

# MPTK Slurry Pump

The MPTK-I pump is a highly efficient slurry pump designed for pumping all kinds of slurry.

All MPTK pumps can be equipped with a knife system at the inlet to the pump, which ensures problem-free operations under conditions where many other pumps have problems with clogging.

## APPLICATION EXAMPLES

- Long distance pumping
- Dry well installations
- Straight flush
- Vacuum system
- Abrasive slurry applications

## PUMP RPM

- 1,500 rpm – medium pressure
- 3,000 rpm – high pressure



## MATERIAL OF CONSTRUCTION

Motor housing and oil chamber	Cast iron EN-GJL-250
Pump housing	Cast iron EN-GJL-250
Pump impeller	Cast iron EN-GJL-250 Cast iron EN-GJS-700-2 (optional)
Pump Shaft	W1.6582/AISI4340
Bolts	A4
Sealing system	Mechanical shaft seals: silicon carbide/silicon carbide
Knife system	Hardened steel W1.0038/S235JR
Extended knife system	Hardened steel W1.0038 (optional)
Oil type	15W-40

## SERVICE AND MAINTENANCE

Recommended service interval/oil change	Maximum 2,000 operating hours/minimum once a year
Motor	Lifetime lubricated bearings
Oil chamber	Periodic oil change

## SURFACE TREATMENT

Machinery enamel: RAL 9005 (Jet Black)

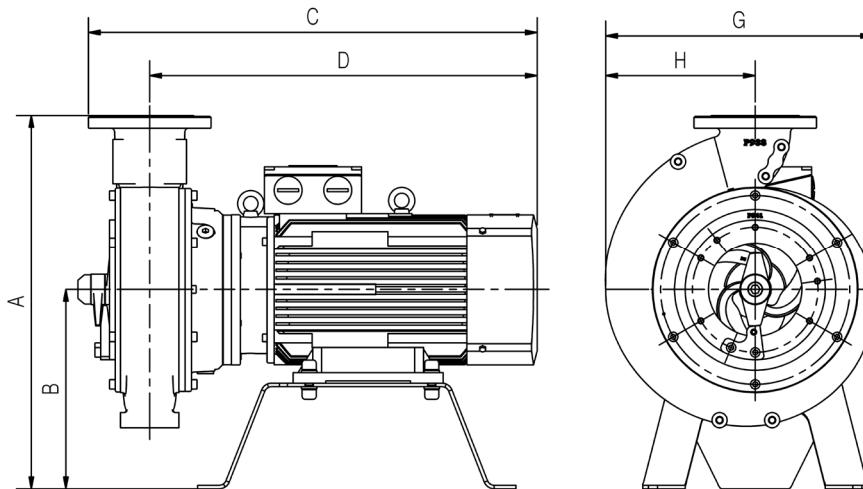
Jet Black

**ELECTRICAL DATA MPTK**

Motor type	3-phase AC motor
Nominal voltage	400 V
Minimum voltage allowed	360 V
Nominal frequency	50 Hz
Applicable for VFD operation	Yes
Ingress protection rating	IP 55
Insulation class	F

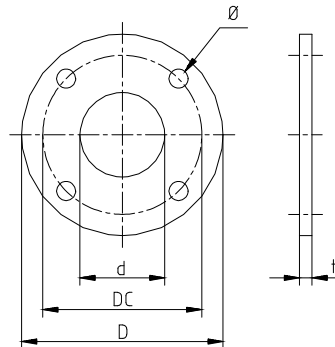
Model	Nominal power	Motor	Full load current (400 V)	Connection method	Start current (DOL)	cos phi	Efficiency
	[kW]	[rpm]	[A]	Y/Δ	[A]		[%]
<b>Medium pressure</b>							
MPTK 50 0.75 kW-1,500 rpm	0.75	1,400	2.1	Y	10	0.70	73.6
MPTK 65 2.2 kW-1,500 rpm	2.2	1,410	5.0	Y	30	0.80	80.2
MPTK 80 5.5 kW-1,500 rpm	5.5	1,440	11.0	Δ	68	0.87	84.6
MPTK 105 11.0 kW-1,500 rpm	11.0	1,455	21.5	Δ	146	0.84	87.9
MPTK 105 18.5 kW-1,500 rpm	18.5	1,460	35.0	Δ	238	0.85	89.3
MPTK 150 22.0 kW-1,500 rpm	22.0	1,465	43.0	Δ	280	0.82	90.1
MPTK 150 30.0 kW-1,500 rpm	30.0	1,465	57.0	Δ	399	0.84	90.7
<b>High pressure</b>							
MPTK 50 5.5 kW-3,000 rpm	5.5	2,860	11.0	Δ	61	0.86	84.7
MPTK 65 11.0 kW-3,000 rpm	11.0	2,905	20.5	Δ	143	0.88	87.6
MPTK 65 15.0 kW-3,000 rpm	15.0	2,940	27.5	Δ	195	0.89	88.7
MPTK 65 18.5 kW-3,000 rpm	18.5	2,925	33.0	Δ	238	0.90	89.9
MPTK 80 18.5 kW-3,000 rpm	18.5	2,925	33.0	Δ	238	0.90	89.9
MPTK 80 22.0 kW-3,000 rpm	22.0	2,935	39.0	Δ	265	0.90	90.5
MPTK 80 30.0 kW-3,000 rpm	30.0	2,940	52.5	Δ	383	0.91	90.6

## OVERALL DIMENSIONS MPTK



Model	A [mm]	B [mm]	C [mm]	D [mm]	G [mm]	H [mm]	Weight [kg]
<b>Medium pressure</b>							
MPTK 50 0.75 kW-1,500 rpm	295	135	360	305	250	135	25
MPTK 65 2.2 kW-1,500 rpm	455	250	490	410	320	175	55
MPTK 80 5.5 kW-1,500 rpm	522	280	635	540	370	205	100
MPTK 105 11.0 kW-1,500 rpm	640	340	720	615	460	250	160
MPTK 105 18.5 kW-1,500 rpm	640	340	730	625	460	250	210
MPTK 150 22.0 kW-1,500 rpm	822	380	870	725	580	320	330
MPTK 150 30.0 kW-1,500 rpm	822	380	870	725	580	320	360
<b>High pressure</b>							
MPTK 50 5.5 kW-3,000 rpm	410	250	545	490	250	135	61
MPTK 65 11.0 kW-3,000 rpm	545	340	650	570	320	175	105
MPTK 65 18.5 kW-3,000 rpm	545	340	695	615	320	175	155
MPTK 80 18.5 kW-3,000 rpm	622	380	719	624	370	205	205
MPTK 80 22.0 kW-3,000 rpm	622	380	759	664	370	205	258
MPTK 80 30.0 kW-3,000 rpm	622	380	805	710	370	205	305

## OVERALL DIMENSIONS WELDING FLANGE



Model/ Pump series	Material	MPTK 50 - 65 - 80 - 105 DIN 2573 PN 6 Dim. [mm] MPTK 150 2576 PN 10 Dim. [mm]				
		D	DC	d	ø	t
MPTK 50	W1.0038/S235JR	ø110	90	ø52	4 x ø10	8
MPTK 65	W1.0038/S235JR	ø160	130	ø69	4 x ø14	8
MPTK 80	W1.0038/S235JR	ø192	150/160	ø82	4 x ø18	10
MPTK 105	W1.0038/S235JR	ø212	170/180	ø107	4 x ø18	10
MPTK 150	W1.0038/S235JR	ø285	240	ø152	4 x ø22	12

We reserve the right to make technical changes.

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Prepared by: BNV/GB  
Approved by: KSK/TM

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