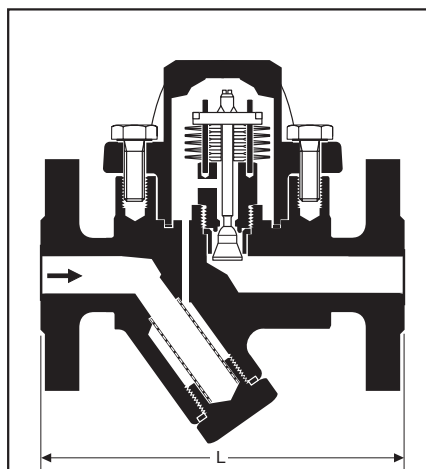
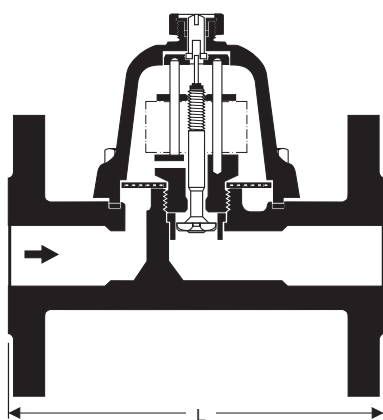


Thermostatic Steam Traps BK with Duo Stainless Steel (Bimetallic) Regulator PN 40 – PN 630



BK 45, BK 46
DN 15, 20, 25 mm **RHOMBUSline**®



BK 15, DN 40, 50 mm

Features of the BK series

- Robust regulator for roughest operating conditions (unaffected by waterhammer and frost)
- Suitable for superheated steam applications
- Automatic air-venting (steam trap can be used for thermal air-venting in steam systems)
- Installation in any position (horizontal and vertical lines)
- Stage nozzle acts as non-return valve
- Stainless steel internals
- Repairable in-line
- Base bushing ensures positive metal-to-metal sealing between body and regulator.
- Up to Δp 250 barg
- Optional extra: Integrated steam trap monitoring for BK 45 (temperature or steam loss)

Application

For open-loop controlled heating processes.

Draining of

- saturated steam lines
- superheated steam lines
- steam tracers

Can also be used for thermal air-venting

Air-venting

Steam trap for thermostatic air-venting with bimetallic regulator

The thermostatic steam traps with corrosion-resistant Duo S.S. (bimetallic) regulator of the BK series can also be used for air-venting.

Application

Thermostatic steam trap for automatic air-venting and discharge of non-condensable gases and steam/air mixtures from steam lines and heat exchangers.

Special adjustment might be required.

Pressure/Temperature Ratings *)

Type	PN Class	Δ PMX [bar]	Material		Max. Pressure / Temp. Rating	
			EN	ASTM	PMA / TMA	PMA / TMA
BK 45 ¹⁾	PN 40	22	1.0460 ²⁾	A 105 ²⁾	28.4 bar / 250 °C	23.1 bar / 400 °C
BK 15 DN 40/50	PN 40	22	1.0460 ²⁾	A 105 ²⁾	28.4 bar / 250 °C	23.1 bar / 400 °C
BK 46 ⁵⁾	PN 40	32	1.5415	A 182 F 1 ³⁾	30.2 bar / 300 °C	25.8 bar / 450 °C
BK 27N DN 15/25	PN 63	45	1.5415	A 182 F 1 ³⁾	47.6 bar / 300 °C	25.8 bar / 500 °C
BK 27N DN 40/50	PN 63	45	1.5415	A 182 F 1 ³⁾	47.6 bar / 300 °C	25.8 bar / 500 °C
BK 28	PN 100/160	85	1.5415	A 182 F 1 ³⁾	124.2 bar / 350 °C	34.3 bar / 530 °C
BK 29	PN 160	110	1.7335	A 182 F 12	146.1 bar / 350 °C	44.5 bar / 540 °C
BK 212	PN 630	250	1.7380	A 182 F 22 ²⁾	447.5 bar / 500 °C ⁴⁾	163 bar / 580 °C ⁴⁾
BK 212 F91	–	250	1.4903/F91	–	932.9 bar / 500 °C	348.4 bar / 600 °C
BK 28 ASTM	Class 600	85	–	A 182 F 12	80.4 bar / 350 °C	50.6 bar / 500 °C
BK 29 ASTM	Class 900	110	–	A 182 F 12	120.7 bar / 350 °C	43.6 bar / 540 °C
BK 212 ASTM	Class 2500	250	–	A 182 F 22	231.7 bar / 500 °C	63.0 bar / 593 °C

¹⁾ Also available: BK 45 U (discharges condensate with approx. 30 K undercooling).

²⁾ Material complies with EN and ASTM requirements.

³⁾ Physical and chemical properties comply with EN grade.

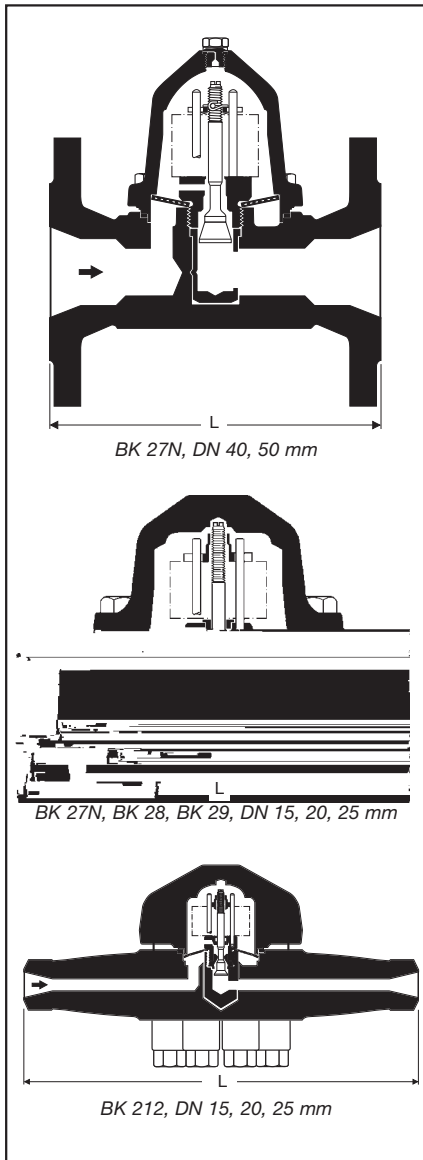
ASTM nearest equivalent grade is stated for guidance only.

⁴⁾ DN 25 mm with special nuts and bolts.

⁵⁾ BK 46 replaces BK 16.

*) For more information see data sheet.

Thermostatic Steam Traps BK with Duo Stainless Steel (Bimetallic) Regulator PN 40 – PN 630



Available End Connections and Overall Lengths

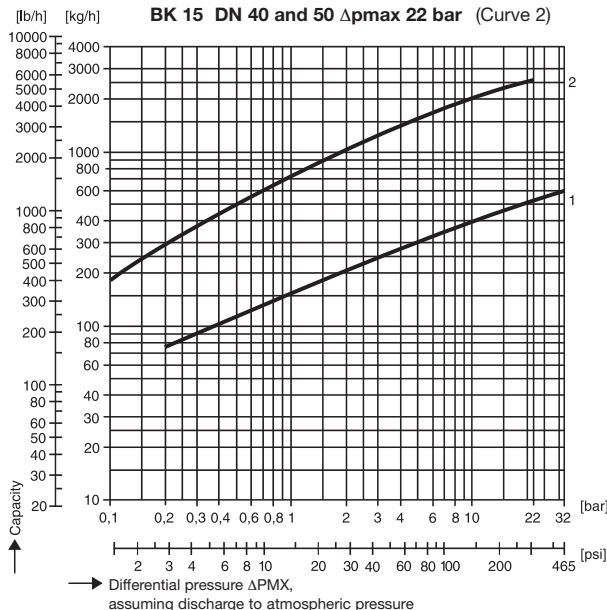
Type	Connection	Overall length (L) in mm				
		DN 15 1/2"	DN 20 3/4"	DN 25 1"	DN 40 1 1/2"	DN 50 2"
BK 45 <small>RHOMBUSline®</small> DN 15 – 25	Flanged EN PN 40	150	150	160	230	230
	Flanged ASME 150 ¹⁾	150	150	160	230	230
	Flanged ASME 300 ¹⁾	150	150	160	230	230
BK 15 DN 40, 50	Screwed sockets	95	95	95	130	230
	Socket-weld (SW)	95	95	95	130	230
	Butt-weld (BW)	200	200	200	250	250
BK 46 <small>RHOMBUSline®</small>	Flanged EN PN 40	150	150	160	–	–
	Flanged ASME 300	150	150	160	–	–
	Screwed sockets	95	95	95	–	–
	Socket-weld (SW)	95	95	95	–	–
BK 27N DN 40, 50	Flanged EN PN 40	–	–	–	230	230
	Flanged EN PN 63	–	–	–	260	300
	Flanged ASME 400/600	–	–	–	241	292
	Socket-weld (SW)	–	–	–	180	180
	Butt-weld (BW)	–	–	–	180	180
BK 27N / BK 28	Flanged EN PN 63/100	210	230	230	–	–
	Socket-weld (SW)	160	160	160	–	–
	Butt-weld (BW)	160	160	160	–	–
BK 28 ASTM	Flanged ASME 400/600	230	230	230	–	–
	Screwed sockets NPT	160	160	160	–	–
	Socket-weld (SW)	160	160	160	–	–
	Butt-weld (BW)	160	160	160	–	–
BK 29	Flanged EN PN 160	210	230	230	–	–
	Socket-weld (SW)	160	160	160	–	–
	Butt-weld (BW)	160	160	160	–	–
BK 29 ASTM	Flanged ASME 900/1500	230	230	254	–	–
	Socket-weld (SW)	200	200	200	–	–
	Butt-weld (BW)	200	200	200	–	–
BK 212	Socket-weld (SW)	330	330	330	–	–
	Butt-weld (BW)	330	330	330	–	–
BK 212 F91	Butt-weld (BW)	330	330	330	–	–
BK 212 ASTM	Socket-weld (SW)	330	330	330	–	–
	Butt-weld (BW)	330	330	330	–	–

¹⁾ BK 45 with ASME flanges: overall length 172 mm available on request.

Capacity Charts

The charts show the maximum hot condensate capacities.

BK 45 DN 15-25 Δp_{max} 22 bar (Curve 1)
BK 46 DN 15-25 Δp_{max} 32 bar (Curve 1)
BK 15 DN 40 and 50 Δp_{max} 22 bar (Curve 2)



BK 27N DN 40 and 50 Δp_{max} 45 bar (Curve 1)
BK 27N DN 15-25 Δp_{max} 45 bar (Curve 2)
BK 28/BK 28 ASTM Δp_{max} 85 bar (Curve 2)
BK 29/BK 29 ASTM Δp_{max} 110 bar (Curve 2)
BK 212/BK 212 ASTM Δp_{max} 250 bar (Curve 3)

