Rittal – The System.

Faster – better – everywhere.

▶ ## The baying system PS 4000

RITTAL

FRIEDHELM **L O H** GROUP

Design and technology customised to meet your needs

Top quality and economy characterise the PS system.

The profile is one of the core features of our successful concepts. It offers top quality combined with a maximum useful internal space, unlimited assembly due to 24 rows of holes in a 25 mm grid, no need for manual machining due to approx. 1000 square and 1000 round holes (for medium sized enclosures) as well as 144 tapped holes at corners where assembly work is mostly required.

Internationally acknowledged approvals, product certifications according to worldwide standards and comprehensive tests at our own test laboratories guarantee for top product quality - for you to be on the safe side.
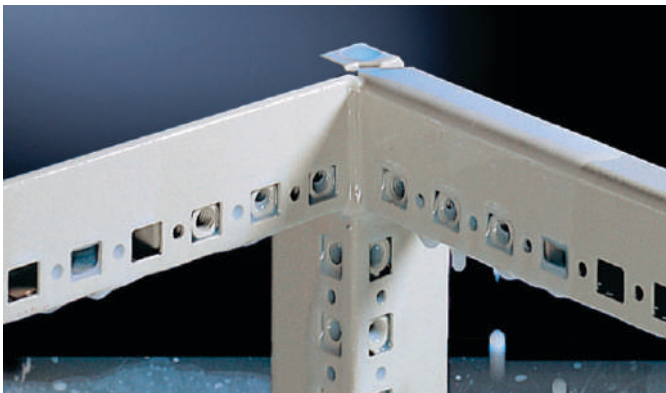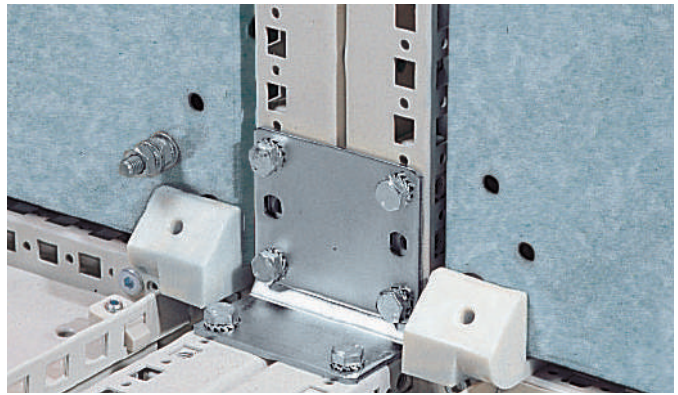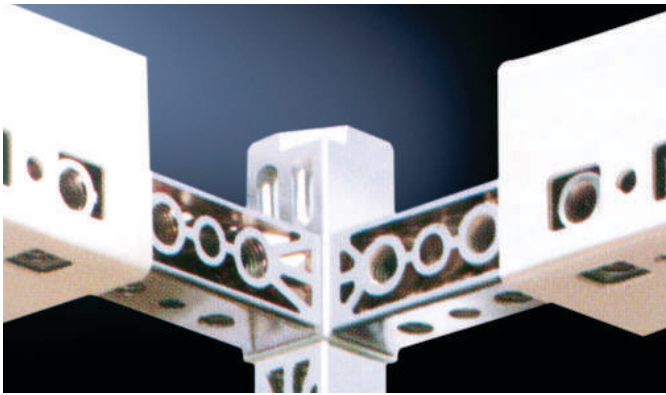
Eight plug-in corner connectors and additional welding provide for strong connections.

18 tapped holes in each corner provide for direct attachment of the mounting plate, of swing frame, cable clamp rails or baying brackets.

The surface is well protected by nano-ceramic coating, dipcoat primed.

Section through the vertical profile (above image) and the door with the tubular door frame. Stability and high protection category are provided by the profile and the labyrinth system.

Maximum sizes of orifices and two rows of holes in all twelve profiles provide for free access from all sides for universal installation.

Identical
the roof and base frame

Quick assembly -
just locate and fix it

Diversity
is offered by groove and assembly
systems.

At any point within the room
an attachment point can be
implemented.

PS 4000
Technology which has your solution.

The baying system PS 4000

Material:
Sheet steel
Enclosure frame: 9-fold profile
Door: 2.0 mm
Rear panel: 1.5 mm
Mounting plate: 3.0 mm
Gland plate: 1.5 mm.

Supply includes:
Enclosure frame with door, removable rear panel and roof plate, 4 eyebolts fitted, mounting plate, gland plates, depth stay as shipping brace (r/h door hinge, can be changed to opposite side - single door Lockable door on right - double door).

Surface finish:
Enclosure frame & bottom cover: Dipcoat primed.
Door, roof and rear panel: dipcoat primed, powder coated in textured RAL 7035 on the outside
Mounting plate & Gland plate: Galvanized sheet steel.

Protection Category:
IP 55 to EN 60 529
Complies with NEMA 12.

Single Door

Article No. PS	Size in mm W x H x D
4684.500	600x1800x400
4685.500	600x1800x500
4604.500	600x2000x400
4605.500	600x2000x500
4606.500	600x2000x600
4608.500	600x2000x800
4626.500	600x2200x600
4884.500	800x1800x400
4885.500	800x1800x500
4886.500	800X1800X600
4888.500	800x1800x800
4804.500	800x2000x400
4805.500	800x2000x500
4806.500	800x2000x600
4808.500	800x2000x800
4826.500	800x2200x600
4084.500	1000x1800x400

Double Door

Article No. PS	Size in mm W x H x D
4005.500	1000x2000x500
4006.500	1000x2000x600
4008.500	1000x2000x800
4284.500	1200x1800x400
4285.500	1200x1800x500
4286.500	1200x1800x600
4204.500	1200x2000x400
4205.500	1200x2000x500
4206.500	1200x2000x600
4208.500	1200x2000x800
4226.500	1200x2200x600

Configuration details:

500 : Enclosure frame, front door, rear bolted cover, roof plate with eyebolts, bottom cover with standard gland plate and one mounting plate.

501 : Enclosure frame, front door, rear door, roof plate with eyebolts, bottom cover with standard gland plate and one mounting plate.

510 : Enclosure frame, front door, rear bolted cover, roof plate with eyebolts, bottom cover with standard gland plate.

511 : Enclosure frame, front door, rear door, roof plate with eyebolts, bottom cover with standard gland plate.

521 : Enclosure frame, front door, rear door, roof plate with eyebolts, bottom cover with standard gland plate and two mounting plates.

Note: Enclosure with IP 65 & Seismic panels - available on request

*Special size available on request

PS Selection
Example:-

4	8	0	8	5	0	0
PS 4000 Series	Width	Height	Depth	RAL 7035	No. of Mounting plates	Rear panel/door
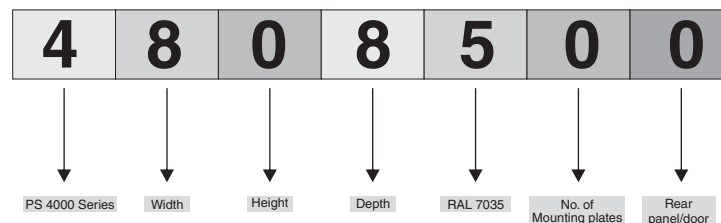
Width
6 – 600 W
8 – 800 W
0 – 1000 W
2 – 1200 W

Height
8 – 1800 H
0 – 2000 H
2 – 2200 H

Depth
4 – 400 D
5 – 500 D
6 – 600 D
8 – 800 D

Mounting plate
0 – 1 mounting plate
1 – without mounting plate
2 – 2 mounting plates

Rear
0 – Rear panel
1 – Rear door

Base / Plinth PS

For increased floor clearance or for cable entry available with a height of either 100 or 200 mm.

Material:
Sheet steel

Surface finish:
Color - RAL 7022 texture spray finished
Cover caps- plastic (color RAL 9005)

Supply includes:
4 corner pieces, 4 cover caps and removable
width & depth trim pre-configured assembly parts

For enclosures		Model No. SO	
Width (mm)	Depth (mm)	100 mm high	200 mm* high
600	400	**2804.200**	**2805.200**
600	500	**2807.200**	**2808.200**
600	600	**2813.200**	-
600	800	**2846.200**	-
800	400	**2823.200**	**2824.200**
800	500	**2829.200**	**2830.200**
800	600	**2833.200**	-
800	800	**2848.200**	-
1000	400	**2909.200**	**2910.200**
1000	500	**2914.200**	-
1000	600	**2916.200**	-
1200	400	**2836.200**	**2837.200**
1200	500	**2839.200**	**2840.200**
1200	600	**2844.200**	-
1200	800	**2853.200**	-
1000	800	**9788.062**	-

*Trim panels at the front and rear with fitted corner pieces and side trim panels without cover caps

Baying kit for PS :

The stable, secure standard connection,
including fixing material.

Material:
Hexagon steel section, Zinc plated, passivated

Supply includes:
Assembly parts

Packs of	Model No. PS
6	**4580.000**

Angular baying bracket for PS :

For baying two enclosures or as an additional
reinforcement to baying kit. PS 4580.000 or 4581.000

Material:
Sheet steel zinc plated, passivated

Supply includes:
Assembly parts

Note: Not suitable for use with a fitted divider panel

Packs of	Model No. PS
4	**4582.000**
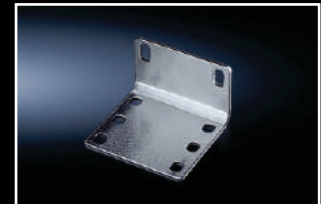
Quick- fit baying clamp for PS :

For quick in situ assembly, also suitable for
temporary use in the workshop.

Material:
Sheet steel zinc plated, passivated

Supply includes:
Assembly parts

Note: Not suitable for the transportation of bayed enclosure suites

Packs of	Model No. PS
6	**4581.000**

The baying system PS 4000

Accessories

Baying bracket for PS :

Baying in situations where the rear panels
and doors are not intended to be removed for
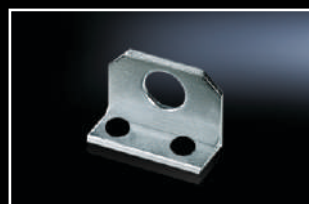baying or where divider panels and inner walls are
already fitted.

Material:
Sheet steel zinc plated, passivated

Supply includes:
Assembly parts

Packs of	Model No. PS
6 pairs	**4584.000**

Combination angle

For optimum distribution of tensile forces during
transportation of bayed enclosures by crane.

Material:
Sheet steel

Surface finish:
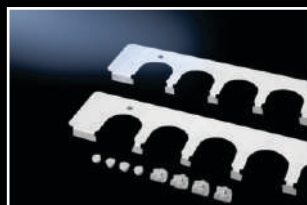Zinc plated

Supply includes:
Assembly parts.

Packs of	Model No. TS
4	**4540.000**

Cable entry plates

For
cable entry grommets
connector grommets
instead of segments of the standard divided gland plates.

Material:
Steel section, Zinc plated, passivated

Supply includes:
Assembly parts

Enclosure width (mm)	Cutouts per plate	Packs of[1]	Model No. PS
600	5	2	**4320.700**
800	8	2	**4321.700**
1000	10	2	**4323.700**
1200	6	4	**4325.700**

[1] compensating panel included

Cable entry grommets

In conjunction with the cable entry plate,
simple and fast sealing of cables inserted in the
base area of enclosures.

Material
Body : Polypropylene
Cover : Thermoplastic elastomer

Protection category
IP55 subject to correct mounting

Cables per grommet	max. Ø mm	Packs of	Model No. PS
8	13	25	**4316.000**
3	21	25	**4317.000**
1	47	25	**4318.000**

Connector grommets

Suitable for cable diameters from 8 to 36 mm

Packs of	Model No. PS
10	**4311.000**

Material:
Outer cover: Polypropylene covered with
thermoplastic elastomer
Seal: Cellular rubber

Protection category:
IP 55 subject to correct mounting.

Cable clamp rails

Mounting angle for TS, PS, PC, TP
Universal Console, Base / Plinths

For strain relief with cable entry. Depth -
variable mounting on a 25 mm pitch
Pattern on the horizontal enclosure section
or inside base/ plinth trim panels
with assembly bolts.

Enclosure width (mm)	Length (mm)	Packs of	Model No. PS
400	385	2	**4193.000**
600	585	2	**4191.000**
800	785	2	**4192.000**
1000	985	2	**4336.000**
1200	1185	2	**4196.000**

Material:
Steel

Surface finish:
Zinc plated

Supply includes:
Assembly parts

Cable clamps

for cable clamp rails
For fastening the cables to the cable clamp rails.

Material:
Sheet steel

Surface finish:
Zinc-plated

Supply includes:
Plastic insert

For cable diameter mm	Packs of	Model No. SZ
6 – 12	25	**2350.000**
12 – 16	25	**2351.000**
14 – 18	25	**2352.000**
18 – 22	25	**2353.000**
22 – 26	25	**2354.000**
26 – 30	25	**2355.000**
30 – 34	25	**2356.000**
34 – 38	25	**2357.000**
38 – 42	25	**2358.000**
42 – 46	25	**2359.000**
46 – 50	25	**2360.000**

System support rails

For heavy installed equipment
such as transformers.
T-head screw and slot in the
support rail to accommodate all
mounting dimensions.

Enclosure width (mm)	Packs of	Model No. PS
600	2	**4361.000**
800	2	**4362.000**
1000	2	**4347.000**
1200	2	**4363.000**

Note: fixing in the enclosure width only

Material: **Surface finish**:   **Supply includes**:

Sheet Steel   Zinc Plated

- 2 system support rails(45 x 25mm)
- 4 T - head screws M12 x 60 mm
- Assembly parts

The baying system PS 4000

Accessories

Side panels for PS, screw fastened

To finish off a complete enclosure unit.
Simply locate and secure with 6 screw fasteners

Material :
Sheet steel 1.5 mm

Surface Finish:
Dipcoat-primed, powder- coated
on the outside with RAL 7035 textured

Supply includes:
Assembly parts

| For enclosures | | Packs of | Model No. PS |
Height (mm)	Depth (mm)		
1800	400	2	**4184.235**
1800	500	2	**4185.235**
1800	600	2	**4186.235**
1800	800	2	**4188.235**
2000	400	2	**4104.235**
2000	500	2	**4105.235**
2000	600	2	**4106.235**
2000	800	2	**4108.235**
2200	400	2	**4124.235**
2200	500	2	**4125.235**
2200	600	2	**4126.235**
2200	800	2	**4128.235**

Door rail for PS

For direct screw-fixing to the tubular door frame

Material :
Sheet steel

Surface Finish:
Zinc plated

Supply includes:
Assembly screws

For door width (mm)	Model No. PS	Packs of
400	**4594.000**	20
500	**4309.000**	20
600	**4596.000**	20
800	**4598.000**	20
900	**4579.000**	20
1000	**4599.000**	20

Wiring plan pockets
of sheet steel

For TS, CM, PS PC, TP pedestal
For fastening to tubular door frames
at any height

Colour :
RAL 7035

Supply includes:
Assembly screws

D = 90mm

| For door width (mm) | Clearance opening in mm | | Model No. PS |
	W	H	
400	255	210	**4114.000**
500	355	210	**4115.000**
600	455	210	**4116.000**
800	655	210	**4118.000**
900	755	210	**4123.000**
1000	855	210	**4124.000**

Wiring plan pockets plastic

Material:
Polystyrene with self-adhesive
fastening strips.

For affixing to the inside surfaces
of doors.

Article No. SZ	For Format
2513.000	A3 landscape
2514.000	A4 Portrait
2515.000	A5 landscape

Accessories

Ergoform-S lock system

The unlocked handle folds down forwards and the lock is opened by swiveling. Prepared for the installation of all 27 mm lock inserts, version A as well as SZ lock and push-button inserts.

Material :
Die-cast zinc

Surface Finish:
Powder-coated

Design	Model No. SZ
RAL 7032 with brown handle	**2450.000**
RAL 7035 with brown handle	**2450.010**
Brown	**2451.000**
Matt nickel-plated	**2452.000**
RAL 7032	**2454.000**
RAL 7035	**2435.000**
RAL 7032[1) with brown handle and bracket	**2455.000**
RAL 7035[1) with brown handle and bracket	**2455.010**

[1) Hole diameter = 7 mm for padlock or multiple latch

Lock and push-button inserts

For installation in

- Comfort handle for semi-cylinders
- Ergo form - S standard
- Folding lever handle for CM

Version	Model No. SZ
Lock insert, lock no. 3524 E	**2467.000**
Push-button insert	**2468.000**
Lock and push-button insert, lock no. 2123; no other lock is possible	**2469.000**

Lock inserts

Version A, length 27 mm	Model No. PS
7 mm square	**2460.000**
8 mm square	**2461.000**
7 mm triangular	**2462.000**
8 mm triangular	**2463.000**
Screwdriver	**2464.000**
Daimler insert	**2465.000**
3 mm double-bit	**2466.000**
Fiat	**2307.000**
6.5 mm triangular (CNOMO)	**2460.650**

Mounting Plate infill

For a continuous mounting surface in bayed suites where the mounting plate is set forward.

Material :
Sheet steel, zinc plated, passivated.

Supply includes :
Assembly parts

Article No. TS/PS	For Encl Height
4590.700	1800
4591.700	2000
4592.700	2200

The baying system PS 4000

Accessories

Hinges 180°

For retrospective conversion of standard doors
with 130° hinges.
Including assembly parts.
For PS, universal console TP, TP pedestal

Material :
Aluminium

Surface finish :
Powder-coated in RAL 8019

Packs of	Model No.PS
6	**4189.000**

Rail systems

Horizontal support strips

Installation options:

– On the PS system punching, in the enclosure depth
– On the tubular door frame PS, TS
– On the outer mounting level TS

Material :
Sheet steel

Surface Finish:
Zinc plated

Supply includes:
Assembly screws

For Enclosure Width/Depth mm	Length mm	Packs of	Model No.PS
400	340	20	**4694.000**
500	440	20	**4695.000**
600	540	20	**4696.000**
800	740	20	**4697.000**

PS punched rails 23 x 23 mm

Installation options :

• On the horizontal enclosure section
  Directly via angle brackets PS 4181.000, mounting brackets
  PS 4182.000 or support brackets PS 4183.000 in conjunction with U nuts

• On the vertical enclosure section

  – Directly via support brackets TS
  – Via adaptor rail for PS compatibility in conjunction with angle brackets,
    mounting brackets or support brackets PS

Material :
Sheet steel

Surface Finish:
Zinc plated

⚠ **Also required:**
  – U nuts
  – Mounting brackets TS/PS or
  – Angle brackets, support brackets TS/PS

Length mm	For WHD mm	Packs of	Model No.PS
295	400	12	**4169.000**
395	500	12	**4170.000**
495	600	12	**4171.000**
695	800	12	**4172.000**
895	1000	12	**4173.000**
1095	1200	6	**4174.000**
1295	1400	6	**4393.000**
1495	1600	6	**4175.000**
1695	1800	6	**4176.000**
1895	2000	6	**4177.000**
2095	2200	6	**4178.000**

The baying system PS 4000

Accessories

PS punched section without mounting flange, 23 x 73 mm

with 5 rows of holes for universal skeleton structures or partial assembly.

Installation options:

- On the vertical enclosure section

    – Directly via support brackets TS
    – Via adaptor rail for PS compatibility in conjunction with support brackets PS

- On the horizontal enclosure section
  Directly via support brackets PS 4183.000

Material :
Sheet steel

Surface Finish:
Zinc plated

⚠ **Also required:**
    Support brackets PS/TS

Length mm	For WHD mm	Packs of	Model No.PS
295	400	4	**4374.000**
395	500	4	**4375.000**
495	600	4	**4376.000**
695	800	4	**4377.000**
895	1000	4	**4382.000**
1095	1200	4	**4378.000**
1695	1800	4	**4379.000**
1895	2000	4	**4380.000**
2095	2200	4	**4381.000**

PS punched section with mounting flange 23 x 73 mm

Variable, with 5 rows of holes for universal skeleton structures or partial assembly. Simply locate into the system punchings and secure.

Installation options:

- On the vertical enclosure section
    – Via adaptor rail for PS compatibility

- On the horizontal TS enclosure section
- On the PS system punchings,
  in the enclosure depth*

Material :
Sheet steel

Surface Finish:
Zinc plated

Supply includes:
Assembly screws

* Installation in enclosure depth PS,TP universal console, mm	Packs of	Model No.PS
400	4	**4369.000**
500	4	**4370.000**
600	4	**4371.000**
800	4	**4372.000**

**Installation in enclosure width / depth TS mm	Packs of	Model No.PS
600	4	**4364.000**
800	4	**4365.000**
1000	4	**4373.000**
1200	4	**4367.000**

** installation in enclosure width for PS

The baying system PS 4000

Accessories
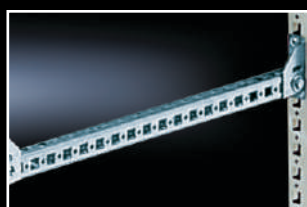
Angle bracket PS

For quick attachment of punched rails 23 x 23 mm.

Installation options:

- On the vertical TS enclosure section via
    – Adaptor rail for PS compatibility
- On the horizontal TS enclosure section
- On enclosures and rails with rectangular
    system punching 12.5 x 10.5 mm.

Material :
Sheet steel

Surface Finish:
Zinc plated

Supply includes (1 set) :
1 angle bracket, left

1 angle bracket, right

2 metal screws 5.5 x 13 mm

⚠ Also required :
– U nuts for punched rails
– Multi-tooth screws M6 x 12 mm, 2504.500

Packs of	Model No.PS
12 set	**4181.000**

Mounting bracket PS

For variable attachment of punched rail 23 x 23 mm.

Installation options:

- Optionally flush with :
    – Outer enclosure edge or
    – Enclosure clearance width
- On the vertical TS enclosure section via
    – Adaptor rail for PS compatibility,
- On the horizontal TS enclosure section
- On enclosures and rails with rectangular system punching 12.5 x 10.5 mm

Material :
Die-cast zinc

Supply includes (1 set) :
1 mounting bracket
1 screw M6 x 12 mm
1 cage nut M6

⚠ Also required :
– U nuts for punched rails (recommended: M6)
– Multi-tooth screws M6 x 12 mm, 2504.500

Packs of	Model No.PS
24 set	**4182.000**

Support bracket PS

For the attachment of punched sections without mounting flange 23 x 73 mm or punched rails 23 x 23 mm.

Packs of	Model No.PS
24 set	**4183.000**

Installation options:

- On the vertical TS enclosure section via
    - Snap-on nut TS 8800.806,
    - Adaptor rail for PS compatibility
- On the horizontal TS enclosure section
- On enclosures and rails with rectangular system punching 12.5 x 10.5 mm

Material :

Die-cast zinc

Supply includes (1 set) :

1 support bracket

2 countersunk screws

2 serrated lock washers

! Also required :

- U nuts for punched rails (recommended: M6)
- Multi-tooth screws M6 x 12 mm
- Adaptor rail for PS compatibility (when mounting on the vertical enclosure section)

Bracket/spacer

For fastening C rails, punched rails or cable clamp rails (angle section). On the sides, to accommodate square sections or tubes (Ø 20 mm). Attachment points with M8 thread.

Packs of	Model No.PS
6 set	**4199.000**

Installation options :

- On the vertical TS enclosure section via
    - Snap-on nut TS 8800.808, or
    - Adaptor rail for PS compatibility
- On the horizontal TS enclosure section
- On enclosures and rails with rectangular

system punching 12.5 x 10.5 mm
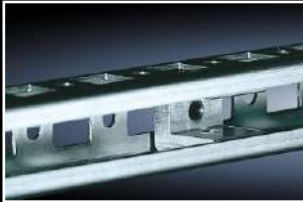
Material :

Die-cast zinc

Supply includes (1 set) :

1 bracket/spacer

2 screws M8 x 16 mm

2 spring lock washers

2 cage nuts M8

2 serrated lock washers

2 Metal screws

The baying system PS 4000
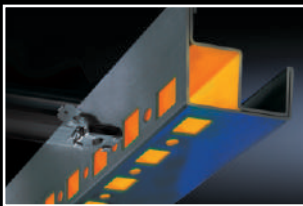
Accessories

U nuts

For

- Punched rail 23 x 23 mm
- Punched section without mounting flange, 23 x 73 mm
- Punched section without mounting flange, 45 x 88 mm
- Punched section with mounting flange, 23 x 73 mm

For mounting punched rails and punched sections without
mounting flanges on angle brackets, mounting
brackets and support brackets, we recommend
U nuts with M6 thread (PS 4179.000)

➕ **Accessories:**

Multi-tooth screws M6 x 12 mm,
(for PS 4179.000)

Thread	Packs of	Model No.TS
M4	20	**4119.000**
M5	20	**4157.000**
M6	20	**4179.000**
M8	20	**4180.000**

Captive nuts/threaded blocks

Installation options :

On enclosures and rails with rectangular system
punching 12.5 x 10.5 mm, such as:

- TS enclosure section
    – vertically, via adaptor rail for PS compatibility
    – horizontally, direct
- PS enclosure body, all-round
- Punched rail 23 x 23 mm
- Punched section without mounting flange, 23 x 73 mm
- Punched section without mounting flange, 45 x 88 mm
- Punched section with mounting flange, 23 x 73 mm

Captive nuts

The compression spring, designed as an insertion
aid, ensures reliable mechanical and electrical
connection in the system punchings.

Thread	Packs of	Model No.TS
M5	50	**4166.000**
M6	50	**4164.000**
M8	50	**4165.000**

Threaded block

With snap-off insertion aid, die-cast zinc

Thread	Packs of	Model No.TS
M6	50	**4162.000**
M8	50	**4163.000**

The baying system PS 4000

Accessories

Door stay

To secure door in open position.

Assembly	Packs of	Model No.
Bottom	5	**4583.000**

Ride-Up roller

Lifts the door with heavy installed equipment
(e.g. cooling unit) as a closing aid. For attaching
to the tubular door frame.

Packs of	Model No. TS
10	**4538.000**

Limit switch

Lifts the door with heavy installed equipment
(e.g. cooling unit) as a closing aid. For attaching
to the tubular door frame.

Article No.	Description
4127.010	Door-operated Switch with Support plate

Rittal – The System.

Faster – better – everywhere.

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

Authorized Channel Partner.

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