



1 TYPE OF INSTALLATION

no code	without mounting plate, rail adaptor or rail nuts
SP	Single Weld Plate
SPV	Elongated Weld Plate
CRA	Channel Rail Adaptor
DSP *3	Twin Weld Plate
RAP *3	Group Weld Plate
SM	Hexagon Rail Nut

3 MATERIAL & DESIGN OF CLAMP BODY *1

PP	Polypropylene, profiled inside, with tension clearance
PPH	Polypropylene, smooth inside, without tension clearance
PA	Polyamide, profiled inside, with tension clearance
PAH	Polyamide, smooth inside, without tension clearance
SA	Santoprene, profiled inside, with tension clearance
SAH	Santoprene, smooth inside, without tension clearance
AL *2	Aluminium, profiled inside, with tension clearance

4 MOUNTING & FITTING COMBINATION

DP - AS	Cover Plate / Hexagon Head Bolt
ASE	Insert / Hexagon Head Bolt (w/o Cover Plate)
IS	Socket Cap Screw
LI *3	Slotted Head Screw
SIG - AF	Safety Locking Plate / Stacking Bolt
EP - AS	Insert EP / Hexagon Head Bolt (without Cover Plate)
ES - AS	Insert ES / Hexagon Head Bolt (without Cover Plate)

7 ASSEMBLING & PACKAGING

no code	components supplied separately (standard)
A	assembled (optional)
K	packed in kits (optional)

2 STAUFF GROUP & SIZE OF CLAMP BODY

Group	Tube O.D. in mm	Tube O.D. in inch	Nominal Bore in mm	Nominal Bore in inch	Material Code	
STAUFF 1 DIN 0	6				106	
	6,4	1/4			106,4	
	8	5/16			108	
	9,5	3/8	1/4		109,5	
	10		1/8		110	
	12				112	
STAUFF 1A DIN 1	6				106A	
	6,4	1/4			106,4A	
	8	5/16			108A	
	9,5	3/8	1/4		109,5A	
STAUFF 1A DIN 1	10		1/8		110A	
	12				112A	
	12,7	1/2	3/8		212,7	
	13,5	1/2	1/4		213,5	
STAUFF 2 DIN 2	14				214	
	15				215	
	16	5/8	1/2		216	
	17,2	3/4			217,2	
	18				218	
	STAUFF 3 DIN 3	13,4		1/4		313,4 *7
17,4			3/8		317,4 *7	
19		3/4			319	
20					320	
20,5			1/2		320,5 *7	
21,3		1/2			321,3	
STAUFF 3 DIN 3	22		3/4		322	
	23,9		5/8		323,9 *7	
	25				325	
	25,4	1			325,4	
	STAUFF 4 DIN 4	26,9	3/4			426,9
		28				428
28,6			1		428,6	
30					430	

2 STAUFF GROUP & SIZE OF CLAMP BODY CONTINUATION

Group	Tube O.D. in mm	Tube O.D. in inch	Nominal Bore in mm	Nominal Bore in inch	Material Code	
STAUFF 5 DIN 5	27,8				527,8 *7	
	32	1 1/4			532	
	33,7		1		533,7	
	35			1 1/4	535	
	35,7				1	535,7 *7
	38	1 1/2				538
STAUFF 6 DIN 6	40				540	
	41,3		1 1/2		541,3	
	42	1 1/4			542	
	43,8			1 1/4	543,8 *7	
	44,5	1 3/4			544,5	
	48,3		1 1/2		548,3	
STAUFF 6 DIN 6	49,8			1 1/2	549,8 *7	
	50,8	2			550,8	
	54			2	554	
	57,2	2 1/4			557,2	
	60,3		2		560,3	
	63,5	2 1/2			563,5	
STAUFF 7 DIN 7	70	2 3/4			570	
	73		2 1/2		573	
	76,1	3	2 1/2		576,1 *5	
	88,9			3	588,9	
STAUFF 8 DIN 8	102	4	3 1/2		58102L	

5 TYPE OF THREAD

M	Metric Thread
U	UNC Thread

6 MATERIAL & SURFACE FINISHING OF METAL PARTS *6

W1	all parts are untreated
W2	all parts are phosphated
W3	all parts are zinc plated
W4	all metal parts made of stainless steel A2 - 1.4301/1.4305 (AISI 304/303)
W5	all metal parts made of stainless steel A4 - 1.4401/1.4571 (AISI 316/316T)
W10	weld plate phosphated, all other parts zinc plated
W11	rail nut untreated, all other parts zinc plated

TECHNICAL NOTES

- *1 SEE MATERIAL PROPERTIES ON PAGE C59. OTHER CLAMP BODY MATERIALS AND COLORS ARE AVAILABLE UPON REQUEST.
- *2 AVAILABLE FOR STAUFF GROUP 1A TO 6 ONLY. (DIN GROUP 1 TO 6).
- *3 AVAILABLE FOR STAUFF GROUP 1 TO 6 ONLY. (DIN GROUP 0 TO 6).
- *4 NOMINAL BORE, EXCEPT DIN 2448.
- *5 NOMINAL BORE, ONLY DIN 2448.
- *6 INDIVIDUAL COMBINATIONS OF ALTERNATIVE SURFACE FINISHES AND SPECIAL PROPERTY MATERIALS ARE AVAILABLE UPON REQUEST.
- *7 CLAMPS WILL BE SMOOTH INSIDE AND WITHOUT TENSION CLEARANCE. HOSE SIZES ARE FOR SAE 100R1 SERIES HYDRAULIC HOSES.

<p>SP 212,7 PP DP-AS U W10</p> <p>2x Hexagon Head Bolt Surface: W3, Zinc Plated Thread: UNC</p> <p>1x Cover Plate Surface: W3, Zinc Plated</p> <p>1x Clamp (two halves) Material: Polypropylene Design: profiled inside, with tension clearance Group: STAUFF 2 DIN 2 Tube-O.D.12,7 mm</p> <p>1x Single Weld Plate Surface: W2, Phosphated Thread: UNC</p> <p>W10 is standard for this type of installation.</p>	<p>SP 212,7 PP IS U W10</p> <p>2x Socket Cap Screw Surface: W3, Zinc Plated Thread: UNC</p> <p>1x Clamp (two halves) Material: Polypropylene Design: profiled inside, with tension clearance Group: STAUFF 2 DIN 2 Tube-O.D.12,7 mm</p> <p>1x Single Weld Plate Surface: W2, Phosphated Thread: UNC</p> <p>W10 is standard for this type of installation.</p>	<p>SP 212,7 PP LI U W10</p> <p>2x Slotted Head Screw Surface: W3, Zinc Plated Thread: UNC</p> <p>1x Clamp (two halves) Material: Polypropylene Design: profiled inside, with tension clearance Group: STAUFF 2 DIN 2 Tube-O.D.12,7 mm</p> <p>1x Single Weld Plate Surface: W2, Phosphated Thread: UNC</p> <p>W10 is standard for this type of installation.</p>
<p>SPV 212,7 PP DP-AS U W10</p> <p>2x Hexagon Head Bolt Surface: W3, Zinc Plated Thread: UNC</p> <p>1x Cover Plate Surface: W3, Zinc Plated</p> <p>1x Clamp (two halves) Material: Polypropylene Design: profiled inside, with tension clearance Group: STAUFF 2 DIN 2 Tube-O.D.12,7 mm</p> <p>1x Elongated Weld Plate Surface: W2, Phosphated Thread: UNC</p> <p>W10 is standard for this type of installation.</p>	<p>SPV 212,7 PP IS U W10</p> <p>2x Socket Cap Screw Surface: W3, Zinc Plated Thread: UNC</p> <p>1x Clamp (two halves) Material: Polypropylene Design: profiled inside, with tension clearance Group: STAUFF 2 DIN 2 Tube-O.D.12,7 mm</p> <p>1x Elongated Weld Plate Surface: W2, Phosphated Thread: UNC</p> <p>W10 is standard for this type of installation.</p>	<p>SPV 212,7 PP LI U W10</p> <p>2x Slotted Head Screw Surface: W3, Zinc Plated Thread: UNC</p> <p>1x Clamp (two halves) Material: Polypropylene Design: profiled inside, with tension clearance Group: STAUFF 2 DIN 2 Tube-O.D.12,7 mm</p> <p>1x Elongated Weld Plate Surface: W2, Phosphated Thread: UNC</p> <p>W10 is standard for this type of installation.</p>
<p>SM 212,7 PP DP-AS U W3</p> <p>2x Hexagon Head Bolt Surface: W3, Zinc Plated Thread: UNC</p> <p>1x Cover Plate Surface: W3, Zinc Plated</p> <p>1x Clamp (two halves) Material: Polypropylene Design: profiled inside, with tension clearance Group: STAUFF 2 DIN 2 Tube-O.D.12,7 mm</p> <p>2x Hexagon Rail Nut Surface: W3, Zinc Plated Thread: UNC</p> <p>W3 is standard for this type of installation.</p>	<p>SM 212,7 PP IS U W3</p> <p>2x Socket Cap Screw Surface: W3, Zinc Plated Thread: UNC</p> <p>1x Clamp (two halves) Material: Polypropylene Design: profiled inside, with tension clearance Group: STAUFF 2 DIN 2 Tube-O.D.12,7 mm</p> <p>2x Hexagon Rail Nut Surface: W3, Zinc Plated Thread: UNC</p> <p>W3 is standard for this type of installation.</p>	<p>SM 212,7 PP LI U W3</p> <p>2x Slotted Head Screw Surface: W3, Zinc Plated Thread: UNC</p> <p>1x Clamp (two halves) Material: Polypropylene Design: profiled inside, with tension clearance Group: STAUFF 2 DIN 2 Tube-O.D.12,7 mm</p> <p>2x Hexagon Rail Nut Surface: W3, Zinc Plated Thread: UNC</p> <p>W3 is standard for this type of installation.</p>



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7 ASSEMBLING & PACKAGING

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2 STAUFF GROUP & SIZE OF CLAMP BODY

Group	Tube O.D. in mm	Tube O.D. in inch	Nominal Bore Copper Tube	Nominal Bore (NOMINAL) Hose	Material Code Clamp Body (both halves)
STAUFF 1 DIN 0	6				106
	6,4	1/4			106,4
	8	5/16			108
	9,5	3/8	1/4		109,5
STAUFF 1A DIN 1	10	1/8			110
	12				112
	6,4	1/4			106A
	8	5/16			108A
STAUFF 1A DIN 1	9,5	3/8	1/4		109,5A
	10	1/8			110A
	12				112A
	STAUFF 2 DIN 2	12,7	1/2	3/8	
13,5		1/4			213,5
14					214
15					215
STAUFF 2 DIN 2	16	5/8	1/2		216
	17,2	3/8			217,2
	18				218
	STAUFF 3 DIN 3	13,4		1/4	
17,4			3/8		317,4 *7
19		3/4			319
20					320
STAUFF 3 DIN 3	20,5		1/2		320,5 *7
	21,3	1/2			321,3
	22		3/4		322
	23,9		5/8		323,9 *7
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	25,4	1			325,4
	26,9	3/4			426,9
	28				428
STAUFF 4 DIN 4	28,6	1			428,6
	30				430

2 STAUFF GROUP & SIZE OF CLAMP BODY CONTINUATION

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	40				540
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STAUFF 6 DIN 6	42	1 1/4			542
	43,8			1 1/4	543,8 *7
	44,5	1 3/4			644,5
	48,3	1 1/2			648,3
STAUFF 6 DIN 6	49,8			1 1/2	649,8 *7
	50,8	2			650,8
	54		2		654
	57,2	2 1/4			757,2
STAUFF 7 DIN 7	60,3		2		760,3
	63,5	2 1/2			763,5
	70	2 3/4			770
	73		2 1/2		773 *4
STAUFF 8 DIN 8	76,1	3	2 1/2		776,1 *5
	88,9		3		888,9
STAUFF 8 DIN 8	102	4	3 1/2		8102L

5 TYPE OF THREAD

M	Metric Thread
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6 MATERIAL & SURFACE FINISHING OF METAL PARTS *6

W1	all parts are untreated
W2	all parts are phosphated
W3	all parts are zinc plated
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212,7 PP DP-AS U W3

2x Hexagon Head Bolt
Surface: W3, Zinc Plated
Thread: UNC

1x Cover Plate
Surface: W3, Zinc Plated

1x Clamp (two halves)
Material: Polypropylene
Design: profiled inside, with tension clearance
Group: STAUFF 2
DIN 2
Tube-O.D.12,7 mm

W3 is standard for this type of installation.

212,7 PP IS U W3

2x Socket Cap Screw
Surface: W3, Zinc Plated
Thread: metric

1x Clamp (two halves)
Material: Polypropylene
Design: profiled inside, with tension clearance
Group: STAUFF 2
DIN 2
Tube-O.D.12,7 mm

W3 is standard for this type of installation.

212,7 PP LI U W3

2x Slotted Head Screw
Surface: W3, Zinc Plated
Thread: metric

1x Clamp (two halves)
Material: Polypropylene
Design: profiled inside, with tension clearance
Group: STAUFF 2
DIN 2
Tube-O.D.12,7 mm

W3 is standard for this type of installation.

212,7 PP SIG-AF U W3

2x Stacking Bolt
Surface: W3, Zinc Plated
Thread: UNC

1x Safety Locking Plate
Surface: W3, Zinc Plated

1x Clamp (two halves)
Material: Polypropylene
Design: profiled inside, with tension clearance
Group: STAUFF 2
DIN 2
Tube-O.D.12,7 mm

W3 is standard for this type of installation.

SP 106 PP DP-AS U W10

1x Hexagon Head Bolt
Surface: W3, Zinc Plated
Thread: UNC

1x Cover Plate
Surface: W3, Zinc Plated

1x Clamp (two halves)
Material: Polypropylene
Design: profiled inside, with tension clearance
Group: STAUFF 1
DIN 0
Tube-O.D.6 mm

1x Single Weld Plate
Surface: W2, Phosphated
Thread: UNC

W10 is standard for this type of installation.

106 PP SIG-AF U W3

1x Stacking Bolt
Surface: W3, Zinc Plated
Thread: UNC

1x Safety Locking Plate
Surface: W3, Zinc Plated

1x Clamp (two halves)
Material: Polypropylene
Design: profiled inside, with tension clearance
Group: STAUFF 1
DIN 0
Tube-O.D.6 mm

W3 is standard for this type of installation.

SP 212,7 PPH DP-AS U W10

2x Hexagon Head Bolt
Surface: W3, Zinc Plated
Thread: UNC

1x Cover Plate
Surface: W3, Zinc Plated

1x Clamp (two halves)
Material: Polypropylene
Design: smooth inside, without tension clearance
Group: STAUFF 2
DIN 2
Hose-O.D.12,7 mm

1x Single Weld Plate
Surface: W2, Phosphated
Thread: UNC

W10 is standard for this type of installation.

NOTES REGARDING THE USE OF THE CHANNEL RAIL ADAPTOR CRA

The CHANNEL RAIL ADAPTOR Type **CRA** is suitable for the following channel rails:

UNISTRUT-Rails
P 1000, P1000T, P1000V, P1000VT, P1001
P2000, P2000T
P3003, P3003T, P3300V, P3300VT, P3301
P4000, P4000T
P5000, P5000T, P5001, P5500, P5500T, P5501

STAUFF-Rails
SCS 048-1-PL, SCS 120-1- PL, SCS 120-1-GR,
SCS 048-1-GR (see page C42 for details)

HALFEN-Rails
HM 41/41
HZA 41/22
HZM 41/41
HZM 41/22
HL 41/41, HL 41/B2

HILTI-Rails
MQ-21, MQ-41, MQ-52, MQ-72
MQ-21U, MQ-41U, MQ-72U
MQ-21D, MQ-41D, MQ-52-72D