

Components for  
construction and material  
handling machines

**STANDARD MACHINE ELEMENTS WORLDWIDE**



**elesa®**

**ELESA**, the worldwide leader in the design and manufacture of **standard machine elements** in engineering plastics and metal, presents an extensive range of accessories for hydraulic systems and a wide range of components for all manoeuvring, clamping and control operations and hinges for **construction and material handling machines**.



ELESA uses electricity produced only from 100% renewable sources, i.e. energy produced with natural resources (water, sunlight, wind, tides, geothermal heat, etc.) which therefore do not involve CO<sub>2</sub> emissions (which are instead produced by coal, oil and gas).



Over 80 years of leadership make ELESA the point of reference for designers and manufacturers. Over 80,000 product codes create an annual production of tens of millions of pieces, more than 300 patents worldwide, 56 international awards in Industrial Design, ISO 9001 certification, ISO 14001, ISO 45001, ISO 27001 and AEOF, are the numbers that sum up our business. 15 international subsidiaries and a close collaboration with the most qualified distributors worldwide ensure an efficient and timely service coupled with the guarantee of technical consultancy from the groups' Monza Headquarters.

### Points of strength

- 300 PATENTS AND REGISTERED DESIGNS
- 58 INDUSTRIAL DESIGN AWARDS
- WORLDWIDE DISTRIBUTION
- FULL STOCK AVAILABILITY
- CUSTOMISED SOLUTIONS
- TECHNICAL COMPETENCE AT THE CUSTOMER'S SERVICE
- ISO 9001 - ISO 14001 - ISO 45001 - ISO 27001



Find out more about ELESA standard elements for construction and material handling machines on [elesa.com](http://elesa.com)



ELESA presents a wide range of **standard elements in engineering plastics and metal for equipment and machinery for the construction and building industry** which operate in particularly unfavourable conditions and sometimes in explosive atmosphere. High or low temperatures, high humidity, high pressure and contact with different chemical substances are some of the most common conditions of use. Therefore, **reliable components** in functionality, quality and performance are essential and of the utmost importance.



Application of SFP+a filler breather cap with splash guard and dipstick.



Application of SFW-VP double -valve pressurised breather cap "vandal-proof".



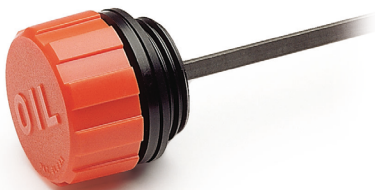
Application of HCFE. oil circulation sight.

#### SFP+a



#### Breather caps with splash guard and dipstick

**Material** technopolymer, NBR packing ring  
**Max. temp.** 100°C/120°C **Diameters** 30 to 70 mm **Threads** G1/4" to G2" M16x1.5 to M22x1.5 Execution SFP.EX compliant with European Directive ATEX 94/9/EC.



#### SFW-VP

#### Double-valve pressurised breather caps "vandal-proof"

**Material** technopolymer, NBR packing ring.  
 Safety (0.350 bar) and suction (0.030 bar) valves. **Max temperature** 100°C.  
 "Vandal-proof" safety device.



#### HCFE.



#### Oil circulation sights

**Material** transparent technopolymer, NBR packing ring **Max. temperature** 110°C  
**Threads** G3/8" to G1 1/4" Execution HCFE-EX compliant with European Directive ATEX 94/9/EC.



### You can also find:

**T.440**  
Plugs



**TSD.**  
Oil drain plugs



**GN 741**  
Plugs



**SFV.**  
Valve breather caps



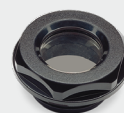
**SMW-BA**  
Double-valve breather caps with bayonet assembly



**HFTX-PR**  
Oil level indicators with prismatic window



**HGFT.**  
Oil level indicators



## Accessories for hydraulic systems

The full range of ELESA accessories for hydraulic systems is available **in a variety of production materials**: plastic, aluminium, brass, zinc-plated steel or Stainless steel with NBR synthetic rubber, FPM or FKM (type Viton\*) to withstand different liquid/oil temperatures.

**Plugs, filler breather caps and oil level indicators** are available with **different types of threads**: ISO-Metric, GAS-BSP and UNC-UNF or NPT for the American market.

\* Registered Trademark by DuPont Dow Elastomers

**More than 25 different types of column level indicators** with or without thermometer and protection frame. Also available with electrical sensor or probe for MAX temperature and MIN level.

The body of the indicator, entirely in transparent technopolymer, is assembled using ultrasonic welding to guarantee a perfect seal ensured by 100% electronic control during production. A progressive serial number for the traceability of every single indicator is laser engraved on its rear side. Total compatibility with commonly used chemicals, hot water and alcohol together with the utmost resistance to shocks represent additional features that make ELESA range unique.



Application of HFTX. oil level indicator.



Application of HCZ-P with SUPER-Technopolymer protection frame.



Application of HCX. column level indicator with incorporated thermometer.

### HFTX.

#### Oil level indicators

**Material** transparent technopolymer, aluminium contrast screen, NBR packing ring  
**Max. temperature** 110°C **Threads** G1/4" to G1 1/4, M16x1.5 to M40x1.5



### HCZ-P

#### Column level indicators with SUPER-Technopolymer protection frame

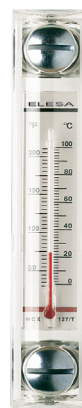
Transparent technopolymer, NBR O-rings, aluminium contrast screen, zinc-plated steel screws, SUPER-Technopolymer protection frame  
**Max. temperature** 90°C  
**Centre dist.** 76 to 127 mm



### HCX.

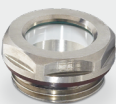
#### Column level indicators

Transparent technopolymer, NBR or FKM O-rings, aluminium contrast screen, zinc-plated, technopolymer or st. steel screws  
**Max. temperature** 90°C  
**Centre dist.** 76 to 254 mm



### GN 743.3

Oil level indicators for high temperatures



### GN 743.6

Oil level indicators



### HCX-P

Column level indicators with metal protection frame



### HCK.

Column level indicators with transparent polycarbonate protection



Customisable length

### HCK-E

Electrical level indicators with MIN level electrical sensor



### HFL-E

Rapid level indicators with float



## Standard machine elements for manoeuvring, clamping and control operations for construction vehicles and equipment

An extensive range of **clamping knobs** and adjustable **levers**; lift, pull and revolving handles; **control knobs** and **control levers**; **hinges** all made in special technopolymer resistant to solvents, oils, greases and other chemical agents or aluminium, zinc-plated steel or stainless steel with the greatest care in surface finishing. **Ergonomy combined with a unique design, a well-proven quality and a perfect functionality.**



Application of GN 300.5 stainless steel adjustable levers



Application of I.222 and I.280 Duroplast handles



Application of GN 565 aluminium U-handles



Application of (clockwise) M.443 technopolymer U-handle, MT. technopolymer crank handle, VC.192 Duroplast clamping knob, CFA. technopolymer hinge



