


Technical characteristics

- Flow rates: from 495 to 2610 lph @ 50Hz
- Max Pressure: 1,2 MPa (12 bar)
- Ambient temperature: -10 °C + 40 °C
- Max altitude: 1000 m (A.S.L.)
- Fluid operating temperature: -5 °C + 50 °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

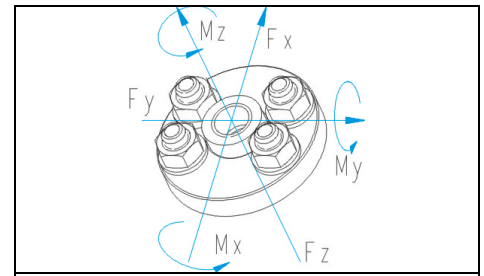
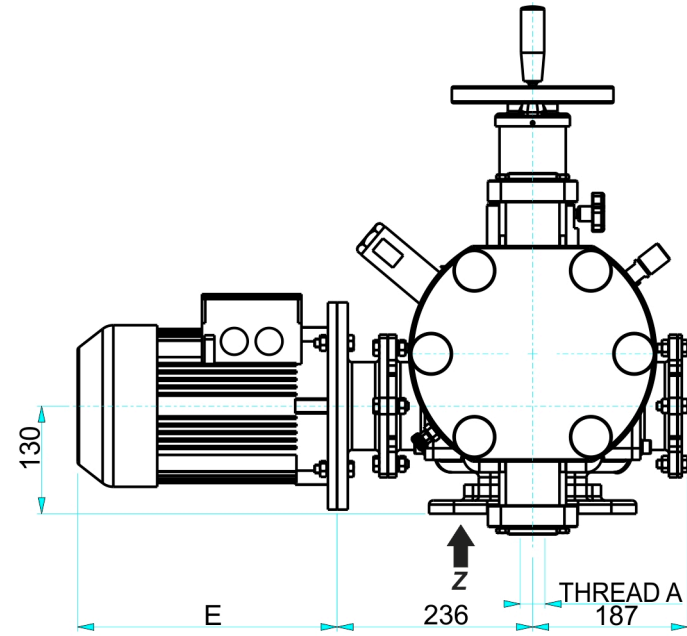
1°	Number of pump head									
1	Simplex pump									
2°	Type of pump head (double diaphragm or packed-plunger)									
Y	Double diaphragm with built-in overpressure valve, air-bleed valve and mechanically actuated oil replenishing									
3°/4°	Plunger diameter									
70=C0	70 - 90 - C0(120) mm									
5°/6°	Mechanism model									
N2	Stroke length 35 mm									
7°/8°	Pump head material									
5B	HEAD	DIAPHRAGM	BALL	VALVE SEAL	VALVE SEAT					
	PP	PTFE	CERAMIC	FPM	FPM					
9°	Valve type									
A	Single ball									
10°	General options									
7	Standard execution									
F	Flanged connections (UNI EN 1092-1)									
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	Y	70	N2	5B	A	7	M	F	6	H	V	0
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HYDRAULIC CHARACTERISTICS

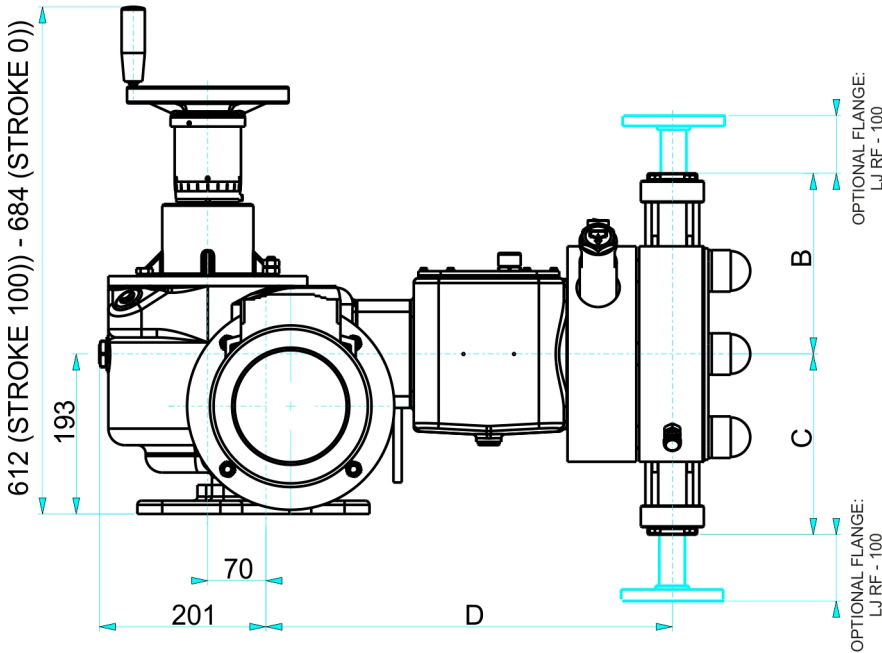
Performances:		50 Hz		60Hz																					
		495/2610		l/h		gph		157/827		<i>Liquid end material</i> PP															
		12/6		bar		p.s.i.		174/87																	
		Flow rate at max pressure		Max speed		Flow rate at max pressure		Max speed		<i>Electric motor kW</i>		<i>Suc/Dis Connec</i>													
										1,5				2,2											
										H		I													
<i>Pump Model</i>				Strokes /min			Strokes /min			Max pressure				Ø BSPP		NPSHr [barg]									
										lph		gph						bar		p.s.i.		bar		p.s.i.	
1 Y 7 0 N 2 5 B A 7 M F 6 H V 0		495		131		62		594		157		74		12		174		-		-		1" F		-0,55	
1 Y 7 0 N 2 5 B A 7 M D 6 H V 0		606		160		78		727		192		94		12		174		-		-		1" F		-0,55	
1 Y 7 0 N 2 5 B A 7 M F 4 I V 0		711		188		93		853		225		112		-		-		12		174		1" F		-0,55	
1 Y 7 0 N 2 5 B A 7 M D 4 I V 0		878		232		117		1054		278		140		-		-		12		174		1" F		-0,55	
1 Y 9 0 N 2 5 B A 7 M F 6 H V 0		778		206		62		934		247		74		11		160		-		-		1 1/2" F		-0,55	
1 Y 9 0 N 2 5 B A 7 M D 6 H V 0		980		259		78		1176		311		94		11		160		-		-		1 1/2" F		-0,55	
1 Y 9 0 N 2 5 B A 7 M F 4 I V 0		1200		317		93		1440		380		112		-		-		11		160		1 1/2" F		-0,55	
1 Y 9 0 N 2 5 B A 7 M D 4 I V 0		1480		391		117		1776		469		140		-		-		11		160		1 1/2" F		-0,40	
1 Y C 0 N 2 5 B A 7 M F 6 H V 0		1370		362		62		1644		434		74		7		102		-		-		1 1/2" F		-0,40	
1 Y C 0 N 2 5 B A 7 M D 6 H V 0		1710		452		78		2052		542		94		6		87		-		-		1 1/2" F		-0,40	
1 Y C 0 N 2 5 B A 7 M F 4 I V 0		2065		546		93		2478		655		112		-		-		7		102		1 1/2" F		-0,40	
1 Y C 0 N 2 5 B A 7 M D 4 I V 0		2610		689		117		3132		827		140		-		-		6		87		1 1/2" F		-0,40	

Test with water @ 20°C.

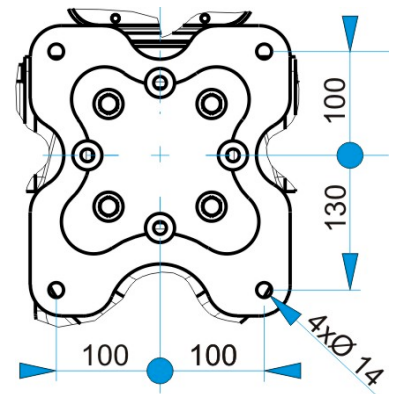


Allowable loads referred to pump nozzles

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)	OPTIONAL FLANGE PN10 MAX. TEMP. 40°C SIZE
	A (EN10226)	B	C	D		
1Y70N25BA..	BSPP 1"F	219	219	491	130,5	DN25
1Y90N25BA..	BSPP 1 1/2"F	284	284	530	150	DN40
1YC0N25BA..	BSPP 1 1/2"F	284	284	530	151	DN40

Electric motor size	4 Poles kw	6 Poles kw	TEFC 1xM20x1.5		EExde 1xM25x1.5	
			E	kg	E	kg
90	1.5	0.75	260	12	340	33
100	2.2	1.50	320	22	370	46