

Technical characteristics

- Flow rates: from 39,6 to 202 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
- Min NPSHr: 3 mwc \rightarrow High suction capability
- 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 Ex 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 \rightarrow 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				
20÷35	from 20 to 35 mm				
5°/6°	Mechanism model				
N2	Stroke length 35 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				
D	1:12				
F	1:15				
13°	Electric motors poles				
4	4 poles				
6	6 poles				
14°	Installed power				
H	1,50 kW				
I	2,20 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)				

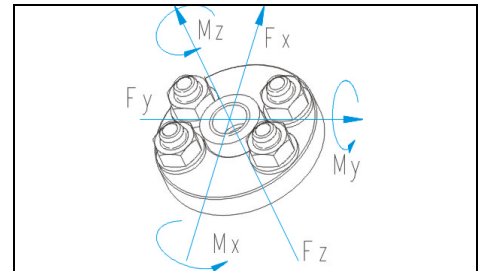
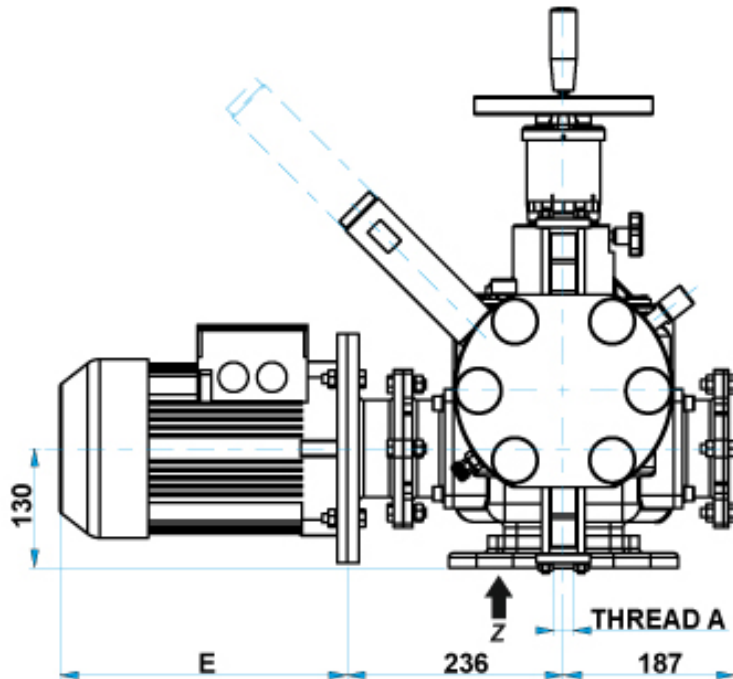
1	T	20	N2	2F	B	7	M	D	6	H	V	0
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HYDRAULIC CHARACTERISTICS

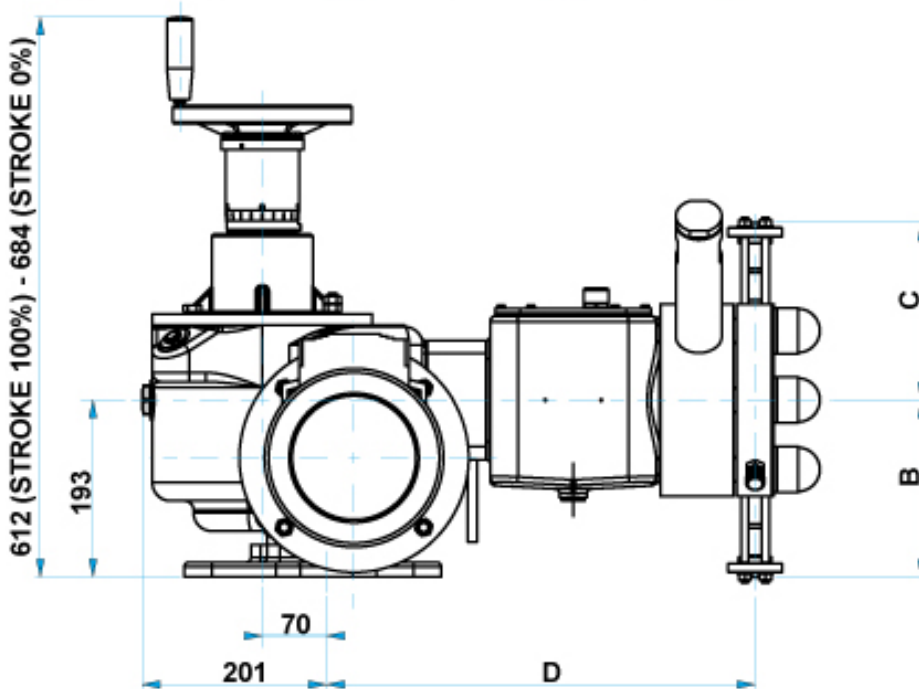
<i>Performances:</i>														50 Hz		60Hz													
										39,6/202 120/80		l/h bar	gph p.s.i.	12.6/64.1 1740/1160		<i>Liquid end material</i>		316L											
										<i>Flow rate at max pressure</i>		<i>Max speed</i>		<i>Flow rate at max pressure</i>		<i>Max speed</i>		<i>Electric motor kW</i>		<i>Suc/Dis Connec</i>									
														1,5 H		2,2 I													
<i>Pump Model</i>																		<i>Max pressure</i>				Ø BSPP F							
														lph		gph		Strokes /min		lph				gph		Strokes /min		bar	
1	T	2	0	N	2	2	F	B	7	M	F	6	H	V	0	36,5	9,7	62	47,5	12,6	74	120	1740	-	-	1/4"			
1	T	2	0	N	2	2	F	B	7	M	D	6	H	V	0	45,9	12,1	78	55	14,6	94	120	1740	-	-	1/4"			
1	T	2	0	N	2	2	F	B	7	M	F	4	H	V	0	54,9	14,5	93	66	17,4	112	120	1740	-	-	1/4"			
1	T	2	0	N	2	2	F	B	7	M	D	4	H	V	0	69,2	18,3	117	83	22,0	140	120	1740	-	-	1/4"			
1	T	2	5	N	2	2	F	B	7	M	F	6	H	V	0	61	16,2	62	73	19,4	74	120	1740	-	-	1/2"			
1	T	2	5	N	2	2	F	B	7	M	D	6	H	V	0	76	20,1	78	91	24,2	94	120	1740	-	-	1/2"			
1	T	2	5	N	2	2	F	B	7	M	F	4	I	V	0	90	23,8	93	108	28,6	112	-	-	120	1740	1/2"			
1	T	2	5	N	2	2	F	B	7	M	D	4	I	V	0	112	29,6	117	134	35,6	140	-	-	120	1740	1/2"			
1	T	3	5	N	2	2	F	B	7	M	F	6	H	V	0	114	30,2	62	137	36,2	74	80	1160	-	-	3/4"			
1	T	3	5	N	2	2	F	B	7	M	D	6	H	V	0	141	37,3	78	169	44,8	94	76	1102	-	-	3/4"			
1	T	3	5	N	2	2	F	B	7	M	F	4	I	V	0	166	43,9	93	199	52,7	112	-	-	80	1160	3/4"			
1	T	3	5	N	2	2	F	B	7	M	D	4	I	V	0	206	54,5	117	247	65,4	140	-	-	80	1160	3/4"			

Test with water @ 20°C.

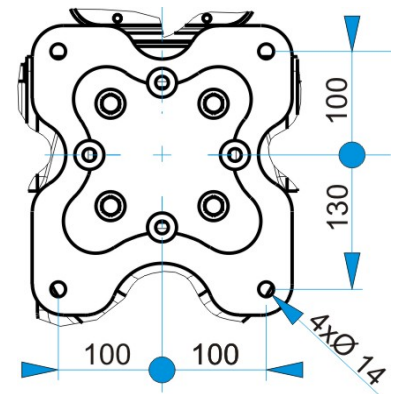


Allowable loads referred to pump nozzles

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