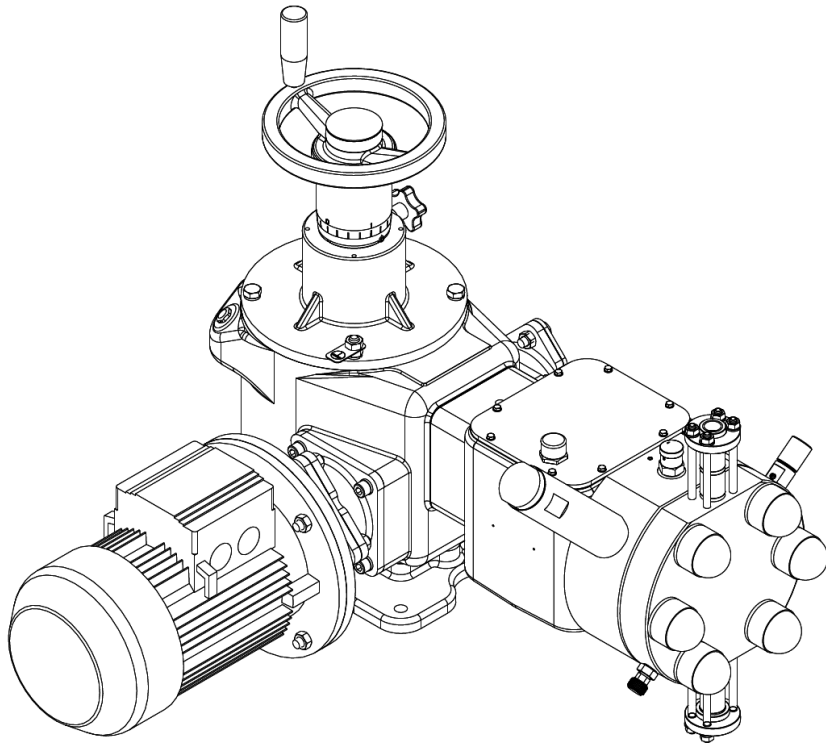



## Technical characteristics



- Flow rates: from 39,6 to 206 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

<b>1°</b>	<b>Number of pump head</b>										
1	Simplex pump										
<b>2°</b>	<b>Type of pump head (double diaphragm or packed-plunger)</b>										
T	Double diaphragm with built-in overpressure valve, air-bleed valve and mechanically actuated oil replenishing										
<b>3°/4°</b>	<b>Plunger diameter</b>										
20=35	from 20 to 35 mm										
<b>5°/6°</b>	<b>Mechanism model</b>										
N2	Stroke length 35 mm										
<b>7°/8°</b>	<b>Pump head material</b>										
2F	HEAD	DIAPHRAGM	BALL	VALVE SEAL	VALVE SEAT						
	316SS	PTFE	316SS	316SS	316SS						
<b>9°</b>	<b>Valve type</b>										
B	Double balls										
<b>10°</b>	<b>General options</b>										
7	Standard execution										
<b>11°</b>	<b>Flow rate adjustment</b>										
M	Manual with adjustment knob (Standard execution)										
E	Electric actuator										
P	Pneumatic actuator										
<b>12°</b>	<b>Gear ratio</b>										
D	1:12										
F	1:15										
<b>13°</b>	<b>Electric motors poles</b>										
4	4 poles										
6	6 poles										
<b>14°</b>	<b>Installed power</b>										
H	1,50 kW										
I	2,20 kW										
<b>15°</b>	<b>Pump head options</b>										
V	Visual diaphragm failure detection (Standard execution)										
R	Remote diaphragm failure detection										
<b>16°</b>	<b>Mechanism options</b>										
0	Standard execution										
5	Compliance with regulation "ATEX" 94/4/CE II 2 G c.IIB T4 (for zone 1)										

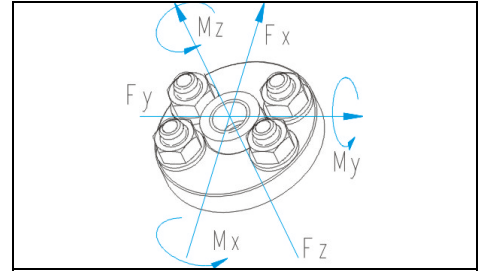
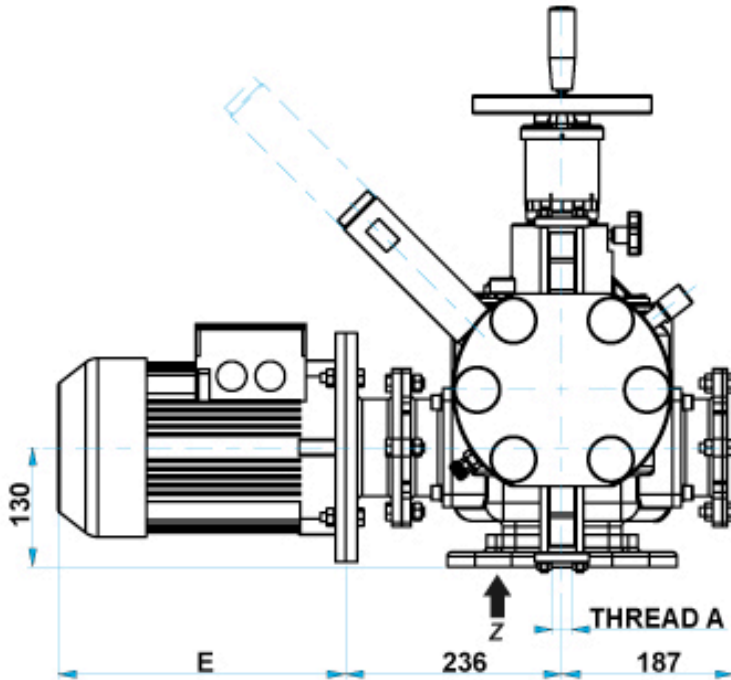
  

1	T	20	N2	2F	B	7	M	D	6	H	V	0
---	---	----	----	----	---	---	---	---	---	---	---	---

### HYDRAULIC CHARACTERISTICS

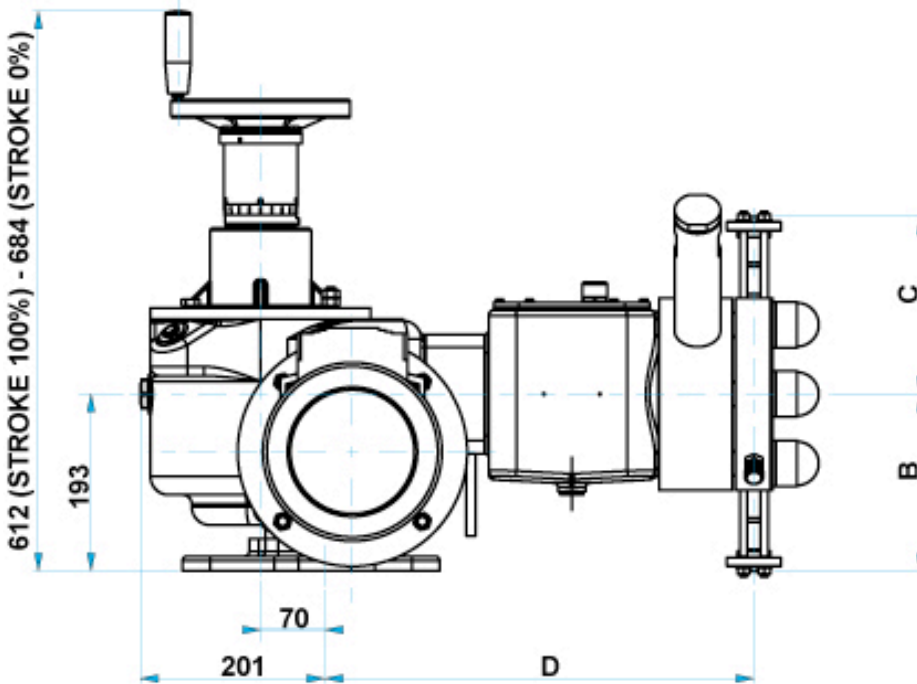
Performances:													50 Hz		60Hz												
						39,6/206		l/h	gph		11,7/65		<i>Liquid end material</i> <b>316L</b>														
						120/76		bar	p.s.i.		1740/1102																
<i>Flow rate at max pressure</i>						<i>Max speed</i>						<i>Electric motor kW</i>				<i>Suc/Dis Connec</i>											
												1,5		2,2													
H		I																									
<i>Pump Model</i>													Max pressure				Ø BSP	NPSHr [barg]									
													lph	gph	Strokes /min				lph	gph	Strokes /min		bar	p.s.i.	bar	p.s.i.	
1	T	2	0	N	2	2	F	B	7	M	F	6	H	V	0	36,9	9,7	62	44,3	11,7	74	120	1740	-	-	1/4" F	-0,65
1	T	2	0	N	2	2	F	B	7	M	D	6	H	V	0	46,5	12,3	78	55,8	14,7	94	120	1740	-	-	1/4" F	-0,65
1	T	2	0	N	2	2	F	B	7	M	F	4	H	V	0	55,5	14,7	93	66,6	17,6	112	120	1740	-	-	1/4" F	-0,65
1	T	2	0	N	2	2	F	B	7	M	D	4	H	V	0	69,9	18,5	117	83,9	22,2	140	120	1740	-	-	1/4" F	-0,65
1	T	2	5	N	2	2	F	B	7	M	F	6	H	V	0	51	13	62	61	16	74	120	1740	-	-	1/2" F	-0,55
1	T	2	5	N	2	2	F	B	7	M	D	6	H	V	0	63	17	78	76	20	94	120	1740	-	-	1/2" F	-0,55
1	T	2	5	N	2	2	F	B	7	M	F	4	I	V	0	75	20	93	90	24	112	-	-	120	1740	1/2" F	-0,55
1	T	2	5	N	2	2	F	B	7	M	D	4	I	V	0	94	25	117	113	30	140	-	-	120	1740	1/2" F	-0,55
1	T	3	5	N	2	2	F	B	7	M	F	6	H	V	0	114	30	62	137	36	74	80	1160	-	-	3/4" F	-0,65
1	T	3	5	N	2	2	F	B	7	M	D	6	H	V	0	141	37	78	169	45	94	76	1102	-	-	3/4" F	-0,65
1	T	3	5	N	2	2	F	B	7	M	F	4	I	V	0	166	44	93	199	53	112	-	-	80	1160	3/4" F	-0,65
1	T	3	5	N	2	2	F	B	7	M	D	4	I	V	0	206	54	117	247	65	140	-	-	80	1160	3/4" F	-0,65

Test with water @ 20°C.

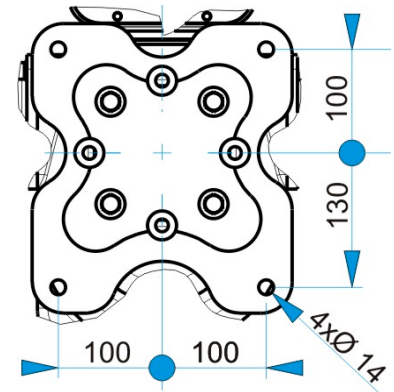


Allowable loads referred to pump nozzles

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 MDEL	DIMENSIONS [mm]				EXTIMATED WEIGHT kg (without motor)
	A (EN10226)	B	C	D	
1T20N22FB..	BSPP 1/4"F	168	168	427	110
1T25N22FB..	BSPP 1/2"F	200	200	468	131
1T35N22FB..	BSPP 3/4"F	238	238	473	137

Electric motor size	4 Poles kw	6 Poles kw	TEFC 1xM20x1.5		EExde 1xM25x1.5	
			E	kg	E	kg
90	1.50	0.75	260	12	340	33
100	2.20	1.50	320	22	370	46