

KNIFE GATES

Knife gate valves are used as shut-off and isolation fittings in material handling systems. These simple devices, designed to work in difficult conditions and are a support for the operation of many industrial installations.

Knife gate valves can be applied and used in the food industry, chemical industry, paper industry, chemical plants, cement plants, mining and many other industrial applications.



FOOD /
AGRICULTURE



CHEMICAL
INDUSTRY



PAPER
INDUSTRY



CEMENT
INDUSTRY



MINING
INDUSTRY



ENVIRONMENTAL
PROTECTION

These devices can be installed at the outlets of tanks, silos, mechanical feeders, under dry dedusting devices and wherever gases and dust are not aggressive and their temperature for the standard version does not exceed +80° C.

POSSIBILITIES OF CONTROL AND VERSIONS:

MANUFACTURING:



Plasma cut
and welded
components

MATERIALS:



Carbon Steel



Stainless Steel

SPECIAL VERSIONS:



FINISHING METHOD:



Painting:
- an epoxy primer
- polyurethane paint or
acrylic paint



Seals:
- spring stainless steel
- plastics
- stuffing box seals

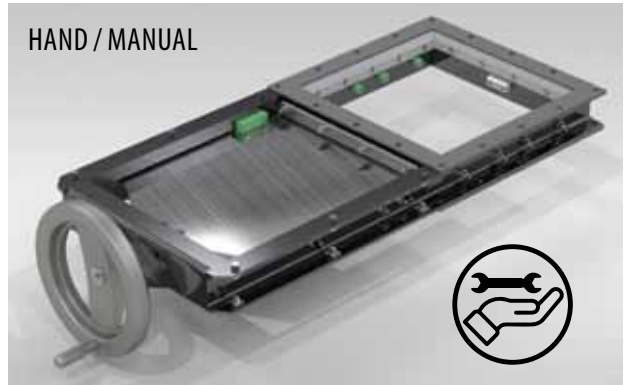


Application of
hard-resistant
surfaces material

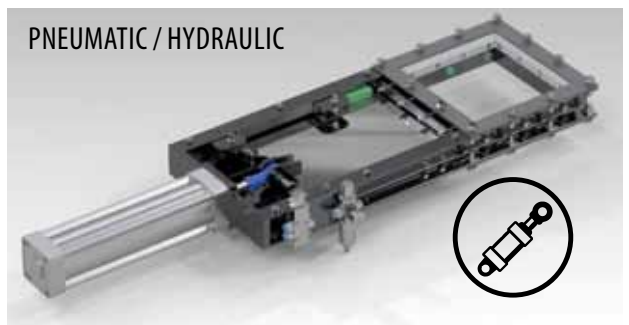
ELECTRICAL



HAND / MANUAL



PNEUMATIC / HYDRAULIC



KNIFE GATES

WORK CONDITIONS:



Ambient temperature: - 15 ... + 40 °C*

Material temperature: - 15 ... + 80°C

*The gate valve itself can be made in temperature resistant versions, however temperatures are limited by sensors and applied drives.



Gate valves are characterized by a minimum pressure drop in the fully open position, they are easy to use and have a relatively low weight.

Knife gate valves should only be used in conditions requiring a fully open or fully closed position and should not be used to regulate the flow of the transported medium, unless intended for this purpose.

DIFFERENT TYPES OF MATERIALS ARE USED FOR THE GIVEN ELEMENTS:

The knife gate valve consists of a body where in the middle, on pin guides, a plate (knife) adjusting the degree of opening of the gate cross-section moves. The passage of the plate through the body is sealed with a stuffing box. Knives and pins are made of stainless steel or acid-resistant stainless steel, which is characterized by even greater resistance to corrosion.

VALVE VERSIONS AND THEIR ADVANTAGES:

We can distinguish various types of knife gate valves: by the construction itself, by the manufacture material used and by the drive way. One of the most important parameters is, of course, the diameter. Despite the large diameter of the flange enabling installation on the pipeline, the gate valve itself has a relatively narrow body, and thus low weight. Thanks to this, knife gate valves take up little space between two sections of the pipeline and allow for optimization of the space occupied by industrial installations.

Manual control is carried out by steering wheel or a drive chain wheel that lowers or raises the knife. Pneumatic control is carried out by means of double-acting or single-acting pneumatic actuators. Another type is the control of the electromechanical drive in the power supply versions 230-400V~ 50Hz.

With the use of pneumatic and electric drives, it is possible to add position sensors and connect them to the automation system.



KNIFE GATE TYPE:	INTERNAL WIDTH OF THE COLLAR:	HEIGHT:	INDICATIVE FLOW LEVEL:
BKKG 150	150 mm	80 mm	55 m ³ /h
BKKG 200	200 mm	80 mm	95 m ³ /h
BKKG 250	250 mm	80 mm	140 m ³ /h
BKKG 300	300 mm	80 mm	215 m ³ /h
BKKG 400	400 mm	80 mm	375 m ³ /h
BKKG 500	500 mm	80 mm	560 m ³ /h