

Stainless steel submersible motor pumps for domestic drainage- and waste water. Free passage 35-50 mm.

TCV

Application

Submersible motor pumps in the TCV series are used for conveying domestic drainage- and waste water with coarse solids and fibrous content. Ideal for economical disposal in municipal, private, trade and industry applications.

DIN EN 12050-2: Design tested and monitored.

Installation: Stationary or mobile. Version with float switch for use as automatic water level controlled drainage pump.

Pumped medium: Clean water and waste water with solid and fibrous content.

Max. temperature of pumped medium: 35°C, for brief periods up to 60°C.

Operating mode: Intermittent operation.

Design

Fully submersible pump, consisting of:

Pump: Single-stage with horizontal discharge.

Impeller: V = Vortex impeller for media containing gas or air, with coarse or long stringy components that are prone to clogging.

Motor: Fully submersible motor, sealed against pressurized water. Insulation class F. Protection rating IP 68. 1-phase motor with thermal sensor in the winding for temperature monitoring.

Connecting cable:

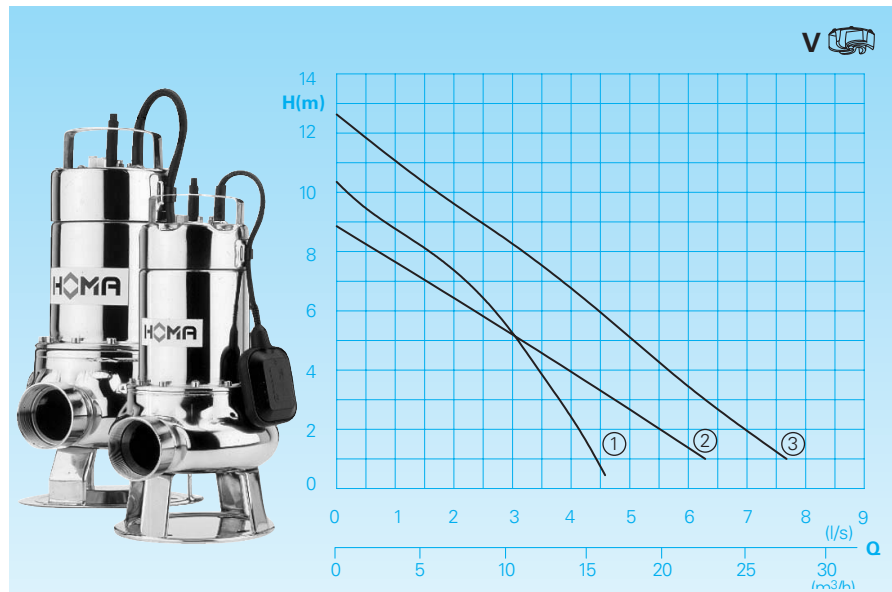
TCV408-519W(A): H07RN-F3G1

TCV513-620D: H07RN-F4G1,5

Shaft/bearing: Chrome steel shaft, lifetime-lubricated roller bearings.

Seal: Combination of mechanical seal and radial seal in oil chamber. TCV408: Combination of 2 shaft sealing rings and SIC mechanical seal.

Conveying capacities



Technical data

Curve No.	Pump type	Motor input P ₁ (kW)	Motor input P ₂ (kW)	Nominal current (A)	Discharge	Free passage (mm)	Weight (kg)
①	TCV408 WA	1,1	0,76	4,9	G1 1/2	35	7,1
②	TCV514 W(A)	1,4	0,75	6,0	G2	50	11,0
③	TCV519 W(A)	1,9	1,1	9,6	G2	50	13,0
②	TCV513 D	1,4	0,9	2,4	G2	50	11,0
③	TCV517 D	2,2	1,2	3,7	G2	50	13,0

Model W: 230V/1Ph 50Hz

Model D: 400V/3Ph 50Hz

Model A: with automatic HOMA-Nivomatik float switch

Impeller: Vortex impeller

Rotational speed: 2900 rpm

Materials

Pump housing, impeller, motor housing	Stainless steel 1.4301
Motor shaft	Stainless steel 1.4305
Screws	Stainless steel
Mechanical seals	Carbon graphite/ Chrome steel
Elastomers	NBR

Scope of supply

Pump with base stand without auto coupling (see accessories). TCV408: PP-bend, hose connection and float locking.

Model W (230 V / 1 Ph):

With 10 m of connecting cable and mains plug.

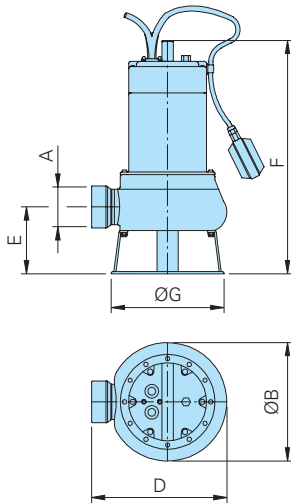
Model D (400 V / 3 Ph):

With 10 m of loose cable end. Switchgears D32; DA10/32 available as accessories.

Model A: Additionally with automatic float switch HOMA-Nivomatik.

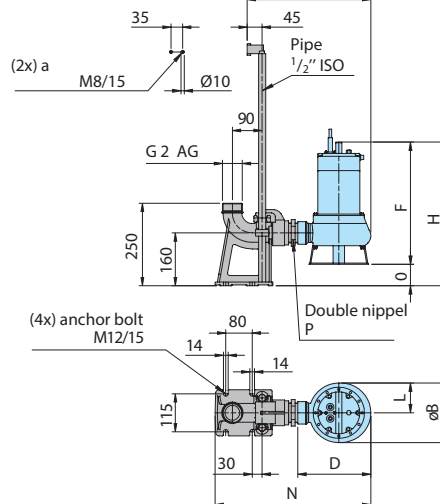
Dimensions and installation example (all dimensions in mm)

Floorstanding installation with base stand

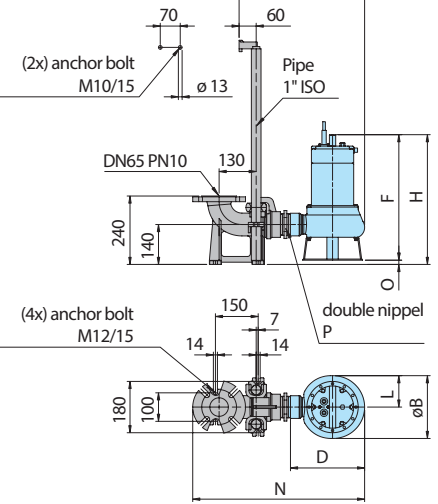


Wet well installation with auto-coupling system

KK 50 / BSP2"

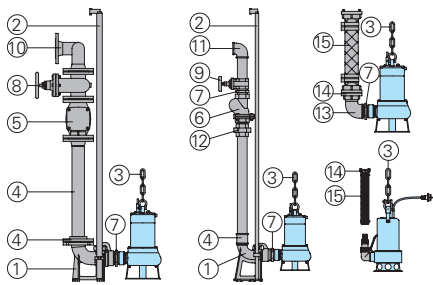


DN65 PN10



Pump type	A	ØB	D	E	F	ØG	H	L	M	N	O	P
TCV408 WA	G1 1/2	166	186	84	378	166	454	83	329	427	76	R1 1/2
TCV514 WA, TCV513 D	G2	180	221	95	370	180	435	90	374	471	65	R2
TCV517 D, TCV519 WA	G2	180	207	86	407	180	481	90	360	458	74	R2

Accessories



Description	Size	Part no.
① Automatic coupling system GG with mating flange - for TCV408, base elbow with thread, slide rail bracket BSP1/2" KK50/BSP1 1/2"		8604000
- Base elbow with thread, slide rail bracket BSP1/2" KK50/BSP2"		8604005
- Base elbow with flange, slide rail bracket BSP1" KK65/BSP2 1/2"		8604015
○ Coupling system completely or partly in stainless steel	all	on request
○ Screw-Kits for fastening of coupling systems		on request
○ Intermediate bracket for slide rail bracket extension for KK80	Ø 1/2"	7320271
	Ø 1"	7323714

Description	Size	Part no.
② Slide rails, in pairs, per m Galvanized steel	Ø 1/2"	2190085
	Ø 1"	2190135
Stainless steel	Ø 1/2"	2190250
	Ø 1"	2190252
③ Pump chain sets, tested. With shackle, single or dual row, different lengths and load bearing capacities		on request
④ Threaded flange	DN 65/ BSP 2 1/2" F	2215060
Pipe with flange	DN 65	on request
Double socket, galvanized	BSP 2"F BSP 2"F/ BSP 1 1/2"F	2109102 2102210
⑤ Non-return valve, GG	DN 65	2212805
⑥ Non-return ball valve	BSP 1 1/2"F BSP 2"F BSP 2 1/2"F	2212902 2212903 2211513
⑦ Double nipple, galvanized	BSP 1 1/2"M BSP 2"M BSP 2 1/2"M	2009020 2009018 2009025
⑧ Shut-off gate valve, GG	DN 65	2216065
⑨ Shut-off gate valve, MS	BSP 1 1/2"F BSP 2"F BSP 2 1/2"F	2216015 2216020 2216025
⑩ 90° bend with flanges	DN 65	2153301
Connection piece for pressure pipe with 3 flanges	3 x DN 65 DN 65/65/80	2160002 2160004
⑪ 90° bend, galvanized	BSP 1 1/2"F BSP 2"F BSP 2 1/2"F	2113605 2113606 2113610
T-piece for merging the pressure pipe in double pump stations	BSP 1 1/2"F BSP 2"F BSP 2 1/2"F	2114302 2114306 2114308

Description	Size	Part no.
⑫ Transition screw connection galvanized	BSP 1 1/2"M/F BSP 2"M/F BSP 2 1/2"M/F	2114305 2114311 2114312
⑬ 90° bend, galvanized	BSP 1 1/2"F/M BSP 2"F/M BSP 2 1/2"F/M	2111505 2111506 2111705
⑭ Fixed coupling, brass	BSP1"F	2005323
⑭ STORZ-fixed coupling	C-G 2"F B-G 2 1/2"F	2010204 2010502
STORZ-hose-coupling	C-52 mm Ø B-75 mm Ø	2013003 2013502
STA-threaded hose fitting, brass	BSP 1 1/2"F	2001513
⑮ Synthetic-pressure hose, with rubber lining and couplings	C-52 mm Ø 10 m long 15 m long 20 m long 30 m long	2611310 2611315 2611320 2611330
	B-75 mm Ø 10 m long 15 m long 20 m long 30 m long	2611210 2611215 2611220 2611230
Plastic spiral hose, per m	1" Ø 25 mm Ø 50 mm Ø 75 mm	2632025 2632050 2632075
PVC-hose, per m	1" Ø 25 mm 1 1/2" Ø 38 mm	2621000 2621500
Hose clamp	3/4"-1" 1 1/2" 2" 85/20	2302330 2304854 2306009 2308520
○ For pump controllers and switchgears for mobile and stationary applications, measuring systems and monitoring devices,	see HOMA accessories	



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