


Technical characteristics

- Flow rates: from 231 to 2565 lph @ 50Hz
- Max Pressure: 4 MPa (40 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  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

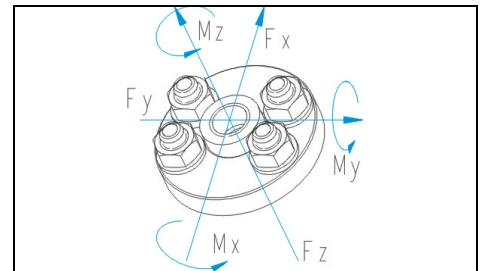
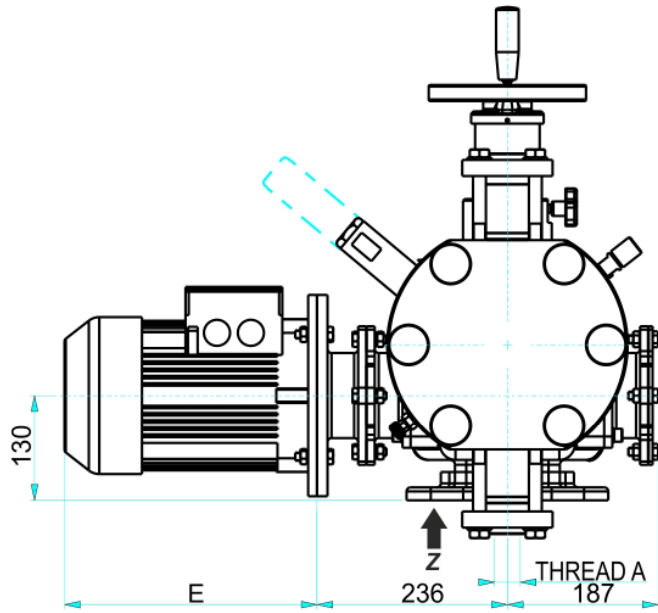
1°	Number of pump head				
1	Simplex pump				
2°	Type of pump head (double diaphragm or packed-plunger)				
Y	Double diaphragm with built-in overpressure valve, air-bleed valve and mechanically actuated oil replenishing				
3°/4°	Plunger diameter				
50+C0	50 - 70 - 90 - C0(120) mm				
5°/6°	Mechanism 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				
A	Single ball				
10°	General options				
7	Standard execution				
F	Flanged connections ANSI B16.5				
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	50	N2	2F	A	7	M	D	6	H	V	0
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HYDRAULIC CHARACTERISTICS

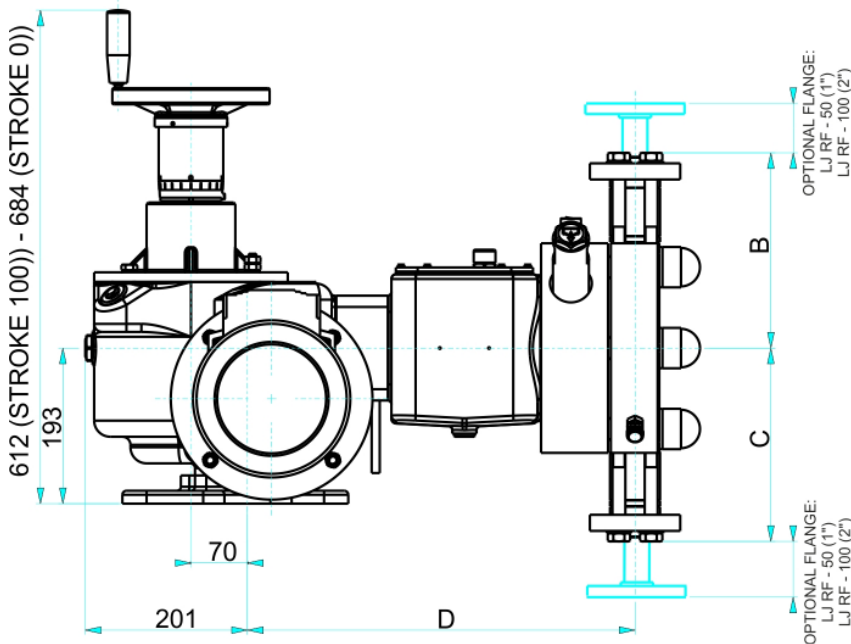
<i>Performances:</i>														50 Hz		60Hz										
										231/2565 40/6		l/h bar	gph p.s.i.		73.2/814.3 580/87		<i>Liquid end material</i>		316L							
										<i>Flow rate at max pressure</i>		<i>Max speed</i>		<i>Flow rate at max pressure</i>		<i>Max speed</i>		<i>Electric motor kW</i>		<i>Suc/Dis Connec</i>						
																		1,5 H		2,2 I						
Pump Model										<i>Strokes /min</i>		<i>Strokes /min</i>		<i>Max pressure</i>				Ø BSPP F								
														lph	gph	lph	gph			bar	p.s.i.	bar	p.s.i.			
1	Y	5	0	N	2	2	F	A	7	M	F	6	H	V	0	236	62,4	62	283	74,9	74	39	566	-	-	1"
1	Y	5	0	N	2	2	F	A	7	M	D	6	H	V	0	288	76,2	78	346	91,4	94	37	537	-	-	1"
1	Y	5	0	N	2	2	F	A	7	M	F	4	I	V	0	337	89,2	93	404	107,0	112	-	-	39	566	1"
1	Y	5	0	N	2	2	F	A	7	M	D	4	I	V	0	416	110,1	117	499	132,1	140	-	-	39	566	1"
1	Y	7	0	N	2	2	F	A	7	M	F	6	H	V	0	494	130,7	62	593	153,3	74	20	290	-	-	1"
1	Y	7	0	N	2	2	F	A	7	M	D	6	H	V	0	603	159,5	78	724	187,3	94	18	261	-	-	1"
1	Y	7	0	N	2	2	F	A	7	M	F	4	I	V	0	705	186,5	93	827	218,8	112	-	-	19	276	1"
1	Y	7	0	N	2	2	F	A	7	M	D	4	I	V	0	865	228,8	117	1016	268,8	140	-	-	20	290	1"
1	Y	9	0	N	2	2	F	A	7	M	F	6	H	V	0	778	205,8	62	934	247,0	74	11	160	-	-	2"
1	Y	9	0	N	2	2	F	A	7	M	D	6	H	V	0	980	259,3	78	1176	311,1	94	11	160	-	-	2"
1	Y	9	0	N	2	2	F	A	7	M	F	4	I	V	0	1200	317,5	93	1440	381,0	112	-	-	11	160	2"
1	Y	9	0	N	2	2	F	A	7	M	D	4	I	V	0	1480	391,5	117	1776	469,8	140	-	-	11	160	2"
1	Y	C	0	N	2	2	F	A	7	M	F	6	H	V	0	1370	362,4	62	1644	434,9	74	7	102	-	-	2"
1	Y	C	0	N	2	2	F	A	7	M	D	6	H	V	0	1710	452,4	78	2052	542,9	94	6	87	-	-	2"
1	Y	C	0	N	2	2	F	A	7	M	F	4	I	V	0	2065	546,3	93	2478	655,6	112	-	-	7	102	2"
1	Y	C	0	N	2	2	F	A	7	M	D	4	I	V	0	2610	690,5	117	3132	828,6	140	-	-	6	87	2"

Test with water @ 20°C.

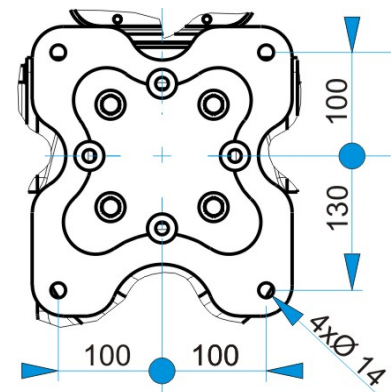


Allowable loads referred to pump nozzles

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 ANSI 300 MAX. TEMP. 38°C MAX. PRESSURE 40BAR SIZE
	A (EN10226)	B	C	D		
1Y50N22FA..	BSPP 1"F	237	237	481	158,5	1"
1Y70N22FA..	BSPP 1"F	237	237	481	158,5	1"
1Y90N22FA ..	BSPP 2"F	288	288	531	209	2"
1YC0N22FA..	BSPP 2"F	288	288	531	210	2"

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