

# RODLESS CYLINDER WITH MAGNETIC SLIDING SERIES MAGNETIC SLIDE

The magnetic-slide rodless cylinder operates pneumatically and is equipped with a piston and a slide with magnets. The slide runs freely along the liner, following the piston movements, thanks to the magnetic coupling force between the two. If an axial force exceeding the magnetic coupling force is applied to the slide, it disengages. It is therefore important to operate within the pressure, force and speed ranges shown in the catalogue.

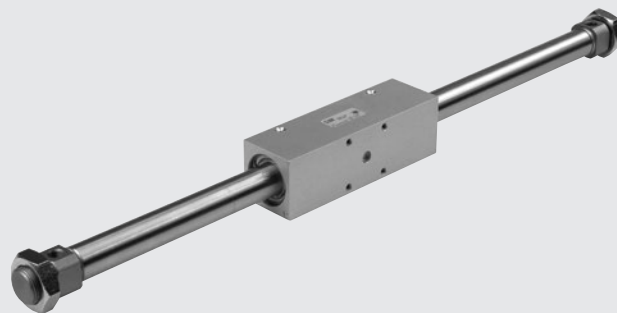
The load is fixed onto the slide using four threaded holes.

The cylinder is secured at the ends by means of nuts, flanges and brackets.

This solution is recommended when there is limited space for assembly, there must be no air leaks or impurities must be prevented from entering.

Available with three bores  $\varnothing$  16-20-25, in the basic or swinging versions, with adjustable pneumatic cushioning or non-adjustable cushioning.

Designed for use with magnetic sensors.

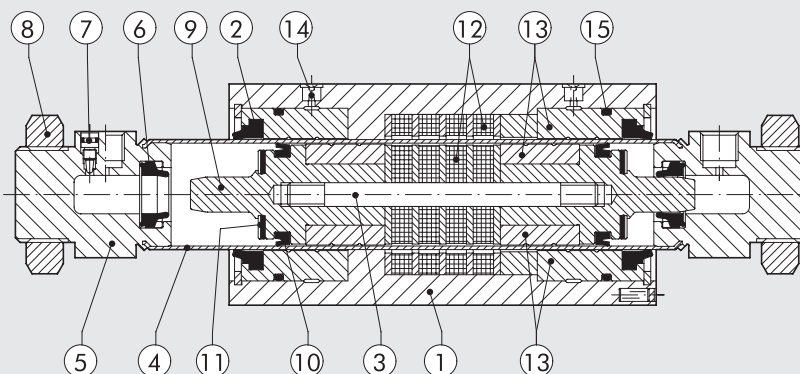


**N.B.:** We always suggest to use flow microregulators. During the setup of the actuator, start with CLOSE flow microregulators, and open gradually till the achievement of the required speed.

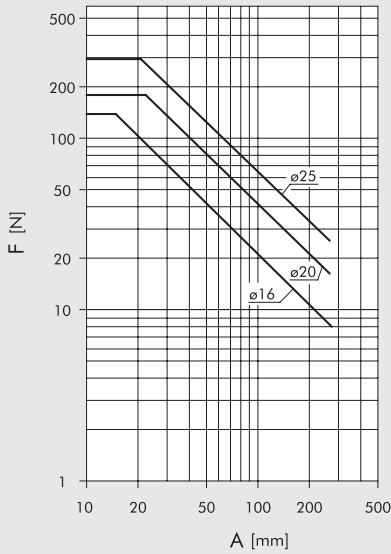
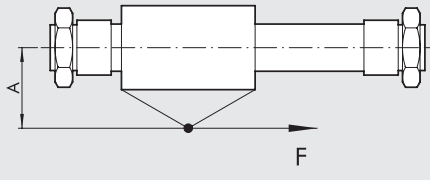
TECHNICAL DATA		$\varnothing$ 16	$\varnothing$ 20	$\varnothing$ 25
Operating pressure	bar		2 to 7	
	MPa		0.2 to 0.7	
	psi		29 to 101	
Temperature range	$^{\circ}$ C		-10 to +60	
	Design	Double-acting rodless cylinder, with magnetic coupling transmission system		
Fluid		50 $\mu$ m unlubricated filtered air Lubrication, if used, must be continuous		
Standard strokes	mm	10 to 1000		
		Magnetic uncushioned/cushioned		
Versions		Swinging magnet uncushioned/cushioned		
		Magnet for limit switch sensor		
Position sensing		Hex nuts (supplied standard) - Legs - Flanges		
Fixing				
Theoretic force at 6 bar	N	118	185	288
Magnetic coupling force (static condition)	N	200	300	500
Recommended speed	m/s	0.4	0.4	0.4
Weights		See cylinder "General technical data" at the beginning of the chapter		
Notes		Lubricate the slide every 2000 km or once a year, through the lubricators		

## COMPONENTS

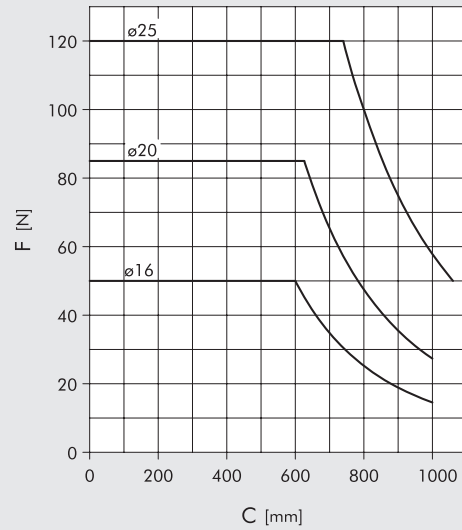
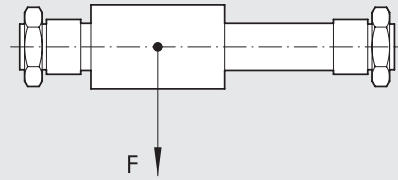
- ① SLIDE: anodized aluminium alloy
- ② WIPER RING: polyurethane
- ③ TIE ROD: stainless steel, thick-chromed
- ④ BARREL: AISI 304 stainless steel
- ⑤ HEAD: anodized aluminium alloy
- ⑥ CUSHIONING GASKET: NBR
- ⑦ NEEDLE: OT 58 with needle-out movement safety system, even when fully open
- ⑧ HEAD NUT: OT 58 nickel-plated
- ⑨ HALF-PISTON: aluminium alloy
- ⑩ PISTON GASKET: polyurethane
- ⑪ BUFFER: NBR
- ⑫ INT/EXT MAGNETS: neodymium
- ⑬ INT/EXT GUIDES: thermoplastic resin with lubricating additive
- ⑭ GREASE NIPPLE: steel
- ⑮ Static O-rings: NBR



**ADMISSIBLE AXIAL FORCE "F" AS A FUNCTION OF THE LEVER ARM "A"**

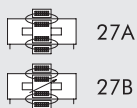
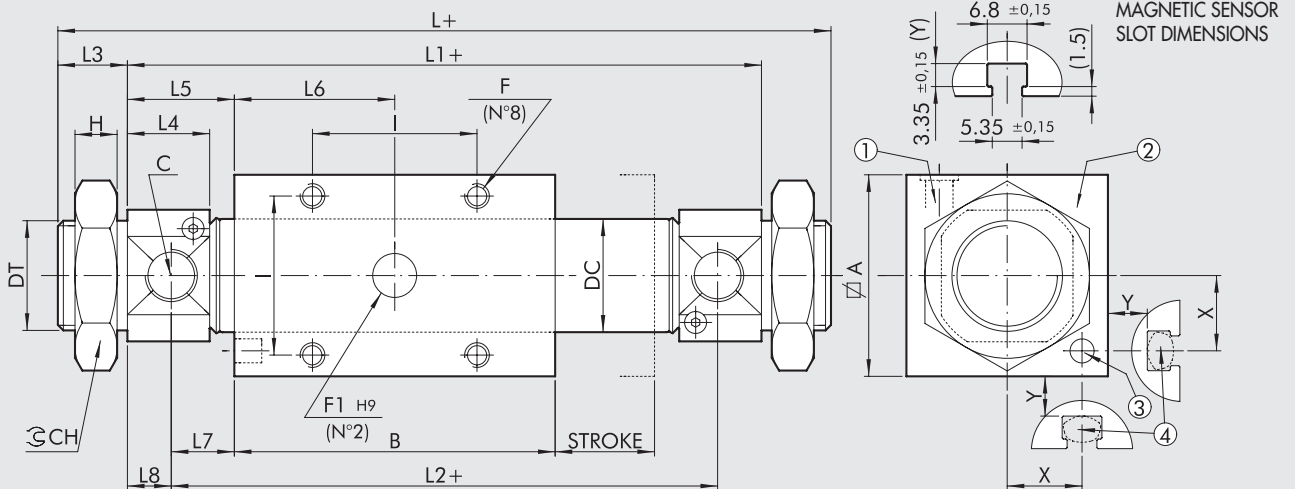


**ADMISSIBLE RADIAL FORCE "F" AS A FUNCTION OF THE STROKE "C"**



**DIMENSIONS**

+ = ADD STROKE



- ① Grease nipple
- ② External cursor, 360° adjustment
- ③ Sensor magnet
- ④ Position for magnetic sensors  
(N.B. customer must provide supports)

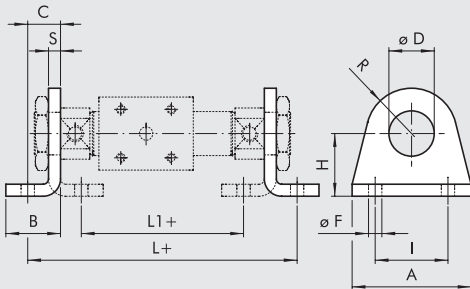
Ø	A	B	C	DC	DT	F	F1	I	L	L1	L2	L3	L4	L5	L6	L7	L8	CH	H	X	Y
16	35	125	M5	17.3	M16x1.5	M5x7	8x3	26	205	181	169	12	10	28	62.5	22	6	24	8	14	9
20	42	135	G1/8	21.3	M22x1.5	M5x10	8x3	32	217	185	169	16	15.5	25	67.5	17	8	32	7	17.5	9
25	50	150	G1/8	26.5	M22x1.5	M6x11	10x4	36	238	206	188	16	17.1	28	75	19	9	32	7	21.5	9



## ACCESSORIES FOR RODLESS CYLINDER WITH MAGNETIC SLIDING: FIXING

### FOOT

+ = ADD STROKE

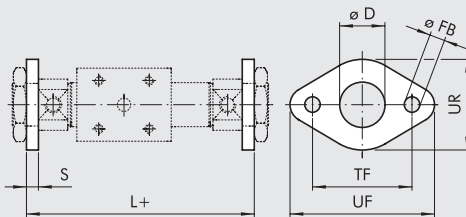


Code	Ø	D	A	B	C	H ±0.3	R	F ±0.2	I ±s	L	L1	S	Weight [g]
0950164040	16	16	42	20	14	27	13	5.5	32	209	161	4	50
0950204040	20	22	54	25	17	30	20	6.5	40	219	161	5	105
0950204040	25	22	54	25	17	30	20	6.5	40	240	182	5	105

Note: individually pocket

### FLANGE MODEL C

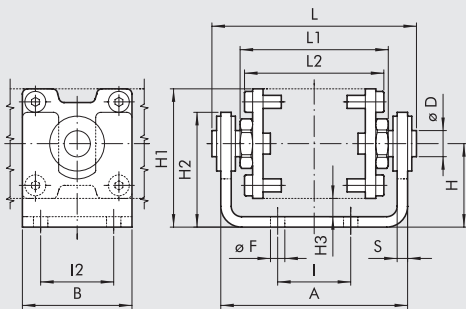
+ = ADD STROKE



Code	Ø	D	FB H13	TF ±14	UF	UR	L	S	Weight [g]
W0950120002	16	16	5.5	40	52	30	189	4	26
W0950200002	20	22	6.5	50	66	40	195	5	52
W0950200002	25	22	6.5	50	66	40	216	5	52

Note: individually pocket

### KIT FOR SWING VERSION



Code	Ø	A	B	D	F ±0.1	H	H1	H2	H3	I	I2	L	L1	L2	S	Weight [g]
0950164050	16	67	40	10	5.5	28.5	46	40	7	26	26	73.5	53	52	4	288
0950204050	20	74	42	10	5.5	32	53	43	7	32	32	80.5	60	59	4	345
0950254050	25	87	50	12	6.5	38	63	50	8	36	36	96.5	68	68	5	576

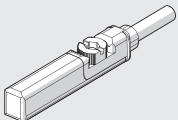
Note: individually pocket. Supplied with 8 screws.

The swinging version kit can be used to avoid bending moments and lateral loads on the slide. It can also be used to compensate for misalignments with respect to the load guide. Max alignment error ±1mm.

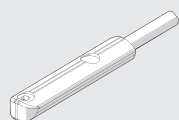
## ACCESSORIES: MAGNETIC SENSOR

### RETRACTABLE SENSOR

**SENSOR, SQUARE TYPE** Latest generation, secure fixing



**SENSOR, OVAL TYPE** Traditional



For codes and technical data, see **chapter A6**.