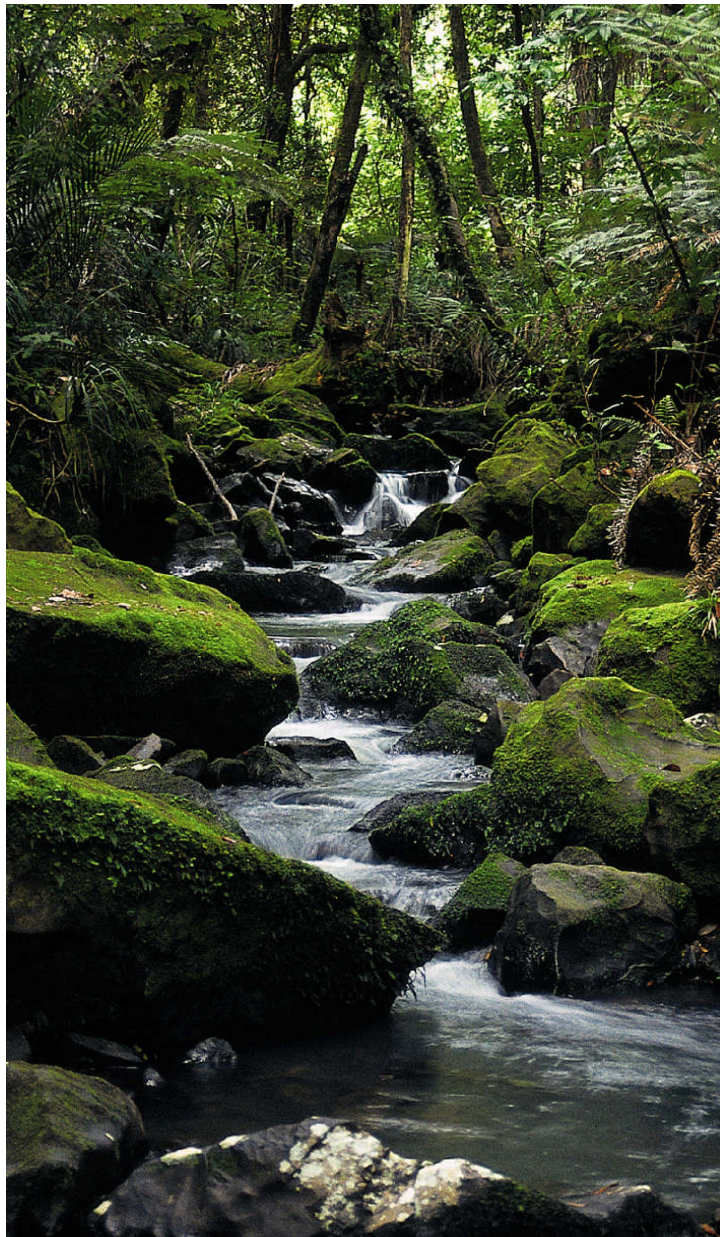


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DI-TEC GmbH

Maschinen- und Verfahrenstechnik

Together for a clean environment !



Creating customized solutions together!

DI-TEC GmbH is a leading company in planning and creating gas, sludge and biology engineering for municipal and industrial waste water treatment and fermentation plants.

As a small company, we are flexible and can respond to customer demands. The target of each project is to combine the optimal procedural solution with the best customer benefit. This applies for an overall concept as well, as for partial solutions, to which we are called in as a competent partner.

We provide expert consulting service in procedural questions and set highest value to maintenance and after sales service of installed facilities.

For the equipment of plants we work together with the best suppliers and manufacturers in order to present the optimal solution for each customer's requirements. We have no binding contracts with our suppliers, to be free to present our customers the best cost-benefit ratio.

As we are centrally located; closed to Zürich (Switzerland), and benefiting from excellent transport links, we supply our products to facilities throughout whole Europe.

Since the company DI-TEC GmbH was founded in 1996, we could continuously strengthen our technical skills within the field of waste water treatment.



Head office of DI-TEC GmbH

We have our own so called "white" production site, where only stainless steel is processed.

To avoid contamination of the white production site, we have a separate production site for the processing of conventional steel.



production site for stainless steel

Condensate water gates

Condensate water gates are used wherever condensate must be discharged out of pipes or tanks. During discharge no gas may escape, as gas is harmful to health and an explosive gas mixture could develop.

Our condensate water gates replace all known hydraulic closure devices. Hydraulic systems are not safe, as with water deficiency, contamination, operation or maintenance errors occurring, gas can discharge uncontrolled. Danger of Explosions or intoxications can occur.

With our DI-TEC condensate water gates, these sources of danger are completely eliminated!



Our condensate water gates exist in two different types and can be customized, so that for every need there is a solution.

Thanks to premium V4A steels and seals of long duration, we guarantee problem free operation for years.

← condensate reservoir with level display and pneumatically driven condensate water gate (automated by PLS).



Condensate water gate, driven by electrical motor (automated by PLS). →

Our DI-TEC condensate water gates have the DVGW certificate DIN EN 161 01.08.1996 certified 2009. They can be used to drain water from tubes at its lowest point (picture below right), in combination with different tanks or on gravel filters (picture below left) and in countless other applications.

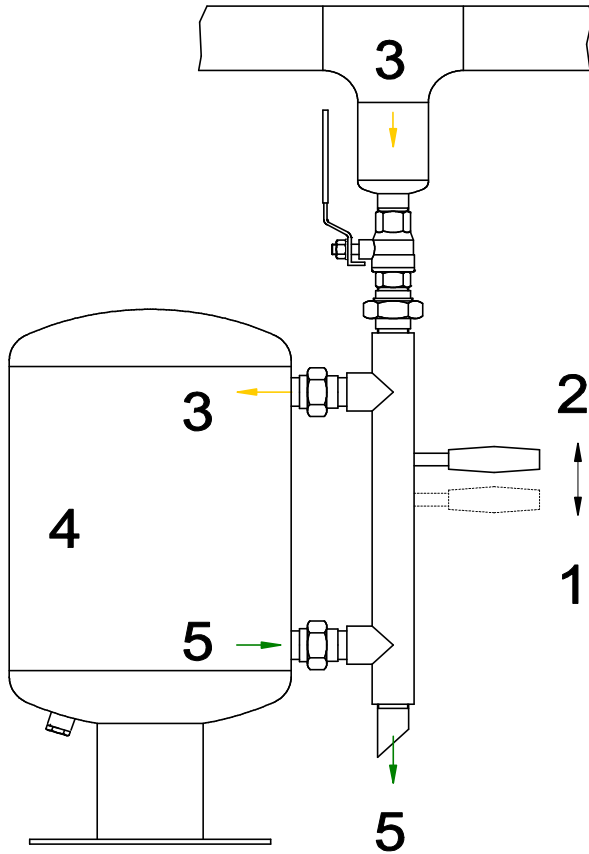
Safety thanks to international DVGW certification and Baumusterprüfzertifikat (only in German) of the year 2009 !



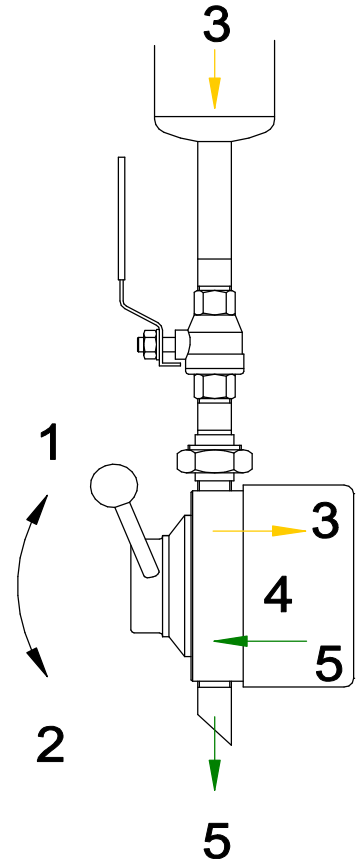
Depending on the individual requirements of the plant, the operation of the condensate water gates can be automated with pneumatic or EX-protected engines. These engines can be equipped with the respective level drives, level indicators (picture below right), visual level displays (picture above left) and needed connections (controlling / programming on site).



Functional scheme:



Type: KSm-300 - 600



Type: KSm-1 - 5

In position **1** of the control lever the condensate supply system is open and the condensate **3** flows from the gas system into the condensate reservoir **4**, the condensate outlet **5** is gastight closed.

The condensate reservoir gets filled with condensate.

When the control lever moves into position **2**, the condensate supply system is first gastight closed, then the condensate outlet **5** is opened and the reservoir **4** gets emptied.

In **no position** of the control lever, gas can escape through the condensate gate outlet!

After the condensate discharge the condensate gate is closed again and the condensate flows again from the gas system into the condensate reservoir. Is the condensate reservoir over filled and the condensate is accumulated into the gas pipe, the condensate water gate is still functioning. In this case the reservoir must be emptied repeatedly until no condensate is flowing out of the gate anymore.

Automation of the condensate water gate with level indicators (2 pieces of magnetic float switches):

When the condensate rises in the reservoir, the lower magnet switch will give contact, then the upper. When both switches give contact (cascade connection) the signal "high level" goes to the controlling (to be installed by the customer). The controlling gives the command to the electrical motor (pneumatic actuator) to open the gate, to enable the condensate to flow out of the gate.

The level sinks, so that the upper switch drops out and then the lower. When both switches have no contact anymore, the controller gives the signal "close" to the motor.

To monitor the emptying of the gate a timing relay can be installed in the control system (by the client) so that a failure signal shows on the PLS when the gate does not close in a defined time gap, it shows that a problem has occurred during the emptying of the gate.

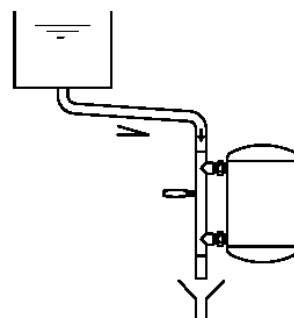
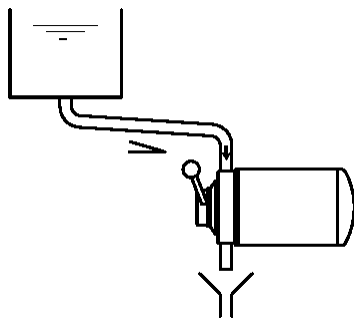
The position of the electrical motor (open or closed) can be transmitted to the PLS with a position indicator.

Installation guide for condensate water gates

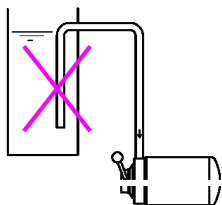
For all condensate water gates; Type KS.-...

Position of installation:

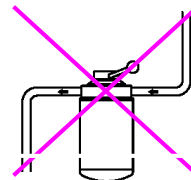
This installation guide is valid for all types of condensate water gates in our product range. The condensate water gate must be always flown through vertically, so that the condensate inlet (yellow) is above and the outlet (green) is below. The feeding pipe should grade down in direction to the gate. The condensate must freely flow off in an outlet cone (see drawing).



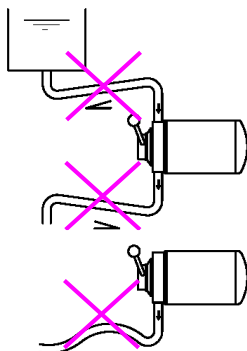
The condensate water gate may absolutely not be installed like this:



Connected to a plunged bleeder or a siphon.

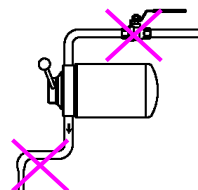


Horizontally installed.

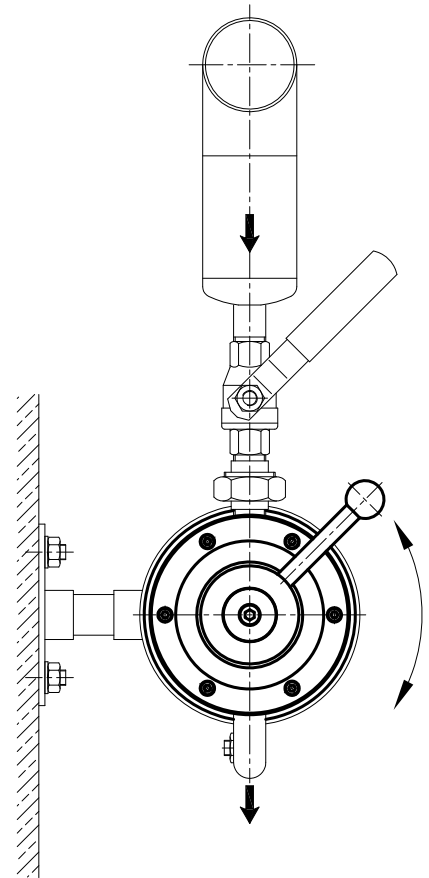
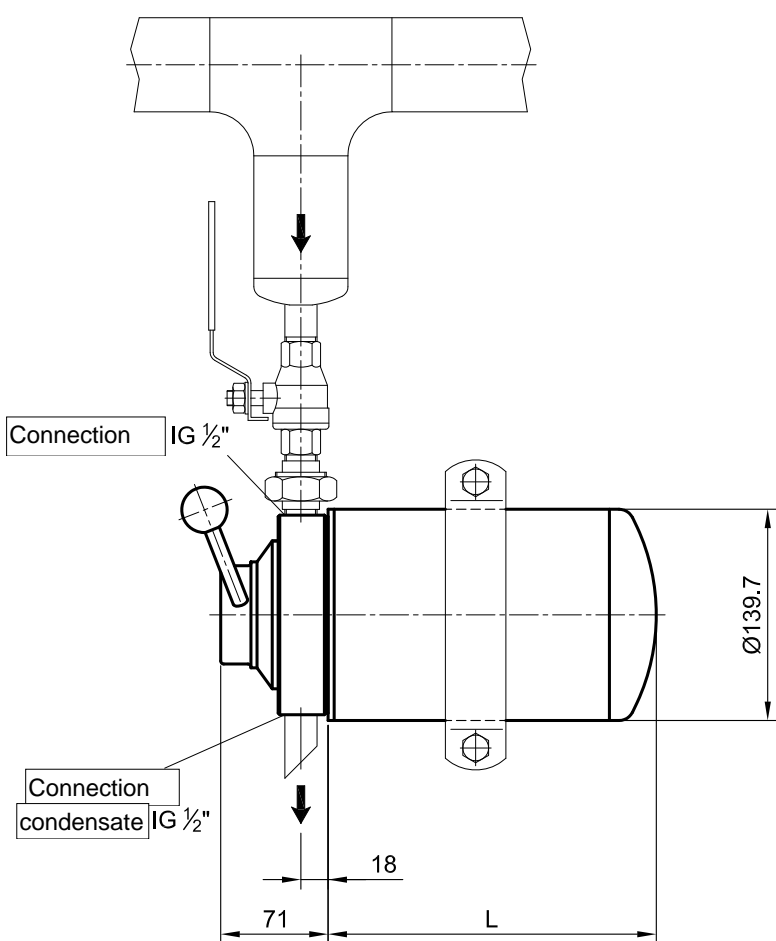


Feeding pipe runs upwards.

Outlet runs upwards or builds an obstruction or reservoir.



Reduction of in- or outlet pipe by using a ball valve or changing the diameter of the pipelines.



Holders and connection pieces by customer on site!

Typ	Inhalt	L
KSm-1 R	1 Liter	127
KSm-2 R	2 Liter	217
KSm-3 R	3 Liter	307
KSm-4 R	4 Liter	397
KSm-5 R	5 Liter	487

Änderungen vorbehalten

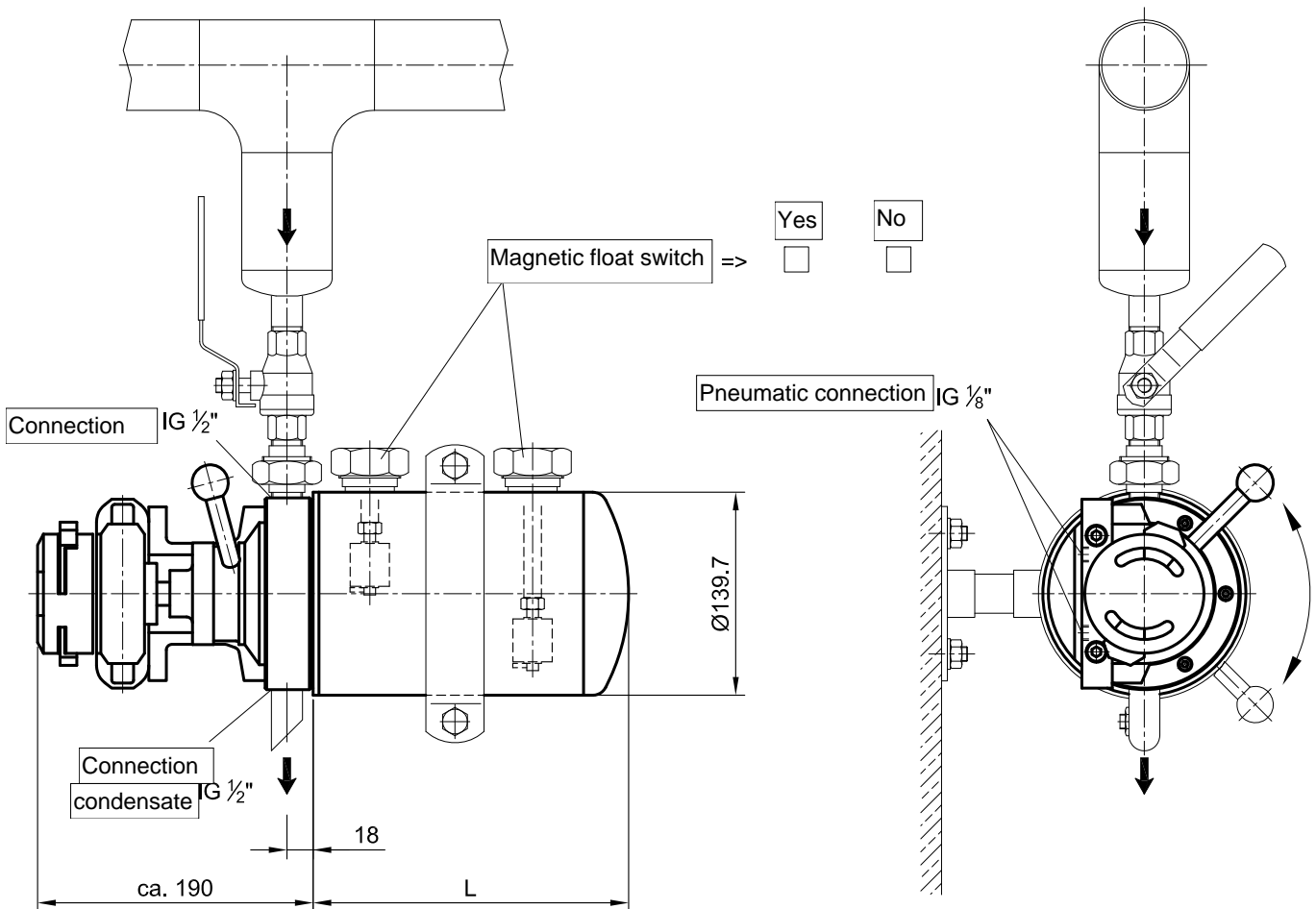
Pos.	Gegenstand	Stk.	Werkstoff	Gewicht in kg	Bemerkungen
Änderungen:	Ohne unsere Genehmigung darf diese Zeichnung nicht vervielfältigt, übertragen oder überarbeitet werden. Sie ist Dritten nicht zugänglich zu machen. Zuwiderhandlungen werden strafrechtlich verfolgt.				

Condensate water gate Typ: KSm- /	actuation: <input type="text" value="manual"/>	Massstab	Gezeichnet	03.02.2005	DI-TEC GmbH
		%	Geprüft	.	.
		.	Normgeprüft	.	.
		.	Gesehen	.	.

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DI-TEC GmbH
 Maschinen- und Verfahrenstechnik

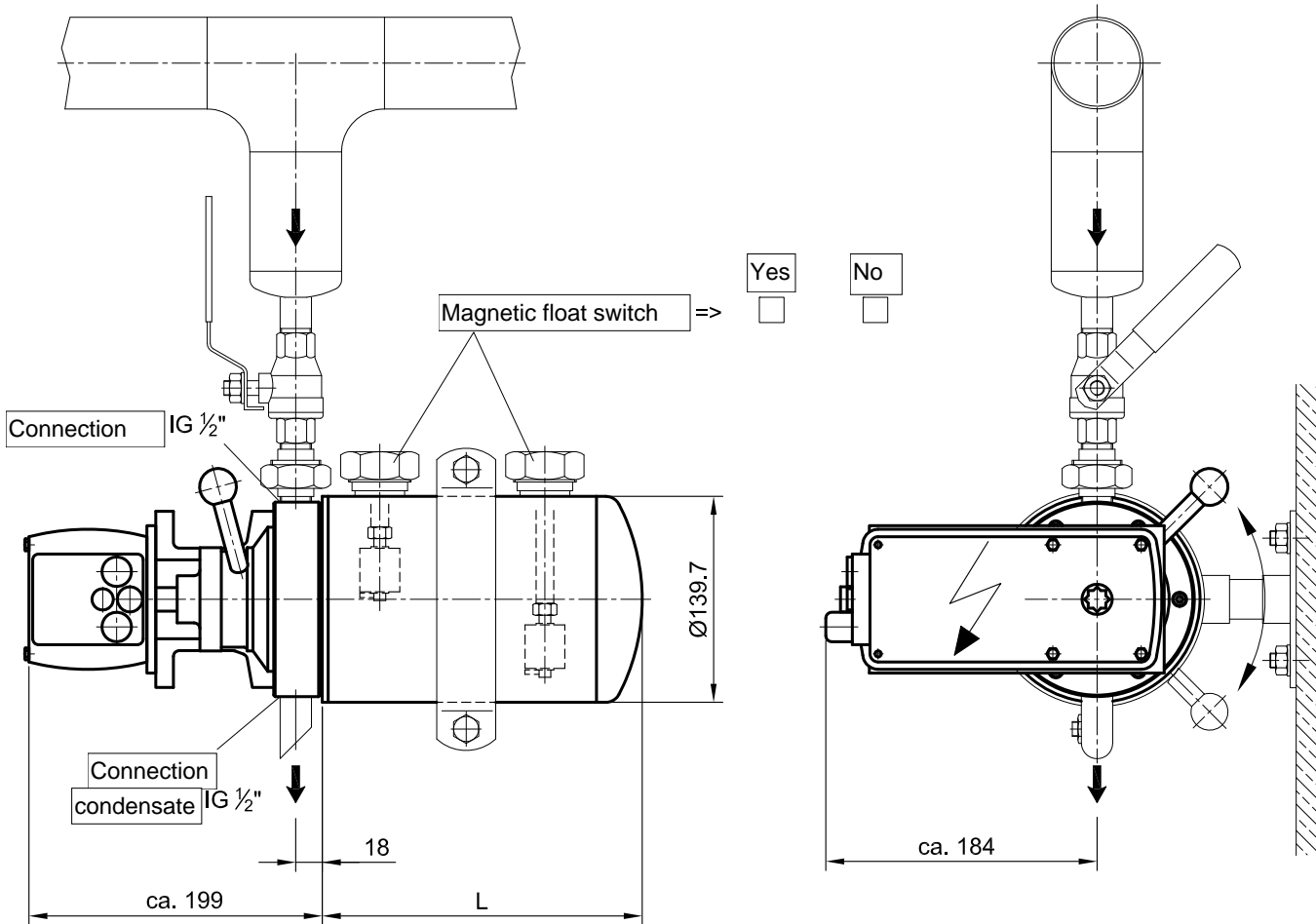
A4-S10.0-0



Typ	Inhalt	L
KSp-1 R	1 Liter	127
KSp-2 R	2 Liter	217
KSp-3 R	3 Liter	307
KSp-4 R	4 Liter	397
KSp-5 R	5 Liter	487

Änderungen vorbehalten

Pos.	Gegenstand	Stk.	Werkstoff	Gewicht in kg	Bemerkungen
Änderungen: .		Ohne unsere Genehmigung darf diese Zeichnung nicht vervielfältigt, übertragen oder überarbeitet werden. Sie ist Dritten nicht zugänglich zu machen. Zuwiderhandlungen werden strafrechtlich verfolgt.			
Condensate water gate Typ: KSp- / actuation: <input type="text" value="pneumatical"/>				Masstab Gezeichnet 03.02.2005 DI-TEC GmbH % Geprüft Normgeprüft Gesehen . . .	
Unotstrasse 8 CH-8248 Uhwiesen Tel. +41 (0)52 345 02 04 Fax +41 (0)52 345 02 05 info@di-tec.ch www.di-tec.ch				DI-TEC GmbH Maschinen- und Verfahrenstechnik	
				A4-S10.1-0	



Holders and connection pieces by customer on site !

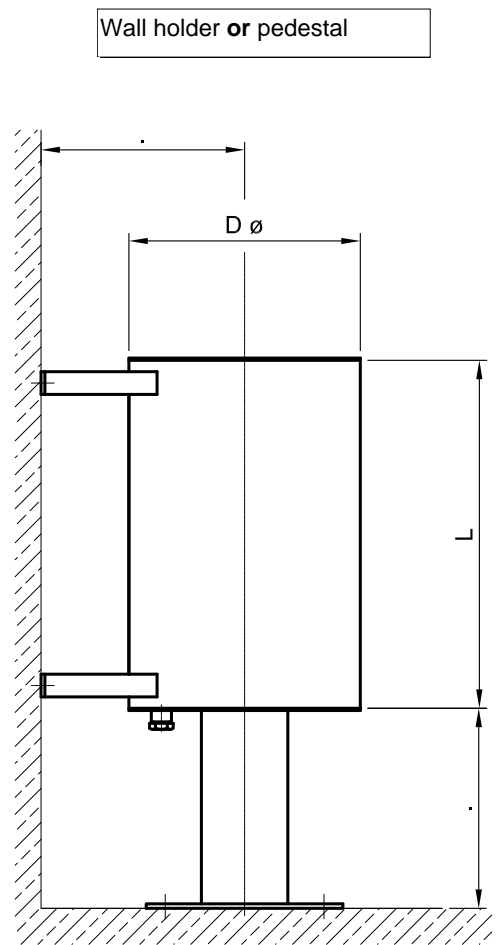
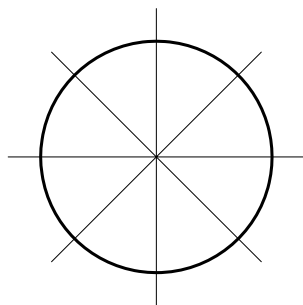
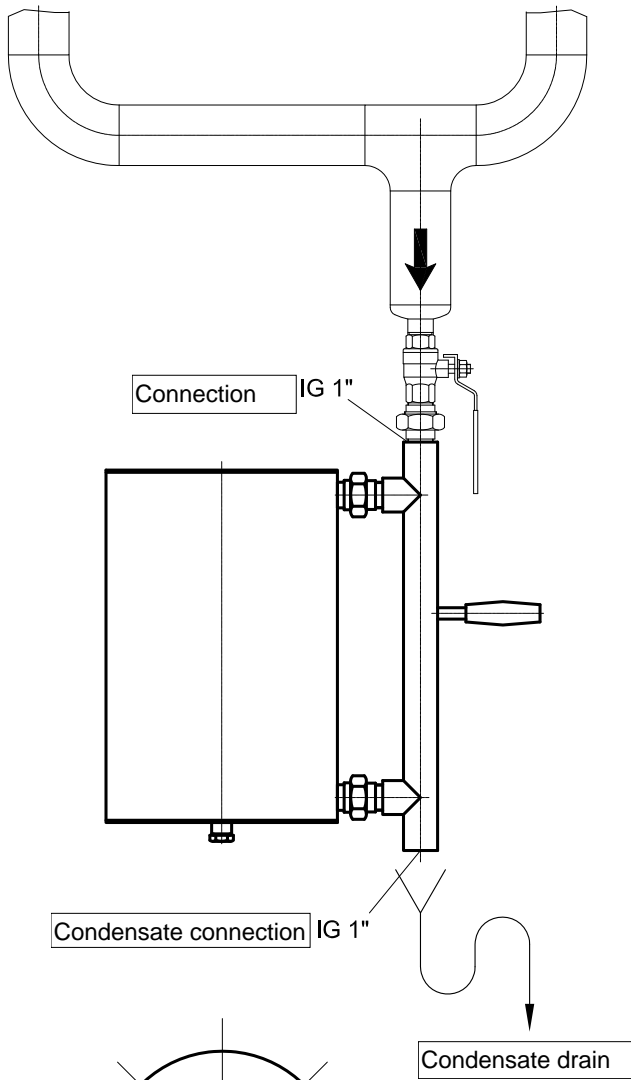
Typ	Inhalt	L
KSe-1 R	1 Liter	127
KSe-2 R	2 Liter	217
KSe-3 R	3 Liter	307
KSe-4 R	4 Liter	397
KSe-5 R	5 Liter	487

Änderungen vorbehalten

Pos.	Gegenstand	Stk.	Werkstoff	Gewicht in kg	Bemerkungen
Änderungen:	Ohne unsere Genehmigung darf diese Zeichnung nicht vervielfältigt, übertragen oder überarbeitet werden. Sie ist Dritten nicht zugänglich zu machen. Zuwiderhandlungen werden strafrechtlich verfolgt.				

Condensate water gate Typ: KSe- / actuation: electrical	Masstab	Gezeichnet	03.02.2005	DI-TEC GmbH
	%	Geprüft	.	.
	.	Normgeprüft	.	.
	.	Gesehen	.	.

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	L	D ø	Liter
KB-10	360	219.1	10
KB-15	460	219.1	15
KB-20	460	254	20
KB-30	460	306	30
KB-40	460	356	40
KB-50	460	406	50
KB-60	460	456	60
KB-80	460	500	80
.	.	.	.

	Yes	No
Condensate water gate =>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Magnetic float switches =>	<input type="checkbox"/>	<input type="checkbox"/>
Level display =>	<input type="checkbox"/>	<input type="checkbox"/>
Wall holder =>	<input type="checkbox"/>	<input type="checkbox"/>
Pedestal =>	<input type="checkbox"/>	<input type="checkbox"/>

- Condensate water gate =>
- Magnetic float switches =>
- Level display =>
- Wall holder =>
- Pedestal =>

Please place symbols at the needed positions and indicate distance (wall or floor)! Änderungen vorbehalten

Pos.	Gegenstand	Stk.	Werkstoff	Gewicht in kg	Bemerkungen
Änderungen: 12.02.07/Di			Ohne unsere Genehmigung darf diese Zeichnung nicht vervielfältigt, übertragen oder überarbeitet werden. Sie ist Dritten nicht zugänglich zu machen. Zuwiderhandlungen werden strafrechtlich verfolgt.		

Condensate tank Typ: KB-	with KS	Masstab	Gezeichnet	01.02.2005	DI-TEC GmbH
		%	Geprüft	.	.
		.	Normgeprüft	.	.
		.	Gesehen	.	.

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