4" (100 mm)

Water / Oil Filled Submersible Motor

50 Hz.

www.virasubmersible.com

VPO4 Oil Filled Submersible Motor 4"

Features

- 4" Oil filled submersible motor.
- Completely rewindable.
- Cooling and lubrication by non toxic fluid.
- Stainless steel outer shell and shaft.
- Maintenance free lubricated ball bearings.
- Mechanical shaft seal (Carbon/Ceramic) provided.
- High efficiency electrical design (lower operating cost).
- Tropicalized design (lower winding temperature).
- All single phase motors will require control box (see page 70 to 76 for control box).
- 4" NEMA coupling flange.
- Pressure compensation diaphragm.

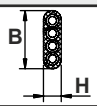
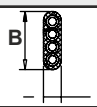
Specifications

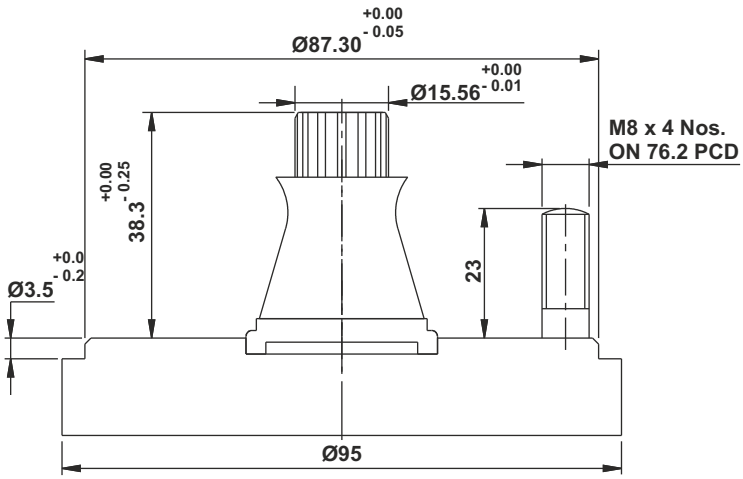
- Ratings: Single phase - 0,37 to 4 kW
  Three phase - 0,37 to 7,5 kW
- Supply voltages (Tolerance +6% / -10%):
  50 Hz, 1 phase, 220 V, 230 V
  50 Hz, 3 phase, 380 V, 400 V, 415 V
  60 Hz, 1 phase, 115 V, 230 V
  60 Hz, 3 phase, 230 V, 380 V, 460 V
- Insulation class: F
- Degree of protection: IP 68
- Continuous duty
- Ambient temperature: 45°C
- Rotation: Single phase - CCW
  Three phase - CCW and CW
- Maximum nos. of starts/hour:
  0,37 to 2,2 kW - 30
  3 to 7,5 kW - 20
- Water pH: 6,5 - 8
- Minimum cooling flow along the motor: 8 cm/sec
- Motor protection: Select thermal overload protection with trip time < 10 sec. at 5 x In
- Maximum submerged depth: 350 metres
- Mounting: vertical / horizontal.

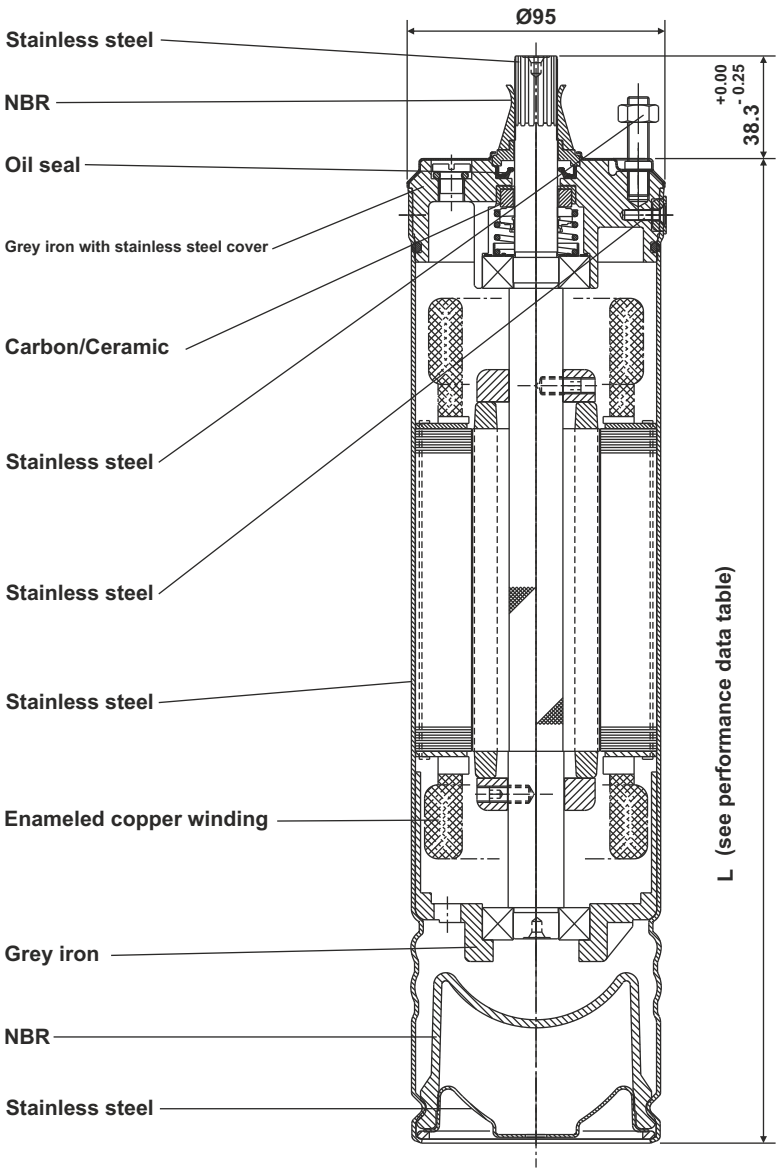
Special features on request

- AISI 304/316 stainless steel construction.
- Special voltages.

Cable data

kW	Type of start	Cable x Leads x Size (mm²)	Length [m]	H x B [mm]	
Single phase					
0,37 - 4	DOL	1 x 4 x 1,5	2,5	6 x 15,8	
Three phase					
0,37 - 4	DOL	1 x 4 x 1,5	2,5	6 x 15,8	





Shaft

Spline shaft: 14 teeth, 24/48 pitch, 30° pressure angle, coupling tolerance 5 as per ANSI B.92.1,

Performance data

50 Hz

Motor type	Pn		Ka	Un	In	Ist/In	n	η [%]			COS φ			Tn	L	Gross weight	Gross volume
	kW	HP	[N]	[V]	[A]		[min⁻¹]	50%	75%	100%	50%	75%	100%	[Nm]	[mm]	[kg]	[m³]
Single phase																	
VCO40502512	0,37	0,5	3000	220	4,50	3,25	2850	53,0	54,0	56,0	0,79	0,81	0,83	1,24	301	8,9	0,0094
				230	4,60	3,30	2850	53,0	54,0	56,0	0,80	0,82	0,84	1,24			
VCO40752512	0,55	0,75	3000	220	4,90	3,45	2850	55,0	59,0	61,0	0,81	0,82	0,84	1,84	331	10,5	0,0094
				230	5,00	3,40	2850	55,0	59,0	61,0	0,82	0,83	0,85	1,84			
VCO41102512	0,75	1	3000	220	5,90	3,48	2850	57,0	61,0	63,0	0,82	0,84	0,85	2,51	346	11,0	0,0094
				230	6,02	3,50	2850	57,0	61,0	63,0	0,83	0,85	0,86	2,51			
VCO41152512	1,1	1,5	3000	220	8,50	3,52	2850	60,0	65,0	67,0	0,83	0,86	0,87	3,67	381	12,6	0,0094
				230	8,60	3,55	2850	60,0	65,0	67,0	0,84	0,87	0,88	3,67			
VCO41202512	1,5	2	3000	220	10,30	3,50	2850	63,0	68,0	70,0	0,85	0,88	0,89	5,01	421	14,2	0,0094
				230	10,35	3,60	2850	63,0	68,0	70,0	0,86	0,89	0,90	5,01			
VCO41302512	2,2	3	4000	220	16,80	3,65	2850	66,0	70,0	72,0	0,87	0,89	0,91	7,38	481	19,6	0,0094
				230	16,90	3,70	2850	66,0	70,0	72,0	0,88	0,90	0,92	7,38			
VCO41552512	4	5,5	4000	220	24,50	3,65	2850	67,0	71,0	73,0	0,88	0,90	0,91	7,10	665	22,5	0,0147
				230	24,60	3,70	2850	67,0	71,0	73,0	0,89	0,91	0,92	7,10			
Three phase																	
VCO40504732	0,37	0,5	3000	380	1,17	4,28	2840	59,0	62,0	65,0	0,67	0,72	0,74	1,23	301	9,1	0,0094
				400	1,06	4,30	2840	60,0	63,0	66,0	0,70	0,74	0,76	1,23			
				415	1,03	4,30	2840	60,0	63,0	66,0	0,70	0,74	0,76	1,23			
VCO40754732	0,55	0,75	3000	380	2,04	4,35	2840	60,0	65,0	67,0	0,68	0,73	0,75	1,84	316	10,0	0,0094
				400	1,90	4,40	2840	62,0	66,0	68,0	0,70	0,75	0,77	1,84			
				415	1,84	4,42	2840	62,0	66,0	68,0	0,70	0,75	0,77	1,84			
VCO41104732	0,75	1	3000	380	2,30	4,56	2840	63,0	67,0	69,0	0,72	0,76	0,78	2,51	331	10,8	0,0094
				400	2,20	4,60	2840	62,0	66,0	68,0	0,71	0,75	0,79	2,51			
				415	2,12	4,60	2840	62,0	66,0	68,0	0,72	0,76	0,79	2,51			
VCO41154732	1,1	1,5	3000	380	3,68	4,66	2850	65,0	70,0	72,0	0,73	0,77	0,79	3,68	351	12,0	0,0094
				400	3,50	4,70	2850	65,0	70,0	73,0	0,72	0,72	0,80	3,68			
				415	3,40	4,72	2850	65,0	70,0	73,0	0,73	0,75	0,80	3,68			
VCO41204732	1,5	2	3000	380	5,19	4,70	2840	66,0	70,0	73,0	0,71	0,75	0,79	5,01	371	13,8	0,0094
				400	4,90	4,75	2840	68,0	72,0	74,0	0,71	0,75	0,80	5,01			
				415	4,77	4,78	2840	68,0	72,0	74,0	0,71	0,75	0,80	5,01			
VCO41304732	2,2	3	3000	380	5,95	4,74	2830	71,0	76,0	75,0	0,72	0,76	0,81	7,38	431	17,2	0,0094
				400	5,50	4,80	2830	72,0	76,0	76,0	0,72	0,76	0,82	7,38			
				415	5,30	4,82	2830	72,0	76,0	76,0	0,74	0,80	0,82	7,38			
VCO41404732	3	4	4000	380	7,21	4,85	2820	71,0	76,0	78,0	0,74	0,80	0,81	10,02	481	18,5	0,0094
				400	6,85	4,90	2820	72,0	76,0	78,0	0,74	0,80	0,81	10,02			
				415	6,61	4,95	2820	72,0	76,0	78,0	0,74	0,80	0,81	10,02			
VCO41554732	4	5,5	4000	380	9,50	5,00	2820	72,0	76,0	78,0	0,73	0,79	0,82	13,46	615	21,4	0,0117
				400	9,03	5,10	2820	73,0	76,0	78,0	0,74	0,80	0,82	13,46			
				415	8,70	5,12	2820	73,0	76,0	78,0	0,75	0,80	0,82	13,46			
VCO41754732	5,5	7,5	6500	380	12,91	5,10	2820	72,0	76,0	78,0	0,74	0,81	0,83	18,50	705	26,5	0,0147
				400	12,26	5,20	2820	73,0	76,0	78,0	0,75	0,80	0,83	18,50			
				415	11,82	5,25	2820	73,0	76,0	78,0	0,76	0,81	0,83	18,50			
VCO42104732	7,5	10	6500	380	20,40	5,10	2800	72,0	76,0	78,0	0,74	0,80	0,81	22,10	805	31,6	0,0147
				400	19,50	5,20	2800	73,0	76,0	78,0	0,75	0,79	0,81	22,10			
				415	18,90	5,25	2800	73,0	76,0	78,0	0,76	0,80	0,81	22,10			

Pn: Rated output
Ka: Thrust load
Un: Rated voltage
In: Rated current
Ist/In: Locked rotor current/Rated amperage
n: Rated speed
η: Efficiency
cos φ: Power factor
Tn: Rated torque
L: Motor length

VSO4 Oil Filled Stainless Steel Submersible Motor 4"

Features

- 4" Oil filled stainless steel submersible motor.
- Complete stainless steel construction.
- Shaft extension made of stainless steel AISI 316.
- Stainless steel AISI 304 motor upper bearing housing.
- Stainless steel AISI 316 fasteners.
- Completely rewindable.
- Cooling and lubrication by non toxic fluid.
- Maintenance free lubricated ball bearings.
- Mechanical shaft seal (Carbon/Ceramic) provided.
- High efficiency electrical design (lower operating cost).
- Tropicalized design (lower winding temperature).
- All single phase motors will require control box (see page 70 to 76 for control box).
- 4" NEMA coupling flange.
- Pressure compensation diaphragm.

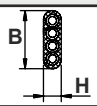
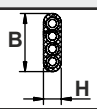
Specifications

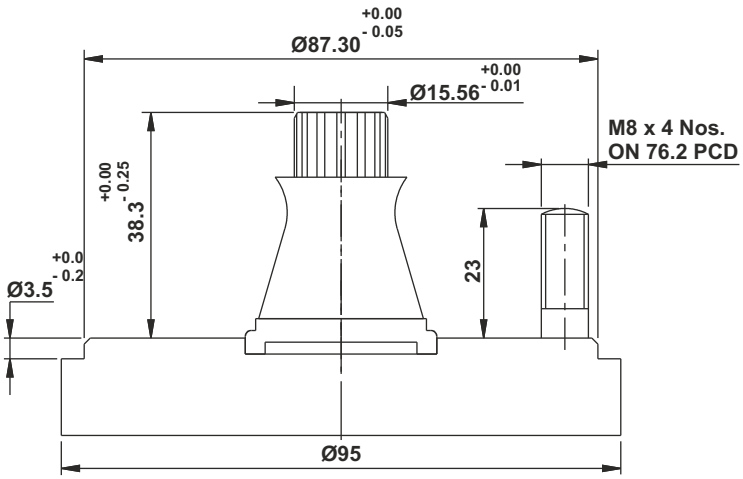
- Ratings: Single phase - 0,37 to 4 kW
  Three phase - 0,37 to 7,5 kW
- Supply voltages (Tolerance +6% / -10%):
  50 Hz, 1 phase, 220 V, 230 V
  50 Hz, 3 phase, 380 V, 400 V, 415 V
  60 Hz, 1 phase, 115 V, 230 V
  60 Hz, 3 phase, 230 V, 380 V, 460 V
- Insulation class: F
- Degree of protection: IP 68
- Continuous duty
- Ambient temperature: 45°C
- Rotation: Single phase - CCW
  Three phase - CCW and CW
- Maximum nos. of starts/hour:
  0,37 to 2,2 kW - 30
  3 to 7,5 kW - 20
- Water pH: 6,5 - 8
- Minimum cooling flow along the motor: 8 cm/sec
- Motor protection: Select thermal overload protection with trip time < 10 sec. at 5 x In
- Maximum submerged depth: 350 metres
- Mounting: vertical / horizontal.

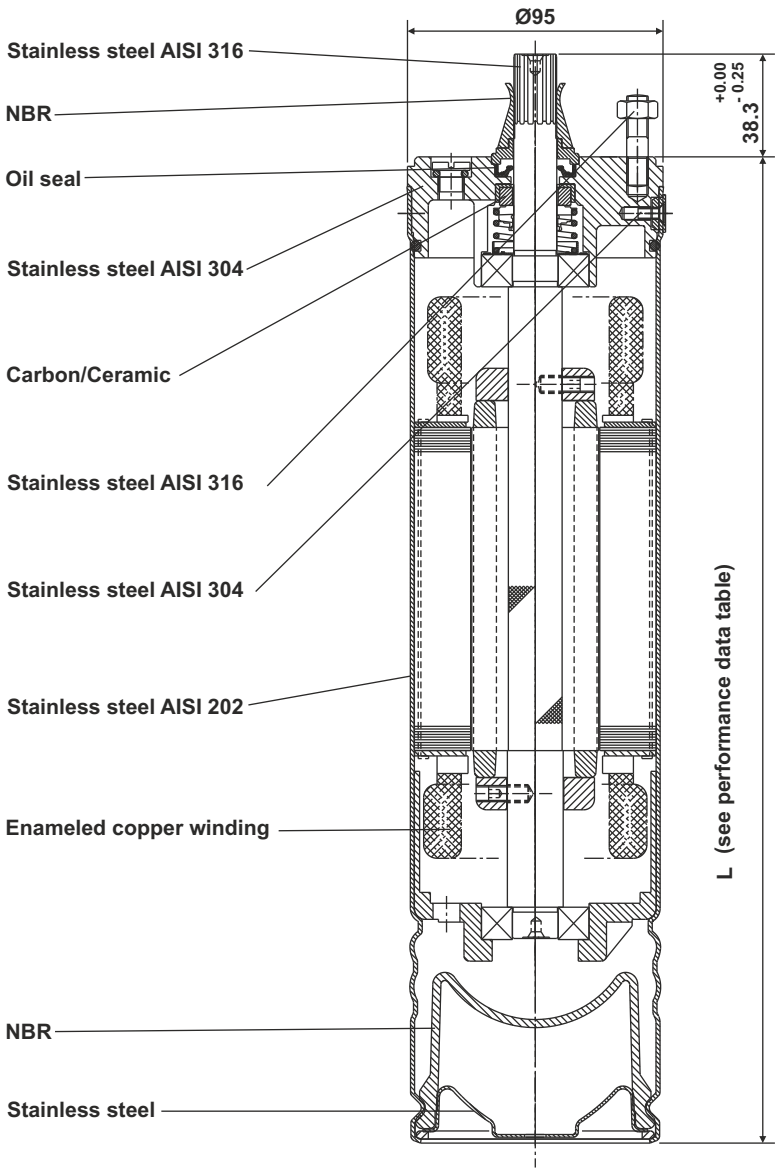
Special features on request

- Special voltages.

Cable data

kW	Type of start	Cable x Leads x Size (mm²)	Length [m]	H x B [mm]	
Single phase					
0,37 - 4	DOL	1 x 4 x 1,5	2,5	6 x 15,8	
Three phase					
0,37 - 4	DOL	1 x 4 x 1,5	2,5	6 x 15,8	
5,5 - 7,5		1 x 4 x 2,5	2,5	6,5 x 18	





Shaft

Spline shaft: 14 teeth, 24/48 pitch, 30° pressure angle, coupling tolerance 5 as per ANSI B.92.1, confirming with NEMA 4".

VSO4 Oil Filled Stainless Steel Submersible Motor 4"

Performance data

50 Hz

Motor type	Pn		Ka [N]	Un [V]	In	Ist/In	n [min⁻¹]	η [%]			COS φ			Tn [Nm]	L [mm]	Gross weight	Gross volume
	kW	HP			[A]			50%	75%	100%	50%	75%	100%			[kg]	[m³]
Single phase																	
VSO40502512	0,37	0,5	3000	220	4,50	3,25	2850	53,0	54,0	56,0	0,79	0,81	0,83	1,24	301	8,9	0,0094
				230	4,60	3,30	2850	53,0	54,0	56,0	0,80	0,82	0,84	1,24			
VSO40752512	0,55	0,75	3000	220	4,90	3,45	2850	55,0	59,0	61,0	0,81	0,82	0,84	1,84	331	10,5	0,0094
				230	5,00	3,40	2850	55,0	59,0	61,0	0,82	0,83	0,85	1,84			
VSO41102512	0,75	1	3000	220	5,90	3,48	2850	57,0	61,0	63,0	0,82	0,84	0,85	2,51	346	11,0	0,0094
				230	6,02	3,50	2850	57,0	61,0	63,0	0,83	0,85	0,86	2,51			
VSO41152512	1,1	1,5	3000	220	8,50	3,52	2850	60,0	65,0	67,0	0,83	0,86	0,87	3,67	381	12,6	0,0094
				230	8,60	3,55	2850	60,0	65,0	67,0	0,84	0,87	0,88	3,67			
VSO41202512	1,5	2	3000	220	10,30	3,50	2850	63,0	68,0	70,0	0,85	0,88	0,89	5,01	421	14,2	0,0094
				230	10,35	3,60	2850	63,0	68,0	70,0	0,86	0,89	0,90	5,01			
VSO41302512	2,2	3	4000	220	16,80	3,65	2850	66,0	70,0	72,0	0,87	0,89	0,91	7,38	481	19,6	0,0094
				230	16,90	3,70	2850	66,0	70,0	72,0	0,88	0,90	0,92	7,38			
VSO41552512	4	5,5	4000	220	24,50	3,65	2850	67,0	71,0	73,0	0,88	0,90	0,91	7,10	665	22,5	0,0147
				230	24,60	3,70	2850	67,0	71,0	73,0	0,89	0,91	0,92	7,10			
Three phase																	
VSO40504732	0,37	0,5	3000	380	1,17	4,28	2840	59,0	62,0	65,0	0,67	0,72	0,74	1,23	301	9,1	0,0094
				400	1,06	4,30	2840	60,0	63,0	66,0	0,70	0,74	0,76	1,23			
				415	1,03	4,30	2840	60,0	63,0	66,0	0,70	0,74	0,76	1,23			
VSO40754732	0,55	0,75	3000	380	2,04	4,35	2840	60,0	65,0	67,0	0,68	0,73	0,75	1,84	316	10,0	0,0094
				400	1,90	4,40	2840	62,0	66,0	68,0	0,70	0,75	0,77	1,84			
				415	1,84	4,42	2840	62,0	66,0	68,0	0,70	0,75	0,77	1,84			
VSO41104732	0,75	1	3000	380	2,30	4,56	2840	63,0	67,0	69,0	0,72	0,76	0,78	2,51	331	10,8	0,0094
				400	2,20	4,60	2840	62,0	66,0	68,0	0,71	0,75	0,79	2,51			
				415	2,12	4,60	2840	62,0	66,0	68,0	0,72	0,76	0,79	2,51			
VSO41154732	1,1	1,5	3000	380	3,68	4,66	2850	65,0	70,0	72,0	0,73	0,77	0,79	3,68	351	12,0	0,0094
				400	3,50	4,70	2850	65,0	70,0	73,0	0,72	0,72	0,80	3,68			
				415	3,40	4,72	2850	65,0	70,0	73,0	0,73	0,75	0,80	3,68			
VSO41204732	1,5	2	3000	380	5,19	4,70	2840	66,0	70,0	73,0	0,71	0,75	0,79	5,01	371	13,8	0,0094
				400	4,90	4,75	2840	68,0	72,0	74,0	0,71	0,75	0,80	5,01			
				415	4,77	4,78	2840	68,0	72,0	74,0	0,71	0,75	0,80	5,01			
VSO41304732	2,2	3	3000	380	5,95	4,74	2830	71,0	76,0	75,0	0,72	0,76	0,81	7,38	431	17,2	0,0094
				400	5,50	4,80	2830	72,0	76,0	76,0	0,72	0,76	0,82	7,38			
				415	5,30	4,82	2830	72,0	76,0	76,0	0,74	0,80	0,82	7,38			
VSO41404732	3	4	4000	380	7,21	4,85	2820	71,0	76,0	78,0	0,74	0,80	0,81	10,02	481	18,5	0,0094
				400	6,85	4,90	2820	72,0	76,0	78,0	0,74	0,80	0,81	10,02			
				415	6,61	4,95	2820	72,0	76,0	78,0	0,74	0,80	0,81	10,02			
VSO41554732	4	5,5	4000	380	9,50	5,00	2820	72,0	76,0	78,0	0,73	0,79	0,82	13,46	615	21,4	0,0117
				400	9,03	5,10	2820	73,0	76,0	78,0	0,74	0,80	0,82	13,46			
				415	8,70	5,12	2820	73,0	76,0	78,0	0,75	0,80	0,82	13,46			
VSO41754732	5,5	7,5	6500	380	12,91	5,10	2820	72,0	76,0	78,0	0,74	0,81	0,83	18,50	705	26,5	0,0147
				400	12,26	5,20	2820	73,0	76,0	78,0	0,75	0,80	0,83	18,50			
				415	11,82	5,25	2820	73,0	76,0	78,0	0,76	0,81	0,83	18,50			
VSO42104732	7,5	10	6500	380	20,40	5,10	2800	72,0	76,0	78,0	0,74	0,80	0,81	22,10	805	31,6	0,0147
				400	19,50	5,20	2800	73,0	76,0	78,0	0,75	0,79	0,81	22,10			
				415	18,90	5,25	2800	73,0	76,0	78,0	0,76	0,80	0,81	22,10			

Pn: Rated output
Ka: Thrust load
Un: Rated voltage
In: Rated current
Ist/In: Locked rotor current/Rated amperage
n: Rated speed
η: Efficiency
cos φ: Power factor
Tn: Rated torque
L: Motor length

VCW4 Water Filled Submersible Motor 4"

Features

- 4" Water filled submersible motor.
- Easily rewindable (wet wound) induction motor with PE insulated windings.
- Corrosion resistant stainless steel stator jacket and shaft.
- Water lubricated radial and axial thrust bearings.
- Counter thrust bearing.
- Motors are pre-filled with clean water + Glycol mixture.
- High efficiency electrical design (lower operating cost).
- Tropicalized design (lower winding temperature).
- Single phase motors are capacitor start and run design. All single phase motors will require control box (see page 70 to 76 for control box).
- Pressure compensation diaphragm.

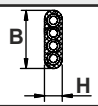
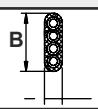
Specifications

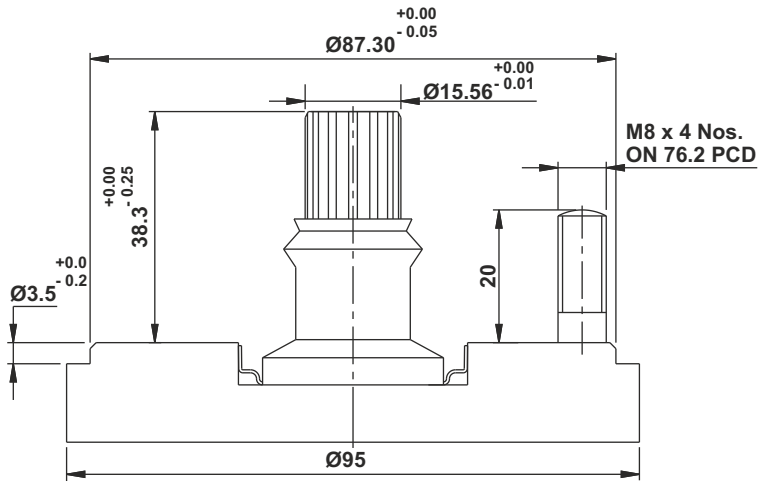
- Ratings: Single phase - 0,37 to 4 kW
  Three phase - 0,37 to 5,5 kW
- Supply voltages (Tolerance +6% / -10%):
  50 Hz, 1 phase, 220 V, 230 V
  50 Hz, 3 phase, 380 V, 400 V, 415 V
  60 Hz, 1 phase, 115 V, 230 V
  60 Hz, 3 phase, 230 V, 380 V, 460 V
- Degree of protection: IP 68
- Continuous duty
- Ambient temperature: 45°C
- Rotation: Single phase - CCW
  Three phase - CCW and CW
- Maximum nos. of starts/hour:
  0,37 to 2,2 kW - 20
  3 to 5,5 kW - 10
- Water pH: 6,5 - 8
- Minimum cooling flow along the motor: 8 cm/sec
- Motor protection: Select thermal overload protection with trip time < 10 sec. at 5 x In
- Maximum submerged depth: 350 metres.

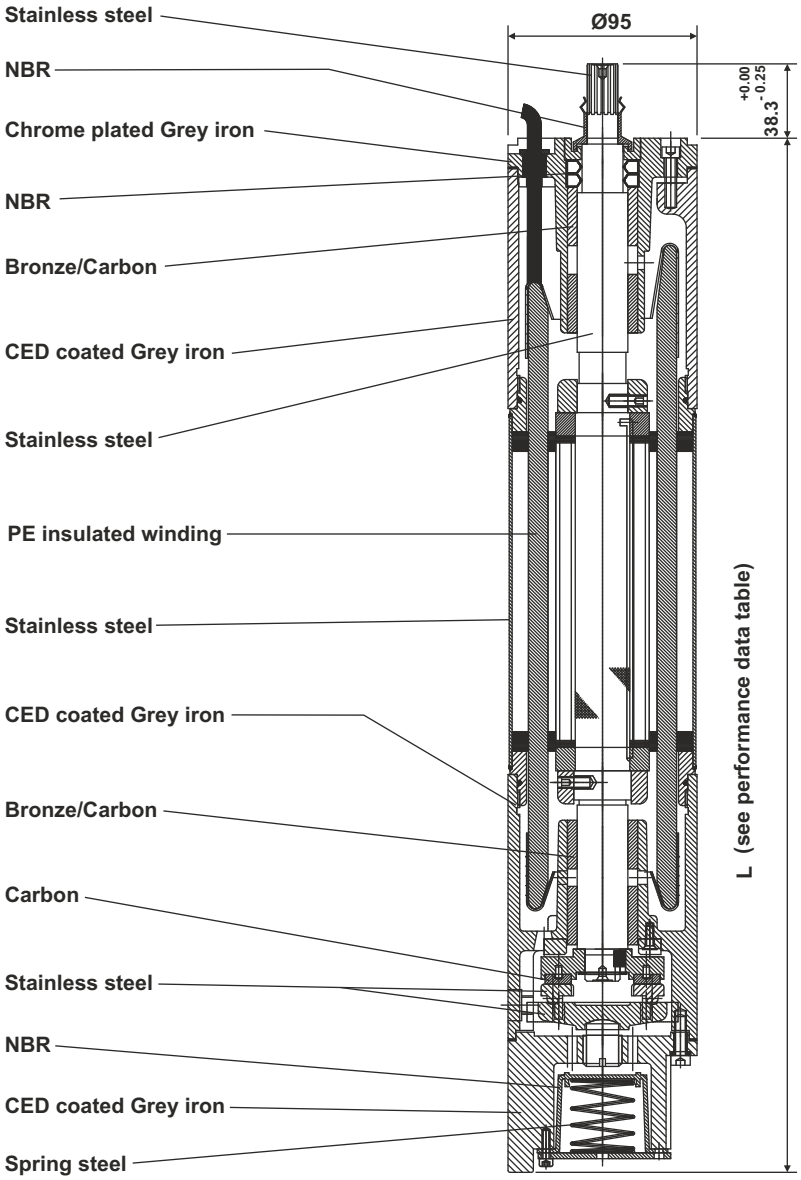
Special features on request

- Special voltages.

Cable data

kW	Type of start	Cable x Leads x Size (mm²)	Length [m]	H x B [mm]	
		Single phase			
0,37 - 0,75	DOL	1 x 4 x 1,5	2.5	6 x 15,8	
1,1 - 4		1 x 4 x 2,5	2.5	6,5 x 18	
Three phase					
0,37 - 2,2	DOL	1 x 4 x 1,5	2.5	6 x 15,8	
3 - 5,5		1 x 4 x 2,5	2.5	6,5 x 18	





Shaft

Spline shaft: 14 teeth, 24/48 pitch, 30° pressure angle, coupling tolerance 5 as per ANSI B.92.1, confirming with NEMA 4".

VCW4 Water Filled Submersible Motor 4"

Performance data

50 Hz

Motor type	Pn		Ka	Un	In	Ist/In	n	η [%]			COS φ			Tn	L	Gross weight	Gross volume
	kW	HP	[N]	[V]	[A]		[min⁻¹]	50%	75%	100%	50%	75%	100%	[Nm]	[mm]	[kg]	[m³]
Single phase																	
VCW40502512	0,37	0,5	4000	220	3,30	3,45	2820	51,0	55,0	57,0	0,79	0,81	0,83	1,23	431	14,3	0,0094
				230	3,44	3,50	2820	51,0	55,0	57,0	0,79	0,81	0,82	1,23			
VCW40752512	0,55	0,75	4000	220	4,50	3,50	2820	55,0	60,0	62,0	0,80	0,81	0,82	1,83	446	15,2	0,0094
				230	4,70	3,60	2820	56,0	60,0	62,0	0,79	0,81	0,82	1,83			
VCW41102512	0,75	1	4000	220	6,00	3,62	2820	59,0	64,0	65,0	0,79	0,81	0,82	2,50	456	16,7	0,0094
				230	6,12	3,68	2820	60,0	64,0	65,0	0,79	0,81	0,82	2,50			
VCW41152512	1,1	1,5	4000	220	8,30	3,70	2820	61,0	66,0	67,0	0,82	0,84	0,85	3,67	511	19,1	0,0094
				230	8,40	3,80	2820	62,0	66,0	67,0	0,82	0,84	0,85	3,67			
VCW41202512	1,5	2	4000	220	10,40	3,90	2820	61,0	69,0	71,0	0,83	0,86	0,87	5,02	611	22,6	0,0117
				230	10,56	4,00	2820	62,0	69,0	71,0	0,83	0,86	0,87	5,02			
VCW41302512	2,2	3	4000	220	14,60	4,00	2820	63,0	69,0	72,0	0,86	0,88	0,90	7,38	711	26,4	0,0147
				230	14,76	4,10	2820	64,0	69,0	72,0	0,86	0,88	0,90	7,38			
VCW41552512	4	5,5	4000	220	24,60	4,00	2800	63,0	69,0	72,0	0,85	0,88	0,90	8,10	841	30,3	0,0147
				230	24,83	4,10	2800	64,0	69,0	72,0	0,86	0,88	0,90	8,10			
Three phase																	
VCW40504732	0,37	0,5	4000	380	1,30	3,90	2820	55,0	61,0	63,0	0,67	0,71	0,73	1,22	441	16,0	0,0094
				400	1,20	4,00	2820	56,0	61,0	63,0	0,68	0,72	0,74	1,22			
				415	1,10	4,05	2820	56,0	61,0	63,0	0,68	0,72	0,74	1,22			
VCW40754732	0,55	0,75	4000	380	1,80	4,05	2820	56,0	62,0	64,0	0,68	0,72	0,75	1,82	456	16,8	0,0094
				400	1,70	4,10	2820	57,0	62,0	64,0	0,69	0,73	0,77	1,82			
				415	1,57	4,12	2820	57,0	62,0	64,0	0,70	0,74	0,76	1,82			
VCW41104732	0,75	1	4000	380	2,20	4,10	2820	61,0	66,0	67,0	0,69	0,73	0,75	2,50	471	17,6	0,0094
				400	2,10	4,15	2820	62,0	66,0	67,0	0,70	0,74	0,76	2,50			
				415	2,05	4,22	2820	62,0	66,0	67,0	0,70	0,74	0,76	2,50			
VCW41154732	1,1	1,5	4000	380	3,00	4,15	2820	65,0	70,0	71,0	0,70	0,71	0,76	3,69	521	20,3	0,0117
				400	2,90	4,20	2820	66,0	70,0	71,0	0,71	0,72	0,77	3,69			
				415	2,80	4,25	2820	66,0	70,0	71,0	0,71	0,75	0,77	3,69			
VCW41204732	1,5	2	4000	380	3,90	4,28	2810	66,0	70,0	72,0	0,70	0,75	0,77	5,03	571	22,5	0,0117
				400	3,80	4,30	2810	67,0	70,0	72,0	0,71	0,76	0,78	5,03			
				415	3,72	4,33	2810	67,0	70,0	72,0	0,71	0,76	0,78	5,03			
VCW41304732	2,2	3	4000	380	5,40	4,40	2800	67,0	73,0	74,0	0,73	0,77	0,79	7,40	671	25,5	0,0147
				400	5,30	4,45	2800	68,0	73,0	74,0	0,74	0,78	0,80	7,40			
				415	5,17	4,50	2800	68,0	73,0	74,0	0,74	0,78	0,80	7,40			
VCW41404732	3	4	4000	380	7,20	4,40	2800	68,0	74,0	75,0	0,74	0,78	0,79	10,09	751	29,5	0,0147
				400	7,10	4,50	2800	69,0	74,0	75,0	0,75	0,79	0,80	10,09			
				415	6,96	4,60	2800	69,0	74,0	75,0	0,75	0,79	0,80	10,09			
VCW41554732	4	5,5	4000	380	10,26	4,55	2800	68,0	74,0	75,0	0,75	0,78	0,79	13,45	821	33,4	0,0147
				400	9,62	4,60	2800	69,0	74,0	75,0	0,76	0,79	0,80	13,45			
				415	9,27	4,80	2800	69,0	74,0	75,0	0,76	0,79	0,80	13,45			
VCW41754732	5,5	7,5	4000	380	14,10	4,75	2800	69,0	74,0	75,0	0,75	0,78	0,79	18,50	891	34,3	0,0147
				400	13,23	4,80	2800	70,0	74,0	75,0	0,76	0,79	0,80	18,50			
				415	12,75	5,00	2800	70,0	74,0	75,0	0,76	0,79	0,80	18,50			

Pn: Rated output
Ka: Thrust load
Un: Rated voltage
In: Rated current
Ist/In: Locked rotor current/Rated amperage
n: Rated speed
η: Efficiency
cos φ: Power factor
Tn: Rated torque
L: Motor length

VSW4 Water Filled Stainless Steel Submersible Motor 4"

Features

- 4" Water filled stainless steel submersible motor.
- Easily rewindable (wet wound) induction motor with PE insulated windings.
- Complete stainless steel AISI 304 construction.
- Water lubricated radial and axial thrust bearings.
- Counter thrust bearing.
- Motors are pre-filled with clean water + Glycol mixture.
- Shaft extension made of stainless steel AISI 316.
- High efficiency electrical design (lower operating cost).
- Tropicalized design (lower winding temperature).
- Single phase motors are capacitor start and run design. All single phase motors will require control box (see page 70 to 76 for control box).
- Pressure compensation diaphragm.

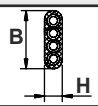
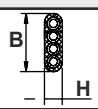
Specifications

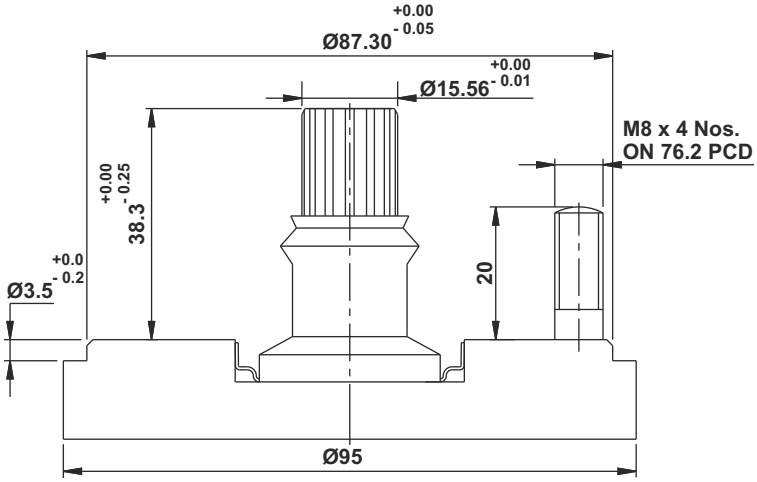
- Ratings: Single phase - 0,37 to 4 kW
  Three phase - 0,37 to 5,5 kW
- Supply voltages (Tolerance +6% / -10%):
  50 Hz, 1 phase, 220 V, 230 V
  50 Hz, 3 phase, 380 V, 400 V, 415 V
  60 Hz, 1 phase, 115 V, 230 V
  60 Hz, 3 phase, 230 V, 380 V, 460 V
- Degree of protection: IP 68
- Continuous duty
- Ambient temperature: 45°C
- Rotation: Single phase - CCW
  Three phase - CCW and CW
- Maximum nos. of starts/hour:
  0,37 to 2,2 kW - 20
  3 to 5,5 kW - 10
- Water pH: 6,5 - 8
- Minimum cooling flow along the motor: 8 cm/sec
- Motor protection: Select thermal overload protection with trip time < 10 sec. at 5 x In
- Maximum submerged depth: 350 metres.

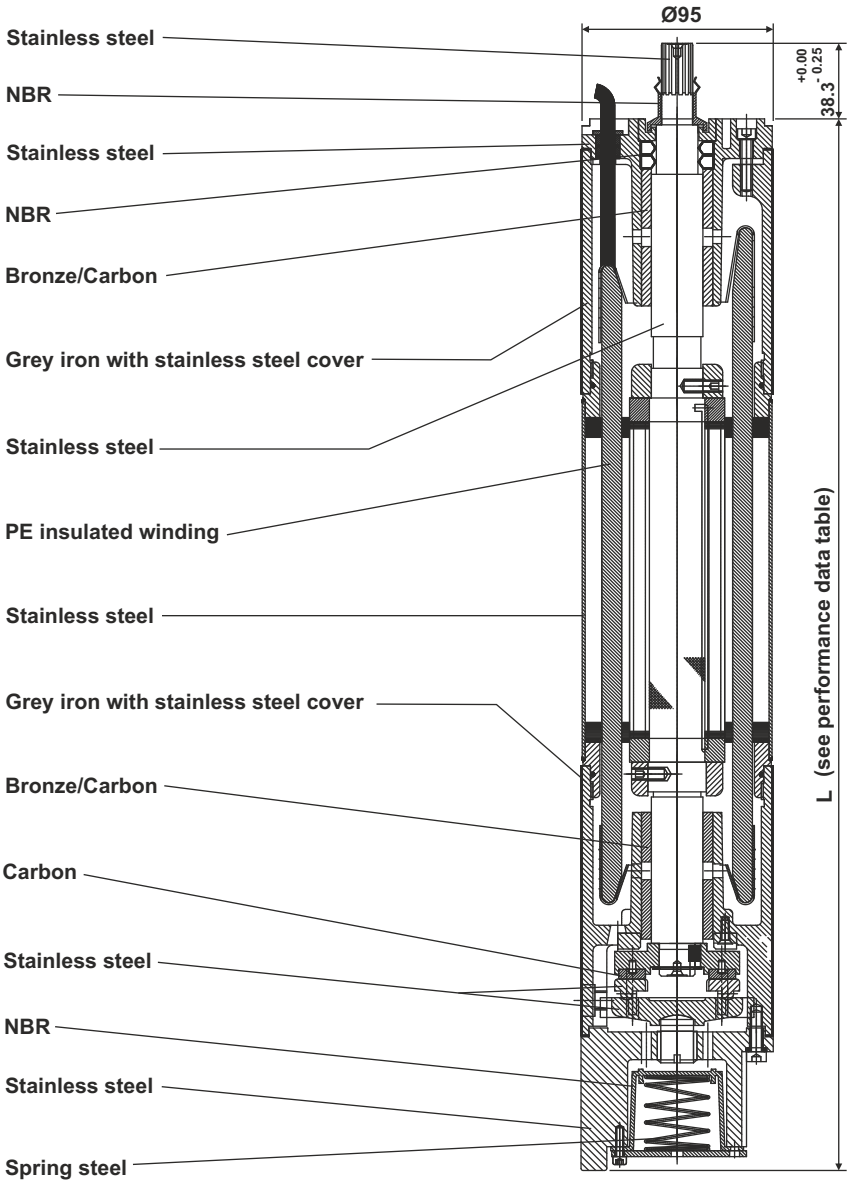
Special features on request

- AISI 316 stainless steel construction.
- Special voltages.

Cable data

kW	Type of start	Cable x Leads x Size (mm²)	Length [m]	H x B [mm]	
Single phase					
0,37 - 0,75	DOL	1 x 4 x 1,5	2.5	6 x 15,8	
1,1 - 4		1 x 4 x 2,5	2.5	6,5 x 18	
Three phase					
0,37 - 2.2	DOL	1 x 4 x 1,5	2.5	6 x 15,8	
3 - 5,5		1 x 4 x 2,5	2.5	6,5 x 18	





Shaft

Spline shaft: 14 teeth, 24/48 pitch, 30° pressure angle, coupling tolerance 5 as per ANSI B.92.1, confirming with NEMA 4".

VSW4 Water Filled Stainless Steel Submersible Motor 4"

Performance data

50 Hz

Motor type	Pn		Ka [N]	Un [V]	In	Ist/In	n [min⁻¹]	η [%]			COS φ			Tn [Nm]	L [mm]	Gross weight	Gross volume
	kW	HP			[A]			50%	75%	100%	50%	75%	100%			[kg]	[m³]
Single phase																	
VSW40502512	0,37	0,5	4000	220	3,30	3,45	2820	51,0	55,0	57,0	0,79	0,81	0,83	1,23	481	15,3	0,0094
				230	3,44	3,50	2820	51,0	55,0	57,0	0,79	0,81	0,82	1,23			
VSW40752512	0,55	0,75	4000	220	4,50	3,50	2820	55,0	60,0	62,0	0,80	0,81	0,82	1,83	496	16,2	0,0094
				230	4,70	3,60	2820	56,0	60,0	62,0	0,79	0,81	0,82	1,83			
VSW41102512	0,75	1	4000	220	6,00	3,62	2820	59,0	64,0	65,0	0,79	0,81	0,82	2,50	506	17,7	0,0094
				230	6,12	3,68	2820	60,0	64,0	65,0	0,79	0,81	0,82	2,50			
VSW41152512	1,1	1,5	4000	220	8,30	3,70	2820	61,0	66,0	67,0	0,82	0,84	0,85	3,67	561	20,1	0,0117
				230	8,40	3,80	2820	62,0	66,0	67,0	0,82	0,84	0,85	3,67			
VSW41202512	1,5	2	4000	220	10,40	3,90	2820	61,0	69,0	71,0	0,83	0,86	0,87	5,02	611	22,6	0,0117
				230	10,56	4,00	2820	62,0	69,0	71,0	0,83	0,86	0,87	5,02			
VSW41302512	2,2	3	4000	220	14,60	4,00	2820	63,0	69,0	72,0	0,86	0,88	0,90	7,38	711	26,4	0,0147
				230	14,76	4,10	2820	64,0	69,0	72,0	0,86	0,88	0,90	7,38			
VSW41552512	4	5,5	4000	220	24,60	4,00	2800	63,0	69,0	72,0	0,85	0,88	0,90	8,10	841	30,3	0,0147
				230	24,83	4,10	2800	64,0	69,0	72,0	0,86	0,88	0,90	8,10			
Three phase																	
VSW40504732	0,37	0,5	4000	380	1,30	3,90	2820	55,0	61,0	63,0	0,67	0,71	0,73	1,22	491	17,0	0,0094
				400	1,20	4,00	2820	56,0	61,0	63,0	0,68	0,72	0,74	1,22			
				415	1,10	4,05	2820	56,0	61,0	63,0	0,68	0,72	0,74	1,22			
VSW40754732	0,55	0,75	4000	380	1,80	4,05	2820	56,0	62,0	64,0	0,68	0,72	0,75	1,82	506	17,8	0,0094
				400	1,70	4,10	2820	57,0	62,0	64,0	0,69	0,73	0,77	1,82			
				415	1,57	4,12	2820	57,0	62,0	64,0	0,70	0,74	0,76	1,82			
VSW41104732	0,75	1	4000	380	2,20	4,10	2820	61,0	66,0	67,0	0,69	0,73	0,75	2,50	521	18,6	0,0117
				400	2,10	4,15	2820	62,0	66,0	67,0	0,70	0,74	0,76	2,50			
				415	2,05	4,22	2820	62,0	66,0	67,0	0,70	0,74	0,76	2,50			
VSW41154732	1,1	1,5	4000	380	3,00	4,15	2820	65,0	70,0	71,0	0,70	0,71	0,76	3,69	571	21,3	0,0117
				400	2,90	4,20	2820	66,0	70,0	71,0	0,71	0,72	0,77	3,69			
				415	2,80	4,25	2820	66,0	70,0	71,0	0,71	0,75	0,77	3,69			
VSW41204732	1,5	2	4000	380	3,90	4,28	2810	66,0	70,0	72,0	0,70	0,75	0,77	5,03	621	23,5	0,0117
				400	3,80	4,30	2810	67,0	70,0	72,0	0,71	0,76	0,78	5,03			
				415	3,72	4,33	2810	67,0	70,0	72,0	0,71	0,76	0,78	5,03			
VSW41304732	2,2	3	4000	380	5,40	4,40	2800	67,0	73,0	74,0	0,73	0,77	0,79	7,40	671	25,5	0,0147
				400	5,30	4,45	2800	68,0	73,0	74,0	0,74	0,78	0,80	7,40			
				415	5,17	4,50	2800	68,0	73,0	74,0	0,74	0,78	0,80	7,40			
VSW41404732	3	4	4000	380	7,20	4,40	2800	68,0	74,0	75,0	0,74	0,78	0,79	10,09	721	28,0	0,0147
				400	7,10	4,50	2800	69,0	74,0	75,0	0,75	0,79	0,80	10,09			
				415	6,96	4,60	2800	69,0	74,0	75,0	0,75	0,79	0,80	10,09			
VSW41554732	4	5,5	4000	380	10,26	4,55	2800	68,0	74,0	75,0	0,75	0,78	0,79	13,45	821	33,4	0,0147
				400	9,62	4,60	2800	69,0	74,0	75,0	0,76	0,79	0,80	13,45			
				415	9,27	4,80	2800	69,0	74,0	75,0	0,76	0,79	0,80	13,45			
VSW41754732	5,5	7,5	4000	380	14,10	4,75	2800	69,0	74,0	75,0	0,75	0,78	0,79	18,50	891	34,3	0,0147
				400	13,23	4,80	2800	70,0	74,0	75,0	0,76	0,79	0,80	18,50			
				415	12,75	5,00	2800	70,0	74,0	75,0	0,76	0,79	0,80	18,50			