

Rittal – The System.

Faster – better – everywhere.

► Rittal Automation Systems – Automate your panel building and switchgear manufacturing



ENCLOSURES

POWER DISTRIBUTION

CLIMATE CONTROL

IT INFRASTRUCTURE

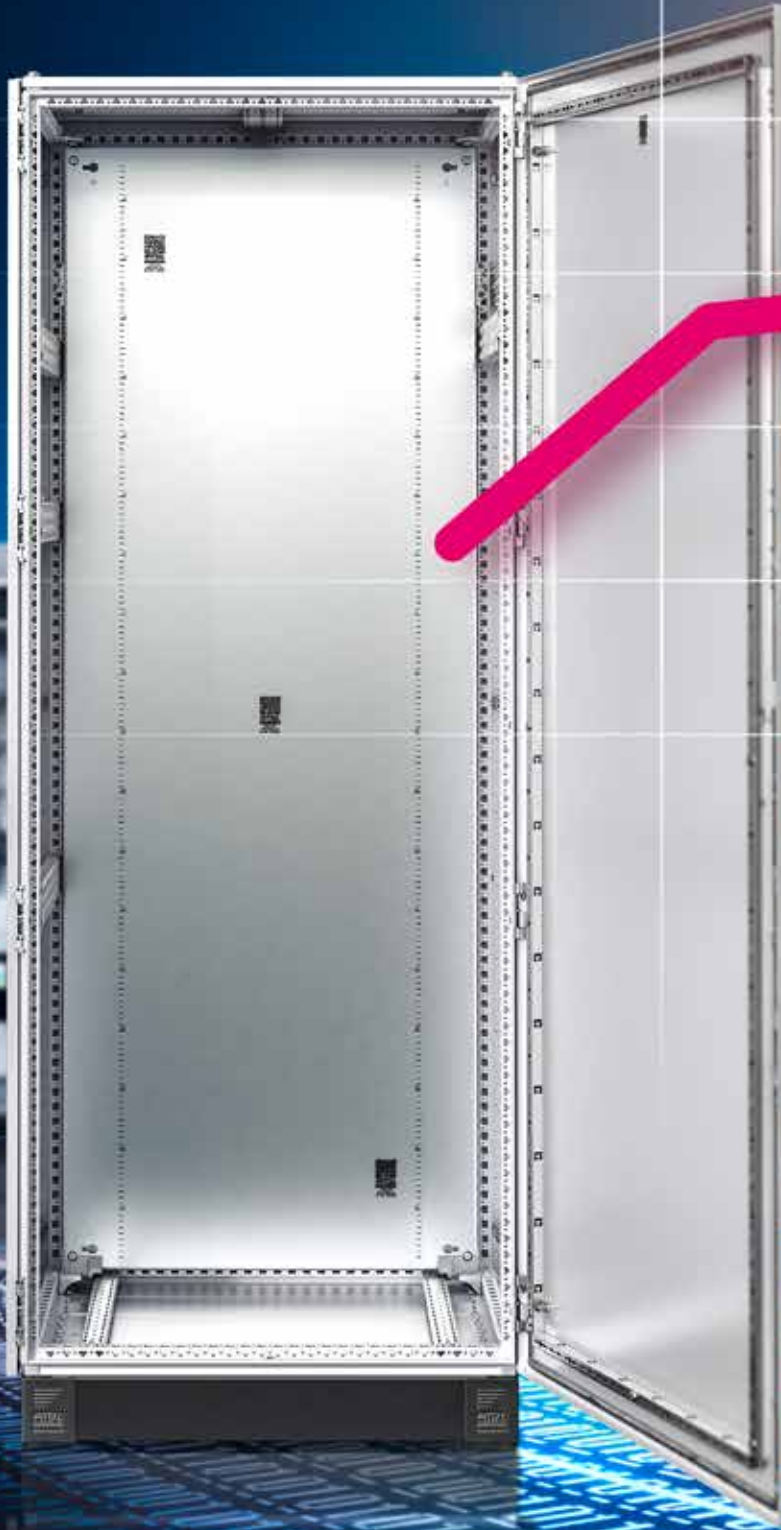
SOFTWARE & SERVICES

FRIEDHELM LOH GROUP



Rittal – The System.

Faster – better – everywhere.



ENCLOSURES

POWER DISTRIBUTION

CLIMATE CONTROL

Increasing efficiency through automation

Rittal can supply all your machines and devices – The Rittal Automation Systems division can supply everything you need to make enclosure assembly easier, faster, more accurate and more repeatable through automation. This allows you to link all work operations together into one highly efficient, digitally seamless, automated process. All machines and devices required for this purpose, including manual handling aids and a wide selection of hand tools, are available from a single source and can be ordered directly from Rittal.

Rittal Automation Systems

Hand Tools

Tool bags.....	9
Screwdrivers.....	10
Hex wrench	14
Bit and bit holders	15
Crimping pliers	17
Wire end ferrules	20
Insulation stripping tools	22
Cutting tools	24
Pliers	25
Hole punching tools.....	26

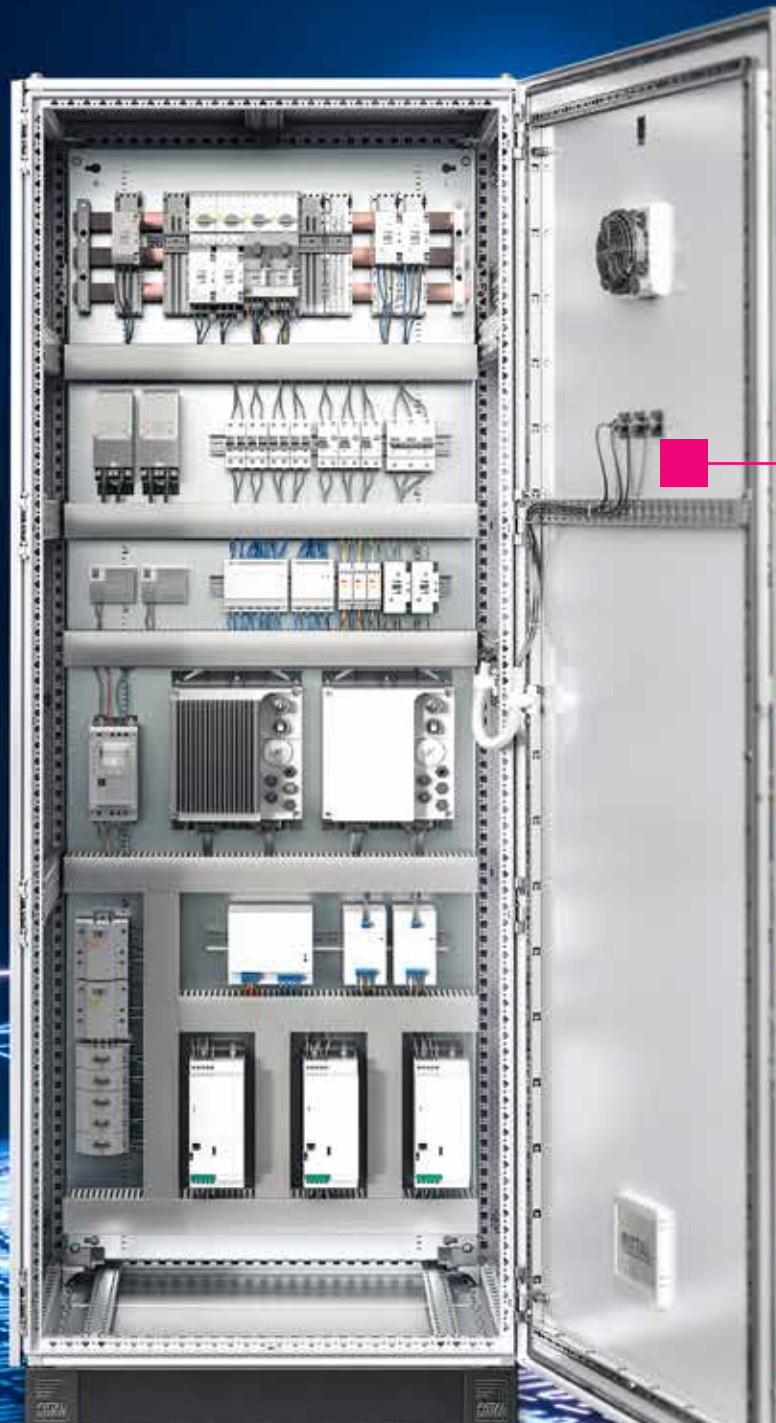
IT INFRASTRUCTURE

SOFTWARE & SERVICES



Improve the workflow in every production phase

With **Rittal Automation Systems** – Engineering-generated digital data (e.g. from Eplan tools) allows the seamless automation of production processes. This is based on the virtual prototype. It carries all the relevant information, and in collaboration with the product spectrum from Rittal Automation Systems, ensures maximum possible efficiency at every point of the panel-building workflow.



ENCLOSURES

POWER DISTRIBUTION

CLIMATE CONTROL



Automate machining

Fully automated milling or laser machining, plus machining of cable ducts and busbars



Make component mounting more flexible

Automatic manufacturing and component mounting of terminal strips



Organize wire processing

Professional, rational solutions for wire machining and processing



Streamline wiring

To complete the process chain, Rittal Automation Systems are involved in developing pioneering wiring solutions, right through to full automation



Simplify handling

Ergonomic, efficient handling systems for transport and lifting operations



Perfecting the hand tool

High-quality hand tools for professional use in industry and trade

IT INFRASTRUCTURE

SOFTWARE & SERVICES



Increase productivity at every step

With seamless optimization of all process stages – In panel building and switchgear manufacturing, efficiency relies on the quality of productivity, and on all automated and manual work stages. We achieve the ideal workflow with the aid of digitalization, from engineering right through to production.

Machining

- Significant time saving with the milling center Perforex BC
- High level of precision with the laser center Perforex LC
- Less wastage with the cutting center Secarex AC 18
- Efficient working with the copper busbar workstations CW 120-S and CS 120-M

Assembly

- Rapid throughput with the terminal block assembly center
- Athex TC 80 CS

Wire processing and wiring

- Project-controlled cutting with the length-cutting machines C8+
- Quick insulation stripping with the stripping machines S22
- User-friendly wire processing with the crimping machines L8, R8, R8 E, RC
- Faster processes, utilizing fully automated wire processing with the Wire Terminal WT

Handling

- Fatigue-free, ergonomic working with Rittal assembly frames
- Safe transportation of enclosure panels with the storage and transport trolley LT 1000
- Flexible work surface with the functional trolley for assembly and maintenance

Hand tools

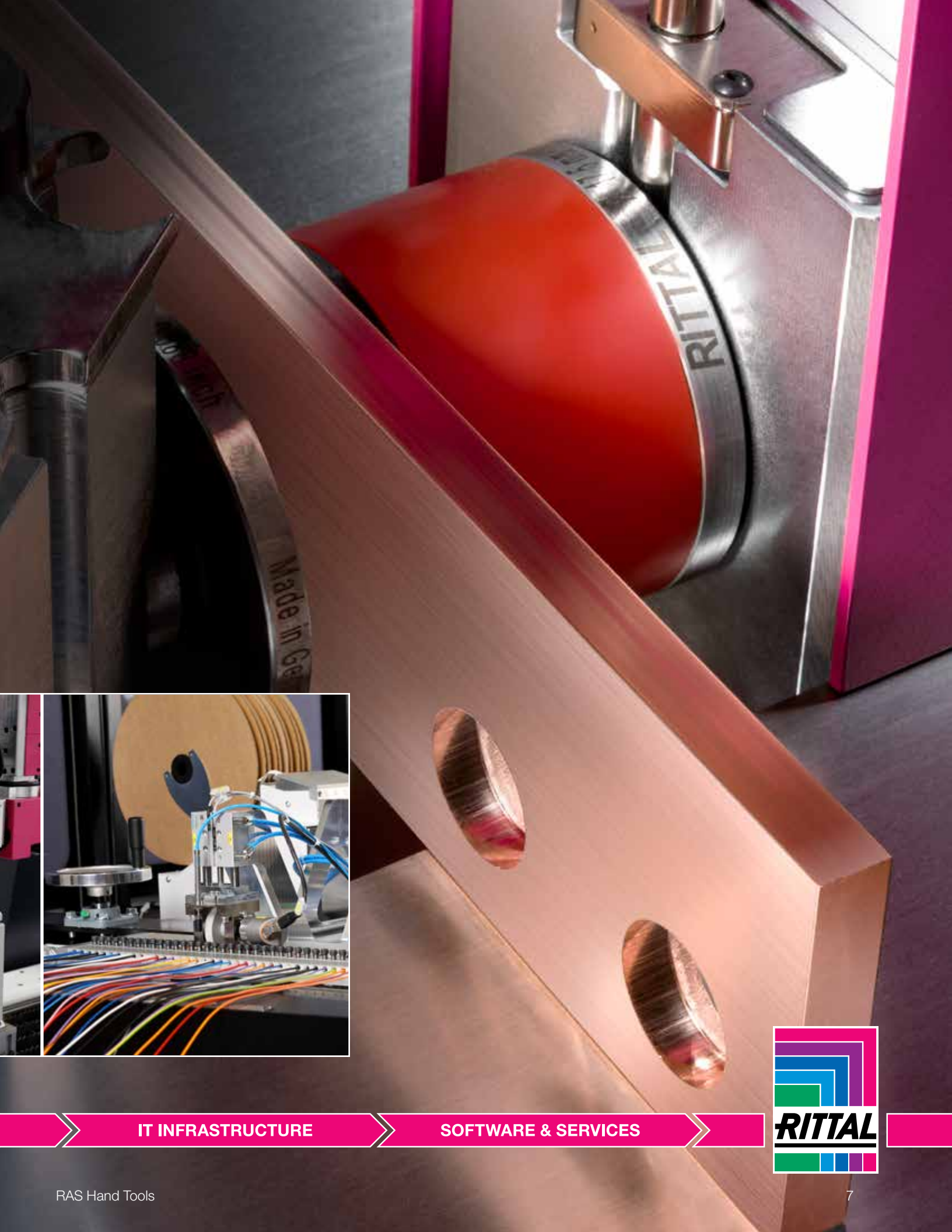
- Covers all manual processes in the workshop with high-quality hand tools



ENCLOSURES

POWER DISTRIBUTION

CLIMATE CONTROL



IT INFRASTRUCTURE

SOFTWARE & SERVICES



The right tool for every application!

All from a single source – Rittal offers a comprehensive range of hand-held tools for professional support with your work operations. All the machining and handling technology you need for time-saving and cost-cutting manufacturing processes, all from a single source.



- Screwdrivers, insulated
- Screwdrivers, uninsulated



- Tools for cable processing

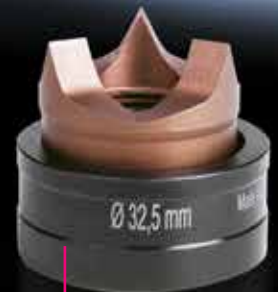


- Pliers
- Cutting tools



- Manual and electric hand-held hydraulic punches

- Bits
- Bit holders



- Hole punches

Tool bag

Configured

Configured tool bag comprising a selected range of Rittal hand tools, designed especially for electricians. The practical, high-quality shoulder bag may be used either as a tool bag or laptop case.

Design

- 19 separate compartments for tools
- Cushioned compartment for laptop or tablet
- Document holder
- Two additional storage pockets inside

Benefits:

- Protected storage
- Shoulder pad for comfortable carrying
- Flexible use

Material:

- Polyester

Supply includes:

- Screwdriver, insulated SL 3.5 x 0.6 (Model No.: 4052.102), SL 6 x 1.2 (Model No.: 4052.107), PZ 2 (Model No.: 4052.122)
- Screwdriver, non-insulated PZ 2 (Model No.: 4052.022), SL 6 x 1.2 (Model No.: 4052.011), TX 20 (Model No.: 4052.055), TX 25 (Model No.: 4052.056), TX 30 (Model No.: 4052.058)
- Bit holder with handle, magnetic (Model No.: 4053.300)
- Bit set with bit holder, 7-piece (Model No.: 4053.420)
- Crimping pliers for wire end ferrules, for cross-section 0.5 - 6 mm², square crimp (Model No.: 4054.001)
- Wire stripper for wire end ferrules, for cross section 0.02 - 11 mm² (Model No.: 4054.300)
- Stripping tools for cables Ø 2.5 - 11 mm (Model No.: 4054.400), for cables Ø 8 - 13 mm (Model No.: 4054.405)
- Side cutter for cables Ø 0.2 - 11 mm (Model No.: 4054.600)
- Electrician's scissors for cables Ø 0.1 - 3.7 mm (Model No.: 4054.700)
- Combination pliers with insulated handle (Model No.: 4054.800)
- Needle-nose pliers with insulated handle (Model No.: 4054.850)
- Tool bag (Model No.: 4053.000)

Width mm (in.)	Height mm (in.)	Depth mm (in.)	Packs of	Model No.
420 (16.5)	340 (13.3)	190 (7.48)	1 pc(s).	4053.500

Tool Bag

Unconfigured

The practical, high-quality shoulder bag may be used either as a tool bag or laptop case.

Design:

- 19 separate compartments for tools
- Cushioned compartment for laptop or tablet
- Document holder
- Two additional storage pockets inside

Benefits:

- Protected storage
- Shoulder pad for comfortable carrying
- Flexible use

Material:

- Polyester

Width mm (in.)	Height mm (in.)	Depth mm (in.)	Packs of	Model No.
420 (16.5)	340 (13.3)	190 (7.48)	1 pc(s).	4053.000



Screwdriver



Screwdriver

Insulated

With a long, slender handle and high-performance tip with non-marking insulation.

Benefits:

- Minimal force required, due to ergonomically styled handle
- Handle head with anti-roll protection and labeling of screw type
- Black coated blade tip to preserve precision and accuracy of fit
- Handle 30% and insulation up to 50% thinner than comparable tools
- Optimum interconnection of hand and handle to support higher torques and longer, fatigue-free working

Material:

- Blade: Chrome-molybdenum-vanadium alloy
- Handle core: Hard plastic
- Handle body: Elastic, highly flexible plastic

Color:

- Handle: Anthracite and Rittal pink

Standards:

- IEC 60 900

Approvals:

- VDE
- Tested Safety GS

For slot-head screws

Blade tip	Blade (width x thickness) mm (in.)	Blade length mm (in.)	Blade dia mm (in.)	Handle length mm (in.)	Handle dia mm (in.)	Packs of	Model No.
SL	3 x 0.5 (0.11 x .001)	100 (3.9)	3.5 (.13)	105 (4.1)	25 (.98)	1 pc(s).	4052.101
SL	3.5 x 0.6 (0.13 x 0.02)	100 (3.9)	3.5 (.13)	105 (4.1)	25 (.98)	1 pc(s).	4052.102
SL	4 x 0.8 (0.15 x 0.03)	100 (3.9)	4 (.15)	105 (4.1)	25 (.98)	1 pc(s).	4052.104
SL	5.5 x 1 (0.21 x 0.03)	125 (3.9)	5.5 (.21)	115 (4.5)	27 (1.06)	1 pc(s).	4052.106
SL	6.5 x 1.2 (0.25 x 0.04)	125 (3.9)	6.5 (.25)	115 (4.5)	27 (1.06)	1 pc(s).	4052.107

For pozidrive screws

Blade tip	Blade (width x thickness) mm (in.)	Blade length mm (in.)	Blade dia mm (in.)	Handle length mm (in.)	Handle dia mm (in.)	Packs of	Model No.
PZ 1	–	80 (3.14)	4.5 (.17)	105 (4.1)	25 (.98)	1 pc(s).	4052.121
PZ 2	–	100 (3.9)	6 (.23)	115 (4.5)	27 (1.06)	1 pc(s).	4052.122

For Phillips-head screws

Blade tip	Blade (width x thickness) mm (in.)	Blade length mm (in.)	Blade dia mm (in.)	Handle length mm (in.)	Handle dia mm (in.)	Packs of	Model No.
PH 1	–	80 (3.14)	4.5 (.17)	105 (4.1)	25 (.98)	1 pc(s).	4052.131
PH 2	–	100 (3.9)	6 (.23)	115 (4.5)	27 (1.06)	1 pc(s).	4052.132

For plus/minus

Blade tip	Blade (width x thickness) mm (in.)	Blade length mm (in.)	Blade dia mm (in.)	Handle length mm (in.)	Handle dia mm (in.)	Packs of	Model No.
Z1	–	80 (3.14)	4.5 (.17)	105 (4.1)	25 (.98)	1 pc(s).	4052.141
Z2	–	100 (3.9)	6 (.23)	115 (4.5)	27 (1.06)	1 pc(s).	4052.142

Screwdriver set

Insulated

Multi-part screwdriver set. With a long, slender handle and high-performance tips with non-marking insulation.

Benefits:

- Minimal force required due to ergonomically styled handle
- Handle head with anti-roll protection and clear screw labelling
- Black coated blade tip to preserve precision and accuracy of fit
- Handle 30% and insulation up to 50% thinner than comparable tools

Material:

- Blade: Chrome-molybdenum-vanadium alloy
- Handle core: Hard plastic
- Handle body: Elastic, highly flexible plastic

Color:

- Handle: Anthracite and Rittal pink

Supply includes:

- Set with 5 screwdrivers

Standards:

- IEC 60 900

Approvals:

- VDE
- Tested Safety

Blade tip	Packs of	Model No.
SL 3 x 05 mm SL 4 x 0.8 mm SL5.5 x 1.1mm PH 1 PH 2	1 pc(s).	4052.210
SL 3 x 05 mm SL 4 x 0.8 mm SL5.5 x 1.1mm PZ 1 PZ 2	1 pc(s).	4052.211
SL 3 x 05 mm SL 4 x 0.8 mm PH 1 PH 2 Z2	1 pc(s).	4052.212



Screwdriver



Screwdriver

Uninsulated

Ergonomic screwdriver which adapts perfectly to the hand, thereby minimizing the force required.

Benefits:

- Handle head with anti-roll protection and labeling of screw type
- Black coated blade tip to preserve precision and accuracy of fit
- Optimum interconnection of hand and handle to support higher torques and longer, fatigue-free working

Material:

- Blade: Chrome-molybdenum-vanadium alloy
- Handle core: Hard plastic
- Handle body: Elastic, highly flexible plastic

Color:

- Handle: Anthracite and Rittal pink

Approvals:

- Tested Safety GS

For slot-head screws

Blade tip	Blade (width x thickness) mm (in.)	Blade length mm (in.)	Blade dia mm (in.)	Handle length mm (in.)	Handle dia mm (in.)	Packs of	Model No.
SL	2.5 x 0.4 (0.098 x .015)	75 (2.9)	2.5 (.09)	86 (3.3)	25 (.98)	1 pc(s).	4052.001
SL	3.5 x 0.6 (0.13 x 0.02)	100 (3.9)	3.5 (.13)	86 (3.3)	25 (.98)	1 pc(s).	4052.003
SL	4 x 0.8 (0.15 x 0.03)	100 (3.9)	4 (.15)	94 (3.7)	30 (1.18)	1 pc(s).	4052.004
SL	5.5 x 1 (0.21 x 0.03)	150 (5.9)	5 (.19)	101 (3.9)	33 (1.29)	1 pc(s).	4052.007
SL	6.5 x 1.2 (0.25 x 0.04)	150 (5.9)	6 (.23)	106 (4.1)	36 (1.41)	1 pc(s).	4052.011
SL	8 x 1.2 (0.31 x 0.04)	175 (6.8)	7 (.27)	112 (4.4)	39 (1.53)	1 pc(s).	4052.014
SL	5.5 x 1 (0.2 x 0.03)	25 (0.9)	5 (.19)	60 (2.3)	21 (.82)	1 pc(s).	4052.018

For pozidrive screws

Blade tip	Blade (width x thickness) mm (in.)	Blade length mm (in.)	Blade dia mm (in.)	Handle length mm (in.)	Handle dia mm (in.)	Packs of	Model No.
PZ 1	–	80 (3.14)	4.5 (.17)	94 (3.7)	30 (1.18)	1 pc(s).	4052.021
PZ 2	–	100 (3.9)	6 (.23)	106 (4.17)	36 (1.41)	1 pc(s).	4052.022

For Phillips-head screws

Blade tip	Blade (width x thickness) mm (in.)	Blade length mm (in.)	Blade dia mm (in.)	Handle length mm (in.)	Handle dia mm (in.)	Packs of	Model No.
PH 1	–	80 (3.14)	4.5 (.17)	94 (3.7)	30 (1.18)	1 pc(s).	4052.031
PH 2	–	100 (3.9)	6 (.23)	106 (4.17)	36 (1.41)	1 pc(s).	4052.032
PH 3	–	25 (.98)	6 (.23)	60 (2.36)	21 (0.82)	1 pc(s).	4052.038

For multi-tooth screws

Blade tip	Blade (width x thickness) mm (in.)	Blade length mm (in.)	Blade dia mm (in.)	Handle length mm (in.)	Handle dia mm (in.)	Packs of	Model No.
TX 10	–	100 (3.93)	3.5 (.13)	86 (3.38)	25 (.98)	1 pc(s).	4052.053
TX 15	–	100 (3.93)	4 (.15)	94 (3.70)	30 (1.18)	1 pc(s).	4052.054
TX 20	–	100 (3.93)	5 (.19)	101 (3.97)	33 (1.29)	1 pc(s).	4052.055
TX 25	–	100 (3.93)	5 (.19)	106 (4.17)	36 (1.41)	1 pc(s).	4052.056
TX 30	–	115 (4.52)	6 (.23)	112 (4.40)	39 (1.53)	1 pc(s).	4052.058

Screwdriver

Screwdriver set

Uninsulated

Multi-part screwdriver set.

Benefits:

- Minimal force required due to ergonomically styled handle
- Handle head with anti-roll protection and labeling of screw type
- Black coated blade tip to preserve precision and accuracy of fit

Material:

- Blade: Chrome-molybdenum-vanadium alloy
- Handle core: Hard plastic
- Handle body: Elastic, highly flexible plastic

Color:

- Handle: Anthracite and Rittal pink

Approvals:

- Tested Safety GS

Blade tip	Product specific scope of supply	Packs of	Model No.
SL 3.5 x 06 mm SL 6.5 x 1.2 mm PZ 1 PZ 2 PH 1 PH 2	6-part set	1 pc(s).	4052.200
PH 1 PH 2 TX 15 TX 20 TX 25 TX 30	6-part set	1 pc(s).	4052.201
TX 10 TX 15 TX 20 TX 25 TX 30	5-part set	1 pc(s).	4052.202



Interchangeable screwdriver set

Uninsulated

13-piece tool set with ergonomic, foldable, lockable handle

Technical specifications:

- PH 1 - SL 4 X 0.8 mm
- PH 2 - PH 3
- PZ 1 - SL 5 x 0.8 mm
- PZ 2 - SL 6 x 1 mm
- PZ 3 - SL 7 x 1.2 mm
- TX 6 - TX 7
- TX 8 - TX 9
- TX 10 - TX 15
- TX 20 - TX 25
- TX 30 - TX 40
- Hex socket 3 mm -hex socket 4 mm
- Hex socket 5 mm -hex socket 6 mm

Material:

- Blade: Chrome-molybdenum-vanadium alloy
- Handle core: Hard plastic
- Handle body: Elastic, highly flexible plastic

Color:

- Handle: Anthracite and Rittal pink

Supply includes:

- Combined blade holder
Screwdriver and T handle
- 12 blades each with 2 tips
- Storage box

Blade length mm (in.)	Handle length mm (in.)	Handle dia. mm (in.)	Packs of	Model No.
160 (6.29)	105 (4.13)	39 (1.5)	1 pc(s).	4053.450



Hex wrench



Hex wrench set

For Allen screws

Hex wrench with optimum, narrow-tolerance hexagonal profiles and precise ballhead geometry. The extra-long design achieves a greater leverage effect.

Benefits:

- Up to 30% more corrosion resistance
- Optimum hardness and elasticity
- Greater leverage effect

Technical specifications:

- For hex socket: 1.27 - 1.5 - 2.0 - 2.5 - 3.0 - 3.5 - 4.0 - 4.5 - 5.0 - 5.5 - 6.0 - 7.0 - 8.0 - 9.0 - 10.0 mm

Supply includes:

- 15 hex wrenches
- Storage box

Packs of	Model No.
1 pc(s).	4052.480

Bits and bit holders

Industrial bit for cordless screwdrivers

With long shaft

Precision screwdriver with a long shaft for industrial use.

Benefits:

– Maximum hardness and torque values

Technical specifications:

– Tool adaptation e 6.3 (1/4")

Material:

– High-quality special tool steel

For slot-head screws

Blade Tip	Blade width x thickness mm (in.)	Length mm (in.)	Blade dia. mm (in.)	Packs of	Model No.
SL	3.5 x 0.6 (0.13 x 0.02)	73 (2.87)	6.3 (2.48)	3 pc(s).	4053.002
SL	4 x 0.8 (0.15 x 0.03)	73 (2.87)	6.3 (2.48)	3 pc(s).	4053.003

For pozidrive screws

Blade Tip	Blade width x thickness mm (in.)	Length mm (in.)	Blade dia. mm (in.)	Packs of	Model No.
PZ 1	–	73 (2.87)	6.3 (2.48)	3 pc(s).	4053.011
PZ 2	–	73 (2.87)	6.3 (2.48)	3 pc(s).	4053.012

For Phillips-head screws

Blade Tip	Blade width x thickness mm (in.)	Length mm (in.)	Blade dia. mm (in.)	Packs of	Model No.
PH 1	–	73 (2.87)	6.3 (2.48)	3 pc(s).	4053.021
PH 1	–	73 (2.87)	6.3 (2.48)	3 pc(s).	4053.022

For plus/minus

Blade Tip	Blade width x thickness mm (in.)	Length mm (in.)	Blade dia. mm (in.)	Packs of	Model No.
Z 1	–	73 (2.87)	6.3 (2.48)	3 pc(s).	4053.031
Z 2	–	73 (2.87)	6.3 (2.48)	3 pc(s).	4053.032

For multi-tooth screws

Blade Tip	Blade width x thickness mm (in.)	Length mm (in.)	Blade dia. mm (in.)	Packs of	Model No.
TX 10	–	73 (2.87)	6.3 (2.48)	3 pc(s).	4053.041
TX 15	–	73 (2.87)	6.3 (2.48)	3 pc(s).	4053.042
TX 20	–	73 (2.87)	6.3 (2.48)	3 pc(s).	4053.043
TX 25	–	73 (2.87)	6.3 (2.48)	3 pc(s).	4053.044
TX 27	–	73 (2.87)	6.3 (2.48)	3 pc(s).	4053.045
TX 30	–	73 (2.87)	6.3 (2.48)	3 pc(s).	4053.046
TX 40	–	73 (2.87)	6.3 (2.48)	3 pc(s).	4053.047



Bits and bit holders



Industrial bit set for cordless screwdriver

With long shaft

Precisely manufactured screwdriver with a long shaft for industrial use.

Benefits

- Case with viewing window
- Secure storage

Technical specifications:

- Tool adaptation E 6.3 (1/4")

Material:

- High-quality special tool steel

Supply includes:

- Set with 6 bits
- Viewing box

Blade Tip	Length mm (in.)	Packs of	Model No.
SL 3.5 x 0.6 mm SL 4 x 0.8 mm SL 5.5 x 1 mm PH 1 PH 2 PZ 2	73 (2.87)	1 pc(s).	4053.400
TX 10 TX 15 TX 20 TX 25 TX 30 TX 40	73 (2.87)	1 pc(s).	4053.410



Bit set

With bit holder

7-piece bit set with an assortment of quality bits with a short shaft and magnetic holder.

Benefits:

- One-handed operation
- Can function as a screwdriver

Technical specifications:

- Tool adaptation C 6.3 (1/4")

Supply includes:

- Set with 6 bits
- Bit holder

Blade Tip	Length mm (in.)	Packs of	Model No.
TX 25 TX 30 TX 40 PH 1 PH 2 PH 3	25 (0.98)	1 pc(s).	4053.420



Bit holder

With handle, magnetic

Ergonomic, adaptable bit holder with handle.

Benefits:

- Extra-strong magnet for optimum retention force
- Precise concentricity
- Handle for anti-roll protection

Technical specifications:

- Tool adaptation C 6.3 (1/4")
- Tool adaptation E 6.3 (1/4")

Material:

- Handle core: Hard plastic
- Handle body: Elastic, highly flexible plastic

Color:

- Handle: Anthracite and Rittal pink

Blade length mm (in.)	Blade dia. mm (in.)	Handle length mm (in.)	Handle dia. mm (in.)	Packs of	Model No.
100 (3.93)	6.3 (0.24)	101 (3.97)	33 (1.29)	1pc(s).	4053.300



Bit holder

Magnetic

Magnetic holder with hex drive to hold bits securely.

Benefits:

- Extra-strong magnet for optimum retention force
- Precise concentricity

Technical specifications:

- Tool adaptation E 6.3 (1/4")

Material:

- High-quality special tool steel

Blade length mm (in.)	Blade dia. mm (in.)	Packs of	Model No.
47 (1.85)	6.3 (0.24)	1pc(s).	4053.310

Crimping pliers

Crimping pliers

For wire end ferrules

For use with wire end ferrules with no insulating collar to DIN 46228 Part 1 and wire end ferrules with insulating collar to DIN 46228 Part 4.

Benefits:

- Minimal effort required with large conductor cross-sections
- Uniform high quality compression
- Marked die stations for precise crimping of the relevant cross-sections
- Releasable ratchet

Material:

- High-quality special tool steel

Surface finish:

- Matt, plated

Color:

- Handle: Anthracite and Rittal pink



Accessories:

- Wire end ferrules, see page 20



For cross-section mm ² (in. ²)	AWG	Direction of cable entry	Compression	Length mm (in.)	Design	Packs of	Model No.
0.25 - 6 (.0003 - .009)	24 - 10	Side	Trapezoid crimp	198 (7.79)	Angled	1 pc(s).	4054.000
0.5 - 6 (.0007 - .009)	22 - 10	Front	Square crimp	198 (7.79)	Angled	1 pc(s).	4054.001
10 - 25 (.01 - .038)	8 - 4	Side	WM crimp	256 (10.07)	Straight	1 pc(s).	4054.004
35 - 50 (.054 - .077)	2 - 1	Side	WM crimp	256 (10.07)	Straight	1 pc(s).	4054.008

Crimping pliers

For crimp tab terminals

For use with non-insulated crimp tab terminals.

Benefits:

- Releasable ratchet
- Marked die stations for precise crimping of the relevant cross-sections

Material:

- High-quality special tool steel

Surface finish:

- Matt, plated

Color:

- Handle: Anthracite and Rittal pink

For cross-section mm ² (in. ²)	AWG	Compression	Length mm (in.)	Design	Packs of	Model No.
0.1 - 1.5 (.0001 - .002)	26 - 16	B-crimp	198 (7.79)	Angled	1 pc(s).	4054.080
0.5 - 6 (.0007 - .009)	22 - 10	B-crimp	256 (10.07)	Straight	1 pc(s).	4054.081

Crimping pliers



Crimping pliers

for ring terminals

For use with non-insulated ring terminals.

Benefits:

- Releasable ratchet
- Optimized lever transmission means that only minimal actuator forces are required, even with large cross sections

Material:

- High-quality special tool steel

Surface finish:

- Matt, plated

Color:

- Handle: Anthracite and Rittal pink

For cross-section mm ² (in. ²)	AWG	Compression	Length mm (in.)	Design	Packs of	Model No.
0.5 - 2.5 (.0007 - .003)	20 - 14	Indent crimp	198 (7.79)	Angled	1 pc(s).	4054.020
0.35 - 6 (.0005 - .009)	22 - 10	Indent crimp	198 (7.79)	Angled	1 pc(s).	4054.021
4 - 10 (.006 - .015)	12 - 8	Double-indent crimp	256 (10.07)	Straight	1 pc(s).	4054.023
10 - 25 (.015 - .038)	8 - 4	Indent crimp	256 (10.07)	Straight	1 pc(s).	4054.024

Crimping pliers

Crimping pliers

For ring terminals

For use with insulated ring terminals and connectors.

Benefits:

- Clear identification of cross-sections, due to color coding on the dies
- Releasable ratchet
- Releases as soon as the required pressure is reached, to prevent underpressing

Material:

- High-quality special tool steel

Surface finish:

- Matt, plated

Color:

- Handle: Anthracite and Rittal pink

For cross-section mm ² (in. ²)	AWG	Compression	Length mm (in.)	Design	Packs of	Model No.
0.75 - 2.5 (0.0011 - 0.0038)	22 - 14	Oval crimp	198 (7.79)	Angled	1 pc(s).	4054.140
0.75 - 6 (0.009 - 0.0011)	22 - 10	Oval crimp	256 (10.07)	Straight	1 pc(s).	4054.141



Crimping pliers

For wire end ferrules

For use with wire end ferrules with no insulating collar to DIN 46228, Part 1 and wire end ferrules with insulating collar to DIN 46228, Part 4.

Benefits:

- Minimal effort required with large conductor cross-sections
- Uniformly high quality compression
- Releasable ratchet
- Self-adjusting

Material:

- High-quality special tool steel

Surface finish:

- Matt, plated

Color:

- Handle: Anthracite and Rittal pink



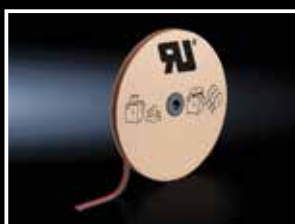
Accessories:

- Wire end ferrules, see page 20

For cross-section mm ² (in. ²)	AWG	Direction of cable entry	Compression	Length mm (in.)	Design	Packs of	Model No.
0.14 - 10 (0.0055 - 0.3937)	26 - 8	Side	Square crimp	176 (6.93)	Straight	1 pc(s).	4054.002
0.14 - 10 (0.0055 - 0.3937)	26 - 8	Side	Hexagonal crimp	176 (6.93)	Straight	1 pc(s).	4054.003



Wire end ferrules



Wire end ferrules

According to DIN color code

With plastic collar.

Technical specifications

- Heat resistant to 105°C (221° F)
- HSS Co8
- TiAlN coating

Material:

- E-Cu, galvanic tin-plated
- Plastic collar: Polypropylene

Note:

- UL-certified in conjunction with the relevant tools, such as crimping machines.

Standards:

- AEH DIN 46228

Approvals

- UL
- UR
- CSA

For crimping machines

For cross-section mm ² (in. ²)	AWG	Length mm (in.)	Color	Delivery form	Packs of	Model No.
0.5 (0.0007)	20	8 (0.31)	White	Loose	500 pc(s).	4050.730
0.75 (.0011)	18	8 (0.31)	Grey	Loose	500 pc(s).	4050.731
1 (.0015)	18	8 (0.31)	Red	Loose	500 pc(s).	4050.732
1.5 (.0023)	16	8 (0.31)	Black	Loose	500 pc(s).	4050.733

For crimping machines

For cross-section mm ² (in. ²)	AWG	Length mm (in.)	Color	Delivery form	Packs of	Model No.
0.5 (0.0007)	20	8 (0.31)	White	Taped	5000 pc(s).	4050.746
0.75 (.0011)	18	8 (0.31)	Grey	Taped	5000 pc(s).	4050.747
1 (.0015)	18	8 (0.31)	Red	Taped	5000 pc(s).	4050.748
1.5 (.0023)	16	8 (0.31)	Black	Taped	5000 pc(s).	4050.749
2.5 (.0038)	14	8 (0.31)	Blue	Taped	3000 pc(s).	4050.750

For manual wire processing (AWG cables) and crimping machines 0.5 - 1.5mm²

For cross-section mm ² (in. ²)	AWG	Length mm (in.)	Color	Delivery form	Packs of	Model No.
0.5 (.0007)	20	8 (0.31)	White	Loose	500 pc(s).	4050.742
0.75 (.0011)	18	8 (0.31)	Grey	Loose	500 pc(s).	4050.743
1 (.0015)	18	8 (0.31)	Red	Loose	500 pc(s).	4050.744
1.5 (.0023)	16	8 (0.31)	Black	Loose	500 pc(s).	4050.745

For manual wire processing

For cross-section mm ² (in. ²)	AWG	Length mm (in.)	Color	Delivery form	Packs of	Model No.
0.5 (.0007)	20	10 (0.39)	White	Loose (10 packs of 100)	1000 pc(s).	4051.638
0.5 (.0007)	20	12 (0.47)	White	Loose (10 packs of 100)	1000 pc(s).	4050.737
0.75 (.0011)	18	10 (0.39)	Grey	Loose (10 packs of 100)	1000 pc(s).	4051.641
0.75 (.0011)	18	12 (0.47)	Grey	Loose (10 packs of 100)	1000 pc(s).	4050.738
1 (.0015)	18	10 (0.39)	Red	Loose (10 packs of 100)	1000 pc(s).	4051.644
1 (.0015)	18	12 (0.47)	Red	Loose (10 packs of 100)	1000 pc(s).	4050.739
1.5 (.0023)	16	10 (0.39)	Black	Loose (10 packs of 100)	1000 pc(s).	4051.647
1.5 (.0023)	16	12 (0.47)	Black	Loose (10 packs of 100)	1000 pc(s).	4050.740
2.5 (.0038)	14	10 (0.39)	Blue	Loose (10 packs of 100)	1000 pc(s).	4051.525
2.5 (.0038)	14	12 (0.47)	Blue	Loose (10 packs of 100)	1000 pc(s).	4050.741
4 (.0062)	12	12 (0.47)	Grey	Loose	500 pc(s).	4050.783
6 (.0093)	10	12 (0.47)	Yellow	Loose	100 pc(s).	4050.736

Wire end ferrules

Wire end ferrule

According to Rittal color code:

With plastic collar.

Technical specifications:

– Heat-resistant to 105°C (221°F)

Material:

- E-Cu, galvanic tin-plated
- Plastic collar: Polypropylene

Note:

- UL-certified in conjunction with the relevant tools, such as crimping machines.

Approvals:

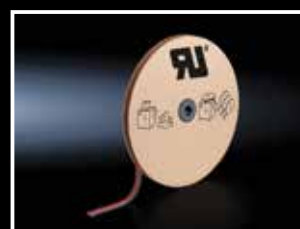
- UL
- UR
- CSA

For crimping machines

For cross-section mm ² (in. ²)	AWG	Length mm (in.)	Color	Deliver form	Packs of	Model No.
0.5 (.0007)	20	8 (0.31)	Orange	Taped	5000 pc(s).	4051.597
0.75 (.0011)	18	8 (0.31)	White	Taped	5000 pc(s).	4051.599
1 (.0015)	18	8 (0.31)	Yellow	Taped	5000 pc(s).	4051.601
1.5 (.0023)	16	8 (0.31)	Red	Taped	5000 pc(s).	4051.603
2.5 (.0038)	14	8 (0.31)	Blue	Taped	3000 pc(s).	4051.750

For manual wire processing and crimping machines 0.5 - 2.5 mm² (.0007 - .0038 in.²)

For cross-section mm ² (in. ²)	AWG	Length mm (in.)	Color	Delivery form	Packs of	Model No.
0.14 (.0002)	26	8 (0.31)	Grey	Loose	500 pc(s).	4050.752
0.25 (.0003)	24	8 (0.31)	Light Blue	Loose	500 pc(s).	4050.754
0.34 (.0005)	22	8 (0.31)	Turquoise	Loose	500 pc(s).	4050.757
0.5 (.0007)	20	8 (0.31)	Orange	Loose	500 pc(s).	4050.760
0.5 (.0007)	20	10 (0.39)	Orange	Loose	500 pc(s).	4050.761
0.75 (.0011)	18	8 (0.31)	White	Loose	500 pc(s).	4050.764
0.75 (.0011)	18	10 (0.39)	White	Loose	500 pc(s).	4050.766
1 (.0015)	18	8 (0.31)	Yellow	Loose	500 pc(s).	4050.769
1 (.0015)	18	10 (0.39)	Yellow	Loose	500 pc(s).	4050.770
1.5 (.0023)	16	8 (0.31)	Red	Loose	500 pc(s).	4050.773
1.5 (.0023)	16	10 (0.39)	Red	Loose	500 pc(s).	4050.774
2.5 (.0038)	14	8 (0.31)	Blue	Loose	500 pc(s).	4050.734
2.5 (.0038)	14	10 (0.39)	Blue	Loose	500 pc(s).	4050.779
4 (.0062)	12	8 (0.31)	Grey	Loose	500 pc(s).	4050.782
4 (.0062)	12	10 (0.39)	Grey	Loose	500 pc(s).	4050.735
6 (.0093)	10	12 (0.47)	Black	Loose	100 pc(s).	4050.785



Insulation stripping tools



Wire stripper

For stripping cables and conductors. Self-adjusting, with ergonomically styled handle, replaceable insulation stripping blade.

Benefits:

- Flexible end stop for the insulation stripping length
- Integrated wire cutter
- Automatic adjustment mechanism for a wide range of insulations and conductor diameters
- Dies compatible with all types of pliers, may be replaced in a few actions
- Two-component handle with anti-slip soft zone

Color:

- Handle: Anthracite and Rittal pink

+ Accessories:

- Spare blade, see page 23

For cross-section mm ² (in. ²)	AWG	Length mm (in.)	Note	Packs of	Model No.
0.02 - 10 (3.1 - 0.015)	34 - 8	191 (7.51)	-	1 pc(s).	4054.300
0.1 - 4 (.0001 - .0062)	28 - 12	191 (7.51)	Also suitable for rubber and silicone insulation	1 pc(s).	4054.310
4 - 16 (.0062 - .024)	12 - 5	191 (7.51)	-	1 pc(s).	4054.305

Stripping tool

For cables Ø 2.5 - 11mm

For stripping installation cables and wires.

Color:

- Handle: Anthracite and Rittal pink

For cable diameters mm (in.)	Length mm (in.)	Packs of	Model No.
2.5 - 11 (.098 - .433)	90.5 (3.56)	1pc(s).	4054.400

+ Accessories:

- Spare blade, see page 23

Stripping tool

For cables Ø 8 - 13 mm

For stripping single- and multi-wire signal, pilot and fiberglass cables.

Color:

- Handle: Anthracite and Rittal pink

For cable diameters mm (in.)	Length mm (in.)	Packs of	Model No.
8 - 13 (.314 - .511)	125 (4.92)	1pc(s).	4054.405

Insulation stripping tools

Stripping tool

For cables Ø 4.5 - 40 mm

For stripping cables. Vertically hinged blade for creating round, longitudinal and spiral cuts.

Color:

– Handle: Anthracite and Rittal pink

For cable diameters mm (in.)	Length mm (in.)	Packs of	Model No.
4.5 - 40 (.177 - 1.57)	167 (6.57)	1pc(s).	4054.410

+ Accessories:

– Spare blade, see page 23



Spare blade

For wire strippers

Interchangeable blade cassettes for cables with different cross-sections. Also suitable for special insulations.

To fit Model No.	For cross-section mm ² (in. ²)	Color	Packs of	Model No.
4054.300	0.02 - 10 (3.10 - .015)	Black	1pc(s).	4054.500
4054.310	0.1 - 4 (.0001 - .006)	Blue	1pc(s).	4054.510
4054.305	4 - 16 (.006 - .024)	Red	1pc(s).	4054.505



Spare blade

For stripping tools

Easily replaceable blades for stripping wires and cables.

To fit Model No.	For cable diameters mm (in.)	Packs of	Model No.
4054.400	2.5 - 11 (.098 - .433)	1pc(s).	4054.520
4054.410	4.5 - 40 (.177 - .157)	1pc(s).	4054.530



Cutting tools



Side cutter

For copper and aluminum conductors.

Benefits:

- Guarantees long-term stable cutting performance and a clean cut
- Ergonomically styled handles for fatigue-free non-slip working

Material:

- High quality special tool steel

Surface finish:

- Matt, plated

Color:

- Handle: Anthracite and Rittal pink

For cable diameters mm (in.)	Length mm (in.)	Design	Packs of	Model No.
0.2 - 11 (.0078 - .433)	160 (6.29)	Straight	1 pc(s).	4054.600



Electronic side cutter

With pointed head, 21° angled blades and small chamfer.

Benefits:

- Even, smooth-running opening with opening spring
- Ergonomically styled handles
- Box-joint for permanent stability and optimum force progression

Material:

- High quality special tool steel

Surface finish:

- Polished, oiled

Color:

- Handle: Anthracite and Rittal pink

Length mm (in.)	Packs of	Model No.
115 (4.52)	1 pc(s).	4054.750



Cable cutter

For copper and aluminum conductors.

Benefits:

- Ergonomically styled handles for fatigue-free, non-slip working

Material:

- High-quality special tool steel

Color:

- Handle: Anthracite and Rittal pink

For cross-section mm ² (in. ²)	For cable diameters mm (in.)	Length mm (in.)	Design	Packs of	Model No.
0.5 - 35 (.0007 - .0542)	12 (.472)	160 (6.29)	Straight	1 pc(s).	4054.650
0.5 - 50 (.0007 - .0775)	18 (.708)	180 (7.08)	Angled	1 pc(s).	4054.660



Electrician's scissors

For cutting copper, aluminum, Kevlar and plastic.

Benefits:

- High cutting performance due to micro-serration in the cutting zone
- Ergonomically styled handles
- Two-component handle with anti-slip soft zone
- Adjustable screw joint

Material:

- High quality special tool steel

Surface finish:

- Brushed

Color:

- Handle: Anthracite and Rittal pink

For cable diameters mm (in.)	Length mm (in.)	Packs of	Model No.
0.1 - 3.7 (.0039 - .1456)	160 (6.29)	1 pc(s).	4054.700

Combination pliers

With serrated gripping surface and integral ring spanner M8 to M10.

Benefits:

- Ergonomically styled handles for fatigue-free, non-slip working
- High force transmission for good holding and cutting performance
- Minimal force required

Material:

- High-quality special tool steel

Surface finish:

- Matt, plated

Color:

- Handle: Anthracite and Rlittal pinkl

Length mm (in.)	Packs of	Model No.
180 (7.08)	1 pc(s).	4054.800



Needle-nose pliers

With serrated gripping surface

Benefits:

- Ergonomically styled handles for fatigue-free, non-slip working

Material:

- High-quality special tool steel

Surface finish:

- Matt, plated

Color:

- Handle: Anthracite and Rlittal pinkl

Length mm (in.)	Packs of	Model No.
200 (7.87)	1 pc(s).	4054.850



Electronic needle-nose pliers

With smooth gripping surface.

Benefits:

- Ergonomically styled handles for fatigue-free, non-slip working
- Even, smooth-running opening with opening spring

Material:

- High-quality special tool steel

Surface finish:

- Matt, plated

Color:

- Handle: Anthracite and Rlittal pinkl

Length mm (in.)	Packs of	Model No.
120 (4.72)	1 pc(s).	4054.860



Slip-joint pliers

For width across flats 10 - 36 mm (.393 - 1.41 in.).

Benefits:

- Ergonomically styled handles for fatigue-free, non-slip working
- Smooth clamping surfaces avoid the usual damage caused by wrenches and pipe wrenches on screws/nuts
- QuickSnap ratcheting for fast adjustment to the workpiece with no push-button
- Robust box-joint

Material:

- High-quality special tool steel

Surface finish:

- Matt, plated

Color:

- Handle: Anthracite and Rlittal pinkl

Length mm (in.)	Packs of	Model No.
260 (10.2)	1 pc(s).	4054.900



Hole punching tools

Hydraulic punches



Manual hydraulic punch

For punching round, square and rectangular cutouts.

Benefits:

- Extend tool life with a built-in overpressure valve

Punching capacity:

- Round punch up to Ø 82 mm
- Square punch up to 68 x 68 mm
- Rectangular punch up to 46 x 86 mm
- Punching force 75 kN

Material:

- Aluminum

Supply includes:

- Manual hydraulic punch
- Hydraulic screw Ø 19 mm
- Hydraulic screw Ø 9.5/19 mm
- HSS pilot drill Ø 11mm
- Spacer sleeve set (3-part)
- Plastic case

Design	Packs of	Model No.
Straight	1 pc(s).	4055.000
With 90° angled and 360° rotating cylinder head	1 pc(s)	4055.010
Flexible, with hydraulic hose and separate cylinder	1 pc(s)	4055.020

Electric hydraulic punch

For punching round and square cutouts.

Benefits:

- Extend tool life with a built-in overpressure valve
- High performance drive motor with ergonomically styled handle
- Slide in the battery packs

Punching capacity:

- Round punch up to Ø 82 mm
- Square punch up to 68 x 68 mm
- Punching force 75 kN

Material:

- Aluminum

Supply includes:

- Electric hydraulic punch with 2 NiMH batteries, 18 V
- Charging device 18 - 28 V
- Hydraulic screw Ø 9.5/19 mm
- Hydraulic screw Ø 19 mm
- Spacer sleeve set (3-part)
- HSS pilot drill Ø 11 mm
- Plastic case

Packs of	Model No.
1 pc(s).	4055.040

Hole punching tools

Hydraulic punches

Manual hydraulic punch set, M16 - M63

Manual hydraulic punch in a practical set with hole punches for sheet steel. Maximum machinable material thickness 2 or 3 mm.

Benefits:

- Extend tool life with a built-in overpressure valve

Supply includes:

- Manual hydraulic punch, straight
- 7 splitter hole punches, triple splitting
- Hydraulic screw Ø 19 mm
- Hydraulic screw Ø 9.5/19 mm
- HSS pilot drill Ø 10 mm
- Spacer sleeve set (3-part)
- Plastic case

For threads	Ø punch mm (in.)	Packs of	Model No.
M16	16.2 (.637)	1 pc(s).	4055.070
M20	20.4 (.803)		
M25	25.4 (1)		
M32	32.5 (1.27)		
M40	40.5 (1.59)		
M50	50.5 (1.98)		
M63	63.5 (2.5)		



Manual hydraulic punch set, M16 - M40

Manual hydraulic punch in a practical set with hole punches for sheet steel. Maximum machinable material thickness 2 or 3 mm.

Design:

- With 90° angled and 360° rotating cylinder head

Benefits:

- Extend tool life with a built-in overpressure valve

Supply includes:

- Manual hydraulic punch
- 5 splitter hole punches, triple splitting
- Hydraulic screw Ø 19 mm
- Hydraulic screw Ø 9.5/19 mm
- HSS pilot drill Ø 10 mm
- Spacer sleeve set (3-part)
- Plastic case

For threads	Ø punch mm (in.)	Packs of	Model No.
M16	16.2 (.637)	1 pc(s).	4055.080
M20	20.4 (.803)		
M25	25.4 (1)		
M32	32.5 (1.27)		
M40	40.5 (1.59)		



Manual hydraulic punch set, PG 9 - PG 48

Manual hydraulic punch in a practical set with hole punches for sheet steel. Maximum machinable material thickness 2 or 3 mm.

Design:

- With 90° angled and 360° rotating cylinder head

Benefits:

- Extend tool life with a built-in overpressure valve

Supply includes:

- Manual hydraulic punch
- 9 splitter hole punches, triple splitting
- Hydraulic screw Ø 19 mm
- Hydraulic screw Ø 9.5/19 mm
- HSS pilot drill Ø 10 mm
- Spacer sleeve set (3-part)
- Plastic case

For PG	Ø punch mm (in.)	Packs of	Model No.
9	15.2 (.598)	1 pc(s).	4055.085
11	18.6 (.732)		
13	20.4 (.803)		
16	22.5 (.885)		
21	28.3 (1.11)		
29	37 (1.45)		
36	47 (1.85)		
42	54 (2.12)		
48	60 (2.36)		



Hole punching tools

Hole punches



Hole punch, round

For sheet steel:

For punching round cut-outs. The hole punch is operated with a wrench or hydraulic punch.

Design:

- With 3 cutting points

Supply includes:

- Die
- Stamp
- Tension screw without ball bearing

Note:

- When operating with wrenches, tension screws with ball bearings should be used

+ Accessories:

- Tension screws, see page 38
- Hydraulic tension screws, see page 38

For threads	For PG	Ø punch mm (in.)	Tension screw (Ø x L) mm (in.)	Tension screw with ball bearing Model No.	Hydraulic tension screw Ø mm (in.)	Hydraulic tension screw Model No.	Maximum machinable material thickness, sheet steel mm (in.)	Packs of	Model No
M12	7	12.7 (0.5)	9.5 x 50 (.37 x 1.9)	4055.631	9.5/19 (.37/.74)	4055.661	2 (.078)	1 pc(s).	4055.212
-	9	15.2 (0.59)	9.5 x 50 (.37 x 1.9)	4055.631	9.5/19 (.37/.74)	4055.661	2 (.078)	1 pc(s).	4055.215
M16	-	16.2 (0.63)	9.5 x 50 (.37 x 1.9)	4055.631	9.5/19(.37/.74)	4055.661	2 (.078)	1 pc(s).	4055.216
-	11	18.6 (0.73)	9.5 x 50 (.37 x 1.9)	4055.631	9.5/19 (.37/.74)	4055.661	2 (.078)	1 pc(s).	4055.218
M20	13	20.4 (0.80)	9.5 x 50 (.37 x 1.9)	4055.631	9.5/19 (.37/.74)	4055.661	2 (.078)	1 pc(s).	4055.220
-	16	22.5 (0.88)	9.5 x 50 (.37 x 1.9)	4055.631	9.5/19 (.37/.74)	4055.661	2 (.078)	1 pc(s).	4055.222
M25	-	25.4 (1.0)	9.5 x 50 (.37 x 1.9)	4055.631	9.5/19 (.37/.74)	4055.661	2 (.078)	1 pc(s)	4055.225
-	21	28.3 (1.11)	9.5 x 50 (.37 x 1.9)	4055.631	9.5/19 (.37/.74)	4055.661	2 (.078)	1 pc(s).	4055.228
-	-	30.5 (1.20)	9.5 x 50 (.37 x 1.9)	4055.631	9.5/19 (.37/.74)	4055.661	2 (.078)	1 pc(s).	4055.230
M32	-	32.5 (1.27)	9.5 x 50 (.37 x 1.9)	4055.631	9.5/19 (.37/.74)	4055.661	2 (.078)	1 pc(s).	4055.232
-	-	34.6 (1.36)	19 x 55 (.74 x 2.1)	4055.633	19 (.74)	4055.663	3 (.118)	1 pc(s).	4055.234
-	29	37 (1.45)	19 x 55 (.74 x 2.1)	4055.633	19 (.74)	4055.663	3 (.118)	1 pc(s).	4055.237
M40	-	40.5 (1.59)	19 x 55 (.74 x 2.1)	4055.633	19 (.74)	4055.663	3 (.118)	1 pc(s).	4055.240
-	-	43.2 (1.70)	19 x 55 (.74 x 2.1)	4055.633	19 (.74)	4055.663	3 (.118)	1 pc(s).	4055.243
-	36	47 (1.85)	19 x 75 (.74 x 2.9)	4055.634	19 (.74)	4055.663	3 (.118)	1 pc(s).	4055.247
-	-	49.6 (1.95)	19 x 75 (.74 x 2.9)	4055.634	19 (.74)	4055.663	3 (.118)	1 pc(s).	4055.249
M50	-	50.5 (1.98)	19 x 75 (.74 x 2.9)	4055.634	19 (.74)	4055.663	3 (.118)	1 pc(s).	4055.250
-	42	54 (2.12)	19 x 75 (.74 x 2.9)	4055.634	19 (.74)	4055.663	3 (.118)	1 pc(s).	4055.254
-	48	60 (2.36)	19 x 75 (.74 x 2.9)	4055.634	19 (.74)	4055.663	3 (.118)	1 pc(s).	4055.260
-	-	61.5 (2.42)	19 x 75 (.74 x 2.9)	4055.634	19 (.74)	4055.663	3 (.118)	1 pc(s).	4055.261
M63	-	63.5 (2.50)	19 x 75 (.74 x 2.9)	4055.634	19 (.74)	4055.663	3 (.118)	1 pc(s).	4055.263

Hole punching tools

Hole punches

Hole punch set, metric

For sheet steel

For punching round cut-outs. The hole punch is operated with a wrench or hydraulic punch.

Design

- With 3 cutting points

Supply includes:

- 5 dies
- 5 stamps
- Plastic case

Note:

- When operating with wrenches, tension screws with ball bearings should be used.

+ Accessories:

- Tension screws, see page 38
- Hydraulic tension screw, see page 38

For threads	Ø punch mm (in.)	Tension screw with ball bearing Model No.	Hydraulic tension screw Model No.	Maximum machinable material thickness, sheet steel mm (in.)	Packs of	Model No
M16	16.2 (.637)	4055.631	4055.661	2 (.078)	1 pc(s).	4055.480
M20	20.4 (.803)	4055.631	4055.661	2 (.078)		
M25	25.4 (1)	4055.631	4055.661	2 (.078)		
M32	32.5 (1.27)	4055.631	4055.661	2 (.078)		
M40	40.5 (1.59)	4055.633	4055.663	3 (.118)		



Hole punch set, PG

For sheet steel

For punching round cut-outs. The hole punch is operated with a wrench or hydraulic punch.

Design

- With 3 cutting points

Supply includes:

- 5 dies
- 5 stamps
- 2 tension screws with ball bearing Ø 9.5x 50mm
- HSS pilot drill Ø 11mm
- 1 tube of lubricant paste
- Plastic case

Note:

- When operating with wrenches, tension screws with ball bearings should be used.

+ Accessories:

- Hydraulic tension screws, see page 38

For PG	Ø punch mm (in.)	Hydraulic tension screw Model No.	Maximum machinable material thickness, sheet steel mm (in.)	Packs of	Model No
9	15.2 (.598)	4055.661	2 (.078)	1 pc(s).	4055.481
11	18.6 (.732)				
13	20.4 (.803)				
16	22.5 (.885)				
21	28.3 (1.11)				



Hole punching tools

Hole punches



Splitter hole punch, round

For sheet steel, with triple splitting:
For punching round cut-outs. The hole punch is operated with a wrench or hydraulic punch.

Design:
– With triple splitting

Supply includes:
– Die
– Stamp

Note:

– When operating with wrenches, tension screws with ball bearings should be used

+ Accessories:

– Tension screws, see page 38
– Hydraulic tension screws, see page 38

For threads	For PG	Ø punch mm (in.)	Tension screw (Ø x L) mm (in.)	Tension screw with ball bearing Model No.	Hydraulic tension screw Ø mm (in.)	Hydraulic tension screw Model No.	Maximum machinable material thickness, sheet steel mm (in.)	Packs of	Model No
M12	–	12.5 (0.49)	6 x 40 (.23 x 1.5)	4055.630	6/19 (.23/.74)	4055.660	1.5 (.059)	1 pc(s).	4055.512
–	9	15.2 (0.59)	9.5 x 50 (.37 x 1.9)	4055.631	9.5/19 (.37/.74)	4055.661	2 (.078)	1 pc(s).	4055.515
M16	–	16.2 (0.63)	9.5 x 50 (.37 x 1.9)	4055.631	9.5/19 (.37/.74)	4055.661	2 (.078)	1 pc(s).	4055.516
–	11	18.6 (0.73)	9.5 x 50 (.37 x 1.9)	4055.631	9.5/19 (.37/.74)	4055.661	2 (.078)	1 pc(s).	4055.518
M20	13	20.4 (0.80)	9.5 x 50 (.37 x 1.9)	4055.631	9.5/19 (.37/.74)	4055.661	2 (.078)	1 pc(s).	4055.520
–	16	22.5 (0.88)	9.5 x 50 (.37 x 1.9)	4055.631	9.5/19 (.37/.74)	4055.661	2 (.078)	1 pc(s).	4055.522
M25	–	25.4 (1.0)	9.5 x 50 (.37 x 1.9)	4055.631	9.5/19 (.37/.74)	4055.661	2 (.078)	1 pc(s)	4055.525
–	21	28.3 (1.11)	9.5 x 50 (.37 x 1.9)	4055.631	9.5/19 (.37/.74)	4055.661	2 (.078)	1 pc(s).	4055.528
–	–	30.5 (1.20)	9.5 x 50 (.37 x 1.9)	4055.631	9.5/19 (.37/.74)	4055.661	2 (.078)	1 pc(s).	4055.530
M32	–	32.5 (1.27)	19 x 55 (.74 x 2.1)	4055.633	19 (.74)	4055.663	3 (.118)	1 pc(s).	4055.532
–	–	34.6 (1.36)	19 x 55 (.74 x 2.1)	4055.633	19 (.74)	4055.663	3 (.118)	1 pc(s).	4055.534
–	29	37 (1.45)	19 x 55 (.74 x 2.1)	4055.633	19 (.74)	4055.663	3 (.118)	1 pc(s).	4055.537
M40	–	40.5 (1.59)	19 x 75 (.74 x 2.9)	4055.634	19 (.74)	4055.663	3 (.118)	1 pc(s).	4055.540
–	–	43.2 (1.70)	19 x 75 (.74 x 2.9)	4055.634	19 (.74)	4055.663	3 (.118)	1 pc(s).	4055.543
–	36	47 (1.85)	19 x 75 (.74 x 2.9)	4055.634	19 (.74)	4055.663	3 (.118)	1 pc(s).	4055.547
–	–	49.6 (1.95)	19 x 75 (.74 x 2.9)	4055.634	19 (.74)	4055.663	3 (.118)	1 pc(s).	4055.549
M50	–	50.5 (1.98)	19 x 75 (.74 x 2.9)	4055.634	19 (.74)	4055.663	3 (.118)	1 pc(s).	4055.550
–	42	54 (2.12)	19 x 75 (.74 x 2.9)	4055.634	19 (.74)	4055.663	3 (.118)	1 pc(s).	4055.554
–	48	60 (2.36)	19 x 75 (.74 x 2.9)	4055.634	19 (.74)	4055.663	3 (.118)	1 pc(s).	4055.560
–	–	61.5 (2.42)	19 x 75 (.74 x 2.9)	4055.634	19 (.74)	4055.663	3 (.118)	1 pc(s).	4055.561
M63	–	63.5 (2.50)	19 x 75 (.74 x 2.9)	4055.634	19 (.74)	4055.663	3 (.118)	1 pc(s).	4055.563

Hole punching tools

Hole punches

Splitter hole punch set, M16 to M40

For sheet steel with triple splitting

For punching round cut-outs. The hole punch is operated with a wrench or hydraulic punch.

Design

- With triple splitting

Supply includes:

- 5 dies
- 5 stamps
- Plastic case

Note:

- When operating with wrenches, tension screws with ball bearings should be used.

+ Accessories:

- Tension screws, see page 38
- Hydraulic tension screws, see page 38



For threads	Ø punch mm (in.)	Tension screw with ball bearing Model No.	Hydraulic tension screw Model No.	Maximum machinable material thickness, sheet steel mm (in.)	Packs of	Model No
M16	16.2 (.598)	4055.631	4055.661	2	1 pc(s).	4055.580
M20	20.4 (.732)	4055.631	4055.661	2		
M25	25.4 (.803)	4055.631	4055.661	2		
M32	32.5 (.885)	4055.633	4055.663	3		
M40	40.5 (1.11)	4055.634	4055.663	3		

Splitter hole punch set, M12 to M40

For sheet steel with triple splitting

For punching round cut-outs. The hole punch is operated with a wrench or hydraulic punch.

Design

- With triple splitting

Supply includes:

- 6 dies
- 6 stamps
- Tension screw with ball bearing Ø 6 x 40 mm
- Tension screw with ball bearing Ø 9.5 x 50 mm
- Tension screw with ball bearing Ø 19 x 55 mm
- HSS pilot drill Ø 10 mm
- 1 can of lubricant
- Plastic case

Note:

- When operating with wrenches, tension screws with ball bearings should be used.

+ Accessories:

- Hydraulic tension screws, see page 38



For threads	Ø punch mm (in.)	Hydraulic tension screw Model No.	Maximum machinable material thickness, sheet steel mm (in.)	Packs of	Model No
M12	12.5 (.492)	4055.660	1.5 (.059)	1 pc(s).	4055.581
M16	16.2 (.637)	4055.661	2 (.078)		
M20	20.4 (.803)	4055.661	2 (.078)		
M25	25.4 (1.00)	4055.661	2 (.078)		
M32	32.5 (1.27)	4055.663	3 (.118)		
M40	40.5 (1.59)	4055.663	3 (.118)		

Hole punching tools

Hole punches



Splitter hole punch set, PG 9 to PG 21

For sheet steel with triple splitting

For punching round cut-outs. The hole punch is operated with a wrench or hydraulic punch.

Design

– With triple splitting

Supply includes:

- 6 dies
- 6 stamps
- 2 Tension screws with ball bearing Ø 9.5 x 50 mm
- HSS pilot drill Ø 10 mm
- 1 tube of lubricant paste
- Plastic case

Note:

– When operating with wrenches, tension screws with ball bearings should be used.

Accessories:

– Hydraulic tension screws, see page 38

For PG	Ø punch mm (in.)	Hydraulic tension screw Model No.	Maximum machinable material thickness, sheet steel mm (in.)	Packs of	Model No
9 11 13 16 21	15.2 (.598) 18.6 (.732) 20.4 (.803) 22.5 (.885) 28.3 (1.11) 30.5 (1.20)	4055.661	2 (.078)	1 pc(s).	4055.582

Hole punching tools

Hole punches

Splitter hole punch, round

For stainless steel, round, with triple splitting

For punching round cut-outs. The hole punch is operated with a wrench or hydraulic punch.

Design

– With triple splitting

Supply includes:

– Die
– Stamp

Note:

– When operation with wrenches, tension screws with ball bearing should be used.

! Also required:

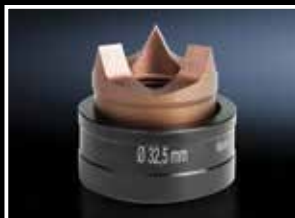
– Tension screws, see page 38
– Hydraulic tension screw, see page 38
– Hydraulic tension screw, see page 38



For threads	For PG	Ø punch mm (in.)	Tension screw (Ø x L) mm (in.)	Tension screw with ball bearing Model No.	Hydraulic tension screw Ø mm (in.)	Hydraulic tension screw Model No.	Maximum machinable material thickness, stainless steel mm (in.)	Packs of	Model No
–	9	15.2 (0.59)	11.1 x 60 (.43 x 2.3)	4055.632	11.1/19 (.23/.74)	4055.665	2 (.078)	1 pc(s).	4055.115
M16	–	16.2 (0.63)	11.1 x 60 (.43 x 2.3)	4055.632	11.1/19 (.37/.74)	4055.665	2 (.078)	1 pc(s).	4055.116
–	11	18.6 (0.73)	11.1 x 60 (.43 x 2.3)	4055.632	11.1/19 (.37/.74)	4055.665	2 (.078)	1 pc(s).	4055.118
M20	13	20.4 (0.80)	11.1 x 60 (.43 x 2.3)	4055.632	11.1/19 (.37/.74)	4055.665	2 (.078)	1 pc(s).	4055.120
–	16	22.5 (0.88)	11.1 x 60 (.43 x 2.3)	4055.632	11.1/19 (.37/.74)	4055.665	2 (.078)	1 pc(s).	4055.122
M25	–	25.4 (1.0)	11.1 x 60 (.43 x 2.3)	4055.632	11.1/19 (.37/.74)	4055.665	2 (.078)	1 pc(s).	4055.125
–	21	28.3 (1.11)	19 x 55 (.74 x 2.1)	4055.633	19 (.74)	4055.663	2.5 (.098)	1 pc(s).	4055.128
–	–	30.5 (1.20)	19 x 55 (.74 x 2.1)	4055.633	19 (.74)	4055.663	2.5 (.098)	1 pc(s).	4055.130
M32	–	32.5 (1.27)	19 x 55 (.74 x 2.1)	4055.633	19 (.74)	4055.663	2.5 (.098)	1 pc(s).	4055.132
–	–	34.6 (1.36)	19 x 55 (.74 x 2.1)	4055.633	19 (.74)	4055.663	2.5 (.098)	1 pc(s).	4055.134
–	29	37 (1.45)	19 x 55 (.37 x 1.9)	4055.633	19 (.74)	4055.663	2.5 (.098)	1 pc(s).	4055.137
M40	–	40.5 (1.59)	19 x 75 (.74 x 2.9)	4055.634	19 (.74)	4055.663	2.5 (.098)	1 pc(s).	4055.140
–	–	43.2 (1.70)	19 x 75 (.74 x 2.9)	4055.634	19 (.74)	4055.663	2.5 (.098)	1 pc(s).	4055.143
–	36	47 (1.85)	19 x 75 (.74 x 2.9)	4055.634	19 (.74)	4055.663	2.5 (.098)	1 pc(s).	4055.147
–	–	49.6 (1.95)	19 x 75 (.74 x 2.9)	4055.634	19 (.74)	4055.663	2.5 (.098)	1 pc(s).	4055.149
M50	–	50.5 (1.98)	19 x 75 (.74 x 2.9)	4055.634	19 (.74)	4055.663	2.5 (.098)	1 pc(s).	4055.150
–	42	54 (2.12)	19 x 75 (.74 x 2.9)	4055.634	19 (.74)	4055.663	2.5 (.098)	1 pc(s).	4055.154
–	48	60 (2.36)	19 x 75 (.74 x 2.9)	4055.634	19 (.74)	4055.663	2.5 (.098)	1 pc(s).	4055.160
–	–	61.5 (2.42)	19 x 75 (.74 x 2.9)	4055.634	19 (.74)	4055.663	2.5 (.098)	1 pc(s).	4055.161
M63	–	63.5 (2.50)	19 x 75 (.74 x 2.9)	4055.634	19 (.74)	4055.663	2.5 (.098)	1 pc(s).	4055.163

Hole punching tools

Hole punches



Splitter hole punch set, metric

For stainless steel, round, with triple splitting

For punching round cut-outs. The hole punch is operated with a wrench or hydraulic punch.

Design

- With triple splitting

Supply includes:

- 5 dies
- 5 stamps
- Plastic case

Note:

- When operating with wrenches, tension screws with ball bearings should be used.

! Also required:

- Tension screws, see page 38
- Hydraulic tension screw, see page 38
- Hydraulic tension screw, see page 38

For threads	Ø punch mm (in.)	Tension screw with ball bearing Model No.	Hydraulic tension screw Model No.	Maximum machinable material thickness, stainless steel mm (in.)	Packs of	Model No.
M16	16.2 (.637)	4055.632	4055.665	2 (.078)	1 pc(s).	4055.180
M20	20.4 (.803)	4055.632	4055.665	2 (.078)		
M25	25.4 (1.00)	4055.632	4055.665	2 (.078)		
M32	32.5 (1.27)	4055.633	4055.663	2.5 (.098)		
M40	40.5 (1.59)	4055.634	4055.663	2.5 (.098)		

Hole punch, square

For sheet steel

For punching square cut-outs. The hole punch is operated with a hydraulic punch.

Benefits:

- With side ejector for the waste
- No jamming of the die

Supply includes:

- Die
- Stamp
- Tension bolts
- Lock nut
- Plastic case



Assembly:

- For hole punch 4055.392, a special tension bolt and a space sleeve are additionally required.

□ punch mm (in.)	Maximum machine material thickness, sheet steel mm (in.)	Product specific scope of supply	Operation, manual	Operation, hydraulic	Packs of	Model No.
22.2 x 22.2 (0.87 x 0.87)	2 (.078)	Pressure nut with ball bearing Adaptor for hydraulics	■	■	1 pc(s).	4055.322
45.5 x 45.5 (1.79 x 1.79)	3 (.118)	-	-	■	1 pc(s).	4055.345
46 x 46 (1.81 x 1.81)	3 (.118)	-	-	■	1 pc(s).	4055.346
50.8 x 50.8 (2.0 x 2.0)	3 (.118)	-	-	■	1 pc(s).	4055.350
68 x 68 (2.67 x 2.67)	3 (.118)	-	-	■	1 pc(s).	4055.368
92 x 92 (3.62 x 3.62)	3 (.118)	-	-	■	1 pc(s).	4055.392

Hole punching tools


Hole punches

Spacer sleeve

For hole punch, square

For punching cut-outs from size 92 x 92 mm.
(3.6 x 3.6 in.)

To fit Model No.	Packs of	Model No.
4055.392	1 pc(s.)	4055.667

 **Also required:**

– Special tension bolt, see page38




Special tension bolt

For hole punch, square

For punching cut-outs from size 92 x 92 mm.
(3.6 x 3.6 in.)

To fit Model No.	Packs of	Model No.
4055.392	1 pc(s.)	4055.666

 **Also required:**

– Spacer sleeve, see page 38



Hole punching tools

Hotel punches



Hole punch, rectangular

For sheet steel

For punching rectangular cut-outs. The hole punch is operated with a wrench or hydraulic punch.

Benefits:

- With side ejector for the waste
- No jamming of the die

Supply includes:

- Die
- Stamp
- Tension bolts
- Lock nut
- Plastic case

□ punch mm (in.)	Maximum machinable material thickness, sheet steel mm (in.)	Product-specific scope of supply	Operation, manual	Operation, hydraulic	Packs of	Model No.
22 x 30 (.86 x 1.65)	2 (.078)	Pressure nut with ball bearing Adaptor for hydraulics	■	■	1 pc(s).	4055.400
22 x 42 (.86 x 1.65)	2 (.078)	Pressure nut with ball bearing Adaptor for hydraulics	■	■	1 pc(s).	4055.401
45 x 92 (1.77 x 3.62)	2 (.078)	-	-	■	1 pc(s).	4055.402
46 x 92 (1.81 x 3.62)	2 (.078)	-	-	■	1 pc(s).	4055.403



Hole punch, special contour

For sheet steel

For punching cut-outs with a special contour. The hole punch is operated with a wrench or hydraulic punch.

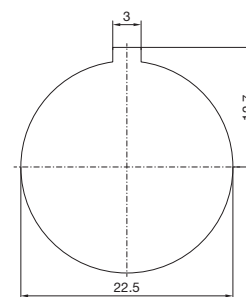
Benefits:

- With side ejector for the waste
- No jamming of the die

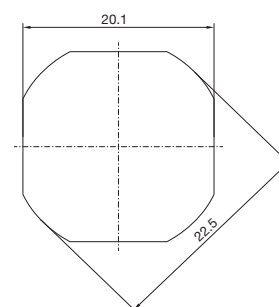
Supply includes:

- Die
- Stamp
- Tension bolts
- Lock nut
- Pressure nut with ball bearing
- Adaptor for hydraulics
- Plastic case

4055.440



4055.441



Design	Ø punch mm (in.)	Maximum machinable material thickness, sheet steel mm (in.)	Packs of	Model No.
With 3 mm (.118 in.) lug	22.5 (.885)	2 (.078)	1 pc(s).	4055.440
Flattened to 20.1 mm (.791 in.) on 4 sides	22.5 (.885)	2 (.078)	1 pc(s).	4055.441

Hole punching tools

Hole punches

Hole punch, heavy connectors

For sheet steel

For punching rectangular cut-outs for connectors.
The hole punch is operated with a hydraulic punch.

Benefits:

- With side ejector for the waste
- No jamming of the die
- When the die and stamp are compressed, the mounting holes for connectors are made on the metal sheet between them

Supply includes:

- Die
- Stamp
- Tension bolts
- Lock nut

□ punch mm (in.)	No. of poles	Maximum machinable material thickness, sheet steel mm (in.)	Packs of	Model No.
36 x 52 (1.41 x 2.04)	6-pole	2 (.078)	1 pc(s).	4055.460
36 x 65 (1.41 x 2.55)	10-pole	2 (.078)	1 pc(s).	4055.461
36 x 86 (1.41 x 3.38)	16-pole	2 (.078)	1 pc(s).	4055.463
36 x 112 (1.41 x 4.40)	24-pole	2 (.078)	1 pc(s).	4055.465



Hole punch, sub-D

For sheet steel and stainless steel

For punching rectangular cut-outs for connectors.
The holepunch is operated with a wrench or hydraulic punch.

Benefits:

- With side ejector for the waste
- No jamming of the die
- Anti-twist axles for stamps and dies are used as tension bolts.

Supply includes:

- Die
- Stamp
- Tension bolts
- Lock nut
- Pressure nut with ball bearing
- Adaptor for hydraulics
- Plastic case

□ punch mm (in.)	No. of poles	Maximum machinable material thickness, sheet steel mm (in.)	Maximum machinable material thickness, stainless steel mm (in.)	Packs of	Model No.
19.8 x 11.3 (0.77 x 0.44)	9-pole	2 (.078)	1.5 (.059)	1 pc(s).	4055.470
28.2 x 11.3 (1.11 x 0.44)	15-pole	2 (.078)	1.5 (.059)	1 pc(s).	4055.471
41.9 x 11.3 (1.64 x 0.44)	25-pole	1.75 (.068)	1.25 (.049)	1 pc(s).	4055.472
58.4 x 11.3 (2.29 x 0.44)	37-pole	1.75 (.068)	1.25 (.049)	1 pc(s).	4055.473
55.7 x 13.9 (2.19 x 0.54)	50-pole	1.65 (.064)	1 (.039)	1 pc(s).	4055.474



Hole punching tools

Hole punches



Tension screws

Accessories for hole punches. Required as a connecting part between the die and stamp.

Note:

– For operation with wrench

Tension screw (ø x L) mm (in.)	Packs of	Model No.
9.5 x 40 (.374 x 1.57)	1 pc(s).	4055.600
9.5 x 50 (.374 x 1.96)	1 pc(s).	4055.601
19 x 55 (.748 x 2.16)	1 pc(s).	4055.602
19 x 75 (.748 x 2.95)	1 pc(s).	4055.603



Tension screws

With ball bearing

Accessories for hole punches. Required as a connecting part between the die and stamp.

Note:

– For operation with wrench

Tension screw (ø x L) mm (in.)	Packs of	Model No.
6 x 40 (.236 x 1.57)	1 pc(s).	4055.630
9.5 x 50 (.374 x 1.96)	1 pc(s).	4055.631
11.1 x 60 (11.1 x 2.36)	1 pc(s).	4055.632
19 x 55 (.748 x 2.16)	1 pc(s).	4055.633
19 x 75 (.748 x 2.95)	1 pc(s).	4055.634



Hydraulic tension screw

Accessories for hole punches. Required as a connecting part between the die and stamp.

Note:

– For operation via hydraulic punch

Hydraulic tension screw ø mm (in.)	Product specific scope of supply	Packs of	Model No.
6/19 (.236/.748)	Adaptor for hydraulics	1 pc(s).	4055.660
9.5/19 (.374/.748)	Adaptor for hydraulics	1 pc(s).	4055.661
11.1/19 (.437/.748)	Adaptor for hydraulics	1 pc(s).	4055.662
19 (.748)	–	1 pc(s).	4055.663



Hole punching tools

Hole punches

Hydraulic tension screws for higher loads

Accessories for hole punches. Required as a connecting part between the die and stamp.

Benefits:

- Hydraulic tension screw made from high-alloy tool steel for higher loads

Note:

- For operation via hydraulic punch

Hydraulic tension screw ø mm (in.)	Packs of	Model No.
9.5/19 (.374/.748 in.)	1 pc(s).	4055.664
11.1/19 (.437/.748)	1 pc(s).	4055.665



Notching pliers

Punches key-way slot quickly and easily. Saves the time-consuming process of filing the grooves for anti-twist protection of push button, switches and instruments. Slots in sizes 3.2 mm (.125 in.) and 4.8 mm (.188 in.) can be created

Benefits:

- Long service life
- Stamp and die made from hardened tool steel
- Easy punching with large leverage

Material:

- Handles: Plastic-coated

Maximum machinable material thickness, sheet steel mm (in.)	Packs of	Model No.
2 (0.078)	1 pc(s).	4055.690



Rittal – The System.

Faster – better – everywhere.

- Enclosures
- Power Distribution
- Climate Control
- IT Infrastructure
- Software & Services

Rittal North America LLC

Woodfield Corporate Center
425 North Martingale Road, Suite 400 • Schaumburg, Illinois 60173 • USA
Phone: 937-399-0500 • Toll-free: 800-477-4000
Email: rittal@rittal.us • Website: www.rittal.us

Rittal Systems Ltd.

6485 Ordan Drive • Mississauga, Ontario L5T 1X2 • Canada
Phone: 905-795-0777 • Toll-free: 800-399-0748
Email: marketing@rittal.ca • Website: www.rittal.ca

Rittal Mexico

Dr. Roberto Gayol 1219-1B • Col. Del Valle Sur, 03100 • Mexico, D.F.
Phone: (+52) (55) 5559-5369 • Toll-free: 01 800 8 Rittal (748.825)
Email: info@rittal.com.mx • Website: www.rittal.com.mx

US446 ■ 6/19

ENCLOSURES

POWER DISTRIBUTION

CLIMATE CONTROL

IT INFRASTRUCTURE

SOFTWARE & SERVICES

FRIEDHELM LOH GROUP

