



3" submersible pumps



PERFORMANCE RANGE

- Flow rate up to **90 l/min** (5.4 m³/h)
- Head up to **267 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 (non-toxic oil for use with food) a 2 pole, 50 Hz
- Voltage:
 - single-phase **230 V**
 - three-phase **400 V**
- Insulation: class 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

PATENTES

- 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



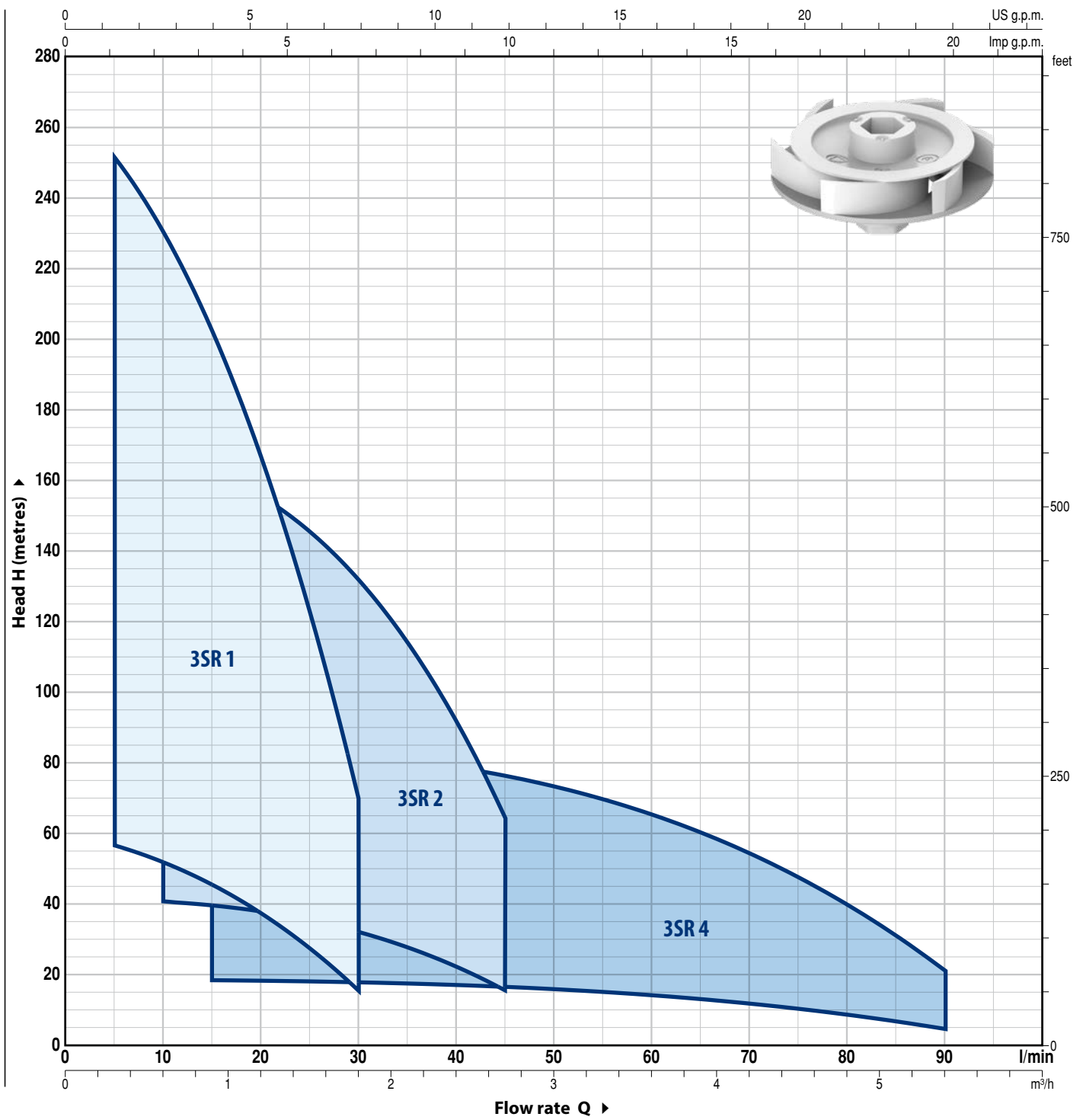
CERTIFICATIONS

Company with management system certified DNV
ISO 9001: QUALITY



PERFORMANCE RANGE

50 Hz n= 2900 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.

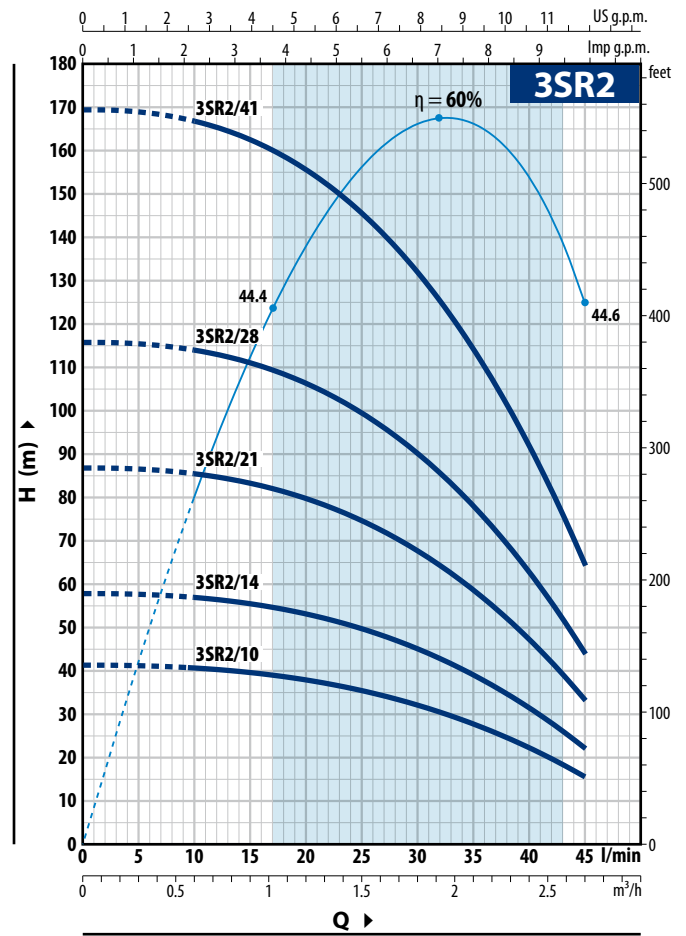
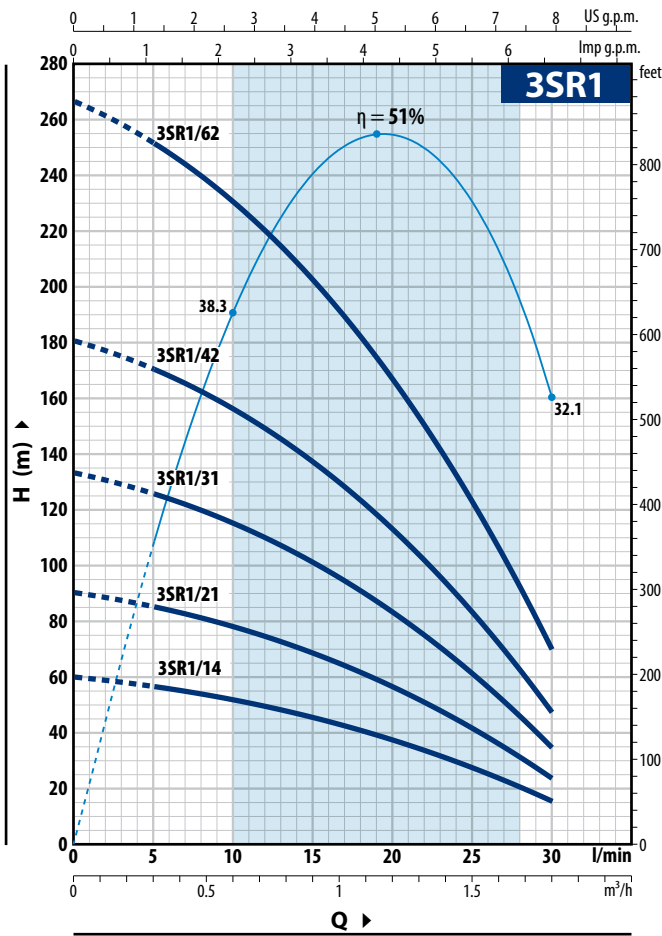
The construction with floating impellers allows the pumping of water with sand content of up to **150 g/m³**.

● **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

50 Hz n = 2900 min⁻¹



3SR1

MODEL		POWER (P ₂)		Q	H metres							
Single-phase	Three-phase	kW	HP		m ³ /h	0	0.3	0.6	0.9	1.2	1.5	1.8
				l/min	0	5	10	15	20	25	30	
3SRm 1/14	3SR 1/14	0.25	0.33	H metres	60	57	52	45.5	37.5	28	16	
3SRm 1/21	3SR 1/21	0.37	0.50		90	85	78	68.5	56.5	41.5	24	
3SRm 1/31	3SR 1/31	0.55	0.75		133	126	115	101	83	61.5	35	
3SRm 1/42	3SR 1/42	0.75	1		181	170	156	137	113	83	47.5	
3SRm 1/62	3SR 1/62	1.1	1.5		267	252	230	203	167	123	70	

3SR2

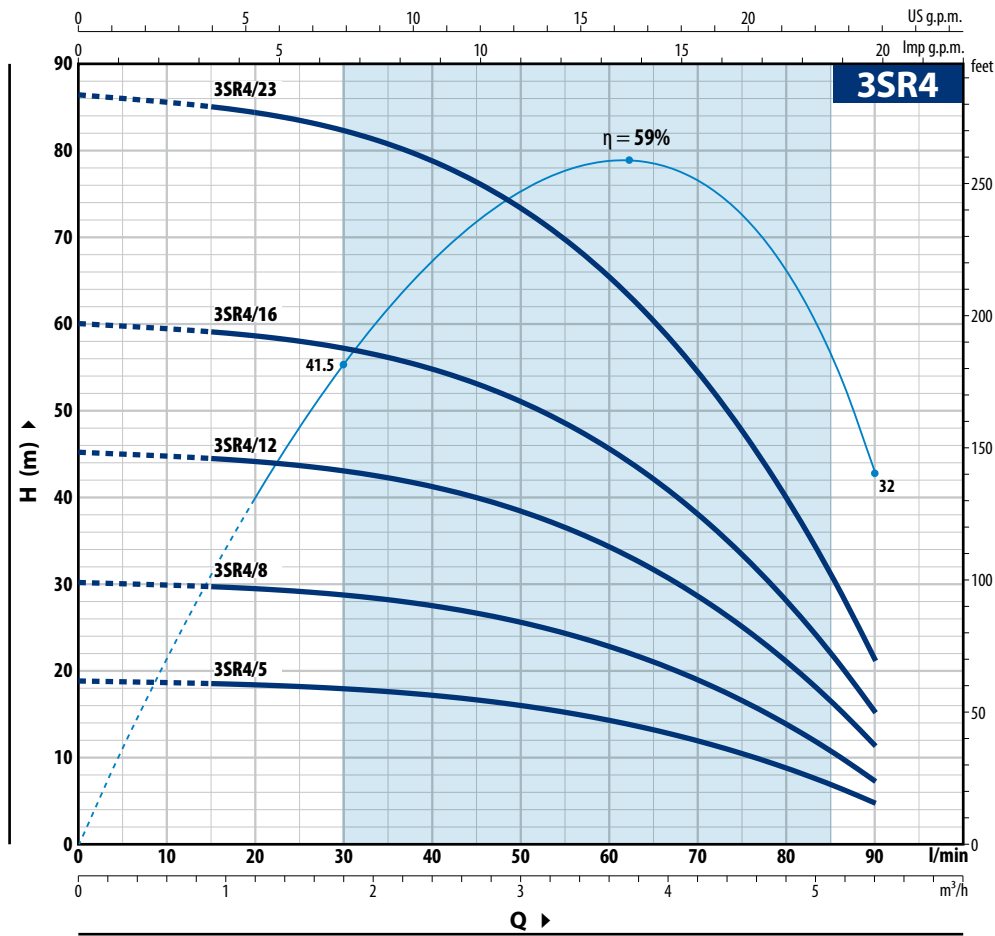
MODEL		POWER (P ₂)		Q	H metres									
Single-phase	Three-phase	kW	HP		m ³ /h	0	0.6	0.9	1.2	1.5	1.8	2.1	2.4	2.7
				l/min	0	10	15	20	25	30	35	40	45	
3SRm 2/10	3SR 2/10	0.25	0.33	H metres	41.5	40.5	39.5	38	35.5	32	28	22.3	15.5	
3SRm 2/14	3SR 2/14	0.37	0.50		58	57	55.5	53	49.5	45	39	31	22	
3SRm 2/21	3SR 2/21	0.55	0.75		87	85	83	80	74	67.5	58.5	47	33	
3SRm 2/28	3SR 2/28	0.75	1		116	114	111	106	99	90	78	62.5	44	
3SRm 2/41	3SR 2/41	1.1	1.5		169	166	162	155	145	132	114	92	64	

Q = Flow rate H = Total manometric head

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

CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n = 2900 min⁻¹



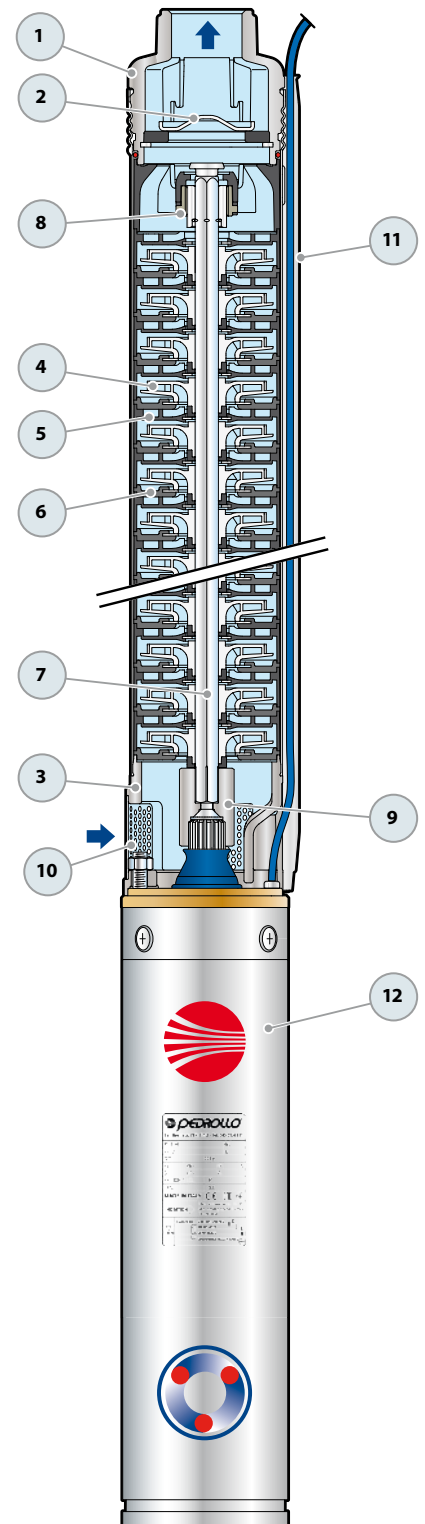
3SR4

MODEL		POWER (P ₂)		Q										
Single-phase	Three-phase	kW	HP		m ³ /h	0	0.9	1.2	1.8	2.4	3	3.6	4.2	4.8
				l/min	0	15	20	30	40	50	60	70	80	90
3SRm 4/5	3SR 4/5	0.25	0.33	H metres	19	18.5	18.3	17.9	17.1	16	14.2	11.9	8.7	4.5
3SRm 4/8	3SR 4/8	0.37	0.50		30	29.5	29.5	28.5	27.5	25.5	22.8	19	14	7.5
3SRm 4/12	3SR 4/12	0.55	0.75		45	44.5	44	43	41	38.5	34	28.5	21	11.5
3SRm 4/16	3SR 4/16	0.75	1		60	59	58.5	57.5	55	51	45.5	38	28	15
3SRm 4/23	3SR 4/23	1.1	1.5		86	85	84	82	79	73	65.5	54.5	40	21.5

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	Stainless steel AISI 304, in 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	Special technopolymer housing with stainless steel AISI 316L, chrome oxide coated, sand resistant shaft bushing.
9 DRIVE COUPLING	Stainless steel AISI 316L
10 FILTER	Stainless steel AISI 304
11 CABLE COVER	Stainless steel AISI 304
12 MOTOR 3"	<ul style="list-style-type: none"> - Oil filled rewindable motors (non-toxic oil for use with food) - 2 pole,, 50 Hz (n ~ 2900 min⁻¹) - Voltage: <ul style="list-style-type: none"> Single-phase 230 V Three-phase 400 V - Insulation:: class 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
		Ø	h1	h2	h3	
Single-phase	DN					1~
3SRm 1/14	1"	76	415	378	793	9.1
3SRm 1/21			547	378	925	9.6
3SRm 1/31			736	398	1134	11.0
3SRm 1/42			973	438	1411	13.1
3SRm 1/62			1380	478	1858	16.0
3SRm 2/10	1"	76	376	378	754	8.9
3SRm 2/14			466	378	844	9.3
3SRm 2/21			624	398	1022	10.6
3SRm 2/28			781	438	1219	12.3
3SRm 2/41			1104	478	1582	14.8
3SRm 4/5	1"	76	311	378	689	8.6
3SRm 4/8			407	378	785	8.9
3SRm 4/12			534	398	932	10.0
3SRm 4/16			662	438	1100	11.6
3SRm 4/23			915	478	1393	13.7

Three-phase	DN					3~
		Ø	h1	h2	h3	
3SR 1/14	1"	76	415	358	773	8.6
3SR 1/21			547	358	905	9.2
3SR 1/31			736	378	1114	10.5
3SR 1/42			973	398	1371	12.1
3SR 1/62			1380	438	1818	14.9
3SR 2/10	1"	76	376	358	734	8.4
3SR 2/14			466	358	824	8.9
3SR 2/21			624	378	1002	10
3SR 2/28			781	398	1179	11.3
3SR 2/41			1104	438	1542	13.7
3SR 4/5	1"	76	311	358	669	8.1
3SR 4/8			407	358	765	8.5
3SR 4/12			534	378	912	9.4
3SR 4/16			662	398	1060	10.6
3SR 4/23			915	438	1353	12.6



ABSORPTION

Single-phase versions					
MODEL	Rated power P ₂		Axial load N	Capacitor (VL=450V) µF	ABSORPTION
	kW	HP			
230 V / 50 Hz					
3SRm 1/14	0.25	0.33	800	12.5	3.2 A
3SRm 1/21	0.37	0.50		12.5	3.4 A
3SRm 1/31	0.55	0.75		16	4.5 A
3SRm 1/42	0.75	1		20	6.0 A
3SRm 1/62	1.1	1.5		30	8.0 A
3SRm 2/10	0.25	0.33	800	12.5	3.2 A
3SRm 2/14	0.37	0.50		12.5	3.4 A
3SRm 2/21	0.55	0.75		16	4.5 A
3SRm 2/28	0.75	1		20	6.0 A
3SRm 2/41	1.1	1.5		30	8.0 A
3SRm 4/5	0.25	0.33	800	12.5	3.2 A
3SRm 4/8	0.37	0.50		12.5	3.4 A
3SRm 4/12	0.55	0.75		16	4.5 A
3SRm 4/16	0.75	1		20	6.0 A
3SRm 4/23	1.1	1.5		30	8.0 A

Three-phase versions					
MODEL	Rated power P ₂		Axial load N		ABSORPTION
	kW	HP			
400 V / 50 Hz					
3SR 1/14	0.25	0.33	800		1.4 A
3SR 1/21	0.37	0.50			1.5 A
3SR 1/31	0.55	0.75			1.9 A
3SR 1/42	0.75	1			2.6 A
3SR 1/62	1.1	1.5			3.5 A
3SR 2/10	0.25	0.33	800		1.4 A
3SR 2/14	0.37	0.50			1.5 A
3SR 2/21	0.55	0.75			1.9 A
3SR 2/28	0.75	1			2.6 A
3SR 2/41	1.1	1.5			3.5 A
3SR 4/5	0.25	0.33	800		1.4 A
3SR 4/8	0.37	0.50			1.5 A
3SR 4/12	0.55	0.75			1.9 A
3SR 4/16	0.75	1			2.6 A
3SR 4/23	1.1	1.5			3.5 A