WILLBRANDT **Rubber Expansion Joint Type 55 SO for Shock Design**

■ **mainly in stock**

DN 20 to DN 300

The type 55 SO is a low corrugated, highly elastic rubber expansion joint. Its flat corrugated shape minimises flow resistance. It has been specially designed for the shipbuilding industry and is characterised by its high shock expansion absorption.

Type 55 SO is primarily used in naval shipbuilding, where it is used to absorb movement and vibrations and to dampen noise, while at the same time protecting the connected units in the event of a shock.

Bellow design	Low corrugated rubber bellow with reinforcement and shaped sealing bead with core ring, self-sealing (no additional seals required). Suitable for swiveling flanges.
Flange version	Both sides with swiveling flange made of galvanized steel, drilled according to DIN PN 10 (standard). Other materials and dimensions are possible.
Approvals/Conformity	CE, drinking water conform, shipbuilding approvals, TÜV tested in accordance with DIN 4809 (Detailed overview on page 5.)
Vacuum resistance	- DN 20 to 50 vakuum-proof - DN 65 to 250 up to -200 mbar - DN 300 to 1000 not vacuum-proof - With vacuum supporting spiral/ring from DN 65 to 1000 vacuum-proof
Accessories	- Tie rods - Vacuum supporting spiral/rings - Guide sleeves - PTFE lining (see type 55 PTFE on page 66) - Potential equalisation - Flame-resistant protective covers - Dust and splash protection covers - Earth cover / sun protection cover Further information on page 99 - 105.

Specifications

Bellow		Bellow design			Permissible operating data									Surface resistance Ro	
Colour code	Colour marking	Core (inner)	Rein-forcement	Cover (outer)	°C	bar	°C	bar	°C	bar	°C	bar	Short-term °C	Core	Cover
red Sp	■■	EPDM	PEEK	EPDM	-40	10	70	16	100	10	130	8	150	dissipative	dissipative
red	■	IIR	Polyamide	EPDM	-40	10	50	16	70	12	100	10	120	dissipative	dissipative
yellow	■	NBR	Polyamide	CR	-20	10	50	16	70	12	90	10	100	conductive	conductive

Bursting pressure for DN 20 - DN 300: > 48 bar
DN 250 and DN 300 max. 10 bar operating pressure / bursting pressure 30 bar

Application

Type 55 SO red Sp
For heating installations according to DIN 4809. For many years of operation under constant loading with hot water and heating water at 100 °C/110 °C at 10 bar/6 bar operating pressure. Electrically dissipative surface. Not suitable for media with additives containing oil.

Type 55 SO red
For drinking water, hot water, sea water, cooling water with glycol or other chemical additives for water treatment, weak acids, alkalis, salt solutions, technical alcohols, esters and ketones. Electrically dissipative surface. Not suitable for oil products or cooling water with additives containing oil.

Type 55 SO yellow
For oils, lubricants, fuels, gases, city and natural gas (not liquefied) and DIN EN fuels with an aromatic content up to 50 %. Electrically conductive surface.

Important information

The expansion joints are designed for connection to a flange in accordance with EN 1092-1, form A/B, type 11. If the flange dimensions or surface finish differ from this, additional measures must be taken, such as installing an adapter disc (see also table „Rubber bellow sealing profiles“ on page 117).

For aggressive media, please have the material resistance checked by our engineers. The bellows must not be painted or insulated at media temperatures >50 °C. Please also note the planning instructions.