

# INDUSTRIAL ETHERNET CABLES CAT 5

**PN 654** Profinet type A, for fixed installation

**PN 655** Profinet type A, for fixed installation with ul approval

**PN 660** Profinet type B, for flexible applications

**PN 661** Profinet type B, for flexible applications with ul approval



Marking for PN 660:

SAB BRÖCKSKES · D-VIERSEN · PN 660 Profinet CAT 5 Typ B 2x2x22AWG CE

Industrial Ethernet is a young and quickly developing network technology. Ethernet with the worldwide accepted TCP/IP (Transmission Control Protocol/Internet Protocol) will be the future connection to the well established field bus or sensor / actuator level. Depending on the application, we are able to offer today CAT 5 cable solutions for flexible and continuous flexible use, for chemical and thermal stress as well as special cable constructions for reeling purpose and robot operation.

item no.	type	dimensions	nominal outer- $\phi$ inch	mm	cable weight $\approx$ lbs/ft	ohmic resistance at 20°C acc. to VDE 0812 max. $\Omega$ /km
▶ 06542202	PN 654	22 AWG/4c	0.209	5,3	28	58.0
▶ 06602202	PN 660	22 AWG/4c	0.260	6,6	42	58.0
▶ 06552202	PN 655	22 AWG/4c	0.232	5,9	33	58.0
▶ 06612202	PN 661	22 AWG/4c	0.260	6,6	42	58.0

Other dimensions and colors are possible on request.

<b>Construction:</b>	<b>PN 654</b> Profinet type A <i>fixed laying</i>	<b>PN 660</b> Profinet type B <i>flexible</i>	<b>PN 655</b> Profinet type A <i>fixed laying</i>	<b>PN 661</b> Profinet type B <i>flexible</i>
<b>Dimension:</b>	2 x 2 x 22 AWG			
<b>Conductor:</b>	bare copper wire	bare copper strands, fine wires acc. to VDE 0812	bare copper wire	bare copper strands, fine wires acc. to VDE 0812
<b>Insulation:</b>	PE, L/MD acc. to DIN VDE 0819 part 103			
<b>Color code:</b>	blue, yellow, white, orange			
<b>Stranding:</b>	in layers			
<b>Wrapping:</b>	PETP foil			
<b>Screen:</b>	tinned copper braiding			
<b>Wrapping:</b>	---	non-woven tape	---	non-woven tape
<b>Outer sheath:</b>	PVC	SABIX® 230	PVC	SABIX® 235
<b>Sheath color:</b>	green (similar RAL 6018)			

<b>Technical data:</b>	<b>PN 654</b> Profinet type A <i>fixed laying</i>	<b>PN 660</b> Profinet type B <i>flexible</i>	<b>PN 655</b> Profinet type A <i>fixed laying</i>	<b>PN 661</b> Profinet type B <i>flexible</i>
<b>Item number:</b>	0654-2202	0660-2202	0655-2202	0661-2202
<b>Peak operating voltage VDE:</b>	max. 350 V			
<b>Voltage UL:</b>	---		300 V	
<b>Testing voltage:</b>	conductor/conductor 1500 V - conductor/screen 1200 V			
<b>Temperature range VDE</b>			<b>UL:</b> up to + 80°C	<b>UL:</b> up to + 75°C
fixed laying:	- 30°C / + 70°C	- 30°C / + 70°C	- 30°C / + 70°C	- 40°C / + 70°C
flexible application:	- 5°C / + 70°C	- 20°C / + 70°C	- 5°C / + 70°C	- 30°C / + 70°C
<b>Min. bending radius</b>				
fixed laying:	5 x d	5 x d	5 x d	5 x d
flexible application:		10 x d		10 x d
<b>Characteristic impedance:</b>	100 $\Omega$ $\pm$ 5 $\Omega$ , accomplishes the electrical and transmission requirements with high frequency acc. to EN 50288-2-2 (CAT 5 acc. to EN 50173-1)			
<b>Zero halogen:</b>	---	acc. to DIN VDE 0472 part 815 + IEC 60754-1	---	acc. to DIN VDE 0472 part 815 + IEC 60754-1
<b>Oil resistance:</b>	acc. to internal standard see page N/25	---	acc. to internal standard see page N/25	---
<b>Absence of harmful substances:</b>	acc. to RoHS-guideline 2002/95/EG as well as GefStoffV appendix IV-no. 24 see page N/25			