

## Description

An improved profile for concrete joints with unique vertical cosine-sine upper strips and a full-height body repeating their geometry.

Due to the fact that the corrugation of the profile is carried out to the full height, which eliminates the occurrence of voids and the appearance of cracks in the concrete, the concrete slab works completely, to the full thickness, similar to the straight profiles of armored joints.

Thanks to its wavy geometry, it allows to achieve shock-free passage of the expansion joint even for steel wheels, increasing the performance of the concrete floor by several times, while significantly reducing the vibration and noise that occur during the passage of the expansion joint.

Perfectly reinforces the edges of concrete on both sides of the shrink joint, as well as serves as a reliable system for transferring loads during storage and when equipment passes through the joint.

The unique centering system of the upper strips, along with the load transfer system, allows two adjacent slabs to be in the same plane with a shrink joint opening up to 25 mm.

The profiles are designed for loads according to TR 34 4th edition and Eurocode 2: EN 1992-1-1.

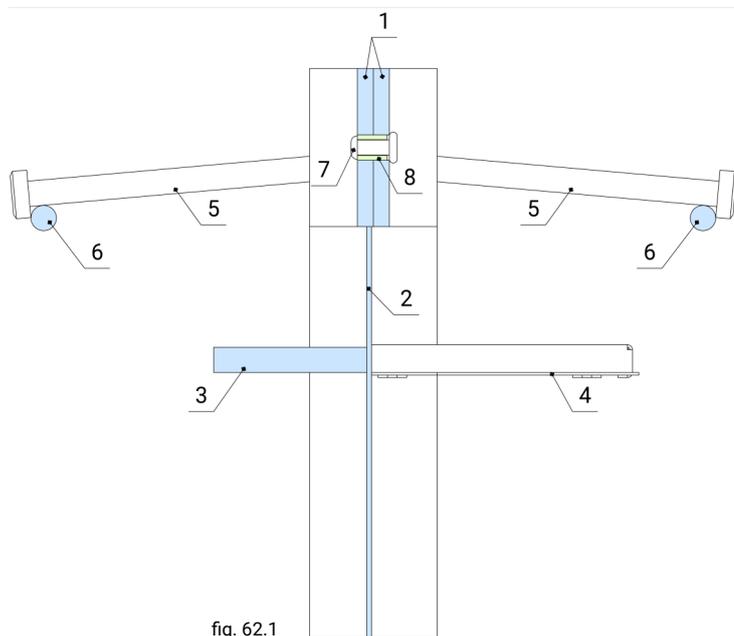


fig. 62.1

### Accessories (specification)

Tab. 62.1

- |   |   |
|---|---|
| 1 | Corrugated steel cosinus-sinus strips 5x50 <sup>1</sup> |
| 2 | Corrugated profile body                                 |
| 3 | Load transfer dowel (3 types) <sup>2</sup>              |
| 4 | Dowel steel casing                                      |
| 5 | Anchor stud SD (Nelson)                                 |
| 6 | Reinforcement cage                                      |
| 7 | Rivet fasteners   |
| 8 | Steel pin   |

<sup>1</sup> On request, hot-dip galvanized strips and strips made of AISI 304 stainless steel.

<sup>2</sup> The thickness of the dowels, depending on the loads, 5 or 8 mm (see Calculation of loads).

fig. 62.2

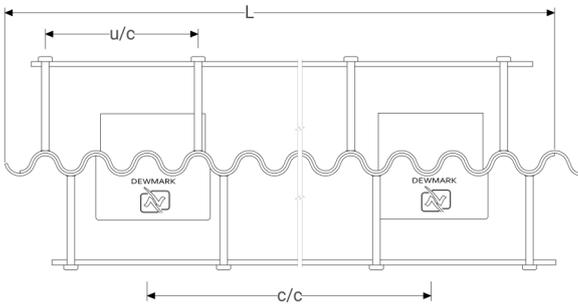
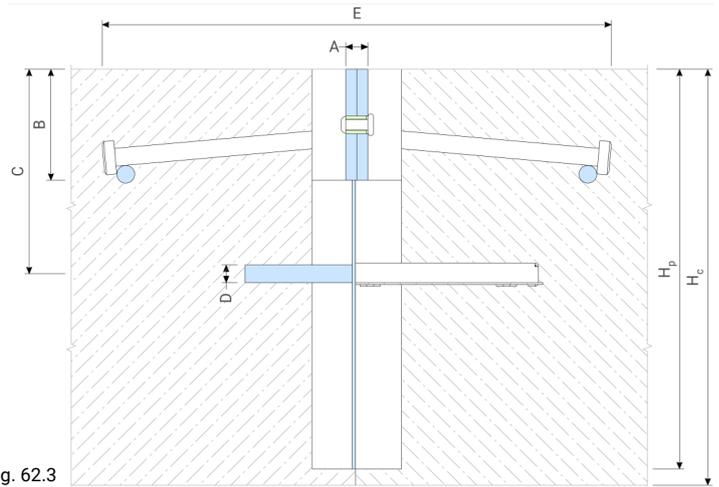


fig. 62.3



Dimensions

Tab. 62.2

Profile	H <sub>p</sub> <sup>4</sup> (mm)	H <sub>c</sub> (mm)	A (mm)	B (mm)	C (mm)	D <sup>1</sup> (mm)	E (mm)	u/c <sup>2</sup> (mm)	c/c <sup>3</sup> (mm)	L (mm)
SG 62/90-... <sup>1</sup> /NV	90	100	10 (5x2)	50	50	5 / 8 / 8XL	230	240	600 / 500	2400
SG 62/110-... <sup>1</sup> /NV	110	125-130	10 (5x2)	50	60	5 / 8 / 8XL	230	240	600 / 500	2400
SG 62/130-... <sup>1</sup> /NV	130	140-150	10 (5x2)	50	70	5 / 8 / 8XL	230	240	600 / 500	2400
SG 62/150-... <sup>1</sup> /NV	150	160-180	10 (5x2)	50	85	5 / 8 / 8XL	230	240	600 / 500	2400
SG 62/180-... <sup>1</sup> /NV	180	190-210	10 (5x2)	50	100	5 / 8 / 8XL	230	240	600 / 500	2400
SG 62/210-... <sup>1</sup> /NV	210	220-240	10 (5x2)	50	120	5 / 8 / 8XL	230	240	600 / 500	2400
SG 62/240-... <sup>1</sup> /NV	240	250-280	10 (5x2)	50	140	5 / 8 / 8XL	230	240	600 / 500	2400
SG 62/280-... <sup>1</sup> /NV	280	290-330	10 (5x2)	50	150	5 / 8 / 8XL	230	240	600 / 500	2400

<sup>1</sup>... – Dowel thickness used. Select a dowel based on the specified loads (see Calculation of loads).

<sup>2</sup> u/c – distance between anchor studs.

<sup>3</sup> c/c – distance between dowels.

<sup>4</sup> Profiles can be produced to any height on request.

PARTS MATERIALS AND MANUFACTURING METHODS (as per specification)

Tab. 62.3

Profile	Nº	Component	Steel grade	EN	Manufacturing method
		Steel strips 5x50	S235J0	10051	Laser cutting, rolling
	1	+ hot-dip galvanized HDG*	S235J0	10051	+ galvanized according EN 1461
		+ steel strips AISI 304*	1.4016	10088-2	
	2	Anchor studs SD	S235J0	13918:2017	Cold heading
	3	Profile body	DC01	10130:2006	Stamping, rolling
		Dowel	S355J0	10025-2	Laser cutting
	4	+ hot-dip galvanized HDG*	S355J0	10025-2	+ galvanized according EN 1461
		+ steel strips AISI 304*	1.4016	10088-2	Laser cutting
	5	Dowel casing	DC01	10130:2006	Stamping, bending

fig. 62.4

\* – On request, the profiles can be fully or partially produced from corrosion-resistant steels: hot-dip galvanized (HDG) structural steels or stainless (AISI 304) steels. In this case, special designations are added to the profiles:

For HDG

FHDG – the profile is fully galvanized.

For AISI 304

SS – upper strips made of AISI 304 steel;  
HSS – upper strips + dowels made of AISI 304 steel;  
FSS – profile made entirely of AISI 304 steel.

MANUFACTURING TOLERANCES

Tab. 62.4

Length	+50 mm	Height	±1 mm	Straightness	±1,5 mm/m	Curl	<0,5°/m
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