

Full flow electronic valves



Full flow electronic valves

The **IGLOO MOTO** full flow electronic valves are bi-directional ball valves for refrigerants actuated by means of brushless servo-operators and are suitable for oil, liquid, suction and hot-gas line in refrigeration and air-conditioning systems: on-off type can be used to shut-off the flow and modulating type can be used to regulate the flow.

Optionally for all the models is available an external access port.

Despite other electronic valves such as solenoid valves, the flow gives maximum through-flow with minimum pressure drop across valve in both directions and internal leaks are not dependent from the differential pressure across the valve.

The combination of welded valve body, ball seat with seal made of PTFE Teflon®, double spindle o-ring seal and cap seal gives absolutely minimum leakage: final tests done on all the pieces produced guarantee leakrate sensibly lower than 1 gram/year of refrigerant.

Features

- Broad range of temperature:
 - Fluid from -40°C (-40°F) to +150°C (+300°F)
 - Ambient from -30°C (-22°F) to +55°C (+130°F)
- All sizes are full port
 - Higher flow rate, lower pressure drop
- Internal tightness not dependent from the back-pressure across the valve
 - No need of check valves to guarantee the tightness
- Bi-directional flow
 - Can be mounted in any position
- Available external access port for service to the system
- Hermetic welded design
- All the valves manufactured are singly leak tested and pressure tested
 - Pressure test at 70bar
 - Leak test with helium in a high vacuum chamber according to EN 1779.B6
- Balls have a pressure equalization hole
 - Open/Close torque independent from the operating pressure
 - Prevents trapped pressure in valve body cavity, with consequent potential failure due to burst in case of overheating
- Burst-proof spindle mounted from the inside
- Can be panel fixed
- Selected technical rubbers and Teflon® compounds for internal sealing elements

Full flow electronic valves

Approvals

CE (PED, RoHS, REACH, LV, ECM), EAC

Technical data

Suitable for HCFC, HFC and R744 (CO₂) refrigerants. Not suitable for ammonia.

Standard valves:

BKS series	without access port	-40 ÷ +150 °C	45bar
BKA series	with access port	-40 ÷ +300 °F	650psig

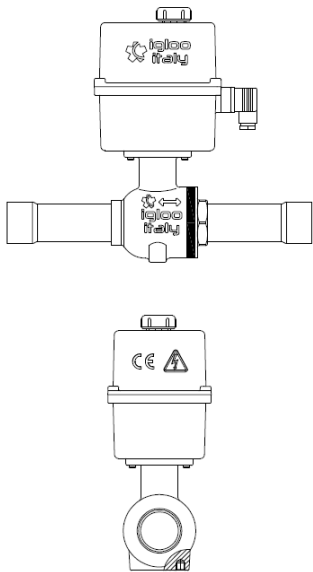
Supply

IGLOO ball valves are supplied with mounting brackets for the actuator already assembled from the factory. The actuator brackets have holes to allow easy fixing of the valve to the wall. The valves are singly packaged into carton boxes with annex fitting instructions. The actuators are supplied into its own box, and we recommend to connect it to the valve just after the brazing in order to prevent demaging it due to overheating.

Ordering

BKS series without access port

Part number	ODF Connections (aka ODS)		Orifice	Kv (m ³ /h)	PED 2014/68/EU
	mm	inch	Ø S (mm)	UNI 9182:2010	Risk Category
BKS-M6	O.D. 6mm	-	10	1,2	Art.4 Par.3
BKS-4	-	O.D. 1/4"	10	1,2	
BKS-5	O.D. 8mm	O.D. 5/16"	10	1,2	
BKS-6	-	O.D. 3/8"	10	3,5	
BKS-M10	O.D. 10mm	-	10	3,5	
BKS-M12	O.D. 12mm	-	10	6,6	
BKS-8	-	O.D. 1/2"	10	6,6	
BKS-M15	O.D. 15mm	-	13	15	
BKS-10	O.D. 16mm	O.D. 5/8"	13	15	
BKS-M18	O.D. 18mm	-	16	20	
BKS-12	O.D. 19mm	O.D. 3/4"	16	20	
BKS-14	O.D. 22mm	O.D. 7/8"	19	24	
BKS-M28	O.D. 28mm	-	25	42	
BKS-18	-	O.D. 1.1/8"	25	42	
BKS-22	O.D. 35mm	O.D. 1.3/8"	32	65	
BKS-26	-	O.D. 1.5/8"	40	110	I
BKS-M42	O.D. 42mm	-	40	110	
BKS-34	O.D. 54mm	O.D. 2.1/8"	50	190	
BKS-M64	O.D. 64mm	-	65	300	
BKS-42	-	O.D. 2.5/8"	65	300	
BKS-48	O.D. 76mm	O.D. 3"	65	300	
BKS-50	O.D. 80mm	O.D. 3.1/8"	65	300	

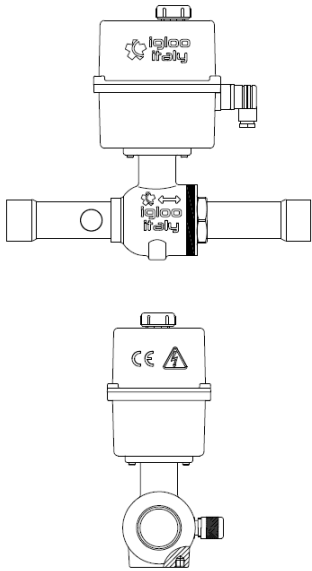


Full flow electronic valves

Ordering

BSS series with access port

(continued)



Part number	ODF Connections (aka ODS)		Orifice	Kv (m3/h)	PED 2014/68/EU	
	mm	inch	Ø S (mm)	UNI 9182:2010	Risk Category	
BKA-M6	O.D. 6mm	-	10	1,2	Art.4 Par.3	
BKA-4	-	O.D. 1/4"	10	1,2		
BKA-5	O.D. 8mm	O.D. 5/16"	10	1,2		
BKA-6	-	O.D. 3/8"	10	3,5		
BKA-M10	O.D. 10mm	-	10	3,5		
BKA-M12	O.D. 12mm	-	10	6,6		
BKA-8	-	O.D. 1/2"	10	6,6		
BKA-M15	O.D. 15mm	-	13	15		
BKA-10	O.D. 16mm	O.D. 5/8"	13	15		
BKA-M18	O.D. 18mm	-	16	20		
BKA-12	O.D. 19mm	O.D. 3/4"	16	20		
BKA-14	O.D. 22mm	O.D. 7/8"	19	24		
BKA-M28	O.D. 28mm	-	25	42		I
BKA-18	-	O.D. 1.1/8"	25	42		
BKA-22	O.D. 35mm	O.D. 1.3/8"	32	65		
BKA-26	-	O.D. 1.5/8"	40	110		
BKA-M42	O.D. 42mm	-	40	110		
BKA-34	O.D. 54mm	O.D. 2.1/8"	50	190		
BKA-M64	O.D. 64mm	-	65	300		
BKA-42	-	O.D. 2.5/8"	65	300		
BKA-48	O.D. 76mm	O.D. 3"	65	300		
BKA-50	O.D. 80mm	O.D. 3.1/8"	65	300		

