



### TECHNICAL INFORMATION

- ➔ **Limits:** From 4 to 57 m<sup>3</sup>/h with a pressure up to 15 meters.
- ➔ **Pumped Liquid:** Chemically neutral, free of explosive substances, solid particals, fibers and mineral oils, containing max %30 glycol, non-viscous, with properties similar to water.
- ➔ **Pumped Liquid Temperature Limits:** -10 °C ~ +110 °C
- ➔ **Connections:**
  - Single types are available in;
 

|                      |                                                |
|----------------------|------------------------------------------------|
| Threaded connections | 1 1/2" M and 2" M                              |
| Flanged connections  | PN6/PN 10 - DN 40, DN 50, DN 65<br>PN6 - DN 80 |
  - Single types with **bronze pump body** available in;
 

|                     |                   |
|---------------------|-------------------|
| Threaded connection | 2" M              |
| Flanged connection  | PN6/PN 10 - DN 40 |
  - Twin types are available in;
 

|                     |                                                |
|---------------------|------------------------------------------------|
| Flanged connections | PN6/PN 10 - DN 40, DN 50, DN 65<br>PN6 - DN 80 |
|---------------------|------------------------------------------------|
- ➔ **Max. Operating Pressure:** 10 Bar
- ➔ **Max. Ambient Temperature:** 40 °C
- ➔ **Voltage:** 1N - 50/60 Hz 230 V ± %10 - Single phase
- ➔ **Protection Level:** IP 44
- ➔ **Insulation Class:** F
- ➔ **Installation:** Motor axis horizontal

### APPLICATION FIELDS

EvoMag electronic circulators can be used for heating systems, air conditioning and cooling systems, heat pump systems and solar systems in;

- ➔ Homes,
- ➔ Apartments,
- ➔ Office buildings,
- ➔ Schools,
- ➔ Hospitals,
- ➔ Large buildings.



### DESIGN FEATURES

- ➔ Cast iron pump body,
- ➔ Bronze pump for the recirculation of sanitary water is available in single types with threaded connection 2" M and flanged connection DN 40 (PN6/PN10),
- ➔ Permanent magnet wet rotor with synchronous motor,
- ➔ Aluminium motor casing with special design to drain condensation without effecting the electronic and mechanical components let the pump can be installed to the systems where the temperature of the pumped liquid is lower then the ambient temperature,
- ➔ Technopolymer impeller,
- ➔ Stainless steel motor shaft on bushings lubricated by the pumped liquid,
- ➔ Stainless steel rotor cover,
- ➔ Viton seal rings,
- ➔ The twin types have a built-in check valve incorporated in the body, to avoid water recirculating through the unit when this is not running; in addition, a blank flange is also supplied as for maintenance.

**Note:** Pay attention not to obstruct drain holes on aluminium motor casing while insulating the pump body.

**HidroTank**

HİDROTANK HİDROFOR VE GENLEŞME TANKI ÜRETİM SAN. TİC. LTD. ŞTİ.



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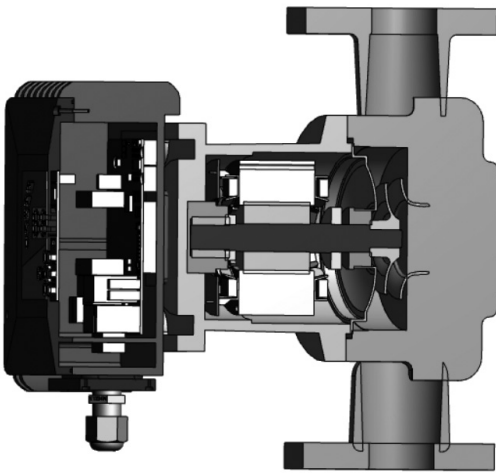


## ELECTRONIC FEATURES

- ➔ Latest generation IGBT unit,
- ➔ Sine-wave PWM modulation,
- ➔ High carrier frequency to eliminate all audio band noise,
- ➔ Optimised vector algorithm,
- ➔ 2 dedicated processors.

**Note:** 0-10 V, PWM external signal and ModBus connection is optional.

## MATERIALS



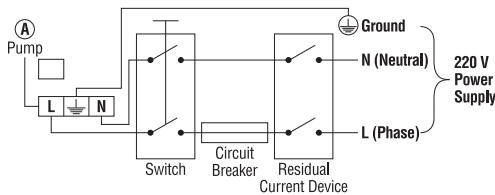
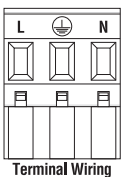
### Part

Pump body  
Motor body  
Shaft  
Impeller  
Rotor cover

### Description

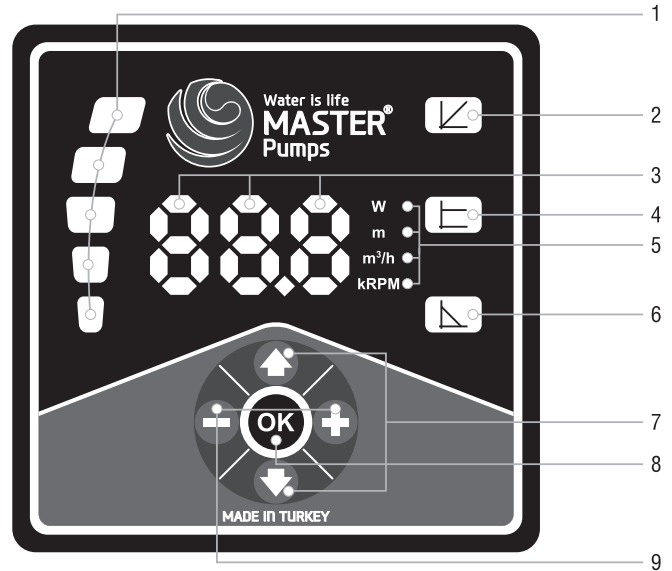
Cast iron  
Aluminium  
Stainless steel  
Technopolymer  
Stainless steel

## CONNECTION DIAGRAM



| Motor Power     | 0-350 Watt            | 351-1000 Watt | 1000-1500 Watt |
|-----------------|-----------------------|---------------|----------------|
| Circuit Breaker | 2 A                   | 10 A          | 16 A           |
| Cable Section   | 3X2.5 mm <sup>2</sup> |               |                |

## USER INTERFACE



- 1 - Motor speed led
- 2 - Variable pressure mode led
- 3 - Screen value
- 4 - Constant pressure mode led
- 5 - Screen value units
- 6 - Constant curve mode led
- 7 - Scroll buttons
- 8 - OK
- 9 - Set point buttons

## MODES OF OPERATION

EvoMag series circulators have 3 different operating modes: variable pressure, constant pressure and constant speed.

### ➔ Variable pressure ( $\Delta P-V$ )

In variable pressure mode, with the variation of flow, the value of the pressure also varies in a linear path, between the set pressure and %50 of the set pressure.

### ➔ Constant pressure ( $\Delta P-C$ )

In constant pressure mode, even the flow varies the pump keeps the differential pressure of the system constant.

### ➔ Constant speed

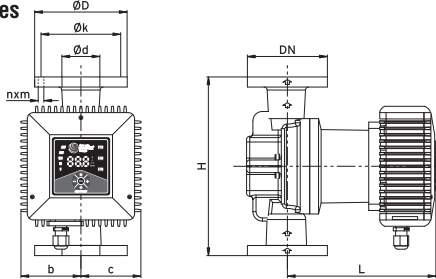
In constant speed mode, pump works according to the constant speed curves. Operation curve can be selected by setting the rotation speed.





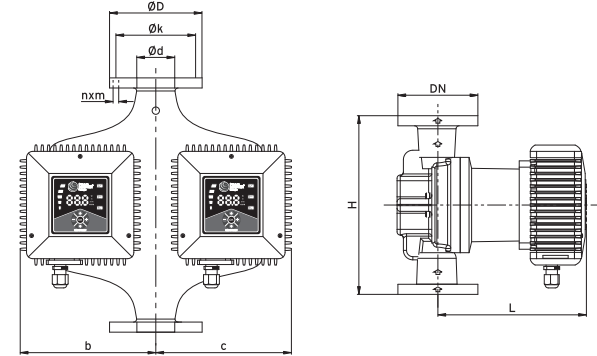
## DIMENSIONS

### Single Types



| Model     | Weight (kg) | ØD (mm) | Øk (mm) | Ød (mm) | DN | nxm  | Øb (mm) | Øc (mm) | ØH (mm) | ØL (mm) |
|-----------|-------------|---------|---------|---------|----|------|---------|---------|---------|---------|
| 25/180.07 | 2.3         | 47      | -       | 43      | 25 | -    | 80      | 48      | 180     | 106     |
| 32/180.08 | 2.5         | 59      | -       | 56      | 32 | -    | 80      | 48      | 180     | 107     |
| 32/180.10 | 11          | 59      | -       | 57      | 32 | -    | 96      | 96      | 180     | 242     |
| 32/180.15 | 11          | 59      | -       | 57      | 32 | -    | 96      | 96      | 180     | 242     |
| 40/220.07 | 15          | 150     | 100-110 | 86      | 40 | 4x16 | 96      | 96      | 220     | 225     |
| 40/250.08 | 15          | 150     | 100-110 | 86      | 40 | 4x16 | 96      | 96      | 250     | 225     |
| 40/250.10 | 15          | 150     | 100-110 | 86      | 40 | 4x16 | 96      | 96      | 250     | 225     |
| 40/250.12 | 15          | 150     | 100-110 | 86      | 40 | 4x16 | 96      | 96      | 250     | 225     |
| 40/250.15 | 16          | 150     | 100-110 | 86      | 40 | 4x16 | 96      | 96      | 250     | 261     |
| 50/280.07 | 17          | 165     | 110-125 | 100     | 50 | 4x18 | 96      | 96      | 280     | 232     |
| 50/280.09 | 17          | 165     | 110-125 | 100     | 50 | 4x18 | 96      | 96      | 280     | 232     |
| 50/280.12 | 18          | 165     | 110-125 | 100     | 50 | 4x18 | 96      | 96      | 280     | 265     |
| 50/280.15 | 18          | 165     | 110-125 | 100     | 50 | 4x18 | 96      | 96      | 280     | 265     |
| 65/340.06 | 20          | 185     | 130-145 | 120     | 65 | 4x18 | 96      | 100     | 340     | 235     |
| 65/340.08 | 20          | 185     | 130-145 | 120     | 65 | 4x18 | 96      | 100     | 340     | 235     |
| 65/340.10 | 22          | 185     | 130-145 | 120     | 65 | 4x18 | 96      | 100     | 340     | 275     |
| 65/340.15 | 22          | 185     | 130-145 | 120     | 65 | 4x18 | 96      | 100     | 340     | 275     |
| 80/360.08 | 24          | 200     | 150-160 | 130     | 80 | 4x18 | 100     | 100     | 360     | 232     |
| 80/360.10 | 26          | 200     | 150-160 | 130     | 80 | 4x18 | 100     | 100     | 360     | 275     |
| 80/360.15 | 26          | 200     | 150-160 | 130     | 80 | 4x18 | 100     | 100     | 360     | 275     |

### Twin Types



| Model     | Weight (kg) | ØD (mm) | Øk (mm) | Ød (mm) | DN | nxm  | Øb (mm) | Øc (mm) | ØH (mm) | ØL (mm) |
|-----------|-------------|---------|---------|---------|----|------|---------|---------|---------|---------|
| 40/250.08 | 29          | 150     | 100-110 | 85      | 40 | 4x16 | 222     | 222     | 250     | 225     |
| 40/250.10 | 29          | 150     | 100-110 | 85      | 40 | 4x16 | 222     | 222     | 250     | 225     |
| 40/250.12 | 29          | 150     | 100-110 | 85      | 40 | 4x16 | 222     | 222     | 250     | 225     |
| 40/250.15 | 32          | 150     | 100-110 | 85      | 40 | 4x16 | 222     | 222     | 250     | 261     |
| 50/280.07 | 31          | 165     | 110-125 | 100     | 50 | 4x18 | 228     | 228     | 280     | 232     |
| 50/280.09 | 31          | 165     | 110-125 | 100     | 50 | 4x18 | 228     | 228     | 280     | 232     |
| 50/280.12 | 34          | 165     | 110-125 | 100     | 50 | 4x18 | 228     | 228     | 280     | 265     |
| 50/280.15 | 34          | 165     | 110-125 | 100     | 50 | 4x18 | 228     | 228     | 280     | 265     |
| 65/340.06 | 36          | 185     | 130-145 | 120     | 65 | 4x18 | 236     | 236     | 340     | 235     |
| 65/340.08 | 36          | 185     | 130-145 | 120     | 65 | 4x18 | 236     | 236     | 340     | 235     |
| 65/340.10 | 39          | 185     | 130-145 | 120     | 65 | 4x18 | 236     | 236     | 340     | 275     |
| 65/340.15 | 39          | 185     | 130-145 | 120     | 65 | 4x18 | 236     | 236     | 340     | 275     |
| 80/360.08 | 48          | 200     | 150-160 | 135     | 80 | 4x18 | 284     | 284     | 360     | 232     |
| 80/360.10 | 48          | 200     | 150-160 | 135     | 80 | 4x18 | 284     | 284     | 360     | 275     |
| 80/360.15 | 51          | 200     | 150-160 | 135     | 80 | 4x18 | 284     | 284     | 360     | 275     |

## VALUES

### Single Types

| MODEL            | CENTER DISTANCE (mm) | CONNECTION SIZE | EEI      | POWER (W) | CURRENT (A) | VOLTAGE (V) | MAXIMUM FLOW RATE (m³/h) | MAXIMUM PRESSURE (mss) |
|------------------|----------------------|-----------------|----------|-----------|-------------|-------------|--------------------------|------------------------|
| EVOMAG 25/180.10 | 180                  | 1 1/2"          | EEI≤0.23 | 185       | 1.1         | 1x230       | 12.0                     | 10.0                   |
| EVOMAG 32/180.10 | 180                  | 2"              | EEI≤0.23 | 185       | 1.2         | 1x230       | 12.0                     | 10.0                   |
| EVOMAG 32/180.15 | 180                  | 2"              | EEI≤0.23 | 350       | 1.6         | 1x230       | 15.0                     | 15.0                   |
| EVOMAG 40/220.07 | 220                  | DN 40           | EEI≤0.23 | 185       | 1.1         | 1x230       | 17.0                     | 7.0                    |
| EVOMAG 40/250.08 | 250                  | DN 40           | EEI≤0.23 | 190       | 1.2         | 1x230       | 18.0                     | 8.0                    |
| EVOMAG 40/250.10 | 250                  | DN 40           | EEI≤0.23 | 360       | 1.7         | 1x230       | 23.0                     | 10.0                   |
| EVOMAG 40/250.12 | 250                  | DN 40           | EEI≤0.23 | 525       | 2.5         | 1x230       | 25.0                     | 12.0                   |
| EVOMAG 40/250.15 | 250                  | DN 40           | EEI≤0.23 | 640       | 3.1         | 1x230       | 28.0                     | 15.0                   |
| EVOMAG 50/280.07 | 280                  | DN 50           | EEI≤0.23 | 200       | 1.2         | 1x230       | 21.0                     | 7.0                    |
| EVOMAG 50/280.09 | 280                  | DN 50           | EEI≤0.23 | 365       | 1.8         | 1x230       | 27.0                     | 9.0                    |
| EVOMAG 50/280.12 | 280                  | DN 50           | EEI≤0.23 | 645       | 3.2         | 1x230       | 34.0                     | 12.0                   |
| EVOMAG 50/280.15 | 280                  | DN 50           | EEI≤0.23 | 940       | 4.0         | 1x230       | 38.0                     | 15.0                   |
| EVOMAG 65/340.06 | 340                  | DN 65           | EEI≤0.23 | 210       | 1.3         | 1x230       | 24.0                     | 6.0                    |
| EVOMAG 65/340.08 | 340                  | DN 65           | EEI≤0.23 | 375       | 1.8         | 1x230       | 30.0                     | 8.0                    |
| EVOMAG 65/340.10 | 340                  | DN 65           | EEI≤0.23 | 650       | 3.2         | 1x230       | 41.0                     | 10.0                   |
| EVOMAG 65/340.15 | 340                  | DN 65           | EEI≤0.23 | 950       | 4.1         | 1x230       | 52.0                     | 15.0                   |
| EVOMAG 80/360.08 | 360                  | DN 80           | EEI≤0.23 | 385       | 1.8         | 1x230       | 32.0                     | 8.0                    |
| EVOMAG 80/360.10 | 360                  | DN 80           | EEI≤0.23 | 655       | 3.3         | 1x230       | 44.0                     | 10.0                   |
| EVOMAG 80/360.15 | 360                  | DN 80           | EEI≤0.23 | 960       | 4.2         | 1x230       | 57.0                     | 15.0                   |

### Twin Types

| MODEL              | CENTER DISTANCE (mm) | CONNECTION SIZE | EEI      | POWER (W) | CURRENT (A) | VOLTAGE (V) | MAXIMUM FLOW RATE (m³/h) | MAXIMUM PRESSURE (mss) |
|--------------------|----------------------|-----------------|----------|-----------|-------------|-------------|--------------------------|------------------------|
| EVOMAG 40/250.08 D | 250                  | DN 40           | EEI≤0.23 | 2x190     | 2x1.2       | 1x230       | 18.0                     | 8.0                    |
| EVOMAG 40/250.10 D | 250                  | DN 40           | EEI≤0.23 | 2x360     | 2x1.7       | 1x230       | 23.0                     | 10.0                   |
| EVOMAG 40/250.12 D | 250                  | DN 40           | EEI≤0.23 | 2x525     | 2x2.5       | 1x230       | 25.0                     | 12.0                   |
| EVOMAG 40/250.15 D | 250                  | DN 40           | EEI≤0.23 | 2x640     | 2x3.1       | 1x230       | 28.0                     | 15.0                   |
| EVOMAG 50/280.07 D | 280                  | DN 50           | EEI≤0.23 | 2x200     | 2x1.2       | 1x230       | 21.0                     | 7.0                    |
| EVOMAG 50/280.09 D | 280                  | DN 50           | EEI≤0.23 | 2x365     | 2x1.8       | 1x230       | 27.0                     | 9.0                    |
| EVOMAG 50/280.12 D | 280                  | DN 50           | EEI≤0.23 | 2x645     | 2x3.2       | 1x230       | 34.0                     | 12.0                   |
| EVOMAG 50/280.15 D | 280                  | DN 50           | EEI≤0.23 | 2x940     | 2x4.0       | 1x230       | 38.0                     | 15.0                   |
| EVOMAG 65/340.06 D | 340                  | DN 65           | EEI≤0.23 | 2x210     | 2x1.3       | 1x230       | 24.0                     | 6.0                    |
| EVOMAG 65/340.08 D | 340                  | DN 65           | EEI≤0.23 | 2x375     | 2x1.8       | 1x230       | 30.0                     | 8.0                    |
| EVOMAG 65/340.10 D | 340                  | DN 65           | EEI≤0.23 | 2x650     | 2x3.2       | 1x230       | 41.0                     | 10.0                   |
| EVOMAG 65/340.15 D | 340                  | DN 65           | EEI≤0.23 | 2x950     | 2x4.1       | 1x230       | 52.0                     | 15.0                   |
| EVOMAG 80/360.08 D | 360                  | DN 80           | EEI≤0.23 | 2x385     | 2x1.8       | 1x230       | 32.0                     | 8.0                    |
| EVOMAG 80/360.10 D | 360                  | DN 80           | EEI≤0.23 | 2x655     | 2x3.3       | 1x230       | 44.0                     | 10.0                   |
| EVOMAG 80/360.15 D | 360                  | DN 80           | EEI≤0.23 | 2x960     | 2x4.2       | 1x230       | 57.0                     | 15.0                   |

# HidroTank

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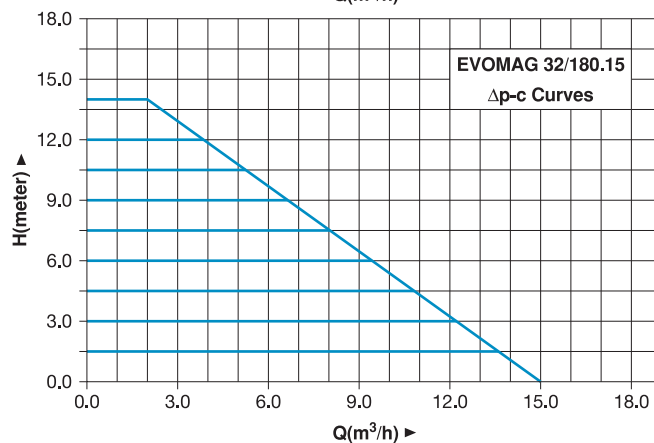
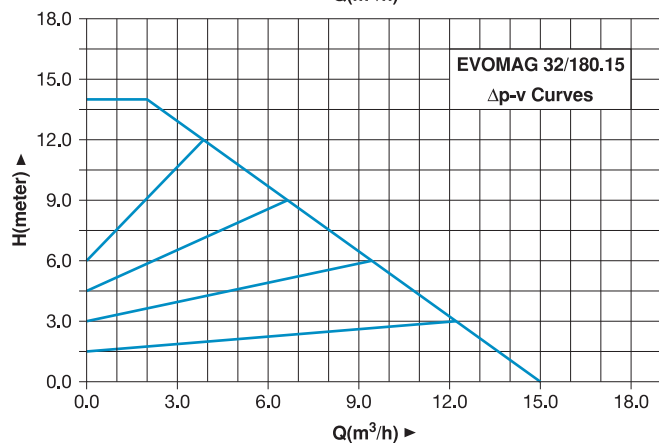
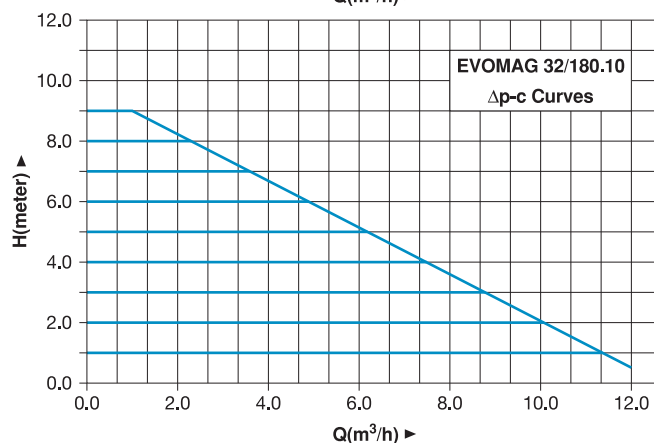
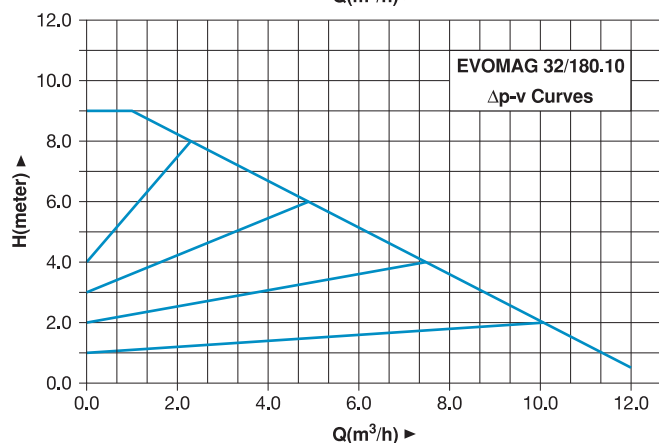
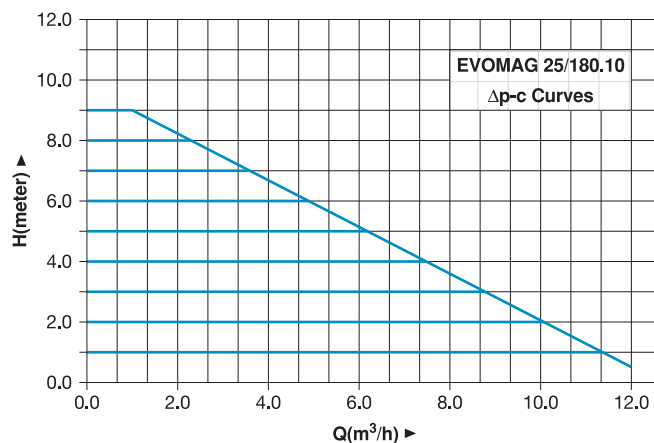
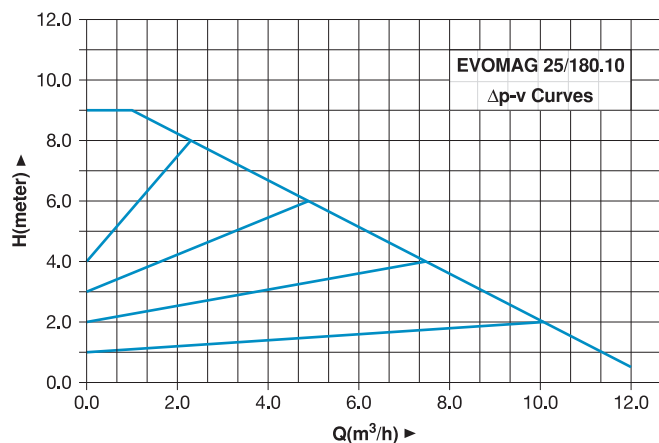
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## PERFORMANCE CURVES

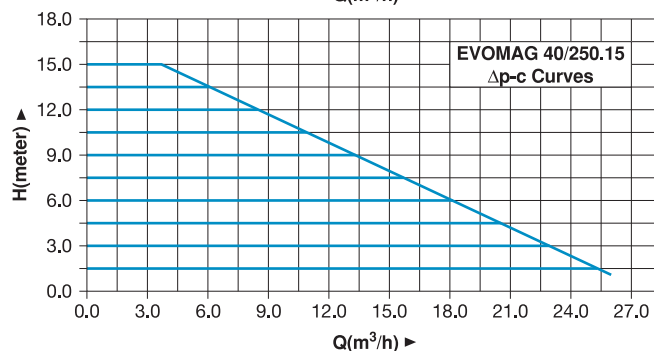
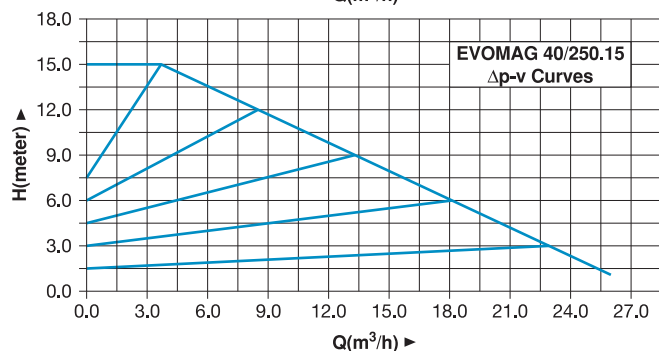
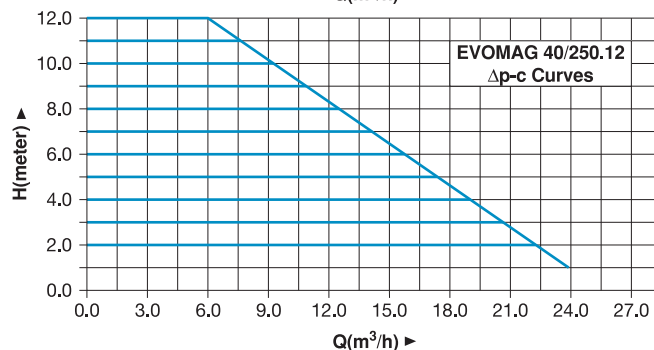
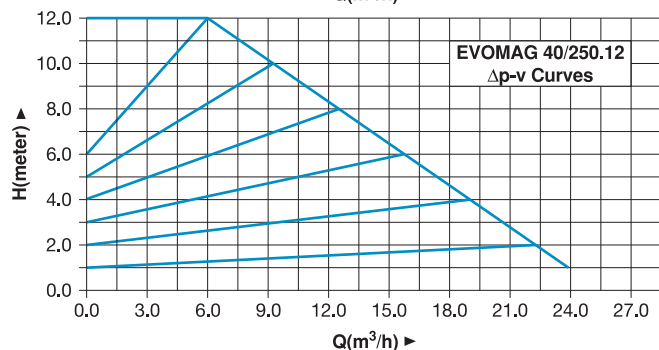
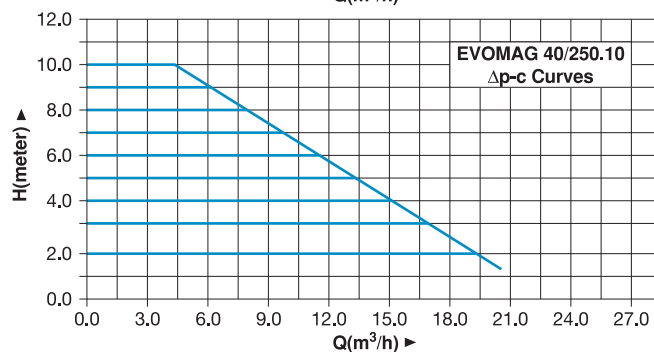
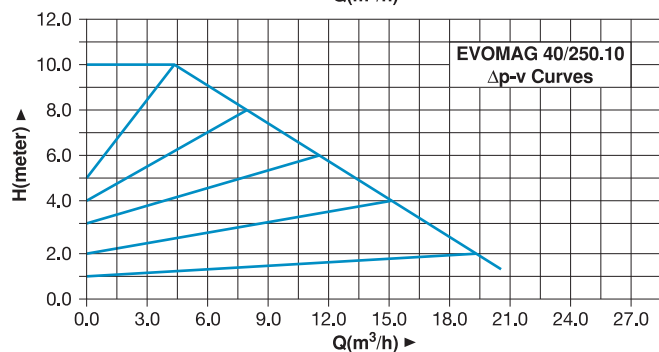
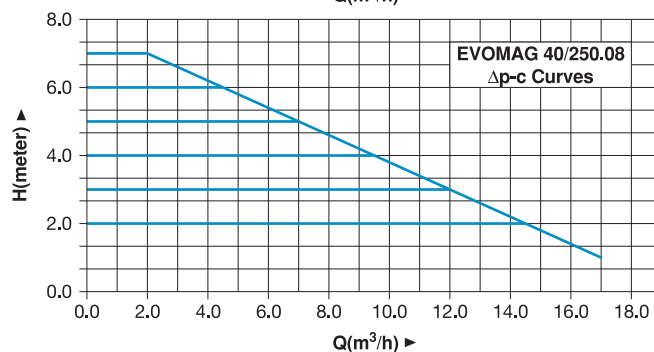
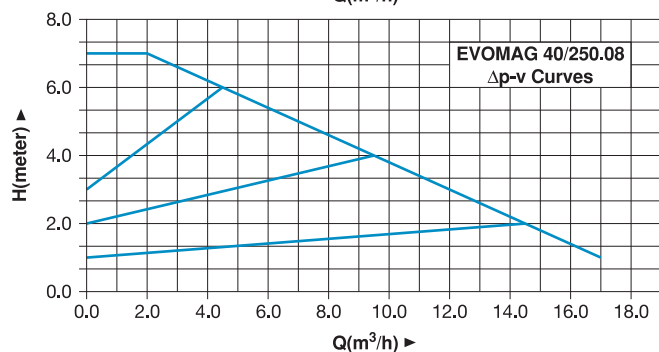
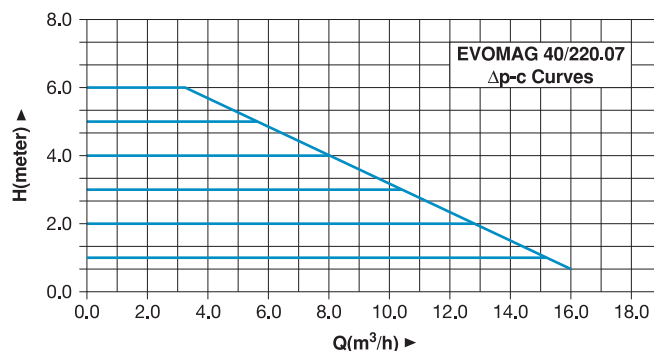
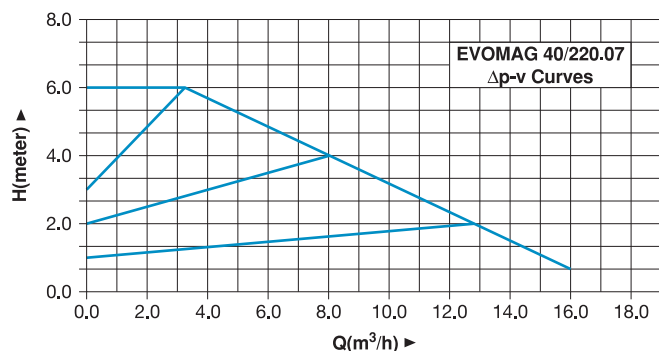
Single - Threaded // EvoMag 25 & EvoMag 32





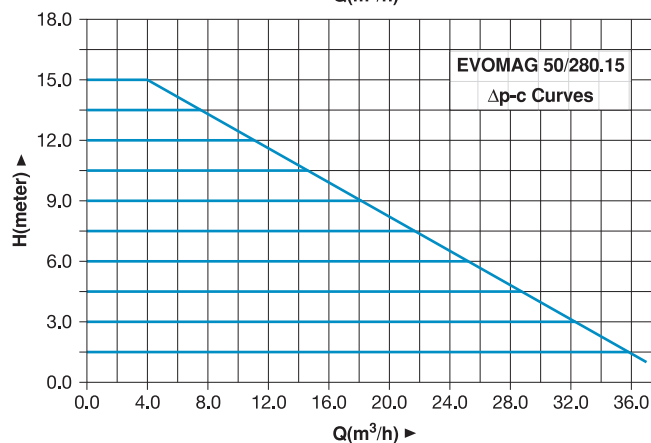
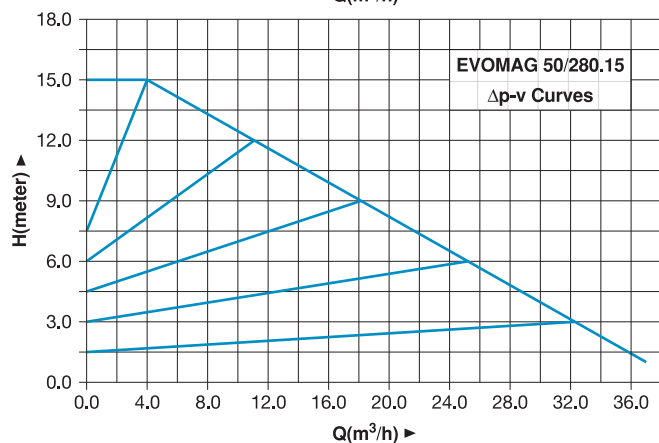
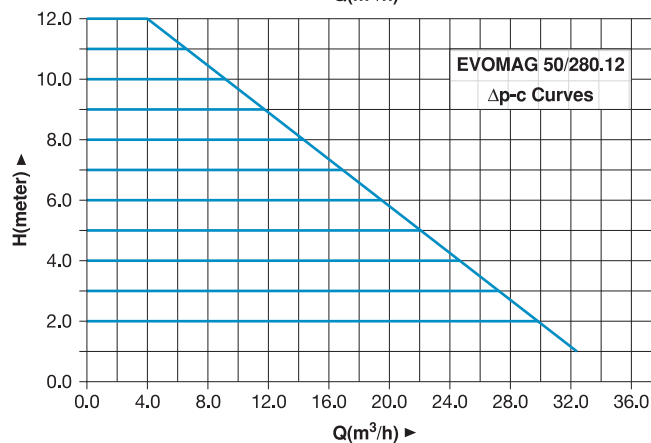
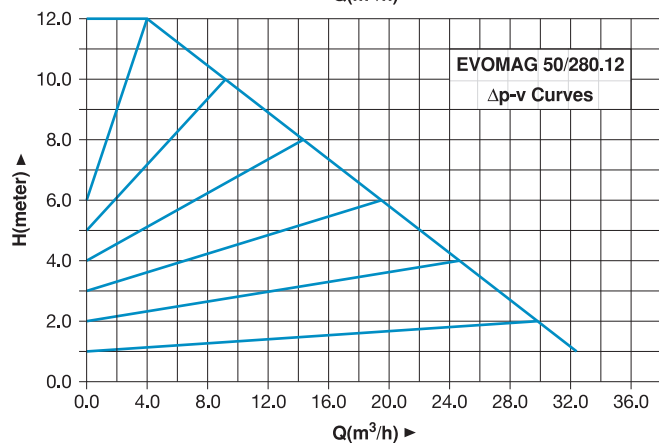
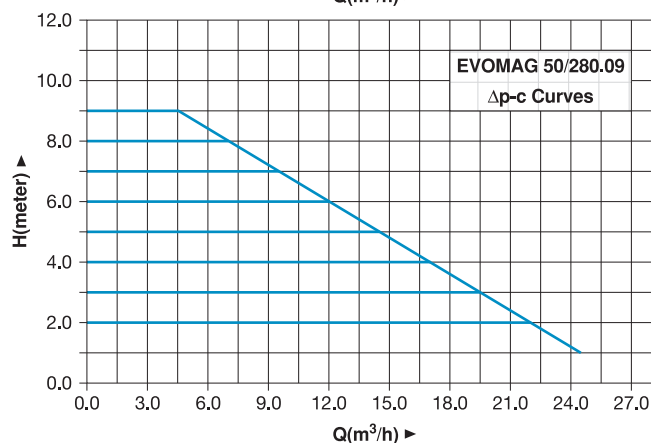
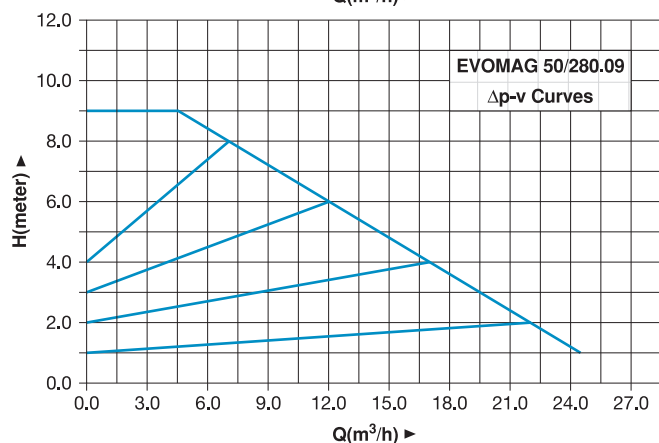
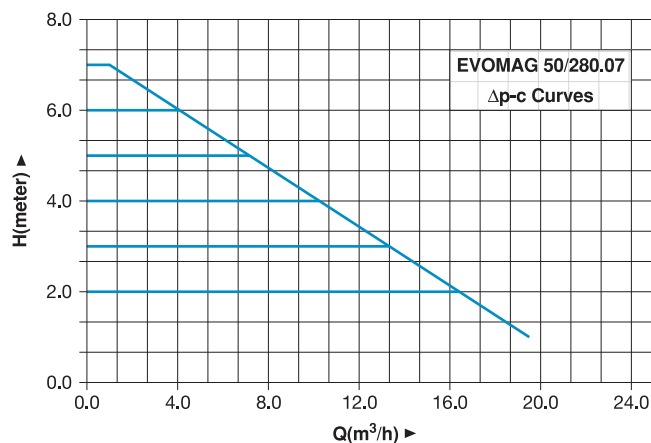
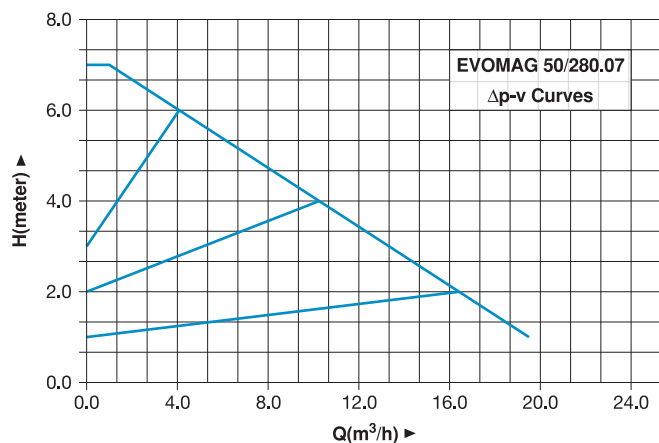
## PERFORMANCE CURVES

Single - Flanged // EvoMag 40



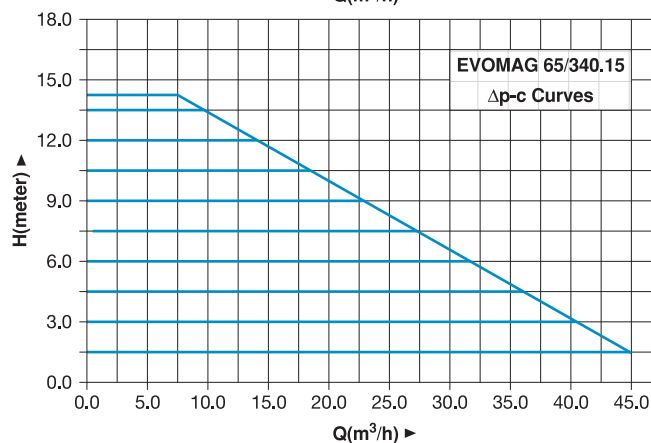
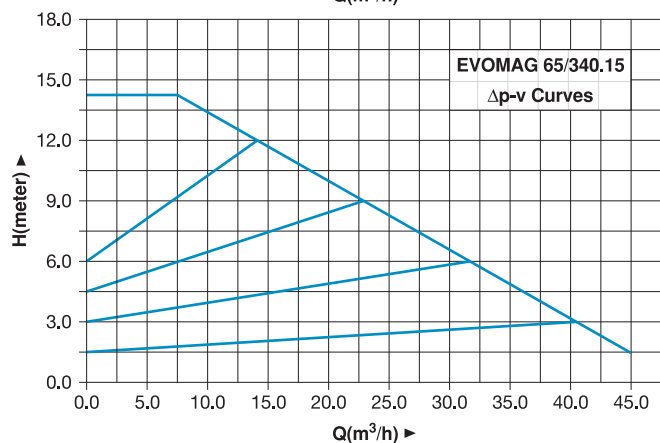
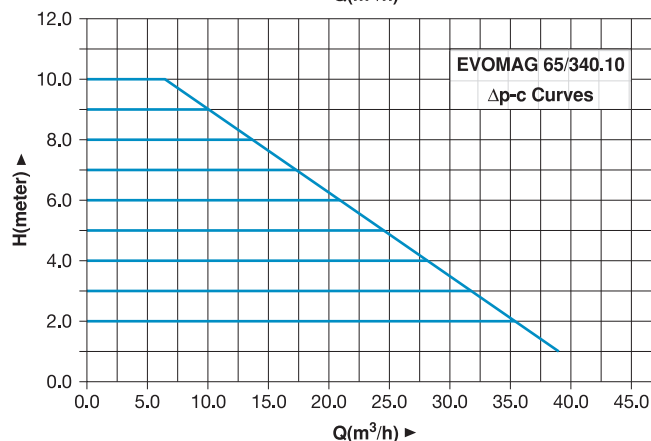
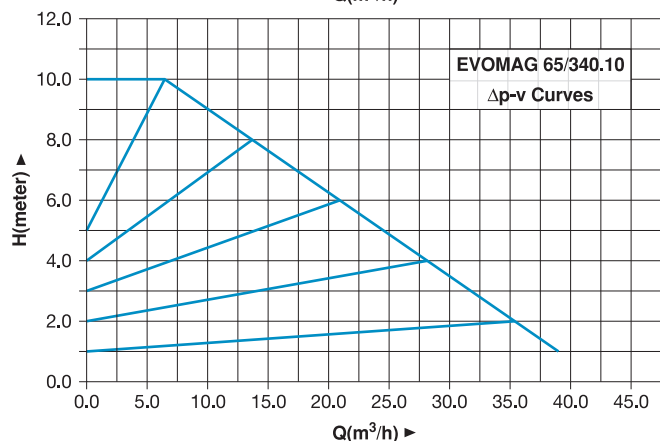
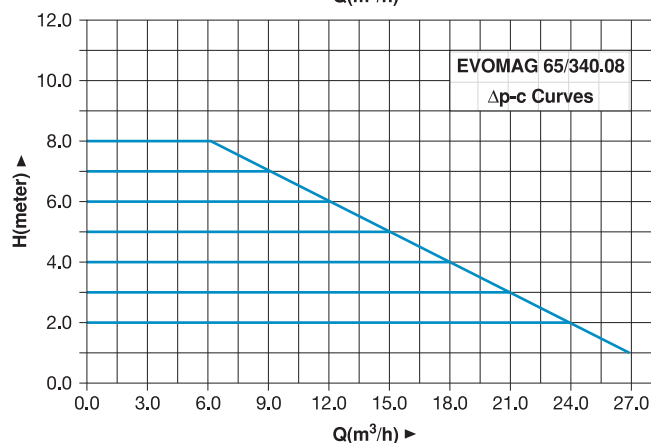
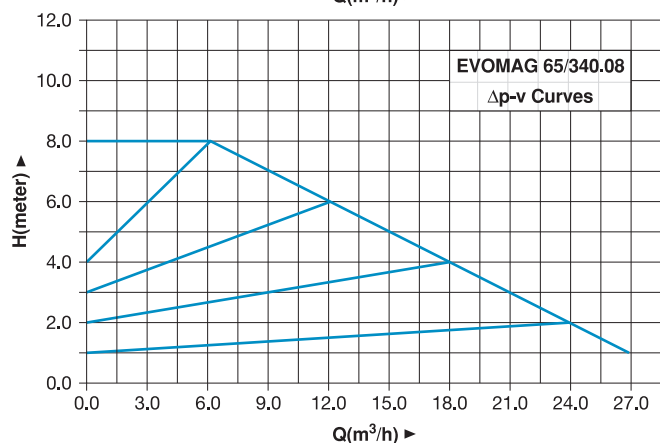
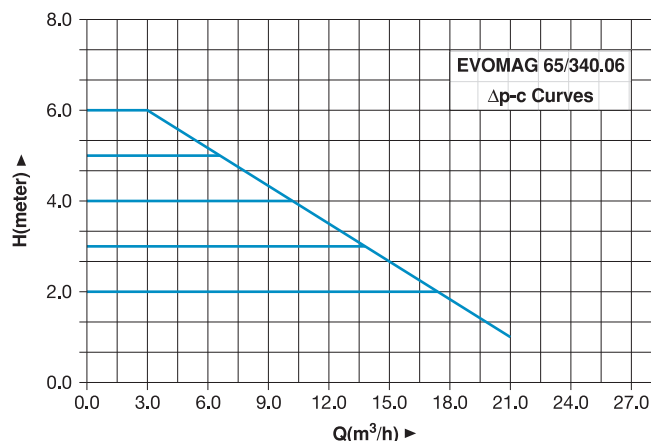
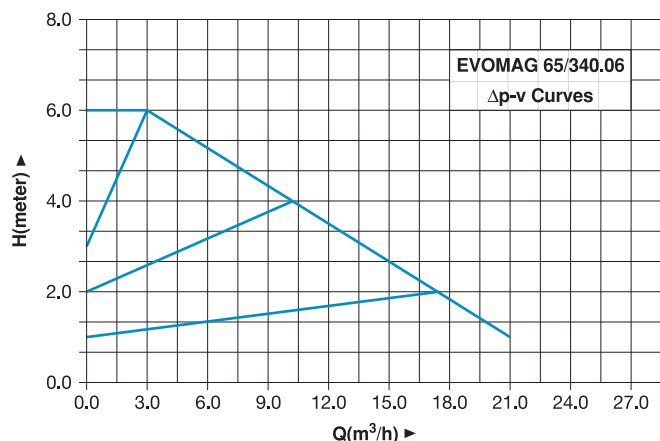
## PERFORMANCE CURVES

Single - Flanged // EvoMag 50



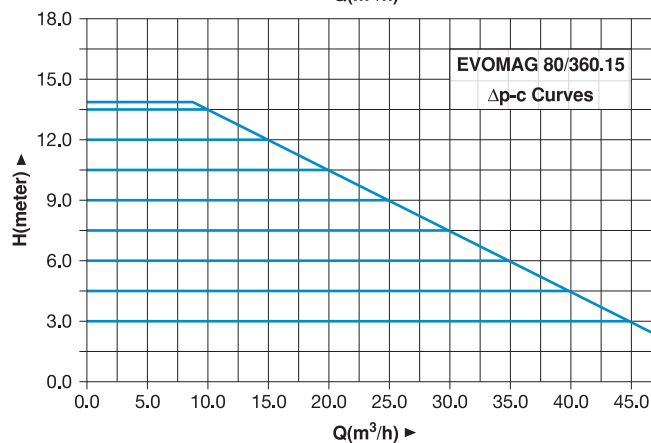
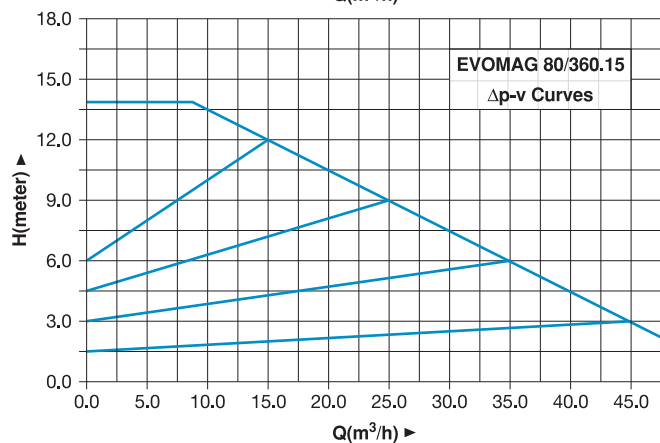
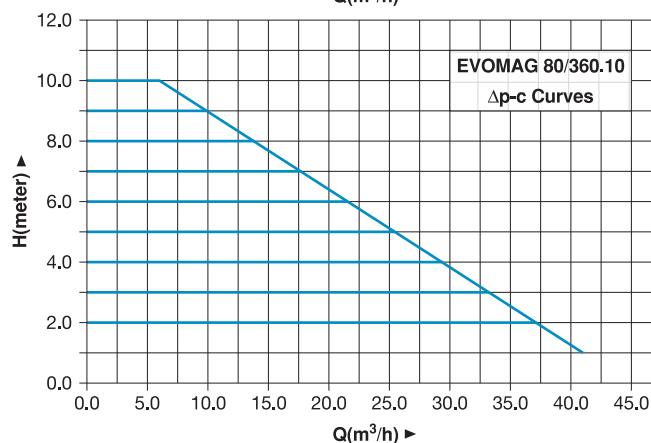
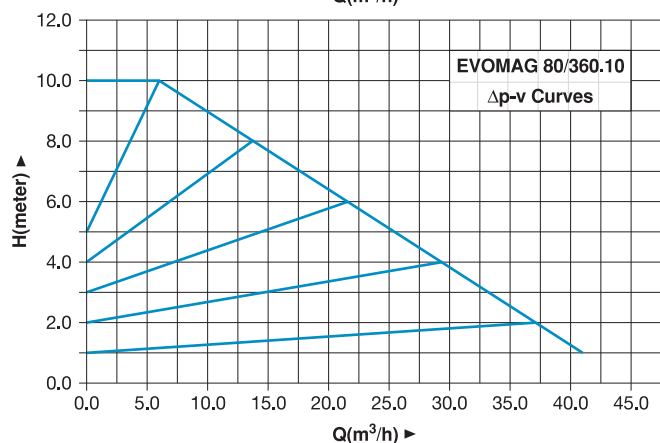
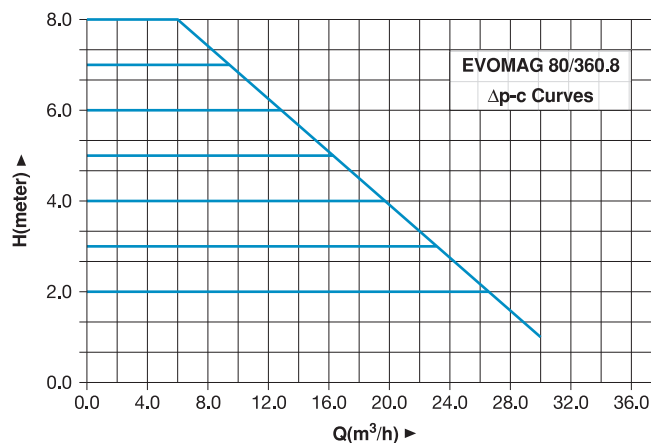
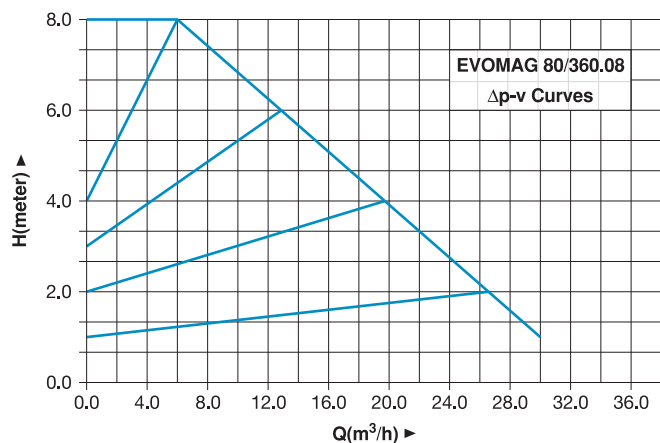
## PERFORMANCE CURVES

Single - Flanged // EvoMag 65



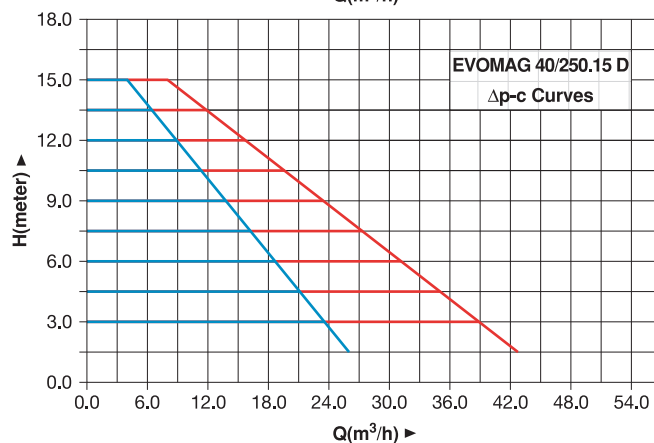
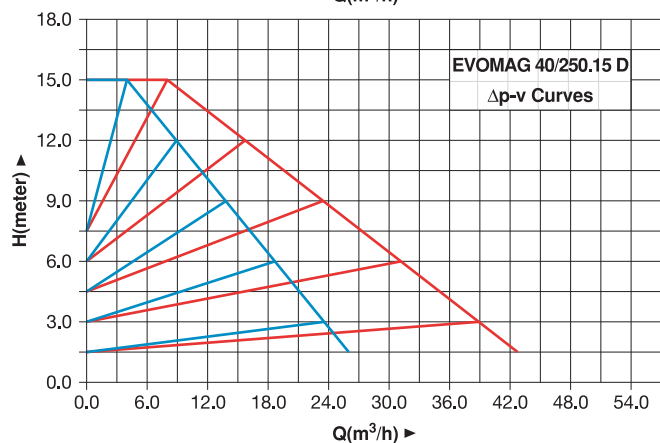
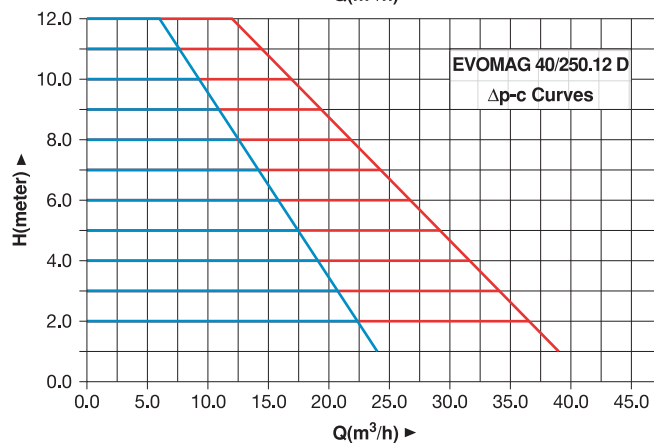
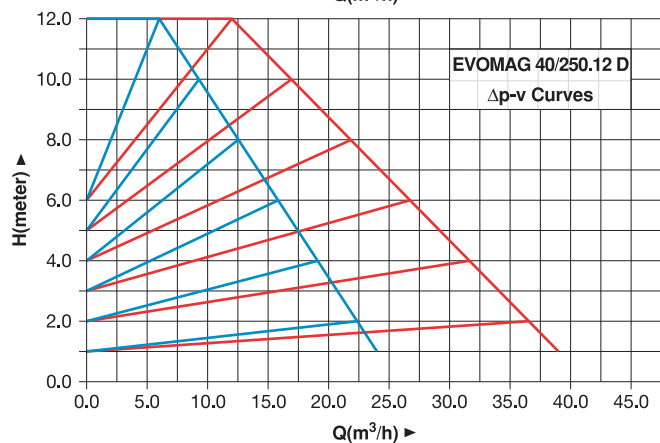
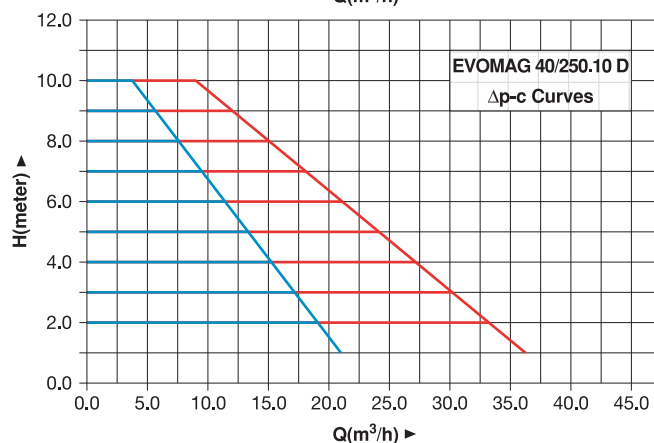
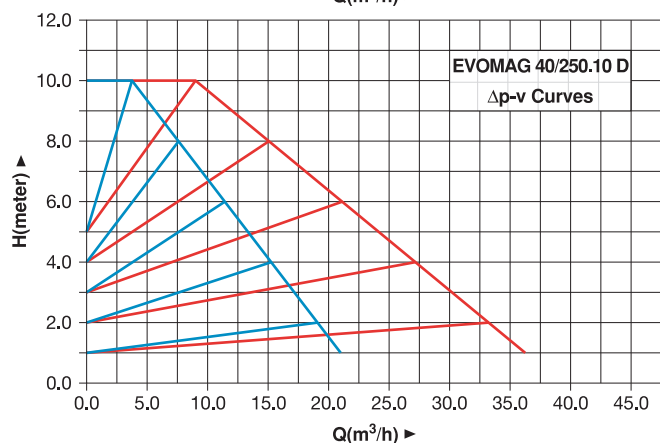
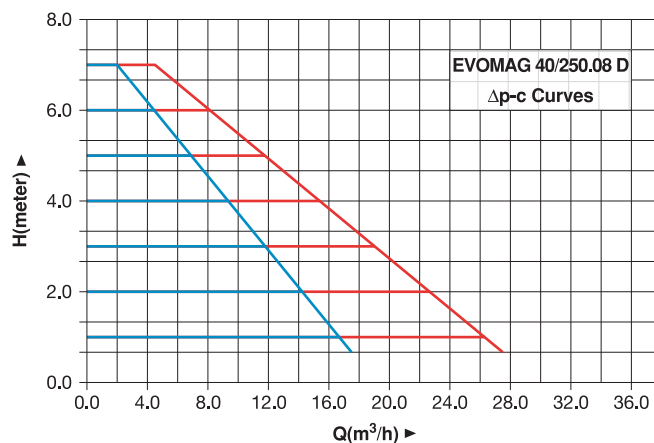
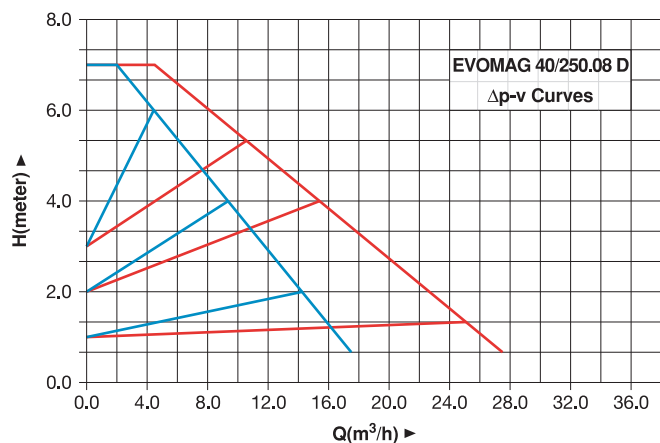
## PERFORMANCE CURVES

Single - Flanged // EvoMag 80



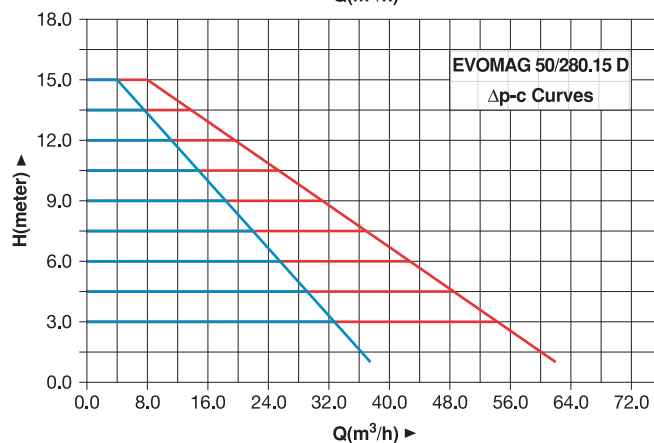
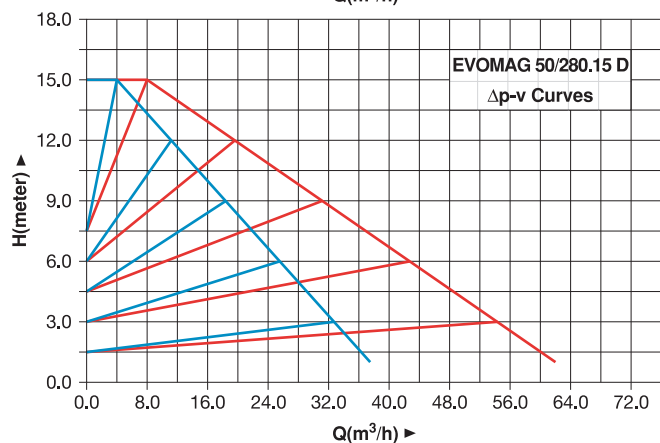
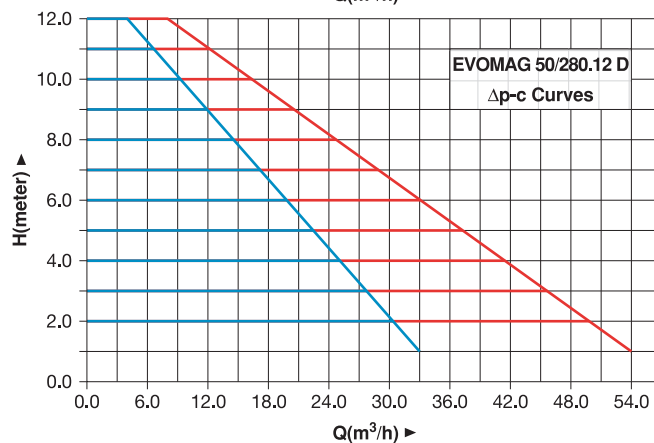
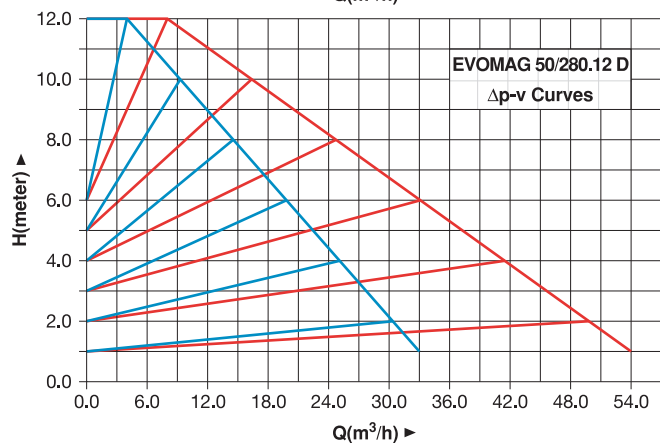
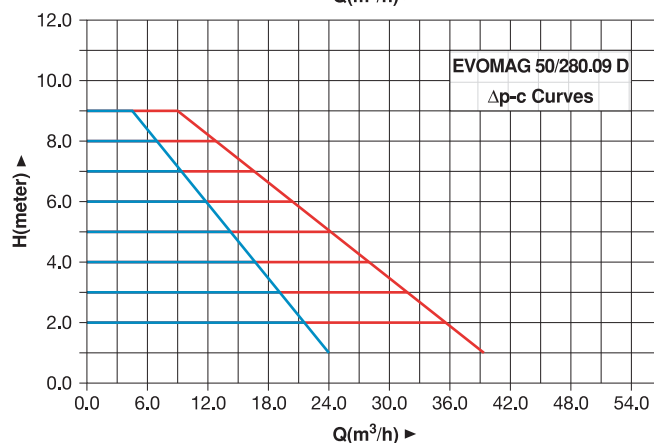
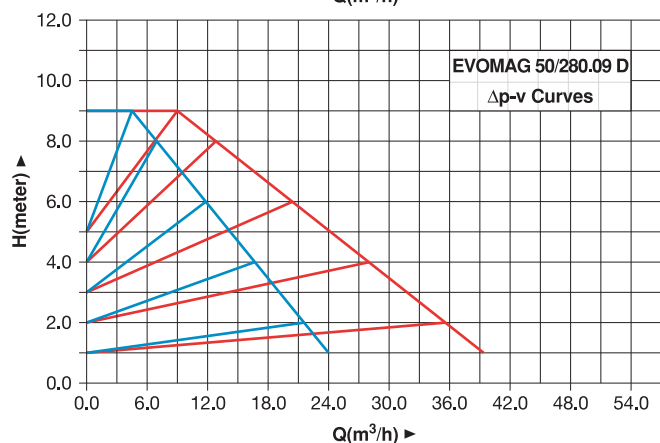
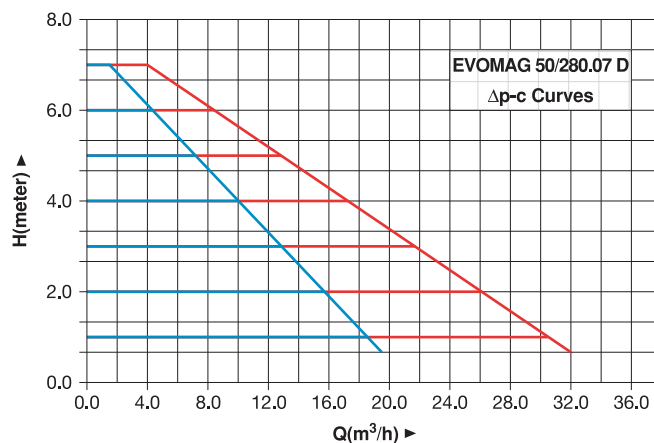
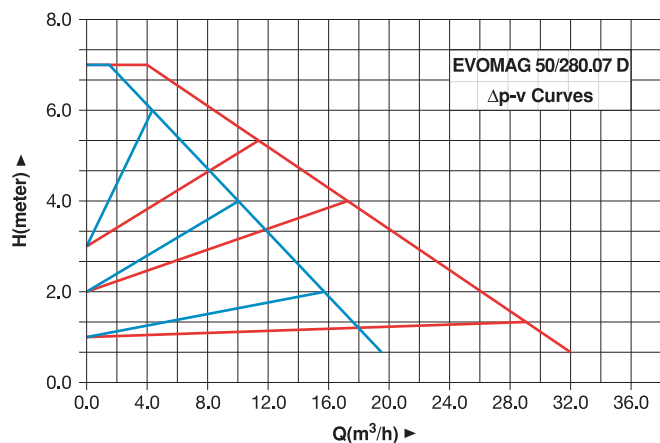
## PERFORMANCE CURVES

Twin - Flanged // EvoMag 40



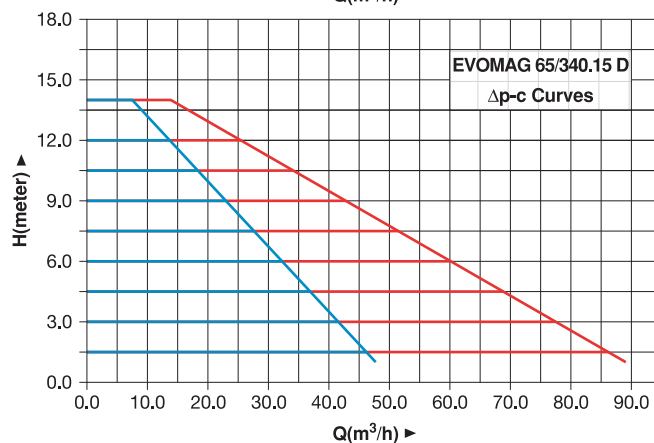
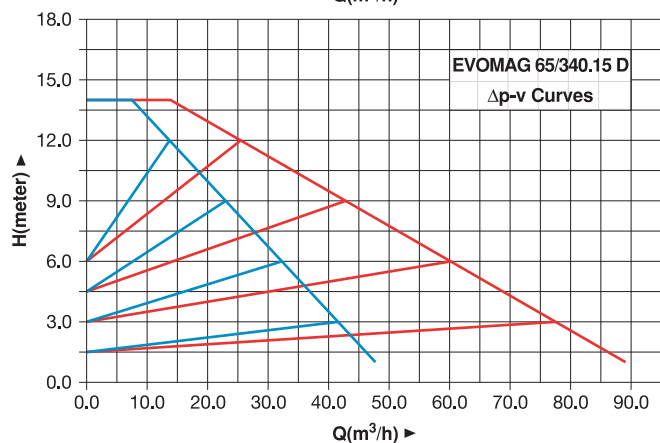
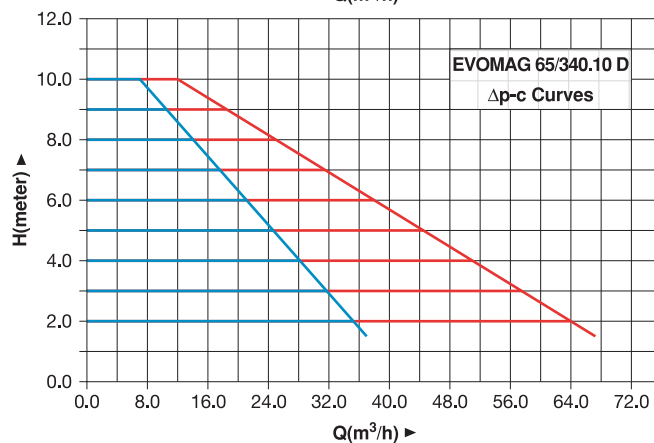
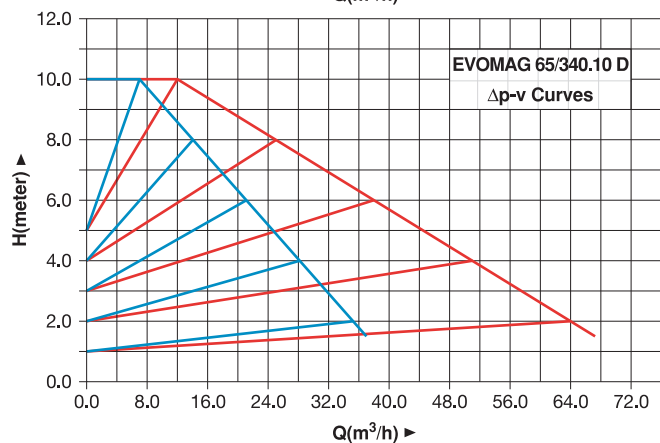
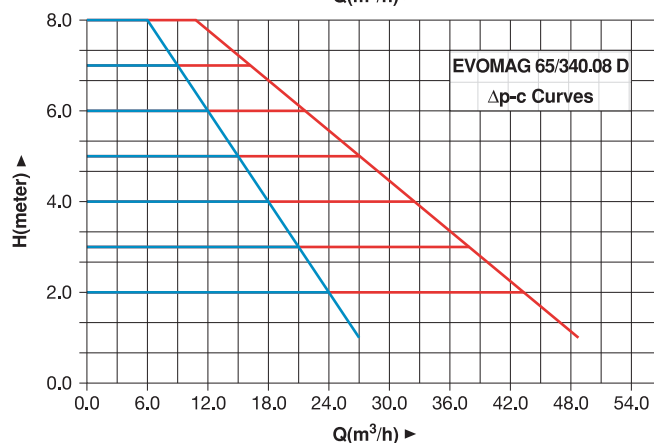
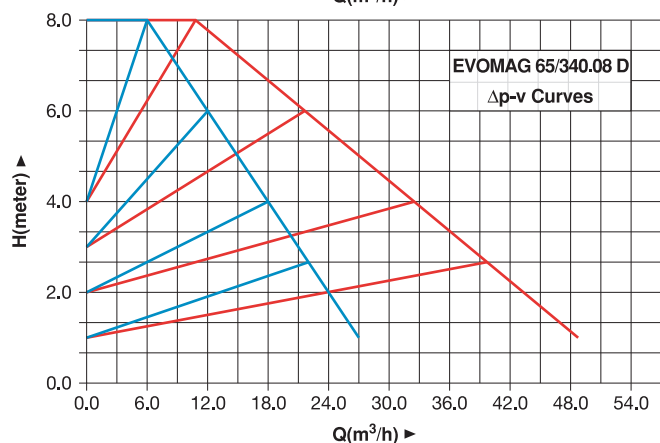
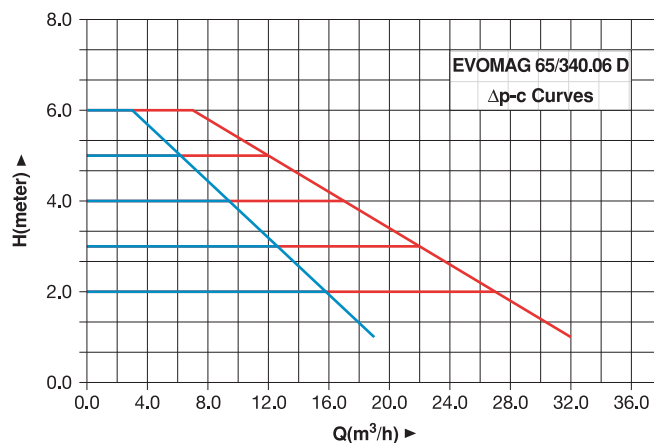
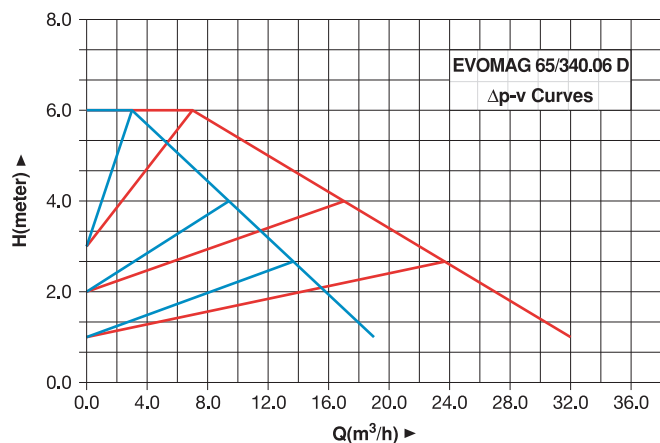
## PERFORMANCE CURVES

Twin - Flanged // EvoMag 50



## PERFORMANCE CURVES

Twin - Flanged // EvoMag 65



## PERFORMANCE CURVES

Twin - Flanged // EvoMag 80

