

**Stroke**: 30mm **Max flow rate**: 1300 L/h **Motors**: 0,37 - 0,75 - 1,5 kW



Plunger Metering Pump

Positive Return

API 675

LK pump is the second size of the four "L" sizes: LY-LK-LN-LP.

The stroke adjustment is based on OBL's unique design.

- OBL's metering pumps are used in several industrial plants. The "L" series ranges from the smallest capacity, 400 cc/h, to the largest, 11.000 L/h.
- All models con be built as multiple units with different sized heads.
- Each pumphead can have a different stroke rate since each has its own reduction gear.
- Power transmission through multiple units is easily achieved by a common motor-speed shaft, so the torque is lower than after the reduction gears.
- Positive displacement mechanism with mechanical return of the plunger, based on **OBL**'s unique design.
- Smooth flowrate adjustment by control knob, either with pump in motion or stationary.
- 1% repeatability of flowrate within 10% and 100% of maximum capacity
- Low NPSH requirement: as low as 1,5m in recommended installation conditions.

TECHNI	TECHNICAL DATA											
TIPO	STROKES/m	RATE h	MA	X PRE	SS.BAR		CONNEC	CTIONS				
TYPE	Š	FLOW L/I	AISI	316L	P	VC	DN	ANSI				
			0,37 kW	0,75 kW	0,37 kW	0,75 kW	DIN	AINJI				
LK10	60 80 100 120	6 8 10 13	80	100	10	10	1,5	1/2"				
LK15	60 80 100 120	15 20 25 30	80 80 80 75	100	10	10	15	1/2"				
LK20	60 80 100 120	30 38 48 58	80 60 55 45	100	10	10	15	1/2"				
LK25	60 80 100 120	47 62 78 93	60 50 35 30	80 80 70 60	10	10	15	1/2"				
LK30	60 80 100 120	70 90 110 135	40 32 25 20	70 70 52 43	10	10	20	3/4"				
LK40	60 80 100 120	128 165 210 250	20 20 15 12	40 40 30 25	10	10	20	3/4"				
LK50	60 80 100 120	200 265 330 400	15 13 9 7	27 27 18 15	10 10 9 7	10	25	1"				
LK65	60 80 100 120	340 450 550 665	7 6 4 3	16 16 12 9	7 6 4 3	10 10 10 9	25	1"				
LK80	60 80 100 120	510 700 850 1000	-	10 8,5 7 6	-	10 8,5 7 6	40	AISI 316: 1" 1/2 PVC: 2"				
LK100	60 80 100	800 1050 1300	-	6 4,5 4	-	6 4,5 4	40	AISI 316: PVC:				

## LK

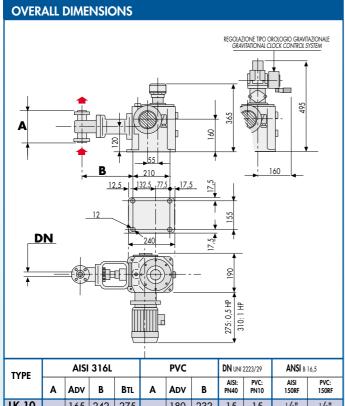
#### **PUMP HEADS**

The standard construction, up to 93 L/h, has duplex ball valves; higher flowrates have single valves.

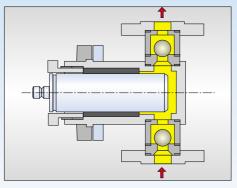
- Materials of construction for wetted parts are:
- Construction A: AISI 316L
- Construction P: PVC-Ceramic PTFE

Pumps in other materials such as Hastelloy, other alloys, PVDF etc., can be supplied on demand.

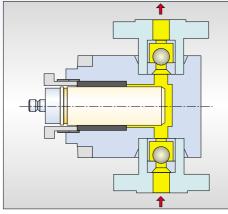
- Plunger packing is of reinforced Teflon chevron rings.
- Suction and discharge connections are flanged.
- Max. temperature of handled liquid:
- with standard stainless steel heads: 120 °C
- with special stainless steel heads: 300 °C
- with stainless steel heads and ceramic plunger: 100 °C
- with PVC head: 40 °C - with PVDF head: 70 °C



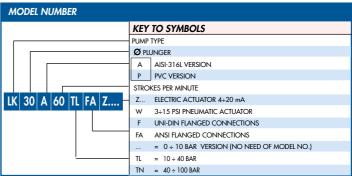
TYPE	YPE AISI 316L					PVC		DN UNI 2223/29		<b>ANSI</b> B 16,5	
1111	Α	ADV	В	BTL	Α	ADV	В	AISI: PN40	PVC: PN10	AISI 150RF	PVC: 150RF
LK 10	-	165	242	275	-	180	232	15	15	1/2"	1/2"
LK 15	-	165	242	275	-	180	232	15	15	1/2"	1/2"
LK 20	-	165	242	275	-	180	232	15	15	1/2"	1/2"
LK 25	-	165	242	275	-	180	232	15	15	1/2"	1/2"
LK 30	148	208	242	275	208	-	232	20	20	3/4"	3/4"
LK 40	148	228	242	275	208	-	232	20	20	3/4"	3/4"
LK 50	1 <i>7</i> 5	264	247	275	228	-	237	25	25	1"	1"
LK 65	198	268	247	260	228	-	237	25	25	1"	1"
LK 80	245	399	245	260	308	-	247	40	40	11/2"	2"
LK 100	269	409	247	1	335	-	247	40	40	11/2"	2"



Stainless steel head "A" execution flanged connections.



PVC head, "P"execution, flanged connections.





MATERIALS OF CONSTRUCTION												
PARTS	A	P	AC	ACV	Н							
LIQUID END	AISI 316L	PVC	AISI 316L	AISI 316L	AISI 316L							
PLUNGER	AISI 316L	CERAMIC	CERAMIC	CERAMIC	CERAMIC							
PACKING	TEFLON/PTFE	TEFLON/PTFE	TEFLON/PTFE	VULKOLLAN POLYURETHAN	TEFLON/PTFE							
VALVE SEAT	AISI 316L	PVC	INCOLOY 825	AISI 316L	AISI 316L							
VALVE	AISI 316L	PIREX	PIREX	AISI 316L	AISI 316L							
VALVE SEAL	VITON/FPM	VITON/FPM	VITON/FPM	VITON/FPM	VITON/FPM							

Max flow rate: 3800 L/h

Stroke: 50mm

Plunger Metering Pump

**Positive Return** 

API 675

LN pump is the third size of the four "L" sizes: LY-LK-LN-LP.

The stroke adjustment is based on OBL's unique desian.



- OBL's metering pumps are used in several industrial plants. The "L" series ranges from the smallest capacity, 400 cc/h, to the largest, 11.000 L/h.
- All models con be built as multiple units with different sized heads.
- Each pumphead can have a different stroke rate since each has its own reduction gear.
- Power transmission through multiple units is easily achieved by a common motor-speed shaft, so the torque is lower than after the reduction gears.
- Positive displacement mechanism with mechanical return of the plunger, based on **OBL**'s unique design.
- Smooth flowrate adjustment by control knob, either with pump in motion or stationary.
- 1% repeatability of flowrate within 10% and 100% of maximum capacity
- Low NPSH requirement: as low as1,5m in recommended installation conditions.

TECHNICAL DATA											
т	PO	STROKES/m	FLOW RATE L/h	M	AX PR	ESS.BA	<b>I</b> R	co	NNE	CTIOI	NS
T T	YPE	ğ	§Š	AISI :	316L	PV	c	10	NI.	A١	ISI
				0,75 kW	1,5 kW	0,75 kW	1,5 kW	Α	P	Α	Р
LN	130	40 47 56 68 80	72 90 105 125 150	45	90	-	-	20	-	3/4"	•
LN	140	68 80 97 118	230 275 340 420	30 25 20 17	50 50 40 35	-	-	20	-	3/4"	-
LN	150	68 80 97 118	380 445 540 650	17 15 13 10	30 30 26 20	10	-	25	25	1"	ן"
LN	165	68 80 97 118	650 750 900 1100	10 9 8 6	20 18 16 12	10 9 8 6	10	40	40	1" 1/2	2"
LN	180	68 80 97 118	950 1100 1330 1650	-	14 12 10 8	-	10 10 10 8	40	40	<b>1"</b> 1/2	2"
LN	100	68 80 97 118	1500 1800 2150 2700	-	9 7 6 5	-	9 7 6 5	40	40	1" 1/2	2"
LN	120	68 80 97 118	2100 2500 3200 3800	-	6 5 4 3,5	-	6 5 4 3,5	50	50	2"	2"
DOUBLE - ACTING	LN120 ADE	56 68 80	3300 4000 4800	-	7 6 5	-	-	5	50	2	"
DOUBLE	LN135 ADE	56 68 80	4200 5300 6500	-	5 4 3	-	-	d	55	2-1,	/2"

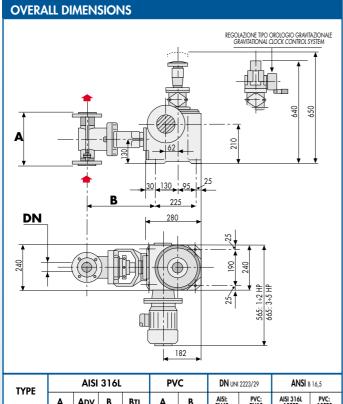
### **PUMP HEADS**

The standard construction, up to 420 L/h, has duplex ball valves; higher flowrates have single valves.

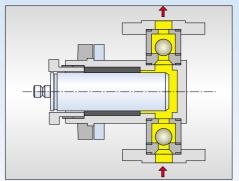
- Materials of construction for wetted parts are:
- Construction A: AISI 316L
- Construction P: PVC-Ceramic PTFE

Pumps in other materials such as Hastelloy, other alloys, PVDF etc., can be supplied on demand.

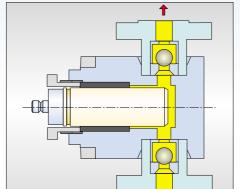
- Plunger packing is of reinforced Teflon chevron rings.
- Suction and discharge connections are flanged.
- Max. temperature of handled liquid:
- with standard stainless steel heads:120 °C
- with special stainless steel heads: 300 °C
- with stainless steel heads and ceramic plunger: 100 °C
- with PVC head: 40 °C - with PVDF head: 70 °C



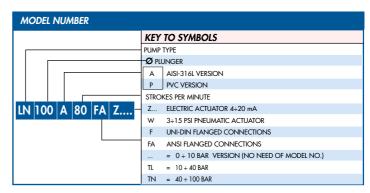
TYPE		AISI	316L		PV	C	<b>DN</b> un	2223/29	<b>ANSI</b> B 16,5			
11112	Α	ADV	В	BTL	Α	В	AISI: PN40	PVC: PN10	AISI 316L 150RF	PVC: 150RF		
LN 40TL	-	226	-	335	-	-	20 -		20 -		3/4"300RF	-
LN 50	1 <i>7</i> 5	255	275	335	228	260	25		25		1"	1"
LN 65	224	358	275	335	297	265	4	0	11/2"	2"		
LN 65TL	224	358	-	335	-	-	40	-	1 <sup>1</sup> /2"300RF	-		
LN 80	243	377	275	335	308	275	40		11/2"	2"		
LN 100	267	-	275	331	334	275	40		11/2"	2"		
LN 120	307	-	300	-	430	300	50		2"	2"		



Stainless steel head "A" execution flanged connections.



PVC head, "P"execution, flanged connections.





MATERIALS OF CONSTRUCTION												
PARTS	A	P	AC	ACV	Н							
LIQUID END	AISI 316L	PVC	AISI 316L	AISI 316L	AISI 316L							
PLUNGER	AISI 316L	CERAMIC	CERAMIC	CERAMIC	CERAMIC							
PACKING	TEFLON/PTFE	TEFLON/PTFE	TEFLON/PTFE	VULKOLLAN POLYURETHAN	TEFLON/PTFE							
VALVE SEAT	AISI 316L	PVC	AISI 316L	AISI 316L	INCOLOY 825							
VALVE	AISI 316L	PIREX	AISI 316L	AISI 316L	PIREX							
VALVE SEAL	VITON/FPM	VITON/FPM	VITON/FPM	VITON/FPM	VITON/FPM							

Stroke: 50mm

Max flow rate: 5500 L/h Motors: 2,2 - 3 - 4 - 5,5 - 7,5 kW



Plunger Metering Pump

**Positive Return** 

API 675

LP pump is the largest pump of the "L" series and is the fourth of the four sizes: LY-LK-LN-LP. The stroke adjustment is based on OBL's unique design.

- OBL's metering pumps are used in several industrial plants. The "L" series ranges from the smallest capacity, 400 cc/h, to the largest, 11.000 L/h.
- All models con be built as multiple units with different sized heads.
- Each pumphead can have a different stroke rate since each has its own reduction gear.
- Power transmission through multiple units is easily achieved by a common motor-speed shaft, so the torque is lower than after the reduction gears.
- Positive displacement mechanism with mechanical return of the plunger, based on **OBL**'s unique design.
- Smooth flowrate adjustment by control knob, either with pump in motion or stationary.
- 1% repeatability of flowrate within 10% and 100% of maximum capacity
- Low NPSH requirement: as low as 1,5m in recommended installation conditions.

1	ECHNIC	CAL D	ATA										
1	YPE	STROKES/m	FLOW RATE L/h			XX PRE Stall. F				C	ONN	ECTIO	NS
		ᅙ	§_,	Al	SI 31	6L		PVC		ι	INI	AN	SI
		S	正	2,2	3	4	2,2	3	4	Α	Р	Α	Р
LF	P40	68 80 97 118	230 275 340 420	70 65 55 50	80 80 70 65	90 90 80 80	-	-	1	20	-	3/4"	-
LF	P50	68 80 97 118	380 445 540 650	45 40 35 28	55 50 45 36	65 60 55 45	10	-	-	25	25	1″	1″
LF	P65	68 80 97 118	650 750 900 1100	28 25 22 17	36 32 28 22	40 40 35 27	10	-	-	40	40	1″ 1/2	2"
LF	P80	68 80 97 118	950 1100 1380 1650	20 17 14 11	26 22 18 14	27 27 22 17	10	-	-	40	40	1″ 1/2	2″
LF	100	68 80 97 118	1500 1800 2150 2700	12 10 8 7	15 13 10 9	15 15 12 11	10 10 8 7	10 10 10 9		40	40	1″ 1/2	2"
LF	P120	68 80 97 118	2100 2500 3200 3800	8 7 5,5 5	10 9 7 6,5	10 10 9 8	8 7 5,5 5	10 9 7 6,5	10 10 9 8	50	50	2"	2″
LF	P158	56 68 80 97	3000 3700 4500 5500	-	-	6 6 6 5	-	-	6 6 5	50	50	2″	2"
ING	LP120 ADE	56 68 80 97 118	3300 4000 4800 6000 7300	-	10 9 8 7 5,5	11 11 10 9 7	-	-	-	50	50	2″	2"
DOUBLE - ACTING	LP135 ADE	56 68 80 97 118	4200 5300 6500 8000 9700	-	-	8 8 8 7 5,5	-	-	-	65	65	2" 1/2	2″ 1/2
ğ	LP160 ADE	56 68 80 97	6000 7500 9000 11000	-	-	6 6 6 5	-	-	-	65	65	2″ 1/2	2″ 1/2

## LP

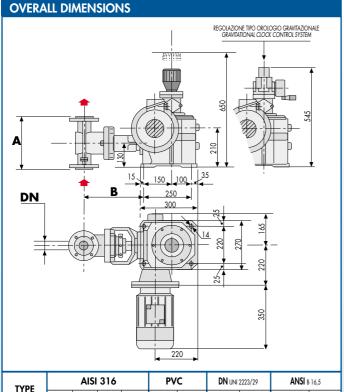
#### **PUMP HEADS**

The standard construction, up to 420 L/h, has duplex ball valves; higher flowrates have single valves.

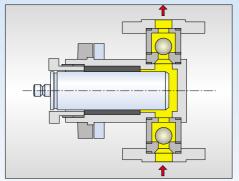
- Materials of construction for wetted parts are:
- Construction A: AISI 316L
- Construction P: PVC-Ceramic PTFE

Pumps in other materials such as Hastelloy, other alloys, PVDF etc., can be supplied on demand.

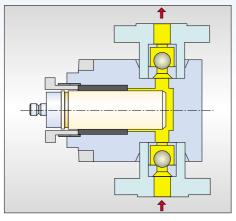
- Plunger packing is of reinforced Teflon chevron rings.
- Suction and discharge connections are flanged.
- Max. temperature of handled liquid:
- with standard stainless steel heads:120 °C
- with special stainless steel heads: 300 °C
- with stainless steel heads and ceramic plunger: 100 °C
- with PVC head: 40 °C - with PVDF head: 70 °C



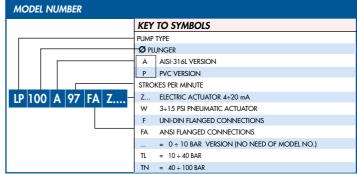
TYPE						C	<b>DN</b> UNI:	2223/29	<b>ANSI</b> B 16,5		
1111	Α	ADV	В	BTL	Α	В	AISI: PN40	PVC: PN10	AISI 150RF	PVC: 150RF	
LP 40TN	-	226	-	315	-	-	20		3/4"	-	
LP 50 TN	180	260	255	305	228	240	25	25	1"	1"	
LP 65	224	358	255	315	297	245	40	40	11/2"	2"	
LP 65TL	224	358	-	315	-	-	40	-	11/2" 300RF	-	
LP 80	250	380	255	305	308	255	40	40	11/2"	2"	
LP 100	275	-	255	270	334	255	40	40	11/2"	2"	
LP 120	314	-	280	-	400	280	50	50	2"	2"	
LP 158	379	-	280	ı	450	340	50	50	2"	2"	



Stainless steel head "A" execution flanged connections.



PVC head, "P"execution, flanged connections.





MATERIALS	OF CONST	RUCTION			
PARTS	A	P	AC	ACV	Н
LIQUID END	AISI 316L	PVC	AISI 316L	AISI 316L	AISI 316L
PLUNGER	AISI 316L	CERAMIC	CERAMIC	CERAMIC	CERAMIC
PACKING	TEFLON/PTFE	TEFLON/PTFE	TEFLON/PTFE	VULKOLLAN POLYURETHAN	TEFLON/PTFE
VALVE SEAT	AISI 316L	PVC	AISI 316L	AISI 316L	INCOLOY 825
VALVE	AISI 316L	PIREX	AISI 316L	AISI 316L	PIREX
VALVE SEAL	VITON/FPM	VITON/FPM	VITON/FPM	VITON/FPM	VITON/FPM

Stroke: 11/17mm Max flow rate: 400 L/h

Motors: 0,18 - 0,37 - 0,75 kW



Plunger Metering Pump

**Positive Return** 

API 675

Model LY is the smallest of the four sizes in the "L" range; LY-LK-LN-LP.

The pump is very compact, but has all the technical features of the positive displacement.

The stroke adjustment is based on OBL's unique design.

- OBL's metering pumps are used in several industrial plants. The "L" series ranges from the smallest capacity, 400 cc/h, to the largest, 11.000 L/h.
- All models con be built as multiple units with different sized heads.
- Each pumphead can have a different stroke rate since each has its own reduction gear.
- Power transmission through multiple units is easily achieved by a common motor-speed shaft, so the torque is lower than after the reduction gears.
- Positive displacement mechanism with mechanical return of the plunger, based on **OBL**'s unique design.
- Smooth flowrate adjustment by control knob, either with pump in motion or stationary.
- 1% repeatability of flowrate within 10% and 100% of maximum capacity
- Low NPSH requirement: as low as 1,5m in recommended installation conditions.

TECHN	ICAL	DATA							
TVDE	:S/m	RATE	M	AX PR	ESS.BA	٨R	CON	NECTIO	ONS
TYPE	STROKES/m	FLOW	0,18		0,37 l	-	THREADED	FLAN	
	S	ᄄ	AISI 316L	PVC	AISI 316L	PVC		UNI	ANSI
LY6	50 70 95	1,2 1,8 2,3	40	-	100	10	3/8" G.F./ <i>Rp</i>	15	1/2"
LY8	36 50 70 95	1,5 1,8 2,5 3,5	40	10	100	10	3/8" G.F./ <i>R</i> p	15	1/2"
LY10	50 70 95	3,5 4,5 6,5	40	10	100	10	3/8" G.F./ <i>Rp</i>	15	1/2"
LY15	50 70 95	8 11 15	40	10	100	10	3/8" G.F./ <i>R</i> p	15	1/2"
LY20	50 70 95	14,5 20 28	23	10	70 60 50	10	3/8" G.F./ <i>Rp</i>	15	1/2"
LY25	50 70 95	23 32 43	15	10	40			15	1/2"
LY30	50 70 95 115	32 45 62 75	-	-	40 40 33 30	10	3/8" G.F./Rp	15	1/2"
LY40	50 70 95 115	60 82 110 130	-	-	22 20 18 16	10	1/2" G.F./ <i>Rp</i>	15	1/2"
LY50	50 70 95 115	90 130 175 210	-	-	14 13 11 10	10	-	20	3/4"
LY65	50 70 95	155 220 300	-	-	7	7	-	20	3/4"
LY75	50 70 95	210 300 400	-	-	4	-	-	25	1"

# LY

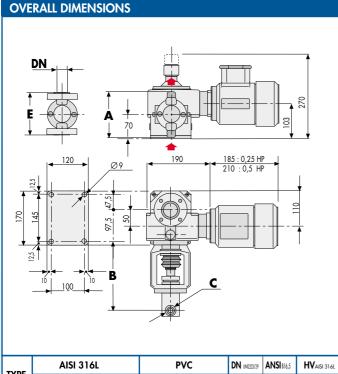
#### **PUMP HEADS**

The standard construction, up to 130 L/h, has duplex ball valves; higher flowrates have single valves.

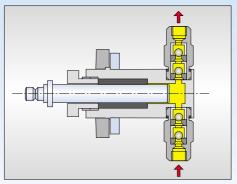
- Materials of construction for wetted parts are:
- Construction A: AISI 316L
- Construction P: PVC-Ceramic PTFE

Pumps in other materials such as Hastelloy, other alloys, PVDF etc., can be supplied on demand.

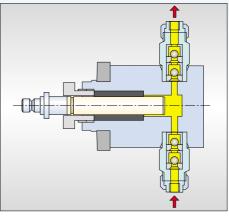
- Plunger packing is of reinforced Teflon chevron rings.
- Suction and discharge connections can be threaded or flanged, up to  $130\ L/h$ . For Higher flowrates, flanged only .
- Max. temperature of handled liquid:
- with standard stainless steel heads: 90 °C
- with special stainless steel heads: 160 °C
- with stainless steel heads and ceramic plunger: 90 °C
- with PVC head: 40 °C - with PVDF head: 70 °C



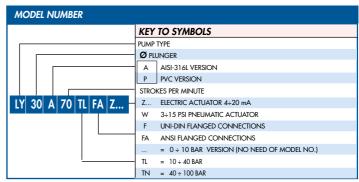
TVDE	AISI 316L					PVC					<b>DN</b> UNI2223/29		<b>ANSI</b> 816,5		<b>HV</b> AISI 316L		316L	
TYPE	ADV	В	Вть	с	E	Edv	<b>A</b> dv	В	с	E	Edv	AISI PN40	PVC PN10	AISI 150RF	PVC 150RF	E	DN	ASA
LY 6-8	143	-	205		-	119	198	202		-	162	15	15	1/2"	1/2"	-	-	-
LY 10	143	-	205		-	119	198	202		-	162	15	15	1/2"	1/2"	-	-	-
LY 15	143	-	205	G.F.	-	119	216	202	G.F.	-	162	15	15	1/2"	1/2"	124	15	1/2"
LY 20	143	210	225	3/8"	-	119	216	200	3/8"	-	162	15	15	1/2"	1/2"	124	15	1/2"
LY 25	143	210	225	,	-	119	216	200	`	-	162	15	15	1/2"	1/2"	124	15	1/2"
LY 30	159	210	225		-	119	230	200		-	176	15	15	1/2"	1/2"	156	20	3/4"
LY 40	195	210	-	1/2"	-	163	242	200	1/2"	-	204	15	15	1/2"	1/2"	156	20	3/4"
LY 50	-	210	-	-	157	213	-	205	-	224	268	20	20	3/4"	3/4"	180	25	1"
LY 65	-	210	-	-	187	256	-	205	-	224	268	20	20	3/4"	3/4"		-	-
LY 75		210	-	-	200	-	-	-	-	-	-	25	-	1"	-	-	-	



Inox steel head, "A" execution, with threaded connections.



PVC head, "P" execution, with threaded connections.





MATERIALS OF CONSTRUCTION												
PARTS	A	P	AC	ACV	Н							
LIQUID END	AISI 316L	PVC	AISI 316L	AISI 316L	AISI 316L							
PLUNGER	AISI 316L	CERAMIC	CERAMIC	CERAMIC	CERAMIC							
PACKING	TEFLON/PTFE	TEFLON/PTFE	TEFLON/PTFE	VULKOLLAN POLYURETHAN	TEFLON/PTFE							
VALVE SEAT	AISI 316L	PVC	AISI 316L	AISI 316L	INCOLOY 825							
VALVE	AISI 316L	PIREX	AISI 316L	AISI 316L	CARPENTER 20							
VALVE SEAL	VITON/FPM	VITON/FPM	VITON/FPM	VITON/FPM	VITON/FPM							