

Progressing cavity dosing pump, for continuous low flow dosing of conditioning agents to delivery pipework in sludge dewatering and thickening applications.

Construction

Materials of construction; cast iron body with stainless steel components (except coupling rod). Suction chamber, end cover and seal housing in advanced HDPE and PVDF plastics. Choice of rotor and stator materials to suit individual applications e.g. hard chrome plated rotor or natural rubber stator.

Applications

Typical applications for the PC dosing pump include:

- Low flow dosing applications
- Delivery of barrier layer injection and conditioning agents in sludge dewatering and thickening
- Controlled flocculent pumping
- General industry and chemical processing

Features

- Enhanced coupling rod design gives higher pressure capabilities of up to 72 bar
- A number of dosing pump parts are interchangeable with the PC Transfer range
- Gentle pumping action, minimises shear and crush damage to the pumped product
- Supplied with a baseplate to ease installation, or optional without
- Fully sealed drive train to maximise life and minimise downtime
- Hard faced, single mechanical seal as standard, with packed gland as an option

Motor / drives

- Electric motor drive units supplied as direct-coupled or variable speed drives with mechanical variable speed or frequency inverter
- Robust drives and gearboxes for longer life



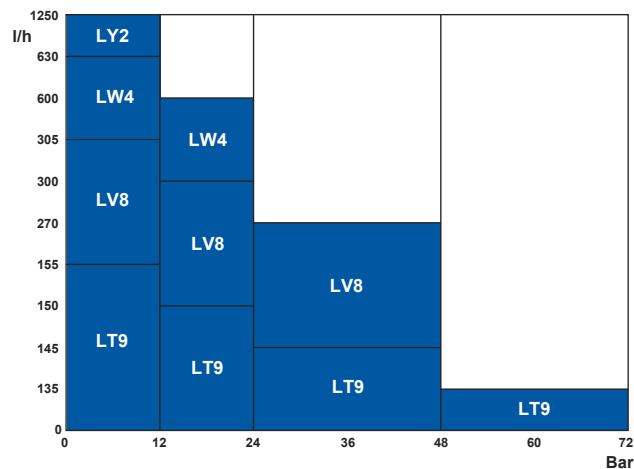
Performance

Capacity, for flows up to 1 250 l/h and differential pressure up to 72 bar, to operate in a range of process temperatures up to 120 °C (stainless steel version).

Weight

Motorized pump weight for all models is 13 kg.
All wear parts are less than 12 kg.

Performance data



l/h = capacity. Bar = differential pressure.

Materials

Description	Material
Pump casing	Cast iron, BS EN 1563 grade EN-GJS 400-18
Rotor	316S11 stainless steel BS 970 or Hastelloy ASTM B574
Stator	See pump coding table, page 2
Drive shaft	316S11 stainless steel BS 970 or Hastelloy ASTM A494
Coupling rod	Steel BS EN 10277, grade 20NiCrMoS2-2 hardened to 650-800Hv
Mechanical seals	Silicon carbide faces, viton o-rings (EPDM by special request), stainless steel 316 springs

For guidance on material options and pump selection please contact Sulzer.

Pump coding

Range	Dosing pump	L																		
Size	140 l/hr @ 1 500 rpm		T																	
	270 l/hr @ 1 500 rpm		V																	
	550 l/hr @ 1 500 rpm		W																	
	1 100 l/hr @ 1 500 rpm		Y																	
Stages	Two stage					2														
	Four stage					4														
	Eight stage					8														
	Twelve stage					9														
Delivery materials	Stainless								S											
	Hastelloy								H											
	HDPE								P											
Rotating parts	Stainless steel AISI 316									2										
	Stainless steel AISI 316 + HCP									3										
	Hastelloy ASTM B574									4										
Rotor	Mk A (EPDM stator only)																		X	
	Mk 1																		A	
	Mk 3																		C	
	Mk 5																		E	
Stator material	Nitrile																			A
	EPDM																			E
	High nitrile																			J
	Viton																			R
Seal type	Mechanical seal																			M
	Packed gland																			P
Build option	Standard																			1

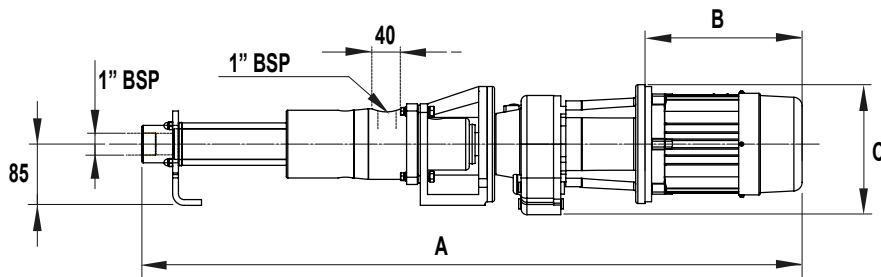
Example:

L V 8 S 3 A R M 1

Dimensions (mm)

Drive type	Pump model			A	B	C
	(code)	(power kW)	(ref.)			
Geared motor	LY2	0.37	DA	803	323	168
	LW4	0.37	DA	803	323	168
	LV8	0.37	DB	863	323	168
	LV8	0.37	DY	932	332	225
	LV8	0.55	DA	940	340	178
	LV8	0.55	DY	957	357	225
	LV8	1.10	DY	998	398	225
	LT9	0.37	DY	932	332	225
	LT9	0.37	DZ	932	332	225
	LT9	0.55	DA	940	340	178
	LT9	0.55	DB	940	340	178
	LT9	0.55	DY	957	357	225
	LT9	1.10	DY	998	398	225
	LT9	1.10	DZ	998	398	225
Variable speed	LY2	0.37	EA / EC	937	457	306
	LY2	0.55	EB / ED	937	457	306
	LW4	0.37	EA / EC	937	457	306
	LW4	0.55	EB / ED	937	457	306
	LV8	0.37	EA / EC	1 027	487	340
	LV8	0.55	EB / ED	1 027	487	340
	LT9	0.37	EA / EC	1 027	487	340
	LT9	0.55	EB / ED	1 027	487	340

Geared motor



Variable speed

