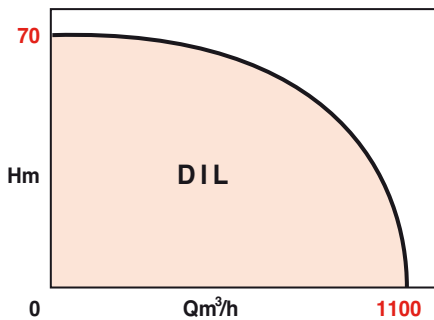


## RANGE OF USE

Flow rates up to:	1100 m <sup>3</sup> /h
Manometric head up to:	70 m
Maximum operating pressure:	13 bar up to +140°C 16 bar up to +120°C
Temperature:	-20° to +140°C
Nominal diameter of holes:	32 to 200
MEI* of reference:	≥ 0,10
*Minimum Efficiency Index	



## ADVANTAGES

- High hydraulic efficiency
- Low electrical consumption
- Mounted directly onto pipework (horizontal or vertical) or onto pad
- Low noise levels
- Complete interchangeability between single pumps and double pumps

# DIL

## DOUBLE IN-LINE PUMPS Heating – Air conditioning 50 Hz

### APPLICATIONS

- Heating water systems according to VDI2035
- Iced water and glycol water systems (from 20 to 40% glycol) and maximum temp 40°C
- Cooling water systems
- For all industries pumping clean liquids, without abrasive particles, chemically neutral and non-explosive.



## DESIGN

### • Hydraulic part

- Single stage centrifuge
- Housing with flanges, holes in line
- Flanges fitted with holes for pressure tapping
- Impellers hydraulically and dynamically balanced
- Waterproofed by standard mechanical seal

### • Lantern

Fitted with holes to drain off condensates, in vertical and horizontal positions

### • Motor

IE2  
Standardised with flanges. Coupled to the pump by rigid coupling  
Speed: 1450 and 2900 rpm  
3 ~ winding ≤ 3 kW: 230 V Δ 50 Hz  
400 V Y 50 Hz  
3 ~ ≥ 4 kW: 400 V Δ 50 Hz  
Insulation class: 155 (F)  
Protection class: IP55  
CE compliance: EN 809  
Options: isothermal protection, 60 Hz...  
(consult us)

## IDENTIFICATION

2 05 - 16/5,5  
DIL 4 05 - 17/1,1

DIL: code for double pump \_\_\_\_\_

2 pole: 2900 rpm \_\_\_\_\_  
4 pole: 1450 rpm \_\_\_\_\_

Nominal diameter of holes in cm \_\_\_\_\_

Nominal diameter of the impeller in cm \_\_\_\_\_

Power of motor in kW \_\_\_\_\_

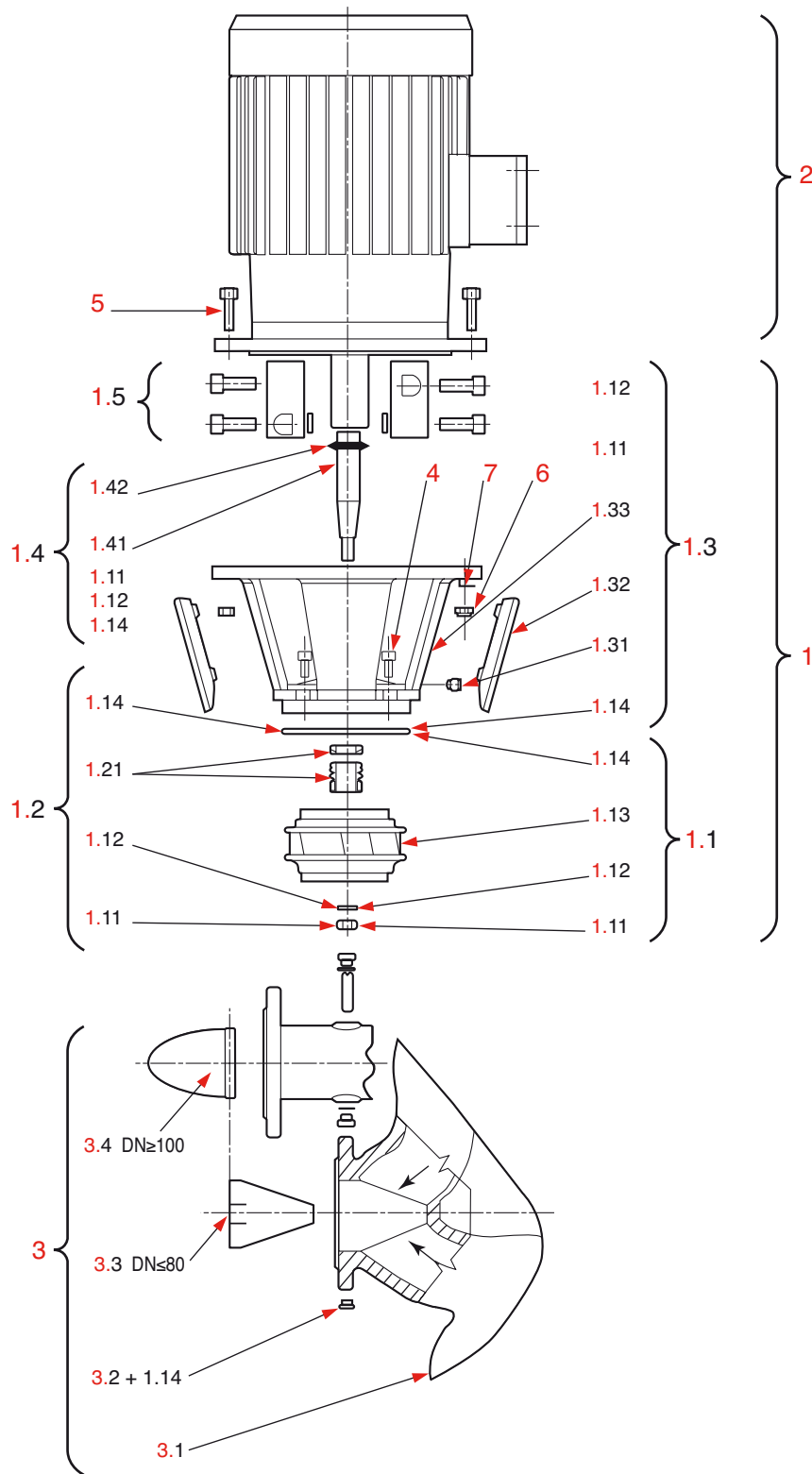
## BASIC CONSTRUCTION

Main parts	Material
Housing of pump	Cast iron EN GJL 250
Impeller	Cast iron EN GJL 200 Bronze*
Lantern	Cast iron EN GJL 250
Shaft	Steel X39 Cr Mo 17.1
Mechanical seal**	Graphite/Carbide Si/EP

\* Options

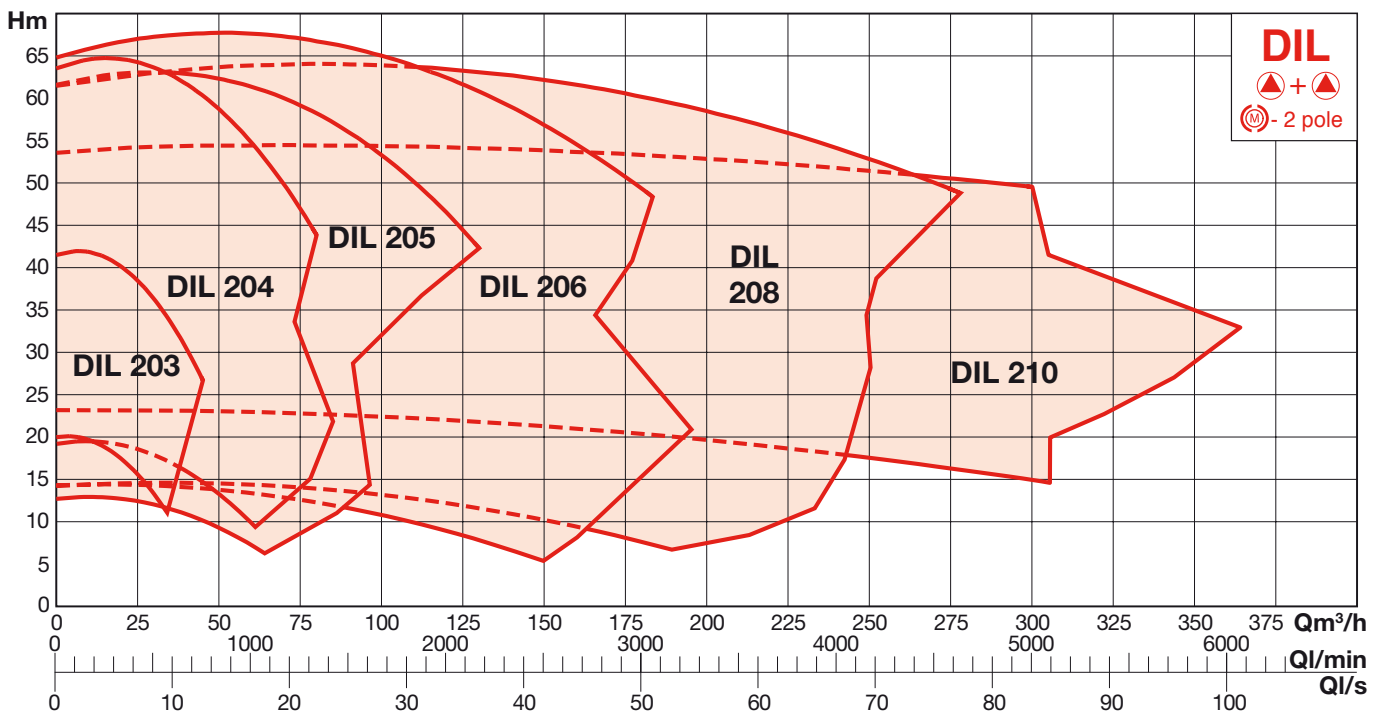
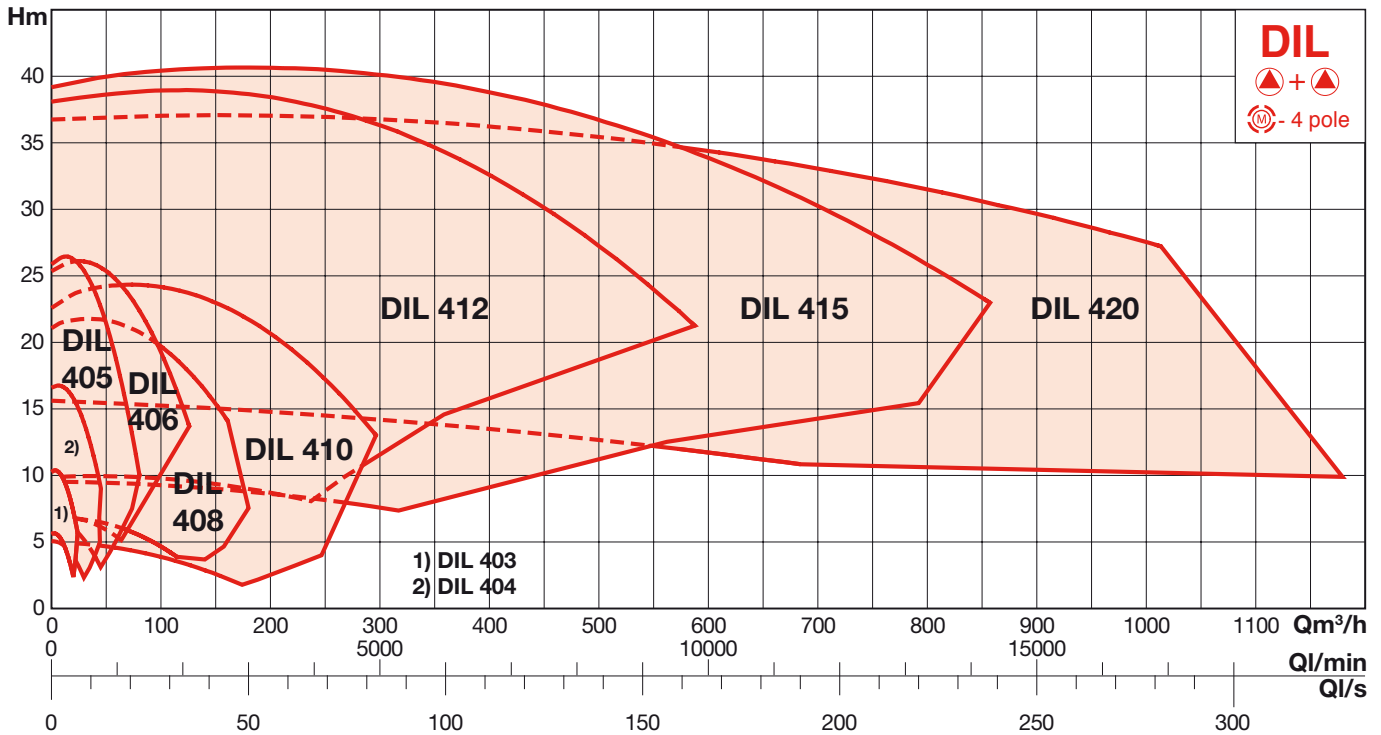
\*\* Others mechanical seals, consult us

CROSS-SECTION DIAGRAM

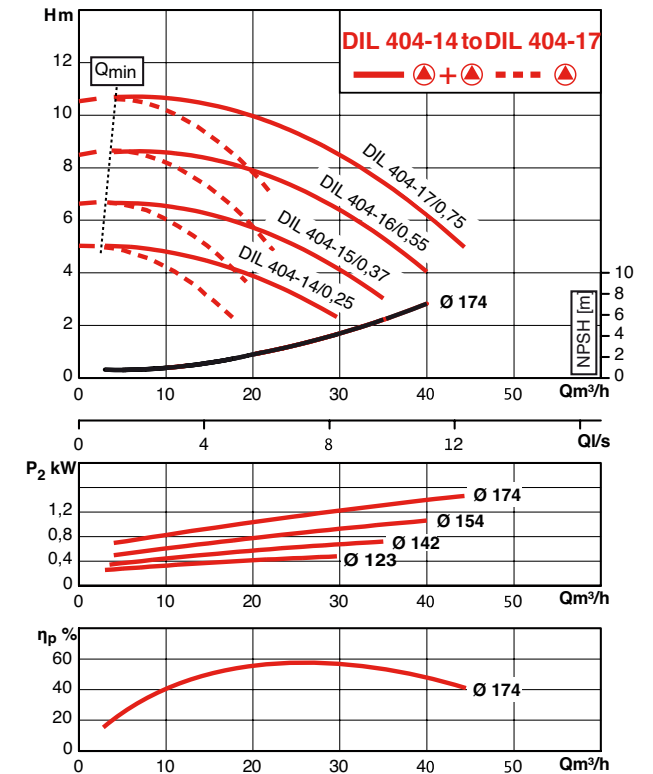
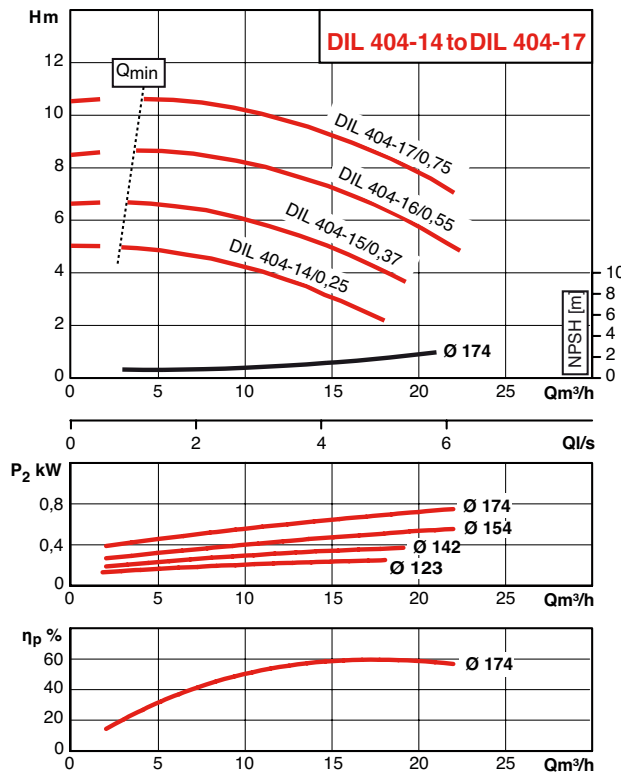
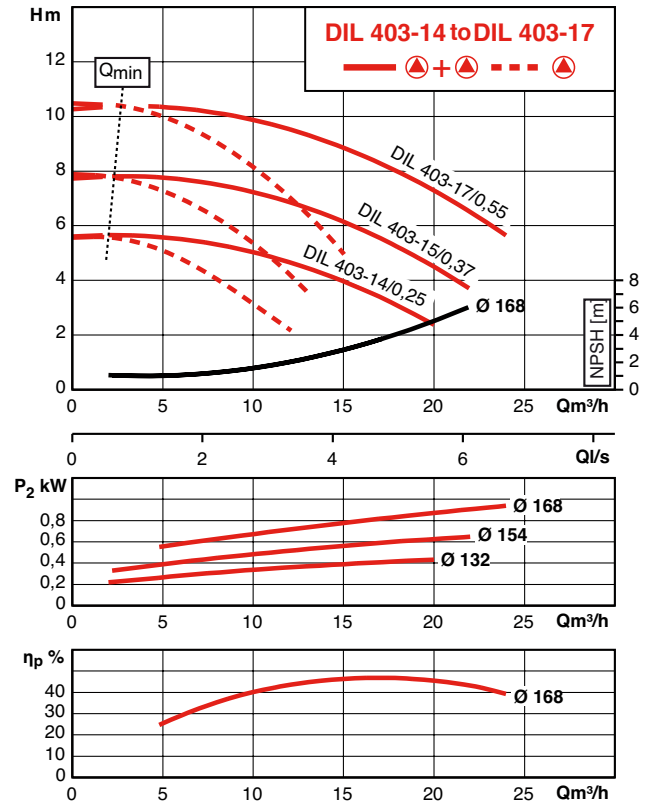
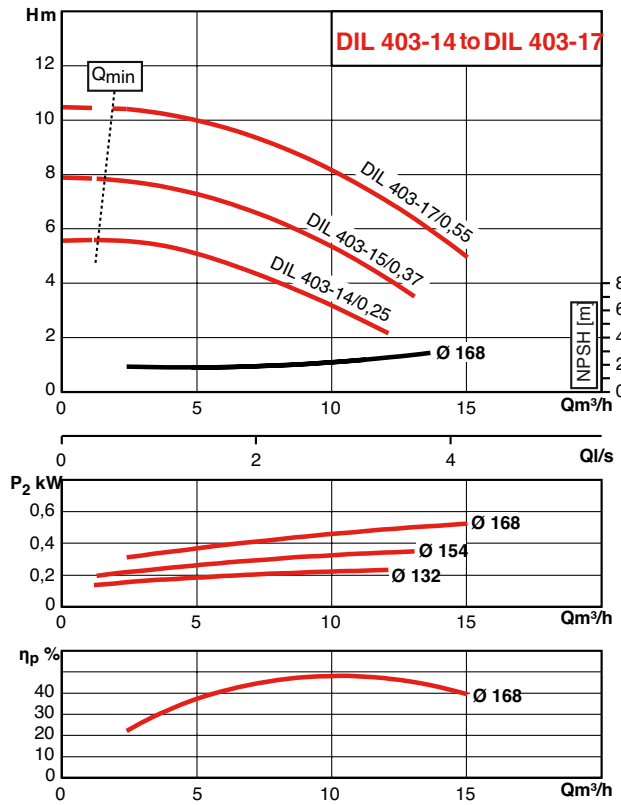


- 1. Complete batch
  - 1.1 Set of spare parts with
    - 1.11 Nut
    - 1.12 Washer
    - 1.13 Impeller
    - 1.14 O-ring
  - 1.2 Set of spare mechanical seal parts with
    - 1.21 Complete mechanical seal
  - 1.3 Set of spare lantern parts with
    - 1.31 Bleeder screw
    - 1.32 Coupling protector
    - 1.33 Lantern
  - 1.4 Set of spare shaft parts with
    - 1.41 Shaft
    - 1.42 Spring retaining ring
  - 1.5 Complete coupling
- 2. Motor
- 3. Complete pump housing with
  - 3.1 Pump housing
  - 3.2 Plug for the pressure holes
  - 3.3 Directional flap  $\leq$  nominal diameter 80
  - 3.4 Directional flap  $\geq$  nominal diameter 100
- 4. Fixing screw for lantern/pump
- 5. Fixing screw for motor/lantern
- 6. Nut for motor/lantern fixing
- 7. Washer for motor/lantern fixing

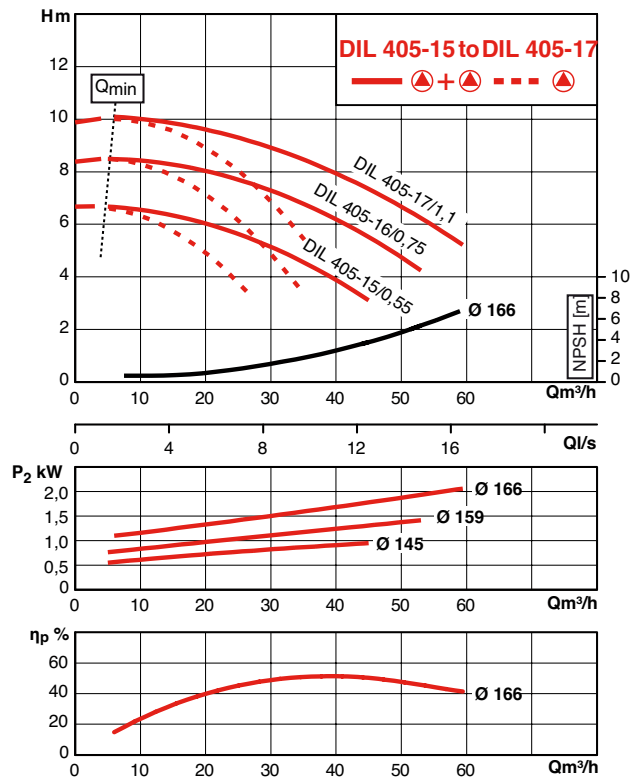
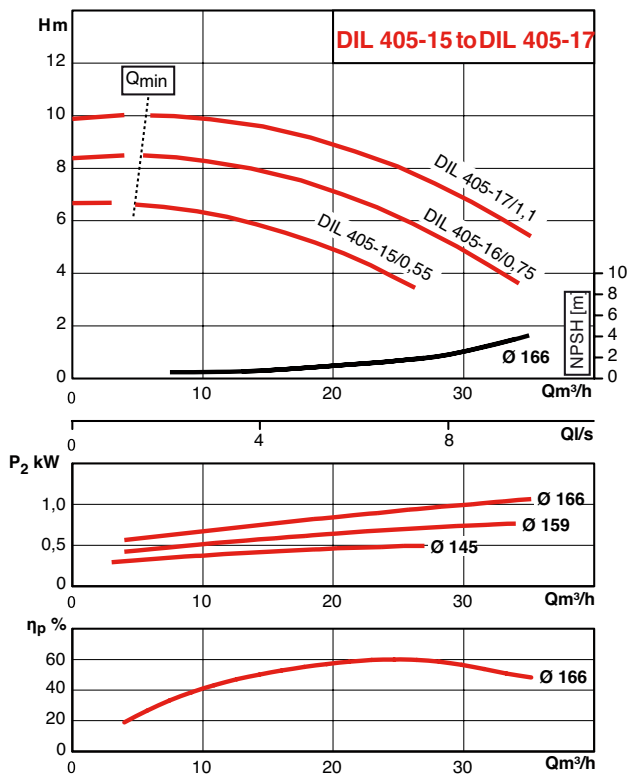
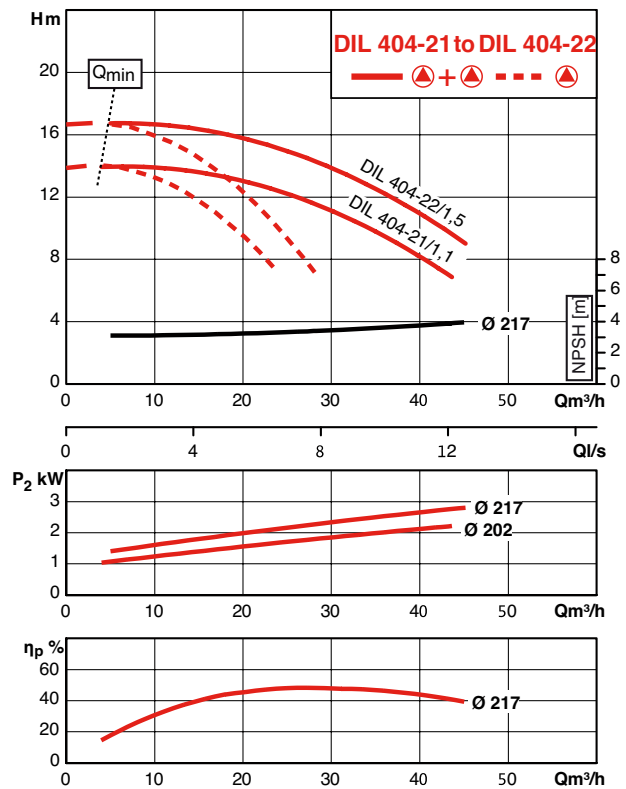
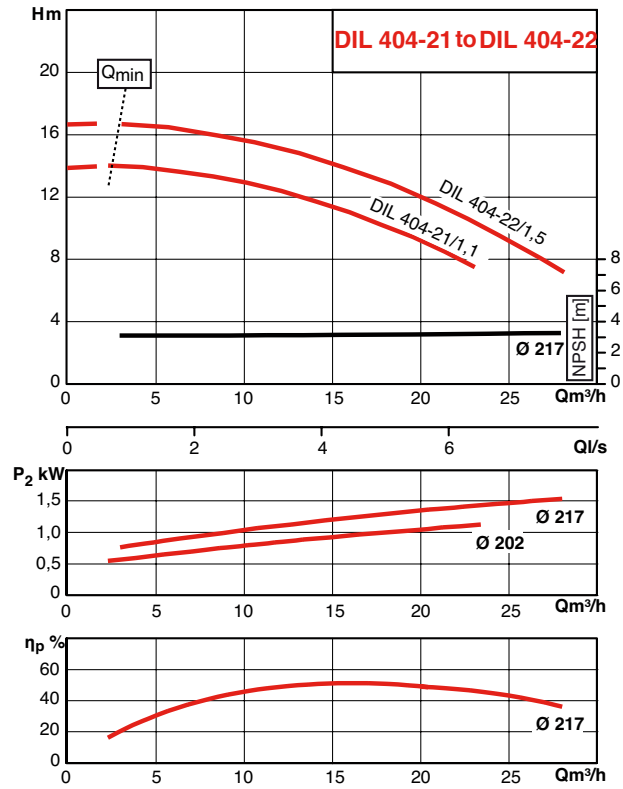
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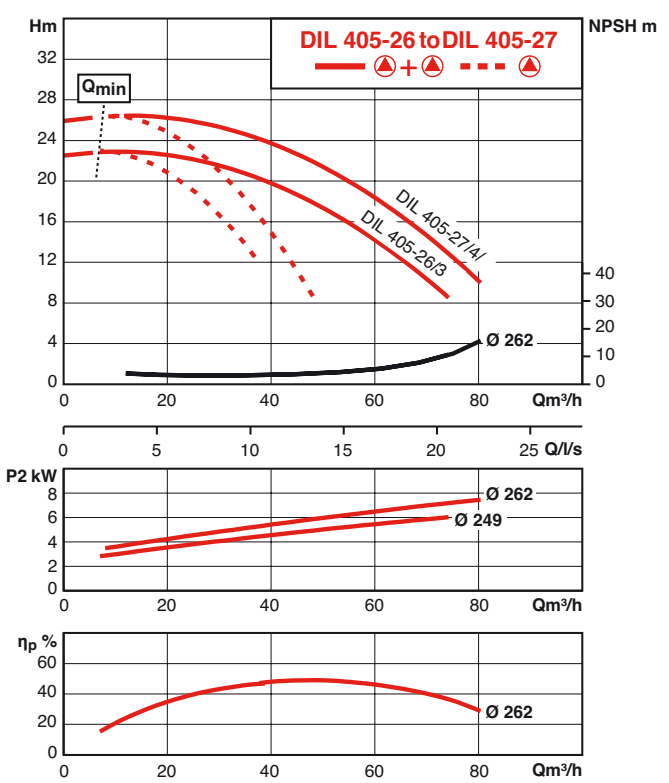
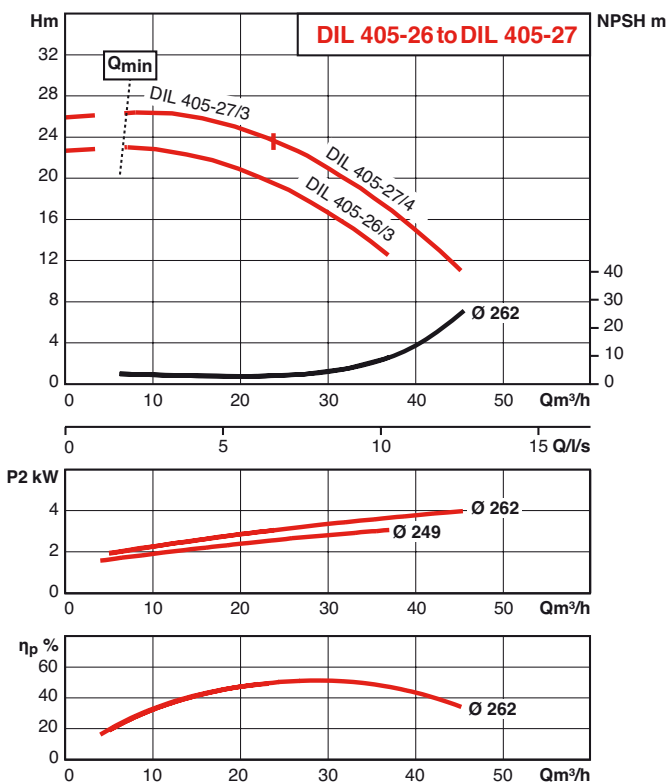
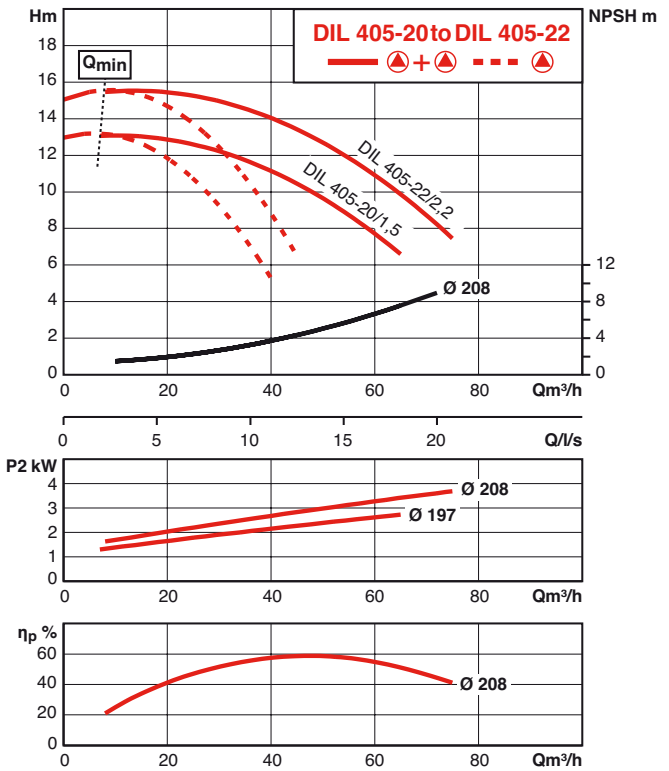
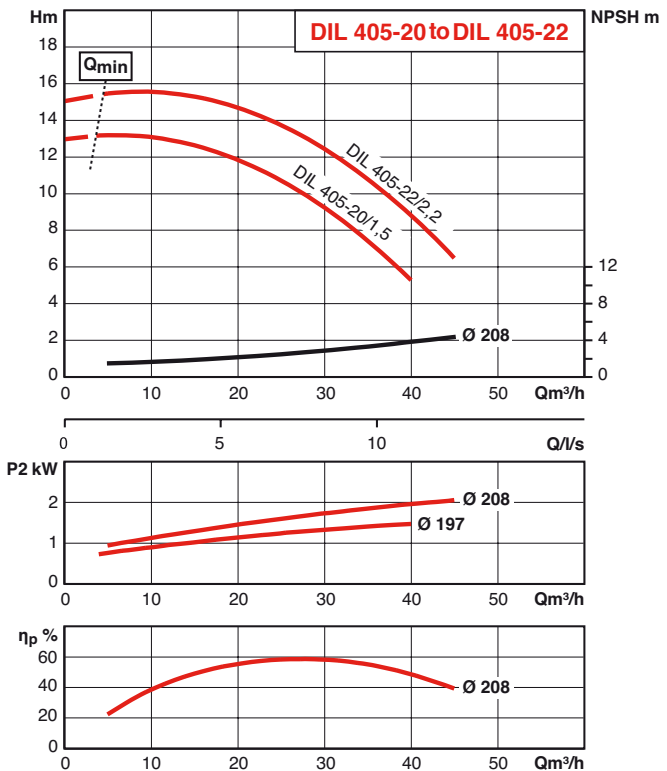
HYDRAULIC PERFORMANCES OF 4 POLE DIL



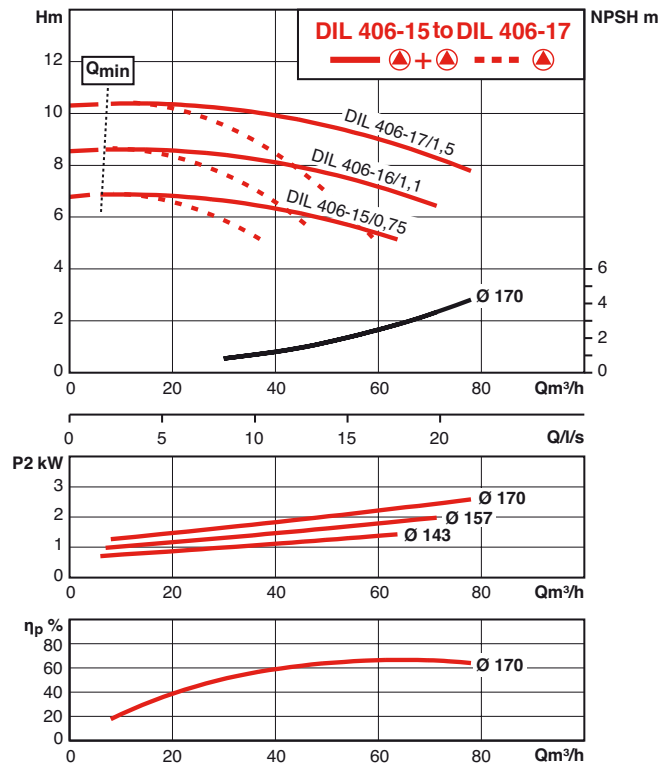
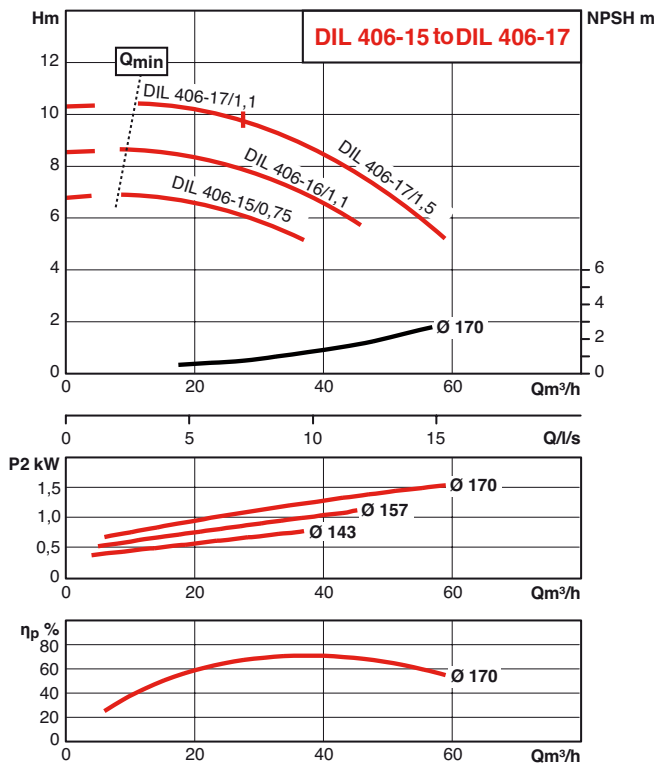
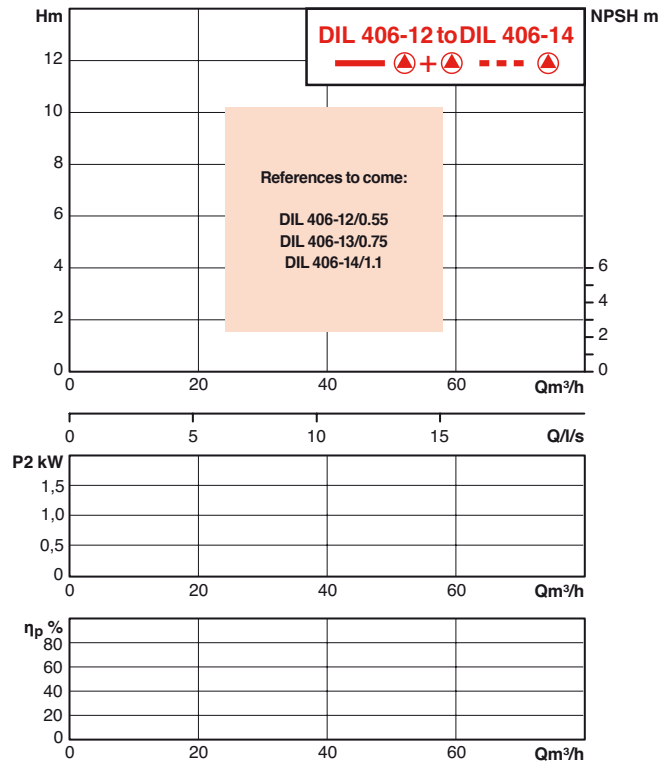
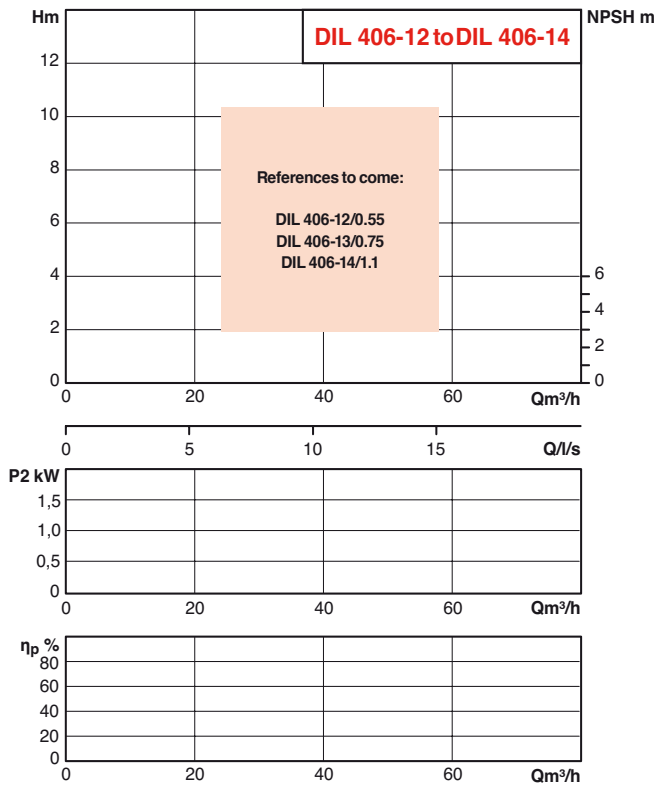
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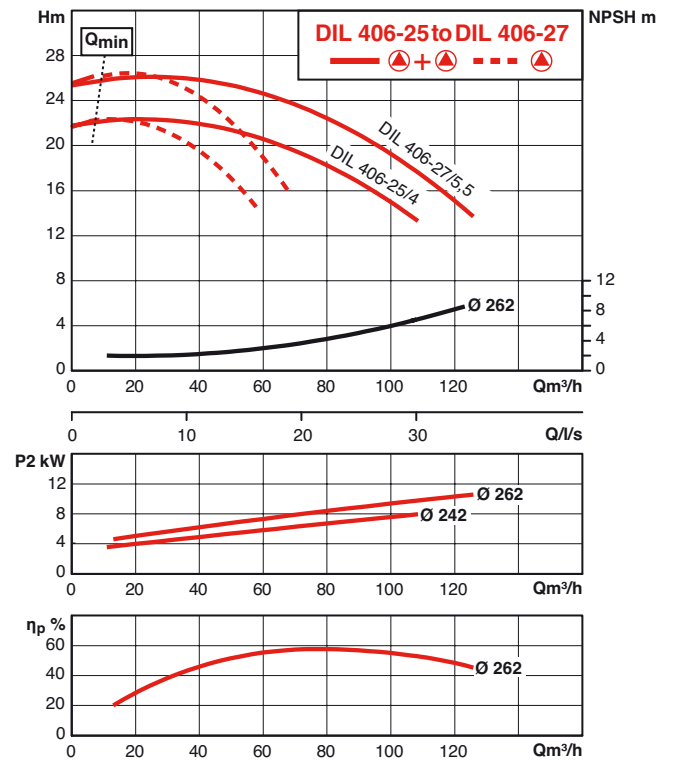
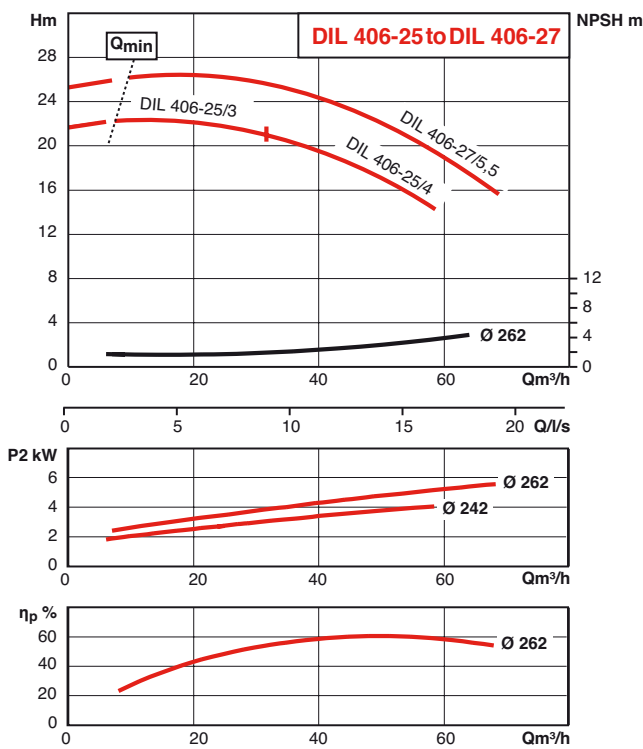
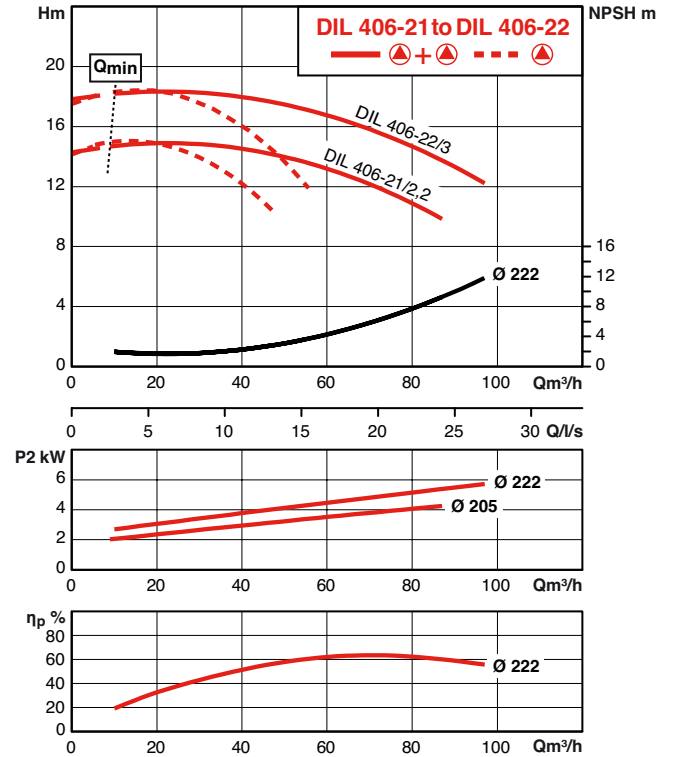
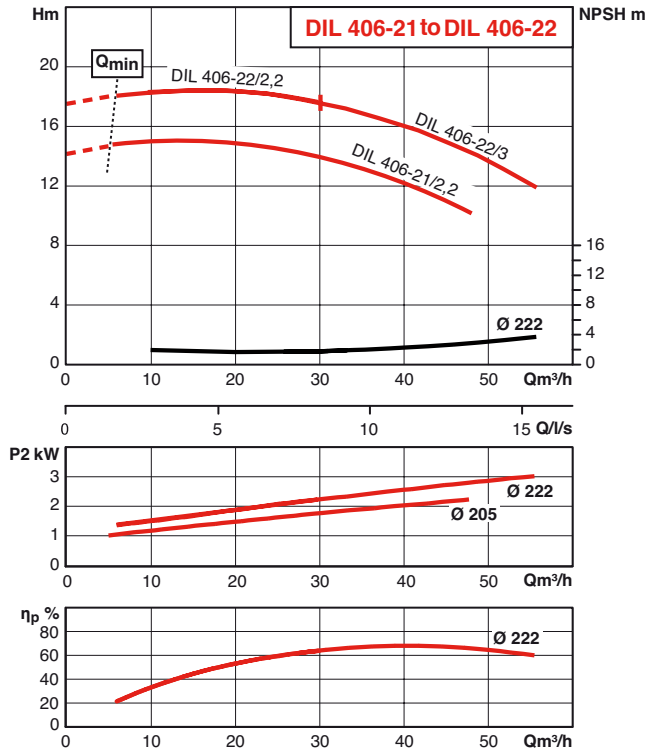


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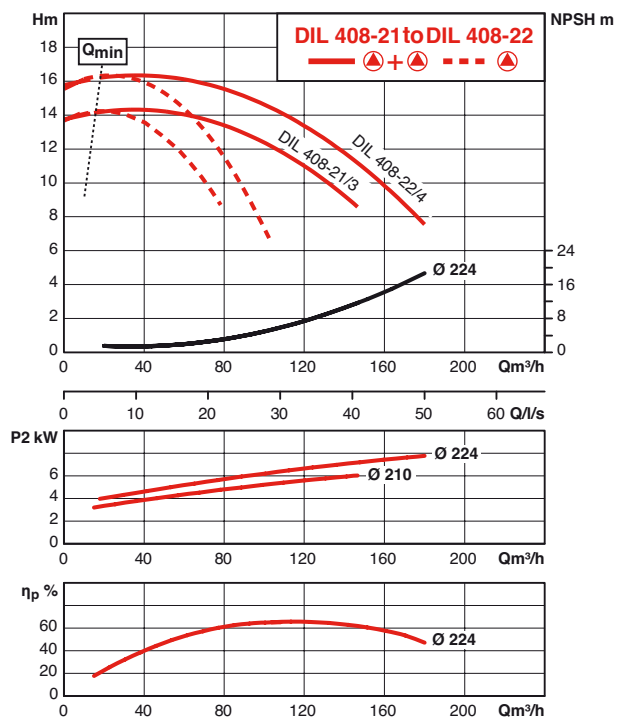
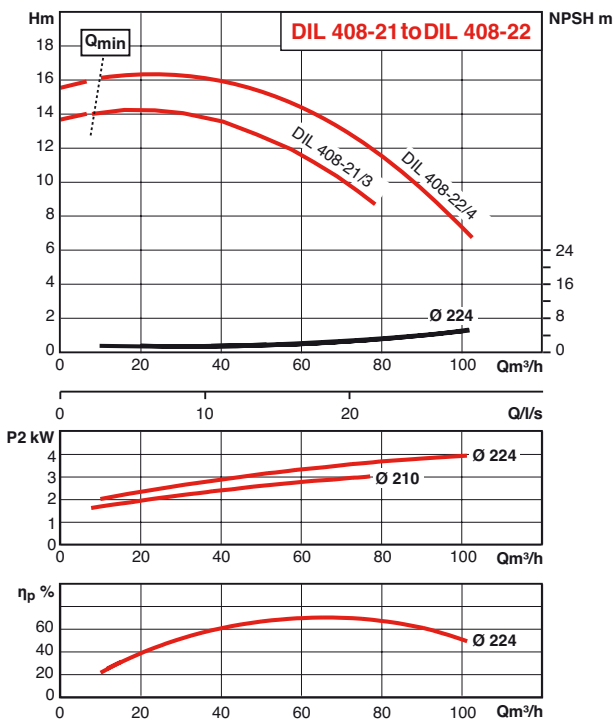
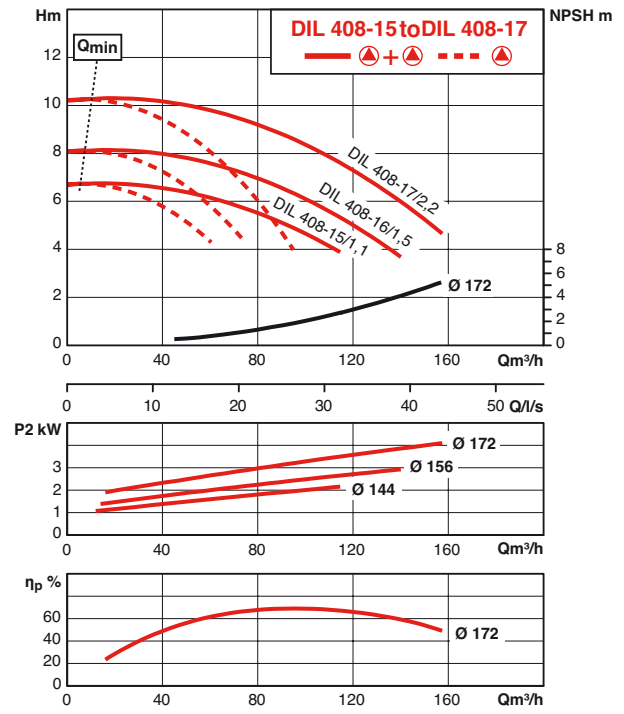
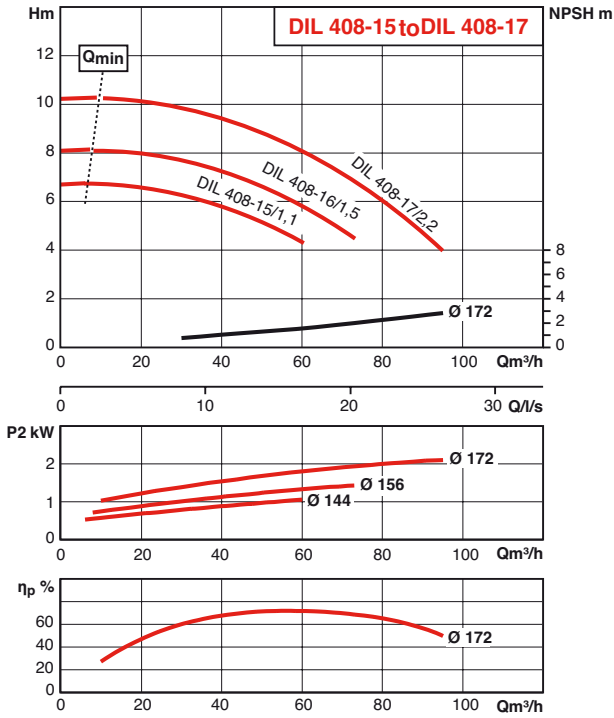




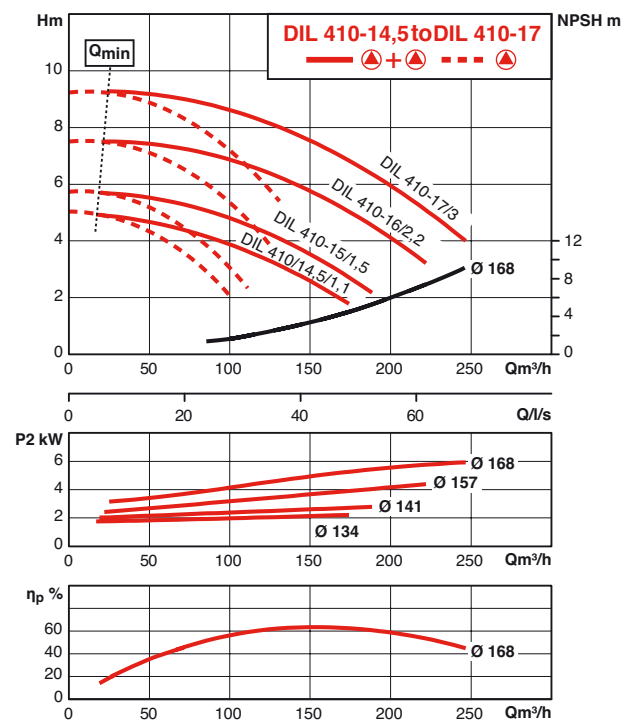
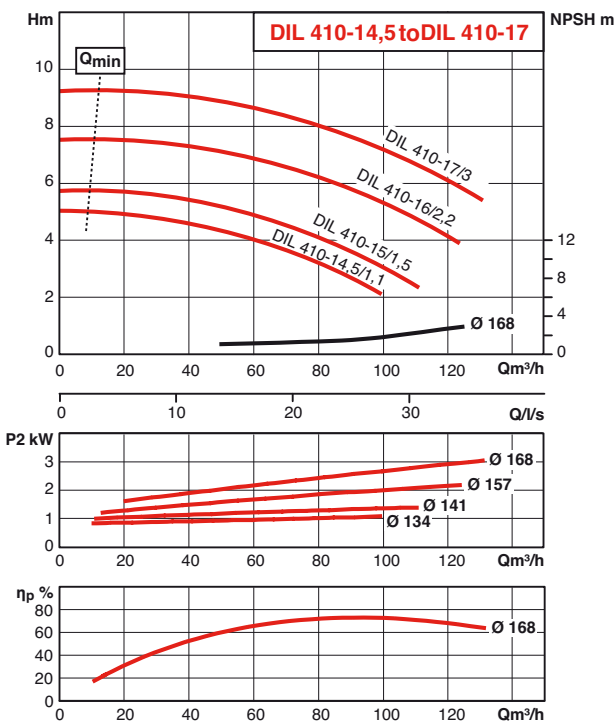
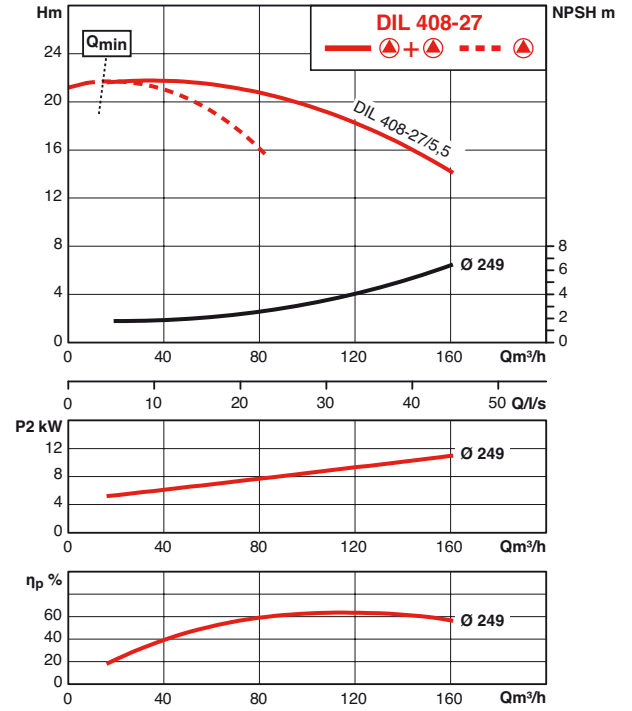
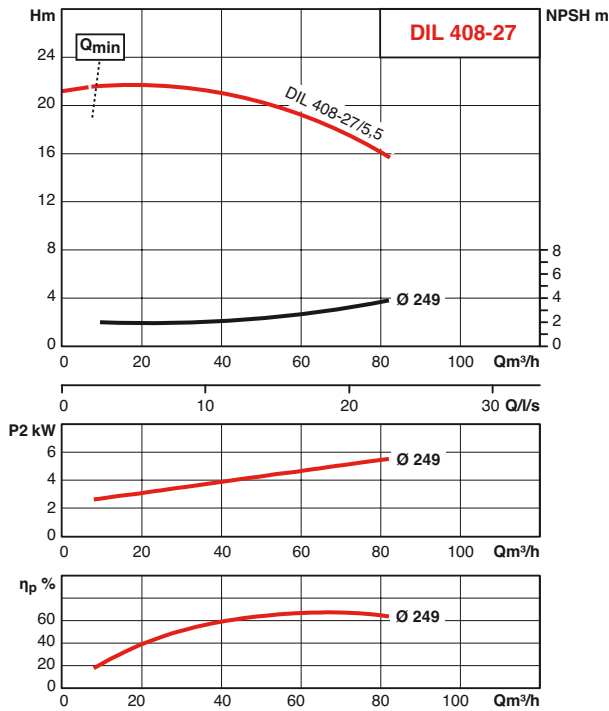
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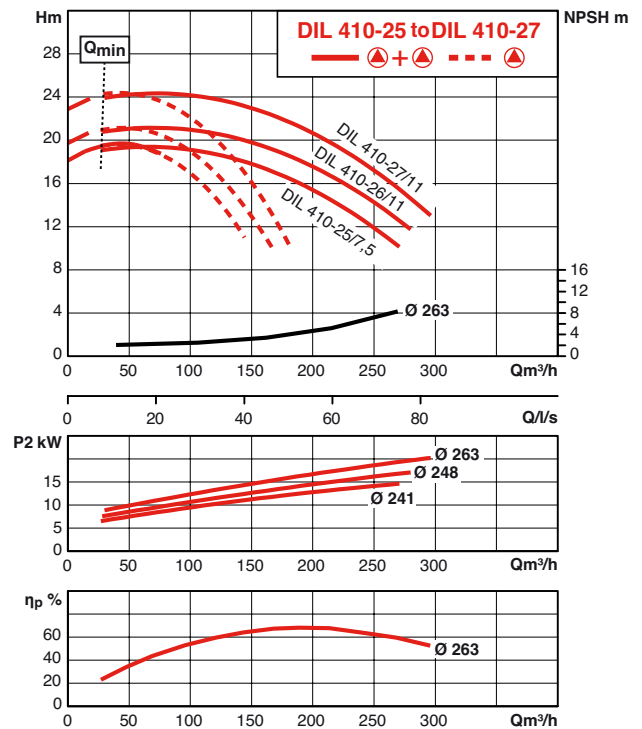
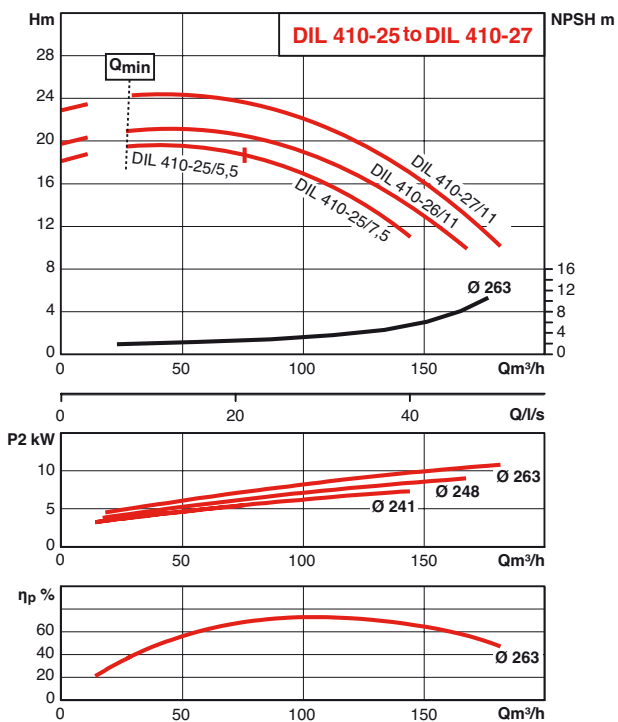
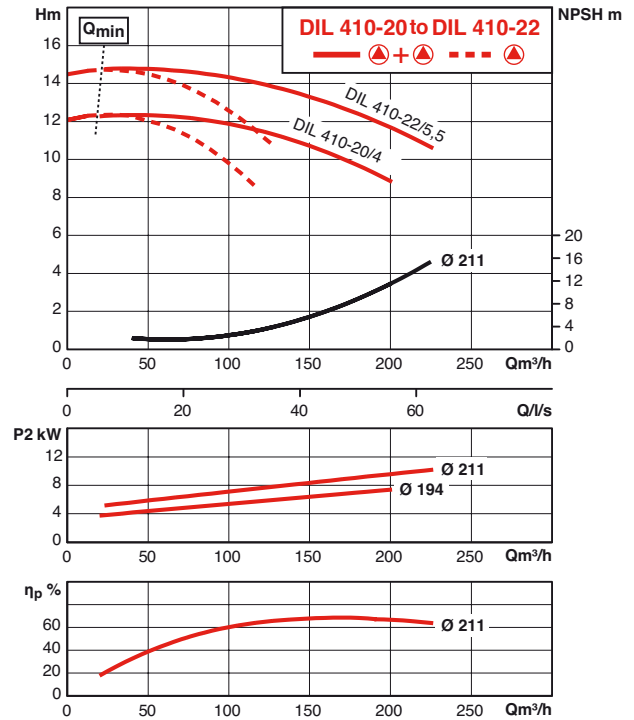
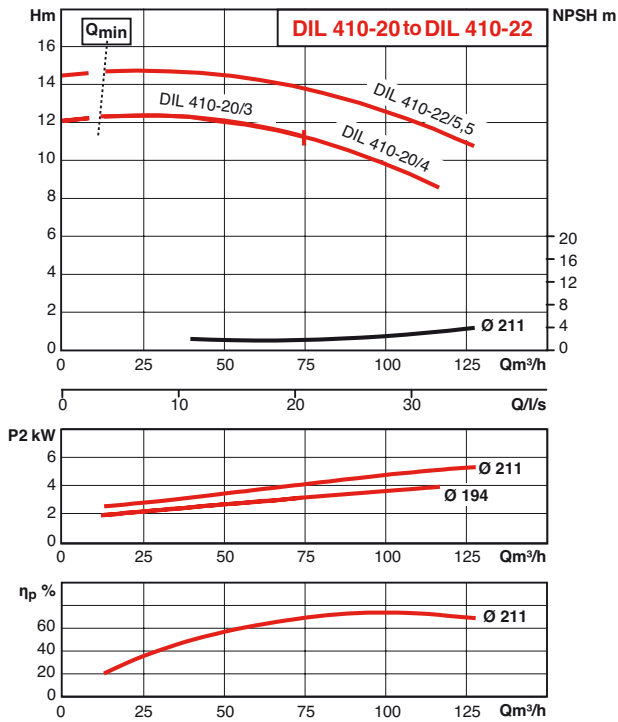
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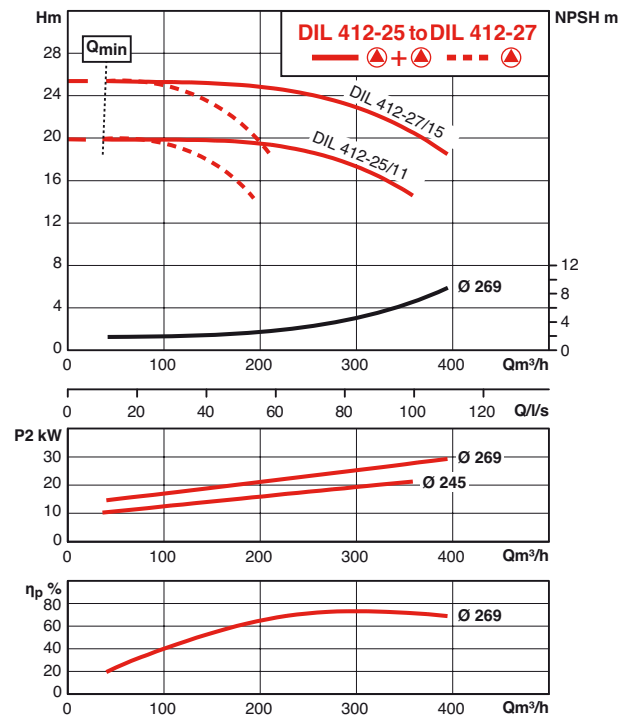
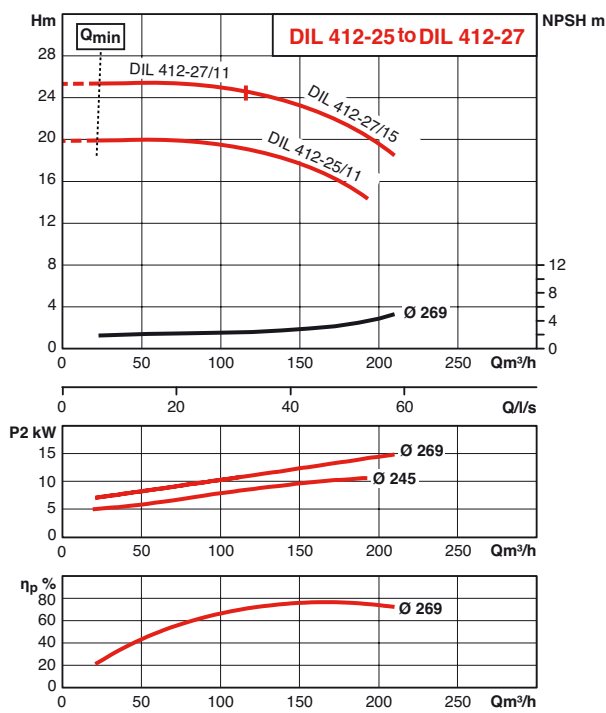
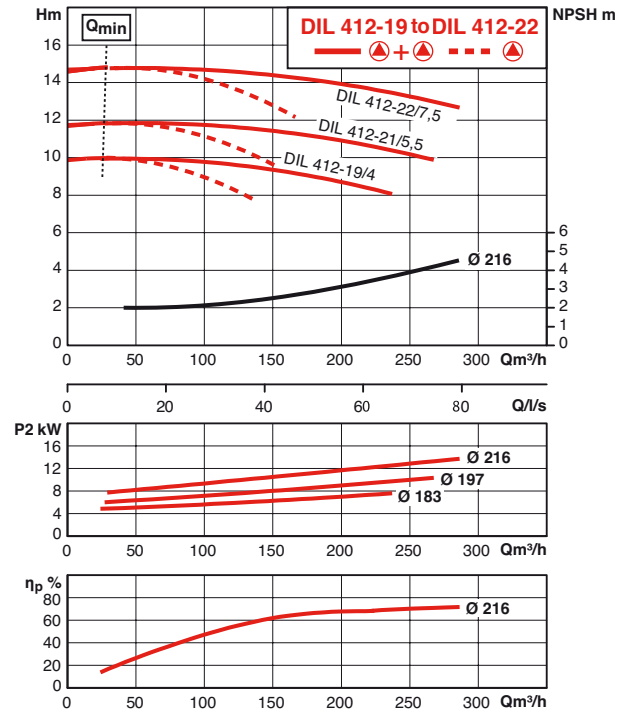
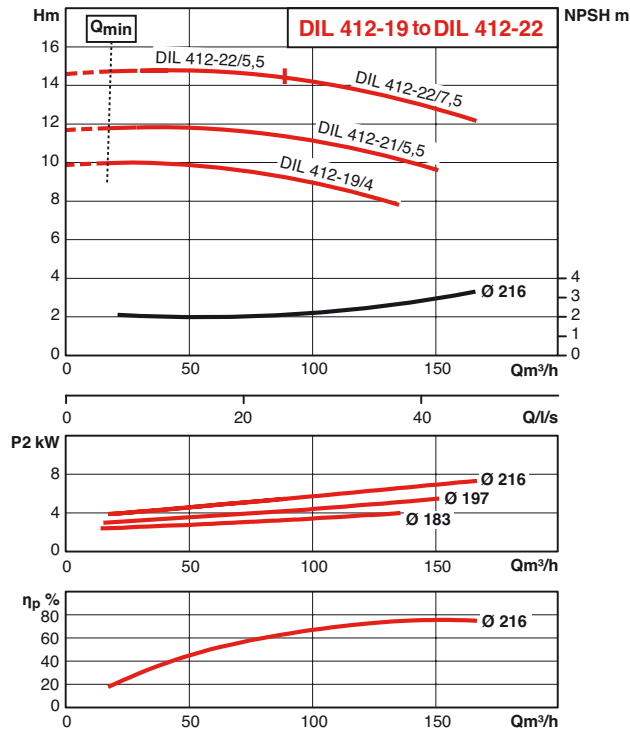
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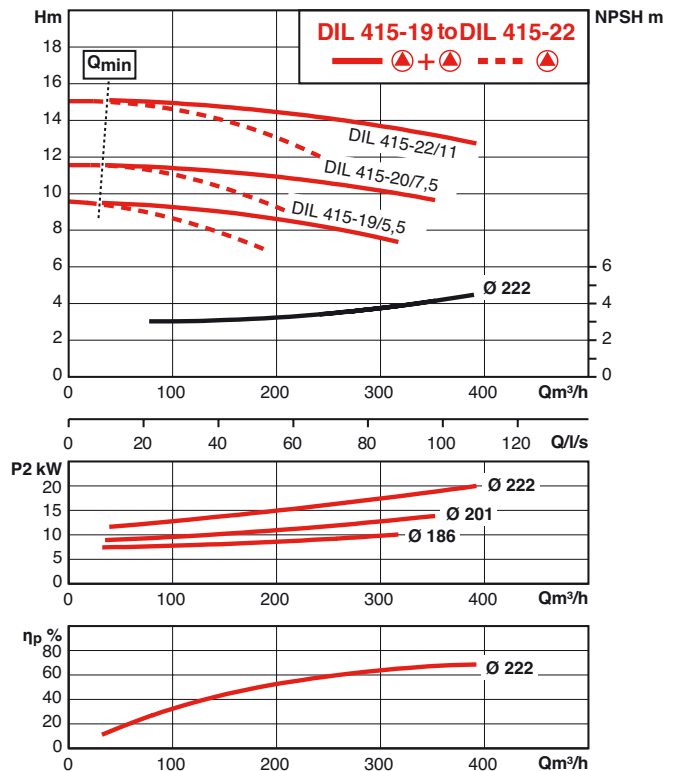
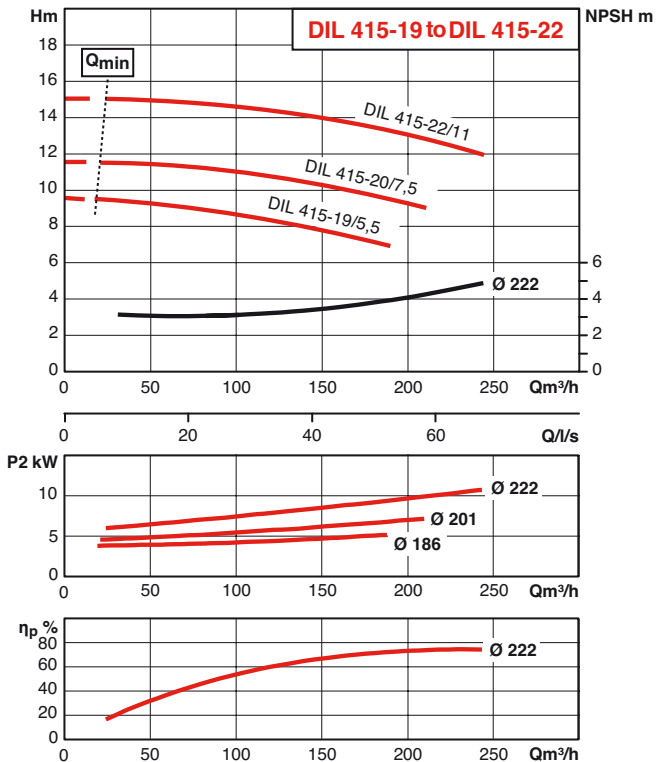
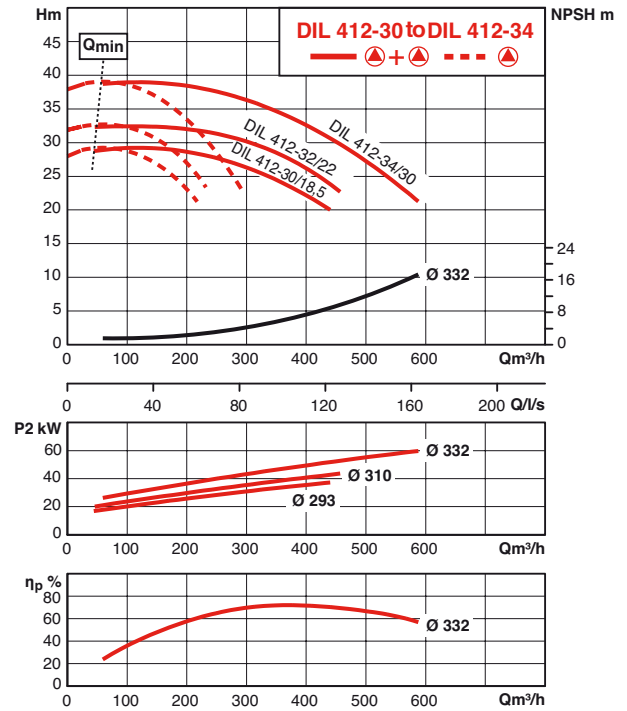
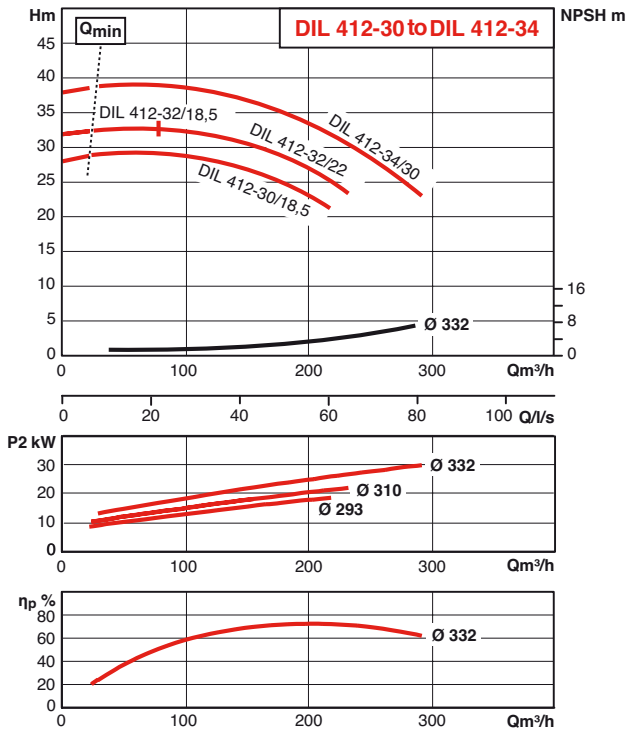
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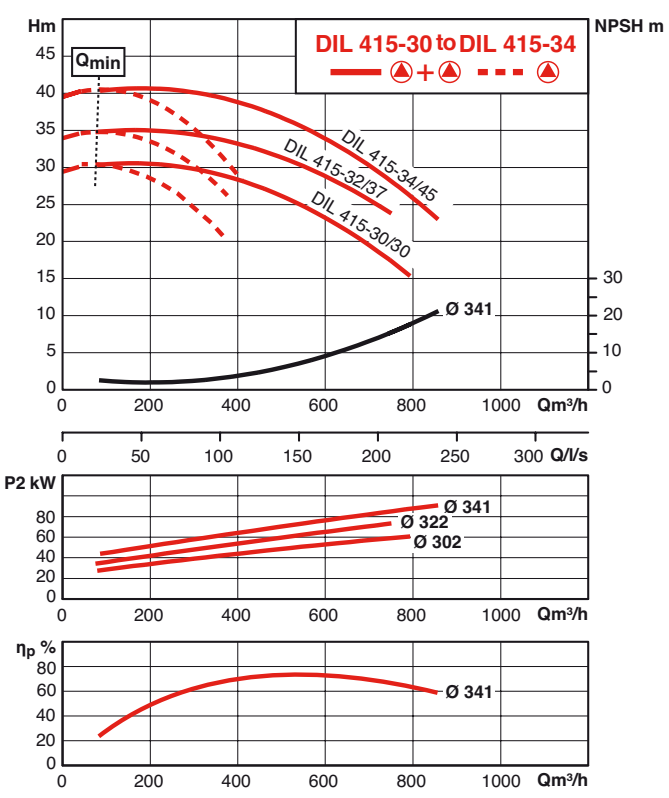
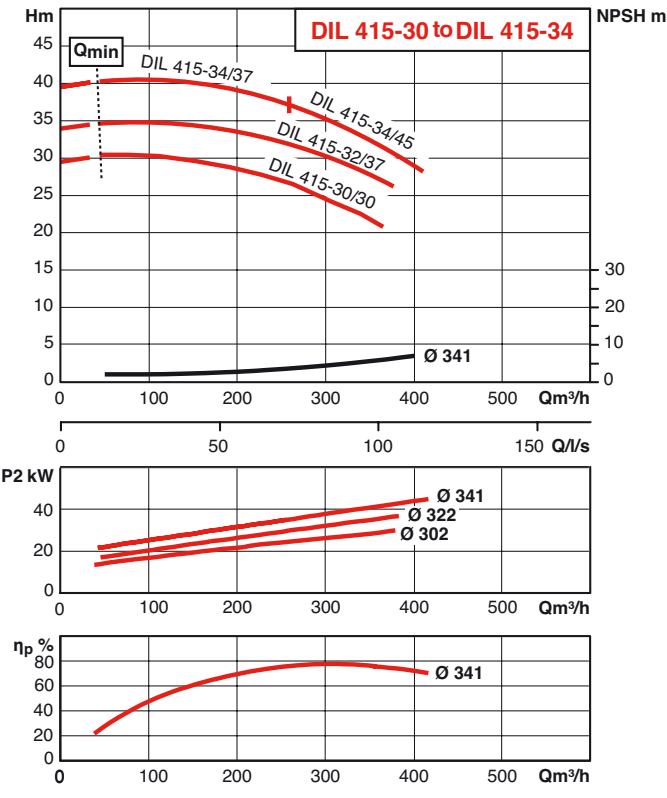
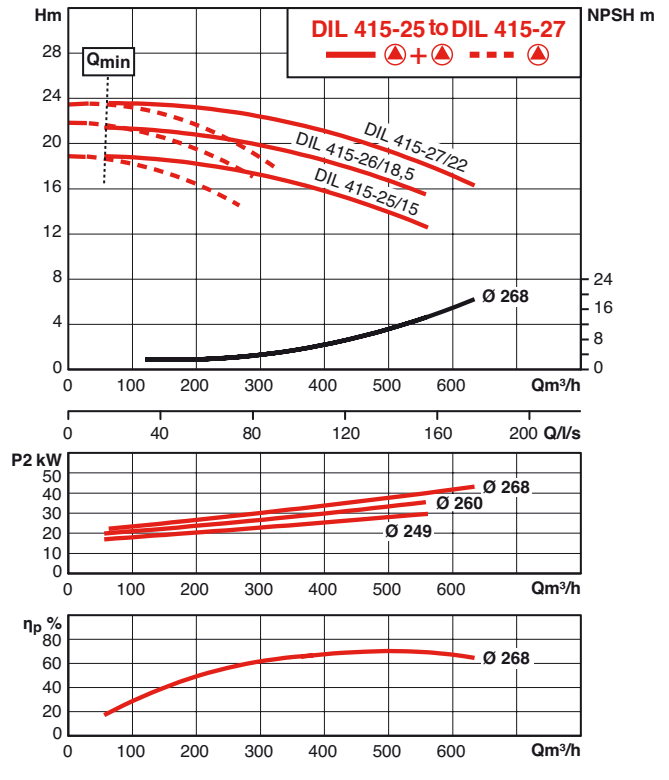
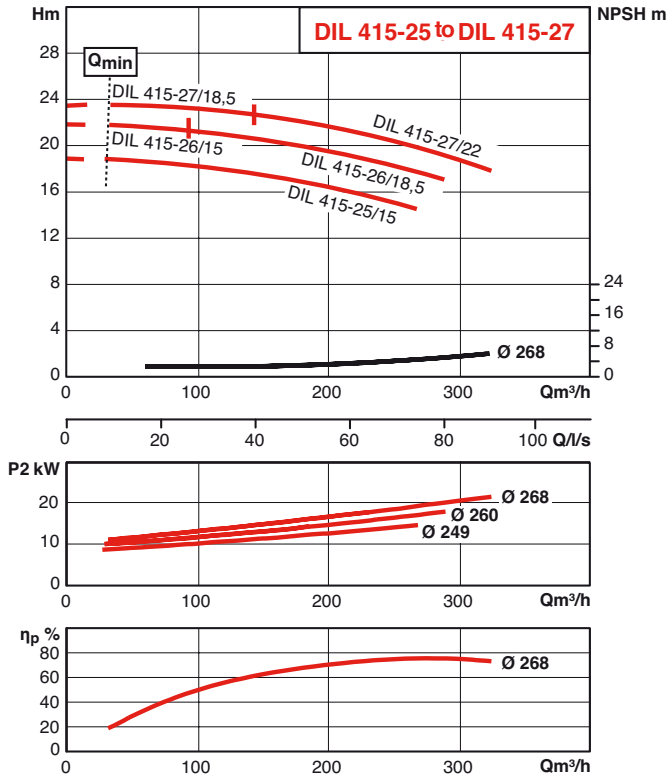
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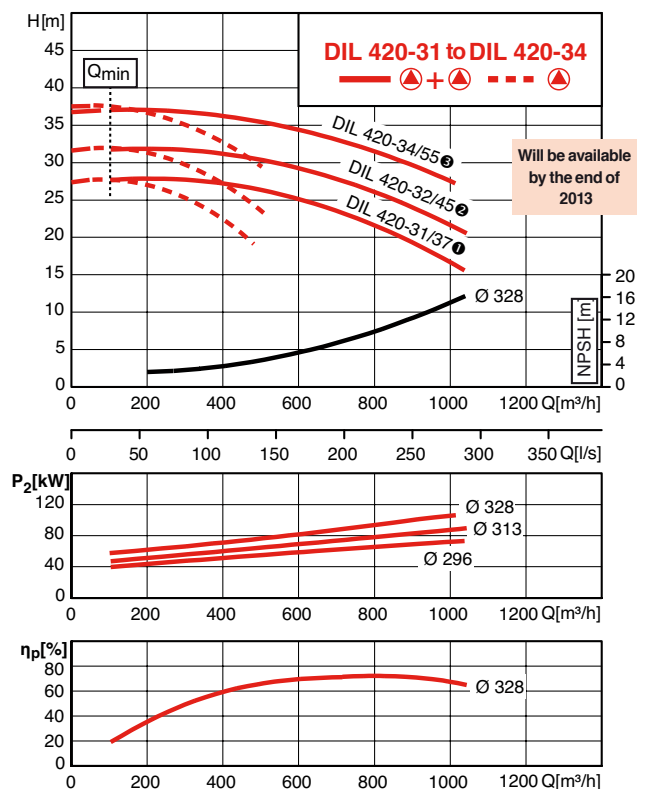
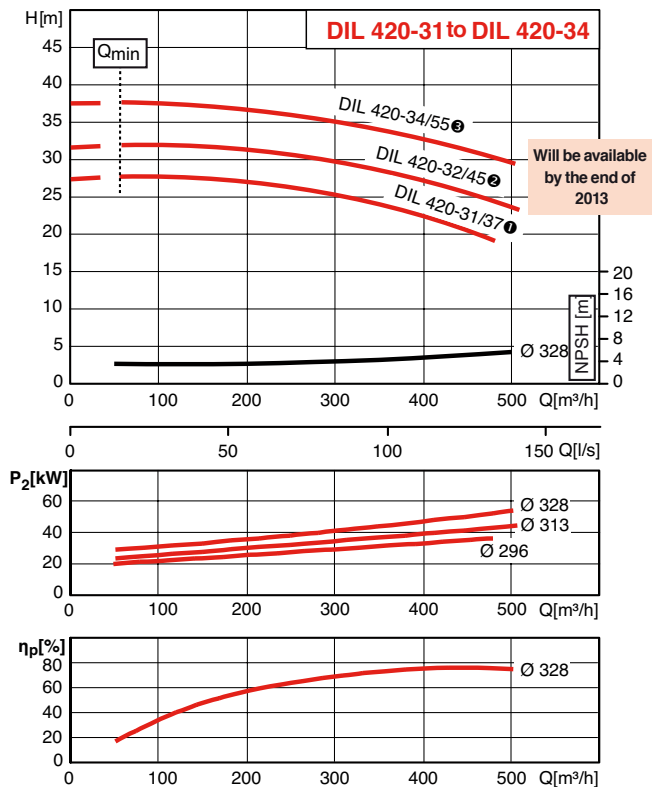
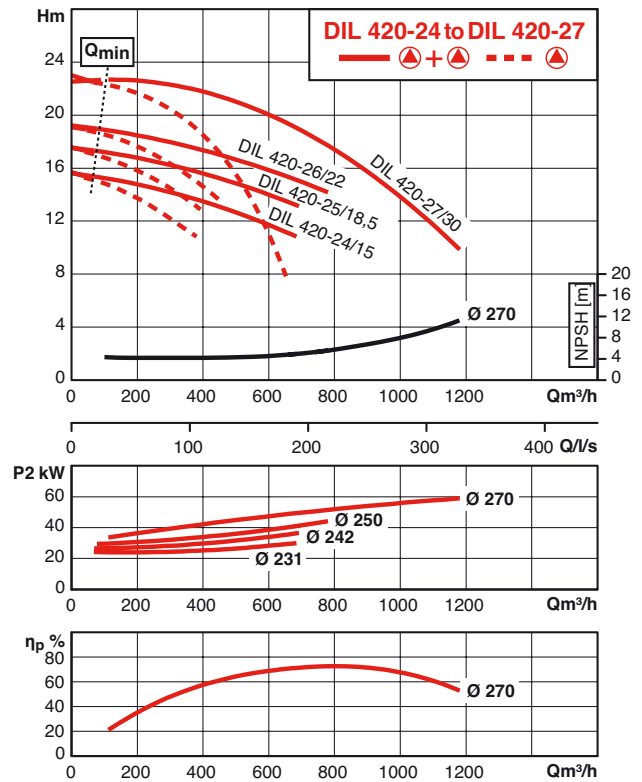
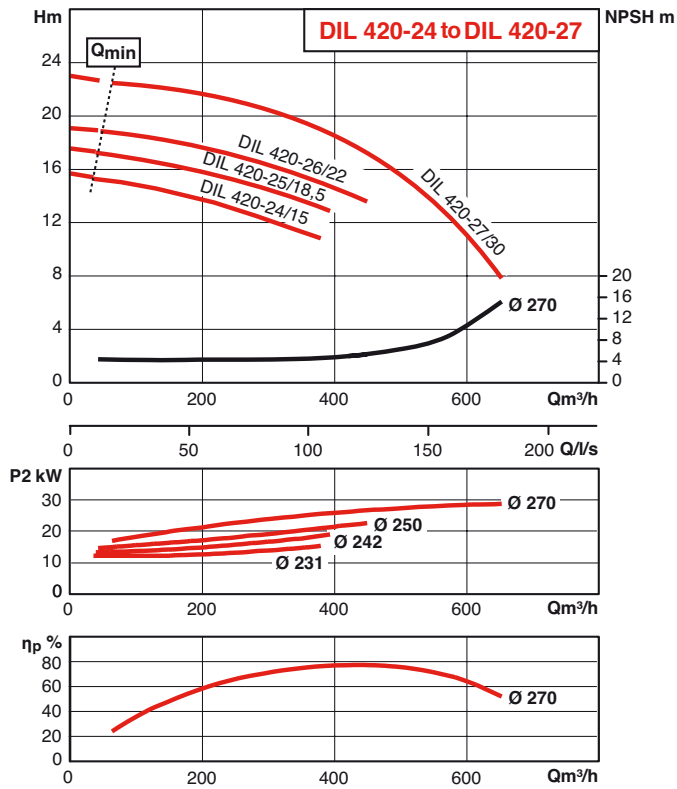
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HYDRAULIC PERFORMANCES OF 4 POLE DIL



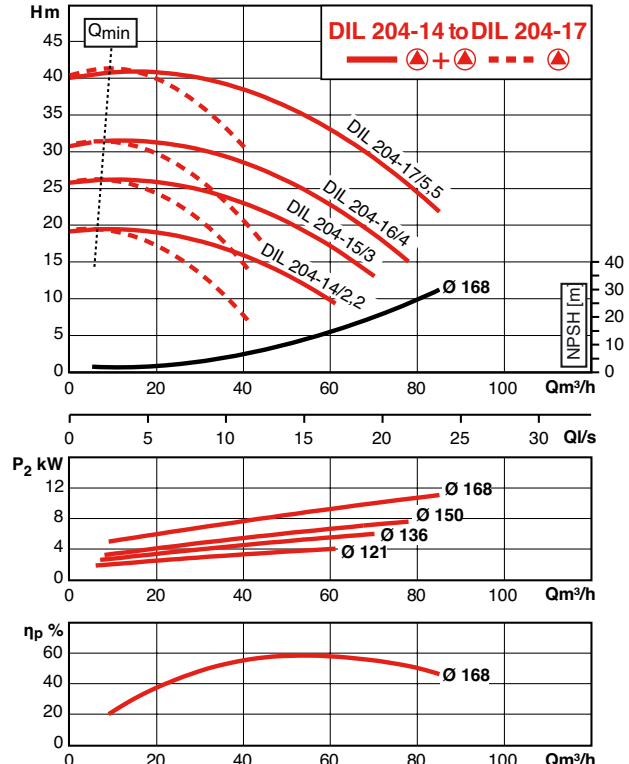
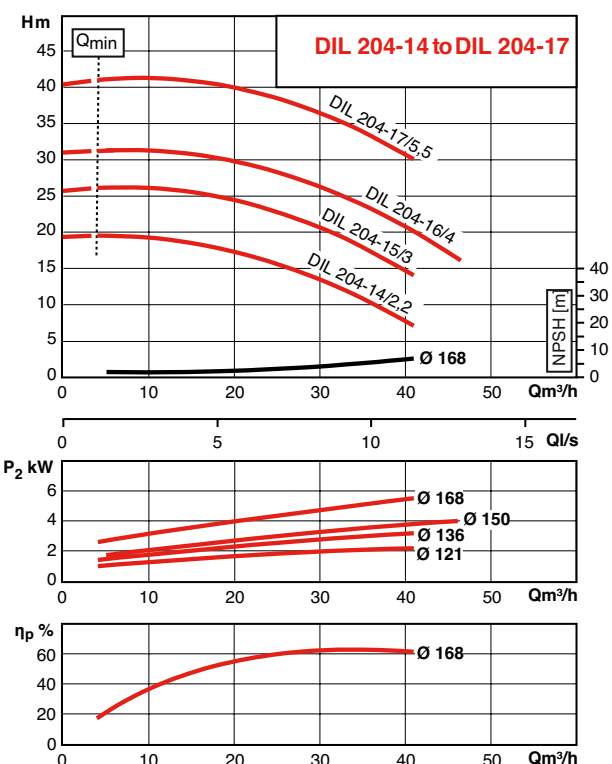
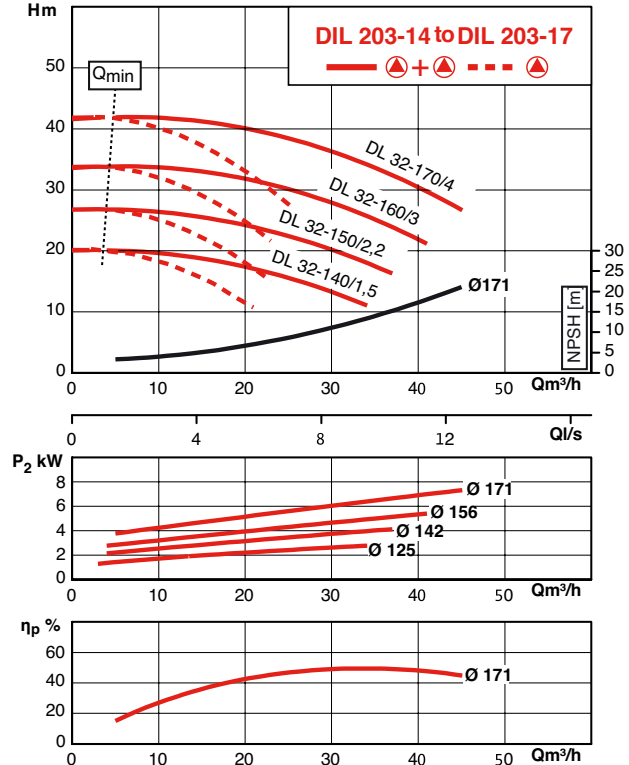
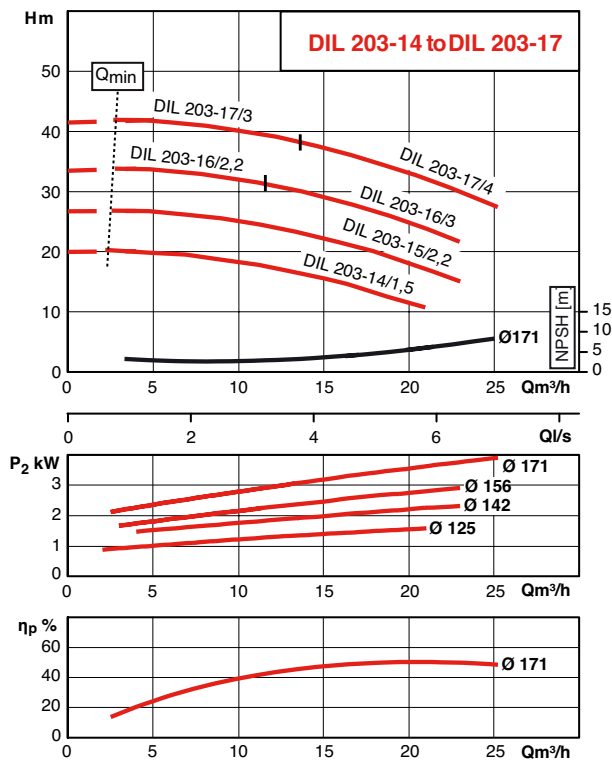
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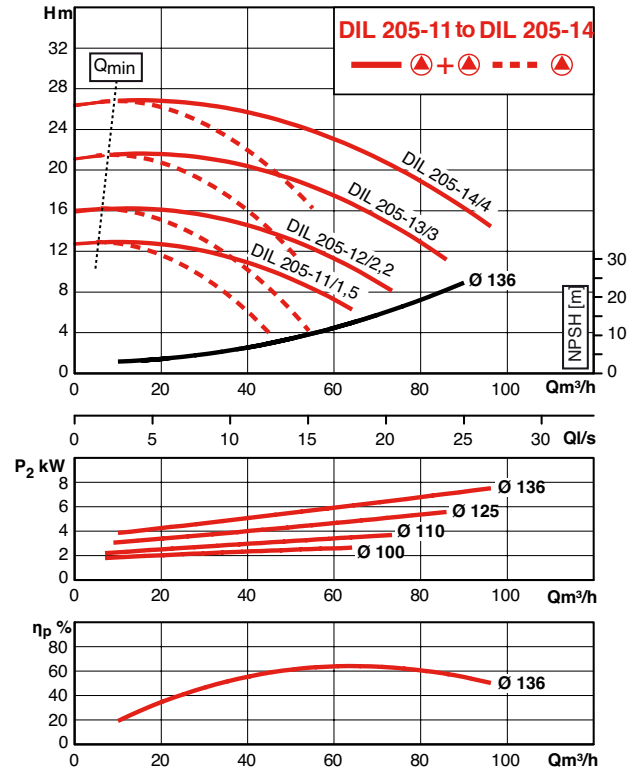
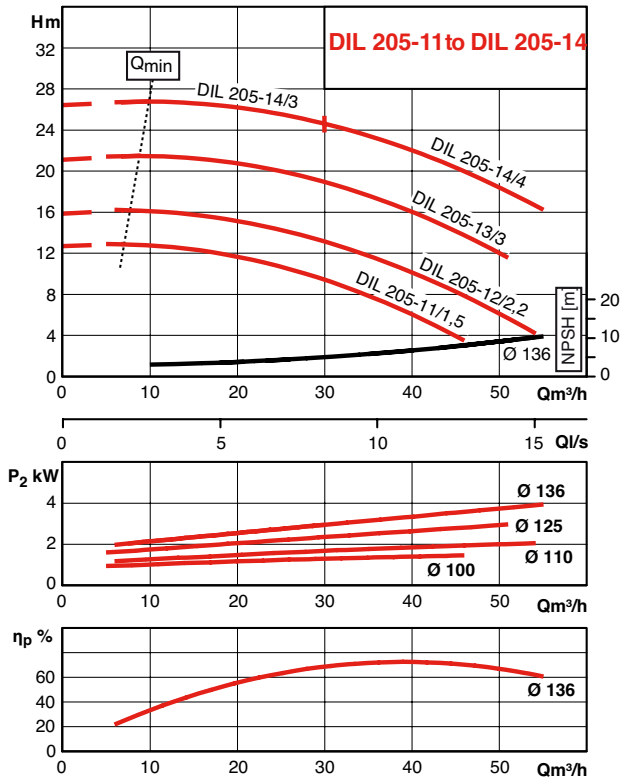
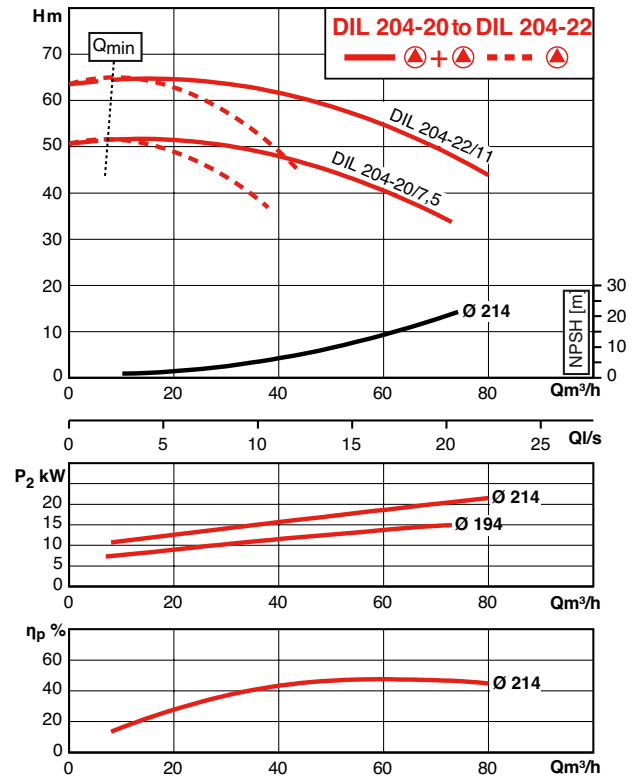
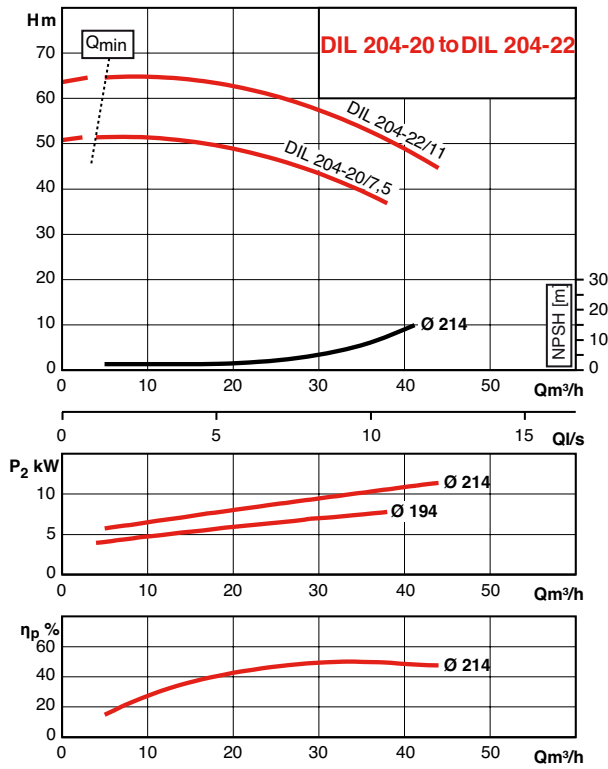
Available by the end of 2013, references to come : in place of ● : DIL 420-30/37 / in place of ● : DIL 420-31.5/37 / in place of ● : DIL 420-34.5/55.  
 New references : DIL 420-33.5/37 / DIL 420-33.5/45 / DIL 420-34.5/45



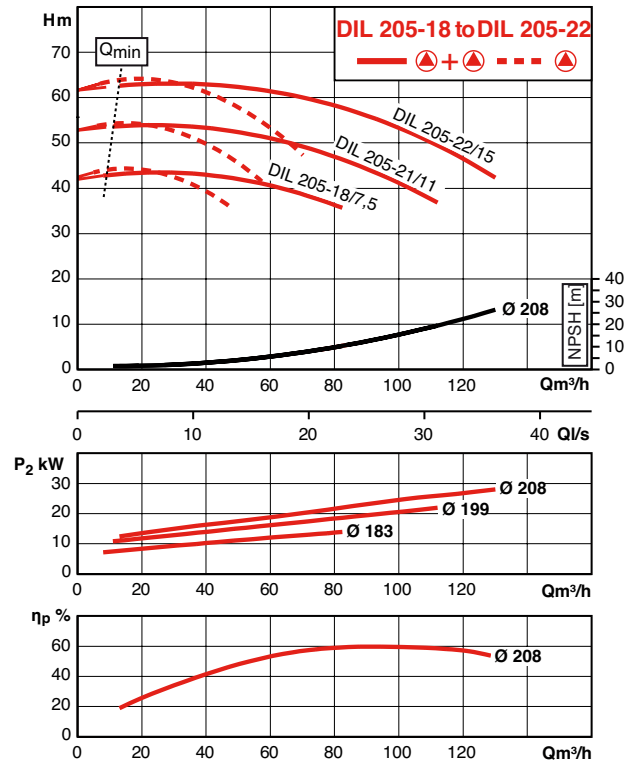
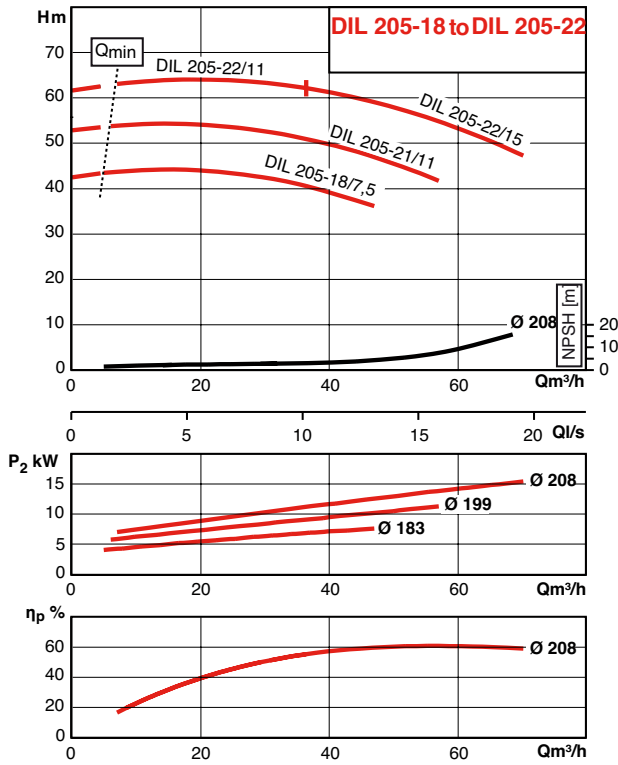
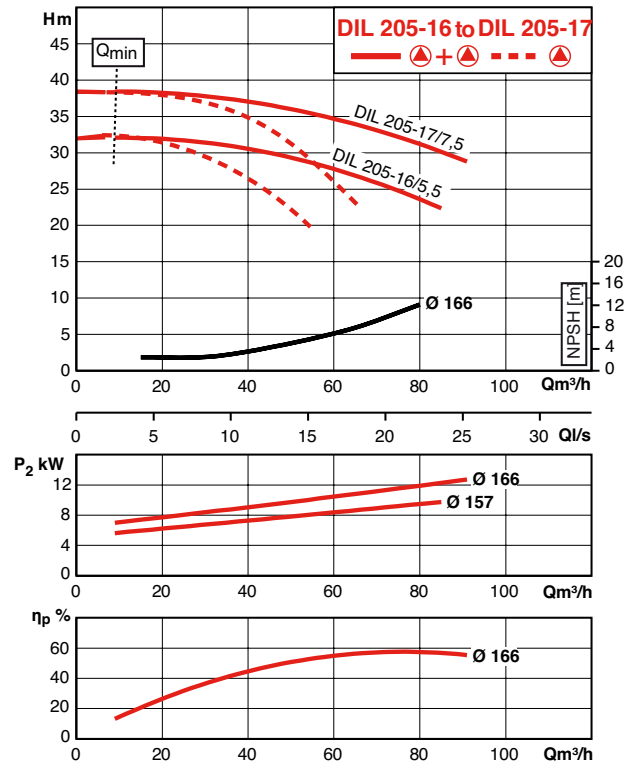
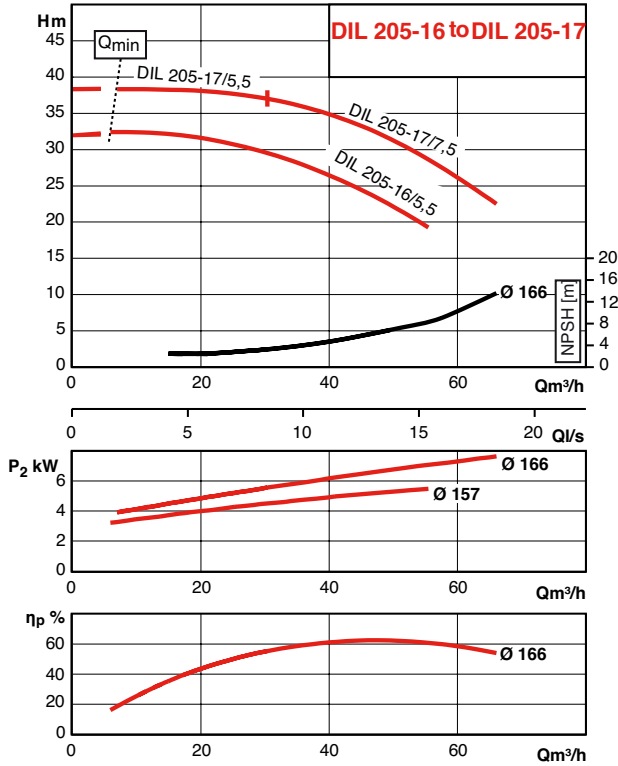
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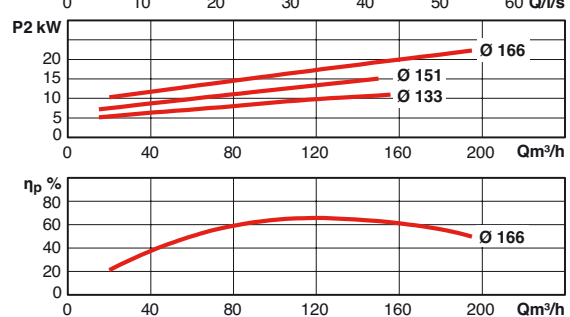
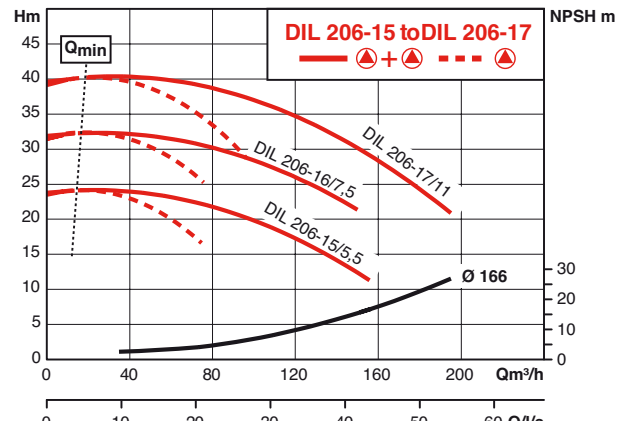
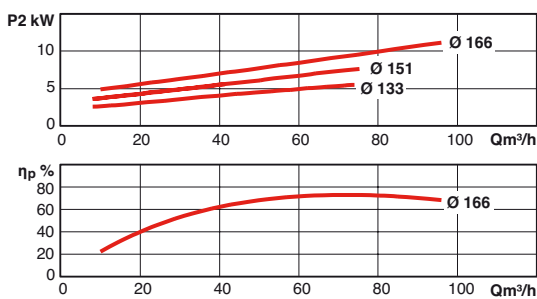
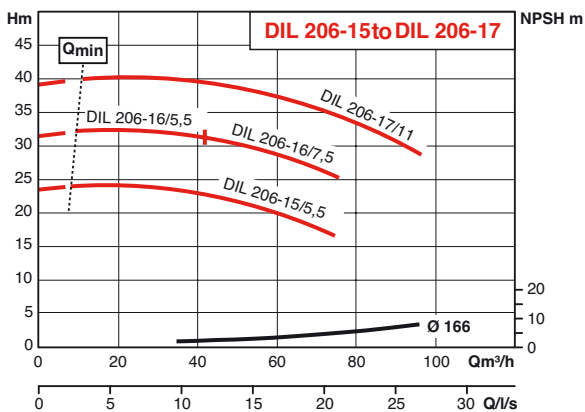
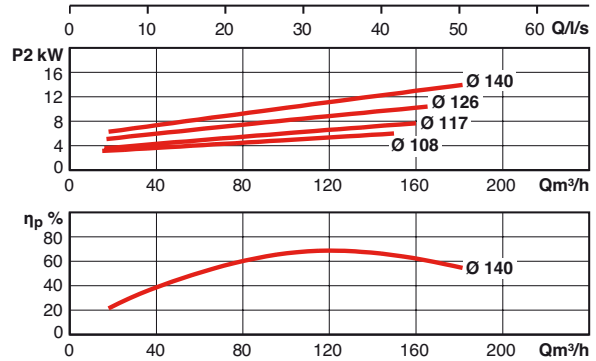
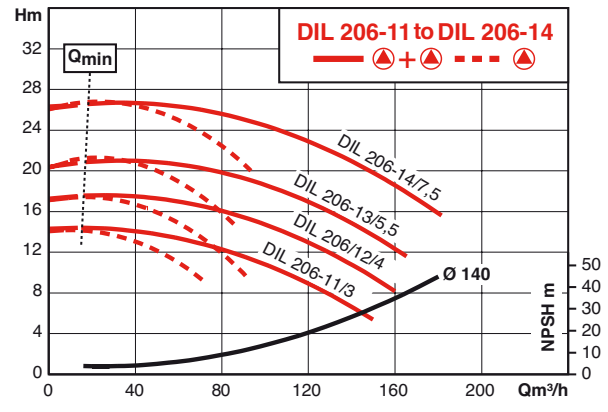
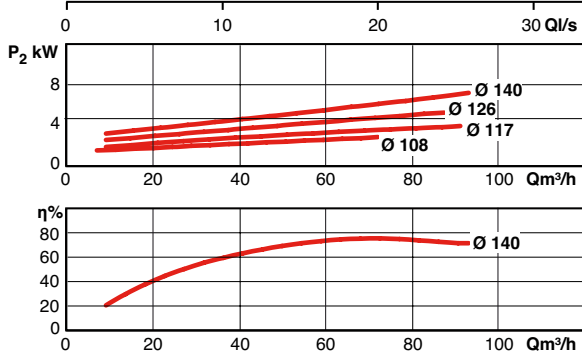
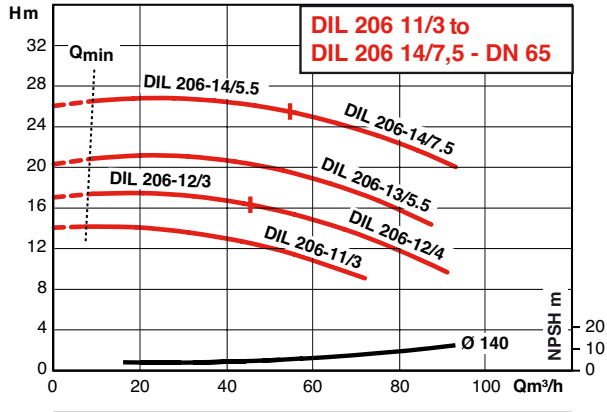
## HYDRAULIC PERFORMANCES OF 2 POLE DIL



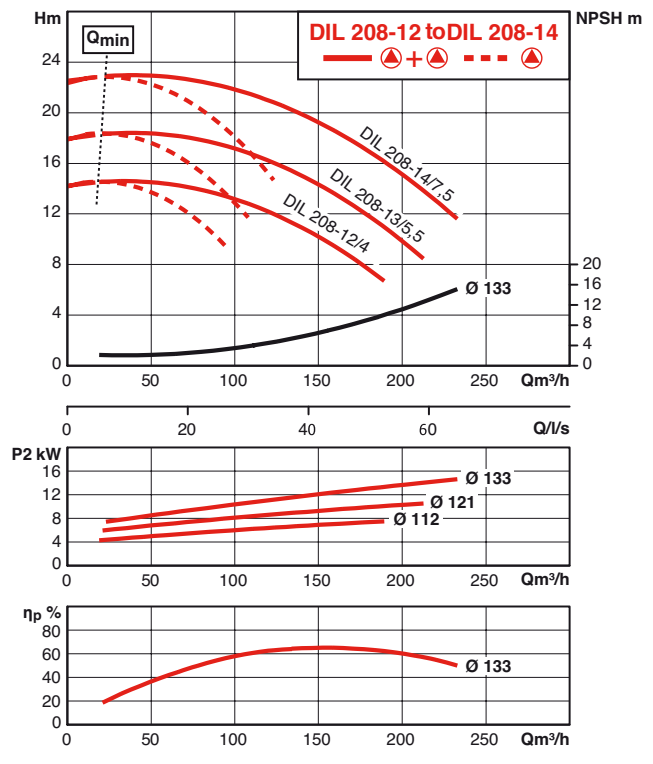
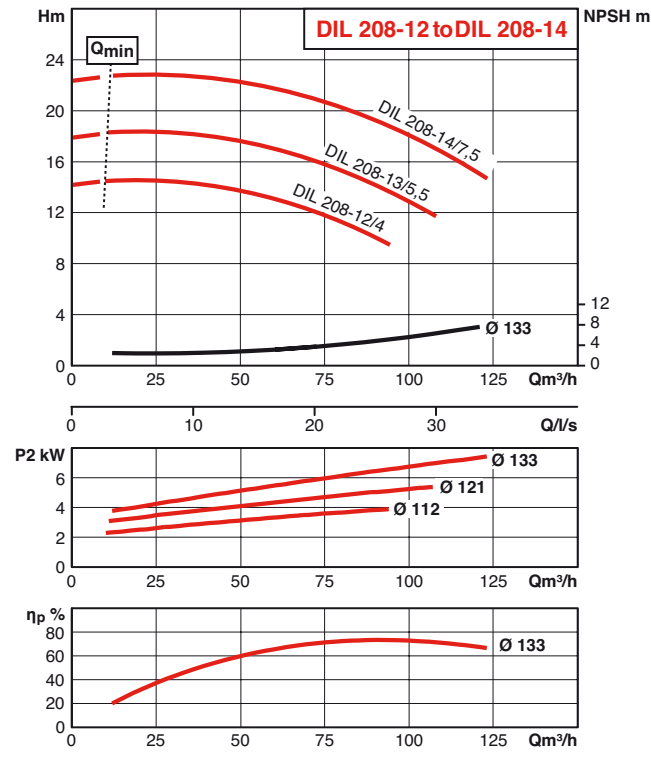
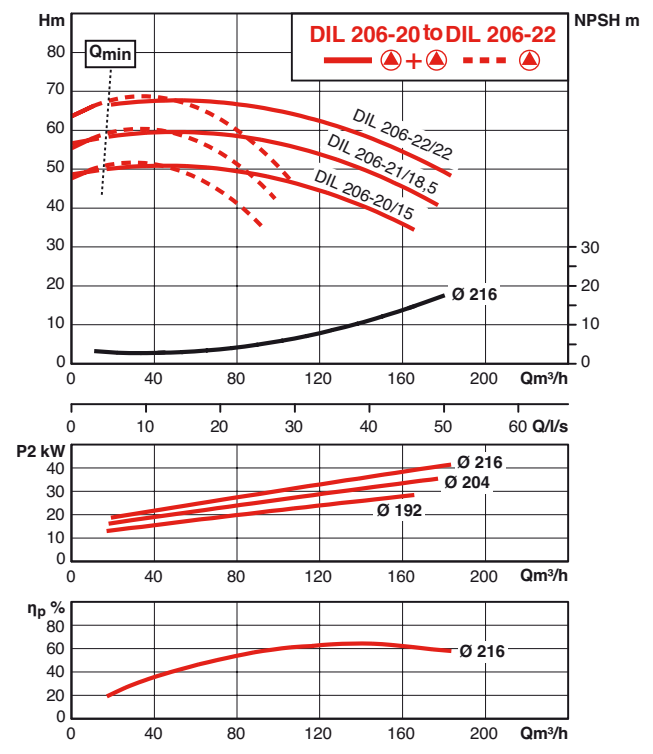
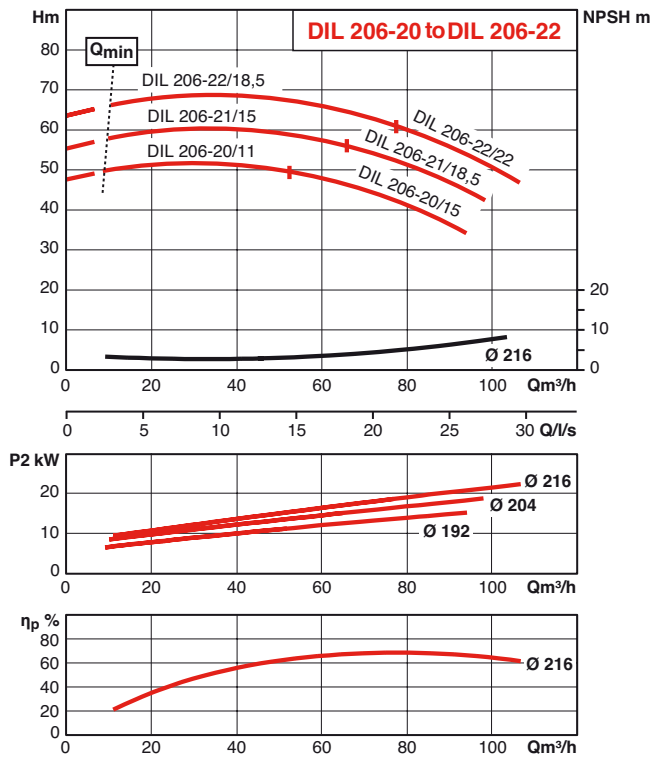
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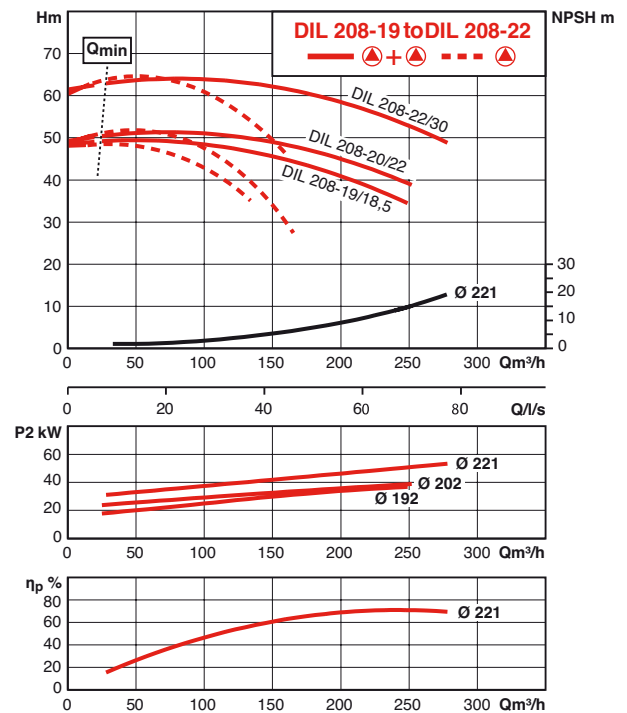
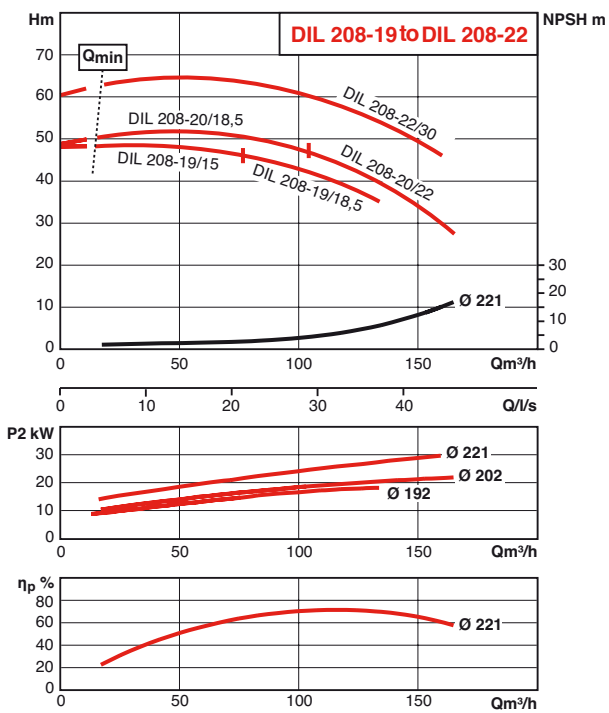
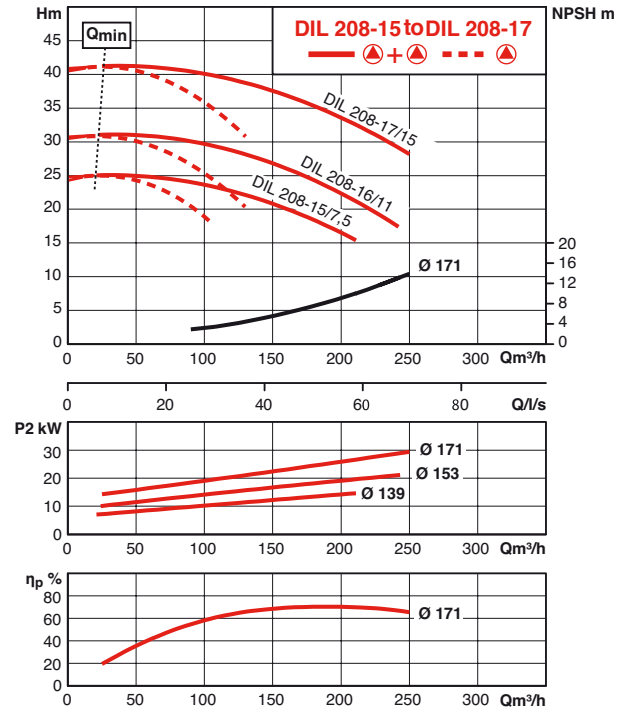
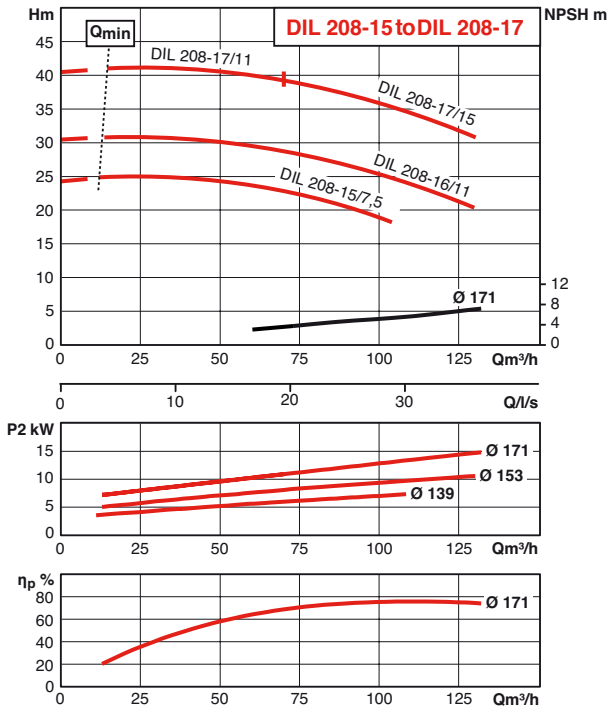
## HYDRAULIC PERFORMANCES OF 2 POLE DIL



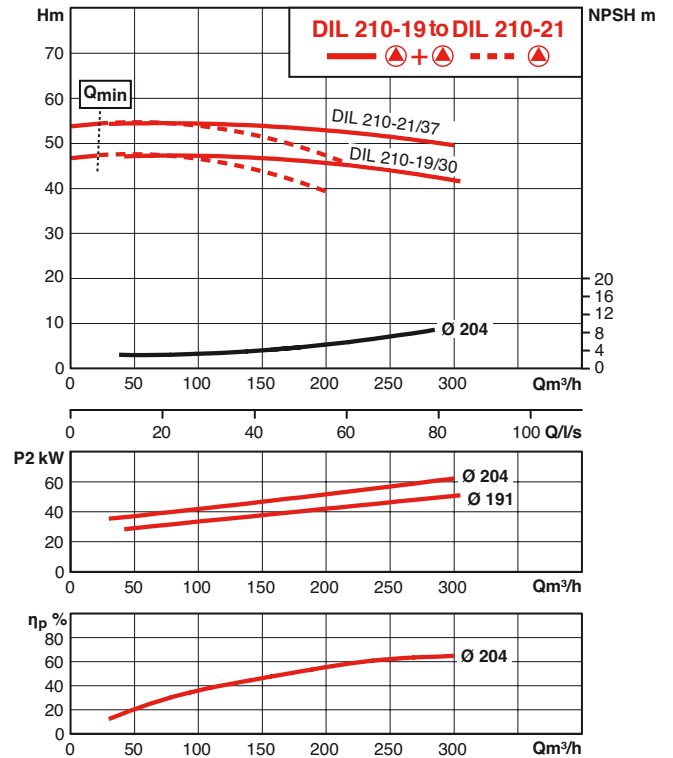
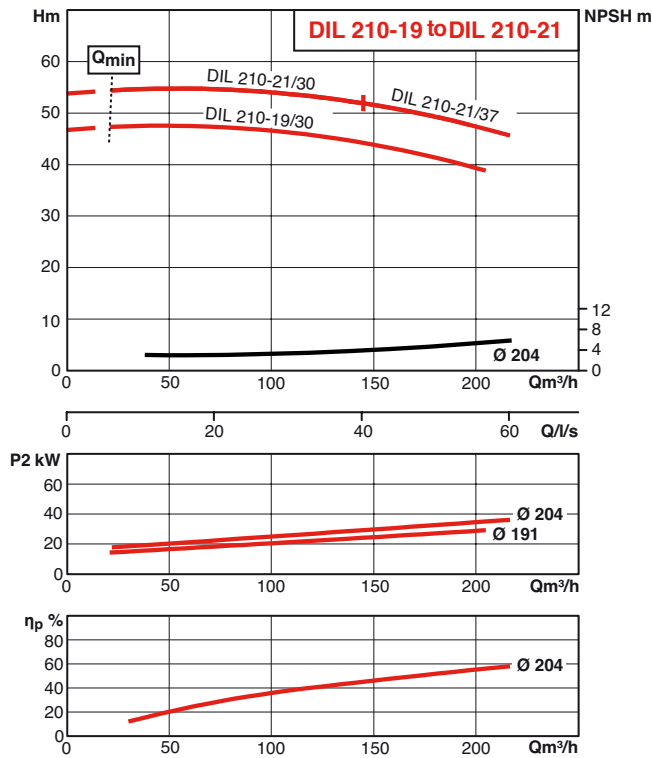
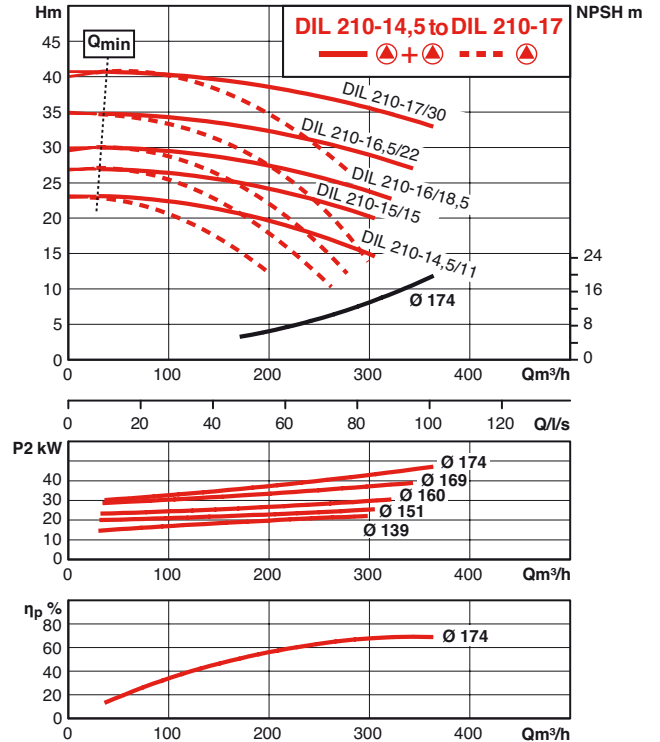
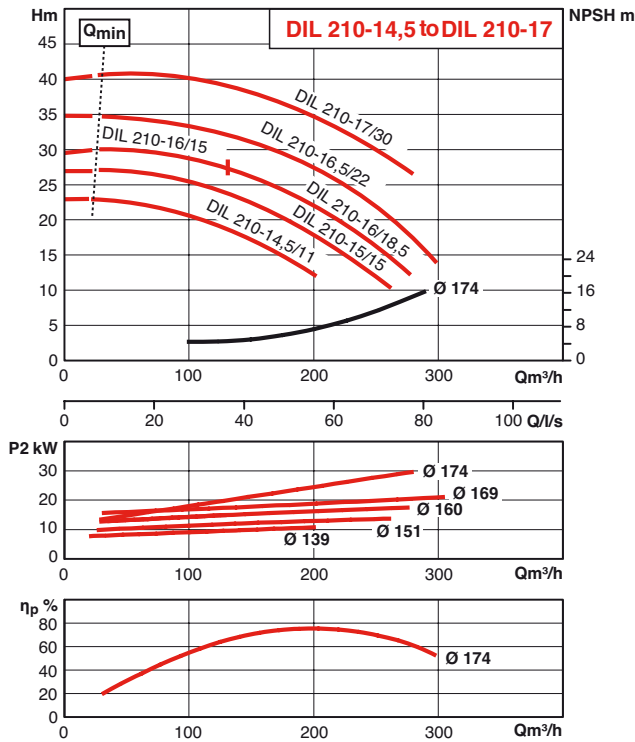
HYDRAULIC PERFORMANCES OF 2 POLE DIL



## HYDRAULIC PERFORMANCES OF 2 POLE DIL

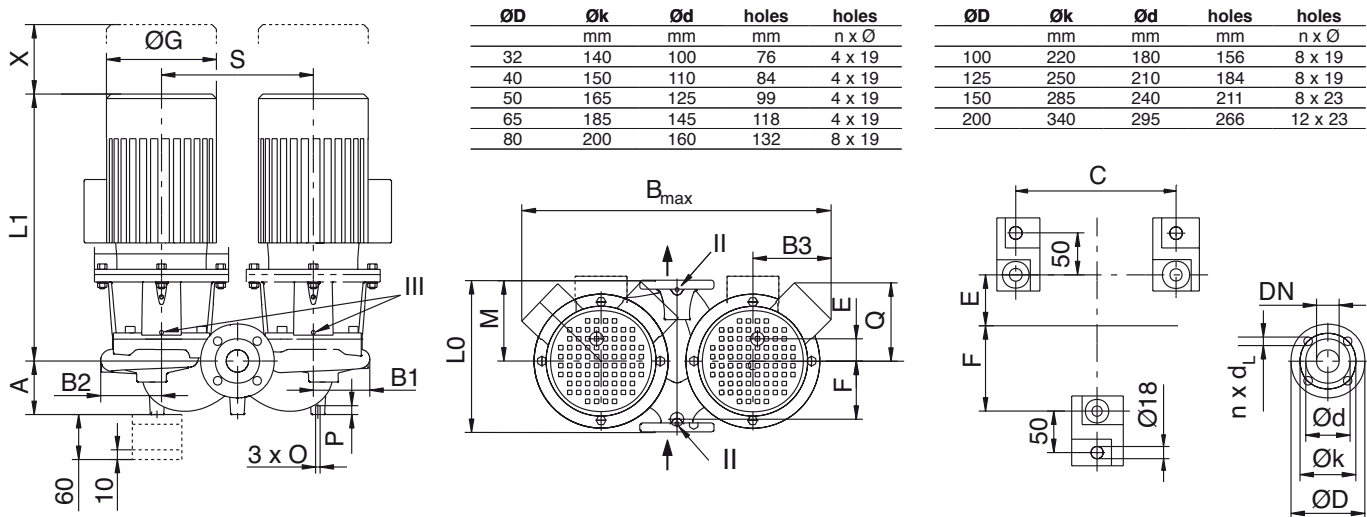


HYDRAULIC PERFORMANCES OF 2 POLE DIL



## ELECTRICAL CHARACTERISTICS AND SIZES AT 1450 RPM

Table A



ØD	Øk	Ød	holes	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
65	185	145	118	4 x 19
80	200	160	132	8 x 19

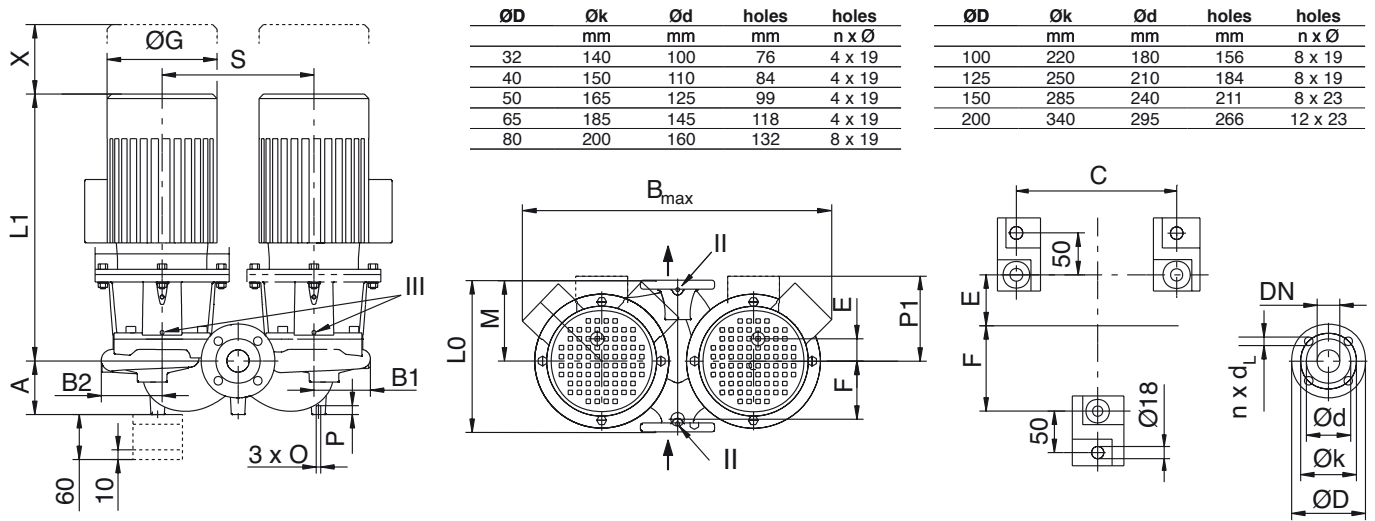
ØD	Øk	Ød	holes	holes
	mm	mm	mm	n x Ø
100	220	180	156	8 x 19
125	250	210	184	8 x 19
150	285	240	211	8 x 23
200	340	295	266	12 x 23

Product references	MOTOR					PUMP					
	Nominal power of the motor	Efficiency of motor %	Power factor	Speed of rotation	Nominal current (appx.)	DN	A	B max	B1	B2	B3
	P2 W	η	cos φ	rpm	in A		mm	mm	mm	mm	mm
DIL203-14/1.5	1500	81.3	78	1450 - 2900	3.3	32	100	588	117	122	144
DIL203-15/2.2	2200	83.2	82	1450 - 2900	4.4	32	100	588	117	122	144
DIL203-16/2.2	2200	83.2	82	1450 - 2900	4.4	32	100	588	117	122	144
DIL203-16/3	3000	84.6	84	1450 - 2900	5.8	32	100	600	117	122	150
DIL203-17/3	3000	84.6	84	1450 - 2900	5.8	32	100	600	117	122	150
DIL203-17/4	4000	85.8	84	1450 - 2900	7.7	32	100	612	117	122	156
DIL204-14/2.2	2200	83.2	82	1450 - 2900	4.4	40	100	628	120	127	144
DIL204-15/3	3000	84.6	84	1450 - 2900	5.8	40	100	640	120	127	150
DIL204-16/4	4000	85.8	84	1450 - 2900	7.7	40	100	652	120	127	156
DIL204-17/5.5	5500	87	87	1450 - 2900	10.2	40	100	692	120	127	176
DIL204-20/7.5	7500	88.1	86	1450 - 2900	13.7	40	110	700	145	147	-
DIL204-22/11	11000	89.4	87	1450 - 2900	22	40	110	750	145	147	-
DIL205-11/1.5	1500	81.3	78	1450 - 2900	3.3	50	105	588	108	116	144
DIL205-12/2.2	2200	83.2	82	1450 - 2900	4.4	50	105	588	108	116	144
DIL205-13/3	3000	84.6	84	1450 - 2900	5.8	50	105	600	108	116	150
DIL205-14/3	3000	84.6	84	1450 - 2900	5.8	50	105	600	108	116	150
DIL205-14/4	4000	85.8	84	1450 - 2900	7.7	50	105	612	108	116	156
DIL205-16/5.5	5500	87	87	1450 - 2900	10.2	50	120	692	126	136	176
DIL205-17/5.5	5500	87	87	1450 - 2900	10.2	50	120	692	126	136	176
DIL205-17/7.5	7500	88.1	86	1450 - 2900	13.7	50	120	692	126	136	176
DIL205-18/7.5	7500	88.1	86	1450 - 2900	13.7	50	120	700	145	148	-
DIL205-21/11	11000	89.4	87	1450 - 2900	22	50	120	750	145	148	-
DIL205-22/11	11000	89.4	87	1450 - 2900	22	50	120	750	145	148	-
DIL205-22/15	15000	90.3	84	1450 - 2900	28.5	50	120	750	145	148	-
DIL206-11/3	3000	84.6	84	1450 - 2900	5.8	65	120	640	121	130	150
DIL206-12/3	3000	84.6	84	1450 - 2900	5.8	65	120	640	121	130	150
DIL206-12/4	4000	85.8	84	1450 - 2900	7.7	65	120	652	121	130	156
DIL206-13/5.5	5500	87	87	1450 - 2900	10.2	65	120	640	121	130	-
DIL206-14/5.5	5500	87	87	1450 - 2900	10.2	65	120	640	121	130	-
DIL206-14/7.5	7500	88.1	86	1450 - 2900	13.7	65	120	640	121	130	-
DIL206-15/5.5	5500	87	87	1450 - 2900	10.2	65	153	752	134	144	176
DIL206-16/5.5	5500	87	87	1450 - 2900	10.2	65	153	752	134	144	176
DIL206-16/7.5	7500	88.1	86	1450 - 2900	13.7	65	153	752	134	144	176
DIL206-17/11	11000	89.4	87	1450 - 2900	22	65	153	750	134	144	-
DIL206-20/11	11000	89.4	87	1450 - 2900	22	65	140	750	157	166	-
DIL206-20/15	15000	90.3	84	1450 - 2900	28.5	65	140	750	157	166	-
DIL206-21/15	15000	90.3	84	1450 - 2900	28.5	65	140	750	157	166	-



**ELECTRICAL CHARACTERISTICS AND SIZES AT 1450 RPM**

**Table B**



ØD	Øk	Ød	holes	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
65	185	145	118	4 x 19
80	200	160	132	8 x 19

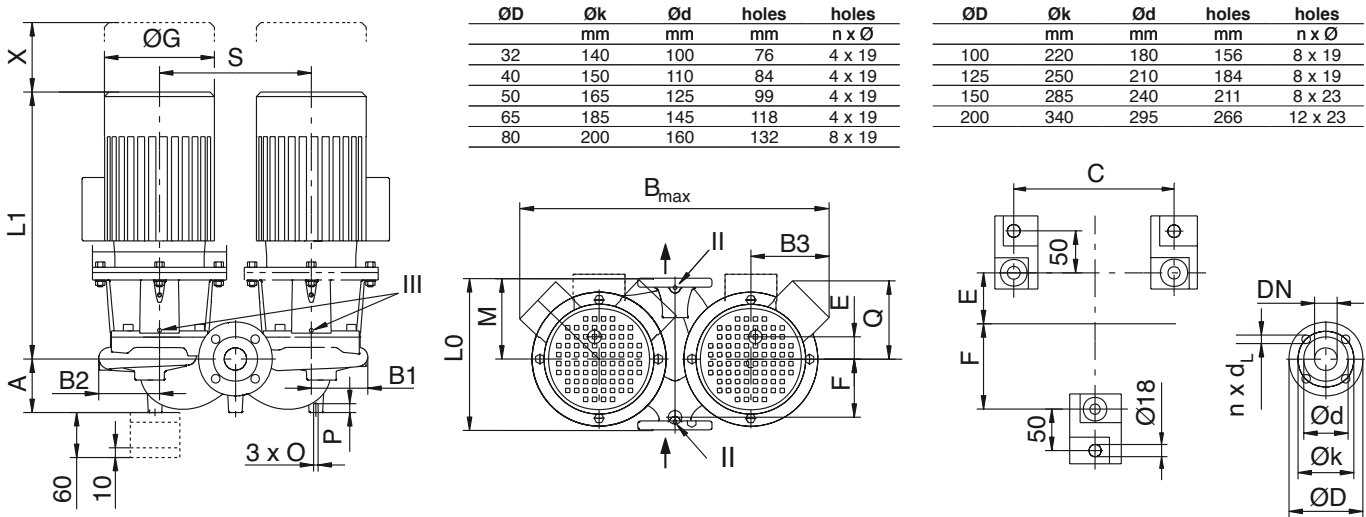
ØD	Øk	Ød	holes	holes
	mm	mm	mm	n x Ø
100	220	180	156	8 x 19
125	250	210	184	8 x 19
150	285	240	211	8 x 23
200	340	295	266	12 x 23

**PUMP**

Product reference	Q	P1	L0	L1	C	E	F	M	O	P	S	X	ØG	mass	Table
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg	
DIL203-14/1.5	144	-	320	446	360	43	137	155	M10	20	300	90	193	98	A
DIL203-15/2.2	144	-	320	473	360	43	137	155	M10	20	300	90	193	99	A
DIL203-16/2.2	144	-	320	473	360	43	137	155	M10	20	300	90	193	99	A
DIL203-16/3	150	-	320	528	360	43	137	155	M10	20	300	90	217	118	A
DIL203-17/3	150	-	320	528	360	43	137	155	M10	20	300	90	217	118	A
DIL203-17/4	156	-	320	552	360	43	137	155	M10	20	300	90	232	137	A
DIL204-14/2.2	144	-	340	477	400	52	145	170	M10	20	340	95	193	100	A
DIL204-15/3	150	-	340	532	400	52	145	170	M10	20	340	95	217	119	A
DIL204-16/4	156	-	340	556	400	52	145	170	M10	20	340	95	232	139	A
DIL204-17/5.5	176	-	340	601	400	52	145	170	M10	20	340	95	279	170	A
DIL204-20/7.5	-	188	440	620	500	38	192	220	M10	20	400	100	279	206	B
DIL204-22/11	-	250	440	767	500	38	192	220	M10	20	400	100	320	271	B
DIL205-11/1.5	144	-	340	449	360	52	148	170	M10	20	300	100	193	94	A
DIL205-12/2.2	144	-	340	476	360	52	148	170	M10	20	300	100	193	93	A
DIL205-13/3	150	-	340	535	360	52	148	170	M10	20	300	100	217	116	A
DIL205-14/3	150	-	340	535	360	52	148	170	M10	20	300	100	217	113	A
DIL205-14/4	156	-	340	559	360	52	148	170	M10	20	300	100	232	133	A
DIL205-16/5.5	176	-	340	598	360	50	130	180	M10	20	340	100	279	172	A
DIL205-17/5.5	176	-	340	598	360	50	130	180	M10	20	340	100	279	172	A
DIL205-17/7.5	176	-	340	604	360	50	130	180	M10	20	340	100	279	187	A
DIL205-18/7.5	-	188	440	626	500	50	200	220	M10	20	400	100	279	215	B
DIL205-21/11	-	250	440	773	500	50	200	220	M10	20	400	100	320	276	B
DIL205-22/11	-	250	440	773	500	50	200	220	M10	20	400	100	320	276	B
DIL205-22/15	-	250	440	773	500	50	200	220	M10	20	400	100	320	291	B
DIL206-11/3	150	-	340	539	400	50	150	170	M12	20	340	110	217	121	A
DIL206-12/3	150	-	340	539	400	50	150	170	M12	20	340	110	217	121	A
DIL206-12/4	156	-	340	563	400	50	150	170	M12	20	340	110	232	140	A
DIL206-13/5.5	-	188	340	614	400	50	150	170	M12	20	340	110	279	178	B
DIL206-14/5.5	-	188	340	614	400	50	150	170	M12	20	340	110	279	169	B
DIL206-14/7.5	-	188	340	620	400	50	150	170	M12	20	340	110	279	184	B
DIL206-15/5.5	176	-	430	617	440	55	185	215	M12	20	400	120	279	190	A
DIL206-16/5.5	176	-	430	617	440	55	185	215	M12	20	400	120	279	190	A
DIL206-16/7.5	176	-	430	623	440	55	185	215	M12	20	400	120	279	205	A
DIL206-17/11	-	250	430	778	440	55	185	215	M12	20	400	120	320	190	B
DIL206-20/11	-	250	475	783	520	45	210	245	M12	20	400	110	320	289	B
DIL206-20/15	-	250	475	783	520	45	210	245	M12	20	400	110	320	303	B
DIL206-21/15	-	250	475	783	520	45	210	245	M12	20	400	110	320	303	B

## ELECTRICAL CHARACTERISTICS AND SIZES AT 1450 RPM

Table A



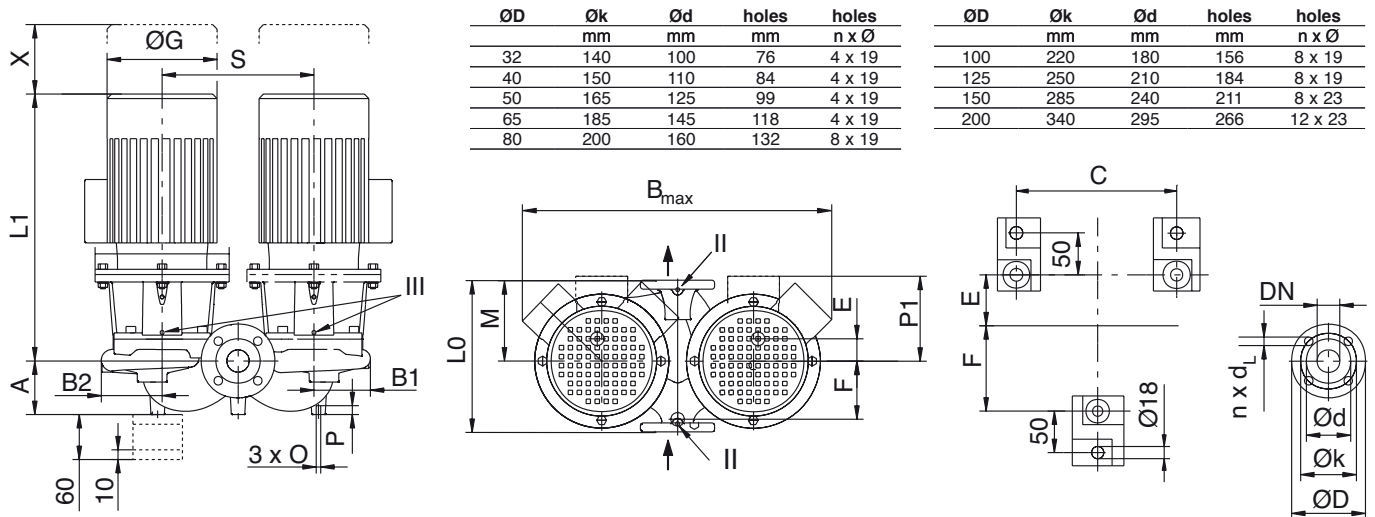
ØD	Øk	Ød	holes	holes
	mm	mm	mm	n x Ø
32	140	100	76	4 x 19
40	150	110	84	4 x 19
50	165	125	99	4 x 19
65	185	145	118	4 x 19
80	200	160	132	8 x 19

ØD	Øk	Ød	holes	holes
	mm	mm	mm	n x Ø
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					DN	PUMP				
	Nominal power of the motor	Efficiency of motor %	Power factor	Speed of rotation	Nominal current (appx.)		A	B max	B1	B2	B3
	P2 W	η	cos φ	rpm	In A		mm	mm	mm	mm	mm
DIL206-21/18.5	18500	90.9	87	1450 - 2900	34.2	65	140	750	157	166	-
DIL206-22/18.5	18500	90.9	87	1450 - 2900	34.2	65	140	750	157	166	-
DIL206-22/22	22000	91.3	85	1450 - 2900	40.7	65	140	763	157	166	-
DIL208-12/4	4000	85.8	84	1450 - 2900	7.7	80	155	662	134	146	156
DIL208-13/5.5	5500	87	87	1450 - 2900	10.2	80	155	650	134	146	-
DIL208-14/7.5	7500	88.1	86	1450 - 2900	13.7	80	155	650	134	146	-
DIL208-15/7.5	7500	88.1	86	1450 - 2900	13.7	80	155	752	144	160	176
DIL208-16/11	11000	89.4	87	1450 - 2900	22	80	155	750	144	160	-
DIL208-17/11	11000	89.4	87	1450 - 2900	22	80	155	750	144	160	-
DIL208-17/15	15000	90.3	84	1450 - 2900	28.5	80	155	750	144	160	-
DIL208-19/15	15000	90.3	84	1450 - 2900	28.5	80	145	801	166	176	-
DIL208-19/18.5	18500	90.9	87	1450 - 2900	34.2	80	145	801	166	176	-
DIL208-20/18.5	18500	90.9	87	1450 - 2900	34.2	80	145	801	166	176	-
DIL208-20/22	22000	91.3	85	1450 - 2900	40.7	80	145	813	166	176	-
DIL208-22/30	30000	92	85	1450 - 2900	53	80	145	852	166	176	-
DIL210-14.5/11	11000	89.4	87	1450 - 2900	22	100	180	803	173	188	-
DIL210-15/15	15000	90.3	84	1450 - 2900	28.5	100	180	803	173	188	-
DIL210-16.5/22	15000	90.3	84	1450 - 2900	28.5	100	180	803	173	188	-
DIL210-16/15	18500	90.9	87	1450 - 2900	34.2	100	180	803	173	188	-
DIL210-16/18.5	22000	91.3	85	1450 - 2900	40.7	100	180	810	173	188	-
DIL210-17/30	30000	92	85	1450 - 2900	53	100	180	842	173	188	-
DIL210-19/30	30000	92	85	1450 - 2900	53	100	155	852	183	197	-
DIL210-21/30	30000	92	85	1450 - 2900	53	100	155	852	183	197	-
DIL210-21/37	37000	92.5	89	1450 - 2900	65	100	155	852	183	197	-

**ELECTRICAL CHARACTERISTICS AND SIZES AT 1450 RPM**

**Table B**



ØD	Øk	Ød	holes	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
65	185	145	118	4 x 19
80	200	160	132	8 x 19

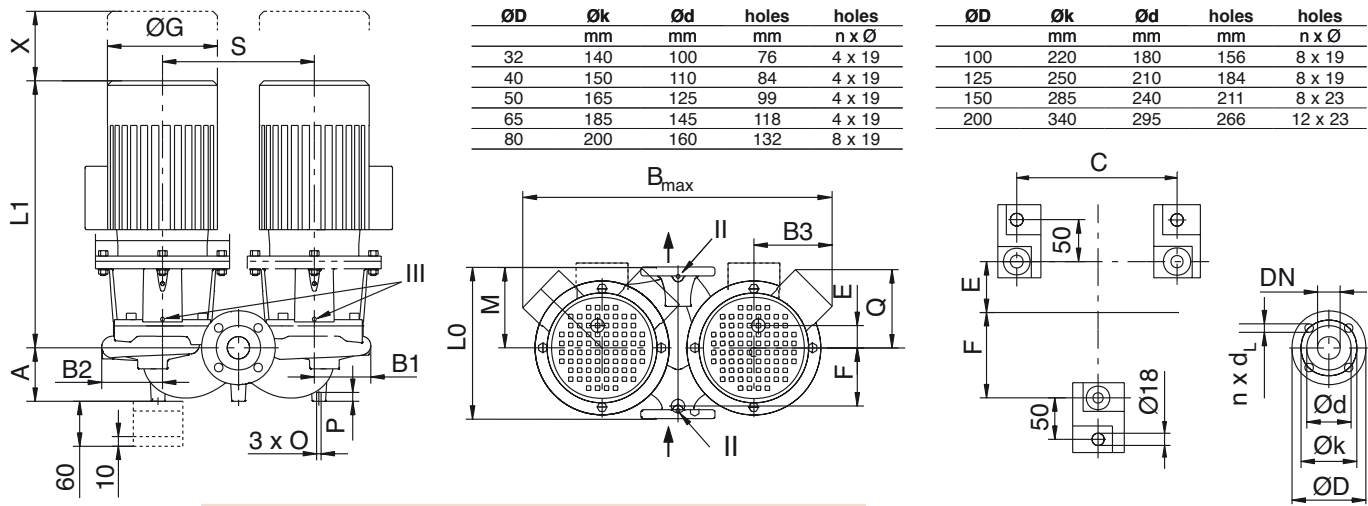
ØD	Øk	Ød	holes	holes
	mm	mm	mm	n x Ø
100	220	180	156	8 x 19
125	250	210	184	8 x 19
150	285	240	211	8 x 23
200	340	295	266	12 x 23

**PUMP**

Product reference	Q	P1	L0	L1	C	E	F	M	O	P	S	X	ØG	mass	Table
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg	
DIL206-21/18.5	-	250	475	784	520	45	210	245	M12	20	400	110	320	337	B
DIL206-22/18.5	-	250	475	784	520	45	210	245	M12	20	400	110	320	337	B
DIL206-22/22	-	291	475	868	520	45	210	245	M12	20	400	110	370	397	B
DIL208-12/4	156	-	400	571	400	62	178	200	M12	20	350	120	232	156	A
DIL208-13/5.5	-	188	400	622	400	62	178	200	M12	20	350	120	279	185	B
DIL208-14/7.5	-	188	400	628	400	62	178	200	M12	20	350	120	279	200	B
DIL208-15/7.5	176	-	440	627	440	62	188	220	M12	20	400	120	279	217	A
DIL208-16/11	-	250	440	783	440	62	188	220	M12	20	400	120	320	272	B
DIL208-17/11	-	250	440	783	440	62	188	220	M12	20	400	120	320	269	B
DIL208-17/15	-	250	440	783	440	62	188	220	M12	20	400	120	320	283	B
DIL208-19/15	-	250	500	787	550	72	228	250	M12	20	450	120	320	352	B
DIL208-19/18.5	-	250	500	788	550	72	228	250	M12	20	450	120	320	318	B
DIL208-20/18.5	-	250	500	788	550	72	228	250	M12	20	450	120	320	352	B
DIL208-20/22	-	291	500	872	550	72	228	250	M12	20	450	120	370	418	B
DIL208-22/30	-	305	500	929	550	72	228	250	M12	20	450	120	415	522	B
DIL210-14.5/11	-	250	500	796	580	80	250	226	M12	20	440	135	320	301	B
DIL210-15/15	-	250	500	796	580	80	250	226	M12	20	440	135	320	315	B
DIL210-16.5/22	-	250	500	796	580	80	250	226	M12	20	440	135	320	315	B
DIL210-16/15	-	250	500	797	580	80	250	226	M12	20	440	135	320	349	B
DIL210-16/18.5	-	291	500	881	580	80	250	226	M12	20	440	135	370	409	B
DIL210-17/30	-	305	500	938	580	80	250	226	M12	20	440	135	415	522	B
DIL210-19/30	-	305	550	938	560	79	251	275	M12	20	450	120	415	551	B
DIL210-21/30	-	305	550	938	560	79	251	275	M12	20	450	120	415	551	B
DIL210-21/37	-	305	550	938	560	79	251	275	M12	20	450	120	415	547	B

## ELECTRICAL CHARACTERISTICS AND SIZES AT 1450 RPM

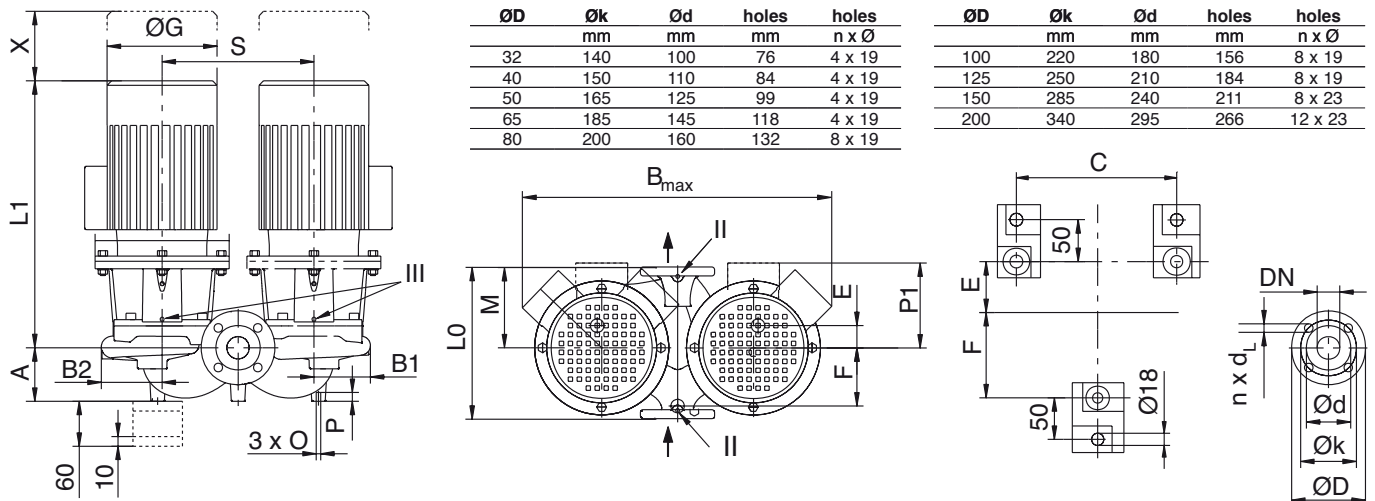
Table A



Product reference	MOTOR					DN	PUMP				
	Nominal power of the motor	Efficiency of motor %	Power factor	Speed of rotation	Nominal current (appx.)		A	B max	B1	B2	B3
	P2 W	η	cos φ	rpm	in A		mm	mm	mm	mm	mm
DIL403-14/0.25	250	74	64	1450 - 2900	0.69	32	100	539	117	122	110
DIL403-15/0.37	370	76.1	71	1450 - 2900	1.06	32	100	539	117	122	110
DIL403-17/0.55	550	78.1	66	1450 - 2900	1.4	32	100	546	117	122	123
DIL404-14/0.25	250	74	64	1450 - 2900	0.69	40	100	587	120	127	110
DIL404-15/0.37	370	76.1	71	1450 - 2900	1.06	40	100	587	120	127	110
DIL404-16/0.55	550	78.1	66	1450 - 2900	1.4	40	100	590	120	127	123
DIL404-17/0.75	750	79.6	72	1450 - 2900	1.9	40	100	590	120	127	123
DIL404-21/1.1	1100	81.4	77	1450 - 2900	2.55	40	110	692	145	147	-
DIL404-22/1.5	1500	82.8	75	1450 - 2900	3.4	40	110	692	145	147	-
DIL405-15/0.55	550	78.1	66	1450 - 2900	1.4	50	120	602	126	136	123
DIL405-16/0.75	750	79.6	72	1450 - 2900	1.9	50	120	602	126	136	123
DIL405-17/1.1	1100	81.4	77	1450 - 2900	2.55	50	120	628	126	136	144
DIL405-20/1.5	1500	82.8	75	1450 - 2900	3.4	50	120	693	145	148	-
DIL405-22/2.2	2200	84.3	73	1450 - 2900	5	50	120	693	145	148	-
DIL405-26/3	3000	85.5	75	1450 - 2900	6.6	50	122	751	177	174	-
DIL405-27/3	3000	85.5	75	1450 - 2900	6.6	50	122	751	177	174	-
DIL405-27/4	4000	86.6	79	1450 - 2900	8.4	50	122	751	177	174	-
DIL 406-12/0.55	550	78.1	0.66	1450 - 2900	1.4	65	120	592	112	134	-
DIL 406-13/0.75	750	79.6	0.72	1450 - 2900	1.9	65	120	592	121	130	-
DIL 406-14/1.1	1100	81.4	0.77	1450 - 2900	2.55	65	120	628	121	130	-
DIL406-15/0.75	750	79.6	72	1450 - 2900	1.9	65	153	678	134	144	123
DIL406-16/1.1	1100	81.4	77	1450 - 2900	2.55	65	153	688	134	144	144
DIL406-17/1.1	1100	81.4	77	1450 - 2900	2.55	65	153	688	134	144	144
DIL406-17/1.5	1500	82.8	75	1450 - 2900	3.4	65	153	688	134	144	144
DIL406-21/2.2	2200	84.3	73	1450 - 2900	5	65	140	723	157	166	-
DIL406-22/2.2	2200	84.3	73	1450 - 2900	5	65	140	723	157	166	-
DIL406-22/3	3000	85.5	75	1450 - 2900	6.6	65	140	723	157	166	-
DIL406-25/3	3000	85.5	75	1450 - 2900	6.6	65	140	760	184	176	-
DIL406-25/4	4000	86.6	79	1450 - 2900	8.4	65	140	760	184	176	-
DIL406-27/5.5	5500	87.7	78	1450 - 2900	11.3	65	140	760	184	176	-
DIL408-15/1.1	1100	81.4	77	1450 - 2900	2.55	80	155	704	144	160	144
DIL408-16/1.5	1500	82.8	75	1450 - 2900	3.4	80	155	704	144	160	144
DIL408-17/2.2	2200	84.3	73	1450 - 2900	5	80	155	710	144	160	150
DIL408-21/3	3000	85.5	75	1450 - 2900	6.6	80	145	792	166	176	-
DIL408-22/4	4000	86.6	79	1450 - 2900	8.4	80	145	792	166	176	-
DIL408-27/5.5	5500	87.7	78	1450 - 2900	11.3	80	125	836	188	198	-
DIL410-14.5/1.1	1100	81.4	77	1450 - 2900	2.55	100	180	801	173	188	144
DIL410-15/1.5	1500	82.8	75	1450 - 2900	3.4	100	180	801	173	188	144
DIL410-16/2.2	2200	84.3	73	1450 - 2900	5	100	180	801	173	188	150
DIL410-17/3	3000	85.5	75	1450 - 2900	6.6	100	180	801	173	188	155

**ELECTRICAL CHARACTERISTICS AND SIZES AT 1450 RPM**

**Table B**



ØD	Øk	Ød	holes	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
65	185	145	118	4 x 19
80	200	160	132	8 x 19

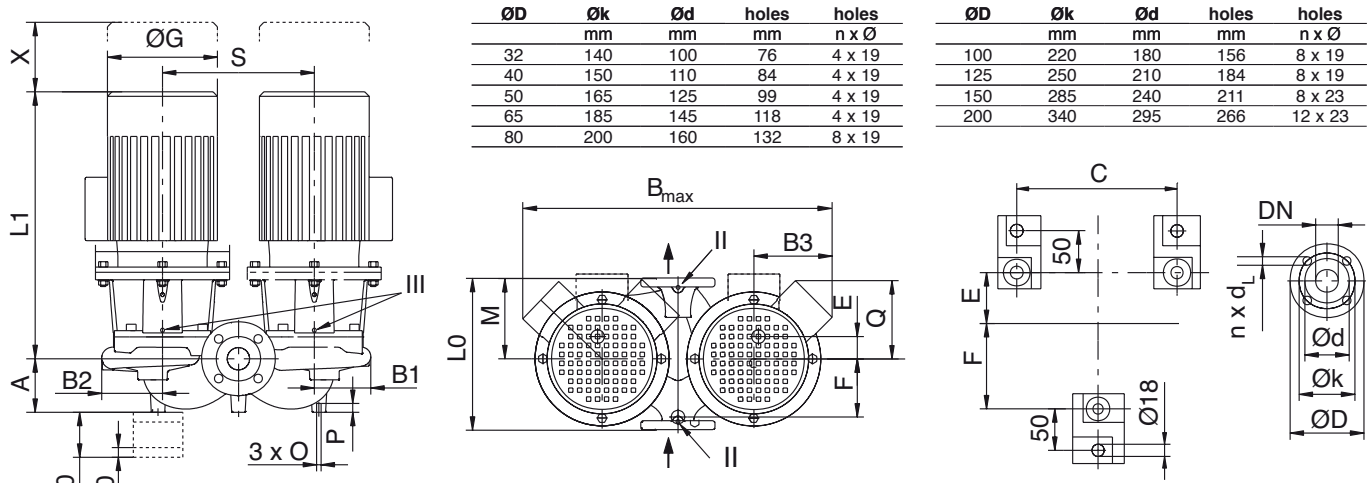
ØD	Øk	Ød	holes	holes
	mm	mm	mm	n x Ø
100	220	180	156	8 x 19
125	250	210	184	8 x 19
150	285	240	211	8 x 23
200	340	295	266	12 x 23

**PUMP**

Product reference	Q	P1	L0	L1	C	E	F	M	O	P	S	X	ØG	mass	Table
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg	
DIL403-14/0.25	110	-	320	385	360	43	137	155	M10	20	300	90	164	73	A
DIL403-15/0.37	110	-	320	385	360	43	137	155	M10	20	300	90	164	73	A
DIL403-17/0.55	123	-	320	420	360	43	137	155	M10	20	300	90	185	82	A
DIL404-14/0.25	110	-	340	389	400	52	145	170	M10	20	340	95	164	74	A
DIL404-15/0.37	110	-	340	389	400	52	145	170	M10	20	340	95	164	74	A
DIL404-16/0.55	123	-	340	424	400	52	145	170	M10	20	340	95	185	84	A
DIL404-17/0.75	123	-	340	438	400	52	145	170	M10	20	340	95	185	88	A
DIL404-21/1.1	-	151	440	452	500	38	192	220	M10	20	400	100	193	113	B
DIL404-22/1.5	-	151	440	479	500	38	192	220	M10	20	400	100	193	113	B
DIL405-15/0.55	123	-	340	420	360	50	130	180	M10	20	340	100	185	88	A
DIL405-16/0.75	123	-	340	434	360	50	130	180	M10	20	340	100	185	92	A
DIL405-17/1.1	144	-	340	446	360	50	130	180	M10	20	340	100	193	105	A
DIL405-20/1.5	-	151	440	485	500	50	200	220	M10	20	400	100	193	124	B
DIL405-22/2.2	-	160	440	541	500	50	200	220	M10	20	400	100	217	144	B
DIL405-26/3	-	168	440	602	480	50	200	220	M10	20	400	120	220	169	B
DIL405-27/3	-	168	440	602	480	50	200	220	M10	20	400	120	220	169	B
DIL405-27/4	-	188	440	645	480	50	200	220	M10	20	400	120	246	183	B
DIL 406-12/0.55	-	-	340	431	140	140	60	160	M12	20	340	110	185	90	A
DIL 406-13/0.75	-	-	340	445	400	50	150	170	M12	20	340	110	185	90	A
DIL 406-14/1.1	-	-	340	457	400	50	150	170	M12	20	340	110	193	100	B
DIL406-15/0.75	123	-	430	452	440	55	185	215	M12	20	400	120	185	110	A
DIL406-16/1.1	144	-	430	464	440	55	185	215	M12	20	400	120	193	123	A
DIL406-17/1.1	144	-	430	464	440	55	185	215	M12	20	400	120	193	123	A
DIL406-17/1.5	144	-	430	491	440	55	185	215	M12	20	400	120	193	126	A
DIL406-21/2.2	-	160	475	550	520	45	210	245	M12	20	400	110	217	152	B
DIL406-22/2.2	-	160	475	550	520	45	210	245	M12	20	400	110	217	152	B
DIL406-22/3	-	168	475	585	520	45	210	245	M12	20	400	110	220	160	B
DIL406-25/3	-	168	475	605	500	50	220	235	M12	20	400	120	220	176	B
DIL406-25/4	-	188	475	648	500	50	220	235	M12	20	400	120	246	190	B
DIL406-27/5.5	-	188	475	649	500	50	220	235	M12	20	400	120	279	236	B
DIL408-15/1.1	144	-	440	469	440	62	188	220	M12	20	400	120	193	134	A
DIL408-16/1.5	144	-	440	496	440	62	188	220	M12	20	400	120	193	137	A
DIL408-17/2.2	150	-	440	552	440	62	188	220	M12	20	400	120	217	160	A
DIL408-21/3	-	168	500	590	550	72	228	250	M12	20	450	120	220	175	B
DIL408-22/4	-	188	500	633	550	72	228	250	M12	20	450	120	246	190	B
DIL408-27/5.5	-	188	500	637	560	62	233	245	M12	20	450	115	279	234	B
DIL410-14.5/1.1	144	-	500	483	580	80	250	226	M12	20	440	135	193	169	A
DIL410-15/1.5	144	-	500	510	580	80	250	226	M12	20	440	135	193	169	A
DIL410-16/2.2	150	-	500	565	580	80	250	226	M12	20	440	135	217	186	A
DIL410-17/3	155	-	500	600	580	80	250	226	M12	20	440	135	220	200	A

## ELECTRICAL CHARACTERISTICS AND SIZES AT 1450 RPM

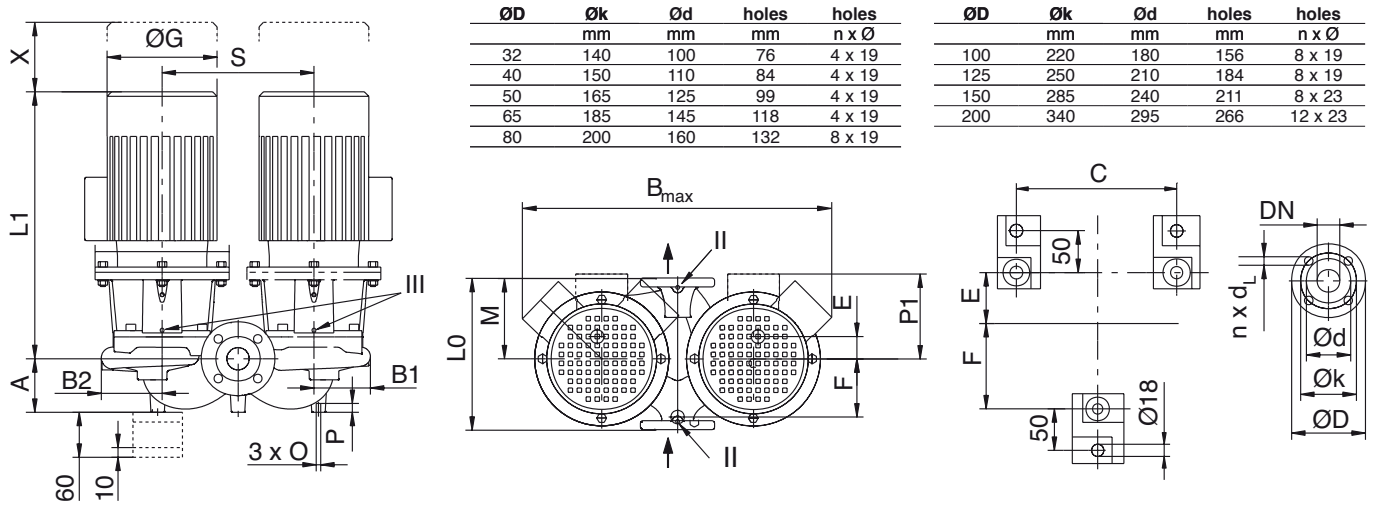
Table A



Product reference	MOTOR					PUMP					
	Nominal power of the motor	Efficiency of motor %	Power factor	Speed of rotation	Nominal current (approx.)	DN	A	B max	B1	B2	B3
	P2 W	η	cos φ	rpm	In A		mm	mm	mm	mm	mm
DIL410-20/3	3000	85.5	75	1450 - 2900	6.6	100	155	830	183	197	-
DIL410-20/4	4000	86.6	79	1450 - 2900	8.4	100	155	830	183	197	-
DIL410-22/5.5	5500	87.7	78	1450 - 2900	11.3	100	155	830	183	197	-
DIL410-25/5.5	5500	87.7	78	1450 - 2900	11.3	100	180	888	198	210	-
DIL410-25/7.5	7500	88.7	81	1450 - 2900	15	100	180	888	198	210	-
DIL410-26/11	11000	89.8	79	1450 - 2900	22.5	100	180	888	198	210	-
DIL410-27/11	11000	89.8	79	1450 - 2900	22.5	100	180	888	198	210	-
DIL412-19/4	4000	86.6	79	1450 - 2900	8.4	125	175	894	189	205	-
DIL412-21/5.5	5500	87.7	78	1450 - 2900	11.3	125	175	894	189	205	-
DIL412-22/5.5	5500	87.7	78	1450 - 2900	11.3	125	175	894	189	205	-
DIL412-22/7.5	7500	88.7	81	1450 - 2900	15	125	175	894	189	205	-
DIL412-25/11	11000	89.8	79	1450 - 2900	22.5	125	200	1042	255	267	-
DIL412-27/11	11000	89.8	79	1450 - 2900	22.5	125	200	1042	255	267	-
DIL412-27/15	15000	90.6	83	1450 - 2900	28.8	125	200	1042	255	267	-
DIL412-30/18.5	18500	91.2	80	1450 - 2900	37.3	125	200	1119	277	292	-
DIL412-32/18.5	18500	91.2	80	1450 - 2900	37.3	125	200	1119	277	292	-
DIL412-32/22	22000	91.6	84	1450 - 2900	41.5	125	200	1119	277	292	-
DIL412-34/30	30000	92.3	85	1450 - 2900	55.7	125	200	1119	277	292	-
DIL415-19/5.5	5500	87.7	78	1450 - 2900	11.3	150	210	1006	215	241	-
DIL415-20/7.5	7500	88.7	81	1450 - 2900	15	150	210	1006	215	241	-
DIL415-22/11	11000	89.8	79	1450 - 2900	22.5	150	210	1006	215	241	-
DIL415-25/15	15000	90.6	83	1450 - 2900	28.8	150	230	1203	293	310	-
DIL415-26/15	15000	90.6	83	1450 - 2900	28.8	150	230	1203	293	310	-
DIL415-26/18.5	18500	91.2	80	1450 - 2900	37.3	150	230	1203	293	310	-
DIL415-27/18.5	18500	91.2	80	1450 - 2900	37.3	150	230	1203	293	310	-
DIL415-27/22	22000	91.6	84	1450 - 2900	41.5	150	230	1203	293	310	-
DIL415-30/30	30000	92.3	85	1450 - 2900	55.7	150	230	1293	314	329	-
DIL415-32/37	37000	92.7	84	1450 - 2900	69	150	230	1293	314	329	-
DIL415-34/37	37000	92.7	84	1450 - 2900	69	150	230	1293	314	329	-
DIL415-34/45	45000	93.1	83	1450 - 2900	83.3	150	230	1293	314	329	-
DIL420-24/15	15000	90.6	83	1450 - 2900	28.8	200	250	1369	322	347	-
DIL420-25/18.5	18500	91.2	80	1450 - 2900	37.3	200	250	1369	322	347	-
DIL420-26/22	22000	91.6	84	1450 - 2900	41.5	200	250	1369	322	347	-
DIL420-27/30	30000	92.3	85	1450 - 2900	55.7	200	250	1369	322	347	-
DIL420-30/37	37000	92.7	84	1450 - 2900	69	200	245	1400	339	361	-
DIL420-31.5/37	45000	93.1	83	1450 - 2900	83.3	200	245	1400	339	361	-
DIL420-33.5/37	37000	92.7	0.84	1450 - 2900	69	200	245	1400	339	362	-
DIL420-33.5/45	45000	93.1	0.83	1450 - 2900	83.3	200	245	1400	339	362	-
DIL420-34.5/45	45000	93.1	0.83	1450 - 2900	83.3	200	245	1400	339	362	-
DIL420-34.5/55	55000	93.5	85	1450 - 2900	100	200	245	1400	339	361	-

**ELECTRICAL CHARACTERISTICS AND SIZES AT 1450 RPM**

**Table B**



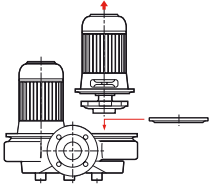
ØD	Øk	Ød	holes	holes
	mm	mm	mm	n x Ø
32	140	100	76	4 x 19
40	150	110	84	4 x 19
50	165	125	99	4 x 19
65	185	145	118	4 x 19
80	200	160	132	8 x 19

ØD	Øk	Ød	holes	holes
	mm	mm	mm	n x Ø
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

**PUMP**

Product reference	Q	P1	L0	L1	C	E	F	M	O	P	S	X	ØG	mass	Table
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg	
DIL410-20/3	-	168	550	598	560	79	251	275	M12	20	450	120	220	203	B
DIL410-20/4	-	188	550	641	560	79	251	275	M12	20	450	120	246	217	B
DIL410-22/5.5	-	188	550	642	560	79	251	275	M12	20	450	120	279	270	B
DIL410-25/5.5	-	188	550	647	600	54	266	260	M12	20	480	120	279	288	B
DIL410-25/7.5	-	250	550	698	600	54	266	260	M12	20	480	120	312	317	B
DIL410-26/11	-	250	550	761	600	54	266	260	M12	20	480	120	320	373	B
DIL410-27/11	-	250	550	761	600	54	266	260	M12	20	480	120	320	373	B
DIL412-19/4	-	188	620	660	640	68	283	312	M16	25	500	120	246	238	B
DIL412-21/5.5	-	188	620	661	640	68	283	312	M16	25	500	120	279	284	B
DIL412-22/5.5	-	188	620	661	640	68	283	312	M16	25	500	120	279	284	B
DIL412-22/7.5	-	250	620	712	640	68	283	312	M16	25	500	120	312	310	B
DIL412-25/11	-	250	620	774	591	86	314	280	M16	25	520	130	320	418	B
DIL412-27/11	-	250	620	774	591	86	314	280	M16	25	520	130	320	418	B
DIL412-27/15	-	250	620	814	591	86	314	280	M16	25	520	130	320	465	B
DIL412-30/18.5	-	258	700	924	800	51	334	340	M16	25	550	140	370	561	B
DIL412-32/18.5	-	258	700	924	800	51	334	340	M16	25	550	140	370	561	B
DIL412-32/22	-	258	700	924	800	51	334	340	M16	25	550	140	370	592	B
DIL412-34/30	-	305	700	981	800	51	334	340	M16	25	550	140	415	711	B
DIL415-19/5.5	-	188	700	665	640	91	309	365	M16	25	550	130	279	360	B
DIL415-20/7.5	-	250	700	716	640	91	309	365	M16	25	550	130	312	386	B
DIL415-22/11	-	250	700	779	640	91	309	365	M16	25	550	130	320	440	B
DIL415-25/15	-	250	700	845	696	116	344	330	M16	25	600	135	320	565	B
DIL415-26/15	-	250	700	845	696	116	344	330	M16	25	600	135	320	575	B
DIL415-26/18.5	-	258	700	929	696	116	344	330	M16	25	600	135	370	623	B
DIL415-27/18.5	-	258	700	929	696	116	344	330	M16	25	600	135	370	623	B
DIL415-27/22	-	258	700	929	696	116	344	330	M16	25	600	135	370	654	B
DIL415-30/30	-	305	770	994	758	130	374	370	M16	25	650	145	415	829	B
DIL415-32/37	-	325	770	1053	758	130	374	370	M16	25	650	145	456	1029	B
DIL415-34/37	-	325	770	1053	758	130	374	370	M16	25	650	145	456	1029	B
DIL415-34/45	-	325	770	1113	758	130	374	370	M16	25	650	145	456	1109	B
DIL420-24/15	-	250	800	870	1000	62	400	370	M16	25	700	140	320	713	B
DIL420-25/18.5	-	258	800	954	1000	62	400	370	M16	25	700	140	370	760	B
DIL420-26/22	-	258	800	954	1000	62	400	370	M16	25	700	140	370	791	B
DIL420-27/30	-	305	800	1011	1000	62	400	370	M16	25	700	140	415	908	B
DIL420-30/37	-	325	820	1078	808	129	391	400	M16	25	700	155	456	1150	B
DIL420-31.5/37	-	325	820	1138	808	129	391	400	M16	25	700	155	456	1230	B
DIL420-33.5/37	-	325	820	1078	808	129	391	400	M16	25	700	155	456	1189	B
DIL420-33.5/45	-	325	820	1138	808	129	391	400	M16	25	700	155	456	1251	B
DIL420-34.5/45	-	325	820	1138	808	129	391	400	M16	25	700	155	456	1251	B
DIL420-34.5/55	-	392	820	1237	808	129	391	400	M16	25	700	155	515	1518	B

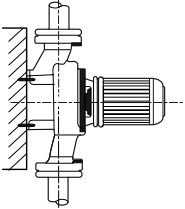
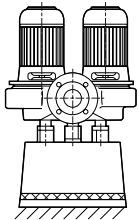
## ASSEMBLY POSITIONS



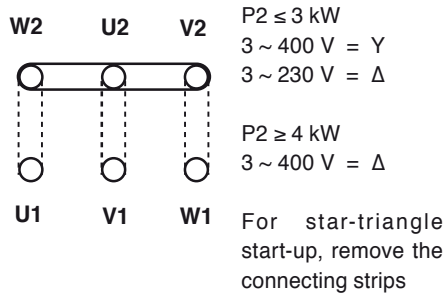
The unit may be mounted with the shaft of the motor horizontal, up to a nominal power of 15 kW.

Do not mount with the "motor at the bottom".

\*Do not fit a butterfly valve directly on the output flange so as not to obstruct the operation of the valve.



## WIRING DIAGRAM



## PARTICULAR FEATURES

### a) Supply

$P2 \leq 3 \text{ kW}$ : three-phase 400 V Y 50 Hz  
 three-phase 230 V  $\Delta$  50 Hz  
 $P2 \geq 4 \text{ kW}$ : three-phase 400 V  $\Delta$  50 Hz.

### b) Installation

Mounted directly onto horizontal or vertical pipework or on pad.  
 The pump must be installed so that it is protected against weather and frost, and not be exposed to direct rain or sunlight.

### c) Packaging

Pump delivered with back-flange gaskets.

### d) Maintenance

- Repair: see recommended spare parts.

### • Accessories recommended

- Back flanges
- Pressure tapping kit
- Protective slave switch
- Shut-off valves
- Anti-vibration sleeves
- Non-return valves
- Base support kit

Special mechanical seal as option for glycol water of 20 - 40% if the temperature is greater than 40°C (consult us).