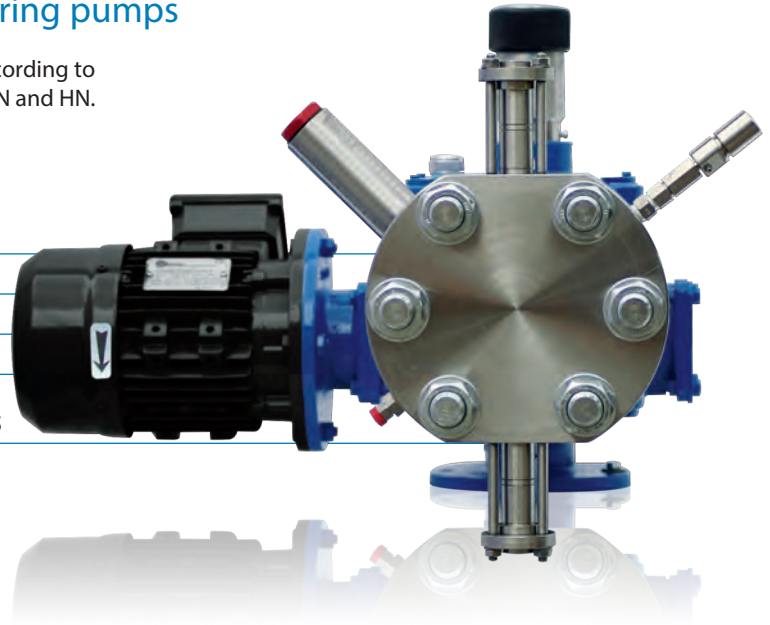


# Nexa Series

## Hydraulic Double Diaphragm Metering pumps

A line hydraulic diaphragm metering pumps designed according to the **API 675 Standards**, It includes three subseries: YN, TN and HN.

■ FLOW RATE	up to 9000 l/h
■ MAX PRESSURE	up 200 bar
■ FLUID TEMPERATURE	-10-70°C
■ CONTACT MATERIALS	SS316L; PP; PVDF
■ COMPLIANCE	STANDARD ACCORDING TO API 675



NEXA series hydraulic diaphragm dosing pumps are 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.

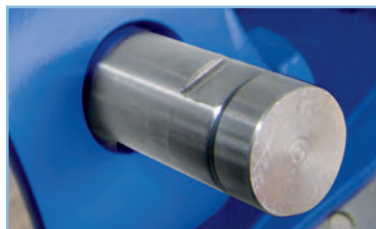
### Main characteristics:

- Low noise integral gearbox, worm type, oil bath lubricated
- Reduced energy consumption based on low friction rolling bearings design
- Micrometric stroke length adjustment both manually and/or automatically actuated.
- Automatic stroke length variation by electrical servomotor or frequency converter
- Linearity and repeatability in compliance with API 675 Standards.
- Easy “on field” installation of electrical servomotor on manual stroke adjustment mechanism.
- can be equipped with explosive-proof motor and frequency conversion motor.



### Venting system

Aside from guaranteeing automatic venting during operation, the venting system also facilitates the pump priming by favouring the air purge by means of a manual action.



### Pressure relief valve

Protects the pump against unexpected overpressure.



### Cartridge valves

In order to ensure maximum dosing precision, even for small flow rates, double and triple ball configurations are available with high precision seats. The metal gaskets for the SS316L stainless steel heads, and the FPM gaskets for those in plastic, guarantee maximum compatibility.

## YN, TN, HN: Hydraulic double diaphragm heads

The ideal solution for applications requiring high levels of operational safety and reliability

- Zero leakage; can dose toxic, corrosive and other hazardous liquids, for which the absence of leaks is fundamental
- Double diaphragm, double protection; if one of the two diaphragms is damaged, the protection system immediately signals the anomaly; the pump is nevertheless permitted to continue to operate, thereby preventing immediate downtime
- Flexibility of use; the PTFE diaphragms are compatible with a vast assortment of liquids
- Solid suspensions; the diaphragm's proper positioning is ensured by a mechanical system which does not require the use of perforated shields on the process side, thereby allowing for liquids containing solid suspensions to be pumped.
- Construction materials; the parts in the standard configuration that make contact with the liquid are made from AISI 316L stainless steel, PP and PVDF.

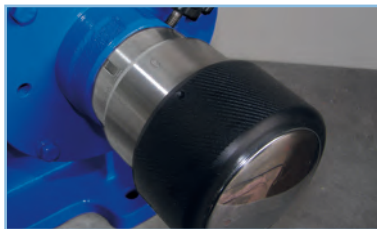
### Mechanical refilling system

Maintains a constant level of the hydraulic fluid, thereby guaranteeing maximum precision and repeatability. Keeping also under control the deformation of diaphragm thereby increasing its duration.

### Double diaphragm with rupture detector



In the event of a rupture of one of the two diaphragms, the detector activates either a local visual alarm or a pressure switch. The second diaphragms ensure the continued operation of the pump. This allows for scheduled maintenance.



### Flow Rate adjustment

- Easy to handle knob with high visibility nonius for the best flow adjustment.
- Optionally automatic variation by electrical actuators **AKTUA**.

The electrical actuators **AKTUA** were designed to replace the manual adjusting device of the flow, on the pump, with an automatic system, remotely controllable, which acts on the length of the stroke of the pump, directly in the field.

- Internal display 4-digit, 7-segment display.
- Calibration can also be executed with system running.
- Available in standard version for installation in areas not classified, or ATEX compliant for installation in hazardous areas.



## Applications

Water treatment and Industrial sectors

- Municipalities
- Wastewater
- Chemical
- Food & Beverages
- Detergents
- Power Generation
- Environment
- Petrochemical
- Pharmaceutical
- Paper
- Textile

## Accessories

- Flow rate calibration pots
- Pulsation dampers
- Safety valves
- Back pressure valves

## Options

- Flanged connections
- Heated or cooled heads
- Transmission of the diaphragm rupture signal

## Nexa YN0

LIQUID END MATERIAL		PP/PVC				
PLUNGER DIAMETER	STROKE LENGHT	MAX. SPEED Strokes/min	FLOW RATE L/h	PRESSURE Bar	CONNECTION Suc/Dis (BSPP)	MOTOR kW
12	10	47	2,8	12	1/2" F	0,18
15		70	6,5			
25		93	25			
35		186	97.3			
LIQUID END MATERIAL		PVDF				
12	10	47	2,8	20	1/2" F	0,18
15		70	6,5			
25		93	25	19		
35		186	97.3			
LIQUID END MATERIAL		SS316L				
12	10	47	2,7	40	1/4" F	0,18
15		70	6,5			
25		93	25	19		
35		186	97.3			

## Nexa YN1

LIQUID END MATERIAL		PP/PVC				
PLUNGER DIAMETER	STROKE LENGHT	MAX. SPEED Strokes/min	FLOW RATE L/h	PRESSURE Bar	CONNECTION Suc/Dis (BSPP)	MOTOR kW
30	25	117	113	12	1/2" F	1,10
50		93	254			
70		117	501		1" F	
		186	629			
		235	996			
		1,258		2,20		
LIQUID END MATERIAL		PVDF				
30	25	117	111	20	1/2" F	1,10
50		93	254			
70		117	501	12	1" F	
		186	629			
		235	996			
		1,258		2,20		
LIQUID END MATERIAL		SS316L				
30	25	117	106	40	1/2" F	1,10
50		93	254	24	3/4" F	
70		117	501	12	1" F	
		186	629			
		235	996			
		1,258		2,20		

## Nexa YN2

LIQUID END MATERIAL		PP/PVC				
PLUNGER DIAMETER	STROKE LENGHT	MAX. SPEED Strokes/min	FLOW RATE L/h	PRESSURE Bar	CONNECTION Suc/Dis (BSPP)	MOTOR kW
70	35	117	865	12	1" F	2,20
90		93	1,200	11	1 1/2" F	
120		2,065	7			
			117	2,610	6	
LIQUID END MATERIAL		PVDF				
70	35	117	865	20	1" F	2,20
90		93	1,200	11	1 1/2" F	
120		2,065	7			
			117	2,610	6	
LIQUID END MATERIAL		SS316L				
70	35	117	865	20	1" F	2,20
90		93	1,200	11	2" F	
120		2,065	7			
			117	2,610	6	

# Technical Features

## Nexa YN3

LIQUID END MATERIAL		SS316L				
PLUNGER DIAMETER	STROKE LENGTH	MAX. SPEED	FLOW RATE	PRESSURE	CONNECTION	MOTOR
		Strokes/min	L/h	Bar	Suc/Dis (BSPP)	kW
130	50	78	2,600	10	3" F	5,5
		117	3,900			7,5

## Nexa YN4

LIQUID END MATERIAL		SS316L				
PLUNGER DIAMETER	STROKE LENGTH	MAX. SPEED	FLOW RATE	PRESSURE	CONNECTION	MOTOR
		Strokes/min	L/h	Bar	Suc/Dis (BSPP)	kW
130	70	117	6,000	10	3" F	18,5
		145	7,500			

high pressure up to 120 bar

## Nexa TN

LIQUID END MATERIAL		SS316L					
TYPE	PLUNGER DIAMETER	STROKE LENGTH	MAX. SPEED	FLOW RATE	PRESSURE	CONNECTION	MOTOR
			Strokes/min	L/h	Bar	Suc/Dis (BSPP)	kW
N0	12	10	93	4,5	120	1/4" F	0,18
	20		70	11,7	57		
N1	15	25	117	26,5	120	1/4" F	1,10
	20			47	68	1/2" F	
	30			99	68	1/2" F	
N2	20	35	117	70	120	1/4" F	2,20
	25			94	120	1/2" F	
	35			93	80	3/4" F	
			117	202	80	3/4" F	

high pressure up to 120 bar

## Nexa HN

LIQUID END MATERIAL		SS316L					
TYPE	PLUNGER DIAMETER	STROKE LENGTH	MAX. SPEED	FLOW RATE	PRESSURE	CONNECTION	MOTOR
			Strokes/min	L/h	Bar	Suc/Dis (BSPP)	kW
N1	10	25	117	10	200	1/4" F	1,10
	15			24			
N2	15	35	117	35,2	200	1/4" F	2,20
	20			67			

# Nyva Series

## Hydraulic diaphragm Metering pumps

A line hydraulic diaphragm metering pumps designed according to the **API 675 Standards**, It includes two subseries: SCB0 and SCB1.

■ FLOW RATE	up to 660 l/h
■ MAX PRESSURE	up 124 bar
■ FLUID TEMPERATURE	-10-70°C
■ CONTACT MATERIALS	SS316L; PVDF; PVC
■ COMPLIANCE	STANDARD ACCORDING TO API 675



## Mechanisms

**Mechanical return** type available in various sizes

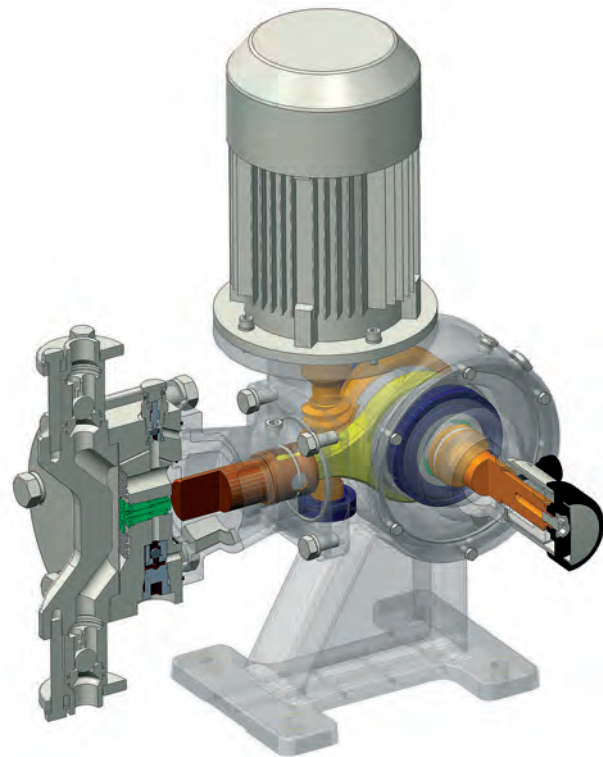
### Main characteristics:

- Internal worm gearbox, oil bath lubricated with low noise emissions
- Rotating parts on bearings to minimise power consumption
- High precision stroke adjustment, both manual and by means of an electric actuator

## Hydraulic diaphragm heads

The ideal solution for applications requiring high levels of operational safety and reliability

- Zero leakage; hermetic construction for dosing toxic, corrosive and other hazardous liquids, for which the absence of leaks is fundamental
- Protection against external pollutants which could contaminate the liquid being pumped
- Flexibility of use; the PTFE diaphragms are compatible with a vast assortment of liquids



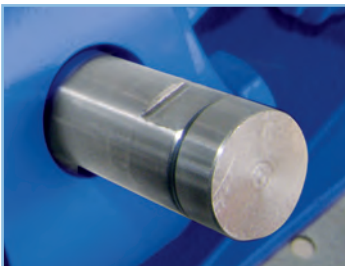
### Mechanical refilling system

Maintains a constant level of the hydraulic fluid, thereby guaranteeing maximum precision and repeatability. Keeping also under control the deformation of diaphragm thereby increasing its duration.



## Venting system

Aside from guaranteeing automatic venting during operation, the venting system also facilitates the pump priming by favouring the air purge by means of a manual action.



## Pressure relief valve

Protects the pump against unexpected overpressure.



## Cartridge valves

In order to ensure maximum dosing precision, even for small flow rates, double and triple ball configurations are available with high precision seats. The metal gaskets for the SS316L stainless steel heads, and the FPM gaskets for those in plastic, guarantee maximum compatibility.



## Flow Rate adjustment

- Easy to handle knob with high visibility nonius for the best flow adjustment.
- Optionally automatic variation by electrical actuators **AKTUA**.

The electrical actuators **AKTUA** were designed to replace the manual adjusting device of the flow, on the pump, with an automatic system, remotely controllable, which acts on the length of the stroke of the pump, directly in the field.

- Internal display 4-digit, 7-segment display.
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- Available in standard version for installation in areas not classified, or ATEX compliant for installation in hazardous areas.



## Applications

Water treatment and Industrial sectors

- Municipalities
- Wastewater
- Chemical
- Food & Beverages
- Detergents
- Power Generation
- Environment
- Petrochemical
- Pharmaceutical
- Paper
- Textile

## Accessories

- Flow rate calibration pots
- Pulsation dampers
- Safety valves
- Back pressure valves

## Nyva C B0

LIQUID END MATERIAL		PVC				
PLUNGER DIAMETER	STROKE LENGHT	MAX. SPEED	FLOW RATE	PRESSURE	CONNECTION	MOTOR
		Strokes/min	L/h	Bar	Suc/Dis (BSPP)	kW
12	10	112	6	15	1/2" F	0,18
		140	8			0,25
		186	11			0,18
20		70	12			0,18
		112	18			0,25
		186	29			0,18
30		93	34			0,18
		140	52			0,18
35		140	76			0,18
		186	97			0,25

LIQUID END MATERIAL		PVDF				
PLUNGER DIAMETER	STROKE LENGHT	MAX. SPEED	FLOW RATE	PRESSURE	CONNECTION	MOTOR
		Strokes/min	L/h	Bar	Suc/Dis (BSPP)	kW
12	10	112	6	20	1/2" F	0,18
		140	8			0,25
		186	11			0,18
20		70	12			0,18
		112	18			0,25
		186	28			0,18
30		93	33			0,18
		140	52			0,18
35		140	74			0,18
		186	96			0,25

LIQUID END MATERIAL		SS316L				
PLUNGER DIAMETER	STROKE LENGHT	MAX. SPEED	FLOW RATE	PRESSURE	CONNECTION	MOTOR
		Strokes/min	L/h	Bar	Suc/Dis (BSPP)	kW
12	10	112	3	124	1/4" F	0,18
		140	4			0,25
		186	6			0,18
20		70	9	40		0,18
		112	15			0,25
		186	25			0,18
30		93	27	27		0,18
		140	46			0,18
35		140	64	20		0,18
		186	86			0,25

## Nyva C B1

LIQUID END MATERIAL		PVC				
PLUNGER DIAMETER	STROKE LENGHT	MAX. SPEED	FLOW RATE	PRESSURE	CONNECTION	MOTOR
		Strokes/min	L/h	Bar	Suc/Dis (BSPP)	kW
30	25	117	<b>110</b>	15	1/2" F	1,10
		186	<b>175</b>			1,50
40		78	<b>130</b>			0,75
		117	<b>200</b>			1,10
50		235	<b>420</b>			1,50
		93	<b>228</b>			1,10
		117	<b>300</b>			1,10
		186	<b>500</b>			1,50
		235	<b>650</b>			1,50

LIQUID END MATERIAL		PVDF				
PLUNGER DIAMETER	STROKE LENGHT	MAX. SPEED	FLOW RATE	PRESSURE	CONNECTION	MOTOR
		Strokes/min	L/h	Bar	Suc/Dis (BSPP)	kW
30	25	117	<b>110</b>	20	1/2" F	1,10
		186	<b>170</b>			1,50
40		78	<b>125</b>			0,75
		117	<b>200</b>			1,10
50		235	<b>415</b>			1,50
		93	<b>225</b>			1,10
		117	<b>295</b>			1,10
		186	<b>500</b>			1,50
		235	<b>640</b>			1,50

LIQUID END MATERIAL		SS316L							
PLUNGER DIAMETER	STROKE LENGHT	MAX. SPEED	FLOW RATE	PRESSURE	CONNECTION	MOTOR			
		Strokes/min	L/h	Bar	Suc/Dis (BSPP)	kW			
15	25	93	<b>18</b>	124	1/4" F	1,10			
20		93	<b>35</b>				1,50		
		117	<b>44</b>						
		235	<b>90</b>						
30		62	<b>63</b>				68	3/4" F	0,75
		117	<b>110</b>						1,10
		186	<b>170</b>	1,50					
40		78	<b>130</b>	35	0,75				
		117	<b>200</b>		1,10				
		186	<b>330</b>		1,50				
		235	<b>420</b>						
50		62	<b>150</b>	24	1" F	0,75			
		93	<b>240</b>			1,10			
		117	<b>310</b>			1,50			
		186	<b>510</b>						
		235	<b>660</b>						