

50Hz



GENERAL CATALOGUE

Edition 2022

www.pentax-pumps.it

Where there's water there's Pentax



Viale dell'Industria, 1
37040 Veronella (VR) - Italia
Tel. +39 0442 489500
Fax +39 0442 489510
com@pentax-pumps.it
www.pentax-pumps.it

PENTAX s.p.a.




DTR with grinder

Drainage
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.

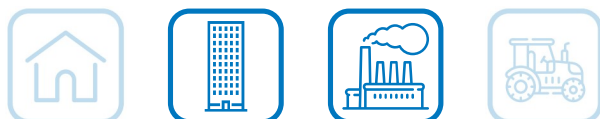
Construction features

Pump body	cast iron
Shell, motor cover	stainless steel (DTR 101)
Impeller	brass (DTR 101) cast iron (DTR)
Mechanical seal	double seal with oil barrier; silicon carbide on pump side (DTR, DTR 101) sealing ring on motor side (DTR 101) ceramic-graphite on motor side (DTR)
Motor shaft	stainless steel AISI 304 (DTR) stainless steel AISI 430 (DTR 101)
Depth of immersion	max 5 m (DTR 101) max 20 m (DTR)
Liquid temperature	0 - 40 °C
Cable	H07 RNF, 10 m
 Grinder	treated stainless steel
Bolts	A2 stainless steel (DTR)
Foot support	galvanized iron (DTR)
Gaskets	NBR rubber (DTR)

Motor

	3- 3x400V-50Hz (DTR 101) 3- 230/400V-50Hz P ≤ 4kW (DTR) 3- 400/690V-50Hz P > 4kW (DTR)
2 Poles induction motor	1- 1x230V-50Hz (with thermal protection) (DTR 101)
	1- 230V-50Hz (DTR) required starter capacitor (35µF for 1,5HP model, 50µF for 2HP model)
Insulation class	F
Protection degree	IPX8

TYPE	LOTS			
	TRUCK		CONTAINER	
	PALLET (cm)	N° pumps	PALLET (cm)	N° pumps
DTRT 150-300	85X110X145	18	85X110X190	27
DTRT 400-550	85X110X170	12	85X110X170	12
DTRT 750-1000	100X120X190	12	100X120X190	12



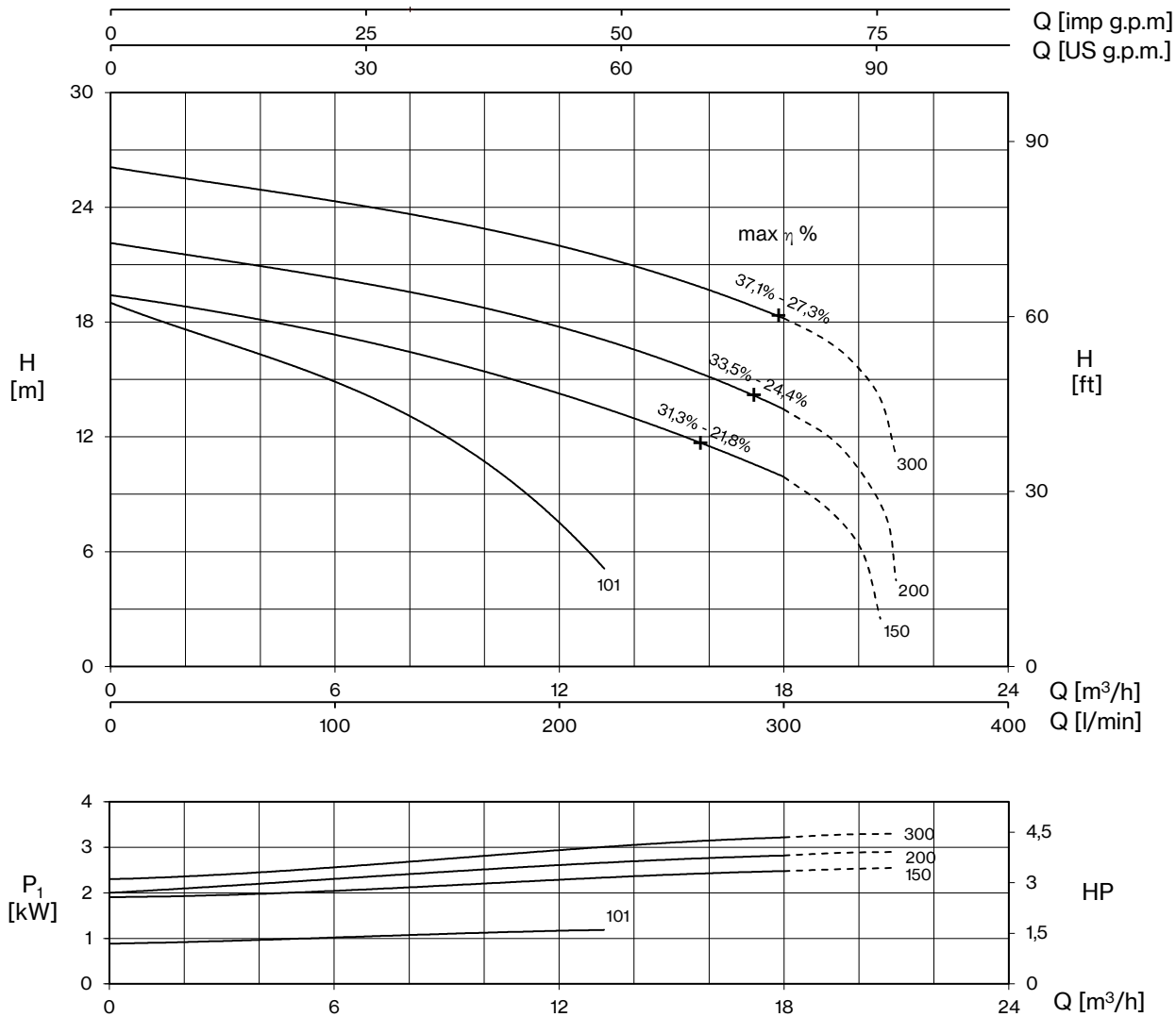
DTR 101



DTR



DTR with grinder



TYPE		AMPERE				
1-	3-	230 V 50 Hz	3x230 V 50 Hz (*)	3x400 V 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 η %

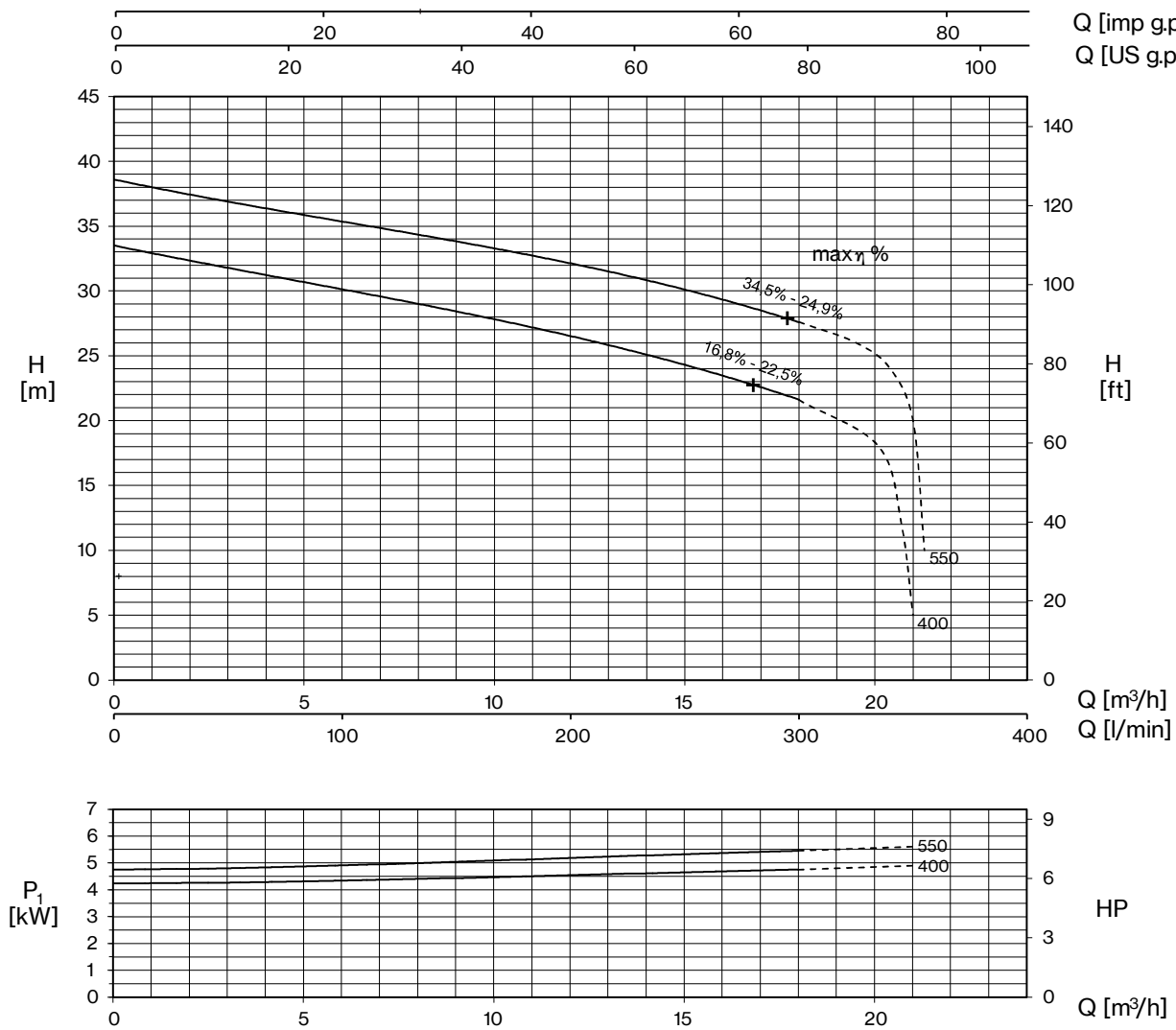
max hydraulic efficiency and respective total efficiency

(*) no standard execution

TYPE		W	P2		P1 (kW)		AMPERE		Q (m³/h - l/min)							
1-	3-		HP	kW	1-	3-	1-	3-	0	3	6	9	12	13,2	15	18
							1x230V	3x400V	0	50	100	150	200	220	250	300
							50Hz	50Hz	H (m)							
DTR 101 (G)	DTRT 101	1200	-	-	-	-	5,3	2,2	19,0	17,1	14,8	11,9	7,8	4,9	-	-
DTRT 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
DTRT 200	DTRT 200	-	2	1,1	3,0	2,8	-	-	22,1	21,3	20,3	19,1	17,7	17,1	16,0	13,4
-	DTRT 300	-	3	2,2	-	3,2	-	-	26,1	25,2	24,3	23,3	22,0	21,4	20,3	18,2



DTR with grinder



TYPE	AMPERE			
	3x230 V 50 Hz (*)	3x400 V 50 Hz	230/400 V 50 Hz λ / Δ (*)	400/690 V 50 Hz λ / Δ
DTRT 400	13,0	7,5	-	-
DTRT 550	15,9	9,2	-	-

+ max η %

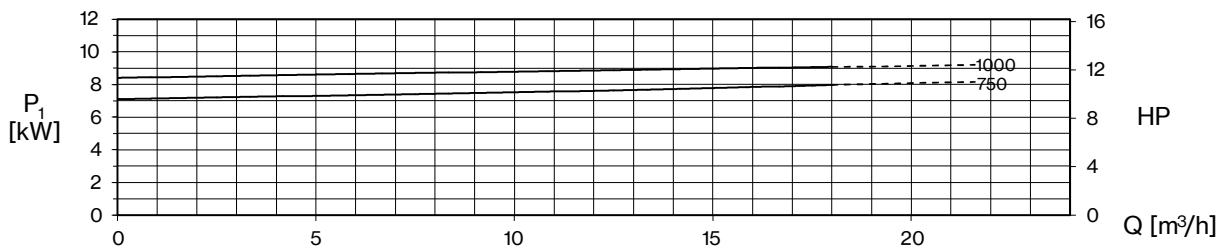
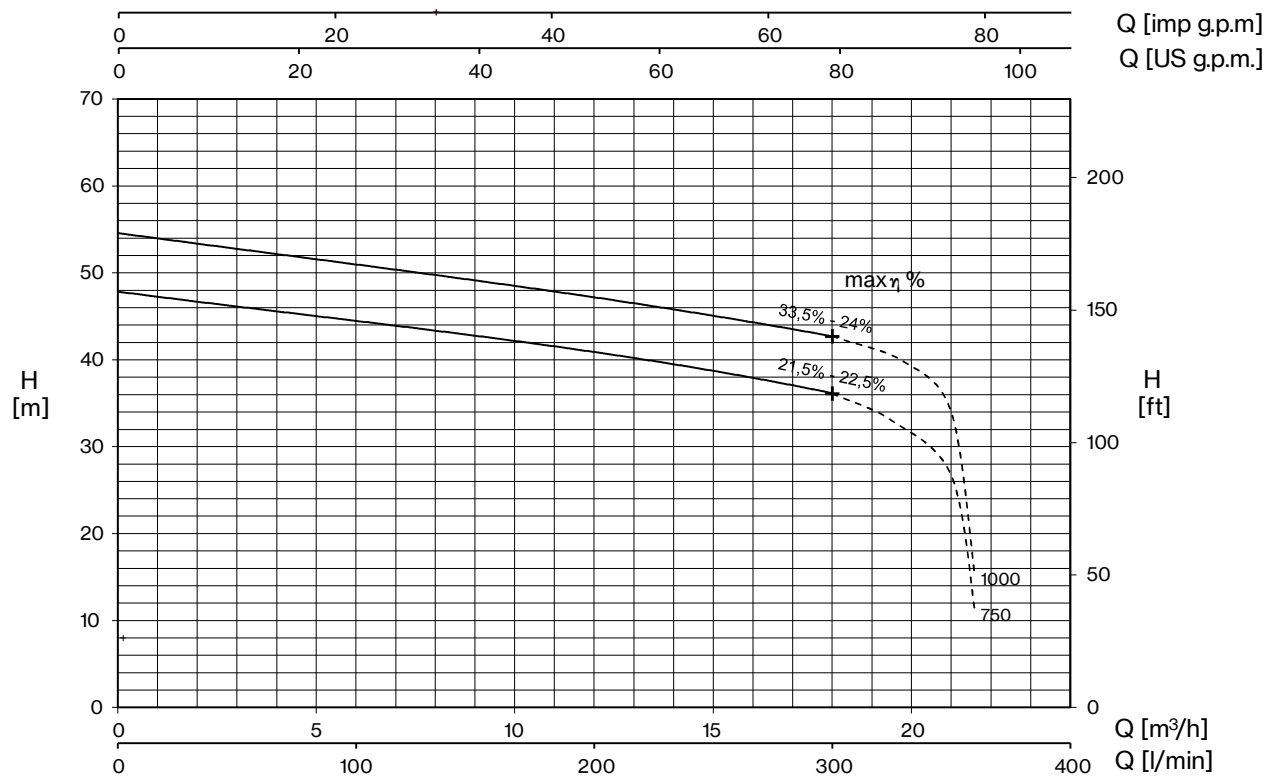
max hydraulic efficiency and respective total efficiency

(*) no standard execution

TYPE	P2		P1 (kW)	Q (m³/h - l/min)							
				0	3	6	9	12	15	1	
	HP	kW	3-	0	50	100	150	200	250	300	
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	



DTR with grinder



TYPE	AMPERE			
	3x230 V 50 Hz (*)	3x400 V 50 Hz	230/400 V 50 Hz λ / Δ (*)	400/690 V 50 Hz λ / Δ
DTRT 750	-	13,9	24,0	13,9
DTRT 1000	-	15,5	26,8	15,5

+ max η %

max hydraulic efficiency and respective total efficiency

(*) no standard execution

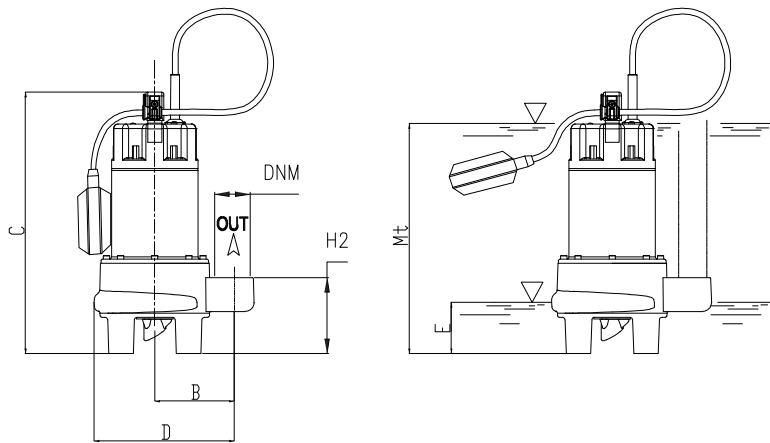
TYPE	P2		P1 (kW)		Q (m³/h - l/min)									
					0	3	6	9	12	15	18	21	21,6	
	HP	kW	1~	3~	0	50	100	150	200	250	300	350	360	
DTRT 750	7,5	5,5	8,0	47,8	47,8	46,2	44,5	42,7	40,8	38,9	36,1	26,7	11,0	
DTRT 1000	10	7,5	9,1	54,6	54,6	52,7	51	49,2	47,1	45,1	42,7	34,0	15	





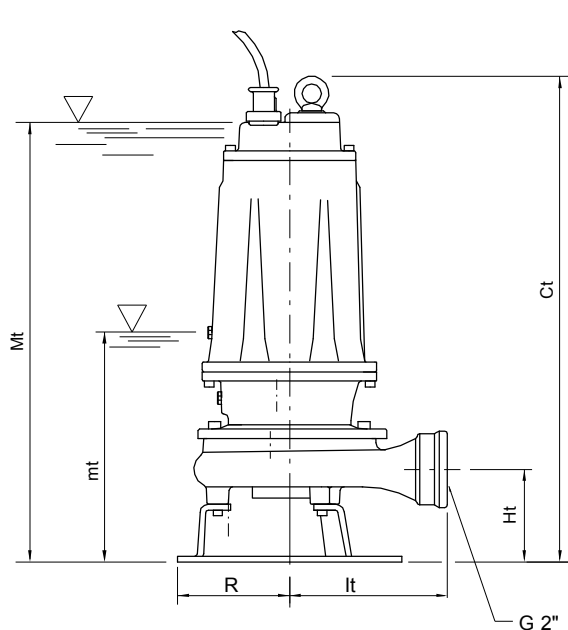
DTR with grinder

E: maximum emptying level

Mt: lowest level for continuous duty




TYPE	DIMENSIONS (mm)										 Kg
	B	C	D	E	H2	Mt	DNM	I	L	M	
DTR 101	105	359	218,5	70	104,5	313	1" 1/2 G	260	185	450	16,5



mt/mf: lowest working level

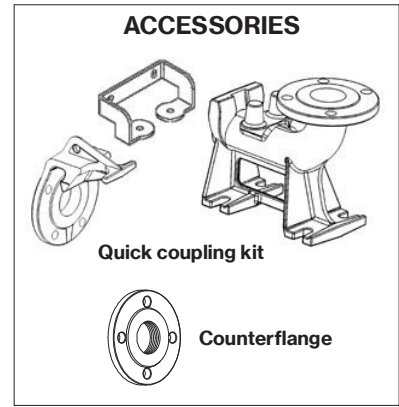
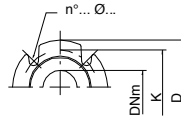
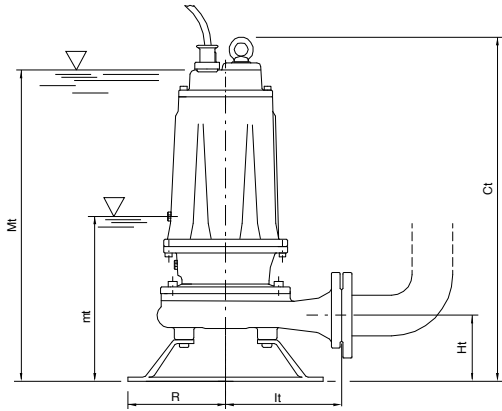
Mt/Mf: lowest level for continuous duty

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

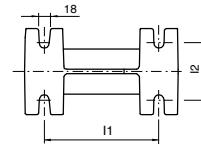
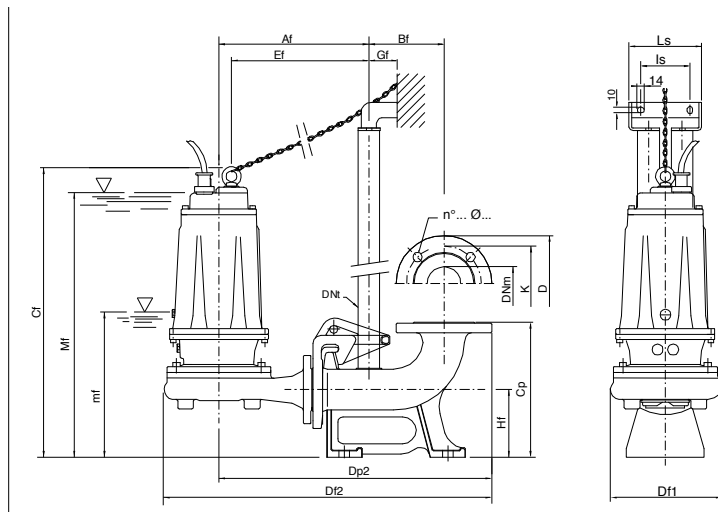
TYPE	PROTECTION		CONTROL PANEL		
	1 x 230 V	3 x 400 V	1 x 230 V	3 x 400 V	400 / 690 V
DTR 150	PMLD 15/35-13	PT 20-30-40/4.3-6.8	QSM + 35µF	QSMT 10	
DTR 200	PMLD 20/50-15	PT 20-30-40/4.3-6.8	QSM + 50µF	QSMT 10	
DTRT 300		PT 20-30-40/4.3-6.8		QSMT 10	
DTRT 400		PT 40-50/5.7-9.1		QSMT 10	
DTRT 550		PT 55-75/8.6-13.5		QSMT 10	
DTRT 750		PT 100/12.5-16.5		QSMT 10	QST 7
DTRT 1000		PT 125-150/16-21		QSMT 15	QST 7



DTR with grinder



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



mt/mf: lowest working level

Mt/Mf: lowest 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
DTRT 400/P	300	145	614	260	237	654	538	1" 1/4	269	55	130	200	100	95	140	290	566	50
DTRT 550/P	300	145	614	260	237	654	538	1" 1/4	269	55	130	200	100	95	140	290	566	50
DTRT 750/P	331	145	656	260	279	710	569	1" 1/4	297	55	130	200	100	95	140	290	600	65
DTRT 1000/P	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...

