

Eccentric Screw Pumps

Series AE1+1H, AE2H, AE2+2H, AE4H, AE 2+2V, AE 4+4V

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, two-, four- or eight-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 50 to 2700 with mechanical system H and the pump sizes 25 to 1450 with mechanical system V in cast iron design are provided with staggered holes for cleaning. The stator vulcanized into a tube or shell casing (even elastomer wall thickness) 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.

Stators are supplied:

For series AE.H with uneven wall thickness:

two+two-stage for sizes 100, 200, 380, 750, 1450, 2700

four-stage for sizes 12, 25, 50, 100, 200, 380, 750, 1450

with even wall thickness:

single+single stage for size 2700

two-stage for sizes 100, 200, 380, 750, 1450

For series AE.V with uneven wall thickness:

four+four-stage for sizes 25, 50, 100, 200, 380, 750, 1450

with even wall thickness:

two+two-stage for sizes 100, 200, 380, 750, 1450

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 particularly simple and sturdy properly taking the eccentric movement 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 4, 5.

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 construction system and, in case of conversion to a different mechanical seal design, can be easily combined with one another.

Installation spaces for mechanical seals according to DIN 24 960 (except for double mechanical seal).

For further data, refer to pages 4, 5, 6 and 7.

Technical data

Deliveries, admissible speed ranges and required drive powers are to be taken from the performance graph on page 3 and/or the separate individual characteristic curves.

				AE.H	AE.V
Delivery	Q	l/min	up to	2900	1900
Temperature of fluid pumped	t	°C ①	up to		150
Delivery pressure	Δp	bar	up to	24	48
Pump outlet pressure	p _d	bar ③	up to	25	64
Attainable under-pressure	p _s	bar ②	up to		0,95
Viscosity	η	mPa·s ②	up to		270.000
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 fibre lengths

Size	12	25	50	100	200	380
max. grain size mm	2	2,5	3	3,8	5	6,8
max. fibre length mm	35	42	42	48	60	79
Size	750	1450	2700			
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 and fluid to be pumped.

③ depending on the direction of rotation, inlet pressure.

Drive

Driving possibilities see page 14.

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

Direction of rotation

Clockwise looking from the drive end is standard. Opposite direction of rotation is possible. For clockwise rotation the permissible pressure at the shaft seal and the permissible pressure of the suction casing, then discharge casing, (16 bar) must be considered.

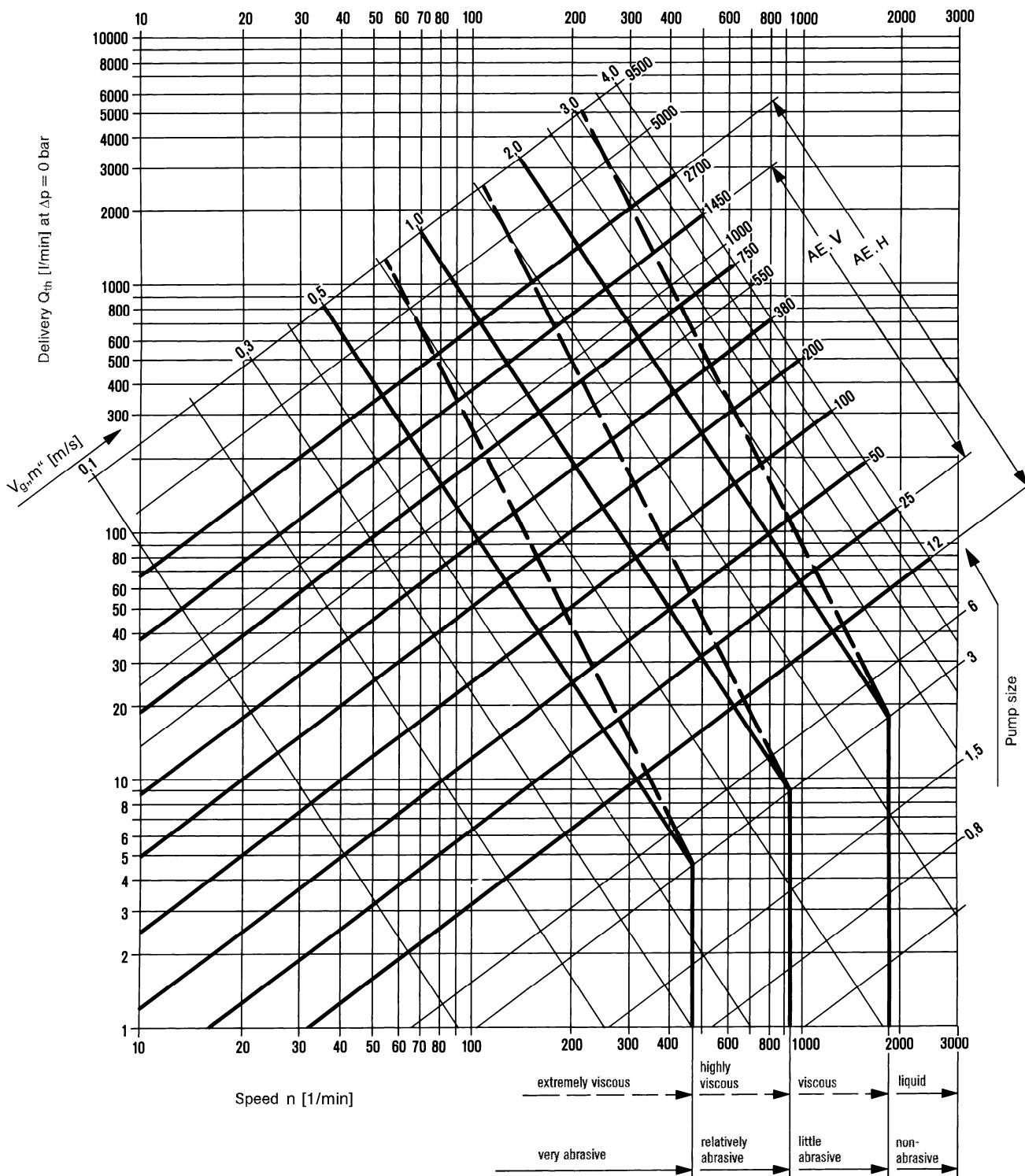
Installation

AE pumps may be installed horizontally or vertically. In case of vertical arrangement, "shaft shank downwards" is not admissible.

By means of a flexible coupling or a via 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.
 $V_{g,m''}$ = available, mean sliding speed of the rotor in the stator.



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

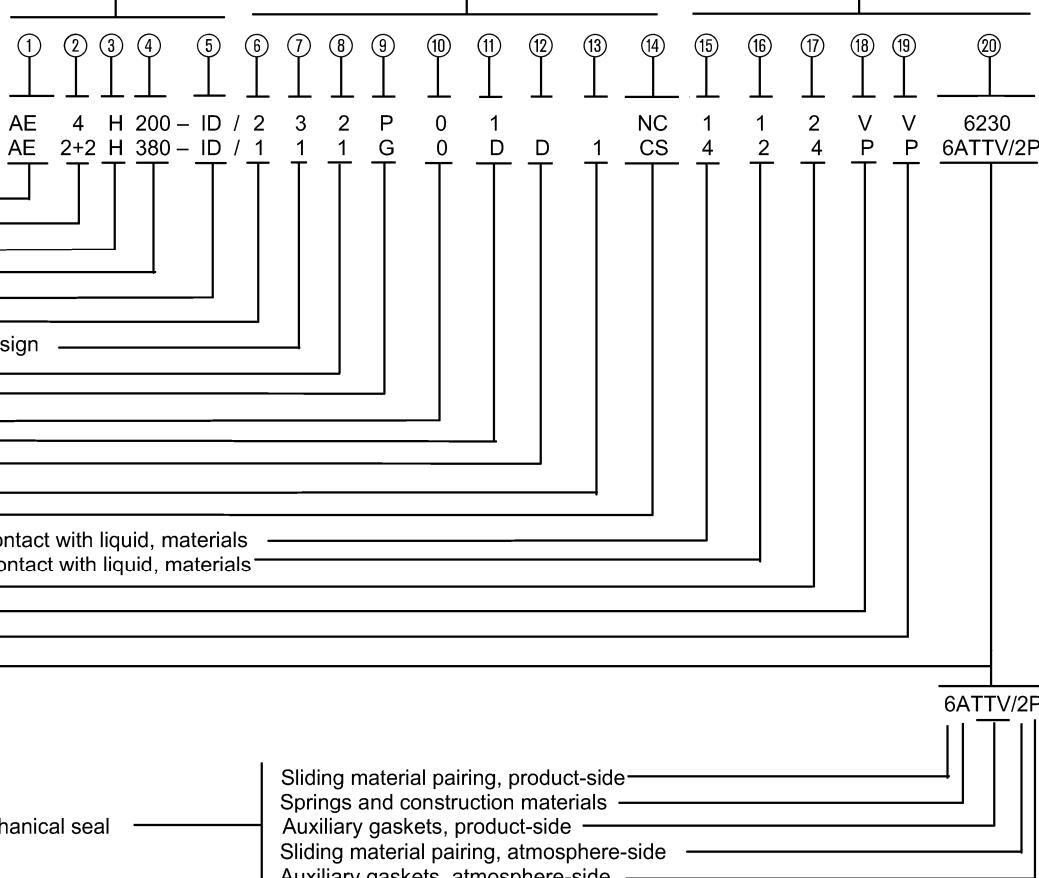
For exact performance data, please refer to the individual characteristics.

Type code

Material design _____

Geometric design _____

Type series _____

**Explanations to the type code:**

Position in type code	Designation	Design
①	Product	ALLWEILER eccentric screw pump
②	Number of stages: Series AE.H	1+1 = single-stage + single-stage up to delivery pressure Δp 24 bar (stator with even elastomer wall thickness), size 2700 2 = two-stage up to delivery pressure Δp 24 bar (stator with even elastomer wall thickness), sizes 100, 200, 380, 750, 1450 2 + 2 = two-stage + two-stage up to delivery pressure Δp 24 bar, sizes 100, 200, 380, 750, 1450, 2700 4 = four-stage up to delivery pressure Δp 24 bar, sizes 12, 25, 50, 100, 200, 380, 750, 1450 2 + 2 = two-stage + two-stage up to delivery pressure Δp 48 bar (stator with even elastomer wall thickness), sizes 100, 200, 380, 750, 1450 4 + 4 = four-stage + four-stage up to delivery pressure Δp 48 bar, sizes 25, 50, 100, 200, 380, 750, 1450
③	Mechanical system	H = rated for delivery pressure Δp 24 bar V = rated for delivery pressure Δp 48 bar
④	Size	Possible sizes series AE.H: 12, 25, 50, 100, 200, 380, 750, 1450, 2700 Possible sizes series AE.V: 25, 50, 100, 200, 380, 750, 1450 The numbers indicate the theoretic delivery in l/min with $n = 400$ 1/min and $\Delta p = 0$ bar.
⑤	Design	ID = Industrial design with internal bearing
⑥	Bearing design	1 = Hose-proof, radial bearing drive-side with sealing washer, axial bearing pump-side with shaft seal ring. Both bearings regreaseable. For horizontal installation. 2 = Hose-proof, radial bearing on both sides with sealing washer, axial bearing pump-side with shaft seal-ring. Axial bearing regreaseable, radial bearing lifetime-lubricated. For vertical installation with shaft shank upwards.
⑦	Suction and outlet branch design	1 = DIN-flanges 3 = ANSI-flanges X = Suction and/or delivery branch of special design
⑧	Branch position	1, 2, 3, 4 For the arrangement, please refer to the representation, page 9. Arrangement 3 for size 12 not possible.
⑨	Shaft seal type	P = Stuffing box or other non-mechanical shaft seal G = Mechanical seal (mechanical shaft seal)
⑩	Shaft design	0 = Shaft without shaft sleeve 1 = Shaft with shaft sleeve (not possible with pump size 12)
⑪	Shaft seal design	Stuffing boxes P01/P11 = Stuffing box of normal design (without sealing chamber ring / without flushing ring) P02/P12 = Stuffing box with flushing ring P03/P13 = Stuffing box with internal sealing chamber ring P04/P14 = Stuffing box with external sealing chamber ring P0X/P1X = Non-mechanical shaft seal of special design

Series AE1+1H, AE2H, AE2+2H, AE4H, AE2+2V, AE4+4V

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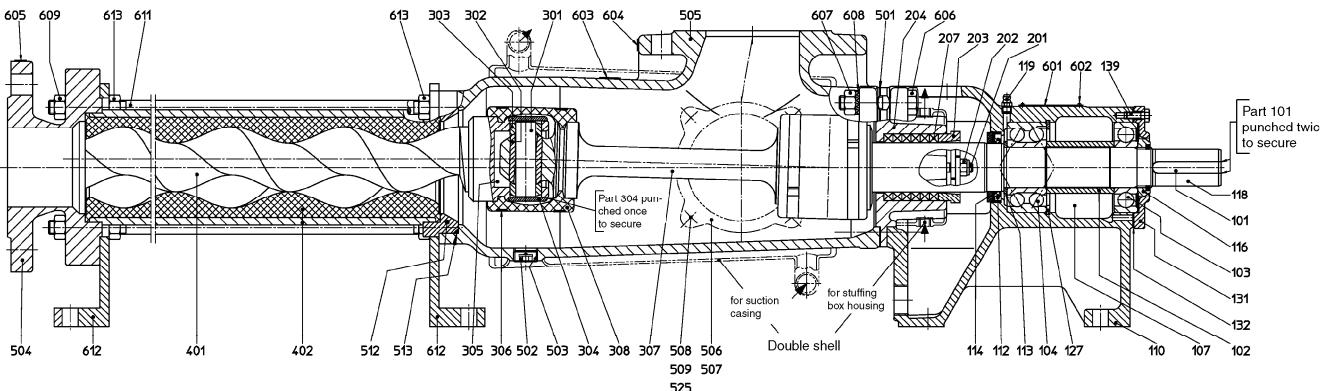
Mechanical seals:																						
for pump sizes series AE.V:		25 50 10 200 380 750 1450																				
for pump sizes series AE.H:		12 25 50 100 20 380 750 1450 2700																				
Shaft diameter at the location of the shaft seal		25 30 35 43 53 60 75 90 110																				
G0K	= individual mechanical seal, DIN 24 960, design K, shape U	X X X X X X X X ①																				
G0N	= as above, however design N	X X X X X X X X -																				
G0S	= individual mechanical seal, DIN 24 960, design K, shape U, rotating part with integrated locking device and pump-sided throttling ring	X X X X X X X X ①																				
G0T	= as above, however design N	X X X X - X X - -																				
G0Q	= individual mechanical seal, DIN 24 960, design K, shape U with quench	X X X X X X X X ①																				
G0D	= double mechanical seal	① ① ① ① ① ① ① ① ①																				
G0X	= mechanical seal of special design																					
① for gasket design, please inquire.																						
⑫	Double shell	D = Double shell for heating/cooling, available in stainless steel only. Connections as threaded nipples for liquid media. Maximum heating/cooling pressure 6 bar, maximum heating temperature + 150°C, maximum cooling temperature -40°C																				
⑬	Double shell design	1 = Suction casing with double shell 2 = Stuffing box for P01/P11 with double shell 12 = Suction and shaft sealing housing P01/P11 with double shell X = Special design for other double shells																				
⑭	Design variants	<table border="0"> <tr> <td>Stator with uneven elastomer wall thickness (all qualities)</td> <td>Stator with even elastomer wall thickness (all qualities)</td> </tr> <tr> <td>N</td><td>D</td> </tr> <tr> <td>M</td><td>E</td> </tr> <tr> <td>H</td><td>F</td> </tr> <tr> <td>T</td><td>R</td> </tr> <tr> <td colspan="2">Rotor with temperature play as a function of the temperature of the fluid pumped</td> </tr> <tr> <td>C = Rotor hard chromium-plated</td><td>W = Winding protection on joint shaft</td> </tr> <tr> <td>Y = Rotor ductile hard chromium-plated</td><td>G = Stator with even elastomer wall thickness</td> </tr> <tr> <td>Z = Rotor metallically coated</td><td>L = Stator for thermic dry running protection</td> </tr> <tr> <td>S = Worm on joint shaft</td><td>X = Other designs</td> </tr> </table>	Stator with uneven elastomer wall thickness (all qualities)	Stator with even elastomer wall thickness (all qualities)	N	D	M	E	H	F	T	R	Rotor with temperature play as a function of the temperature of the fluid pumped		C = Rotor hard chromium-plated	W = Winding protection on joint shaft	Y = Rotor ductile hard chromium-plated	G = Stator with even elastomer wall thickness	Z = Rotor metallically coated	L = Stator for thermic dry running protection	S = Worm on joint shaft	X = Other designs
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⑮	Suction and delivery casting in contact with fluid, materials	1 = EN-GJL-250 / St. 3 = EN-GJL-250 / St., inside H-rubberized 4 = 1.4408/1.4571 A = 1.4462 X = Special materials																				
⑯	Driving shaft, joint shaft in contact with liquid, materials	1 = 1.4021/1.4571/1.1191 2 = 1.4301/1.4571 4 = 1.4571 A = 1.4462 X = Special materials, e.g. also for joint parts																				
⑰	Rotor materials	2 = 1.4301 4 = 1.4571 A = 1.4462 3 = 1.2436/1.2379 X = Special materials, e.g. other metals, plastic materials																				
⑱	Stator materials	<table border="0"> <tr> <td>WB = Caoutchouc soft</td> <td>YL = Chlorosulfonated polyethylene (CSM)</td> <td>PE = Polyethylene</td> </tr> <tr> <td>P = Acrylonitrile-butadiene rubbers (NBR)</td> <td>V = Fluoroelastomer (FPM)</td> <td>PT = Teflon glass fiber reinforced</td> </tr> <tr> <td>PL = Acrylonitrile-butadiene rubbers (NBR)</td> <td>HP = Acrylonitrile-butadiene rubbers, hydrated (HNBR)</td> <td>E = EPDM</td> </tr> <tr> <td>N = Polychloroprene (N)</td> <td>SL = Silicon bright</td> <td>X = Special materials</td> </tr> <tr> <td>Y = Chlorosulfonated polyethylene (CSM)</td> <td>PU = Polyurethan</td> <td></td> </tr> </table>	WB = Caoutchouc soft	YL = Chlorosulfonated polyethylene (CSM)	PE = Polyethylene	P = Acrylonitrile-butadiene rubbers (NBR)	V = Fluoroelastomer (FPM)	PT = Teflon glass fiber reinforced	PL = Acrylonitrile-butadiene rubbers (NBR)	HP = Acrylonitrile-butadiene rubbers, hydrated (HNBR)	E = EPDM	N = Polychloroprene (N)	SL = Silicon bright	X = Special materials	Y = Chlorosulfonated polyethylene (CSM)	PU = Polyurethan						
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⑲	Joint sleeve materials	<table border="0"> <tr> <td>P = Acrylonitrile-butadiene rubbers (NBR)</td> <td>Y = Chlorosulfonated polyethylene (CSM)</td> <td>X = Special materials</td> </tr> <tr> <td>PL = Acrylonitrile-butadiene rubbers (NBR)</td> <td>V = Fluoroelastomer (FPM)</td> <td></td> </tr> <tr> <td>N = Polychloroprene (N)</td> <td>B = Butyl caoutchouc</td> <td></td> </tr> </table>	P = Acrylonitrile-butadiene rubbers (NBR)	Y = Chlorosulfonated polyethylene (CSM)	X = Special materials	PL = Acrylonitrile-butadiene rubbers (NBR)	V = Fluoroelastomer (FPM)		N = Polychloroprene (N)	B = Butyl caoutchouc												
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Series AE1+1H, AE2H, AE2+2H, AE4H, AE2+2V, AE4+4V

Design ID

Sectional drawing and component list

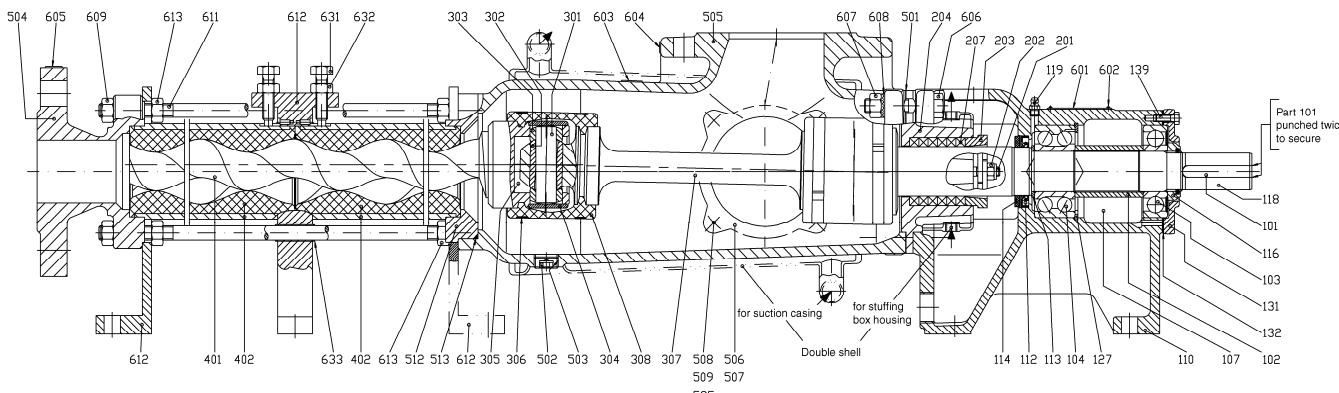
Series AE4H; design ID



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.

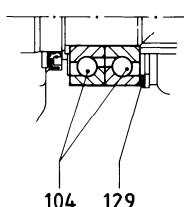
Shaft seal P01: Due to particularly great packing length, versatile, admissible pressure at the shaft seal $p = -0.7$ to 16 bar.

Series AE2+2H, AE4+4V; design ID

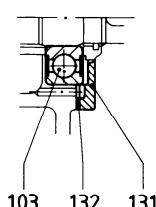


Part No.	Denomination	Part No.	Denomination	Part No.	Denomination
101	Key	213	Joint tape	504	Pressure casing
102	Spacer sleeve	214	Mechanical seal housing	505	Suction casing
103	Groove ball bearing	215	Mechanical seal cover	506	Suction casing cover
104	Angular-contact ball bearing	218	O-ring	507	Gasket
107	Bearing grease	219	Mechanical seal	508	Stud bolt
110	Bearing bracket	220	Locking pin	509	Hexagon nut
112	Shaft seal ring	232	Shaft seal ring	510	Fan-type lock washer
113	Spacer ring	234	Throttling ring	512	Reducer flange
114	Thrower	235	O-ring	513	O-ring
115	O-ring	236	Locking pin	525	Washer
116	Bearing nut	245	Hexagon screw	601	Type plate
118	Driving shaft	251	Sealing compound	602	Round head grooved pin
119	Lubricating nipple	301	Joint bolt	603	Information plate
127	Circlip	302 ①	Joint bush		Commissioning
129	Shim ring	303	Bush for joint bolt	604	Information plate Suction
131	Bearing cover	304	Joint sleeve	605	Information plate Pressure
132	Gasket	305	Joint oil	606	Hexagon screw
139	Hexagon screw	306	Joint clamp	607	Hexagon nut
201	Stud bolt	307	Joint shaft	608	Fan-type lock washer
202	Self-locking nut	308	Joint collar	609	Hexagon nut
203	Gland half	401	Rotor	611	Clamp bolt
204	Shaft sealing housing	402	Stator	612	Support
206	Shaft sleeve	403	Stator gasket outlet side	613	Hexagon screw
207	Stuffing box packing	404	Stator gasket suction side	631	Fixing piece
208	Flushing ring	501	Gasket for suction casing	632	Hexagon nut
209	Sealing chamber ring	502	Screw plug	633	Spacer
212	Screw plug	503	Sealing tape		

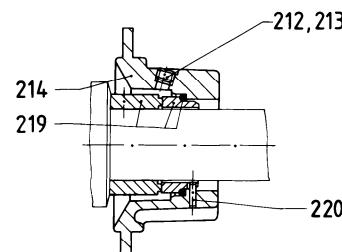
① not fitted to size 12



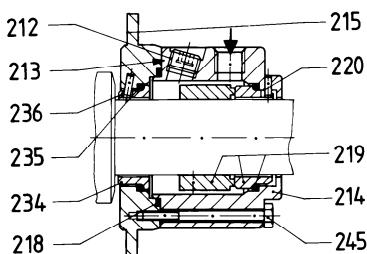
Bearing 1 AE.H: for size 380 and above
 AE.V: for size 200 and above
 and 2:
 Axial bearing with
 two-single-row angular
 contact ball bearings



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

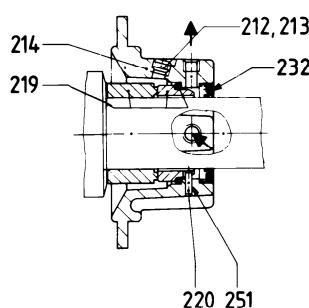


G0K/G0N Single mechanical seal,
 DIN 24 960, K/N design, U shape.
 For employment, please inquire.
 $p = -0,5$ to 16 bar

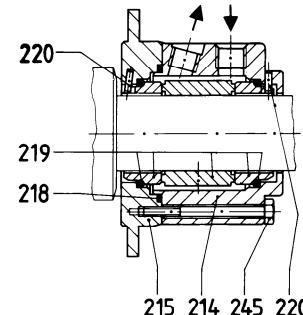


G0S/G0T Single mechanical seal,
 DIN 24 960, K/N design, U shape,
 rotating part with integrated
 locking device, with flushing liquid
 connection and pump-side
 throttling ring.

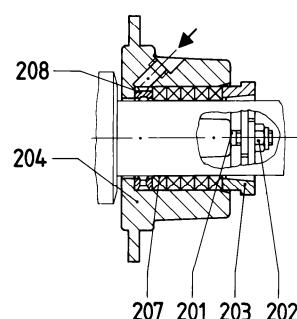
For employment, please inquire,
 $p = -0,5$ to 16 bar



G0Q Single mechanical seal,
 DIN 24 960, K design, U shape
 with quench.
 For employment, please inquire,
 $p = -0,5$ to 16 bar

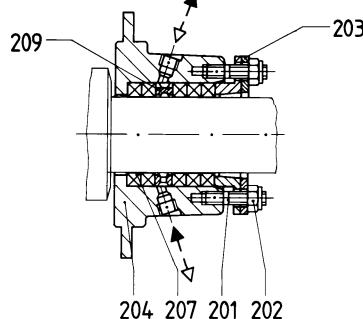


G0D Double mechanical seal,
 with sealing liquid connection.
 For employment, please inquire,
 $p = -0,95$ to 16 bar



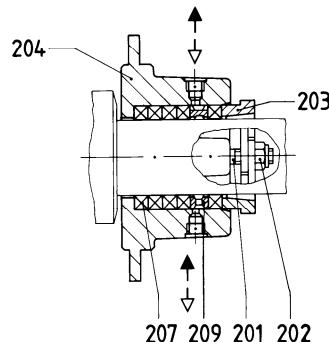
P02 Stuffing box with
 flushing ring

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



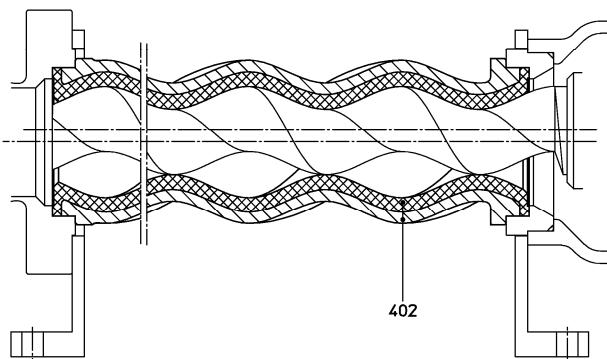
P03 Stuffing box with
 internal sealing
 chamber ring

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

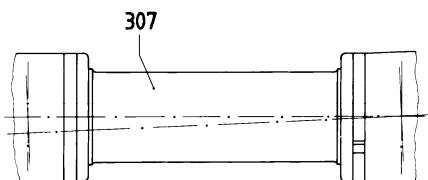


P04 Stuffing box with
 internal sealing
 chamber ring

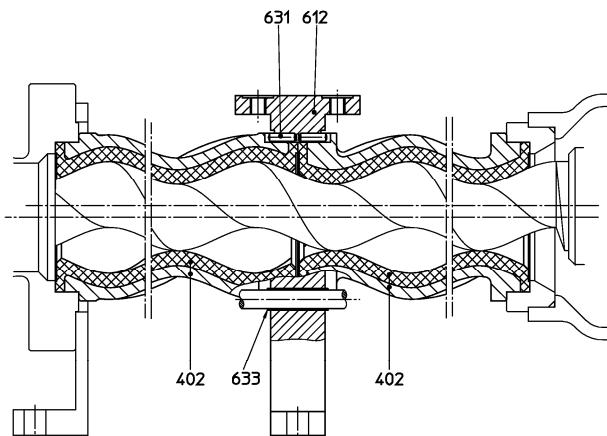
To be employed in case of
 incompatibility of the external sealing
 liquid with the fluid pumped or if
 air inlet is to be avoided
 $p = -0,9$ to 12 bar



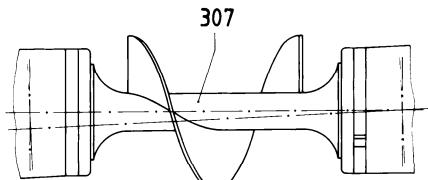
Stator with even elastomer wall thickness
Series AE2H



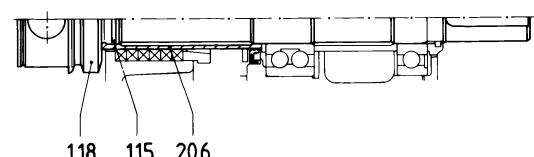
Winding protection on joint shaft



Stator with even elastomer wall thickness
Series AE1+1H, AE2+2V



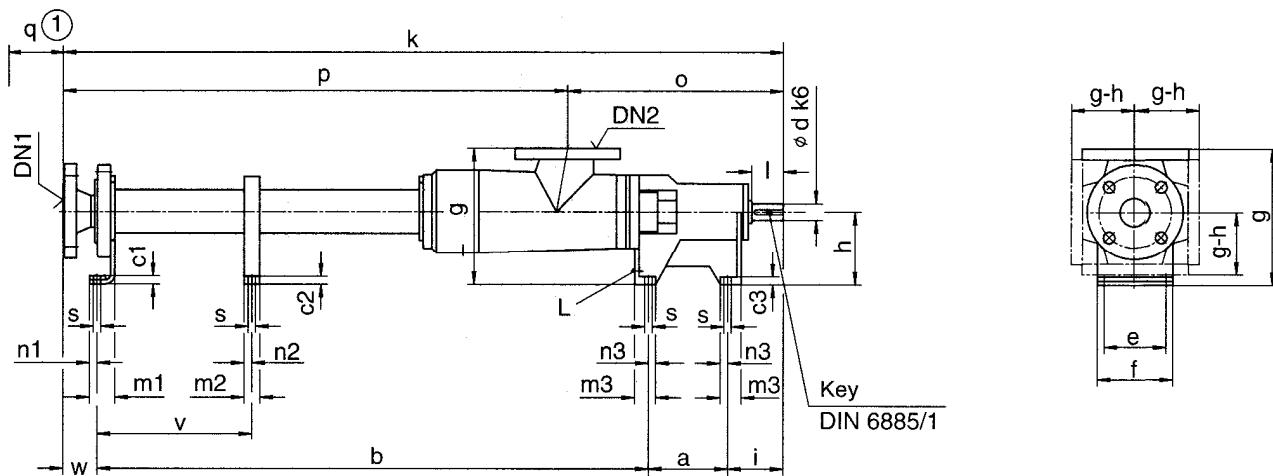
Worm on joint shaft



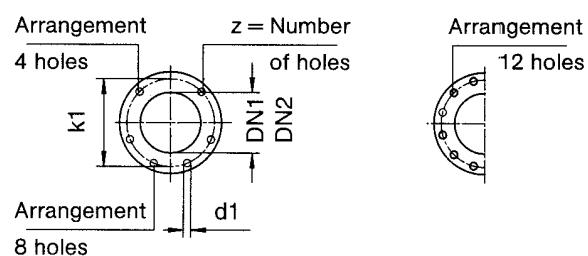
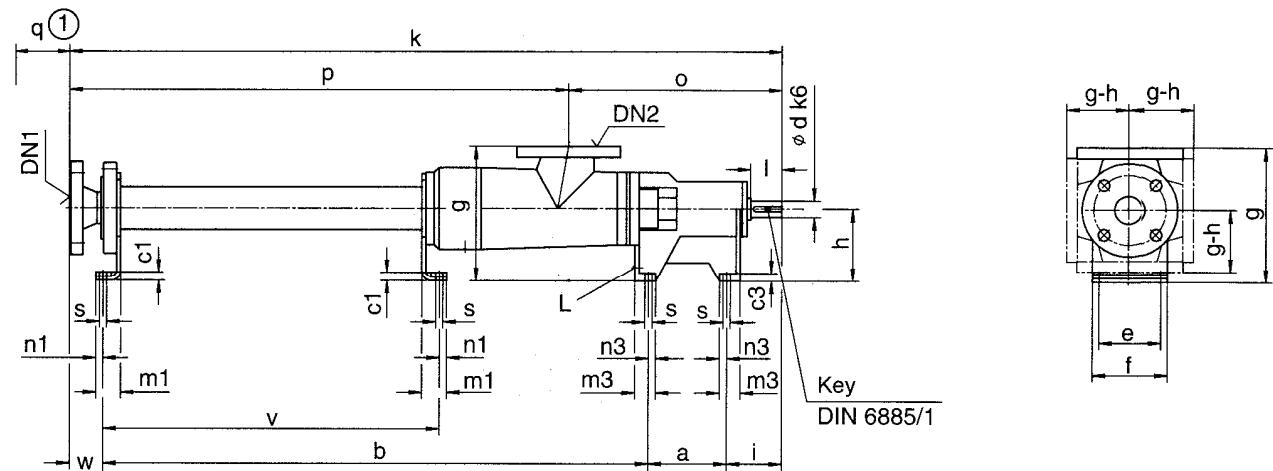
Shaft with sleeve from size 25
and above all stuffing boxes possible

Pump dimensions, auxiliary connections, possible branch positions, weights

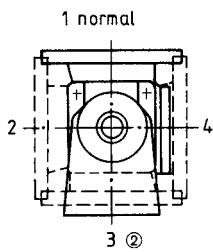
Series AE1+1H, AE2+2H; design ID



Series AE2H, AE4H; design ID



Possible branch positions
as seen from the drive



② for size AE4H 12 not possible

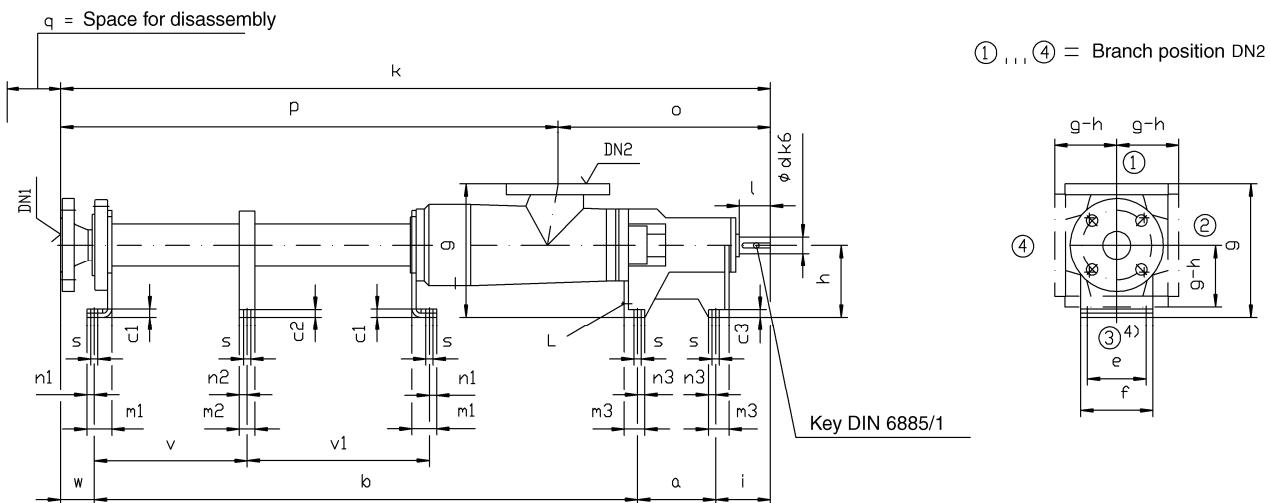
Dimensions in mm, nominal widths
of ANSI flanges (DN) in inch.
Subject to alterations.

Series Size	Pump dimensions																		max. mass kg				
	a	b	c ₁	c ₂	c ₃	d	e	f	h	i	l	m ₁	m ₂	m ₃	n ₁	n ₂	n ₃	o	q ①	s	L	v	
AE4H 12-ID	114	668	8	-	10	18	75	95	90	65	30	42	-	30	11	-	11	273	360	9	Rp ¾	-	20
AE4H 25-ID	122	814	8	-	10	22	85	105	100	79	40	42	-	30	11	-	11	309	465	9	Rp ¾	-	30
AE4H 50-ID	140	1032	13	-	13	28	100	125	125	95	50	48	-	38	13	-	13	371	605	11,5	Rp ¾	-	52
AE2H 100-ID	151	859	16	-	15	32	114	140	140	106	60	48	-	40	14	-	14	411	360	14	Rp ¾	-	62
AE2+2H 100-ID	151	1277	16	15	15	32	114	140	140	106	60	48	35	40	14	17,5	14	411	360	14	Rp ¾	431	86
AE4H 100-ID	151	1259	16	-	15	32	114	140	140	106	60	48	-	40	14	-	14	411	760	14	Rp ¾	856	80
AE2H 200-ID	171	1047,5	16	-	16	42	132	168	160	118	65	50	-	50	19	-	19	479,5	465	18	Rp ¾	-	93
AE2+2H 200-ID	171	1573,5	16	16	16	42	132	168	160	118	65	50	40	50	19	20	19	479,5	470	18	Rp ¾	535	133
AE4H 200-ID	171	1551,5	16	-	16	42	132	168	160	118	65	50	-	50	19	-	19	479,5	950	18	Rp ¾	1058	123
AE2H 380-ID	190	1268,5	16	-	16	48	164	200	180	129,5	75	50	-	50	19	-	19	532	560	18	Rp ¾	-	155
AE2+2H 380-ID	190	1906,5	16	16	16	48	164	200	180	129,5	75	50	45	50	19	22,5	19	532	570	18	Rp ¾	644,5	226
AE4H 380-ID	190	1906,5	16	-	16	48	164	200	180	129,5	75	50	-	50	19	-	19	532	1210	18	Rp ¾	1303	210
AE2H 750-ID	220	1618	20	-	21	60	200	245	225	158	90	70	-	63	23	-	23	644	750	22	Rp 1	-	300
AE2+2H 750-ID	220	2448	20	21	21	60	200	245	225	158	90	70	45	63	23	22,5	23	644	980	22	Rp 1	850,5	414
AE4H 750-ID	220	2448	20	-	21	60	200	245	225	158	90	70	-	63	23	-	23	644	1600	22	Rp 1	1721	390
AE2H 1450-ID	266	2030	20	-	24	75	245	290	250	182	110	70	-	65	23	-	23	769	950	22	Rp 1	1103	498
AE2+2H 1450-ID	266	3076	20	24	24	75	245	290	250	182	110	70	50	65	23	25	23	769	950	22	Rp 1	1065	690
AE4H 1450-ID	266	3076	20	-	24	75	245	290	250	182	110	70	-	65	23	-	23	769	1990	22	Rp 1	2149	655
AE1+1H 2700-ID	320	2508	28	29	29	95	290	350	280	215	130	80	55	80	30	27,5	30	922	980	27	Rp 1	677	780
AE2+2H 2700-ID	320	3824	28	29	29	95	290	350	280	215	130	80	55	80	30	27,5	30	922	1220	27	Rp 1	1335	1030

Series Size	Companion dimensions for outlet branch																		DN ₁	
	Flanges DIN 2501, PN 25 ③							Flanges ANSI B16.5 RF, Class 300 ④												
	d ₁	k ⑤	k ₁	p ⑤	w ⑤	z	d ₁	k ⑤	k ₁	p ⑤	w ⑤	z								
AE4H 12-ID	32	18	886	100	613	39	4	1 ¼	19	908	98,4	635	61	4	DN ₁					
AE4H 25-ID	40	18	1062	110	753	47	4	1 ½	22,2	1084	114,3	775	69	4	DN ₁					
AE4H 50-ID	50	18	1315	125	944	48	4	2	19	1336,5	127	965,5	69,5	8	DN ₁					
AE2H 100-ID	65	18	1171	145	760	55	8	2 ½	22,2	1195,2	149,5	784,2	79,2	8	DN ₁					
AE2+2H 100-ID	65	18	1589	145	1178	55	8	2 ½	22,2	1613,2	149,2	1202,2	79,2	8	DN ₁					
AE4H 100-ID	65	18	1571	145	1160	55	8	2 ½	22,2	1595,2	149,2	1184,2	79,2	8	DN ₁					
AE2H 200-ID	80	18	1398,5	160	919	62	8	3	22,2	1418,5	168,3	939	82	8	DN ₁					
AE2+2H 200-ID	80	18	1924,5	160	1445	62	8	3	22,2	1944,5	168,3	1465	82	8	DN ₁					
AE4H 200-ID	80	18	1902,5	160	1423	62	8	3	22,2	1922,5	168,3	1443	82	8 <th>DN₁</th>	DN ₁					
AE2H 380-ID	100	22	1662	190	1130	74	8	4	22,2	1681	200	1149	93	8	DN ₁					
AE2+2H 380-ID	100	22	2300	190	1768	74	8	4	22,2	2319	200	1787	93	8	DN ₁					
AE4H 380-ID	100	22	2300	190	1768	74	8	4	22,2	2319	200	1787	93	8	DN ₁					
AE2H 750-ID	125	26	2069	220	1425	73	8	5	22,2	2099,5	234,9	1455,5	103,5	8	DN ₁					
AE2+2H 750-ID	125	26	2899	220	2255	73	8	5	22,2	2929,5	234,9	2285,5	103,5	8	DN ₁					
AE4H 750-ID	125	26	2899	220	2255	73	8	5	22,2	2929,5	234,9	2285,5	103,5	8	DN ₁					
AE2H 1450-ID	150	26	2555	250	1786	77	8	6	22,2	2577	269,9	1808	99	12	DN ₁					
AE2+2H 1450-ID	150	26	3601	250	2832	77	8	6	22,2	3623	269,9	2854	99	12	DN ₁					
AE4H 1450-ID	150	26	3601	250	2832	77	8	6	22,2	3623	269,9	2854	99	12	DN ₁					
AE1+1H 2700-ID	200	26	3129	310	2207	86	12	8	25,4	3160	330,2	2238	117	12	DN ₁					
AE2+2H 2700-ID	200	26	4445	310	3523	86	12	8	25,4	4476	330,2	3554	117	12	DN ₁					

Series Size	Companion dimensions for suction branch																		DN ₂	
	Flanges DIN 2501, PN 16 ⑥					Flanges ANSI B16.1, Class 125 ④					Flanges ANSI B16.5 RF, Class 150 ④									
	d ₁	g ⑤	k ₁	z	DN ₂	d ₁	g ⑤	k ₁	z	DN ₂	d ₁	g ⑤	k ₁	z						
AE4H 12-ID	40	18	175	110	4	1 ½	15,9	172	98,4	4	1 ½	15,9	175	98,4	4	DN ₂				
AE4H 25-ID	50	18	190	125	4	2	19	186	120,6	4	2	19	190	120,6	4	DN ₂				
AE4H 50-ID	65	18	230	145	4	2 ½	19	229	139,7	4	2 ½	19	234	139,7	4	DN ₂				
AE2H 100-ID	80	18	260	160	8	3	19	258	152,4	4	3	19	263	152,4	4	DN ₂				
AE2+2H 100-ID	80	18	260	160	8	3	19	258	152,4	4	3	19	263	152,4	4	DN ₂				
AE4H 100-ID	80	18	260	160	8	3	19	258	152,4	4	3	19	263	152,4	4	DN ₂				
AE2H 200-ID	100	18	300	180	8	4	19	302	190,5	8	4	19	302	190,5	8	DN ₂				
AE2+2H 200-ID	100	18	300	180	8	4	19	302	190,5	8	4	19	302	190,5	8	DN ₂				
AE4H 200-ID	100	18	300	180	8	4	19	302	190,5	8	4	19	302	190,5	8	DN ₂				
AE2H 380-ID	125	18	350	210	8	5	22,2	350	215,9	8	5	22,2	350	215,9	8	DN ₂				
AE2+2H 380-ID	1																			

Series AE2+2V, AE4+4V; design ID



Series Size	Pump dimensions																						
	a	b	c1	c2	c3	d	e	f	h	i	l	m1	m2	m3	n1	n2	n3	o	q ①	s	v	v1	L ⑦
AE 4+4V 25-ID	140	1409	13	13	13	28	100	125	125	95	50	48	30	38	13	15	13	371	470	11,5	532	-	Rp½ -
AE 4+4V 50-ID	151	1748	16	15	15	32	114	140	140	106	60	48	30	40	14	15	14	411	600	14	668	-	Rp¾ -
AE 2+2V 100-ID	171	1361,5	16	16	16	42	132	168	160	118	65	50	35	50	19	17,5	19	479,5	385	18	429	-	Rp¾ -
AE 4+4V 100-ID	171	2161,5	16	16	16	42	132	168	160	118	65	50	35	50	19	17,5	19	479,5	745	18	829	-	Rp¾ -
AE 2+2V 200-ID	190	1687,5	16	16	16	48	164	200	180	130	75	50	40	50	19	20	19	532	495	18	535	-	Rp¾ -
AE 4+4V 200-ID	190	2695,5	16	16	16	48	164	200	180	130	75	50	40	50	19	20	19	532	950	18	1039	1053	Rp¾ -
AE 2+2V 380-ID	220	2066	20	21	21	60	200	245	225	158	90	70	45	63	23	22,5	23	644	550	22	659,5	-	Rp1 -
AE 4+4V 380-ID	220	3342	20	21	21	60	200	245	225	158	90	70	45	63	23	22,5	23	644	1190	22	1297,5	1317,5	Rp1 -
AE 2+2V 750-ID	266	2665	20	24	24	75	245	290	250	182	110	70	45	65	23	22,5	23	769	865	22	850,5	-	Rp1 -
AE 4+4V 750-ID	266	4325	20	24	24	75	245	290	250	182	110	70	45	65	23	22,5	23	769	1555	22	1680,5	1717,5	Rp1 -
AE 2+2V 1450-ID	320	3315	28	29	29	95	290	350	280	215	130	80	50	80	30	25	30	922	980	27	1069	-	Rp1 -
AE 4+4V 1450-ID	320	5407	28	29	29	95	290	350	280	215	130	80	50	80	30	25	30	922	1990	27	2115	2162	Rp1 -

Series Size	Companion dimensions for outlet branch								Companion dimensions for suction branch							
	Flanges DIN 2501, PN 64 ②				Flanges ANSI B16.5, RF, Class 600 ④				Flanges DIN 2501, PN 16 ⑥				Flanges ANSI B16.1, Class 125 ④		Flanges ANSI B16.5, Class 150 ④	
	DN1	k ⑤	p ⑤	w ⑤	DN1	k ⑤	p ⑤	w ⑤	DN2	g ⑤	DN2	g ⑤	DN2	g ⑤	DN2	g ⑤
AE 4+4V 25-ID	40	1706	1335	62	1½"	1721,2	1350,2	77,2	65	230	2½"	229	2½"	234		
AE 4+4V 50-ID	50	2070	1659	65	2"	2087,5	1676,5	82,5	80	260	3"	258	3"	263		
AE 2+2V 100-ID	65	1722,5	1243	72	2½"	1737,5	1258	87	100	300	4"	302	4"	302		
AE 4+4V 100-ID	65	2522,5	2043	72	2½"	2537,5	2058	87	100	300	4"	302	4"	302		
AE 2+2V 200-ID	80	2087,5	1555	80	3"	2101,5	1569	94	125	350	5"	350	5"	350		
AE 4+4V 200-ID	80	3095,5	2563	80	3"	3109,5	2577	94	125	350	5"	350	5"	350		
AE 2+2V 380-ID	100	2524	1880	80	4"	2551	1907	107	150	425	6"	425	6"	425		
AE 4+4V 380-ID	100	3800	3156	80	4"	3827	3183	107	150	425	6"	425	6"	425		
AE 2+2V 750-ID	125	3203	2434	90	5"	3232	2463	119	200	485	8"	485	8"	485		
AE 4+4V 750-ID	125	4863	4094	90	5"	4892	4123	119	200	485	8"	485	8"	485		
AE 2+2V 1450-ID	150	3943	3021	93	6"	3967	3045	117	250	550	10"	550	10"	550		
AE 4+4V 1450-ID	150	6035	5113	93	6"	6059	5137	117	250	550	10"	550	10"	550		

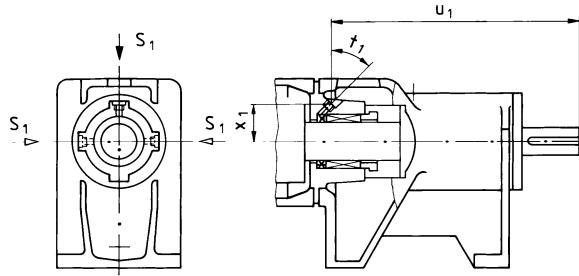
① Stator dismantling dimensions ② Sealing surface DIN 2526 shape E ③ Sealing surface DIN 2526 shape C ④ Sealing surface: stock finish

⑤ for rubber-coating + 3 mm

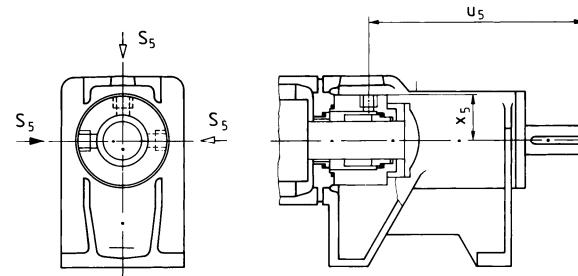
⑥ up to DN 100 sealing surface DIN 2526 shape C, machined as shape A, from DN 125 sealing surface DIN 2526 shape A

⑦ maximal weight: kg

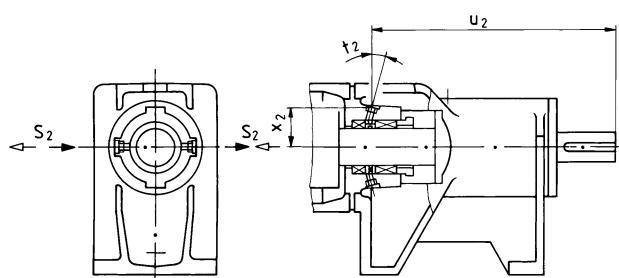
Arrangement of auxiliary connections for shaft seals



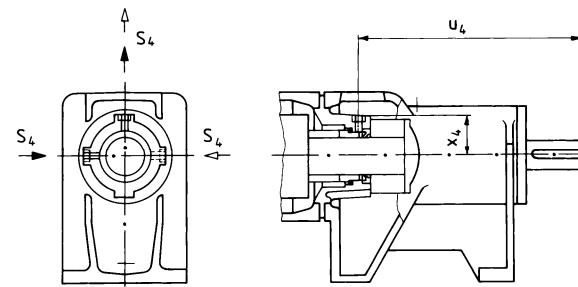
P02, P12 with flushing ring



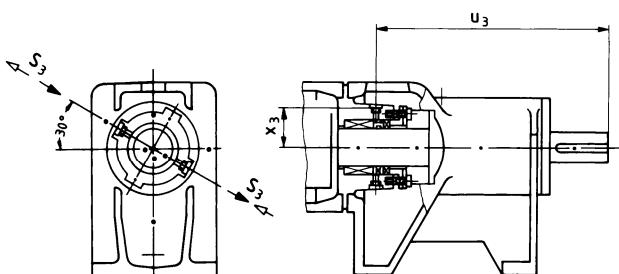
G0S/G0T with flushing connection



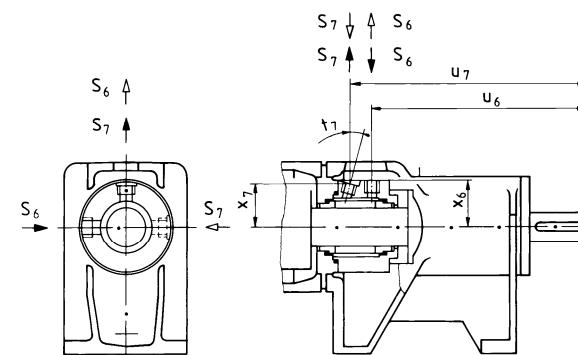
P03, P13 with internal sealing chamber ring



G0Q with quench connection



P04, P14 with external sealing chamber ring



G0D with sealing connection

Series AE1+1H, AE2H, AE2+2H, AE4H, AE2+2V, AE4+4V

Design ID



Series Size	Companion dimensions auxiliary connections for shaft seals											
	P02, P12 with flushing ring					P03, P13 with internal sealing chamber ring				P04, P14 with external sealing chamber ring		
	S ₁ ⑦	U ₁	X ₁	t ₁	S ₂ ⑦	U ₂	X ₂	t ₂	S ₃ ⑦	U ₃	X ₃	
	AE.H 12-ID	M 8 x 1	195,5	28	42°	M 8 x 1	188	30	20°	M 8 x	180,5	30,5
	AE.H 25-ID	M 8 x 1	217	31,5	40°	M 8 x 1	211	32	20°	M 8 x	202,5	33,5
AE.V 25-ID	AE.H 50-ID	Rp 1/8	255	38	42°	Rp 1/8	248	40	17°	Rp 1/8	236	39,5
AE.V 50-ID	AE.H 100-ID	Rp 1/8	279	42	42°	Rp 1/8	272	44	17°	Rp 1/8	261	43,5
AE.V 100-ID	AE.H 200-ID	Rp 1/8	316	52	42°	Rp 1/8	307	54	17°	Rp 1/8	292,5	54,5
AE.V 200-ID	AE.H 380-ID	Rp 1/4	349	56	35°	Rp 1/4	338,5	57	13°	Rp 1/4	322,5	58
AE.V 380-ID	AE.H 750-ID	Rp 1/4	416	67	35°	Rp 1/4	403	68,5	13°	Rp 1/4	383	69,5
AE.V 750-ID	AE.H 1450-ID	Rp 1/4	492	77	35°	Rp 1/4	474,5	79	13°	Rp 1/4	451	80
AE.V 1450-ID	AE.H 2700-ID	Rp 1/4	588	94,5	35°	Rp 1/4	568,5	97	13°	Rp 1/4	542	97

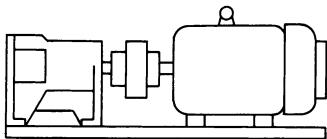
Series Size	Companion dimensions auxiliary connections for shaft seals												
	G0S/G0T, G1S/G1T with flushing connection			G0Q, G1Q with quench connection			G0D, G1D with sealing connection						
	S ₅ ⑦	U ₅	X ₅	S ₄ ⑦	U ₄	X ₄	S ₆ ⑦	S ₇ ⑦	U ₆	U ₇	X ₆	X ₇	t ₇
	AE.H 12-ID	Rp 1/4	157	34	Rp 1/8	167	30,5	Rp 1/4	Rp 1/4	157	182,5	34	33 15°
	AE.H 25-ID	Rp 1/4	179	38	Rp 1/8	187,5	30,5	Rp 1/4	Rp 1/4	179	204,5	38	36,5 15°
AE.V 25-ID	AE.H 50-ID	Rp 1/4	220,5	41,5	Rp 1/8	230	33,5	Rp 1/4	Rp 1/4	220,5	245,5	41,5	40 15°
AE.V 50-ID	AE.H 100-ID	Rp 1/8	241	48,5	Rp 1/8	255	41	Rp 1/8	Rp 1/8	241	266	48,5	47 15°
AE.V 100-ID	AE.H 200-ID	Rp 1/8	280	56	Rp 1/8	287	54	Rp 1/8	Rp 1/8	280	305,5	56	53,5 20°
AE.V 200-ID	AE.H 380-ID	Rp 1/8	297	61	Rp 1/8	315,5	57,5	Rp 1/8	Rp 1/8	297	337,5	61	58,5 20°
AE.V 380-ID	AE.H 750-ID	Rp 1/8	364	71,5	Rp 1/4	375,5	68,5	Rp 1/8	Rp 1/8	364	406	71,5	69 22°
AE.V 750-ID	AE.H 1450-ID	Rp 1/8	440,5	81	Rp 1/8	446	79	Rp 1/8	Rp 1/8	440,5	479,5	81	78,5 20°
AE.V 1450-ID	AE.H 2700-ID	Rp 1/8	527	98	Rp 1/8	542	96	Rp 1/8	Rp 1/8	527	576	98	95,5 25°

⑦ Screw hole DIN 3852, shape Z

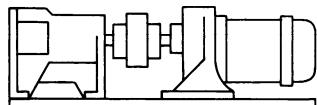
► Standard supply

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

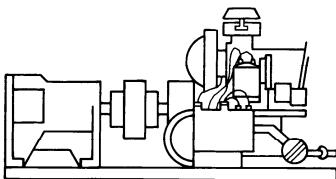
Driving possibilities AE.N ... -ZD, AE.H ... -ZD



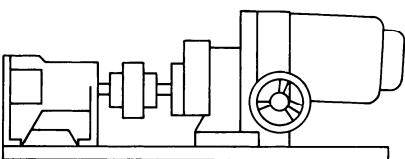
1 AE-ID with flexible coupling and motor



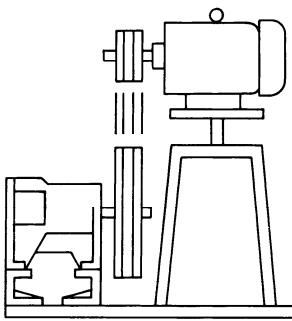
2 AE-ID with flexible coupling and geared motor



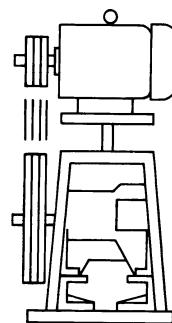
3 AE-ID with flexible coupling and combustion engine



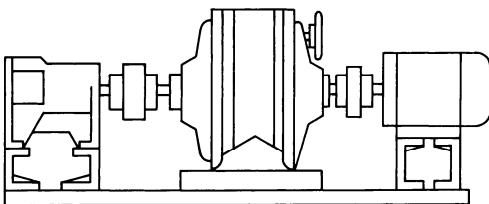
6 AE-ID with flexible coupling and infinitely variable gear



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.

Series AE1+1H, AE2H, AE2+2H, AE4H, AE2+2V, AE4+4V

Design ID



Range of eccentric screw pumps	Series	Number of stages	Maximum output at $\Delta p = 0 \text{ bar}$		Maximum delivery pressure	Maximum viscosity mPa·s
			m³/h	l/min		
	TECFLOW	1	186	3100	4	200.000
	AE.E-ID	1,2	450	7500	10	300.000
	AE.N-ID	1,2	290	4850	16	270.000
	AE.H-ID	2,4	174	2900	24	270.000
	AE.V-ID	2+2, 4+4	174	2900	48	270.000
	AEB.E-IE	1,2	174	2900	6	300.000
	AEB.N-IE	1,2	111	1850	12	270.000
	AEB4H-IE	4	12	200	24	270.000
	AED.E-ID	1	720	12000	8	250.000
	AED.N-ID	2	450	7500	16	225.000
	AEDB.E-IE	1	258	4300	6	250.000
	AEDB.N-IE	2	174	2900	12	225.000
	AE.N...-RG	1,2,4	30	500	20	1.000.000
	AE.N-ZD	1,2	102	1700	18	1.000.000
	AE.H-ZD	1+1, 2, 2+2, 4	60	1000	36	1.000.000
	AEB.N-ZE	1,2	45	750	12	1.000.000
	AEB.H-ZE	4	3,3	55	24	1.000.000
	SEZP	1,2	21	350	10	1.000.000
	SSP	1,2	48	800	12	150.000
	SSBP	1,2	48	800	12	150.000
	SETP ①	1,2	140	2350	10	300.000
	SETBP	1,2	40	670	10	150.000
	SEFBP	1	40	670	6	150.000
	SMP	1	40	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	29	480	12	150.000
	ACNBP	1,2	29	480	12	150.000

① Special versions for higher pressures available.

Peristaltic range	Series	Maximum output		Maximum delivery pressure	Maximum viscosity mPa·s
		m³/h	l/min		
	ASL	2,4	40	4	100.000
	ASH	60	1000	15	100.000

Macerator range	Series	Maximum throughput	Generated delivery head
		m³/h	m
	AM...S-1	80 at 3% solids	3
	ABM...S-1	80 at 3% solids	3
	AM...I-1	160 at 3% solids	-
	ABM...I-1	80 at 3% solids	-

Accessories	<u>Pump accessories:</u> Stator setting devices, electrical heaters, bridge breakers.
	<u>Drivers:</u> Electric motors, geared motors, variable speed transmissions, reduction gearboxes, internal combustion engines, pneumatic and hydraulic drives.
	<u>Transmission components:</u> Couplings, V-belt transmissions, toothed belt transmissions, other types of transmission.
	<u>Base plates:</u> Standard and special versions, wheeled trolleys, mounting flanges.
	<u>Safety arrangements:</u> Bypass lines with safety or regulating valves, systems to guard against dry running (conductive, capacitive, thermal etc.).
	<u>Other accessories:</u> Electrical, hydraulic and pneumatic control arrangements, filter systems, metering equipment, seal liquid and circulating systems for shaft seals, valves, flanges, flexible pipes.

Subject to technical alterations.



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VM 852 GB/2018.04 – Ident-No. 796 204