



# Adapter

AD.\*.\*.\*.\*

- Adapter male thread metric to female thread metric
- Adapter male thread metric to female thread NPT
- Metric and NPT versions available
- Brass nickel-plated or stainless steel
- Ex db, Ex eb and Ex tb certified
- Suitable for operation in Zone 1, Zone 2, Zone 21 and Zone 22



## Function

The metal adapters type AD.\* are suitable to adjust different thread types and sizes for connections to enclosures certified according to type of protection Ex db, Ex eb and Ex tb.

## Technical Data

### Mechanical specifications

Thread type	metric ISO pitch 1.5 mm or NPT ANSI ASME B1.20.1
Thread size (TD)	see data table
Thread type female	metric ISO pitch 1.5 mm or NPT ANSI ASME B1.20.1
Thread size female (TF)	see data table
Degree of protection	IP66 / IP68
Material	
Finish	inherent color silver
Washer gasket	aramid fibers bonded with NBR
Adapter	brass nickel-plated or AISI 316 (1.4401) stainless steel
O-Ring	chloroprene / neoprene or silicone
Mass	see data table
Dimensions	see data table

### Ambient conditions

Ambient temperature	chloroprene O-ring: -40 ... 100 °C (-40 ... 212 °F) silicone O-ring: -60 ... 130 °C (-76 ... 266 °F) washer gasket: -40 ... 80 °C (-40 ... 176 °F) Service temperature might be limited by the use of O-rings or washer gaskets.
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### Data for application in connection with hazardous areas

EU-type examination certificate	CESI 15 ATEX 029X
Marking	Ⓜ II 2 GD Ex db IIC Gb Ex eb IIC Gb Ex tb IIIC Db

### International approvals

IECEX approval	IECEX CES 15.0006X
UKCA approval	CML 22 UKEX 1267X
CCoE approval	PESO A/P/HQ/KA/104/5579 (P420366)
CCC approval	2021312313000345

### Conformity

Degree of protection	EN 60529
CE marking	0102

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

**Technical Data**

General information	
Scope of delivery	K01 - metric variants, individual component: Adapter , washer gasket , locknut , Brief instructions K01 - NPT variants, individual component: Adapter , washer gasket , locknut , Brief instructions Knn - packing unit with multiple components: Adapter , Brief instructions (1 copy)
Supplementary information	EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a> .

**Type Code**

1	2	3	4	5	6	7						
AD	.	***	.	***	.	**	.	*	.	**	.	K**
AD	.	M50	.	NPT2	.	BN	.	C	.	18	.	K01

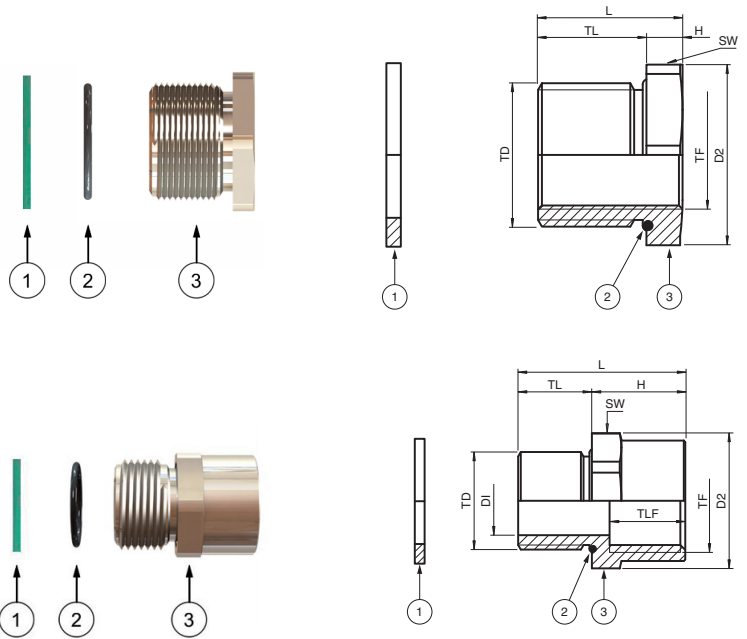
Example: AD.M50.NPT2.BN.C.18.K01  
 Adapter, male thread size M50, female thread size NPT 2", body brass nickel-plated, chloropren O-ring for -40 °C ... 100 °C, installation thread length 18 mm, one piece

<b>1</b>	<b>Series</b>
AD	Adapter
<b>2</b>	<b>Thread, male</b>
M*	metric ISO pitch 1.5; sizes see dimensions data table
NPT*	NPT ANSI ASME B1.20.1; sizes see dimensions data table
<b>3</b>	<b>Thread, female</b>
M*	metric ISO pitch 1.5; sizes see dimensions data table
NPT*	NPT ANSI ASME B1.20.1; sizes see dimensions data table
<b>4</b>	<b>Material</b>
BN	brass nickel-plated
SS	stainless steel
<b>5</b>	<b>Material seals / O-Ring</b>
C	chloroprene / neoprene
S	silicone
X	no seal
<b>6</b>	<b>Thread length for installation in enclosure</b>
**	length in mm
<b>7</b>	<b>Packaging unit</b>
	units not packaged, for use in Pepperl+Fuchs Solution Engineering Centers
K**	units quantity per package

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**Dimensions**

Legend	
1	Washer gasket (accessory, only with metric threads)
2	O-Ring (only with metric threads)
3	Adapter
DI	Diameter thru-hole
D2	Width across corners
H	Length outside enclosure
SW*	Width across flats
TD	Thread size
TF	Thread size female
TL	Thread length
TLF	Thread length female
L	Total length



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## Dimensions Metric-Metric - Brass Nickel-plated, O-Ring Chloroprene

Type	Thread Male		Thread Female		Dimensions [mm]					Mass approx.		Nut torques [Nm]	Delivery quantity
	TD	TL [mm]	TF	TLF [mm]	H	L	DI	D2	SW	Component	Packaging unit	SW1	
AD.M20.M16.BN.C.15.K01	M20	15	M16	19	4	19	-	27.5	25	39 g	51 g	6	1
AD.M20.M16.BN.C.15.K63	M20	15	M16	19	4	19	-	27.5	25	39 g	2.7 kg	6	63
AD.M25.M20.BN.C.15.K01	M25	15	M20	19	4	19	-	33	30	66 g	86 g	8.5	1
AD.M25.M20.BN.C.15.K35	M25	15	M20	19	4	19	-	33	30	66 g	2.54 kg	8.5	35
AD.M32.M20.BN.C.15.K01	M32	15	M20	19	4	19	-	39.5	36	83 g	108 g	9	1
AD.M32.M20.BN.C.15.K35	M32	15	M20	19	4	19	-	39.5	36	83 g	3.2 kg	9	35
AD.M32.M25.BN.C.15.K01	M32	15	M25	19	4	19	-	39.5	36	53 g	69 g	9	1
AD.M32.M25.BN.C.15.K35	M32	15	M25	19	4	19	-	39.5	36	53 g	2.04 kg	9	35
AD.M40.M32.BN.C.18.K01	M40	18	M32	22	4	22	-	50	45	91 g	118 g	9.5	1
AD.M40.M32.BN.C.18.K20	M40	18	M32	22	4	22	-	50	45	91 g	2 kg	9.5	20
AD.M50.M40.BN.C.18.K01	M50	18	M40	23	5	23	-	61	55	153 g	199 g	10	1
AD.M50.M40.BN.C.18.K12	M50	18	M40	23	5	23	-	61	55	153 g	2.02 kg	10	12
AD.M63.M50.BN.C.18.K01	M63	18	M50	23	5	23	-	77	70	199 g	259 g	10.5	1
AD.M63.M50.BN.C.18.K12	M63	18	M50	23	5	23	-	77	70	199 g	2.63 kg	10.5	12

\*Knn: scope of delivery see table technical data

## Dimensions NPT-Metric - Brass Nickel-plated

Type	Thread Male		Thread Female		Dimensions [mm]					Mass approx.		Nut torques [Nm]	Delivery quantity
	TD	TL [mm]	TF	TLF [mm]	H	L	DI	D2	SW	Component	Packaging unit	SW1	
AD.NPT1/2.M20.BN.X.15.K01	NPT 1/2"	15	M20	15	19	34	14.5	27.5	25	55 g	65 g	8	1
AD.NPT1/2.M20.BN.X.15.K35	NPT 1/2"	15	M20	15	19	34	14.5	27.5	25	55 g	2.12 kg	8	35
AD.NPT3/4.M20.BN.X.15.K01	NPT 3/4"	15	M20	19	4	19	-	33	30	41 g	51 g	9	1
AD.NPT3/4.M20.BN.X.15.K35	NPT 3/4"	15	M20	19	4	19	-	33	30	41 g	1.58 kg	9	35
AD.NPT3/4.M25.BN.X.15.K01	NPT 3/4"	15	M25	15	19	34	19	33	30	49 g	59 g	9	1
AD.NPT3/4.M25.BN.X.15.K35	NPT 3/4"	15	M25	15	19	34	19	33	30	49 g	1.89 kg	9	35
AD.NPT3/4.M32.BN.X.15.K01	NPT 3/4"	15	M32	15	19	34	19	39.5	36	83 g	93 g	9	1
AD.NPT3/4.M32.BN.X.15.K35	NPT 3/4"	15	M32	15	19	34	19	39.5	36	83 g	3.2 kg	9	35
AD.NPT1.M32.BN.X.15.K01	NPT 1"	15	M32	15	19	34	26	39.5	36	77 g	87 g	11	1
AD.NPT1.M32.BN.X.15.K35	NPT 1"	15	M32	15	19	34	26	39.5	36	77 g	2.96 kg	11	35
AD.NPT1.M40.BN.X.15.K01	NPT 1"	15	M40	18	22	37	26	50	45	103 g	113 g	11	1
AD.NPT1.M40.BN.X.15.K35	NPT 1"	15	M40	18	22	37	26	50	45	103 g	3.97 kg	11	35
AD.NPT1-1/4.M40.BN.X.18.K01	NPT 1-1/4"	18	M40	18	22	40	35	50	45	110 g	120 g	13	1
AD.NPT1-1/4.M40.BN.X.18.K20	NPT 1-1/4"	18	M40	18	22	40	35	50	45	110 g	2.42 kg	13	20
AD.NPT1-1/2.M50.BN.X.18.K01	NPT 1-1/2"	18	M50	18	22	40	40	61	55	115 g	125 g	15	1
AD.NPT1-1/2.M50.BN.X.18.K20	NPT 1-1/2"	18	M50	18	22	40	40	61	55	115 g	2.53 kg	15	20
AD.NPT2.M75.BN.X.18.K01	NPT 2"	18	M75	18	22.5	40.5	51	88.5	80	120 g	130 g	18	1
AD.NPT2.M75.BN.X.18.K12	NPT 2"	18	M75	18	22.5	40.5	51	88.5	80	120 g	1.58 kg	18	12

\*Knn: scope of delivery see table technical data

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 **PEPPERL+FUCHS**

**Dimensions Metric-NPT - Brass Nickel-plated, O-Ring Chloroprene**

Type	Thread Male		Thread Female		Dimensions [mm]					Mass approx.		Nut torques [Nm]	Delivery quantity
	TD	TL [mm]	TF	TLF [mm]	H	L	DI	D2	SW	Component	Packaging unit	SW1	
AD.M20.NPT1/2.BN.C.15.K01	M20	15	NPT 1/2"	15	19	34	14	27.5	25	51 g	66 g	6	1
AD.M20.NPT1/2.BN.C.15.K35	M20	15	NPT 1/2"	15	19	34	14	27.5	25	51 g	1.96 kg	6	35
AD.M20.NPT3/4.BN.C.15.K01	M20	15	NPT 3/4"	15	19	34	14	33	30	64 g	83 g	6	1
AD.M20.NPT3/4.BN.C.15.K35	M20	15	NPT 3/4"	15	19	34	14	33	30	64 g	2.46 kg	6	35
AD.M25.NPT1/2.BN.C.15.K01	M25	15	NPT 1/2"	19	4	19	-	33	30	33 g	43 g	8.5	1
AD.M25.NPT1/2.BN.C.15.K35	M25	15	NPT 1/2"	19	4	19	-	33	30	33 g	1.27 kg	8.5	35
AD.M25.NPT3/4.BN.C.15.K01	M25	15	NPT 3/4"	15	19	34	19	33	30	49 g	64 g	8.5	1
AD.M25.NPT3/4.BN.C.15.K35	M25	15	NPT 3/4"	15	19	34	19	33	30	49 g	1.89 kg	8.5	35
AD.M25.NPT1.BN.C.15.K01	M25	15	NPT 1"	15	19	34	19	39.5	36	49 g	64 g	8.5	1
AD.M25.NPT1.BN.C.15.K35	M25	15	NPT 1"	15	19	34	19	39.5	36	49 g	1.89 kg	8.5	35
AD.M32.NPT3/4.BN.C.15.K01	M32	15	NPT 3/4"	19	4	19	-	39.5	36	53 g	69 g	9	1
AD.M32.NPT3/4.BN.C.15.K35	M32	15	NPT 3/4"	19	4	19	-	39.5	36	53 g	2.04 kg	9	35
AD.M32.NPT1.BN.C.15.K01	M32	15	NPT 1"	15	19	34	26	39.5	36	77 g	100 g	9	1
AD.M32.NPT1.BN.C.15.K35	M32	15	NPT 1"	15	19	34	26	39.5	36	77 g	2.96 kg	9	35
AD.M40.NPT1-1/4.BN.C.18.K01	M40	18	NPT 1-1/4"	18	22	40	34	50	45	103 g	134 g	9.5	1
AD.M40.NPT1-1/4.BN.C.18.K20	M40	18	NPT 1-1/4"	18	22	40	34	50	45	103 g	2.27 kg	9.5	20
AD.M40.NPT1-1/2.BN.C.18.K01	M40	18	NPT 1-1/2"	18	22	40	34	61	55	208 g	270 g	9.5	1
AD.M40.NPT1-1/2.BN.C.18.K20	M40	18	NPT 1-1/2"	18	22	40	34	61	55	208 g	4.58 kg	9.5	20
AD.M50.NPT1-1/2.BN.C.18.K01	M50	18	NPT 1-1/2"	18	22	40	40	61	55	220 g	286 g	10	1
AD.M50.NPT1-1/2.BN.C.18.K12	M50	18	NPT 1-1/2"	18	22	40	40	61	55	220 g	2.9 kg	10	12
AD.M50.NPT2.BN.C.18.K01	M50	18	NPT 2"	18	22.5	40.5	44	72	65	238 g	309 g	10	1
AD.M50.NPT2.BN.C.18.K12	M50	18	NPT 2"	18	22.5	40.5	44	72	65	238 g	3.14 kg	10	12
AD.M63.NPT2.BN.C.18.K01	M63	18	NPT 2"	18	22.5	40.5	51	75	68	362 g	471 g	10.5	1
AD.M63.NPT2.BN.C.18.K12	M63	18	NPT 2"	18	22.5	40.5	51	75	68	362 g	4.78 kg	10.5	12

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**Dimensions Metric-NPT - Stainless Steel, O-Ring Chloroprene**

Type	Thread Male		Thread Female		Dimensions [mm]					Mass approx.		Nut torques [Nm]	Delivery quantity
	TD	TL [mm]	TF	TLF [mm]	H	L	DI	D2	SW	Component	Packaging unit	SW1	
AD.M20.NPT1/2.SS.C.15.K01	M20	15	NPT 1/2"	15	19	34	14	27.5	25	48 g	62 g	6	1
AD.M20.NPT1/2.SS.C.15.K35	M20	15	NPT 1/2"	15	19	34	14	27.5	25	48 g	1.85 kg	6	35
AD.M20.NPT3/4.SS.C.15.K01	M20	15	NPT 3/4"	15	19	34	14	33	30	60 g	78 g	6	1
AD.M20.NPT3/4.SS.C.15.K35	M20	15	NPT 3/4"	15	19	34	14	33	30	60 g	2.31 kg	6	35
AD.M25.NPT1/2.SS.C.15.K01	M25	15	NPT 1/2"	19	4	19	-	33	30	33 g	43 g	8.5	1
AD.M25.NPT1/2.SS.C.15.K35	M25	15	NPT 1/2"	19	4	19	-	33	30	33 g	1.27 kg	8.5	35
AD.M25.NPT3/4.SS.C.15.K01	M25	15	NPT 3/4"	15	19	34	19	33	30	93 g	121 g	8.5	1
AD.M25.NPT3/4.SS.C.15.K35	M25	15	NPT 3/4"	15	19	34	19	33	30	93 g	3.58 kg	8.5	35
AD.M25.NPT1.SS.C.15.K01	M25	15	NPT 1"	15	19	34	19	39.5	36	62 g	81 g	8.5	1
AD.M25.NPT1.SS.C.15.K35	M25	15	NPT 1"	15	19	34	19	39.5	36	62 g	2.39 kg	8.5	35
AD.M32.NPT3/4.SS.C.15.K01	M32	15	NPT 3/4"	19	4	19	-	39.5	36	70 g	91 g	9	1
AD.M32.NPT3/4.SS.C.15.K35	M32	15	NPT 3/4"	19	4	19	-	39.5	36	70 g	2.7 kg	9	35
AD.M32.NPT1.SS.C.15.K01	M32	15	NPT 1"	15	19	34	26	39.5	36	52 g	68 g	9	1
AD.M32.NPT1.SS.C.15.K35	M32	15	NPT 1"	15	19	34	26	39.5	36	52 g	2 kg	9	35
AD.M40.NPT1-1/4.SS.C.18.K01	M40	18	NPT 1-1/4"	18	22	40	34	50	45	103 g	134 g	9.5	1
AD.M40.NPT1-1/4.SS.C.18.K20	M40	18	NPT 1-1/4"	18	22	40	34	50	45	103 g	2.27 kg	9.5	20
AD.M40.NPT1-1/2.SS.C.18.K01	M40	18	NPT 1-1/2"	18	22	40	34	61	55	208 g	270 g	9.5	1
AD.M40.NPT1-1/2.SS.C.18.K20	M40	18	NPT 1-1/2"	18	22	40	34	61	55	208 g	4.58 kg	9.5	20
AD.M50.NPT1-1/2.SS.C.18.K01	M50	18	NPT 1-1/2"	18	22	40	40	61	55	217 g	282 g	10	1
AD.M50.NPT1-1/2.SS.C.18.K12	M50	18	NPT 1-1/2"	18	22	40	40	61	55	217 g	2.86 kg	10	12
AD.M50.NPT2.SS.C.18.K01	M50	18	NPT 2"	18	22.5	40.5	44	72	65	240 g	312 g	10	1
AD.M50.NPT2.SS.C.18.K12	M50	18	NPT 2"	18	22.5	40.5	44	72	65	240 g	3.17 kg	10	12
AD.M63.NPT2.SS.C.18.K01	M63	18	NPT 2"	18	22.5	40.5	51	75	68	362 g	471 g	10.5	1
AD.M63.NPT2.SS.C.18.K12	M63	18	NPT 2"	18	22.5	40.5	51	75	68	362 g	4.78 kg	10.5	12

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