

MPTKR-I

The MPTKR-I pump is a highly efficient chopper pump made entirely of acid-proof steel. It is ideal for aggressive liquids with a low or high PH value, as well as liquids with a high dry matter content.

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

APPLICATION EXAMPLES

- ▶ Chemical industry
- ▶ Paper industry
- ▶ Food industry
- ▶ Biogas plants
- ▶ Pumping abrasive or aggressive liquids



PUMP RPM

- 1,500 rpm
- 3,000 rpm

MATERIAL OF CONSTRUCTION

Motor housing and oil chamber	Cast iron EN-GJL-250
Pump housing	W1.4408/AISI316
Pump impeller	W1.4408/AISI316
Pump Shaft	W.1.4404/AISI316
Bolts	A4
Sealing system	Mechanical shaft seals: silicon carbide/silicon carbide
Knife system	W1.4404/AISI316 (*)
Extended knife system	W1.4404/AISI316 (optional)
Oil type	15W-40 Vario HDX (with moisture detection)

(*) On the MPTKR-I, the knife system is optional. The MPTKR-I Ex includes the knife system.

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
2-component coating: RAL 7005 (Mouse Grey) (optional)	Mouse Grey

MONITORING FUNCTIONS

Thermistor 140 °C

Moisture detection system (optional)

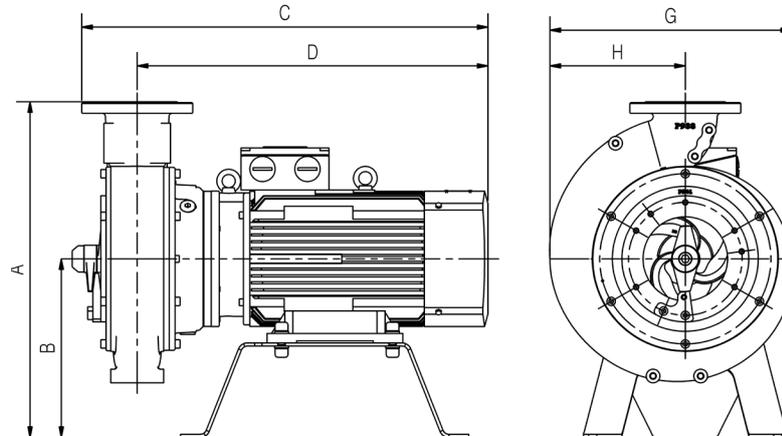
ELECTRICAL DATA MPTKR-I

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]		[%]
Medium pressure							
MPTKR-I 65 1.1 kW-1,500 rpm	1.1	1,410	2.6	Y	14	0.79	76.7
MPTKR-I 65 2.2 kW-1,500 rpm	2.2	1,410	5.0	Y	30	0.80	80.2
MPTKR-I 80 5.5 kW-1,500 rpm	5.5	1,440	11.0	Δ	68	0.87	84.6
MPTKR-I 105 11.0 kW-1,500 rpm	11.0	1,455	21.5	Δ	146	0.84	87.9
MPTKR-I 105 18.5 kW-1,500 rpm	18.5	1,460	35.0	Δ	238	0.85	89.3
MPTKR-I 105 22.0 kW-1,500 rpm	22.0	1,465	43.0	Δ	280	0.82	90.1
High pressure							
MPTKR-I 65 11.0 kW-3,000 rpm	11.0	2,905	20.5	Δ	143	0.88	87.6
MPTKR-I 65 18.5 kW-3,000 rpm	18.5	2,925	33.0	Δ	238	0.90	89.9
MPTKR-I 80 18.5 kW-3,000 rpm	18.5	2,925	33.0	Δ	238	0.90	89.9
MPTKR-I 80 22.0 kW-3,000 rpm	22.0	2,935	39.0	Δ	265	0.90	90.5
MPTKR-I 80 30.0 kW-3,000 rpm	30.0	2,940	52.5	Δ	383	0.91	90.6
Medium pressure							
MPTKR-I 80 5.5/3.0 kW-1,500 rpm	5.5	1465	11.3	Δ	105	0.87	88.4
MPTKR-I 105 11.0/7.5 kW-1,500 rpm	11.0	1,470	22.5	Δ	190	0.78	90.3
MPTKR-I 105 18.5/15.0 kW-1,500 rpm	18.5	1,470	37.5	Δ	270	0.78	91.2
MPTKR-I 105 22.0 kW-1,500 rpm	22.0	1,475	42.0	Δ	325	0.83	91.6
High pressure							
MPTKR-I 80 18.5/15.0 kW-3,000 rpm	18.5	2,935	32.0	Δ	230	0.91	91.0
MPTKR-I 80 22.0 kW-3,000 rpm	22.0	2,935	38.5	Δ	239	0.90	91.3
MPTKR-I 80 30.0 kW-3,000 rpm	30.0	2,945	52.0	Δ	359	0.91	92.0

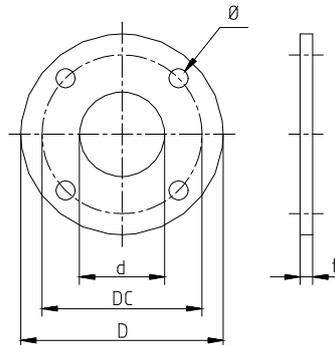
For voltages others than 400 V/50 Hz please refer to the attached Appendix.

OVERALL DIMENSIONS MPTKR-I



Model	A [mm]	B [mm]	C [mm]	D [mm]	G [mm]	H [mm]	Vægt [kg]
Medium pressure							
MPTKR-I 65 1,1 kW-1500 rpm	455	250	455	375	320	175	45
MPTKR-I 65 2,2 kW-1500 rpm	455	250	490	410	320	175	55
MPTKR-I 80 5,5 kW-1500 rpm	522	280	635	540	370	205	100
MPTKR-I 105 11,0 kW-1500 rpm	640	340	720	615	460	250	178
MPTKR-I 105 18,5 kW-1500 rpm	640	340	730	625	460	250	228
MPTKR-I 105 22,0 kW-1500 rpm	640	340	795	690	460	250	310
High pressure							
MPTKR-I 65 11,0 kW-3000 rpm	545	340	650	570	320	175	105
MPTKR-I 65 18,5 kW-3000 rpm	545	340	695	615	320	175	155
MPTKR-I 80 18,5 kW-3000 rpm	622	380	719	624	370	205	205
MPTKR-I 80 22,0 kW-3000 rpm	622	380	759	664	370	205	258
MPTKR-I 80 30,0 kW-3000 rpm	622	380	805	710	370	205	305
Medium pressure							
MPTKR-I 80 5,5/3,0 kW-1500 rpm	522	280	705	610	370	205	400
MPTKR-I 105 11,0/7,5 kW-1500 rpm	640	340	769	664	460	250	400
MPTKR-I 105 18,5/15,0 kW-1500 rpm	640	340	752	647	460	250	400
MPTKR-I 105 22,0 kW-1500 rpm	640	340	797	692	460	250	400
High pressure							
MPTKR-I 80 18,5/15,0 kW-3000 rpm	622	380	722	627	370	205	215
MPTKR-I 80 22,0 kW-3000 rpm	622	380	761	666	370	205	270
MPTKR-I 80 30,0 kW-3000 rpm	622	380	806	711	370	205	315

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	ø	t
MPTK-I 50	7115021	W1.4404/AISI316	ø110	90	ø52	4 x ø10	8
MPTK-I 65	7715004	W1.4404/AISI316	ø160	130	ø69	4 x ø14	8
MPTK-I 80	7715005	W1.4404/AISI316	ø192	150/160	ø82	4 x ø18	10
MPTK-I 105	7715006	W1.4404/AISI316	ø212	170/180	ø107	4 x ø18	10
MPTK-I 150	7715025	W1.4404/AISI316	ø285	240	ø152	8 x ø22	12

We reserve the right to make technical changes.