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## Flare / solder adaptor type FSA

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### Introduction



With the flare / solder adaptor, type FSA, flare connections can be easily and reliably changed to solder connections.

The adaptor provides a method of joining that preserves the advantages of flare connections, i.e. easy and fast component replacement. At the same time, the flare / solder adaptor also provides the advantage of soldered joints, i.e. a high degree of tightness that prevents leakage. The adaptor contains no soft gaskets or O-rings which age and lose their sealing properties. Instead, it contains a copper seal which protects

the flare collar against wear and fatigue. This copper seal ensures a tightness similar to that of soldered joints.

The copper seal must be changed each time the adaptor is dismantled for servicing flare components.

Frost grooves in the nut mean that the adaptors are suitable for wet environment, where the temperature is below the water freezing point. The nut cannot be loosened by encapsulated ice formation.

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### Application

The flare / solder adaptor, type FSA, is for use where servicing or some other factor makes a "genuine" solder connection impractical.

The adaptor can be used with advantage for components with flare connections on:

- pressure controls
- filter driers
- sight glasses, etc.

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### Standards

DIN 8964, which stipulates a maximum leak rate for refrigeration plant of  $< 6,4 \times 10^{-6}$  mbar l/s at a differential pressure of 10 bar He.

The Dutch refrigeration standard (9.12.94/IBP 07d 94007, part 2.2.8.2.): "In variation to regulation 2.2.8.1 flanged joints, compression joints, quick-couplings, flat or conical packing or trapped O-rings will be permitted, but only if the packing or O-ring provide the seal and are replaced if the joint is disconnected and then remade.

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### Technical data

*Refrigerants*  
HFC, HCFC, CFC and other fluorinated refrigerants

*Max. working pressure*  
PB = 35 bar

*Leak rate*  
Max. 1 g / year

*Max. tightening torque*  
1/4 in. / 6 mm: 20 Nm  
3/8 in. / 10 mm: 30 Nm  
1/2 in. / 12 mm: 60 Nm  
5/8 in. / 16 mm: 100 Nm  
3/4 in. / 18 mm: 200 Nm

## Flare / solder adaptor, type FSA

### Type designation

<i>Example</i> FSA 36m	FSA	3	6 m
Flare/solder adaptor			
Flare nut in eighth of an inch			
2 = 1/4 in. or 6 mm, 3 = 3/8 in. or 10 mm, 4 = 1/2 in. or 12 mm, 5 = 5/8 in. or 16 mm, 6 = 3/4 in.			
Solder connection			
2 = 1/4 in., 3 = 3/8 in., 4 = 1/2 in., 6 = 3/4 in. 6m = 6 mm, 10m = 10 mm, 12m = 12 mm, 16m = 16 mm or 5/8 in., 18m = 18 mm			

### Ordering

#### Flare / solder adaptor set, 2 pcs.

Type	Connection flare × solder in.	Code no. for 2 pcs.	Type	Connection flare × solder mm	Code no. for 2 pcs.
FSA 22	1/4 × 1/4	<b>023U8002</b>	FSA 26m	1/4 × 6	<b>023U8001</b>
FSA 33	3/8 × 3/8	<b>023U8004</b>	FSA 310m	3/8 × 10	<b>023U8003</b>
FSA 44	1/2 × 1/2	<b>023U8006</b>	FSA 412m	1/2 × 12	<b>023U8005</b>
FSA 516m	5/8 × 5/8	<b>023U8007</b>	FSA 516m	5/8 × 16	<b>023U8007</b>
FSA 66	3/4 × 3/4	<b>023U8010</b>	FSA 618m	3/4 × 18	<b>023U8009</b>

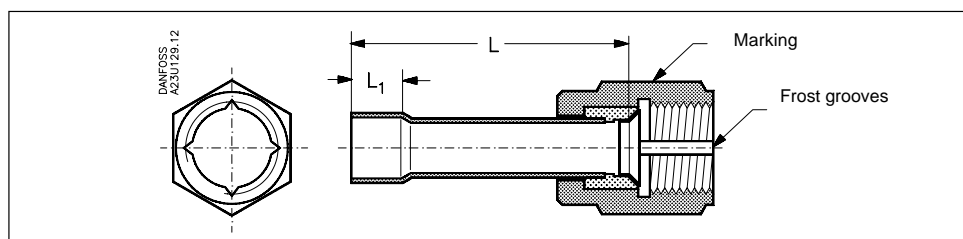
#### Flare / solder adaptor set, 1 pc.

Type	Connection flare × solder in.	Code no. for 1 pc.	Type	Connection flare × solder mm	Code no. for 2 pcs.
FSA 22	1/4 × 1/4	<b>023U8012</b>	FSA 26m	1/4 × 6	<b>023U8011</b>
FSA 32	3/8 × 1/4	<b>023U8022</b>	FSA 36m	3/8 × 6	<b>023U8021</b>
FSA 33	3/8 × 3/8	<b>023U8014</b>	FSA 310m	3/8 × 10	<b>023U8013</b>
FSA 44	1/2 × 1/2	<b>023U8016</b>	FSA 412m	1/2 × 12	<b>023U8015</b>
FSA 516m	5/8 × 5/8	<b>023U8017</b>	FSA 516m	5/8 × 16	<b>023U8017</b>
FSA 66	3/4 × 3/4	<b>023U8020</b>	FSA 618m	3/4 × 18	<b>023U8019</b>

#### Accessories

Copper seal	Size	Number in packing	Code no.
B2 - 4 spec.	1/4 in. / 6 mm	300	<b>011L4025</b>
B2 - 6	2/8 in. / 10 mm	300	<b>011L4017</b>
B2 - 8	1/2 in. / 12 mm	200	<b>011L4018</b>
B2 -10	5/8 in. / 16 mm	100	<b>011L4019</b>
B2 -12	3/4 in. / 18 mm	50	<b>011L4020</b>

### Dimensions and weights



Type	Connection		L mm	L <sub>1</sub> mm	Stamping	Weight kg
	Flare in.	Solder ODF				
FSA 22	1/4	1/4 in.	39	7		0.05
FSA 26m	1/4	6 mm	39	7	MM	0.05
FSA 32	3/8	1/4 in.	39	7		0.09
FSA 36m	3/8	6 mm	50	7	MM	0.09
FSA 33	3/8	3/8 in.	50	9		0.09
FSA 310m	3/8	10 mm	50	9	MM	0.09
FSA 44	1/2	1/2 in.	57	10		0.11
FSA 412m	1/2	12 mm	57	10	MM	0.11
FSA 516m	5/8	5/8 in. / 16 mm	57	12	MM	0.14
FSA 516	5/8	16 mm	57	14	MM	0.14
FSA 66	3/4	3/4 in.	68	14		0.28
FSA 618m	3/4	18 mm	68	14	MM	0.28