



MDA Highlights

April 2015

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Grand Opening of ARGO-HYTOS in Yangzhou, China



On October 25, 2014, we celebrated the grand opening of the ARGO-HYTOS manufacturing plant in Yangzhou, China.

At two o'clock in the afternoon, Christian H. Kienzle, CEO of ARGO-HYTOS, his daughters, Nicola and Christine Kienzle, and Mr. Chen Xi, district manager of the Guangling region, welcomed the guests, cut the ceremonial red ribbon and wished the new facility success and growth.

Afterwards, the 200 guests were asked into the beautifully decorated production plant, where more surprises were awaited.

Mr. Li Li, chairman of the CHPSA (China Hydraulics Pneumatics & Seals Association), Mr. Chen Xi, district manager of the Guangling region, and Mr. Rauen from the German engineering association VDMA (Verband Deutscher Maschinen- und Anlagenbau) offered their warmest congratulations.

Between speeches, the guests were treated to traditional Chinese music and dance performances.

Afterwards, Andreas Briegel, new managing director of ARGO-HYTOS Yangzhou, opened the Bavarian-style buffet.

An amazing fireworks display that lasted almost thirty minutes – an opening present by the industrial park GIP – marked the grand finale of the ceremony.

The opening of the Yangzhou branch clearly demonstrates the commitment of ARGO-HYTOS to China as an industrial powerhouse.

On an area of 2,500 square meters hydraulic components and systems are manufactured and assembled.

Approximately 60 people will be employed by the end of the year.

Other sales offices of ARGO-HYTOS in China are located in Shanghai, Beijing, Shenzhen, Xiamen and Hong Kong.



A Multifunctional Hydraulic Filter System Sets New Standards



Objective

Filter systems of the future must meet market requirements regarding the highest variability in combination with an optimal cost / benefit ratio. The state of the art is to be redefined by pioneering developments.

Filter Options

By the new high modular concept, suction filters, return filters and return-suction filters of one basic housing can be realized.

The filters can furthermore be used as in-tank filters or as in-line filters.



Return Filter

The basis module consists of a return filter housing with three connections. Heart-piece is the one-piece manufactured head part with molded housing.

Suction Filter

An add-on module at the housing converts the filter into a suction filter for horizontal installation.

The add-on module is connected to the housing via the quick coupling system.

Return-suction Filter

The integration of a pressure holding valve, pressure relief valve and suction valve in the return-suction filter is achieved by a complex module. The module is connected with the housing end via the quick coupling system.

In-line Filter

By installing an end cap on the tank outlet of the housing, the in-tank filter module converts to an in-line filter module.

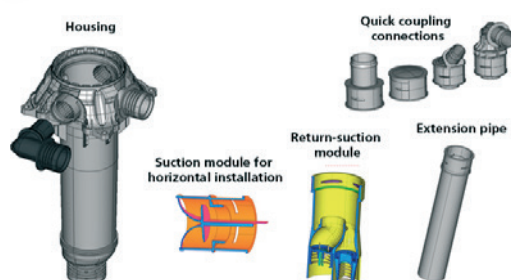
Sizes

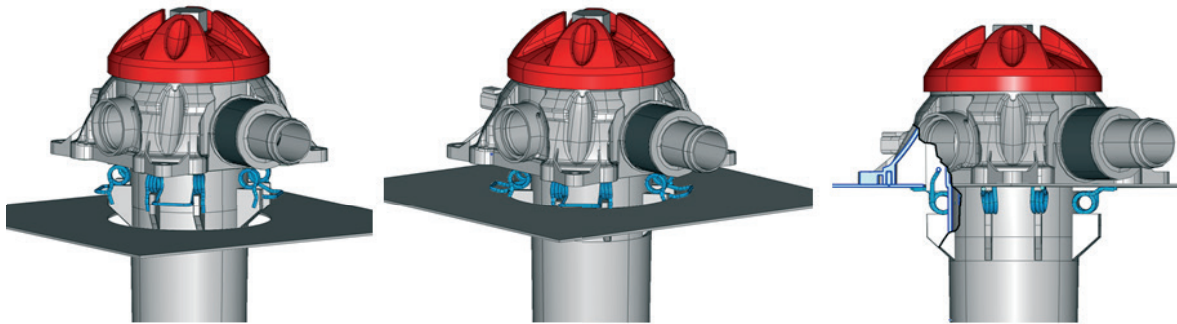
Two sizes will be available. The flow rates for the different versions are up to 150 l/min, resp. up to 300 l/min with return filters and return-suction filters and up to 50 l/min, resp. 100 l/min with suction filters.

Quick Coupling System

An integrated, high efficient quick coupling system connects both internal add-on modules to the filter housing and external components (such as pipes and hoses) to the filter head part.

Via the unique mounting system, standard hoses with pressed-in adapter can be connected to the head part. There are a variety of connector couplings available - straight nozzle, 45° and 90° bend in a great number of nominal sizes.





Tank Connection

The newly developed tank connection solution revolutionizes the assembly of in-tank filters. With minimal insertion force, the in-tank filter is securely mounted in a round cutout. No threads / bolts or assembly tools are required. The fastening force is less than 80 N. In conjunction with a newly developed seal concept, unevenness of the tank up to 2 mm is completely leveled out.

Ventilating Filters

As another highlight, the ventilating filter is integrated in the filter cover. The ventilating filter element is a separate exchangeable module.

Furthermore, an additional aeration and deaeration valve is integrated, whereby the integration density is further increased.

Service

Particular emphasis was placed on a clean filter maintenance.

When opening the filter cover, an oil overflow zone is opened, from where the oil is directly returned into the tank. This prevents oil running on the filter housing during filter element change. The filter element is removed together with the filter cover. Oily fingers are a thing of the past.

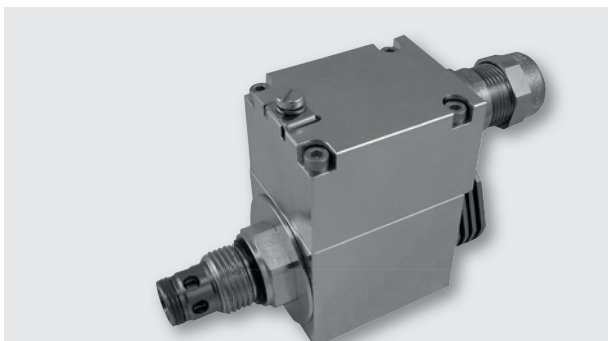
When closing the filter cover, the already inserted filter element locks in the cover.

Summary

Technologically, the new high modular filter system with an extremely large integration density of various functions represents a new milestone in the hydraulic filtration.

Explosion-proof Valves, Modular Valves and Cartridges

Hydraulic valves for use in potentially explosive atmospheres



APPLICATIONS



The valves comply with the requirements according to:

- › ATEX according to Directive 94 / 9 / EC and standard EN 60079
- › IECEx according to standard IEC 60079

Available product range

- › Solenoid operated spool valves, modular and cartridges
- › Poppet valves normally open, closed and double poppets

Features

- › The Valve and solenoid design prevent surface temperatures from rising up to the point where they might cause ignition
- › ATEX 94/9/EC certification
I M2 Ex e mb I Mb
II 2G Ex e mb IIB T4, T5, T6 Gb
II 2D Ex tb IIIC T135°C, T100°C, T85°C Db
- › IECEx worldwide certification
Ex e mb I Mb
Ex e mb IIB T4, T5, T6 Gb
Ex tb IIIC T135°C, T100°C, T85°C Db
- › High flow capacity and transmitted hydraulic power
- › Variety of optional spools connections
- › In standard configuration the valve is zinc-coated for 600 h protection acc. to ISO 9227

Symbol	Type Code Data Sheet	Cavity/Size	Flow/Pressure l/min (GPM)/bar (PSI)
4/2 and 4/3 Solenoid Operated Directional Control Valve			
	RPEX3-06 HA 4054	D06 / NG6	60 (11.81) 350 (5100)
2/2 Solenoid Operated Directional Control Valves Spool Types			
	SD2EX-B2 HA 4064	7/8-14 UNF	50 (9.84) 350 (5100)
3/2 Solenoid Operated Directional Control Valves Spool Types			
	SD2EX-B3 HA 4065	7/8-14 UNF	50 (9.84) 350 (5100)
4/2 Solenoid Operated Directional Control Valves Spool Types			
	SD2EX-B4 HA 4066	7/8-14 UNF	50 (9.84) 350 (5100)
2/2 Solenoid Operated Directional Control Valves Poppet Types			
	SD3EX-B2 HA 4067	7/8-14 UNF	60 (11.81) 420 (6120)
3/2 Solenoid Operated Directional Control Valves Poppet Types			
	SD1EX-A3 HA 4068	3/4-16 UNF	20 (3.94) 350 (5100)

PRM9-06 and PRM9-10

Proportional Valves with Digital On-Board Electronics

The next generation of proportional directional control valves with digital on-board electronics, CETOP 03 (Size NG06) & CETOP 05 (Size NG10)



PRM9-06



PRM9-10

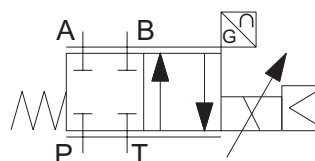
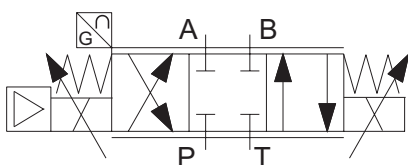
Proportional directional control valves achieve high dynamics, low hysteresis, and are very good at building up closed loop control circuits; these are the main reasons to use this kind of proportional valves. Using digital on-board electronics and prescribed controller types makes it easy to handle the set-up phase by using the graphic-based parameterization software.

Features

- › Up to 40% higher hydraulic power limits through:
 - CFD simulation to reduce flow forces
 - Electromagnetic field simulation to increase force of the solenoid
- › New Digital On-Board Electronic design
- › Improved shock and vibration behaviour
- › Easy to connect via USB ⇔ Micro-USB ports
- › Optimized parameterization software
- › Field bus capability, standard CANopen

The valves will be available in 4 versions:

- › Basic version, as all the others includes an internal position sensor to avoid hysteresis, and to achieve by this a high accuracy
- › Version with additional external sensor input to realize a decentralized closed loop control in the application, with e.g. position-, speed-, pressure-, force-, torque sensor, etc.
- › CANopen connection; basic and external sensor versions are also available with CANopen



Gear Pumps

The ARGO-HYTOS range is designed for advanced mobile and stationary hydraulic systems as well as for simple hydraulic systems with lower capacity.



APPLICATIONS



Two lines are offered within the range: **High performance and Light Line**

A wide variety of designs with diverse drives, connecting flanges, fluid inlets and outlets enable the pumps to be used in hydraulic systems of both fixed and mobile machines and equipment. Ranges offer both variants one way and reversible, single and multiple. Connecting dimensions correspond to all worldwide standards.

Features

High performance

- › Life time 3000 working hours or 2 years guarantee for nominal pressure
- › Nominal pressure 320 bar (4663 psi)
- › High quality aluminum alloys
- › Low noise level across entire operating range
- › High operational reliability and long service life
- › High volumetric efficiency up to 98%

Light Line

- › Nominal pressure 270 bar (3950 PSI)
- › High operational reliability
- › Cost optimized design for dedicated application

Type Code Data Sheet	p _{max} bar (PSI)	Max. Displacement ccm (cin/rev)	Q _{max} l/min (GPM)
GP0 - High Performance Line HA 8004	260 (3789)	3,2 (0.195)	5,69 (1.5)
GP1-L - Light Line HA 8011	270 (3650)	8 (0.488)	16,3 (3.2)
GP1 - High Performance Line HA 8003	310 (4517)	11,8 (0.720)	20,82 (4.09)
GP2 - High Performance Line HA 8002	310 (4517)	31 (1.892)	66,84 (17.68)
GP3 - High Performance Line HA 8001	320 (4663)	100 (6.102)	177,3 (46.9)

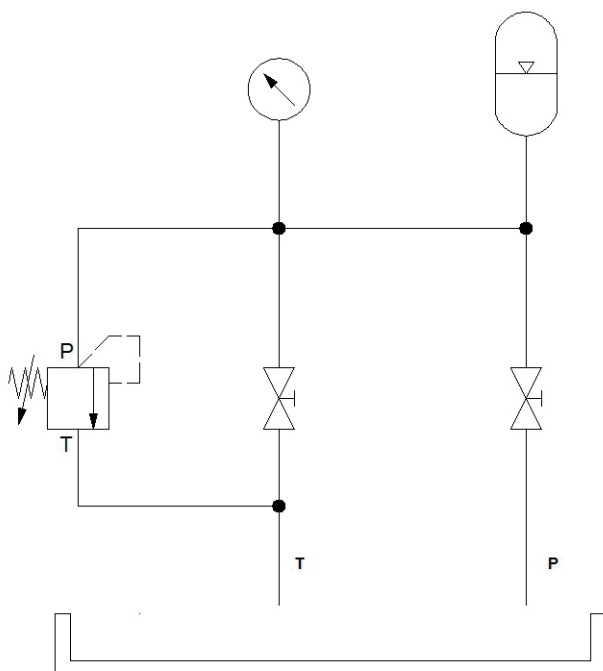
SR1A-B2/HxSx-CE1017-x-x

Direct-Operated Pressure Relief Valve with TÜV Certification

for protection of hydraulic circuits with accumulators



Pressure Relief Valve SR1A-B2



Direct-operated pressure relief valve, cartridge type, generally used to protect hydraulic circuits against over-pressure. The TÜV certification pursuant to PED Directive 97/23/EC allows for the use of this valve in circuits with accumulators, especially. The cracking pressure value is pre-set by the manufacturer and sealed.

Features

- › TÜV Certification (Directive 97/23/EC)
- › Simple design and reliable function
- › Rapid response to pressure changes whilst maintaining stable function in the circuit
- › Seven pressure ranges
- › Hardened and accurately machined cone
- › Leakfree valve in closed position
- › Flat pressure characteristic over the entire flow range
- › Valve body and adjusting screw zinc-coated
- › The seat is carbonitrided

Technical Data

Connecting thread	7/8-14 UNF
Max. pressure	420 bar
Max. flow	60 l/min
Fluid temperature range (for NBR)	-30 ... + 100°C
Fluid temperature range (for Viton)	-20 ... + 120°C
Viscosity range	10-500 mm ² s ⁻¹
Pressure ranges:	25, 63, 100, 160, 250, 350, 420 bar

APPLICATIONS

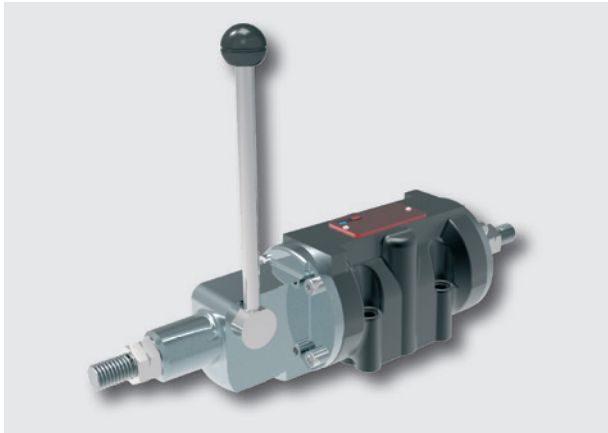
Hydraulic circuits with accumulators:

- › stationary machines and equipment
- › mobile applications



4/2 and 4/3 Manually Operated Directional Control Valves

for directional and proportional flow control



RPR1-10

The ARGO-HYTOS directional manually operated valves are spool type, four-way, two or three position for direction of flow in hydraulic circuits.

Features

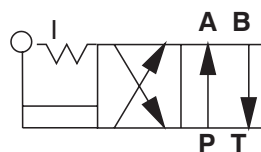
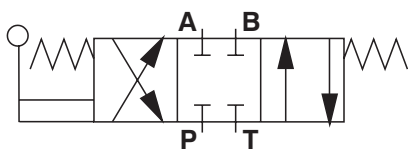
- › High flow capacity valve
- › 4/3 and 4/2 spool valve
- › Directional and proportional control
- › Detent versions of spools
- › Robust reliable design
- › Stroke limiters option
- › Spool position sensor options
- › Actuating section can be rotated in four positions
- › High protection surface treatment
- › Service life 10 million cycles

Technical Data

- › Flow up to 140 l/min (30,79 GPM)
- › Pressure up to 350 bar (5076 PSI)
- › Temperature ranges: -30 ... +120 °C (-22 ... +248 °F)
- › Installation dimensions to ISO 4401/ DIN 24340/CETOP RP121-H
- › In standard configuration the valve housing is phosphated and the steel parts are zinc-coated

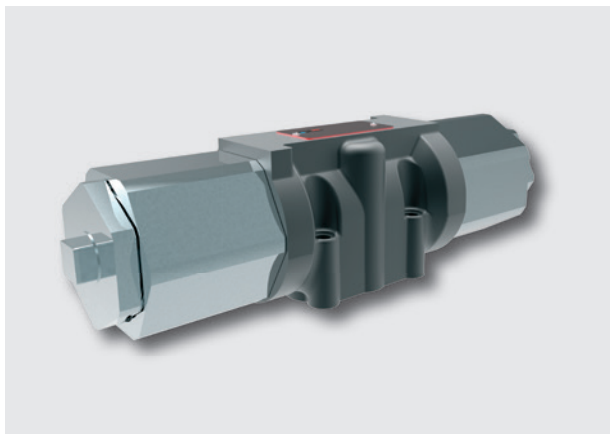
APPLICATIONS

- › Industrial winches
- › Offshore / marine industry
- › Movement of hydraulic cylinders
- › Rotation of hydraulic motors
- › Power packs and mobile and agricultural applications

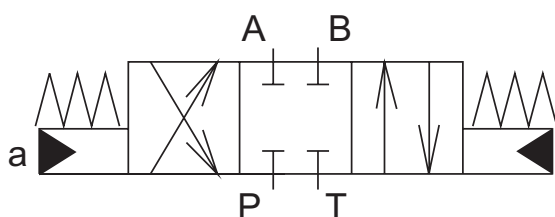


RPH1-10

4/2 and 4/3 Hydraulic and Pneumatic Operated Directional Control Valves



RPH1-10



The ARGO-HYTOS directional hydraulic and pneumatic piloted valves are spool type, four-way, two or three position for direction of flow in hydraulic circuits.

Features

- › High flow capacity
- › 4/3 and 4/2 spool valve
- › Hydraulically and pneumatically piloted version
- › Wide range of spool variants
- › Robust reliable design
- › High protection surface treatment
- › Service life 10 million cycles

Technical Data

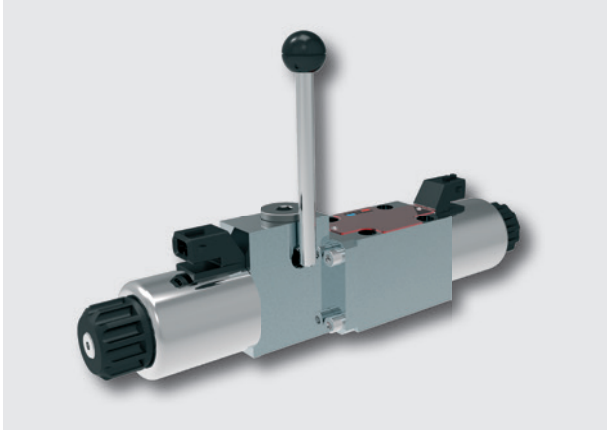
- › Flow up to 140 l/min (30,79 GPM)
- › Pressure up to 350 bar (5076 PSI)
- › Pilot pressure min. 2 bar (29 PSI)
- › Pilot pressure max. 70 bar (1015 PSI)
- › Temperature ranges: -30 ... +120 °C (-22 ... +248 °F)
- › Installation dimensions to ISO 4401/ DIN 24340/CETOP RP121-H
- › In standard configuration the valve is phosphated

APPLICATIONS

- › Industrial winches
- › Offshore / marine industry
- › System integrators

4/2 and 4/3 Directional Control Valves, Solenoid-Operated with Lever Manual Override

Direct operated spool type, four way, two or three position for direction of flow in hydraulic circuits



RPER1-06



Features

- › High flow capacity
- › High variety of DC voltage versions
- › 4/3 and 4/2 spool valve
- › Robust reliable design
- › Low leakage valve even in standard configuration
- › High protection surface treatment
- › High variety of electrical terminals (DIN, AMP JET, Deutsch DT04, Flying Leads)
- › Service life 10 million cycles at nominal pressure

Technical Data

- › Flow up to 80 l/min (21 GPM)
- › Pressure up to 350 bar (5076 PSI)
- › Temperature ranges: -30 ... +80 °C (-22 ... +176 °F)
- › Installation dimensions to ISO 4401/ DIN 24340/CETOP RP121-H
- › In standard configuration the valve housing is phosphated and the steel parts are zinc-coated

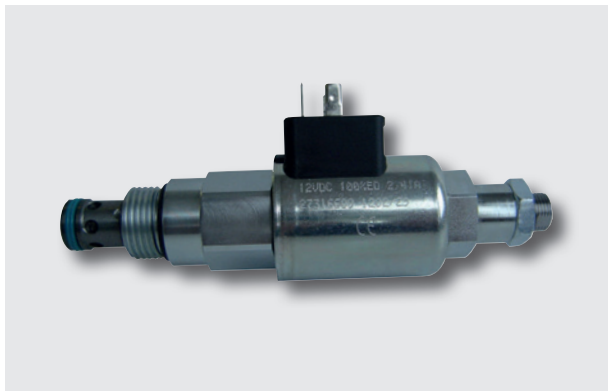
APPLICATIONS

- › Power packs and mobile and agricultural applications
- › Industrial winches
- › Offshore / marine industry
- › Movement of hydraulic cylinders
- › Rotation movement of hydraulic motors

SR4E2-B2

One4All Solenoid Controlled Unloading Valve, Normally Open with Integrated Pressure Relief Valve

for protection of hydraulic circuits against overshoot



Pressure Relief Valve SR4E2-B2

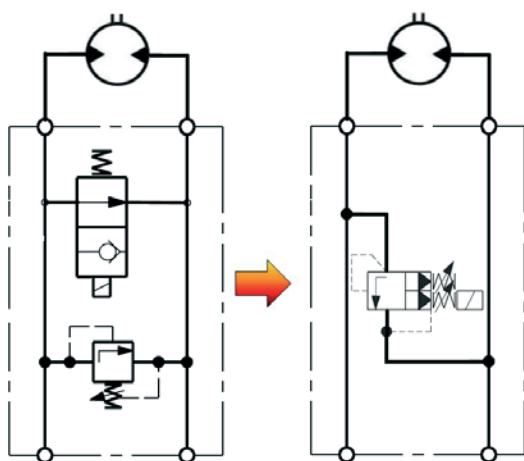
The ARGO-HYTOS SR4E2-B2 cartridge valve combines a normally open solenoid unloading function and a pressure relief function in one valve. The One4All function design allows cost-effective and space-saving installation in hydraulic circuits.

The SR4E2-B2 alone performs two functions for which there normally have to be two valves:

- › unloading function
- › hydraulic system pressure protection

The valve is designed to build up system pressure without overshoot.

The valve can be used in a variety of mobile and industrial system applications for common 7/8-14 UNF cavity.



Features

- › Rated parameters 60 l/min / 350 bar
- › Hardened and precise working parts
- › Wide range of pressure settings
- › Rapid response to pressure changes without overshoots
- › Flat pressure characteristic over whole flow range
- › Mechanical adjustment of upper and lower pressure
- › Optional surface protection for 900 h
- › Life time 10 million cycles for nominal pressure 350 bar
- › Factory pre-set relief valve

Technical Data

Cartridge cavity / Valve size	
Max. flow l/min (GPM)	60 (15.9)
Max. inlet pressure (port P) bar (PSI)	350 (5080)
Max. output pressure (port T**) bar (PSI)	100 (1450)
Fluid temperature range for FPM °C (°F)	-20 ... +80 (-4 ... 176)
Ambient temperature range °C (°F)	-20 ... +80 (-4 ... +176)

APPLICATIONS

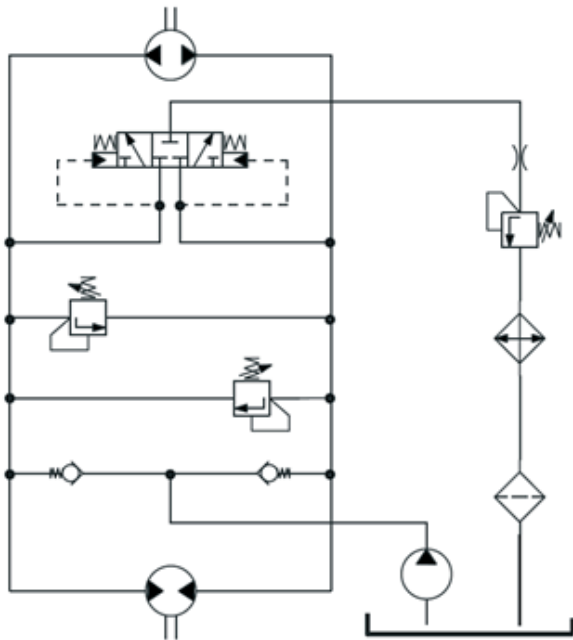
- › Motor control applications
- › Unloading of hydraulic systems
- › Open loop vibration circuit solution

Hot Oil Shuttle Valve

as protection of hydrostatic transmission circuits



Hot Oil Shuttle Valve SD2H-LA3



Low side hot oil shuttle valve is used to discharge hydraulic oil from the low pressure side of the closed loop circuit. The valve is piloted from both sides of reversible pump outputs. When the high pressure side exceeds the settled pressure limit the valve shifts the low pressure side to tank for cooling or filtration purpose. In pump neutral position the valve is centered by springs and the excessive oil exits the loop through pump relief valve.

Features

- › Hardened and precision working parts
- › High flow capacity
- › Two spring centering options for different applications
- › Simple design
- › Reliable hydraulic control
- › Automatic relief of fluid discharge from the circuit
- › Surface protection option for 600 h salt spray acc. to EN ISO 9227

Technical Data

Cartridge cavity	M24x1,5
Max. flow	40 l/min (10.6 GPM)
Max. operating pressure	320 bar (4640 PSI)
Spring setting ranges	7,0 bar (102 PSI) 12,0 bar (174 PSI)
Fluid temperature range for -30...+100 NBR °C (-22 ...+212°F)	
Fluid temperature range for -20 ...+120 FPM °C (-4 ...+248°F)	

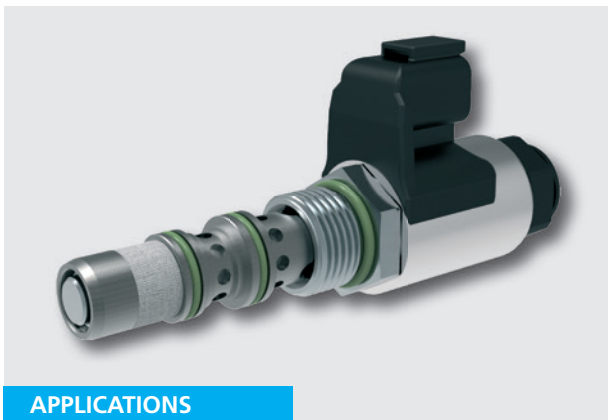
APPLICATIONS

- › Hydrostatic transmission circuits
- › Drives in mobile construction machines, agriculture or municipal vehicles

SP4P1-B4

Proportional, Pilot-Operated Reducing/Relieving Valve

for proportional control of hydraulic clutches



APPLICATIONS



SP4P1-B4

The Pilot-operated reducing valve SP4P1-B4 is a screw-in, cartridge-style, spool-type hydraulic pressure reducing/relieving valve which allows to adjust the reduced pressure in a defined range. Pressure level is proportional to DC current excitement.

Features

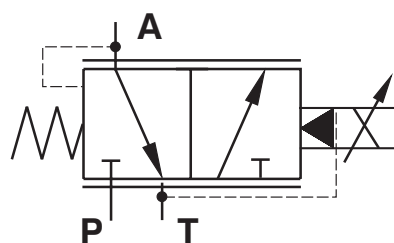
- › High nominal pressure level
- › Low pressure drops
- › Stable performance in a variety of working conditions
- › Adaptable pressure gain for client application
- › Small and compact
- › Low power consumption 4W at nominal conditions

Technical Data

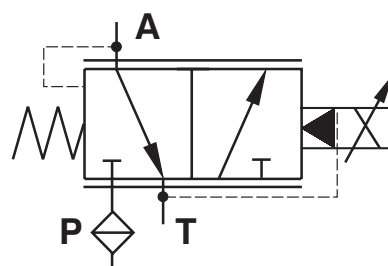
- › Nominal reduced pressure 30 bar (435 PSI)
- › Nominal Flow: 40 l/min (10,58 GPM)
- › Hysteresis: $\leq 5\%$
- › Cycle life: 10 million peak impulse cycles at nominal pressure
- › Fluid temperature range: $-30 \dots +100 \text{ }^{\circ}\text{C}$ ($-22 \dots 212 \text{ }^{\circ}\text{F}$)
- › Ambient temperature range: $-30 \dots +100 \text{ }^{\circ}\text{C}$ ($-22 \dots 212 \text{ }^{\circ}\text{F}$)
- › Cavity size 7/8-14 UNF

APPLICATIONS

- › Hydraulic clutch gear boxes control
- › Agriculture and construction machines

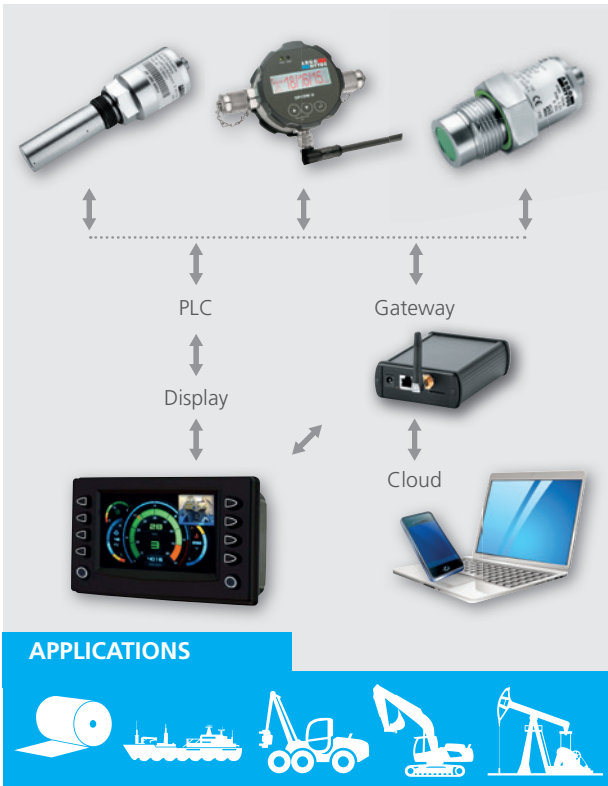


No filter



With filter

Oil Condition Monitoring



According to studies, 80 % of all breakdowns in fluid power systems can be detected before they occur by monitoring the fluid condition.

Advantages

- › Detection of fluid ageing, wrong fluids, lack of additives or dangerous acid numbers
- › Measurement of water content, particle concentration and viscosity of the fluid
- › Switch alarms at critical levels
- › Preventing breakdowns and increasing longevity
- › Providing remote access and service on demand planning

ARGO-HYTOS Systems and sensors can be used in almost all fluid power systems.

Wear Sensor OPCom FerroS



The new wear sensor OPCom FerroS allows the establishment of cost-effective monitoring systems, through which the operational and consequential costs for the plant operator may be lowered effectively. The OPCom FerroS sensor has a high sensitivity and is insensitive to disturbances, such as foaming and vibrations.

Advantages

- › Continuous monitoring of ferromagnetic particles
- › Automated condition evaluation, manual inspection or sampling are no longer necessary
- › Robust against interferences (air, vibrations, humidity etc.)
- › Ideal for monitoring of drive units

APPLICATIONS



Condition Monitoring

OPCom Particle Monitor



APPLICATIONS



The OPCom particle monitor allows continuous monitoring of contamination and wear in fluid power systems. Condition changes can be detected at an early stage and countermeasures can be taken. Subsequent damages and failures are minimized and costs are effectively reduced.

Advantages

- › Continuous monitoring of contamination and wear to avoid damages and failures
- › Display according to ISO 4406, NAS 1638, SAE AS 4059, GOST 17216
- › Communication via 4-20mA, RS232, CANopen and J1939
- › Compact and robust design

Condition Monitoring

Particle Counter OPCount



APPLICATIONS



The OPCount is a particle counter of the latest generation which can be used for stationary and mobile operation. The high measuring accuracy of the OPCount, in connection with the possibility to display the measured particle concentration according to all current standards, allows use in a variety of applications. Measurement can be carried out directly at a pressure line or from a bottle, using the integrated pump.

Advantages

- › Accurate mobile and stationary measurement
- › Intuitive operation via touch display or keypad
- › Measurement with integrated pump or at system pressure up to 420 bar

Large Volume In-line Filters FNL 1000-2000



APPLICATIONS



A perfect combination of highly effective filtration and high flow rates at low differential pressures. A combination of proven function and modern advanced filter element technology has once more extended the application range of this filter solution. An optimal version in seawater resistant aluminum even allows offshore use without further corrosion protection measures.

Features

- › Uncomplicated in-line installation via SAE flanges, 2 and 4 inches
- › With clogging indicator and optional temperature compensation
- › Large volume flows up to 1500 l/min – can also be used for lubricating oil

Oil Service Unit UMPC 045



APPLICATIONS



The new UMPC offers the perfect combination of oil control and filtration. Due to the mixture of proven function and modern advanced technology, operation and functionality of the UMPC 045 could be improved and expanded. All relevant oil characteristics such as temperature, humidity and cleanliness classes are now directly displayed and stored.

Equipment

- › Compact unit, ready for connection (incl. filter element)
- › Integrated particle counter OPCOM
- › Electrical clogging indicator
- › Suction and return tube, electric cable, oil pan
- › Mobile, wireless data transmission
- › Central control panel with data logging

Lightline Return Filter



Technical Data

- › 4 types / sizes G $\frac{1}{2}$, G $\frac{3}{4}$, G1, G1 $\frac{1}{4}$, G1 $\frac{1}{2}$ / SAE 2
- › UNF thread connections on request
- › Flow rate up to 650 l/min / 170 gpm
- › 3 Filter finenesses: 10 μ m & 16 μ m as EXAPOR®Light and 30 μ m Cellulose

Price Advantage

- › 30 % for filter assemblies compared to EXAPOR®MAX2
- › 40 % for EXAPOR®Light filter elements compared to EXAPOR®MAX2

Performance

- › Nominal flow rate and pressure drop same as EXAPOR®MAX2
- › EXAPOR®Light filter elements fully compatible to EXAPOR®MAX2 filter elements:
 - Dirt holding capacity approx. 40 % less compared to EXAPOR®MAX2
 - 500 h recommended service life

APPLICATIONS

- › Hydraulic and lubrication systems with up to 500 h service life
- › Low and medium spec. systems without high cold start requirements or high flow dynamics

Duplex Filter Series



APPLICATIONS



ARGO-HYTOS offers you an ideal solution for uninterrupted machine operation with its new Duplex filter range. The perfect combination of highly effective filtration and advanced design allows for high volume flow rates at low differential pressures.

By uniting tried and tested functionality with the latest technology, ARGO-HYTOS was able to expand the range of application of its filtration solutions to include industrial applications.

The completely new change-over method facilitates simple and safe handling while at the same time guaranteeing maximum ease of use.

The performance characteristics of the EXAPOR®MAX 2 filter elements ensure optimum filtration performance, coupled with a long service life and excellent fatigue strength.

Benefits

- › High-tech change-over switching mechanism secures ease of use and failure proof 24-7 operation
- › In-line change-over ensures maximum flow rates with lower pressure drop and less switching force
- › Totally new technical concept outperforms competitor's solutions!
- › Effortless in-line mounting: various nominal sizes with different threads, simple line adapters
- › With electrical and / or visual clogging indicators
- › High volume flow rates of up to 1300 l/min
- › Large filter surface with high dirt holding capacity allows for extended maintenance intervals
- › Stable performance data throughout the entire service life of the filter element
- › Very simple handling
- › Modern design

Stainless Steel Filter Series



ARGO-HYTOS offers you an ideal solution for sophisticated high-tech applications with its new stainless steel filter range.

The perfect combination of highly effective filtration and advanced design allows for high volume flow rates at a low differential pressure.

By uniting tried and tested functionality with the latest technology, ARGO-HYTOS was able to expand the range of application of its filtration solutions to include industrial applications that pose special demands on hydraulic components.

The slim design, together with new and innovative manufacturing technologies, allow for lower material input and cost-efficient parts. The materials used make the filters suitable for a broad range of application – e.g. oil and gas filtration, water filtration, chemical applications, shipbuilding and offshore industry.

The performance characteristics of the EXAPOR®MAX 2 filter elements ensure optimum filtration performance, coupled with a long service life and excellent fatigue strength.

Benefits

- › Effortless in-line mounting
- › With electrical and / or visual clogging indicators
- › Low differential pressure
- › Stable performance data throughout the entire service life of the filter element
- › Excellent resistance to acids and alkaline solutions, as well as to water-based liquids and fluids
- › Modern, space-saving design

Return, Suction & Return-Suction In-line-Filters



APPLICATIONS



After the successful launch of this newly developed series, ARGO-HYTOS extends the product family.

The ECO-friendly and efficient alternative to spin-on filter provides the necessary security for the oil cleanliness and reduces life-cycle-costs significantly.

This new filter series for in-line mounting now offers filter solutions in the suction, return and return-suction filter area up to $Q = 330 \text{ l/min}$. The patented filter element technology EXAPOR®MAX 2 is also available for this filters and offers excellent values in terms of low pressure drop and dirt holding capacity and is thus ideally suited for modern machines.

Advantages

- › Efficient and environmentally friendly alternative to spin-on
- › Serviceability in compact designed machines
- › Effortless in-line mounting
- › Robust and corrosion-resistant construction
- › Stable performance data throughout the entire service life of the filter element

Clogging Indicators for Many Applications



APPLICATIONS



The new screw-in clogging indicators from ARGO-HYTOS offer the greatest possible flexibility and reliability in monitoring the filter contamination of pressure and high-pressure filters. The modular design allows a variety of connector configurations for industrial and mobile applications.

The five electrical interfaces, most commonly used in the hydraulics, are available. Visual displays with automatic or manual reset complete the new product range.

Advantages

- › Large range of parts for various applications
- › Robust design for reliable monitoring
- › IP67; dust-tight and protected against temporary immersion
- › For all pressure and high-pressure filters from ARGO-HYTOS
- › Also suitable for block mounting
- › Simple retrofitting possible

Filtration

Reliable Tank Ventilation



APPLICATIONS



The ARGO-HYTOS ventilating filter series L1.0807/L1.0808/L1.0809 are now available in a new design. The improved outer contour of the filters facilitates assembly and service. Inside, there is still the proven technology:

- › As standard, a 2µm composite filter material is used to clean the sucked air from dirt.
- › Versions with double check valve allow an increase of the pressure level in the tank, which prevents cavitation. Simultaneously, air exchange with the environment is minimized, reducing dirt ingress and thus extending the filter lifetime.
- › The oil separator is used against splashing oil in mobile operation.
- › The patented vandalism proof versions can only be removed by means of a special tool. Unwanted access to the tank or theft of the ventilating filter is made more difficult.

Part of the new design is the robust silver-colored adhesive label. Printing of the label during final assembly also allows customer specified configuration.

All improvements are also incorporated in the filling and ventilating filters of the series LE.0817/LE.0827/LE.0818/LE.0819.

Filtration

Suction Filter



APPLICATIONS



Characteristics

- › Tank mounting
- › Connection up to G1¼
- › Nominal flow rate up to 45 l/min
- › Pressure fluid temperature range - 30°C ... + 100°C (temporary - 40°C ... + 120°C)

Advantages

- › Vertical and horizontal mounting position
- › The integrated closing valve allows simple filter maintenance also with installation below oil level
- › Unchanged space, therefore exchangeable with the previous series ES 074
- › Low pressure loss and excellent oil cleanliness by the use of EXAPOR®MAX 2 filter elements

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