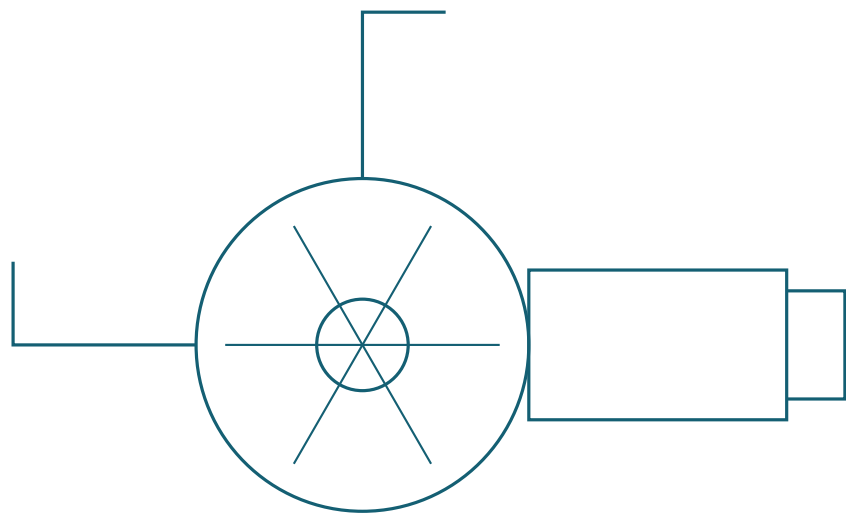


SYNTHETIC PX-42

Process Pump



Synthetic demonstration document created by the ANCHOR authors. Values do not describe a real product and must not be used for engineering decisions.

Purpose

The PX-42 is a fictional centrifugal process pump used only to demonstrate document-grounded extraction, persistent specification artifacts, and source review in ANCHOR. The document deliberately resembles a compact engineering datasheet while containing no vendor text, graphics, or product claims.

Summary

Document identifier	SYN-PX42-2026-01
Document status	Demonstration material
Intended use	Software screenshots and reproducibility examples
Product status	Fictional; not offered for sale

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TECHNICAL DATA

Property	Value
Product wetted parts	316L stainless steel
Shaft seal material	EPDM
Impeller configuration	Semi-open, six vane
Nominal connection	DN 50
Motor power range	0.75 to 15 kW
Motor speed range	900 to 2200 rpm
Dry mass, base unit	34 kg

OPERATING DATA

Operating parameter	Limit or range
Maximum inlet pressure	600 kPa (6 bar)
Maximum differential pressure	900 kPa (9 bar)
Process temperature range	-10 to 140 degrees C
Nominal flow range	5 to 45 cubic metres per hour
Recommended continuous speed	1200 to 2000 rpm
Ambient temperature range	0 to 45 degrees C

Review note

Each value above is intentionally placed in a visually bounded row so that an ANCHOR specification row can retain a page and bounding-box reference to its supporting source location.

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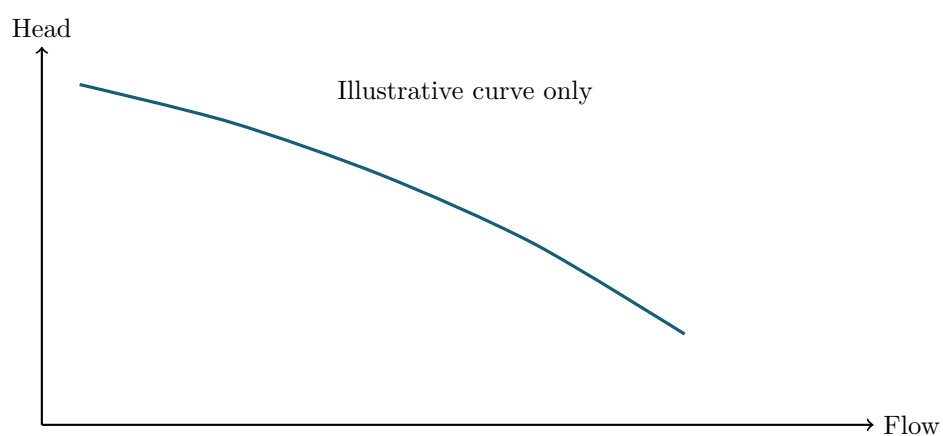
ILLUSTRATIVE PERFORMANCE POINTS

The values in this table are synthetic. They exist only to provide structured content for software demonstrations.

Speed rpm	Flow m3/h	Head m	Input power kW	Efficiency percent
1200	10	8	0.9	62
1400	18	12	1.8	68
1600	26	17	3.2	72
1800	34	22	5.1	70
2000	42	28	7.8	66

Interpretation boundary

These points are not measurements, simulation output, or validation data. They must not be cited as evidence of pump performance. Their only function is to exercise document ingestion, region addressing, and canvas artifact review.



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INSTALLATION AND REVIEW CHECKLIST

Step	Review item
1	Confirm that the selected operating point lies within the synthetic ranges listed on page 2.
2	Confirm that every transferred value retains a source reference to the supporting page and row.
3	Inspect the source location before retaining, revising, rejecting, or using a derived canvas artifact.
4	Do not treat extraction output as verified engineering data.

Document provenance

This four-page PDF was authored for the ANCHOR SoftwareX manuscript. It does not reproduce or adapt vendor documentation. The fictional product name, diagram, prose, tables, and values were created specifically for publication and demonstration.

Revision record

Revision	Date	Change
1	2026-09-16	Initial author-created demonstration document.