

# Metering pumps

## Model D

FPZ Dosing Pump model D are used in the most severe duty applications. Mechanical Diaphragm dosing pumps are the best solution when:

PUMPED LIQUID CONTAINS SMALL AMOUNTS OF SUSPENDED SOLIDS

PUMPED LIQUID IS HAZARDOUS

NO LEAKAGE IS ALLOWED

HIGH PRESSURE IS NOT REQUIRED



### Applications

Injection of chemicals as coagulant, fertilizer, acids, polymers and much more.

Commonly used in the following applications:

- Fertigation
- Water treatment
- Paper industry
- Chemical industry
- Food industry
- Cooling towers

### Features

- Simplex and multi-head version are available.
  - NPT valve connections are standard. BSP or other connections are available upon request.
  - Cathaphoresis painting for gearbox
  - Endless screw worm gear box supported by bearings and fully lubricated in an oil bath.
  - Fitted as standard with high quality 4 pole electric motor that conform to UL;CSA;UNEL-MEC specifications, and range start at 1/3 HP. Standard 3 phase voltages are 208-230/460V -60Hz. Standard 1 phase voltages are 115/208-230V-60Hz.
- Motors are available to meet a wide range of alternative specifications including: IEEEE841, IEEEE45, Explosion proof; different voltages, frequencies, higher insulation standards and more.
- Stroke adjustment can be made with the pump at rest or in operation and it can be manual or an automatic actuator can be driven by a 4-20 mA; different BUS; pneumatically.
  - Components in wetted areas are available in a wide range of materials suitable for chemical injection applications.

## General specifications

Pump model	Reducer ratio	SPM	Capacity (gph)	Max pressure (PSI <sub>g</sub> )	Connection	Power installed (HP)	
D050U-30	I	42	1.59	Metal 203	Plastic 145	1/2" NPT male	1/3
	F	70	2.54				
	C	116	4.44				
	B	139	5.39				
D050U-50	I	42	4.44	145.5	1/2" NPT male	1/3	
	F	70	7.61				
	C	116	12.36				
	B	139	15.53				

Reducer ratio legend: **I** = 1:40 · **F** = 1:24 · **C** = 1:14.5 · **B** = 1:12

D100U-70	I	42	16.80	72.5	1/2" NPT male	1/3
	F	70	27.90			
	C	116	46.23			
	B	139	55.74			
D100U-90	I	42	25.62	43.5	3/4" NPT male	1/3
	F	70	42.80			
	C	116	70.80			
	B	139	85.86			
D100U-105	I	42	34.08	21.75	3/4" NPT male	1/3
	F	70	57.06			
	C	116	94.04			
	B	139	114.12			
D100U-120	I	42	41.74	21.75	1" NPT male	1/3
	F	70	69.21			
	C	116	114.65			
	B	139	138.69			

Reducer ratio legend: **I** = 1:40 · **F** = 1:24 · **C** = 1:14.5 · **B** = 1:12

D101U-70	F	84	31.17	145	1/2" NPT male	1/3
	C	116	42.26			
	B	144	50.45			
D101U-90	F	84	50.45	101	3/4" NPT male	1/3
	C	116	68.70			
	B	144	85.30			
D101U-105	F	84	69.74	94	3/4" NPT male	1/2
	C	116	99.59			
	B	144	121.78			
D101U-120	F	84	79.25	72.5	1" NPT male	1/2
	C	116	108.31			
	B	144	132.61			

Reducer ratio legend: **F** = 1:20 · **C** = 1:14.5 · **B** = 1:11.5



Pump model	Reducer ratio	SPM	Capacity (gph)	Max pressure (PSI <sub>g</sub> )	Connection	Power installed (HP)
D121U-120	F	84	105.14	72.5	1" NPT male	1/2
	C	116	144.24			
	B	144	180.69			

Reducer ratio legend: **F** = 1:20 · **C** = 1:14.5 · **B** = 1:11.5

### Metallic version

D122U-120	F	67	81.36	87	1" NPT male	3/4
	C	115	141.07			
	B	134	168.54			
D122U-140	F	67	141.07	43.5	1" NPT male	3/4
	C	115	168.54			
	B	134	273.95			
D122U-160	F	67	167.22	43.5	1 1/2" NPT male	1
	C	115	283.98			
	B	134	336.82			

### Plastic version

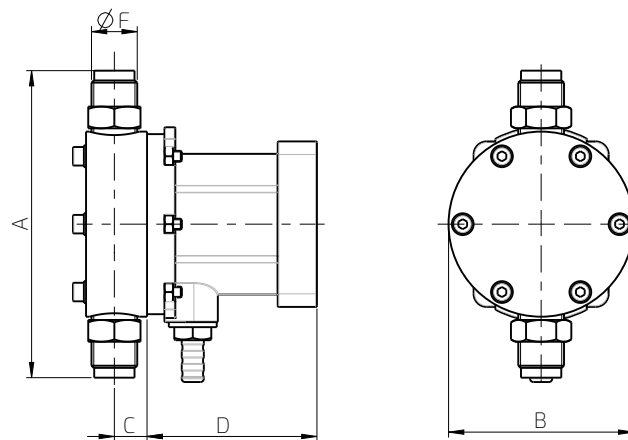
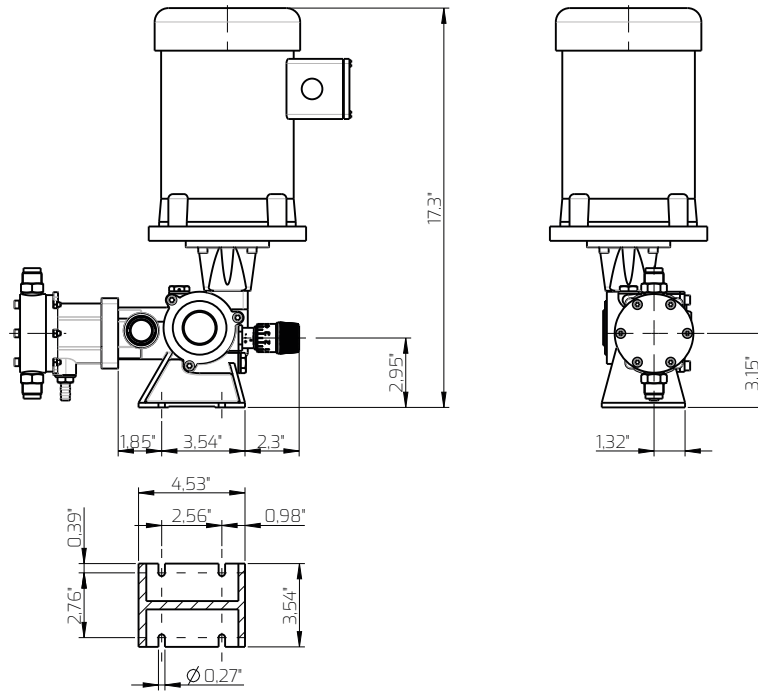
D122U-120	F	67	85.59	87	1" NPT male	3/4
	C	115	148.46			
	B	134	177.52			
D122U-140	F	67	148.46	43.5	1" NPT male	3/4
	C	115	177.52			
	B	134	288.47			
D122U-160	F	67	175.94	43.5	1 1/2" NPT male	1
	C	115	299.04			
	B	134	354.52			

Reducer ratio legend: **F** = 1:20 · **C** = 1:14.5 · **B** = 1:11.5



# Dimensions

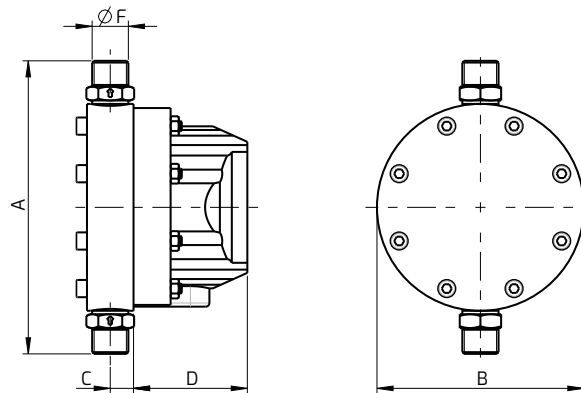
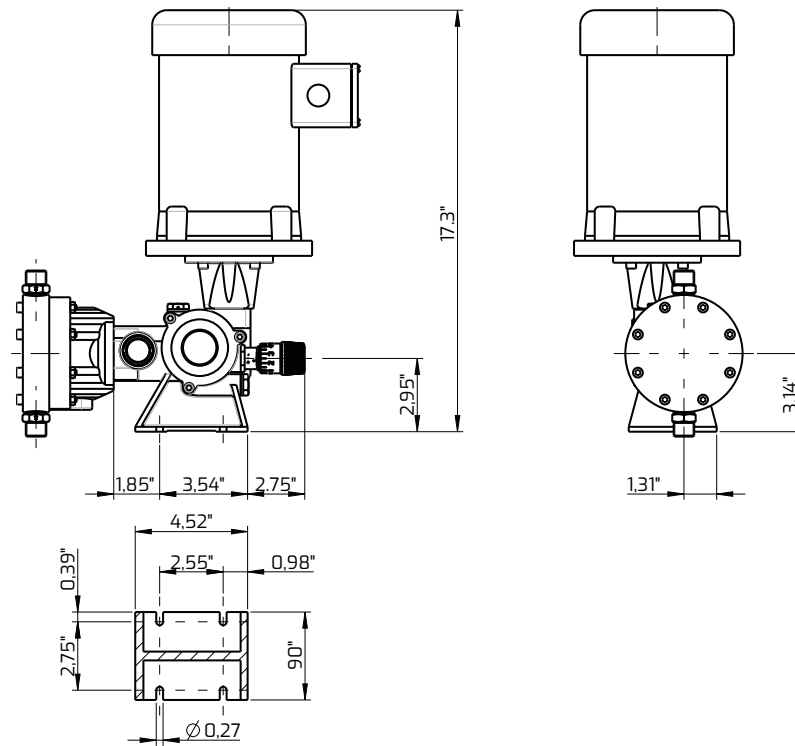
## D050U



Pump model	Stainless Steel Configuration						Plastic Configuration					
	A	B	C	D	$\varnothing F$	lb	A	B	C	D	$\varnothing F$	lb
D050U-30	4.96"	2.76"	0.53"	2.99"	1/2" NPT	24.6	5.87"	2.28"	6.5"	2.99"	1/2" NPT	22.4
D050U-50	5.55"	3.35"	0.59"	3.07"	1/2" NPT	25.7	6.46"	3.54"	0.85"	3.07"	1/2" NPT	23.5



D100U

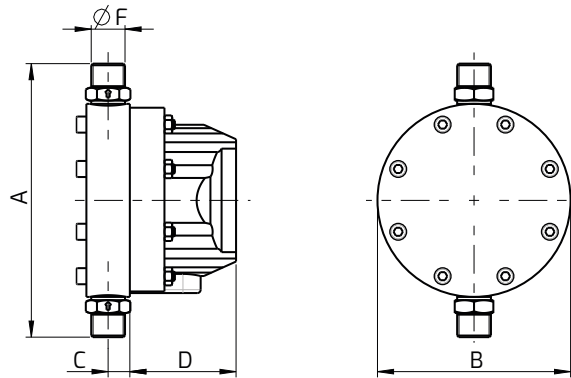
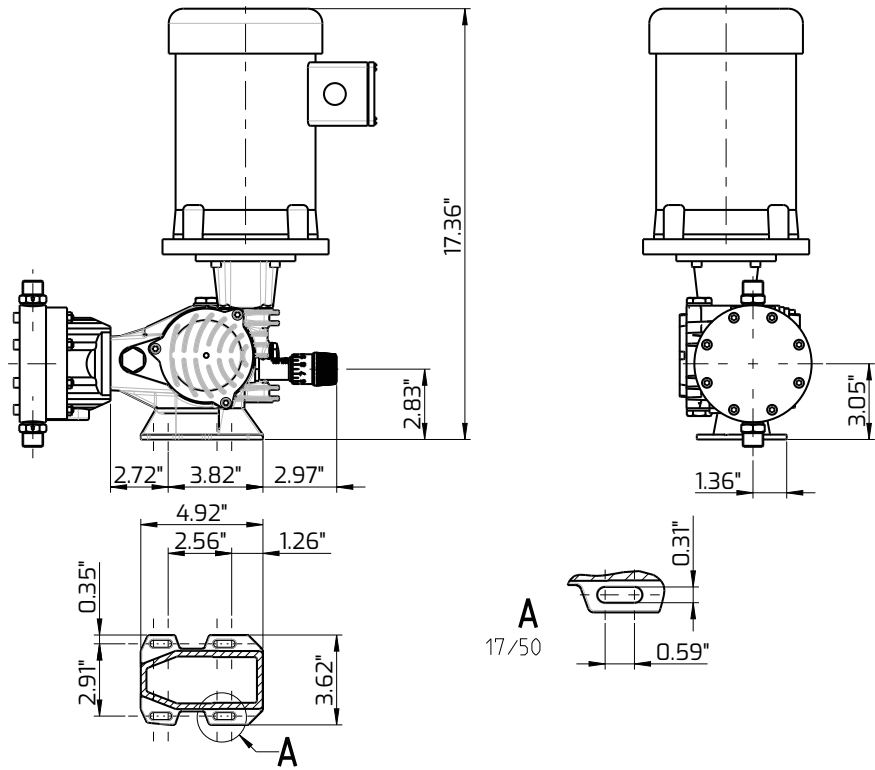


Pump model	Stainless Steel Configuration						Plastic Configuration					
	A	B	C	D	$\varnothing F$	lb	A	B	C	D	$\varnothing F$	lb
D100U-70	6.69"	4.72"	0.53"	2.16"	1/2" NPT	29	9.05"	4.8"	0.9"	2.44"	1/2" NPT	22.5
D100U-90	8.03"	5.51"	0.82"	2.12"	3/4" NPT	33.5	9.21"	5.39"	1.33"	2.36"	3/4" NPT	24.6
D100U-105	8.34"	5.9"	0.82"	2.12"	3/4" NPT	35.7	8.66"	6.1"	0.9"	2.12"	3/4" NPT	26.8
D100U-120	11.02"	6.69"	1.06"	2.2"	1" NPT	45.6	10.98"	7.09"	1.26"	2.2"	1" NPT	31.3



# Dimension

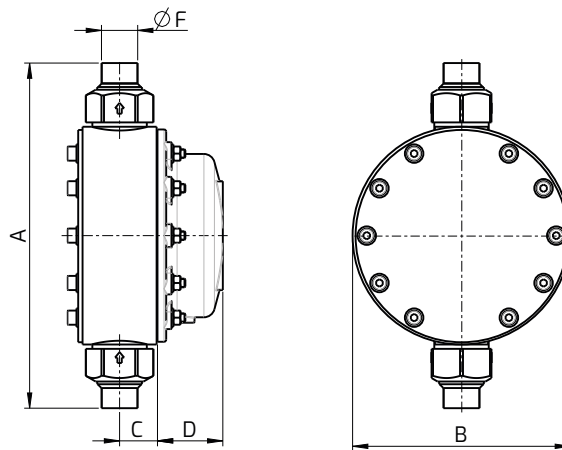
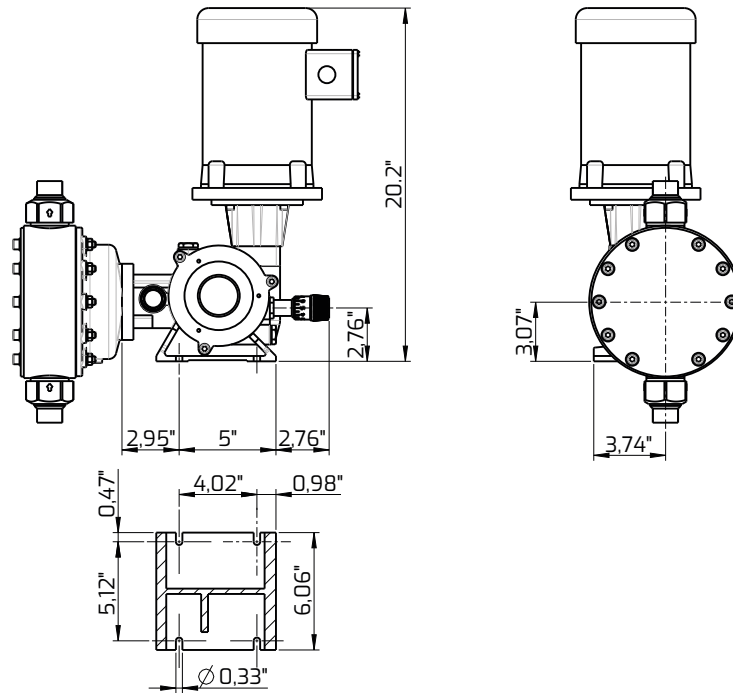
D101U  
D121U



Pump model	Stainless Steel Configuration						Plastic Configuration					
	A	B	C	D	$\varnothing F$	lb	A	B	C	D	$\varnothing F$	lb
D101U-70	6.69"	4.72"	0.53"	2.16"	1/2" NPT	33.3	9.05"	4.8"	0.9"	2.44"	1/2" NPT	26.8
D101U-90	8.03"	5.51"	0.83"	2.13"	3/4" NPT	36.8	9.21"	5.39"	1.33"	2.36"	3/4" NPT	27.9
D101U-105	8.35"	5.9"	0.83"	2.13"	3/4" NPT	39	8.66"	6.1"	0.90"	2.12"	3/4" NPT	30.1
D101U-120	11.02"	6.69"	1.06"	2.2"	1" NPT	48.9	10.98"	7.09"	7.09"	2.20"	1" NPT	34.6
D121U-120	11.02"	6.69"	1.06"	2.2"	1" NPT	48.8	10.98"	7.09"	7.09"	2.20"	1" NPT	34.6



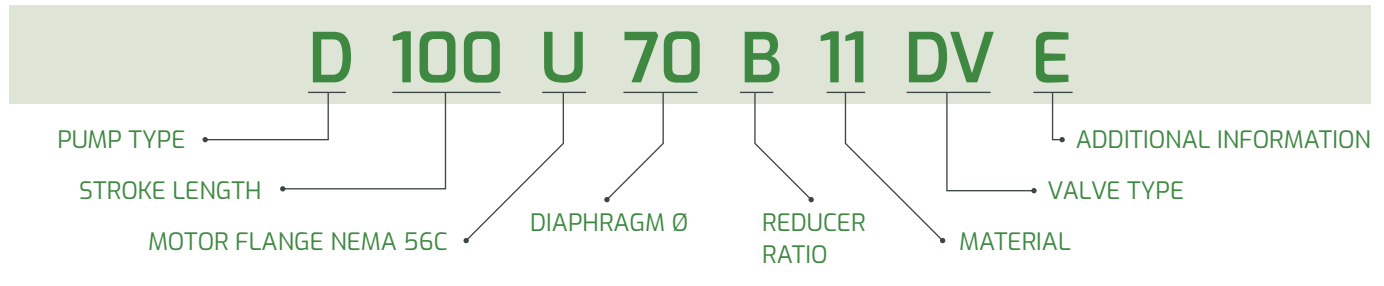
D122U



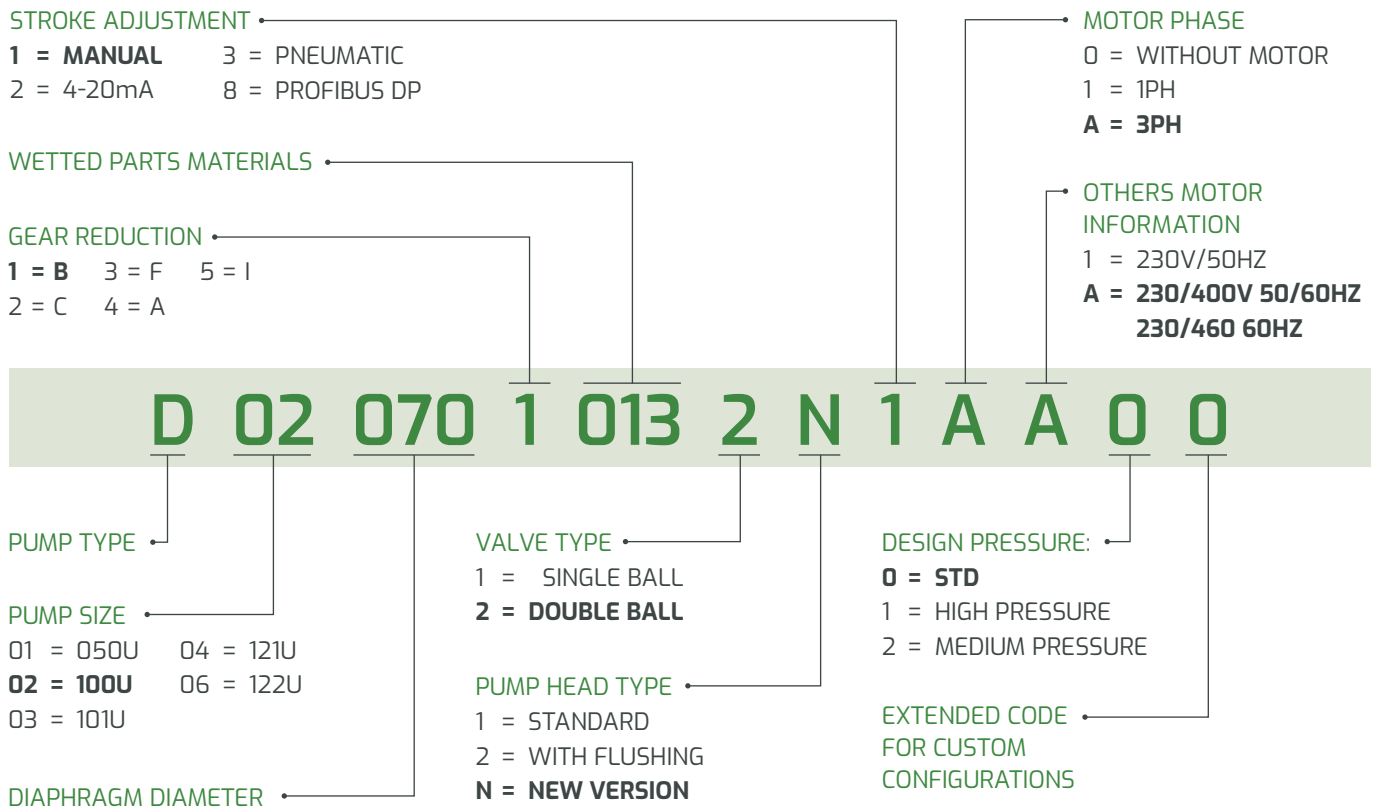
Pump model	Stainless Steel Configuration						Plastic Configuration					
	A	B	C	D	$\varnothing F$	lb	A	B	C	D	$\varnothing F$	lb
D122U-120	11.02"	6.69"	1.1"	2.62"	1" NPT	99.4	11.69"	7.08"	1.30"	2.62"	1" NPT	83.9
D122U-140	12.2"	7.87"	1.1"	2.36"	1" NPT	106	12.48"	7.87"	1.38"	2.36"	1" NPT	88.3
D122U-160	13.85"	8.66"	1.46"	2.36"	1 1/2" NPT	125.8	13.81"	8.86"	1.38"	2.36"	1 1/2" NPT	90.5



## How to read the pump model



## How to read the pump code



## Wetted parts code for standard materials

### Standard construction materials (wetted parts only)

Material codes	Pump head	Diaphragm	Valve ball	Valve seat	Valve gasket
11	S.S.316L	PTFE coated	S.S.316L	S.S.316L	FPM
12	PP	PTFE coated	Pyrex	PP	FPM
13	PVC	PTFE coated	Pyrex	PVC	FPM
16	PVC	PTFE coated	S.S.316L	PVC	FPM
23	PVDF	PTFE coated	Pyrex	PVDF	FPM

Data is for reference only and subject to change without notice.



**SIMPLIFIED FLUID HANDLING**

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