

# 4" submersible pumps

**5**  
YEARS  
WARRANTY



**4SR-F**<sup>®</sup>  
**FLOATING IMPELLERS**  
**PATENTED**

**MADE IN ITALY**

 **PEDROLLO**<sup>®</sup>  
*the spring of life*

# 4SR-F<sup>®</sup>

## FLOATING IMPELLERS PATENTED

 Clean water

 Domestic use

 Civil use

 Industrial use



### PERFORMANCE RANGE

- Flow rate up to **200 l/min** (12.0 m<sup>3</sup>/h)
- Head up to **432 m**

### APPLICATION LIMITS

- Maximum liquid temperature **+35 °C**
- Maximum sand content **150 g/m<sup>3</sup>**
- **200 m** immersion limit (with motors 4PD)
- Installation:
  - vertical
  - horizontal, with the following limits:
    - 4SR1 - 4SR1.5 - 4SR2 - 4SR4 up to **23 stages**
    - 4SR6 - 4SR8 up to **17 stages**
- Starts/hour: **20** at regular intervals
- Minimum flow rate for motor cooling **8 cm/s**
- Continuous service **S1**

### INSTALLATION AND USE

Suitable for use with clean water with a sand content of no more than **150 g/m<sup>3</sup>**. Because of their high efficiency and reliability, they are suitable for use in domestic, civil and industrial applications such as for the distribution of water in combination with pressure tanks, for irrigation, for washing plants etc.

### PATENTS

- Patent n° EP3123031, EP2419642

### CONSTRUCTION AND SAFETY STANDARDS

#### ELECTRIC MOTOR

- Three-phase 400 V - 50 Hz
- Single-phase 230 V - 50 Hz
- **Capacitor included in the packaging**

Length of power cable:

- **2 m** powers from 0.37 to 2.2 kW
- **3.6 m** powers from 3 to 7.5 kW.

EN 60335-1  
IEC 60335-1  
CEI 61-150

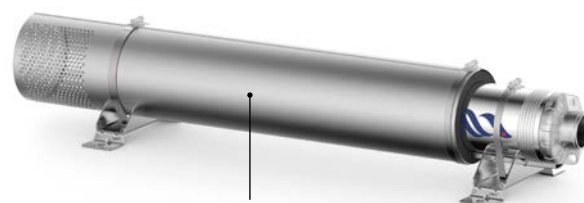
EN 60034-1  
IEC 60034-1  
CEI 2-3



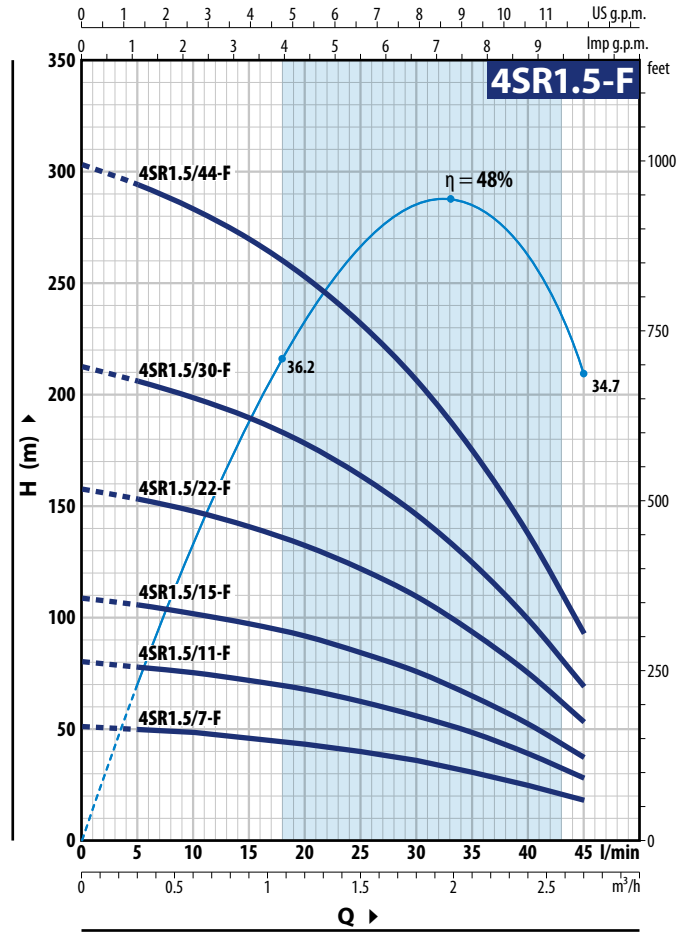
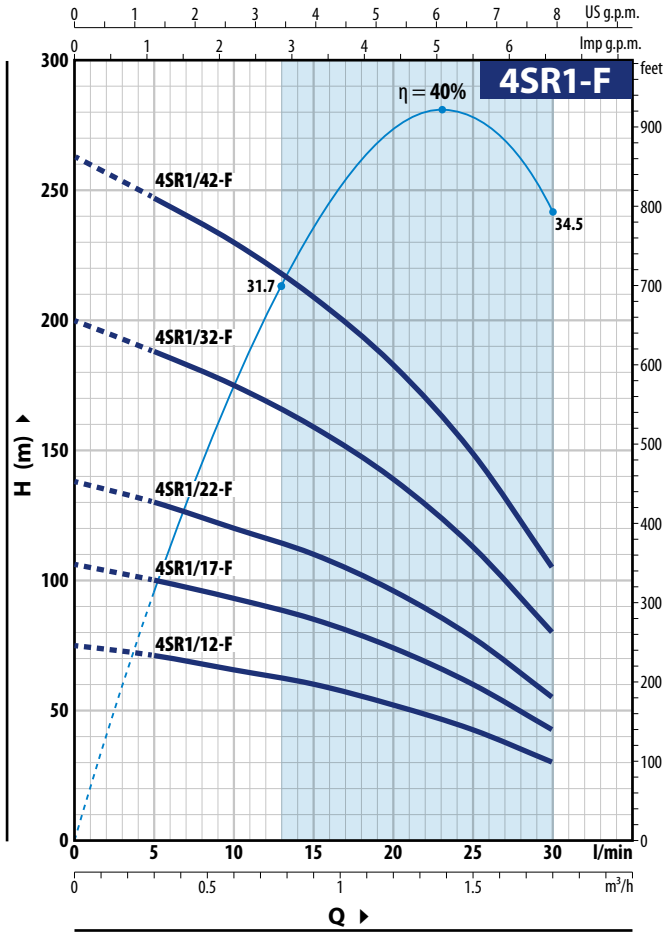
EU REGULATION N. 547/2012

### OPTIONS AVAILABLE ON REQUEST

- Other voltages or 60 Hz frequency
- Kit of cooling jacket complete with filter and supports; recommended for powers from 2.2 kW to 7.5 kW



COOLING JACKET



### 4SR1-F

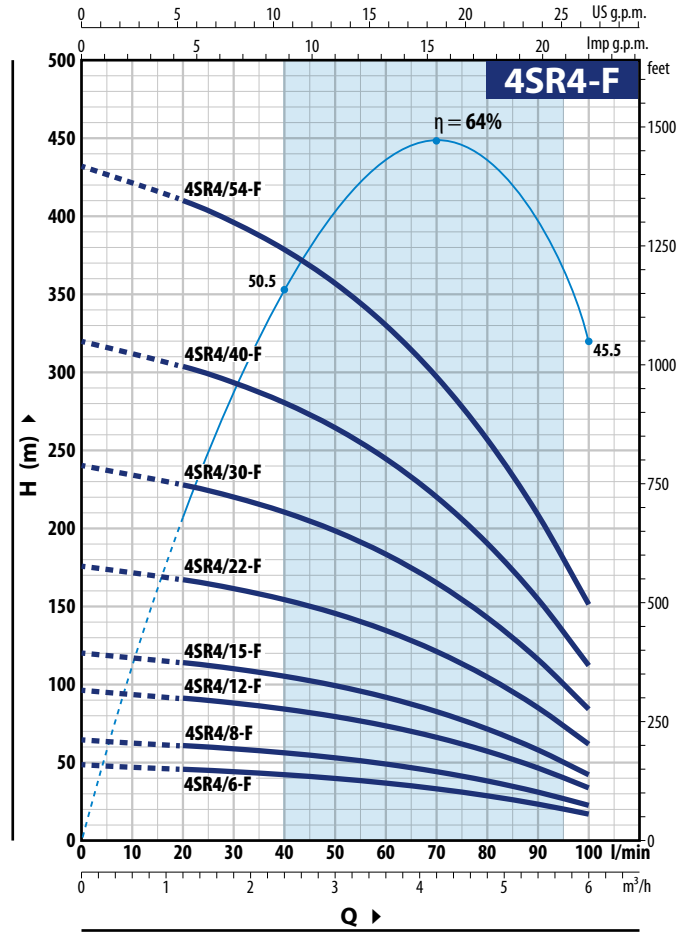
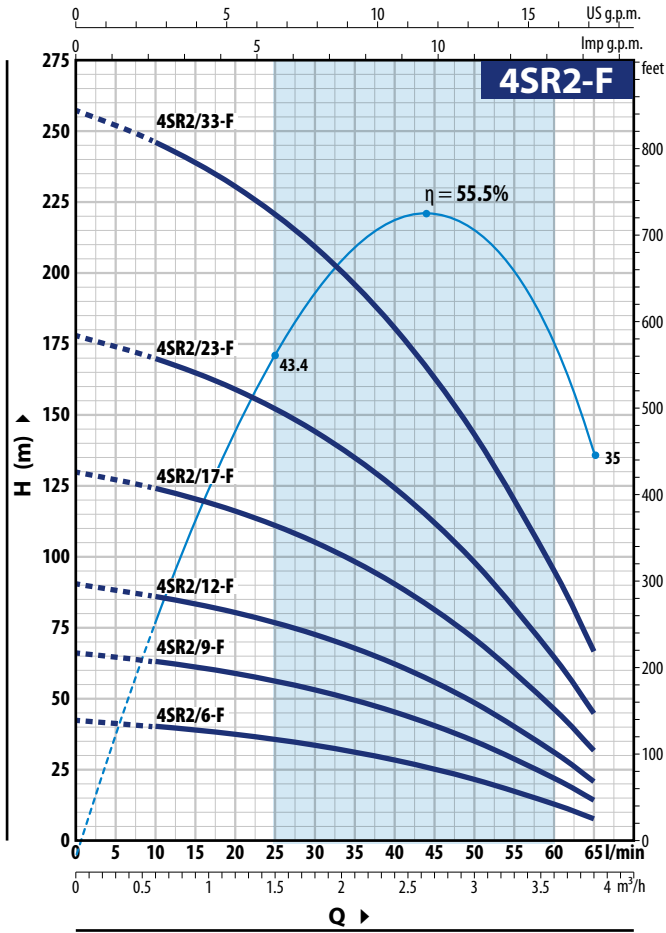
MODEL		POWER (P <sub>2</sub> )		Q	m <sup>3</sup> /h						
Single-phase	Three-phase	kW	HP		0	0.3	0.6	0.9	1.2	1.5	1.8
4SRm 1/12-F	4SR 1/12-F	0.37	0.50	H metres	0	5	10	15	20	25	30
4SRm 1/17-F	4SR 1/17-F	0.55	0.75		75	71	65.5	60	52	42.5	30
4SRm 1/22-F	4SR 1/22-F	0.75	1		106	100	93	85	74	60	42.5
4SRm 1/32-F	4SR 1/32-F	1.1	1.5		138	130	120	110	96	78	55
4SRm 1/42-F	4SR 1/42-F	1.5	2		200	188	175	159	139	113	80
					263	247	230	209	183	149	105

### 4SR1.5-F

MODEL		POWER (P <sub>2</sub> )		Q	m <sup>3</sup> /h									
Single-phase	Three-phase	kW	HP		0	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4	2.7
4SRm 1.5/7 -F	4SR 1.5/7 -F	0.37	0.50	H metres	0	5	10	15	20	25	30	35	40	45
4SRm 1.5/11 -F	4SR 1.5/11 -F	0.55	0.75		51.5	50	48.5	46	43.5	40	36	31	25	18
4SRm 1.5/15 -F	4SR 1.5/15 -F	0.75	1		81	78	76	72	68	62.5	56	48.5	39	28
4SRm 1.5/22-F	4SR 1.5/22-F	1.1	1.5		109	106	102	98	92	85	76	65	53	37.5
4SRm 1.5/30-F	4SR 1.5/30-F	1.5	2		158	154	148	141	133	122	110	94	75	53
4SRm 1.5/44-F	4SR 1.5/44-F	2.2	3		213	206	199	190	178	164	146	125	99	69
					304	295	284	270	253	232	207	175	138	93

Q = Flow rate H = Total manometric head

Tolerance of characteristic curves in compliance with EN ISO 9906 Grade 3B.



### 4SR2-F

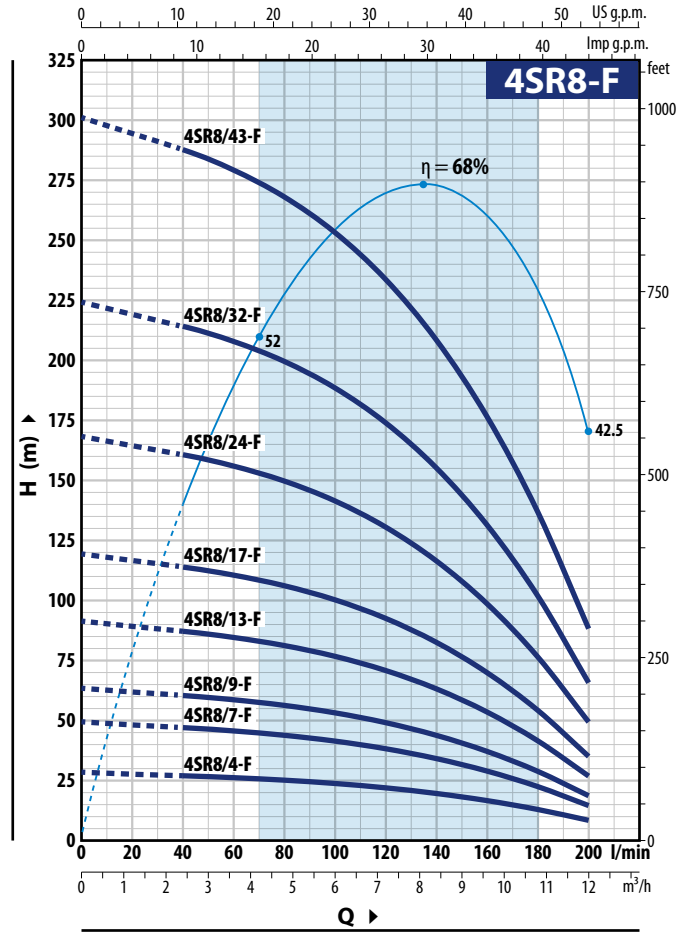
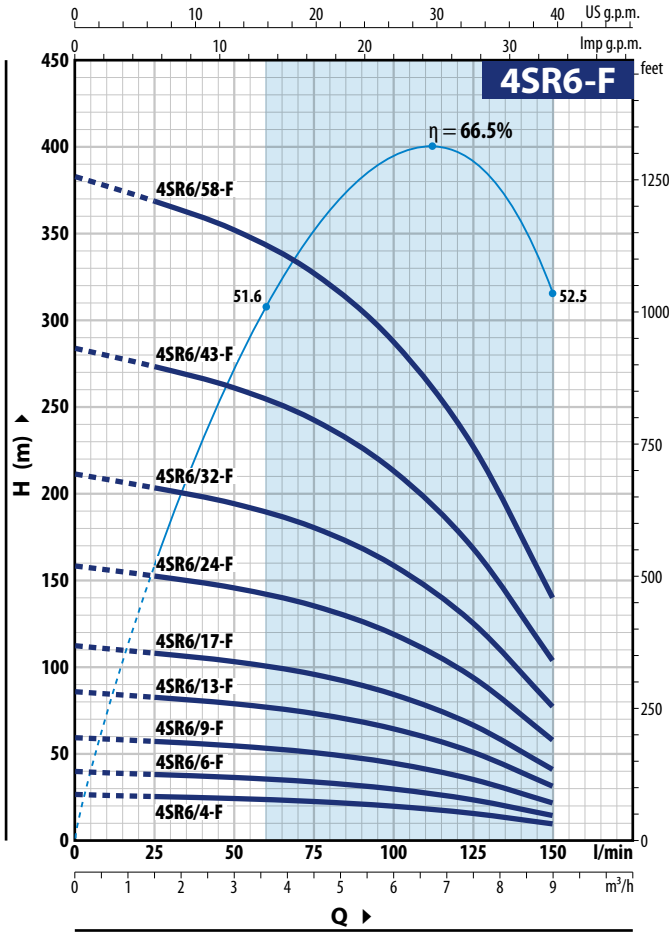
MODEL		POWER (P <sub>2</sub> )		Q	m <sup>3</sup> /h							
Single-phase	Three-phase	kW	HP		0	0.6	1.2	1.8	2.4	3.0	3.6	3.9
4SRm 2/6 -F	4SR 2/6 -F	0.37	0.50	H metres	0	10	20	30	40	50	60	65
4SRm 2/9 -F	4SR 2/9 -F	0.55	0.75		47	45	42	38	33	26.5	17.9	13
4SRm 2/12-F	4SR 2/12-F	0.75	1		70	67	63	57.5	49.5	39.5	26.8	19.5
4SRm 2/17-F	4SR 2/17-F	1.1	1.5		94	90	84	76	66.2	52.9	35.8	25.7
4SRm 2/23-F	4SR 2/23-F	1.5	2		133	127	119	108	94	75	50.7	36.4
4SRm 2/33-F	4SR 2/33-F	2.2	3		179	172	161	146	127	101	68.5	49
					257	246	231	210	182	145	98	71

### 4SR4-F

MODEL		POWER (P <sub>2</sub> )		Q	m <sup>3</sup> /h									
Single-phase	Three-phase	kW	HP		0	1.2	1.8	2.4	3.0	3.6	4.2	4.8	5.4	6.0
4SRm 4/6 -F	4SR 4/6 -F	0.55	0.75	H metres	0	20	30	40	50	60	70	80	90	100
4SRm 4/8 -F	4SR 4/8 -F	0.75	1		48	45.5	44	42	39.5	36.5	33	28.5	23.2	17
4SRm 4/12-F	4SR 4/12-F	1.1	1.5		64	60.5	58.5	56	53	49	44	38	31	22.5
4SRm 4/15-F	4SR 4/15-F	1.5	2		96	91	88	84	79	73	66	57	46.5	33.5
4SRm 4/22-F	4SR 4/22-F	2.2	3		120	114	110	105	99	92	83	71	58	42
-	4SR 4/30-F	3	4		176	167	161	154	145	134	121	105	85	61.5
-	4SR 4/40-F	4	5.5		240	228	220	210	198	183	165	143	116	84
-	4SR 4/54-F	5.5	7.5		320	304	293	280	264	244	220	190	154	112
					432	410	396	379	357	330	297	257	209	151

Q = Flow rate H = Total manometric head

Tolerance of characteristic curves in compliance with EN ISO 9906 Grade 3B.



### 4SR6-F

MODEL		POWER (P <sub>2</sub> )		Q m <sup>3</sup> /h l/min	H metres						
Single-phase	Three-phase	kW	HP		0	1.5	3.0	4.5	6.0	7.5	9.0
4SRm 6/4 -F	4SR 6/4 -F	0.55	0.75	0	0	25	50	75	100	125	150
4SRm 6/6 -F	4SR 6/6 -F	0.75	1	26.5	25.5	24.3	22.5	19.8	15.7	9.5	
4SRm 6/9 -F	4SR 6/9 -F	1.1	1.5	39.5	38	36.5	34	29.5	23.5	14.5	
4SRm 6/13-F	4SR 6/13-F	1.5	2	59.5	57	54.5	50.5	44.5	35.5	21.5	
4SRm 6/17-F	4SR 6/17-F	2.2	3	86	83	79	73	64.5	51	31.5	
-	4SR 6/24-F	3	4	112	108	103	96	84	66.5	41	
-	4SR 6/32-F	4	5.5	158	152	146	135	119	94	58	
-	4SR 6/43-F	5.5	7.5	211	203	194	180	159	125	77	
-	4SR 6/58-F	7.5	10	284	273	261	242	213	168	104	
				383	368	352	327	287	227	140	

### 4SR8-F

MODEL		POWER (P <sub>2</sub> )		Q m <sup>3</sup> /h l/min	H metres									
Single-phase	Three-phase	kW	HP		0	2.4	3.6	4.8	6.0	7.2	8.4	9.6	10.8	12.0
4SRm 8/4 -F	4SR 8/4 -F	0.75	1	0	0	40	60	80	100	120	140	160	180	200
4SRm 8/7 -F	4SR 8/7 -F	1.1	1.5	28	27	26	25	23.6	21.8	19.4	16.4	12.7	8	
4SRm 8/9 -F	4SR 8/9 -F	1.5	2	49	47	45.5	43.5	41.5	38	34	28.5	22.3	14.5	
4SRm 8/13-F	4SR 8/13-F	2.2	3	63	60.5	58.5	56	53	49	43.5	37	28.5	18.5	
-	4SR 8/17-F	3	4	91	87	85	81	77	71	63	53.5	41.5	26.5	
-	4SR 8/24-F	4	5.5	119	114	111	106	100	92	82	70	54	35	
-	4SR 8/32-F	5.5	7.5	168	161	156	150	141	131	116	99	76	49	
-	4SR 8/43-F	7.5	10	224	214	208	200	189	174	155	131	102	65.5	
				301	288	280	268	253	234	209	177	137	88	

Q = Flow rate H = Total manometric head

Tolerance of characteristic curves in compliance with EN ISO 9906 Grade 3B.

# 4SR-N<sup>®</sup>

## SEMI-AXIAL IMPELLERS

-  Clean water
-  Domestic use
-  Civil use
-  Industrial use



### PERFORMANCE RANGE

- Flow rate up to **340 l/min** (20.4 m<sup>3</sup>/h)
- Head up to **271 m**

### APPLICATION LIMITS

- Maximum liquid temperature **+35 °C**
- Maximum sand content **150 g/m<sup>3</sup>**
- **200 m** immersion limit (with motors 4PD)
- Installation:
  - vertical
  - horizontal, with the following limits:  
4SR10 - 4SR12 - 4SR15 up to **13 stages**
- Starts/hour: **20** at regular intervals
- Minimum flow rate for motor cooling **8 cm/s**
- Continuous service **S1**

### INSTALLATION AND USE

Suitable for use with clean water with a sand content of no more than **150 g/m<sup>3</sup>**. Because of their high efficiency and reliability, they are suitable for use in domestic, civil and industrial applications such as for the distribution of water in combination with pressure tanks, for irrigation, for washing plants etc.

### PATENTS

- Patent n° EP2419642

### CONSTRUCTION AND SAFETY STANDARDS

#### ELECTRIC MOTOR

- Three-phase 400 V - 50 Hz
- Single-phase 230 V - 50 Hz
- **Capacitor included in the packaging**

Length of power cable:

- **2 m** powers from 0.75 to 2.2 kW
- **3.6 m** powers from 3 to 7.5 kW.

EN 60335-1  
IEC 60335-1  
CEI 61-150

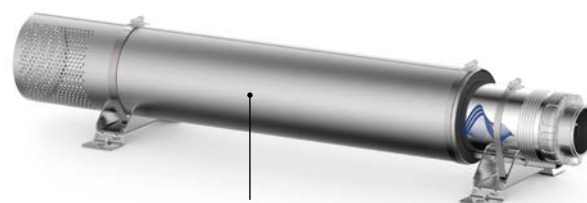
EN 60034-1  
IEC 60034-1  
CEI 2-3



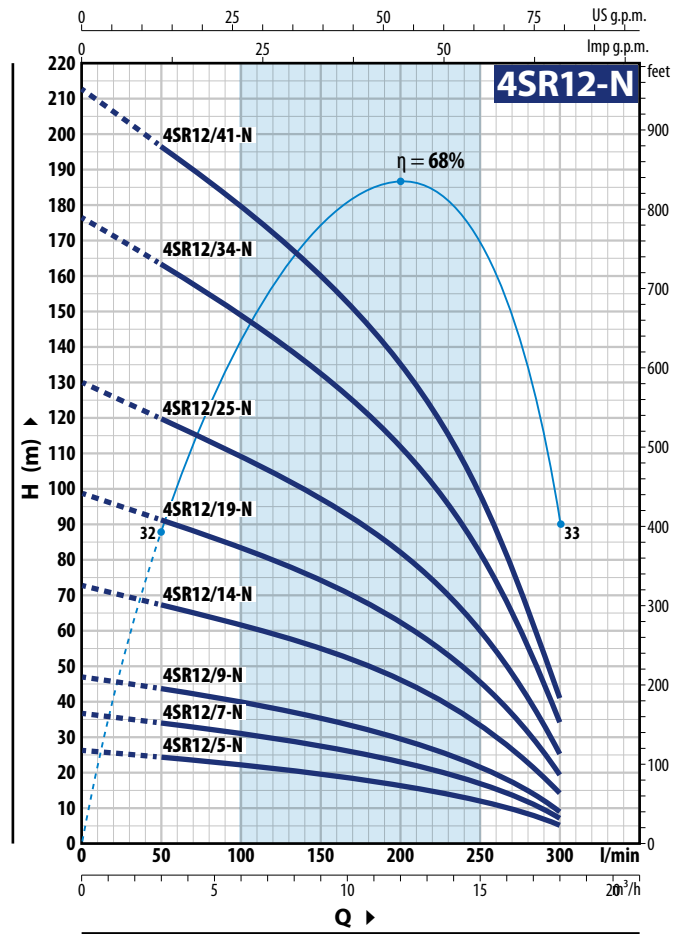
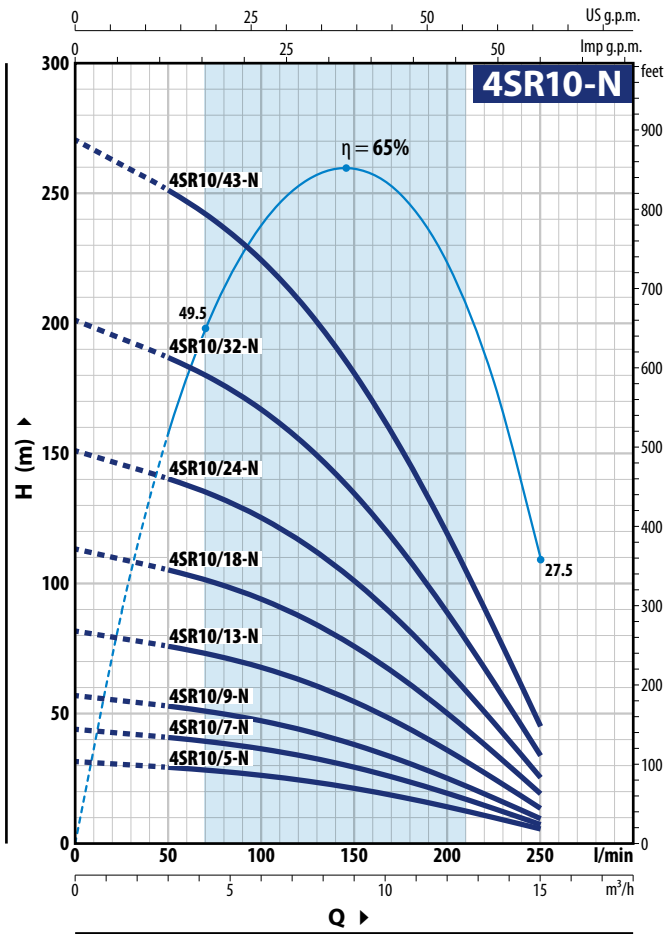
EU REGULATION N. 547/2012

### OPTIONS AVAILABLE ON REQUEST

- Other voltages or 60 Hz frequency
- Kit of cooling jacket complete with filter and supports; recommended for powers from 2.2 kW to 7.5 kW



COOLING JACKET



### 4SR10-N

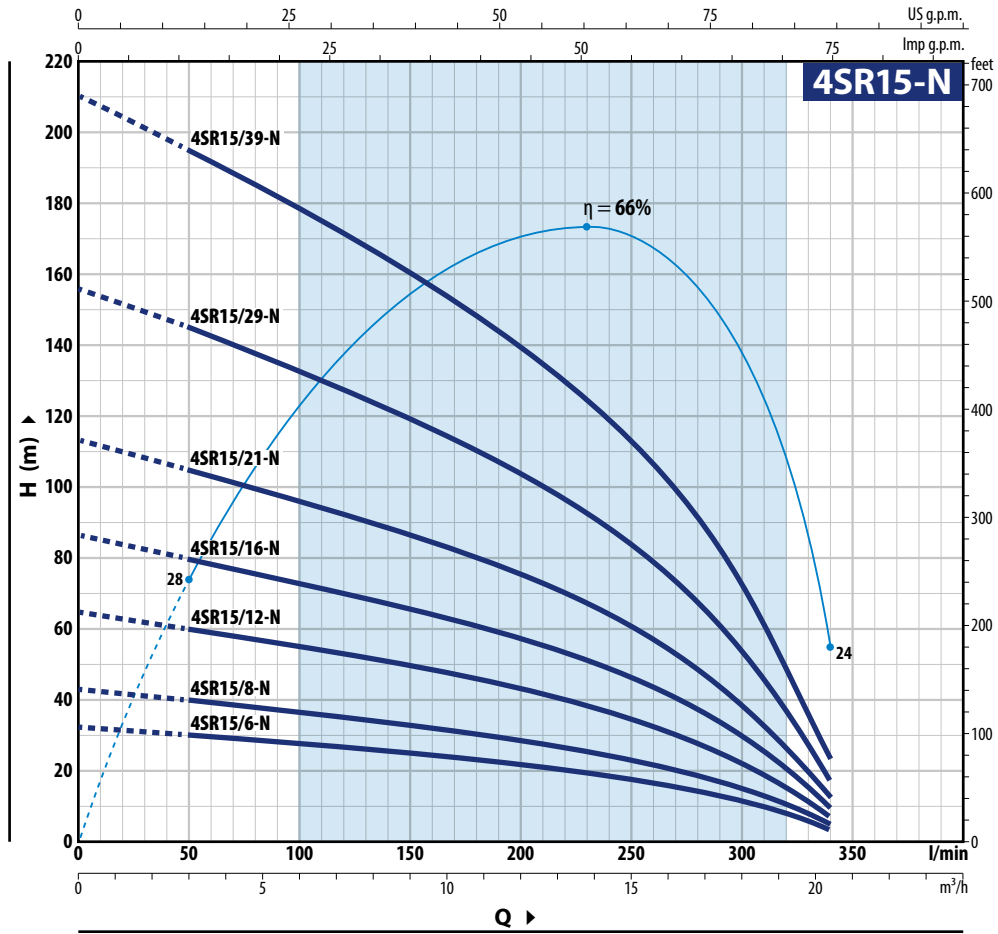
MODEL		POWER (P <sub>2</sub> )		Q	H metres								
Single-phase	Three-phase	kW	HP		m <sup>3</sup> /h	0	3.0	6.0	7.5	9.0	10.5	12	13.5
				l/min	0	50	100	125	150	175	200	225	250
4SRm 10/5 -N	4SR 10/5 -N	0.75	1	H metres	31.5	29	26.1	23.9	21	17.7	13.9	9.6	5
4SRm 10/7 -N	4SR 10/7 -N	1.1	1.5		44	41	36.5	33.5	29.5	24.8	19.4	13.5	7.5
4SRm 10/9 -N	4SR 10/9 -N	1.5	2		56.5	52.5	47	43	38	32	24.9	17.4	9.5
4SRm 10/13 -N	4SR 10/13 -N	2.2	3		82	76	68	62	54.5	46	36	25.1	13.5
-	4SR 10/18 -N	3	4		113	105	94	86	76	63.5	50	34.5	19
-	4SR 10/24 -N	4	5.5		151	140	125	115	101	85	66.5	46.5	25
-	4SR 10/32 -N	5.5	7.5		202	187	167	153	135	113	89	61.5	33.5
-	4SR 10/43 -N	7.5	10		271	252	225	205	181	152	119	83	45

### 4SR12-N

MODEL		POWER (P <sub>2</sub> )		Q	H metres									
Single-phase	Three-phase	kW	HP		m <sup>3</sup> /h	0	3.0	6.0	8.4	10.2	12	13.8	15.6	16.8
				l/min	0	50	100	140	170	200	230	260	280	300
4SRm 12/5 -N	4SR 12/5 -N	0.75	1	H metres	26	24	22	20	18.5	16.5	14	10.5	8	5
4SRm 12/7 -N	4SR 12/7 -N	1.1	1.5		36.5	33.5	30.5	28	26	23	19.5	15	11	7
4SRm 12/9 -N	4SR 12/9 -N	1.5	2		47	43	39.5	36	33	30	25.5	19	14.5	9
4SRm 12/14 -N	4SR 12/14 -N	2.2	3		73	67	61	56	51.5	46	39.5	30	22.5	14
-	4SR 12/19 -N	3	4		99	91	83	76	70	63	53.5	40.5	30.5	19
-	4SR 12/25 -N	4	5.5		130	120	109.5	100	92	83	70.5	53.5	40	25
-	4SR 12/34 -N	5.5	7.5		177	163	149	136	125	112.5	96	73	54.5	34
-	4SR 12/41 -N	7.5	10		213	197	179.5	164	151	135.5	115.5	87.5	66	41

Q = Flow rate H = Total manometric head

Tolerance of characteristic curves in compliance with EN ISO 9906 Grade 3B.



### 4SR15-N

MODEL		POWER (P <sub>2</sub> )		Q	H metres										
Single-phase	Three-phase	kW	HP		m³/h	0	3.0	6.0	9.0	12	15	18	19.2	20.4	
				l/min	0	50	100	150	200	250	300	320	340		
4SRm 15/6 -N	4SR 15/6 -N	1.1	1.5	H metres	32.5	30	27.5	24.5	21.5	17.5	11	7.5	3.5		
4SRm 15/8 -N	4SR 15/8 -N	1.5	2		43	40	36.5	33	39	23	14.5	10	5		
4SRm 15/12 -N	4SR 15/12 -N	2.2	3		65	60	54.5	49	43	35	22	15.5	7		
-	4SR 15/16 -N	3	4		86.5	80	73	65.5	57.5	46.5	29.5	20.5	9.5		
-	4SR 15/21 -N	4	5.5		113.5	105	96	86	75.5	61	38.5	27	12.5		
-	4SR 15/29 -N	5.5	7.5		156.5	145	132	119	104.5	84.5	53.5	37	17.5		
-	4SR 15/39 -N	7.5	10		210.5	195	178	160	140.5	113.5	72	50	23.5		

Q = Flow rate H = Total manometric head

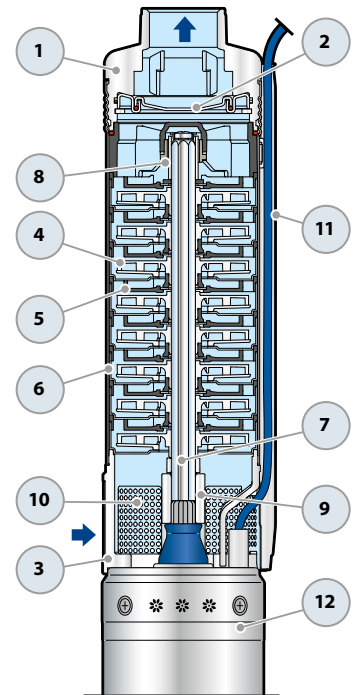
Tolerance of characteristic curves in compliance with EN ISO 9906 Grade 3B.



# 4SR-F®

## CONSTRUCTION CHARACTERISTICS

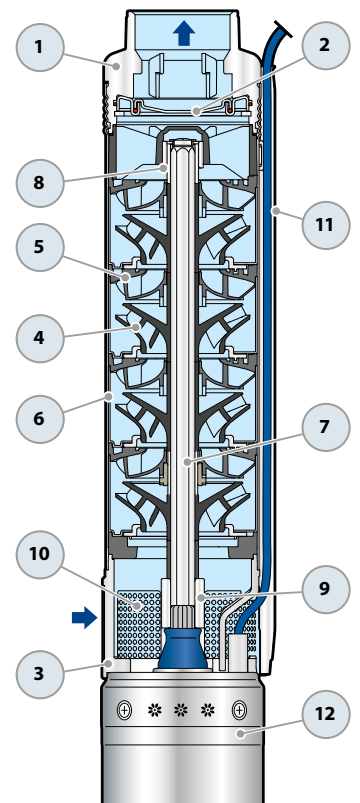
1	<b>DELIVERY BODY</b>	Precision cast stainless steel AISI 304 complete with threaded delivery port in compliance with ISO 228/1
2	<b>NON-RETURN VALVE</b>	Stainless steel AISI 304
3	<b>MOTOR BRACKET</b>	Stainless steel AISI 304 in compliance with NEMA standards
4	<b>IMPELLER</b>	Delrin
5	<b>DIFFUSER</b>	Noryl FE1520PW
6	<b>STAGE CASING</b>	Stainless steel AISI 304
7	<b>PUMP SHAFT</b>	Stainless steel AISI 304
8	<b>PUMP BEARINGS</b>	Special technopolymer housing with stainless steel AISI 316, chrome oxide coated, sand resistant shaft bushing
9	<b>DRIVE COUPLING</b>	Stainless steel AISI 316L up to 2.2 kW; stainless steel AISI 304 for higher powers
10	<b>FILTER</b>	Stainless steel AISI 304
11	<b>CABLE COVER</b>	Stainless steel AISI 304
12	<b>MOTOR 4"</b>	<b>4PD</b> = "PEDROLLO" oil filled motor



# 4SR-N®

## CONSTRUCTION CHARACTERISTICS

1	<b>DELIVERY BODY</b>	Precision cast stainless steel AISI 304 complete with threaded delivery port in compliance with ISO 228/1
2	<b>NON-RETURN VALVE</b>	Stainless steel AISI 304
3	<b>MOTOR BRACKET</b>	Stainless steel AISI 304 in compliance with NEMA standards
4	<b>IMPELLER</b>	Noryl FE1520PW
5	<b>DIFFUSER</b>	Noryl FE1520PW
6	<b>STAGE CASING</b>	Stainless steel AISI 304
7	<b>PUMP SHAFT</b>	Stainless steel AISI 304
8	<b>PUMP BEARINGS</b>	Special technopolymer housing with stainless steel AISI 316, chrome oxide coated, sand resistant shaft bushing
9	<b>DRIVE COUPLING</b>	Stainless steel AISI 316L up to 2.2 kW; stainless steel AISI 304 for higher powers
10	<b>FILTER</b>	Stainless steel AISI 304
11	<b>CABLE COVER</b>	Stainless steel AISI 304
12	<b>MOTOR 4"</b>	<b>4PD</b> = "PEDROLLO" oil filled motor

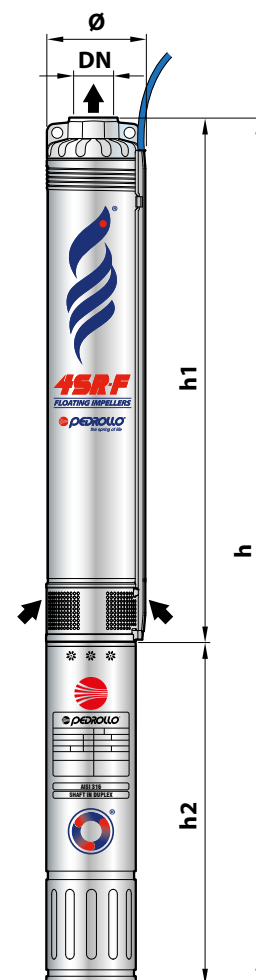


# DIMENSIONS AND WEIGHT (Pumps paired with 4PD submersible motors)



MODEL Single-phase	DN	DIMENSIONS mm				kg
		Ø	h1	h2	h	
4SRm 1/12 - F	1 1/4"	98	402	311	713	11.0
4SRm 1/17 - F			528	331	859	13.4
4SRm 1/22 - F			628	356	984	16.2
4SRm 1/32 - F			853	396	1249	20.4
4SRm 1/42 - F			1052	437	1489	24.2
4SRm 1.5/7 - F			303	311	614	10.1
4SRm 1.5/11 - F			382	331	713	11.5
4SRm 1.5/15 - F			488	356	844	14.3
4SRm 1.5/22 - F			627	396	1023	17.8
4SRm 1.5/30 - F			787	437	1224	20.9
4SRm 1.5/44 - F			1163	492	1655	29.5
4SRm 2/6 - F			283	311	594	9.9
4SRm 2/9 - F			343	331	674	11.1
4SRm 2/12 - F			402	356	758	13.1
4SRm 2/17 - F			528	396	924	16.4
4SRm 2/23 - F			647	437	1084	19.5
4SRm 2/33 - F	873	492	1365	25.5		
4SRm 4/6 - F	2"	98	313	331	644	10.8
4SRm 4/8 - F			363	356	719	12.6
4SRm 4/12 - F			462	396	858	15.5
4SRm 4/15 - F			563	437	1000	17.8
4SRm 4/22 - F			737	492	1229	23.4
4SRm 6/4 - F			289	331	620	10.4
4SRm 6/6 - F			352	356	708	12.3
4SRm 6/9 - F			446	396	842	15.1
4SRm 6/13 - F			598	437	1035	17.8
4SRm 6/17 - F			723	492	1215	22.7
4SRm 8/4 - F			240	356	596	11.7
4SRm 8/7 - F			382	396	778	14.4
4SRm 8/9 - F			446	437	883	16.6
4SRm 8/13 - F			598	492	1090	20.9

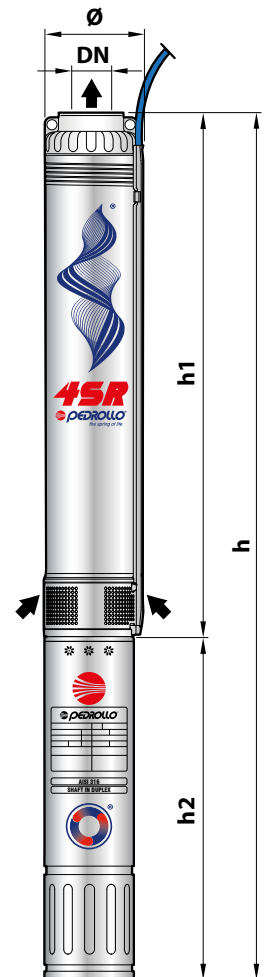
MODEL Three-phase	DN	DIMENSIONS mm				kg
		Ø	h1	h2	h	
4SR 1/12 - F	1 1/4"	98	402	311	713	11.0
4SR 1/17 - F			528	331	859	13.4
4SR 1/22 - F			628	356	984	16.2
4SR 1/32 - F			853	371	1224	19.6
4SR 1/42 - F			1052	396	1448	22.7
4SR 1.5/7 - F			303	311	614	10.1
4SR 1.5/11 - F			382	331	713	11.5
4SR 1.5/15 - F			488	356	844	14.3
4SR 1.5/22 - F			627	371	998	17.0
4SR 1.5/30 - F			787	396	1183	19.4
4SR 1.5/44 - F			1163	437	1600	26.3
4SR 2/6 - F			283	311	594	9.9
4SR 2/9 - F			343	331	674	11.1
4SR 2/12 - F			402	356	758	13.1
4SR 2/17 - F			528	371	899	15.6
4SR 2/23 - F			647	396	1043	18.0
4SR 2/33 - F	873	437	1310	22.3		
4SR 4/6 - F	2"	98	313	331	644	10.8
4SR 4/8 - F			363	356	719	12.6
4SR 4/12 - F			462	371	833	14.7
4SR 4/15 - F			563	396	959	16.3
4SR 4/22 - F			737	437	1174	20.2
4SR 4/30 - F			963	450	1413	23.9
4SR 4/40 - F			1284	505	1789	32.0
4SR 4/54 - F			1684	590	2274	39.0
4SR 6/4 - F			289	331	620	10.4
4SR 6/6 - F			352	356	708	12.3
4SR 6/9 - F			446	371	817	14.3
4SR 6/13 - F			598	396	994	16.3
4SR 6/17 - F			723	437	1160	19.5
4SR 6/24 - F			969	450	1419	23.5
4SR 6/32 - F			1247	505	1752	29.2
4SR 6/43 - F			1618	590	2208	36.9
4SR 6/58 - F	2161	800	2961	52.4		
4SR 8/4 - F	2"	98	240	356	596	11.7
4SR 8/7 - F			382	371	753	13.6
4SR 8/9 - F			446	396	842	15.1
4SR 8/13 - F			598	437	1035	17.7
4SR 8/17 - F			723	450	1173	21.0
4SR 8/24 - F			969	505	1474	26.4
4SR 8/32 - F			1247	590	1837	32.9
4SR 8/43 - F			1618	800	2418	45.8



# 4SR-N

MODEL Single-phase	DN	DIMENSIONS mm				kg 1~
		Ø	h1	h2	h	
4SRm 10/5 - N	2"	98	429	356	785	12.4
4SRm 10/7 - N			531	371	902	15.0
4SRm 10/9 - N			633	396	1029	17.4
4SRm 10/13 - N			836	437	1273	22.4
4SRm 12/5 - N			543	356	899	14.1
4SRm 12/7 - N			689	396	1085	17.8
4SRm 12/9 - N			835	437	1272	21.0
4SRm 12/14 - N			1200	492	1692	26.8
4SRm 15/6 - N			616	396	1012	16.6
4SRm 15/8 - N			762	437	1199	20.4
4SRm 15/12 - N			1054	492	1546	25.4

MODEL Three-phase	DN	DIMENSIONS mm				kg 3~
		Ø	h1	h2	h	
4SR 10/5 - N	2"	98	429	356	785	12.4
4SR 10/7 - N			531	371	902	14.2
4SR 10/9 - N			633	396	1029	15.9
4SR 10/13 - N			836	437	1273	19.2
4SR 10/18 - N			1091	450	1541	23.0
4SR 10/24 - N			1396	505	1901	28.5
4SR 10/32 - N			1803	590	2393	35.8
4SR 10/43 - N			2363	800	3163	50.0
4SR 12/5 - N			543	356	899	14.0
4SR 12/7 - N			689	371	1060	12.7
4SR 12/9 - N			835	396	1231	19.3
4SR 12/14 - N			1200	437	1637	24.3
4SR 12/19 - N	1565	450	2015	28.3		
4SR 12/25 - N	2003	505	2508	35.8		
4SR 12/34 - N	2660	590	3360	46.4		
4SR 12/41 - N	3165	800	3965	60.6		
4SR 15/6 - N	616	371	987	15.4		
4SR 15/8 - N	762	396	1158	18.5		
4SR 15/12 - N	1054	437	1491	23.0		
4SR 15/16 - N	1346	450	1796	26.6		
4SR 15/21 - N	1711	505	2216	32.9		
4SR 15/29 - N	2295	590	2995	42.7		
4SR 15/39 - N	3020	800	3820	58.7		





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