

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



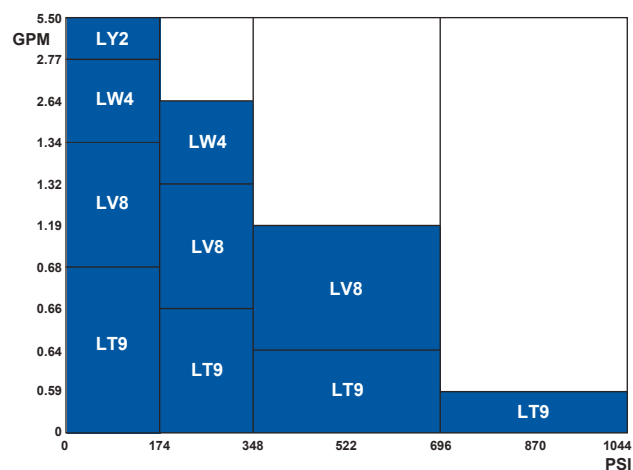
## Performance

Capacity, for flows up to 5.5 gpm [1 250 l/h] and differential pressure up to 1 044 psi [72 bar], to operate in a range of process temperatures up to 248 °F [120 °C] (stainless steel version).

## Weight

Motorized pump weight for all models is 29 lbs [13 kg]. All wear parts are less than 26 lbs [12 kg].

## Performance data



GPM = capacity. PSI = 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

<b>Range</b>	Dosing pump	L																		
<b>Size</b>	0.6 gpm [140 l/hr] @ 1 500 rpm		T																	
	1.2 gpm [270 l/hr] @ 1 500 rpm		V																	
	2.4 gpm [550 l/hr] @ 1 500 rpm		W																	
	4.8 gpm [1 100 l/hr] @ 1 500 rpm		Y																	
<b>Stages</b>	Two											2								
	Four											4								
	Eight											8								
	Twelve											9								
<b>Delivery materials</b>	Stainless																			S
	Hastelloy																			H
	HDPE																			P
<b>Rotating parts</b>	Stainless steel AISI 316																			2
	Stainless steel AISI 316 + HCP																			3
	Hastelloy ASTM B574																			4
<b>Rotor</b>	Mk A (EPDM stator only)																			X
	Mk 1																			A
	Mk 3																			C
	Mk 5																			E
<b>Stator material</b>	Nitrile																			A
	EPDM																			E
	High nitrile																			J
	Viton																			R
<b>Seal type</b>	Mechanical seal																			M
	Packed gland																			P
<b>Build option</b>	Standard																			1

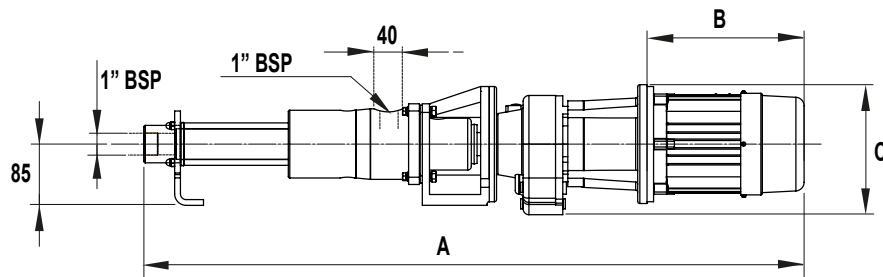
Example:

L V 8 S 3 A R M 1

## Dimensions (mm)

Drive type	Pump model			A	B	C
	(code)	(power HP)	(ref.)			
Geared motor	LY2	0.50	DA	31.6	12.7	6.6
	LW4	0.50	DA	31.6	12.7	6.6
	LV8	0.50	DB	34.0	12.7	6.6
	LV8	0.50	DY	36.7	13.1	8.9
	LV8	0.74	DA	37.0	13.4	7.0
	LV8	0.74	DY	37.7	14.1	8.9
	LV8	1.48	DY	39.3	15.7	8.9
	LT9	0.50	DY	36.7	13.1	8.9
	LT9	0.50	DZ	36.7	13.1	8.9
	LT9	0.74	DA	37.0	13.4	7.0
	LT9	0.74	DB	37.0	13.4	7.0
	LT9	0.74	DY	37.7	14.1	8.9
	LT9	1.48	DY	39.3	15.7	8.9
	LT9	1.48	DZ	39.3	15.7	8.9
Variable speed	LY2	0.50	EA / EC	36.9	18.0	12.1
	LY2	0.74	EB / ED	36.9	18.0	12.1
	LW4	0.50	EA / EC	36.9	18.0	12.1
	LW4	0.74	EB / ED	36.9	18.0	12.1
	LV8	0.50	EA / EC	40.4	19.2	13.4
	LV8	0.74	EB / ED	40.4	19.2	13.4
	LT9	0.50	EA / EC	40.4	19.2	13.4
	LT9	0.74	EB / ED	40.4	19.2	13.4

Geared motor



Variable speed

