TECHNICAL INFORMATION

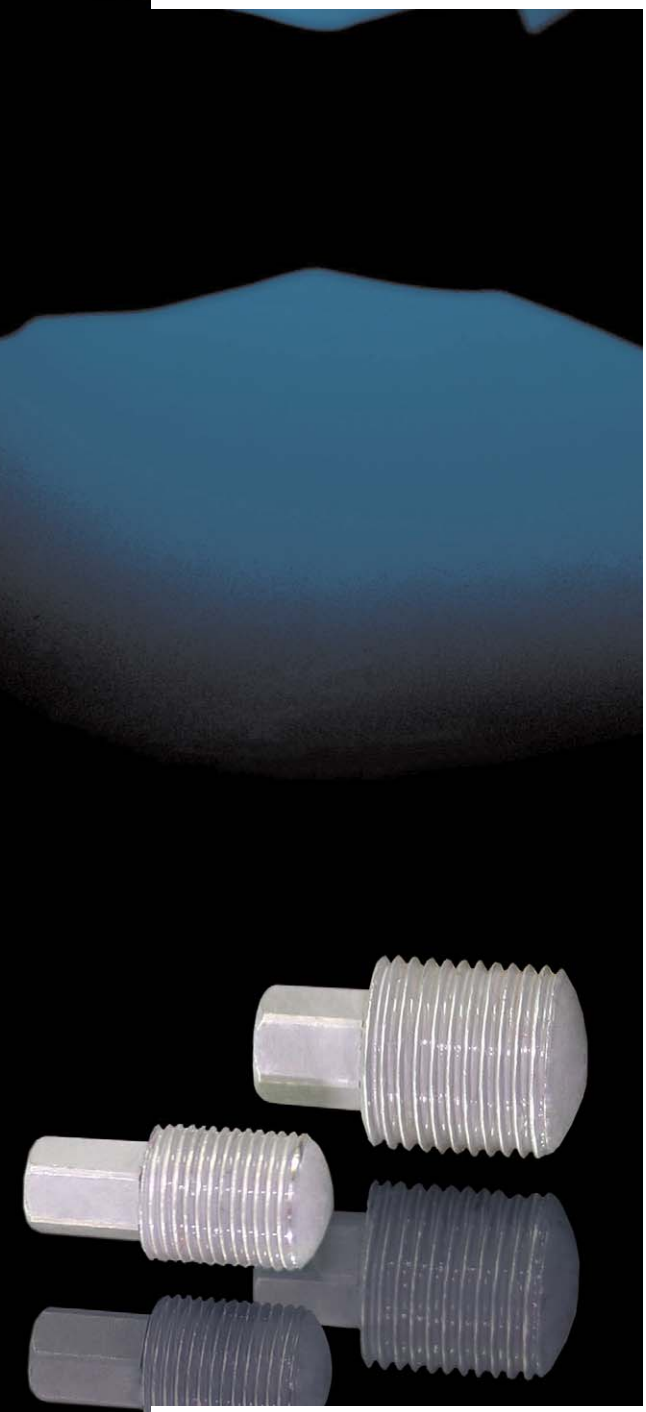


CABLE CONNECTION TECHNIQUE

Screw Connectors and Screw Cable Lugs for Medium Voltage with Intelligent Contact Screw

ARCUS ELEKTROTECHNIK
ALOIS SCHIFFMANN GMBH

... with intelligent contact screw ...



From now on we are in the position to present screw connectors and screw cable lugs with an intelligent contact screw.

- It covers a large cross sectional range.

- It produces optimum contact forces.

- It is safe and simple to install.

- After the head broke off it leaves a smooth and even surface of fracture.

Our new contact screw is based on our long-term experience with multiple shear-head screws.

In former times the rated break point was visible at the outside. Now it is placed at the inside of the screw, invisible for the user.

This new construction and arrangement of rated break points allows the technician to obtain an optimum contact on large and small cross sections with highest stability and longest life time !

The result: a safe and simple connection of underground cables !

... connector barrel ...

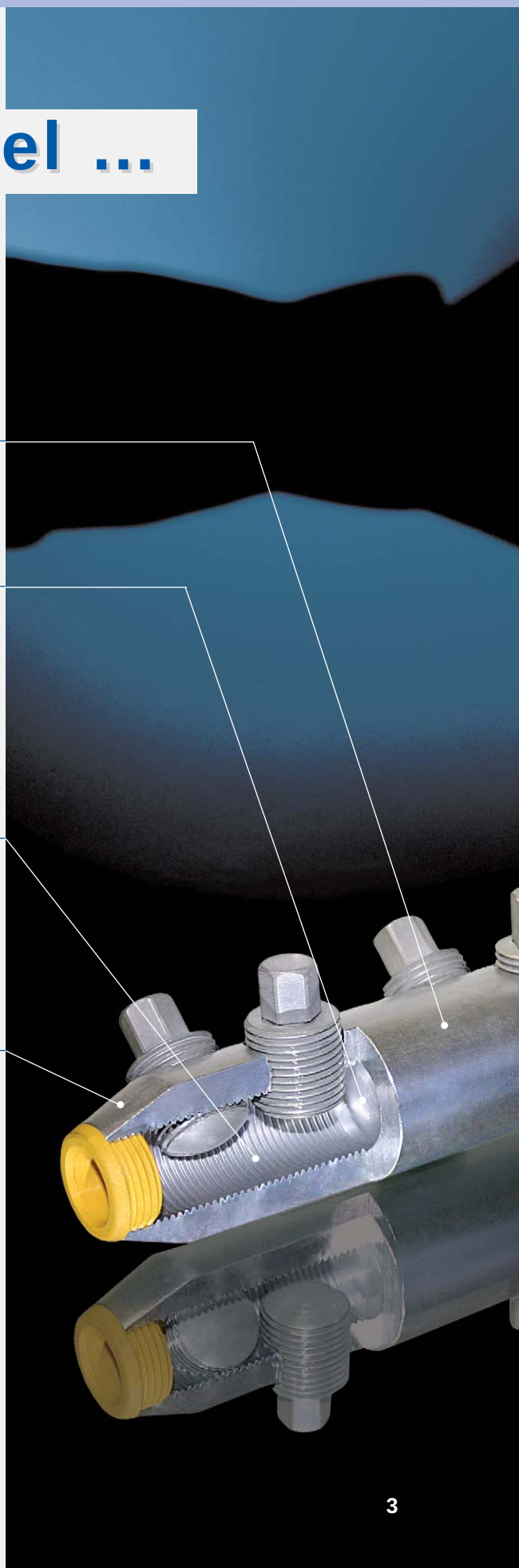
Our connector barrels are made of high-strength aluminium alloy.

- The tin-plated and greased surface protects the contacts against humidity and other environmental influences.

- A partition takes care of cable types that are to be connected and allows you to be unconcerned about it. Feel free to connect plastic insulated cables to paper-insulated mass-impregnated cables.

- Cross-grooves inside the concentric connector barrel penetrate possible foreign layers on the cable conductor and also secure high tensile strength of the cable connection.

- The special design enables an optimum control of electric field at the connection. This field control works on all medium voltage levels.



... large range of cross sections with concentric sleeves ...



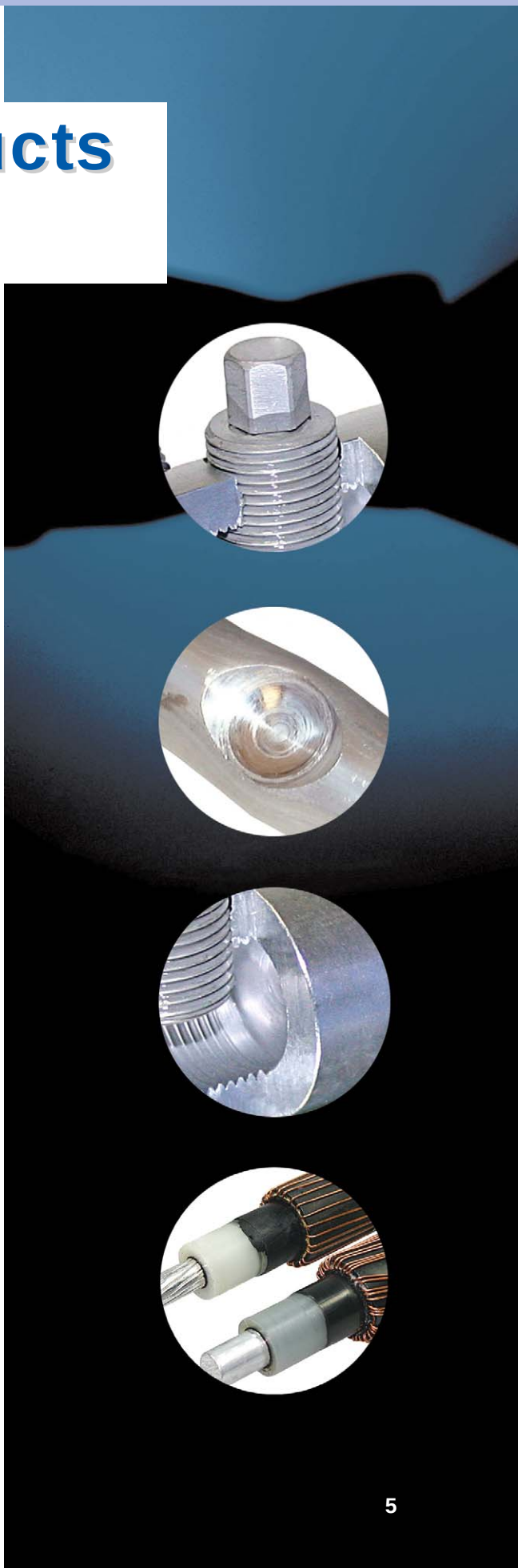
Different concentric sleeves allow a centrical conductor guidance outside the connector barrel. Exchange is simple, no tools required !

... tested for safety ...

All screw connectors and screw cable lugs with our intelligent contact screw are based on types tested to IEC 61238-1: 2003-05.

... why our products are better ...

- Our screw connectors and screw cable lugs are installed fast, simple and safe.
- Whichever conductor type, cross section, aluminium or copper - you will always reach an optimum contact pressure.
- You are uncertain which cable type you will find in the ground ?
  No problem - our screw connectors and screw cable lugs are provided for universal usage due to intelligent contact screws and easily exchangeable concentric sleeves.
- Connect plastic insulated cables to paper-insulated mass-impregnated cables ? No problem - our screw connectors are provided with partition.
- Only 1 installation tool required - whichever cross section needs to be connected.

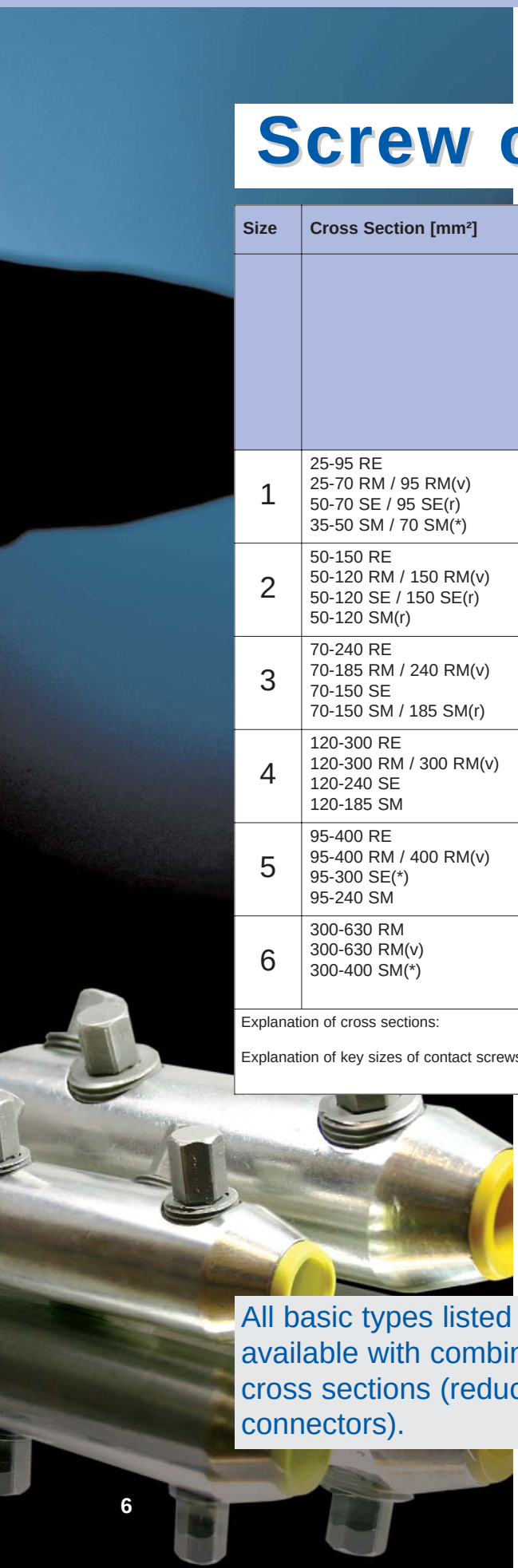


Screw connectors

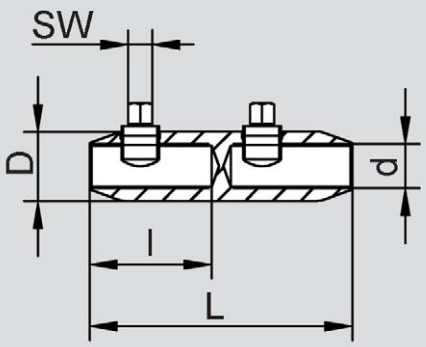
Size	Cross Section [mm²]	Connector Barrel							Contact Screw				Type Number
		with oil-stop	filled with grease	tin-plated	Dimensions [mm] D	d	L	l	shear-head screw unremovable	number	SW (DIN 475)	torque [Nm]	
1	25-95 RE 25-70 RM / 95 RM(v) 50-70 SE / 95 SE(r) 35-50 SM / 70 SM(*)	•	•	•	23	12.4	95	43.5	•	4	8	16 - 19	209 109
2	50-150 RE 50-120 RM / 150 RM(v) 50-120 SE / 150 SE(r) 50-120 SM(r)	•	•	•	28	15.4	110	50	•	4	8	19 - 22	209 112
3	70-240 RE 70-185 RM / 240 RM(v) 70-150 SE 70-150 SM / 185 SM(r)	•	•	•	33	20.4	125	56.5	•	4	10	27 - 31	209 110
4	120-300 RE 120-300 RM / 300 RM(v) 120-240 SE 120-185 SM	•	•	•	36	24.4	140	63	•	4	13	28 - 32	209 111
5	95-400 RE 95-400 RM / 400 RM(v) 95-300 SE(*) 95-240 SM	•	•	•	42	27.4	170	77	•	6	10	27 - 31	209 113
6	300-630 RM 300-630 RM(v) 300-400 SM(*)	•	•	•	52	33.4	200	90	•	6	13	28 - 32	209 114

Explanation of cross sections: R=round, S=sectorial, E=solid, M=stranded, (v)=compacted, (r)=rounded (*)=conductor slightly rounded, for instance with flat-nose pliers

Explanation of key sizes of contact screws: SW=outer hexagon



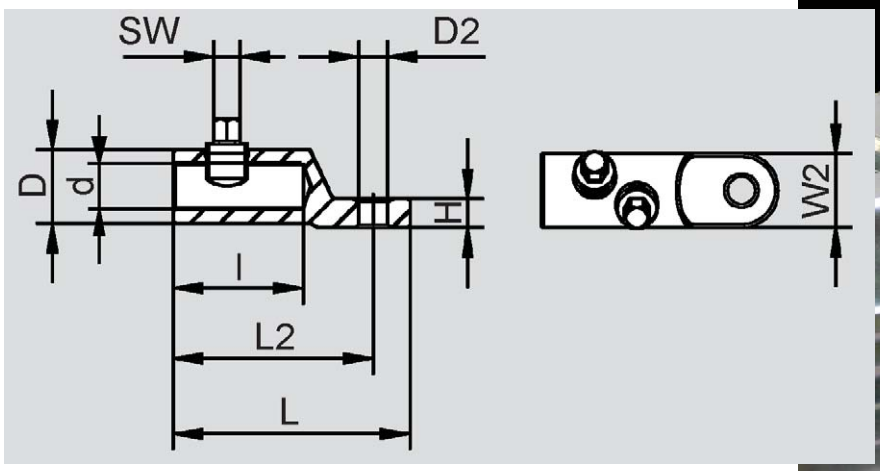
All basic types listed are available with combined cross sections (reduction connectors).

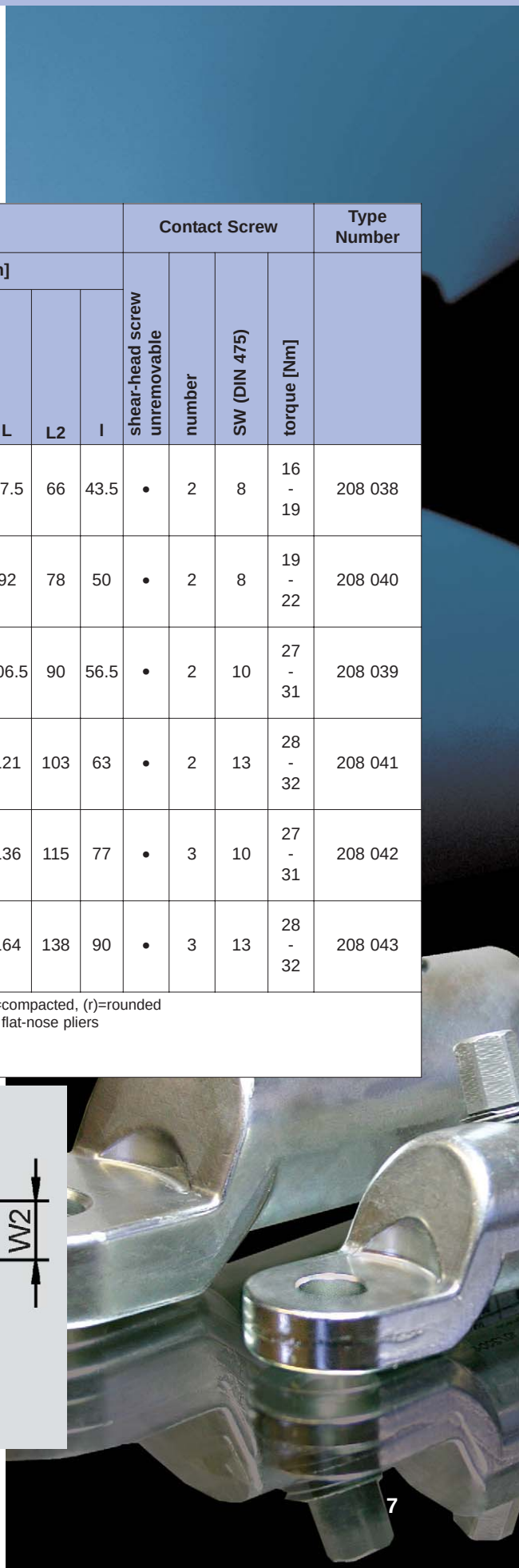


Screw cable lugs

Size	Cross Section [mm²]	Connector Barrel									Contact Screw				Type Number
				Dimensions [mm]											
		filled with grease	tin-plated	W2	D	D2[1]	d	H	L	L2	l	shear-head screw unremovable	number	SW (DIN 475)	torque [Nm]	
1	25-95 RE 25-70 RM / 95 RM(v) 50-70 SE / 95 SE(r) 35-50 SM / 70 SM(*)	•	•	23	23	9	12.4	8	77.5	66	43.5	•	2	8	16 - 19	208 038
2	50-150 RE 50-120 RM / 150 RM(v) 50-120 SE / 150 SE(r) 50-120 SM(r)	•	•	28	28	11	15.4	10	92	78	50	•	2	8	19 - 22	208 040
3	70-240 RE 70-185 RM / 240 RM(v) 70-150 SE 70-150 SM / 185 SM(r)	•	•	33	33	13	20.4	13	106.5	90	56.5	•	2	10	27 - 31	208 039
4	120-300 RE 120-300 RM / 300 RM(v) 120-240 SE 120-185 SM	•	•	36	36	13	24.4	15	121	103	63	•	2	13	28 - 32	208 041
5	95-400 RE 95-400 RM / 400 RM(v) 95-300 SE(*) 95-240 SM	•	•	42	42	17	27.4	16	136	115	77	•	3	10	27 - 31	208 042
6	300-630 RM 300-630 RM(v) 300-400 SM(*)	•	•	52	52	17	33.4	18	164	138	90	•	3	13	28 - 32	208 043

Explanation of cross sections: R=round, S=sectorial, E=solid, M=stranded, (v)=compacted, (r)=rounded
(*)=conductor slightly rounded, for instance with flat-nose pliers
Explanation of key sizes of contact screws: SW=outer hexagon
1) Also available with other palm hole size, if required.





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