



# multibus

## 4x1.5mm<sup>2</sup>

**Without the cable insulation having to be stripped!**

Connecting box 4x0.75mm<sup>2</sup>, No. 49670.

- Direct connection of loads at any point of the cable.
- Flat cable connected by means of piercing points, without the cable insulation having to be stripped.
- Connection of round cables up to 4x0.75mm<sup>2</sup>, by means of piercing points.
- For supply or branching of flat cable.
- For rational installations it is recommended to use an electric screwdriver (Please observe the tightening torques!)

### **Where are these flat cables used?**

- for low voltage installations (rugged version for high mechanical strains).
- as a complement to the flat cable system ecobus combi.
- for heating, ventilating and air-conditioning processes (HVAC).
- for basic controls in buildings.
- specially adapted to MP bus products of the company Belimo.



# multibus 4x1.5mm<sup>2</sup>

Flat cable 4x1.5mm<sup>2</sup>

5.2.60

- resistant flat cable with 4 leads
- for bus and control systems
- asymmetric flat cable to avoid reverse polarity



Flat cable halogen-free, 4x1.5mm<sup>2</sup>  
for low voltage appliances

No.

**49651**

113 277 509

## Technical data

Sheath	Polyethylene Compound, halogen-free
Colour of the sheath	light grey <sup>1</sup>
Dimensions	16x4.6mm
Weight	125g/m
Fire load	7.137kWh/m
No. of leads x cross-section	4x1.5mm <sup>2</sup>
Copper conductors	tinned, highly flexible
Insulation of the leads	Polyethylene Compound, halogen-free
Colour of the leads	black, red, white, brown
Test voltage	4kV, 50Hz
Rated voltage	300V
DC-resistance	13.3Ω/km according to CEI 228 class 5
Packing unit	500m/1000m

## Accessories

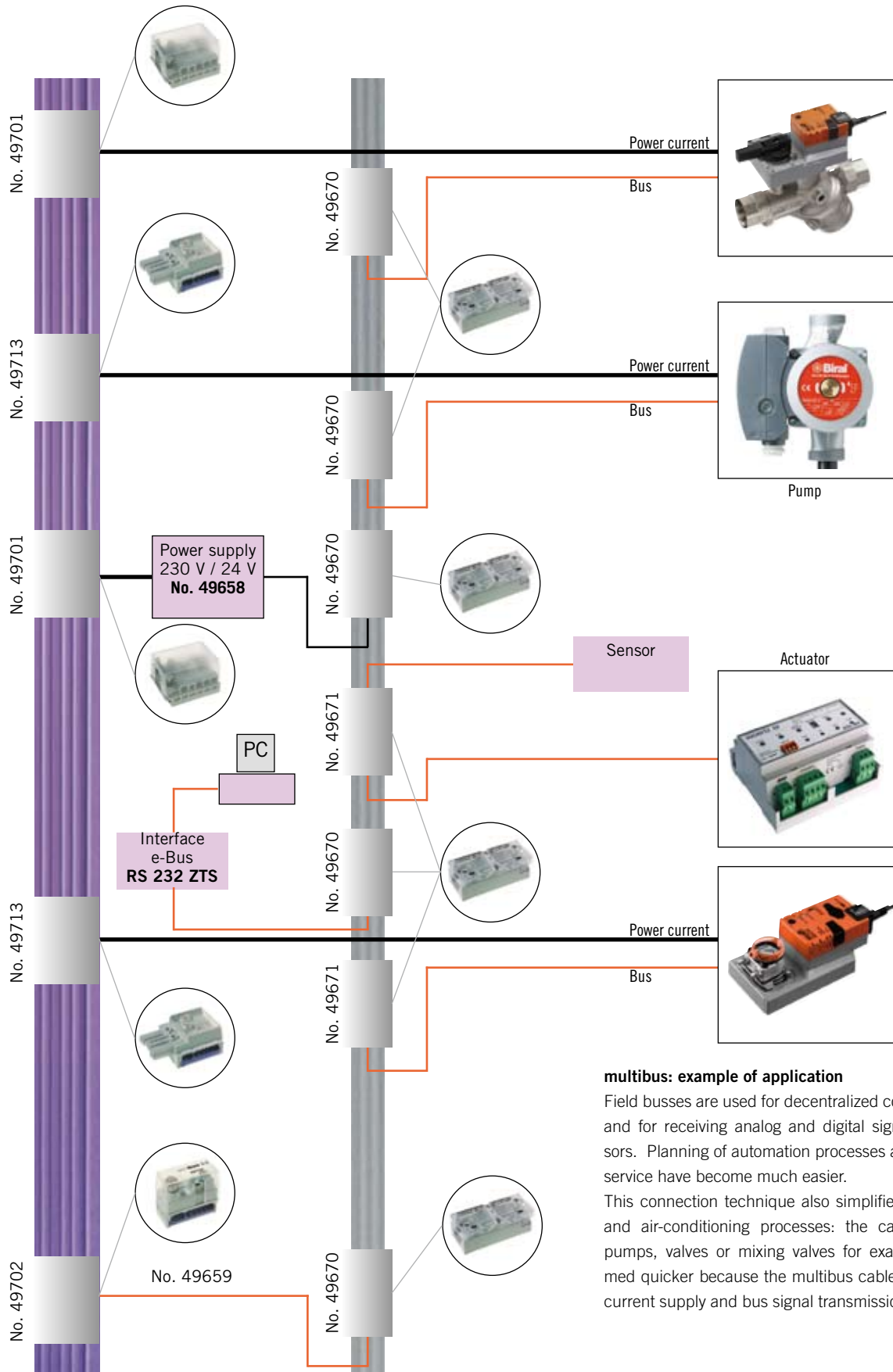
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Connecting boxes	49670, 49671	5.2.62
Connecting box	9052	5.2.63
Power supply	49658	5.2.63
Bus coupler	49659	5.2.63
Cable end piece	9039	5.2.63
Fixing clamps	49661, 49664	5.2.63
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<sup>1</sup> other colours on request (e.g. red, white, black)

# multibus 4x1.5mm<sup>2</sup>

Examples of application: Belimo - Multitherm



Flat cable ecobus combi  
**No. 49945**  
 5G2.5 mm<sup>2</sup> + Bus  
 (KNX, LON, bus MP)

Flat cable multibus  
**No. 49651**  
 4x1.5 mm<sup>2</sup> (Bus MP,...)

### multibus: example of application

Field busses are used for decentralized controlling of actuators and for receiving analog and digital signals emitted by sensors. Planning of automation processes and putting them into service have become much easier.

This connection technique also simplifies heating, ventilating and air-conditioning processes: the cabling procedures of pumps, valves or mixing valves for example can be performed quicker because the multibus cable ensures both power current supply and bus signal transmission.

# multibus 4x1.5mm<sup>2</sup>

Connecting boxes with 3 or 4 contacts to flat cable No. 49651

5.2.62

- connection round cable/flat cable without the conductors having to be stripped of insulation
- for bus and control systems
- wiring diagram on the product data sheets



Connecting box for 2 round cables 4x0.75mm<sup>2</sup> flex with 1 connector and 3 contacts for supply and branching, specially adapted to MP bus devices from the company Belimo



Connecting box for 2 round cables 4x0.75mm<sup>2</sup> flex with 4 contacts for supply and branching

No.

**49670**

150 701 317

**49671**

150 701 347

## Technical data

Weight	55.5g	55.5g
Dimensions LxWxH	76x32x27mm	76x32x27mm
Fire load	0.4kWh	0.4kWh
Plastic parts	transparent, halogen-free	transparent, halogen-free
Metal parts	corrosion-resistant	corrosion-resistant
Screwed sealing plugs	tightening torque 0.7Nm, Phillips-head screwdriver No. 1	tightening torque 0.7Nm, Phillips-head screwdriver No. 1
Number of contacts with flat cable	3	4
Connector round cable/round cable	1	-
Rated voltage	48V	48V
Max. rated current	3.5A	3.5A
Colour	light grey	light grey
Packing unit	25 pce.	25 pce.
Degree of protection	IP20	IP20

## Accessories

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Round cable	49665	5.2.63	49665	5.2.63
Stopper	49675	5.2.63	49675	5.2.63

## Accessories

### Cable end piece



**9039**  
120 900 097

Of polycarbonate, halogen-free, transparent  
Dimensions: 35x28x18.5mm  
Weight: 7g  
Fire load: 0.06kWh  
Packing unit: 10 pce.

Note:  
Before mounting the cable, first strip it at both ends for a distance of 19mm so that the specified creepage distance will be observed.

5.2.63

### Connecting box



**9052**  
150 706 037

for the supply with rigid strands or strands with a cross section different from 0.75mm<sup>2</sup>

### Power supply and coupler



**49658**  
960 905 107

Power supply 230V/24VDC consisting of 1 power supply, 1 box No. 49670, 1 box No. 49671

**49659**  
150 700 017

Bus coupler between multibus and ecobus combi flat cables consisting of 1 box No. 49670, 1 box No. 49702, 1 cable No. 49665, ready to be connected

### Flexible round cable



**49665**  
113 271 047

Of PVC, black, 4x0.75mm<sup>2</sup>, highly flexible leads (flex)  
Diameter 6.8mm  
For connecting devices.  
Strip the cable for a distance of 28mm.  
Colour of the leads: black/red/white/white.  
Temperature range: -30°C up to +90°C  
Fire behaviour: flame retardant according to CEI 60332.1, low smoke development according to CEI 61034-1/2  
Packing unit: 500 m

### Stopper



**49675**  
120 660 007

To obturate unused cable outlets. 1 stopper delivered with connecting boxes No. 49670 and 49671.  
Packing unit: 25 pce.

### Clamp for screw fixing, single



**49661**  
120 008 407

to flat cable multibus, of polyamide 66, halogen-free  
Dimensions: 31x10x7mm  
Weight: 1g  
Fire load: 0.01kWh  
Packing unit: 100 pce.

## Accessories

### Clamp for screw fixing, double

5.2.64



**49664**  
120 008 507

to flat cables multibus/ecobus combi, of polyamide 66, halogen-free  
Dimensions: 70x10x10mm  
Weight: 2g  
Fire load: 0.02kWh  
Packing unit: 50 pce.

### Shears



**49930**  
983 045 007

For cutting neatly and easily every type of flat cables (max. width 32mm).  
With sliding anvil. Teflon coated blades.  
Packing unit: 1 pce.

### Insulating tape



**49632**  
150 901 147

To reinsulate correctly the holes due to pointed screws or cutting teeth when removing or displacing connections.  
Insulating tape trademark "Scotch 2210", synthetic caoutchouc-based product, PVC coated black.  
Weatherproof, self-fusing.  
Dimensions: 50mmx1m  
Dielectric strength: max. 18kV/mm  
Temperature: max. +70°C  
Packing unit: 1 meter