


### Technical characteristics

- Flow rates: from 0,264 to 32,4 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 (on request)
- 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

<b>1°</b>	Number of pump head				
1	Simplex pump				
<b>2°</b>	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				
<b>3°/4°</b>	Plunger diameter				
06÷20	from 6 to 20 mm				
<b>5°/6°</b>	Mechanism model				
NO	Stroke length 10 mm				
<b>7°/8°</b>	Pump head material				
2F	HEAD	DIAPHRAGM	BALL	VALVE SEAL	VALVE SEAT
	316SS	PTFE	316SS	316SS	316SS
<b>9°</b>	Valve type				
B	Double balls				
C	Triple balls				
<b>10°</b>	General options				
7	Standard execution				
<b>11°</b>	Flow rate adjustment				
M	Manual with adjustment knob (Standard execution)				
E	Electric actuator				
P	Pneumatic actuator				
<b>12°</b>	Gear ratio				
A	1:7				
F	1:15				
I	1:20				
L	1:25				
V	1:8,5				
<b>13°</b>	Electric motors poles				
4	4 poles				
6	6 poles				
<b>14°</b>	Installed power				
B	0,18 kW				
C	0,25 kW				
<b>15°</b>	Pump head options				
V	Visual diaphragm failure detection (Standard execution)				
R	Remote diaphragm failure detection				
<b>16°</b>	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	C	7	M	L	6	B	V	0
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### HYDRAULIC CHARACTERISTICS

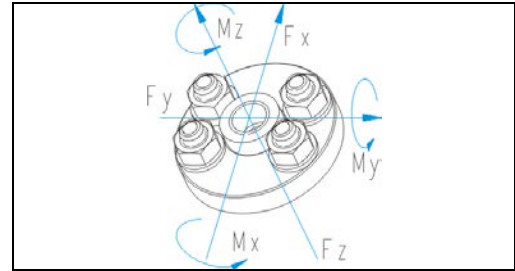
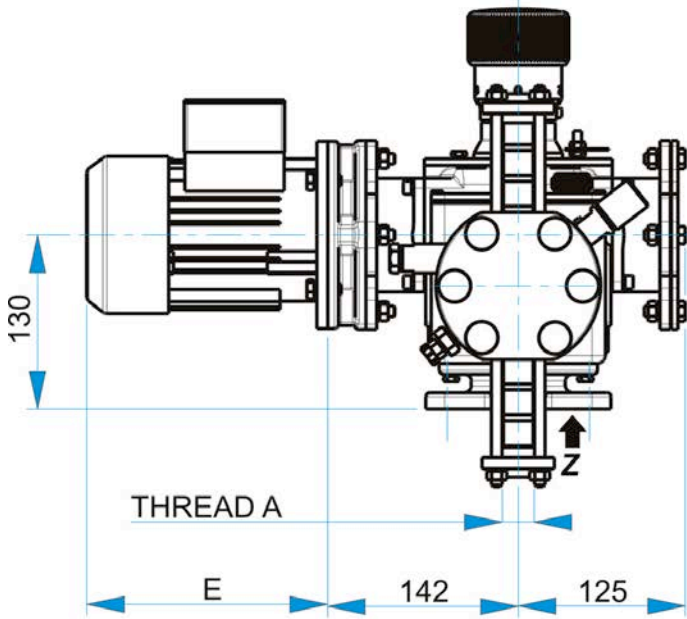
Performances	50 Hz	60 Hz	Pump Head and Mechanism Type	<b>TN0</b>
	0,264/32,4 120/40	l/h bar	gph p.s.i.	0,086/10,1 1740/580
			Liquid end material	<b>316L</b>

Flow rate at max pressure	Max speed	Flow rate at max pressure	Max speed	Electric motor kW		Suc/Dis Connec
				0,18 B	0,25 C	

Pump Model	lph	gph	Strokes /min	lph	gph	Strokes /min	Max pressure		Ø BSPP	NPSHr [bar]
							bar	p.s.i.		

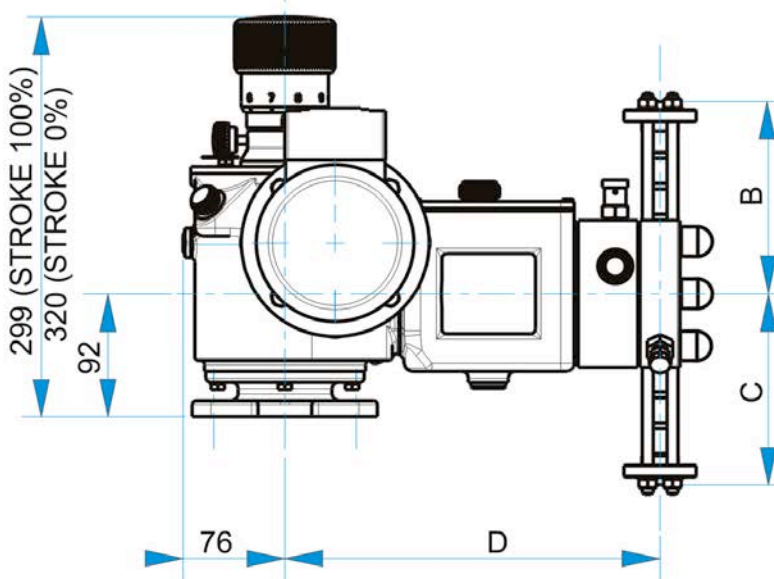
1 T 0 6 N 0 2 F C 7 M L 4 B V 0	0,264	0,070	37	0,325	0,086	44	120	1740	-	-	1/4" F	-0,40
1 T 0 6 N 0 2 F C 7 M I 6 B V 0	0,346	0,091	47	0,424	0,112	56	120	1740	-	-	1/4" F	-0,40
1 T 0 6 N 0 2 F C 7 M L 4 B V 0	0,420	0,111	56	0,513	0,136	67	120	1740	-	-	1/4" F	-0,40
1 T 0 6 N 0 2 F C 7 M I 6 B V 0	0,478	0,126	63	0,582	0,154	76	120	1740	-	-	1/4" F	-0,40
1 T 0 6 N 0 2 F C 7 M I 4 B V 0	0,536	0,142	70	0,651	0,172	84	120	1740	-	-	1/4" F	-0,40
1 T 0 6 N 0 2 F C 7 M F 4 B V 0	0,725	0,192	93	0,878	0,232	112	120	1740	-	-	1/4" F	-0,40
1 T 0 6 N 0 2 F C 7 M V 6 B V 0	0,873	0,231	111	1,056	0,279	133	120	1740	-	-	1/4" F	-0,40
1 T 0 6 N 0 2 F C 7 M A 6 B V 0	1,062	0,281	134	1,283	0,339	161	120	1740	-	-	1/4" F	-0,30
1 T 0 6 N 0 2 F C 7 M V 4 B V 0	1,317	0,348	165	1,589	0,420	198	120	1740	-	-	1/4" F	-0,30
1 T 0 6 N 0 2 F C 7 M A 4 B V 0	1,605	0,424	200	1,934	0,511	240	120	1740	-	-	1/4" F	-0,30
1 T 0 8 N 0 2 F C 7 M I 6 B V 0	0,79	0,21	47	0,98	0,26	56	120	1740	-	-	1/4" F	-0,45
1 T 0 8 N 0 2 F C 7 M L 4 B V 0	0,98	0,26	56	1,21	0,32	67	120	1740	-	-	1/4" F	-0,45
1 T 0 8 N 0 2 F C 7 M I 4 B V 0	1,27	0,34	70	1,56	0,41	84	120	1740	-	-	1/4" F	-0,45
1 T 0 8 N 0 2 F C 7 M F 4 B V 0	1,75	0,46	93	2,14	0,57	112	120	1740	-	-	1/4" F	-0,45
1 T 0 8 N 0 2 F C 7 M V 6 B V 0	2,13	0,56	111	2,59	0,69	133	120	1740	-	-	1/4" F	-0,45
1 T 0 8 N 0 2 F C 7 M A 6 B V 0	2,61	0,69	134	3,17	0,84	161	120	1740	-	-	1/4" F	-0,25
1 T 0 8 N 0 2 F C 7 M V 4 C V 0	3,26	0,86	165	3,95	1,04	198	-	-	120	1740	1/4" F	-0,25
1 T 0 8 N 0 2 F C 7 M A 4 C V 0	3,99	1,06	200	4,83	1,28	240	-	-	120	1740	1/4" F	-0,25
1 T 1 0 N 0 2 F C 7 M I 6 B V 0	1,38	0,36	47	1,78	0,47	56	120	1740	-	-	1/4" F	-0,50
1 T 1 0 N 0 2 F C 7 M L 4 B V 0	1,70	0,45	56	2,19	0,58	67	120	1740	-	-	1/4" F	-0,50
1 T 1 0 N 0 2 F C 7 M I 4 B V 0	2,21	0,58	70	2,81	0,74	84	120	1740	-	-	1/4" F	-0,50
1 T 1 0 N 0 2 F C 7 M F 4 B V 0	3,04	0,80	93	3,84	1,01	112	120	1740	-	-	1/4" F	-0,50
1 T 1 0 N 0 2 F C 7 M V 6 B V 0	3,69	0,97	111	4,64	1,23	133	120	1740	-	-	1/4" F	-0,50
1 T 1 0 N 0 2 F C 7 M A 6 B V 0	4,52	1,19	134	5,67	1,50	161	120	1740	-	-	1/4" F	-0,25
1 T 1 0 N 0 2 F C 7 M V 4 C V 0	5,64	1,49	165	7,06	1,86	198	-	-	120	1740	1/4" F	-0,25
1 T 1 0 N 0 2 F C 7 M A 4 C V 0	6,90	1,82	200	8,62	2,28	240	-	-	120	1740	1/4" F	-0,25
1 T 1 2 N 0 2 F C 7 M I 6 B V 0	2,27	0,60	47	2,73	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	3,27	0,86	67	120	1740	-	-	1/4" F	-0,40
1 T 1 2 N 0 2 F C 7 M I 4 B V 0	3,41	0,90	70	4,10	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	5,46	1,44	112	120	1740	-	-	1/4" F	-0,40
1 T 1 2 N 0 2 F C 7 M V 6 B V 0	5,43	1,44	111	6,53	1,73	133	120	1740	-	-	1/4" F	-0,40
1 T 1 2 N 0 2 F C 7 M A 6 B V 0	6,66	1,76	134	8,00	2,11	161	115	1668	-	-	1/4" F	-0,35
1 T 1 2 N 0 2 F C 7 M V 4 C V 0	8,11	2,14	165	9,74	2,57	198	-	-	120	1740	1/4" F	-0,35
1 T 1 2 N 0 2 F C 7 M A 4 C V 0	9,97	2,63	200	11,98	3,16	240	-	-	115	1668	1/4" F	-0,35
1 T 1 5 N 0 2 F B 7 M I 6 B V 0	3,87	1,02	47	4,68	1,24	56	107	1552	-	-	1/4" F	-0,35
1 T 1 5 N 0 2 F B 7 M L 4 B V 0	4,65	1,23	56	5,61	1,48	67	107	1552	-	-	1/4" F	-0,35
1 T 1 5 N 0 2 F B 7 M I 4 B V 0	5,86	1,55	70	7,07	1,87	84	107	1552	-	-	1/4" F	-0,35
1 T 1 5 N 0 2 F B 7 M F 4 B V 0	7,85	2,07	93	9,45	2,50	112	107	1552	-	-	1/4" F	-0,35
1 T 1 5 N 0 2 F B 7 M V 6 B V 0	9,84	2,60	111	11,85	3,13	133	82	1189	-	-	1/4" F	-0,40
1 T 1 5 N 0 2 F B 7 M A 6 B V 0	12,01	3,17	134	14,47	3,82	161	78	1131	-	-	1/4" F	-0,40
1 T 1 5 N 0 2 F B 7 M V 4 C V 0	14,74	3,90	165	17,74	4,69	198	-	-	82	1189	1/4" F	-0,30
1 T 1 5 N 0 2 F B 7 M A 4 C V 0	18,06	4,77	200	21,72	5,74	240	-	-	78	1131	1/4" F	-0,30
1 T 2 0 N 0 2 F B 7 M I 6 B V 0	8,5	2,24	47	9,9	2,6	56	57	827	-	-	1/4" F	-0,30
1 T 2 0 N 0 2 F B 7 M L 4 B V 0	9,9	2,61	56	11,6	3,1	67	57	827	-	-	1/4" F	-0,30
1 T 2 0 N 0 2 F B 7 M I 4 B V 0	12,0	3,18	70	14,2	3,8	84	57	827	-	-	1/4" F	-0,30
1 T 2 0 N 0 2 F B 7 M F 4 B V 0	15,6	4,13	93	18,5	4,9	112	57	827	-	-	1/4" F	-0,30
1 T 2 0 N 0 2 F B 7 M V 6 B V 0	18,5	4,89	111	22,0	5,8	133	44	638	-	-	1/4" F	-0,40
1 T 2 0 N 0 2 F B 7 M A 6 B V 0	22,1	5,84	134	26,3	6,9	161	40	580	-	-	1/4" F	-0,40
1 T 2 0 N 0 2 F B 7 M V 4 C V 0	26,9	7,11	165	32,1	8,5	198	-	-	44	638	1/4" F	-0,30
1 T 2 0 N 0 2 F B 7 M A 4 C V 0	32,4	8,56	200	38,6	10,2	240	-	-	40	580	1/4" F	-0,30

Test with water @ 20°C.

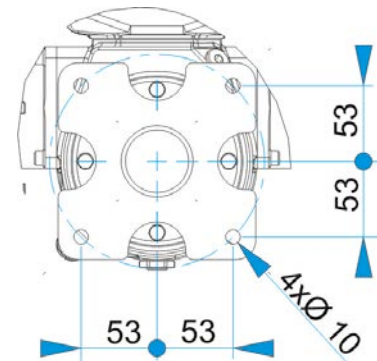


**Allowable loads referred to pump nozzles**

Fx-y-z	112 N	Mx-y-z	40 Nm
Ft	158 N	Mt	57 Nm



**FIXING HOLES – VIEW FROM Z**



PUMP MODEL	DIMENSIONS [mm]				EXTIMATED 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	4 Poles kw	6 Poles kw	TEFC 1xM16x1.5		EExde 1xM25x1.5	
			E	kg	E	kg
63	0.18	0.18	193	4	224	16
71	0.25	--	210	6	255	20