

Technical characteristics

- Flow rates: from 0,567 to 25,6 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					
06÷25	from 6 to 25 mm					
5°/6°	Mechanism model					
NO	Stroke length 10 mm					
7°/8°	Pump head materia l					
	HEAD	PLUNGER	SEAL PACK	BALL	VALVE SEAL	VALVE SEAT
1A	316SS	316SS + CERAMIC	ARAMIDIC FIBER	316SS	316SS	316SS
9°	Val ve type					
B	Double balls					
C	Triple 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					
F	1:15					
I	1:20					
L	1:25					
13°	Electric motors poles					
2	2 poles (not available ATEX version)					
4	4 poles					
6	6 poles					
14°	Installed power					
B	0,18 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) (*)					

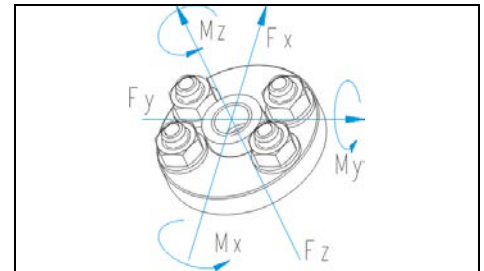
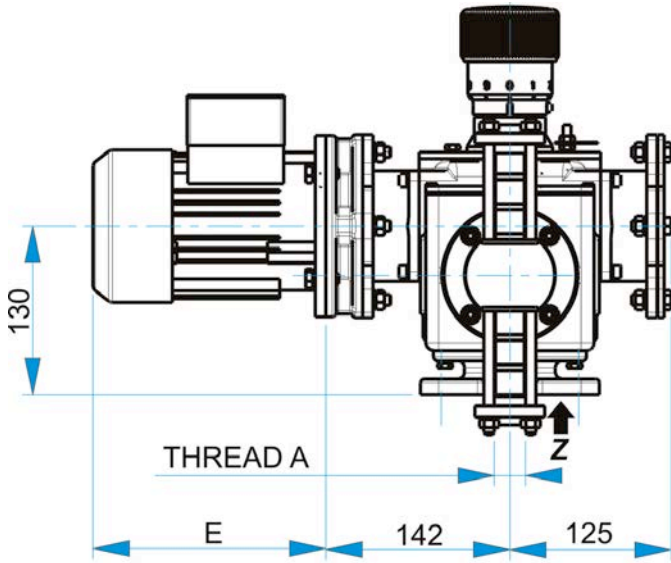
1	K	06	NO	1A	C	7	M	L	6	B	F	0
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(*) for toxic, inflammable, hazardous and/or pyrophoric liquids packed plunger pumps are not suitable.

HYDRAULIC CHARACTERISTICS

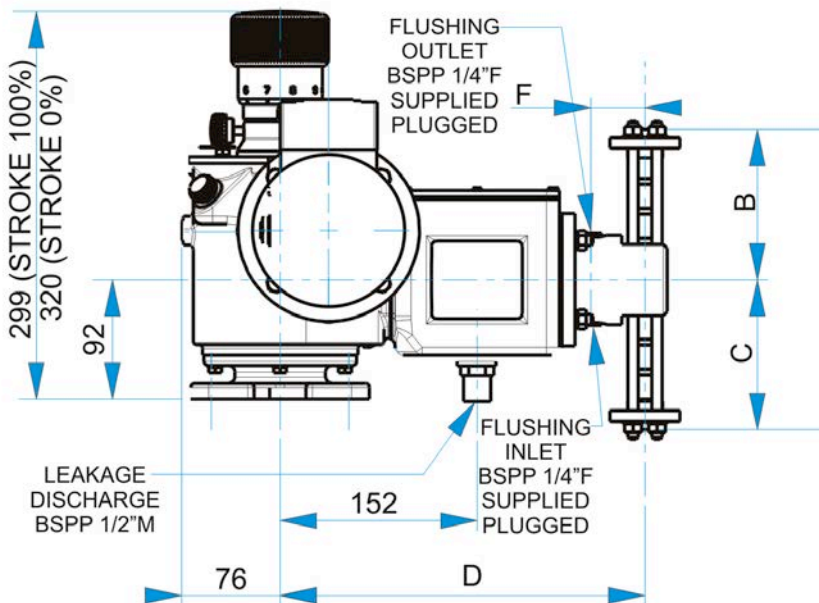
Performances:		50 Hz			60Hz										
		0,567/25,6			l/h	0,180/8,1			Liquid end material		316L				
		200/41			bar	p.s.i. 2900/595									
		<i>Flow rate at max pressure</i>			<i>Max speed</i>			<i>Flow rate at max pressure</i>		<i>Max speed</i>		<i>Electric motor kW</i>		<i>Suc/Dis Connec</i>	
										0,18					
										B					
Pump Model				<i>Strokes</i>			<i>Max pressure</i>		Ø BSP	NPSHr [barg]					
	lph	gph	/min	lph	gph	/min	bar	p.s.i.							
1 K 0 6 N 0 1 A C 7 M L 6 B F 0	0,567	0,150	37	0,680	0,180	44	200	2900	1/4" F	-0,50					
1 K 0 6 N 0 1 A C 7 M L 4 B F 0	0,720	0,190	47	0,864	0,228	56	200	2900	1/4" F	-0,50					
1 K 0 6 N 0 1 A C 7 M L 4 B F 0	0,858	0,227	56	1,030	0,272	67	200	2900	1/4" F	-0,50					
1 K 0 6 N 0 1 A C 7 M L 4 B F 0	1,072	0,283	70	1,286	0,340	84	200	2900	1/4" F	-0,50					
1 K 0 6 N 0 1 A C 7 M F 4 B F 0	1,425	0,376	93	1,710	0,452	112	200	2900	1/4" F	-0,50					
1 K 0 6 N 0 1 A C 7 M L 2 B F 0	1,716	0,453	112	2,059	0,544	134	200	2900	1/4" F	-0,50					
1 K 0 8 N 0 1 A C 7 M L 6 B F 0	1,28	0,34	47	1,54	0,41	56	200	2900	1/4" F	-0,50					
1 K 0 8 N 0 1 A C 7 M L 4 B F 0	1,53	0,40	56	1,83	0,48	67	200	2900	1/4" F	-0,50					
1 K 0 8 N 0 1 A C 7 M L 4 B F 0	1,91	0,50	70	2,29	0,60	84	200	2900	1/4" F	-0,50					
1 K 0 8 N 0 1 A C 7 M F 4 B F 0	2,53	0,67	93	3,04	0,80	112	200	2900	1/4" F	-0,50					
1 K 0 8 N 0 1 A C 7 M L 2 B F 0	3,05	0,81	112	3,66	0,97	134	200	2900	1/4" F	-0,50					
1 K 1 0 N 0 1 A C 7 M L 6 B F 0	2,00	0,53	47	2,40	0,63	56	200	2900	1/4" F	-0,50					
1 K 1 0 N 0 1 A C 7 M L 4 B F 0	2,38	0,63	56	2,86	0,76	67	200	2900	1/4" F	-0,50					
1 K 1 0 N 0 1 A C 7 M L 4 B F 0	2,98	0,79	70	3,57	0,94	84	200	2900	1/4" F	-0,50					
1 K 1 0 N 0 1 A C 7 M F 4 B F 0	3,96	1,05	93	4,75	1,25	112	200	2900	1/4" F	-0,50					
1 K 1 0 N 0 1 A C 7 M L 2 B F 0	4,77	1,26	112	5,72	1,51	134	200	2900	1/4" F	-0,50					
1 K 1 2 N 0 1 A C 7 M L 6 B F 0	2,89	0,76	47	3,47	0,92	56	177	2567	1/4" F	-0,50					
1 K 1 2 N 0 1 A C 7 M L 4 B F 0	3,45	0,91	56	4,14	1,09	67	177	2567	1/4" F	-0,50					
1 K 1 2 N 0 1 A C 7 M L 4 B F 0	4,31	1,14	70	5,17	1,37	84	177	2567	1/4" F	-0,50					
1 K 1 2 N 0 1 A C 7 M F 4 B F 0	5,73	1,51	93	6,87	1,81	112	177	2567	1/4" F	-0,50					
1 K 1 2 N 0 1 A C 7 M L 2 B F 0	6,90	1,82	112	8,28	2,19	134	177	2465	1/4" F	-0,50					
1 K 1 5 N 0 1 A B 7 M L 6 B F 0	4,58	1,21	47	5,50	1,45	56	113	1639	1/4" F	-0,50					
1 K 1 5 N 0 1 A B 7 M L 4 B F 0	5,46	1,44	56	6,55	1,73	67	113	1639	1/4" F	-0,50					
1 K 1 5 N 0 1 A B 7 M L 4 B F 0	6,83	1,80	70	8,19	2,16	84	113	1639	1/4" F	-0,50					
1 K 1 5 N 0 1 A B 7 M F 4 B F 0	9,07	2,40	93	10,88	2,87	112	113	1639	1/4" F	-0,50					
1 K 1 5 N 0 1 A B 7 M L 2 B F 0	10,92	2,89	112	13,11	3,46	134	113	1450	1/4" F	-0,50					
1 K 2 0 N 0 1 A B 7 M L 6 B F 0	8,2	2,2	47	9,9	2,6	56	60	870	1/4" F	-0,50					
1 K 2 0 N 0 1 A B 7 M L 4 B F 0	9,8	2,6	56	11,8	3,1	67	60	870	1/4" F	-0,50					
1 K 2 0 N 0 1 A B 7 M L 4 B F 0	12,3	3,2	70	14,7	3,9	84	60	870	1/4" F	-0,50					
1 K 2 0 N 0 1 A B 7 M F 4 B F 0	16,3	4,3	93	19,6	5,2	112	60	870	1/4" F	-0,50					
1 K 2 0 N 0 1 A B 7 M L 2 B F 0	19,6	5,2	112	23,6	6,2	134	60	870	1/4" F	-0,50					
1 K 2 5 N 0 1 A B 7 M L 6 B F 0	10,2	2,7	37	12,2	3,2	44	41	595	1/4" F	-0,50					
1 K 2 5 N 0 1 A B 7 M L 6 B F 0	12,9	3,4	47	15,5	4,1	56	41	595	1/4" F	-0,50					
1 K 2 5 N 0 1 A B 7 M L 4 B F 0	15,4	4,1	56	18,5	4,9	67	41	595	1/4" F	-0,50					
1 K 2 5 N 0 1 A B 7 M L 4 B F 0	19,3	5,1	70	23,1	6,1	84	41	595	1/4" F	-0,50					
1 K 2 5 N 0 1 A B 7 M F 4 B F 0	25,6	6,8	93	30,7	8,1	112	41	595	1/4" F	-0,50					

Test with water @ 20°C.

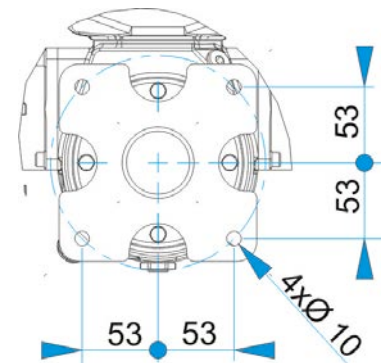


Allowable loads referred to pump nozzles

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	B	C	D	F	
1K06N01AC..	BSPP 1/4"F	116	116	283	42	28
1K08N01AC..	BSPP 1/4"F	116	116	283	42	28
1K10N01AC..	BSPP 1/4"F	116	116	303	49	29
1K12N01AC..	BSPP 1/4"F	116	116	303	49	29
1K15N01AB..	BSPP 1/4"F	93	93	303	49	29
1K20N01AB..	BSPP 1/4"F	116	116	316	53	29
1K25N01AB..	BSPP 1/4"F	116	116	316	53	29

Electric motor size	2 Poles kw	4 Poles kw	6 Poles kw	TEFC 1xM16x1.5		EExde 1xM25x1.5	
				E	kg	E	kg
63	0.18	0.18	0.18	193	4	224	16