

# Stainless steel submersible drainage pumps for chemically aggressive liquids. Spherical clearance 10 mm.

### CH 432, CH 436

#### **Application**

HOMA CH 432 and CH 436 stainless steel submersible drainage pumps are suitable for pumping corrosive, abrasive or chemically aggressive liquids, drainage water or chemicals containing soft solids up to 10 mm diameter. They are used in various domestic, industrial or municipal applications.

DIN EN 12050-2: Conformity and design approved and controlled by LGA, certificate No. 0220119.

<u>Installation:</u> Transportable or permanent.

Pumped liquid: Drainage water with abrasive or chemically aggressive contents, chemical liquids. Chemical waste or effluent.

Max. medium temperature: 40°C, short term up to 60°C, for limitation to lower temperatures see specific chemical resistance of used materials.

<u>Operation:</u> Permanent operation (S1) with completely submerged motor.

#### Design

Fully submersible, compact integrated motor-pump unit consisting of:

<u>Pump</u>: Single stage centrifugal pump with horizontal discharge.

<u>Impeller</u>: Open multi-channel impeller, spherical clearance 10 mm.

Motor: Fully submersible, pressure tight electric motor. Insulation class F, degree of protection IP 68. Thermal sensor embedded in the winding.

Cable H07RN-F PLUS-6G1,5 with cable protective hose and longitudinally tight cable trumpet. Explosion proof motors according to ATEX Ex II G EEx d II BT4.

<u>Shaft/Bearing:</u> Large diameter stainless steel rotor shaft, pre-lubricated bearings.

Seals: Combination of mechanical seal and lip seal (CH 432) respectively 2 mechanical seals (CH 436) from siliconcarbide/ silicon-carbide and viton in a separate oil chamber. Oil inspection from outside.



#### **Technical Data**

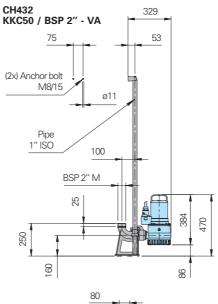
Pump type	Motor input	Motor output	Voltage 50 Hz	Nominal current	Discharge	Weight (kg)
	$P_1(kW)$	$P_2(kW)$	(V)	(A)		
CH432-1,3/2 W (Ex)	1,3	1,0	230/1ph	6,6	BSP 2" M	28
CH432-1,7/2 W (Ex)	1,7	1,3	230/1ph	7,9	BSP 2" M	28
CH432-1,2/2 D (Ex)	1,2	0,9	400/3ph	2,3	BSP 2" M	28
CH432-1,6/2 D (Ex)	1,6	1,2	400/3ph	2,8	BSP 2" M	28
CH436-1,9/2 D (Ex)	1,9	1,5	400/3ph	4,0	BSP 2 <sup>1</sup> / <sub>2</sub> " M	40
CH436-2,4/2 D (Ex)	2,4	1,9	400/3ph	4,6	BSP 2 <sup>1</sup> / <sub>2</sub> " M	40
CH436-3,5/2 D (Ex)	3,5	2,8	400/3ph	7,1	BSP 2 <sup>1</sup> / <sub>2</sub> " M	52
	CH432-1,7/2 W (Ex) CH432-1,2/2 D (Ex) CH432-1,6/2 D (Ex) CH436-1,9/2 D (Ex) CH436-2,4/2 D (Ex)	input P <sub>1</sub> (kW) CH432-1,3/2 W (Ex) 1,3 CH432-1,7/2 W (Ex) 1,7 CH432-1,2/2 D (Ex) 1,2 CH432-1,6/2 D (Ex) 1,6 CH436-1,9/2 D (Ex) 1,9 CH436-2,4/2 D (Ex) 2,4	CH432-1,3/2 W (Ex)         1,3         1,0           CH432-1,7/2 W (Ex)         1,7         1,3           CH432-1,2/2 D (Ex)         1,2         0,9           CH432-1,6/2 D (Ex)         1,6         1,2           CH432-1,6/2 D (Ex)         1,9         1,5           CH436-2,4/2 D (Ex)         2,4         1,9	input P <sub>1</sub> (kW)         output P <sub>2</sub> (kW)         50 Hz (V)           CH432-1,3/2 W (Ex)         1,3         1,0         230/1ph           CH432-1,7/2 W (Ex)         1,7         1,3         230/1ph           CH432-1,2/2 D (Ex)         1,2         0,9         400/3ph           CH432-1,6/2 D (Ex)         1,6         1,2         400/3ph           CH436-1,9/2 D (Ex)         1,9         1,5         400/3ph           CH436-2,4/2 D (Ex)         2,4         1,9         400/3ph	input P <sub>1</sub> (kW) P <sub>2</sub> (kW) 50 Hz current (A)  CH432-1,3/2 W (Ex) 1,3 1,0 230/1ph 6,6  CH432-1,7/2 W (Ex) 1,7 1,3 230/1ph 7,9  CH432-1,2/2 D (Ex) 1,2 0,9 400/3ph 2,3  CH432-1,6/2 D (Ex) 1,6 1,2 400/3ph 2,8  CH436-1,9/2 D (Ex) 1,9 1,5 400/3ph 4,0  CH436-2,4/2 D (Ex) 2,4 1,9 400/3ph 4,6	input P <sub>1</sub> (kW) P <sub>2</sub> (kW) SO Hz current (A) CH432-1,3/2 W (Ex) 1,3 1,0 230/1ph 6,6 BSP 2" M CH432-1,7/2 W (Ex) 1,7 1,3 230/1ph 7,9 BSP 2" M CH432-1,2/2 D (Ex) 1,2 0,9 400/3ph 2,3 BSP 2" M CH432-1,6/2 D (Ex) 1,6 1,2 400/3ph 2,8 BSP 2" M CH436-1,9/2 D (Ex) 1,9 1,5 400/3ph 4,0 BSP 2 1/2" M CH436-2,4/2 D (Ex) 2,4 1,9 400/3ph 4,6 BSP 2 1/2" M

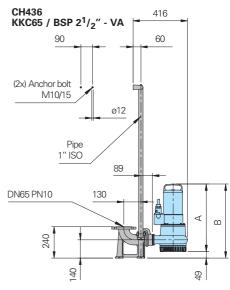
Materials:	
Pump housing, motor housing, impeller	Stainless steel 1.4436
Rotor shaft	Stainless steel 1.4462
Mechanical connecting parts	Stainless steel 1.4571
O-Rings	FPM (Viton)
Mechanical seals	SiC/SiC, FPM (Q1Q1VGG)
Shaft seal ring	FPM (Viton)
Cable protective hose	Polyolefine

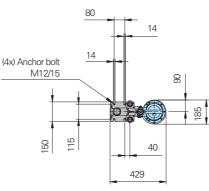
#### **Equipment supplied**

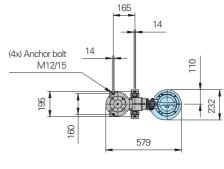
Pump with 10 m of cable, 5 m cable protective hose.

For operation of 230V/1ph models a capacitor is necessary which is fitted in the control box (see accessories).







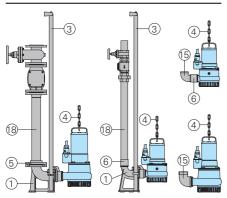


all dimensions in mm

## 25 BSP 2<sup>1</sup>/<sub>2</sub>" M 9 45 ø198 110 232 287

Pump type	Dimension A	Dimension B
CH436-1,9/2D(Ex)	486	535
CH436-2,4/2D(Ex)	486	535
CH436-3,5/2D(Ex)	517	566

-				
Α	CCE	288	or	ies



Part Description	Dimension	Part No.
① Auto-coupling syster from stainless steel 1.4 consisting of auto coup with flange, flange purr coupling and upper slide rail bracket - Type KKC 50/R 2" - Type KKC 65/R 2 1/2"	436 ling	8604011 8604017
③ Guide rails, stainless steel 1.4571, pair, per m	dia. 1"	2190253
4 Lifting chain, stainless steel 1.4401, per m	5 mm Ø	2800351
Shackle, for chain stainless steel 1.4401	5 mm Ø	2801390
(5) Screw flange,	DN 50, PN16	2215112

DN 65, PN16

BSP2" F

BSP21/2" F

2215115

2216042

2216043

stainless steel 1.4571

stainless steel 1.4571

6 Double socket

Part Description	Dimension	Part No.
⑤ Elbow 90°, stainless steel 1.4401	BSP2" F/M BSP21/2" F/M	2111825 1 2111826
Stainless steel or plas discharge pipe and fitting		On request
Pump controls and control panels for permanent or transportal installation, level controll and monitoring devices	ers s	see HOMA- accessories



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