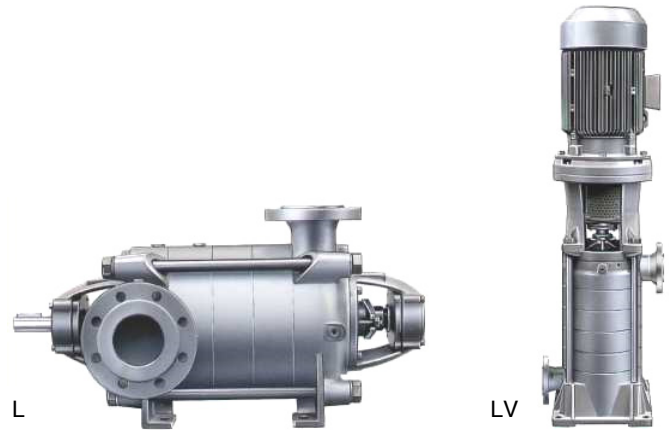


# High-Pressure Centrifugal Pumps SERIES L/LV



### Application

For handling fluids which do not contain any abrasive particles nor chemically attack the pump materials.

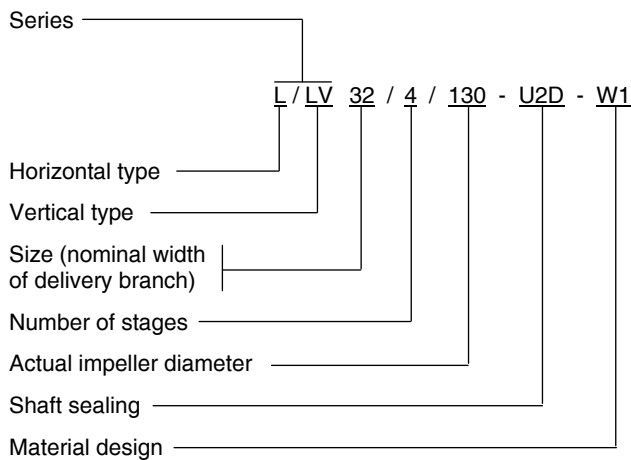
### Main fields of application

In water supply, booster, fire-fighting, irrigation plants, in cooling and heating systems, for boiler feed and handling of condensate.

Moreover, for application fields of the most varied kind in all industrial branches.

### Abbreviation

Example:



### Design and series construction

L: horizontal, two or multi-stage high-pressure centrifugal pump of the segmental-type of construction

LV: vertical, two or multi-stage high-pressure centrifugal pump of the segmental-type of construction

Replaceable impellers and diffusers as well as shaft sleeves and shaft protection sleeves.

The casing parts sealed by O-rings are held together by external casing tie bolts.

Axial thrust compensation by single-wheel balancing.

Any residual forces are absorbed by the bearings arranged in the bearing casings and motor brackets respectively.

With series L, the pump feet are cast to the suction and delivery casing. Thus, the pipeline forces are directly passed into the base plate and foundation.

Vertical and horizontal pumps of the same size have identical hydraulic capacities.

### Branch positions/flanges

L: Suction branch: horizontally to the right as seen from the driving side  
 Delivery branch: vertically upwards  
 Other branch positions on request.

LV: Delivery branch set off by 180° against the suction branch. The arrangement of the delivery branch, set off by 90° each is possible. Arrangement on top of each other with 3 and more stages only.

Flanges: Suction flange PN 16 according to DIN - EN 1092-2  
 Delivery flange PN 40 according to DIN - EN 1092-2

### Shaft sealing

Stuffing box uncooled: **Type U1**

Packing rings on graphite PTFE basis (asbestos-free).

Mechanical seal balanced, uncooled:

**Type U2D/U2.2D/U2.6D**

Dependent on sense of rotation (suction side = clockwise; delivery side = counter-clockwise), maintenance-free.

For the mechanical seals, the following material designs are provided:

Abbreviation	Material design		Material key DIN EN 12 756
U2.2D U 2 D	Rotating seal ring	Hard carbon, synthetic resin impregnated	B
	Stationary seal ring	Oxide ceramics	V
	O-rings	EP rubber	E
	Spring	CrNiMo steel	G
	Other structural components	CrNiMo steel	G
U2.6D	Rotating seal ring	Hard carbon, synthetic resin impregnated	B
	Stationary seal ring	Silicon carbide	Q
	O-rings	EP rubber	E
	Spring	CrNiMo steel	G
	Other structural components	CrNiMo steel	G

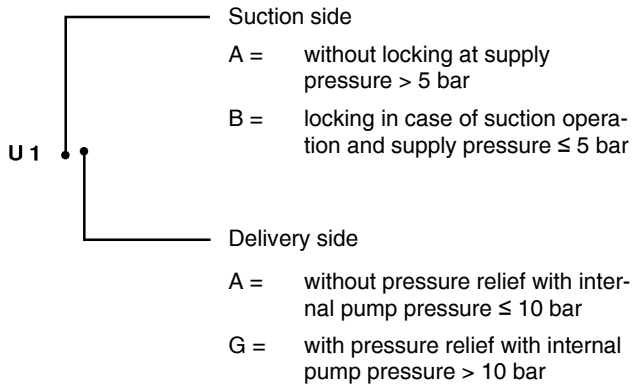
Allocation of the shaft sealing types to the pump sizes:

Pump size	Shaft sealing				Mechanical seal balanced
	Stuffing box uncooled				
L 25	U1BA	U1BG	U1AA	U1AG	U2.2D
L 32 L 40					U 2D
L 50 L 65					U2.6D
LV 25	-	-	-	-	U2.2D
LV 32 LV 40	-	-	-	-	U 2 D
LV 50 LV 65	U1A	U1G	-	-	U2.6D

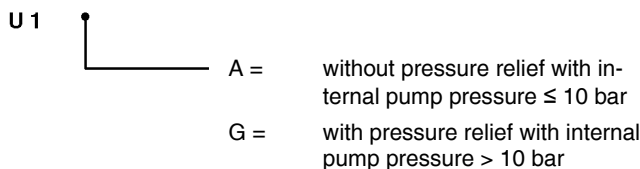
The suction and/or supply conditions and the internal pump pressure determine the selection of the stuffing boxes. Identification letters are allocated to the stuffing box U1.

Explanations of the identification letters for stuffing boxes:

**Uncooled stuffing box for pump series L**



**Uncooled stuffing box for pump series LV 50 and 65**



**Locking** of the type with stuffing box by means of locking bore and locking notch and/or lantern ring.

**Pressure relief** of type with stuffing box by means of return line from the delivery side to the first stage and/or suction side.

**Flushing** of type with mechanical seal by means of by-pass line.

**Shaft sleeves/shaft protection sleeves**

For the type with stuffing box or mechanical seal within the area of the shaft sealings, replaceable shaft sleeves and/or protective shaft sleeves.

**Upper temperature and pressure limits/speed as a function of the shaft sealing type**

Applicable to all material types.

Pump series, Pump size	Abbreviation of the shaft sealing type	Temperature ① [°C]	max. admissible		Speed [1/min]
			Supply pressure [bar]	Internal pump pressure [bar]	
L	U 1 BA	125	5	10	3500
	U 1 BG			25	
	U 1 AA	140	10	10	
	U 1 AG			25	
L and LV	U2.2D U 2 D U2.6D	140	16	25	
LV 50 and 65	U 1 A U 1 G	125	10 less delivery pressure of 1st stage	10 25	

① The admissible temperatures apply to water. In case of other fluids to be pumped, the temperature limits may change.

For the max. admissible numbers of stages as a function of speed, please refer to the individual characteristics.

**Notice:**

The series L and LV are approved for a max. admissible internal pressure level of 31 bar (supply and delivery pressure at Q = 0 m³/h).

Maximum internal pump pressure may not exceed 25 bar at the operating point.

Pressure surges greater than 20% of the internal pressure at the operating point are not permitted.

**Bearing and lubrication**

For all sizes L:  
Suction and delivery side one each grooved ball bearing C3 DIN 625 grease-lubricated.

For all sizes LV:  
Suction side one sliding bearing, lubricated by the fluid to be pumped. Delivery side grooved ball bearing C3 DIN 625, grease-lubricated.

**Shaft coupling and coupling guard**

Shaft coupling according to DIN 740. A coupling guard as a protection against accidental contact according to EN 809 is also supplied.

For the L sizes only as soon as the scope of supply includes pump, base plate and shaft coupling.

**Base plate**

L: of steel (channel)  
LV: Base plates are not required.

Assembly dimensions are available in our selection programme ALL2CAD.

**Drive**

L: Serial, suction side or delivery side (at extra charge) by surface-cooled three-phase squirrel-cage induction motors, IM B3 type of construction, enclosure IP 55, class F insulation, according to IEC standard. Performances and main dimensions according to DIN 42 673.

LV: Motors as under L, however, IMV1 type of construction with performances and main dimensions according to DIN 42677.

**Connections**

The following connections are always provided for series L:

- FF1 Fluid to be pumped, filling
- FD1 Fluid to be pumped, draining (suction casing)
- FD3 Fluid to be pumped, draining (delivery casing)
- LO1 Leakage, outlet (suction side)
- LO3 Leakage, outlet (delivery side)
- PM1 Pressure measurement (suction casing)
- PM2 Pressure measurement (delivery casing)
- FV3 Venting (pump)
- FV1 Venting (mechanical seal suction side)
- FV4 Venting (mechanical seal delivery side)

The following connections are always provided for series LV :

- LO Leakage, outlet (with stuffing box)
- PM2 Pressure measurement delivery casing)
- FV1 Venting (mechanical seal)

**Werkstoffe**

Denomination	Part No.		Material design		
	L	LV	W1	W2	W3
Suction casing	106.01	106.01	EN-GJL-250	EN-GJL-250	G-CuAl 10 Ni (CC 333 G)
Delivery casing	107.01	107.01	EN- GJL -250	EN-GJL-250	G-CuAl 10 Ni (CC 333 G)
Stage casing	108.01/.02	108.01/.02	EN- GJL -250	EN-GJL-250	G-CuAl 10 Ni (CC 333 G)
Impeller	230.01	230.01	EN- GJL -200	G-CuAl 10 Ni (CC 333 G)	G-CuAl 10 Ni (CC 333 G)
Diffuser L, LV 40, 50,	171.01	171.01	EN- GJL -200	G-CuAl 10 Ni (CC 333 G)	G-CuAl 10 Ni (CC 333 G)
Diffuser L, LV 25, 32	171.01	171.01	Ryton R4 ①	Ryton R4 ①	Ryton R4 ①
Shaft	210.01	210.01	1.4021	1.4021	1.4571
Journal bearing lantern	-	342.01	EN- GJL -250	EN-GJL-250	EN-GJL-250
Bearing casing	350.01/.02	-	EN- GJL -250	EN-GJL-250	EN-GJL-250
Gland	452.01/.02	452.02	EN- GJL -250	EN-GJL-250	G-CuAl 10 Ni (CC 333 G)
Bearing cover	360.01/.02	360.02	EN- GJL -250	EN-GJL-250	EN-GJL-250
Shaft sleeve	523.01/.02	523.02	1.4021	1.4021	1.4571
Spacer sleeve	520.01	-	EN- GJL -250	EN-GJL-250	2.1052
Shaft sleeve	524.01/.02	524.02	1.4021	1.4021	1.4571
Seal cover	471.01/.02	471.02	EN- GJL -250	EN-GJL-250	G-CuAl 10 Ni (CC 333 G)
Bearing bush	-	545.01	2.1182	2.1182	2.1182

① Polyphenylene sulfide, a technical thermoplast with a glass fibre portion of 40%

**Table combination of components**

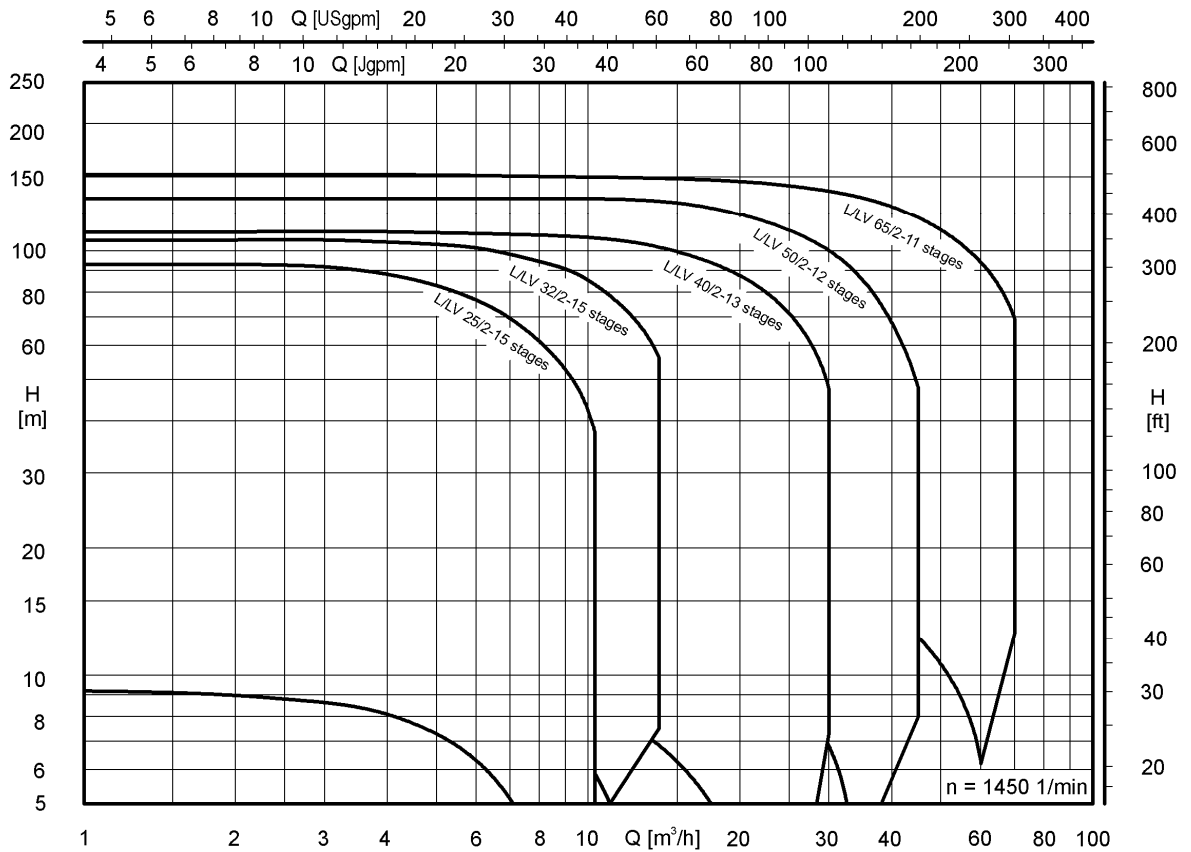
The table below shows the combination possibilities of structural parts and/or components of the sizes and series.

Series	L					LV				
	25	32	40	50	65	25	32	40	50	65
Suction casing	1	2	3	4	5	6	7	8	9	10
Delivery casing	1	2	3	4	5	6	7	8	9	10
Stage casing	1	2	3	4	5	1	2	3	4	5
Impeller	1	2	3	4	5	1	2	3	4	5
Diffuser	1	2	3	4	5	1	2	3	4	5
Journal bearing lantern	-	-	-	-	-	1	2	3	4	4
Bearing cover	1	2	2	3	3	1	2	2	3	3
Shaft	1	2	3	4	5	6	7	8	9	10
Connecting screws	1	2	3	4	5	1	2	3	4	5
Mechanical seal cover	1	2	2	3	3	1	2	2	3	3
Shaft sleeve	1	2	2	3	3	1	2	2	3	3
Gland	1	2	2	3	3	-	-	-	3	3
Protective shaft sleeve	1	2	2	3	3	-	-	-	3	3
Bearing casing, driving side	1	2	2	3	3	-	-	-	-	-
Bearing casing, end side	1	2	2	3	3	-	-	-	-	-

Within a horizontal column, parts with identical numbers are interchangeable.

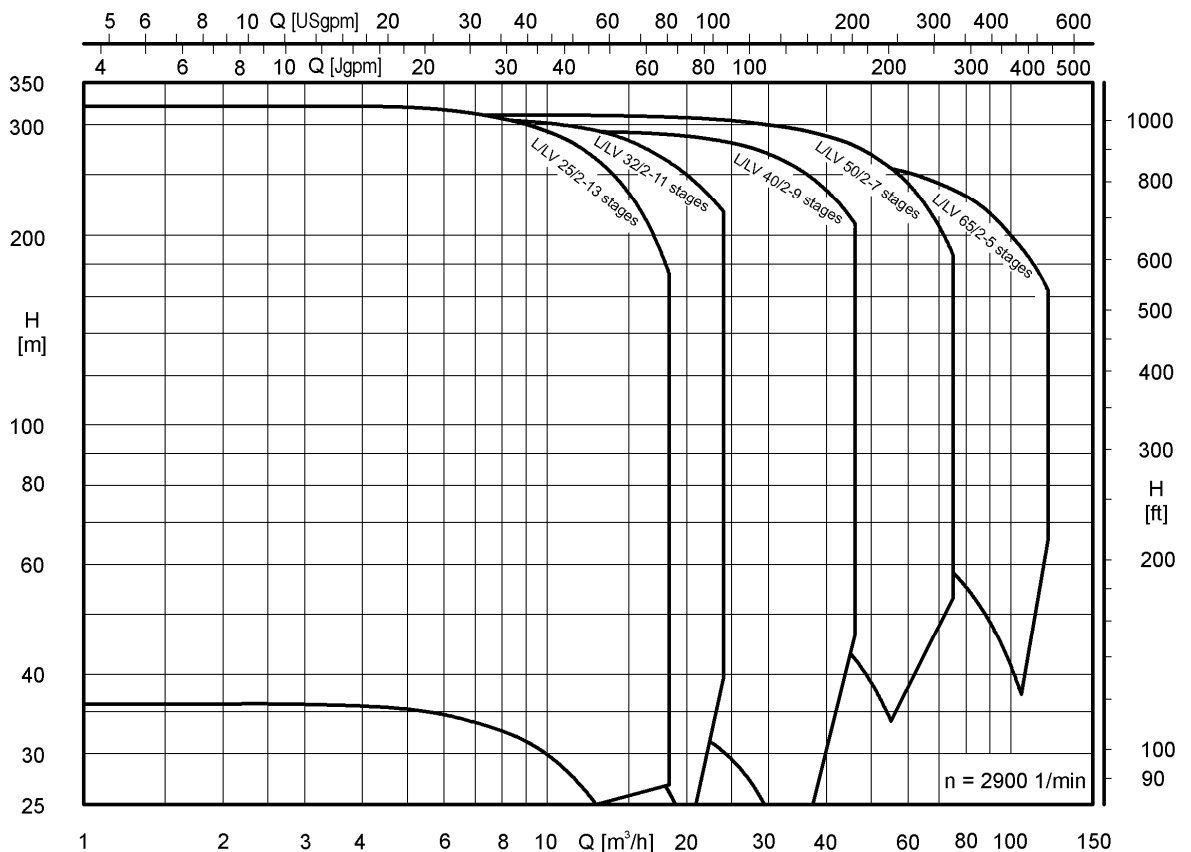
Performance graph

1450 1/min



Performance graph

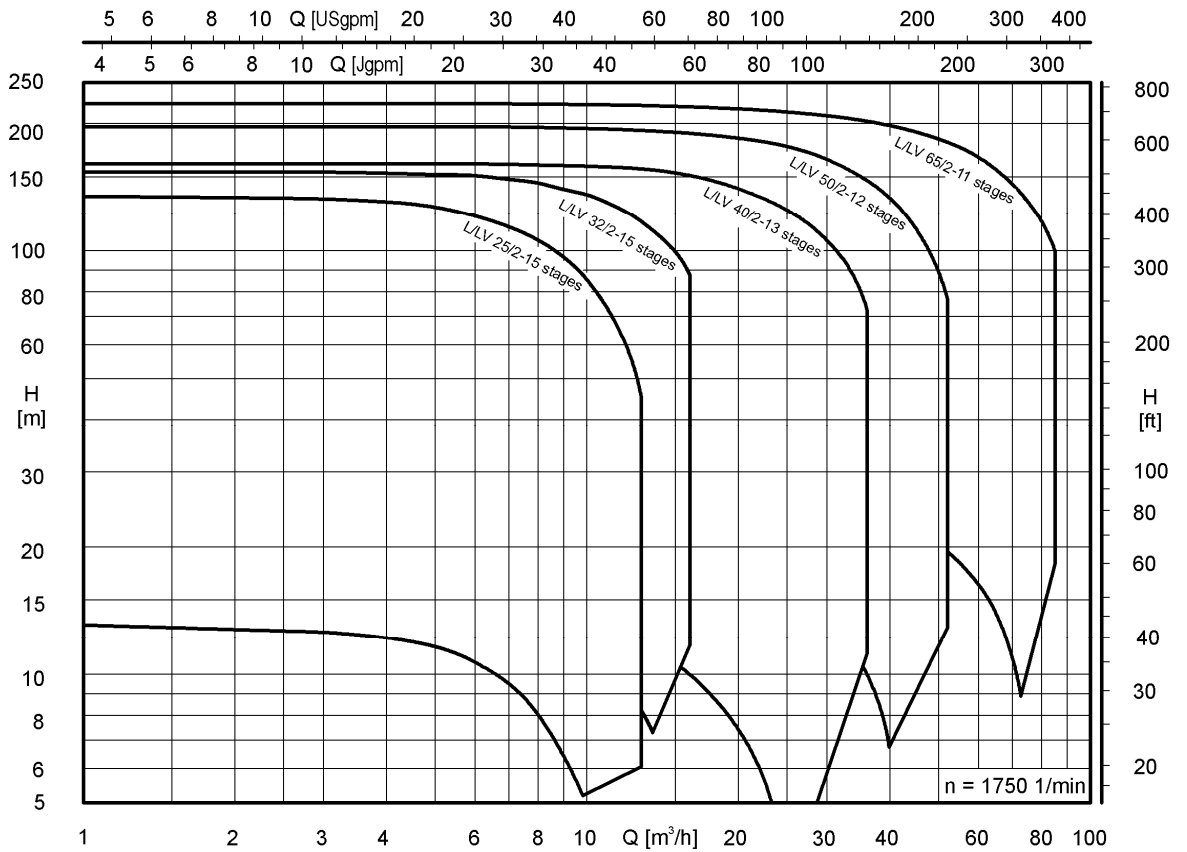
2900 1/min



For exact performance data, please refer to the individual characteristics.  
 Maximum internal pump pressure may not exceed 25 bar at the operating point.

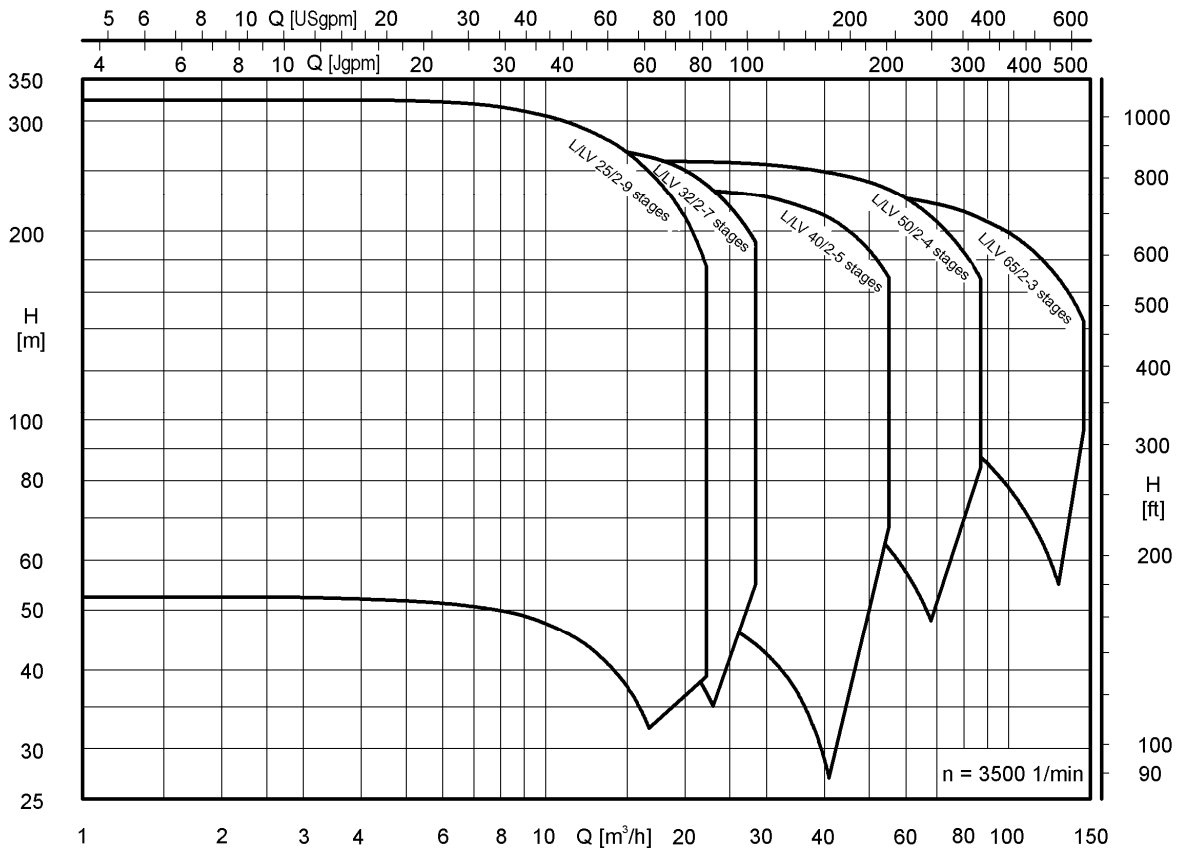
Performance graph

1750 1/min



Performance graph

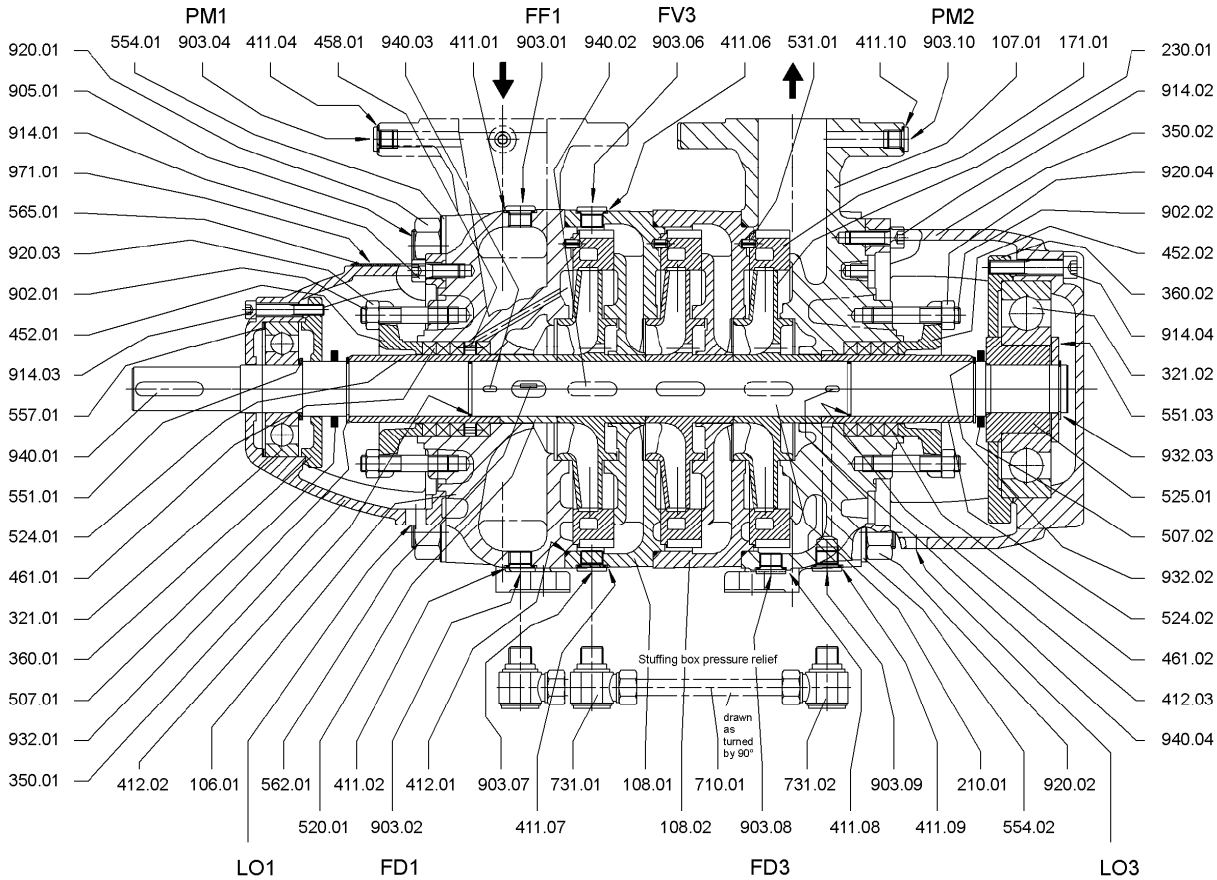
3500 1/min



For exact performance data, please refer to the individual characteristics.  
 Maximum internal pump pressure may not exceed 25 bar at the operating point.

Sectional drawing, Series L, with list of components

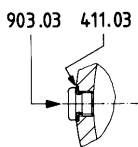
Design with stuffing box



Sizes L 25, L32, L 40, L 50 and L 65

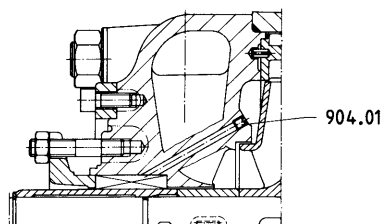
with uncooled stuffing box, **type U1BA**, suction side with locking device, delivery side without pressure relief (supply pressure ≤ 5 bar, internal pump pressure ≤ 10 bar)

with uncooled stuffing box, **type U1BG**, suction side with locking device, delivery side with pressure relief (supply pressure ≤ 5 bar, internal pump pressure > 10 bar, max. 25 bar)



Connection stuffing box pressure relief in suction casing

Connections	Denomination
FF1	Fluid to be pumped, filling
FD1 / FD3	Fluid to be pumped, draining (suction casing/delivery casing)
LO1/ LO3	Leakage, outlet (suction side/delivery side)
PM1 / PM2	Pressure measurement (suction casing/delivery casing)
FV3	Venting (pump)

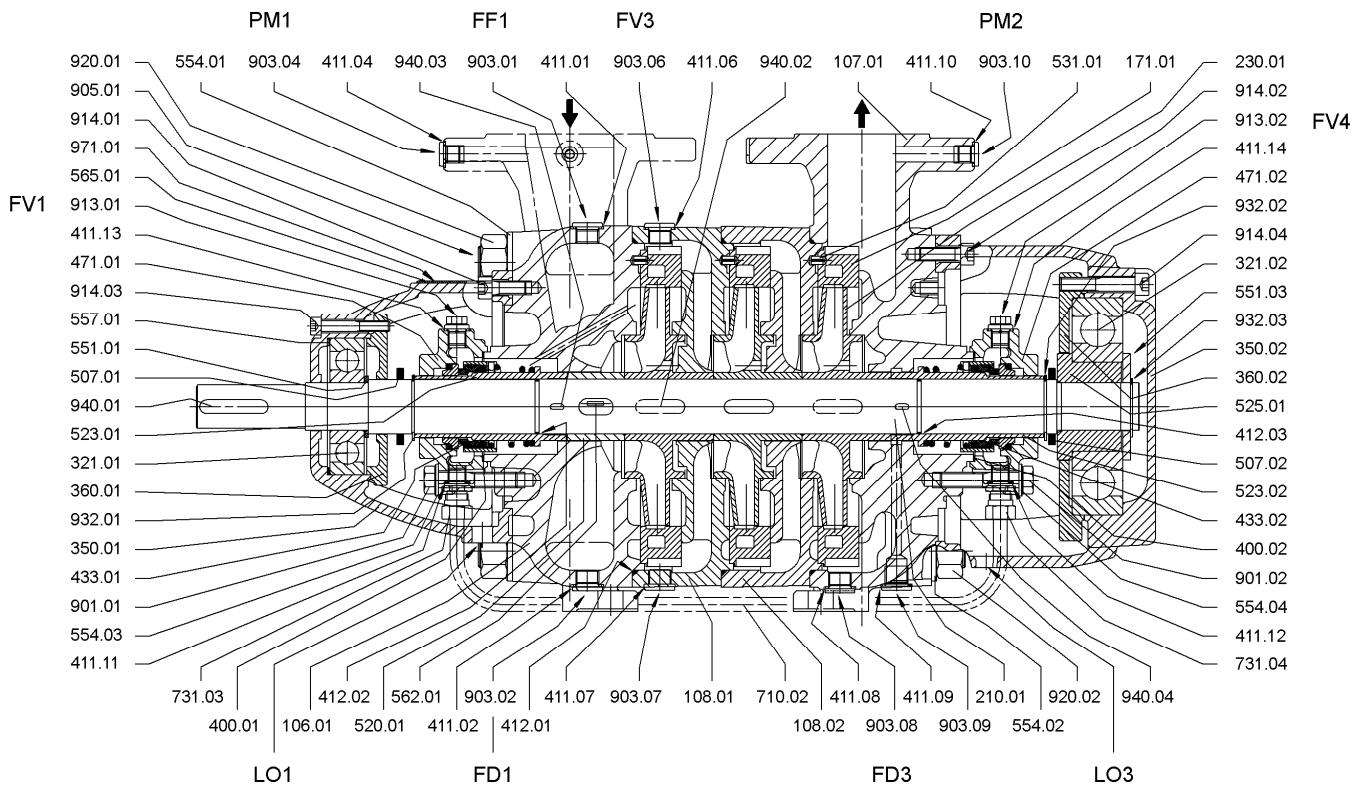


Series L 25, L 32, L 40, L 50 and L 65

with uncooled stuffing box,  
**type U1AA**,  
suction side without locking device,  
delivery side without pressure relief  
(supply pressure > 5 bar,  
internal pump pressure ≤ 10 bar)

with uncooled stuffing box,  
**type U1AG**,  
suction side without locking device,  
delivery side with pressure relief  
supply pressure > 5 bar,  
internal pump pressure > 10 bar)

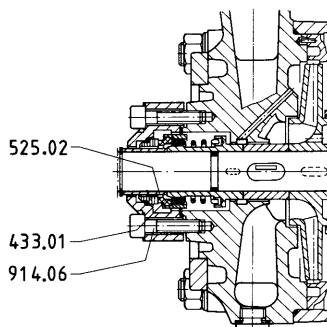
**Design with mechanical seal**



**Sizes L 50 and L 65**

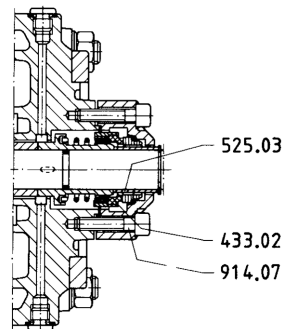
with mechanical seal, balanced, uncooled, **type U2.6D (suction side = clockwise; delivery side = counter-clockwise)** with flushing (supply pressure max. 16 bar, internal pump pressure max. 25 bar)

Connections	Denomination
FF1	Fluid to be pumped, filling
FD1 / FD3	Fluid to be pumped, draining (suction casing/delivery casing)
LO1/ LO3	Leakage, outlet (suction side/delivery side)
PM1 / PM2	Pressure measurement (suction casing/delivery casing)
FV3	Venting (pump)
FV1 / FV4	Venting mechanical seal suction side/delivery side



**Sizes L 25, L 32, L 40 (suction side)**

with mechanical seal balanced, uncooled, **type U2D / U2.2D (suction side = clockwise)**, with flushing (supply pressure max. 16 bar, internal pump pressure max. 25 bar)



**Sizes L 25, L 32, L 40 (delivery side)**

with mechanical seal balanced, uncooled, **type U2D / U2.2D (delivery side = counter-clockwise)**, with flushing (supply pressure max. 16 bar, internal pump pressure max. 25 bar)

Denomination	Part No.	Denomination	Part No.
Suction casing	106.01	Washer	554.01
Delivery casing	107.01	Washer	554.02
Stage casing	108.01	Washer	554.03
Stage casing	108.02	Washer	554.04
Diffuser	171.01	Compensating disk	557.01
Shaft	210.01	Cylindrical pin	562.01
Impeller	230.01	Blind rivet	565.01
Radial ball bearing	321.01	Pipe	710.01
Radial ball bearing	321.02	Pipe	710.02 ①
Bearing casing	350.01	Pipe union	731.01 ④
Bearing casing	350.02	Pipe union	731.02 ④
Bearing cover	360.01	Pipe union	731.03 ①
Bearing cover	360.02	Pipe union	731.04 ①
Gasket	400.02	Hexagonal screw	901.01
Gasket	400.02	Hexagonal screw	901.02
Joint ring	411.01	Stud bolt	902.01
Joint ring	411.02	Stud bolt	902.02
Joint ring	411.03	Screwed plug	903.01
Joint ring	411.04	Screwed plug	903.02
Joint ring	411.06	Screwed plug	903.03 ⑤
Joint ring	411.07	Screwed plug	903.04
Joint ring	411.08	Screwed plug	903.06
Joint ring	411.09	Screwed plug	903.07 ⑤
Joint ring	411.10	Screwed plug	903.08
Joint ring	411.11 ①	Screwed plug	903.09 ⑤
Joint ring	411.12 ①	Screwed plug	903.10
Joint ring	411.13 ①	Grub screw	904.01 ⑥
Joint ring	411.14 ①	Connecting screw	905.01
O-ring seal	412.01	Venting screw	913.01
O-ring seal	412.02	Venting screw	913.02
O-ring seal	412.03	Socket-head cap screw	914.01
Mechanical seal		Socket-head cap screw	914.02
(clockwise)	433.01	Socket-head cap screw	914.03
Mechanical seal		Socket-head cap screw	914.04
(counter-clockwise)	433.02	Socket-head cap screw	914.06 ②
Gland	452.01	Socket-head cap screw	914.07 ②
Gland	452.02	Hexagonal nut	920.01
Lantern ring	458.01 ③	Hexagonal nut	920.02
Packing ring	461.01	Hexagonal nut	920.03
Packing ring	461.02	Hexagonal nut	920.04
Joint cover	471.01	Circlip	932.01
Joint cover	471.02	Circlip	932.02
Deflector	507.01	Circlip	932.03
Deflector	507.02	Key	940.01
Sleeve	520.01	Key	940.02
Shaft sleeve	523.01	Key	940.03
Shaft sleeve	523.02	Key	940.04
Protective shaft sleeve	524.01	Name plate	971.01
Protective shaft sleeve	524.02		
Spacer sleeve	525.01 ②		
Spacer sleeve	525.02		
Spacer sleeve	525.03		
Clamping sleeve	531.01		
Distance washer	551.01		
Distance washer	551.03		

① only with mechanical seal type U2D/U2.2D/U2.6D

② only with mechanical seal type U2D/U2.2D

③ with sizes L 50 and L 65

④ only with stuffing box pressure relief

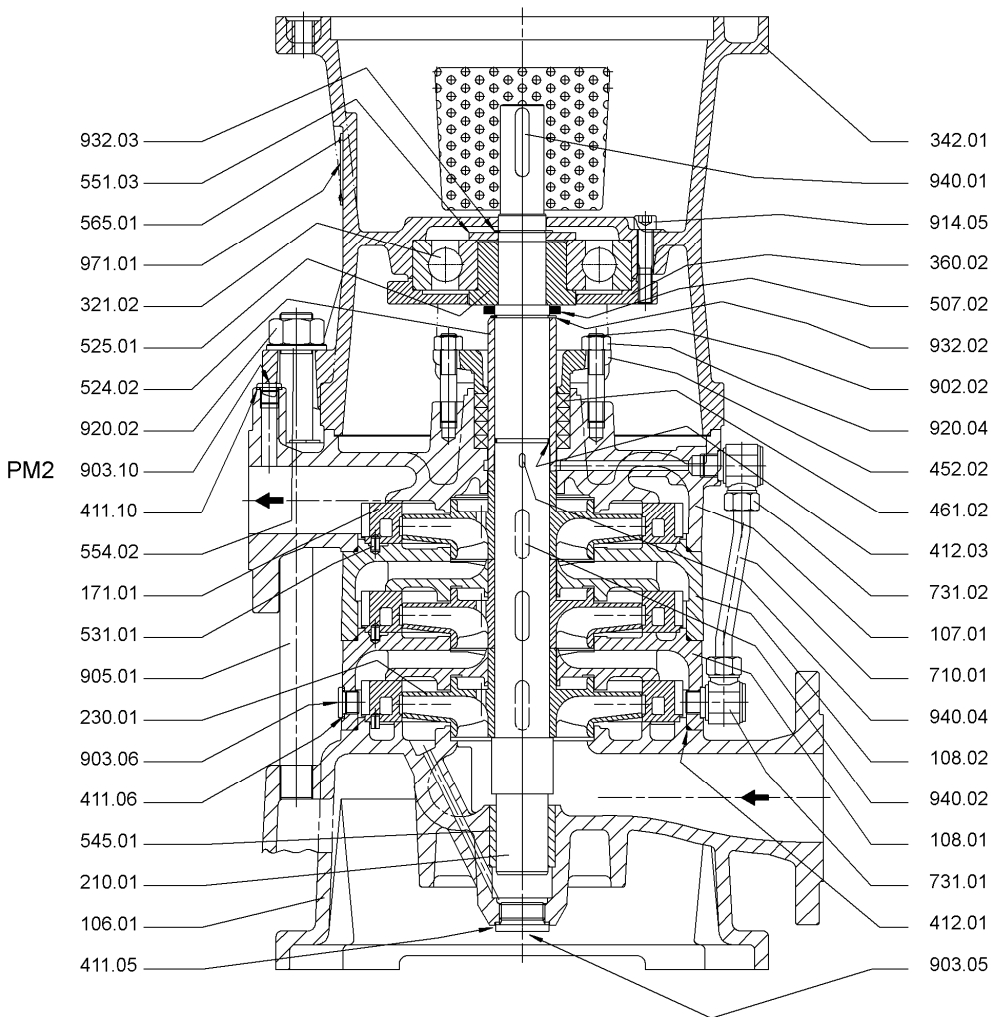
⑤ not provided in case of stuffing box pressure relief

⑥ only for type without locking



Sectional drawing, Series LV, with list of components

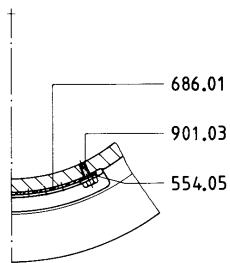
Design with stuffing box



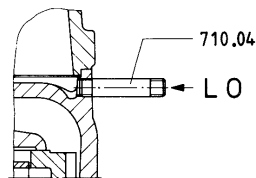
Sizes LV 50 and LV 65

with uncooled stuffing **type U1A**, delivery side without pressure relief  
 (max. supply pressure 10 bar, less delivery pressure of one stage; internal pump pressure ≤ 10 bar)

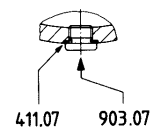
with uncooled stuffing box, **type U1G**, delivery side with pressure relief  
 (max. supply pressure 10 bar, less delivery pressure of one stage; internal pump pressure > 10 bar, max. 25 bar)



Fixing of guard sheet to the support bearing lantern  
 Protection against accidental contact acc. to DIN EN 809

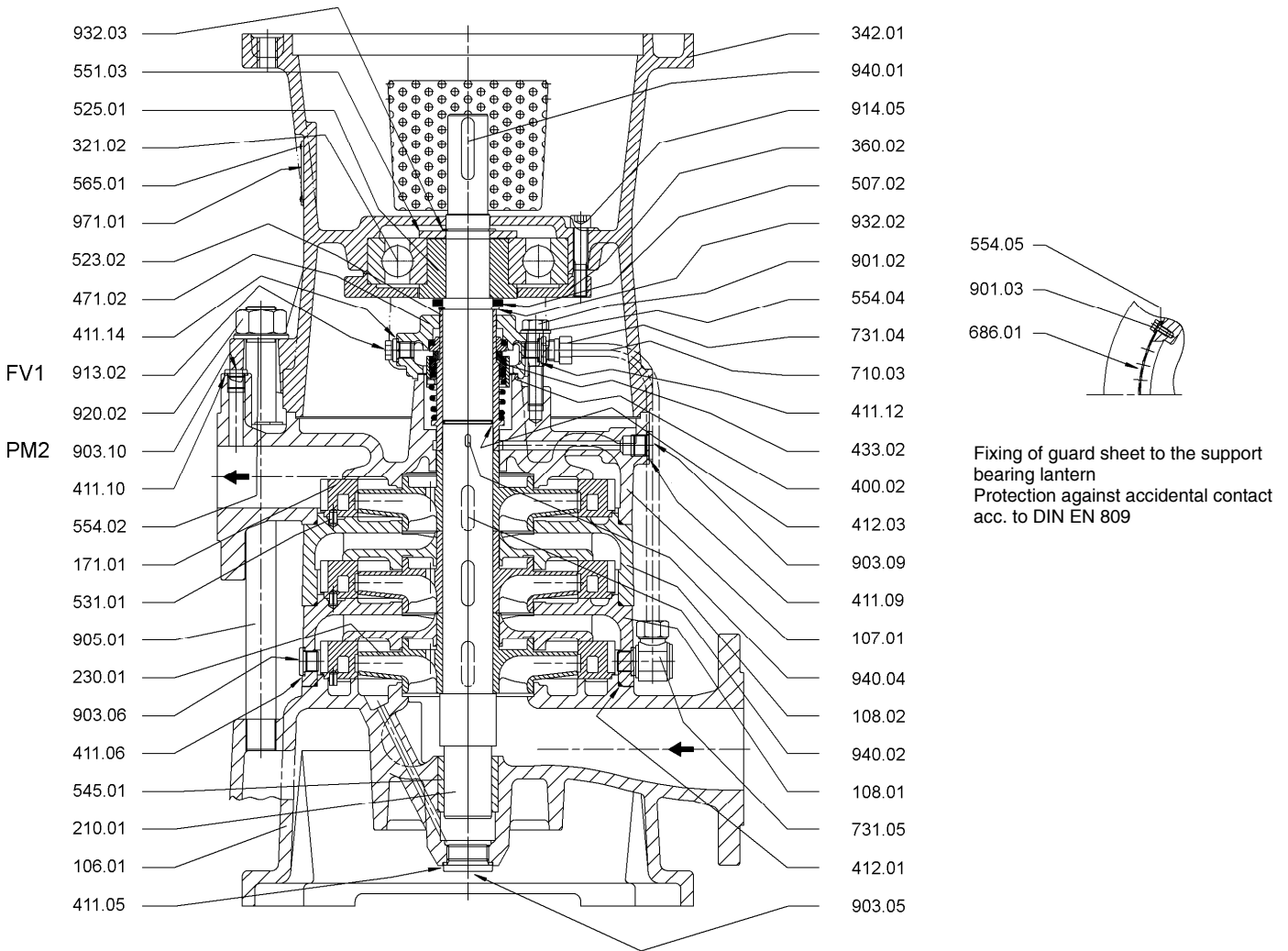


Leakage drain in delivery casing



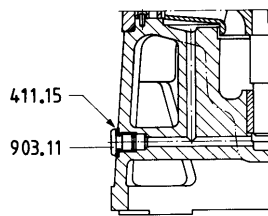
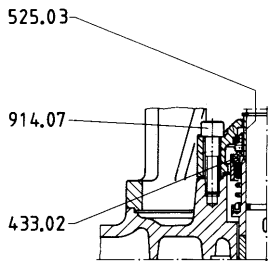
Connection stuffing box pressure relief 1st stage

**Design mechanical seal**



**Sizes LV 50 und LV 65**

with mechanical seal, balanced, uncooled, **type U2.6D (counter-clockwise)**, with flushing (max. supply pressure 16 bar, internal pump pressure max. 25 bar)



**Sizes LV 25, LV 32, and LV 40**

with mechanical seal balanced, uncooled **type U2D / U2.2D (counter-clockwise)**, with flushing (supply pressure max. 16 bar, internal pump pressure max. 25 bar)

**Series LV 25, LV 32, and LV 40**

Lube holes for sliding bearing  
Suction side with screw plugs

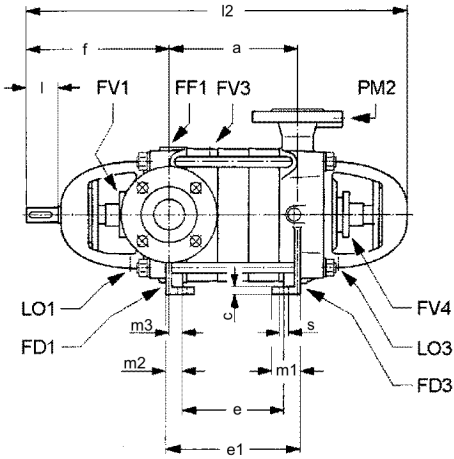
Denomination	Part No.
Suction casing	106.01
Delivery casing	107.01
Stage casing	108.01
Stage casing	108.02
Diffuser	171.01
Shaft	210.01
Impeller	230.01
Radial ball bearing	321.01
Journal bearing lantern	342.01
Gasket	360.02
Joint ring	400.01
Joint ring	411.05
Joint ring	411.06
Joint ring	411.07
Joint ring	411.09
Joint ring	411.10
Joint ring	411.12 ①
Joint ring	411.14 ①
Joint ring	411.15 ⑥
O-ring seal	412.01
O-ring seal	412.03
Mechanical seal (counter-clockwise)	433.02
Gland	452.02
Packing ring	461.02
Joint cover	471.02
Deflector	507.02
Shaft sleeve	523.02
Protective shaft sleeve	524.02
Spacer sleeve	525.01 ②
Spacer sleeve	525.03
Clamping sleeve	531.01
Bearing bush	545.01
Distance washer	551.03
Washer	554.02
Washer	554.04
Washer	554.05
Blind rivet	565.01
Guard plate	686.01
Pipe	710.01

Denomination	Part No.
Pipe	710.03 ①
Pipe	710.04
Pipe union	730.01 ⑥
Pipe union	731.01 ③
Pipe union	731.02 ④
Pipe union	731.04 ①
Pipe union	731.05 ①
Hexagonal screw	901.02
Hexagonal screw	901.03
Stud bolt	902.02
Screwed plug	903.05
Screwed plug	903.06
Screwed plug	903.07 ④
Screwed plug	903.09 ④
Screwed plug	903.10
Screwed plug	903.11 ⑤
Connecting screw	905.01
Venting screw	913.02
Socket-headed cap screw	914.05
Socket-headed cap screw	914.07 ②
Hexagonal nut	920.02
Hexagonal nut	920.04
Circlip	932.02
Circlip	932.03
Key	940.01
Key	940.02
Key	940.04
Name plate	971.01

- ① only with mechanical seal type U2D/U2.2D/U2.6D
- ② only with mechanical seal type U2D/U2.2D
- ③ only with stuffing box pressure relief
- ④ not provided in case of stuffing box pressure relief
- ⑤ only for size LV 25, LV 32 and LV 40
- ⑥ only for size LV 65 - W3

Connections	Denomination
LO	Leakage, outlet (with stuffing box)
PM2	Pressure measurement (delivery casing)
FV1	Venting (mechanical seal)

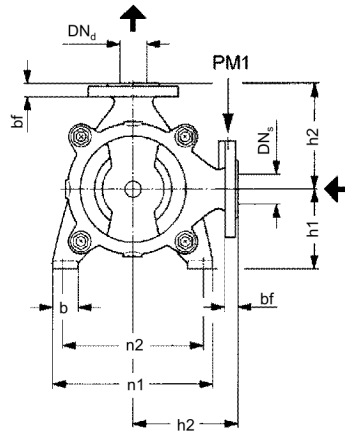
Pump dimensions, Series L



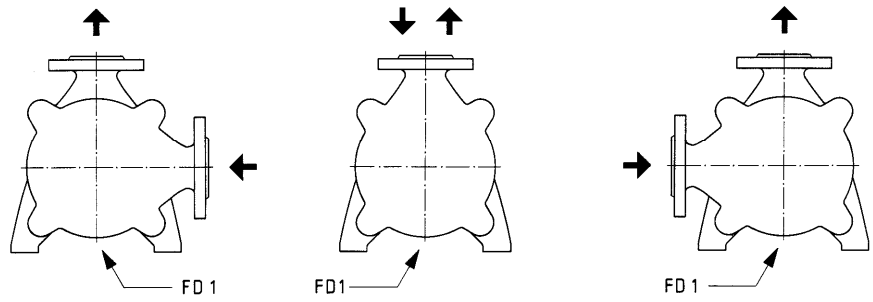
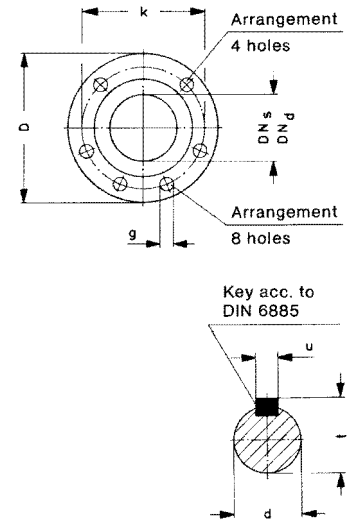
Sense of rotation: clockwise, as seen from as seen from the driving side

Dimensions in mm without commitment.

Suction flange PN 16 acc. to EN 1092-2					
DN <sub>s</sub>	D	bf	k	g	Number of holes
32	140	18	100	19	4
40	150	18	110	19	4
50	165	20	125	19	4
65	185	20	145	19	4
80	200	22	160	19	8
Delivery flange PN 40 acc. to EN 1092-2					
DN <sub>d</sub>	D	bf	k	g	Number of holes
25	115	18	85	14	4
32	140	20	100	19	4
40	150	20	110	19	4
50	165	22	125	19	4
65	185	24	145	19	8



Possible suction branch positions (related to the delivery branch). All data as seen from the driving side



Suction branch 90° to the right standard type

Suction branch upwards (with L 25/L 32 and L 40 with 3 stage only)

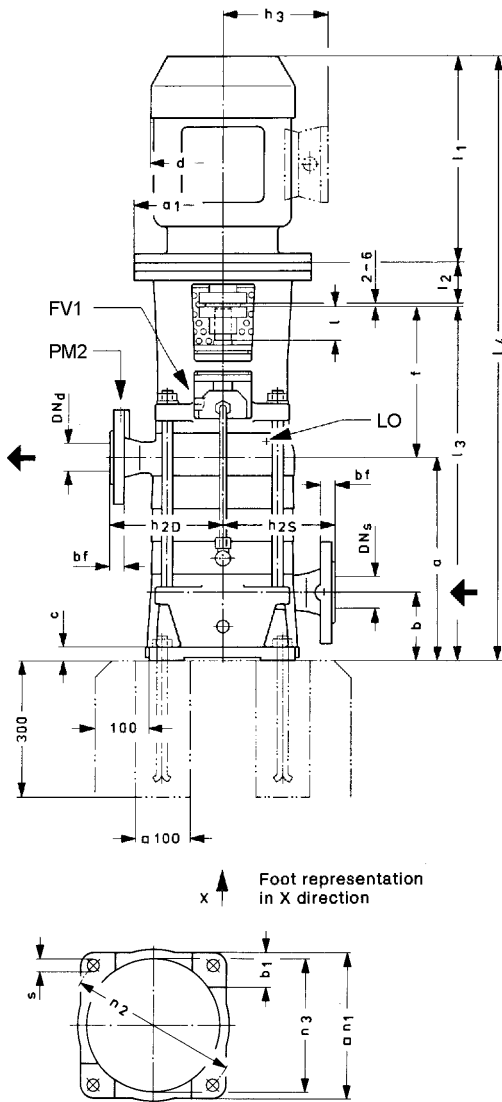
Suction branch 90° to the left

Series and size	Suction flange DN <sub>s</sub>	Delivery flange DN <sub>d</sub>	Pump dimensions			Foot dimensions							Shaft end				Connections										
			f	h <sub>1</sub>	h <sub>2</sub>	b	c	m <sub>1</sub>	m <sub>2</sub>	m <sub>3</sub>	n <sub>1</sub>	n <sub>2</sub>	s	d	l	t	u	Filling		Draining		Leakage drain		Venting		Pressure gauge	
																		FF1	FD1	FD3	L01	L03	FV3	FV4	PM1	PM2	
L 25	32	25	210	112	145	40	10	40	25	21	220	190	M12	19	40	21,5	6	G $\frac{3}{8}$	G $\frac{3}{8}$	G $\frac{1}{4}$	G $\frac{3}{8}$	Ø 15	G $\frac{1}{4}$	G $\frac{1}{8}$	G $\frac{1}{4}$	G $\frac{1}{4}$	G $\frac{1}{4}$
L 32	40	32	215	120	160	40	12	40	25	21	250	220	M12	24	50	27	8	G $\frac{3}{8}$	G $\frac{3}{8}$	G $\frac{3}{8}$	G $\frac{3}{8}$	Ø 15	G $\frac{1}{4}$	G $\frac{1}{8}$	G $\frac{1}{4}$	G $\frac{1}{4}$	G $\frac{1}{4}$
L 40	50	40	222	130	170	40	12	40	25	21	270	240	M12	24	50	27	8	G $\frac{3}{8}$	G $\frac{3}{8}$	G $\frac{3}{8}$	G $\frac{3}{8}$	Ø 15	G $\frac{1}{4}$	G $\frac{1}{8}$	G $\frac{1}{4}$	G $\frac{1}{4}$	G $\frac{1}{4}$
L 50	65	50	274	150	200	55	15	55	35	30	310	260	M16	32	80	35	10	G $\frac{3}{8}$	G $\frac{3}{8}$	G $\frac{3}{8}$	G $\frac{3}{8}$	Ø 15	Ø 15	G $\frac{1}{4}$	G $\frac{1}{4}$	G $\frac{1}{4}$	G $\frac{1}{4}$
L 65	80	65	280	170	220	55	15	55	35	30	350	300	M16	32	80	35	10	G $\frac{3}{8}$	G $\frac{3}{8}$	G $\frac{3}{8}$	G $\frac{3}{8}$	Ø 15	Ø 15	G $\frac{1}{4}$	G $\frac{1}{4}$	G $\frac{1}{4}$	G $\frac{1}{4}$

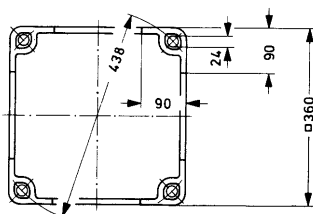
Number of stages	Series																			
	L 25				L 32				L 40				L 50				L 65			
	a	e	e <sub>1</sub>	l <sub>2</sub>	a	e	e <sub>1</sub>	l <sub>2</sub>	a	e	e <sub>1</sub>	l <sub>2</sub>	a	e	e <sub>1</sub>	l <sub>2</sub>	a	e	e <sub>1</sub>	l <sub>2</sub>
2	97	55	105	482	103	61	111	499	121	79	129	528	149	89	159	642	165	105	175	668
3	140	98	148	525	151	109	159	547	178	136	186	585	214	154	224	707	240	180	250	743
4	183	141	191	568	199	157	207	595	235	193	243	642	279	219	289	772	315	255	325	818
5	226	184	234	611	247	205	255	643	292	250	300	699	344	284	354	837	390	330	400	893
6	269	227	277	654	295	253	303	691	349	307	357	756	409	349	419	902	465	405	475	968
7	312	270	320	697	343	301	351	739	406	364	414	813	474	414	484	967	540	480	550	1043
8	355	313	363	740	391	349	399	787	463	421	471	870	539	479	549	1032	615	555	625	1118
9	398	356	406	783	439	397	447	835	520	478	528	927	604	544	614	1097	690	630	700	1193
10	441	399	449	826	487	445	495	883	577	535	585	984	669	609	679	1162	765	705	775	1268
11	484	442	492	869	535	493	543	931	634	592	642	1041	734	674	744	1227	840	780	850	1343
12	527	485	535	912	583	541	591	979	691	649	699	1098	799	739	809	1292	-	-	-	-
13	570	528	578	955	631	589	639	1027	748	706	756	1155	-	-	-	-	-	-	-	-
14	613	571	621	998	679	637	687	1075	-	-	-	-	-	-	-	-	-	-	-	-
15	656	614	664	1041	727	685	735	1123	-	-	-	-	-	-	-	-	-	-	-	-

① for type with mechanical seal

**Pump dimensions and installation plan, series LV**  
 n = 1450/1750 1/min et 2900/3500 1/min



For sizes LV 25, LV 32 and LV 40



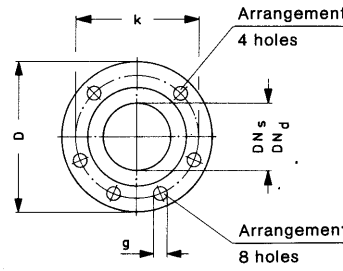
For sizes LV 50 and LV 65

**Possible driving motors and allocation to pump sizes**

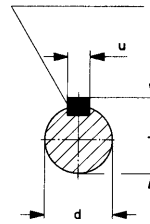
The motor dimensions as indicated are approximate values. Exact data depend on the motor make.

When using special motors, it must be noted that depending upon the enclosures, different performances are allocated to the individual sizes. The main dimensions are changed accordingly. In case of order, binding tables of motor dimensions are to be transmitted to us.

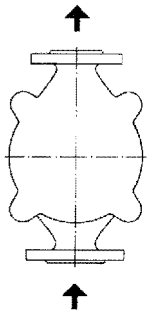
Sens de rotation:  
 Counter-clockwise as seen from the driving side



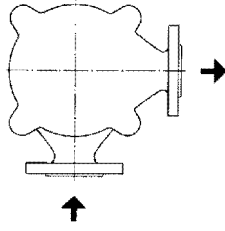
Key acc. to  
 DIN 6885



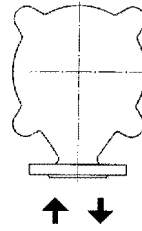
Possible delivery branch positions (related to the suction branch). All data as seen from the driving side



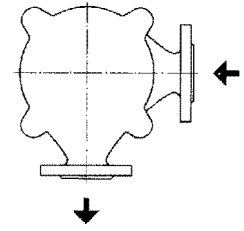
Delivery branch set off by 180° standard design



Delivery branch 90° to the right



Branches on top of each other 3 and more stages



Delivery branch 90° to the left

Dimensions in mm without commitment

Series and size	Suction flange DN <sub>s</sub>	Delivery flange DN <sub>d</sub>	Pump dimensions				Foot dimensions					Shaft end				Connections			
			b±3	f	h <sub>2D</sub>   h <sub>2S</sub>		b <sub>1</sub>	c	n <sub>1</sub> ±4,5	n <sub>2</sub>	n <sub>3</sub>	for screws s	d	l	t	u	Leakage drain LO	Venting FV1	Pressure gauge PM 2
					±2,5														
LV 25	32	25	93	207	145	46	18	193	222	178	M16	19	40	21,5	6	-	G $\frac{1}{8}$	G $\frac{1}{4}$	
LV 32	40	32	100	223	160	52	20	214	248	200	M16	24	50	27	8	-	G $\frac{1}{8}$	G $\frac{1}{4}$	
LV 40	50	40	113	233	170	54	22	234	274	225	M16	24	50	27	8	-	G $\frac{1}{8}$	G $\frac{1}{4}$	
LV 50	65	50	125	290	200   220	-	28	-	-	-	M20	32	80	35	10	G $\frac{1}{4}$	G $\frac{1}{4}$	G $\frac{1}{4}$	
LV 65	80	65	125	290	220	-	28	-	-	-	M20	32	80	35	10	G $\frac{1}{4}$	G $\frac{1}{4}$	G $\frac{1}{4}$	

① for type with stuffing box

② for type with mechanical seal

Number of stages	Series															Suction flange PN 16 acc. to EN 1092-2					
	LV 25			LV 32			LV 40			LV 50			LV 65			DN <sub>s</sub>	D	bf	k	g	Lochzahl
	a ±3	l <sub>s</sub>	l <sub>d</sub>	a ±3	l <sub>s</sub>	l <sub>d</sub>	a ±3	l <sub>s</sub>	l <sub>d</sub>	a ±3	l <sub>s</sub>	l <sub>d</sub>	a ±3	l <sub>s</sub>	l <sub>d</sub>						
2	190	397		203	426		234	467		278	568		305	595		32	140	18	100	19	4
3	233	440		251	474		291	524		343	633		380	670		40	150	18	110	19	4
4	276	483		299	522		346	579		408	698		455	745		50	165	20	125	19	4
5	319	526		347	570	l <sub>d</sub> =	405	638	l <sub>d</sub> =	473	763	l <sub>d</sub> =	530	820	l <sub>d</sub> =	65	185	20	145	19	4
6	362	569	l <sub>1+</sub>	395	618	l <sub>1+</sub>	462	695	l <sub>1+</sub>	538	828	l <sub>1+</sub>	605	895	l <sub>1+</sub>	80	200	22	160	19	8
7	405	612	l <sub>2+</sub>	443	666	l <sub>2+</sub>	519	752	l <sub>2+</sub>	603	893	l <sub>2+</sub>	680	970	l <sub>2+</sub>						
8	448	655	l <sub>3+</sub>	491	714	l <sub>3+</sub>	576	809	l <sub>3+</sub>	668	958	l <sub>3+</sub>	755	1045	l <sub>3+</sub>						
9	491	698	Coupling clearance	539	762	Coupling clearance	633	866	Coupling clearance	733	1023	Coupling clearance	830	1120	Coupling clearance						
10	534	741		587	810		690	923		798	1088		905	1195							
11	577	784		635	858		747	980		863	1153		980	1270							
12	620	827		683	906		804	1037		928	1218		-	-							
13	663	870		731	954		861	1094		-	-		-	-							
14	706	913		779	1002		-	-		-	-		-	-							
15	749	956		827	1050		-	-		-	-		-	-							

Possible driving motors

1450/1750 1/min							
Motor size	Pump size	kW	a <sub>1</sub>	∅ d	∅ h <sub>s</sub>	∅ l <sub>1</sub>	l <sub>2</sub>
80	LV 25 to LV 32	0,55	200	162	124	234	40
	LV 25 to LV 40	0,75					
90 S	LV 25 to LV 50	1,1	200	181	130	282	50
90 L		1,5					
100 L	LV 25 to LV 50	2,2	250	203	158	312	60
	LV 25 to LV 65	3					
112 M	LV 25 to LV 65	4	250	228	171	335	60
132 S	LV 32 to LV 65	5,5					
132 M	LV 40 to LV 65	7,5	300	266	196	413	80
160 M	LV 40 to LV 65	11					
160 L	LV 50 and LV 65	15	350	320	234	525	110
180 M	LV 50 and LV 65	18,5					
180 L	LV 65	22	350	375	275	610	110
200 L	LV 65	30					

© The dimensions depend on the motor make and slightly deviate.

2900/3500 1/min							
Motor size	Pump size	kW	a <sub>1</sub>	∅ d	∅ h <sub>s</sub>	∅ l <sub>1</sub>	l <sub>2</sub>
90 L	LV 25	2,2	200	181	130	282	50
100 L	LV 25 and LV 32	3	250	203	158	312	60
112 M	LV 25 and LV 32	4	250	228	171	335	60
132 S	LV 25 to LV 40	5,5	300	266	196	413	80
		7,5					
160 M	LV 25 to LV 40	11	350	320	234	525	110
		15					
160 L	LV 25 to LV 50	18,5	350	320	234		110
180 M	LV 25 to LV 65	22	350	375	275	610	110
200 L	LV 32 to LV 65	30	400	415	310	665	110
		37					
225 M	LV 40 to LV 65	45	450	470	335	695	140
250 M	LV 50 and LV 65	55	550	520	430	790	140
280 S	LV 50 and LV 65	75	550	575	455	865	140
280 M	LV 65	90	550	575	455	865	140

# ALLWEILER Solutions

## Successful in important branches

Decades of experience and branch-specific know-how ensure solutions that are practical and dependable. In addition to individual units with a motor or with a free shaft end, you can get complete systems and customer-specific cast parts from ALLWEILER GmbH. You are not just investing in machines with ALLWEILER GmbH. You are also profiting from decades of know-how about applications and processes in your branch.

You will find pumps and systems by ALLWEILER GmbH in the following sectors:

▶ **Marine and Offshore**

Made of particularly corrosion-resistant, saltwater-proof materials and in accordance with specific standards (shock testing, national marine, international classifications, etc.).

▶ **Power Generation**

Block and twin units for fuel and water injection in gas and steam turbines.  
For fuel supply, injection and lubricating oil delivery in power plants.

▶ **Water and Wastewater**

Pumps for water treatment; share of dry solids content up to 45 percent; macerators, which make it possible to pump delivery media that are high in fibre and solids.

▶ **Process Engineering and Chemical Industry (ATEX-conformity)**

Shaft bearing, shaft seal and material designs in accordance with the chemical characteristics of the delivery media. Magnetic coupling for hermetically sealed pumps.

▶ **Building Industry**

Special units for oil furnace and lift systems. oil submersible pumps for all types of hydraulic machines.

▶ **Food and Pharma**

Stainless steel pumps with CIP and SIP design, EHEDG and FDA certified. Especially for the careful delivery and proportioning of even sticky, paste-like and solids-rich media.

▶ **Tool Machinery**

Designed for large delivery amounts or a high delivery pressure; resistant to contaminants and foreign materials. Especially for cooling lubricant supply.

▶ **Pulp and Paper**

Pumps with extremely high availability (24 hours; 365 days) and many sizes, starting with small proportioning pumps and ranging to large Kaolin feeding pumps.

▶ **Heat Transfer**

In supply circuits, circulating systems and heating circuits for the delivery of hot water and heat-transfer oil up to 207 °C and 450 °C.

Subject to technical alterations.

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VM 502 GB/09.10 - Ident.-No. 795 322

The stated performance data are to be understood only as an outline of performance data of our products. For exact limits of application please refer to the quotation and acceptance of order.