

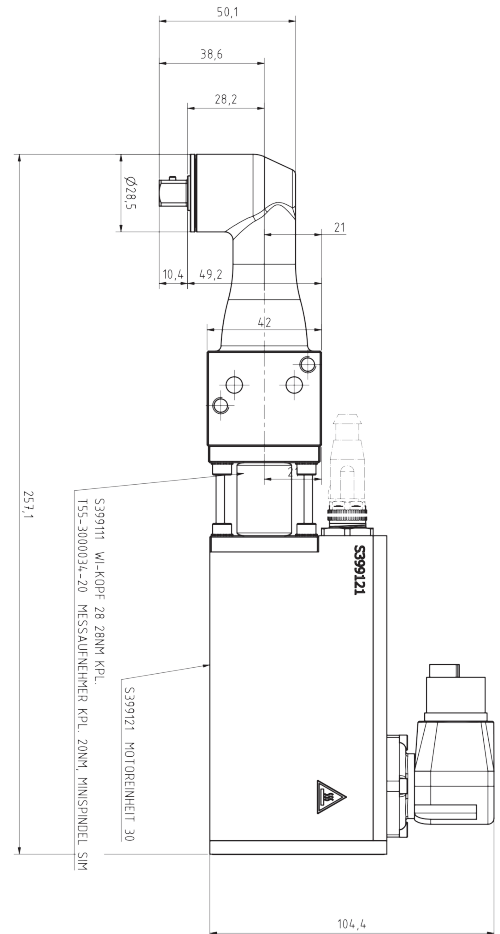
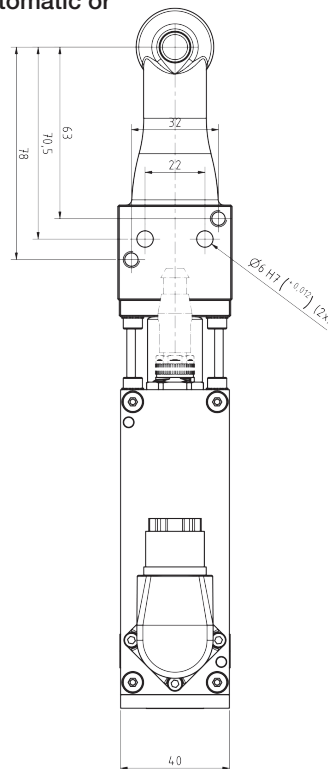
Compact Reliable Performance

30MAD28P3E CONVENTIONAL FIXTURED SPINDLE

FEATURES

Spindle Assembly

- Compact solution for low-torque applications in automatic or semi-automatic assembly (fixed automation or robots)
- Built-in mounting provisions for ease of fixturing
- Proven technology
- Lightweight



SPECIFICATIONS

TYPE

MA (Mini-Spindle Angle)

TORQUE RANGE (Nm)

Min / Max: 7 - 28

FREE SPEED (1/min)

495

DOWNFORCE

3/8 in

WEIGHT & DIMENSIONS

Weight 1.7 kg / 3.74 lb
Length 257.1 mm / 10.12 in
Side to Center 14.25 mm / 0.56 in
Country of Origin: Germany



Compact Reliable Performance

30MAD38P3E CONVENTIONAL FIXTURED SPINDLE

FEATURES

Spindle Assembly

- Compact solution for low-torque applications in automatic or semi-automatic assembly (fixed automation or robots)
- Built-in mounting provisions for ease of fixturing
- Proven technology
- Lightweight

SPECIFICATIONS

TYPE

MA (Mini-Spindle Angle)

TORQUE RANGE (Nm)

Min / Max: 8 - 38

FREE SPEED (1/min)

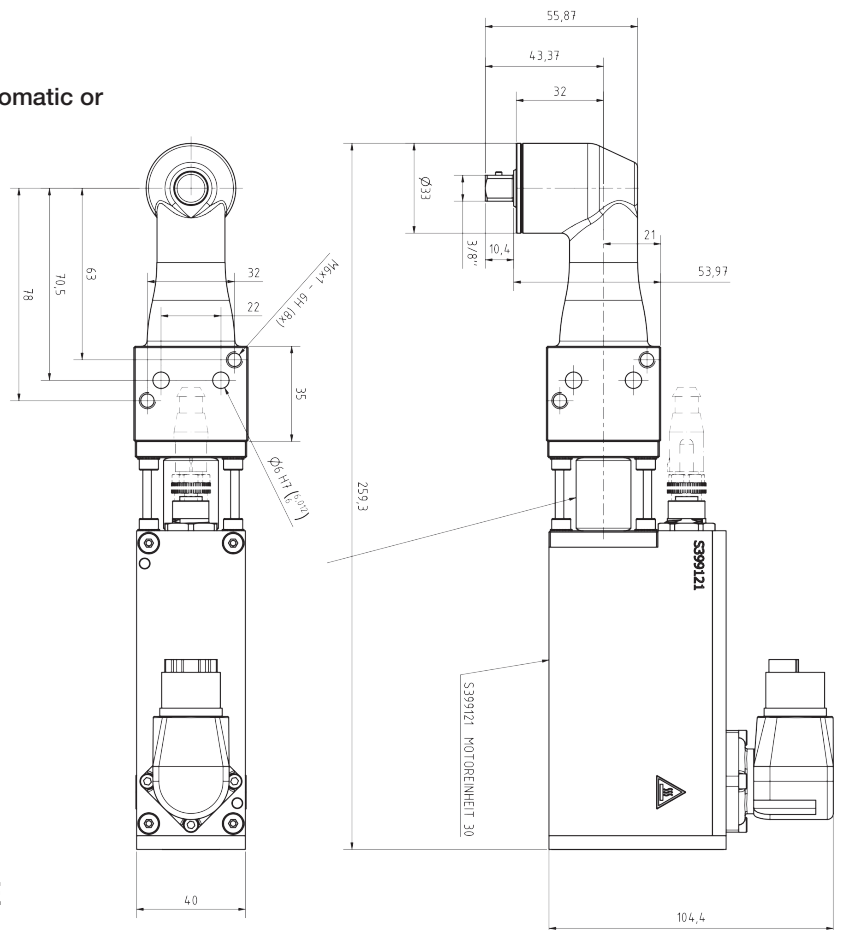
495

DOWNFORCE

3/8 in

WEIGHT & DIMENSIONS

Weight 1.8 kg / 3.96 lb
Length 259.3 mm / 10.21 in
Side to Center 16.5 mm / 0.65 in
Country of Origin: Germany



Compact Reliable Performance

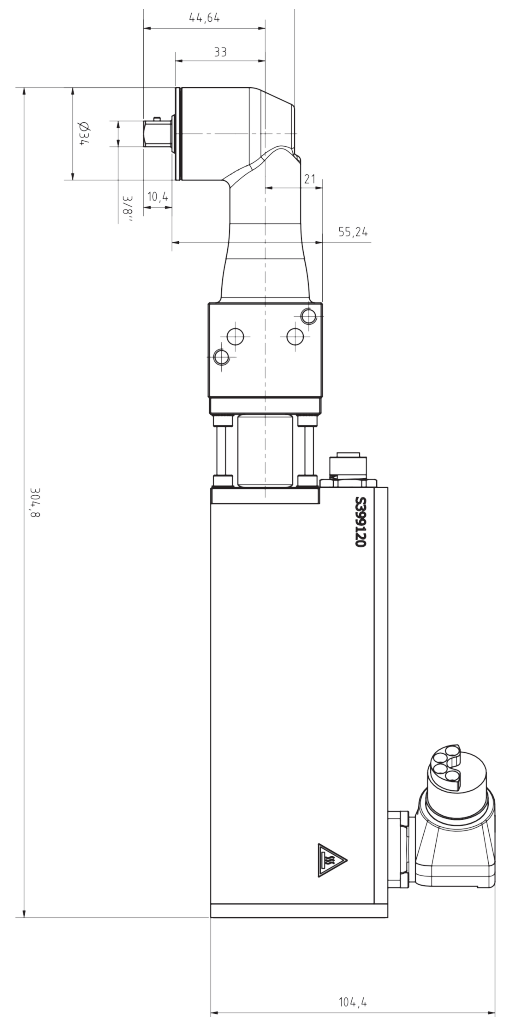
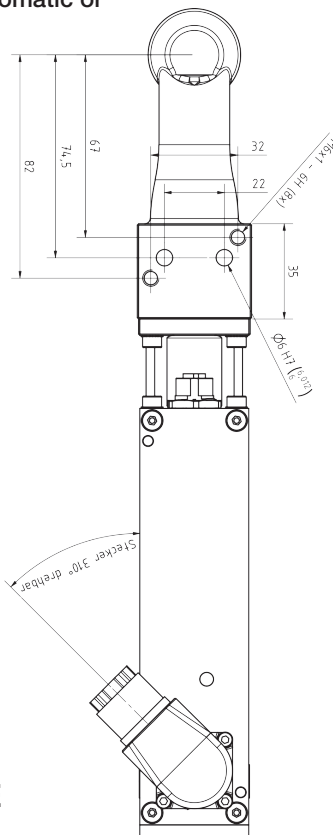
50MAD51P3E

CONVENTIONAL FIXTURED SPINDLE

FEATURES

Spindle Assembly

- Compact solution for low-torque applications in automatic or semi-automatic assembly (fixed automation or robots)
- Built-in mounting provisions for ease of fixturing
- Proven technology
- Lightweight



SPECIFICATIONS

TYPE

MA (Mini-Spindle Angle)

TORQUE RANGE (Nm)

Min / Max: 14 - 51

FREE SPEED (1/min)

920

DOWNFORCE

3/8 in

WEIGHT & DIMENSIONS

Weight	2.2 kg / 4.84 lb
Length	304.8 mm / 12 in
Side to Center	17 mm / 0.67 in
Country of Origin:	Germany



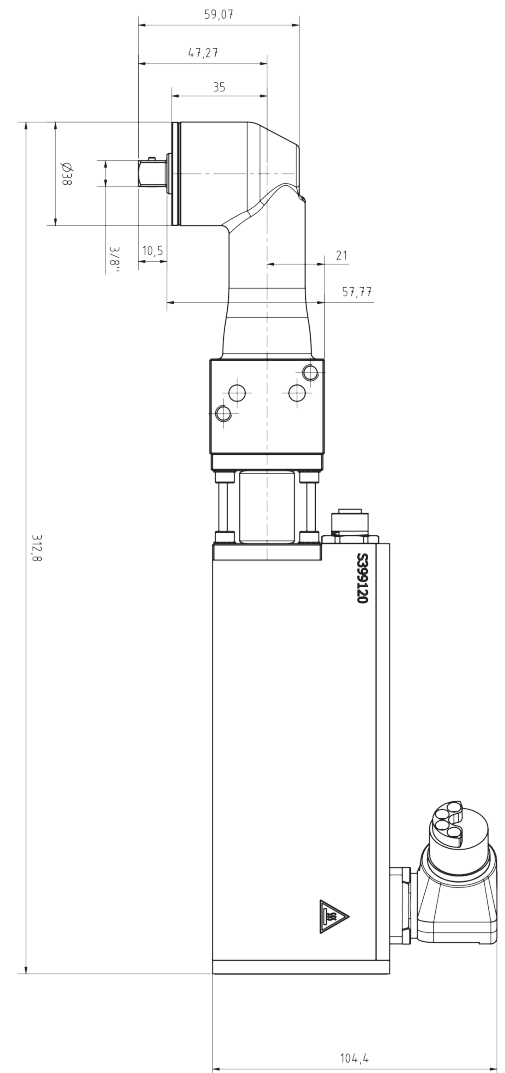
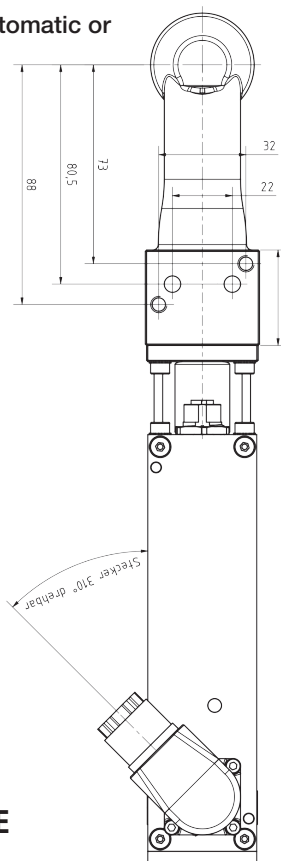
Compact Reliable Performance

50MAD61P3E CONVENTIONAL FIXTURED SPINDLE

FEATURES

Spindle Assembly

- Compact solution for low-torque applications in automatic or semi-automatic assembly (fixed automation or robots)
- Built-in mounting provisions for ease of fixturing
- Proven technology
- Lightweight



SPECIFICATIONS

TYPE

MA (Mini-Spindle Angle)

TORQUE RANGE (Nm)

Min / Max: 16 - 61

FREE SPEED (1/min)

800

DOWNFORCE

3/8 in

WEIGHT & DIMENSIONS

Weight 2.3 kg / 5.06 lb
Length 312.8 mm / 12.31 in
Side to Center 19 mm / 0.75 in
Country of Origin: Germany



Apex Tool Group, LLC

www.ClecoTools.com / www.ClecoTools.de

Compact Reliable Performance

30MSD10D3E CONVENTIONAL FIXTURED SPINDLE

FEATURES

Spindle Assembly

- Compact solution for low-torque applications in automatic or semi-automatic assembly (fixed automation or robots)
- Built-in mounting provisions for ease of fixturing
- Proven technology
- Lightweight

SPECIFICATIONS

TYPE

MS (Mini-Spindle Straight)

TORQUE RANGE (Nm)

Min / Max: 3 - 10

FREE SPEED (1/min)

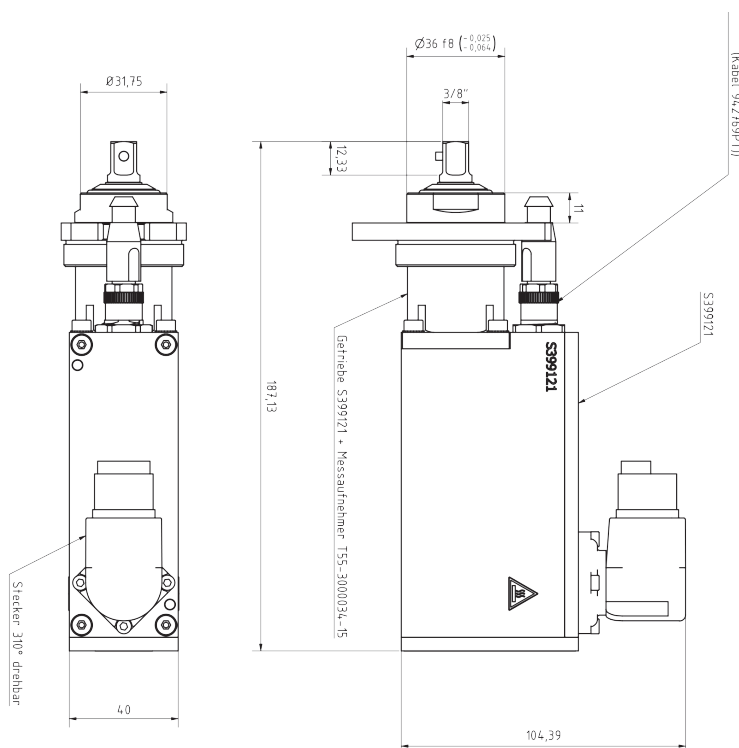
1,425

DOWNFORCE

3/8 in

WEIGHT & DIMENSIONS

Weight 1.2 kg / 2.64 lb
Length 187.1 mm / 7.37 in
Side to Center 23 mm / 0.91 in
Country of Origin: Germany



Compact Reliable Performance

30MSD15D3E CONVENTIONAL FIXTURED SPINDLE

FEATURES

Spindle Assembly

- Compact solution for low-torque applications in automatic or semi-automatic assembly (fixed automation or robots)
- Built-in mounting provisions for ease of fixturing
- Proven technology
- Lightweight

SPECIFICATIONS

TYPE

MS (Mini-Spindle Straight)

TORQUE RANGE (Nm)

Min / Max: 4 - 15

FREE SPEED (1/min)

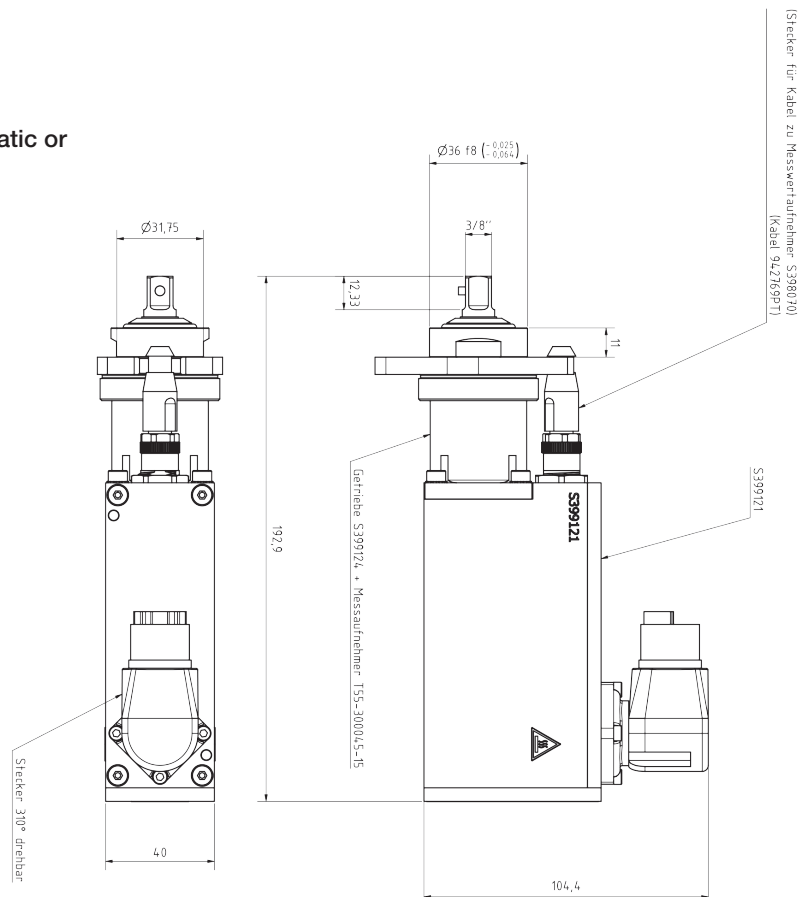
1,075

DOWNFORCE

3/8 in

WEIGHT & DIMENSIONS

Weight 1.2 kg / 2.64 lb
Length 192.9 mm / 7.6 in
Side to Center 23 mm / 0.91 in
Country of Origin: Germany



Compact Reliable Performance

50MSD32D3E CONVENTIONAL FIXTURED SPINDLE

FEATURES

Spindle Assembly

- Compact solution for low-torque applications in automatic or semi-automatic assembly (fixed automation or robots)
- Built-in mounting provisions for ease of fixturing
- Proven technology
- Lightweight

SPECIFICATIONS

TYPE

MS (Mini-Spindle Straight)

TORQUE RANGE (Nm)

Min / Max: 9 - 32

FREE SPEED (1/min)

770

DOWNFORCE

3/8 in

WEIGHT & DIMENSIONS

Weight 1.6 kg / 3.52 lb
Length 237.7 mm / 9.36 in
Side to Center 23 mm / 0.91 in
Country of Origin: Germany

