

WATER & WASTE WATER INDUSTRIES



INDUSTRIAL PLUGS & SOCKET-OUTLETS

SAFE AND RELIABLE ELECTRICAL CONNECTIONS IDEALLY SUITED TO THE WATER & WASTE WATER INDUSTRIES.

MARECHAL ELECTRIC offers a range of products suited to your applications.

Supply pumps or motors used for the treatment and the purification of water requires products that meet specific criteria and requirements.

To satisfy the many needs linked to this activity, MARECHAL ELECTRIC provides you with a wide range of electrical connection solutions which reduce the time and means required for operations:

- Reliability
- Speed
- Flexibility
- Quality

... always with the goal to ensure safety for staff and plant.





CONTENTS

MARECHAL ELECTRIC TECHNOLOGY P. 4



DSN COMPACT AND WATERTIGHT DECONTACTOR™ P. 6



DS METAL DECONTACTOR™ P. 8

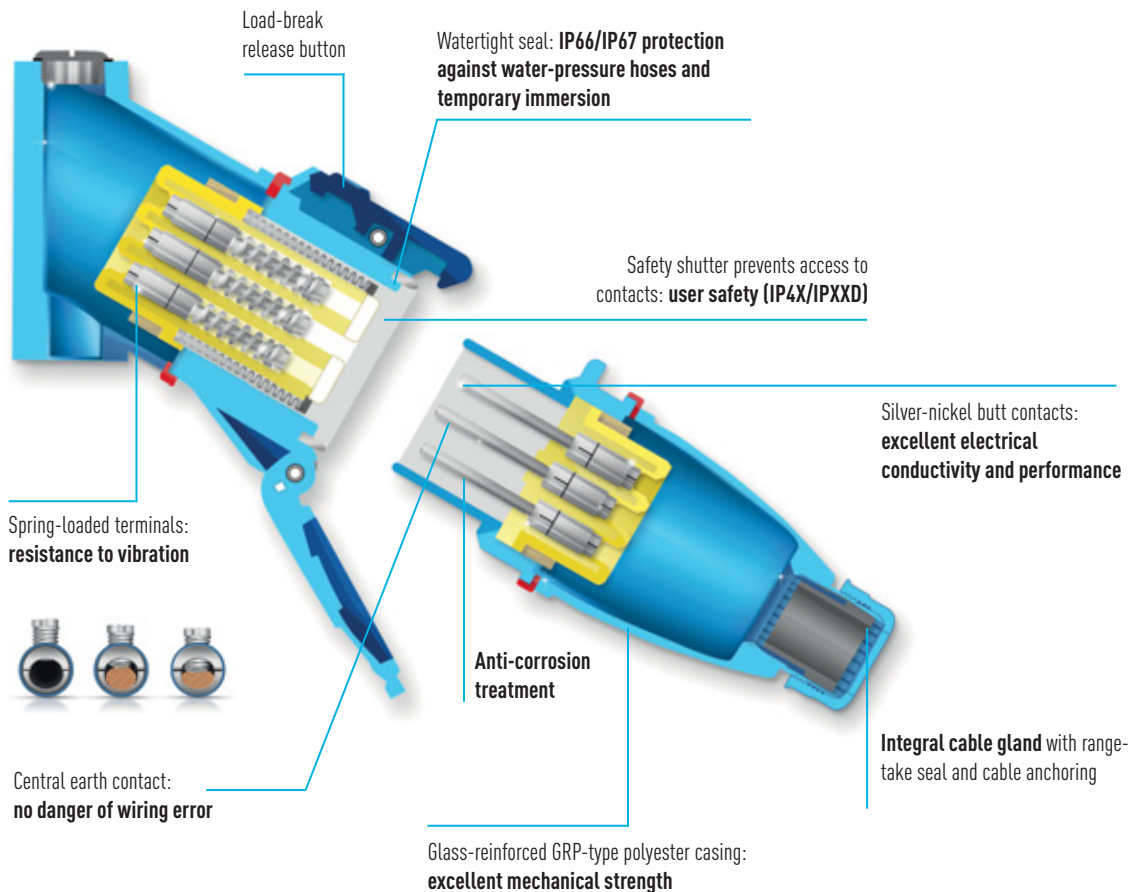


STAR-DELTA 7 POLE DECONTACTOR™ & CONNECTORS P. 10



MARECHAL ELECTRIC TECHNOLOGY

The MARECHAL® industrial electrical power socket has a built-in switching function called DECONTACTOR™. This technology makes it possible to connect and disconnect motors in absolute safety, with the ease of "Plug & Play". MARECHAL® industrial electrical power sockets provide unequalled strength over time and guarantee a fast and safe operation during maintenance work. They comply with the IEC EN 60309-1 standard and the European Low Voltage Directive.



DECONTACTOR™ technology: tested safety

- ▶ A socket with built-in switch in a compact unit
- ▶ Simply pressing the button once cuts off the current and eliminates all risk of electrical arcing.
- ▶ The plugs then eject automatically and the appliance is off-load.
- ▶ The safety of users is guaranteed at all times.

Connection quality and life expectancy

MARECHAL® products are fitted with spring-loaded contacts providing a permanent and durable contact.

The silver-nickel tipped contacts provide exceptional connection quality and excellent resistance to wet and corrosive environments, even after years of use.

Fast and safe connection under any circumstances

The socket latch holds the plug in the socket against the force of the internal springs. This ensures the plug is watertight and that the appliance will start up properly.

When the plug is removed from the socket, the safety shutter closes to prevent access to live parts.

IP66/IP67 sealing

IP66/IP67 sealing is automatic as soon as the plug is inserted or once the socket lid is closed manually.

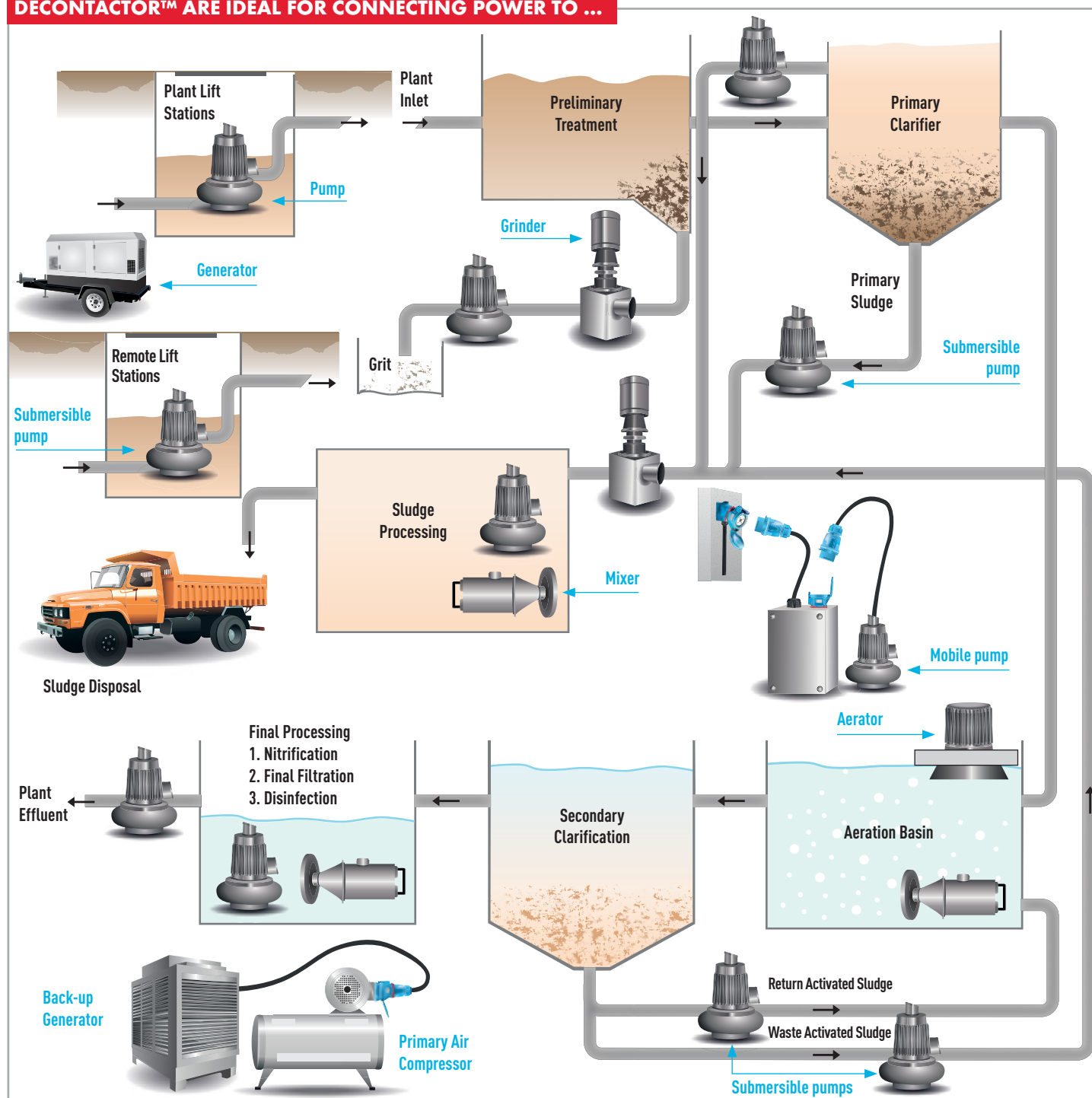


FASTER, SAFER, EASIER.

Decontactor has an AC-22/AC-23 breaking capacity according to switches standard. It can then replace a plug and socket, a switch and a disconnect. Technicians can thus easily connect and disconnect under load without having to undergo lengthy safety procedures. DECONTACTOR™ plugs are built with high quality materials. Silver-nickel contacts, stainless steel hardware, and chemical resistant housings all help withstand corrosion caused by the hydrogen sulfide gases usually found in wastewater environments.



DECONTACTOR™ ARE IDEAL FOR CONNECTING POWER TO ...





DSN

COMPACT AND WATERTIGHT DECONTACTOR™ 20 A / 32 A / 63 A

Covering sizes from 20 to 63 A, DSN DECONTACTOR™ plugs are noted for their small footprint. The socket + plug combination is automatically IP66/IP67 as soon as the plug is inserted or once the cover is closed manually.

- ▶ Automatic IP66/IP67
- ▶ Built-in AC-22 and AC-23 switching capability
- ▶ Shock-resistant GRP casing

SPECIFICATION

Plug and socket-outlet with incorporated load-breaking capacity AC-22 / AC-23, IP66/IP67 without additional operation, safety shutter (socket IP4X/IPXXD) silver-nickel butt contacts and metallic braid.

MAIN FEATURES

Rated current (In)	20 A	32 A	63 A
Umax	500 V	690 V	1 000 V
AC-22 switching capability	20 A / 500 V	32 A / 690 V	63 A / 690 V
AC-23 switching capability	20 A / 400 V (5,5 kW)	32 A / 400 V (7,5 kW)	63 A / 400 V (18,5 kW)
Auxiliary contacts	-	2	4
Keying positions ⁽¹⁾	24 for all DSN		
IP protection lid closed	IP66/IP67 for all DSN		
IP protection connected plug	IP66/IP67 for all DSN		
Ambient temperature	-40°C to +60°C for all DSN		
Shock resistance	IK08 for all DSN		
Flexible wiring [min. – max.]	1 - 2,5 mm ²	2,5 - 6 mm ²	6 - 16 mm ²
Stranded wiring [min. – max.]	1,5 - 4 mm ²	2,5 - 10 mm ²	10 - 25 mm ²
Short circuit current [Icc]	10 kA for all DSN		

⁽¹⁾ To distinguish between different power supplies and applications.

**WALL MOUNTING SOCKET DSN6****PLUG DSN6****70° GRP wall box**
51CA058**Socket-outlet**
6164013**Straight GRP handle**
616A013**Inlet**
6168013**SOCKET-OUTLET**
female**INLET**
male

	50 Hz voltage	Polarity	Part number	Part number
DSN1 (20 A)	380 - 440 V	3P+E	6114013	6118013
DSN3 (32 A)	380 - 440 V	3P+E	6134013	6138013
	380 - 440 V	3P+E+2aux	6134013972	6138013972
DSN6 (63 A)	380 - 440 V	3P+E	6164013	6168013
	380 - 440 V	3P+E+2aux	6164013972	6168013972
	380 - 440 V	3P+E+4aux	6164013264	6168013264

For other voltages, polarities, locking options and specific keying positions, please contact us.

BOXES

Cable gland not included

**30° GRP wall box****GRP box + 70° GRP sleeve***

	Entry		
DSN1	M20	611A053	51AA058
DSN3	M20	613A053	51BA058
	M25	613A083	
DSN6	M25	616A083	51CA058

* Undrilled and without cable gland.

SLEEVES**30° inclined GRP**

DSN1	611A027
DSN3	613A027
DSN6	616A027

HANDLES**Straight GRP**

DSN1	9-18 mm	611A013
DSN3	5-21 mm	613A013
DSN6	10-30 mm	616A013
	10-30 mm	616A473*



* With built-in finger draw plate [recommended for inline connections].

ACCESSORIES AND OPTIONS

Locking with shaft for 3 padlocks –Ø 4mm (padlocks not supplied): socket part no. + 844



Physical separation of the male plug and locking by padlock: inlet part no. + 839

Inlet cap:

DSN1 : 611A126

DSN3 : 613A126

DSN6 : 616A126



180° opening lid

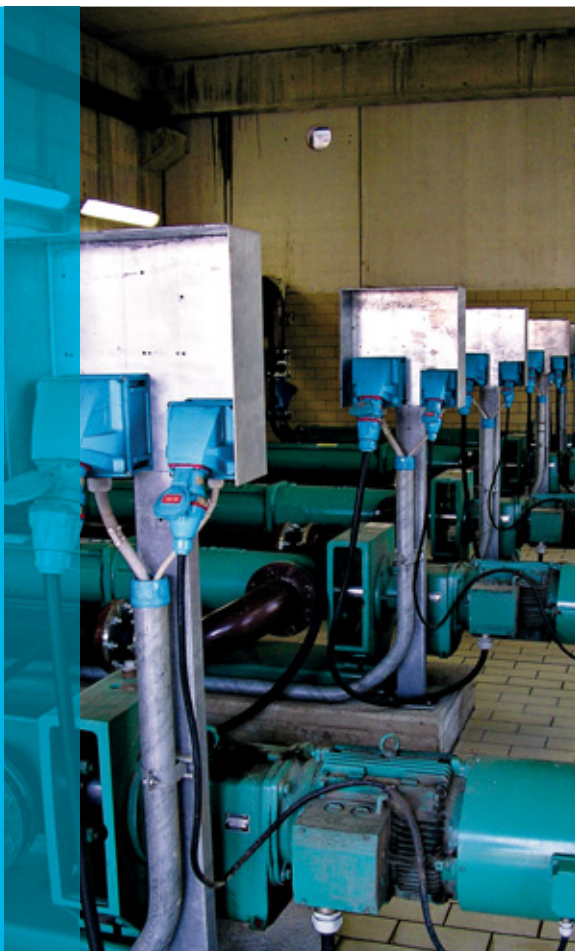
Self-returning lid

180° opening and self-returning lid

Socket part no. + 10

Socket part no. + R

Socket part no. + 18



DS

METAL DECONTACTOR™

90 A / 150 A / 250 A

Covering sizes from 90 to 250 A [sizes covered in the 60309-1 standard – edition 4.1], the DS range is the broadest and the most complete range of DECONTACTOR™ plugs. Sockets and inlets exist in metal.

- ▶ Safe load-breaking up to 250 A
- ▶ Safety shutter
- ▶ GRP or metal casing

SPECIFICATION

IP66/IP67 Plug and socket-outlet with incorporated AC-22 / AC-23 load-breaking device, safety shutter (IP4X/IPXXD socket-outlet), silver-nickel butt contacts with metallic braid.

MAIN FEATURES

	DS6 METAL*	DS9 METAL*	DS2 METAL
Rated current (In)	90 A	150 A	250 A
Umax	1000 V	1000 V	1000 V
AC-22 switching capability	63 A / 690 V	150 A / 400 V	250 A / 400 V
AC-23 switching capability	90 A / 400 V	100 A / 440 V	160 A / 440 V
Auxiliary contacts	4	6	7
Keying positions ⁽¹⁾	24	24	12
IP protection lid closed	IP66/IP67	IP66/IP67	IP66/IP67
IP protection connected plug	IP66/IP67	IP66/IP67	IP66/IP67
Ambient temperature	-40°C to +60°C for all DS		
Shock resistance	IK08	IK08	IK09
Flexible wiring [min. – max.]	10 - 25 mm ²	25 - 70 mm ²	70 - 95 mm ²
Stranded wiring [min. – max.]	10 - 35 mm ²	25 - 95 mm ²	70 - 120 mm ²
Short circuit current [Icc]	10 kA for all DS		

⁽¹⁾ To distinguish between different power supplies and applications.

* The DS6 and DS9 versions are also available in GRP. Please consult us for Part numbers.



WALL MOUNTING SOCKET DS9



PLUG DS9

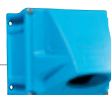
70° metal box
879A053Socket-outlet
3994013Elastomer handle
659A013D45Inlet
3998013SOCKET-OUTLET
femaleINLET
male

	50 Hz voltage	Polarity	Part number	Part number
DS6 (90 A IP66/IP67)	380 - 440 V	3P+E	3964013600	3968013600
	380 - 440 V	3P+E+2aux	3964013602	3968013602
	380 - 440 V	3P+E+4aux	3964013268	3968013268
DS9 (150 A) IP66/IP67	380 - 440 V	3P+E	3994013600	3998013600
	380 - 440 V	3P+E+2aux	3994013655	3998013655
	380 - 440 V	3P+E+4aux	3994013656	3998013656
DS2 (250 A) IP66/IP67	380 - 440 V	3P+E	3924013600	3928013600
	380 - 440 V	3P+E+2aux	3924013602	3928013602

For other voltages, polarities, locking options and specific keying positions, please contact us.

BOXES

Cable gland not included

Metal box +
70° metal sleeveMetal box +
60° metal sleeveGRP box +
70° GRP sleeve*

	Entry		
DS6	M40	876A053	51DA058
DS9	M50	879A053	
DS2	M63	392A053	

* Undrilled and without cable gland.

SLEEVES

70° Inclined
metal60° Inclined
metal70° inclined
GRP

DS6	876A087	51DA757
DS9	879A087	
DS2		392A027

HANDLES



Straight GRP



Straight elastomer

DS6	13-35 mm	316A013	
	13-35 mm	316A473*	
DS9	35-45 mm	659A013D45**	
DS2	45-49 mm	352A013D49**	

* With built-in finger draw plate [recommended for inline connections].

** D35 = Cable diameter 25 to 35 mm - D45 = Cable diameter 35 to 45 mm.
D49 = Cable diameter 45 to 49 mm.

ACCESSORIES AND OPTIONS

Locking with shaft for 3 padlocks -Ø 8mm
(padlocks not supplied): socket part no. + 844

Physical separation of the male plug and
locking by padlock: inlet part no. + 839

Inlet cap:

DS6 : 316A126

DS9 : 319A126

DS2 : 312A126



180° opening lid

Self-returning lid

180° opening and self-returning lid

Socket part no. + 10

Socket part no. + R

Socket part no. + 18

STAR-DELTA

7 POLE DECONTACTOR™ AND CONNECTORS FROM 30A TO 150A

Thanks to their silver-nickel tipped contacts, the DECONTACTOR™ plugs are designed to withstand significant and repeated overloads. They are thus especially suited for reliable motor connections even with frequent re-starting.

- ▶ Connection of star-delta motors
- ▶ Connection of motors with two speed cycles
- ▶ Simpler and safer than fixed wiring
- ▶ Watertight and overload-resistant

MAIN FEATURES

	DN9C	DSN7C3	DS7C3 METAL	DN7C6	DS7C9
I _{max} per phase	30 A	32 A	50 A	90 A	150 A
U _{max}	415 V	500 V	500 V	415 V	500 V
AC-22 switching capability	30 A / 415 V	32 A / 500 V	50 A / 500V	90 A / 415 V	-
Wiring (terminals)	Screw-type for the whole range				
Auxiliary contacts	2	-	3	-	3
Keying positions ⁽¹⁾	2	-	5	-	-
IP protection lid closed	IP55	IP66/IP67	IP55	IP55	IP55
IP protection connected plug	IP54	IP66/IP67	IP54	IP54	IP54
Ambient temperature	-40°C to +60°C for the whole range				
Shock resistance	IK09	IK08	IK09	IK09	IK09
Flexible wiring [min. – max.]	1 - 6 mm ²	2,5 - 6 mm ²	2,5 - 10 mm ²	10 - 25 mm ²	16 - 50 mm ²
Stranded wiring [min. – max.]	1,5 - 10 mm ²	2,5 - 10 mm ²	2,5 - 16 mm ²	10 - 35 mm ²	16 - 70 mm ²

⁽¹⁾ To distinguish between different power supplies and applications.

**WALL MOUNTING SOCKET DS7c3****PLUG DS7c3****30° metal box**
396A653**Socket-outlet**
3934561**Straight GRP handle**
316A013**Inlet**
3938561**SOCKET-OUTLET**
female**INLET**
male

	Umax (V) / Imax (A)	Polarity	Part number	Part number
DN9c (30 A)	415 / 30	6P+E	1914061	1918061
	415 / 30	6P+E+2aux	1914081262	1918081262
DSN7c3 (32 A)	500 / 32	6P+E	6134061	6138061
DS7c3 (50 A)	500 / 50	6P+E	3934561	3938561
	500 / 50	6P+E+2aux	3934561172	3938561172
	500 / 50	6P+E+3aux	3934561263	3938561263
DN7c6 (90 A)	415 / 90	6P+E	1964061	1968061
DS7c9 (150 A)*	500 / 150	6P+E	3994061	3998061
	500 / 150	6P+E+2aux	3994061172	3998061172

* Connector without circuit breaker capacity.

BOXES

Without cable glands

**Metal box +**
70° metal sleeve**Metal box +**
60° metal sleeve**GRP box +**
70° GRP sleeve*

	Entry	
DN9c	M25	873A053
DSN7c3		51BA058
DS7c3	M40	876A053
DN7c6	M50	879A053
DS7c9	M63	392A053

* Without drilling and without cable gland.

SLEEVES**70° Inclined**
metal**60° Inclined**
metal**30° inclined**
GRP

DN9c	873A087
DSN7c3	613A027
DS7c3	876A087
DN7c6	879A087
DS7c9	392A027

HANDLES**Straight GRP****Straight elastomer**

DN9c	10-30 mm	191A013
	10-30 mm	191A473*
DSN7c3	5-21 mm	613A013
DS7c3	13-35 mm	316A013
	13-35 mm	316A473*
DN7c6	35-45 mm	659A013D45**
DS7c9	45-49 mm	352A013D49**

* With built-in finger draw plate [recommended for inline connections].

** D35 = Cable diameter 25 to 35 mm - D45 = Cable diameter 35 to 45 mm.
D49 = Cable diameter 45 to 49 mm.**ACCESSORIES AND OPTIONS**

Locking with shaft for 3 padlocks – Ø 8mm (Ø 4mm for the DSN7C3)]
(padlocks not supplied): socket part no. + 844



Physical separation of the male plug and locking by padlock: inlet part no. + 839

Inlet cap:

DN9C: 191A126
DSN7C3: 613A126
DS7C3: 316A126
DN7C6: 196A126
DS7C9: 312A126

**180° opening lid**

Socket part no. + 10

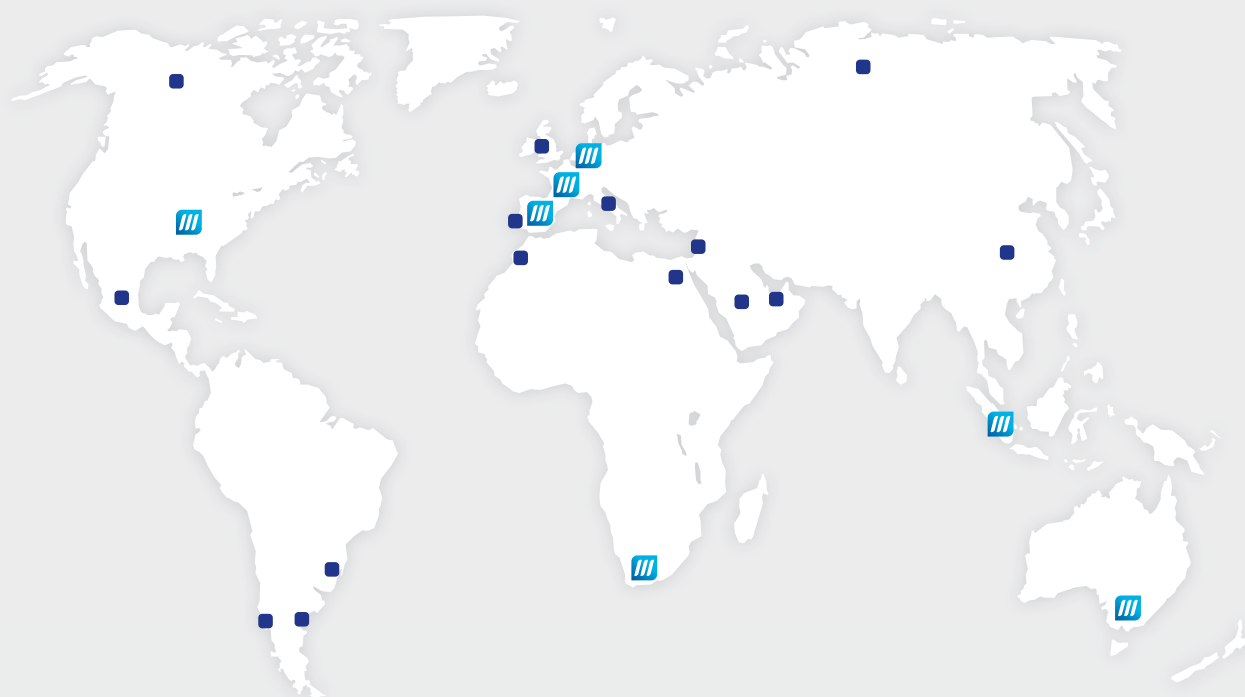
Self-returning lid

Socket part no. + R

180° opening and self-returning lid

Socket part no. + 18

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