



submersible SINGLE VANE impeller pumps

DOUBLE CHANNEL IMPELLER (up to 0.75 kW) (for sewage)

High efficiency, submersible pumps for professional use. Extremely sturdy and suitable for continuous heavy duty service on building sites and industrial use. Specifically designed for dirty water, sewage, industrial waste, etc.



PERFORMANCE RANGE

- Flow rate up to 1600 l/min (96 m³/h)
- Dynamic head up to 24 m
- Maximum suspended solid Ø 45 mm for MC10/45
- Maximum suspended solid Ø 50 mm for MC15-20-30/50
- Maximum suspended solid Ø 70 mm for MC30/70

OPERATING LIMITS

- Maximum operating depth 10 m
- Fluid temperature up to + 50°C
- Maximum passage for suspended solids Ø 70 mm

CONSTRUCTION AND SAFETY STANDARDS:

EN 60 335-1
IEC 335-1
CEI 61-150

EN 60034-1
IEC 34-1
CEI 2-3



PUMP INSTALLATION AND APPLICATIONS

MC PUMPS ARE FITTED WITH CAST IRON SINGLE VANE IMPELLERS, AND ARE SUITABLE FOR PUMPING LIQUIDS CONTAINING SOLIDS IN SUSPENSION, INCLUDING SHORT FIBERS. MC PUMPS ARE PARTICULARLY RECOMMENDED FOR HANDLING WASTE WATER AND SEWAGE, REFLUENT WATER, WATER MIXED WITH MUD, GROUNDWATER AND SURFACE WATER IN AREAS SUCH AS: RESIDENTIAL HOUSING BLOCKS, PUBLIC BUILDINGS, INDUSTRIES, MULTI-STOREY CAR PARKS, CAR WASHES, ETC.

Manufactured entirely in extremely thick cast iron, these pumps are particularly sturdy, abrasion resistant and built to last. A purpose built pit with minimum dimensions 800x800x800h mm is recommended for fixed installations.

WARRANTY: 1 YEAR

(according to our general sales conditions).

STRUCTURAL CHARACTERISTICS

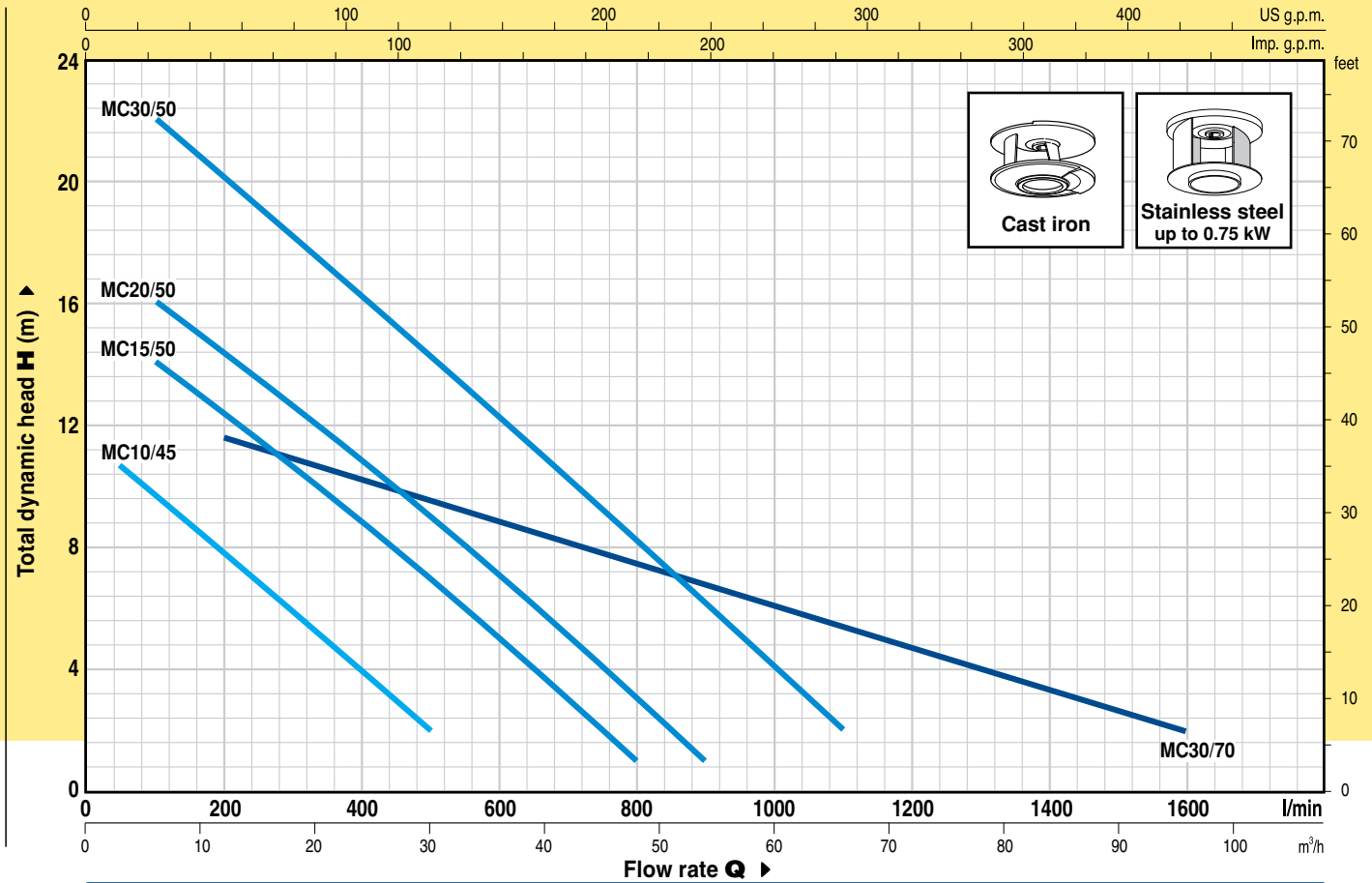
- PUMP BODY, BASE AND MOTOR CASING: cast iron.
- IMPELLER: cast iron, single vane type (AISI 304 stainless steel, two channel type, up to 0.75 kW).
- SCREWS: AISI 304 stainless steel.
- MOTOR SHAFT: AISI 304 stainless steel (AISI 430F stainless steel up to 0.75 kW).
- DOUBLE MECHANICAL SEAL: widia/silicon carbide (silicon carbide/silicon carbide up to 0.75 kW) on the pump side and sealing ring on the motor side (with barrier oil chamber to lubricate and cool the sealing surfaces in the absence of water).
- MOTOR: Sealed induction motor with double impregnated class F winding.
The thermal cutout relay (motor protector) is incorporated in single phase models.
• In the three phase versions (over 0.75 kW) three thermal overload cutouts (motor protectors) are placed against the windings in series connected by a grey cable. The two ends coming out from the supply cable must be properly connected to the contactor coil by the user.
- PROTECTION: IP 68.
- CONTROL BOX: with capacitor (and motor protector with manual reset for power above 0,75kW) on single phase versions. Protection IP 64.
- NEOPRENE SUBMERSIBLE SUPPLY CABLE:
 - up to 0.75 kW: supplied standard with 5 meters of cable, and SCHUKO plug.
 - above 0.75 kW: supplied standard with 10 meters of cable; Single phase: "H07 RN-F"; Three phase: "FG5 0K".
- EXTERNAL FLOAT SWITCH: for single phase versions.

SPECIAL FEATURES ON REQUEST:

⇒ 10 meters supply cable, for pumps intended for outdoor use, length compulsory according to EN 60335-2-41 (up to 0.75 kW).



PERFORMANCE CHART AT n= 2900 1/min

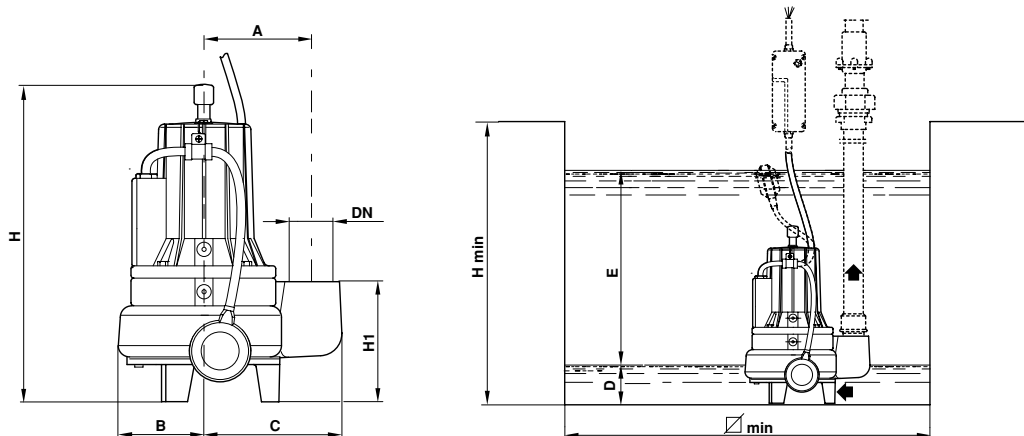


PERFORMANCE DATA AT n= 2900 1/min

PUMP MODEL		POWER		Q	0	3	6	12	18	24	30	36	42	48	54	60	66	72	84	96		
Single phase	Three phase	kW	HP	m³/h	0	50	100	200	300	400	500	600	700	800	900	1000	1100	1200	1400	1600		
				l/min	0	50	100	200	300	400	500	600	700	800	900	1000	1100	1200	1400	1600		
MCm 10/45	MC 10/45	0.75	1	H (m)	12	10.7	9.7	7.8	5.9	4	2											
MCm 15/50	MC 15/50	1.1	1.5		16	—	14	12.5	10.5	8.5	7	5	3	1								
MCm 20/50	MC 20/50	1.5	2		18	—	16	14	12.5	10.5	9	7	5	3	1							
—	MC 30/50	2.2	3		24	—	22	20	18	16	14	12	10	8	6	4	2					
—	MC 30/70	2.2	3		13	—	—	11.5	11	10.2	9.5	8.8	8.2	7.6	6.8	6	5.3	4.8	3.2	2		

Q = FLOW RATE H = TOTAL DYNAMIC HEAD IN METERS

Curve tolerance according to ISO 2548.



DIMENSIONS

PUMP MODEL		DN	maximum suspended solid size	DIMENSIONS mm								
Single phase	Three phase			A	B	C	H	H1	D min	E	H min	∅ min
MCm 10/45	MC 10/45	2"	∅ 45 mm	110	90	150	375	148	55	Adjustable	500	500
MCm 15/50	MC 15/50	2 1/2"	∅ 50 mm	162	124	212	475	173	55	Adjustable	800	800
MCm 20/50	MC 20/50	2 1/2"	∅ 50 mm	162	124	212	475	173	55	Adjustable	800	800
—	MC 30/50	2 1/2"	∅ 50 mm	162	124	212	475	173	55	Adjustable	800	800
—	MC 30/70	3"	∅ 70 mm	180	136	240	520	220	80	Adjustable	800	800