FLOATING IMPELLERS
(PATENTED)

3" submersible pumps

Clean water
(Maximum sand content 150 g/m³)

Domestic use

Civil use

PERFORMANCE RANGE

- Flow rate up to **110 l/min** (**6.6 m³**/h)
- Head up to **251 m**

APPLICATION LIMITS

- Maximum liquid temperature **+35 °C**
- Maximum sand content **150 g/m³**
- Maximum immersion depth of **60 m** with a sufficiently long
- power cable
- Installation::
  - vertical
  - horizontal up to 0.37 kW
- Starts/hour: **20** at regular intervals
- Minimum flow rate for motor cooling **8 cm/s**
- Continuous service **S1**

INSTALLATION AND USE

3" submersible pumps suitable for pumping clean water for many applications such as domestic supply, irrigation and water systems for small communities.

ELECTRIC MOTOR

- Oil filled rewindable motors (food grade, non-toxic oil)
- Voltage:
  - Single phase **220 V - 60 Hz**
  - Three phase **380 V - 60 Hz**
- Insulation:: **class F**
- Protection: **IP 68**
- Shaft and jacket: **AISI 304** stainless steel
- Dimensions of the flange connection in compliance with **NEMA** standard
- 1.5 m long power cable

PATENTS

- **Patent n° EP3123031, EP2419642**

CONSTRUCTION AND SAFETY STANDARDS

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

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

CE

OPTIONS AVAILABLE ON REQUEST

- Pump body with ISO 228/1 threaded ports
- Other voltages

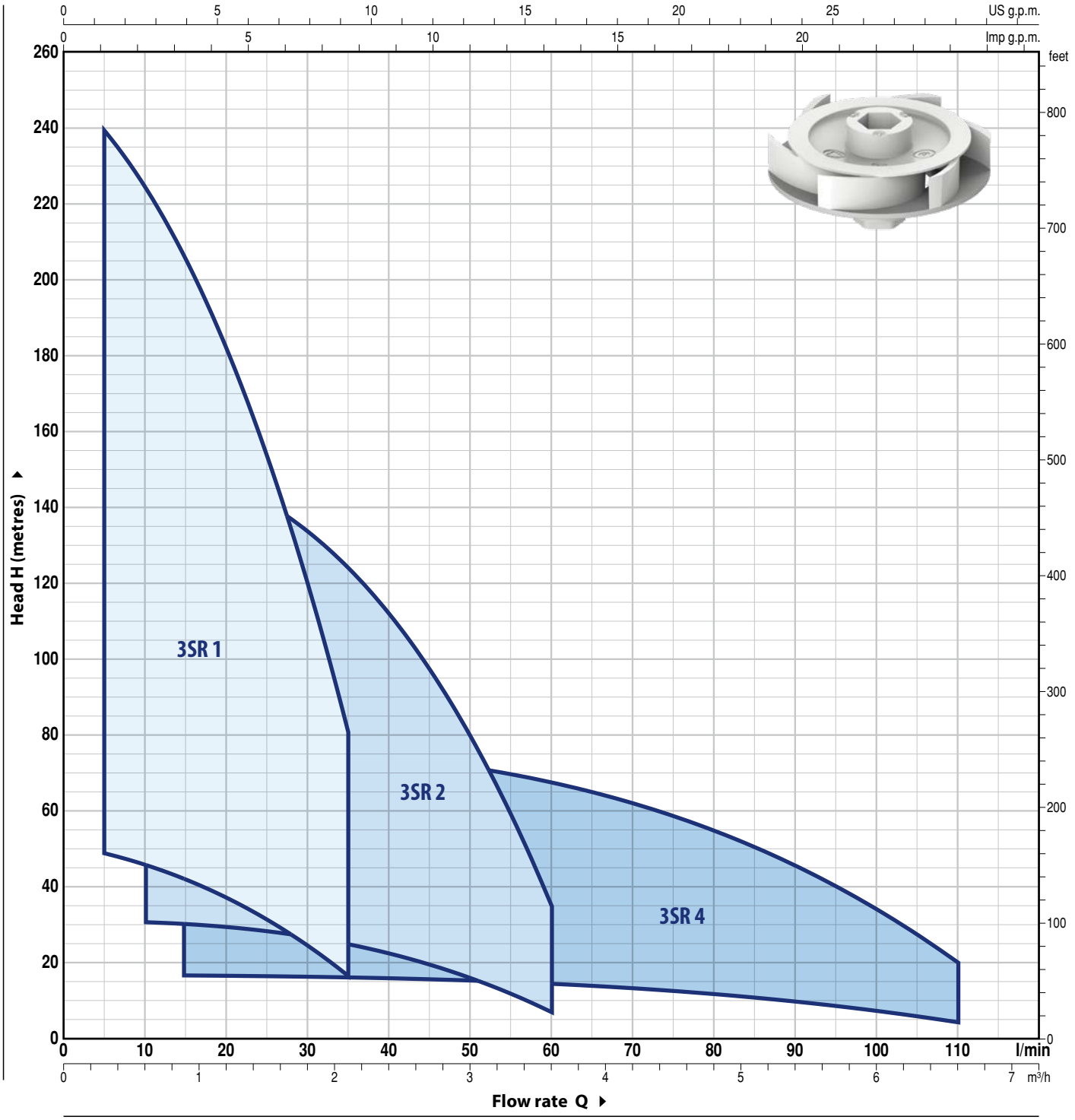
GUARANTEE

2 years subject to terms and conditions

ECO FRIENDLY · ErP ready · RoHS2 COMPLIANT · REACH COMPLIANT · EMC COMPLIANT

PERFORMANCE RANGE

60 Hz n= 3450 min^{-1}



THE ADVANTAGES FOR THE USER

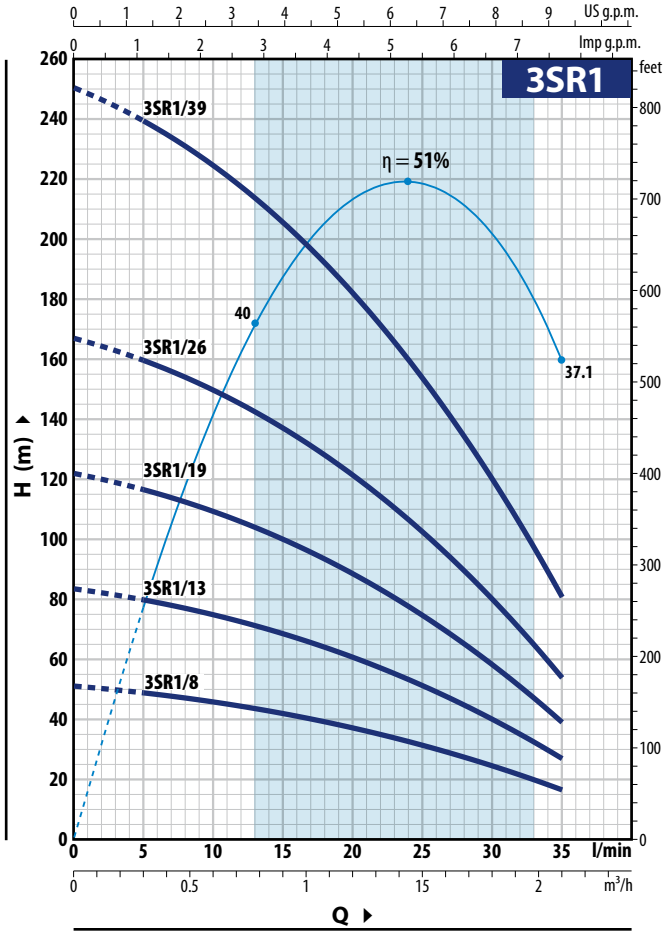
Economic savings on the use of water thanks to the high efficiency and the consequent reduced electricity consumption. With a diameter of only 3 inches, the costs of drilling a new well and the installation are greatly reduced.
In the case of pre-existing drilling the 3SR pump is the ideal replacement solution, especially in the presence of old and encrusted wells. The construction with floating impellers allows the pumping of water with sand content of up to **150 g/m³**.

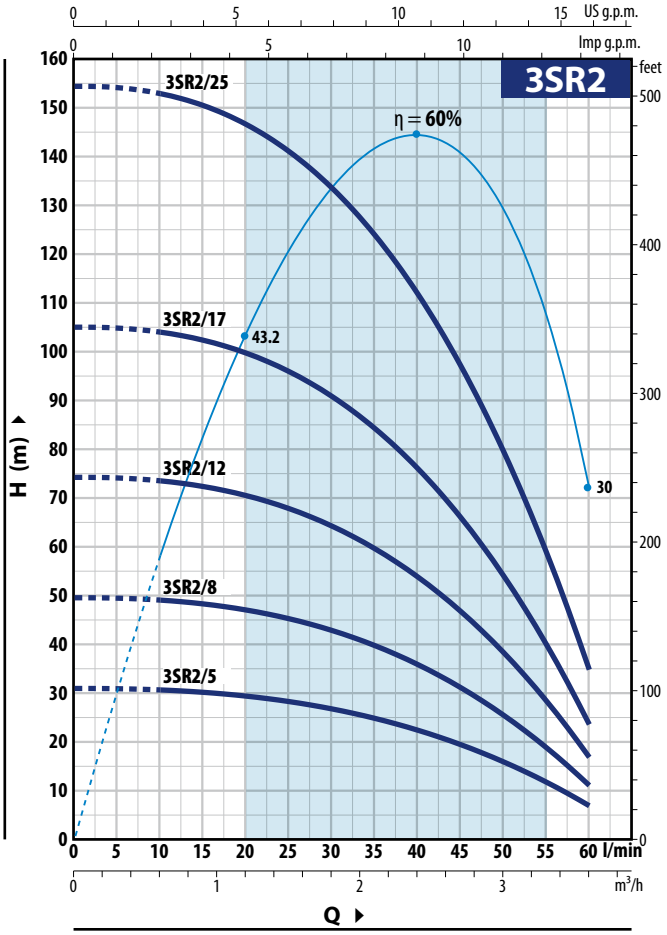
HIGH PERFORMANCE

The hydraulic components, coupled to a high performance electric motor, make the 3SR pump extremely efficient in 3" category

CHARACTERISTIC CURVES AND PERFORMANCE DATA

60 Hz n= 3450 min⁻¹





3SR1

MODEL		POWER (P2)		Q	m³/h	0	0.3	0.6	0.9	1.2	1.5	1.8	2.1
Single-phase	Three-phase	kW	HP		l/min	**0**	**5**	**10**	**15**	**20**	**25**	**30**	**35**
3SRm 1/8	**3SR 1/8**	0.25	0.33			51.5	49	46	42	37.5	31.5	24.7	16.5
3SRm 1/13	**3SR 1/13**	0.37	0.50			84	80	75	68.5	61	51.5	40	27
3SRm 1/19	**3SR1/19**	0.55	0.75	**H**	metres	122	117	110	100	89	75	58.5	39.5
3SRm 1/26	**3SR 1/26**	0.75	1			167	160	150	137	122	103	80	54
3SRm 1/39	**3SR 1/39**	1.1	1.5			251	240	225	206	182	154	120	81

3SR2

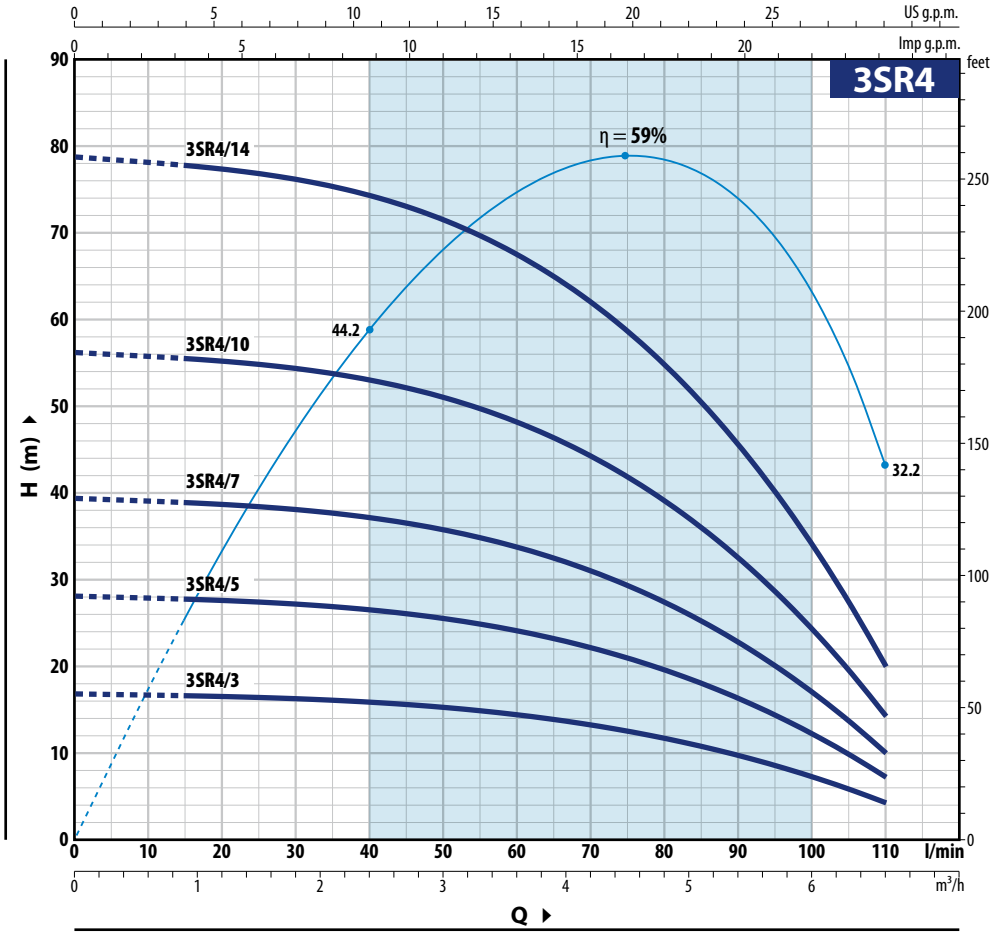
MODEL		POWER (P2)		Q	m³/h	0	0.6	0.9	1.2	1.8	2.4	3	3.6
Single-phase	Three-phase	kW	HP		l/min	**0**	**10**	**15**	**20**	**30**	**40**	**50**	**60**
3SRm 2/5	**3SR 2/5**	0.25	0.33			31	30.5	30	29.5	26.7	22.4	15.9	7
3SRm 2/8	**3SR 2/8**	0.37	0.50			49.5	49	48	47	42.5	36	25.4	11
3SRm 2/12	**3SR 2/12**	0.55	0.75	**H**	metres	74	73	72	70	64	53.5	38	16.5
3SRm 2/17	**3SR 2/17**	0.75	1			105	104	102	100	91	76	54	23.5
3SRm 2/25	**3SR 2/25**	1.1	1.5			154	153	150	147	134	112	80	34.5

Q = Flow rate **H** = Total manometric head

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

CHARACTERISTIC CURVES AND PERFORMANCE DATA

60 Hz n= 3450 min^{-1}



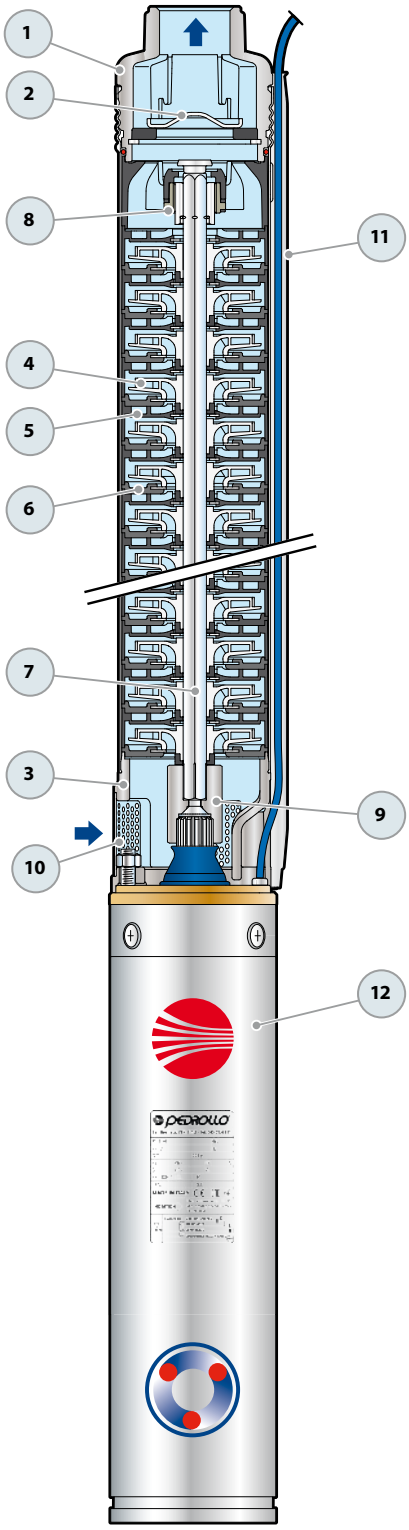
3SR4

MODEL		POWER (P2)		Q	m³/h	0	0.9	1.8	2.4	3	4.2	5.4	6.6
Single-phase	Three-phase	kW	HP		l/min	**0**	**15**	**30**	**40**	**50**	**70**	**90**	**110**
3SRm 4/3	**3SR 4/3**	0.25	0.33			17	16.5	16.3	15.9	15.3	13.3	9.7	4.5
3SRm 4/5	**3SR 4/5**	0.37	0.50			28	28	27	26.5	25.5	22.1	16.2	7
3SRm 4/7	**3SR 4/7**	0.55	0.75	**H**	metres	39.5	39	38	37	35.5	31	22.7	10
3SRm 4/10	**3SR 4/10**	0.75	1			56.5	55.5	54.5	53	51	44.5	32.5	14
3SRm 4/14	**3SR 4/14**	1.1	1.5			79	78	76	74	71	62	45.5	20

Q = Flow rate **H** = Total manometric head

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

POS.	COMPONENT	CONSTRUCTION CHARACTERISTICS
1	**DELIVERY BODY**	Precision cast stainless steel AISI 304 complete with threaded delivery port in compliance with ISO 228/1
2	**NON-RETURN VALVE**	Stainless steel AISI 304
3	**MOTOR BRACKET**	Precision cast stainless steel AISI 304, compliance with NEMA standards
4	**IMPELLERS**	Delrin
5	**DIFFUSER**	Noryl - Stainless steel AISI 304
6	**DIFFUSER PLATE**	Noryl - Stainless steel AISI 304
7	**PUMP SHAFT**	Stainless steel AISI 304
8	**PUMP BEARINGS**	Fixed part in special technopolymer. Rotating part in AISI 316L stainless steel coated with chromium oxide, for a longer life even in presence of sand.
9	**DRIVE COUPLING**	Stainless steel AISI 316L
10	**FILTER**	Stainless steel AISI 304
11	**CABLE COVER**	Stainless steel AISI 304
12	**MOTOR 3"**	– Oil filled rewindable motors (non-toxic oil for use with food) – 2 pole, 60 Hz (n ~ 3450 min^{-1}) – Voltage: single-phase 220 V three-phase 380 V or 220 V – Insulation: classe F – Protection: IP 68 – Shaft and jacket: AISI 304 stainless steel – Dimensions of the flange connection in compliance with NEMA standards – **1.5 m** long power cable



DIMENSIONS AND WEIGHT

MODEL	PORT	DIMENSIONS mm				kg
Single-phase	DN	Ø	h1	h2	h3	1~
3SRm 1/8			303	378	681	**9.5**
3SRm 1/13			397	378	775	**10.0**
3SRm 1/19		**76**	510	398	908	**11.2**
3SRm 1/26			642	438	1080	**13.1**
3SRm 1/39			917	478	1395	**15.7**
3SRm 2/5			264	378	642	**9.3**
3SRm 2/8			332	378	710	**9.7**
3SRm 2/12	**1″ NPT**	**76**	422	398	820	**10.8**
3SRm 2/17			534	438	972	**12.5**
3SRm 2/25			714	478	1192	**14.6**
3SRm 4/3			248	378	626	**9.2**
3SRm 4/5			311	378	689	**9.5**
3SRm 4/7		**76**	375	398	773	**10.4**
3SRm 4/10			471	438	909	**12.0**
3SRm 4/14			598	478	1076	**13.8**

Three-phase	DN	Ø	h1	h2	h3	3~
3SR 1/8			303	378	681	**9.6**
3SR 1/13			397	378	775	**10.1**
3SR1/19		**76**	510	398	908	**11.4**
3SR 1/26			642	438	1080	**13.2**
3SR 1/39			917	438	1355	**14.9**
3SR 2/5			264	378	642	**9.4**
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3SR 2/12	**1″ NPT**	**76**	422	398	820	**10.9**
3SR 2/17			534	438	972	**12.6**
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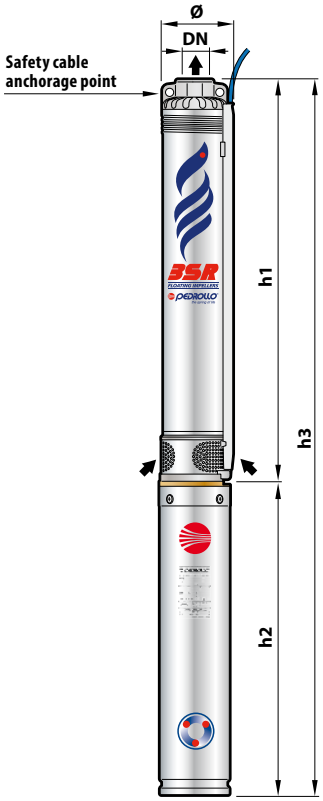
3SR 4/3			248	378	626	**9.3**
3SR 4/5			311	378	689	**9.5**
3SR 4/7		**76**	375	398	773	**10.6**
3SR 4/10			471	438	909	**12.1**
3SR 4/14			598	438	1036	**13.1**



ABSORPTION

Single-phase versions 220 V - 60Hz

MODEL	Rated power P2		Axial load	Capacitor (VL=450V)	ABSORPTION
Single-phase	kW	HP	N	µF	220V
3SRm 1/8	0.25	0.33		12.5	**2.4** A
3SRm 1/13	0.37	0.50		12.5	**3.1** A
3SRm 1/19	0.55	0.75	800	16	**4.2** A
3SRm 1/26	0.75	1		20	**5.5** A
3SRm 1/39	1.1	1.5		30	**8.0** A
3SRm 2/5	0.25	0.33		12.5	**2.4** A
3SRm 2/8	0.37	0.50		12.5	**3.1** A
3SRm 2/12	0.55	0.75	800	16	**4.2** A
3SRm 2/17	0.75	1		20	**5.5** A
3SRm 2/25	1.1	1.5		30	**8.0** A
3SRm 4/3	0.25	0.33		12.5	**2.4** A
3SRm 4/5	0.37	0.50		12.5	**3.1** A
3SRm 4/7	0.55	0.75	800	16	**4.2** A
3SRm 4/10	0.75	1		20	**5.5** A
3SRm 4/14	1.1	1.5		30	**8.0** A

Three-phase versions 220 V or 380 V - 60Hz

MODEL	Rated power P2		Axial load	ABSORPTION	
Three-phase	kW	HP	N	220 V	380 V
3SR 1/8	0.25	0.33		**2.6** A	**1.5** A
3SR 1/13	0.37	0.50		**2.9** A	**1.7** A
3SR1/19	0.55	0.75	800	**3.6** A	**2.1** A
3SR 1/26	0.75	1		**4.5** A	**2.6** A
3SR 1/39	1.1	1.5		**6.1** A	**3.5** A
3SR 2/5	0.25	0.33		**2.6** A	**1.5** A
3SR 2/8	0.37	0.50		**2.9** A	**1.7** A
3SR 2/12	0.55	0.75	800	**3.6** A	**2.1** A
3SR 2/17	0.75	1		**4.5** A	**2.6** A
3SR 2/25	1.1	1.5		**6.1** A	**3.5** A
3SR 4/3	0.25	0.33		**2.6** A	**1.5** A
3SR 4/5	0.37	0.50		**2.9** A	**1.7** A
3SR 4/7	0.55	0.75	800	**3.6** A	**2.1** A
3SR 4/10	0.75	1		**4.5** A	**2.6** A
3SR 4/14	1.1	1.5		**6.1** A	**3.5** A