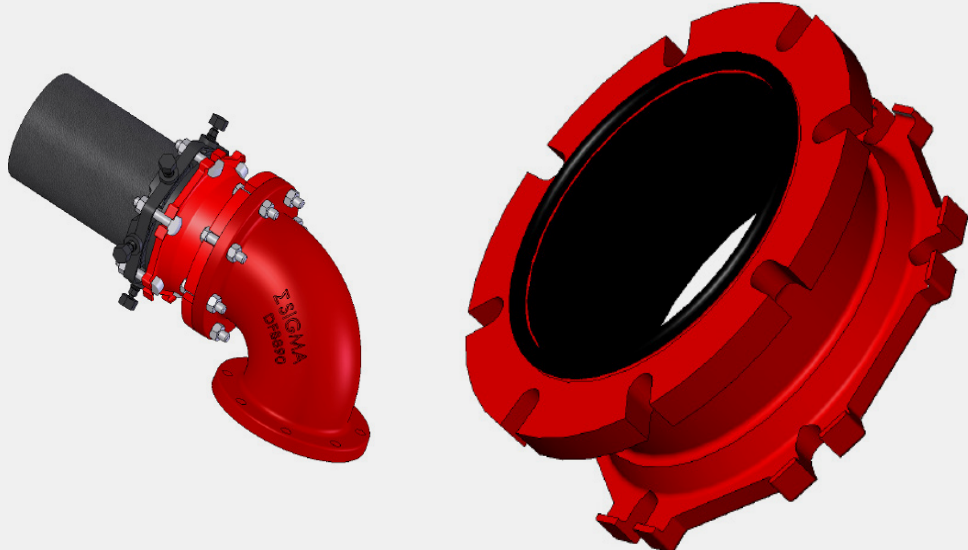
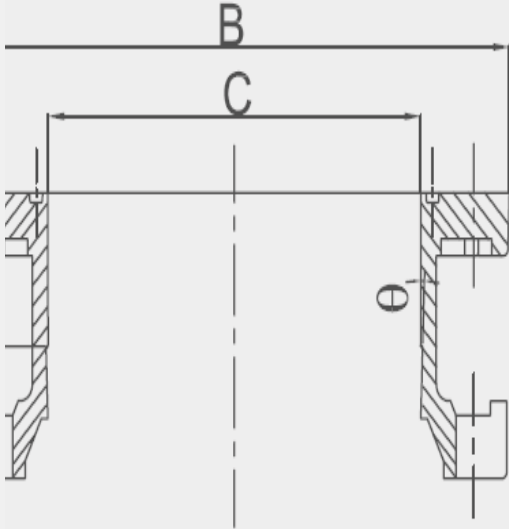


SIGMAFLANGE™ Adapter



SIGMA Corporation's SIGMAFLANGE Model SFA is designed to connect plain-end ductile iron or PVC pressure pipe to a flanged fitting, pipe, valve and other flanged appurtenances. An oversized ductile iron mechanical joint x flanged sleeve provides proper sealing of the adjacent flange outlet using an O-ring gasket while accommodating necessary pipe end restraint to the mechanical outlet using SIGMA ONE-LOK™ SLDE for ductile iron or SLCE for PVC pipe wedge-action restraining gland.

Deflection Chart

Nominal Size	Item No.	Deflection	Pressure Rating
3	SFA3	5 deg	350 psi
4	SFA4	5 deg	350 psi
6	SFA6	5 deg	350 psi
8	SFA8	5 deg	350 psi
10	SFA10	5 deg	350 psi
12	SFA12	5 deg	350 psi
14	SFA14	2 deg	350 psi
16	SFA16	2 deg	350 psi
18	SFA18	1.5 deg	250 psi
20	SFA20	1.5 deg	250 psi
24	SFA24	1.5 deg	250 psi
30	SFA30	1 deg	250 psi
36	SFA36	1 deg	250 psi

Features:

- Accommodates pipe misalignment.
- Acts as a dismantling joint for service and maintenance requirements.
- Provides a pressure rating equal to the pipe with a 2:1 factor of safety.
- No special tools required for installation or removal.
- Allows slight variations in field-cut pipe.
- Slotted bolt hold design for ease of installation.
- Accommodate DIA PVC pipe.
- O-ring on flange face for better compression and sealing.

SIGMAFLANGE™ Adapter

Sample Specification

Restrained joint flange adapter in connecting plain-end pipe to a flanged fitting, valve or pipe shall incorporate a ductile iron mechanical joint x flange oversized sleeve and wedge-action restraining gland manufactured in accordance with ASTM A536, Grade 65-45-12. The flanged end must conform to Class 125/150 and ANSI/AWWA C115/A21.15 drill pattern. The mechanical joint end must be in accordance with ANSI/AWWA C111/A21.11, C110/A21.10 and C153/A21.53. Adapter must be installed using a SIGMA ONE-LOK for ductile iron or PVC pipe as appropriate for the carrier pipe material. The restrained joint flange adapter shall offer a maximum water working pressure rating of 350 psi (3" through 12") or 250 psi (14"-24") and provide a minimum 2:1 factor of safety. Restrained joint flange adapter shall be SIGMAFLANGE™ Adapter Model SFA or approved equal.

Installation Instructions

1. Examine the SIGMAFLANGE adapter sleeve to insure that all parts are free of damage and the SIGMA provided O-ring is properly secured in the cavity located on the face of the flanged end. Clean the pipe end thoroughly of any dirt or debris to facilitate the assembly of the mechanical joint gasket and provide a proper seal. Slide the SIGMA ONE-LOK™ restraining gland over the pipe end with the frontal lip facing the pipe end. Thoroughly apply soapy water or approved pipe lubricant per the ANSI/AWWA C111/A21.11 standard to the UL recognized mechanical joint gasket and the plain end of the pipe and slide the gasket over the plain end pipe making sure the tapered side of the gasket is facing the pipe end.

2. Install the SIGMAFLANGE adapter sleeve against the mating flanged outlet and insert the flange bolts in the corresponding bolt holes. Completely assemble the flanged joint (flange bolts are not included with the SIGMAFLANGE adapter). Insert the plain end pipe with the mechanical joint gasket and ONE-LOK restraining gland into the mechanical joint end of the adapter sleeve. The pipe must be inserted into the SIGMAFLANGE sleeve a minimum distance of 2.125" on 3"-4", 2.5" on 6"-12", and 3" on 14"-24" in order to accommodate the maximum deflection in the joint.

3. Ensure that the pipe is centered and the spacing of the pipes outside diameter and adapter sleeve's inside diameter are even throughout the entire circumference of the joint. Slide the mechanical joint gasket forward and seat evenly inside the mechanical joint cavity of the adapter sleeve, followed by the ONE-LOK restraining gland and hand tighten the necessary t-head bolts and nuts in the corresponding bolt holes. If joint deflection is required, make deflection following joint assembly but before tightening the bolts.

4. Install the SIGMA ONE-LOK restraining gland in accordance with the SIGMA installation instructions as appropriate for PVC or ductile iron pipe.

