

STANDARD

Large bore flange couplings are specially designed for large bore hoses starting from DN 200 up to DN 400. Due to the lightweight, large bore flanges are very user friendly during hose assembly.

OPERATION

A flange coupling is fitted to a rubber or pvc hose using a hose shank coupling, which is inserted into the hose. The hose shank may be smooth with collar or serrated.

1. The design of the smooth hose shank of flange couplings is based on the principle of EN 14420-2. To limit the weight of large bore flanges the wall thickness of the flange coupling is reduced to the minimum of 2-3mm. Up to DN 200 large bore flange couplings with smooth hose shank are assembled with RK safety clamps complying with EN 14220-3 / DIN 2817.
2. Serrated hose shanks with collars are recommended for assembly using band or bolted clamps.

The hose shank may have a fixed or swivel flange. A flange-to-hose connection should preferably be fitted with at least one swivel flange. During assembly, the connection with the fixed flange is fitted to the piping system first, followed by the swivel flange. The swivel flange prevents twisting of the hose during assembly.

APPLICATION

To connect rubber, pvc and thermoplastic hoses.

WORKING PRESSURE

Flange ring: connection working pressure classes PN 10 / PN 16

Hose shank - PN 10

TEMPERATURE

-20°C / -40°F up to 65°C / 149°F

Hose, coupling, assembly method and seal must be chosen in relation with the desired application and temperature.

MATERIAL

Stainless steel AISI 304

White plated steel

ASSEMBLY

Smooth hose shank: RK safety clamps according to EN 14420-3

Serrated hose shank: band or bolted clamps



1. Flange coupling

Standard	-
Description	Swivel or fixed flange coupling
Dimension ¹	ND 200 / ND 250 / ND 300 / ND 350 / ND 400
Working pressure	Maximum 10 bar
Assembly	Safety clamps + band clamps
Material	Steel or stainless steel AISI 304
Production process	Welding

2. Hose shank

Standard	-
Description	Multi serrated hose shank / smooth hose shank
For hose ¹	200-204 / 250-254 / 300-304 / 350-354 / 400-406 mm
Working pressure	Maximum 10 bar
Assembly	Safety clamps or band clamps
Material	Plated steel or stainless steel AISI 304
Production process	Welded tube

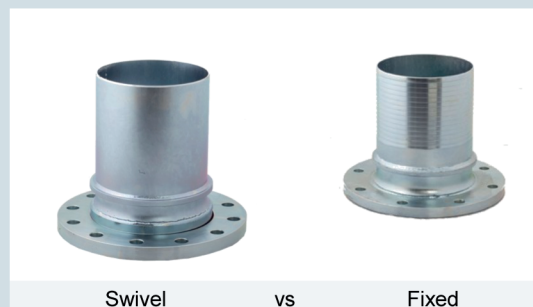
3. Stub end

Standard	-
Description	Lapped pipe end
Dimension ¹	ND 200 / ND 250 / ND 300 / ND 350 / ND 400
Working pressure	Maximum 10 bar
Assembly	Flat welding end
Material ²	Plated steel or stainless steel AISI 304
Production process	Forged steel plate

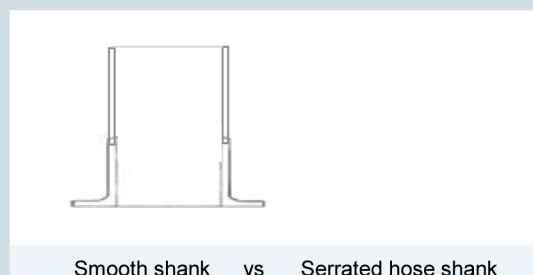
4. Flange ring

Standard	DIN 2642 - or pressed / DIN 2576
Description	Swivel flange / fixed flange
Dimension	ND 200 / ND 250 / ND 300 / ND 350 / ND 400
Flange connection	PN 10 / PN 16
Material	Plated steel / stainless steel AISI 304
Production process	Forging

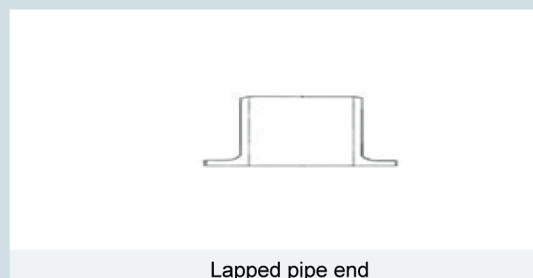
¹ Due to limitations in safety clamps the smooth hose flange couplings are only offered in DN 200.



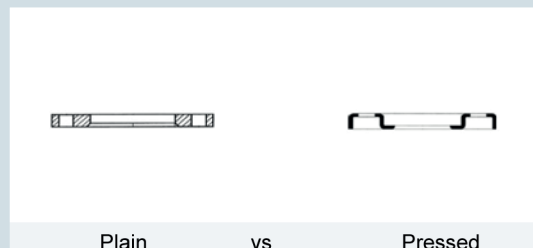
Swivel vs Fixed



Smooth shank vs Serrated hose shank



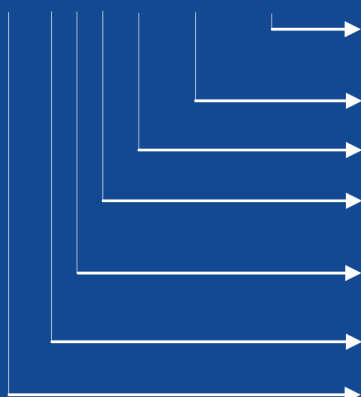
Lapped pipe end



Plain vs Pressed

ORDERING REFERENCES

Example: RR4_F_L_S_200_PN10_ECO1



Flange type: plain flange = ECO 1
pressed flange = ECO 2

Pressure class flange ring

200 = size flange and hose shank

Hose shank type: S = serrated hose shank
G = smooth hose shank

Swivel vs fixed flange: L = swivel flange
F = fixed flange

Type of coupling: F = Flange coupling

Material: RR4 = stainless steel AISI 304 (standard)
RR6 = stainless steel AISI 316 (on request)
- = white plated steel