

Hydraulic 14MPa

Three piece **Compact cylinder**

model **KM**



Three piece Compact cylinder
model **KML**

Model designation

Model designation **KML 080 S N 050**

① Cylinder inner diameter

② Rod tip section

③ Packing seal

④ Stroke

Specifications

Maximum allowable working pressure	14 MPa	
Proof pressure	21 MPa	
Operating temperature range	Standard	0~70°C
	Thermal resistant specification	5~120°C
Cushion	None	
Fluid used	General mineral based hydraulic oil (ISO-VG32 equivalent) Water glycol system working oil *	

*: Set the temperature range as 0-70°C when using water glycol hydraulic oil.

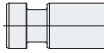

Do not conduct single unit operation.

Operation check must be performed with cylinder bolted.

① Cylinder inner diameter

Symbol	040	050	063	080
Cylinder inner diameter (mm)	ø40	ø50	ø63	ø80

② Rod tip section

Symbol	S	F	M
Rod tip section	Stepped (standard) 	Female thread 	Male thread 

③ Packing seal

Symbol	N	V
Packing Material	NBR (Standard) Operating temperature: 0~70°C	Fluorocarbon (Thermal resistant specification) Operating temperature: 5~120°C

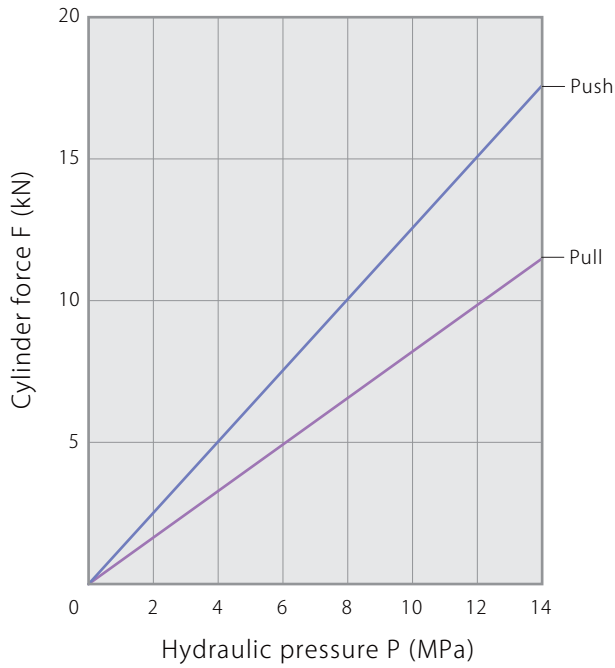
④ Stroke

Symbol	010	015	020	025	050
Stroke (mm)	10	15	20	25	50

Performance diagram

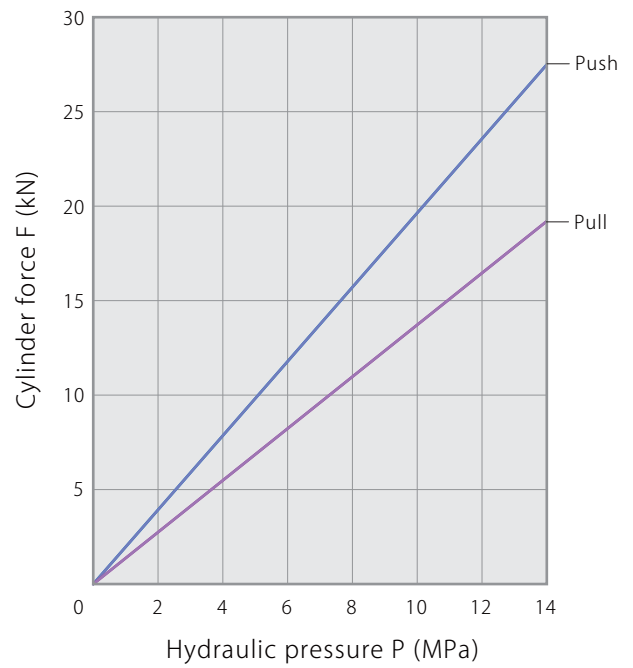
KML040

$$F(\text{Push}) = 1.257 \times P$$
$$F(\text{Pull}) = 0.863 \times P$$



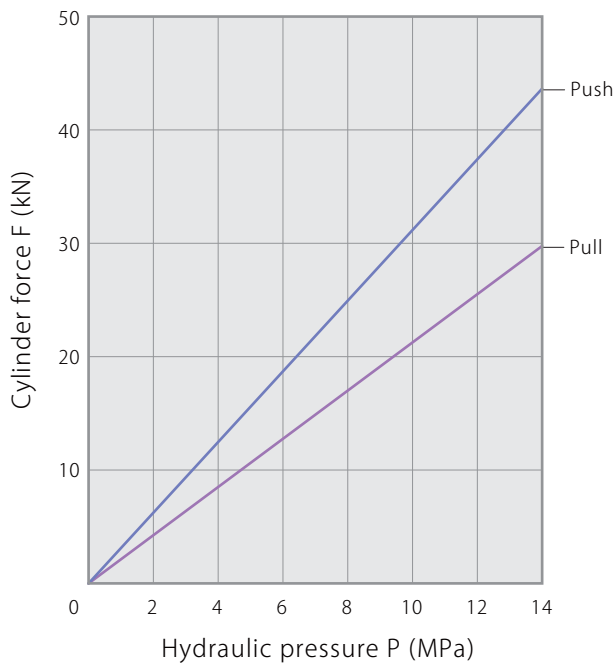
KML050

$$F(\text{Push}) = 1.963 \times P$$
$$F(\text{Pull}) = 1.348 \times P$$



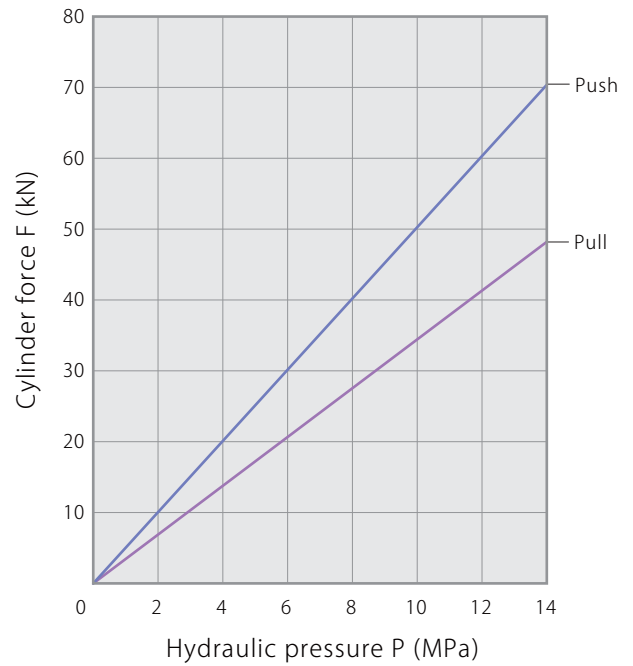
KML063

$$F(\text{Push}) = 3.117 \times P$$
$$F(\text{Pull}) = 2.127 \times P$$



KML080

$$F(\text{Push}) = 5.027 \times P$$
$$F(\text{Pull}) = 3.436 \times P$$



Inner diameter **ø40** Three piece Compact cylinder

Model designation

KM L 040

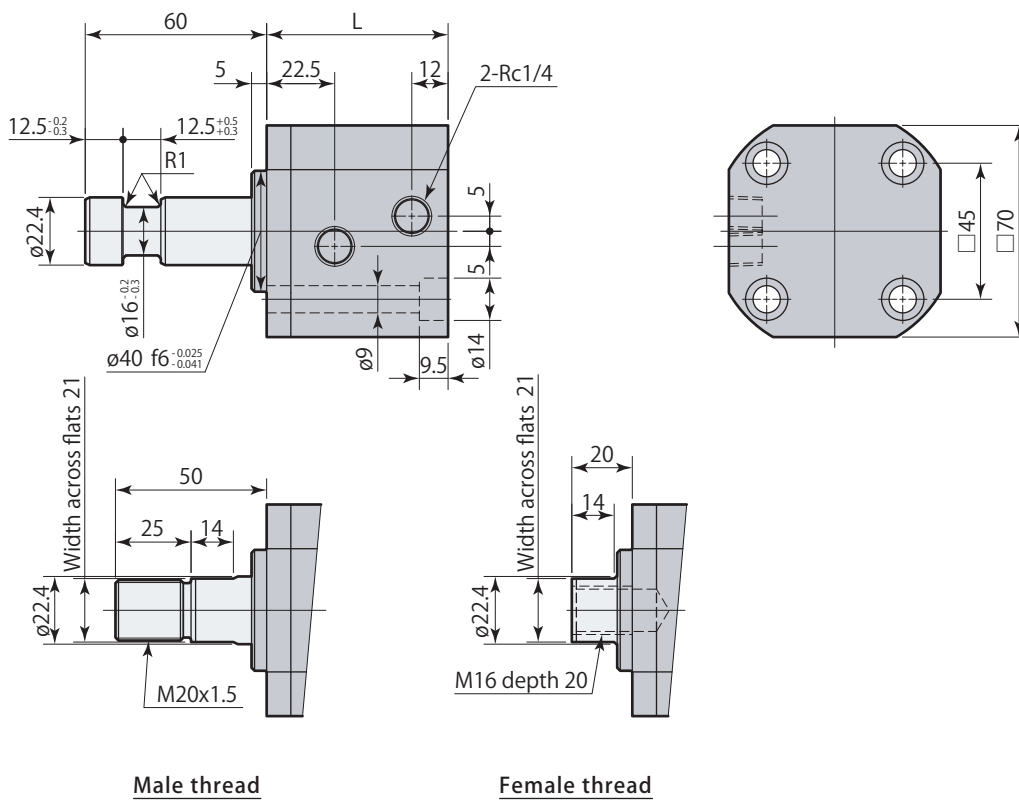
Rod tip section specifications

Packing specifications

Stroke

● Refer to **page → 1** for the details of model.

Stroke	mm	10	15	20	25	50
L	mm	60	65	70	75	100
Mass	kg	2.0	2.2	2.3	2.4	3.1



Specifications

Model		KML040	
Cylinder inner diameter	mm	40	
Rod diameter	mm	22.4	
Maximum allowable working pressure	MPa	14	
Stroke	mm	See the table shown above	
Cylinder force *	Push	kN	17.6
	Pull	kN	12.1

*: Hydraulic pressure at 14MPa. Refer to Performance diagram (**page → 2**).
 Mounting screws are not included.

Inner diameter $\phi 50$ Three piece Compact cylinder

Model designation

KM L 050

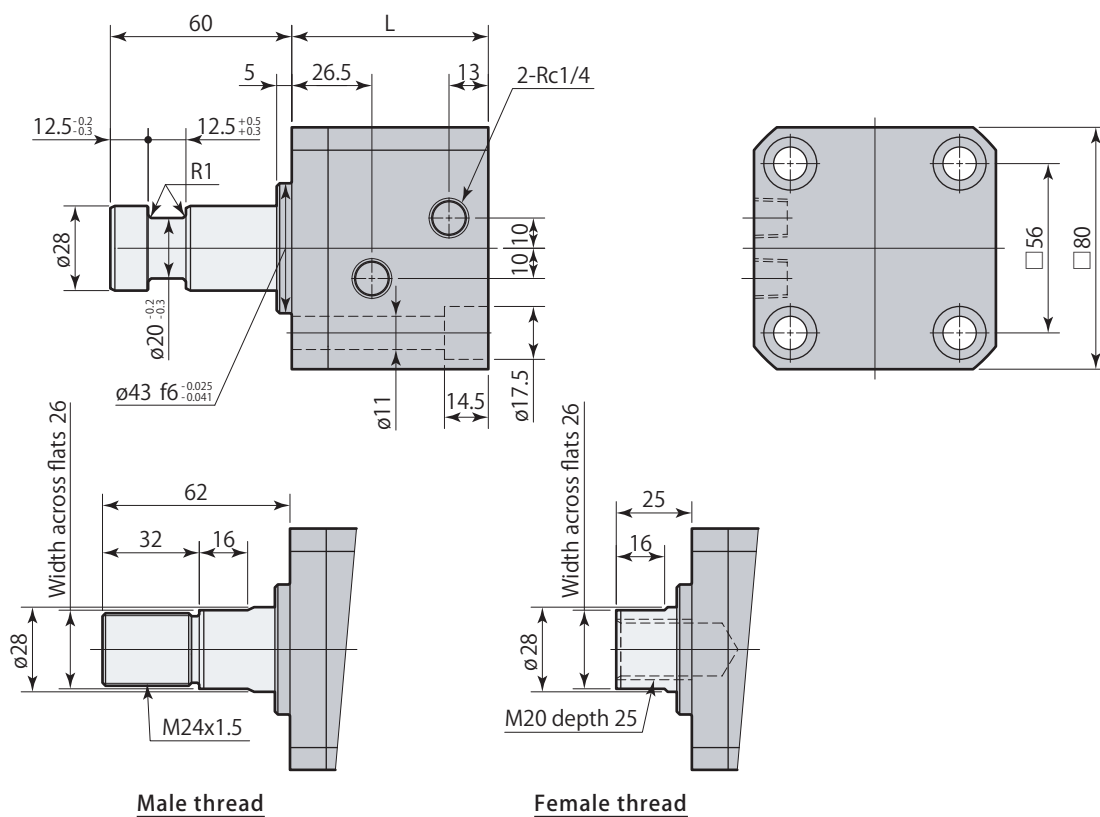
Rod tip section specifications

Packing specifications

Stroke

● Refer to **page → 1** for the details of model.

Stroke	mm	10	15	20	25	50
L	mm	65	70	75	80	105
Mass	kg	3.0	3.2	3.4	3.5	4.4



Specifications

Model		KML050	
Cylinder inner diameter	mm	50	
Rod diameter	mm	28	
Maximum allowable working pressure	MPa	14	
Stroke	mm	See the table shown above	
Cylinder force *1	Push	kN	27.5
	Pull	kN	18.9

*: Hydraulic pressure at 14MPa. Refer to Performance diagram (**page → 2**).
Mounting screws are not included.

Inner diameter $\phi 63$ Three piece Compact cylinder

Model designation

KM L 063

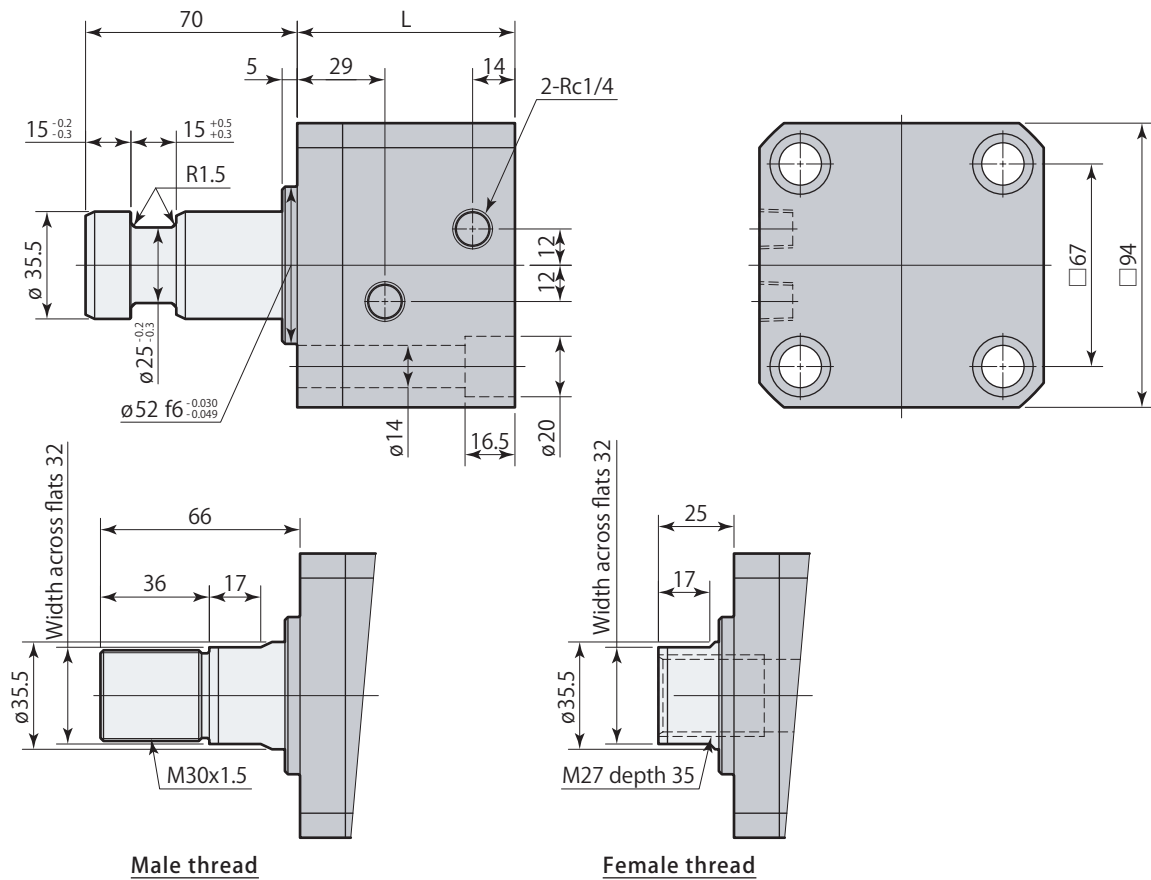
Rod tip section specifications

Packing specifications

Stroke

● Refer to **page → 1** for the details of model.

Stroke	mm	10	15	20	25	50
L	mm	72	77	82	87	112
Mass	kg	4.7	5.0	5.2	5.4	6.6



Specifications

Model		KML063	
Cylinder inner diameter	mm	63	
Rod diameter	mm	35.5	
Maximum allowable working pressure	MPa	14	
Stroke	mm	See the table shown above	
Cylinder force *1	Push	kN	43.6
	Pull	kN	29.8

*: Hydraulic pressure at 14MPa. Refer to Performance diagram (**page → 2**).
Mounting screws are not included.

Inner diameter $\varnothing 80$ Three piece Compact cylinder

Model designation

KM L 080

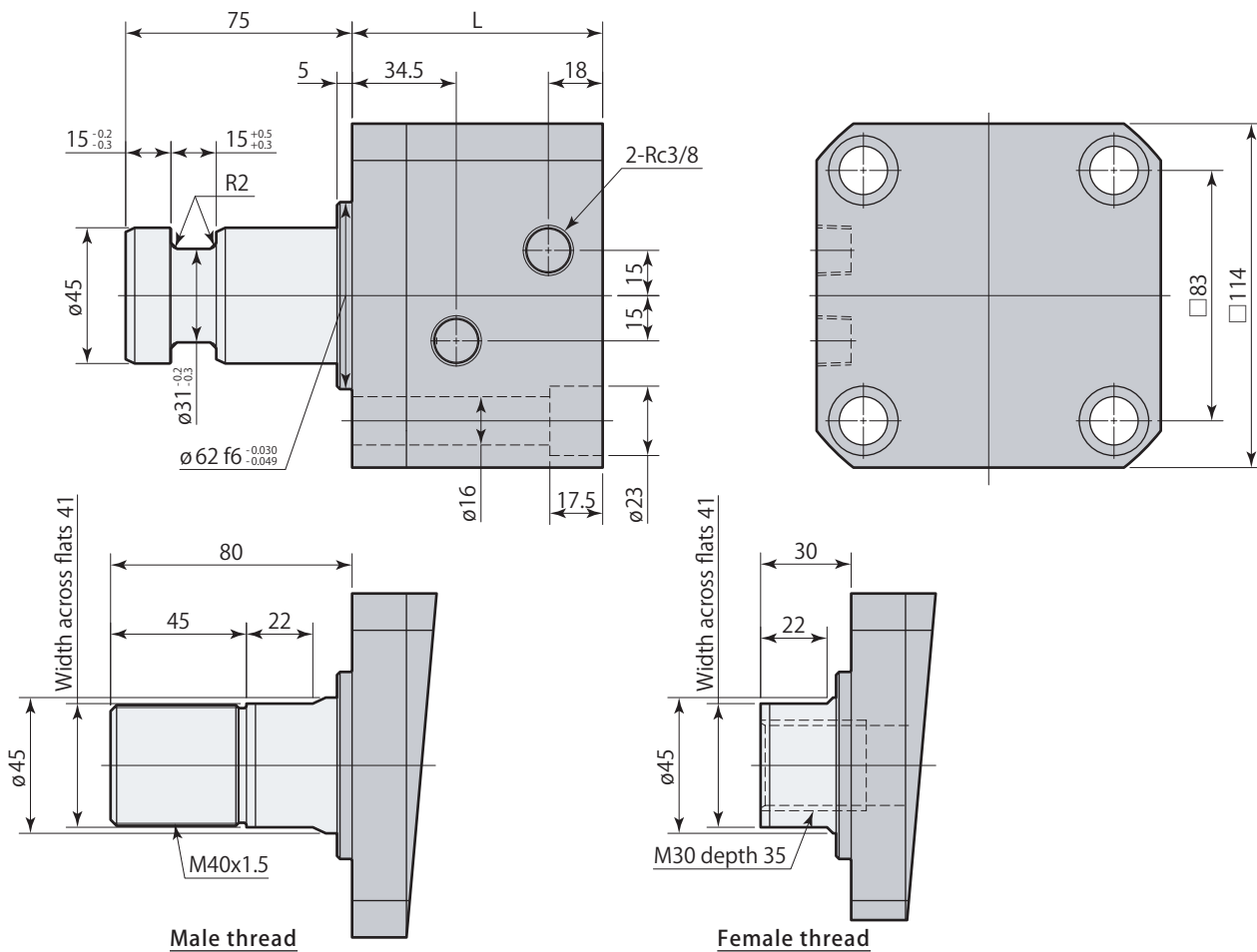
Rod tip section specifications

Packing specifications

Stroke

● Refer to **page → 1** for the details of model.

Stroke	mm	10	15	20	25	50
L	mm	83	88	93	98	123
Mass	kg	8.1	8.4	8.8	9.1	10.8



Specifications

Model		KML080	
Cylinder inner diameter	mm	80	
Rod diameter	mm	45	
Maximum allowable working pressure	MPa	14	
Stroke	mm	See the table shown above	
Cylinder force *1	Push	kN	70.4
	Pull	kN	48.1

*: Hydraulic pressure at 14MPa. Refer to Performance diagram (**page → 2**).
Mounting screws are not included.

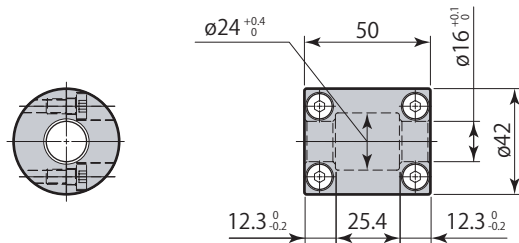
Coupling

Model designation **KCA-C-080**

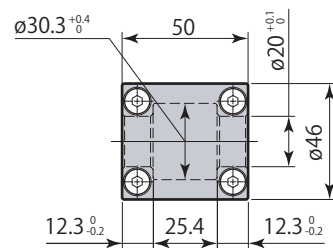
Symbol

Cylinder inner diameter (mm)	ø40	ø50	ø63	ø80
Symbol	050	063	080	100

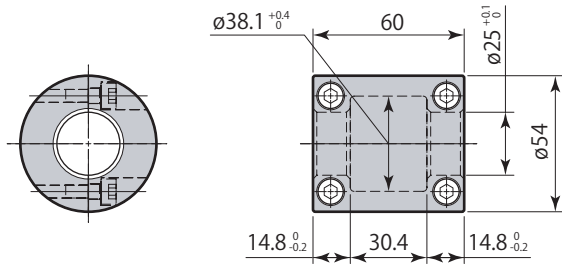
KCA-C-050



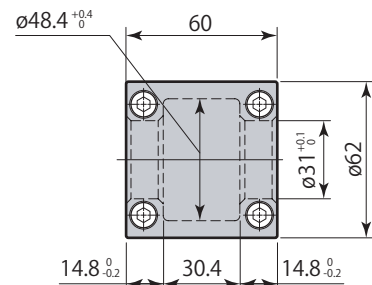
KCA-C-063



KCA-C-080



KCA-C-100

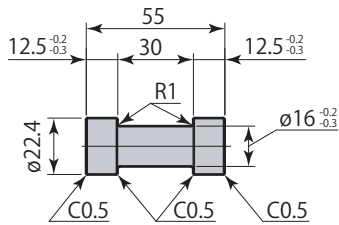


Joint P

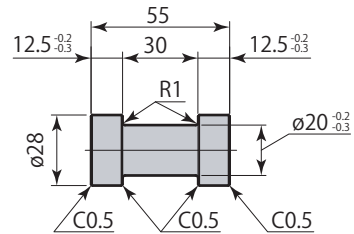
Model designation **KCA-J-080 P**
 Symbol

Cylinder inner diameter (mm)	ø40	ø50	ø63	ø80
Symbol	050	063	080	100

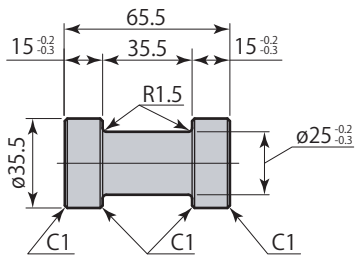
KCA-J-050P



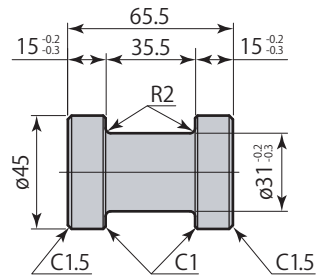
KCA-J-063P



KCA-J-080P



KCA-J-100P



Joint (with coupler plug)

Model designation **KCA-P-03 04-DC**

① Port size

② Coupler model

① Port size

Port size	Rc1/4	Rc3/8
Symbol	02	03

② Coupler model

Coupler model	2HP	2HP-DC	3HP	3HP-DC	4HP	4HP-DC
Symbol	02	02-DC	03	03-DC	04	04-DC

Model	Port size	Coupler model (Nitto Kohki)	Dimensions
KCA-P-0202	Rc1/4	2HP	
KCA-P-0202-DC		2HP-DC	
KCA-P-0203	Rc1/4	3HP	
KCA-P-0203-DC		3HP-DC	
KCA-P-0303	Rc3/8	3HP	
KCA-P-0303-DC		3HP-DC	
KCA-P-0304	Rc3/8	4HP	
KCA-P-0304-DC		4HP-DC	

Joint (with coupler socket)

Model designation **KCA-S-03 04-DC**

① Port size

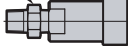


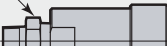
② Coupler model

① Port size

Port size	Rc1/4	Rc3/8
Symbol	02	03

② Coupler model

Coupler model	2HP	2HP-DC	3HP	3HP-DC	4HP	4HP-DC
Symbol	02	02-DC	03	03-DC	04	04-DC

Model	Port size	Coupler model (Nitto Kohki)	Dimensions
KCA-S-0202	Rc1/4	2HP	 Hex. width across flats 17
KCA-S-0202-DC		2HP-DC	
KCA-S-0203	Rc1/4	3HP	 Hex. width across flats 19
KCA-S-0203-DC		3HP-DC	
KCA-S-0303	Rc3/8	3HS	 Hex. width across flats 19
KCA-S-0303-DC		3HS-DC	
KCA-S-0304	Rc3/8	4HS	 Hex. width across flats 24
KCA-S-0304-DC		4HS-DC	

Pascal

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