

Pleuger Electrical Submersible Pumps and Water-filled Motors

MAINTENANCE CHECKLIST



! DANGER

Read User Instructions (1042.277/7) **before** installing or maintaining the submersible pump unit with submersible water-filled motor.

Submersible Pump End

Submersible Pump Standard

Pump checklist on nameplate or datacard	
Flow	m ³ /h - gpm
Head	m - ft
Riser pipe connection	threaded/flanged
Shut-off head	m - ft
Pump unit dry running protection	Install dry running sensor 10 m above pump



Submersible Motor Water-filled Design

Submersible motor checklist on nameplate or datacard	
Network voltage/frequency	Check network voltage and frequency with nameplate motor
Motor lubricant water/glycol fluid*	If needed refill with drinking water only (no other liquid permissible)
Insulation resistance	Minimum insulation value 150 Mohm at 20°C (new windings)
Safe cable installation	Protect cable at riser pipes with clamps
Connection to power source	Check cable connection to power source (refer detailed manual 1042.277/7)
Adjust motor current at relay	Set at maximum rated current to guarantee motor protection
Motor/pump rotation	Verify total delivered head of pump

* Motors are pre-filled (65% volume drinking water/35% volume glycol)

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For sales and product information, go to www.flowserve.com

Submersible – Pump Motor Cable Connection to Network

Clockwise Rotation

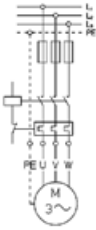


Figure 1

Direct on-line starting – one power supply cable		
	Old	New
U =	black	
V =	light blue	brown
W =	brown	grey
PE =	green/yellow	

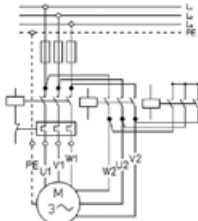


Figure 2

Star-delta starting		
	Old	New
U ₁ /U ₂ =	black	
V ₁ /V ₂ =	light blue	brown
W ₁ /W ₂ =	brown	grey
PE =	green/yellow	

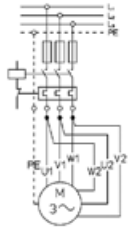


Figure 3

Direct-on line starting – delta connection in control panel		
	Old	New
U ₁ /U ₂ =	black	
V ₁ /V ₂ =	light blue	brown
W ₁ /W ₂ =	brown	grey
PE =	green/yellow	

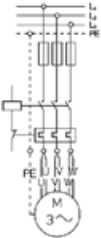


Figure 4

Direct on-line starting – two power supply cable		
	Old	New
U =	black	
V =	light blue	brown
W =	brown	grey
PE =	green/yellow	

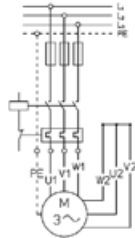


Figure 5

Direct on-line starting – star connection in control panel		
	Old	New
U ₁ /U ₂ =	black	
V ₁ /V ₂ =	light blue	brown
W ₁ /W ₂ =	brown	grey
PE =	green/yellow	

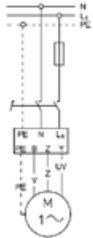


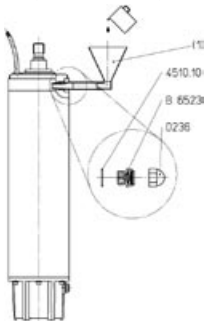
Figure 6

Single-phase motor		
	Old	New
V =	light blue	
UV =	brown	
Z =	black	
PE =	green/yellow	

Re-fill Submersible Motors**

Note: After re-filling procedure is completed, do not install cap 0236.

The cap is for motor transport only!



Submersible Motor
(water/glycol – pre-filled)
Standard Motor

