INNOVATIVE

in hydraulics





HYDROKOMP

Couplings and multiple coupling systems

Coupling elements

For low-loss transfer ¹ of liquid and gaseous substances

Coupling elements are directly inserted into the construction. They have a compact structure, are noncorrosive and transfer liquids, gases, compressed air or vacuum. The couplings can be coupled without pressure or under pressure.

At HYDROKOMP[®] system seals are easy to change.

22 MM	Lhydrokomp.da 4460-5-EG002 07/08					
	Maximum flow rate	l/min	8	12	25	50
		nominal diameter	NW 3	NW 5	NW 8	NW 12
	Screw-in-	mechanics	M 20	M24; M30	M 36	M 45
		nipples	M 20	M24; M28	M 30	M 45
	Mounting-	mechanics ø mm	11	14	20	30
		nipples ø mm	13	16	21	31

For further information please check catalogue pages 100-3

Manual coupling system

Fast and easy to couple

Coupling systems, like the manual coupling unit by HYDROKOMP®, are used with machine tools which operate with hydraulic constructions, but which are not equipped with a hydraulic interface for hydraulic oil supply for fixture pallet.

Coming from HYDROKOMP®: A compact assembly group which is easy to couple and comprises all necessary security elements.



Multiple coupling systems

With or without pressure ¹² to couple

Multiple coupling systems are basically used in machine tools where they function as intersection for transferring media to and from fixture pallets and processing stations.

Your advantage with elements by HYDROKOMP®: Coupling elements either are without pressure or are to be coupled under maximum operating pressure. The integrated lock takes up free coupling forces.



For further information please check catalogue pages 100-4

Special designs Various coupling systems



With our own coupling systems, various projects in all kinds of technical applications, like toolmaking and moldmaking, have been successfully executed in handling and robotics. Above that, HYDROKOMP® plans, develops and manufactures customer specific systems.

For further information please check catalogue pages 100-2

Reliable components

Clamping technique

Rotary couplings

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Cylinders Multi-variant, space-optimized, economical



HYDROKOMP®-cylinders distinguish by one special feature: Despite their high performance, those cylinders have an extremely compact structure. This allows for our customers ways of construction, which have not been possible so far. At HYDROKOMP® serially: The metal wiper for a long service life.

Hydrokomp cylinder

- Screw-in cylinders
- Block cylinders
- Built-in pistons
- Pull-down cylinders



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For further information please check catalogue pages 200-2/200-3 and 210-1/210-2

Swivel clamps and lever clamps, support elements

For clamping, unclamping and easy exchange of workpieces. To support against vibrations and bending.



Rotary couplings For single- or double-acting Hydraulic elements

Rotary valve couplings transfer hydraulic oil from a stationary machine part to a rotating machine part. Depending on the number of channels, several hydraulic elements can be coupled.

At HYDROKOMP®: Coming also with integrated electrical grinders for performance electricity, signals and data.



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Passages 2 Special designs on request

For further information please check catalogue pages 500-3

Rotary valve couplings For reliable operation in revolving tables

Controlled rotary valve couplings transfer hydraulic oil onto revolving tables. The constructive mounting as rotary slide valve allows for several hydraulic fixtures to be supplied with hydraulic oil simultaneously.

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At HYDROKOMP[®]: Minimized hydraulic and electrical control effort.



Stations		6	8	10	
single-acting		_			
double-acting		_			
Maximum pressure	bar	350	350	350	

Special designs on request

For further information please check catalogue pages 500-4

to support your success

Pressure pump units, hydraulic intensifiers and accessories

Pressure pump unit For single-acting clamping jigs



The small and light pressure pump units are operated pneumatic. They are meant for single-acting clamping jigs. Single-acting or double-acting hydraulic systems can be serviced.

At HYDROKOMP®: The drive medium is compressed air for EX-fields.

Flow rate I/min	2,50						
	2,00						
	1,50						
	1,00						
	0.50						
	0,00						
Operating pressur	e bar	0	100	200	300	400	500

For further information please check catalogue pages 430-1

Hydraulic intensifiers For optimal pressure utilization

Hydraulic-hydraulic intensifiers raise a hydraulic primary relief in a set ratio. This way, a machine hydraulic with low pressure can be used for such consumers who use the secondary relief, which

is much higher, economical. At HYDROKOMP[®]: Three design variations with partly integrated filter technology.





Hydraulic and mechanical accessories From the inline filter up to the contact bolt

Each aggregate is just as strong as its weakest element. This is why we put also great care into accessories by using first-class materials and precise production.



Inline filter

Prevents function errors and premature wear. Availability and reliability in service are important tasks. Filter cartridge can be exchanged.

Max. operating pressure 210 bar Filter acuteness 10 / 25 μm

Connects two parts short-distance, without screwing them together. These connecting inserts are especially constructed for hydraulic oil connections without

Nominal diameter 5 8 10 12

10 14 16 18

Connecting inserts









Pressure control cylinder

tubes and screws.

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An important safety component: Pressure control cylinder convert hydraulic signals (test pressure / pressure loss) into a mechanical signal, which can be evaluated through an electrical or pneumatic switch unit.

At HYDROKOMP[®]: One type for all setting ranges.

Piston stroke at obtained pressure 2,5 mm Adjustable pressure from 15 up to 500 bar

Contact bolts

Mechanical accessories for single-acting and double-acting clamp cylinders. The contact bolts are hardened, the screw-in thread is soft.

For pistons with $16 - 100 \text{ mm } \emptyset$

For further information please check catalogue pages 430-2

Ideas and quality as a program

Our program consists of first-class hydraulic components and fixture elements. Design ideas, solutions with a long life time and customized high-precision designs are a specialty among HYDROKOMP[®].

Consultation, development and manufacturing

Beginning with the consultation, over to product training and up to complete development of customer specific solutions, our applications engineers and design engineers are available to support and assist you.

Consistent accuracy

HYDROKOMP® products are designed for long-lasting application in rough industrial daily routine. Our customers can surely trust that the process will flow smoothly. Each and every one of our products, from the filter up to a complete power unit are developed and manufactured according to the highest quality standards. With modern CAD systems we design new solutions. After that, current procedures of precision manufacture and quality assurance are next in process. Before a product is released it has to prove its quality with an endurance test. The result: Ideas and quality right from the start.











HYDROKOMP

supports you

Hydraulic elements and coupling systems by HYDROKOMP[®] are already in use very successfully in the most various industrial branches. These are for example:

- Agricultural technology
- Machinery installations
- Resources
- Production engineering
- Molds and tools
- Handling technology
- Machinery
- Fixtures
- Machine tools

Seminars

Professional seminars belong to our service philosophy for our customers. Target group are masters, technicians, designers and assemblers who develop with our products and install them. With pleasure we plan and organize seminars especially for your demand.

- Basics of the hydraulic
- Hydraulic systems and their servicing
- Clamping systems
- Production of hydraulic controls according to control diagrams
- Operational fields and applications
- Economic efficiency calculations

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