

PNEUMATIC CYLINDERS

CRR SERIES



The rotary actuator is a unit that converts the linear motion of a cylinder into a rotative motion, with rotation angle presetted by means of a pinion-rack coupling.

The range is available also in the magnetic version, that includes the magnetic piston to get the signals by reed contacts.

The standard range is of 7 bores from 32 to 125 mm.



Available with ATEX certification.

RANGE

BORE AND STROKE

TYPE	CRR	32	40	50	63	80	100	125
Cylinder bore size	mm.	32	40	50	63	80	100	125
Standard rotation (see fig. 2-3)		96° - 186° - 366°						
Air entry	gas	1/8"	1/4"		3/8"		1/2"	
Position air entry		At the top (other 3 positions at 90° are possible)						
Pressure max	bar	12						
Temperature	°C	-20°C : +80°C						
Stroke for rotation of 10°	mm.	2,6	3,5		4,7		6,5	
Angle of rotation adjustment "Y" (see fig. 2)		19°	20°		17°		17°	
Angle of deceleration "Z" (see fig. 3)		50°	50°		50°		40°	
Initial position of slot		See figure 1						
Torque moment	Nm	See performances diagrams						
Compressed air consumption		See performances diagrams						
Weight Kg	96°	1,5	2,0	2,3	4,1	4,6	7,0	7,8
	186°	1,6	2,2	2,5	4,3	4,9	7,4	8,3
	366°	1,8	2,4	2,9	4,7	5,5	8,2	9,3

PERFORMANCES DIAGRAMS

DIAGRAM TORQUE MOMENT

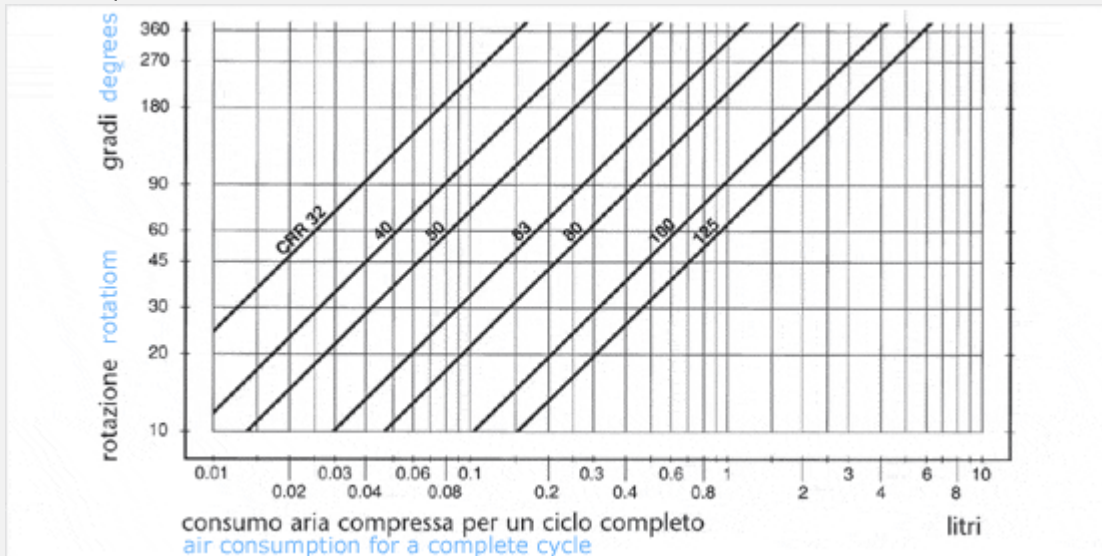


DIAGRAM CONSUMPTION COMPRESSED AIR

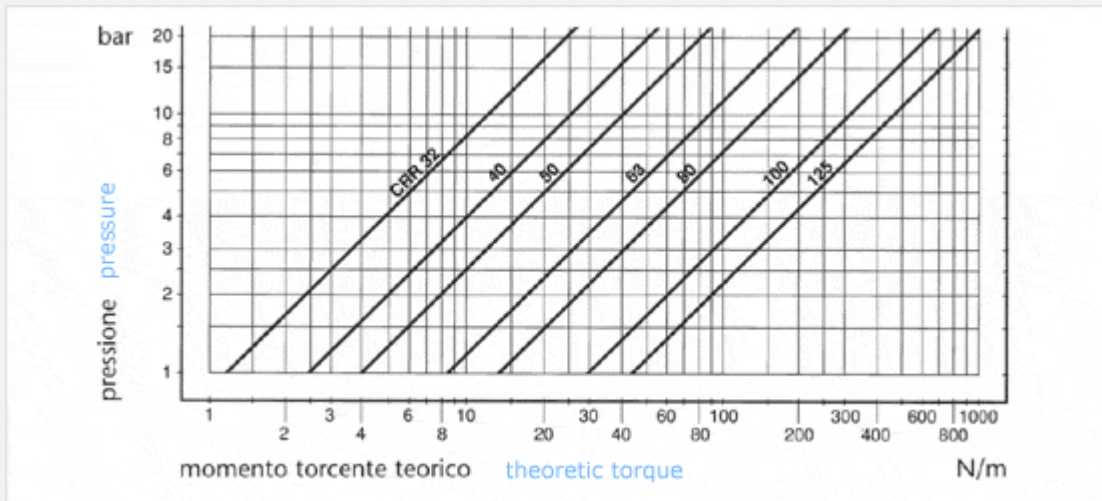
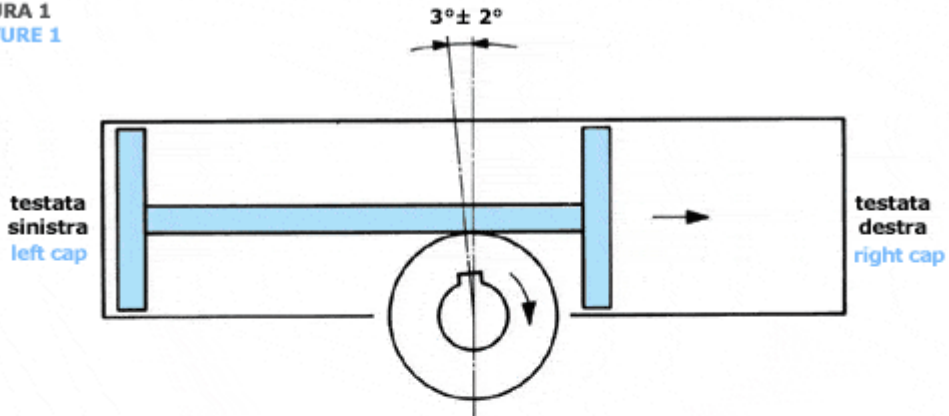


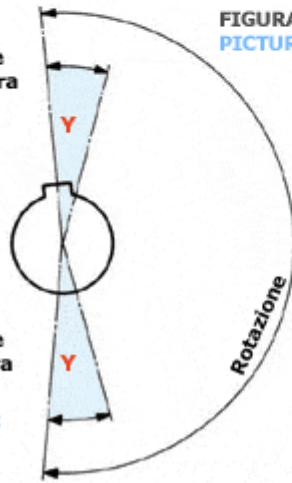
DIAGRAMMA MOMENTO TORCENTE

FIGURA 1
PICTURE 1



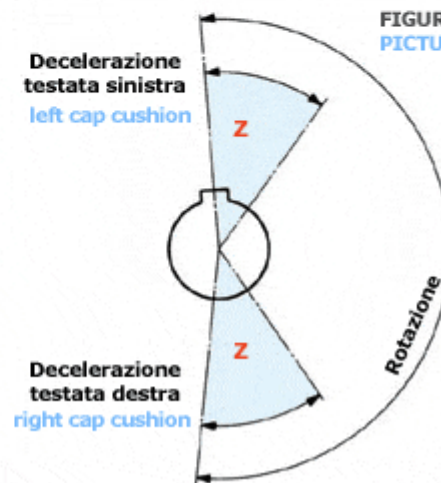
Regolazione
testata sinistra
left cap
adjustment

FIGURA 2
PICTURE 2



Decelerazione
testata sinistra
left cap
cushion

FIGURA 3
PICTURE 3



TECHNICAL FEATURES

End caps : realized by aluminium light alloy die cast, protection by black anodization .

Central body : aluminium light alloy black anodized , with the slide for the piston-rack in self lubricant bronze



Piston and rack in steel C45.



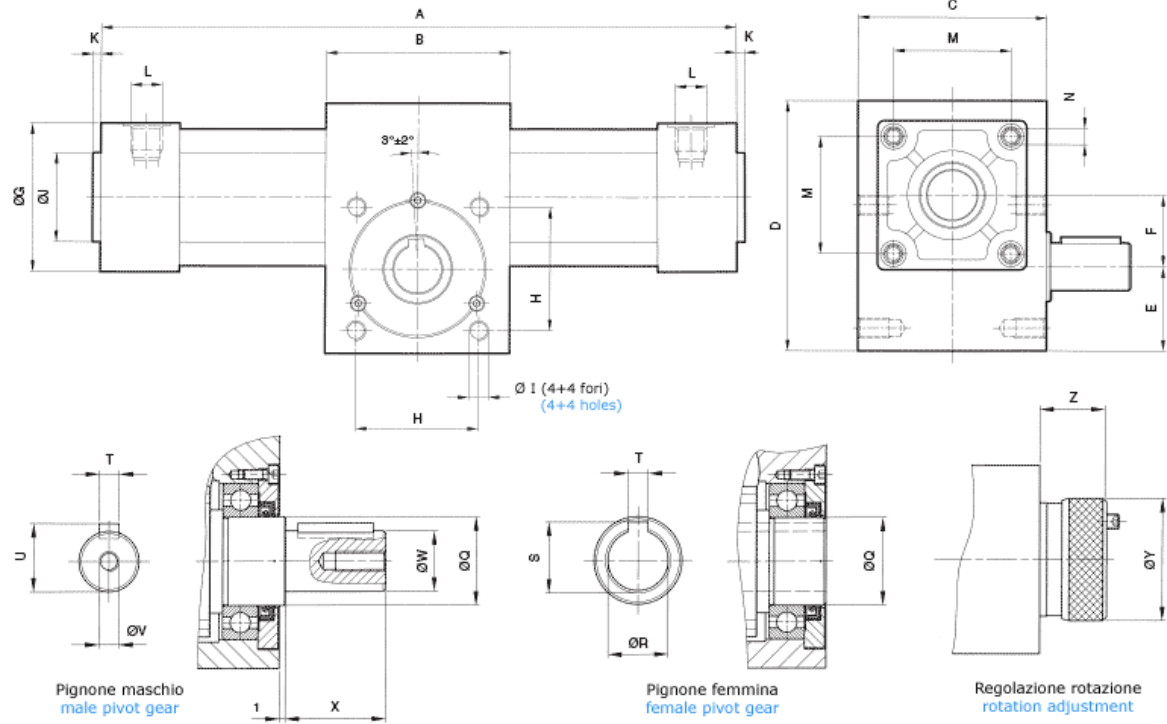
The rotating group is mounted on ball bearings, for an optimal sliding and an higher life.



DIMENSIONS

**ALCULATION OF A IN FUNCTION OF ALPHA ROTATION
ANGLE (IN DEGREES)**

BORE SIZE mm	A ± 1 mm
32	$159 + 0,5236 \times \text{ALFA}$
40	$214 + 0,6982 \times \text{ALFA}$
50	$211 + 0,6982 \times \text{ALFA}$
63-80	$255 + 0,9425 \times \text{ALFA}$
100-125	$315 + 1,3090 \times \text{ALFA}$



Bore size mm	A±1			B mm	C mm	D mm	E mm	F mm	G mm	H ±0,1 mm	I mm	J e9 mm	K mm	L gas	M ±0,1 mm	N mm	O k7	P +0 -0,2	Q k6	R H7	S +0,1 -0	T	U +0 -0,1	V	W h6	X	Y	Z max
	96°	186° gradi	366°																									
32	203	250	344	50	50	70	24	22	45	35	M6x10	25	3	1/8"	33	M6x5	35	2,4	17	10	11,7	4	13,5	M4x15	12	20	28	20
40	275	338	464	72	65	92,5	32,5	27,5	52	47	M8x14	32	3	1/4"	40	M6x12	47	3,2	25	15	17,2	5	18	M5x15	16	30	35	23
50									65						49	M8x13	47	3,2	25	15	17,2	5	18	M5x15	16	30	35	23
63	340	426	595	93	95	126	42,5	36	75	62	M10x16	45	4	3/8"	59	M8x13	62	3,9	35	24	27,2	8	27	M8x20	24	40	48,5	27
80									95						75	M10x14	62	3,9	35	24	27,2	8	27	M8x20	24	40	48,5	27
100	437	555	790	128	140	186,5	64	52,5	115	90	M14x24	55	5	1/2"	90	M10x14	90	5,4	55	35	38,7	10	38,5	M12x20	35	50	60	39
125									140						110	M12x14	90	5,4	55	35	38,7	10	38,5	M12x20	35	50	60	39

