

Replaces DVS 2205-1 Supplement 17 (February 2006)

Short-time ( $f_z$ ) and long-time ( $f_s$ ) welding factors

Processes	Materials	Welding factors, short-time / long-time	PE <sup>1)</sup>	PP <sup>2)</sup>	PVC-U	PVC-C	PVDF
Heated tool butt welding		$f_z$	0.9	0.9	0.9	0.8	0.9
HS		$f_s$	0.8	0.8	0.6	0.6	0.6
Hot gas extrusion welding, discontinuous		$f_z$	0.8	0.8	–	–	–
WE		$f_s$	0.4	0.4	–	–	–
Hot gas extrusion welding, continuous		$f_z$	0.8	0.8	–	–	–
WE		$f_s$	0.6	0.6	–	–	–
Hot gas welding		$f_z$	0.8	0.8	0.8	0.7	0.8
WZ/WF		$f_s$	0.4	0.4	0.4	0.4	0.4
IR welding for pipes, pressure-controlled		$f_z$	–	0.9	–	–	0.9
		$f_s$	–	0.8	–	–	0.8
IR welding for pipes, displacement-controlled		$f_z$	0.9	0.9	–	–	0.9
		$f_s$	0.7	0.8	–	–	0.8

1) Applies to PE 63, PE 80 and PE 100

2) Applies to PP-H, PP-B and PP-R

The prerequisites for the specified values are the command of the corresponding welding processes and the execution by qualified and certified personnel.

The short-time factors apply to loading times up to one hour. In the case of other materials and/or joining processes, the values must be proven individually.

The prerequisite for computation with higher welding factors than stipulated in the above table is proof which is provided on the material combination to be welded and must not be more than two years' old.

This publication has been drawn up by a group of experienced specialists working in an honorary capacity and its consideration as an important source of information is recommended. The user should always check to what extent the contents are applicable to his particular case and whether the version on hand is still valid. No liability can be accepted by the Deutscher Verband für Schweißen und verwandte Verfahren e.V., and those participating in the drawing up of the document.

DVS, Technical Committee Working Group "Joining of Plastics"