

Application

Type	
AK 45 	Condensate drain valve for discharging condensate from steam systems during start-up and draining residual condensate at shut-down, with integral Y-type strainer and hand purging knob. Factory-set closing pressure 0.8 bar.
UBK 46 	Steam trap with adjustable condensate discharge temperature, thereby suppressing the formation of flash steam. With Y-type strainer.
MK 20	Steam trap for low-pressure steam-heating installations.
TK 23, TK 24	Steam trap with thermostatic pilot control using thermostatic capsules for the discharge of very large condensate flowrates with relatively continuous condensate formation.
GK 11¹⁾	Thermodynamic steam trap with stage nozzle for the discharge of very large condensate flowrates. With integral Vaposcope (sightglass) for optimum trap adjustment.

¹⁾ DN 50 mm: GK 21

Pressure/Temperature Ratings

Type	PN / Class	ΔPMX [bar]	Material		Max. Pressure/Temperature Rating ¹⁾		
			EN	ASTM	PMA [bar]	TMA [°C]	p/T [bar/°C]
AK 45	PN 40	—	1.0460	A105	40.0	450	27.6 / 300 13.1 / 450
UBK 46	PN 40	32	1.0460	A105	40.0	450	27.6 / 300 13.1 / 450
MK 20	PN 6	4.5	5.4202	—	6.0	300	4.5 / 250 3.6 / 300
TK 23	PN 16	5 / 10	5.1301	A126 Cl.B ²⁾	16.0	300	16.0 / 120 10.0 / 300
TK 24	PN 25	5 / 14	1.0619	A216 WCB	25.0	400	19.4 / 200 14.2 / 400
GK 11, GK 21	PN 10/16	6	5.1301	A126 Cl.B ²⁾	16.0 ³⁾	300	16.0 / 120 ³⁾ 13.0 / 300 ³⁾

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⁾ ASTM nearest equivalent is stated for guidance. Physical and chemical properties comply with EN.

³⁾ GK 11, DN 100/150, PN 10, max. 10 bar

Available End Connections and Overall Lengths

Type	Connection	Overall length (L) in mm								
		DN 10 3/8"	DN 15 1/2"	DN 20 3/4"	DN 25 1"	DN 50 2"	DN 65 2 1/2"	DN 80 3"	DN 100 4"	DN 150 6"
AK 45	Flanged EN PN 40	—	150	150	160	—	—	—	—	—
	Flanged ASME 150	—	150	150	160	—	—	—	—	—
	Flanged ASME 300	—	150	150	160	—	—	—	—	—
	Screwed sockets	—	95	95	95	—	—	—	—	—
UBK 46	Flanged EN PN 40	—	150	150	160	—	—	—	—	—
	Flanged ASME 150	—	150	150	160	—	—	—	—	—
	Flanged ASME 300	—	150	150	160	—	—	—	—	—
	Screwed sockets	—	95	95	95	—	—	—	—	—
	Socket-weld (SW)	—	95	95	95	—	—	—	—	—
MK 20¹⁾	Male/female thread	—	120	125	—	—	—	—	—	—
TK 23	Flanged EN PN 16	—	—	—	—	230	290	310	350	—
TK 24	Flanged EN PN 25	—	—	—	—	230	290	310	350	—
GK 11²⁾	Flanged EN PN 10/16	—	—	—	—	320	420	420	620	900

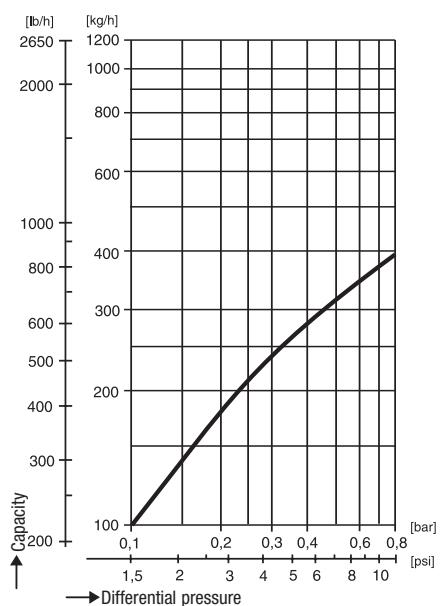
¹⁾ Straight-through or angle design (see representation)

²⁾ DN 50 mm: GK 21

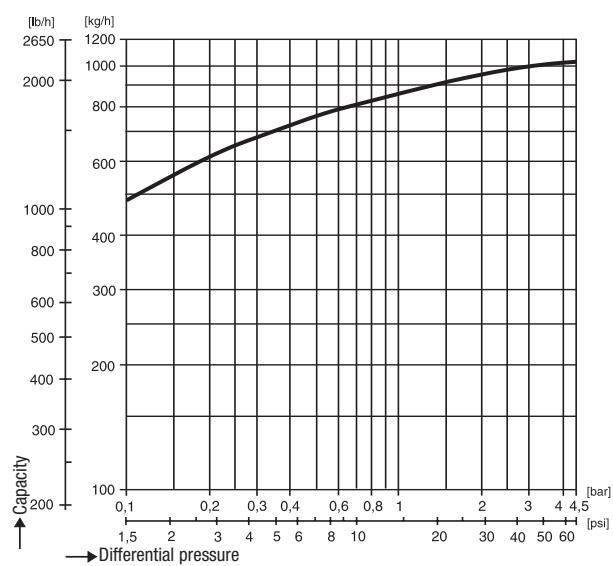
Capacity Charts

The charts show the maximum hot condensate capacities. (Exception: AK 45 – cold water capacity.)

AK 45 Cold water capacity



MK 20

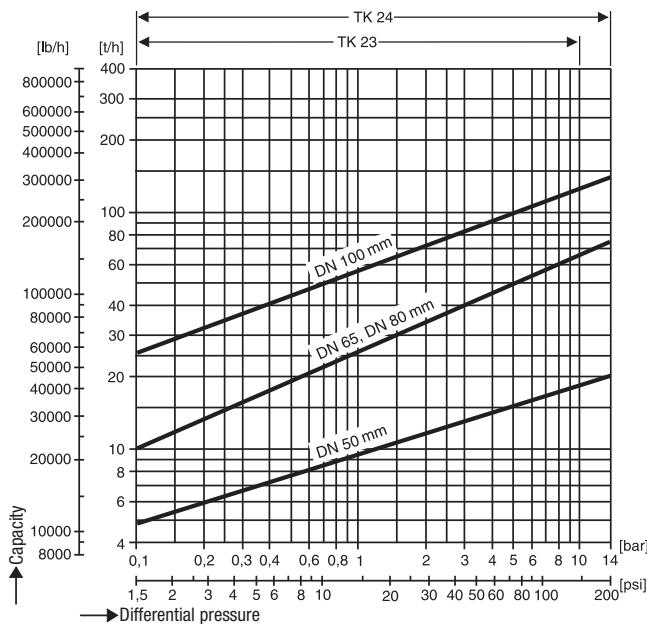


Capacities, opening temperatures UBK 46

Service pressure	[barg]	1	2	4	8	12	16	20	26	32
Factory-set opening temperature	[°C]	60	64	72	84	93	102	110	118	128
Capacity at t 10 K below opening temperature	[kg/h]	30	60	90	120	130	140	150	160	170
Cold water capacity at 20 °C (start-up capacity)	[kg/h]	250	320	480	760	1020	1280	1500	1780	2040

TK 23, TK 24

For differential pressures < 1 bar use capsule "OH2"
(max. service pressure 5 bar).



GK 11, GK 21

