY VALVE 300	300	220	196	56	275	78	76.5	40	82	297	189	154

Dimensions

Code	*Size DN*	Stem mm	Ratio	Mechanical Efficiency	Max Input Torque Nm	Max Torque Output Nm	Weight kg
1103485	50 - 80	12.7	24:1	0.4	18	170	4
1103486	100	15.88	24:1	0.4	18	170	4
1103487	125 - 150	19.05	24:1	0.4	18	170	4
1103488	200	22.23	30:1	0.4	63	750	8
1103489	250	28.58	30:1	0.4	63	750	8
1103490	300	31.75	50:1	0.4	60	1200	10

Product Drawing





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Installation Instructions
Butterfly Valve Gear Operator

Installation of the gear operator and butterfly valve:

- Manually turn the gear operator hand wheel until the indicator is pointed to the open position. (See Figure 1)
- Using the handle, manually open the butterfly valve to ensure the disc is in fully open position.
- Remove original handle, notch plate and bolts from the butterfly valve. (See Figure 2)
- Fit the gear operator onto the butterfly valve stem, aligning square cutout with square stem, and using 2 bolts from notch plate to bolt them together.

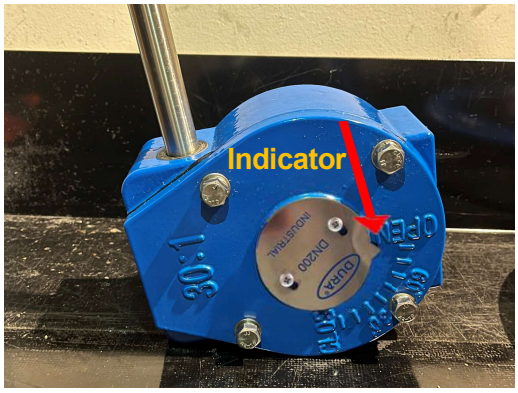

Figure 1

Adjustment of the “Closed” position travel stop:

- Remove the outer set screws to access the adjustment screws (See Figure 3)
- Looking at the end of the gear operator (See Figure 4), the top screw is for close adjustment.
- Loosen the close adjustment screw and turn hand-wheel until the valve disc is in fully closed position. (Special note: Fully closed position for the valve disc is against valve rubber seal face. Do not force disc hard into seal face or seal face could be damaged. (See figure 5))
- Carefully re-tighten the close adjustment screw.
- Replace the outer set screw.

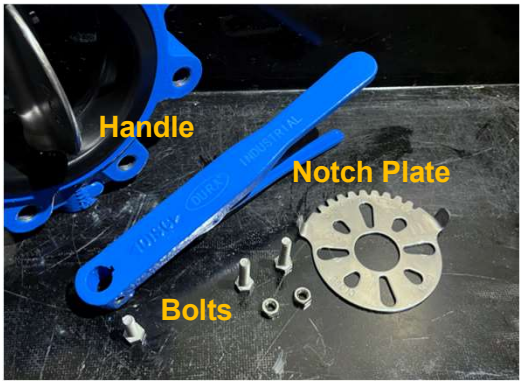

Figure 2

Adjustment of the “Open” position travel stop:

- Remove the outer set screws to access the adjustment screws
- Looking at the end of the gear operator (See Figure 4), the bottom screw is for open adjustment.
- Loosen the open adjustment screw and turn hand-wheel until the valve disc is in fully opened position.
- Carefully re-tighten the open adjustment screw.
- Replace the outer set screw.

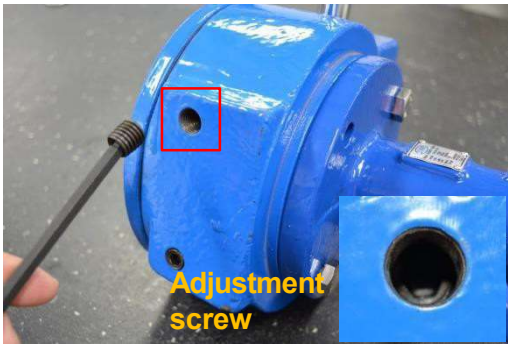

Figure 3

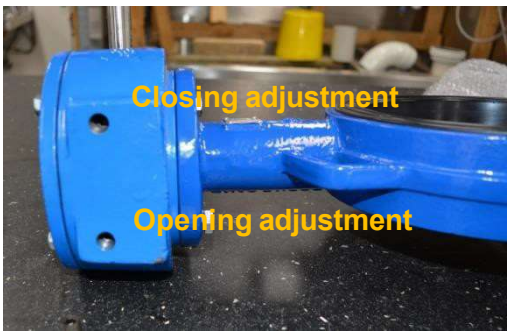

Figure 4

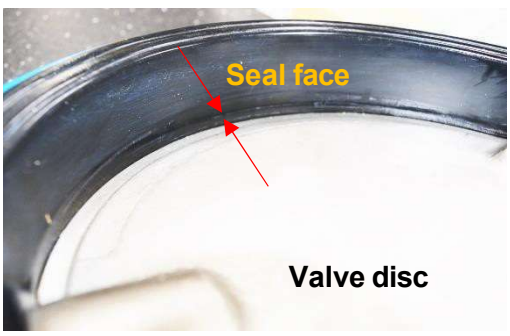

Figure 5

Installation Instructions

Butterfly Valve Gear Operator

Lubrication:

These instructions are to be used when servicing the gear operator. Proper lubrication maintenance is necessary if unit is slow to operate or noisy, to ensure smooth operation and long service life of the unit. Failure to maintain the unit properly may lead to loss of performance or premature failure of the unit.

1. Lubricant:
   Petroleum based lubricant/grease
2. Application:
   - Remove 4 bolts and 2 screws to remove housing cover and indicator plate (See Figure 6)
   - Worm shaft
     Apply generous amount of grease to coat the entire worm shaft inside the housing. (See Figure 7)
   - Worm gear
     Apply grease into the worm gear teeth. After applying the grease, rotate the worm gear for at least 2 complete cycles, check even layer of grease and re-apply more grease if necessary. (See Figure 7)
   - Replace 4 bolts and 2 screws to install housing cover and indicator plate.

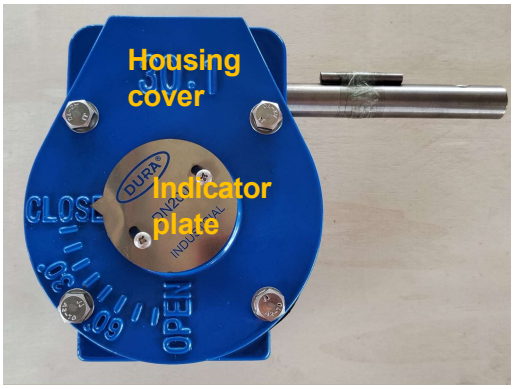

Figure 6

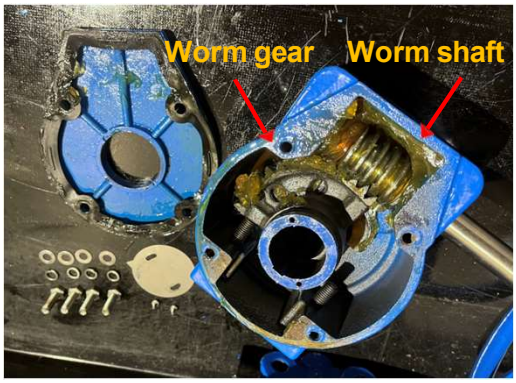

Figure 7