

Technical characteristics

- Flow rates: from 347 to 4426 lph @ 50Hz
- Max Pressure: 4 MPa (40 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

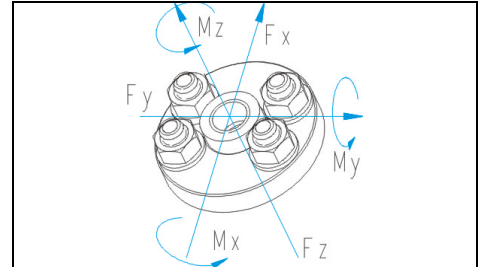
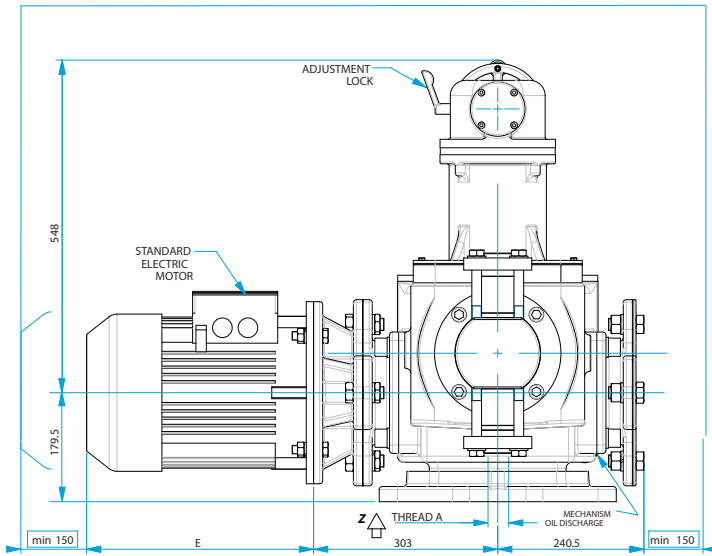
1°	Number of pump head					
1	Simplex pump					
2°	Type of pump head (double diaphragm or packed-plunger)					
P	Packed plunger with square section rings					
3°/4°	Plunger diameter					
50÷D0	50 - 70 - A0(100) - D0(130) mm					
5°/6°	Mechanism model					
N3	Stroke length 50 mm					
7°/8°	Pump head material					
	HEAD	PLUNGER	SEAL PACK	BALL	VALVE SEAL	VALVE SEAT
7Y	316SS	316SS	PTFE	316SS	316SS	316SS
9°	Valve type					
A	Single ball					
B	Double balls					
F	Wing					
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					
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	P	50	N3	7Y	B	7	M	F	6	K	F	0
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HYDRAULIC CHARACTERISTICS

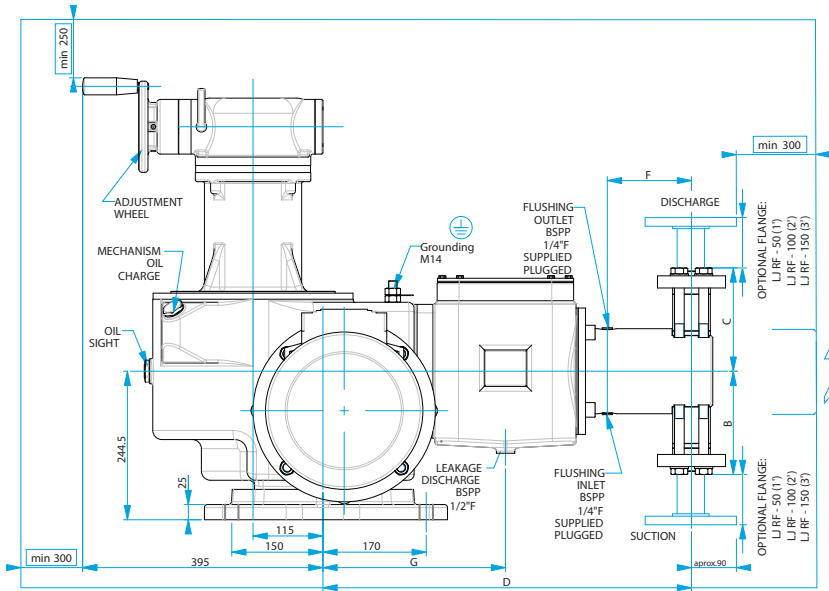
Performances:										50 Hz		60Hz																	
				347/4426 40/11		l/h bar		gph p.s.i.		116/1477 580/160		Liquid end material				316L													
				Flow rate at max pressure		Max speed		Flow rate at max pressure		Max speed		Electric motor kW																	
												4,00 K		5,50 L		7,50 M		Suc/Dis Connec											
Pump Model				lph		gph		Strokes /min		lph		gph		Strokes /min		Max pressure						Ø BSPP		NPSHr [barg]					
																bar		p.s.i.		bar						p.s.i.		bar	
1	P	5	0	N	3	7	Y	B	7	M	F	6	K	F	0	347	92	62	416	110	74	40	580	-	-	-	-	1" F	-0.50
1	P	5	0	N	3	7	Y	B	7	M	D	6	L	F	0	436	115	78	523	138	94	-	-	40	580	-	-	1" F	-0.50
1	P	5	0	N	3	7	Y	B	7	M	F	4	M	F	0	520	137	93	624	165	112	-	-	-	-	40	580	1" F	-0.50
1	P	5	0	N	3	7	Y	B	7	M	D	4	M	F	0	655	173	117	786	208	140	-	-	-	-	40	580	1" F	-0.50
1	P	7	0	N	3	7	Y	A	7	M	F	6	K	F	0	680	180	62	816	216	74	38	551	-	-	-	-	1" F	-0.50
1	P	7	0	N	3	7	Y	A	7	M	D	6	L	F	0	856	226	78	1027	271	94	-	-	38	551	-	-	1" F	-0.50
1	P	7	0	N	3	7	Y	A	7	M	F	4	M	F	0	1020	269	93	1224	323	112	-	-	-	-	38	551	1" F	-0.50
1	P	7	0	N	3	7	Y	A	7	M	D	4	M	F	0	1283	339	117	1540	407	140	-	-	-	-	38	551	1" F	-0.50
1	P	A	0	N	3	7	Y	A	7	M	F	6	K	F	0	1388	367	62	1666	440	74	18	261	-	-	-	-	2" F	-0.50
1	P	A	0	N	3	7	Y	A	7	M	D	6	L	F	0	1746	461	78	2095	553	94	-	-	18	261	-	-	2" F	-0.50
1	P	A	0	N	3	7	Y	A	7	M	F	4	M	F	0	2082	550	93	2498	660	112	-	-	-	-	18	261	2" F	-0.50
1	P	A	0	N	3	7	Y	A	7	M	D	4	M	F	0	2619	692	117	3143	830	140	-	-	-	-	18	261	2" F	-0.50
1	P	D	0	N	3	7	Y	F	7	M	F	6	K	F	0	2345	619	62	2814	743	74	11	160	-	-	-	-	3" F	-0.50
1	P	D	0	N	3	7	Y	F	7	M	D	6	L	F	0	2951	780	78	3541	935	94	-	-	11	160	-	-	3" F	-0.50
1	P	D	0	N	3	7	Y	F	7	M	F	4	M	F	0	3518	929	93	4222	1115	112	-	-	-	-	11	160	3" F	-0.50
1	P	D	0	N	3	7	Y	F	7	M	D	4	M	F	0	4426	1169	117	5311	1403	140	-	-	-	-	11	160	3" F	-0.50

Test with water @ 20°C.

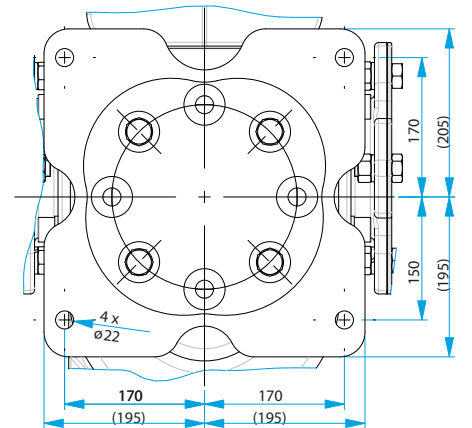


Allowable loads referred to pump nozzles

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)	OPTIONAL FLANGE ANSI 300 MAX. TEMP. 38°C MAX. PRESSURE 40BAR SIZE
	A (EN10226)	B	C	D	F	G		
1P50N37YB..	BSPP 1" F	170	170	607	139	301	355	1"
1P70N37YA..	BSPP 1" F	233	233	607	139	301	350	1"
1PA0N37YA..	BSPP 2" F	230	230	600	131	301	383	2"
1PD0N37YA..	BSPP 3" F	254	254	614	146	301	408	3"

Electric motor size	4 Poles kw	6 Poles kw	TEFC 1xM20x1.5		EExde 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