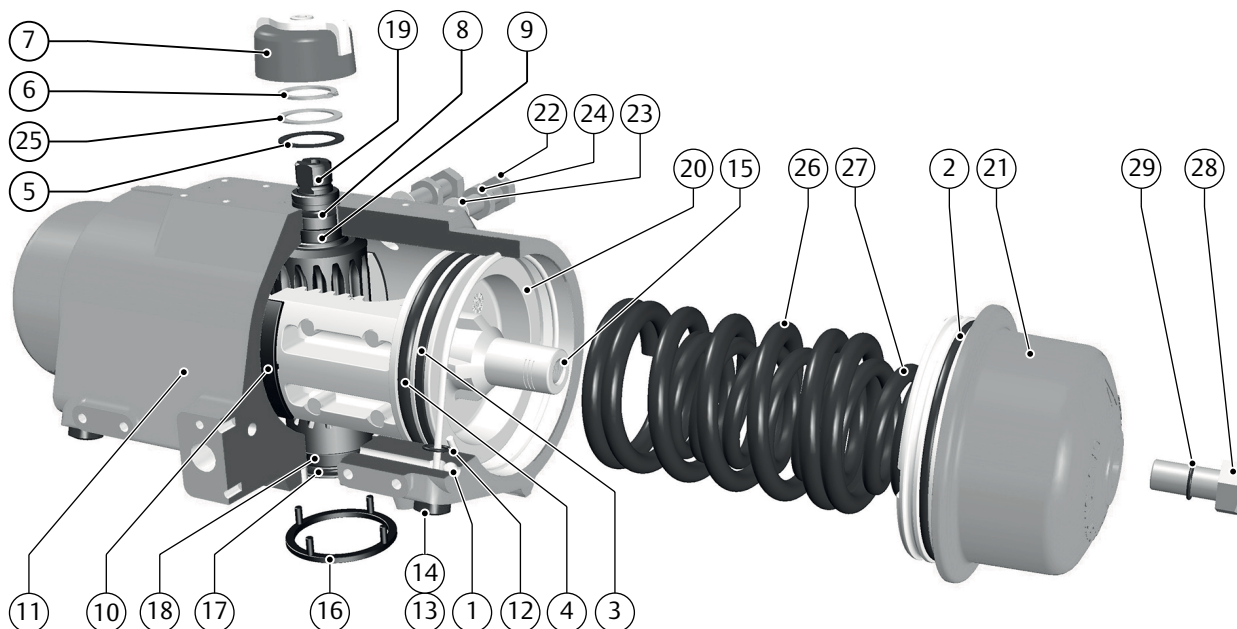


# Materials of Construction

## XL Series Actuators



Pos.	Description	Material	Qty	Note:
1	Ball Bearing	Chromium steel	2	-
2 *	'O' Ring (End Cap)	Nitrile	2	-
3 *	Wear Ring (Piston)	Acetal M90	2	-
4 *	'O' Ring (Piston)	Nitrile	2	-
5 *	Thrust Bearing (Circlip)	Acetal M90	1	-
6 *	Circlip	Springsteel	1	-
7	Indicator	Nylon	1	-
7a	Indicator screw	Stainless steel	1	3
8 *	'O' Ring (Pinion top)	Nitrile	1	-
9 *	Bearing (Pinion top)	Acetal M90	1	-
10 *	Bearing block (Piston)	Acetal M90	2	-
11	Body	Aluminum alloy	1	-
12 *	'O' Ring (SAFEKEY)	Nitrile	2	-
13 *	SAFEKEY Head	Grivory	2	-
14 *	SAFEKEY Wire	Stainless steel	2	-
15	Thread Insert	Steel	2	-
16	Location Ring	Acetal	1	-
17 *	'O' Ring (Pinion bottom)	Nitrile	1	-
18 *	Bearing (Pinion bottom)	Acetal M90	1	-
19	Pinion	Steel	1	-
20	Piston	Aluminum alloy	2	-
20a	Retractor plate	Aluminum alloy	2	1/8
21	End Cap (DA & SR)	Aluminum alloy	2	2/8
21a	End Cap DA	Aluminum alloy	2	1
22	Travel Stop	Stainless steel	2	5
23 *	Thread Seal	Steel/Rubber	2	3/6
23a *	'O' Ring (Travel Stop)	Nitrile	2	4
23b *	Washer (Travel Stop)	Stainless steel	2	4
24	Locking Nut	Stainless steel	2	5
25 *	Thrust Washer (Circlip)	Stainless steel	1	-
26	Spring Outer	Spring steel	2	8
27	Spring Inner	Spring steel	2	8
28	Sealing Bolt (End Cap)	Steel	2	-
29 *	'O' Ring (Sealing Bolt)	Nitrile	2	-

### Optional temperature ranges:

High temperature range : -20 °C to +120 °C / -4 °F to +248 °F  
(see data sheet D128 for more details)

Low temperature range : -40 °C to +100 °C / -40 °F to +212 °F  
(see data sheet D129 for more details)

### Grease:

Temperature range: -20 °C to +100 °C / -4 °F to +212 °F

- Castrol High Temperature  
(Formerly called Castrol LMX)
- Rocol Sapphire Premier  
(Formerly called Sapphire HI-TEMP 2)
- Castrol Spherol EPL 2  
(Formerly called BP Energrelse LS-EP2)
- Total Ceran XM 220  
(Formerly called Total Ceran WR2)

### Notes:

- 1 on XL 1127 to 4851
- 2 on XL 26 to XL 681
- 3 on XL 26 to XL 221
- 4 on XL 281 to XL 1372
- 5 on XL 26 to XL 1372
- 6 on XL 26/71 equipped with extra nylon washer
- 7 Items marked with an asterisks (\*) are included in the service kits.
- 8 Spring Return Models only

