



*Pumps to process*

# PCM DELASCO

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## Peristaltic pumps Series DSC 65, 80, 100

### Characteristics

- |                       |                          |                   |               |
|-----------------------|--------------------------|-------------------|---------------|
| - Minimum flow-rate   | : 3,1 m <sup>3</sup> /h  | - Self-priming    | : 9 m head    |
| - Maximum flow-rate   | : 65,2 m <sup>3</sup> /h | - Speed DSC 65    | : 7 to 79 rpm |
| - Maximum pressure    | : 15 Bar                 | - Speed DSC 80    | : 5 to 61 rpm |
| - Maximum temperature | : 150 °C                 | - Speed DSC 100   | : 5 to 51 rpm |
| - Cubic capacities    | : 3600 to 10 300 cc      | - Reversible pump |               |



### Advantages

#### ▶ Of peristaltic technology

- Self-priming.
- Can be run dry.
- Natural tightness.
- Fast and economical servicing.
- Reversibility.

#### ▶ Of design linked with experience

- Versatility (varied products and applications).
- Minimized hose wear (roller squeezing).
- Compatibility with pumped product.
- Control of design, manufacturing and associated services

#### ▶ Of PCM POMPES

- A technical-sales network of proficient people available to advise you in selection and installation.
- A stock of pumps and parts over 1500 m<sup>2</sup>.
- Before and after-sales service.

### The range

The PCM DELASCO range incorporates 4 series of peristaltic pumps

- PMA series (low flow-rates)
- Z series (low pressure)
- DSC series (high pressure)
- DL series (high pressure)

For more information, request our documentation



# Peristaltic pumps

## Series DSC 65, 80, 100

The flow-rates are given for water pumped at 20 °C. These are maximum values that may vary according to the conditions on the suction side (suction height, pipe length, viscosity).

### DSC 65

Flow-rate m <sup>3</sup> /h	Speed rpm	Motor power (kW)			
		5 bar	7,5 bar	10 bar	15 bar
4,7	11	2,2	2,2	3	3
8,5	20	3	4	5,5	5,5
11,5	27	4	5,5	7,5	7,5
14,1	33	5,5	7,5	7,5	9,2
18,3	43	7,5	7,5	9,2	11
22,2	52	7,5	9,2	11	
27,4	64	9,2	11		
33,8	79	11			
3,1/17,95	7/35	11	11	11	11
3,1/17,95	7/42	11	11	11	
4,3/25,7	9,7/58	15	15		
5,1/30,8	12/72	15			

### DSC 80

Flow-rate m <sup>3</sup> /h	Speed rpm	Motor power (kW)			
		5 bar	7,5 bar	10 bar	15 bar
5,9	8,4	3	3	4	4
7,7	11	4	4	4	5,5
11,2	16	5,5	5,5	5,5	7,5
15,4	22	5,5	7,5	7,5	11
19,6	28	7,5	7,5	11	11
26,6	38	11	11	15	
36,4	52	15			
46,9	67	18,5			
3,5/21	5/30	15	15	18,5	18,5
7/42,7	10/61	22			

### DSC 100

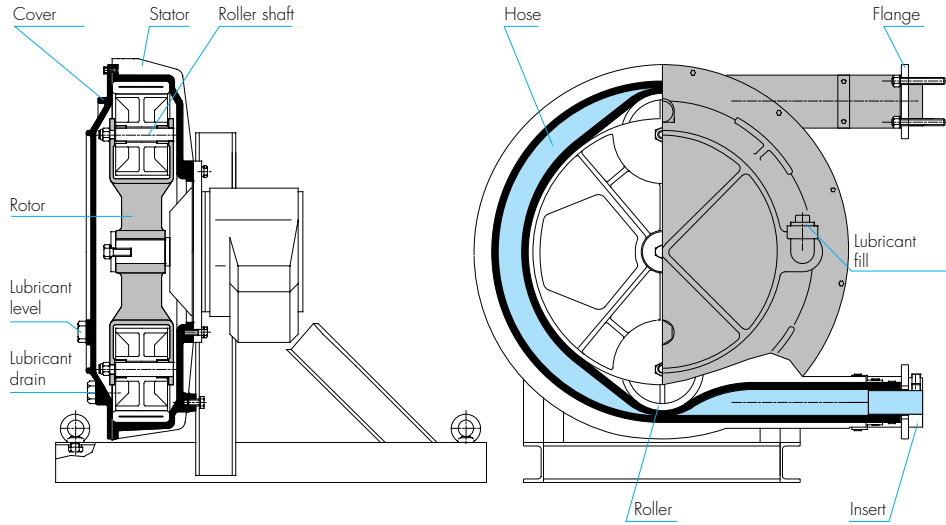
Flow-rate m <sup>3</sup> /h	Speed rpm	Motor power (kW)			
		5 bar	7,5 bar	10 bar	15 bar
11,2	8,8	5,5	5,5	5,5	7,5
15,4	12	5,5	5,5	7,5	11
21,7	17	9,2	9,2	11	15
28,1	22	9,2	11	15	18,5
35,8	28	11	15	18,5	
46	36	18,5	18,5		
52,4	41	22			
62,6	49	22			
6/30,7	4,7/24	22	22	22	22
6,9/42,2	5,4/33	22	22		
10,7/65,2	8,4/51	22			

 Continuous use

 Intermittent use

 Nonapplicable

### Simplified sectional diagram

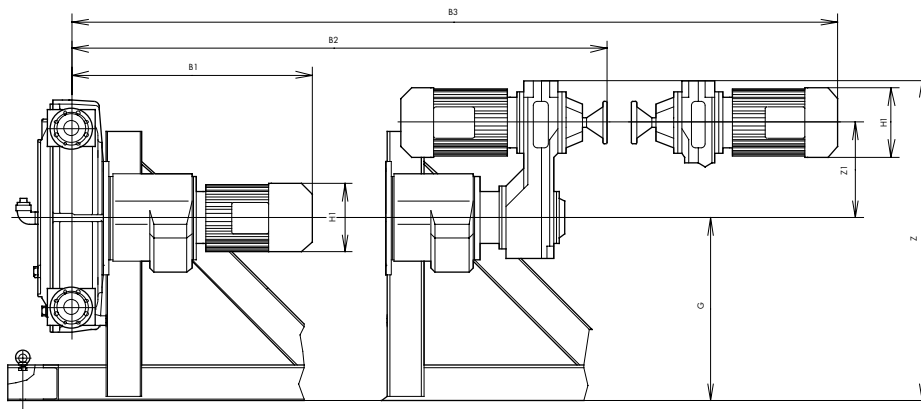


### Components material

COMPONENT	PUMPS	MATERIAL	COMMENTS
Rollers	All	FGL 250 cast iron	
Stator	All	FGL 250 cast iron	The stator contains an oil bath providing permanent tube lubrication
Rotor	All	FGL 250 cast iron	
Flange	DSC 65 DSC 80 DSC 100	Stainless steel (304L) or Polypropylene insert + steel flange Insert steel + steel flange Insert steel (A37) + steel flange	NP 16 ND 65 NP 16 ND 80 NP 16 ND 100
Hose	DSC 65, DSC 80 DSC 100 DSC 65	Natural rubber  Nitrile Food nitrile EPDM	The hose is reinforced by an internal synthetic thread backing. This armature allows operation at 15 bar

## Dimensions

### Monobloc pump



### Monobloc assembly

PUMP	Motor power (Kw)										
	2,2	3	4	5,5	7,5	9,2	11	15	18,5	22	
DSC 65	B1	751	751	786	831	851	911	911	-	-	-
	B2	-	-	-	-	-	-	-	1092	-	-
	B3	-	-	-	-	-	-	1290	-	-	-
	Z	-	-	-	-	-	-	1108	1213	-	-
	Z1	-	-	-	-	-	-	380	460	-	-
	Ø H1	197	197	221	221	275	275	275	331	-	-
	MB1	580	580	595	600	620	630	635	-	-	-
	MB2-MB3	-	-	-	-	-	-	755	890	-	-
DSC 80	B1	-	944	964	944	964	-	1024	1072	1144	-
	B2	-	-	-	-	-	-	-	1201	1201	1201
	Z	-	-	-	-	-	-	-	1518	1518	1518
	Z1	-	-	-	-	-	-	-	460	460	460
	Ø H1	-	221	275	221	275	-	275	331	331	331
	MB1	-	1120	1125	1120	1125	-	1135	1200	1215	-
	MB2	-	-	-	-	-	-	-	1400	1420	1440
DSC 100	B1	-	-	-	1119	1119	1119	1119	1323	1395	1395
	B2	-	-	-	-	-	-	-	-	1296	1296
	Z	-	-	-	-	-	-	-	-	1510	1510
	Z1	-	-	-	-	-	-	-	-	460	460
	Ø H1	-	-	-	275	275	275	275	331	331	331
	MB1	-	-	-	1555	1560	1555	1560	1620	1645	1660
	MB2	-	-	-	-	-	-	-	-	1840	1850

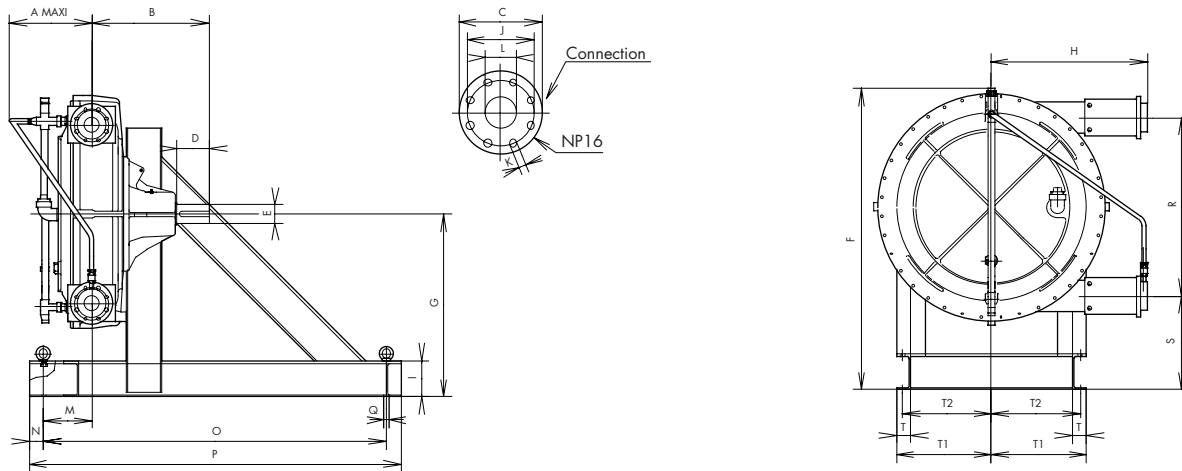
The dimensions are given for guidance and are not binding on the manufacturer.

MB1, MB2, MB3: Weight in kg.

MB1: Weight of motor-gear configuration.  
MB2/MB3: Weight of variable-speed motor gear.

# Peristaltic pumps DSC 65, 80, 100 series

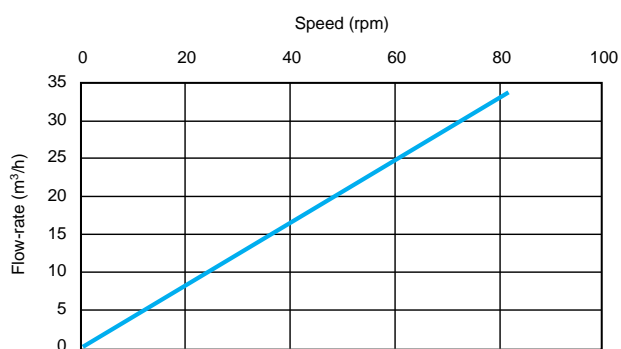
## Bearing pump (bare shaft)



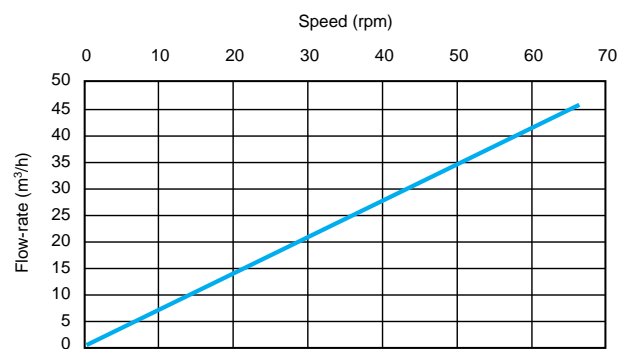
## Bearing mounted

PUMP	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	T1	T2	weight kg
DSC 65	423	513	185	100	55	1057	575	650	100	145	4xM16	60	165	50	1170	1270	4x18	740	205	50	345	327	550
DSC 80	440	571	200	160	90	1457	885	756	175	160	8xM16	75	233	70	1660	1800	4 X26	864	453	70	460	430	990
DSC 100	480	648	220	200	100	1555	885	883	175	180	8xM16	95	197	70	1660	1800	4X26	1024	373	70	460	430	1290

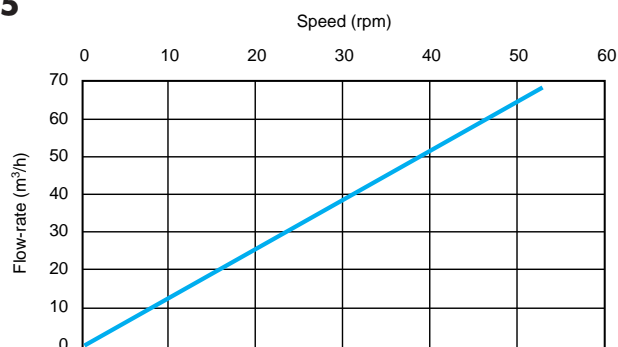
## Performances



**DSC 65**



**DSC 80**



**DSC 100**



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## Applications

*This table is not exhaustive. It refers to the more basic applications. There are many others in a variety of fields.*

ACTIVITY SECTOR	APPLICATION EXAMPLES	
• Water treatment	Lime milk dosing Bacteriological sludge transfer	Filter-press feed
• Paper-cardboard making	Coating fluid transfer Titanium dioxide (TiO <sub>2</sub> ) transfer	Waste water - charged water transfer Glue or resin transfer
• Building, public works, quarries and ceramics	Liquid enamel transfer Slip transfer Coating transfer Desludging	Decanting sludge transfer Cement grout transfer Glue and emulsion transfer
• Food	Wine lees - grape mold transfer Fruit puree transfer Potato waste transfer	Process sludge transfer Slaughterhouse waste/greasy water/ viscera/blood transfer
• Chemicals	Charged effluent transfer Liquid chalk transfer	Soda aluminate transfer Sulfate and oxide transfer
• Other sectors	Coating product transfer (foundry) Bentonite transfer	Nuclear effluent transfer

## Pumped products

### Density:

Maximum density: 2. Above 2, consult us.

### Particles:

The maximum particle size must not exceed 1/3 of the inside diameter of the hose. For soft particles (whole fruit or fruit pieces; pieces of meat or fish), the size can be the same as the hose diameter.

### Dry matter:

Concentrations can be up to 25 to 60% of dry matter depending on the density.

The pump speed must be adjusted to prevent wringing out the charged liquids or causing the suction end to block.

### Viscosity:

From 0 to 40,000 centipoises depending on the diameter of the hose and the pump operating speed. For high viscosity levels, examination of a sample or a pumping test may sometimes be necessary. Consult us.

## Temperature (limits)

Tube material	Continuous service ≥ 8 h/day	Intermittent service Sequence of 10 to 20 min	Occasional service Instantaneous temperature peak
Natural rubber	5 to 80° C	90° C	100° C
EPDM	5 to 110° C	120° C	150° C
Nitrile	5 to 90° C	100° C	110° C
Food nitrile	5 to 90° C	100° C	110° C