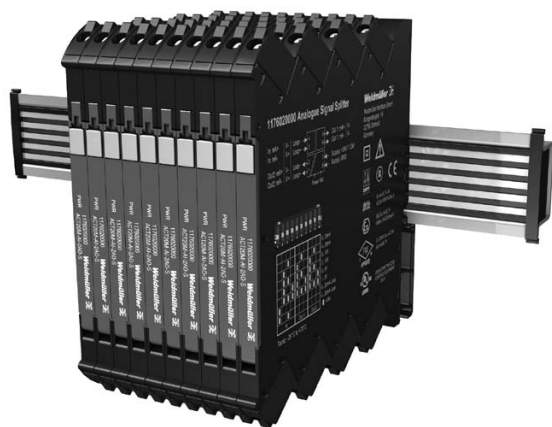


ACT20M Signal Isolation and Conversion

Available from



NEW



High quality signal isolation and conversion in a slim 6mm wide housing format is now available with Weidmüller's ACT20M range. Featuring worldwide approvals for both standard and hazardous area installations, this series of eight single- and dual-channel models extends Weidmüller's signal conditioning portfolio with a package of solutions for industrial process measurement and control applications. ACT20M is designed to reduce the time and cost of building control panels. DIN-rail mounted in

Weidmüller's new 8-pole housing, module power can be distributed through the rail for minimized power wiring and reduced installation costs. This "Power Rail" provides the flexibility to add or remove individual modules quickly and easily without affecting the wiring or operation of other components on the rail.

The ACT20M range offers two-channel loop-powered isolation, signal splitting with power provided for the transmitter, or universal input conversion in a 6mm wide module — without compromising performance. In addition, configuration is simple because the ACT20M modules require no calibration. Models with selectable voltage and current ranges feature DIP switches. For the Universal input model, Weidmüller provides vendor-independent, FDT-based configuration software available for download from the Weidmüller website.

Features:

- Very high density analog signal isolation and conversion
- Easy installation with Power Rail cross-connect option
- DIP switches for calibration-free re-ranging
- Universal input model uses FDT configuration software (and CBX200 interface)
- CE, cULus, cFmus Class 1 Div. 2 and Class 1 Zone 2 ATEX, IECEx Zone 2, DNV, GL approvals
- Ambient temperature range typically -13°F to 158°F (-25°C to 70°C)

Weidmüller, Canada

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Facsimile: (877) 300-5635
Email: info1@weidmuller.ca
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Weidmüller, Mexico

Bldv. Hermanos Serdán 698
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Telephone: 01 222 2686267
Facsimile: 01 222 2686219
Email: clientes@weidmuller.com.mx
Website: www.weidmuller.com.mx

Weidmüller, United States

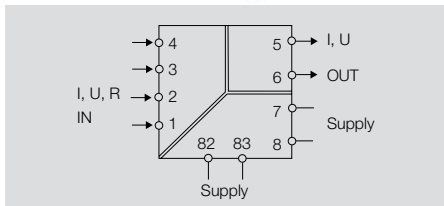
821 Southlake Blvd.
Richmond, Virginia 23236
Telephone: (800) 849-9343
Facsimile: (804) 379-2593
Email: info@weidmuller.com
Website: www.weidmuller.com

Weidmüller

Universal input converter

- Isolating and converting of temperature signals and DC signals
- Configuration using FDT/DTM software
- Optional power supply via the DIN-rail-bus
- 3 way isolation

ACT20M-UI-AO-S



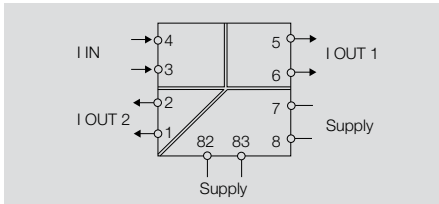
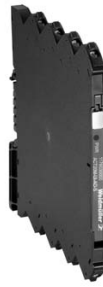
Technical data

Input			
Sensor			
Potentiometer/Resistance		10 Ω...10 k Ω	
Input current		0/4...20 mA	
Input voltage		0/2...10 V	
Load resistance, current		< 75 Ω	
Load resistance, voltage		> 500 k Ω	
Sensor supply		> 15 V DC at 20 mA	
Output			
Output current		0/4...20 mA	
Output voltage		0/2...10 V	
Load resistance, current		< 600 Ω	
Load resistance, voltage		> 10 k Ω	
General data			
Supply voltage		24 V DC ± 30 %	
Power consumption		0.4 W (24 V supply / Passive input / 20 mA input & output / 100 Ω load)	
Ambient temperature (operational)		-25 °C...+70 °C	
Storage temperature		-40 °C...+85 °C	
Accuracy		< 0.1 % span (DC, RTD) < 0.2 % + CJ error (TC) < 0.01 % /K	
Temperature coefficient			
Insulation coordination			
Insulation voltage		2.5 kV	
Rated voltage		300 V	
Pollution degree		2	
Overvoltage category		II	
Approvals			
		cULus 61010-1, cFMus Div.2, ATEX zone 2, IECEx Zone 2, DNV, GL	
Dimensions			
Length x width x height	mm	114.3 x 6.1 x 112.5	
Clamping range (nominal / min. / max.)	mm ²	2.5 / 0.5 / 2.5	
Note			
Ordering data			
	Type	Qty.	Part No.
	ACT20M-UI-AO-S	1	1176030000
Note			
Accessories			
	Type	Qty.	Part No.
Marker	MF 5/7.5 MC NEUTRAL		1877680000
USB interface	CBX200 USB		8978580000
Note		DIN-rail bus, refer to accessories page	

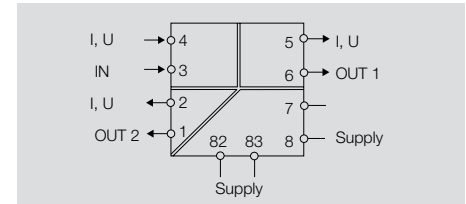
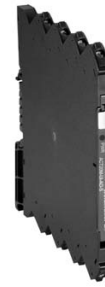
Signal splitter

- Isolating, converting and splitting DC signals
- Configured using DIP switch
- Optional power supply via the DIN-rail bus
- 4 way isolation

ACT20M-CI-2CO-S



ACT20M-AI-2AO-S



Technical data

Input	
Input current	0/4...20 mA
Input voltage	-
Load resistance, current	< 75 Ω
Load resistance, voltage	-
Sensor supply	-
Output	
Output current	0/4...20 mA
Output voltage	-
Load resistance, current	< 300 Ω / channel
Load resistance, voltage	-
General data	
Supply voltage	24 V DC ± 30 %
Power consumption	0.4 W (24 V supply / Passive input / 20 mA input & output / 100 Ω load)
Ambient temperature (operational)	-25 °C...+70 °C
Storage temperature	-40 °C...+85 °C
Accuracy	< 0.05 % of measurement range
Temperature coefficient	< 0.01 % /K
Cut-off-frequency	100 Hz
Insulation coordination	
Insulation voltage	2.5 kV
Rated voltage	300 V
Pollution degree	2
Overvoltage category	II
Approvals	
cULus 61010-1, cFMus Div.2, ATEX zone 2, IECEx Zone 2, DNV, GL	

Input current	0/4...20 mA
Input voltage	-
Load resistance, current	< 75 Ω
Load resistance, voltage	-
Sensor supply	-
Output current	0/4...20 mA
Output voltage	-
Load resistance, current	< 300 Ω / channel
Load resistance, voltage	-
Supply voltage	24 V DC ± 30 %
Power consumption	0.4 W (24 V supply / Passive input / 20 mA input & output / 100 Ω load)
Ambient temperature (operational)	-25 °C...+70 °C
Storage temperature	-40 °C...+85 °C
Accuracy	< 0.05 % of measurement range
Temperature coefficient	< 0.01 % /K
Cut-off-frequency	100 Hz
Insulation voltage	2.5 kV
Rated voltage	300 V
Pollution degree	2
Overvoltage category	II
Approvals	cULus 61010-1, cFMus Div.2, ATEX zone 2, IECEx Zone 2, DNV, GL

Input current	0/4...20 mA
Input voltage	0/2...10 V 0/1...5 V
Load resistance, current	< 75 Ω
Load resistance, voltage	> 500 k Ω
Sensor supply	> 17 V DC at 20 mA
Output current	0/4...20 mA
Output voltage	0/2...10 V 0/1...5 V
Load resistance, current	< 300 Ω / channel
Load resistance, voltage	> 10k Ω / channel
Supply voltage	24 V DC ± 30 %
Power consumption	0.4W (24 V supply / Passive input / 20 mA input & output / 100 Ω load)
Ambient temperature (operational)	-25 °C...+70 °C
Storage temperature	-40 °C...+85 °C
Accuracy	< 0.05 % of measurement range
Temperature coefficient	< 0.01 % /K
Cut-off-frequency	100 Hz
Insulation voltage	2.5 kV
Rated voltage	300 V
Pollution degree	2
Overvoltage category	II
Approvals	cULus 61010-1, cFMus Div.2, ATEX zone 2, IECEx Zone 2, DNV, GL

Dimensions	
Length x width x height	mm 114.3 x 6.1 x 112.5
Clamping range (nominal / min. / max.)	mm ² 2.5 / 0.5 / 2.5

Note

Ordering data

Type	Qty.	Part No.
ACT20M-CI-2CO-S	1	1175990000

Note

Type	Qty.	Part No.
ACT20M-CI-2CO-S	1	1175990000

Type	Qty.	Part No.
ACT20M-AI-2AO-S	1	1176020000

Accessories

Type	Qty.	Part No.
Marker		MF 5/7.5 MC NEUTRAL 1877680000

Type	Qty.	Part No.
Marker		MF 5/7.5 MC NEUTRAL 1877680000

Type	Qty.	Part No.
Marker		MF 5/7.5 MC NEUTRAL 1877680000

Note

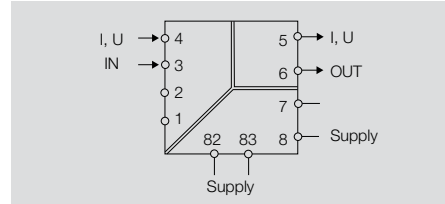
DIN-rail bus, refer to accessories page

DIN-rail bus, refer to accessories page

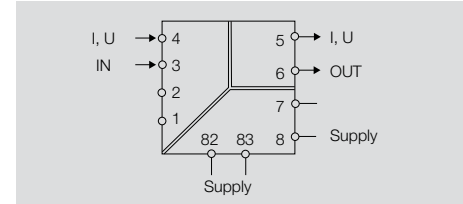
Converters for DC mA and Volts

- Isolating and converting DC signals
- DIP switch for range changes without re-calibration
- Optional power supply via the DIN-rail-bus
- 3 way isolation
- Choice of active or passive mA input ("E" model is passive only)

ACT20M-AI-AO-S



ACT20M-AI-AO-E-S



Technical data

Input		
Input current	0/4...20 mA	0/4...20 mA
Input voltage	0/2...10 V 0/1...5 V	0/2...10 V 0/1...5 V
Load resistance, current	< 75 Ω	< 75 Ω
Load resistance, voltage	> 500 k Ω	> 500 k Ω
Sensor supply	> 17 V DC at 20 mA	-
Output		
Output current	0/4...20 mA	0/4...20 mA
Output voltage	0/2...10 V 0/1...5 V	0/2...10 V 0/1...5 V
Load resistance, current	< 600 Ω	< 600 Ω
Load resistance, voltage	> 10 k Ω	> 10 k Ω
General data		
Supply voltage	24 V DC ± 30 %	24 V DC ± 30 %
Power consumption	0.4 W (24 V supply / Passive input / 20 mA input & output / 100 Ω load)	0.4 W (24 V supply / Passive input / 20 mA input & output / 100 Ω load)
Ambient temperature (operational)	-25 °C...+70 °C	0 °C...+70 °C
Storage temperature	-40 °C...+85 °C	-40 °C...+85 °C
Accuracy	< 0.05 % of measurement range	< 0.2 % of measurement range
Temperature coefficient	< 0.01 % /K	< 0.015 % /K
Cut-off-frequency	100 Hz	100 Hz
Insulation coordination		
Insulation voltage	2.5 kV	2.5 kV
Rated voltage	300 V	300 V
Pollution degree	2	2
Overvoltage category	II	II
Approvals	cULus 61010-1, cFMus Div.2, ATEX zone 2, IECEx Zone 2, DNV, GL	cULus 61010-1, DNV, GL

Dimensions

Length x width x height	mm	114.3 x 6.1 x 112.5	114.3 x 6.1 x 112.5
Clamping range (nominal / min. / max.)	mm ²	2.5 / 0.5 / 2.5	2.5 / 0.5 / 2.5

Note

Ordering data

Type	Qty.	Part No.	Type	Qty.	Part No.
ACT20M-AI-AO-S	1	117600000	ACT20M-AI-AO-E-S	1	117601000

Note

Accessories

Type	Qty.	Part No.	Type	Qty.	Part No.
MF 5/7.5 MC NEUTRAL		1877680000	MF 5/7.5 MC NEUTRAL		1877680000

Note

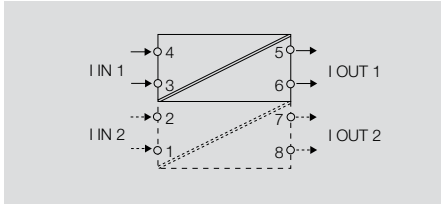
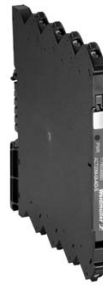
DIN-rail bus, refer to accessories page

DIN-rail bus, refer to accessories page

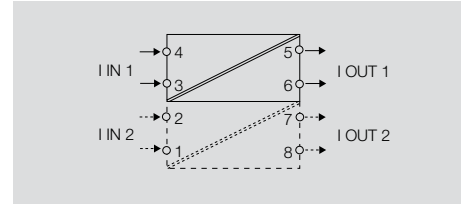
ILP and OLP isolators

- Isolation of DC mA signals
- Takes power from the input loop (ILP) or output loop (OLP)
- Available as either single-channel or double-channel version
- 2 way isolation

ACT20M-CI-CO-ILP-S



ACT20M-CI-CO-OLP-S



Technical data

Input	
Input current	0/4...20 mA
Load resistance, current	-
Voltage drop	≤ 1.2 V
Output	
Output current	0/4...20 mA
Load resistance, current	< 600 Ω
General data	
Power consumption	30 mW per channel - from input loop
Ambient temperature (operational)	-25 °C...+70 °C
Storage temperature	-40 °C...+85 °C
Accuracy	< 0.1 % of measurement range
Temperature coefficient	< 0.01 % /K
Cut-off-frequency	100 Hz
Insulation coordination	
Insulation voltage	2.5 kV
Rated voltage	300 V
Pollution degree	2
Overvoltage category	II
Approvals	
cULus 61010-1, cFMus Div.2, ATEX zone 2, IECEx Zone 2, DNV, GL	

Input	
Input current	0/4...20 mA
Load resistance, current	-
Voltage drop	≤ 1.2 V
Output	
Output current	0/4...20 mA
Load resistance, current	< 600 Ω
General data	
Power consumption	55 mW per channel - from output loop
Ambient temperature (operational)	-25 °C...+70 °C
Storage temperature	-40 °C...+85 °C
Accuracy	< 0.1 % of measurement range
Temperature coefficient	< 0.01 % /K
Cut-off-frequency	100 Hz
Insulation coordination	
Insulation voltage	2.5 kV
Rated voltage	300 V
Pollution degree	2
Overvoltage category	II
Approvals	
cULus 61010-1, cFMus Div.2, ATEX zone 2, IECEx Zone 2, DNV, GL	

Input	
Input current	0/4...20 mA
Load resistance, current	< 75 Ω
Voltage drop	-
Output	
Output current	4 - 20 mA
Load resistance, current	< 600 Ω
General data	
Power consumption	55 mW per channel - from output loop
Ambient temperature (operational)	-25 °C...+70 °C
Storage temperature	-40 °C...+85 °C
Accuracy	< 0.1 % of measurement range
Temperature coefficient	< 0.01 % /K
Cut-off-frequency	100 Hz
Insulation coordination	
Insulation voltage	2.5 kV
Rated voltage	300 V
Pollution degree	2
Overvoltage category	II
Approvals	
cULus 61010-1, cFMus Div.2, ATEX zone 2, IECEx Zone 2, DNV, GL	

Dimensions

Length x width x height	mm	114.3 x 6.1 x 112.5
Clamping range (nominal / min. / max.)	mm ²	2.5 / 0.5 / 2.5

Length x width x height	mm	114.3 x 6.1 x 112.5
Clamping range (nominal / min. / max.)	mm ²	2.5 / 0.5 / 2.5

Length x width x height	mm	114.3 x 6.1 x 112.5
Clamping range (nominal / min. / max.)	mm ²	2.5 / 0.5 / 2.5

Ordering data

Single-channel version	ACT20M CI-CO-ILP-S	Qty. 1	Part No. 1176070000
Double-channel version	ACT20M 2CI-2CO-ILP-S	Qty. 1	Part No. 1176080000

Single-channel version	ACT20M CI-CO-OLP-S	Qty. 1	Part No. 1176040000
Double-channel version	ACT20M-2CI-2CO-OLP-S	Qty. 1	Part No. 1176050000

Single-channel version	ACT20M CI-CO-OLP-S	Qty. 1	Part No. 1176040000
Double-channel version	ACT20M-2CI-2CO-OLP-S	Qty. 1	Part No. 1176050000

Note

Accessories

Marker	Type MF 5/7.5 MC NEUTRAL	Qty. 1	Part No. 1877680000
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Marker	Type MF 5/7.5 MC NEUTRAL	Qty. 1	Part No. 1877680000
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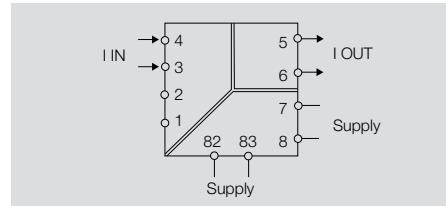
Marker	Type MF 5/7.5 MC NEUTRAL	Qty. 1	Part No. 1877680000
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Note

DC isolator

- Isolating DC signals
- Optional power supply via the DIN-rail-bus
- 3 way isolation

ACT20M-CI-CO-S



Technical data

Input	
Input current	0/4...20 mA
Load resistance, current	< 75 Ω
Output	
Output current	0/4...20 mA
Load resistance, current	< 600 Ω
General data	
Supply voltage	24 V DC ± 30 %
Power consumption	0.4 W (24 V supply / Passive input / 20 mA input & output / 100 Ω load)
Ambient temperature (operational)	-25 °C...+70 °C
Storage temperature	-40 °C...+85 °C
Accuracy	< 0.05 % of measurement range
Temperature coefficient	< 0.01 % span/K
Cut-off-frequency	100 Hz
Insulation coordination	
Insulation voltage	2.5 kV
Rated voltage	300 V
Pollution degree	2
Overvoltage category	II
Approvals	
	cULus 61010-1, cFMus Div.2, ATEX zone 2, IECEx Zone 2, DNV, GL

Dimensions

Length x width x height	mm	114.3 x 6.1 x 112.5 mm
Clamping range (nominal / min. / max.)	mm ²	2.5 / 0.5 / 2.5 mm ²

Note

Ordering data

Type	Qty.	Part No.
ACT20M-CI-CO-S	1	1175980000

Note

Ordering data

Type	Qty.	Part No.
MF 5/7.5 MC NEUTRAL		1877680000

Note DIN-rail bus, refer to accessories page

Rail bus accessories

Preliminary product data!

CH20M BUS-PROFIL TS35x7.5/1000

Support section for bus PCB



- Support section for TS35 x 7.5
- Length: 250, 500 or 750 mm

Ordering data

Type	Qty.	Part No.
CH20M BUS-PROFIL TS35x7.5/250	10	1248150000
CH20M BUS-PROFIL TS35x7.5/500	10	1248160000
CH20M BUS-PROFIL TS35x7.5/750	5	1248170000

CH20M BUS-PROFIL TS35x15/1000

Support section for bus PCB



- Support section for TS35 x 15
- Length: 250, 500 or 750 mm

Ordering data

Type	Qty.	Part No.
CH20M BUS-PROFIL TS35x15/250	5	1248180000
CH20M BUS-PROFIL TS35x15/500	5	1248190000
CH20M BUS-PROFIL TS35x15/750	5	1248210000

CH20M BUS 4.50/05 AU/1000

Bus PCB



- Bus PCB for use on TS35 x 7.5 and TS 35 x 15
- Length: 250, 500 or 750 mm
- Five conductor paths, gold plated
- Electrical rating: 63 V AC, 5 A/conductor path

Ordering data

Type	Qty.	Part No.
CH20M BUS 4.50/05 AU/250	10	1248220000
CH20M BUS 4.50/05 AU/500	10	1248230000
CH20M BUS 4.50/05 AU/750	5	1248240000

CH20M BUS-ADP TS35/1000

Cover plate



- Cover plate for rail bus
- Length: 250, 500 or 750 mm

Ordering data

Type	Qty.	Part No.
CH20M BUS-ADP TS35/250	10	1248250000
CH20M BUS-ADP TS35/500	10	1248260000
CH20M BUS-ADP TS35/750	5	1248270000

CH20M BUS-AP LI TS35x7.5 & 15

End plate



- End plate for rail bus
- Fits on TS35 x 7.5 and TS 35 x 15
- Left

Ordering data

Type	Qty.	Part No.
CH20M BUS-AP LI TS35x7.5 & 15	50	1193160000

CH20M BUS-AP RE TS35x7.5 & 15

End plate



- End plate for rail bus
- Fits on TS35 x 7.5 and TS 35 x 15
- Right

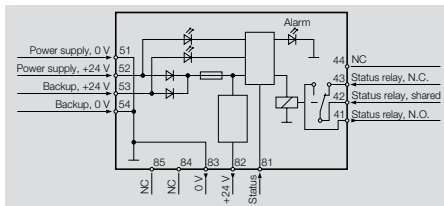
Ordering data

Type	Qty.	Part No.
CH20M BUS-AP RE TS35x7.5 & 15	50	1193170000

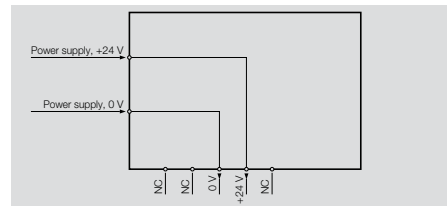
ACT20 power feed module

- Distributes the voltage supply on the busbar
- Compatible with Weidmüller's CH20 rail bus
- Optional backup supply connection
- Approved for installation in Ex Zone 2 /Div. 2
- Monitors the supply voltage
- Alarm alerts via the status relay

ACT20-Feed-In-PRO-S



ACT20-FEED-IN-BASIC-S



Technical data

Input	
Power supply	21.6...26.4 V DC
Max. input current	4A
Backup power supply	21.6...26.4 V DC
Trigger level for the power supply	Fault < 21 V DC
Output, power supply	
Output voltage	Input voltage -0.5 V DC @ 4 A
Output power	max. 96 W
Output current	max. 4 A
Output, status relay in safe zone	
Max. voltage	250 AC / 30 V DC
Max. current	2 A AC / 2 A DC
Max. AC power	500 VA / 60 W
General data	
Efficiency degree	> 97.9 %
Ambient temperature	-20...+60 °C
Storage temperature	-20...+85 °C
Power consumption	< 2 W
Protection degree	IP20
Weight	140 g
Humidity	< 95 %, no condensation
Approvals	cULus, cULus EX, ATEX, IECEx Zone 2, DNV*, GOST*, CE

Dimensions	
Clamping range (nominal / min. / max.)	2.5 / 0.5 / 2.5 mm
Length x width x height	119.2 / 22.5 / 113.6 mm ²
Note	* applied for
Screw connection	
Type	ACT20-Feed-In-PRO-S
Qty.	1
Part No.	896550000

Dimensions	
Clamping range (nominal / min. / max.)	2.5 / 0.5 / 2.5 mm
Length x width x height	114.3 / 6.1 / 112.5 mm ²
Note	
Screw connection	
Type	ACT20-FEED-IN-BASIC-S
Qty.	1
Part No.	1282490000

Ordering data

Type	ACT20-Feed-In-PRO-S
Qty.	1
Part No.	896550000

Type	ACT20-FEED-IN-BASIC-S
Qty.	1
Part No.	1282490000

Type	ACT20-FEED-IN-BASIC-S
Qty.	1
Part No.	1282490000

Note

Accessories

Note

Available from

