

Technical characteristics

- Flow rates: from 2,3 to 116 lph @ 50Hz
- Max Pressure: 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 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					
06+30	from 6 to 30 mm					
5°/6°	Mechanism model					
N1	Stroke length 25 mm					
7°/8°	Pump head materia					
	HEAD	PLUNGER	SEAL PACK	BALL	VALVE SEAL	VALVE SEAT
1A	316SS	316SS + CERAMIC	ARAMIDIC FIBER	316SS	316SS	316SS
9°	Valve type					
A	Single ball					
B	Double balls					
10°	General options					
7	Standard execution					
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					
E	0,55 kW					
F	0,75 kW					
G	1,10 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) (*)					

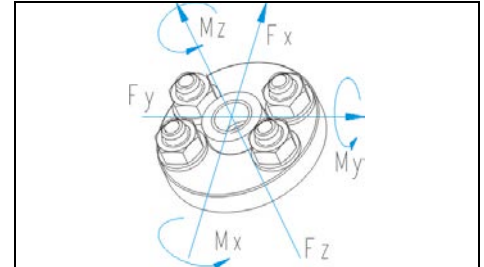
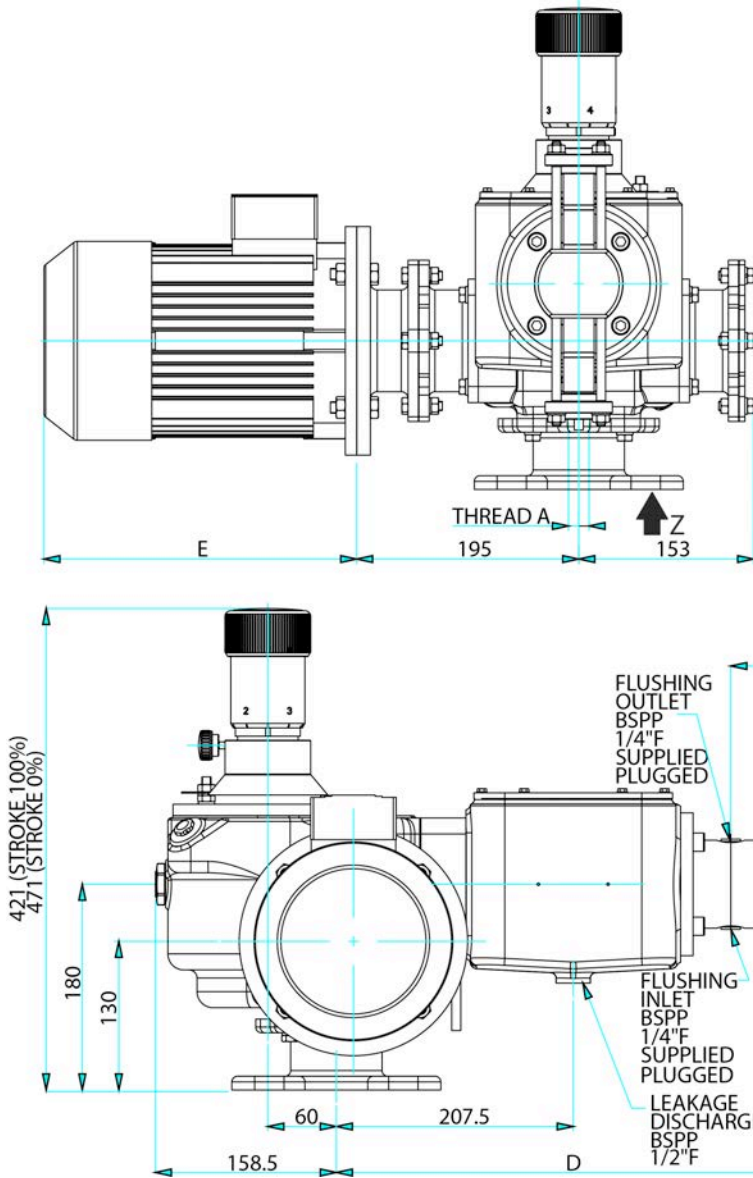
1	K	06	N1	1A	B	7	M	D	6	E	F	0
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(*) for toxic, inflammable, hazardous and/or pyrophoric liquids packed plunger pumps are not suitable.

HYDRAULIC CHARACTERISTICS

Performances:		50 Hz		60Hz													
		2,3/116		l/h		0,7/37		<i>Liquid end material</i>						316L			
		200/69		bar		p.s.i. 2900/1001											
		<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>	
										0,55		0,75		1,10			
										E		F		G			
<i>Pump Model</i>							<i>Max pressure</i>						Ø BSSP	NPSHr [barg]			
	lph	gph	Strokes /min	lph	gph	Strokes /min	bar	p.s.i.	bar	p.s.i.	bar	p.s.i.					
1K06N11AB7MF6EF0	2,3	0,6	62	2,8	0,7	74	200	2900	-	-	-	-	1/4" F	-0,50			
1K06N11AB7MD6EF0	2,9	0,8	78	3,5	0,9	94	200	2900	-	-	-	-	1/4" F	-0,50			
1K06N11AB7MF4EF0	3,5	0,9	93	4,2	1,1	112	200	2900	-	-	-	-	1/4" F	-0,50			
1K06N11AB7MD4EF0	4,4	1,2	117	5,3	1,4	140	200	2900	-	-	-	-	1/4" F	-0,50			
1K08N11AB7MF6EF0	4,1	1,1	62	4,9	1,3	74	200	2900	-	-	-	-	1/4" F	-0,50			
1K08N11AB7MD6EF0	5,2	1,4	78	6,2	1,6	94	200	2900	-	-	-	-	1/4" F	-0,50			
1K08N11AB7MF4EF0	6,2	1,6	93	7,4	2,0	112	200	2900	-	-	-	-	1/4" F	-0,50			
1K08N11AB7MD4EF0	7,8	2,1	117	9,4	2,5	140	200	2900	-	-	-	-	1/4" F	-0,50			
1K10N11AB7MF6EF0	6,4	1,7	62	7,7	2,0	74	200	2900	-	-	-	-	1/4" F	-0,50			
1K10N11AB7MD6EF0	8,1	2,1	78	9,7	2,6	94	200	2900	-	-	-	-	1/4" F	-0,50			
1K10N11AB7MF4EF0	9,6	2,5	93	11,5	3,0	112	200	2900	-	-	-	-	1/4" F	-0,50			
1K10N11AB7MD4EF0	12,1	3,2	117	14,5	3,8	140	200	2900	-	-	-	-	1/4" F	-0,50			
1K15N11AB7MF6FF0	14,5	3,8	62	17,4	4,6	74	-	-	200	2900	-	-	1/4" F	-0,50			
1K15N11AB7MD6FF0	18,2	4,8	78	21,8	5,8	94	-	-	200	2900	-	-	1/4" F	-0,50			
1K15N11AB7MF4GF0	21,7	5,7	93	26,0	6,9	112	-	-	-	-	200	2900	1/4" F	-0,50			
1K15N11AB7MD4GF0	27,3	7,2	117	32,8	8,7	140	-	-	-	-	200	2900	1/4" F	-0,50			
1K20N11AB7MF6FF0	26,3	6,9	62	31,6	8,3	74	-	-	155	2248	-	-	1/4" F	-0,50			
1K20N11AB7MD6FF0	33,1	8,7	78	39,7	10,5	94	-	-	155	2248	-	-	1/4" F	-0,50			
1K20N11AB7MF4GF0	39,5	10,4	93	47,4	12,5	112	-	-	-	-	155	2248	1/4" F	-0,50			
1K20N11AB7MD4GF0	49,6	13,1	117	59,5	15,7	140	-	-	-	-	155	2248	1/4" F	-0,50			
1K30N11AB7MF6FF0	62	16	62	74	20	74	-	-	69	1001	-	-	1/2" F	-0,50			
1K30N11AB7MD6FF0	78	21	78	93	25	94	-	-	70	1015	-	-	1/2" F	-0,50			
1K30N11AB7MF4GF0	93	24	93	111	29	112	-	-	-	-	70	1015	1/2" F	-0,50			
1K30N11AB7MD4GF0	116	31	117	140	37	140	-	-	-	-	70	1015	1/2" F	-0,50			

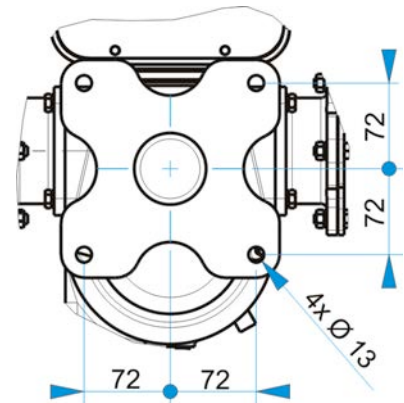
Test with water @ 20°C.



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]					EXTIMATED WEIGHT Kg (without motor)
	A (EN10226)	B	C	D	F	
1K06N11AB..	BSPP 1/4"F	98	98	380	56	57
1K08N11AB..	BSPP 1/4"F	98	98	380	56	57
1K10N11AB..	BSPP 1/4"F	121	121	401	64	58
1K15N11AB..	BSPP 1/4"F	121	121	401	64	58
1K20N11AB..	BSPP 1/4"F	121	121	416	71	58,5
1K30N11AB..	BSPP 1/2"F	119	119	411	65	58,5

Electric motor size	4 Poles Kw	6 Poles Kw	TEFC 1xM20x1.5		EExde 1xM25x1.5	
			E	Kg	E	Kg
90	1.1	0.75	274	12	340	33
80	0.55	0.55	255	9	290	26