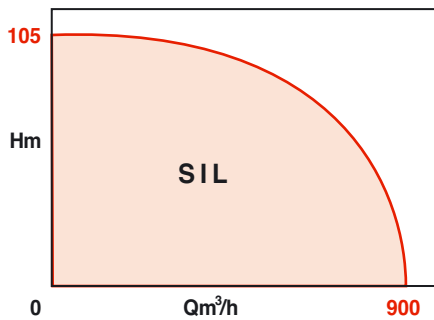


## OPERATING RANGE

Flow rates up to:	900 m <sup>3</sup> /h
Mano. head up to:	105 m
Max. operating pressure:	13 bar up to +140°C 16 bar up to +120°C
Temperature:	-20° to +140°C
Opening DN:	32 to 200
Reference MEI*:	≥ 0,10

\*Minimum Efficiency Index



## ADVANTAGES

- High hydraulic output
- Low electricity consumption
- Direct assembly on (horizontal or vertical) piping or on solid equipment
- Low sound levels
- Completely interchangeable between single and double pumps.

# SIL

## SINGLE IN-LINE PUMPS

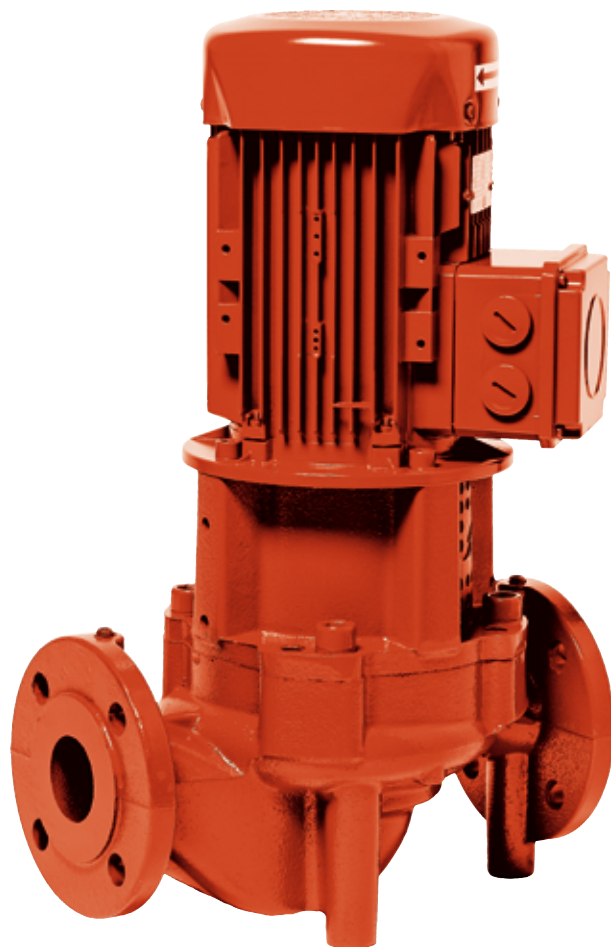
### Heating - Air conditioning - E.C.S.\*

### 50 Hz

\*A.C.S. standard: contact us

## APPLICATIONS

- Heating water circuits according to VDI2035.
- Iced water and glycol water circuits (20 to 40% of glycol) and max. T° 40°C.
- Cooling water circuits.
- Domestic hot water loop.
- A.C.S. standard : contact us.
- For all industries involved in pumping clear water without abrasive particles which are chemically neutral and non-explosive.



## DESIGN

### • Hydraulic section

- Centrifugal, single cell
- Flanged body, in-line openings
- Flanges fitted with pressure taps
- Hydraulically and dynamically balanced impellers
- Imperviousness provided with standard mechanical seal

### • Lantern

Fitted with condensate recuperation holes in vertical and horizontal positions

### • Motor

IE2

Standard flanged Coupled to the pump with rigid coupling

Speed: 950, 1450 and 2900 rpm

3 ~ winding ≤ 3 kW: 230 V Δ 50 Hz

400 V Y 50 Hz

three phase ≥ 4 kW: 400 V Δ 50 Hz

Insulation category: 155 (F)

Protection index: IP55

EC compliance: EN 809

Options: isothermal protection, 60Hz... (contact us)

## BASIC CONSTRUCTION

Main parts	Material
Pump body	Cast iron EN GJL250 EN GJS400-18-LT*
Impeller	Cast iron EN GJL250 Bronze*
Lantern	Cast iron EN GJL250
Shaft	Steel X39 Cr Mo 17.1
Mechanical seal**	Graphite/Silicon carbide/EP

\* Options: contact us

\*\* Other mechanical seals, contact us

## IDENTIFICATION

SIL 2 05 - 16/5,5 - P2

4 05 - 17/1,1 - P2

SIL: single pump code

2 pole: 2900 rpm

4 pole: 11450 rpm

6 pole: 950 rpm

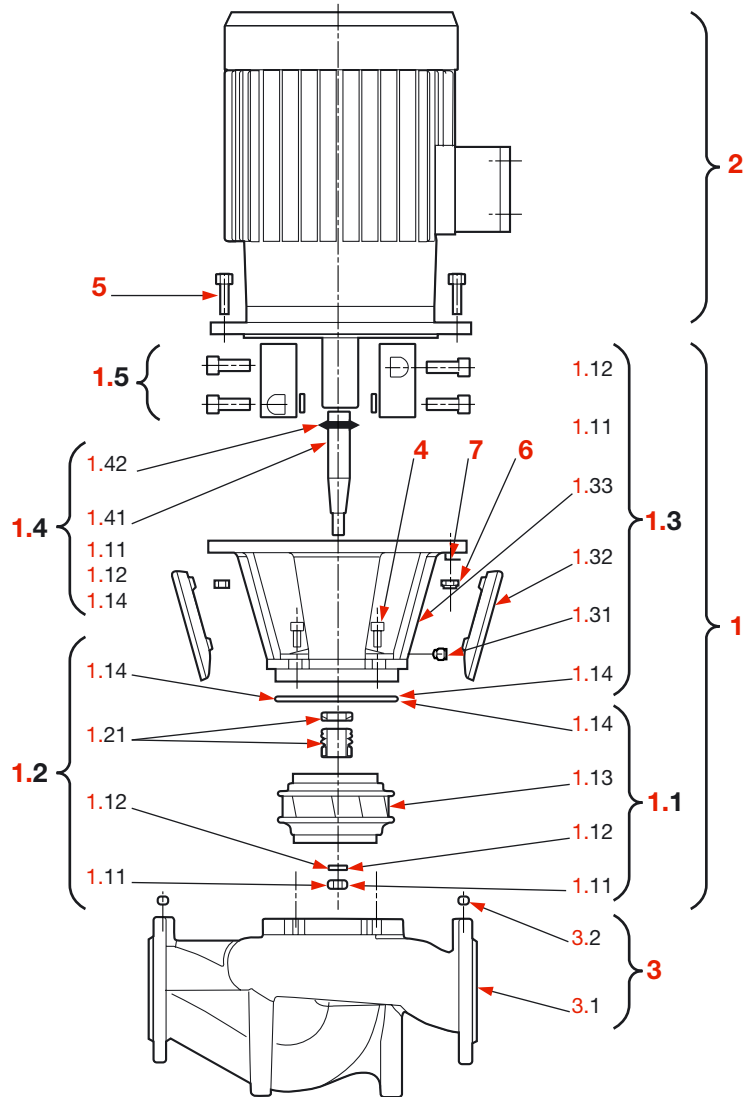
nominal Ø of openings in cm

nominal Ø of impeller in cm

Motor power in kW

Option : ACS version (contact us)

## REPRESENTATIVE CROSS-SECTION



### PARTS LIST

#### 1. Complete batch

- 1.1 Set of spare parts including
  - 1.11 Nut
  - 1.12 Washer
- 1.13 Impeller
- 1.14 JO-ring
- 1.2 Set of mechanical seal spare parts including
  - 1.21 Complete mechanical seal
- 1.3 Set of lantern spare parts including
  - 1.31 Purger screw
  - 1.32 Coupling protector
  - 1.33 Lantern
- 1.4 Set of shaft spare parts including
  - 1.41 Shaft
  - 1.42 Spring retaining ring
- 1.5 Complete coupling

#### 2. Motor

- 3. Complete pump body with
  - 3.1 Pump body
  - 3.2 Plug for pressure openings

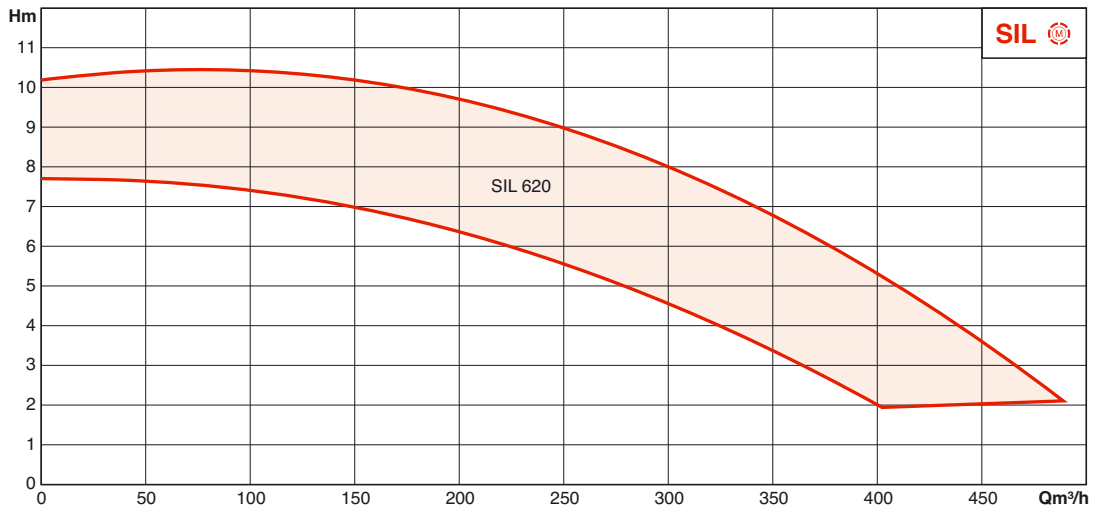
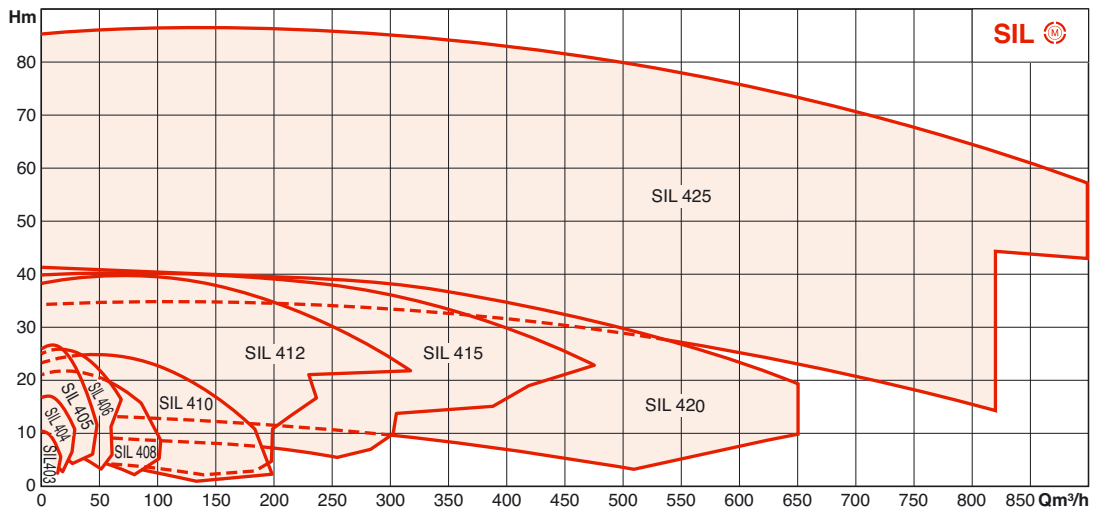
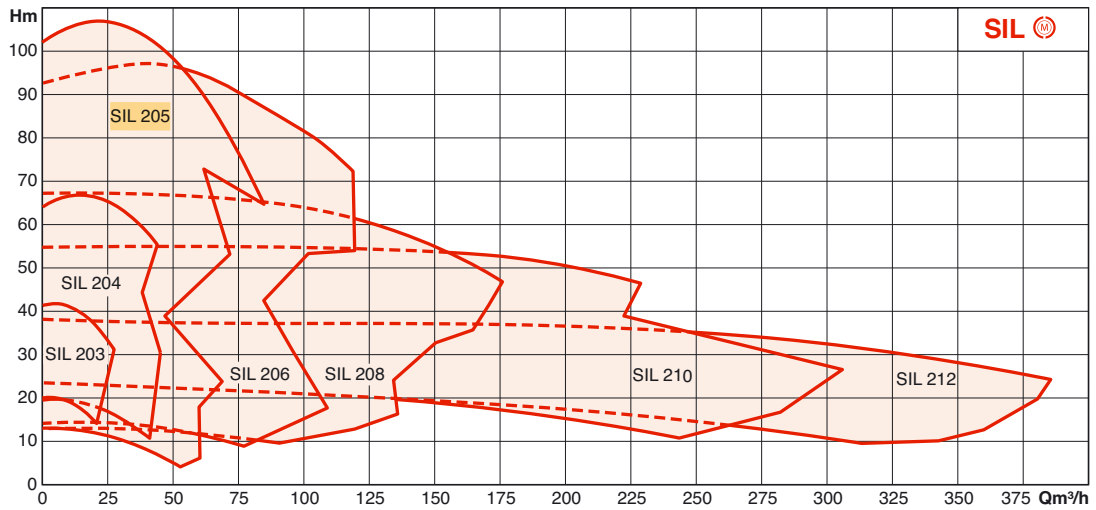
#### 4. Attachment screw for lantern/pump

#### 5. Attachment screw for motor/lantern

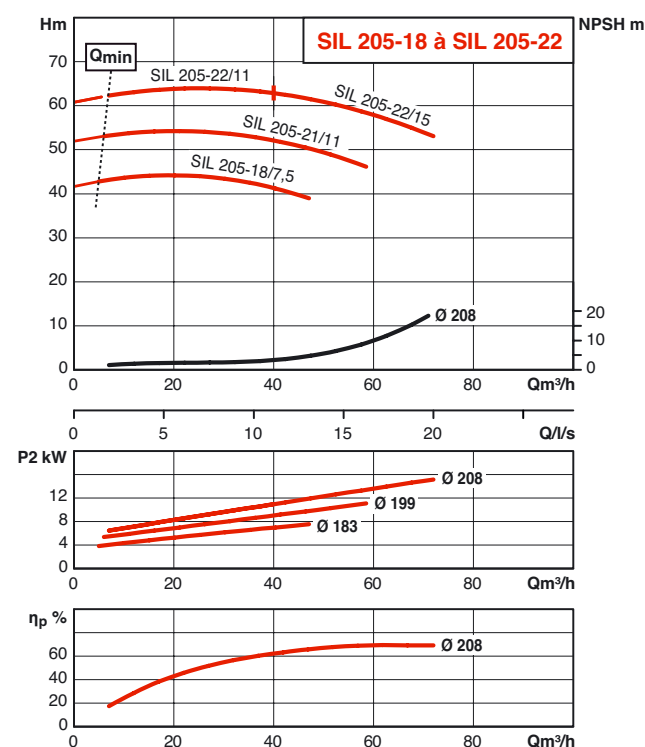
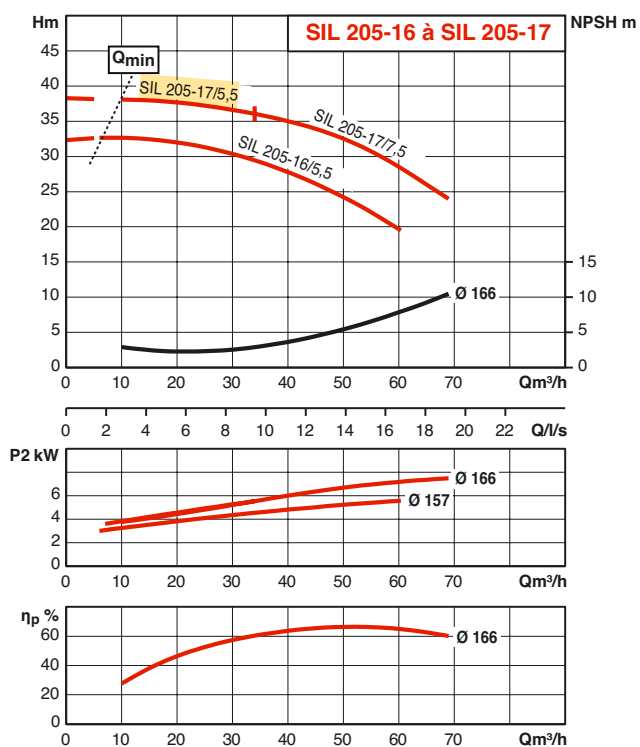
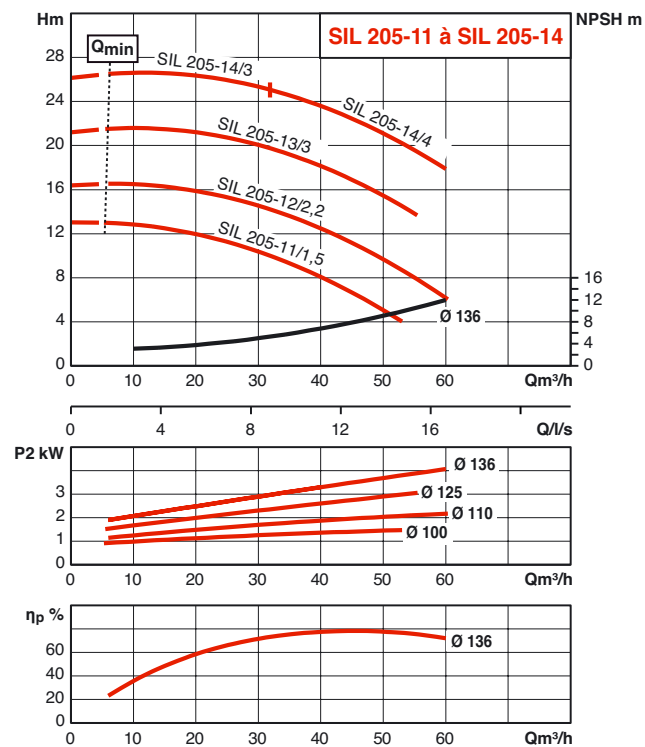
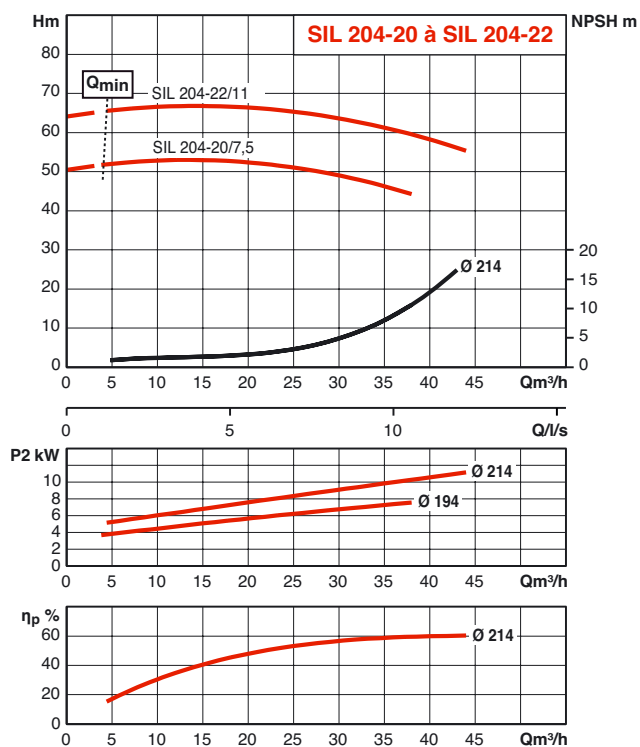
#### 6. Nut for motor/lantern attachment

#### 7. Washer for motor/lantern attachment

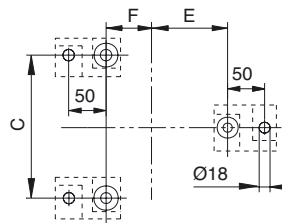
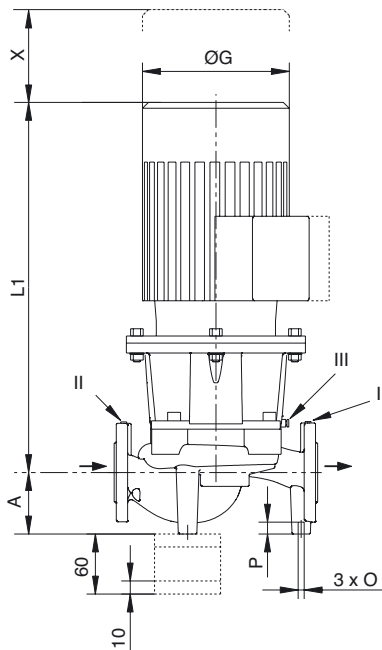
## GENERAL PRE-SELECTION GRAPH



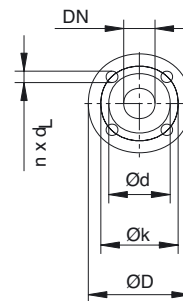
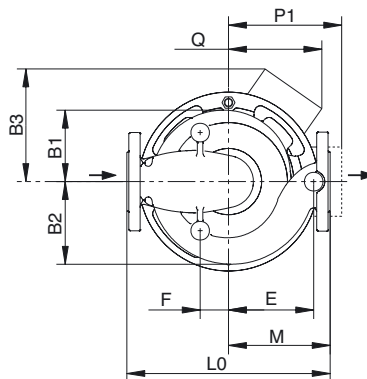
## HYDRAULIC PERFORMANCES - SIL 2 POLE



## ELECTRICAL AND DIMENSIONAL FEATURES



DN	ØD	Øk	Ød	holes
	mm	mm	mm	n x Ø
32	140	100	76	4 x 19
40	150	110	84	4 x 19
50	165	125	99	4 x 19
50	165	125	99	4 x 19
65	185	145	118	4 x 19
80	200	160	132	8 x 19
100	220	180	156	8 x 19
125	250	210	184	8 x 19
150	285	240	211	8 x 23
200	340	295	266	12 x 23



Product reference	MOTOR					PUMP																	mass	
	Nominal motor power	Motor performance %	Power factor	Rotation speed	Nominal current (approx.)	DN	A	B1	B2	B3	Q	P1	L0	L1	C	E	F	M	O	P	X	ØG		
	P2	η	cos φ	rpm	in A		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm		mm
	W																							
SIL203-14/1.5	1500	81.3	0.78	2900	3.3	32	100	112	124	144	144	-	320	449	120	132	68	155	M10	20	90	193	49	
SIL203-15/2.2	2200	83.2	0.82	2900	4.4	32	100	112	124	144	144	-	320	476	120	132	68	155	M10	20	90	193	49	
SIL203-16/2.2	2200	83.2	0.82	2900	4.4	32	100	112	124	144	144	-	320	476	120	132	68	155	M10	20	90	193	49	
SIL203-16/3	3000	84.6	0.84	2900	5.8	32	100	112	124	150	150	-	320	531	120	132	68	155	M10	20	90	217	60	
SIL203-17/3	3000	84.6	0.84	2900	5.8	32	100	112	124	150	150	-	320	531	120	132	68	155	M10	20	90	217	59	
SIL203-17/4	4000	85.8	0.84	2900	7.7	32	100	112	124	156	156	-	320	555	120	132	68	155	M10	20	90	232	83	
SIL204-14/2.2	2200	83.2	0.82	2900	4.4	40	82	113	129	144	144	-	340	490	130	149	58	170	M10	20	95	193	50	
SIL204-15/3	3000	84.6	0.84	2900	5.8	40	82	113	129	150	150	-	340	545	130	149	58	170	M10	20	95	217	60	
SIL204-16/4	4000	85.8	0.84	2900	7.7	40	82	113	129	156	156	-	340	569	130	149	58	170	M10	20	95	232	70	
SIL204-17/5.5	5500	87	0.87	2900	10.2	40	82	113	129	176	176	-	340	614	130	149	58	170	M10	20	95	279	84	
SIL204-20/7.5	7500	88.1	0.86	2900	13.7	40	110	145	149	-	-	188	440	625	180	172	78	190	M10	20	100	279	105	
SIL204-22/11	11000	89.4	0.87	2900	22	40	110	145	149	-	-	250	440	772	180	172	78	190	M10	20	100	320	138	
SIL205-11/1.5	1500	81.3	0.78	2900	3.3	50	105	102	119	144	144	-	340	449	140	130	40	150	M10	20	100	193	48	
SIL205-12/2.2	2200	83.2	0.82	2900	4.4	50	105	102	119	144	144	-	340	476	140	130	40	150	M10	20	100	193	48	
SIL205-13/3	3000	84.6	0.84	2900	5.8	50	105	102	119	150	150	-	340	535	140	130	40	150	M10	20	100	217	58	
SIL205-14/3	3000	84.6	0.84	2900	5.8	50	105	102	119	150	150	-	340	535	140	130	40	150	M10	20	100	217	58	
SIL205-14/4	4000	85.8	0.84	2900	7.7	50	105	102	119	156	156	-	340	559	140	130	40	150	M10	20	100	232	68	
SIL205-16/5.5	5500	87	0.87	2900	10.2	50	103	120	138	176	176	-	340	621	164	143	48	170	M10	20	100	279	89	
SIL205-17/5.5	5500	87	0.87	2900	10.2	50	103	120	138	176	176	-	340	621	164	143	48	170	M10	20	100	279	89	
SIL205-17/7.5	7500	88.1	0.86	2900	13.7	50	103	120	138	176	176	-	340	627	164	143	48	170	M10	20	100	279	96	
SIL205-18/7.5	7500	88.1	0.86	2900	13.7	50	120	145	150	-	-	188	440	626	160	170	70	190	M10	20	100	279	109	
SIL205-21/11	11000	89.4	0.87	2900	22	50	120	145	150	-	-	250	440	773	160	170	70	190	M10	20	100	320	141	

