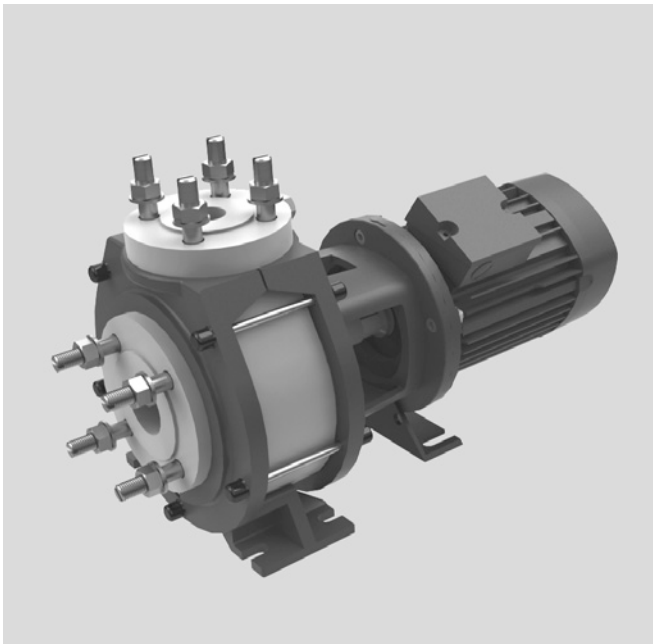



Thermoplastic Centrifugal Pump

Type NMB

Suction and pressure connection acc. DIN 24256, EN 22858, ISO 2858



Technical data

Flow rate (1450 rpm)	up to 110 m ³ /h
Flow rate (2900 rpm)	up to 75 m ³ /h
Head (1450 rpm)	up to 15 m
Head (2900 rpm)	up to 60 m
Materials limits of use	PE-HD up to 60°C PP up to 80°C PVDF up to 110°C
Pressure socket nominal width	DN 32 up to DN 80
Drive capacity (kW)	up to 7,5 kW
Explosion protection (ATEX)	Unit group II  Unit category 2 Temperature class T6

Design

- Horizontal, single-stage, non self-priming chemical pump with flange connection according to DIN 24256, EN 22858, ISO 2858 with single flow spiral casing of modular concept
- Pumphead with intermediate flange directly flanged at the motor.
- Compact design

Sizes

- NMB 32–125 to NMB 80–200

Technical design

- Axial suction socket and radial pressure socket
- Closed radial impeller
- Axial thrust compensation by relief bores
- Impeller mounting independent of the rotational direction
- Corrosion protection by a 2C paint coat

Drive

- Three-phase motor up to 7,5 kW acc. to IEC
- Motor with extended stainless steel shaft for seat the impeller
- Shaft protection sleeve of carbon or thermoplastic

Options/Accessories

- ASV pump monitor
- Container for self-priming (non self-priming as standard)
- Housing drainage
- Circulation
- Smooth starting unit

Application

- Chemical plants
- Water treatment
- Process engineering

Utilisation

- For transportation of neutral or aggressive fluids provided that the components coming into contact with the medium are resistant at the operating temperature according to the ASV resistance guide.

Fluid viscosity

- Maximal up to 160 mPas (cP)

Examinations

- DIN EN ISO 9906

Suction

- The pump is not self-priming. The fluid has to run

freely into the pump.

- The pump can only selfprime with an additionally installed ASV self-priming tank.
- Documentation of the tanks are available on request.

Construction

- ASV thermoplastic chemical centrifugal pump type NMB is a single-stage spiral casing pump in horizontal construction with axial suction and radial pressure connection.
- Low maintenance, space-saving compact pump. Pumphead with intermediate flange directly flanged at the motor. Motor (IEC standard) with extended stainless steel shaft for seat the impeller.
- Nominal output and flange connections acc. to EN 22858.
- The modular concept of the ASV thermoplastic centrifugal pump allows an easy and fast exchange of wear and tear parts.
- The mounting of the pump into the line system is problemfree as an adjustment of the coupling is not necessary.
- The hydraulic of ASV chemical pumps is made of only few thermoplastic parts in order to guarantee high operational reliability for which corrosion and wearing resistant thermoplastics like high molecular weight Polyethylene (PE), ultra high molecular weight low-pressure-Polyethylene (Hostalen GUR), Polypropylene (PP) or Polyvinylidene fluoride (PVDF) are used.
- Absorption of external forces by rugged metal casing.
- Housing outflow on request.

Impeller

- Closed radial impeller
- Axial-thrust-compensation by relief holes
- Impeller mounting independent of direction of rotation because of in-moulded metal insert and groove and key connection between impeller and shaft
- Seal of impeller mounting with thermoplastic impeller cap with internal O-ring.

Shaft and bearing carrier

- Shaft bedding in an one-piece bearing carrier with greased roller bearing. Oil lubrication on customer's request.
- A shaft of highly flexural strength made of special steel guarantees a trouble free operation and optimal conditions for the mechanical seal.

Shaft protection sleeve

- Standard is a resin impregnated carbon or depending on the fluid various materials like PP, PE or PVDF

Shaft-seal

- Seal of the shaft by single or double mechanical seal of various systems and manufacturers
- Circulation, flushing, quenching or flushing fluid depending on operation (see illustration)
- Sliding surface combination in silicon carbide against silicon carbide (SiC/SiC).
- O-rings and liner of (FPM) or (CSM), metal parts of

stainless steel 1.4571 or Hastelloy as standard execution. This combination offers trouble-free operation and allows a wide range of application.

- Materials in other combinations are also possible

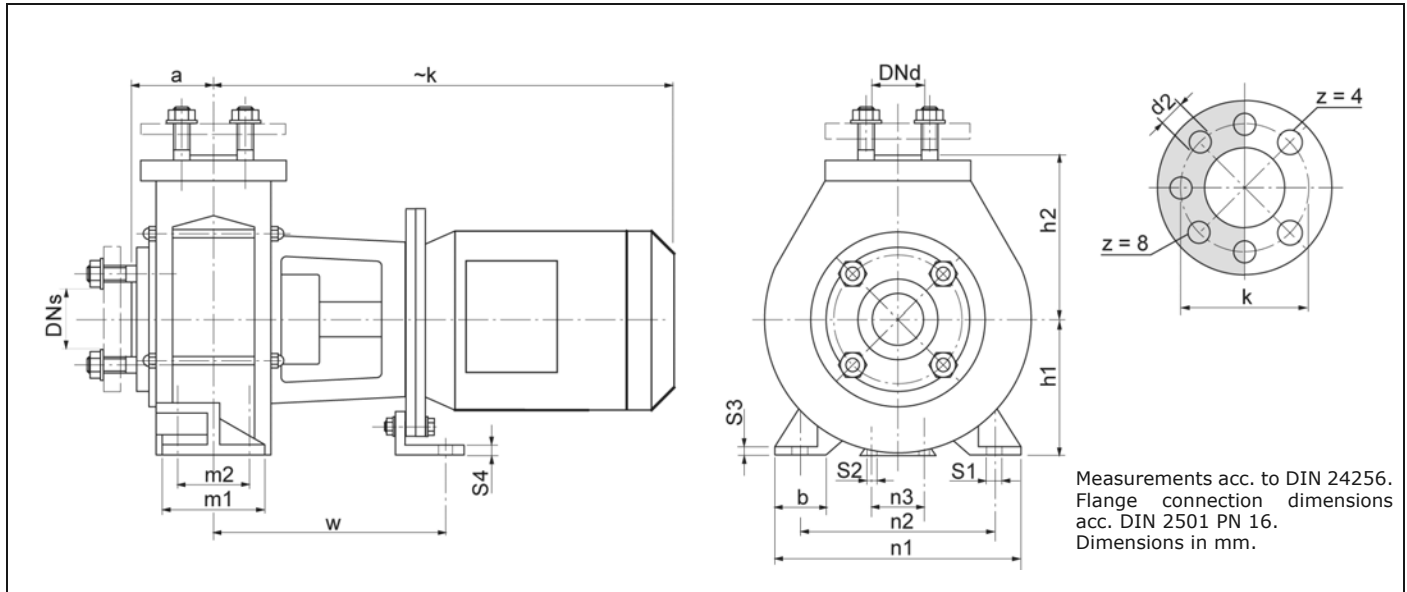
Screws

- stainless steel as standard (1.4301)

Painting

- Several coatings with an acid-proof paint protect all metal parts not made of special steel against corrosion.

Dimension



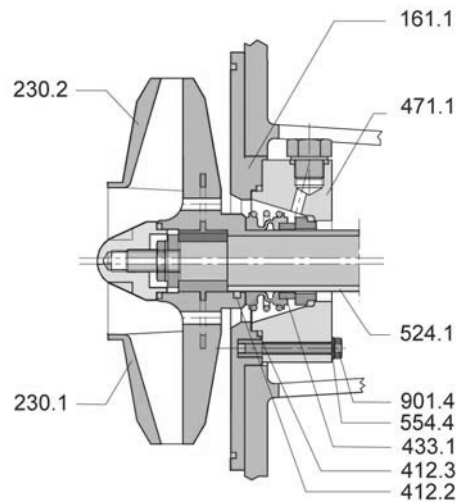
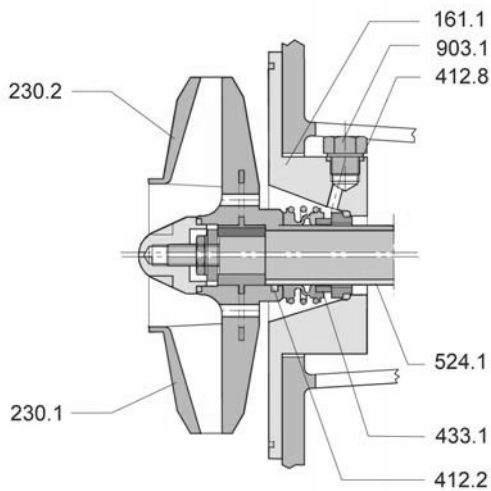
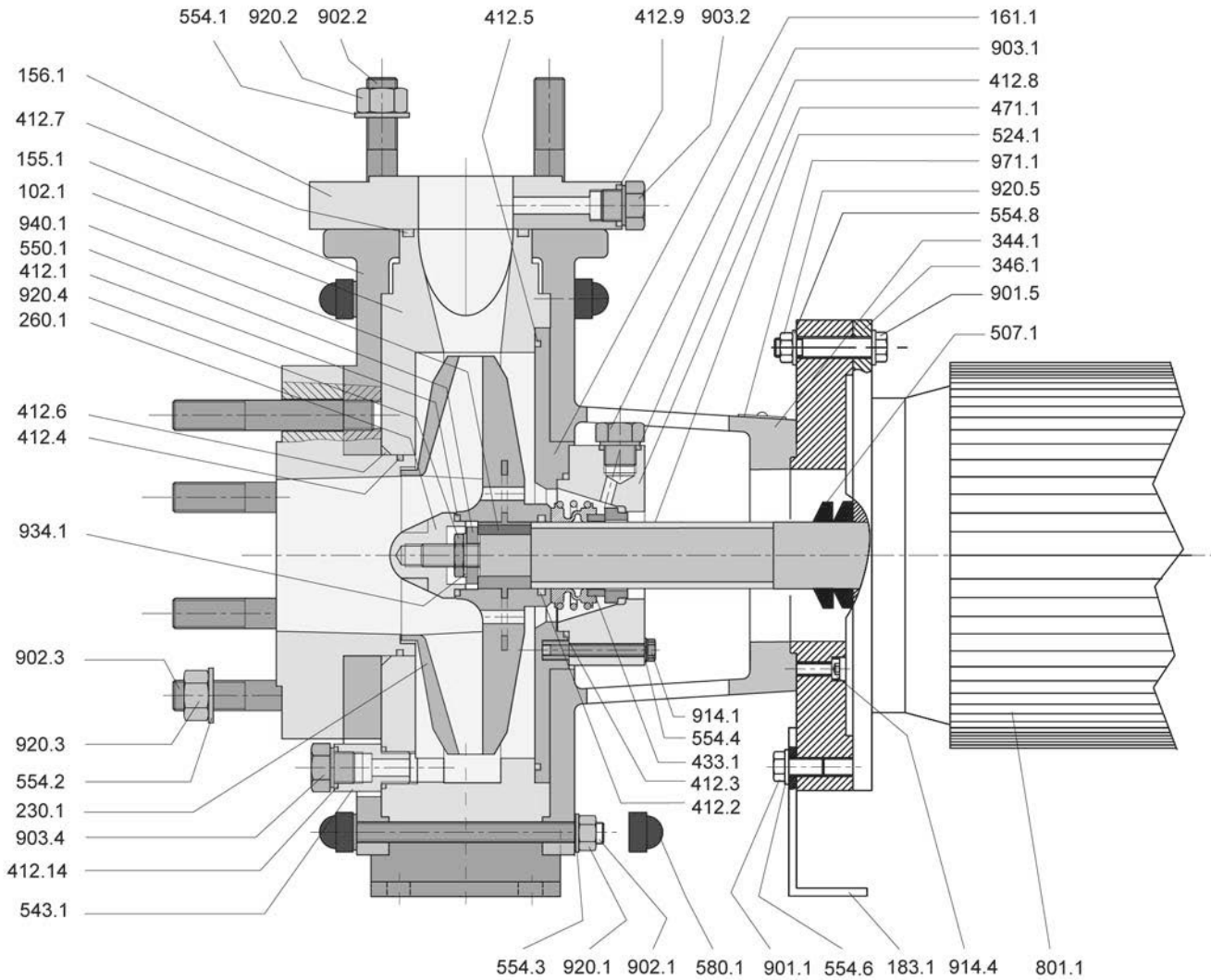
type NMB	dimensions (mm)															flange measure							
	a	h1	h2	b	m1	m2	n1	n2	n3	s1	s2	s3	s4	w	pressure side				suction side				
	DN _s	DN _d	k	d2	z	DN _s	k	d2	z														
32-125	80	112	140	50	100	70	190	140	110	14	14	10	5	200	32	100	M16	4	50	125	M16	4	
32-160	80	132	160	50	100	70	240	190	110	14	14	10	5	200	32	100	M16	4	50	125	M16	4	
32-200	80	160	180	50	100	70	240	190	110	14	14	10	5	200	32	100	M16	4	50	125	M16	4	
40-125	80	112	140	50	100	70	210	160	110	14	14	10	5	200	40	110	M16	4	65	145	M16	4	
40-160	80	132	160	50	100	70	240	190	110	14	14	10	5	200	40	110	M16	4	65	145	M16	4	
40-200	100	160	180	50	100	70	265	212	110	14	14	10	5	200	40	110	M16	4	65	145	M16	4	
50-125	100	132	160	50	100	70	240	190	110	14	14	10	5	200	50	125	M16	4	80	160	M16	8	
50-160	100	160	180	50	100	70	265	212	110	14	14	10	5	200	50	125	M16	4	80	160	M16	8	
50-200	100	160	200	50	100	70	265	212	110	14	14	10	5	200	50	125	M16	4	80	160	M16	8	
65-160	100	160	200	65	125	95	280	212	110	14	14	10	8	235	65	145	M16	4	100	180	M16	8	
65-200	100	180	225	65	125	95	320	250	110	14	14	10	8	235	65	145	M16	4	100	180	M16	8	
80-160	125	180	225	65	125	95	320	250	110	14	14	15	6	224	80	160	M16	8	125	210	M16	8	
80-200	125	180	250	65	125	95	345	280	110	14	14	18	6	224	80	160	M16	8	125	210	M16	8	

Dimension k

type NMB	Motor size		90S	90L	100L	112M	132S
	kW	1450 rpm	1.1	1.5	2.2 3.0	4.0	5.5
NMB	kW	2900 rpm	1.5	2.2	3	4.0 5.5	7.5
32-125	k appr.		465				
32-125	k appr.		465	492	520	538	
32-160	k appr.		465	492	520	538	595
32-200	k appr.		465	492			
32-200	k appr.			492	520	538	595
40-125	k appr.		465	492			
40-125	k appr.			492	520	538	
40-160	k appr.		465	492	520		
40-160	k appr.			492	520	538	595
40-200	k appr.		465	492	520		
40-200	k appr.			492	520	538	595
50-125	k appr.		465	492	520		
50-125	k appr.			492	520	538	595
50-160	k appr.		465	492	520	513	
50-160	k appr.						595
50-200	k appr.		465	492	520	513	
50-200	k appr.						595

type NMB	Motor size		90S	90L	100L	112M	132S
	kW	1450 rpm	1.1	1.5	2.2 3.0	4.0	5.5
NMB	kW	2900 rpm	1.5	2.2	3	4.0 5.5	7.5
65-160	k appr.			502	530	523	
65-160	k appr.						605
65-200	k appr.				530	523	
65-200	k appr.						605
80-160	k appr.				554	547	625
80-160	k appr.				554	547	625
80-200	k appr.				554	547	625
80-200	-				-	-	-

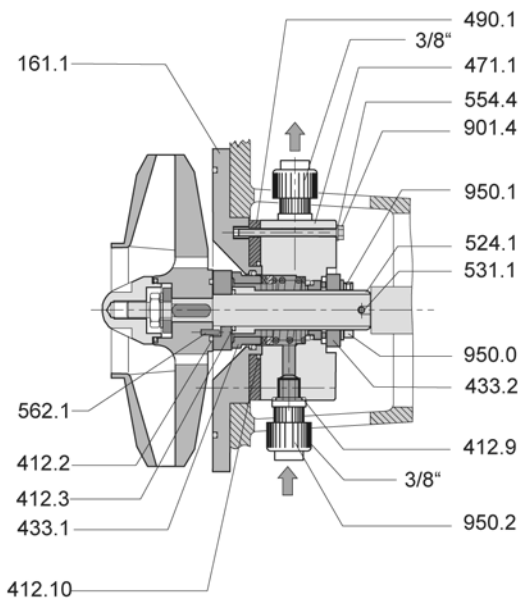
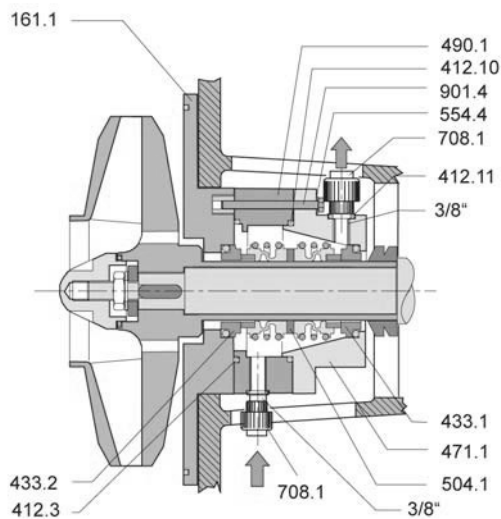
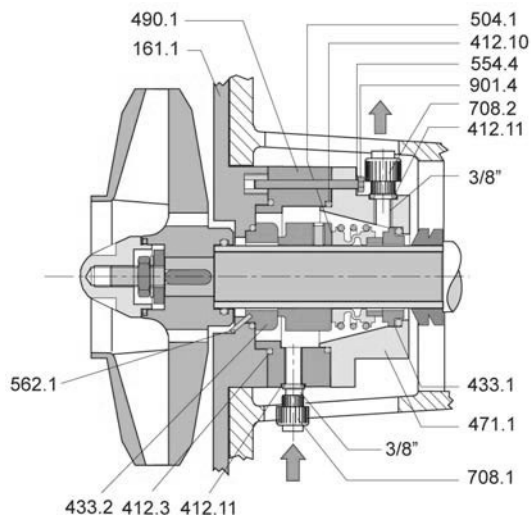
Sectional drawing and component part register



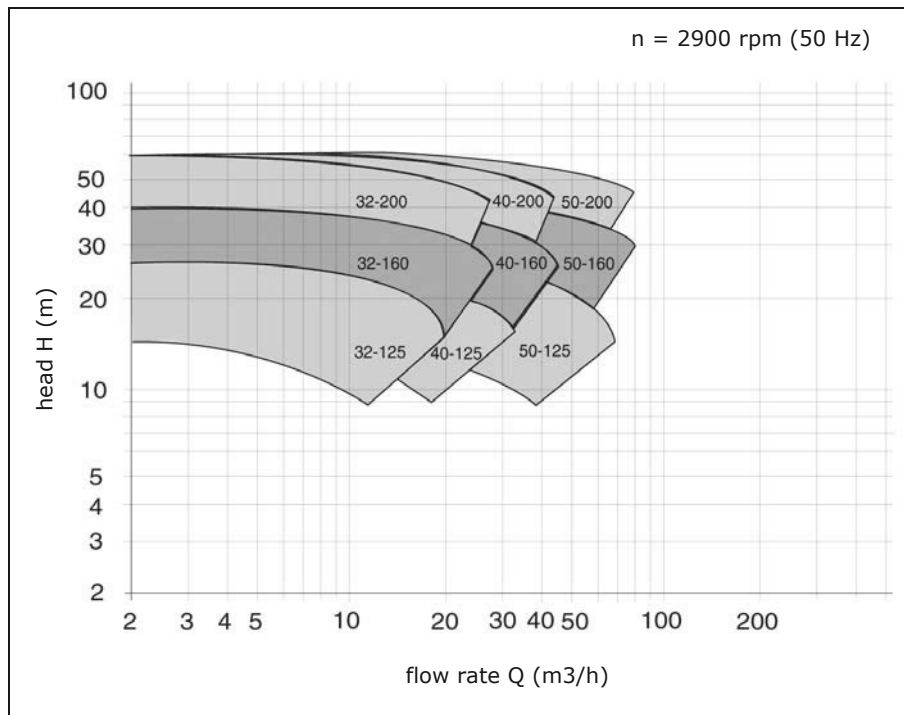
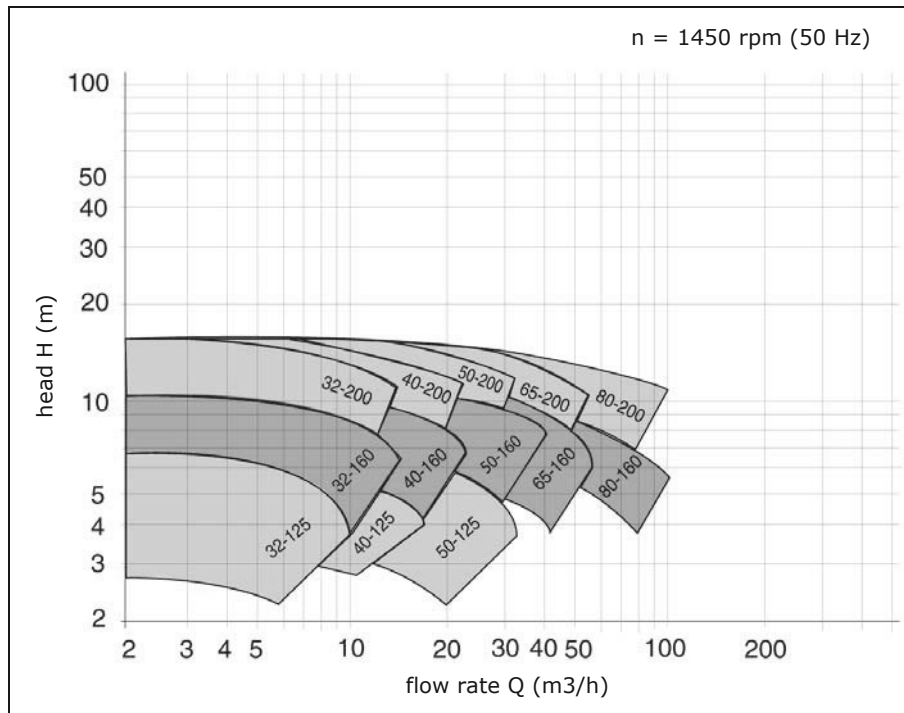
Execution:

Size: 32-125 and 40-125

Casing cover and seal housing as unit

**Mechanical seal (GLRD):
 single acting type UV with quench**

**Mechanical seal (GLRD):
 double acting type MG1/MG1 with flushing chamber**

**Mechanical seal (GLRD):
 double acting type M7N/MG1 with flushing chamber**


item	designation
102.1	spiral casing
153.1	suction connection
155.1	housing flanges
156.1	pressure connection
161.1	casing cover
183.1	support foot
210.1	shaft
230.1	impeller
230.2	impeller with shaft protection sleeve (unit)
260.1	impeller cap
346.1	intermediate flange
412.1	O-ring
412.2	O-ring
412.3	O-ring
412.4	O-ring
412.5	O-ring
412.6	O-ring
412.7	O-ring
412.8	O-ring
412.9	O-ring
412.10	O-ring
412.11	o-ring
412.14	o-ring
433.1	mechanical seal (GLRD)
433.2	mechanical seal (GLRD)
471.1	seal cover
490.1	seal flange
504.1	distance ring
507.1	V-ring
524.1	shaft protection sleeve
531.1	clamping sleeve
543.1	adapter
550.1	washer
554.1	washer
554.2	washer
554.3	washer
554.4	washer
554.6	washer
554.8	washer
562.1	straight pin
580.1	hexagonal protection cap
801.1	three-phase motor
901.1	hexagonal screw
901.4	hexagonal screw
901.5	hexagonal screw
902.1	stud bolt
902.2	stud bolt
902.3	stud bolt
903.1	plug screw
903.2	plug screw (circulation optional)
903.4	plug screw (housing drainage optional)
914.1	socket head cap screw
914.4	socket head cap screw
920.1	hexagonal nut
920.2	hexagonal nut
920.3	hexagonal nut
920.4	hexagonal nut
920.5	hexagonal nut
934.1	spring ring
940.1	feather key
950.0	clamp ring
950.1	set screw
950.2	quench connection
971.1	identification plate

Characteristic fields acc. DIN 24256

Weight without motor *

pump type	weight (kg)	
	PE / PP	PVDF
NM		
32 - 125	22	27
32 - 160	25	30
32 - 200	31	37
40 - 125	22	27
40 - 160	27	34
40 - 200	37	44
50 - 125	26	32
50 - 160	37	44
50 - 200	38	45
65 - 160	36	43
65 - 200	36	43
80 - 160	30	39
80 - 200	69	84

Weight of motor*

motor size	power kW	weight (kg)	
		2900 rpm	1450 rpm
90 S	1.1	-	12
90 S	1.5	12	-
90 L	1.5	-	14
90 L	2.2	15	-
100 L	2.2	-	18
100 L	3.0	20	20
112 M	4.0	25	28
112 M	5.5	45	-
132 S	5.5	45	45
132 S	7.5	48	-

* standard values

Subject to technical modifications