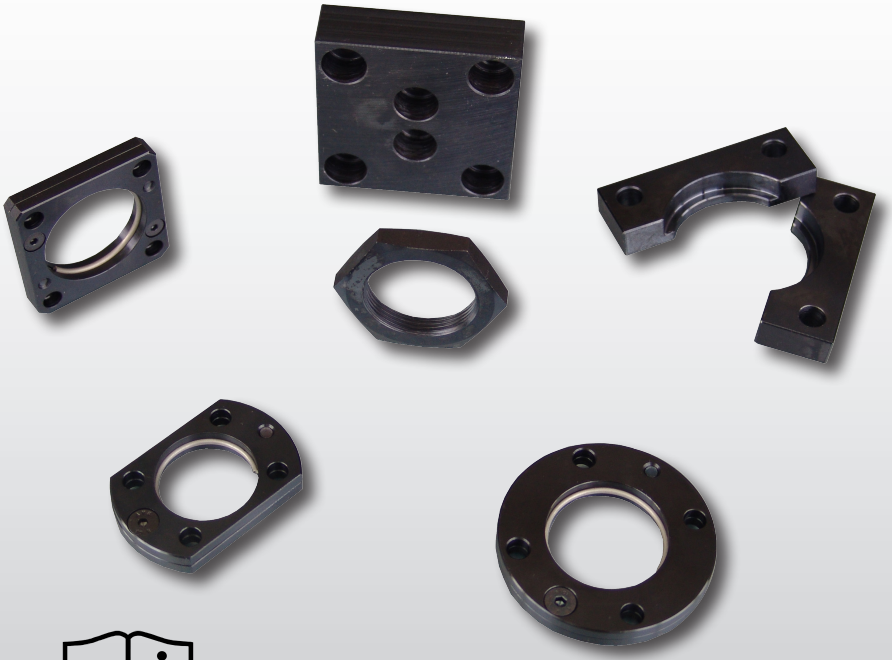


Follow guidelines

Flanges for attaching gas springs to tools

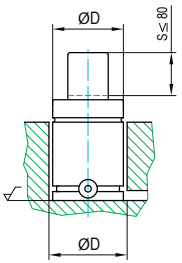


Code	Type
FS	
FSC	
FP	
FPR	
FB	
FI	
FI / 1	
FR	
FRS	

POCKET ASSEMBLY · MONTAJE EN CAJERA

A flat surface is to be guaranteed for the base of the cylinder. Inadequate fixtures produce structural damage or reduce gas spring useful life. This type of installation is not possible for interconnected gas springs.

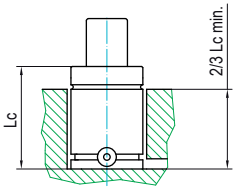
Se debe asegurar un apoyo plano contra la base del cilindro. Alojamientos inadecuados causan daños estructurales o reducen la vida útil del cilindro. Este tipo de instalación no es posible para cilindros intercomunicados.



TOLERANCE / TOLERANCIA

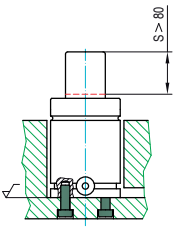
D≤95 - ØD $^{+1.0}_{+0.5}$

D≤120 - ØD $^{+1.5}_{+1.0}$



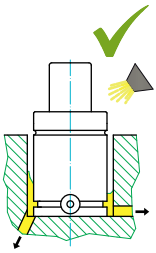
Hole dimensioning

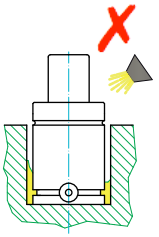
Dimensionado cajera



For strokes bigger than 80mm use clamping screws

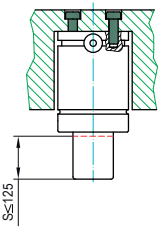
Para carreras superiores a 80mm utilizar tornillos de amarre





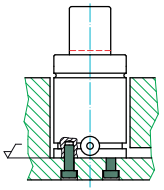
The hole is to be equipped with drainage and conducts are to be cleaned regularly

Proveer de orificios de drenaje a la cajera, y limpiar con regularidad



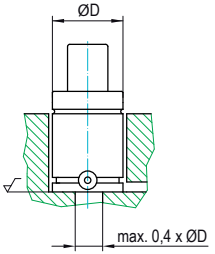
In upside down pockets always mandatory clamping screws

En cajeras invertidas, obligatorio siempre amarre con tornillos



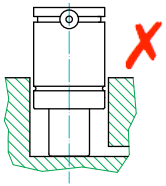
The use of screws is recomended even in drop-in assemblys

Incluso en montajes en cajera, se recomienda la utilizacion de tornillos



In drop-in assemblys respecte the maximum diameter

En cajeras pasante, respetar diametro maximo



Never install a cylinder in a pocket in an inverted position

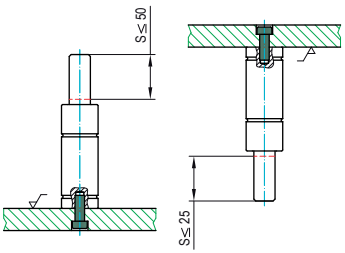
Nunca instalar un cilindro en cajera en posicion invertida

ASSEMBLY WITH SCREWS · MONTAJE CON TORNILLOS

Secure the gas spring to the tool firmly. If possible, we recommend using the fixture holes in the gas spring to secure it with screws. This type of fixture is the most recommended for interconnected gas springs as vibrations and damage to the connecting elements are thus avoided.
In order to ensure a better grip of the gas spring to the tool, you should follow these guidelines:

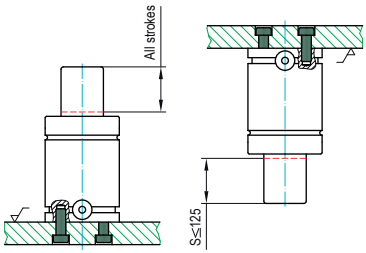
Fijar el cilindro al útil sólidamente. Si es posible, se recomienda usar los agujeros de amarre del cilindro para fijarlo con tornillos. Esta fijación de los cilindros es la más recomendable para cilindros intercomunicados, ya que evitan vibraciones y daños en los elementos de conexión.

Con el fin de asegurar la mejor sujeción del cilindro al útil, es recomendable seguir las siguientes indicaciones:



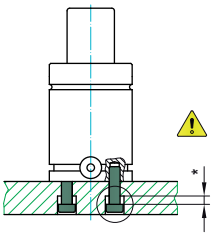
Fastening with a single central screw

Amarre con un solo tornillo central



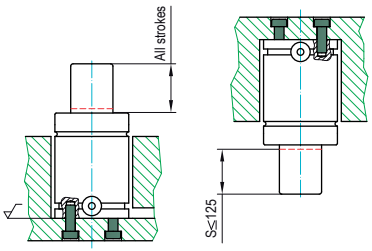
Fastening with multiple screws

Amarre con múltiples tornillos



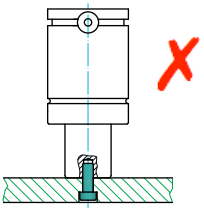
The screws must have the rigth size

Los tornillos deben tener la longitud adecuada



In inverted position, the cylinder must always be secured with screws

En posicion invertida el cilindro siempre amarrado con tornillos



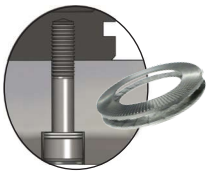
Only for maintenance and transport

Usar solo para mantenimiento y transporte



The stem thread should only be used for maintenance or transportation operations

La rosca del vástago solo debe usarse para mantenimiento o transporte



The use of safety washers is recommended in all screwed fixtures or anaerobic thread fixtures.

Se recomienda utilizar arandelas de seguridad en todas las uniones atornilladas o fijadores de rosca anaeróbicos.

Torque references for SHCS-type threaded screws:

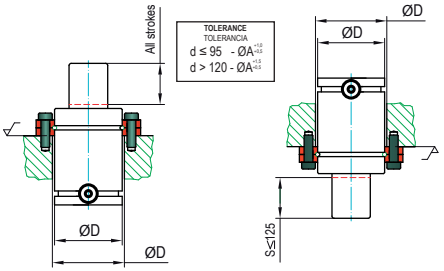
- **Quality 8.8**
- **Without lubrication**
- **New thread**
- **Torque coefficient μ = 0,14**

Diameter Diámetro	Torque (Nm)
M6	10
M8	25
M10	49
M12	85
M16	210

Valores de referencia de apriete para tornillos roscados tipo SHCS:

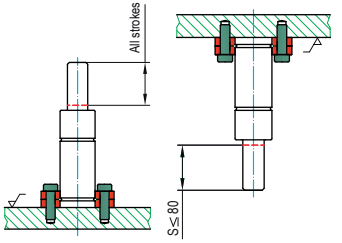
- Calidad 8.8
- Sin lubricación
- Rosca nueva
- Coeficiente de apriete μ = 0,14

FS / FSC / FRS FLANGE ASSEMBLY · MONTAJE CON BRIDA FS / FSC / FRS



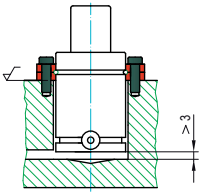
Respect maximum stroke in inverted position

Respetar carrera máxima en posicion invertida



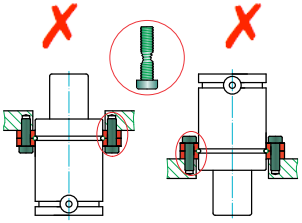
Take into account maximum stroke for instalation in inverted position

Tener en cuenta la carrera máxima para instalación en posición invertida



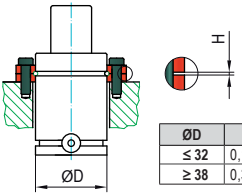
Leave enough space at the base

Dejar espacio suficiente en la base



The screws must not withstand the effort of the cylinder

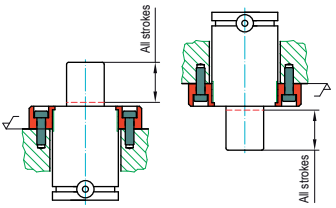
Los tornillos no deben soportar el esfuerzo del clindro



ØD	H
≤ 32	0,1 ÷ 0,3
≥ 38	0,3 ÷ 0,6

According to VDI regulation, there is a gap between the flage parts

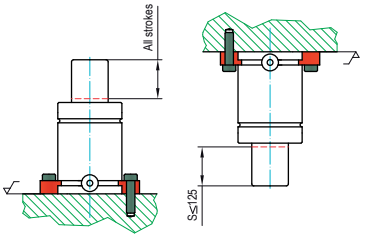
Según normativa VDI, existe un gap entre las partes de la brida



FRS FLANGE
(Threaded flange with permanent seal)

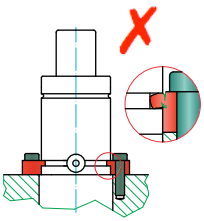
(Brida roscada con sellado permanente)

FP / FPR LOWER FLANGE ASSEMBLY · BRIDA CON MONTAJE INFERIOR FP / FPR



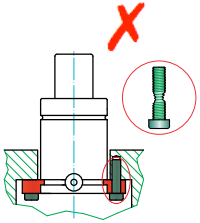
Respect maximum stroke in inverted position

Respetar carrera máxima en posicion invertida



Provide enough support to the entire cylinder base

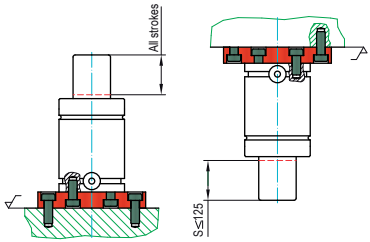
Proveer de apoyo suficiente a toda la base del cilindro



The clamping screws must not withstand the effort of the cylinder

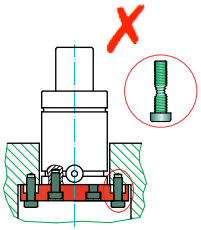
Los tornillos de amarre no deben soportar el esfuerzo del cilindro

ASSEMBLY WITH FB BASE FLANGE · MONTAJE CON BRIDA BASE FB



Respect maximum stroke in inverted position

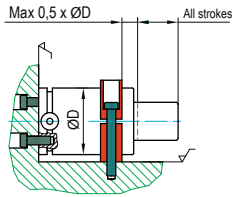
Respetar carrera máxima en posición invertida

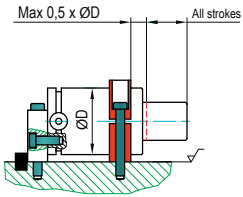


Respect maximum stroke in inverted position

Respetar carrera máxima en posición invertida

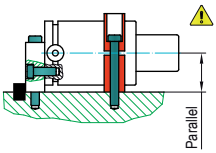
ASSEMBLY WITH FI / FI/1 TYPE FLANGE · MONTAJE CON BRIDA LATERAL FI / FI/1





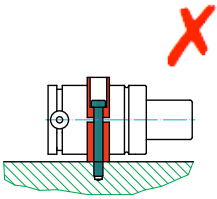
The cylinder must be supported on its base correctly

El cilindro debe estar soportado en su base correctamente



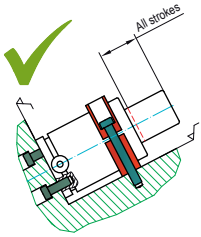
The cylinder support surface must be completely parallel

La superficie de apoyo del cilindro debe ser completamente paralela



The cylinder flange is not enough to withstand the effort of the cylinder

La brida del cilindro no es suficiente para soportar el esfuerzo del cilindro



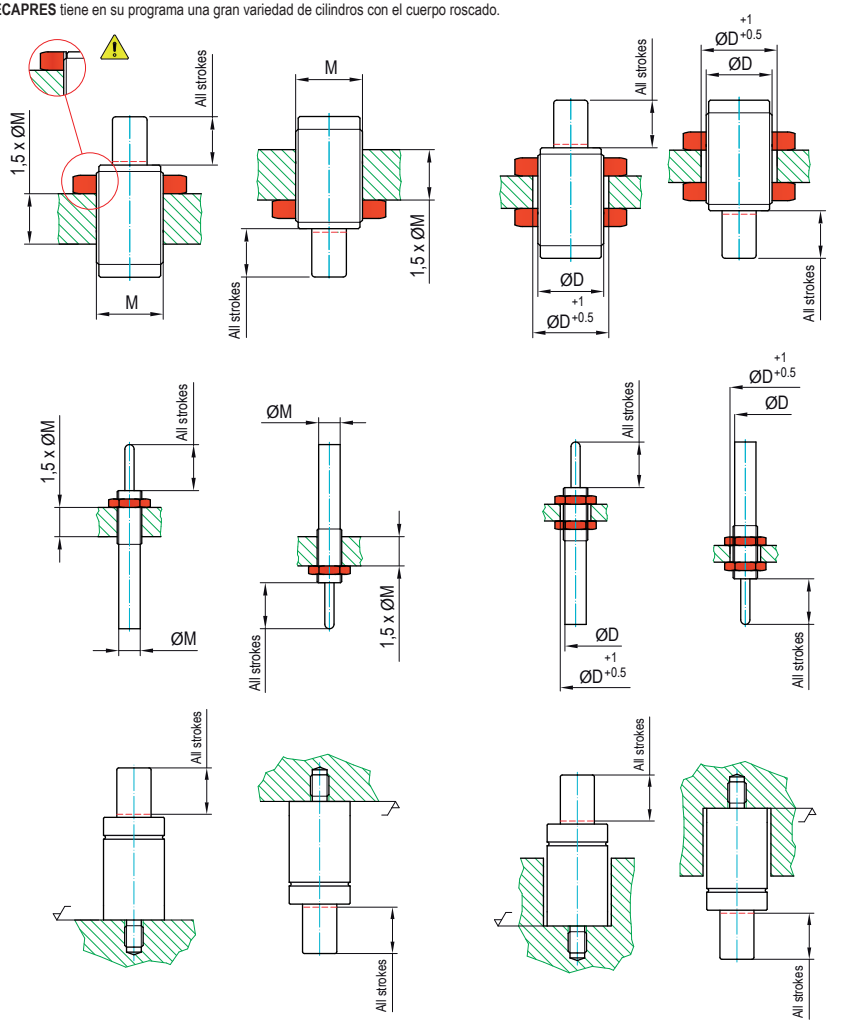
The cylinder must be supported on its base correctly

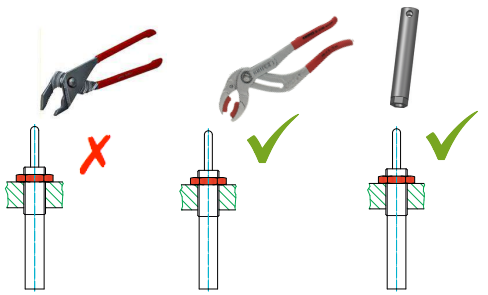
El cilindro debe estar soportado en su base correctamente

ASSEMBLY WITH THREADED GAS SPRINGS · MONTAJE CON CILINDROS ROSCADOS

TECAPRES has a wide variety of threaded body gas springs in its program.

TECAPRES tiene en su programa una gran variedad de cilindros con el cuerpo roscado.

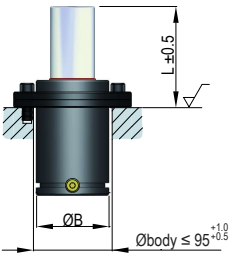


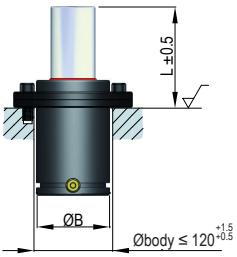


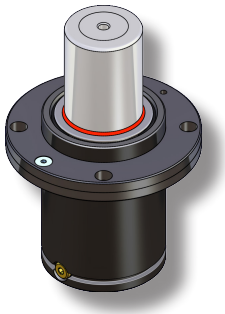


The use of chemical thread locker is recommended. This prevents the gas cylinder from coming loose due to vibrations and shocks

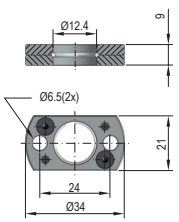
Se recomienda la utilizacion de fijadores de rosca quimicos. Esto evita que el cilindro de gas se pueda soltar debido a vibraciones y golpes.



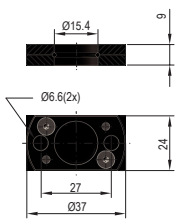




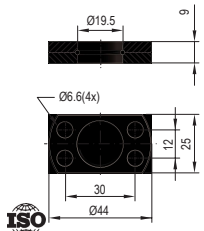
FS 12



FS 15

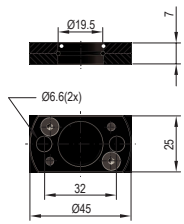


FS 19

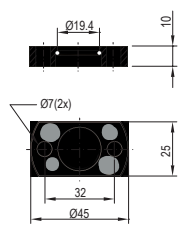


VDI

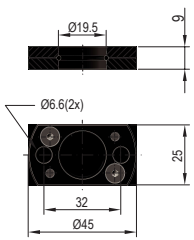
FS 19/1



FS 19/2

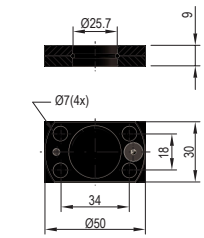


FS 19/3

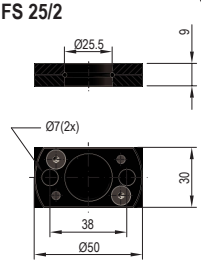


VDI

FS 25/1

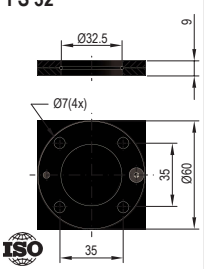


FS 25/2



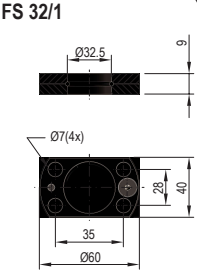
VDI

FS 32

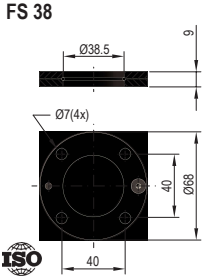


VDI

FS 32/1

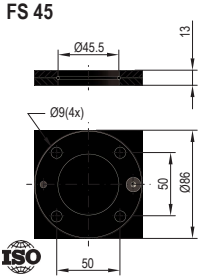


FS 38

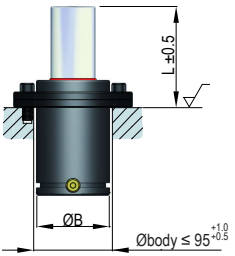


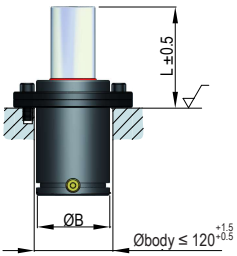
VDI

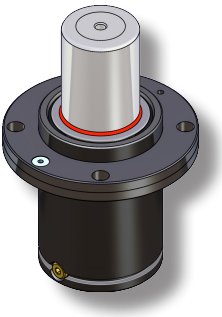
FS 45

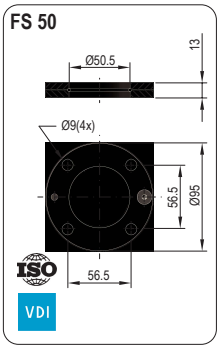


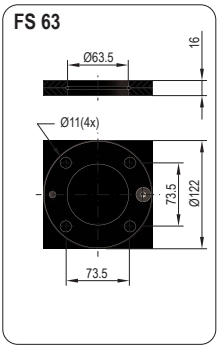
VDI

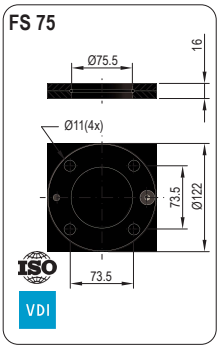

L ±0.5
ØB
Øbody ≤ 95 +1.0 +0.5

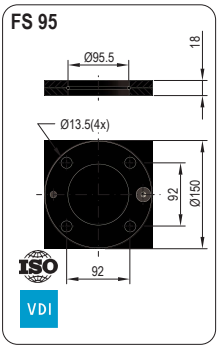

L ±0.5
ØB
Øbody ≤ 120 +1.5 +0.5

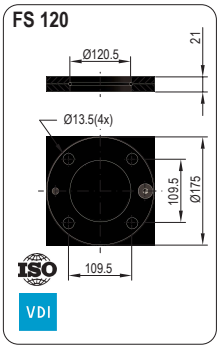


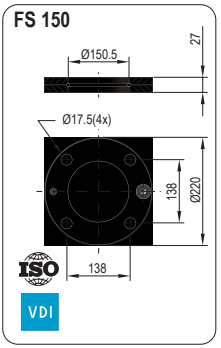

FS 50
Ø50.5
13
Ø9(4x)
56.5
Ø95
56.5
ISO
VDI

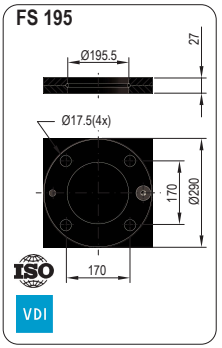

FS 63
Ø63.5
16
Ø11(4x)
73.5
Ø122
73.5


FS 75
Ø75.5
16
Ø11(4x)
73.5
Ø122
73.5
ISO
VDI

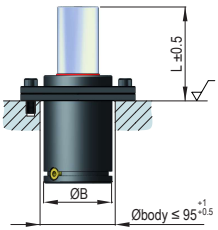

FS 95
Ø95.5
18
Ø13.5(4x)
92
Ø150
92
ISO
VDI

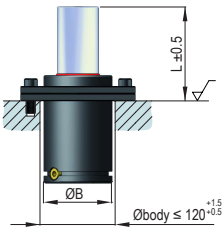

FS 120
Ø120.5
21
Ø13.5(4x)
109.5
Ø175
109.5
ISO
VDI

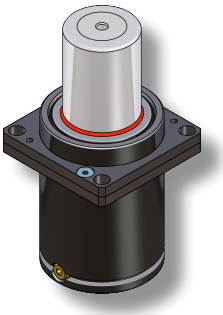

FS 150
Ø150.5
27
Ø17.5(4x)
138
Ø220
138
ISO
VDI


FS 195
Ø195.5
27
Ø17.5(4x)
170
Ø290
170
ISO
VDI

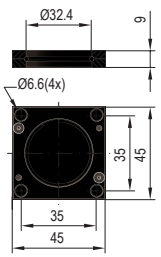
FSC FLANGE



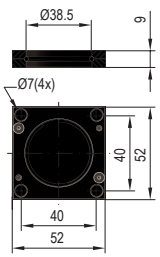




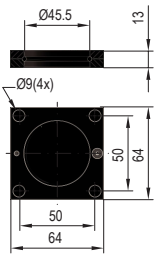
FSC 32



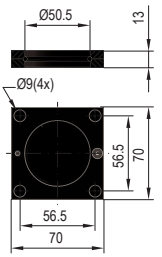
FSC 38



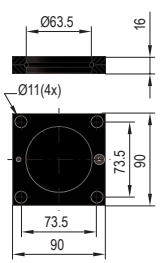
FSC 45



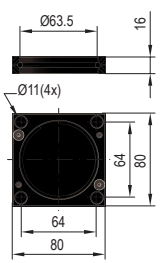
FSC 50



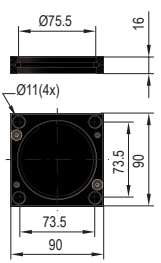
FSC 63



FSC 63/1

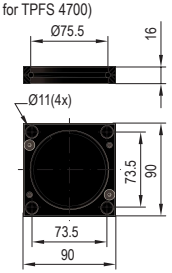


FSC 75

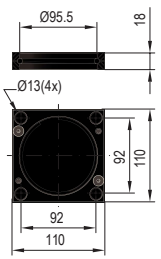


FSCS 75

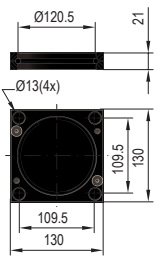
(only for TPFS 4700)



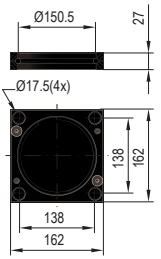
FSC 95



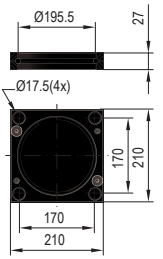
FSC 120

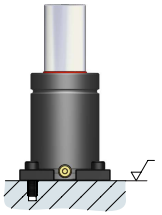


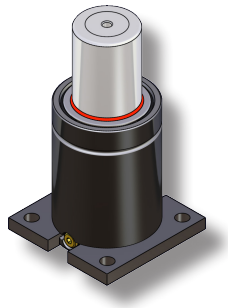
FSC 150



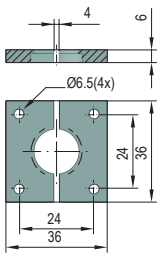
FSC 195



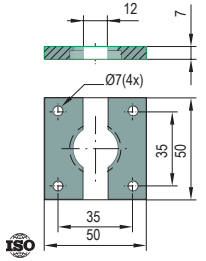




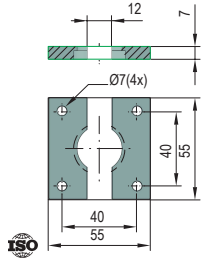
FP 20



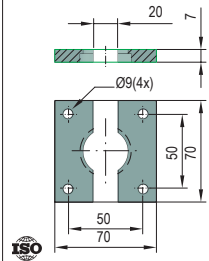
FP 32



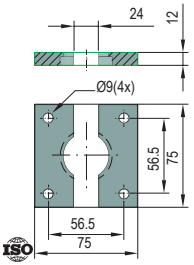
FP 38



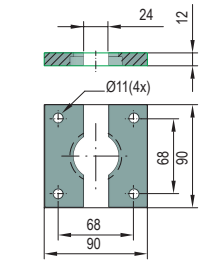
FP 45



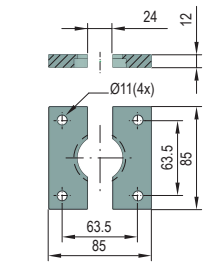
FP 50



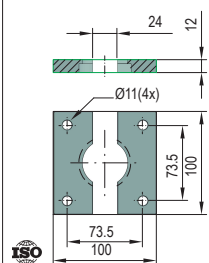
FP 63



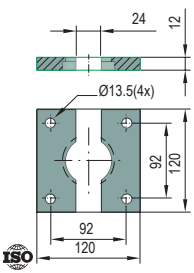
FP 63/1



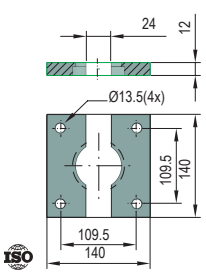
FP 75



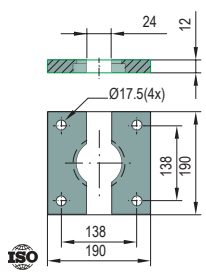
FP 95



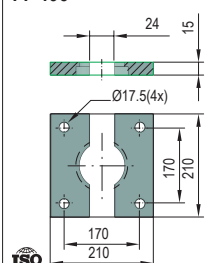
FP 120

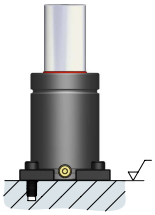


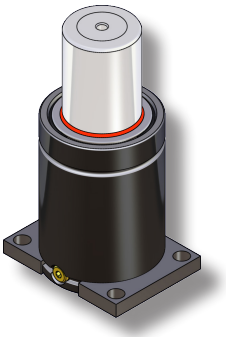
FP 150



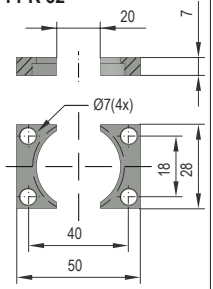
FP 195



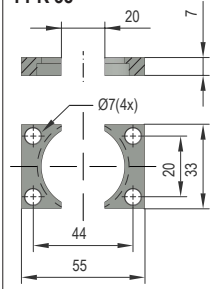




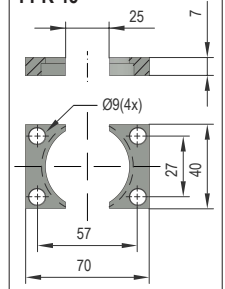
FPR 32



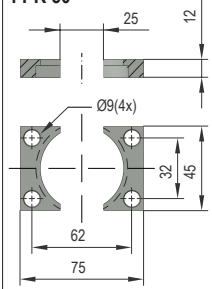
FPR 38



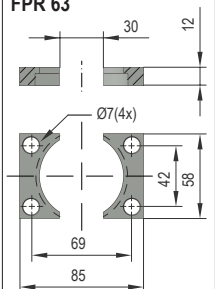
FPR 45



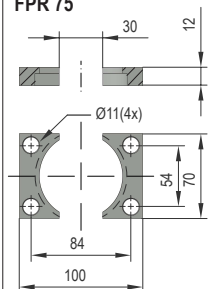
FPR 50



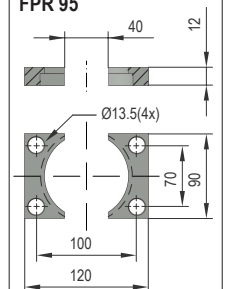
FPR 63



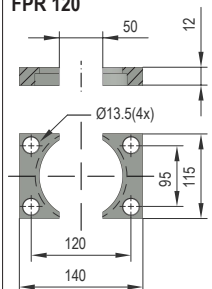
FPR 75



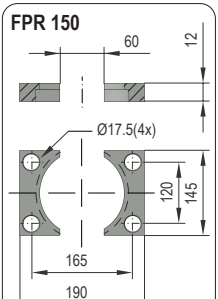
FPR 95



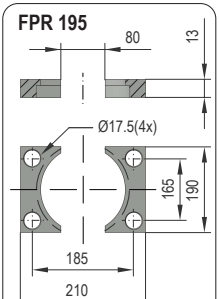
FPR 120

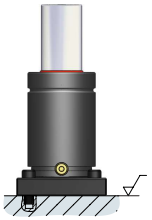


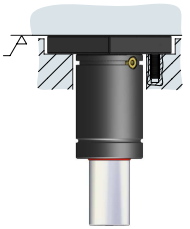
FPR 150

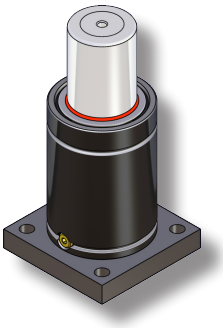


FPR 195

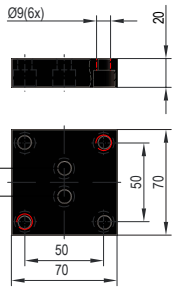




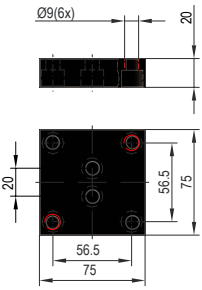




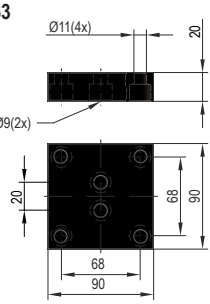
FB 45



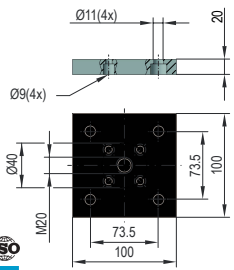
FB 50



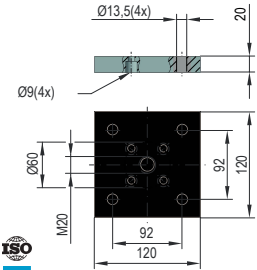
FB 63



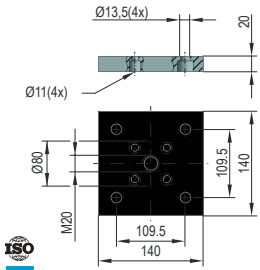
FB 75



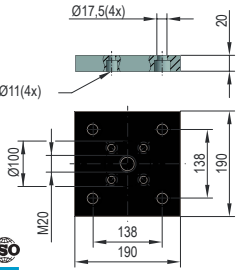
FB 95



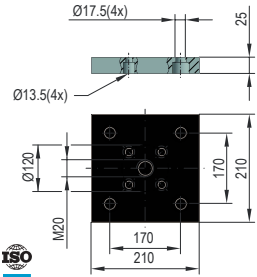
FB 120

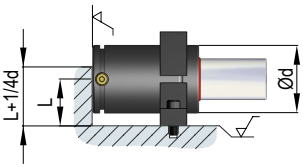


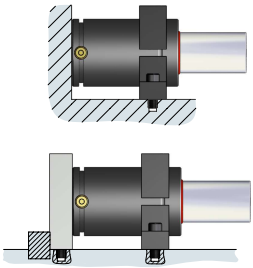
FB 150

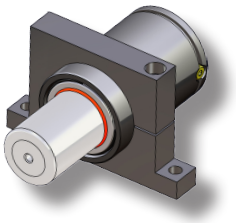


FB 195

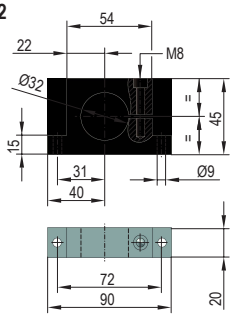




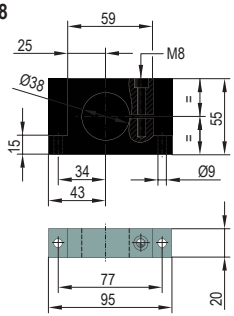




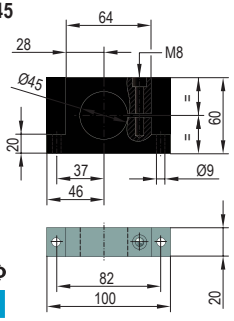
FI 32



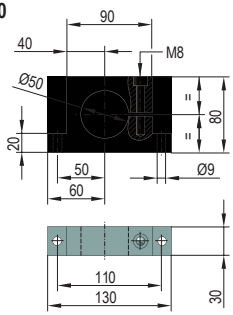
FI 38



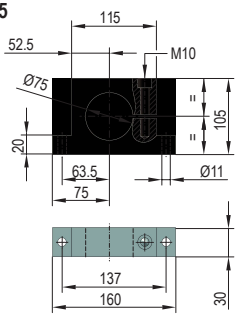
FI 45



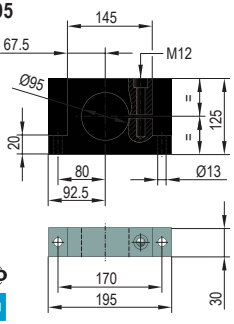
FI 50



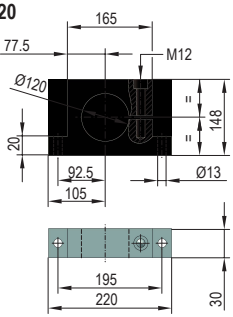
FI 75



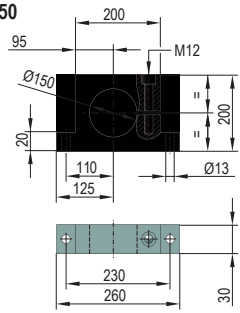
FI 95

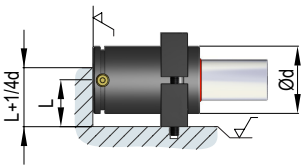


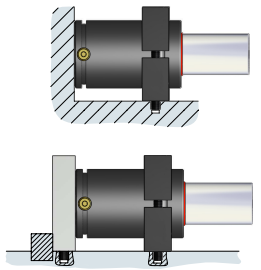
FI 120

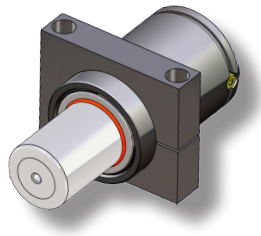


FI 150

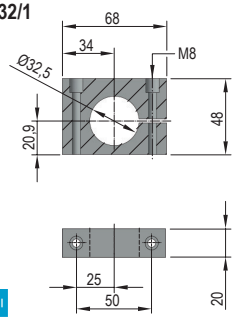




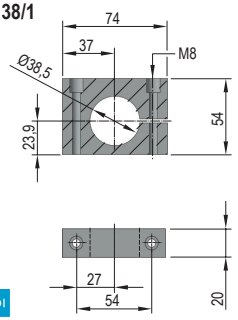




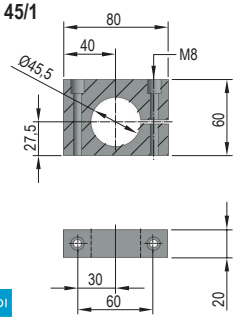
FI 32/1



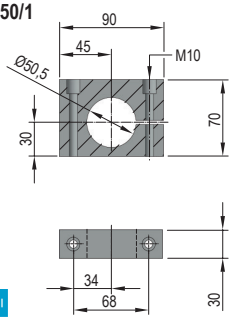
FI 38/1



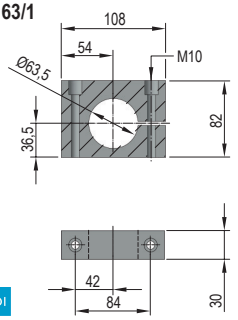
FI 45/1



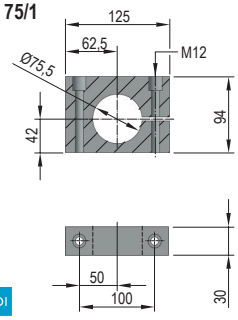
FI 50/1



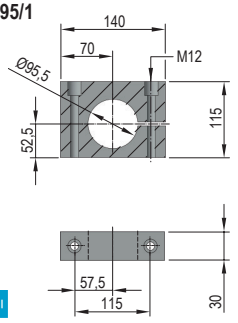
FI 63/1



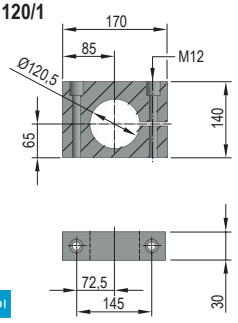
FI 75/1



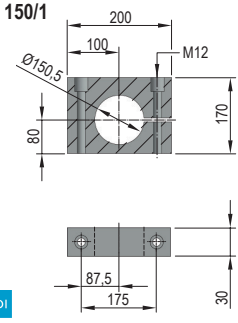
FI 95/1

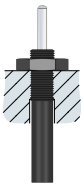


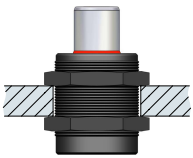
FI 120/1

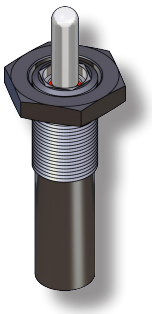


FI 150/1

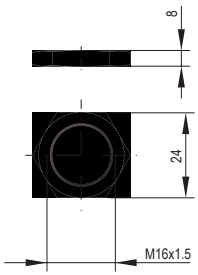




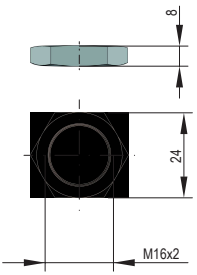




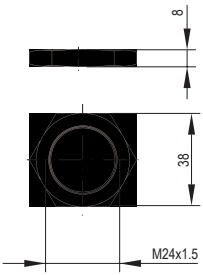
FR 16



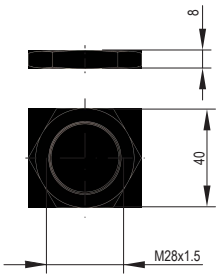
FRC 16.1



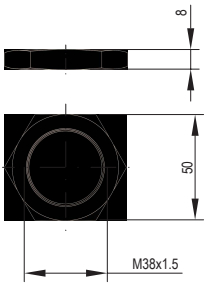
FR 24



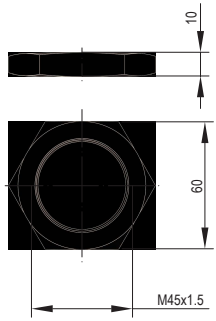
FR 28



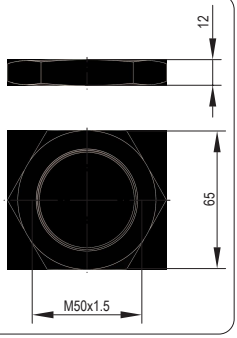
FR 38

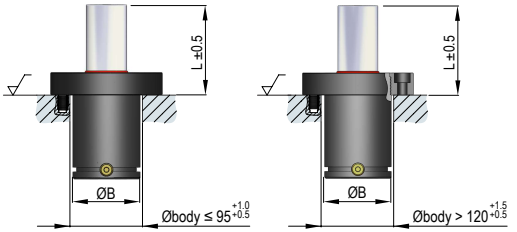


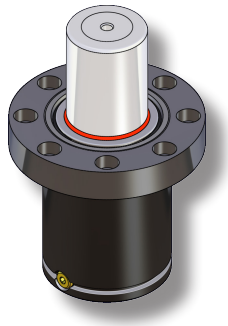
FR 45



FR 50

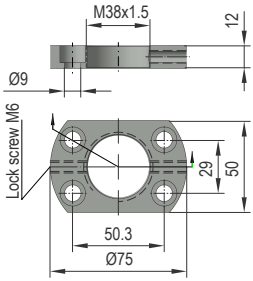




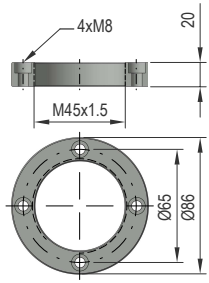


It should be assembled only at factory: no removable flange

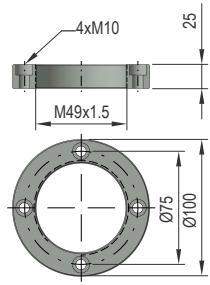
FRS 38



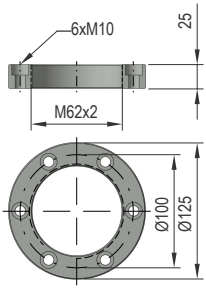
FRS 45



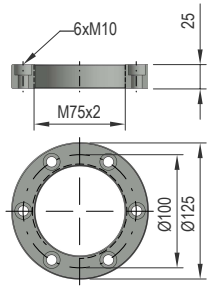
FRS 50



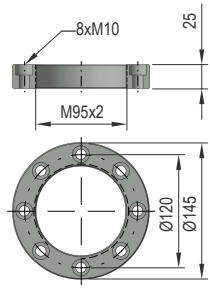
FRS 63



FRS 75



FRS 95



FRS 120

