

Certificate of Compliance/Typical Material Certification

Distributor	Customer	Customer PO#
BEST Fluidsysteme GmbH Hamburg Vor Dem Hassel 3 21438 Brackel Deutschland		027/4500117

No.	Part Number	Qty
1	SS-12M0-6	12

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

This certification does not include such components as snap rings, springs, balls, o-rings, gaskets, jam nuts, space collars, seals, locking dogs, lanyards, or sleeves.

Stainless Steel Barstock material has passed the Intergranular Corrosion Test requirements of ASTM A-262 Practice A or E.

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. Actual values for a material heat may vary from those indicated.

MATERIAL STANDARDS

Components	Material	Standards
Shaped Fittings	F316 Stainless Steel Forgings	ASTM A182, ASME SA182
Straight Fittings	316 Stainless Steel Bar	ASTM A276, ASTM A479, ASME SA479

MECHANICAL PROPERTIES

Components / Materials	Yield Strength (ksi/MPa)	Tensile Strength (ksi/MPa)	Elongation (%)	% Red. Area	Hardness
Shaped Fittings	48/331	90/621	61	76	
Straight Fittings	93/641	108/745	36	73	HRC 22

CHEMICAL ANALYSIS

Components / Materials	C	Cr	Mn	Mo	N	Ni	P	S	Si	Co
Shaped Fittings	0.043	17.16	1.57	2.09	0.042	12.23	0.028	0.025	0.60	
Straight Fittings	0.040	17.51	1.71	2.27	0.037	12.19	0.029	0.025	0.60	0.23

The Swagelok product specified above were manufactured in accordance with Swagelok Company's Quality Assurance Manual (latest revision, revision D, dated December 16, 2002). Swagelok Company's Quality System is approved to ISO 9001 (BSI Certificate # FM01729).



Carl Meece
Vice President of Engineering