

Technical characteristics

- Flow rates: from 22,3 to 230 lph @ 50Hz
- Max Pressure: 20 MPa (200 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
- 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.

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)						
K	Packed plunger with square section rings						
3°/4°	Plunger diameter						
15-35	From 15 to 35 mm						
5°/6°	Mechanism model						
N2	Stroke length 35 mm						
7°/8°	Pump head material						
		HEAD	PLUNGER	SEAL PACK	BALL	VALVE SEAL	VALVE SEAT
1A		316SS	316SS + CERAMIC	ARAMIDIC FIBER	316SS	316SS	316SS
9°	Valve type						
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						
F	0,75 kW						
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	K	15	N2	1A	B	7	M	D	6	F	F	0
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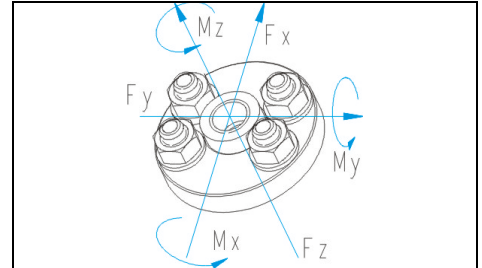
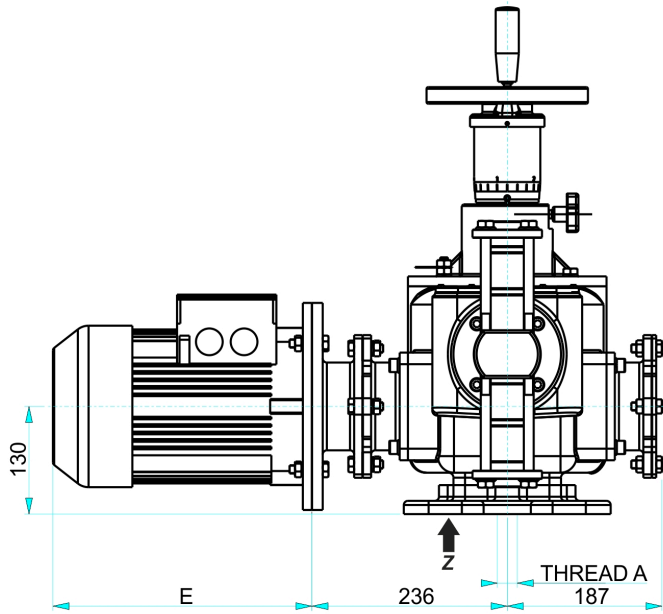
(*) for toxic, inflammable, hazardous and/or pyrophoric liquids packed plunger pumps are not suitable.

HYDRAULIC CHARACTERISTICS

Prestazioni/Performances:		50 Hz	60Hz					
		22,3/230 200/79	l/h bar	gph p.s.i.	7,4/77 2900/1146		Liquid end material	316L
Flow rate at max pressure		Max speed		Flow rate at max pressure		Max speed		Suc/Dis Connec
Electric motor kW								
		0,75 F		1,5 H		2,2 I		

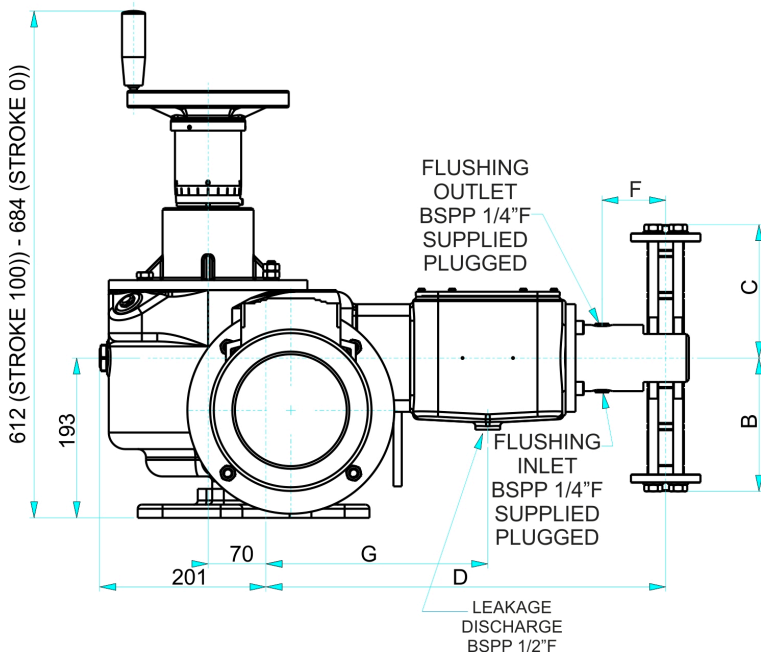
Pump Model				Strokes /min			Max pressure						Ø BSPP	NPSHr [barg]
							bar		p.s.i.		bar			
	lph	gph		bar	p.s.i.	bar	p.s.i.	bar	p.s.i.					
1 K 1 5 N 2 1 A B 7 M F 6 F F 0	22,3	5,9	62	26,8	7,1	74	200	2900	-	-	-	-	1/4" F	-0,50
1 K 1 5 N 2 1 A B 7 M D 6 F F 0	28,1	7,4	78	33,7	8,9	94	200	2900	-	-	-	-	1/4" F	-0,50
1 K 1 5 N 2 1 A B 7 M F 4 H F 0	33,5	8,8	93	40,2	10,6	112	-	-	200	2900	-	-	1/4" F	-0,50
1 K 1 5 N 2 1 A B 7 M D 4 H F 0	42,2	11,1	117	50,6	13,4	140	-	-	200	2900	-	-	1/4" F	-0,50
1 K 2 0 N 2 1 A B 7 M F 6 H F 0	39,7	10,5	62	47,6	12,6	74	-	-	200	2900	-	-	1/4" F	-0,50
1 K 2 0 N 2 1 A B 7 M D 6 H F 0	50,0	13,2	78	60,0	15,9	94	-	-	200	2900	-	-	1/4" F	-0,50
1 K 2 0 N 2 1 A B 7 M F 4 I F 0	59,6	15,7	93	71,5	18,9	112	-	-	-	-	200	2900	1/4" F	-0,50
1 K 2 0 N 2 1 A B 7 M D 4 I F 0	74,9	19,8	117	89,9	23,7	140	-	-	-	-	200	2900	1/4" F	-0,50
1 K 2 5 N 2 1 A B 7 M F 6 H F 0	62	16	62	74	20	74	-	-	163	2364	-	-	1/2" F	-0,50
1 K 2 5 N 2 1 A B 7 M D 6 H F 0	78	21	78	94	25	94	-	-	153	2219	-	-	1/2" F	-0,50
1 K 2 5 N 2 1 A B 7 M F 4 I F 0	93	25	93	112	30	112	-	-	-	-	163	2364	1/2" F	-0,50
1 K 2 5 N 2 1 A B 7 M D 4 I F 0	117	31	117	140	37	140	-	-	-	-	163	2364	1/2" F	-0,50
1 K 3 5 N 2 1 A B 7 M F 6 H F 0	122	32	62	146	39	74	-	-	83	1204	-	-	3/4" F	-0,50
1 K 3 5 N 2 1 A B 7 M D 6 H F 0	153	40	78	184	49	94	-	-	79	1146	-	-	3/4" F	-0,50
1 K 3 5 N 2 1 A B 7 M F 4 I F 0	182	48	93	218	58	112	-	-	-	-	83	1204	3/4" F	-0,50
1 K 3 5 N 2 1 A B 7 M D 4 I F 0	230	61	117	276	73	140	-	-	-	-	83	1204	3/4" F	-0,50

Test with water @ 20°C.

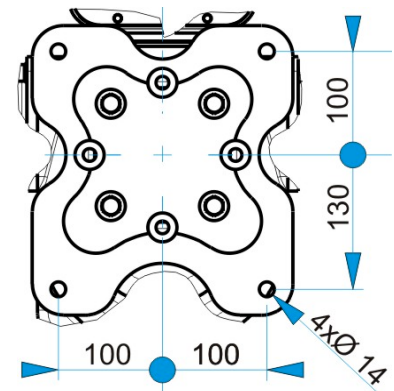


Allowable loads referred to pump nozzles

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)
	A (EN10226)	B	C	D	F	G	
1K15N21AB..	BSPP 1/4\"F	128	128	472	77	268	106
1K20N21AB..	BSPP 1/4\"F	126	126	485	80	268	107
1K25N21AB..	BSPP 1/2\"F	126	126	484	79	268	107
1K35N21AB..	BSPP 3/4\"F	160	160	483	77	268	109

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