

Technical characteristics

- Flow rates: from 236 to 2610 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
- 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 → 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

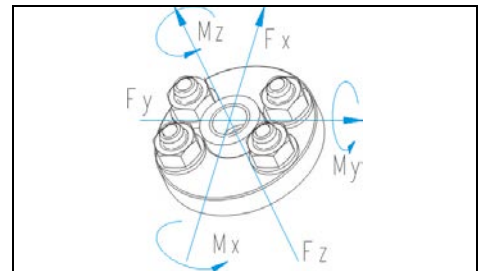
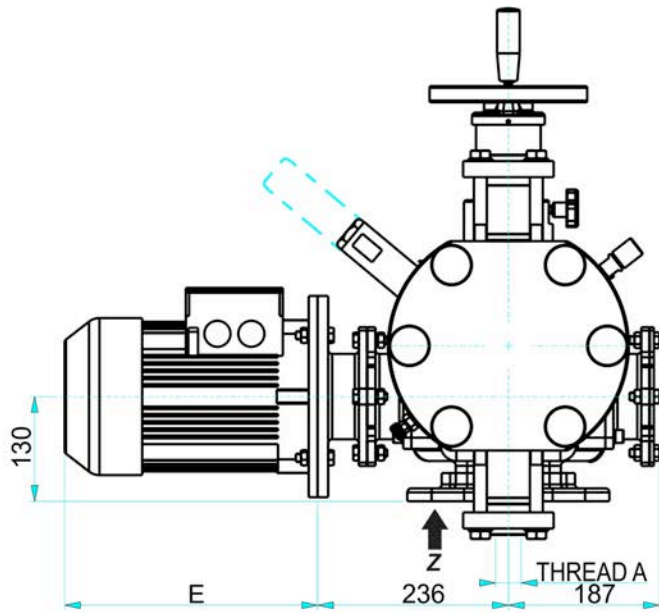
1°	Number of pump head				
1	Simplex pump				
2°	Type of pump head (double diaphragm or packed-plunger)				
Y	Double diaphragm with built-in overpressure valve, air-bleed valve and mechanically actuated oil replenishing				
3°/4°	Plunger diameter				
50+C0	50 - 70 - 90 - C0(120) mm				
5°/6°	Mechanism model				
N2	Stroke length 35 mm				
7°/8°	Pump head material				
	HEAD	DIAPHRAGM	BALL	VALVE SEAL	VALVE SEAT
2F	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

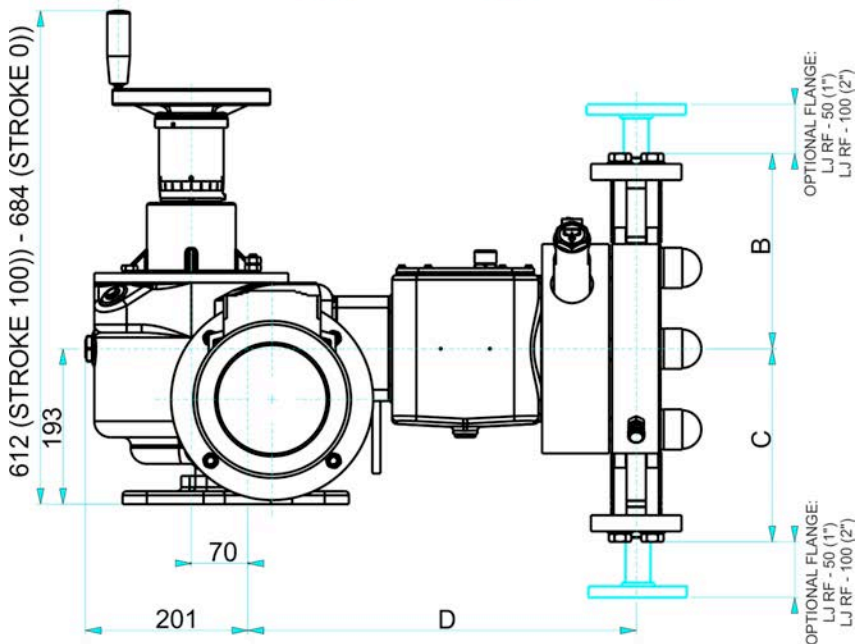
Performances:													50 Hz		60Hz				Liquid end material		316L						
						236/2610		l/h		gph		75/827															
						39/6		bar		p.s.i.		566/87															
Flow rate at max pressure						Max speed		Flow rate at max pressure				Electric motor kW				Suc/Dis Connec											
												1,5		2,2													
Pump Model						lph		gph		Strokes /min		Max pressure				Ø BSP		NPSHr [barg]									
												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	62	283	75	74	39	566	-	-	1" F	-0,35
1	Y	5	0	N	2	2	F	A	7	M	D	6	H	V	0	288	76	78	346	91	94	37	537	-	-	1" F	-0,35
1	Y	5	0	N	2	2	F	A	7	M	F	4	I	V	0	337	89	93	404	107	112	-	-	39	566	1" F	-0,50
1	Y	5	0	N	2	2	F	A	7	M	D	4	I	V	0	416	110	117	499	132	140	-	-	39	566	1" F	-0,50
1	Y	7	0	N	2	2	F	A	7	M	F	6	H	V	0	494	131	62	593	157	74	20	290	-	-	1" F	-0,40
1	Y	7	0	N	2	2	F	A	7	M	D	6	H	V	0	603	159	78	724	191	94	18	261	-	-	1" F	-0,40
1	Y	7	0	N	2	2	F	A	7	M	F	4	I	V	0	704	186	93	845	223	112	-	-	19	276	1" F	-0,55
1	Y	7	0	N	2	2	F	A	7	M	D	4	I	V	0	865	229	117	1038	274	140	-	-	20	290	1" F	-0,55
1	Y	9	0	N	2	2	F	A	7	M	F	6	H	V	0	778	206	62	934	247	74	11	160	-	-	2" F	-0,55
1	Y	9	0	N	2	2	F	A	7	M	D	6	H	V	0	980	259	78	1176	311	94	11	160	-	-	2" F	-0,55
1	Y	9	0	N	2	2	F	A	7	M	F	4	I	V	0	1200	317	93	1440	380	112	-	-	11	160	2" F	-0,55
1	Y	9	0	N	2	2	F	A	7	M	D	4	I	V	0	1480	391	117	1776	469	140	-	-	11	160	2" F	-0,40
1	Y	C	0	N	2	2	F	A	7	M	F	6	H	V	0	1370	362	62	1644	434	74	7	102	-	-	2" F	-0,30
1	Y	C	0	N	2	2	F	A	7	M	D	6	H	V	0	1710	452	78	2052	542	94	6	87	-	-	2" F	-0,30
1	Y	C	0	N	2	2	F	A	7	M	F	4	I	V	0	2065	546	93	2478	655	112	-	-	7	102	2" F	-0,30
1	Y	C	0	N	2	2	F	A	7	M	D	4	I	V	0	2610	689	117	3132	827	140	-	-	6	87	2" F	-0,30

Test with water @ 20°C.

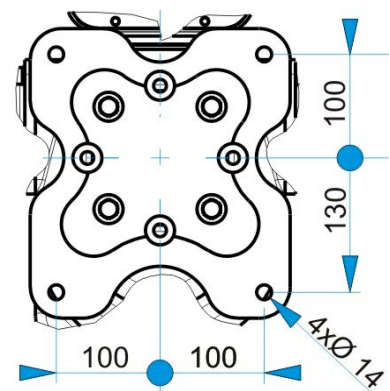


Allowable loads referred to pump nozzles

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