

KDX - Series DX Knife Gate Valve



- Abrasion-resistant slurry sleeves are field replaceable
- 100% full-port design provides bi-directional, drop-tight shutoff
- · Eliminates packing
- Wiper blade cleans debris from heavyduty Stainless Steel gate as it strokes
- · Optional open/close lock-out feature

Materials of Construction

- Body: 3-24" ductile cast iron; 3" and larger fabricated carbon steel
- **Gate:** 316 Stainless Steel, 17-4 pH, Hastelloy C-276 Other materials are available, contact Red Valve.
- Optional Gate Coating: Polytetrafluoroethylene (PTFE)
- Elastomers: Ethylene Propylene Diene Terpolymer (EPDM), Acrylonitrile-Butadiene (NBR), Chloroprene (CR)
- Flange Drillings: ASME 150, ASME 300, ASME B16.1 125 cast flanges, AWWA C110 125 flanges, EN1092 PN 10, EN1092 PN 16.
 Other drill patterns available upon request.
- · Optional: Splash guard and pipe away containment

The Series DX Knife Gate Valve is the most durable and user-friendly valve available for difficult slurry applications. The fully elastomer-lined Series DX Valve prevents slurry build-up or dewatering by eliminating the seat cavity. Ductile cast iron bodies provide enhanced performance when external and internal factors require a less brittle and more malleable material.

When open, the Series DX Valve's reinforced elastomer sleeves seal against each other, providing a 100% full-port opening which minimizes turbulence and wear. In this open position, the seats isolate and protect all metal parts of the valve from coming in contact with the process. When closed, the sleeves provide a drop-tight seal in both directions.

Each time the Series DX Valve strokes, it discharges a small amount of slurry, which keeps the gate path and seat area clear of entrapped particulates. Unlike traditional knife gate valves, the DX prevents slurry build-up in the seat area, which might otherwise prohibit the valve's ability to close. Both the slurry sleeves and gates are field-replaceable.

A wiper blade mounted on top of the valve prevents the gate lubricant and process from leaking through the top. The Series DX Valve's innovative design eliminates the need for traditional packing. This wiper blade also prevents external grit from entering the valve body. To control slurry discharging from the slot in the valve, a plate style splash guard is utilized. Optional systems to pipe or flush slurry away are also available.

Series DX

	DIMENSIONS in/mm						
	Length F to F				MAX. OPERATING PRESSURE		
VALVE SIZE	WITHOUT RETAINING FLANGES	WITH RETAINING FLANGES	HEIGHT CLOSED C	HEIGHT OPEN H	316 GATE psi/kPa	17-4 pH GATE psi/kPa	WEIGHT lbs/kg
<u>3"</u>	<u>5.88</u>	<u>6.88</u>	17.13	<u>20.38</u>	<u>100</u>	<u>150</u>	<u>49</u>
80mm	149	175	435	518	690	1030	22
<u>4"</u>	<u>5.88</u>	<u>6.88</u>	18.25	<u>22.63</u>	<u>100</u>	<u>150</u>	<u>66</u>
100mm	149	175	464	575	690	1030	30
<u>6"</u>	<u>6</u>	<u>7.00</u>	<u>21.06</u>	<u>27.18</u>	<u>100</u>	<u>150</u>	<u>109</u>
150mm	152	178	535	690	690	1030	49
<u>8"</u>	<u>6.25</u>	<u>7.25</u>	<u>26.56</u>	34.50	<u>100</u>	<u>150</u>	<u>173</u>
200mm	165	184	675	876	690	1030	78
<u>10"</u>		8.88	32.44	43.63	100	<u>150</u>	<u>222</u>
250mm		226	824	1108	690	1030	101
<u>12"</u>		<u>10.13</u>	37.00	<u>50.88</u>	<u>100</u>	<u>150</u>	<u>340</u>
300mm		257	940	1292	690	1030	154
<u>14"</u>		<u>10.13</u>	<u>43.63</u>	<u>57.63</u>	<u>100</u>	<u>150</u>	<u>495</u>
350mm		257	1108	1464	690	1030	225
<u>16"</u>		<u>11.00</u>	47.50	63.00	100	<u>150</u>	<u>635</u>
400mm		279	1207	1600	690	1030	288
<u>18"</u>		12.13	<u>52.53</u>	70.00	100	<u>150</u>	<u>895</u>
450mm		308	1334	1778	690	1030	406
<u>20"</u>		<u>14.13</u>	<u>57.94</u>	74.13	<u>100</u>	<u>150</u>	<u>1060</u>
500mm		359	1472	1883	690	1030	481
<u>24"</u>		<u>14.63</u>	66.68	86.94	<u>100</u>	<u>150</u>	<u>2250</u>
600mm		372	1694	2208	690	1030	1021
<u>30"</u>		<u>15.75</u>	88.63	120.63	<u>75</u>	<u>150</u>	<u>2388</u>
750mm		400	2251	3064	520	1030	1083





Plate Style Splash Guard

