

Spring hinges

for automatic return, SUPER-technopolymer

MATERIAL

Glass-fibre reinforced polyamide (PA) SUPER-technopolymer body, black colour, matte finish.

ROTATING PIN

Aluminium.

Pin housing end caps made out of acetal based (POM) technopolymer, black colour.

RETURN SPRING

Stainless steel.

STANDARD EXECUTIONS

Pass-through holes for M6 cylindrical head screws.

- **CFMR-NC-035**: max return torque 0.35Nm (at 180°), holding torque 0.12Nm (at 0°).
- **CFMR-NC-070**: max return torque 0.70Nm (at 180°), holding torque 0.25Nm (at 0°).
- **CFMR-NO-035**: max return torque 0.35Nm (at 0°), holding torque 0.12Nm (at 180°).
- **CFMR-NO-070**: max return torque 0.70Nm (at 0°), holding torque 0.25Nm (at 180°).
- **CFMR-NS**: complementary hinge, no return spring.

ROTATION ANGLE (APPROXIMATE VALUE)

Max 270° (-90° and +180° being 0° the condition where the two interconnected surfaces are on the same plane).

The hinge can reach -90° but this condition must not be used for CFMR-NO execution.

Do not exceed the rotation limit angle so as not to prejudice the correct operation of the return spring.




To choose the convenient type and the right number of hinges for your application, see the Guidelines (on page 1368).

FEATURES AND PERFORMANCES

CFMR hinge is used for the automatic re-closing or re-opening of the door by the return spring.

The torque varies progressively with the opening/closing angle of the hinge.

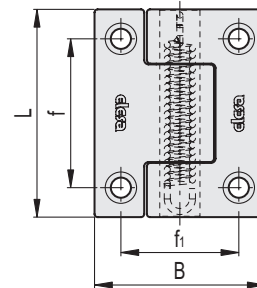
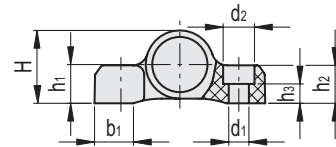
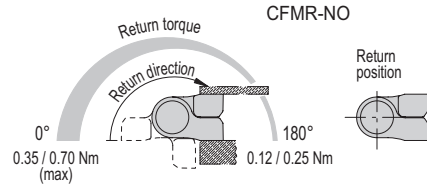
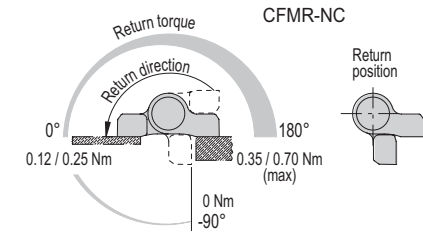
In special stress resistance tests, the return spring has exceeded 100,000 cycles while keeping the torque values unchanged.

Resistance tests	AXIAL STRESS	RADIAL STRESS	90° ANGLED STRESS
			
	Max limit static load Sa [N]	Max limit static load Sr [N]	Max limit static load S90 [N]
CFMR.	2100	3500	1900

The max static load is the value above which the material may break thus prejudicing the hinge functionality. Obviously, a suitable factor, according to the importance and the safety level of the specific application must be applied to this value.



ELESA Original design



Code	Description	L	B	d1	d2	f	f1	H	h1	h2	h3	b1	C# [Nm]	⚖
425841	CFMR.67-NC-035	67	55	6.5	10	48	38	24	12.5	12.5	6.3	12.5	6	67
425845	CFMR.67-NC-070	67	55	6.5	10	48	38	24	12.5	12.5	6.3	12.5	6	67
425852	CFMR.67-NO-035	67	55	6.5	10	48	38	24	12.5	12.5	6.3	12.5	6	67
425855	CFMR.67-NO-070	67	55	6.5	10	48	38	24	12.5	12.5	6.3	12.5	6	67
425840	CFMR.67-NS	67	55	6.5	10	48	38	24	12.5	12.5	6.3	12.5	6	61

Suggested torque for screw assembly.