

# Needle gripper range

## Overview

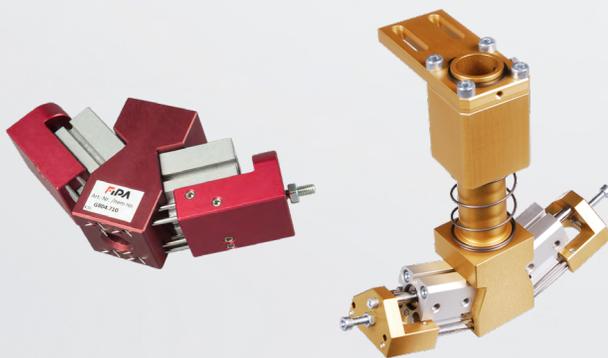


SMALL  
NEEDLE DIAMETER

### 32 needles – Diameter 0.7 mm each

- Grippers with flat entry angle enables handling of thin or flat parts
- Knurled screw for stroke adjustment to textile thickness
- Stroke corresponds to maximum entry depth of needles
- GR04.700: double-acting enables short duty cycles: separate compressed air connections for extraction/retraction of needles, additional compressed air inlet (A) for fast product release

Item no.	Stroke [mm]	Infeed angle [°]	Sensor
GR04.700-20	0 - 2	30	without
GR04.700-25	0 - 2.5	30	without
GR04.730-20	0 - 2	30	without



WIDE  
STROKE RANGE

### 10 needles – Diameter 2 mm each

- Strokes adjustable to material thickness
- Central bore hole (Ø 10 mm) to allow insertion of gripper into stack rails for pick & place
- Stroke limitation adjustable to material thickness
- GR04.720: Stroke spring leveler 35 mm
- Needles centrally crossed for firm grip
- Double-acting enables short duty cycles: separate compressed air connections for extraction/retraction of needles
- Needles can be individually replaced

Item no.	Stroke [mm]	Infeed angle [°]	Sensor
GR04.710-25	0 - 2.5	30	NPN; PNP
GR04.710-50	0 - 5	30	NPN; PNP
GR04.710-75	0 - 7.5	30	NPN; PNP
GR04.710-100	0 - 10	30	NPN; PNP
GR04.720-25	0 - 2.5	30	NPN
GR04.720-50	0 - 5	30	NPN

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SECURE GRIP

12 needles – Diameter 2 mm each

- Stroke limitation by spacer plates
- Needles centrally crossed for firm grip
- Double-acting enables short duty cycles: separate compressed air connections for extraction/retraction of needles

Item no.	Stroke [mm]	Infeed angle [°]	Sensor
GR04.711-25	2.5	30	NPN; PNP
GR04.711-40	4	30	NPN; PNP
GR04.711-60	6	30	NPN; PNP



NARROW DESIGN

6 needles – Diameter 2 mm each

- Narrow design
- Stroke can be adjusted to material thickness
- Double-acting enables short duty cycles: separate compressed air connections for extraction/retraction of needles on the face-side
- Needles can be individually replaced

Item no.	Stroke [mm]	Infeed angle [°]	Sensor
GR04.715	0 - 7	30	NPN; PNP

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HEAVY WORKPIECES

### 32 needles – Diameter 2 mm each

- Suited for handling heavier workpieces
- Max. gripping force 360 N
- Double-acting enables short duty cycles: separate compressed air connections for extraction/retraction of needles

Item no.	Stroke [mm]	Infeed angle [°]	Sensor
GR04.725-60	6	45	NPN
GR04.725-60V	6 (adjustable)	45	NPN
GR04.725-90	9	45	NPN
GR04.725-90V	9 (adjustable)	45	NPN
GR04.725-200	20	45	NPN



ADJUSTABLE STROKE

### 4 needles – Diameter 2 mm each

- Alignment to material thickness via adjustable stroke
- Internal stroke guiding for extra slim design
- Stroke corresponds to maximum entry depth of needles
- Double-acting, enables short duty cycles: separate compressed air connections for extraction/retraction of needles

Item no.	Stroke [mm]	Infeed angle [°]	Sensor
GR04.740B	0 - 3	45	NPN; PNP

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NON-DIMENSIONALLY STABLE /  
DIFFICULT-TO-SUCTION MATERIAL

### 4 needles – Diameter 2,35 mm each

- Grippers for materials that are non-dimensionally stable or difficult to handle with vacuum
- Central bore hole (Ø 11.5 mm) to allow insertion of gripper into stack rails for pick & place
- Needles centrally crossed for firm grip
- Easy adjustment of needle depth, markings at 1, 2, 3 and 4 mm
- Double-acting enables short duty cycles: compressed air connections for extraction/retraction of needles
- Needles can be individually replaced

Item no.	Stroke [mm]	Infeed angle [°]	Sensor
GR04.750	4.5	30	NPN; PNP

