Variable Displacement Plug-In Motor A6VE

RE 91 606/06.05 1/16 Replaces: 05.99

Technical data sheet

Series 6

Sizes Nominal pressure / Peak pressure

28 ... 160 400 / 450 bar 250 350 / 400 bar open and closed circuits



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Features

- Variable displacement plug-in motor with a axial tapered piston rotary group of bent axis design for hydrostatic drives in open and closed circuits
- Easy assembly, simply «plugs-in» to mechanical gearboxes (no installation tolerances to consider)
- The design of the motor with the mounting flange in the centre of the housing allows it to be almost fully integrated into a mechanical gearbox to give an extremely compact unit.
- For use in mobile applications
- Ready assembled and tested unit
- The displacement is continuously variable from $V_{g\ max}$ to $V_{g\ min}$ = 0.
- The output speed depends on the flow capacity of the pumps and the displacement of the motor.
- The torque increases with the pressure differential between the high and low pressure side and with increasing displacement.
- Further informations:

Variable displacement motor A6VM

RE 91 604

Ordering Code / Standard Program

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		`									<u>, </u>										
A	\6V	Е					/	6	3	W		-	٧								
	01	02	03	04	05	06		07	08	09	10		11	12	13	14	. 1	5 10	6 17	7 18	3 19
	Axial p	oiston	units	i																	
01	Bent-	axis ty	pe, va	ıriable																	A6V
	Mode of operation																				
	Motor																				Е
	Size																				
	≈ Disp	olacen	nent V	/ _{g max} i	n cm ³										28	55	80	107	160	250	
	Contro	ol devi	ice	_											28	55	80	107	160	250	
	Hydra	ulic c	ontrol	,							Δp =	= 10 ba	r H	D1	•	•	•	•	•	•	HD1
		oressu									Δp =	= 25 ba	r H	D2	•	•	•	•	•	•	HD2
	Hydra	ulic tv	vo-po	int cor	ntrol								H	z	-	-	_	_	-	•	HZ
													H	Z1	•	-	_	_	•	-	HZ1
													H	Z3	-	•	•	•	1)	-	HZ3
	Electr	ical co	ontrol,									12 V	El	21	•	•	•	•	•	•	EP1
	with p	ropor	tional	solen	oid							24 V	El	2	•	•	•	•	•	•	EP2
												12 V	ΕZ	Z1		-	-	_	•	•	EZ1
04	Electr	ical tw	o-poi	nt cor	ntrol,							24 V	ΕZ	Z2		-	-	_	•	•	EZ2
	with s	olenoi	id									12 V	ΕZ	Z3	-	•	•	•	_	_	EZ3
												24 V	ΕZ	Z4	-	•	•	•	_	_	EZ4
							with	out pre	essur	e incre	ease		H	A1	•	•	•	•	•	•	HA1
		natic c oressu					pres	sure ir	ncrea	se Δ p:	=100b	ar	H	A2	•	•	•	•	•	•	HA2
	9 k	J. 000u					with	out pre	essur	e incre	ease		H	A3	-	•	•	•	•		HA3 ¹)
	Hydra	ulic c	ontrol	, spee	d relat	ed															
		p _{St} /	p _{HD} ≕	3/100,	hydra	ulic tra	vel di	rection	n valv	е			D	A	-	-	_	_	_	•	DA
		p _{St} /	p _{HD} ≕	5/100,	el. tra	vel dire	ection	valve	+ el.	V _{g max}	switch	n (24V)	D	A3	•	•	•	•	•	_	DA3
	Pressu	ıre cu	t off (for H	D, EP)																
05	witho	ut pres	ssure	cut of	f (no c	ode)															
03	with p	ressu	re cut	off, d	irect																D
	Overri	ding H	НА со	ntrol																	
00	witho	ut ove	rride (no co	de)																
06	with c	verrid	e, hyc	Iraulic																	Т
	Series	;																			
07																					6
	Index																				
80																					3
Direction of rotation																					
09					ternatii	ng															W
	Setting	g ranc	e for	displ	aceme	ent ²)									28	55	80	107	160	250	
					(no co										•	•	•	•	•	_	
10	9			Jan		-	\/		,		\/							T			

¹⁾ only possible in connection with port plate 22 (integral motion control valve)

10 $V_{g \text{ min}} = 0 \text{ to } 0.4 V_{g \text{ max}}$ $V_{g \text{ min}} > 0.4 V_{g \text{ max}} \text{ to } 0.8 V_{g \text{ max}}$ $V_{g max} = V_{g max}$ to 0,8 $V_{g max}$

 $V_{g max} = V_{g max}$ to 0,8 $V_{g max}$

²⁾ Note: $V_{g \, min}$ and $V_{g \, max}$ are infinitely adjustabel in the adjustment ranges. Please specify precise values in plain text when placing your order: $V_{g \, min} = ... \, cm^3$, $V_{g \, max} = ... \, cm^3$.

Ordering Code / Standard Program

Δ	A6V E							W		-	V										
	01	02	03	04	05	06		07	08	09	10		11	12	13	14	15	16	3 17	7 18	3 19
	Seals	fl		١٠٠٠٠											28	55	80	107	160	250	V
	,		caouto	nouc)																	V
	Shaft e		(. DIN	F 400																	
12	Splined shaft DIN 5480															Z					
	- ● - ● - 2 2 2 2 3 3 3 3 3 3																				
				00.0	210.0										28	55	80	107	160	250	
10	2-hole															•	•	•	•	_	L
13		-													-	_	_	_	-	•	M
																U					
	Service													_							
	Ports	A, B:	SAE s	ide, o	pposit	е						0	2	0 7							020
14	Б.		50 - 1 - 2					/				م (2	0	7	_	•				_	027 221 ⁴
	Port p									releas	se valv	e) 2	- -	2							2224
			ary var	, (bc	, _	,, O, (L	0.00,	Carrio	0.007					<u> </u>							222
	Valves	.4 1	_										Т	0							
	withou							intorn	al bori	na			+	1							
15	Brake (pilot)				releas	se)	-		al pipi				+	2							
	with fl							CALCITI	ai pipi	iiig			+	7							
	Speed														28	55	80	107	160	250	
	withou				ment (no co	de)								•	•	•	•	100	230	
16	prepai							5)								•		•	•	_	F
	Conne																	I			
	DEUT							on mo				EP	1/2		•	•	•	•		•	Р
17	520.	00	D .0.				i ijooti	011 1110	naoa				1/2		•	_	_	_	•	•	P
						-	with le	ad				EZ	3/4		_	•	•	•	_	_	Т
	Start o	f con	rol																		
	Port p						at V _{a n}	_{nin} (sta	ındard	for H	A)				•	•	•	•	•	•	Α
						-						, EP, E	Z, D	A)	•	•	•	•	•	•	В
18	Port p	late 2	2							for H		-			-	•	•	•	•	-	В
							at V _{g n}	nax (sta	andaro	for H	Z3)				-	•	•	•	•	-	В
	Counte	erbala	nce v	alve c	ode (f	for po	rt plat	e 22	only)												
19										the int	egral c	ounter	bala	nce \	alve)						
 3) fa	astening	thre	ads ar	e meti	ric			-													•
[‡]) o	nly pos	sible	n com	binati	on wit																
) C	omplete	orde	r reco	mmer	ided, s	speed	senso	r page	e 11												
=	= availa	able	0	= in	prepa	ration		- =	not a	availab	le							=	= pref	erred	progra

Technical Data

Hydraulic fluid

Before starting project planning, please refer to our data sheets RE 90220 (mineral oil), RE 90221 (environmentally acceptable hydraulic fluids) and RE 90223 (HF hydraulic fluids) for detailed information regarding the choice of hydraulic fluids and conditions of use.

The A6VE variable displacement plug-in motor is not suitable for use with HFA. If HFB, HFC and HFD or environmentally acceptable hydraulic fluids are being used, the constraints regarding technical data and seals mentioned in RE 90221 and RE 90223 must be observed.

If necessary, please contact us to discuss the type of hydraulic fluid you intend to use.

Viscosity range

We recommend that a viscosity (at operating temperature) for optimum efficiency and service life purposes of

 v_{opt} = optimum viscosity 16 to 36 mm²/s

be chosen, taken the circulation temperature (closed circuit) and reservoir temperature (open circuit) into account.

Limits of viscosity range

The following values apply in extreme cases:

 $v_{min} = 5 \text{ mm}^2/\text{s}$

short-term (t < 3 min) at max. permitted temperature of t_{max} = +115°C.

 $\nu_{\text{max}} = 1600 \text{mm}^2/\text{s},$

short-term (t \leq 3 min) with cold start (p \leq 30 bar, n \leq 1000 rpm, $t_{min} = -40$ °C).

Note that the maximum hydraulic fluid temperature must not be exceeded locally either (e.g. during storage). The temperature in the bearing area is - depending on pressure and speed - up to 12 k higher than the average case drain temperature.

Special measures are necessary at temperatures between -25°C and -40°C. Please contact us.

See RE 90300-03-B for detailed information about use at low temperatures.

Filtering

The finer the filtering, the cleaner the fluid and the longer the service life of the axial piston unit.

To ensure proper function of the axial piston unit, the pressure fluid must have a cleanliness level of at least

20/18/15 according to ISO 4406.

At very high hydraulic fluid temperatures (90°C to max. 115°C, not permitted for sizes 250), a purity class of at least

19/17/14 according to ISO 4406 is required.

Please contact us if these cleanliness level cannot be achieved.

Operating pressure range

Maximum pressure on port A or B (pressure data according to DIN 24312)

for sizes 28...160

Nominal pressure p _N	400 bar
Peak pressure p _{max}	450 bar
Summation pressure (press. A + press. B) p_{max}	700 bar
for size 250	
Nominal pressure p _N	350 bar
Peak pressure p _{max}	400 bar
Summation pressure (press. A + press. B) p_{max}	700 bar

Please note:

These values are valid for radial force free load. With additional radial force see RE 91604.

Direction of flow

Direction of rotation	
Clockwise	Counterclockwise
A to B	B to A

Speed range

No limit to minimum speed n_{min} . If uniform motion is required, n_{min} must not be less than 50 rpm. See table on page 5 for maximum speed.

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Technical Data

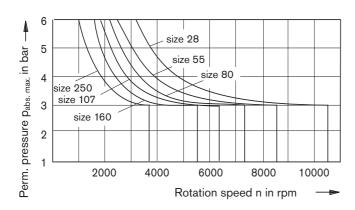
Shaft seal ring

Permissible pressure load

The service life of the shaft seal ring is affected by the speed of the motor and the case drain pressure. The permitted loading with intermittent case drain pressure depends on the rotational speed (see chart). Short-term (t < 5 s) pressure spikes of up to 6 bar absolute are permitted.

The average permanent case drain pressure must not exceed 3 bar absolute.

The pressure in the case must be equal to or greater than the external pressure on the shaft seal ring.



Temperature range

The FKM shaft seal ring is suitable for case temperatures of -25°C to +115°C.

Note:

For applications below -25°C a NBR shaft seal ring is necessary (admissible temperature range -40°C to +90°C). Please consult us.

Effect of case pressure on start of control

An increase in the case pressure has an effect on the following settings when control of the variable displacement motor begins:

HA1T (size 28160)	increase
HD, EP, HA, HA.T (size 250):	increase
DA:	reduction

The start of control is set in the factory at a case pressure of $p_{abs} = 2$ bar (sizes 28 to 160) and $p_{abs} = 1$ bar (size 250).

Table of values (theoretical values, ignoring η_{mh} and η_{v} ; values roundet)

Size				28	55	80	107	160	250
Displacement ¹)		$V_{ m g\ max}$	cm ³	28,1	54,8	80	107	160	250
		V _{g 0}	cm ³	0	0	0	0	0	0
	Rotation speed max. (while adhering to max. permitted flow)		rpm	5550	4450	3900	3550	3100	2700
			g,1 rpm	8750	7000	6150	5600	4900	3600
max. permitted no	vv)		_{g,1} cm ³	18	35	51	68	101	188
		$n_{max\ 0}$ at $V_{g\ 0}$	rpm	10450	8350	7350	6300	5500	3600
Flow max.		q _{V max}	L/min	156	244	312	380	496	675
Torque max.		T_{max} at $V_{g max}$ ²)	Nm	179	349	509	681	1019	1391
Rotary stiffness			Nm/rad	360	700	1150	1560	2320	3733
Mass moment of i		J	kgm²	0,0014	0,0042	0,0080	0,0127	0,0253	0,061
Filling capacity			L	0,5	0,75	1,2	1,5	2,4	3,0
Mass (approx.)	port plate 02	m	kg	16	26	34	47	64	90
	port plate 22	m	kg	_	35	43	53	72	-

¹⁾ The minimum and maximum displacement are continuously variable, see ordering code on page 2. (default setting size 250 unless specified in order: $V_{g min} = 0,2 \cdot V_{g max}$, $V_{g max} = V_{g max}$).

Further informations see technical data sheet RE 91604 (variable displacement motor A6VM):

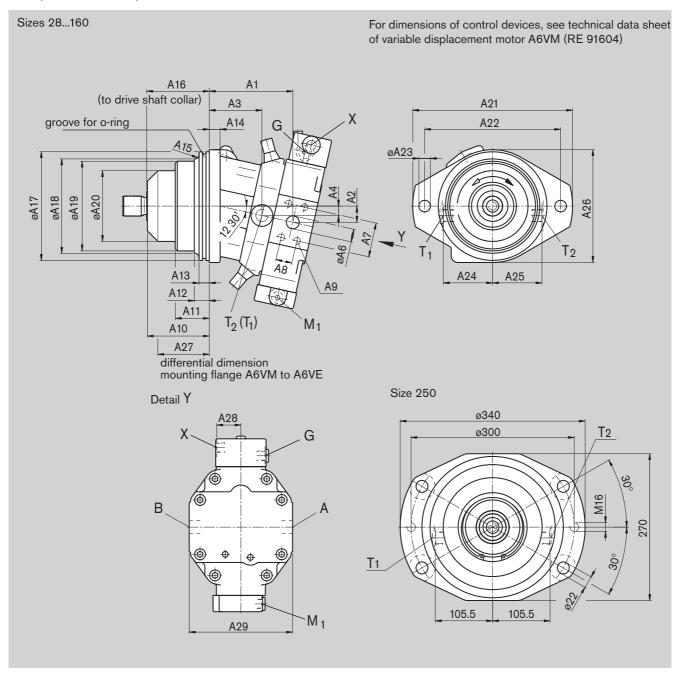
- selection diagram and details regarding the choice of hydraulic fluid
- permitted displacement and inlet pressure in relation to rotational speed
- permissible transverse and axial forces on drive shaft
- description and dimensions of displacements

²) sizes 28...160: $\Delta p = 400$ bar; size 250: $\Delta p = 350$ bar

Unit Dimensions

Before finalizing your design, please request approved installation drawing. Dimensions in mm

Port plate 02: SAE-ports at side



Ports

Size	Service line port A, B SAE J518	Case drain port T ₁ ; T ₂ ¹) DIN 3852
28	3/4 in	M18x1,5; 12 deep 140 Nm ²)
55	3/4 in	M18x1,5; 12 deep 140 Nm ²)
80	1 in	M18x1,5; 12 deep 140 Nm ²)
107	1 in	M18x1,5; 12 deep 140 Nm ²)
160	1 1/4 in	M26x1,5; 16 deep 230 Nm ²)
250	1 1/4 in	M22x1,5; 14 deep 210 Nm ²)

^{1) 1}x plugged 2) Tightening torque, max.

Further ports see variable displacement motor A6VM (RE 91604)!

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Unit Dimensions

Before finalizing your design, please request approved installation drawing. Dimensions in mm

Standard flange L (sizes 28-160), M (size 250)

Size	A1	A2	А3	A 4	øA6	A7	A8	A9 (DIN 13) 1)	A10	A11	A12	A13	A14	A15
28	91	20	47	10	ø19	50,8	23,8	M10x1,5; 17 deep	88	54	_	15	14	R10
55	123	24	77	14	ø19	50,8	23,8	M10x1,5; 17 deep	91	50	22	15	16	R6
80	130	28	78	16	ø25	57,2	27,8	M12x1,75; 17 deep	109,5	65	30	15	18	R10
107	137	30	84	18	ø25	57,2	27,8	M12x1,75; 17 deep	121,8	72	35	15	18	R12
160	171	34	109	20	ø32	66,7	31,8	M14x2; 19 deep	122	67	29	15	20	R5
250	204	44	103	20	ø32	66,7	31,8	M14x2; 19 deep	131,5	_	_	14	25	_

Size	A16	A17	A18	A19	A20	A21	A22	øA23	A24	A25	A26	A27	A28	A29	o-ring ²)
28	89	135-0,025	110	-	86	188	160	ø13,5	62,5	62,5	142	64	35,5	132	126x4
55	92	160-0,025	139	132	104	235	200	ø17	72,5	72,5	166	59	35,5	152	150x4
80	110,5	190-0,029	151	143	116	260	224	ø21	78,5	78,5	198	79	35,5	164	182x4
107	122,8	200-0,029	168	160	132	286	250	ø21	86,5	86,5	210	82	40,5	180	192x4
160	123	200-0,029	188	180	146	286	250	ø21	98,5	98,5	210	83	40,5	204	192x4
250	133,5	260-0,081	-	230	-	-	-	-	-	-	-	83,5	48,5	224	250x5

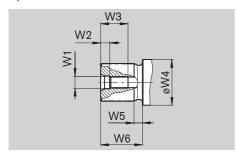
Adaption flange U (size 107)

Size	A1	A2	A3 A	4 A	.5	A6	A7	8 A	A9 (D	IN 13) ¹)	A10	A11	A12	A13	A14
107	150	30	96 18	3 1	5,5	25	57,2	27,8	M12x1	,75; 17	deep	109,5	59,7	22,7	18	15
Size	A15	A16	A17	A18	A19	A20	A21	A22	A23	A24	A25	A26	A27	A28	A29	O-Ring ²)

¹⁾ Tightening torque see general notes

Shaft ends

Splined shaft DIN 5480



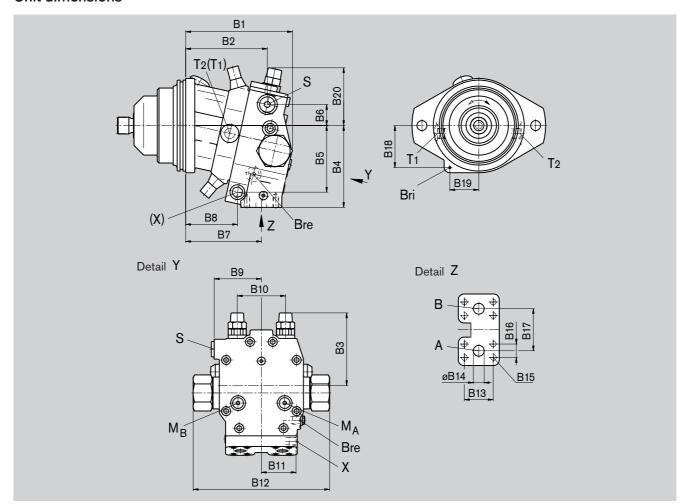
Size	Shaft end	W1	W2	W3	øW4	W5	W6
28	A (W30x2x30x14x9g)	M10	7,5	22	ø35	8	35
55	Z (W30x2x30x14x9g)	M12	9,5	28	ø45	8	35
80	A (W40x2x30x18x9g)	M16	12	36	ø50	8	45
107	Z (W40x2x30x18x9g)	M12	9,5	28	ø60	8	45
160	A (W50x2x30x24x9g)	M16	12	36	ø70	11	36
250	Z (W50x2x30x24x9g)	M16	12	36	ø60	9	58

²) The o-ring is not included in supply

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Port Plate 22 with Integr. Counterbalance Valve Before finalizing your design, please request approved installation drawing. Dimensions in mm

Unit dimensions



Ports

Size	B1	B2	В3	B4	B5	B6	B7	B8	В9	B10	B11	B12	B13	B14	B15 (DIN 13) 1)	B16	B17
55	192	144	127	144	117	37	133	91	83	85	64	259	50,8	19	M10x1,5; 17 deep	23,8	80
80	198	150	136	162	132	40	138	93	83	90	69	259	57,2	25	M12x1,75; 17 deep	27,8	86
107	202	161	139	171,5	143	40	144	99	85	96	72	259	57,2	25	M12x1,75; 17 deep	27,8	86
160	240	195	152	197	162	47	177	128	102	108	78	259	66,7	32	M14x2; 19 deep	31,8	94

Size	B18	B19	B20	Service line port A, B SAE J518	Case drain port T ₁ ; T ₂ ²) DIN 3852	Boosting S DIN 3852
55	74	51	102	3/4in	M18x1,5; 12 deep 140 Nm ³)	M22x1,5; 14 deep
80	90	53	114	1in	M18x1,5; 12 deep 140 Nm ³)	M22x1,5; 14 deep
107	96	58	122	1in	M18x1,5; 12 deep 140 Nm ³)	M22x1,5; 14 deep
160	94	65	136	1 1/4in	M26x1,5; 16 deep 230 Nm ³)	M27x2; 16 deep

¹⁾ Tightening torque see general notes

³⁾ Tightening torque, max

Χ	Pilot pressure port (open at HZ3 and HA3T, closed at HA3)	DIN 3852	M14x1,5; 12 deep
M_A,M_B	Measuring port	DIN 3852	M14x1,5; 12 deep
M	Measuring port for control pressure (at HA3 only)	DIN 3852	M 10x1; 8 deep
Bre	Brake released port extern (open at design 222)	DIN 3852	M14x1,5; 12 deep
Bri	Brake released port intern (not at design with flange U)		ø4

Note: Port plate HZ3 and HA3 are not identical!

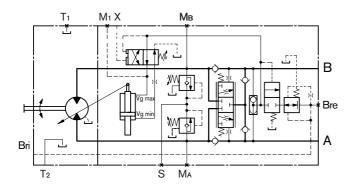
^{2) 1}x plugged

Circuit Diagrams

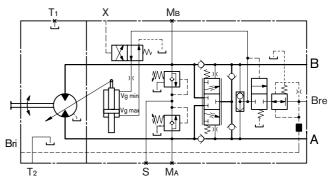
Before finalizing your design, please request approved installation drawing. Dimensions in mm

A6VE...HA3...221 (Brake release via internal boring)

(port X open at HA3T)



A6VE...HZ3...222 (Brake release via external piping)



Flushing and Boost Pressure Valve

Before finalizing your design, please request approved installation drawing. Dimensions in mm

The flushing and boost pressure valve is used to remove heat from the closed circuit and to ensure that a minimum charge pressure is present (opening pressure 16 bar, fixed; note when setting primary valve). A side effect is flushing of the case.

Warm pressure fluid is removed from the relevant low pressure side into the motor case. This is then fed into the reservoir, together with the leakage fluid. The pressure fluid drawn out of the closed circuit in this way has to be replaced by cooled oil that is pumped in by the charge pump.

In the open circuit, the flushing and boost pressure valve is used solely to flush the case from the return line.

The valve is fitted to the variable displacement motor (or integrated into the servo unit, depending on the type of control and the size).

Restrictors can be used to adjust the flow as required.

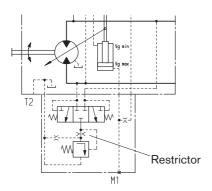
Standard flow at low pressure $\Delta p_{ND} = 25$ bar

Size	Quantity	Matno. of restrictor
28, 55	3,5 L/min	R909651766
80	5 L/min	R909419695
107	8 L/min	R909419696
160	10 L/min	R909419697
250	10 L/min	on request

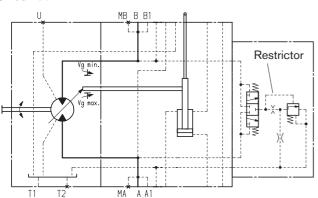
For sizes 28 to 160, restrictors for flows of 3,5 - 10 L/min can be supplied. In the case of non-standard flows, please specify the restrictor you require when placing your order.

The flushing flow without orifice is approx. 12 to 14 L at low-pressure $\Delta p_{ND} = 25$ bar.

Sizes 28...160

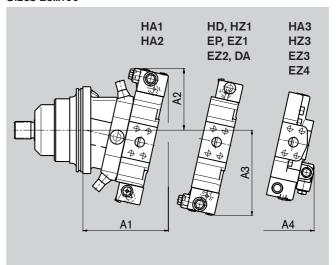


Sizes 250



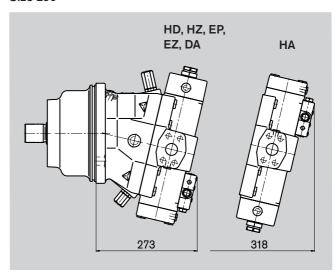
Unit dimensions

Sizes 28...160



Size	A1	A2	А3	A 4	
28	152	125	161	_	
55	182	133	176	176	
80	192	141	194	176	
107	203	144	200	187	
160	245	154	220	_	

Size 250



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Speed Measurement

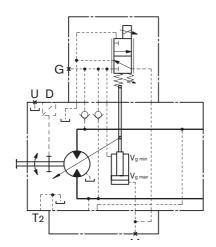
Version "F" (sizes 28...160) prepared for speed measurement

The A6VE...F version ("prepared for speed measurement" without sensor) have teeth on the drive shaft.

The rotating, toothed drive shaft generates a signal in proportion to the speed. The signal is picked up by a sensor and forwarded for evaluation.

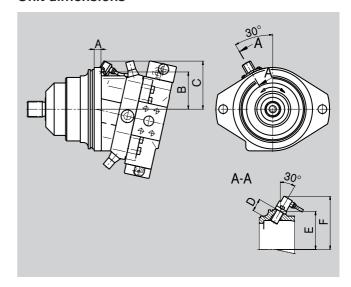
The Version F is suitable to be build-on to HDD hall effect speed sensor (see RE 95135). The HDD sensor is flange mounted with two locking screws at the especially planed port. The standard connection is plugged with a compression-proof flange cover. We recommend ordering the A6VE variable displacement motor with fitted sensor. The ordering code for the sensor must be specified separately..

Circuit diagram A6VE 28...160

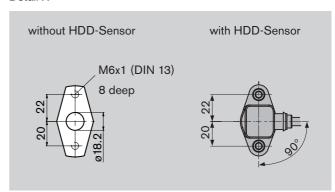


Before finalizing your design, please request approved installation drawing. Dimensions in mm

Unit dimensions



Detail X



Size	28	55	80	107	160	
Number of teeth	40	54	58	67	75	
Α	20,7	25,8	16,8	14,7	28,3	
В	59,8	72,2	75,4	83,1	90,4	
С	97,9	110,3	113,5	121,2	128,5	
D	32	32	32	32	32	
E	69±0,1	83,4±0,1	87,1±0,1	95,9±0,1	104,4±0,1	
F	107,3	121,7	124,4	133,2	141,7	

Suitable speed sensor: size 28...160: HDD.L32../20 (see RE 95 135)

Connectors for Solenoid (for EP, EZ only)

Before finalizing your design, please request approved installation drawing. Dimensions in mm

DEUTSCH DT04-2P-EP04, 2-pin

injection molded, without bidirectional quenching diode	
(for EP, EZ1/2)	P
with lead, without bidirectional quenching diode (for EZ3/4)	Т
Type of protection to DIN/EN 60529: IP67 and IP69K	

Mating connector

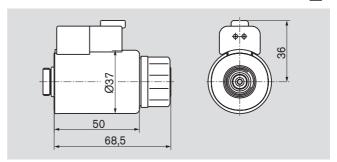
DEUTSCH DT06-2S-EP04

Rexroth Mat.-no. R902601804

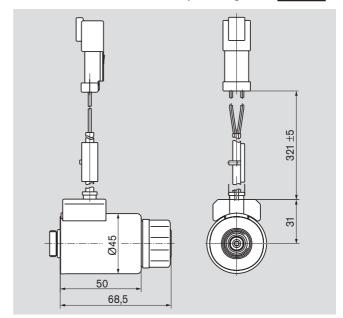
comprising:	DT-designation
- 1 case	DT06-2S-EP04
– 1 wedge	W2S
- 2 sockets	0462-201-16141

The mating connector is not included in supply. It can be supplied by Rexroth on request.

injection molded, without bidirectional quenching diode __P



with lead, without bidirectional quenching diode _____



Installation and Commissioning Notes

General

The motor case must be completely filled up with hydraulic fluid during startup and during operation (filling the case chamber). The motor must be started up at low speed and no load until the system has been bled completely.

If stopped for an extended period, fluid may drain out of the case through the working lines. When restarting, make sure that the case contains sufficient fluid.

The case drain inside the case chamber must be drained off to the reservoir through the highest case drain port.

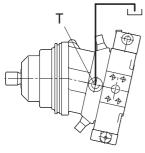
Installation position

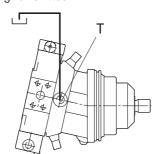
Shaft horizontal and shaft downwards. Shaft upwards is not permitted!

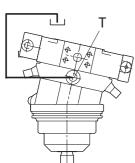
Installation below the reservoir

Motor below minimum fluid level in reservoir (standard)

- Fill axial piston motor before startup via the highest case drain port
- Run the motor at low speed until the system is bled completely (bleed through service line port A, B if tubing is long)
- Minimum immersion depth of case drain line in reservoir:
 200 mm (relative to the min. fluid level in the reservoir)
- Bleed the A6VE variable displacement motor in a closed circuit:
 - via port G
- no bleeding required if flushing valve fitted





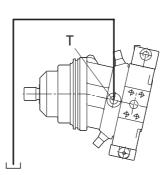


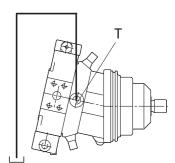
Installation above the reservoir

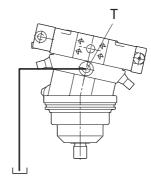
Motor above minimum fluid level in reservoir

- Proceed in same way as below the reservoir installation
- Additional measures for installation positions "shaft horizontal"

If stopped for an extended period, fluid may drain out of the case chamber through the working lines (air enters through the shaft seal). The bearings will therefore not be properly lubricated when the motor is started up again. Fill the axial piston unit before restarting via the highest case drain port.







Project Sheet

for variable motor A6VE with Integral Counterbalance Valve (Sizes 55...160)

Сору:
Please send back the filled in
project sheet, when ordering the motor
motor
Annual need:
t
Phosphate-Ester (HFD-R)
Type(s):
$q_{V max}$ (at $n_{max engine}$) = I/min
Type(s):
2-step proportional
LUDV
Opening section: A; B \rightarrow T mm ²
bar
-

Bosch Rexroth AG

Project Sheet

3. Hydraulic motor

for variable motor A6VE with Integral Counterbalance Valve

Type code as to RE 9160	06			
Control device: 2	-step prop	ortional		
Input flow/motor	q _{V max} =	l/min		
Displacement/motor	$V_{g min} = $	_cm ³ /rpm	V _{g max} =	cm³/rpm
Necessary min. boost pro	essure (self suction sp	peed at n _{max})	p _{min} =	bar
Secondary relief valves:	pressure setting		p _{max} =	bar
Parking brake:	no	yes	release pressure ra	ange bar up to bar
Brake lifting in	ternal (Bri)	external (Bre)	separate by pilot pr	ressure
4. Track drive gear box				
Supplier/Type				
Gear ratio i =		_ Sprocket diam	eter d =	m
Additional informations _				
Comissioned by:				
	(Name)		(Signature)	
Modifications				
at the prototype:				
at the hydraulic system:				
Release				
Rexroth:	(Date)	(Name)		(Signature)
Customer:		_		
	(Date)	(Name)		(Signature)
Type-code of the motor	r			
to RE 91606	A6VE	/63W-V 2	2	
Rexroth-Material-no. (fixir	ng after receipt of orde	er):		_

General Notes

- The A6VM motor is designed to be used in open and closed circuits.
- Project planning, assembly, and startup of the motor require the involvement of trained personnel.
- The working and functional ports are only designed to accommodate hydraulic piping.
- Tightening torques:
 - The tightening torques specified in this data sheet are maximum values and may not be exceeded (maximum value for screw thread). Manufacturer specifications for the max. permissible tightening torques of the used fittings must be observed!
 - For DIN 13 fastening screws we recommend checking the tightening torque individually according to VDI 2230 Edition 2003.
- The housing temperature rises during and shortly after operation. Take suitable safety precautions (e.g. wear protective clothing).
- The data and information contained herein must be adhered to.

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Subject to change.