

NEWS



SEWAGE AND WASTE WATER



Design for the pumping of wastewater and sewage from buildings and sites in private, commercial, industrial areas in accordance with European Standard EN 12050-1.

Vortex impeller with maximum solids handling with new no-clogging shape, single channel impeller with high efficiency and compliance with European Standard EN 12050-1. Single-unit cartridge seal with double mechanical seals, Sic-Sic at the pump side, Sic-C at the motor side. All seals are independent of rotation direction. DN 65, DN 80, DN 100 radial slot EN 1092-1 flange discharge.

Liquid Viscosity : 1mm²/s. Premium Efficiency IE3, three-phase, squirrel-cage motor. Continuously S1 rated motor in submerged applications, or discontinuous S3 according to minimum levels. Seal monitoring by a moisture sensor in the seal chamber, which signals an inspection alert if there is leakage at the mechanical seals (optional). Bi-metallic switch in stator windings, with max temperature (150°C). Stainless steel shaft. Designed with high resistance fatigue fracture.

Available in Ex version for use in potentially explosive atmosphere (ATEX certifications: II2G Ex db k IIB T4 or IECEx: Ex db IIB T4 Gb).

Impeller type: FKV: Vortex.

FKC: Single channel.

Solid handling: 65 ÷ 100 mm

Nominal power: 1,1 ÷ 11 kW

Outlet: DN 65 / 80 / 100 / 150

Performance range: from 4.3 to 280 m³/h with 41 meters head.

Fluid: wastewater and sewage from buildings and sites in private, commercial, industrial areas.

Fluid PH: 6.5 ÷ 12.

Fluid temperature range: from 0° to +40°C.

For higher temperature please contact our sales offices.

Max installation depth: 20 mt (with a proper cable length).

Type of installation: fixed by Coupling Unit, portable in vertical position with pedestal. Continuous working with total submerged applications, or discontinuous S3 with respect of minimum levels.

Approvals: EN 12050-1 e Ex (ATEX , IECEx).

Degree of protection: IP 68

Insulation class: F

Max starting /hours: 20

ACCESSORIES | PAG. 237

PANELS | PAG. 247

ENERGY EFFICIENCY **IE3**



NEW IE3 MOTORS

The new **IE3 premium efficiency motors** drastically reduce energy operation costs. Given the low running temperatures, it is guaranteed their operation up to 40°C, for higher temperatures please contact the sales department.

Thermal protection is standard and they have an insulation class equal to F.



SINGLE-UNIT CARTRIDGE SEAL

A single-unit cartridge seal is a great advantage for maintenance of the pump as allows the removal and insertion of the seals in less time, having a total guarantee to carry out properly. It's an **exclusive patent DAB**: a double mechanical seal Sic-Sic with opposite faces, independent from the rotation direction of shaft, with Viton elastomers and leap seal.

EN 12050-1



NEW NO-CLOGGING VORTEX IMPELLER

The guarantee of operation comes before efficiency. A new design of the Vortex impellers and the total solid handling are respectively the two guarantees to have no-clogging issues.

Compliant with EN 12050-1

EN 12050-1



NEW SINGLE CHANNEL HYDRAULICS

The new high efficiency single-channel hydraulic has been designed especially for continuous wastewater operations with high flow demand and low fiber content.

Compliant with EN 12050-1

TECHNICAL DATA - FKV 65

MODEL	STANDARD	OIL SENSOR	Ex (ATEX)	ELECTRICAL DATA				HYDRAULIC DATA										DNM	FREE PASSAGE mm	WEIGHT KG									
	CODE	CODE	CODE	VOLTAGE 50 Hz	P1 MAX kW	P2 NOM. kW	In HP	In A	Q=m³/h	0	8	16	23	31	39	47	55				62	72	Q=l/min	0	130	260	390	520	650
FKV 65.11.4 T5	60172586	60176718	60178992	3x400 V DOL	1,3	1,1	1,5	3,3	H (m)	9,1	8,7	7,7	6,4	4,9	3,4	2,2					65	55	94						
FKV 65.22.2 T5	60171422	60176719	60178993	3x400 V DOL	2,5	2,2	3	4,8		16,5	14,1	11,4	8,5	5,8	3,5	2,1					65	65	94						
FKV 65.30.2 T5	60170389	60176720	60176081	3x400 V DOL	3,3	3	4	5,7		21,1	19,3	16,6	13,4	10,0	6,9	4,3	2,6				65	65	94						
FKV 65.40.2 T5	60171423	60172163	60178994	3x400 V DOL	4,6	4	5,5	7,5		27,2	25,8	23,5	20,6	17,2	13,7	10,3	7,2	4,8	3,0		65	65	143						

TECHNICAL DATA - FKV 80

MODEL	STANDARD	OIL SENSOR	Ex (ATEX)	ELECTRICAL DATA				HYDRAULIC DATA										DNM	FREE PASSAGE mm	WEIGHT KG									
	CODE	CODE	CODE	VOLTAGE 50 Hz	P1 MAX kW	P2 NOM. kW	In HP	In A	Q=m³/h	0	12	24	36	48	60	72	84				96	108	Q=l/min	0	200	400	600	800	1000
FKV 80.11.4 T5	60171443	60176715	60178995	3x400 V DOL	1,3	1,1	1,5	3,5	H (m)	7,0	6,3	5,0	3,6	2,1							80	80	103						
FKV 80.15.4 T5	60171444	60176716	60178996	3x400 V DOL	1,3	1,1	1,5	3,5		9,3	9,0	7,8	6,1	4,2	2,7	1,9					80	80	103						
FKV 80.22.4 T5	60170418	60176717	60178997	3x400 V DOL	1,3	1,1	1,5	3,5		11,5	11,4	10,5	9,1	7,3	5,4	3,7					80	80	104						
FKV 80.40.4 T5	60171445	60172165	60178998	3x400 V DOL	1,3	1,1	1,5	3,5		17,5	16,7	15,5	14,0	12,4	10,7	9,0	7,4				80	80	172						
FKV 80.40.2 T5	60171424	60172158	60178999	3x400 V DOL	4,6	4	5,5	7,7		22,1	20,1	16,5	12,2	8,0	4,6	2,9					80	80	148						
FKV 80.60.2 T5	60171425	60172166	60179000	3x400 V Y/D	6,9	6	8,2	11,7		29,1	27,5	24,4	20,3	15,7	11,4	7,9					80	80	152						
FKV 80.75.2 T5	60170434	60172167	60179001	3x400 V Y/D	8,3	7,5	10,2	13,7		32,1	31,2	28,5	24,5	19,9	15,1	10,6	7,1	5,1			80	80	152						
FKV 80.92.2 T5	60171426	60172168	60179002	3x400 V Y/D	10,2	9,2	12,5	18		35,9	35,5	33,1	29,2	24,4	19,3	14,3	10,2	7,3			80	80	202						
FKV 80.110.2 T5	60170429	60172169	60179003	3x400 V Y/D	12,1	11	15	21		40,9	40,7	38,7	35,2	30,6	25,6	20,3	15,5	11,4	8,5		80	80	202						

TECHNICAL DATA - FKV 100

MODEL	STANDARD	OIL SENSOR	Ex (ATEX)	ELECTRICAL DATA				HYDRAULIC DATA										DNM	FREE PASSAGE mm	WEIGHT KG									
	CODE	CODE	CODE	VOLTAGE 50 Hz	P1 MAX kW	P2 NOM. kW	In HP	In A	Q=m³/h	0	15	30	45	60	75	90	105				126	144	Q=l/min	0	250	500	750	1000	1250
FKV 100.30.4 T5	60171446	60172170	60179004	3x400 V DOL	3,5	3	4	8	H (m)	11,8	10,9	9,6	8,0	6,2	4,6	3,1					100	100	166						
FKV 100.40.4 T5	60171447	60172171	60179005	3x400 V DOL	4,5	4	5,5	8,9		14,0	13,1	11,9	10,4	8,8	7,1	5,4	3,9				100	100	166						
FKV 100.55.4 T5	60171448	60172172	60179006	3x400 V Y/D	6,2	5,5	7,5	11,3		15,9	15,5	14,8	13,7	12,3	10,8	9,2	7,5	5,4			100	100	220						
FKV 100.75.4 T5	60170428	60172173	60179007	3x400 V Y/D	8,3	7,5	10	14,3		19	18,8	18,3	17,4	16,3	15	13,5	11,9	9,6	7,7		100	100	220						

Power input: 3x400V DOL direct start-up, 3x400V Y/D star-delta start-up.
All models are available with 230V power input voltage and Y/D or DOL start-up.