

## Kempster ECO Knife Gate Valve

### 1. Features

A one-piece resilient seated bi-directional wafer style pattern Knife Gate Valve providing a tight shut-off on an extensive range of slurries from heavy sludges to clean fluids. The blade has a round bottom and chamfered knife-edge to cut the demanding product media. An Internal and external powder coated blue paint finish for the valve body is used as a rust preventative. The gland packing can be replaced without removing the valve from the pipeline.

### 2. Operating Systems

Non – rising spindle hand wheel  
 Double acting pneumatic cylinder  
 Electric Actuation

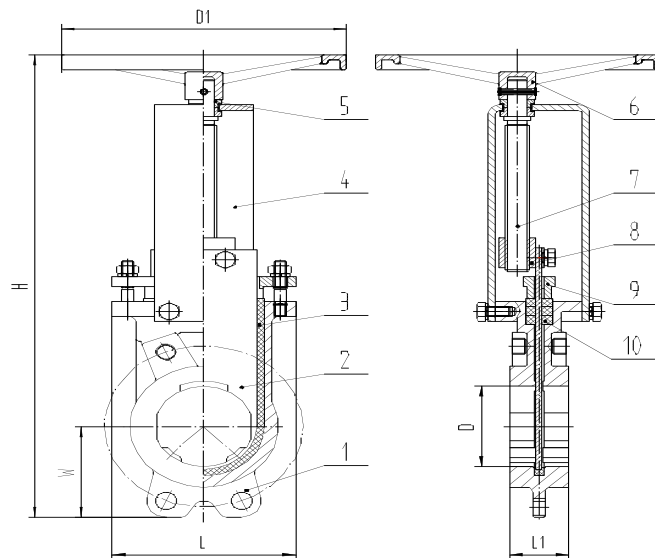
### 3. Materials of Major Components (Item numbers are shown in Figure 1)

Item	Description	Material
1	Body	Ductile Cast Iron QT450-10
2	Blade	Stainless Steel 304
3	Seal	NBR
4	Bracket	Carbon Steel Q235A
5	Yoke	Brass HPb59-1
6	Hand Wheel	Cast Steel ZG230-450
7	Spindle	Stainless Steel
8	Spindle Nut	Cast Aluminum BronzeZCuAL10Fe3
9	Gland Housing	Ductile Cast Iron QT450-10
10	Gland Packing	PTFE

### 3. Major Technical Parameters

DN (mm)	Max. Working Pressure (bar)	Max. Pressure Difference (bar)		
50-150	10	16		
200、250	10	10	10	
300、350、400	10	6.5	8.5	6.5
450、500、600	10	5	6	4

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**Figure 1: Structural Drawing**

#### 4. Structural Dimensions

DN D(mm)	Flange Width L1(mm)	Body Width L(mm)	Hand Wheel OD D1(mm)	Center Height W(mm)	Total Height H(mm)	Weight (kg)
50	40	127	180	75	415	8.9
65	44	127	180	80	438	9.7
80	47	148	230	90	459	11.5
100	50	170	230	100	483	13
125	55	200	230	117	538	17
150	64	240	300	133	630	28.7
200	66	254	300	165	742	38.6
250	72	278	400	200	875	68
300	80	340	400	230	1012	84
350	96	400	400	260	1163	115
400	102	460	300	290	1300	157
450	105	520	300	320	1455	200
500	111	580	400	357	1708	290
600	114	690	400	420	1864	380
700	124	800	400	455	2150	500
800	140	910	400	510	2400	640
900	150	1020	400	560	2600	850
1000	170	1140	400	625	2800	1000

Note: Dimensions and weight of DN50, DN65 and DN250 to DN1000 are only for reference. They are subject to change without notification

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