

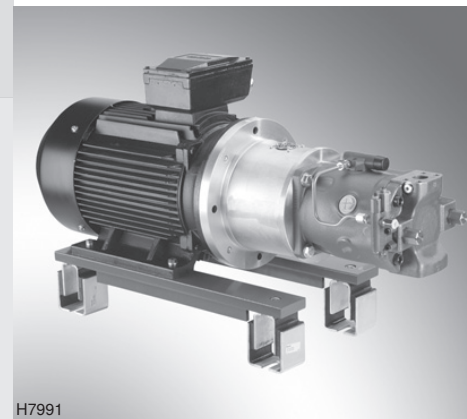
Motor-pump group

RE 51174/ 01.13
Replaces: 11.12

1/14

Type ABAPG

with pump type: A10VSO
Series 32: Sizes 45 to 180
Electric motor frame size 132M to 315M



H7991

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Features

- In the motor-pump groups, electric energy is converted into hydraulic energy.
- They have been designed for hydrostatic drives in open circuits.
- Electric motor, design IM B3/B5 (ABAPG)
 - Pump fastened at the electric motor with rigid pump carrier and coupling
 - Low operating noise
 - Versatile possible applications on tank, base frame or separate installation
 - Clear, maintenance-friendly set-up
 - With axial piston pump A10VSO (variable displacement pump), shock and vibration absorber type
 - DRS (hydraulic flow controller) und LA6DS (power controller with pressure cut off) adjustment

Ordering code

ABAPG

A10VSO

V

S

B

/

CB

4

5

2

3

/S

E

HOY

Assembly
with motor de-
sign B35 = ABAPG

Pump type
Axial piston
pump A10VSO = A10VSO
According to data sheet 92714

Displacement
10 ... 140 cm³ per rotation = 10 ... 140

Control and adjustment device
e.g.
Pressure/flow controller,
hydraulic, X-T closed = DRS
Power controller with pressure cut off and flow
control, hydraulic, X-T closed = LA6DS

Seal material (according to DIN ISO 1629)
FKM = V

Shaft end version
Splined shaft (ANSI B92.1a standard shaft) = S

Mounting flange
ISO 4-hole = B

Motor power
7.5 kW ... 132 kW = 7.5 ... 132

Motor supplier
HOY =Hoyer Mo-
tors (preferred)
SIE = Siemens
VEM = VEM

Damping bearing design
E = Elastic
damping bearing

Pump carrier design
S = Rigid pump
carrier AB 03337

Motor protection
3 = PTC resistor with
3 temperature sensors

Efficiency class
2 = IE 2

Rated frequency
5 = 50 Hz

Number of pole pairs
4 =

Rated voltage
CB = 400 / 690 at 50 Hz

Order example:
ABAPG-A10VSO 45DRSVSB/18,5CB4523/SE HOY

Set-up of the motor-pump group

- Pump
- Electric motor
- Pump carrier
- Coupling
- Strips
- Damping bearing

STEP files of the relevant assemblies on request.

Technical data (For applications outside these parameters, please consult us!)

Line connections				See table Line connections on page 16	
Hydraulic fluid				Mineral oil HLP according to DIN 51524; part 2 e.g. with operating temperature 50 °C ISO VG46 DIN ISO 3448 (other fluids on request!) • Please observe our provisions according to data sheet 90220, 90221. • Different oil types must not be mixed as this might result in degradation and deterioration of the lubricity. • According to the operating conditions, the fluid must be renewed at certain intervals.	
Pump type				A10VSO series 32 according to data sheet 92714	
– Direction of rotation				R = clockwise	
Operating pressure, absolute					
– Inlet		$p_{\min-\max}$	bar	0.8 to 10 for sizes 45 to 100, 1 to 10 from size 140	
– Output		p_{nom}	bar	280	
– Peak pressure		$p_{\max}$	bar	350	
– Leakage port		$p_{\max}$	bar	2	
Hydraulic fluid temperature range, observe viscosity range				ϑ	–25 to +90
– T_{optimal} with HLP 46 (DIN 51524)		ϑ	°C	+45 to +55	
– $T_{\max}$ in continuous operation		ϑ	°C	< +65	
For start-up at low temperatures a heating can be provided. For cooling, you can either provide an oil/water or an oil/air cooler. See data sheet 50126 (ABUKG) and 50112 (KOL/KOLP).					
Cleanliness classes according to ISO code				Maximum admissible degree of contamination of the hydraulic fluid according to ISO 4406 (c) depending on the pump type used ¹⁾ . At least cleanliness class 20/18/15 must be achieved.	
Viscosity range		ν	mm²/s	16 to 36 optimally 10 to 1000 for short periods (see data sheet 92714)	
Electric motor	– Motor type			Three-phase asynchronous motor	
	– Efficiency class			IE2	
	– Number of pole pairs			4	
	– Voltage according to IEC 38 U		V	400 / 690 at 50 Hz (CB)	
	– Speed		n	min ^{–1}	1450 at 50 Hz
	– Protection class		IP	55	
	– Installation position			Horizontal	
Surface treatment				By default, all steel components and components are at least provided with temporary corrosion protection (e.g. for transport).	

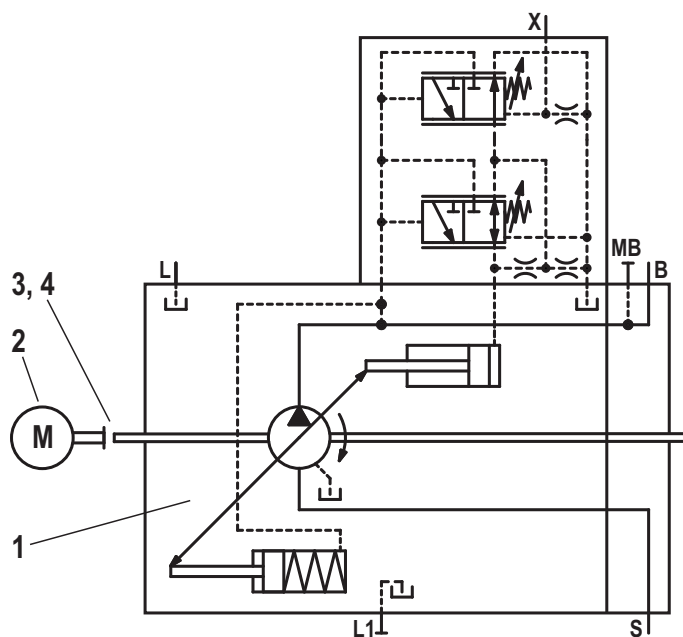
¹⁾ The cleanliness classes specified for the components must be adhered to in hydraulic systems. Effective filtration prevents faults and at the same time increases the life cycle of the components.

For selecting the filters, see data sheet 51501.

 **Notice:** For assembly, commissioning and maintenance of hydraulic systems please observe data sheet 07900. The motor-pump group is constructed and manufactured in accordance with the harmonized EN standards/specifications.

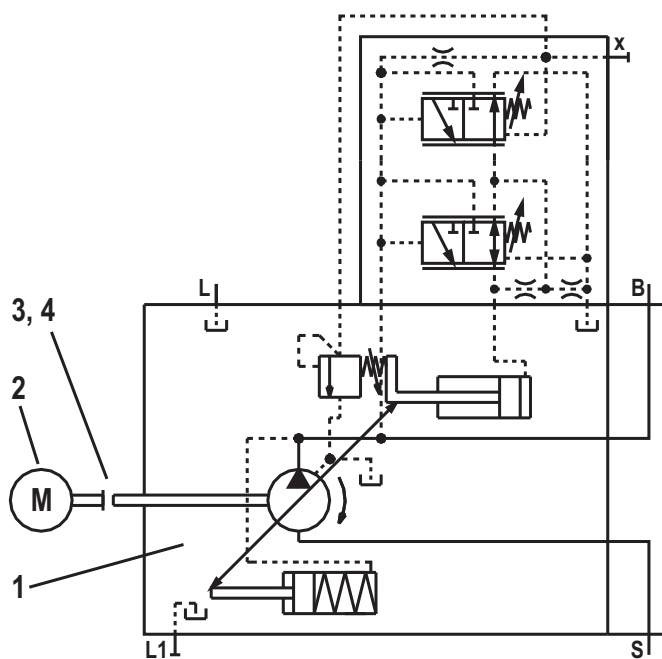
Circuit diagrams

Axial piston pump with flow controller, hydraulic (basic design), type ABAPG...DRS



- 1 Axial piston pump A10VSO
- 2 Electric motor
- 3 Pump carrier
- 4 Coupling

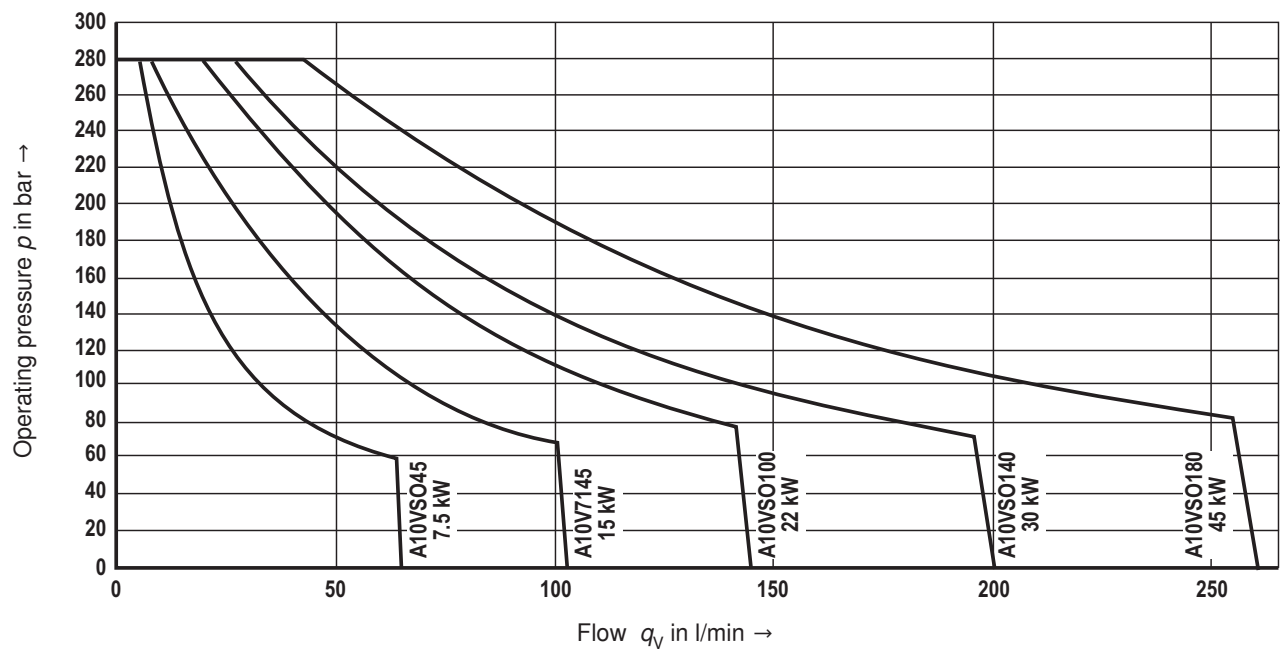
Axial piston pump with power controller with pressure cut off, type ABAPG...LA6DS



- 1 Axial piston pump A10VSO
- 2 Electric motor
- 3 Pump carrier
- 4 Coupling

Performance characteristic

Axial piston pump with power controller, type ABAPG...LA6DS measured at $n = 1450 \text{ min}^{-1}$
(factory setting)



 For the project planning, please use the performance characteristic from data sheet 92714.

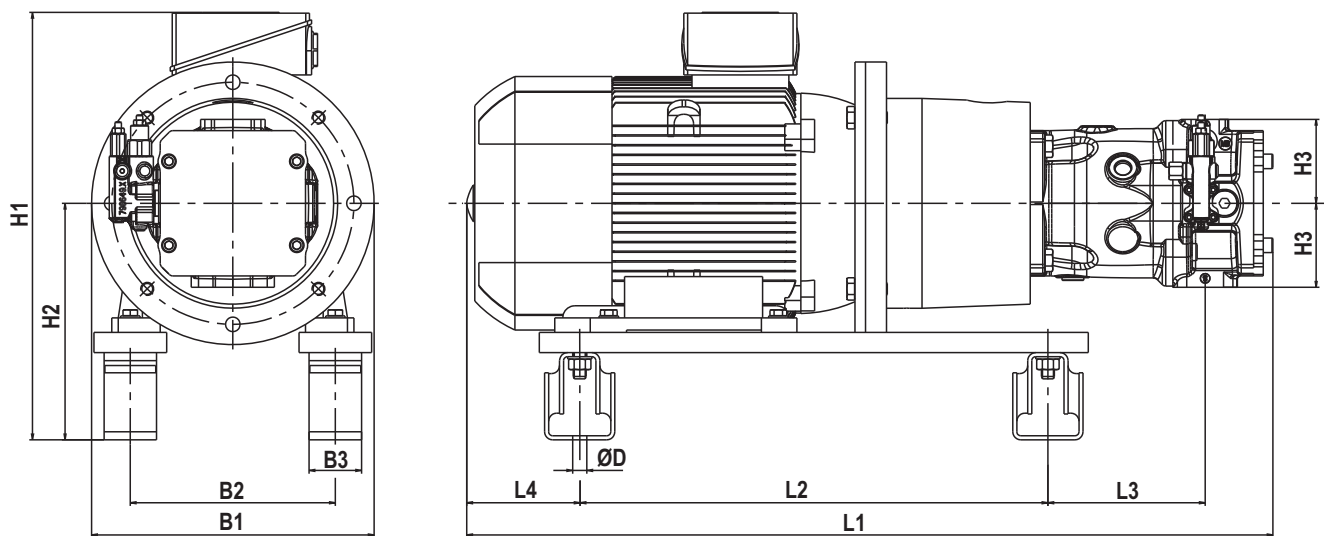
Standard program incl. preferred types ABAPG-A10VSO, series 32

Frequency	50 Hz 1450 min ⁻¹									
Pump	q _v max in l/min	p _{max} in bar	Power in kW	Motor frame size	ABAPG					
					VEM	MKZ	HOY	MKZ	SIE	MKZ
A10VSO 45...32 DRS	62	78	11.0	160M	R901342822	A3	R901342824	A3	R901342825	A3
		118	15.0	160L	R901342818	A2	R901342819	A3	R901342820	A3
		157	18.5	180M	R901342831	A3	R901342832	A3	R901342833	A3
		193	22.0	180L	R901342827	A3	R901342828	A3	R901342829	A3
		276	30.0	200L	R901342834	A3	R901342835	A3	R901342836	A3
		280	37.0	225S	R901342837	A3	R901342838	A3	R901342839	A3
A10VSO 71...32 DRS	98	68	15.0	160L	R901342840	A3	R901342841	A3	R901342842	A3
		88	18.5	180M	R901342846	A3	R901342847	A3	R901342848	A3
		112	22.0	180L	R901342843	A2	R901342844	A3	R901342845	A3
		158	30.0	200L	R901342849	A3	R901342850	A3	R901342851	A3
		198	37.0	225S	R901342855	A3	R901342856	A3	R901342857	A3
		244	45.0	225M	R901342852	A3	R901342853	A3	R901342854	A3
		280	55.0	250M	R901342858	A3	R901342859	A3	R901342860	A3
A10VSO 100...32 DRS	138	57	18.5	180M	R901342864	A3	R901342865	A3	R901342866	A3
		72	22.0	180L	R901342861	A3	R901342862	A3	R901342863	A3
		101	30.0	200L	R901342867	A3	R901342868	A3	R901342870	A3
		129	37.0	225S	R901342874	A3	R901342875	A3	R901342876	A3
		160	45.0	225M	R901342871	A2	R901342872	A3	R901342873	A3
		196	55.0	250M	R901342877	A3	R901342878	A3	R901342879	A3
		273	75.0	280S	R901342883	A3	R901342884	A3	R901342885	A3
		280	90.0	280M	R901342880	A3	R901342881	A3	R901342882	A3
A10VSO 140...32 DRS	193	52	22.0	180L	R901342886	A3	R901342887	A3	R901342888	A3
		75	30.0	200L	R901342890	A3	R901342891	A3	R901342892	A3
		95	37.0	225S	R901342897	A3	R901342898	A3	R901342899	A3
		119	45.0	225M	R901342894	A3	R901342895	A3	R901342896	A3
		148	55.0	250M	R901342900	A3	R901342901	A3	R901342903	A3
		204	75.0	280S	R901342907	A3	R901342908	A3	R901342909	A3
		246	90.0	280M	R901342904	A3	R901342905	A3	R901342906	A3
		280	110.0	315S	R901342910	A3	R901342911	A3	R901342912	A3
A10VSO 180...32 DRS	248	62	30.0	200L	R901342913	A3	R901342914	A3	R901342915	A3
		77	37.0	225S	R901342920	A3	R901342921	A3	R901342922	A3
		95	45.0	225M	R901342916	A3	R901342917	A3	R901342918	A3
		120	55.0	250M	R901342923	A3	R901342924	A3	R901342925	A3
		167	75.0	280S	R901342929	A3	R901342930	A3	R901342931	A3
		203	90.0	280M	R901342926	A3	R901342927	A3	R901342928	A3
		251	110.0	315S	R901342936	A3	R901342937	A3	R901342938	A3
		280	132.0	315M	R901342932	A3	R901342933	A3	R901342934	A3
A10VSO 45LA6S	62		7.5	132M	R901342939	A3	R901342940	A3	R901342941	A3
A10VSO 71LA6S	98		15.0	160L	R901342942	A3	R901342943	A3	R901342944	A3
A10VSO- 100LA6S	138		22.0	180L	R901342945	A3	R901342947	A3	R901342948	A3
A10VSO- 140LA6S	193		30.0	200L	R901342949	A3	R901342950	A3	R901342951	A3
A10VSO- 180LA6S	248		45.0	225M	R901342952	A3	R901342953	A3	R901342954	A3

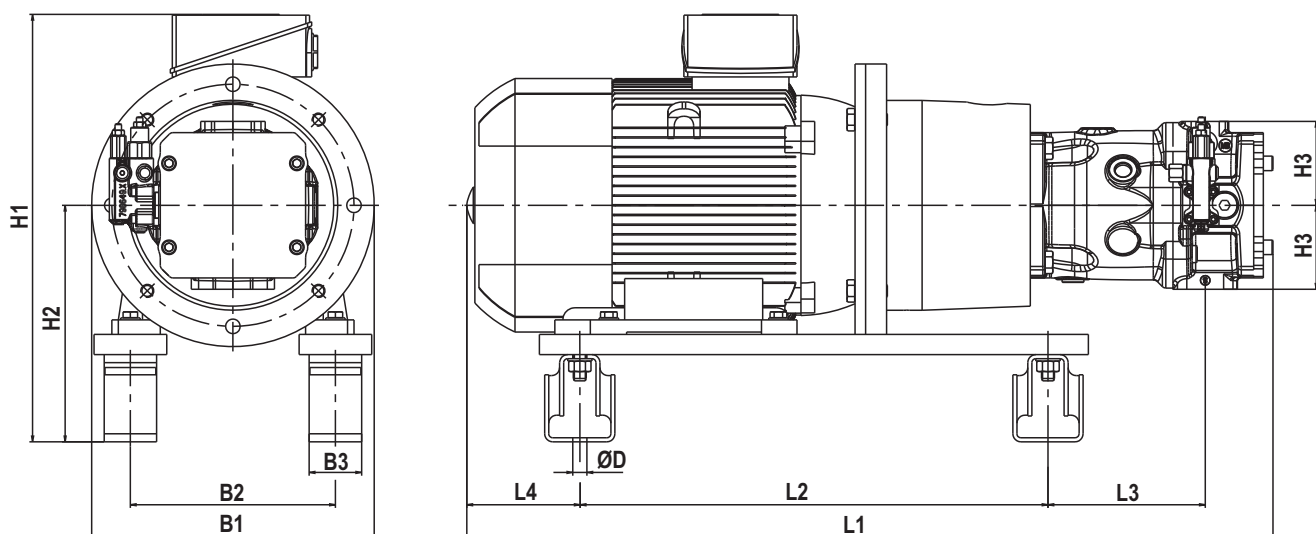
MKZ = material mark

A2 = preferred delivery range

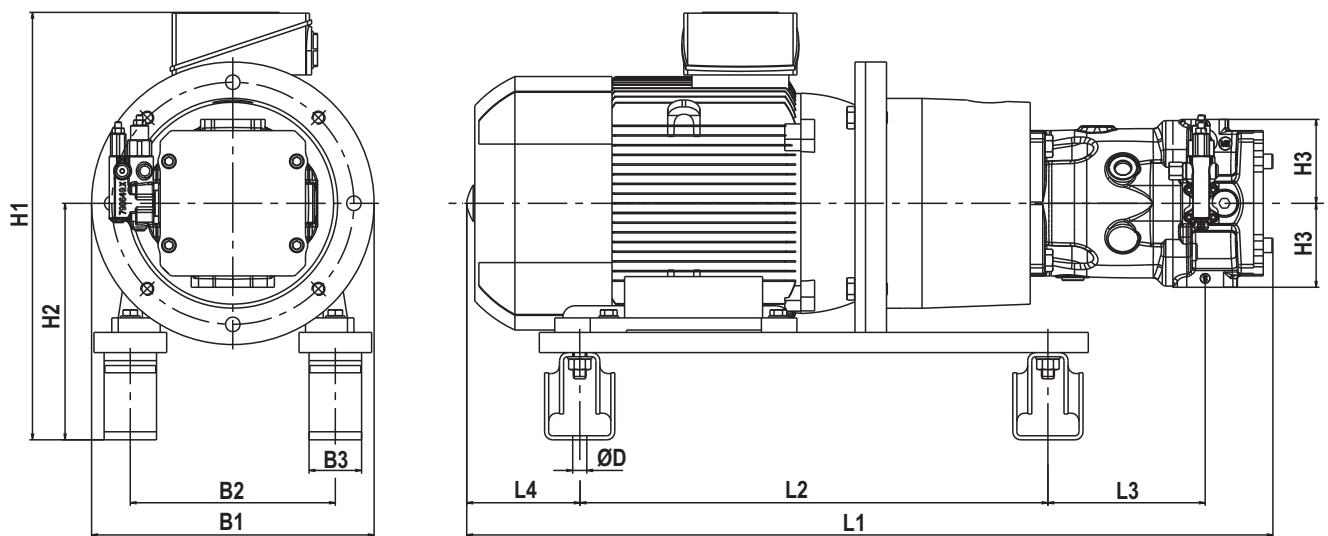
A3 = standard delivery range. Device dimensions see pages 7 to 10

Device dimensions: Type ABAPG A10VSO HOYER-MOTORS (nominal dimensions in mm)


Pump	Electric motor	Dimensions											
	KW / frame size	B1	B2	B3	ØD	H1	H2	H3	L1	L2	L3	L4	Weight
A10VSO 45 DRS	11 / 160M	350	254	50	13.5	523	263	91	959	580	190	107	186.5
	15 / 160L	350	254	50	13.5	523	263	91	1014	580	190	162	202.5
	18.5 / 180M	350	279	65	17.5	588	313	91	1060	620	204	154	249.6
	22 / 180L	350	279	65	17.5	588	313	91	1100	620	204	194	276.6
	30 / 200L	400	318	65	17.5	643	338	91	1130	700	171	177	354.8
	37 / 225S	450	356	80	17.5	720	385	91	1175	800	127	166	449.1
A10VSO 71 DRS	15 / 160L	350	254	65	17.5	553	293	104	1065	580	239	162	223.3
	18.5 / 180M	350	279	65	17.5	588	313	104	1095	620	237	154	265.3
	22 / 180L	350	279	65	17.5	588	313	104	1135	620	237	194	292.3
	30 / 200L	400	318	80	17.5	665	360	104	1165	700	204	177	371.5
	37 / 225S	450	356	80	17.5	720	385	104	1204	800	154	166	465.0
	45 / 225M	450	356	80	17.5	720	385	104	1234	800	154	196	484.1
A10VSO100 DRS	55 / 250M	550	406	80	17.5	785	420	104	1304	850	172	198	579.0
	18.5 / 180M	350	279	65	17.5	588	313	100	1154	620	295	154	284.9
	22 / 180L	350	279	65	17.5	588	313	100	1194	620	295	194	311.9
	30 / 200L	400	318	80	17.5	665	360	100	1224	700	262	177	377.8
	37 / 225S	450	356	80	17.5	720	385	100	1269	800	218	166	488.5
	45 / 225M	450	356	80	17.5	720	385	100	1299	800	218	196	507.5
A10VSO140 DRS	55 / 250M	550	406	80	17.5	785	420	100	1383	850	250	198	604.0
	22 / 180L	350	279	65	17.5	588	313	110	1235	620	319	194	316.7
	30 / 200L	400	318	80	17.5	665	360	110	1265	700	286	177	397.0
	37 / 225S	450	356	80	17.5	720	385	110	1300	800	232	166	492.3
	45 / 225M	450	356	80	17.5	720	385	110	1330	800	232	196	511.3
A10VSO180 DRS	55 / 250M	550	406	80	17.5	785	420	110	1400	850	250	198	609.0
	30 / 200L	400	318	80	17.5	665	360	110	1275	700	296	177	402.0
	37 / 225S	450	356	80	17.5	720	385	110	1310	800	242	166	497.3
	45 / 225M	450	356	80	17.5	720	385	110	1340	800	242	196	516.3
A10VSO180 DRS	55 / 250M	550	406	80	17.5	785	420	110	1410	850	260	198	614.0
A10VSO 45 LA6S	7.5 / 132M	300	216	50	13.5	423	235	91	899	480	196	141	202.5
A10VSO 71 LA6S	15 / 160L	350	254	65	17.5	553	293	104	1065	580	239	162	223.3
A10VSO100 LA6S	22 / 180L	350	279	65	17.5	588	313	100	1194	620	295	194	311.9
A10VSO140 LA6S	30 / 200L	400	318	80	17.5	665	360	110	1265	700	286	177	397.0
A10VSO180 LA6S	45 / 225M	450	356	80	17.5	720	385	110	1340	800	242	196	516.3

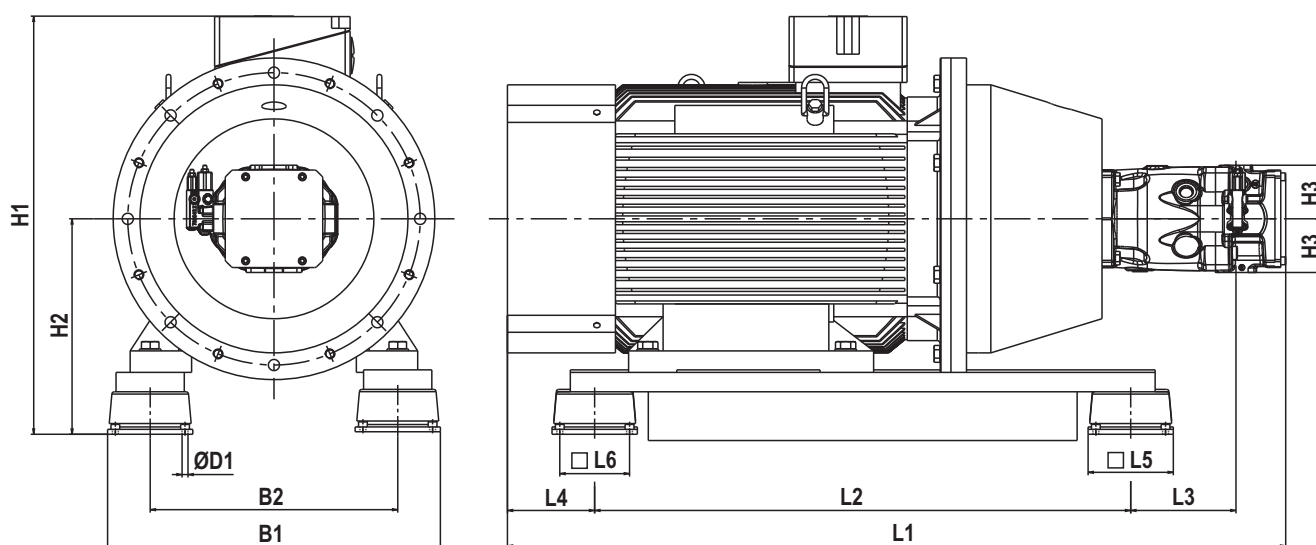
Device dimensions: Type ABAPG A10VSO VEM (nominal dimensions in mm)


Pump	Electric motor	Dimensions											
	KW / frame size	B1	B2	B3	ØD	H1	H2	H3	L1	L2	L3	L4	Weight
A10VSO 45 DRS	11 / 160M	350	254	50	13.5	505	263	91	915	580	190	63	188.5
	15 / 160L	350	254	50	13.5	505	263	91	1011	580	190	159	229.5
	18.5 / 180M	350	279	65	17.5	574	313	91	1040	620	204	134	285.6
	22 / 180L	350	279	65	17.5	574	313	91	1040	620	204	134	290.6
	30 / 200L	400	318	65	17.5	638	338	91	1087	700	171	134	373.8
	37 / 225S	450	356	80	17.5	685	385	91	1117	800	127	108	430.1
A10VSO 71 DRS	15 / 160L	350	254	65	17.5	535	293	104	1062	580	239	159	250.3
	18.5 / 180M	350	279	65	17.5	574	313	104	1075	620	237	134	301.3
	22 / 180L	350	279	65	17.5	574	313	104	1075	620	237	134	306.3
	30 / 200L	400	318	80	17.5	660	360	104	1122	700	204	134	390.5
	37 / 225S	450	356	80	17.5	685	385	104	1146	800	154	108	446.0
	45 / 225M	450	356	80	17.5	709	385	104	1251	800	154	213	511.1
A10VSO100 DRS	55 / 250M	550	406	80	17.5	806	420	104	1313	850	172	207	692.0
	18.5 / 180M	350	279	65	17.5	574	313	100	1134	620	295	134	320.9
	22 / 180L	350	279	65	17.5	574	313	100	1134	620	295	134	325.9
	30 / 200L	400	318	80	17.5	660	360	100	1181	700	262	134	396.8
	37 / 225S	450	356	80	17.5	685	385	100	1211	800	218	108	469.5
	45 / 225M	450	356	80	17.5	709	385	100	1316	800	218	213	534.5
A10VSO140 DRS	55 / 250M	550	406	80	17.5	806	420	100	1392	850	250	207	717.0
	22 / 180L	350	279	65	17.5	574	313	110	1175	620	319	134	330.7
	30 / 200L	400	318	80	17.5	660	360	110	1222	700	286	134	416.0
	37 / 225S	450	356	80	17.5	685	385	110	1242	800	232	108	473.3
	45 / 225M	450	356	80	17.5	709	385	110	1347	800	232	213	538.3
A10VSO180 DRS	55 / 250M	550	406	80	17.5	806	420	110	1409	850	250	207	722.0
	30 / 200L	400	318	80	17.5	660	360	110	1232	700	296	134	421.0
	37 / 225S	450	356	80	17.5	685	385	110	1252	800	242	108	478.3
	45 / 225M	450	356	80	17.5	709	385	110	1357	800	242	213	543.3
A10VSO180 LA6S	55 / 250M	550	406	80	17.5	806	420	110	1419	850	260	207	727.0
	7.5 / 132M	300	216	50	13.5	434	235	91	903	480	196	145	229.5
	15 / 160L	350	254	65	17.5	535	293	104	1062	580	239	159	250.3
	22 / 180L	350	279	65	17.5	574	313	100	1134	620	295	134	325.9
	30 / 200L	400	318	80	17.5	660	360	110	1222	700	286	134	416.0

Device dimensions: Type ABAPG A10VSO SIEMENS (nominal dimensions in mm)


Pump	Electric motor	Dimensions											
	KW / frame size	B1	B2	B3	ØD	H1	H2	H3	L1	L2	L3	L4	Weight
A10VSO 45 DRS	11 / 160M	350	254	50	13.5	500	263	91	948	580	190	96	140.5
	15 / 160L	350	254	50	13.5	500	263	91	948	580	190	96	147.5
	18.5 / 180M	350	279	65	17.5	575	313	91	1029	620	204	123	230.6
	22 / 180L	350	279	65	17.5	575	313	91	1080	620	204	174	260.6
	30 / 200L	400	318	65	17.5	638	338	91	1080	700	171	127	320.8
	37 / 225S	450	356	80	17.5	713	385	91	1149	800	127	140	390.1
A10VSO 71 DRS	15 / 160L	350	254	65	17.5	530	293	104	999	580	239	96	168.3
	18.5 / 180M	350	279	65	17.5	575	313	104	1064	620	237	123	246.3
	22 / 180L	350	279	65	17.5	575	313	104	1115	620	237	174	276.3
	30 / 200L	400	318	80	17.5	660	360	104	1115	700	204	127	337.5
	37 / 225S	450	356	80	17.5	713	385	104	1178	800	154	140	406.0
	45 / 225M	450	356	80	17.5	713	385	104	1238	800	154	200	436.1
A10VSO100 DRS	55 / 250M	550	406	80	17.5	812	420	104	1340	850	172	234	587.0
	18.5 / 180M	350	279	65	17.5	575	313	100	1123	620	295	123	265.9
	22 / 180L	350	279	65	17.5	575	313	100	1174	620	295	174	295.9
	30 / 200L	400	318	80	17.5	660	360	100	1174	700	262	127	343.8
	37 / 225S	450	356	80	17.5	713	385	100	1243	800	218	140	429.5
	45 / 225M	450	356	80	17.5	713	385	100	1303	800	218	200	459.5
A10VSO140 DRS	55 / 250M	550	406	80	17.5	812	420	100	1419	850	250	234	612.0
	22 / 180L	350	279	65	17.5	575	313	110	1215	620	319	174	300.7
	30 / 200L	400	318	80	17.5	660	360	110	1215	700	286	127	363.0
	37 / 225S	450	356	80	17.5	713	385	110	1274	800	232	140	433.3
	45 / 225M	450	356	80	17.5	713	385	110	1334	800	232	200	463.3
A10VSO180 DRS	55 / 250M	550	406	80	17.5	812	420	110	1436	850	250	234	617.0
	30 / 200L	400	318	80	17.5	660	360	110	1225	700	296	127	368.0
	37 / 225S	450	356	80	17.5	713	385	110	1284	800	242	140	438.3
	45 / 225M	450	356	80	17.5	713	385	110	1344	800	242	200	468.3
A10VSO180 DRS	55 / 250M	550	406	80	17.5	812	420	110	1446	850	260	234	622.0
	7.5 / 132M	300	216	50	13.5	437	235	91	839	480	196	81	147.5
	15 / 160L	350	254	65	17.5	530	293	104	999	580	239	96	168.3
	22 / 180L	350	279	65	17.5	575	313	100	1174	620	295	174	295.9
	30 / 200L	400	318	80	17.5	660	360	110	1215	700	286	127	363.0
A10VSO180 DRS	45 / 225M	450	356	80	17.5	713	385	110	1344	800	242	200	468.3

Device dimensions: Type ABAPG A10VSO HOYER-MOTORS, VEM, SIEMENS from 75 kW (nominal dimensions in mm)



ABAPG with motor supplier HOYER-MOTORS

Pump	Electric motor	Dimensions												
	KW / frame size	B1	B2	ØD1	H1	H2	H3	L1	L2	L3	L4	L5	L6	Weight
A10VSO100 DRS	75 / 280S	590	457	11.9	780	380	100	1443	900	283	175	133	108	775 kg
	90 / 280M	590	457	11.9	780	380	100	1493	900	283	225	133	108	875 kg
A10VSO140 DRS	75 / 280S	590	457	11.9	780	380	110	1477	900	300	175	133	108	787 kg
	90 / 280M	590	457	11.9	780	380	110	1527	900	300	225	133	108	887 kg
	110 / 315S	683	508	13.5	972	442	110	1747	1100	201	344	175	143	1275 kg
A10VSO180 DRS	75 / 280S	590	457	11.9	780	380	110	1487	900	310	175	133	108	792 kg
	90 / 280M	590	457	11.9	780	380	110	1537	900	310	225	133	108	892 kg
	110 / 315S	683	508	13.5	972	442	110	1757	1100	211	344	175	143	1280 kg
	132 / 315M	683	508	13.5	972	442	110	1867	1100	211	454	175	143	1460 kg

ABAPG with motor supplier VEM

Pump	Electric motor	Dimensions												
	KW / frame size	B1	B2	ØD1	H1	H2	H3	L1	L2	L3	L4	L5	L6	Weight
A10VSO100 DRS	75 / 280S	590	457	11.9	766	380	100	1392	900	283	124	133	108	757 kg
	90 / 280M	590	457	11.9	766	380	100	1438	900	283	170	133	108	812 kg
A10VSO140 DRS	75 / 280S	590	457	11.9	766	380	110	1426	900	300	124	133	108	769 kg
	90 / 280M	590	457	11.9	766	380	110	1472	900	300	170	133	108	824 kg
	110 / 315S	683	508	13.5	858	442	110	1582	1100	201	179	175	143	1060 kg
A10VSO180 DRS	75 / 280S	590	457	11.9	766	380	110	1436	900	310	124	133	108	774 kg
	90 / 280M	590	457	11.9	766	380	110	1482	900	310	170	133	108	829 kg
	110 / 315S	683	508	13.5	858	442	110	1592	1100	211	179	175	143	1065 kg
	132 / 315M	683	508	13.5	858	442	110	1647	1100	211	234	175	143	1155 kg

ABAPG with motor supplier Siemens

Pump	Electric motor	Dimensions												
	KW / frame size	B1	B2	ØD1	H1	H2	H3	L1	L2	L3	L4	L5	L6	Weight
A10VSO100 DRS	75 / 280S	590	457	11.9	812	380	100	1428	900	283	160	133	108	767 kg
	90 / 280M	590	457	11.9	812	380	100	1538	900	283	270	133	108	847 kg
A10VSO140 DRS	75 / 280S	590	457	11.9	812	380	110	1462	900	300	160	133	108	779 kg
	90 / 280M	590	457	11.9	812	380	110	1572	900	300	270	133	108	859 kg
	110 / 315S	683	508	13.5	942	442	110	1604	1100	201	201	175	143	1050 kg
A10VSO180 DRS	75 / 280S	590	457	11.9	812	380	110	1472	900	310	160	133	108	784 kg
	90 / 280M	590	457	11.9	812	380	110	1582	900	310	270	133	108	864 kg
	110 / 315S	683	508	13.5	942	442	110	1614	1100	211	201	175	143	1055 kg
	132 / 315M	683	508	13.5	942	442	110	1774	1100	211	361	175	143	1175 kg

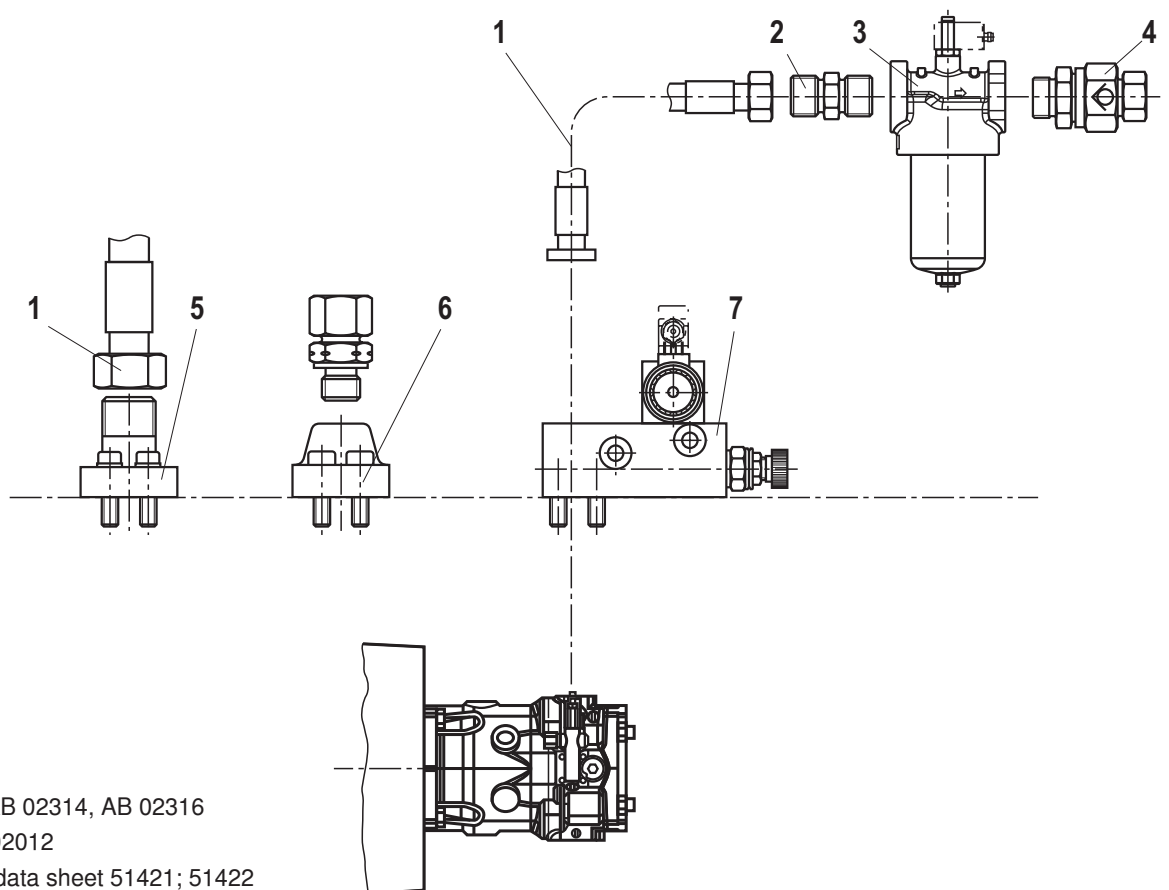
Pressure line connections

Pump type	Line connections			
	Pressure connection P(B)	Suction port S	Leakage oil connection L / L1	Pilot oil port X
A10VSO 45	DIN/ISO 6162-1 1"	DIN/ISO 6162-1 1 1/2"	DIN 3852 – M22x1.5	DIN 3852 – M14x1.5
A10VSO 71	DIN/ISO 6162-1 1"	DIN/ISO 6162-1 2"	DIN 3852 – M22x1.5	DIN 3852 – M14x1.5
A10VSO100	DIN/ISO 6162-2 1 1/4"	DIN/ISO 6162-1 2 1/2"	DIN 3852 – M33x2	DIN 3852 – M14x1.5
A10VSO140	DIN/ISO 6162-2 1 1/4"	DIN/ISO 6162-1 2 1/2"	DIN 3852 – M33x2	DIN 3852 – M14x1.5
A10VSO180	DIN/ISO 6162-2 1 1/4"	DIN/ISO 6162-1 2 1/2"	DIN 3852 – M33x2	DIN 3852 – M14x1.5

Standard pressure SAE flange figure with metric mounting screws

High pressure SAE flange figure with metric mounting screws

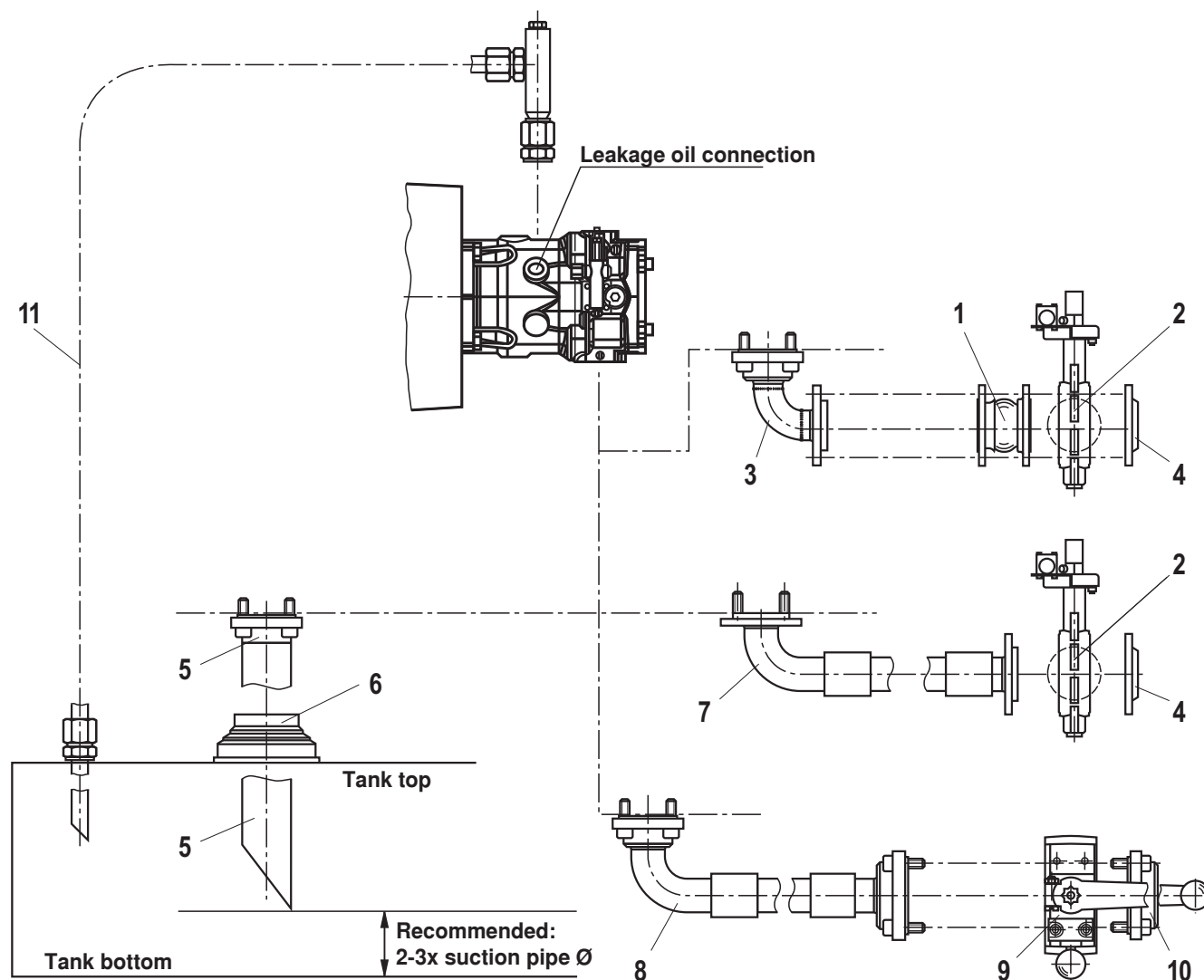
Optional accessories at the pressure connection



- 1 Hose line AB 02314, AB 02316
- 2 Fitting AB 02012
- 3 Inline filter data sheet 51421; 51422
- 4 Check valve AB 02112
- 5 SAE flange AB 02214
- 6 SAE flange high pressure AB 02213
- 7 Pump shut-off block data sheet 25891

Items 1 to 7 as optional accessories upon request

Optional accessories at the suction port and leakage oil connection



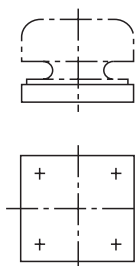
- 1 Compensator DIN AB 02231
- 2 Shut-off valve DIN AB 02129
- 3 Flange bend SAE-DIN AB 02229
- 4 DIN flange AB 02204
- 5 Suction pipe AB 02303
- 6 Elastic pipe fitting AB 01203

- 7 Suction tube SAE-DIN AB 02315
- 8 Suction tube SAE-SAE AB 02315
- 9 Shut-off valve SAE (on request)
- 10 SAE flange AB 02215
- 11 Drain line

Items 1 to 11 as optional accessories upon request

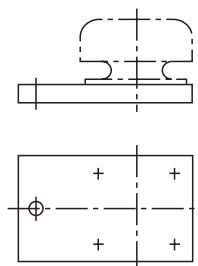
Optional accessories for damping bearing according to AB33-11 (from 75 kW)

Accessories: Plate



Weld-on plate

Accessories: Clip



Clip for foundation installation

Installation information

Fluid tank

- Adjust useful volume of the tank to the operating conditions.
- The admissible fluid temperature must not be exceeded; use coolers, if necessary.

Lines and connections

- Remove the protective plug at the pump.
- Select the clear width of the pipes according to the connections (suction speed 0.8 m/s).
- Pipelines and fittings must be carefully cleaned before assembly. Observe the installation information of the manufacturers.

Filter

- Use return flow and/or pressure filters.

Hydraulic fluid

- Please observe the instructions according to data sheet 90220.
- Brand-name hydraulic oils are recommended. In order to guarantee functional safety, at least cleanliness class 20/18/15 in accordance with ISO 4406 is necessary.
- Different oil types must not be mixed as this might result in degradation and deterioration of the lubricity.
- According to the operating conditions, the oil quality must be checked by means of an oil analysis at certain intervals and the oil must be replaced, if necessary. In this connection, it is also necessary to clean the fluid tank.
- Return fluid must not be directly sucked in again under any circumstances. The largest distance between suction and return line possible is to be selected.
- The return flow exit must always be below the oil level.
- Ensure tight assembly of the pipelines.

Commissioning, maintenance and operating instructions

In this connection, please observe the instructions contained in the following documents:

- Data sheet 07009
- Data sheet 07009-MON
- Data sheet 92714

Legal provisions

- In Germany, the Ordinance on Industrial Safety and Health (BetrSichV) applies.
- The EU Regulation 640/2009 on the environmentally friendly design of electric motors.

Notice pursuant to the EC Machinery Directive 2006/42/EC, according to annex II part 1, section A, manufacturer's declaration:

- The assemblies were manufactured in accordance with the harmonized standards DIN EN ISO 4413, DIN EN ISO 12100 and DIN 60204-1.
- The commissioning is prohibited until it was confirmed that the machine into which the assemblies are to be integrated complies with the regulations laid down in the EC Directives.