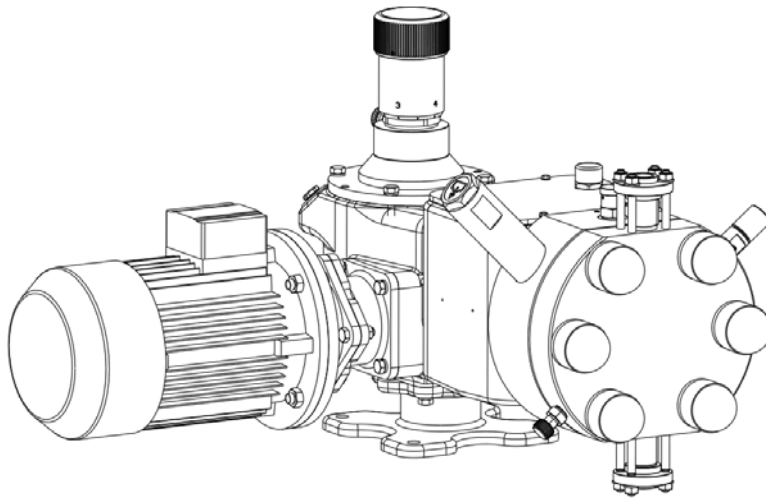



Technical characteristics



- Flow rates: from 3,8 to 282,5 lph @ 50Hz
- Max Pressure: 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 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 spare 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				
08÷35	from 08 to 35 mm				
5°/6°	Mechanism model				
N1	Stroke length 25 mm				
7°/8°	Pump head material				
2F	HEAD	DIAPHRAGM	BALL	VALVE SEAL	VALVE SEAT
	316SS	PTFE	316SS	316SS	316SS
9°	Valve type				
B	Double 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				
A	1:7				
D	1:12				
F	1:15				
V	1:8,5				
13°	Electric motors poles				
4	4 poles				
6	6 poles				
14°	Installed power				
E	0,55 kW				
F	0,75 kW				
G	1,10 kW				
H	1,50 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	08	N1	2F	B	7	M	D	6	F	V	0
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HYDRAULIC CHARACTERISTICS

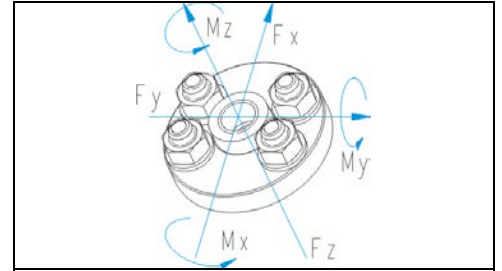
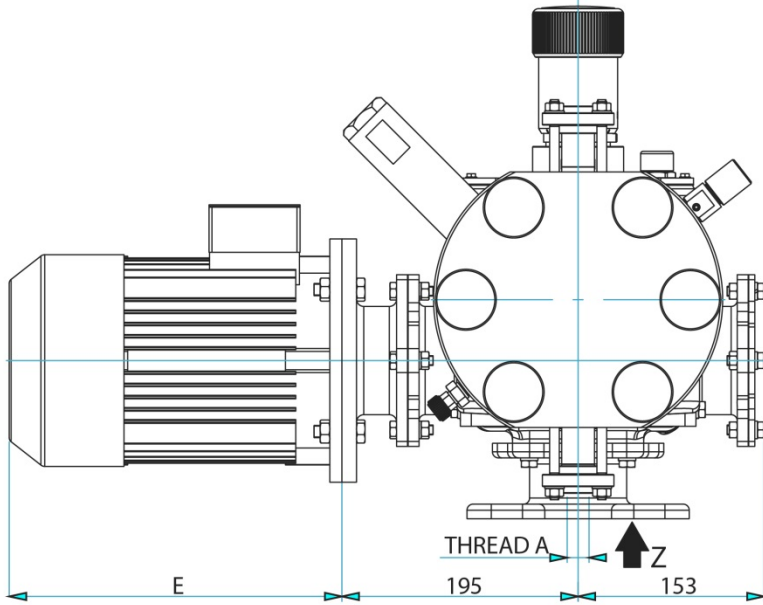
Performances	50 Hz	60 Hz	Pump Head and Mechanism Type	TN1
	3,2/280,1 120/43	l/h bar	1,0/88,8 1740/624	Liquid end material 316L

Flow rate at max pressure	Max speed	Flow rate at max pressure	Max speed	Electric motor kW				Suc/Dis Connec
				0,55 E	0,75 F	1,1 G	1,5 H	

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

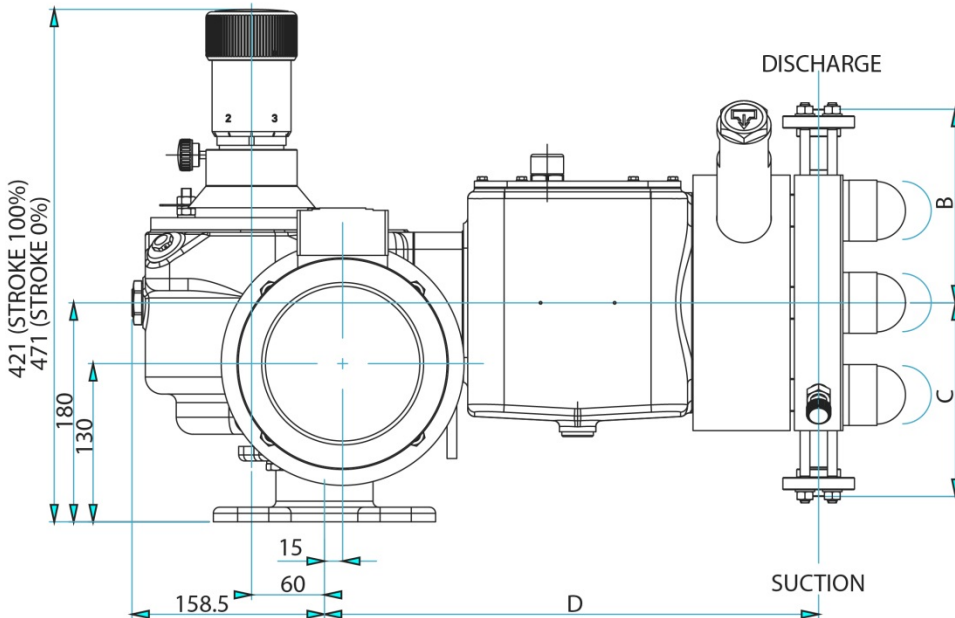
1 T 0 8 N 1 2 F B 7 M F 6 E V 0	3,2	0,8	62	3,8	1,0	74	120	1740	-	-	-	-	-	-	-	-	1/4" F	-0,45
1 T 0 8 N 1 2 F B 7 M D 6 E V 0	4,0	1,1	78	4,8	1,3	94	120	1740	-	-	-	-	-	-	-	-	1/4" F	-0,45
1 T 0 8 N 1 2 F B 7 M F 4 E V 0	4,8	1,3	93	5,7	1,5	112	120	1740	-	-	-	-	-	-	-	-	1/4" F	-0,45
1 T 0 8 N 1 2 F B 7 M D 4 E V 0	6,0	1,6	117	7,2	1,9	140	120	1740	-	-	-	-	-	-	-	-	1/4" F	-0,30
1 T 0 8 N 1 2 F B 7 M A 6 E V 0	6,9	1,8	134	8,2	2,2	161	120	1740	-	-	-	-	-	-	-	-	1/4" F	-0,30
1 T 0 8 N 1 2 F B 7 M V 4 E V 0	8,4	2,2	165	10,1	2,7	198	120	1740	-	-	-	-	-	-	-	-	1/4" F	-0,30
1 T 0 8 N 1 2 F B 7 M A 4 F V 0	10,2	2,7	200	12,2	3,2	240	-	-	120	1740	-	-	-	-	-	-	1/4" F	-0,15
1 T 1 0 N 1 2 F B 7 M F 6 E V 0	4,9	1,3	62	5,8	1,5	74	120	1740	-	-	-	-	-	-	-	-	1/4" F	-0,50
1 T 1 0 N 1 2 F B 7 M D 6 E V 0	6,5	1,7	78	7,7	2,0	94	120	1740	-	-	-	-	-	-	-	-	1/4" F	-0,50
1 T 1 0 N 1 2 F B 7 M F 4 E V 0	8,0	2,1	93	9,9	2,6	112	120	1740	-	-	-	-	-	-	-	-	1/4" F	-0,50
1 T 1 0 N 1 2 F B 7 M D 4 F V 0	10,4	2,7	117	12,8	3,4	140	-	-	120	1740	-	-	-	-	-	-	1/4" F	-0,50
1 T 1 0 N 1 2 F B 7 M A 6 F V 0	12,1	3,2	134	14,8	3,9	161	-	-	120	1740	-	-	-	-	-	-	1/4" F	-0,30
1 T 1 0 N 1 2 F B 7 M V 4 F V 0	15,2	4,0	165	18,5	4,9	198	-	-	120	1740	-	-	-	-	-	-	1/4" F	-0,30
1 T 1 0 N 1 2 F B 7 M A 4 F V 0	18,7	4,9	200	22,8	6,0	240	-	-	120	1740	-	-	-	-	-	-	1/4" F	-0,30
1 T 1 5 N 1 2 F B 7 M F 6 F V 0	13,4	3,5	62	16,0	4,2	74	-	-	120	1740	-	-	-	-	-	-	1/4" F	-0,40
1 T 1 5 N 1 2 F B 7 M D 6 F V 0	16,8	4,4	78	20,2	5,3	94	-	-	120	1740	-	-	-	-	-	-	1/4" F	-0,40
1 T 1 5 N 1 2 F B 7 M F 4 F V 0	20,0	5,3	93	24,0	6,3	112	-	-	120	1740	-	-	-	-	-	-	1/4" F	-0,40
1 T 1 5 N 1 2 F B 7 M D 4 F V 0	25,2	6,7	117	30,2	8,0	140	-	-	120	1740	-	-	-	-	-	-	1/4" F	-0,40
1 T 1 5 N 1 2 F B 7 M A 6 G V 0	28,8	7,6	134	34,6	9,1	161	-	-	-	120	1740	-	-	-	-	-	1/4" F	-0,50
1 T 1 5 N 1 2 F B 7 M V 4 G V 0	35,5	9,4	165	42,6	11,3	198	-	-	-	120	1740	-	-	-	-	-	1/4" F	-0,50
1 T 1 5 N 1 2 F B 7 M A 4 G V 0	43,0	11,4	200	51,6	13,6	240	-	-	-	120	1740	-	-	-	-	-	1/4" F	-0,50
1 T 2 0 N 1 2 F B 7 M F 6 G V 0	24,8	6,6	62	29,7	7,8	74	-	-	-	120	1740	-	-	-	-	-	1/4" F	-0,45
1 T 2 0 N 1 2 F B 7 M D 6 G V 0	31,2	8,2	78	37,4	9,9	94	-	-	-	120	1740	-	-	-	-	-	1/4" F	-0,45
1 T 2 0 N 1 2 F B 7 M F 4 G V 0	37,2	9,8	93	44,6	11,8	112	-	-	-	120	1740	-	-	-	-	-	1/4" F	-0,45
1 T 2 0 N 1 2 F B 7 M D 4 G V 0	46,7	12,3	117	56,1	14,8	140	-	-	-	120	1740	-	-	-	-	-	1/4" F	-0,45
1 T 2 0 N 1 2 F B 7 M A 6 H V 0	53,5	14,1	134	64,2	17,0	161	-	-	-	-	120	1740	-	-	-	-	1/4" F	-0,55
1 T 2 0 N 1 2 F B 7 M V 4 H V 0	65,9	17,4	165	79,1	20,9	198	-	-	-	-	120	1740	-	-	-	-	1/4" F	-0,55
1 T 2 0 N 1 2 F B 7 M A 4 H V 0	79,9	21,1	200	95,8	25,3	240	-	-	-	-	-	120	1740	-	-	-	1/4" F	-0,55
1 T 2 5 N 1 2 F B 7 M F 6 G V 0	38	10	62	45	12	74	-	-	-	-	97	1407	-	-	-	-	1/2" F	-0,40
1 T 2 5 N 1 2 F B 7 M D 6 G V 0	47	12	78	55	15	94	-	-	-	-	97	1407	-	-	-	-	1/2" F	-0,40
1 T 2 5 N 1 2 F B 7 M F 4 G V 0	55	15	93	65	17	112	-	-	-	-	97	1407	-	-	-	-	1/2" F	-0,40
1 T 2 5 N 1 2 F B 7 M D 4 G V 0	68	18	117	81	21	140	-	-	-	-	97	1407	-	-	-	-	1/2" F	-0,40
1 T 2 5 N 1 2 F B 7 M A 6 H V 0	80	21	134	95	25	161	-	-	-	-	-	85	1233	-	-	-	1/2" F	-0,40
1 T 2 5 N 1 2 F B 7 M V 4 H V 0	98	26	165	117	31	198	-	-	-	-	-	85	1233	-	-	-	1/2" F	-0,40
1 T 2 5 N 1 2 F B 7 M A 4 H V 0	118	31	200	141	37	240	-	-	-	-	-	85	1233	-	-	-	1/2" F	-0,40
1 T 3 0 N 1 2 F B 7 M F 6 G V 0	52,9	14,0	62	64,6	17,1	74	-	-	-	-	68	986	-	-	-	-	1/2" F	-0,60
1 T 3 0 N 1 2 F B 7 M D 6 G V 0	64,6	17,1	78	78,9	20,8	94	-	-	-	-	68	986	-	-	-	-	1/2" F	-0,60
1 T 3 0 N 1 2 F B 7 M F 4 G V 0	79,2	20,9	93	96,2	25,4	112	-	-	-	-	68	986	-	-	-	-	1/2" F	-0,60
1 T 3 0 N 1 2 F B 7 M D 4 G V 0	102,4	27,1	117	123,8	32,7	140	-	-	-	-	68	986	-	-	-	-	1/2" F	-0,60
1 T 3 0 N 1 2 F B 7 M A 6 H V 0	120,8	31,9	134	145,6	38,5	161	-	-	-	-	-	59	856	-	-	-	1/2" F	0,00
1 T 3 0 N 1 2 F B 7 M V 4 H V 0	151,0	39,9	165	181,5	47,9	198	-	-	-	-	-	59	856	-	-	-	1/2" F	0,00
1 T 3 0 N 1 2 F B 7 M A 4 H V 0	185,0	48,9	200	222,0	58,6	240	-	-	-	-	-	59	856	-	-	-	1/2" F	0,00
1 T 3 5 N 1 2 F B 7 M F 6 G V 0	61,4	16,2	62	81,0	21,4	74	-	-	-	-	48	696	-	-	-	-	3/4" F	-0,55
1 T 3 5 N 1 2 F B 7 M D 6 G V 0	86,7	22,9	78	111,2	29,4	94	-	-	-	-	48	696	-	-	-	-	3/4" F	-0,55
1 T 3 5 N 1 2 F B 7 M F 4 G V 0	110,3	29,1	93	139,6	36,9	112	-	-	-	-	48	696	-	-	-	-	3/4" F	-0,55
1 T 3 5 N 1 2 F B 7 M D 4 G V 0	148,1	39,1	117	185,0	48,9	140	-	-	-	-	48	696	-	-	-	-	3/4" F	-0,55
1 T 3 5 N 1 2 F B 7 M A 6 H V 0	176,3	46,6	134	218,8	57,8	161	-	-	-	-	-	43	624	-	-	-	3/4" F	-0,35
1 T 3 5 N 1 2 F B 7 M V 4 H V 0	225,4	59,5	165	277,3	73,3	198	-	-	-	-	-	43	624	-	-	-	3/4" F	-0,35
1 T 3 5 N 1 2 F B 7 M A 4 H V 0	280,1	74,0	200	336,1	88,8	240	-	-	-	-	-	43	624	-	-	-	3/4" F	-0,35

Test with water @ 20°C.

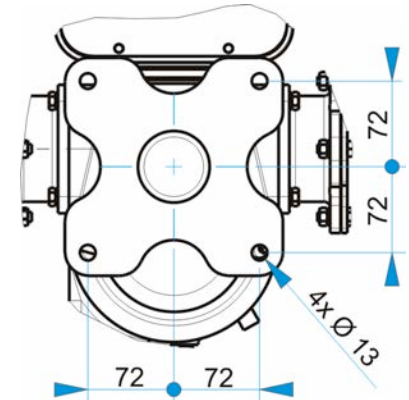


Allowable loads referred to pump nozzles

Thread	Force	Value	Moment	Value
BSPP 1/4"F	Fx-y-z	112 N	Mx-y-z	40 Nm
	Ft	158 N	Mt	57 Nm
BSPP 1/2"F	Fx-y-z	139 N	Mx-y-z	55 Nm
	Ft	196 N	Mt	79 Nm
BSPP 3/4"F	Fx-y-z	166 N	Mx-y-z	70 Nm
	Ft	234 N	Mt	101 Nm



FIXING HOLES – VIEW FROM Z



PUMP MODEL	DIMENSIONS [mm]				EXTIMATED WEIGHT Kg (without motor)
	A (EN10226)	B	C	D	
1T08N12FB..	BSPP 1/4"F	126	126	366	58
1T10N12FB..	BSPP 1/4"F	126	126	366	58
1T15N12FB..	BSPP 1/4"F	163	163	366	61
1T20N12FB..	BSPP 1/4"F	163	163	366	61
1T25N12FB..	BSPP 1/2"F	194	194	407	82
1T30N12FB..	BSPP 1/2"F	194	194	407	82
1T35N12FB..	BSPP 3/4"F	187	187	412	88

Electric motor size	4 Poles Kw	6 Poles Kw	TEFC 1xM20x1.5		Eexde 1xM25x1.5	
			E	Kg	E	Kg
100	–	1.5	324	35	390	46
90	1.1 – 1.5	0.75 – 1.1	395	25	340	33
80	0.55	0.55	255	20	290	26