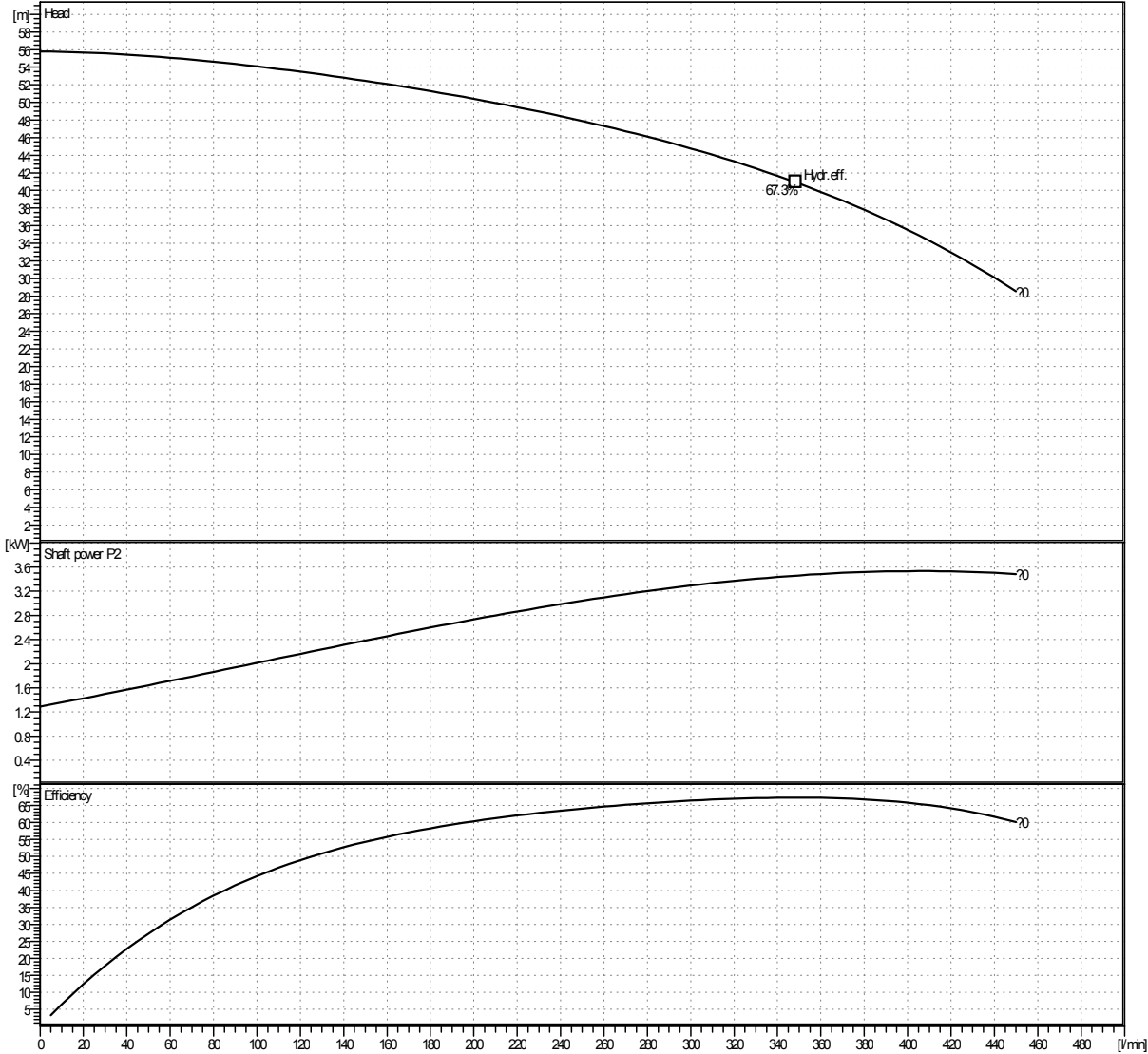


					Sheet No.						
					Customer						
					Item No.						
					Date	2017-02-09					
1	MODEL		Helix V1603 / PN16		Title						
2	Location				Agent						
3	Service				Plant Name						
4	Quantity		Set(s)		Installation		☒ Indoor ☐ Outdoor				
5	OPERATING CONDITION										
6	Liquid		Water		Flow		0 l/min				
7	Pumping Temp.		Ambient		Suc. Pressure						
8	S.G.		1		Dis. Pressure						
9	Vap. Pressure		0.03kg/cm2A at 24?		Diff. Pressure						
10	Viscosity		1 cP		Total Head		0 m				
11	PERFORMANCE AND CONSTRUCTION					MATERIAL					
12	Vertical		Efficiency		%		Part Name Symbol				
13	No. of Stages		3		Rated Power		Casing GC250				
14	Speed		3550 rpm		NPSHre		Impeller STS304L				
15	Rotation		CW		(view from drive end)		Shaft STS304				
16	Bore		Size(Dia)		Rating		Face Position Tube STS304				
17	Suction		50 mm		PN 16		RF Side Diffuser STS304L				
18	Discharge		50 mm		PN 16		RF Side Top Cover STS304				
19	Impeller Type		Closed		Vertical Multi-Stage		HYDROSTATIC				
20	Flow Direction		Radial		Casing			3 min			
21	Shaft Seal		M/Seal		Shaft Sleeve		No	Jacket		3 min	
22	Mounting		Foot		TESTING						
23	Lubrication		☒ Grease		Items		Witness				
24	Cooling		☒ No Cooling		Run Perform.		☒ Yes ☐ No	☐ Yes ☒ No			
25	Radial Bearing		-		Thrust Bearing		-		Hydrostatic(Air Press.)	☒ Yes ☐ No	☐ Yes ☒ No
26	MOTOR SPECIFICATION					SPARE PART					
27	Supplier		WILO		Phase / V / Hz		3~ 380V ~ 60 Hz		Set(s)		
28	Type		TEFC		Furnished by		☒ WILO ☐ Customer		Set(s)		
29	Power		3.7 kW		Mounted by		☒ WILO ☐ Customer		Set(s)		
30	No. of Pole		2 P		Enclosure		☒ IP 55 ☐		Set(s)		
31	Insulation		☒ F ☐						Set(s)		
32	ACCESSORY(☒Supplied : WILO)								Set(s)		
33	☐ Common Base								Set(s)		
34	☐ Foundation Bolts & Nuts								Set(s)		
35	☒ Coupling		Half (Rigid & Split Type)		☒ Coupling Guard				Set(s)		
36	☐ Pressure Guage								Set(s)		
37	☒ Plug for Drain & Air vent.								Set(s)		
38	☐ Seal Flushing								Set(s)		
39	M/Seal		Maker		Eagle-Burgmann		Model & Size		MG12		Set(s)
40			Type		Unbalanced		Cooler		☐ Yes ☒ No		Set(s)
41			API 610 Plan				WEIGHT				
42			Material Code		SiC/Carbon,EPDM		Pump		58 kg		
43	☐ Companion Flanges										
44	☐ Special Tool										
					Total wt.		58 kg				
*Pump test acceptance grade in accordance with ISO 9906:2012, Grade 2B.											

Estimated Performance Curve

Sheet No.	
Customer	
Item No.	
Date	2017-02-09

SPECIFICATION					
PUMP	CAPACITY	0 l/min	MOTOR	OUTPUT	3.7 kW
	TOTAL HEAD	0 m		VOLTAGE	380V
	SUCTION BORE	50 mm		FREQUENCY	60 Hz
	DISCHARGE BORE	50 mm		SPEED	3550 1/min
	LIQUID	WATER		TYPE	TEFC
	MAKER	WILO		SUPPLIER	WILO



A/B Efficiency	Capacity	Efficiency(%)
A Efficiency	348.57 l/min	67.3
B Efficiency		

* Pump test acceptance grade in accordance with ISO 9906:2012, Grade 2B.

* Subject to change without prior notice.

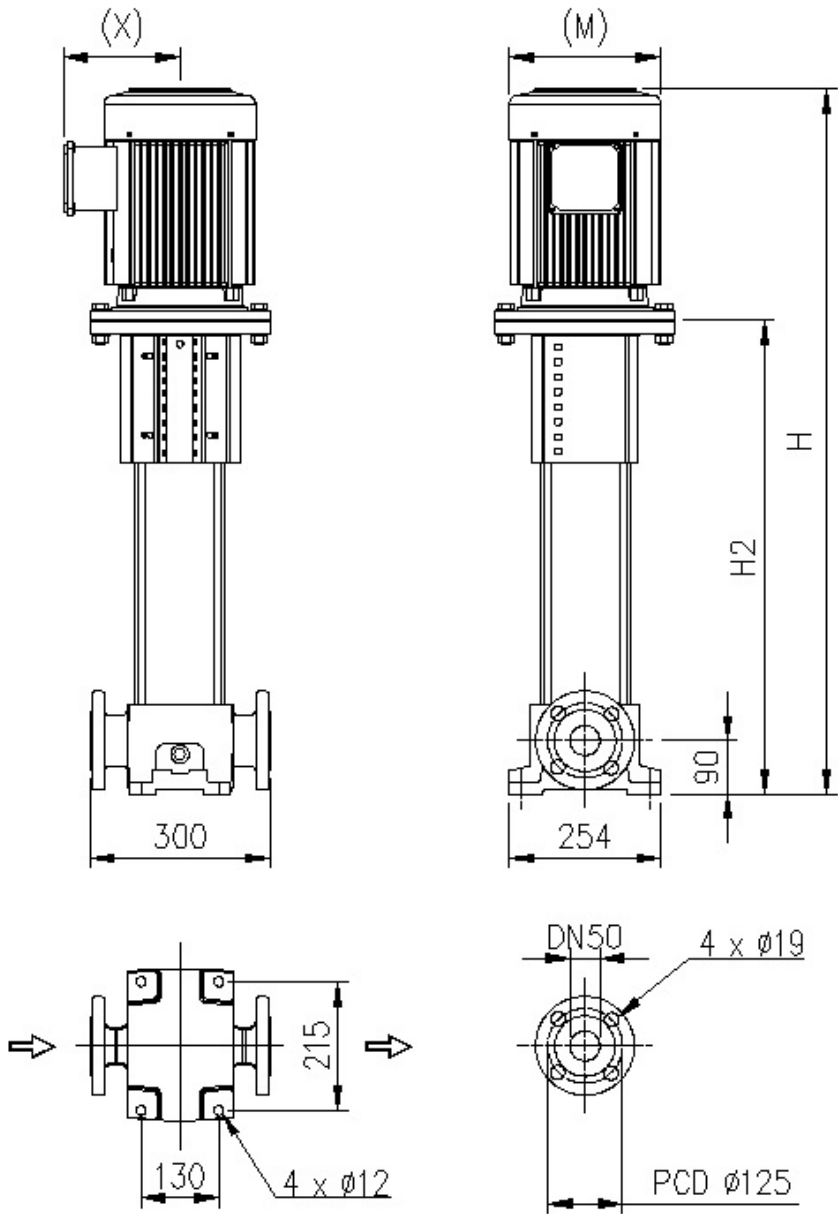
TYPE	Vertical Multi-Stage
MODEL	Helix V1603 / PN16
SERVICE	

Outline Drawing

Sheet No.	
Customer	
Item No.	
Date	2017-02-09

SPECIFICATION

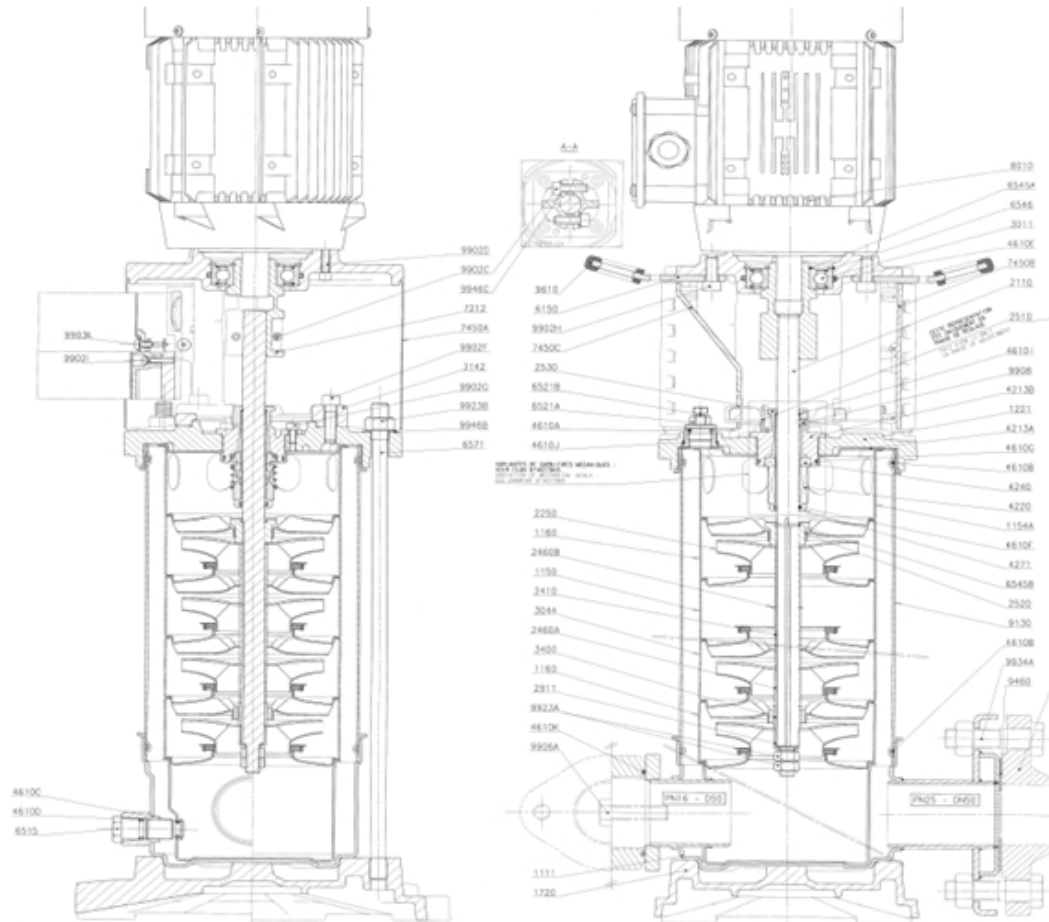
PUMP	CAPACITY	0 l/min	MOTOR	OUTPUT	3.7 kW
	TOTAL HEAD	0 m		VOLTAGE	380V
	SUCTION BORE	50 mm		FREQUENCY	60 Hz
	DISCHARGE BORE	50 mm		SPEED	3550 1/min
	LIQUID	WATER		TYPE	TEFC
	MAKER	WILO		SUPPLIER	WILO



* Dimension of outline drawing subjects to change without prior notice.

H	849	H2	522	M	195	X	147
TYPE		Vertical Multi-Stage					
MODEL		Helix V1603 / PN16					
SERVICE							

Sheet No.	
Customer	
Item No.	
Date	2017-02-09

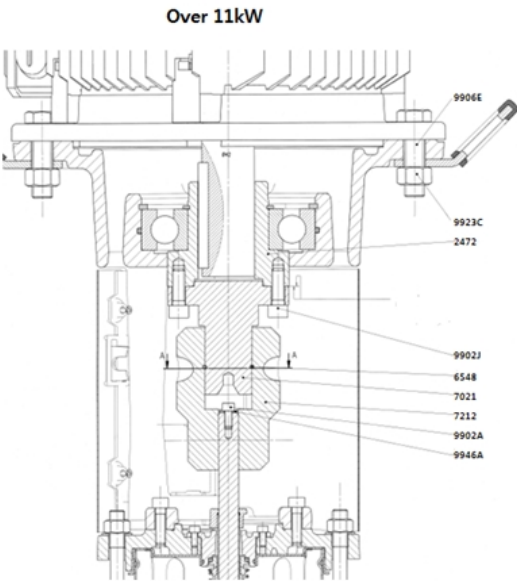
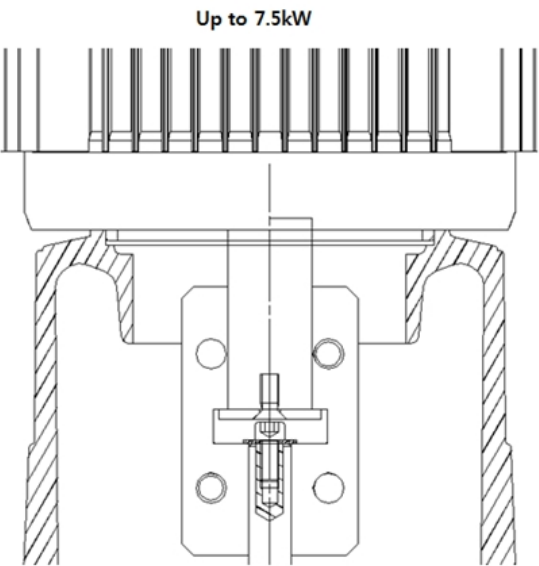


No.	Description	No.	Description	No.	Description
1111	Pump casing	2472	Hub	6571	Tie bolt
1150	Stage casing with return guide vane serial 16	6548	Stop-rush	8010	Motor
1160	Stage casing without return guide vane serial 16	7021	Spacer	9130	Tube
1160	Stage casing without return guide vane serial 16	7212	Coupling	9908	Screw
1154A	Discharge chamber with return guide vane serial 16	9902A	Shaft end upper screw	1221	End shield
4213A	Assembled ring cover of mechanical seal	9902J	Screw for spacer	2460A	Sleeve spacer
2110	Pump shaft	9906E	Screw fix. motor	2460B	Flat washer
2250	Impeller m=16	9946A	Washer under 9902A screw	3400	Shaft sleeve
2410	Spacer	9923C	Nut for fixing motor	1720	Base
2510	Setting shim shaft	4610C	O'ring drain and priming plug	4213B	Mechanical seal ring holder
2520	Back-up ring(or Thrust ring)	4610D	O'ring drain and priming plug	4220	Rotating part-mechanical seal
2530	Drive ring for mechanical seal	4610E	O'ring ø63.10xø3.53 for ball bearing	4240	Stationary part-mechanical seal
2911	Shaft end washer	4610F	O'ring	9902C	Screw for coupling
3011	Lantern ball bearing	4610G	O'ring	9902D	Screw fix. motor
3044	Bearing stage casing with return guide vane serial 16	4610I	O'ring	9902F	Screw fix. lantern/end shield
3142	Lantern	4610J	O'ring	9902G	Screw
4271	Shaft sleeve	4610K	O'ring	9902H	Screw fix. Platinize handling
6150	Platinize handling	6545A	Circlip shaft for ball bearing	9902I	Plastic support screw
6515	Drain and priming plug	6545B	Half keeper(thrust ring)	9906A	Screw
6521	Filing and venting plug	7450A	Sheet coupling protector	9923A	Shaft end nut
6546	Circlip(lantern ball bearing)	7450	Coupling guard support	9923B	Nut for tie bolt
9934A	Bolt	9946B	Washer under 9923B nut	4610B	O'ring

TYPE	Vertical Multi-Stage
MODEL	Helix V1603 / PN16
SERVICE	

Sectional Drawing

Sheet No.	
Customer	
Item No.	
Date	2017-02-09



No.	Description
9906E	Screw fix. Motor
9923C	Motor fastening nut
2472	Hub
9902J	Screw for spacer
6548	Stop-rush
7021	Spacer
7212	Coupling

TYPE	Vertical Multi-Stage
MODEL	Helix V1603 / PN16
SERVICE	