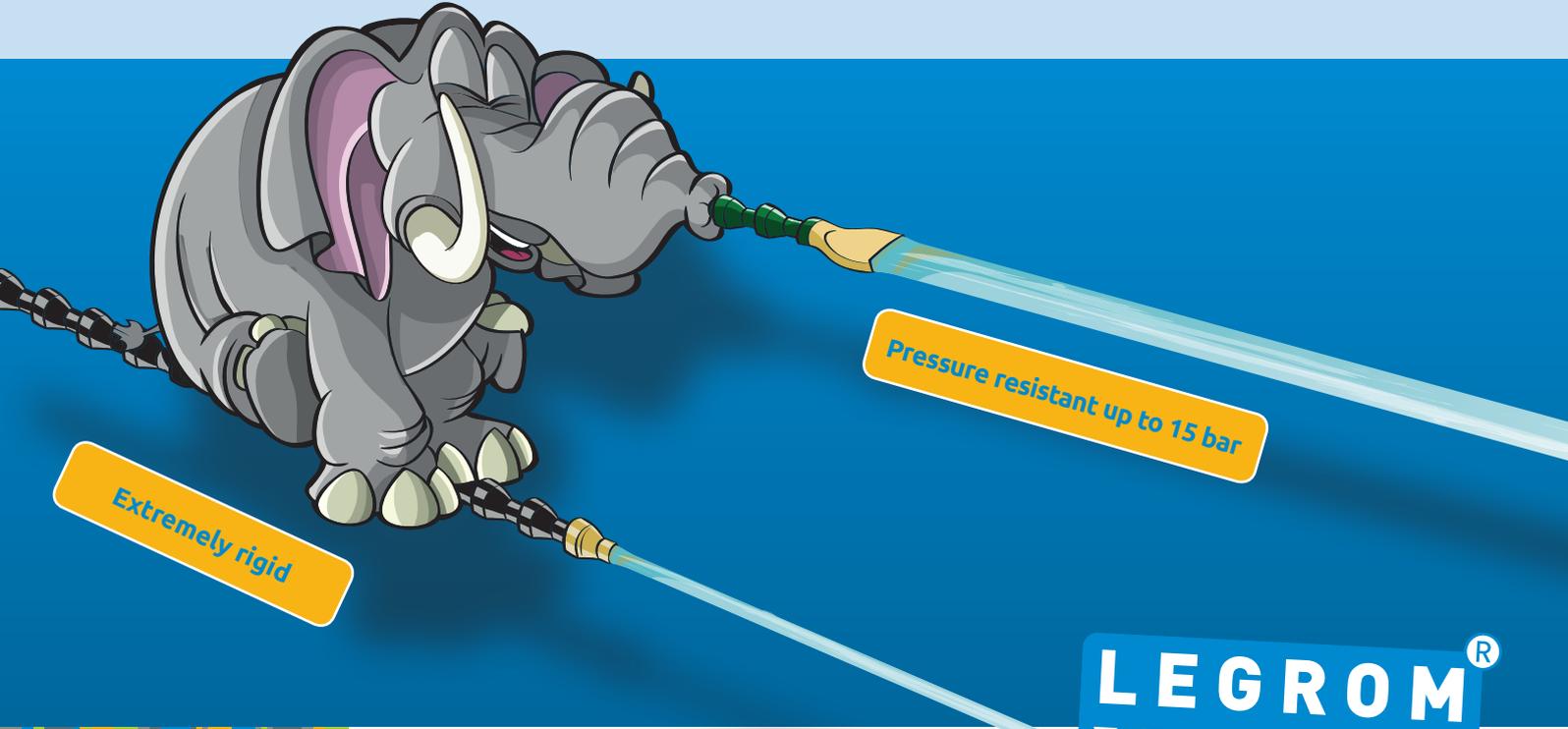


ONLINESHOP  
www.legrom.de

**LEGROM<sup>®</sup>**

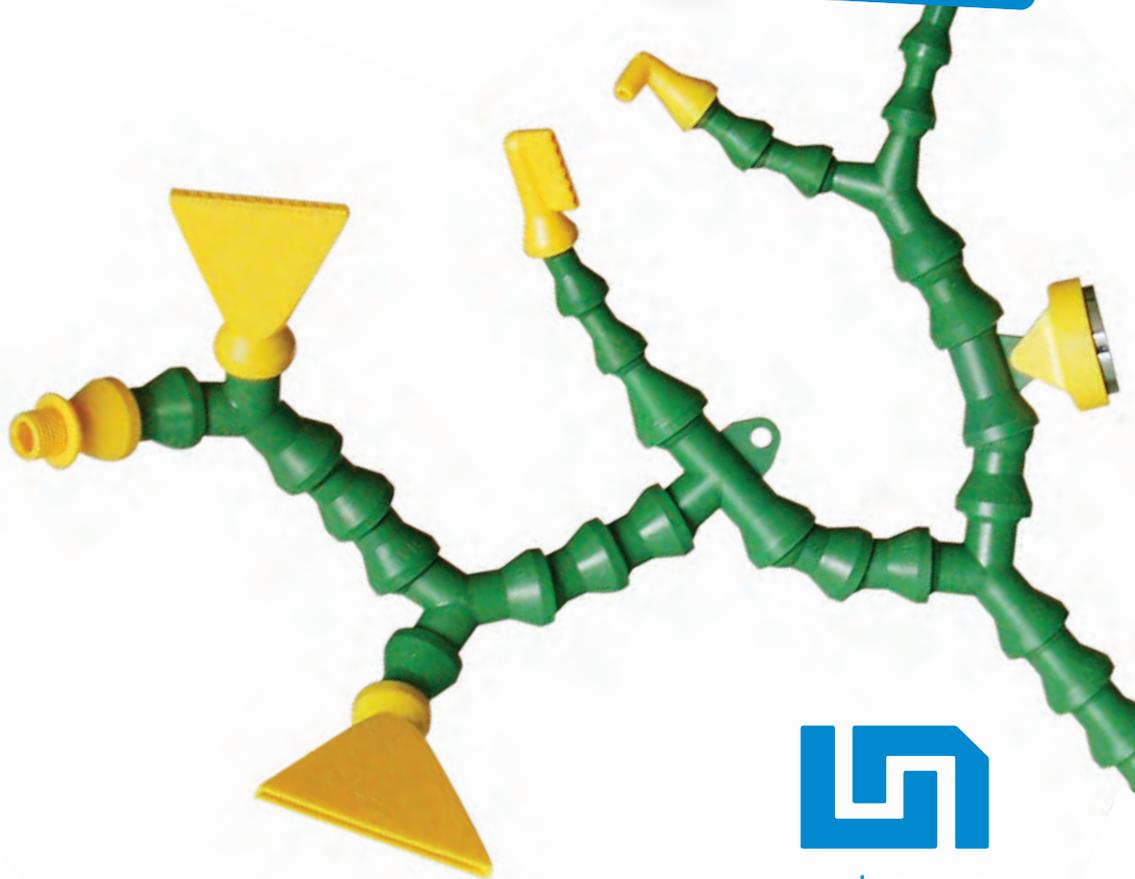


Extremely rigid

Pressure resistant up to 15 bar

**LEGROM<sup>®</sup>**  
**VARIO**  
**SYSTEM**

Keep cool! The variable  
segment hose system



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**HENNLICH -  
ŽIJEME TECHNIKOU**

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Českolipská 9, 412 01 Litoměřice

Telefon: +420 416 711 222  
E-mail: hydro-tech@hennlich.cz

www.hennlich.cz/hydro-tech



# Keep cool! The variable segment hose system



## ONE idea - 1000 solutions:

The unmistakable green and yellow or black and yellow segments of the flexible hose system are your guarantee of quick and easy integration with your machines, production systems and other devices. Just as the segments of our hose system can be shaped to suit the required purpose, so does our company react to the needs of the market and the requirements of our customers. For over 25 years, we have been developing and marketing our high-quality and versatile system for long-term use in a wide variety of sectors and workplaces.

The rapidly increasing demands for faster machining speeds, superior surface qualities and a longer service life of machining tools coupled with immense cost pressure necessitate a thorough and targeted use of the coolants and lubricants required for:

[Turning](#) | [Drilling](#) | [Grinding](#) | [Milling](#) | [Eroding](#)

The **LEGROM VARIO SYSTEM®** can also be used for blowing away chips during the machining of workpieces as well as for quickly and accurately suctioning off fluids, dust, moisture and smoke. The versatility of our flexible hose system and its many combination possibilities are reflected in particular in custom designs:

Our development department with its expertise in mold construction and plastics processing enable us to react quickly and effectively to the special requirements of our customers.



Our fully-automatic installation of the flexible hose system guarantees both high bending strength and a constant high quality level.

# Universal, flexible, precise



All components can also be found in our online shop at [www.legrom.de](http://www.legrom.de)

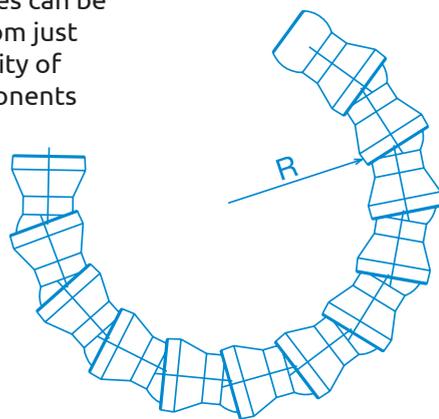
As the direct manufacturer of the LEGROM VARIO SYSTEM®, we also offer:

- » Manufacture of special components
- » Assembly and installation of special sets according to the customer's requirements
- » Short delivery times of all standard components within 24/48 h
- » Made in Germany

## The LEGROM VARIO SYSTEM® is available in 3 different sizes: 1/4" | 1/2" | 3/4"

All sizes can be combined by using adapters, so that one or several nozzles can be attached simultaneously from just one connection. The flexibility of the individual system components enables random positioning and tight bend radii.

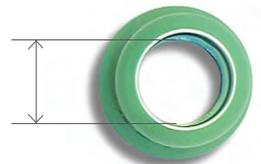
- » 1/4" R=29 mm
- » 1/2" R=38 mm
- » 3/4" R=45 mm



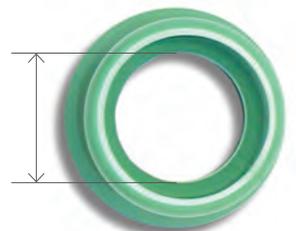
1/4" segment  
7.0 mm



1/2" segment  
12.7 mm



3/4" segment  
18.5 mm

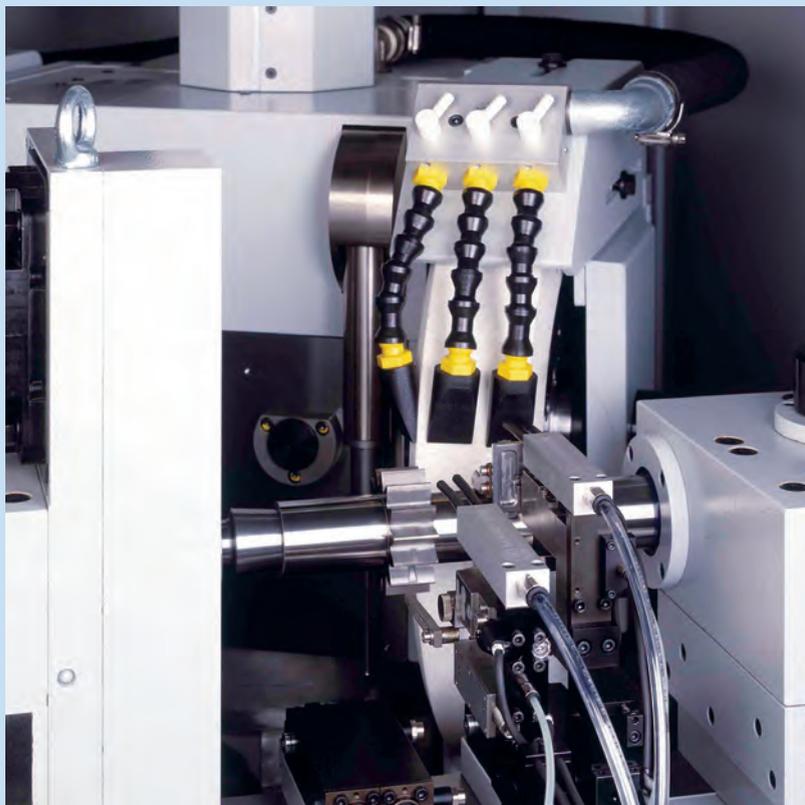


System	Bore diameter	Flow rate	Max. pressure*	Min. bend radius R
1/4"	7.0 mm	16 l/min	6 bar	29 mm
1/2"	12.7 mm	32 l/min	6 bar	38 mm
3/4"	18.5 mm	72 l/min	6 bar	45 mm

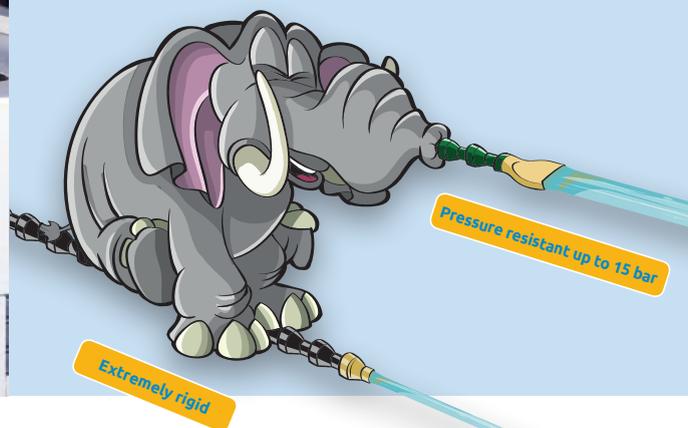
\* Maximum pressure depends on various factors. e.g.:  
Hose length | Nozzle size | Bend radius (according to Legrom testing methods)



# A versatile system with a long list of benefits



- » Excellent chemical resistance
- » Flexibility and versatility
- » High production quality and efficiency
- » Quick to assemble / dismantle
- » Numerous combination possibilities
- » Acid-resistant design
- » Also available in V-0 in compliance with UL-94 (flame protection)
- » High bend resistance and position stability
- » High pressure resistance up to 15 bar



## We guarantee best manufacturer quality

Benefit from the versatility and the numerous advantages of the **LEGROM VARIO SYSTEM®**: Whether hoses, nozzles, threaded connectors or valves, couplings and junctions – you are sure to find the right combination for your application in our range of components!

### High-quality plastic

All **LEGROM VARIO SYSTEM®** components are manufactured from high-quality POM in our own injection-molding plant. This material is renowned for its excellent stability and bending stiffness as well as its excellent elasticity and low tendency to creep. **LEGROM VARIO SYSTEM®** components are non-conductive and thus ideal for eroding machines.

### Maximum long-term usage temperature of 80°C and high chemical resistance

Ideally suited for lubricants, hydraulic fluids, coolants, fuels, ester, alcohol, ether and ketone.

### Stable position

The extreme stability of the joints ensures that the **LEGROM VARIO SYSTEM®** remains directionally stable when subject to pressure surges and vibration of machinery.

### Colours

Our standard version is available in green and yellow or black and yellow.

### Resistant

Resistant to pressure up to 6 bar in the low pressure range for fluids and gases, in the high pressure range up to 15 bar thanks to our liner that is equipped with a special inner hose.

### Quality assurance

We are certified according to DIN EN ISO 9001: 2008 and guarantee the high standard of the **LEGROM VARIO SYSTEM®**.

### Quick to assemble and dismantle

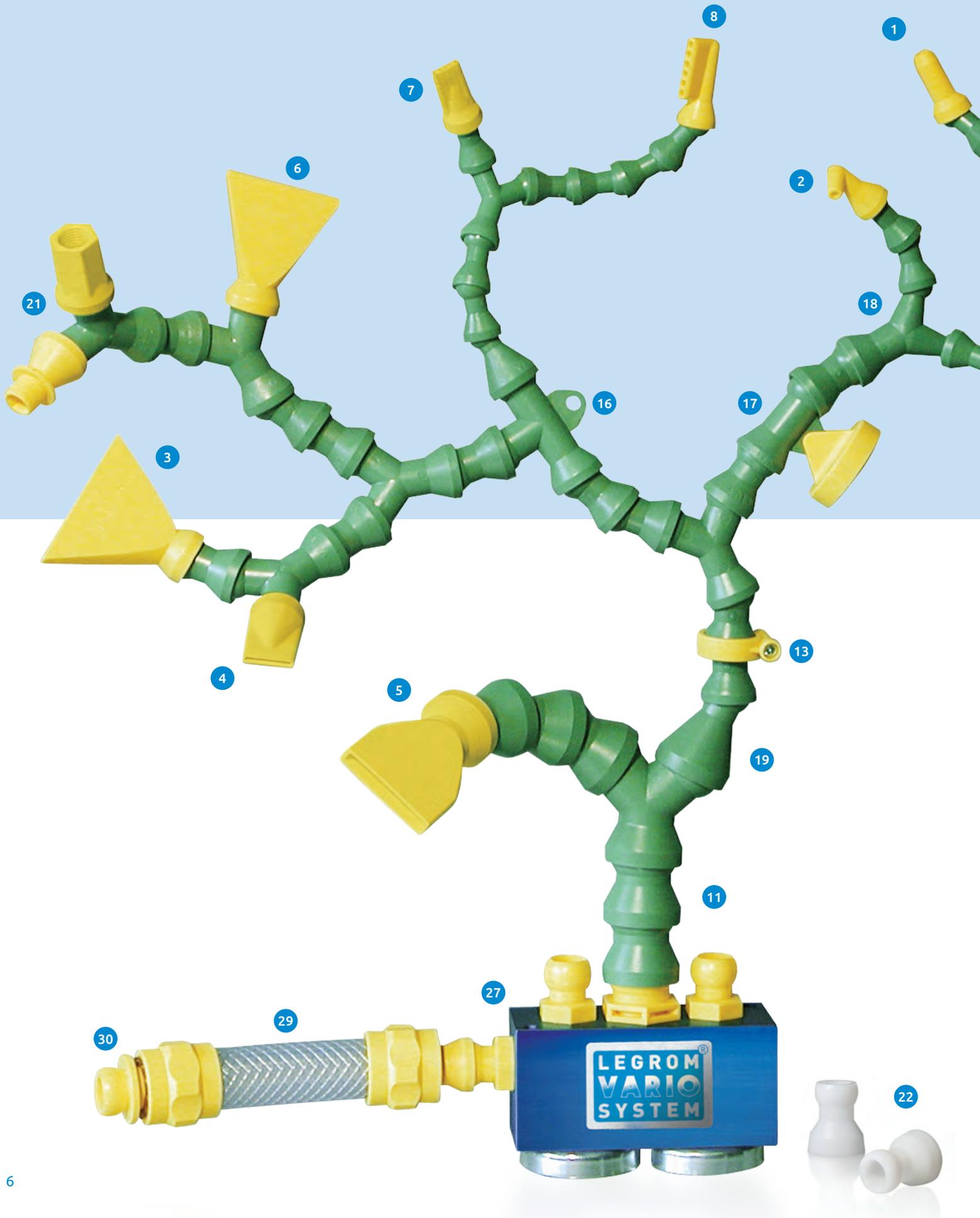
Our unique assembly pliers make it easy to assemble or dismantle the **LEGROM VARIO SYSTEM®** components and to either lengthen or shorten the hoses as and when required.

### The VARIO-Service

**Feel free to consult us.** Our service team will advise you on the right combination of **LEGROM VARIO SYSTEM®** components for your application.

Contact our service staff at: **+49 (0) 791 / 956688-0**

# VARIO - the intelligent system for transporting fluids and air to



# machine tools and production lines



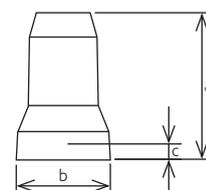
- 1 Round nozzles Page 8
- 2 Elbow round nozzles Page 8
- 3 Flare nozzles Page 8
- 4 Mini flare nozzles Page 8
- 5 Straight flow nozzles Page 9
- 6 Shower nozzles Page 9
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- Acid-resistant and self-extinguishing system components (in compliance with UL94 V-0) Page 20



## Round nozzles



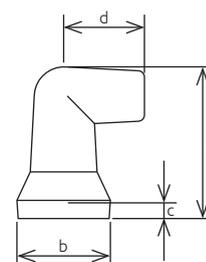
Opening [mm]	a [mm]	b [mm]	c [mm]	Order No. 1/4"	Order No. 1/2"	Order No. 3/4"	Quantity
ø 1.5	30.0	15.5	2.0	504-030			4
ø 3.0	30.0	15.5	2.0	504-040			4
ø 5.0	30.0	15.5	2.0	504-050			4
ø 6.5	30.0	15.5	2.0	504-060			4
ø 6.5	34.0	22.0	3.5		502-025		4
ø 9.0	34.0	22.0	3.5		502-030		4
ø 12.0	34.0	22.0	3.5		502-040		4
ø 16.0	38.0	32.0	4.5			508-040	4
ø 19.0	38.0	32.0	4.5			508-050	4



## Round elbow nozzles



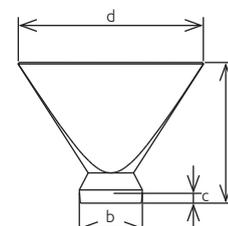
Opening [mm]	a [mm]	b [mm]	c [mm]	d [mm]	Order No. 1/4"	Order No. 1/2"	Order No. 3/4"	Quantity
ø 1.5	25.0	15.5	2.0	13.0	504-035			4
ø 3.0	25.0	15.5	2.0	13.0	504-045			4
ø 6.5	25.0	15.5	2.0	13.0	504-065			4
ø 9.0	36.0	22.0	3.5	19.0		502-035		4
ø 12.0	36.0	22.0	3.5	19.0		502-045		4



## Flare nozzles



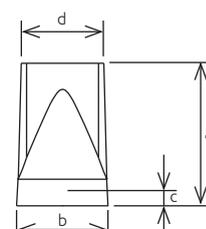
Opening [mm]	a [mm]	b [mm]	c [mm]	d [mm]	Order No. 1/4"	Order No. 1/2"	Order No. 3/4"	Quantity
20.0 x 1.1	29.5	15.5	2.0	24.5	504-070			2
29.0 x 1.0	29.5	15.5	2.0	32.5	504-080			2
44.0 x 2.1	50.5	22.0	3.5	46.5		502-050		2
63.5 x 2.1	50.5	22.0	3.5	66.5		502-060		2
97.5 x 1.4	78.0	22.0	3.5	100.5		502-240		1
75.0 x 5.0	63.0	32.0	4.5	79.0			508-075	2



## Mini flare nozzles



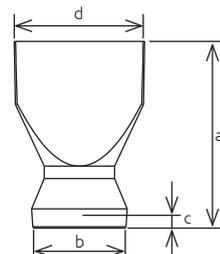
Opening [mm]	a [mm]	b [mm]	c [mm]	d [mm]	Order No. 1/4"	Order No. 1/2"	Order No. 3/4"	Quantity
12.0 x 1.0	29.0	15.5	2.0	12.5	504-078			4
12.0 x 1.5	29.0	15.5	2.0	12.5	504-079			4
18.0 x 2.0	34.0	22.0	3.5	19.5		502-061		4
18.0 x 3.2	34.0	22.0	3.5	19.5		502-062		4



## Straight flow nozzles



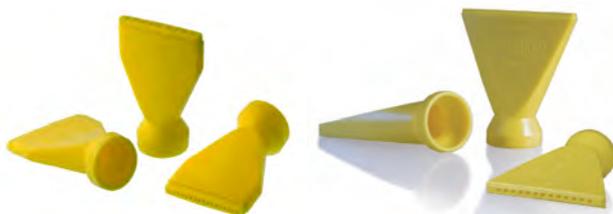
Opening [mm]	a [mm]	b [mm]	c [mm]	d [mm]	Order No. 1/4"	Order No. 1/2"	Order No. 3/4"	Quantity
25.0 x 1.5	35.0	15.5	2.0	26.5	504-071			2
30.0 x 4.0	45.0	22.5	3.5	32.5		502-048		2
40.0 x 2.5	45.0	22.5	3.5	42.5		502-049		2
40.0 x 6.5	63.0	32.0	4.5	44.0			508-060	2



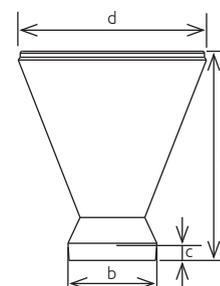
## Shower nozzles

We are as flexible as our system.  
This also applies to the holes  
(number of holes and diameter).

**Put us to the test!!**



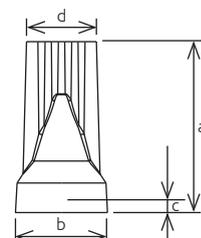
Opening [mm]	a [mm]	b [mm]	c [mm]	d [mm]	Order No. 1/4"	Order No. 1/2"	Order No. 3/4"	Quantity
9.0 x 1.5	37.0	15.5	2.0	26.5	504-072			2
17.0 x 1.0	37.0	15.5	2.0	26.5	504-073			2
11x $\varnothing$ 1.5	52.0	22.0	3.5	46.5		502-052-1115		2
13x $\varnothing$ 0.8	52.0	22.0	3.5	46.5		502-052-1308		2
13x $\varnothing$ 1.1	52.0	22.0	3.5	46.5		502-052-1311		2
13x $\varnothing$ 1.5	52.0	22.0	3.5	46.5		502-052-1315		2



## Mini shower nozzles



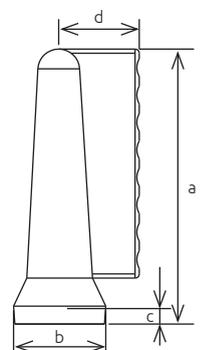
Opening [mm]	a [mm]	b [mm]	c [mm]	d [mm]	Order No. 1/4"	Order No. 1/2"	Order No. 3/4"	Quantity
5x $\varnothing$ 1.5	29.0	15.5	2.0	11.8	504-076			4
7x $\varnothing$ 1.0	29.0	15.5	2.0	11.8	504-077			4
5x $\varnothing$ 3.2	34.0	22.0	3.5	18.5		502-053		4
7x $\varnothing$ 2.0	34.0	22.0	3.5	18.5		502-054		4



## Elbow shower nozzles



Opening [mm]	a [mm]	b [mm]	c [mm]	d [mm]	Order No. 1/4"	Order No. 1/2"	Order No. 3/4"	Quantity
6x $\varnothing$ 2.5	36.0	15.5	2.0	13.0	504-075			2
8x $\varnothing$ 4.2	66.0	22.0	3.5	19.0		502-055		2

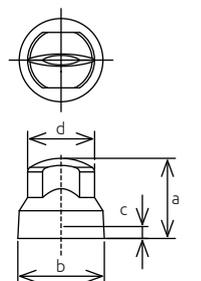


## Fan nozzles

- » For use in car washes for targeted wide spraying of water, hot foam, hard wax, etc.
- » For wide-area coverage and cleaning of enclosures, tool-changer covers, etc. at machines



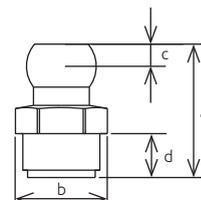
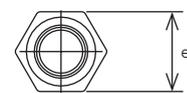
Opening [mm]	a [mm]	b [mm]	c [mm]	d [mm]	Order No. 1/4"	Order No. 1/2"	Order No. 3/4"	Quantity
7.0 x 1.6	14.5	15.5	2.0	12.0	504-081BK			2



## Threaded connectors



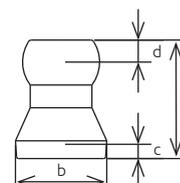
Thread	a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	Order No. 1/4"	Order No. 1/2"	Order No. 3/4"	Quantity
G1/8"	31.0	15.0	4.5	10.0	13.0	504-090			4
PT1/8"	31.0	15.0	4.5	11.0	13.0	504-091			4
G1/4"	31.0	19.5	4.5	10.0	17.0	504-110			4
PT1/4"	31.0	16.0	4.5	11.0	14.0	504-111			4
M10x1	31.0	15.0	4.5	10.0	13.0	504-120			4
G3/8"	36.5	25.0	6.0	12.0	22.0		502-070		4
PT3/8"	36.5	19.0	6.0	12.0	17.0		502-071		4
G1/2"	36.5	25.0	6.0	12.0	22.0		502-080		4
PT1/2"	36.5	25.0	6.0	12.0	22.0		502-081		4
G3/4"	39.5	35.0	5.5	15.0	30.0			508-090	4



## Hoses



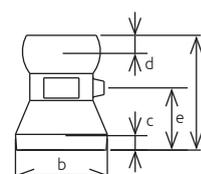
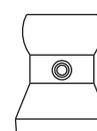
	a [mm]	b [mm]	c [mm]	d [mm]	Order No. 1/4"	Order No. 1/2"	Order No. 3/4"	Quantity
1/4" segment	26.0	16.0	2.0	4.5	504-010-1			1
1/4" 320 mm hose (16 segments)					504-010			1
1/2" segment	29.5	22.5	3.5	5.5		502-010-1		1
1/2" 320 mm hose (15 segments)						502-010		1
3/4" segment	34.0	32.0	4.5	5.5			508-010-1	1
3/4" 320 mm hose (12 segments)							508-010	1
Set of 320 mm hoses					504-020	502-020	508-020	4
Orders by the meter from 10 m (32 seg.)					504-021	502-021	508-021	



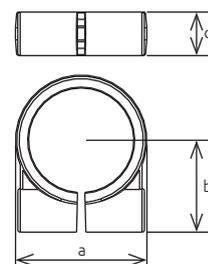
## Segments with spray holes



	a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	Order No. 1/4"	Order No. 1/2"	Order No. 3/4"	Quantity
1/4" segment with ø 1.5 mm spray hole	24.5	16.0	2.0	3.0	14.0	504-400-1			1
1/4" segment with spray holes (15 seg. + end cap)						504-400			1
1/4" end cap	24.5	16.0	2.0	3.0	14.0	504-401			1
1/2" segment with ø 2.5 mm spray hole	29.5	22.5	3.5	4.0	16.0		502-400-1		1
1/2" segment with spray hole (15 seg. + end cap)							502-400		1
1/2" end cap	29.5	22.5	3.5	4.0	16.0		502-401		1

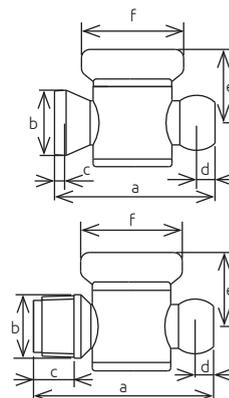


## Clamping rings with screw for fixing the hoses



a [mm]	b [mm]	c [mm]	Order No. 1/4"	Order No. 1/2"	Order No. 3/4"	Quantity
19.5	16.0	9.0	504-165			4
27.0	19.0	9.0		502-165		4
38.5	27.5	11.0			508-165	4

## Valves

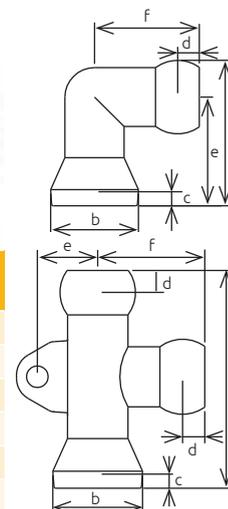


	a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	f [mm]	Order No. 1/4"	Order No. 1/2"	Order No. 3/4"	Quantity
W/o thread	37.0	17.0	2.0	4.5	21.5	22.0	504-140			1
W/o thread	55.0	22.5	3.5	6.0	25.5	35.0		502-130N		1
PT1/4" thread	41.0	15.0	12.0	4.5	21.5	22.0	504-141			1
PT1/2" thread	62.0	22.0	14.0	6.0	25.5	35.0		502-131N		1

## T- and elbow fittings

Also available in black!

Please add "BK" when quoting our order no.

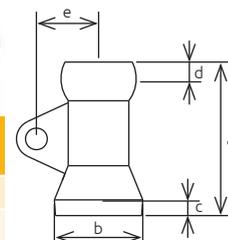


	a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	f [mm]	Order No. 1/4"	Order No. 1/2"	Order No. 3/4"	Quantity
T-fitting	43.0	16.0	2.0	5.0	12.5	20.5	504-470			2
T-fitting	55.0	22.5	3.5	5.5	15.0	27.0		502-470		2
T-fitting	76.0	32.0	4.35	5.5	20.0	37.0			508-470	2
Elbow fitting	28.0	16.0	2.0	5.0	20.5	22.0	504-480			2
Elbow fitting	38.0	22.5	3.5	5.5	27.0	28.0		502-480		2
Elbow fitting	53.5	32.0	4.35	5.5	39.5	37.0			508-480	2

## Segments with mounting lug

Also available in black!

Please add "BK" when quoting our order no.

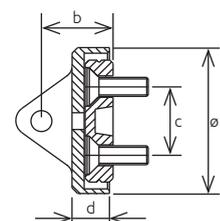


a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	Order No. 1/4"	Order No. 1/2"	Order No. 3/4"	Quantity
36.0	16.0	2.0	4.5	12.5	504-150			2
39.0	22.5	3.5	4.0	15.5		502-140		2

## Mounting units with magnet and mounting plate with screws

Also available in black!

Please add "BK" when quoting our order no.



a [mm]	b [mm]	c [mm]	d [mm]	Order No. 1/4"	Order No. 1/2"	Order No. 3/4"	Quantity
38.5	19.0	18.0	10.0	504-160			1
38.5	19.0	18.0	10.0		502-160		1

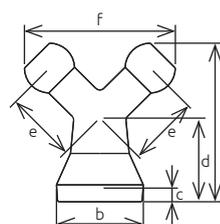
## Y-fittings and Y-fitting reducers

Also available in black!

Please add "BK" when quoting our order no.



	a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	f [mm]	Order No. 1/4"	Order No. 1/2"	Order No. 3/4"	Quantity
Y-fitting	38.5	16.0	2.0	20.5	16.5	36.5	504-130			2
Y-fitting	48.5	22.5	3.5	25.0	20.0	47.5		502-090		2
Y-fitting	55.0	32.0	4.5	25.0	24.5	60.5			508-130	2
Y-reducer 1/2" to 2x 1/4"	41.5	22.5	3.5	22.0	18.5	39.0		502-110		2
Y-reducer 3/4" to 2x 1/2"	51.0	32.0	4.5	25.0	23.5	52.5			508-110	2



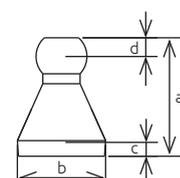
## Reducers

Also available in black!

Please add "BK" when quoting our order no.



	a [mm]	b [mm]	c [mm]	d [mm]	Order No. 1/4"	Order No. 1/2"	Order No. 3/4"	Quantity
1/2" to 1/4"	30.5	22.5	3.5	5.0		502-120		2
3/4" to 1/2"	44.0	32.0	4.5	6.0			508-120	2



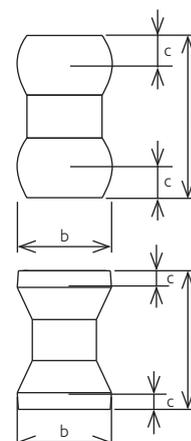
## Couplings

Also available in black!

Please add "BK" when quoting our order no.



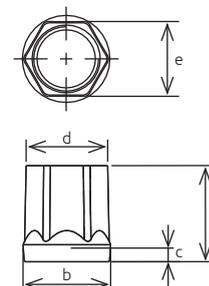
	a [mm]	b [mm]	c [mm]	Order No. 1/4"	Order No. 1/2"	Order No. 3/4"	Quantity
Socket-socket	27.5	16.0	2.0	504-260			2
Socket-socket	33.5	22.5	3.5		502-260		2
Socket-socket	38.0	32.0	4.35			508-260	2
Ball-ball				504-280			2
Ball-ball					502-280		2



## Adapter with inner thread



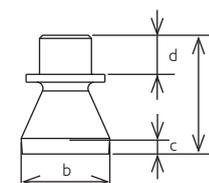
Socket	a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	Order No. 1/4"	Order No. 1/2"	Order No. 3/4"	Quantity
1/4" with M8 inner thread	17.0	15.5	2.0	15.5	13.0	504-012			4
1/4" with G1/8" inner thread	17.0	15.5	2.0	14.5	13.0	504-013			4
1/2" with G1/4" inner thread	25.0	22.5	3.5	19.0	17.0		502-012		4
1/2" with G3/8" inner thread	25.0	22.5	3.5	21.5	19.0		502-015		4



## Adapter with outer thread



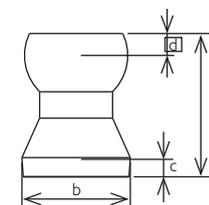
Socket	a [mm]	b [mm]	c [mm]	d [mm]	Order No. 1/4"	Order No. 1/2"	Order No. 3/4"	Quantity
1/2" with G1/4" outer thread	30.5	22.5	3.5	10.0		502-013		4



## Loc-Line adapter



	a [mm]	b [mm]	c [mm]	d [mm]	Order No. 1/4"	Order No. 1/2"	Order No. 3/4"	Quantity
1/4" adapter	26.5	16.0	2.0	5.0	504-999			1
1/2" adapter	31.0	25.5	4.0	4.0		502-999		1



## Assembly pliers



	Order No. 1/4"	Order No. 1/2"	Order No. 3/4"	Quantity
Assembly pliers	504-250	502-250	508-250	1

## Threaded liner with round nozzle

- » Available in any lengths
- » Pressure-resistant up to 15 bar
- » Inner hose diameter 1/4" = 3.0 mm, 1/2" = 6.0 mm and 3/4" = 14.0 mm



### Also available in black!

Please add "BK" when quoting our order no.

Thread	Length [mm]	Round nozzle [mm]	Order No. 1/4"	Order No. 1/2"	Order No. 3/4"	Quantity
G1/4"	380	ø 5.0	504-310			1
G1/8"	380	ø 5.0	504-311			1
G1/4"	610	ø 5.0	504-320			1
G1/8"	610	ø 5.0	504-321			1
G1/2"	380	ø 9.0		502-310		1
G3/8"	380	ø 9.0		502-311		1
G1/2"	610	ø 9.0		502-320		1
G3/8"	610	ø 9.0		502-321		1
G3/4"	380	ø 19.0			508-310	1
G3/4"	610	ø 19.0			508-320	1

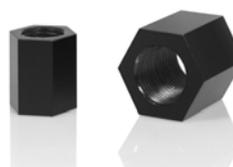
## Double-threaded liner (special design)

- » Available in any length
- » Pressure resistant up to 15 bar
- » Inner hose diameter 8.0 mm



Thread	Length [mm]	Order No. 1/4"	Order No. 1/2"	Order No. 3/4"	Quantity
G3/8" to G1/2"	170		506-502-311-6BK		1
G1/2" to G1/2"	130		506-502-320-2BK		1
G1/2" to G1/2"	210		506-502-320-6BK		1
G1/2" to G1/2"	270		506-502-320-10BK		1

## Threaded bushings for double-threaded liners



	Length [mm]	Order No. 1/4"	Order No. 1/2"	Order No. 3/4"	Quantity
G1/4" inner thread (hexagonal SW17)	21.0	504-016BK			1
G1/2" inner thread (hexagonal SW24)	25.0		502-016BK		1
G3/8" inner thread (hexagonal SW24)	25.0		502-017BK		1
G3/4" inner thread (hexagonal SW32)	33.0			508-016BK	1



## Basic sets

Image: 1/2" basic set



	Order No. 1/4"	Order No. 1/2"	Order No. 3/4"	Quantity
1/4" basic set	504-100			1x 320 mm hose, 1x threaded connector G1/8", G1/4" and M10x1, 1x round nozzle $\varnothing$ 1.5 / 3.0 / 5.0 and 6.5 mm
1/2" basic set		502-100		1x 320 mm hose, 1x threaded connector G3/8" and G1/2", 1x round nozzle $\varnothing$ 9.0 and 12.0 mm
3/4" basic set			508-100	1x 320 mm hose, 2x threaded connector G3/4", 1x round nozzle $\varnothing$ 16.0 and 19.0 mm

## Maxi sets

Image: 1/2" maxi set



	Order No. 1/4"	Order No. 1/2"	Order No. 3/4"	Quantity
1/4" maxi set	504-900			4x 320 mm hose, 4x threaded connector G1/8" and G1/4", 4x round nozzles $\varnothing$ 1.5 / 3.0 and 6.5 mm, 1x flare nozzle 29.0 x 1.0 mm
1/2" maxi set		502-900		4x 320 mm hose, 4x threaded connector G3/8" and G1/2", 4x round nozzles $\varnothing$ 9.0 and 12.0 mm

## Basic box

Image: 1/2" basic box

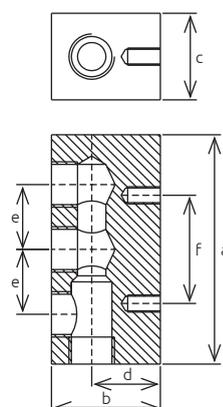


	Order No. 1/4"	Order No. 1/2"	Order No. 3/4"	Quantity
1/4" basic box	504-802			3x 320 mm hose, 1x valve 2x round nozzles $\varnothing$ 1.5 / 3.0 and 6.5 mm 1x elbow round nozzle $\varnothing$ 1.5 / 3.0 and 6.5 mm 1x elbow shower nozzle 6x $\varnothing$ 2.5 mm 1x flare nozzle 20.0 and 30.0 mm 2x threaded connector G1/8" and G1/4" 1x mini shower nozzle 5x $\varnothing$ 1.5 mm and 7x $\varnothing$ 1.0 mm 1x mini flare nozzle 12.0 x 1.0 mm and 12.0 x 1.5 mm 1x Y-fitting, 2x clamping rings, 1x assembly pliers
1/2" basic box		502-802		3x 320 mm hose, 1x valve 2x round nozzles $\varnothing$ 9.0 and 12.0 mm 1x elbow round nozzle $\varnothing$ 9.0 and 12.0 mm 1x shower nozzle 45.0 mm 1x elbow shower nozzle 8x $\varnothing$ 4.2 mm 1x flare nozzle 45.0 and 65.0 mm 2x threaded connector G3/8" and G1/2" 1x mini shower nozzle 5x $\varnothing$ 3.2 mm and 7x $\varnothing$ 2.0 mm 1x mini flare nozzle 18.0 x 2.0 mm and 18.0 x 3.2 mm 1x Y-fitting, 2x clamping rings, 1x assembly pliers

## Manifold blocks



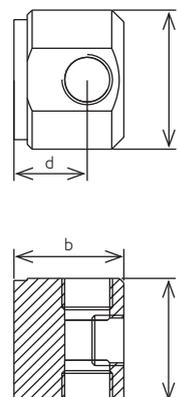
Thread	a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	f [mm]	Order No. 1/4"	Order No. 1/2"	Order No. 3/4"	Quantity
4x G1/4" with threaded connector and 2 magnets	101.0	40.0	30.0	20.0	30.0	25.0	504-500			1
4x G1/2" with threaded connector and 2 magnets	106.0	50.0	40.0	31.5	30.0	50.0		502-500		1
3x G3/4" with threaded connector and 2 magnets	106.0	50.0	40.0	26.0	25.5	50.0			508-500	1



## Round manifold blocks



Thread	a [mm]	b [mm]	c [mm]	d [mm]	Order No. 1/4"	Order No. 1/2"	Order No. 3/4"	Quantity
3x 1/4" inner threads 1x G1/4" threaded connector 1x plug, 1 magnet	51.5	45.5	58.0	25.0	504-510			1
3x 1/2" inner threads 1x G1/2" threaded connector 1x plug, 1 magnet	51.5	45.5	58.0	30.5		502-510		1



## PVC hoses



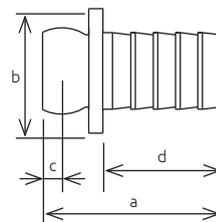
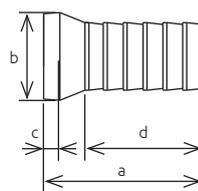
Hose diameter	Order No. 1/4"	Order No. 1/2"	Order No. 3/4"	Quantity
Inner ø 9.0 mm, thickness 2.0 mm, not reinforced	504-230			1 Meter
Inner ø 9.0 mm, thickness 3.0 mm, reinforced	504-240			1 Meter
Inner ø 16.0 mm, thickness 2.0 mm, not reinforced		502-220		1 Meter
Inner ø 16.0 mm, thickness 4.0 mm, reinforced		502-230		1 Meter
Inner ø 19.0 mm, thickness 3.0 mm, not reinforced			508-230	1 Meter
Inner ø 19.0 mm, thickness 3.5 mm reinforced			508-240	1 Meter



## PVC hose accessories



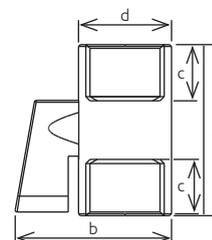
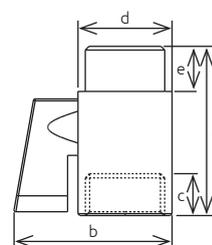
	a [mm]	b [mm]	c [mm]	d [mm]	Order No. 1/4"	Order No. 1/2"	Order No. 3/4"	Quantity
Female hose connectors	30.0	15.5	2.0	19.0	504-180			4
Male hose connectors	30.0	18.0	4.0	19.0	504-190			4
Female hose connectors	39.0	22.0	3.5	29.0		502-170		4
Male hose connectors	39.0	28.0	4.5	26.0		502-180		4
Clamping rings for hose 504-230					504-210			4
Clamping rings for hose 504-240					504-220			4
Clamping rings for hose 504-220						502-190		4
Clamping rings for hose 504-230						502-210		4



## Chromed brass valves



Thread	a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	Order No. 1/4"	Order No. 1/2"	Order No. 3/4"	Quantity
2x 1/4" internal thread	40.0	38.0	10.0	21.0		504-142			1
2x 1/2" internal thread	46.0	41.0	10.5	25.0			502-132		1
2x 3/4" internal thread	53.0	47.5	12.0/ 14.0	30.0				508-140	1
1x 1/4" internal thread, 1x 1/4" external thread	39.0	38.0	9.0	21.0	9.0	504-143			1
1x 1/2" internal thread, 1x 1/2" external thread	45.0	42.0	12.0	25.0	12.0		502-133		1
1x 3/4" internal thread, 1x 3/4" external thread	51.0	46.5	12.0	30.0	13.5			508-141	1

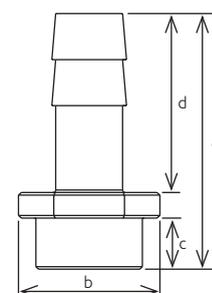


Thread	a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	Order No. 1/4"	Order No. 1/2"	Order No. 3/4"	Quantity
2x 3/4" internal thread	57.0	65.0	13.0	31.0				508-142	1
1x 3/4" external thread, 1x 3/4" external thread	66.0	65.0	13.0	31.0	13.0			508-143	1

## Brass hose couplings



	a [mm]	b [mm]	c [mm]	d [mm]	Order No. 1/4"	Order No. 1/2"	Order No. 3/4"	Quantity
1/4" (For DN 9) SW17	35.0	19.5	9.0	21.0	504-181			1
1/2" (For DN 13) SW27	50.0	27.5	10.0	35.0		502-171		1
3/4" (For DN 19) SW32	60.0	35.5	16.0	36.0			508-150	1



## Coolant equipment with underwater pump (in tank)

- » 230 V
- » 50Hz
- » 10 m power cable
- » Standard CE safety plug (only in Germany)
- » **CE**



Maximum throughput	Maximum pump lift	Tank	Power	Outer dimensions [mm]	Order No.
600 l/h (10 l/min)	1.5 m/WS	15 l	10 W	400 x 300 x 170	500-001
1,200 l/h (20 l/min)	2.0 m/WS	20 l	28 W	400 x 300 x 220	500-002
1,200 l/h (20 l/min)	2.0 m/WS	30 l	28 W	400 x 300 x 325	500-003

## Coolant equipment with top pump

- » 230/400 V Euro standard
- » 50 Hz
- » 0.12 kW
- » **CE**



Maximum throughput	Maximum pump lift	Tank	Outer dimensions [mm]	Order No.
2,940 l/h (49 l/min)	5.0 m/WS	30 l	400 x 300 x 170	500-004
2,940 l/h (49 l/min)	5.0 m/WS	40 l	400 x 300 x 220	500-005



» If requested, spare pumps can be provided with all coolant equipment.



Legrom presents a patented world first:

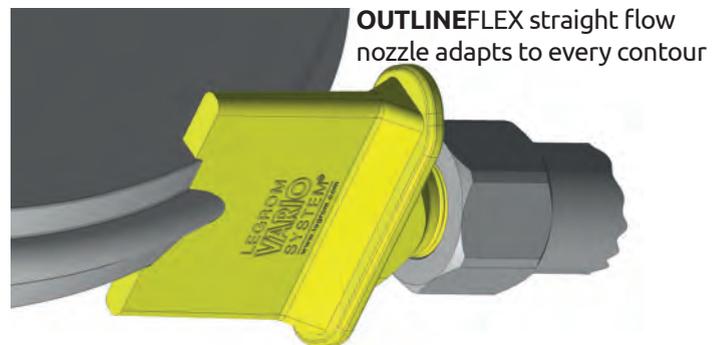
# OUTLINEFLEX

The flexible straight flow nozzle

Despite the wide range of straight flow nozzles on the market, many users today have problems in finding one with the right profile to suit their grinding tool. To overcome this problem many nozzles are painstakingly soldered together. With **OUTLINEFLEX** this laborious work is a thing of the past. When opened with the grinding tool the nozzle blank automatically adapts exactly to the contour of the grinding tool!

The flexible straight flow nozzle **OUTLINEFLEX** with its intelligent parameters optimizes the cooling lubricant system. The nozzle shape that is adapted to the profile of the grinding tool and an opening cross-section that is dimensioned to correspond with the flow volume ensure a close-contoured, evenly discharged cooling lubricant. At the same time, the grinding wheel is optimally cleaned and the heat generation significantly reduced. Further benefits to the user are the high grinding quality and a considerable increase in the cutting capacity. The operator-friendly nozzle blank can be easily and quickly adapted to the machine without damaging the surface of the grinding wheel. Combined with the variable segment hose system **VARIO** by Legrom or other systems, **OUTLINEFLEX** meets the needs of virtually every application.

**OUTLINEFLEX** enables the exact setting of the gap between the grinding wheel and the nozzle blank, so that the flow conditions in the grinding gap, the contact volume flow and the pressure in the grinding gap can be directly influenced. High cooling lubricant volume flows which do not positively influence the



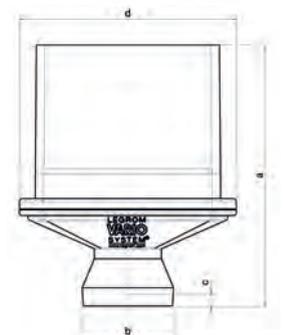
cooling effect in the contact zone can be detected and eliminated. The nozzle, which is adapted to suit the contour of the grinding tool, is extremely close to the grinding wheel. As a consequence, the air cushion surrounding the grinding wheel can be almost completely deflected. This considerably reduces the volume of coolant lubricant required, as no turbulence occurs. As only pure cooling lubricant is introduced to the contact surface, the quality of the grinding process is additionally enhanced as a result. The reduction of the cooling lubricant flow can also be exploited so that machines can be configured with a lower motor/pump capacity, thus making them more energy efficient.

- » Available as blank for flexible straight flow nozzle
- » Available as flexible straight flow nozzle according to your CAD data
- » Higher productivity, lower heat generation, better cleaning of grinding wheel hence longer service life of the grinding wheel
- » Lower compressive stress in the surface of the workpiece hence improved structure



Type	a [mm]	b [mm]	c [mm]	d [mm]	Order No. 3/4"	Quantity
Slit size 60.0 x 3.0 mm G3/4" socket	92	32	4,5	76	508-600-603	1
Slit size 60.0 x 3.0 mm G3/4" external thread	92	SW30	15*	76	508-610-603	1

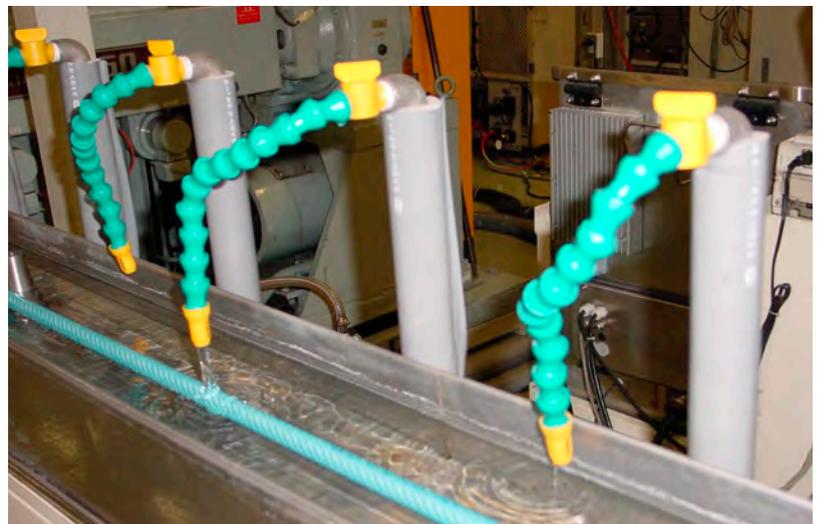
\* Thread length



» Further designs will be available shortly, see [www.legrom.com](http://www.legrom.com)

## Acid-resistant and self-extinguishing system components (in compliance with UL94 V-0)

Part		Order No. 1/4"	Order No. 1/2"	Order No. 3/4"	Orders from
Round nozzles	ø 5.0 mm	504-050-1-V0			1
	ø 6.5 mm		502-025-1-V0		1
	ø 9.0 mm		502-030-1-V0		1
	ø 19.0 mm			508-050-1-V0	1
Flare nozzles	29.0 x 1.0 mm	504-080-1-V0			1
Straight flow nozzles	25.0 x 1.5 mm	504-071-1-V0			1
Shower nozzles	9x ø 1.5 mm	504-072-1-V0			1
	13x ø 1.5 mm		502-052-1115-1-V0		1
Threaded connectors	G1/4"	504-110-1-V0			1
	PT1/4"	504-111-1-V0			1
	G1/2"		502-080-1-V0		1
	G3/4"			508-090-1-V0	1
Elbow shower nozzles	6x ø 2.5 mm	504-075-1-V0			1
	8x ø 4.2 mm		502-055-1-V0		1
Valves	PT1/4"	504-141-1-V0			1
Y-fittings		504-130-1-V0	502-090-1-V0	508-130-1-V0	1
Y-fitting reducers	1/2" to 2x 1/4"		502-110-1-V0		1
	3/4" to 2x 1/2"			508-110-1-V0	1
Coupling	Socket-socket	504-260-1-V0			1
	Ball-ball		502-280-1-V0		1
Threaded adapter	1/2" socket with 1/4" outer thread		502-013-1-V0		1
Clamping ring with screw		504-165-1-V0	502-165-1-V0		1
Hoses	Segment	504-010-1-V0	502-010-1-V0	508-010-1-V0	1
	1/4" hose (16 segments)	504-010-V0			1
	1/2" hose (15 segments)		502-010-V0		1
	3/4" hose (12 segments)			508-010-V0	1



Chemical resistance		bad*	fairly good**	excellent***
PBT				
Alkalis				
Alcohols				
Ester				
Ether				
Ketone				
Automotive fluids	Petrol			
	Brake fluid (heavy alcohols)			
	Coolant (Glycols)			
	Oils (unsaturated aliphatic mixtures)			
	Cleaning agents			
	Lubricants (non-reactive organic ester)			
	Waxes (heavy fuels)			
Hydrocarbons	Aliphatic			
	Aromatic			
	Partially halogenated			
	Fully halogenated			
Phenols				
Acids	Inorganic			
	Organic			
	Oxidising			
Water - hot (< 80 °C)				

- \* not recommended » Results in failure or substantial decomposition
- \*\* suitable only to a limited extend » Only suitable for short-term exposure at low temperatures or when the loss of mechanical properties is not critical
- \*\*\* acceptable under normal conditions » Long-term exposure can result in minor loss of properties. High temperatures can result in considerable loss of properties



Combustibility	Test Standard	Unit	Values
Combustibility in compliance with UL94	UL94	V-0	0.71 mm
Flammability HWI	UL746A	Klasse	4
Flammability HAI	UL746A	Klasse	0



## We leave nothing to chance



### The demands of our customers are our benchmark

Nothing is so good that it cannot be improved. We and our customers come face to face with this challenge every day.

The quality of our products and services is our top priority. In order to satisfy the demands of the market for continuously improving products, we are constantly working on identifying and implementing the best solutions from both a technical and economic point of view.

*„Our goal is to find the most efficient - yet cost-effective solution - to every challenge we are set.“*

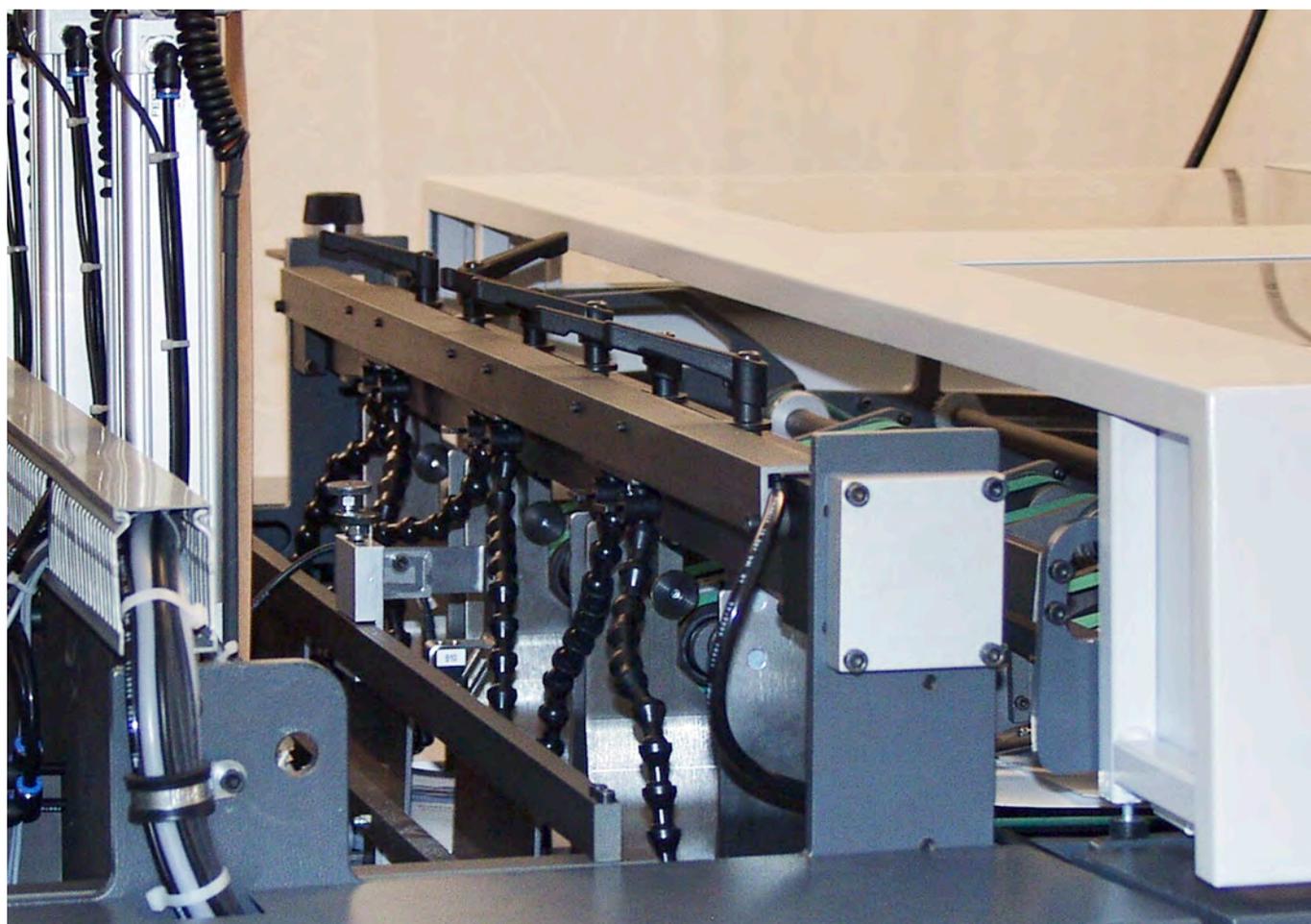


Images: Pressure test (above) and Stiffness test (below)

**QUALITY MANAGEMENT**  
CERTIFIED ACCORDING TO  
**DIN EN ISO 9001:2008**

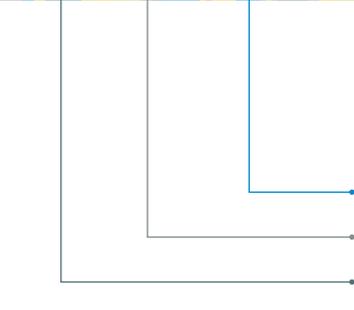
Our team of highly skilled experts employs the latest computerized measuring and testing technology and provides comprehensive documentation to guarantee the consistent quality of our products and the satisfaction of our customers.







[www.legrom.com](http://www.legrom.com)



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