

# 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

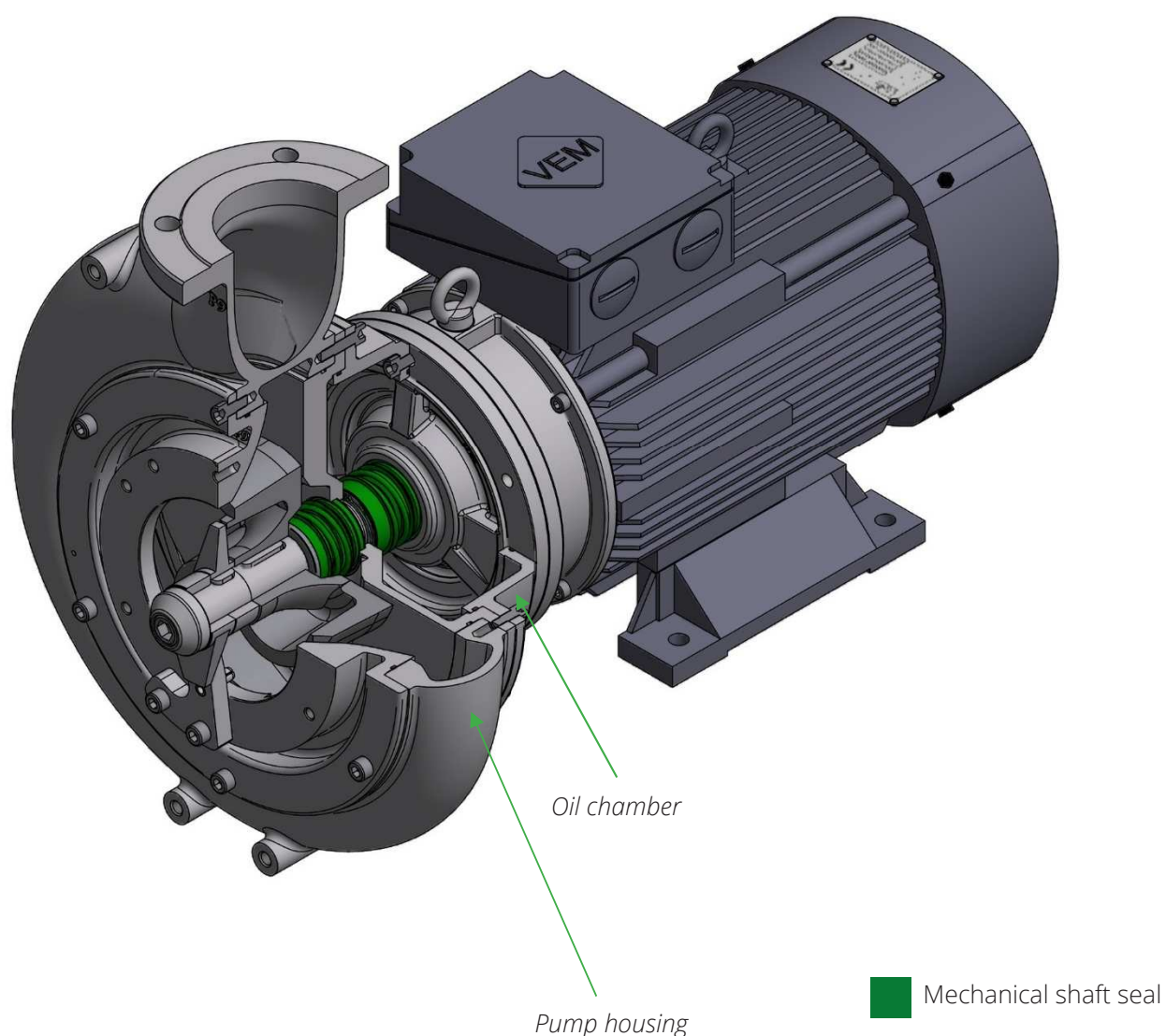
## SURFACE TREATMENT

Machinery enamel: RAL 9005 (Jet Black)	Jet Black
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## DESIGN

The open pump impeller design means that the MPTK pump can pump slurry with a high TS concentration. For slurry containing abrasive particles, such as sand, Landia has developed special materials so that the pump's life span is extended significantly in comparison to a standard pump.

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

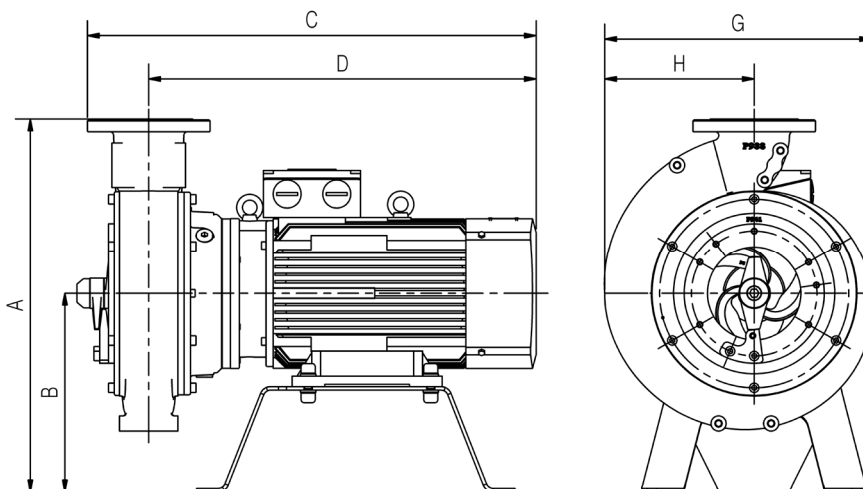


## ELECTRICAL DATA MPTK

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

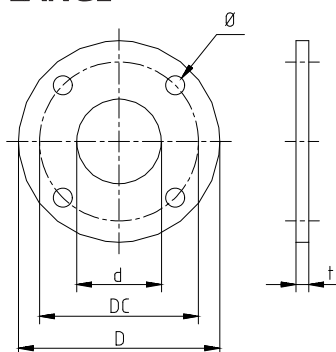
Model	Item number	Nominal power	Motor	Full load current (400 V)	Connection method	Start current (DOL)	cos phi	Efficiency
		[kW]	[rpm]	[A]	Y/Δ	[A]		[%]
<b>Medium pressure</b>								
MPTK 50 0.75 kW-1,500 rpm	2504197	0.75	1,400	2.1	Y	10	0.70	73.6
MPTK 65 1.1 kW-1,500 rpm	2504798	1.1	1,410	2.6	Y	14	0.79	76.7
MPTK 65 1.5 kW-1,500 rpm	2504701	1.5	1,400	3.4	Y	19	0.81	78.6
MPTK 65 2.2 kW-1,500 rpm	2504702	2.2	1,410	5.0	Y	30	0.80	80.2
MPTK 80 3.0 kW-1,500 rpm	2504803	3.0	1,430	6.7	Δ	43	0.79	82.4
MPTK 80 4.0 kW-1,500 rpm	2504804	4.0	1,435	8.8	Δ	61	0.78	84.1
MPTK 80 5.5 kW-1,500 rpm	2504805	5.5	1,440	11.0	Δ	68	0.87	84.6
MPTK 105 7.5 kW-1,500 rpm	2504907	7.5	1,455	15.0	Δ	90	0.83	86.2
MPTK 105 11.0 kW-1,500 rpm	2504911	11.0	1,455	21.5	Δ	146	0.84	87.9
MPTK 105 15.0 kW-1,500 rpm	2504915	15.0	1,465	29.0	Δ	212	0.84	88.7
MPTK 105 18.5 kW-1,500 rpm	2504918	18.5	1,460	35.0	Δ	238	0.85	89.3
MPTK 150 18.5 kW-1,500 rpm	2504618	18.5	1,460	35.0	Δ	238	0.85	89.3
MPTK 150 22.0 kW-1,500 rpm	2504622	22.0	1,465	43.0	Δ	280	0.82	90.1
MPTK 150 30.0 kW-1,500 rpm	2504630	30.0	1,465	57.0	Δ	399	0.84	90.7
<b>High pressure</b>								
MPTK 50 2.2 kW-3,000 rpm	2502102	2.2	2,850	4.6	Y	34	0.85	82.1
MPTK 50 3.0 kW-3,000 rpm	2502103	3.0	2,865	6.2	Δ	42	0.85	82.8
MPTK 50 4.0 kW-3,000 rpm	2502104	4.0	2,900	8.4	Δ	59	0.81	84.9
MPTK 50 5.5 kW-3,000 rpm	2502105	5.5	2,860	11.0	Δ	61	0.86	84.7
MPTK 65 7.5 kW-3,000 rpm	2502707	7.5	2,890	15.0	Δ	99	0.85	86.1
MPTK 65 11.0 kW-3,000 rpm	2502711	11.0	2,905	20.5	Δ	143	0.88	87.6
MPTK 65 15.0 kW-3,000 rpm	2502715	15.0	2,940	27.5	Δ	195	0.89	88.7
MPTK 65 18.5 kW-3,000 rpm	2502718	18.5	2,925	33.0	Δ	238	0.90	89.9
MPTK 80 15.0 kW-3,000 rpm	2502815	15.0	2,940	27.5	Δ	195	0.89	88.7
MPTK 80 18.5 kW-3,000 rpm	2502818	18.5	2,925	33.0	Δ	238	0.90	89.9
MPTK 80 22.0 kW-3,000 rpm	2502822	22.0	2,935	39.0	Δ	265	0.90	90.5
MPTK 80 30.0 kW-3,000 rpm	2502830	30.0	2,940	52.5	Δ	383	0.91	90.6

OVERALL DIMENSIONS MPTK



Model	Item number	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	2504197	295	135	360	305	250	135	25
MPTK 65 1.1 kW-1,500 rpm	2504798	455	250	455	375	320	175	45
MPTK 65 1.5 kW-1,500 rpm	2504701	455	250	480	400	320	175	50
MPTK 65 2.2 kW-1,500 rpm	2504702	455	250	490	410	320	175	55
MPTK 80 3.0 kW-1,500 rpm	2504803	522	280	570	475	370	205	80
MPTK 80 4.0 kW-1,500 rpm	2504804	522	280	605	510	370	205	85
MPTK 80 5.5 kW-1,500 rpm	2504805	522	280	635	540	370	205	100
MPTK 105 7.5 kW-1,500 rpm	2504907	640	340	670	565	460	250	140
MPTK 105 11.0 kW-1,500 rpm	2504911	640	340	720	615	460	250	160
MPTK 105 15.0 kW-1,500 rpm	2504915	640	340	730	625	460	250	200
MPTK 105 18.5 kW-1,500 rpm	2504918	640	340	730	625	460	250	210
MPTK 150 18.5 kW-1,500 rpm	2504618	822	380	775	630	580	320	270
MPTK 150 22.0 kW-1,500 rpm	2504622	822	380	870	725	580	320	330
MPTK 150 30.0 kW-1,500 rpm	2504630	822	380	870	725	580	320	360
<b>High pressure</b>								
MPTK 50 2.2 kW-3,000 rpm	2502102	410	250	450	395	250	135	36
MPTK 50 3.0 kW-3,000 rpm	2502103	410	250	465	410	250	135	41
MPTK 50 4.0 kW-3,000 rpm	2502104	440	280	510	455	250	135	53
MPTK 50 5.5 kW-3,000 rpm	2502105	410	250	545	490	250	135	61
MPTK 65 7.5 kW-3,000 rpm	2502707	485	280	605	525	320	175	80
MPTK 65 11.0 kW-3,000 rpm	2502711	545	340	650	570	320	175	105
MPTK 65 15.0 kW-3,000 rpm	2502715	545	340	655	575	320	175	140
MPTK 65 18.5 kW-3,000 rpm	2502718	545	340	695	615	320	175	155
MPTK 80 15.0 kW-3,000 rpm	2502815	622	380	681	586	370	205	188
MPTK 80 18.5 kW-3,000 rpm	2502818	622	380	719	624	370	205	205
MPTK 80 22.0 kW-3,000 rpm	2502822	622	380	759	664	370	205	258
MPTK 80 30.0 kW-3,000 rpm	2502830	622	380	805	710	370	205	305

**OVERALL DIMENSIONS WELDING FLANGE**



Model/ Pump series	Article no.	Material	MPTK 50 - 65 - 80 - 105 DIN 2573 PN 6 Dim. [mm] MPTK 150 2576 PN 10 Dim. [mm]				
			D	DC	d	$\varnothing$	t
MPTK 50	7713006	W1.0038/S235JR	$\varnothing 110$	90	$\varnothing 52$	4 x $\varnothing 10$	8
MPTK 65	7713052	W1.0038/S235JR	$\varnothing 160$	130	$\varnothing 69$	4 x $\varnothing 10$	8
MPTK 80	7713053	W1.0038/S235JR	$\varnothing 192$	150/160	$\varnothing 82$	4 x $\varnothing 10$	10
MPTK 105	7713054	W1.0038/S235JR	$\varnothing 212$	170/180	$\varnothing 107$	4 x $\varnothing 10$	10
MPTK 150	7713009	W1.0038/S235JR	$\varnothing 285$	240	$\varnothing 152$	4 x $\varnothing 10$	12

We reserve the right to make technical changes.

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

