

**50Hz**



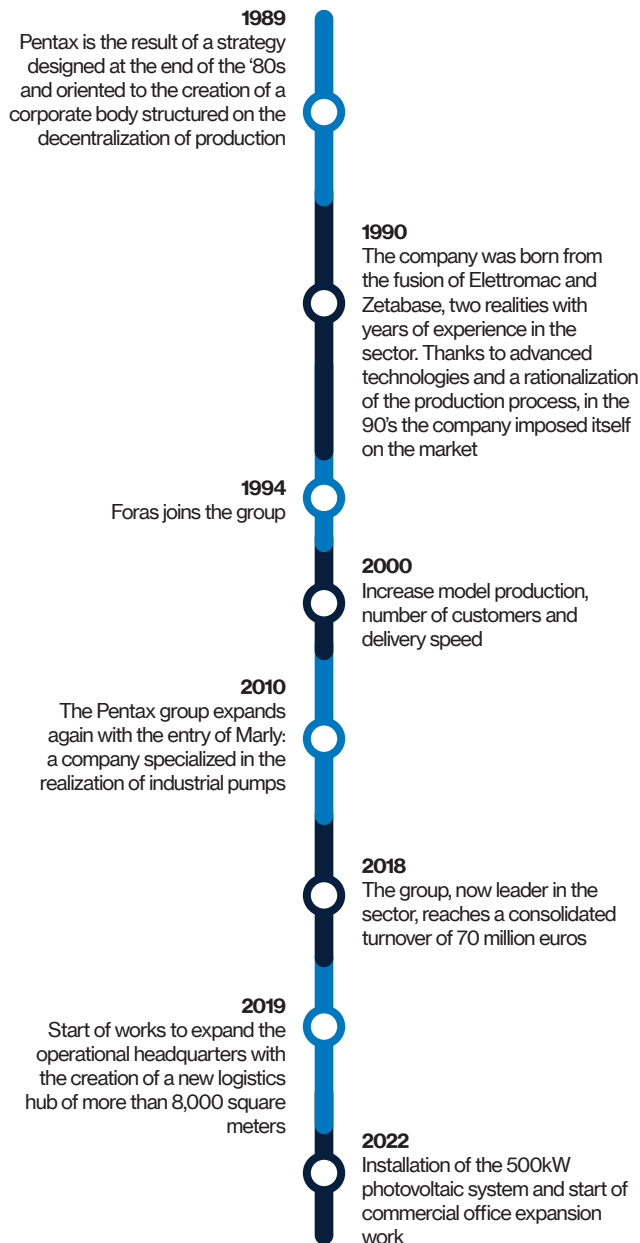
# **GENERAL CATALOGUE**

[www.pentax-pumps.it](http://www.pentax-pumps.it)



# HISTORY

For many years **Pentax** has held a large share of the world market for motorized pumps. The sales department is constantly working to better serve existing customers and to open up new markets. This is possible thanks to the wide range of products available which allows to cover most of the applications in the pump field. Special attention is also paid to market surveys, so that any new requirements can be immediately transferred to the research and development department: the best way to properly develop and forecast future scenarios.

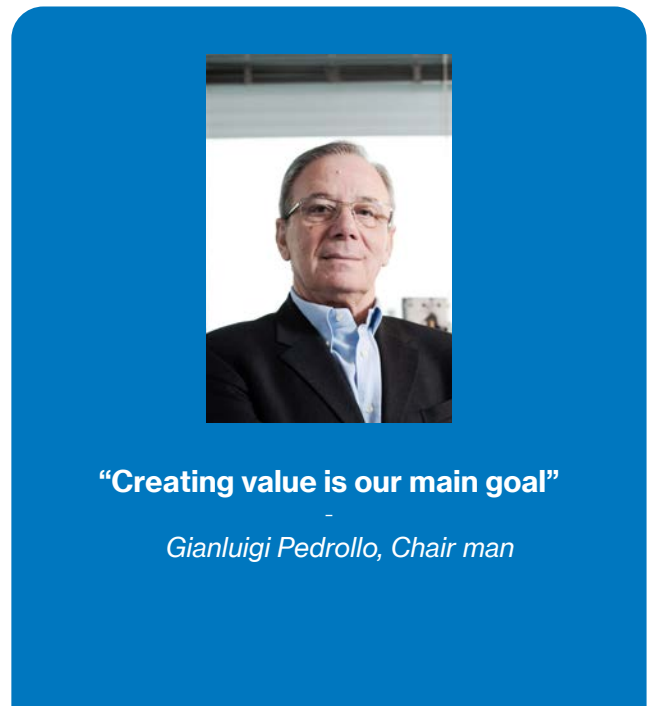


# MISSION

After more than **20 years of activity** we can finally trace the guidelines that have governed and directed the industrial development of **Pentax Industries SpA**. Actions and processes that have intersected with the obvious aim of creating value, benefits to be redistributed to the various components of the production and distribution process.

A rational allocation of available resources, together with a refined program of production decentralization have allowed the company to adapt to changing market conditions, each time with extreme rapidity.

Maximum attention to the markets, therefore, with the commitment to respond in real time to the specific needs of the different markets, paying particular attention to technological progress. All this in the perspective of a careful policy for **customer satisfaction**.



**“Creating value is our main goal”**

*Gianluigi Pedrollo, Chair man*

# VALUES



## Reliability

Choosing Pentax means choosing safety at every stage

## Quality

Where there is control, there is reliability: the basis for success

## Speed

Impeccable delivery time

## Flexibility

Pentax studies each case thoroughly, identifies the best solution and then takes action with security

## Variety

The best service: a wide range of Pentax products, one for every need



# OFFICIAL JOURNAL OF THE EUROPEAN UNION

## Regulation UE 547/2012

### ANNEX II

«The benchmark for most efficient water pumps is  $MEI \geq 0,70$ ».

«The efficiency of a pump with a trimmed impeller is usually lower than that of a pump with the full impeller diameter. The trimming of the impeller will adapt the pump to a fixed duty point, leading to reduced energy consumption. The minimum efficiency index (MEI) is based on the full impeller diameter».

«The operation of this water pump with variable duty points may be more efficient and economic when controlled, for example, by the use of a variable speed drive that matches the pump duty to the system».

Information on benchmark efficiency is available at:

[www.europump.org/efficiencycharts](http://www.europump.org/efficiencycharts).



# DTR/DTRT


Sewage  
Grinder



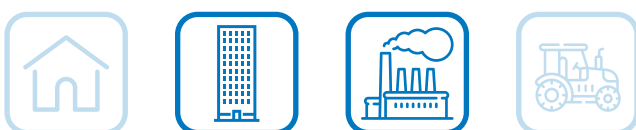
Drainage and waste water pumps equipped with open impeller and grinder system able to shred sewage with suspended solids and prevent the pump from clogging. Best for emptying of septic tanks and residential sumps as well as for rain water systems and for draining of flooded areas where seamless operation is required. The quick coupling feet DN50 and DN65 is available for flanged pumps.



## Construction features

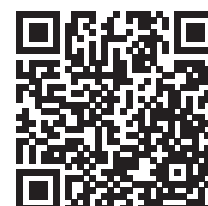
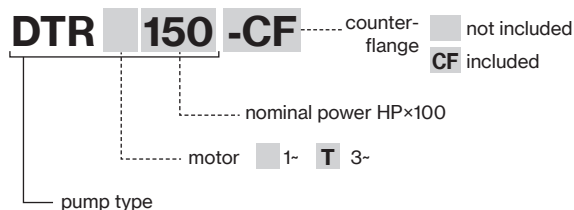
<b>Painting</b>	cataphoresis
<b>Pump body</b>	cast iron
<b>Impeller</b>	cast iron
<b>Mechanical seal</b>	double seal with oil barrier: silicon carbide on pump side, ceramic-graphite on motor side
<b>Motor shaft</b>	stainless steel AISI 304
<b>Max submergence</b>	20 m
<b>Liquid temperature</b>	0 - 40 °C
	<b>Grinder</b> treated stainless steel
<b>Bolts</b>	A2 stainless steel
<b>Foot support</b>	galvanized iron
<b>Gaskets</b>	NBR rubber

TYPE	LOTS			
	TRUCK		CONTAINER	
	PALLET (cm)	N° pumps	PALLET (cm)	N° pumps
<b>DTRT 150-300</b>	85×110×145	18	85×110×190	27
<b>DTRT 400-550</b>	85×110×170	12	85×110×170	12
<b>DTRT 750-1000</b>	100×120×190	12	100×120×190	12

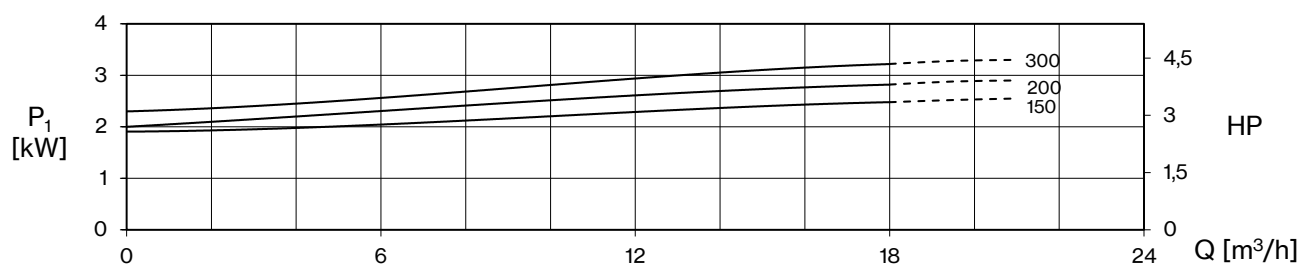
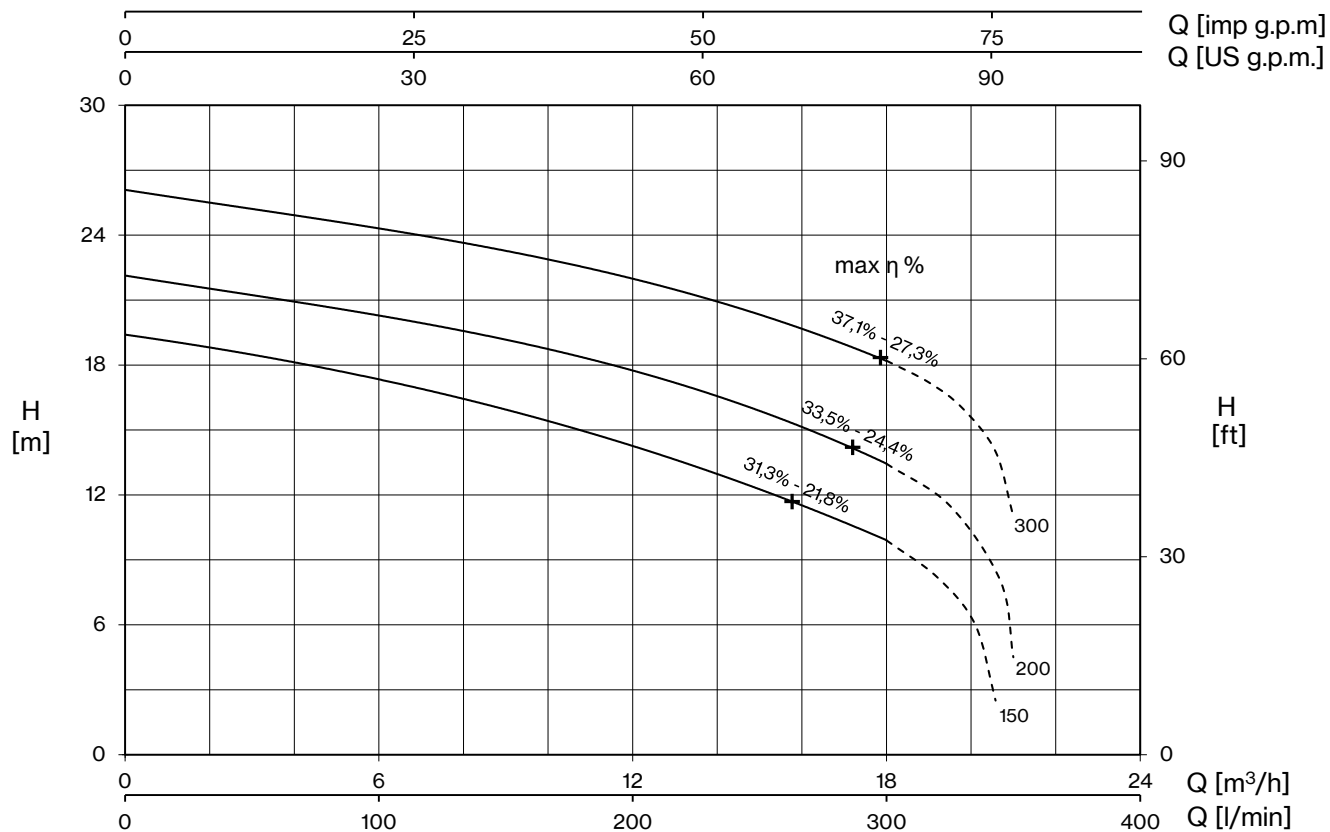


## Motor

<b>2 Poles induction motor</b>	3- 230V - 50Hz 3- 400V - 50Hz 3- 230/400V - 50Hz 3- 400/690V - 50Hz
<b>Insulation class</b>	F
<b>Protection degree</b>	IPX8
<b>1 Pole induction motor</b>	1- 230V - 50Hz required run capacitor (35µF for 1,5HP models, 50µF for 2HP model) + start capacitor (80µF with disjuntor)



# DTR/DTRT



TYPE		AMPERE				
1~	3~	230 V 50 Hz	3~ 230V 50 Hz (*)	3~ 400V 50 Hz	230/400 V 50 Hz λ / Δ (*)	400/690 V 50 Hz λ / Δ
DTR 150	DTRT 150	11,5	7,6	4,4	-	-
DTR 200	DTRT 200	13,6	8,8	5,1	-	-
-	DTRT 300	-	10,0	5,8	-	-

+ max  $\eta$  %

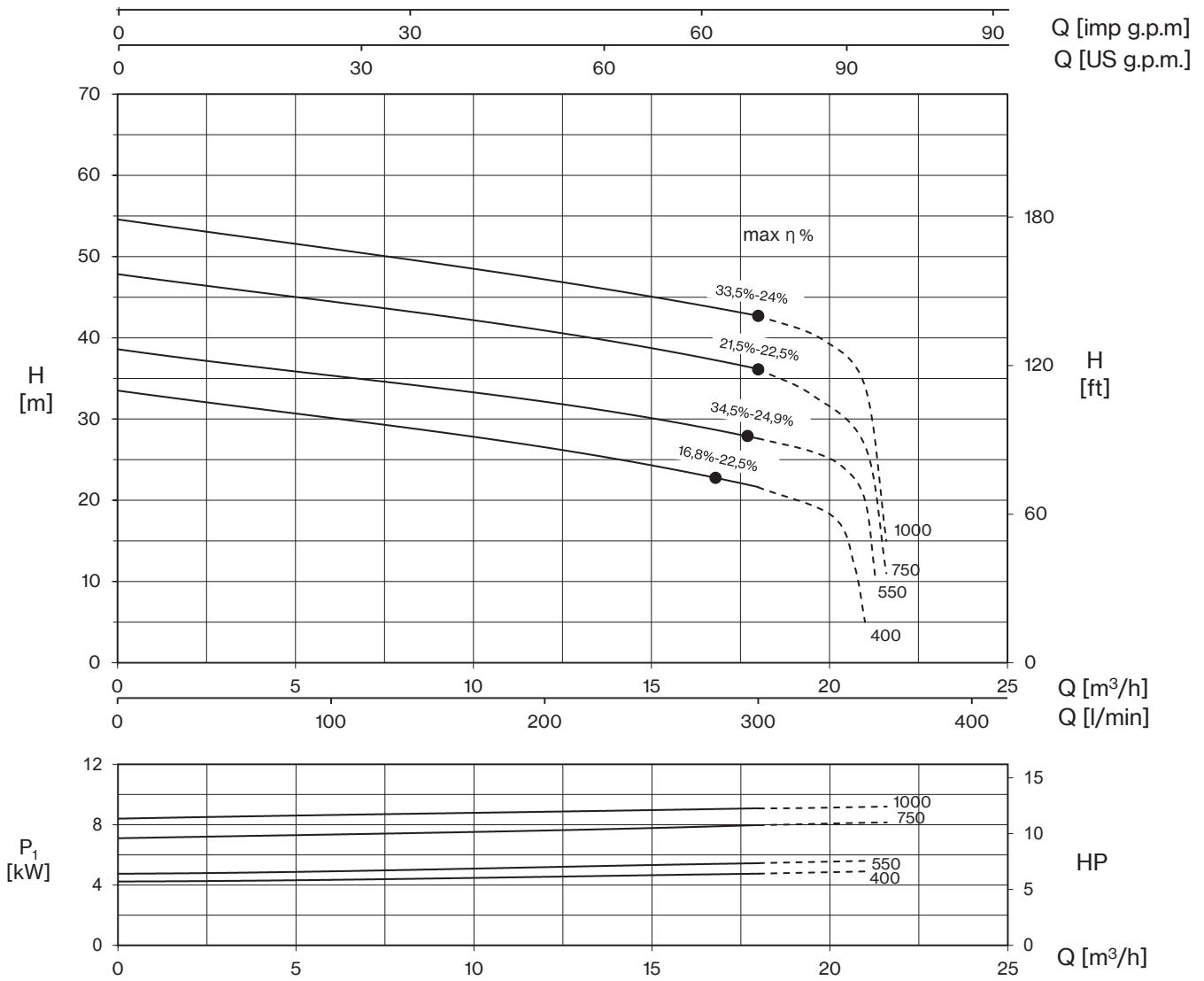
max hydraulic efficiency and respective total efficiency

(\*) no standard execution

TYPE		P2		P1 (kW)		Q (m³/h - l/min)							
1~	3~	HP	kW	1~	3~	0	3	6	9	12	13,2	15	18
						0	50	100	150	200	220	250	300
						H (m)							
DTR 150	DTRT 150	1,5	1,1	2,6	2,5	19,4	18,5	17,3	16,0	14,2	13,5	12,3	9,9
DTR 200	DTRT 200	2	1,1	3	2,8	22,1	21,3	20,3	19,1	17,7	17,1	16	13,4
-	DTRT 300	3	2,2	-	3,2	26,1	25,2	24,3	23,3	22	21,4	20,3	18,2



# DTR/DTRT



TYPE	AMPERE			
	3~ 230V 50 Hz (*)	3~ 400V 50 Hz	230/400V 50 Hz λ / Δ (*)	400/690V 50 Hz λ / Δ
DTRT 400	13,0	7,5	-	-
DTRT 550	15,9	9,2	-	-
DTRT 750	-	13,9	24	13,9
DTRT 1000	-	15,5	26,8	15,5

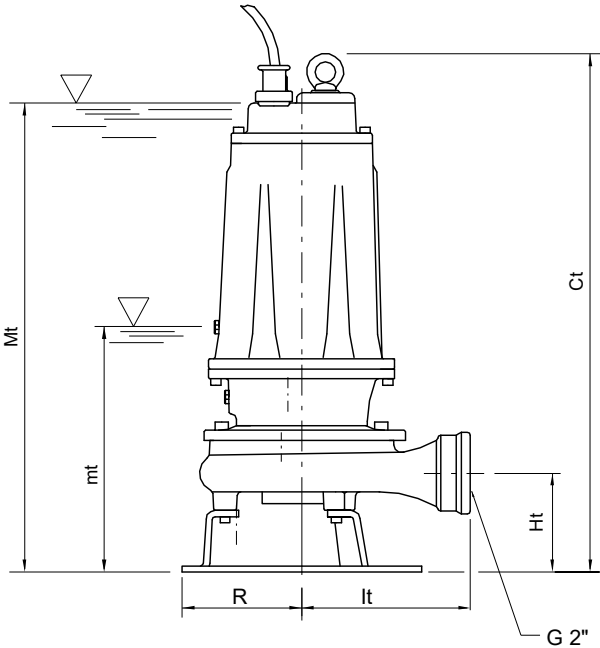
(\*) no standard execution

## + max η %

max hydraulic efficiency and respective total efficiency

TYPE	P2		P1 (kW)	Q (m³/h - l/min)							
				0	3	6	9	12	15	18	
	HP	kW	3~	0	50	100	150	200	250	300	
	H (m)										
DTRT 400	4	3	4,5	33,5	31,8	30,1	28,5	26,4	24,4	21,6	
DTRT 550	5,5	4	5,3	38,6	36,9	35,3	33,9	32,1	30,1	27,6	
DTRT 750	7,5	5,5	8,0	47,8	46,2	44,5	42,7	40,8	38,9	36,1	
DTRT 1000	10	7,5	9,1	54,6	52,7	51,0	49,2	47,1	45,1	42,7	





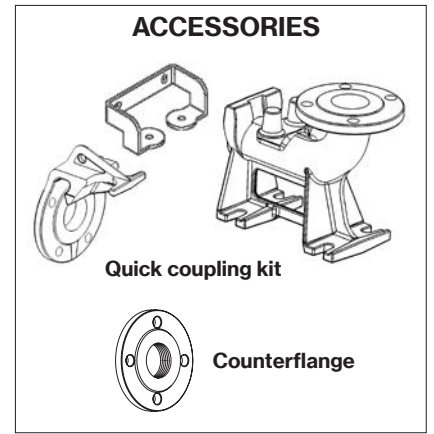
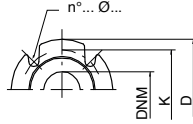
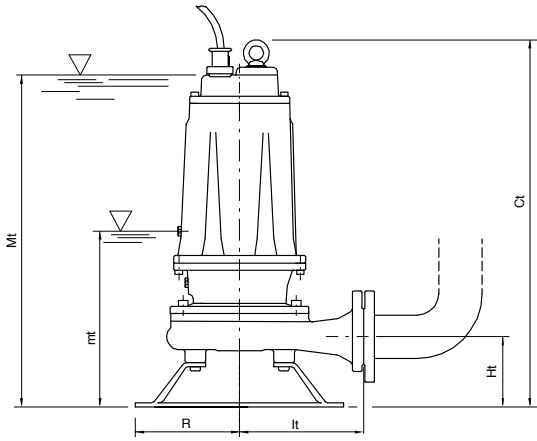
mt: minimum working level  
 Mt: minimum submersion level for continuous duty

TYPE	DIMENSIONS (mm)							Kg
	Ct	Ht	R	lt	mt	Mt	DNM	
DTR 150 - DTRT 150	513	102	117	174	205	475	2"G	38
DTR 200 - DTRT 200	513	102	117	174	205	475	2"G	38,5
DTRT 300	513	102	117	174	205	475	2"G	38

TYPE	PROTECTION		1 PUMP CONTROL PANEL			2 PUMPS CONTROL PANEL		
	1- 230V	3- 400V	1- 230V	3- 400V	400/690 V	1- 230V	3- 400V	400/690 V
DTR 150	PMLD 15/35-13	PT 20-30-40/4.3-6.8	EQSM + 35µF + 80µF*	EQSMT 10		EQ2SM + 2×35µF + 2×80µF*	EQ2SMT 10	
DTR 200	PMLD 20/50-15	PT 20-30-40/4.3-6.8	EQSM + 50µF + 80µF*	EQSMT 10		EQ2SM + 2×50µF + 2×80µF*	EQ2SMT 10	
DTRT 300		PT 20-30-40/4.3-6.8		EQSMT 10			EQ2SMT 10	
DTRT 400		PT 40-50/5.7-9.1		EQSMT 10			EQ2SMT 10	
DTRT 550		PT 55-75/8.6-13.5		EQSMT 10			EQ2SMT 10	
DTRT 750		PT 100/12.5-16.5		EQSMT 10	QST 7		EQ2SMT 10	Q2ST 7
DTRT 1000		PT 125-150/16-21		EQSMT 10	QST 10		EQ2SMT 10	Q2ST 10

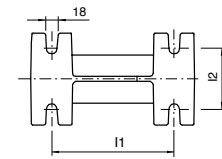
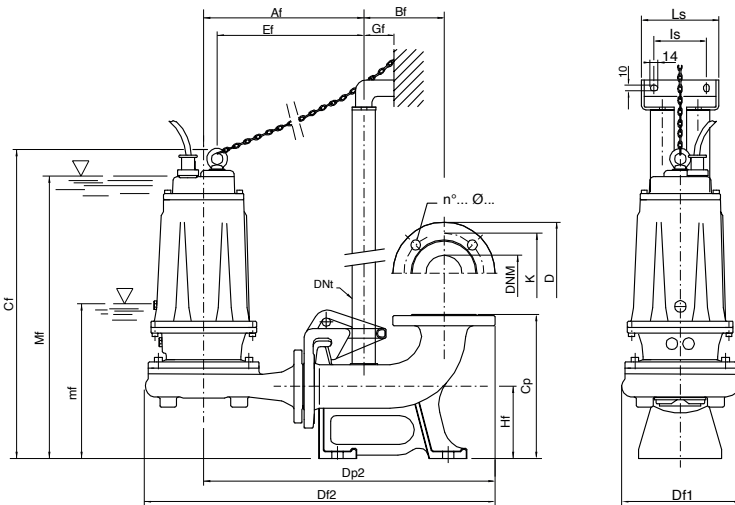
\*start capacitor with disjuntor

# DTR/DTRT



mt: minimum working level  
Mt: minimum submersion level for continuous duty

TYPE	DIMENSIONS (mm)							Kg
	Ct	Ht	R	It	mt	Mt	DNM	
<b>DTRT 400</b>	595	112	160	190	265	550	50	62,5
<b>DTRT 550</b>	595	112	160	190	265	550	50	65,5
<b>DTRT 750</b>	680	160	180	250	280	630	65	91,5
<b>DTRT 1000</b>	680	160	180	250	280	630	65	94,5



mf: minimum working level  
Mf: minimum submersion level for continuous duty

TYPE	DIMENSIONS (mm)																	
	Af	Bf	Cf	Cp	Df1	Df2	Dp2	Dnt	Ef	Gf	Hf	I1	I2	Is	Ls	mf	Mf	DNM
<b>DTRT 400/P</b>	300	145	614	260	237	654	538	1" 1/4	269	55	130	200	100	95	140	290	566	50
<b>DTRT 550/P</b>	300	145	614	260	237	654	538	1" 1/4	269	55	130	200	100	95	140	290	566	50
<b>DTRT 750/P</b>	331	145	656	260	279	710	569	1" 1/4	297	55	130	200	100	95	140	290	600	65
<b>DTRT 1000/P</b>	331	145	656	260	279	710	569	1" 1/4	297	55	130	250	100	95	140	290	600	65

Flange UNI PN 10 (mm)			
DNM	K	D	n°... Ø...
50	125	165	4... 18...
65	145	185	4... 18...

