

# ARMATECA

## CIRCULATION PUMP

### ME

**INTELLIGENT CIRCULATOR  
FOR COMMERCIAL**

ME series efficiency circulation pump has the characteristics such as no leakage, super quiet, energy saving, high efficiency, ect.



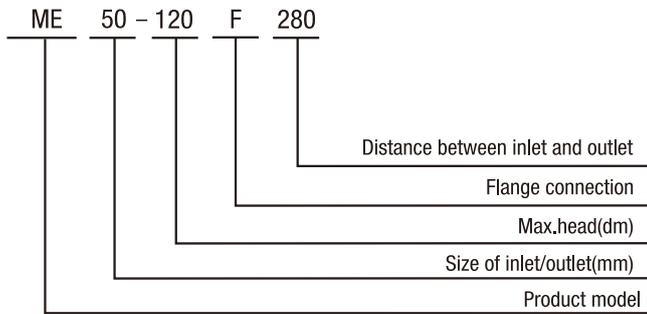
# ME CIRCULATION PUMP



### INTELLIGENT CIRCULATOR FOR COMMERCIAL

ME serial are intelligent efficiency circulation pump. Equipped with permanent magnet motor and intelligent pressure control system. It adopts canned structure, the motor stator is completely canned, the rotating parts are immersed in the conveying liquid, the liquid plays the role of cooling the motor and lubricating the bearings. The product has the characteristics such as no leakage, super quiet, energy saving, high efficiency, ect.

#### MODEL INSTRUCTION



#### TECHNICAL ARECIFICATIONS

Max. Flow:	61.1 m³/h
Max. Head:	18 m
Power range:	16~1535 W

#### PUMP CONFIGURATION

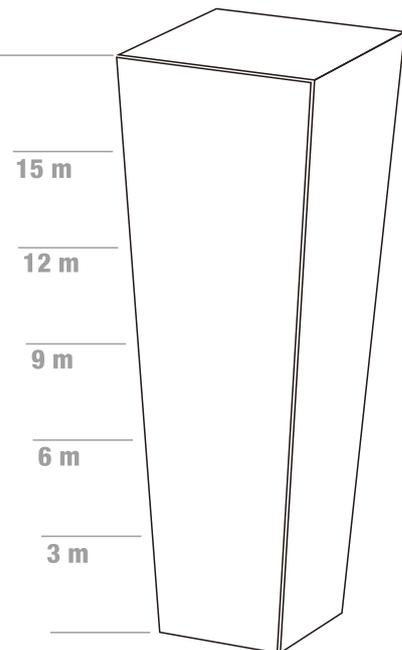
Motor:	High efficiency permanent magnet motor
Bearing:	Ceramic
Shaft:	2cr13+Tungten steel
Impeller:	PES + 30%GF/brass insert
Shield Sleeve:	Plastic

#### APPLICATION LIMITS

Liquid temperature:	(Max. Ambient 25°C): 2–110°C (Max. Ambient 40°C): 2–95°C
Max ambient temperature:	+40°C
Max. working pressure:	10 bar
Insulation:	Class F
Protection:	IP 44
Use requirements:	Running can not no more than 10s without water

Head up to  
**18 m**

Flow rate up to  
**61.1 m³/h**



### Communication Description

#### 1 Digital Input signal (DI)

Can be used to externally control pump start/stop.

- When the external switch is on, the pump is running.
- When the external switch is closed, the pump is stopped.

#### 1 Digital Output signal (DO)

Relay output is a passive switching contact for external fault indication.

- When it is disconnected, the pump is in normal state ;
- When closed, the pump is faulty.

### Your perfect control mode

# 3 Modes

Intelligent control saves time and energy



**Delta-pressure mode**

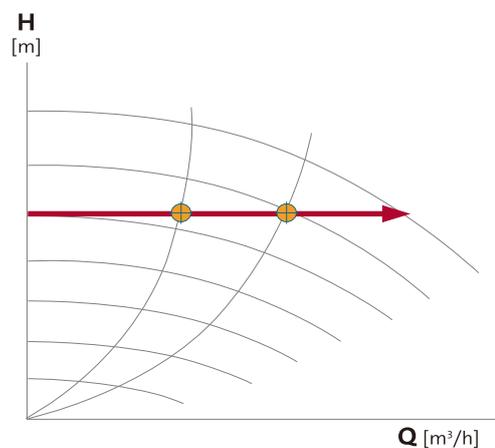


**Proportional pressure mode**



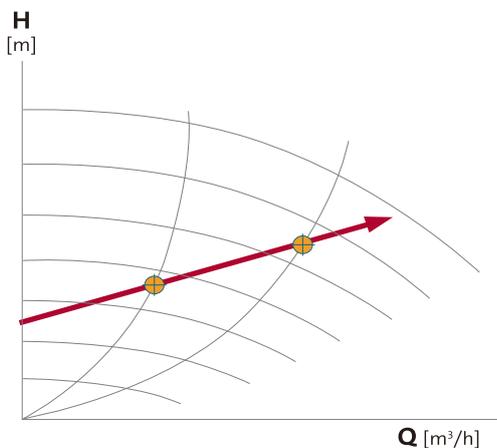
**Constant speed mode**

#### Delta-pressure mode



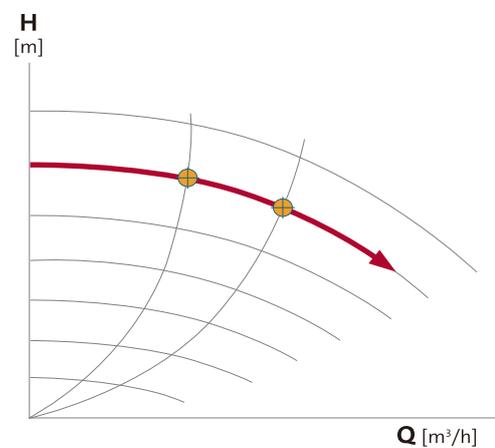
Delta-pressure control is used to adjust the performance of the pump according to the actual system heat demand, the pump performance from the minimum to the maximum value, the head setting value of **0.5 m** to accumulate

#### Proportional pressure mode



Proportional pressure control is used to adjust the pump performance according to the actual system heat demand, the pump performance from the minimum value to the maximum value, the head setting value of **0.5 m** for the cumulative

#### Constant speed mode



At constant speed, the pump runs at a constant speed, independent of the actual flow demand of the system, and the performance of the pump is determined according to the required power curve.

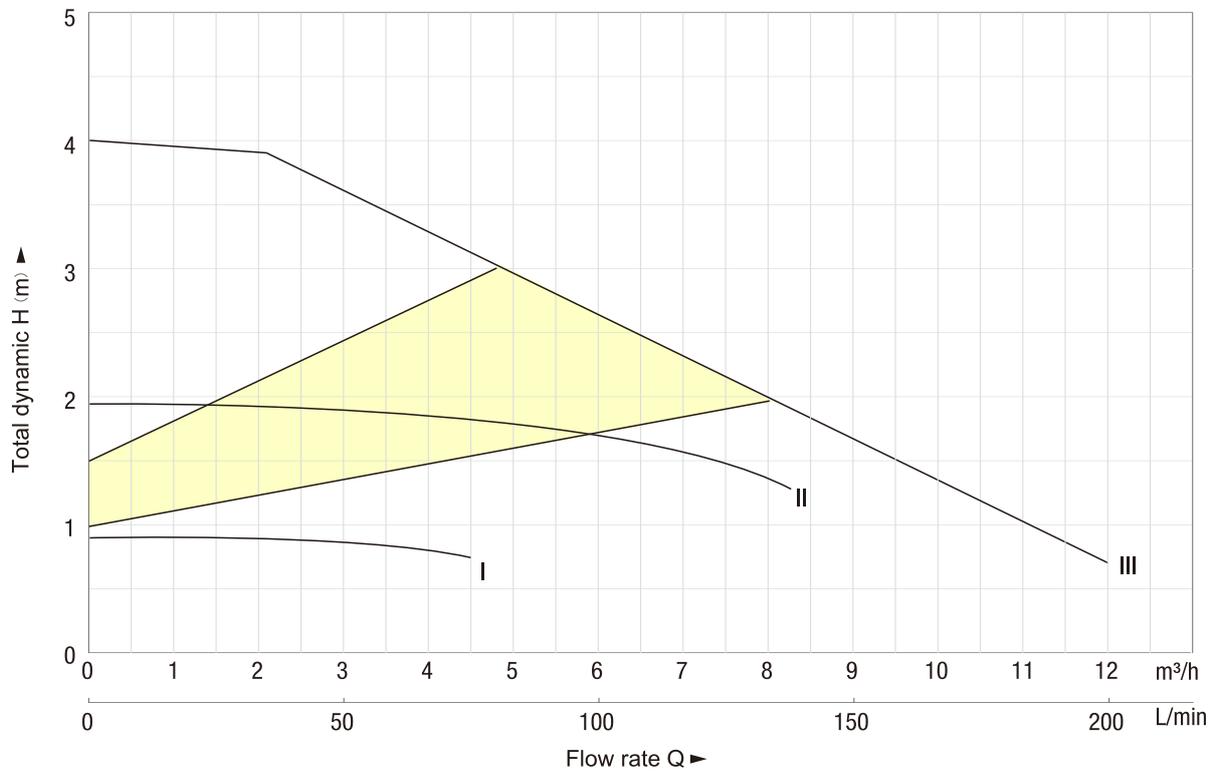
### Performance chart

Model	Rated voltage(V)	Power frequency	Input power	Max. Current	Max. Flow (m³/h)	Max. head (m)	Max. pressure	Pressure rating for pipe connection
ME40-40F 250	1 x 230 V	50 / 60 Hz	16 .. 86 W	0.16 .. 0.46 A	12	4	10 bar	PN10
ME40-60F 250	1 x 230 V	50 / 60 Hz	16 .. 188 W	0.16 .. 0.91 A	16.5	6	10 bar	PN10
ME40-80F 250	1 x 230 V	50 / 60 Hz	16 .. 260 W	0.16 .. 1.24 A	19	8	10 bar	PN10
ME40-100F 250	1 x 230 V	50 / 60 Hz	16 .. 360 W	0.16 .. 1.72 A	22	10	10 bar	PN10
ME40-120F 250	1 x 230 V	50 / 60 Hz	16 .. 450 W	0.12 .. 2.13 A	22	12	10 bar	PN10
ME40-150F 250	1 x 230 V	50 / 60 Hz	16 .. 608 W	0.13 .. 2.85 A	26.2	15	10 bar	PN10
ME40-180F 250	1 x 230 V	50 / 60 Hz	16 .. 600 W	0.17 .. 2.81 A	26.2	18	10 bar	PN10
ME50-40F 240	1 x 230 V	50 / 60 Hz	16 .. 132 W	0.13 .. 0.65 A	17	4	10 bar	PN10
ME50-60F 240	1 x 230 V	50 / 60 Hz	16 .. 250 W	0.16 .. 1.18 A	22	6	10 bar	PN10
ME50-80F 240	1 x 230 V	50 / 60 Hz	16 .. 330 W	0.16 .. 1.55 A	26	8	10 bar	PN10
ME50-100F 280	1 x 230 V	50 / 60 Hz	20.9 .. 425 W	0.18 .. 2 A	30	10	10 bar	PN10
ME50-120F 280	1 x 230 V	50 / 60 Hz	20.2 .. 545 W	0.18 .. 2.57 A	33	12	10 bar	PN10
ME50-150F 280	1 x 230 V	50 / 60 Hz	22.2 .. 800 W	0.19 .. 3.73 A	35	15	10 bar	PN10
ME50-180F 280	1 x 230 V	50 / 60 Hz	22.2 .. 800 W	0.19 .. 3.73 A	37.5	18	10 bar	PN10
ME65-40F 340	1 x 230 V	50 / 60 Hz	23.9 .. 200 W	0.21 .. 0.96 A	28	4	10 bar	PN10
ME65-60F 340	1 x 230 V	50 / 60 Hz	23.2 .. 385 W	0.21 .. 1.84 A	36	6	10 bar	PN10
ME65-80F 340	1 x 230 V	50 / 60 Hz	24.2 .. 485 W	0.21 .. 2.32 A	37	8	10 bar	PN10
ME65-100F 340	1 x 230 V	50 / 60 Hz	24.7 .. 630 W	0.21 .. 3 A	41	10	10 bar	PN10
ME65-120F 340	1 x 230 V	50 / 60 Hz	24.4 .. 780 W	0.21 .. 3.65 A	41	12	10 bar	PN10
ME65-150F 340	1 x 230 V	50 / 60 Hz	40 .. 1285 W	0.38 .. 5.96 A	50	15	10 bar	PN10
ME80-40F 360	1 x 230 V	50 / 60 Hz	24 .. 328 W	0.20 .. 1.57 A	32.8	4	10 bar	PN6/10
ME80-60F 360	1 x 230 V	50 / 60 Hz	24 .. 538 W	0.20 .. 2.54 A	42	6	10 bar	PN6/10
ME80-80F 360	1 x 230 V	50 / 60 Hz	24 .. 730 W	0.37 .. 3.4 A	44.5	7.8	10 bar	PN6/10
ME80-100F 360	1 x 230 V	50 / 60 Hz	35 .. 1025 W	0.37 .. 4.8 A	50	10	10 bar	PN6/10
ME80-120F 360	1 x 230 V	50 / 60 Hz	35 .. 1300 W	0.37 .. 6 A	60	12	10 bar	PN6/10
ME80-150F 360	1 x 230 V	50 / 60 Hz	35 .. 1550 W	0.37 .. 7.22 A	60	15	10 bar	PN6/10
ME100-40F 450	1 x 230 V	50 / 60 Hz	19 .. 510 W	0.18 .. 2.4 A	42.6	4.3	10 bar	PN6/10
ME100-60F 450	1 x 230 V	50 / 60 Hz	31 .. 690 W	0.36 .. 3.24 A	48.8	6	10 bar	PN6/10
ME100-80F 450	1 x 230 V	50 / 60 Hz	31 .. 1085 W	0.36 .. 5.04 A	56.2	8	10 bar	PN6/10
ME100-100F 450	1 x 230 V	50 / 60 Hz	31 .. 1435 W	0.36 .. 6.65 A	60.1	10	10 bar	PN6/10
ME100-120F 450	1 x 230 V	50 / 60 Hz	31 .. 1535 W	0.36 .. 7.12 A	61.1	12	10 bar	PN6/10
ME100-150F 450	1 x 230 V	50 / 60 Hz	31 .. 1535 W	0.36 .. 7.12 A	61.1	15	10 bar	PN6/10

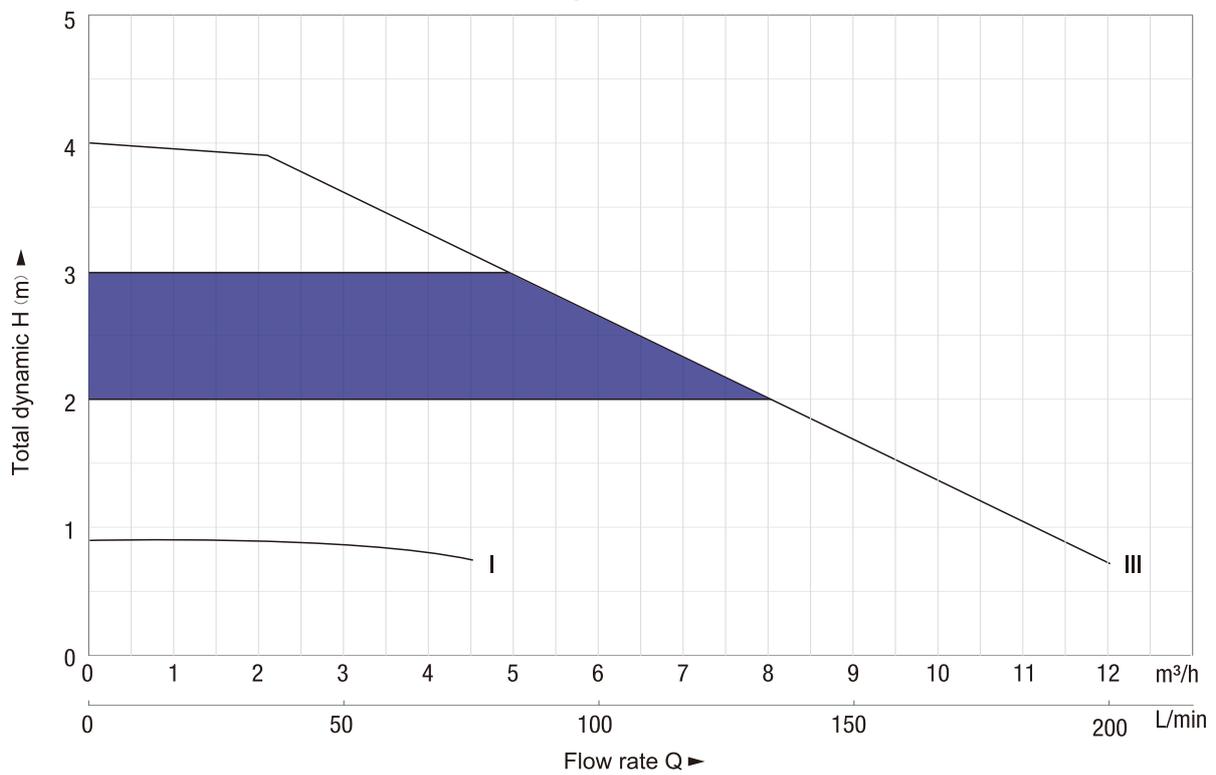
## Performance chart

### ME40-40F

#### Proportional pressure



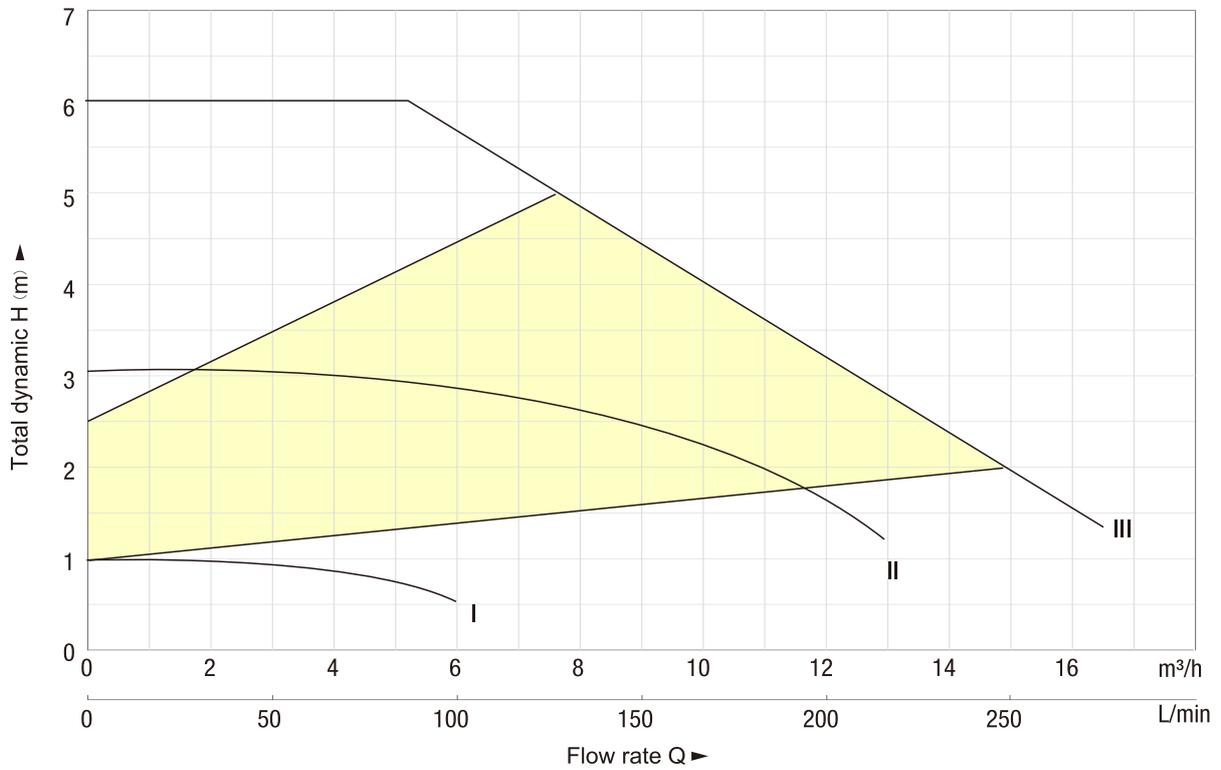
#### Delta-pressure



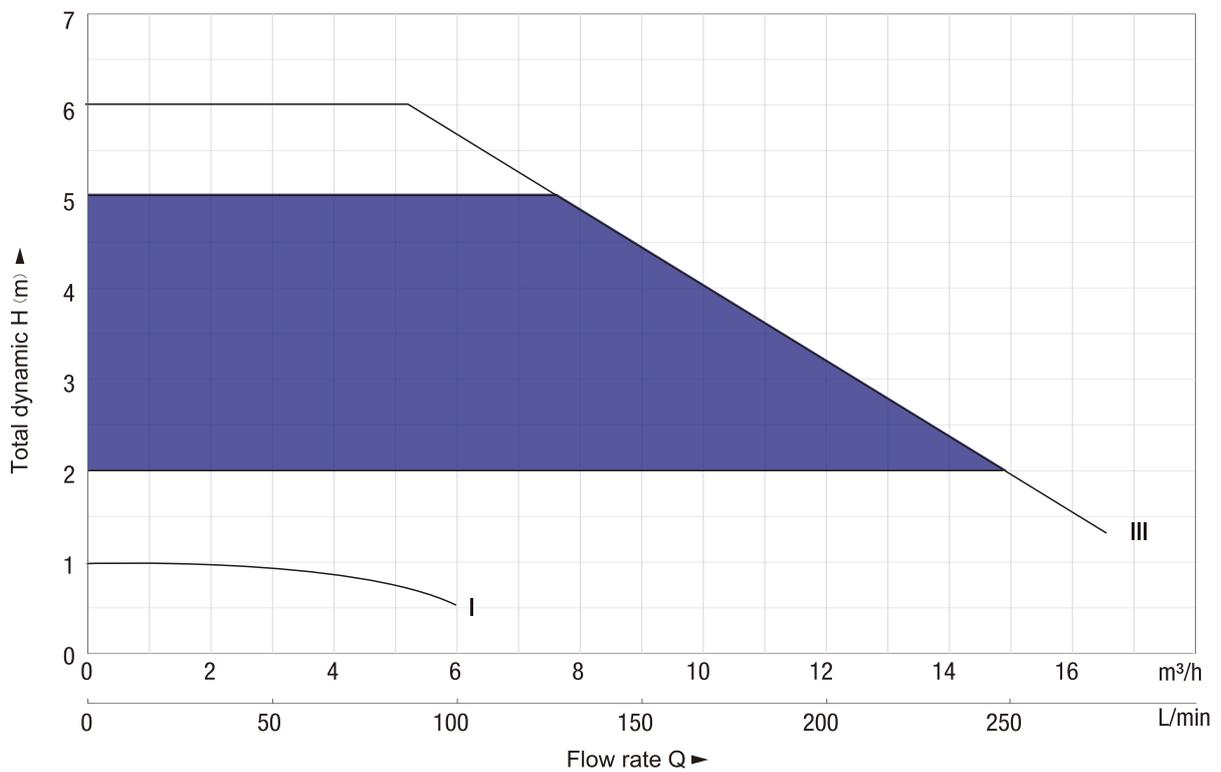
## Performance chart

**ME40-60F**

### Proportional pressure



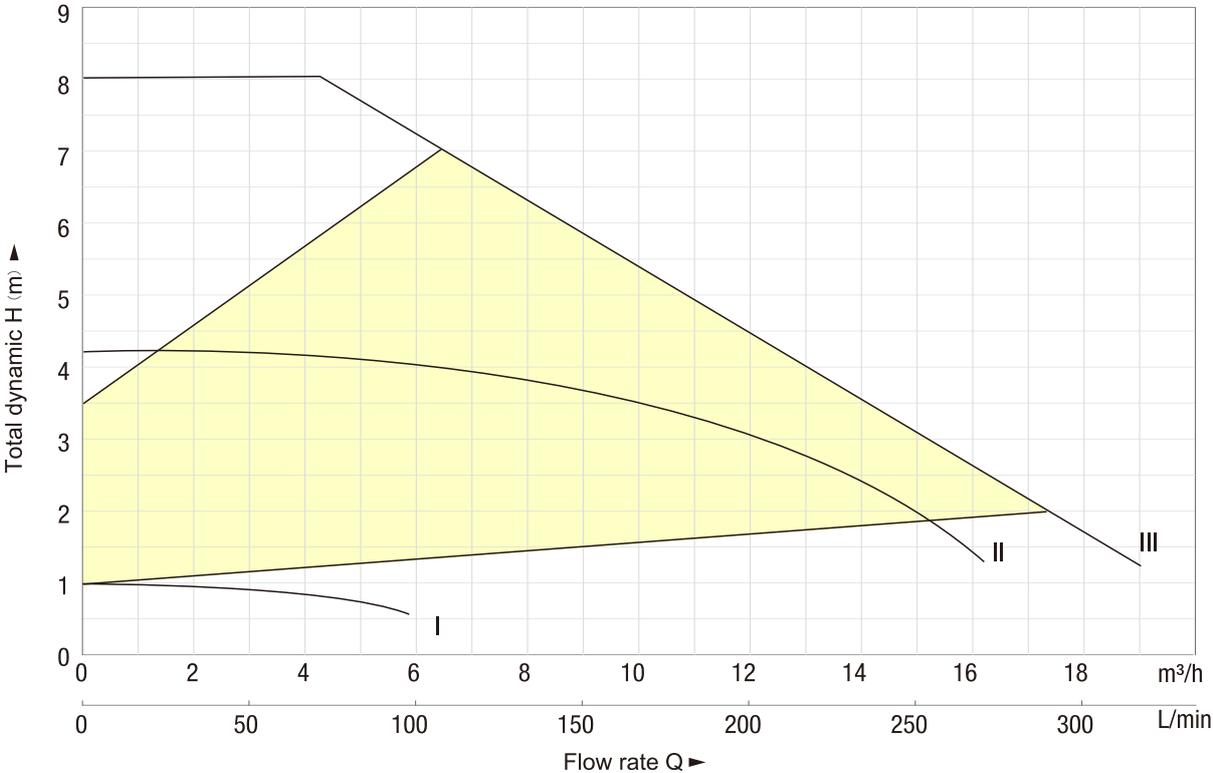
### Delta-pressure



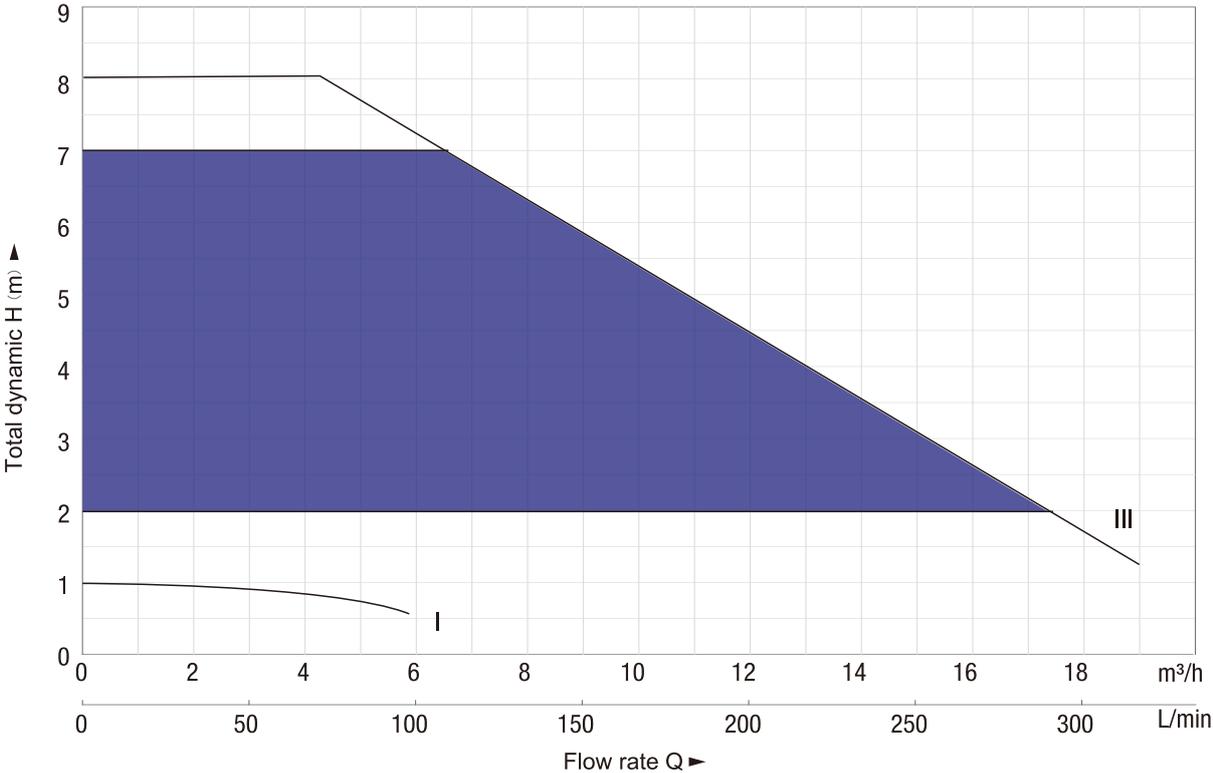
**Performance chart**

**ME40-80F**

**Proportional pressure**



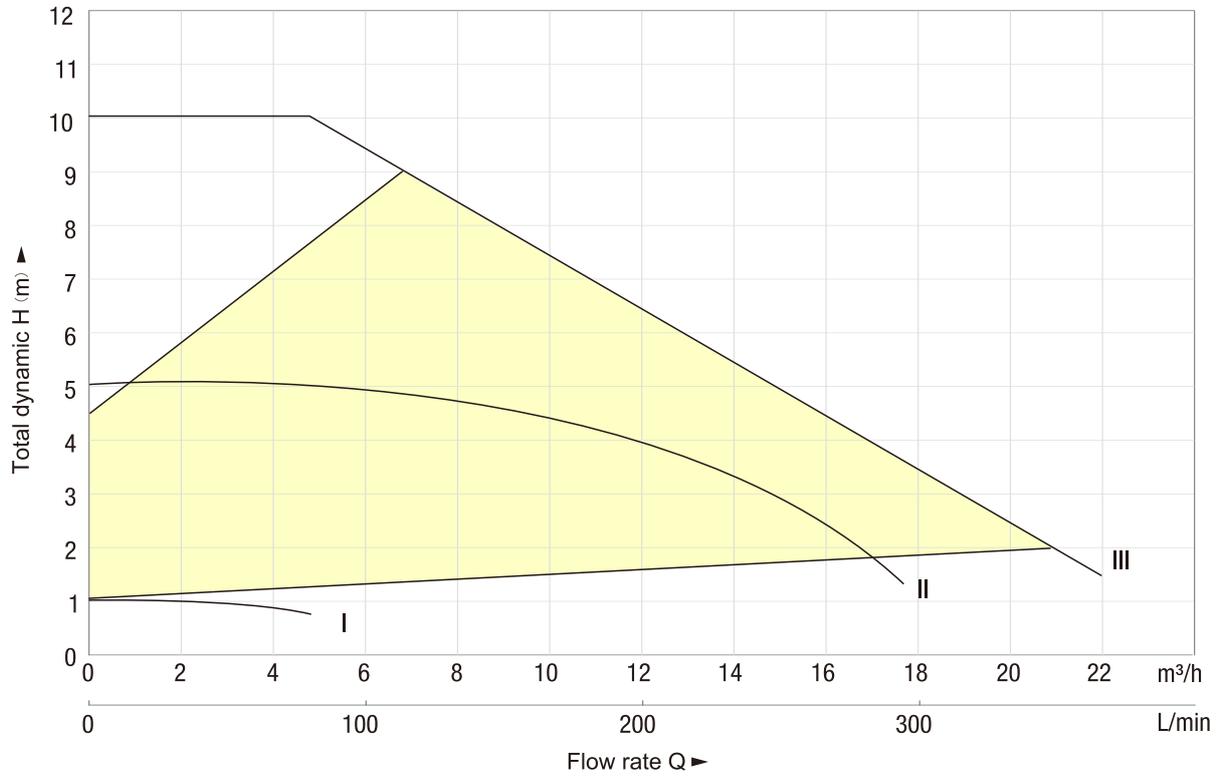
**Delta-pressure**



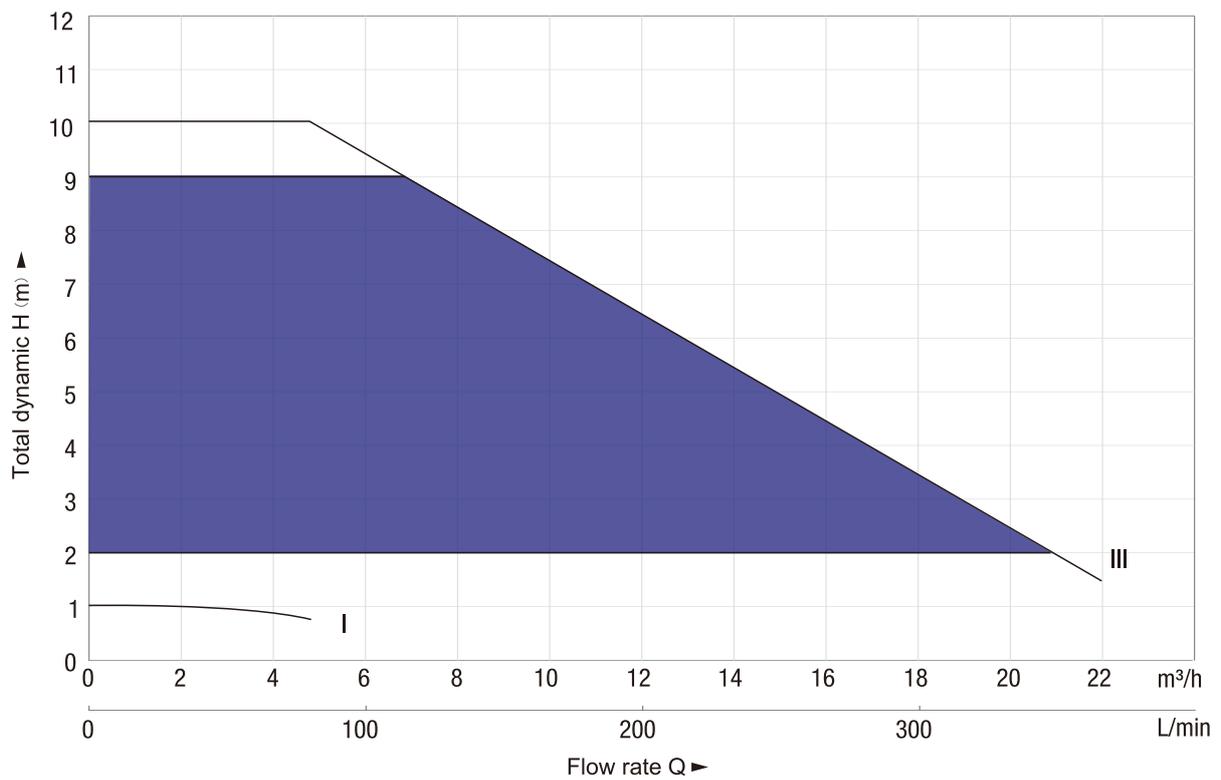
## Performance chart

### ME40-100F

#### Proportional pressure



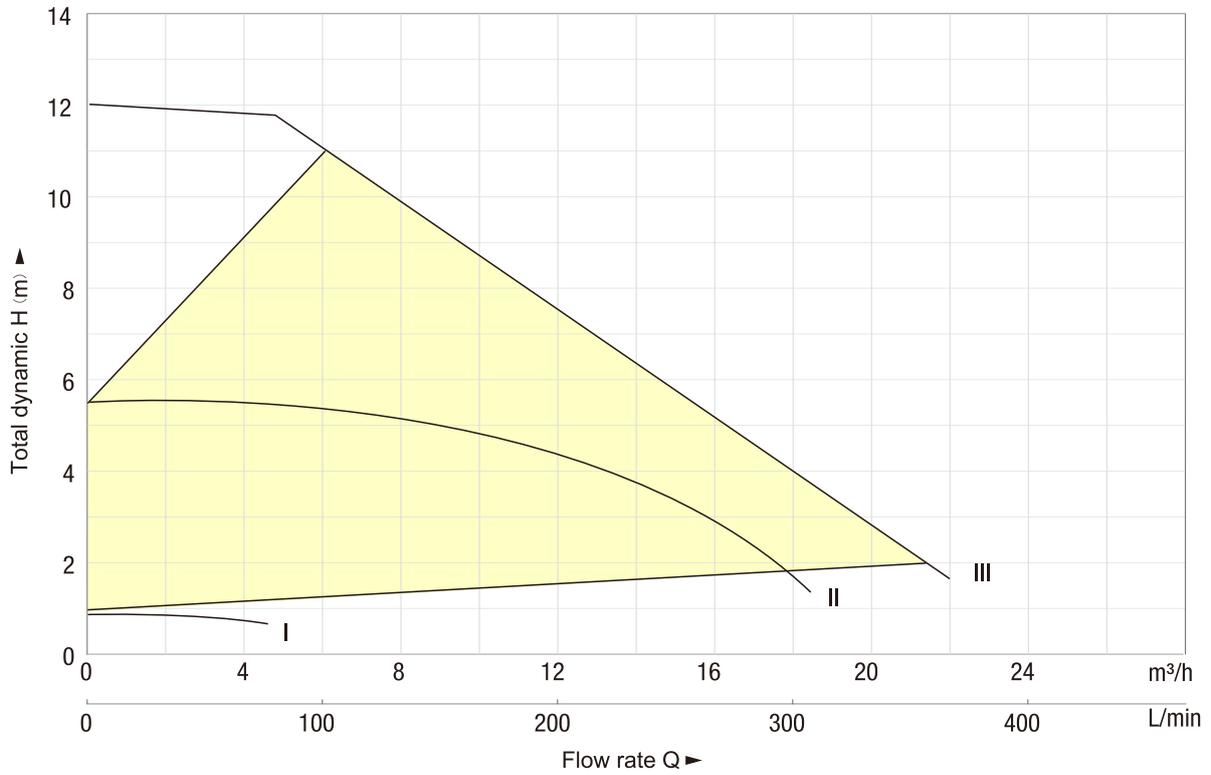
#### Delta-pressure



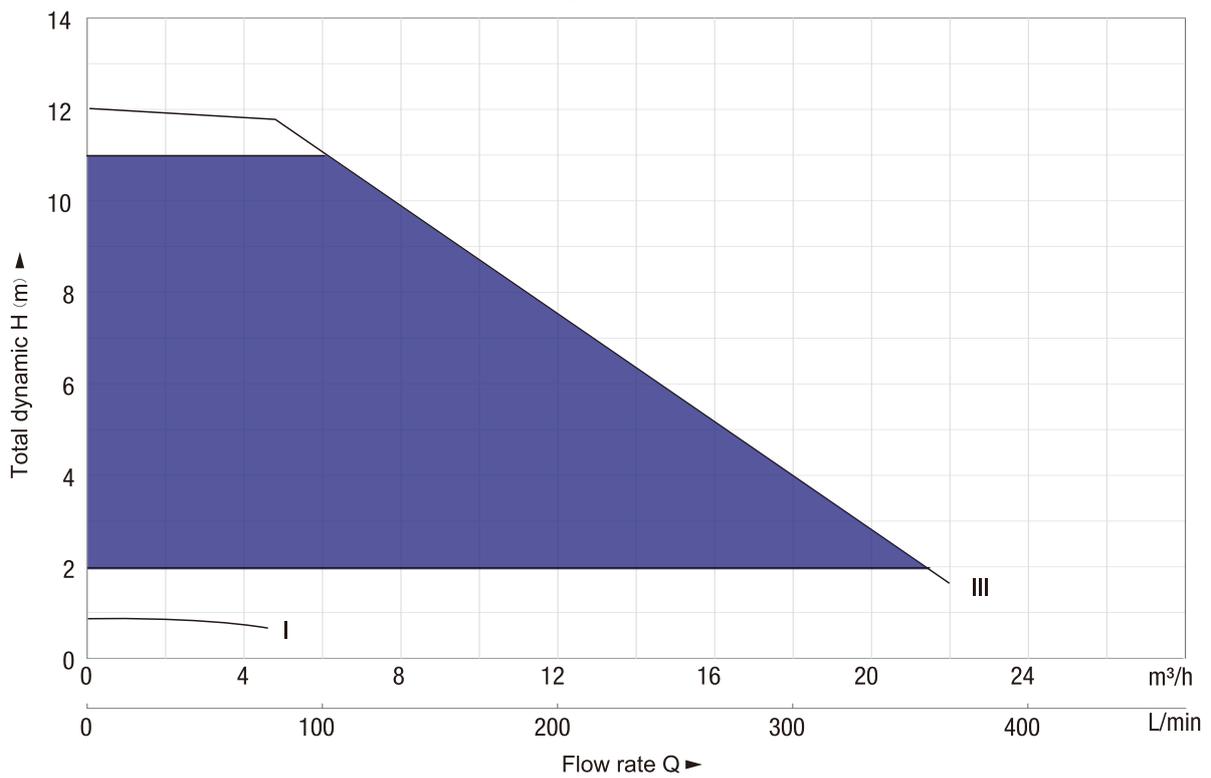
## Performance chart

### ME40-120F

#### Proportional pressure



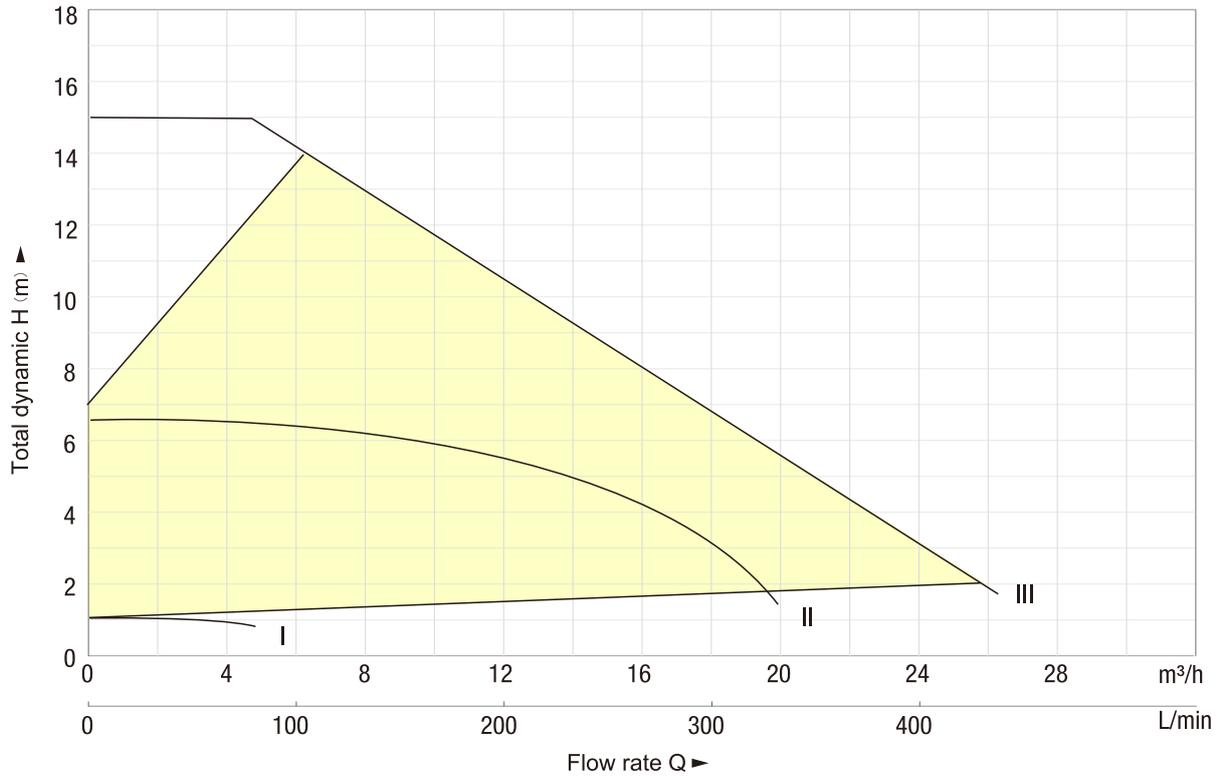
#### Delta-pressure



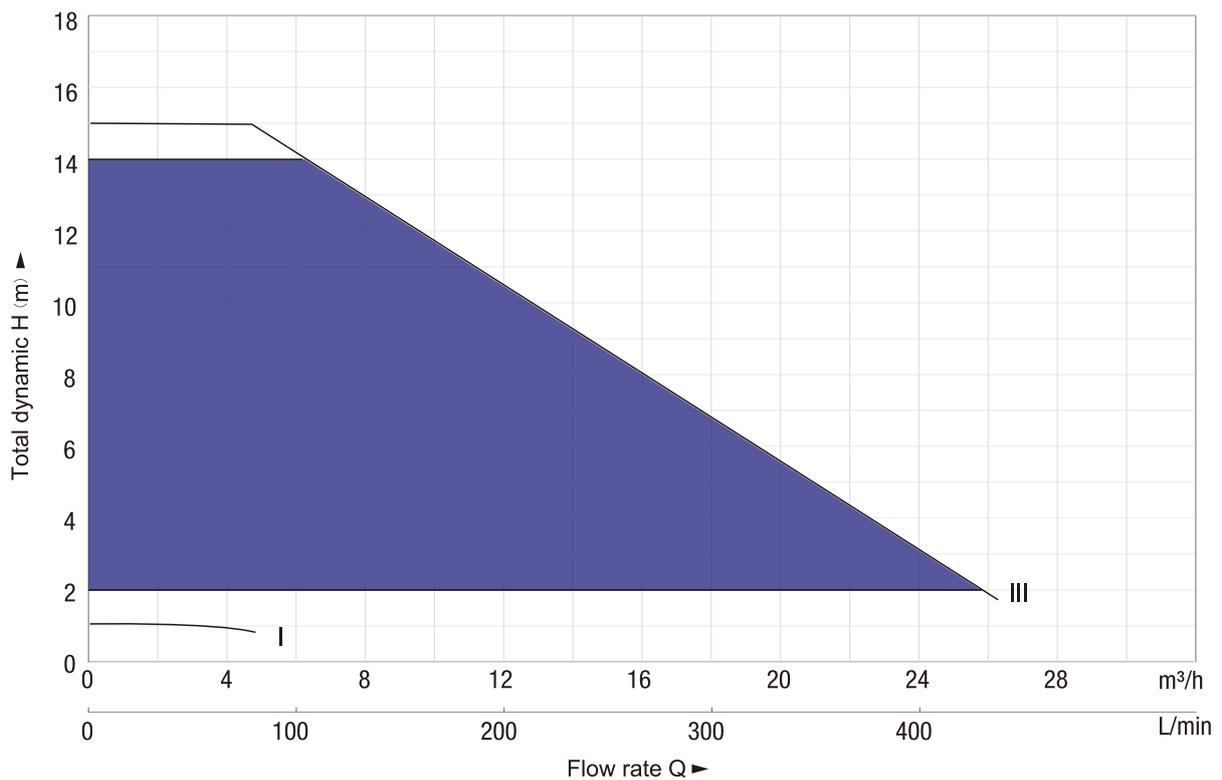
## Performance chart

### ME40-150F

#### Proportional pressure



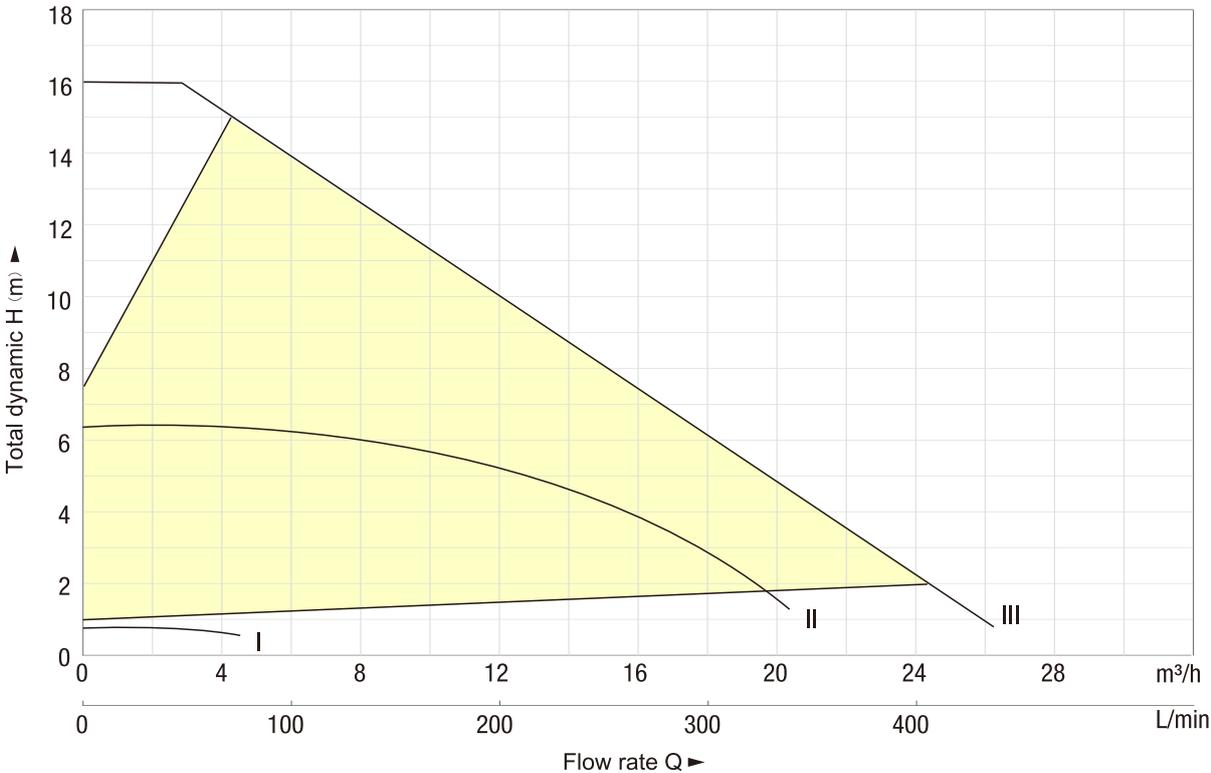
#### Delta-pressure



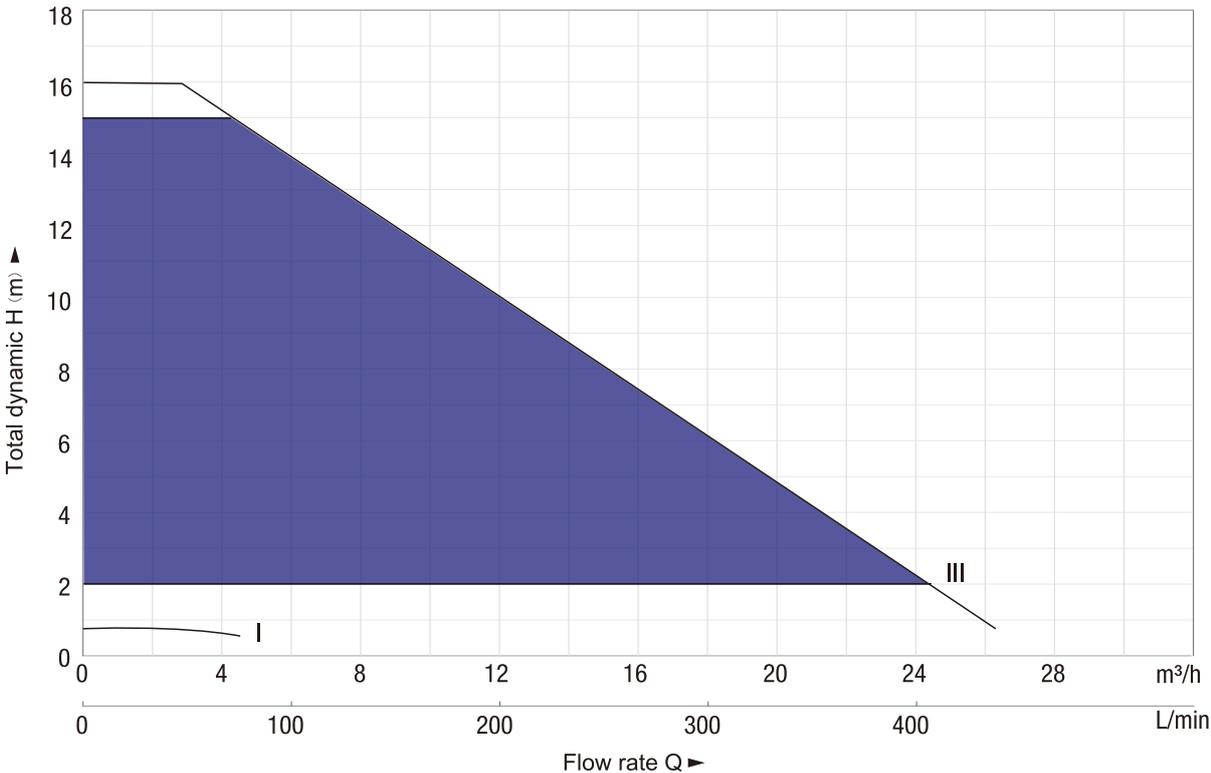
**Performance chart**

**ME40-180F**

**Proportional pressure**



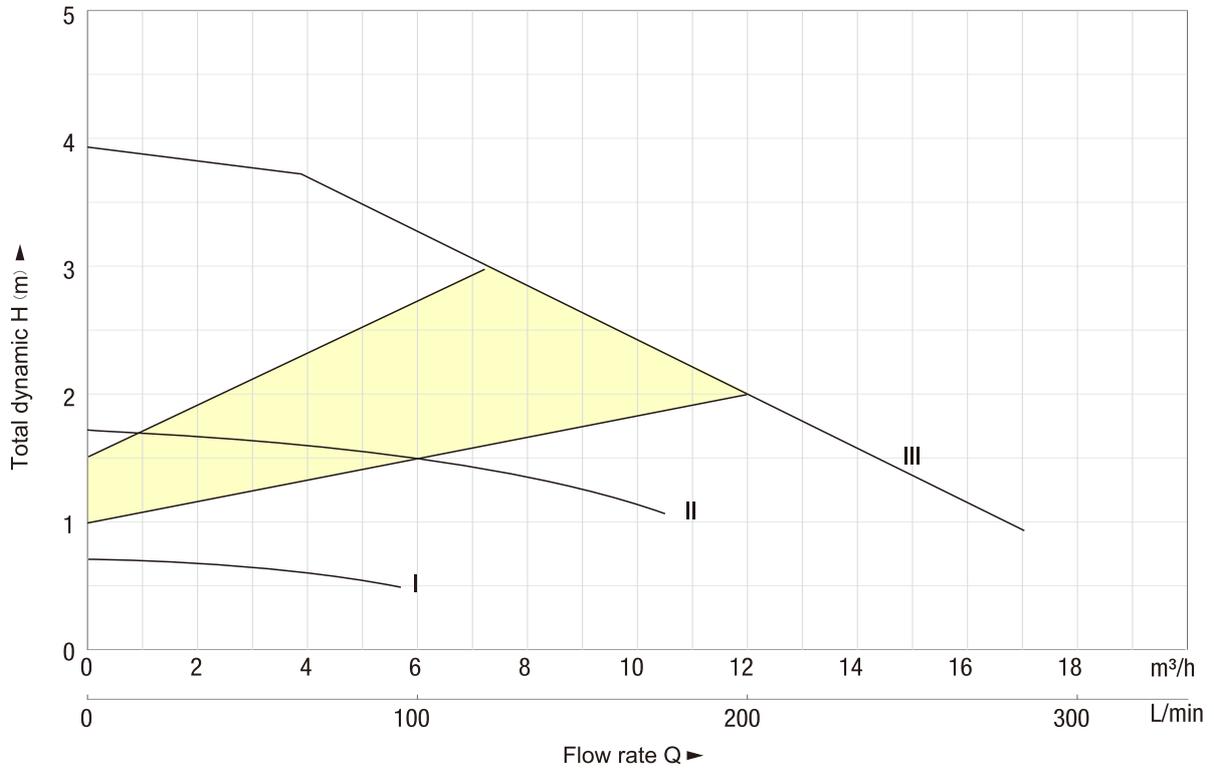
**Delta-pressure**



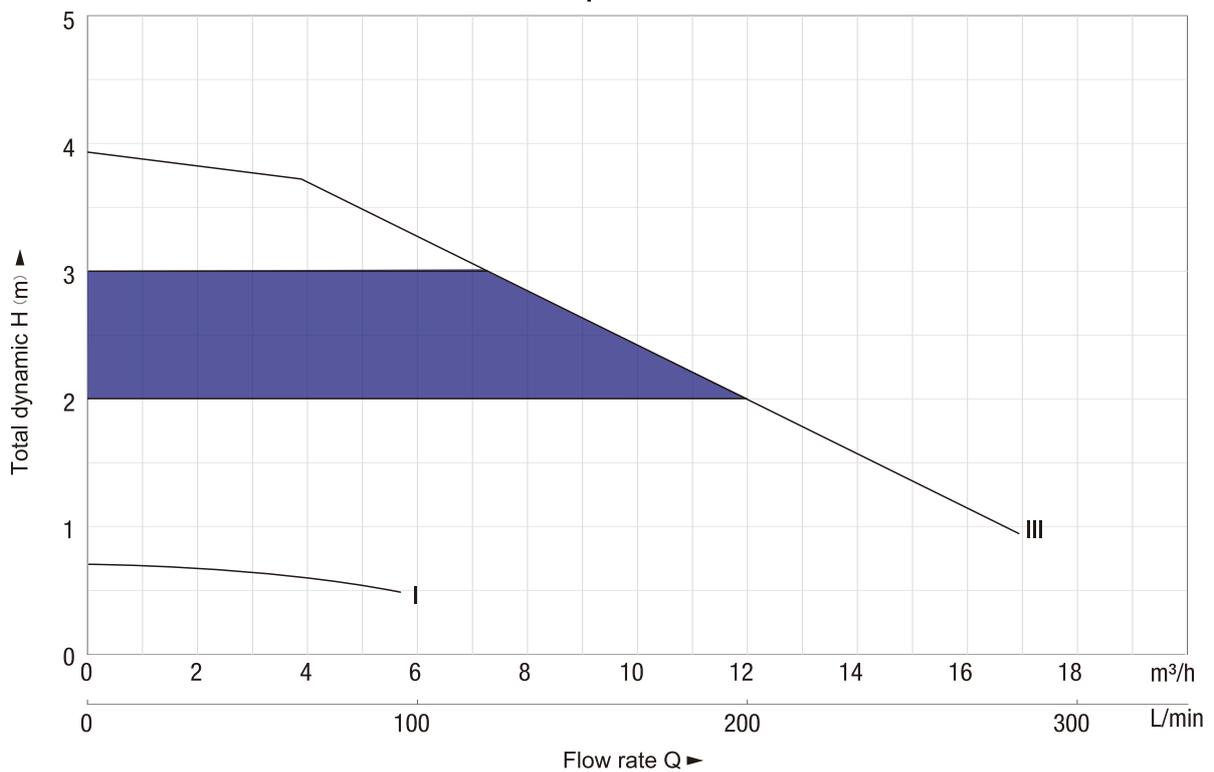
## Performance chart

**ME50-40F**

### Proportional pressure



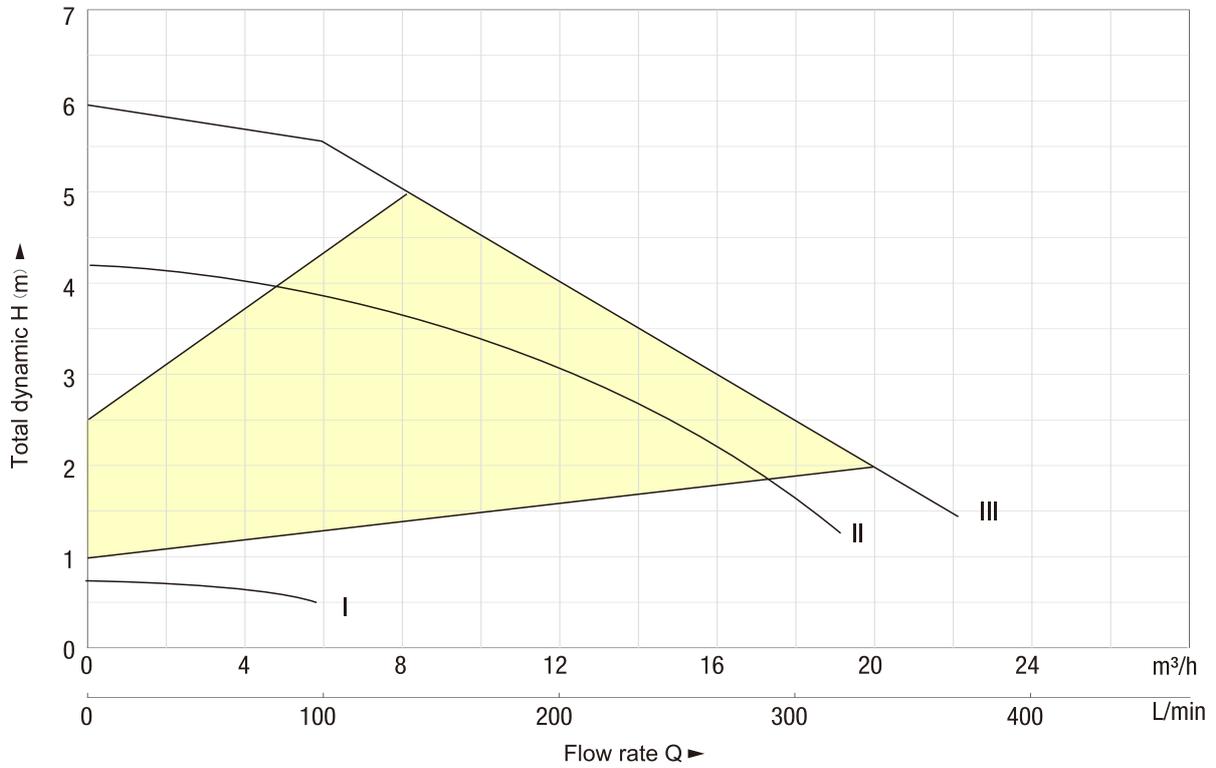
### Delta-pressure



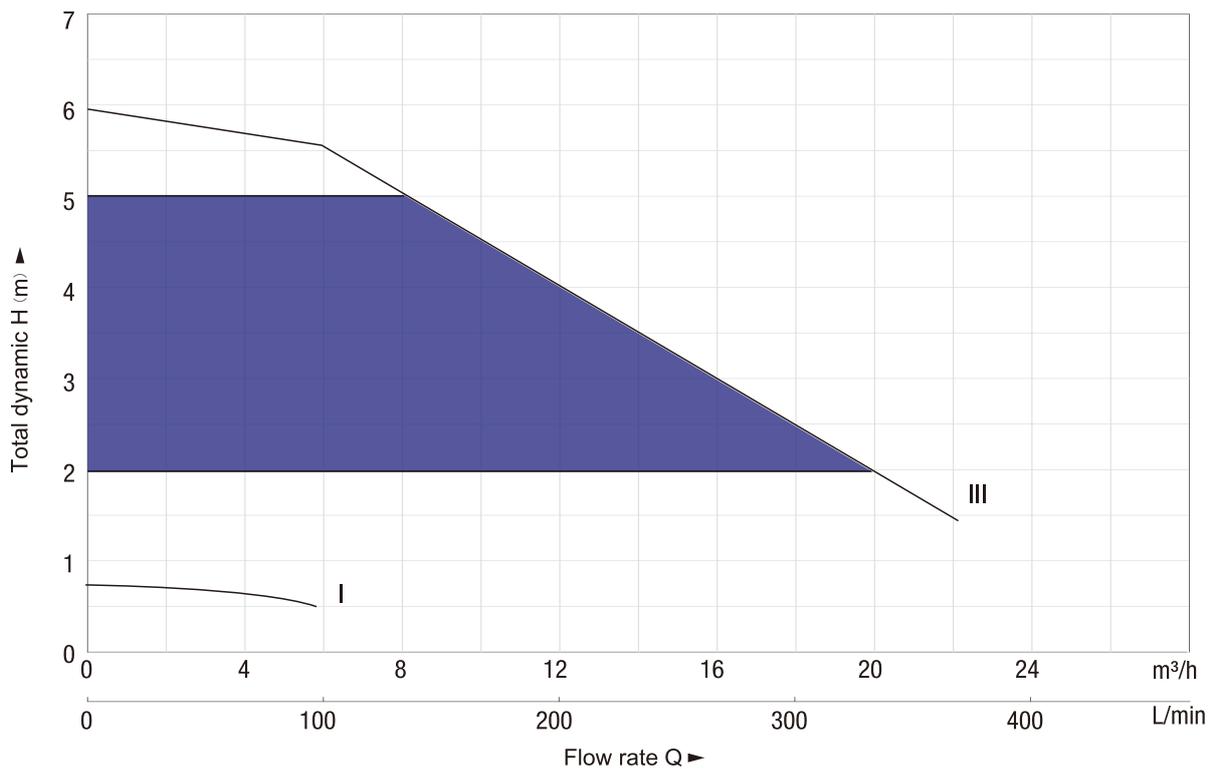
## Performance chart

### ME50-60F

#### Proportional pressure



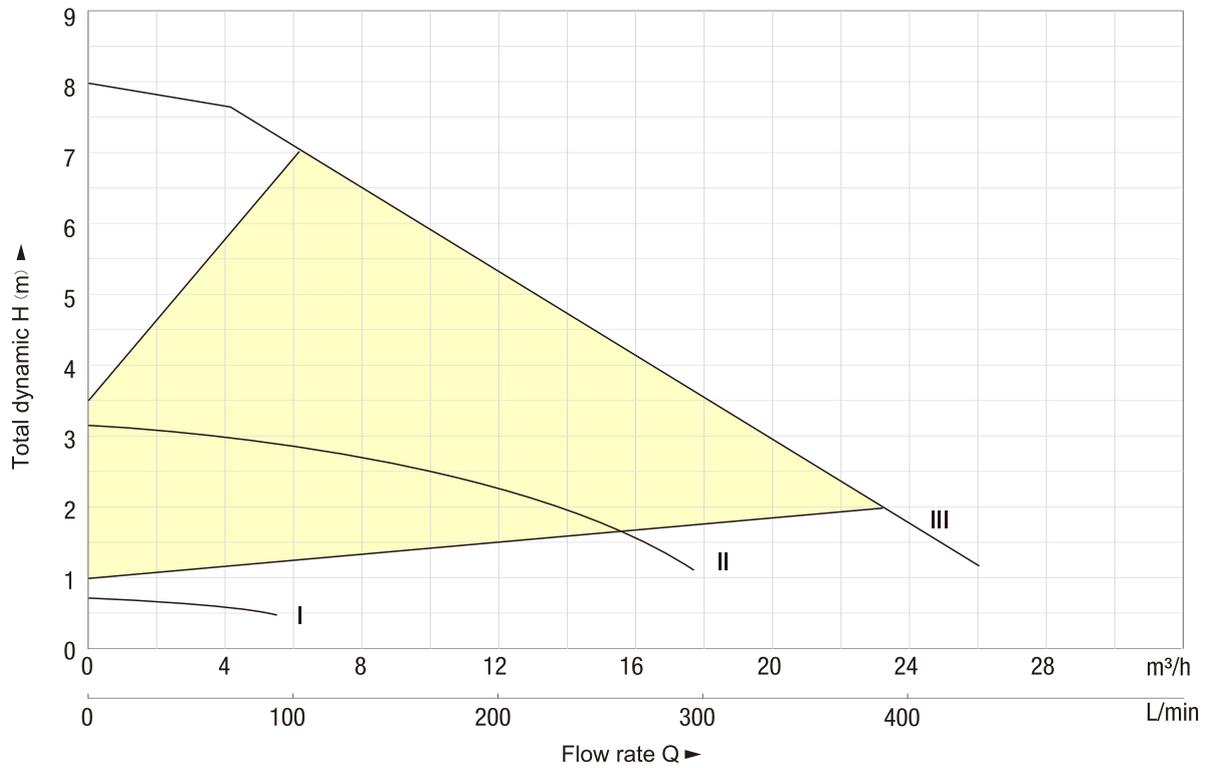
#### Delta-pressure



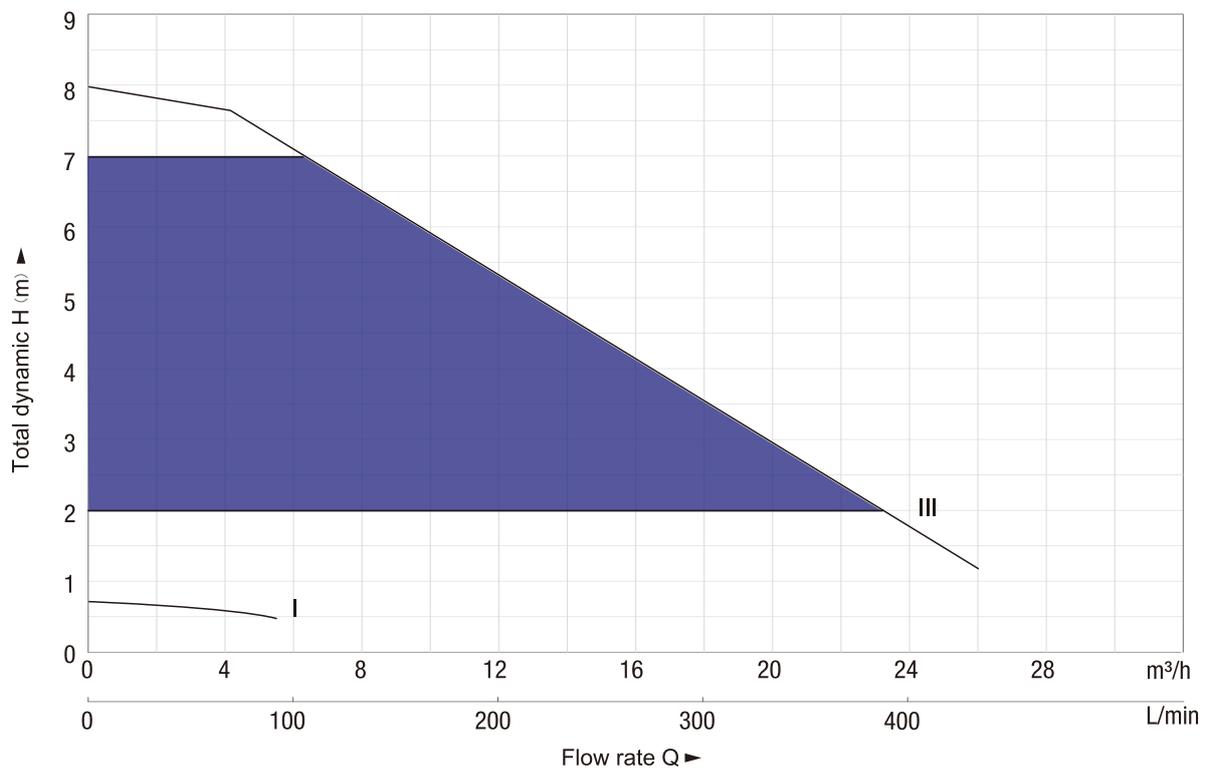
## Performance chart

### ME50-80F

#### Proportional pressure



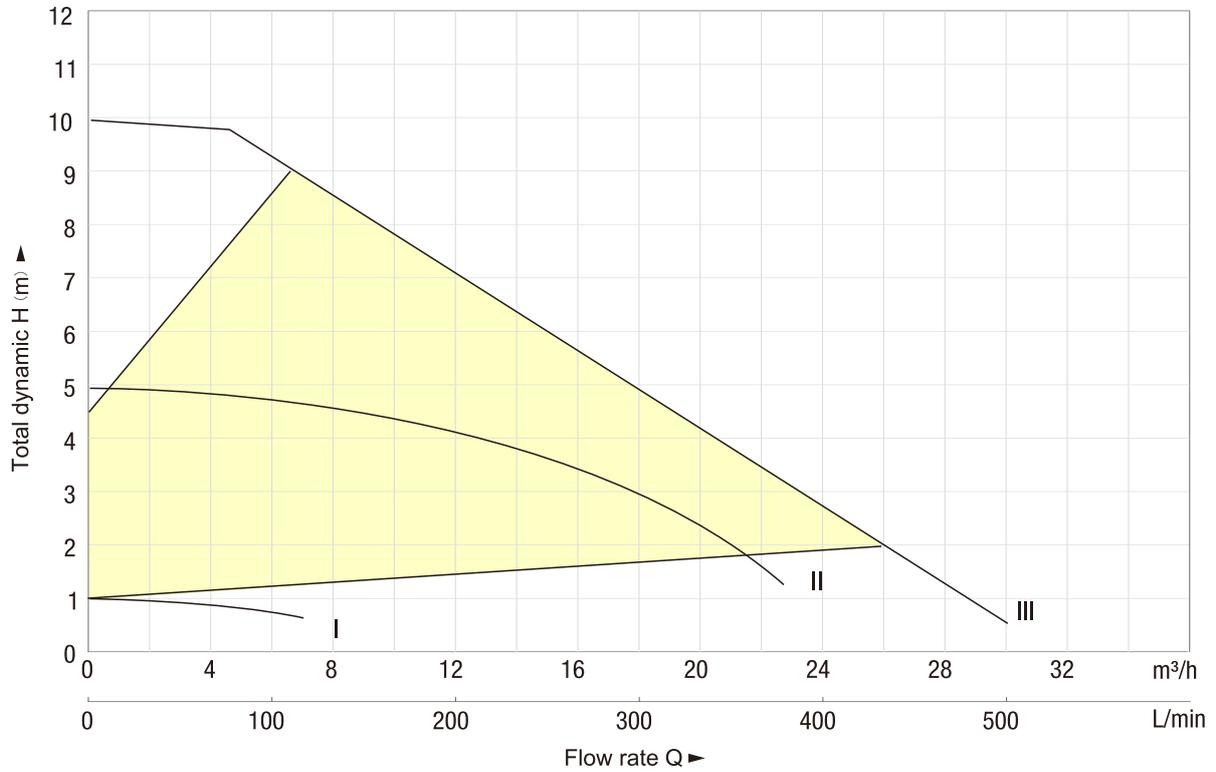
#### Delta-pressure



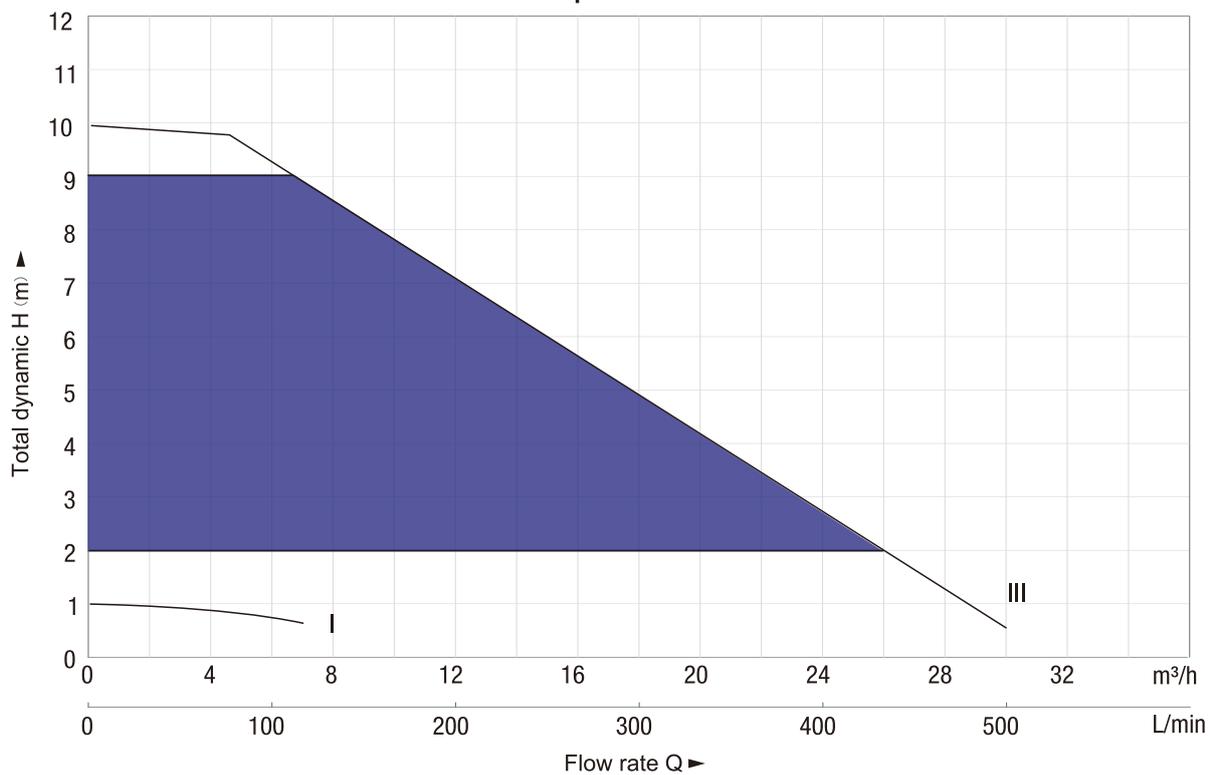
## Performance chart

### ME50-100F

#### Proportional pressure



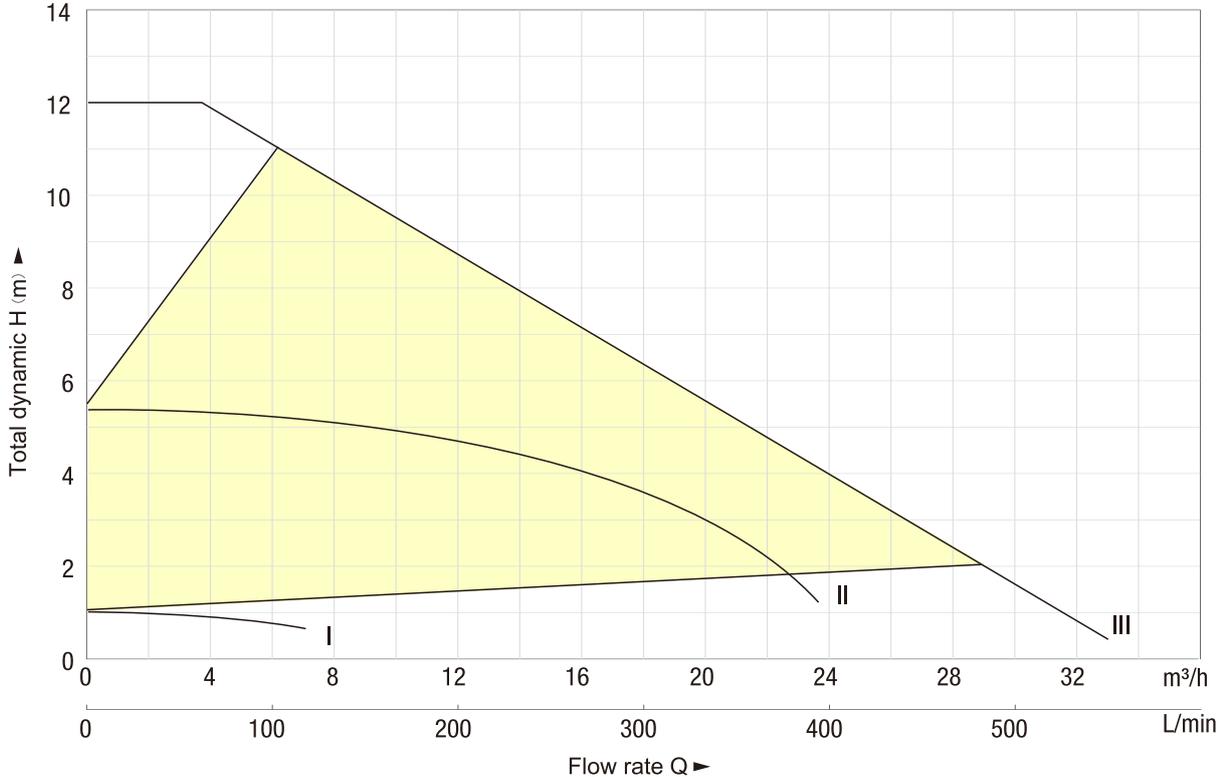
#### Delta-pressure



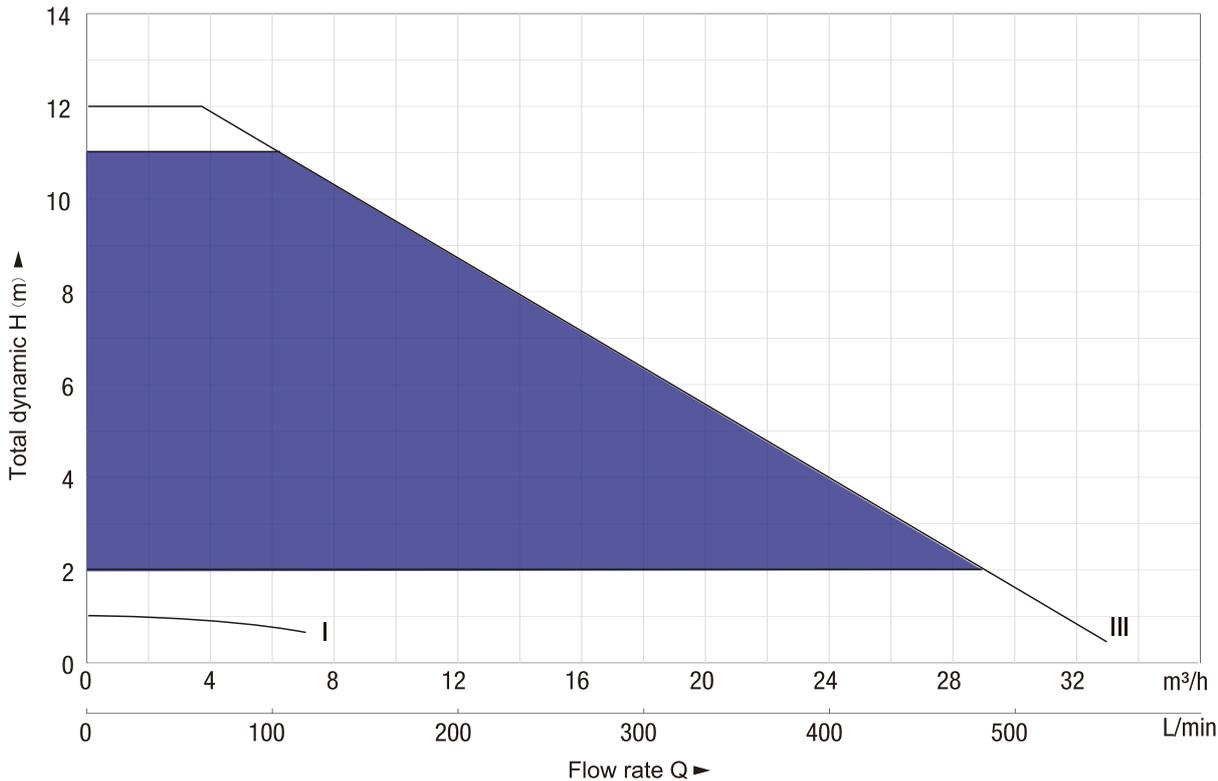
**Performance chart**

**ME50-120F**

**Proportional pressure**



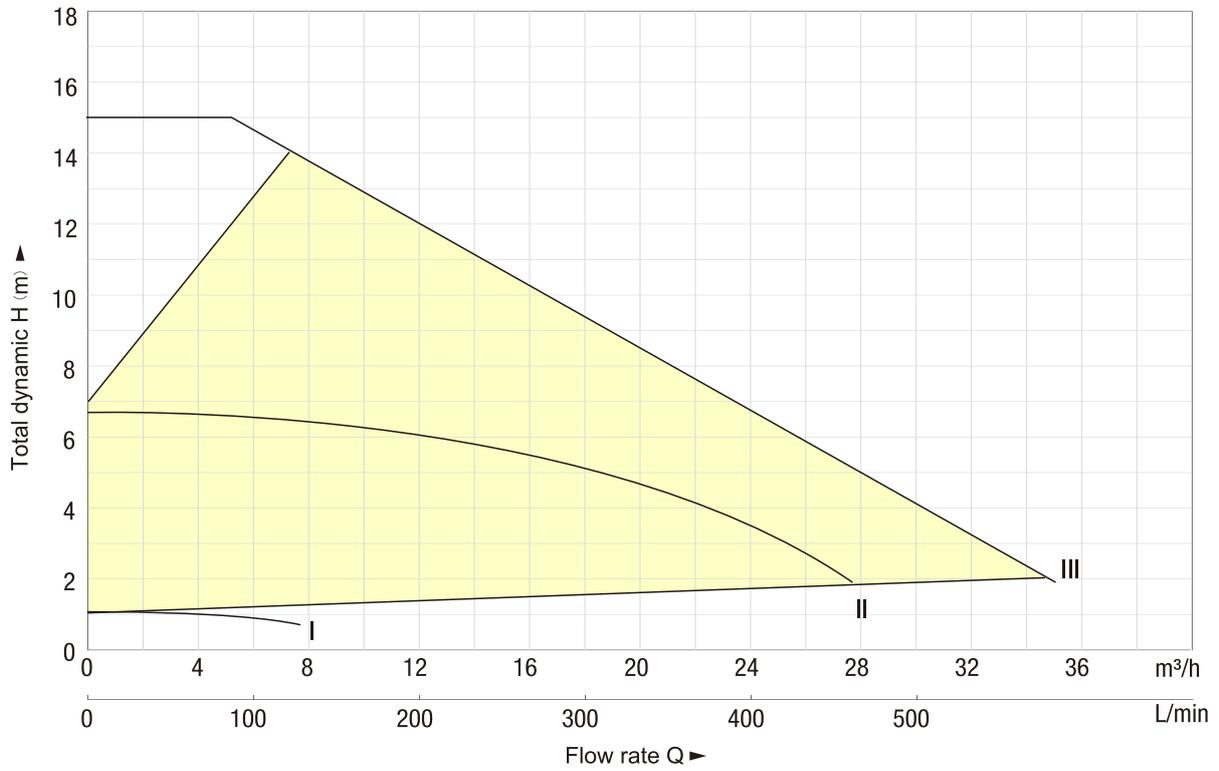
**Delta-pressure**



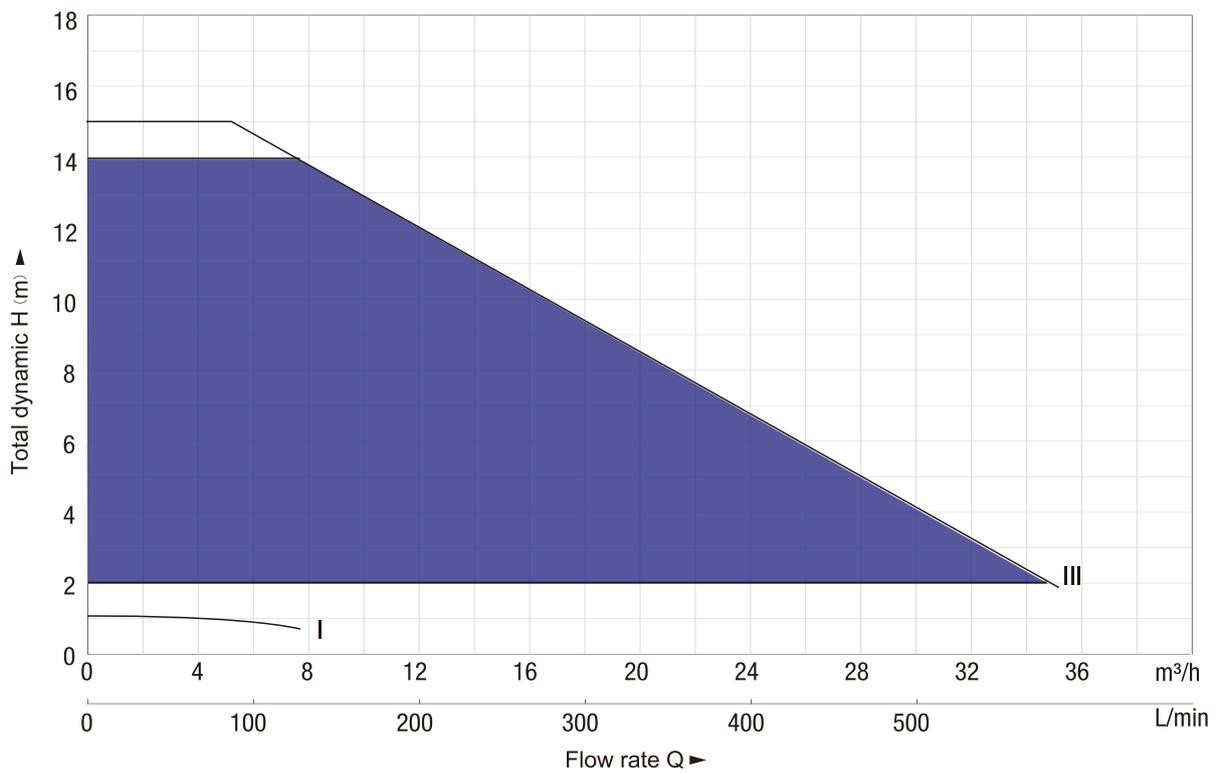
## Performance chart

### ME50-150F

#### Proportional pressure



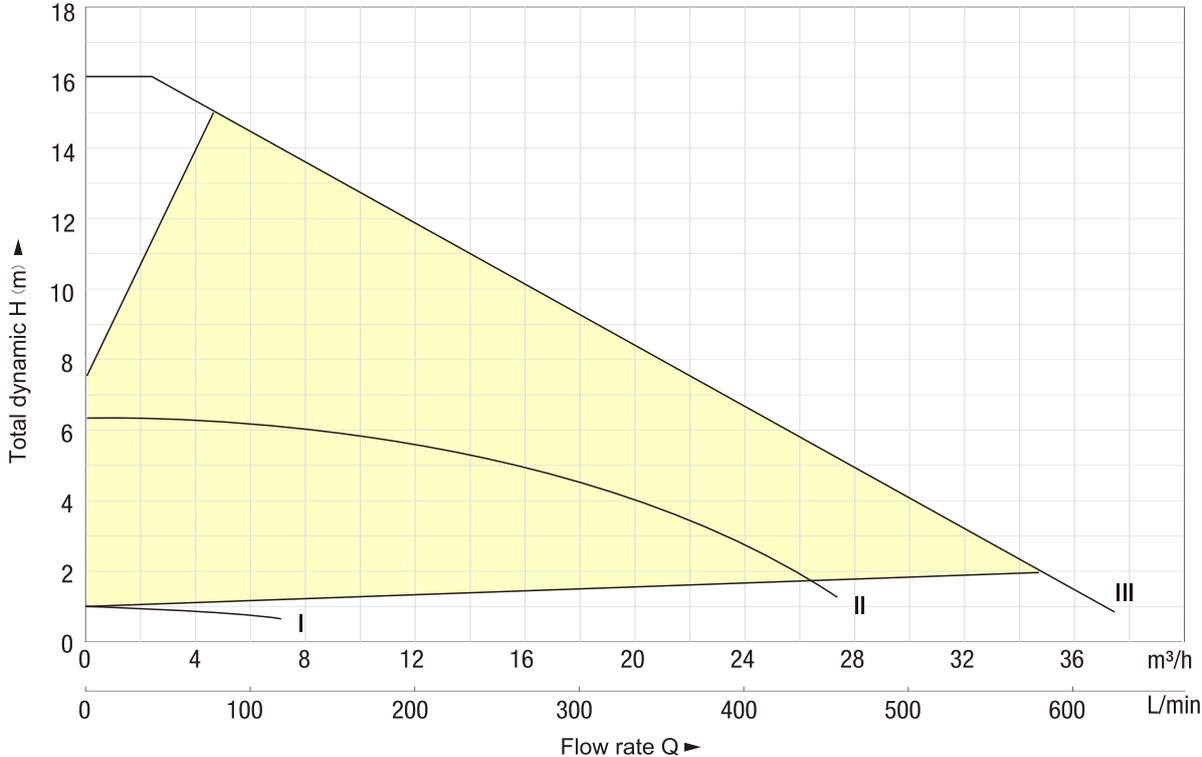
#### Delta-pressure



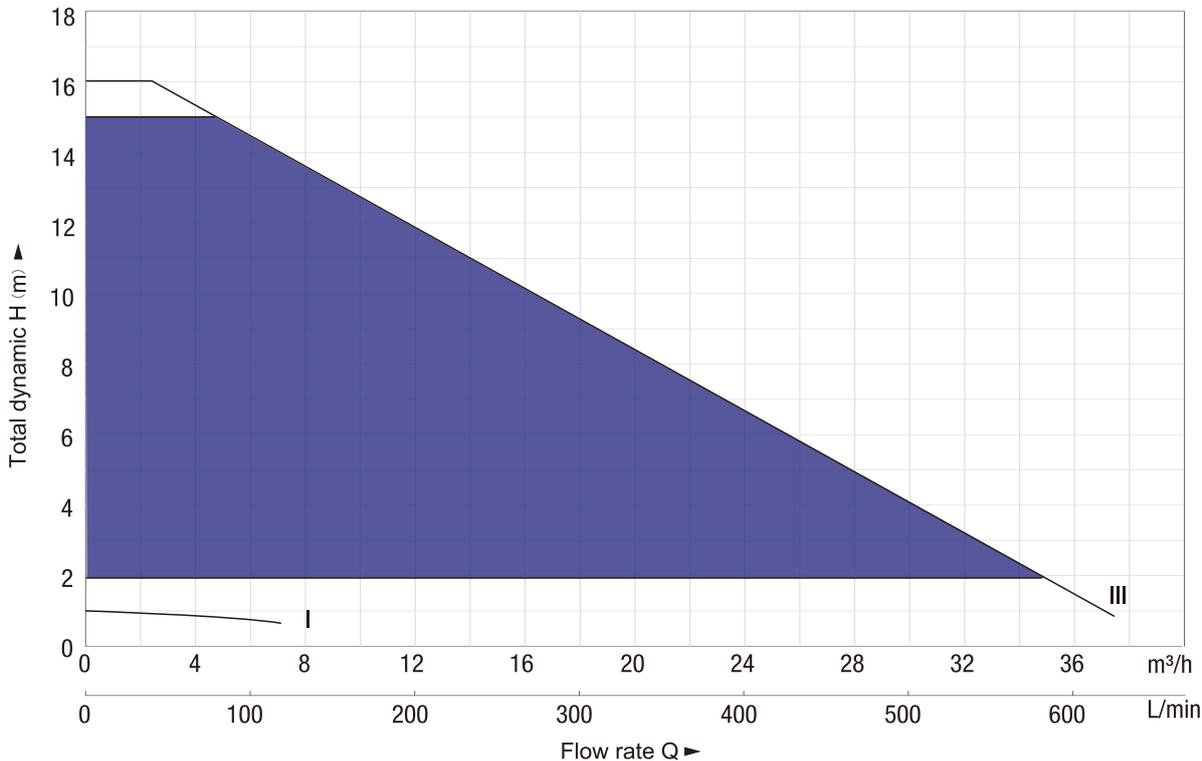
## Performance chart

### ME50-180F

#### Proportional pressure



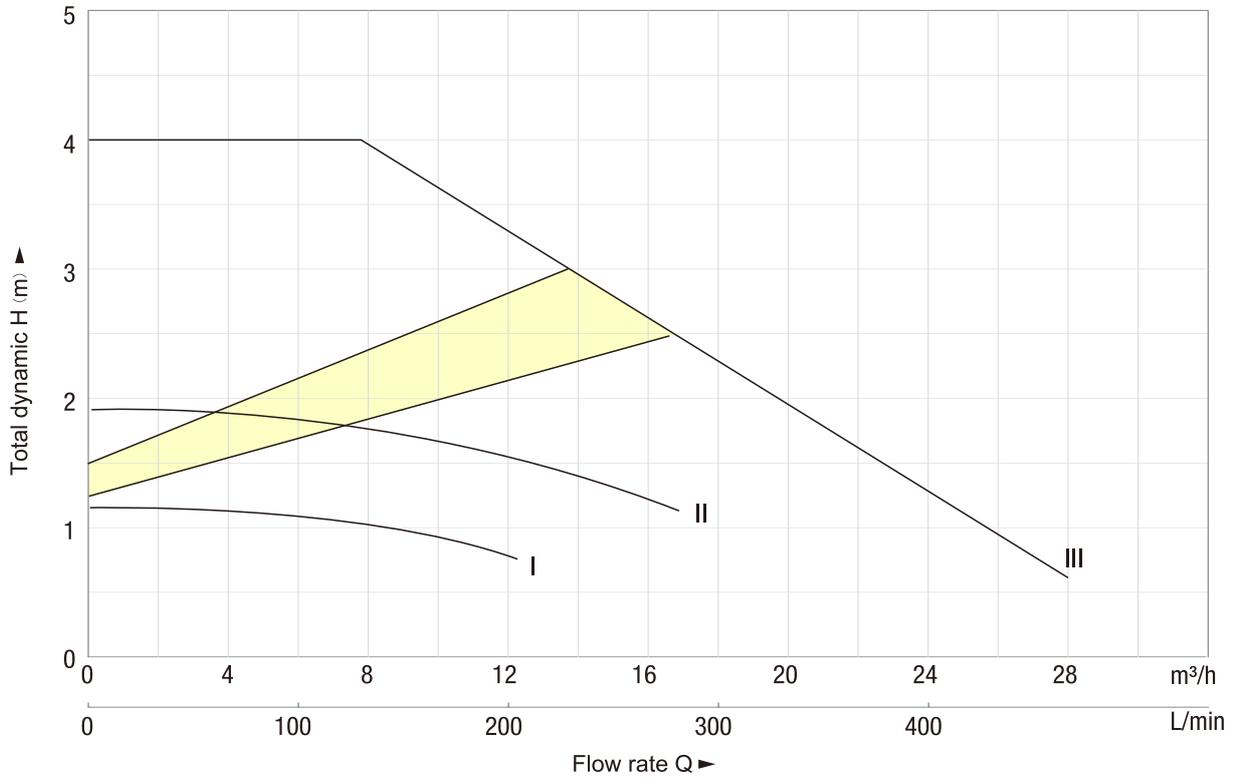
#### Delta-pressure



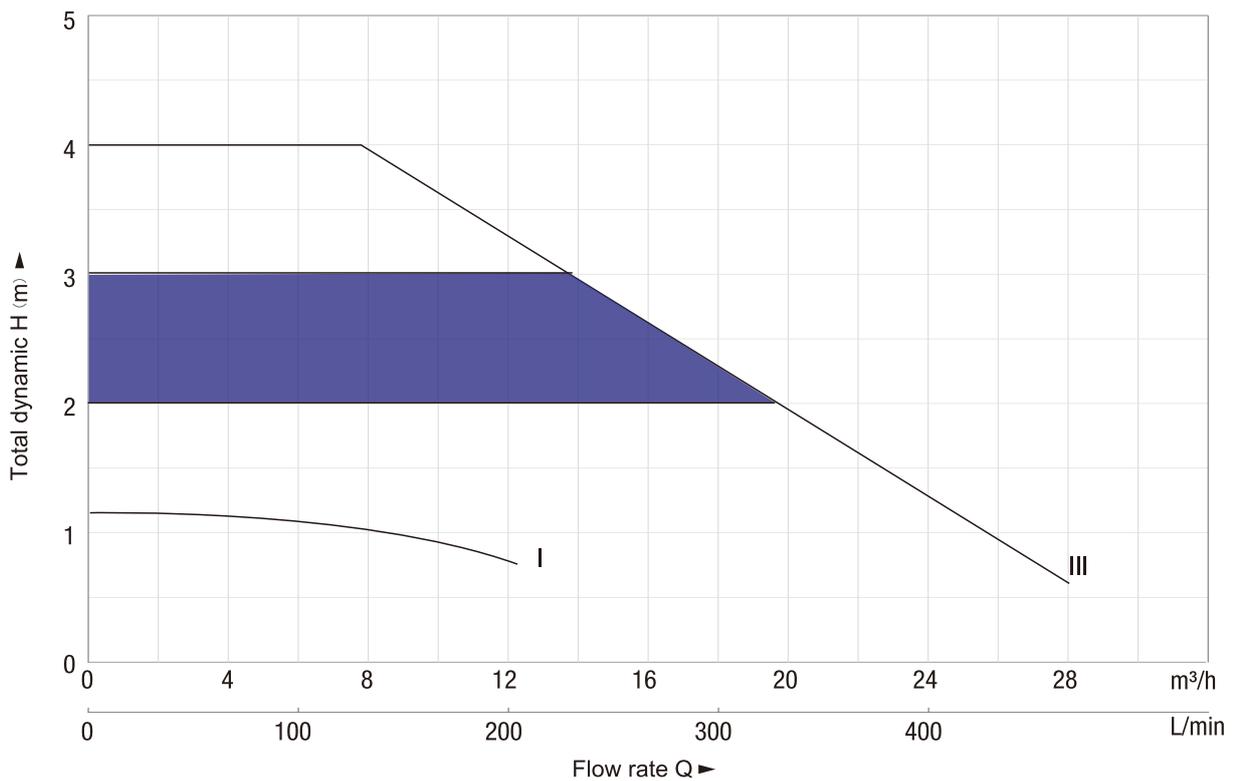
## Performance chart

### ME65-40F

#### Proportional pressure



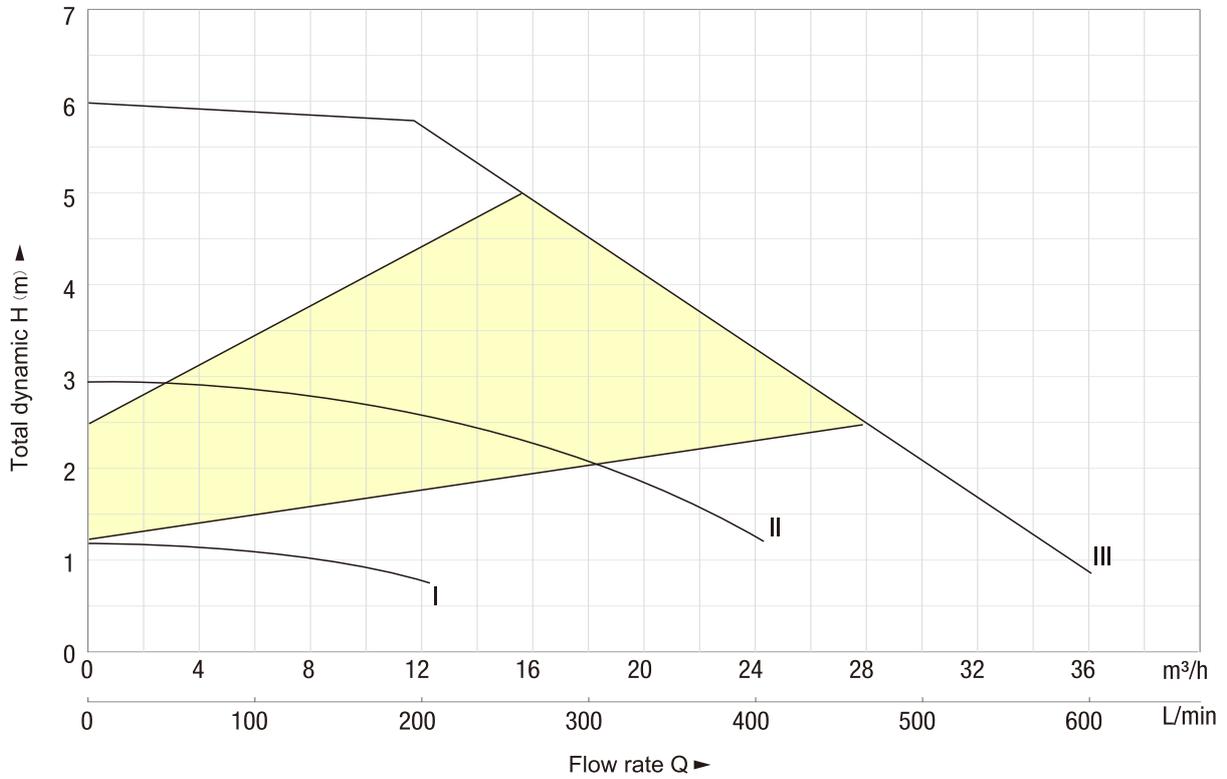
#### Delta-pressure



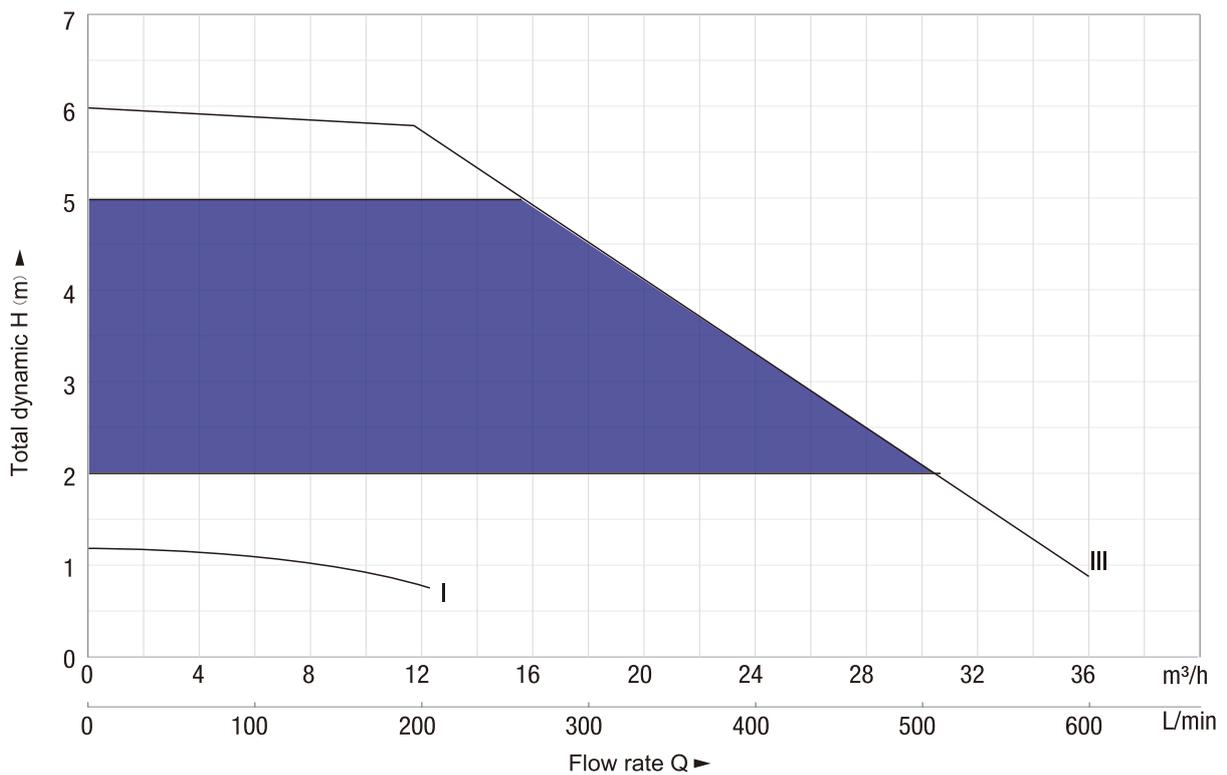
## Performance chart

### ME65-60F

#### Proportional pressure



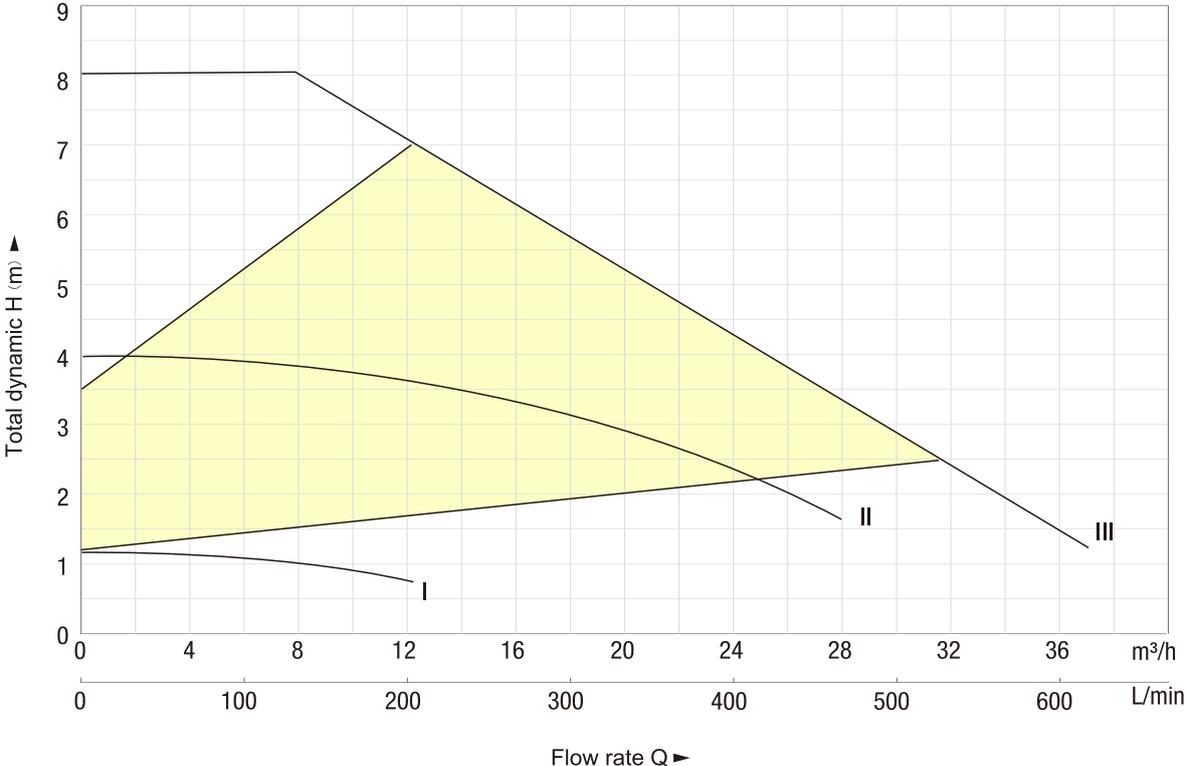
#### Delta-pressure



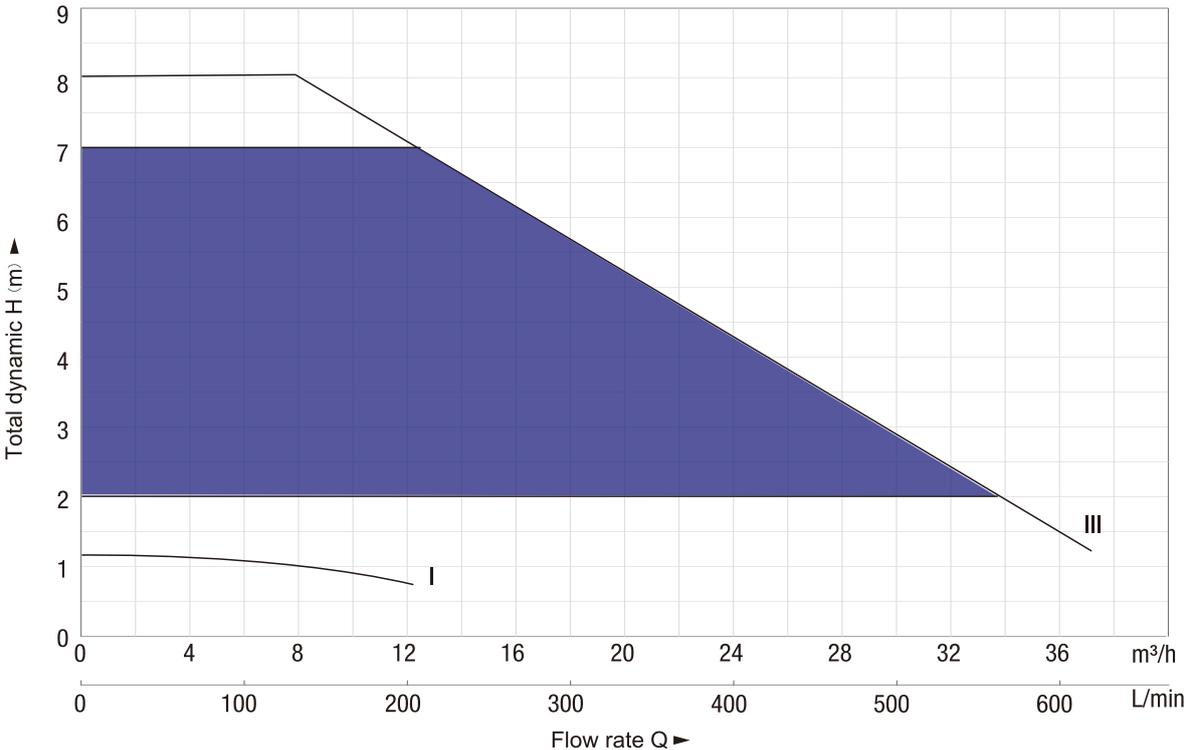
**Performance chart**

**ME65-80F**

Proportional pressure



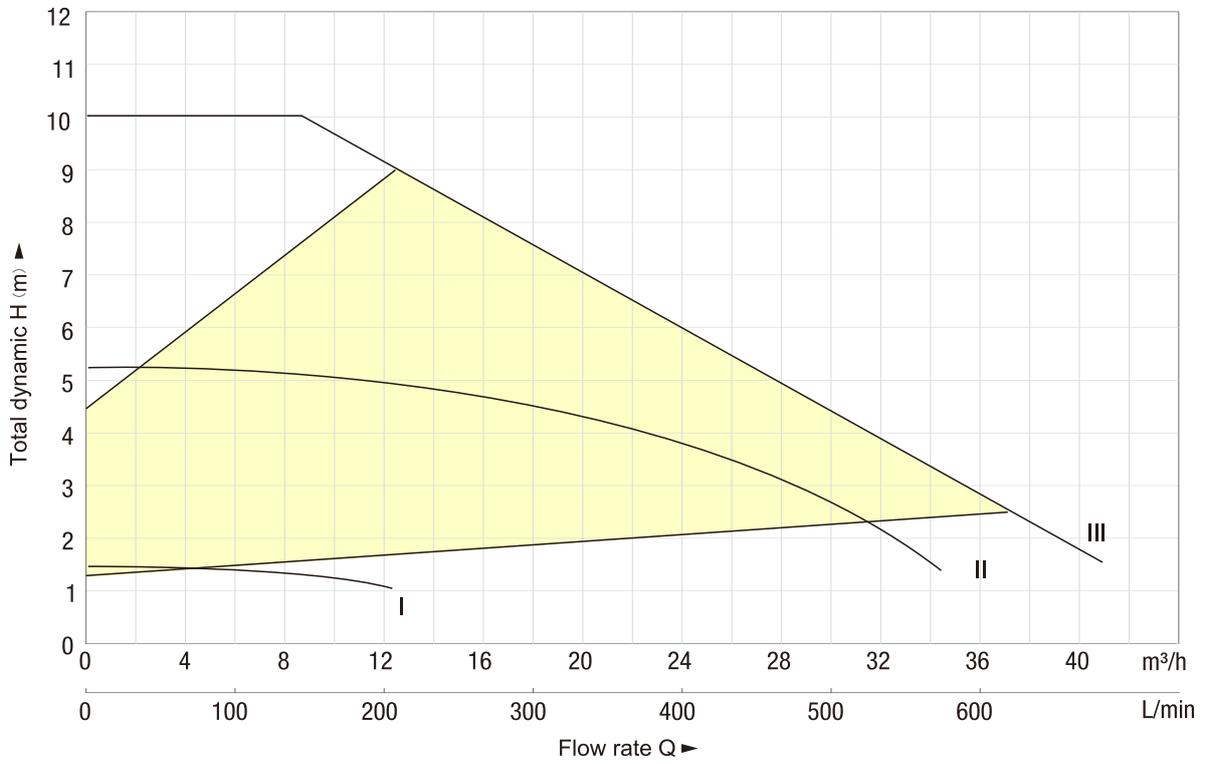
Delta-pressure



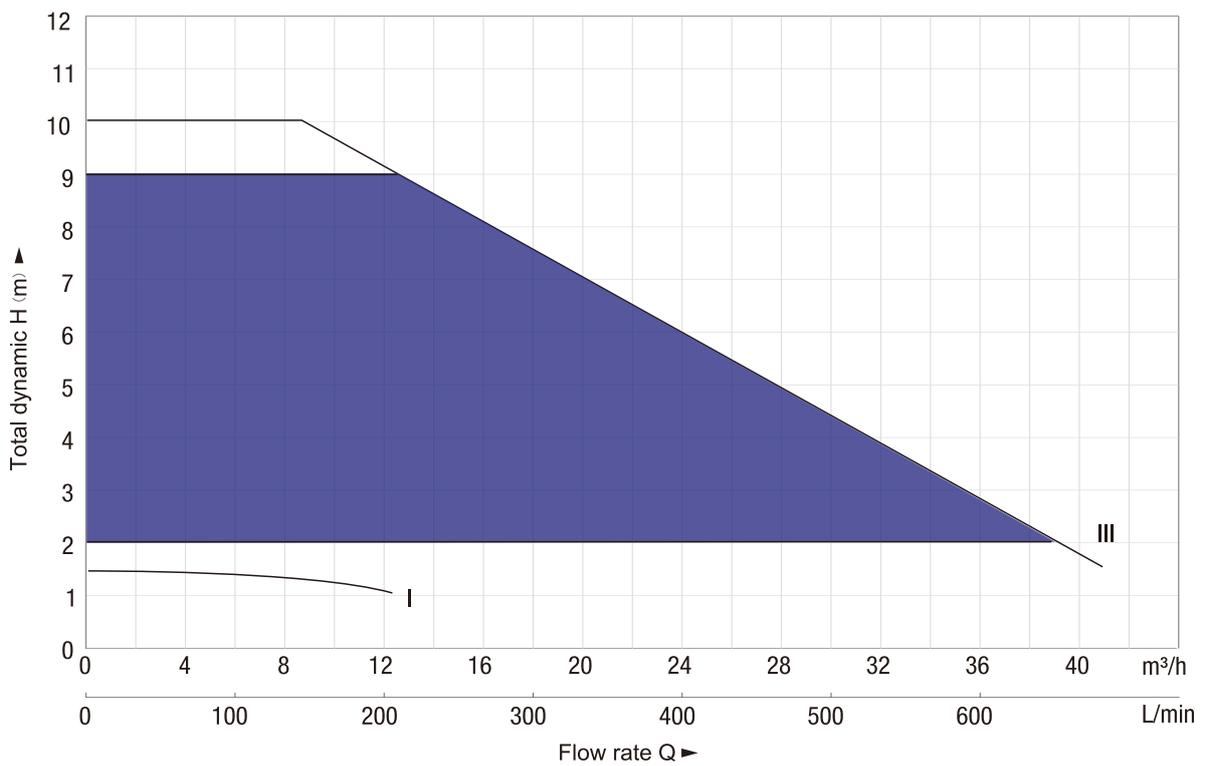
## Performance chart

### ME65-100F

#### Proportional pressure



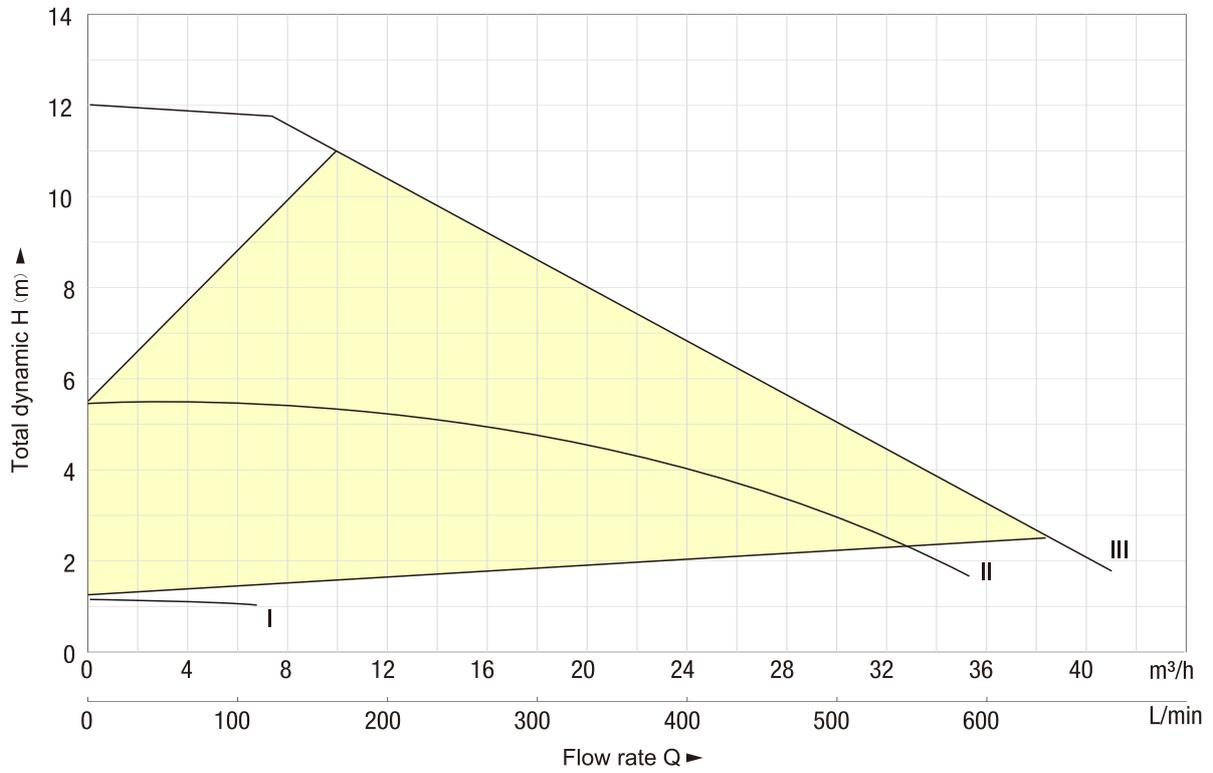
#### Delta-pressure



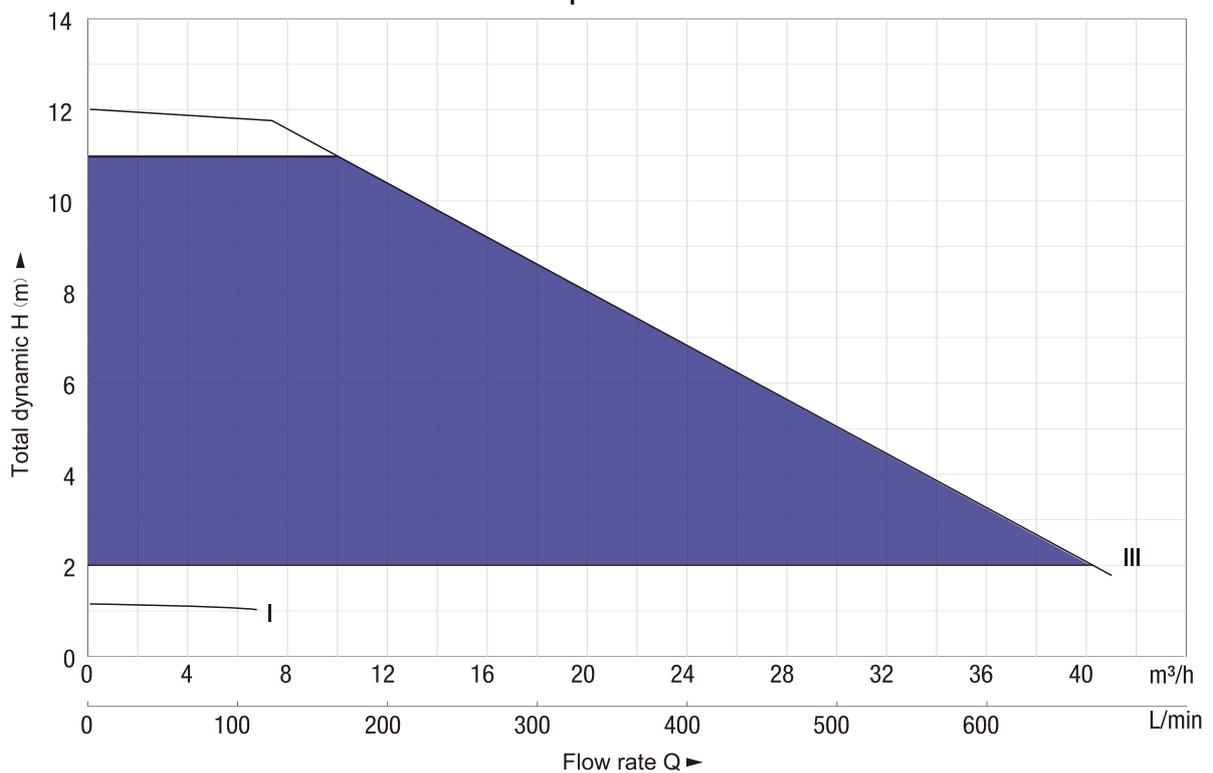
## Performance chart

### ME65-120F

#### Proportional pressure



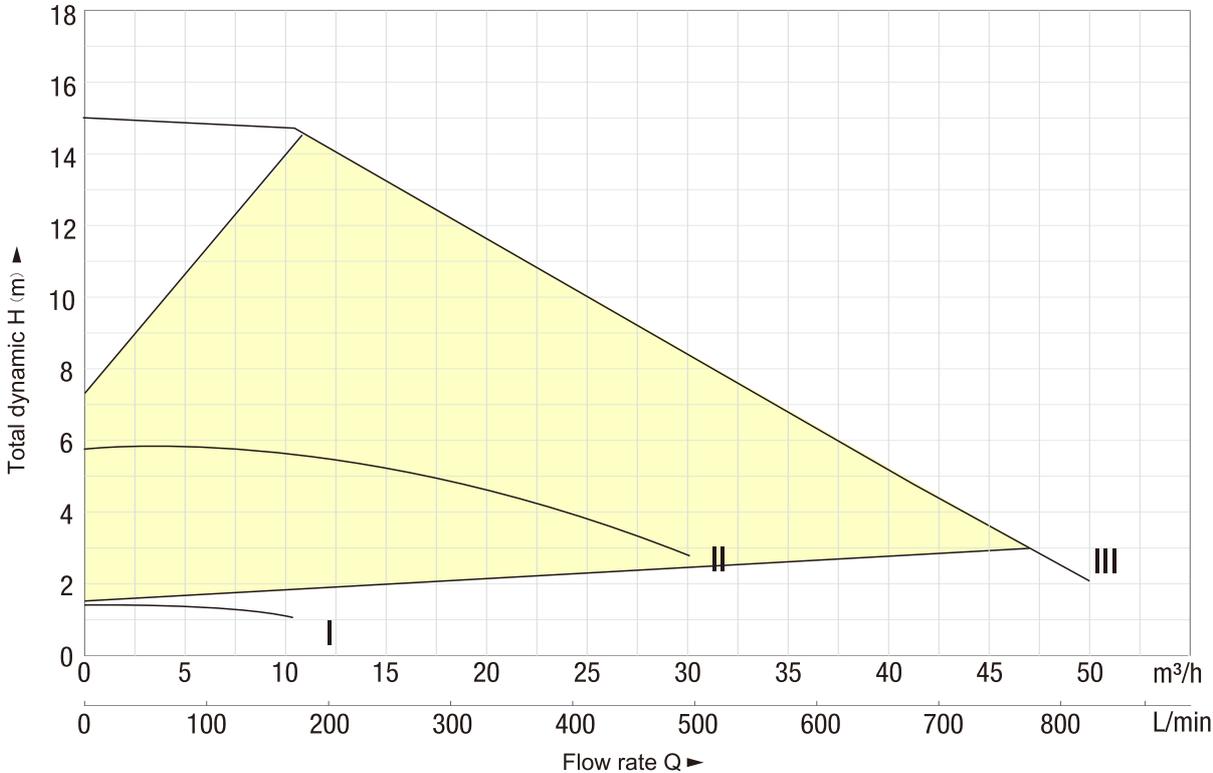
#### Delta-pressure



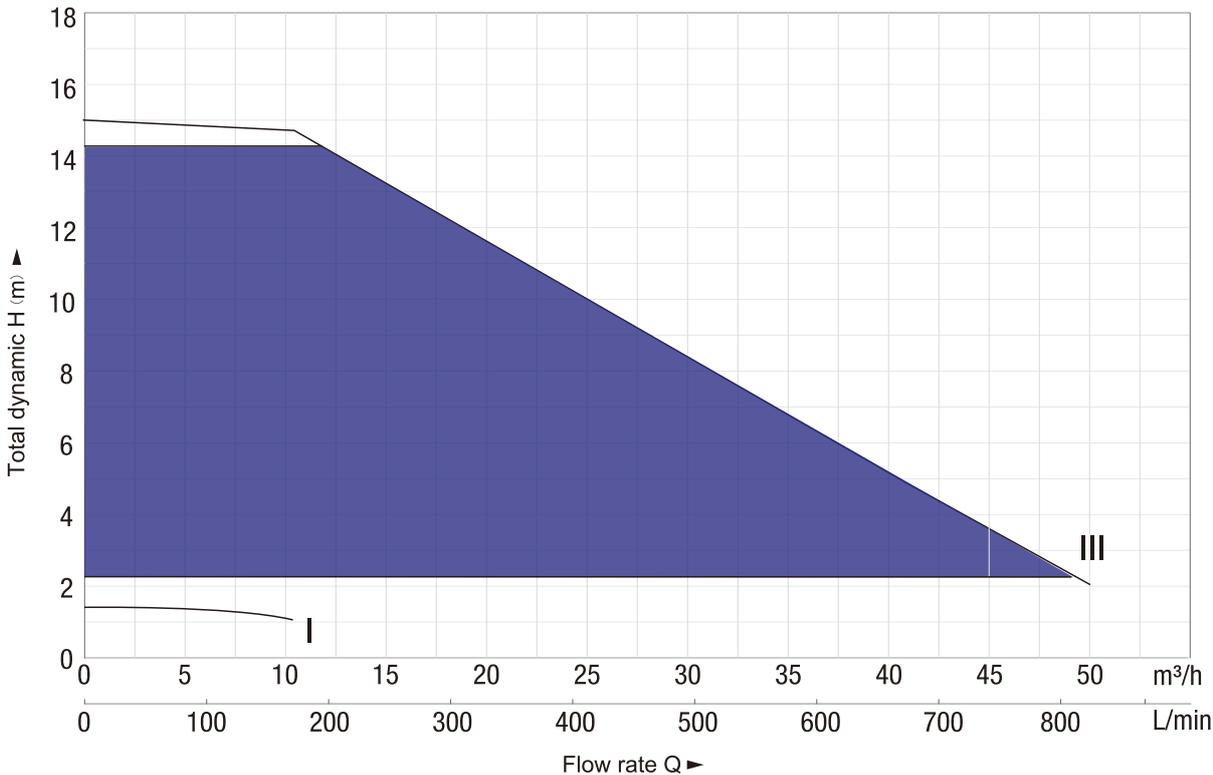
## Performance chart

### ME65-150F

#### Proportional pressure



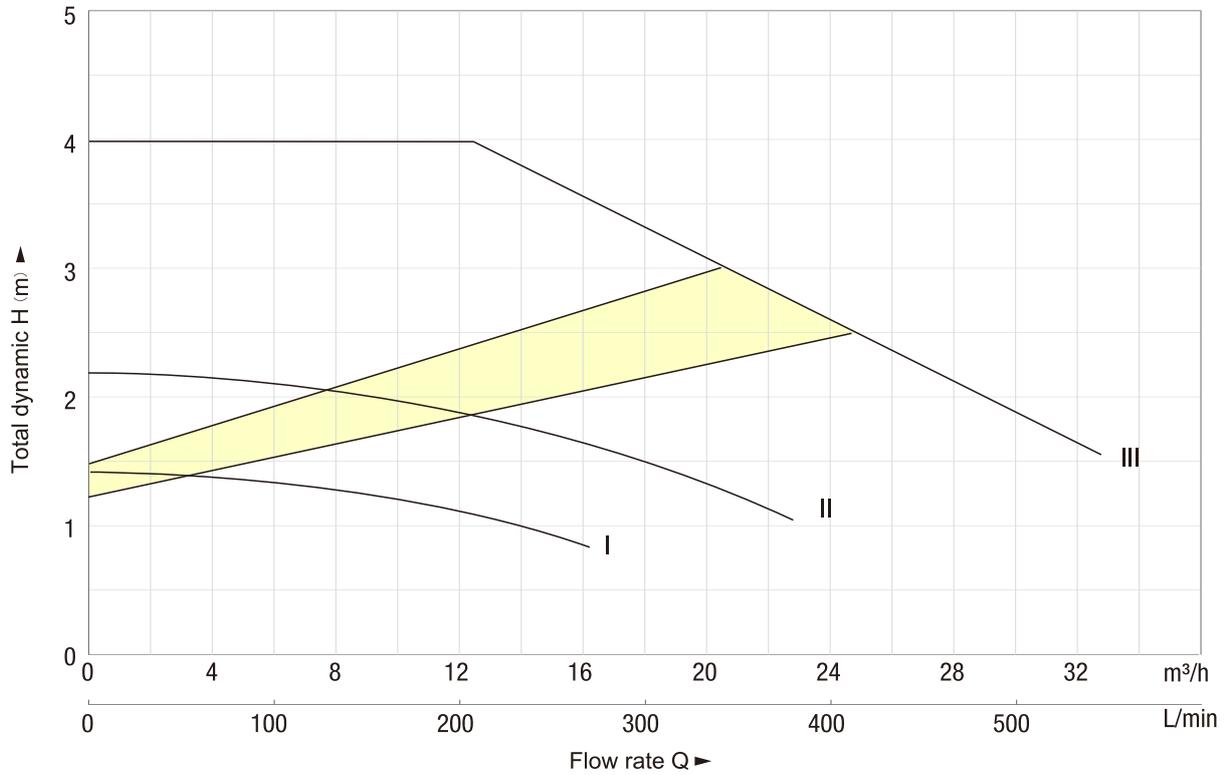
#### Delta-pressure



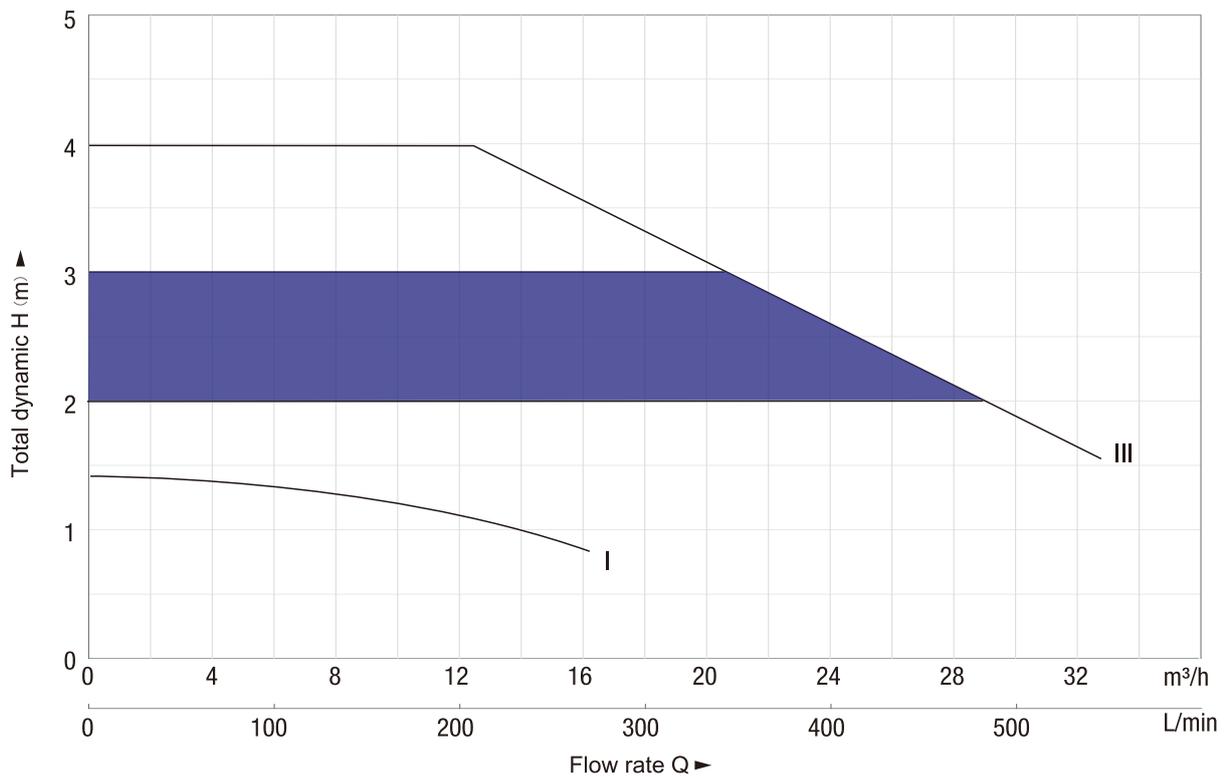
## Performance chart

### ME80-40F

#### Proportional pressure



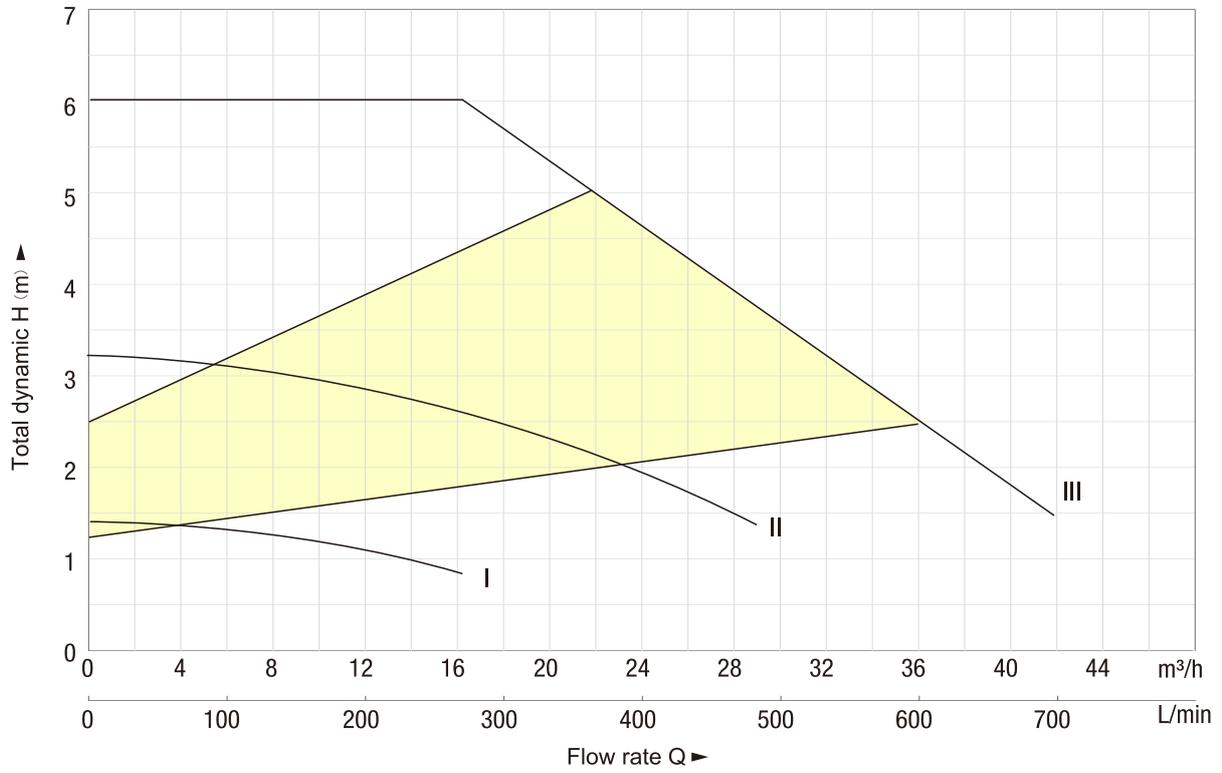
#### Delta-pressure



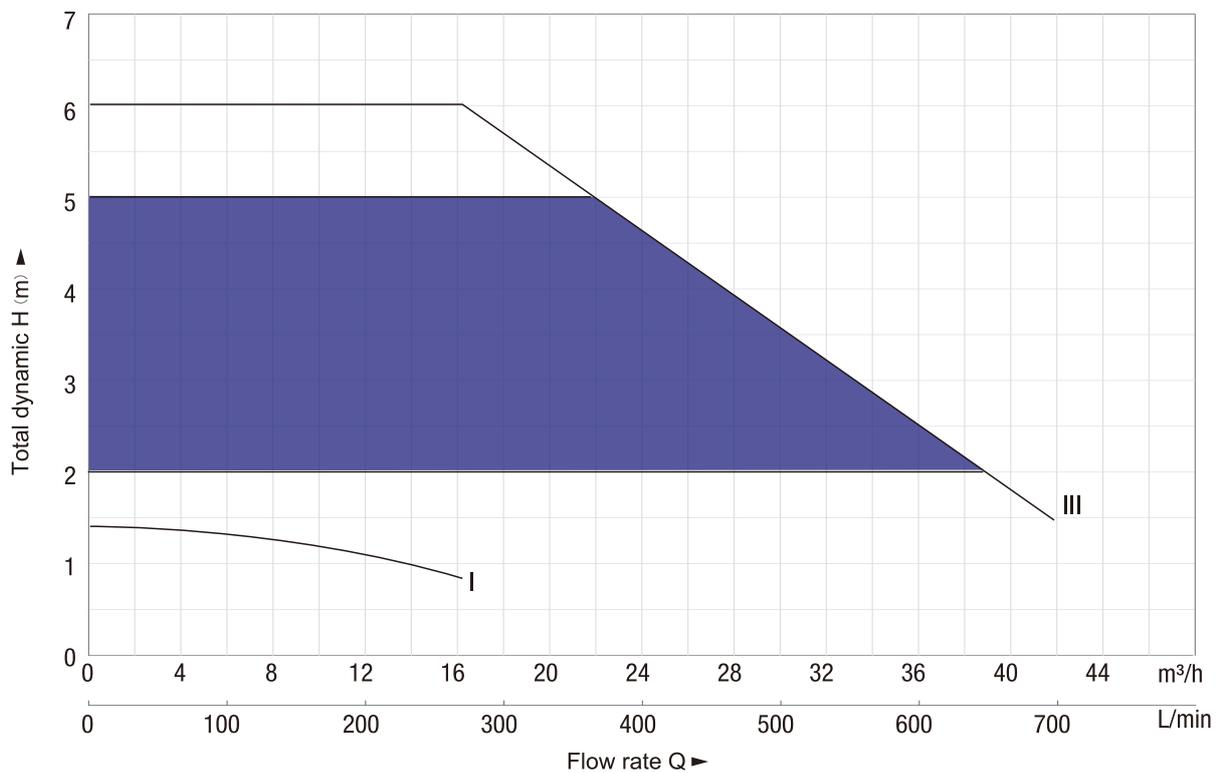
## Performance chart

### ME80-60F

#### Proportional pressure



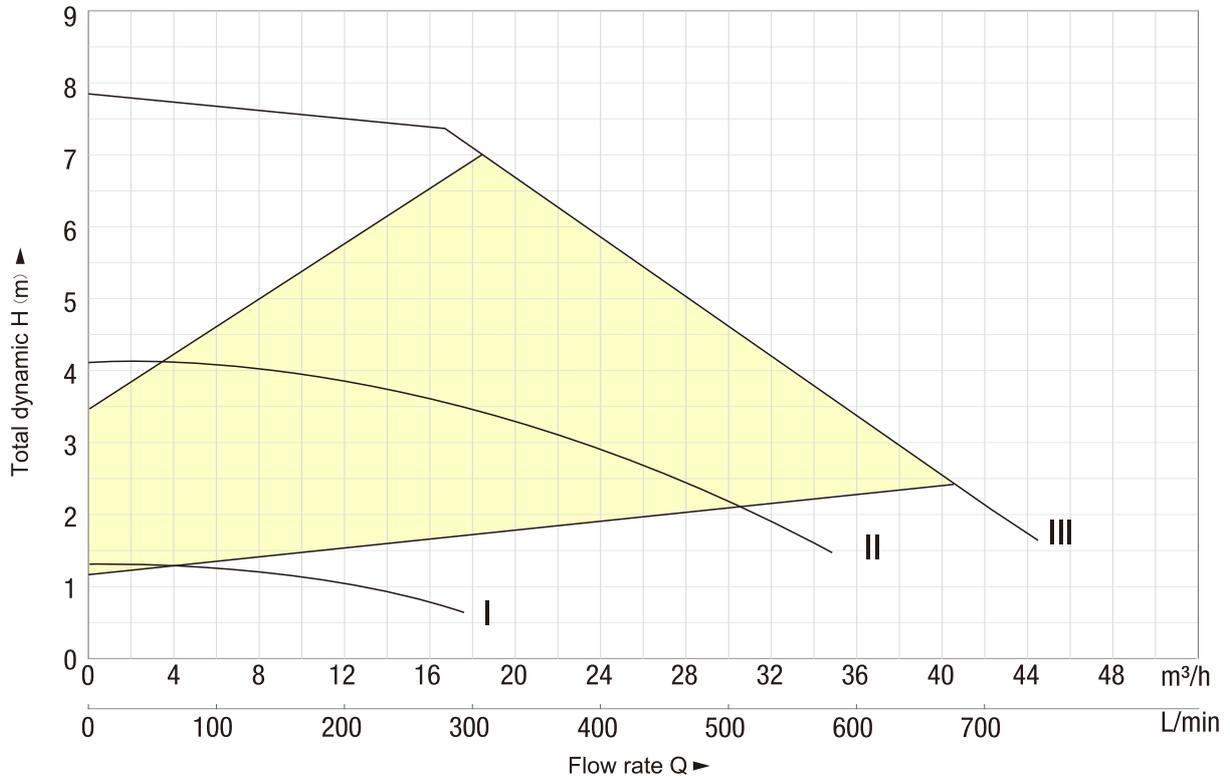
#### Delta-pressure



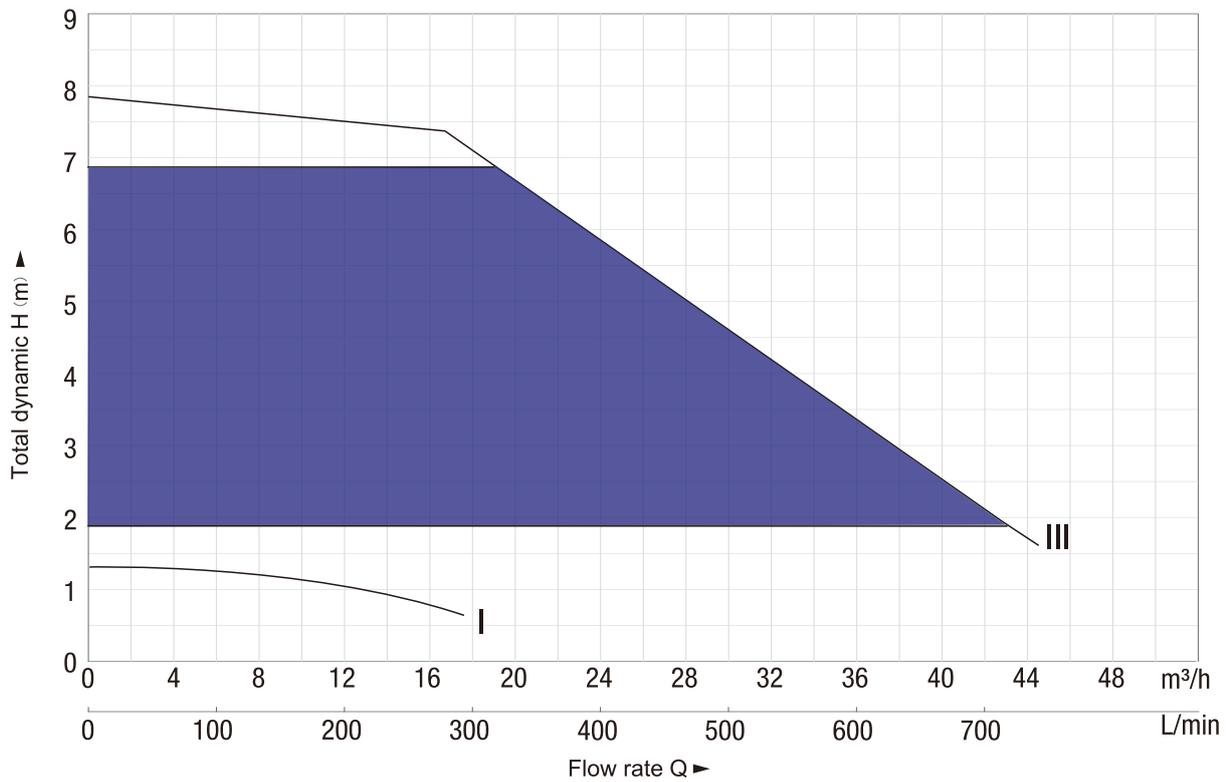
## Performance chart

### ME80-80F

#### Proportional pressure



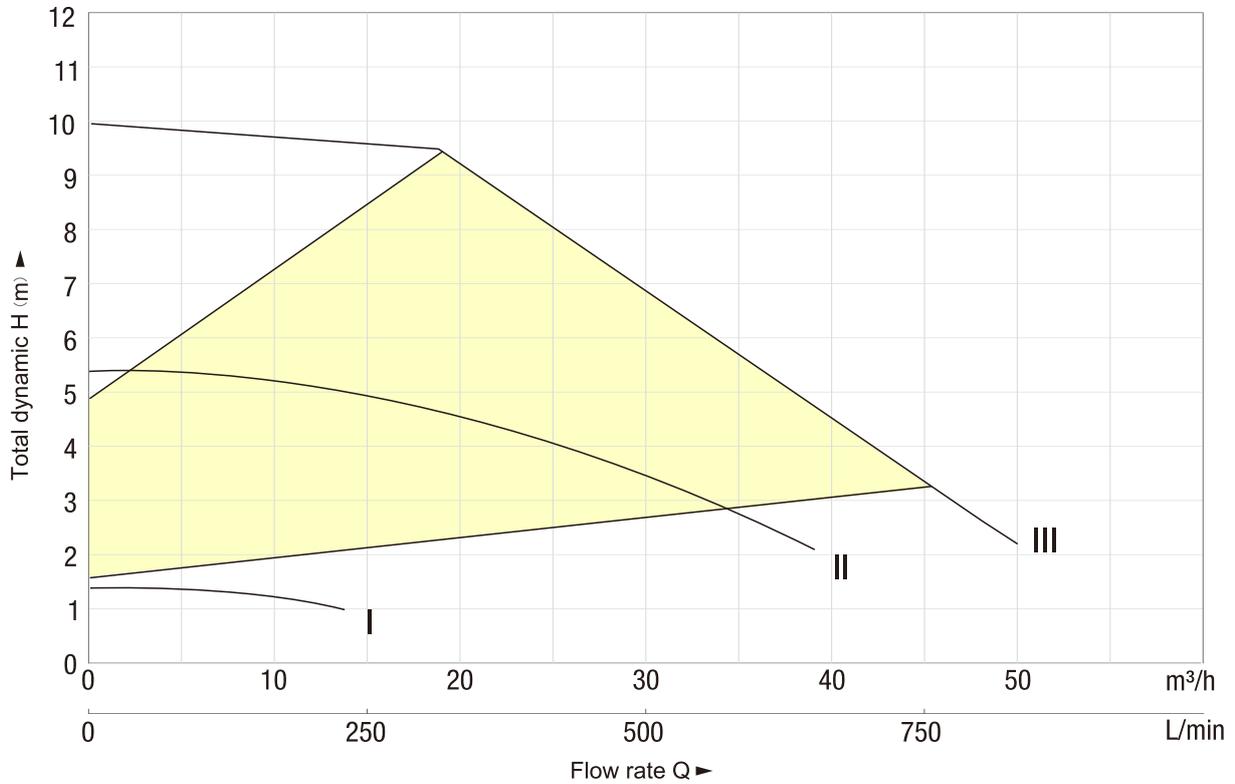
#### Delta-pressure



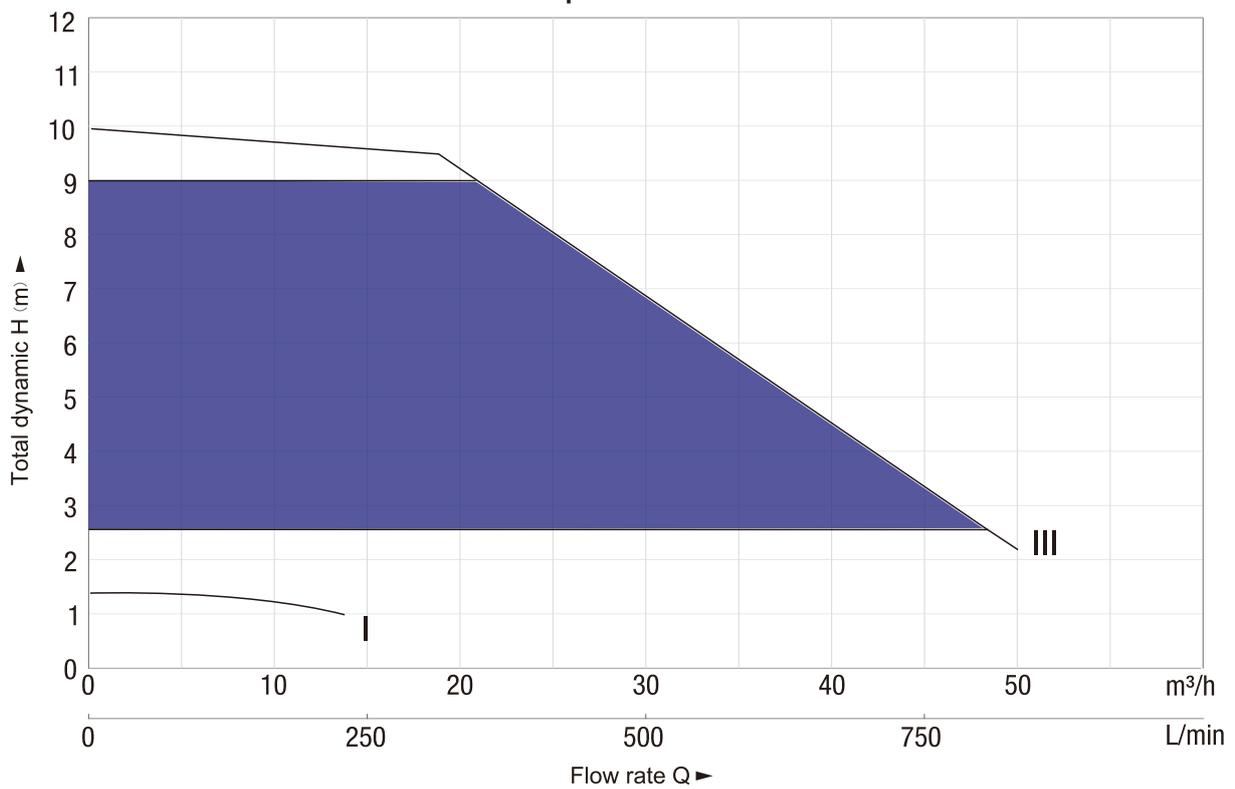
## Performance chart

### ME80-100F

#### Proportional pressure



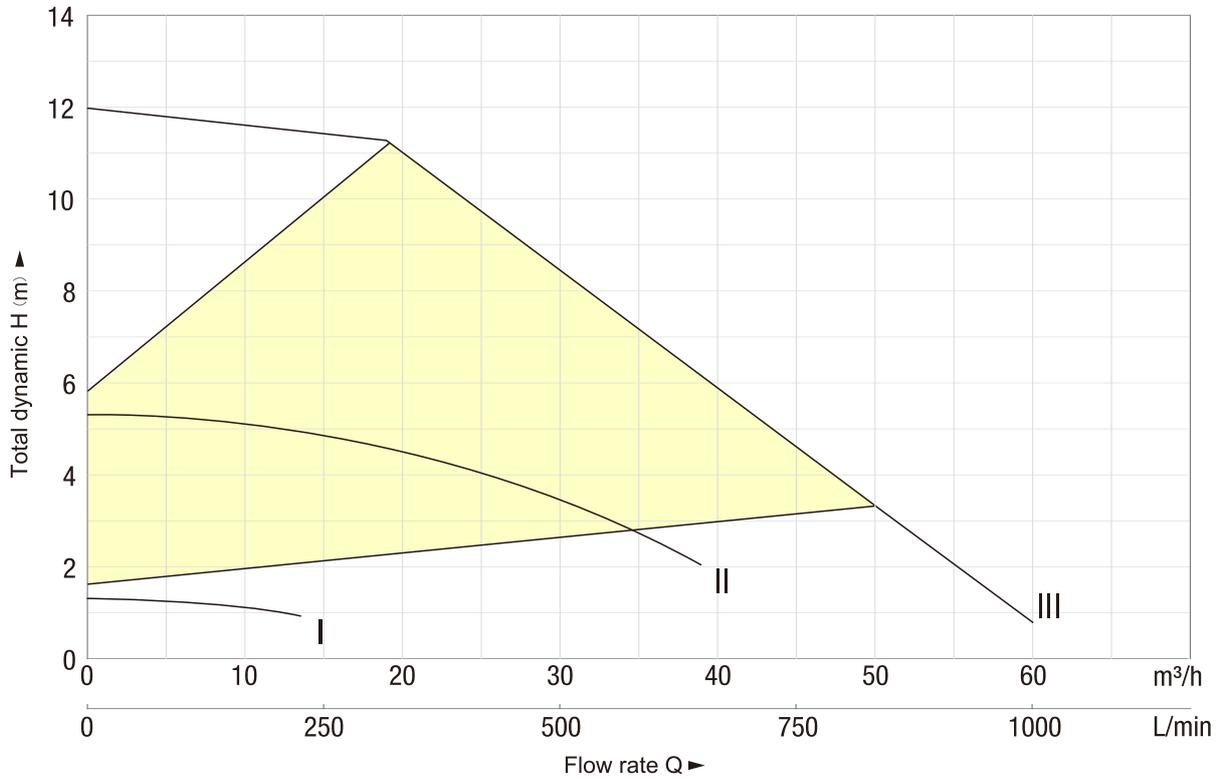
#### Delta-pressure



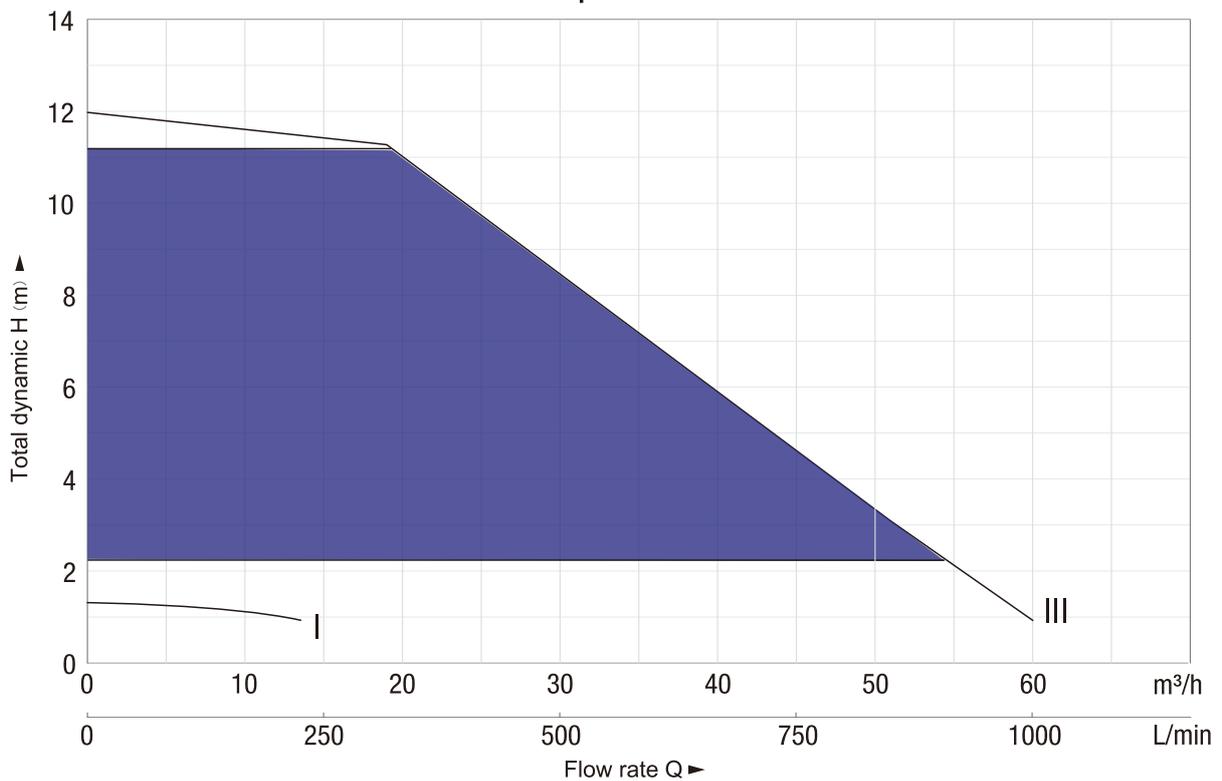
## Performance chart

### ME80-120F

#### Proportional pressure



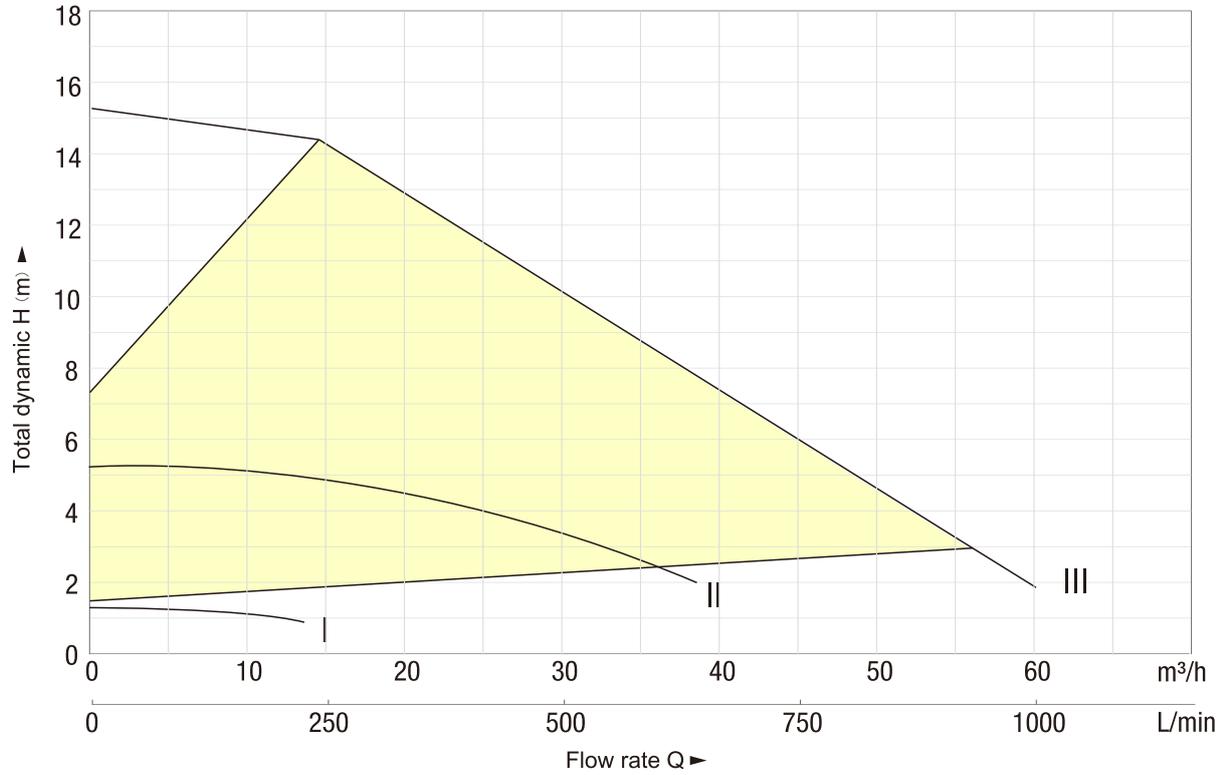
#### Delta-pressure



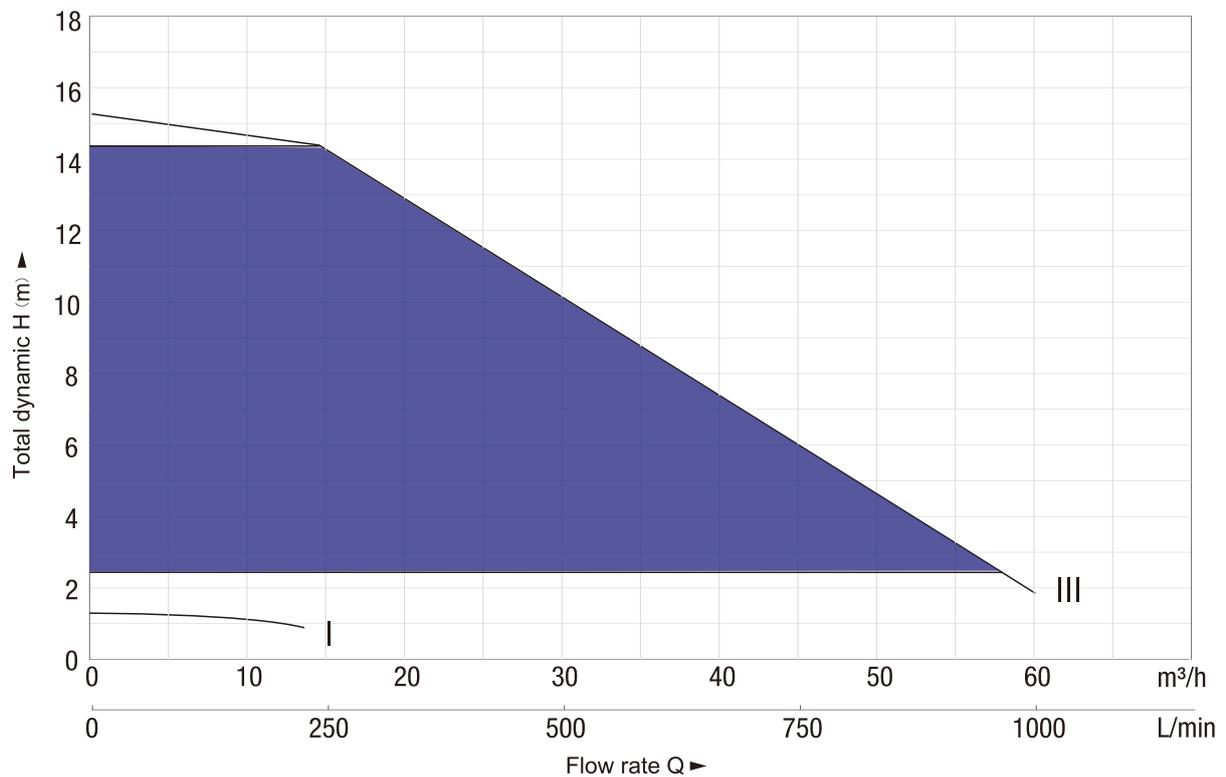
## Performance chart

### ME80-150F

#### Proportional pressure



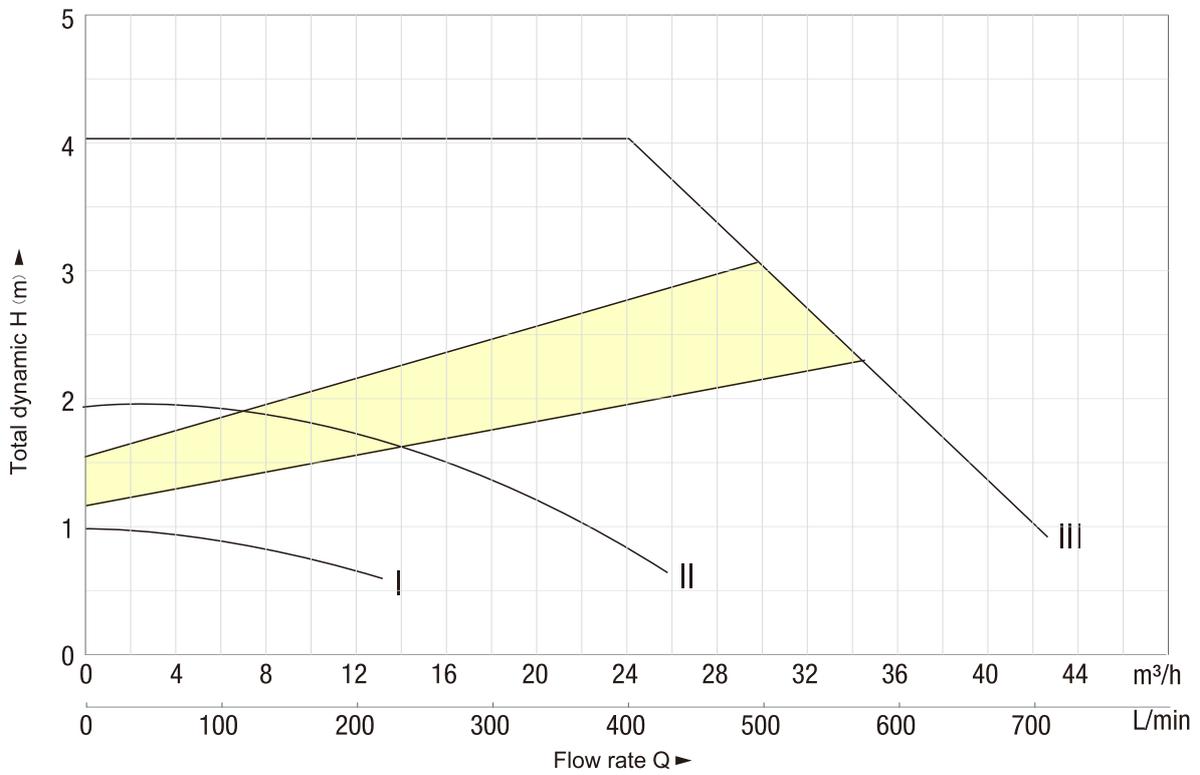
#### Delta-pressure



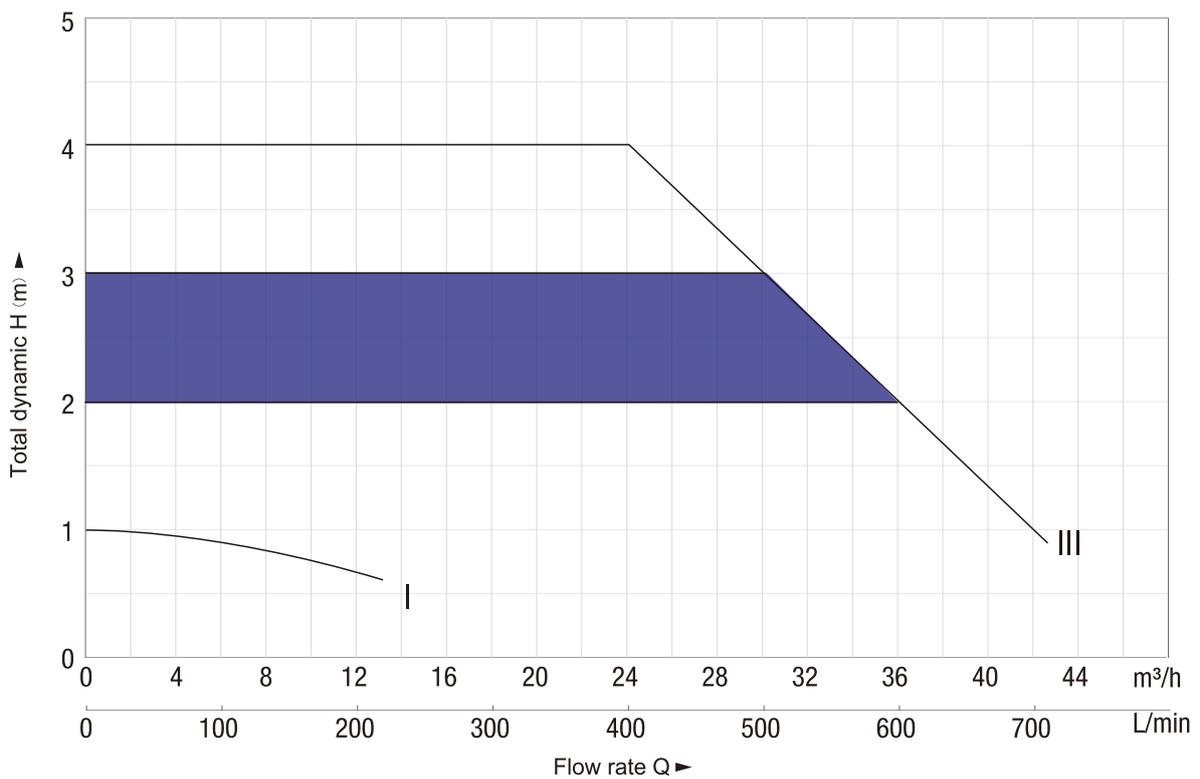
## Performance chart

### ME100-40F

#### Proportional pressure



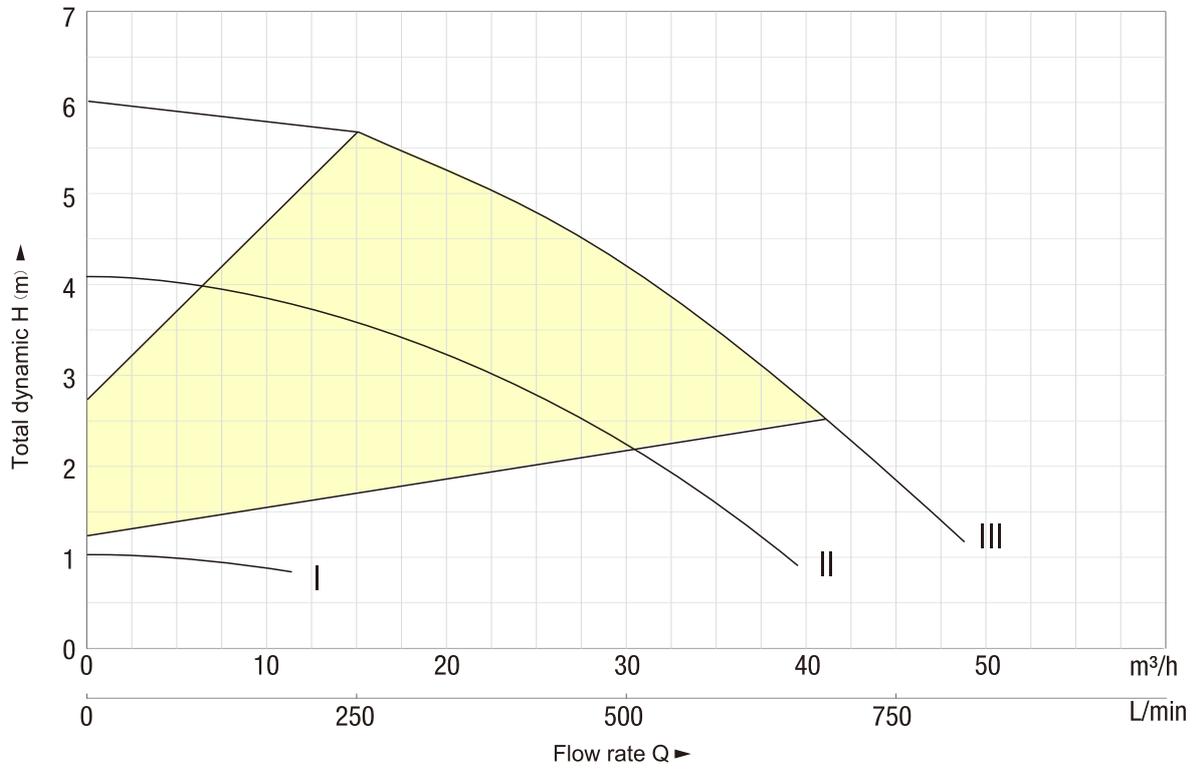
#### Delta-pressure



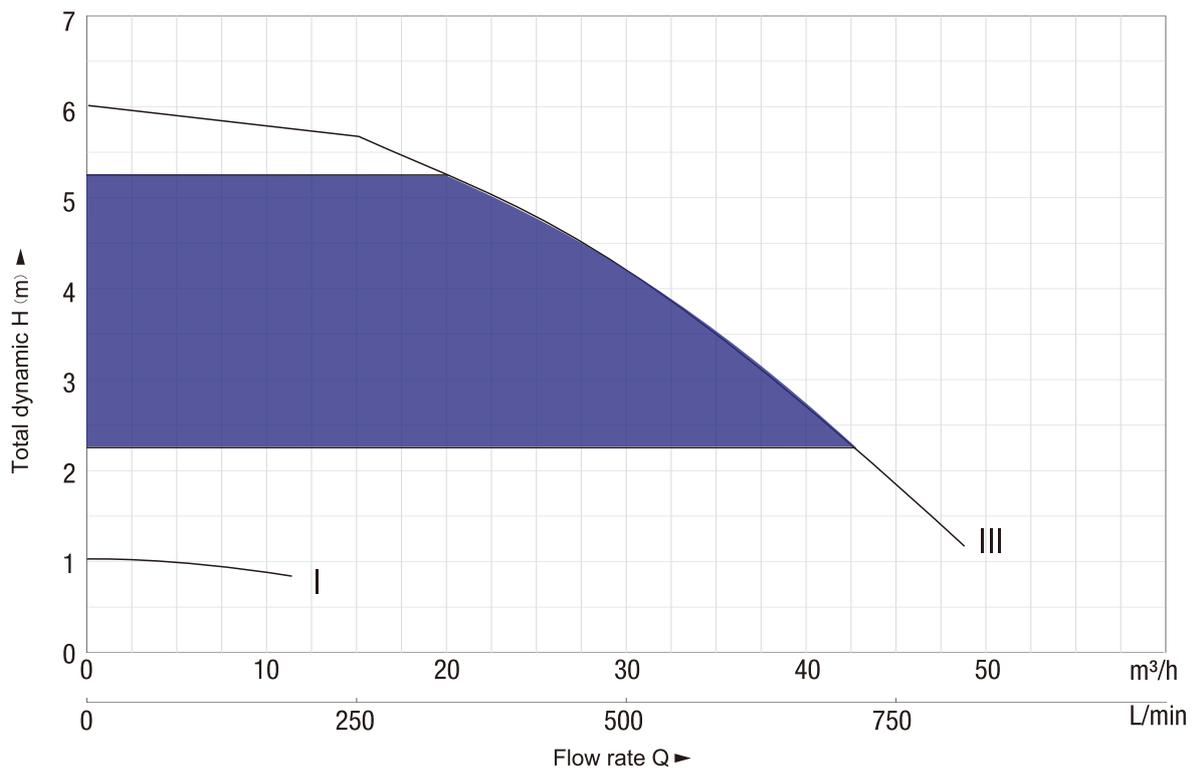
## Performance chart

### ME100-60F

#### Proportional pressure



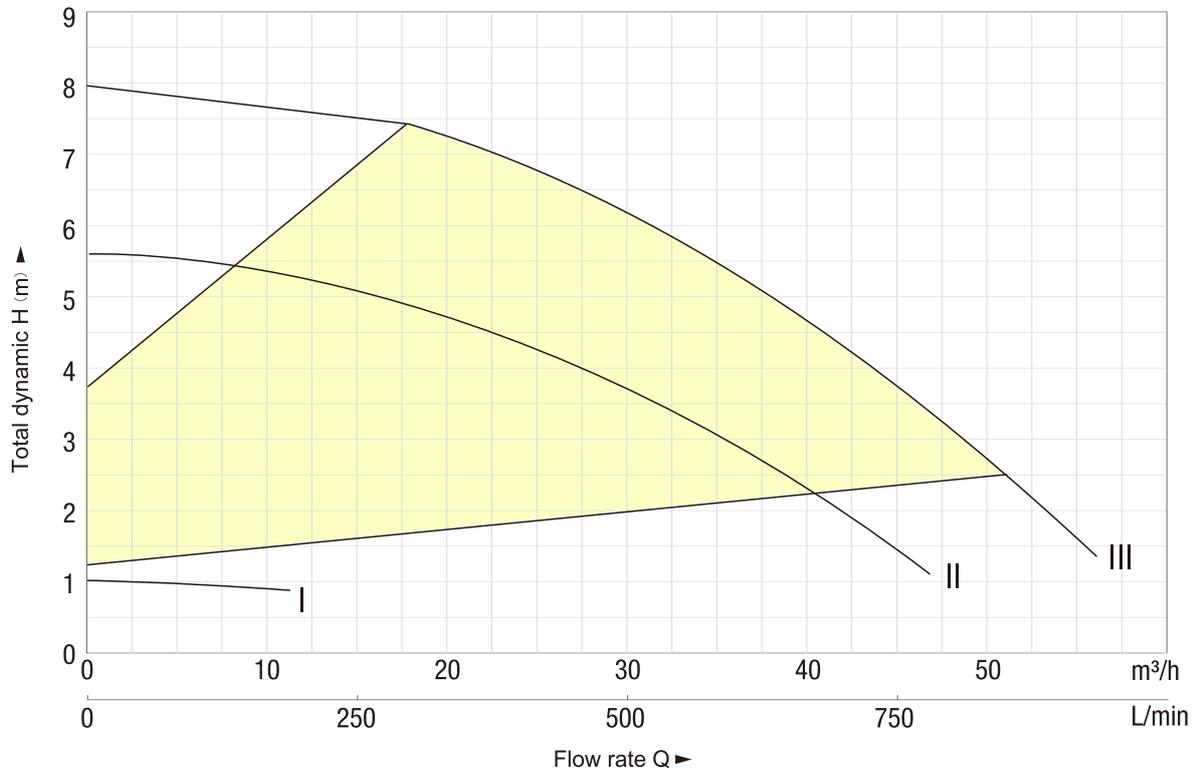
#### Delta-pressure



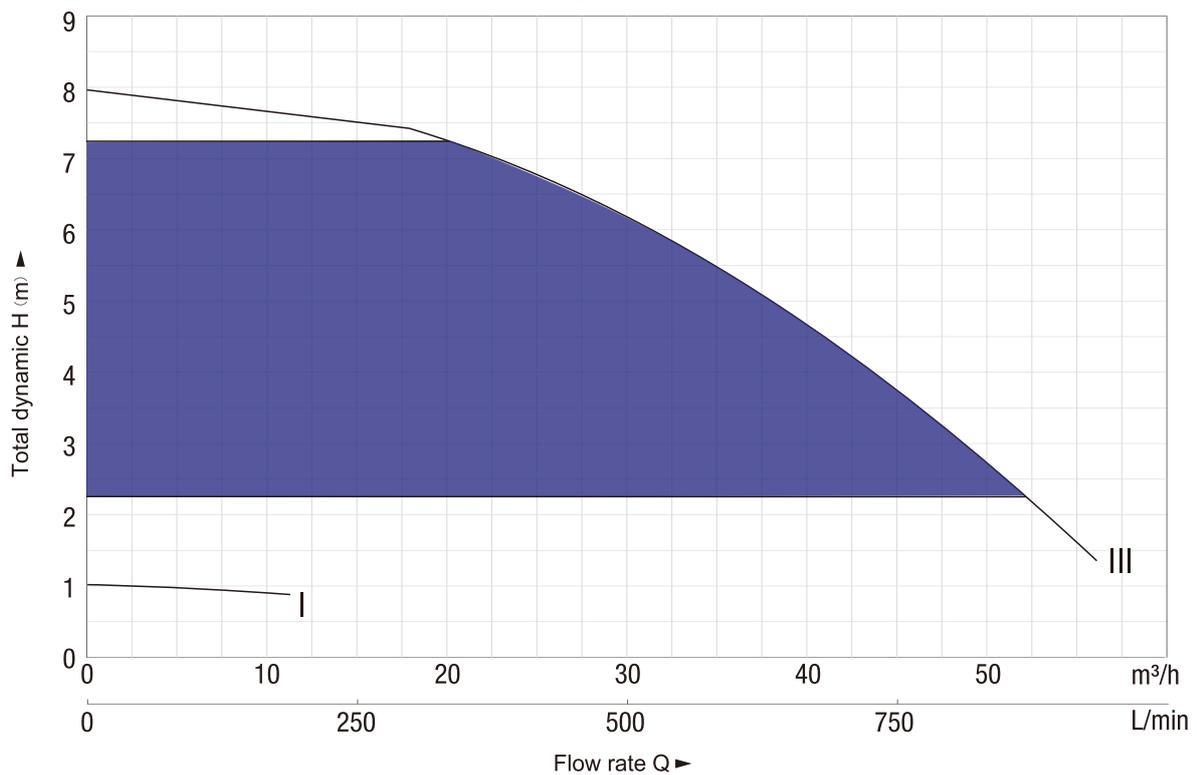
## Performance chart

### ME100-80F

#### Proportional pressure



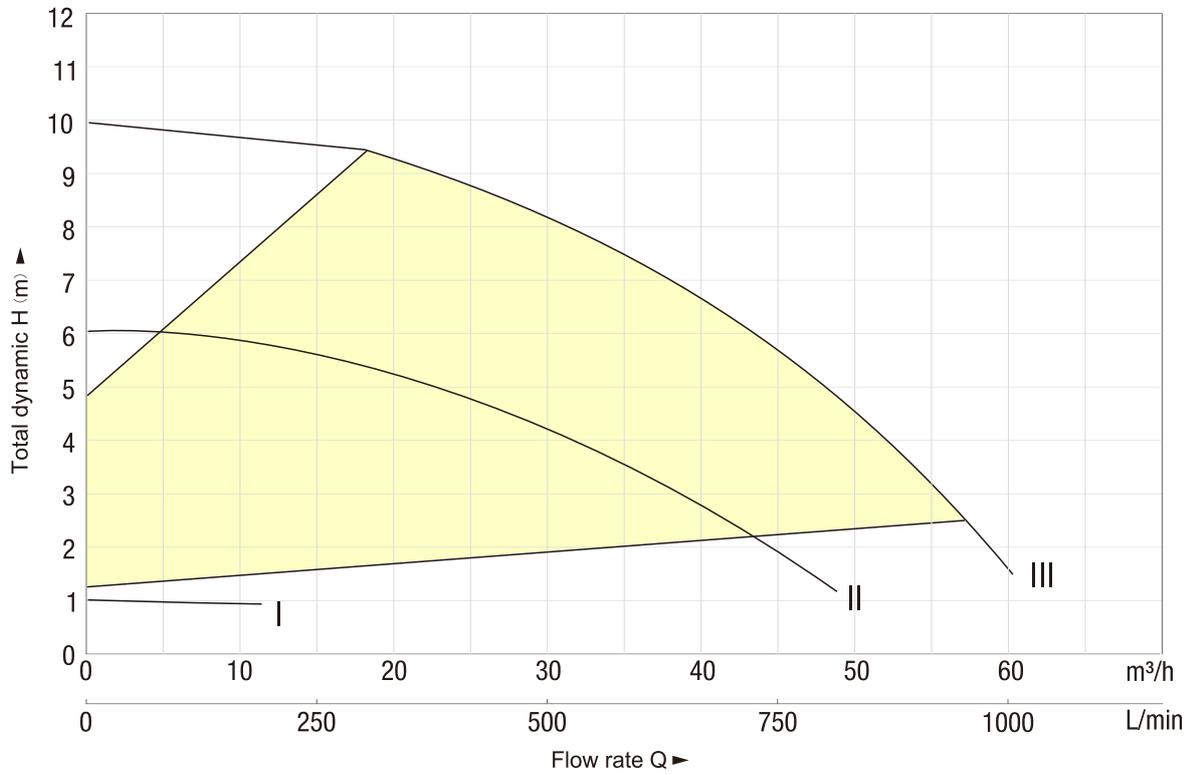
#### Delta-pressure



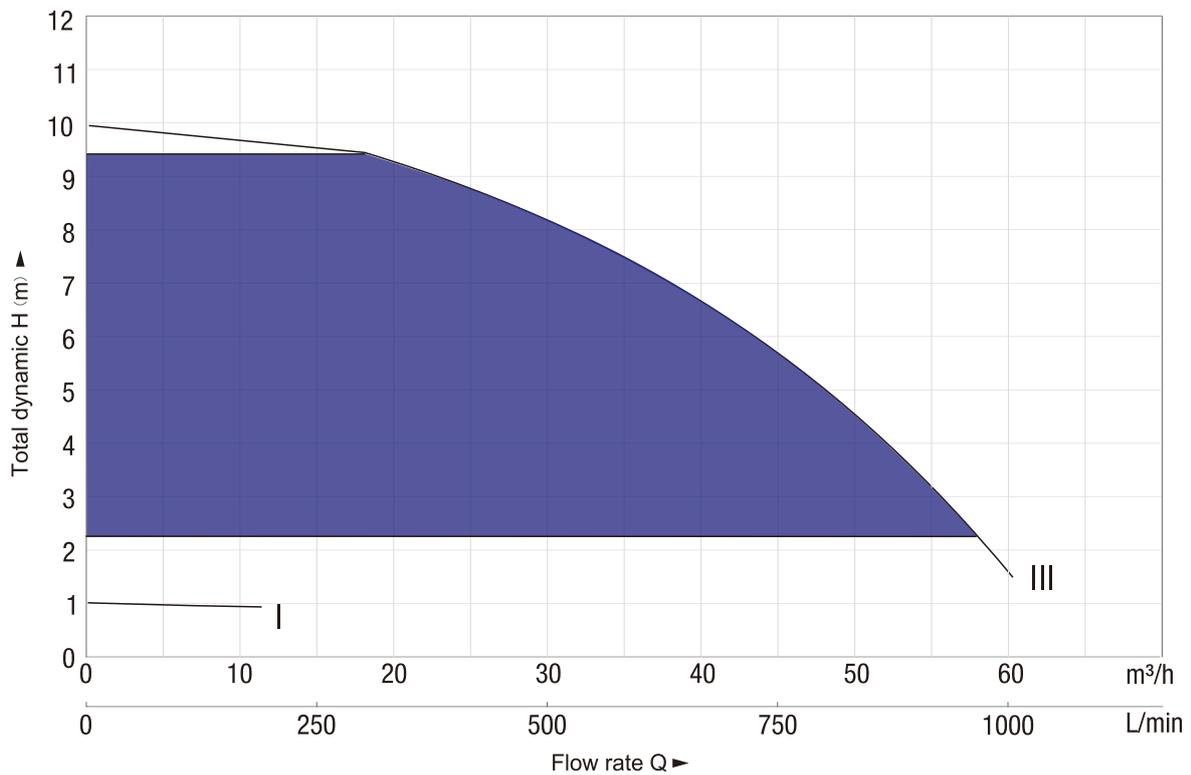
## Performance chart

### ME100-100F

#### Proportional pressure



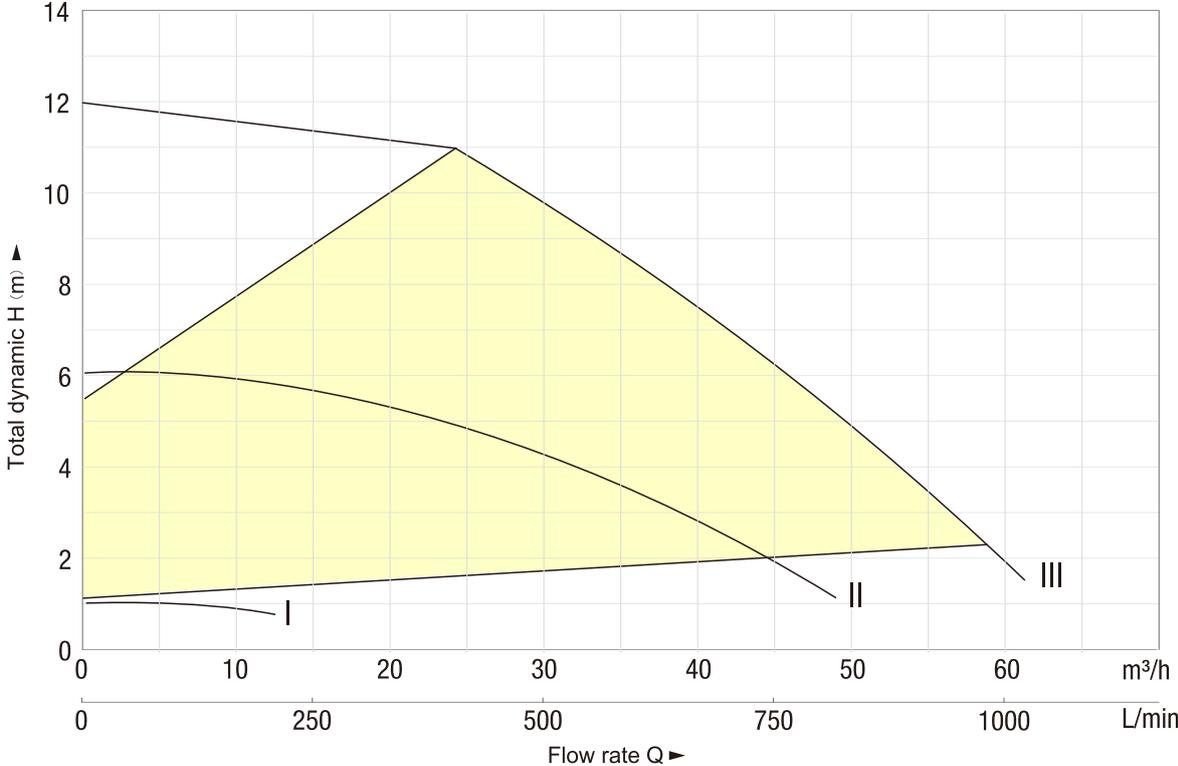
#### Delta-pressure



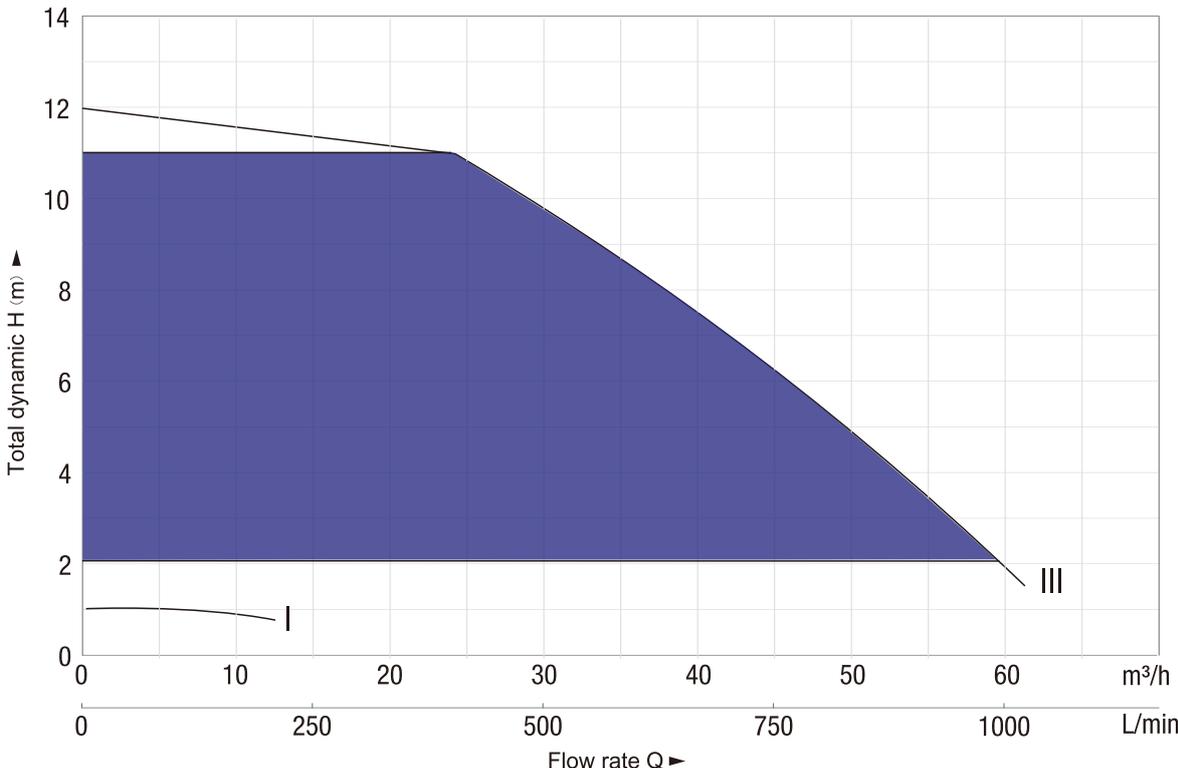
**Performance chart**

**ME100-120F**

**Proportional pressure**



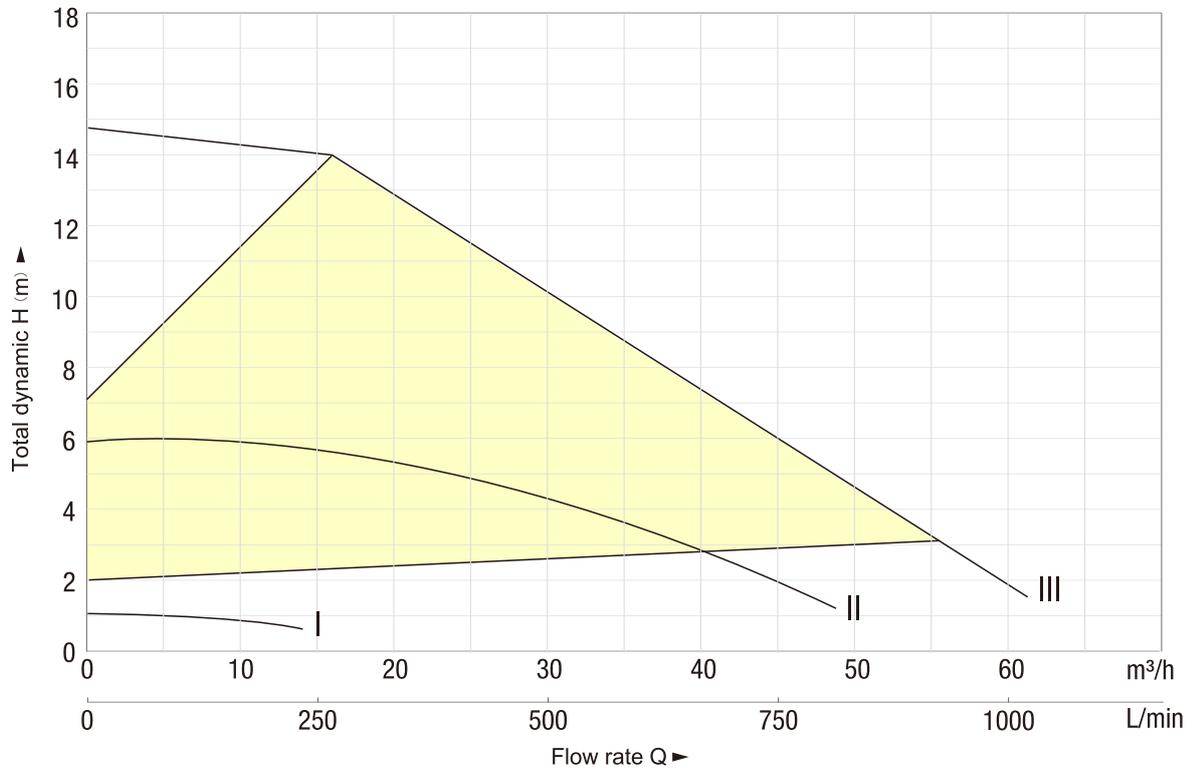
**Delta-pressure**



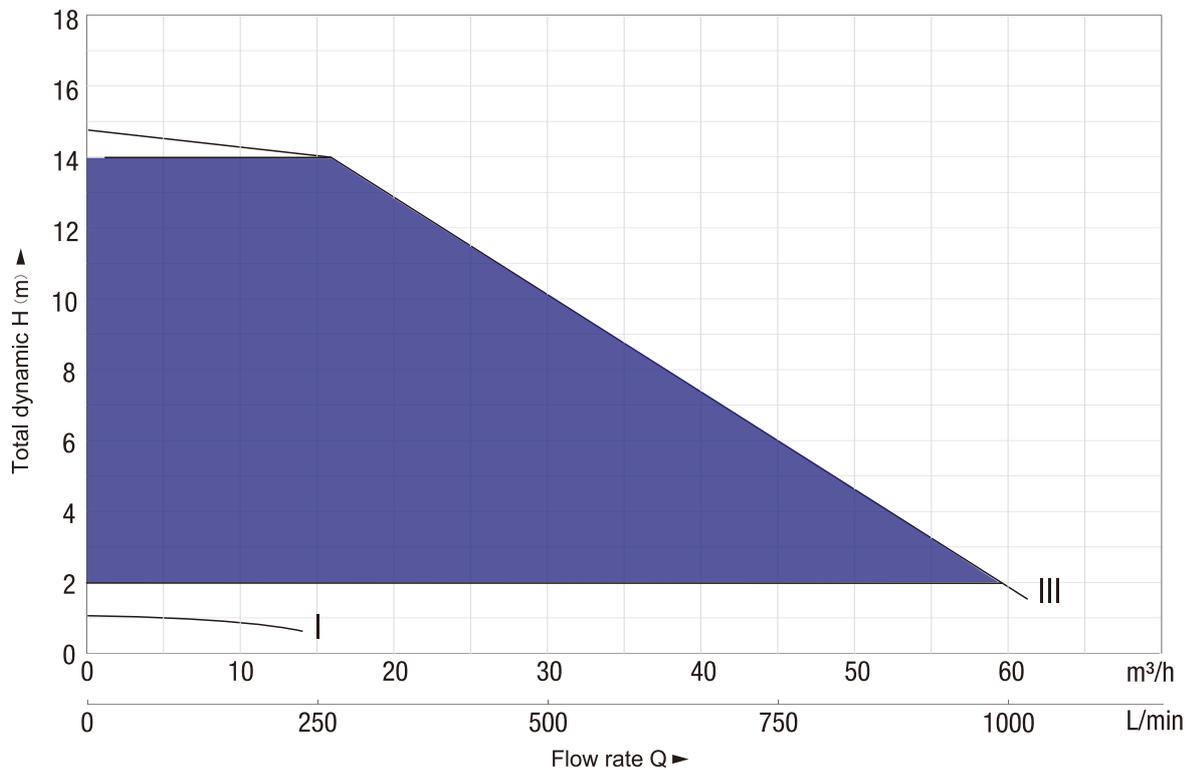
## Performance chart

### ME100-150F

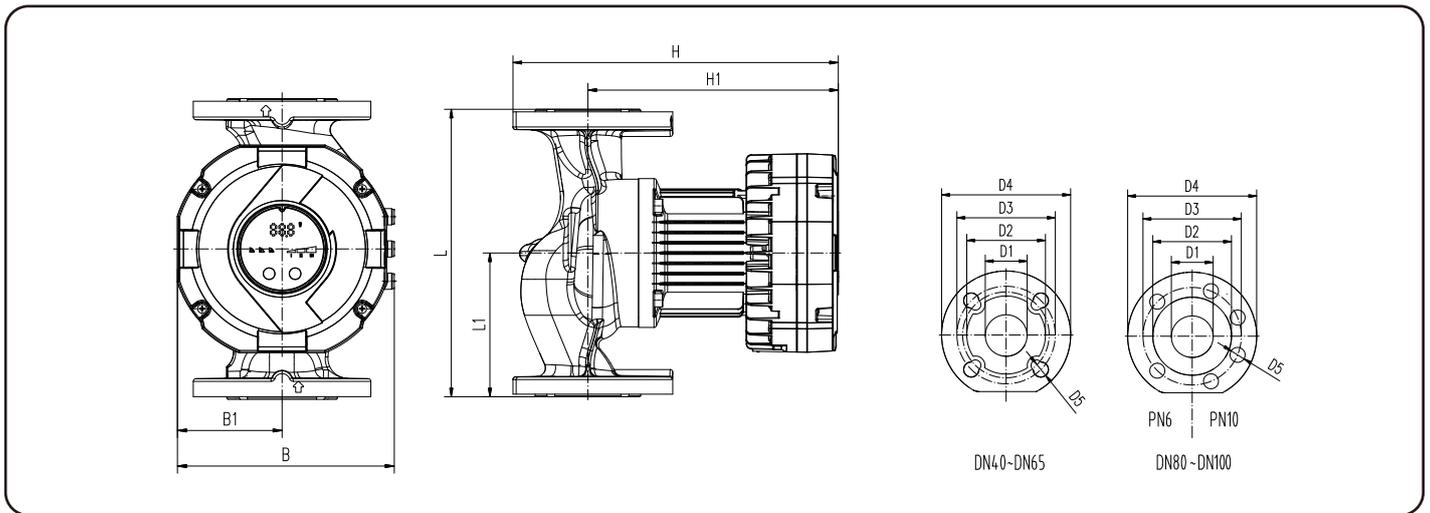
#### Proportional pressure



#### Delta-pressure

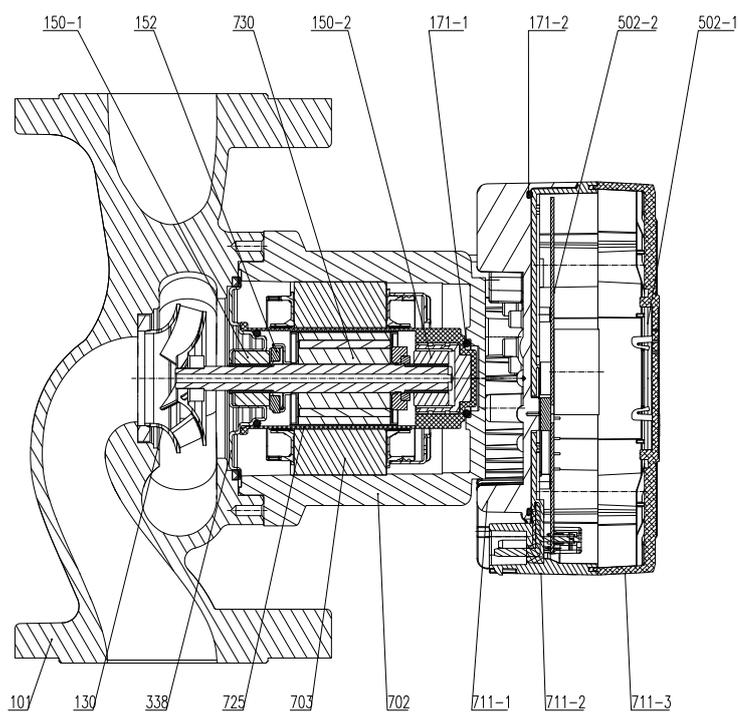


### Installation dimensions



Model	Dimensions(mm)												
	L	L1	B	B1	H	H1	D1	D2	D3		D4	D5	
									PN6	PN10		PN6	PN10
ME40-40F 250	250	125	200	97	310	240	40	84	100	110	150	4-φ14	4-φ19
ME40-60F 250	250	125	200	97	310	240	40	84	100	110	150	4-φ14	4-φ19
ME40-80F 250	250	125	200	97	310	240	40	84	100	110	150	4-φ14	4-φ19
ME40-100F 250	250	125	200	97	310	240	40	84	100	110	150	4-φ14	4-φ19
ME40-120F 250	250	125	200	97	310	240	40	84	100	110	150	4-φ14	4-φ19
ME40-150F 250	250	125	200	97	310	240	40	84	100	110	150	4-φ14	4-φ19
ME40-180F 250	250	125	200	97	310	240	40	84	100	110	150	4-φ14	4-φ19
ME50-40F 240	240	120	200	97	320	243	50	102	110	130	165	4-φ14	4-φ19
ME50-60F 240	240	120	200	97	320	243	50	102	110	130	165	4-φ14	4-φ19
ME50-80F 240	240	120	200	97	320	243	50	102	110	130	165	4-φ14	4-φ19
ME50-100F 280	280	120	200	97	320	243	50	102	110	130	165	4-φ14	4-φ19
ME50-120F 280	280	120	200	97	320	243	50	102	110	130	165	4-φ14	4-φ19
ME50-150F 280	280	120	200	97	320	243	50	102	110	130	165	4-φ14	4-φ19
ME50-180F 280	280	120	200	97	320	243	50	102	110	130	165	4-φ14	4-φ19
ME65-40F 340	340	170	200	97	320	233	65	119	130	145	185	4-φ14	4-φ19
ME65-60F 340	340	170	200	97	320	233	65	119	130	145	185	4-φ14	4-φ19
ME65-80F 340	340	170	200	97	320	233	65	119	130	145	185	4-φ14	4-φ19
ME65-100F 340	340	170	200	97	320	233	65	119	130	145	185	4-φ14	4-φ19
ME65-120F 340	340	170	200	97	320	233	65	119	130	145	185	4-φ14	4-φ19
ME65-150F 340	340	170	232	126	365	278	65	119	130	145	185	4-φ14	4-φ19
ME80-40F 360	360	180	200	97	360	265	80	128	150	160	200	4-φ19	8-φ19
ME80-60F 360	360	180	200	97	360	265	80	128	150	160	200	4-φ19	8-φ19
ME80-80F 360	360	180	250	125.5	392	297	80	128	150	160	200	4-φ19	8-φ19
ME80-100F 360	360	180	250	125.5	392	297	80	128	150	160	200	4-φ19	8-φ19
ME80-120F 360	360	180	250	125.5	392	297	80	128	150	160	200	4-φ19	8-φ19
ME80-150F 360	360	180	250	125.5	392	297	80	128	150	160	200	4-φ19	8-φ19
ME100-40F 450	450	225	223	97	377	276	100	160	170	180	220	4-φ19	8-φ19
ME100-60F 450	450	225	252	125.5	413	312	100	160	170	180	220	4-φ19	8-φ19
ME100-80F 450	450	225	252	125.5	413	312	100	160	170	180	220	4-φ19	8-φ19
ME100-100F 450	450	225	252	125.5	413	312	100	160	170	180	220	4-φ19	8-φ19
ME100-120F 450	450	225	252	125.5	413	312	100	160	170	180	220	4-φ19	8-φ19
ME100-150F 450	450	225	252	125.5	413	312	100	160	170	180	220	4-φ19	8-φ19

### Product parameters



POS.	COMPONENT	MATERIAL
101	PUMP BODY	Cast iron
130	IMPELLER	PES
150-1	BEARING	Graphite
150-2	BEARING	Graphite
152	THRUST BEARING	Ceramics
171-1	O ring	Rubber
171-2	O RING	Rubber
338	BEARING COVER	Stainless steel
502-1	CONTROL PANEL	Electronic device
502-2	DRIVE BOARD	Electronic device
702	MOTOR CASE	Aluminium alloy
703	STATOR ASSEMBLY	Assembly
711-1	WIRING BOX HOLDER	Aluminium alloy
711-2	WIRING BOX HOLDER	Engineering plastics
711-3	TERMINAL BOX COVER	Engineering plastics
725	SHIELD SLEEVE	Plastics
730	ROTOR ASSEMBLY	Assembly