

Technical characteristics

- Flow rates: from 2,5 to 118 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) (*)					

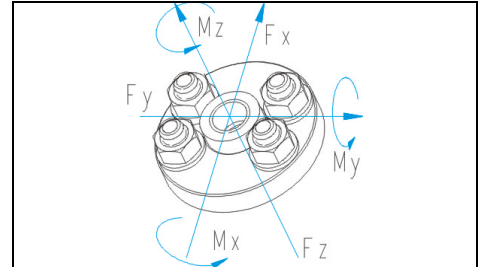
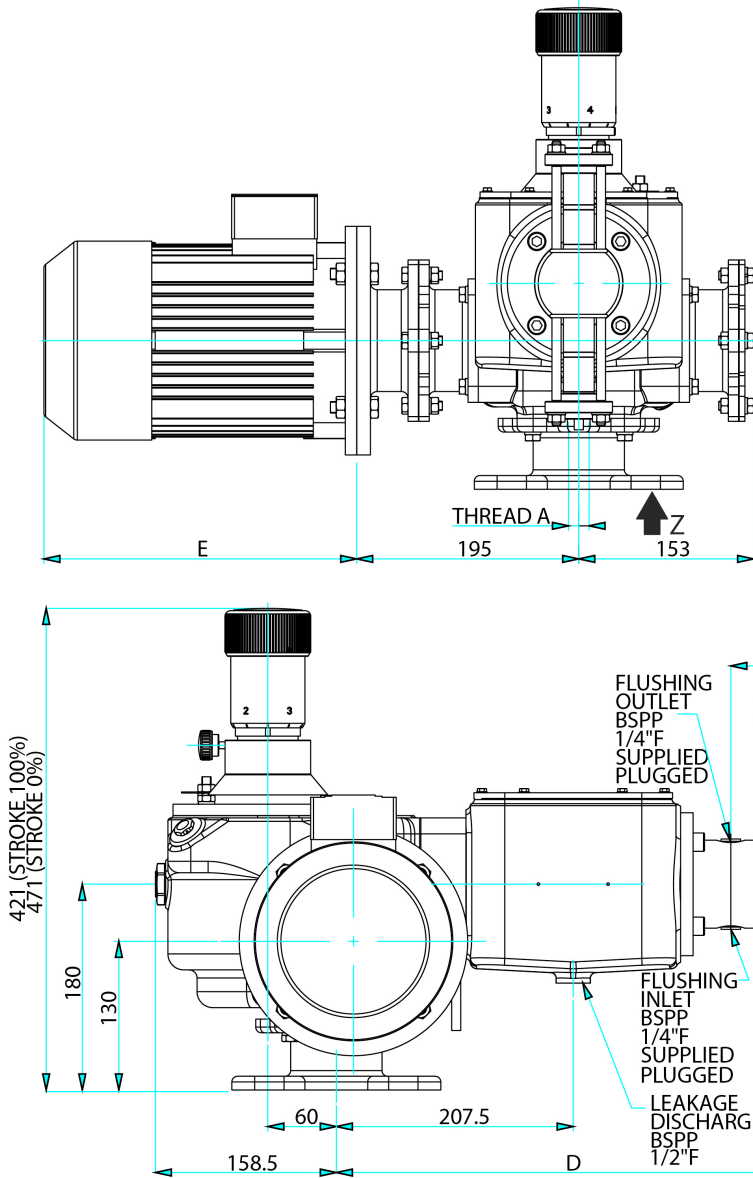
1	K	06	N1	1A	B	7	M	D	6	E	F	0
---	---	----	----	----	---	---	---	---	---	---	---	---

(*) for toxic, inflammable, hazardous and/or pyrophoric liquids packed plunger pumps are not suitable.

HYDRAULIC CHARACTERISTICS

Performances:		50 Hz		60Hz											
		2,5/118 200/69		l/h bar		gph 0,8/40 p.s.i. 2900/1001		Liquid end material				316L			
		Flow rate at max pressure		Max speed		Flow rate at max pressure		Max speed		Electric motor kW			Suc/Dis Connc		
										0,55 E	0,75 F	1,10 G			
Pump Model							Max pressure						Ø BSPB	NPSHr [barg]	
	lph	gph	Strokes /min	lph	gph	Strokes /min	bar	p.s.i.	bar	p.s.i.	bar	p.s.i.			
1K06N11AB7MF6EFO	2,5	0,7	62	3,0	0,8	74	200	2900	-	-	-	-	1/4" F	-0,50	
1K06N11AB7MD6EFO	3,1	0,8	78	3,7	1,0	94	200	2900	-	-	-	-	1/4" F	-0,50	
1K06N11AB7MF4EFO	3,7	1,0	93	4,4	1,2	112	200	2900	-	-	-	-	1/4" F	-0,50	
1K06N11AB7MD4EFO	4,7	1,2	117	5,6	1,5	140	200	2900	-	-	-	-	1/4" F	-0,50	
1K08N11AB7MF6EFO	4,4	1,2	62	5,3	1,4	74	200	2900	-	-	-	-	1/4" F	-0,50	
1K08N11AB7MD6EFO	5,6	1,5	78	6,7	1,8	94	200	2900	-	-	-	-	1/4" F	-0,50	
1K08N11AB7MF4EFO	6,7	1,8	93	8,0	2,1	112	200	2900	-	-	-	-	1/4" F	-0,50	
1K08N11AB7MD4EFO	8,4	2,2	117	10,1	2,7	140	200	2900	-	-	-	-	1/4" F	-0,50	
1K10N11AB7MF6EFO	6,9	1,8	62	8,3	2,2	74	200	2900	-	-	-	-	1/4" F	-0,50	
1K10N11AB7MD6EFO	8,7	2,3	78	10,4	2,7	94	200	2900	-	-	-	-	1/4" F	-0,50	
1K10N11AB7MF4EFO	10,4	2,7	93	12,5	3,3	112	200	2900	-	-	-	-	1/4" F	-0,50	
1K10N11AB7MD4EFO	13,1	3,5	117	15,7	4,1	140	200	2900	-	-	-	-	1/4" F	-0,50	
1K15N11AB7MF6EFO	15,6	4,1	62	18,7	4,9	74	-	-	200	2900	-	-	1/4" F	-0,50	
1K15N11AB7MD6EFO	19,6	5,2	78	23,5	6,2	94	-	-	200	2900	-	-	1/4" F	-0,50	
1K15N11AB7MF4EFO	23,4	6,2	93	28,1	7,4	112	-	-	-	-	200	2900	1/4" F	-0,50	
1K15N11AB7MD4EFO	29,5	7,8	117	35,4	9,4	140	-	-	-	-	200	2900	1/4" F	-0,50	
1K20N11AB7MF6EFO	27,8	7,3	62	33,4	8,8	74	-	-	155	2248	-	-	1/4" F	-0,50	
1K20N11AB7MD6EFO	34,9	9,2	78	41,9	11,1	94	-	-	155	2248	-	-	1/4" F	-0,50	
1K20N11AB7MF4EFO	41,6	11,0	93	49,9	13,2	112	-	-	-	-	155	2248	1/4" F	-0,50	
1K20N11AB7MD4EFO	52,4	13,8	117	62,9	16,6	140	-	-	-	-	155	2248	1/4" F	-0,50	
1K30N11AB7MF6EFO	62	16	62	74	20	74	-	-	69	1001	-	-	1/2" F	-0,50	
1K30N11AB7MD6EFO	79	21	78	95	25	94	-	-	70	1015	-	-	1/2" F	-0,50	
1K30N11AB7MF4EFO	94	25	93	113	30	112	-	-	-	-	70	1015	1/2" F	-0,50	
1K30N11AB7MD4EFO	118	31	117	142	38	140	-	-	-	-	70	1015	1/2" F	-0,50	

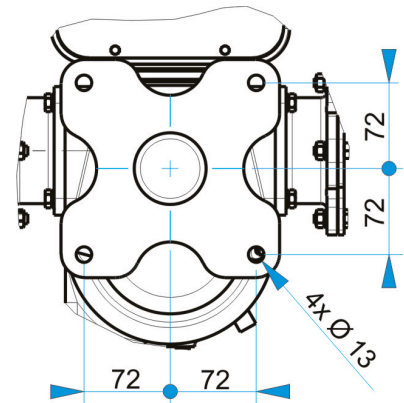
Test with water @ 20°C.



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