


### Technical characteristics

- Flow rates: from 0,390 to 19,0 lph @ 50Hz
- Max Pressure: 12 MPa (120 bar)
- Ambient temperature: -10 °C + 40 °C
- Max altitude: 1000 m (A.S.L.)
- Fluid operating temperature: -10 °C + 70 °C
- Viscosity up to 1000 mPa\*s (1000 cP) (Higher on request)
- Stroke adjustment during operation from 0 to 100%
- Accuracy  $\pm 1\%$  on the turndown ratio 10:1
- Built-in overpressure valve
- Double diaphragm and diagnostic of the rupture
- Diaphragm duration up to 20.000 hours, depending of the application
- Multiheads (up to six) solutions
- API 675 compliance
- CE marking
- ATEX  II 2 G c IIB T4 compliance
- Protection: IP 55
- Epoxy painting at 125 micron

**nexa series** includes plunger and hydraulic diaphragm dosing pumps designed in compliance with **API 675 Standards**; the conformity to the API Standards implies a “heavy duty” design, high safety and severe controls of the performances during the tests. The broad variety of heads execution offers a wide selection of dosing pumps to cover practically any application needs. In addition the full compliance with the **ATEX** European Directive gives the possibility to install these pumps in classified areas too.

### Mechanism

Available in different sizes, they are mechanical return type, giving the maximum reliability in all working conditions.

General Specifications:

- Low noise integral gearbox, worm type, oil bath lubricated
- Reduced energy consumption based on low friction rolling bearings design
- High flexibility multiple mechanism solution to permit different piston speeds (SPM) on the same group
- Micrometric stroke length adjustment both manually and/or automatically actuated.
- Automatic stroke length variation by electrical servomotor, pneumatic actuator or frequency converter
- Linearity and repeatability in compliance with API 675 Standards.
- Easy “on field” installation of electrical servomotor on manual stroke adjustment mechanism.

### Diaphragm Pumphead

- High capacity flexibility → On site easy volume changing by changing the piston cartridge
- Easy to change spares parts (all “one cartridge” solution).
- Maximum compatibility PTFE diaphragm
- Visual or remote diaphragm failure detection

### PUMP KEY CODE

1°	Number of pump head										
1	Simplex pump										
2°	Type of pump head (double diaphragm or packed-plunger)										
T	Double diaphragm with built-in overpressure valve, air-bleed valve and mechanically actuated oil replenishing										
3°/4°	Plunger diameter										
06÷20	from 6 to 20 mm										
5°/6°	Mechanism model										
NO	Stroke length 10 mm										
7°/8°	Pump head material										
	HEAD	DIAPHRAGM	BALL	VALVE SEAL	VALVE SEAT						
2F	316SS	PTFE	316SS	316SS	316SS						
9°	Valve type										
B	Double balls										
C	Triple balls										
10°	General options										
7	Standard execution										
11°	Flow rate adjustment										
M	Manual with adjustment knob (Standard execution)										
E	Electric actuator										
P	Pneumatic actuator										
12°	Gear ratio										
F	1:15										
I	1:20										
L	1:25										
13°	Electric motors poles										
2	2 poles (not available ATEX version)										
4	4 poles										
6	6 poles										
14°	Installed power										
B	0,18 kW										
15°	Pump head options										
V	Visual diaphragm failure detection (Standard execution)										
R	Remote diaphragm failure detection										
16°	Mechanism options										
0	Standard execution										
5	Compliance with regulation "ATEX" 94/4/CE II 2 G c IIB T4 (for zone 1)										

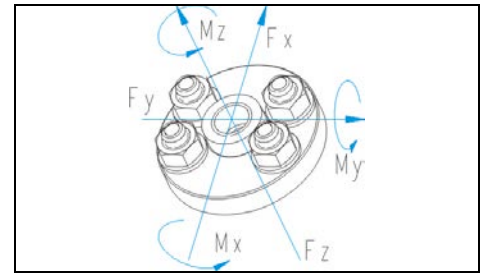
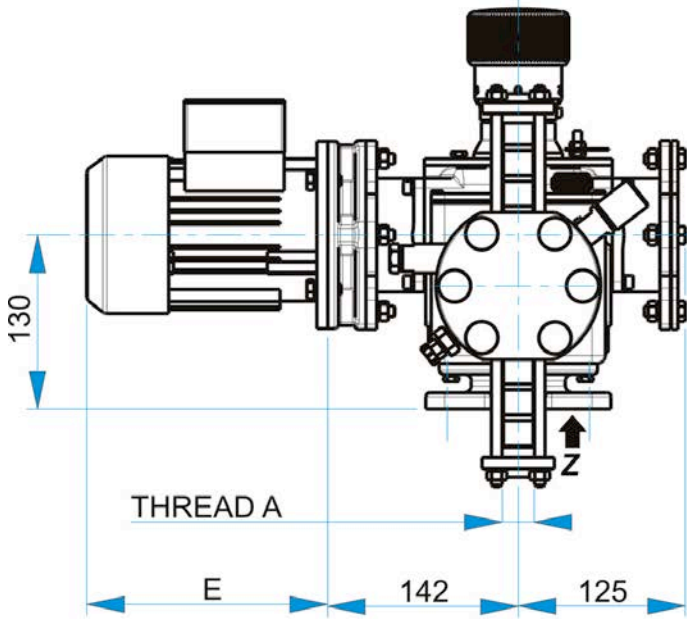
  

1	T	06	NO	2F	B	7	M	L	6	B	V	0
---	---	----	----	----	---	---	---	---	---	---	---	---

### HYDRAULIC CHARACTERISTICS

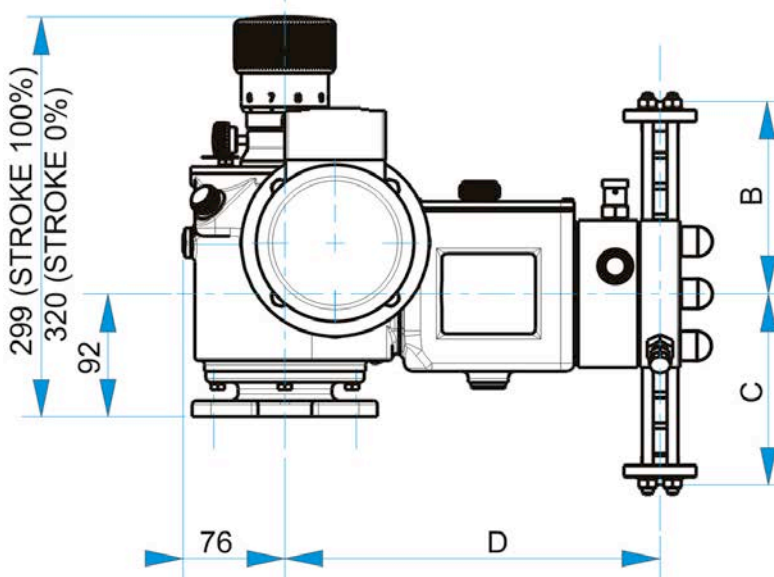
Performances:												50 Hz		60Hz	
				0,390/19,0 120/57		l/h bar		gph p.s.i.		0,1245/6,0 1740/827		Liquid end material	<b>316L</b>		
				Flow rate at max pressure		Max speed		Flow rate at max pressure		Max speed		Electric motor kW <b>0,18</b> <b>B</b>	Suc/Dis Connec		
Pump Model				Strokes /min			Max pressure		Ø BSP	NPSHr [barg]					
	lph	gph	/min	lph	gph	/min	bar	p.s.i.							
1 T 0 6 N 0 2 F C 7 M L 6 B V 0	0,390	0,103	37	0,468	0,124	44	120	1740	1/4" F	-0,40					
1 T 0 6 N 0 2 F C 7 M L 4 B V 0	0,462	0,122	47	0,554	0,146	56	120	1740	1/4" F	-0,40					
1 T 0 6 N 0 2 F C 7 M L 4 B V 0	0,526	0,139	56	0,631	0,167	67	120	1740	1/4" F	-0,40					
1 T 0 6 N 0 2 F C 7 M L 4 B V 0	0,627	0,166	70	0,752	0,199	84	120	1740	1/4" F	-0,40					
1 T 0 6 N 0 2 F C 7 M F 4 B V 0	0,792	0,209	93	0,950	0,251	112	120	1740	1/4" F	-0,40					
1 T 0 6 N 0 2 F C 7 M L 2 B V 0	0,928	0,245	112	1,114	0,294	134	120	1740	1/4" F	-0,40					
1 T 0 8 N 0 2 F C 7 M L 6 B V 0	0,78	0,21	47	0,94	0,25	56	120	1740	1/4" F	-0,45					
1 T 0 8 N 0 2 F C 7 M L 4 B V 0	0,97	0,26	56	1,16	0,31	67	120	1740	1/4" F	-0,45					
1 T 0 8 N 0 2 F C 7 M L 4 B V 0	1,25	0,33	70	1,50	0,40	84	120	1740	1/4" F	-0,45					
1 T 0 8 N 0 2 F C 7 M F 4 B V 0	1,73	0,46	93	2,08	0,55	112	120	1740	1/4" F	-0,45					
1 T 0 8 N 0 2 F C 7 M L 2 B V 0	2,12	0,56	112	2,54	0,67	134	120	1740	1/4" F	-0,45					
1 T 1 0 N 0 2 F C 7 M L 6 B V 0	1,25	0,33	47	1,50	0,40	56	120	1740	1/4" F	-0,50					
1 T 1 0 N 0 2 F C 7 M L 4 B V 0	1,64	0,43	56	1,97	0,52	67	120	1740	1/4" F	-0,50					
1 T 1 0 N 0 2 F C 7 M L 4 B V 0	2,24	0,59	70	2,69	0,71	84	120	1740	1/4" F	-0,50					
1 T 1 0 N 0 2 F C 7 M F 4 B V 0	3,23	0,85	93	3,88	1,02	112	120	1740	1/4" F	-0,50					
1 T 1 0 N 0 2 F C 7 M L 2 B V 0	4,05	1,07	112	4,86	1,28	134	120	1740	1/4" F	-0,50					
1 T 1 2 N 0 2 F C 7 M L 6 B V 0	2,27	0,60	47	2,72	0,72	56	120	1740	1/4" F	-0,40					
1 T 1 2 N 0 2 F C 7 M L 4 B V 0	2,71	0,72	56	3,25	0,86	67	120	1740	1/4" F	-0,40					
1 T 1 2 N 0 2 F C 7 M L 4 B V 0	3,40	0,90	70	4,08	1,08	84	120	1740	1/4" F	-0,40					
1 T 1 2 N 0 2 F C 7 M F 4 B V 0	4,54	1,20	93	5,45	1,44	112	120	1740	1/4" F	-0,40					
1 T 1 2 N 0 2 F C 7 M L 2 B V 0	5,48	1,45	112	6,58	1,74	134	120	1740	1/4" F	-0,40					
1 T 1 5 N 0 2 F B 7 M L 6 B V 0	3,97	1,05	47	4,76	1,26	56	107	1552	1/4" F	-0,45					
1 T 1 5 N 0 2 F B 7 M L 4 B V 0	4,68	1,24	56	5,62	1,48	67	107	1552	1/4" F	-0,45					
1 T 1 5 N 0 2 F B 7 M L 4 B V 0	5,78	1,53	70	6,94	1,83	84	107	1552	1/4" F	-0,45					
1 T 1 5 N 0 2 F B 7 M F 4 B V 0	7,59	2,01	93	9,11	2,41	112	107	1552	1/4" F	-0,45					
1 T 1 5 N 0 2 F B 7 M L 2 B V 0	9,09	2,40	112	10,91	2,88	134	107	1552	1/4" F	-0,45					
1 T 2 0 N 0 2 F B 7 M L 6 B V 0	7,8	2,10	47	9,4	2,5	56	57	827	1/4" F	-0,60					
1 T 2 0 N 0 2 F B 7 M L 4 B V 0	9,3	2,50	56	11,2	3,0	67	57	827	1/4" F	-0,60					
1 T 2 0 N 0 2 F B 7 M L 4 B V 0	11,7	3,10	70	14,0	3,7	84	57	827	1/4" F	-0,60					
1 T 2 0 N 0 2 F B 7 M F 4 B V 0	15,7	4,10	93	18,8	5,0	112	57	827	1/4" F	-0,60					
1 T 2 0 N 0 2 F B 7 M L 2 B V 0	19,0	5,00	112	22,8	6,0	134	57	827	1/4" F	-0,60					

Test with water @ 20°C.

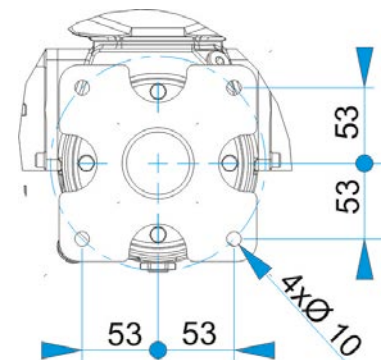


**Allowable loads referred to pump nozzles**

Fx	0.10 kN	Mx	0.04 kNm
Fy	0.12 kN	My	0.04 kNm
Fz	0.10 kN	Mz	0.04 kNm



**FIXING HOLES – VIEW FROM Z**



PUMP MODEL	DIMENSIONS [mm]				ESTIMATED WEIGHT kg (without motor)
	A	B	C	D	
1T06N02FC..	BSPP 1/4"F	144	144	282	30
1T08N02FC..	BSPP 1/4"F	144	144	282	30
1T10N02FC..	BSPP 1/4"F	144	144	282	30
1T12N02FC..	BSPP 1/4"F	149	149	279	30,5
1T15N02FB..	BSPP 1/4"F	126	126	279	30,5
1T20N02FB..	BSPP 1/4"F	149	149	279	30,5

Electric motor size	2 Poles kw	4 Poles kw	6 Poles kw	TEFC 1xM16x1.5		EExde 1xM25x1.5	
				E	kg	E	kg
63	0.18	0.18	0.18	193	4	224	16