>> ROBUST. POWERFUL. RELIABLE.

HRS / CHRS - the next generation of non-entwining mixers





>> OUR SOLUTION FOR ENTWINEMENT

HOMA submersible mixers have various applications in homogenization, suspension of solids, flow generation, freezing prevention and other mixing or flushing duties. Fibrous solids in the medium are particularly challenging because they lead to entwinement in the propeller area that can seriously impair the performance of the mixer.

To adress this challenge, HOMA research and development designed a new propeller for the HRS/CHRS series. The optimum-efficiency propeller design reliably prevents entwinement by eliminating flow dead zones near the propeller blades. Know-how made by HOMA.



>> SOPHISTICATED IN EVERY DETAIL

Compact Versatility:

Areas of application for HOMA submersible mixers of the HRS and CHRS series are municipal and industrial wastewater treatment, industrial processing, agriculture and many others. The robust design of the mixers assure trouble-free operation even under the most demanding conditions. The hydraulically optimized design of propeller and motor unit results in outstanding efficiency and excellent mixing performance with minimal flow losses. High-quality materials and engineering expertise ensure the well-known HOMA quality of our motors: Silicon carbide mechanical shaft seals, electronic oil chamber seal probes and thermal protection switches in the motor windings assure longevity.

The models of the CHRS series can even be operated in many chemically aggressive media. For more information on corrosion resistance, please contact the HOMA sales team. Solid, flexible and easy to handle installation systems allow optimal and individual positioning of the mixers as well as easy installation and maintenance.

COMPELLING FEATURES:

- » No entwinement due to superior propeller design
- » Deflector ring between propeller and motor housing reliably prevents accumulation of solids
- » Robust and compact design
- » Stable and user-friendly installation and lifting system



CHRS: Stainless steel motor housing and Viton elastomeres allow operation in many chemically aggressive media.



>> COMPELLING DETAILS

TECHNICAL DATA

Туре	Motor power P ₁ kW (HP)	Motor power P ₂ kW (HP)	Nominal current (A)	Speed (rpm) motor / propeller	Axial force (N)	Weight (Ib)
HRS10/4/3-203 (C)/(FM)	2,4 (3,2)	1,9 (2,5)	2,6	1750 / 1750	105	74,9
HRS15/4/3-203 (C)/(FM)	2,4 (3,2)	1,9 (2,5)	2,6	1750 / 1750	176	74,9
HRS23/6/3-203 (C)/(FM)	4,4 (5,9)	3,2 (4,3)	5,3	1160 / 1160	433	92,5
HRS27/6/3-203 (C)/(FM)	4,4 (5,9)	3,2 (4,3)	5,3	1160 / 1160	529	92,5
HRS29/4/3-203 (C)/(FM)	5,0 (6,7)	4,1 (5,5)	5,9	1750 / 1750	369	92,6
CHRS10/4/3-203 (C)/(FM)	2,4 (3,2)	1,9 (2,5)	2,6	1750 / 1750	105	74,9
CHRS15/4/3-203 (C)/(FM)	2,4 (3,2)	1,9 (2,5)	2,6	1750 / 1750	176	74,9
CHRS23/6/3-203 (C)/(FM)	4,4 (5,9)	3,2 (4,3)	5,3	1160 / 1160	433	92,5
CHRS27/6/3-203 (C)/(FM)	4,4 (5,9)	3,2 (4,3)	5,3	1160 / 1160	529	92,5
CHRS29/4/3-203 (C)/(FM)	5,0 (6,7)	4,1(5,5)	5,9	1750 / 1750	369	92,6

Voltages standart models: 230/460V / 3Ph, 230/380V / 3Ph, 460V / 3Ph Voltages FM models: 230/460V / 3Ph

DESIGN

- » Propeller: 2-blade propeller, self cleaning design
- » Shaft seals: Propeller shaft sealing by mechanical seal in oil chamber, sealed from motor chamber by mechanical seal
- » Motor shaft bearing: 2 grooved ball bearings
- » Motor: Pressure tight sealed submersible motor, IP 68 protection, Insulation class H = 180°C, pressure tight cable, gland, thermal sensors for temperature control embedded in motor winding. Optional explosion proof according to FM.
- » Seal Condition monitor probe: Electrode in oil chamber, available for most designs.
- » Installation: Various mounting and lifting devices.

MATERIALS

- » Propeller: stainless steel 1.4436 (316SS)
- » Motor- / Propeller shaft: stainless steel, HRS: 1.4104 (430SS) / CHRS: 1.4462 (318SS)
- » Motorhousing: HRS: cast iron EN-GJL-250 CHRS: stainless steel 1.4436 (316SS)
- » Mechanical seal: SiC / SiC
- » Elastomeres: HRS: NBR / CHRS: Viton
- » Bolts / Nuts: stainless steel
- » Lifting system / Motor bracket / Installation system: stainless steel 1.4571 (316SS)

DIMENSIONS in mm (inch)



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