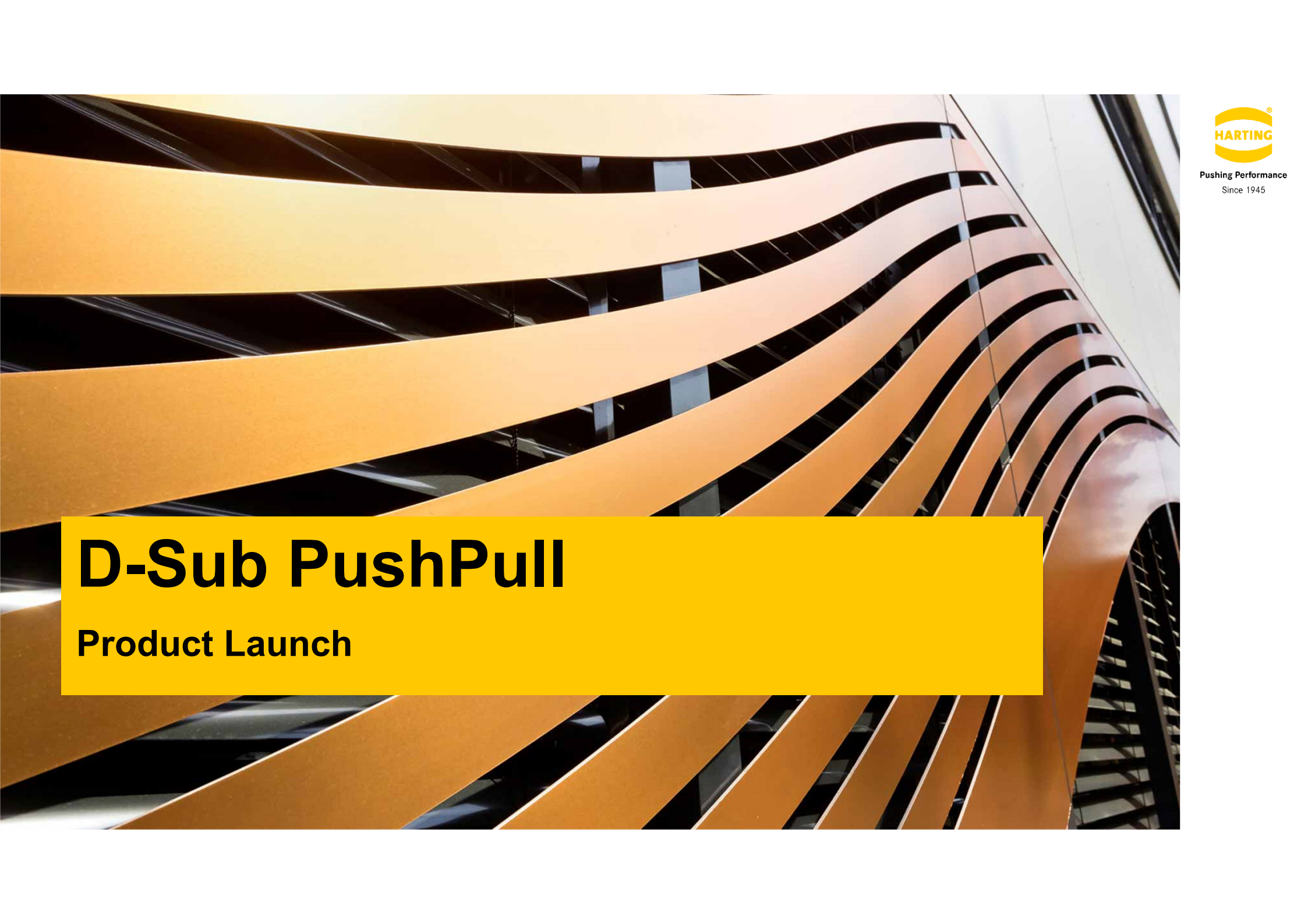




D-Sub PushPull

Product Launch



Pushing Performance
Since 1945



D-Sub PushPull

Simplify classic connections



Highlights

- **Retrofit**
- **PushPull**
- **> 50% time saving**
- **The Packaging**
- **Coding system**
- **Reliability**

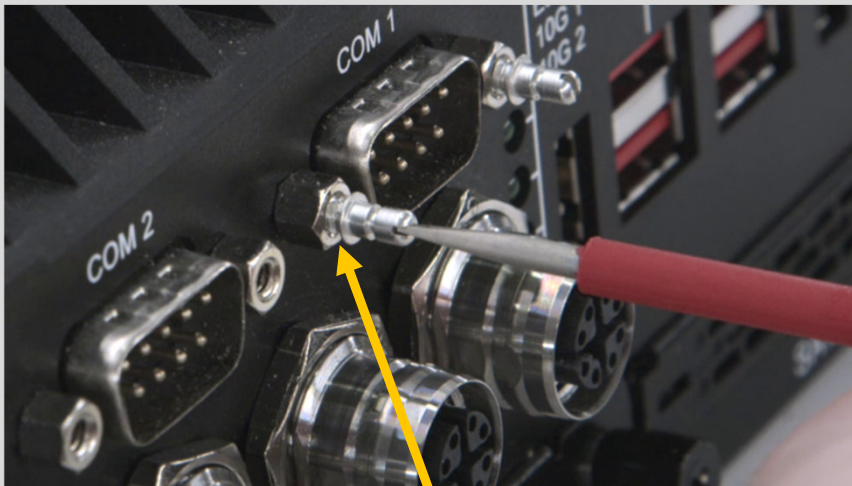


D-Sub PushPull

Simplify classic connections



Easy retrofit!



Screw the upgrade pin into the screw lock on the device side...



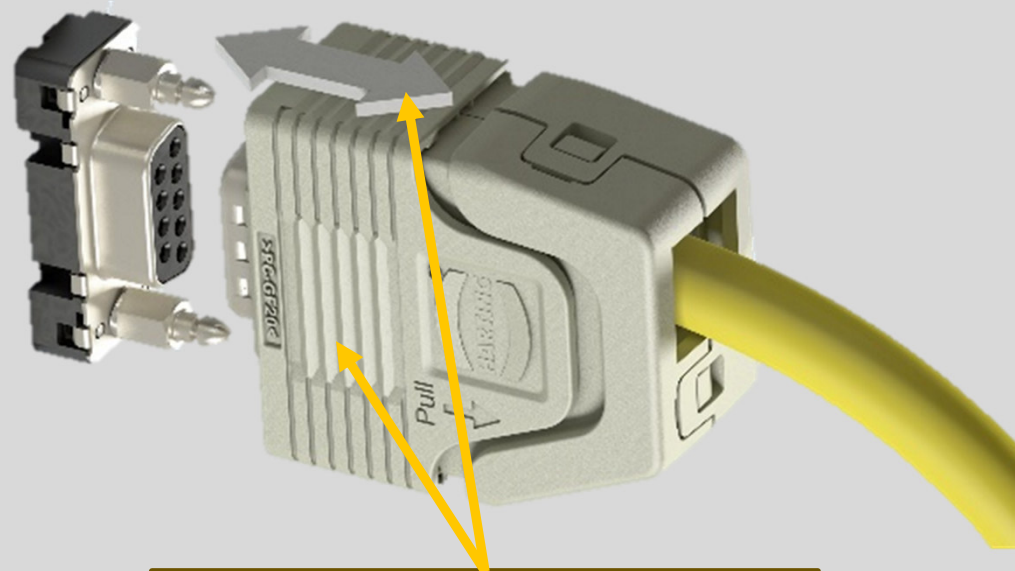
... PUSH the assembled hood onto the pins

D-Sub PushPull

Simplify classic connections



True PushPull function!



Wherever you want to grab

USP



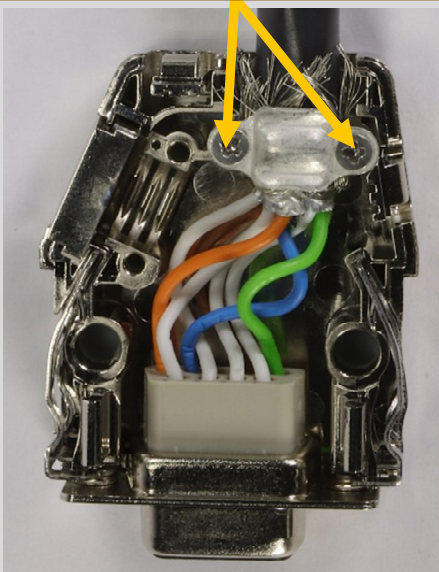
D-Sub PushPull

Simplify classic connections

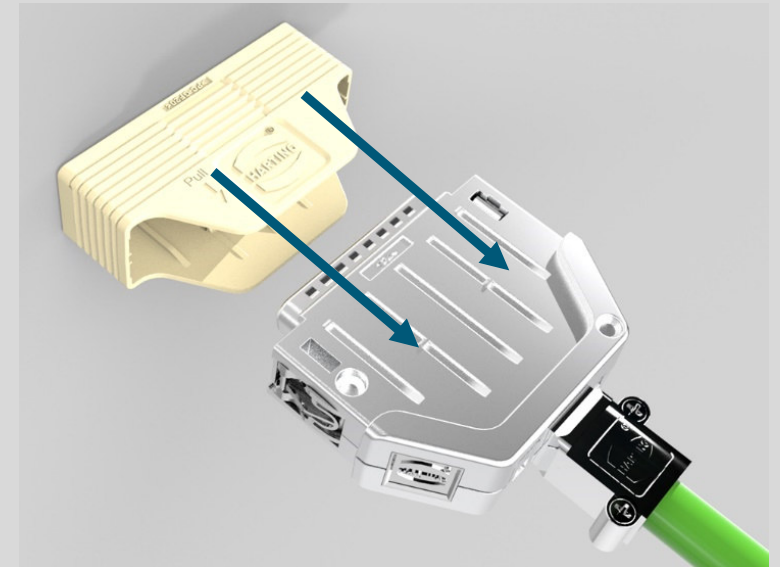


Save Time!

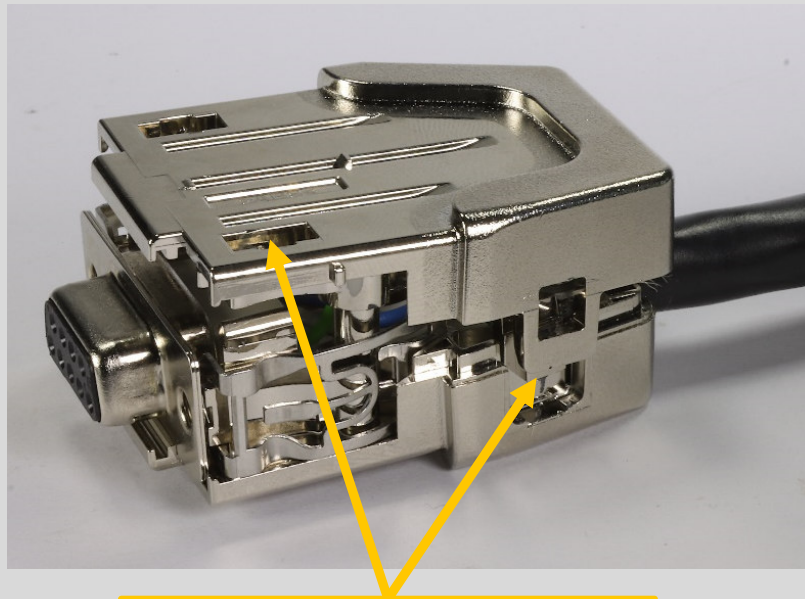
Screws for strain relief clamp



Easy PushPull cover assembly from the front



No screws to close the hood



USP



D-Sub PushPull Simplify Packaging



Pushing Performance
Since 1945

Packaging is important!

- Less plastic
- Clear separation
- QR-Code with link to assembly instruction

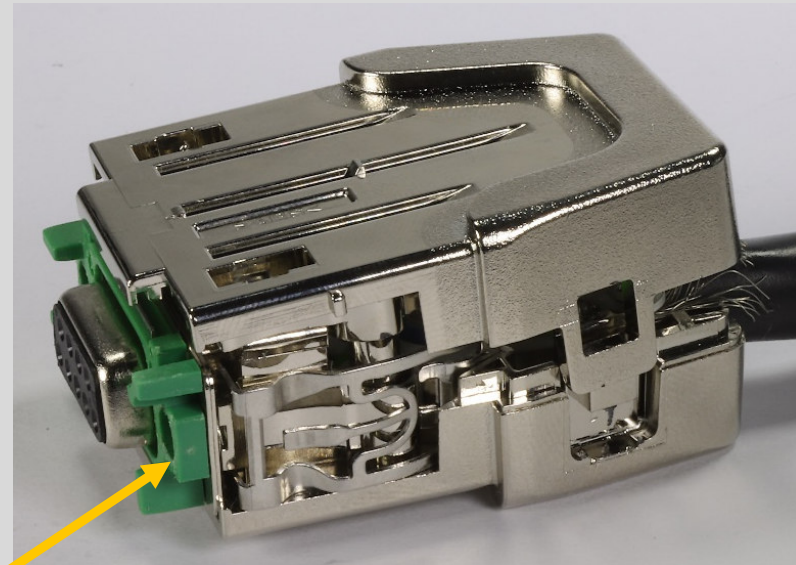
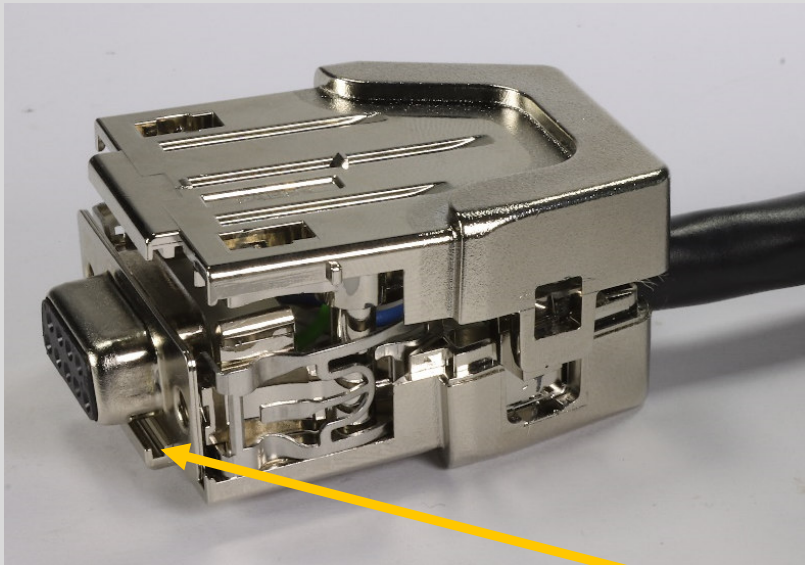


D-Sub PushPull

Simplify classic connections



No mis-mating!



Versions with two slits allows the customer to implement the D-Sub coding system

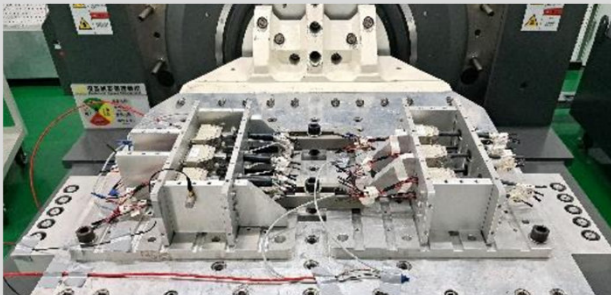
USP



D-Sub PushPull Reliability



Proven!



proven cable clamp resistance to cable pull and cable torsion

Shock and vibration proof as per IEC 61373 - Category 1, Class B

10.000 mating cycles*

Hold time	Result			Conclusion
	750 cycles	5000 cycles	10000 cycles	
60s	Housing not unlocked	Housing not unlocked	Housing not unlocked	Passed
	Housing not unlocked	Housing not unlocked	Housing not unlocked	Passed
	Housing not unlocked	Housing not unlocked	Housing not unlocked	Passed

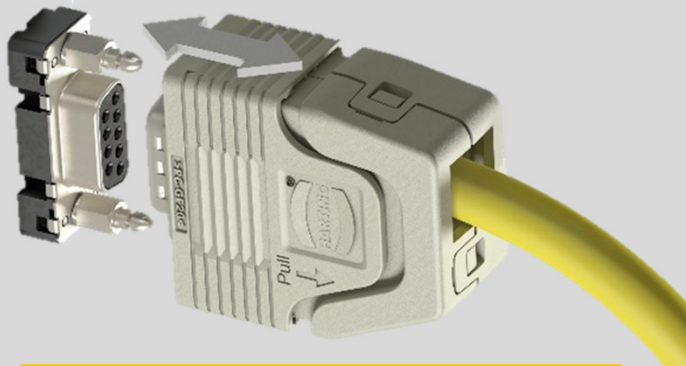
* Applies to the PushPull mechanism only. D-Sub connectors are standardised to a maximum of 500 mating cycles (PL1).



D-Sub PushPull Competition



No single source!



HARTING solution offers a
true PushPull function



PushPull

There are already two fast
locking mechanisms on the
market and HARTING D-Sub
PushPull is compatible.
Only HARTING offers true
PushPull functionality.

USP



D-Sub PushPull

Quick Info cable side



The cable side!

- Size 1, 2 and 3 (09, 15, 25 pole)
- Plastic and metallized plastic version
- Standard or for coding
- MOQ for hoods is 10 pcs.
- Packaging is 10 pcs.
- No sample part numbers

12 part numbers in total





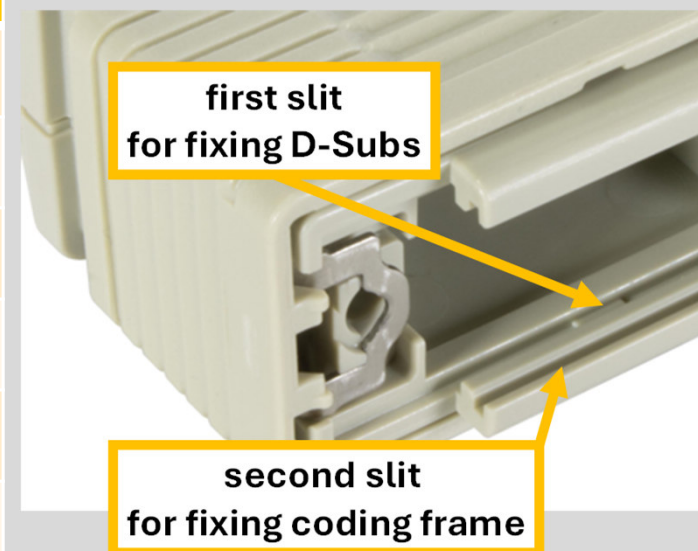
D-Sub PushPull

Quick Info cable side details



Hood overview

Hood Size	Hood Type	One slit (standard)	Two slits (for coding)
1	Plastic	09 67 009 0200	09 67 009 0200 160
	Metalized Plastic	09 67 009 0210	09 67 009 0210 160
2	Plastic	09 67 015 0200	09 67 015 0200 160
	Metalized Plastic	09 67 015 0210	09 67 015 0210 160
3	Plastic	09 67 025 0200	09 67 025 0200 160
	Metalized Plastic	09 67 025 0210	09 67 025 0210 160





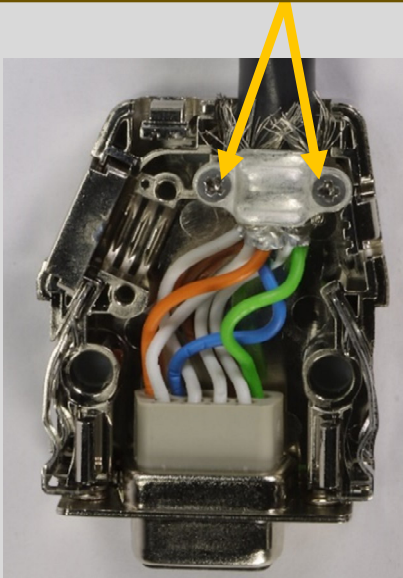
D-Sub PushPull

Quick Info cable side details



Cable clamp overview

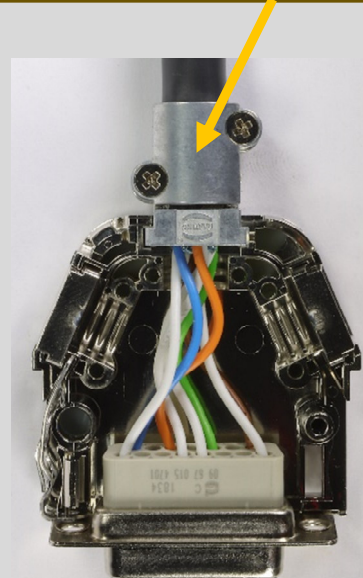
Internal strain relief clamp
always included



Cable diameter

5 - 7 mm

External strain relief clamp
to be ordered separately



Cable diameter

**External
cable clamp**

5 - 7 mm

61 03 000 0141

7 - 10 mm

61 03 000 0044

9 - 12 mm

61 03 000 0143

11 - 14 mm

61 03 000 0148



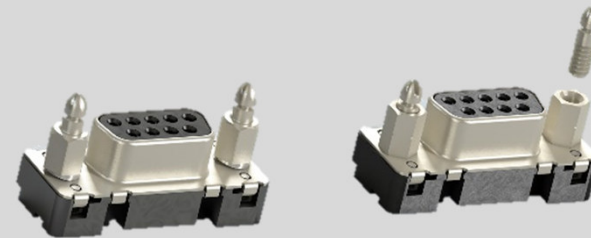
D-Sub PushPull

Quick Info device side



The device side!

- Different locking bolts depending on type of installation
 - front mount; rear mount; upgrade pins
- standard or for coding
- MOQ for bolts is 20 pcs.
- packaging is 20 pcs.
- No sample part numbers



34 part numbers in total



D-Sub PushPull

Quick Info device side details



Locking bolt versions for FRONT mounting

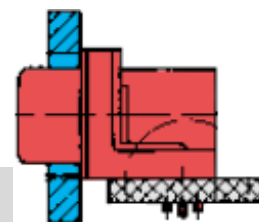
Kind of thread	Upgrade bolt	Upgrade bolt with stop	Locking bolt for thread	Locking bolt for through hole
4-40 UNC	0967 002 9170	97 00 000 2050	0967 002 9172	0967 002 9174
M3	0967 002 9171	97 00 000 2051	0967 002 9173	0967 002 9175





D-Sub PushPull

Quick Info - Details device side



Locking bolt versions for REAR mounting:

Kind of thread	Panel thickness	Upgrade bolt	Upgrade bolt with stop	Locking bolt for thread	Locking bolt for through hole
4-40 UNC	0,8 -1,3	Screw too long	UNC 97 00 000 2050 M3 97 00 000 2051	97 00 000 2048	97 00 000 2052
M3	0,8 -1,3	Screw too long		97 00 000 2049	97 00 000 2053
4-40 UNC	1,5 – 1,8	Screw too long		planned*	planned*
M3	1,5 – 1,8	Screw too long		planned*	planned*
4-40 UNC	2,2 – 2,5	Screw too long		planned*	planned*
M3	2,2 – 2,5	Screw too long		planned*	planned*

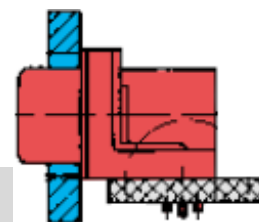


*** on base of customer request**



D-Sub PushPull

Quick Info - Details device side



Locking bolt versions for coding frames

Kind of thread	Panel thickness	Upgrade bolt	Upgrade bolt with stop	Locking bolt for thread	Locking bolt for through hole
4-40 UNC	0,8 -1,3	Screw too long	UNC 97 00 000 2050 M3 97 00 000 2051	97 00 000 2038	planned*
M3	0,8 -1,3	Screw too long		97 00 000 2039	planned*
4-40 UNC	1,5 – 1,8	Screw too long		planned*	planned*
M3	1,5 – 1,8	Screw too long		planned*	planned*
4-40 UNC	2,2 – 2,5	Screw too long		planned*	planned*
M3	2,2 – 2,5	Screw too long		planned*	planned*



For coding elements, a special bolt is required

Round



D-Sub PushPull Promotion



Watch our Videos!



[Demonstration](#)



[Internal strain relief
assembly](#)



[External strain relief
assembly](#)



D-Sub PushPull

Simplify classic connections



Features at a glance

- Available in plastic and metallized plastic versions in sizes 09, 15, and 25
- Suitable for D-Sub Standard, D-Sub mixed, D-Sub High-Density, and more
- Tool-free installation with screwless assembly for simple connectivity
- Shock and vibration proof as per IEC 61373 - Category 1, Class B
- Choice of internal or external cable clamp
- Cable diameter up to 14 mm
- Up to 3 cable entries
- Compatible with HARTING coding system, offering up to 36 variations
- True PushPull function

USP



Pushing Performance

New D-Sub Coding System



Why do customers need a coding system?



Our solution!



Coding System for D-Sub Size 1 and Size 2



Product features at a glance



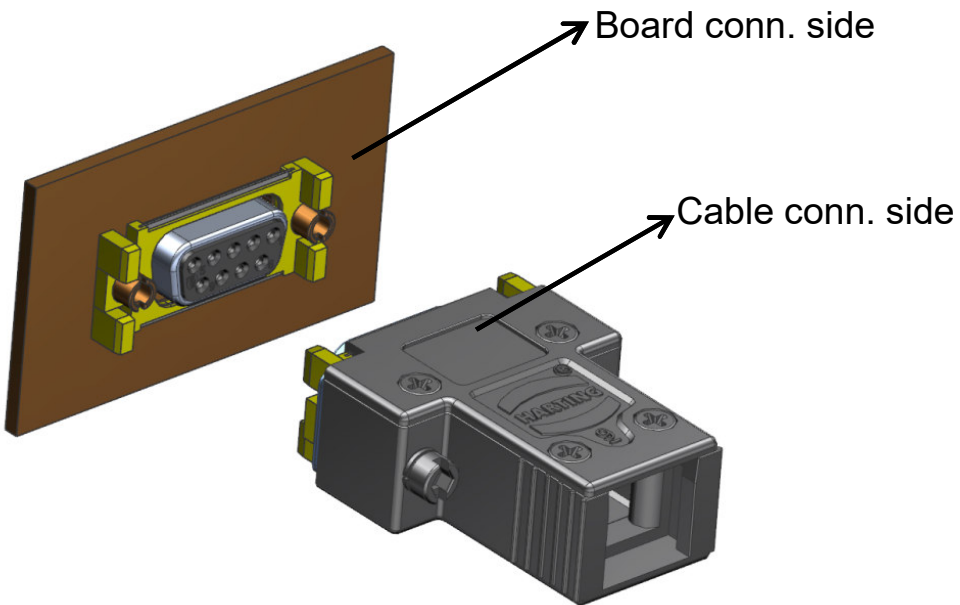
Available and possible versions, further sizes

Why do customers need a coding system?

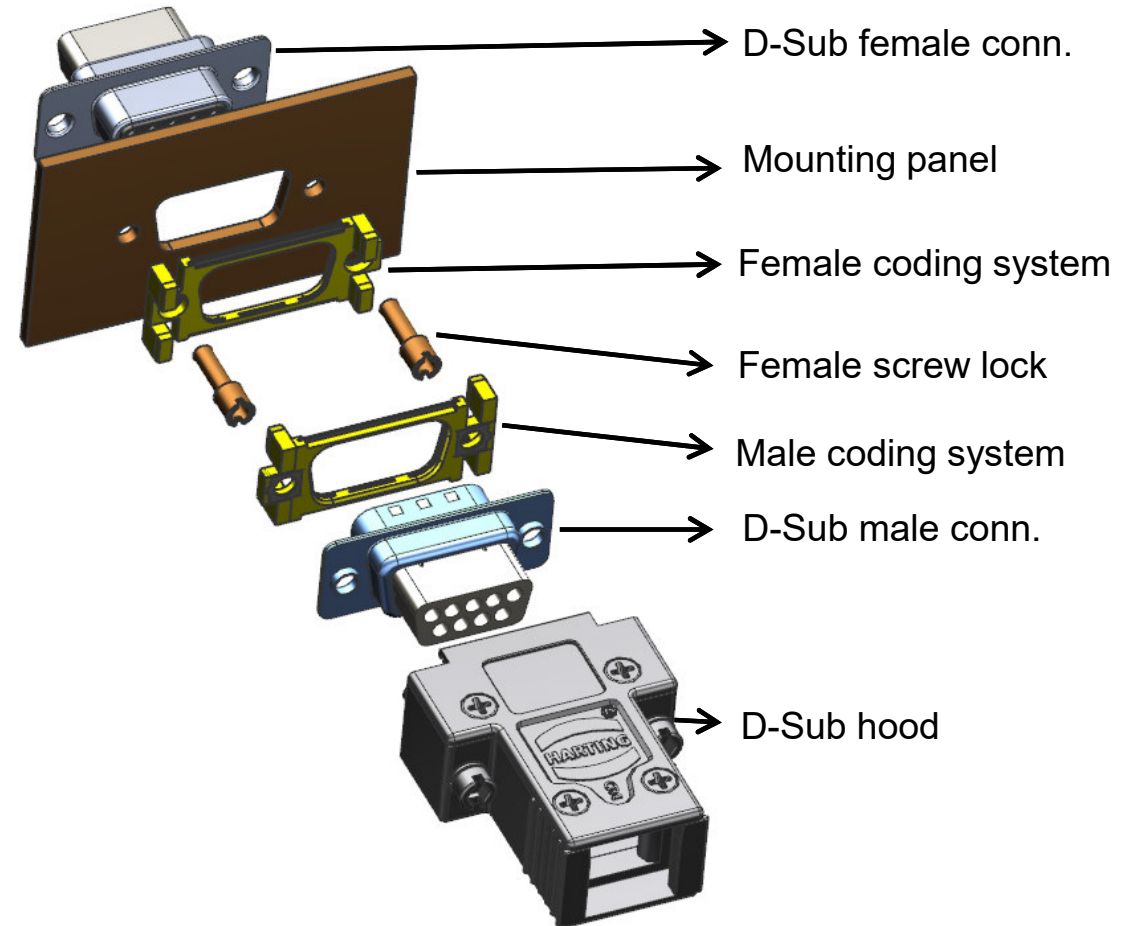
- **For a lot of measuring-, communication-devices and controll units it is necessary to avoid abusive or coincidental mismating. The marking with a label or a sign is sometimes not enough.**
- **A mechanical coding prevents that damages occure and associated with it repair costs and interruptions can be avoided**
- **a coding supported by colored mating partners makes it easier for the user to assemble the right connectors into the right device**

Our solution: Coding system for rear mounted connectors at a panel thickness of 1,6-2,0mm!

Assembly view

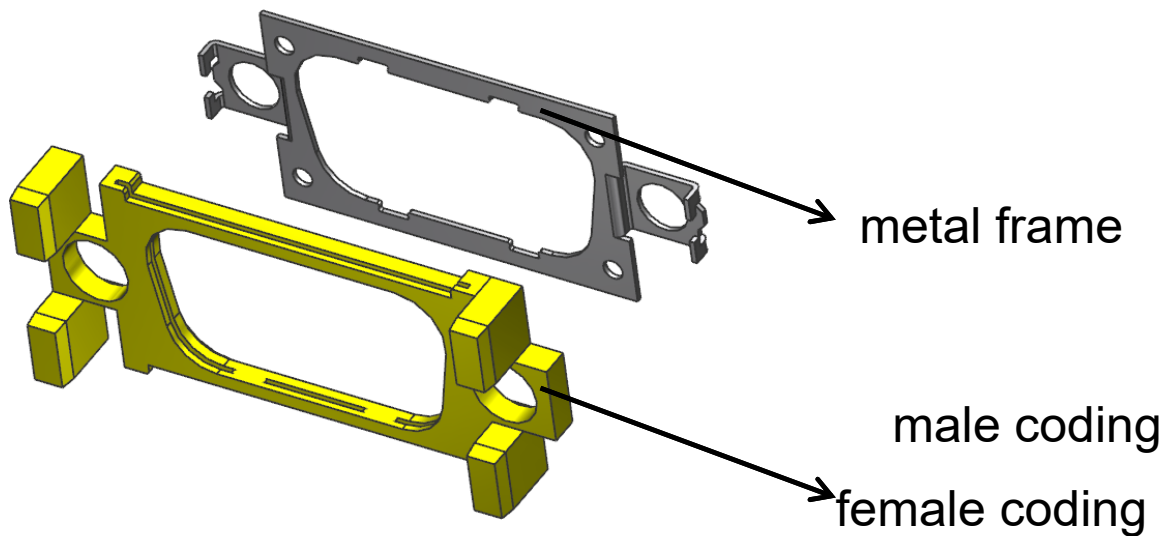


Explode view

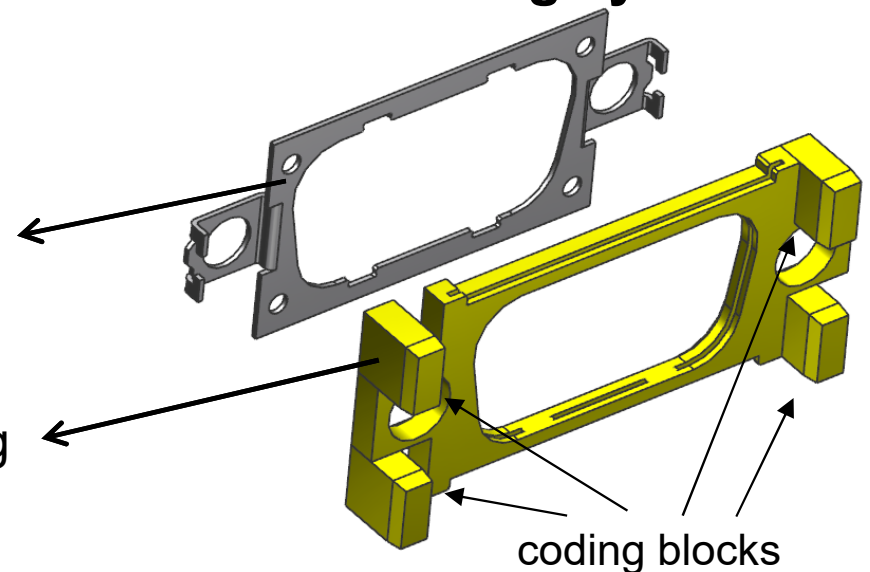


Our solution: coding system for rear mounted connectors at a panel thickness of 1,6-2,0mm!

Explode view for female coding system



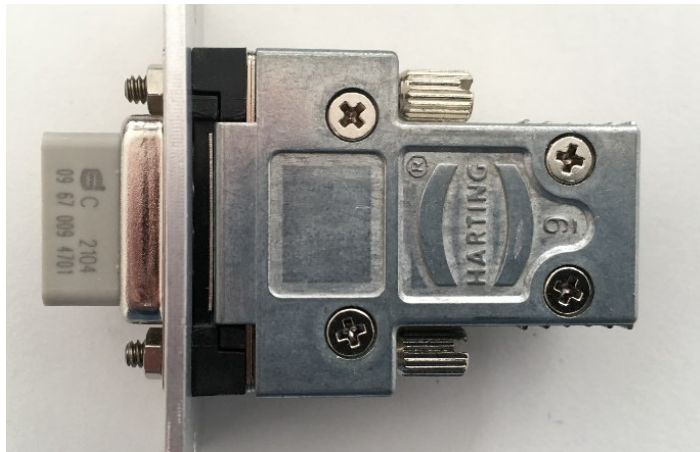
Explode view for male coding system



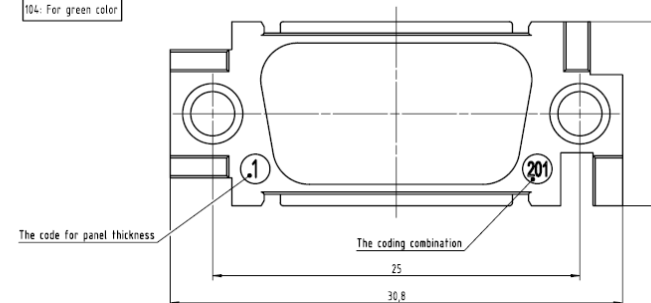
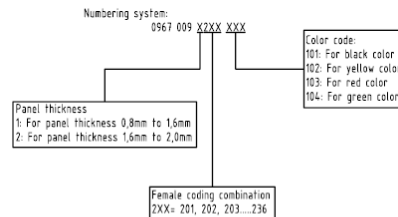
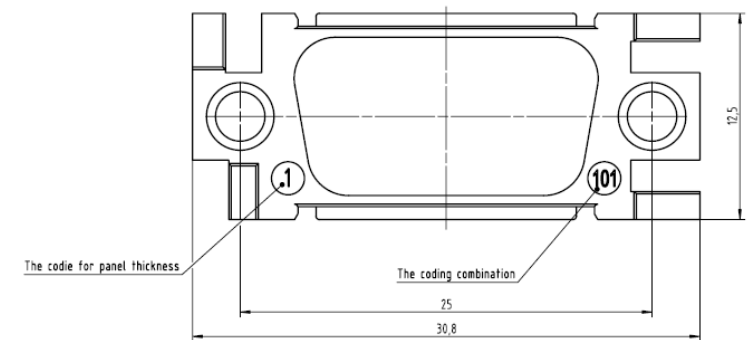
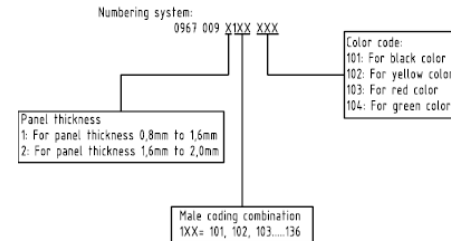
The combination of 6 different coding block designs molded to the 4 edges of the metal frame result a unique mechanical coding in 36 combinations!

Coding System for D-Sub Size 1

male coding system

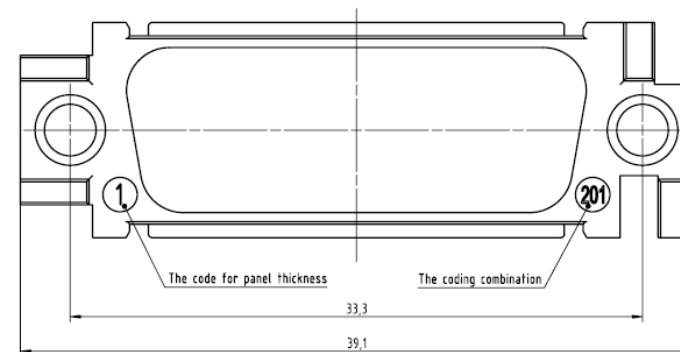
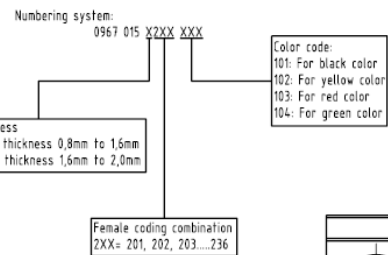
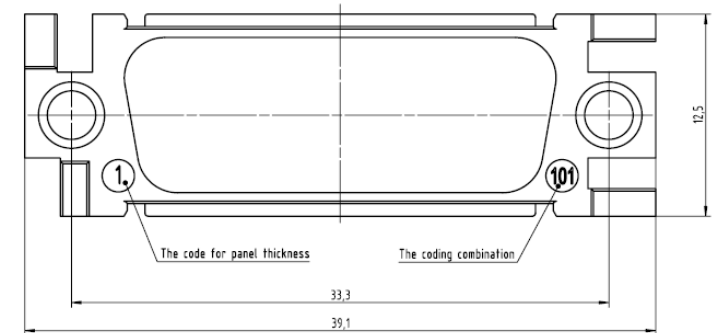
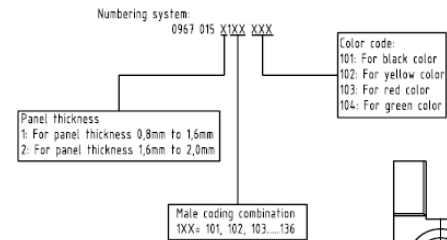


female coding system

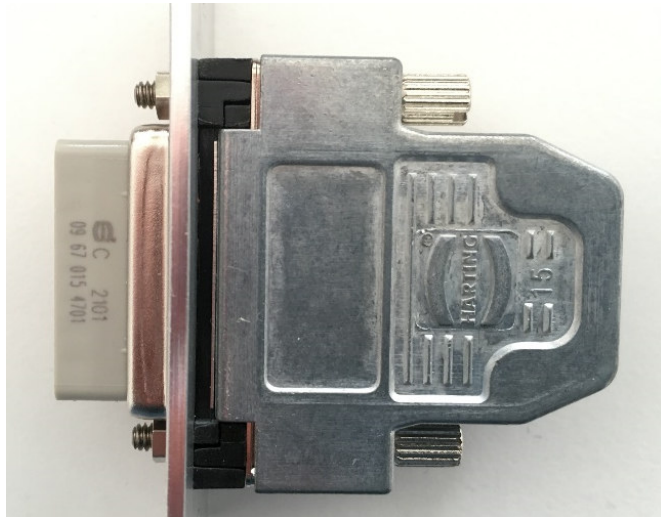


Coding System for D-Sub Size 2

male coding system



female coding system





Product features at a glance

- ✓ **Up to 36 different mechanical coding combinations possible**
- ✓ **Robust design**
- ✓ **Coding elements made of plastic on a metal frame**
- ✓ **4 different colors are possible: black, yellow, red and green**
- ✓ **Can be used with InduCom, -Inducom9 and D-Sub hoods with 2 slits**
- ✓ **Easy assembling to the hoods**
- ✓ **Easy assembling to panel mount or PCB connectors with special female screwlocks**
- ✓ **Thus easily adaptable on existing applications**