

Eccentric Screw Pumps ALL-Optiflow

Series AE1F Design ID



Application

For handling liquid to highly viscous, neutral or aggressive, uncontaminated or abrasive liquids, liquids containing gases or which tend to froth, also containing fibres and solid matter.

In waste water and waste water treatment engineering, chemical and petrochemical industry, paper and cellulose industry, soap and fats industry, paint and lacquer industry, food and beverage industry, plastics industry, ceramics industry, agriculture, sugar industry and in shipbuilding.

Function

Self-priming, single stage, rotary positive displacement pump. Conveying elements are the rotating eccentric screw (rotor) and the fixed stator. In the cross-sectional plane, both are in contact with one another at two points forming two sealing lines along the length of the conveying elements. The contents of the sealed chambers which are formed as the rotor turns are displaced axially and with complete continuity from the suction to the delivery end of the pump. Despite rotor rotation, there is no turbulence. The constant chamber volume excludes squeezing, thus ensuring an extremely gentle low-pulsating delivery.

Structural design

By external casing connecting screws (clamping screws), the pressure casing, stator and suction casing are interconnected. The suction casings are designed particularly favourable to flow. The pump sizes 403 to 5503 in cast iron design are provided with staggered holes for cleaning. The stator vulcanized into a tube is provided with external collars vulcanized to it on both sides reliably sealing towards the suction casing and delivery casing and protecting the stator shell from corrosion.

The exchangeable shaft sealing housing or mechanical seal housing (subsequent conversion to another sealing variant is possible) are arranged between the suction casing and bearing bracket. The sealing housings (shaft seals) are easily accessible as the complete bearing unit can be withdrawn from the driving shaft without any further pump dismounting.

Bearing of the driving spindle is effected in the bearing bracket. The torque of the drive is transmitted over the driving shaft and the joint shaft onto the rotor. On both sides, the joint shaft ends in liquid-tight encapsulated bolt joints, which are designed par-ticularly simple and sturdy properly taking the eccentric move-ment of the rotor.

Shaft seal

By uncooled, cooled or heated stuffing box or by uncooled or cooled maintenance-free unbalanced, single or double-acting mechanical seal

Material pairing and design are adapted to the respective operating conditions. For further data, refer to pages 3, 4.

The stuffing box or mechanical seal housings of the various shaft sealing types are interchangeable within one size. The various mechanical seal housing parts form a modular con-struction system and, in case of conversion to a different mechanical seal design, can be easily combined with one an-other.

Installation spaces for mechanical seals according to DIN EN 12 756 (except for double mechanical seal).

For further data, refer to pages 3, 4, 5 and 6.

Technical data

Deliveries, admissible speed ranges and required drive powers are to be taken from the performance graph on page 2 and/or the separate individual characteristic curves.

				AE1F
Delivery	Q	I/min	up to	3800
Temperature of fluid pumped	t	\mathcal{C} ①	up to	135
Delivery pressure				
single-stage	Δр	bar	up to	6
Pump outlet pressure	$p_{\text{d}} \\$	bar ③	up to	16
Attainable under pressure	$p_{\text{s}} \\$	bar ②	up to	0,95
Viscosity	η	mPas	up to	300.000
Admissible solids content	vol	% ②	up to	60

The mentioned performance data are to be considered as a product and performance abstract only. The particular operating limits can be taken from the quotation or order acknowledgement.

Max. admissible grain sizes and fiber lengths

Size		103	203	403	553	703	1003
max. grain size	mm	3	3,8	5	6,8	6,8	9,5
max. fibre length	mm	42	48	60	79	79	98

Size		1603	3003	5503
max. grain size	mm	9,5	14	20
max. fibre length	mm	98	130	210

Increasing solids content and increasing grain size require a reduction of the pump speed:

- ① depending upon the fluid to be pumped and the elastomers employed.
- ② depending upon the pump size/design, speed, fluid to be pumped.
- 3 depending on direction of rotation, inlet pressure.

Drive

Driving possibilities see page 11.

Drives of any manufacturers can be employed. For the technical data and dimensions, please refer to the documents of the manufacturers.

Installation

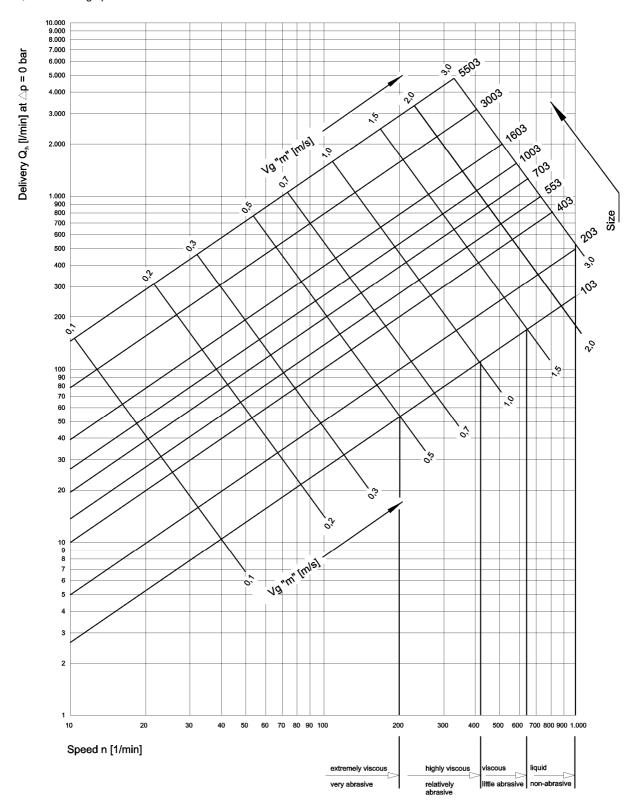
AE pumps may be installed horizontally or vertically, depending on the shaft seal. In case of vertical arrangement, "shaft shank downwards" is not admis-sible.

By means of a flexible coupling or via a gear (as a rule, V-belt drive), the pump and drive are connected with one another and mounted on a common base plate. For aggregate dimensions, please inquire.



Performance graph

For a rough selection of the pump size and speed as a function of the requested delivery and kind of fluid to be pumped. V₉,m"= available, mean sliding speed of the rotor in the stator.



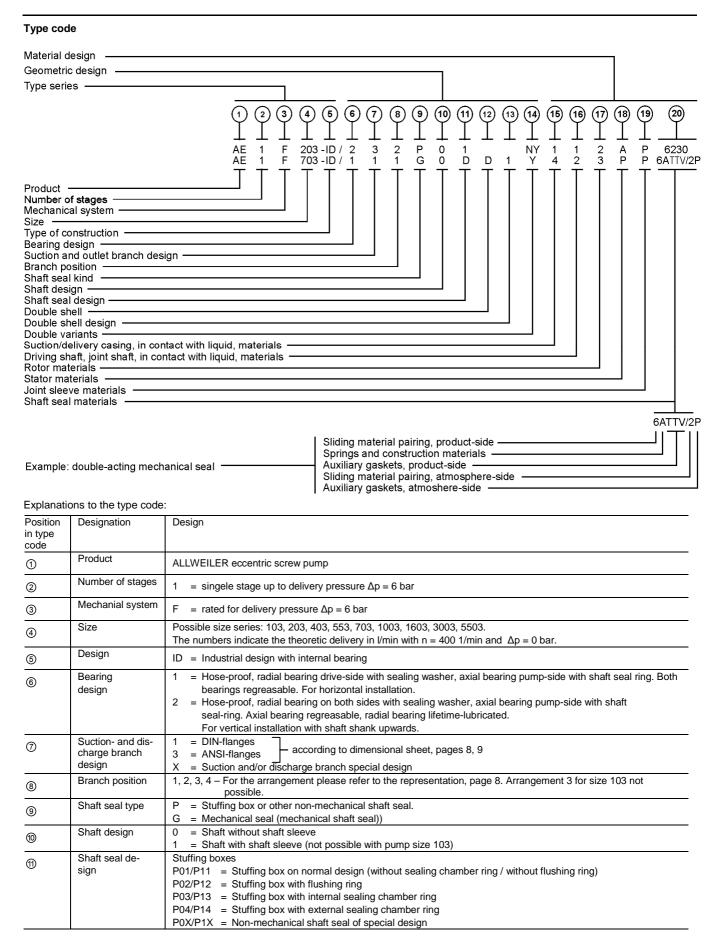
Sizes of series AE1F. Data on the performance range not covered by AE1F series are to be taken from the rear side of this brochure and/or the individual brochures of the other series.

For exact performance data, please refer to the individual characteristics.

2

Series AE1F Design ID GB/2012.06 – Ident-No. 228494





Series AE1F Design ID



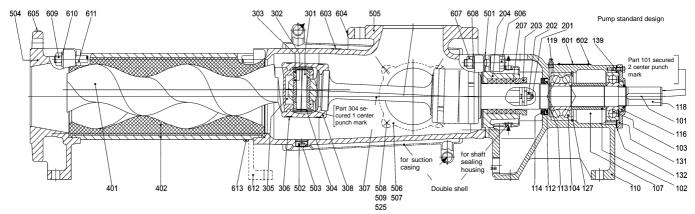
11)	Shaft seal design	Mechanical seals											
	(continued) X = design	for pump sizes	10		403	553	703	1003	1603	3003	5503		
	possible	Shaft diameter at the location of the shaft seal G0K/G1K = individual mechanical seal, D			35 X	43 X	43 X	53 X	53 X	60 X	75 X		
		12756, design K, shape U G0N/G1N = as above, however design N	①	X X	Х	Х	Х	Х	Х	Х	X		
		G0S/G1S = individual mechanical seal, D		^ ^									
		12756,design K, shape U, rotating part with ir ed locking device and pump-sided throttling rir	ntegrat- ①	х х	Χ	Χ	Χ	Χ	Χ	Χ	X		
		G0T/G1T = as above, however design N	①	х х	Х	Х	Х	-	-	Х	Х		
		G0Q/G1Q = individual mechanical seal, D 12756, design K, shape U with quench	OIN EN ①	х х	Х	Х	Х	Х	Х	Х	Х		
		G0D/G1D = double mechanical seal	100	2 2	2	2	2	2	2	2	2		
		G0X/G1X = mechanical seal of special desig	gn										
		① not available with shaft sleeve	② for gasket	design,	please	inquir	е						
12	Double shell	D = Double shell for heating/cooling, availa Connections as threaded nipples for lic max. heating temperature + 150℃, ma	quid media. M	lax. heat	ting/co		ressure	e 6 bar,					
13	Double shell de-	1 = Suction casing with double shell	-										
	sign	 2 = Stuffing box for P01/P11 with double st 12 = Suction and shaft sealing housing P01/ 		shell									
		X = Special design for other double shells											
14)	Design variants	Stator with uneven elastomer wall thickness (a	all qualities)										
		M a function of the temperature of the fl	luid										
		H pumped											
		Y = Rotor ductile hard chromium-plated		= Wir			on on jo	oint sha	ıft				
		Z = Rotor metallically coatedS = Worm on joint shaft	Х	= Oth	er desi	gns							
(15)	Suction and dis-	1 = EN-GJL-250											
(9)	charge casing in contact with fluid	3 = EN-GJL-250, inside H-rubberized 4 = 1.4408											
	materials	A = 1.4462											
_	Driving shaft,	X = Special materials 1 = 1.4021/1.4571											
16	joint shaft in con-	2 = 1.4301/1.4571											
	tact with liquid materials	4 = 1.4571 A = 1.4462											
	materials	X = Special materials, e. g. also for joint pa	ırts										
177	Rotor- materials	2 = 1.4301 $4 = 1.3 = 1.2436/1.2379 X = S_1$.4571 pecial materia	ale o a	other		= 1.440		toriale				
<u> </u>	Stator-		crylonitrile-bu				ALLD		teriais				
18	materials		ubbers (NBR)										
		HP = Acrylonitrile-butadiene E = E rubbers, hydrated (HNBR)	PDIVI										
			Special materi	als									
<u> </u>	Joint sleeve	polyethylene (CSM) P = Acrylonitrile-butadiene Y = C	Chlorosulfona	ted		Χ =	= Spec	ial mate	erials				
19	materials		oolyethylene (•						
_	Shaft seal	N = Polychloroprene B = B Stuffing box:	Butyl caoutsch	iouc									
20	materials	5846 = Ramie fiber with PTFE impregnation											
		6426 = Aramid-endless fiber with PTFE imp 6230 = Graphite-incorporated PTFE with sli											
		Mechanical seal:											
			Spring and co	nstructio	n	Auxi	liary ga	skets					
			2nd point					r single					
		1st + 4th point for double gasket 2 = CrMo cast iron/hard carbon A	A = 1.4300					oints for Ionitrile			<u>: </u>		
		4 = Ceramics/hard carbon F	F = 1.4500			F	•	ers (NB			double		
			_ = Hastelloy M = Hastelloy			Е		aoutch		0	PTFE-		
			vi = Hastelloy K = Special r		5	S		on caou			coated		
		highly wear-resistant,	•			N V		chlorop roelasto					
		corrosion-resistant 7 = Silicon carbide/silicon carbide				TTE		aoutch	,	-			
		highly wear-resistant, highly				TTV	= Fluoi	roelasto	omer (F	PM) ①			
		corrosion-resistant X = Special materials				TTS	= Silico	on caou	itchouc	1			
						Χ	=Spec	cial mat	erials				

 Series AE1F
 Design ID

 GB/2012.06 - Ident-No. 228494



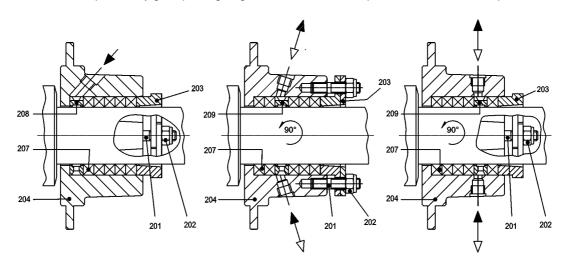
Sectional drawing and component list



Bearing 1: Hose-proof, radial bearing drive-side with sealing washer; axial bearing pump-side with shaft seal ring.

Both bearings regreasable. Only for horizontal installation.

Shaft seal **P01**: Due to particularly great packing length, versatile, admissible pressure at the shaft seal p = - 0,7 to 16 bar.



P02 Stuffing box with flushing ring

To be employed for very abrasive fluids pumped with external flushing, p = -0,7 to 12 bar

P03 Stuffing box with internal sealing chamber ring

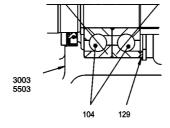
To be employed for pure fluids with internal sealing or for abrasive fluids with external sealing, p = -0,8 to 6,0 bar

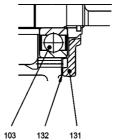
P04 Stuffing box with external sealing chamber ring

To be employed in case of incompatibility of the external sealing liquid with the fluid pumped or if air inlet is to be avoided, p = -0.9 to 12 bar

Part N	o. Denomination	Part N	o. Denomination	Part No. Denomination				
101	Key	127	Circlip	212	Screw plug			
102	Spacer sleeve	129	Shim ring	213	Joint tape			
103	Groove ball bearing	131	Bearing cover	214	Mechanical seal housing			
104	Angular contact ball	132	Gasket	215	Mechanical seal cover			
	bearing	139	Hexagon screw	218	O-ring			
107	Bearing grease	201	Stud bolt	219	Mechanical seal			
110	Bearing bracket	202	Self-locking nut	220	Locking pin			
112	Shaft seal ring	203	Gland half	232	Shaft seal ring			
113	Spacer ring	204	Shaft sealing housing	234	Throttling ring			
114	Thrower	206	Shaft sleeve	235	O-ring			
115	O-ring	207	Stuffing box	236	Locking pin			
116	Bearing nut	208	Flushing ring	245	Hexagon screw			
118	Driving shaft	209	Sealing chamber ring	251	Sealing compound			
119	Lubricating nipple		5	-	3 1			







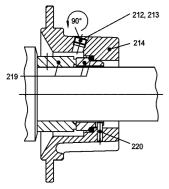
Bearing 1

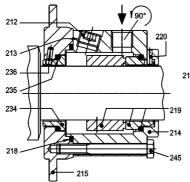
ng 1 for size 3003 and above

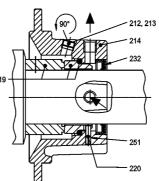
and 2:

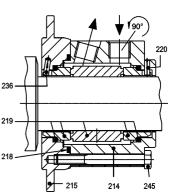
Axial bearing with two-single-row angular contact ball bearings

Radial bearing in case of bearing **2** (only for vertical installation with shaft shank upwards).









G0K/G0N Single mechanical seal, DIN EN 12 756, K/N design,

U shape.

For employment, please inquire. p = -0,5 bis 16 bar.

G0S/G0T Single mechanical seal, DIN EN 12 756, K/N design, U shape, rotating part with integrated locking device, with flushing liquid connection and pump-side throttling ring. For employment, please inquire. p = - 0.5 to 16 bar

Part No. Denomination

G0Q Single mechanical seal, DIN EN 12 756, K design, U shape with quench. For employment, please in-

quire.

p = -0.5 to 16 bar

G0D Double mechanical seal, with sealing liquid connection. For employment, please inquire. p = - 0.95 to 16 bar

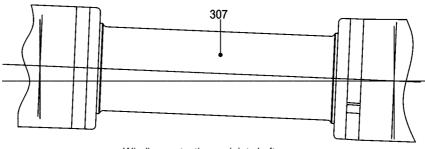
Part No.	Denomination
301	Joint bolt
302	Joint bush
303	Bush for joint bolt
304	Joint sleeve
305	Joint lubricant
306	Joint clamp
307	Joint shaft
308	Joint collar
401	Rotor
402	Stator
403	Stator gasket delivery-side
404	Stator gasket suction-side
501	Gasket for suction casing

502	Screw plug
503	Joint tape
504	Delivery casing
505	Suction casing
506	Suction casing cover
507	Gasket
508	Stud bolt
509	Hexagon nut
510	Fan-type lock washer
525	Washer
601	Type plate
602	Round head grooved pin
603	Information plate commissioning

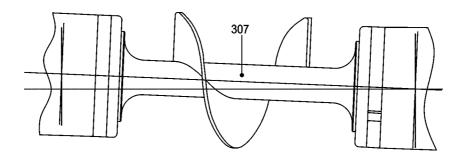
Part No.	Denomination
604	Information plate suction
605	Information plate pressure
606	Hexagon screw/stud bolt
607	Hexagon nut
608	Fan-type lock washer
609	Hexagon nut
610	Washer
611	Clamp bolt
612	Support
613	Hexagon screw
627	Information plate
	physical hazard

Series AE1F Design ID GB/2012.06 – Ident-No. 228494

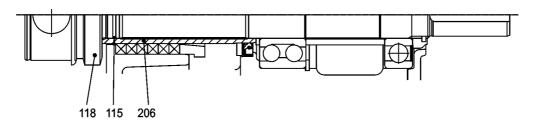




Winding protection on joint shaft



Worm on joint shaft

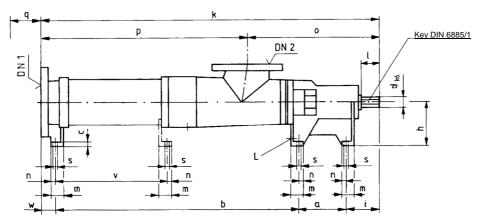


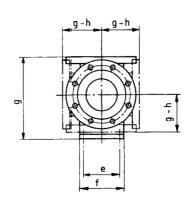
Shaft with shaft sleeve from size 203 and above for all gasket designs possible

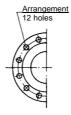
GB/2012.06 – Ident-No. 228494 Series AE1F Design ID 7

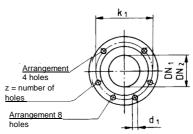


Pump dimensions, auxiliary connections, possible branch positions, weights Suction casing with flange connection









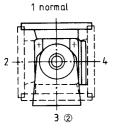
Dimensions in mm, nominal widths of ANSI flanges (DN) in inch. Subject to alternations

Sense of rotation: normally counterclockwise as seen from the driving side, here $DN_1=$ discharge branch, $DN_2=$ suction branch, change of sense of rotation possible, then, $DN_1=$ suction branch, $DN_2=$ discharge branch

Series		Pump dimensions															max.
Size																	mass
															kg		
	а	b	С	d	е	f	h	i	-1	m	n	0	q①	s	L	v	
AE 1F 0103-ID	114	585	10	18	75	95	90	65	30	30	11	278	280	9	Rp ¾	-	28
AE 1F 0203-ID	122	711	10	22	85	105	100	79	40	30	11	316	365	9	Rp ¾	-	42
AE 1F 0403-ID	140	897	13	28	100	125	125	95	50	38	13	378	470	11,5	Rp ⅓	-	65
AE 1F 0553-ID	151	923	15	32	114	140	140	106	60	40	14	422	430	14	Rp ¾	-	85
AE 1F 0703-ID	151	1075	15	32	114	140	140	106	60	40	14	422	580	14	Rp ¾	-	93
AE 1F 1003-ID	171	1071	16	42	132	168	160	118	65	50	19	492	490	18	Rp ¾	-	132
AE 1F 1603-ID	171	1359	16	42	132	168	160	118	65	50	19	492	780	18	Rp ¾	-	157
AE 1F 3003-ID	190	1679	16	48	164	200	180	130	75	50	19	546	980	18	Rp ¾	1079	272
AE 1F 5503-ID	220	2042	21	60	200	245	225	158	90	63	23	669	1200	22	Rp 1	1313	495

① Stator dismantling dimension

Possible branch positions as seen from the drive



② for size 103 not possible

Flange	dimensions
1 larige	uninchisions

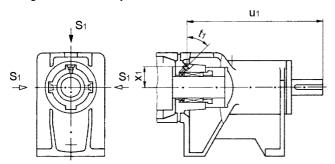
		•	.ago a								
DIN EN	1092, P	N 16 ⑤		ANSI B16.1/16.5, Class 125/150 ④							
DN ₁ /DN ₂	k ₁	d₁	Z	DN ₁ /DN ₂	k ₁	d ₁	Z				
50	125	18	4	2	120,6	19	4				
65	145	18	4	2 ½	139,7	19	4				
80	160	18	8	3	152,4	19	4				
100	180	18	8	4	190,5	19	8				
125	210	18	8	5	215,9	22,2	8				
150	240	22	8	6	241,3	22,2	8				
200	295	22	12	8	298,4	22,2	8				
250	355	26	12	10	361,9	25,4	12				
300	410	26	12	12	431,8	25,4	12				



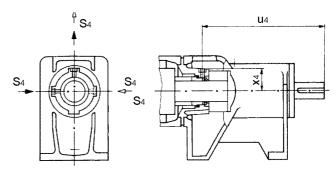
Series		Connection dimensions for suction and discharge branch																
Size	F	langes	DIN EN	l 1092, l	PN 16	5	Flanges ANSI B16.1, Class 125 ④						Flanges ANSI B16.5, Class 150 ④					
			3	3	3	3			3	3	3	3						
	DN ₁	DN_2	k	р	W	g	DN₁	DN_2	k	р	W	g	DN ₁	DN_2	k	р	W	g
AE 1F 0103-ID	50	50	807	529	43	175	2	2	803	525	39	171	2	2	807	529	43	175
AE 1F 0203-ID	65	65	958	642	46	190	2 ½	2 ½	957	641	45	189	2 ½	2 ½	962	646	50	194
AE 1F 0403-ID	80	80	1177	799	45	230	3	3	1175	797	43	228	3	3	1180	802	48	233
AE 1F 0553-ID	100	100	1224	802	44	260	4	4	1226	804	46	262	4	4	1226	804	46	262
AE 1F 0703-ID	100	100	1376	954	44	260	4	4	1378	956	46	262	4	4	1378	956	46	262
AE 1F 1003-ID	125	125	1404	912	44	300	5	5	1404	912	44	300	5	5	1404	912	44	300
AE 1F 1603-ID	125	125	1692	1200	44	300	5	5	1692	1200	44	300	5	5	1692	1200	44	300
AE 1F 3003-ID	150	150	2058	1512	59	350	6	6	2058	1512	59	350	6	6	2058	1512	59	350
AE 1F 5503-ID	200	200	2484	1815	64	425	8	8	2484	1815	64	425	8	8	2484	1815	64	425

③for rubber-coating + 3 mm④Sealing surface: stock finish

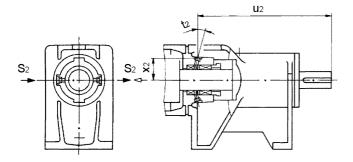
Arrangement of auxiliary connections for shaft seals



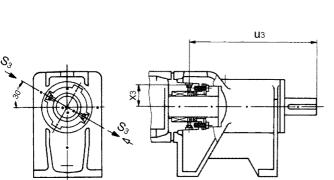
P02, P12 with flushing ring

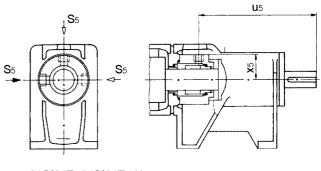


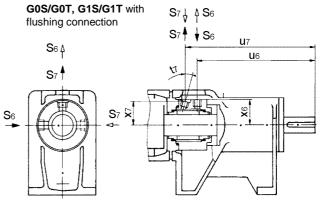
G0Q, G1Q with quench connection



P03, P13 with internal sealing chamber ring







⑤ Connecting dimensions acc. DIN EN 1092, up to DN100 raised face form B, greater than DN100 raised form A



ı	P04, P14 wi	th external	amber rin	g	G0D, G1D with sealing connection							
Series		Connection dimensions auxiliary connections for shaft seals										
Size	P02, P12 with flushing ring				P03, P13 with internal sealing chamber ring				P04, P14 with external sealing chamber ring			
		S ₁ ⑥	U ₁	X ₁	t ₁	S ₂ 6	U ₂	X 2	t ₂	S ₃ 6	U ₃	X 3
AE 1F	103-ID	M 8 x 1	195,5	28	42°	M 8 x 1	188	30	20°	M 8 x 1	180,5	30,5
AE 1F	203-ID	M 8 x 1	217	31,5	40°	M 8 x 1	211	32	20°	M 8 x 1	202,5	33,5
AE 1F	403-ID	Rp ⅓	255	38	42°	Rp ⅓	248	40	17°	Rp ⅓	236	39,5
AE 1F AE 1F	553-ID 703-ID	Rp ⅓	279	42	42°	Rp ⅓	272	44	17°	Rp ⅓	261	43,5
AE 1F AE 1F	1003-ID 1603-ID	Rp ⅓	316	52	42°	Rp ⅓	307	54	17°	Rp ⅓	292,5	54,5
AE 1F	3003-ID	Rp ⅓	349	56	35°	Rp ⅓	338,5	57	13°	Rp ⅓	322,5	58
AE 1F	5503-ID	Rp ¼	416	67	35°	Rp ¼	403	68,5	13°	Rp ¼	383	69,5

Series		Connection dimensions auxiliary connections for shaft seals												
Size		G0S/G0T, G1S/G1T with flushing connection			G0Q, G1Q with quench connection			G0D, G1D with sealing connection						
		S ₅ ⑥	u ₅	X ₅	S ₄ ⑥	u_4	X_4	S ₆ ⑥	S ₇ 6	u ₆	U ₇	X ₆	X ₇	t ₇
AE 1F	103-ID	Rp ¼	157	34	Rp ⅓	167	30,5	Rp ¼	Rp ¼	157	182,5	34	33	15°
AE 1F	203-ID	Rp ⅓	179	38	Rp ⅓	187,5	30,5	Rp ¼	Rp ¼	179	204,5	38	36,5	15°
AE 1F	403-ID	Rp ¼	220,5	41,5	Rp ⅓	230	33,5	Rp ¼	Rp ¼	220,5	245,5	41,5	40	15°
AE 1F	553-ID	Rp ¾	241	48,5	Rp ⅓	255	41	Rp ⅔	Rp ⅔	241	266	48,5	47	15°
AE 1F	703-ID													
AE 1F	1003-ID	Rp ⅔	280	56	Rp ⅓	287	54	Rp ¾	Rp ⅔	280	305,5	56	53,5	20°
AE 1F	1603-ID													
AE 1F	3003-ID	Rp ⅔	297	61	Rp ⅓	315,5	57,5	Rp ¾	Rp ¾	297	337,5	61	58,5	20°
AE 1F	5503-ID	Rp ⅔	364	71,5	Rp ¼	375,5	68,5	Rp ⅔	Rp ⅔	364	406	71,5	69	22°

[©]Screw hole DIN 3852, shape Z

Standard supply

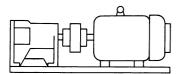
10

Possible supply, for these purposes, the sealing housing must be turned in case of designs P02/P12, G0S/G1S, G0T/G1T, G0Q/G1Q, G0D/G1D.

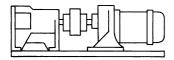
Series AE1F Design ID GB/2012.06 – Ident-No. 228494



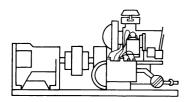
Driving possibilities



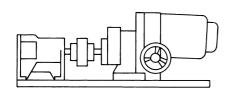
1 AE-ID with flexible coupling and motor



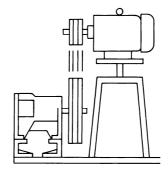
2 AE-ID with flexible coupling and geared motor



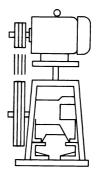
3 AE-ID with flexible coupling and combustion engine



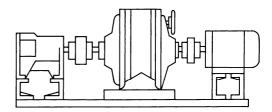
6 AE-ID with flexible coupling and infinitely variable gear



4 AE-ID with V-belt drive, rocker and motor arranged behind the pump



5 AE-ID with V-belt drive rocker and motor, arranged above the pump



7 AE-ID with flexible coupling, gear or variable speed gear, flexible coupling and motor

Further driving variants (e.g. hydraulic or pneumatic drives) are possible.



Range of eccentric screw pumps	Series	Number of stages	M	aximum cap Δp = 0 b		Maximum discha	rge Maximum viscosity				
		o.agoo	m	_r	l/min	bar	mPa s				
	AE1F	1	22		3800	6	300.000				
	AEB1F	1	22		3800	6(4)	300.000				
	AE.E-ID	1,2	45		7500	10	300.000				
	AE.N-ID	1,2	29		4850	16	270.000				
	AE.H-ID	2,4	17		2900	24	270.000				
	AEB.E-IE	1,2	17		2900	6 12	300.000 270.000				
	AEB.N-IE	1,2	11		1850						
	AEB4H-IE	4	1		200	24	270.000				
	AED.E-ID	1	72 45		12000	8	250.000				
	AED.N-ID	2	45		7500	16	225.000				
	AEDB.E-IE	1	25		4300	6	250.000				
	AEDB.N-IE	2	17		2900	12	225.000				
	AE.NRG	1,2,4	3		500	20	1.000.000				
	TECFLOW	1	18		3100	4	200.000				
	SEZP	1,2	2		350	10	1.000.000				
	SNZP	1,2	4		750	12	1.000.000				
	SSP	1,2	4		800	12	150.000				
	SSBP	1,2	4		800	12	150.000				
	SETP ①	1,2	14		2350	10	300.000				
	SETBP	1,2	4		670	10	150.000				
	SEFBP	1	4		670	6	150.000				
	SMP	1	4		670	6	150.000				
	SMP2	1	5,5		92	6	11.500				
	AFP	1	2,8		47	6	50.000				
	ANP	2	2,5		42	12	20.000				
	ANBP	2	2,5		42	12	20.000				
	ASP	2	2,5		42	12	20.000				
	ASBP	2	2,5		42	12	20.000				
	ADP	3	0,6		10	12	20.000				
	ADBP	3	0,6		10	12	20.000				
	ACNP	1,2	2		480 480	12 12	150.000 150.000				
	ACNBP	1,2		9	460		ns for higher pressures available				
Peristaltic range	Series		Maximu	m capacity		Maximum discharge pressure	Maximum viscosity				
			m³/h	l/mir	1	bar	mPa s				
	ASL		2,4	40		4	100.000				
	ASH		60	1000		15	100.000				
Macerator range	Series	Maximum th		Static pressure head m		d					
	AMS-1	80 at 3% solids			3						
	ABMS-1	80 at 3%		3							
	AMI-1	160 at 3%	solids	-							
	ABMI-1	80 at 3% solids		-							
Accessories	Pump accessories: Drivers:	Elec	Stator setting devices, electrical heaters, bridge breakers. Electric motors, geared motors, variable speed transmissions, reduction gearboxes, internal combustion engines, pneumatic and hydraulic drives.								
	Transmission comp Base plates:	onents: Cou	: Couplings, V-belt transmissions, toothed belt transmissions, other types of transmission. Standard and special versions, wheeled trolleys, mounting flanges.								
	Safety arrangemen	ts: Bypa	Bypass lines with safety or regulating valves, systems to guard against dry running (conductive, capacitive, thermal etc.).								
	Other accessories:	Elec	trical, hydra pment, seal	ulic and pne	umatic o	control arrangements, fil	ter systems, metering s, valves, flanges, flexible				
Subject to technical alteration	one	pipe	· · ·								

Subject to technical alterations.



ALLWEILER GmbH
Business Unit Eccentric Screw Pumps
Postfach 200123 • 46223 Bottrop
Kirchhellener Ring 77-79 • 46244 Bottrop
Germany
Tel. +49 (0)2045 966-60
Fax. +49 (0)2045 966-679
E-Mail: service-ge@allweiler.de
Internet: http://www.allweiler.com
GB/2012.06 – Ident-No. 228494