

Alfa Laval TK20-W

Gasketed plate heat exchanger for demanding applications

Introduction

Alfa Laval Industrial semi-welded line is used when gaskets are not suitable for one of the process media. The semiwelded line can also withstand a higher design pressure compared to fully gasketed plate-and-frame heat exchangers.

The relatively short plate makes this model suitable for duties with short temperature programs and when a low pressure drop is appreciated. A large range of plate and gasket types is available.

Applications

- Chemicals
- Energy and Utilities
- Food and Beverages
- HVAC and Refrigeration
- Marine and Transportation
- Mining, Minerals and Pigments
- Pulp and Paper
- Steel
- Water and Waste treatment

Benefits

- High energy efficiency low operating cost
- Flexible configuration heat transfer area can be modified
- Easy to install compact design
- High serviceability easy to open for inspection and cleaning and easy to clean by CIP
- Access to Alfa Laval's global service network

Features

Every detail is carefully designed to ensure optimal performance, maximum uptime and easy maintenance. Selection of available features, depending on configuration some features may not be applicable:

- Five-point alignment
- T-bar roller
- CurveFlowTM distribution area
- ClipGripTM gasket attachment
- Leak chamber
- RefTightTM sealing system
- Compact frame
- Bearing boxes

- Fixed bolt head
- Key hole bolt opening
- Lifting lug
- Lining
 - Lock washer
 - Swing feet
 - Tightening bolt cover
 - Optimized Alfa Laval drain connection

Alfa Laval 360° Service Portfolio

Our extensive service offering ensure top performance from your Alfa Laval equipment throughout its life cycle. The Alfa Laval 360 Service Portfolio include installation services, cleaning and repair as well as spare parts, technical documentation and trouble shooting. We also offer replacement, retrofit, monitoring and much more.

For information about our complete service offering and how to contact us - please visit www.alfalaval.com/service.



General remarks for technical information

- The global offering presented in this leaflet may not be available for all regions
- All combinations may not be configurable

Dimensional drawing

Measurements mm (inches)



Туре	Н	W	h
TK20-FG	1525 (60.0")	740 (29.1")	301 (11.9")
TK20-FD	1525 (60.0")	785 (30.9")	301 (11.9")
TK20-FX	1560 (61.4")	900 (35.4")	331 (13.0")

The number of tightening bolts may vary depending on pressure rating.

Technical data

Plates	Туре		Free channel, mm (inches)
TK20-BW	Semi-welde	d	2.5 (0.098)
Materials			
Heat transfer plates		304/30	4L, 316/316L, 254
		Ti	
Field gaskets		NBR, E	PDM, FKM
		NBR, E	PDM, CR
Ring gaskets		NBR, EPDM, FEPM, CR	
Flange connect	ions	Metal li	ned: stainless steel, Alloy 254, titanium
Frame and pres	ssure plate	Carbon steel, epoxy painted	

Other materials may be available on request

Operational data

Frame, PV-code	Max. design pressure (barg/psig)	Max. design temperature (°C/°F)
FG, pvcALS	15.5/225	200/392
FG, PED	16.0/232	50/122
FD, pvcALS	25.0/363	150/302
FD, ASME	20.7/300	150/302
FD, PED	25.0/362	150/302
FX, PED	63.0/914	150/302

Extended pressure and temperature rating may be available on request.

Flange connections

Frame model	Connection standard
	EN 1092-1 DN150 PN16
	EN 1092-1 DN200 PN16
FG, pvcALS	ASME B16.5 Class 150 NPS 6
	ASME B16.5 Class 150 NPS 8
	JIS B2220 16K 200A
	EN 1092-1 DN150 PN16
	EN 1092-1 DN200 PN16
FG, PED	ASME B16.5 Class 150 NPS 6
	ASME B16.5 Class 150 NPS 8
	EN 1092-1 DN150 PN25
	EN 1092-1 DN200 PN25
FD, pvcALS	ASME B16.5 Class 300 NPS 6
	ASME B16.5 Class 300 NPS 8
	JIS B2220 20K 200A
	ASME B16.5 Class 300 NPS 6
FD, ASME	ASME B16.5 Class 300 NPS 8
FDc, ASME	
	EN 1092-1 DN150 PN25
	EN 1092-1 DN200 PN25
FD, PED	ASME B16.5 Class 300 NPS 6
	ASME B16.5 Class 300 NPS 8
FX. ASME	ASME B16.5 Class 150 NPS 8
FA, ASIVIE	ASME B16.5 Class 900 NPS 6
	EN 1092-1 DN200 PN16
FX, PED	EN 1092-1 DN200 PN25
	EN 1092-1 DN150 PN63
	ASME B16.5 Class 150 NPS 8
	ASME B16.5 Class 900 NPS 6

Standard EN1092-1 corresponds to GOST 12815-80 and GB/T 9115.

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