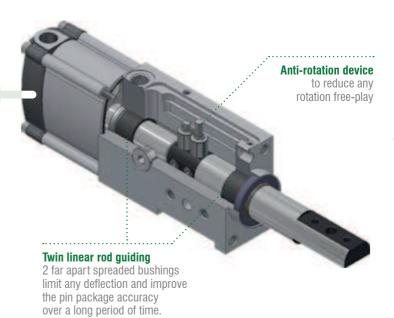
Locating

High locating accuracy.

High protection against welding debris and corrosion.







High positioning accuracy level

Precise guiding through 2 far-apart spreaded bushings for an optimal support of the rods > twin piston rod guide

- Low deflection
- · Efficient anti rotation mechanism

Long life built-in components in rust prevention

- No weld covers or bellows required
- Steel and brass rod scraper to prevent welding debris from entering the pin package
- Chrome rod coating as a protection against adhering weld sparks

High resistance to welding debris and corrosion

Anti-rotation system to reduce any rotation free-play

Locating products

Dual rods

- Extra-light products
- · Short body length
- Clear design with user-friendly surfaces and no dirt or welding deposit traps



High performance pin package

The heat generated from any welding process can cause a localized deformation in the workpiece when the metal cools, some parts could contract more than others, leaving residual stress.

To improve the process reliability, a higher level of pull force to disengage the pin can be required to overcome the tensions in the workpiece.





Nano pin packages





2-sided mounting option



mount mount

Supply ports on 3 sides



G ports on 3 sides

Cnomo

Pin packages according to Cnomo standard also available with manual operation.





F-Series



Retractable locating pin packages with dual rods

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 40-41 mm

Max deflection

Stroke	Load (kg)	Load position A deviation (mm)	Load position B deviation (mm)	Load position deviation (mm)
	0.5	0.004	0.021	0.003
40 mm	1	0.01	0.05	0.01
	1.5	0.015	0.08	0.019
	2	0.022	0.122	0.028
	2.5	0.03	0.158	0.037
	3	0.035	0.195	0.046
20 mm	0.5	0.004	0.013	0.005
	1	0.009	0.035	0.008
	1.5	0.013	0.053	0.011
	2	0.017	0.083	0.017
	2.5	0.021	0.107	0.021
	3	0.026	0.13	0.025

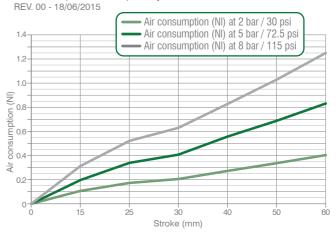
• Functional data (at 5 bar / 72.5 psi)

Thrust force	430 N
Pull force	630 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

Air consumption for complete cycle



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 deviation (mm)
	0.5	0.003	0.009	0
	1	0.007	0.026	0.001
	1.5	0.013	0.043	0.007
60	2	0.017	0.063	0.009
mm	2.5	0.022	0.085	0.018
	3	0.026	0.109	0.023
	3.5	0.031	0.129	0.033
	4	0.036	0.148	0.042

Air consumption Air consumption for complete cycle REV. 00 - 18/06/2015 Air consumption (NI) at 2 bar / 30 psi · Air consumption (NI) at 5 bar / 72.5 psi Air consumption (NI) at 8 bar / 115 psi 3.0 2.5 consu 1.0 Air Stroke (mm)

• Functional data (at 5 bar / 72.5 psi)

Thrust force	430 N
Pull force	630 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 NO flow valve required < 0.8 s

Load position A Load position B Load position C Horizontal mounting Horizontal mounting Vertical mounting position of the position of the position of the retractable locating retractable locating retractable locating pin/load centre pin/load centre at 100 pin/load centre at 100 on the rod mm from the rod axis mm from the rod axis 100 mm . . . 100 mm

Ordering string

F-Series 40-41

PORTS

F P 40 E 20 3 **VERSION** = Retractable locating pin package with dual rod **OPERATION P** = pneumatic SIZE **40** = \emptyset 40 mm mounting pattern 35x25 mm 41 = Ø 40 mm mounting pattern 30x25 mm **SENSOR** E = electronic sensor with M12 swivel connector - PNP = electronic sensor with M12 swivel connector - NPN Ν = no sensor В = electronic sensor with M8 swivel connector - PNP **STROKE** 20 = 20 mm40 = 40 mm**ROD TERMINATION** = rod termination type 3 with improved radius = rod termination type 7 with improved radius 3 = rod termination for offset pins

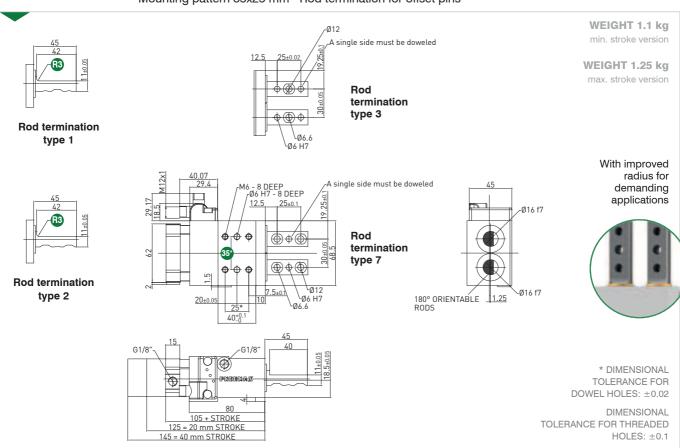
G = G thread - BSPP

= rod termination for offset pins - with 2 dowel holes (see datasheet)

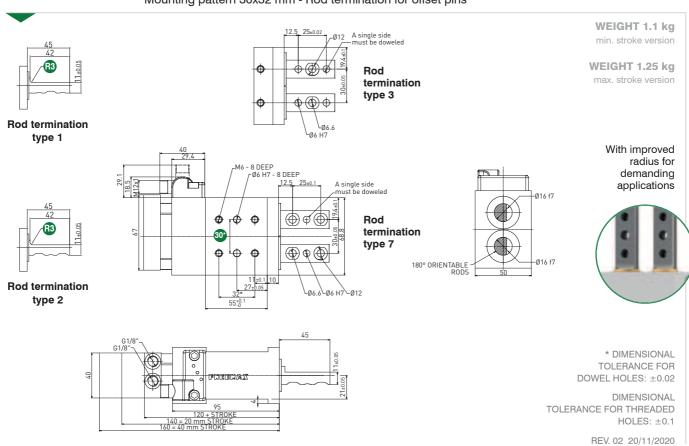
Ordering string F P 63 E 60 3 G F-Series 63 **VERSION F** = Retractable locating pin package with dual rod **OPERATION P** = pneumatic **D2** = pneumtic with manul operation SIZE $63 = \emptyset 63 \text{ mm}$ **SENSOR E** = electronic sensor with M12 swivel connector - PNP = electronic sensor with M12 swivel connector - NPN **N** = no sensor **B** = electronic sensor with M8 swivel connector - PNP **STROKE** 15 = 15 mm25 = 25 mm**40** = 40 mm 50 = 50 mm60 = 60 mm**ROD TERMINATION** 1 = rod termination type 3 with improved radius **3** = rod termination for offset pins **PORTS G** = G thread – BSPP

REV. 02 - 28/06/2018

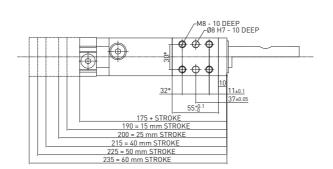
FP40E__1/2/3/7 / Retractable locating pin package with dual rod - Size 40 mm Mounting pattern 35x25 mm - Rod termination for offset pins



FP41E__1/2/3/7 / Retractable locating pin package with dual rod - Size 41 mm Mounting pattern 30x32 mm - Rod termination for offset pins



$\textbf{FP63E}__1/3 \ / \ \textbf{Retractable locating pin package with dual rod} \ - \ \textbf{Size 63 mm} \ - \ \textbf{Rod termination for offset pins}$



WEIGHT 3.35 kg

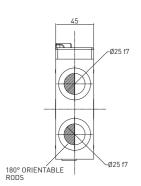
min. stroke version

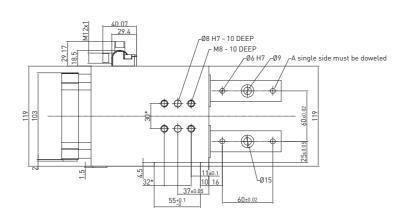
WEIGHT 3.65 kg

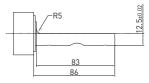
max. stroke version



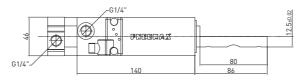








Rod termination 1



Rod termination 3

* DIMENSIONAL TOLERANCE FOR DOWEL HOLES: ±0.02

DIMENSIONAL TOLERANCE FOR THREADED HOLES: ±0.1

REV. 01 - 10/04/2017

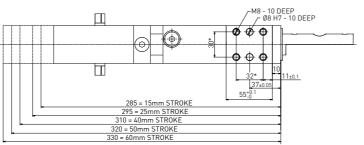
FD263E_ _ 1/3 / Retractable locating pin package with dual rod - Size 63 mm - Rod termination for offset pins



Ø8 H7 - 10 DEEP / M8 - 10 DEEP / Ø6 H7

 $\bullet \bullet \bullet$

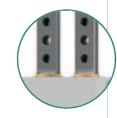
37±0.05 55±0.1 ● ◆

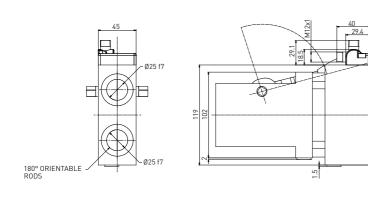


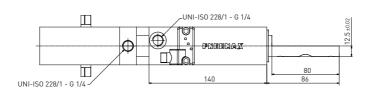
Max Hand Force: 200 N

WEIGHT 1.1 kg

With improved radius for demanding applications







* DIMENSIONAL TOLERANCE FOR DOWEL HOLES: ±0.02

REV. 00 - 02/04/2020