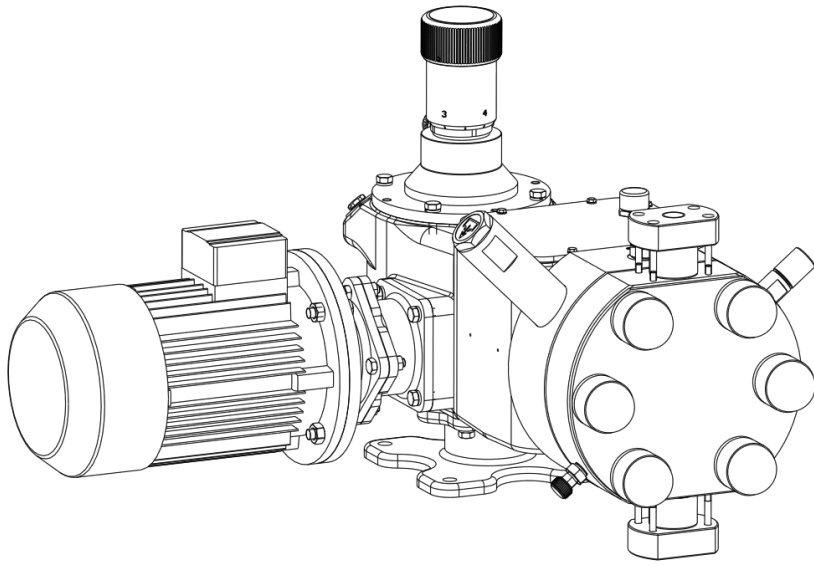



## Technical characteristics



- Flow rates: from 58 to 1258 lph @ 50Hz
- Max Pressure: 20 bar (12 bar with plunger diameter of 70 mm)
- Ambient temperature: -10 °C + 40 °C
- Max altitude: 1000 m (A.S.L.)
- Fluid operating temperature: -5 °C + 50 °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
- Built-in overpressure valve
- Double diaphragm and diagnostic of the rupture
- Diaphragm duration up to 20.000 hours, depending of the application
- Multiheads (up to six) solutions
- API 675 compliance
- CE marking
- ATEX  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.

## Diaphragm Pumphead

- High capacity flexibility → On site easy volume changing by changing the piston cartridge
- Easy to change spare parts (all “one cartridge” solution).
- Maximum compatibility PTFE diaphragm
- Visual or remote diaphragm failure detection

### PUMP KEY CODE

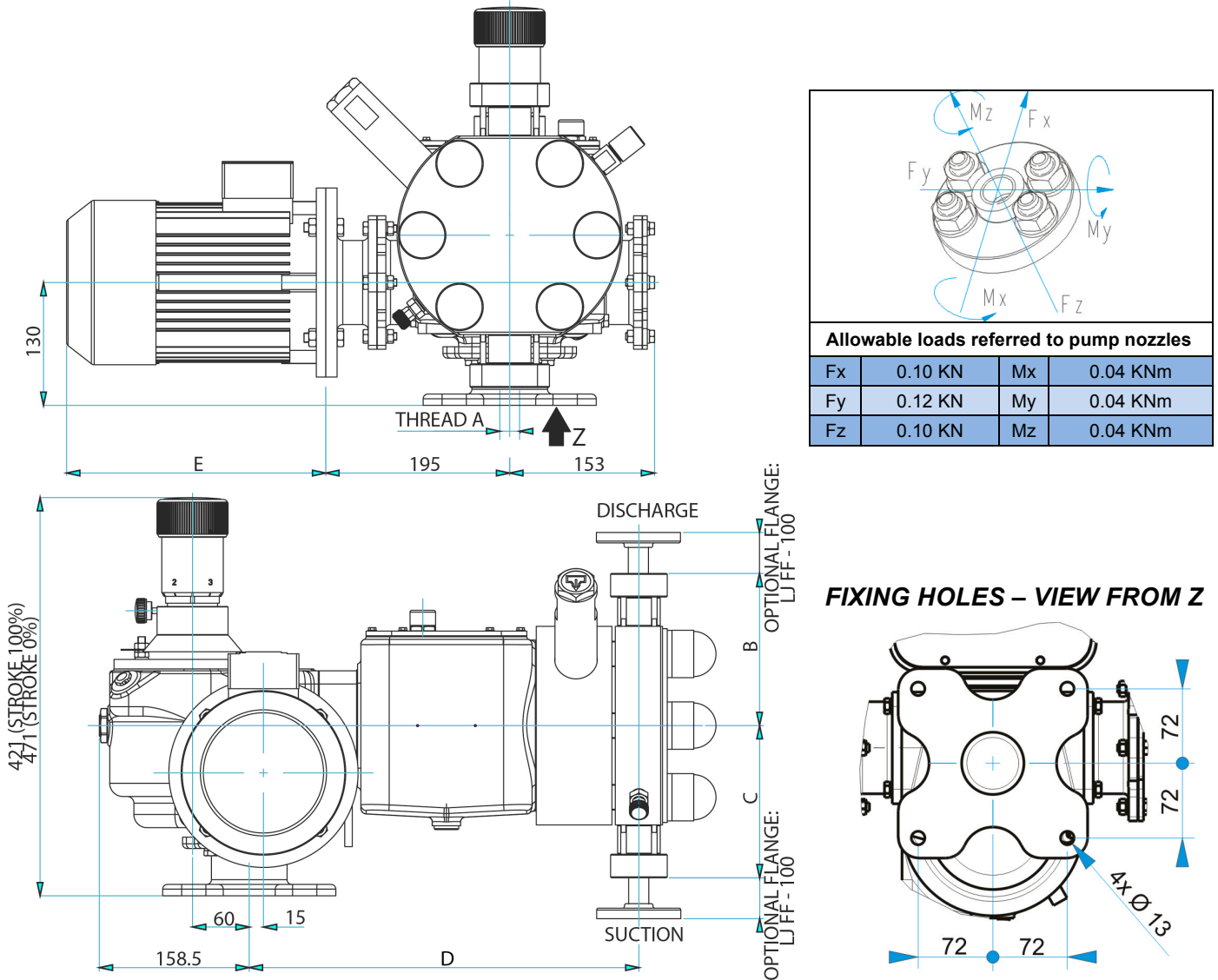
1°	Number of pump head				
1	Simplex pump				
2°	Type of pump head (double diaphragm or packed-plunger)				
Y	Double diaphragm with built-in overpressure valve, air-bleed valve and mechanically actuated oil replenishing				
3°/4°	Plunger diameter				
30=70	from 30 to 70 mm				
5°/6°	Mechanism model				
N1	Stroke length 25 mm				
7°/8°	Pump head material				
4J	HEAD	DIAPHRAGM	BALL	VALVE SEAL	VALVE SEAT
	PVDF	PTFE	CERAMIC	FPM	FPM
9°	Valve type				
A	Single ball				
B	Double balls				
10°	General options				
7	Standard execution				
F	Flanged connections (UNI EN 1092-1)				
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				
2	2 poles (not available ATEX version)				
4	4 poles				
6	6 poles				
14°	Installed power				
E	0,55 kW				
F	0,75 kW				
G	1,10 kW				
I	2,20 kW				
15°	Pump head options				
V	Visual diaphragm failure detection (Standard execution)				
R	Remote diaphragm failure detection				
16°	Mechanism options				
0	Standard execution				
5	Compliance with regulation "ATEX" 94/4/CE II 2 G c IIB T4 (for zone 1)				

1	Y	30	N1	4J	B	7	M	F	6	E	V	0
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### HYDRAULIC CHARACTERISTICS

Performances:		50 Hz		60Hz						Liquid end material								
		58/1258 20/12		l/h bar		gph p.s.i.		18/399 290/174				PVDF						
		Flow rate at max pressure		Max speed		Flow rate at max pressure		Max speed		Electric motor kW				Suc/Dis Connec				
										0,55 E		0,75 F		1,10 G		2,20 I		
Pump Model			Strokes /min			Strokes /min			Max pressure								Ø BSSP	NPSHr [barg]
	lph	gph	lph	gph	lph	gph	lph	gph	bar	p.s.i.	bar	p.s.i.	bar	p.s.i.	bar	p.s.i.		
1Y30N14JB7M:6E:V0	58	15	62	70	18	74	20	290	-	-	-	-	-	-	-	-	1/2" F	-0.60
1Y30N14JB7M:6E:V0	74	20	78	89	24	94	20	290	-	-	-	-	-	-	-	-	1/2" F	-0.60
1Y30N14JB7M:4E:V0	88	23	93	106	28	112	20	290	-	-	-	-	-	-	-	-	1/2" F	-0.60
1Y30N14JB7M:4E:V0	111	29	117	133	35	140	20	290	-	-	-	-	-	-	-	-	1/2" F	-0.60
1Y40N14JA7M:6E:V0	109	29	62	131	35	74	20	290	-	-	-	-	-	-	-	-	1/2" F	-0.65
1Y40N14JA7M:6E:V0	136	36	78	163	43	94	20	290	-	-	-	-	-	-	-	-	1/2" F	-0.65
1Y40N14JA7M:4E:V0	161	43	93	193	51	112	20	290	-	-	-	-	-	-	-	-	1/2" F	-0.65
1Y40N14JA7M:4E:V0	201	53	117	241	64	140	20	290	-	-	-	-	-	-	-	-	1/2" F	-0.65
1Y50N14JA7M:6F:V0	170	45	62	204	54	74	-	-	20	290	-	-	-	-	-	-	1/2" F	-0.65
1Y50N14JA7M:6F:V0	214	57	78	257	68	94	-	-	20	290	-	-	-	-	-	-	1/2" F	-0.65
1Y50N14JA7M:4G:V0	254	67	93	305	81	112	-	-	-	-	20	290	-	-	-	-	1/2" F	-0.65
1Y50N14JA7M:4G:V0	320	85	117	384	101	140	-	-	-	-	20	290	-	-	-	-	1/2" F	-0.65
1Y70N14JA7M:6F:V0	336	89	62	403	106	74	-	-	12	174	-	-	-	-	-	-	1" F	-0.65
1Y70N14JA7M:6F:V0	421	111	78	505	133	94	-	-	12	174	-	-	-	-	-	-	1" F	-0.65
1Y70N14JA7M:4G:V0	501	132	93	601	159	112	-	-	-	-	12	174	-	-	-	-	1" F	-0.65
1Y70N14JA7M:4G:V0	629	166	117	755	199	140	-	-	-	-	12	174	-	-	-	-	1" F	-0.65
1Y70N14JA7M:2I:V0	996	263	186	1195	316	223	-	-	-	-	-	-	12	174	-	-	1" F	0.00
1Y70N14JA7M:2I:V0	1258	332	235	1510	399	282	-	-	-	-	-	-	12	174	-	-	1" F	0.00

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

PUMP MDEL	DIMENSIONS [mm]				EXTIMATED WEIGHT Kg (without motor)	OPTIONAL FLANGE PN16 MAX. TEMP. 40°C SIZE
	A (EN10226)	B	C	D		
1Y30N14JB..	BSPP 1/2"F	187	187	407	73	DN15
1Y40N14JA..	BSPP 1/2"F	161	161	412	74	DN15
1Y50N14JA..	BSPP 1/2"F	161	161	412	74	DN15
1Y70N14JA..	BSPP 1"F	219	219	430	88	DN25

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