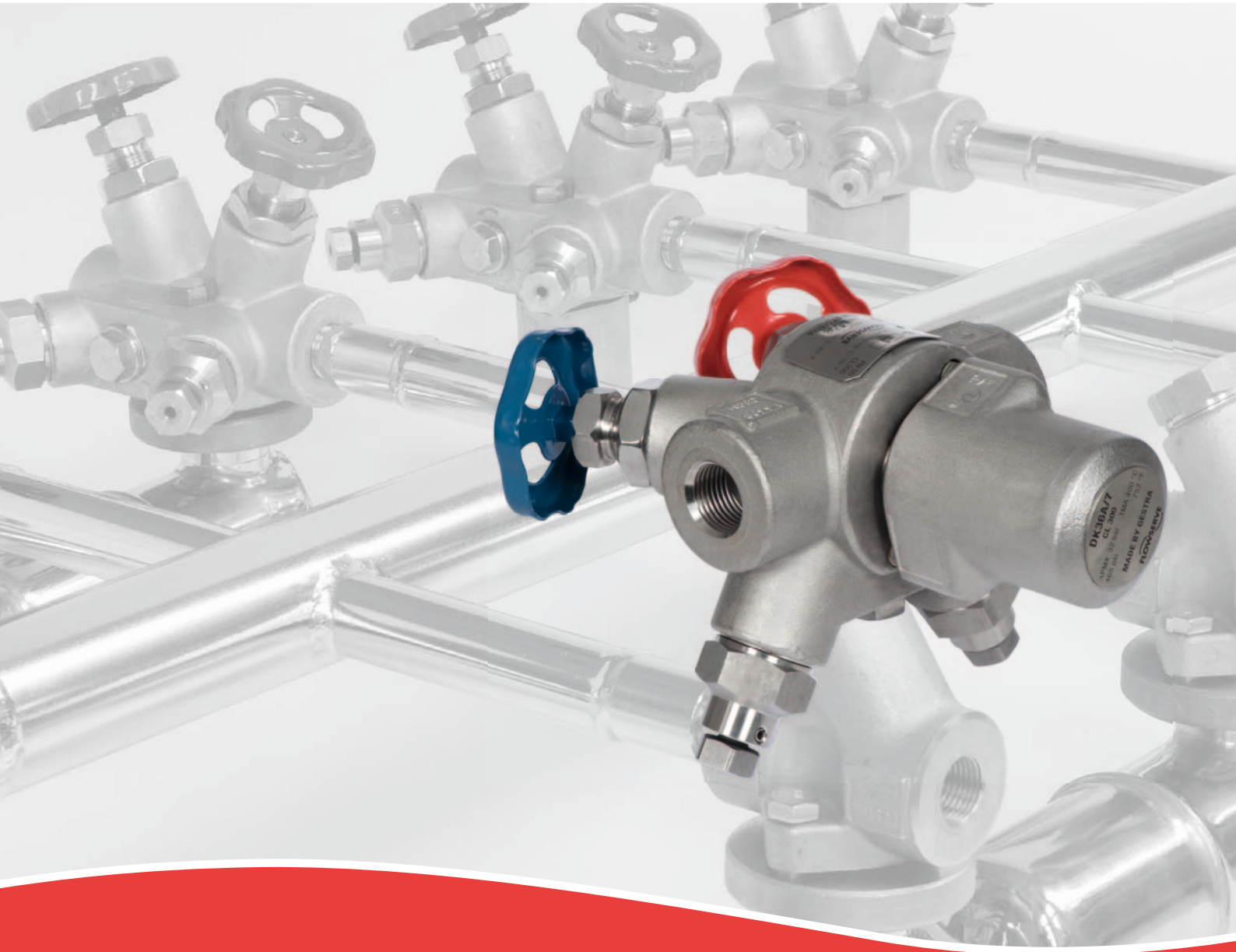
FLOWSERVE GESTRA

GESTRA

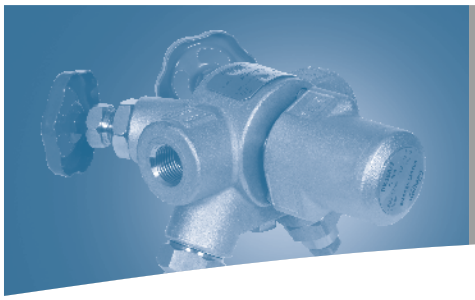
Program for Universal Connections

The Smart Solutions



Experience In Motion

FLOWSERVE GESTRA



GESTRA – a smart solution for your convenience

With a background of more than 100 years in the steam trap business, GESTRA has always aimed at turning experience into reliable energy-saving products providing optimum service quality. Amongst the many inventions GESTRA has given the market, the RHOMBUS*line* steam traps represent an ideal combination of long-lasting quality and maximum serviceability in a standard-connection steam trap.

With the new series of steam traps, connectors and trap stations, GESTRA now continues along its path of combining reliability, energy-saving technology and serviceability. New options are provided to increase the efficiency of your steam and condensate applications through long service life, energy-saving working principles, and short downtimes during maintenance.

BK 36A-7

The robust energy-saving solution

This bimetallic steam trap series implements a very robust design and is an excellent choice for saturated and superheated applications. A choice of two regulators with different amounts of undercooling allows you to pick the appropriate solution for your applications.

This series is insensitive to water hammer and features automatic air venting. Unlike other technologies, this bimetallic steam trap can be applied across the entire working range up to 465 psi / 32 bar.

Materials

Designation	EN	ASTM
Cover	1.4408 (GX5CrNiMo19-11-2)	A351-CF8M
Nozzle support	1.4404 (X2CrNiMo17-12-2)	A182-F316L
Regulator	stainless steel	
Gaskets	spiral wound gasket (graphite/CrNi)	

The different types of BK for universal connectors:

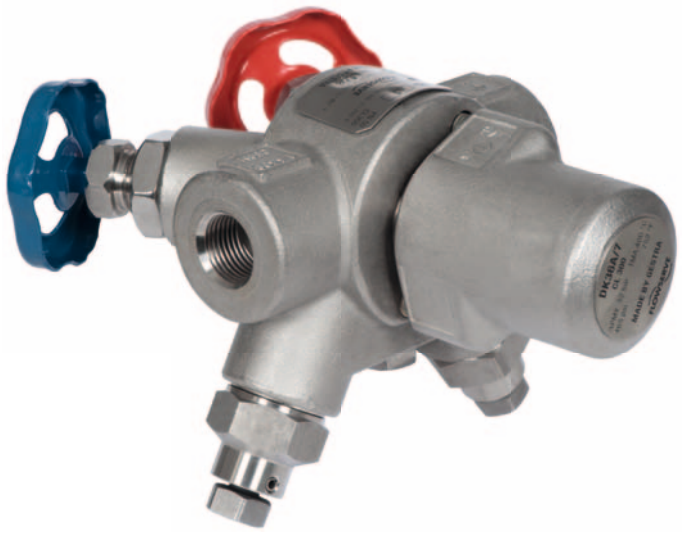
BK 36A-7: specialized for robust installations in saturated or superheated steam, providing a constant undercooling of 10 °C (18 °F).
BK 36A-7U: the same robust design as the BK36A-7 with increased undercooling of 30 °C (54 °F) which makes it possible to extract the utmost energy out of the condensate.

Order & Enquiry Specification

Type:	BK 36 A-7, BK 36 A-7U
Connection:	Universal connectors and trap stations
PMO:	488 psig at 468 °F 33.7 barg at 242 °C
PMA:	465 psig at 556 °F 32 barg at 290 °C

Capacity chart and P/T chart see page 7

MK 36A-7



The fast energy-saving solution

This capsule steam trap series is based on a fast acting, intermittent or modulating discharge pattern, which is an excellent choice for saturated steam applications. Four different capsules, varying in capacity and undercooling allow you to make the best selection for each application. Quick startup and automatic air venting without backing up of condensate are outstanding properties of this series of steam traps, which can be applied across a complete range of differential pressures up to 465 psi / 32 bar.

Materials

Designation	EN	ASTM
Cover	1.4408 (GX5CrNiMo19-11-2)	A351-CF8M
Nozzle support	1.4404 (X2CrNiMo17-12-2)	A182-F316L
Regulator	stainless steel	
Gaskets	spiral wound gasket (graphite/CrNi)	

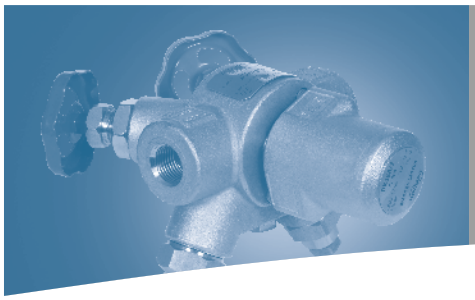
The different types of MK for universal connectors:

MK 36A-71: specialized for lower condensate loads, providing a constant undercooling of 10 °C (18 °F).
MK 36A-72: specialized for higher condensate loads, providing a constant undercooling of 10 °C (18 °F).
MK 36A-71U: specialized for lower condensate quantities, with increased undercooling of 30 °C (54 °F) which makes it possible to extract the utmost energy out of the condensate.
MK 36A-72U: specialized for higher condensate quantities, with increased undercooling of 30 °C (54 °F) which makes it possible to extract the utmost energy out of the condensate.

Order & Enquiry Specification

Type:	MK 36 A-71, MK 36 A-72, MK 36 A-71U, MK 36 A-72U
Connection:	Universal connectors and trap stations
PMO:	488 psig at 468 °F 33.7 barg at 242 °C
PMA:	465 psig at 556 °F 32 barg at 290 °C

Capacity chart and P/T chart see page 7



DK 36A-7

The popular thermodynamic solution

The thermodynamic steam trap relies on a working principle that is quite popular for saturated and superheated steam applications. Dual insulation prevents the high number of opening cycles often encountered in outdoor applications. Because this type is absolutely unaffected by rain in any outdoor installation, it uses less steam during rainy periods and provides constant operation even in the wet season. GESTRA offers the DK 36A-7 for differential pressures up to 465 psi / 32 bar.

Materials

Designation	EN	ASTM
Cover	1.4408 (GX5CrNiMo19-11-2)	A351-CF8M
Nozzle support	1.4404 (X2CrNiMo17-12-2)	A182-F316L
Regulator	stainless steel	
Gaskets	spiral wound gasket (graphite/CrNi)	

Order & Enquiry Specification

Type: DK 36 A/7
Connection: Universal connectors and trap stations

PMO: 488 psig at 468 °F
33.7 barg at 242 °C

PMA: 465 psig at 556 °F
32 barg at 290 °C

IB 16A-7

The inverted bucket solution

This stainless steel inverted bucket features proven technology combined with an ASME Section VIII body design. This series type is offered with four different orifices for differential pressures up to 400 psi/28 bar.

Capacity chart and P/T chart see page 7

Connectors

The quality long-term solution

Stainless steel connectors, made to last a lifetime. GESTRA provides three different makes of connector; the only difference is the convenience level you wish to see in your facility. Regardless of which type you choose, all three fit every working principle and are designed to meet Class 300 requirements.

TS 36-1 or 2

This trap station is an ideal combination of all the features necessary for convenient maintenance of all steam trap types. The TS 36 has piston valves with non-rising handwheels that are completely protected against dirt – resulting in perfect operation even after years of no usage. The blow-off and test valves make it possible to depressurize the steam trap application, and the colored handwheels facilitate closing and opening of the isolating valves in the correct sequence.
The trap station is available in flow direction left to right (T536-1) or right to left (T536-2).

UC or UCY

As the basis for any universal steam trap application, these stainless steel connectors are available as a simple connection platform (UC) or already fitted with a strainer (UCY). Depending on the quality of the condensate and the piping material, you are able to select the appropriate type for your installation.

Materials TS 36

Component	EN	ASTM
Body	1.4408	A351-CF8M
Strainer	1.4301	A182-F304
Test valve	stainless steel	
Blow-off valve	stainless steel	
Stuffing box gland	1.4404	A182-F316L
Stem	1.4301	A182-F304*
Gasket	Graphite	
Hexagon screws (nickel-plated) 3/8-16 UNCx25 mm	1.7225 (42CrMo4)	A193 Gr. B7

Materials UCY, UC

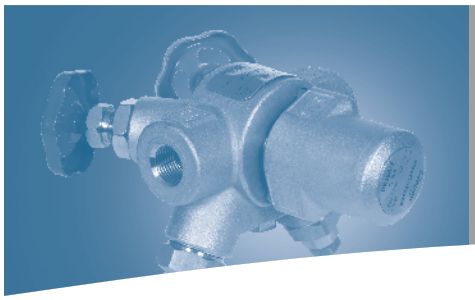
Component	EN	ASTM
Universal connector UCY 36, UC 36	1.4408 (GX5CrNiMo19-11-2)	A351-CF8M

Order & Enquiry Specification

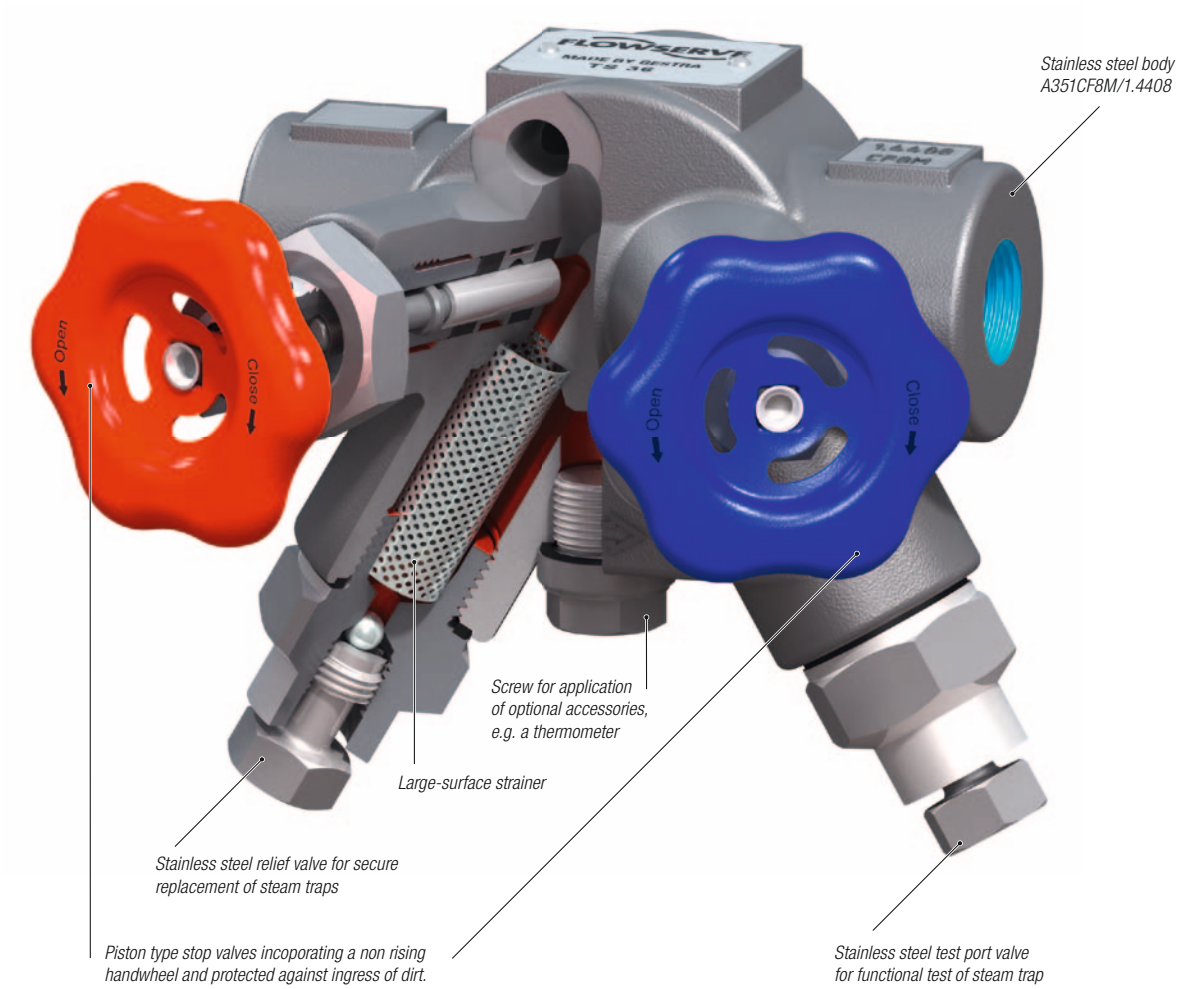
GESTRA Universal Connector

Type:	UC 36, UCY 36, TS 36-1, TS 36-2
Connection:	Screwed sockets G, NPT, socket-weld ends
Size:	½“, ¾“, 1“
PMO:	488 psig at 468 °F
	33.7 barg at 242 °C
PMA:	465 psig at 556 °F
	32 barg at 290 °C

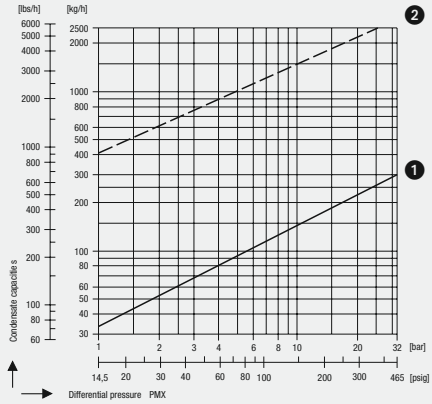
Capacity chart and P/T chart see page 7



TS 36 - The perfect trap station for all steam trap types

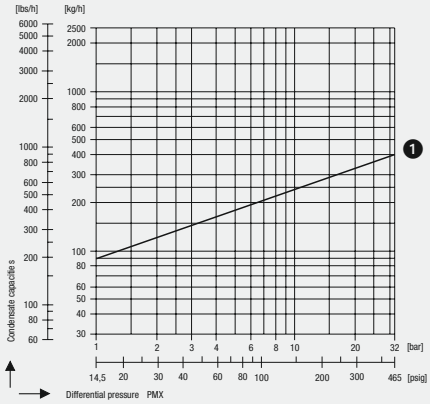


Capacity charts



❶ BK 36A/7
The steam traps discharge the indicated hot water capacities with virtually no banking-up.

❷ BK 36A/7
Discharge capacity of cold condensate at 20 °C.



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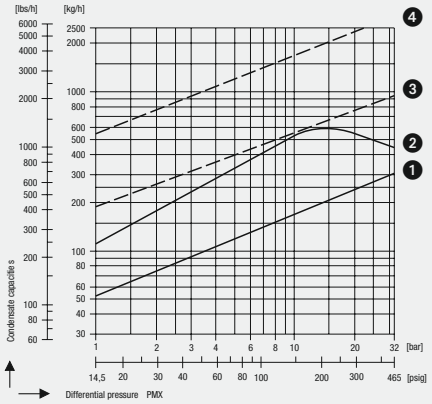

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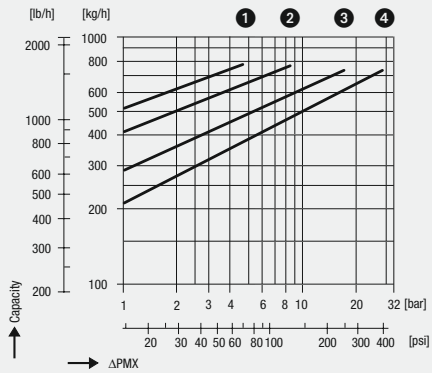
❷ MK 36A/72
The steam traps discharge the indicated hot water capacities with virtually no banking-up.

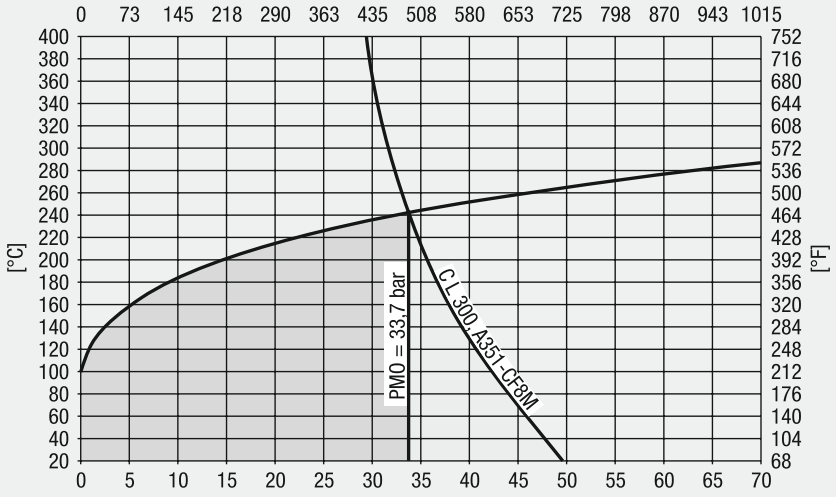
❸ MK 36A/71
❹ MK 36A/72
Discharge capacity of cold condensate at 20 °C.



IB 16A-7

Key	Orifice size	PMX [psi]
❶	5/32	70
❷	1/8	125
❸	3/32	250
❹	5/64	400

Pressure / Temperature Limits



ASME B 16.5 Class 300 (PN 50) Material Group 2.2

PMA (Max. allowable pressure)	[bar]g	49.6	42.3	35.7	31.6	29.4
TMA (Max. allowable temperature)	[°C]	38	100	200	300	400
PMA (Max. allowable pressure)	[psi]g	720	613	519	460	425
TMA (Max. allowable temperature)	[°F]	100	212	392	572	750
Δ PMX (admissible differential pressure)	[bar]	32				
	[psi]	465				

Pressure/temperature series according to ASME B 16.5, PMO = Max. operating pressure,
PMA = Max. allowable pressure,
TMA = Max. allowable temperature, Δ PMX = Admissible differential pressure (ISO 6552)

Ony for TS 36

PMO (max. operating pressure)	33.7 barg at 242 °C
PMO (max. operating pressure)	489 psig at 467 °F

Based on ASME B 16.5, ASME B 16.34

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With Energy into the Future