HAFNER
VALVES & CYLINDERS FOR
CEMENT PACKAGING MACHINES

HAFNER Pneumatik

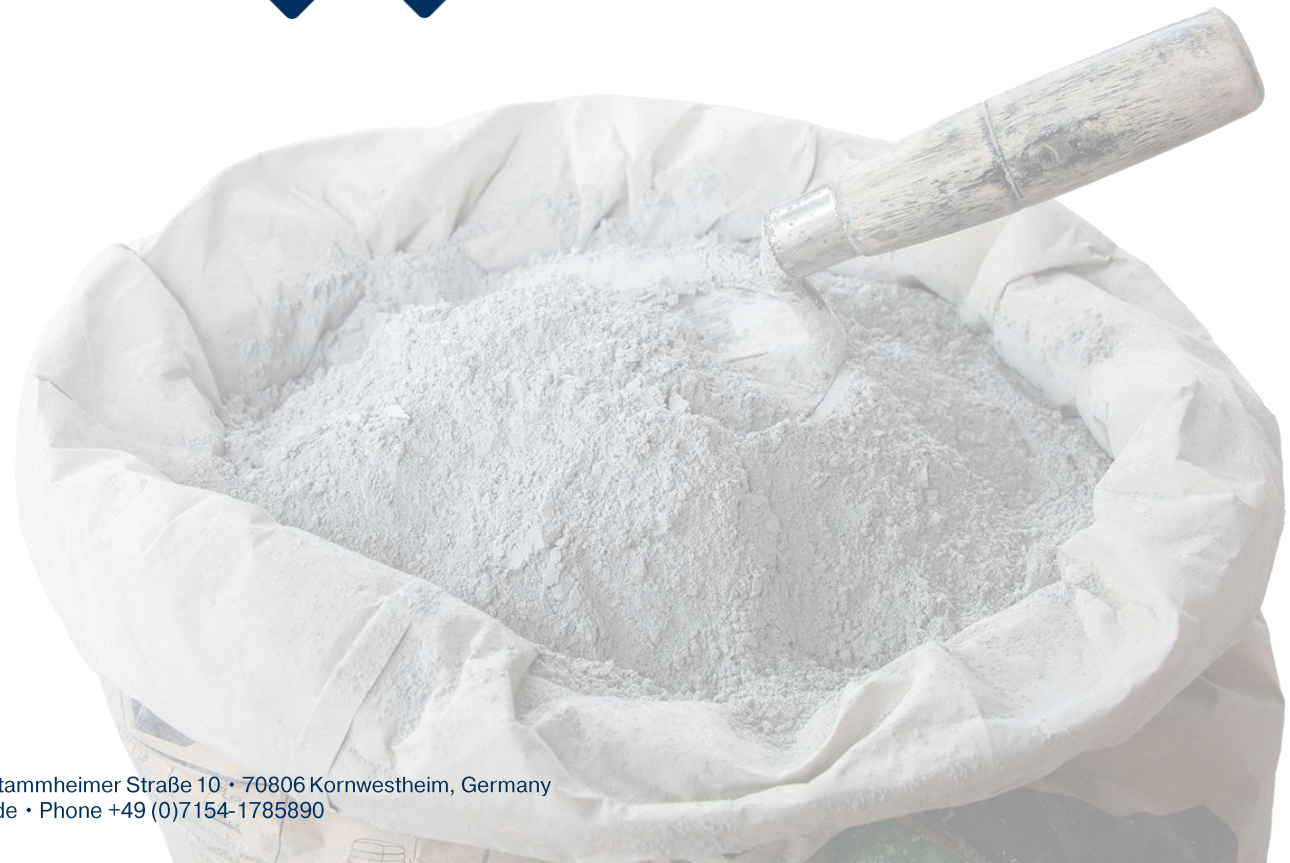
1:1 REPLACEMENT PARTS IN CEMENT PACKAGING MACHINES

For cement packaging machines, HAFNER Pneumatik offers a range of valves and cylinders designed as direct 1:1 replacement parts.

These components are intended for easy integration into existing systems and support reliable operation under continuous heavy loads and in extremely dusty environments.

CONTENT

1. VALVES WITH CUSTOMIZED FLANGE-INTERFACE – NEWER GENERATION
2. VALVES WITH CUSTOMIZED FLANGE-INTERFACE – OLD GENERATION
3. LEVER ACTUATED VALVES
4. CLAMPING CYLINDERS
5. 3-POSITION CYLINDERS



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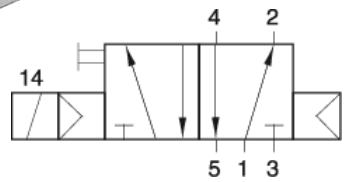
5/2-WAY SINGLE SOLENOID, WITH AIR SPRING RETURN

HAFNER type MH 510 714 B / MH 510 714 BT to replace MG 07 510-HN (201971758)

Competitor type
MG 07 510-HN



MH 510 714 B

MH 510 714 BT

Spool valve with 24 V DC coil. Actuated by permanent signal and equipped with air spring return.

Neutral position: flow from 1 to 2 and from 4 to 5
Actuated position: flow from 1 to 4 and from 2 to 3.

The valves are equipped with manual override as standard.

Mounting screws and seals are included in the scope of delivery.

Type B	For manifold assembly
Type BT	For valve terminal assembly, including intermediate plate type ZP 714 BT

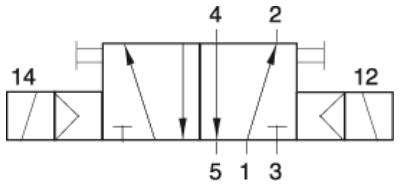
Available with solenoid operators:
230V/50Hz, 110V/50Hz, 48V/50Hz, 24V/50 Hz, 24V=, 12V=

- Port size: ø 7 mm
- Operating pressure: 2-10 bar
- Air-flow: 1,250 Nl/min
- Power consumption: 3 W = / 5 VA ~

In order to make the HAFNER valve interchangeable to the competitor product on a valve terminal the series BT includes an additional intermediate plate (ZP 714 BT). Furthermore, the valve is extended by an additional head made of aluminium.

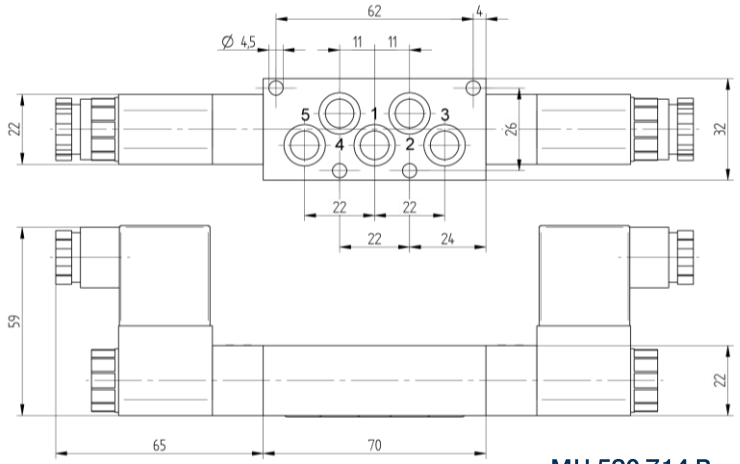
5/2-WAY DOUBLE SOLENOID

HAFNER type MH 520 714 B / MH 510 214 BT to replace competitor type MG 07 520-HN



Type B For manifold assembly
Type BT For valve terminal assembly, including intermediate plate type ZP 714 BT

Available with solenoid operators:
230V/50Hz, 110V/50Hz, 48V/50Hz, 24V/50 Hz, 24V=, 12V=

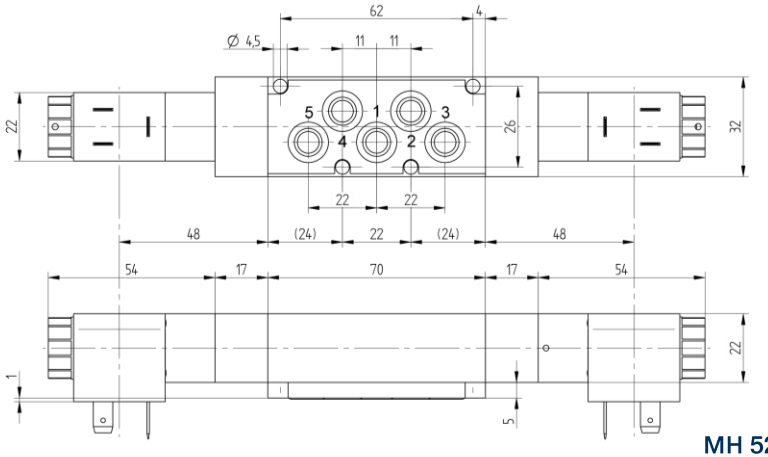


MH 520 714 B

Valves are generally equipped with manual override.
Mounting screws and seals are included.

- Port size: ø 7 mm
- Air-flow: 1,250 Nl/min
- Operating pressure: 2-10 bar
- Power consumption: 3 W = / 5 VA ~

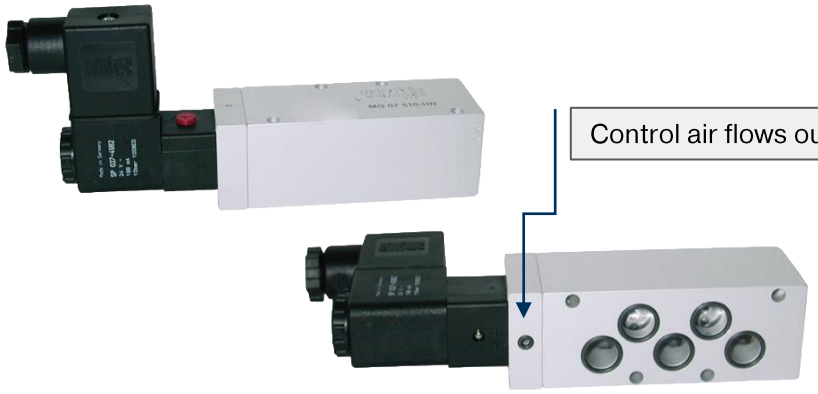
5/3-way versions available upon request.



MH 520 714 BT

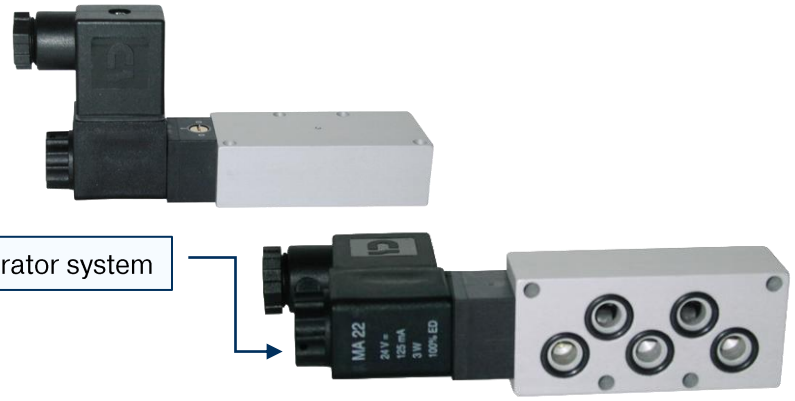
01 TECHNICAL DIFFERENCES AT A GLANCE

COMPETITOR PRODUCT



Control air flows out of the air recirculation port

HAFNER PRODUCT



Control air flows out of the operator system

COMPETITOR PRODUCT (CATALOGUE DATA)	TECHNICAL FACTS	HAFNER PRODUCT
7 mm	NOMINAL DIAMETER	7 mm
1,200 l/min	AIR-FLOW	1,250 l/min
1,5-10 bar	OPERATING PRESSURE	2-10 bar
4,5 W =	POWER CONSUMPTION	3,0 W = ↓ 33% LESS
22 mm	COIL	22 mm
Industry form type B	CONNECTOR	Industry form type B

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REPLACEMENT FOR OLDER/PREDECESSOR TYPE

HAFNER type MH 510 704 J / MH 520 704 J / MH 53_ 704 J to replace competitor type MC 07 ...

Competitor type MC 07...

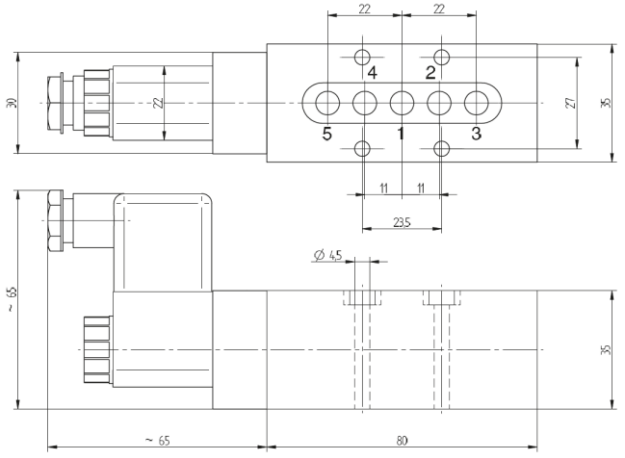
MH 510 704 J: 5/2-way solenoid valve actuated by permanent signal and equipped with air spring return.

MH 520 704 J: 5/2-way double solenoid valve actuated by impulse. Position is kept until an electrical signal is applied to the opposite side even when not attached to electrical source.

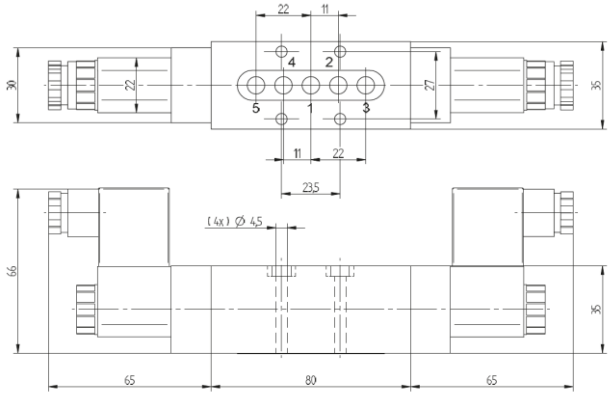
MH 53_ 704 J: 5/3-way solenoid valve with spring return to middle position, actuated by permanent signal.

type 531 centre closed
type 532 centre exhausted
type 533 centre pressurized

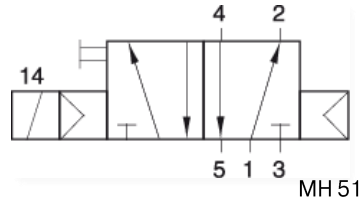
All valves are available with solenoid operators (coil is 30 mm wide, type-number MA 30 ...): 230V/50Hz (5VA), 110V/50Hz (5VA), 24V/50Hz (5VA), 48V= (5W), 24V= (2W), 110V= (6W)



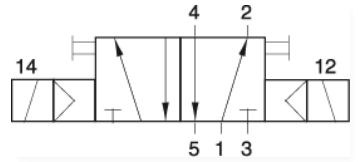
MH 510 704 J



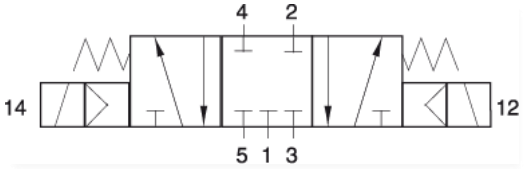
MH 520 704 J/MH 53_ 704 J



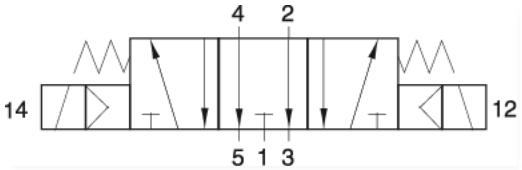
MH 510 704 J



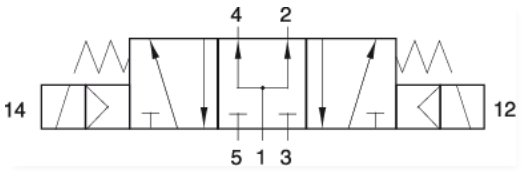
MH 520 704 J



MH 531 704 J



MH 532 704 J



MH 533 704 J

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REPLACEMENT FOR PNEUMATICALLY ACTUATED VALVES

P 510 704 J / P 511 704 J / P 520 704 J / P 53_ 704 J

P 510 704 J: 5/2-way pneumatically actuated valve with air spring return.

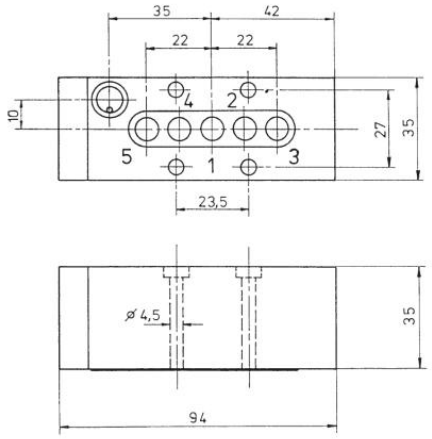
P 511 704 J: 5/2-way pneumatically actuated valve with mechanical spring return.

P 520 704 J: 5/2-way pneumatically actuated valve, bistable.

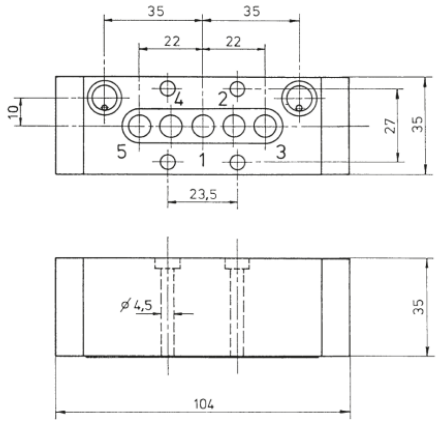
P 53_ 704 J: 5/3-way pneumatically actuated valve with spring return to middle position.

type 531	middle position closed
type 532	middle position exhausted
type 533	middle position pressurized

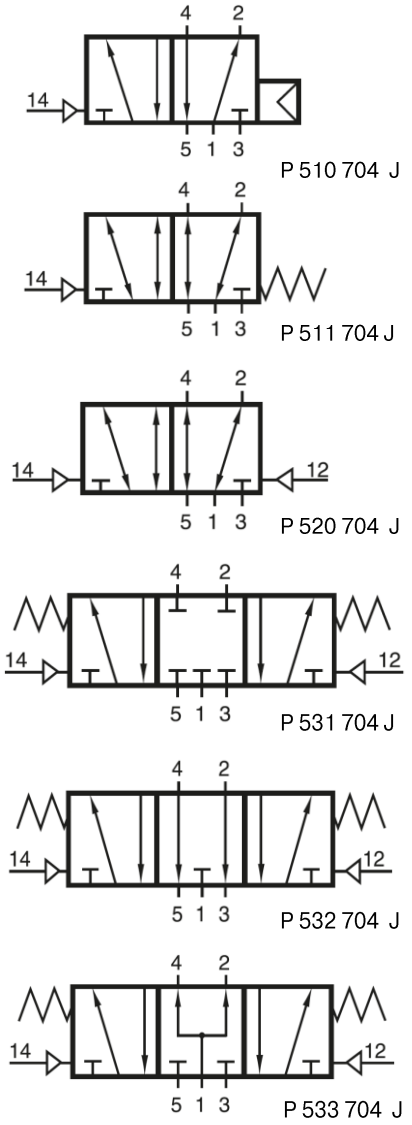
Common characteristics: all ports are in the plate, valves offer Ø 7 mm orifice size with an air-flow of 1200 l/min. Working pressure = 2 to 10 bar



P 51_ 704 J



P 520 704 J / P 53_ 704 J



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REPLACEMENT FOR NON-STANDARD VALVES

SPECIAL INTERFACES

SIMPG-5/1

SIVG-5/1

SIMPG-5/1

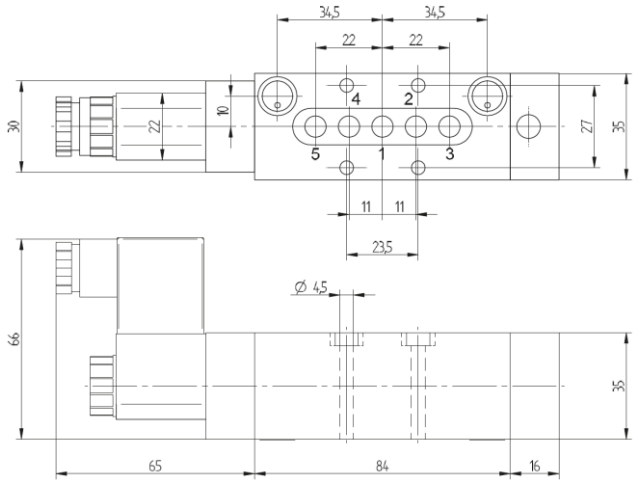
5/2-way bistable solenoid valve with detent in both positions. Electric signal at 14 actuates the valve, the spool locks. If the electric signal is taken away, the valve stays in this position.

A pneumatic signal has to be applied to port 12 to change the position again. Pilot port 14 is not an external pilot feed but an additional signal can be taken, when solenoid is actuated.

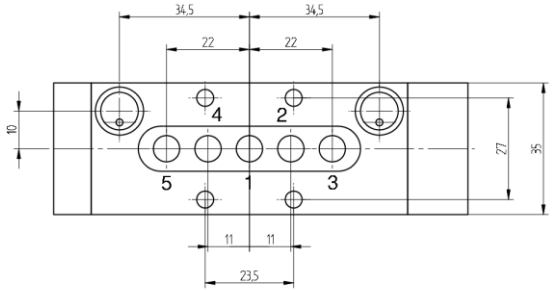
Valve to be used with 30 mm coils type MA 30.

SIVG-5/1

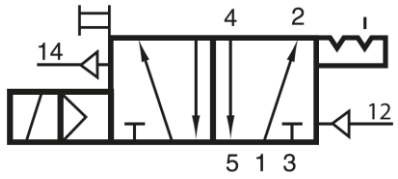
Bistable 5/2-way pneumatically actuated valve with detent in both positions. Actuation through pneumatic signals at X or Y.



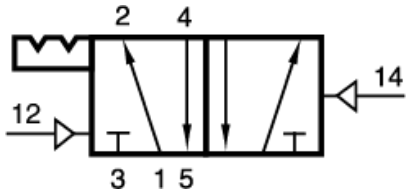
SIMPG-5/1



SIVG-5/1



SIMPG-5/1



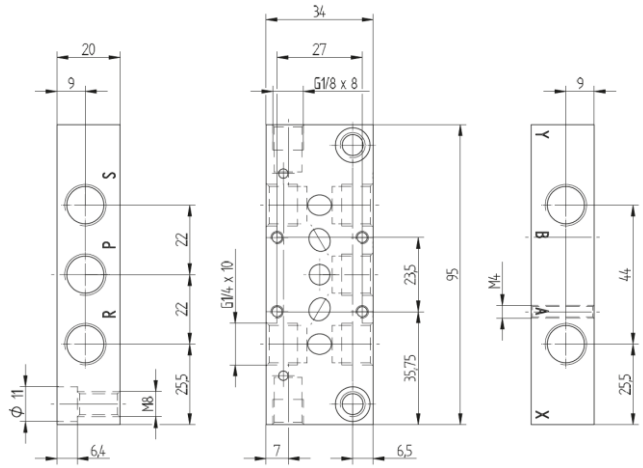
SIVG-5/1

BASE-PLATES FOR VALVES TYP ... 704 J

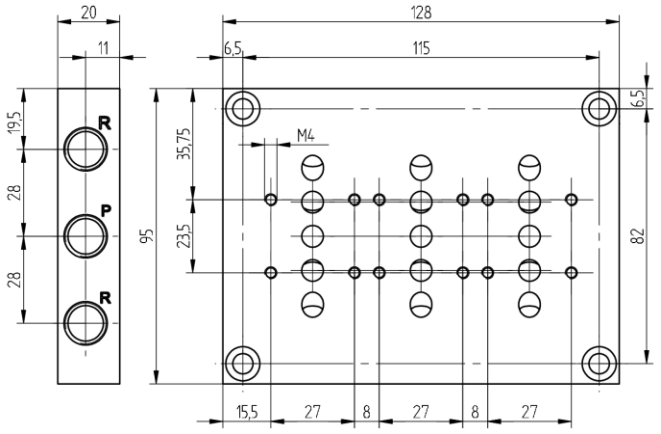
SINGLE AND 3-FOLD MANIFOLD

Base-plates for valves on page 6 and 7

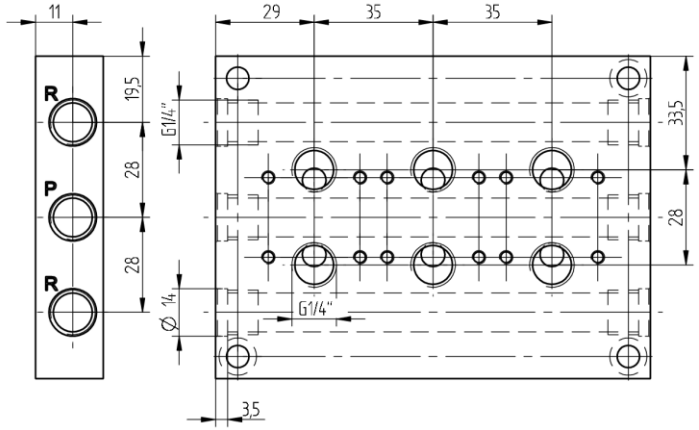
R 520 704 J	**single base-plate**
R 503 704 J	**3-fold base-plate**



R 520 704 J



R 503 704 J



REPLACEMENT FOR ROLLER LEVER VALVE

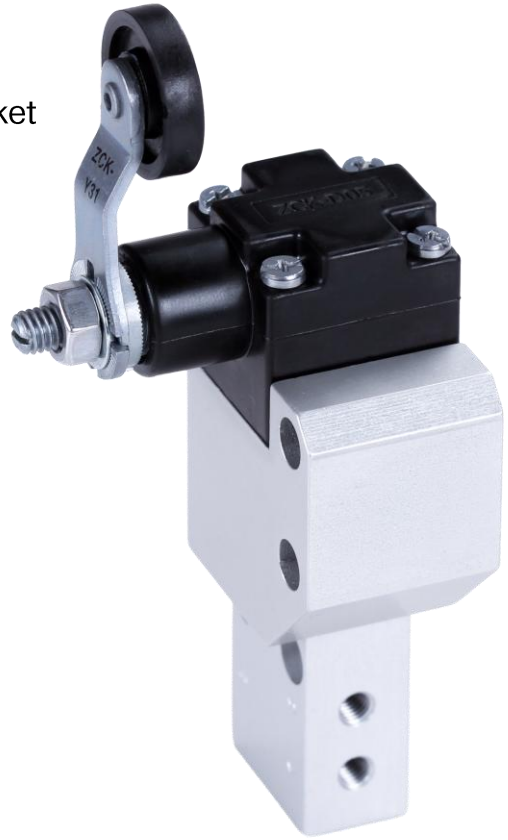
HAFNER type WRVS-001/1 to replace competitor type 9.912.0024.01

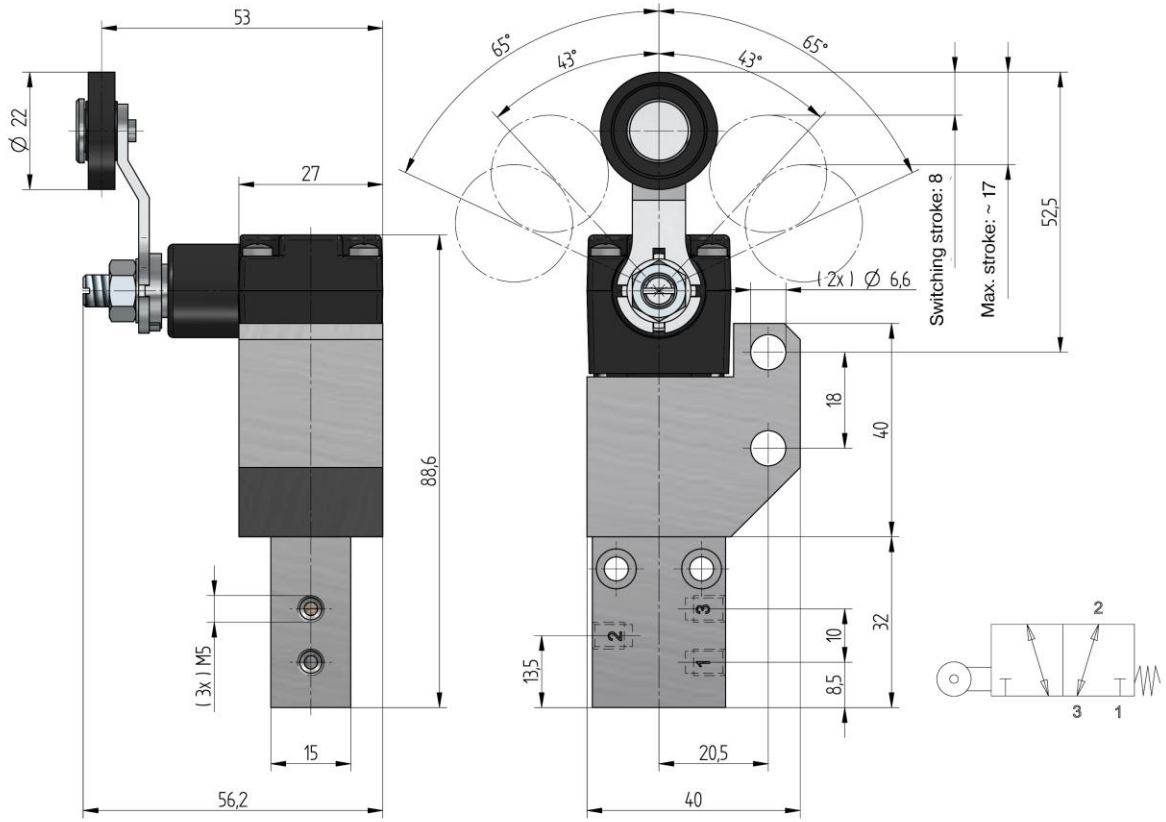
Mechanically actuated roller lever valve.

The valve has been available on the market under the type numbers WRVS-001/1, I/81260 and 9.912.0024.01.

TECHNICAL SPECIFICATIONS

- Pressure range: -0,9 to 10 bar
- Air-flow: 125 l/min
- Port size: M5
- Temperature range: -20 to +50 °C





WRVS-001/1

REPLACEMENT FOR LEVER VALVE

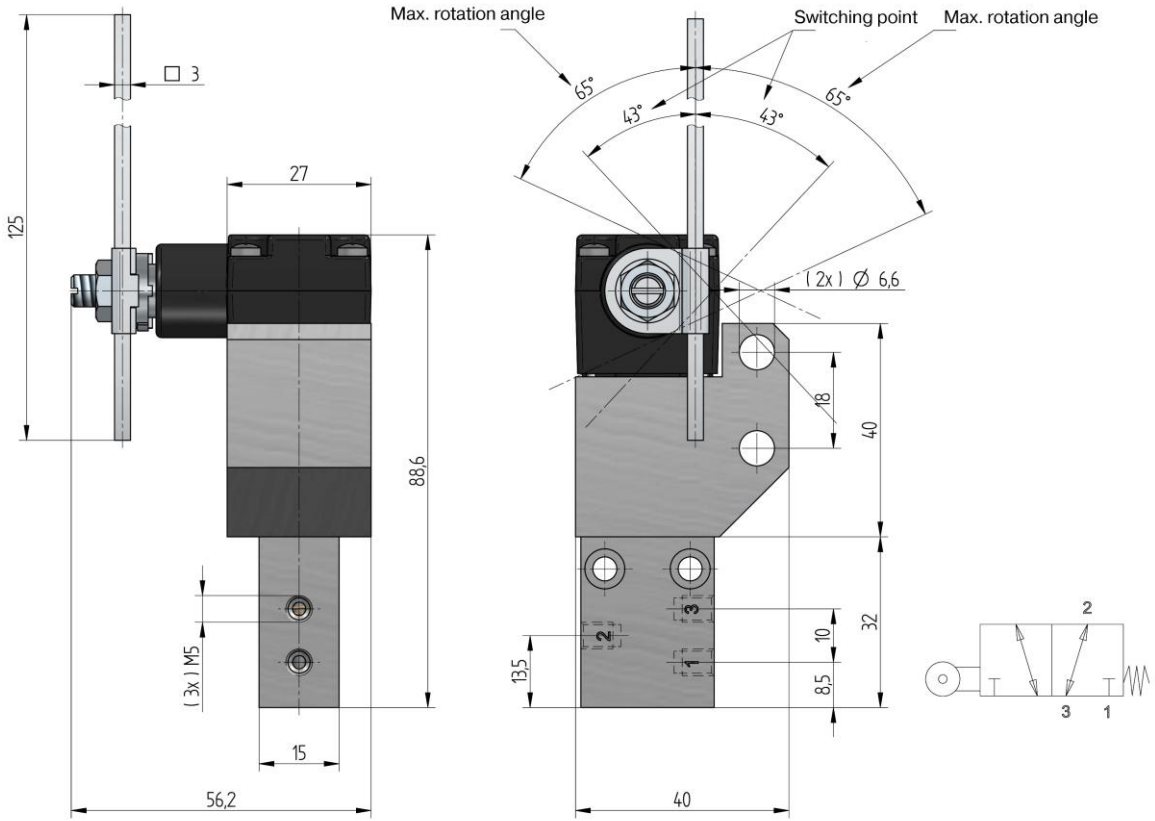
HAFNER type WSVS-001/1 to replace competitor type 9.912.0025.01

Lever actuated valve for left and right actuation.

Valve has been available on the under the type numbers WSVS-001/1, I/81259 and 9.912.0025.01.

TECHNICAL SPECIFICATIONS

- Pressure range: -0,9 to 10 bar
- Air-flow: 125 l/min
- Port size: M5
- Temperature range: -20 to +50 °C



WSVS-001/1

CLAMPING CYLINDERS

Type SEJ / SDJ and SDAS (SPECIAL VERSION)

Pneumatic cylinders made from aluminum wrought alloy, anodized. Those cylinders were part of the KNORR-pneumatic range for several decades.

Available with piston diameter 20 mm, 30 mm and 40 mm.

SEJ = single-acting
SDJ = double-acting

ADVANTAGES:

- Very compact design
- Stainless steel piston rod
- Low friction due to the K-ring

TECHNICAL SPECIFICATIONS

Drawing can be found on the next page.

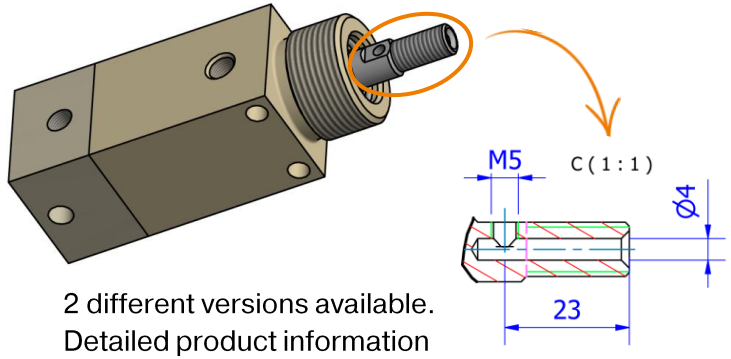
- Port size: G 1/8"
- Pressure range: 0.2 to10 bar

Standard strokes (mm)

- SEJ 20-40: 10, 20, 30, 50
- SDJ 20: 10, 20, 30, 50, 75, 100 → Ordering example: SDJ-20/30
- SDJ 30 and 40: 10, 20, 30, 50, 75, 100, 125, 150

SDAS 30/… Special “blow-out” cylinder based on clamping cylinder

Piston diameter 30 mm – with hollow piston rod; various strokes are available.



2 different versions available.
Detailed product information available upon request.

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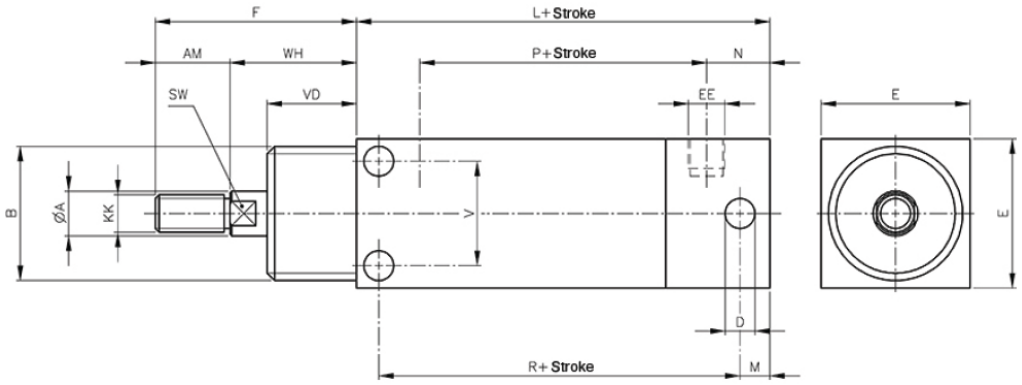
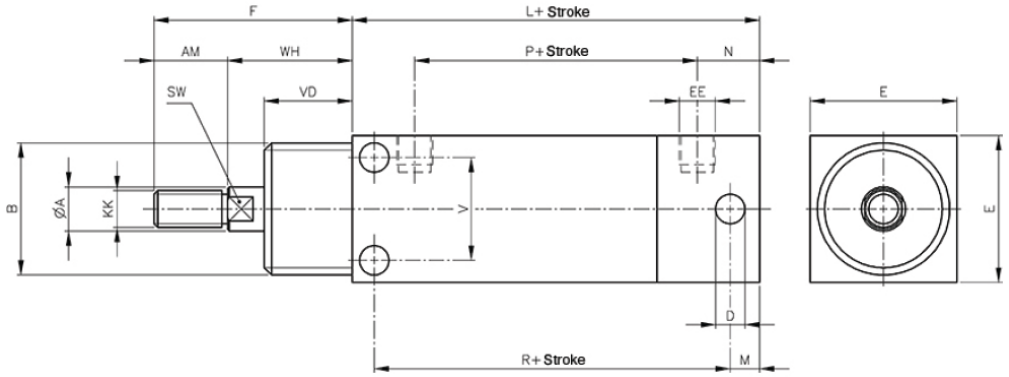
CLAMPING CYLINDERS

Type SEJ / SDJ drawings and dimensions

Type SEJ (single-acting)



Type SDJ (double-acting)



Ø [mm]	A	B	D	E	F	L	M	N	P	R	V	AM	EE	KK	SW	VD	WH
Ø 20	10	M26x1,5	-	30	40	50	6	15	26	-	-	14	G1/8	M8	9	20	26
Ø 30	12	M36x2	7	40	54	61	8	17	27	47	28	20	G1/8	M10	10	24	34
Ø 40	12	M36x2	7	50	61,5	68,5	10	20,5	30	52	38	20	G1/8	M10	10	30	41,5

CYLINDERS WITH 3-POSITIONS

HAFNER type 3SNE... to replace older series of cylinders

3-position pneumatic cylinder – the two versions differ in their mounting options:

3SNE-11-60/60/30: **Foot mounting**
3SNE-72-60/60/30: **Middle swivel mounting**

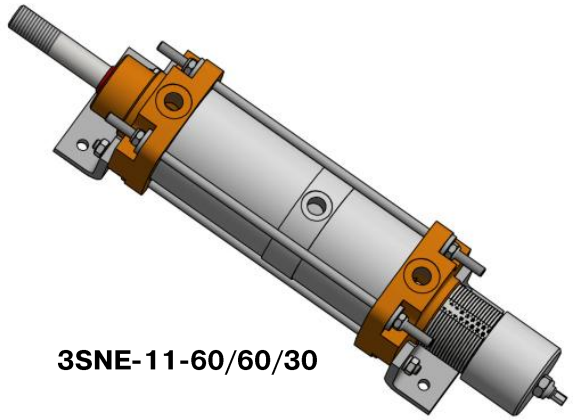
- Piston diameter: 60 mm
- Stroke: 60 mm, 30 mm adjustable

Other parameters:

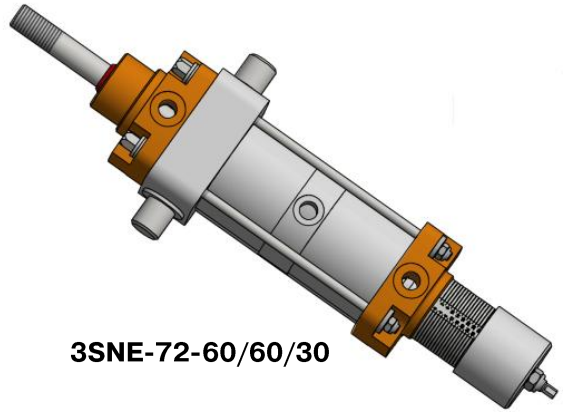
- Medium: Air, < 40 µm (lubricated or unlubricated)
- Pressure range: 1 to 10 bar
- Temperature range: -20 to +80 °C

Materials:

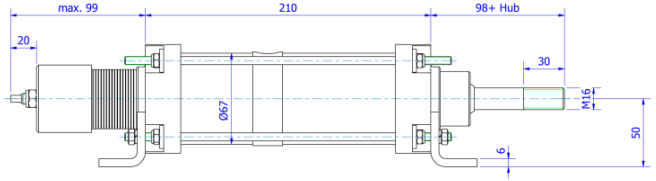
- Head / Tube: Aluminum / Aluminum anodized
- Tie rod / nut: 1.4201
- Piston rod: 1.4201
- Seals: NBR / PUR
- Wiper: PUR

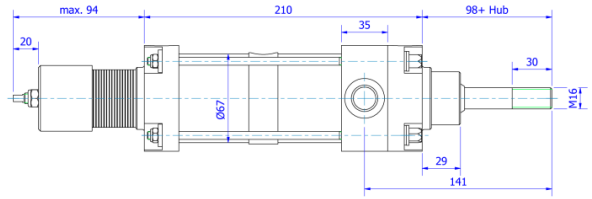


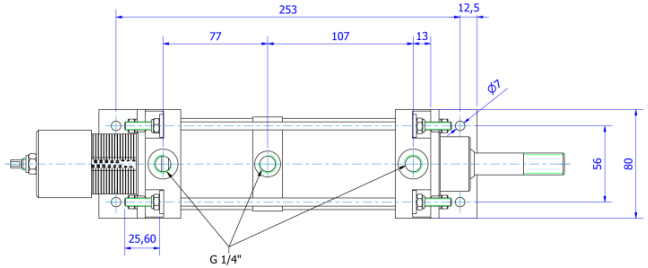
3SNE-11-60/60/30

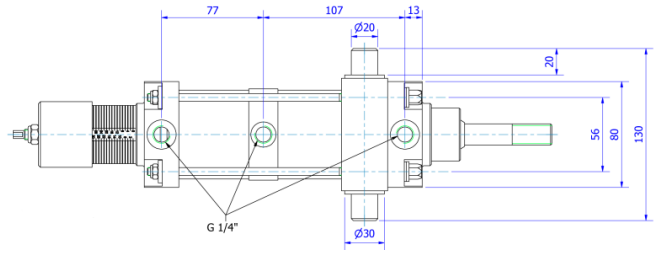


3SNE-72-60/60/30









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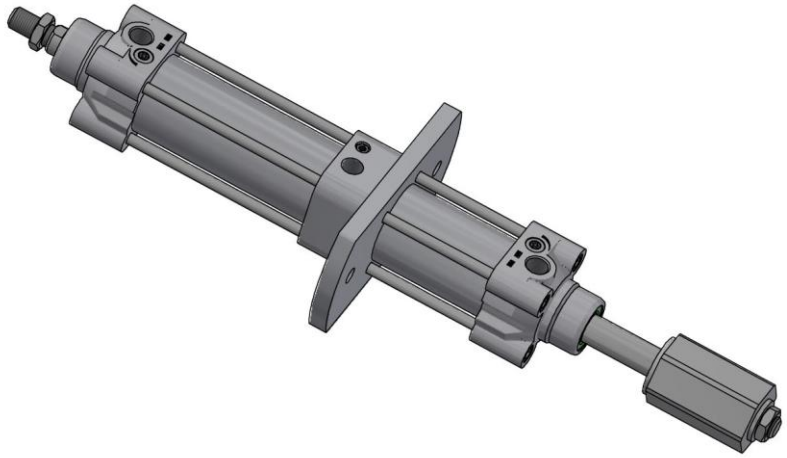
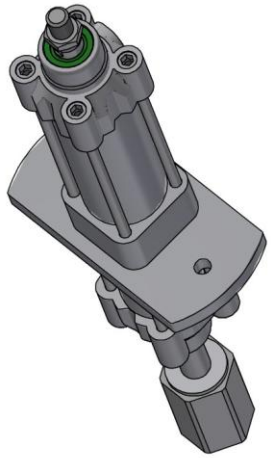
CYLINDERS WITH 3-POSITIONS ACCORDING TO ISO 15552

HAFNER type DIS3PM-40/60/40 to replace competitor type SPC/120009/*/**

Double acting 3-position pneumatic cylinder according to ISO 15552 **for newer generation of packaging machines**, with adjustable end-of-stroke cushioning, stroke 1 with a magnetic piston.





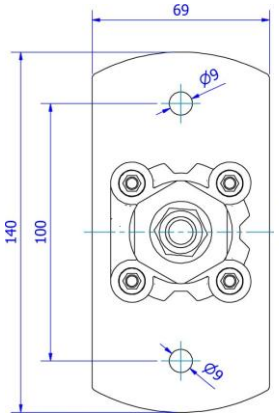
- Piston diameter: 40 mm
- Stroke: 60 mm, 40 mm adjustable

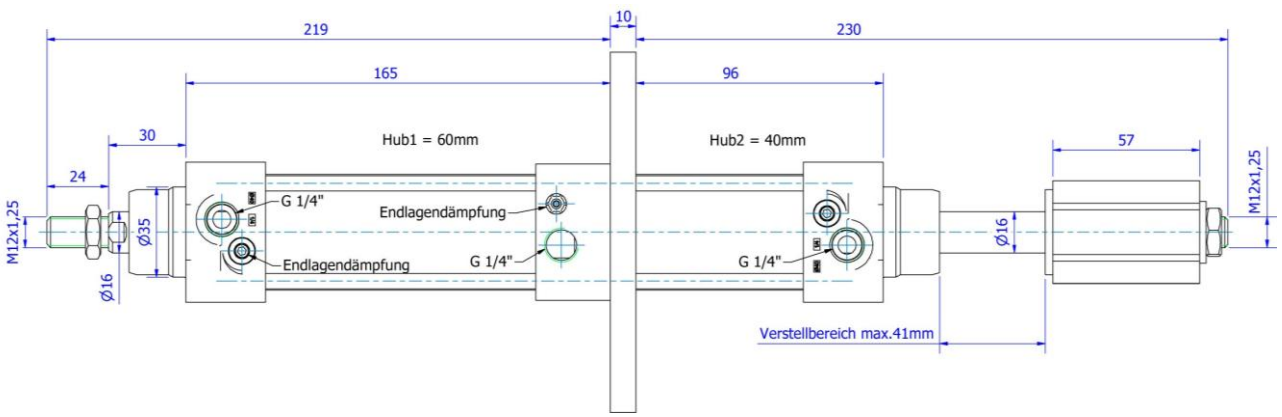
Other parameters:

- Medium: Air, < 40 µm (unlubricated)
- Pressure range: 1 to 10 bar
- Temperature range: -20 to +80 °C

Materials:

- Head: Aluminum anodized
- Tube: Aluminum hard-anodized
- Piston rod: C45 hard-chrome plated
- Middle flange: Aluminum anodized
- Seals: NBR / PUR





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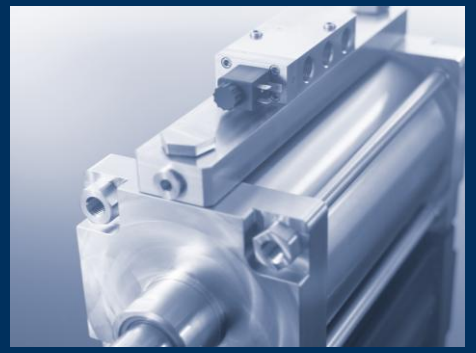
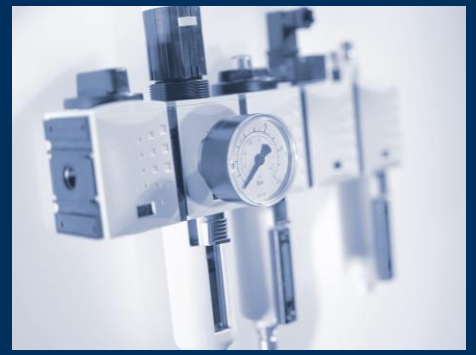
THE HAFNER PRODUCT RANGE AT A GLANCE

Valves



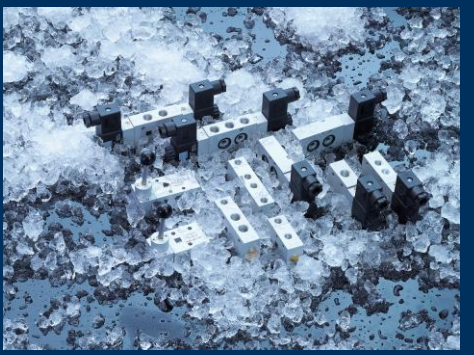
Pneumatic Cylinders

Fittings & Function Fittings



Air Preparation Equipment

Tubing



Products for Extreme Conditions