TCU • TEMPERATURE CONTROL UNIT

SMART 4 WDC 90TS

Water temperature control unit for industrial aplications up to 90ºC in the field of plastic injection moulding, extrusion, chemical, pharmaceutical, cosmetics or steel.

Water
FLUID

90ºC
MAX. TEMP.

MAIN FEATURES

- Pump works under pressure
- Solid state relays for heating
- Frontal cooler for solid state relays
- PID temperature control in cooling and heating process
- Hose breakage and leakage monitor
- Sensor failure monitor
- Automatic water filling
- Direct cooling system
- Two independent solenoide valves one for cooling one for filling
- Entire heaters, tank, process pipes and thermocouple in stainless steel
- Water level sensor through electrode
- Acoustic alarm
- Castors
- Pressure transducer
- Thermocouple in process return
- User friendly touch screen pcb card
- By pass

OPTIONS

- *Analogic Input/Output temperature 4...20mA / 0-10 volt* OPT.
- *Interface TTY 20mA, OPC UA, Profinet, RS 485* OPT.
- *Multi polar connector for external signals* OPT.
- *Electronic flow measurement* OPT.
- *Frequency converter only for magnetic pumps* OPT.
- *Automatic blow mould system* OPT.

EQUIPMENT TYPE

WATER PRESSURIZED

EQUIPMENT IMAGE

KEY DATA

Water
Fluid

90 ºC
Max. temp.

400/3/50hz
Power supply

CERTIFICATION
Industry 4.0 Ready

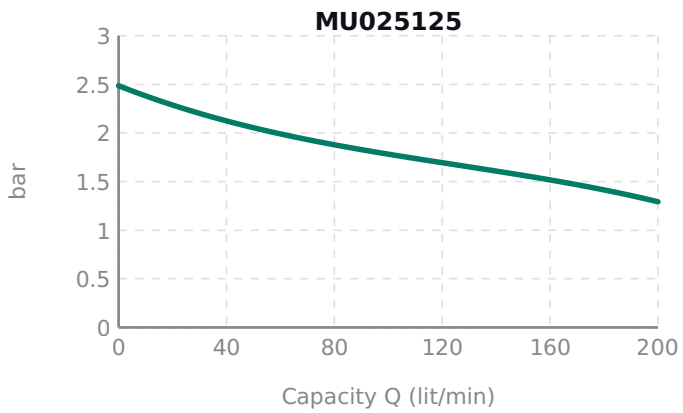
TECHNICAL DATA

PARAMETER	UNIT	SMART 4 WDC 90TS
SMART 4 WDC 90TS		
Fluid		**Water**
Maximum temperature	ºC	**90**
PID temperature control heating / cooling		**Yes**
Solid state relays + frontal cooler		**Yes**
Heating power	kW	**9 – 16**
Direct cooling	kW	**--**
Capacity heating cylinder	Lit.	**9,6**
Centrifugal pump MU025125	Max.Flow Max.Pressure Motor power	**200 lit/min 2,5 bar 1 Kw**
Magnetic pump EY2251 OPT	Max.Flow Max.Pressure Motor power	**40 lit/min 5 bar 0.5 Kw**
Magnetic pump EY4281 OPT	Max.Flow Max.Pressure Motor power	**60 lit/min 6 bar 1 Kw**
Hydraulic process connections	inlet / outlet	**1”**
Hydraulic cooling connections	inlet / outlet	**½”**
PCB card	Touch screen	**TG 111**
Thermocouple type		**PT1000**
Dimensions	mm	**390 x 800 x 850h**
Color	RAL	**7016 – 7035**
Max. electrical cabinet temperature	ºC	**40**
Sound pressure level	db (A)	**< 70**
Weight	kg	**70**
Voltage	V/Ph/Hz	**400/3/50hz** **480/3/60hz** OPT

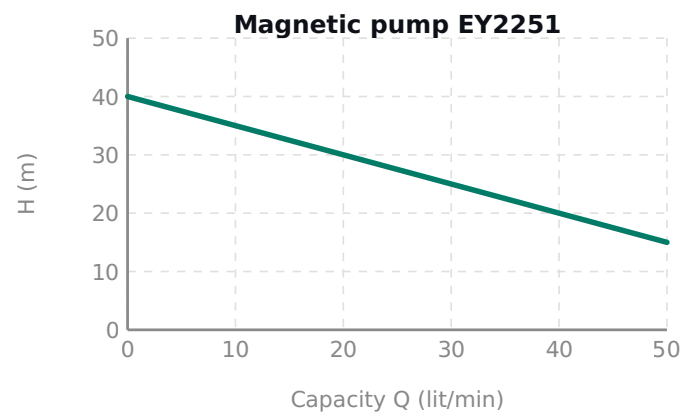
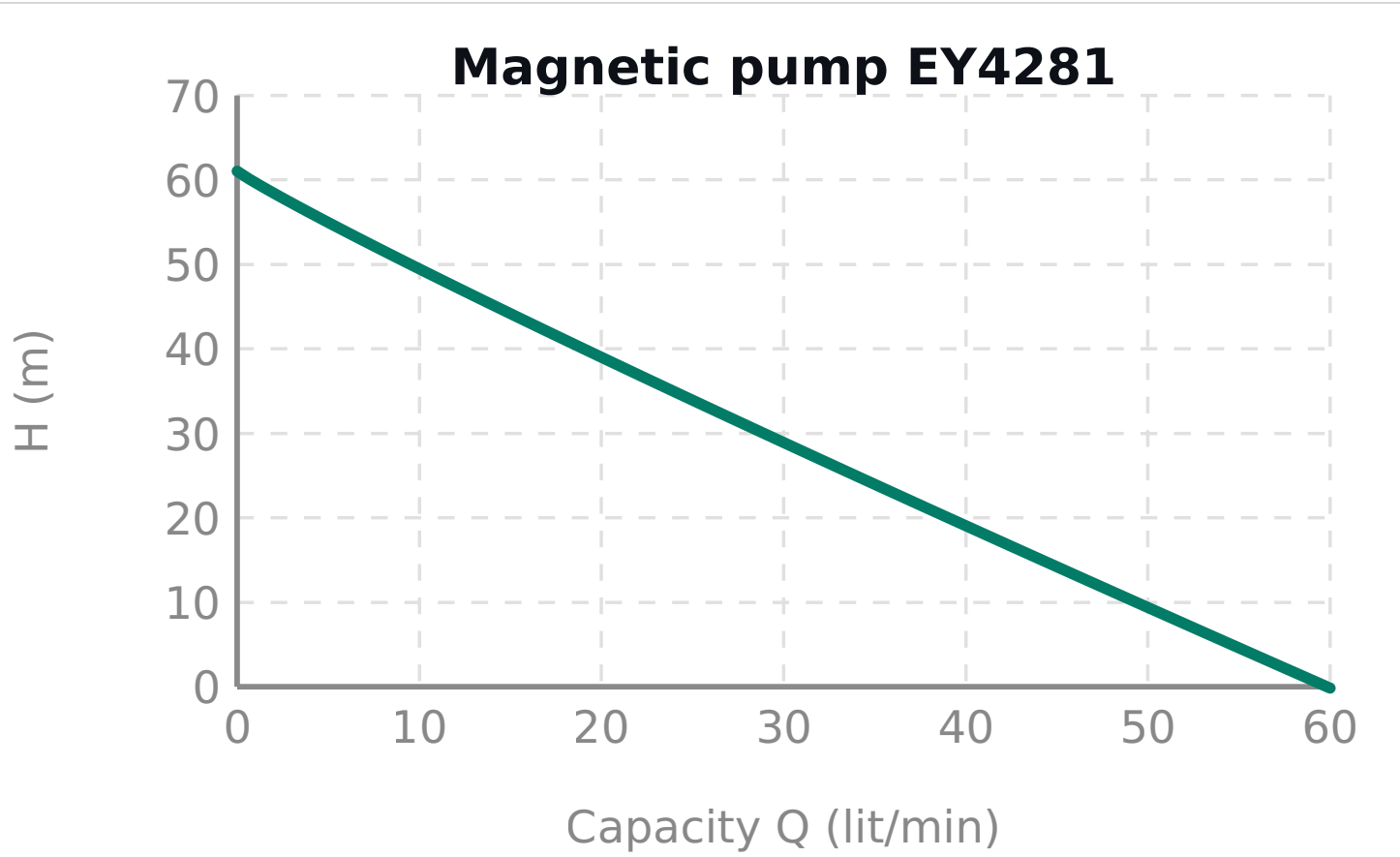
Note: Technical data subject to change. For custom specifications, contact the Marse technical department.

PUMP CURVES

MU025125 STANDARD



MAGNETIC PUMP EY2251 OPT



MAGNETIC PUMP EY4281 OPT