

Rotary actuators generate a torque through a cogwheel and a rack moved by a hydraulic cylinder. This solution simplifies the kinematic and the maintenance required during its life cycle. Rotary actuators have an adjustable cushioning, which can generate a cushioning torque comparable to the maximum torque of the cylinder. The stroke end adjuster allows phasing the system with a regulation range of +/-5°. They are also available in a version with magnetic piston for applications with magnetic proximity switches along the stroke of the piston.

HR



MR



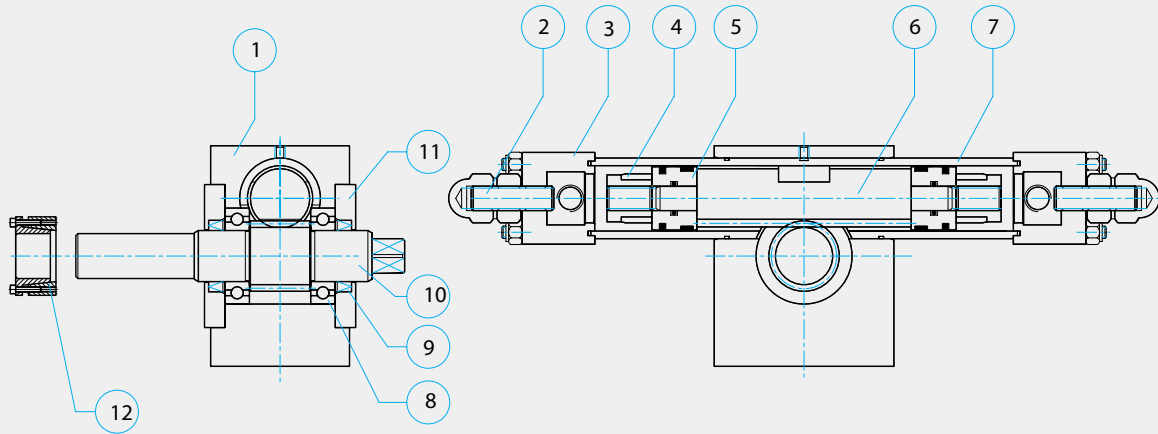
		SPECIFICATIONS		
		HR 32/32	HR 40/70	HR 63/96
Bore		32	40	63
Specific stroke	(1)	0.28	0.61	0.83
Maximum operating torque	daNm	6	40	120
Operating pressure	bar	50	100	100
Peak pressure	bar	80	140	140
Max. speed rotation	rad/sec	30	14	10
Weight	(180°) Kg	4.80	12.5	43

Other features such as CD and MD cylinders

(1) Specific stroke for every rotation angle.
For example HR 40/70-180° stroke (0.61x180)=110.

Seal code	Performance					Fluid		
	High sealing	Low friction	Max speed	Temp °C		Hydraulic oil	Phosphoric esters	HFC-fluid
				Min	Max			
S	√		0,5 m/s	- 20	+ 80	√		
L		√	1 m/s	- 20	+ 80	√		
H		√	1 m/s	- 20	+ 150	√	√	
G		√	0,5 m/s	- 20	+ 80			√

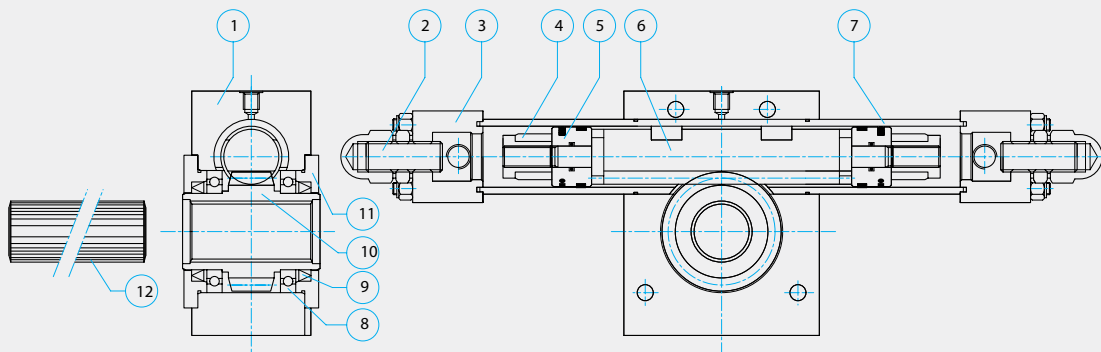
HR 32/32



Component	Material
1 Body	Aluminum
2 Stroke adjuster +/-5°	Steel
3 Head	Steel
4 Cushioning	Hardened steel
5 Piston	Steel
6 Rack	Alloy steel
7 Tube	Steel
8 Ball bearing	
9 Rotating shaft seal	NBR
10 Cogwheel with shaft	Alloy steel
11 Closing flange	Steel
12* Shaft clamp	

* Supplied on request.

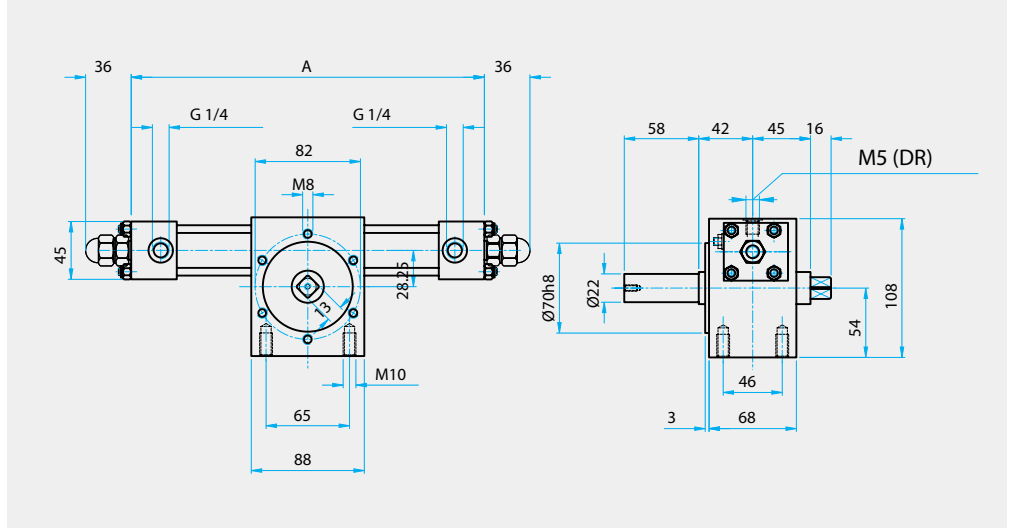
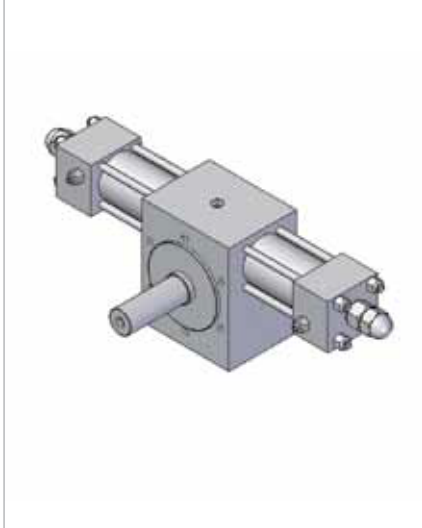
HR 40/70 HR 63/96



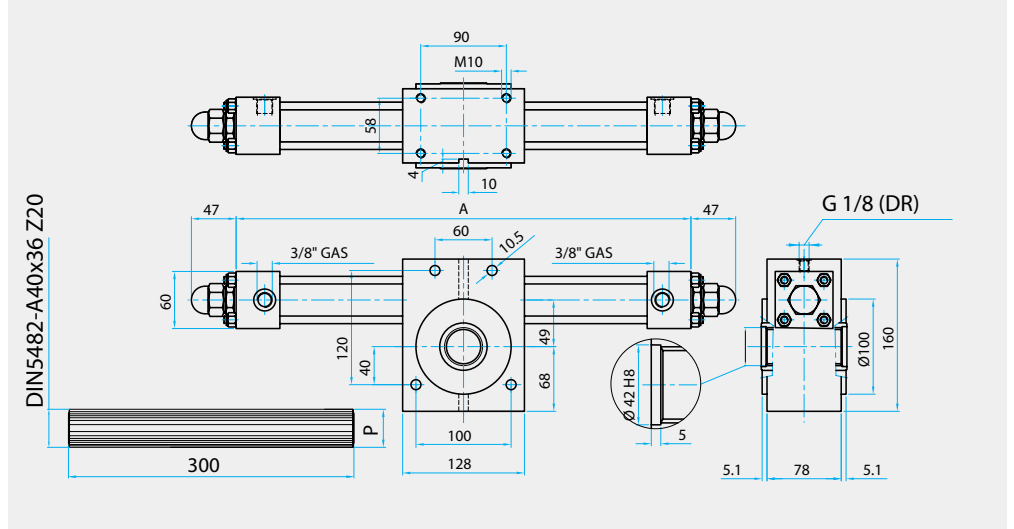
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10 Cogwheel	Alloy steel
11 Closing flange	Steel
12* Grooved shaft	

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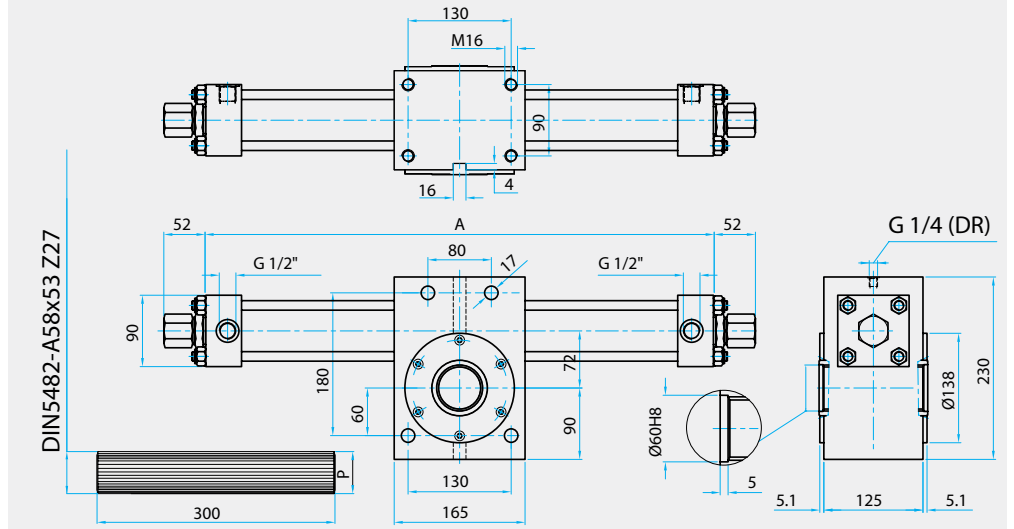
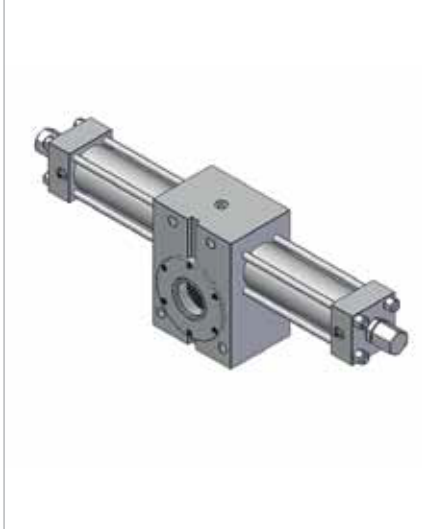
HR 32/32



HR 40/70



HR 63/96



Type	rotation angle		
	90	180	270
HR 32/32	222	272	322
HR 40/70	368	478	587
HR 63/96	462	610	760

It's compulsory to link the drain (DR) to the tank.

