

# DATA SHEET

## Internal Thread Ball Valves PROKOSCH Model 450



PROKOSCH ball valves are suitable for use with granulated, pulverized media as well as neutral liquids, suspensions and gases. They are characterised by the use of fewer individual parts, space-saving elements as well as easy operation and a long service life.

The full bore trunnion mounted ball reduces flow resistance and wear to the ball and seats to a minimum and provides a low switching torque over the entire pressure range.

Thanks to their modular design, PROKOSCH ball valves are easy to configure and our standard designs and options have been proven in a wide range of applications. Since the ball valve does not have any ignition source, it can also be configured for safe use in various ATEX applications.

### Specifications

Pressure rating	PN10, optionally PN16
Nominal diameter	DN50...DN100
Min. Temperature <sup>1)</sup>	-15 °C / -20 °C / -40 °C
Max. Temperature <sup>2), 3)</sup>	+80 °C / +180 °C / 230 °C
Upstream connection	Internal Thread DIN ISO 259 <sup>8)</sup>
Downstream connecton	Internal Thread DIN ISO 259 <sup>8)</sup>

### Material Selection

Body	cast iron (primed) / aluminium / stainless-steel
Ball	cast iron <sup>5)</sup> / aluminium / stainless-steel
Seats	PTFE / E-PTFE / UHMWPE / stainless-steel
O-Rings	NBR / FKM / Silicone (FEP coated)

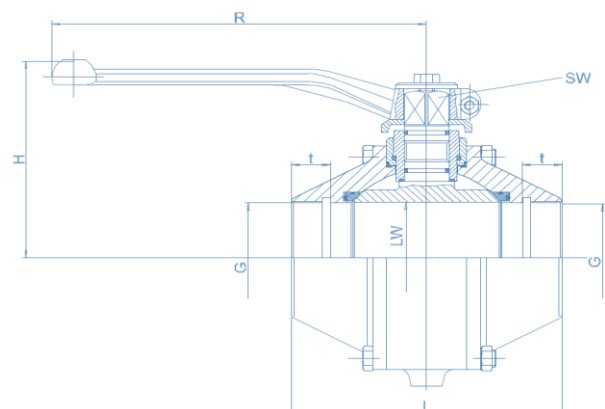
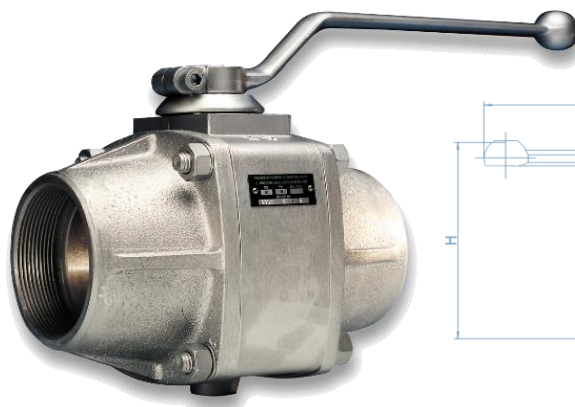
### Seat Selection

PROKOSCH PTFE O-Ring tensioned	solids, suspensions and liquids
PROKOSCH UHMWPE O-Ring tensioned	more abrasive solids and suspensions
PROKOSCH Metal-O-Ring tensioned	abrasive and adhesive solids, media tight
PROKOSCH special casing	gases and liquids, reinforced for high flow rates
PROKOSCH non-clogging <sup>4)</sup>	seated upstream with open downstream, media tight

### Recommended Application

### Dimensions

													Weights (kg) by MK			
DN	PN	LW	L	-	-	-	-	t	G	H	R	SW	5	3,4	8,9	Rest
<input type="checkbox"/> 40 (1½")	16	39	130	-	-	-	-	22	2"	130	250	17	1,9	-	-	-
<input type="checkbox"/> 50 (2")	16	50	145	-	-	-	-	23	2"	130	250	17	2,3	3,3	3,5	5,9
<input type="checkbox"/> 65 (2½")	16	64	165	-	-	-	-	25	2½"	140	270	19	-	5,5	6,0	8,8
<input type="checkbox"/> 80 (3")	16	78	195	-	-	-	-	28	3"	150	270	19	-	7,4	8,0	12,5
<input type="checkbox"/> 100 (4")	16	97	220	-	-	-	-	30	4"	175	330	27	-	13,0	13,9	23,0





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Product configuration - most applications are covered by our standard designs. The standard design can be supplemented with a selection of options to suit the application. In addition, we can offer customised special designs for more demanding requirements.

A special feature of the 450 series is that the threaded ends do not have to be removed from the pipeline for maintenance and replacement of all wear parts. For this, however, the piping system must allow sufficient clearance, e.g. connected on one side to a hose.

All ball valves are manufactured in our factory in Germany. Our employees and our ISO9001 certified quality management system - a thorough system of controls and verifications from the raw materials supply through material receipt until to final inspection - ensure the high and consistent quality of our products. Furthermore, factory certificates according to EN 10204 2.2 and 3.1 are available on request.

Design				Code	
<i>Housing</i>	<i>Ball</i>	<i>Seat/O-Rings</i>	<i>Seat Type</i>	<i>MK</i>	
Cast iron	Cast iron <sup>5)</sup>	PTFE/FKM	Special casing	1	<input type="radio"/>
Cast iron	Cast iron <sup>5)</sup>	PTFE/NBR	O-Ring tensioned	2	<input type="radio"/>
Aluminium	Cast iron <sup>5)</sup>	PTFE/FKM	Special casing	3	<input type="radio"/>
Aluminium	Cast iron <sup>5)</sup>	PTFE/NBR	O-Ring tensioned	4	<input type="radio"/>
Aluminium	Aluminium <sup>6)</sup>	PTFE/NBR	O-Ring tensioned	5	<input type="radio"/>
Cast iron	Stainless-st.	PTFE/FKM	Special casing	6	<input type="radio"/>
Cast iron	Stainless-st.	PTFE/NBR	O-Ring tensioned	7	<input type="radio"/>
Aluminium	Stainless-st.	PTFE/FKM	Special casing	8	<input type="radio"/>
Aluminium	Stainless-st.	PTFE/NBR	O-Ring tensioned	9	<input type="radio"/>
Cast iron	Stainless-st. <sup>7)</sup>	Stainless-st. <sup>7)</sup>	Metal O-Ring tensioned	10	<input type="radio"/>
Top Mounting				Code	
Standard, with stop washer and hand lever				-	<input type="radio"/>
Bare shaft, with stop washer				/OH	<input type="radio"/>
Bare shaft with top flange prepared for actuator adaptation				/SO	<input type="radio"/>
Options				Code	
Anti clogging design, seated only upstream with aerodynamic open downstream				/FA	<input type="checkbox"/>
Flushing port, a 1/2" threaded hole for flushing on one side of the ball valve				/SB	<input type="checkbox"/>
Anti-static-device, enabling the dissipation and inhibition of electrostatic buildup				/AS	<input type="checkbox"/>
Lock-out-device, a valve can be locked in place by a mechanical locking device				/LO	<input type="checkbox"/>
E-PTFE seats, for increased conductivity for anti-static applications				(E-PTFE)	<input type="checkbox"/>
UHMWPE seats, alternative to PTFE seats for increased wear resistance				(UHMWPE)	<input type="checkbox"/>
FKM o-rings, alternative to NBR o-rings of a standard design				-FKM	<input type="checkbox"/>
FEP o-rings, alternative to the o-rings of a standard design				-FEP	<input type="checkbox"/>
Protective coating in addition to priming the cast iron bodied valves				-RAL#	<input type="checkbox"/>

Note:  single selection,  multiple selection

Order Code: <Model>/<Nominal Diameter in Inch>/<Design> <Top Mounting> <Options>

Examples: 450/1,5/5, or 450/100/9/LO-FKM

1) NBR O-Rings -20°C, FKM O-Rings -15°C, Low temperature application -40°C with Silicone(FEP) O-Rings; 2) Higher temperature range +180°C with PTFE Seats and FKM O-Rings; 3) High temperature applications 230°C only with stainless-steel seats and FKM O-Rings; 4) The /FA anti-clogging design is available for all O-Ring tensioned seat types; 5) hard chrome plated and polished; 6) Aluminium balls available for DN40 and DN50 other sizes upon request; 7) borated for increased wear resistance, the seats are fitted with FKM O-Rings.



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