

Ara™

WATERJET PUMP

3.800 bar | 50 HP / 37 kW



SIMPLIFIED CUTTING OPERATION

Field Proven Technology for a Wide Range of Applications

The Ara™ high-pressure pump meets all essential requirements for successful and seamless operation of a waterjet cutting system. While it fully eliminates complex features in favor of ease of operation, Ara™ hosts one of the most successful and reliable KMT intensifier designs, called "SSEC". Whether you're cutting hourly or single shift operation, Ara™ handles the load easily.



Field Proven Intensifier Concept "SSEC"

Today, hundreds of the Ara™ style intensifiers are in use all over the world. The highly reliable intensifier design is one of the key features of the Ara™ pump. It represents "the heart of the pump", determining the success of your waterjet operation.



Intelligent Control System for Built-in Safety

To ensure highest safety and reliability, the Ara™ is equipped with a Siemens PLC system. The graphic display provides the machine operator with valuable information regarding the operating status of the pump. Information that might be relevant for proper servicing is thus easily available, and the display acts as an indispensable tool for troubleshooting.



Maintenance Friendly Frame Design

To facilitate instant access to the maintenance and inspection areas, doors and covers are designed for easy removal and re-positioning.

Stand-alone Operation or Overall System Integration

Depending on the customer's requirements, the pump can be run as a stand-alone unit or it can be hardwired to the central PLC of the motion system.

The Right Pump Matters

KMT
WATERJET

ARA™ PUMP SYSTEM INFORMATION

Nominal Power Rate	50 HP / 37 kW
Max. Continuous Pressure	800-3.800 bar
Max. Water Flow Rate at Max. Pressure	3.8 l/min.
No. of Language Options on Display	6*
Control Voltage & Power Supply VDC	24 V DC
Nominal Motor Current 380V/50Hz	66 A
Max. Circuit Breaker at 380V/50 Hz	100 A
Length	2.006 mm
Width	914 mm
Height	1.183 mm
Weight	1.111 kg
Control System	Siemens
Pneumatic Supply Pressure Requirement	5.9 bar
Pneumatic Supply Volume Requirement	28.3 l/min.
Max. Noise Level	<80 dB (A)
Label According to EC-Machinery Directive	CE Mark & CE Declaration of Conformity

CONNECTIONS

High Pressure Outlet Connections	9/16" UNF
Low Pressure Connection	1/2" BSPT
Drainage Connection	1/2" BSPT

CUTTING WATER

Min. Inlet Cutting Water Pressure	2 - 4 bar
Max. Nominal Stroke Rate	54 min. ⁻¹
Accumulator Volume	1 l
Low Pressure Filter	101 l/min

HYDRAULIC SYSTEM

Max. Hydraulic Pressure	190 bar
Hydraulic Tank Capacity	151 l
Hydraulic Pump Flow Rate at 50 Hz	101 l/min.

COOLING SYSTEM

Cooling Water Pressure bar	2 - 7 bar
Cooling Water Consumption at 24° C / 75° F	5,7 l/min.
Ambient Temp. Oil/Water Heat Exchanging	40° C

OPTIONS & OTHER FEATURES

SSEC Intensifier Design	Standard
HYPERLIFE™ Seal Technology	Standard
Safety Dump Valve	Standard
Inlet Shut-Off Valve	Standard
Oil Level & Temperature Sensor	Standard
Booster Pump (adjustable & protected)	Standard
Oil/Water Heat Exchanger	Standard
Y/D Starter	Standard
Dual Pressure Compensator	Standard
ProfiBus Connection	Optional
Electric V/P/N : 208/3/60, 575/3/60, 460/3/60, 230/3/60	Optional (others on request)

* English, French, German, Italian, Polish, Spanish

MAX. QUANTITY OF ORIFICES

@ 3.800bar

Dia. in mm	Dia. in Inches	Quantity of Orifices
0.10	0.004	14
0.12	0.005	9
0.15	0.006	5
0.17	0.007	4
0.20	0.008	3
0.23	0.009	2
0.25	0.010	2
0.28	0.011	1
0.30	0.012	1
0.33	0.013	1
0.35	0.014	1

The maximum quantity of orifices installed can be increased or larger orifice sizes can be installed by reducing the working pressure. Please feel free to contact us for your individual calculation.

KMT CUT CALCULATOR APP

Compare cutting speeds.



KMT GENUINE SERVICE

KMT 360 PM programs available.



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SHAPE TECHNOLOGIES GROUP®

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