



Clean water



Agricultural use



Civil use



Industrial use



✧ **Featuring high mechanical resistance against both sand abrasion and corrosion, even in marine environments or brackish water installations, the 4HR pump is the ideal choice when durability and quality are paramount.**

PERFORMANCE RANGE

- Flow rate up to **420 l/min** (25.2 m³/h)
- Head up to **176 m**

INSTALLATION AND USE

Submersible pump designed for 4" wells, constructed with durable micro-cast stainless steel.

Designed to transfer clean or brackish water with sand content up to 100 g/m³. Highly efficient and reliable, they are suitable for industrial, civil, and agricultural applications, such as water distribution coupled with pressure tanks, irrigation, pressure boosting, fire-fighting systems, and more.

INCLUDES

- ✧ Electric motor
 - Single-phase 230 V - 50 Hz
 - Three-phase 400 V - 50 Hz
- The pump can be supplied with a motor:
- **4PD** rewindable and oil filled
 - **4PS** encapsulated and water filled

- ✧ Power cable from:
 - **2 m** for power ratings from 0.37 to 2.2 kW
 - **3.6 m** for power ratings from 3 to 7.5 kW.

APPLICATION LIMITS

- Liquid temperature up to **+40 °C**
- Sand content max. **100 g/m³**
- Maximum operating depth below water level:
 - **200 m** with 4PD motors
 - **300 m** with 4PS motors
- Operation:
 - in vertical position
 - horizontally up to **12 stages**
- Starts per hour: **20** at regular intervals
- Minimum motor cooling flow **8 cm/s**
- Continuous running duty **S1**

AVAILABLE UPON REQUEST

- ✧ Different voltage requirements 60 Hz frequency

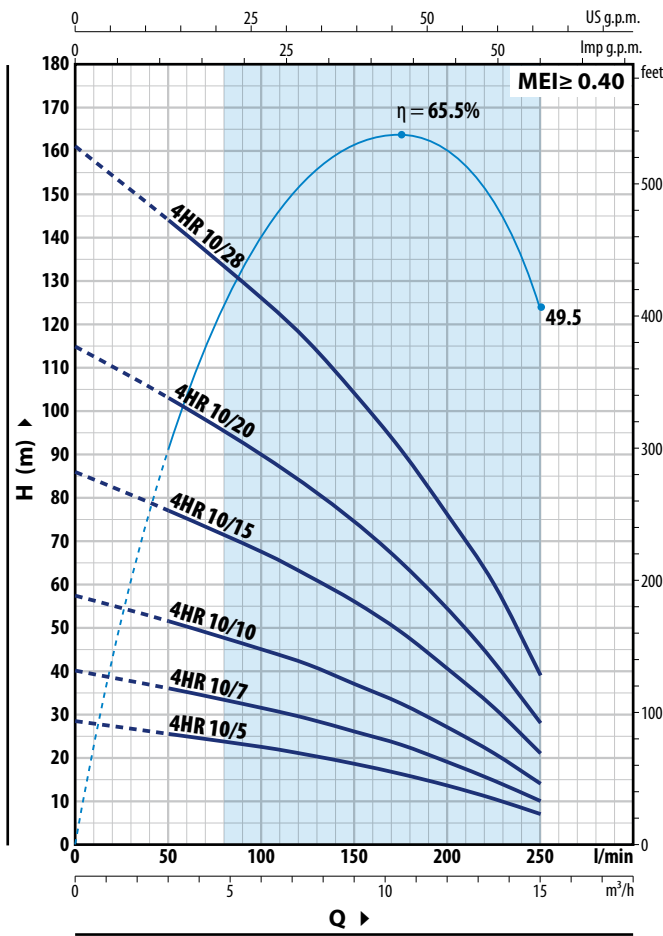
PATENTS - TRADE MARKS - MODELS

- Registered Community Model No. 004128619-0001

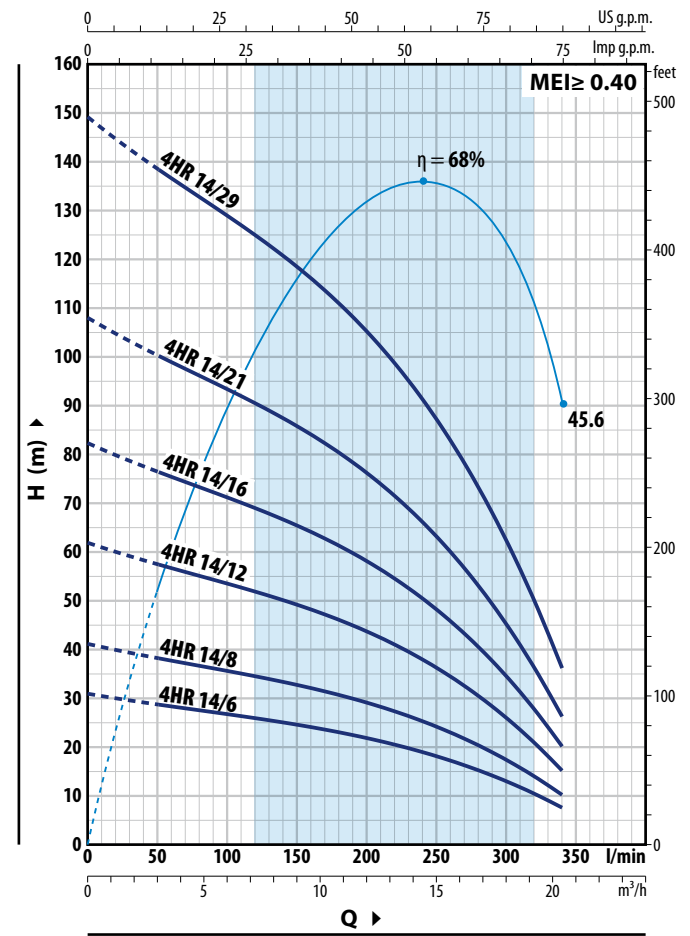
PERFORMANCE RANGE

50 Hz

4HR 10



4HR 14



4HR 10

TYPE		POWER (P ₂)		Q	H metres									
Single-phase	Three-phase	kW	HP		m ³ /h	0	3.0	6.0	7.5	9.0	10.5	12.0	13.5	15.0
				l/min	0	50	100	125	150	175	200	225	250	
4HRm 10/5	4HR 10/5	0.75	1		28.5	25.5	22.5	20.7	18.6	16.3	13.6	10.5	7	
4HRm 10/7	4HR 10/7	1.1	1.5		40	36	31.5	29	26	23	19	14.7	10	
4HRm 10/10	4HR 10/10	1.5	2		57.5	51.5	45	41.5	37	32.5	27	21	14	
4HRm 10/15	4HR 10/15	2.2	3		86	77	67.5	62	56	49	40.5	31.5	21	
-	4HR 10/20	3	4		115	103	90	83	74	65	54.5	42	28	
-	4HR 10/28	4	5.5		161	144	126	116	104	91	76	60	39	

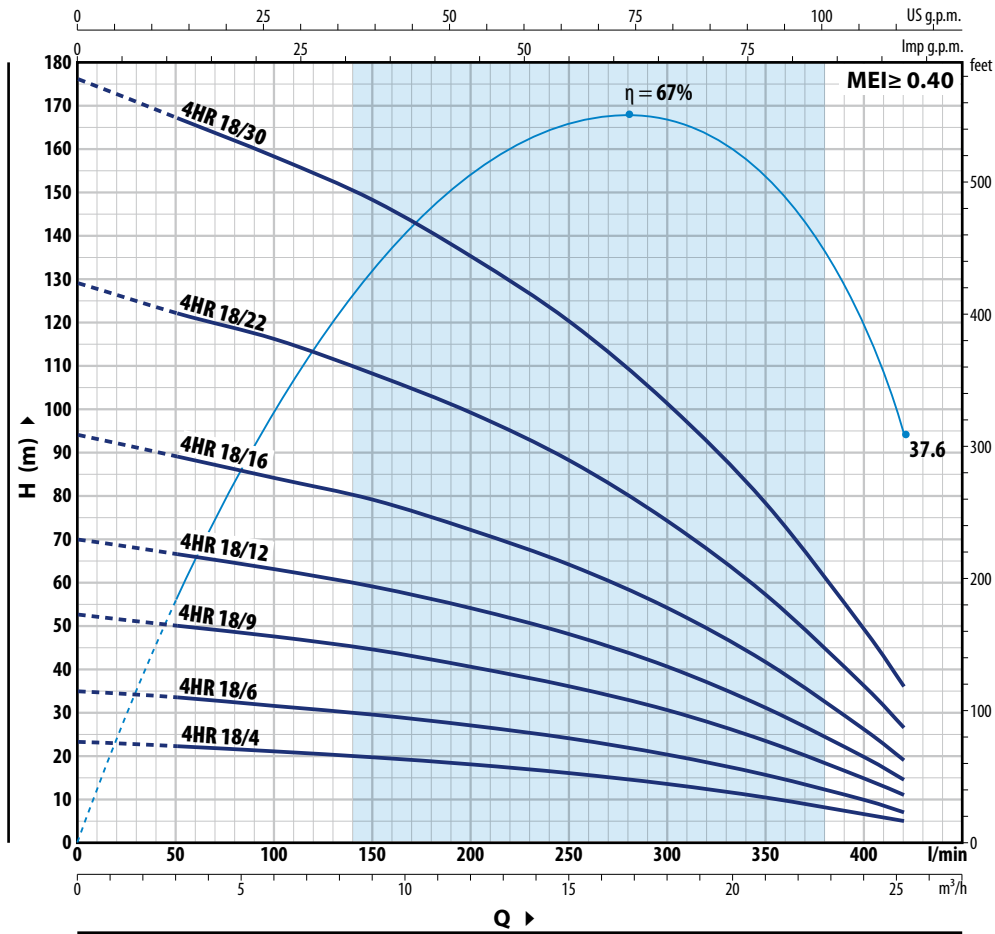
4HR 14

TYPE		POWER (P ₂)		Q	H metres									
Single-phase	Three-phase	kW	HP		m ³ /h	0	3.0	6.0	9.0	12.0	15.0	18.0	19.2	20.4
				l/min	0	50	100	150	200	250	300	320	340	
4HRm 14/6	4HR 14/6	1.1	1.5		31	28.5	26.7	24.5	21.8	18	13	10.4	7.5	
4HRm 14/8	4HR 14/8	1.5	2		41	38.5	35.5	32.5	29	24	17.2	13.8	10	
4HRm 14/12	4HR 14/12	2.2	3		62	57.5	53.5	49	43.5	36	25.8	20.7	15	
-	4HR 14/16	3	4		82	77	71	65.5	58	48	34.5	27.5	20	
-	4HR 14/21	4	5.5		108	100	93	86	76	63	45	36.5	26.5	
-	4HR 14/29	5.5	7.5		149	139	129	119	105	87	62.5	50	36.5	

Q = Flow rate H = Total manometric head

Performance curves comply with EN ISO 9906 Grade 3B tolerance limits.

4HR 18



4HR 18

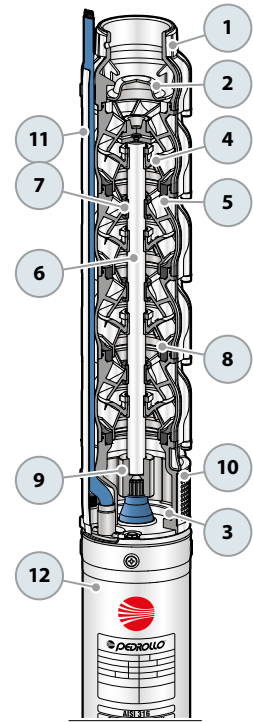
TYPE		POWER (P ₂)		Q	H metres											
Single-phase	Three-phase	kW	HP		m ³ /h	0	3.0	6.0	9.0	12.0	15.0	18.0	21.0	24.0	25.2	
				l/min	0	50	100	150	200	250	300	350	400	420		
4HRm 18/4	4HR 18/4	1.1	1.5		23.4	22	21	19.7	18	16	13.5	10.4	6.6	5		
4HRm 18/6	4HR 18/6	1.5	2		35	33.5	31.5	29.5	27	24	20.3	15.6	9.8	7		
4HRm 18/9	4HR 18/9	2.2	3		52.5	50	47.5	44.5	40.5	36	30.5	23.4	14.8	11		
-	4HR 18/12	3	4		70	66.5	63	59	54	48	40.5	31	19.7	14.5		
-	4HR 18/16	4	5.5		94	89	84	79	72	64	54	41.5	26	19		
-	4HR 18/22	5.5	7.5		129	122	116	108	99	88	74	57	36	26.5		
-	4HR 18/30	7.5	10		176	167	158	148	135	120	101	78	49	36		

Q = Flow rate H = Total manometric head

Performance curves comply with EN ISO 9906 Grade 3B tolerance limits.

MATERIALS AND COMPONENTS

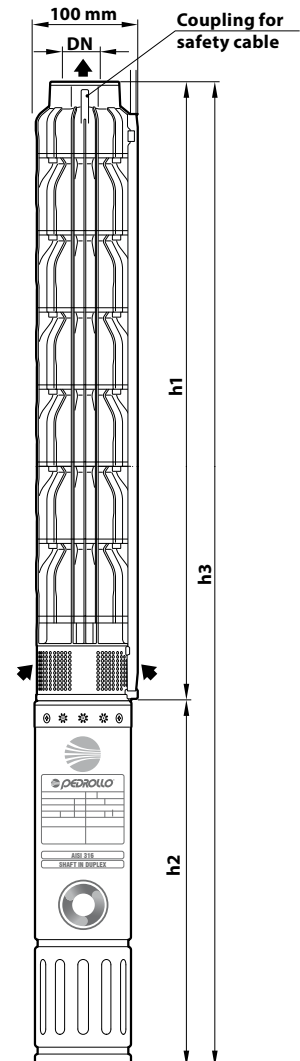
1 Delivery port	Micro-cast AISI 304 stainless steel with thread according to ISO 228/1
2 Check valve	Stainless steel AISI 304
3 Motor bracket	AISI 304 micro-cast stainless steel sized to NEMA standards
4 Impellers	AISI 304 micro-cast stainless steel
5 Diffusers	AISI 304 micro-cast stainless steel
6 Pump shaft	Stainless steel AISI 304
7 Pump bearings	Special elastomer
8 Wear rings	Special elastomer
9 Tow coupling	Stainless steel AISI 304
10 Filter	Stainless steel AISI 304
11 Cable sheath	Stainless steel AISI 304
12 Motor 4"	※ 4PD = rewindable oil filled motor ※ 4PS = encapsulated water filled motor



DIMENSIONS AND WEIGHT

TYPE Single-phase ※	DN	DIMENSIONS mm			kg	TYPE Single-phase ※	DN	DIMENSIONS mm			kg
		h1	h2	h3				h1	h2	h3	
4HRm 10/5 - PD	2"	511	356	867	19.0	4HRm 10/5 - PS	2"	511	272	783	20.3
4HRm 10/7 - PD		657	396	1053	22.5	4HRm 10/7 - PS		657	312	969	24.8
4HRm 10/10 - PD		876	437	1313	29.0	4HRm 10/10 - PS		876	352	1228	32.7
4HRm 10/15 - PD		1241	492	1733	39.2	4HRm 10/15 - PS		1241	402	1643	38.0
4HRm 14/6 - PD		584	396	980	20.5	4HRm 14/6 - PS		584	312	896	22.0
4HRm 14/8 - PD		730	437	1167	25.0	4HRm 14/8 - PS		730	352	1082	26.9
4HRm 14/12 - PD		1022	492	1514	33.5	4HRm 14/12 - PS		1022	402	1424	33.0
4HRm 18/4 - PD		438	396	834	18.1	4HRm 18/4 - PS		438	312	750	19.4
4HRm 18/6 - PD		584	437	1021	22.8	4HRm 18/6 - PS		584	352	936	24.3
4HRm 18/9 - PD		803	492	1295	29.5	4HRm 18/9 - PS		803	402	1205	29.1

TYPE Three-phase ※	DN	DIMENSIONS mm			kg	TYPE Three-phase ※	DN	DIMENSIONS mm			kg
		h1	h2	h3				h1	h2	h3	
4HR 10/5 - PD	2"	511	356	867	18.0	4HR 10/5 - PS	2"	511	257	768	18.3
4HR 10/7 - PD		657	371	1028	22.0	4HR 10/7 - PS		657	272	929	22.0
4HR 10/10 - PD		876	396	1272	26.8	4HR 10/10 - PS		876	297	1173	26.4
4HR 10/15 - PD		1241	437	1678	37.0	4HR 10/15 - PS		1241	352	1593	38.7
4HR 10/20 - PD		1606	450	2056	45.0	4HR 10/20 - PS		1606	484	2090	49.2
4HR 10/28 - PD		2190	625	2815	61.8	4HR 10/28 - PS		2190	574	2764	65.1
4HR 14/6 - PD		584	371	955	20.0	4HR 14/6 - PS		584	272	856	18.6
4HR 14/8 - PD		730	396	1126	23.2	4HR 14/8 - PS		730	297	1027	24.2
4HR 14/12 - PD		1022	437	1459	30.4	4HR 14/12 - PS		1022	352	1374	32.1
4HR 14/16 - PD		1314	450	1764	36.8	4HR 14/16 - PS		1314	484	1798	40.6
4HR 14/21 - PD		1679	625	2304	50.2	4HR 14/21 - PS		1679	574	2253	53.5
4HR 14/29 - PD		2263	725	2988	68.2	4HR 14/29 - PS		2263	664	2927	68.6
4HR 18/4 - PD		438	371	809	17.0	4HR 18/4 - PS		438	272	710	17.5
4HR 18/6 - PD		584	396	980	20.5	4HR 18/6 - PS		584	297	881	22.0
4HR 18/9 - PD		803	437	1240	27.0	4HR 18/9 - PS		803	352	1155	28.5
4HR 18/12 - PD		1022	450	1472	31.8	4HR 18/12 - PS		1022	484	1506	35.6
4HR 18/16 - PD		1314	625	1939	43.7	4HR 18/16 - PS		1314	574	1888	45.8
4HR 18/22 - PD		1752	725	2477	59.4	4HR 18/22 - PS		1752	664	2416	60.4
4HR 18/30 - PD	2336	845	3181	74.0	4HR 18/30 - PS	2336	764	3100	73.2		



※ **4PD = rewindable oil filled motor**

※ **4PS = encapsulated water filled motor**