

GESTRA Steam Systems

Product Range A1

Drain Module

QuickEM, PN 16 / PN 40, DN 15, 20, 25

QuickEM Control, PN 16 / PN 40, DN 15, 20, 25

QuickEM

QuickEM Control

Description

GESTRA QuickEM is a pre-assembled drain module to be used in installations for heat recovery. The drain module is suitable for discharging condensed water. The QuickEM assembly consists of two or three shut-off valves, one steam trap type BK..., MK... or UNA..., one sightglass Vaposcope VK..., one wafer-type non-return valve RK... as well as pipes and all necessary flanges, flange gaskets and bolts. Counterflanges with bolts and gaskets are not part of the delivery.

The QuickEM Control is designed for electronic condensate monitoring. Instead of the sightglass Vaposcope VK the measuring electrode NRG 16... is installed as sensor for electronic condensate monitoring.

If the QuickEM Control assembly is fitted with steam traps type BK... and MK... the measuring electrode NRG 16... is installed directly in the steam trap.

If the QuickEM Control assembly is fitted with steam traps type UNA... the measuring electrode NRG 16... is installed in a test chamber VKE.

QuickEM and QuickEM Control are available for horizontal or vertical installation. Note that QuickEM Control with trap type UNA... is only available for horizontal installation!

QuickEM and QuickEM Control are available with or without bypass line.

Function

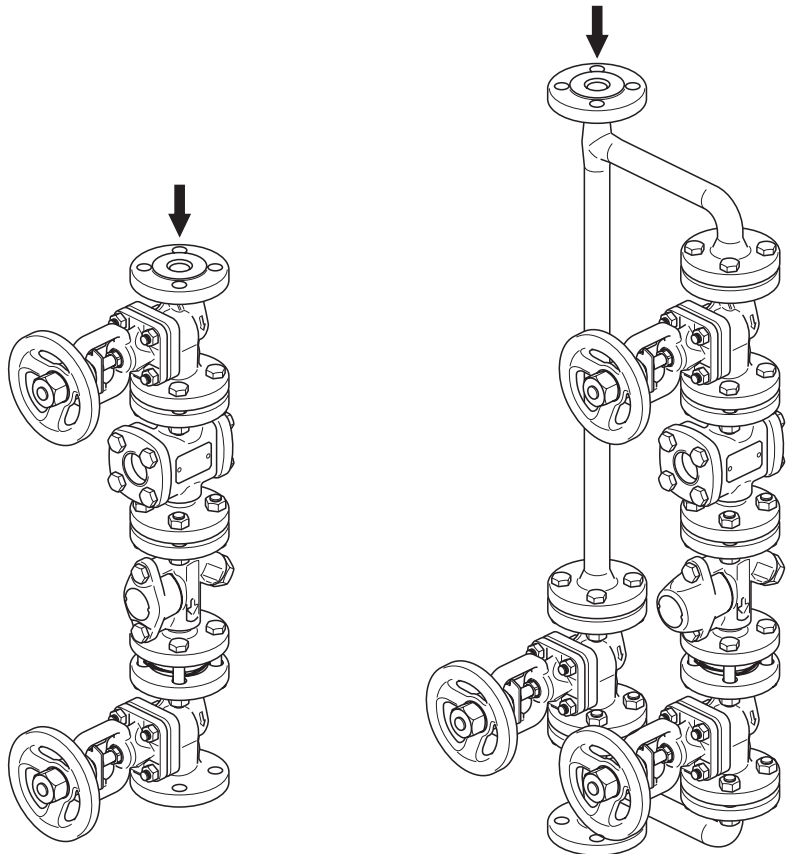
QuickEM:

Steam and condensate flows through the shut-off valve to the steam trap. The regulator in the steam trap discharges the condensate from the live steam system through the second shut-off valve into the condensate collecting system. The two shut-off valves can isolate the steam trap if the need arises (e. g. for maintenance work). The integrated bypass line is an optional extra for bypassing the steam trap if necessary.

QuickEM Control:

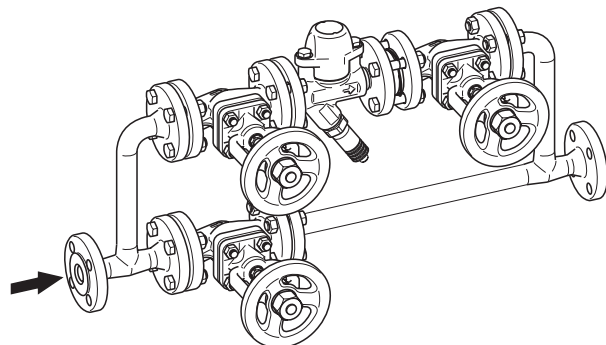
Same function as QuickEM but the measuring electrode NRG 16... is used as sensor for electronic condensate monitoring. The steam traps are monitored for banking-up of condensate (waterlogging) and steam loss.

The two shut-off valves can isolate steam traps equipped with measuring electrode or with test chamber if the need arises (e. g. for maintenance work). The integrated bypass line is an optional extra for bypassing the steam trap if necessary.

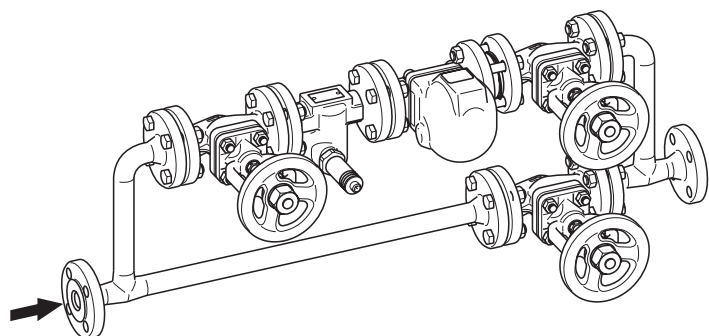


QuickEM MK without bypass, vertical assembly

QuickEM BK with bypass, vertical assembly



QuickEM Control BK... with bypass, horizontal assembly



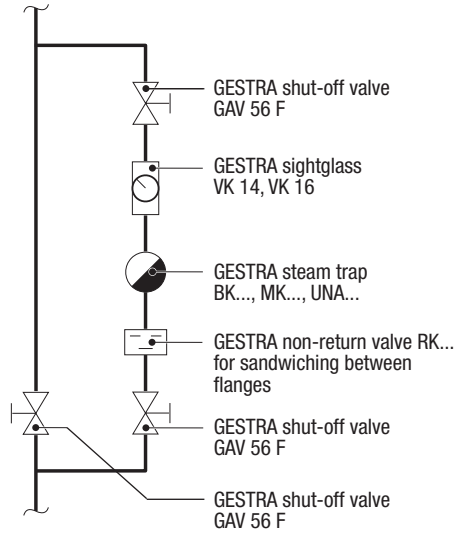
QuickEM Control UNA... with bypass, horizontal assembly

Temperature/Pressure Ratings & End Connections

Note that the pressure/temperature ratings for the QuickEM are limited by the sightglasses VK 14 and VK 16.

The pressure/temperature ratings for the QuickEM Control are limited by the measuring electrodes NRG 16-27 and NRG 16-28.

Schematic arrangement



Temperature/Pressure Ratings & End Connections – continued –

QuickEM with and without bypass, flanges PN 16, EN 1092-1						
PS (max. admissible pressure)	[barg]	16	14.4	12.8	11.2	9.6
TS (max. admissible temperature)	[°C]	20	100	200	250	280
pH value		≤ 9				
Δ PMX / Δ P (admissible differential pressure)	[barg]	see data sheets for steam trap / shut-off valve				

QuickEM with and without bypass, flanges PN 40, EN 1092-1						
PS (max. admissible pressure)	[barg]	40	37.3	30.0	28.4	25.8
TS (max. admissible temperature)	[°C]	20	100	200	250	300
pH value		≤ 10				
Δ PMX / Δ P (admissible differential pressure)	[barg]	see data sheets for steam trap / shut-off valve				

QuickEM Control with and without bypass, flanges PN 16, EN 1092-1						
PS (max. admissible pressure)	[barg]	16	14.4	12.8	11.2	9.6
TS (max. admissible temperature)	[°C]	20	100	200	238	238
Δ PMX / Δ P (admissible differential pressure)	[barg]	see data sheets for steam trap / shut-off valve				

QuickEM Control with and without bypass, flanges PN 40, EN 1092-1						
PS (max. admissible pressure)	[barg]	40.0	37.3	30.0	28.4	25.8
TS (max. admissible temperature)	[°C]	20	100	200	238	238
Δ PMX / Δ P (admissible differential pressure)	[barg]	see data sheets for steam trap / shut-off valve				

Dimensions and weights

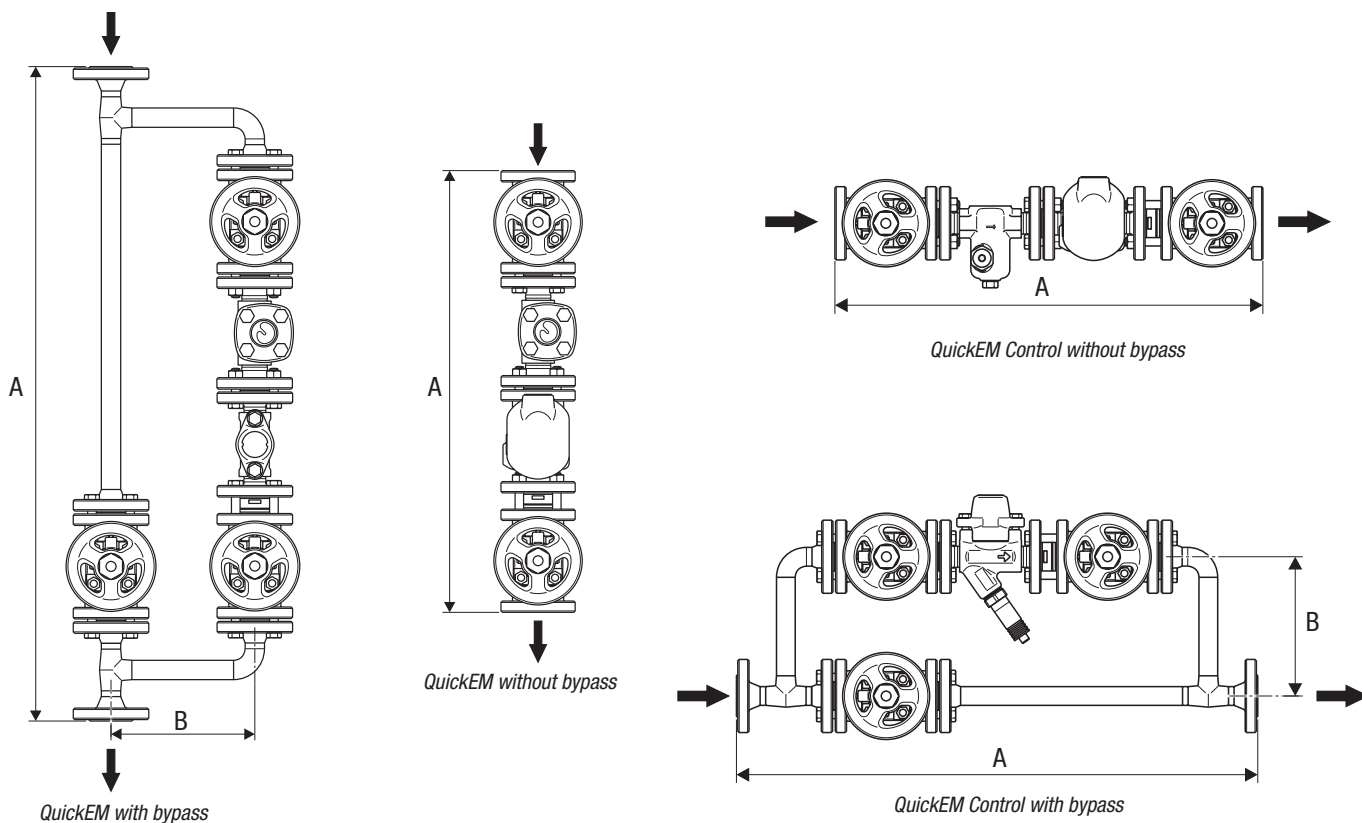
QuickEM with bypass	DN 15				DN 20				DN 25			
	Dimensions [mm]		Weight [kg]		Dimensions [mm]		Weight [kg]		Dimensions [mm]		Weight [kg]	
	A*)	B	PN 16	PN 40	A	B	PN 16	PN 40	A	B	PN 16	PN 40
QuickEM BK	821/841	200	21	25	908	200	27	31	988	200	45	49
QuickEM MK	821/841	200	21	25	908	200	27	31	988	200	45	49
QuickEM UNA 14	821/841	200	26		908	200	33		988	200	51	
QuickEM UNA 16	821/841	200		27	908	200		34	988	200		53

QuickEM Control with bypass	DN 15				DN 20				DN 25			
	Dimensions [mm]		Weight [kg]		Dimensions [mm]		Weight [kg]		Dimensions [mm]		Weight [kg]	
	A	B	PN 16	PN 40	A	B	PN 16	PN 40	A	B	PN 16	PN 40
QuickEM Control BK	671	250	21	21	858	250	27	27	828	300	45	45
QuickEM Control MK	671	250	21	21	858	250	27	27	828	300	45	45
QuickEM Control UNA 14	821	200	27		858	200	33		988	200	51	
QuickEM Control UNA 16	821	200		27	858	200		33	988	200		51

QuickEM without bypass	DN 15				DN 20				DN 25			
	Dimensions [mm]		Weight [kg]		Dimensions [mm]		Weight [kg]		Dimensions [mm]		Weight [kg]	
	A*)	B	PN 16	PN 40	A	B	PN 16	PN 40	A	B	PN 16	PN 40
QuickEM BK	564/584		11	14	623		14	17	666		16	20
QuickEM MK	564/584		11	14	623		14	17	666		16	20
QuickEM UNA 14	564/584		16		623		20		666		23	
QuickEM UNA 16	564/584			17	623			21	666			23

QuickEM Control without bypass	DN 15				DN 20				DN 25			
	Dimensions [mm]		Weight [kg]		Dimensions [mm]		Weight [kg]		Dimensions [mm]		Weight [kg]	
	A	B	PN 16	PN 40	A	B	PN 16	PN 40	A	B	PN 16	PN 40
QuickEM Control BK	429		11	11	472		14	14	505		16	16
QuickEM Control MK	429		11	11	472		14	14	505		16	16
QuickEM Control UNA 14	580		17		623		20		666		22	
QuickEM Control UNA 16	580			17	623			20	666			22

*) PN 16 / PN 40



Drain Module

QuickEM

QuickEM Control

When ordering please state:

Fluid, flowrate, service pressure and temperature.

Standard designation of pipe flanges.

The following test certificates can be issued on request, at extra cost:

In accordance with EN 10204-3.1 .

All inspection requirements have to be stated with the order. After supply of the equipment certification cannot be established. Charges and extent of the above mentioned certificates as well as the different tests confirmed therein are listed in our price list "Test and Inspection Charges for Standard Equipment". For other test certificates please consult us.

Specification Text

GESTRA Drain module
QuickEM, QuickEM Control
DN 15 to DN 25

Type	QuickEM / QuickEM Control
Installation position	Horizontal / vertical
End connection	Flanged to EN 1092-1 (2001)
Nominal size	DN 15 / DN 20 / DN 25
Pressure rating	PN 16 / PN 40
Steam trap	BK 45 MK 45-1 UNA 14 (PN 16), Orifice 4 / 13 / Duplex UNA 16 (PN 40), Orifice 13 / 22 , Duplex
Certification	In accordance with EN 10204, 3.1

PED (Pressure Equipment Directive)

The equipment fulfills the requirements of the Pressure Equipment Directive PED 97/23/EC.

For use with fluids of group 2.

With CE marking (apart from equipment that is excluded from the scope of the PED as specified in section 3.3).

For more information see Declaration of Conformity.

ATEX (Atmosphère Explosible)

The equipment does not have its own potential source of ignition and is therefore not subject to the ATEX Directive 94/9/EC.

Applicable in Ex zones 0, 1, 2, 20, 21, 22 (1999/92/EC). The equipment does not bear an Ex marking.

According to the European Directive 94/9/EC the QuickEM Control must **not** be used in potentially explosive areas.

Supply in accordance with our general terms of business.

Capacity Chart

The selection of QuickEM and QuickEM Control depends on the operating parameters pressure, temperature, pH value and condensate flowrate.

The max. condensate flowrate that can be discharged is a function of the selected steam trap type and its flowrate characteristics. These characteristics can be read off the capacity charts of the selected steam traps.

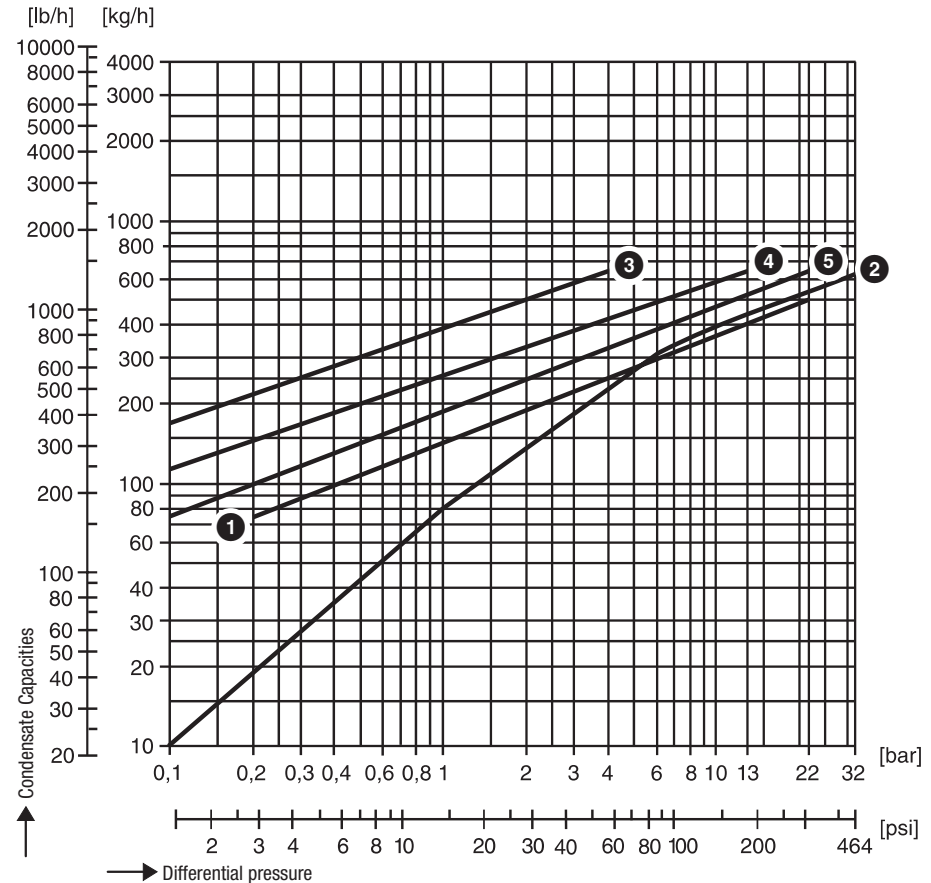
BK 45: ①, (hot water capacity)

MK 45-1: ②, (hot water capacity)

UNA 14 / Orifice 4: ③, (hot water capacity)

UNA 14, UNA 16 / Orifice 13: ④, (hot water capacity)

UNA 16 / Orifice 22: ⑤, (hot water capacity)



Spare Parts

For lists of spare parts see the installation manuals of the devices installed in the QuickEM and QuickEM Control subassemblies.

No spare parts are available for the GESTRA shut-off valve GAV 56F and the GESTRA wafer-type non-return valve RK...

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