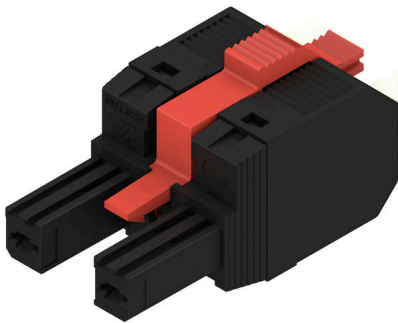


**BVFL 7.62HP/02/180MF2 SN BK BX**

**Weidmüller Interface GmbH & Co. KG**  
 Klingenbergstraße 26  
 D-32758 Detmold  
 Germany

www.weidmueller.com

**Product image**


180° female plug with PUSH IN connection system with adjustable actuator (pusher) for field wiring 6 mm<sup>2</sup> in a 7.62 pitch. Meets the requirements of UL 1059 600 V Class C ad IEC 61800-5-1. Also ideal as a touch-safe solution for the power output. The self-locking middle flange which can optionally also be screwed, reduces the space requirements by one pitch width in comparison with conventional solutions. Variants: without flange, external flange, middle flange with snap-on mechanism and optionally additional screw mount

**General ordering data**

Version	PCB plug-in connector, female plug, 7.62 mm, Number of poles: 2, 180°, PUSH IN with actuator, Clamping range, max. : 6 mm <sup>2</sup> , Box
Order No.	<a href="#">2549300000</a>
Type	BVFL 7.62HP/02/180MF2 SN BK BX
GTIN (EAN)	4050118558739
Qty.	84 items
Product data	IEC: 1000 V / 41 A / 0.5 - 6 mm <sup>2</sup> UL: 600 V / 39 A / AWG 24 - AWG 8
Packaging	Box

**BVFL 7.62HP/02/180MF2 SN BK BX**

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**Technical data**
**Approvals**

ROHS	Conform
------	---------

**Dimensions and weights**

Depth	52.1 mm	Depth (inches)	2.0512 inch
Height	20.6 mm	Height (inches)	0.811 inch
Net weight	14.36 g		

**Environmental Product Compliance**

RoHS Compliance Status	Compliant without exemption
REACH SVHC	No SVHC above 0.1 wt%

**System Parameters**

Product family	OMNIMATE Power - series BV/SV 7.62HP	Type of connection	Field connection
Wire connection method	PUSH IN with actuator	Pitch in mm (P)	7.62 mm
Pitch in inches (P)	0.300 "	Conductor outlet direction	180°
Number of poles	2	L1 in mm	15.24 mm
L1 in inches	0.600 "	Number of rows	1
Pin series quantity	1	Rated cross-section	6 mm <sup>2</sup>
Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch	Touch-safe protection acc. to DIN VDE 0470	IP 20
Protection degree	IP20	Volume resistance	4.50 mΩ
Can be coded	Yes	Stripping length	12 mm
Screwdriver blade	0.6 x 3.5	Plugging cycles	25

**Material data**

Insulating material	PA GF	Colour	black
Colour of operational elements	white	Colour chart (similar)	RAL 9011
Insulating material group	II	Comparative Tracking Index (CTI)	≥ 600
Moisture Level (MSL)		UL 94 flammability rating	V-0
Contact material	Cu-alloy	Contact surface	tinned
Layer structure of plug contact	6...8 μm Sn glossy	Storage temperature, min.	-40 °C
Storage temperature, max.	70 °C	Operating temperature, min.	-50 °C
Operating temperature, max.	125 °C	Temperature range, installation, min.	-25 °C
Temperature range, installation, max.	125 °C		

**Conductors suitable for connection**

Clamping range, min.	0.5 mm <sup>2</sup>
Clamping range, max.	6 mm <sup>2</sup>
Solid, min. H05(07) V-U	0.5 mm <sup>2</sup>
Solid, max. H05(07) V-U	6 mm <sup>2</sup>
Flexible, min. H05(07) V-K	0.5 mm <sup>2</sup>
Flexible, max. H05(07) V-K	6 mm <sup>2</sup>
w. plastic collar ferrule, DIN 46228 pt 4, 0.5 mm <sup>2</sup> min.	
w. plastic collar ferrule, DIN 46228 pt 4, 6 mm <sup>2</sup> max.	
w. wire end ferrule, DIN 46228 pt 1, min.	0.5 mm <sup>2</sup>
w. wire end ferrule, DIN 46228 pt 1, max.	6 mm <sup>2</sup>

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**Technical data**

Clampable conductor	Cross-section for conductor connection	Type	fine-wired
		nominal	0.5 mm <sup>2</sup>
wire end ferrule	Stripping length	nominal	14 mm
		Recommended wire-end ferrule	<a href="#">H0,5/12 OR</a>
		Recommended wire-end ferrule	<a href="#">H0,75/18 W</a>
Cross-section for conductor connection	Type	fine-wired	
		nominal	0.75 mm <sup>2</sup>
wire end ferrule	Stripping length	nominal	14 mm
		Recommended wire-end ferrule	<a href="#">H0,75/18 W</a>
		Recommended wire-end ferrule	<a href="#">H1,0/18 GE</a>
Cross-section for conductor connection	Type	fine-wired	
		nominal	1 mm <sup>2</sup>
wire end ferrule	Stripping length	nominal	15 mm
		Recommended wire-end ferrule	<a href="#">H1,0/18 GE</a>
		Recommended wire-end ferrule	<a href="#">H1,5/12</a>
Cross-section for conductor connection	Type	fine-wired	
		nominal	1.5 mm <sup>2</sup>
		Stripping length	nominal 12 mm
		Recommended wire-end ferrule	<a href="#">H1,5/12</a>
wire end ferrule	Stripping length	nominal	15 mm
		Recommended wire-end ferrule	<a href="#">H1,5/18D SW</a>
		Recommended wire-end ferrule	<a href="#">H2,5/12</a>
		Recommended wire-end ferrule	<a href="#">H2,5/19D BL</a>
Cross-section for conductor connection	Type	fine-wired	
		nominal	2.5 mm <sup>2</sup>
wire end ferrule	Stripping length	nominal	12 mm
		Recommended wire-end ferrule	<a href="#">H2,5/12</a>
		Recommended wire-end ferrule	<a href="#">H2,5/19D BL</a>
		Recommended wire-end ferrule	<a href="#">H4,0/12</a>
Cross-section for conductor connection	Type	fine-wired	
		nominal	4 mm <sup>2</sup>
		Stripping length	nominal 12 mm
		Recommended wire-end ferrule	<a href="#">H4,0/12</a>
wire end ferrule	Stripping length	nominal	14 mm
		Recommended wire-end ferrule	<a href="#">H4,0/20D GR</a>
		Recommended wire-end ferrule	<a href="#">H6,0/12</a>
		Recommended wire-end ferrule	<a href="#">H6,0/20 SW</a>
Cross-section for conductor connection	Type	fine-wired	
		nominal	6 mm <sup>2</sup>
wire end ferrule	Stripping length	nominal	12 mm
		Recommended wire-end ferrule	<a href="#">H6,0/12</a>
		Recommended wire-end ferrule	<a href="#">H6,0/20 SW</a>
		Recommended wire-end ferrule	<a href="#">H6,0/20 SW</a>

Reference text The outside diameter of the plastic collar should not be larger than the pitch (P), Length of ferrules is to be chosen depending on the product and the rated voltage.

**Rated data acc. to IEC**

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	41 A
Rated current, max. number of poles (Tu=20°C)	41 A	Rated current, min. number of poles (Tu=40°C)	41 A
Rated current, max. number of poles (Tu=40°C)	38 A	Rated voltage for surge voltage class / pollution degree II/2	1000 V
Rated voltage for surge voltage class / pollution degree III/2	1000 V	Rated voltage for surge voltage class / pollution degree III/3	800 V

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### Technical data

Rated impulse voltage for surge voltage class/ pollution degree II/2	6 kV	Rated impulse voltage for surge voltage class/ pollution degree III/2	8 kV
Rated impulse voltage for surge voltage class/ contamination degree III/3	8 kV	Short-time withstand current resistance	3 x 1s with 420 A
Creepage distance, min.	12.7 mm	Clearance, min.	10.4 mm

#### Rated data acc. to CSA

Rated voltage (Use group B / CSA)	600 V	Rated voltage (Use group C / CSA)	600 V
Rated voltage (Use group D / CSA)	600 V	Rated current (Use group B / CSA)	33 A
Rated current (Use group C / CSA)	33 A	Rated current (Use group D / CSA)	5 A
Wire cross-section, AWG, min.	AWG 24	Wire cross-section, AWG, max.	AWG 8

#### Rated data acc. to UL 1059

Rated voltage (Use group B / UL 1059)	600 V	Rated voltage (Use group C / UL 1059)	600 V
Rated voltage (Use group D / UL 1059)	600 V	Rated current (Use group B / UL 1059)	39 A
Rated current (Use group C / UL 1059)	39 A	Rated current (Use group D / UL 1059)	5 A
Wire cross-section, AWG, min.	AWG 24	Wire cross-section, AWG, max.	AWG 8

#### Packing

Packaging	Box	VPE length	353.00 mm
VPE width	136.00 mm	VPE height	61.00 mm

#### Important note

IPC conformity	Conformity: The products are developed, manufactured and delivered according international recognized standards and norms and comply with the assured properties in the data sheet resp. fulfill decorative properties in accordance with IPC-A-610 "Class 2". Further claims on the products can be evaluated on request.
Notes	<ul style="list-style-type: none"> <li>• Additional variants on request</li> <li>• Wire end ferrule with plastic collar to DIN 46228/4</li> <li>• Wire end ferrule without plastic collar to DIN 46228/1</li> <li>• P on drawing = pitch</li> <li>• Rated data refer only to the component itself. Clearance and creepage distances to other components are to be designed in accordance with the relevant application standards.</li> <li>• Additional pole combinations on request</li> <li>• In accordance with IEC 61984, OMNIMATE-connectors are connectors without breaking capacity (COC). During designated use, connectors are not allowed to be engaged or disengaged when live or under load</li> <li>• Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months</li> </ul>

#### Classifications

ETIM 8.0	EC002638	ETIM 9.0	EC002638
ETIM 10.0	EC002638	ECLASS 14.0	27-46-02-02
ECLASS 15.0	27-46-02-02		

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**Drawings**

**Product image**



**Dimensional drawing**



Similar to illustration

**Connection diagram**

6	M(S)F6	o	o	o	o	o	o	X	o
6	M(S)F5	o	o	o	o	o	X	o	o
6	M(S)F4	o	o	o	X	o	o	o	o
6	M(S)F3	o	o	X	o	o	o	o	o
6	M(S)F2	o	X	o	o	o	o	o	o
5	M(S)F5	o	o	o	o	o	X	o	o
5	M(S)F4	o	o	o	X	o	o	o	o
5	M(S)F3	o	o	X	o	o	o	o	o
5	M(S)F2	o	X	o	o	o	o	o	o
4	M(S)F4	o	o	o	X	o	o	o	o
4	M(S)F3	o	o	X	o	o	o	o	o
4	M(S)F2	o	X	o	o	o	o	o	o
3	M(S)F3	o	o	X	o	o	o	o	o
3	M(S)F2	o	X	o	o	o	o	o	o
2	M(S)F2	o	X	o	o	o	o	o	o
NO OF POLES	X = MIDDLE FLANGE POSITION	1	2	3	4	5	6	7	

**Graph**



**Graph**



**Graph**



**Product benefits**



Secure connection of small  
conductors  
PUSH IN WIRE READY

**Product benefits**



Installation without tools  
Outlet direction: 90° und 180°

## BVFL 7.62HP/02/180MF2 SN BK BX

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## Accessories

### Coding elements



The pluggable connections for power electronics - optimised for modern drive technologies, e.g. motor starters, frequency converters and servo-controllers. OMNIMATE Power sets the new standard – with increased safety and innovative solutions such as the pluggable shield, integrated signal contacts and one-handed operation.

The three product lines offer you further advantages:

- Application-oriented scalability: from the compact 4 mm<sup>2</sup> connector for 29 A (IEC) or 20 A (UL) up to the sturdy 16 mm<sup>2</sup> connector for 76 A (IEC) or 54 A (UL)
- Unlimited usage up to 1,000 V (IEC) or 600 V (UL)
- A variety of application optimised mounting options

Our service:

Design your individual connectors simply by using the product configurator.

### General ordering data

Type	BV/SV 7.62HP KO	Version	
Order No.	<a href="#">1937590000</a>	PCB plug-in connector, Accessories, Coding element, black, Number	
GTIN (EAN)	4032248608881	of poles: 1	
Qty.	50 ST		

### Crimping tools



Crimping tools for wire end ferrules, with and without plastic collars

- Ratchet guarantees precise crimping
- Release option in the event of incorrect operation

### General ordering data

Type	PZ 6/5	Version	
Order No.	<a href="#">9011460000</a>	Pressing tool, Crimping tool for wire-end ferrules, 0.25mm <sup>2</sup> , 6mm <sup>2</sup> ,	
GTIN (EAN)	4008190165352	Trapezoidal indentation crimp	
Qty.	1 ST		

### Coupling set



With the aid of the SVF/BVF 7.62HP COUPLE SET the two plug-in elements can be connected back-to-back to form a 2-row connector with a maximum of 2 x 4 poles.

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**Accessories**
**General ordering data**

Type	SVF/BVF 7.62HP COUPLE S...	Version	
Order No.	<a href="#">1440850000</a>	PCB plug-in connector, Accessories, Mounting block, black	
GTIN (EAN)	4050118247060		
Qty.	20 ST		

**Slotted screwdriver**


Slotted screwdriver with rounded blade SD DIN 5265,  
 ISO 2380/2, output to DIN 5264, ISO 2380/1.  
 ChromTop tip, SoftFinish grip

**General ordering data**

Type	SDS 0.6X3.5X100	Version	
Order No.	<a href="#">9008330000</a>	Screwdriver, Screwdriver	
GTIN (EAN)	4032248056286		
Qty.	1 ST		

## BVFL 7.62HP/02/180MF2 SN BK BX

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## Counterpart

### SV 7.62HP 90MSF SN

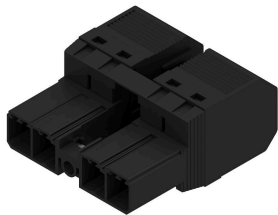


Single-row, high-current and high-performance male headers for side-by-side mounting without sacrificing any poles or with flange for fast fixing without tools. Maximum connection and operating reliability thanks to a mating profile that prevents incorrect connection, unique coding diversity and additional fastening in the flange.

#### General ordering data

Type	SV 7.62HP/02/90MSF2 3.5...	Version
Order No.	<a href="#">1048400000</a>	PCB plug-in connector, male header, closed side, Middle screw flange,
GTIN (EAN)	4032248786626	THT solder connection, 7.62 mm, Number of poles: 2, 90°, Solder pin
Qty.	78 ST	length (l): 3.5 mm, tinned, black, Box

### SVF 7.62HP/180MSF

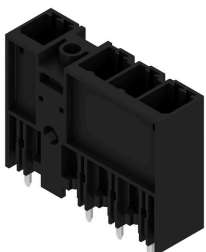


180° inverted inverse voltage-safe male header with PUSH IN connection technology for field wiring. With automatically locking middle flange for field wiring in 6 mm<sup>2</sup> with 7.62 pitch. Also ideal as a touch-safe solution for inverse voltages. Meets the requirements of UL 1059 600 V class C and IEC 61800-5-1. On request, also available without middle flange.

#### General ordering data

Type	SVF 7.62HP/02/180MSF2 S...	Version
Order No.	<a href="#">1061110000</a>	PCB plug-in connector, male plug, 7.62 mm, Number of poles:
GTIN (EAN)	4032248810659	2, 180°, PUSH IN without actuator, Tension-clamp connection,
Qty.	65 ST	Clamping range, max. : 10 mm <sup>2</sup> , Box

### SV 7.62HP 180MF SN



180° male header with middle flange with a 7.62 pitch. Meets the requirements of IEC 61800-5-1 and enables UL approval as per UL840 600 V. Without a female header, the mating profile guarantees minimum touch safety of >3 mm with 20 N pressure on the test finger. The automatically locking middle flange which can optionally also be screwed, reduces space requirements by one pitch width in comparison with conventional solutions. On request: available with screw flange or without flange.

## BVFL 7.62HP/02/180MF2 SN BK BX

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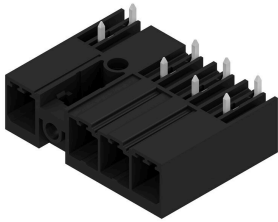
## Counterpart

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### General ordering data

Type	SV 7.62HP/02/180MF2 3.5...	Version
Order No.	<a href="#">1048350000</a>	PCB plug-in connector, male header, closed side, Middle flange, THT
GTIN (EAN)	4032248786671	solder connection, 7.62 mm, Number of poles: 2, 180°, Solder pin
Qty.	78 ST	length (l): 3.5 mm, tinned, black, Box

### SV 7.62HP 270MF SN

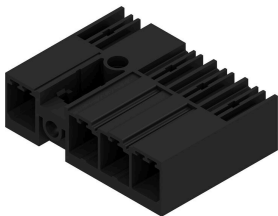


270° male header with middle flange with a 7.62 pitch. Meets the requirements of IEC 61800-5-1 and enables UL approval as per UL840 600 V. Without a female header, the mating profile guarantees minimum touch safety of >3 mm with 20 N pressure on the test finger. The automatically locking middle flange which can optionally also be screwed, reduces space requirements by one pitch width in comparison with conventional solutions.  
 On request: available with screw flange or without flange.

### General ordering data

Type	SV 7.62HP/02/270MF2 3.5...	Version
Order No.	<a href="#">1048370000</a>	PCB plug-in connector, male header, closed side, Middle flange, THT
GTIN (EAN)	4032248786657	solder connection, 7.62 mm, Number of poles: 2, 270°, Solder pin
Qty.	78 ST	length (l): 3.5 mm, tinned, black, Box

### SV 7.62HP 90MF SN



90° male header with middle flange with a 7.62 pitch. Meets the requirements of IEC 61800-5-1 and enables UL approval as per UL840 600 V. Without a female header, the mating profile guarantees minimum touch safety of >3 mm with 20 N pressure on the test finger. The automatically locking middle flange which can optionally also be screwed, reduces space requirements by one pitch width in comparison with conventional solutions.  
 On request: available with screw flange or without flange.

### General ordering data

Type	SV 7.62HP/02/90MF2 3.5S...	Version
Order No.	<a href="#">1048390000</a>	PCB plug-in connector, male header, closed side, Middle flange, THT
GTIN (EAN)	4032248786633	solder connection, 7.62 mm, Number of poles: 2, 90°, Solder pin
Qty.	78 ST	length (l): 3.5 mm, tinned, black, Box

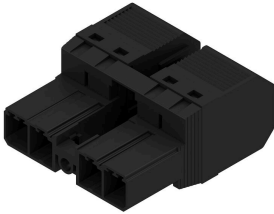
## BVFL 7.62HP/02/180MF2 SN BK BX

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## Counterpart

### SVF 7.62HP/180MF

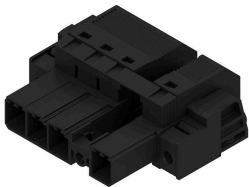


180° inverted inverse voltage-safe male header with PUSH IN connection technology for field wiring. With automatically locking middle flange for field wiring in 6 mm<sup>2</sup> with 7.62 pitch. Also ideal as a touch-safe solution for inverse voltages. Meets the requirements of UL1059 600 V class C and IEC 61800-5-1. On request, also available without middle flange.

#### General ordering data

Type	SVF 7.62HP/02/180MF2 SN...	Version
Order No.	<a href="#">1061020000</a>	PCB plug-in connector, male plug, 7.62 mm, Number of poles:
GTIN (EAN)	4032248810727	2, 180°, PUSH IN without actuator, Tension-clamp connection,
Qty.	65 ST	Clamping range, max. : 10 mm <sup>2</sup> , Box

### SVF 7.62HP/180SFBMF

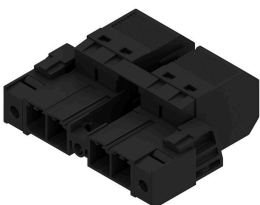


180° inverted male header with PUSH IN connection technology for field wiring in 6 mm<sup>2</sup> with 7.62 pitch as "three-flange variant" for housing passage. Suitable for housings with a max. wall thickness of 16 mm. Also perfect as a finger-safe solution for inverse voltages. Meets the requirements of UL1059 600 V class C and IEC 61800-5-1.

#### General ordering data

Type	SVF 7.62HP/02/180SFBMF2...	Version
Order No.	<a href="#">1429920000</a>	PCB plug-in connector, male plug, 7.62 mm, Number of poles:
GTIN (EAN)	4050118234800	2, 180°, PUSH IN without actuator, Tension-clamp connection,
Qty.	40 ST	Clamping range, max. : 10 mm <sup>2</sup> , Box

### SVF 7.62HP/180SFMF



180° inverted male header with PUSH IN connection technology for field wiring in 6 mm<sup>2</sup> with 7.62 pitch as "three-flange variant" for housing passage. Suitable for housings with a max. wall thickness of 2 mm. Also perfect as a finger-safe solution for inverse voltages. Meets the requirements of UL1059 600 V class C and IEC 61800-5-1.

#### General ordering data

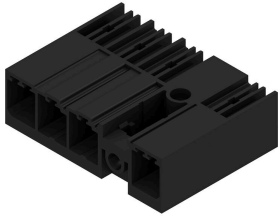
Type	SVF 7.62HP/02/180SFMF2 ...	Version
Order No.	<a href="#">1427220000</a>	PCB plug-in connector, male plug, 7.62 mm, Number of poles:
GTIN (EAN)	4050118231250	2, 180°, PUSH IN without actuator, Tension-clamp connection,
Qty.	40 ST	Clamping range, max. : 10 mm <sup>2</sup> , Box

**BVFL 7.62HP/02/180MF2 SN BK BX**

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**Counterpart**

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**SV-SMT 7.62IT 90MF SN BX**


OMNIMATE Power for IT networks – scalable to 50 kVA  
 Tailor-made solutions for special requirements  
 More standard-compliance means fewer compromises:  
 OMNIMATE Power for IT networks has integrated features incorporated as standard across the range. This makes the design-in and approvals process simpler and makes them safer and more reliable in operation.  
 Results for the application and advantages for the user: unlimited use in 400-V IT systems and touch safety according to IEC 61800-5-1 (+ 5.5 mm). The self-snapping one-handed safety flange enables intuitive and safe usage. Operational reliability is guaranteed by the automatic interlock feature during the plug-in process.  
 In conclusion: You need no additional device covering. The application-oriented design means that no compromises are necessary during the approval process.

**General ordering data**

Type	SV-SMT 7.62IT/02/90MF2 ...	Version
Order No.	<a href="#">2499530000</a>	PCB plug-in connector, male header, Middle flange, THT/THR solder connection, 7.62 mm, Number of poles: 2, 90°, Solder pin length (l): 2.6 mm, tinned, black, Box
GTIN (EAN)	4050118513134	
Qty.	50 ST	
Type	SV-SMT 7.62IT/02/90MF2 ...	Version
Order No.	<a href="#">2498580000</a>	PCB plug-in connector, male header, Middle flange, THT/THR solder connection, 7.62 mm, Number of poles: 2, 90°, Solder pin length (l): 3.5 mm, tinned, black, Box
GTIN (EAN)	4050118511567	
Qty.	50 ST	