

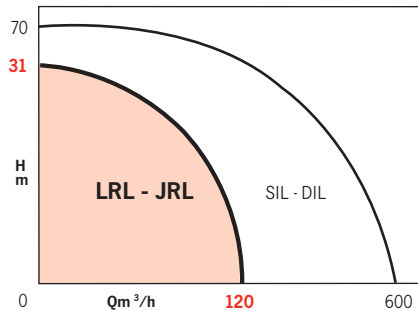
OPERATING LIMITS

Flow rates up to:	120 m ³ /h
Head up to:	31 m
Max. operating pressure:	10 bar
Temperature range:	- 10° to + 110°C
Flanges ND	32 to 80

LRL-JRL

SINGLE AND TWIN-HEAD IN-LINE PUMPS

Heating, Air conditioning,
Secondary hot water
50 Hz



APPLICATIONS

- Central heating systems: light commercial and commercial.
- Air-conditioning.
- Secondary hot water loop.

Many industrial or agricultural applications.

- Greenhouse heating.
- Pumping of water/glycol mixtures.
- Circulation of chilled water.



• LRL : horizontal motor



• JRL : horizontal motor



• MGP control and protection box for JRL



• LRL - JRL : vertical motors

LRL-JRL

ADVANTAGES

- Thermal overload protection on all motors.
- Direct mounting on horizontal or vertical pipe.
- No coupling: no need for shaft alignment.
- Permanent de-aerating device on mechanical seal.
- Quick and easy installation.
- Practically no maintenance required.

> JRL

- Standby pump available at all times.
- Possibility of operating the two pumps in parallel to increase flowrate.
- Pump changeover may be manual or automatic, by MGP control box.

DESIGN

• Hydraulic part

Centrifugal, single-stage.
 "IN-LINE" suction-discharge ports.
 Flanged pump casing with pressure gauge ports.
 Lantern-bearing joining pump and motor.
 Dynamically balanced impeller fitted directly on motor shaft.
 Mechanical seal.

> JRL

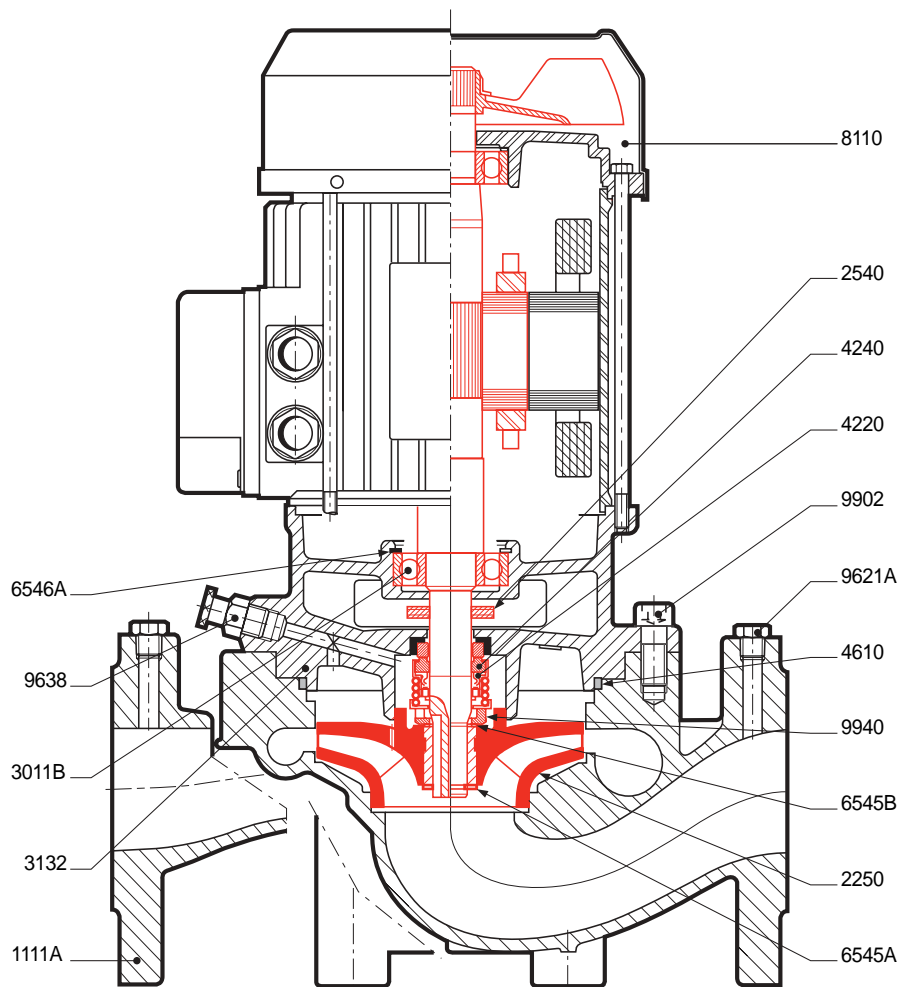
Two pumps in one body.
 Hydraulic separation by silent flap.

• Motor

With extended shaft end.
 Shaft-impeller guide bearings selected for silent operation.

Rotation speed:	1450 and 2900 rpm
Winding 3-phase ≤ 3 kW:	230 V Δ
	400 V Y
3-phase = 4 kW:	400 V Δ
Frequency:	50 Hz (optional 60 Hz)
Insulation category:	F
Protection index:	IP 55
EC conformity:	EN 809

LRL - SECTIONAL DRAWING



STANDARD CONSTRUCTION

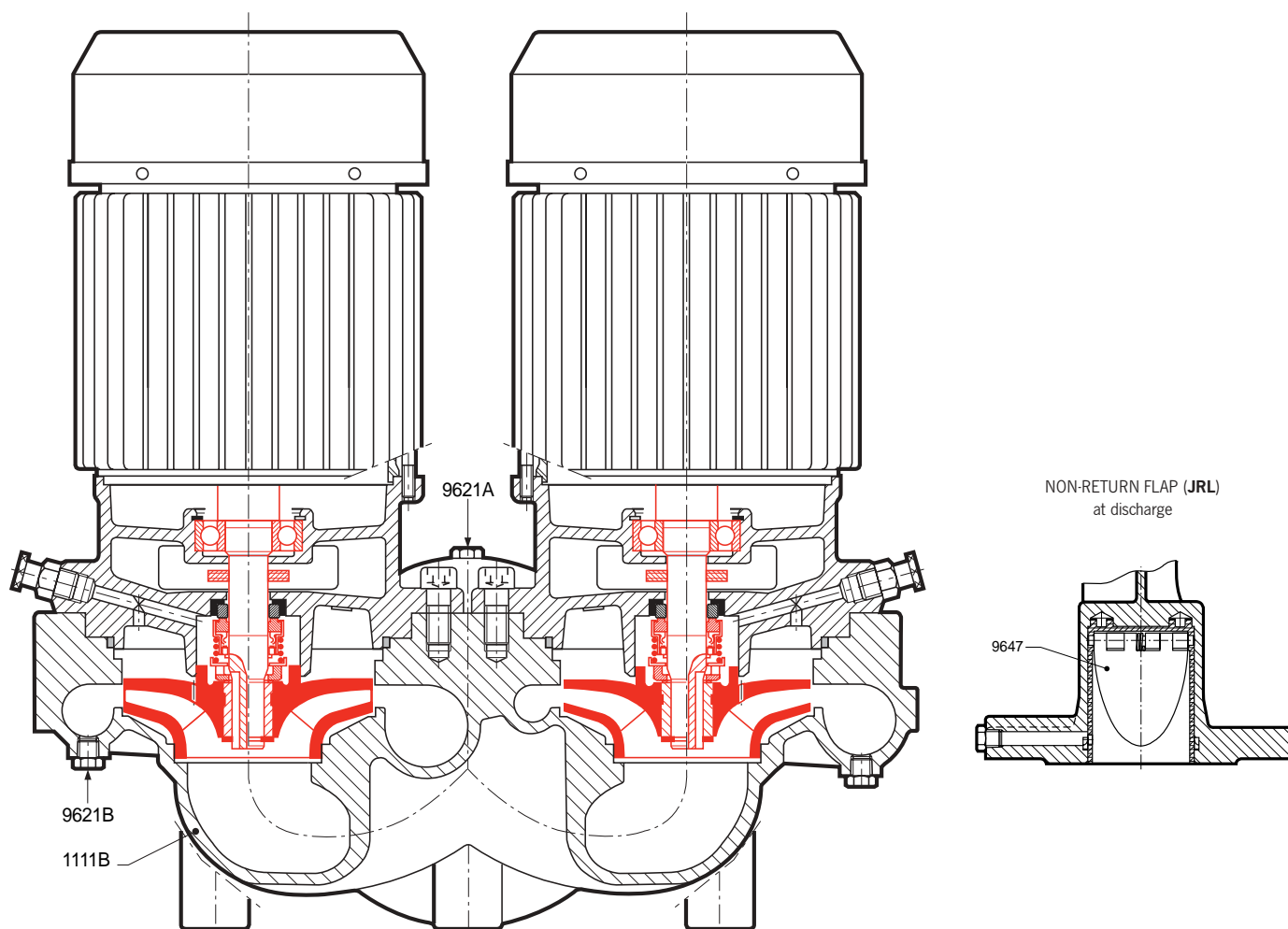
Main parts	Material
Pump casing	Cast iron FGL 250
Lantern bearing	Cast iron FGL 250
Shaft	Stainless steel Z20-C13
Mechanical seal	Graphite/Silicon carbide/EP
Casing gasket	Ethylene-Propylene
Impeller	Propylene

IDENTIFICATION

LRL 2 03 - 13/1.1
JRL 4

Single or twin pump code	2 = 2 pole: 2900 rpm
	4 = 4 pole: 1450 rpm
Nominal port Ø in cm	
Nominal impeller Ø in cm	
Motor power in kW	

JRL - SECTIONAL DRAWING

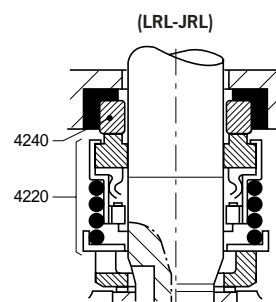


PARTS LIST (COMMON TO LRL AND JRL)

- 1111A - Single pump casing
- 1111B - Twin pump casing
- 2250 - Impeller
- 2540 - Deflector
- 3011B - Guide ball bearing unit
- 3132H - Lantern bearing
- 4220H - Rotary ring of mechanical seal
- 4240H - Stationary ring of mechanical seal
- 4610H - Pump casing O-ring
- 6545A - Shaft keeper ring
- 6545B - Shaft keeper ring
- 6546A - Bearing circlips
- 8110H - Electric motor
- 9621A - Pressure gauge plugs
- 9621B - Drain plugs (JRL)
- 9638 - Mechanical seal de-aerating device
- 9647H - Discharge non-return flap (JRL)
- 9902H - Lantern bearing attachment screw
- 9940H - Mechanical seal thrust ring

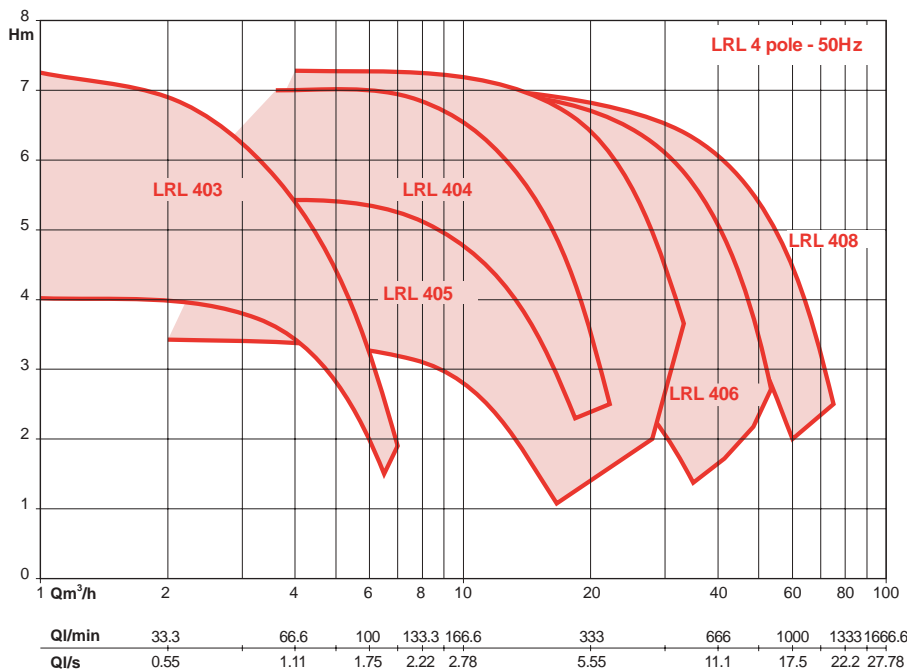
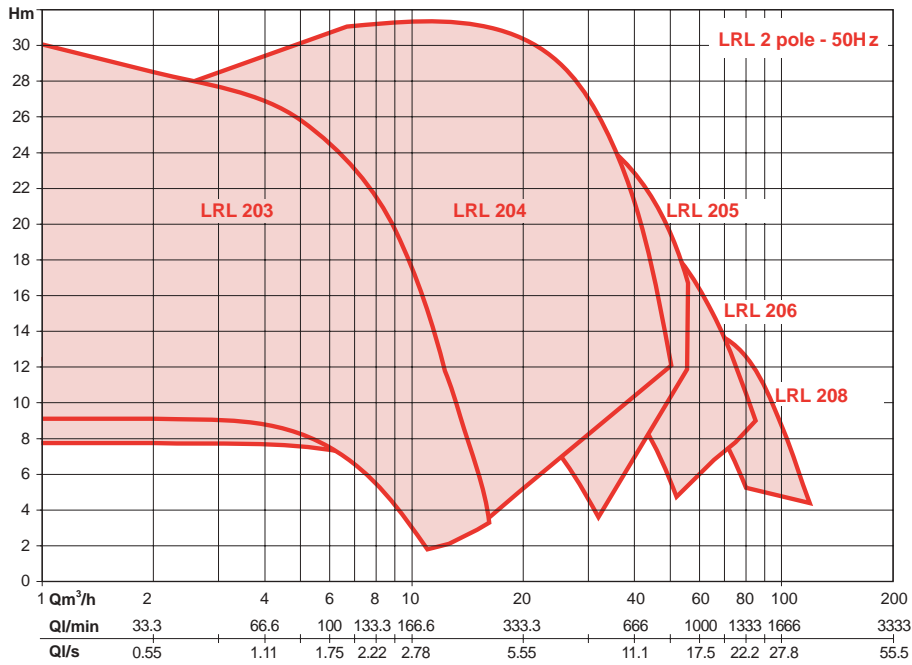
(*) Recommended spare parts

MECHANICAL SEAL



LRL-JRL

LRL - PRE-SELECTION GRAPHS



MOUNTING POSITION

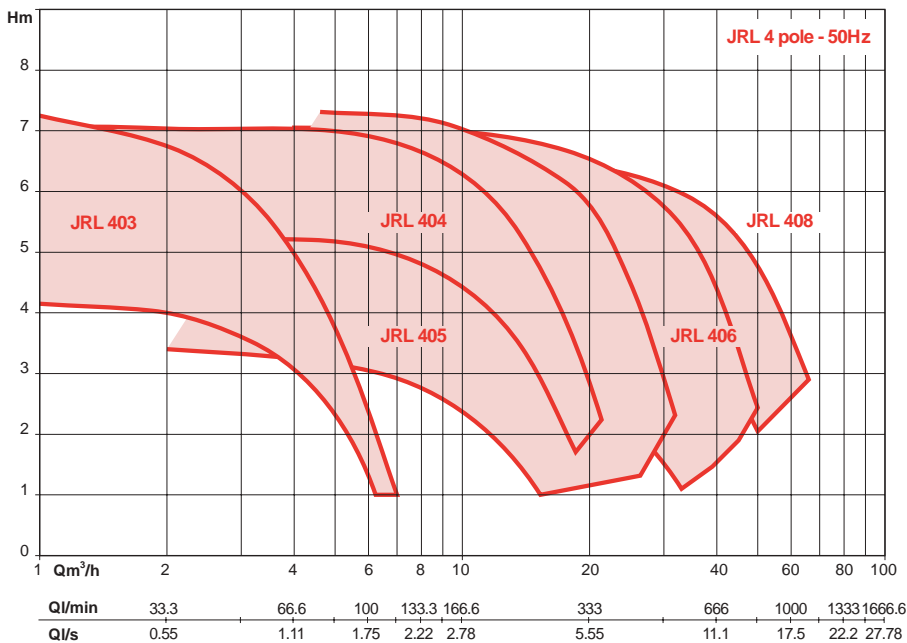
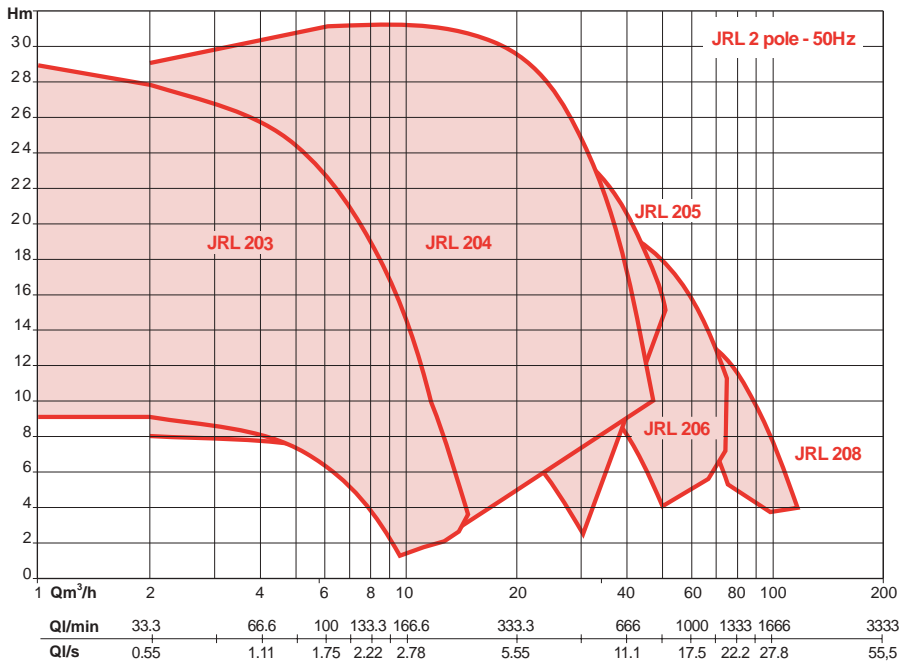
direct mounting on vertical or horizontal pipe



pumps ND 65 and 80
mounting on solid block with optional base
plate

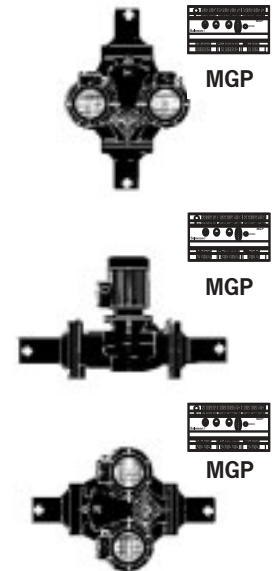


JRL - PRE-SELECTION GRAPHS

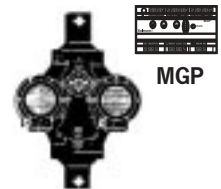


MOUNTING POSITION

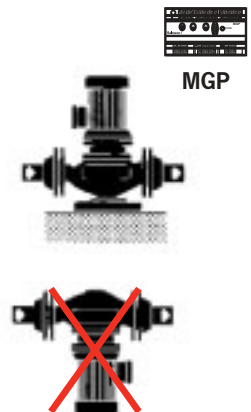
direct mounting on vertical or horizontal pipe



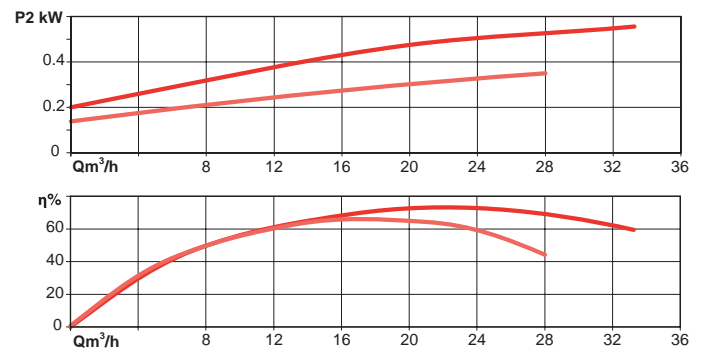
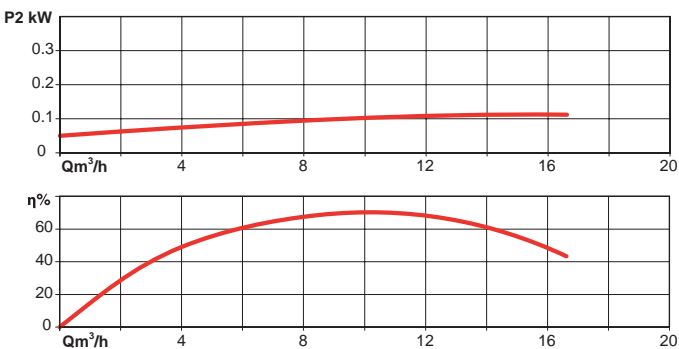
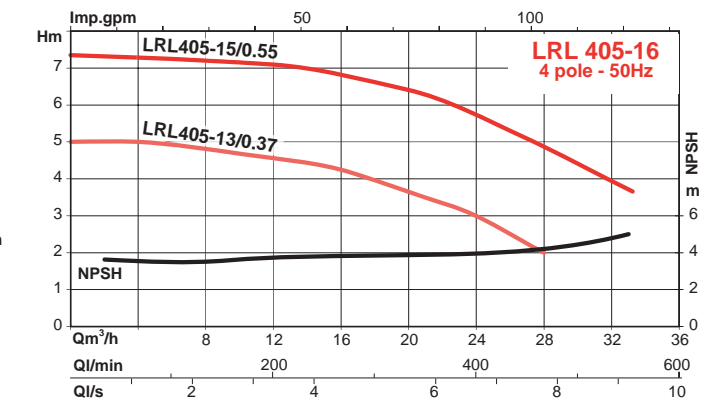
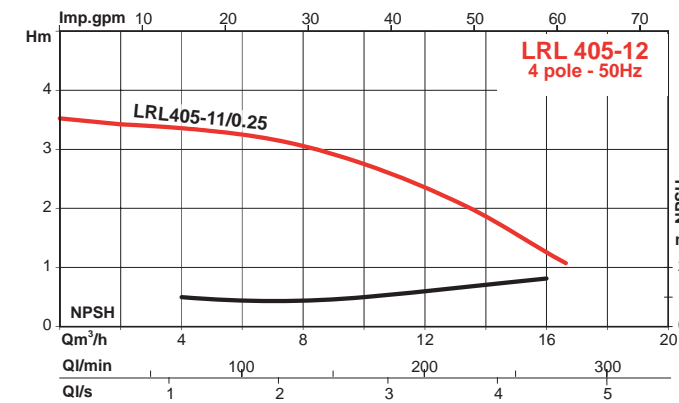
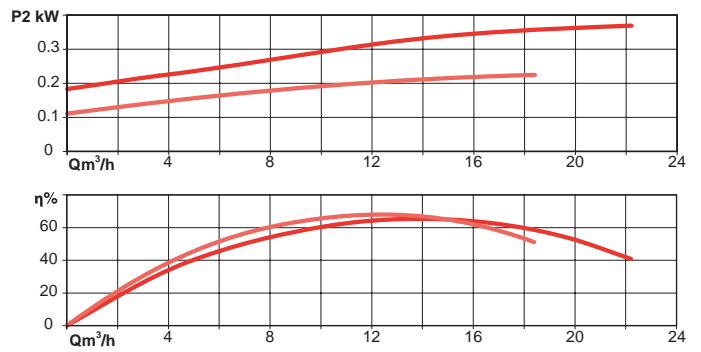
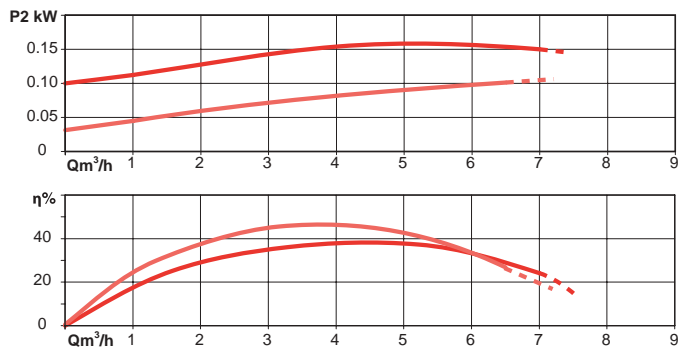
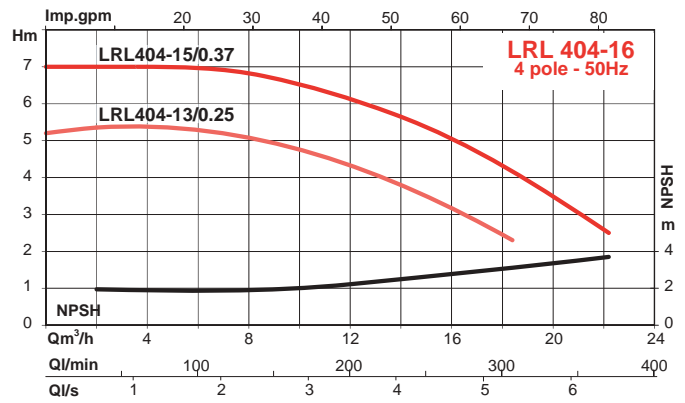
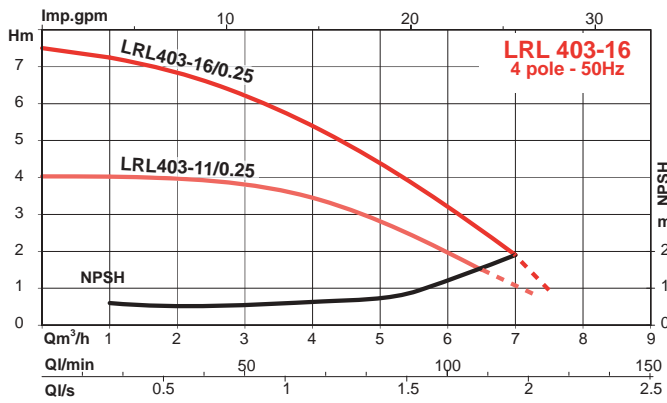
Possible mounting position, but pumps need periodical changeover to avoid trapped air at the high point.



pumps ND 65 and 80
mounting on solid block with optional base plate

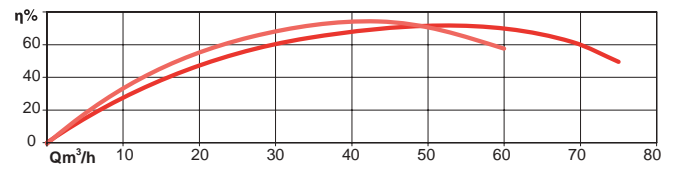
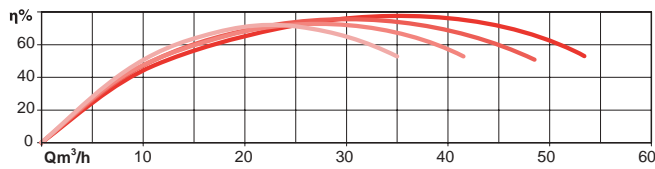
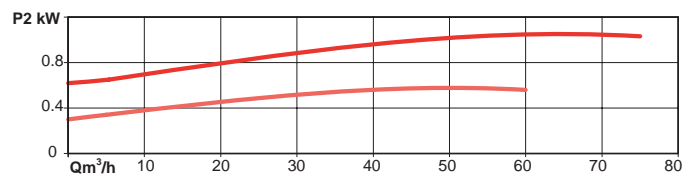
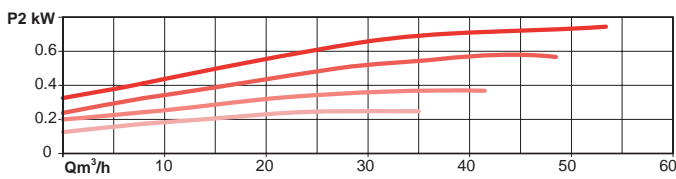
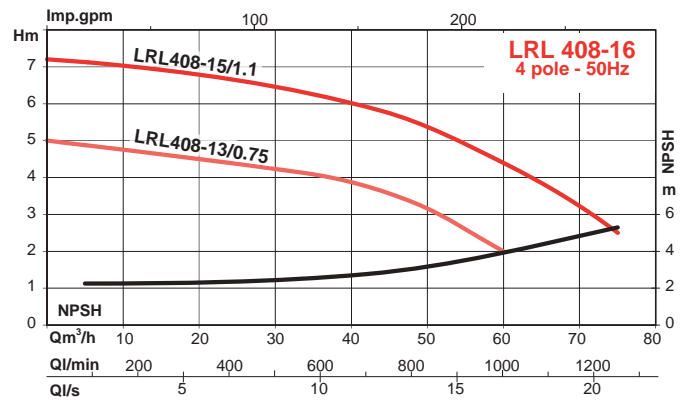
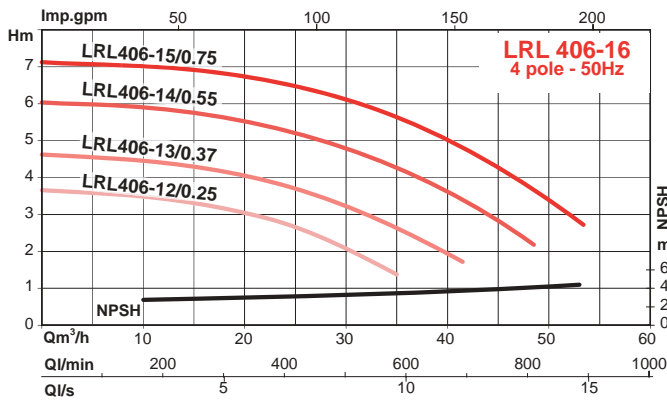


*To prevent the flap from malfunctioning, do not mount a butterfly valve directly on the discharge flange.

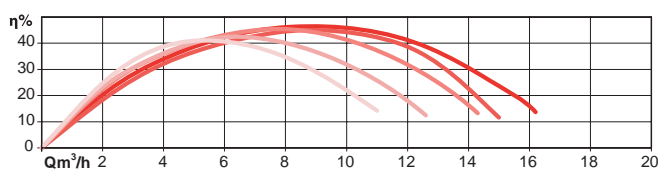
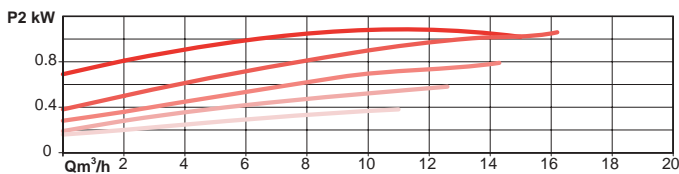
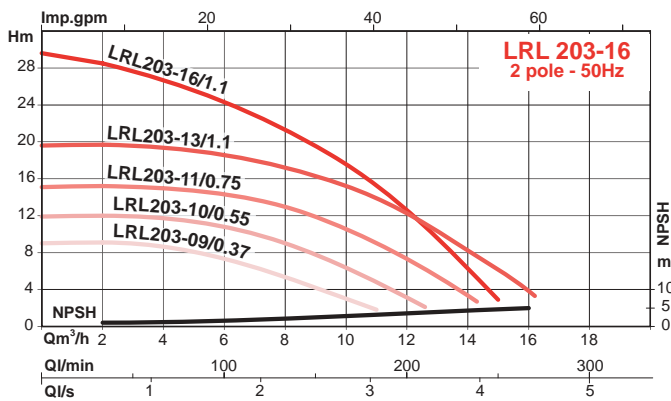


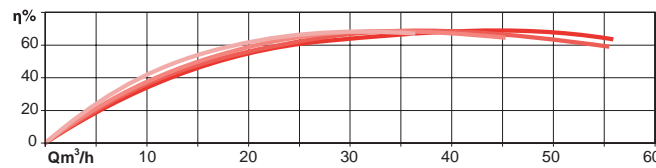
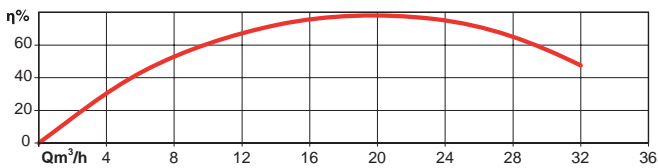
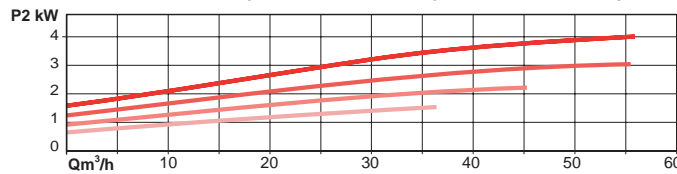
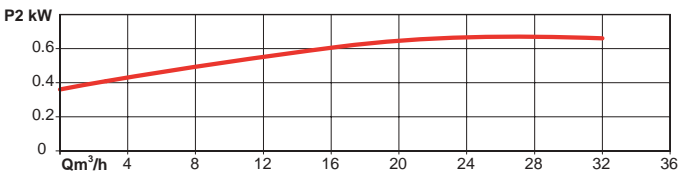
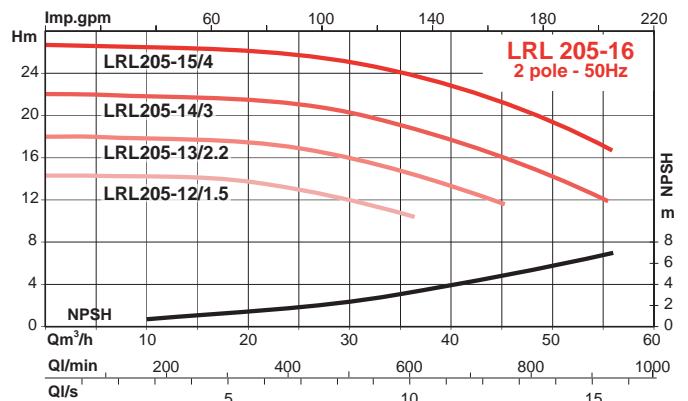
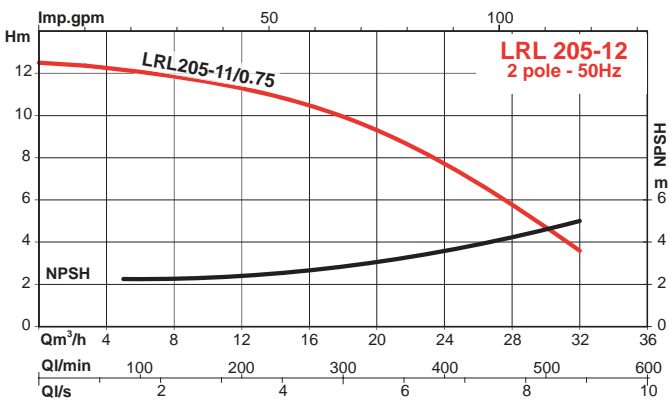
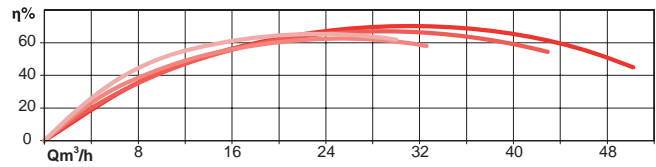
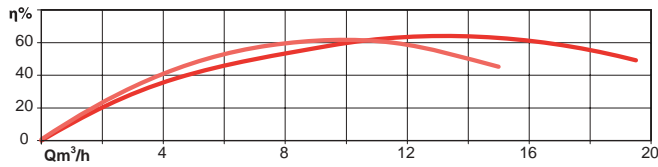
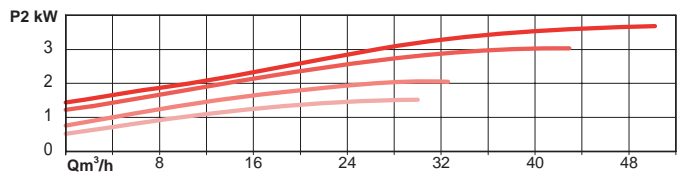
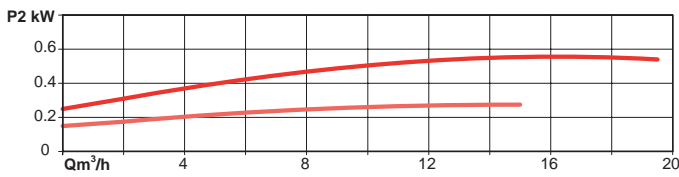
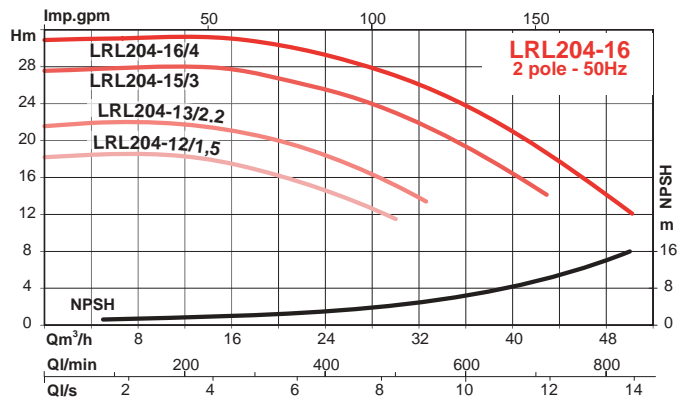
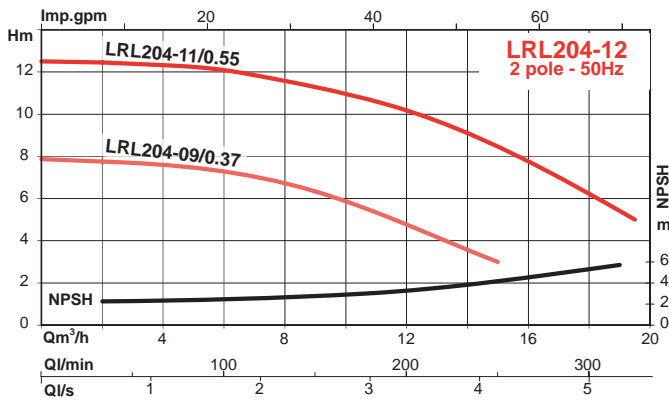
LRL 4 POLE

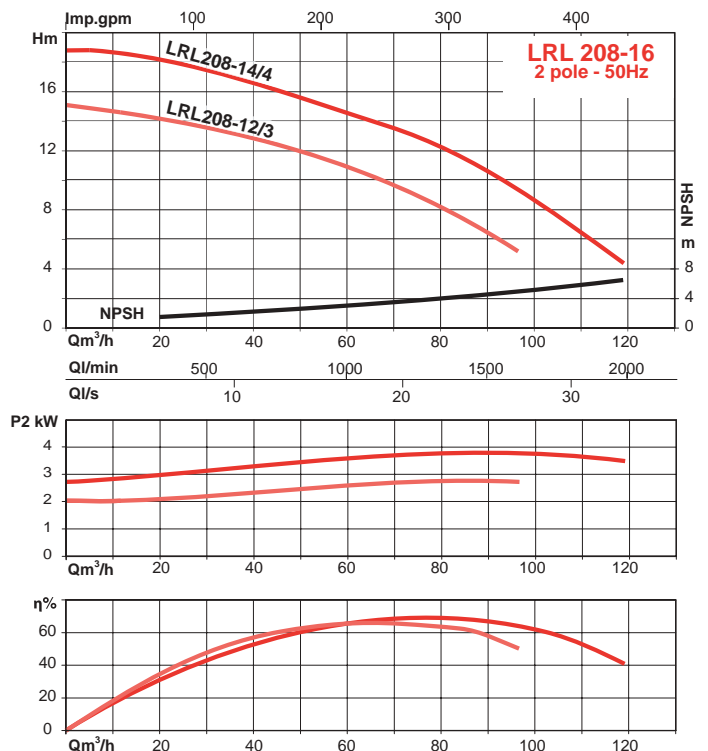
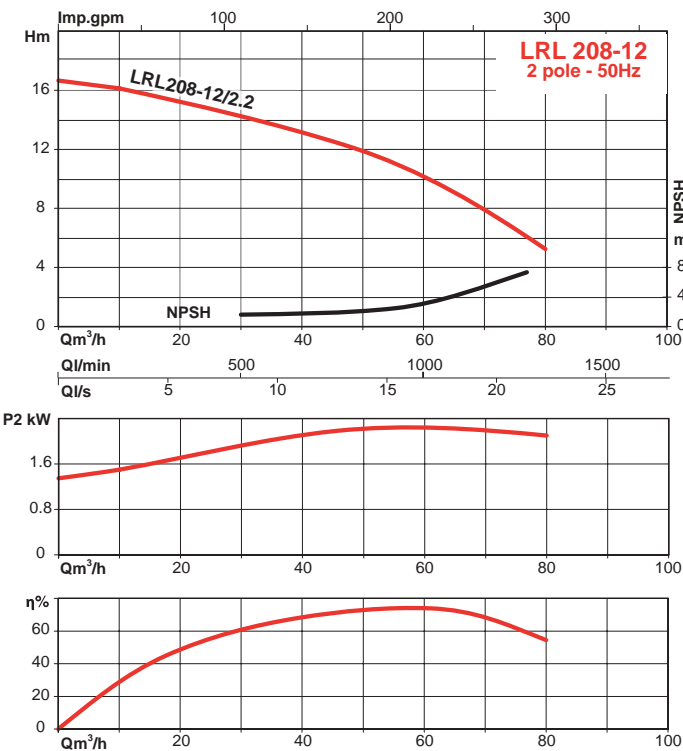
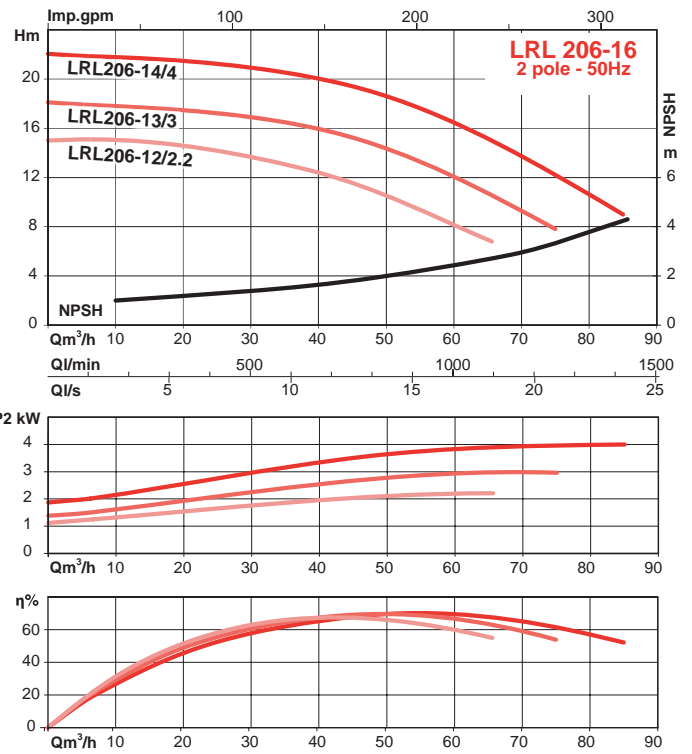
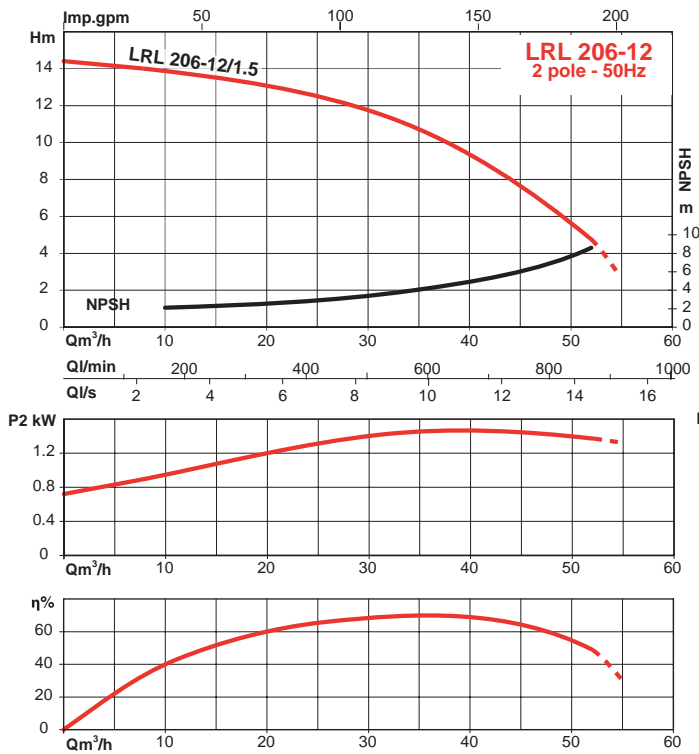
LRL-JRL

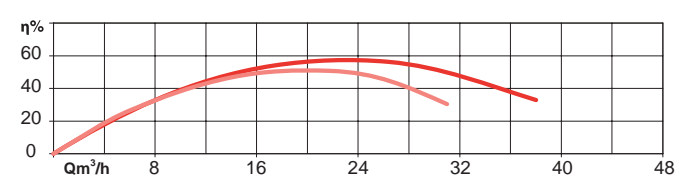
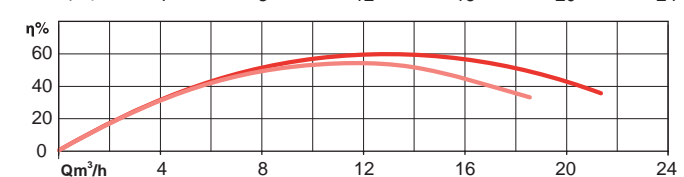
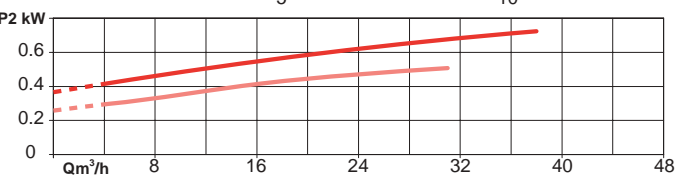
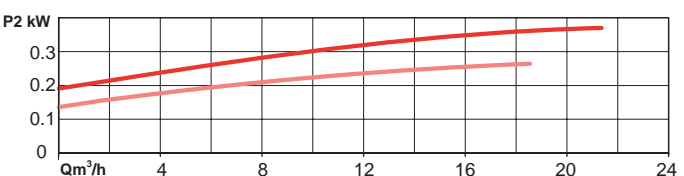
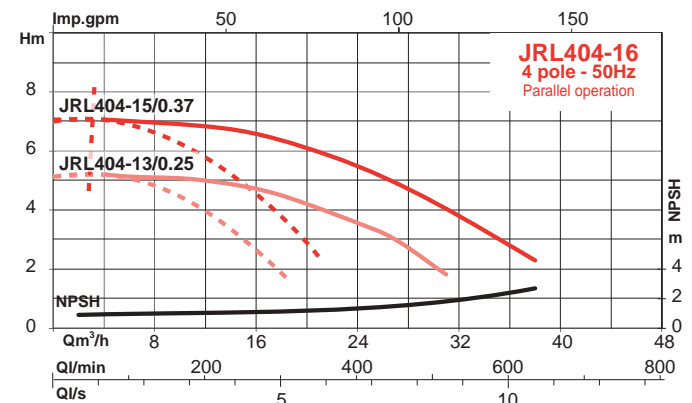
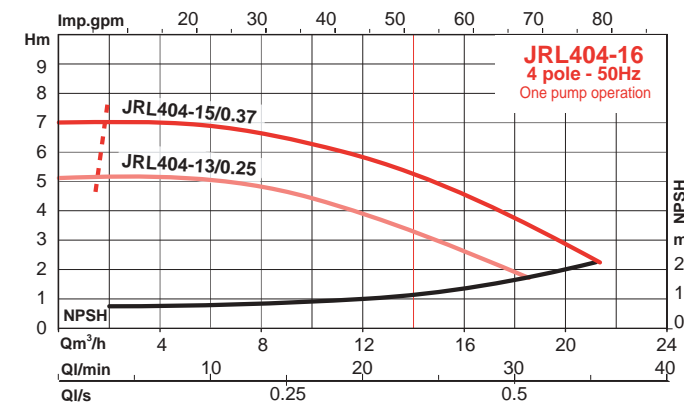
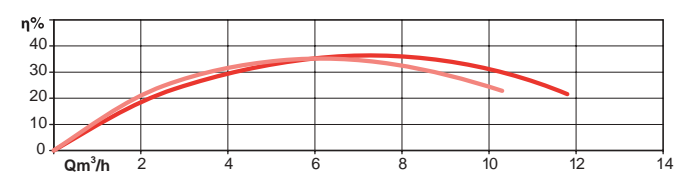
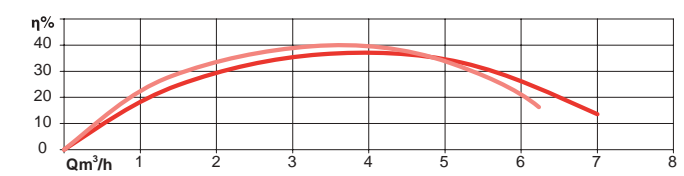
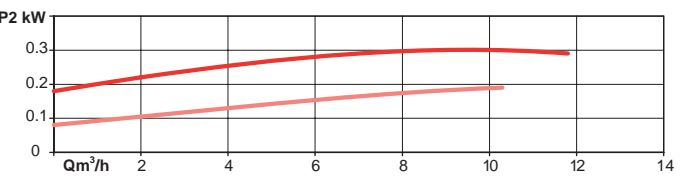
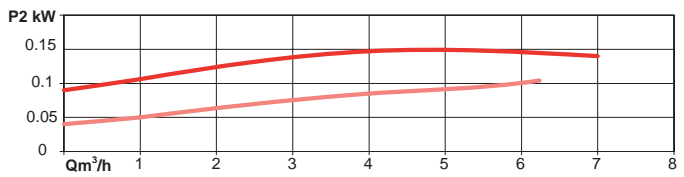
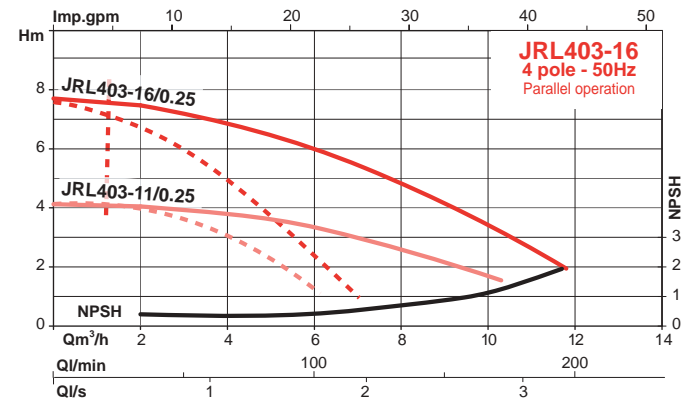
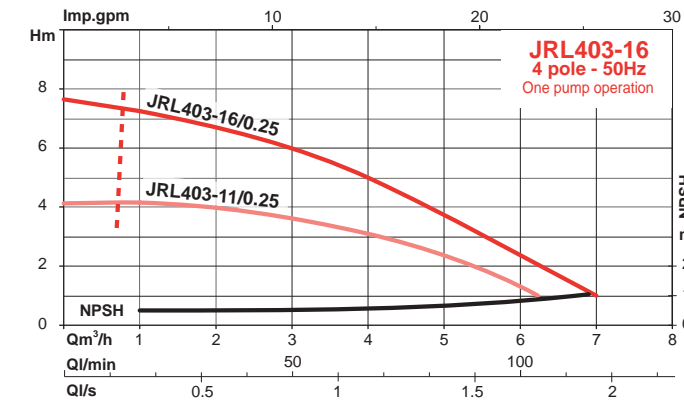


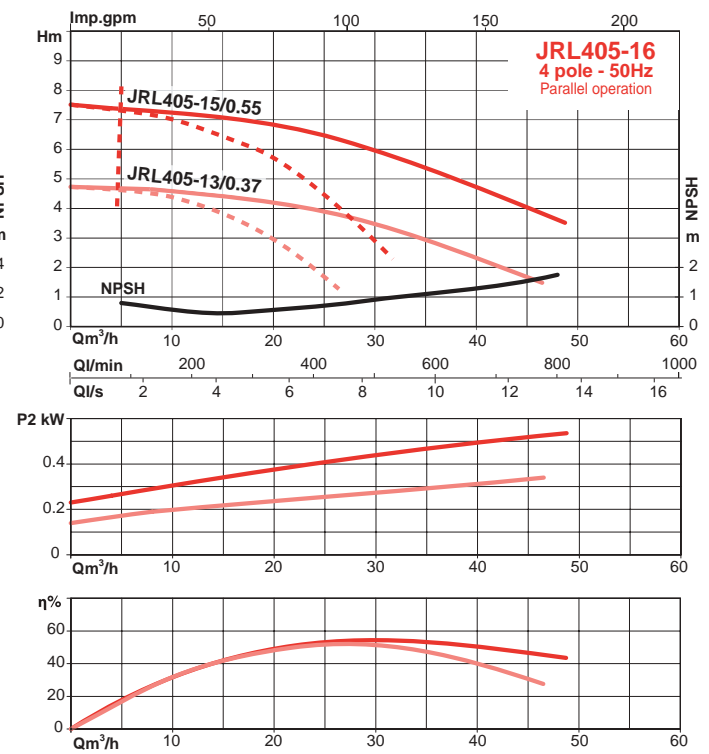
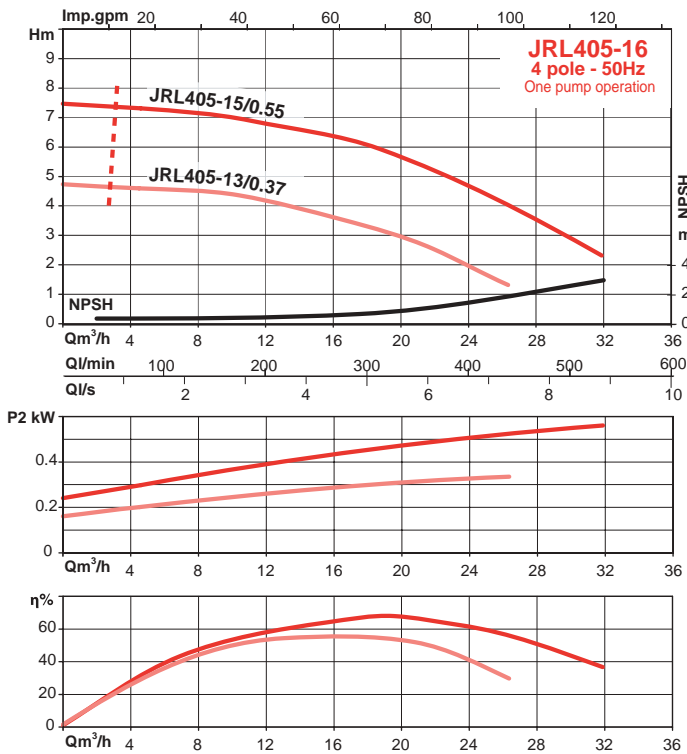
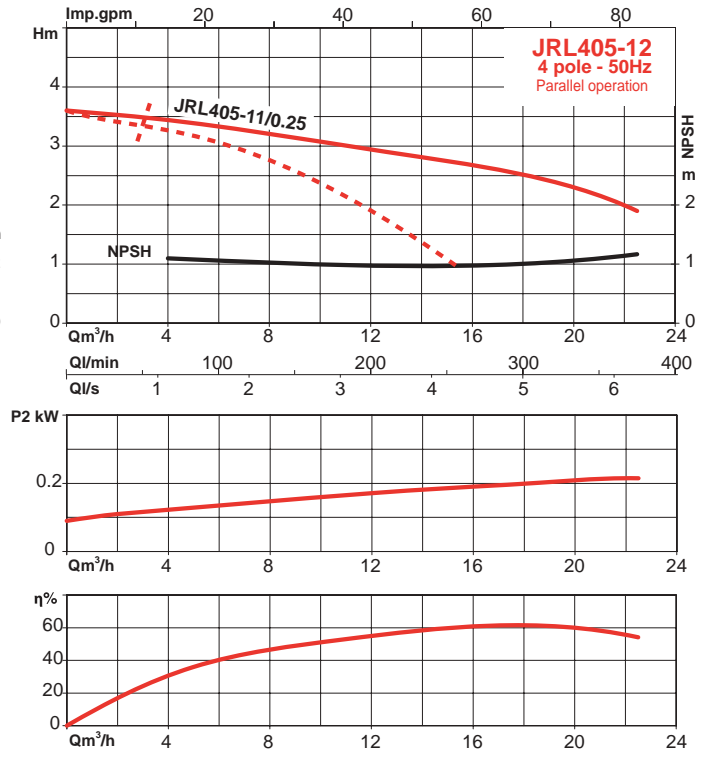
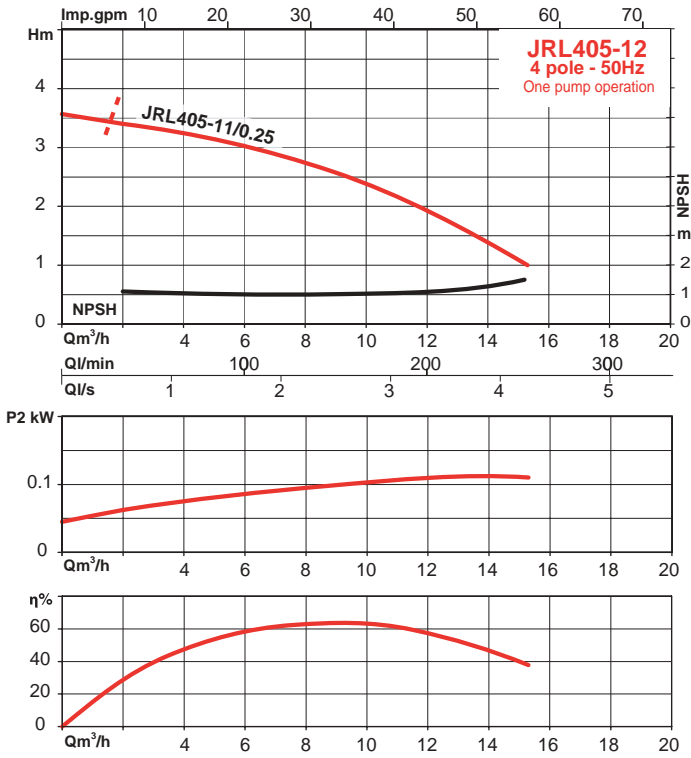
LRL 2 POLE

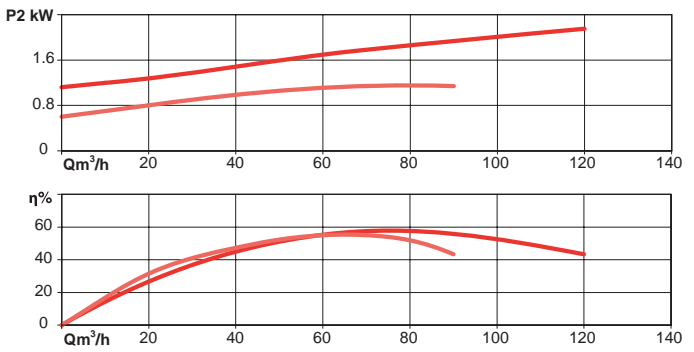
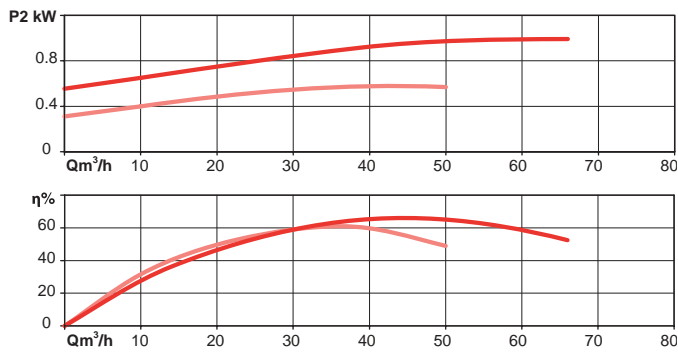
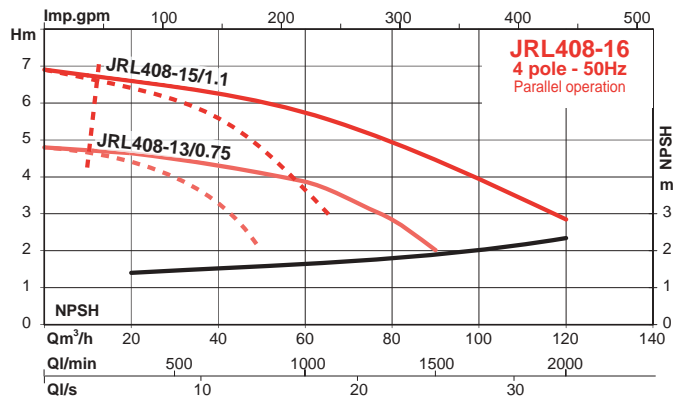
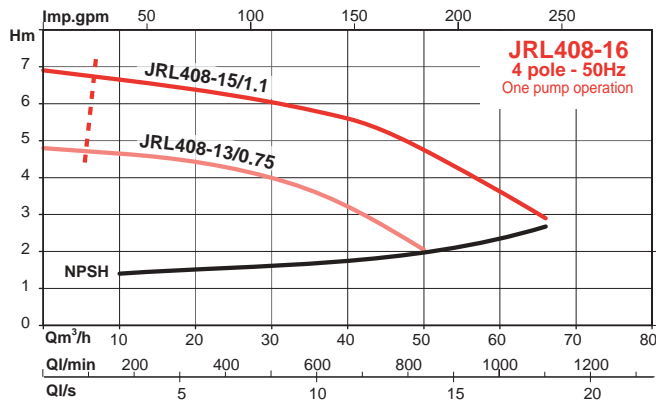
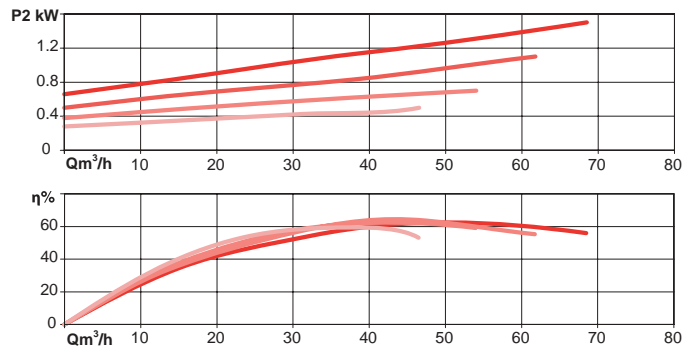
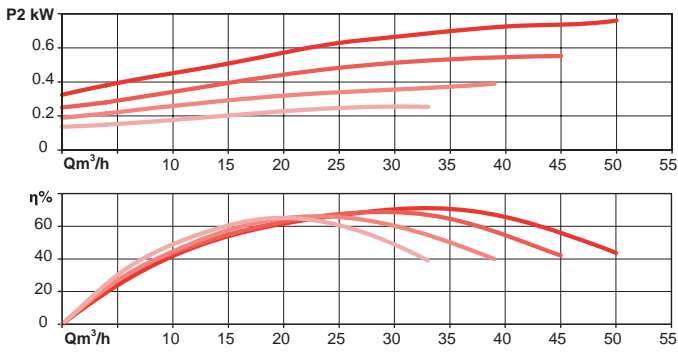
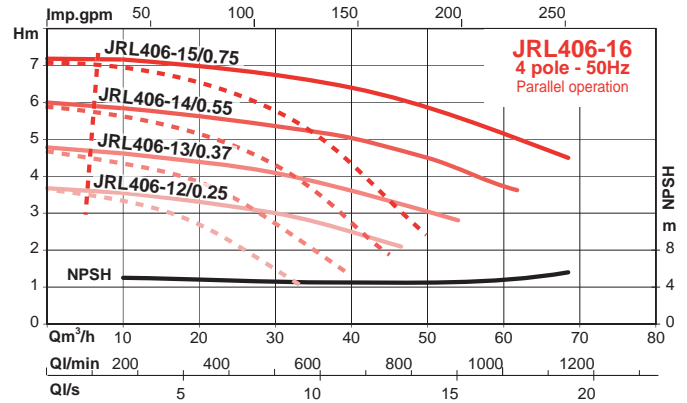
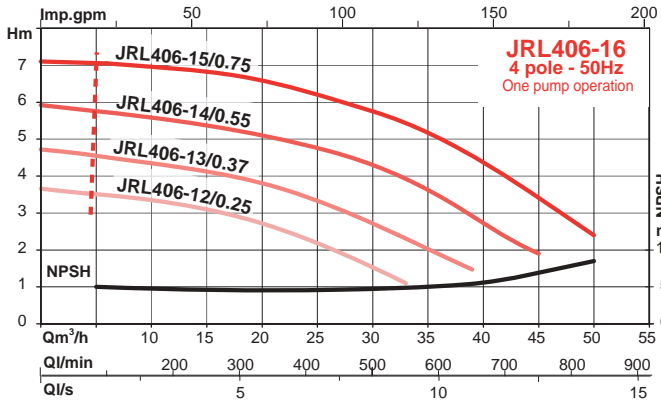


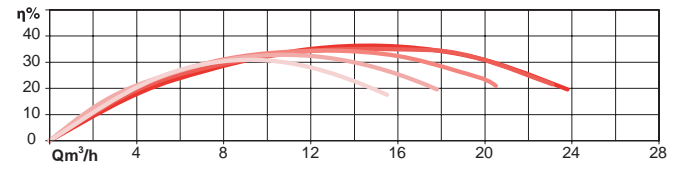
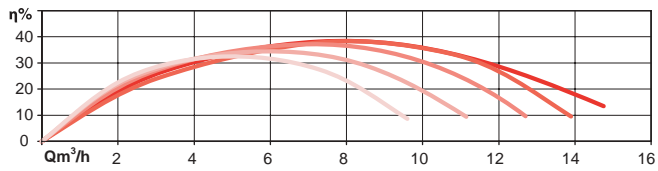
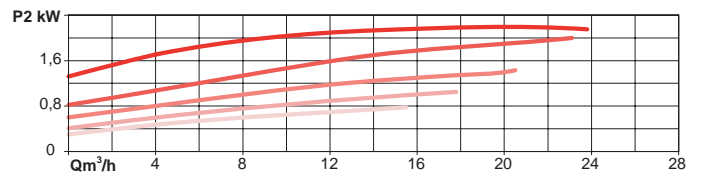
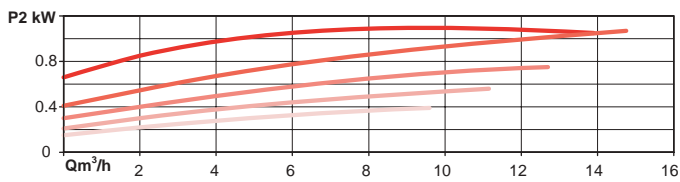
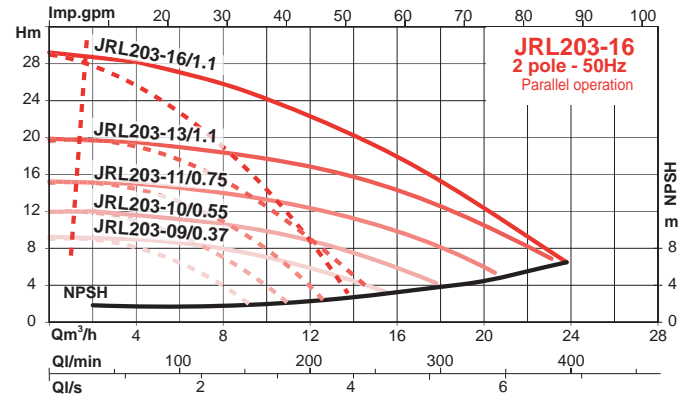
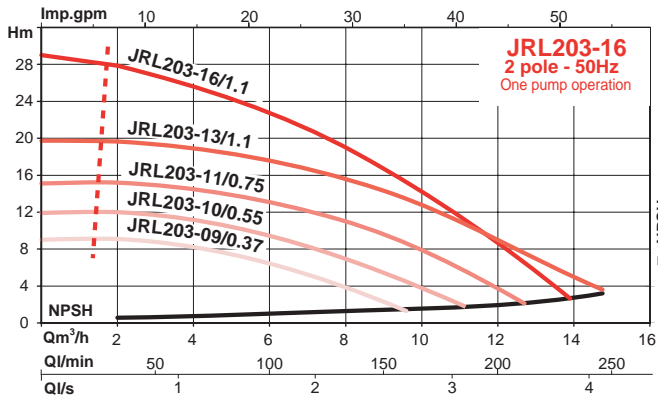


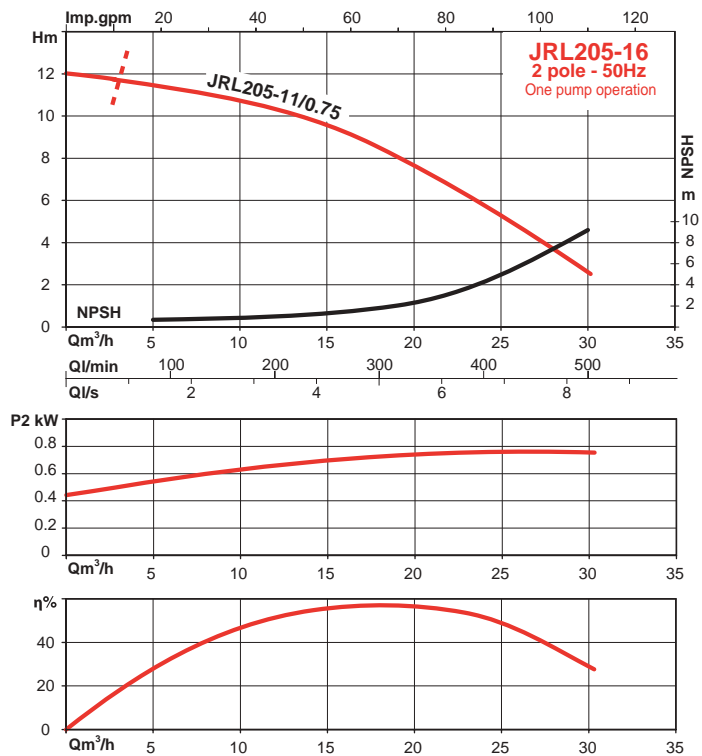
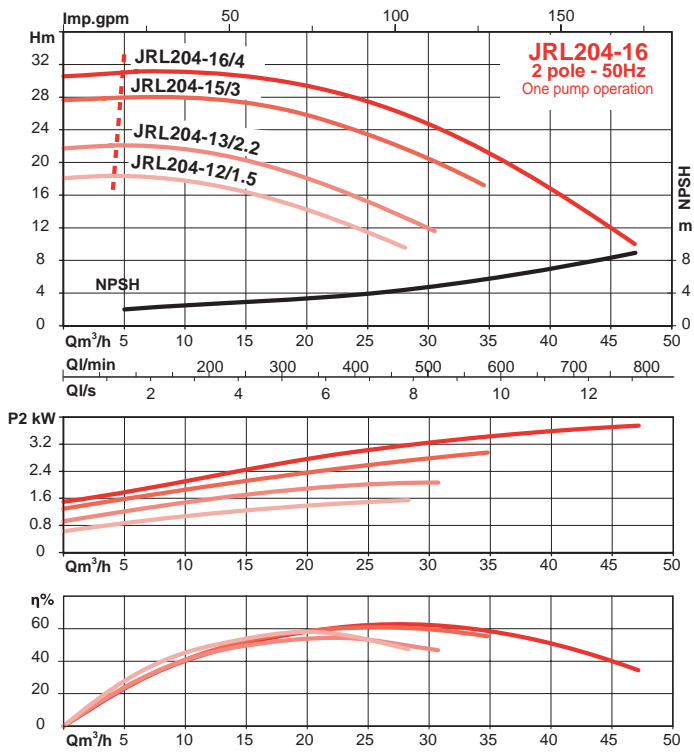


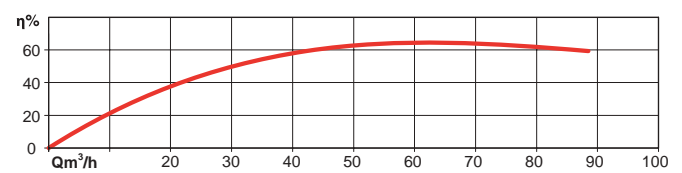
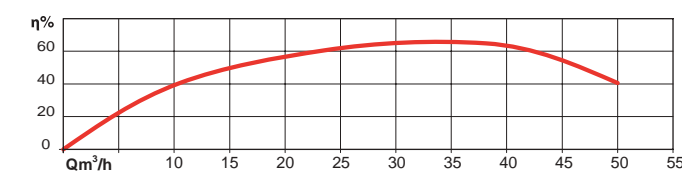
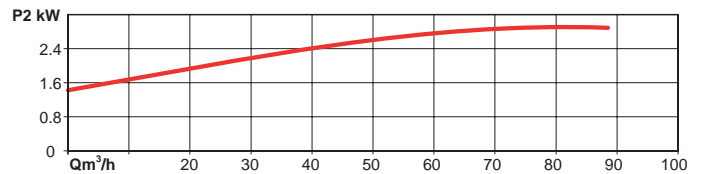
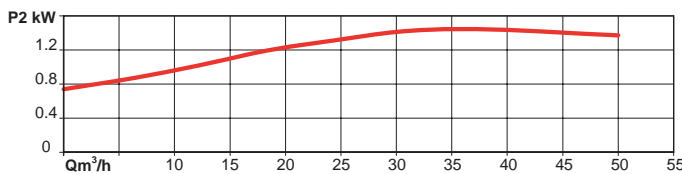
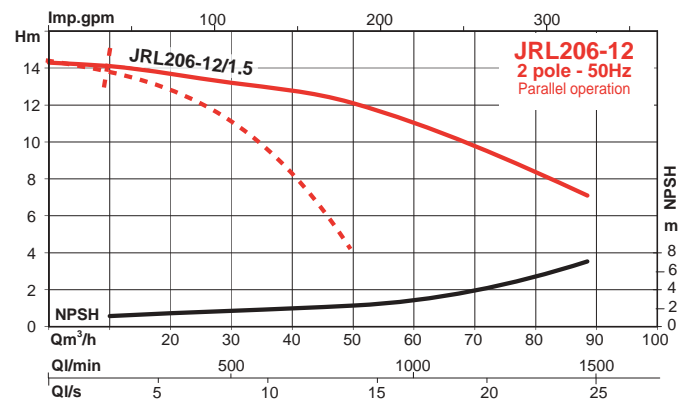
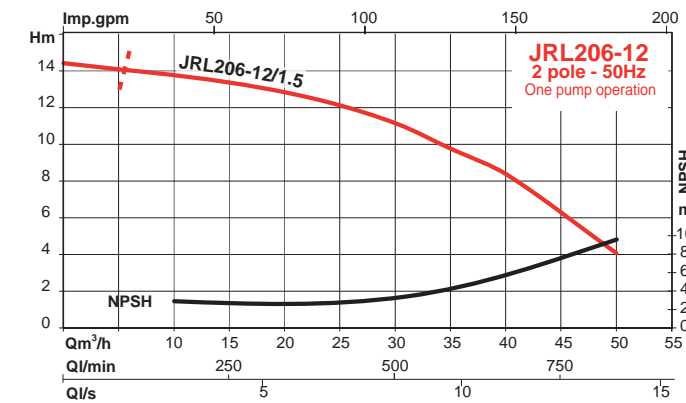
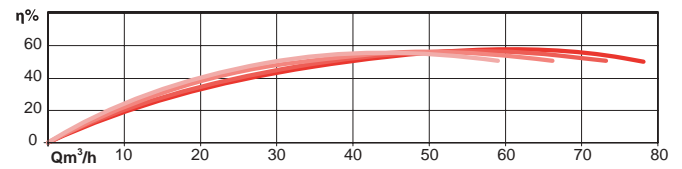
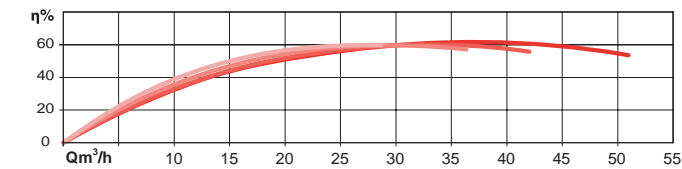
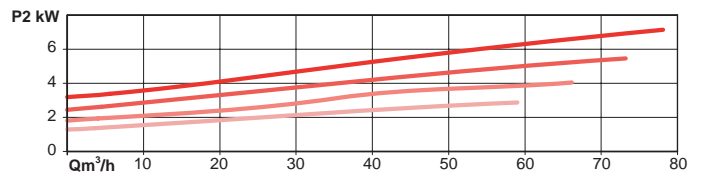
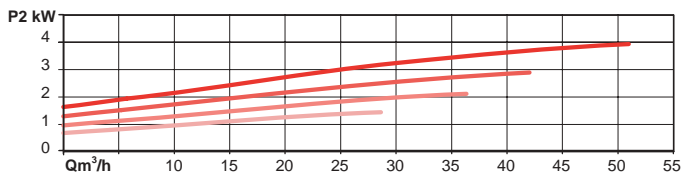
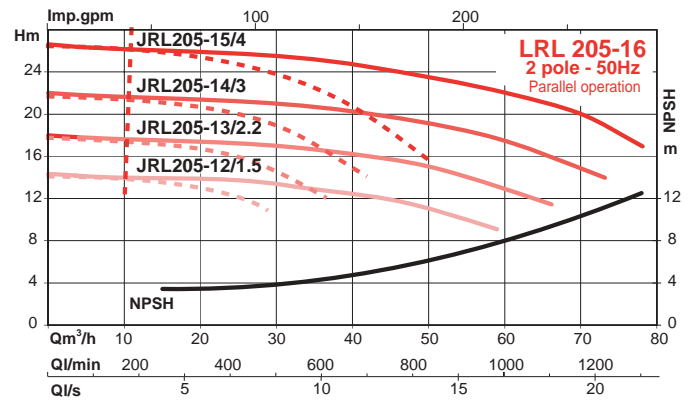
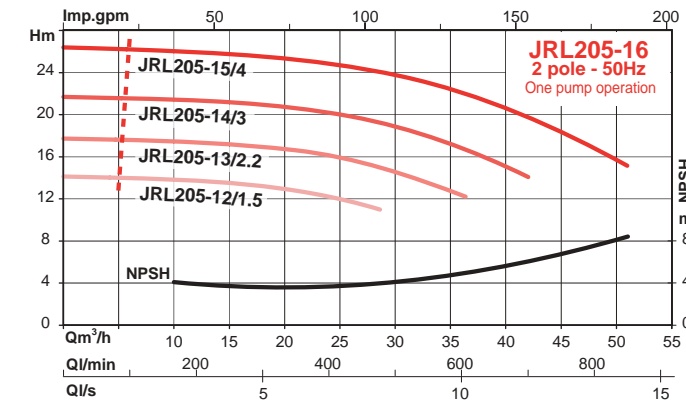


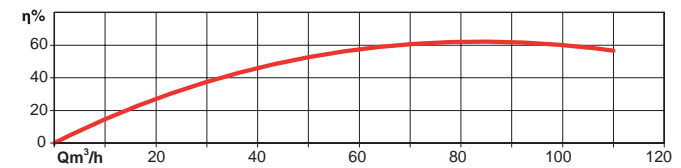
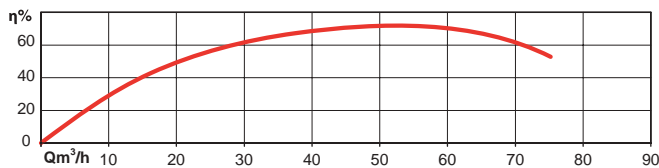
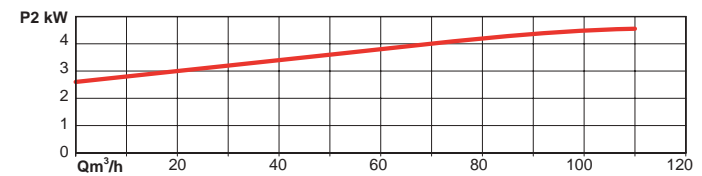
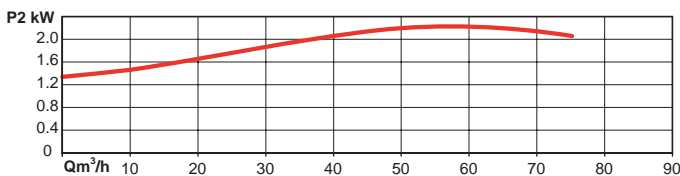
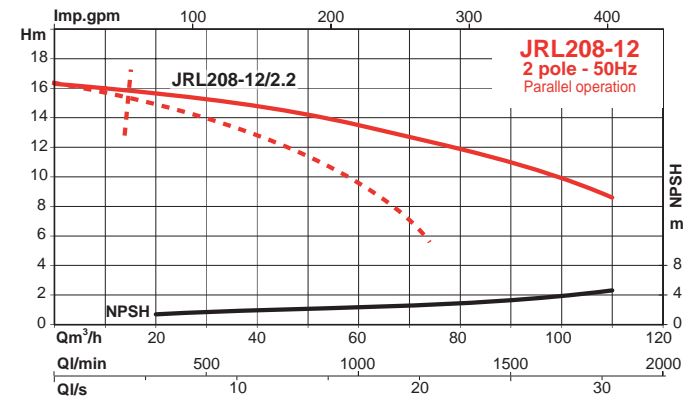
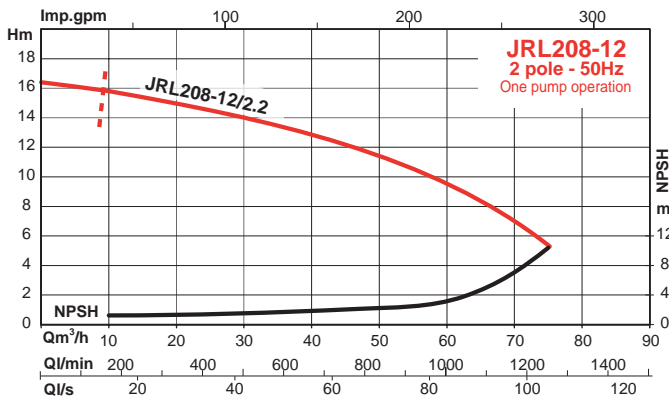
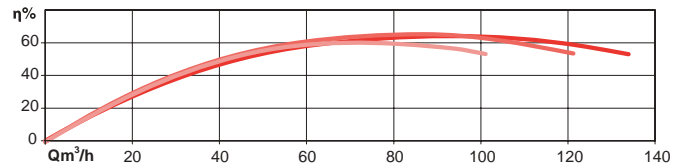
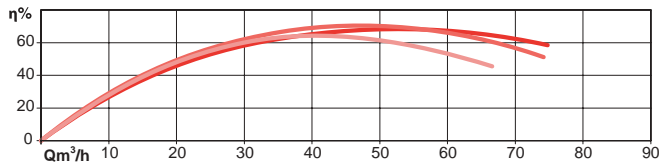
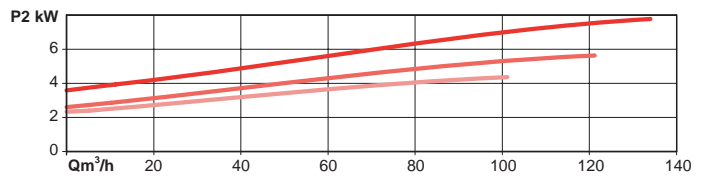
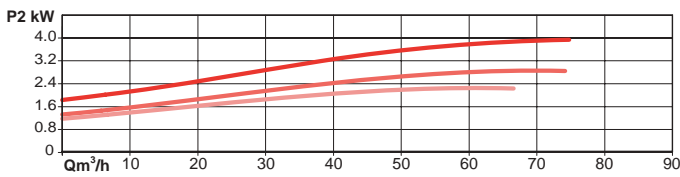
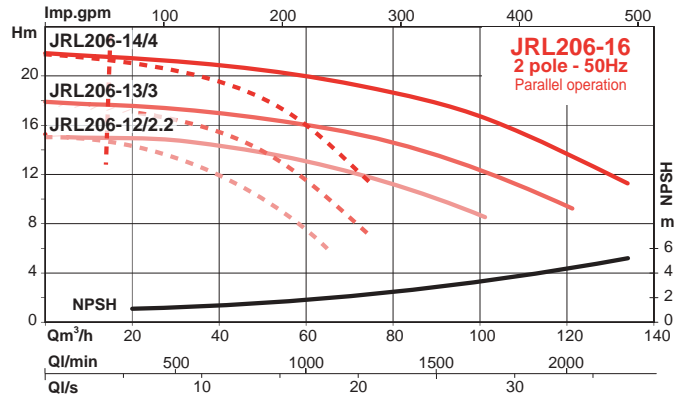
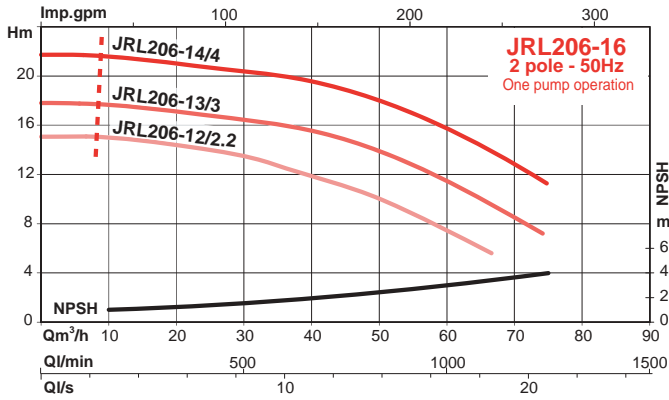


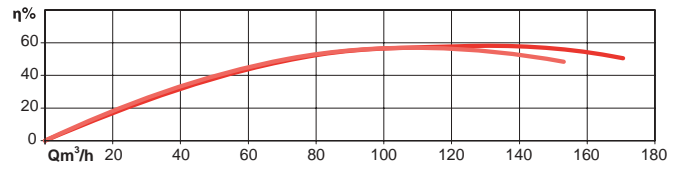
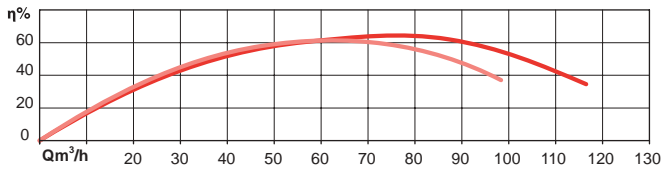
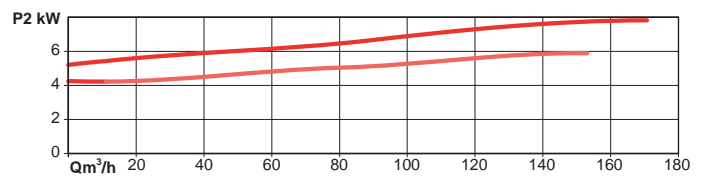
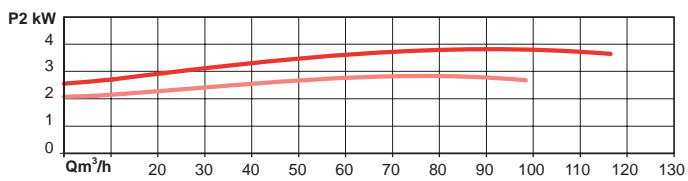
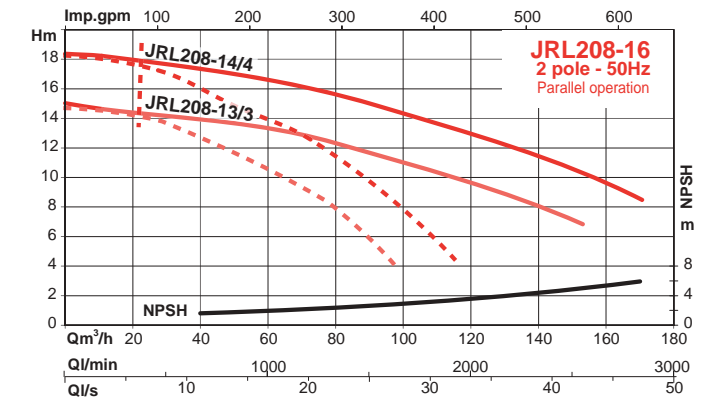
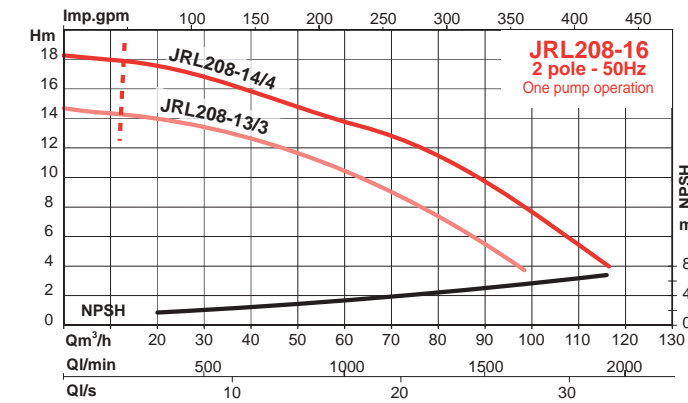




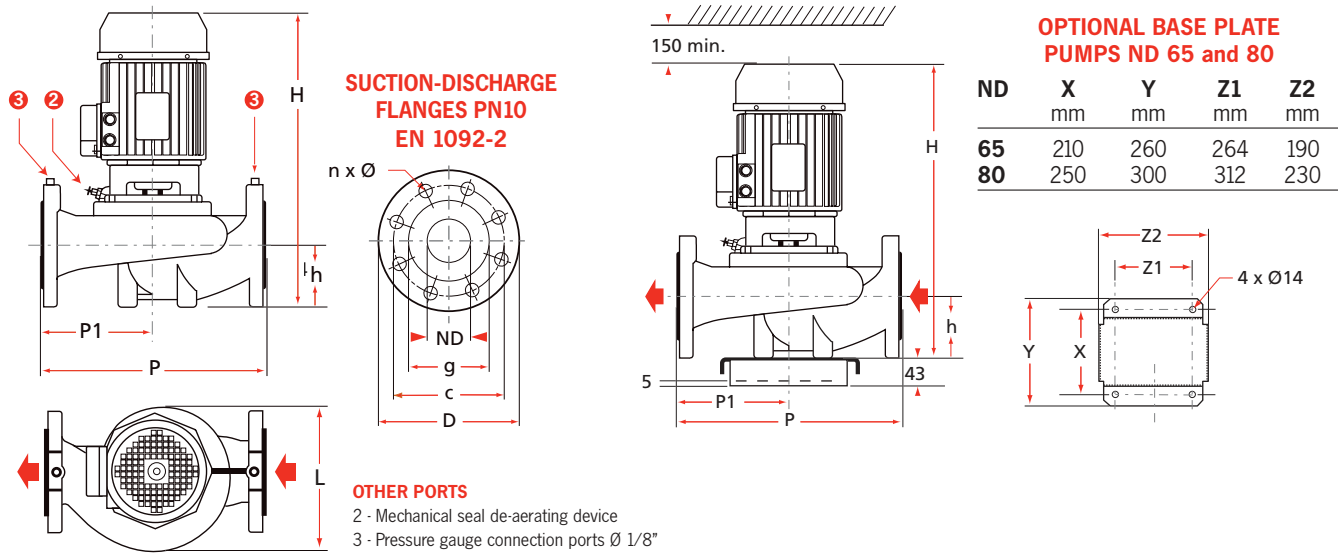






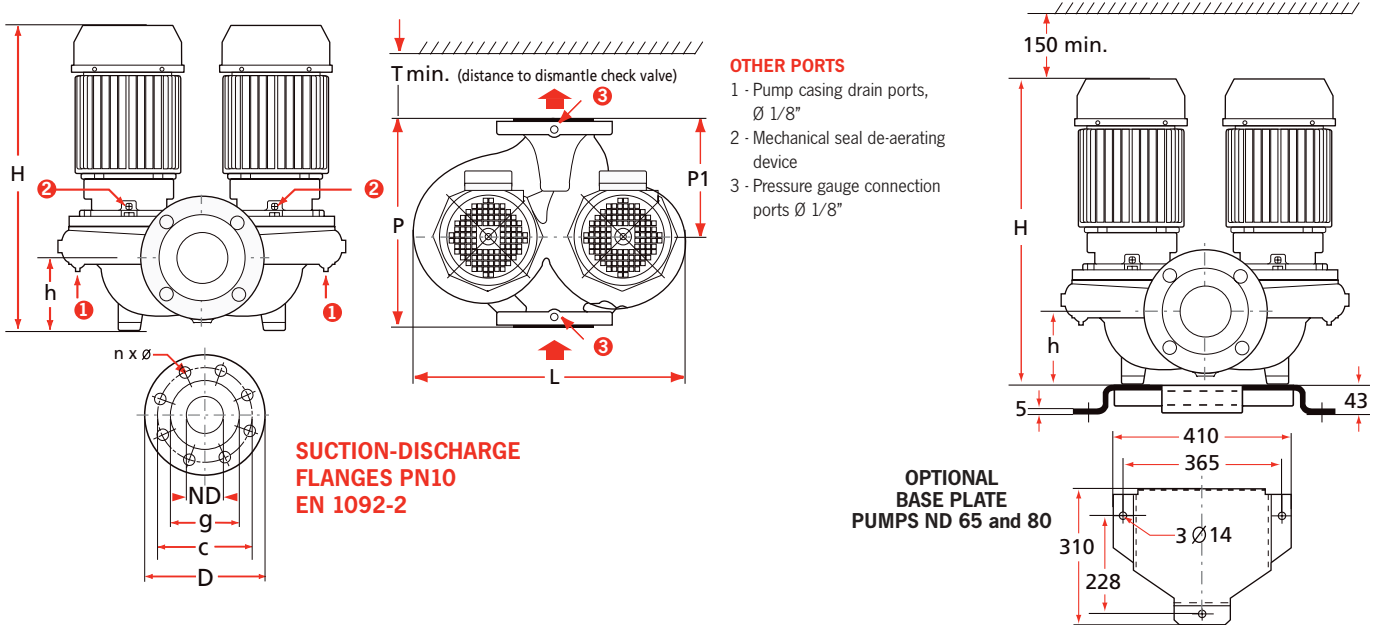


LRL - ELECTRICAL DATA AND DIMENSIONS



Order reference	MOTOR			L mm	H mm	h mm	P mm	P1 mm	PUMP mass kg	ND mm	D mm	g mm	c mm	holes n x Ø
	P2 kW	full load current in A	3-ph.230V 3-ph.400V											
LRL203-09/0.37	0.37	2	1.15	207	365	70	260	130	20.5	32	140	78	100	4 x 19
LRL203-10/0.55	0.55	2.85	1.65	207	365	70	260	130	21.5	32	140	78	100	4 x 19
LRL203-11/0.75	0.75	3.3	1.91	207	365	70	260	130	24	32	140	78	100	4 x 19
LRL203-13/1.1	1.1	4.6	2.7	207	401	70	260	130	25	32	140	78	100	4 x 19
LRL203-16/1.1	1.1	4.6	2.7	207	401	70	260	130	25	32	140	78	100	4 x 19
LRL204-09/0.37	0.37	2	1.15	170	369	75	250	125	19	40	150	88	110	4 x 19
LRL204-11/0.55	0.55	2.85	1.65	170	369	75	250	125	20	40	150	88	110	4 x 19
LRL204-12/1.5	1.5	6	3.5	234	400	75	320	160	25	40	150	88	110	4 x 19
LRL204-13/2.2	2.2	8.5	4.9	234	428	75	320	160	28	40	150	88	110	4 x 19
LRL204-15/3	3	10.6	6.1	234	451	75	320	160	34.5	40	150	88	110	4 x 19
LRL204-16/4	4	-	7.5	234	494.5	75	320	160	40.5	40	150	88	110	4 x 19
LRL205-11/0.75	0.75	3.3	1.91	192	383	83	280	140	23	50	165	102	125	4 x 19
LRL205-12/1.5	1.5	6	3.5	247	435.5	86	340	170	34.5	50	165	102	125	4 x 19
LRL205-13/2.2	2.2	8.5	4.9	247	435.5	86	340	170	34.5	50	165	102	125	4 x 19
LRL205-14/3	3	10.6	6.1	247	464	86	340	170	37.5	50	165	102	125	4 x 19
LRL205-15/4	4	-	7.5	247	507.5	86	340	170	43.5	50	165	102	125	4 x 19
LRL206-12/1.5	1.5	6	3.5	218	453.5	93	340	170	34	65	185	122	145	4 x 19
LRL206-12/2.2	2.2	8.5	4.9	257	448.5	93	340	170	37	65	185	122	145	4 x 19
LRL206-13/3	3	10.6	6.1	257	477	93	340	170	40	65	185	122	145	4 x 19
LRL206-14/4	4	-	7.5	257	520.5	93	340	170	46	65	185	122	145	4 x 19
LRL208-12/2.2	2.2	8.5	4.9	245	478	100	360	180	39	80	200	138	160	8 x 19
LRL208-13/3	3	10.6	6.1	278	495	105	360	180	44	80	200	138	160	8 x 19
LRL208-14/4	4	-	7.5	278	538.5	105	360	180	50	80	200	138	160	8 x 19
LRL403-11/0.25	0.25	1.2	0.7	207	365	70	260	130	20	32	140	78	100	4 x 19
LRL403-16/0.25	0.25	1.2	0.7	207	365	70	260	130	20	32	140	78	100	4 x 19
LRL404-13/0.25	0.25	1.2	0.7	234	364	75	320	160	20	40	150	88	110	4 x 19
LRL404-15/0.37	0.37	2	1.15	234	364	75	320	160	24	40	150	88	110	4 x 19
LRL405-11/0.25	0.25	1.2	0.7	192	383	83	280	140	25	50	165	102	125	4 x 19
LRL405-13/0.37	0.37	2	1.15	247	377	86	340	170	25	50	165	102	125	4 x 19
LRL405-15/0.55	0.55	2.85	1.65	247	413	86	340	170	26	50	165	102	125	4 x 19
LRL406-12/0.25	0.25	1.2	0.7	257	390	93	340	170	27	65	185	122	145	4 x 19
LRL406-13/0.37	0.37	2	1.15	257	390	93	340	170	28	65	185	122	145	4 x 19
LRL406-14/0.55	0.55	2.85	1.65	257	426	93	340	170	29	65	185	122	145	4 x 19
LRL406-15/0.75	0.75	3.3	1.91	257	426	93	340	170	31	65	185	122	145	4 x 19
LRL408-13/0.75	0.75	3.3	1.91	278	444	105	360	180	37	80	200	138	160	8 x 19
LRL408-15/1.1	1.1	4.6	2.7	278	444	105	360	180	42	80	200	138	160	8 x 19

JRL - ELECTRICAL DATA AND DIMENSIONS



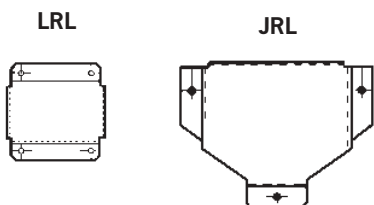
Order reference	MOTOR			L mm	H mm	h mm	P mm	P1 mm	PUMP mass kg	ND	D mm	c mm	g mm	holes n x \varnothing
	P2 kW	full load current in A 3-ph.230V	3 ph.400V											
JRL203-09/0.37	0.37	2	1.15	410	365	70	260	136	36.3	32	140	100	78	4 x 19
JRL203-10/0.55	0.55	2.85	1.65	410	365	70	260	136	38.3	32	140	100	78	4 x 19
JRL203-11/0.75	0.75	3.3	1.91	410	365	70	260	136	43.3	32	140	100	78	4 x 19
JRL203-13/1.1	1.1	4.6	2.7	410	401	70	260	136	43.3	32	140	100	78	4 x 19
JRL203-16/1.1	1.1	4.6	2.7	410	401	70	260	136	43.3	32	140	100	78	4 x 19
JRL204-09/0.37	0.37	2	1.15	349.5	369	75	250	135	36	40	150	110	88	4 x 19
JRL204-11/0.55	0.55	2.85	1.65	349.5	369	75	250	135	36	40	150	110	88	4 x 19
JRL204-12/1.5	1.5	6	3.5	456	399.5	75	320	167	49.5	40	150	110	88	4 x 19
JRL204-13/2.2	2.2	8.5	4.9	456	427.5	75	320	167	62.5	40	150	110	88	4 x 19
JRL204-15/3	3	10.6	6.1	456	450.5	75	320	167	68.5	40	150	110	88	4 x 19
JRL204-16/4	4	-	7.5	456	494	75	320	167	80.5	40	150	110	88	4 x 19
JRL205-11/0.75	0.75	3.3	1.91	390	383	83	280	155	37.1	50	165	125	102	4 x 19
JRL205-12/1.5	1.5	6	3.5	500	435.5	86	340	190	64.3	50	165	125	102	4 x 19
JRL205-13/2.2	2.2	8.5	4.9	500	435.5	86	340	190	64.3	50	165	125	102	4 x 19
JRL205-14/3	3	10.6	6.1	500	464	86	340	190	70.3	50	165	125	102	4 x 19
JRL205-15/4	4	-	7.5	500	507.5	86	340	190	82.3	50	165	125	102	4 x 19
JRL206-12/1.5	1.5	6	3.5	431.5	453.5	93	340	185	30	65	185	145	122	4 x 19
JRL206-12/2.2	2.2	8.5	4.9	550	448.5	93	340	185	71.8	65	185	145	122	4 x 19
JRL206-13/3	3	10.6	6.1	550	477	93	340	185	77.8	65	185	145	122	4 x 19
JRL206-14/4	4	-	7.5	550	520.5	93	340	185	89.8	65	185	145	122	4 x 19
JRL208-12/2.2	2.2	8.5	4.9	479.5	478	100	360	205	74	80	200	160	138	8 x 19
JRL208-13/3	3	10.6	6.1	601	493	103	360	192	81	80	200	160	138	8 x 19
JRL208-14/4	4	-	7.5	601	536.5	103	360	192	93	80	200	160	138	8 x 19
JRL403-11/0.25	0.25	1.2	0.7	410	365	70	260	136	34.3	32	140	100	78	4 x 19
JRL403-16/0.25	0.25	1.2	0.7	410	365	70	260	136	34.3	32	140	100	78	4 x 19
JRL404-13/0.25	0.25	1.2	0.7	456	363.5	75	320	167	40.5	40	150	110	88	4 x 19
JRL404-15/0.37	0.37	2	1.15	456	363.5	75	320	167	42.5	40	150	110	88	4 x 19
JRL405-11/0.25	0.25	1.2	0.7	390	383	83	280	155	36.1	50	165	125	102	4 x 19
JRL405-13/0.37	0.37	2	1.15	500	377	86	340	190	44.3	50	165	125	102	4 x 19
JRL405-15/0.55	0.55	2.85	1.65	500	413	86	340	190	51.3	50	165	125	102	4 x 19
JRL406-12/0.25	0.25	1.2	0.7	550	390	93	340	185	49.8	65	185	145	122	4 x 19
JRL406-13/0.37	0.37	2	1.15	550	390	93	340	185	51.8	65	185	145	122	4 x 19
JRL406-14/0.55	0.55	2.85	1.65	550	426	93	340	185	62	65	185	145	122	4 x 19
JRL406-15/0.75	0.75	3.3	1.91	550	426	93	340	185	62	65	185	145	122	4 x 19
JRL408-13/0.75	0.75	3.3	1.91	601	442	103	360	192	62	80	200	160	138	8 x 19
JRL408-15/1.1	1.1	4.6	2.7	601	442	103	360	192	62	80	200	160	138	8 x 19

LRL-JRL

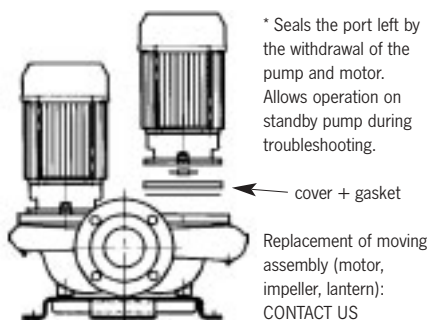
LRL-JRL OPTIONS

pump base plate*

* Allow mounting and attachment of LRL or JRL models with ND 65 or 80 on concrete base.



JRL: blank cover* with o-ring



Pump models	Pump base plate		Blank cover for JRL	
	LRL	JRL	Order reference	Item reference
203 - 16			COUV 160	30 908 178 F
204 - 12			COUV 120	30 925 165 P
204 - 16			COUV 160	30 908 178 F
205 - 12			COUV 120	30 925 165 P
205 - 16			COUV 160	30 908 178 F
206 - 12	30 925 701 Y	30 925 702 G	COUV 121	30 925 166 Y
206 - 16	30 925 700 P	30 925 702 G	COUV 160	30 908 178 F
208 - 12	30 925 700 P	30 925 702 G	COUV 121	30 925 166 Y
208 - 16	30 925 700 P	30 925 702 G	COUV 160	30 925 178 F
403 - 16 et 404 - 16			COUV 160	30 908 178 F
405 - 12			COUV 120	30 925 165 P
405 - 16			COUV 160	30 908 178 F
406 - 16 et 408 - 16	30 925 700 P	30 925 702 G	COUV 160	30 908 178 F

The pump families are indicated on the curves.

FEATURES (LRL-JRL)

a) Electrical data

3-PHASE 230 - 400 V - 50 Hz motor ≤ 3 kW.
3-PHASE 400 V Δ - 50 Hz motor = 4 kW.
Motor protection: circuit breaker for LRL and MGP control box for JRL.

b) Installation

Direct mounting on horizontal or vertical pipe.
Connection to the installation: PN10 round counter-flanges to be welded (not supplied).

OPTIONAL

Pump base plate mounted on concrete block for ND 65 and 80 models (contact us for all other types).

c) Packaging

Pumps supplied with gaskets and bolts, no counter-flanges (optional).

d) Maintenance

Full standard replacement or repair of the pump. See recommended spare parts (•) subject to wear.

RECOMMENDED ACCESSORIES

- Motor safety circuit breaker (LRL).
- Control and protection box for motors (JRL).
- Blank off cover (JRL).
- Pressure gauge kit.
- Round counter-flanges (to be welded) PN10.
- Isolating valves.

MGP CONTROL BOX FOR JRL

- Motor control and thermal overload protection.
- Operating reliability: standby pump starts automatically when active pumps fails.

For further technical information, see the MGP control box data sheet.

