***XLB** series pumps are hydraulic diaphragm positive return metering pumps, with fixed stroke length. Fluid end flow adjustment is by controlled bypass of the hydraulic oil. This design incorporates a built-in relief valve and mechanically actuated oil replenishing system, in full compliance with **API** Standard **675**. Guaranteed no flow when pump adjustment is set to zero even without backpressure.*

Hydraulic Diaphragm Pump with Cast Iron Monobloc Construction

Positive Return **API 675**

GENERAL FEATURES

■ Maintenance is reduced to a minimum. The plunger operates in an oil bath, without packing, and maintains as-new volumetric efficiency even after 50,000 working hours. The diaphragm protected by the built-in relief valve and mechanically actuated oil-replenishing system, has a working life in excess of 50,000 hours.

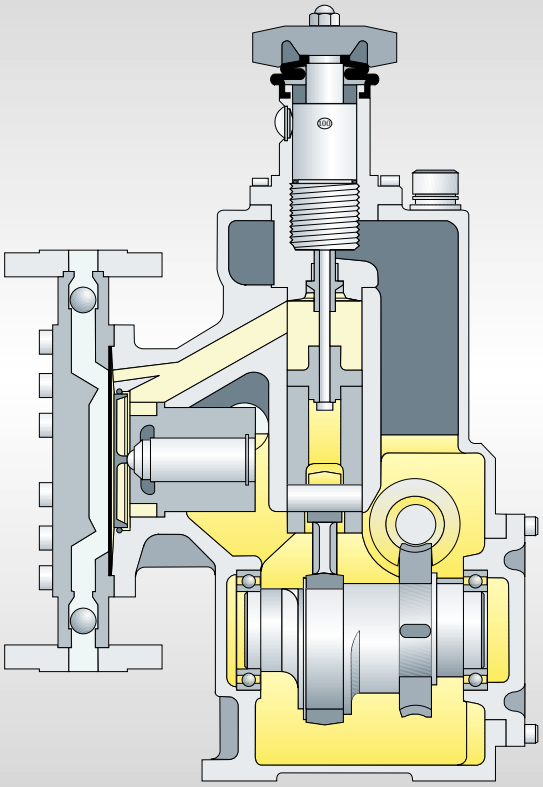
■ The diaphragm is held independently of the pump head, so that when the head is dismantled, the diaphragm is retained in the body and no oil is lost.
This significantly improves the ease of maintenance.

■ The inclusion of and integral safety valve results in some 50% cost saving on the installation.

■ *Excellent value for the money is achieved thanks to the few components mechanism.*

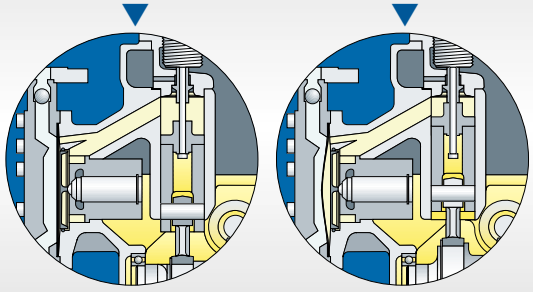
Max flow rate: 430 L/h
Max pressure: 30 bar
Motors: 0,75 kW - **1,5** kW

SECTIONAL VIEW



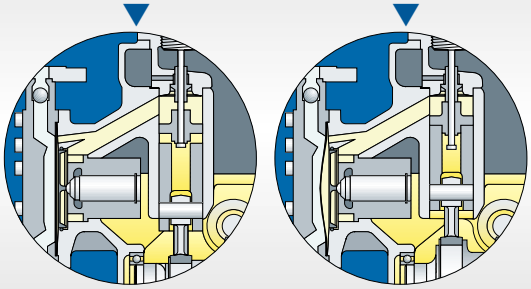
STROKE 100%

END OF SUCTION STROKE END OF DISCHARGE STROKE



STROKE 50%

END OF SUCTION STROKE END OF DISCHARGE STROKE



***XLB** pump, hydraulic diaphragm positive displacement type, suitable for process applications, has a heavy duty mechanism for higher pressures.*
***AISI 316L** made pump heads.*
Equipped with standard motor size 80, Frame B14 and size 90 Frame B5.

Max Flow Rate:	● 430 l/h
Stroke:	● 25 mm.
Motors:	● Threephase 0,75 kW - 1,5 kW 230/400 V - 50/60 Hz - 4 Poli - IP55 - CL F - IEC38-1
Pump:	● Single - Multiple
Material:	● Cast Iron Casing
Weigth:	● 35 Kg

CONSTRUCTION CHARACTERISTICS

■ The hydraulic system with its mechanically actuated oil replenishing (smart diaphragm) system overcomes many common suction and discharge problems.

■ Hydraulic diaphragm positive displacement pump (API 675 STD) for continuous operation and extreme running safety (leak-free head) with cast iron monobloc construction.

■ Smooth and linear adjustment, whether stationary or running, by means of a handwheel with 0-100% digital display.

■ ± 1% accuracy within 10 to 100% of the nominal flow rate.

MODEL NUMBER

XLB 50 A 120 FA Z

KEY TO SYMBOLS	
PUMP TYPE	
Ø	PLUNGER
A	AISI 316L VERSION
A22	AISI 316L VERSION + INCOLOY 825 VALVE & VALVE SEAT
Z	4÷20 mA *OBL ELECTRIC ACTUATOR*
W	3÷15 PSI PNEUMATIC ACTUATOR
F	UNI-DIN FLANGED CONNECTIONS
FA	ANSI FLANGED CONNECTIONS
N°	STROKES PER MINUTE

TECHNICAL DATA

XLB 50 MA - MMA (max 24 bar) **50 Hz**

TYPE	STROKES/m	FLOW RATE L/h	MAX PRESS. bar			CONNECTIONS		
			EXERCISE	BUILT-IN RELIEF VALVE SET PRESS	kW	THREADED	FLANGED UNI	FLANGED ANSI
XLB50	40	**105**	24	30	0,75	1/2″ g.f. BSPF	DN20 PN40	3/4″
	60	**155**	24	30	0,75			
	82	**215**	24	30	1,5			
	100	**260**	24	30	1,5	3/4″ g.f. BSPF		
	123	**320**	24	30	1,5			
	140	**370**	20	25	1,5	1″ g.f. BSPF	DN25 PN40	1″
	160	**430**	16	20	1,5			

XLB 50 MA - MMA (max 24 bar) **60 Hz**

TIPO	STROKES/m	FLOW RATE L/h	MAX PRESS. bar			CONNECTIONS		
			EXERCISE	BUILT-IN RELIEF VALVE SET PRESS	kW	THREADED	FLANGED UNI	FLANGED ANSI
XLB50	48	**126**	24	30	0,75	1/2″ g.f. BSPF	DN20 PN40	3/4″
	72	**186**	24	30	1,5			
	96	**258**	24	30	1,5	3/4″ g.f. BSPF		
	121	**312**	24	30	1,5			
	144	**384**	20	25	1,5	1″ g.f. BSPF	DN25 PN40	1″
	168	**444**	16	20	1,5			

MULTIPLE PUMP UNITS

■ **XLB** metering pumps can be built as multiple units.

■ Each pump, in a multiple unit, can have a separate stroke adjustment, adjustable either stationary or while running.

■ Each pump head can have a separate stroke rate since each has its own reduction gear.

■ A multiple unit is driven by a single motor with total power up to 1,5 kW.

Three headed XLB metering pump with AISI 316L head. Flanged connections.

CONTROL SYSTEMS

■ **Manual:**
- Handwheel with 0-100% digital display.

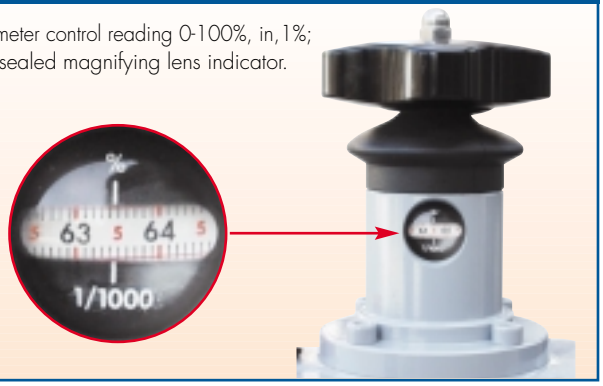
■ **Electric:**
- 4÷20 mA electric positioner, type Z, designed by OBL.

■ **Pneumatic:**
- 3÷15 PSI pneumatic positioner, type WA.

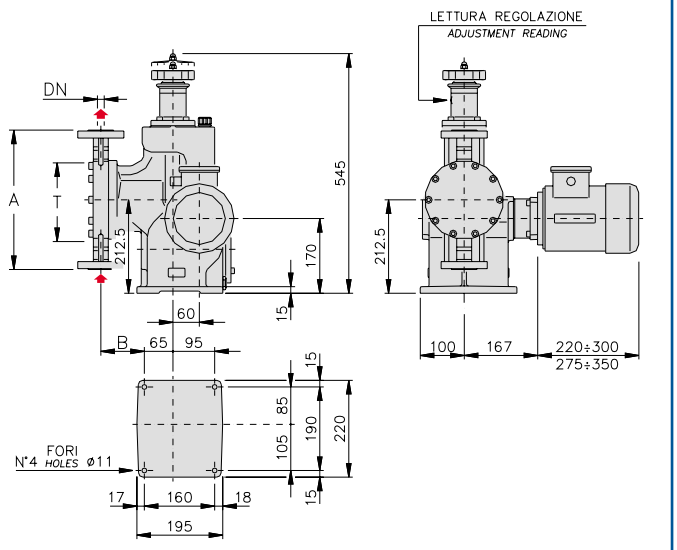
■ Pumps can, on request, be fitted with stroke counters.

MANUAL ADJUSTMENT

- Micrometer control reading 0-100%, in 1%;
- Steps sealed magnifying lens indicator.



OVERALL DIMENSIONS



TYPE	FLOW RATE 50Hz	FLOW RATE 60Hz	A	A DV	B	T ∅	DN UNI 2223/29	DN ANSI B16.5
XLB50	105 155 215 260 320	126 186 258 312	261 274	317 343	99 99	179 179	20 20	3/4" 3/4"
	370 430	384 444	283	363	104	179	25	1"

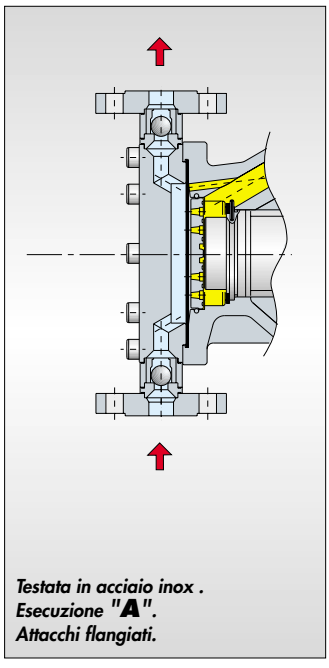
PUMP HEADS

■ Execution with single ball and double ball valves.

■ Suction and discharge connections can be only flanged.

■ Low NPSH R: as low as 6÷9m in recommended installation conditions. However the worst suction conditions will not harm the pump.

■ Maximum temperature of pumped liquid:
- 60 °C with stainless steel pump heads.



Testata in acciaio inox .
*Esecuzione "**A**".*
Attacchi flangiati.

MATERIALS OF CONSTRUCTION

PARTS	MA - MMA
LIQUID END	AISI 316L
DIAPHRAGM	TEFLON (*PTFE*)
VALVE SEAT	AISI 316L
VALVE GUIDE	AISI 316L
VALVE	AISI 316L
VALVE HOUSING	AISI 316L
VALVE SEAL	FPM