

Technical characteristics

- Flow rates: from 56,0 to 655 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

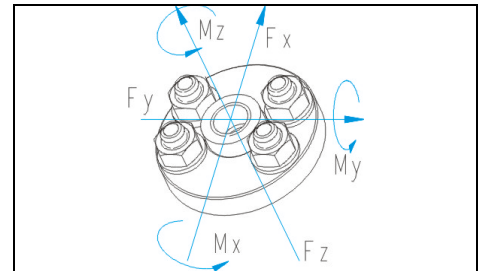
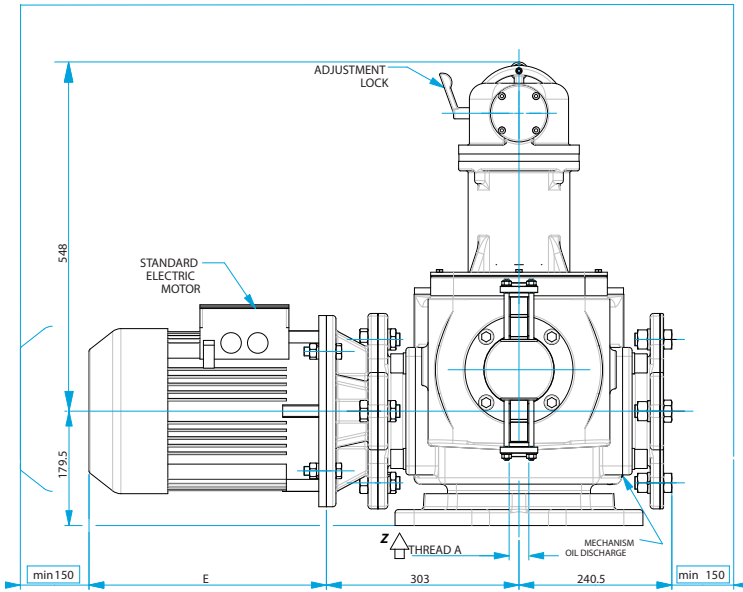
1°	Number of pump head					
1	Simplex pump					
2°	Type of pump head (double diaphragm or packed-plunger)					
K	Packed plunger with square section rings					
3°/4°	Plunger diameter					
20÷50	20 - 25 - 35 - 50 mm					
5°/6°	Mechanism model					
N3	Stroke length 50 mm					
7°/8°	Pump head material					
	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					
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					
K	4,00 kW (230 ÷ 400Vac)					
L	5,50 kW (400 ÷ 690Vac)					
M	7,50 kW (400 ÷ 690Vac)					
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	20	N3	1A	B	7	M	F	6	K	F	0
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HYDRAULIC CHARACTERISTICS

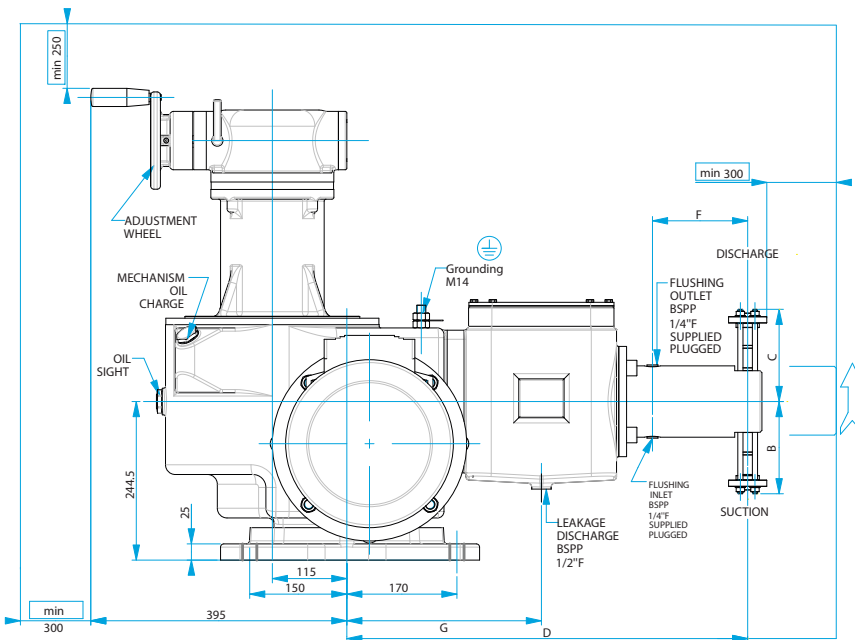
Performances:										50 Hz		60Hz																	
				56/655		l/h		gph		18,5/218		<i>Liquid end material</i>																	
				200/76		bar		p.s.i.		2900/1102		316L																	
				Flow rate at max pressure		Max speed		Flow rate at max pressure		Max speed		<i>Electric motor kW</i>																	
												4,0		5,5		7,5		Suc/Dis Conec											
												K		L		M													
<i>Pump Model</i>										<i>Max pressure</i>						Ø BSPP		NPSHr [barg]											
				lph		gph	Strokes /min		lph		gph	Strokes /min		bar					p.s.i.		bar		p.s.i.						
1	K	2	0	N	3	1	A	B	7	M	F	6	K	F	0	56	15	62	67	18	74	200	2900	-	-	-	-	1/2" F	-0,50
1	K	2	0	N	3	1	A	B	7	M	D	6	L	F	0	70	18	78	84	22	94	-	-	200	2900	-	-	1/2" F	-0,50
1	K	2	0	N	3	1	A	B	7	M	F	4	M	F	0	83	22	93	100	26	112	-	-	-	-	200	2900	1/2" F	-0,50
1	K	2	0	N	3	1	A	B	7	M	D	4	M	F	0	105	28	117	126	33	140	-	-	-	-	200	2900	1/2" F	-0,50
1	K	2	5	N	3	1	A	B	7	M	F	6	K	F	0	87	23	62	104	27	74	200	2900	-	-	-	-	3/4" F	-0,50
1	K	2	5	N	3	1	A	B	7	M	D	6	L	F	0	109	29	78	131	35	94	-	-	200	2900	-	-	3/4" F	-0,50
1	K	2	5	N	3	1	A	B	7	M	F	4	M	F	0	130	34	93	156	41	112	-	-	-	-	200	2900	3/4" F	-0,50
1	K	2	5	N	3	1	A	B	7	M	D	4	M	F	0	164	43	117	197	52	140	-	-	-	-	200	2900	3/4" F	-0,50
1	K	3	5	N	3	1	A	B	7	M	F	6	K	F	0	170	45	62	204	54	74	156	2262	-	-	-	-	3/4" F	-0,50
1	K	3	5	N	3	1	A	B	7	M	D	6	L	F	0	214	57	78	257	68	94	-	-	156	2262	-	-	3/4" F	-0,50
1	K	3	5	N	3	1	A	B	7	M	F	4	M	F	0	255	67	93	306	81	112	-	-	-	-	156	2262	3/4" F	-0,50
1	K	3	5	N	3	1	A	B	7	M	D	4	M	F	0	321	85	117	385	102	140	-	-	-	-	156	2262	3/4" F	-0,50
1	K	5	0	N	3	1	A	B	7	M	F	6	K	F	0	347	92	62	416	110	74	76	1102	-	-	-	-	1" F	-0,50
1	K	5	0	N	3	1	A	B	7	M	D	6	L	F	0	436	115	78	523	138	94	-	-	76	1102	-	-	1" F	-0,50
1	K	5	0	N	3	1	A	B	7	M	F	4	M	F	0	520	137	93	624	165	112	-	-	-	-	76	1102	1" F	-0,50
1	K	5	0	N	3	1	A	B	7	M	D	4	M	F	0	655	173	117	786	208	140	-	-	-	-	76	1102	1" F	-0,50

Test with water @ 20°C.

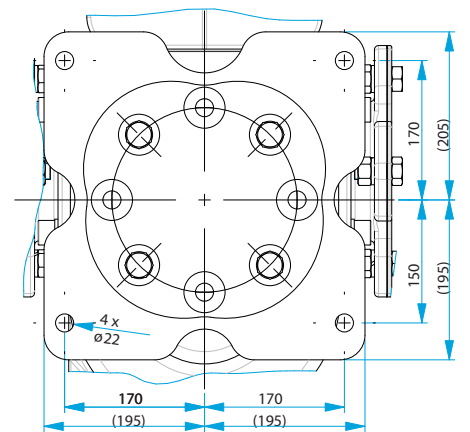


Allowable loads referred to pump nozzles

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	G	
1K20N21AB..	BSPP 1/2"F	142	142	619	147	301	106
1K25N21AB..	BSPP 3/4"F	178	178	619	147	301	107
1K35N21AB..	BSPP 3/4"F	178	178	619	146	301	107
1K50N21AB..	BSPP 1"F	233	233	607	139	301	109

Electric motor size	4 Poles kw	6 Poles kw	TEFC 1xM20x1.5		EExD 1xM25x1.5	
			E	kg	E	kg
132	5.50*	4.00*	435	78	585	95
132	7.50*	5.50*	435	78	585	95

* for motor voltage detail refer to Pump Key Code