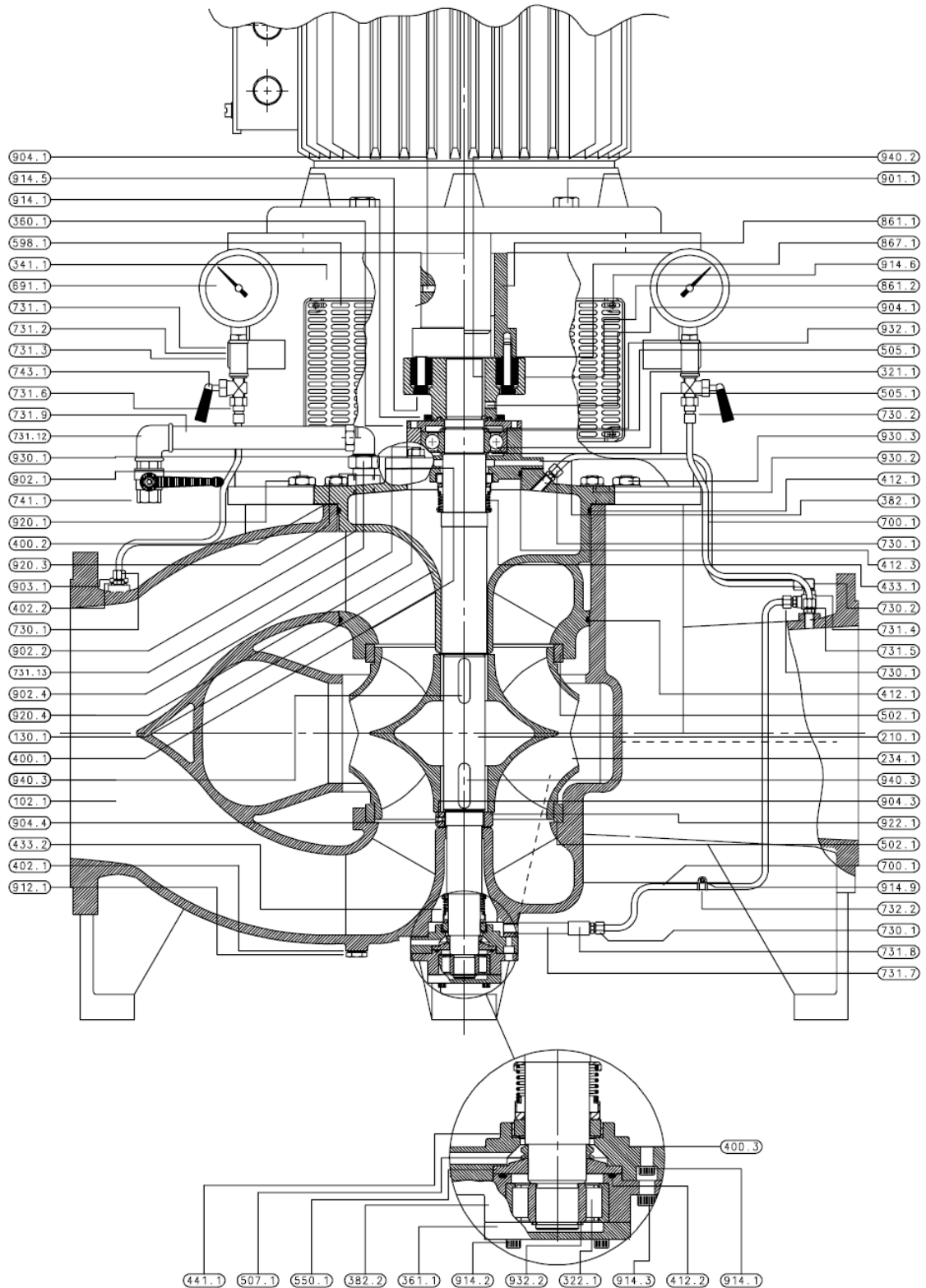


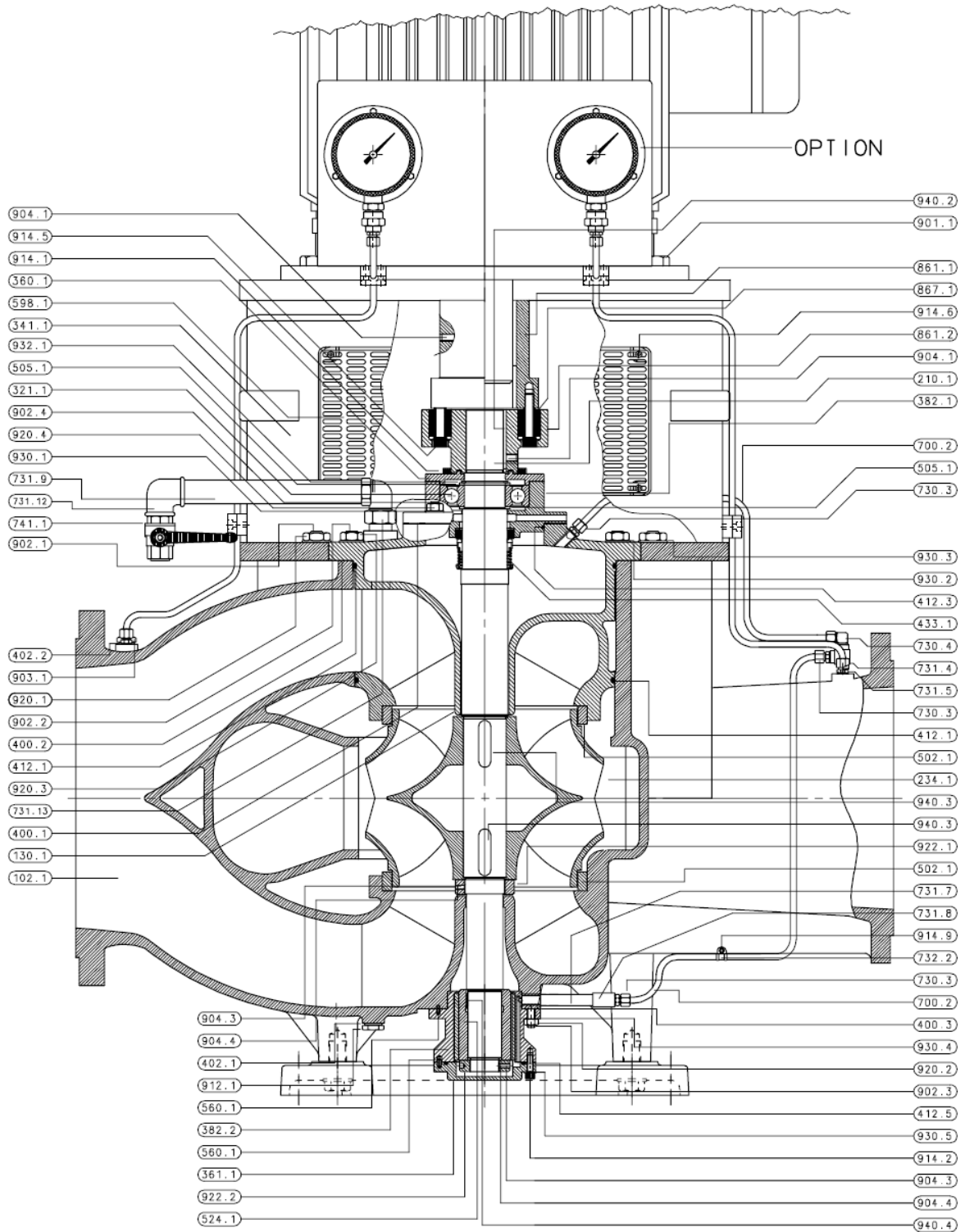
15.2 DSL300 COMPACT DESIGN WITH BOTTOM ROLLER BEARING



PARTS LIST

Pos.	Designation	Pos.	Designation
102.1	Pump casing	731.7	Fitting
130.1	Rear cover	731.8	Fitting
210.1	Shaft	731.9	Fitting
234.1	Impeller	731.12	Fitting
321.1	Ball bearing	731.13	Fitting
322.1	Roller bearing	732.2	Fitting
341.1	Motor bracket	741.1	Ball valve
360.1	Bearing cover	743.1	Gauge valve
361.1	Bearing end cover	861.1	Coupling half-motor
382.1	Bearing housing	861.2	Coupling half-pump
382.2	Bearing housing	867.1	Coupling bush
400.1	Gasket	901.1	Hexagon head screw
400.2	Gasket	902.1	Stud
400.3	Gasket	902.2	Stud
402.1	Plastic seal	902.4	Stud
402.2	Plastic seal	903.1	Plug
412.1	O-ring	904.1	Pointed screw
412.2	O-ring	904.3	Pointed screw
412.3	O-ring	904.4	Ball
433.1	Mech. shaft seal	912.1	Bottom plug
433.2	Mech. shaft seal	914.1	Allen screw
441.1	Shaft seal housing	914.2	Allen screw
502.1	Seal Ring	914.3	Screw
505.1	Support disc	914.5	Allen screw
507.1	Water deflector	914.6	Allen screw
550.1	Intermediate ring	914.9	Allen screw
598.1	Coupling guard	920.1	Nut
691.1	Manometer	920.3	Nut
700.1	Pipe	920.4	Nut
730.1	Fitting	922.1	Shaft nut
730.2	Fitting	930.1	Washer
731.1	Fitting	930.2	Washer
731.2	Fitting	930.3	Washer
731.3	Fitting	932.1	Snap ring
731.4	Fitting	932.2	Snap ring
731.5	Fitting	940.2	Key
731.6	Fitting	940.3	Key

15.4 DSL300 COMPACT DESIGN WITH BOTTOM SLIDING BEARING

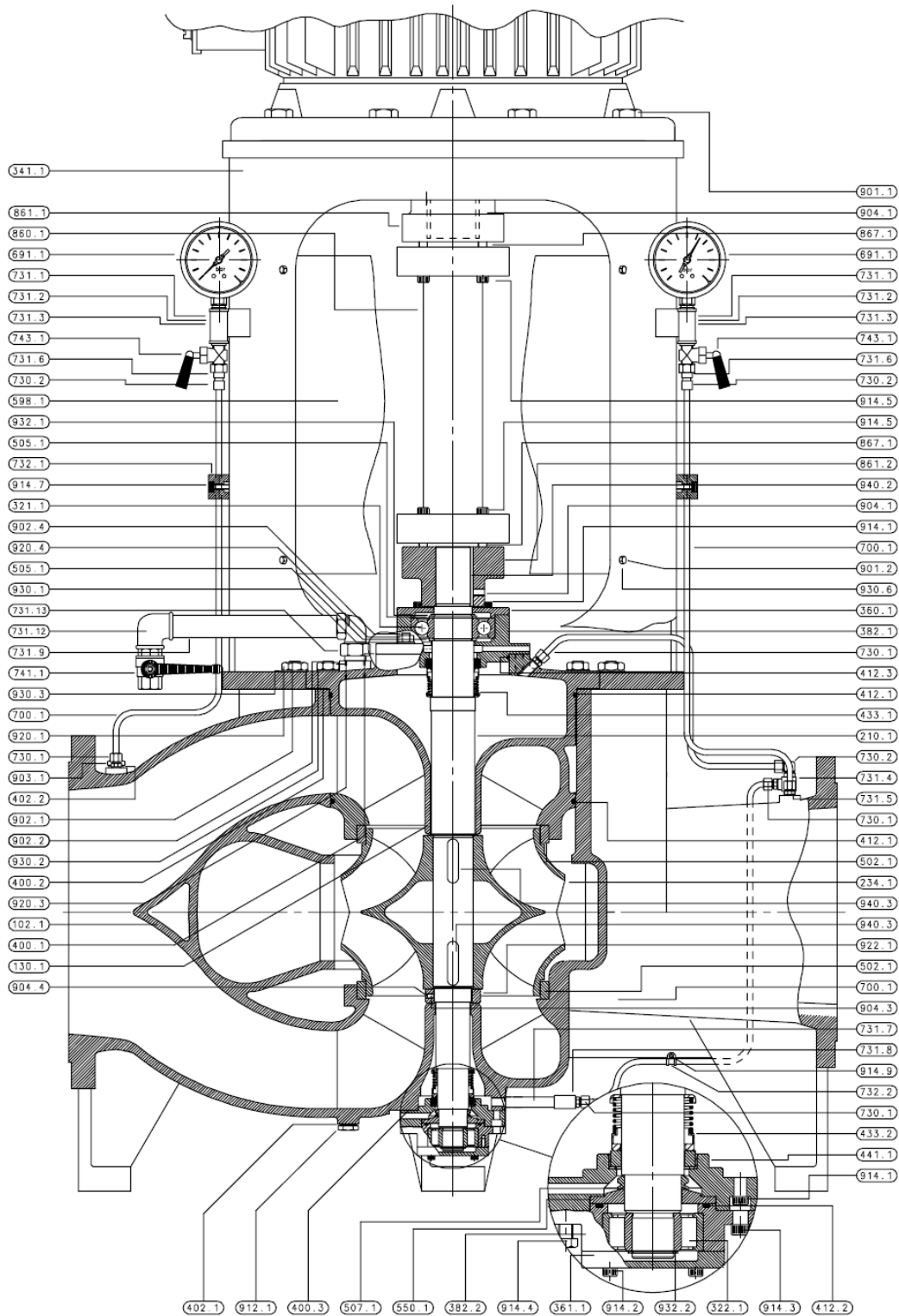


PARTS LIST

Pos.	Designation	Pos.	Designation
102.1	Pump casing	741.1	Ball valve
130.1	Rear cover	861.1	Coupling half-motor
210.1	Shaft	861.2	Coupling half-pump
234.1	Impeller	867.1	Coupling bush
321.1	Ball bearing	901.1	Hexagon head screw
341.1	Motor bracket	902.1	Stud
360.1	Bearing cover	902.2	Stud
361.1	Bearing end cover	902.3	Stud
382.1	Bearing housing	902.4	Stud
382.2	Bearing housing	903.1	Plug
400.1	Gasket	904.1	Pointed screw
400.2	Gasket	904.3	Pointed screw
400.3	Gasket	904.4	Ball
402.1	Plastic seal	912.1	Bottom plug
402.2	Plastic seal	914.1	Allen screw
412.1	O-ring	914.2	Allen screw
412.3	O-ring	914.5	Allen screw
412.5	O-ring	914.6	Allen screw
433.1	Mech. shaft seal	914.9	Allen screw
502.1	Seal Ring	920.1	Nut
505.1	Support disc	920.2	Nut
524.1	Sleeve	920.3	Nut
560.1	Pin	920.4	Nut
598.1	Coupling guard	922.1	Shaft nut
700.2	Pipe	922.2	Shaft nut
730.3	Fitting	930.1	Washer
730.4	Fitting	930.2	Washer
731.4	Fitting	930.3	Washer
731.5	Fitting	930.4	Washer
731.7	Fitting	930.5	Washer
731.8	Fitting	932.1	Snap ring
731.9	Fitting	940.2	Key
731.12	Fitting	940.3	Key
731.13	Fitting	940.4	Key
732.2	Fitting		

15. ASSEMBLY DRAWING

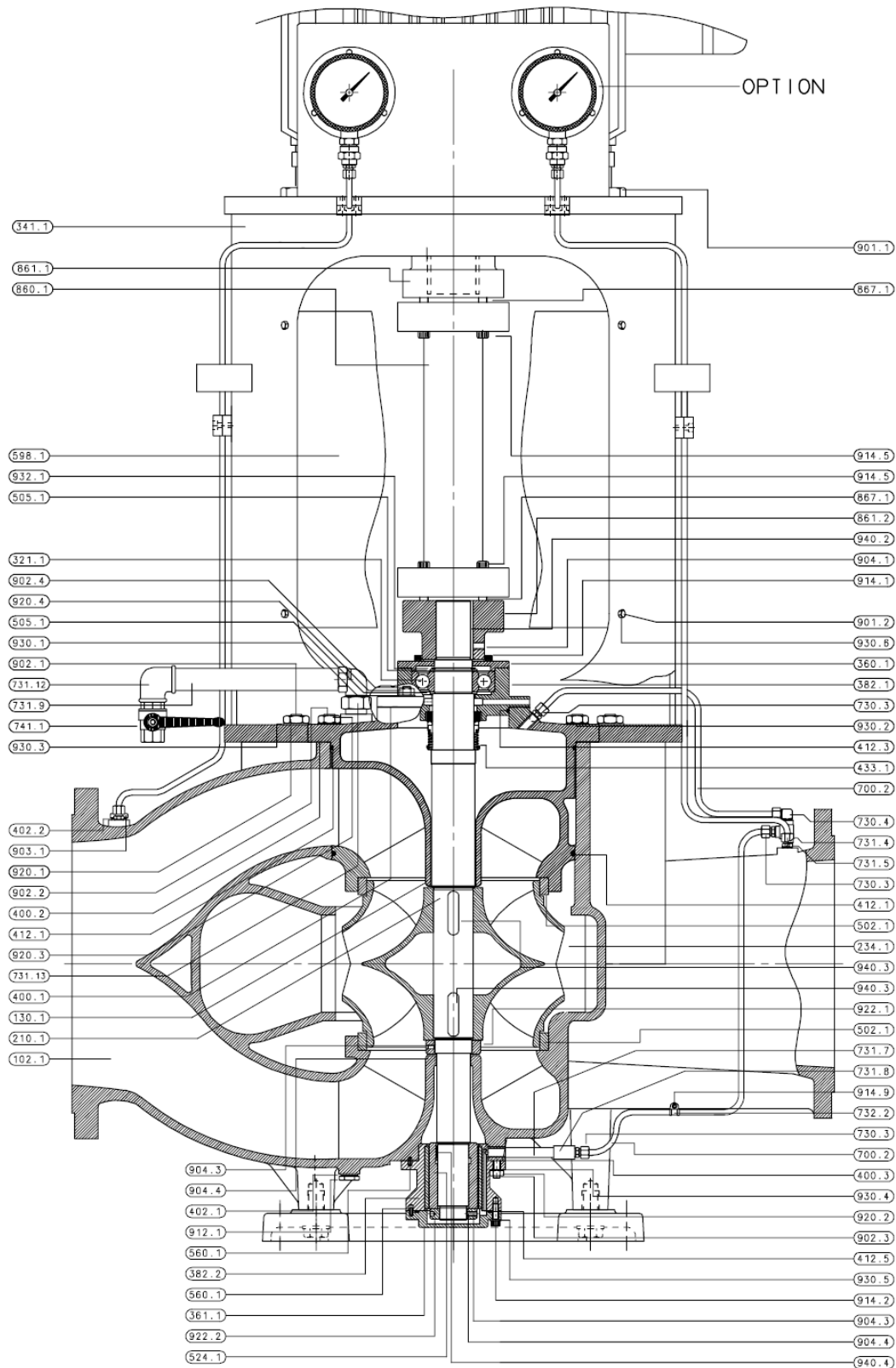
15.1 DSL300 SPACER DESIGN WITH BOTTOM ROLLER BEARING



PARTS LIST

Pos.	Designation	Pos.	Designation
102.1	Pump casing	731.12	Fitting
130.1	Rear cover	731.13	Fitting
210.1	Shaft	732.1	Fitting
234.1	Impeller	732.2	Fitting
321.1	Ball bearing	741.1	Ball valve
322.1	Roller bearing	743.1	Gauge valve
341.1	Motor bracket	860.1	Spacer shaft
360.1	Bearing cover	861.1	Coupling half-motor
361.1	Bearing end cover	861.2	Coupling half-pump
382.1	Bearing housing	867.1	Coupling bush
382.2	Bearing housing	901.1	Hexagon head screw
400.1	Gasket	901.2	Hexagon head screw
400.2	Gasket	902.1	Stud
400.3	Gasket	902.2	Stud
402.1	Plastic seal	902.4	Stud
402.2	Plastic seal	903.1	Plug
412.1	O-ring	904.1	Pointed screw
412.2	O-ring	904.3	Pointed screw
412.3	O-ring	904.4	Ball
433.1	Mech. shaft seal	912.1	Bottom plug
433.2	Mech. shaft seal	914.1	Allen screw
441.1	Shaft seal housing	914.2	Allen screw
502.1	Seal Ring	914.3	Screw
505.1	Support disc	914.4	Screw
507.1	Water deflector	914.5	Allen screw
550.1	Intermediate ring	914.7	Allen screw
598.1	Coupling guard	914.9	Allen screw
691.1	Manometer	920.1	Nut
700.1	Pipe	920.3	Nut
730.1	Fitting	920.4	Nut
730.2	Fitting	922.1	Shaft nut
731.1	Fitting	930.1	Washer
731.2	Fitting	930.2	Washer
731.3	Fitting	930.3	Washer
731.4	Fitting	930.6	Washer
731.5	Fitting	932.1	Snap ring
731.6	Fitting	932.2	Snap ring
731.7	Fitting	940.2	Key
731.8	Fitting	940.3	Key
731.9	Fitting		

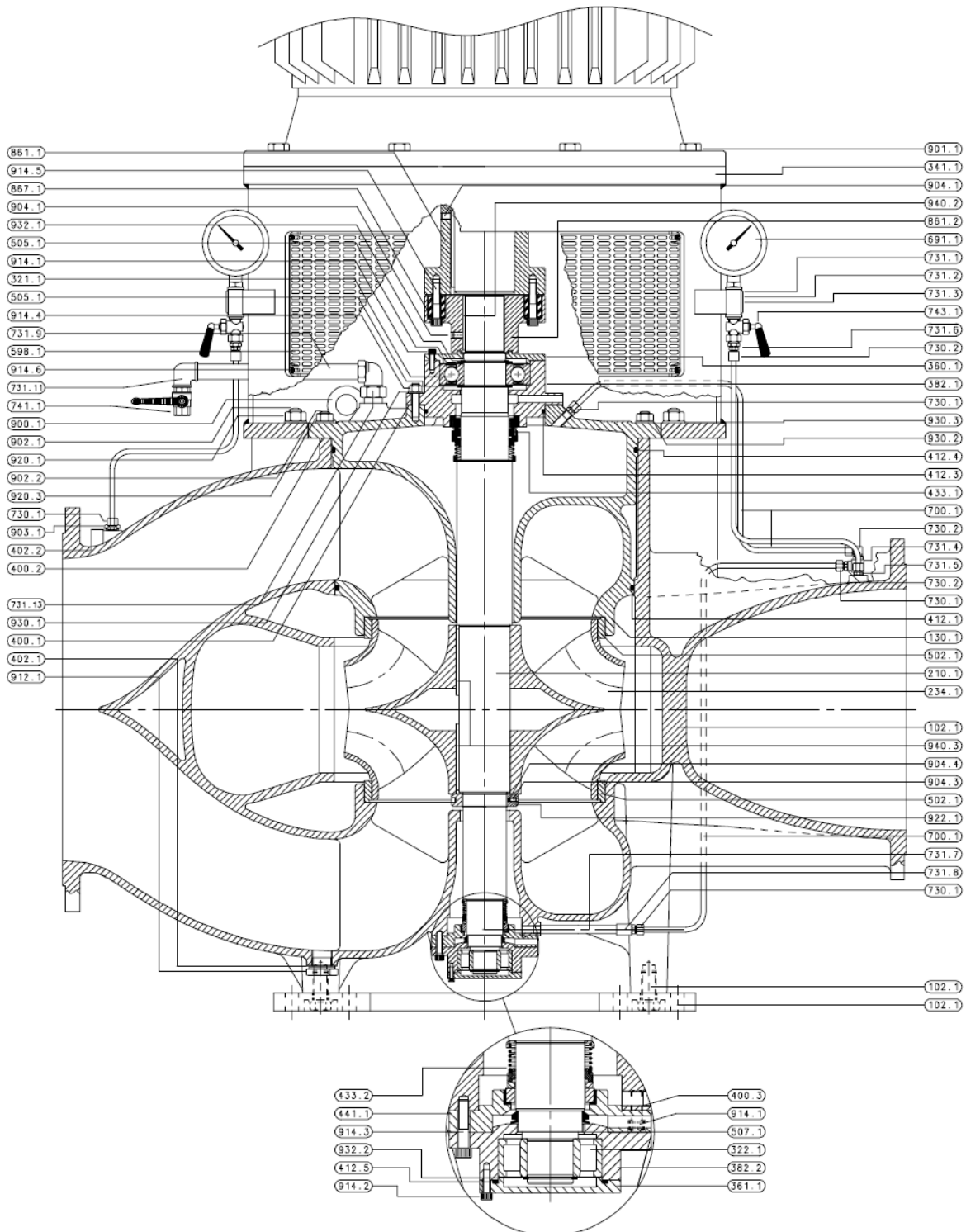
15.3 DSL300 SPACER DESIGN WITH BOTTOM SLIDING BEARING



PARTS LIST

Pos.	Designation	Pos.	Designation
102.1	Pump casing	860.1	Spacer shaft
130.1	Rear cover	861.1	Coupling half-motor
210.1	Shaft	861.2	Coupling half-pump
234.1	Impeller	867.1	Coupling bush
321.1	Ball bearing	901.1	Hexagon head screw
341.1	Motor bracket	901.2	Hexagon head screw
360.1	Bearing cover	902.1	Stud
361.1	Bearing end cover	902.2	Stud
382.1	Bearing housing	902.3	Stud
382.2	Bearing housing	902.4	Stud
400.1	Gasket	903.1	Plug
400.2	Gasket	904.1	Pointed screw
400.3	Gasket	904.3	Pointed screw
402.1	Plastic seal	904.4	Ball
402.2	Plastic seal	912.1	Bottom plug
412.1	O-ring	914.1	Allen screw
412.3	O-ring	914.2	Allen screw
412.5	O-ring	914.5	Allen screw
433.1	Mech. shaft seal	914.9	Allen screw
502.1	Seal Ring	920.1	Nut
505.1	Support disc	920.2	Nut
524.1	Sleeve	920.3	Nut
560.1	Pin	920.4	Nut
598.1	Coupling guard	922.1	Shaft nut
700.2	Pipe	922.2	Shaft nut
730.3	Fitting	930.1	Washer
730.4	Fitting	930.2	Washer
731.4	Fitting	930.3	Washer
731.5	Fitting	930.4	Washer
731.7	Fitting	930.5	Washer
731.8	Fitting	930.6	Washer
731.9	Fitting	932.1	Snap ring
731.12	Fitting	940.2	Key
731.13	Fitting	940.3	Key
732.2	Fitting	940.4	Key
741.1	Ball valve		

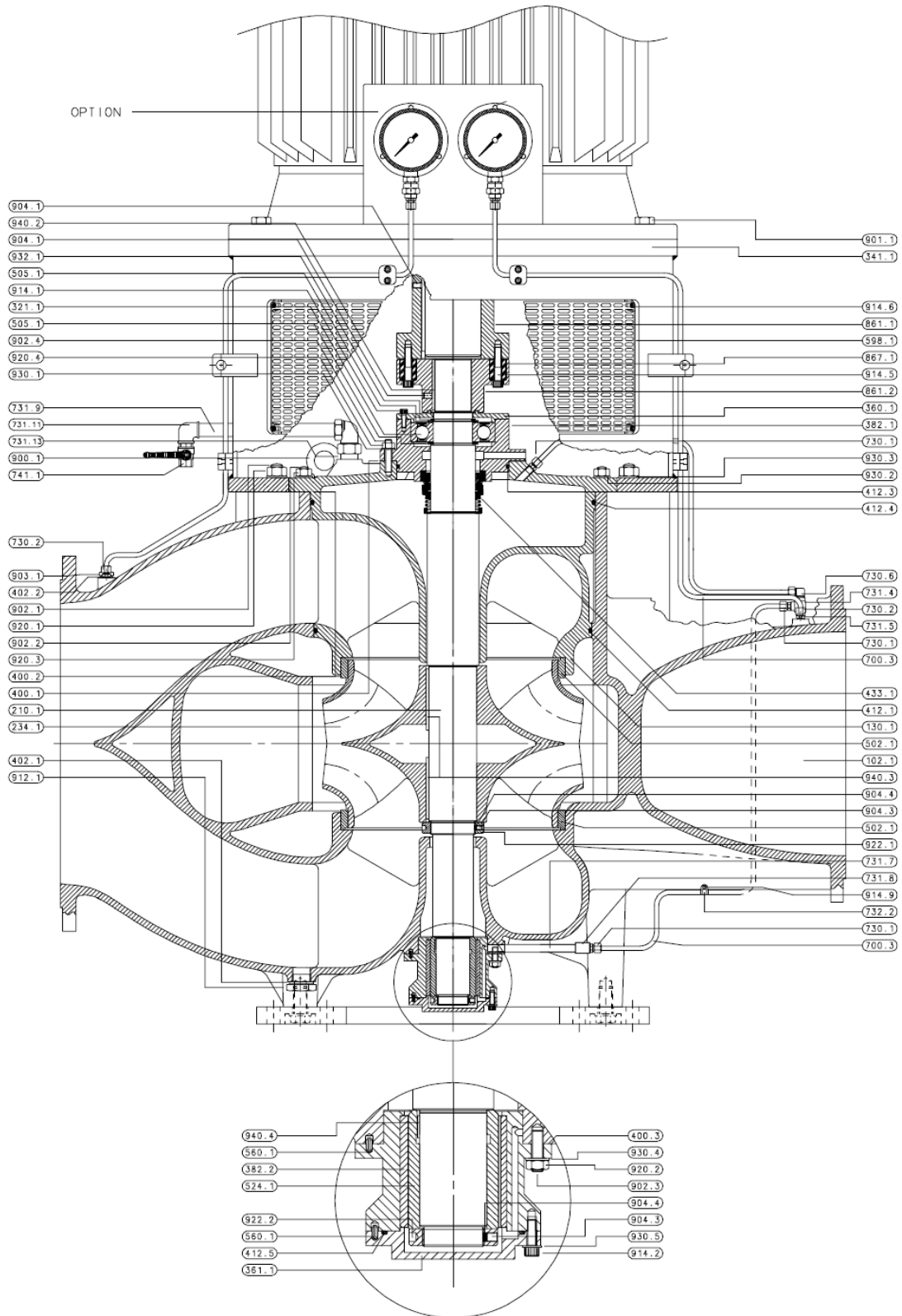
15.6 DSL400 COMPACT DESIGN WITH BOTTOM ROLLER BEARING



PARTS LIST

Pos.	Designation	Pos.	Designation
102.1	Pump casing	731.7	Fitting
130.1	Rear cover	731.8	Fitting
210.1	Shaft	731.9	Fitting
234.1	Impeller	731.11	Fitting
321.1	Ball bearing	731.13	Fitting
322.1	Roller bearing	741.1	Ball valve
341.1	Motor bracket	743.1	Gauge valve
360.1	Bearing cover	861.1	Coupling half-motor
361.1	Bearing end cover	861.2	Coupling half-pump
382.1	Bearing housing	867.1	Coupling bush
382.2	Bearing housing	900.1	Eye bolt
400.1	Gasket	901.1	Hexagon head screw
400.2	Gasket	902.1	Stud
400.3	Gasket	902.2	Stud
402.1	Plastic seal	902.4	Stud
402.2	Plastic seal	903.1	Plug
412.1	O-ring	904.1	Pointed screw
412.3	O-ring	904.3	Pointed screw
412.4	O-ring	904.4	Ball
412.5	O-ring	912.1	Bottom plug
433.1	Mech. shaft seal	914.1	Allen screw
433.2	Mech. shaft seal	914.2	Allen screw
441.1	Shaft seal housing	914.3	Screw
502.1	Seal Ring	914.4	Nut
505.1	Support disc	914.5	Allen screw
507.1	Water deflector	914.6	Allen screw
598.1	Coupling guard	920.1	Nut
691.1	Manometer	920.3	Nut
700.1	Pipe	922.1	Shaft nut
730.1	Fitting	930.1	Washer
730.2	Fitting	930.2	Washer
731.1	Fitting	930.3	Washer
731.2	Fitting	932.1	Snap ring
731.3	Fitting	932.2	Snap ring
731.4	Fitting	940.2	Key
731.5	Fitting	940.3	Key
731.6	Fitting		

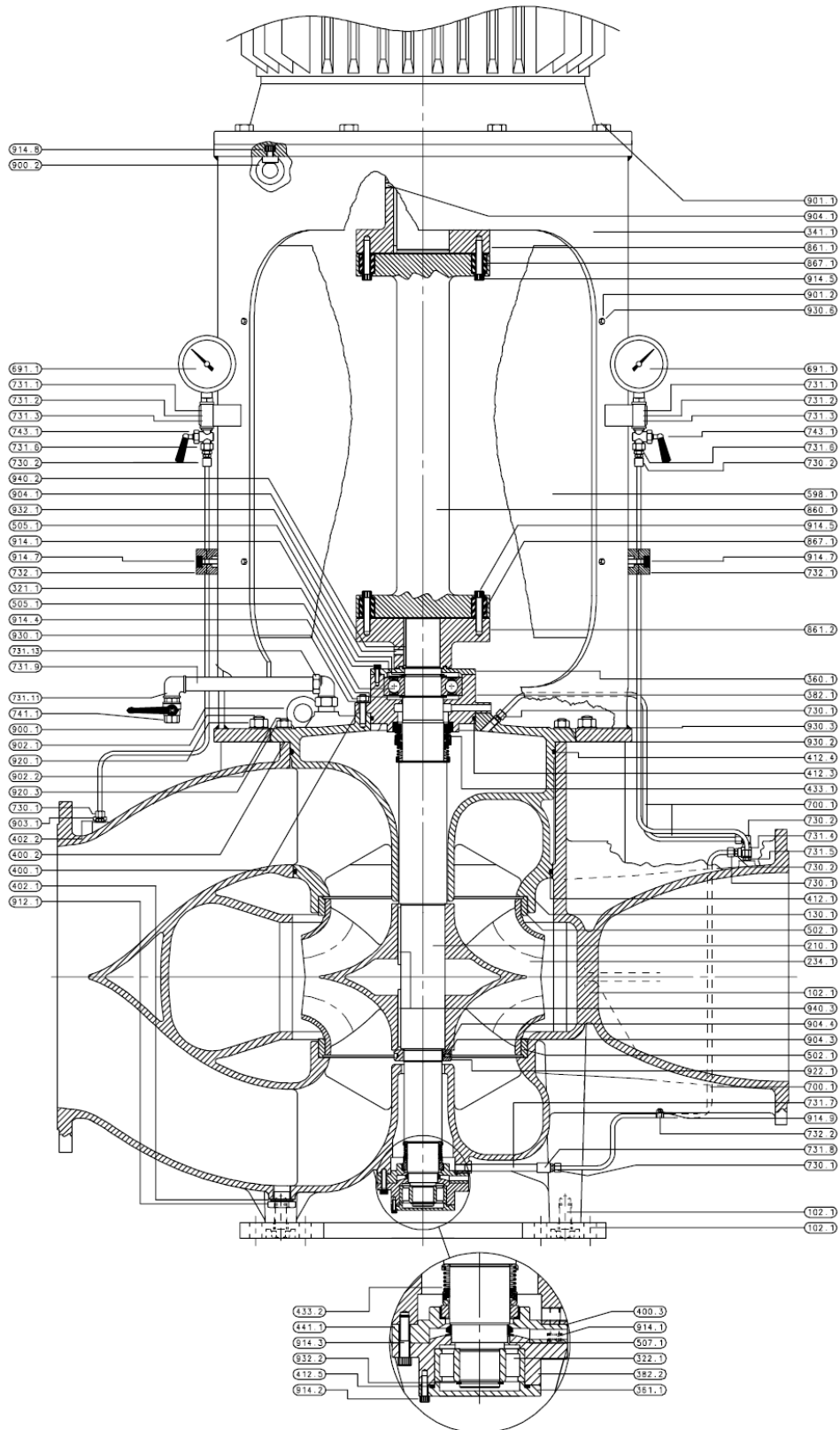
15.8 DSL400 COMPACT DESIGN WITH BOTTOM SLIDING BEARING



PARTS LIST

Pos.	Designation	Pos.	Designation
102.1	Pump casing	732.2	Fitting
130.1	Rear cover	741.1	Ball valve
210.1	Shaft	861.1	Coupling half-motor
234.1	Impeller	861.2	Coupling half-pump
321.1	Ball bearing	867.1	Coupling bush
341.1	Motor bracket	900.1	Eye bolt
360.1	Bearing cover	901.1	Hexagon head screw
361.1	Bearing end cover	902.1	Stud
382.1	Bearing housing	902.2	Stud
382.2	Bearing housing	902.3	Stud
400.1	Gasket	902.4	Stud
400.2	Gasket	903.1	Plug
400.3	Gasket	904.1	Pointed screw
402.1	Plastic seal	904.3	Pointed screw
402.2	Plastic seal	904.4	Ball
412.1	O-ring	912.1	Bottom plug
412.3	O-ring	914.1	Allen screw
412.4	O-ring	914.2	Allen screw
412.5	O-ring	914.5	Allen screw
433.1	Mech. shaft seal	914.6	Allen screw
502.1	Seal Ring	914.9	Allen screw
505.1	Support disc	920.1	Nut
524.1	Sleeve	920.2	Nut
560.1	Pin	920.3	Nut
598.1	Coupling guard	920.4	Nut
700.3	Pipe	922.1	Shaft nut
730.1	Fitting	922.2	Shaft nut
730.2	Fitting	930.1	Washer
731.4	Fitting	930.2	Washer
731.5	Fitting	930.3	Washer
731.6	Fitting	930.4	Washer
731.7	Fitting	930.5	Washer
731.8	Fitting	932.1	Snap ring
731.9	Fitting	940.2	Key
731.11	Fitting	940.3	Key
731.13	Fitting	940.4	Key

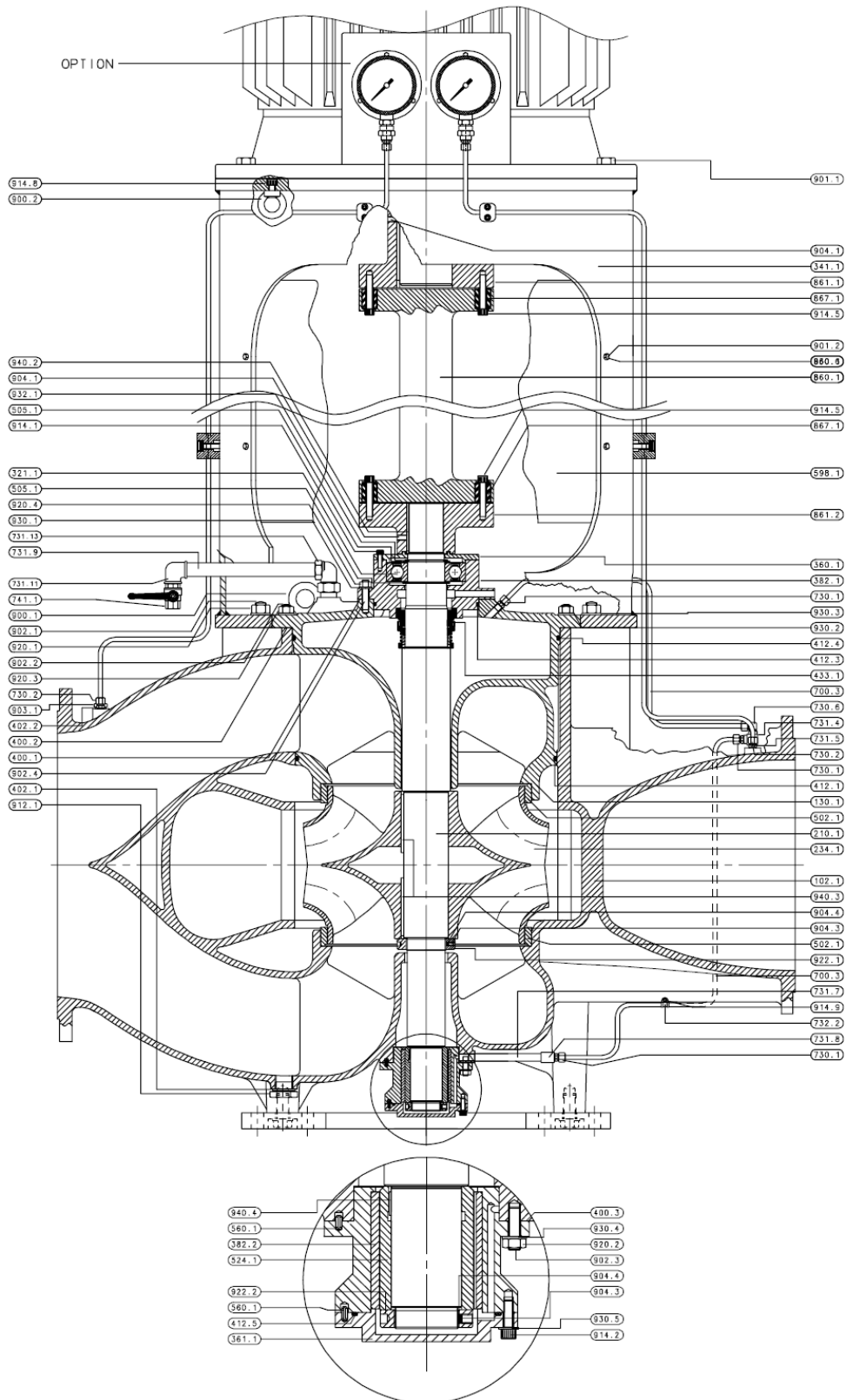
15.5 DSL400 SPACER DESIGN WITH BOTTOM ROLLER BEARING



PARTS LIST

Pos.	Designation	Pos.	Designation
102.1	Pump casing	731.13	Fitting
130.1	Rear cover	732.1	Fitting
210.1	Shaft	732.2	Fitting
234.1	Impeller	741.1	Ball valve
321.1	Ball bearing	743.1	Gauge valve
322.1	Roller bearing	860.1	Spacer shaft
341.1	Motor bracket	861.1	Coupling half-motor
360.1	Bearing cover	861.2	Coupling half-pump
361.1	Bearing end cover	867.1	Coupling bush
382.1	Bearing housing	900.1	Eye bolt
382.2	Bearing housing	900.2	Eye bolt
400.1	Gasket	901.1	Hexagon head screw
400.2	Gasket	901.2	Hexagon head screw
400.3	Gasket	902.1	Stud
402.1	Plastic seal	902.2	Stud
402.2	Plastic seal	902.4	Stud
412.1	O-ring	903.1	Plug
412.3	O-ring	904.1	Pointed screw
412.4	O-ring	904.3	Pointed screw
412.5	O-ring	904.4	Ball
433.1	Mech. shaft seal	912.1	Bottom plug
433.2	Mech. shaft seal	914.1	Allen screw
441.1	Shaft seal housing	914.2	Allen screw
502.1	Seal Ring	914.3	Screw
505.1	Support disc	914.4	Nut
507.1	Water deflector	914.5	Allen screw
598.1	Coupling guard	914.7	Allen screw
691.1	Manometer	914.8	Allen screw
700.1	Pipe	914.9	Allen screw
730.1	Fitting	920.1	Nut
730.2	Fitting	920.3	Nut
731.1	Fitting	922.1	Shaft nut
731.2	Fitting	930.1	Washer
731.3	Fitting	930.2	Washer
731.4	Fitting	930.3	Washer
731.5	Fitting	930.6	Washer
731.6	Fitting	932.1	Snap ring
731.7	Fitting	932.2	Snap ring
731.8	Fitting	940.2	Key
731.9	Fitting	940.3	Key
731.11	Fitting		

15.7 DSL400 SPACER DESIGN WITH BOTTOM SLIDING BEARING



PARTS LIST

Pos.	Designation	Pos.	Designation
102.1	Pump casing	860.1	Spacer shaft
130.1	Rear cover	861.1	Coupling half-motor
210.1	Shaft	861.2	Coupling half-pump
234.1	Impeller	867.1	Coupling bush
321.1	Ball bearing	900.1	Eye bolt
341.1	Motor bracket	900.2	Eye bolt
360.1	Bearing cover	901.1	Hexagon head screw
361.1	Bearing end cover	901.2	Hexagon head screw
382.1	Bearing housing	902.1	Stud
382.2	Bearing housing	902.2	Stud
400.1	Gasket	902.3	Stud
400.2	Gasket	902.4	Stud
400.3	Gasket	903.1	Plug
402.1	Plastic seal	904.1	Pointed screw
402.2	Plastic seal	904.3	Pointed screw
412.1	O-ring	904.4	Ball
412.3	O-ring	912.1	Bottom plug
412.4	O-ring	914.1	Allen screw
412.5	O-ring	914.2	Allen screw
433.1	Mech. shaft seal	914.5	Allen screw
502.1	Seal Ring	914.8	Allen screw
505.1	Support disc	914.9	Allen screw
524.1	Sleeve	920.1	Nut
560.1	Pin	920.2	Nut
598.1	Coupling guard	920.3	Nut
700.3	Pipe	920.4	Nut
730.1	Fitting	922.1	Shaft nut
730.2	Fitting	922.2	Shaft nut
730.6	Fitting	930.1	Washer
731.4	Fitting	930.2	Washer
731.5	Fitting	930.3	Washer
731.7	Fitting	930.4	Washer
731.8	Fitting	930.5	Washer
731.9	Fitting	930.6	Washer
731.11	Fitting	932.1	Snap ring
731.13	Fitting	940.2	Key
732.2	Fitting	940.3	Key
741.1	Ball valve	940.4	Key
743.1	Gauge valve		