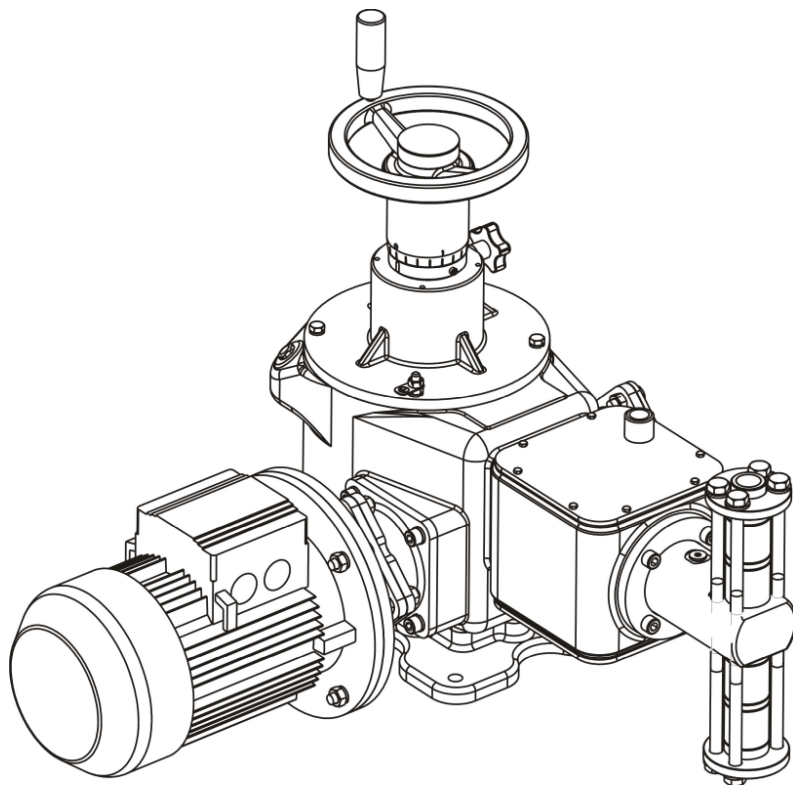




Technical characteristics

- Flow rates: from 243 to 2650 lph @ 50Hz
- Max Pressure: 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 cP (Higher on request)
- Stroke adjustment during operation from 0 to 100%
- Accuracy $\pm 1\%$ on the turndown ratio 10:1
- Min NPSHr: 3 mwc $\rightarrow$ High suction capability
- 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.

Plunger Pumphead:

- Reliable and easy maintenance
- Ready for flushing connection or for leakage recovery system connection
- Plunger coating or mechanical surface hardening for heavy-duty application

PUMP KEY CODE

1°	Number of pump head					
1	Simplex pump					
2°	Type of pump head (double diaphragm or packed-plunger)					
P	Packed plunger with square section rings					
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	PLUNGER	SEAL PACK	BALL	VALVE SEAL	VALVE SEAT
7Y	316SS	316SS	PTFE	316SS	316SS	316SS
9°	Valve type					
A	Single ball					
B	Double balls					
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					
F	Flushing connections					
16°	Mechanism options					
0	Standard execution					
5	Compliance with regulation "ATEX" 94/4/CE II 2 G c IIB T4 (for zone 1) (*)					

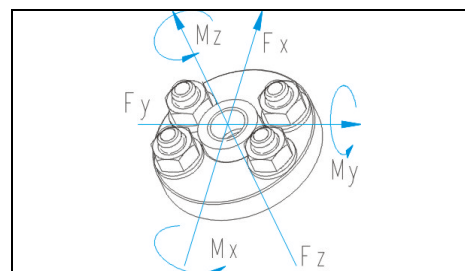
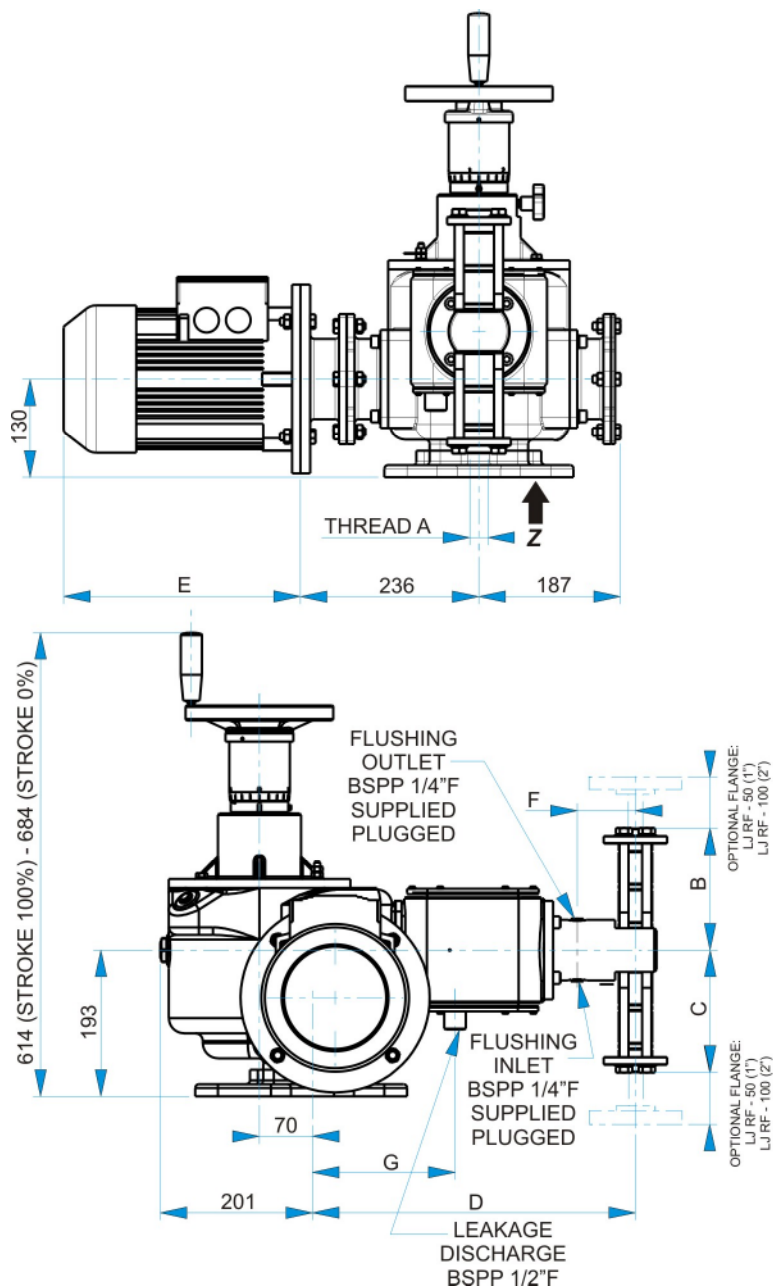
1	P	50	N2	7Y	B	7	M	D	6	H	F	0
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(*) for toxic, inflammable, hazardous and/or pyrophoric liquids packed plunger pumps are not suitable.

HYDRAULIC CHARACTERISTICS

Performances:														50 Hz			60Hz									
														243/2650 40/6			l/h bar	gph 77/841.3 p.s.i. 580/87			Liquid end material				316L	
														Flow rate at max pressure			Max speed	Flow rate at max pressure			Max speed	Electric motor kW				Suc/Dis Connec
																						1,5 H		2,2 I		
Pump Model														lph gph Strokes /min			lph gph Strokes /min			Max pressure				Ø BSPP F		
																				bar	p.s.i.	bar	p.s.i.			
1	P	5	0	N	2	7	Y	A	7	M	F	6	H	F	0	243	64,3	62	291	77,0	75	40	580	-	-	1"
1	P	5	0	N	2	7	Y	A	7	M	D	6	H	F	0	306	81,0	78	367	97,1	93	38	551	-	-	1"
1	P	5	0	N	2	7	Y	A	7	M	F	4	I	F	0	364	96,3	93	437	115,6	112	-	-	40	580	1"
1	P	5	0	N	2	7	Y	A	7	M	D	4	I	F	0	458	121,2	117	550	145,4	-	-	-	40	580	1"
1	P	7	0	N	2	7	Y	A	7	M	F	6	H	F	0	476	125,9	62	571	151,1	75	21	305	-	-	1"
1	P	7	0	N	2	7	Y	A	7	M	D	6	H	F	0	599	158,5	78	719	190,2	93	19	276	-	-	1"
1	P	7	0	N	2	7	Y	A	7	M	F	4	I	F	0	714	188,9	93	857	226,7	112	-	-	21	305	1"
1	P	7	0	N	2	7	Y	A	7	M	D	4	I	F	0	898	237,6	117	1078	285,1	-	-	-	21	305	1"
1	P	9	0	N	2	7	Y	A	7	M	F	6	H	F	0	787	208,2	62	944	249,8	75	12	174	-	-	2"
1	P	9	0	N	2	7	Y	A	7	M	D	6	H	F	0	990	261,9	78	1188	314,3	93	12	174	-	-	2"
1	P	9	0	N	2	7	Y	A	7	M	F	4	I	F	0	1180	312,2	93	1416	374,6	112	-	-	12	174	2"
1	P	9	0	N	2	7	Y	A	7	M	D	4	I	F	0	1485	392,9	117	1782	471,4	-	-	-	12	174	2"
1	P	C	0	N	2	7	Y	A	7	M	F	6	H	F	0	1400	370,4	62	1680	444,4	75	7	102	-	-	2"
1	P	C	0	N	2	7	Y	A	7	M	D	6	H	F	0	1760	465,6	78	2112	558,7	93	6	87	-	-	2"
1	P	C	0	N	2	7	Y	A	7	M	F	4	I	F	0	2100	555,6	93	2520	666,7	112	-	-	7	102	2"
1	P	C	0	N	2	7	Y	A	7	M	D	4	I	F	0	2650	701,1	117	3180	841,3	-	-	-	6	87	2"

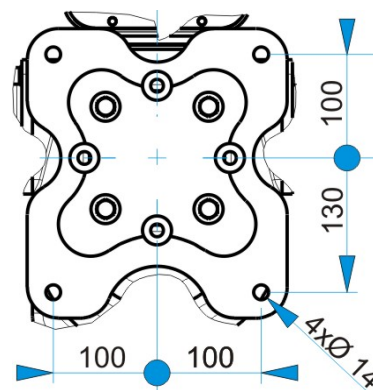
Test with water @ 20°C.



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 MODEL	DIMENSIONS [mm]						ESTIMATED WEIGHT kg (without motor)	OPTIONAL FLANGE ANSI 300 MAX. TEMP. 38°C MAX. PRESSURE 40BAR SIZE
	A (EN10226)	B	C	D	F	G		
1P50N27YA..	BSPP 1"F	152	152	438	73	187	125	1"
1P70N27YA..	BSPP 1"F	157	157	446	81	187	125	1"
1P90N27YA..	BSPP 2"F	223	223	474	90	206	172.5	2"
1PC0N27YA..	BSPP 2"F	223	223	474	88	206	172.5	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	1.5	320	22	370	46