



Swagelok Company
29500 Solon Rd
Solon, OH 44139 U.S.A.

440.349.5600
440.519.4997 fax

Certificate of Compliance/Typical Material Certification (EN 10204-2.2)

Distributor

Chicago Fluid System Technologies, Inc.
360 Windy Point Drive
Glendale Heights, IL 60139

No.	Part Number	Qty
1	SS-FJ24KF40KF40-36	1

Information contained in the above customer address column (marked as "Customer") and area marked "Reference" (when applicable) of this certification are for reference purposes only. Swagelok Company makes no stipulations, nor takes responsibility, for the accuracy or reliability of such information.

Swagelok products referenced above are manufactured from material purchased and certified as being in accordance with the specification(s) listed below.

Swagelok products are manufactured under conditions which are free from mercury. No mercury bearing components have been used in the products of your order and no mercury bearing instruments or other equipment have been used in their manufacture, assembly, or testing in such a manner as might cause contamination.

No asbestos or asbestos-containing components are used in Swagelok brand products.

Swagelok FJ Hose assemblies are manufactured using the following materials and purchased in accordance with the specifications listed:

- Corrugated tubing is made from type 316L stainless steel strip per ASTM A-240
- Braid Wire is type 304 or 304L stainless steel per ASTM A-478
- Braid Collar is type 304 stainless steel per ASTM A-269
- All hose assemblies pass a standard vacuum helium leak test adjusted to detect a leak of 1x10⁻⁵ atm cc/sec

All parts were cleaned and packaged in accordance with Swagelok Specifications.

Typical mechanical and/or chemical analysis of the material used in the manufacture of the Swagelok products involved are listed below. These values are average values determined from a sample of certified material test reports. Specific chemistry obtained from analysis of product made from this material may vary from the batch values as provided with this certification.

MATERIAL STANDARDS

Components	Material	Standards
End Connections	316 Stainless Steel Bar (1.4401)	ASTM A479, ASME SA479, ASTM A276 (exception of square and rectangular bar)

MECHANICAL PROPERTIES

Components/Materials	Yield Strength (ksi/MPa)	Tensile Strength (ksi/MPa)	Elongation (%)	% Red. Area	Hardness
End Connections	93/641	108/745	36	73	HRC 22

CHEMICAL ANALYSIS (%)

Components/Materials	C	Co	Cr	Mn	Mo	N	Ni	P	S	Si
End Connections	0.040	0.23	17.51	1.71	2.27	0.037	12.19	0.029	0.025	0.60

The Swagelok® products specified above are certified for use in commercial-grade applications and were manufactured in accordance with Swagelok Company's Quality Manual (SQS-F latest revision, revision M, dated December 22, 2021).

Swagelok Company's Quality System is approved to ISO 9001 (BSI Certificate # FM01729).



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A handwritten signature in black ink that reads "Michael J. Zickes".

Certifications Supervisor
Michael J. Zickes