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BRD. KLEEGadagervej 11
DK 2620 Albertslund
Tlf. 43 86 83 33 - Fax 43 86 83 88
www.klee.dk - mail: klee@klee.dk

INGENIØR- & HANDELSAKTIESELSKAB



Oil drain valves, Breather valves



GN 880
Oil drain valves
Steel, Brass

page 4



GN 880.1
Connector pieces
with drain hose
Brass / PVC

page 6



GN 880.1
Connector pieces
Brass

page 6



GN 881
Breather valves
Brass

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GN 882
Breather filters
Brass

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GN 883
Breather valves
Brass

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GN 880

Oil drain valves

4

Accessories for hydraulic systems

•Valve body

- Version **ST**: zinc-plated steel, blue passivated.
- Version **MS**: brass.

•Valve plate

Brass, with O-ring rubber FPM (Viton®).

•Sealing DIN 7603 A

Copper.

•Protective cap

Plastic, Polyamide based (PA) technopolymer.
Resistant to solvents, oils, greases and other chemical agents.
Temperature resistant up to 120 °C.

•Chain

Zinc-plated Steel, blue passivated, eye brass.

•Standard version available

Type **K**: with plastic protective cap and chain.

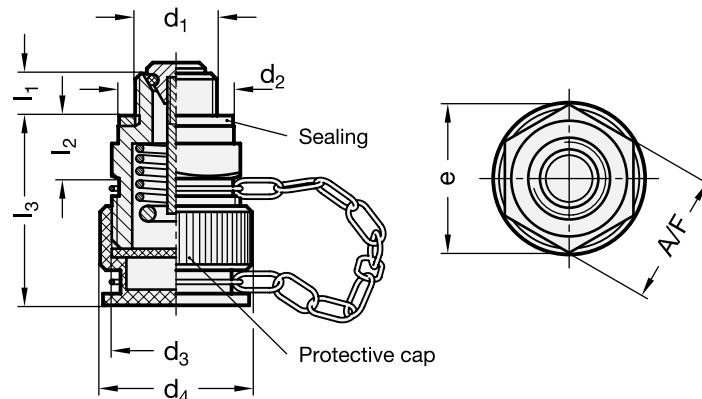


Accessories on request

- other materials.
- with Stainless Steel cable (instead of chain).

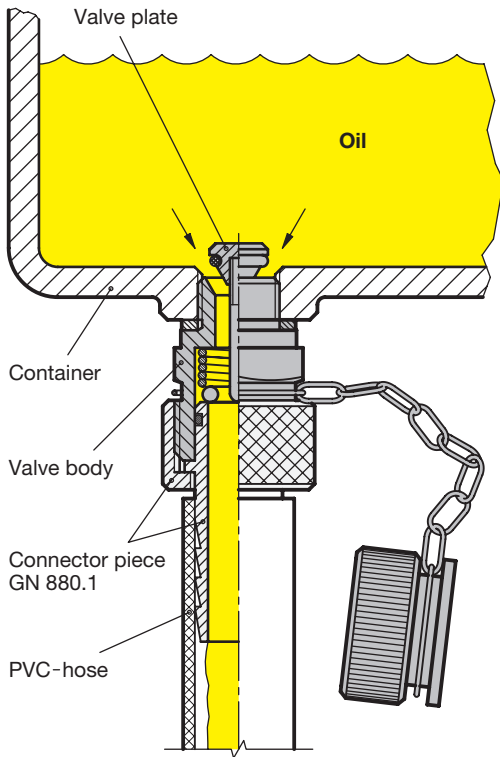
Features and applications

Oil drain valves GN 880 may be used for draining non-pressurised oil.
As well conditionally as for vacuum drainage.
The flow volume (l/min.) depends on the viscosity of the medium, the filling quantity and the temperature. Guidance values available on request.



Standard Elements	Main dimensions									△△
Description	d1	d2	d3*	d4	e ≈	l1	l2	l3	A/F	g
GN 880-M14x1.5-ST-K	M14x1.5	20	M22x1.5	26	25.4	7.5	10.5	31	22	54
GN 880-M16x1.5-ST-K	M16x1.5	22	M22x1.5	26	25.4	7.5	10.5	31	22	58
GN 880-M18x1.5-ST-K	M18x1.5	24	M22x1.5	26	25.4	8.5	10.5	31	22	62
GN 880-M20x1.5-ST-K	M20x1.5	26	M22x1.5	26	31.2	8.5	10.5	31	27	81
GN 880-M22x1.5-ST-K	M22x1.5	27	M26x1.5	30	31.2	8.5	12	32	27	94
GN 880-M24x1.5-MS-K	M24x1.5	29	M26x1.5	30	34.7	9	12	32	30	116
GN 880-M26x1.5-MS-K	M26x1.5	32	M26x1.5	30	37	9	12	32	32	132
GN 880-M30x1.5-MS-K	M30x1.5	36	M26x1.5	30	41.6	9	12	32	36	166
GN 880-G1/4-ST-K	G1/4	20	M22x1.5	26	25.4	7.5	10.5	31	22	55
GN 880-G3/8-ST-K	G3/8	23	M22x1.5	26	25.4	7.5	10.5	31	22	61
GN 880-G1/2-ST-K	G1/2	26	M26x1.5	30	31.2	8.5	12	32	27	91
GN 880-G3/4-MS-K	G3/4	32	M26x1.5	30	37	9	12	32	32	133
GN 880-G1-MS-K	G1	39	M26x1.5	30	47.3	9	12	32	41	205

* Connection thread for GN 880.1 (see page 6)



Other features

- easy and safe handling
- optimum flow rate
- high pressure resistance (up to 100 bar)
- high temperature resistance (-30 °C to +160 °C)
- 100 % seal-tight tested
- TÜV and DLG tested

Operation description

After removing the protective cap secured against loss with a chain, turn in the matching connector pieces GN 880.1 (see page 6). When the connector is screwed in, the valve plate will open and the oil will empty through the hose into a pan. Take off the connector after the oil has drained. The valve plate will be lowered and closes off the drainage outlet. The container with the oil drain vale is ready for filling again.

Other benefits of the oil drain valves GN 880

- No risk of burns caused by hot oil
- No dirt caused by uncontrolled oil drainage
- Quick and easy

GN 880.1

Connector pieces

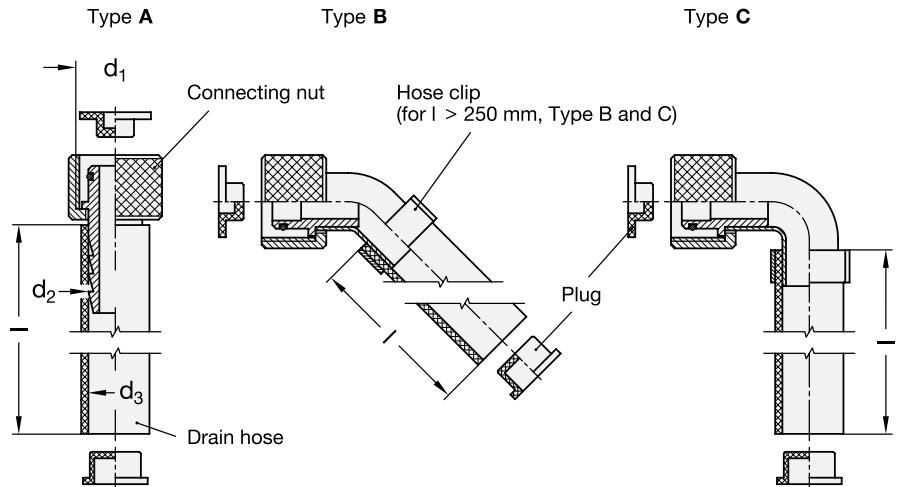
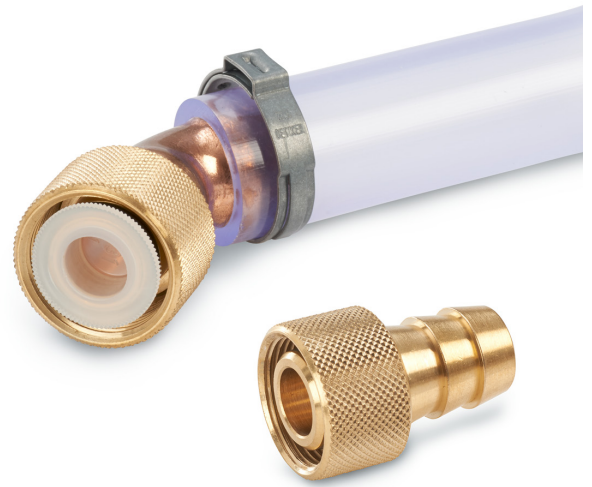
- **Connecting nut**
Brass, with hose liner.
- **L bend**
Copper, 45° / 90°.
- **O-ring**
NBR (Perbunan) synthetic rubber.
- **Drain hose**
Version **T**: PVC, transparent.
- **Hose clip**
Zinc-plated steel.
- **Plug**
Plastic, LD-PE.
- **Standard versions available**
 - Type **A**: Connector straight.
 - Type **B**: Connector 45°.
 - Type **C**: Connector 90°.

Accessories on request

- other hose lengths.
- Drain hose with inside webbing (Nylon).

Features and applications

Connector pieces GN 880.1 are required when using oil drain valves GN 880. Screwing on the connector piece will activate the valve plate of the oil drain valve, allowing the oil to flow through the hose into a pan held ready. The plug prevents remaining oil from dripping out after discharging.



Standard Elements	Main dimensions						⚖
Description	Size	d1*	l	d2	d3	g	
GN 880.1-22-A	22	M22x1.5	-	15	-	58	
GN 880.1-22-B	22	M22x1.5	-	15	-	58	
GN 880.1-22-C	22	M22x1.5	-	15	-	61	
GN 880.1-26-A	26	M26x1.5	-	20	-	88	
GN 880.1-26-B	26	M26x1.5	-	20	-	88	
GN 880.1-26-C	26	M26x1.5	-	20	-	89	
GN 880.1-22-A-250-T	22	M22x1.5	250	15	14	97	
GN 880.1-22-B-250-T	22	M22x1.5	250	15	14	97	
GN 880.1-22-C-250-T	22	M22x1.5	250	15	14	97	
GN 880.1-22-A-500-T	22	M22x1.5	500	15	14	140	
GN 880.1-22-B-500-T	22	M22x1.5	500	15	14	140	
GN 880.1-22-C-500-T	22	M22x1.5	500	15	14	140	
GN 880.1-22-A-1000-T	22	M22x1.5	1000	15	14	220	
GN 880.1-22-B-1000-T	22	M22x1.5	1000	15	14	220	
GN 880.1-22-C-1000-T	22	M22x1.5	1000	15	14	220	
GN 880.1-26-A-250-T	26	M26x1.5	250	20	19	153	
GN 880.1-26-B-250-T	26	M26x1.5	250	20	19	153	
GN 880.1-26-C-250-T	26	M26x1.5	250	20	19	153	
GN 880.1-26-A-500-T	26	M26x1.5	500	20	19	230	
GN 880.1-26-B-500-T	26	M26x1.5	500	20	19	230	
GN 880.1-26-C-500-T	26	M26x1.5	500	20	19	230	
GN 880.1-26-A-1000-T	26	M26x1.5	1000	20	19	390	
GN 880.1-26-B-1000-T	26	M26x1.5	1000	20	19	390	
GN 880.1-26-C-1000-T	26	M26x1.5	1000	20	19	390	

* Connection thread GN 880 (see page 4)

GN 881

Breather valves

- **Material**

Brass.

- **Breather cap**

Plastic, Polyamide based (PA) technopolymer.

Resistant to solvents, oils, greases and other chemical agents.

- **Gasket**

Brass, with silicone-rubber coating (VMQ).

- **Spring**

AISI 301 stainless steel.

- **Sealing DIN 7603 A**

Soft iron 1.0338.

- **Temperature resistance**

From -30 °C to +100 °C.

Accessories on request

- other materials.

- with other opening pressure (20 mbar).

- with dipstick.

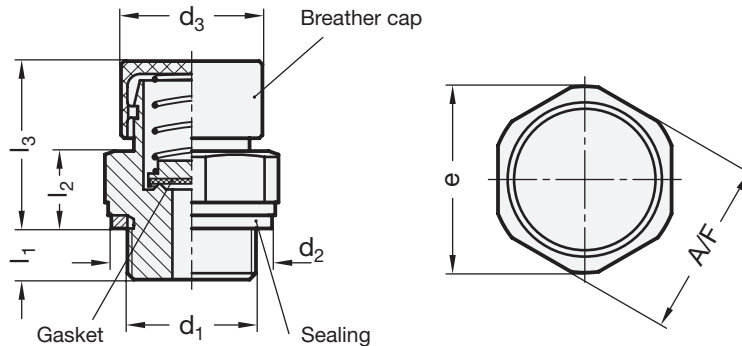
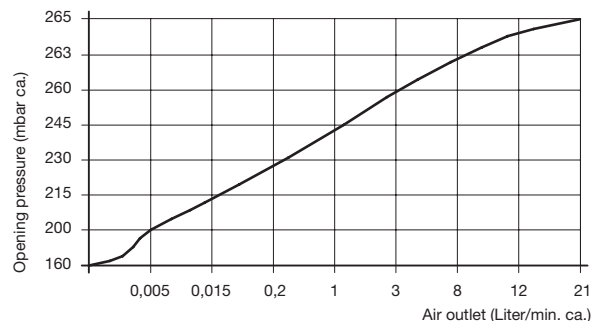
Features and applications

Once the opening pressure given in the table is exceeded, breather valves GN 881 with gasket will vent into a container and so protect against excessive inside container pressure.

In its normal state, the gasket closes the container and so prevents dirt or dust getting inside the container.

The diagram shows the air outlet as a factor of the opening pressure.

The valves are checked for leak tightness and opening pressure.



Standard Elements	Main dimensions								Opening pressure in mbar $\pm 20\%$	\triangle g
Description	d1	d2	d3	e \approx	l1	l2	l3	A/F		
GN 881-M12x1.5-200-MS-K	M12x1.5	18	22	23.5	8.5	11.5	26.5	22	200	39
GN 881-M14x1.5-200-MS-K	M14x1.5	20	22	23.5	8.5	11.5	26.5	22.5	200	44
GN 881-M16x1.5-200-MS-K	M16x1.5	22	22	23.5	8.5	11.5	26.5	22	200	49
GN 881-M18x1.5-200-MS-K	M18x1.5	24	22	23.5	8.5	11.5	26.5	22	200	52
GN 881-M20x1.5-200-MS-K	M20x1.5	26	22	29	8.5	11.5	26.5	27	200	74
GN 881-M22x1.5-200-MS-K	M22x1.5	27	22	29	8.5	11.5	26.5	27	200	79
GN 881-M24x1.5-200-MS-K	M24x1.5	29	22	32.5	8	12	27	30	200	96
GN 881-M26x1.5-200-MS-K	M26x1.5	32	22	34	8	12	27	32	200	112
GN 881-M30x1.5-200-MS-K	M30x1.5	36	22	39	8	12	27	36	200	148
GN 881-G1/4-200-MS-K	G1/4	20	22	23.5	8.5	11.5	26.5	22	200	42
GN 881-G3/8-200-MS-K	G3/8	23	22	23.5	8.5	11.5	26.5	22	200	51
GN 881-G1/2-200-MS-K	G1/2	26	22	29	8.5	11.5	26.5	27	200	76
GN 881-G3/4-200-MS-K	G3/4	32	22	34	8	12	27	32	200	113
GN 881-G1-200-MS-K	G1	39	22	44	8	12	27	41	200	186

GN 882

Breather filters

•Material

Brass.

•Breather cap

Plastic, Polyamide based (PA) technopolymer.

Resistant to solvents, oils, greases and other chemical agents.

•Air filter

- Wire mesh, AISI 304 stainless steel.

- Filter category G2-G3.

- Mean separation rate (Am approx. 65-85 %, based in a particle size 10 µm).

•Spring

Stainless steel.

•Sealing DIN 7603 A

Soft iron 1.0338.

•Temperature resistance

From -30 °C to +100 °C.

Accessories on request

- other materials.

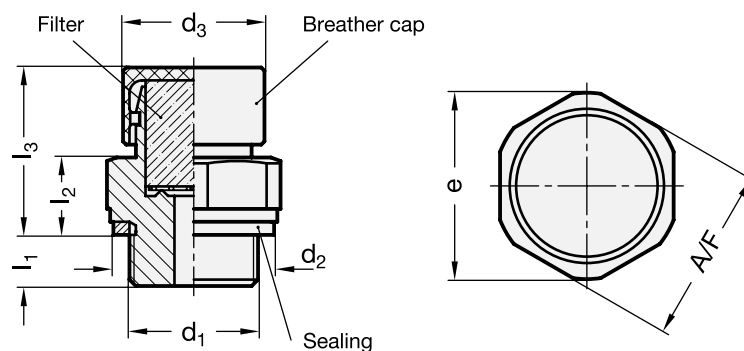
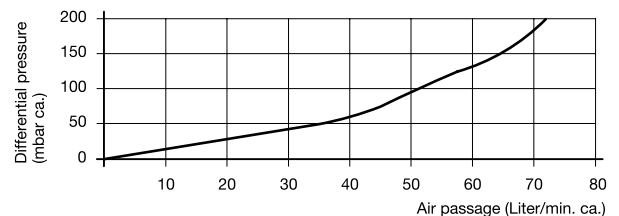
- with dipstick.

Features and applications

Breather filters GN 882 are used when the air exchange is to be allowed between the inside of the container and the ambient air.

The filter prevents air-borne particles (e.g. dust) from being carried from the outside to the inside of the container. It also ensures that e.g. oil particles do not escape to the outside.

The diagram shows the air passage as a factor of the differential pressure.



Standard Elements	Main dimensions								
Description	d1	d2	d3	e ≈	l1	l2	l3	A/F	g
GN 882-M12x1.5-200-MS-K	M12x1.5	18	22	23.5	8.5	11.5	25.5	22	40
GN 882-M14x1.5-200-MS-K	M14x1.5	20	22	23.5	8.5	11.5	25.5	22	44
GN 882-M16x1.5-200-MS-K	M16x1.5	22	22	23.5	8.5	11.5	25.5	22	49
GN 882-M18x1.5-200-MS-K	M18x1.5	24	22	23.5	8.5	11.5	25.5	22	53
GN 882-M20x1.5-200-MS-K	M20x1.5	26	22	29	8.5	11.5	25.5	27	75
GN 882-M22x1.5-200-MS-K	M22x1.5	27	22	29	8.5	11.5	25.5	27	79
GN 882-M24x1.5-200-MS-K	M24x1.5	29	22	32.5	8	12	26	30	97
GN 882-M26x1.5-200-MS-K	M26x1.5	32	22	34	8	12	26	32	113
GN 882-M30x1.5-200-MS-K	M30x1.5	36	22	39	8	12	26	36	148
GN 882-G1/4-200-MS-K	G1/4	20	22	23.5	7.5	10.5	25.5	22	42
GN 882-G3/8-200-MS-K	G3/8	23	22	23.5	8.5	11.5	25.5	22	49
GN 882-G1/2-200-MS-K	G1/2	26	22	29	8	12	26	27	75
GN 882-G1-200-MS-K	G1	39	22	44	8	12	26	41	105

GN 883

Breather valves

- **Material**

Brass.

- **Breather cap**

Plastic, Polyamide based (PA) technopolymer. Resistant to solvents, oils, greases and other chemical agents.

- **Ball**

AISI 5210 stainless steel.

- **Spring**

AISI 301 stainless steel.

- **Sealing DIN 7603 A**

Soft iron 1.0338 (for $d_1 = M10 \times 1$: PA6)

- **Temperature resistance**

From $-30\text{ }^\circ\text{C}$ to $+100\text{ }^\circ\text{C}$.

- **Standard versions available**

- Type **A**: low design.

- Type **B**: high design, with plastic cap.

Accessories on request

- other materials.

- with dipstick.

Features and applications

Once the opening pressure given in the table is exceeded, breather valves GN 883 will vent into a container and so protect against excessive inside container pressure. They also feature highly compact dimensions.

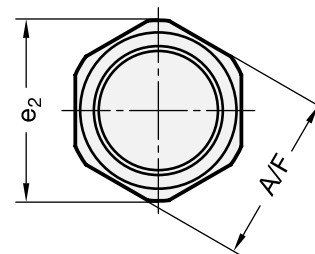
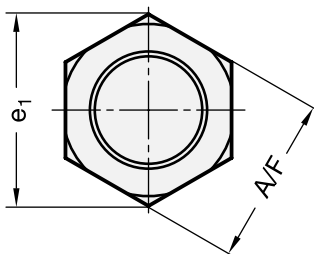
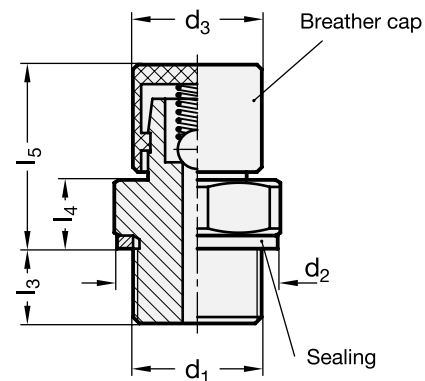
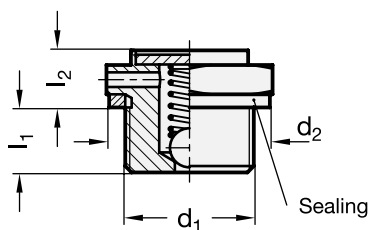
The simple function principle (pressure spring / ball) ensures long and trouble-free use of the valve acting to one side.

The installation position is vertical to the top.



Type A

Type B



Standard Elements	Main dimensions											Opening pressure in mbar		ca. air passage l/min.	△△ g
	Description	d1	d2	d3	e1	e2	l1	l2	l3	l4	l5	A/F	min.		
GN 883-M10x1-20-*-MS	M10x1	17	13	16	18.5	6	6	8	7	18.5	14	20	80	1.2	8
GN 883-M10x1-160-*-MS	M10x1	17	13	16	18.5	6	6	8	7	18.5	14	160	240	1.2	8
GN 883-M12x1.5-20-*-MS	M12x1.5	18	13	19.5	18.5	6.5	6	7.5	7	19	17	20	80	1.2	14
GN 883-M12x1.5-160-*-MS	M12x1.5	18	13	19.5	18.5	6.5	6	7.5	7	19	17	160	240	1.2	14
GN 883-M14x1.5-20-*-MS	M14x1.5	20	13	19.5	18.5	6.5	6	7.5	7.5	19	17	20	80	1.2	16
GN 883-M14x1.5-160-*-MS	M14x1.5	20	13	19.5	18.5	6.5	6	7.5	7.5	19	17	160	240	1.2	16
GN 883-M16x1.5-20-*-MS	M16x1.5	22	13	25	24	9	11	7.5	7.5	19	22	20	80	1.2	35
GN 883-M16x1.5-160-*-MS	M16x1.5	22	13	25	24	9	11	7.5	7.5	19	22	160	240	1.2	36
GN 883-G1/4-20-*-MS	G1/4	20	13	19.5	18.5	6.5	6	7.5	7.5	19	17	20	80	1.2	15
GN 883-G1/4-160-*-MS	G1/4	20	13	19.5	18.5	6.5	6	7.5	7.5	19	17	160	240	1.2	15
GN 883-G3/8-20-*-MS	G3/8	23	13	25	24	9	11	7.5	7.5	19	22	20	80	1.2	37
GN 883-G3/8-160-*-MS	G3/8	23	13	25	24	9	11	7.5	7.5	19	22	20	240	1.2	37
GN 883-G1/2-20-*-MS	G1/2	26	13	31	29	8.5	11	8	8	19.5	27	20	80	1.2	46
GN 883-G1/2-160-*-MS	G1/2	26	13	31	29	8.5	11	8	8	19.5	22	160	240	1.2	54
GN 883-G3/4-20-*-MS	G3/4	32	13	37	35	8.5	11	8	8	19.5	32	20	80	1.2	72
GN 883-G3/4-160-*-MS	G3/4	32	13	37	35	8.5	11	8	8	19.5	32	160	240	1.2	83

* Complete the description of the standard item needed by adding the index of the type: A (low design) or B (high design, with plastic cap).

Electronic catalogue

The electronic version of the Eles+Ganter General Catalogue on DVD or on www.elesa-ganter.com offers the design-engineer the possibility to search for the right element for the application either by going through the catalogue pages on the video or by selecting from the menus.

For each product series you can find:

- colour photos
- technical information
- line drawings and related dimension tables
- 2D CAD drawings
- 3D CAD drawings



2D CAD drawings



3D CAD drawings



3D CAD drawings are available on the www.elesa-ganter.com website almost in all formats.

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