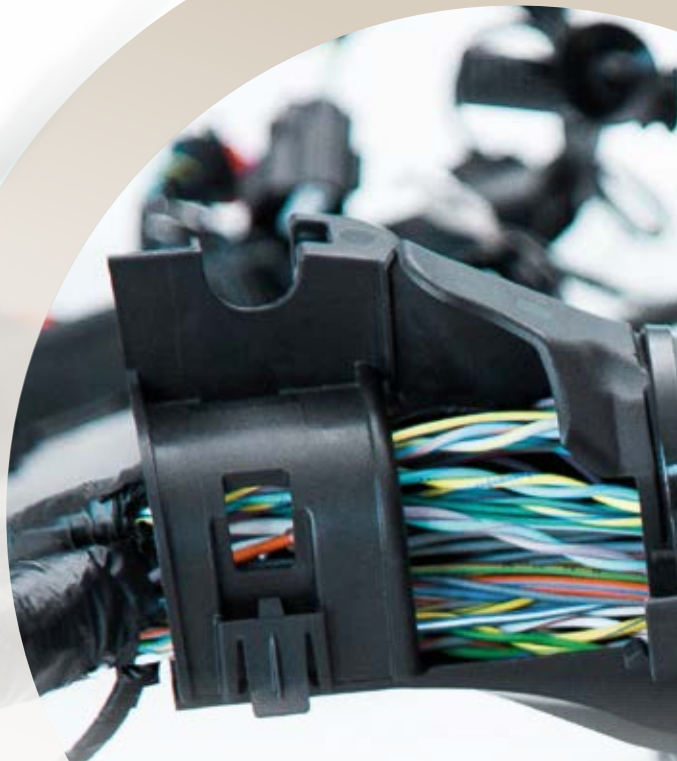


AUTOMOTIVE ELECTRICAL
DISTRIBUTION SYSTEMS
**PRODUCT
CATALOG**





We are pleased to announce the new ARaymond EDS product catalog to display a selection of our broad portfolio. This catalog will allow you to rapidly choose the products you need for all automotive electrical distributions systems. One glance at the selection guide (p4-5) and you will discover the various product families easily identified by function and fastening strategy.

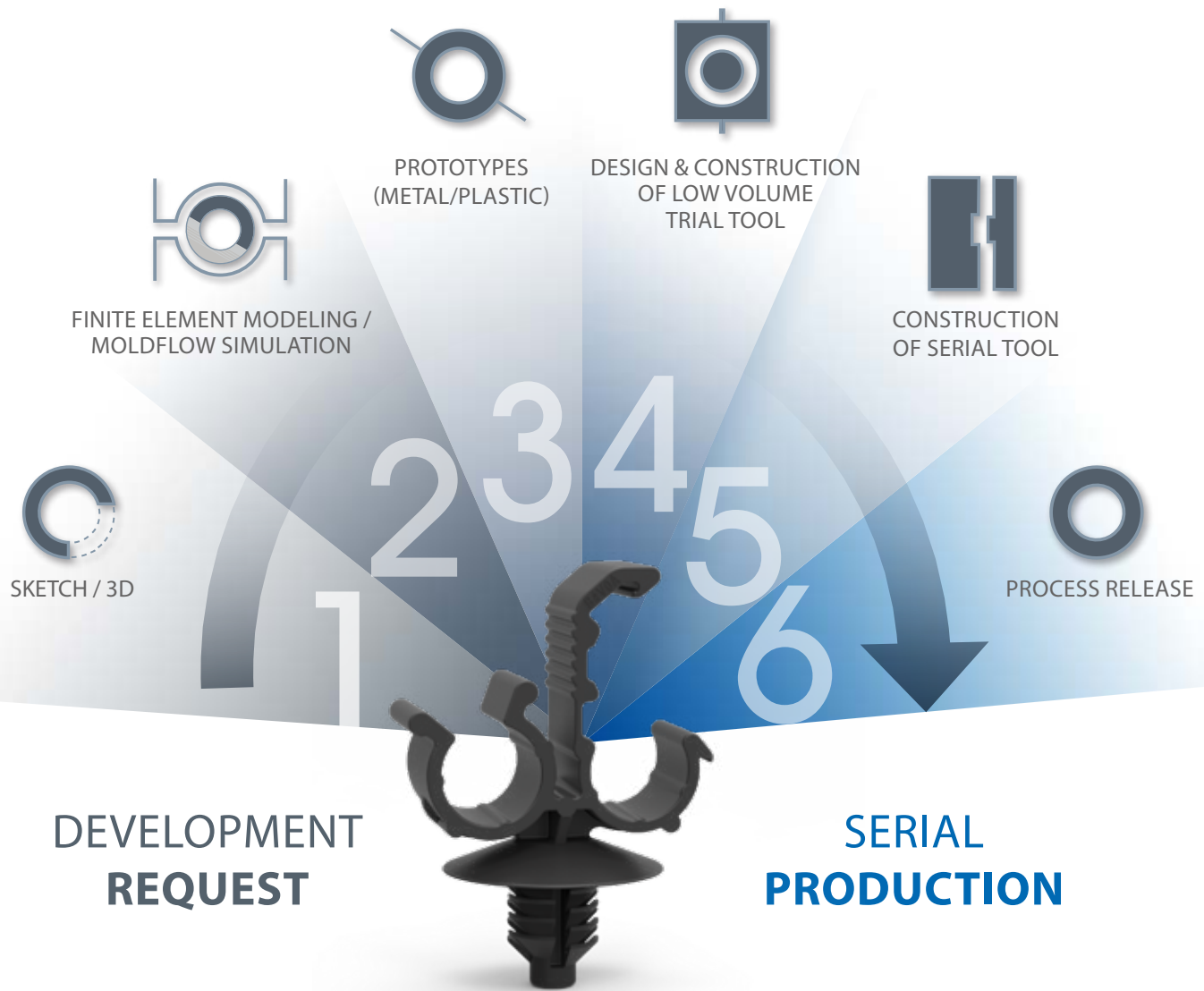
The products in this catalog have been analyzed and selected to suit the most complex needs of our global customers. We also design and develop customer specific products, and thanks to the work in close collaboration with our customers we come up with tailor-made solutions and new developments.

ARaymond representatives will be pleased to answer your questions and support you in your search for the fastening solution that is suited for your project. We truly appreciate your interest in our products and look forward to working closely with you to support your vehicle programs.

Simon FELL

Electrical Marketing
ARaymond Network

ARAYMOND IS ABLE TO MANAGE THE COMPLETE PRODUCT DEVELOPMENT PROCESS



At ARaymond we capitalize on a complete spectrum of capabilities in the product development life cycle to design innovative assembly solutions.

By understanding your needs and taking into account your manufacturing processes and methods, our experts are able to design personalized assembly solutions for your specific needs. We offer automation and assembly-line analysis, as well as process development as part of our comprehensive strategic approach for improving customer productivity.

In the product development process, digital simulation has been fully integrated for non-linear and dynamic mechanics, rheology, and thermal and fluid transfer treatment.

GENERAL SUMMARY

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Tape-on clip & cable strap	p.7
Metal and plastic expertise	p.8-9
Single molded swivel clips	p.10
Weight saving brackets	p.11

CABLE & TUBE FASTENERS

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SELECTION GUIDE

CABLE & TUBE FASTENERS



ROUND HOLE



OVAL & OBLONG HOLE

Cable straps

CABLE STRAPS

Standard, sealed, with housing, spacers



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ADAPTERS

Plastic or metal



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Tape-on clips

TAPE-ON CLIPS



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TAPE-ON CLIPS

with offset



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TAPE-ON CLIPS

with housing



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Cable & Tube holders

CABLE CLIPS

Standard, swivel



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CORRUGATED

HOSE CLIPS



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MODULAR HARNESS CLIPS

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CONNECTOR HOLDERS



ROUND HOLE

OVAL & OBLONG HOLE

CONNECTOR HOLDERS

Standard, rotatable, sealed, anti-rotation, square, rectangular



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CONNECTOR CAPS

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STUD



PANEL EDGE



WIRE TO WIRE



SPECIFIC

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STUD



PANEL EDGE



WIRE TO WIRE



SPECIFIC

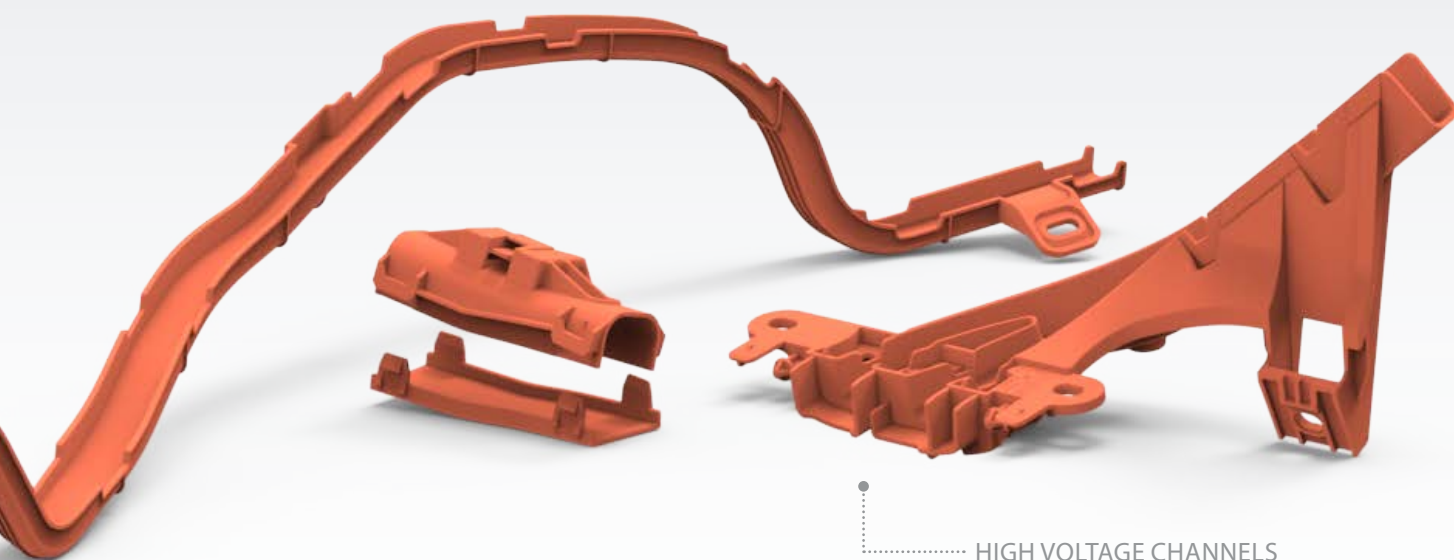
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SOLUTIONS FOR HYBRID & FULL EV

ROBUST FASTENING FOR HIGH VOLTAGE

ARAYMOND OFFER STRONG FASTENING SOLUTIONS
FOR HEAVY HIGH VOLTAGE CABLES,

fitting either corrugated hoses, cable covers or plain cables.



HIGH VOLTAGE CHANNELS

TUBE HOLDERS
Hole or stud fixing / Multicable clipping for 1, 2 or 3 cables



HIGH VOLTAGE CABLE CLIP RANGE

Robust design / High retention forces / Serviceable / Large range of diameters / Anti vibration features

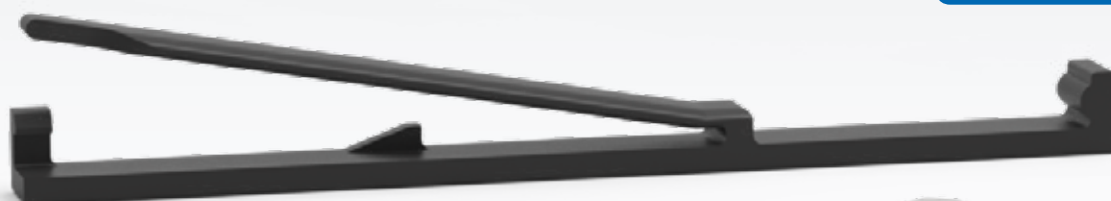
Our high voltage clip range cover all cable diameters from 15 to 40 mm,
fastening into oval hole or M6 stud and available for single, double or triple cables.

TAPE-ON CLIP & CABLE STRAP

SAVING THROUGH COMMONIZING



See products p.32



Ref. 224250



INNOVATIVE SOLUTION USING TAPE-ON CLIP & CABLE STRAP

To cover all directions of cable routing
on edge by tape-on clip or cable strap,
only 3 parts will be needed.



METAL AND PLASTIC EXPERTISE

METAL TRANSFORMATION

At ARaymond we manage all major metal transformation processes—cutting, bending and stamping. We work with spring steel, stainless steel, brass and copper in thicknesses of 0.2 to 6.35 mm, and can provide single or multi-layer surface treatments (Zn, Zn-Ni, Zn-Fe, etc.). We have in-house capabilities to handle the entire process from design to production, surface treatment and quality control and we have the capacity to produce up to 140 million pieces per year for a specific reference.



PLASTIC INJECTION

The ARaymond production facilities are equipped with presses as large as 1,000 tons and more than 1,000 molding tools specifically for EDS. We also have overmolding and bi-injection (multi-material) molding processes compatible with over 300 thermoplastic materials available (polyamide, polyethylene, polyvinyl acetates, polypropylenes and more).

For applications calling for tracking, RFID (Radio Frequency Identification) tags can be incorporated directly into the product.

Bi-injected cable strap

Excellent sealing performance to protect against water ingress for round and oval holes.



ASSEMBLY

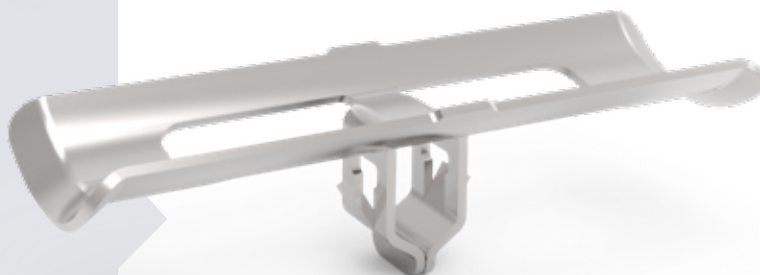
ARaymond's plants worldwide handle all modes of assembly: manual, semi-automated and cycle-time optimized fully automated assembly. Our many years of experience have made us experts in designing and building semi and fully automatic assembly machines and devices.





Springsteel tape-on clip

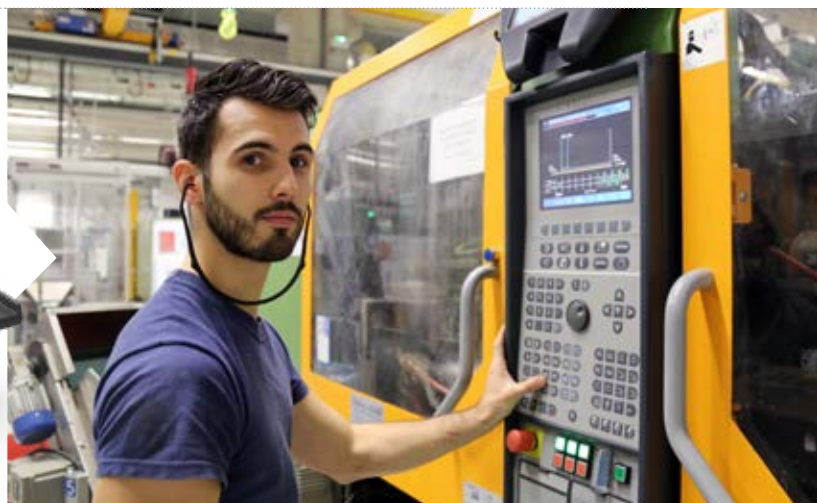
High strength, light weight spring steel tape-on clip for 6.5 mm blind hole and M6 internal threaded hole. Suitable for high temperature and harsh environments such as engine bay.



See p.39 for detailed information

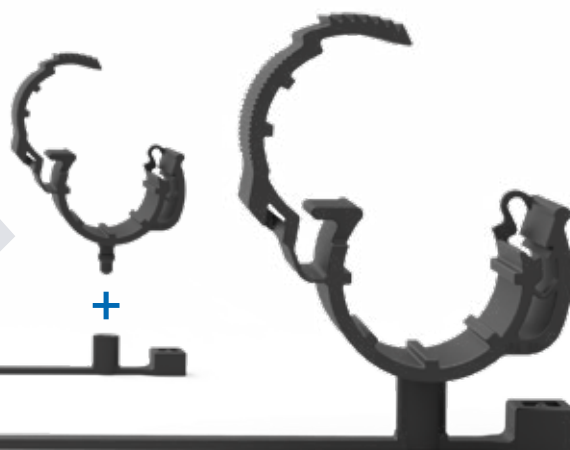
Overmolded tape-on clip with integrated metal starwasher

For mounting on plastic or plain metal studs. Repeatable high assembly quality preventing squeaks and rattles.



Assembled modular swivel clips

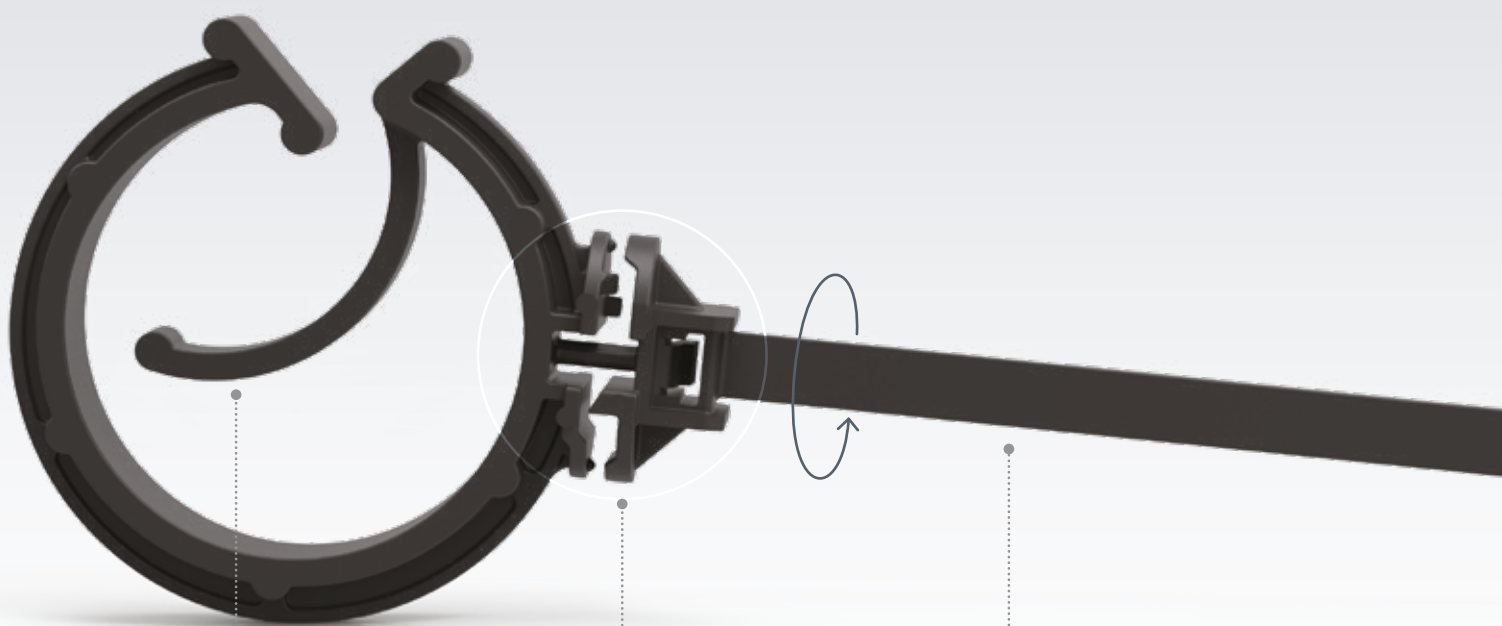
Manual, semi-automated and cycle-time optimized fully automated assembly. Extensive range of different solutions available.



See p.62 for detailed information

SINGLE MOLDED SWIVEL CLIPS

OPTIMIZED SOLUTION FOR WIRE HARNESS



Multi diameters
choose among a range
of **5 diameters:**

Ref. 235923: Ø 27-40 mm

Ref. 235922: Ø 17-27 mm

Ref. 235920: Ø 10-17 mm

Ref. 235918: Ø 6-10 mm

Ref. 235654: Ø 4-6 mm

Locking **90°**
Swivel **270°**

Wire harness bundle
Ø from **1 to 40 mm**

LOCKING 90° - SWIVELS 270° BUNDLE Ø FROM 1 TO 40 MM

Robust design managing a large range
of wire harness to pipe / hose fixing.

This new, innovative solution also has a locking
function at 90°, and swivels 270° for easy assembly.
The cable strap is suitable for wire harness bundle
diameters 1-40 mm.



WEIGHT SAVING BRACKETS

INITIAL SOLUTIONS

Assembled metal brackets



NEW SOLUTIONS

Lightweight and cost efficient single molded, bracket and clip, plastic solutions.

Reinforced with metal anticeeping inserts.

OUR PLASTIC BRACKETS ARE LIGHTWEIGHT,
ROBUST AND RESISTANT TO HIGH TEMPERATURES.

ARaymond can provide versatile, complex shapes
to suit almost any packaging requirement for all vehicle environments.



CABLE STRAPS & ADAPTERS

CABLE STRAPS

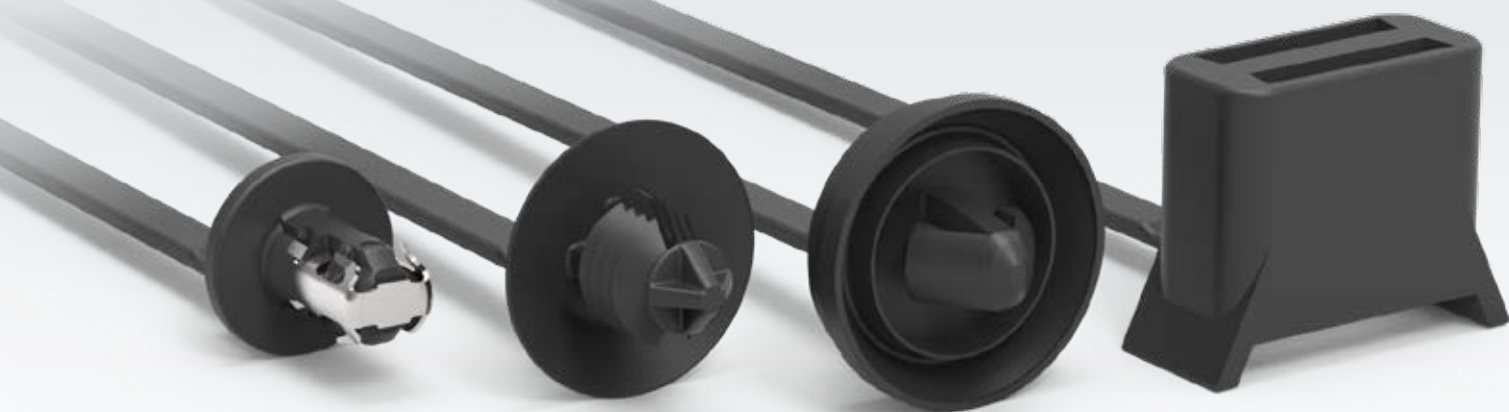
		Round hole - Fir tree	p.15
		Round hole - Anchor foot	p.17
		Round hole sealed	p.20
		Round hole - With housing	p.21
		Oval & oblong hole	p.22
		Oval & oblong hole - Sealed	p.24
		Onto threaded stud	p.25
		Onto threaded stud - With housing	p.27
		Panel edge	p.28
		Wire to wire - 2 housing	p.29

ADAPTERS FOR CABLE STRAP / TAPE-ON CLIPS

		Panel edge - Metal clipping on	p.32
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OPTIMIZED STRAPS

IDEAL FOR SMALLER BUNDLES



REDUCTION OF WASTE AND IMPROVED LOGISTIC MANAGEMENT

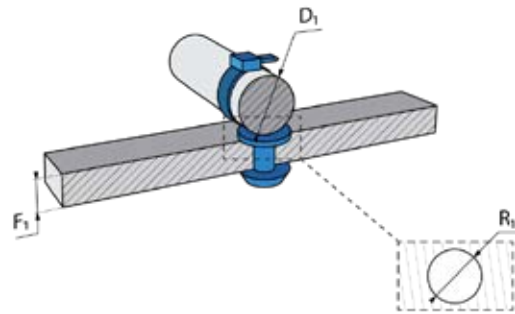
ARaymond offers a complete range of optimized cable straps for all fastening requirements, covering any wire harness diameter up to 25 mm.

These light straps mean less time and waste at harness manufacturers and improved logistic management with more parts per box.



Cable straps

Round hole - Fir tree



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Hole Diameter (R1)	Panel Thickness (F1)	Tube or Cable Diameter (D1)
201836		M6	-	1-30
216956		5.4	0.6-3	0.5-25
214383		6.3-7	0.7-7	1-35
164448		6.5	0.7-4	1-40
164460		6.5	0.7-4	1-40
019667		6.5	0.6-2.5	1.5-43
200161		6.5	0.8-8	1.5-43
018061		6.5	0.6-2.5	1.5-43

Cable straps

Round hole - Fir tree



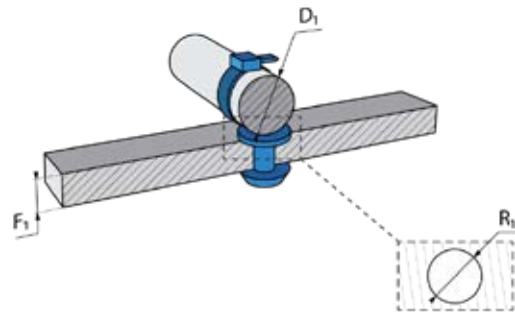
All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Hole Diameter (R1)	Panel Thickness (F1)	Tube or Cable Diameter (D1)
239089		6.5	0.6-3	1.5-40
210600		6.5	0.6-4	0.5-25
175149		6.5	0.6-5	1.5-43
205617		6.5	1	2-30
213254		6.5	2-9.5	1-40
056350		6.7	0.5-3	3-40
201937		7	0.7-3	1.5-40
175179		8	0.8-5	2-29
215633		9.7-10	0.8-5	8-45

**Contact us
for more dimensions
and variants!** See p.120

Cable straps

Round hole - Anchor foot



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Hole Diameter (R1)	Panel Thickness (F1)	Tube or Cable Diameter (D1)
200014		5	1.8	1.5-13
016186		6	0.7-1.2	5-50
015246		6.2	0.8-2.5	3-45
016231		6.2	0.8-2.5	3-56
210666		6.2-7.2	0.6-3	0.5-25
175200		6.2-7.2	0.6-3	1-40
064575		6.3	0.5-3	10-28
222922		6.5	0.7-1.2	0.5-30



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Hole Diameter (R1)	Panel Thickness (F1)	Tube or Cable Diameter (D1)
014568		6.5	0.7-1.5	8-35
175057		6.5	0.7-1.8	2-40
015578		6.5	0.7-3	14-32
205246		6.5	0.8-1.5	0.5-25
014832		6.5	0.8-1.8	5-24
208025		6.5	0.8-2.8	2-30
219784		7	0.6-2.6	2-36
224584		7	0.7-3.5	2-40
012463		7	0.8-2.2	14-38
200435		11	0.5-1.9	40-60
205679		22	1	2.5-30

Cable straps

Round hole - Anchor foot



COMPLEMENTARY PRODUCT



Adapter for
round hole
Ref. 017160

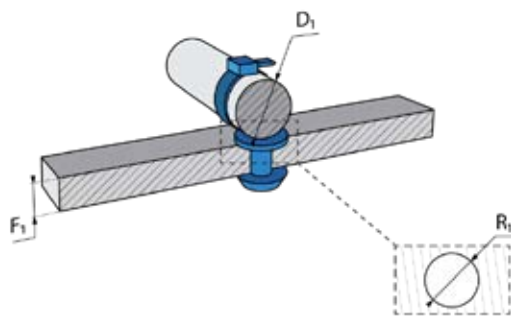
This kind of strap adaptor provides the interface between the strap and the vehicle fixing.

- Plug into a panel hole
- To be used with standard or re-openable cable straps

**Contact us
for more dimensions
and variants!** See p.120

Cable straps

Round hole - Sealed



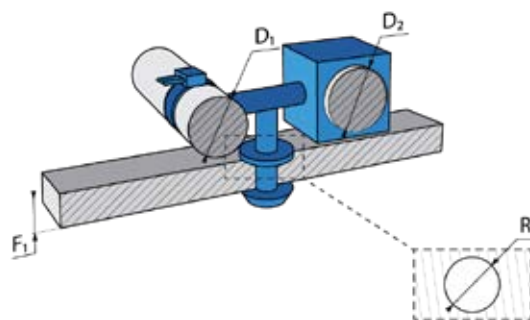
All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Hole Diameter (R1)	Panel Thickness (F1)	Tube or Cable Diameter (D1)
224699		6.5	0.6-1.25	1-15
214948		6.5	0.6-1.3	0.5-25
223778		6.5	0.7-1.7	1.5-25
203940		6.5	0.8-1.3	2-40
201113		6.5	0.8-1.3	2-40
230346		6.5	1.25-2	1-15

**Contact us
for more dimensions
and variants!** See p.120

Cable straps

Round hole - With housing



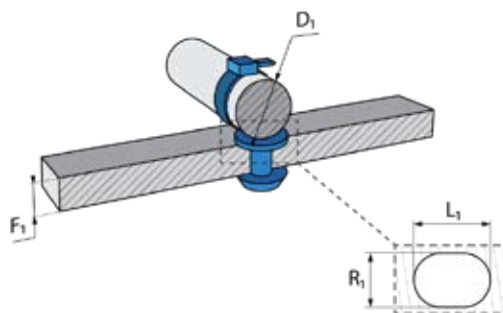
All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Hole Diameter (R1)	Panel Thickness (F1)	Tube or Cable Diameter (D1)	Tube or Cable Diameter (D2)
202089		6	0.7-3.5	1.5-40	5-13.5
018361		6.5	0.6-2.5	1.5-43	5-11
233564		6.5	0.8-4	28-48	5.07-5.23
235166		6.5	0.8-4	28-48	5.07-5.23
222881		6.5	0.8-4	28-36	5.15
207181		7	2-4	5-40	4.8-5.2

**Contact us
for more dimensions
and variants!** See p.120

Cable straps

Oval & oblong hole



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Hole Size (R1 x L1)	Panel Thickness (F1)	Tube or Cable Diameter (D1)
056299		6.2 x 12.2	0.5-3	3-40
219956		6.2 x 12.2	0.6-3	0.5-25
200600		6.2 x 12.2	0.6-3	1-40
214659		6.2 x 12.2	0.7-3	1.5-25
128287		6.2 x 12.2	0.7-3	1.5-40
240638		6.5 x 12.5	0.6-2.5	1-25
240639		6.5 x 12.5	0.6-2.5	1-25
218390		7 x 12	0.65-2.6	3-25

Cable straps

Oval & oblong hole



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Hole Size (R1 x L1)	Panel Thickness (F1)	Tube or Cable Diameter (D1)
218391		7 x 12	0.65-2.6	3-25



COMPLEMENTARY PRODUCT



Adapter for oval
or oblong hole
Ref. 014130

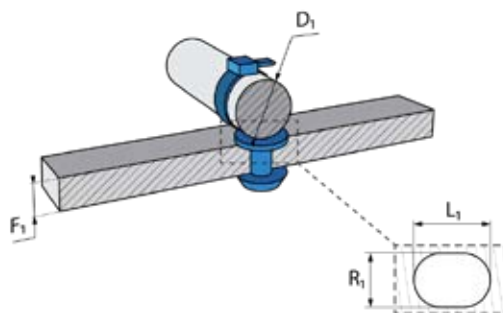
This kind of strap adaptor provides the interface between the strap and the vehicle fixing.

- Plug into a panel hole
- To be used with standard or re-openable cable straps

**Contact us
for more dimensions
and variants!** See p.120

Cable straps

Oval & oblong hole - Sealed



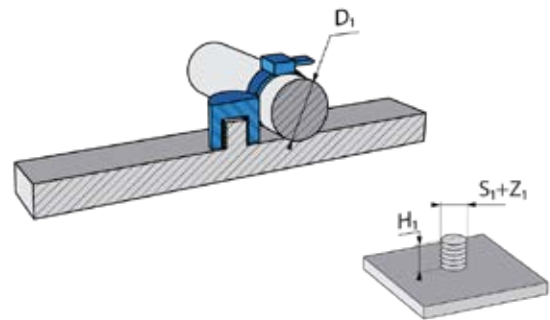
All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Hole Size (R1 x L1)	Panel Thickness (F1)	Tube or Cable Diameter (D1)
224721		6.5 x 12.5	0.6-1.25	1-45
230347		6.5 x 12.5	1.25-2	1-45
235767		7 x 12	0.6-1.9	1-45
235769		7 x 12	1.9-3.2	1-45

**Contact us
for more dimensions
and variants!** See p.120

Cable straps

Onto threaded stud



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Stud Specification (S1+Z1)	Stud Height (H1)	Tube or Cable Diameter (D1)
164459		M6	14.2	1-40
202587		M8	20	2-40
020494		M8	20	2-25
203449		T5	-	2-40
218161		T5	9	0.5-25
015770		T5	9	10-55
201614		T5	12	1.5-40
015474		T5	12	3-40

Cable straps

Onto threaded stud



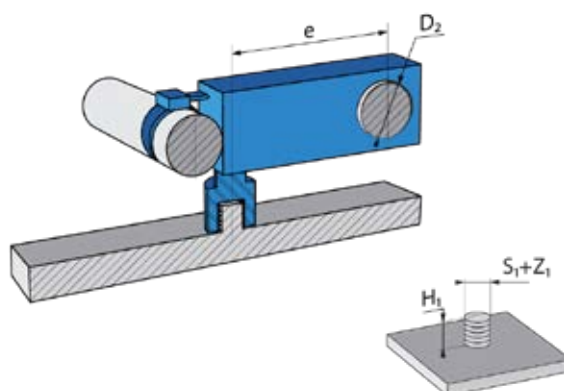
All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Stud Specification (S1+Z1)	Stud Height (H1)	Tube or Cable Diameter (D1)
214658		T5	14.2	0.5-25
175207		T5	14.2	1-40
201335		T5	14.2	1.5-40
175084		T5	14.2	2-22
018062		T5	14.2	2.5-41
222339		T5	14.2	8-50
055081		T5	14.2	13-44
017412		T5	14.2	13-44
205247		T5	16	0.5-25
020361		T6	9	10-55
175170		T6	14	2-40

Contact us for more dimensions and variants! See p.120

Cable straps

Onto threaded stud - With housing



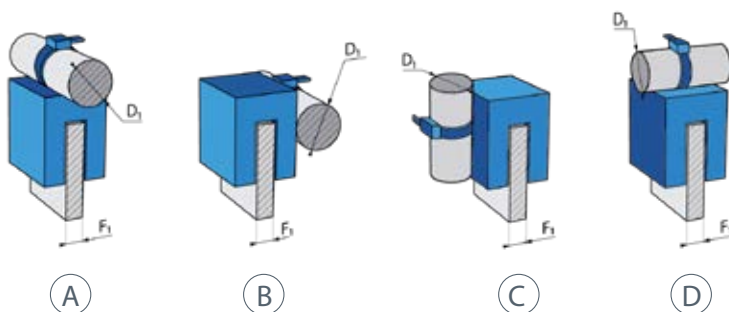
All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Stud Specification (S1+Z1)	Stud Height (H1)	Tube or Cable Diameter (D2)	Offset (e)
212461		T5	14.2	12-15	13.75
200598		T5	14.2	12-15	13.75

**Contact us
for more dimensions
and variants!** See p.120

Cable straps

Panel edge



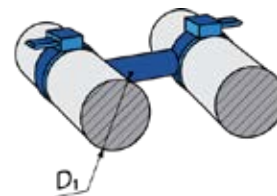
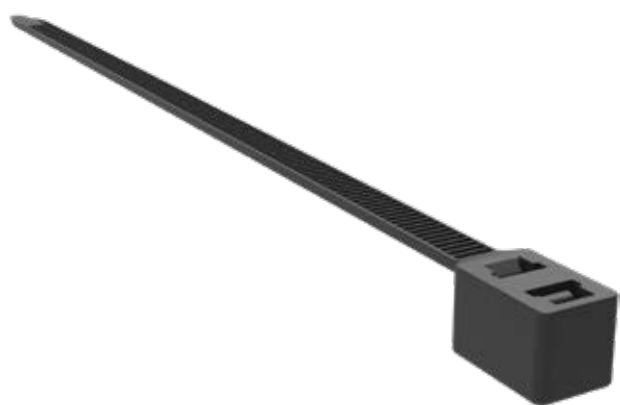
All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Panel Thickness (F1)	Tube or Cable Diameter (D1)	Orientation
190042		0.7-2.5	1.5-40	A Swivel function
020847		0.8	8-20	C
203870		1-3	8-33	A Swivel function
082651		1.5-3.5	1.5-43	D
082652		1.5-3.5	1.5-43	A
082653		1.5-3.5	1.5-43	B
210049		1.5-3.5	1.5-45	C
206316		1.5-3.5	1-50	B

**Contact us
for more dimensions
and variants!** See p.120

Cable straps

Wire to wire - 2 housing



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Tube or Cable Diameter (D1)
208596		2-38

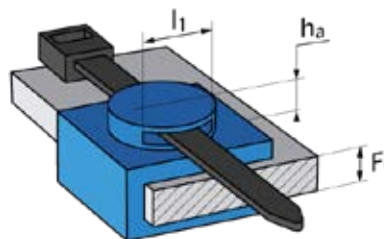
Contact us
for more dimensions
and variants! See p.120



ADAPTERS

Cable strap adapters

Panel edge - Metal clipping on



All dimensions in mm / Other dimensions and variants on request / *Stainless steel parts

Ref.	Design	Panel Thickness (F1)	Height Above Support (ha)	Length (l1)
019752		0.8-1.2	2.5	5
019408		1-3	-	5
220403*		1-3	2.1	5
222690*		1-3	2.2	5
218991		1.15-1.35	2.2	5
208738		1.5-4	2.1	5
017890		1.5-4.5	3	6
220737		3-6	2.7	5

Cable strap adapters

Panel edge - Metal clipping on



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Panel Thickness (F1)	Height Above Support (ha)	Length (l1)
223268		3-6	2.2	5
053748		3-10	-	-
020848		9	3.1	5



Ref. 224250



APPLICATION INFORMATION

- Compatible for edge mounting
- To be used in conjunction with cable strap, tape-on feature

**Contact us
for more dimensions
and variants!** See p.120



TAPE-ON CLIPS

TAPE-ON CLIPS

		Round hole - Fir tree	p.36
		Round hole - Anchor foot	p.38
		Blind hole	p.39
		Oval & oblong hole	p.40
		Onto an edge	p.42

TAPE-ON CLIPS WITH OFFSET

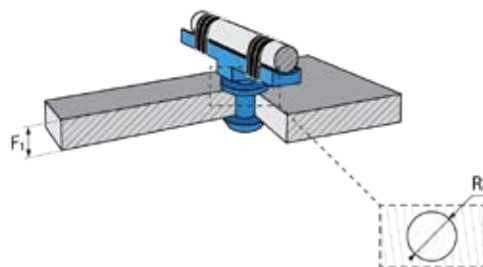
		Round hole	p.44
		Oval & oblong hole	p.47
		Onto stud - Smooth	p.49
		Onto stud - Threaded	p.50

TAPE-ON CLIPS WITH HOUSING

		Round hole	p.53
		Oval & oblong hole	p.55
		Onto stud	p.56
		Wire to wire	p.57
		Specific	p.58

Tape-on clips

Round hole - Fir tree



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Hole Diameter (R1)	Panel Thickness (F1)
215149		6.5	0.6-2
215148		6.5	0.6-3.5
108099		6.5	0.7-1
175137		6.5	0.7-4
164465		6.5	0.7-4
211640		6.5	0.7-4
213369		6.5	0.8-10
175181		6.5	1-2

Tape-on clips

Round hole - Fir tree



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Hole Diameter (R1)	Panel Thickness (F1)
209423		6.7	0.7-4
108253		7	0.7-2
212459		7.5-8.5	0.8-6
108124		8	0.7-4
211381		8	1-3
207589		8	2-10
210522		8	3.9-4.3

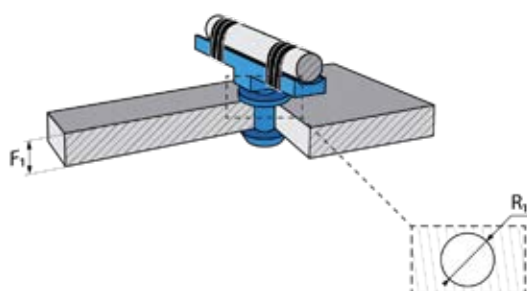
APPLICATION INFORMATION

- Good control of wire harness over tape feature length

**Contact us
for more dimensions
and variants!** See p.120

Tape-on clips

Round hole - Anchor foot



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Hole Diameter (R1)	Panel Thickness (F1)
108108		6.5	0.7-1.2
018505		6.5	1.5
020826		6.5	4
175027		7	0.6-2
175031		7	1.5-2.4
108120		6.5	0.8-2.5
081807		6.5	0.6
108258		8	0.8-2.5
108166		8	0.7-2.5

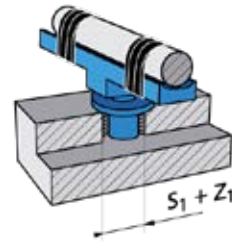
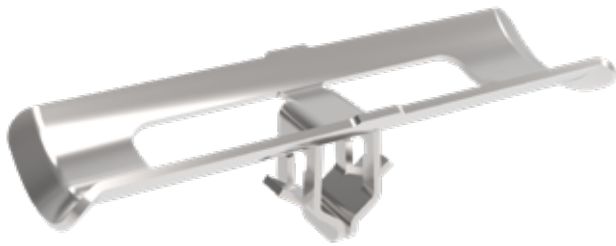
APPLICATION INFORMATION

- Good control of wire harness over tape feature length

**Contact us
for more dimensions
and variants!** See p.120

Tape-on clips

Blind hole



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Screw specification (S1+Z1)
164274		M5
237211		6.5-6.7

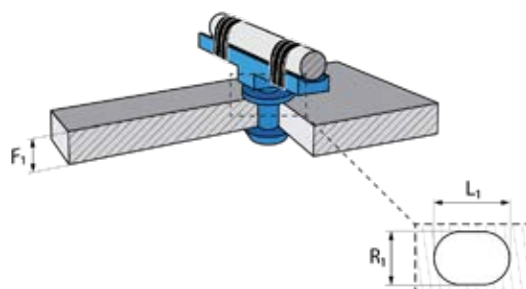
APPLICATION INFORMATION

- Allowing for additional wire or tube support
- Plastic and metal parts

**Contact us
for more dimensions
and variants!** See p.120

Tape-on clips

Oval & oblong hole



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Hole Size (R1 x L1)	Panel Thickness (F1)
201662		6.2 x 12.2	0.6-3
205789		6.2 x 12.2	0.62-4
215150		6.2 x 12.2	0.7-4
201830		6.2 x 12.2	0.7-4
240519		6.5 x 12.5	0.6-2.5
240520		6.5 x 12.5	0.6-2.5
108183		7 x 12	0.7-2
211380		7-7.3 x 12	0.7-2

Tape-on clips

Oval & oblong hole



APPLICATION INFORMATION

- Good control of wire harness over tape feature length
- Plastic and metal parts

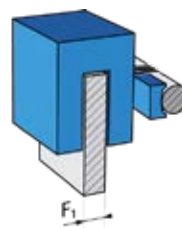
**Contact us
for more dimensions
and variants!** See p.120

Tape-on clips

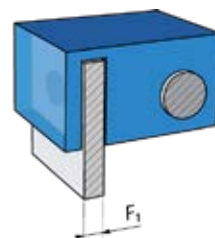
Onto an edge



A



B



C

All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Panel Thickness (F1)	Orientation
135240		0.7-2	A
018372		0.7-2	B
200590		0.8-1.5	C
108192		1-2	A
201697		1.5-3.5	C
081748		2.3-4	A

APPLICATION INFORMATION

- Good control of wire harness over tape feature length
- Plastic and metal parts

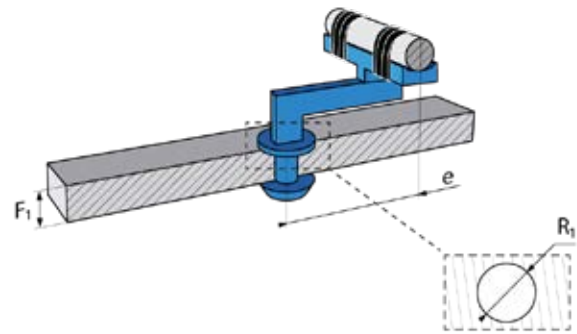
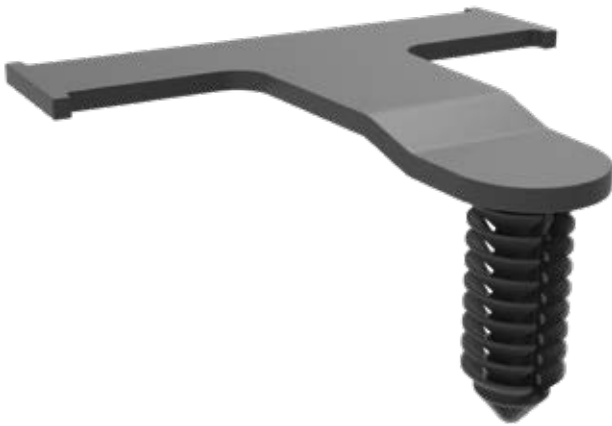
**Contact us
for more dimensions
and variants!** See p.120



TAPE-ON CLIPS WITH OFFSET

Tape-on clips with offset

Round hole



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Offset (e)	Hole Diameter (R1)	Panel Thickness (F1)
108113		5.5	8	0.7-3
108114		5.5	8	0.7-3
108201		6.5	6.5	0.7-2
020138		10.3	6.5	0.8-1.2
175182		13	6.5	0.6-2.5
020388		15	5	0.8
201273		15	6.5	0.6-1
200031		15	6.5	0.6-1.3

Tape-on clips with offset

Round hole



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Offset (e)	Hole Diameter (R1)	Panel Thickness (F1)
218701		15	6.5	0.8-4
201340		15	6.5	0.8-4
108170		19	8	0.7-2
175148		20	6.3	1.5
201878		20	6.5	0.8-1.2
175026		20	7	0.6-2
164239		20.3	7	0.8-6
214656		22	6.3	0.7-2.5
108112		24	8	0.7-4
018968		26.5	6.5	1-4
106060		30	8	0.7-3

Tape-on clips with offset

Round hole



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Offset (e)	Hole Diameter (R1)	Panel Thickness (F1)
200294		30.2	6.5	0.67
175183		31	6.5	0.6-2.5
164452		32	6.5	0.7-4
164453		32	6.5	0.7-4
201336		32	6.5	0.8-4
214007		32	12	7.5-8.5
175186		40	6.5	0.6-2.5
175056		50	8	3.2-3.5

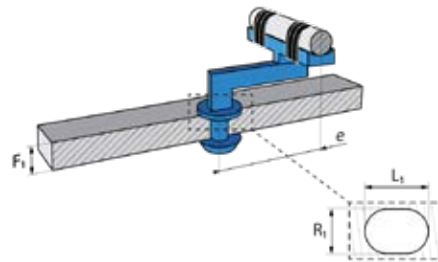
APPLICATION INFORMATION

- To allow off centered wire support

**Contact us
for more dimensions
and variants!** See p.120

Tape-on clips with offset

Oval & oblong hole



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Offset (e)	Hole Size (R1 x L1)	Panel Thickness (F1)
240412		5	6.5 x 10.5	0.6-2.5
240521		15	6.5 x 12.5	0.6-2.5
106090		15	7 x 12	0.7-2
200037		20	6 x 12	2.4-2.6
240522		20	6.5 x 10.5	0.6-2.5
200470		21.6 / 28.3	7 x 12	1.4-2
055478		23	6.2 x 12.2	0.5-3
240523		30	6.5 x 10.5	0.6-2.5

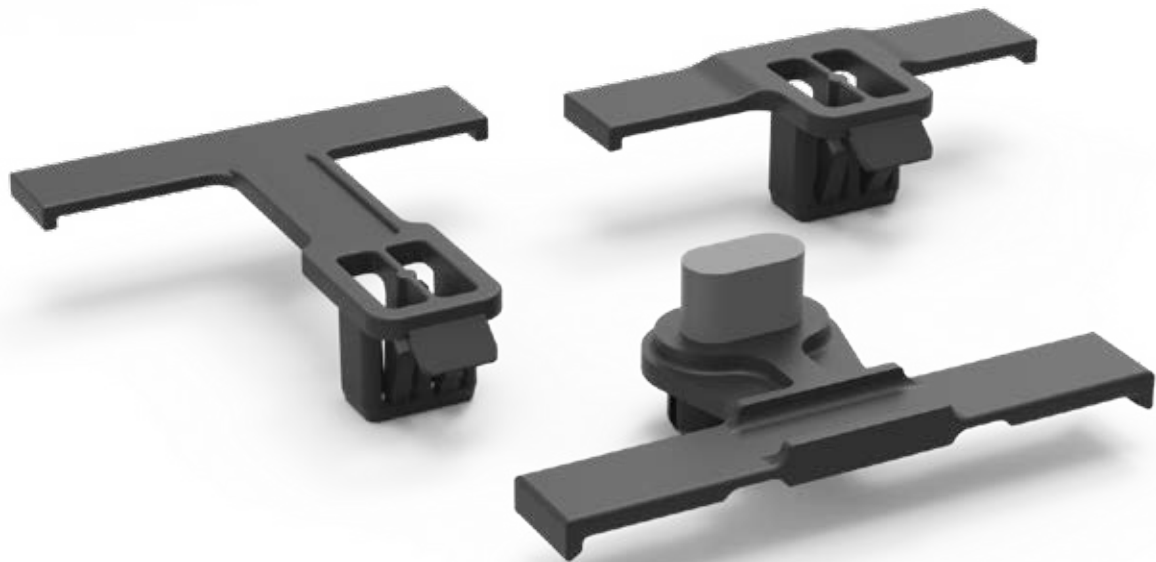
Tape-on clips with offset

Oval & oblong hole



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Offset (e)	Hole Size (R1 x L1)	Panel Thickness (F1)
018470		31.8	6.5 x 10	1



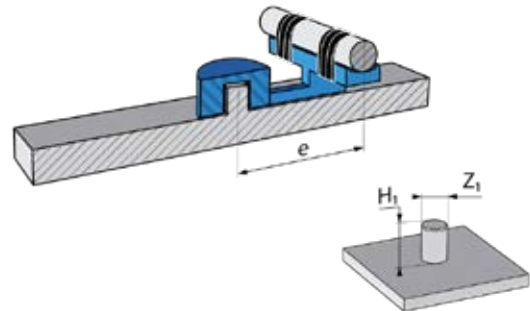
APPLICATION INFORMATION

- To allow off centered wire support

**Contact us
for more dimensions
and variants!** See p.120

Tape-on clips with offset

Onto stud - Smooth



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Offset (e)	Stud Diameter (Z1)	Stud Height (H1)
233291		13	6.2	11.4
240711		13	8	10

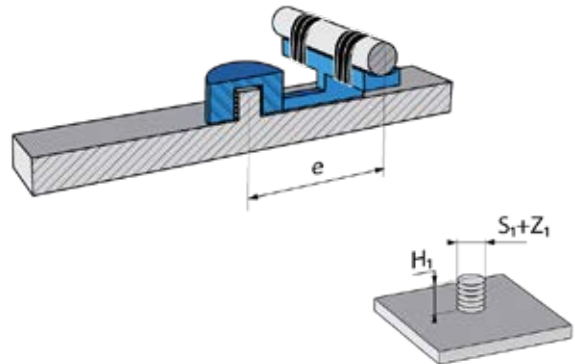
APPLICATION INFORMATION

- To allow off centered wire support

**Contact us
for more dimensions
and variants!** See p.120

Tape-on clips with offset

Onto stud - Threaded



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Offset (e)	Stud Specification (S1+Z1)	Stud Height (H1)
057598		4.4	M6	-
164440		14	M6	-
057182		15	T5	8-20
211321		15	M5	15
201337		15	T6	-
175156		17.15	T5	16
211320		19.8	M5	15
211319		26	M8	-

Tape-on clips with offset

Onto stud - Threaded



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Offset (e)	Stud Specification (S1+Z1)	Stud Height (H1)
108152		35	M6	-
108220		35	T5	16
201338		36.5	T6	14
164473		41	M6	-
020680		86.6	T5	14.2

APPLICATION INFORMATION

- To allow off centered wire support

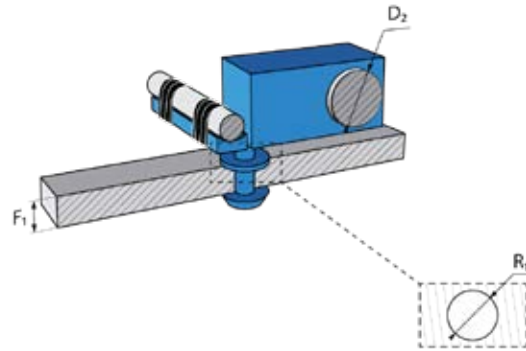
**Contact us
for more dimensions
and variants!** See p.120



TAPE-ON CLIPS WITH HOUSING

Tape-on clips with housing

Round hole



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Hole Diameter (R1)	Panel Thickness (F1)	Tube or Cable Diameter (D2)
108115		6.5	0.7-1.2	4.5-6.6
190028		6.5	0.7-1.2	4-8
057256		6.5	0.7-1.5	1.3-10
019148		6.5	0.7-1.5	13
200256		6.5	0.8-1.5	9
175042		6.5	0.8-1.5	4-8
175158		6.5	0.8-2.5	4-8
175037		7	0.7-1.2	5-6

Tape-on clips with housing

Round hole



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Hole Diameter (R1)	Panel Thickness (F1)	Tube or Cable Diameter (D2)
108126		8	0.7-1.2	4.5-6.6
106073		8	0.7-2.5	6.2
108196		8	0.7-4	7
201669		8	0.8-4	6

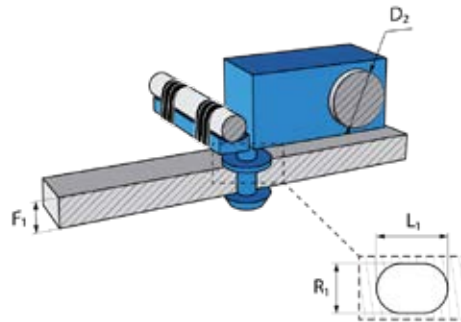
APPLICATION INFORMATION

- Allowing for additional wire or tube support

**Contact us
for more dimensions
and variants!** See p.120

Tape-on clips with housing

Oval & oblong hole



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Hole Size (R1 x L1)	Panel Thickness (F1)	Tube or Cable Diameter (D2)
205789		6.2 x 12.2	0.62-4	4
201830		6.2 x 12.2	0.7-4	8
057180		6.2 x 12.2	0.67-3	6
108296		7 x 12	0.8-1.5	5

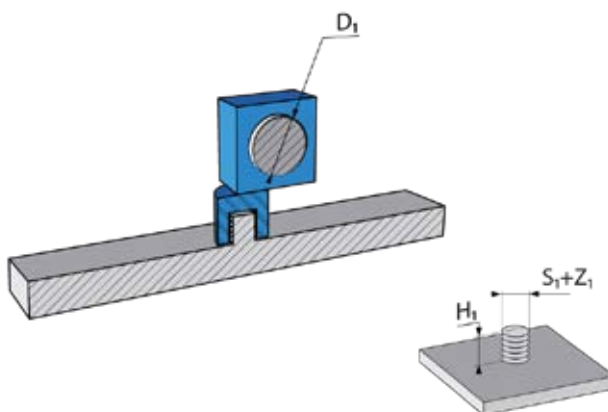
APPLICATION INFORMATION

- Allowing for additional wire or tube support

**Contact us
for more dimensions
and variants!** See p.120

Tape-on clips with housing

Onto stud



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Stud Specification (S1+Z1)	Stud Height (H1)	Tube or Cable Diameter (D1)
056457		T5	9-18	8-18
216772		T5	14	2-10
216773		T5	14	18

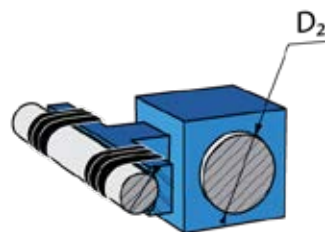
APPLICATION INFORMATION

- To fix one or more tubes/wires to a panel
- Plastic and spring steel combinations
- Available with the modular swivel assembly fastener range
- Covering most common wire and tube diameters and fixings

**Contact us
for more dimensions
and variants!** See p.120

Tape-on clips with housing

Wire to wire



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Tube or Cable Diameter (D2)
164179		3-4
211322		6 x 12.2
202569		12
211715		24
237859		25
057159		25

APPLICATION INFORMATION

- Allowing for additional wire or tube support

**Contact us
for more dimensions
and variants!** See p.120

Specific tape-on clips

Easy approaches of securing cables



*For more information,
please contact us.
We have a solution for you.*



ARaymond's extensive range of tape-on clips offers easy approaches of securing cables, wires or hoses. They are available with or without offsets and wire housings to adapt to hole, stud, edge, and virtually all other packaging and mounting situations.

These tape-on clips are easy to install without the need for a tool.

Tape-on clips are designed to hold cables or pipes in place with a tape binding.



Ref. 201581



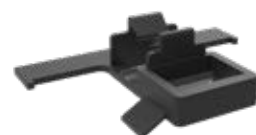
Ref. 213020



Ref. 175187



Ref. 018583



Ref. 211382



Ref. 205027



Ref. 082047



Ref. 201339



CABLE & TUBE HOLDERS

CABLE CLIPS

		Swivel clips - Modular harness solutions	p.62
		Swivel clips - Cable straps into hole	p.64
		Swivel clips - Specific	p.65
		Swivel clips - Cable straps & Tape-on	p.66
		Swivel clips - Corrugated hose	p.67
		High performing ergonomic Fir Tree	p.68
		Round hole	p.69
		Oval & oblong hole	p.70
		Panel edge	p.71
		Specific	p.72

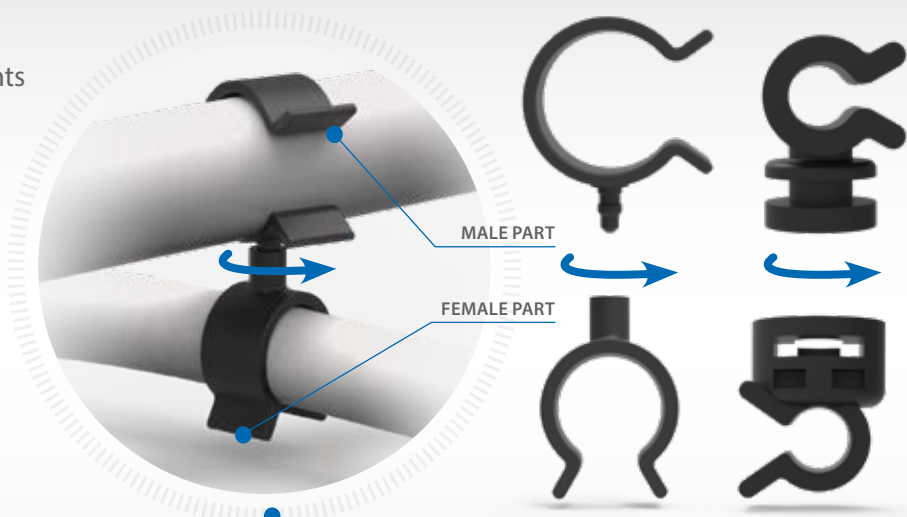
CORRUGATED HOSE CLIPS

		Round hole	p.74
		Blind round hole - Manual lock	p.76
		Oval & oblong hole	p.77
		Onto threaded stud	p.78
		Profile edge	p.80
		Onto panel edge	p.81

MODULAR HARNESS CLIPS

A WIDE PRODUCT RANGE ▶ Mix and match to create your ideal solution.

Extensive range of swivel clips with more than 5.000 individual components offering an almost infinite number of **multidirectional** combinations of fastening solutions. The ARaymond™ modular harness clips are supplied pre-assembled and offer a **great variety in terms of diameters and design** configurations. The swivel function enables multidirectional cable mounting.



The ARaymond™ modular harness clips consist of female and male parts that are combined to become tailor-made fasteners.

▶ Two standard systems to fit OEM's specifications

FIXING SOLUTIONS

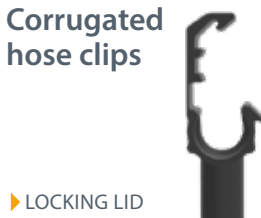
Cable straps



Tape-on clips



Corrugated hose clips



▶ LOCKING LID

Cable & tube clips



▶ ADJUSTABLE LOCKING LID

CABLE OR WIRE FIXINGS



▶ ADJUSTABLE LOCKING LID



▶ LOCKING LID



▶ VARIABLE LOCKING STRAP



▶ CLOSING WITH FLEXIBLE LID



▶ OPEN WITH FLEXIBLE FINGER

BODY IN WHITE OR PANEL FIXING



▶ STUD MOUNT M6



▶ EDGE



▶ FIRTREE ROUND



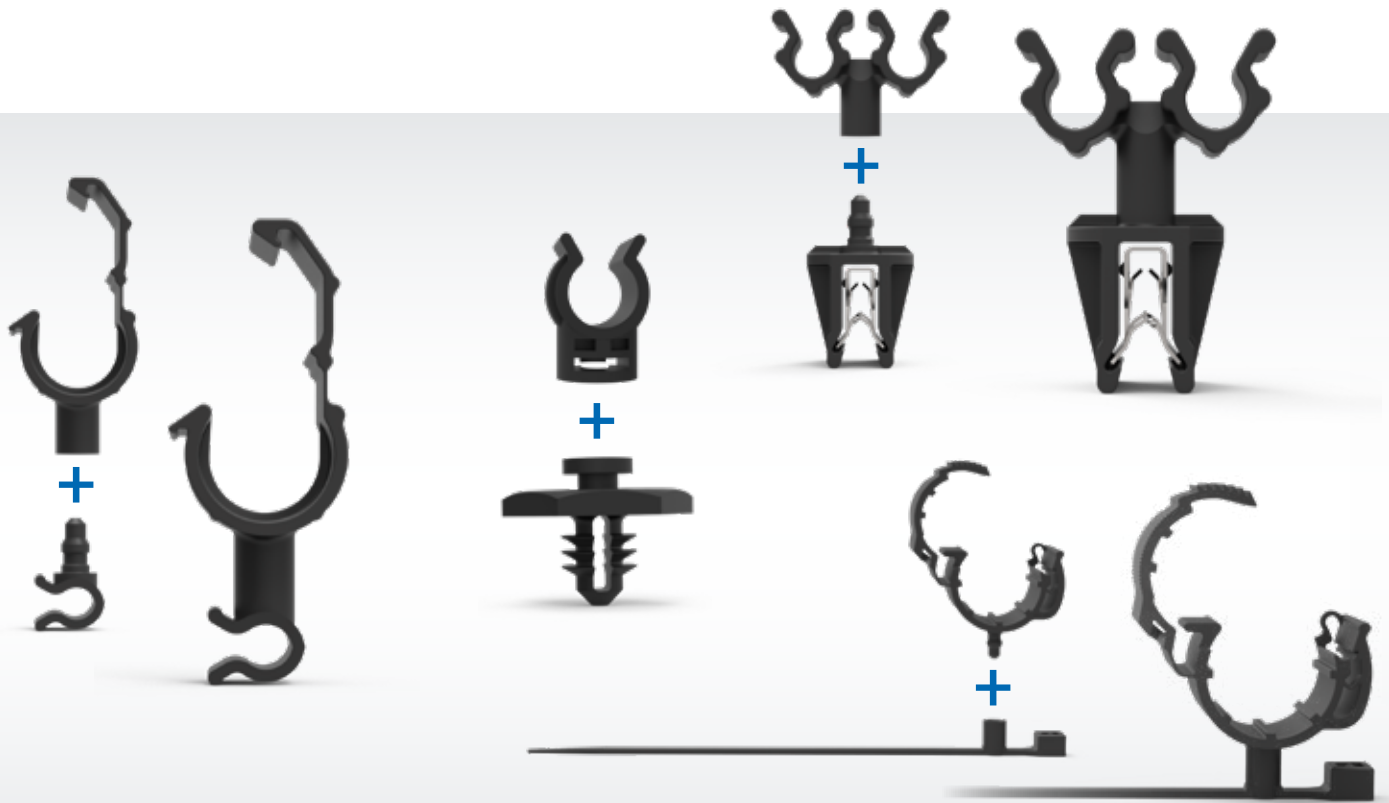
▶ ANCHOR FOOT



▶ THREADED HOLE

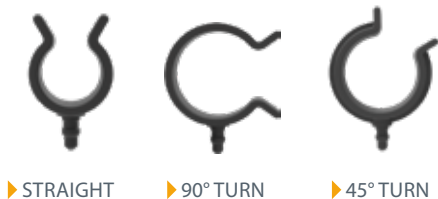


▶ OVAL & OBLONG



FIXING COMBINATIONS

One fixing



▶ STRAIGHT ▶ 90° TURN ▶ 45° TURN

Multiple fixings



▶ ONE WAY ▶ TWO WAYS STRAIGHT ▶ TWO WAYS 90° TURN ▶ THREE WAYS ▶ FOUR WAYS

SINGLE OR MULTIPLE CABLE HOUSINGS

Single



Multiple



SPACERS

A large variety of different length of offset/stand off dimension available on request.



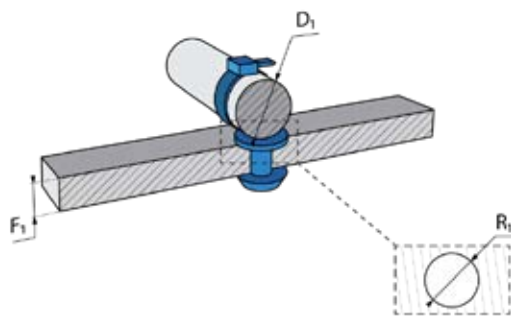
▶ MALE / FEMALE END ▶ MALE / FEMALE END + ANGLED SPACER ▶ MALE / MALE ENDS ▶ FEMALE / FEMALE ENDS

SPECIFIC



Cable clips

Swivel clips - Cable straps into hole



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Hole Diameter (R1)	Panel Thickness (F1)	Tube or Cable Diameter (D1)	Stand off
201351		6.5	0.8-6	8-33	12
208910		5 / M6	1-9	8-33	12
238554		6.5	0.8-6	8-50	13
218797		6.5	0.8-6	8-50	14
215613		6.5	0.8-6	8-33	20
218945		6.5	0.8-6	8-50	30

APPLICATION INFORMATION

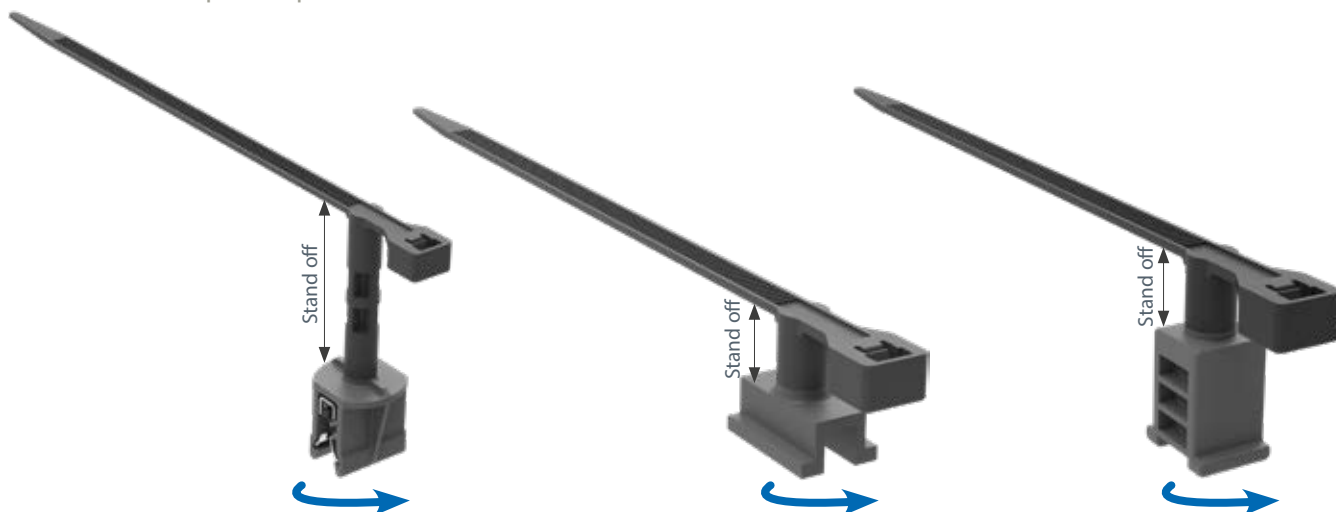
- Multidirectional mounting of the cables
- Possibility to assemble several clips for multiple routing and parallel cables

**Contact us
for more dimensions
and variants!** See p.120

Cable clips



Swivel clips - Specific



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Mounting option	Panel Thickness (F1)	Tube or Cable Diameter (D1)	Stand off
202801		Connector holder to wire	-	8-33	12
218680		Wire to wire	-	8-33	12
203870		Wire to panel edge	1-3	8-33	13
216403		Wire to panel edge	2-4	8-33	13
207507		Wire to stud	-	8-33	15
220160		Wire to panel edge	1-3	8-33	36

APPLICATION INFORMATION

- Multidirectional mounting of the cables
- Possibility to assemble several clips for multiple routing and parallel cables

**Contact us
for more dimensions
and variants!** See p.120

Cable clips



Swivel clips – Cable straps & Tape-on



All dimensions in mm / *Part number available on request

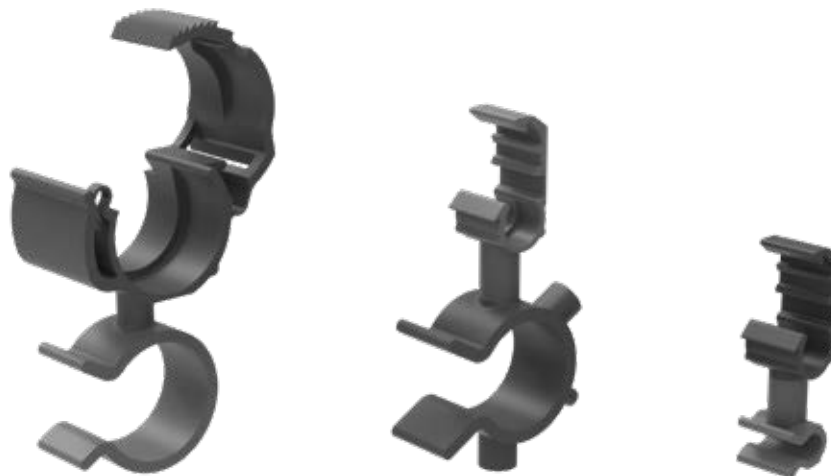
	CABLE STRAP DIAMETER					
Tube size	up to 33 mm Worldwide	up to 33 mm North America preference	up to 50 mm Worldwide	up to 50 mm North America preference	Tape-on feature Worldwide	Tape-on feature North America preference
4.3 - 5.2	082293	168796	221354	168823	207368	168902
6 - 6.5	201807	*	204820	168750	202918	*
8 - 9	082294	*	211451	168869	205574	168846
9.5 - 10.5	082520	168797	*	168824	*	168903
10 - 12	*	*	204818	*	*	168847
11 - 13	082281	168803	207168	168809	202919	168904
13 - 14	*	*	204817	*	*	*
14 - 15	082516	168822	*	168782	212314	168905
15 - 16	*	168804	204815	168752	*	168857
16 - 18	082282		*	*	221557	215757
18 - 20	*	168781	208966	168775	*	168917
19 - 24.5	*	*	204814	*	*	*
22 - 24	082280	082280	*	168812	208579	*
28 - 30	202609	202609	*	168877	218958	*
34 - 36	214346	*	*	*	231310	*
38 - 45	*	223346	204821	*	*	*
48 - 53	205571	*	*	*	*	*

APPLICATION INFORMATION

- Multidirectional mounting of cables
- Possibility to assemble several clips for multiple routing and parallel cables

**Contact us
for more dimensions
and variants!** See p.120

Swivel clips – Corrugated hose



All dimensions in mm / *Part number available on request

 Tube size	 CORRUGATED HOSE SIZE						
	Size 4.5 Ø 7.1	Size 7.5 Ø 9.9	Size 8.5 Ø 11.4	Size 10 Ø 12.9	Size 13 Ø 15.8	Size 17 Ø 21	Size 22 Ø 25.5
4.3 - 5.2	081837	200110	245337	200127	203906	*	*
6 - 6.5	081762	082025	206343	*	225861	209010	*
8 - 9	215963	081892	*	082124	082036	082034	207699
9.5 - 10.5	081968	*	235013	082241	*	202448	082554
10 - 12	081795	082190	*	082559	*	*	*
11 - 13	081636	200245	237716	081853	081964	081946	*
13 - 14	*	214892	*	081952	082097	*	*
14 - 15	081882	082101	*	082065	*	205689	082436
15 - 16	081846	081714	*	081944	081975	*	*
16 - 18	*	*	239909	242175	082619	082145	082705
18 - 20	081902	208189	*	082058	081965	*	*
19-24.5	081726	081763	*	082141	082059	201408	*
22 - 24	201933	*	*	219121	*	*	082529
24-26	*	*	*	*	*	*	*
28 - 30	*	204090	*	228167	*	214070	202301
34 - 36	*	204747	*	*	222620	*	*
38 - 45	241867	222619	*	*	204022	*	*
48 - 53	*	*	*	*	214419	*	*

APPLICATION INFORMATION

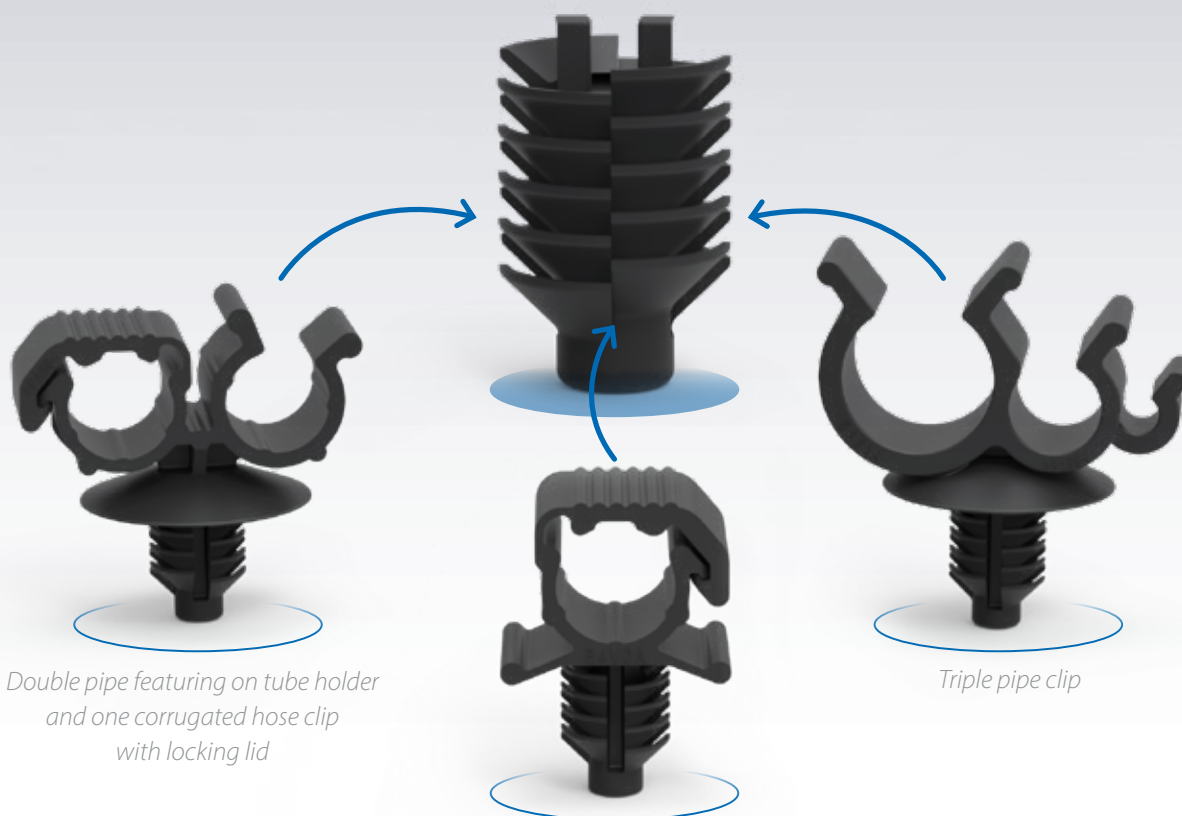
- Multidirectional mounting of cables
- Possibility to assemble several clips for multiple routing and parallel cables

**Contact us
for more dimensions
and variants!** See p.120

HIGH PERFORMING ERGONOMIC FIR TREE

A new fir tree design with **very good insertion and extraction forces**.

This design has fir tree lamellas offset from each other from one half of the fixing to the other, which helps to achieve reliable and consistent forces.



*Double pipe featuring on tube holder
and one corrugated hose clip
with locking lid*

Triple pipe clip

*Pipe and hose clip
with locking lid*



Ref. 243285



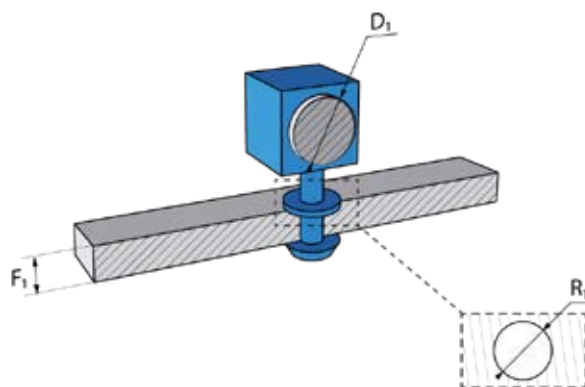
Ref. 243286

Swivel clip bases available (male and female)

- Push-in force $F < 45\text{N}$ / Pull-out force $F > 150\text{N}$
(new OEM requirements, ergonomic approved)
- Comparable pull-out force to existing designs
- Functional element for any kind of fastening
- Hole diameter 6.5 mm
- Assembly thickness 0.8 to 6 mm

Cable clips

Round hole



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Hole Diameter (R1)	Panel Thickness (F1)	Tube or Cable Diameter (D1)
207766		6.5	0.7	-
207268		6.5-6.7	0.6-7.9	21.5-24.5
233857		6.5-6.7	0.8-6	23
018776		6.5-6.7	1.5-6	16
108141		8	0.7-1.2	-
225553		9-9.2	1.8	9.5

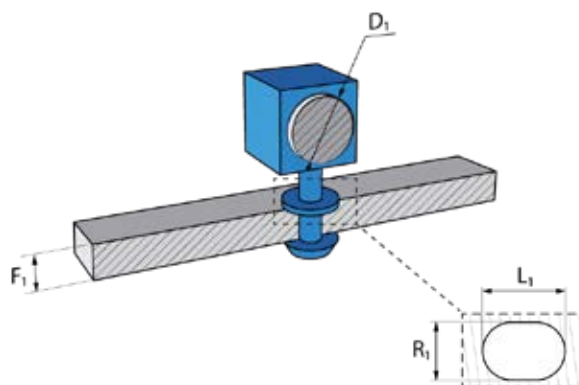
APPLICATION INFORMATION

- To fix one or more tube/wire to a panel
- Plastic and spring steel combinations
- Covering most common wire and tube diameters and fixings

**Contact us
for more dimensions
and variants!** See p.120

Cable clips

Oval & oblong hole



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Hole Size (R1 x L1)	Panel Thickness (F1)	Tube or Cable Diameter (D1)
056061		6.2 x 12.2	0.67-2	2.5-8
057656		6.2 x 12.2	0.67-3	2.5-8
056095		6.2 x 12.2	0.67-3	20
055575		6.2 x 12.2	0.7	6
206902		6.2 x 12.2	0.7-4	2-8
219294		6.2 x 12.2	0.7-1.5	10
214323		6.5 x 9	3.4	8

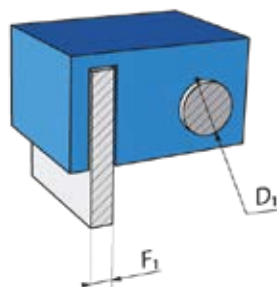
APPLICATION INFORMATION

- To fix one or more tube/wire to a panel
- Plastic and spring steel combinations
- Covering most common wire and tube diameters

**Contact us
for more dimensions
and variants!** See p.120

Cable clips

Panel edge



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Panel Thickness (F1)	Tube or Cable Diameter (D1)
016596		3-6	5-11
017699		3-6	5-11

APPLICATION INFORMATION

- To fix one or more tube/wire to a panel
- Covering most common wire and tube diameters
- Suitable for high temperature performance requirements such as engine or exhaust application area

**Contact us
for more dimensions
and variants!** See p.120

Specific cable clips

Fix one or more wires



For more information,
please contact us.
We have a solution for you.

ARaymond's wide range of cable and tube holders are made to fix one or more wires to a panel. It covers all common tube diameters and fixings. They are suitable to a wide range of panel thickness with different anchoring systems like studs, holes or panel clips. They can suit to different holes depths.

Our corrugated hose clips are specifically designed to be placed around the corrugated tubes of wiring assemblies to prevent fasteners from moving along the wiring bundles.



Open

Ref. 056974



Closed



Ref. 020140

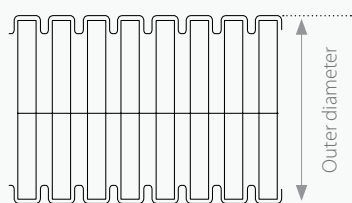


Ref. 220772

- Compatible with all common mounting strategies (hole, stud, or edge)
- To fix one or more tube/wire to a panel
- Plastic and spring steel combinations
- Available with the modular swivel assembly fastener range



OUTER HOSE DIAMETER (D1)

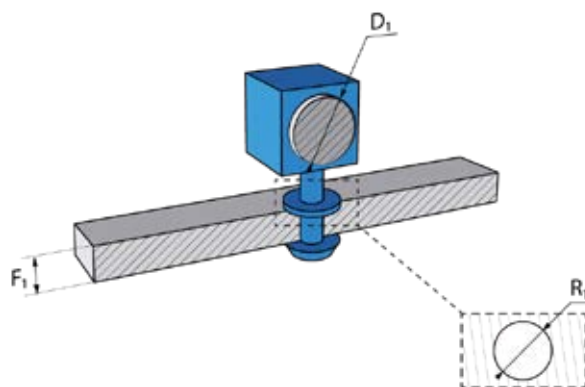


NW (size)	4.5	7.5	8.5	10	13	17	22
Outer diameter (mm)	7.1	9.9	11.4	12.9	15.8	21	25.5

CORRUGATED HOSE CLIPS

Corrugated hose clips

Round hole



All dimensions in mm except for Inner Hose Diameter / Other dimensions and variants on request.

Ref.	Design	Hole Diameter (R1)	Panel Thickness (F1)	Inner Hose Diameter (NW)	Outer Hose Diameter (D1)
019670		6.5	0.8-2.5	-	23
017878		6.5	0.8-2.5	-	31.4
017521		6.5	0.8-2.5	17	21
017529		6.5	0.8-2.5	22	25.5
017098		6.5	0.8-6	-	17.25
220131		6.5	1-3	-	14
017713		6.5	1-6	-	9.9
017096		6.5	1-6	-	12.2

Corrugated hose clips

Round hole



All dimensions in mm except for Inner Hose Diameter / Other dimensions and variants on request.

Ref.	Design	Hole Diameter (R1)	Panel Thickness (F1)	Inner Hose Diameter (NW)	Outer Hose Diameter (D1)
017714		6.5	1-6	-	12.9
017097		6.5	1-6	-	18.3
017482		6.5	1-6	4.5	7.1
017095		6.5	1-6	7.5	9.9
017600		6.5	1-6	13	15.8
019778		6.5	1-6	22	25.5
222837		6.5	1.8-3.5	-	25.5
018480		6.5	2-3.7	17	21
018890		6.5	2.5	13	15.8
175072		7	2.8-4	-	31.4

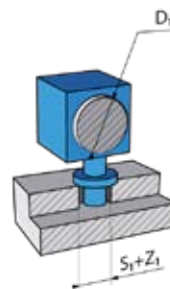
APPLICATION INFORMATION

- Suitable for most corrugated hoses
- Optimised fastener location to wire bundle

**Contact us
for more dimensions
and variants!** See p.120

Corrugated hose clips

Blind round hole - Manual lock



All dimensions in mm except for Inner Hose Diameter / Other dimensions and variants on request.

Ref.	Design	Stud Specification (S1)	Inner Hose Diameter (NW)	Outer Hose Diameter (D1)
201721		M6	4.5	7.1
108135		10	-	18

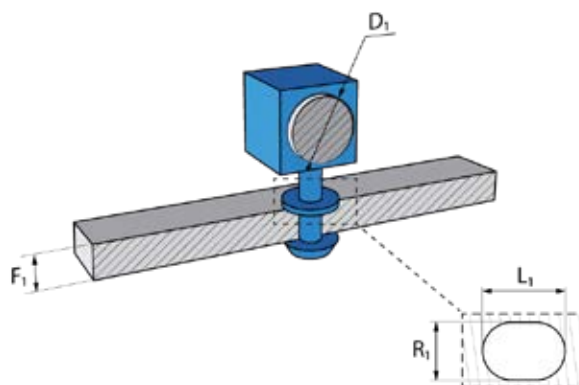
APPLICATION INFORMATION

- Suitable for most corrugated hoses
- Optimised fastener location to wire bundle

**Contact us
for more dimensions
and variants!** See p.120

Corrugated hose clips

Oval & oblong hole



All dimensions in mm except for Inner Hose Diameter / Other dimensions and variants on request.

Ref.	Design	Hole Size (R1 x L1)	Panel Thickness (F1)	Inner Hose Diameter (NW)	Outer Hose Diameter (D1)
055950		6.2 x 12.2	0.7-2	-	25

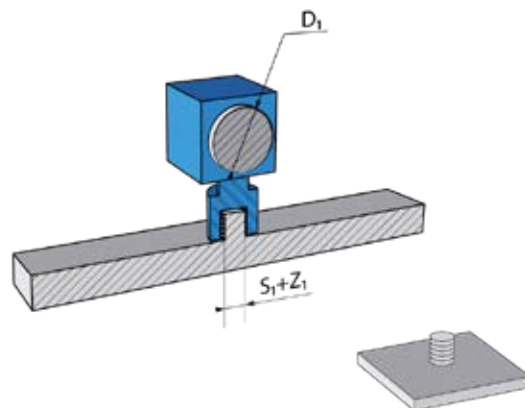
APPLICATION INFORMATION

- Suitable for most corrugated hoses
- Optimised fastener location to wire bundle

**Contact us
for more dimensions
and variants!** See p.120

Corrugated hose clips

Onto threaded stud



All dimensions in mm except for Inner Hose Diameter / Other dimensions and variants on request.

Ref.	Design	Stud Specification (S1+Z1)	Inner Hose Diameter (NW)	Outer Hose Diameter (D1)
018633		M6	4.5	7.1
017620		T5	4.5	7.1
017693		T5	-	9.9
017639		T5	-	12.9
017528		T5	13	15.8
017694		T5	17	21
017716		T5	22	25.5
017790		T5	-	31.4

Corrugated hose clips

Onto threaded stud



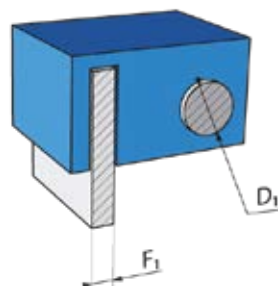
APPLICATION INFORMATION

- Suitable for most corrugated hoses
- Optimised fastener location to wire bundle

**Contact us
for more dimensions
and variants!** See p.120

Corrugated hose clips

Profile edge



All dimensions in mm except for Inner Hose Diameter / Other dimensions and variants on request.

Ref.	Design	Panel Thickness (F1)	Inner Hose Diameter (NW)	Outer Hose Diameter (D1)
017554		2 - 3	13	15.8
017613		2 - 3	17	21
020022		2 - 3	-	23
017798		2 - 3	-	31.4

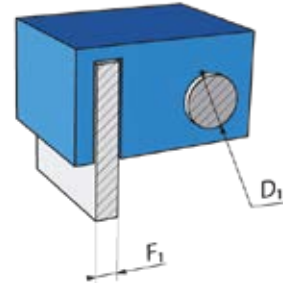
APPLICATION INFORMATION

- Suitable for most corrugated hoses
- Optimised fastener location to wire bundle

**Contact us
for more dimensions
and variants!** See p.120

Corrugated hose clips

Onto panel edge



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Panel Thickness (F1)	Outer Hose Diameter (D1)
017783		0.8-3	10
017784		0.8-3	10
018917		0.8-3	10
019152		0.8-1.8	8
019150		0.8-1.8	25
019378		0.8-1.8	14.25
019314		1-3.2	14.25
019151		1-3.5	8

Corrugated hose clips

Onto panel edge



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Panel Thickness (F1)	Outer Hose Diameter (D1)
017785		3-6	10
017786		3-6	10

APPLICATION INFORMATION

- Suitable for most corrugated hoses
- Optimised fastener location to wire bundle
- Suitable for high temperature performance requirements such as engine or exhaust application area

**Contact us
for more dimensions
and variants!** See p.120



CONNECTOR HOLDERS

CONNECTOR HOLDERS

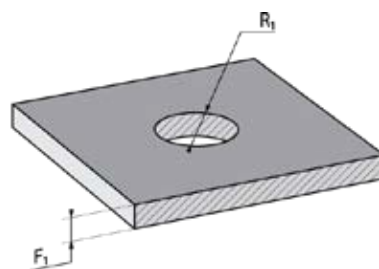
		Round hole	p.86
		Round hole - Sealed	p.89
		Oval & oblong hole	p.90
		Oval & oblong hole - Sealed	p.93
		Square hole	p.94
		Rectangular hole	p.95
		Anti-rotation	p.96
		Threaded stud	p.98
		Panel edge	p.99
		Specific	p.100

CONNECTOR CAPS

		Connector caps	p.102
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Connector holders

Round hole



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Hole Diameter (R1)	Panel Thickness (F1)
056151		6.5	0.5-6.5
082564		6.5	0.6
209461		6.5	0.6-1.3
201634		6.5	0.6-3
018162		6.5	0.8-2.5
082200		6.5	0.8-2.5
017530		6.5	0.8-6
019849		6.5	0.8-6

Connector holders

Round hole



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Hole Diameter (R1)	Panel Thickness (F1)
164516		6.5	0.8-7.5
212994		6.5	0.8-20
018701		6.5	1-6
201727		6.5	1.5-3.5
201728		6.5	1.5-3.5
114015		6.5	0.8-2
114022		6.5	0.7-1.5
117042		6.5	1-2
175028		7	0.7-1.6
210921		7	0.7-1.6
211383		8	0.7-2

Connector holders

Round hole



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Hole Diameter (R1)	Panel Thickness (F1)
211384		8	0.7-2
114006		8	0.8-2.5
206094		8	0.8-5

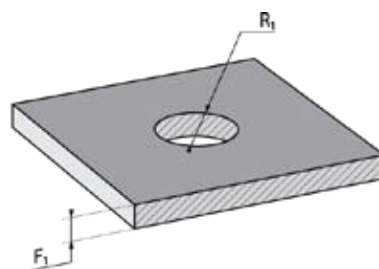
APPLICATION INFORMATION

- To securely fasten connectors to the vehicle
- Suitable for most types of automotive connectors

**Contact us
for more dimensions
and variants!** See p.120

Connector holders

Round hole - Sealed



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Hole Diameter (R1)	Panel Thickness (F1)
082564		6.5	0.6
082200		6.5	0.8-2.5
081855		6.5	0.8-6
082019		6.5	0.8-2.5
213360		8	0.7-2
213363		8	0.7-2

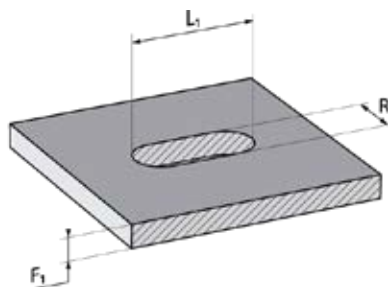
APPLICATION INFORMATION

- To securely fasten connectors to the vehicle
- Suitable for most types of automotive connectors

**Contact us
for more dimensions
and variants!** See p.120

Connector holders

Oval & oblong hole



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Hole Size (R1 x L1)	Panel Thickness (F1)
211318		6.2 x 12.2	0.6-1.5
209310		6.2 x 12.2	0.6-3
082359		6.2 x 12.2	0.5-3
056868		6.2 x 12.2	0.5-6
057597		6.2 x 12.2	0.5-6
212922		6.2 x 12.2	0.6
215081		6.2 x 12.2	0.62-3.5
206667		6.2 x 12.2	0.67-1

Connector holders

Oval & oblong hole



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Hole Size (R1 x L1)	Panel Thickness (F1)
212188		6.2 x 12.2	0.67-4
202498		6.2 x 12.2	0.67-6.5
208694		6.2 x 12.2	0.7-1
056150		6.2 x 12.2	0.7-3
201925		6.2 x 12.2	0.7-5
132768		6.2 x 12.2	0.7-6
245549		6.2 x 12.2	0.7-6
131833		6.2 x 12.2	1.5-3
220448		6.3 x 12.3	2
221052		6.3 x 12.3	2
241327		6.5 x 10.5	0.6-2.5

Connector holders

Oval & oblong hole



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Hole Size (R1 x L1)	Panel Thickness (F1)
241326		6.5 x 10.5	0.6-2.5
202090		8 x 12	0.7-2.5

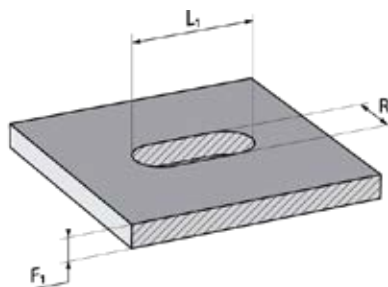
APPLICATION INFORMATION

- To securely fasten connectors to the vehicle
- Suitable for most types of automotive connectors

**Contact us
for more dimensions
and variants!** See p.120

Connector holders

Oval & oblong hole - Sealed



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Hole Size (R1 x L1)	Panel Thickness (F1)
228333		6.5 x 12.5	0.6-1.25
230577		6.5 x 12.5	1.25-2
228334		6.5 x 12.5	2.25-3

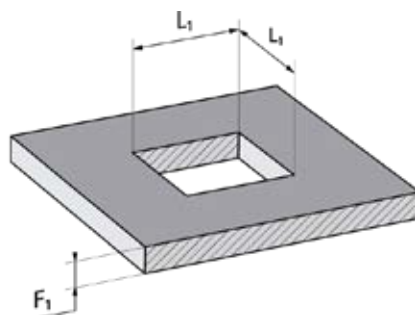
APPLICATION INFORMATION

- To securely fasten connectors to the vehicle
- Suitable for most types of automotive connectors

**Contact us
for more dimensions
and variants!** See p.120

Connector holders

Square hole



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Length of Hole (L1xL1)	Panel Thickness (F1)
018853		6.8 x 6.8	0.8-1.5

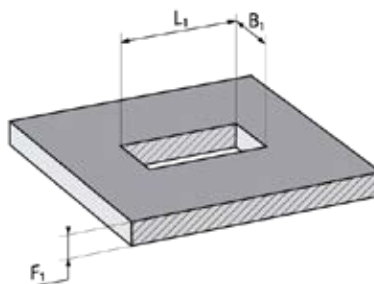
APPLICATION INFORMATION

- To securely fasten connectors to the vehicle
- Suitable for most types of automotive connectors

**Contact us
for more dimensions
and variants!** See p.120

Connector holders

Rectangular hole



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Hole Size (B1 x L1)	Panel Thickness (F1)
213701		6.5 x 9.5	0.7-2.5
211562		8 x 15	0.8-2.5

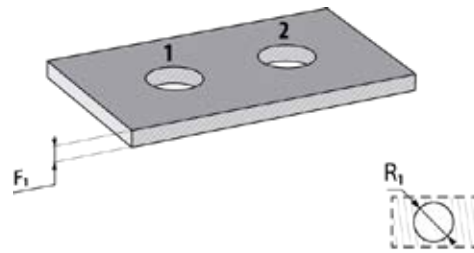
APPLICATION INFORMATION

- To securely fasten connectors to the vehicle
- Suitable for most types of automotive connectors

**Contact us
for more dimensions
and variants!** See p.120

Connector holders

Anti-rotation



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Hole Diameter 1 (R1)	Hole Diameter 2 (R1)	Panel Thickness (F1)
020464		5	6.5	0.8-3
214259		5	6.5	1.2-1.8
209481		5	8	1-3
209435		5	8	1-3
214790		6.1-7.15	5	1-4
219021		6.5	6.5	0.8-4
210101		6.5	5	0.8-4
212482		6.5	5	0.8-4

Connector holders

Anti-rotation



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Hole Diameter 1 (R1)	Hole Diameter 2 (R1)	Panel Thickness (F1)
211835		6.5	5	0.8-4
230164		6.7	5.5	0.6-4

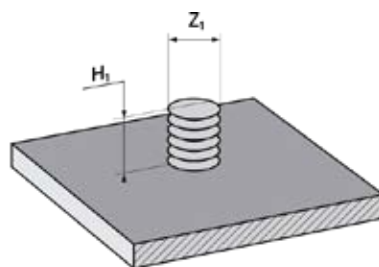
APPLICATION INFORMATION

- To securely fasten connectors to the vehicle
- Suitable for most types of automotive connectors

**Contact us
for more dimensions
and variants!** See p.120

Connector holders

Threaded stud



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Stud Diameter (Z1)	Stud Height (H1)
056369		5	9
020002		5	16

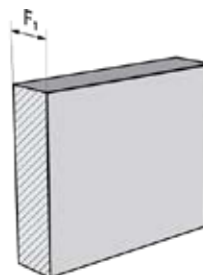
APPLICATION INFORMATION

- To securely fasten connectors to the vehicle
- Suitable for most types of automotive connectors

**Contact us
for more dimensions
and variants!** See p.120

Connector holders

Panel edge



All dimensions in mm / Other dimensions and variants on request.

Ref.	Design	Panel Thickness (F1)
061807		1.5-3
061835		1.5-3
061899		4-7

APPLICATION INFORMATION

- To securely fasten connectors to the vehicle
- Suitable for most types of automotive connectors

**Contact us
for more dimensions
and variants!** See p.120

Specific connector holders



Allowing secure fastening of connectors to the vehicle



*For more information,
please contact us.
We have a solution for you.*

ARaymond's broad range of connector holders ensure a secure fastening to the vehicle. They are suitable for most types of automotive connectors like electrical supports.



Ref. 017811



Ref. 017812



Ref. 018689



Ref. 057391



Ref. 057796



Ref. 213687



Ref. 210510



Ref. 201636



Ref. 020895



Ref. 114153



Ref. 211179



CONNECTOR CAPS

Connector caps



Allowing secure fastening to vehicle

The ARaymond range of connector caps offers a great variety in terms of end completions and fixing solutions. Connector caps are **made to protect and fasten the unused connectors** at point of vehicle manufacture. It allows easy addition of electrical aftermarket vehicle options.

Ensure secure fastening to the vehicle, suitable for most types of automotive connectors. Protecting, covering, and mounting connectors available for any circuits unused at point of manufacture.

*For more information, please contact us.
We have a solution for you.*

Hole fixings



Ref. 214932



Ref. 205551



Ref. 205550

Anti-rotation



Ref. 207631



Ref. 207726

Stud fixings



Ref. 206321

Multi fixings



Ref. 205549



Ref. 206595



Ref. 215616

No mount feature Cap only



Ref. 206311



Edge fixings



Ref. 206313



Ref. 208090



Ref. 211958

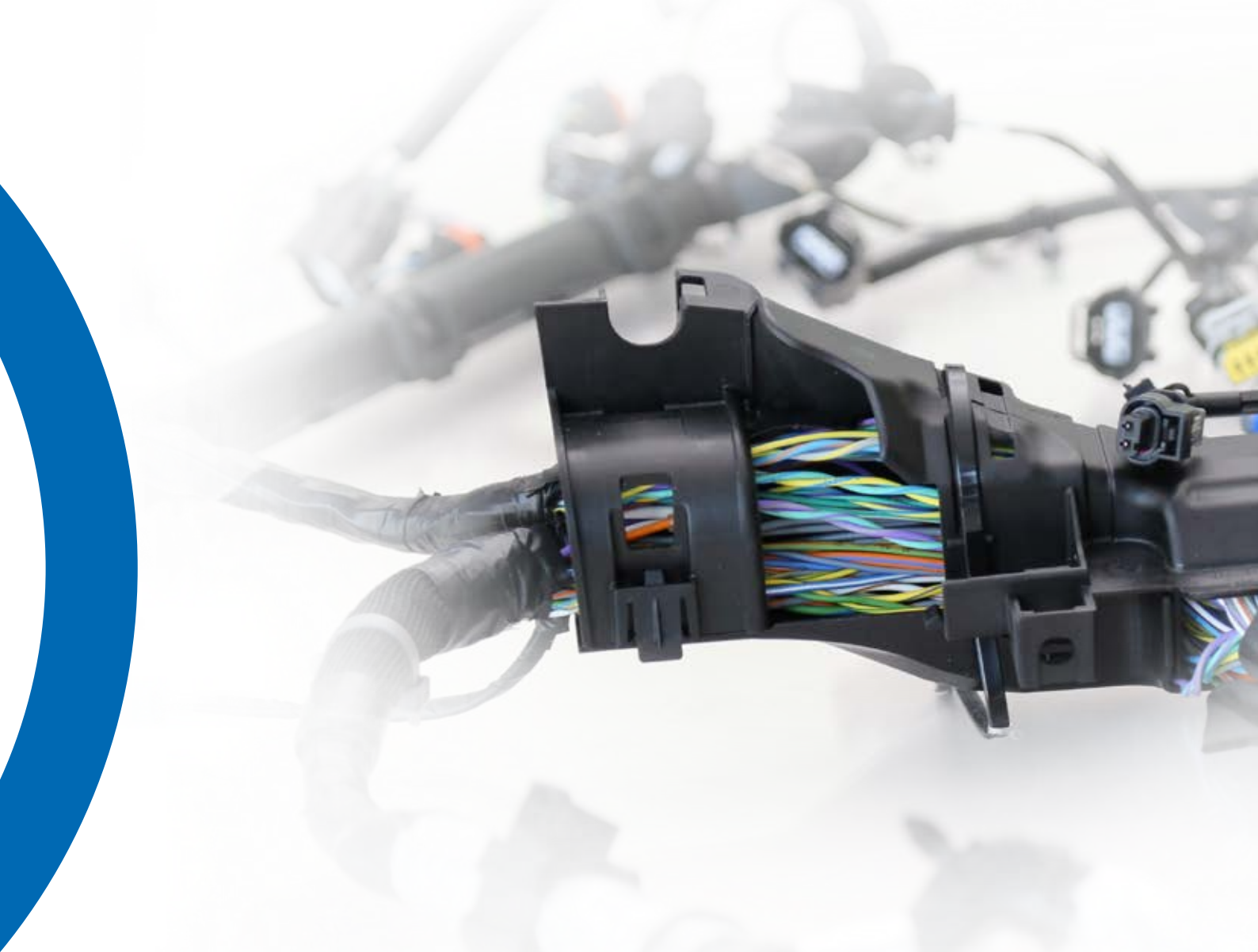
Tape-on



Ref. 205558



Ref. 205566



VEHICLE SPECIFIC DEVELOPMENTS



Cable channels	p.106
Springsteel brackets	p.108
Fuse boxes and relay holders	p.109
Battery terminal covers and protectors	p.110
Bi-injected grommets	p.111

Cable channels

Vehicle specific developments

Protecting or forming of the wiring harness

Our many years experience and design expertise allow us to develop cable channels which are optimized to fit both our wire harness customers and OEMs requirements and specifications.

ROBUST AND OPTIMIZED

The ARaymond™ cable channels are made from injection-molded plastic components with or without metal inserts and provide robust performance throughout the vehicle's lifetime. The parts allow an optimized number of fixing points while maintaining complete control of wire harness.

REPEATABILITY

Our designs facilitate quick and easy assembly line processes. They provide **repeatable wiring harness assembly, even in complex packaging areas.**



METAL ANTI-CREEPING RINGS

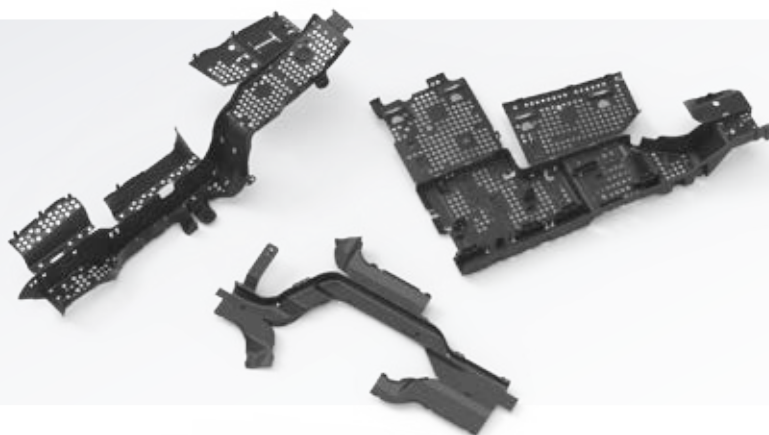
Anti-creeping rings transmit the locking torque of the screw while preventing plastic creeping, thus stabilizing the screwing points. ARaymond provides a wide range of designs (elastic and non-elastic, round or oblong, etc.) compatible with a great variety of panel thickness.



ENGINE BAY



CABIN



UNDERBODY



HIGH VOLTAGE



Springsteel brackets

Vehicle specific developments

Multi-purpose holders for ABS jump leads, relays, connectors, electronic boxes and wire harnesses.

ROBUST

Our spring steel brackets are ideal for harsh environments and high temperature areas, for applications such as underbody, engine bay, wheel arches.

VERSATILE

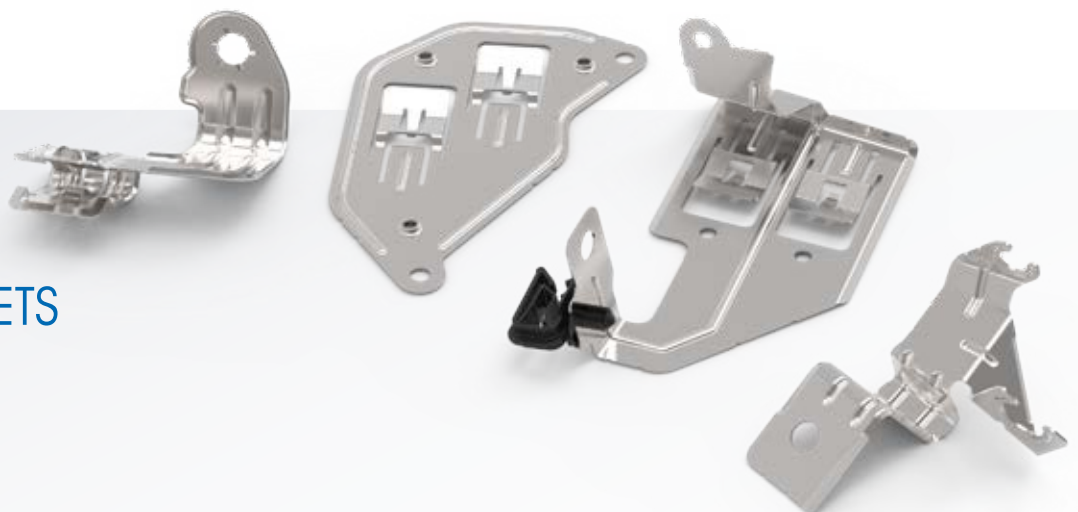
We can provide versatile, complex shapes to suit almost any packaging requirement, as well as surface treatment to suit all vehicle environments.

WEIGHT SAVING

Spring steel is a light weight, high strength and yet flexible material specifically suitable for ergonomic fastening.



BRACKETS



Fuse boxes & relay holders

Vehicle specific developments

Specific designs suitable for boxes, covers, fuse and relay holders.

At ARaymond™ we handle all stages of manufacturing in-house, from designing the molds to performing the plastic injection molding process for complex and particularly detailed parts.

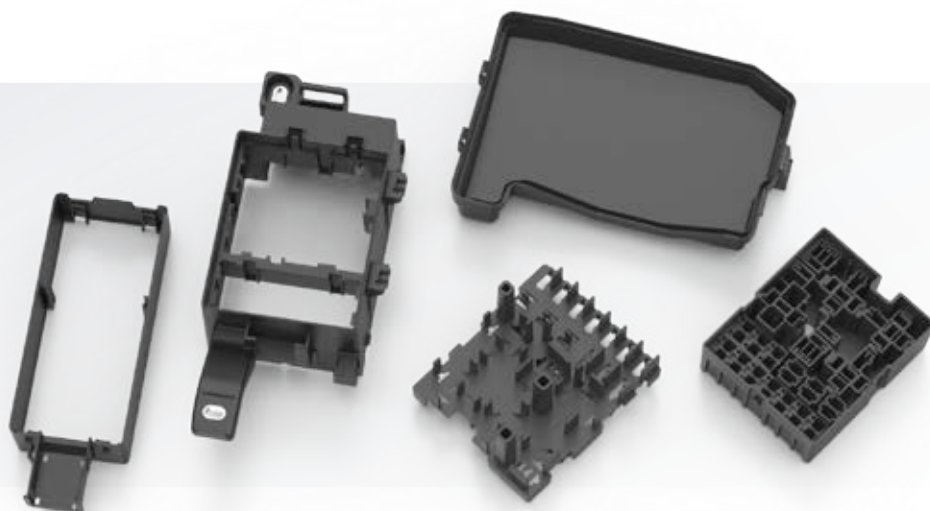
SECURE FASTENING

Metal inserts, over molded or assembled, provide secure and reliable fastening to vehicle.

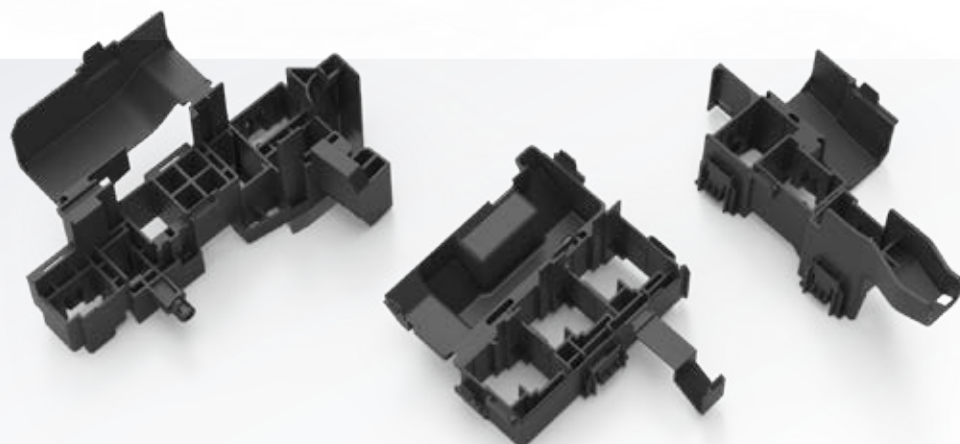
LASER MARKING

A high quality laser marking process for identification of serviceable content.

BOXES



HOLDERS

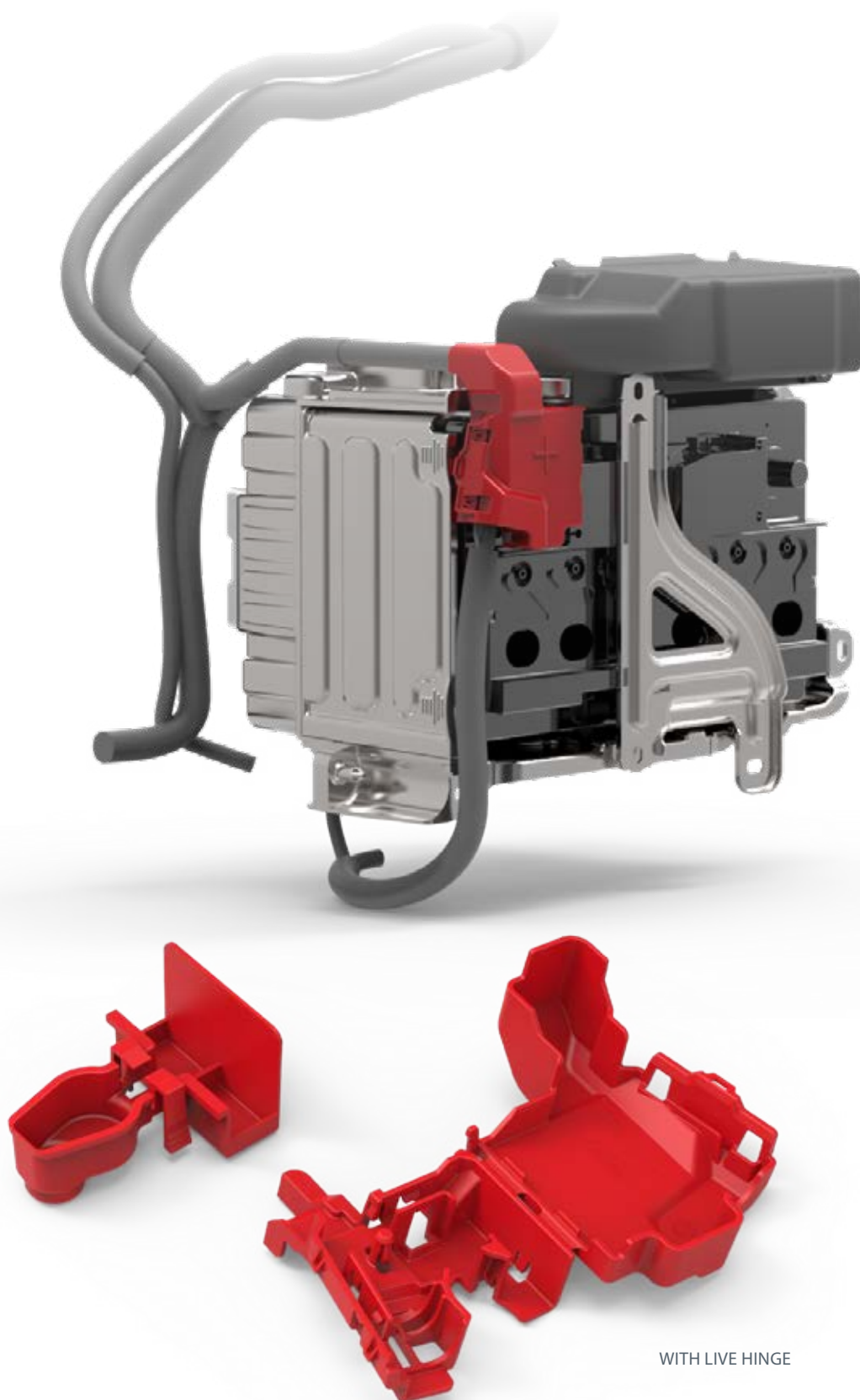


Battery positive covers and protectors

Vehicle specific developments

Color coded for easy identification.

These covers and protectors allow service access to battery terminal.



WITH LIVE HINGE

Bi-injected grommets

Vehicle specific developments

Protection for through body wires, harness or cables from sharp edges

SNAP-FIT

Fast and effective assembly at OEMs.

SEALING

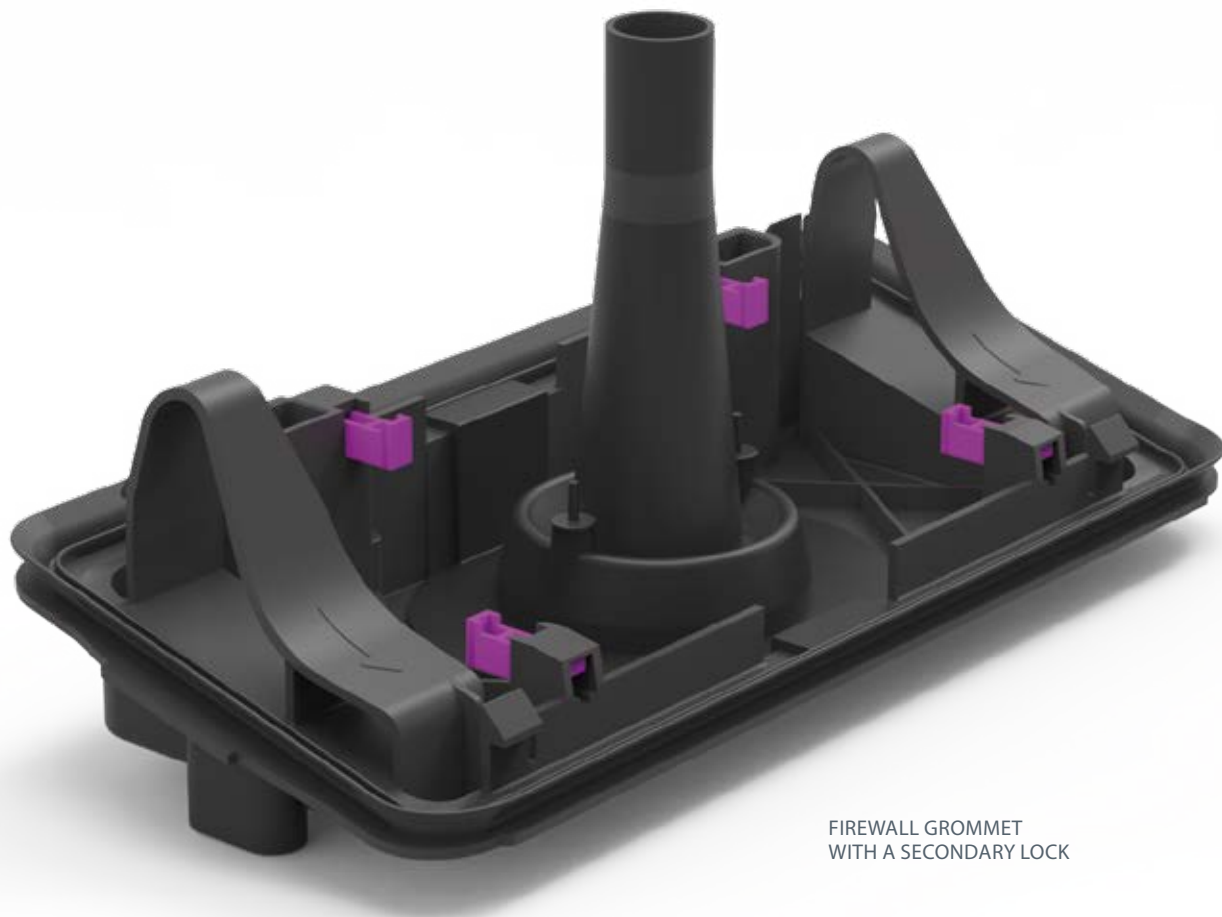
High performance sealing against water ingress due to selected material and the ARaymond design of seal.

NOISE REDUCTION

Minimize vibration and reduce the transfer of noise.

ROBUST

The bi-injection process ensures a robust retention of the seal, and has a cost-effective design.



FIREWALL GROMMET
WITH A SECONDARY LOCK

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RAW MATERIALS GUIDE

Material	Material Specification	Temperature range		Applications	Standard Color
		Temp short 3hrs	Temp long 5000hrs		
PE	Standard	80	60	Low performance parts, plugs low temp	Black & Natural
PP	Standard	140	100	Suitable for low temp environments. Flexible material for live hinges, fir trees, anchor feet and straps	Black & Natural
	With talcum powder	140	110	Cable channels higher stiffness	Black & Natural
	With glass fiber	150	110	High stiffness grades	Black
Polyamid 6	Standard	160	100	Expanding rivets, cable straps	Black & Natural
PA66	Standard	180	100	Live hinges, anchor feet, fir trees and cable straps	Black & Natural
	Heat stabilised	180	140	Suitable for high temp environments. Live hinges, anchor feet, fir trees and cable straps	Black & Natural
	Heat stabilised with glass fiber	220	170	Strong, stiff high temp material. Not suitable for live hinges or other flexible designs	Black & Natural
PA12	Heat stabilised	150	110	Cable straps, high chemical resistance, low moisture	Black & Natural
PA46	Heat stabilised	220	135-155	Extreme high temp applications	Black & Natural
POM-H	Standard	140	105	Low temp material, high strength, high retention force, no hinges	Black & Natural
	Impact modified	140	90	Low temp material, good strength, high flexibility, no hinges	Black & Natural
POM-C	Standard	140	105	Low temp material, high strength, high retention force, no hinges	Black & Natural
	Impact modified	140	90	Low temp material, good strength, high flexibility, no hinges	Black & Natural
PBT	Standard	200	140	High dimensional performance	Black & Natural
TPE-V	Standard	150	120	Flexible plugs Shore 55A - 50D	Black & Natural

A LONG HISTORY OF INNOVATION

Innovation has been one of ARaymond's core values for more than 150 years. And it is innovation that drives our constant quest for new and better assembly solutions.

We have been striving to develop new products, processes, and product features for new applications and markets since the beginning.

We currently invest 6% of our revenue in R&D and innovation. We created an innovation center staffed by researchers working to develop tomorrow's technologies and conduct proof-of-concept testing on ARaymond solutions. Our comprehensive innovation process includes market research, customer focus groups, and new design thinking. All ARaymond R&D teams worldwide contribute, enabling a powerful collaborative approach that leads to new ideas, concepts, and products.



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