

Contents

1	<i>Vacuum and metering systems</i>	2
1.1	<i>Vacuum conveyors</i>	2
1.1.1	Vacuum conveyor with fixed suction pressure	2
1.1.2	Vacuum conveyor with variable suction pressure	4
1.2	<i>Suction nozzle</i>	5
1.3	<i>Two-component switch</i>	6
1.4	<i>Air passage</i>	7
1.5	<i>Pneumatic cylinder with hollow rod</i>	8
2	<i>Cutting and vibrating elements</i>	9
2.1	<i>Pneumatic striking cylinders</i>	9
2.1.1	Striking cylinder Piston diameters 32 mm and 50 mm	9
2.1.2	Striking cylinder Piston diameters 50 mm and 80 mm	10
2.2	<i>Pneumatic short stroke striking cylinder</i>	11
2.3	<i>Pneumatic striking cylinder</i>	12
2.4	<i>Pneumatic striker</i>	13

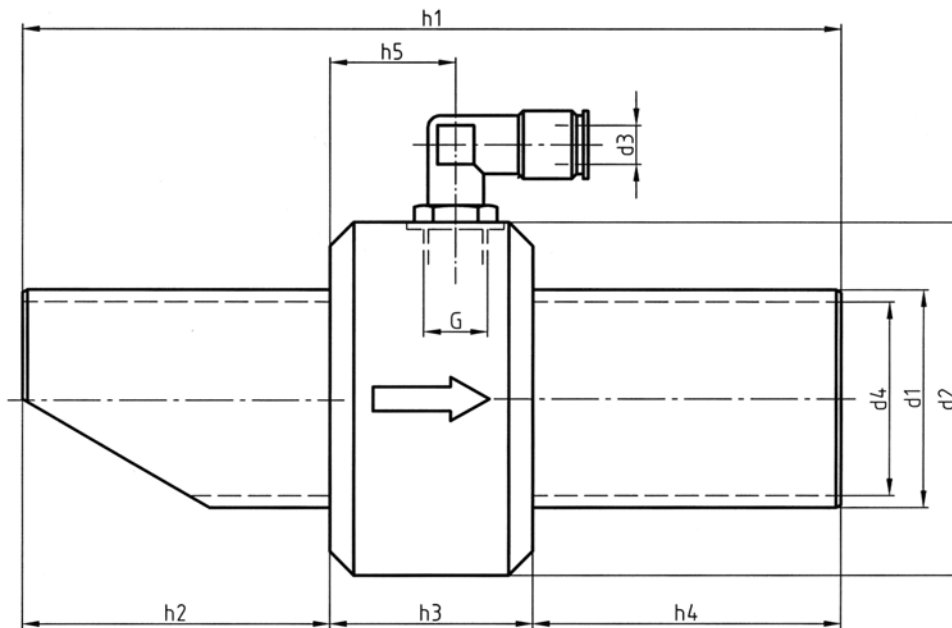
1 Vacuum and metering systems

1.1 Vacuum conveyors

1.1.1 Vacuum conveyor with fixed suction pressure

Technical description

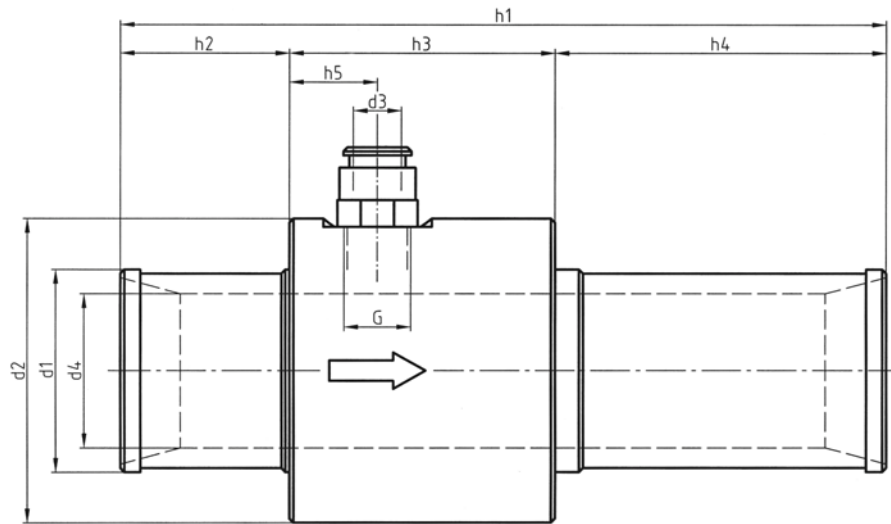
Design	Pipe shape
Nominal diameter	20 mm to 40 mm
Function	Vacuum generation for conveying granulate, for hose lines
Connection ND	25 to 45 mm (dependent on application)
Temperature range	-20°C to +80°C
Medium	Filtered compressed air, oil-bearing, or not oil-bearing
Operating pressure	1 bar to 10 bar



Part No.	h1	h2	h3	h4	h5	d1	d2	d3	d4	G
00056-11	150	54	42	54		25	53	8	20	G1/4
00054-46	150	54	42	54		32	60	8	26	G1/4
00056-34	170	64	42	64		45	73	8	40	G1/4

Technical description

Design	Pipe shape
Nominal diameter	10 mm to 38 mm
Function	Vacuum generation for conveying bulk produce, for hose lines, low-wear suction pipe with special coating (special coatings dependent on application).
Connection ND	19 to 50 mm (dependent on application)
Temperature range	-20°C to +80°C
Medium	Filtered compressed air, oil-bearing, or not oil-bearing
Operating pressure	1 bar to 10 bar

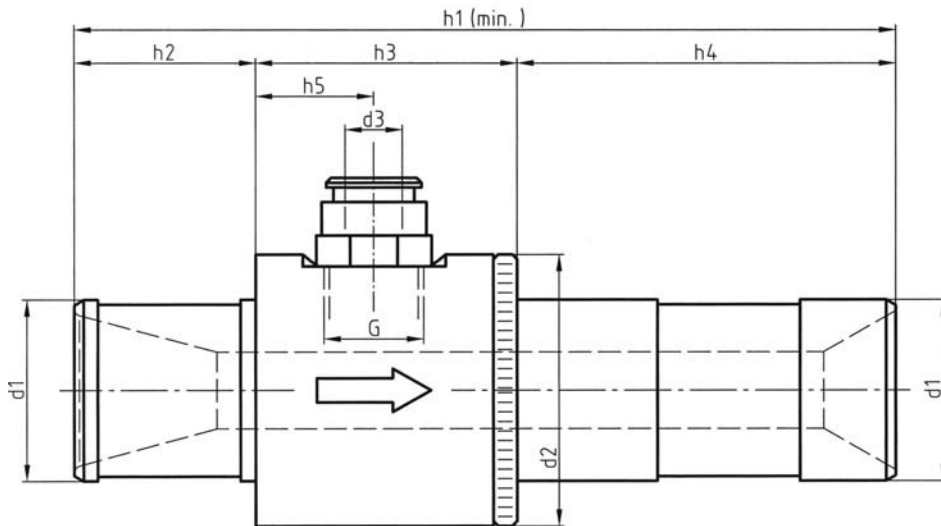


Part No.	h1	h2	h3	h4	h5	d1	d2	d3	d4	G	Working pressure [bar]	max. vacuum [mbar]	Air consumption [l/min] (at 6 bar)	Suction pressure [l/min] (at 6 bar)	Ambient temp. [°C]
00056-47	90	15	42	33	13	19	32	8	10	G1/8	3 - 6	-100	approx. 150	530	-20/+80
00056-48	140	30	55	55	18	25	45	12	13	G1/4	3 - 6	-100	approx. 400	1020	-20/+80
00056-49	190	43	65	82	22	32	54	12	19	G3/8	3 - 6	-100	approx. 600	1920	-20/+80
00056-50	190	42	66	82	22	38	60	12	25	G3/8	3 - 6	-100	approx. 990	2500	-20/+80
00056-51	190	42	66	82	22	50	75	12	38	G3/8	3 - 6	-100	approx. 1660	3080	-20/+80

1.1.2 Vacuum conveyor with variable suction pressure

Technical description

Design	Pipe shape
Nominal diameter	8 mm to 12 mm
Function	Variable vacuum generation for conveying bulk produce, for hose lines, low-wear suction pipe with special coating (special coatings dependent on application).
Connection ND	19 to 38 mm (dependent on application)
Temperature range	-20°C to +80°C
Medium	Filtered compressed air, oil-bearing, or not oil-bearing
Operating pressure	1 bar to 10 bar

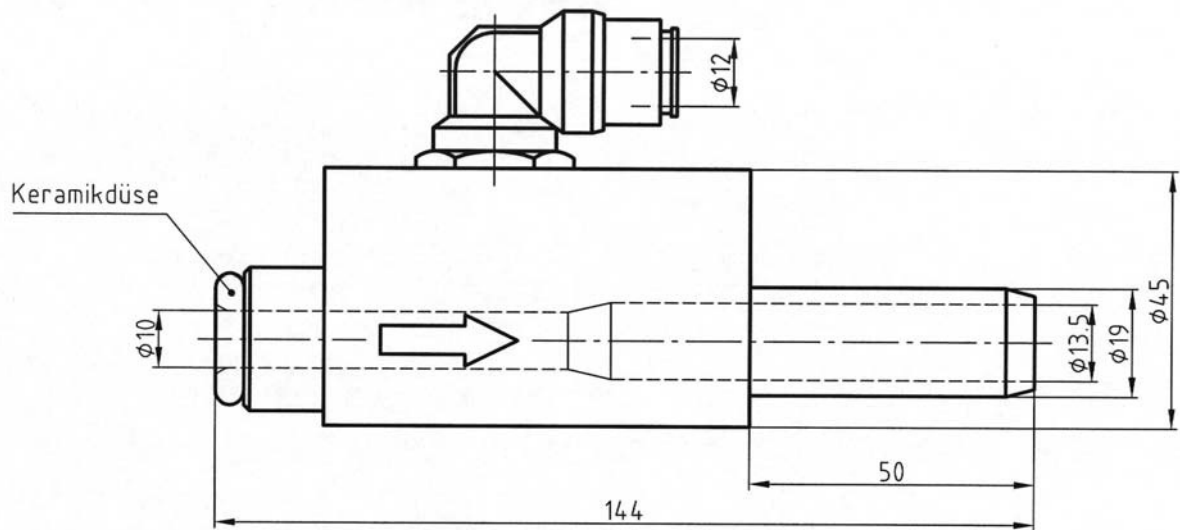


Part No.	h_1 min.	h_2	h_3	h_4	h_5	d_1	d_2	d_3	G	Working pressure [bar]	max. vacuum [mbar]	max. Air consumption [NI/min]	Suction pressure [m ³ /h]	Ambient temp. [°C]
00056-46	100	19	47	34	22	19	32	8	G1/8	6	-750	approx. 400	25	-20/+80
00056-45	150	35	54	61	25	25	38	12	G1/4	6	-750	approx. 800	50	-20/+80
00056-44	150	35	60	55	28	32	50	12	G3/8	6	-750	approx. 1250	100	-20/+80
00056-05	173	38	55	80	25	38	57	12	G1/2	6	-750	approx. 2550	200	-20/+80

1.2 Suction nozzle

Technical description

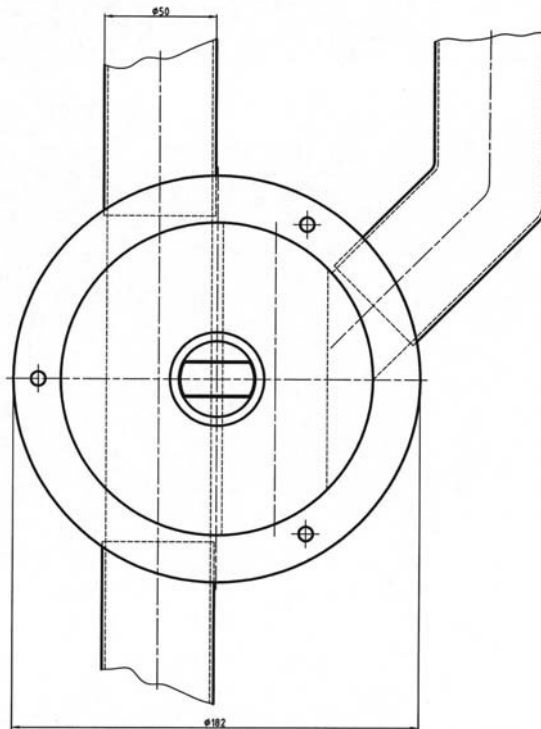
Design	Housing shape
Nominal diameter	10 mm
Function	Vacuum generation for thread suction, low-wear suction opening through ceramic nozzle
Connection ND	19 mm
Temperature range	-20°C to +80°C
Medium	Filtered compressed air, oil-bearing, or not oil-bearing
Operating pressure	1 bar to 10 bar



1.3 Two-component switch

Technical description

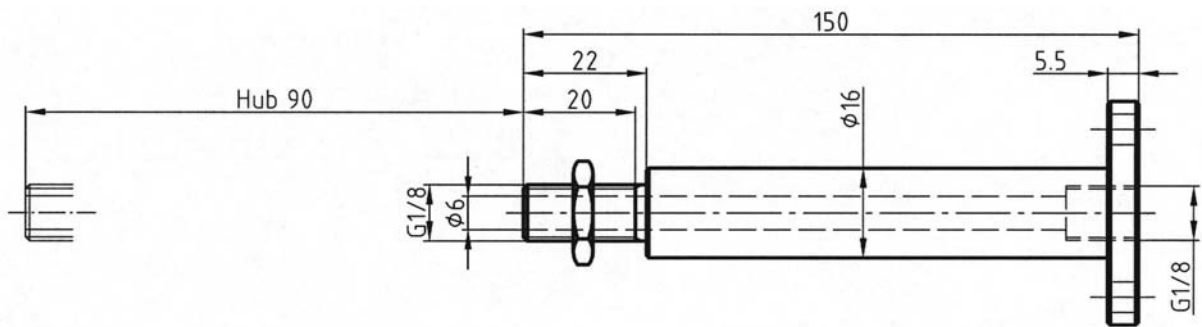
Design	Rotary version
Nominal diameter	50 mm
Function	Opens and closes lines by turning the runner through the flanged rotary drive.
Temperature range	-20°C to +80°C
Medium	Filtered compressed air, oil-bearing, or not oil-bearing
Operating pressure	1 bar to 10 bar



1.4 Air passage

Technical description

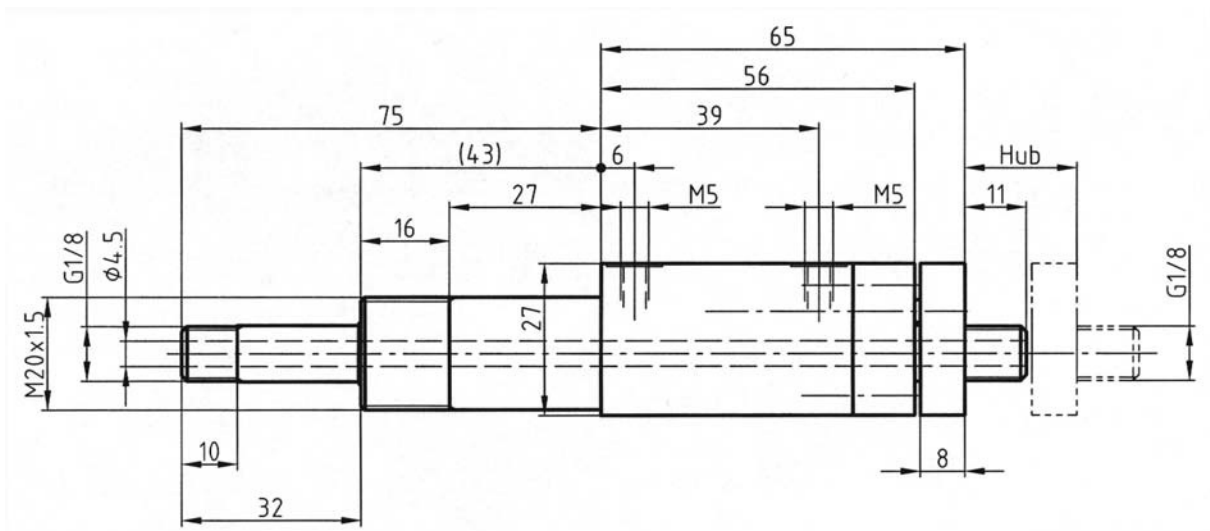
Design	2-stage telescoping shape
Nominal diameter	6 mm
Function	Air passage via variable distance, no interfering components within distance area.
Stroke lengths	up to 90 mm (dependent on application)
Temperature range	-20°C to +80°C
Materials	Pipes: aluminium, hard anodized; seals: Perbunan
Medium	Filtered compressed air, oil-bearing, or not oil-bearing
Operating pressure	1 bar to 10 bar



1.5 Pneumatic cylinder with hollow rod

Technical description

Piston diameter	16 mm
Function	Double-action pneumatic cylinder, with hollow piston rod locked to prevent rotating, for compressed-air/vacuum transfer.
Stroke lengths	10 mm, 20 mm
Temperature range	-20°C to +80°C
Materials	Piston rod: stainless steel; cylinder housing: aluminium, hard anodized;
Medium	Filtered compressed air, oil-bearing, or not oil-bearing
Operating pressure	1 bar to 10 bar



2 Cutting and vibrating elements

2.1 Pneumatic striking cylinders

2.1.1 Striking cylinder Piston diameters 32 mm and 50 mm

Technical description

Piston diameter	32 mm and 50 mm
Function	Double-action Optionally with guide unit acting as locking piston (anti-twist).
Stroke lengths	80 mm
Temperature range	-20°C to +80°C
Materials	Piston rod: stainless steel; cylinder: aluminium section; front, intermediate and end pieces: aluminium Seals: Perbunan
Medium	Filtered compressed air, oil-bearing, or not oil-bearing
Operating pressure	5 bar to 8 bar

Functional description

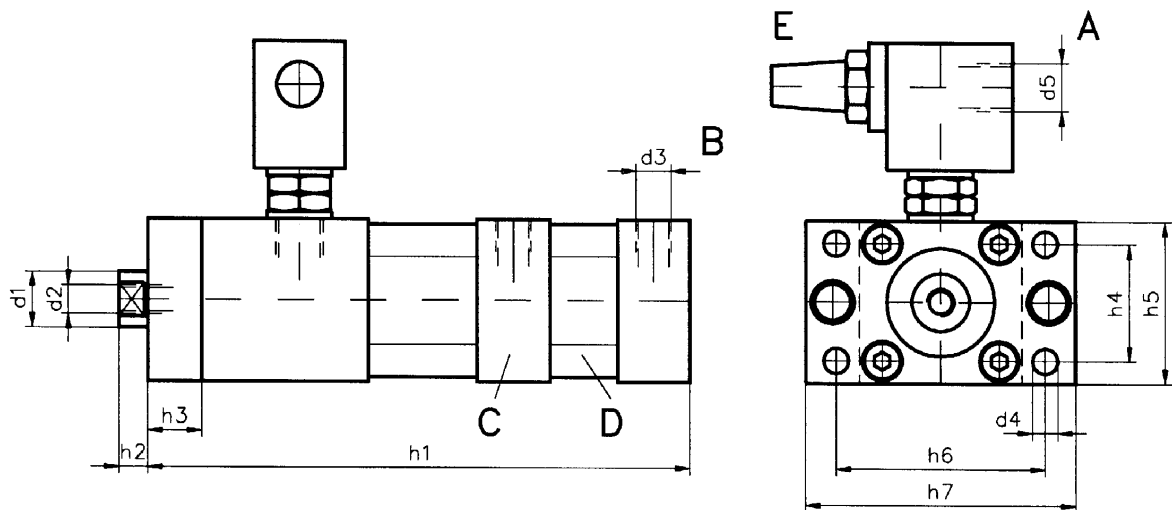
When switching compressed air from A to B, a vacuum is created in C.

Delay time is set on the vacuum one-way restrictor.

The striking action is caused by the piston accelerating with such force that the compressed air in D expands like an explosion and vents rapidly in E.

Applications

Punching, cutting and shearing of film, plastic, felt, etc.



PistonØ	Stroke	d ₁ Ø	d ₂	d ₃	d ₄ Ø	d ₅	h ₁	h ₂	h ₃	h ₄	h ₅	h ₆	h ₇
32	80	16	M8	G1/8	7	G1/4	256	8	15	32.5	45	58	75
50	80	20	M12	G1/4	11	G3/8	296	10	20	45	60	80	100

2.1.2 Striking cylinder Piston diameters 50 mm and 80 mm

Technical description

Piston diameter	50 mm and 80 mm
Function	Double-action, locked by 3 piston rods to prevent rotating, air tank for variable mounting
Stroke lengths	130 mm
Temperature range	-20°C to +80°C
Materials	Piston rods: stainless steel; cylinder: aluminium section, front, intermediate and end pieces: aluminium Seals: Perbunan
Medium	Filtered compressed air, oil-bearing, or not oil-bearing
Operating pressure	5 bar to 8 bar

Functional description

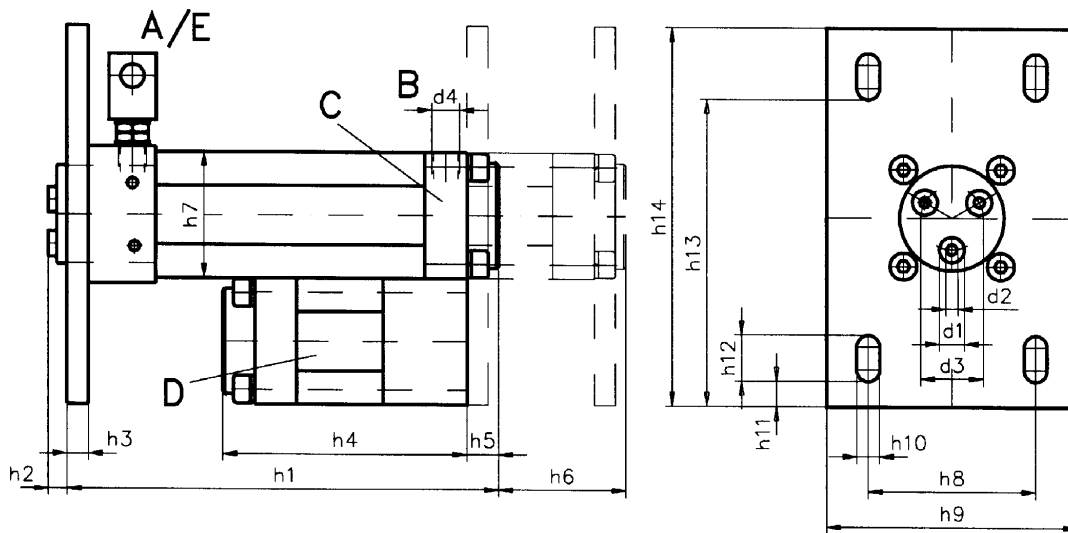
When switching compressed air from A to B, a vacuum is created in C.

Delay time is set on the vacuum one-way restrictor.

The striking action is caused by the piston accelerating with such force that the compressed air in D expands like an explosion and vents rapidly in E.

Applications

Punching, cutting and shearing of film, plastic, felt, etc.



Piston∅	Stroke	d1 ∅	d2	d3 ∅	d4	h1	h2	h3	h4	h5	h6	h7	h8	h9	h10	h11	h12	h13	h14
50	130	12	M6	28	G1/4	255	9	10	116	15	61	60	80	120	11	12	22	146	180
80	130	16	M10	50	G1/4	298	14	10	176	20	96	90	80	120	11	12	22	146	180

2.2 Pneumatic short stroke striking cylinder

Technical description

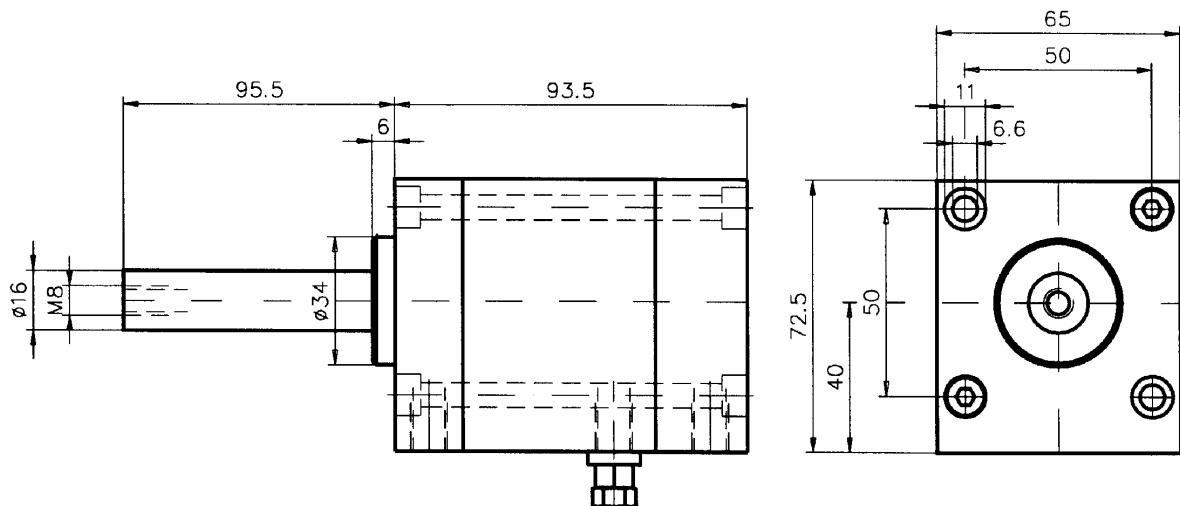
Piston diameter	50 mm
Function	Double-action
Stroke lengths	25 mm
Temperature range	-20°C to +80°C
Materials	Piston rod: stainless steel; cylinder housing: aluminium; Seals: Perbunan
Medium	Filtered compressed air, oil-bearing, or not oil-bearing
Operating pressure	5 bar to 8 bar

Functional description:

The striking action is caused by the piston accelerating with such force that the compressed air in the integrated air tank expands like an explosion.

Applications:

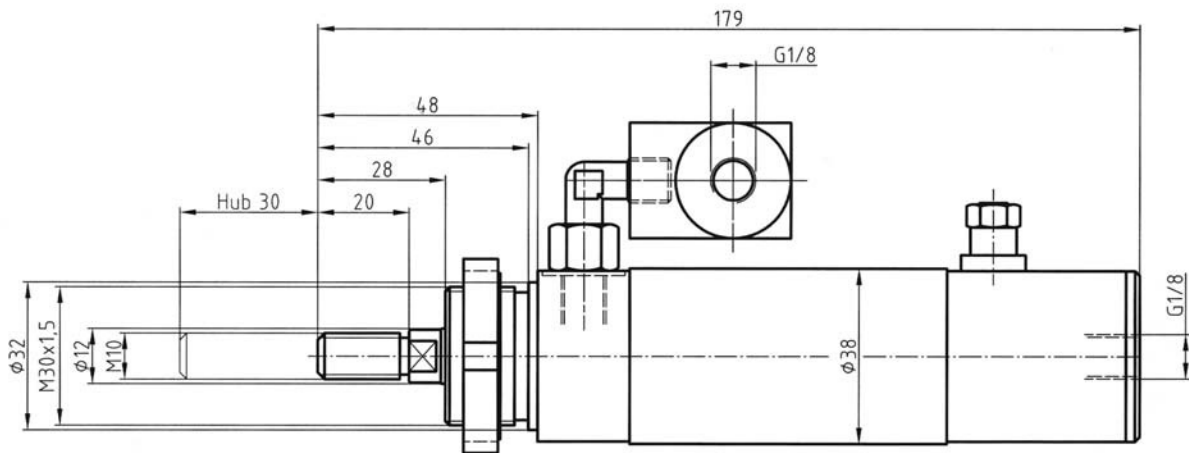
Punching, cutting and shearing of film, plastic, felt, etc.



2.3 Pneumatic striking cylinder

Technical description

Piston diameter	32 mm
Function	Double-action, integrated air tank, integrated quick-action ventilating valve on extension
Stroke lengths	30 mm (dependent on application)
Temperature range	-20°C to +80°C
Medium	Filtered compressed air, oil-bearing, or not oil-bearing
Operating pressure	5 bar to 8 bar



2.4 Pneumatic striker

Technical description

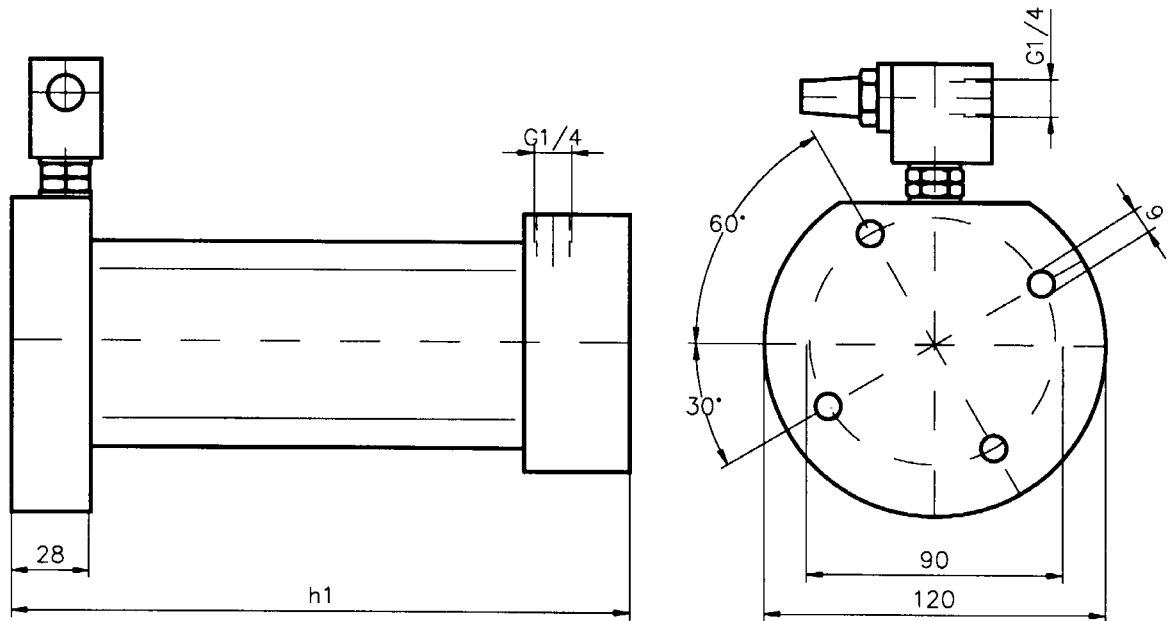
Piston diameter	50 mm
Function	Double-action
Temperature range	-20°C to +80°C
Materials	Cylinder: aluminium section; front and end pieces: aluminium
Medium	Filtered compressed air, oil-bearing, or not oil-bearing
Operating pressure	5 bar to 8 bar

Functional description

The striking piston accelerates through the explosive expansion of compressed air in the air tank and strikes against the Vulkollan damper in the head piece.

Applications

Striking materials on walls of silos, driers, vessels, pipes, pipeline systems, etc.



Work in Nm at 5 bar	h_1
180	296
85	216
40	176

