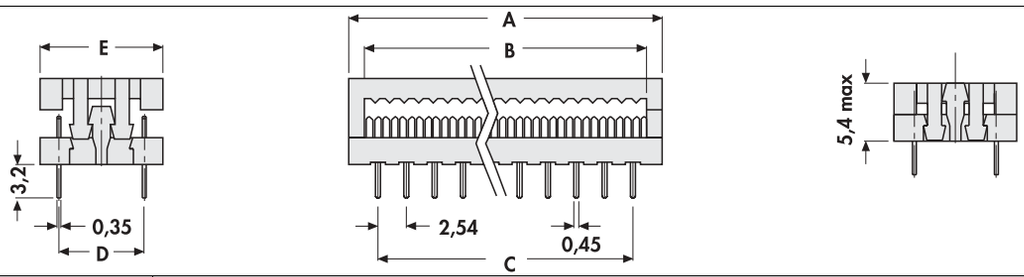
Printed circuit connector

Design DIL



art. no.	no. of contacts	dim. [mm]				
		A	B	C	D	E (max.)
KK 04 Z	4	8.00	5.10	2.54	7.62	11.00
KK 06 Z	6	10.30	7.60	5.08	7.62	11.00
KK 08 Z	8	13.00	10.20	7.62	7.62	11.00
KK 10 Z	10	15.40	12.70	10.16	7.62	11.00
KK 12 Z	12	18.00	15.30	12.70	7.62	11.00
KK 14 Z	14	20.50	17.80	15.24	7.62	11.00
KK 16 Z	16	23.00	20.30	17.78	7.62	11.00
KK 18 Z	18	25.60	22.90	20.32	7.62	11.00
KK 20 Z	20	28.10	25.40	22.86	7.62	11.00
KK 22 Z	22	30.70	28.00	25.40	7.62	11.00
KK 24 Z	24	33.00	30.50	27.94	15.24	18.70
KK 28 Z	28	38.10	35.60	33.02	15.24	18.70
KK 32 Z	32	43.20	40.70	38.10	15.24	18.70
KK 36 Z	36	48.20	45.70	43.18	15.24	18.70
KK 40 Z	40	53.30	50.80	48.26	15.24	18.70

contact surface finish: tin-plated

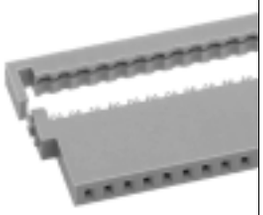
Use with ribbon cable:
round conductor flat strip:
AWG 28 = solid or stranded
AWG 30 = solid

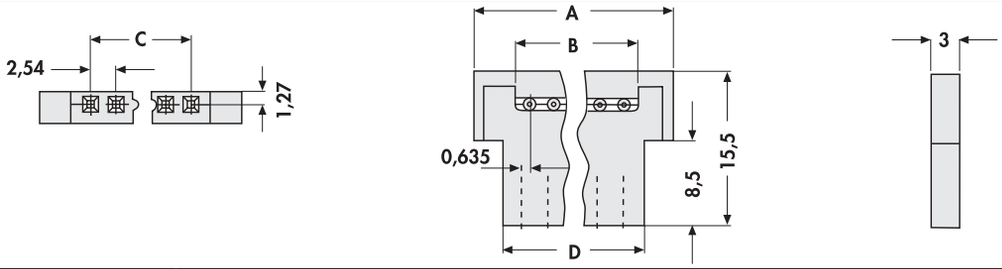
conductor diameter:
AWG 28 ... 30 = 0.09 ... 0.05 mm²
insulation-Ø:
max. 1.1 mm

Sockets for DIL-IC → **F 4 - 10**
Application tools → **H 13**
Flat cable → **H 12**
PC connectors → **H 8 - 9**
Technical data → **H 14**
D-Sub connectors /flat cable → **I 11**
Single precision contacts → **F 2 - 3**

Female connector

One row





art. no.	no. of contacts	dim. [mm]			
		A	B	C	D
FV 03 ...	3	15.24	7.62	5.08	8.89
FV 04 ...	4	17.78	10.16	7.62	11.43
FV 05 ...	5	20.32	12.70	10.16	13.97
FV 06 ...	6	22.86	15.24	12.70	16.51
FV 07 ...	7	25.40	17.78	15.24	19.05
FV 08 ...	8	27.94	20.32	17.78	15.24
FV 10 ...	10	33.02	25.40	22.86	26.67
FV 12 ...	12	38.10	30.48	27.94	31.75
FV 13 ...	13	40.64	33.02	30.48	34.29
FV 14 ...	14	43.18	35.66	33.02	36.83
FV 16 ...	16	48.26	40.64	38.10	41.91
FV 17 ...	17	50.80	43.18	40.64	44.45
FV 18 ...	18	53.34	45.72	43.18	46.99
FV 20 ...	20	58.42	50.80	48.26	52.07
FV 24 ...	24	68.58	60.96	58.42	62.23
FV 25 ...	25	71.12	63.50	60.96	64.77
FV 30 ...	30	83.82	76.20	73.66	77.47
FV 32 ...	32	88.90	81.28	78.74	82.55
FV 36 ...	36	99.06	91.44	88.90	92.71

please indicate: **... contact surface finish:**
Z = tin-plated
G = gold-plated

recommended plugs
0.635 mm
length 5 ... 8 mm

Use with ribbon cable:
round conductor flat strip:
AWG 28 = solid or stranded
AWG 30 = solid

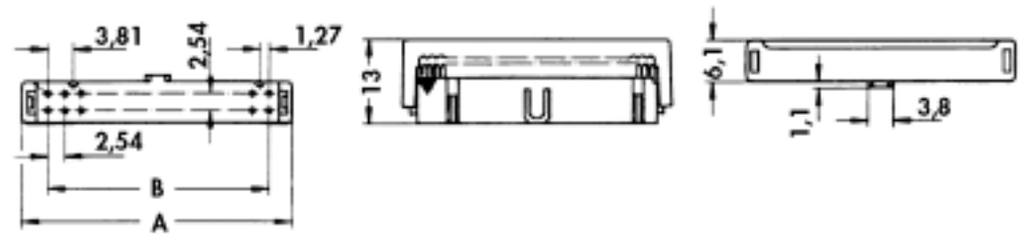
conductor diameter:
AWG 28 ... 30 = 0.09 ... 0.05 mm²
insulation-Ø:
max. 1.1 mm

Female connector

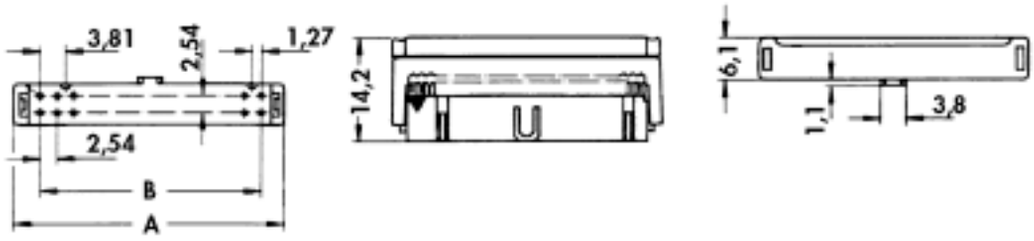
Two rows, with guiding nose

suitable for shrouded male header ASL ...

PV



PV + ZEPV



art. no.	no. of contacts	dim. [mm]		suitable strain relief
		A	B	
PV 06 G	6	12.20	5.08	**ZEPV 06**
PV 10 G	10	17.30	10.16	**ZEPV 10**
PV 14 G	14	22.40	15.24	**ZEPV 14**
PV 16 G	16	24.90	17.78	**ZEPV 16**
PV 20 G	20	30.00	22.86	**ZEPV 20**
PV 26 G	26	37.60	30.48	**ZEPV 26**
PV 34 G	34	47.80	40.64	**ZEPV 34**
PV 40 G	40	55.40	48.26	**ZEPV 40**
PV 50 G	50	68.10	60.96	**ZEPV 50**
PV 60 G	60	80.80	73.66	**ZEPV 60**
PV 64 G	64	85.90	78.74	**ZEPV 64**

contact surface finish: gold-plated

Use with ribbon cable:
round conductor flat strip:
AWG 28 = solid or stranded
AWG 30 = solid

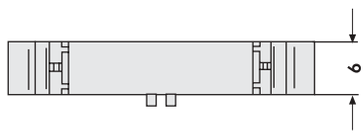
conductor diameter:
AWG 28 ... 30 = 0.09 ... 0.05 mm²
insulation-Ø:
max 1.1 mm

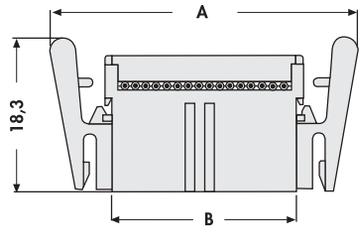
Male headers .1" solder → **G 8 - 18**
Application tools → **H 13**
Flat cable → **H 12**
Technical data → **H 14**
Boltable female header → **H 5**
Shroud. male header SMD → **H 7**
Shrouded male header → **H 6**

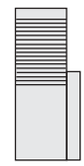
Female connector

Two rows, with guiding nose

boltable female header, suitable for shrouded male header ASL ...



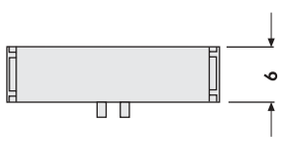


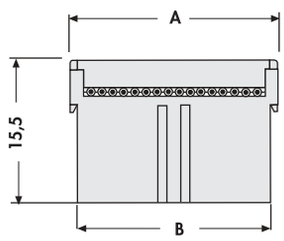


art. no.	no. of contacts	dim. [mm] A	dim. [mm] B	art. no.	no. of contacts	dim. [mm] A	dim. [mm] B
VFL 06 ...	6	23.58	9.56	**VFL 20 ...**	20	41.36	27.34
VFL 08 ...	8	26.12	12.10	**VFL 26 ...**	26	48.98	34.96
VFL 10 ...	10	28.66	14.64	**VFL 34 ...**	34	59.14	45.12
VFL 12 ...	12	31.20	17.18	**VFL 40 ...**	40	66.76	52.74
VFL 14 ...	14	33.74	19.72	**VFL 50 ...**	50	79.46	65.44
VFL 16 ...	16	36.28	22.26				

please indicate: **... contact surface finish:**
Z = tin-plated
G = gold-plated

suitable for shrouded male header ASL ...





art. no.	no. of contacts	dim. [mm] A	dim. [mm] B	art. no.	no. of contacts	dim. [mm] A	dim. [mm] B
FLMP 06 ...	6	10.97	9.56	**FLMP 20 ...**	20	28.75	27.34
FLMP 08 ...	8	13.51	12.10	**FLMP 26 ...**	26	36.37	34.96
FLMP 10 ...	10	16.05	14.64	**FLMP 34 ...**	34	46.53	45.12
FLMP 12 ...	12	18.59	17.18	**FLMP 40 ...**	40	54.15	52.74
FLMP 14 ...	14	21.13	19.72	**FLMP 50 ...**	50	66.85	65.44
FLMP 16 ...	16	23.67	22.26				

please indicate: **... contact surface finish:**
Z = tin-plated
G = gold-plated

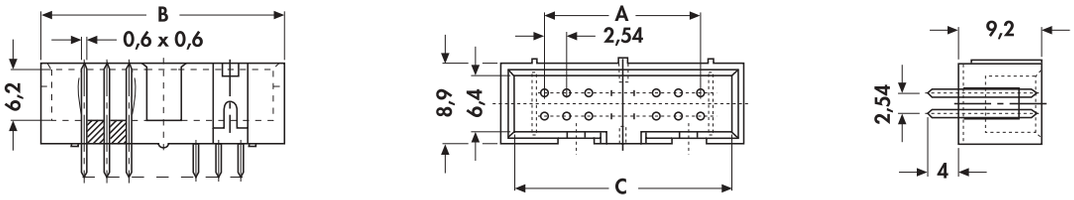
Use with ribbon cable:
round conductor flat strip:
AWG 28 = solid or stranded
AWG 30 = solid

conductor diameter:
AWG 28 ... 30 = 0.09 ... 0.05 mm²
insulation-Ø: max 1.1 mm

Male header

Straight, two rows, shrouded

suitable for boltable female header VFL, FLMP, PV

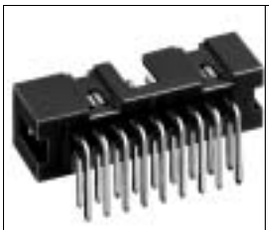


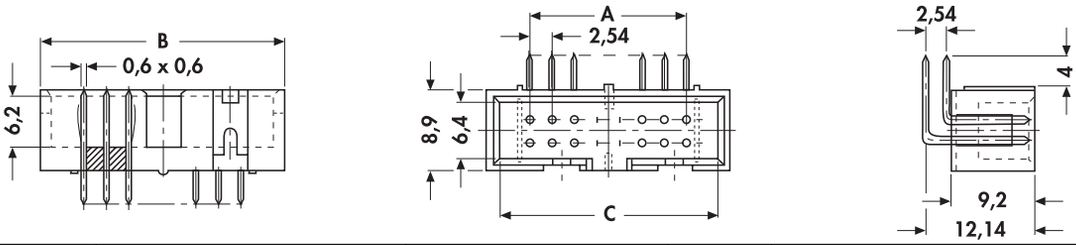
art. no.	no. of contacts	dim. [mm] A	B	C	art. no.	no. of contacts	dim. [mm] A	B	C
ASLG 06 ...	6	5.08	15.24	12.70	**ASLG 18 ...**	18	20.32	30.48	27.94
ASLG 08 ...	8	7.62	17.78	15.24	**ASLG 20 ...**	20	22.86	33.02	30.48
ASLG 10 ...	10	10.16	20.32	17.78	**ASLG 26 ...**	26	30.48	40.64	38.10
ASLG 12 ...	12	12.70	22.86	20.32	**ASLG 34 ...**	34	40.64	50.80	48.26
ASLG 14 ...	14	15.24	25.40	22.86	**ASLG 40 ...**	40	48.26	58.42	55.88
ASLG 16 ...	16	17.78	27.94	25.40	**ASLG 50 ...**	50	60.96	71.12	68.58

please indicate: **... contact surface finish:**
Z = tin-plated
G = gold-plated

Angled, two rows, shrouded

suitable for boltable female header VFL, FLMP, PV





art. no.	no. of contacts	dim. [mm] A	B	C	art. no.	no. of contacts	dim. [mm] A	B	C
ASLA 06 ...	6	5.08	15.24	12.70	**ASLA 18 ...**	18	20.32	30.48	27.94
ASLA 08 ...	8	7.62	17.78	15.24	**ASLA 20 ...**	20	22.86	33.02	30.48
ASLA 10 ...	10	10.16	20.32	17.78	**ASLA 26 ...**	26	30.48	40.64	38.10
ASLA 12 ...	12	12.70	22.86	20.32	**ASLA 34 ...**	34	40.64	50.80	48.26
ASLA 14 ...	14	15.24	25.40	22.86	**ASLA 40 ...**	40	48.26	58.42	55.88
ASLA 16 ...	16	17.78	27.94	25.40	**ASLA 50 ...**	50	60.96	71.12	68.58

please indicate: **... contact surface finish:**
Z = tin-plated
G = gold-plated

Gold-plated resp. tin-plated contacts are available with either straight or squared terminations.
In addition they can be combined with many other stripline connectors in 2.54 mm pitch.

Shroud. male header SMD → **H 7**
Application tools → **H 13**
Flat cable → **H 12**
Technical data → **H 14**
Boltable female header → **H 5**
Female header two rows → **H 4**

fischer elektronik

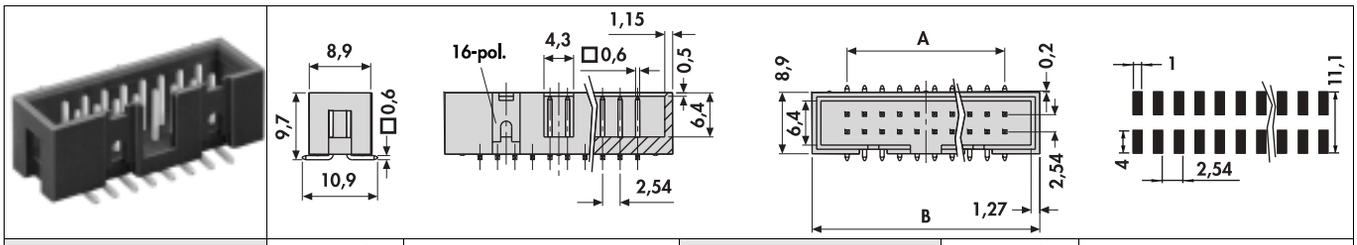
260°C

2.54

Male header

SMD, two rows, shrouded

suitable for boltable female header VFL, FLMP, PV



art. no.	no. of contacts	dim. [mm] A	dim. [mm] B	art. no.	no. of contacts	dim. [mm] A	dim. [mm] B
ASL 06 SMD ...	6	5.08	15.30	**ASL 18 SMD ...**	18	20.32	30.60
ASL 08 SMD ...	8	7.62	17.80	**ASL 20 SMD ...**	20	22.86	33.10
ASL 10 SMD ...	10	10.16	20.40	**ASL 26 SMD ...**	26	30.48	40.70
ASL 12 SMD ...	12	12.70	22.90	**ASL 34 SMD ...**	34	40.64	50.90
ASL 14 SMD ...	14	15.24	25.50	**ASL 40 SMD ...**	40	48.26	58.50
ASL 16 SMD ...	16	17.78	27.00	**ASL 50 SMD ...**	50	60.96	71.20

please indicate:

... contact surface finish:
Z = tin-plated
G = gold-plated

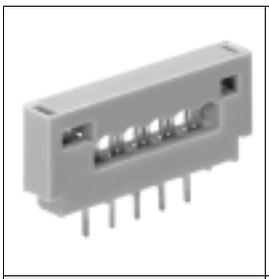
Gold-plated resp. tin-plated contacts are available with either straight or squared terminations.

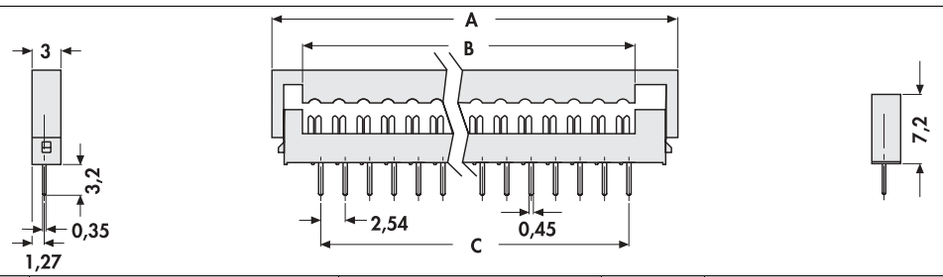
In addition they can be combined with many other strip-line connectors in 2.54 mm pitch.

Female header two rows → **H 4**
Application tools → **H 13**
Flat cable → **H 12**
Technical data → **H 14**
Boltable female header → **H 5**
Shrouded male header → **H 6**

Printed circuit connector

One row

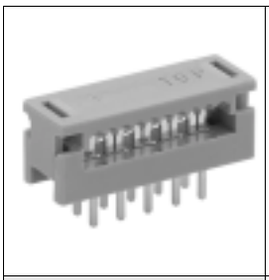


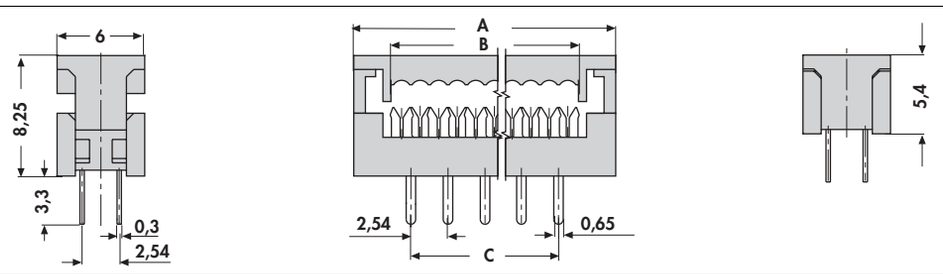


art. no.	no. of contacts	dim. [mm] A	B	C	art. no.	no. of contacts	dim. [mm] A	B	C
SBAU 1 03 Z	3	15.24	7.62	5.08	**SBAU 1 14 Z**	14	43.18	35.56	33.02
SBAU 1 04 Z	4	17.78	10.16	7.62	**SBAU 1 15 Z**	15	45.72	38.10	35.56
SBAU 1 05 Z	5	20.32	12.70	10.16	**SBAU 1 16 Z**	16	48.26	40.64	38.10
SBAU 1 06 Z	6	22.86	15.24	12.70	**SBAU 1 17 Z**	17	50.80	43.18	40.64
SBAU 1 07 Z	7	25.40	17.78	15.24	**SBAU 1 18 Z**	18	53.34	45.72	43.18
SBAU 1 08 Z	8	27.94	20.32	17.78	**SBAU 1 20 Z**	20	58.42	50.80	48.26
SBAU 1 09 Z	9	30.48	22.86	20.32	**SBAU 1 24 Z**	24	68.58	60.96	58.42
SBAU 1 10 Z	10	33.02	25.40	22.86	**SBAU 1 25 Z**	25	71.12	63.50	60.96
SBAU 1 11 Z	11	35.56	27.94	25.40	**SBAU 1 30 Z**	30	83.82	76.20	73.66
SBAU 1 12 Z	12	38.10	30.48	27.94	**SBAU 1 32 Z**	32	88.90	81.28	78.74
SBAU 1 13 Z	13	40.64	33.02	30.48	**SBAU 1 36 Z**	36	99.06	91.44	88.90

contact surface finish: tin-plated

Two rows





art. no.	no. of contacts	dim. [mm] A	B	C	art. no.	no. of contacts	dim. [mm] A	B	C
SBAU 06 Z	6	12.90	7.80	5.08	**SBAU 26 Z**	26	38.30	33.20	30.48
SBAU 10 Z	10	18.00	12.90	10.16	**SBAU 30 Z**	30	43.40	38.30	35.56
SBAU 14 Z	14	23.00	18.00	15.24	**SBAU 34 Z**	34	48.50	43.40	40.64
SBAU 16 Z	16	25.60	20.50	17.78	**SBAU 40 Z**	40	56.10	51.00	48.26
SBAU 20 Z	20	30.70	25.60	22.86					

contact surface finish: tin-plated

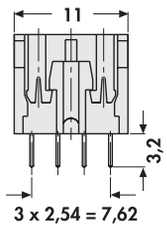
Use with ribbon cable:
round conductor flat strip:
AWG 28 = solid or stranded, AWG 30 = solid

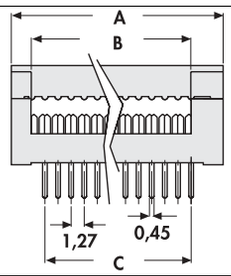
conductor diameter:
AWG 28 ... 30 = 0.09 ... 0.05 mm²
insulation-Ø:
max. 1.1 mm

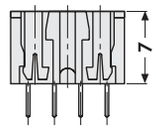
Sockets for DIL-IC → **F 4 - 10**
D-Sub connectors /flat cable → **I 11**
Flat cable → **H 12**
Technical data → **H 14**
Application tools → **H 13**
PC connector design DIL → **H 2**
Female header grid .079" → **H 11**

Printed circuit connector

Four rows







art. no.	no. of contacts	dim. [mm] A	B	C	art. no.	no. of contacts	dim. [mm] A	B	C
SBAU 4 10 Z	10	17.78	12.70	11.43	**SBAU 4 26 Z**	26	38.10	33.02	31.75
SBAU 4 12 Z	12	20.32	15.24	13.97	**SBAU 4 34 Z**	34	48.26	43.18	41.91
SBAU 4 14 Z	14	22.86	17.78	16.51	**SBAU 4 40 Z**	40	55.88	50.80	49.53
SBAU 4 16 Z	16	25.40	20.32	19.05	**SBAU 4 50 Z**	50	68.58	63.50	62.23
SBAU 4 18 Z	18	27.94	22.86	21.59	**SBAU 4 60 Z**	60	81.28	76.20	74.93
SBAU 4 20 Z	20	30.48	25.40	24.13	**SBAU 4 64 Z**	64	86.36	81.28	80.01

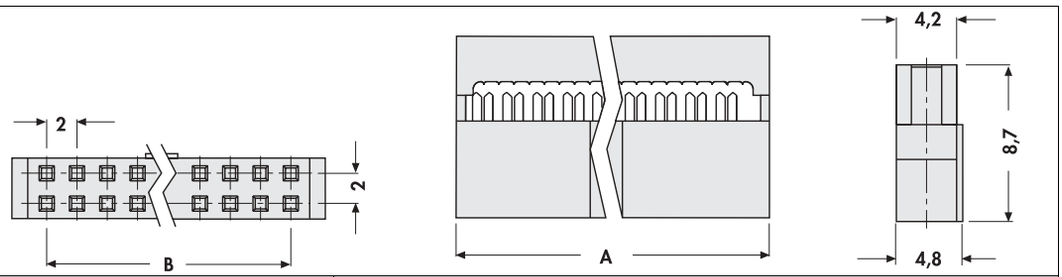
contact surface finish: tin-plated

Use with ribbon cable:
round conductor flat strip:
AWG 28 = solid or stranded
AWG 30 = solid

conductor diameter:
AWG 28 ... 30 = 0.09 ... 0.05 mm²
insulation-Ø:
max 1.1 mm

Female connector

Two rows

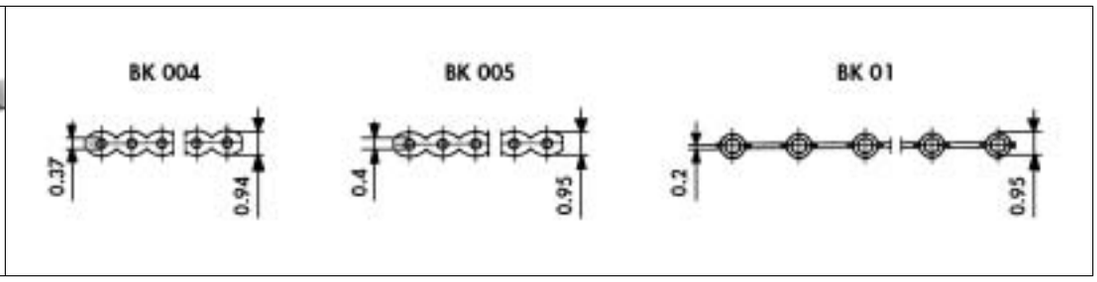


art. no.	no. of contacts	dim. [mm]	
		A	B
PVY 20 S	20	25.10	18.00
PVY 40 S	40	45.30	38.00
PVY 44 S	44	49.30	42.00
PVY 50 S	50	55.10	48.00

contact surface finish: selective gold-plated

Accessories for flat ribbon cable and application tools

Flat ribbon cable



cross section: AWG 28/~0.089 mm²
operating voltage: 300 V_{eff} max.
operating temperature range: -30 ... +105 °C

Spacing 1.00 mm - suitable for connectors PVY

art. no.	no. of contacts
BK 004 20	20
BK 004 40	40
BK 004 50	50

Technical data:
current rating: 1.5 A; conductor resistance: # 240 m ! /m; capacitance: # 46 pF/m symmetrical; wave impedance: 105 ! symmetrical

Spacing 1,27 mm - suitable for connectors

art. no.	no. of contacts
BK 005 10	10
BK 005 14	14
BK 005 16	16
BK 005 20	20
BK 005 25	25
BK 005 26	26
BK 005 34	34
BK 005 40	40
BK 005 50	50
BK 005 64	64

Technical data:
current rating: 1 A; conductor resistance: # 250 m ! /m; capacitance: # 45 pF/m symmetrical; wave impedance: 104 ! symmetrical

Spacing 2,54 mm - suitable for connectors FV

art. no.	no. of contacts
BK 01 32	32

Technical data:
current rating: 2 A; conductor resistance: # 230 m ! /m; capacitance: # 65 pF/m symmetrical; wave impedance: 170 ! symmetrical

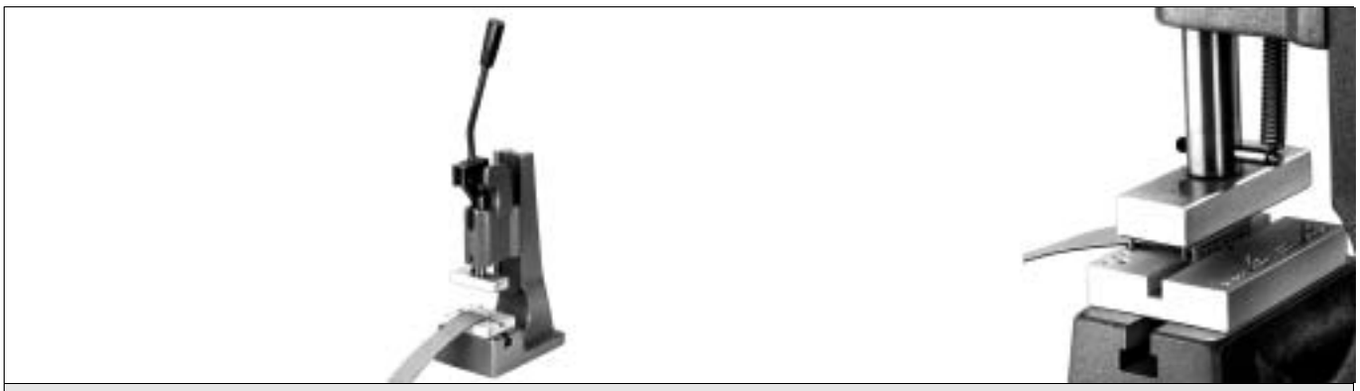
Application tools → **H 13**
Technical data → **H 14**
PC connectors → **H 8 - 9**
Boltable female header → **H 5**
Female header one row → **H 3**
Female header two rows → **H 4**
Female header grid .079" → **H 11**

fischer elektronik

Accessories for flat ribbon cable and application tools

Bench press

height without handle: 28 cm, weight: 9.02 kg



art. no.
VBK 1

The bench press VBK 1 connects all contacts of IDC connector types KK, SB, FV, PV, PVZ and VFL in one simple operation.

By piercing through the insulation, the contacts form, due to their conception,
a gas-tight and corrosion-proof connection.

Accessories, suitable for strip-line connector

art. no.	suitable for male connectors and female headers
KK W	KK
SB W	SB
FV W	FV
PV W	PV, PVZ, VFL, FLMP
VFL W	VFL, PV, PVZ, FLMP
D W 9 37	D-Sub (9-37 contacts)
D W 50	D-Sub (50 contacts)
PVY W	PVY

Removable locating frames for every indicated type available.

Technical data ICC connectors

	KK, SBAU	FV	FLMP, VFL	ASL, ASL ... SMD	PV	PVY
Contact material: shell	CuSn-alloy					CuSn-alloy
Contact surface:	Ni + min. 5 µm Sn Ni + min. 0,8 µm Au					sel. gold plated/ at marting end Ni + 0,38 µm Au balance of pin Ni + Sn
Insulator material:	polycarbonat: colour: RAL 7032			PA 4.6, GF	thermoplast polycarbonat: colour: RAL 7032	thermoplastic polyester, GF colour: black
Creeping current capacity:	KC 175 according to DIN 53480					KC 250
Creep distance:	≥ 0,7 mm VDE 0110	≥ 1,4 mm VDE 0110				≥ 1,1 mm VDE 0110
Air distance:	≥ 0,5 mm VDE 0110	≥ 1,0 mm VDE 0110				≥ 0,8 mm VDE 0110
Insulation resistance:	≥ 10^{12} Ohm					≥ 10^{10} Ohm
Current rating:	1 A	2 A	1 A		2 A	
Nominal voltage:	250 Volt ~ isolation class A according to VDE 0110					
Test voltage:	500 V ~					650 V ~
Temperature range:	–40 °C … +125 °C	–55 °C … +125 °C		–40 °C … +163 °C (+260 °C 1 min.)	–55 °C … +125 °C	–55 °C … +105 °C
Flammability class:	UL 94 V–1			UL 94 V–0		
Mechan. endurance:	min. 50 acc. to DIN 41640				200 acc. to DIN 41651	
Insertion/extraction force, type:	≥ 0,3 N … ≤ 0,7 per contact				≥ 0,3 N … ≤ 0,7 per contact	≥ 0,5 N … ≤ 1,8 per contact
Notes:	IDC-pitch 1,27 mm SBAU 1... 2,54 mm	IDC-pitch 2,54 mm	IDC-pitch 1,27 mm		IDC-pitch 1,27 mm	IDC-pitch 1 mm

Flat cable → **H 12**
Shrouded male header SMD → **H 7**
Female header two rows → **H 4 - 5**
Female header grid spacing .079" → **H 11**
Female header one row → **H 3**
Printed circuit connectors → **H 8 - 10**
Boltable female header → **H 5**
Shrouded male header → **H 6**