

R-Series



Retractable locating pin packages

Technical features

Pneumatic ports on both sides of the cylinder.

Operating features

Operating pressure	from 2 to 8 bar / from 30 to 115 psi
Lubrication	all the devices are lubricated for life at the factory. Inline air lubrication isn't required

Functional charts

Size 50 mm

• Max deflection

Stroke	Load (kg)	Load position A deviation (mm)	Load position B deviation (mm)	Load position C deviation (mm)
60 mm	0.5	0.007	0.012	0.01
	1	0.013	0.025	0.023
	1.5	0.02	0.04	0.036
	2	0.03	0.053	0.049
	2.5	0.038	0.067	0.064
	3	0.045	0.082	0.075
50 mm	0.5	0.006	0.009	0.007
	1	0.013	0.02	0.018
	1.5	0.021	0.032	0.028
	2	0.026	0.047	0.043
	2.5	0.032	0.66	0.057
	3	0.037	0.075	0.068
40 mm	0.5	0.004	0.009	0.004
	1	0.009	0.02	0.009
	1.5	0.013	0.032	0.013
	2	0.018	0.047	0.018
	2.5	0.022	0.66	0.022
	3	0.026	0.075	0.026
25 mm	0.5	0	0.005	0
	1	0.005	0.015	0.005
	1.5	0.007	0.032	0.007
	2	0.011	0.047	0.011
	2.5	0.012	0.66	0.012
	3	0.014	0.075	0.014
15 mm	0.5	0	0.005	0
	1	0.002	0.018	0
	1.5	0.004	0.025	0.002
	2	0.007	0.033	0.006
	2.5	0.012	0.043	0.009
	3	0.014	0.052	0.013

• Functional data (at 5 bar / 72.5 psi)

Thrust force	825 N
Pull force	980 N
Max bending moment	3 N m / 2.21 lb-ft
Max distance from the load centre to the rod	200 mm

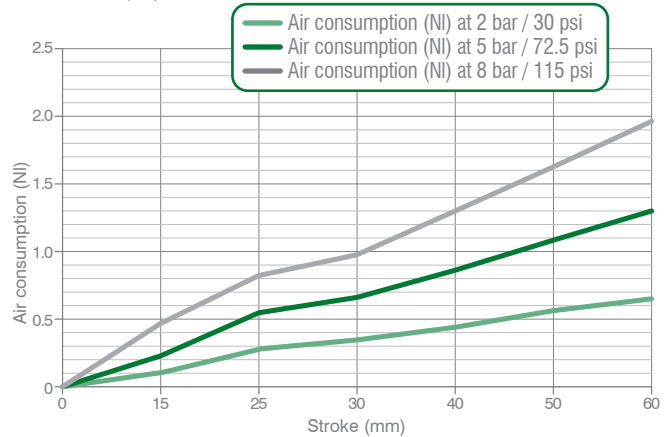
• Cycle time for max stroke

< 0.8 s NO flow valve required

• Air consumption

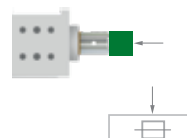
Air consumption for complete cycle

REV. 00 - 18/06/2015



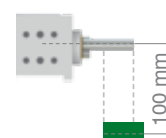
Load position **A**

Horizontal mounting position of the retractable locating pin/load centre on the rod



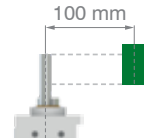
Load position **B**

Horizontal mounting position of the retractable locating pin/load centre at 100 mm from the rod axis



Load position **C**

Vertical mounting position of the retractable locating pin/load centre at 100 mm from the rod axis



Size 63 mm

• Max deflection

Stroke	Load (kg)	Load position A deviation (mm)	Load position B deviation (mm)	Load position C deviation (mm)
60 mm	0.5	0.007	0.012	0.01
	1	0.013	0.025	0.023
	1.5	0.02	0.04	0.036
	2	0.03	0.053	0.049
	2.5	0.038	0.067	0.064
	3	0.045	0.082	0.075
50 mm	0.5	0.006	0.009	0.007
	1	0.013	0.02	0.018
	1.5	0.021	0.032	0.028
	2	0.026	0.047	0.043
	2.5	0.032	0.66	0.057
	3	0.037	0.075	0.068
40 mm	0.5	0.004	0.009	0.004
	1	0.009	0.02	0.009
	1.5	0.013	0.032	0.013
	2	0.018	0.047	0.018
	2.5	0.022	0.66	0.022
	3	0.026	0.075	0.026
25 mm	0.5	0	0.005	0
	1	0.005	0.015	0.005
	1.5	0.007	0.032	0.007
	2	0.011	0.047	0.011
	2.5	0.012	0.66	0.012
	3	0.014	0.075	0.014
15 mm	0.5	0	0.005	0
	1	0.002	0.018	0
	1.5	0.004	0.025	0.002
	2	0.007	0.033	0.006
	2.5	0.012	0.043	0.009
	3	0.014	0.052	0.013

• Functional data (at 5 bar / 72.5 psi)

Thrust force	1,400 N
Pull force	1,555 N
Max bending moment	3 N m / 2.21 lb-ft
Max distance from the load centre to the rod	200 mm

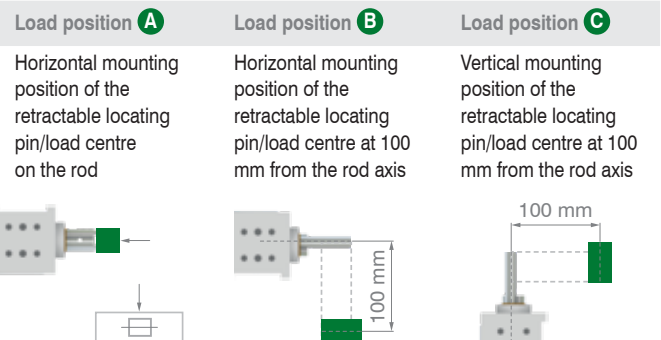
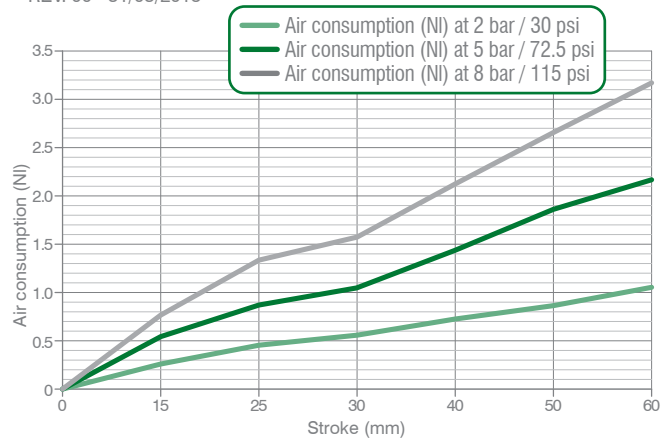
• Cycle time for max stroke

< 0.8 s **NO flow valve required**

• Air consumption

Air consumption for complete cycle

REV. 00 - 31/03/2015



Please get in touch with our technical representatives for any application which exceeds the above values, to find the appropriate solution for your application.

R-Series / Ordering string

R_32-series

R P 32 E 20 G 2

LOCATING

R	VERSION	R = retractable locating pin package
P	OPERATION	P = pneumatic – sensor mounted on the end cap A = pneumatic – sensor mounted on the front side
32	SIZE	32 = Ø 32 mm
E	SENSOR	E = electronic sensor with M12 swivel connector - PNP A = electronic sensor with M12 swivel connector - NPN N = no sensor B = electronic sensor with M8 swivel connector - PNP
20	STROKE	20 = 20 mm 40 = 40 mm
G	PORTS	G = G thread – BSPP
2	ROD TERMINATION	1 = iØ 16 mm cross-cut key rod termination 2 = iØ 10 mm cross-cut key rod termination



Rod 1

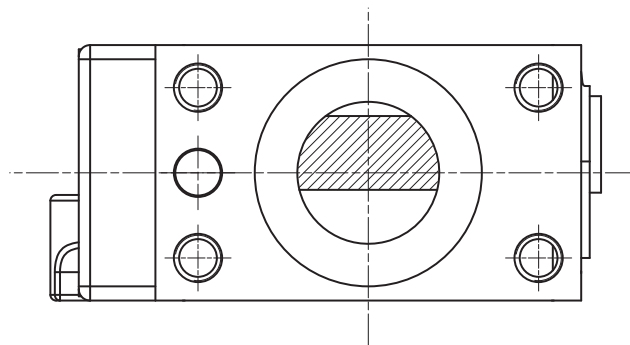
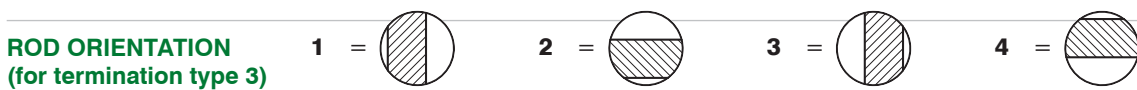


Rod 2

R_50/63-series

R P 50 E 40 G 3 1

R	VERSION	R = retractable locating pin package
P	OPERATION	P = pneumatic D2 = pneumatic with manual operation (available in size 50)
50	SIZE	50 = Ø 50 mm 63 = Ø 63 mm
E	SENSOR	E = electronic sensor with M12 swivel connector - PNP A = electronic sensor with M12 swivel connector - NPN N = no sensor B = electronic sensor with M8 swivel connector - PNP
40	STROKE	15 = 15 mm 25 = 25 mm 40 = 40 mm 50 = 50 mm 60 = 60 mm
G	PORTS	G = G thread – BSPP
3	ROD TERMINATION	1 = iØ 16 mm cross-cut key rod termination 2 = iØ 10 mm cross-cut key rod termination 3 = rod termination for offset pins 4 = rod termination with key 5 = rod with flat termination dia. 10 mm 6 = rod with flat termination dia. 12 mm 7 = iØ 12 mm CNOMO termination 8 = iØ 20 mm CNOMO termination



RM250-series

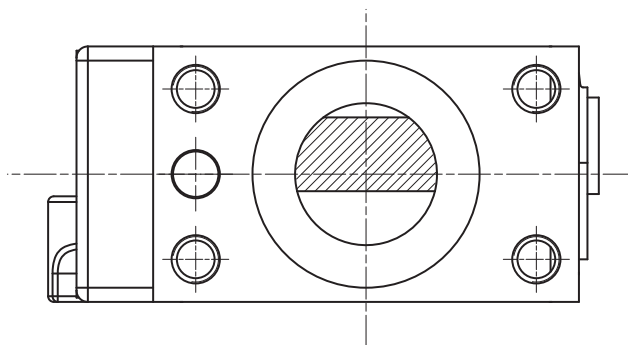
R M2 50 E 15 3 1

R	VERSION	R = retractable locating pin package
M2	OPERATION	M2 = manual operation - handle included
50	SIZE	50 = body corresponding to size 50
E	SENSOR	E = electronic sensor with M12 swivel connector - PNP A = electronic sensor with M12 swivel connector - NPN N = no sensor B = electronic sensor with M8 swivel connector - PNP
15	STROKE	15 = 15 mm 25 = 25 mm 40 = 40 mm 50 = 50 mm 60 = 60 mm
3	ROD TERMINATION	1 = iØ 16 mm cross-cut key rod termination 2 = iØ 10 mm cross-cut key rod termination 3 = rod termination for offset pins 4 = rod termination with key 5 = rod with flat termination dia. 10 mm 6 = rod with flat termination dia. 12 mm 7 = iØ 12 mm CNOMO termination 8 = iØ 20 mm CNOMO termination



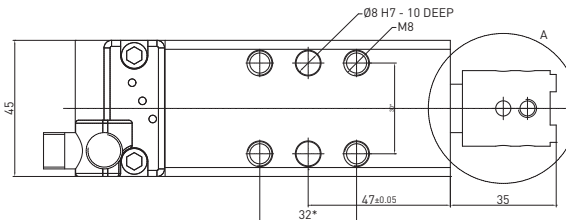
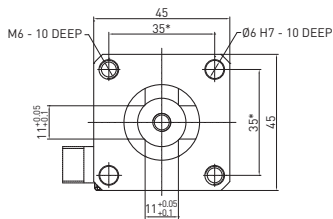
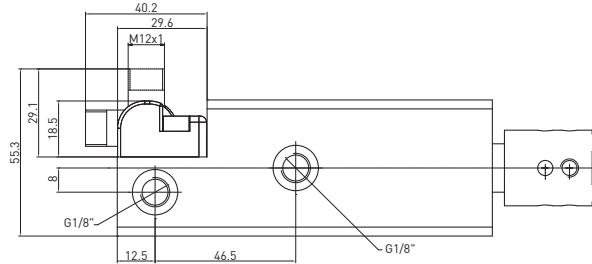
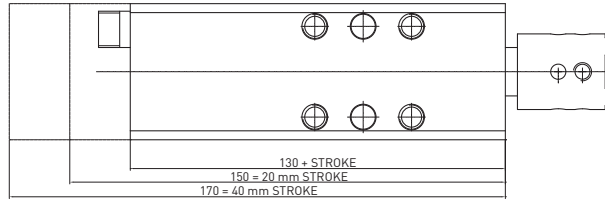
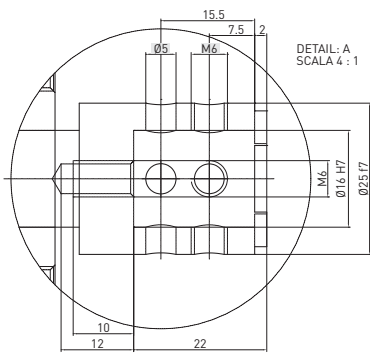
Rod 1 Rod 2 Rod 3 Rod 4 Rod 5 Rod 6 Rod 7 Rod 8

1	ROD ORIENTATION (for termination type 3)	1 =	2 =	3 =	4 =
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RP32E _1 / Retractable locating pin package - Size 32 mm - iØ 16 mm cross-cut key rod termination

WEIGHT 0.88 kg
min. stroke version



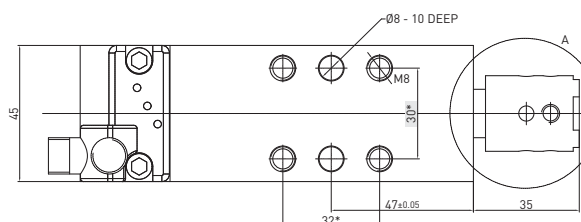
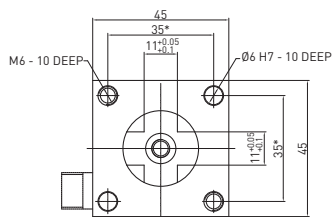
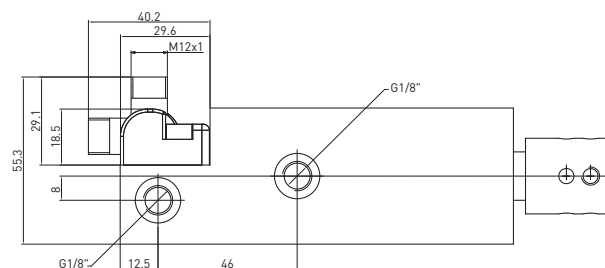
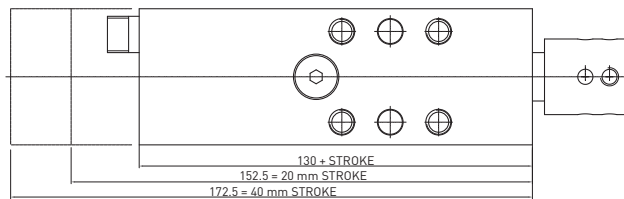
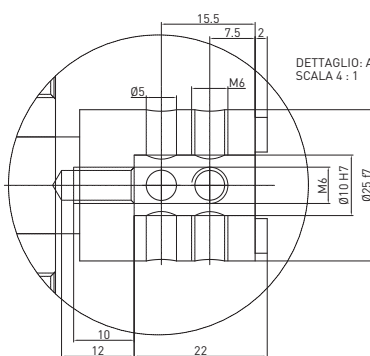
* DIMENSIONAL
TOLERANCE FOR
DOWEL HOLES: ±0.02

DIMENSIONAL
TOLERANCE FOR
THREADED HOLES: ±0.1

REV. 00 - 07/03/2017

RP32E _2 / Retractable locating pin package - Size 32 mm - iØ 10 mm cross-cut key rod termination

WEIGHT 0.88 kg
min. stroke version



* DIMENSIONAL
TOLERANCE FOR
DOWEL HOLES: ±0.02

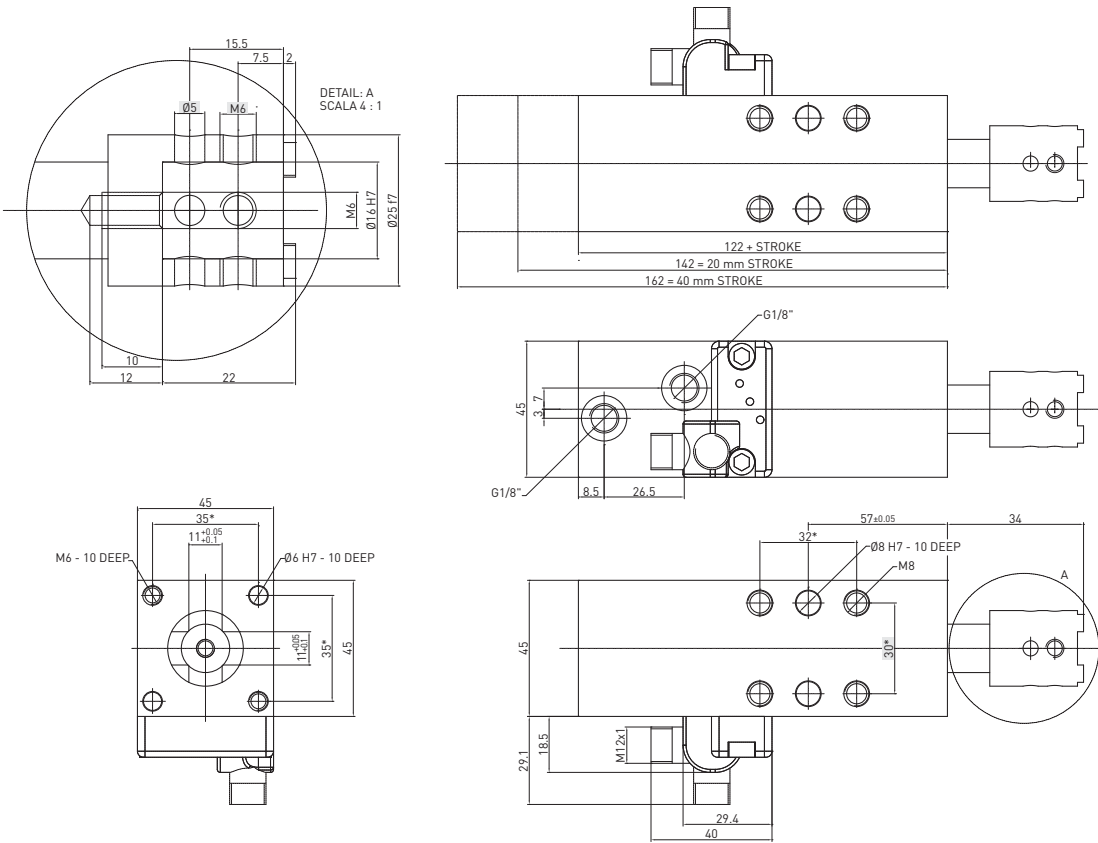
DIMENSIONAL
TOLERANCE FOR
THREADED HOLES: ±0.1

REV. 00 - 00/00/0000

RA32E _1 / Retractable locating pin package - Size 32 mm - iØ 16 mm cross-cut key rod termination

WEIGHT 0.94 kg
min. stroke version

LOCATING



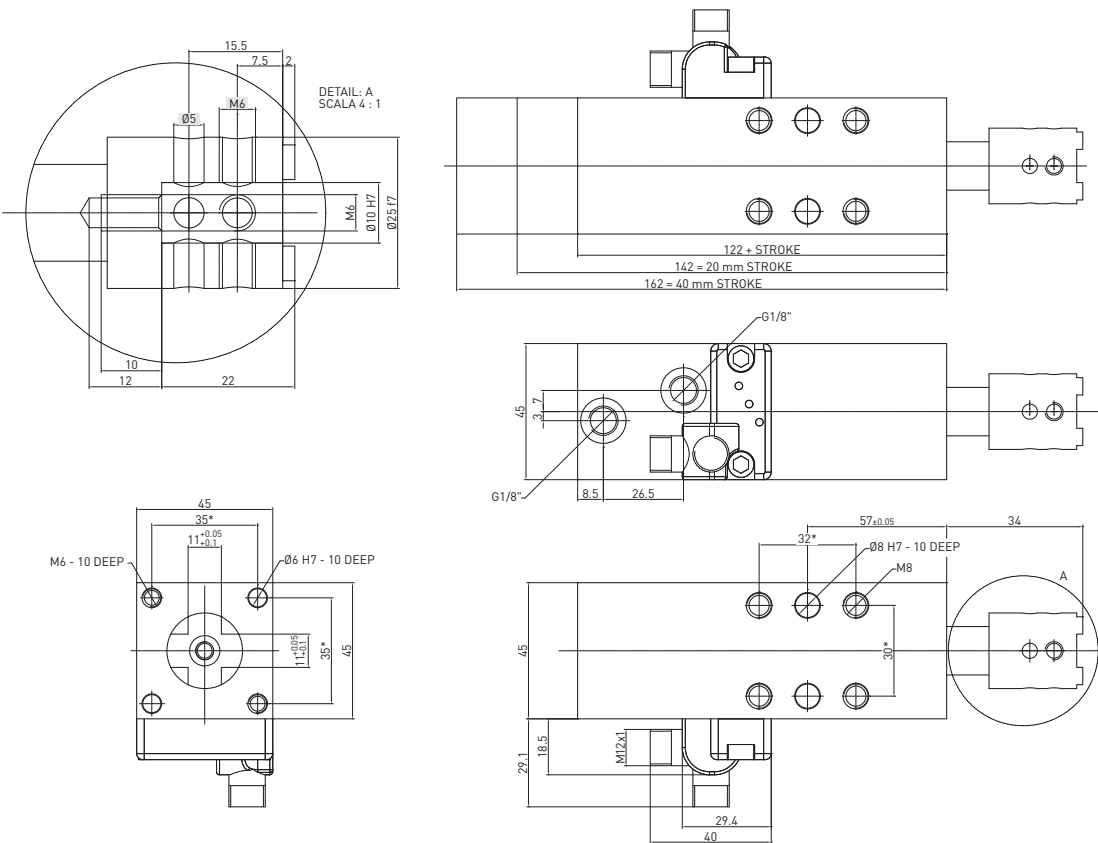
* DIMENSIONAL
TOLERANCE FOR
DOWEL HOLES: ±0.02

DIMENSIONAL
TOLERANCE FOR
THREADED HOLES: ±0.1

REV. 02 - 12/01/2018

RA32E _2 / Retractable locating pin package - Size 32 mm - iØ 10 mm cross-cut key rod termination

WEIGHT 0.94 kg
min. stroke version

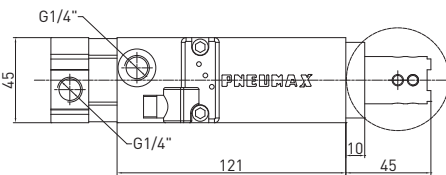
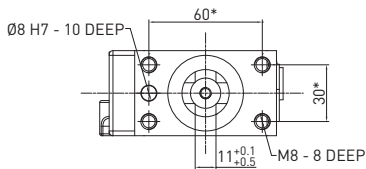
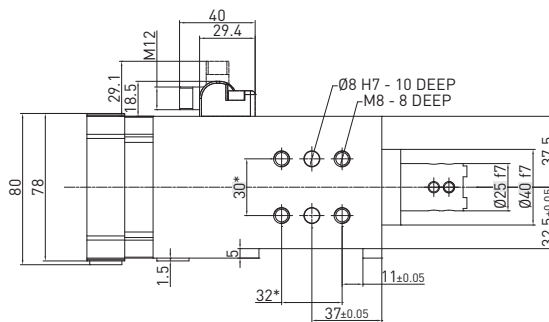
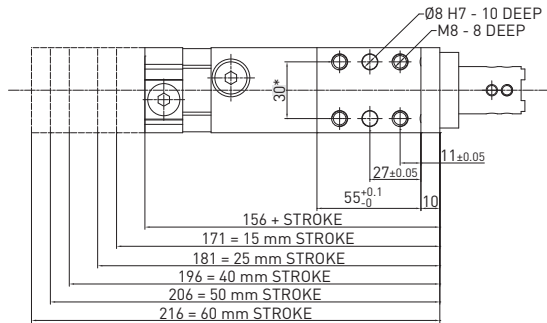
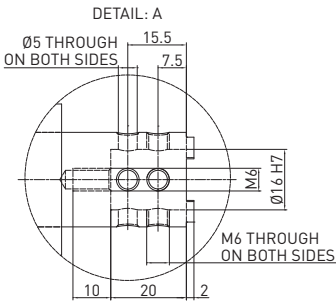


* DIMENSIONAL
TOLERANCE FOR
DOWEL HOLES: ±0.02

DIMENSIONAL
TOLERANCE FOR
THREADED HOLES: ±0.1

REV. 02 - 12/01/2018

RP50E _1 / Retractable locating pin package - Size 50 mm - iØ 16 mm cross-cut key rod termination



WEIGHT 1.85 kg
min. stroke version

WEIGHT 2.1 kg
max. stroke version

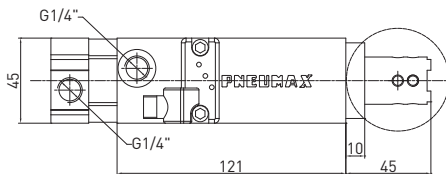
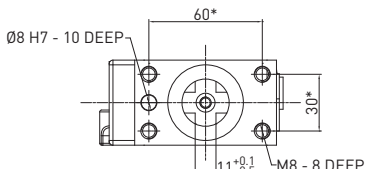
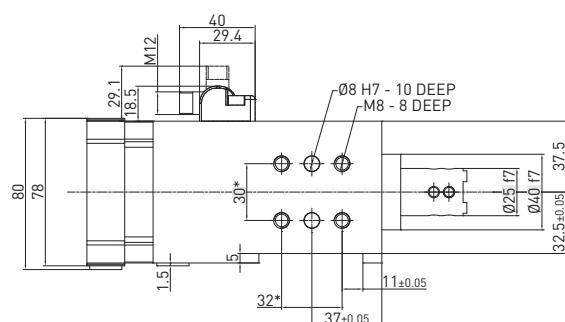
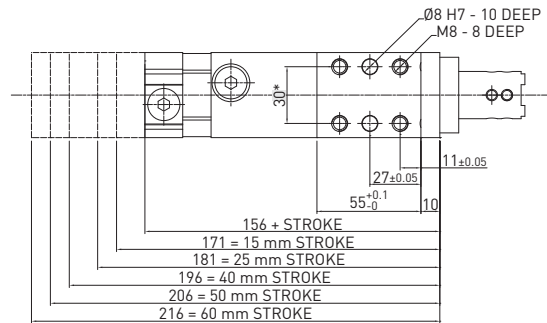
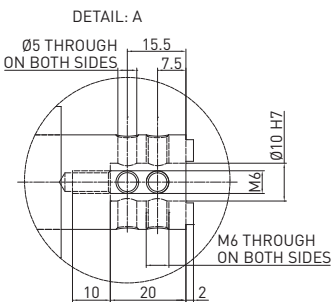
* DIMENSIONAL TOLERANCE FOR DOWEL HOLES: ±0.02

DIMENSIONAL TOLERANCE FOR THREADED HOLES: ±0.1

REV. 01 - 26/02/2016

LOCATING

RP50E _2 / Retractable locating pin package - Size 50 mm - iØ 10 mm cross-cut key rod termination



WEIGHT 1.85 kg
min. stroke version

WEIGHT 2.1 kg
max. stroke version

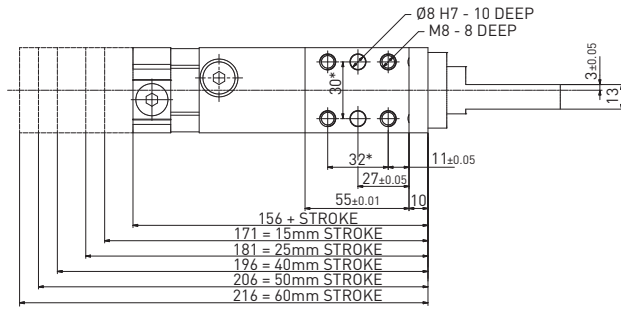
* DIMENSIONAL TOLERANCE FOR DOWEL HOLES: ±0.02

DIMENSIONAL TOLERANCE FOR THREADED HOLES: ±0.1

REV. 01 - 26/02/2016

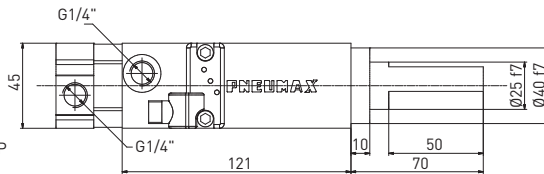
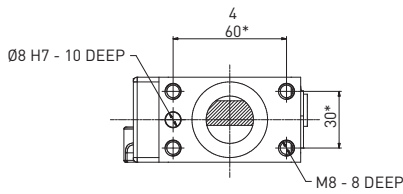
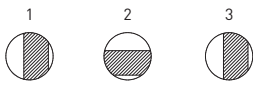
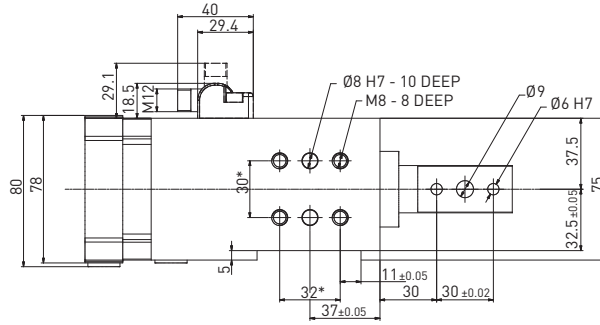
RP50E_3 / Retractable locating pin package - Size 50 mm - Rod termination for offset pins

LOCATING



WEIGHT 1.85 kg
min. stroke version

WEIGHT 2.1 kg
max. stroke version

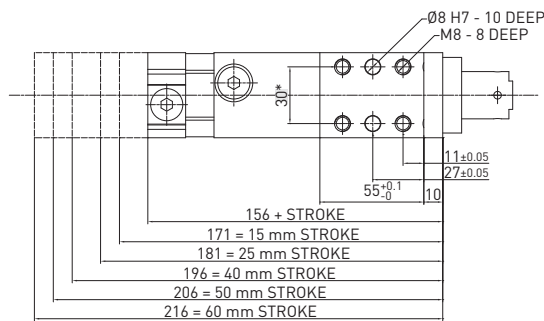
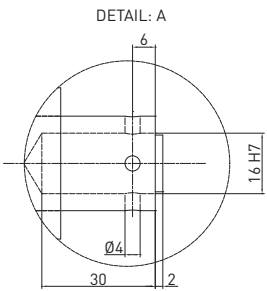


* DIMENSIONAL
TOLERANCE FOR
DOWEL HOLES: ± 0.02

DIMENSIONAL
TOLERANCE FOR
THREADED HOLES: ± 0.1

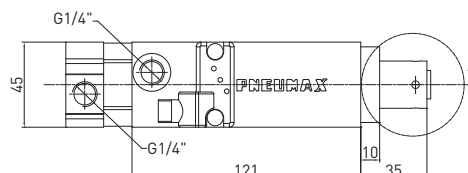
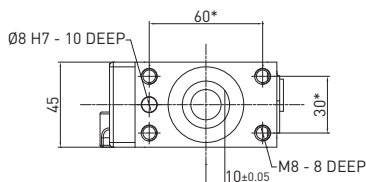
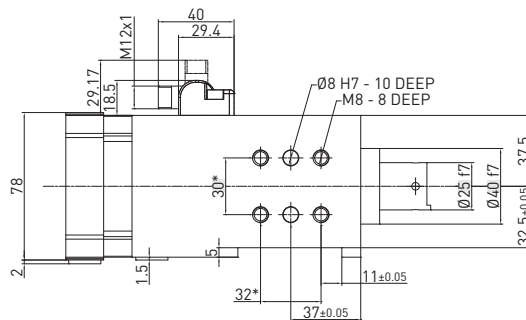
REV. 00 - 03/04/2015

RP50E_4 / Retractable locating pin package - Size 50 mm - Rod termination with key



WEIGHT 1.85 kg
min. stroke version

WEIGHT 2.1 kg
max. stroke version



* DIMENSIONAL
TOLERANCE FOR
DOWEL HOLES: ± 0.02

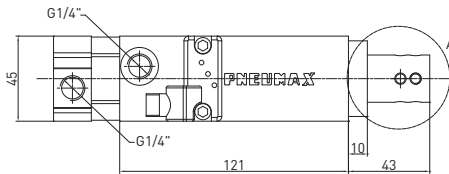
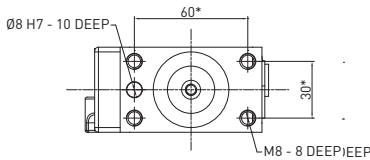
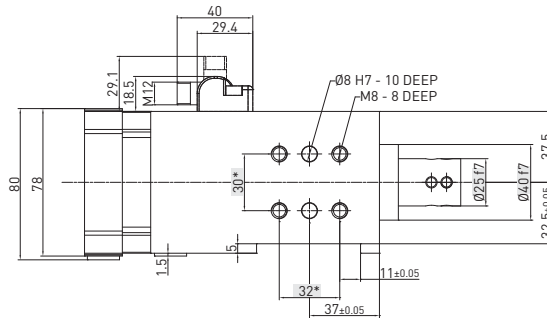
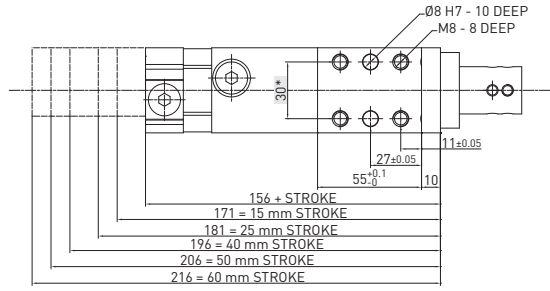
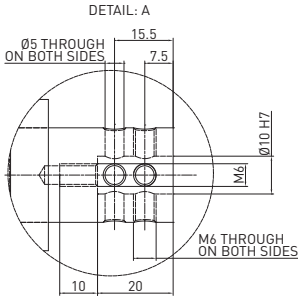
DIMENSIONAL
TOLERANCE FOR
THREADED HOLES: ± 0.1

REV. 02 - 31/03/2015

RP50E_5 / Retractable locating pin package - Size 50 mm - iØ 10 mm flat termination

WEIGHT 1.85 kg
min. stroke version

WEIGHT 2.1 kg
max. stroke version



* DIMENSIONAL TOLERANCE FOR DOWEL HOLES: ±0.02

DIMENSIONAL TOLERANCE FOR THREADED HOLES: ±0.1

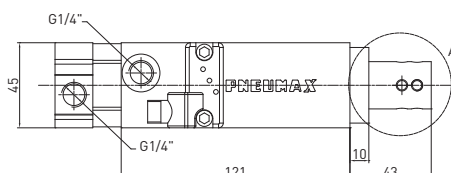
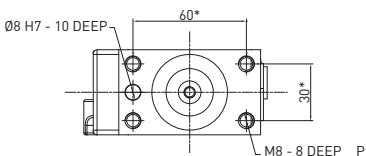
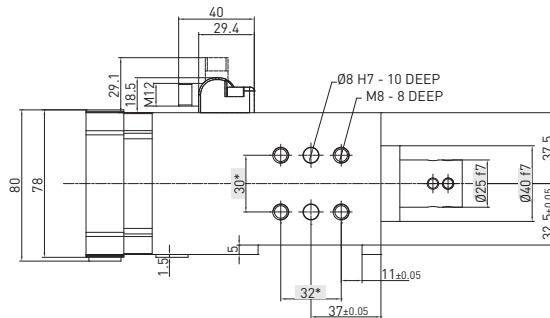
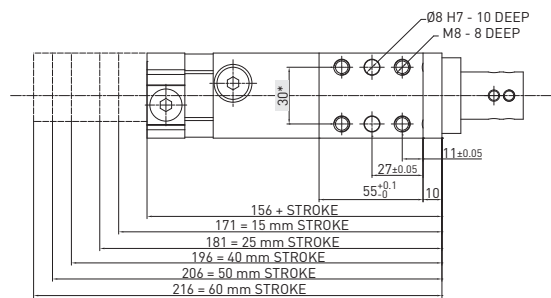
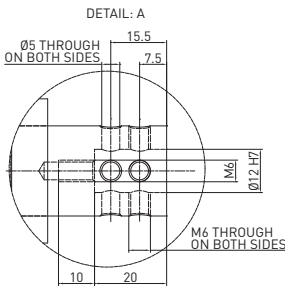
REV. 00 - 14/03/2016

LOCATING

RP50E_6 / Retractable locating pin package - Size 50 mm - iØ 12 mm flat termination

WEIGHT 1.85 kg
min. stroke version

WEIGHT 2.1 kg
max. stroke version



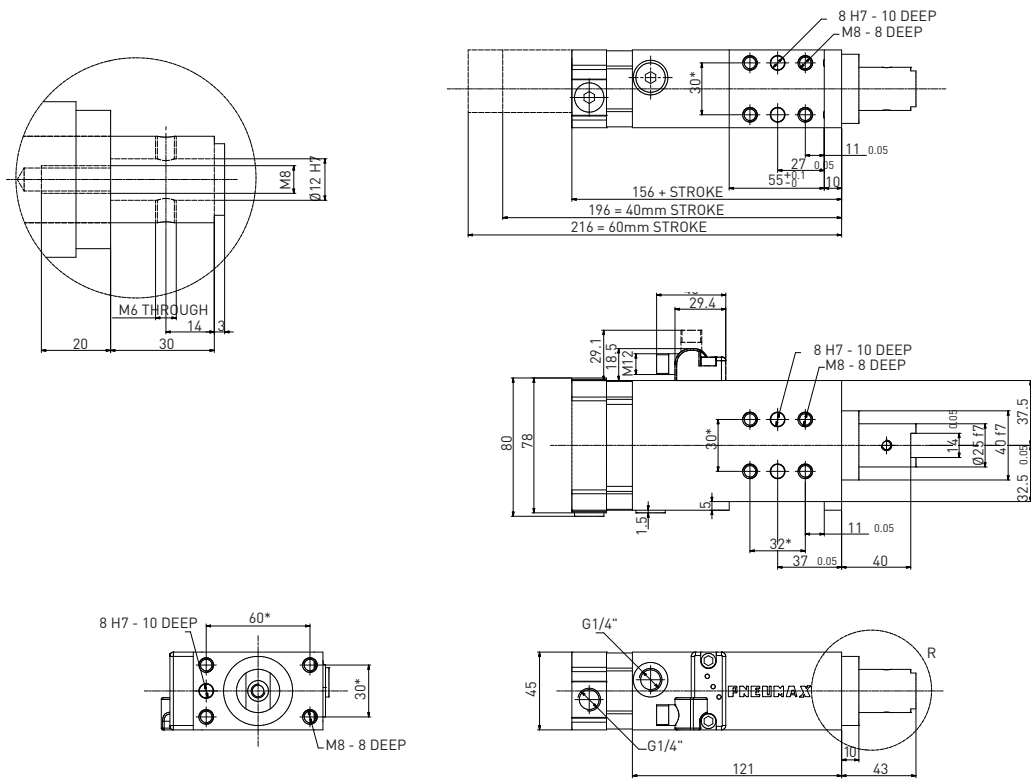
* DIMENSIONAL TOLERANCE FOR DOWEL HOLES: ±0.02

DIMENSIONAL TOLERANCE FOR THREADED HOLES: ±0.1

REV. 01 - 26/02/2016

RP50E_7 / Retractable locating pin package - Size 50 mm - iØ 12 mm CNOMO termination

LOCATING



WEIGHT 1.85 kg
min. stroke version

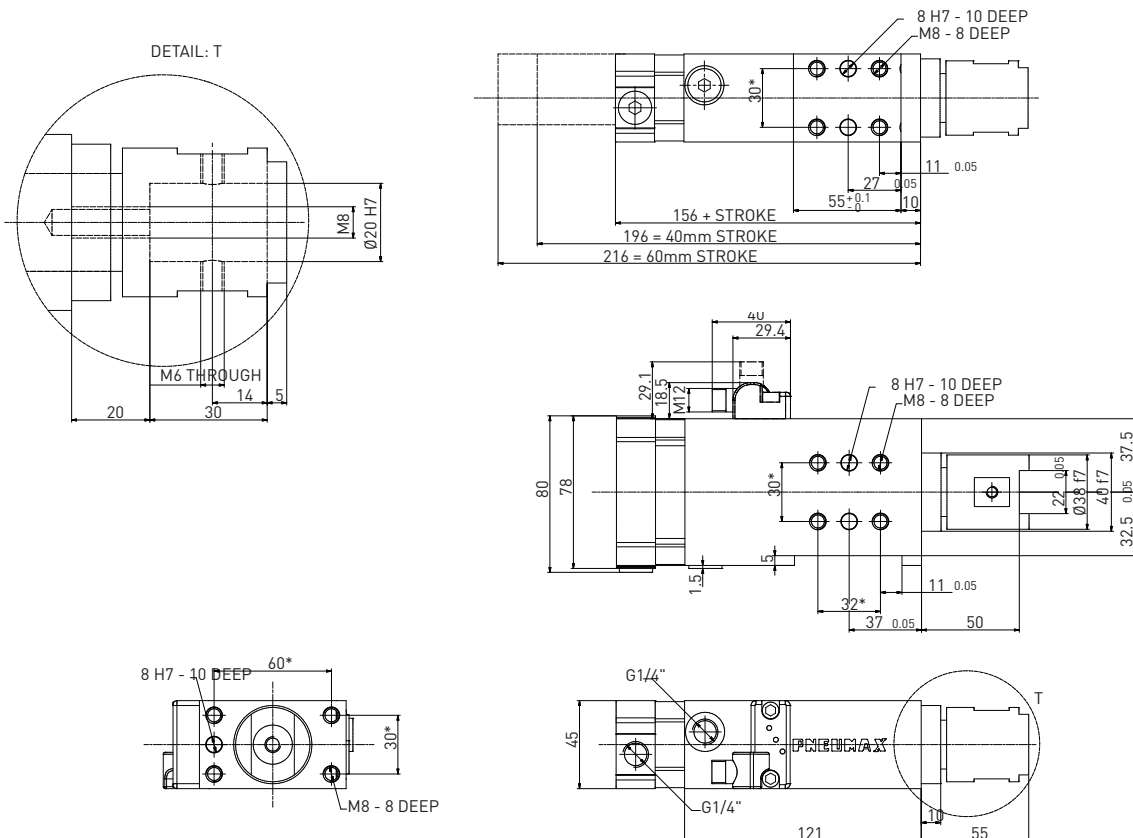
WEIGHT 2.1 kg
max. stroke version

* DIMENSIONAL
TOLERANCE FOR
DOWEL HOLES: ±0.02

DIMENSIONAL
TOLERANCE FOR
THREADED HOLES: ±0.1

REV. 00 - 26/09/2017

RP50E_8 / Retractable locating pin package - Size 50 mm - iØ 20 mm CNOMO termination



WEIGHT 1.85 kg
min. stroke version

WEIGHT 2.1 kg
max. stroke version

* DIMENSIONAL
TOLERANCE FOR
DOWEL HOLES: ±0.02

DIMENSIONAL
TOLERANCE FOR
THREADED HOLES: ±0.1

REV. 00 - 26/09/2017

RD250E_3 / Retractable locating pin package - Size 50 mm - Rod termination for offset pins with manual operation

LOCATING

WEIGHT 1.85 kg
min. stroke version

WEIGHT 3.1 kg
max. stroke version

Handle swivel angle

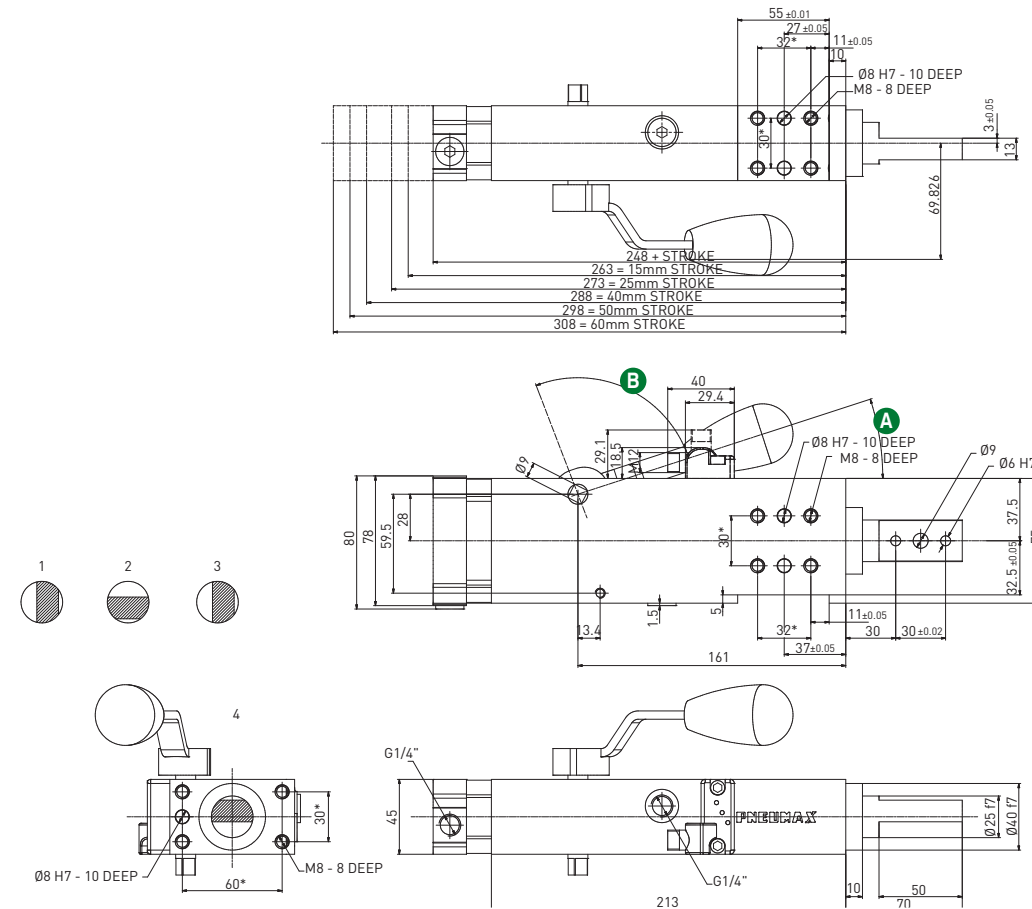
Stroke	A Handle swivel angle	B Handle swivel angle
15	90°	18°
25	70°	38°
40	42°	76°
50	25°	83°
60	15°	93°

Max Hand Force: 200 N

* DIMENSIONAL TOLERANCE FOR DOWEL HOLES: ±0.02

DIMENSIONAL TOLERANCE FOR THREADED HOLES: ±0.1

REV. 03 - 05/03/2018



RD250E_4 / Retractable locating pin package - Size 50 mm - Rod termination with key with manual operation

WEIGHT 2.85 kg
min. stroke version

WEIGHT 3.1 kg
max. stroke version

Handle swivel angle

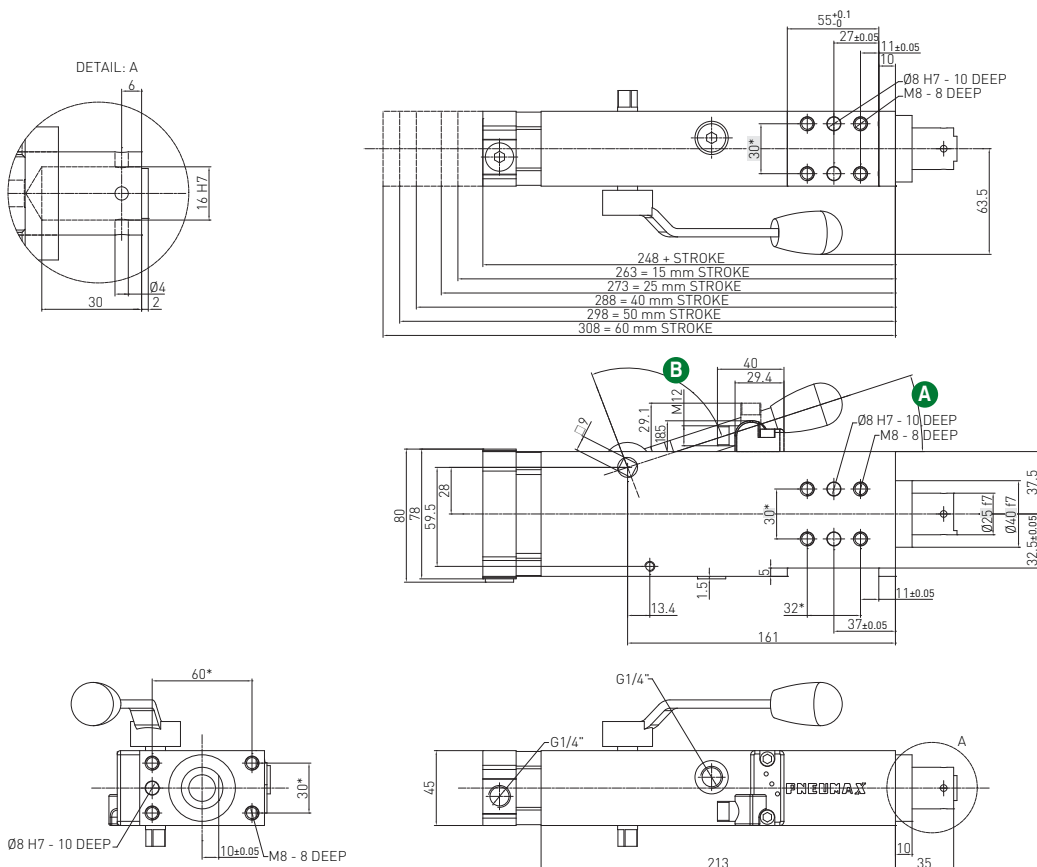
Stroke	A Handle swivel angle	B Handle swivel angle
15	90°	18°
25	70°	38°
40	42°	76°
50	25°	83°
60	15°	93°

Max Hand Force: 200 N

* DIMENSIONAL TOLERANCE FOR DOWEL HOLES: ±0.02

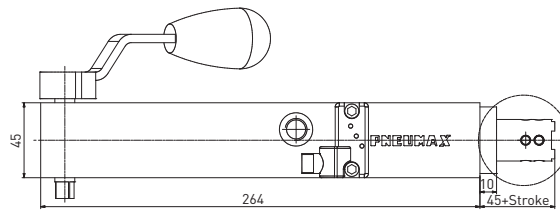
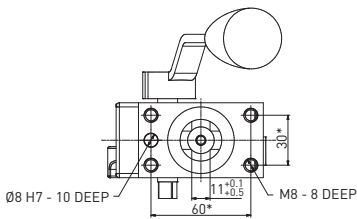
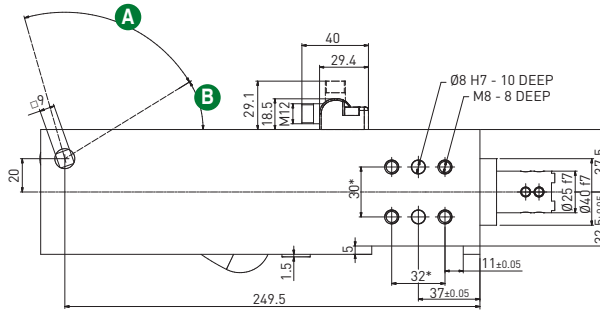
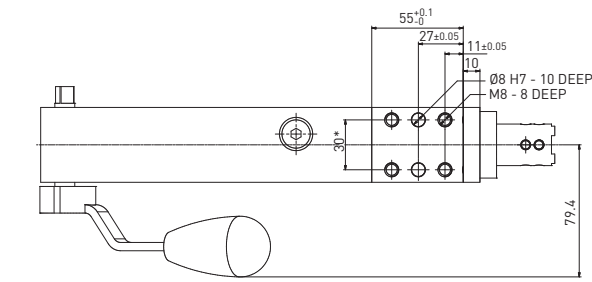
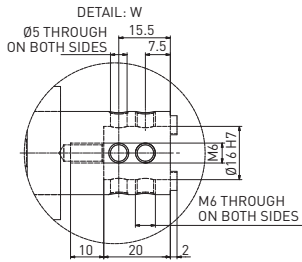
DIMENSIONAL TOLERANCE FOR THREADED HOLES: ±0.1

REV. 04 - 05/03/2018



RM250 _1 / Manual retractable locating pin package - Size 50 mm - iØ 16 mm cross-cut key rod termination

WEIGHT 3.2 kg



Max Hand Force: 200 N

* DIMENSIONAL TOLERANCE FOR DOWEL HOLES: ±0.02

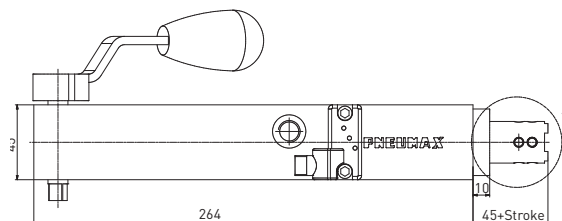
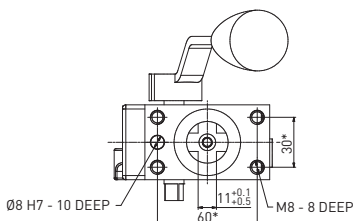
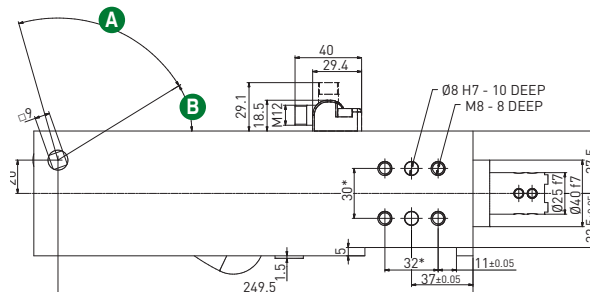
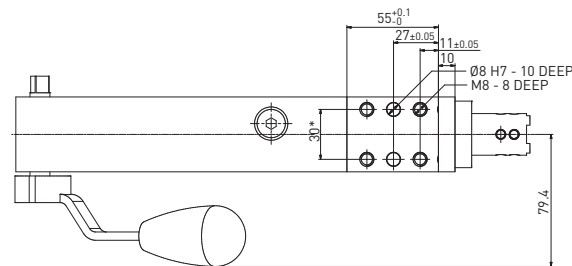
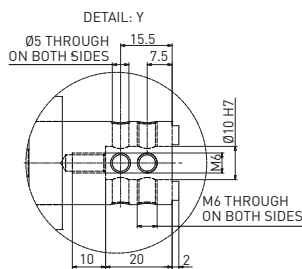
DIMENSIONAL TOLERANCE FOR THREADED HOLES: ±0.1

REV. 00 - 27/01/2022

LOCATING

RM250 _2 / Manual retractable locating pin package - Size 50 mm - iØ 16 mm cross-cut key rod termination

WEIGHT 3.2 kg



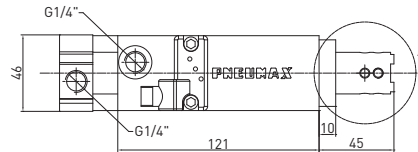
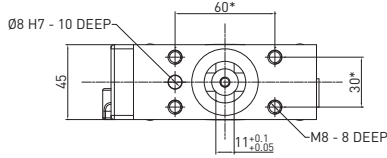
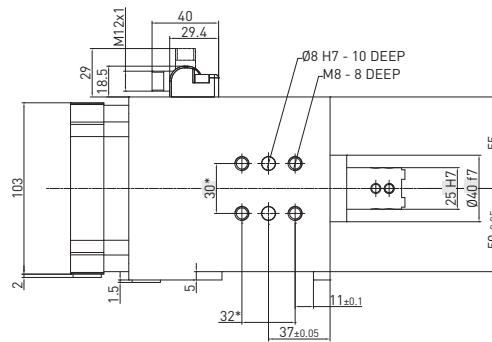
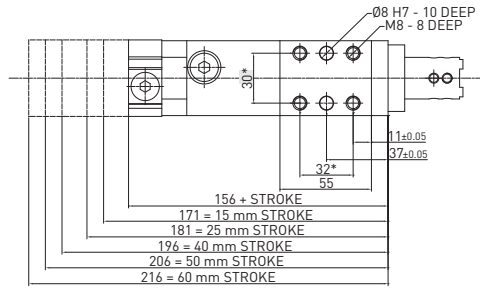
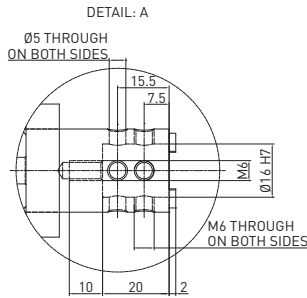
Max Hand Force: 200 N

* DIMENSIONAL TOLERANCE FOR DOWEL HOLES: ±0.02

DIMENSIONAL TOLERANCE FOR THREADED HOLES: ±0.1

REV. 00 - 27/01/2022

RP63E _1 / Retractable locating pin package - Size 63 mm - iØ 16 mm cross-cut key rod termination



WEIGHT 2.45 kg
min. stroke version

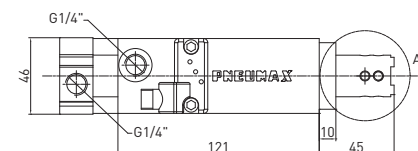
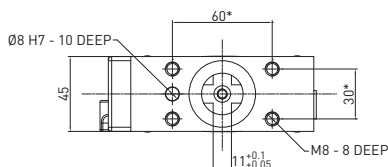
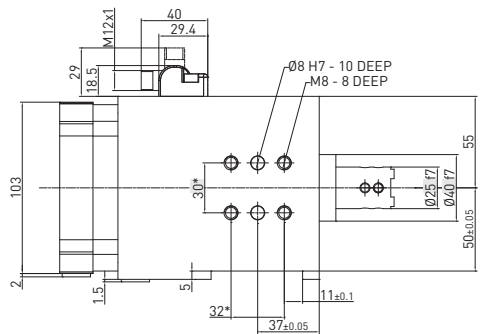
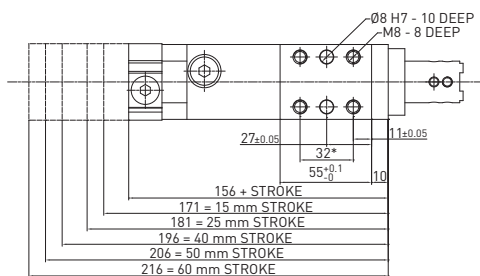
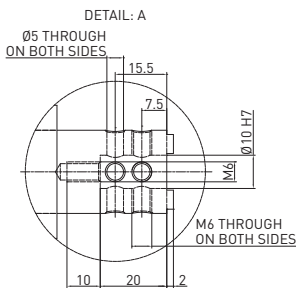
WEIGHT 2.75 kg
max. stroke version

* DIMENSIONAL TOLERANCE FOR DOWEL HOLES: ±0.02

DIMENSIONAL TOLERANCE FOR THREADED HOLES: ±0.1

REV. 01 - 29/02/2016

RP63E _2 / Retractable locating pin package - Size 63 mm - iØ 10 mm cross-cut key rod termination



WEIGHT 2.45 kg
min. stroke version

WEIGHT 2.75 kg
max. stroke version

* DIMENSIONAL TOLERANCE FOR DOWEL HOLES: ±0.02

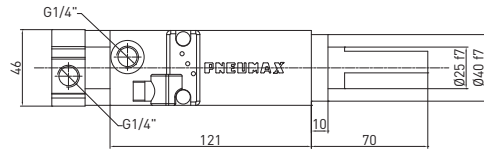
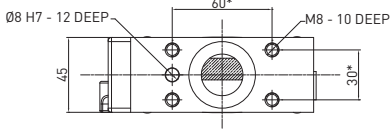
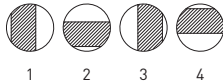
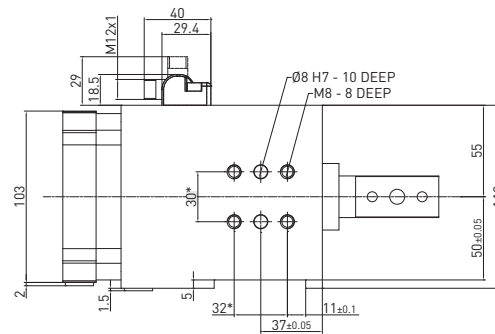
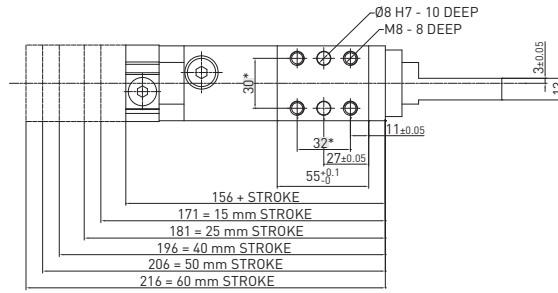
DIMENSIONAL TOLERANCE FOR THREADED HOLES: ±0.1

REV. 01 - 29/02/2016

RP63E_3 / Retractable locating pin package - Size 63 mm - Rod termination for offset pins

WEIGHT 2.45 kg
min. stroke version

WEIGHT 2.75 kg
max. stroke version



* DIMENSIONAL
TOLERANCE FOR
DOWEL HOLES: ±0.02

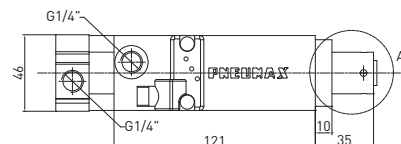
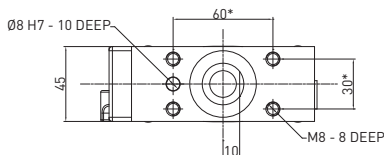
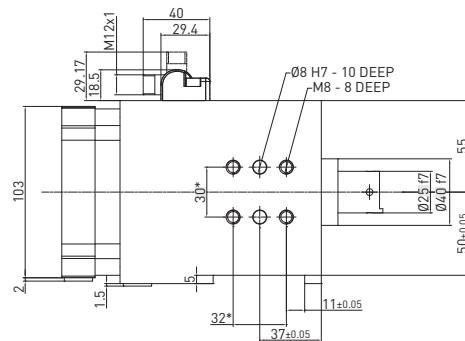
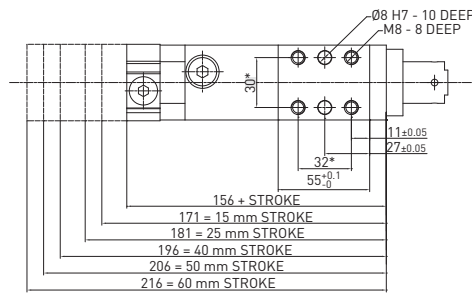
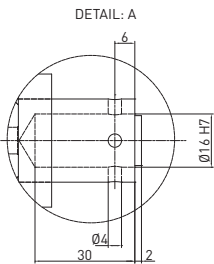
DIMENSIONAL
TOLERANCE FOR
THREADED HOLES: ±0.1

REV. 00 - 31/03/2015

RP63E_4 / Retractable locating pin package - Size 63 mm - Rod termination with key

WEIGHT 2.45 kg
min. stroke version

WEIGHT 2.75 kg
max. stroke version



* DIMENSIONAL
TOLERANCE FOR
DOWEL HOLES: ±0.02

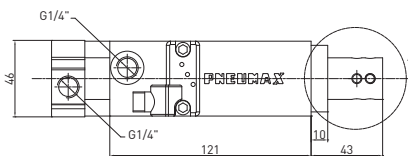
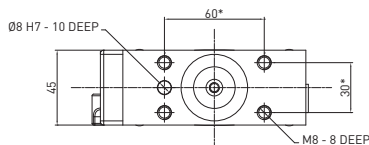
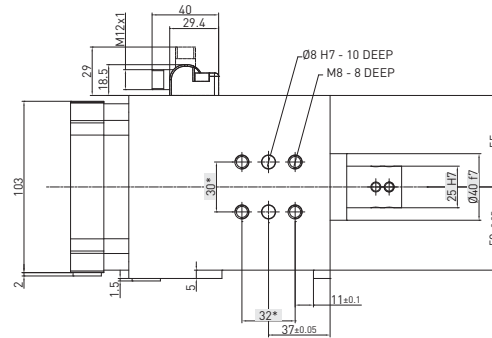
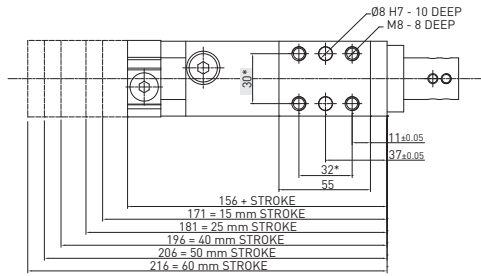
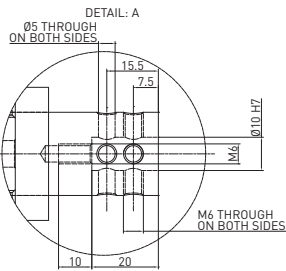
DIMENSIONAL
TOLERANCE FOR
THREADED HOLES: ±0.1

REV. 00 - 31/03/2015

RP63E_5 / Retractable locating pin package - Size 63 mm - iØ 10 mm flat termination

WEIGHT 2.45 kg
min. stroke version

WEIGHT 2.75 kg
max. stroke version



* DIMENSIONAL TOLERANCE FOR DOWEL HOLES: ±0.02

DIMENSIONAL TOLERANCE FOR THREADED HOLES: ±0.1

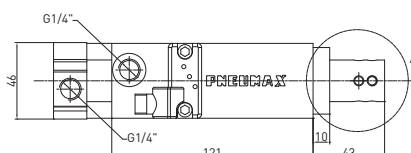
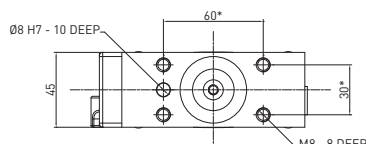
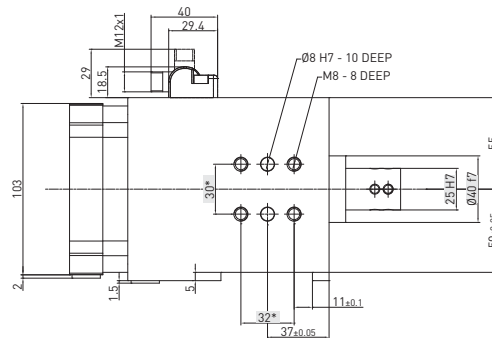
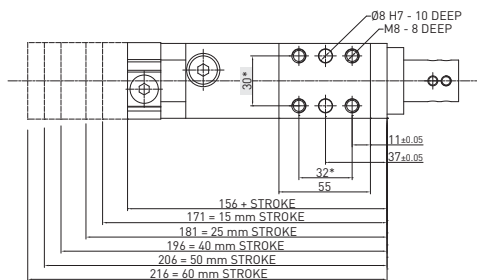
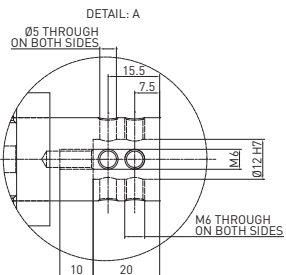
REV. 00 -15/03/2016

LOCATING

RP63E_6 / Retractable locating pin package - Size 63 mm - iØ 12 mm flat termination

WEIGHT 2.45 kg
min. stroke version

WEIGHT 2.75 kg
max. stroke version



* DIMENSIONAL TOLERANCE FOR DOWEL HOLES: ±0.02

DIMENSIONAL TOLERANCE FOR THREADED HOLES: ±0.1

REV. 00 -15/03/2016