

**MODEL****KP**

## TRANSMITTER ISOLATION VALVE

Orbinox **KP** valve provides isolation of an instrument level transmitter from a storage tank. Installation of this valve allows for transmitter replacement or maintenance without disruption of the process or draining of the vessel.

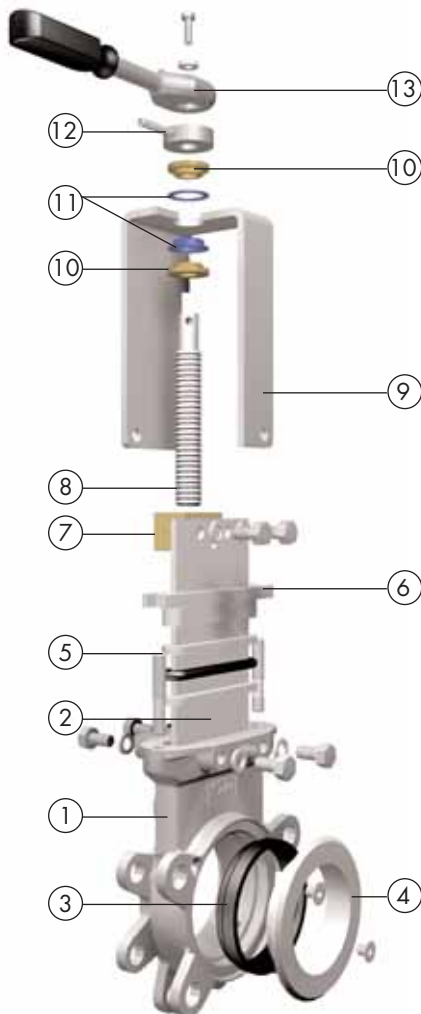
**Sizes:** DN 80

**Standard flange connection:** PN10 / ANSI 150  
Tank side: see pag. 4

**Working pressure:** DN80: 10 bar

**Directives:** DIR 98/37/CE (MACHINES)  
DIR 97/23/CE (PED) Fluid: Group 1 (b),  
2 (Cat. I, mod. A)  
DIR 94/9/CE (ATEX) Group II, Cat. 3:  
zones 2 and 22

All valves are tested prior to shipping in accordance with the standard developed by the Quality Control Department at ORBINOX.



### STANDARD PARTS LIST

Part:	Material:
1- Body	CF8M (1.4408)
2- Gate	AISI 316 (1.4404)
3- Seat	EPDM
4- "K" Ring	AISI 316 (1.4404)
5- Packing	Dynapack (Graphite impregnated PTFE and Aramid yarn combination with an elastomeric core)+ (EPDM O-ring)
6- Gland	CF8M (1.4408)
7- Stem nut	Brass
8- Stem	AISI 430 (1.4016)
9- Yoke	AISI 304 (1.4301)
10 - Bushing	Brass
11- Bushing + washer	Nylon
12- Spring Pin	DIN1481
13- Ratchet wrench	Carbon steel
14- Bolts&Nuts	A2

## DESIGN FEATURES

### BODY:

Wafer style cast stainless steel **monoblock** with raised face.  
 Internal cast-in gate wedges and guides allow for tighter shut-off.  
 Full port design for greater flow capacity and minimal pressure drop.  
 Internal design avoids any build-up of solids that would prevent valve from closing.

### GATE:

Stainless steel gate as standard.  
 Gate is polished on both sides to avoid jamming and seat damage.  
 The bottom of the gate edge is machined to a bevel to cut through solids for a tighter seal in the closed position.

### SEAT: (resilient)

Unique design that mechanically locks the seat in the inner side of the valve body with a cast, easy to replace, stainless steel seat ring.  
 Standard EPDM also available in different materials such as PTFE, etc.

### PACKING:

Long-life packing with several graphite impregnated PTFE and Aramid yarn combination with an elastomeric core, plus an EPDM O-ring with an easy access packing gland ensuring a tight seal. Long-life braided packing is available in a wide range of materials.

### STEM:

The standard stainless steel stem offers a long corrosion resistant life.

### ACTUATORS:

All valves supplied with WRENCH.

### YOKE or ACTUATOR SUPPORT:

Made of stainless steel (EPOXY coated steel available on request).  
 Compact design makes it extremely robust even under the most severe conditions.

### EPOXY COATING:

The epoxy coating on all **ORBINOX** cast iron and carbon steel components is electrostatically applied, making the valves corrosion resistant with a high quality finished surface.

The **ORBINOX** standard colour is RAL-5015 **blue**.



**TEMPERATURE CHART**

SEAT / SEALS			PACKING		
Material	Max.Temp.(°C)	Applications	Material	Max. Temp. (°C)	pH
EPDM (E)	120	Acids and non mineral oils.	Dynapack (DP)	270	2 - 14
Nitrile (N)	120	Resistance to petroleum products.	Braided PTFE (TH)	260	0 - 14
Viton (V)	200	General chemical service. High temperature.	Graphited (GR)	600	0 - 14
Silicone (S)	250	Food service. / High temperature.	Ceramic fibre (FC)	1200	—
PTFE (T)	250	Corrosion resistance.	NOTE: all types include an elastomere O-ring (same material as seal).		
Polyurethane	90	Abrasion resistance.			

More details and other materials on request.

**SEAT TYPES**

**TYPE "K" SEAT (EPDM)**



- Standard replaceable resilient EPDM seat.
- Replaceable stainless steel ring.

**DEFLECTION CONE "C"**



- Deflects the media away from any internal exposed parts of the valve such as gate guides, seat, etc.
- Different types of material available such as AISI 316 stainless, CA15, Ni-Hard, etc.

Face to face dimension increase:  
 DN 50 to DN 250 X = 9mm  
 DN 300 to DN 600 X = 12mm  
 Larger diameters on request.

**TYPE "K" SEAT (PTFE)**



- Replaceable resilient PTFE + O-ring seat.
- Replaceable stainless steel ring.

**POLYURETHANE**



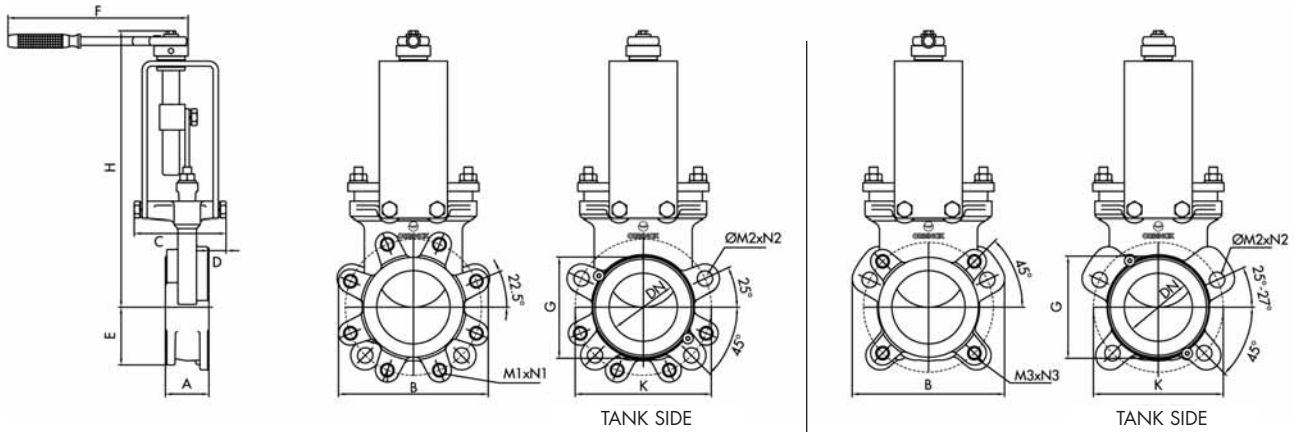
- Replaceable polyurethane seat ring.

MODEL

**KP**



**MAIN DIMENSIONS**



PN 10

ANSI 150

	DN										PN10		ANSI class 150		TANK SIDE	
		A	B	C	D	E	F	G	H	K	M1	N1	M3	N3	ØM2	N2
<b>PN 10</b>	80	51	177	110	22	88	212	120	325	160	M16	8	-	-	18	4
<b>ANSI Class 150</b>	80	51	180	110	22	74	212	120	325	152.4	-	-	5/8-11 UNC	4	18	4