Distribution Box



Distribution Box

Elco supplies metal and plastic housing junction box. Metal junction box is circular connector wiring, while plastic junction box isdivided into straight wiring and terminal wiring products. All junction box products up to IP67 provide economical and practicalwiring system in the sensors and actuators working area. Sensing and executive signal need transferring and extending, and thejunction box is imperative, because it can connect with large criss-cross controlling system easily and quickly. Meanwhile, Elco has multi-branch box for DeviceNet, incluing 4, 6, 8 terminal inlet and 2, 4, 6 terminal inlet\outlet products.

- LED indicator for diagnosing input signal and power error of all products.
- Juntion box interface for selection: M8 M12
- Supplying 4 and 8 channel products for selection.
- Wiring type: pre-wired, M23 interface wiring and terminal wiring
- Metal and plastic housing for selection
- One I/O interface importing 2 signals
- Field wiring products with plastic terminal choosing 2-zone power mode
- Indication function: PNP NPN





| Plastic distribution box ESP4 series (M8 socket, with M12 plug connector)

Description:						
Plastic housing, distributed design						
Features:				00		
 Optional output (PNP/NPN) 					IT R.B.	
	! 1007				-	
LED indicator and high protectio		1-41				
 Compact size - 93mm, especially Standard 3m PUR cable for M12 						
Type List	ESP4-8-2P-Q12	ESP4-8-2N-Q12	ESP4-	8-3P-Q12	ESP4-8-3N-Q12	
Technical Data						
				01		
Output Function Output Type	1 sig	NPN	_	2 SI PNP	gnals NPN	
Connection for Sensors/Actuators	3-pin M8		-		18 female	
Locking Sockets	3-pin we		eaded M8x1	4-pin w	io remaie	
Dimensions	Fig.			Fic	1.2,3	
Pin Assignment	Fig.				ig.5	
Wiring Diagram	Fig.9	Fig.10		ig.11	Fig.12	
Supply Voltage	rig.o		VDC (24VDC)	19.11	119.12	
Supply Voltage Indicator			ED green			
I/O Channels			4			
Signals per Port	1				2	
Status Indicators	LED y	ellow		LED yellow / red		
Operating Current	,		lax. 1.5A	220 90		
Current Parameter	Max. 1.5A					
	Please do not operate cables above max. load capacity.					
Housing Material			Plastic			
		F	C + ABS			
Protection Class			IP67			
Temperature Range		-4	0+80°C			
Resistance	Good resistance against chem	icals and oils. The resistance	o aggressive media	should be individu	ally verified for your application.	
Connector	•		12(12pins)			
Dimensions				Pin Assign	ment	
				Fig. 4		
		193 <u>0</u>		3-р	4(S1) 3(-) • • 1(+) in PNP/NPN 1 signal	
		46.0	£0 1	Fig. 5 4 (S 3 (-	(1) (1) (1) (2) (S2) (1) (+)	

20.0

Fig. 3

30.0

Fig. 2

4-pin PNP/NPN 2 signals



30.0

Fig. 1



Plastic distribution box ESP4 series (M8 socket, with pre-wired cable)

able, single/double signal.				
			000	
		0	A BERT	
class IP67				
	on	1		
•				
ESP4-8-2P-3/P	ESP4-8-2N-3 / P	ESP4-8-3P-3 / P	ESP4-8-3N-3 / P	
1 signal		2 sig	nals	
PNP	NPN	PNP	NPN	
3-pin M8 fer	nale	4-pin M	8 female	
Fig.1,3		Fig.	2,3	
Fig.4		Fig		
Fig. 6	Fig. 7	Fig. 8	Fig. 9	
4				
1		2	2	
Max. 8A				
Please do not operate cables above max. load capacity.				
Plastic				
PC + ABS				
	IP67			
	-40+8	0°C		
Good resistance against chemicals	and oils. The resistance to aggre	essive media should be individua	Ily verified for your application.	
	Standard PUR / PP E	ending≥5 million		
	3m			
		Pin Assignn	nent	
		Fig. 5	-) (• • 1 (+)	
30,0	20.0	4-pin	PNP/NPN 2 signals	
	I class IP67 suitable for small space installation ESP4-8-2P-3/P 1 signal PNP 3-pin M8 fer Fig.1,3 Fig.4 Fig.6 1 LED yello Good resistance against chemicate	I class IP67 suitable for small space installation I cable length ESP4-8-2P-3/P ESP4-8-2N-3/P I signal PNP NPN 3-pin M8 female Threaded Fig.1,3 Fig.4 Fig.6 I 030VDC (LED gellow Max.2 Max.8 Please do not operate cables a Please do not	re class IP67 suitable for small space installation I cable length ESP4-8-2P-3/P ESP4-8-2N-3/P ESP4-8-3P-3/P I signal 2 sig PNP NPN PNP 3-pin M8 female 4-pin M Threaded M8x1 Fig.1.3 Fig.4 Fig.6 Fig.7 Fig.8 1030VDC (24VDC) LED green 4 1 2 LED yellow LED yellow Max. 2A Max. 8A Please do not operate above max. load capacity. Please PC + ABS IP67 -40480'C Codor resistance against chemicals and oils. The resistance to aggressive media should be individual Standard PUR/PP. Bending25 million 3m Fig. 4 Fig. 6 Fig. 7 Fig. 6 Fig. 6 Fig. 7 Fig.	



Plastic distribution box ESP6 series (M8 socket, with M12 plug connector)



Dimensions Fig. 1





4(S1) 3(-) • • • 1(+) 3(-) 4(S1) 3-pin PNP/NPN 1 signal

Accessories of Distribution Box -Co	nnector	
	0.000	
Type List		
Туре	CO12.12-3 / P	CBO12.12-3 / P
Description	Straight pre-wired connector	Angled pre-wired connector
Cable Material	Standard PUR / PP Bending≥5 million	Standard PUR / PP Bending≥5 million
Cable Length	3m	3m
Dimensions	Fig. 3	Fig. 4
Pin Assignment	Fig. 5	Fig. 5
Dimensions		
Pin Assignment	Fig. 3	Fig. 4
	Fig. 5	12-pin M12 Male Suggested Cable Color 1 BK 2 WH 4 ON 6 PK 7 BK 8 GY 10 PT 11 GYPK 12 RUSBU
Wiring Diagram		
Fig. 6 Connector		PK RD
	LED indicator PNP	
Fig. 7 Connector	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
		120



131



| Plastic distribution box ESP6 series (M8 socket, with pre-wired cable)

Description:					
Plastic housing, 6-way, pre-wired c	able, single/double signal.				
Features:				0.00	
Optional output (PNP/NPN)				CO EST	
LED indicator and high protection	class IP67		A DE		
Compact size - 110mm, especial		ation			
Standard 3m PUR cable, optional					
	-				
Type List	ESP6-8-2P-3 / P	ESP6-8-2N-3 / P	ESP6-8-3P-3 / P	ESP6-8-3N-3 / P	
Technical Data					
Output Function	1 signa	al	2 si	gnals	
Output Type	PNP	NPN	PNP	NPN	
Connection for Sensors/Actuators	3-pin M8 fe	emale	4-pin M	8 female	
Locking Sockets	.,	Threade			
Dimensions	Fig.1,3			.2,3	
Pin Assignment	Fig.4			g.5	
Wiring Diagram	Fig.6	Fig.7	Fig.8	Fig.9	
Supply Voltage		1030VDC			
Supply Voltage Indicator		LED g	reen		
I/O Channels		6			
Signals per Port	1			2	
Status Indicators	LED yell	ow	LED yel	low / red	
Operating Current		Max.			
Current Parameter		Max.	8A		
	Please do not operate cables above max. load capacity.				
Housing Material	Plastic				
		PC + /	ABS		
Protection Class		IP6	7		
Temperature Range		-40+	80°C		
Resistance	Good resistance against chemica	ls and oils. The resistance to agg	ressive media should be individu	ally verified for your application.	
Cable Material		Standard PUR / PP	Bending≥5 million		
Length		3m	1		
Dimensions			Pin Assigni	ment	
\square		P	Fig. 4		
				4(S1)	
				3(-) (• •)1(+)	
				\bigcirc	
			3-р	in PNP/NPN 1 signal	
			1		
		la l	the c		
d	⊉∘© ⁶		දී Fig. 5	_	
			4 (S1) • • 2 (S2)	
		-	3 ((-) (• •) 1 (+)	
601	601			\smile	
			4-pir	n PNP/NPN 2 signals	
Fig. 1	Fig. 2	Fig. 3			



Plastic distribution box ESP8 series (M8 socket, with M12 plug connector)



	box ESP8 series (M8 socket, with M	rz plug connector)			
Description:					
Plastic housing, distributed design	, 8-way, single signal.	01010			
Features:		O O I			
Optional autout (DND/NDNI)					
 Optional output (PNP/NPN) LED indicator and high protection 					
	Ily suitable for small space installation				
	2 connector, optional cable material and length	Elen			
Type List	ESP8-8-2P-Q12	ESP8-8-2N-Q12			
Technical Data					
Output Function	1 signal				
Output Type	PNP	NPN			
Connection for Sensors/Actuators	- INF 3-pin M8 fer				
Locking Sockets	3-pin M8 fer Threaded M				
Dimensions	Fig.1				
Pin Assignment	Fig.2				
Wiring Diagram	Fig.6	Fig.7			
Supply Voltage	1030VDC (2				
Supply Voltage Indicator	LED gree				
I/O Channels	8	, , , , , , , , , , , , , , , , , , ,			
Signals per Port	1				
Status Indicators	LED yellow				
Operating Current	Max. 1.5A				
Current Parameter	Max. 1.5A Max. 1.5A				
	Max. 1.5A Please do not operate cables above max. load capacity.				
Housing Material	Plastic				
	PC + AB				
Protection Class	IP67				
Temperature Range	-40+80°	°C			
Resistance	Good resistance against chemicals and oils. The resistance to aggres	sive media should be individually verified for your application.			
Connector	M12(12pir				
Dimensions		Pin Assignment			
Fig. 1	1- <u>20.0</u>	Fig. 2			
3		4(S1) 1 (+) 3(-) • • • • 1(+) 3 (-) 4 (S1) 3-pin PNP/NPN 1 signal			

Accessories of Distribution Bo	ox -Connector	
	6	-
Type List		
Туре	CO12.12-3 / P	CBO12.12-3 / P
Description	Straight pre-wired connector	Angled pre-wired connector
Cable Material	Standard PUR / PP Bending≥5 million	Standard PUR / PP Bending≥5 million
Cable Length	3m	3m
Dimensions	Fig. 3	Fig. 4
Pin Assignment	Fig. 5	Fig. 5
Dimensions		
Di Asimuni	Fig. 3	Fig. 4
Pin Assignment		
	Fig. 5	
		12.pin M12 Male Suggested Cable Color 1 BN 2 BU 3 WH4 4 C(N) 5 YE 7 BK 8 GY 9 RO 11 GYFK 12 RD/BU
Wiring Diagram		
Fig. 6 Connector	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
Fig. 7 Connector	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ио вк VT ф , ф , ф , ф , ф , ф , ф , ф , ф , ф ,
	LED indicator NPN	

| Plastic distribution box ESP8 series (M8 socket, with pre-wired cable)

Description: Plastic housing, 8-way, pre-wired c	able, single/double signal.			a vic	
Features:				000	
Optional output (PNP/NPN)			02		
LED indicator and high protection	alaca ID67		h		
Compact size - 130mm, especial		lation			
Standard 3m PUR cable, optiona		mation			
Standard Shi For Cable, optiona	r cable length				
Type List	ESP8-8-2P-3 / P	ESP8-8-2N-3/P	ESP8-8-3P-3 / P	ESP8-8-3N-3 / P	
Technical Data					
Output Function	1 sig	nal	2 сі	gnals	
Output Type	PNP	NPN	PNP 2 SIL	NPN	
Connection for Sensors/Actuators	3-pin M8			8 female	
Locking Sockets	5-pii1 Wo	Threade		o romaio	
Dimensions	Fig.1			.2,3	
Pin Assignment	Fig.			g.5	
Wiring Diagram	Fig.6	Fig.7	Fig.8	Fig.9	
Supply Voltage	J	1030VD			
Supply Voltage Indicator		LED			
/O Channels		5			
Signals per Port	1			2	
Status Indicators	LED ye			low / red	
Operating Current	Max. 2A				
Current Parameter	Max. 8A				
	Please do not operate cables above max. load capacity.				
Housing Material	Plastic				
-		PC +	ABS		
Protection Class		IP	67		
Temperature Range		-40	+80°C		
Resistance	Good resistance against chemi	cals and oils. The resistance to ag	gressive media should be individua	ally verified for your application.	
Cable Material		Standard PUR / PP	Bending≥5 million		
Length		31	m		
Dimensions			Pin Assignr	ment	
\square		P	Fig. 4		
<u> </u>				4(64)	
		i 🗎 🛱		4(31)	
				3(-) () 1(+)	
<u></u> 2□	₽			\bigcirc	
		A	3-pi	in PNP/NPN 1 signal	
Ö ° –	5	la la	*		
		33,2	S Fig. 5		
		-		\frown	
			4 (
			3 (-) • 1 (+)	
6 ~1	5.1			_	
		20.0	· 4-pir	PNP/NPN 2 signals	





Wiring Diagram Fig. 6 Cable

Fig. 7 Cable

Fig. 8



| Plastic distribution box ESP10 series (M8 socket, with M12 plug connector)



Description:						
Plastic housing, distributed design	, 10-way, single signal.	HI TO TO TO TOTOTO				
Features:		0 0 0				
 Optional output (PNP/NPN) 						
LED indicator and high protection	n class IP67	C. C				
	ly suitable for small space installation					
	connector, optional cable material and length					
Type List	ESP10-8-2P-Q12	ESP10-8-2N-Q12				
Technical Data						
Output Function	1 ი	ignal				
Output Type	PNP	NPN				
Connection for Sensors/Actuators		18 female				
Locking Sockets		led M8x1				
Dimensions		ig.1				
Pin Assignment		ig.2				
Wiring Diagram	Fig.6	Fig.7				
Supply Voltage						
Supply Voltage Indicator	1030VDC (24VDC) LED green					
I/O Channels		10				
Signals per Port		1				
Status Indicators		yellow				
Operating Current		. 1.5A				
Current Parameter		. 1.5A				
ourion r diamotor		es above max. load capacity.				
Housing Material		astic				
		+ ABS				
Protection Class		267				
Temperature Range		+80°C				
Resistance		ggressive media should be individually verified for your application.				
Connector		12pins)				
	(
Dimensions		Pin Assignment				
Fig. 1		Fig. 2				
-	46,0					
	40,0					
	$\Phi_{2,a_{4,5}}$	50.0				
11		4(S1) 4(C)				





3-pin PNP/NPN 1 signal

Accessories of Distribu	ution Box -Connector		
Type List			
Туре		CO12.12-3 / P	CBO12.12-3 / P
Description	Stra	ight pre-wired connector	Angled pre-wired connector
Cable Material		I PUR / PP Bending≥5 million	Standard PUR / PP Bending≥5 million
Cable Length	otandare	3m	3m
Dimensions		Fig. 3	Fig. 4
Pin Assignment		Fig. 5	Fig. 5
Dimensions			
Pin Assignment	Fig. 3		Fig. 4
Wiring Diagram	Fig. 5	1 C 0 0 0 0 - 6 9 C 0 0 0 - 6 8 C 0 0 0 - 6	12-pin N12 Male Suggested Cable Color 2 BN 3 BH 4 GN 6 PK 7 YK 8 GY 9 TF 11 GY/FK 12 RD/RU
Fig. 6			
Connector	LED indicator PNP		bx VT OVER BOBU 0 10 0 10 0 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10
Fig. 7 Connector	EU EN VH ON A		

Plastic distribution box ESP10 series (M8 socket, with pre-wired cable)

Plastic housing, 10-way, pre-wire	d cable, single/double signal.			a to to to	
Features:				and to be to be to	
 Optional output (PNP/NPN) 					
LED indicator and high protection	on class IP67		AND		
Compact size - 154mm, especia	ally suitable for small space instal	lation			
Standard 3m PUR cable, option	al cable length				
Type List	ESP10-8-2P-3/P	ESP10-8-2N-3/P	ESP10-8-3P-3/P	ESP10-8-3N-3/P	
Technical Data					
Output Function	1 sign	al	2 sig	gnals	
Output Type	PNP	NPN	PNP	NPN	
Connection for Sensors/Actuators	3-pin M8 f	emale	4-pin M	8 female	
Locking Sockets		Threade	d M8x1		
Dimensions	Fig.1	3	Fig	.2,3	
Pin Assignment	Fig.4	1	Fi	g.5	
Wiring Diagram	Fig.6	Fig.7	Fig.8	Fig.9	
Supply Voltage		1030VDC	(24VDC)		
Supply Voltage Indicator	LED green				
I/O Channels	10				
Signals per Port	1 2				
Status Indicators	LED yellow LED yellow / red				
Operating Current	Max. 2A				
Current Parameter	Max. 8A				
	Please do not operate cables above max. load capacity.				
Housing Material	Plastic				
		AB	S		
Protection Class		IP6	7		
Temperature Range		-40+	80°C		
Resistance	Good resistance against chemic	als and oils. The resistance to agg	ressive media should be individu	ally verified for your application.	
Cable Material		Standard PUR / PP	Bending≥5 million		
Length		3m	1		
Dimensions			Pin Assign	ment	
Fig. 1	Fig. 2	Fig. 3	Fig. 4 З-р	3(-) (-) (+) 3(-) (+) 1(+) 1(+) 1(+)	
ଖ୍ୟୁଡ଼ାଡ଼ୀ ଡ଼୍ମୁଡ ଅଭିନ୍ତି ହୁ ଅଭିନ୍ତି ଭାର ************************************			3	S1) 2 (S2) (-) 2 (S2) 1 (+) n PNP/NPN 2 signals	





| Plastic distribution box ESP12 series (M8 socket, with pre-wired cable)

Description:					
Plastic housing, 12-way, pre-wired cable, single signal.					C. C
Features:					a states
 Optional output (PNP/NPN) 					
 LED indicator and high protection 	n class IP67				ALC: NO PERSONNEL PROVIDENCE PROVIDENCE PROVIDENCE PROVIDENCE PROV
 Standard 3m PUR cable, optional 				-	
	in ouble longth				
Type List	ES	P12-8-2P-3/P			ESP12-8-2N-3 / P
Technical Data					
Output Function			1 signa	1	
Output Type		PNP	1 Signa	1	NPN
Connection for Sensors/Actuators			3-pin M8 fe	male	- • • •
Locking Sockets			Threaded		
Dimensions			Fig.1,2		
Pin Assignment			Fig.3		
Wiring Diagram		Fig.4			Fig.5
Supply Voltage			1030VDC (24VDC)	
Supply Voltage Indicator			LED gre		
I/O Channels	12				
Signals per Port	1				
Status Indicators			LED ye	llow	
Operating Current	Max. 2A				
Current Parameter	Max. 8A				
	Please do not operate cables above max. load capacity.				
Housing Material	Plastic				
	ABS				
Protection Class			IP67		
Temperature Range			-40+80)°C	
Resistance	Good resistance again	st chemicals and oils.	The resistance to aggre	ssive media sho	ould be individually verified for your application.
Cable Material		5	Standard PUR / PP B	ending≥5 milli	on
Length			3m		
Dimensions					Pin Assignment
Fig. 1		Fig. 2	\cap		Fig. 3
					4(S1) 3(-) • • 1(+) 3-pin PNP/NPN 1 signal
			<u>200</u> 2.00		



Plastic distribution box ESP4 series (M12 socket, with M12 plug connector)



Plastic distribution	DOX ESP4 Series	(IVITZ SOCKEL, WILL	i wirz piug com	lector)		
Description:				0.010		
Plastic housing, distributed design	, 4-way, single/double signal.					
Features:						
 Optional output (PNP/NPN) 						
LED indicator and high protectio	n class IP67			ona lite		
Standard 3m PUR cable for M12	connector, optional cable mate	erial and length	100			
Type List	ESP4-12-2P-Q12 ESP4-12-2N-Q12 ESP4-12-3P-Q12 ESP4-12-3P-Q12					
Taskalad Data						
Technical Data						
Output Function	1 sig			signals		
Output Type	PNP	NPN	PNP	NPN		
Connection for Sensors/Actuators	4-pin M12			M12 female		
Locking Sockets		Threaded				
Dimensions		Fig				
Pin Assignment		j. 2		Fig. 3		
Wiring Diagram	Fig. 7	Fig. 8	Fig. 9	Fig.10		
Supply Voltage		1030VDC	(24VDC)			
Supply Voltage Indicator		LED g	reen			
I/O Channels		4				
Signals per Port	1			2		
Status Indicators	LED yellow					
Operating Current		Max. 1.5A / p	er contact			
Current Parameter		Max. 1	1.5A			
		Please do not operate cables	above max. load capacity.			
Housing Material		Plas	tic			
		PC + /	ABS			
Protection Class		IP6	7			
Temperature Range		-40+	80°C			
Resistance	Good resistance against chemi	cals and oils. The resistance to agg	ressive media should be individ	dually verified for your application.		
Connector		M12(12	tpins)			
Dimensions			Pin Assig	nment		
Fig. 1			Fig. 2			
	12 4.5	- 59 -				
	<u> </u>	•••••		4-pin		
			()3 • • 4(S1) • • • (FE) (+)		
			Fig. 3 (5-pin)3 4(S1))2 1(+) 5(PE) 1(+) 2(S2) 3(-) 4(S1) 5(PE)		

Accessories of Distribution Box -Co	apector		
	0		6
Type List			
Туре	CO12.12-3 / P		CBO12.12-3 / P
Description	Straight pre-wired connector		Angled pre-wired connector
Cable Material	Standard PUR / PP Bending≥5 mi	illion	Standard PUR / PP Bending≥5 million
Cable Length	3m		3m
Dimensions	Fig. 4		Fig. 5
Pin Assignment	Fig. 6		Fig. 6
Dimensions			
	Fig. 4	*1	Fig. 5
Pin Assignment			
	Fig. 6	5	12-pin M12 Main Suggested Cable Color 1 BV 2 BU 3 WH 4 ON 6 VE 7 BK 8 OY 9 DY 10 DY 11 OYYPK 12 RDBU
Wiring Diagram			
Fig. 7 Connector		Fig. 8 Connector	
Fig. 9 Connector		Fig. 10 Connector μυ μ2 Sock	

Plastic distribution box ESP4 series (M12 socket, with M23 plug connector)



	201 201 1001100	(IVI12 SOCKET, WIT		g oonno	
Description:					
Plastic housing, distributed design	, 4-way, single/double signal.			G	2.00
Features:				E	- Q
 Optional output (PNP/NPN) 				No.	E
 LED indicator and high protectio 	n class IP67			1000	
Standard 3m PUR cable for M23	connector, optional cable mat	erial and length			
Type List	ESP4-12-2P-Q23	ESP4-12-2N-Q23	ESP4-12-3	P-Q23	ESP4-12-3N-Q23
Technical Data					
Output Function	1 sig	nol		2 sig	nale
Output Function Output Type	PNP	NPN	PNP	2 sig	NPN
Connection for Sensors/Actuators	4-pin M12		PINP	5-pin M1	
Locking Sockets	+ pirt with	Threaded	1 M12v1	0-ріп інгі	2 Tomaio
Dimensions		Fig.			
Pin Assignment	Fig		1	Fig	3
Wiring Diagram	Fig. 8	Fig. 9	Fig. 1		. 3 Fig. 11
Supply Voltage	riy. o	Fig. 9 1030VDC		•	riy. II
Supply Voltage Indicator		LED g			
I/O Channels		4	loon		
Signals per Port	1			2	
Status Indicators		LED y	ellow	2	
Operating Current		Max. 2A / p			
Current Parameter		Max.			
ourion ratanotor		Please do not operate cables		capacity.	
Housing Material		Plas		oupdony.	
nodoling matorial		PC +			
Protection Class		IP6	7		
Temperature Range		-40+			
Resistance	Good resistance against chemi	icals and oils. The resistance to agg		uld be individual	ly verified for your application.
Connector	Ū	M23(19			
Dimensions				Pin Assignn	nent
Fig. 1				Fig. 2	
		4.5		-	
		- ^{4.3} ►65 - ►			4-pin
	93 20 10 10 10 10 10 10 10 10 10 10 10 10 10		μ L	(-)3	4(S1) 5(PE) 1(+)
			12.	Fig. 3 (-)3 (S2)2	5-pin 4(S1) 5(PE) 1(+) 2(S2) 3(-) 4(S1) 5(PE)

Accessories of Distribution Box-Connector Type List Image: Construction Type List Image: Construction Type List Image: Construction Type List Image: Construction Description Struction Hox-Connector Struction Hox-Connector Struction Hox-Connector Description Struction Hox-Connector Cable Length - Description Struction Hox-Connector Cable Length - Pin Assignment Fig.4 Fig.4 Fig.5 Fig.4 Fig.5 Fig.7 Fig.6 Pin Assignment Fig.7 Fig.8 Fig.6 Concoln Fig.6 Image: Concoln Image: Concoln				
Type List Type List DescriptionLS9023 19-0 Straight field state/ment connectorC023 19-0 Straight pre-wied connectorCable Material Cable Material 	Accessories of Distribution Box -Co	nnector		
$\begin{array}{c c c c }\hline \mathbf{y}_{\mathbf{p}} & \mathbf{LO23}190 & \mathbf{LO23}190 & \mathbf{CO23}190 & \mathbf{CO23}192 \\ \hline \mathbf{Description} & \mathbf{Straight field-attachment connector } & \mathbf{Argled field-attachment connector } & \mathbf{Straight field-attachment connector } & Straight field$		Ø		
$\begin{array}{c c c c }\hline \mathbf{y}_{\mathbf{p}} & \mathbf{LO23}190 & \mathbf{LO23}190 & \mathbf{CO23}190 & \mathbf{CO23}192 \\ \hline \mathbf{Description} & \mathbf{Straight field-attachment connector } & \mathbf{Argled field-attachment connector } & \mathbf{Straight field-attachment connector } & Straight field$	Type List			
Cable Material - - Standard PUR/ PP Bendragds million Cable Langth - - 3m Dimensions Fig. 4 Fig. 5 Fig. 6 Pin Assignment Fig. 7 Fig. 7 Fig. 7 Dimensions Fig. 7 Fig. 7 Fig. 7 Pin Assignment Fig. 4 Fig. 5 Fig. 6 Pin Assignment Fig. 7 Fig. 5 Fig. 6 Pin Assignment Fig. 7 Fig. 6 Fig. 6 Connector Fig. 6 Fig. 6 Fig. 6 Connector Fig. 6 Fig. 6 Fig. 6 Fig. 1 Connector Fig. 1 Fig. 1 Fig. 1 Connector Fig. 1 Fig. 1 Fig. 1 Fig. 1 Connector Fig.		LSO23.19-0	LSBO23.19-0	CO23.19-3/P
$ \begin{array}{c c} Cable Length & & & 3m \\ \hline Dimensions & Fig. 4 & Fig. 5 & Fig. 6 \\ \hline Pin Assignment & Fig. 7 & Fig. 7 \\ \hline Pin Assignment & Fig. 7 & Fig. 7 \\ \hline Pin Assignment & Fig. 4 & Fig. 5 & Fig. 6 \\ \hline Pin Assignment & Fig. 4 & Fig. 5 & Fig. 6 \\ \hline Pin Assignment & Fig. 7 & Fig. 6 \\ \hline Pin Assignment & Fig. 7 & Fig. 6 \\ \hline Pin Assignment & Fig. 7 & Fig. 6 \\ \hline Pin Assignment & Fig. 7 & Fig. 6 \\ \hline Pin Assignment & Fig. 7 & Fig. 6 \\ \hline Pin Assignment & Fig. 7 & Fig. 6 \\ \hline Pin Assignment & Fig. 7 & Fig. 6 \\ \hline Pin Assignment & Fig. 7 & Fig. 6 \\ \hline Pin Assignment & Fig. 7 & Fig. 6 \\ \hline Pin Assignment & Fig. 7 & Fig. 6 \\ \hline Pin Assignment & Fig. 7 & Fig. 6 \\ \hline Pin Assignment & Fig. 7 & Fig. 6 \\ \hline Pin Assignment & Fig. 7 & Fig. 6 \\ \hline Pin Assignment & Fig. 7 & Fig. 6 \\ \hline Pin Assignment & Fig. 7 & Fig. 6 \\ \hline Pin Assignment & Fig. 7 & Fig. 6 \\ \hline Pin Assignment & Fig. 7 & Fig. 7 & Fig. 7 \\ \hline Pin Assignment & Fig. 7 & F$	Description	Straight field-attachment connector	Angled field-attachment connector	Straight pre-wired connector
$\begin{array}{c c c c c c } \hline Piq.5 & Fig.5 & Fig.6 \\ \hline Piq.Assignment & Fig.7 & Fig.7 & Fig.7 \\ \hline Dimensions & Fig.7 & Fig.7 & Fig.7 \\ \hline Dimensions & Fig.4 & Fig.5 & Fig.7 & Fig.7 \\ \hline Dimensions & Fig.4 & Fig.5 & Fig.7 & Fig.6 \\ \hline Dimensions & Fig.4 & Fig.5 & Fig.6 & \hline Dimensions & \hline Dimensio $	Cable Material			Standard PUR/ PP Bending≥5 million
$\begin{array}{c c c c c } \hline Piq. A signment \\ \hline Dimensions \\ \hline Piq. 7 \\ \hline Pi$	Cable Length			3m
	Dimensions	Fig. 4	Fig. 5	Fig. 6
	Pin Assignment	Fig. 7	Fig. 7	Fig. 7
<figure>$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$</figure>	Dimensions			
		Fig. 4	×22 ×24	
Wring Diagram Fg. 8 Connector LED indicator PNP Fg. 1 Connector Juint of the state o	Pin Assignment			
Fig.8 Connector Fig.9 Connector Image: search of the sea		Fig. 7	3 GT 4 RDIBU 5 GN 6 BU 7 GY/PK 8 WH/CN 9 WH/CY 10 WH/CY	16 YE 17 PK
ConnectorConnectorImage: ConnectorImage: ConnectorImage: ConnectorImage: ConnectorImage: ConnectorImage: ConnectorFig. 10Image: ConnectorImage: ConnectorFig. 11Image: ConnectorImage: Connector<				
in the set of the set	Connector		Connector	
Connector	schert 1		CUTE Contraction of the second	
	Fig. 10		Fig. 11	
	Connector		Connector	
LED indicator PNP LED indicator NPN				
	LED indicator PNP		LED indicator NPN	

| Plastic distribution box ESP4 series (M12 socket, with pre-wired cable)

Plastic housing, 4-way, pre-wired o	cable, single/double signal.				
Features:					
 Optional output (PNP/NPN) 					
LED indicator and high protection	n class IP67		1	55	
Standard 3m PUR cable, optiona				1	
Type List	ESP4-12-2P-3/P	ESP4-12-2N-3 / P	ESP4-12-3P-3/P	ESP4-12-3N-3 / P	
Technical Data					
Output Function	1 si	ignal	2 sign	als	
Output Type	PNP	NPN	PNP	NPN	
Connection for Sensors/Actuators	4-pin M1	12 female	5-pin M12	female	
Locking Sockets			ed M12x1		
Dimensions		Fi	g.1		
Pin Assignment	Fi	g.2	Fig.	3	
Wiring Diagram	Fig.4	Fig.5	Fig.6	Fig.7	
Supply Voltage	1030VDC (24VDC)				
Supply Voltage Indicator		LED	green		
I/O Channels			4		
Signals per Port	1 2				
Status Indicators	LED yellow				
Operating Current	Max. 2A				
Current Parameter	Max. 8A				
	Please do not operate cables above max. load capacity.				
Housing Material	Plastic				
		PC +	ABS		
Protection Class		IP	67		
Temperature Range		-40	+80°C		
Resistance	Good resistance against chem	icals and oils. The resistance to ag	gressive media should be individual	ly verified for your application.	
Cable Material		Standard PUR / PF	P Bending≥5 million		
Length		3	m		
Dimensions					
Fig. 1	12		15		
		-	55 4.3		
	l m				
	ШР				
		S (
		2×4.	×2		
		╵╺╴╤╤╤┦╚╧	╪╤╷ _┡ ╤┦┈┧		
	20	<u>8.5</u>			





Pin Assignment

Wiring Diagram Fig. 4 Cable

Fig. 5 Cable

Fig. 6 Cable

Fig. 7 Cable 4-pin

4(S1)

5(PE

Scket

Fig. 2



Plastic distribution box ESP6 series (M12 socket, with M12 plug connector)



Plastic housing, distributed design, 6-way, single signal.

Features:

Optional output (PNP/NPN)

- LED indicator and high protection class IP67
- Standard 3m PUR cable for M12 connector, optional cable material and length



Type List	ESP6-12-2P-Q12	ESP6-12-2N-Q12	
Technical Data			
Output Function	1 si	gnal	
Output Type	PNP	NPN	
Connection for Sensors/Actuators	4-pin M1	2 female	
Locking Sockets	Threade	d M12x1	
Dimensions	Fig	j. 1	
Pin Assignment	Fig	j. 2	
Wiring Diagram	Fig. 6	Fig. 7	
Supply Voltage	1030VDC (24VDC)		
Supply Voltage Indicator	LED green		
I/O Channels	6		
Signals per Port	1		
Status Indicators	LED yellow		
Operating Current	Max. 1.5A /	per contact	
Current Parameter	Max.	1.5A	
	Please do not operate cable	es above max. load capacity.	
Housing Material	Pla	stic	
	PC +	ABS	
Protection Class	IP	67	
Temperature Range	-40	+80°C	
Resistance	Good resistance against chemicals and oils. The resistance to ag	gressive media should be individually verified for your application.	
Connector	M12(1	2pins)	



Accessories of Distribution Box -	Connector	
	63	
Type List		
Туре	CO12.12-3 / P	CBO12.12-3 / P
Description	Straight pre-wired connector	Angled pre-wired connector
Cable Material	Standard PUR / PP Bending≥5 million	Standard PUR / PP Bending≥5 million
Cable Length	3m	3m
Dimensions	Fig. 3	Fig. 4
Pin Assignment	Fig. 5	Fig. 5
Dimensions		
Dimensions	Fig. 3	Fig. 4
	44.5 44.5 M12x1	9 9 9 10 10 10 10 10 10 10 10 10 10 10 10 10
Pin Assignment		
	Fig. 5	12-pin M12 Male Suggested Cable Color 1 BN
		2 BU 3 WH 4 GR 5 PK 6 PK 7 BK 8 GY 8 GY 10 SYPK 11 SYPK 12 RD/8U
Wiring Diagram		
Fig. 6 Connector	BU BV VH OV VE OV 	
Fig. 7		
rig, r Connector	BU BN VW ON VE O' -2 +1 +2 + 1 + 2 + 4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 + 4	

151



Plastic distribution box ESP6 series (M12 socket, with M23 plug connector)



Plastic distribution	box ESP6 series	(M12 socket, with	M23 plug conne	ector)
Description:				
Plastic housing, distributed desig	n, 6-way, single/double signal.			V Y G
Features:				
 Optional output (PNP/NPN) 			N P I P	
 LED indicator and high protecti 	on class IP67			
Standard 3m PUR cable for M2	3 connector, optional cable mat	erial and length		
Type List	ESP6-12-2P-Q23	ESP6-12-2N-Q23	ESP6-12-3P-Q23	ESP6-12-3N-Q23
Technical Data				
Output Function	1 sig		2 sig	
Output Type	PNP	NPN	PNP	NPN
Connection for Sensors/Actuators	4-pin M12		5-pin M1	2 female
Locking Sockets		Threaded	M12x1	
Dimensions		Fig. 1	1	
Pin Assignment	Fig		Fig	
Wiring Diagram	Fig. 8	Fig. 9	Fig. 10	Fig. 11
Supply Voltage		1030VDC		
Supply Voltage Indicator		LED gr	een	
I/O Channels		6		
Signals per Port	1		2	
Status Indicators		LED ye		
Operating Current		Max. 2A / pe		
Current Parameter		Max. 8		
		Please do not operate cables		
Housing Material		Plast		
		PC + A		
Protection Class		IP67		
Temperature Range		-40+8		h
Resistance	Good resistance against chemi	cals and oils. The resistance to aggr		ly verified for your application.
Connector		M23(19p	uns)	
Dimensions			Din Assister	t
			Pin Assignr	nem
Fig. 1			Fig. 2 (-)3	4-pin 4(S1) 5(PE) 1(+)
			Fig. 3 (-)3 (S2)2	5-pin 4(S1) 5(PE) 1(+) 2(S2) 3(-) 4(S1) 5(PE)

Accessories of Distribution Box -Co	nnector		
	()		
Type List			
Туре	LSO23.19-0	LSBO23.19-0	CO23.19-3/P
Description	Straight field-attachment connector	Angled field-attachment connector	Straight pre-wired connector
Cable Material			Standard PUR/ PP Bending≥5 million
Cable Length			3m
Dimensions	Fig. 4	Fig. 5	Fig. 6
Pin Assignment	Fig. 7	Fig. 7	Fig. 7
Dimensions			
	Fig. 4	Fig. 5 10 10 10 10 10 10 10 10 10 10	
Pin Assignment			
	Fig. 7	19-pin MM Mule Suggester Cable Court 1 VT 2 RD 3 GVU 6 RU 7 GV/PK 8 WHCN 9 WHTE 11 PK 12 GNYE	15-pin MH Mail Suggested Cable Color 13 YE/BN 14 BN/GN 15 WH 16 WH 17 PK 18 PK 19 BN 19 BN
Wiring Diagram			
Fig. 8 Connector		Fig. 9 Connector	
CONT RU RU RU CA 1278 LED indicator PNP		UNE BU BN VN ON UNE - The first of the firs	
Fig. 10 Cable		Fig. 11 Cable	
CIVE BU BI CIVE OF EDU ON W UPE CIVE		ONTE BU IN OVERVIN ROBUON	
LED indicator PNP		LED indicator NPN	

Plastic distribution box ESP6 series (M12 socket, with pre-wired cable)

ble, single/double signal.				
n class IP67		50 50	THE PART	
I cable length				
ESP6-12-2P-3/P	ESP6-12-2N-3 / P	ESP6-12-3P-3 / P	ESP6-12-3N-3 / P	
1 si	gnal	2 sig	nals	
PNP	NPN	PNP	NPN	
4-pin M1	2 female	5-pin M1	2 female	
	Fig.	1		
Fiç			J.3	
Fig.4	Fig.5	Fig.4	Fig.5	
	1030VDC	(24VDC)		
	LED g	reen		
	6			
1		2	2	
	LED ye	ellow		
Max. 2A / per contact				
	Max.	8A		
	Please do not operate cables	above max. load capacity.		
	Plas	tic		
	PC + /	ABS		
	IP6	7		
	-40+	80°C		
Good resistance against chemi	cals and oils. The resistance to agg	ressive media should be individua	ally verified for your application.	
	Standard PUR / PP	Bending≥5 million		
	3m	1		
= = 12	55	-		
, , 				
		3 7		
ш л				
l In				
100		2°.		
		13		
		-00		
		12		
	1 class IP67 I cable length ESP6-12-2P-3 / P 1 si PNP 4-pin M1 Fig.4 1	n class IP67 I cable length ESP6-12-2P-3 / P ESP6-12-2N-3 / P 1 signal NPN 4-pin M12 female Threaded Fig.2 Fig.4 Fig.5 1030VDC LED g 6 1 LED y Max. 2A / p Max. 2A / p Max. 2A / p Max. 2A / p 1030VDC LED y Max. 2A / p Max. 2A / p 1030VDC LED y Max. 2A / p Max. 2A / p 1030VDC C + J IP6ase do not operate cables PC + J IP6 C - 1	h class IP67 I cable length	



Plastic distribution box ESP8 series (M12 socket, with M12 plug connector)



Description:				
Plastic housing, distributed design, 8-wa	ay, single signal.	10 10 10 10		
Features:				
 Optional output (PNP/NPN) 				
LED indicator and high protection class	ss IP67	000		
 Standard 3m PUR cable for M12 conn 	ector, optional cable material and length			
Type List	ESP8-12-2P-Q12	ESP8-12-2N-Q12		
Technical Data				
Output Function	1 signal			
Output Type	PNP	NPN		
Connection for Sensors/Actuators				
	4-pin M12 fem			
Locking Sockets	Threaded M1	2X1		
Dimensions	Fig. 1			
Pin Assignment	Fig. 2			
Wiring Diagram	Fig. 6	Fig. 7		
Supply Voltage	1030VDC (24			
Supply Voltage Indicator	LED green	1		
I/O Channels	8			
Signals per Port	1			
Status Indicators	LED yellow			
Operating Current	Max. 1.5A / per c	contact		
Current Parameter	Max. 1.5A	1		
	Please do not operate cables abo	ove max. load capacity.		
Housing Material	Plastic			
	PC + ABS	3		
Protection Class	IP67			
Temperature Range	-40+80℃	2		
Resistance	Good resistance against chemicals and oils. The resistance to aggress	sive media should be individually verified for your application		
Connector	M12(12pins	s)		
Dimensions		Pin Assignment		
Fig. 1	55	Fig. 2		
		4-pin (-)3 (-)3 (-)3 (-) (-) (-) (-) (-) (-) (-) (-) (-) (-)		

Accessories of Distribution Box -	Connector	
		6
Type List		
Туре	CO12.12-3 / P	CBO12.12-3 / P
Description	Straight pre-wired connector	Angled pre-wired connector
Cable Material	Standard PUR / PP Bending≥5 million	Standard PUR / PP Bending≥5 million
Cable Length	3m	3m
Dimensions	Fig. 3	Fig. 4
Pin Assignment	Fig. 5	Fig. 5
Dimensions	~	~
Pin Assignment	Fig. 3	Fig. 4
	Fig. 5	12-pin M12 Male Suggested Cable Color 1 8 2 8U 3 WH 4 0 5 9K 6 YE 7 8K 8 GY 10 0YF 11 GYPK 12 RD/6U
Wiring Diagram		
Fig. 6 Connector	NU NI VII ON VE OV N -2	
Fig. 7 Connector	NU BN VH ON VE OV PK	



Plastic distribution box ESP8 series (M12 socket, with M23 plug connector)

Description:					
Plastic housing, distributed desig	n, 8-way, single/double signal.				Nº NO
Features:			4	C. C.	9
 Optional output (PNP/NPN) 			A 1	2 1	ALL DE
LED indicator and high protecti	on class IP67		100	do HE	
Standard 3m PUR cable for M2	3 connector, optional cable ma	terial and length			
Type List	ESP8-12-2P-Q23	ESP8-12-2N-Q23	ESP8-12-3	P-Q23	ESP8-12-3N-Q23
Technical Data					
Output Function	1 sig	nal		2 sign	als
Output Type	PNP	NPN	PNP		NPN
Connection for Sensors/Actuators	4-pin M1	2 female		5-pin M12	female
Locking Sockets			ed M12x1		
Dimensions			ig. 1		
Pin Assignment	Fig		-	Fig.	3
Wiring Diagram	Fig. 8	Fig. 9	Fig. 1		- Fig. 11
Supply Voltage	<u> </u>		DC (24VDC)		5
Supply Voltage Indicator			green		
I/O Channels			8		
Signals per Port	1 2				
Status Indicators	LED yellow				
Operating Current			/ per contact		
Current Parameter	Max. 8A				
		Please do not operate cabl		capacity.	
Housing Material	Plastic				
~			+ ABS		
Protection Class	IP67				
Temperature Range		-40	.+80°C		
Resistance	Good resistance against cherr	nicals and oils. The resistance to a	ggressive media shou	d be individually	verified for your application.
Connector		M23(19pins)		
Dimensions				Pin Assignm	ent
Fig. 1		5		Fig. 2	
Г	4.5	-			
_					4-pin
				(-)3	4(S1)
				(-)5	4(31) 5(PE)
				(
1			+	Fig. 2	5-pin
				Fig. 3	3 pm
				(-)3 /	4(S1)
				(-)3	4(S1) 5(PE)
				(-)3 (S2)2	• • • • • • •
				(S2)2	5(PE)
				(S2)2	• • • • • • • • • • • • • • • • • • • •

Accessories of Distribution Box -0	Connector		
	Ø		
Type List			•
Туре	LSO23.19-0	LSBO23.19-0	CO23.19-3/P
Description	Straight field-attachment connector	Angled field-attachment connector	Straight pre-wired connector
Cable Material			Standard PUR/ PP Bending≥5 million
Cable Length			3m
Dimensions	Fig. 4	Fig. 5	Fig. 6
Pin Assignment	Fig. 7	Fig. 7	Fig. 7
Dimensions	5	5	5
	Fig. 4	Fig. 5	
Pin Assignment	Fig. 7	19-pin M19 Male Suggested Cable Color	19-pin M19 Male Suggested Cable Color
		2 RD 3 OY 4 RD8U 5 GRU 7 OYPK 8 WHYEN 8 WHYEN 10 WHYEN 10 WHYEN 12 ONYE	13 YEBN 14 BNGN 15 WE 16 WE 17 PK 18 GYBN 19 BN
Wiring Diagram			
Fig. 8 Connector LED indicator PNP	CAVE NU NU UN ON UNE E- 11- 01- 01- 10- 01- 01- 00- 00- 00- 00		
Fig. 9 Connector LED indicator NPN			
Fig. 10 Connector		φ φ16 14φ φ3 9φ φ17 13φ φ2 100	
LED indicator PNP	Scket 1 2	3 4 5 6	7 8
Fig. 11 Connector LED indicator NPN			

Plastic distribution box ESP8 series (M12 socket, with pre-wired cable)





