


### Technical characteristics

- Flow rates: from 0,594 to 97,3 lph @ 50 Hz
- 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
- 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 spares parts (all “one cartridge” solution).
- Maximum compatibility PTFE diaphragm
- Visual or remote diaphragm failure detection

### PUMP KEY CODE

<b>1°</b>	Number of pump head										
1	Simplex pump										
<b>2°</b>	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										
<b>3°/4°</b>	Plunger diameter										
06+35	from 6 to 35 mm										
<b>5°/6°</b>	Mechanism model										
NO	Stroke length 10 mm										
<b>7°/8°</b>	Pump head material										
2F	HEAD	DIAPHRAGM	BALL	VALVE SEAL	VALVE SEAT						
	316SS	PTFE	316SS	316SS	316SS						
<b>9°</b>	Valve type										
A	Single ball										
B	Double balls										
C	Triple balls										
<b>10°</b>	General options										
7	Standard execution										
F	Flanged connections ANSI B16.5										
<b>11°</b>	Flow rate adjustment										
M	Manual with adjustment knob (Standard execution)										
E	Electric actuator										
P	Pneumatic actuator										
<b>12°</b>	Gear ratio										
F	1:15										
I	1:20										
L	1:25										
<b>13°</b>	Electric motors poles										
2	2 poles (not available ATEX version)										
4	4 poles										
6	6 poles										
<b>14°</b>	Installed power										
B	0,18 kW										
<b>15°</b>	Pump head options										
V	Visual diaphragm failure detection (Standard execution)										
R	Remote diaphragm failure detection										
<b>16°</b>	Mechanism options										
0	Standard execution										
5	Compliance with regulation "ATEX" 94/4/CE II 2 G c IIB T4 (for zone 1)										

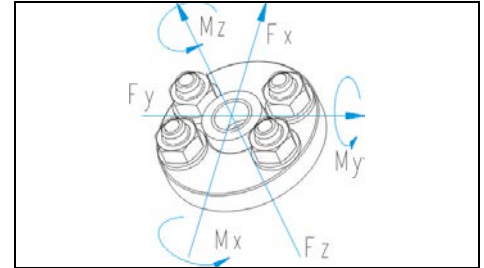
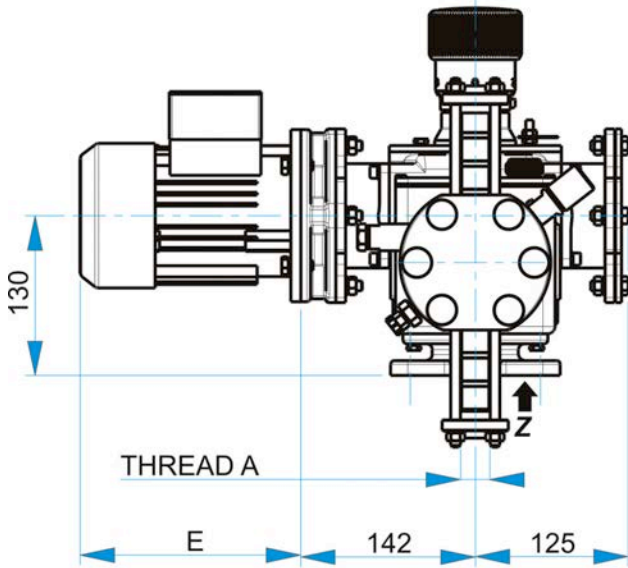
  

1	Y	06	NO	2F	C	7	M	L	6	B	V	0
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### HYDRAULIC CHARACTERISTICS

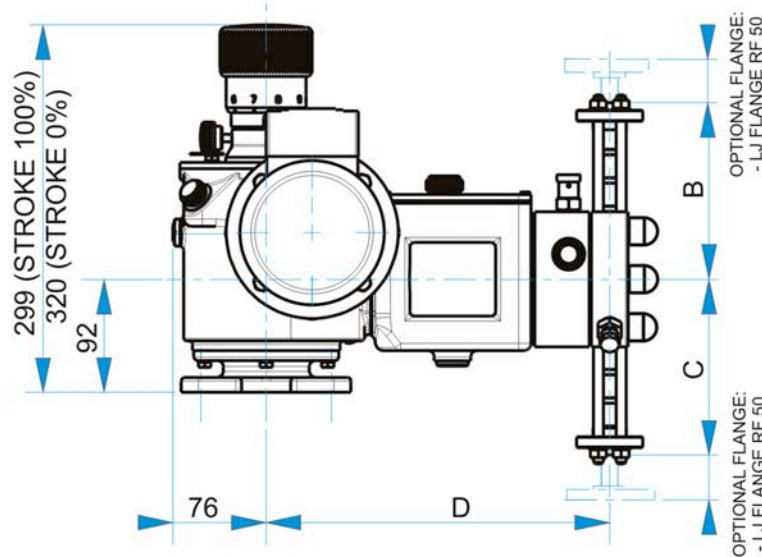
Performances:												50 Hz		60Hz		Liquid end material		316L	
0,594/97,3 40/16				l/h bar		gph p.s.i.		0,188/30,9 580/232											
Flow rate at max pressure				Max speed		Flow rate at max pressure		Max speed		Electric motor kW 0,18 B		Suc/Dis Connec							
Pump Model			Strokes			Strokes			Max pressure		Ø BSPP	NPSHr [barg]							
			lph	gph	/min	lph	gph	/min	bar	p.s.i.									
1Y06N02FC7ML6BV0	0,594	0,157	37	0,713	0,188	44	40	580	1/4" F	-0,40									
1Y06N02FC7ML6BV0	0,709	0,187	47	0,851	0,225	56	40	580	1/4" F	-0,40									
1Y06N02FC7ML4BV0	0,812	0,215	56	0,974	0,257	67	40	580	1/4" F	-0,40									
1Y06N02FC7MI4BV0	0,972	0,257	70	1,166	0,308	84	40	580	1/4" F	-0,40									
1Y06N02FC7MF4BV0	1,235	0,326	93	1,482	0,392	112	40	580	1/4" F	-0,40									
1Y06N02FC7ML2BV0	1,453	0,384	112	1,744	0,461	134	40	580	1/4" F	-0,40									
1Y08N02FC7ML6BV0	0,98	0,26	47	1,18	0,31	56	40	580	1/4" F	-0,45									
1Y08N02FC7ML4BV0	1,19	0,31	56	1,43	0,38	67	40	580	1/4" F	-0,45									
1Y08N02FC7MI4BV0	1,52	0,40	70	1,82	0,48	84	40	580	1/4" F	-0,45									
1Y08N02FC7MF4BV0	2,06	0,54	93	2,47	0,65	112	40	580	1/4" F	-0,45									
1Y08N02FC7ML2BV0	2,51	0,66	112	3,01	0,80	134	40	580	1/4" F	-0,45									
1Y10N02FC7ML6BV0	1,51	0,40	47	1,81	0,48	56	40	580	1/4" F	-0,50									
1Y10N02FC7ML4BV0	1,94	0,51	56	2,33	0,62	67	40	580	1/4" F	-0,50									
1Y10N02FC7MI4BV0	2,62	0,69	70	3,14	0,83	84	40	580	1/4" F	-0,50									
1Y10N02FC7MF4BV0	3,73	0,99	93	4,48	1,18	112	40	580	1/4" F	-0,50									
1Y10N02FC7ML2BV0	4,65	1,23	112	5,58	1,47	134	40	580	1/4" F	-0,50									
1Y12N02FC7ML6BV0	2,73	0,72	47	3,28	0,87	56	40	580	1/4" F	-0,40									
1Y12N02FC7ML4BV0	3,27	0,86	56	3,92	1,04	67	40	580	1/4" F	-0,40									
1Y12N02FC7MI4BV0	4,11	1,09	70	4,93	1,30	84	40	580	1/4" F	-0,40									
1Y12N02FC7MF4BV0	5,49	1,45	93	6,59	1,74	112	40	580	1/4" F	-0,40									
1Y12N02FC7ML2BV0	6,64	1,75	112	7,97	2,11	134	40	580	1/4" F	-0,40									
1Y15N02FB7ML6BV0	4,41	1,16	47	5,29	1,40	56	40	580	1/4" F	-0,45									
1Y15N02FB7ML4BV0	5,21	1,38	56	6,25	1,65	67	40	580	1/4" F	-0,45									
1Y15N02FB7MI4BV0	6,47	1,71	70	7,76	2,05	84	40	580	1/4" F	-0,45									
1Y15N02FB7MF4BV0	8,53	2,25	93	10,24	2,71	112	40	580	1/4" F	-0,45									
1Y15N02FB7ML2BV0	10,23	2,70	112	12,28	3,24	134	40	580	1/4" F	-0,45									
1Y20N02FB7ML6BV0	8,0	2,1	47	9,6	2,5	56	40	580	1/4" F	-0,60									
1Y20N02FB7ML4BV0	9,5	2,5	56	11,4	3,0	67	40	580	1/4" F	-0,60									
1Y20N02FB7MI4BV0	12,0	3,2	70	14,4	3,8	84	40	580	1/4" F	-0,60									
1Y20N02FB7MF4BV0	16,0	4,2	93	19,2	5,1	112	40	580	1/4" F	-0,60									
1Y20N02FB7ML2BV0	19,3	5,1	112	23,2	6,1	134	40	580	1/4" F	-0,60									
1Y25N02FB7ML6BV0	10,2	2,7	37	12,2	3,2	44	39	566	1/4" F	-0,40									
1Y25N02FB7MI6BV0	12,9	3,4	47	15,5	4,1	56	39	566	1/4" F	-0,40									
1Y25N02FB7ML4BV0	15,3	4,0	56	18,4	4,9	67	39	566	1/4" F	-0,40									
1Y25N02FB7MI4BV0	19,1	5,0	70	22,9	6,0	84	39	566	1/4" F	-0,40									
1Y25N02FB7MF4BV0	25,3	6,7	93	30,4	8,0	112	39	566	1/4" F	-0,40									
1Y25N02FB7ML2BV0	30,4	8,0	112	36,5	9,6	134	39	566	1/4" F	-0,40									
1Y30N02FA7ML6BV0	14,7	3,9	37	17,6	4,6	44	27	392	1/4" F	-0,45									
1Y30N02FA7MI6BV0	18,6	4,9	47	22,3	5,9	56	27	392	1/4" F	-0,45									
1Y30N02FA7ML4BV0	22,1	5,8	56	26,5	7,0	67	27	392	1/4" F	-0,45									
1Y30N02FA7MI4BV0	27,6	7,3	70	33,1	8,7	84	27	392	1/4" F	-0,45									
1Y30N02FA7MF4BV0	36,6	9,7	93	43,9	11,6	112	27	392	1/4" F	-0,45									
1Y30N02FA7ML2BV0	44,0	11,6	112	52,8	13,9	134	27	392	1/4" F	-0,45									
1Y35N02FA7ML6BV0	20,0	5,3	37	24,0	6,3	44	19	276	1/4" F	-0,65									
1Y35N02FA7MI6BV0	25,2	6,7	47	30,2	8,0	56	19	276	1/4" F	-0,65									
1Y35N02FA7ML4BV0	29,9	7,9	56	35,9	9,5	67	19	276	1/4" F	-0,65									
1Y35N02FA7MI4BV0	37,2	9,8	70	44,6	11,8	84	19	276	1/4" F	-0,65									
1Y35N02FA7MF4BV0	49,1	13,0	93	58,9	15,6	112	19	276	1/4" F	-0,65									
1Y35N02FA7ML2BV0	58,9	15,6	112	70,7	18,7	134	18	261	1/4" F	-0,65									
1Y35N02FA7MI2BV0	73,4	19,4	140	88,1	23,3	168	16	232	1/4" F	0,00									
1Y35N02FA7MF2BV0	97,3	25,7	186	116,8	30,9	223	16	232	1/4" F	0,00									

Test with water @ 20°C.

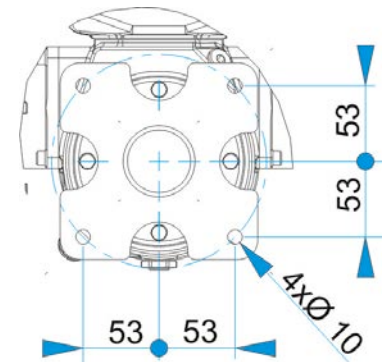


Allowable loads referred to pump nozzles

Fx	0.10 kN	Mx	0.04 kNm
Fy	0.12 kN	My	0.04 kNm
Fz	0.10 kN	Mz	0.04 kNm



**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	B	C	D		
1Y06N02FC..	BSPP 1/4"F	144	144	282	30	1/2"
1Y08N02FC..	BSPP 1/4"F	144	144	282	30	1/2"
1Y10N02FC..	BSPP 1/4"F	144	144	282	30	1/2"
1Y12N02FC..	BSPP 1/4"F	149	149	279	30,5	1/2"
1Y15N02FB..	BSPP 1/4"F	126	126	279	30,5	1/2"
1Y20N02FB..	BSPP 1/4"F	149	149	279	30,5	1/2"
1Y25N02FB..	BSPP 1/4"F	163	163	279	33,5	1/2"
1Y30N02FA..	BSPP 1/4"F	128	128	279	33,5	1/2"
1Y35N02FA..	BSPP 1/4"F	128	128	279	33,5	1/2"

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