

mPJM

Pompy w wykonaniu specjalnym - morskim



PRZEZNACZENIE

Pompy mPJM przeznaczone są do pompowania wody morskiej oraz wody słonej.

ZASTOSOWANIE

- przemysł stoczniowy
- rybołówstwo

ZAKRES UŻYTKOWANIA

Wydajność	do 300 m ³ /h
Wysokość podnoszenia	do 130 m
Ciśnienie robocze	1,6 MPa
Przyłączy	0,6-1,6 MPa
Średnica króćca tłocznego	40-125 mm
Średnica króćca ssącego	50-150 mm

CECHY KONSTRUKCYJNE

Pompa

- wirowa, jednostopniowa,
- wirnik montowany bezpośrednio na wałku silnika,
- ssanie w osi poziomej, tłoczenie pionowo w górę,
- uszczelnienie mechaniczne DMc lub sznurowe DS.,
- wykonanie brązowe lub żeliwne

Silnik

- trójfazowy asynchroniczny z wirnikiem klatkowym,
- w wykonaniu morskim,
- kierunek obrotów w prawo,
- z wydłużoną końcówką wałka,
- wymagane pełne zabezpieczenie elektryczne,
- napięcie 380/440V,
- częstotliwość 50 lub 60Hz.

KLUCZ OZNACZEŃ

mPJM	50	160	DMc	2,2kW	2900min ⁻¹	BS
Typoszereg						
Średnica króćca tłocznego 40-150mm						
Średnica wirnika 130-315mm						
Typ dławnicy DS - sznurowa Dmc - mechaniczna						
Wielkość silnika 0,75-99,0kW						
Obroty 1400, 1700, 2900 lub 3500min ⁻¹						
Wykonanie materiałowe: BS - wyk. brązowe dławnica sznurowa BM - wyk. brązowe dławnica mechaniczna ZS - wyk. żeliwne dławnica sznurowa ZM - wyk. żeliwne dławnica mechaniczna						

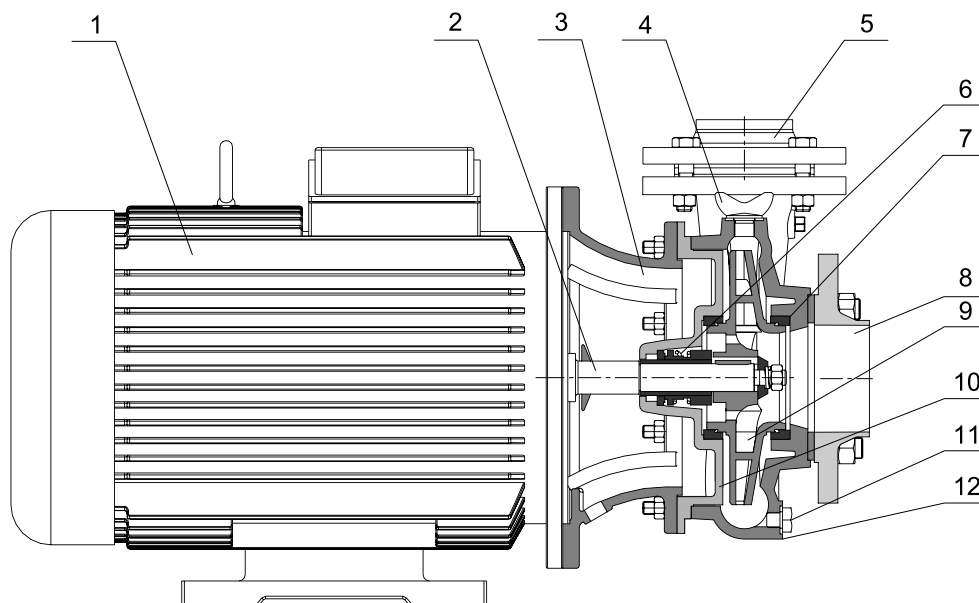
ZALETY

- przystosowanie do pracy w środowisku wody morskiej i słonej,
- łatwość instalacji i obsługi,
- bezpieczeństwo pracy,
- wykluczenie przestawienia osi pompa silnik,
- dobra relacja cena/jakość.

ZAKRES DOSTAWY

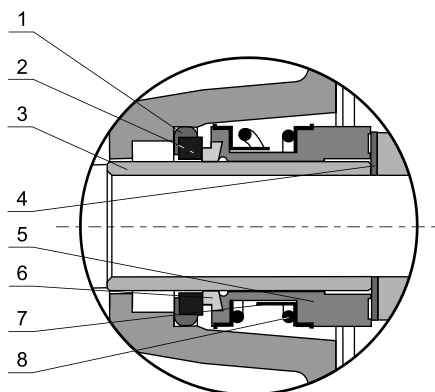
Pompa kompletna z instrukcją obsługi i gwarancją, przeciwkołnierze standardowo w zakresie dostawy.

KONSTRUKCJA



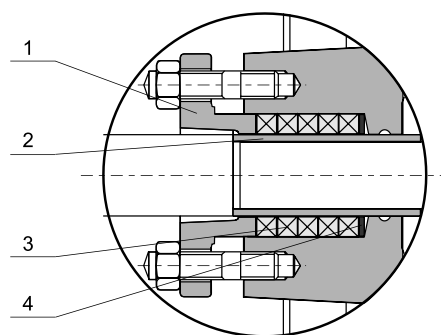
Lp.	Nazwa części	Materiał
1.	Silnik	
2.	Wał	stal nierdzewna
3.	Łącznik	EN-GJL200
4.	Korek zalewowy	stal nierdzewna
5.	Przeciwnośnierz tłoczny	stal
6.	Dławnica	
7.	Pierścień labiryntu	mosiądz
8.	Przeciwnośnierz ssący	stal
9.	Wirnik	CuSn10 i EN-GJL200
10.	Pokrywa	CuSn10 i EN-GJL200
11.	Korek spustowy	stal nierdzewna
12.	Koprus pompy	CuSn10 i EN-GJL200

Dławnica mechaniczna typu DMC



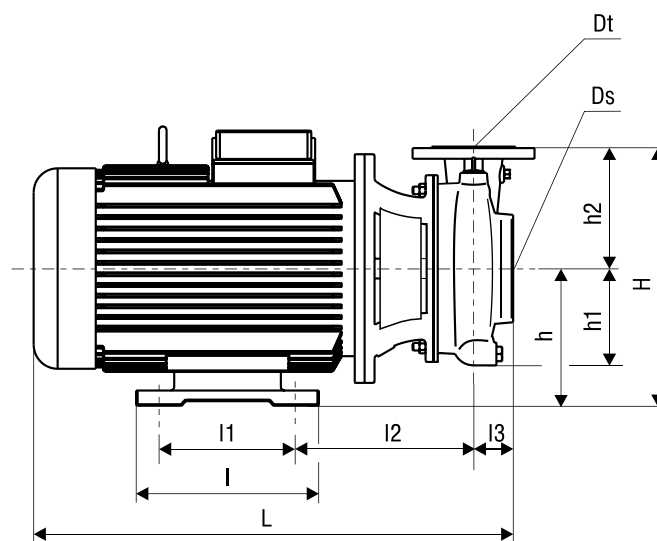
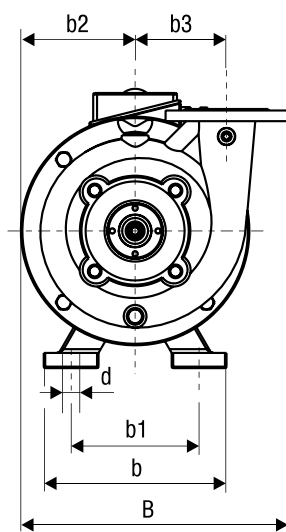
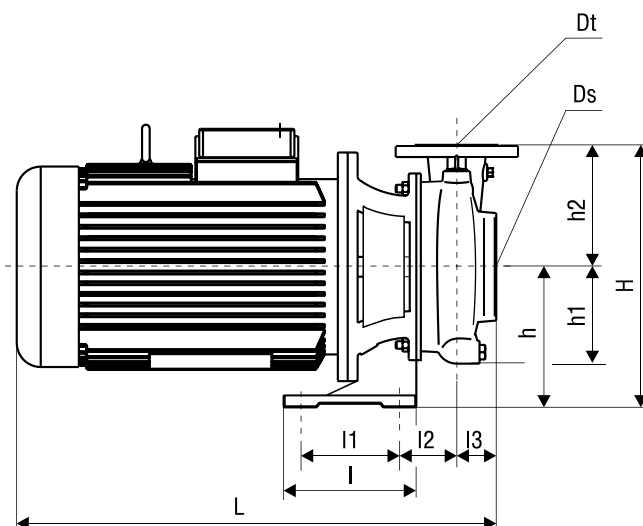
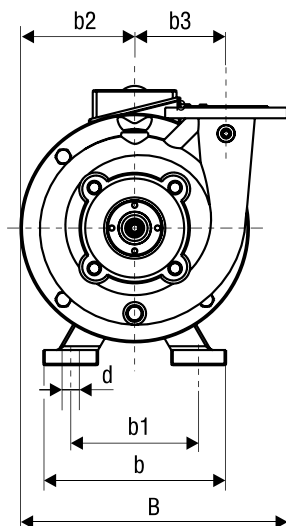
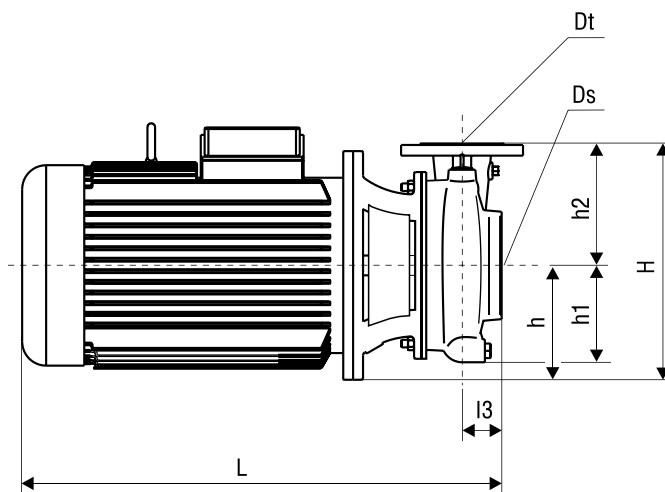
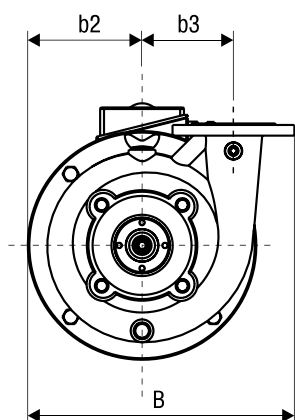
1. Uszczelka pierścienia stałego
 2. Pierścień stały
 3. Tulejka ochronna
 4. Podkładka dystansowa
 5. Mieszek gumowy
 6. Pierścień obrotowy
 7. Kosz ochronny
 8. Sprężyna
- } elementy
stanowią
komplet

Dławnica mechaniczna typu DS



1. Dławnik
2. Tulejka ochronna
3. Szczeliwo
4. Podkładka ciśnieniowa

WYMIARY MONTAŻOWE



POMPY W WYKONANIU SPECJALNYM

Typ pompy	Moc [kW]		Wymiary [mm]																	Masa [kg]																					
	1400/1700	2900/3500	L	I	I1	I2	I3	B	b	b1	b2	b3	H	h	h1	h2	D1	D2	d																						
	Obroty [min ⁻¹]																																								
mPJM 40/130		0,75/0,87	412		165	130	45,5	40	262		215	180	97	90	317	160	103	110	50	40	14	26																			
mPJM 40/130		1,1/1,3	428																			28																			
mPJM 40/140		1,1/1,3																				28																			
mPJM 40/140		1,5/1,7	457																			33																			
mPJM 40/150		1,1/1,3	428	165	130	45,5	40						97	90	260	80	103	110	50	40		28																			
mPJM 40/150		1,5/1,7	457																			33																			
mPJM 40/160		1,5/1,7																				33																			
mPJM 40/160		2,2/2,5	482																			36																			
mPJM 50/130		1,5/1,7	458	185	150	56,5			283	215	180		105	95	335	160	105	125	165		14	41																			
mPJM 50/140		1,5/1,7																				483	41																		
mPJM 50/150		2,2/2,5																					44																		
mPJM 50/150		2,2/2,5																					44																		
mPJM 50/160		2,2/2,5	534	185	150								105	95	335	160	105	125	165		50	55																			
mPJM 50/160		3,0/3,4	436																			59																			
mPJM 50/180		3,0/3,4																				59																			
mPJM 50/180		4,0/4,6	544																			68																			
mPJM 50/190		4,0/4,6											122	115			126	145	65			68																			
mPJM 50/190		5,5/6,3	613																			182	140	218	278	216	327	132	12	93											
mPJM 50/200		4,0/4,6	544																			185	150	56,5	235	200	355	160	14	68											
mPJM 50/200		5,5/6,3	613																			182	1400	218	278	216	327	132	12	93											
mPJM 65/130		2,2/2,5	507	165	130																	49																			
mPJM 65/130		3,3/3,4	558	185	150																	60,5	55	303		215	180		110	100	350	160	113	140			60				
mPJM 65/140		3,0/3,4																																			566	69			
mPJM 65/140		4,0/4,6																																				69			
mPJM 65/150	0,75/0,87	4,0/4,6				535	182	140	222	278	216	322	132	12	92																										
mPJM 65/150	1,1/1,3	5,5/6,3	566	185	150	60,5			235	200			350	160								14	69																		
mPJM 65/160		4,0/4,6	635	182	140	222			278	216			322	132								12	92																		
mPJM 65/170	0,75/0,87		459												340	80						42																			
mPJM 65/170	1,1/1,3		493																			48																			
mPJM 65/170		5,5/6,3	631																			182			278	278			342	132			90						12	97	
mPJM 65/170		7,5/8,6	669																			220	140	221															108		
mPJM 65/180	0,75/0,87		459												340	80						42																			
mPJM 65/180	1,1/1,3		493																			48																			
mPJM 65/180		5,5/6,3	631																			182			278	216			342	132			90					12	97		
mPJM 65/180		7,5/8,6	669																			220	140	221															108		
mPJM 65/190	0,75/0,87		459				52	340			127	120		120	340	80		130	160	80	65		42																		
mPJM 65/190	1,1/1,3		493																				48																		
mPJM 65/190		5,5/6,3	631																				182			278	216			342	132			90					12	97	
mPJM 65/190		7,5/8,6	669																				220	140	221															108	
mPJM 65/190		11,0/12,7	780	256	210	270			305	254					370	160						15	139																		
mPJM 65/200	1,1/1,3		493												340	90						0	48																		
mPJM 65/200		7,5/8,6	669																			220	140	221			278	216			342	132						12	108		
mPJM 65/200		11,0/12,7	780																			256	210	270			305	254					370						15	139	
mPJM 65/215	2,2/2,6		577																			185	150	59,5			235	200											14	76	
mPJM 65/215		11,0/12,7	773	256	210	260	55	390							390	160	157	180					157																		
mPJM 65/215		15,0/17,2																					172																		
mPJM 65/230	2,2/2,6		577	185	150	59,5																	235	200	157	140									14	76					
mPJM 65/230		11,0/12,7	773	256	210	260																	305	254											15	157					
mPJM 65/230		15,0/17,2	577	185	150	59,5																172																			
mPJM 65/250	2,2/2,6																					773	256	210	260			235	200										14	76	
mPJM 65/250		15,0/17,2																				773	256	210	260			305	254											15	172
mPJM 65/250		18,5/21,3																				817	300	254				305												15	187
mPJM 80/130	0,75/0,87		473												343	80							44																		
mPJM 80/130		4,0/4,6	576																				185	150	63,5			235	200			365	160						14	76	
mPJM 80/130		5,5/6,3	645																				182	140	225			278	216					132					12	99	
mPJM 80/140	0,75/0,87		473																															80						44	
mPJM 80/140		5,5/6,3	645	182	140	225	60	368		278	216	128	110		343		132						99																		
mPJM 80/140		7,5/8,6	683	220																												80					12	110			
mPJM 80/150	0,75/0,87		473																									90						44							
mPJM 80/150	1,1/1,3		507																															51							
mPJM 80/150		5,5/6,3	645	182	140	225				278	216					132							99																		
mPJM 80/150		7,5/8,6	683	220																												90				12	110				
mPJM 80/150		11,0/12,7	748	256	210	264					305												254			365	160							15	142						
mPJM 80/160	1,1/1,3		507																																51						
mPJM 80/160		7,5/8,6	683	220	140	225			278	216			343									12	110																		
mPJM 80/160		11,0/12,7	784	256	210	264			305	254			365	160								15	142																		
mPJM 80/170	1,1/1,3		544	185	150	70,5				235	200	138	130		370	90	140	175					59																		
mPJM 80/170	1,5/1,8																						690	220	140	232			278	216			390	160					14	61	
mPJM 80/170		7,5/8,6	781	256	210	261					278												216			370	132							12	119						
mPJM 80/170		11,0/12,7									305												254											15	154						

Typ pompy	Moc [kW]		Wymiary [mm]																	Masa [kg]	
	1400/1700	2900/3500	L	I	I1	I2	I3	B	b	b1	b2	b3	H	h	h1	h2	D1	D2	d		
	Obroty [min ⁻¹]																				
mPJM 80/180	1,5/1,8		529	185	150	70,5	60	368	235	200	138	130	390	160	140	175	100	80	14	61	
mPJM 80/180		11,0/12,7	781	256	210	261			305	254									15	154	
mPJM 80/190	1,5/1,8		529	185	150	70,5			235	200									14	61	
mPJM 80/190	2,2/2,6		585						305	254									15	154	
mPJM 80/190		11,0/12,7	781	256	210	262			305	254									15	169	
mPJM 80/190		15,0/17,2																		61	
mPJM 80/200	1,5/1,8		529	185	150	70,5	60	368	235	200	138	130	390	160	140	175	100	80	14	72	
mPJM 80/200	2,2/2,6		585						305	200									14	72	
mPJM 80/200		11,0/12,7	781	256	210	261			305	254									15	154	
mPJM 80/200		15,0/17,2																		169	
mPJM 80/215	2,2/2,6		589			62,5														61	
mPJM 80/215	3,0/3,6																			72	
mPJM 80/215		15,0/17,2	785	256	210	263	60	60	305	254	160	150	410	100	165	190	100	80	15	154	
mPJM 80/215		18,5/21,3	829	300	254														15	178	
mPJM 80/230	3,0/3,6		589			62,5														84	
mPJM 80/230		15,0/17,2	785	256	210															92	
mPJM 80/230		18,5/21,3	829	300	254															193	
mPJM 80/230		22,0/25,3	878	320	241	276														193	
mPJM 80/250	3,0/3,6		589			62,5	60	60	350	279	160	150	410	100	165	190	100	80	15	228	
mPJM 80/250	4,0/4,8		597																	84	
mPJM 80/250		18,5/21,3	829	300	254	263			305	254									15	193	
mPJM 80/250		22,0/34,0	878	320	241	276			350	279									15	228	
mPJM 80/250		30,0/34,0	1003	380	305	308			400	318									19	316	
mPJM 80/270	5,5/6,6		685	182	140	253			278	216									192	180	470
mPJM 80/270		22,0/25,3	917	320	241	305	350	279	15	263											
mPJM 80/270		30,0/34,0	1022	380	380	317	400	318	19	345											
mPJM 80/270		37,0/41,0					400	318	19	365											
mPJM 80/290	5,5/6,6		685	182	140	253	278	216	12	158											
mPJM 80/290		30,0/34,0	1022	380	400	318	400	318	19	345											
mPJM 80/290		37,0/41,0					400	318	19	365											
mPJM 80/290		45,0/51,0	1067	380	311	333	445	356	19	436											
mPJM 80/315	5,5/6,6		685	182	140	253	70	472	278	216	192	180	470	132	195	220	100	80	12	158	
mPJM 80/315	7,5/9,0		723	220	178	253			400	318									12	169	
mPJM 80/315		37,0/41,0	1022	380	305	317			445	356									19	365	
mPJM 80/315		45,0/51,0	1067		311	333			445	356									24	519	
mPJM 80/315		55,0/62,0	1172	420	349	362			495	406											
mPJM 100/140	1,1/1,3		527						395										278	216	150
mPJM 100/140		7,5/8,6	703	220	140	230						120									
mPJM 100/150	1,1/1,3		527				278	216				60									
mPJM 100/150		7,5/8,6	703	220	140	230	305	254				120									
mPJM 100/150		11,0/12,7	804	256	210	269	215	180				151									
mPJM 100/160	1,5/1,8		552	165	130	68,5	215	180				63									
mPJM 100/160		11,0/12,7	804	256	210	269	305	254	192	180	409	160	175	180	125	100	15	151			
mPJM 100/170	2,2/2,6		600	185	150	75,5	235	200									14	82			
mPJM 100/170		15,0/17,2	796	256	210	266	305	254									15	179			
mPJM 100/180	2,2/2,6		600	185	150	75,5	235	200									14	82			
mPJM 100/180		15,0/17,2	796	256	210	266	305	254									15	179			
mPJM 100/180		18,5/21,3	840	300	254	266												194			
mPJM 100/190	2,2/2,6		600	185	150	75,5	65	410	235	200	160	140	409	160	175	180	125	100	14	83	
mPJM 100/190	3,0/3,6								305	254									15	194	
mPJM 100/190		18,5/21,3	840	300	254	266			305	254									14	83	
mPJM 100/190		22,0/25,3	889	320	241	279			350	279									15	194	
mPJM 100/200	2,2/2,6		600	185	150	75,5			235	200									14	83	
mPJM 100/200	3,0/3,6								350	279									15	229	
mPJM 100/200		22,0/25,3	889	320	241	279	65	410	350	279	160	140	409	160	175	180	125	100	19	308	
mPJM 100/200		30,0/34,0	1014	380	305	311			400	318											
mPJM 100/215	3,0/3,6		579			63,5			380											98	
mPJM 100/215	4,0/4,8		587						350	279										106	
mPJM 100/215		22,0/25,3	868	320	241	257			350	279										235	
mPJM 100/215		30,0/34,0	1013	380	305	309			400	318										324	
mPJM 100/230	4,0/4,8		587			63,5				106											
mPJM 100/230	5,5/6,6		676	182	140	245	438		278	216	168	160	443	132	176	210	125	100	12	130	
mPJM 100/230		30,0/34,0	1013	380	305	309			400	318										324	
mPJM 100/230		37,0/41,0																		344	
mPJM 100/250	5,5/6,6		676	182	140	245			278	216										130	
mPJM 100/250	7,5/9,0		714	220	178	245														141	
mPJM 100/250		30,0/34,0	1013	380	305	309			400	318										324	
mPJM 100/250		37,0/41,0					445	356		492	225								19	344	
mPJM 100/250		45,0/51,0	1058		311	325															

POMPY W WYKONANIU SPECJALNYM

Typ pompy	Moc [kW]		Wymiary [mm]																Masa [kg]					
	1400/1700	2900/3500	L	I	I1	I2	I3	B	b	b1	b2	b3	H	h	h1	h2	D1	D2		d				
	Obroty [min ⁻¹]																							
mPJM 100/270	5,5/6,6		693	182	140	256	72	500	278	216	210	190	499	132	202	240	125	100	12	168				
mPJM 100/270	7,5/9,0		731	220	178									400					318	132	19	179		
mPJM 100/270		37,0/41,0	1030	380	305									320					200	24	375			
mPJM 100/270		45,0/51,0	1075		311	336			445	356			522	225					19	446				
mPJM 100/270		55,0/62,0	1180	420	349	365			495	406			547	250					24	529				
mPJM 100/290	7,5/9,0		731	220	178	256			278	216			132	160					12	179				
mPJM 100/290	11,0/13,2		832	256	210	295			305	254											15	213		
mPJM 100/290		45,0/51,0	1075	380	311	336			445	356											522	225	19	446
mPJM 100/290		55,0/62,0	1180	420	349	365			495	406			547	250					24	529				
mPJM 100/290		75,0/84,0	1240	520	368	387			560	457			577	280					24	654				
mPJM 100/315	7,5/9,0		731	220	178	256			278	216			132	160					12	179				
mPJM 100/315	11,0/13,2		832	256	310	295			305	254											15	213		
mPJM 100/315		55,0/62,0	1180	420	349	365			495	406											547	250	24	529
mPJM 100/315		75,0/84,0	1240	520	368	387			560	457			577	280					24	654				
mPJM 100/315		90,0/99,0			419																724			
mPJM 125/170	3,0/3,6		614	185	150	79,5	75	439	235	200	164	150			438	160	178	200					14	95
mPJM 125/170		18,5/21,3	854	300	254	270			305	254			15	205										
mPJM 125/170		22,0/25,3	903	320	241	283			350	279			180	240										
mPJM 125/180	3,0/3,6		614	185	150	79,5			235	200			160	14	95									
mPJM 125/180		22,0/25,3	903	320	241	283			350	279			180	15	240									
mPJM 125/180		30,0/34,0	1028	380	305	315			400	318			200	19	319									
mPJM 125/190	4,0/4,8		622	185	150	79,5			235	200			160	14	103									
mPJM 125/190		30,0/34,0	1028	380	305	315			400	318			200	19	319									
mPJM 125/190		37,0/41,0							460	200			339											
mPJM 125/200	4,0/4,8		622	185	150	79,5			235	200			438	160	14	103								
mPJM 125/200	5,5/6,6		681	182	140	241			278	216				132	12	131								
mPJM 125/200		30,0/34,0	1028	380	305	315			400	318			200	19	319									
mPJM 125/200		37,0/41,0											339											
mPJM 125/215	5,5/6,6		695	182	140	250	80	470	278	216	175	150	465	132	185	220	150	125	12	153				
mPJM 125/215	7,5/9,0		733	220	178	250			400	318				200					19	164				
mPJM 125/215		37,0/41,0	1032	380	305	314			445	356				225					12	366				
mPJM 125/215		45,0/51,0	1077		311	330			445	356			225	19					436					
mPJM 125/230	5,5/6,6		695	182	140	250			278	216			132	12					153					
mPJM 125/230	7,5/9,0		733	220	178	250			445	356			505	225					19	164				
mPJM 125/230		45,0/51,0	1077	380	311	330															505	225	19	436
mPJM 125/230		55,0/62,0	1192	420	349	369															530	250	24	517
mPJM 125/250	7,5/9,0		733	220	178	250			278	216			465	132					12	164				
mPJM 125/250	11,0/13,3		814	256	210	269			305	254											160	15	198	
mPJM 125/250		45,0/45,0	1077	380	311	330			445	356											225	19	436	
mPJM 125/250		55,0/62,0	1192	420	349	369			495	406			530	250					24	517				
mPJM 125/250		75,0/84,0	1252	520	368	391			560	457			560	280					24	652				
mPJM 125/270	11,0/13,2		838	256	210	296	78	582	305	254	203	200	518	160	208	250			15	225				
mPJM 125/270		75,0/84,0	1246	520	368	388			560	457				280					24	666				
mPJM 125/270		90,0/99,0			419				736															
mPJM 125/290	11,0/13,0		838	256	210	296			305	254			160	15					225					
mPJM 125/290		75,0/84,0	1246	520	368	388			560	457			280	24					666					
mPJM 125/290		90,0/99,0			419				736															
mPJM 125/315	11,0/13,2		838	256	210	296			305	254			518	160					15	225				
mPJM 125/315	15,0/18,0		882	300	254																245			
mPJM 125/315		75,0/84,0	1246	520	368																388	560	457	280
mPJM 125/315		90,0/99,0			419	736																		

UWAGA: ze względu na możliwość zastosowania silników w wykonaniu morskim różnych producentów rzeczywiste moce silników przy częstotliwości 60Hz i obrotach 1700 i 3500min⁻¹ mogą nieznacznie odbiegać od podanych w tabeli.

ZMIANA PARAMETRÓW

Do wyznaczania parametrów pompy przy obrotach innych niż 1400 i 2900 min⁻¹ należy dokonać przeliczeń wg poniższych wzorów:

Wydajność

$$\frac{Q_1}{Q_2} \approx \frac{n_1}{n_2}$$

Wysokość podnoszenia

$$\frac{H_1}{H_2} \approx \left[\frac{n_1}{n_2} \right]^2$$

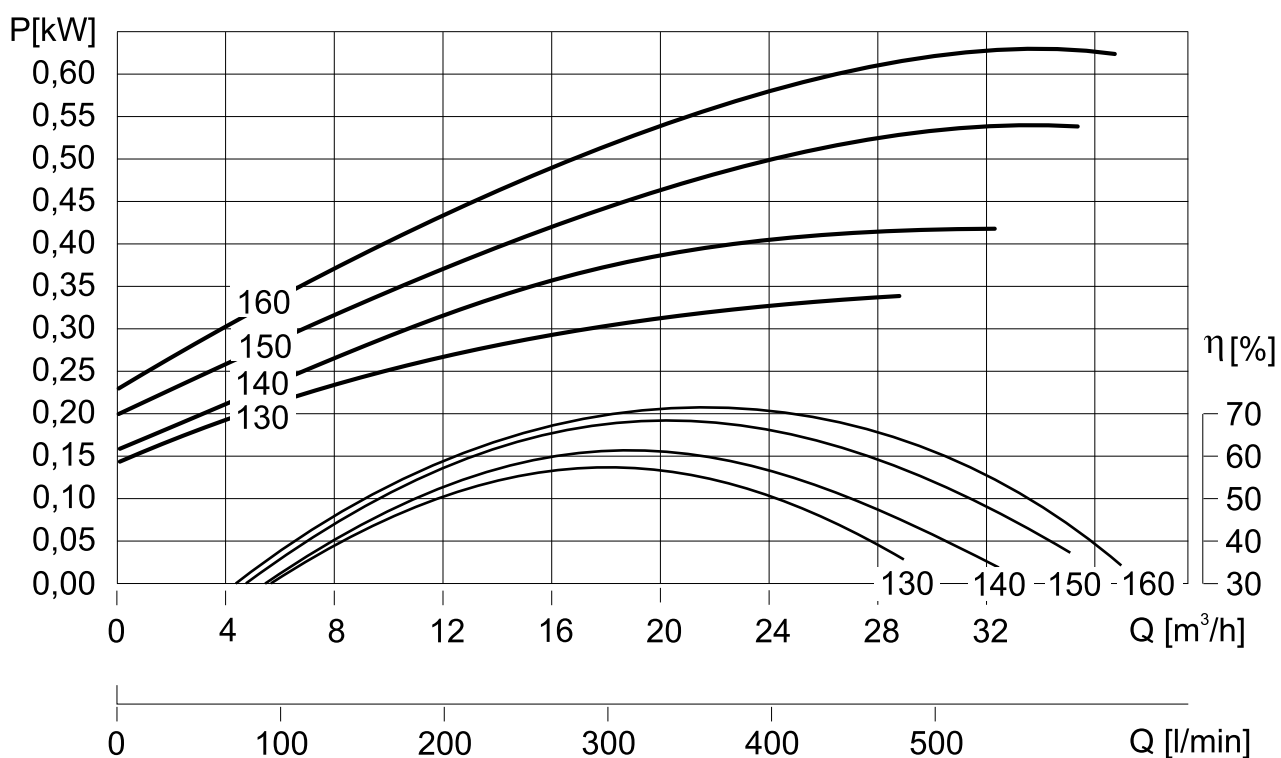
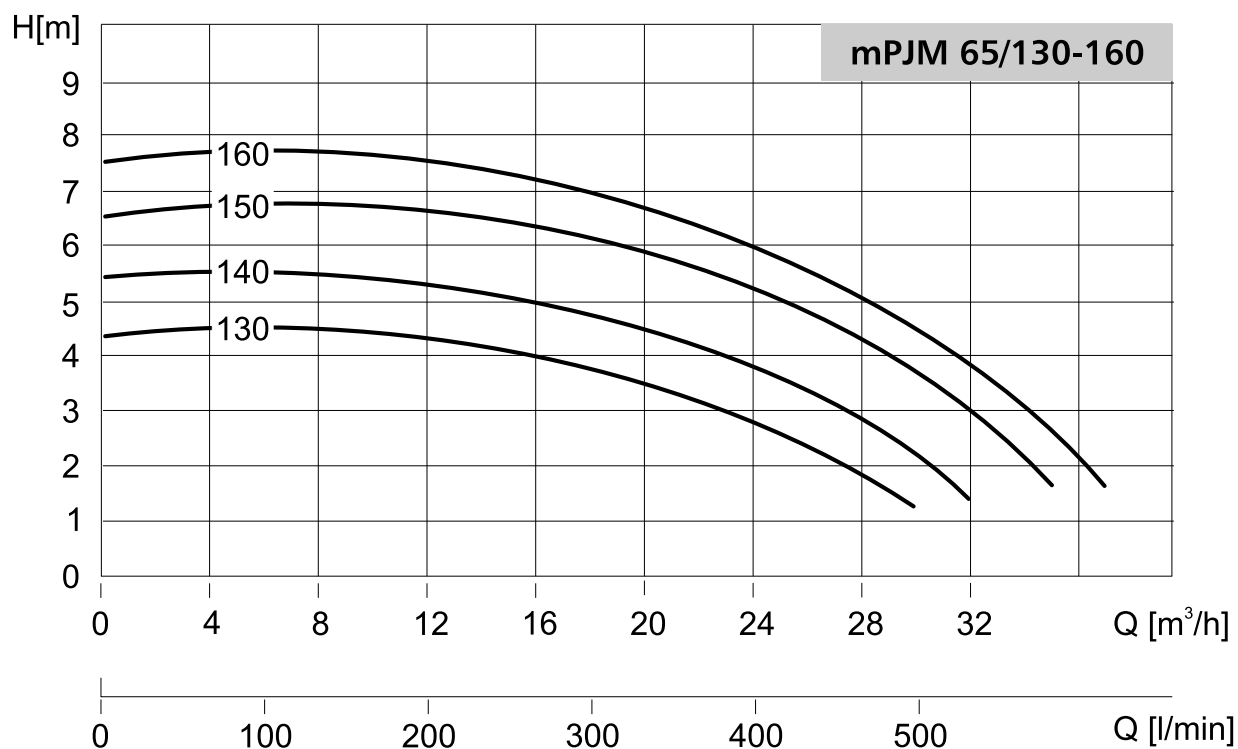
Zapotrzebowanie mocy

$$\frac{P_1}{P_2} \approx \left[\frac{n_1}{n_2} \right]^3$$

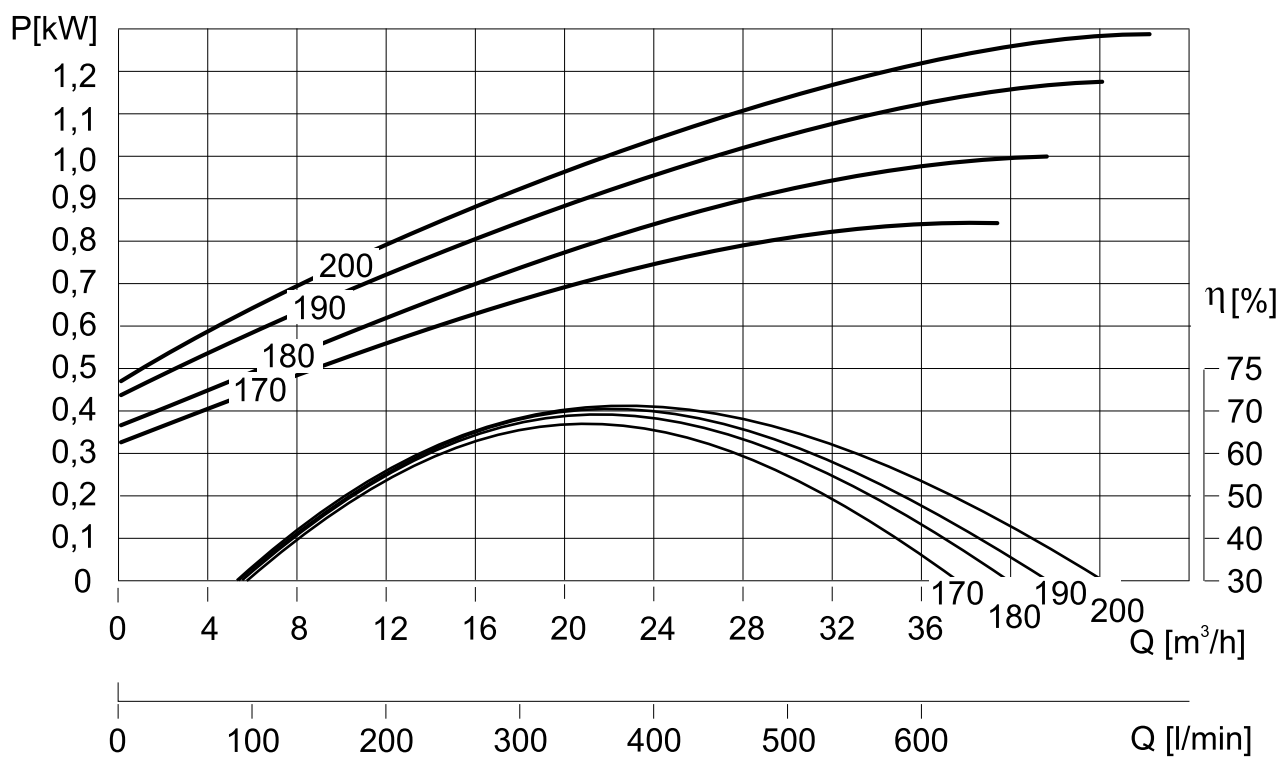
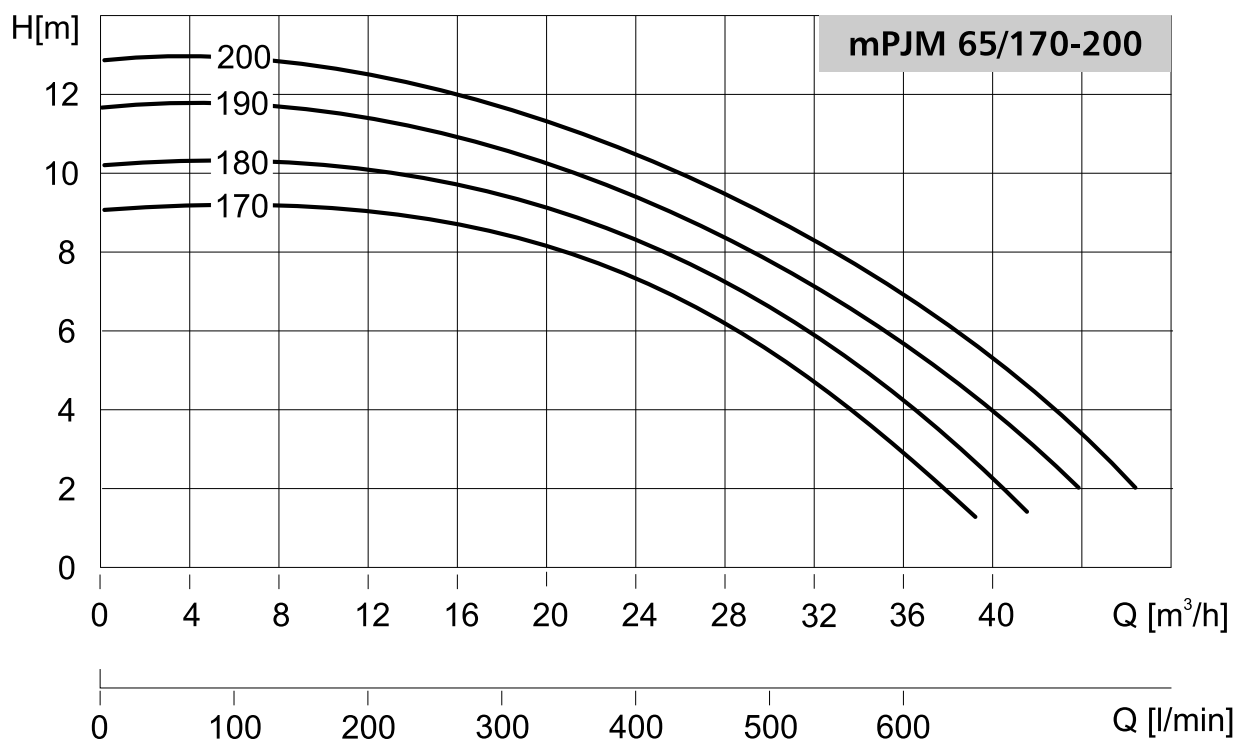
gdzie:

- Q1, H1, P1 parametry pompy przy obrotach n1
- Q2, H2, P2 parametry pompy przy obrotach n2

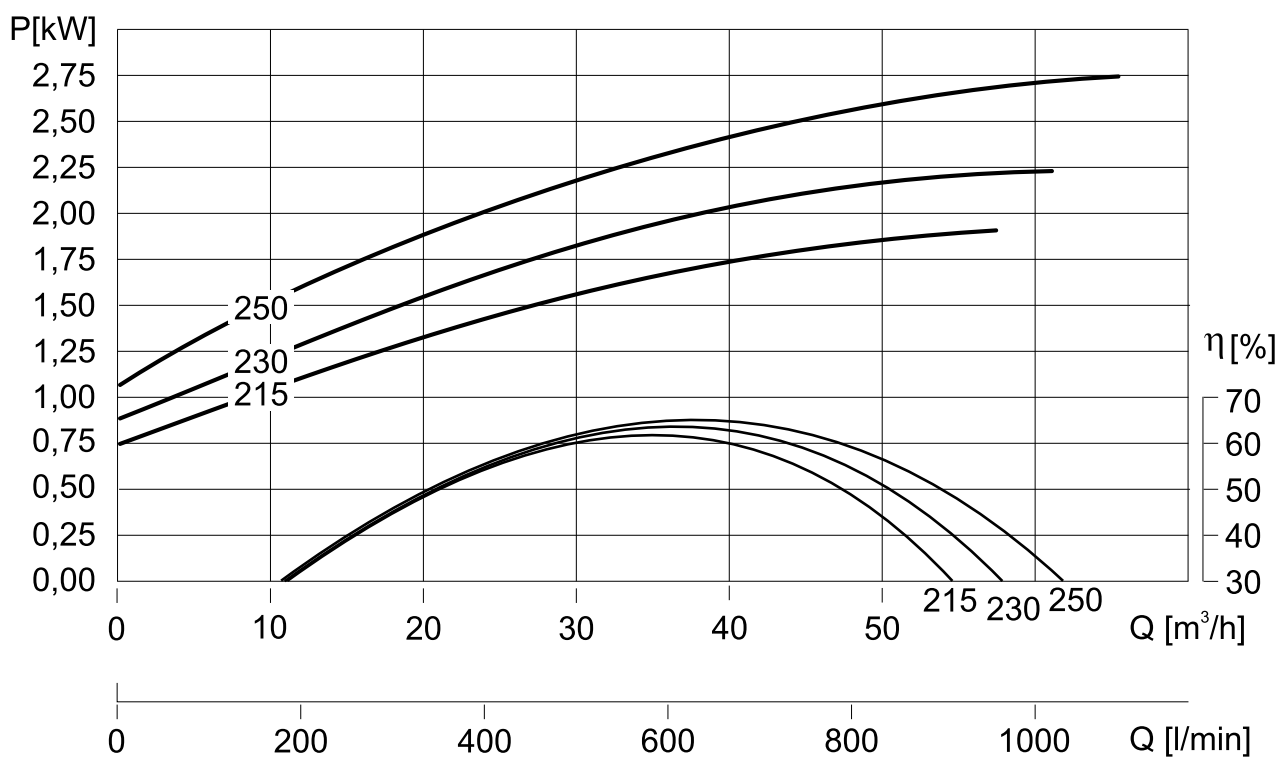
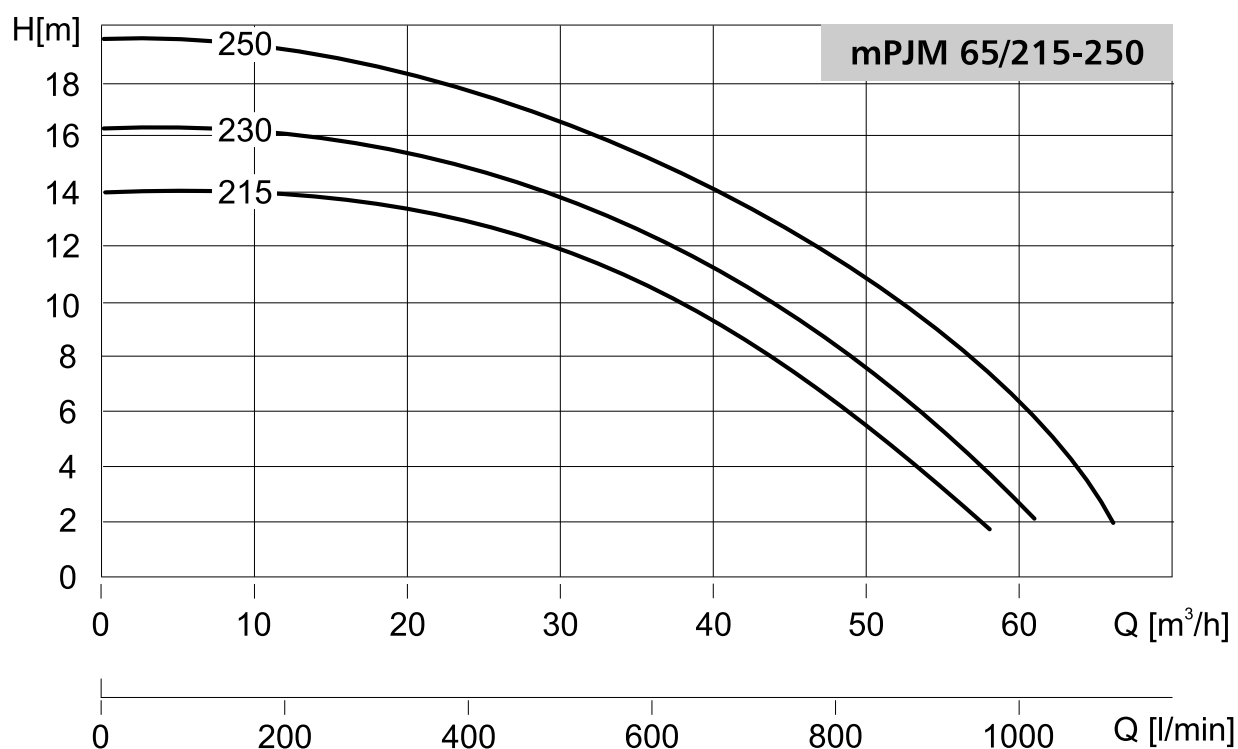
$n = 1400 \text{ min}^{-1}$



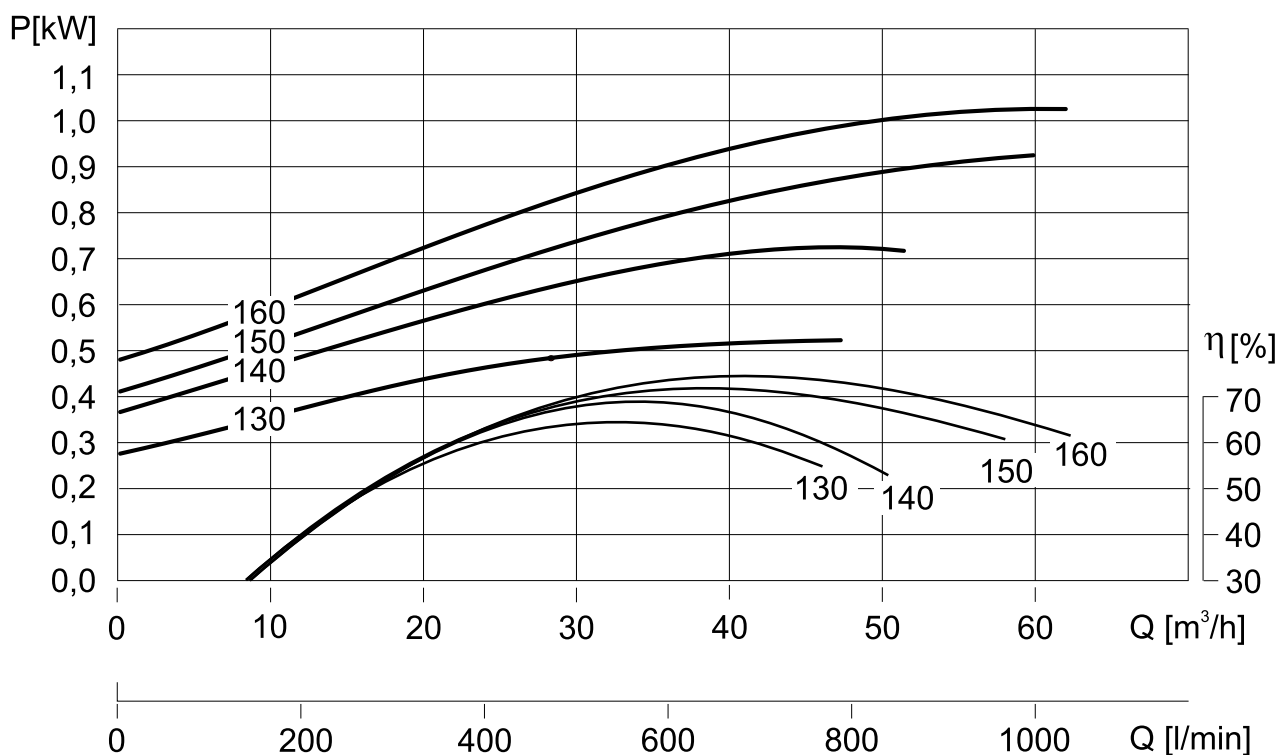
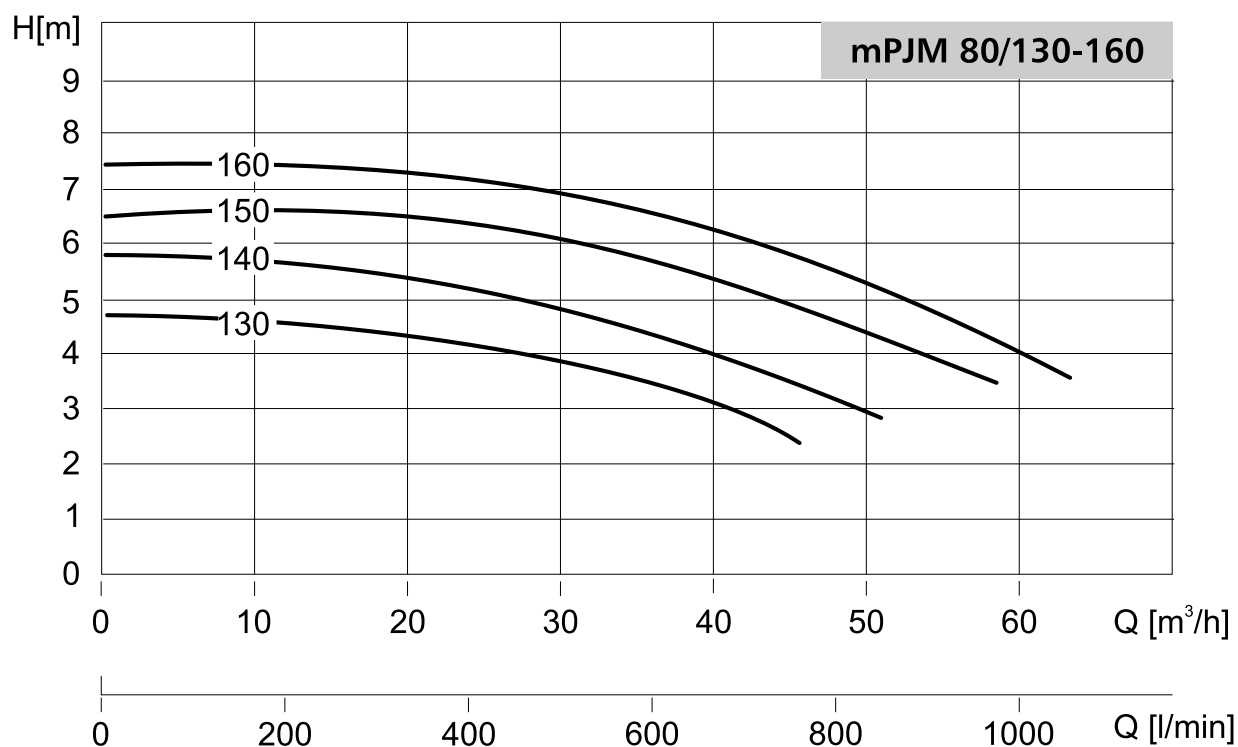
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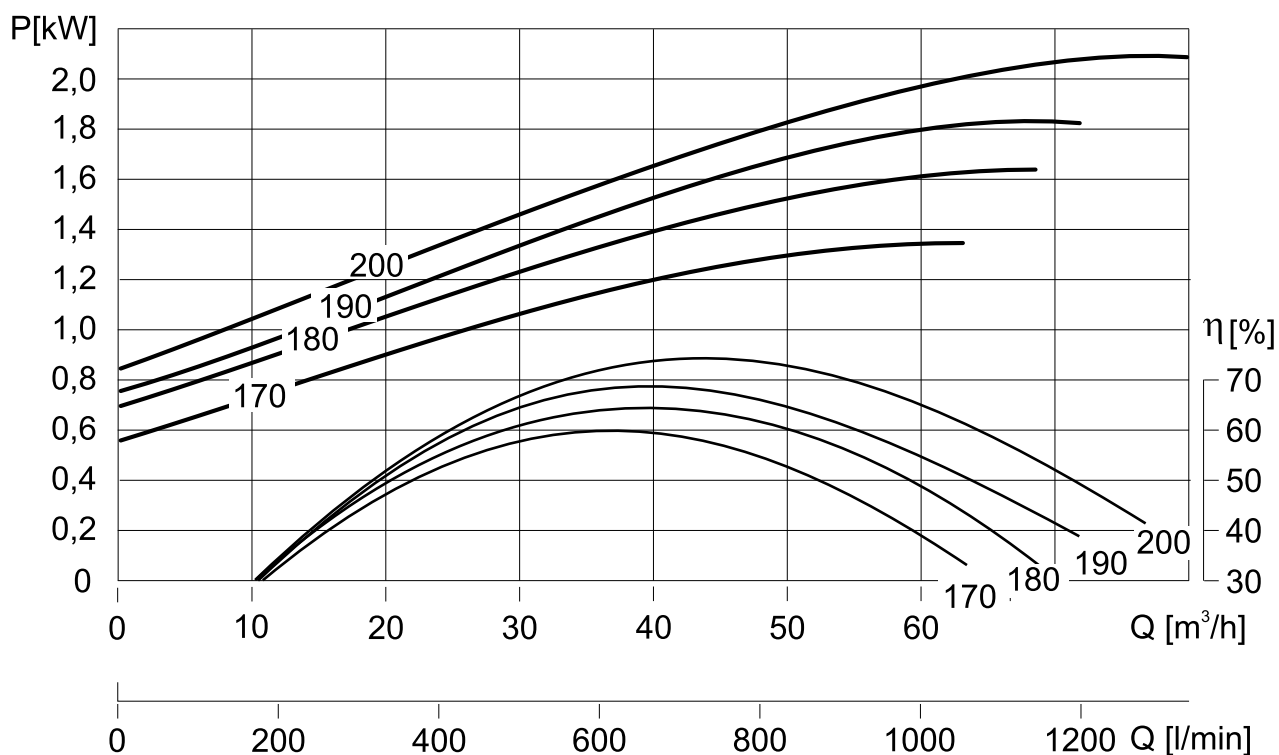
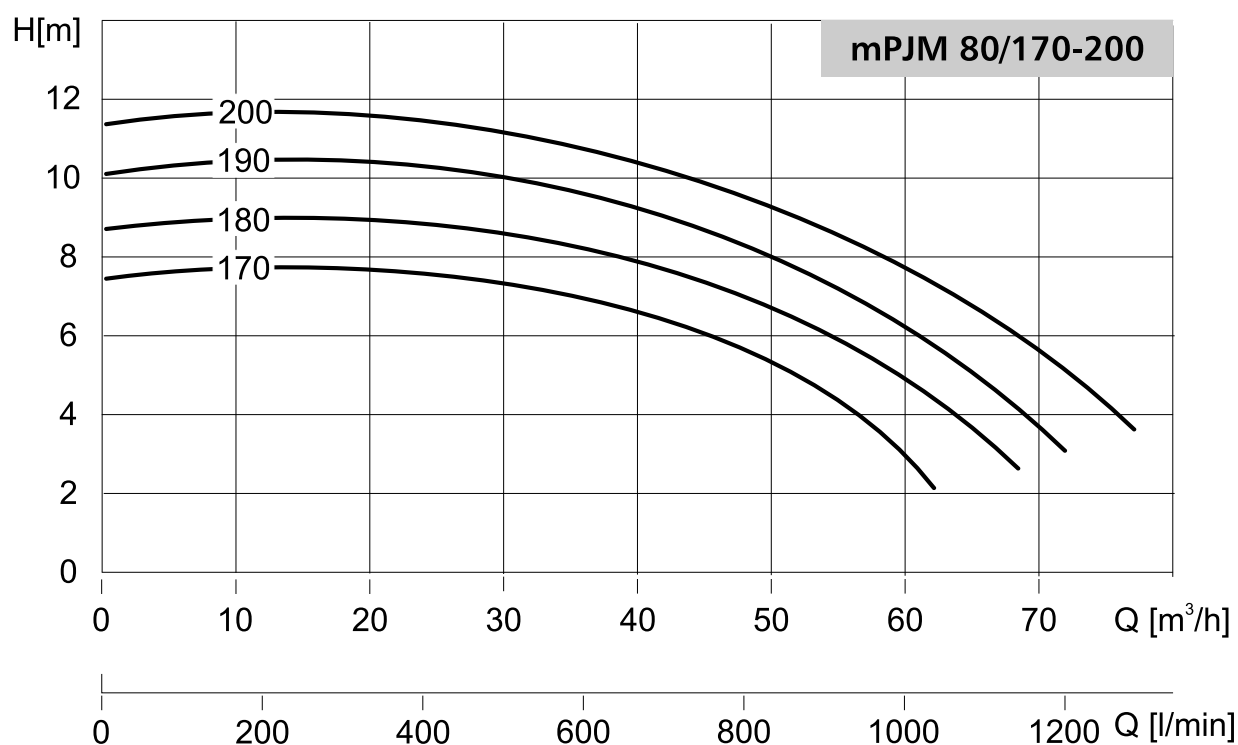
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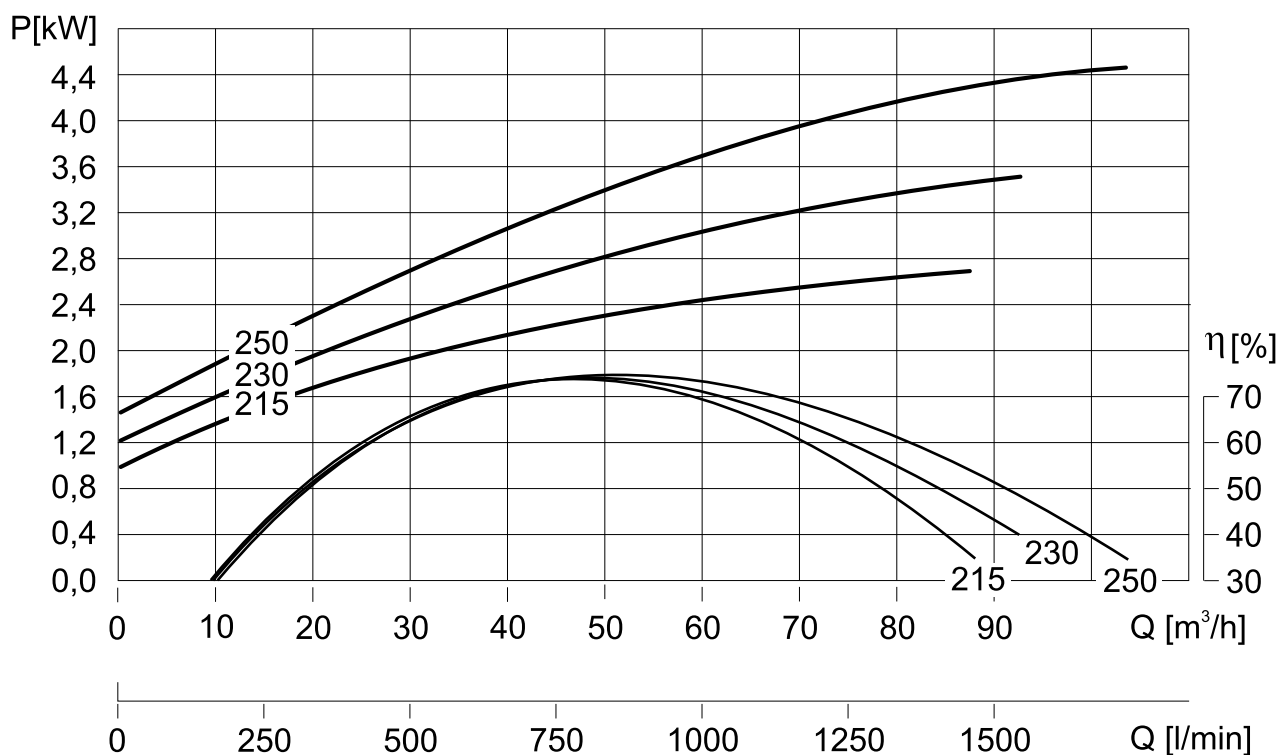
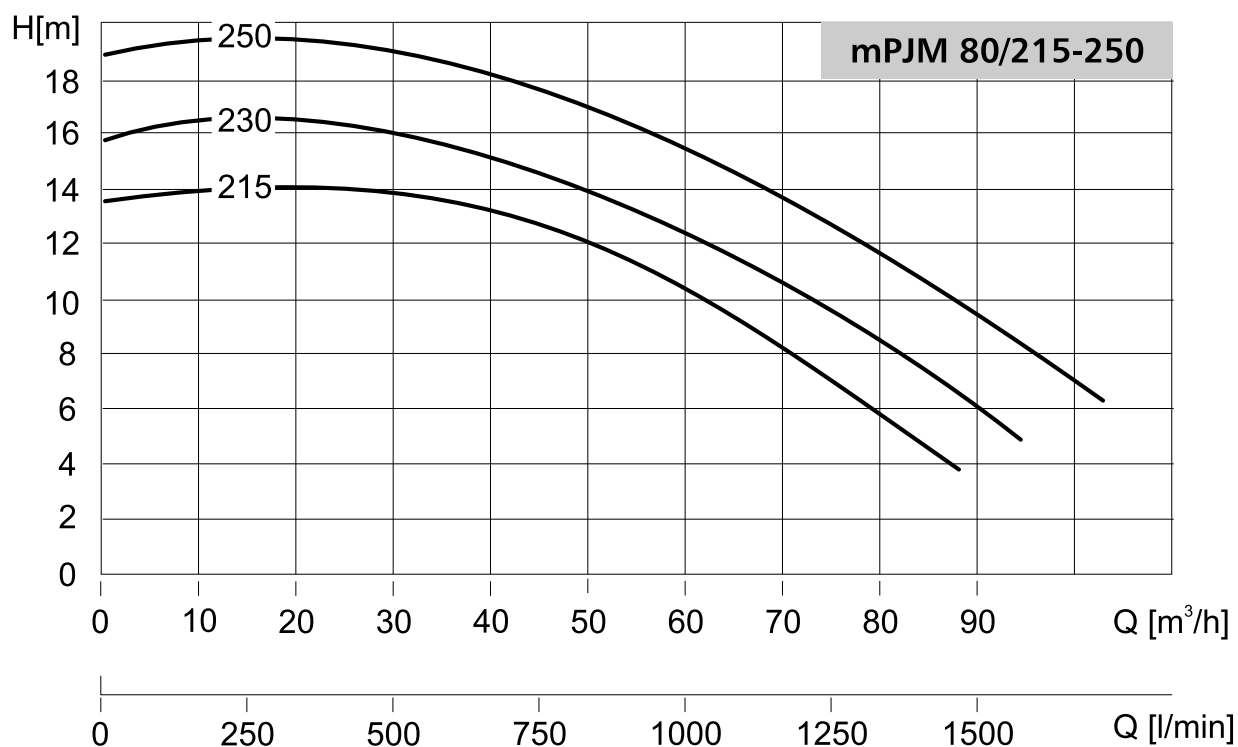
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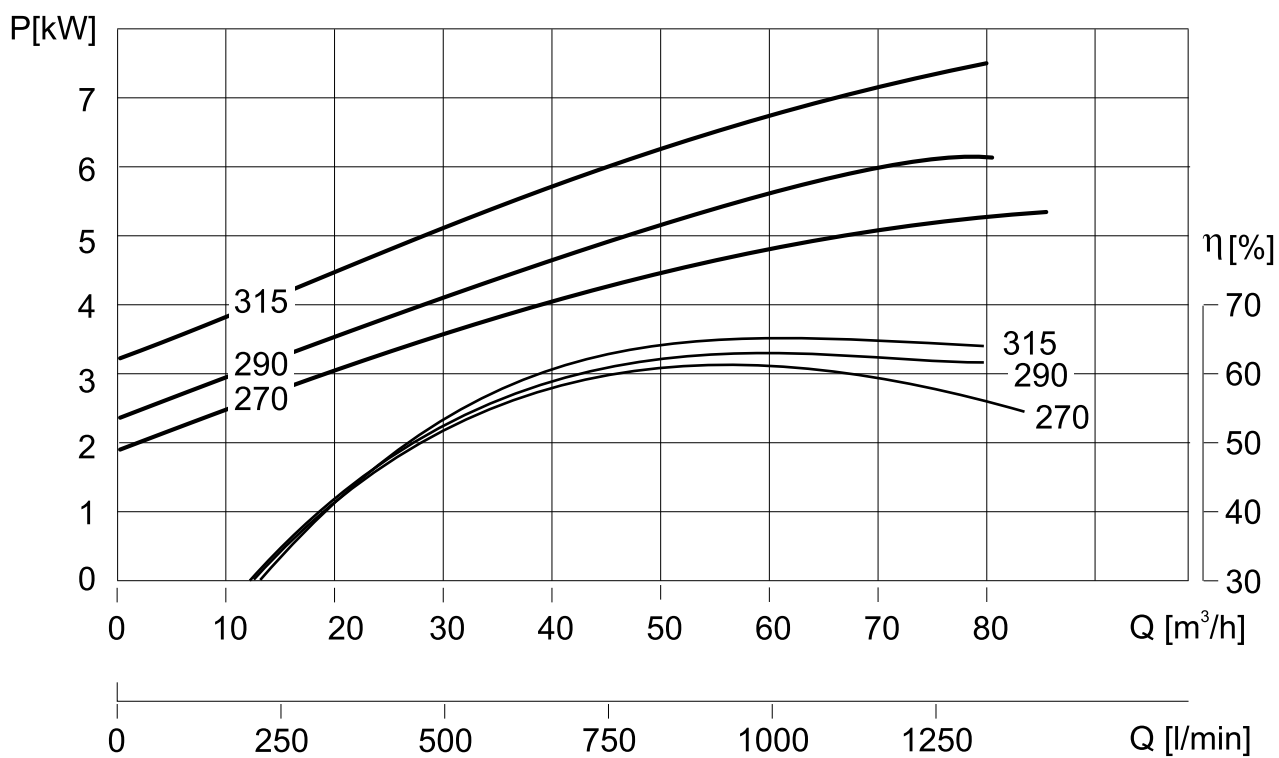
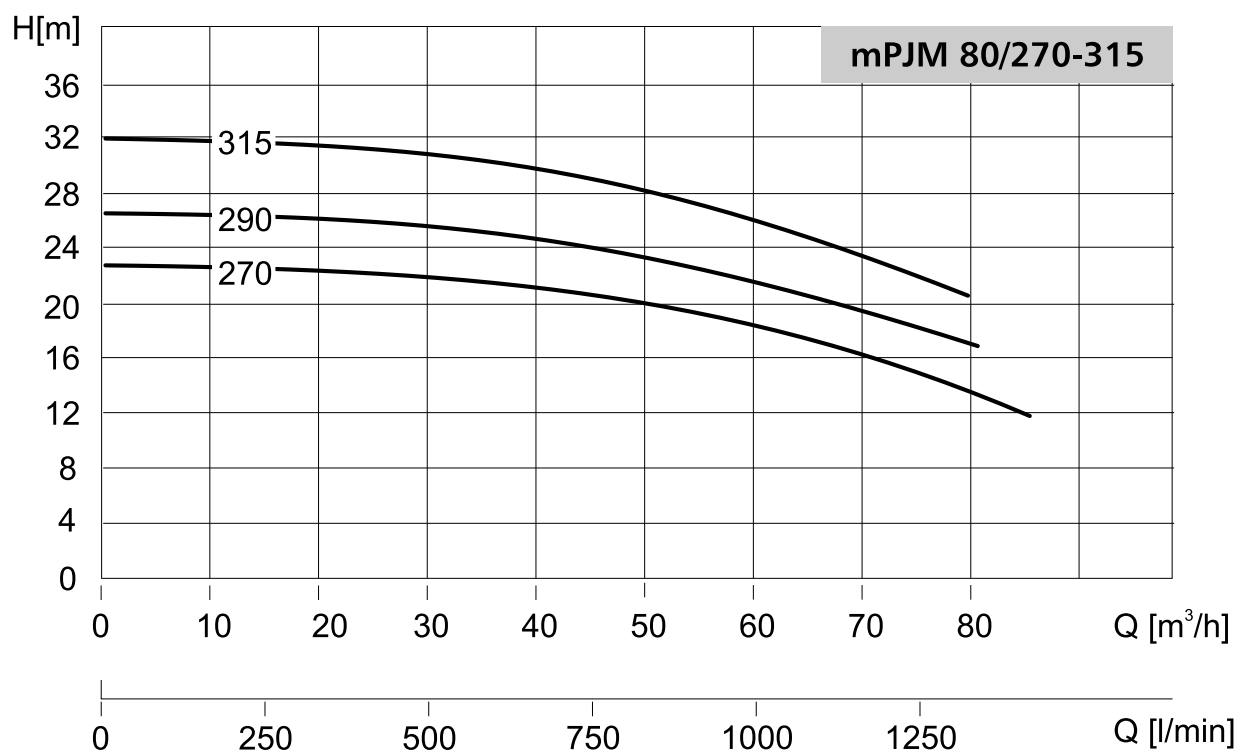
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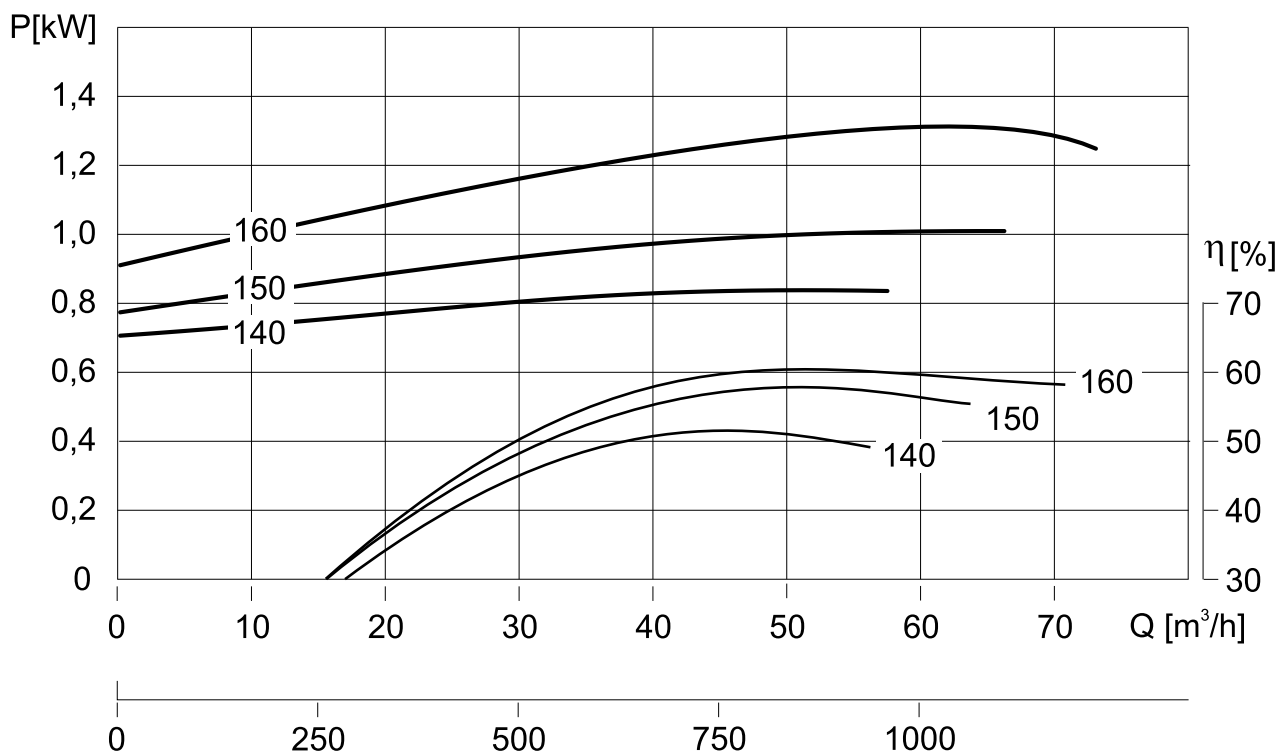
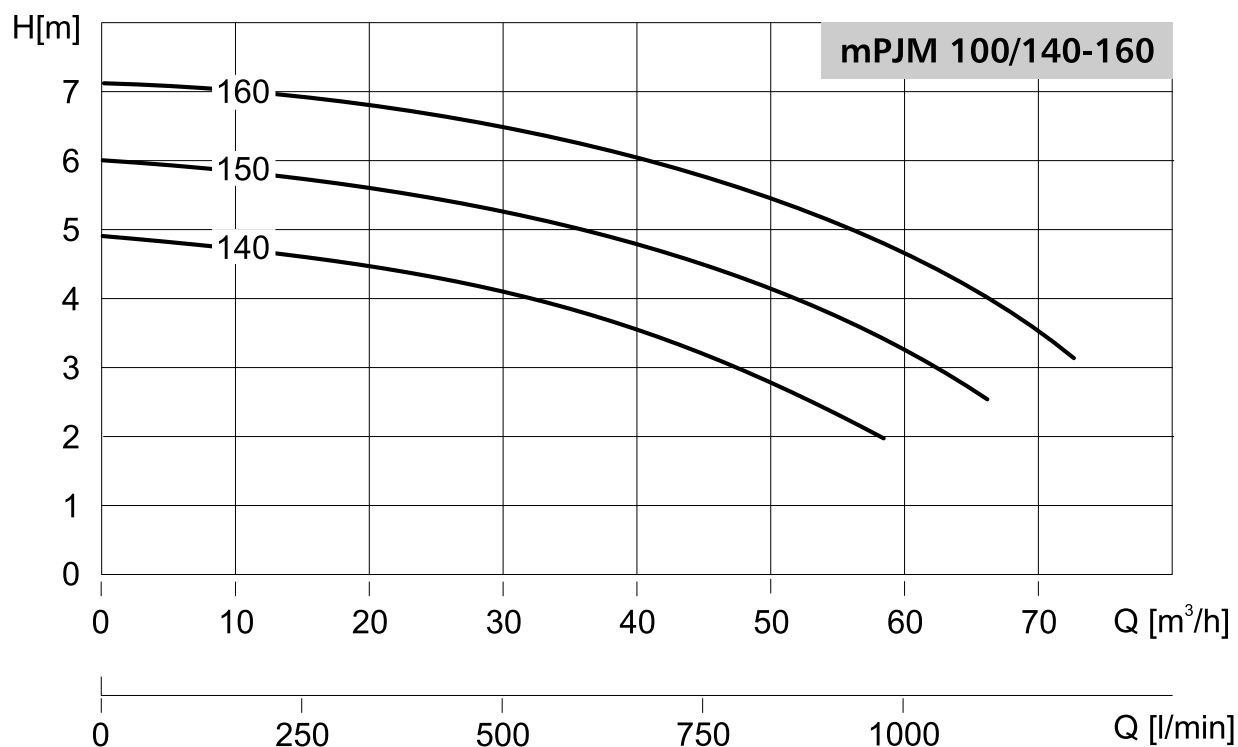
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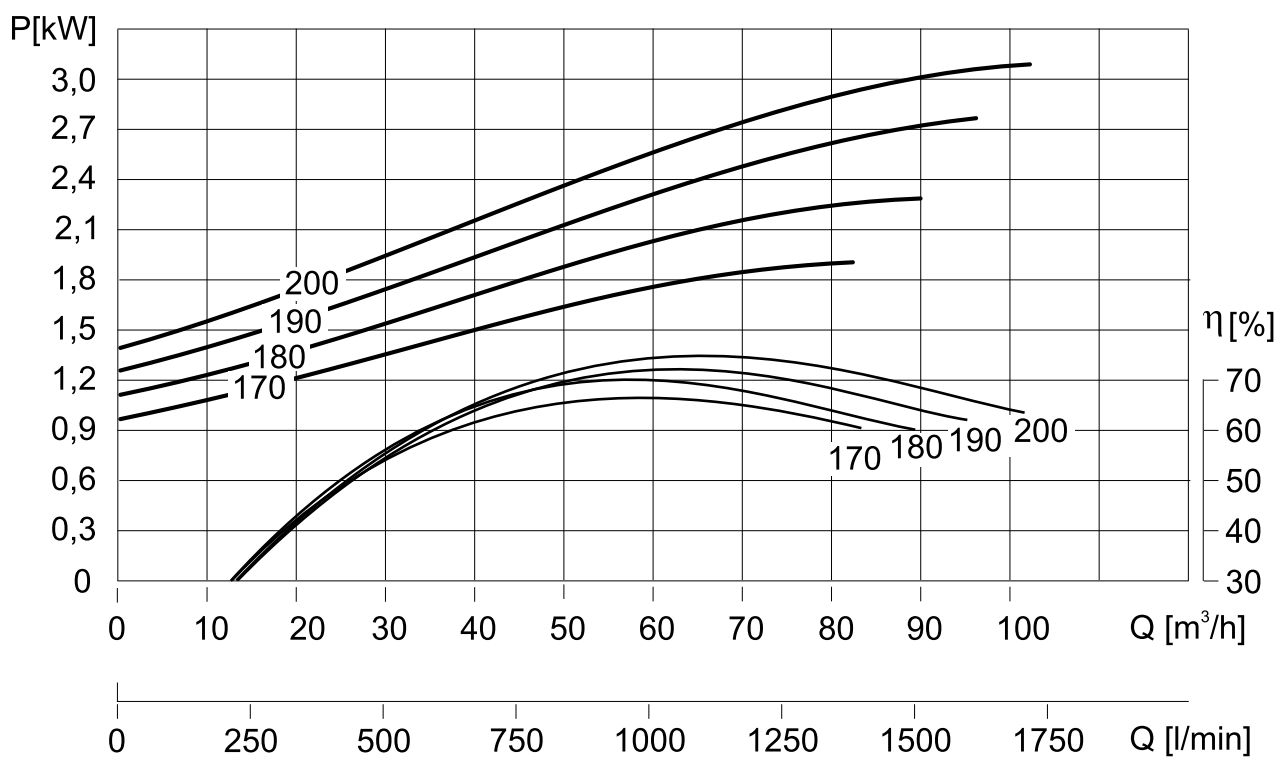
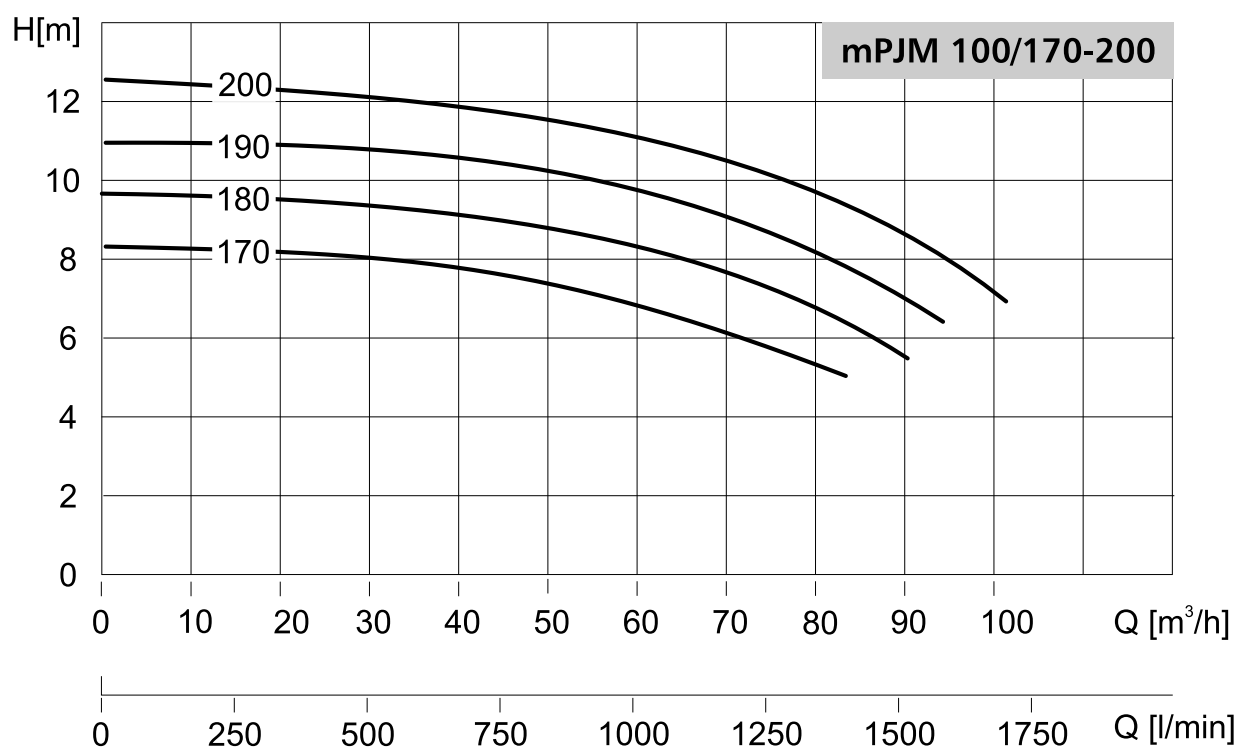
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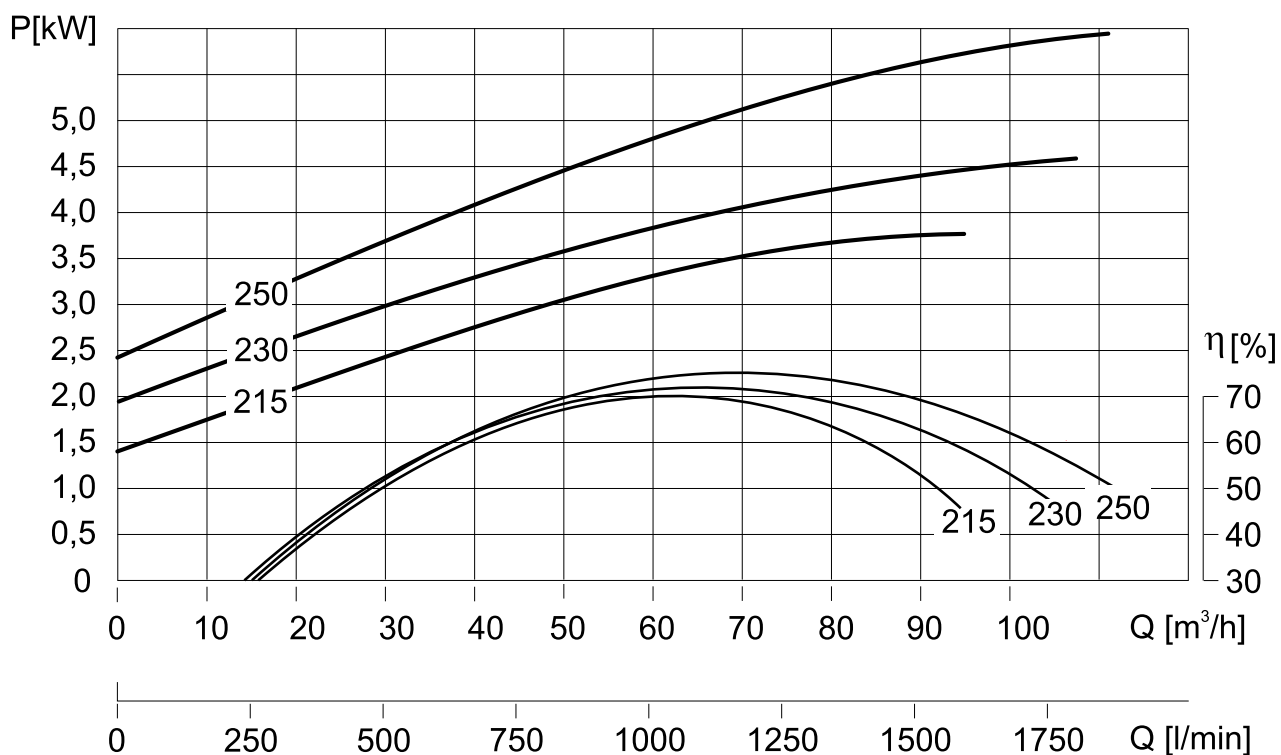
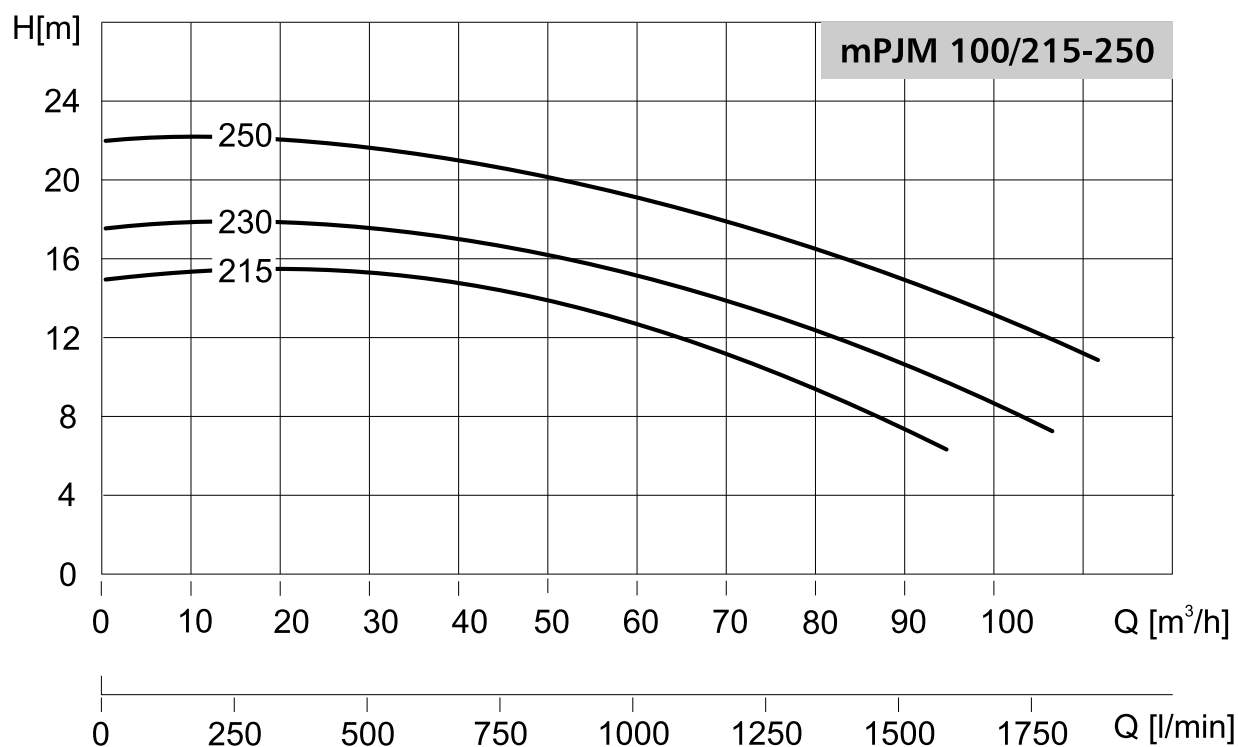
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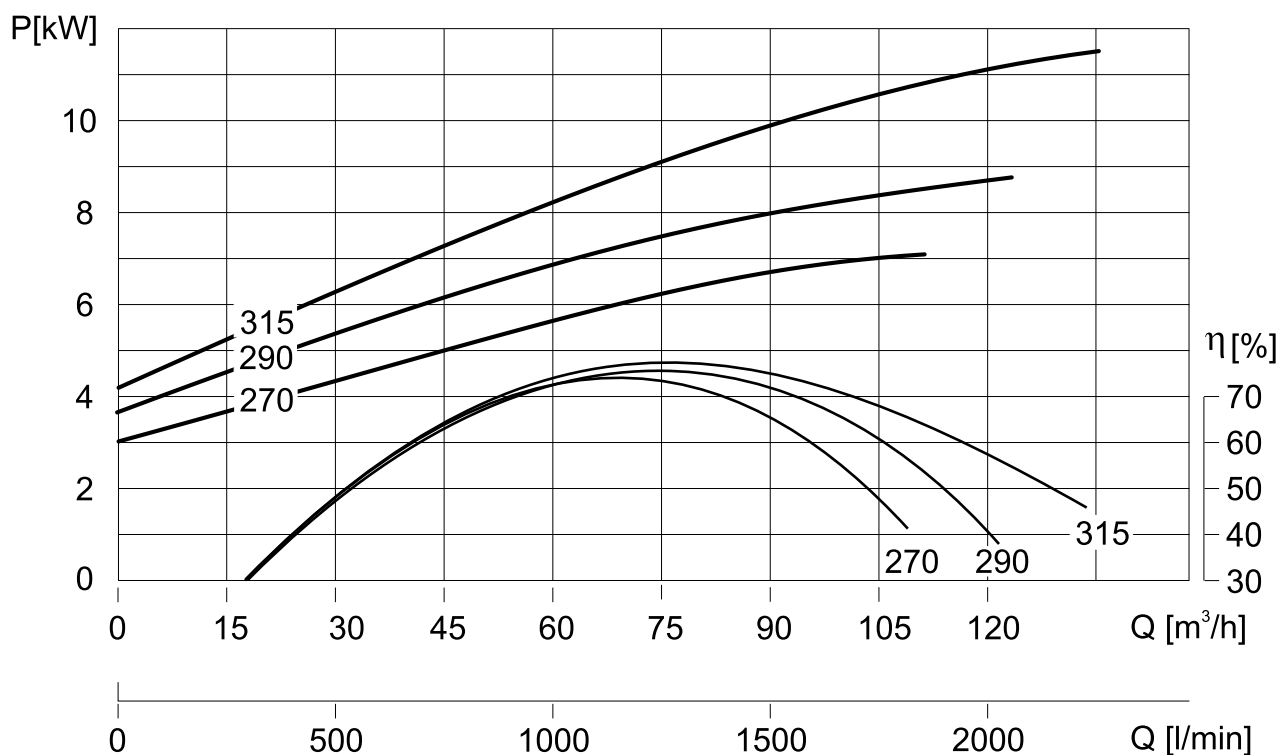
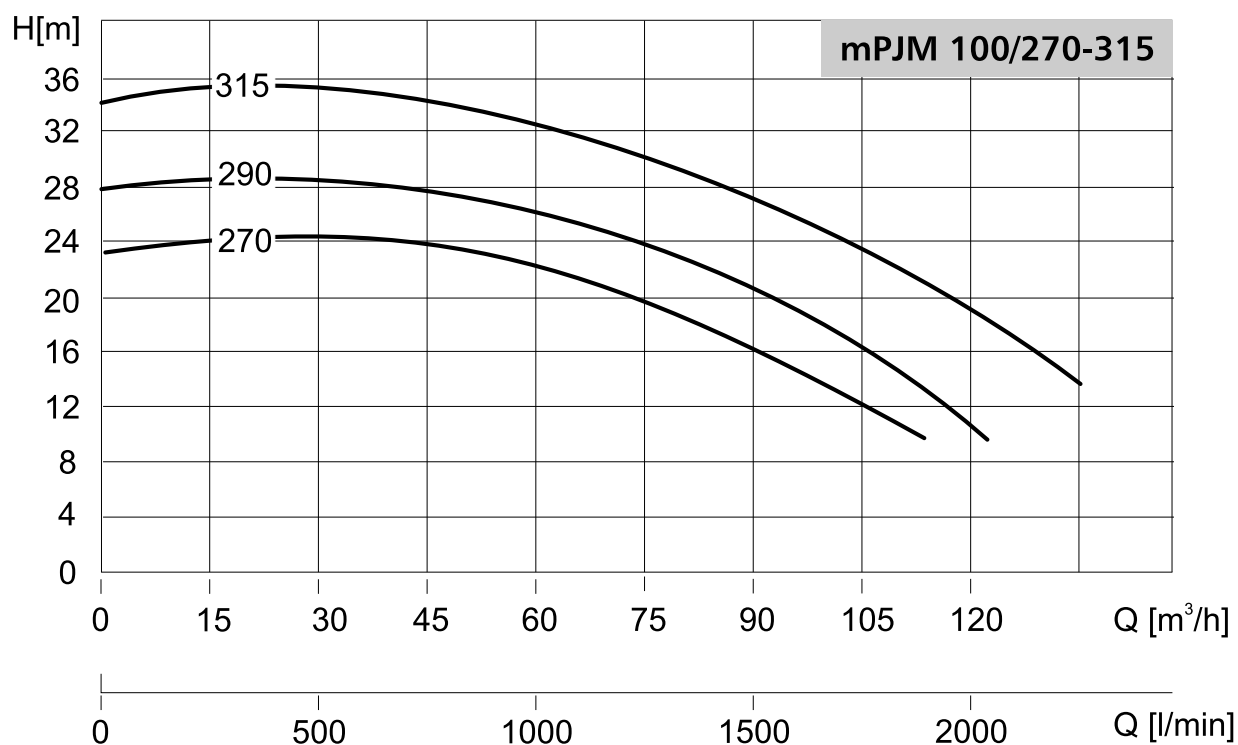
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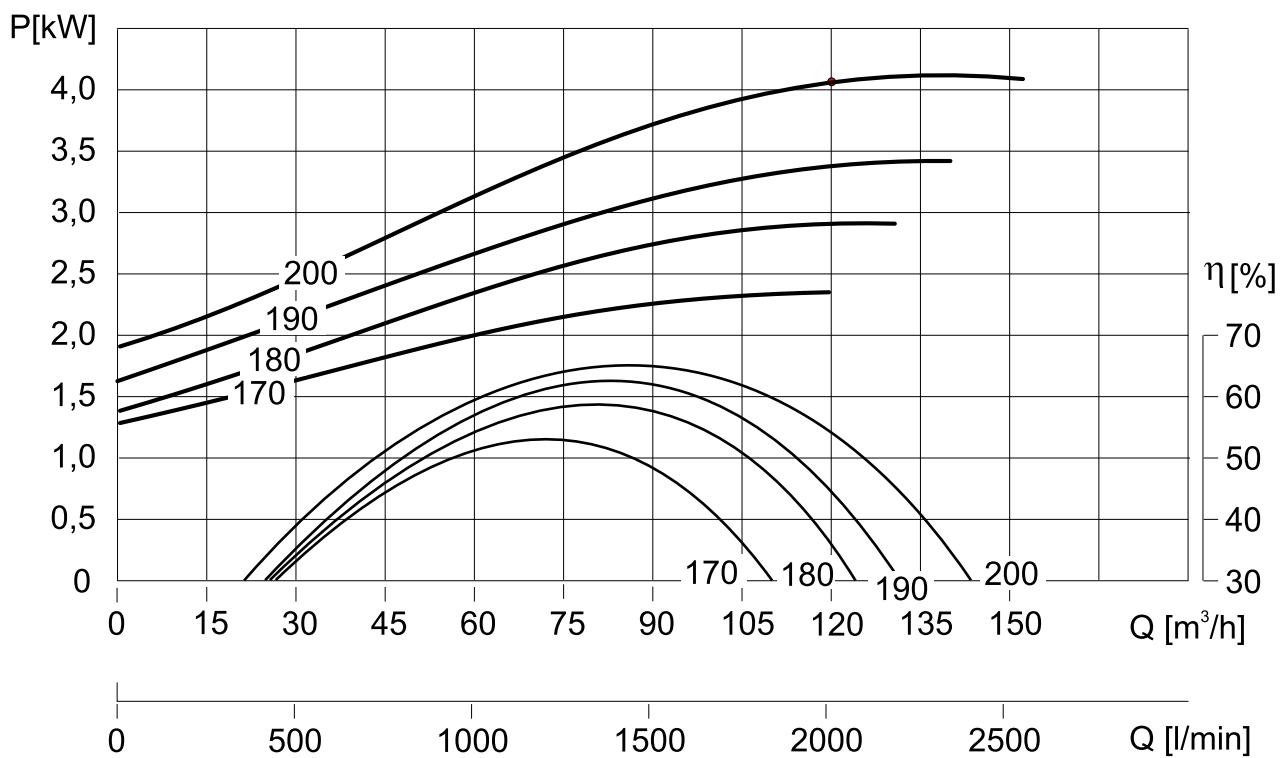
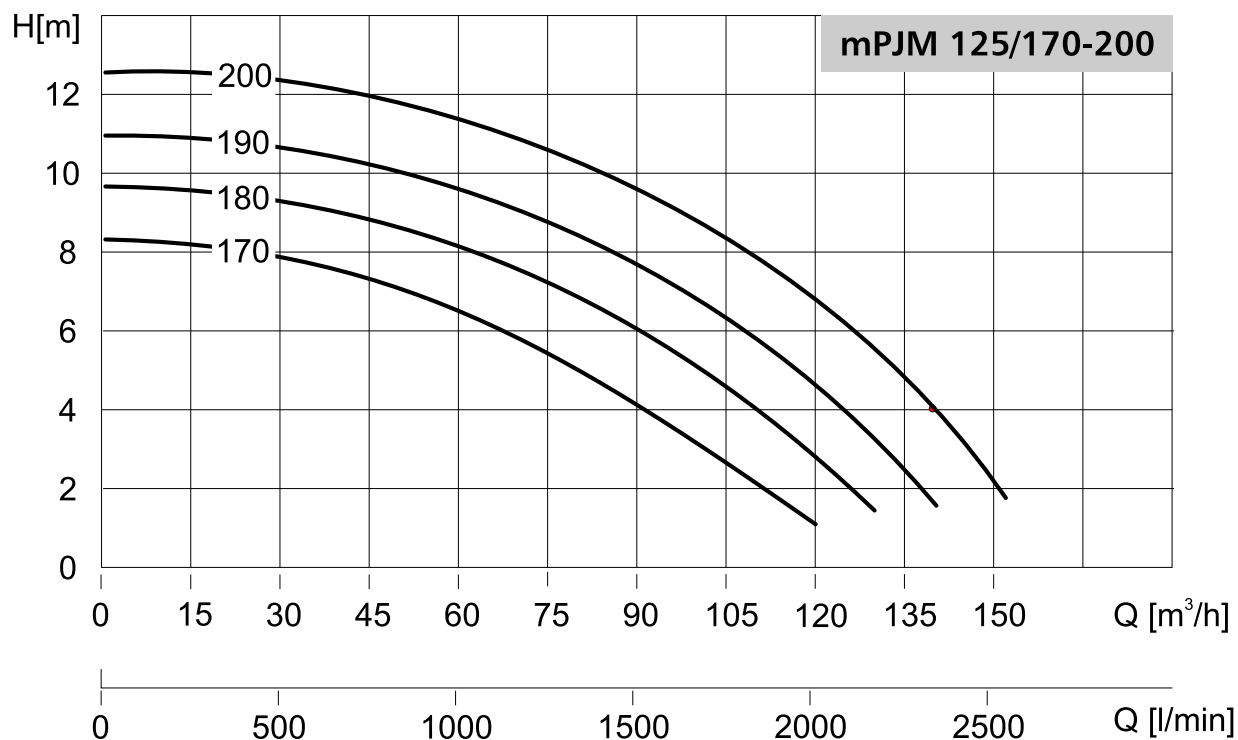
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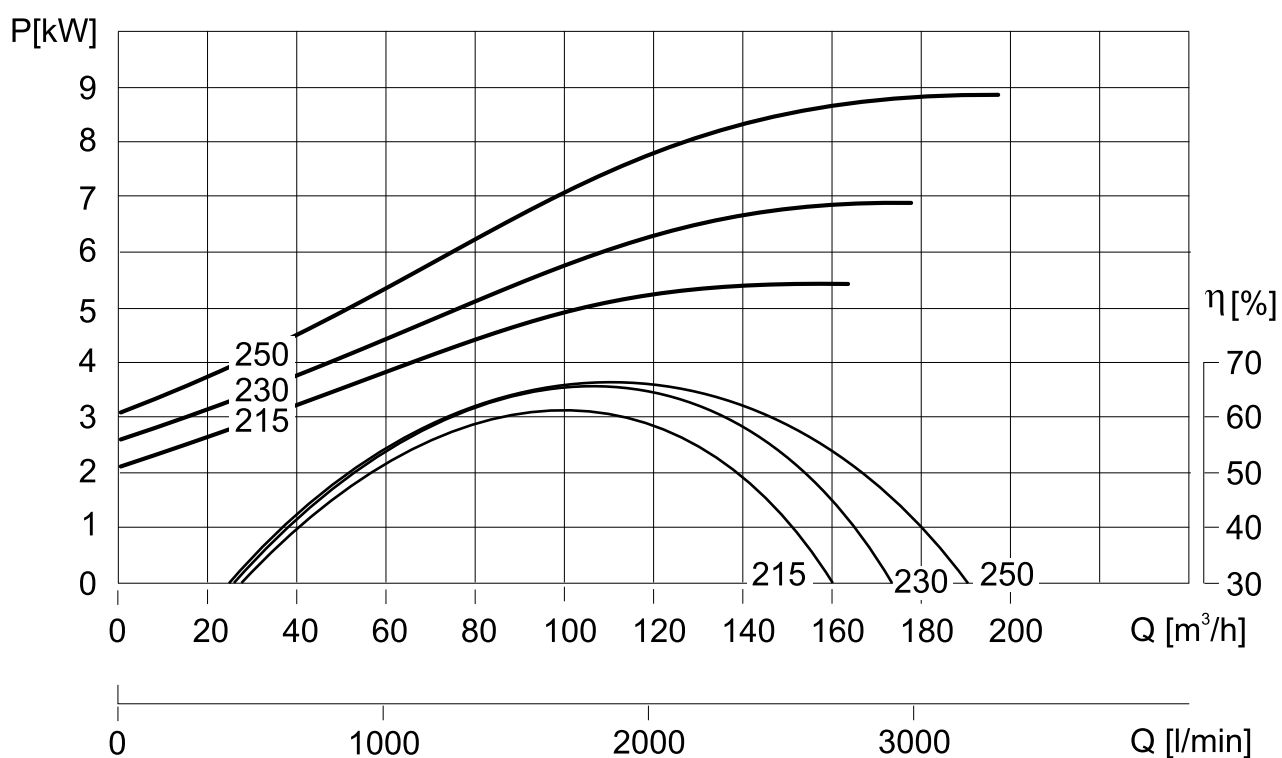
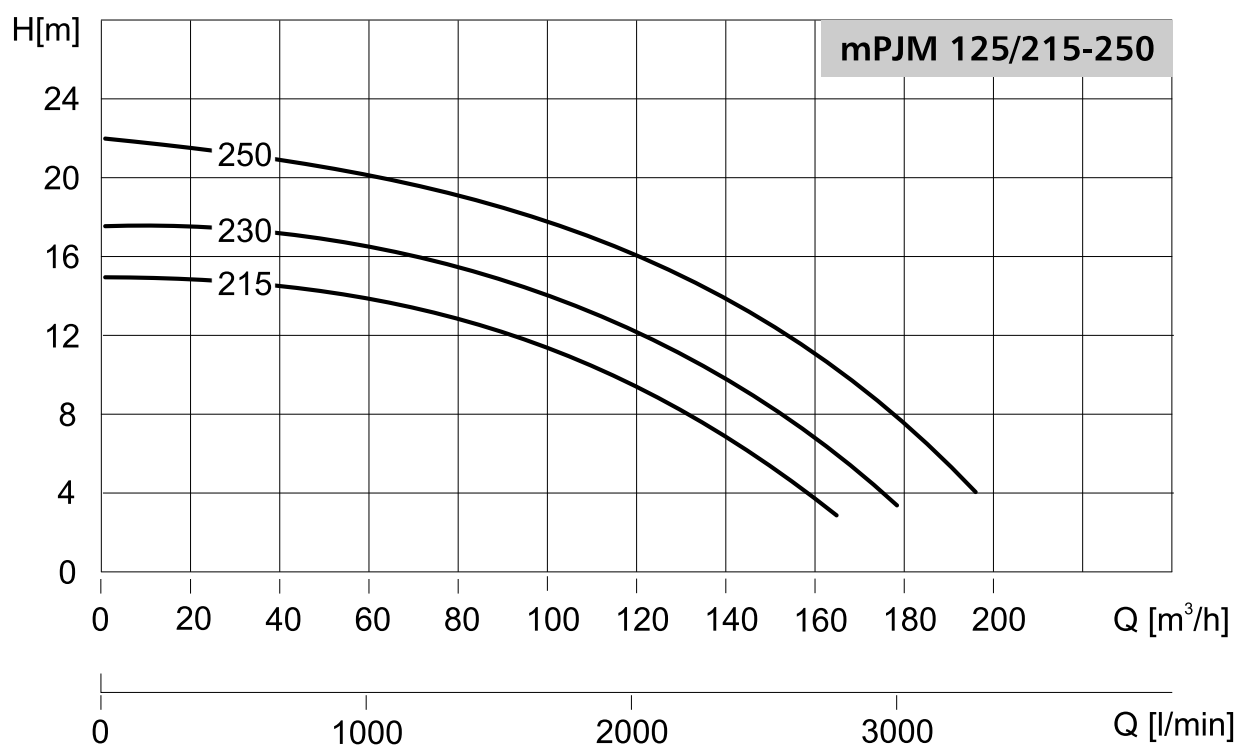
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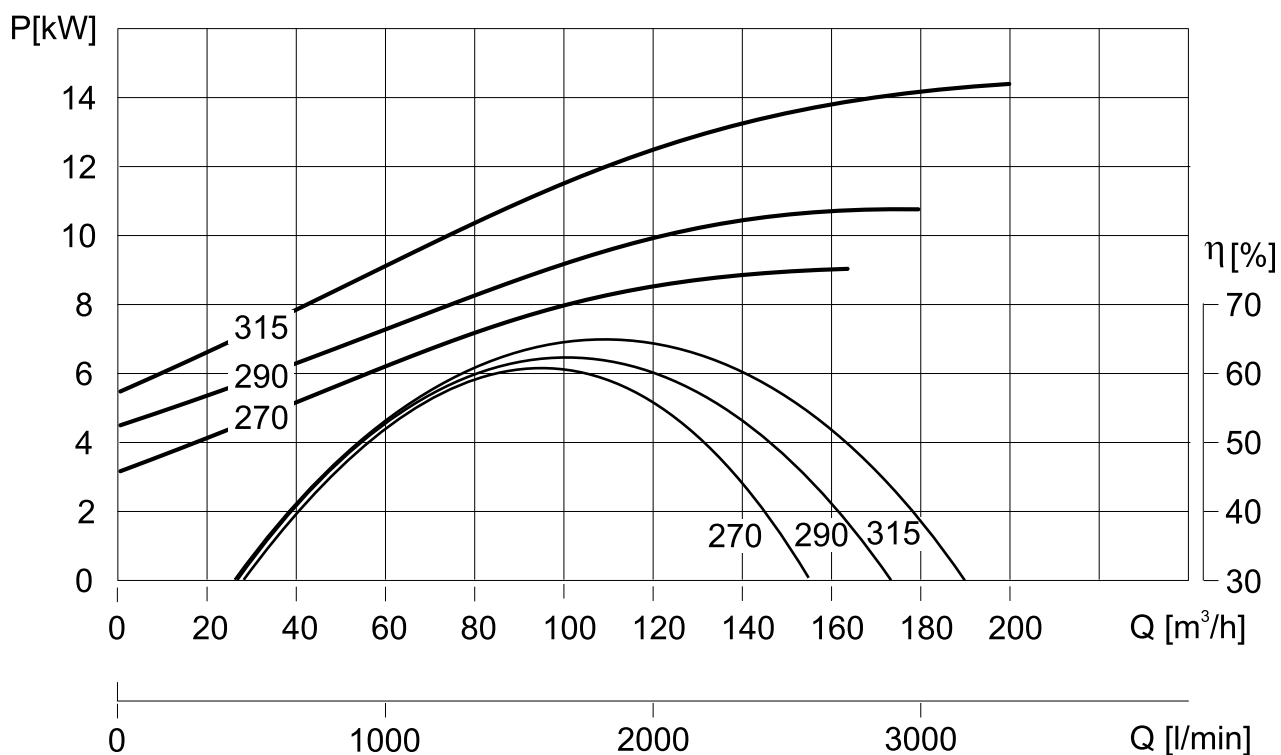
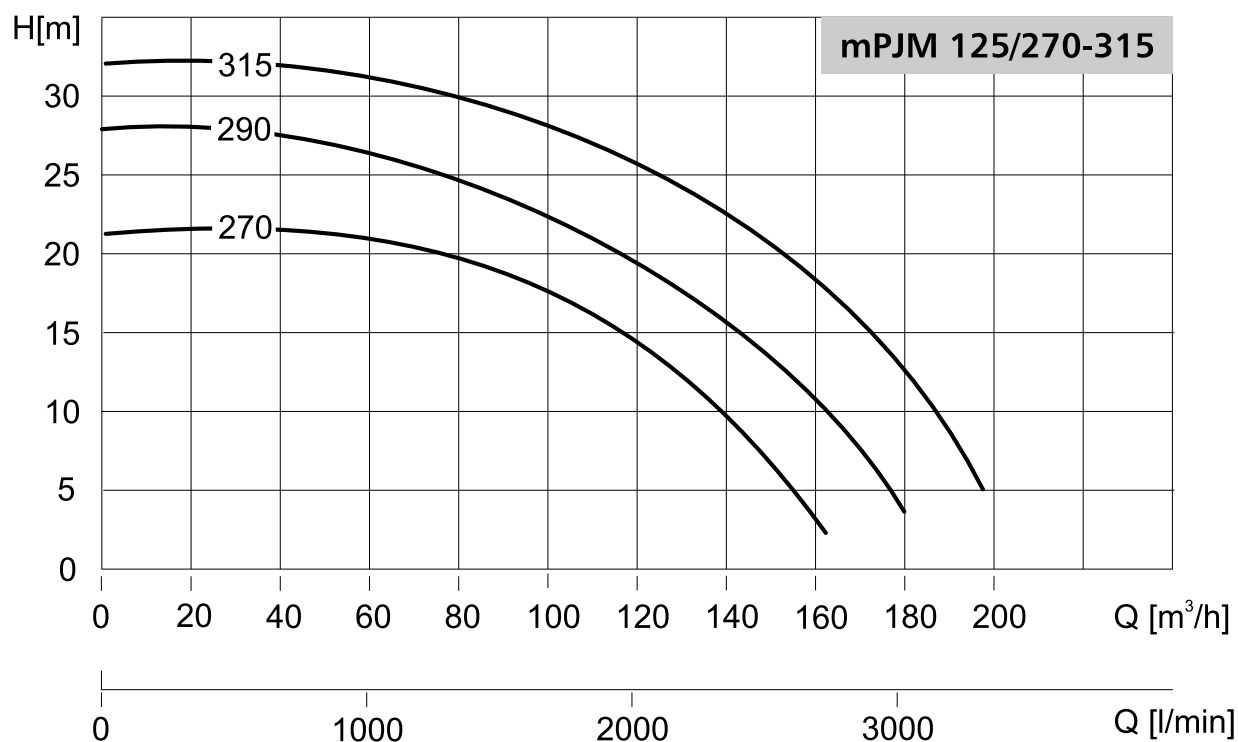
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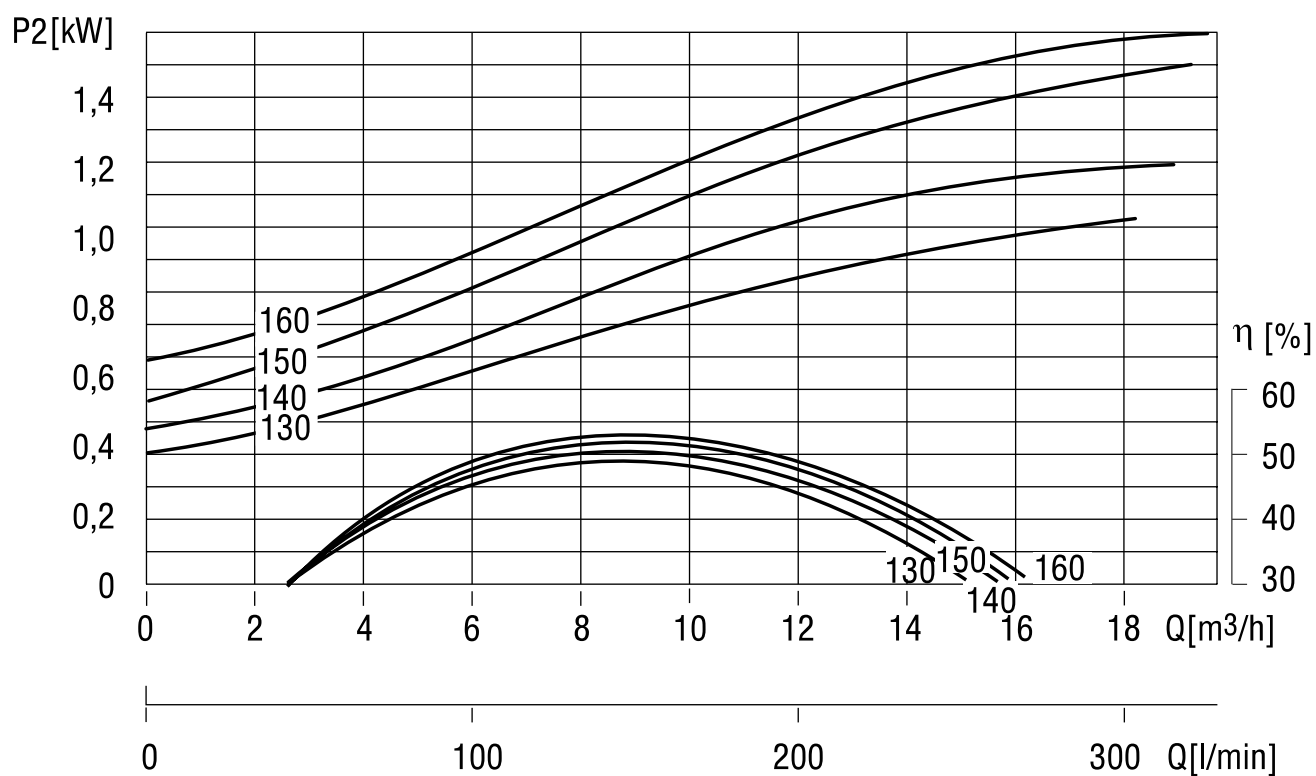
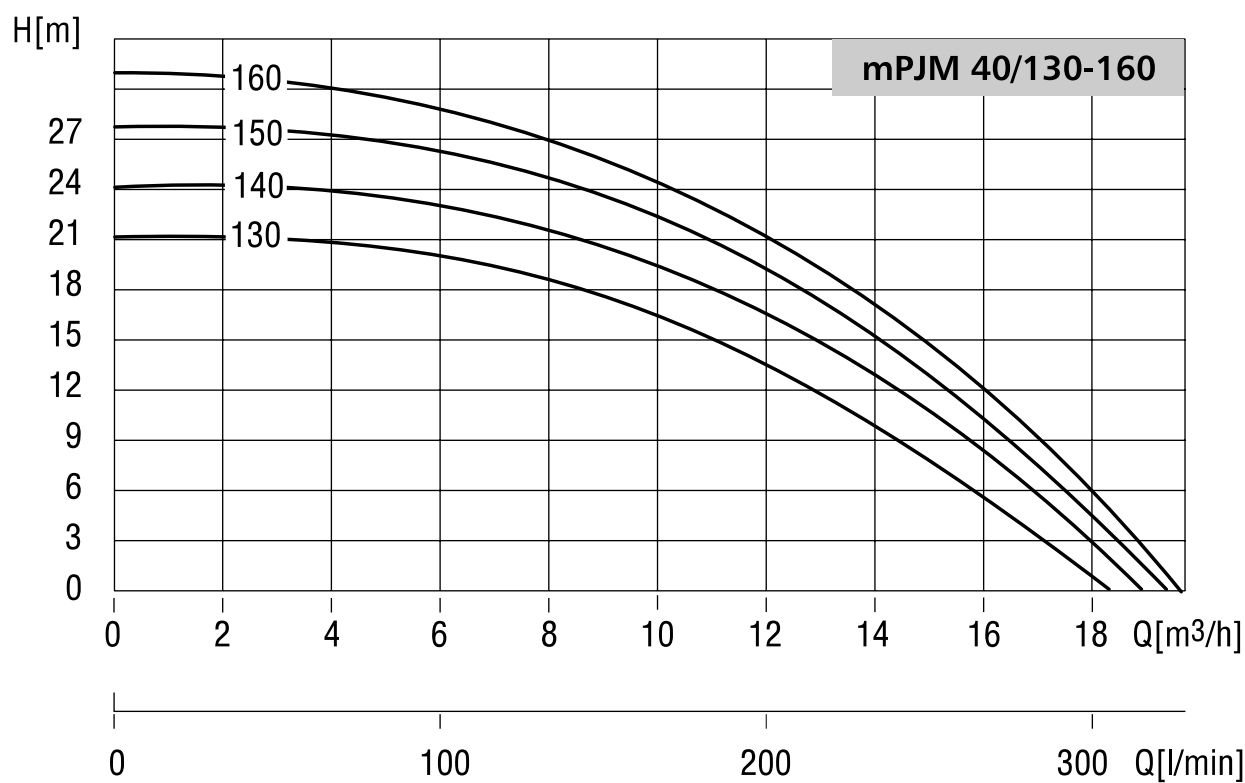
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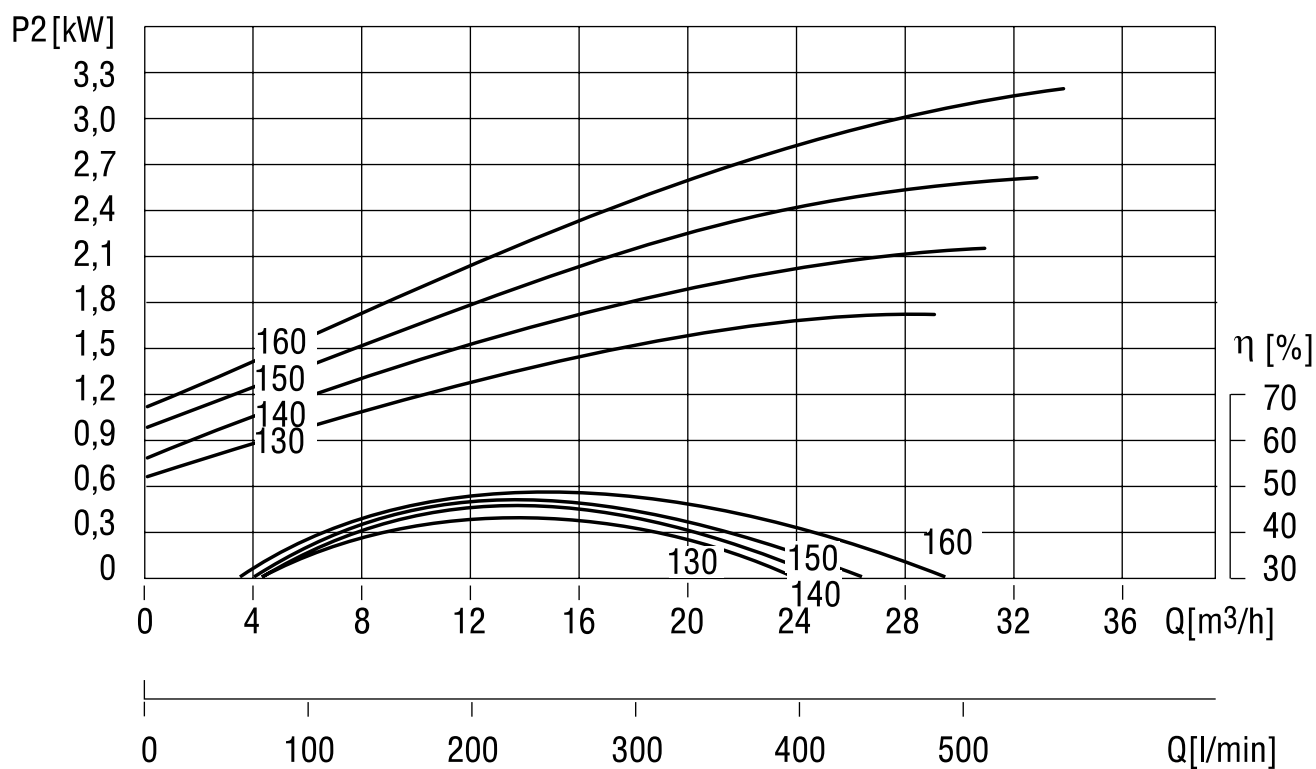
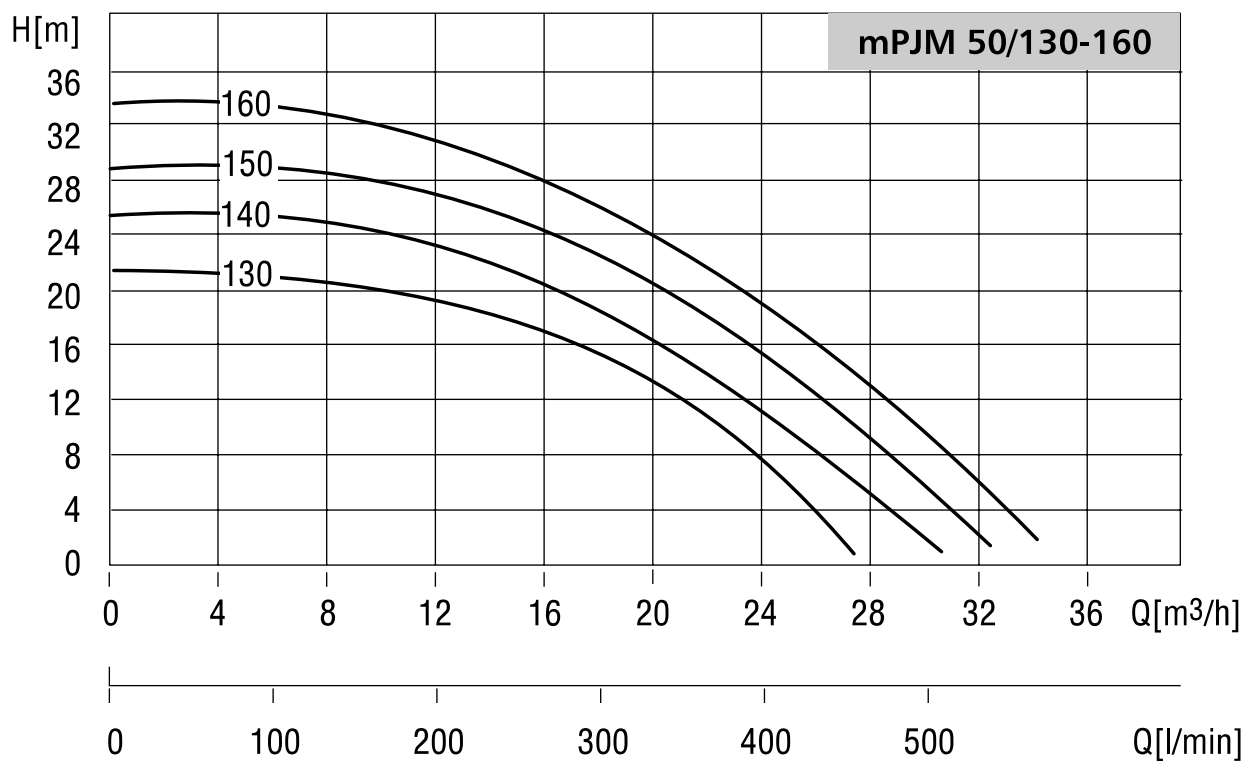
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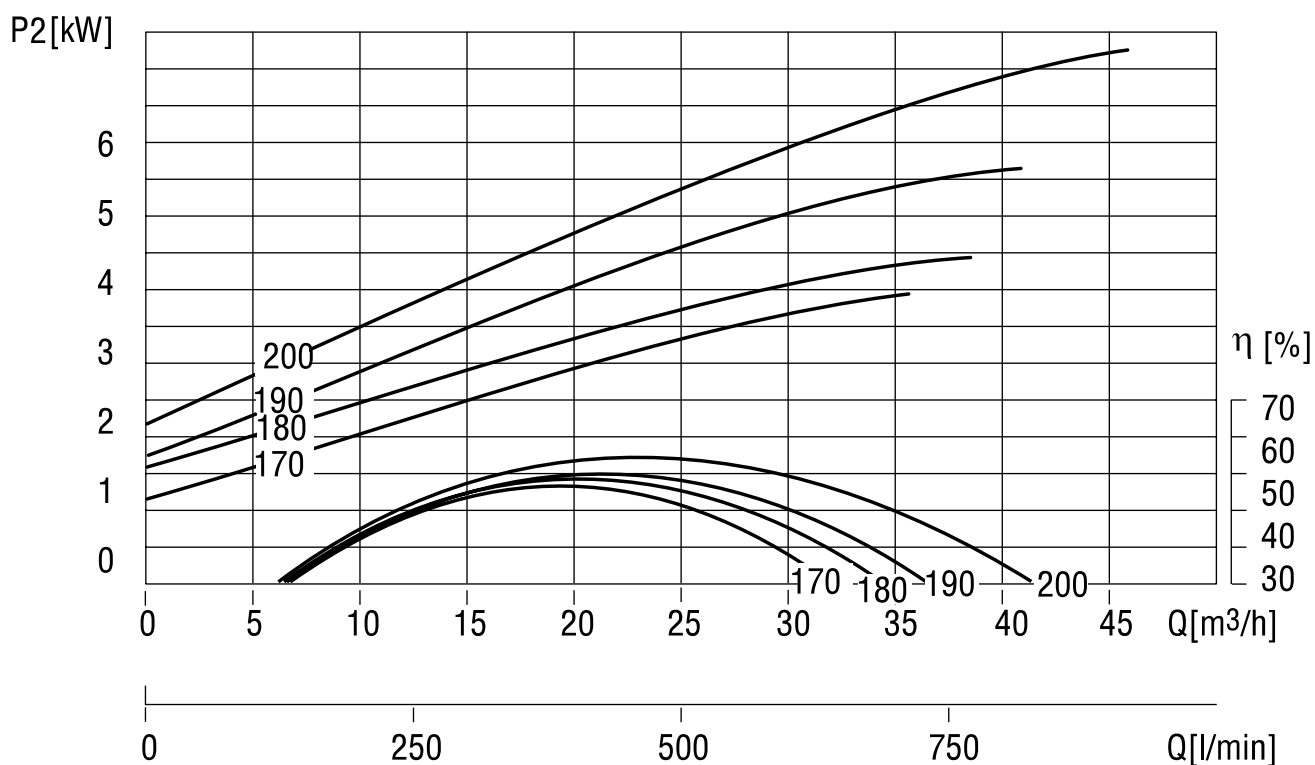
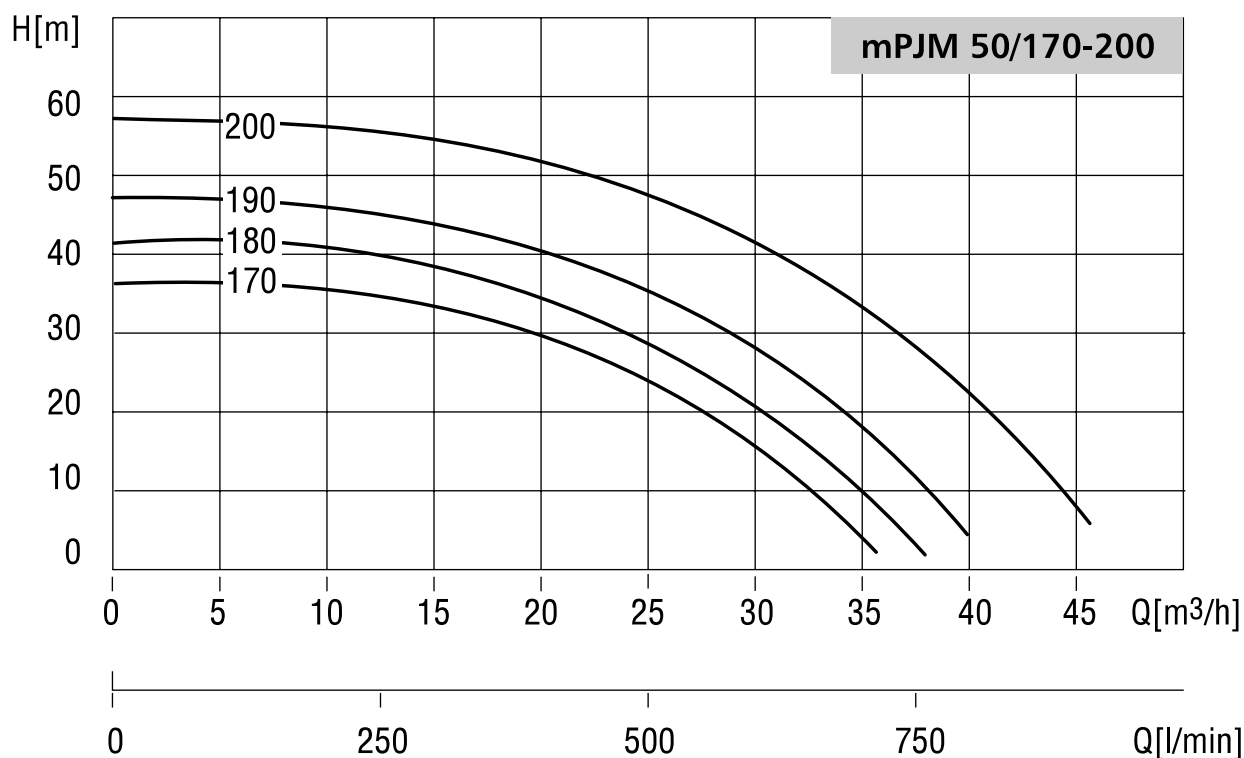
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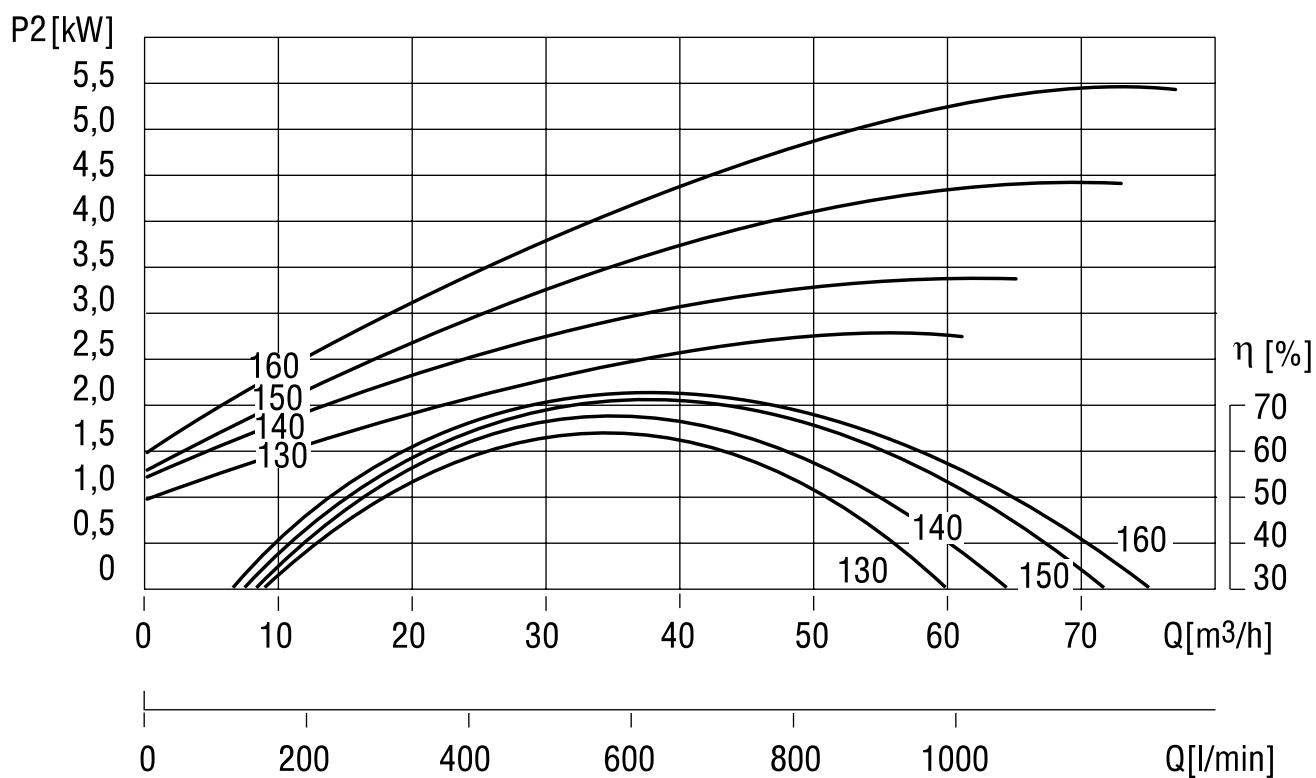
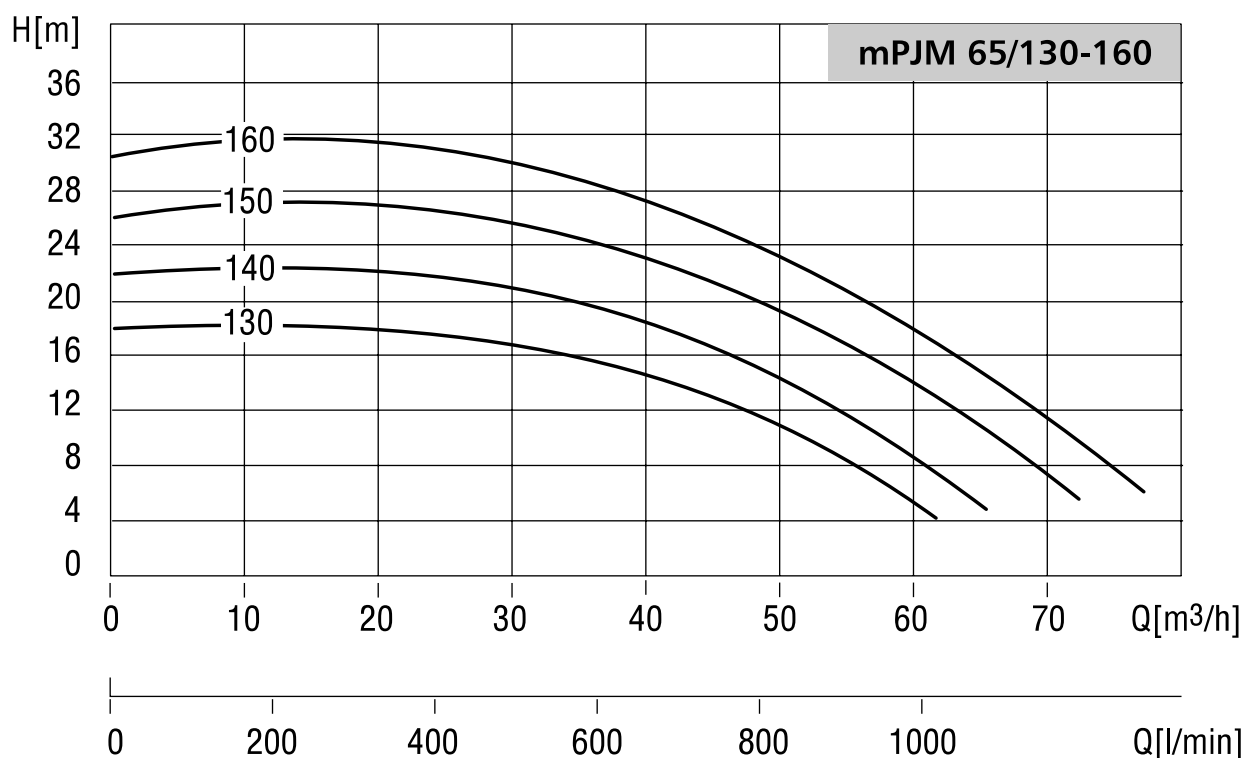
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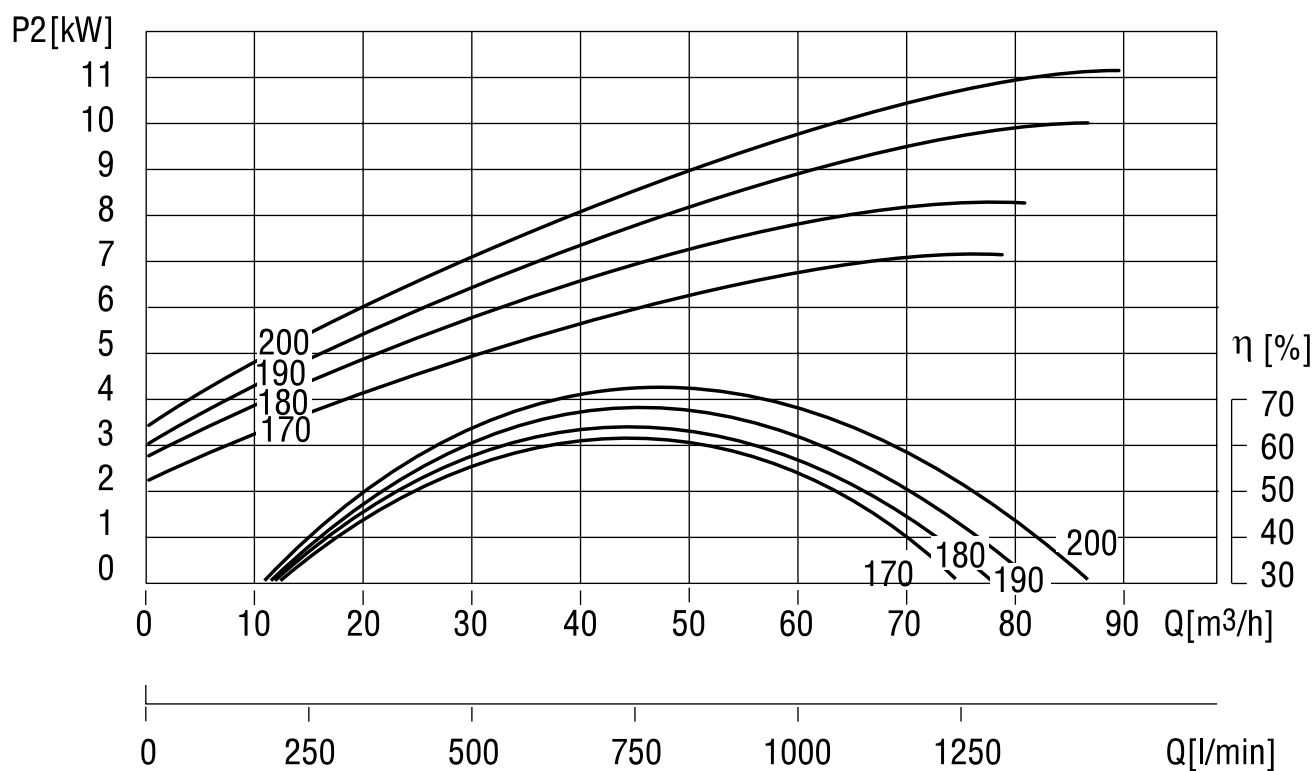
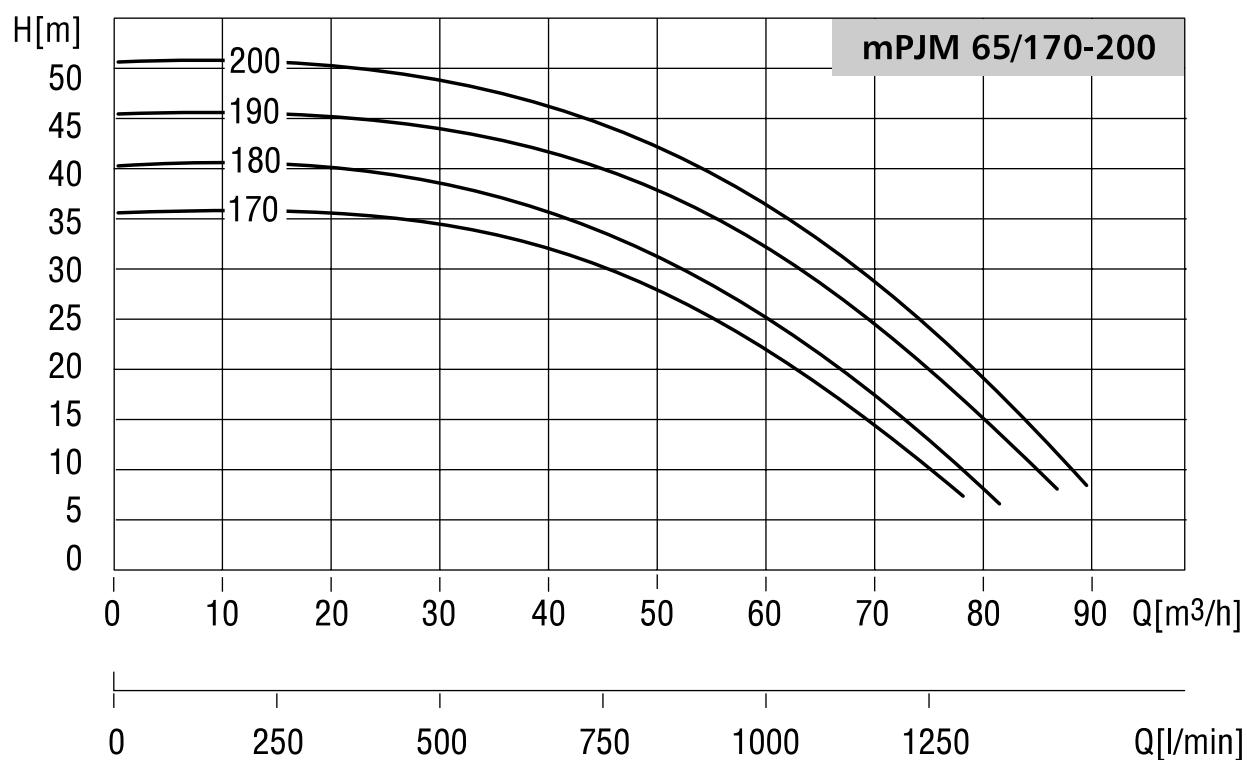
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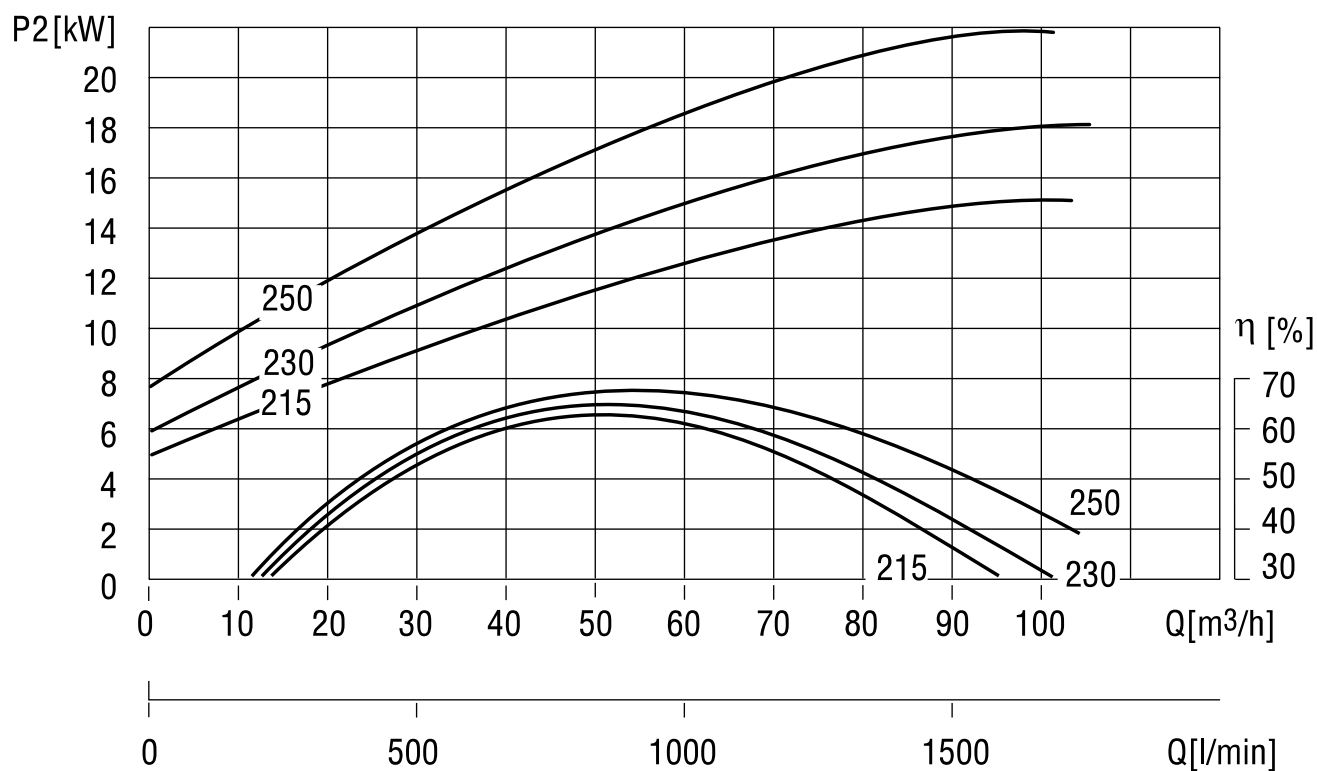
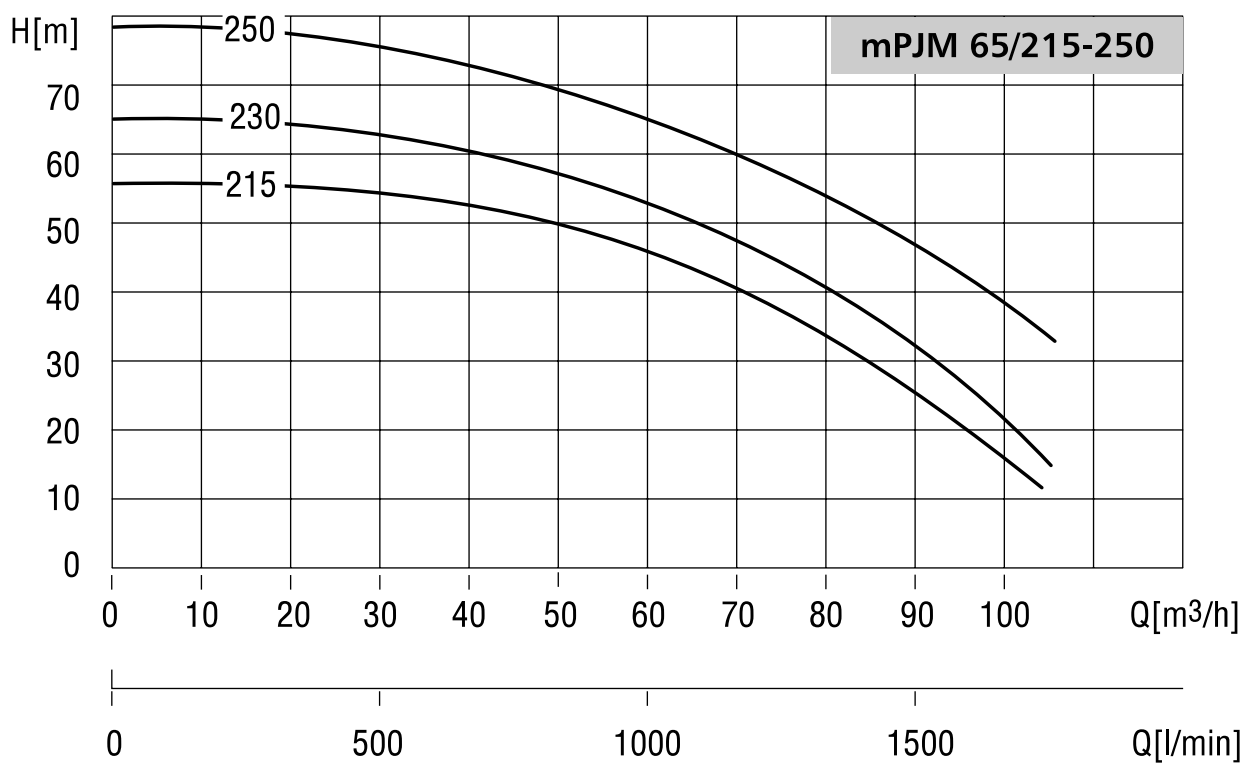
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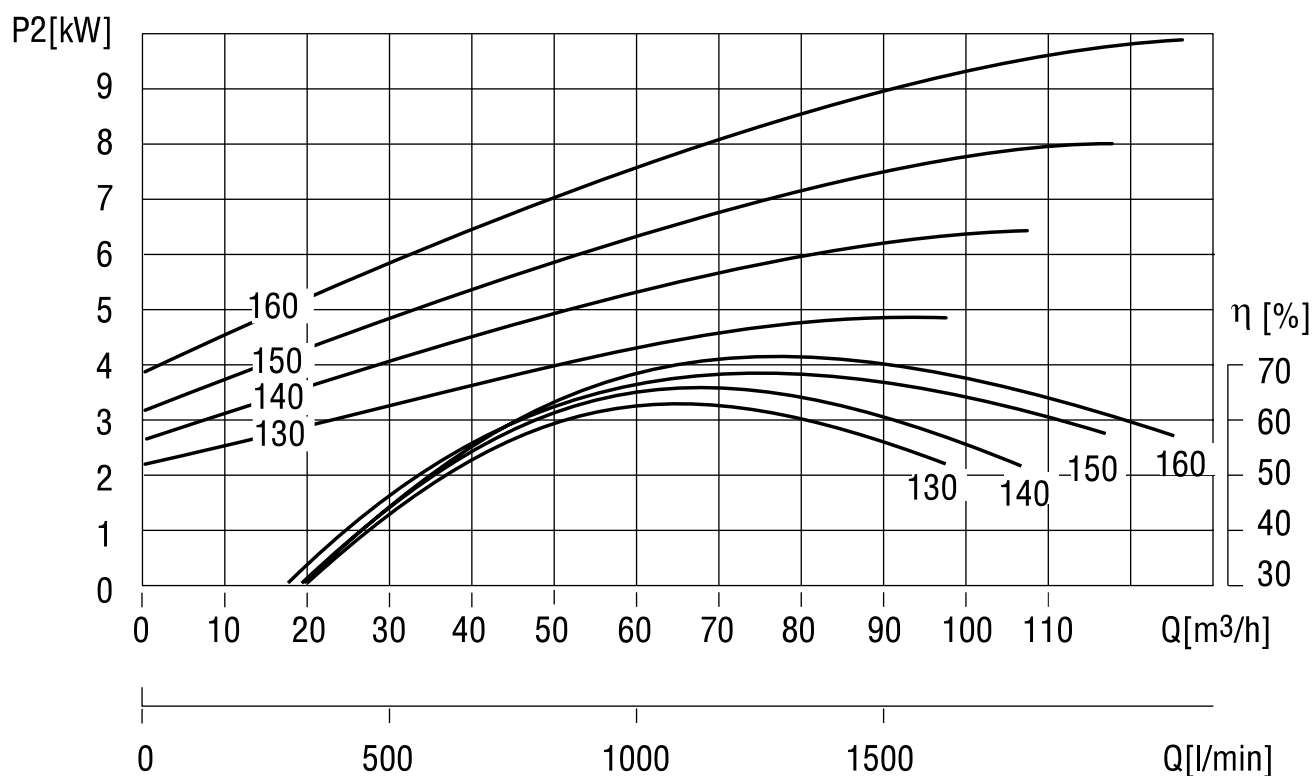
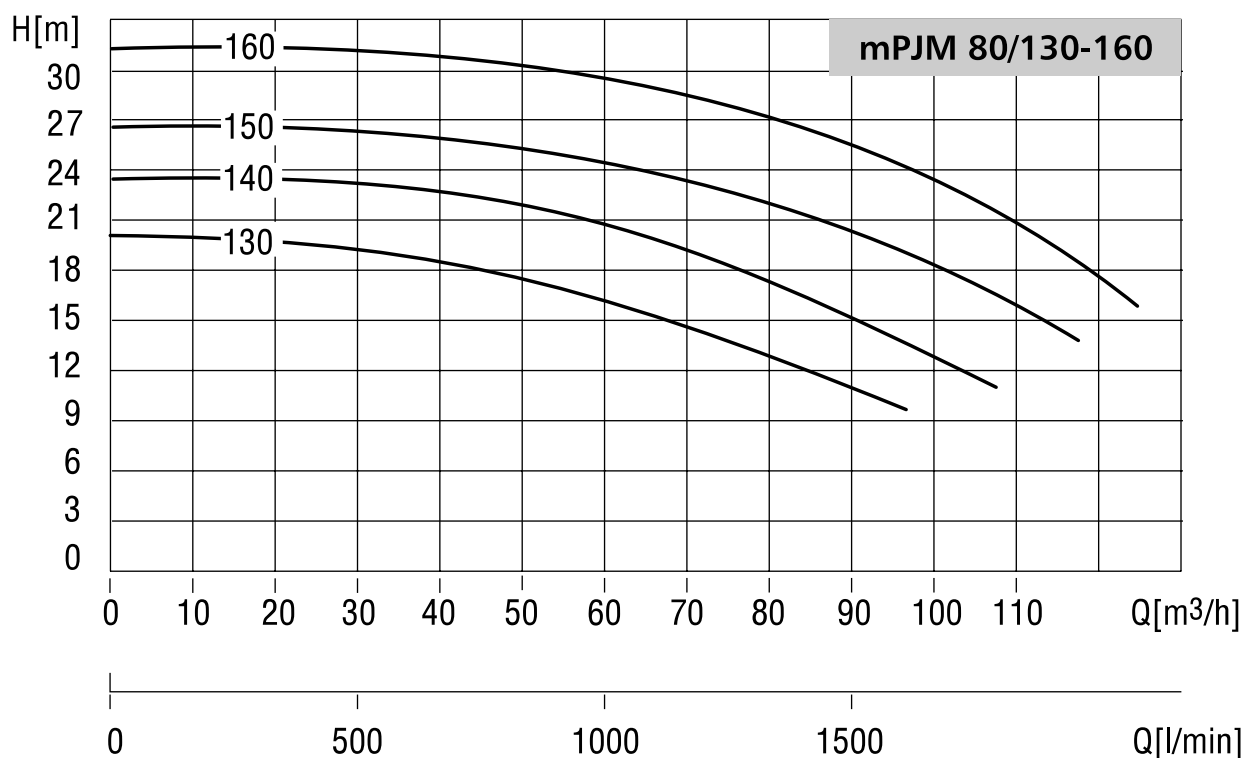
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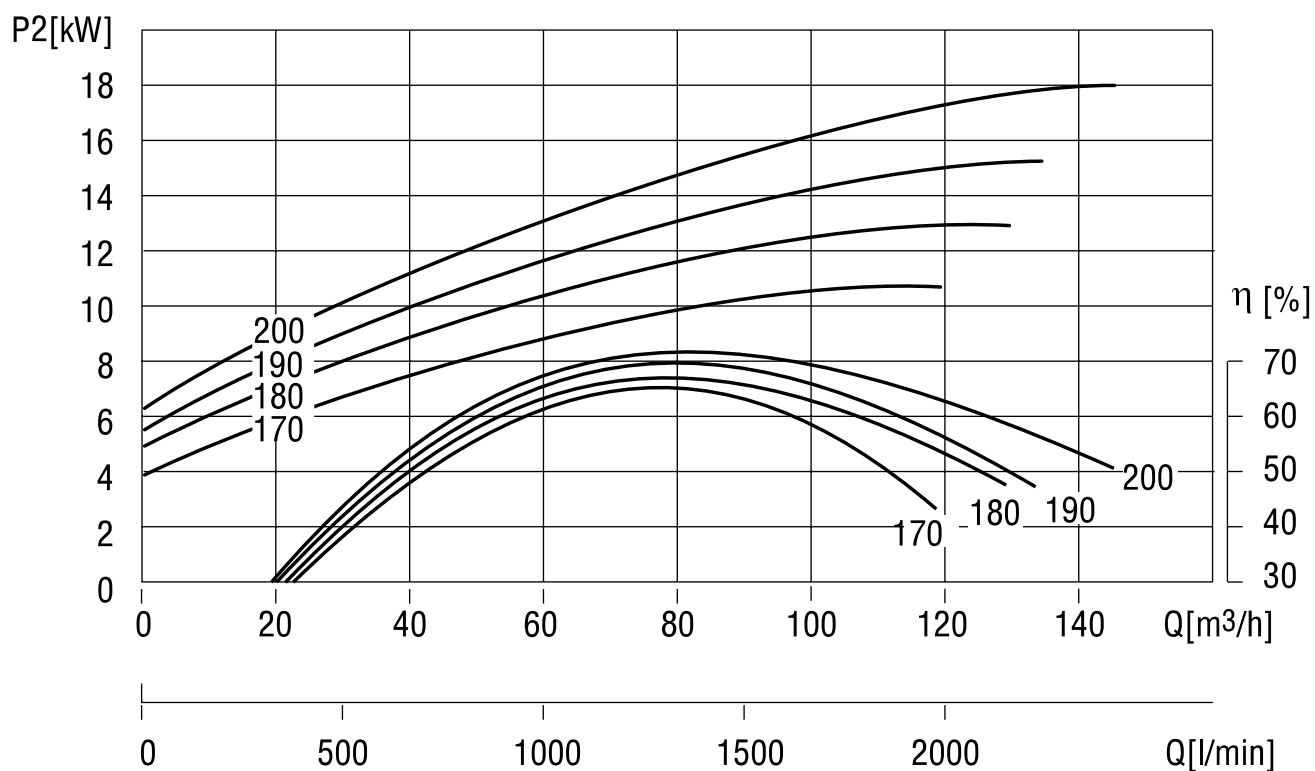
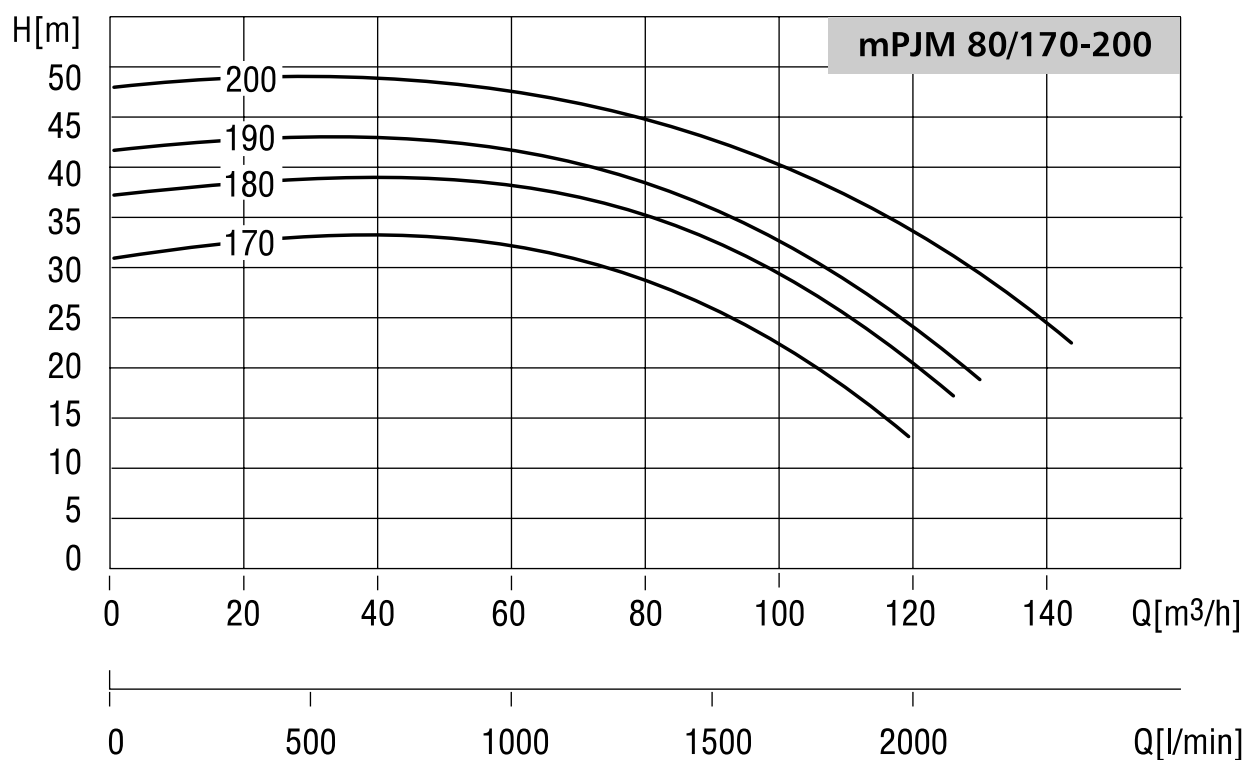
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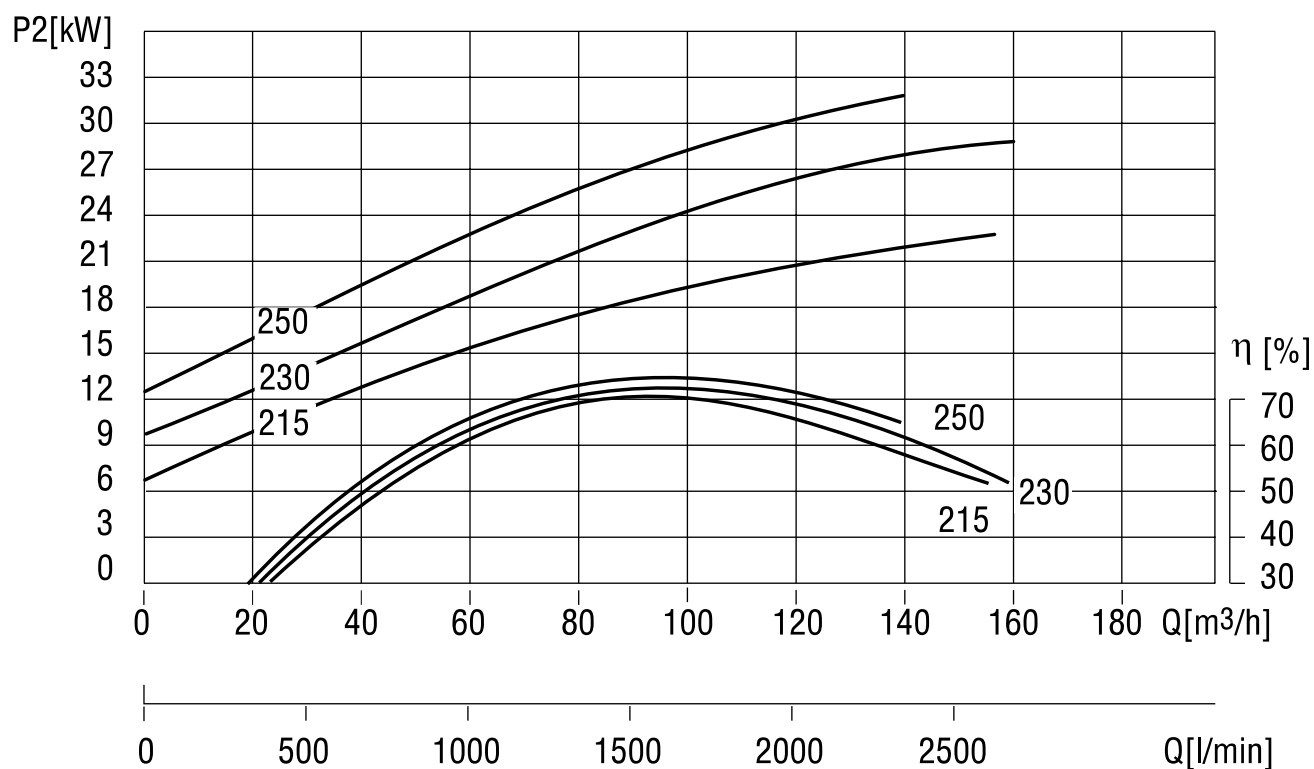
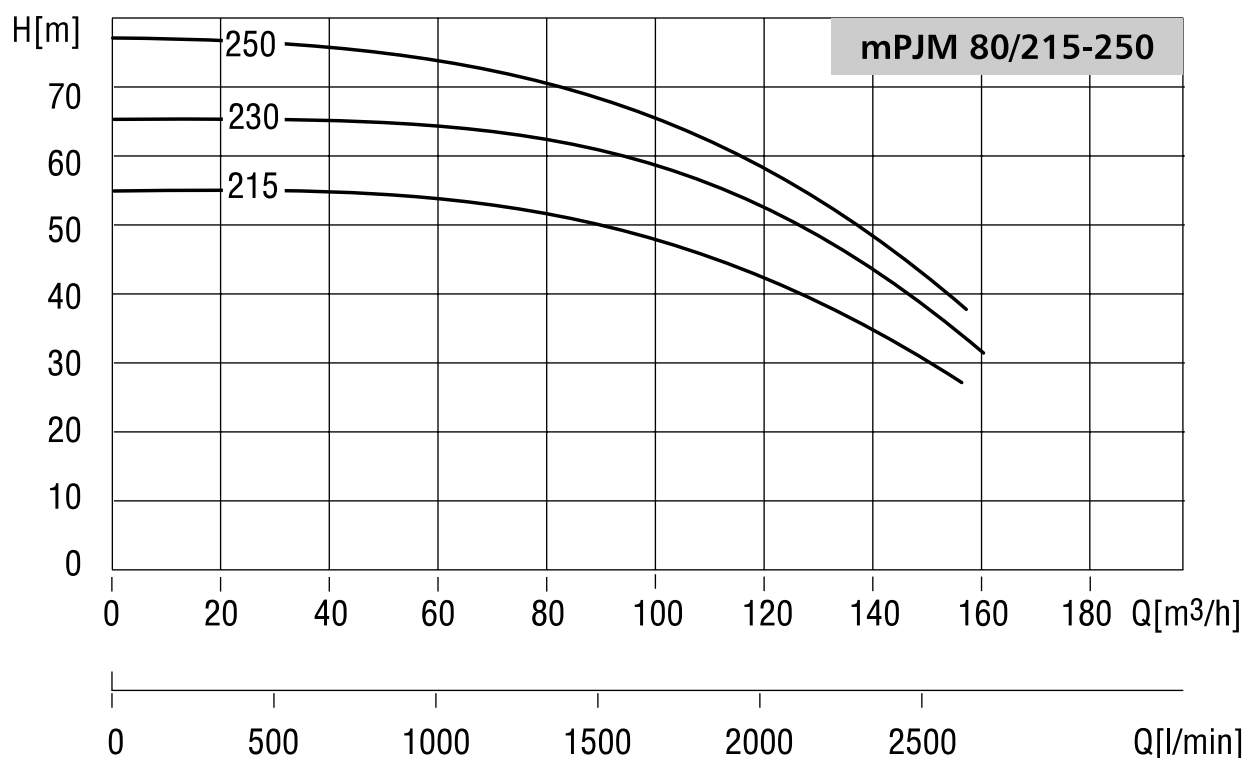
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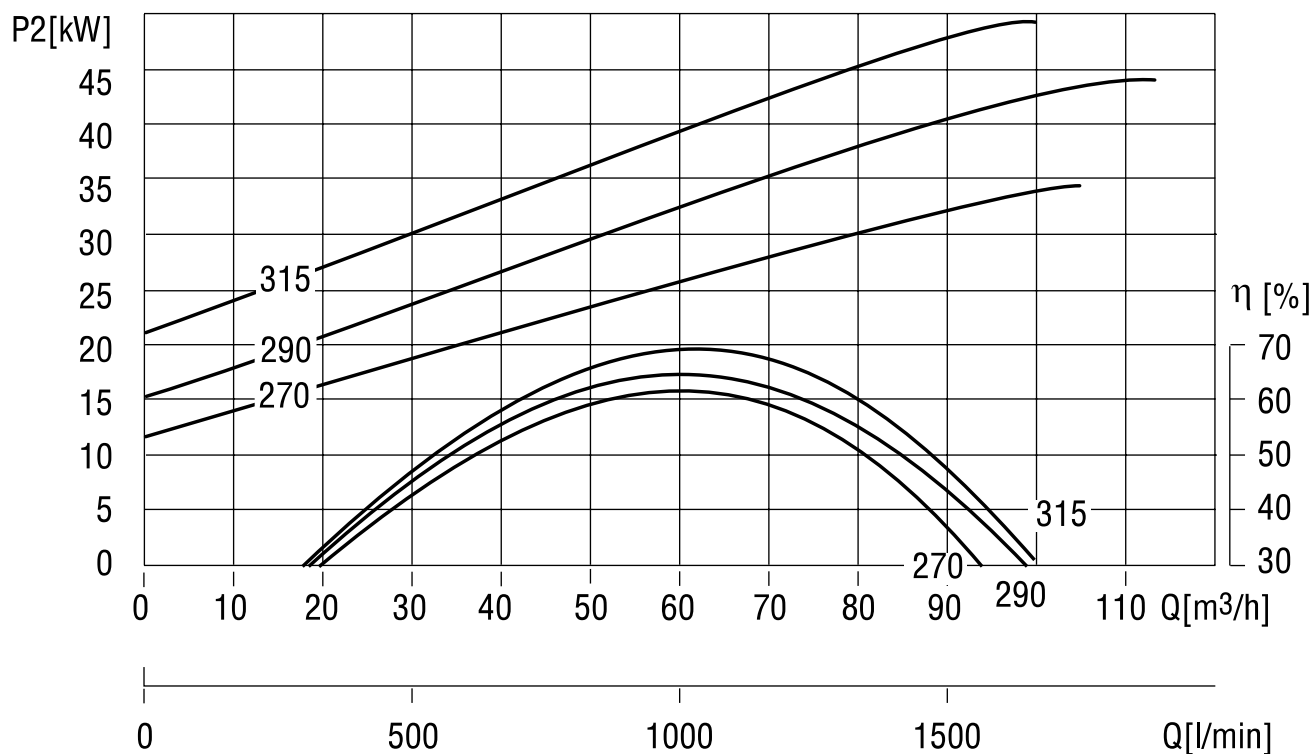
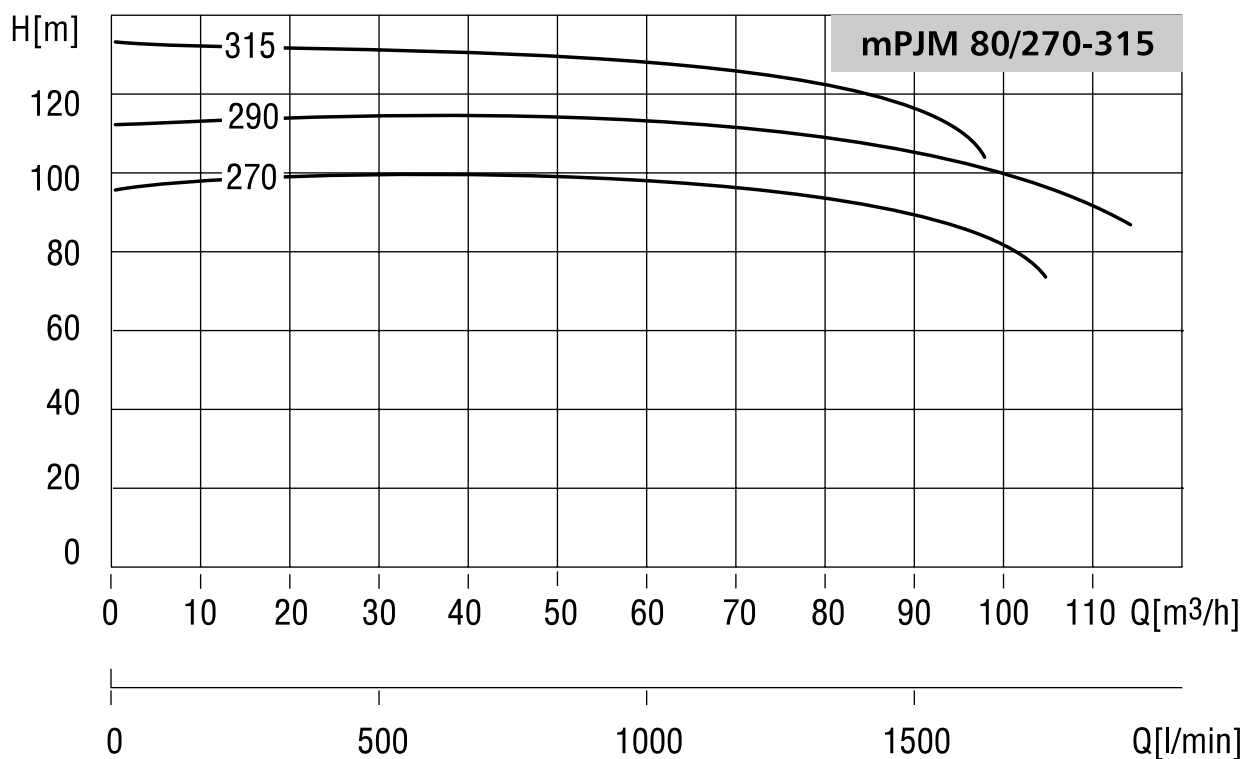
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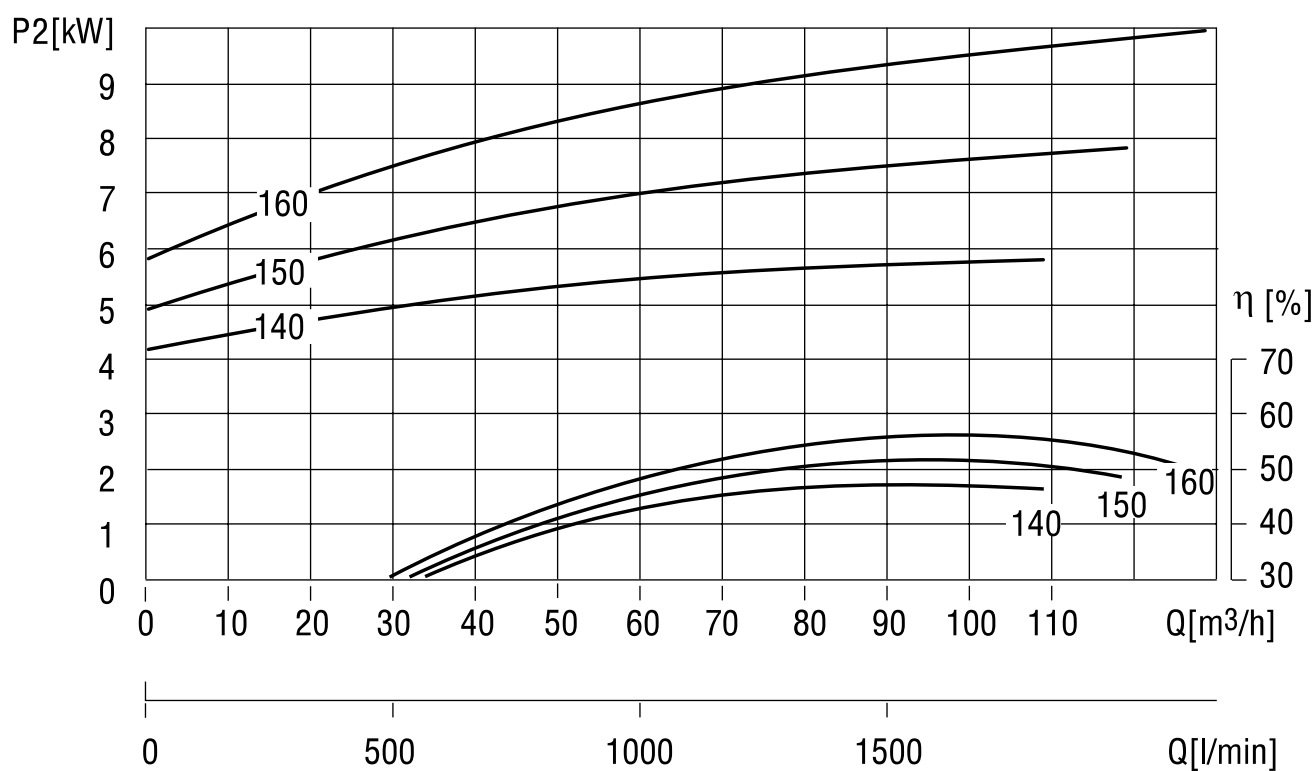
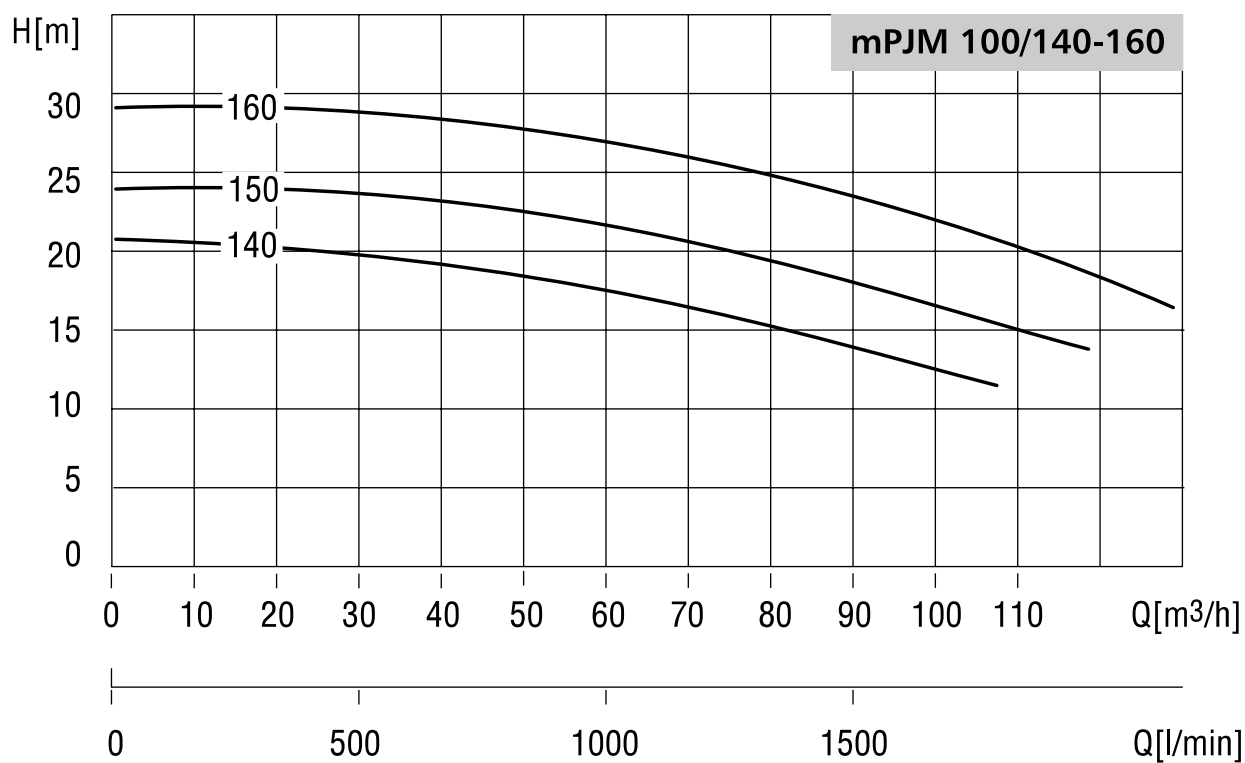
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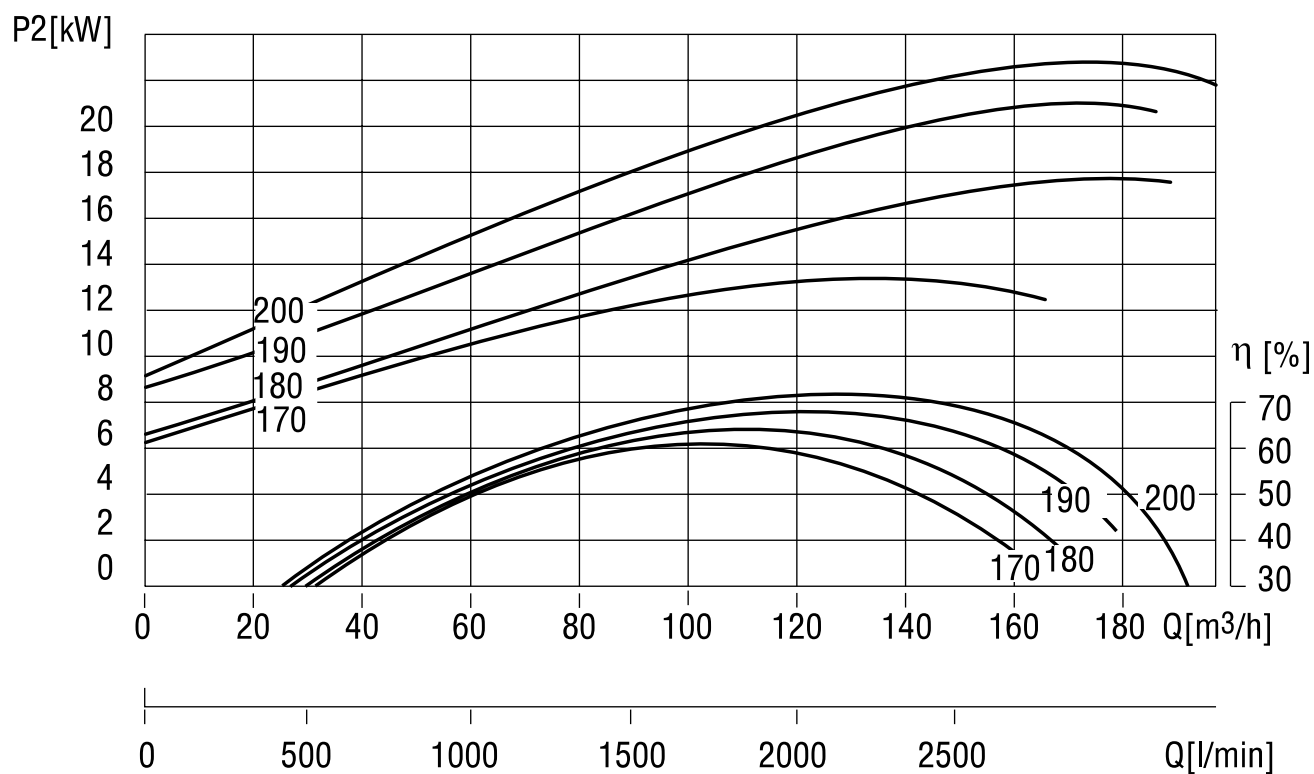
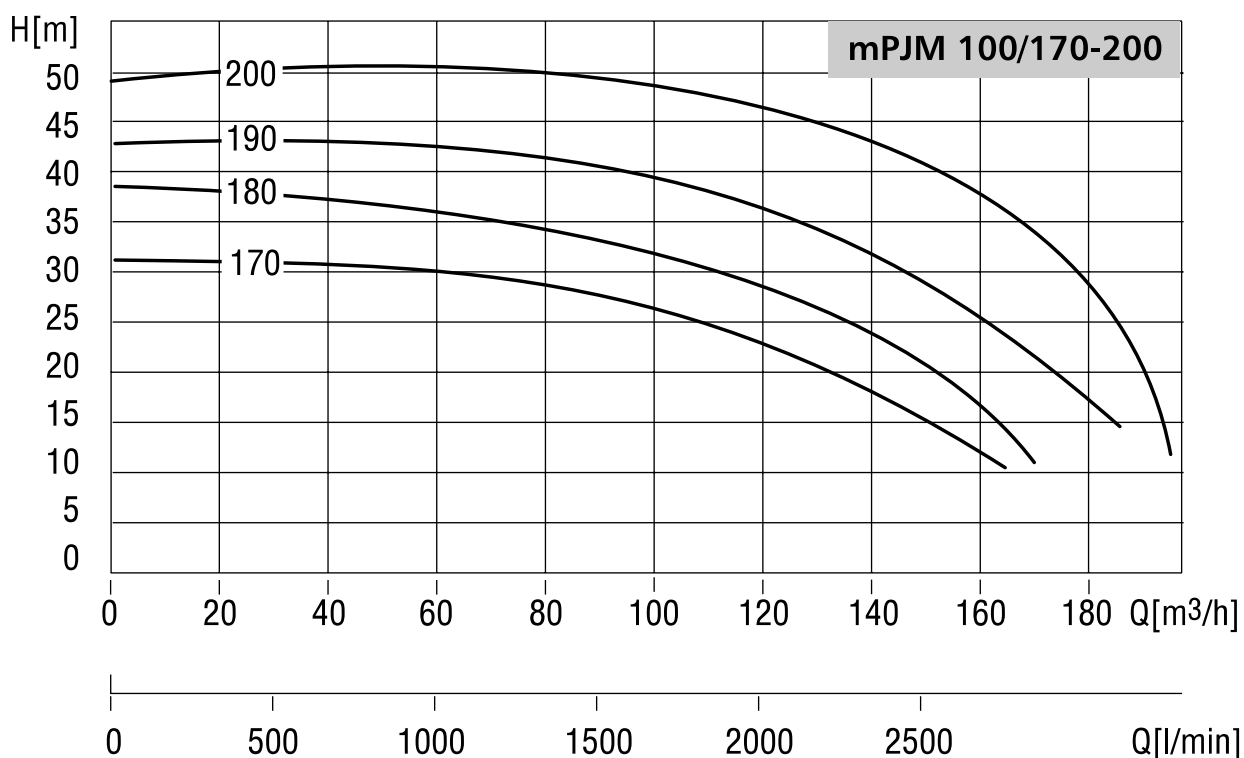
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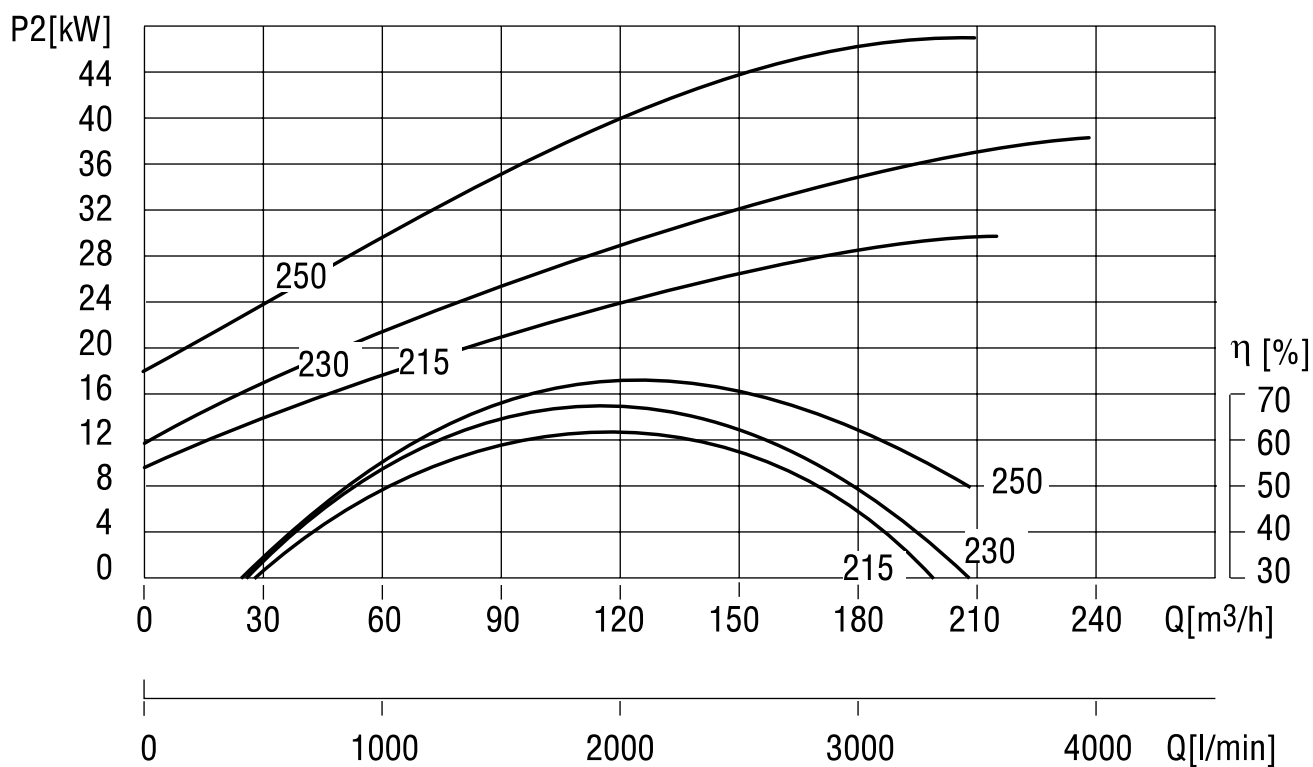
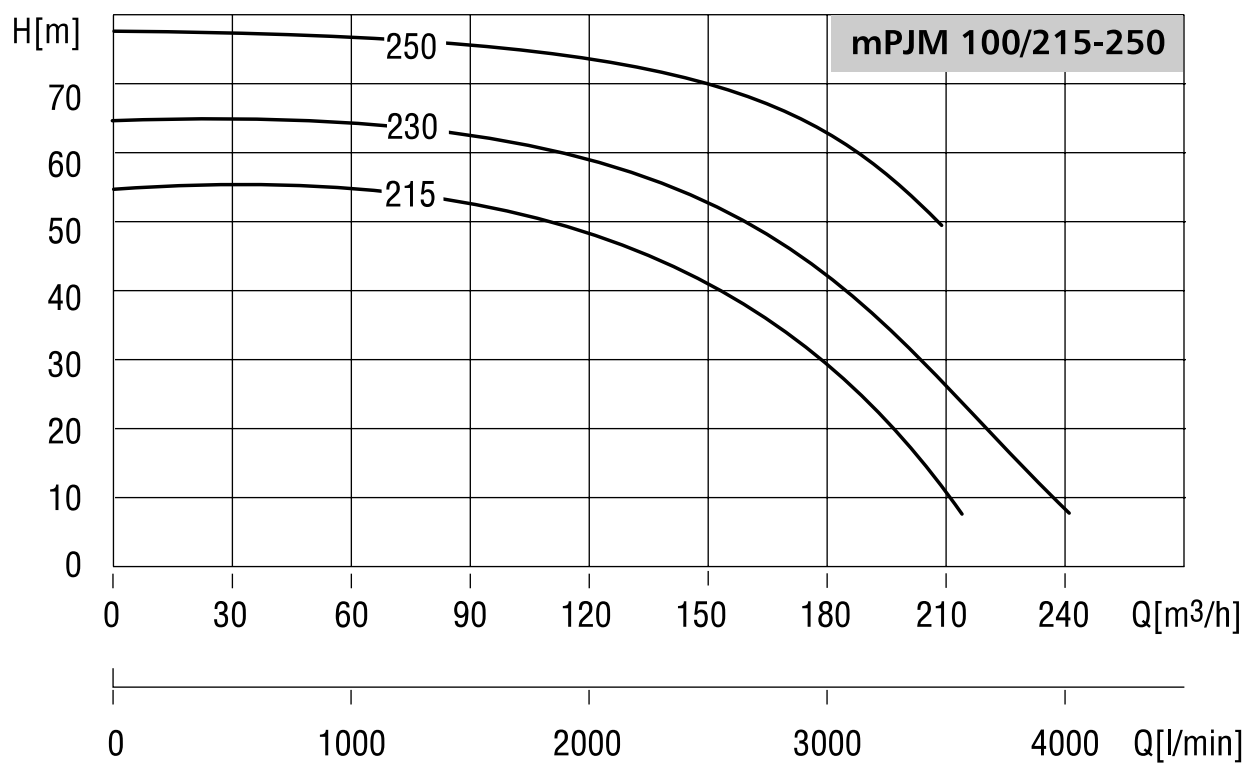
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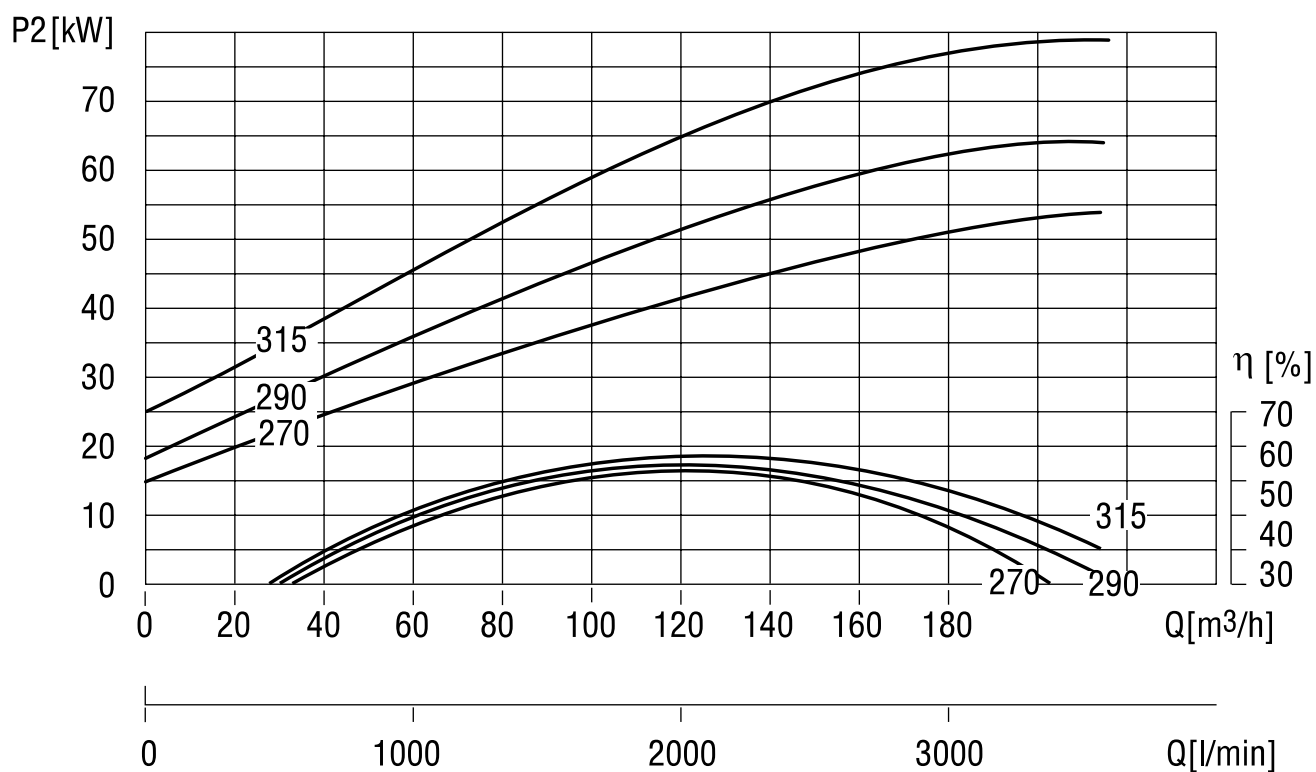
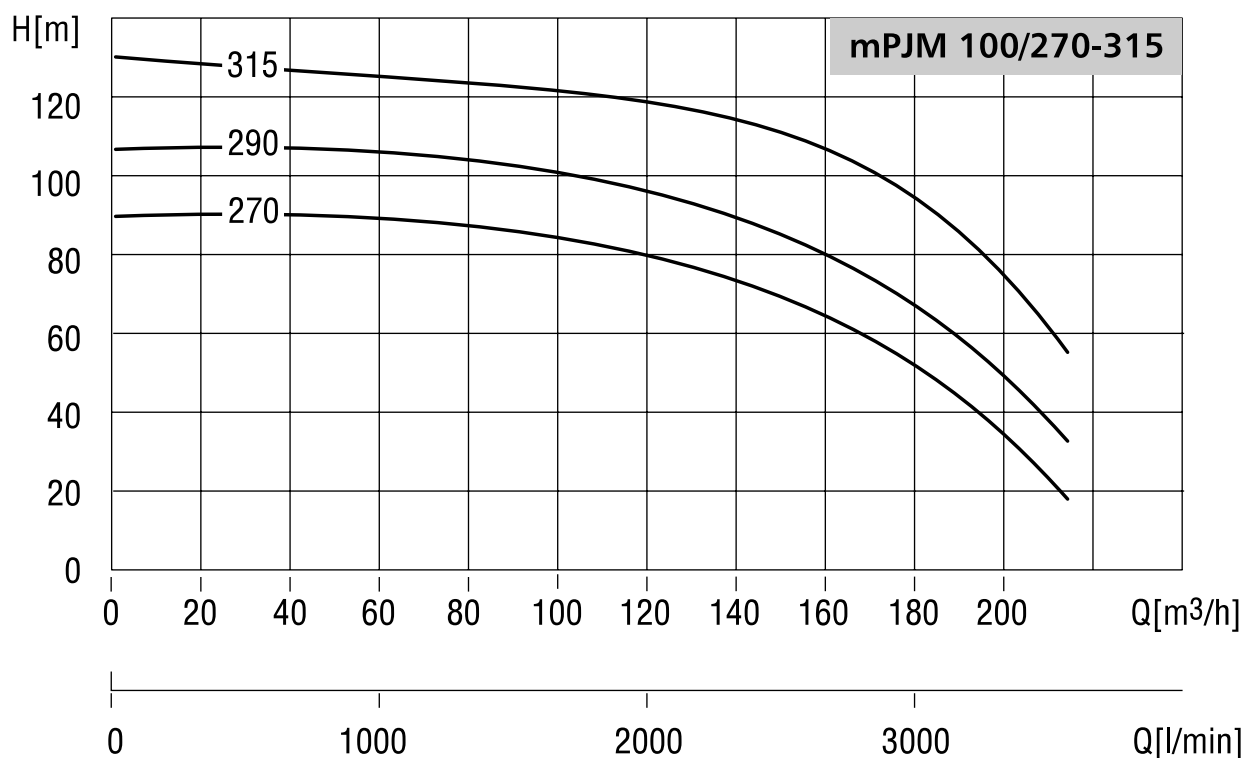
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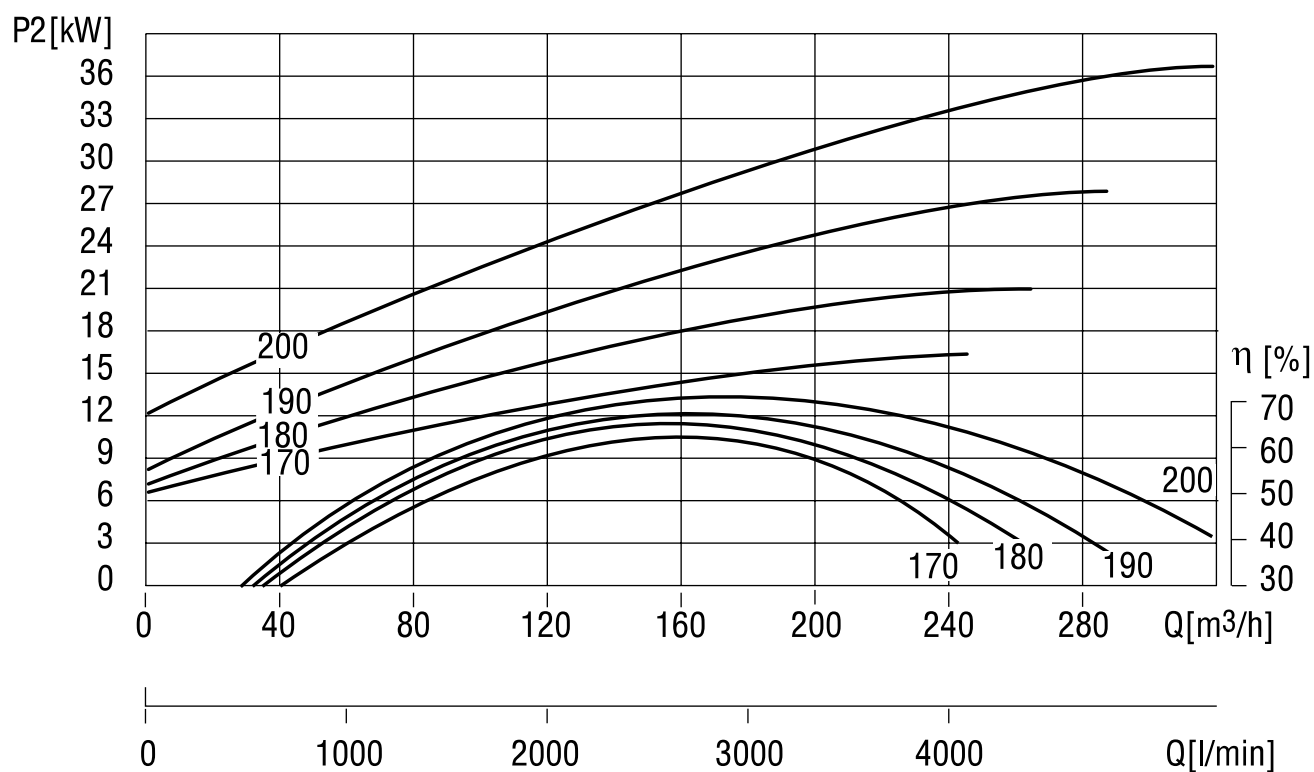
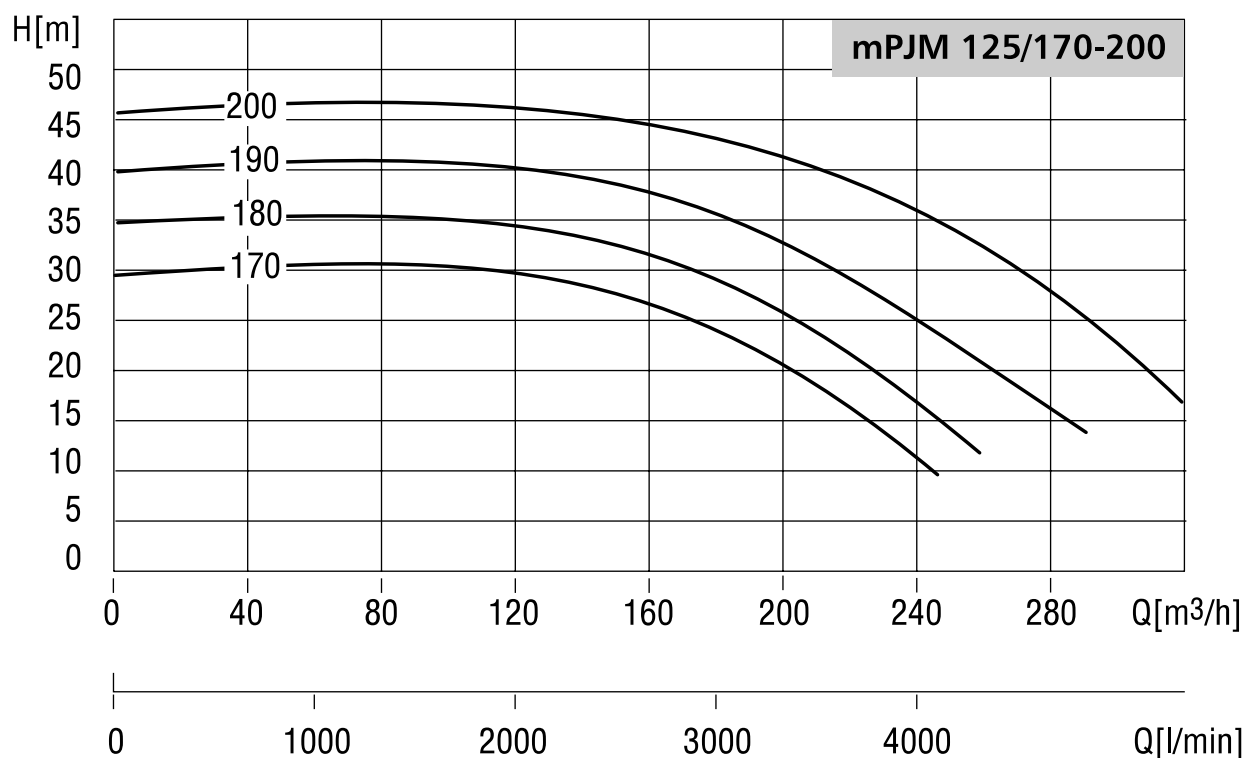
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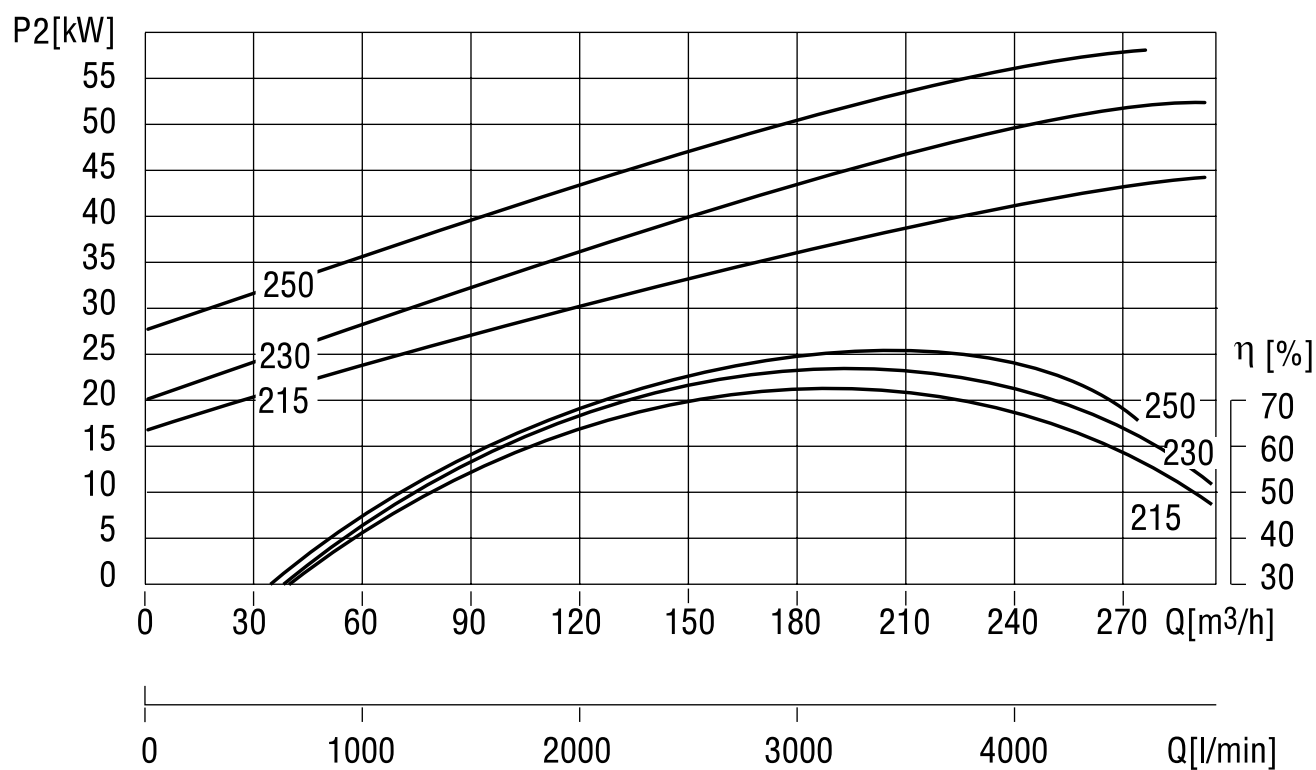
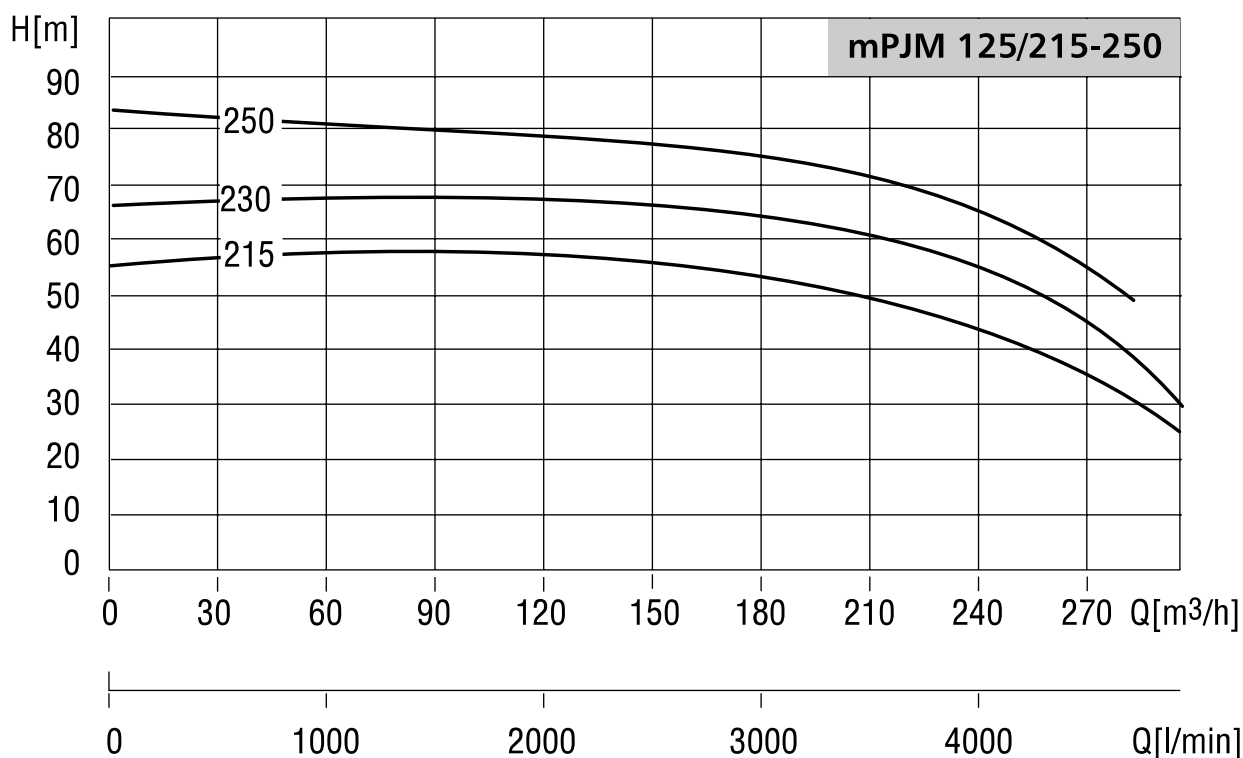
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$n=2900\text{min}^{-1}$



$n=2900\text{min}^{-1}$

