

86P40/86P60

Pneumatic Pin Package | Single Shaft | Ordering and Technical Information

86P40

-2

02

C8

G1

A

-K

Ceramic Option
for Piston Rod
K

Base Model

Description

86P40

40 mm Cylinder (G1/8 Port)

86P60

63 mm Cylinder (G1/4 Port)

Hand Lever

Description

-2

No Handle

H2

Handle for Manual
Control for 86P60 only
(excludes **F, 8** stroke option)

H2



Piston Rod

Description

01

Ø16 mm Inside Hole (Standard)

02

Ø16 mm M6 Threaded Inside Hole, Cross Groove

04

NAAMS Standard

A4

NAAMS Standard Rotated 180°

B4

NAAMS Standard Rotated 90°

C4

NAAMS Standard Rotated 270°

05

Ø10 mm Inside Hole, Cross Groove

07

Ø16 mm Inside Hole, NAAMS

09

Ø20 mm Straight Groove

10

Ø12 mm Straight Groove

01

02

04

A4

C4

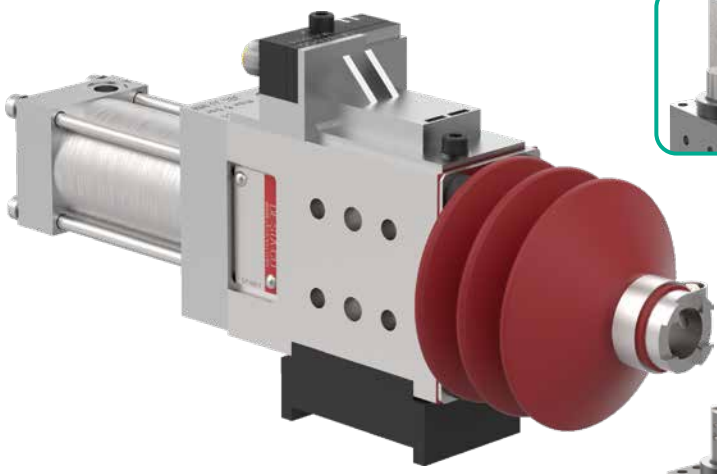
B4

05

07

09

10



86P40

86P60

Stroke Option:

Max Pushing Force at 5 bar [72 psi]:

Max Retracting Force at 5 bar [72 psi]:

A, B, 2, 4

C, 6

F, 8

620 N [139 lbf]

520 N [117 lbf]

A, B, 2, 4

C, 6

F, 8

1550 N [348 lbf]

1400 N [315 lbf]

 **DESTACO**
a  company

PC-PKG | 5

Dimensions and technical information are subject to change without notice

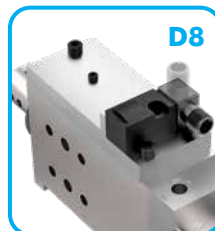
Accessories	Description
00	No Accessories
H1	Adaptor (86P0-20000H1)
E1	External Guide for A, B (82ZB-009-2, Ceramic 82ZB-181-1)
E2	External Guide for C (82ZB-090-1, Ceramic 82ZB-105-1)
E4	External Guide for F (82ZB-180-1, Ceramic 82ZB-179-1)
J1	External Guide for A, B (82ZB-184-1, Ceramic 82ZB-183-1) + Adaptor (86P0-20000H1)
F1	Bellows for piston rods 02, 05, 07, 10 in strokes A, B, 2, 4 (82ZB-013-3)
G1	Bellows F1 + Adaptor H1 for piston rods 02, 05, 07, 10 in strokes A, B, 2, 4



Stroke	Description
	Anti-Twist Device/Low Accuracy
B	20 mm Stroke (8MF-071-1)
A	40 mm Stroke (8CE-231-1)
C	60 mm Stroke (8CE-231-1)
F	80 mm Stroke (8CE-231-1)
	Anti-Twist Device
2	20 mm Stroke (86P0-20000002)
4	40 mm Stroke (86P0-20000004)
6	60 mm Stroke (86P0-20000006)
8	80 mm Stroke (86P0-20000008)



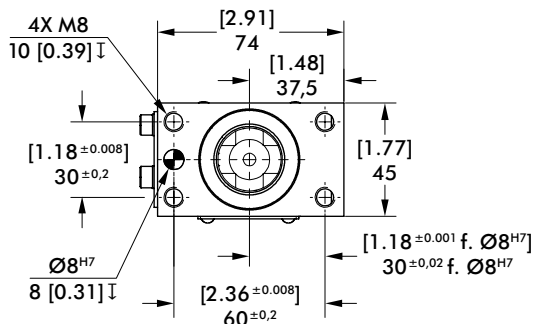
Sensor	Description
L4	Cover Plate for A, B, 2, 4 (86P0-200L4)
L6	Cover Plate for C, 6 (86P0-200L6)
L8	Cover Plate for F, 8 (86P0-200L8)
C8	Inductive Sensing System with M12x1 Connector for A, B, 2, 4 (86P0-200C8), for C, 6 (86P0-200C8006), for F, 8 (86P0-200C8008)
D8	Inductive Sensing System with 90° M12x1 Swivel Connector for A, B, 2, 4 (86P0-200D8), for C, 6 (86P0-200D8006), for F, 8 (86P0-200D8008)



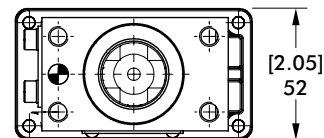
86P40-2/86P60-2

Pneumatic Pin Package | Single Shaft | Dimensions and Technical Specifications

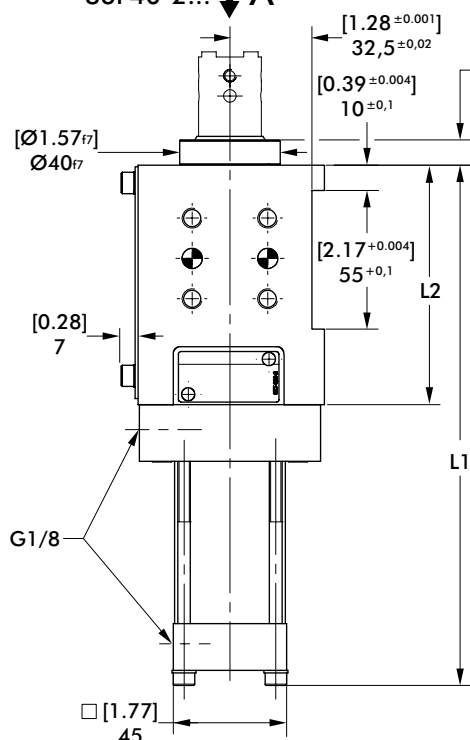
View "A"



View "B"

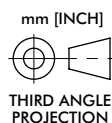
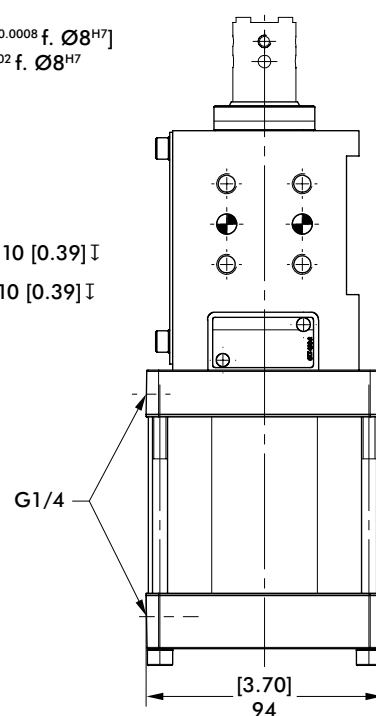
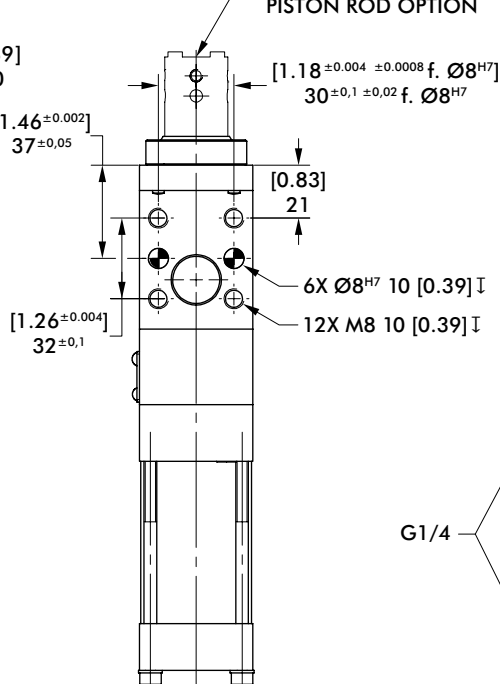


86P40-2... ↓ A



SHOWN WITH 02 PISTON ROD OPTION

86P60-2... ↓ B

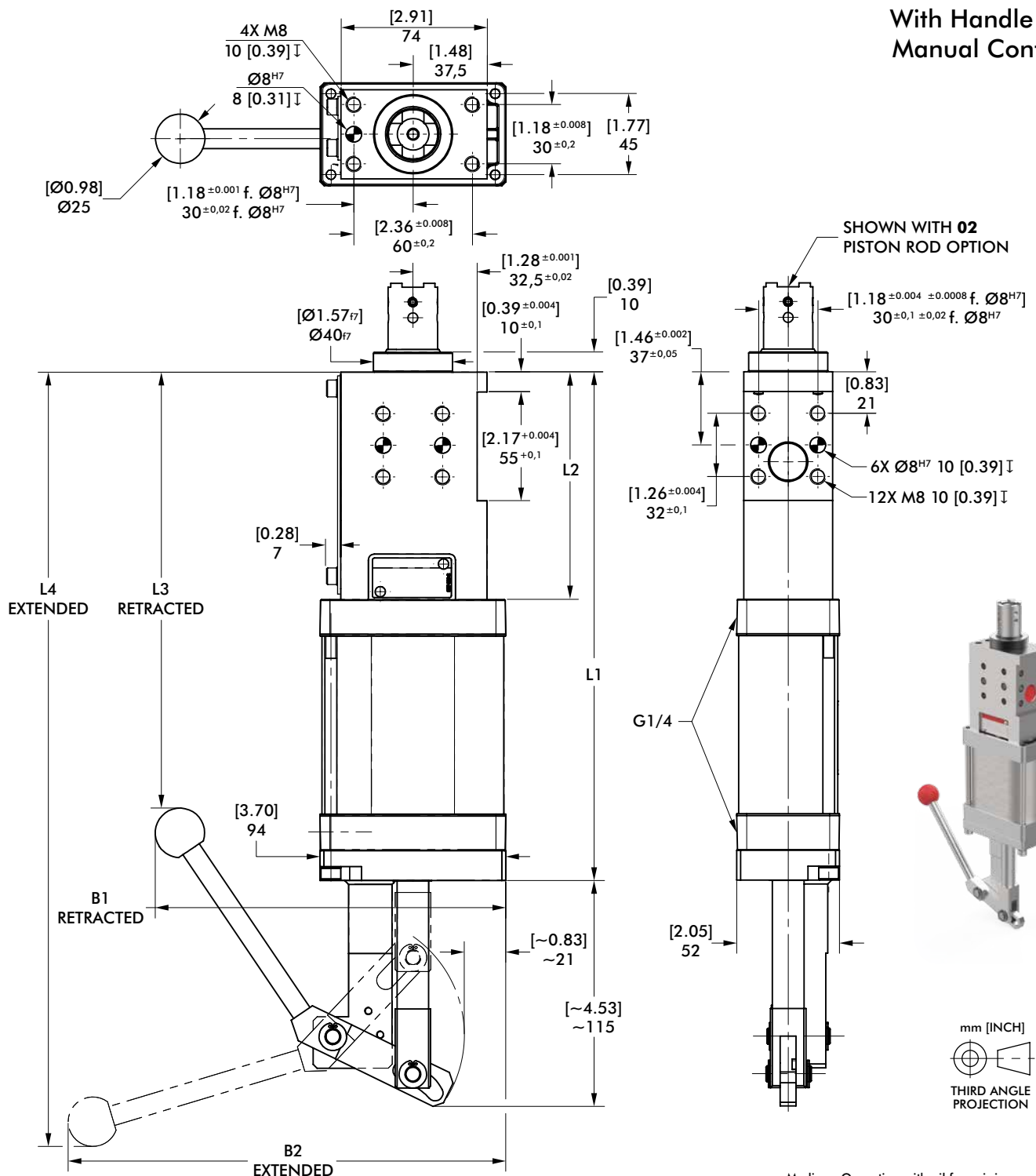


Medium: Operation with oil free air is permissible

Base Model	Stroke Option	Stroke +2 [0.08] mm [in]	L1 mm [in]	L2 mm [in]	Pushing force at 5 bar N [lbs]	Retraction force at 5 bar N [lbs]	Max. operating pressure bar [psi]	Piston Ø mm [in]	Weight Kg [lbs]	Air consumption per double stroke at 5 bar dm ³ [ft ³]
86P40	B, 2	20 [0.79]	207 [8.15]	95 [3.74]	620 [139]	520 [117]	6 [87]	40 [1.57]	1,6 [3.52]	0,5 [0.017]
	A, 4	40 [1.57]								0,7 [0.025]
	C, 6	60 [2.36]							2,0 [4.40]	0,9 [0.032]
	F, 8	80 [3.15]							2,4 [5.29]	1,0 [0.035]
86P60	B, 2	20 [0.79]	213 [8.39]	95 [3.74]	1550 [348]	1400 [315]	6 [87]	63 [2.48]	2,0 [4.40]	0,8 [0.028]
	A, 4	40 [1.57]								1,4 [0.049]
	C, 6	60 [2.36]							2,5 [5.51]	2,0 [0.070]
	F, α8	80 [3.15]							2,8 [6.17]	2,5 [0.088]

Pneumatic Pin Package | Single Shaft | Dimensions and Technical Specifications

With Handle for Manual Control



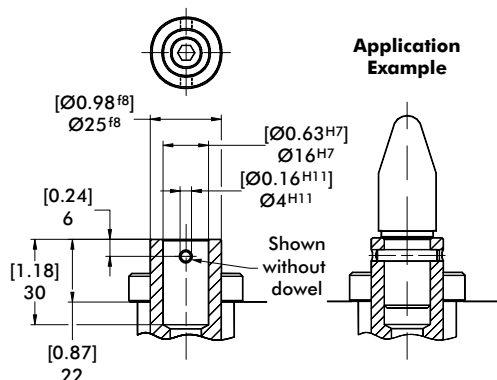
Medium: Operation with oil free air is permissible

Base Model	Stroke Option	Stroke +2 [0.08] mm [in]	B1 (retracted) mm [in]	B2 (extended) mm [in]	L1 mm [in]	L2 mm [in]	L3 (retracted) mm [in]	L4 (extended) mm [in]	Weight Kg [lbs]
86P60H2	B, 2	20 [0.79]	177 [6.97]	216 [8.50]	217 [8.54]	95 [3.74]	179 [7.05]	253 [9.96]	2,3 [5.07]
	A, 4	40 [1.57]		229 [9.02]	217 [8.54]	95 [3.74]	179 [7.05]	306 [12.05]	
	C, 6	60 [2.36]		222 [8.74]	257 [10.12]	115 [4.53]	220 [8.66]	392 [15.43]	2,6 [5.73]

86P40/86P60 PISTON RODS

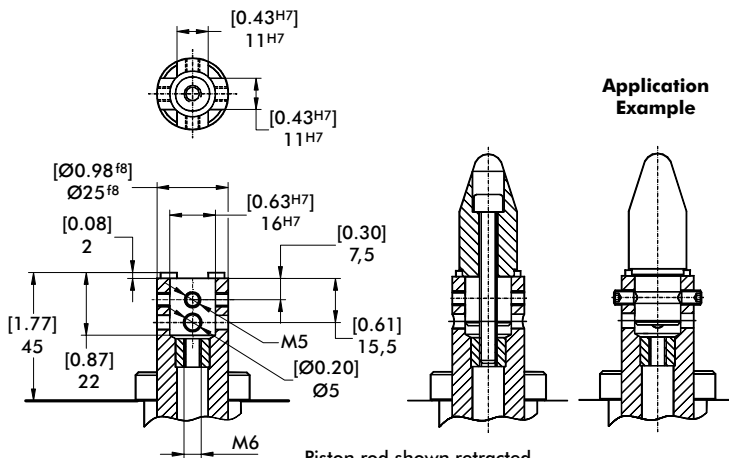
Pneumatic Pin Package | Single Shaft | Dimensions and Technical Specifications

01 Ø16 mm Inside Hole



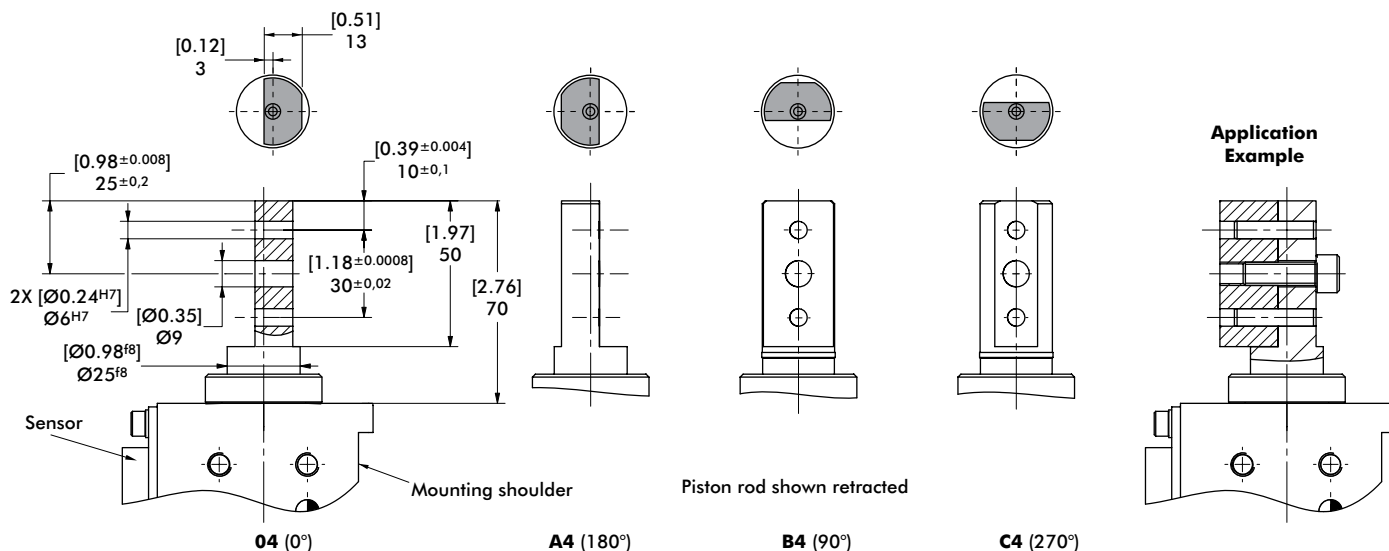
Piston rod shown retracted

02 Ø16 mm M6 Threaded Inside Hole, Cross Groove



Piston rod shown retracted

04, A4, B4, C4 NAAMS Standard



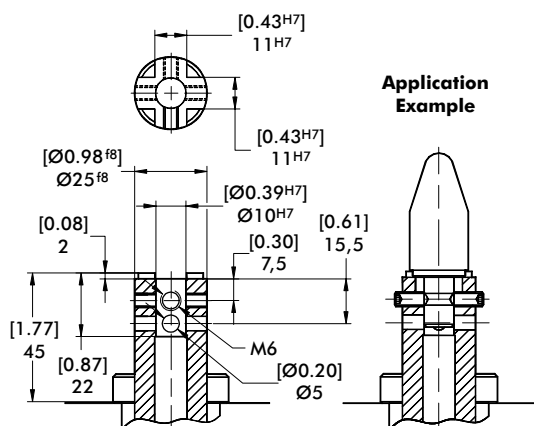
04 (0°)

A4 (180°)

B4 (90°)

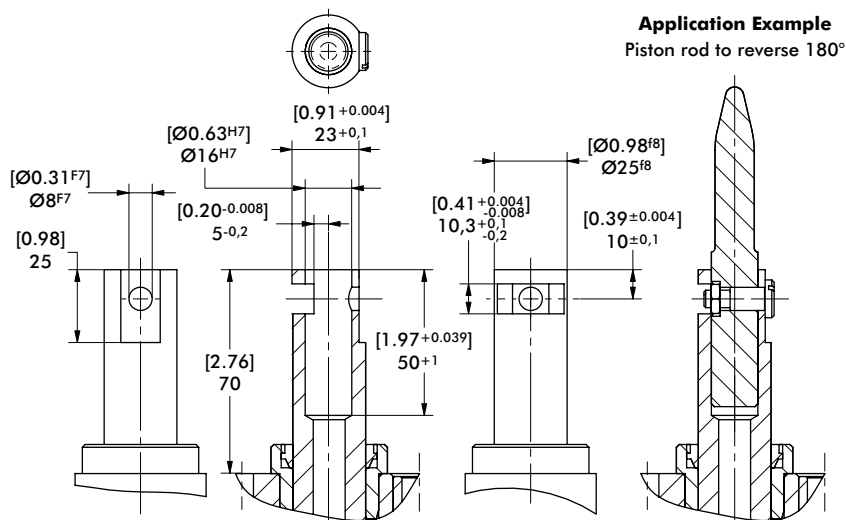
C4 (270°)

05 Ø10 mm Inside Hole, Cross Groove



Piston rod shown retracted

07 Ø16 mm Inside Hole, NAAMS

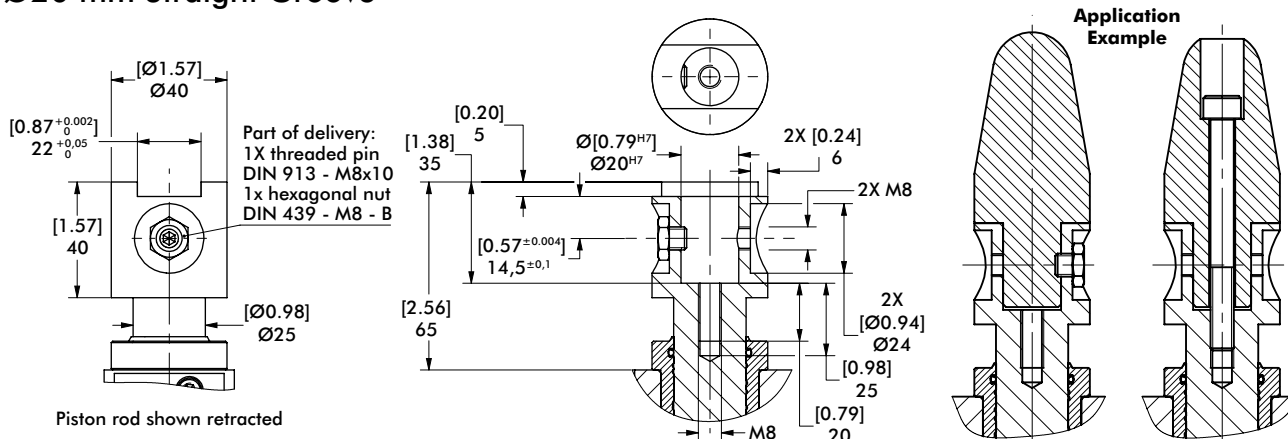


Piston rod shown retracted

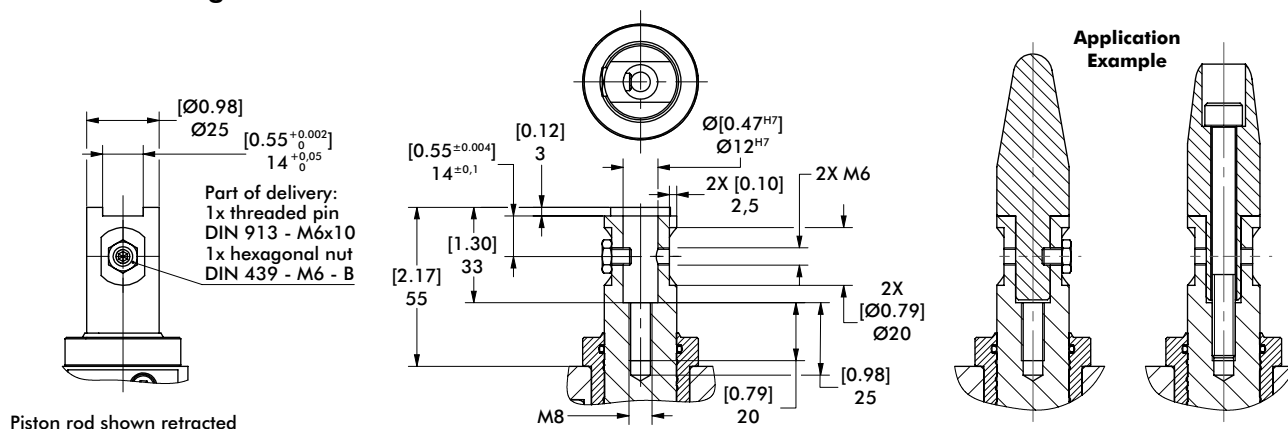
86P40/86P60 PISTON RODS

Pneumatic Pin Package | Single Shaft | Dimensions and Technical Specifications

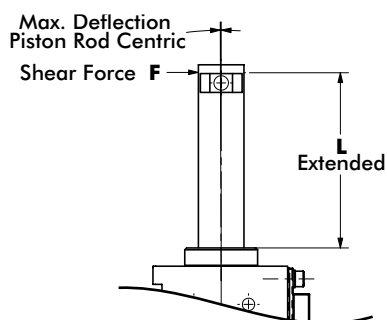
09 Ø20 mm Straight Groove



10 Ø12 mm Straight Groove



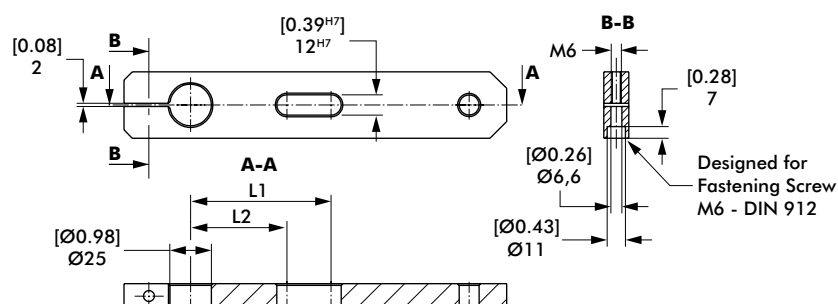
Max Deflection for Centering Pin



Model no.	Shear force N [lbs]	L mm [in]	Stroke mm [in]	Deflection mm [in]
86P40 / 60-2...B / 2	200 [45]	52 [2.05]	20 [0.79]	0,06 [0.002]
86P40 / 60-2...A / 4		70 [2.76]	40 [1.58]	0,09 [0.004]
86P40 / 60-2...C / 6		90 [3.54]	60 [2.36]	0,12 [0.005]
86P40 / 60-2...F / 8		115 [4.53]	80 [3.15]	0,15 [0.006]

Caution: Generally we recommend using an external guide when the transverse force is more than 200 N [45 lbs]. Also independently of the stroke, less transverse forces, when the overall height L2 > 120 mm [4.7 in] (L2 = extended piston rod plus centering pin).

Example application of an off-center centering pin (Example component shown below is to be made by the customer)



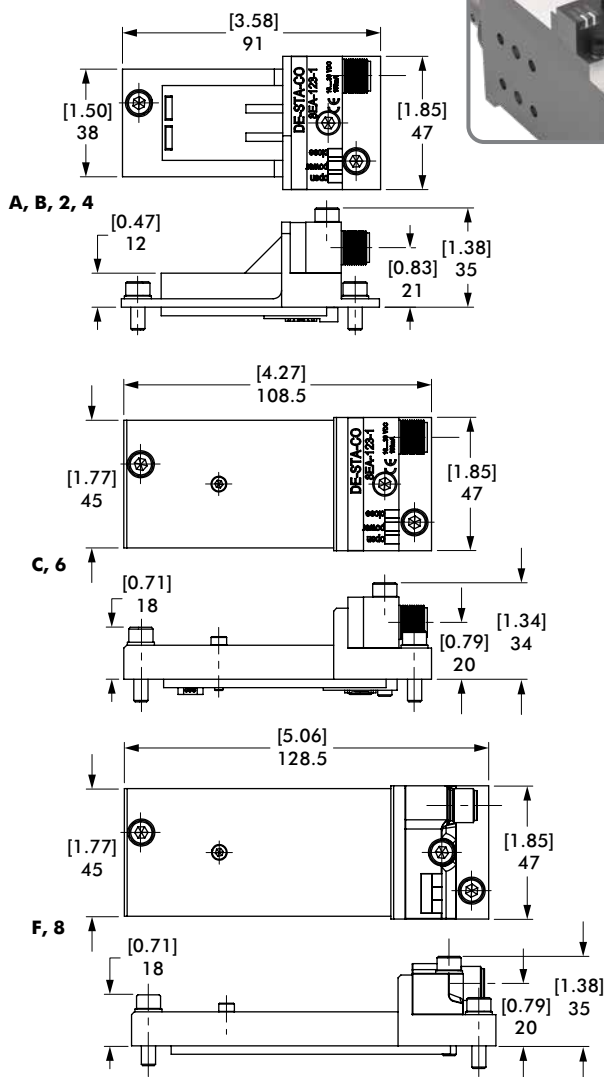
Model no.	L1 mm [in]	L2 mm [in]
86P40 / 60-2...E1	62 [2.44]	58 [2.28]
86P40 / 60-2...E2		
86P40 / 60-2...E4		
86P40 / 60-2...J1*	84,5 [3.33]	80,5 [3.17]

*J1 is not available with 60 or 80 mm strokes.

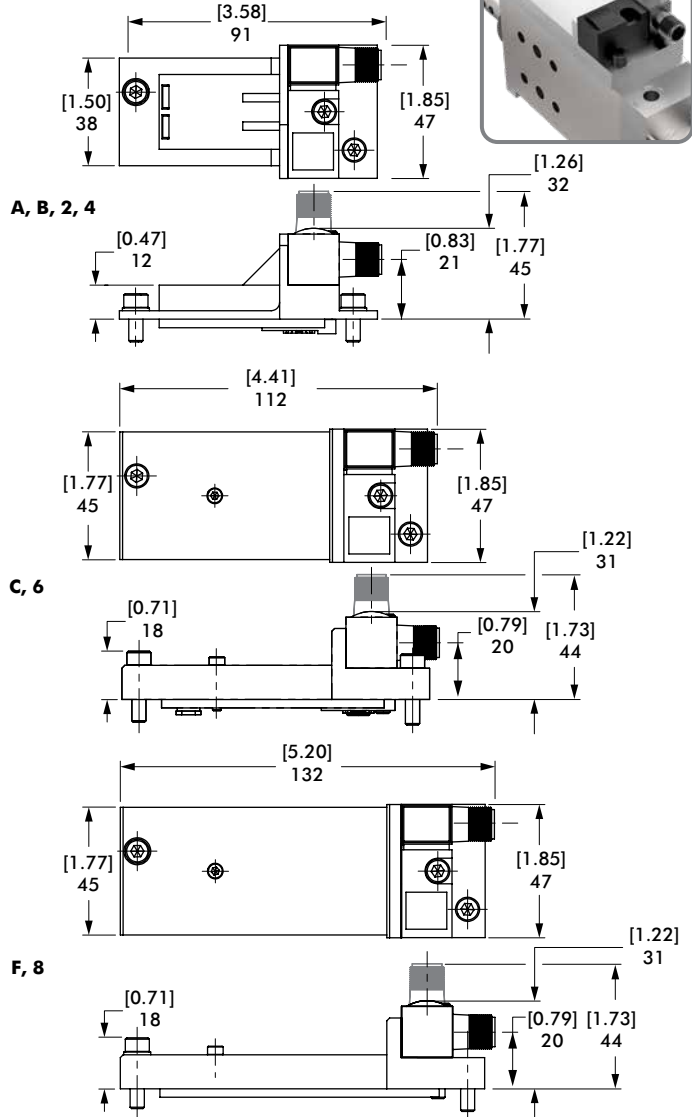
86P40/86P60 SENSORS

Pneumatic Pin Package | Single Shaft | Dimensions and Technical Specifications

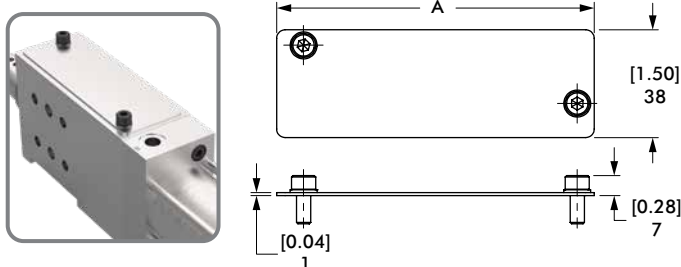
C8 Inductive Sensing System



D8 Inductive Sensing System with 90° Swivel Connector



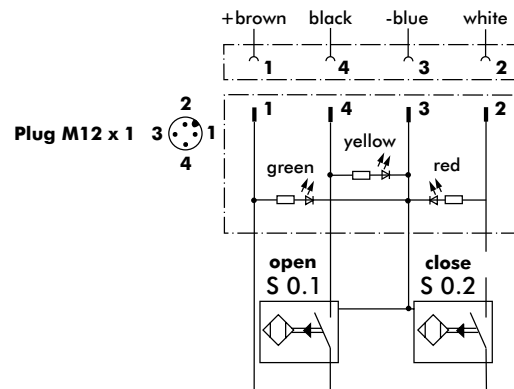
L4, L6, L8 Sensor Cover Plate



Cover Plate Option	Stroke Option	A mm [in]
L4	A, B, 2, 4	92 [3.62]
L6	C, 6	112 [4.41]
L8	F, 8	132 [5.20]

Inductive Sensor Wiring Diagram for C8, D8

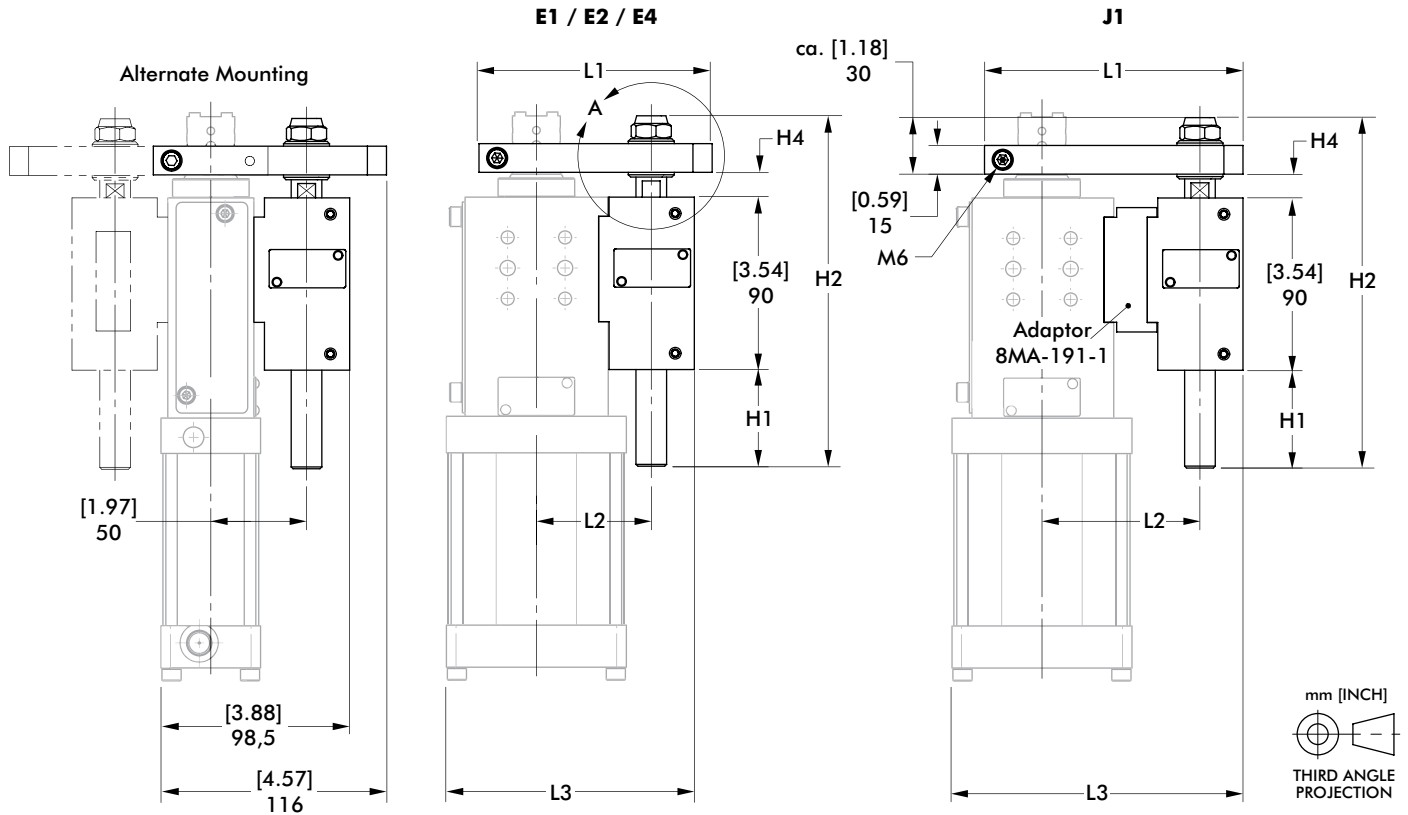
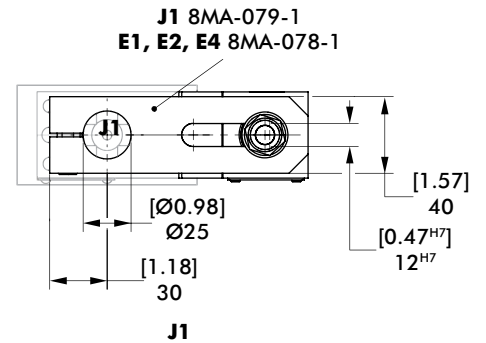
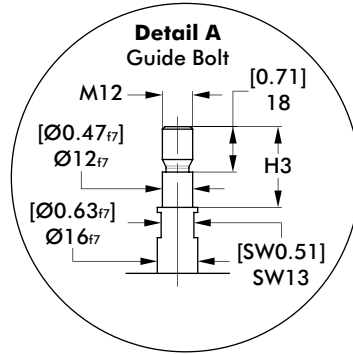
Sensing system immune to interference from AC / DC arc welding.



86P40/86P60 OPTIONS

Pneumatic Pin Package | Single Shaft | Dimensions and Technical Specifications

J1, E1, E2, E4 External Guide



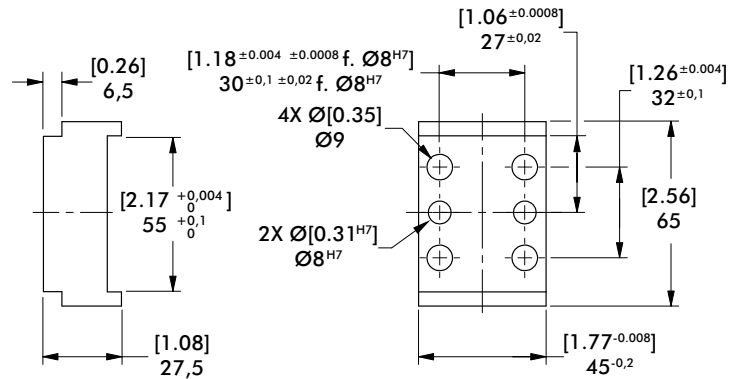
Base Model	External Guide Option	Stroke Option	L1 mm [in]	L2 mm [in]	L3 mm [in]	H1 (max.) mm [in]	H2 mm [in]	H3 mm [in]	H4 (min.) mm [in]
86P40 or 86P60	E1	A, B	120 [4.72]	60 [2.36]	130 [5.12]	47 [1.85]	183 [7.20]	32 [1.26]	16,5 [0.65]
	E1_-K*					55 [2.17]	195 [7.68]	35 [1.38]	17,5 [0.69]
	E2	C				67 [2.64]	203 [7.99]	32 [1.26]	16,5 [0.65]
	E2_-K*					109 [4.29]	250 [9.84]	35 [1.38]	18,5 [0.73]
	E4	F				131 [5.16]	270 [10.63]		16,5 [0.65]
	E4_-K*					133 [5.24]	273 [10.75]	17,5 [0.69]	
	J1	A, B	135 [5.31]	82,5 [3.25]	152 [5.98]	47 [1.85]	183 [7.20]	32 [1.26]	16,5 [0.65]
	J1_-K*					55 [2.17]	195 [7.68]	35 [1.38]	17,5 [0.69]

*Ceramic Option

86P40/86P60 OPTIONS

Pneumatic Pin Package | Single Shaft | Dimensions and Technical Specifications

H1 Adaptor



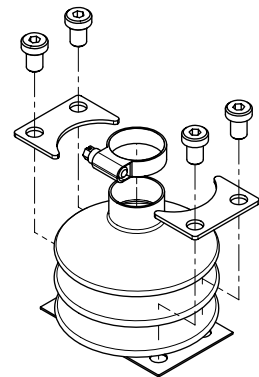
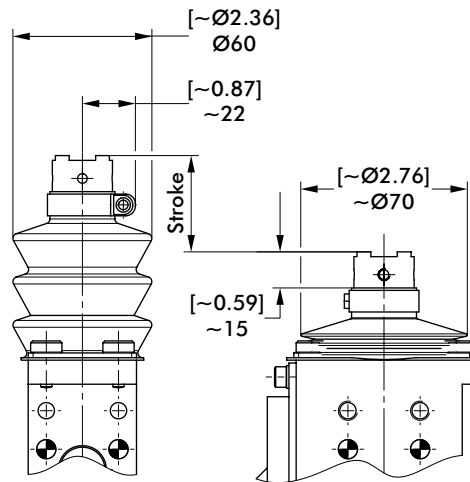
F1 Bellows (Piston Rod Cover)



extended



retracted

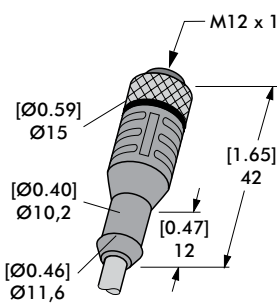


G1 Adaptor + Bellows

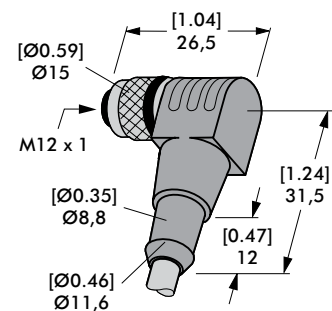
(See dimensions above)



Sensor Cable Accessories



Straight Cable
8EL-002-1



Angular Cable
8EL-003-1

Sensor Cables (1 connector & 5m cable)

Order no.

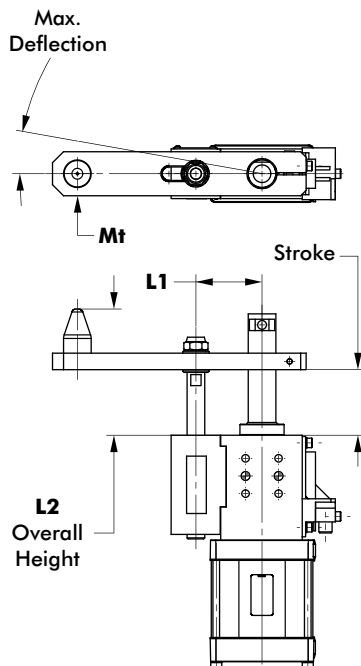
M12x1 connector, straight, 5-pin

8EL-002-1

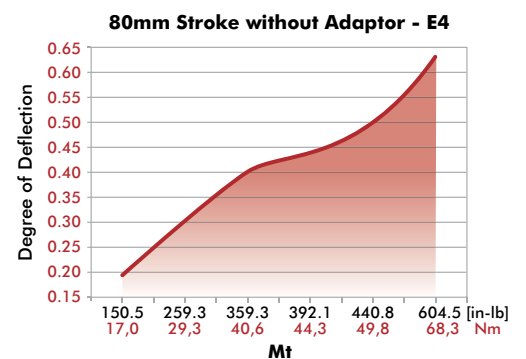
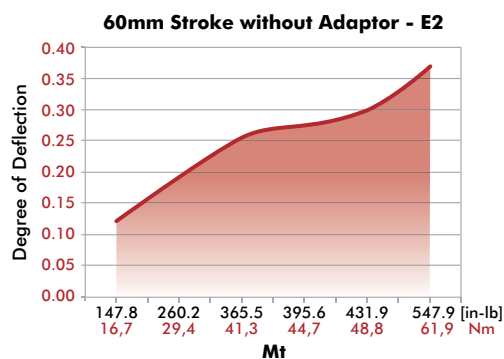
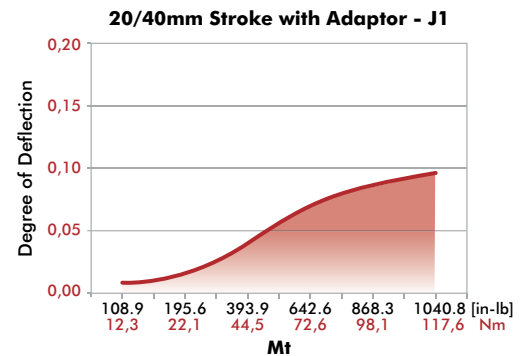
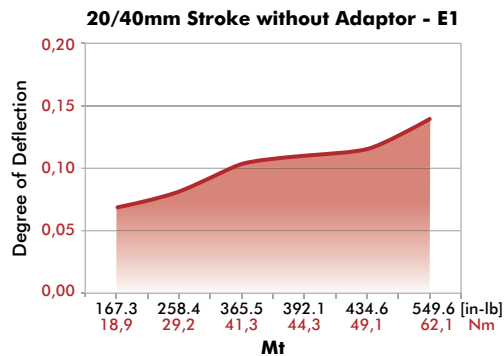
M12x1 connector, 90° angular, 4-pin

8EL-003-1

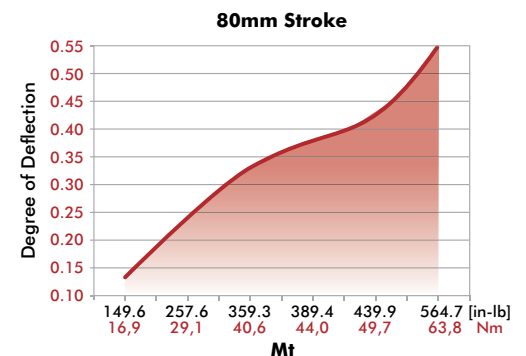
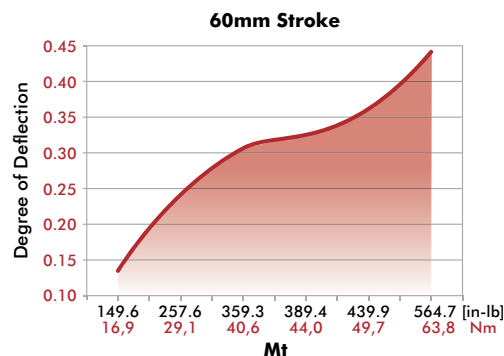
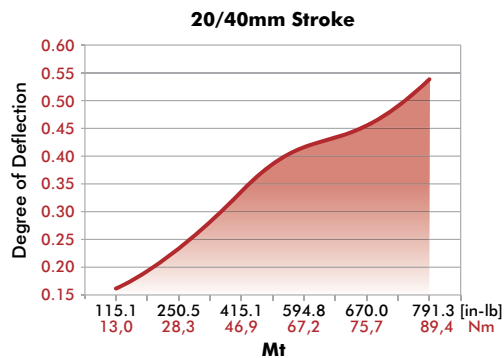
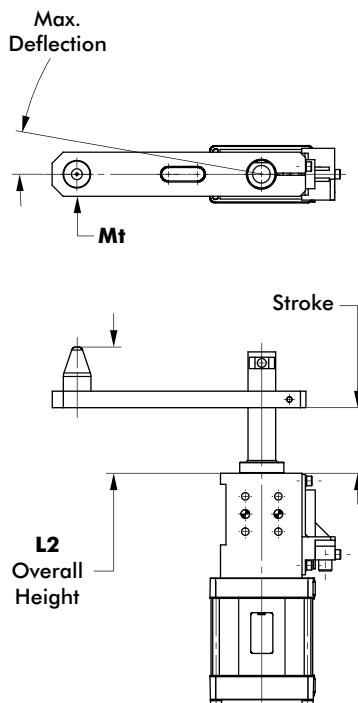
Deflection with External Guide **E1, E2, E4, J1**



L1 = 60mm without Adapter
L1 = 82,5mm with Adapter



Deflection without External Guide



Caution: Generally we recommend using an external guide when the transverse force is more than 200 N [45 lbs]. Also independently of the stroke, less transverse forces, when the overall height L2 > 120 mm [4.7 in] (L2 = extended piston rod plus centering pin).