

Needle Grippers SNG-V

Needle stroke 0 mm to 25 mm (variable)



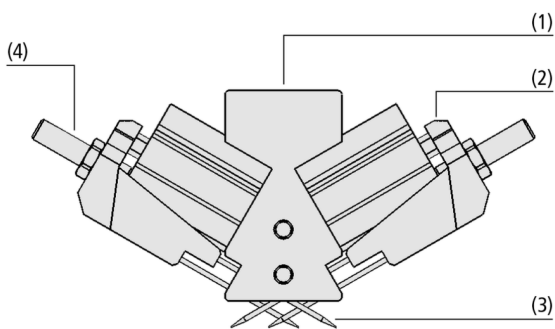
Suitability for Industry Specific Applications

Applications

- Needle gripper for handling non-rigid and highly porous materials (primary textiles)
- Handling materials that are difficult to grip using vacuum such as textiles, fleece, filter materials, insulation and foam materials, and much more



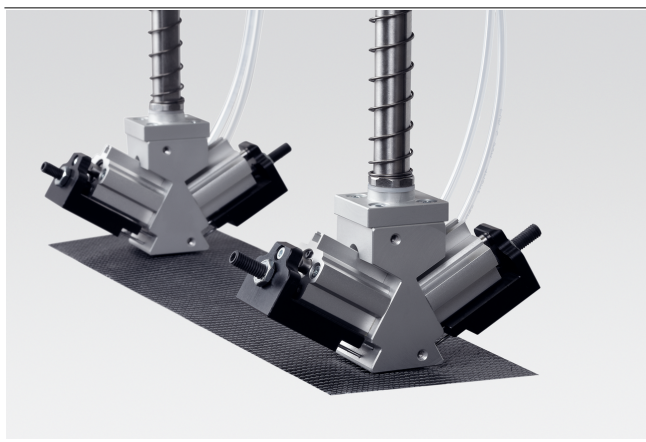
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Design

- Robust aluminum housing (1)
- Drive via double-acting pneumatic cylinders (2)
- 6 or 10 needles with diameter 0.8 mm, 1.2 mm or 1.5 mm (3)
- Insertion angle 30°
- Continuously variable stroke adjustment (4)
- Optional mounting with holder system HTS

System Design Needle Grippers SNG-V



Needle grippers SNG-V being used for handling composite textiles

Product Highlights

- Crossed needles hold even very unstable workpieces securely
- Gripping with minimized effective area optimal for handling small workpieces
- Double-acting pneumatic cylinder minimizes cycle times
- Variable needle stroke enables individual adaptation to a wide range of workpieces

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Designation Code Needle Grippers SNG-V

SNG-V	–	10	–	1.2	–	V	–	7
1		2		3		4		5

1 – Abbreviated designation

Code	Version
SNG-V	Crossed needles

2 – Number of needles

Code	Number
6...10	6 and 10

3 – Needle diameter

Code	Diameter in mm
0.8...1.5	ø 0.8 to 1.5

4 – Product addition

Code	Type
V	Variable needle stroke
V-HT	Variable needle stroke and high temperature
S	Narrow shape
V-HP	Variable needle stroke and high force

5 – Needle stroke

Code	Stroke in mm
5...25	5 to 25

Needle gripper SNG-V is delivered assembled.

Available spare parts: needle module, gripping surface

Available accessories: mounting plate (BEF-PL), holder system (HTS)

Ordering Data Needle Grippers SNG-V

Type*	Part no.
SNG-V 6 0.8 V-S-5	10.01.29.00555
SNG-V 6 1.2 V-S-5	10.01.29.00539
SNG-V 6 1.5 V-HP-25	10.01.29.00568
SNG-V 10 1.2 V-7	10.01.29.00176
SNG-V 10 1.2 V-HT-7	10.01.29.00428
SNG-V 10 1.2 V-HP-18	10.01.29.00547
SNG-V 10 1.5 V-CH-7 10.5	10.01.29.00600

*SNG-V HT for operating temperatures from 5 to 150 °C and a maximum workpiece temperature of 260 °C

Ordering Data Spare Parts Needle Grippers SNG-V

Type	Spare Parts*	Part no.
SNG-V 6 0.8 V-S-5	Spare parts kit needle gripper	ERS SNG-V 6 0.8 5
SNG-V 6 1.2 V-S-5	Spare parts kit needle gripper	ERS SNG-V 6 1.2 5
SNG-V 6 1.5 V-HP-25	Spare parts kit needle gripper	ERS SNG-V-HP 6 1.5 25
SNG-V 10 1.2 V-7	Spare parts kit needle gripper	ERS SNG-V 10 1.2
SNG-V 10 1.2 V-HT-7	Spare parts kit needle gripper	ERS SNG-V-HT 1.2
SNG-V 10 1.2 V-HP-18	Spare parts kit needle gripper	ERS SNG-V-HP 10 1.2 18
SNG-V 10 1.5 V-CH-7 10.5	Spare parts kit needle gripper	ERS SNG-V-CH 10 1.5 7

*Set of two needle housings with needles

Type	Spare Parts	Part no.
SNG-V 10 1.2 V-HT-7	Gripping surface	ERS SNG-V-HT
SNG-V 10 1.2 V-HP-18	Gripping surface	ERS SNG-V-HP-HT 10 1.2 18
SNG-V 10 1.5 V-CH-7 10.5	Gripping surface	ERS SNG-V-CH 10 1.5 7

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Ordering Data Accessories Needle Grippers SNG-V

Type	Mounting plate (top)	Mounting plate	Holder system HTS-A2	Holder system HTS-A3	Holder system HPS-SNG	Holder system HPS-SGM
SNG-V 6 0.8 V-S-5	-	10.01.29.00403	10.01.29.00622	10.01.29.00619	10.01.29.00666	-
SNG-V 6 1.2 V-S-5	-	10.01.29.00403	10.01.29.00622	10.01.29.00619	10.01.29.00666	-
SNG-V 6 1.5 V-HP-25	-	10.01.29.00403	10.01.29.00622	10.01.29.00619	10.01.29.00666	-
SNG-V 10 1.2 V-7	10.01.29.00093	-	10.01.17.00581	10.01.17.00558	-	10.01.17.00655
SNG-V 10 1.2 V-HT-7	10.01.29.00093	10.01.29.00403	10.01.29.00622	10.01.29.00619	-	10.01.17.00655
SNG-V 10 1.2 V-HP-18	-	10.01.29.00403	10.01.29.00622	10.01.29.00619	10.01.29.00666	-
SNG-V 10 1.5 V-CH-7 10.5	10.01.29.00093	10.01.29.00403	10.01.29.00622	10.01.29.00619	10.01.29.00666	-

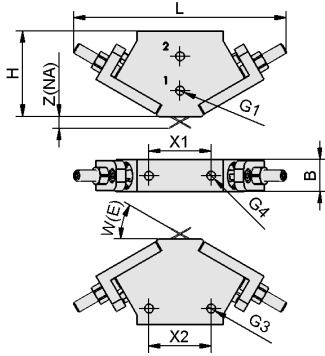
Technical Data Needle Grippers SNG-V

Type	Number of needles	Needle diameter [mm]	Additional function	Pressure range (operating pressure) [bar]	Operating temperature [°C]	Installation position	Weight [g]	Needle stroke Z(NA) [mm]
SNG-V 6 0.8 V-S-5	6	0.8	Variable stroke	3.0 ... 6.0 bar	5 ... 60 °C	BEL	85	5
SNG-V 6 1.2 V-S-5	6	1.2	Variable stroke	3.0 ... 6.0 bar	5 ... 60 °C	BEL	85	5
SNG-V 6 1.5 V-HP-25	6	1.5	Variable stroke, high force	3.0 ... 7.0 bar	5 ... 60 °C	BEL	1,140	25
SNG-V 10 1.2 V-7	10	1.2	Variable stroke	3.0 ... 7.0 bar	5 ... 60 °C	BEL	265	7
SNG-V 10 1.2 V-HP-18	10	1.2	Variable stroke, high force	3.0 ... 7.0 bar	5 ... 80 °C	BEL	930	18
SNG-V 10 1.2 V-HT-7	10	1.2	Var. stroke, high temperature	3.0 ... 7.0 bar	5 ... 150 °C	BEL	255	7
SNG-V 10 1.5 V-CH-7 10.5	10	1.5	Var. stroke, center hole	3.0 ... 7.0 bar	5 ... 60 °C	BEL	289	7

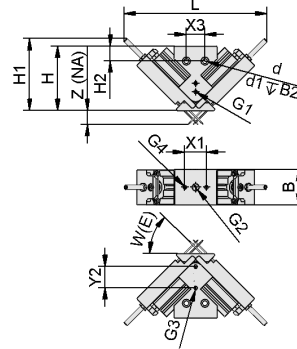
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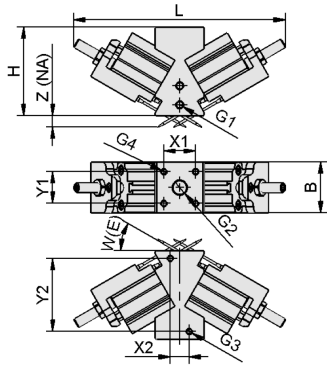
Design Data Needle Grippers SNG-V



SNG-V S



SNG-V HP



SNG-V

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Design Data Needle Grippers SNG-V

Type	B [mm]	B2 [mm]	d [mm]	d1 [mm]	G1	G2	G3	G4	H [mm]	H1 [mm]	H2 [mm]	L [mm]	W(E) [°]	X1 [mm]	X2 [mm]	X3 [mm]	Y1 [mm]	Y2 [mm]	Z(NA) [mm]
SNG-V 6 0.8 V- S-5	15	-	-	-	M5-F	-	M5-F	M5-F	40	-	-	115	30	29	29	-	-	-	5
SNG-V 6 1.2 V- S-5	15	-	-	-	M5-F	-	M5-F	M5-F	40	-	-	115	30	29	29	-	-	-	5
SNG-V 6 1.5 V- HP-25	48	10	6.6	11	M5-F	G1/8"-F	M5-F	M5-F	88	111.6	20	229	45	29	-	25	-	29	25
SNG-V 10 1.2 V-7	32	-	-	-	M5-F	G1/8"-F	M4-F	M4-F	56	-	-	149	30	20	12	-	20	46	7
SNG-V 10 1.2 V-HT-7	32	-	-	-	M5-F	G1/8"-F	M5-F	M4-F	56	-	-	149	30	20	-	-	20	29	7
SNG-V 10 1.2 V-HP-18	48	10	6.6	11	M5-F	G1/8"-F	M5-F	M5-F	88	97.4	20	237	45	29	-	25	-	29	18
SNG-V 10 1.5 V-CH-7 10.5	37	-	-	-	M5-F	-	M5-F	M4-F	56	-	-	167	30	20	-	-	20	29	7