# - ROAD JOINTS SX EXPANSION JOINT



Data sheet n°: CV1-8

- High shock absorption capacity
- Transversal movement capacity
- Corrosion protection

- Watertight
- User comfort
- User safety

#### Introduction

Expansion joints for road bridges are used to ensure the continuity of the running surface and its load bearing capacity (safety and comfort of the users) while guaranteeing the structure freedom of movement

#### Description

The Multiflex SX joint is a mat joint which absorbs the movements imposed by the main structure through deformation of the elastomeric sections. Each section comprises vulcanised moulded elastomeric elements bonded to metal inserts designed to accommodate moving loads and distribute stress in the fasteners. This assembly forms a single block system joint of 1 to 2 metres in length (depending on the model).



# **Applications**

- Concrete, steel, and composite structures.
- Slab, cable-stayed, suspension, lifting or tilting bridges
- New build or repair works



Pont Mirabeau, Rouen (France)

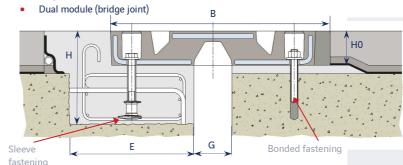
### Advantages

- High shock absorption capacity, without equivalent in the mat joints' category, owing to the flexibility and damping properties of the high-quality rubber implemented
- Corrosion resistant: metal parts are not directly subjected to chemical or corrosive attack
- Fully watertight joint, due to the continuous elastomer the elements are made of and to the positioning of high-quality adhesive seal where the elements meet
- Anti-skid grooves on upper surface, for optimum user safety
- Very effectively adapts to transverse, vertical and rotational movements of the main structure
- Easy installation, without recesses in the main structure

#### Models

The SX joint is proposed in two versions:

Single module



Single element module

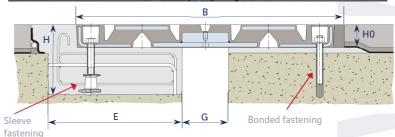
▲ Cross section ▲ -

▼ Main dimensions (in mm) ▼

Туре	В		G		E	Н	L*	НО
	mini	maxi	mini	maxi	mini	mini	L	ΠV
SX80	235	315	10	90	195	190	2000	42
SX100	305	405	10	110	225	190	2000	46
SX120	330	450	10	130	235	210	2000	53
SX160	390	550	10	170	265	230	2000	78
SX180	410	590	10	190	275	230	2000	82

: Length of the module





Dual element module

▲ Cross section ▲

▼ Main dimensions (in mm) ▼

Туре	В		G		E	Н	L*	НО
	mini	maxi	mini	maxi	mini	mini		
SX220	690	910	10	230	415	250	2000	69
SX250	915	1165	10	260	535	250	2000	69
SX270	755	1025	15	285	445	260	2000	78
SX320	1115	1435	60	380	605	350	1250	82
SX350	930	1280	45	395	525	360	1000	100

<sup>\*:</sup> Length of the module

#### --- ROAD JOINTS

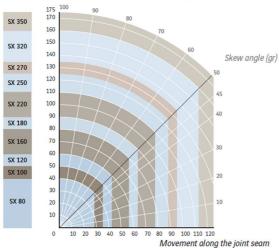
# SX EXPANSION JOINT



#### Movement range

The SX joint allows longitudinal and transversal movements. The combination of both movements (skew angle line) gives the following effective capacities:

± Movement along the axis of the main structure (mm)



Capacity movement vs skew angle

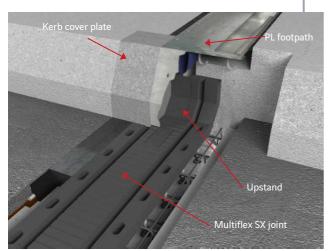


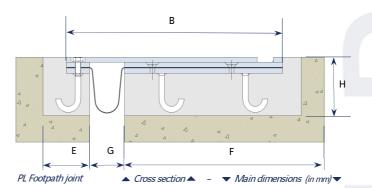
SX350 anchors tensioning

#### Add-ons

To ensure overall waterproofing and joint continuity on footpaths (or non-traffic areas), the following add-ons are available:

- Footpath joints
- End-section upstands





Туре	Model	В		G		E	F	н
		mini	maxi	mini	maxi	-	•	"
SX80	PL80	180	260	10	90	150	270	150
SX100	PL100	210	310	20	120	150	290	150
SX120	PL120	230	350	20	140	150	310	150
SX160	PL160	280	440	40	270	150	350	150
SX180	PL180	300	480	50	400	150	370	150
SX220	PL230	360	590	40	270	150	420	150
SX250	PL250	380	630	12	92	150	440	150
SX270	PL300	440	740	50	350	150	490	150
SX320	PL350	490	840	30	190	150	540	150
SX350	PL350	490	840	30	190	150	540	150



Oresund (Denmark)

# Global approach

- Specification and design services
- Manufacture by carefully selected partners
- Production supervision to ensure compliance with specifications defined
- Full installation / replacement or technical support
- Inspection and maintenance
- Certifications include ISO 9001, ISO 14001, ISO 45001