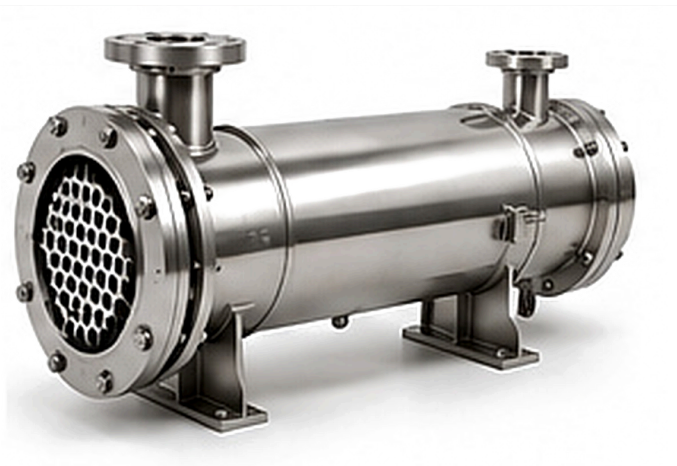


Aftercoolers ACFR Series

COMPRESSED-AIR AFTERCOOLER

SHELL & TUBE

REMOVABLE HEAT-TRANSFER BUNDLE



Performance Notes

- ACFR aftercoolers are straight-tube water-cooled exchangers for reducing compressed-air temperature after compression. Cooling promotes moisture condensation for downstream separation and treatment.
- Shell diameter range in supplied data: 3-10 in..
- Tube length range in supplied data: 50 in..
- Tube-pass arrangements in supplied data: 1-Pass.

Ratings	Materials
Shell pressure Model dependent	Shell Steel
Tube pressure Model dependent	Tubes Copper
Maximum temperature 300°F	Tubesheet / bonnets Steel / Cast Iron

Series Configuration

Shell diameter	Tube OD	Tube passes	Tube lengths	Surface area
3-10 in.	1/4" O.D.	1-Pass	50 in.	4.2-103.1 ft²

Ratings, materials and dimensional ranges above are summarized from the supplied HeatX/Bell & Gossett catalog spreadsheet. Exact construction varies by model and option code.

ACFR Series Size Range & Model Guid



CATALOG RANGE FROM SUPPLIED DATA

Shell dia.	Catalog records	Tube length	Surface area	Passes	Tube-side conn.
3-1/2"	6	50 in.	4.2-8.5 ft ²	1-Pass	3.0" FLG
4-1/2"	2	50 in.	13 ft ²	1-Pass	4.0" FLG
6-5/8"	6	50 in.	18-32.1 ft ²	1-Pass	6.0" FLG
8-5/8"	6	50 in.	40-57.2 ft ²	1-Pass	8.0" FLG
10-3/4"	6	50 in.	73.1-103.1 ft ²	1-Pass	10.0" FLG
Model dependent	25	Model dependent	Model dependent	1-Pass	Model dependent

Construction Summary

Feature	Catalog summary
Tube construction	1/4" O.D.
Shell material	Steel
Tube material	Copper
Tubesheet	Steel
Bonnet / head	Cast Iron
Tube passes	1-Pass
Pressure / temperature	Shell: Model dependent; Tube: Model dependent; Temp: 300°F

The range table is intended as a family-level guide. Use the complete part number and current dimensional submittal when replacing an installed exchanger.

Representative ACFR Models

SELECTED FROM THE SUPPLIED PART-NUMBER FILE

Part / model	Shell	Length	Surface	Tube conn.	Passes
5-005-03-050-005	3-1/2"	50"	4.2	3.0" FLG	1-Pass
ACFR-332	3-1/2"	50"	8.5	3.0" FLG	1-Pass
5-005-06-050-005	6-5/8"	50"	25.4	6.0" FLG	1-Pass
5-005-08-050-004	8-5/8"	50"	40	8.0" FLG	1-Pass
ACFR-8185	8-5/8"	50"	49	8.0" FLG	1-Pass
ACFR-10276	10-3/4"	50"	73.09	10.0" FLG	1-Pass
5-005-03-050-002	—	—	—	—	1-Pass
5-005-06-050-003	—	—	—	—	1-Pass
5-005-10-050-001	—	—	—	—	1-Pass
ACF-1084	—	—	—	—	1-Pass
ACF-410	—	—	—	—	1-Pass
ACF-847	—	—	—	—	1-Pass

Model / Part-Number Identification

Bell & Gossett heat-transfer equipment exists under multiple numbering generations. The supplied data includes current 5-xxx drawing-style numbers as well as legacy model designations on some series. For replacement work, retain the complete original model, part number and nameplate information rather than inferring construction from a shortened designation.

Selection Inputs

- Heat load or required duty
- Hot- and cold-side fluids
- Entering and leaving temperatures
- Flow rates on both sides
- Available pressure drop
- Design pressure and temperature
- Fouling allowance and fluid properties
- Required materials, code stamping and double-wall requirement where applicable

ACFR Application & Specification Guide



ENGINEERING CHECKLIST

Typical Applications

- Compressor discharge aftercooling
- Compressed-air dryer pre-cooling
- Moisture removal systems
- Plant and instrument air conditioning

Specification Notes

- Series: Bell & Gossett ACFR
- Configuration: Compressed-Air Aftercooler
- Size the exchanger on the actual fluid properties, temperatures, flow rates and allowable pressure drops.
- Confirm the exact model pressure rating, connection size, materials and tube-pass arrangement before release.
- Provide service clearance for bonnet/head removal and bundle withdrawal where the construction is removable.
- For steam service, provide proper condensate drainage and venting. For liquid service, arrange piping to keep the exchanger flooded and ventable.
- Where potable or contamination-sensitive fluids are involved, confirm local code requirements for double-wall construction and leak detection.

Source & Data Basis

Catalog values and representative part numbers in this HeatX guide are derived from the supplied Bell & Gossett series spreadsheet dated 8/9/2026. Product-family descriptions were cross-checked against official Bell & Gossett / Xylem literature, including: Bell & Gossett straight-tube aftercooler literature and B&G; heat-transfer parts identification literature.

This document is a HeatX selection and replacement reference, not a substitute for the current manufacturer-certified submittal. Dimensions and ratings should be verified for the exact part number before fabrication, purchase or installation.