

Technical characteristics

- Flow rates: from 43,5 to 293 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
- 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 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.

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

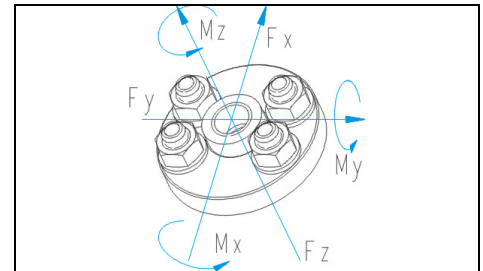
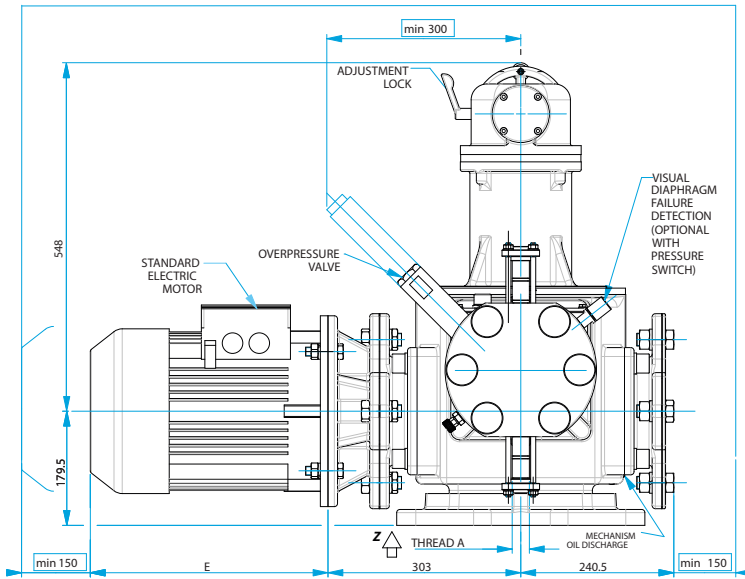
1°	Number of pump head				
1	Simplex pump				
2°	Type of pump head (double diaphragm or packed-plunger)				
H	Double diaphragm with built-in overpressure valve, air-bleed valve and mechanically actuated oil replenishing				
3°/4°	Plunger diameter				
20÷35	20 - 25 - 35 mm				
5°/6°	Mechanism model				
N3	Stroke length 50 mm				
7°/8°	Pump head material				
	HEAD	DIAPHRAGM	BALL	VALVE SEAL	VALVE SEAT
2F	316SS	PTFE	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				
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	H	20	N3	2F	B	7	M	F	6	K	V	0
---	---	----	----	----	---	---	---	---	---	---	---	---

HYDRAULIC CHARACTERISTICS

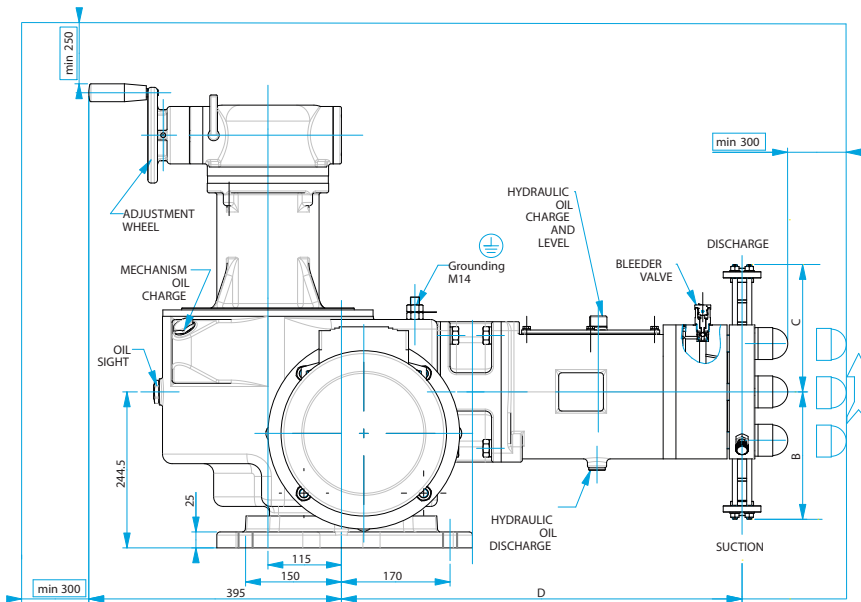
Performances:										50 Hz		60Hz																	
				43,5/293 200/156		l/h bar		gph p.s.i.		13,8/93 2900/2262		Liquid end material				316L													
		Flow rate at max pressure		Max speed		Flow rate at max pressure		Max speed		Electric motor kW						Suc/Dis Connec													
										4,0 K		5,5 L		7,5 M															
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		p.s.i.					
1	H	2	0	N	3	2	F	B	7	M	F	6	K	V	0	43,5	11,5	62	52,2	13,8	74	200	2900	-	-	-	-	1/2" F	-0,70
1	H	2	0	N	3	2	F	B	7	M	D	6	K	V	0	54,4	14,4	78	65,3	17,3	94	200	2900	-	-	-	-	1/2" F	-0,70
1	H	2	0	N	3	2	F	B	7	M	F	4	L	V	0	64,7	17,1	93	77,6	20,5	112	-	-	200	2900	-	-	1/2" F	-0,70
1	H	2	0	N	3	2	F	B	7	M	D	4	L	V	0	81,1	21,4	117	97,3	25,7	140	-	-	200	2900	-	-	1/2" F	-0,70
1	H	2	5	N	3	2	F	A	7	M	F	6	K	V	0	73	19	62	87	23	74	200	2900	-	-	-	-	3/4" F	-0,70
1	H	2	5	N	3	2	F	A	7	M	D	6	K	V	0	90	24	78	108	29	94	200	2900	-	-	-	-	3/4" F	-0,70
1	H	2	5	N	3	2	F	A	7	M	F	4	L	V	0	107	28	93	128	34	112	-	-	200	2900	-	-	3/4" F	-0,70
1	H	2	5	N	3	2	F	A	7	M	D	4	L	V	0	134	35	117	160	42	140	-	-	200	2900	-	-	3/4" F	-0,70
1	H	3	5	N	3	2	F	A	7	M	F	6	K	V	0	156	41	62	187	50	74	156	2262	-	-	-	-	3/4" F	-0,60
1	H	3	5	N	3	2	F	A	7	M	D	6	L	V	0	196	52	78	235	62	94	-	-	156	2262	-	-	3/4" F	-0,60
1	H	3	5	N	3	2	F	A	7	M	F	4	L	V	0	233	62	93	280	74	112	-	-	156	2262	-	-	3/4" F	-0,60
1	H	3	5	N	3	2	F	A	7	M	D	4	M	V	0	293	77	117	352	93	140	-	-	-	-	156	2262	3/4" F	-0,60

Test with water @ 20°C.

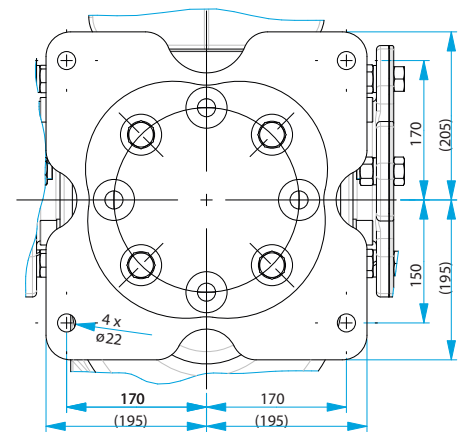


Allowable loads referred to pump nozzles

F _x	0.10 kN	M _x	0.04 kNm
F _y	0.12 kN	M _y	0.04 kNm
F _z	0.10 kN	M _z	0.04 kNm



FIXING HOLES – VIEW FROM Z



PUMP MDEL	DIMENSIONS [mm]				EXTIMATED WEIGHT kg (without motor)
	A (EN10226)	B	C	D	
1H20N32FB..	BSPP 1/2"F	200	200	627	335
1H25N32FB..	BSPP 3/4"F	238	238	632	340
1H35N22FB..	BSPP 3/4"F	238	238	632	340

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