



CLAMPING AND BRAKING ELEMENTS FOR LINEAR GUIDES AND RODS

PNEUMATIC AND MANUAL UNITS

2025/2026



 **ERRE DI**



ERRE.DI. Automation has been manufacturing and supplying quality automation components and systems for over 20 years.

Within its own facilities, ERRE.DI. is able to design, produce and test an extensive range of clamping and braking elements for linear guides and rods.

Through its new automation line, ERRE.DI. can easily meet the market's requirements for quality and safety, responding to every technical and design problem thanks to the expertise of its engineering department.

In addition to the standard production, ERRE.DI. provides tailor-made solutions to best meet the customers' needs.

High technology production, reliability of components and technical support make ERRE.DI. the ideal partner for every industrial sector, including aerospace, robotics, machine tool, automotive, industrial automation, packaging and material handling.

CLAMPING AND BRAKING ELEMENTS FOR LINEAR GUIDES AND RODS

Pneumatic and Manual Units

Following an adequate period of design, analysis, development and testing, ERRE.DI. is able to offer clamping and braking elements for linear guides and rods with the following characteristics:

- High clamping force with minimum space required
- Easy installation
- Both elements working in single or double effect need the same installation space
- The "Normally Closed" devices can be used as safety elements (clamping without air pressure)
- High switching speed Open/Closed
- Italian technology

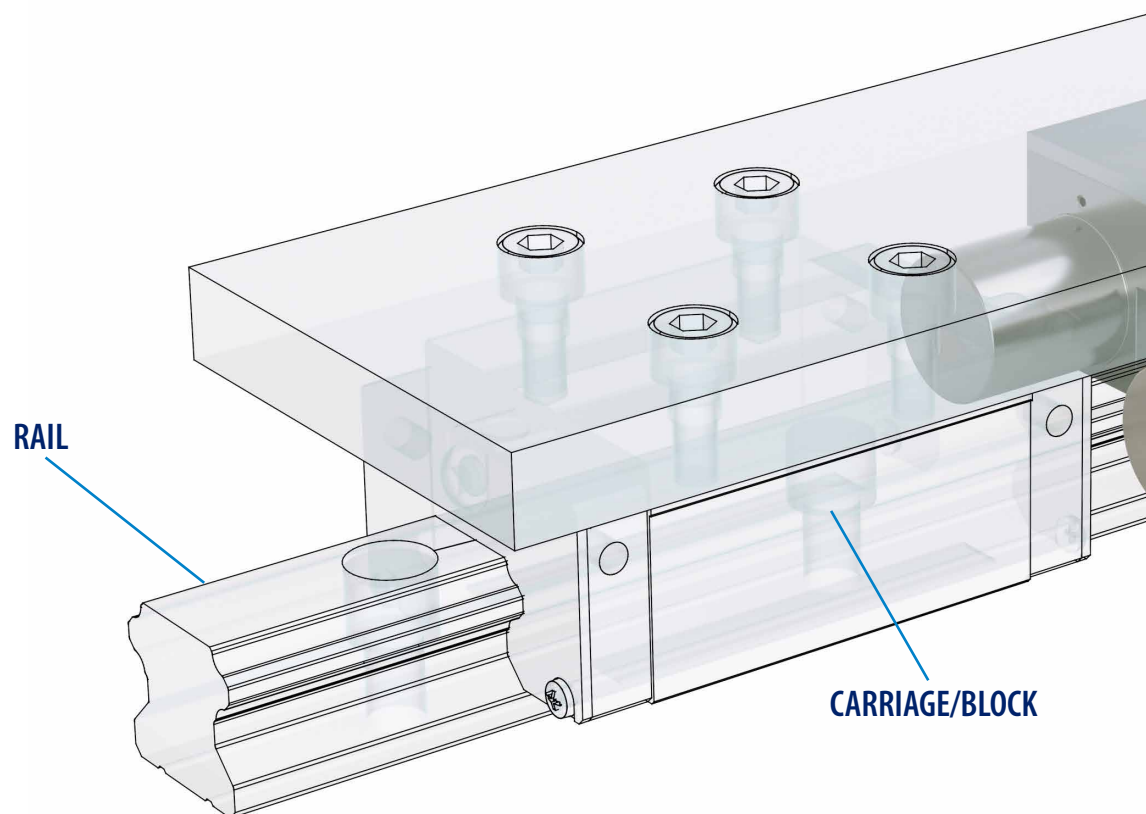
All the clamping and braking elements undergo galvanic treatments to protect against corrosion: hard anodizing for aluminum elements and electrolytic nickel plating bath for steel elements.

The clamping elements (M or D Operating Type) satisfy all the essential requirements of safety of the Directive 2006/42/EC.
Harmonised standard applied: EN ISO 13849.

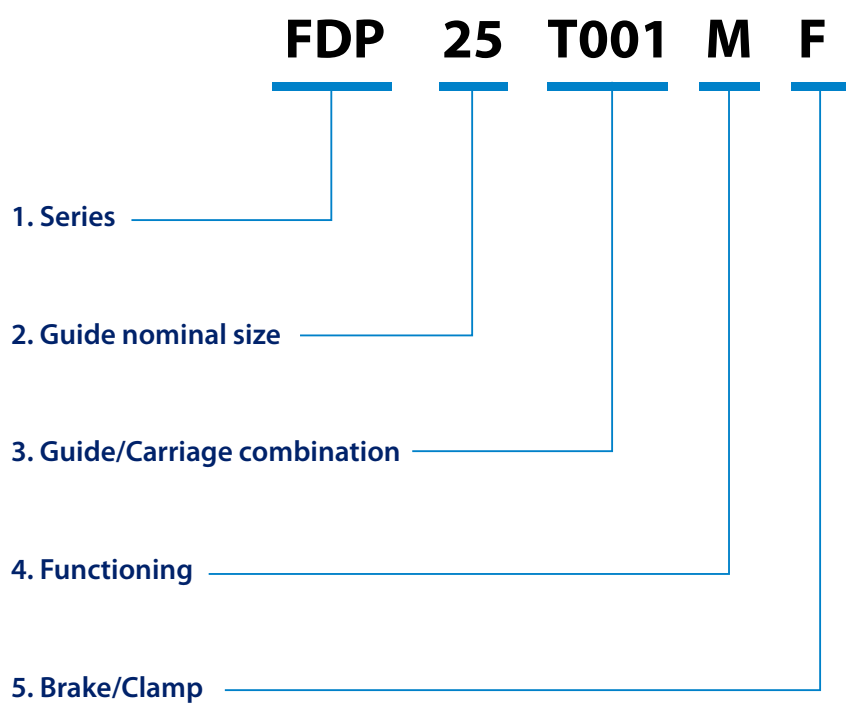
FIELDS OF APPLICATION:

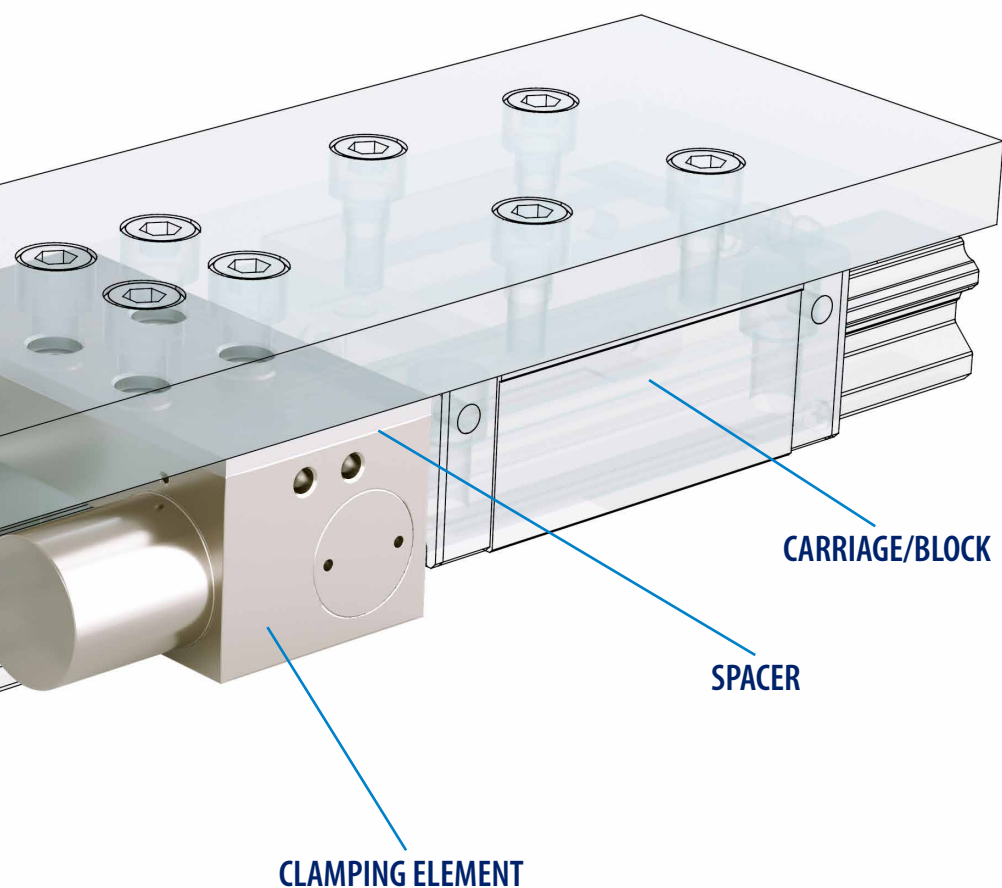
- Woodworking machine
- Metal working machine
- Glass working machine
- Packaging machinery
- Automation and Robotics
- Handling systems





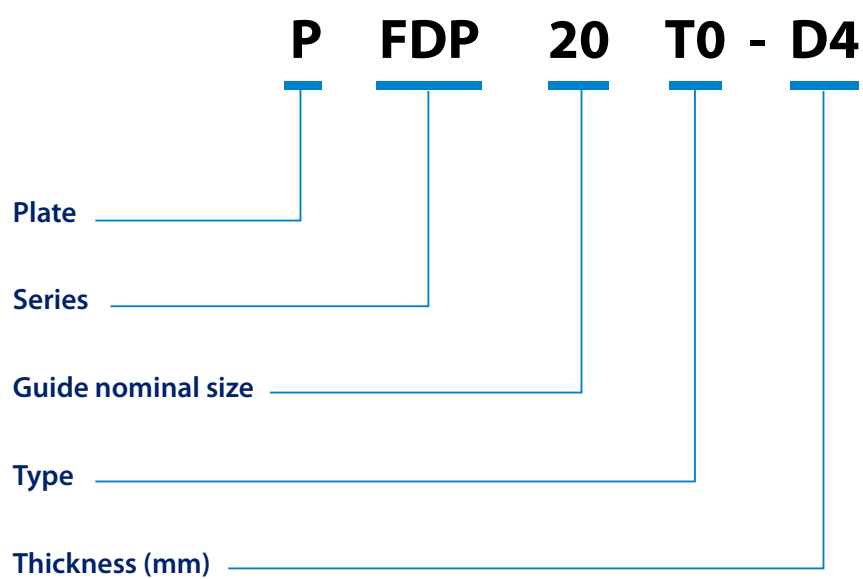
Codes for clamping and braking elements are composed as follows:





Clamping and braking elements can optionally be supplied with a “spacer” plate made in Steel, used to align the height of the element with the height of the sliding guides.

Codes for the spacer are composed as follows:



1.

Series codes are the following:

F
FC
FDP
FDPH
FDPM

FDI
FMC
FMCE
FMN
FCMN

FBS
FBC
FMN-M

2.

Nominal guide size indicates the size of the guide rail on which the element is mounted.
It is also the size of the element.

3.

The Guide/Carriage combination identifies the clamping element associated with the guide/carriage

4.

The code of the Pneumatic functioning type parameter is the following:

S	Normally open – Air to close
M	Normally closed – Air to open
E	Normally open – Air to close and to open
D	Normally closed – Air to open and to close

5.

The Working type parameter defines the clamping element:

F	Dynamic braking element (otherwise it is clamping).
S	With sensor integration of a proximity sensor in order to verify the opening status of the element. The sensor is an inductive sensor in cylindrical stainless steel housing M8 (PNP or NPN). It comes with a connector and a cable. Working temperature: -25°C ÷ +75°C.
P	Element working with pressure less than 6 bar, but more than 4.5 bar
Q	Element working with pressure from 4.5 bar to 4 bar
R	Element working with pressure less than 4 bar

RAILS

ABBA	ISB	RUBIX
AIRTAC	LEANTECHNIK	SBC LINEAR
ALULIN	LIMON	SCHNEEBERGER
BOSCH-REXROTH	MISUMI	SNR
CPC	MOTOPRECISION	STAF-NTN-SNR
EWELLIX (SKF)	Nippon Bearing	TBI THK
FRANKE	NITEK	THOMSON
HEPCO	NORELEM	THREE-R
HIWIN	NSK	WON ST
IKO	PMI	
INA	ROLLON	
IRSO	ROSA	

CONFIGURATOR



ELEMENTS FOR LINEAR GUIDES

SERIES	CHARACTERISTICS
 F	STANDARD CLAMPING ELEMENT GREAT HOLDING FORCE/DIMENSION RATIO
 FDP	DOUBLE PISTON SYSTEM. HIGH HOLDING FORCE SMALL DIMENSIONS
 FDPH	POWERED DOUBLE PISTON SYSTEM EXTREMELY HIGH HOLDING FORCE SMALL DIMENSIONS
 FDPM	CLAMPING AND BRAKING ELEMENT HIGH CLAMPING FORCE SHAPED PROFILE
 FDI	CLAMPING AND BRAKING ELEMENT WITH INTEGRATED SPRINGS FURTHER INCREASE OF CLAMPING FORCE COMPARED TO FDPM
 FMC	MONOCYLINDER CLAMPING AND BRAKING ELEMEN. HIGH CLAMPING FORCE. SHAPED PROFILE
 FMCE	ELECTRIC CLAMPING ELEMENT
 FMN	MANUAL ELEMENT PRACTICAL AND RELIABLE NEW ERGONOMIC DESIGN
 FMN-M	MANUAL ELEMENT FOR MINIATURE GUIDE PRACTICAL AND RELIABLE NEW ERGONOMIC DESIGN
 FC	SAME HIGH PERFORMANCES AS F SERIES FOR ROUND GUIDES
 FCMN	MANUAL ELEMENT FOR ROUND GUIDES PRACTICAL AND RELIABLE NEW ERGONOMIC DESIGN
 FBS	DOUBLE PISTON SYSTEM HIGH HOLDING FORCE FOR ROUND GUIDES
 FBC	CYLINDER BLOCKING ELEMENT HIGH HOLDING FORCE FOR LINEAR GUIDES AND RODS OF PNEUMATIC CYLINDERS
 FMV	CLAMPING SYSTEM WITH ONLY ONE CONTACT ELEMENT SMALL DIMENSIONS DIFFERENT MODES OF USE
 F_SP	EASY TO ASSEMBLE THANKS TO THE DECOMPOSABLE SYSTEM INDEPENDENT PISTON SYSTEM SHAPED PROFILE

ELEMENTS FOR
ROUND GUIDES AND RODSSPECIAL
ELEMENTS

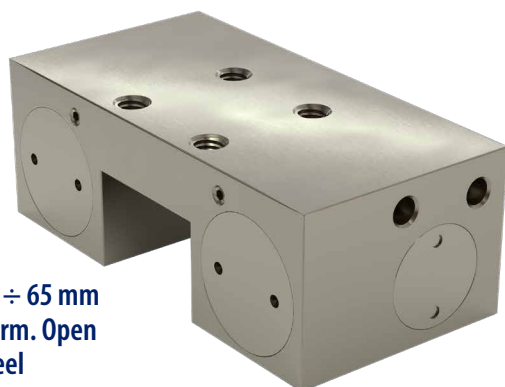
FUNCTIONING	NORMALLY CLOSED	BRAKING	SENSOR	PAG.
PNEUMATIC	YES	YES	YES	10
PNEUMATIC	YES	YES	YES	12
PNEUMATIC	YES	YES	YES	14
PNEUMATIC	YES	YES	YES	16
PNEUMATIC	YES	YES	YES	18
PNEUMATIC	YES	YES	YES	20
ELECTRIC	YES	NO	YES	22
MANUAL	NO	NO	NO	24
MANUAL	NO	NO	NO	26
PNEUMATIC	YES	YES	YES	28
MANUAL	NO	NO	NO	30
PNEUMATIC	YES	YES	YES	32
PNEUMATIC	YES	YES	YES	34
PNEUMATIC	YES	YES	YES	36
PNEUMATIC	YES	NO	NO	38

F Series - Pneumatic clamping element

The tightening is done using an amplification system with inclined plane.
Made in construction steel, for high axial and horizontal stiffness.

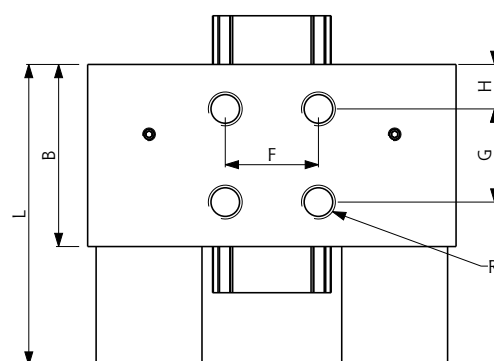
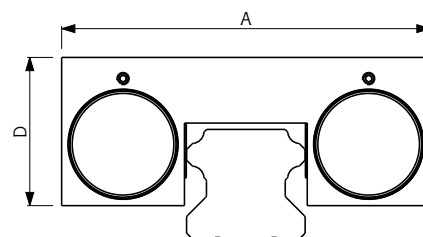
F##--- S

F##--- E

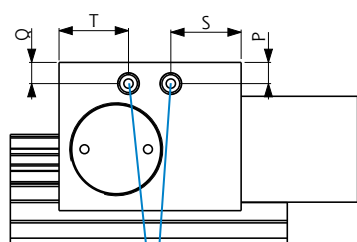


Guide size **15 ÷ 65 mm**
Working type **Norm. Open**
Body **Steel**
Operating Temperature **20°C ÷ +80°C**
Operating Pressure **5,5 ÷ 8 bar**
Switching time **40 ÷ 60 mSec**
Contact parts Hardness **60 ÷ 62 HRC**

- Small dimensions.
- High clamping force.
- Precise positioning
- High stiffness
- Can be supplied complete with proximity sensor.



Type	Size	Holding Force [N]				A [mm]	B [mm]
		M	S	E	D		
F	15 S0	400	650	650	1050	57	43
F	15 S5	400	650	650	1050	55	39
F	15 T0	400	650	650	1050	60	43
F	15 T5	400	650	650	1050	55	39
F	20 S0	600	1000	1000	1600	68	39
F	20 S5	600	1000	1000	1600	64.1	39
F	20 T0	600	1000	1000	1600	70	39
F	20 T5	600	1000	1000	1600	66	39
F	25 S0	750	1200	1200	1950	75	39
F	25 S5	750	1200	1200	1950	75	35
F	25 T0	750	1200	1200	1950	77	39
F	25 T5	750	1200	1200	1950	75	35
F	30 S0	1050	1750	1750	2800	87	43
F	30 S5	1050	1750	1750	2800	90	39
F	30 T0	1050	1750	1750	2800	87	43
F	30 T5	1050	1750	1750	2800	90	39
F	35 S0	1250	2000	2000	3250	106	46
F	35 S5	1250	2000	2000	3250	100	39
F	35 T0	1250	2000	2000	3250	106	46
F	35 T5	1250	2000	2000	3250	100	39
F	45 S0	1500	2300	2300	3800	116	50
F	45 T0	1500	2300	2300	3800	120	50
F	45 T5	1500	2300	2300	3800	120	49
F	55 S0	2000	3000	3000	5000	128	49
F	55 S5	2000	3000	3000	5000	128	49
F	55 T0	2000	3000	3000	5000	136	49
F	65 T0	2000	3000	3000	5000	146	49



**M5
AIR CONNECTION**
we recommend
the use of compressed
air hose $\varnothing 6 \times 4$

F##--- M
F##--- D



Guide size **15 ÷ 65 mm**
Working type **Norm. Closed**
Body **Steel**
Operating Temperature **20°C ÷ +80°C**
Operating Pressure **5,5 ÷ 8 bar**
Switching time **40 ÷ 60 mSec**
Contact parts Hardness **60 ÷ 62 HRC**

- Clamping element without the use of energy.
- Includes springs for closing, while the pressure is for opening
- Can be supplied complete with proximity sensor.

D [mm]	F [mm]	G [mm]	H [mm]	L [mm]	P [mm]	Q [mm]	R	S [mm]	T [mm]
21	15	15	12.5	62	5	15	M4x5	37	6
20.8	15	15	8.5	58	5.4	16.3	M4x5	37	4.5
21.5	15	15	12.5	62	5.5	15.5	M4x5	37	6
21.5	15	15	8.5	58	5.5	17	M4x5	37	4.5
27	20	20	14	61	5	7	M5x5	16.9	5.5
27	20	20	10	61	5	6.5	M5x5	16.9	5
25.5	20	20	14	61	5	5	M5x5	18.5	5
25.5	20	20	14	61	5	5	M5x5	18.5	5
32.5	20	20	14	63.5	6.6	9.5	M6x8	19.5	5.5
32.5	20	20	10	56	6.6	9.5	M6x8	19.5	5
28	20	20	14	63.5	5	6	M6x8	19	5.5
28	20	20	10	56	5	6	M6x8	19	5
38.5	22	22	10.5	71	8.5	8.5	M8x8	16.5	16.5
38.5	22	22	8.5	68	8.5	8.5	M8x8	16.5	14.5
35	22	22	10.5	71	5	5	M8x8	16.5	16.5
35	22	22	8.5	68	5	5	M8x8	16.5	14.5
42.5	24	24	7.5	78	5.5	11	M8x15	23	7
42	24	24	7.5	59	10.5	12.5	M8x15	23	4.5
42.5	24	24	7.5	78	12	11	M8x15	23	7
36.5	24	24	7.5	59	5	7	M8x15	23	4.5
52	26	26	12	82	15	8	M10x19	20.5	21
52	26	26	12	82	15	8	M10x19	20	20
43.5	26	26	11.5	81	6.5	6.5	M10x18	20	20
59	30	30	9.5	82	17	10	M10x19	18.5	18.5
53	30	30	9.5	81	16	9	M10x19	18.5	20
54	30	30	9.5	82	13	8	M10x19	18.5	18.5
67	50	30	9.5	82	26	21	M10x20	18.5	18.5

FDP Series - Double piston element

New line created to achieve a high clamping force in small spaces..
Dual Locking Action made by a pair of pistons for each tightening part.

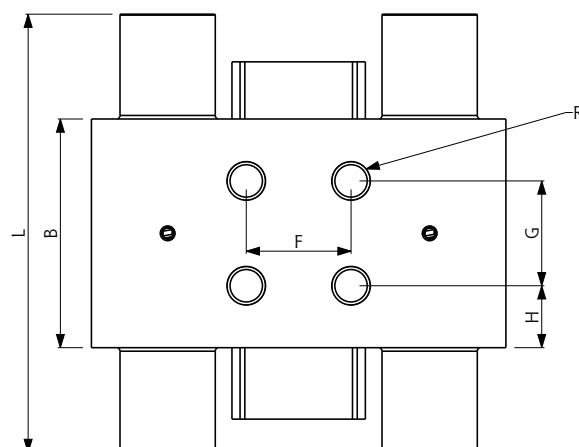
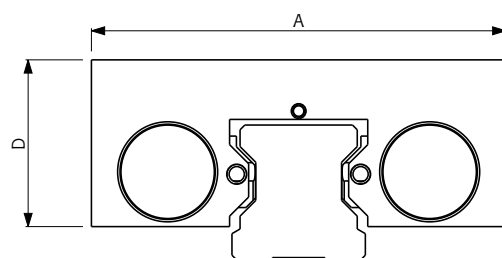
FDP##--- S

FDP##--- E

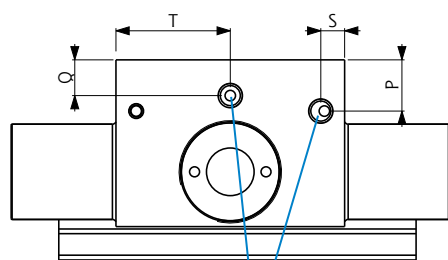


## Guide size	20 ÷ 45 mm
Working type	Norm. Open
Body	Steel
Operating Temperature	-20°C ÷ +80°C
Operating Pressure	5,5 ÷ 8 bar
Switching time	40 ÷ 60 mSec
Contact parts Hardness	60 ÷ 62 HRC

- ◆ **Double piston system: high clamping force.**
- ◆ **Small size.**
- ◆ **Short reaction time.**
- ◆ **Can be supplied complete with proximity sensor.**



Type	Size	Holding Force [N]				A [mm]	B [mm]	D [mm]
		M	S	E	D			
FDP	20 S	800	1300	1300	2100	70	51	27
FDP	20 T	800	1300	1300	2100	73	51	25.5
FDP	25 S	1200	2000	2000	3200	74	51	32.5
FDP	25 T	1200	2000	2000	3200	78	51	30.5
FDP	30 S	1200	2000	2000	3200	87	48	35
FDP	30 T	1200	2000	2000	3200	89	48	33
FDP	35 S	1500	2200	2200	3700	94	49	44
FDP	35 T	1500	2200	2200	3700	100	49	36.5
FDP	45 S	2000	3000	3000	5000	107.8	56	52
FDP	45 T	2000	3000	3000	5000	120	56	43.5



**M5
AIR CONNECTION**
we recommend
the use of compressed
air hose $\varnothing 6 \times 4$

FDP#--- M

FDP#--- D



Guide size **20 ÷ 45 mm**
Working type **Norm. Closed**
Body **Steel**
Operating Temperature **-20°C ÷ +80°C**
Operating Pressure **5,5 ÷ 8 bar**
Switching time **40 ÷ 60 mSec**
Contact parts Hardness **60 ÷ 62 HRC**

- ◆ **Clamping element without the use of energy.**
- ◆ **High clamping force thanks to the double piston system**
- ◆ **Small size.**
- ◆ **Short reaction time.**
- ◆ **Can be supplied complete with proximity sensor.**

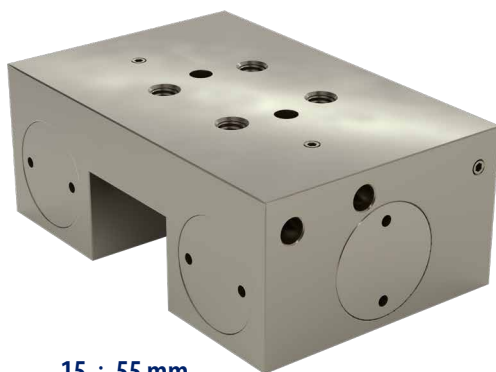
F [mm]	G [mm]	H [mm]	L [mm]	P [mm]	Q [mm]	R	S [mm]	T [mm]
20	27	12	89	7.5	5	M5x6	15	10
20	27	12	89	5.5	5	M5x6	15	10
20	20	15.5	95	5.25	8.75	M6x7	25.5	5.5
20	20	15.5	95	5	6.5	M6x7	30.5	5.5
22	22	13	92	7.5	11	M8x10	24	5
22	22	13	92	6	9.5	M8x10	19.5	6
24	24	12.5	98	13	10	M8x15	14	19.5
24	24	12.5	98	7.5	5.25	M8x15	30.5	4.5
26	26	15	114	16.55	12.55	M10x17	28	4.5
26	26	15	114	13	9.5	M10x17	22	5

FDPH Series - Powered double piston element

New line created to have a high clamping force in small spaces.
 Powered Dual Locking Action: with a pair of pistons for each tightening part.
 The clamping force of this element is double that of F line.

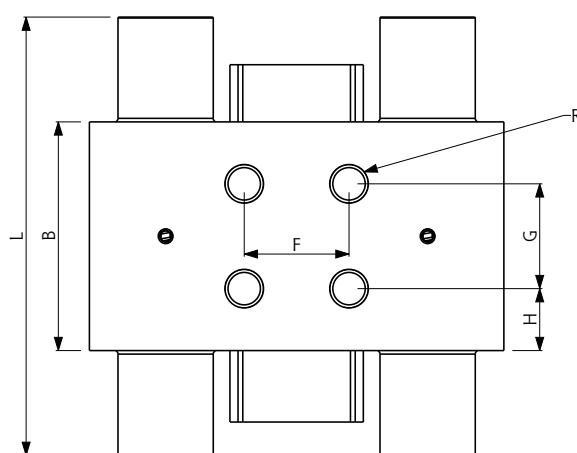
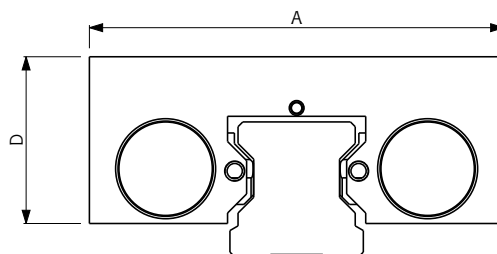
FDPH##--- S

FDPH##--- E

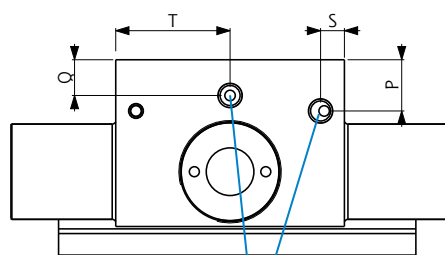


Guide size **15 ÷ 55 mm**
 Working type **Norm. Open**
 Body **Steel**
 Operating Temperature **-20°C ÷ +80°C**
 Operating Pressure **5,5 ÷ 8 bar**
 Switching time **40 ÷ 60 mSec**
 Contact parts Hardness **60 ÷ 62 HRC**

- ◆ **Dual piston system: high clamping force**
- ◆ **Small size**
- ◆ **Short reaction time**
- ◆ **Can be supplied complete with proximity sensor.**



Type	Size	Holding Force [N]				A [mm]	B [mm]	D [mm]
		M	S	E	D			
FDPH	15 S	800	1300	1300	2100	61	56	21.5
FDPH	15 T	800	1300	1300	2100	61	56	21.5
FDPH	20 S	1200	2000	2000	3200	70	51	27
FDPH	20 T	1200	2000	2000	3200	73	51	25.5
FDPH	25 S	1500	2400	2400	3900	75	51	32.5
FDPH	25 T	1500	2400	2400	3900	78	51	32.5
FDPH	30 S	2100	3500	3500	5600	90	50	38
FDPH	30 T	2100	3500	3500	5600	93	50	38
FDPHL	35 S	2100	3500	3500	5600	97	50	40
FDPH	35 S	2500	4000	4000	6500	101	57.6	42
FDPHH	35 S	3000	4600	4600	7600	106	57.6	43.5
FDPH	35 T	2500	4000	4000	6500	109	60.8	42.3
FDPH	45 S	3000	4600	4600	7600	120	60.8	55
FDPH	45 T	3000	4600	4600	7600	120	60.8	49.3
FDPH	55 S	4000	6000	6000	10000	128	60	59
FDPH	55 T	4000	6000	6000	10000	136	60	54



M5
AIR CONNECTION

we recommend
the use of compressed
air hose $\varnothing 6 \times 4$

FDPH##\$ M
FDPH##\$ D



Guide size **15 ÷ 55 mm**
Working type **Norm. Closed**
Body **Steel**
Operating Temperature **-20°C ÷ +80°C**
Operating Pressure **5,5 ÷ 8 bar**
Switching time **40 ÷ 60 mSec**
Contact parts Hardness **60 ÷ 62 HRC**

- ◆ Locking element without the use of energy
- ◆ High clamping force thanks to a double piston system
- ◆ Small size
- ◆ Short reaction times.
- ◆ Can be supplied complete with proximity sensor.

F [mm]	G [mm]	H [mm]	L [mm]	P [mm]	Q [mm]	R	S [mm]	T [mm]
15	15	20.5	94	5	5	M4x4	16.2	16.2
15	15	20.5	94	5	5.2	M4x4	17	17
20	27	12	95	6.5	6.5	M5x6	16.1	15.8
20	27	12	95	5	5	M5x6	16.1	15.8
20	20	15.5	100	5	7.25	M6x7	25.5	5
20	20	15.5	100	5	7.25	M6x7	20.5	5
22	22	14	108	9	5	M8x10	12	25
22	22	14	108	9	5	M8x10	20.5	5
24	24	13	108	11	8	M8x15	25	12
24	24	16.8	97/6	10.5	6.5	M8x15	28.8	5
24	24	16.8	121.6	10.5	6.5	M8x15	28.8	6
24	24	18.4	124.6	7	5	M8x16	30.4	5
26	26	17.4	124.8	12	7	M10x18	30.4	5
26	26	17.4	124.8	12.3	7	M10x19	30.4	5
30	30	15	126	18	8	M10x20	30	23.5
30	30	15	126	13	8	M10x20	27	23.5

FDPM Series - Clamping and braking element

Braking element with high clamping force.

Material and shape of contact parts allow high clamping force without damaging the rail.

FDPM##--- M

FDPM##--- D

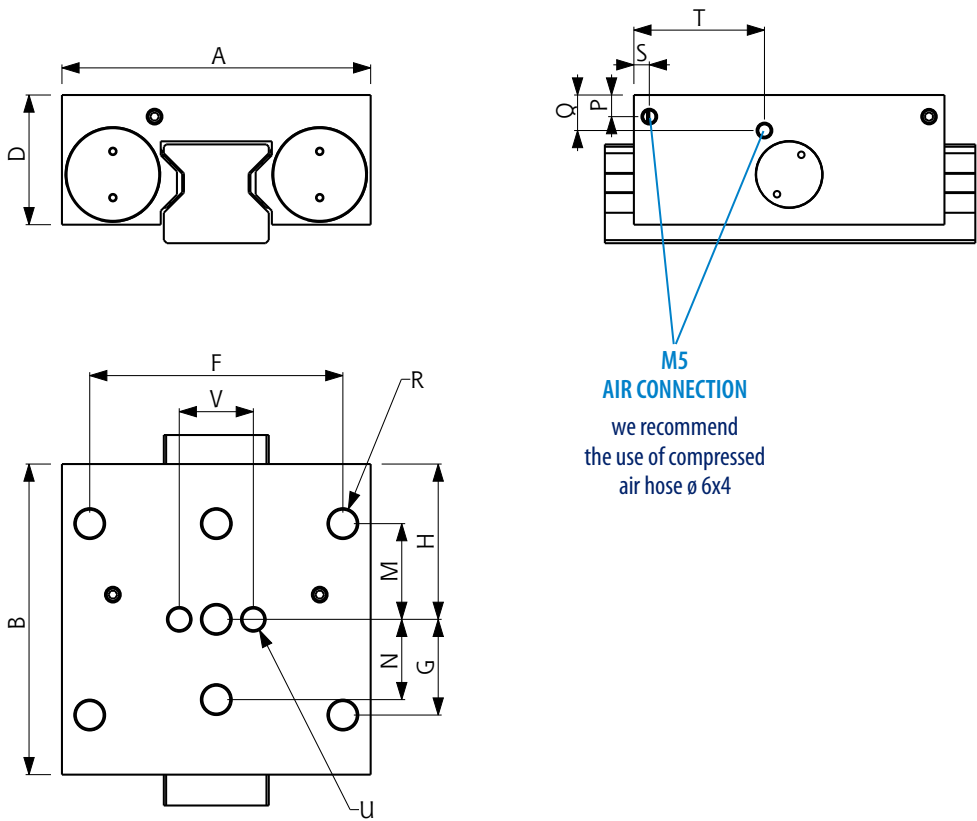


## Guide size	25 ÷ 35 mm
Working type	Norm. Closed
Body	Steel
Operating Temperature	-20°C ÷ 80°C
Operating Pressure	5,5 ÷ 8 bar
Switching time	40 ÷ 60 mSec
Contact parts Hardness	60 ÷ 62 HRC

- ◆ Locking element without the use of energy
- ◆ High clamping force thanks to a double piston system
- ◆ Short reaction times
- ◆ Compact and rigid body
- ◆ Clamping in case of pressure drop
- ◆ Working in emergency stop

Type	Size	Holding Force [N]		A [mm]	B [mm]	D [mm]	F [mm]	G [mm]
		M	D					
FDPM	25 S	1500	3900	70	99	32.5	57	22.5
FDPM	25 T	1500	3900	72	99	32.5	57	22.5
FDPM	30 S	2100	5600	87	99	38	72	26
FDPM	30 T	2100	5600	90	99	38	72	26
FDPM	35 S	2600	6600	100	100.6	42	82	31
FDPM	35 T	2600	6600	108	100.6	42	82	31

with integrated springs



H [mm]	M [mm]	N [mm]	P [mm]	Q [mm]	R	S [mm]	T [mm]	U	V [mm]
49.5	22.5	20	7.75	5.25	M8x7	5	56	M6x7	20
49.5	22.5	20	7.75	7.75	M8x7	5	43	M6x7	20
49.5	26	22	9	5	M10x8	5	42	M8x8	22
49.5	26	22	9	5	M10x8	5	42	M8x8	22
50.3	31	26	7	11.5	M10x10	5	42.3	M8x10	24
50.3	31	26	7	11.5	M10x10	5	42.3	M8x10	24

FDI Series - Clamping and braking element with

Braking element with high clamping force.

Material and shape of contact parts allow high clamping force without damaging the rail.

FDI##--- M

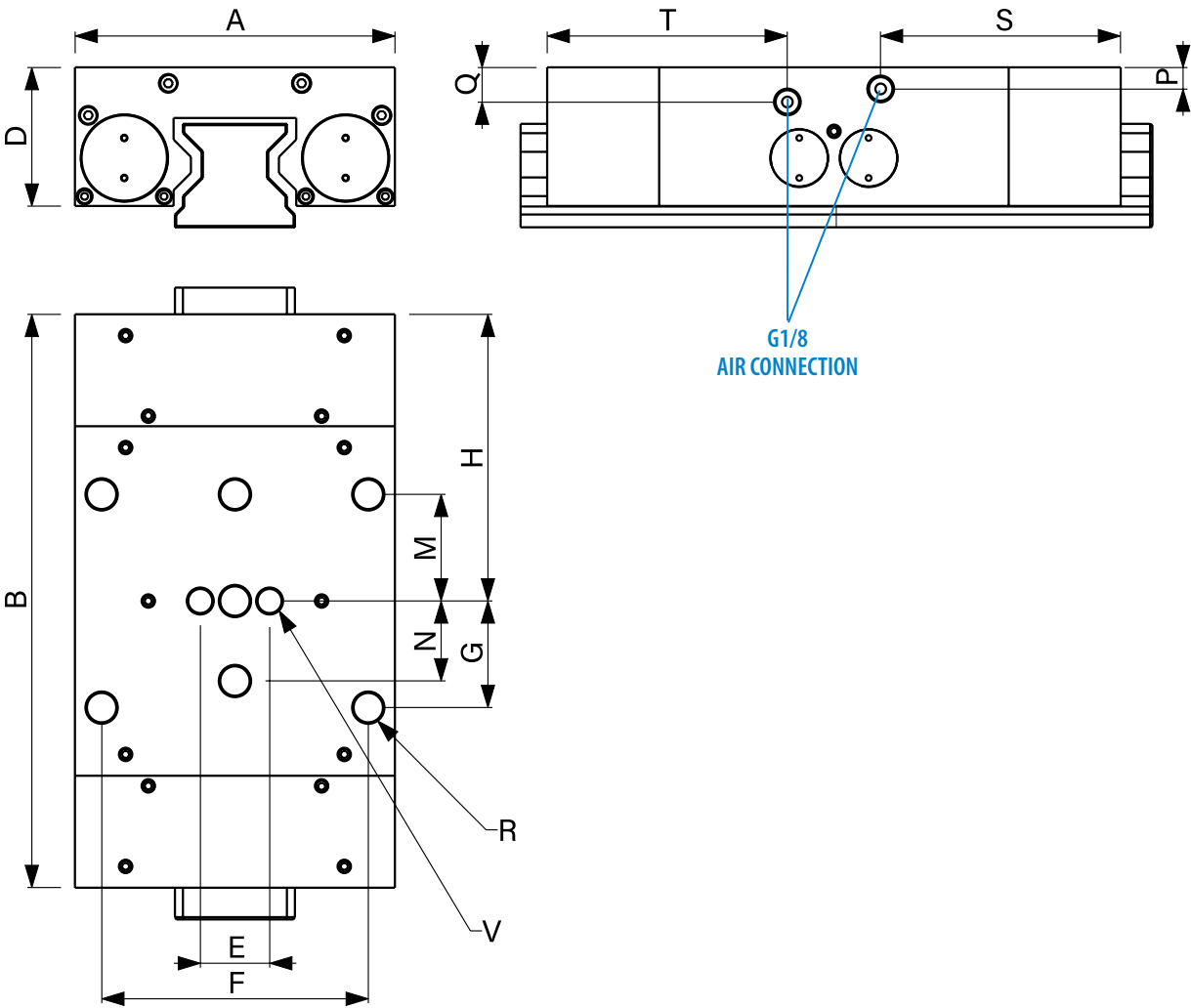
FDI##--- D



Guide size **55 mm**
 Working type **Norm. Closed**
 Body **Steel**
 Operating Temperature **-20°C ÷ 80°C**
 Operating Pressure **5,5 ÷ 8 bar**

- ◆ Locking element without the use of energy
- ◆ High clamping force thanks to a double piston system
- ◆ Short reaction times
- ◆ Compact and rigid body
- ◆ Clamping in case of pressure drop
- ◆ Working in emergency stop
- ◆ Can be supplied complete with proximity sensor.

Type	Size	Holding Force [N]		A [mm]	B [mm]	D [mm]	E [mm]	F [mm]
		M	D					
FDI	45 S	6000	8000	120	215	52	26	100
FDI	55 S	7700	9200	140	219	59	-	116



G [mm]	H [mm]	M [mm]	N [mm]	P [mm]	Q [mm]	R	S [mm]	T [mm]	V
40	107.55	40	30	8.1	92	M12x12	90	90	M10X12
47.5	109.5	47.5	35	10	92	M14x14	92	92	-

FMC Series - Single cylinder element

Compact and inexpensive locking element.

These characteristics are obtained using a single contact section.

The clamping action is allowed by the floating system of the body that ensures:

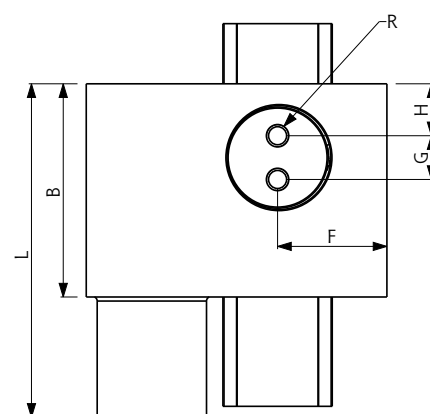
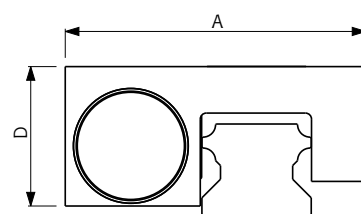
- the clamping of the rail on one side by the contact section and on the other by the body itself;
- a symmetrical distribution of clamping force on the linear guide;
- absolutely no friction between the linear guide with the body and with the contact section when the clamping is released.

FRCMC##--- S
FRCMC##--- E

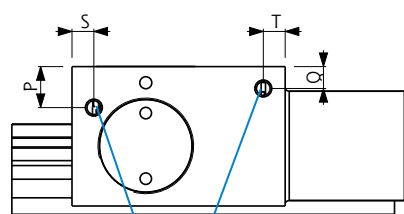


Guide size **15 ÷ 55 mm**
Working type **Norm. Open**
Body **Steel**
Operating Temperature **-20°C ÷ 80°C**
Operating Pressure **5,5 ÷ 8 bar**
Switching time **40 ÷ 60 mSec**
Contact parts Hardness **60 ÷ 62 HRC**

Can be supplied complete with proximity sensor.



Type	Size	Holding Force [N]				A [mm]	B [mm]	D [mm]
		M	S	E	D			
FMC	15 T0	200	320	320	520	41.5	36	18
FMC	20 S0	300	500	500	800	55	39	27
FMC	20 T0	300	500	500	800	55	39	25.5
FMC	25 S0	375	600	600	975	60.5	39	30
FMC	25 T0	375	600	600	975	60.5	39	30
FMC	25 T5	300	500	500	800	58	35	28



**M3/M5
AIR CONNECTION**

we recommend
the use of compressed
air hose $\varnothing 6 \times 4$

FRCMC##--- M
FRCMC##--- D



Guide size **15 ÷ 55 mm**
Working type **Norm. Closed**
Body **Steel**
Operating Temperature **-20°C ÷ 80°C**
Operating Pressure **5,5 ÷ 8 bar**
Switching time **40 ÷ 60 mSec**
Contact parts Hardness **60 ÷ 62 HRC**
◆ **Can be supplied complete with proximity sensor.**

F [mm]	G [mm]	H [mm]	L [mm]	P [mm]	Q [mm]	R	S [mm]	T [mm]
14.25	7	8.9	55	4	4	M4x4.5	3	4.5
21	8	9.5	61	5	4	M4x5.8	4	4
20	8	9.5	61	5	4	M4x5.8	4	4
22	14	12.5	63.5	5	7.5	M4x5.8	5	5
22	14	12.5	63.5	5	7.5	M4x5.8	5	5
23	12	11.5	57	6	5	M5x7	5	5

FMCE Series Electric clamping element

Bistable clamping element.

Keeping the element closed or open doesn't require voltage supply.

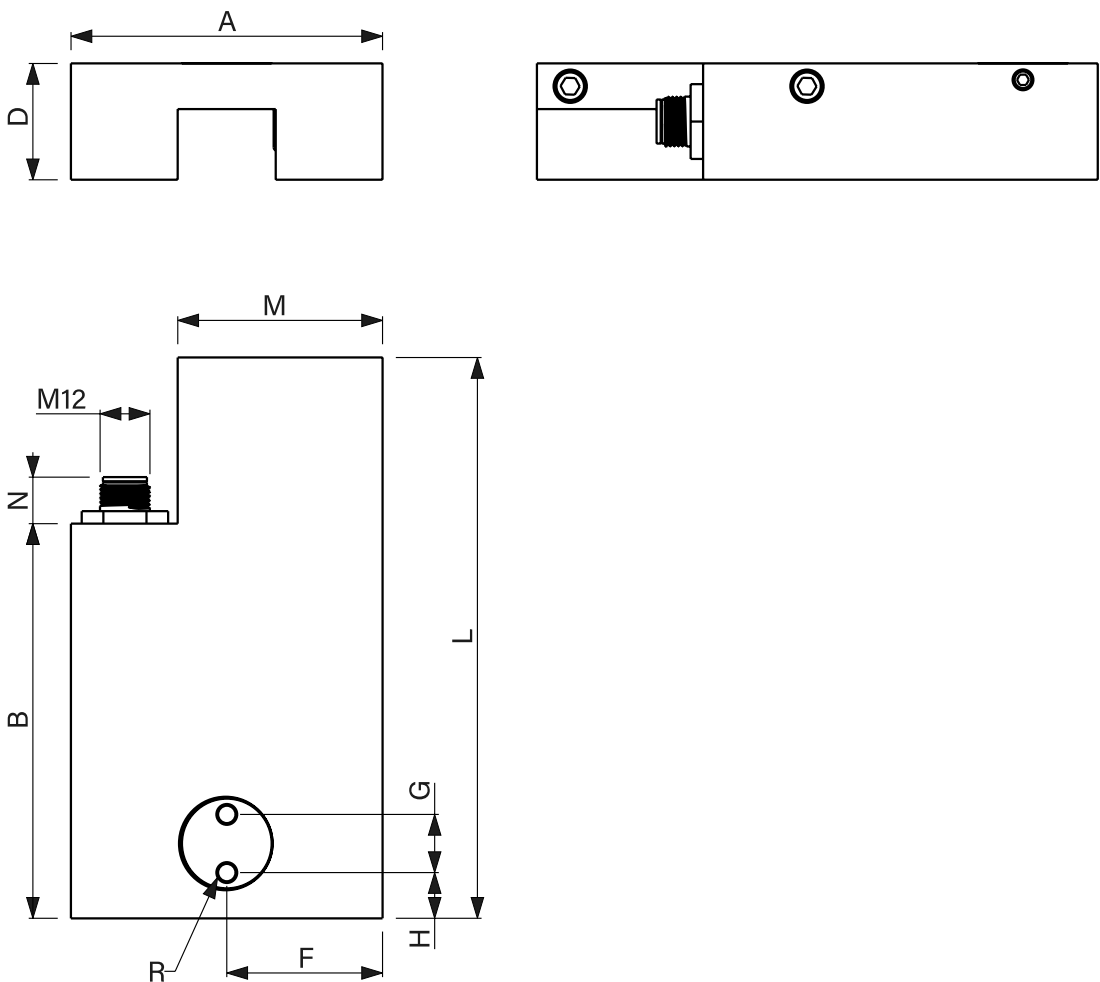
FMCE##--



## Guide size	20 ÷ 25 mm
Body	Steel
Operating Temperature	-10°C ÷ 70°C
Direct Current Voltage	24 V
Closing time	< 3 Sec
Opening time	< 1.5 Sec

- ◆ Short length
- ◆ Self-locking
- ◆ 5 pin connector
- ◆ Bistable
- ◆ Can be supplied complete with proximity sensor.

Type	Size	Holding Force [N]	A [mm]	B [mm]
FMCE	20 T0	1000	60	80
FMCE	25 T0	1400	75	95



D [mm]	F [mm]	G [mm]	H [mm]	L [mm]	M [mm]	N [mm]	R
24	29.75	8	14	115	40.3	11.2	M4x5
28	37.5	14	11	135	49.3	11.2	M5x7

FMN Series - Manual clamping element for linear

Simple and reliable, this clamping element is manually controlled.

By acting on the adjustable locking lever, the contact profiles press with sync on the surfaces of the rail.

The floating profiles of contact ensure a symmetrical distribution of the force on the linear guide.

New ergonomic design.

FMN ##---

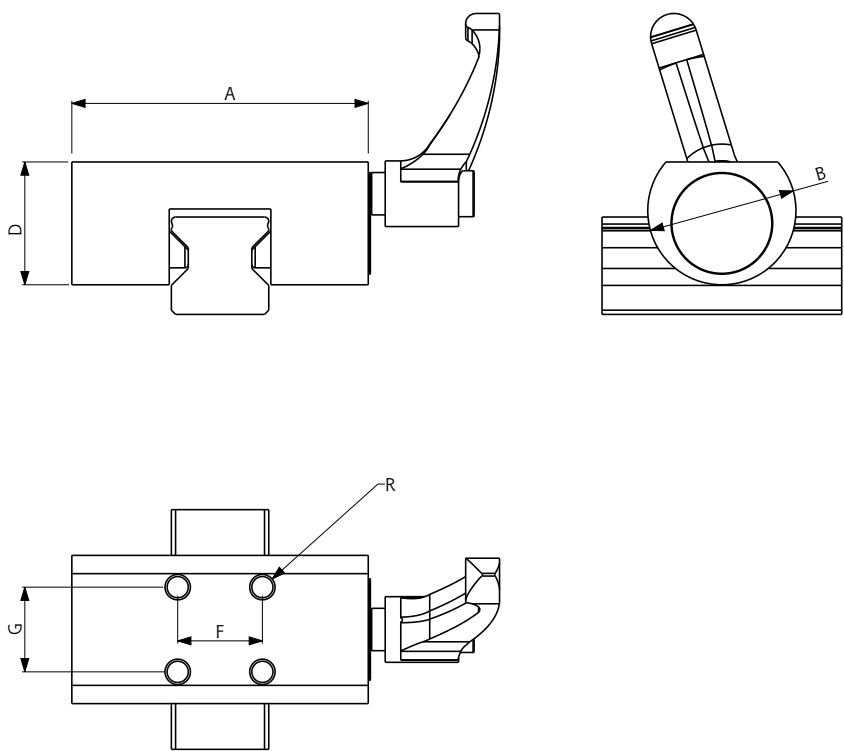


Guide size
Working type
Body

15 ÷ 65 mm
Manual
Steel

- ◆ Simple and inexpensive
- ◆ Floating locking contacts

Type	Size	Holding Force [N]	A [mm]
FMN	15 S	1200	47
FMN	15 T	1200	47
FMN	20 S	1200	60
FMN	20 T	1200	60
FMN	25 S	1200	70
FMN	25 T	1200	70
FMN	30 S	2000	90
FMN	30 T	2000	90
FMN	35 S	2000	98
FMN	35 T	2000	98
FMN	45 S	2000	118
FMN	45 T	2000	118
FMN	55 S	2000	138
FMN	55 T	2000	138
FMN	65 T	2000	160



B [mm]	D [mm]	F [mm]	G [mm]	R
25	19	17	17	M4x5
25	17.5	17	17	M4x5
28	23	15	15	M5X6
26	20	15	15	M5X6
35	29	20	20	M6x7
32	24	20	20	M6x8
40	32	22	22	M6x8
38	29	22	22	M6x8
45	37	24	24	M8x10
42	32	24	24	M8x10
55	48	26	26	M10x14
50	42	26	26	M10x14
65	57.8	30	30	M14x16
56	47	30	30	M14x16
70	58	35	35	M16x20

FMN-M Series - Manual clamping element for

Manual clamping element for miniature linear guides.

By acting on the locking screw, the contact sections press with sync on the surfaces of the rail.

The floating profiles of contact ensure a symmetrical distribution of the force on the linear guide.

New ergonomic design to save space.

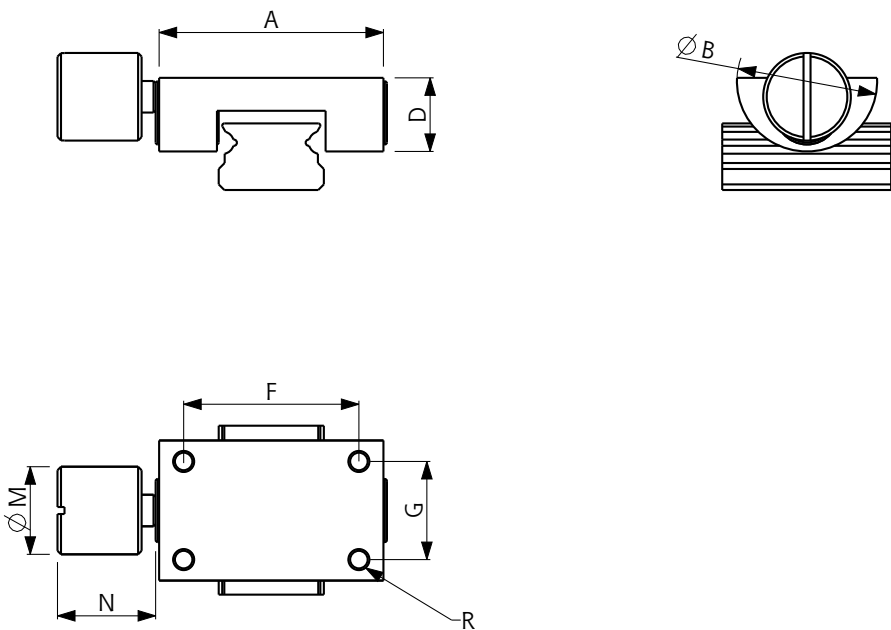
FMN ##---



Guide size **9 ÷ 15 mm**
 Working type **Manual**
 Body **Steel**

- ◆ Simple and inexpensive
- ◆ Floating locking contacts

Type	Size	Holding Force [N]	A [mm]	B [mm]
FMN	9 M	100	20	17
FMN	12 M	150	27	19
FMN	15 M	180	32	20



D [mm]	F [mm]	G [mm]	M [mm]	N [mm]	R
7.3	15	11	8	9	M3x3
9.5	20	13	10	10	M3x4.5
10.5	25	14	12.5	14	M3X5

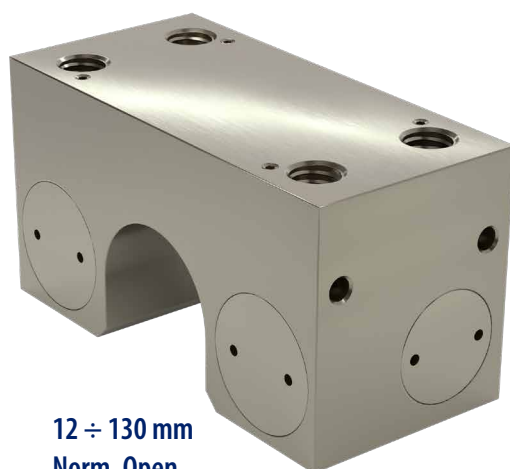
FC Series - Pneumatic clamping elements for

The same high performance of F line for round guides

The tightening is done using an amplification system with inclined plane.

FC##--E

FC##--E



Guide size

12 ÷ 130 mm

Working type

Norm. Open

Body

Steel

Operating Temperature

-20°C ÷ 80°C

Operating Pressure

5,5 ÷ 8 bar

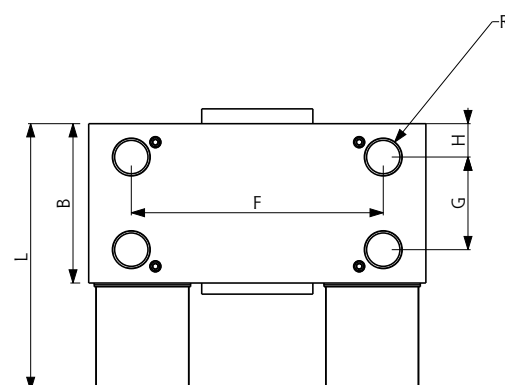
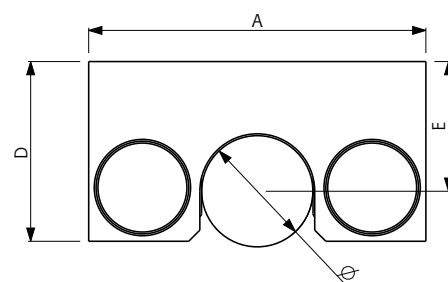
Switching time

40 ÷ 60 mSec

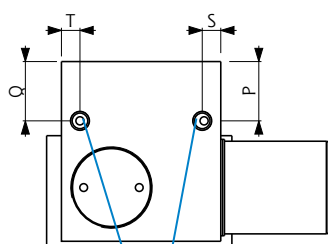
Contact parts Hardness

60 ÷ 62 HRC

◆ Can be supplied complete with proximity sensor.



Type	Size	Holding Force [N]				A [mm]	B [mm]	D [mm]
		M	S	E	D			
FC	12	400	650	650	1050	50	35	31.5
FC	14	400	650	650	1050	55	35	31.5
FC	16	400	650	650	1050	55	35	31.5
FC	20	600	1000	1000	1600	66	38	36.5
FC	25	750	1200	1200	1950	77	38.5	43
FC	30	1050	1750	1750	2800	91	43	48.5
FC	40	1500	2300	2300	3800	115	49	63
FC	50	2000	3000	3000	5000	131	48	70
FC	60	2000	3000	3000	5000	141	48	70
FC	130	2000	3000	3000	5000	211	48	109



M5

AIR CONNECTION

we recommend
the use of compressed
air hose $\varnothing 6 \times 4$

FC##-M

FC##-D



Guide size

Working type

Body

Operating Temperature

Operating Pressure

Switching time

Contact parts Hardness

12 ÷ 130 mm

Norm. Closed

Steel

-20°C ÷ 80°C

5,5 ÷ 8 bar

40 ÷ 60 mSec

60 ÷ 62 HRC

◆ Can be supplied complete with proximity sensor.

E [mm]	F [mm]	G [mm]	H [mm]	L [mm]	P [mm]	Q [mm]	R	S [mm]	T [mm]
22	15	15	10	54	11.65	11.65	M5x6	5	5
22	15	15	10	54	11.65	11.65	M5x6	5	5
22	15	15	10	54	11.65	11.65	M5x6	5	5
25	45	18	13	60	12.5	12.5	M8x10	13.5	5
30	60	20	8	63	10.5	15.5	M10x12	5	5
35	68	25	9	72	16	16	M10x12	5	5
45	90	26	9	81	20	20	M10x15	5	17
50	108	30	9	81	21.5	21.5	M10x15	5	5
70	108	30	9	81	15	15	M10x15	5	5
89	-	-	-	81	15	15	M10x15	17	17

FCMN Series - Manual clamping element for linear

Simple and reliable, this clamping element is manually controlled.

By acting on the adjustable locking lever, the contact profiles clamp in sync on the surfaces of the bar.

The floating profiles of contact ensure a symmetrical distribution of the force on the round bar or guide.

Ergonomic design.

FCMN##---

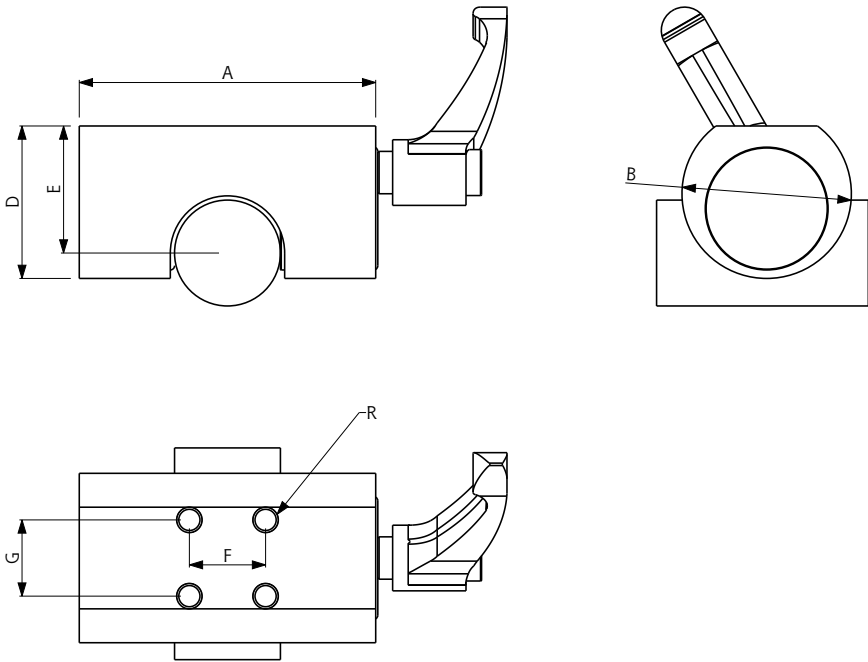


Guide size
Working type
Body

12 ÷ 50 mm
Manual
Steel

- ◆ Simple and inexpensive
- ◆ Floating locking contacts

Type	Size	Holding Force [N]	A [mm]	B [mm]
FCMN	12 01	1200	43	30
FCMN	12 02	1200	43	33
FCMN	16 01	1200	47	30
FCMN	16 02	1200	53	39
FCMN	20 01	1200	60	32
FCMN	25 01	1200	70	40
FCMN	30 01	2000	90	45
FCMN	40 01	2000	107	58
FCMN	50 01	2000	130	65



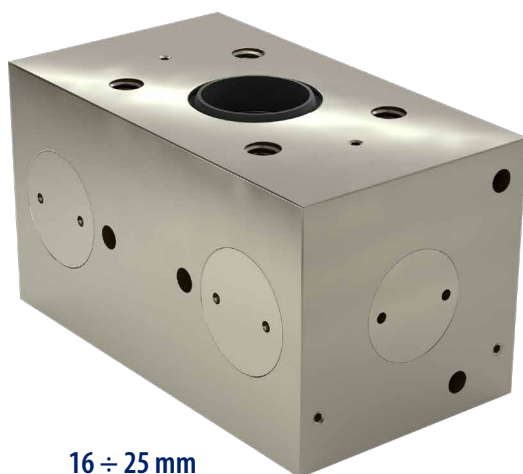
D [mm]	E [mm]	F [mm]	G [mm]	R
24	18	17	17	M4x5
24	18	32	-	M4x5
26	22	17	17	M4x5
29	22	40	-	M4x5
28	25	15	15	M5X6
36	30	18	18	M6x8
41	35	20	20	M6x8
51	45	25	25	M10x15
55	50	30	30	M14x20

FBS Series - Clamping and braking element for

The body of the element made in anodized aluminium improves the mechanical properties of this device.

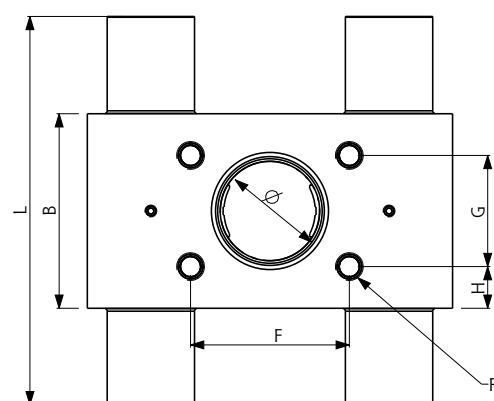
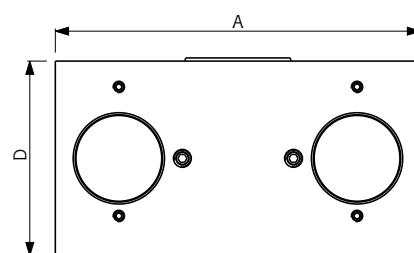
The double piston system produces clamping forces that are 50% higher than the normal mechanism, maintaining a small size.

FBS##--S
FBS##--E

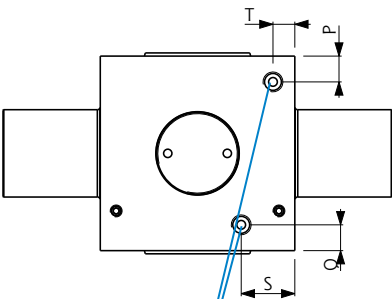


Roll diameter **16 ÷ 25 mm**
Working type **Norm. Open**
Body **Anodized aluminum**
Temperature **-20°C ÷ 80°C**
Operating Pressure **5,5 ÷ 8 bar**
Switching time **40 ÷ 60 mSec**

- ◆ Compact in size
- ◆ Functioning in both directions
- ◆ High clamping force thanks to a double piston system.
- ◆ Can be supplied complete with proximity sensor.



Type	Size	Holding Force [N]				A [mm]	B [mm]
		M	S	E	D		
FBS	16	1200	1600	1600	2800	83	49
FBS	20	1200	1800	1800	3000	87	49
FBS	25	1500	2000	2000	3500	92	49



M5
AIR CONNECTION
we recommend
the use of compressed
air hose Ø 6x4



FBS##--M
FBS##--D

## Roll diameter	16 ÷ 25 mm
Working type	Norm. Closed
Body	Anodized aluminum
Temperatur	-20°C ÷ 80°C
Operating Pressure	5,5 ÷ 8 bar
Switching time	40 ÷ 60 mSec

- ◆ Compact in size Functioning in both directions.
- ◆ High clamping force thanks to a double piston system.
- ◆ Used to block guided loads in case of pressure drop (emergency).
- ◆ Can be supplied complete with proximity sensor.

D [mm]	F [mm]	G [mm]	H [mm]	L [mm]	P [mm]	Q [mm]	R	S [mm]	T [mm]
49	40	28	10.5	98	6.5	6.5	M6x6	13.5	5.5
49	40	28	10.5	98	6.5	6.5	M6x6	13.5	5.5
49	40	28	10.5	98	6.5	6.5	M6x6	13.5	5.5

Series FBC Pneumatic cylinder blocking element

FBC is a clamping element for Pneumatic cylinders ISO 15552 and VDMA 6432.

The device blocks the rod in any position it is in the moment it is activated, not necessary in its ends of stroke.

It can also be used as a clamping unit for separate rods.



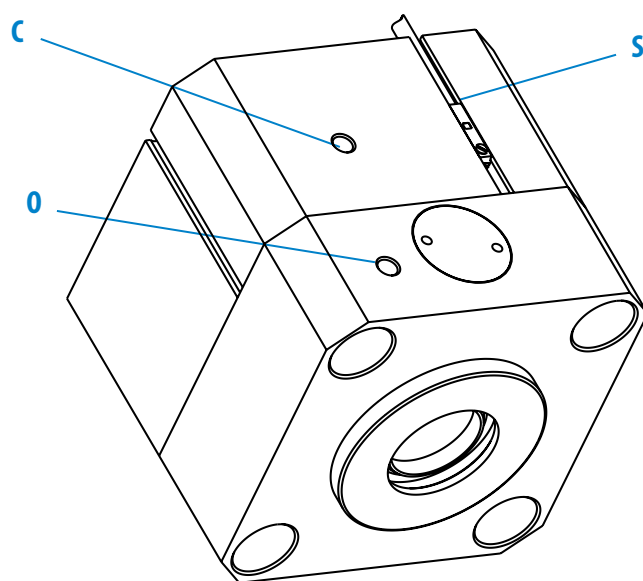
Technical Data

- Ø rod f7 tolerance of at least 54 HRC hardness
- Pneumatic air with ISO ISO 8573-1:2010 lubrication
- Working pressure 3-10 bar (6 bar for standard FBC which the forces refer to)
- Working temperature: -20°C / 80°C
- Clamping type: two-way mechanical
- Normally closed functioning [NC] -> it is blocked without pressure / or Normally open functioning [NO] – unlocked without pressure
- Life cycle (B10d) of 1.500.000 cycles.
- Can be supplied complete with proximity sensor.

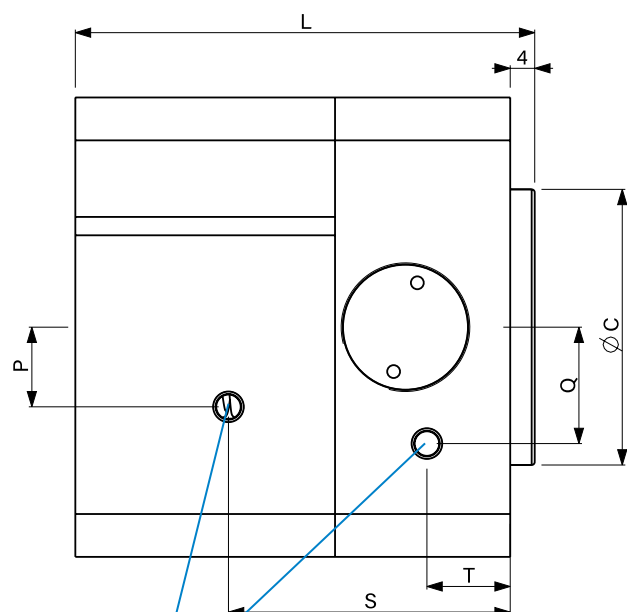
S: Sensor (optional). Can be mounted on any side

C: M5 bore. Used to connect a filter (in case of FBC normally closed and simple effect) or a pneumatic connector in order to “close” the element (if in double effect)

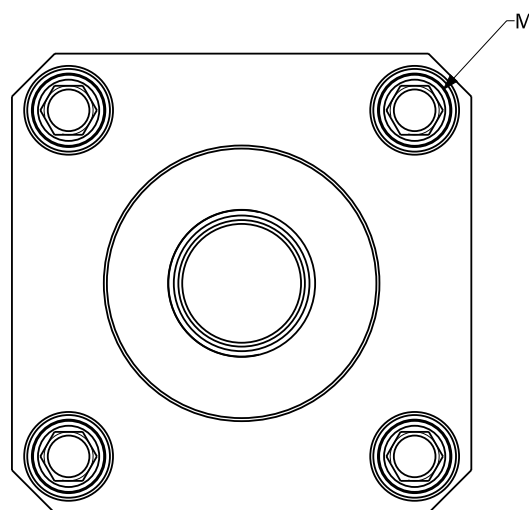
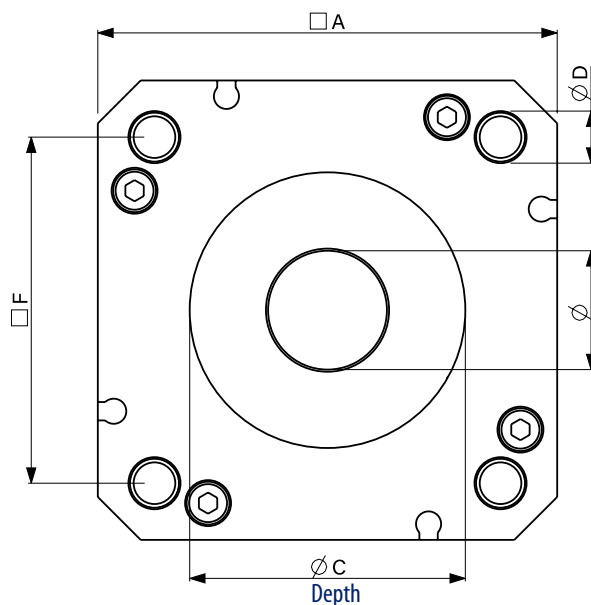
O: M5 bore. Used to connect a pneumatic connector to “open” the element in case of NC. If it is NO, a filter shall be connected.



Type	Bore	Ø Rod	M	Holding Force [N]			A [mm]	C [mm]	Depth [mm]	D [mm]
				S	E	D				
FBC	32	12	700	850	850	1550	47	30	20.1	6.5
FBC	40	16	1000	1250	1250	2250	52	35	20.1	6.5
FBC	50	20	1600	1900	1900	3500	65	40	25.1	8.5
FBC	63	20	2500	3000	3000	5500	75	45	25.1	8.5
FBC	80	25	4300	5000	5000	9300	95	45	30.1	10.5
FBC	100	25	7000	8500	8500	15500	115	55	35.1	10.5
FBC	125	32	10500	12000	12000	13000	140	60	45.9	12.5



**M5 /G1/8
AIR CONNECTION**
we recommend
the use of compressed
air hose Ø 6x4



F [mm]	L [mm]	M	P [mm]	Q [mm]	R	S [mm]	T [mm]	PISTON EXTENSION [mm]	PNEUMATIC CONNECTION V[cm ³]	FIXING SCREW [Nm]
32.5	80	M8	0	11	M5	39.5	20	59.5	7	9.5
38	99	M8	7	13	M5	48	21.3	75	12	9.5
46.5	75	M8	0	14	M5	42.5	20.1	46	15	23
56.5	75	M8	13	19	M5	46	13.6	46	23	23
72	85.9	M10	16	22	G1/8	51.9	24.9	52	41	46
89	92.1	M10	26	26	G1/8	53.1	23.5	53	66.5	46
110	108	M12	27	27	G1/8	58.5	28	58.6	100	84

ERRE.DI. Automation also provides special elements to best meet customers' needs

Thanks to its advanced technical know-how and a continuous process of innovation, ERRE.DI. is able to provide customized automation components to best meet its customers' needs, creating a real partnership during the development of new solutions.

Design, manufacturing and testing are carried out within ERRE.DI. facilities in order to give a quick and effective response to customers' requests. Here below some examples of customized solutions..

FMV Series Multifunction element

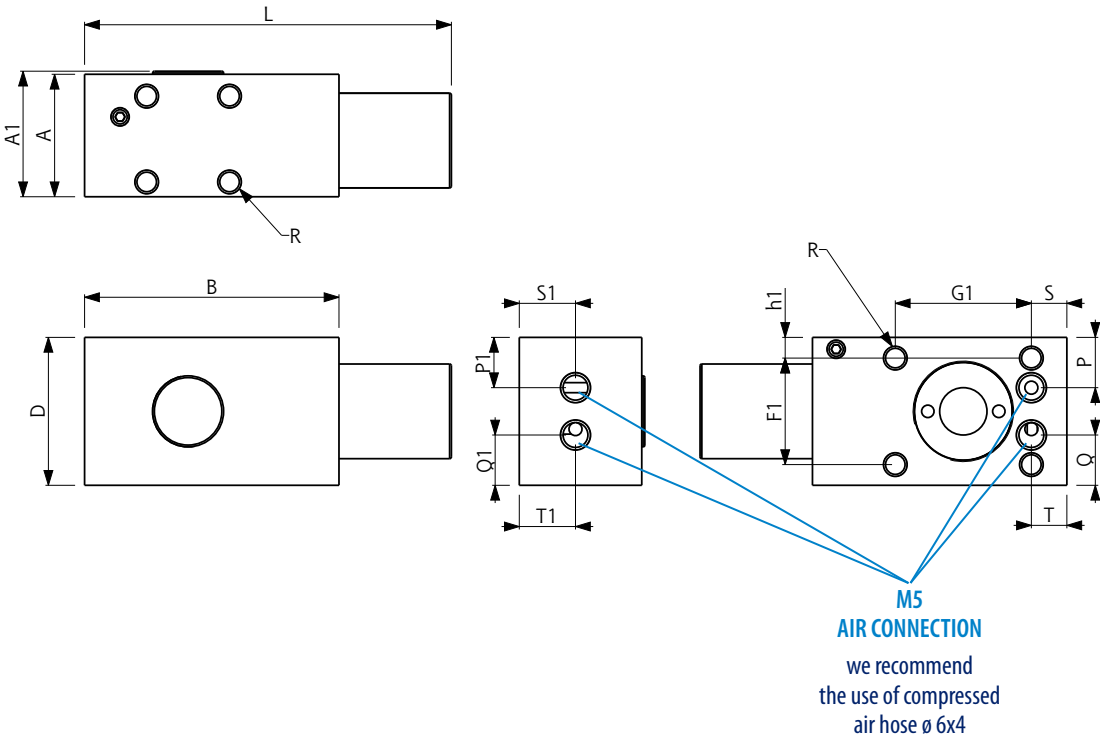
FMV##---



## Guide size	15 mm
Working type	Norm. Open /Norm. Closed
Body	Steel/Aluminium
Temperature	-20°C ÷ 80°C
Operating Pressure	5,5 ÷ 8 bar

- ◆ **Small dimensions**
- ◆ **Multiple ways to use**
- ◆ **Different fields of application**
- ◆ **Also available with contact parts covered with rubber**

Type	Size	Holding Force [N]				A [mm]	A1 [mm]	B [mm]	D [mm]	F [mm]	F1 [mm]	G [mm]
		M	S	E	D							
FMV	15	200	320	320	520	20.7	21.22	43	25	14.5	18	14



G1 [mm]	H [mm]	h [mm]	h1 [mm]	L [mm]	P [mm]	Q [mm]	R	S [mm]	T [mm]	P1 [mm]	Q1 [mm]	S1 [mm]	T1 [mm]
23	10.5	2.5	3.5	62	8.5	8.5	M4X4	6	6	8.5	8.5	9.5	9.5

Decomposable Clamping Element

It's a small element, extremely easy to install and/or replace in the system where is used:

- Fewer parts of the production machine need to be displaced;
- No need to slide the blocking element along the whole length of the guide.



## Guide size	20 – 25
Working type	Norm. Open / Norm. Closed
Body	Steel
Operating Temp.	-20°C ÷ 80°C
Operating Pressure	5,5 ÷ 8 bar

- ◆ **Single-piston system**
- ◆ **Reduced length**
- ◆ **High clamping forces**
- ◆ **Precise positioning**
- ◆ **High rigidity**
- ◆ **Shaped profile**

Note





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