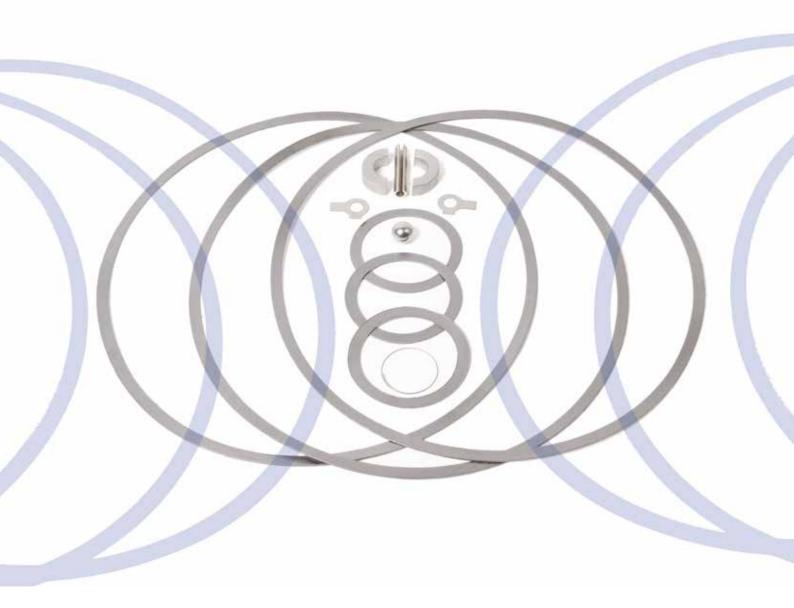
LESER Original Spare Parts Kits

Maintenance Support





LESER Original Spare Parts Kits – General Information

The Challenge of Spare Parts Management

How can the handling and logistics of spare parts for the maintenance of a safety valve be optimized?

Do you always know exactly which replacement parts are required for the maintenance and where a certain spare part is installed?

How can the ordering process, warehousing and logistics for many items be handled easily and efficiently?

Get to know the LESER Spare Parts Kits.

LESER Original Spare Parts Kits

- The LESER Spare Parts Kits contain all the parts recommended for the regular maintenance of a LESER safety valve
- The LESER original spare parts are individually packaged and clearly identified
- The Spare Parts Kits include instructions for identifying and allocating the individual parts
- Detailed maintenance instructions for all LESER product groups and safety valve types are described in the Maintenance Handbook with photo documentation and are available at www.leser.com
- The Spare Parts Kits can be ordered with one article number
- The Spare Parts Kits are available within 72 hours ex works Hohenwestedt/Germany or in even less time from one of our many stocks worldwide



Spare Parts Kits with original LESER spare parts are available for the following safety valves:

| API | High Efficiency | High Performance | Compact Performance | Modulate Action |
|----------|-----------------|-----------------------------------|---------------------|-----------------|
| | | | | |
| Type 526 | Type 811 | Type 441, 442 DIN | Type 459 | Type 427, 429 |
| | Type 821 | Type 441, 442 ANSI | Type 462, 462 HDD | Type 431, 433 |
| | | Type 441, 442 DIN Full nozzle | | |
| | | Type 441, 442 ANSI Full nozzle | | |



Easy maintenance handling

- Instructions for identifying and allocating the individual parts
- Sturdy external packaging with hanger for space-saving storage
- Protection against dust and moisture in every climatic condition thanks to the insert bag
- Original spare parts individually removable thanks to the pressure lock
- 5 Easy identification of individual parts



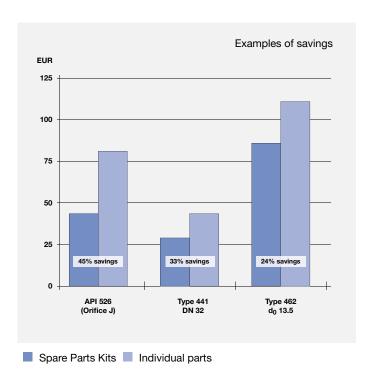
Our references

- LESER Original Spare Parts Kits are successful worldwide
- Every eighth API valve is supplied with a Spare Parts Kit
- Every fourth Pilot Operated Safety Valve (POSV) is ordered with a Spare Parts Kit

Benefits

- Clearer: The Spare Parts Kit provides all the spare parts recommended by LESER to be replaced during the regular maintenance of a safety valve. It minimizes the risk of ordering wrong parts.
- Better: Easy maintenance through the clear labelling of the original spare parts. The Spare Parts Kit reduces the variety of parts at stock.
- Easier: One article number reduces the effort and time of ordering
- Cost effective: Kits are less expensive than the sum of the individual parts
- Rapid availability: The Spare Parts Kits are available within 72 hours ex works Hohenwestedt/Germany or in even less time from one of our many stocks worldwide

LESER Original Spare Parts Kits: A picture-perfect solution for maintenance handling from LESER.





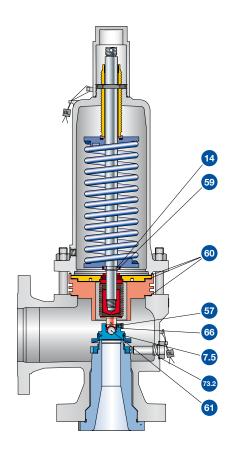
API

The API Spare Parts Kits are organised by orifice letter:

| Orifice | Flange Class |
|---------|----------------|
| | |
| D – G | CL150 - CL2500 |
| H – L | CL150 - CL1500 |
| M – P | CL150 - CL900 |
| Q – R | CL150 - CL600 |
| Т | CL150 - CL300 |

Contents

| Item | Component | Material | Quantity |
|------|----------------------|-------------------------------------|----------|
| | | | |
| 7.5 | Securing ring (Disc) | 1.4571 / 316Ti | 1 |
| 14 | Split ring | 1.4404 / 316L | 2 |
| 57 | Ball | 1.4401 / 316 | 15 |
| 59 | Securing ring | 1.4571 / 316Ti | 1 |
| 60 | Gasket | Graphite / 1.4401 Graphite / 316 | 3 |
| 61 | Ball | 1.4401 / 316 | 1 |
| 66 | Screw | 1.4401 / 316 | 1 |
| 73.2 | Gasket (Lock screw) | 1.4401 / 316 | 1 |



| Orifica | | Inlet t | flange ratir | ng class of | the safety | valve | |
|---------|-----------|-----------|--------------|-------------|------------|-----------|-------------|
| Orifice | CL150 | CL300L | CL300 | CL600 | CL900 | CL1500 | CL2500 |
| | | | | | | | |
| D | | 5012 | .1101 | | | 5012.1102 | |
| E | | 0012 | | | | 0012.1102 | |
| F | 5012.1103 | | | | | | |
| G | | | 5012.1104 | | | 5012 | .1121 |
| Н | 5012 | .1105 | | 5012 | .1106 | | |
| J | 5012 | .1107 | | 5012 | .1108 | | |
| K | | 5012 | .1109 | | 5012 | .1110 | |
| L | 5012 | .1111 | | 5012 | .1112 | | |
| М | | | 5012.1113 | | | | |
| N | | | 5012.1114 | | | | 100 |
| Р | 5012 | .1115 | | 5012.1116 | | | M |
| Q | | 5012 | .1117 | | | | EK. |
| R | 5012. | .1118 | 5012 | .1119 | | | |
| Т | | 5012.1120 | | | ı | | The same of |

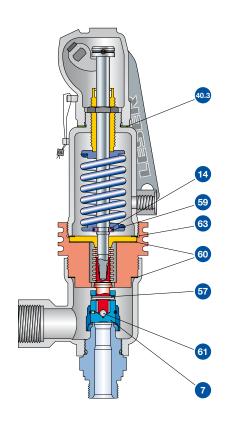


Compact Performance – Type 459

Contents

| Item | Component | Material | Quantity | |
|------|----------------------------|-------------------------------------|----------|--|
| | | | | |
| 7 | Disc | 1.4404 / 316L | 1 | |
| 14 | Split ring | 1.4404 / 316L | 2 | |
| 57 | Pin | 1.4310 / Stainless steel | 1 | |
| 59 | Securing ring (split ring) | 1.4571 / 316Ti | 1 | |
| 60 | Gasket | Graphite / 1.4401 Graphite / 316 | 2 | |
| 63 | Gasket | Graphite / 1.4401 Graphite / 316 | 1 | |
| 61 | Ball | 1.4401 / 316 | 1 | |
| 40.3 | Spacer | 1.4571 / 316Ti | 3 | |

The Compact Performance Spare Parts Kits are the only ones equipped with a new disc. For discs size d_0 17.5 mm and smaller, LESER recommends to exchange the entire disc. The manual relapping of such small discs is uneconomical and requires high effort.



| \mathbf{d}_{o} | | 9 | 13 | 17.5 | | |
|---------------------------|----------|------|------|------|--|--|
| | | | | | | |
| | Art. No. | | | | | |
| Type 459 | 5012. | 1230 | 1231 | 1232 | | |



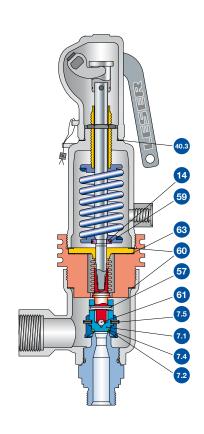


Compact Performance – Type 462, 462 HDD

Contents

| Item | Component | Material | Quantity |
|------|----------------------------|-------------------------------------|----------|
| | | | |
| 7.1 | O-ring disc body | 1.4404 / 316L | 1 |
| 7.2 | Lifting aid | 1.4404 / 316L | 1 |
| 7.4 | O-ring | FKM (70/75 Shore A) | 1 |
| 7.4 | O-ring | FKM (90 Shore A) | 1 |
| 7.4 | O-ring | EPDM (70 Shore A) | 1 |
| 7.5 | Pin | 1.4310 / Stainless steel | 2 |
| 14 | Split ring | 1.4404 / 316L | 2 |
| 59 | Securing ring (split ring) | 1.4571 / 316Ti | 1 |
| 57 | Pin | 1.4310 / Stainless steel | 1 |
| 61 | Ball | 1.4401 / 316 | 1 |
| 60 | Gasket | Graphite / 1.4401 Graphite / 316 | 2 |
| 63 | Gasket | Graphite / 1.4401 Graphite / 316 | 1 |
| 40.3 | Spacer | 1.4571 / 316Ti | 3 |

The Compact Performance Type 462 Spare Parts Kits are equipped with three O-rings in the two most commonly used materials – FKM and EPDM – with different shore hardness. The correct O-ring should be selected depending on the set pressure.



| | d _o | 9 | 13 | 17.5 | |
|--------------------------|----------------|------|------|------|--|
| | Art. No. | | | | |
| Type 462 Type 462 HDD | 5012. | 1233 | 1234 | 1235 | |





High Performance

Spare Parts Kits are available for nominal sizes from DN 20 to DN 200 of the following types:

Type 441, 442 DIN

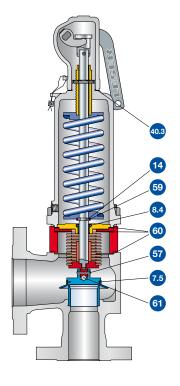
Type 441, 442 ANSI

Type 441, 442 DIN Full nozzle

Type 441, 442 ANSI Full nozzle

Contents

| Item | Component | Material | Quantity | |
|------|-------------------------------|-------------------------------------|----------|--|
| | | | | |
| 7.5 | Securing ring (Disc) | 1.4571 / 316Ti | 1 | |
| 8.4 | Securing ring (Guide) | 1.4571 / 316Ti | 1 | |
| 14 | Split ring | 1.4404 / 316L | 2 | |
| 40.3 | Spacer | 1.4571 / 316Ti | 3 | |
| 57 | Pin | 1.4310 / Stainless steel | 1 | |
| 59 | Securing ring (Split ring) | 1.4571 / 316Ti | 1 | |
| 60 | Gasket | Graphite / 1.4401 Graphite / 316 | 3 | |
| 61 | Ball | 1.4401 / 316 | 1 | |
| 1.9 | O-ring (Lifting device H4) | FKM | 1 | |



| DN | 20 | 25 | 32 | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 |
|-----------------------|------|---------|------------|---------------|---------|---------|------|---------|------|------|------|
| Valve size | - | 1" x 2" | 11/2" x 2" | 11/2" x 21/2" | 2" x 3" | 3" x 4" | - | 4" x 6" | - | - | - |
| | | | | | | | | | | | |
| Art. No. 5012. | 1201 | 1202 | 1203 | 1204 | 1205 | 1206 | 1207 | 1208 | 1209 | 1210 | 1211 |





Modulate Action

Spare Parts Kits are available for nominal sizes from DN 15 to DN 150 of the following types:

Type 427

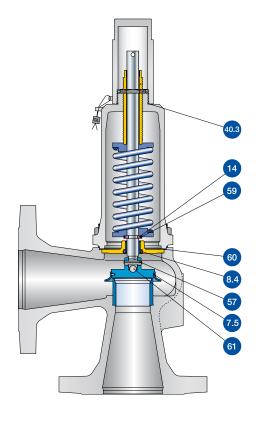
Type 429

Type 431

Type 433

Contents

| Item | Component | Material | Quantity | |
|------|-------------------------------|-------------------------------------|----------|--|
| | | | | |
| 7.5 | Securing ring (Disc) | 1.4571 / 316Ti | 1 | |
| 8.4 | Securing ring (Guide) | 1.4571 / 316Ti | 1 | |
| 14 | Split ring | 1.4404 / 316L | 2 | |
| 40.3 | Spacer | 1.4571 / 316Ti | 3 | |
| 57 | Pin | 1.4310 / Stainless steel | 1 | |
| 59 | Securing ring (Split ring) | 1.4571 / 316Ti | 1 | |
| 60 | Gasket | Graphite / 1.4401 Graphite / 316 | 3 | |
| 61 | Ball | 1.4401 / 316 | 1 | |
| 1.9 | O-ring (Lifting device H4) | FKM | 1 | |



| DN | 15 – 20 | 25 | 32 | 40 | 50 | 65 | 80 | 100 | 125 | 150 |
|-----------------------|---------|------|------|------|------|------|------|------|------|------|
| | | | | | | | | | | |
| Art. No. 5012. | 1201 | 1201 | 1201 | 1201 | 1212 | 1213 | 1204 | 1214 | 1215 | 1216 |

