

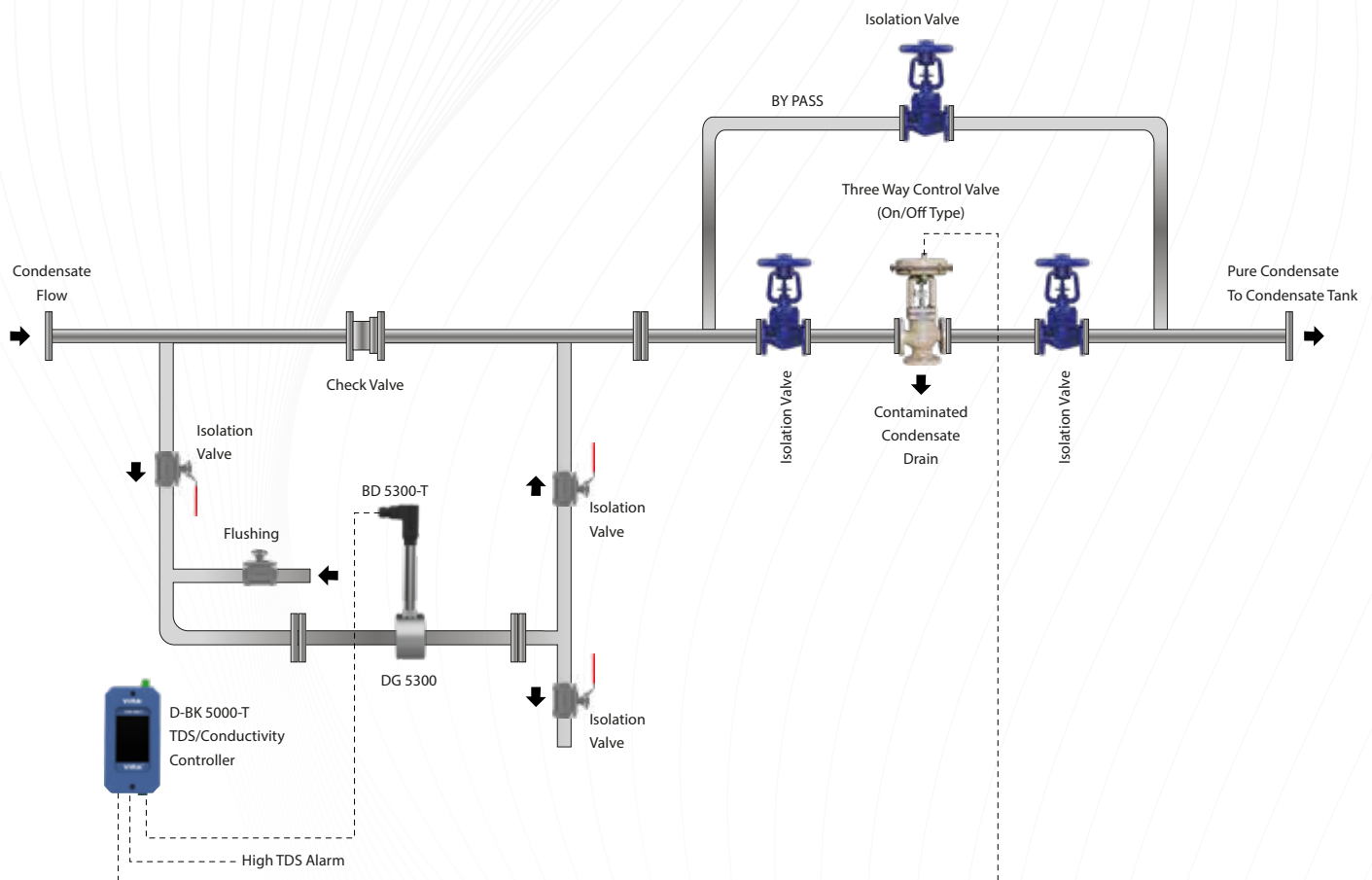
Condensate Contamination Control System

Condensate is very valuable for steam producing plants and needs to be recycled. It must be ensured that the returned condensate is clean. Leakage in one of the devices used for heat transfer may cause the heated fluid to mix into the condensate water.

The condensate contamination control system monitors and displays the conductivity of the condensate. It automatically diverts the condensate to drain by a 3 way valve instead of back to the boiler system.

When the conductivity drops to the desired level, the condensate is allowed to return to the boiler system, thus minimizing heat and water wastage, as well as avoiding the possibility of contaminating the feedwater.

Note: BS3-T and D-BS3-T Vira Condensate Contamination Control system performs contamination control with electrical conductivity measurement.



D-BS3-T Condensate Conductivity Control System



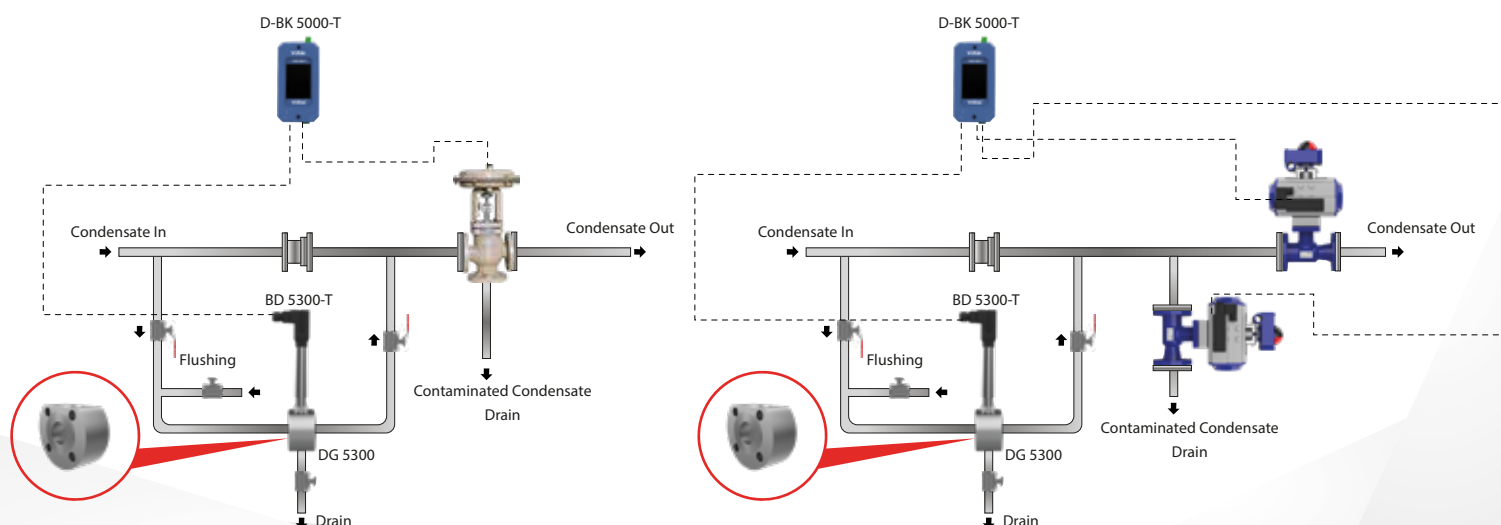
Temp. Comp. Type Conductivity Controller

Type	: D-BK 5000-T
Supply Voltage	: 24VDC
Enclosure	: Panel-mount and Din Rail Type
Functions	: Conductivity Measurement and Continuous Blowdown Control, Valve Control, High TDS Alarm, Adjustable Setpoints and Hysteresis, Touchscreen Display, Multi-Language User Interface, Alarm Reset
Outputs	: 1 Valve Control Relay, 1 High TDS Alarm Relay, 4–20 mA Analog Conductivity Output, RS485 Modbus Communication
Features	: Conductivity and Alarm Set Values, Valve & Alarm Relay Test Functions, Touchscreen Display, User-Friendly Parameter Setting, Multi-Language Support
Compliance	: CE (EMC 2014/30/EU, LVD 2014/35/EU), Type Approval (Module B + D), EN 12952 & EN 12953

Temp. Compensation Type Conductivity Probe

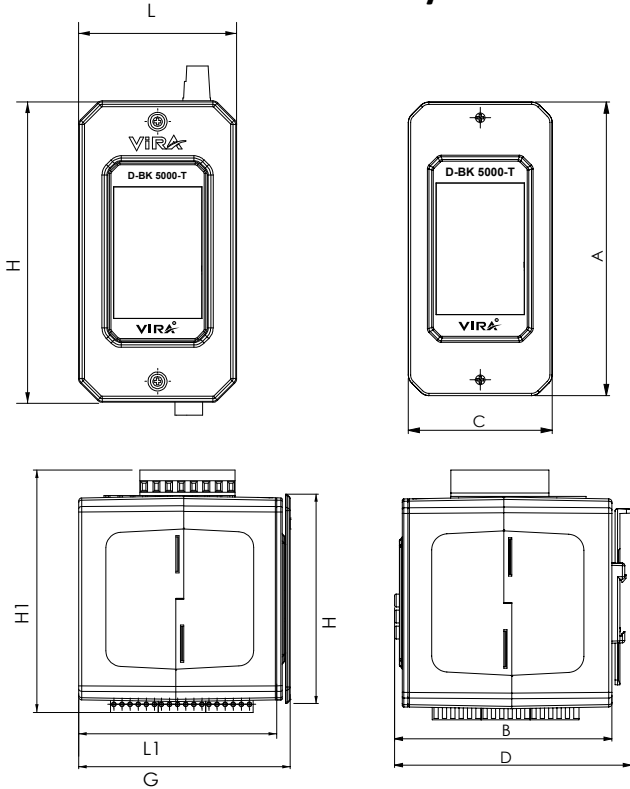
Type	: BD 5300-T
Nominal Pressure	: PN 40
Max. Operat. Temp.	: 239 °C
Max. Operat. Press.	: 32 Bar g
Connection	: 1/2" BSPT (Optional NPT)
Max. Ambient Temp.	: 75 °C
Compliance	: CE (PED 2014/68/EU), Type Approval (Module B + D), EN 12952 & EN 12953

D-BS3-T Typical Installations



TECHNICAL SPECIFICATION

D-BK 5000-T Conductivity Controller



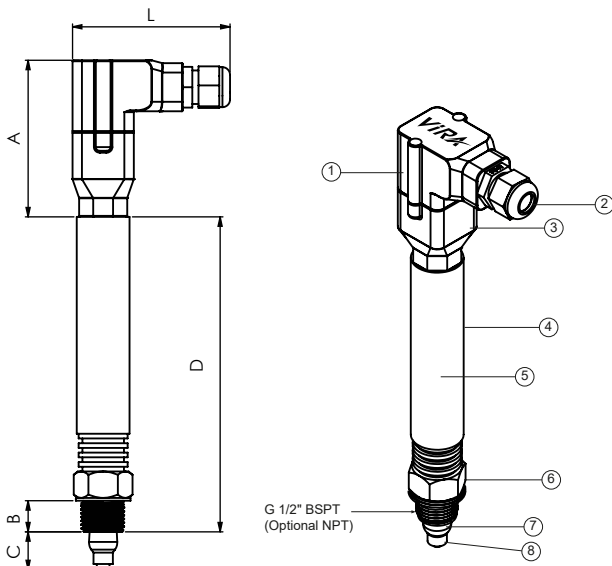
Technical Data

Controller	D-BK 5000-T
Supply Voltage	24VDC
Functions	Conductivity Measurement and Continuous Blowdown Valve Control, High TDS Alarm, Adjustable Setpoints and Hysteresis, Touchscreen Display, Multi-Language User Interface, Alarm Reset
Inputs	1 Conductivity Input (via Probe), 1 Temperature Sensor Input (Pt100 via Probe), Ground Connection
Outputs	1 Valve Control Relay, 1 High TDS Alarm Relay, 4-20 mA Analog Conductivity Output, RS485 Modbus Communication
Range	0-1.000 $\mu\text{S/cm}$ (default)
Display & Control	Touch Screen
Label	Silicone Rubber
Max. Ambient Temp.	55°C
Enclosure	PC (Polycarbonate)
Type	Panel-mount and Din Rail
Protection Class	IP 40

Dimensions

H (mm)	H1 (mm)	L (mm)	L1 (mm)	C (mm)	D (mm)	B (mm)	G (mm)	A (mm)
134,6	156	72	130	64	148	136	136	130

BD 5300-T Conductivity Probe



No	Part	Material
1	Upper Connector Housing	GF-PP (Glass Fiber Reinforced Polypropylene)
2	Cable Gland	PA6 (Polyamide)
3	Lower Connector Housing	GF-PP (Glass Fiber Reinforced Polypropylene)
4	Label	Laser Marking
5	Cover Tube	Austenitic Stainless Steel 304
6	Probe Body	Austenitic Stainless Steel 316L
7	Probe Tip Sleeve	Politetrafluoroetilen (PTFE)
8	Probe Tip	Austenitic Stainless Steel 316L

Dimensions

L (mm)	A (mm)	B (mm)	C (mm)	D (mm)
83,5	83	16,5	20	167

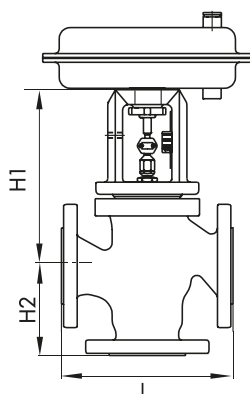


Control Valve for Condensate Conductivity Control

Type	: SKV 3300-3
Body Material	: ENJL 1040 PN 16, ENJS 1049 PN 25, 1.0619 PN 40
Leakage Class	: Class I
Flow Characteristic	: Linear
Operating Temp.	: -10 - + 220°C (High Temp. on Request)
Sealing	: Metal to Metal
Actuator	: Pneumatic

Technical Data

Model	SKV 3300-3
Type	Diverting Valve
Pressure Class	PN 16, PN 25, PN 40
Body Material	EN-JL1040 - PN16 EN-JS1049 - PN25 1.0619 - PN40
Operat. Temp.	-10 - +220 °C
Sealing	Metal to Metal
Actuator	Pneumatic

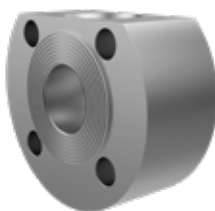


Dimensions

Valve	DN	15	20	25	32	40	50	65	80	100	125	150
L	-	130	150	160	180	200	230	290	310	350	400	480
H1	-	235	235	235	235	235	235	270	270	360	375	375
H2	-	70	80	85	100	105	120	130	140	150	200	210

Conductivity Probe Body

Type	: DG 5300
Nominal Pressure	: PN 40
Sizes	: DN 20, DN 25, DN32, DN 40, DN 50
Max. Operat. Temp.	: 239 °C
Max. Operat. Press.	: 32 Bar g
Body	: Stainless Steel



Technical Data

Type	DG 5300
Body	Carbon Steel, Stainless Steel
Pressure Class	PN 40
Process Connection	Threaded
Probe Connection	Threaded

Dimensions

Type	Size	L (mm)	A (mm)	B (mm)	ø C (mm)	ø D (mm)	ø D1 (mm)
DG 5320	DN 20	47	68	92,5	105	27,6	14 x 4
DG 5325	DN 25	47	82,5	97,5	115	34,5	14 x 4
DG 5332	DN 32	47	104	117	140	43	18 x 4
DG 5340	DN 40	47	112	125	150	49	18 x 4

