RE 08140
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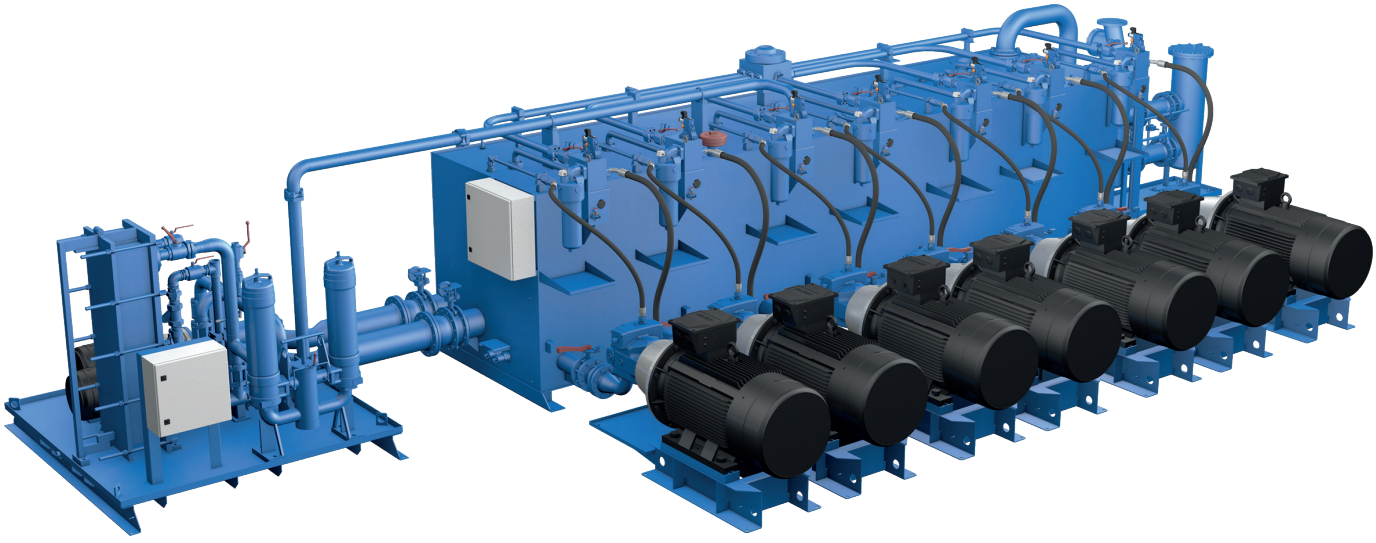
ABMAXX – Large modular HPU

Technical Information



Content

Product Description

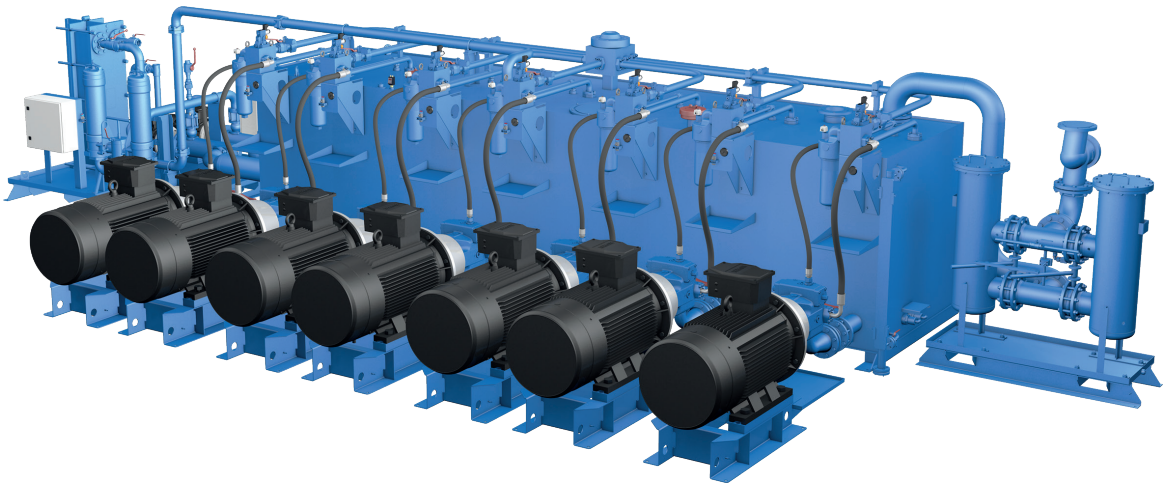
With ABMAXX, Bosch Rexroth is the first hydraulic supplier to offer a modular system for large HPUs.
ABMAXX reduces significantly the time for engineering and commissioning of large HPUs in green field or modernization projects.
Our hydraulic specialists can build up a quotation within 5 days, including footprints, 3d drawings, hydraulic schematics and list of material.
OEMs and end user are therefore able to reduce their basic engineering time by up to 80 percent.
The pre-configured modules from ABMAXX are based on highly available standard components. The modular design reduces the costs and increases the service lifetime significantly. The faster engineering and commissioning time is achieved with the modular concept.
This concept combines the advantages of a standardization allowing sufficient freedom for individual solutions.
Therefore, the engineers from Bosch Rexroth have defined 6 basic modules: tank unit, motor pump unit, return filter unit, circulation unit, pump block and accumulator unit.
Each module is based on proven construction and tried and tested design and composed on highly available standard products. The modules can operate with mineral oil as well as with special fire resistant fluids, which is often the requirement in the metallurgical sector.

Details of the technical specification see TS

- Tank in steel and stainless steel
- Voltage valves 24 VDC
- Voltage motors 400/690 V – 50 Hz
- Shut off valve with position monitoring
- Medium mineral oil
- Paint Rexroth standard
- Wiring Rexroth standard
- Placement of the modules as shown

ABMAXX tank sizes start with 2,000 l up to 12,500 l.
With the three pressure levels 160, 210 and 315 the concept complies with the increasing requirements of high pressure systems. The possible hydraulic flows vary from 345 l/pm up to 2,160 l/pm.
The main motor pump unit and the circulation unit are always equipped with a stand-by unit offering therefore highest system availability.
Stand-by units are also optionally available only with one motor pump group.
Proofed safety design, together with the necessary documentation, helps the design engineers to comply with the relevant safety regulations.

The standardization reduces the system costs and simplifies the maintenance work. All modules are designed for easy accessibility to the components. In addition, the standardization reduces the maintenance and service effort during the whole operation life time as the used standard components are highly available and will also remain in our product portfolio for a long time.
A maintenance friendly design also reduces the time for the exchange of the components.
ABMAXX reduces the engineering of complete HPUs as well as for separate modules. The HPUs comply fully with the requirements in steel plants and big presses, regarding function and performance.



Advandages

Swift integration in the overall design
- Swift feasibility study and determination of footprint
- Compliance with relevant safety regulations
- Detailed documentation
- Also suitable for HF media (on request)
- Six modules: MTU – Tank Unit, MPU – Motor Pump Unit, MCU – Circulation Unit, MPB – Pump Blocks, MFU – Return Filter Unit, MAU – Accumulator Unit

Low initial investment costs and high availability
- Composed of highly available standard components
- Low engineering effort
- Reduction of engineering errors by using preconfigured modules

Accelerated quote phase
- Quotation, circuit diagram, parts list and 3D models in 5 days
- Proven construction and tried-and-tested design

Reduction of total cost of ownership
- Maintenance friendly design
- Impressive service life of components
- Reduction of tank size with myCro system

Time saved and errors avoided
- Always the same design features
- Engineering errors ruled out
- Optimized for transportation and handling
- Extensive installation documentation

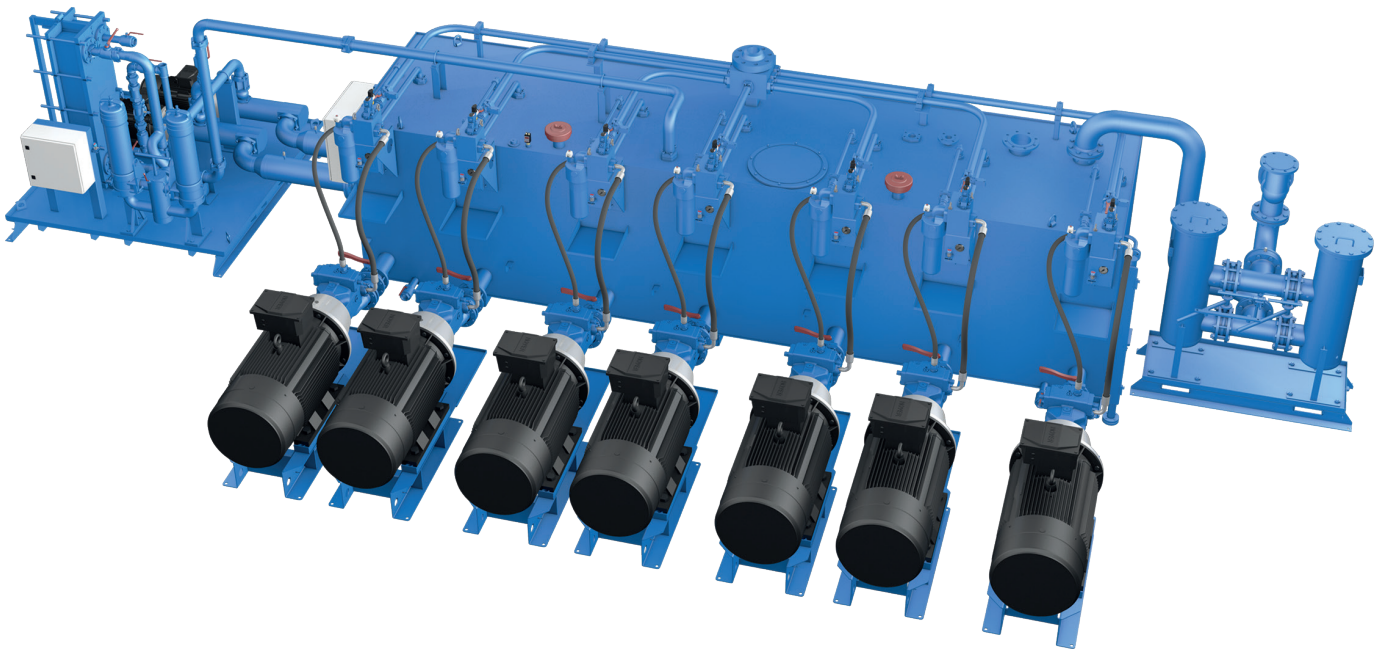
Low storage costs
- Identical parts concept
- Highly available standard components

High system availability (24/7)
- Standardized solutions
- Modules are composed of highly available standard components

Reduced operating costs
- Up to 80 % energy saving (variable speeds)
- Impressive service life of components

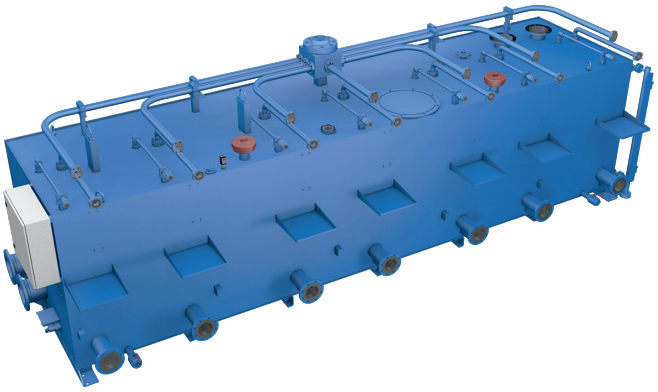
Impressive identical parts concept
- Option for connectivity
- Basic modules with standardized design features
- Low storage costs

Maintenance friendly design
- Good access to components and connections
- Uncomplicated and swift replacement of components



Overview of the Modules

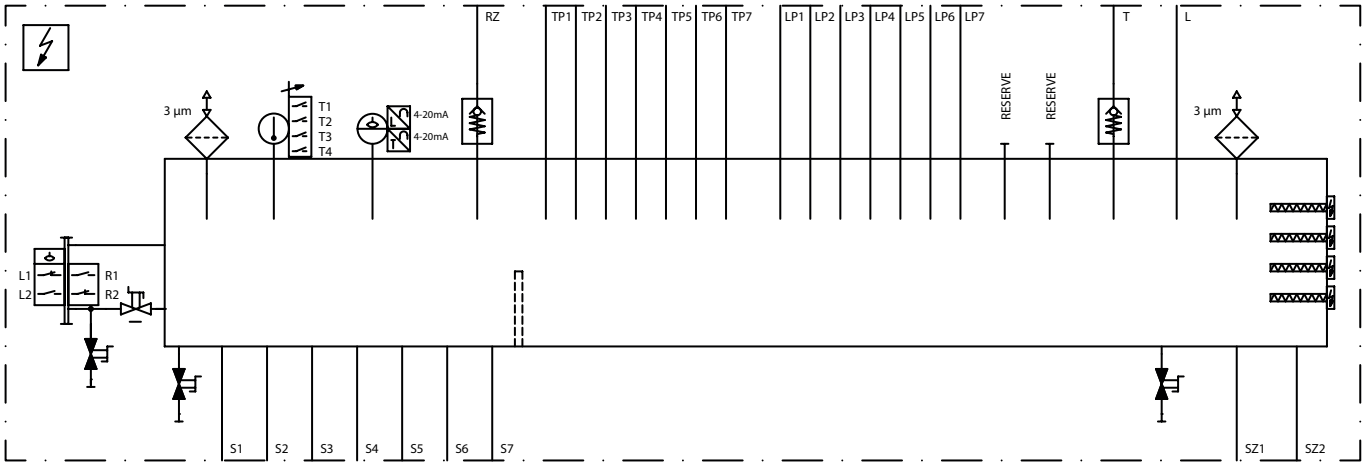
Modular Tank Unit MTU



Modular Tank Unit MTU

- Tank size – 2,000 l up to 12,500 l
- Tank top cover with leakage edge to avoid leakage spill during filter replacement
- Until tank size 4,000 l – double return filter with 10 µm integrated in the tank
- Oil level indicator on the outside with 4 level switches, as well as an outlet for taking oil probes
- Temperature sensor with 4 temperature switches and visual temperature indicator
- Analogue sensor for monitoring oil level and temperature with 4 to 20 mA signal output (connection to ODiN possible)

Hydraulic schematic

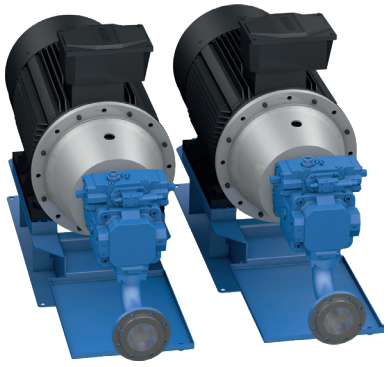


Variant overview

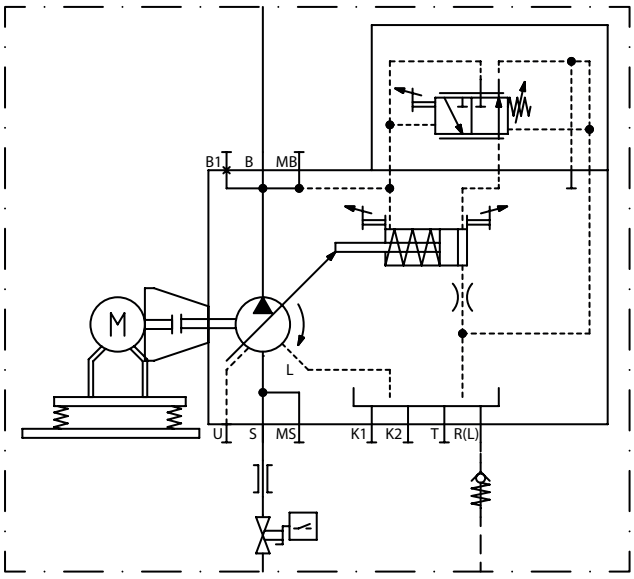
Tank type	Tank size in l	Usable volume in l	Number pumps additionally each 1x stand-by	Material number	Type / description
ABMAXX	2000	1860	2x A4VSO125	R920063343	ABTSR-MTU-02000-2XA4VSO125
				R920069703	ABTSR-MTU-02000-2XA4VSO125-V
			1x A4VSO250	R920064060	ABTSR-MTU-02000-1XA4VSO250
				R920069704	ABTSR-MTU-02000-1XA4VSO250-V
	3000	2950	2x A4VSO180	R920063344	ABTSR-MTU-03000-2XA4VSO180
				R920069705	ABTSR-MTU-03000-2XA4VSO180-V
			3x A4VSO125	R920064061	ABTSR-MTU-03000-3XA4VSO125
				R920069706	ABTSR-MTU-03000-3XA4VSO125-V
	4000	4060	3x A4VSO180	R920063345	ABTSR-MTU-04000-3XA4VSO180
				R920069707	ABTSR-MTU-04000-3XA4VSO180-V
			2x A4VSO250	R920064062	ABTSR-MTU-04000-2XA4VSO250
				R920069714	ABTSR-MTU-04000-2XA4VSO250-V
	6000	5870	4x A4VSO180	R920063346	ABTSR-MTU-06000-4XA4VSO180
				R920069709	ABTSR-MTU-06000-4XA4VSO180-V
			3x A4VSO250	R920064063	ABTSR-MTU-06000-3XA4VSO250
				R920069710	ABTSR-MTU-06000-3XA4VSO250-V
	8000	7860	4x A4VSO250	R920064065	ABTSR-MTU-08000-4XA4VSO250
				R920069711	ABTSR-MTU-08000-4XA4VSO250-V
	10000	9850	5x A4VSO250	R920063347	ABTSR-MTU-10000-5XA4VSO250
				R920069712	ABTSR-MTU-10000-5XA4VSO250-V
	12500	12150	6x A4VSO250	R920064066	ABTSR-MTU-12500-6XA4VSO250
				R920069713	ABTSR-MTU-12500-6XA4VSO250-V

Overview of the Modules

Modular Motor Pump Unit MPU



Hydraulic schematic



Modular Motor Pump Unit MPU

- Pump variants – A4 (NG 71 up to NG 355) and A10 (NG 100 up to NG 180)
- Motor size – 37 kW up to 315 kW (Fa. Hoyer) Motor voltage 400/690 V – 50 Hz (combinations depending on pumps)
- 5x standardized frames with integrated drip pan for all variants
- MPU modules as a unit package with suitable suction line, compensator and position monitored shut off valve

Variant overview A10VSO

Frequency	50 Hz / 1450 min^{-1}		50 Hz / 1450 min^{-1}	E-Motor Hoyer		
Pump A10VSO	q_{vmax} in l/min	p_{max} in bar	Power in kW		Material number	Type / description
100DR	138	129	37,0	225S	R920069151	ABPSA-MPU-A10VSO100DR-37KW-HOY
					R920069550	ABPSA-MPU-A10VSO100DR-37KW-HOY-V
		160	45,0	225M	R920069152	ABPSA-MPU-A10VSO100DR-45KW-HOY
					R920069551	ABPSA-MPU-A10VSO100DR-45KW-HOY-V
		196	55,0	250M	R920069470	ABPSA-MPU-A10VSO100DR-55KW-HOY
					R920069552	ABPSA-MPU-A10VSO100DR-55KW-HOY-V
		273	75,0	280S	R920069471	ABPSA-MPU-A10VSO100DR-75KW-HOY
					R920069553	ABPSA-MPU-A10VSO100DR-75KW-HOY-V
		280	90,0	280M	R920069481	ABPSA-MPU-A10VSO100DR-90KW-HOY
					R920069554	ABPSA-MPU-A10VSO100DR-90KW-HOY-V
140DR	193	119	45,0	225M	R920069153	ABPSA-MPU-A10VSO140DR-45KW-HOY
					R920069555	ABPSA-MPU-A10VSO140DR-45KW-HOY-V
		148	55,0	250M	R920069482	ABPSA-MPU-A10VSO140DR-55KW-HOY
					R920069556	ABPSA-MPU-A10VSO140DR-55KW-HOY-V
		204	75,0	280S	R920069154	ABPSA-MPU-A10VSO140DR-75KW-HOY
					R920069557	ABPSA-MPU-A10VSO140DR-75KW-HOY-V
		246	90,0	280M	R920069480	ABPSA-MPU-A10VSO140DR-90KW-HOY
					R920069558	ABPSA-MPU-A10VSO140DR-90KW-HOY-V
		280	110,0	315S	R920069475	ABPSA-MPU-A10VSO140DR-110KW-HOY
					R920069559	ABPSA-MPU-A10VSO140DR-110KW-HOY-V
180DR	248	120	55,0	250M	R920069157	ABPSA-MPU-A10VSO180DR-55KW-HOY
					R920069560	ABPSA-MPU-A10VSO180DR-55KW-HOY-V
		167	75,0	280S	R920069158	ABPSA-MPU-A10VSO180DR-75KW-HOY
					R920069569	ABPSA-MPU-A10VSO180DR-75KW-HOY-V
		203	90,0	280M	R920069476	ABPSA-MPU-A10VSO180DR-90KW-HOY
					R920069570	ABPSA-MPU-A10VSO180DR-90KW-HOY-V
		251	110,0	315S	R920069477	ABPSA-MPU-A10VSO180DR-110KW-HOY
					R920069571	ABPSA-MPU-A10VSO180DR-110KW-HOY-V
		280	132,0	315M	R920069478	ABPSA-MPU-A10VSO180DR-132KW-HOY
					R920069572	ABPSA-MPU-A10VSO180DR-132KW-HOY-V

Overview of the Modules

Modular Motor Pump Unit MPU

Variant overview A4VSO

Frequency	50 Hz / 1450 min^{-1}		50 Hz / 1450 min^{-1}	E-Motor Hoyer		
Pump A4VSO	q_{vmax} in l/min	p_{max} in bar	Power in kW		Material number	Type / description
71DR	98	185	37,0	225S	R920069736	ABPSA-MPU-A4VSO71DR-37KW
					R920069908	ABPSA-MPU-A4VSO71DR-37KW-V
		238	45,0	225M	R920069737	ABPSA-MPU-A4VSO71DR-45KW
					R920069909	ABPSA-MPU-A4VSO71DR-45KW-V
		295	55,0	250M	R920069738	ABPSA-MPU-A4VSO71DR-55KW
					R920069910	ABPSA-MPU-A4VSO71DR-55KW-V
		350	75,0	280S	R920069739	ABPSA-MPU-A4VSO71DR-75KW
					R920069911	ABPSA-MPU-A4VSO71DR-75KW-V
125DR	172	162	55,0	250M	R920069740	ABPSA-MPU-A4VSO125DR-55KW
					R920069929	ABPSA-MPU-A4VSO125DR-55KW-V
		227	75,0	280S	R920069741	ABPSA-MPU-A4VSO125DR-75KW
					R920069930	ABPSA-MPU-A4VSO125DR-75KW-V
		276	90,0	280M	R920069742	ABPSA-MPU-A4VSO125DR-90KW
					R920069931	ABPSA-MPU-A4VSO125DR-90KW-V
		342	110,0	315S	R920069743	ABPSA-MPU-A4VSO125DR-110KW
					R920069932	ABPSA-MPU-A4VSO125DR-110KW-V
180DR	248	193	90,0	280M	R920069744	ABPSA-MPU-A4VSO180DR-90KW
					R920069916	ABPSA-MPU-A4VSO180DR-90KW-V
		237	110,0	315S	R920069759	ABPSA-MPU-A4VSO180DR-110KW
					R920069917	ABPSA-MPU-A4VSO180DR-110KW-V
		282	132,0	315M	R920069760	ABPSA-MPU-A4VSO180DR-132KW
					R920069918	ABPSA-MPU-A4VSO180DR-132KW-V
		344	160,0	315L	R920069761	ABPSA-MPU-A4VSO180DR-160KW
					R920069919	ABPSA-MPU-A4VSO180DR-160KW-V
250DR	344	167	110,0	315S	R920069762	ABPSA-MPU-A4VSO250DR-110KW
					R920069920	ABPSA-MPU-A4VSO250DR-110KW-V
		249	160,0	315L	R920069749	ABPSA-MPU-A4VSO250DR-160KW
					R920069921	ABPSA-MPU-A4VSO250DR-160KW-V
		311	200,0	315L	R920069750	ABPSA-MPU-A4VSO250DR-200KW
					R920069922	ABPSA-MPU-A4VSO250DR-200KW-V
		350	250,0	355M	R920069751	ABPSA-MPU-A4VSO250DR-250KW
					R920069923	ABPSA-MPU-A4VSO250DR-250KW-V
355DR	489	169	160,0	315L	R920069752	ABPSA-MPU-A4VSO355DR-160KW
					R920069933	ABPSA-MPU-A4VSO355DR-160KW-V
		212	200,0	315L	R920069764	ABPSA-MPU-A4VSO355DR-200KW
					R920069934	ABPSA-MPU-A4VSO355DR-200KW-V
		267	250,0	355M	R920069765	ABPSA-MPU-A4VSO355DR-250KW
					R920069935	ABPSA-MPU-A4VSO355DR-250KW-V
		334	315,0	355L	R920069766	ABPSA-MPU-A4VSO355DR-315KW
					R920069927	ABPSA-MPU-A4VSO355DR-315KW-V

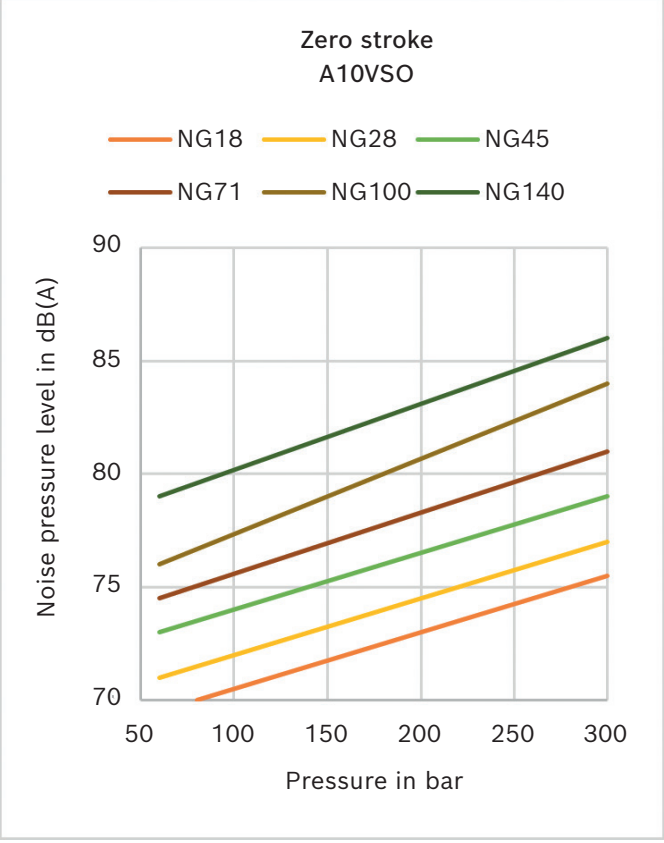
Overview of the Modules

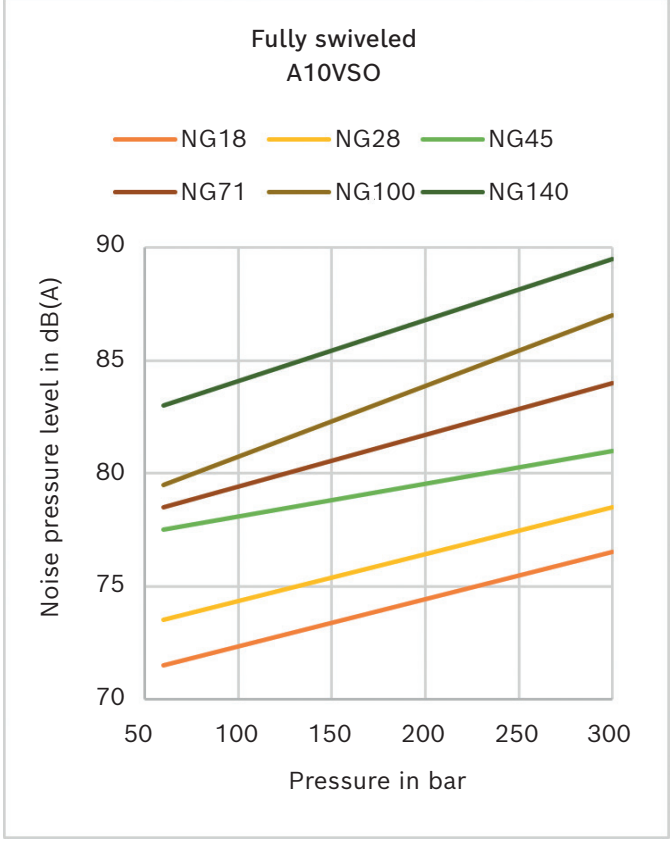
Modular Motor Pump Unit MPU

Noise values ABMAXX MPU: A10VSO

Zero stroke		
A10VSO	**Pressure in bar**	**Noise pressure level in dB(A)**
NG 18	80	70
	300	75,5
NG 28	60	71
	300	77
NG 45	60	73
	300	79
NG 71	60	74,5
	300	81
NG 100	60	76
	300	84
NG 140	60	79
	300	86

Fully swiveled		
A10VSO	**Pressure in bar**	**Noise pressure level in dB(A)**
NG 18	60	71,5
	300	76,5
NG 28	60	73,5
	300	78,5
NG 45	60	77,5
	300	81
NG 71	60	78,5
	300	84
NG 100	60	79,5
	300	87
NG 140	60	83
	300	89,5





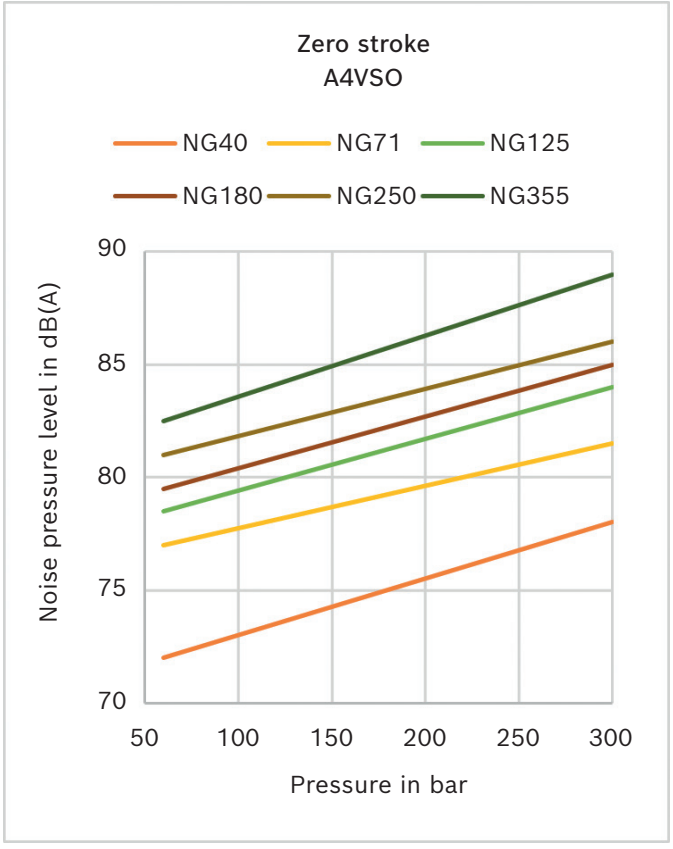
Overview of the Modules

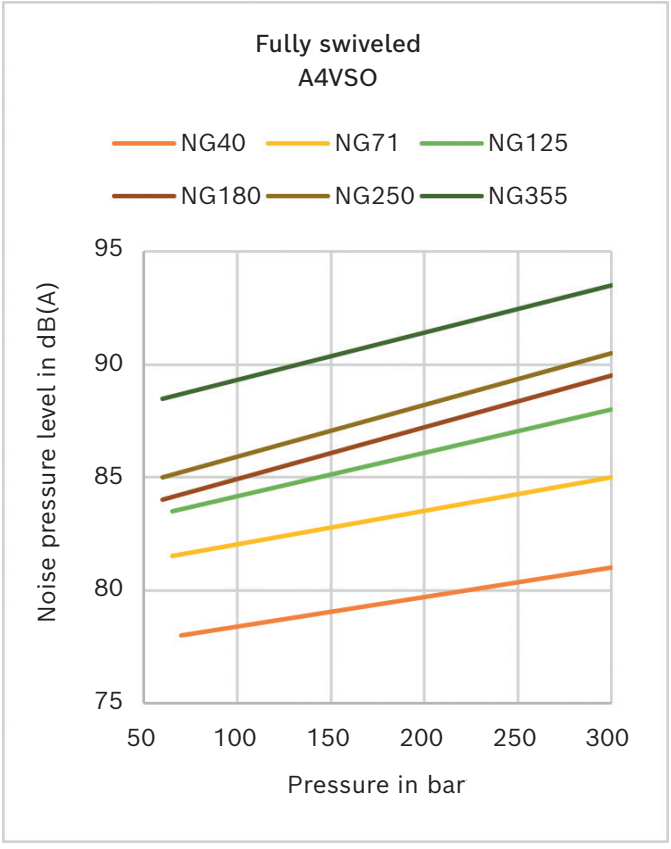
Modular Motor Pump Unit MPU

Noise values ABMAXX MPU: A4VSO

Zero stroke		
A4VSO	**Pressure in bar**	**Noise pressure level in dB(A)**
NG 40	60	72
	300	78
NG 71	60	77
	300	81,5
NG 125	60	78,5
	300	84
NG 180	60	79,5
	300	85
NG 250	60	81
	300	86
NG 355	60	82,5
	300	89

Fully swiveled		
A4VSO	**Pressure in bar**	**Noise pressure level in dB(A)**
NG 40	70	78
	300	81
NG 71	65	81,5
	300	85
NG 125	65	83,5
	300	88
NG 180	60	84
	300	89,5
NG 250	60	85
	300	90,5
NG 355	60	88,5
	300	93,5

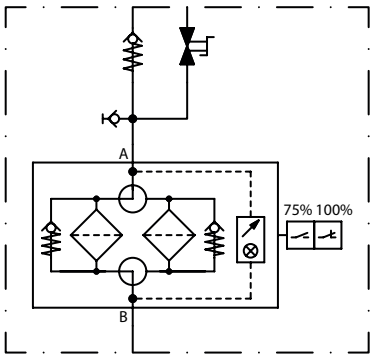




Overview of the Modules

Modular Return Filter Unit MFU

Hydraulic schematic



Modular Return Filter Unit MFU

- Filter variants – double filter switchable – 10 µm filtration rating
- 4x standardized frames with integrated drip pan for all variants
- Oil filling through ball valve (also usable as drain in T-Line)
- Electronic clogging indicator 75 % and 100 %

Variant overview

Filter type	Filter size Filtration rating 10 µm Nominal pressure 16 bar	Volume in l/min at v = 30 mm²/s and Δp = 0,5 bar	Material number	Type / description
Rexroth	2500	2200	R920058922	ABFST-MFU-16FD-2500-F10
			R920069577	ABFST-MFU-16FD-2500-F10-V
	3000	2700	R920058923	ABFST-MFU-16FD-3000-F10
			R920069578	ABFST-MFU-16FD-3000-F10-V
	4000	3400	R920058924	ABFST-MFU-16FD-4000-F10
			R920069579	ABFST-MFU-16FD-4000-F10-V
	6000	5500	R920058925	ABFST-MFU-16FD-6000-F10
			R920069580	ABFST-MFU-16FD-6000-F10-V
	7000	7400	R920058926	ABFST-MFU-16FD-7000-F10
			R920069581	ABFST-MFU-16FD-7000-F10-V
	7500	10500	R920058927	ABFST-MFU-16FD-7500-F10
			R920069582	ABFST-MFU-16FD-7500-F10-V

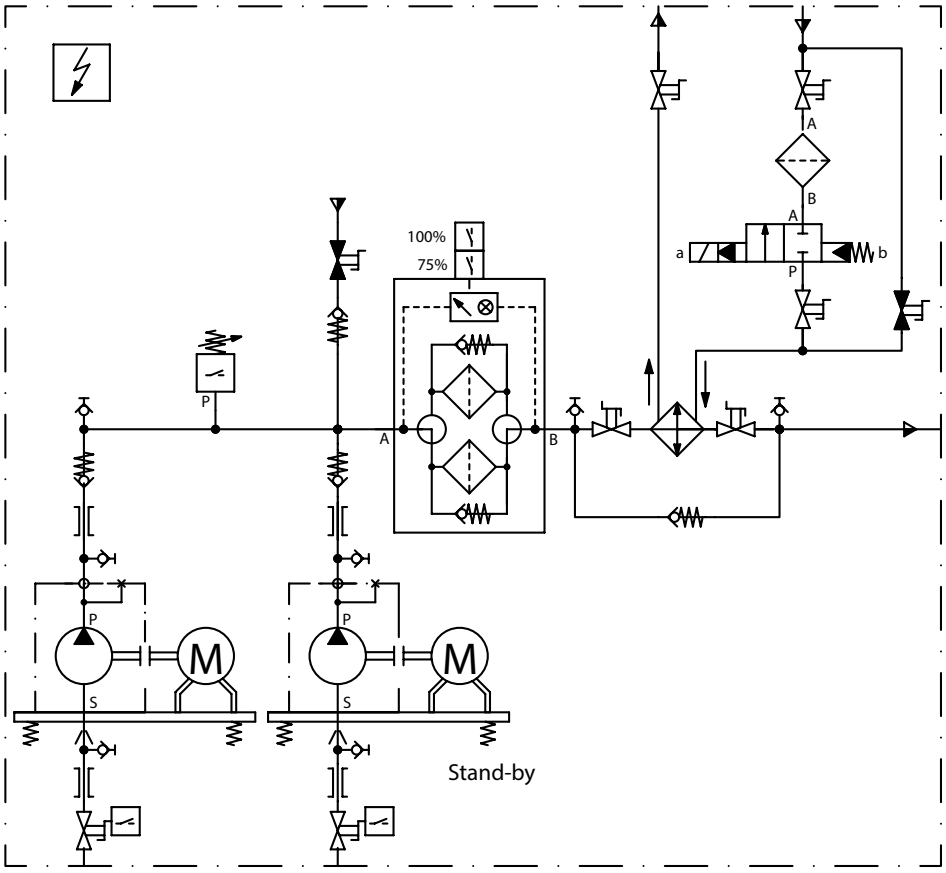
Overview of the Modules

Modular Circulation Unit MCU

Modular Circulation Unit MCU

- Circulation unit for cooling and filtering
- 6 variants, each with 3 cooler variants with a cooling capacity up to 396 kW
- Design with 2 pumps (1x stand-by)
- Design with 1 pump
- Double filter switchable with 6 micron filtration
- Screwed plate heat exchanger
- Filling port with ball valve at the filter
- Electrical water valve with dirt filter

Hydraulic schematic



Overview of the Modules

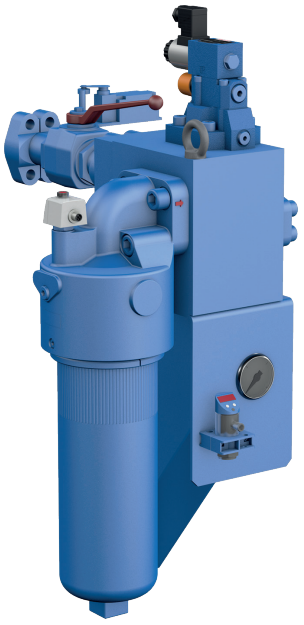
Modular Circulation Unit MCU – Variant overview

Cooler type	Oil flow in l	Power cooler in kW ΔT = 30 °C	Power E-Motor in kW	Material number	Type / description	Usable for tank in l
FP	150	36	5,5	R920064500	ABFKS-MCU-150L-36KW-F6	2000
				R920069715	ABFKS-MCU-150L-36KW-F6-V[1]	
				R920067525	ABFKS-MCU-150L-36KW-F6-1P[2]	
				R920069942	ABFKS-MCU-150L-36KW-F6-1P-V[3]	
		53	5,5	R920064499	ABFKS-MCU-150L-53KW-F6	
				R920069716	ABFKS-MCU-150L-53KW-F6-V[1]	
				R920067526	ABFKS-MCU-150L-53KW-F6-1P[2]	
				R920069943	ABFKS-MCU-150L-53KW-F6-1P-V[3]	
		66	5,5	R920063476	ABFKS-MCU-150L-66KW-F6	
				R920069717	ABFKS-MCU-150L-66KW-F6-V[1]	
				R920067527	ABFKS-MCU-150L-66KW-F6-1P[2]	
				R920069944	ABFKS-MCU-150L-66KW-F6-1P-V[3]	
	252	59	7,5	R920064501	ABFKS-MCU-252L-59KW-F6	3000/4000
				R920069718	ABFKS-MCU-252L-59KW-F6-V[1]	
				R920067528	ABFKS-MCU-252L-59KW-F6-1P[2]	
				R920069945	ABFKS-MCU-252L-59KW-F6-1P-V[3]	
		73	7,5	R920064502	ABFKS-MCU-252L-73KW-F6	
				R920069720	ABFKS-MCU-252L-73KW-F6-V[1]	
				R920067529	ABFKS-MCU-252L-73KW-F6-1P[2]	
				R920069946	ABFKS-MCU-252L-73KW-F6-1P-V[3]	
		105	7,5	R920064503	ABFKS-MCU-252L-105KW-F6	
				R920069721	ABFKS-MCU-252L-105KW-F6-V[1]	
				R920067530	ABFKS-MCU-252L-105KW-F6-1P[2]	
				R920069947	ABFKS-MCU-252L-105KW-F6-1P-V[3]	
		132	7,5	R920063477	ABFKS-MCU-252L-132KW-F6	
				R920069722	ABFKS-MCU-252L-132KW-F6-V[1]	
				R920067532	ABFKS-MCU-252L-132KW-F6-1P[2]	
				R920069948	ABFKS-MCU-252L-132KW-F6-1P-V[3]	
	406	109	11	R920064504	ABFKS-MCU-406L-109KW-F6	6000
				R920069723	ABFKS-MCU-406L-109KW-F6-V[1]	
				R920067533	ABFKS-MCU-406L-109KW-F6-1P[2]	
				R920069949	ABFKS-MCU-406L-109KW-F6-1P-V[3]	
		158	11	R920064505	ABFKS-MCU-406L-158KW-F6	
				R920069724	ABFKS-MCU-406L-158KW-F6-V[1]	
				R920067534	ABFKS-MCU-406L-158KW-F6-1P[2]	
				R920069950	ABFKS-MCU-406L-158KW-F6-1P-V[3]	
		198	11	R920063498	ABFKS-MCU-406L-198KW-F6	
				R920069725	ABFKS-MCU-406L-198KW-F6-V[1]	
				R920067535	ABFKS-MCU-406L-198KW-F6-1P[2]	
				R920069951	ABFKS-MCU-406L-198KW-F6-1P-V[3]	
	510	145	15	R920064506	ABFKS-MCU-510L-145KW-F6	8000
				R920069726	ABFKS-MCU-510L-145KW-F6-V[1]	
				R920067537	ABFKS-MCU-510L-145KW-F6-1P[2]	
				R920069952	ABFKS-MCU-510L-145KW-F6-1P-V[3]	
		211	15	R920064507	ABFKS-MCU-510L-211KW-F6	
				R920069727	ABFKS-MCU-510L-211KW-F6-V[1]	
				R920067538	ABFKS-MCU-510L-211KW-F6-1P[2]	
				R920069953	ABFKS-MCU-510L-211KW-F6-1P-V[3]	
		264	15	R920063484	ABFKS-MCU-510L-264KW-F6	
				R920069728	ABFKS-MCU-510L-264KW-F6-V[1]	
				R920067539	ABFKS-MCU-510L-264KW-F6-1P[2]	
				R920069954	ABFKS-MCU-510L-264KW-F6-1P-V[3]	
	746	181	22	R920064508	ABFKS-MCU-746L-181KW-F6	10000
				R920069729	ABFKS-MCU-746L-181KW-F6-V[1]	
				R920067540	ABFKS-MCU-746L-181KW-F6-1P[2]	
				R920069955	ABFKS-MCU-746L-181KW-F6-1P-V[3]	
		264	22	R920064509	ABFKS-MCU-746L-264KW-F6	
				R920069730	ABFKS-MCU-746L-264KW-F6-V[1]	
				R920067542	ABFKS-MCU-746L-264KW-F6-1P[2]	
				R920069956	ABFKS-MCU-746L-264KW-F6-1P-V[3]	
		330	22	R920063480	ABFKS-MCU-746L-330KW-F6	
				R920069731	ABFKS-MCU-746L-330KW-F6-V[1]	
				R920067543	ABFKS-MCU-746L-330KW-F6-1P[2]	
				R920069957	ABFKS-MCU-746L-330KW-F6-1P-V[3]	
	870	218	22	R920064510	ABFKS-MCU-870L-218KW-F6	12500
				R920069732	ABFKS-MCU-870L-218KW-F6-V[1]	
				R920067544	ABFKS-MCU-870L-218KW-F6-1P[2]	
				R920069958	ABFKS-MCU-870L-218KW-F6-1P-V[3]	
		317	22	R920064511	ABFKS-MCU-870L-317KW-F6	
				R920069733	ABFKS-MCU-870L-317KW-F6-V[1]	
				R920067545	ABFKS-MCU-870L-317KW-F6-1P[2]	
				R920069959	ABFKS-MCU-870L-317KW-F6-1P-V[3]	
		396	22	R920064189	ABFKS-MCU-870L-396KW-F6	
				R920069734	ABFKS-MCU-870L-396KW-F6-V[1]	
				R920067546	ABFKS-MCU-870L-396KW-F6-1P[2]	
				R920069960	ABFKS-MCU-870L-396KW-F6-1P-V[3]	

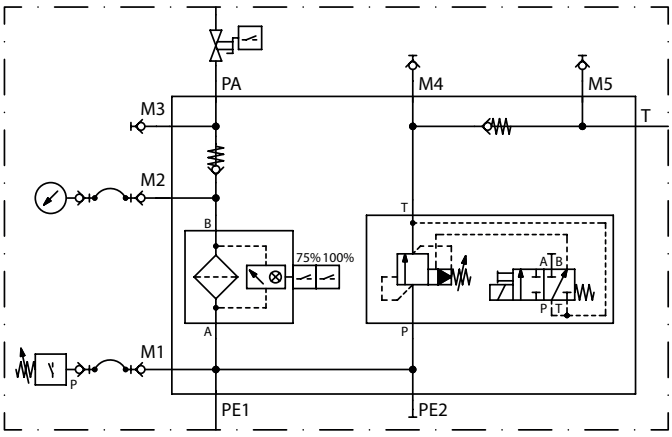
[1] FKM version; [2] Without stand-by pump; [3] Without stand-by pump, FKM version

Overview of the Modules

Modular Pump Block MPB



Hydraulic schematic



Modular Pump Block MPB

- 4 variants for Q_{max} = 200 l/min and Q_{max} = 450 l/min, as well as pressure range from 200 bar and 315 bar
- Directly mounted on the tank with permanent pressure monitoring
- Integrated pressure filtration 10 µm
- Drip pan for exchange of filter element
- If required a variant with TÜV-DB is available
- Position switch for the ball valve on the pressure line
- Integrated check valve in p and t line
- Soft start of the pump

Variant overview

Block type	Block size	Usable volume in l/min filtration rating 10 µm	Pressure rating in bar	Material number	Type / description
PSBS01	NG 10	200	200	R920065053	ABVSK-MPB-PSBS01-10-200-F10
				R920069869	ABVSK-MPB-PSBS01-10-200-F10-V
			315	R920065054	ABVSK-MPB-PSBS01-10-315-F10
				R920069870	ABVSK-MPB-PSBS01-10-315-F10-V
	NG 20	450	200	R920065055	ABVSK-MPB-PSBS01-20-200-F10
				R920069871	ABVSK-MPB-PSBS01-20-200-F10-V
			315	R920063373	ABVSK-MPB-PSBS01-20-315-F10
				R920069872	ABVSK-MPB-PSBS01-20-315-F10-V

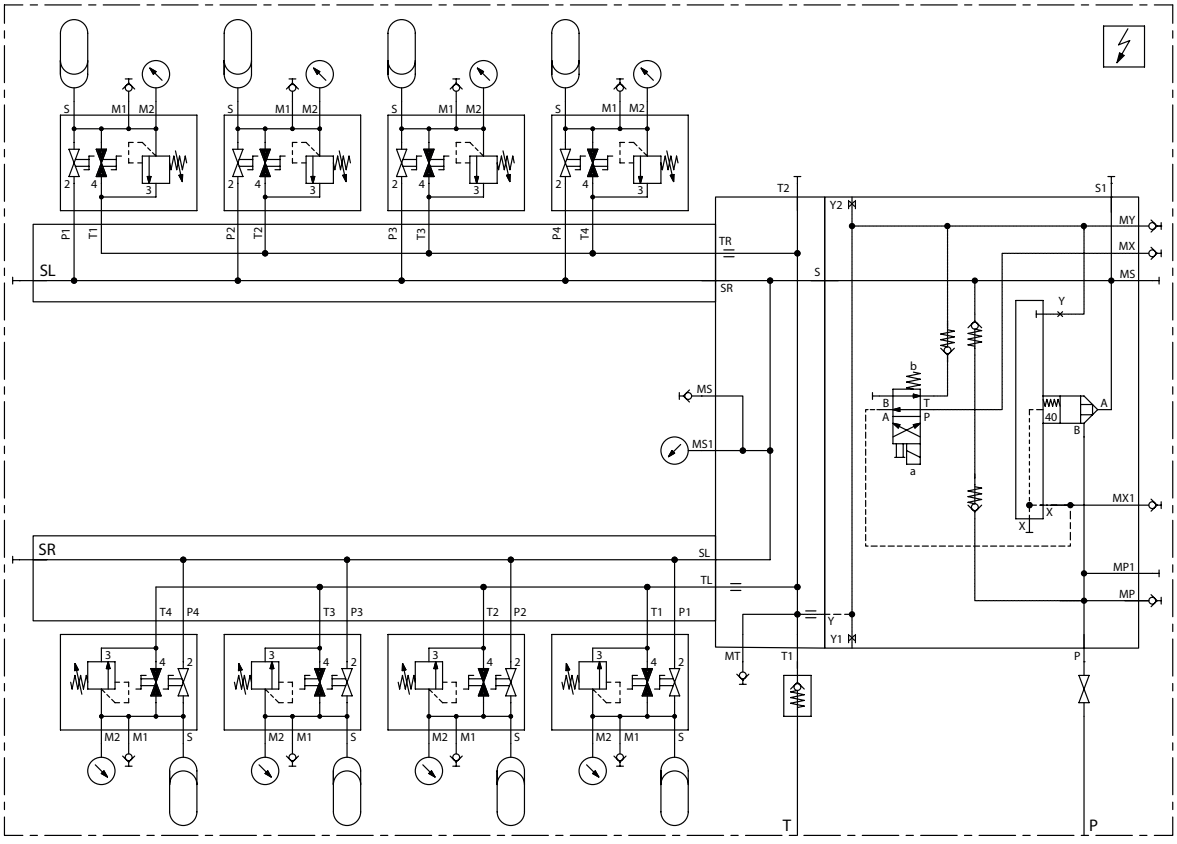
Overview of the Modules

Modular Accumulator Unit MAU

Modular Accumulator Unit MAU

- Pressure accumulator 50 l with safety manifold
- Variants with 3, 5, 6 and 10 x 50 l
- Electrical shut-off/release of the pressure
- Manual shut-off on the safety manifold per accumulator quantity 3 and 5 plus 1 x electrical shut off only with single mounting

Hydraulic schematic



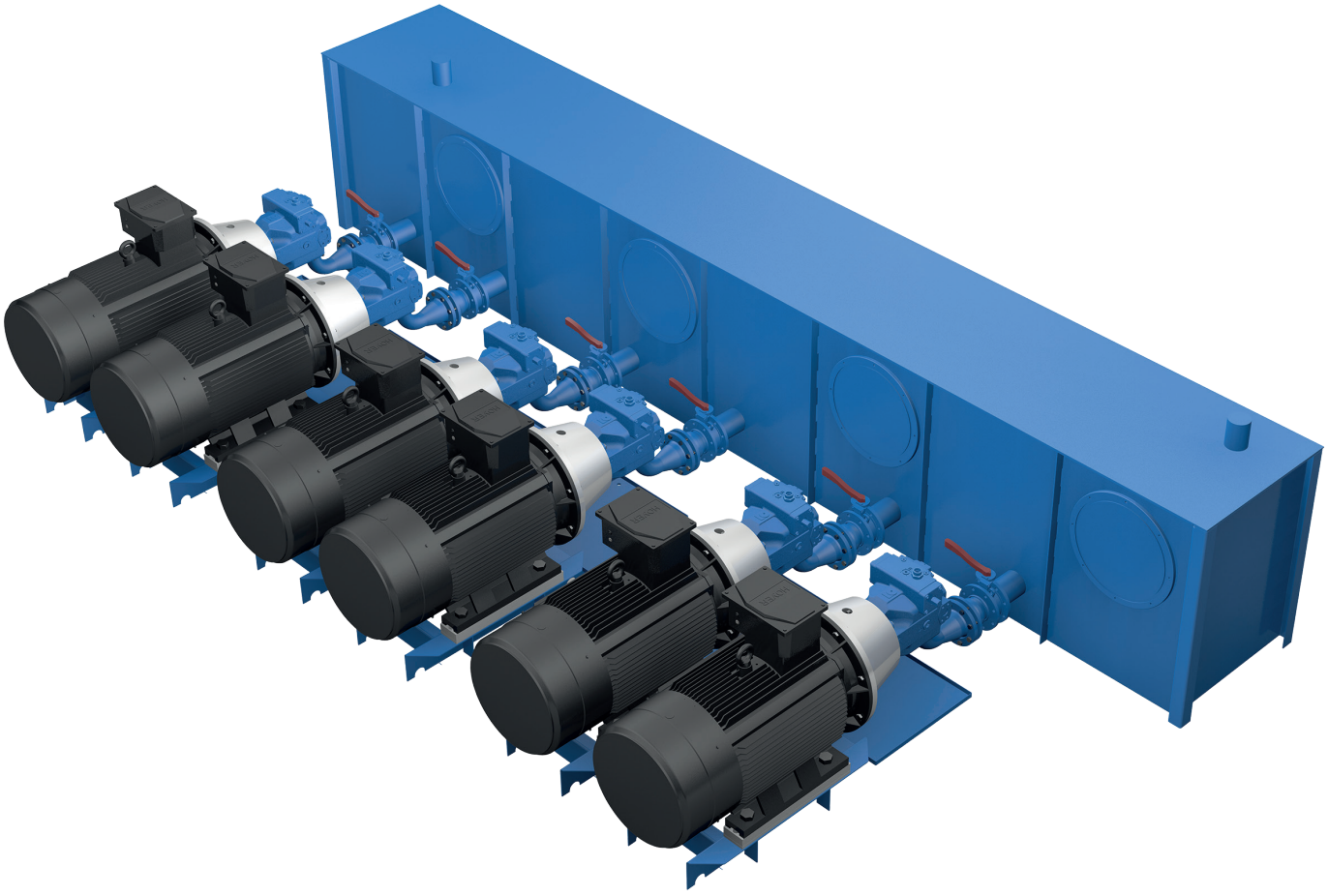
myCro

ABMAXX for industrial applications is a future orientated concept and can also be equipped with the latest innovations from Rexroth. One example therefore is the tank downsizing concept myCro with which the TCO (Total cost of ownership) can be reduced significantly.

As an option Bosch Rexroth can coffer patented and proven myCro downsized tanks for the following sizes:

Tank size 1,500 l myCro – Replacement of a MTU 3,000 l
Tank size 3,000 l myCro – Replacement of a MTU 6,000 l
Tank size 4,500 l myCro – Replacement of a MTU 8,000 l
Tank size 6,000 l myCro – Replacement of a MTU 12,500 l

The inner tank design of these myCro tanks was optimized based on advanced fluid simulation programs; nevertheless, the return flow of the system must also always be taken into account.
That is why a selection of the tank size must be done by a Bosch Rexroth expert considering the specific application.



Outlook into the Future

Energy efficiency, environmental protection and connectivity are the future topics of industry.
For this reason, we also want to offer the right solution for big power units.
Therefore we are expanding the already available modular system with our variable-speed Sytronix drive solutions, defined sensor packages and integration into our IoT platform. The combination of benchmark axial piston pumps, energy-efficient drives, condition monitoring and demand-oriented maintenance increases the availability of our products while significantly reducing operating costs.

Sizing Guidelines ABMAXX

Medium	Standard mineral oil HLP46 (optional HFD-U with FKM sealing)
Reservoir and piping material	Carbon steel (optional stainless steel available)
Reservoir size to pump flow	6 times
Circulation of the reservoir volume	4 times in 1 hr
Circulation of oil volume flow to water volume flow	1,5 times
Velocity pressure line	4 up to 5 m/s
Velocity return line	2 up to 3 m/s
Velocity suction line	0,5 m/s
Filtration	6 / 10 µm
Heater capacity per 1000 l	1 kW
Motor power (kW) MPG to cooling capacity	30 %

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