

D 24-4 TYPE WATERSTOP

(Expansion Joint Waterstop Placed In Concrete)

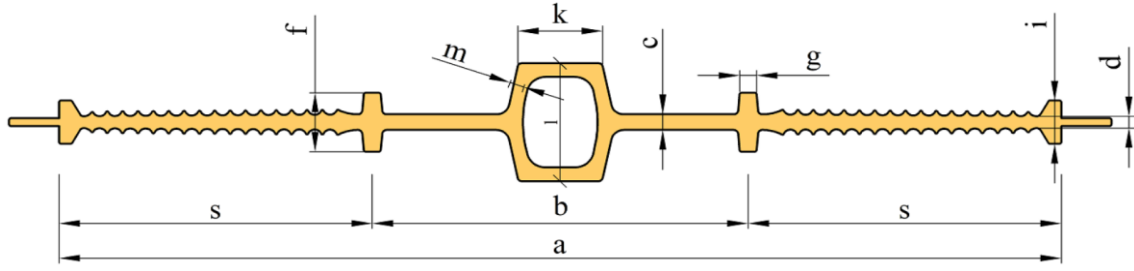
- *Waterstop placed on the outer surface of the concrete construction element with a flat outer surface without profiles, without an expansion gap in the middle and with profiles parallel to each other in the direction perpendicular to the longitudinal axis of the gasket in order to prevent the gasket from peeling out of the concrete at the gasket parts on both sides, are used in raft foundation-raft foundation and shearwall - shearwall, partial contraction and full contraction joints.*
- *Resistant to high water pressures.*
- *Waterstop tapes can be joined to each other by heat (thermal) welding (150 °C - 180 °C).*



TECHNICAL DATA

General Application Areas of Waterstop

- *Dams,*
- *Irrigation canals,*
- *Water tanks, reservoirs,*
- *Water purification plants,*
- *Swimming pools,*
- *Docks Transmission tunnels,*
- *Hydroelectric power plants,*
- *Bridges,*
- *Metro constructions,*
- *Viaducts,*
- *Retaining walls,*
- *Slabs on ground and foundations,*
- *Industrial structures.*
- *Production length 20 meters.*



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|----------|---|----------|--|
| a | Total width | i | Thickness of edge anchor thread |
| b | Width of the expansion section | k | Expansion gap width |
| c | Thickness at the thinnest part of the expansion section | l | Expansion gap height |
| d | Thickness at the thinnest part of the anchor section | m | Wall thickness at the thinnest part of the expansion gap |
| f | Height of the straight anchor thread | s | Width of the anchor section |
| g | End width of anchor thread | | |

Type D waterstop cross-section

Type D waterstop nominal dimensions (mm)

Product Code	a Min.	b Min.	c Min.	d Min.	f Min.	g Min.	i Min.	k Min.	l Min.	m Min.	s Min.
D 24-4	240	80	4	3	15 ≥ 3c	≥ c	11 ≥ d+6	20	30	3.5	62.5

Tolerances for length dimensions

Nominal Size Range (mm)											
< 3	≥ 3 < 6	≥ 6 < 10	≥ 10 < 18	≥ 18 < 30	≥ 30 < 50	≥ 50 < 80	≥ 80 < 120	≥ 120 < 180	≥ 180 < 250	≥ 250 < 320	≥ 320
± 0.3	± 0.4	± 0.5	± 0.6	± 0.7	± 0.8	± 1.0	± 1.2	± 1.4	± 1.7	± 2.0	± %0.8

Tolerances for wall thicknesses

Nominal Size Range (mm)					
< 1.2	≥ 1.2 < 2.5	≥ 2.5 < 4	≥ 4 < 6.5	≥ 6.5 < 10	≥ 10
± 0.2	± 0.3	± 0.4	± 0.5	± 0.6	± %0.8

Mechanical Properties

Analysis	Standard	Basic requirement
Appearance inspection	TS 3078-2	No gaps, cracks, shrinkage, etc.
Size inspection	TS 3078-2	Dimensions must comply with TS 3078-1
Shore A hardness	TS 3078-2	70 ± 5
Tensile strength	TS 3078-2	≥ 10 MPa
Elongation rate at break	TS 3078-2	≥ %275
Tear resistance	TS 3078-2	≥ 12 kN/m
Low temperature behavior: Elongation at break at -20 °C	TS 3078-2	≥ %200
Behavior: a) After soaking in slaked lime milk b) Behavior in the face of heat c) Behavior after aging Percentage change in the average value compared to the initial value:	TS 3078-2	
Tensile strength		≤ %20
Elongation rate at break		≤ %20
Modulus of elasticity		≤ %50
Joint strength Short-term junction factor (f_z)	TS 3078-2	Rupture outside the weld zone or ≥ 0.6
Fire reaction class according to TS EN 13501-1+A1	TS 3078-2	Class E must be
Residue fraction by mass	TS 3078-2	< %5.0