

BK 45, BK 46
DN 15, 20, 25



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 275 bar g
- 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

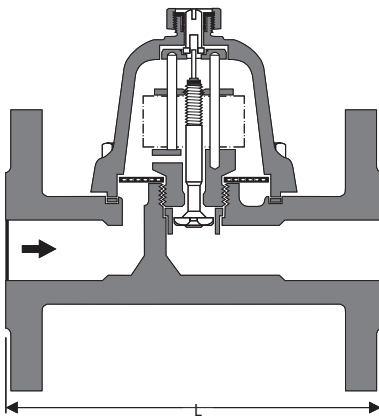
Steam trap for thermostatic air-venting with bimetallic regulator

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.



BK 15, DN 40, 50

Pressure/Temperature Ratings

Type	PN / Class	ΔPMX [bar]	Material		Max. Pressure / Temp. Rating ¹⁾		p/T	
			EN	ASTM	PMA [bar]	TMA [°C]	[bar/°C]	
BK 45, BK 45U ³⁾	PN 40	22	1.0460	A105	40.0	450	27.6 / 300	13.1 / 450
BK 45, BK 45U ³⁾	Class 300	22	1.0460	A105	51.1	425	39.8 / 300	28.8 / 425
BK 45-LT	Class 300	22	–	SA350 LF2	51.1	425	51.1 / –46 ⁴⁾	28.8 / 425 ⁴⁾
BK 15 DN 40, 50	PN 40	22	1.0460	A105	40.0	450	27.6 / 300	13.1 / 450
BK 15 DN 40, 50	Class 300	22	1.0460	A105	51.1	425	39.8 / 300	28.8 / 425
BK 46	PN 40	32	1.5415	A182-F1 ²⁾	40.0	450	39.0 / 250	27.6 / 450
BK 46	Class 300	32	1.5415	A182-F1 ²⁾	51.7	450	41.1 / 250	29.8 / 450
BK 37	PN 63/100	45	1.5415	A182-F1 ²⁾	100.0	530 ⁴⁾	100.0 / 450 ⁴⁾	30.9 / 530 ⁴⁾
BK 27N DN 40, 50	PN 63	45	1.5415	A182-F1 ²⁾	63.0	530	54.0 / 300	13.0 / 530
BK 28	PN 100	85	1.5415	A182-F1 ²⁾	181.0 ⁴⁾	530 ⁴⁾	100.0 / 450 ⁴⁾	30.9 / 530 ⁴⁾
BK 29	PN 160	110	1.7335	A182-F12	201.0 ⁴⁾	540 ⁴⁾	131.5 / 450 ⁴⁾	44.5 / 540 ⁴⁾
BK 212	PN 630	275	1.7383	A182-F22	630.0 ⁴⁾	540 ⁴⁾	447.0 / 500 ⁴⁾	261.0 / 540 ⁴⁾
BK 212-F91	–	275	1.4903	A182-F91	775.0 ⁴⁾	580 ⁴⁾	607.0 / 500 ⁴⁾	205.0 / 580 ⁴⁾
BK 212-S	PN 630	275	1.7383	A182-F22	630	580	289.0 / 540 ⁴⁾	163.0 / 580 ⁴⁾
BK 212-F91-S	–	275	1.4903	A182-F91	775	625	473.0 / 575 ⁴⁾	255.0 / 625 ⁴⁾
BK 212-1.4901	–	275	1.4901	A182-F92 ²⁾	800	650	418.0 / 600 ⁴⁾	207.0 / 650 ⁴⁾
BK 37-ASME	Class 400/600	45	–	A182-F12	103.4 ⁴⁾	500 ⁴⁾	85.7 / 300 ⁴⁾	42.8 / 500 ⁴⁾
BK 28-ASME	Class 600	85	–	A182-F12	103.4 ⁴⁾	500 ⁴⁾	85.7 / 300 ⁴⁾	50.6 / 500 ⁴⁾
BK 29-ASME	Class 900	110	–	A182-F12	155.0 ⁴⁾	540 ⁴⁾	101.4 / 450 ⁴⁾	43.6 / 540 ⁴⁾
BK 212-ASME	Class 2500	275	–	A182-F22	430.9 ⁴⁾	593 ⁴⁾	235.0 / 500 ⁴⁾	63.0 / 593 ⁴⁾

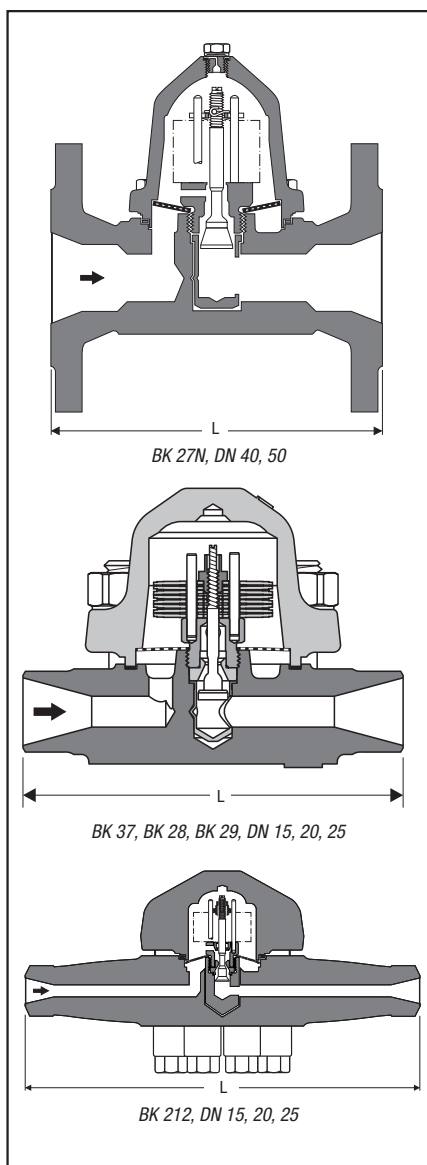
¹⁾ Limits for body/cover. Functional requirements may restrict the use to below the limits quoted.

For full details on limiting conditions depending on end connection and type of regulator see data sheet.

²⁾ Material complies with EN and ASTM requirements.

³⁾ Opening undercooling approx. 30 K.

⁴⁾ Only applicable for traps with butt-weld (BW) or socket-weld (SW) ends DN 25. Note that limits will be lower for traps with other dimensions or flanged end connections.



Available End Connections and Overall Lengths in mm

Type	Connection	DN 15 [1/2"]	DN 20 [3/4"]	DN 25 [1"]	DN 40 [1 1/2"]	DN 50 [2"]
BK 45 <small>RHOMBUSline®</small>	Flanged EN PN 40	150	150	160	230	230
	Flanged ASME 150 ¹⁾	150	150	160	230	230
	DN 15 – 25 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 37	Flanged EN PN 63/100	210	230	230	–	–
	BK 28	Socket-weld (SW)	160	160	160	–
Butt-weld (BW)		160	160	160	–	–
BK 29	Flanged EN PN 160	210	–	230	–	–
	Socket-weld (SW)	160	160	160	–	–
	Butt-weld (BW)	160	160	160	–	–
BK 212... Series	Butt-weld (BW)	330	330	330	–	–
	Socket-weld (SW)	330	330	330	–	–
BK 37-ASME	Flanged ASME 400/600	230	230	230	–	–
	Socket-weld (SW)	160	160	160	–	–
	Butt-weld (BW)	160	160	160	–	–
BK 28-ASME	Flanged ASME 400/600	230	230	230	–	–
	Socket-weld (SW)	160	160	160	–	–
	Butt-weld (BW)	160	160	160	–	–
BK 29-ASME	Flanged ASME 900/1500	230	230	254	–	–
	Socket-weld (SW)	200	200	200	–	–
	Butt-weld (BW)	200	200	200	–	–

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

Capacity Charts

The charts show the maximum hot condensate capacities.

