



Type 431 PN 160
Packed lever H4
Open bonnet
Conventional design

Type 431, 433 PN 160

**Flanged Safety Relief Valves
- spring loaded**



Type 433 PN 160
Cap H2
Closed bonnet
Conventional design

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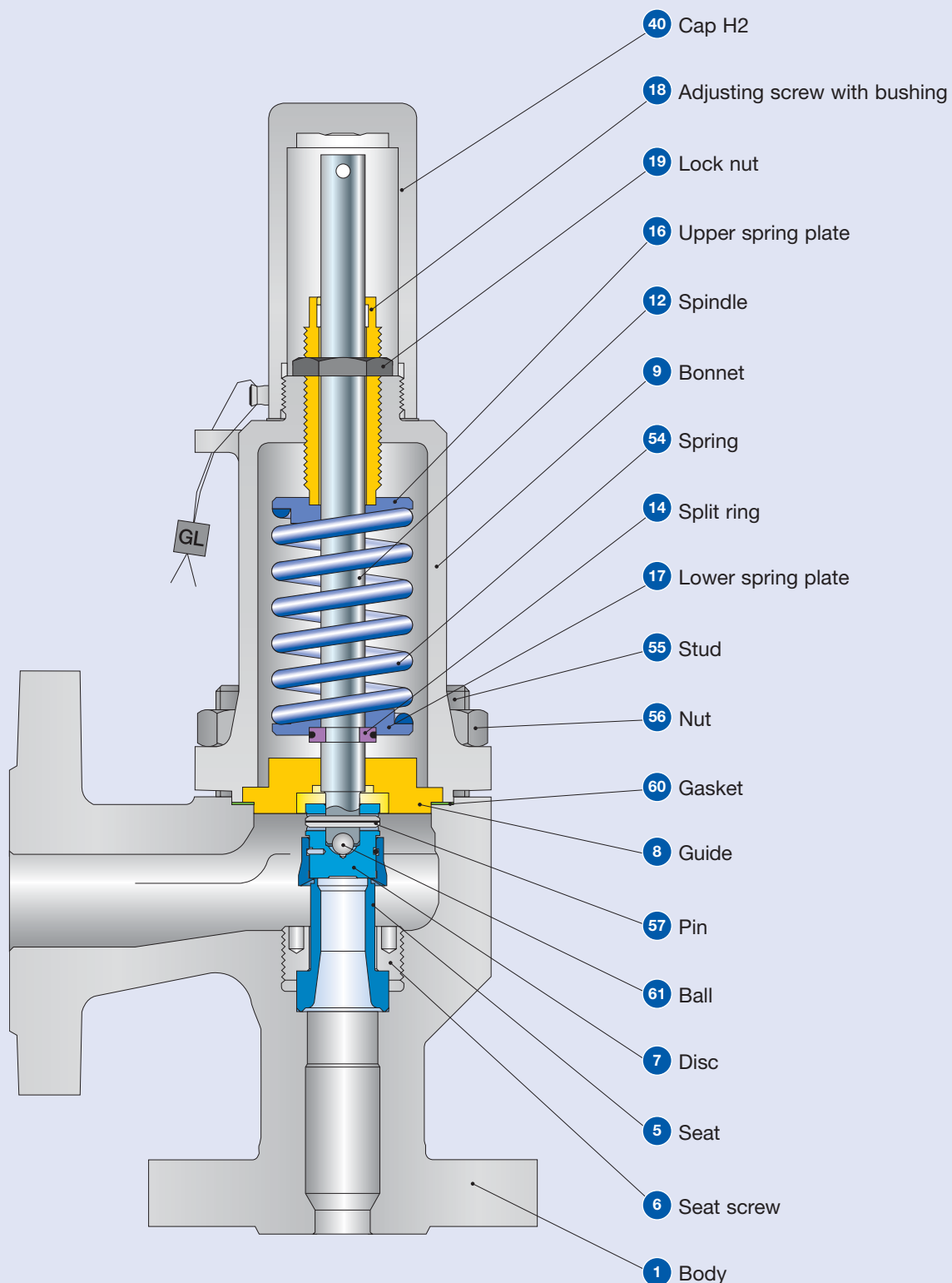
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Conventional design

Type 433 PN 160



Conventional design

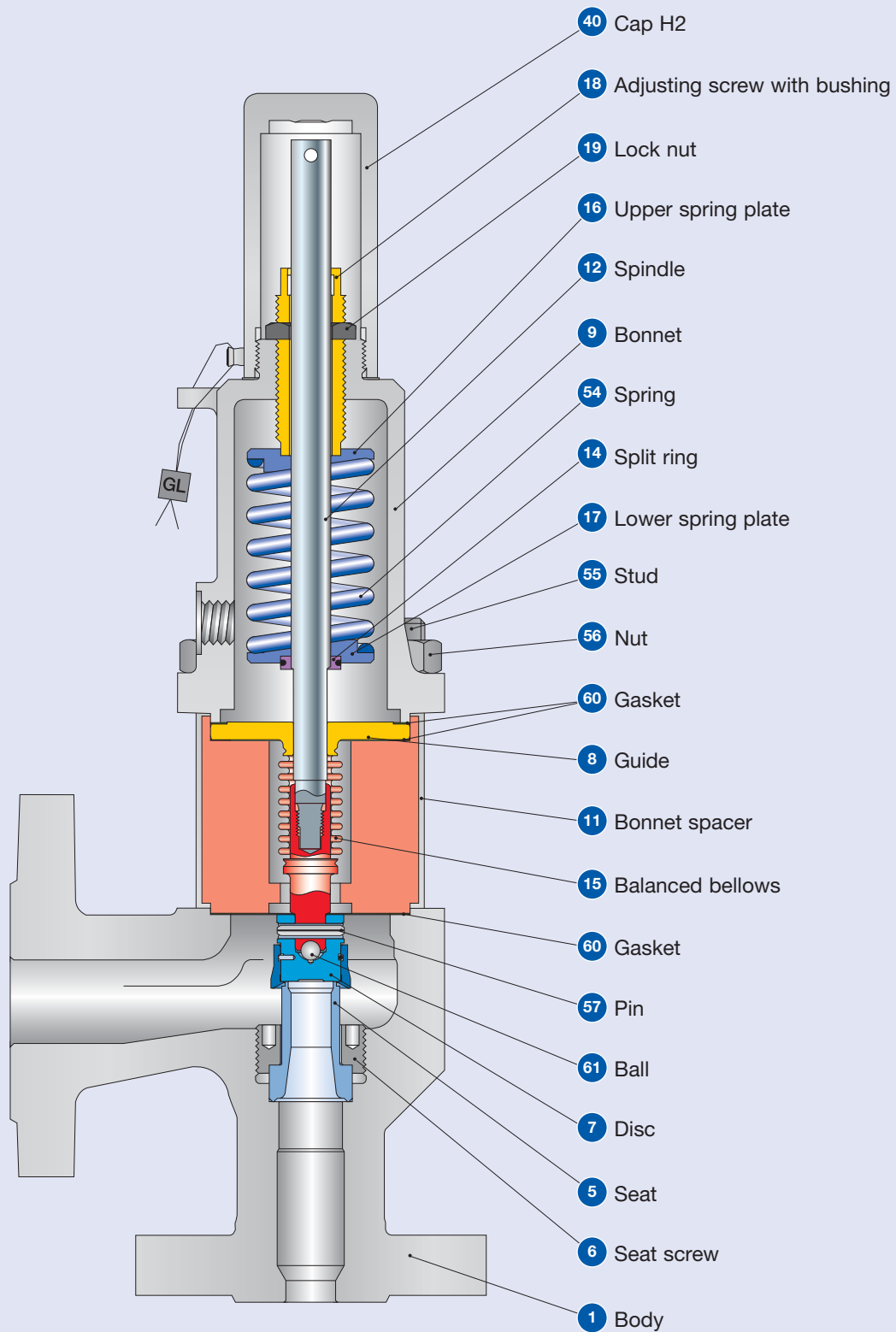
Materials		O-ring disc	Metal disc	O-ring disc	Metal disc
Item.	Component	Type 4312 / 4332	Type 4312 / 4332	Type 4334	Type 4334
1	Body	1.0619 SA 216 WCB	1.0619 SA 216 WCB	1.4408 SA 351 CF8M	1.4408 SA 351 CF8M
5	Seat	1.4404 316L	1.4404 316L	1.4404 316L	1.4404 316L
6	Seat screw	1.4404 316L	1.4404 316L	1.4404 316L	1.4404 316L
7	Disc	1.4404 316L	1.4122 Hardened stainless steel	1.4404 316L	1.4404 316L
8	Guide	1.4104 tenifer Chrome steel tenifer	1.4104, 1.0501, 1.0570 Chrome or stainless steel	1.4404 316L	1.4404 316L
9	Bonnet	0.7040 Ductile Gr. 60-40-18	0.7040 Ductile Gr. 60-40-18	1.4408 SA 351 CF8M	1.4408 SA 351 CF8M
12	Spindle	1.4021 420	1.4021 420	1.4404 316L	1.4404 316L
14	Split ring	1.4104 Chrome steel	1.4104 Chrome steel	1.4404 316L	1.4404 316L
16/17	Spring plate	1.0718 Steel	1.0718 Steel	1.4404 316L	1.4404 316L
18	Adjusting screw with bushing	1.4104 PTFE Chrome steel PTFE	1.4104 PTFE Chrome steel PTFE	1.4404 PTFE 316L PTFE	1.4404 PTFE 316L PTFE
19	Lock nut	1.4104 Chrome steel	1.4104 Chrome steel	1.4404 316L	1.4404 316L
40	Cap H2	1.0718 12L13	1.0718 12L13	1.4404 316L	1.4404 316L
54	Spring, standard	1.1200, 1.8159, 1.7102 Steel	1.1200, 1.8159, 1.7102 Steel	1.4310 Stainless steel	1.4310 Stainless steel
	Spring, optional	1.4310 Stainless steel	1.4310 Stainless steel	– –	– –
55	Stud	1.1181 Steel	1.1181 Steel	1.4401 B8M	1.4401 B8M
56	Nut	1.0501 2H	1.0501 2H	1.4401 8M	1.4401 8M
57	Pin	1.4310 Stainless steel	1.4310 Stainless steel	1.4310 Stainless steel	1.4310 Stainless steel
60	Gasket	Graphite / 1.4401 Graphite / 316	Graphite / 1.4401 Graphite / 316	Graphite / 1.4401 Graphite / 316	Graphite / 1.4401 Graphite / 316
61	Ball	1.3541 Hardened stainless steel	1.3541 Hardened stainless steel	1.4401 316	1.4401 316

Note:

- LESER reserves the right to make changes.
- LESER may use higher quality materials without giving prior notice.
- Each component can be constructed of another material according to the customer's specification.
- All components exposed to pressure are highlighted in bold. The material will be specified according to DIN and ASTM here.

Balanced bellows design

Type 433 PN 160



Balanced bellows design

Materials		O-ring disc	Metal disc	O-ring disc	Metal disc
Item.	Component	Type 4312 / 4332	Type 4312 / 4332	Type 4334	Type 4334
1	Body	1.0619 SA 216 WCB	1.0619 SA 216 WCB	1.4408 SA 351 CF8M	1.4408 SA 351 CF8M
5	Seat	1.4404 316L	1.4404 316L	1.4404 316L	1.4404 316L
6	Seat screw	1.4404 316L	1.4404 316L	1.4404 316L	1.4404 316L
7	Disc	1.4404 316L	1.4122 Hardened stainless steel	1.4404 316L	1.4404 316L
8	Guide Upper connection of balanced bellows	1.4404 316L	1.4404 316L	1.4404 316L	1.4404 316L
9	Bonnet	0.7040 Ductile Gr. 60-40-18	0.7040 Ductile Gr. 60-40-18	1.4408 SA 351 CF8M	1.4408 SA 351 CF8M
11	Bonnet spacer	1.4404 316L	1.4404 316L	1.4404 316L	1.4404 316L
12	Spindle	1.4404 316L	1.4404 316L	1.4404 316L	1.4404 316L
14	Split ring	1.4104 Chrome steel	1.4104 Chrome steel	1.4404 316L	1.4404 316L
15	Balanced bellows	1.4571 316Ti	1.4571 316Ti	1.4571 316Ti	1.4571 316Ti
16/17	Spring plate	1.0718 Steel	1.0718 Steel	1.4404 316L	1.4404 316L
18	Adjusting screw with bushing	1.4104 PTFE Chrome steel PTFE	1.4104 PTFE Chrome steel PTFE	1.4404 PTFE 316L PTFE	1.4404 PTFE 316L PTFE
19	Lock nut	1.4104 Chrome steel	1.4104 Chrome steel	1.4404 316L	1.4404 316L
40	Cap H2	1.0718 12L13	1.0718 12L13	1.4404 316L	1.4404 316L
54	Spring, standard	1.1200, 1.8159, 1.7102 Steel	1.1200, 1.8159, 1.7102 Steel	1.4310 Stainless steel	1.4310 Stainless steel
	Spring, optional	1.4310 Stainless steel	1.4310 Stainless steel	– –	– –
55	Stud	1.4401 8M	1.4401 8M	1.4401 B8M	1.4401 B8M
56	Hex nut	1.4401 8M	1.4401 8M	1.4401 B8M	1.4401 B8M
57	Roll pin	1.4310 Stainless steel	1.4310 Stainless steel	1.4310 Stainless steel	1.4310 Stainless steel
60	Gasket	Graphite / 1.4401 Graphite / 316	Graphite / 1.4401 Graphite / 316	Graphite / 1.4401 Graphite / 316	Graphite / 1.4401 Graphite / 316
61	Ball	1.3541 Hardened stainless steel	1.3541 Hardened stainless steel	1.4401 316	1.4401 316

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