

ROTARY ACTUATOR SERIES R3



Actuator with double rack and play take-up. Angle of rotation adjustable from 0 to 180°. The R3 rotary actuator can come with a mechanical stop or hydraulic end-of-stroke cushioning.

There is a version with flange and one with shaft (for $\varnothing 16-20-25-30$). There are slots in the body for retracting magnetic proximity sensors, two on each side. There is hole in the flange for air pipes or wires.

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.



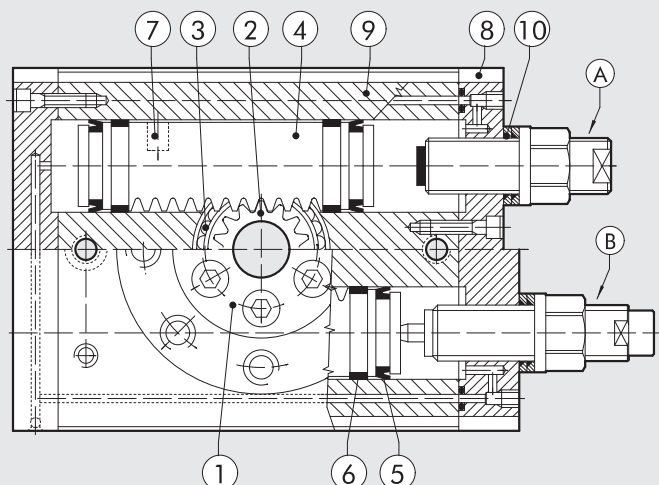
TECHNICAL DATA		R3-16	R3-20	R3-22	R3-25	R3-30	R3-40
Operating pressure	bar	3 to 7					
	MPa	0.3 to 0.7					
Temperature range	psi	43.5 to 101					
	°C	-10 to +80					
Angle adjustment	degrees	0° to 180°					
Fluid		20 μ m filtered, lubricated or unlubricated air; lubrication if used, it must be continuous					
Versions		With mechanical stop / hydraulic decelerator					
Sizes		16	20	22	25	30	40
Bores	mm	2 x 16	2 x 20	2 x 22	2 x 25	2 x 30	2 x 40
Theoretical torque at 6 bar	Nm	0.9	1.8	2.7	4.6	9.3	22
Max. axial load	N	74	135	195	300	340	360
Max. radial load	N	78	137	360	450	490	560
Weight	kg	0.53	0.99	1.29	2.08	3.9	6.7
Rotation time without load	s	0.2	0.2	0.2	0.2	0.3	0.3
Admissible kinetic energy	Joule						
WITH MECHANICAL STOP (with flange W1630_2180 and with shaft W1630_5180)		0.007	0.025	0.049	0.082	0.090	0.150
WITH HYDRAULIC DECELERATOR (with flange W1630_2180 and with shaft W1630_5180)		-	-	-	0.29	1.10	1.60

COMPONENTS

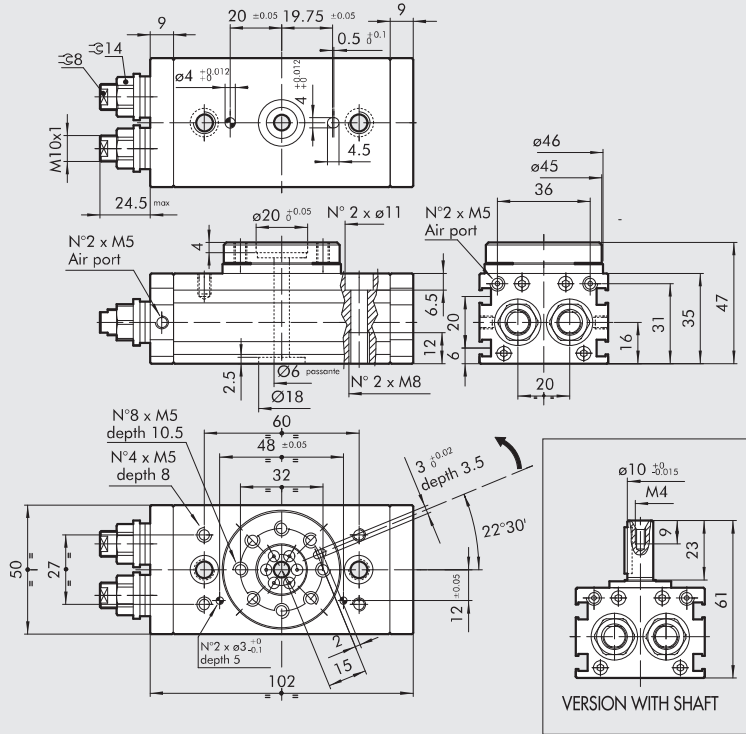
- ① ROTARY FLANGE: anodized aluminium
- ② PINION: hardened and tempered steel
- ③ BALL BEARING
- ④ PISTON / RACK: hardened and tempered steel
- ⑤ CUSHIONING GASKET: NBR
- ⑥ GUIDE PAD: PTFE
- ⑦ MAGNET: neodymium
- ⑧ HEAD: anodized aluminium
- ⑨ BARREL: anodized aluminium
- ⑩ SEAL: NBR

VERSIONS:

- A Stroke adjustment
- B Stroke adjustment with inside hydraulic shock absorbers (available from $\varnothing 25$)

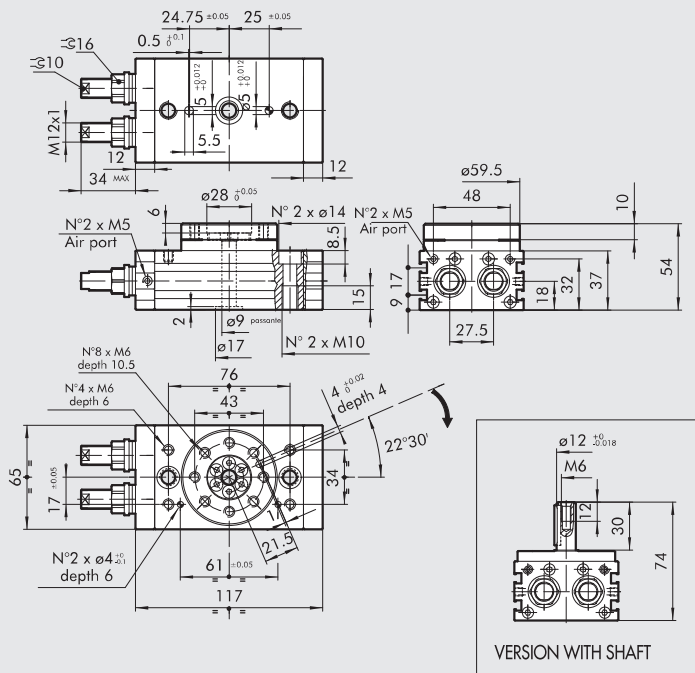


ROTARY ACTUATOR R3-16



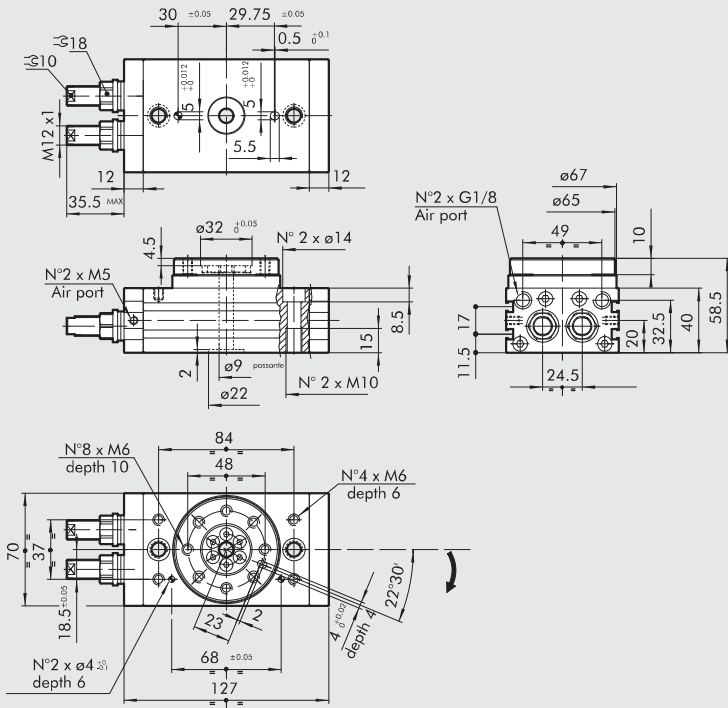
Code	Description
W1630162180	Rotary actuator with flange R3-16
W1630165180	Rotary actuator with shaft R3-16

ROTARY ACTUATOR R3-20



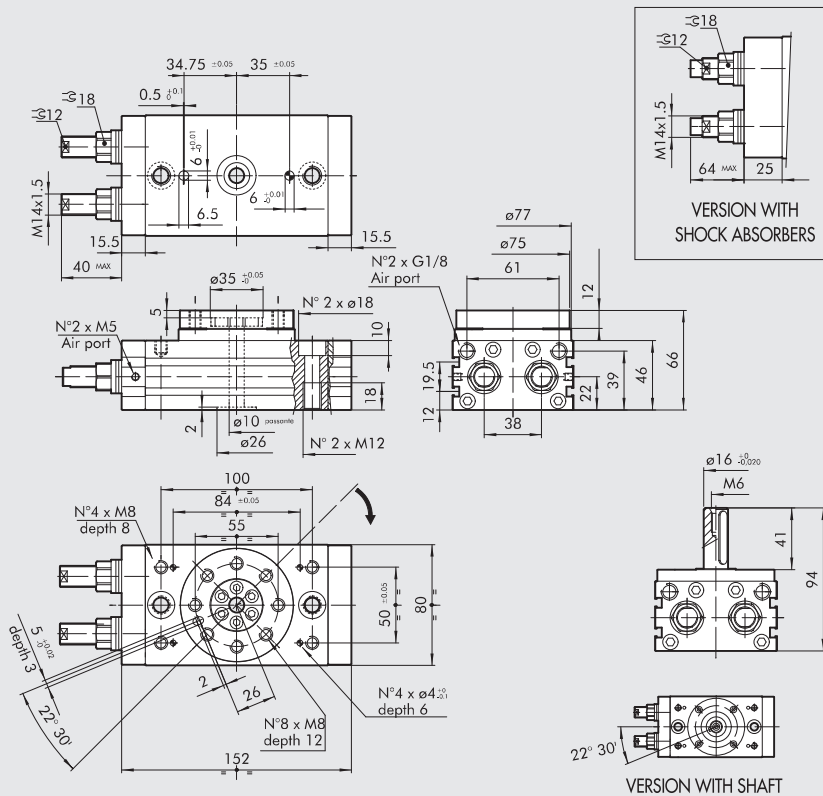
Code	Description
W1630202180	Rotary actuator with flange R3-20
W1630205180	Rotary actuator with shaft R3-20

ROTARY ACTUATOR R3-22



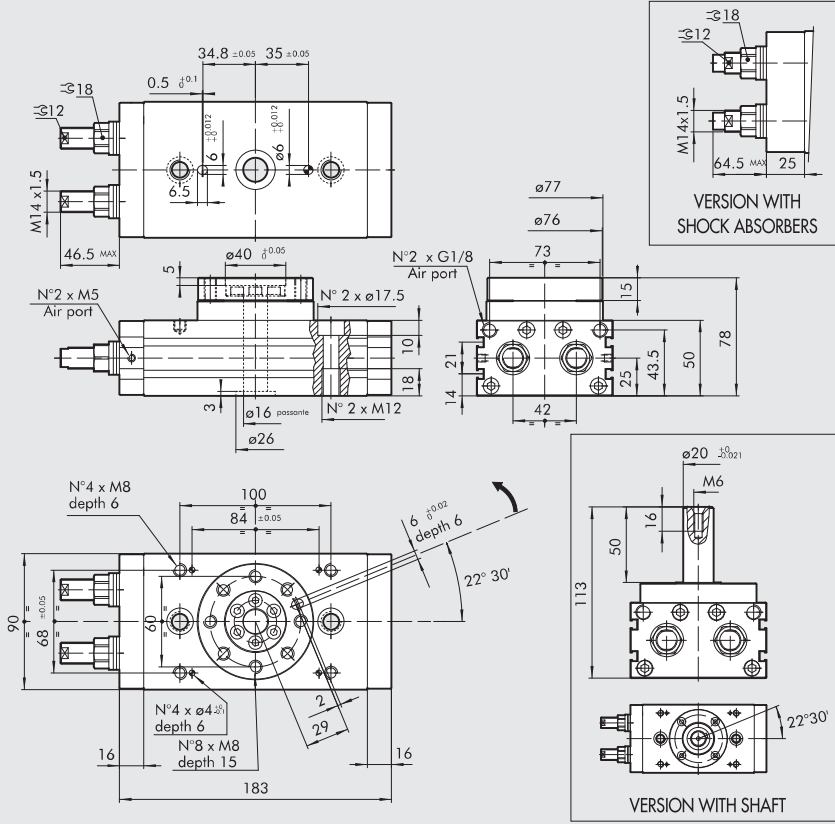
Code W1630222180
Description Rotary actuator with flange R3-22

ROTARY ACTUATOR R3-25



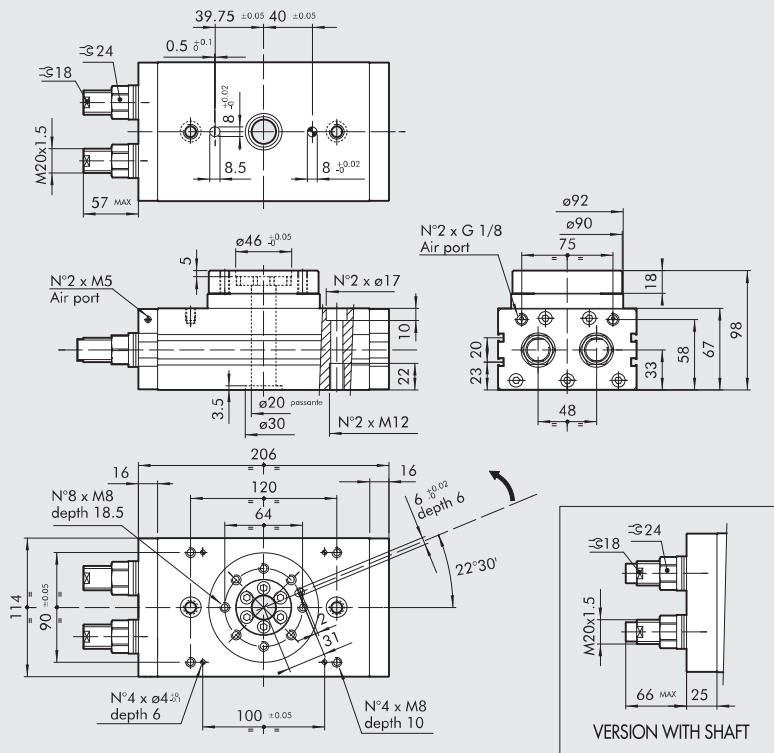
Code W1630252180
Description Rotary actuator with flange R3-25
 W1630253180 Rotary actuator with flange + shock absorbers R3-25
 W1630255180 Rotary actuator with shaft R3-25
 W1630256180 Rotary actuator with shaft + shock absorbers R3-25

ROTARY ACTUATOR SERIES R3-30



Code	Description
W1630302180	Rotary actuator with flange R3-30
W1630303180	Rotary actuator with flange + shock absorbers R3-30
W1630305180	Rotary actuator with shaft R3-30
W1630306180	Rotary actuator with shaft + shock absorbers R3-30

ROTARY ACTUATOR SERIES R3-40

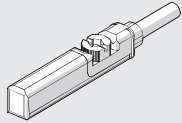


Code	Description
W1630402180	Rotary actuator with flange R3-40
W1630403180	Rotary actuator with flange + shock absorbers R3-40

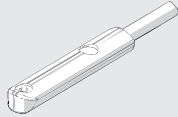
ACCESSORIES

RETRACTABLE SENSOR

SENSOR, SQUARE TYPE
 Latest generation,
 secure fixing

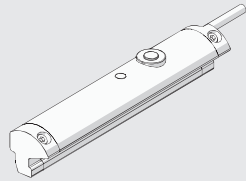


SENSOR, OVAL TYPE
 Traditional



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

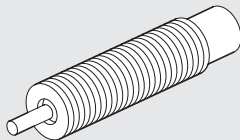
LTS POSITION SENSORS



For technical data and usage strokes see **chapter A6**.

SPARE PARTS

SHOCK ABSORBERS



Code	Ø	Description
0950004015	25	Shock absorbers ECO S 25 MC2 short M14x1.5
0950004008	30	Shock absorbers ECO 25 MC4 M14x1.5
0950004005	40	Shock absorbers ECO 50 MC2 + nut M20x1.5

NOTES