



Available with single and three phase motors

ecocirc® XL

A COMPLETE SMART & HIGHLY EFFICIENT PUMPING SOLUTION
FOR HEATING, COOLING AND POTABLE WATER SYSTEMS
PERFORMANCE 50/60HZ CURVES



Bell & Gossett

a xylem brand

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Useful Pump Formulas

$$\begin{aligned} \text{Pressure (PSI)} &= \frac{\text{Head (Feet)} \times \text{Specific Gravity}}{2.31} \\ \text{Head (Feet)} &= \frac{\text{Pressure (PSI)} \times 2.31}{\text{Specific Gravity}} \\ \text{Vacuum (Inches of Mercury)} &= \frac{\text{Dynamic Suction Lift (Feet)} \times .883}{\text{Specific Gravity}} \\ \text{Horsepower (Brake)} &= \frac{\text{GPM} \times \text{Head (Feet)} \times \text{Specific Gravity}}{3960 \times \text{Pump Efficiency}} \\ \text{Horsepower (Water)} &= \frac{\text{GPM} \times \text{Head (Feet)} \times \text{Specific Gravity}}{3960} \\ \text{Efficiency (Pump)} &= \frac{\text{Horsepower (Water)}}{\text{Horsepower (Brake)}} \times 100 \\ \text{NPSH (Available)} &= \text{Positive Factors} - \text{Negative Factors} \end{aligned}$$

Affinity Laws: Effect of change of speed or impeller diameter on centrifugal pumps.

	GPM Capacity	Ft. Head	BHP
Impeller Diameter Change	$Q_2 = \frac{D_2}{D_1} Q_1$	$H_2 = \left(\frac{D_2}{D_1}\right)^2 H_1$	$P_2 = \left(\frac{D_2}{D_1}\right)^3 P_1$
Speed Change	$Q_2 = \frac{RPM_2}{RPM_1} Q_1$	$H_2 = \left(\frac{RPM_2}{RPM_1}\right)^2 H_1$	$P_2 = \left(\frac{RPM_2}{RPM_1}\right)^3 P_1$

Where Q = GPM, H = Head, P = BHP, D = Impeller Dia., RPM = Pump Speed

ecocirc XL

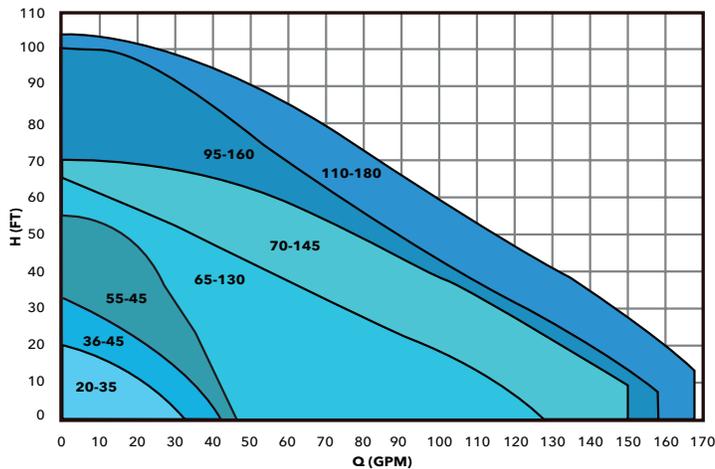
Motor Data

Model Number	Version		Power Supply				Flange Connection				Pump Body		Fluid Temp. Range	Ambient Temp. Range	Maximum Pressure Range	Protection Class
	High Head	High Flow	Single Phase 115V	Single Phase 208-230V	3 Phase 208-230/400-460V	3 Phase 400-460V	Small Booster (2 Bolts)	Large Booster (2 Bolts)	2" Booster (4 Bolts)	3" Booster (4 Bolts)	Cast Iron	Stainless Steel	14°F - 230°F	32°F - 104°F	175 PSI	IP44
ecocirc XL 20-35	•		•				•				•	•	•	•	•	•
ecocirc XL 36-45	•		•	•			•				•	•	•	•	•	•
ecocirc XL 15-75		•	•	•					•		•	•	•	•	•	•
ecocirc XL 55-45	•			•			•				•	•	•	•	•	•
ecocirc XL 20-140		•		•					•		•	•	•	•	•	•
ecocirc XL 65-130	•			•	•			•			•	•	•	•	•	•
ecocirc XL 40-200		•		•	•				•		•	•	•	•	•	•
ecocirc XL 70-145	•			•				•			•	•	•	•	•	•
ecocirc XL 40-275		•		•							•	•	•	•	•	•
ecocirc XL 95-160	•				•			•			•	•	•	•	•	•
ecocirc XL 27-320		•			•				•		•	•	•	•	•	•
ecocirc XL 110-180	•					•		•			•	•	•	•	•	•
ecocirc XL 45-375		•				•			•		•	•	•	•	•	•

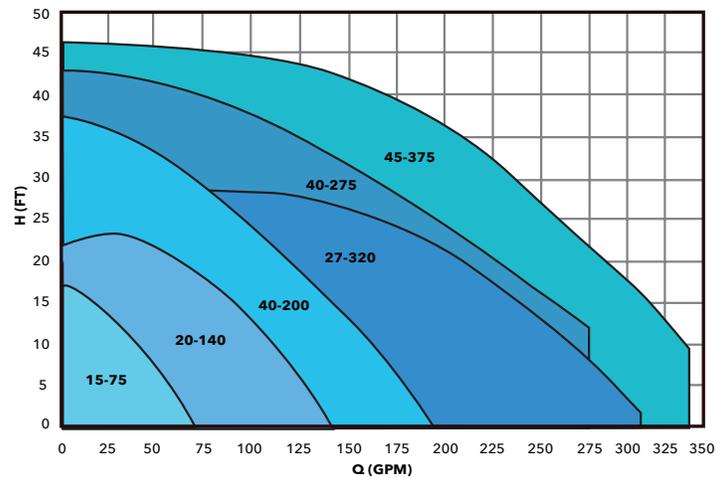
*304 stainless steel body - certified to NSF 372.

- Small Booster (2 bolts) has a bolt hole to bolt hole dimension of 3-3/16".
- Large Booster (2 bolts) has a bolt hole to bolt hole dimension of 3-7/16".

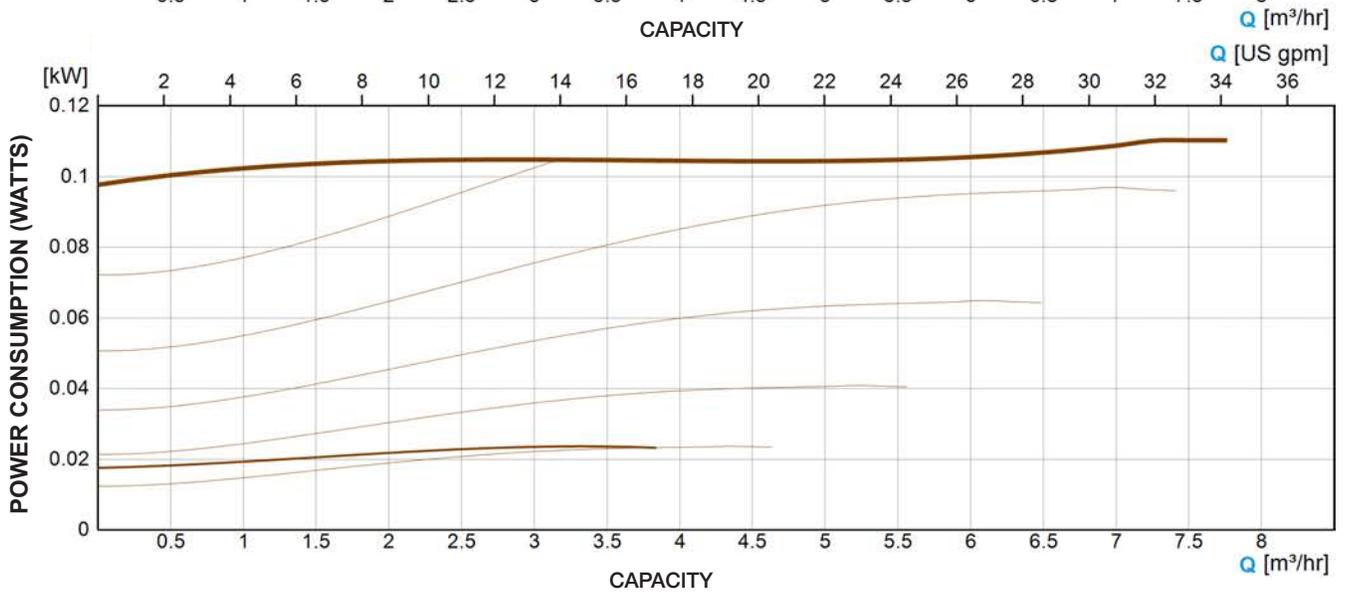
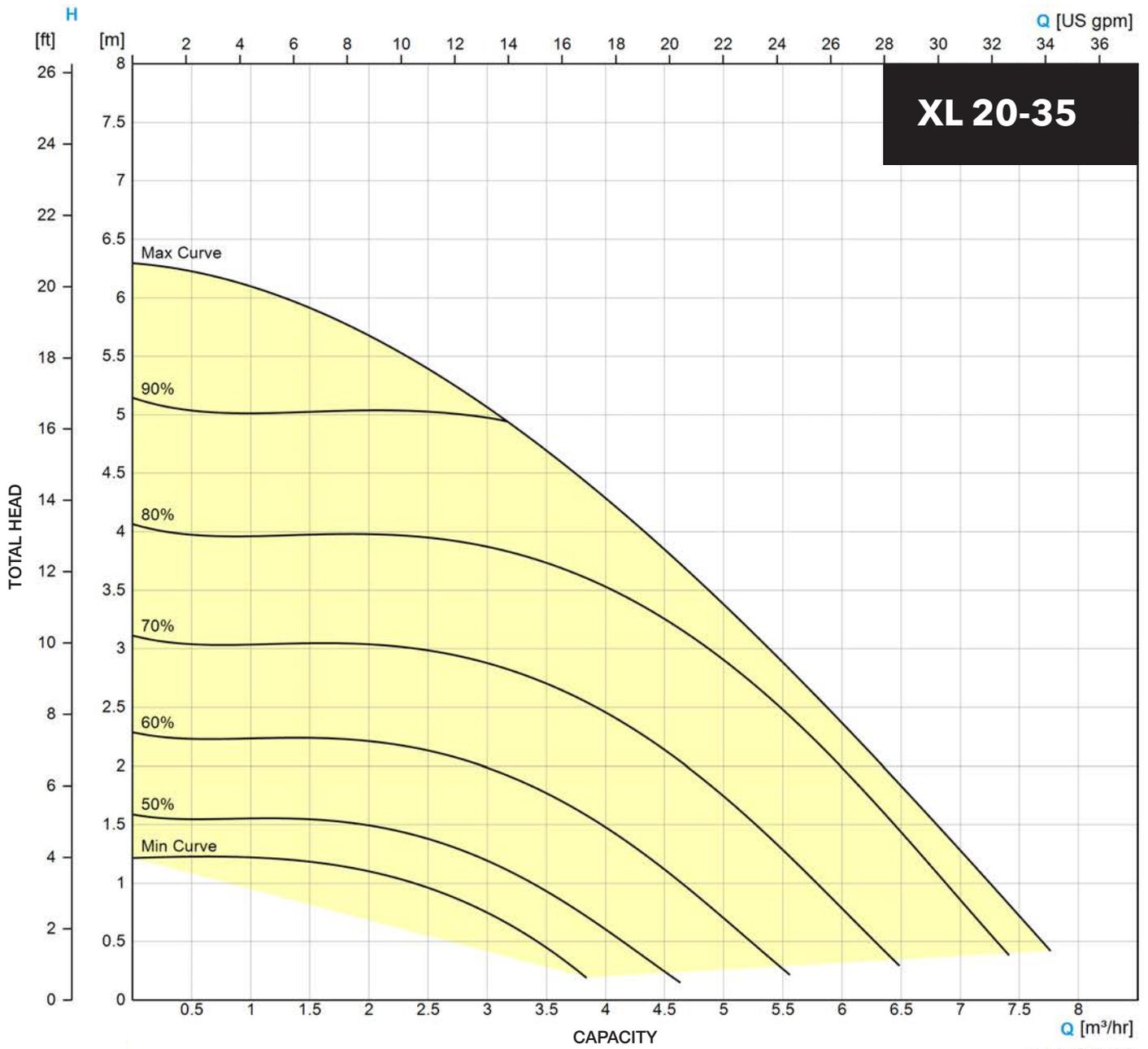
ecocirc XL High Head Performance Range



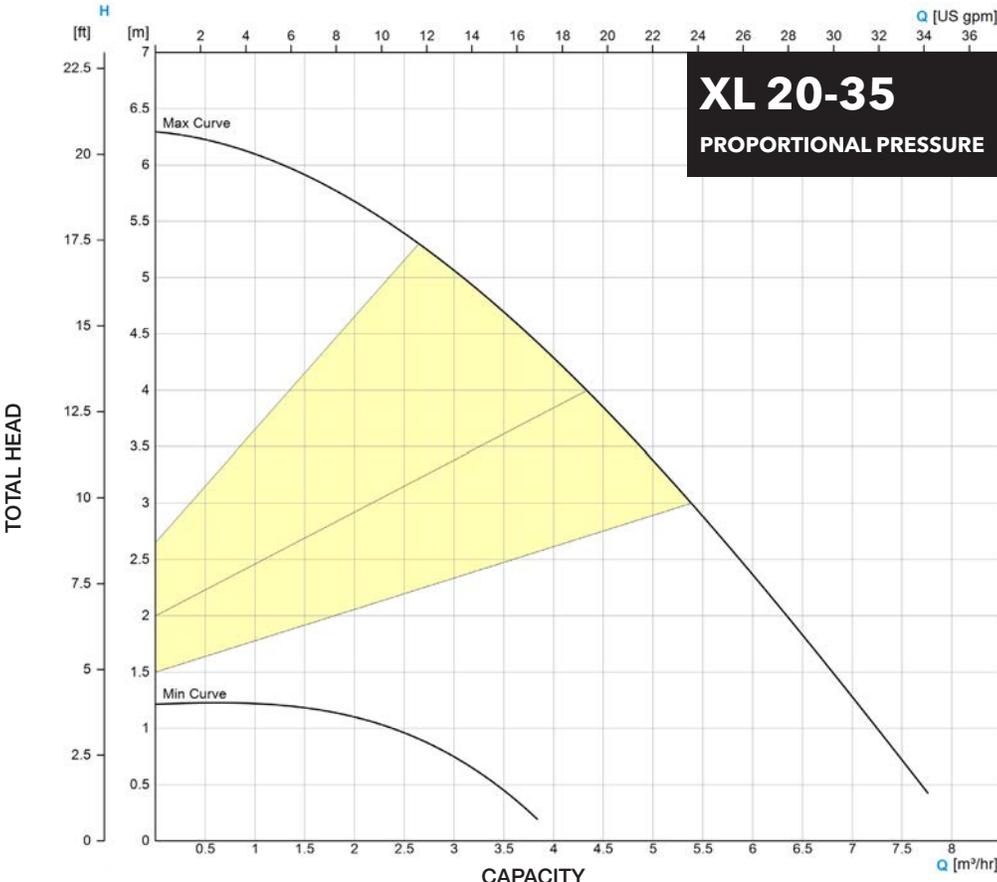
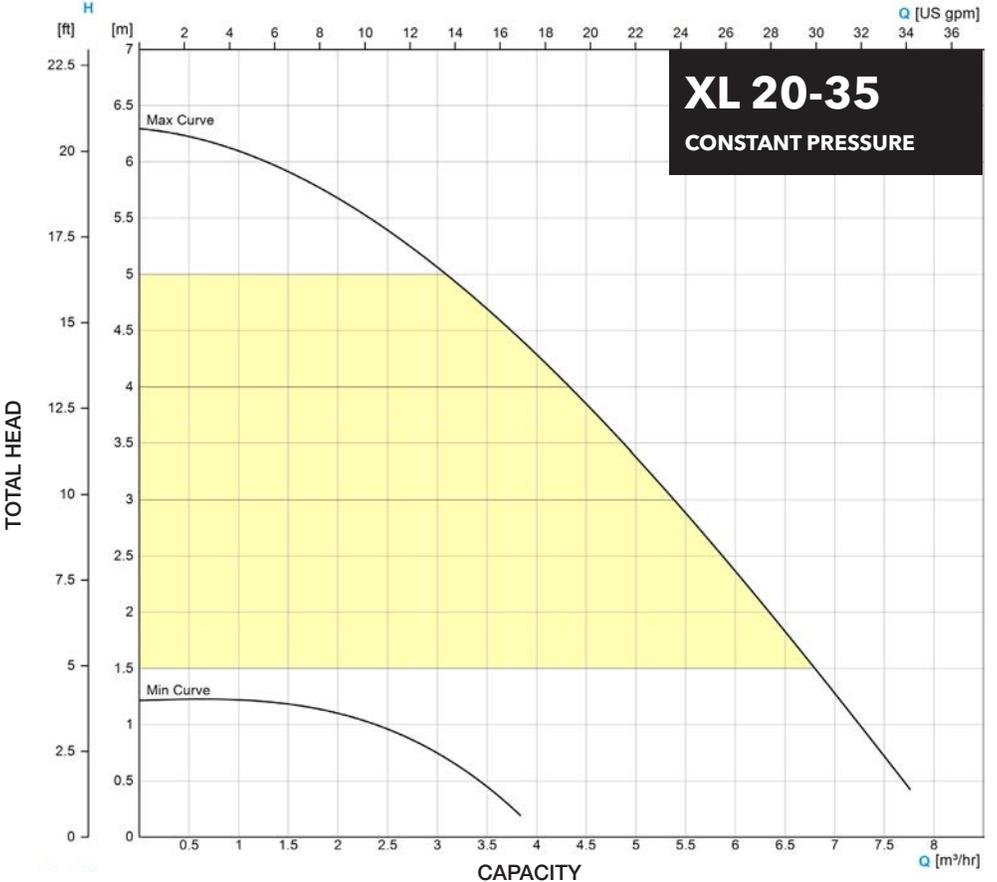
ecocirc XL High Flow Performance Range



ecocirc XL 20-35 Curves

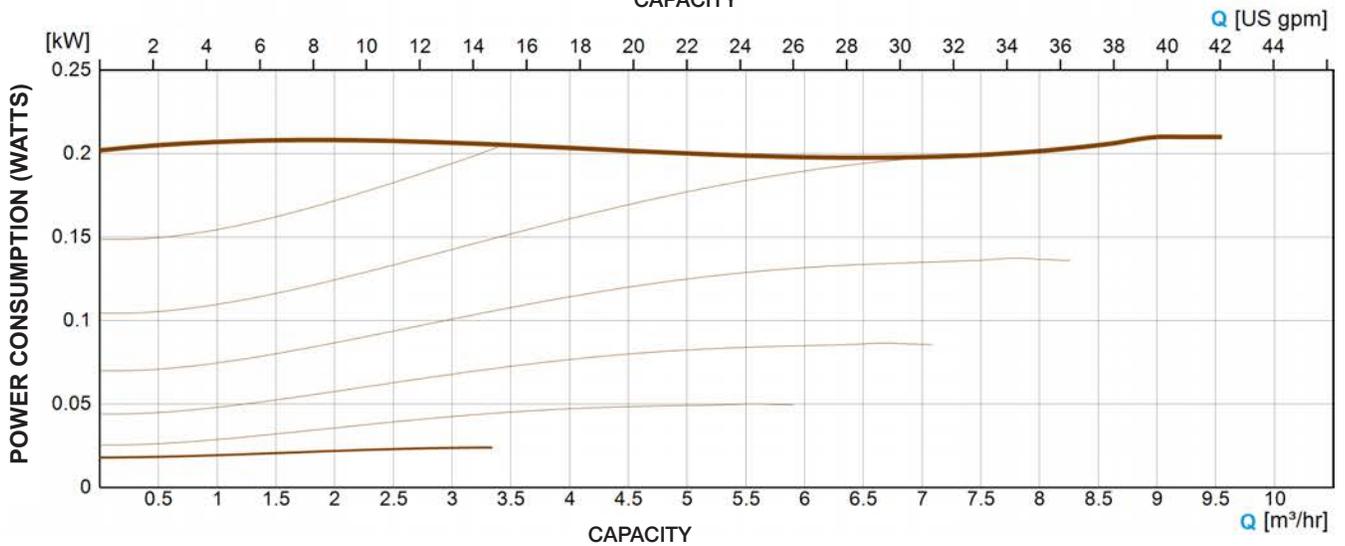
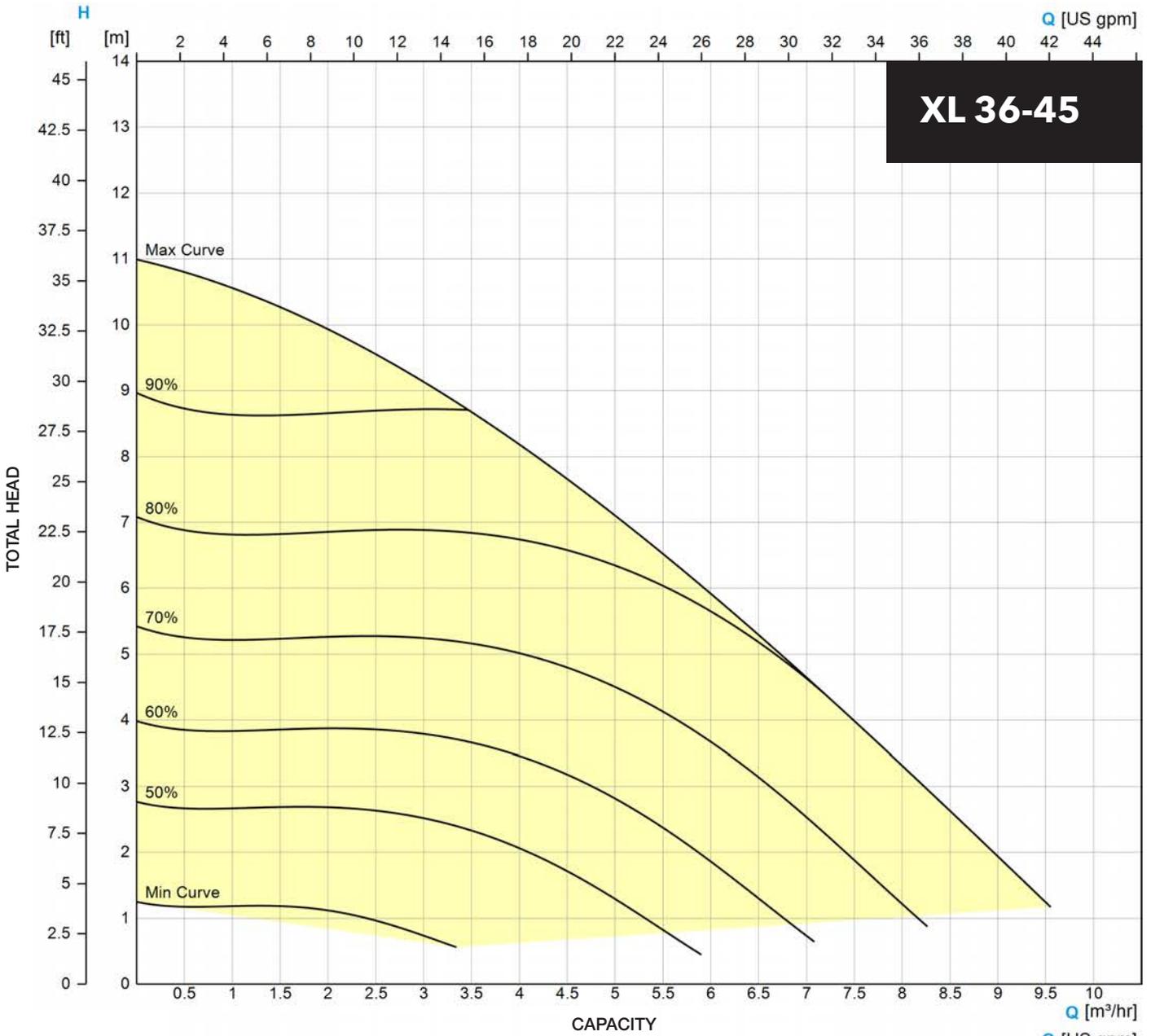


ecocirc XL 20-35 Curves

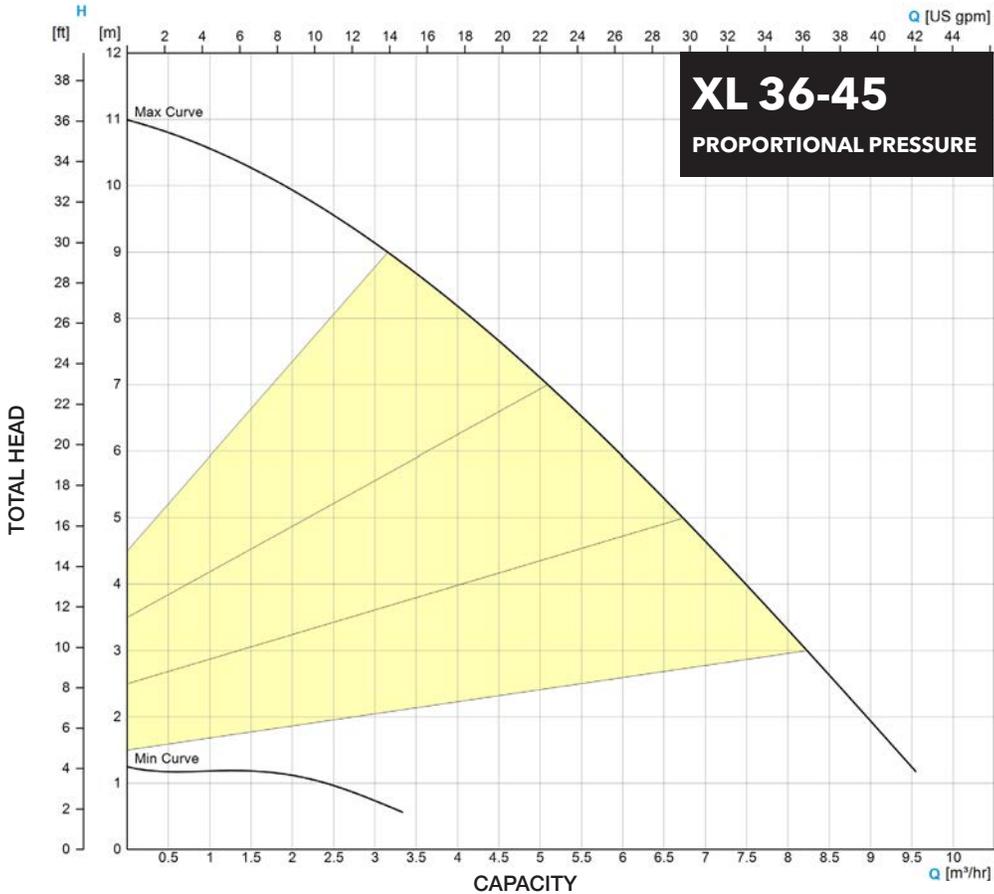
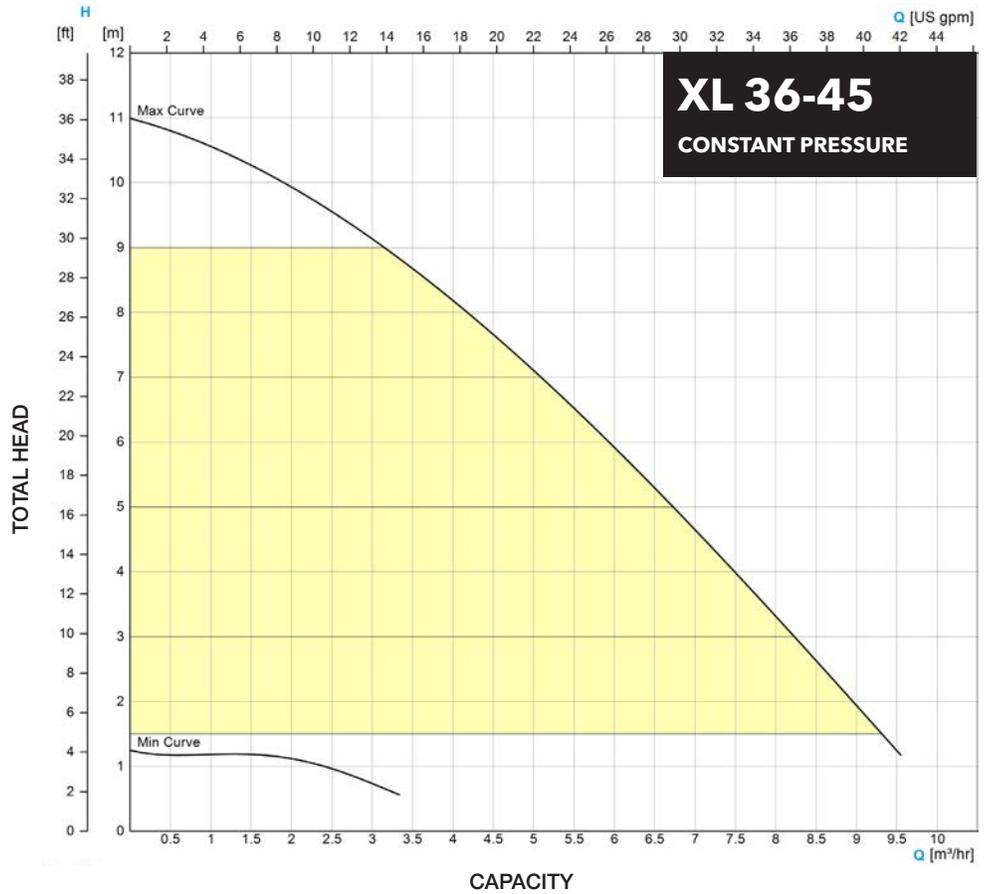


Note: The shaded area represents the operating range for the control mode. Each control mode will operate along a single control curve set by the max differential pressure set point.

ecocirc XL 36-45 Curves

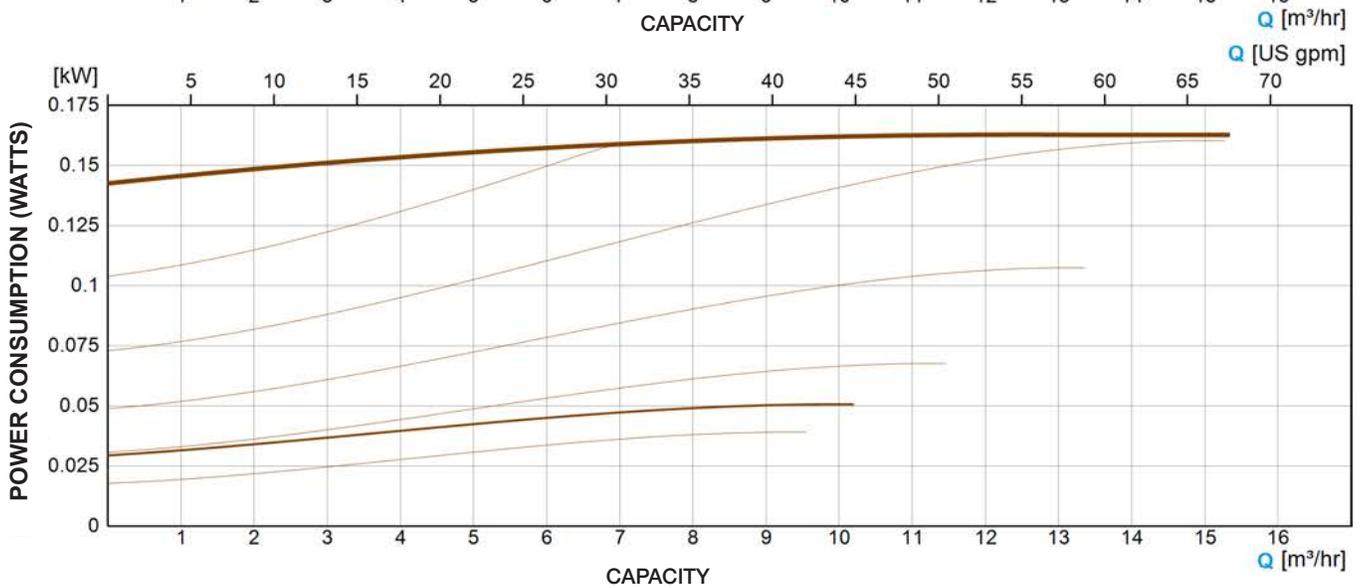
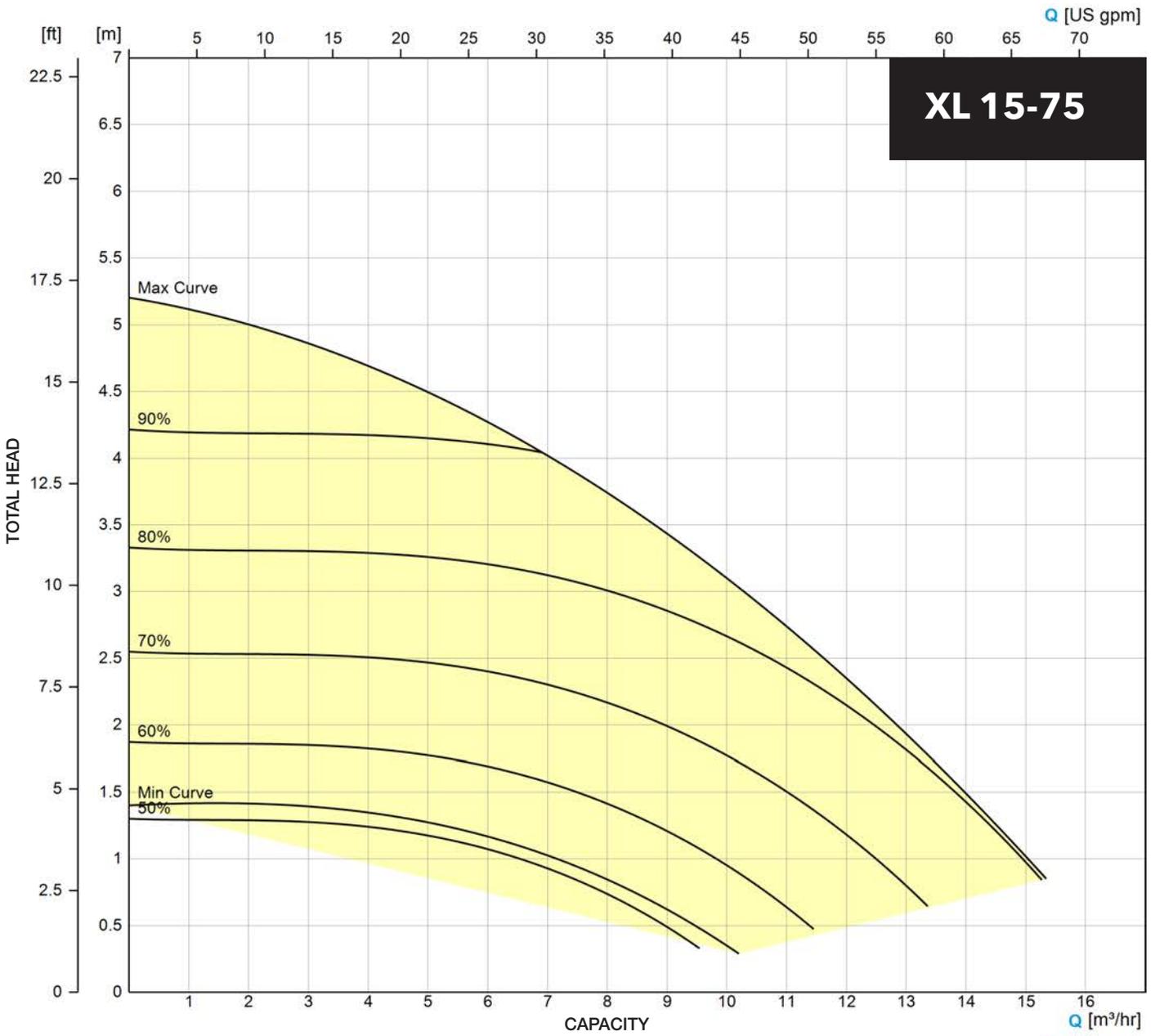


ecocirc XL 36-45 Curves

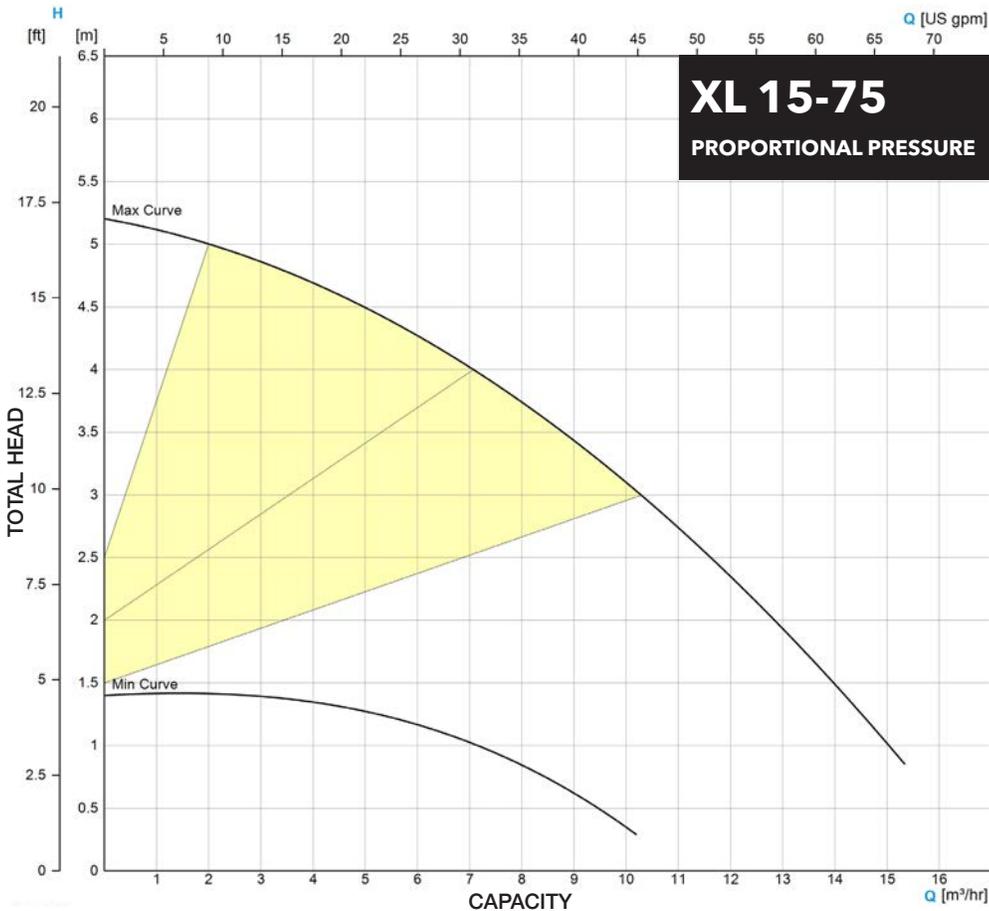
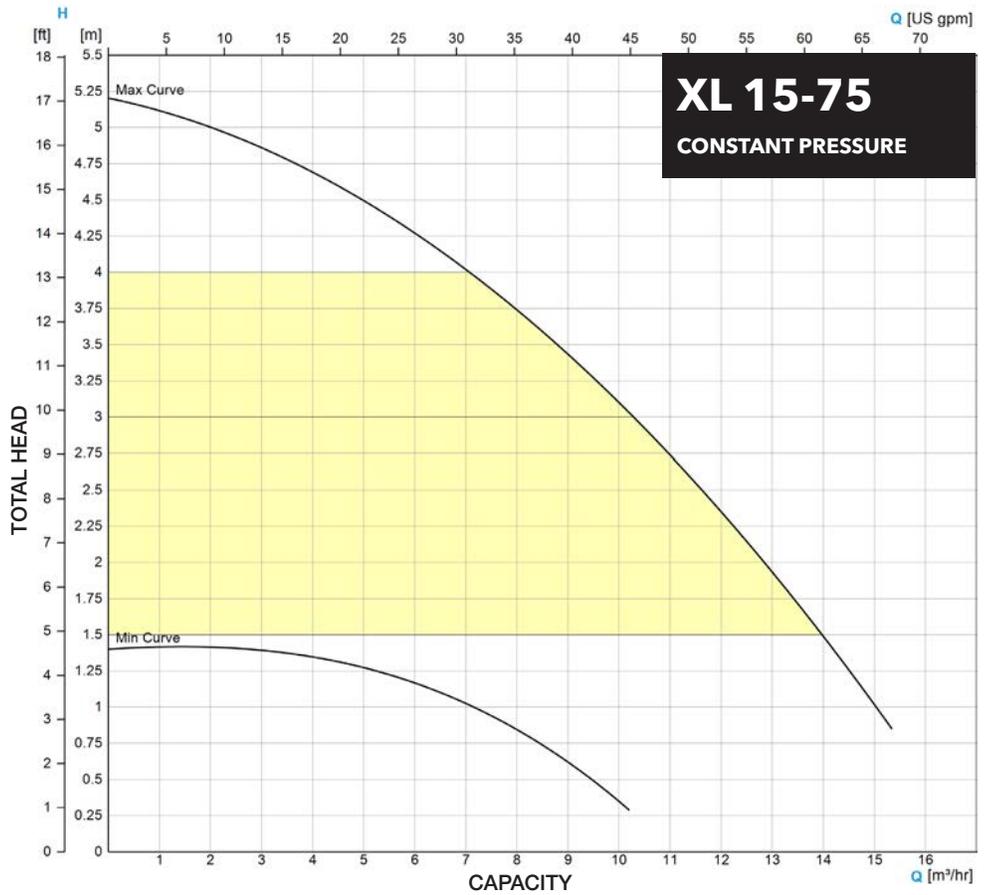


Note: The shaded area represents the operating range for the control mode. Each control mode will operate along a single control curve set by the max differential pressure set point.

ecocirc XL 15-75 Curves

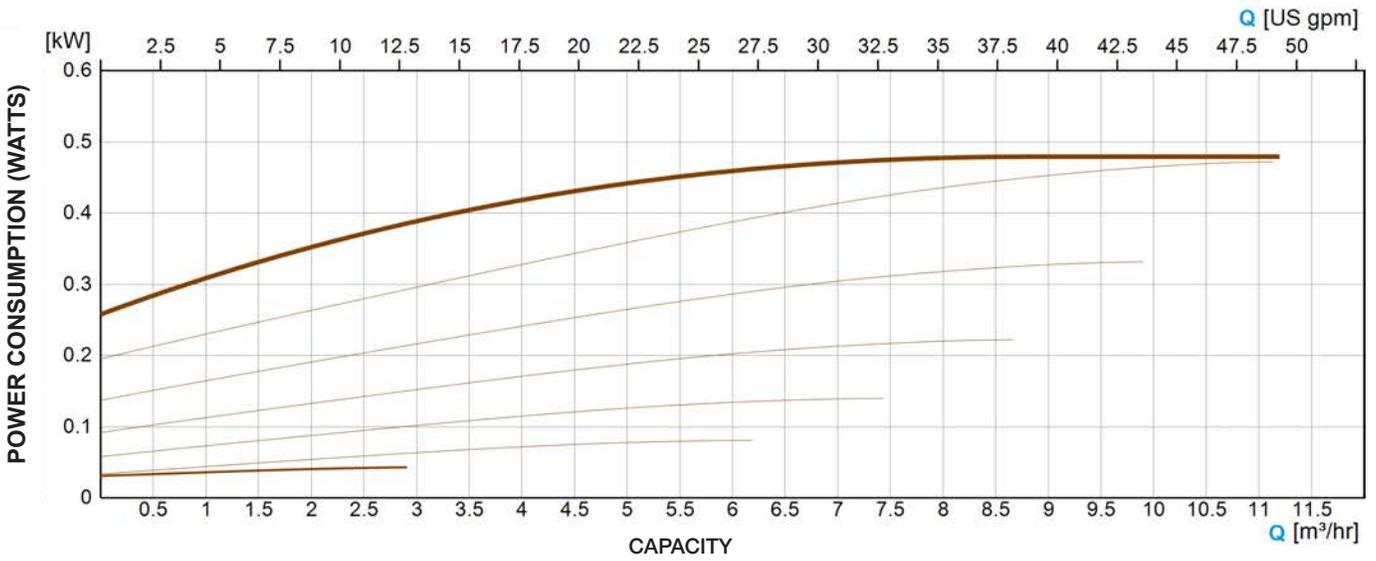
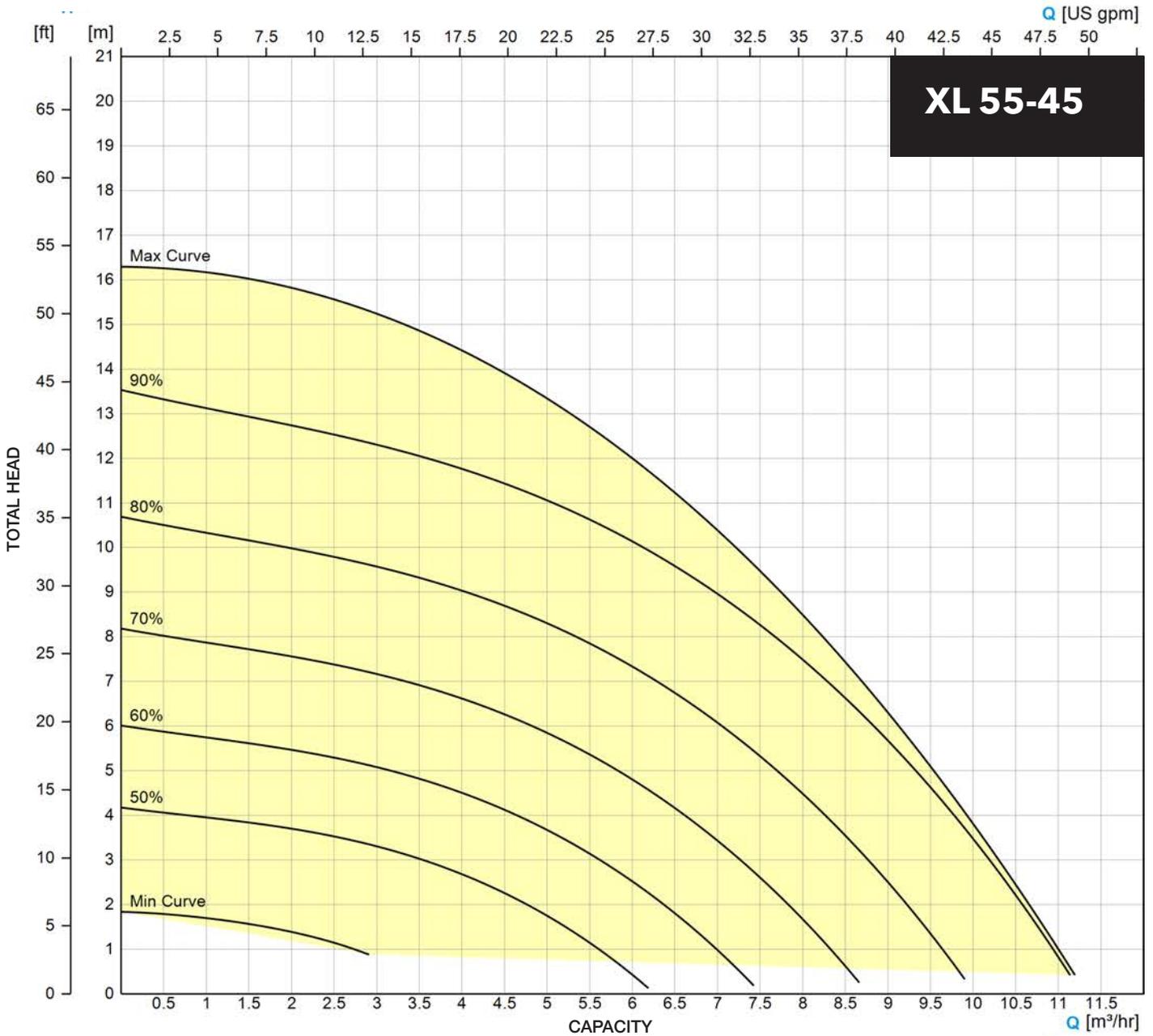


ecocirc XL 15-75 Curves

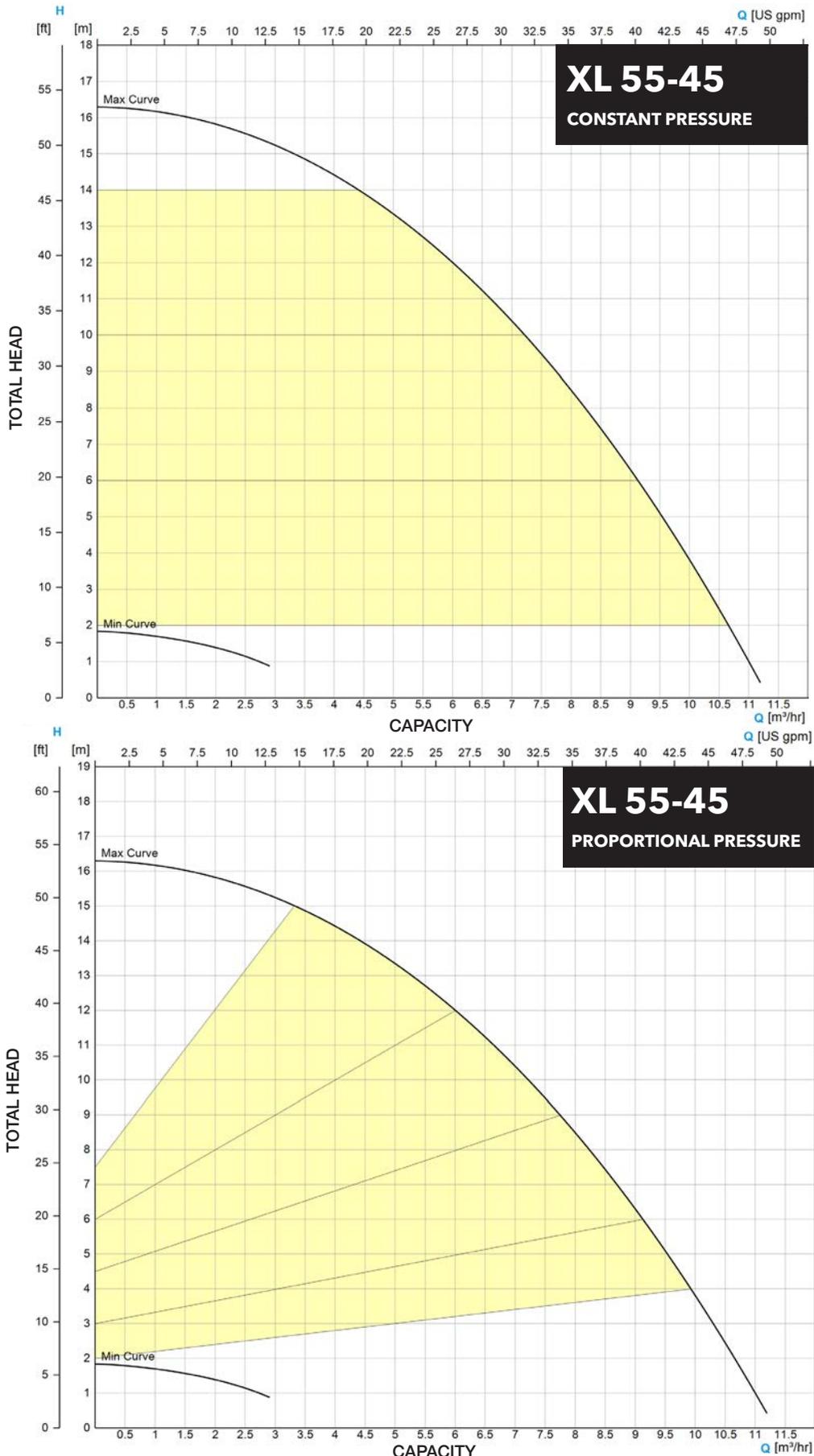


Note: The shaded area represents the operating range for the control mode. Each control mode will operate along a single control curve set by the max differential pressure set point.

ecocirc XL 55-45 Curves

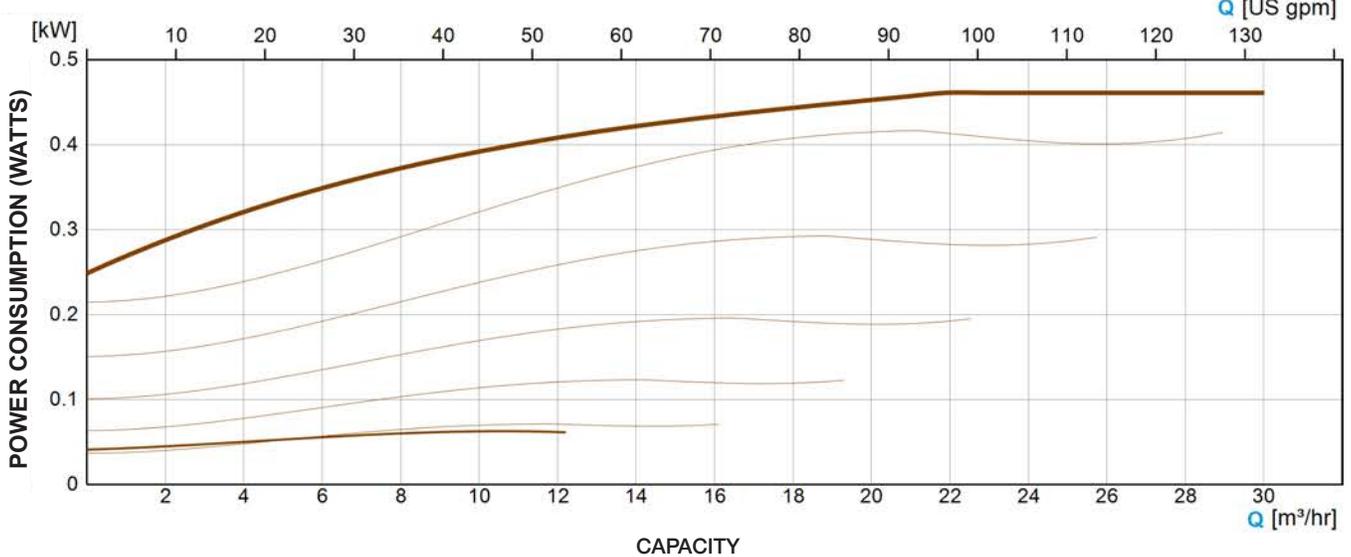
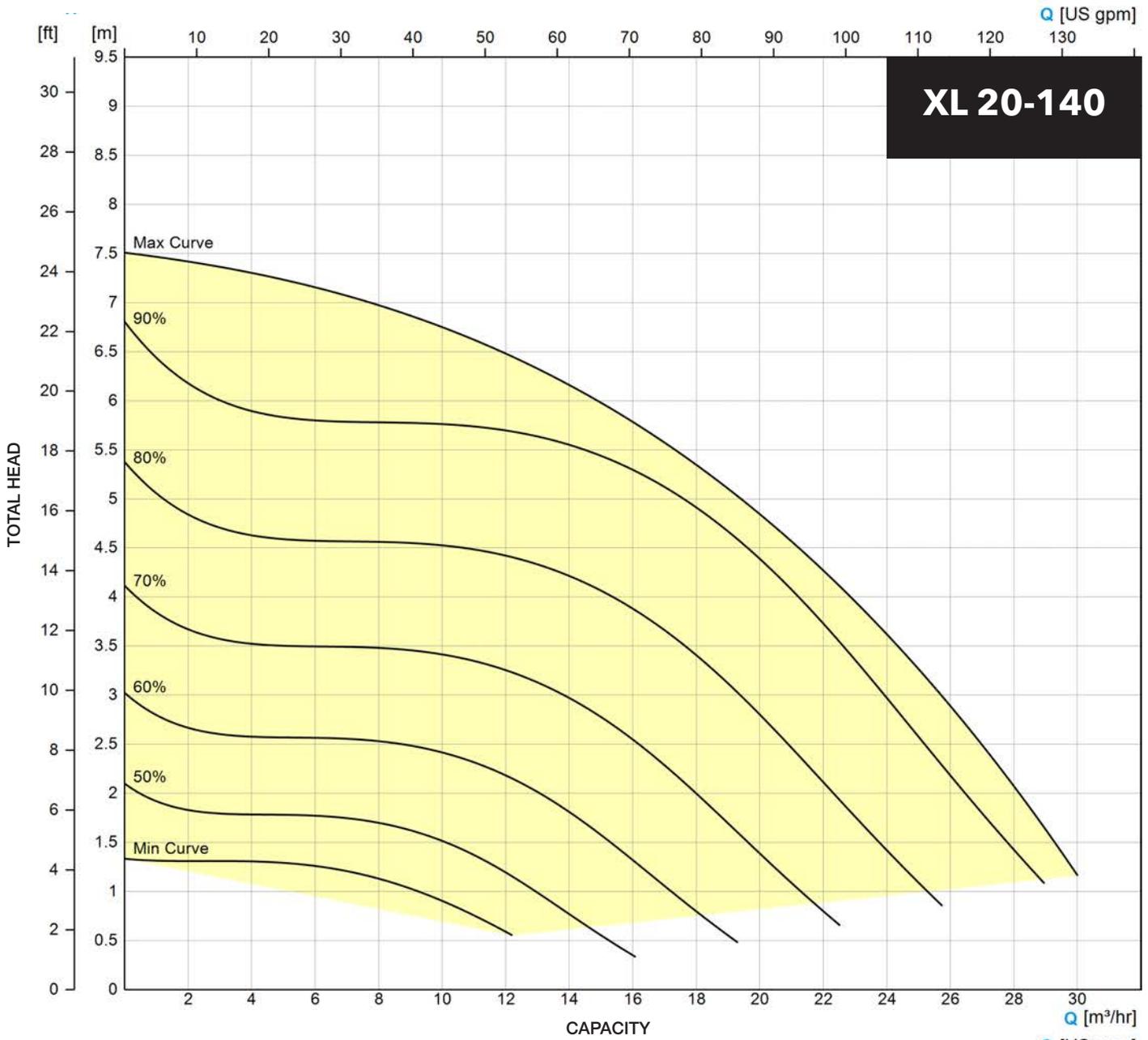


ecocirc XL 55-45 Curves

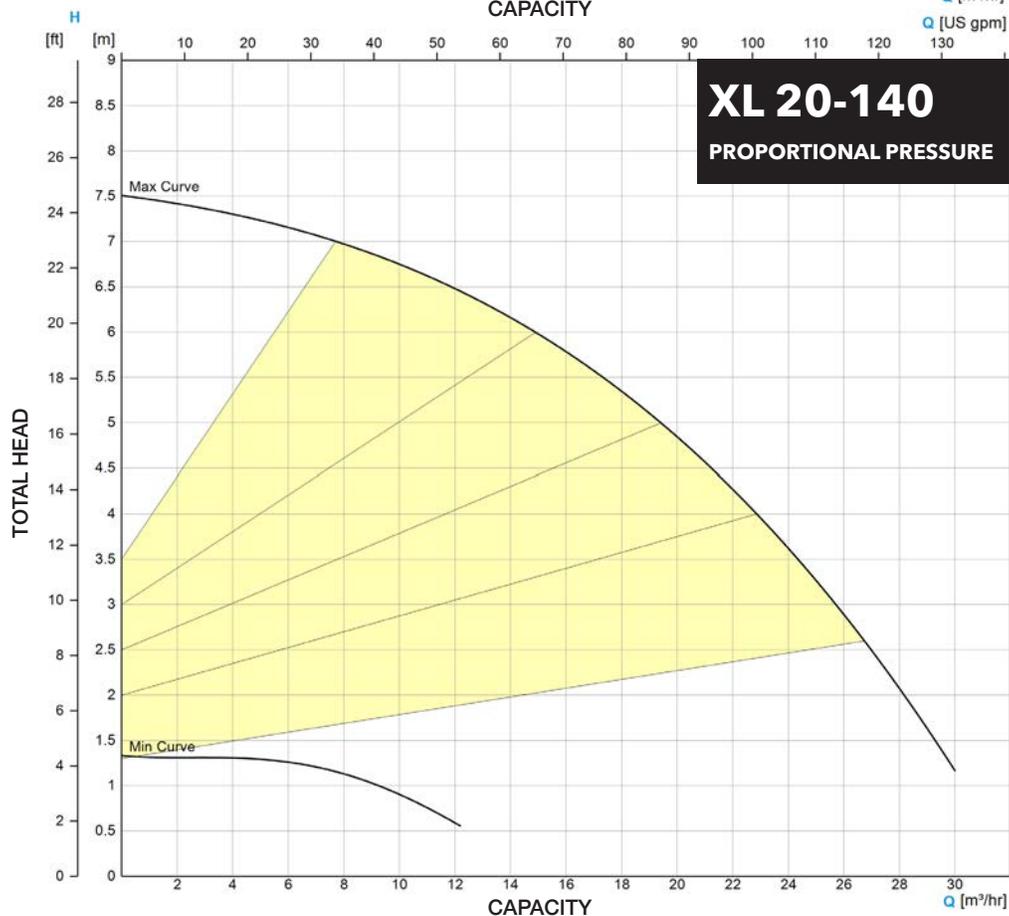


Note: The shaded area represents the operating range for the control mode. Each control mode will operate along a single control curve set by the max differential pressure set point.

ecocirc XL 20-140 Curves

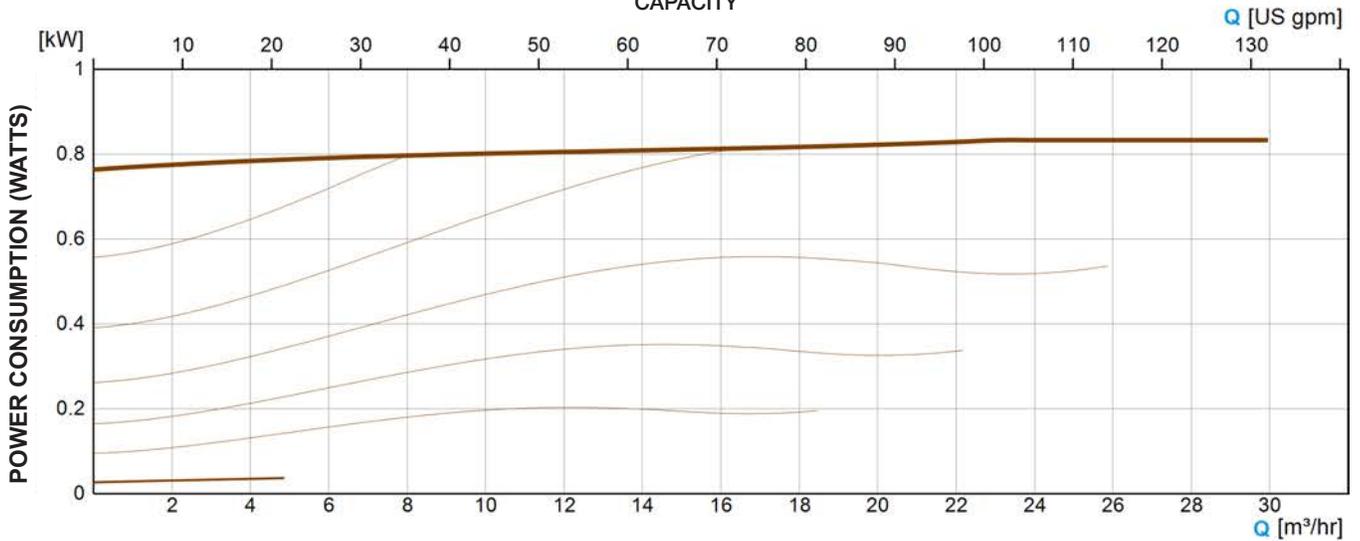
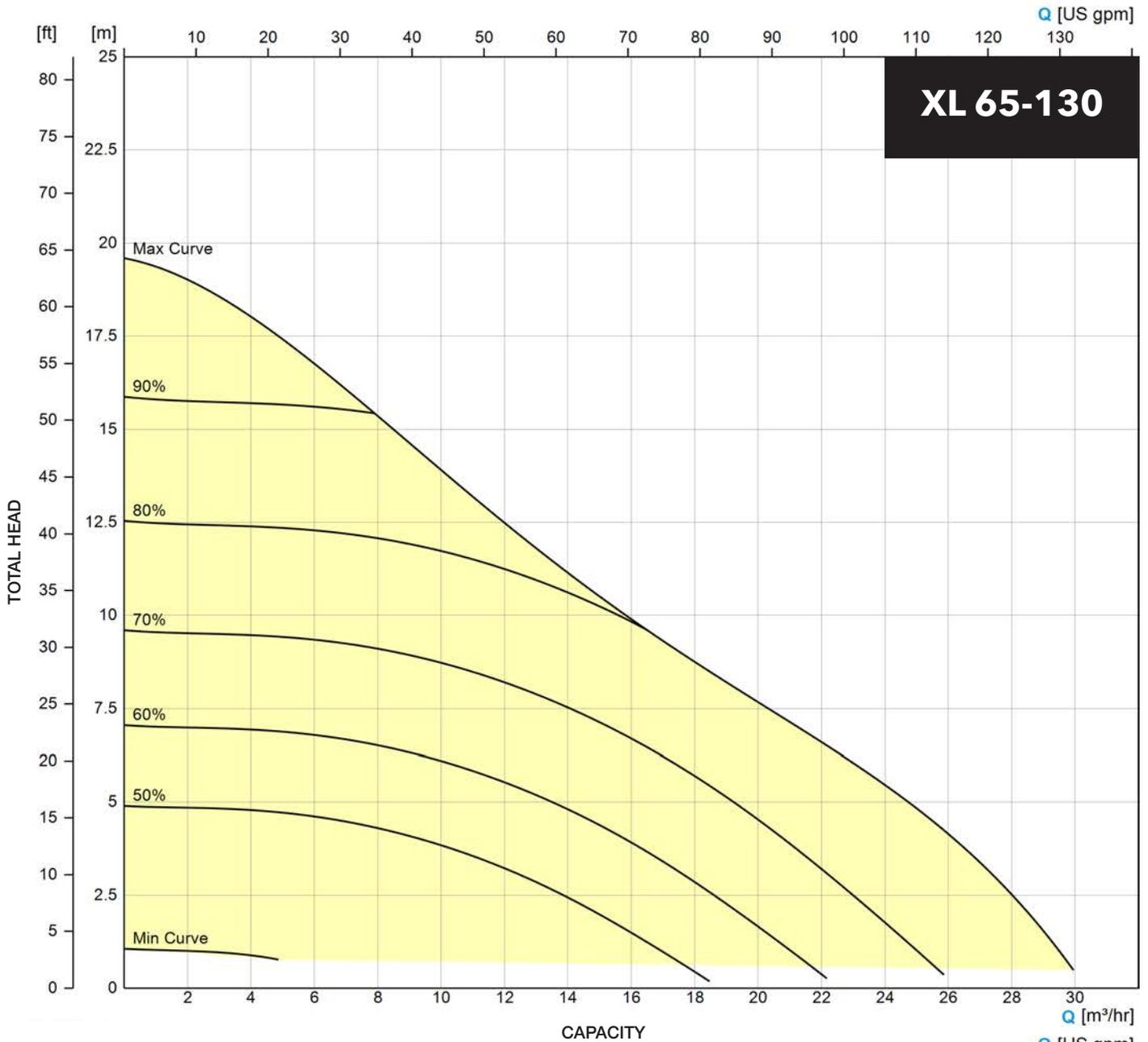


ecocirc XL 20-140 Curves

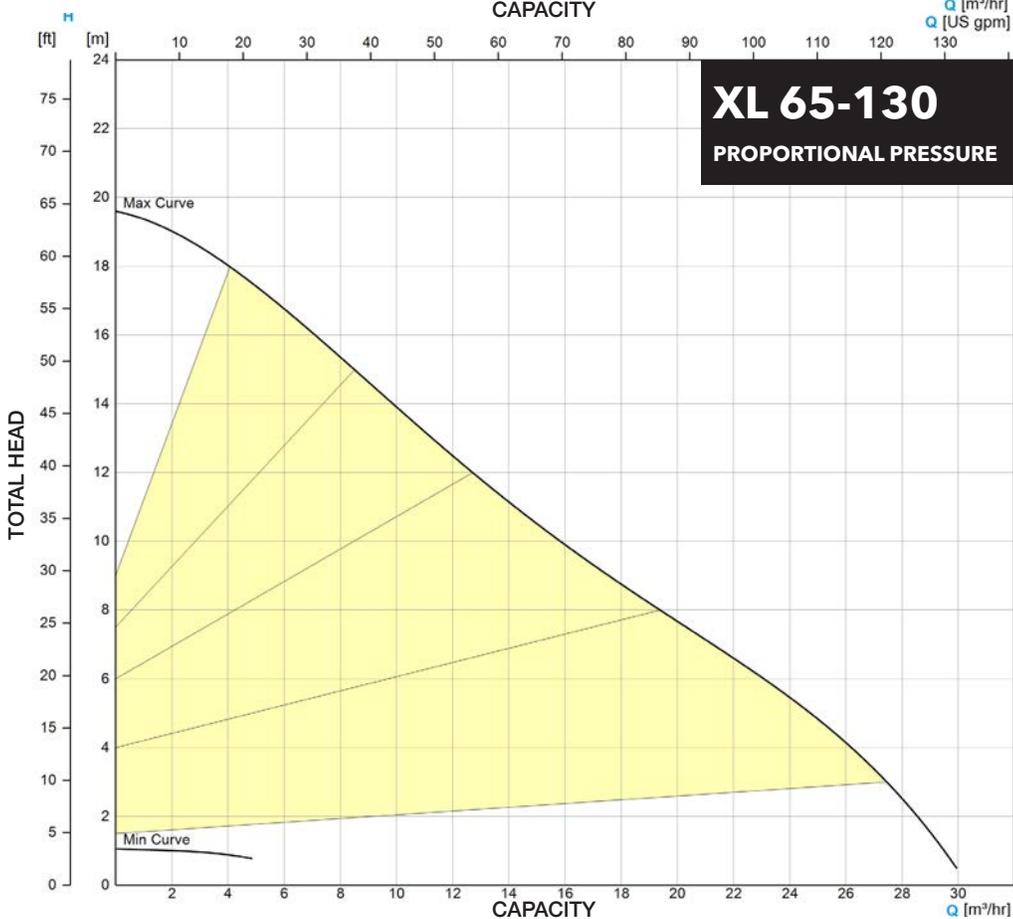
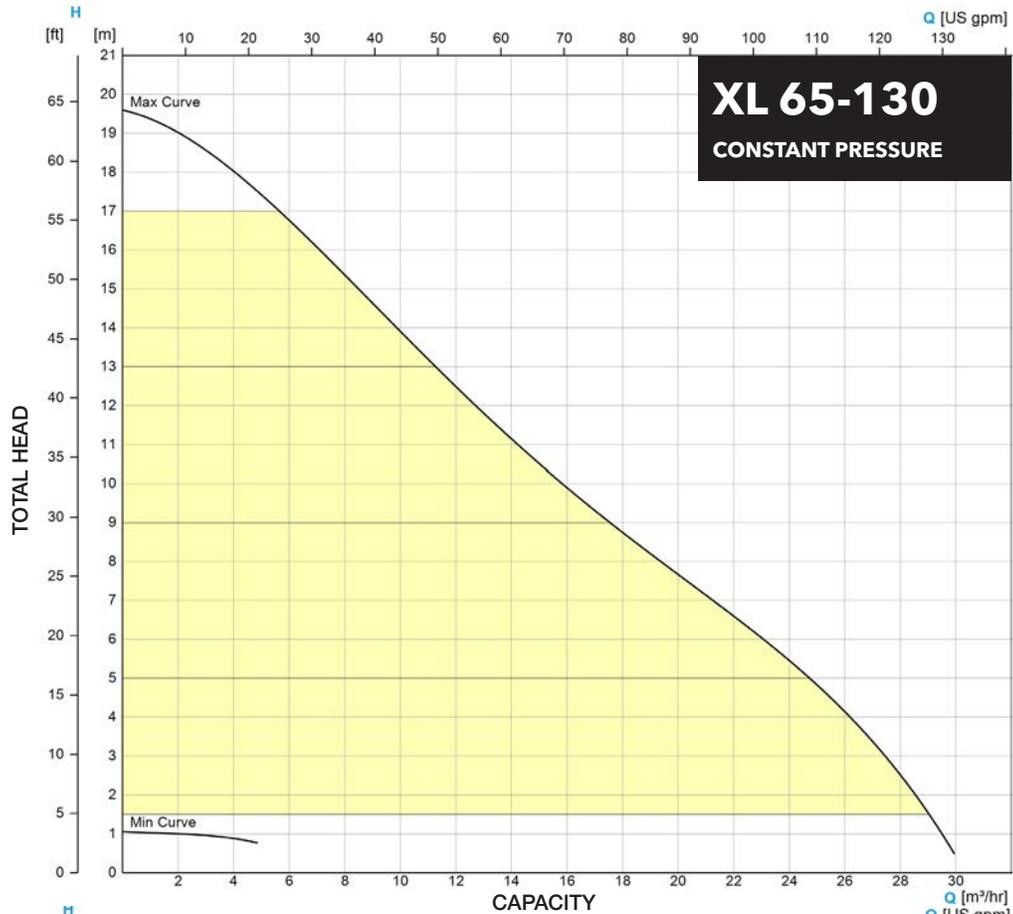


Note: The shaded area represents the operating range for the control mode. Each control mode will operate along a single control curve set by the max differential pressure set point.

ecocirc XL 65-130 Curves

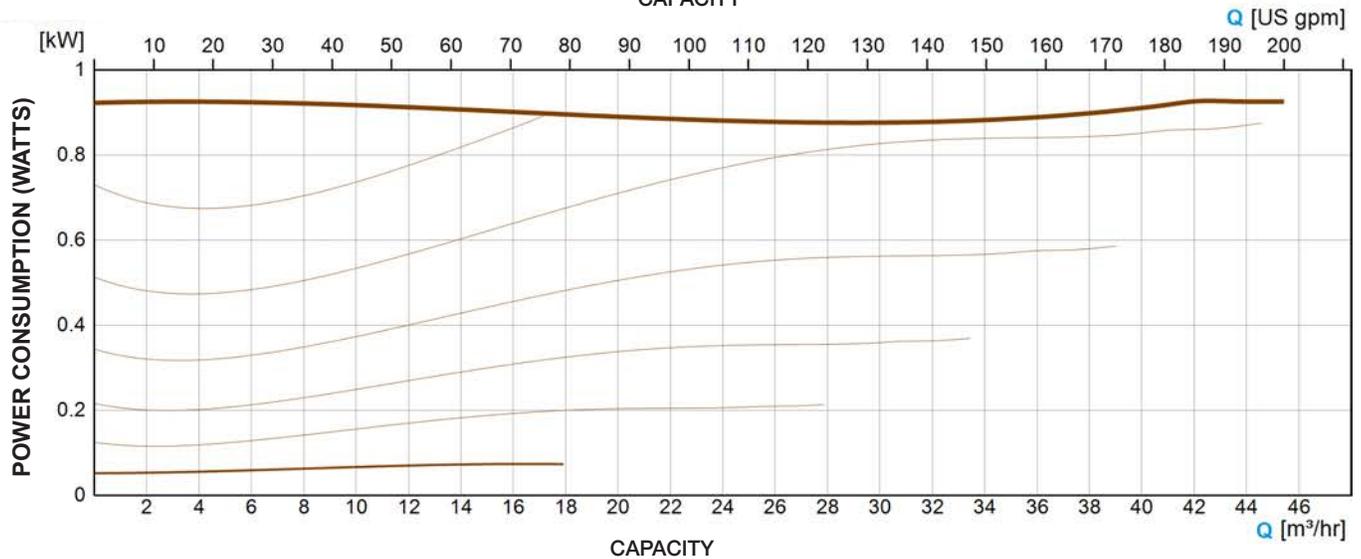
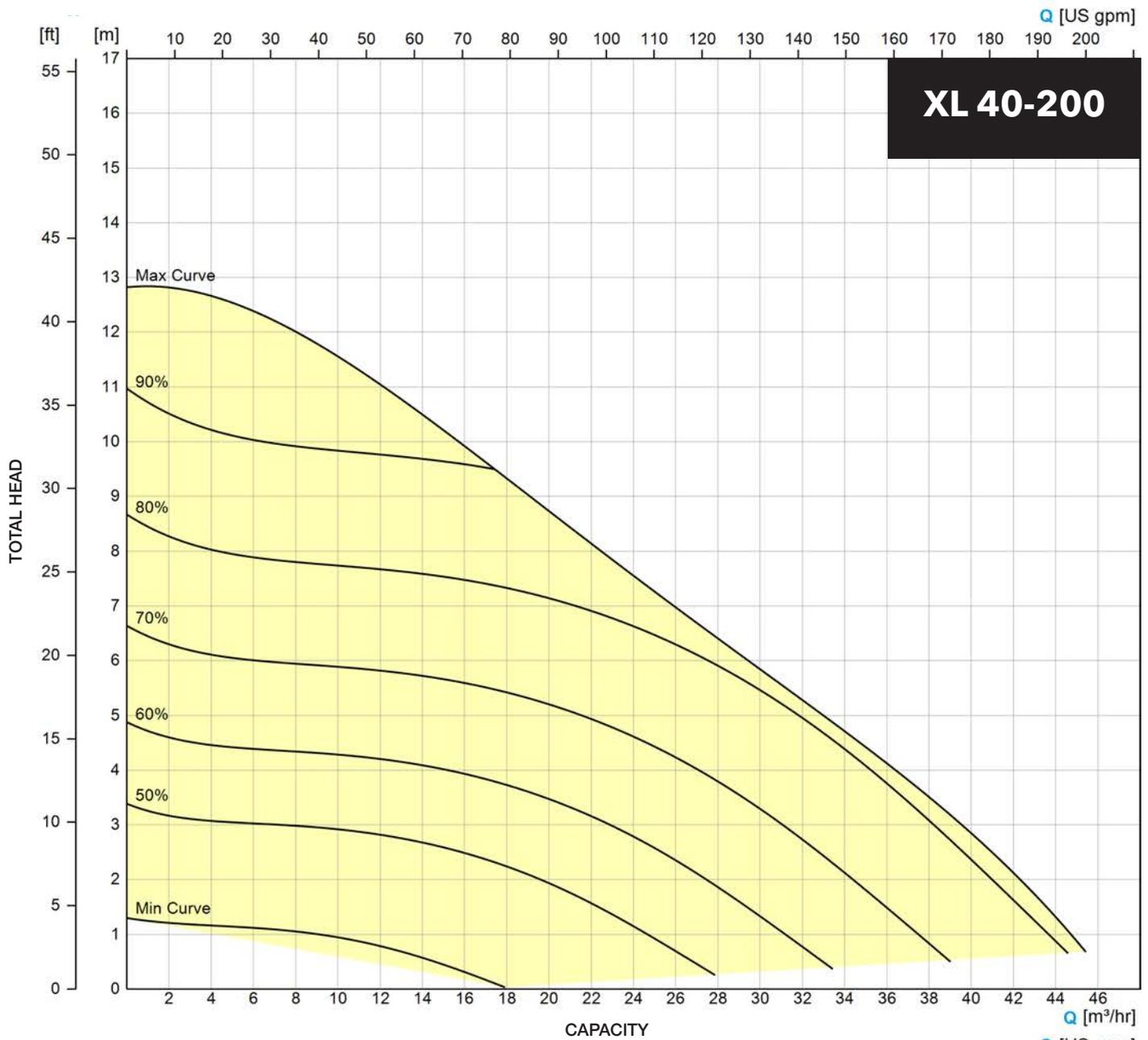


ecocirc XL 65-130 Curves

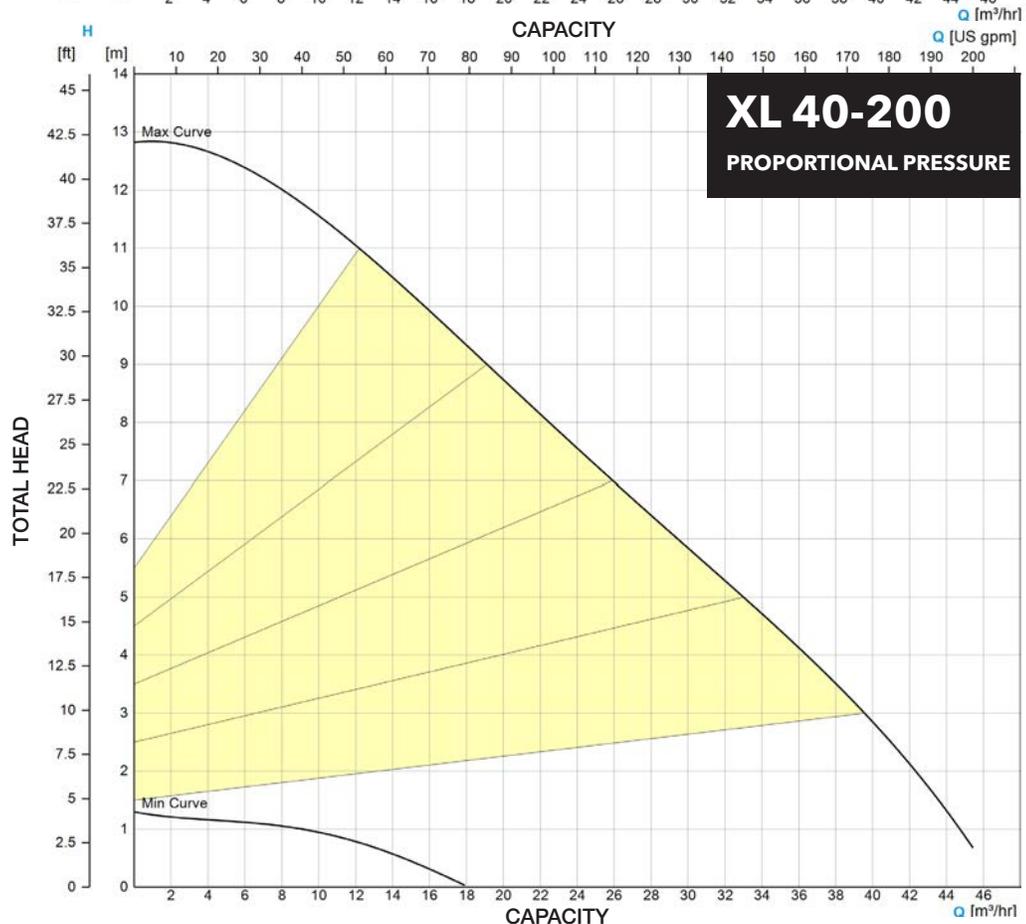
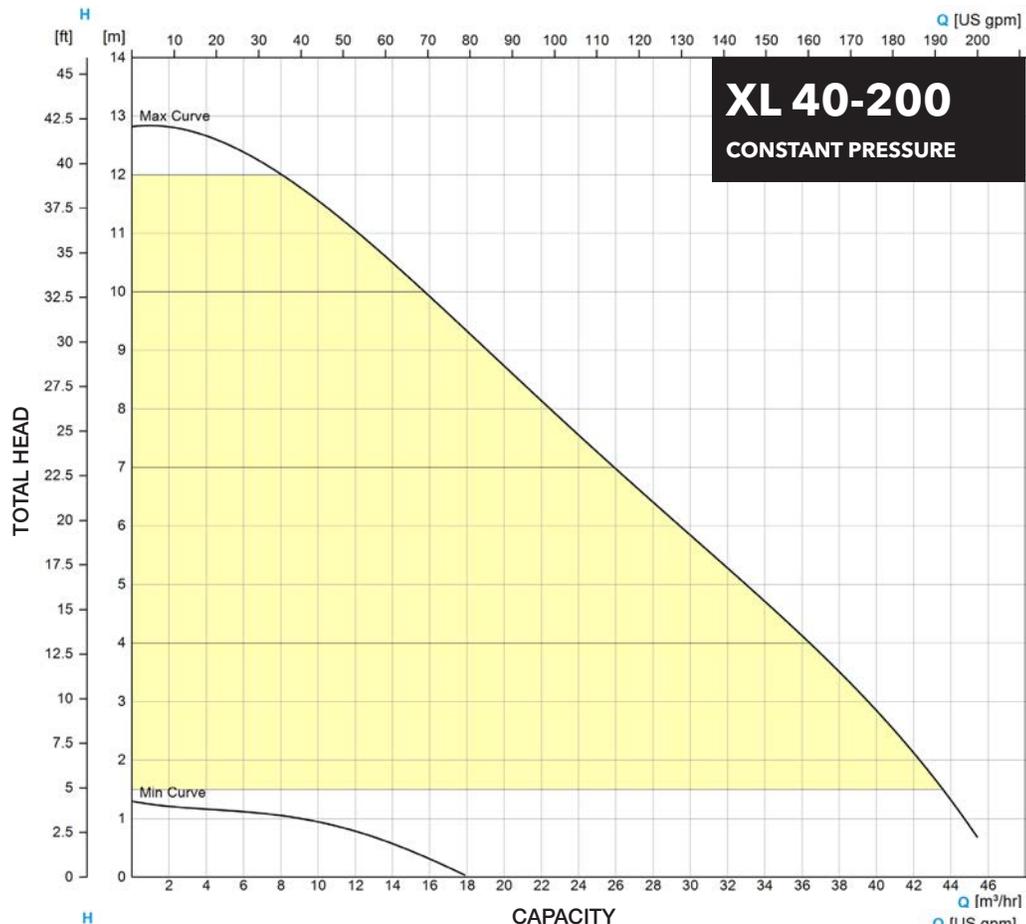


Note: The shaded area represents the operating range for the control mode. Each control mode will operate along a single control curve set by the max differential pressure set point.

ecocirc XL 40-200 Curves

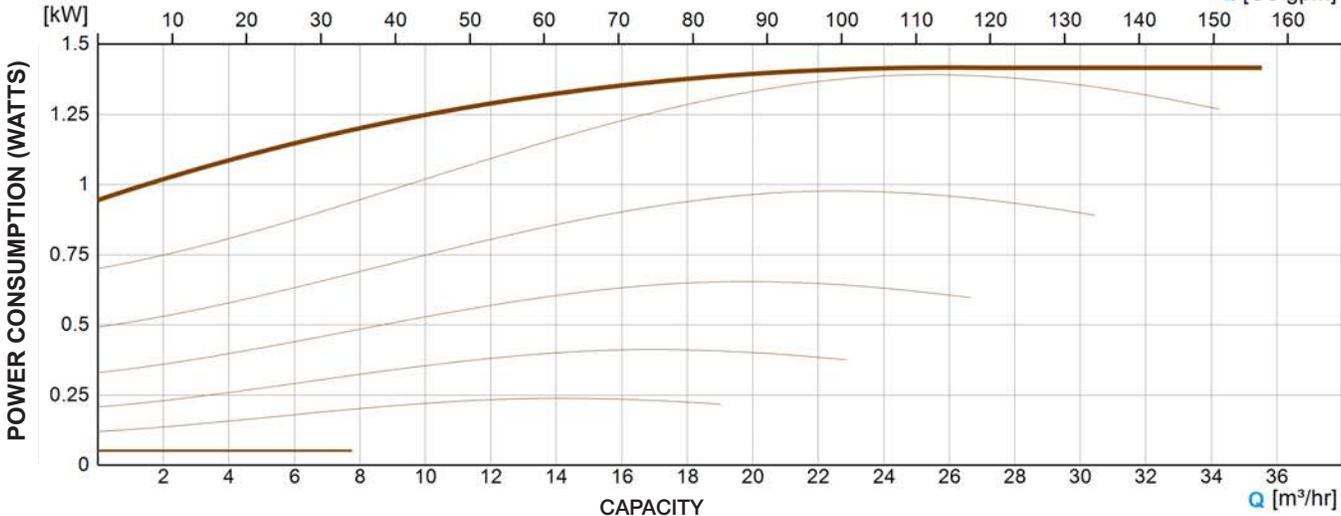
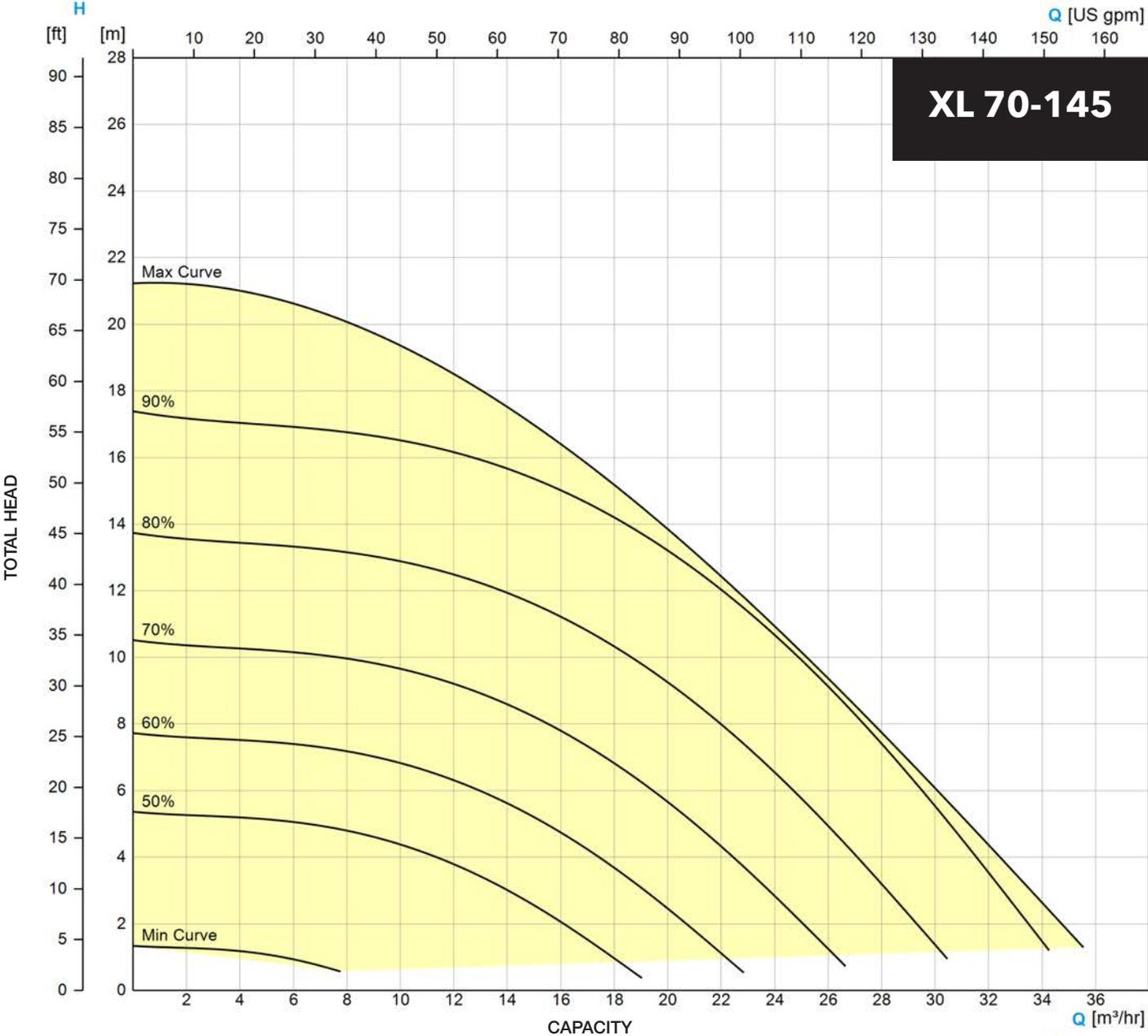


ecocirc XL 40-200 Curves

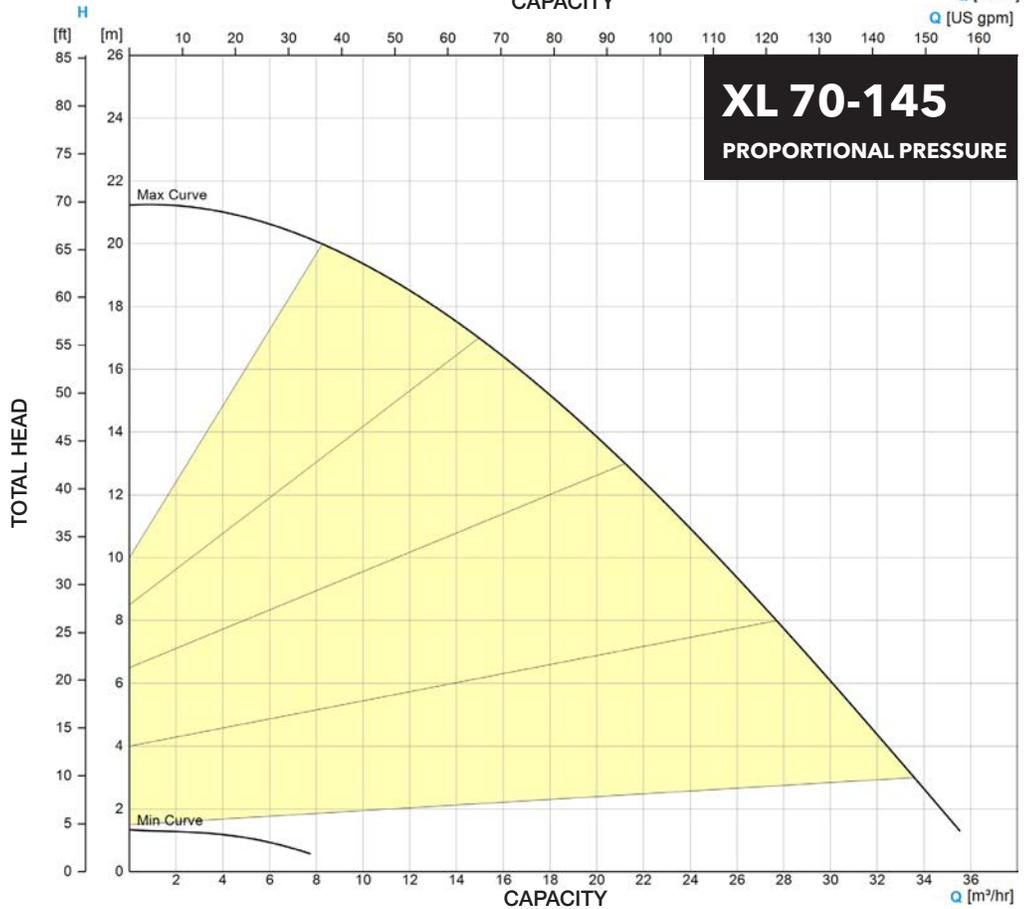


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ecocirc XL 70-145 Curves

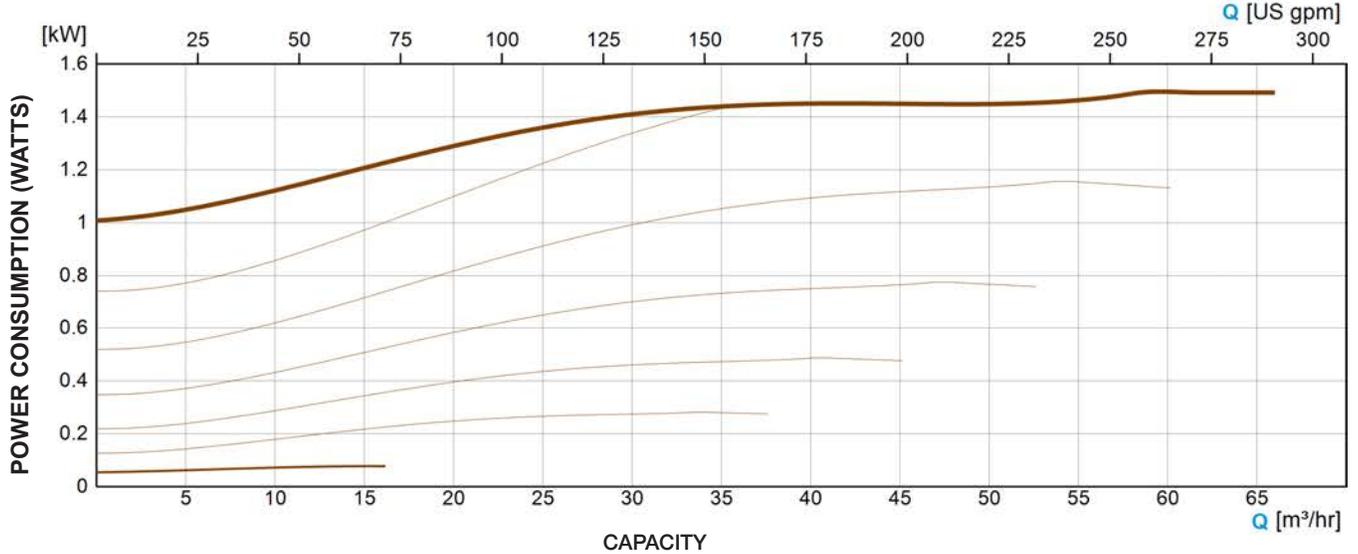
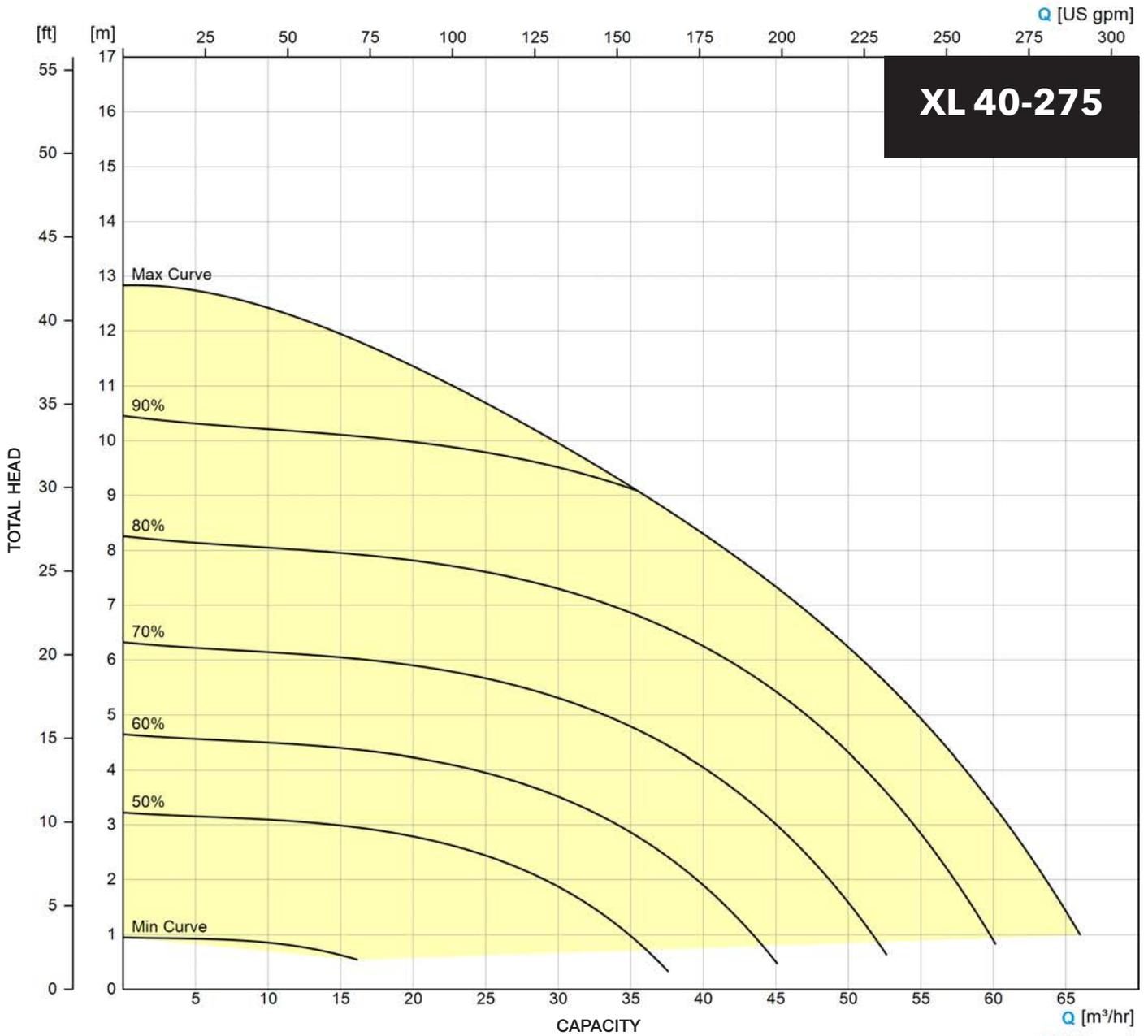


ecocirc XL 70-145 Curves

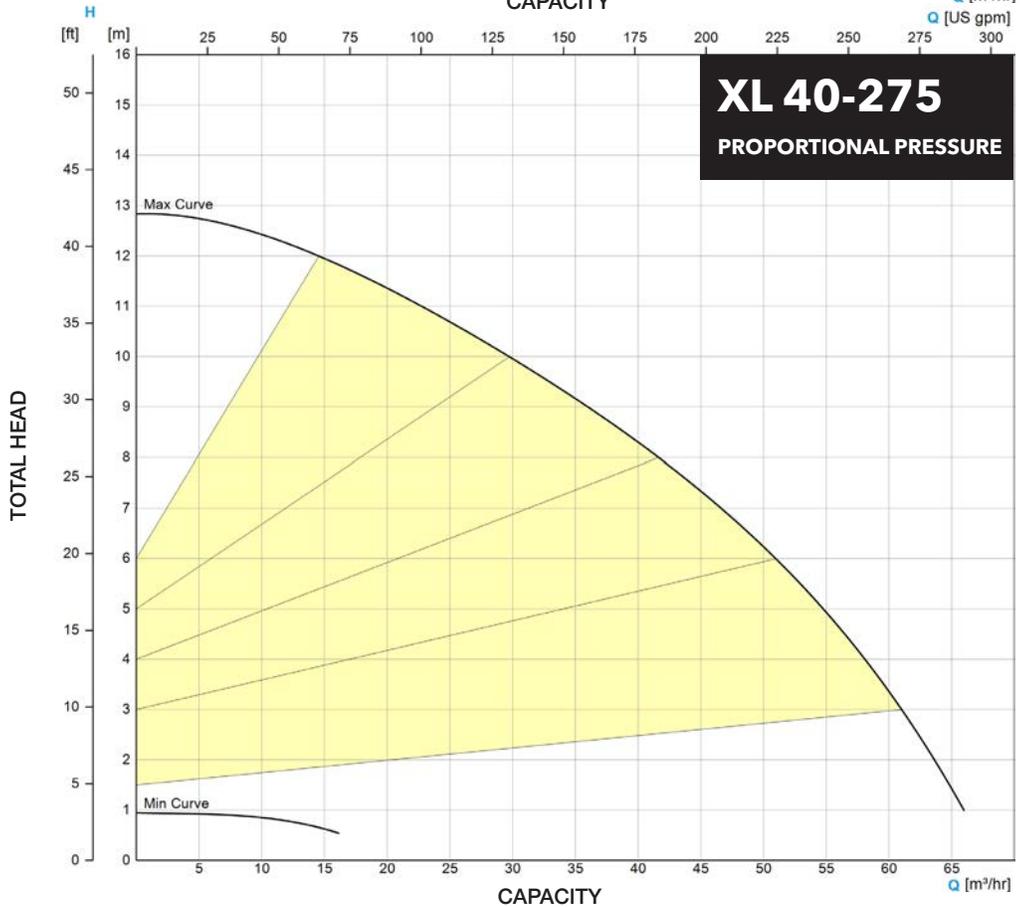


Note: The shaded area represents the operating range for the control mode. Each control mode will operate along a single control curve set by the max differential pressure set point.

ecocirc XL 40-275 Curves

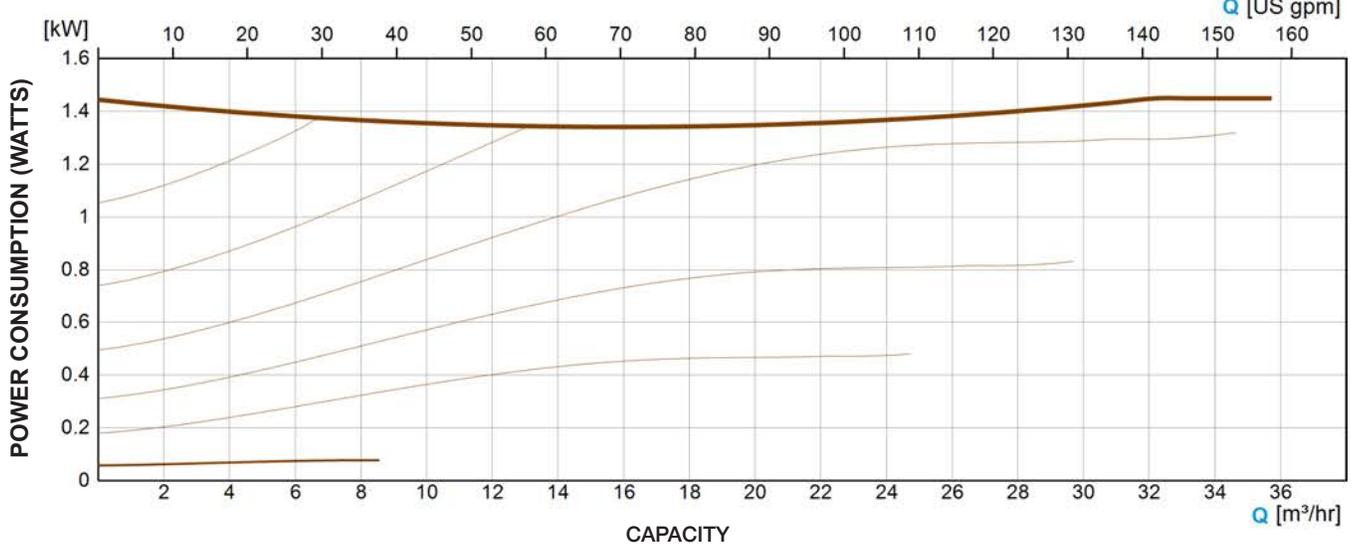
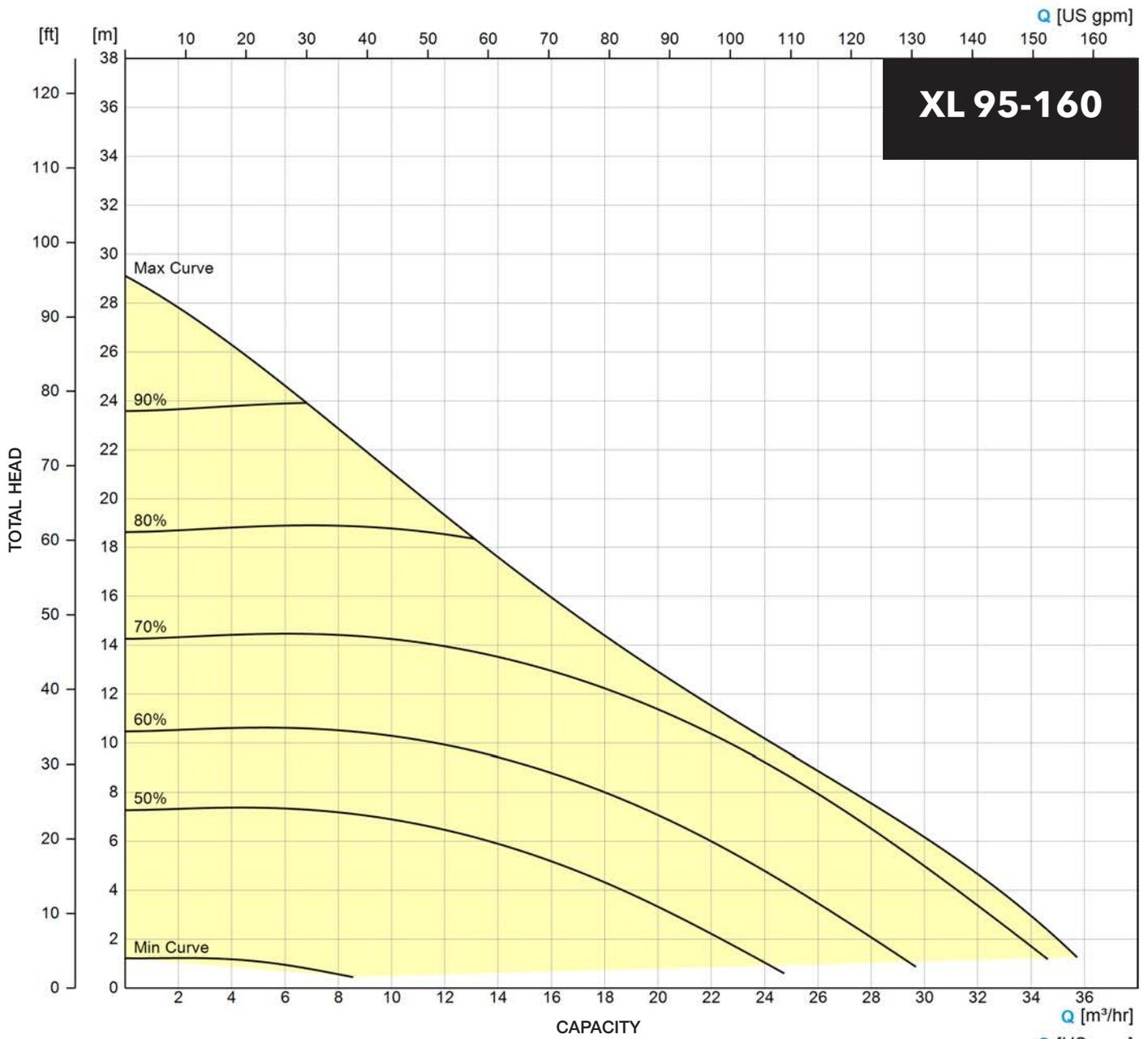


ecocirc XL 40-275 Curves

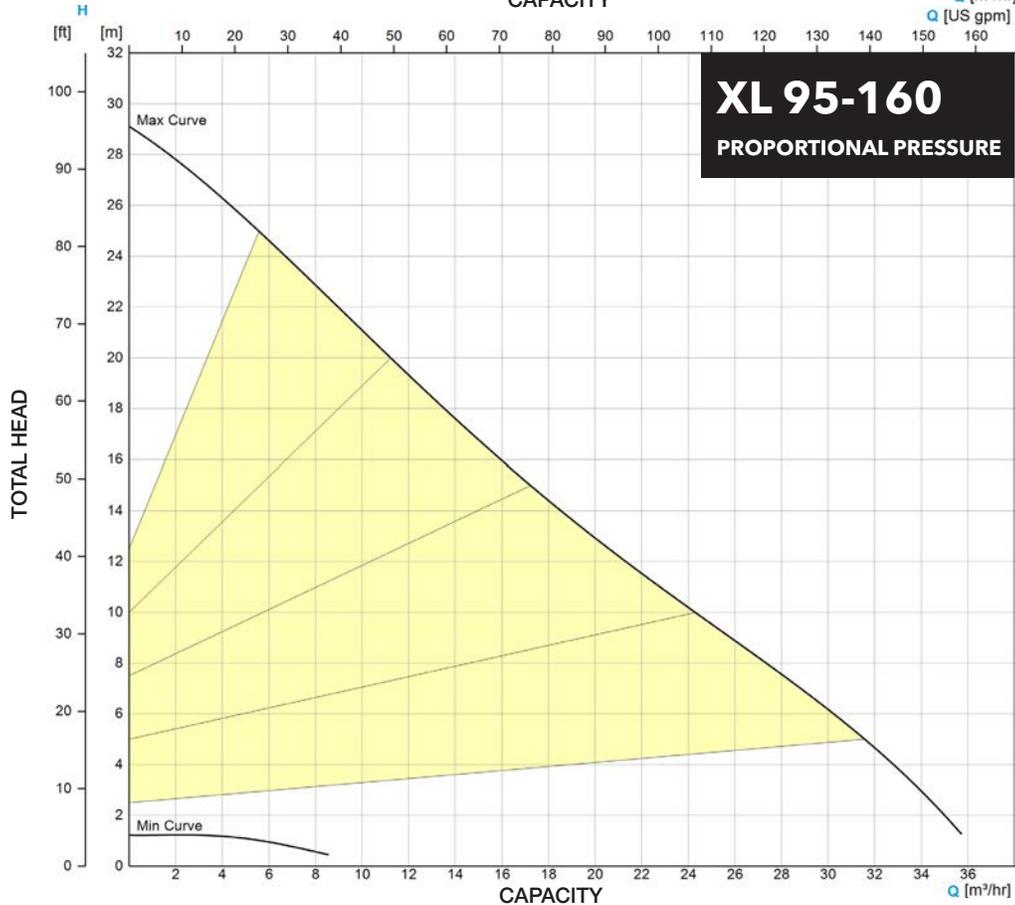
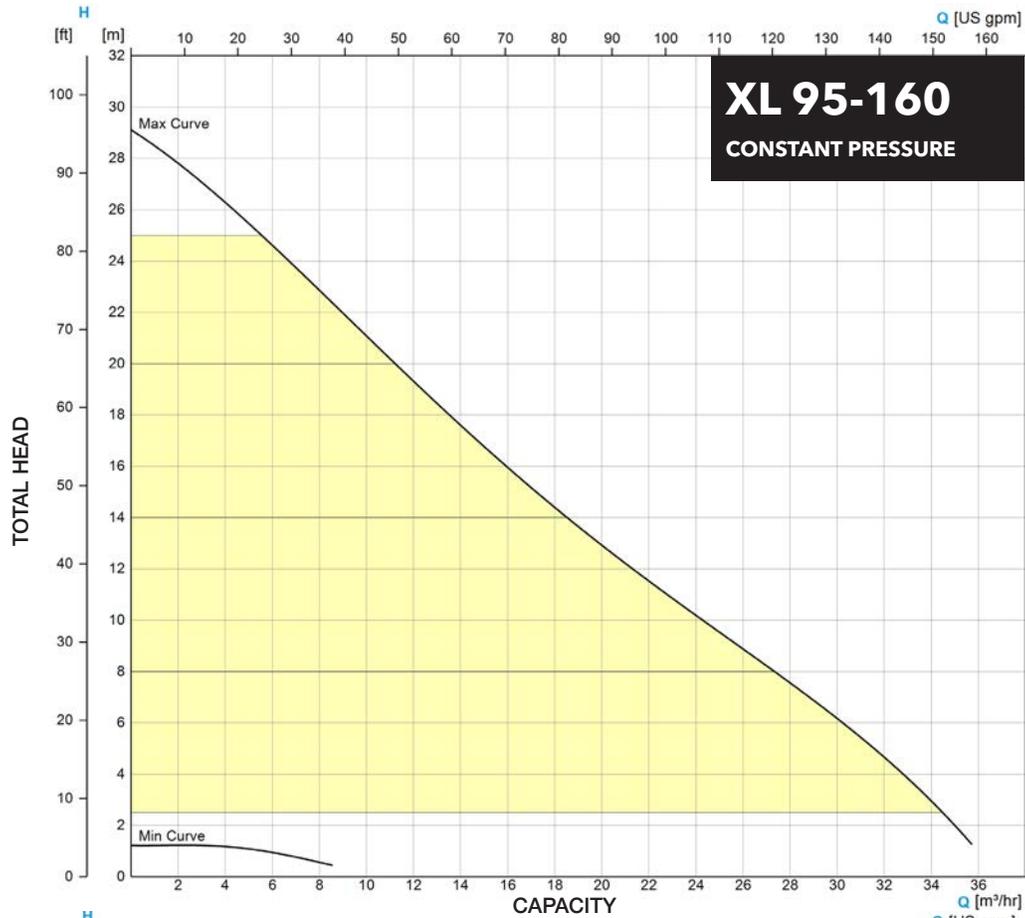


Note: The shaded area represents the operating range for the control mode. Each control mode will operate along a single control curve set by the max differential pressure set point.

ecocirc XL 95-160 Curves

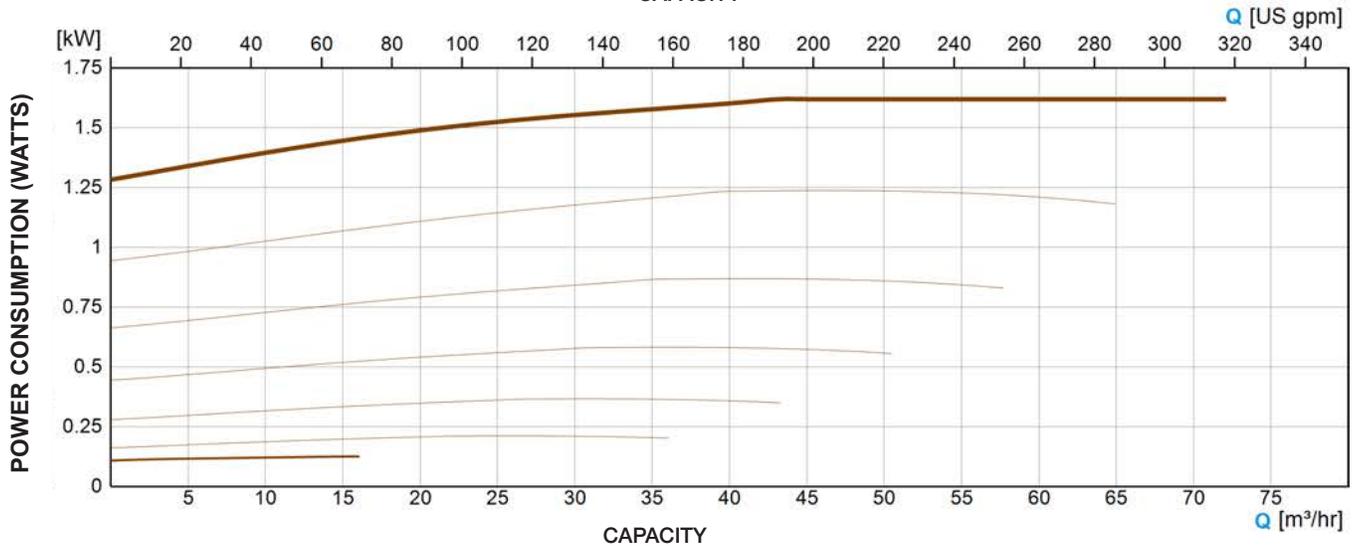
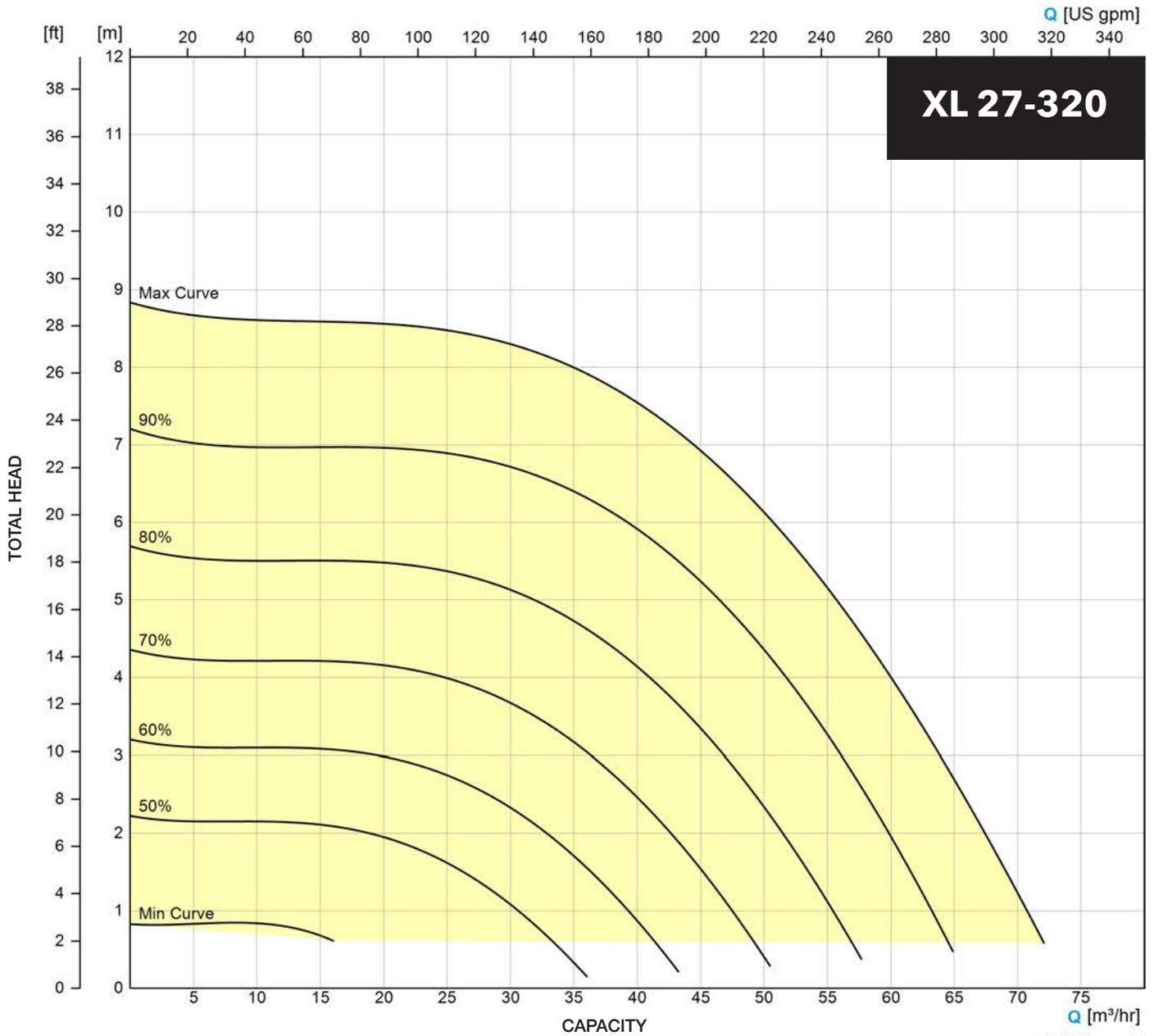


ecocirc XL 95-160 Curves

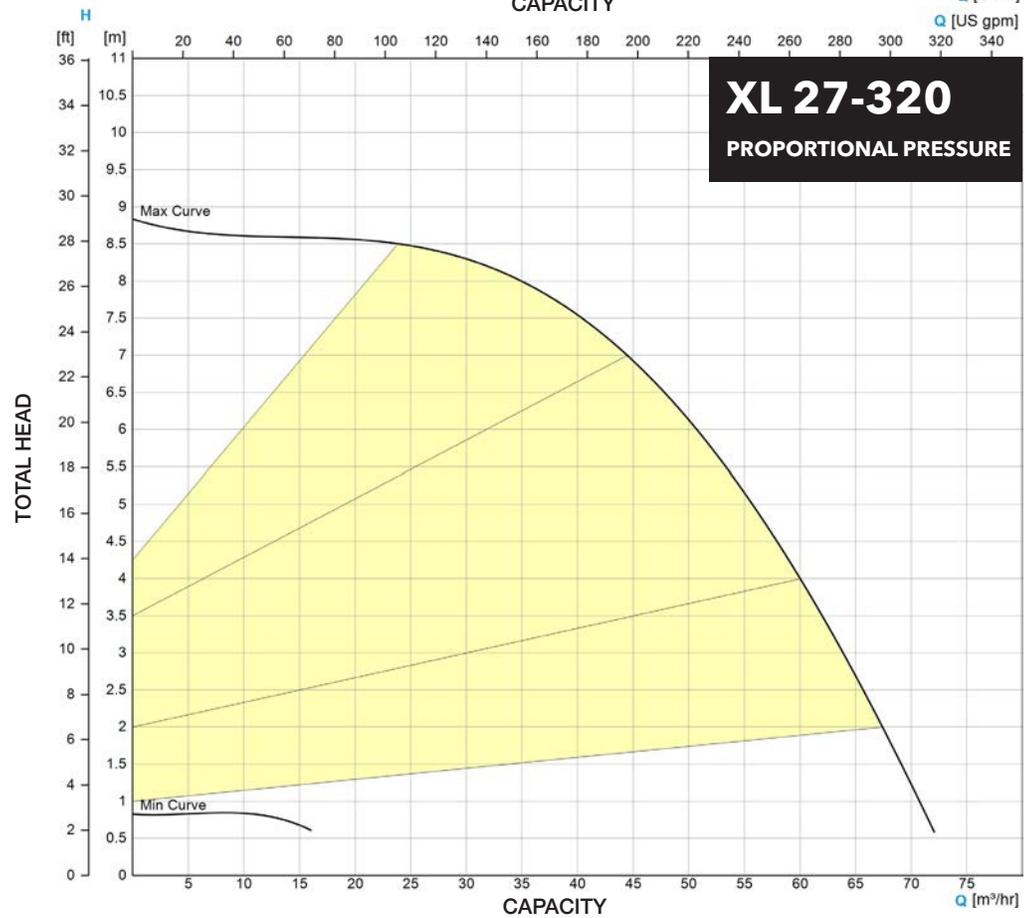


Note: The shaded area represents the operating range for the control mode. Each control mode will operate along a single control curve set by the max differential pressure set point.

ecocirc XL 27-320 Curves

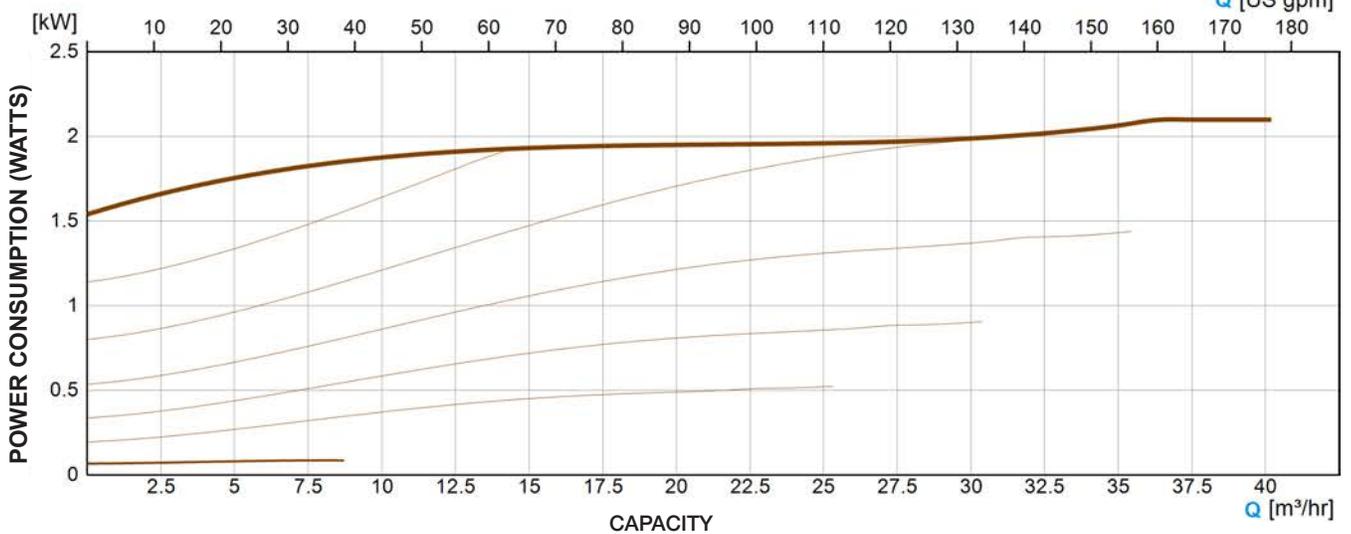
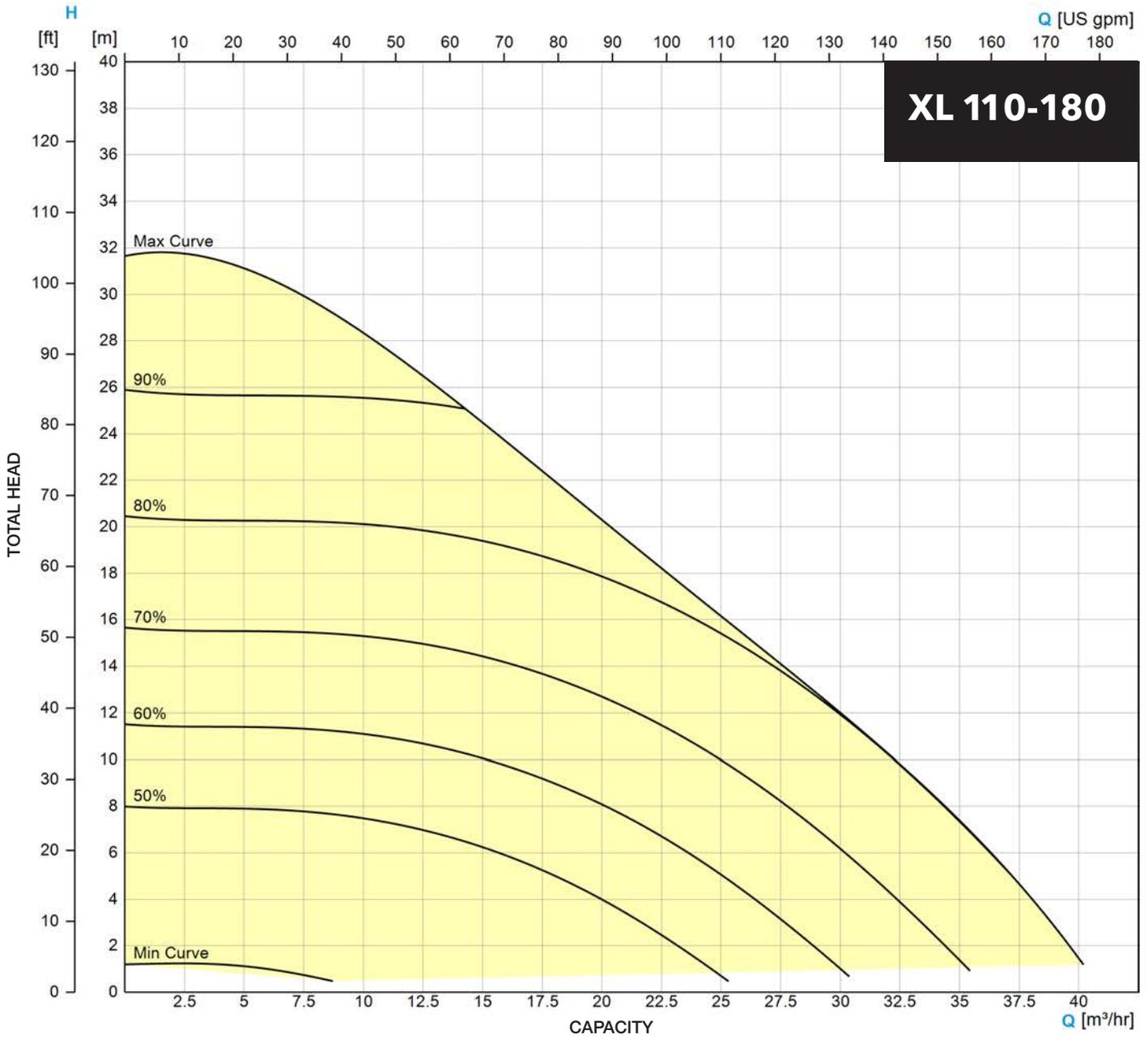


ecocirc XL 27-320 Curves

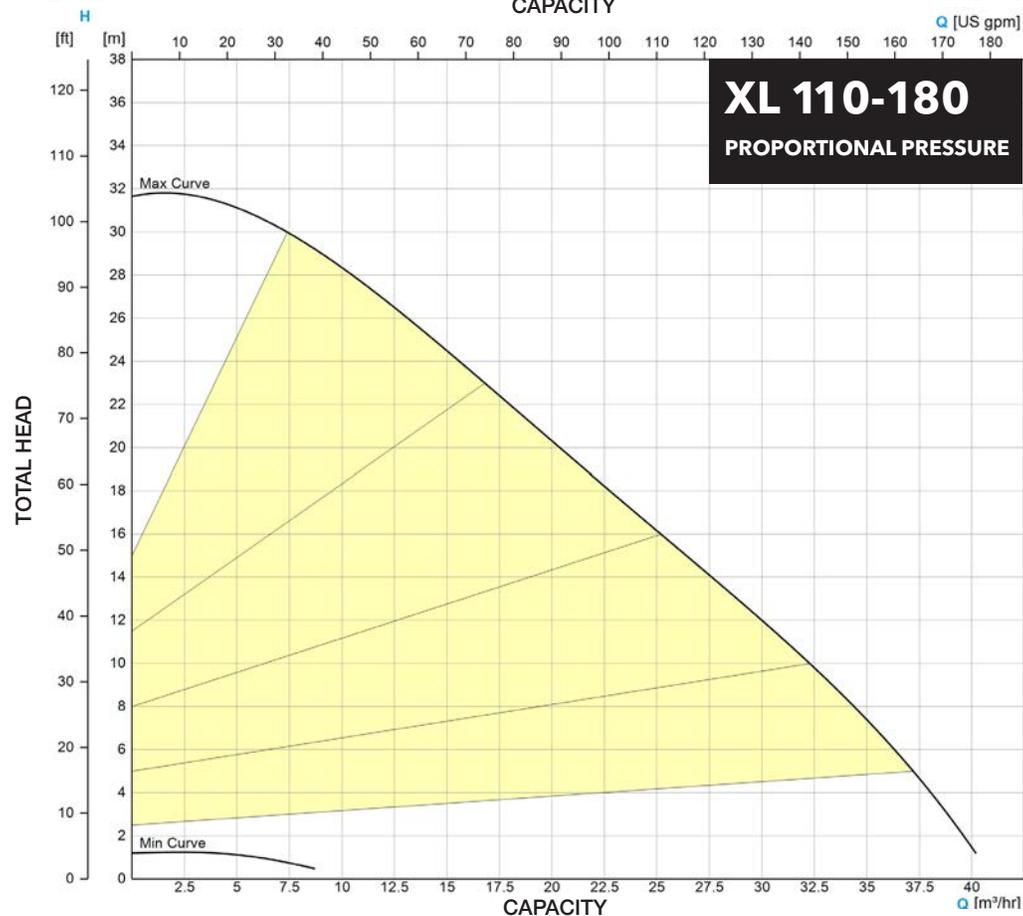
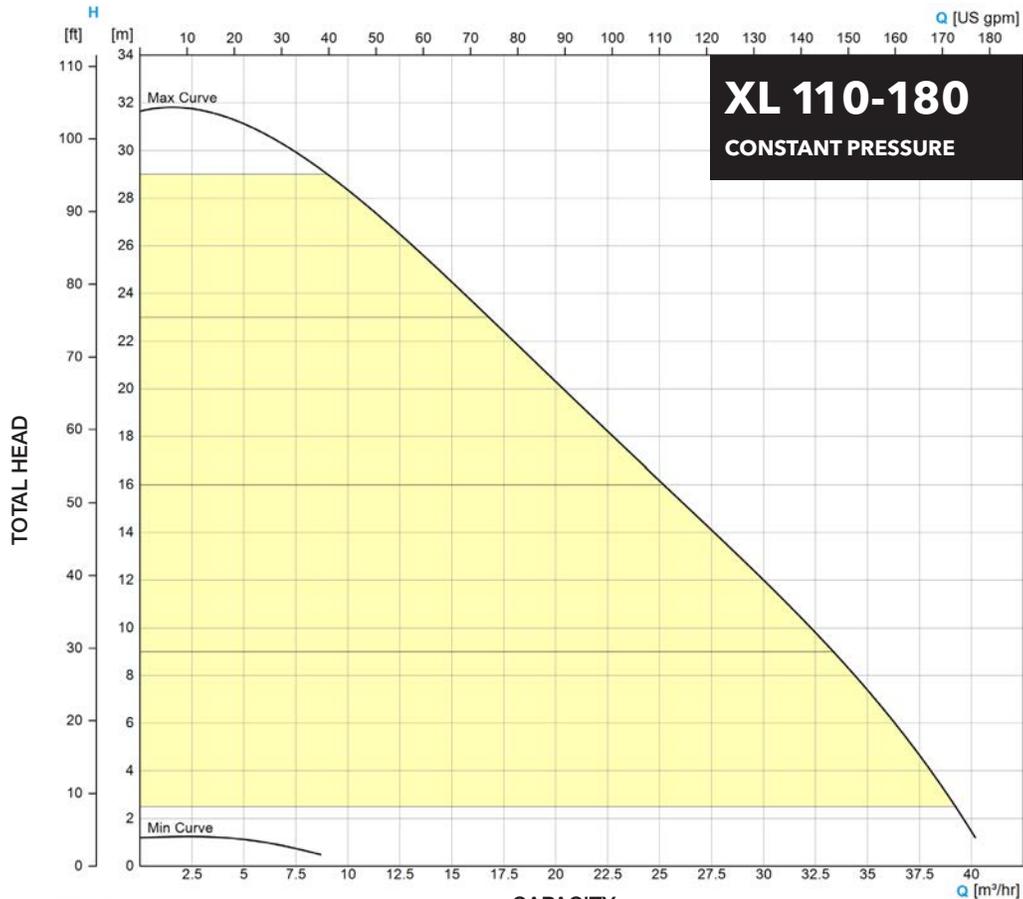


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ecocirc XL 110-180 Curves

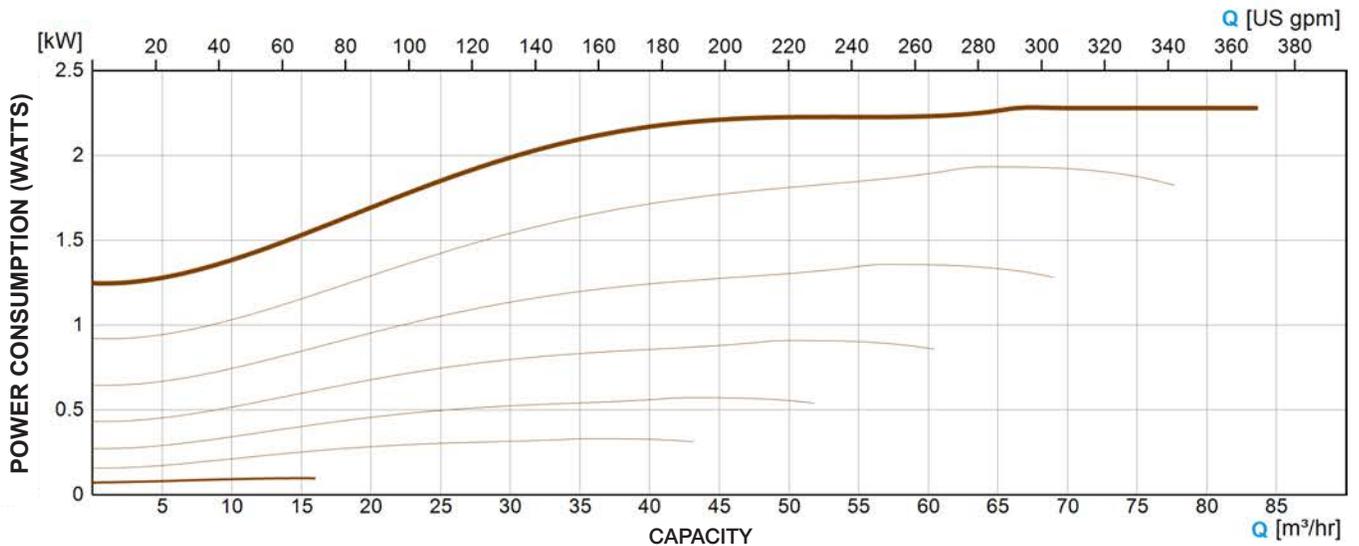
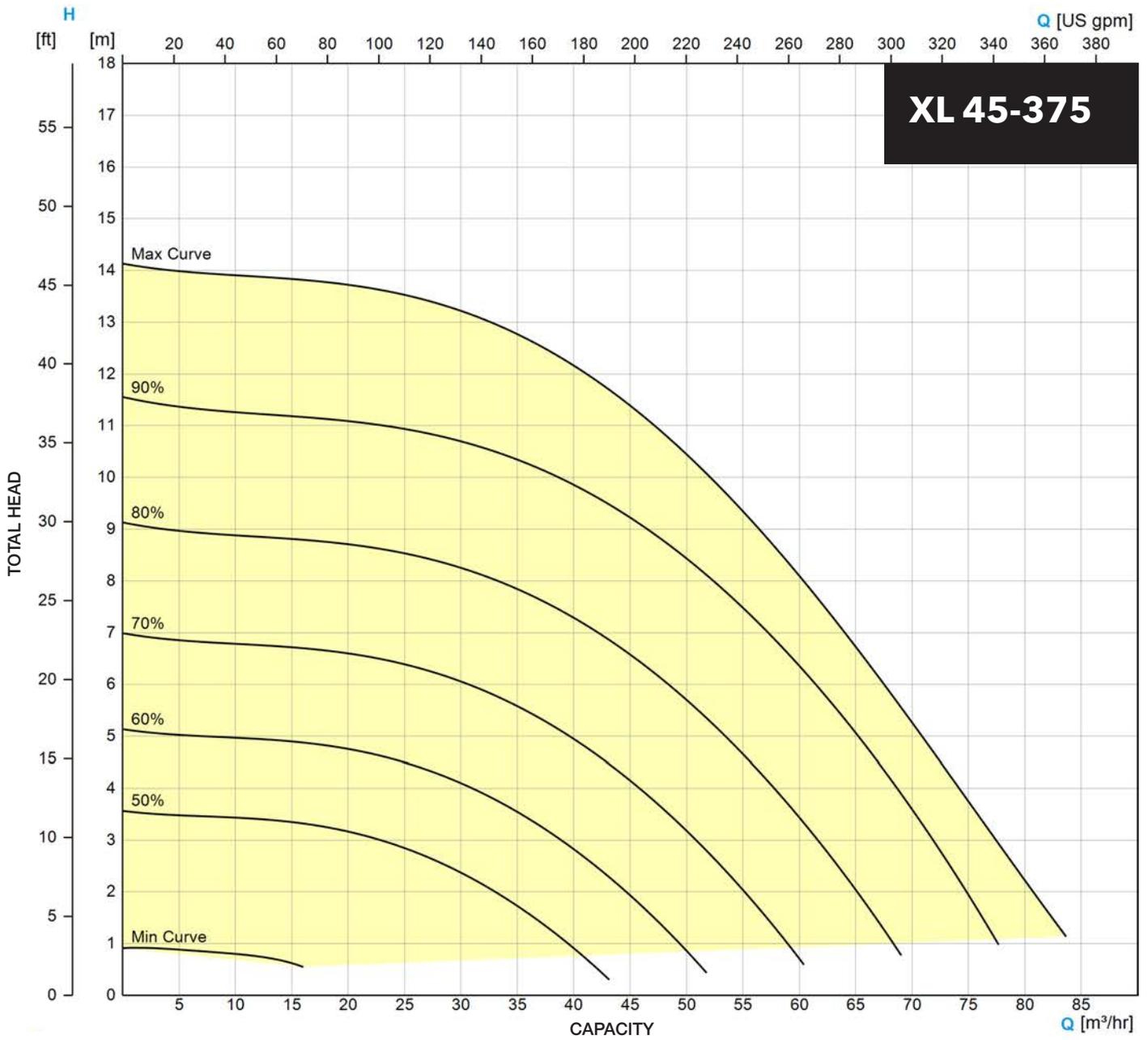


ecocirc XL 110-180 Curves

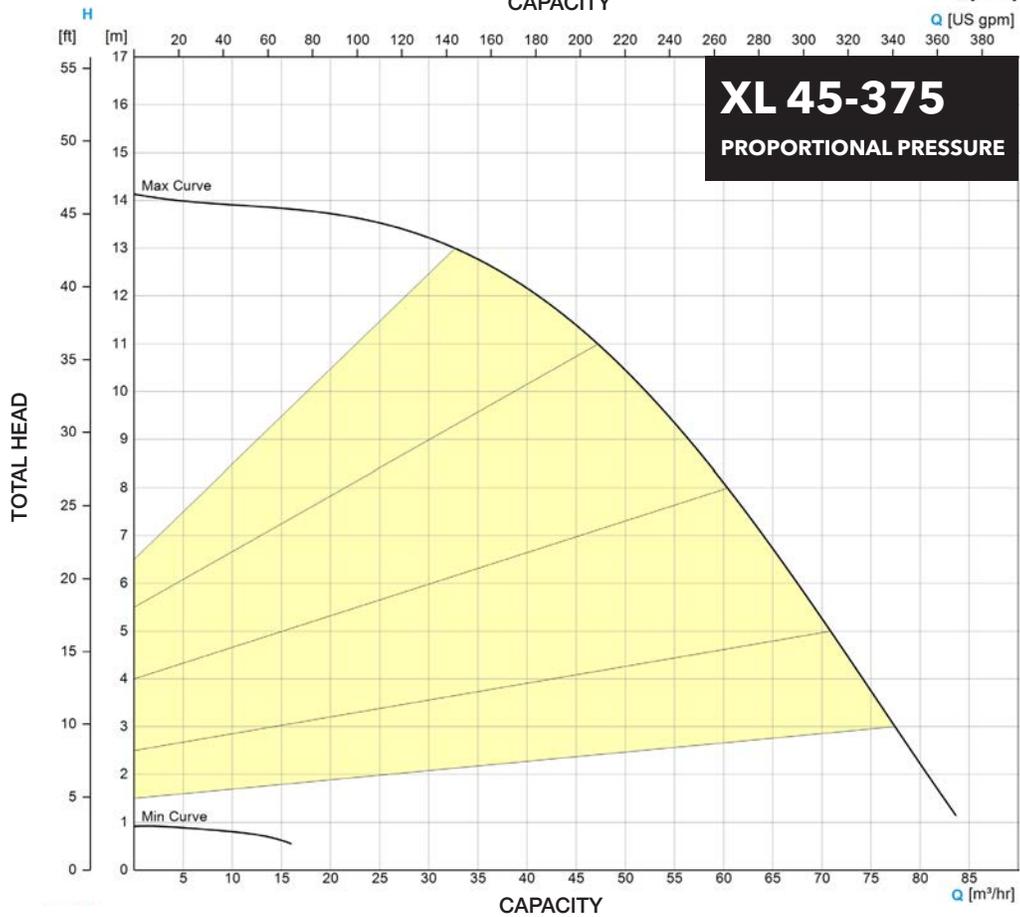
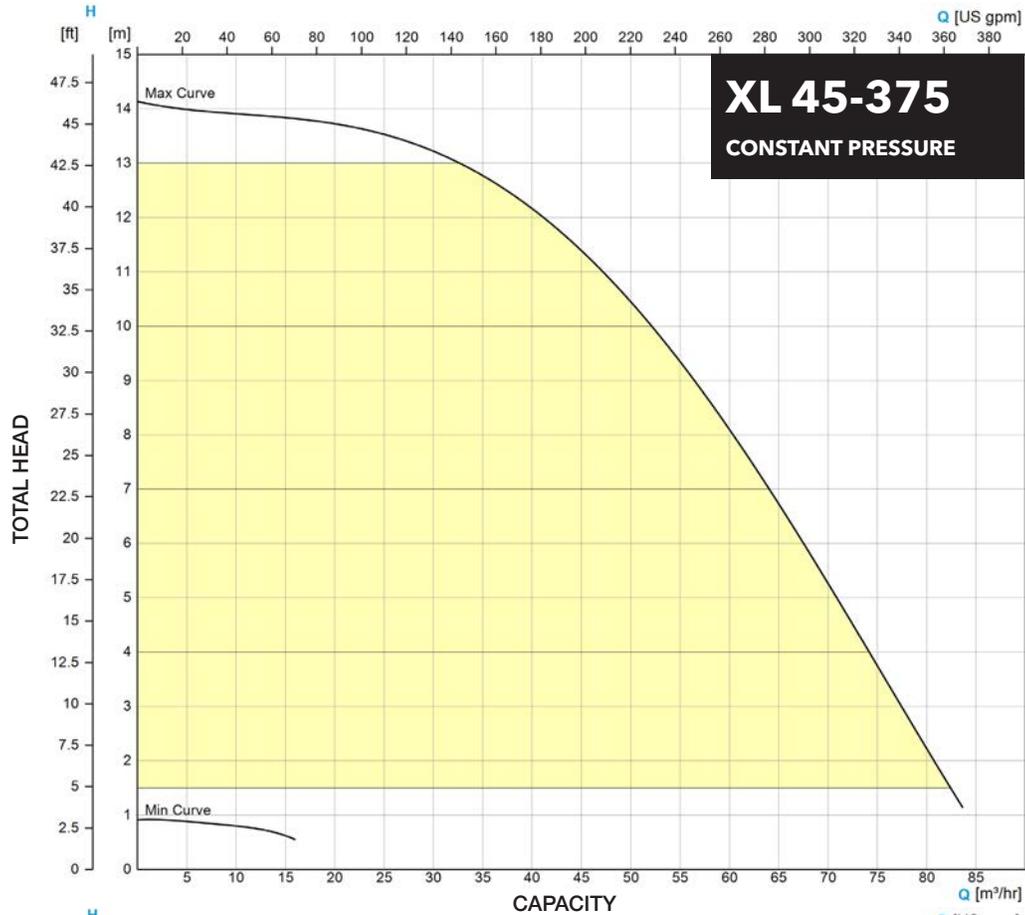


Note: The shaded area represents the operating range for the control mode. Each control mode will operate along a single control curve set by the max differential pressure set point.

ecocirc XL 45-375 Curves



ecocirc XL 45-375 Curves



Note: The shaded area represents the operating range for the control mode. Each control mode will operate along a single control curve set by the max differential pressure set point.

Service and support from the most trusted name in the industry - Bell & Gossett.

The Bell & Gossett name has always stood for uncompromising quality and dependability. That's evident in the way every one of our centrifugal pumps is built and backed by our outstanding customer service and support team.

Your local Bell & Gossett representative is available any time and is an experienced professional with a wealth of technical expertise. In addition to expert system and product application assistance and a wide product inventory warehoused locally, we offer ESP-Systemwize software selection program.



ESP-Systemwize is a Bell & Gossett web-based software that helps you design HVAC systems accurately, effectively and very quickly. You get fast, precise equipment selection, pump performance curves and equipment schedules, submittals, specifications replacement parts and more.

ESP-Systemwize includes:

- Centrifugal Pumps
- Air/Dirt Separators
- Drives and Controls
- Expansion Tanks
- Heat Exchangers
- PIC Valves
- Replacement Parts
- Suction Diffuser and Triple Duty Valve
- Wastewater/Stormwater

esp-systemwize.com

The Little Red Schoolhouse® - Training the Industry



Bell & Gossett has long been known for its dedication to training. The "Little Red Schoolhouse®" has graduated over 60,000 students since it was founded in 1954.

Graduates from the "Little Red Schoolhouse" may be found throughout North America, Europe, Africa, Asia and Australia.

For applications to attend these seminars, please contact a Bell & Gossett Representative in your area. They will have the schedule dates for all seminars and will make all the arrangements for you. As a service and a continuing educational source to the HVAC industry, these seminars are offered free of charge. IACET certified CEU credits are awarded for each seminar.

* The USGBC has approved the technical and instructional quality of the Modern Hydronic Heating Systems - Basic Seminar (15 GBCI CE Hours) and the Large Chilled Water Design Seminar (11 GBCI CE Hours). These courses are approved for GBCI Continuing Education Hours towards LEED Credential Maintenance Programs.

Seminars currently offered are:

- Modern Hydronic System Design - Basic*
- Modern Hydronic System Design - Advanced*
- Design & Application of Water Based HVAC Systems
- Large Chilled Water System Design*
- Pump Service & Maintenance School
- Steam Systems Design & Applications
- Steam System Operation & Maintenance
- Plumbing Systems Design



Xylem |'zīləm|

- 1) The tissue in plants that brings water upward from the roots;
- 2) a leading global water technology company.

We're a global team unified in a common purpose: creating advanced technology solutions to the world's water challenges. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work. Our products and services move, treat, analyze, monitor and return water to the environment, in public utility, industrial, residential and commercial building services settings. Xylem also provides a leading portfolio of smart metering, network technologies and advanced analytics solutions for water, electric and gas utilities. In more than 150 countries, we have strong, long-standing relationships with customers who know us for our powerful combination of leading product brands and applications expertise with a strong focus on developing comprehensive, sustainable solutions.

For more information on how Xylem can help you, go to www.xylem.com

We value your feedback. Please take our 3 question survey at **bellgossett.com/survey** to let us know how we are doing.



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