



TI-P119-07
CMGT Issue 3

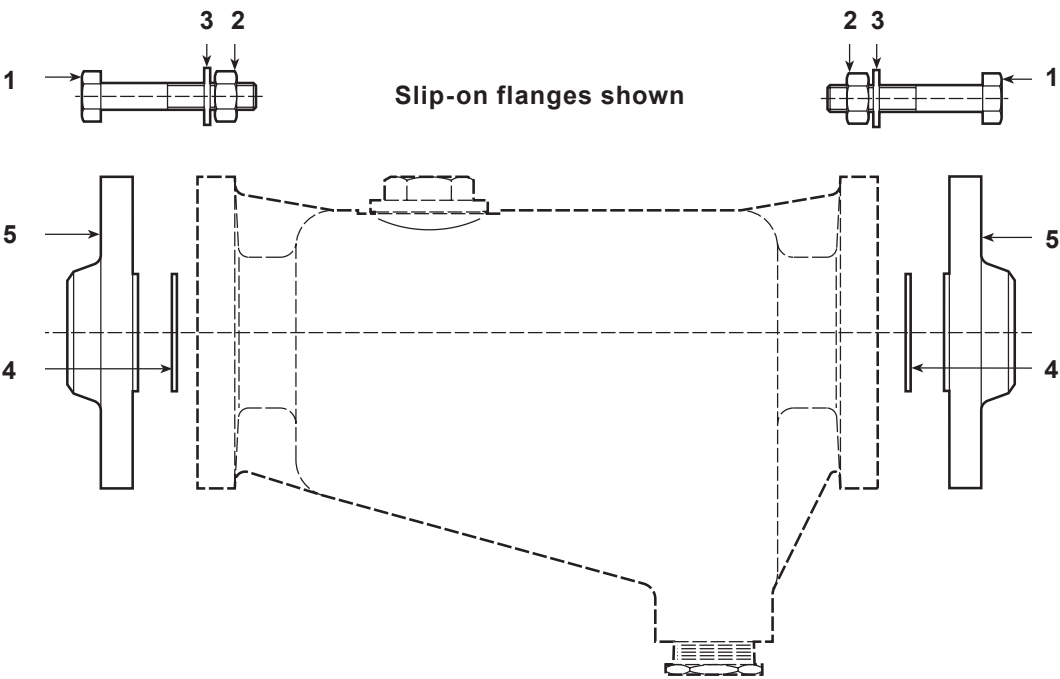
Mating Flanges

Description

Spirax Sarco mating flange sets are designed to provide a suitable connection upstream and downstream of Spirax Sarco flanged products. They comprise 2 flanges, 2 gaskets and 2 sets of fasteners (bolt, washer and nut).

Optional extras

Insulation jackets for flanges both low temperature (220 °C) and high temperature (425 °C) are available for sizes: DN15 - DN50 (see TI-P119-01), and a payback calculator is also available (see TI-P119-02).



Materials

No.	Part	Material	
1	Bolt	Carbon steel	BS 3692 Grade 8.8/DIN 931
2	Nut	Carbon steel	BS 3692 Grade 8/DIN 931 - Zinc plated up to M20 Self colour above M20
3	Washer	Carbon steel	BS 4320 Form A - Zinc plated up to M20 Self colour above M20
4	Gasket	Non-asbestos fibre	BS 7531 Grade X Type A or B
5	Flange	Forged carbon steel	BS 4504 (DIN) ASTM A181 Gr. 60
			ANSI B 16.5 ASTM A105N
			BS 970 070 M20 BS 1503 221/430 ASTM A181 Gr. 60
			BS10

Pipeline ancillaries
Separators and insulation jackets

Available types

DN15 - DN50	BS 10	Table F	Screwed BSP
	BS 10	Table H	Screwed BSP
	ANSI B 16.5	Class 150	Screwed NPT
	ANSI B 16.5	Class 300	Screwed NPT
DN15 - DN80	BS 4504	PN16	Screwed BSP
	BS 4504	PN25/PN40	Screwed BSP
DN15 - DN200	BS 10	Table F	Slip-on
	BS 10	Table H	Slip-on
	BS 4504	PN16	Slip-on
	BS 4504	PN16	Weld neck
	BS 4504	PN25 or PN40	Slip-on
	BS 4504	PN25 or PN40	Weld neck
	ANSI B16.5	Class 150	Slip-on
	ANSI B16.5	Class 300	Slip-on
	ANSI B16.5	Class 600	Slip-on

Other types may be available on request.

Limiting conditions (gaskets)

Note: Type A gaskets are on all flanges except ANSI 600 which require Type B gaskets.		Type A	Type B
	Maximum temperature	430 °C	450 °C
	Maximum pressure	100 bar g	130 bar g
	Maximum steam temperature	250 °C	290 °C
	Maximum inert liquid temperature	440 °C	450 °C

How to order

Example:
1 set of Spirax Sarco mating flanges to fit BS 4504 PN40 flanges providing screwed BSP connections upstream and downstream of the product.

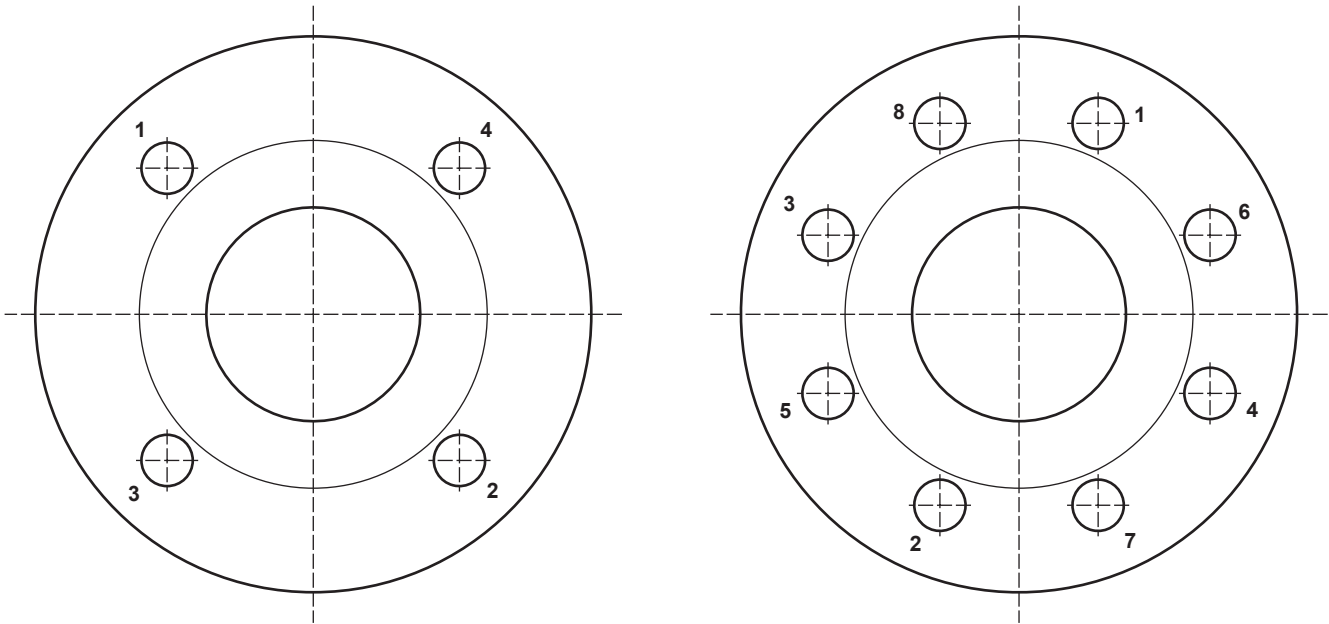
Installation

Upon receipt ensure that the mating flange set consists of the correct number of gaskets and fasteners. The mating flanges should be attached to the designated piece of pipework by the appropriate method of connection i.e. screwed or welded. If welding ensure that an appropriate procedure is selected to suit the flange and pipe material.

When installing the flanges please bear in mind that the gasket material has the following properties for a thickness of 1.5 mm:

Specific gravity	1.5
Compressibility	7% - 14%
Recovery	55%
Stress relaxation	30 N/mm².

It is the responsibility of the installer to ensure that, dependent on the number of fasteners, the gasket material is not under/over tightened as it is torque sensitive. Flange fasteners should be tightened in diametrically opposed sequence, as shown below.



Disposal

The product is recyclable. No ecological hazard is anticipated with the disposal of this product providing due care is taken.