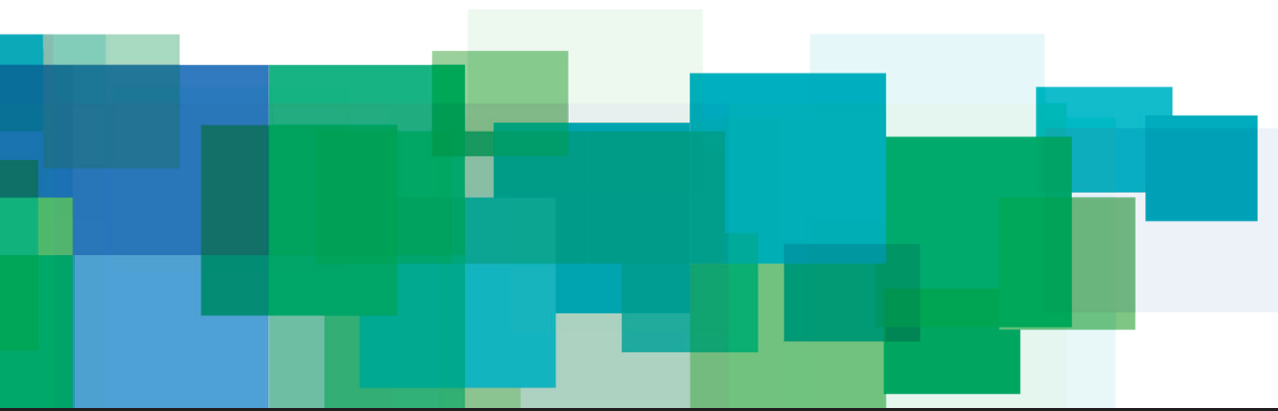
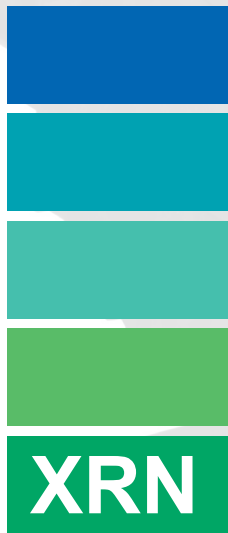


# blackline

an OBL brand



## WATER DIVISION



**Motor UNEL-MEC:**

Motor UNEL-MEC standard 3 phase, 50/60Hz. Single phase and ATEX options available.  
Permits standardization and quick std motor availability on site.

**Spring return mechanism with oversized bearing:**

Extends pump life and lowers life-cycle cost.

**All models with double valve standard:**

Increased accuracy when operating at low flow. Enhance application flexibility.

**Hydraulic system of the concept of process pumps API-675:**

With mechanical replenishing (smart diaphragm), internal safety valve and air bleed valve. More safe and performing pump.

**Single block aluminum anodized casing:**

Improved corrosion resistance against aggressive fumes. Extends pump life and lowers life-cycle cost.

**Hydraulic system of the concept of process pumps API-675:**

With mechanical replenishing (smart diaphragm), internal safety valve and air bleed valve. More safe and performing pump.

**Motor UNEL-MEC:**

Motor UNEL-MEC standard 3 phase, 50/60Hz. Single phase and ATEX options available.  
Permits standardization and quick std motor availability on site.

**Sealless Plunger:**

Maintenance free plunger. Reduces cost and time of maintenance.

**Smart Hydraulic Diaphragm:**

Diaphragm fastening system is hermetic and independent from pumphead body fastening. Allows to check diaphragm condition by removing the pumphead, but does not cause oil leakage from the hydraulic system. Reduces cost and time of maintenance.

**All models with double valve standard:**

Increased accuracy when operating at low flow. Enhance application flexibility.

**ATEX**

ALL models comply to ATEX (2014/34/CE) Group II, Category 2 (zone 1/21) and Group II, Category 3 (zone 2/22).

**ATEX**

ALL models comply to ATEX (2014/34/CE) Group II, Category 2 (zone 1/21) and Group II, Category 3 (zone 2/22).

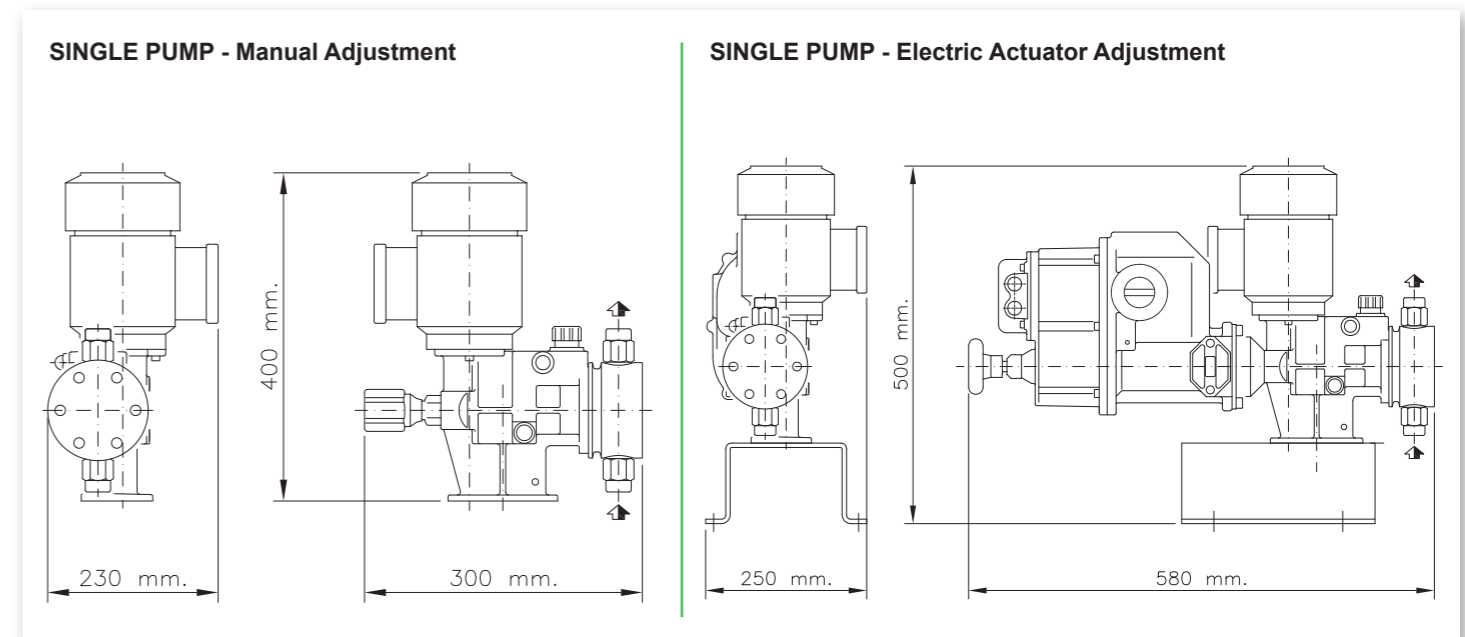
### ► Technical data

TYPE	50 Hz		60 Hz		MAX PRESS. bar		CONNECTIONS		
	STROKES / 1	MAX FLOW RATE l/h	STROKES / 1	MAX FLOW RATE l/h	①		THR.	FLANGED	
					A	P - S		BSP f	UNI
XRN 2.15	55	0,6	67	0,8	20	13	1/4"	DN 15	1/2"
	72	0,9	87	1					
	85	1,2	103	1,2					
	111	1,5	133	1,6					
	145	2							
XRN 2.30	28	1,8	33	2,1	20	13	1/4"	DN 15	1/2"
	36	2,5	43	2,8					
	55	3,8	67	4,5					
	72	5	87	6					
	85	5,8	103	7					
	145	11	133	10					
XRN 6.20	28	2	33	2,5	40	/	1/4"	DN 15	1/2"
	36	2,8	43	3,5					
	55	4,5	67	5,5					
	72	6	87	7,2					
	85	7,3	103	9					
	145	13	133	12					
XRN 6.30	55	10	67	14	20	13	1/4"	DN 15	1/2"
	72	14	87	20					
	85	20	103	24					
	111	23	133	30					
	145	30	174	30					
XRN 6.38	72	26	67	24	15	13	3/8"	DN 15	1/2"
	85	32	87	33					
	111	42	103	40					
	145	54	133	50					
	170	65	174	68					
XRN 6.48	72	42	67	38	10	10	3/8"	DN 15	1/2"
	85	50	87	50					
	111	66	103	62					
	145	87	133	80					
	170	105	174	105					

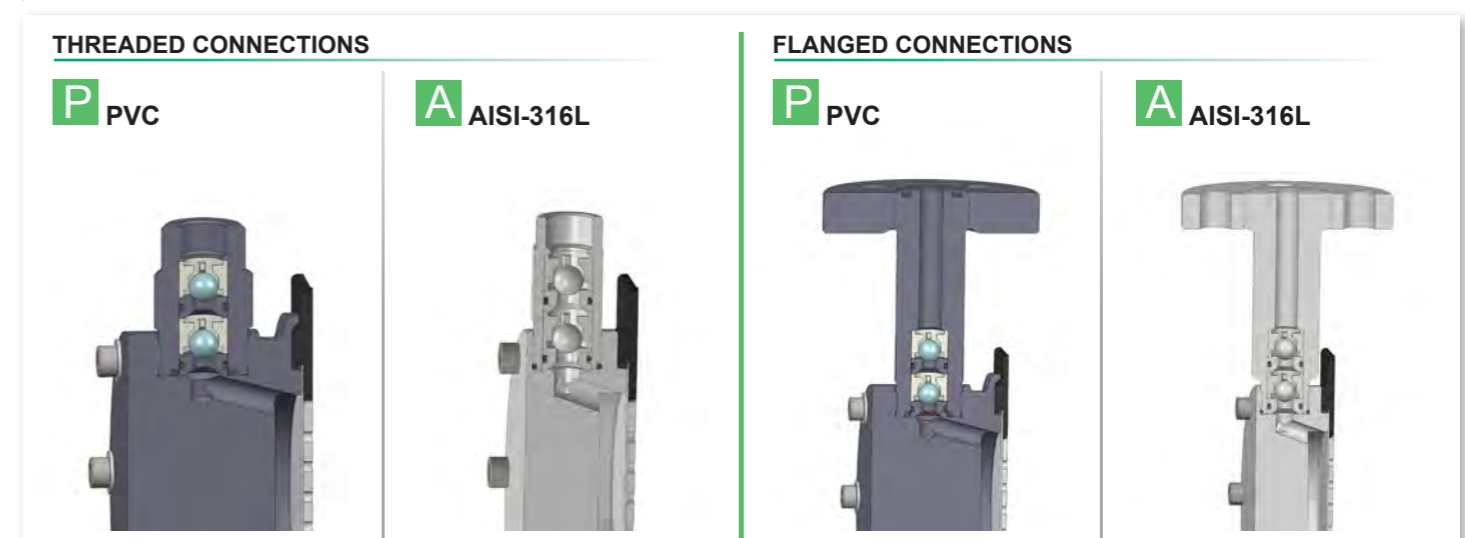
### ► Material of construction

COMPONENTS	A	A32	P	P11	S
PUMP HEAD	AISI-316L	AISI-316L	PVC	PVC	PVC
DIAPHRAGM	PTFE	PTFE	PTFE	PTFE	PTFE
VALVE GUIDE	PP	PP	PP	PP	PTFE
VALVE SEAT	AISI-316L	INCOLOY-825	PVC	AISI-316L	PVC
VALVE (BALL)	AISI-316L	HASTELLOY C-276	PYREX	AISI-316L	PVC
VALVE HOUSING	AISI-316L	AISI-316L	PVC	PVC	PYREX
VALVE SEAL	FPM	FPM	FPM	FPM	FPM

### ► Overall dimensions



### ► Sectional view



### ► Identification code

**XRN 2.30 A 85 FA ZC**

<b>XRN</b>	PUMP TYPE
<b>2</b>	PLUNGER STROKE
<b>30</b>	PLUNGER DIAMETER
<b>A</b>	PUMPHEAD EXECUTION
...A...	AISI-316L
...P...	PVC
...S...	PDVF
<b>85</b>	PLUNGER STROKER PER MINUTE
<b>FA</b>	CONNECTIONS
"..."	THREADED BSP f
...F...	FLANGED UNI-DIN
...FA...	FLANGED ANSI
<b>ZC</b>	ADJUSTMENT
"..."	GRADUATE KNOB AND VERNIER
...W...	PNEUMATIC ACTUATOR
...Z...	ELECTRIC ACTUATOR

BUILT-IN RELIEF VALVE SET PRESS. (PSV) bar ①	
PSV SET PRESS. bar	MAX WORK. PRESS. bar
5	4
7	5,5
8	6,5
10	8,5
13	10
15	13
17	14,5
20	17
23	20
30	25
35	30

## ► Safe area

On all pumps M, ME, R, XRN it is possible to automate the control system by installing the OBL's electric actuator Z type (ZC or ZP).

### ELECTRIC ACTUATOR CHARACTERISTICS

- IP 66 standard
- 115/230V – 1 – 50/60 Hz
- 4-20 mA feedback signal
- Manual emergency override
- Anticondensation heater (on demand)
- External automatic/manual selector (on demand)
- Flow-rate limiter (Q.max trimmer) allows to reduce the pump maximum flow-rate (corresponding to 20 mA command signal) up to 50% of the nameplate rated capacity.

The flowrate is adjusted according to following input signals:

- 4-20 mA, 0-20 mA, 20-4 mA and 0-10 V
- Pulses (0÷2 Hz - 0÷30 Hz)
- RS 485 communication protocol
- Profibus DP-V0



## OBL DESIGN

## ► Hazardous Area: ATEX version

On request the pumps M, R, XRN can be made comply with the requirements of the ATEX European Directive. Even the control system can be comply with that Directive, by installing the ATEX electric actuator Z type (ZR or ZG).

### ELECTRIC ACTUATOR CHARACTERISTICS

- ATEX II 2GD EEx-d IIB T4 IP6X
- 115/230V – 1 – 50/60 Hz
- Manual emergency override
- Anticondensation heater (on demand)
- 4-20 mA pilot signal
- 4-20 mA feedback signal



## ATEX

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