B.4

### **STANDARD**

SMS (Swedish Manufacturing Standard) food couplings are used in the food, chemical and pharmaceutical industries.

#### **OPERATION**

SMS food couplings are connected in the same way as DIN 11851-compliant food couplings. The nut is slid across the head of the female coupling and onto the male coupling. The flat face of the female coupling is brought into contact with the turned-up seal of the male coupling. The nut is then tightened by hand or using a wrench.

LMC-Couplings offer male and female SMS food couplings with smooth or serrated hose shank. The smooth hose shank with collar is designed in accordance with EN 14420-2 / DIN2817 for assembly using RK safety clamps or FLEXOLINE® safety clamps. Where a serrated hose shank assembly is required, HRRK swage ferrules are recommended.

## **FEATURES**



- Electro-polished external surface for improved hygiene
- Wrench surface to prevent twisting of the hose when fitting one half of the coupling to the other half
- 3. Extra-long head for easy assembly and disassembly
- 4. Low Ra-value up to ≤1.6 μm
- 5. Hose shank for assembly with RK safety clamps, FLEXOLINE® safety clamps or HRRK or HRP swage ferrules
- 6. Easy assembly of a protection ring
- Standard EPDM seal, conforming FDA direcitve









## CONNECTION



- 1. Male coupling with smooth hose shank type SMSM ...  $\mathsf{D}$
- 2. EPDM seal type DIN273 ...
- 3. Female coupling with smooth hose shank type SMSV ... D
- 4. Nut type DIN 272 ...

# Food couplings SMS vs DIN 11851

	SMS	DIN 11851
Female coupling	Flat face	Conical face
Male coupling	Turned-up seal	Deep seal
Seal	Square seal	U-shape seal
Male and female thread	Rounded thread	Rounded thread
	complying with DIN 405/1	complying with DIN 405/1
Max. working pressure	6 bar / 87 psi	40 bar / 580 psi

## SMS







**DIN 11851** 







# **APPLICATION**

For the food, beverage, pharmaceutical and chemical industries.

## **WORKING PRESSURE**

6 bar / 87 psi

# **TEMPERATURE**

-40°C / -40°F up to 145°C / 290°F, depending on the seal material used.



B.4

## **MATERIAL**

- Coupling
  Stainless steel AISI 316 EN 1.4401 = shank (standard)
  Stainless steel AISI 304 EN 1.4301 = nut and cap (standard)
- SealEPDMNBR, FPM on request available

## **ASSEMBLY**

- 1. RK safety clamps complying with EN 14420-3 / DIN 2817
- 2. FLEXOLINE® safety clamps
- 3. HRRK or HRP swage ferrules
- 4. Welding

#### **THREADS**

Food couplings complying with SMS are not interchangeable with DIN 11851 couplings. Although the threads of both couplings comply with DIN 405/1, precise dimensions vary, making them non-interchangeable.

ND	THREAD COMPLYING WITH DIN 405/1
ND	THREAD COMPLYING WITH DIN 403/1
25	RD 40 x 1/6"
32	RD 48 x 1/6"
38	RD 60 x 1/6"
51	RD 70 x 1/6"
63.5	RD 85 x 1/6"
76	RD 98 x 1/6"
101.6	RD 132 x 1/6"



## **RA-VALUE**

Roughness average value (Ra-value) SMS couplings

- 1. Ra-value inner side ≤ 1.6 µm
- 2. Ra-value outer side  $\leq$  3.2  $\mu$ m

Other Ra-values and Ra-report available on request.

