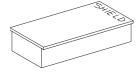
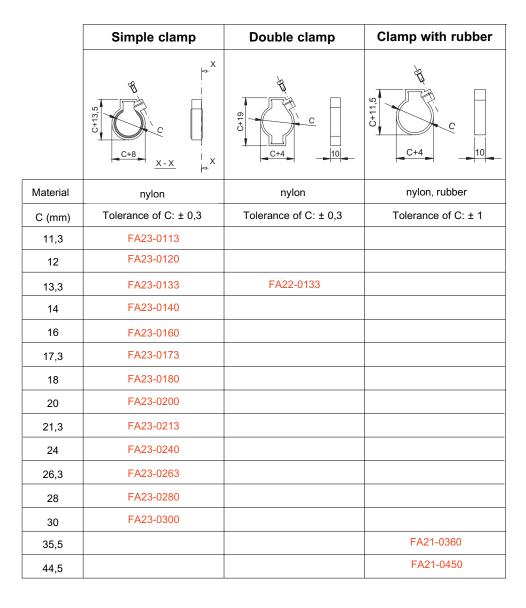
General characteristics

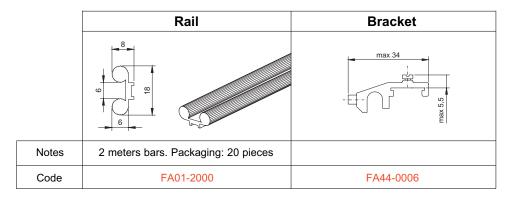
The system for mounting these switches is based on a Tee. This is suitable for cylinders without tye-rods, cylinders with tie-rods, cylinders with shaped profile and other applications where the use of this type may be useful.



Clamps



Rail with bracket



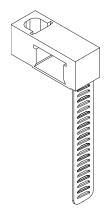
Universal brackets for microcylinders and cylinders with tie-rods Materiali: Polyammide + 30% glass filled; brass.

Patented universal bracket, manufactured in 4 sizes, can be used with an extremely wide choice of cylinders with tie-roads and with any micro-cylinder on the market.

Its resistance to high vibrations is ensured by the special coupling between screw-thread and brass band.

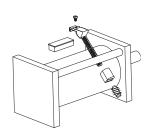
D = external diameter of the cylinder

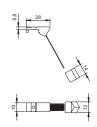
X = length of the metallic part



		×	×
D max mm	X mm	26.5	29,2
30	115	FA45-01	
65	225		FA45-02
125	415		FA45-03
180	615		FA45-04

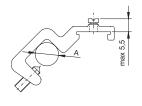
Universal brackets for cylinders with tie-rods

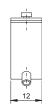




Materials: polyammide +30% glass filled; stainless steel					
Bore	Code				
from 32 to 200 mm	FA49-0001				
from 200 to 250 mm	FA49-0002				

Low cost bracket



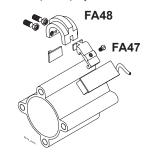


Material: aluminium					
A (i	mm) max	Code			
4	9	FA44-0009			
9	15	FA44-0015			
15	20	FA44-0020			

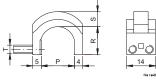
Combined clamp FA51 Mounting system made by mazak FA48 clamp and polyammide + 30% glass filled FA47 clamp.

Characteristics of FA47 bracket

These brackets are manufactured with different angles and different lenghts in order to fit perfectly all cylinders with shaped profile. For example, the chart below shows a list of cylinders on the market with the codes of the suitable clamps and brackets



Characteristics of FA48 clamps



P mm	R mm	S mm	T mm	Code
12,2	12	6	M4 x 10	FA48-0011
15,5	15,5	7	M4 x 10	FA48-0012
20	19,5	7	M4 x 20	FA48-0013
26	23	7	M4 x 20	FA48-0014

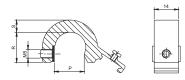
Brand names	Cylind. bore mm.	Complete bracket	Clamp for fixing to the cylinder	Switch fixing	
	32	FA51-1131	EA40.0044	FA47-0031	
	40	1 A31-1131	FA48-0011		
Eural 90 Hoerbiger D	50	FA51-1232		FA47-0032	
Metal Work 1	63	E4.54.4007	FA48-0012		
Silmer I Khunke	80	FA51-1237		FA47-0037	
	100	FA51-1337	FA48-0013	17147 0007	
	125				
	32	FA51-1131	FA48-0011	FA47-0031	
	40	FA51-1137	FA40-0011		
	50	FA51-1237	FA48-0012		
Pneumax I	63	FA51-1237	FA40-0012	EA 47 0007	
	80			FA47-0037	
	100	FA51-1337	FA48-0013		
	125				
	32	FA51-1231		FA47-0031	
	40		FA48-0012		
	50		1 A40-0012		
Parker F	63	FA51-1237			
	80	FA51-1337	FA48-0013	FA47-0037	
	100	1 A01-1007	1 A40-0013		
	125				
	32				
	40	FA51-1131	FA48-0011	FA47-0031	
	50				
Univer I	63	FA51-1333		EA47.0022	
	80	FA31-1333	EA40.0040	FA47-0033	
	100	FA51-1334	FA48-0013	EA47.0024	
	125	1 A01-1004		FA47-0034	

Hints for the choice of FA51 combined bracket

	Cylind. bore mm.	Complete bracket	Clamp for fixing to the cylinder	Switch fixing	
	32	FA51-1131		FA47-0031	
Eural 80	40	FA31-1131	FA48-0011	FA47-0031	
Airmatic I Alfamatic I	50	FA51-1137			
Diottalevi I	63				
Kpm I Megliani I	80	FA51-1237	FA48-0012	FA47-0037	
Tecmatic E	100				
	125	FA51-1337	FA48-0013		
	32	FA51-1131	FA48-0011	FA47-0031	
	40	171011101	17(10 0011		
A16 (* 1	50	FA51-1232		FA47-0032	
Alfamatic I Numatics D	63	FA51-1237	FA48-0012	FA47-0037	
	80	- 1 A01-1201	17140 0012		
	100	FA51-1238		FA47-0038	
	125	FA51-1338	FA48-0013		
	32	FA51-1131	FA48-0011	FA47-0031	
	40				
Festo D	50	FA51-1237	FA48-0012	FA47-0037	
Vesta I	63				
Waircom I	80				
	100	FA51-1337	FA48-0013		
	125				
	32	FA51-1131	FA48-0011	FA47-0031	
	40				
	50	FA51-1233	FA48-0012	FA47-0033	
Camozzi I	63	FA51-1234	77110 0012	FA47-0034	
	80	FA51-1337	FA48-0013	FA47-0037	
	100	. 7.0. 1001	77110 0010	77117 0007	
	125				
	32	FA51-1131		FA47-0031	
	40	. 7.01 1101	FA48-0011	77117 0001	
Cmb I	50	FA51-1137	7740.0011		
Metra I	63	1 A01-1101			
	80	FA51-1237	FA48-0012	FA47-0037	
	100	FA51-1337	FA48-0013		
	125	17.01 1007	1 1740-00 10		

Whole bracket FA55

Metal bracket for cylinders with shaped profile. It has been designed to replace FA47 and FA48 brackets. The FA55 whole bracket is actually easier to assemble. Sizes have been studied to fit in the better way all the profile cylinders.





Cylinder bore	P (mm)	R (mm)	S (mm)	Code
32 / 40	11,5	12,9	6,5	FA55-03
50 / 63	17,3	17,5	7	FA55-05
80 / 100	19,3	22	8,3	FA55-08
> 100	On request, also for small quant			•

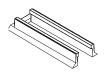
Adapters for FP switches

These adapters make FP switches universal. With all brackets and clamps is possible to mount a unique switch type on any cylinder.



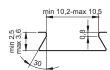
Cod. FA60-01

The FA60 adapter is of polyammide. It allows to mount FP switches in all brackets and clamps designed for FE, FF, FG series



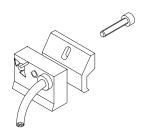
The FA61 adapter is of polyammide. It allows to mount FP switches in the cylinders with the grove here shown. (For which otherwise should be necessary to use FT switches)

Cod. FA61-01



MAGNETIC **S**WITCHES MOUNTINGS FOR FT SERIE

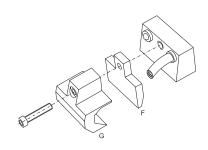
The system for mounting these switches is based on cylinders with a grove. This is generally suitable for short stroke cylinders. After insertion in the grove, the bracket and the switch are fixed by a central screw which causes the opening of the two parts If the grove is larger than usual, the clamp set could include also a shim of plastic. For different fitting types, please contact Shield's technical office.



Grove on the cylinder	Metal racket	Metal screw	Full code
min 10,2-max 10,5		;1	FA52-0040

Mountings for series FB switches

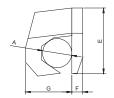
The system for mounting these switches is based on a M4 threaded nut inserted in the core of the switch itself. This is suitable for cylinders with tie-rods and other applications where the use of a threaded nut is necessary.



FA11 Plastic clampMaterial: polyammide + 30% glass filled A fixing screw, a clamp G and a shim F compose the clamp FA11.

The shim F is used only for big cylinders, whose diameter of the tie-rod is larger than

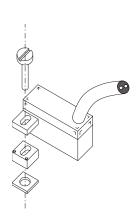
The measure A refers to the diameter of the tie-rod.



A (mm) min max		E (mm)	F (mm)	G (mm)	Code
5	6		-	11	FA11-0506
7	8	22	-	15	FA11-0708
9	10		-	17	FA11-0910
11	12	27	4.5	19	FA11-1112
15	16	21	4.5	23	FA11-1516

Mountings for series FI switches

The system for mounting these switches is based on a vertical hole positioned on a side. This system is suitable for cylinders or other devices with a grove suited to fit the fixing nut C.



Grove on the cylinder	Brand names	Metal screw A	Nylon shim B	Metal nut C	Full code
max 8 min 3.5	SMC (12-25)		-		FA53-0001
min 3.5	SMC (32-100) Farbo (20-100)		4		FA53-0002