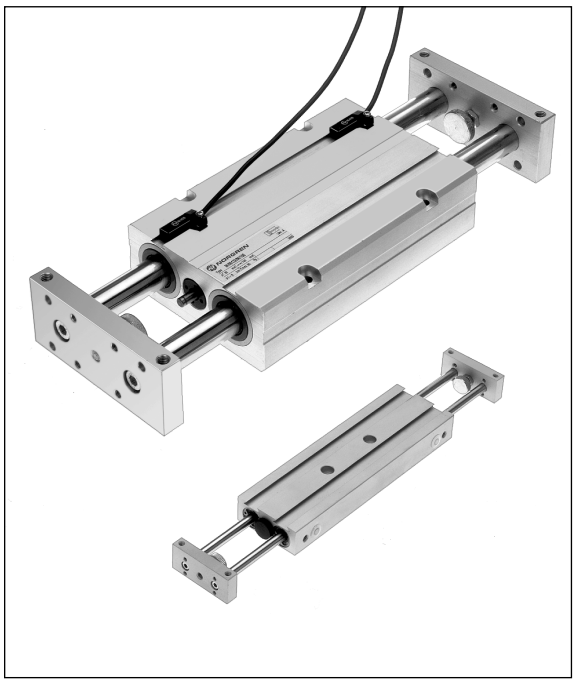
NORGREN

OBSOLETE DOCUMENT Technical Reference Only

M/60111/M to M/60140/M

Slide Units
Double Acting
∅ 10 to 40 mm

- **Double piston rod provides high bending and torsional rigidity**
- **Magnet piston rod operation for reduced costs, compactness and ease of installation**
- **Alternative port connections for mounting options**



Technical Data

Medium:
Compressed air, filtered, lubricated or non-lubricated

Operating Pressure:
1 to 8 bar

Operation:
Double acting with rubber buffer cushioning. Optional shock absorbers available for ∅ 16 mm to ∅ 40 mm bore

Cylinder Diameters:
10, 16, 25, 32, 40 mm

Operating Temperature:
+80°C* maximum
*Consult our Technical Service for use below +2°C

Maximum Load:
See details overleaf

Standard Stroke:
M/60111/M – 25, 50, 75, 100 mm
M/60116/M – 25, 50, 75, 100, 125, 150 mm
M/60125/M – 50, 75, 100, 125, 150, 175 mm
M/60132/M – 75, 100, 125, 150, 175, 200 mm
M/60140/M – 100, 125, 150, 175, 200, 225 mm

Non-standard Stroke:
On request

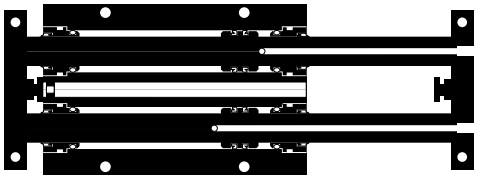
Materials:
Hard chromed steel piston, anodised aluminium body and end covers.

Ordering Information

To order a 25 mm bore Slide Unit with a 75 mm stroke quote: M/60125/M/75

Order magnetically operated switches separately

Accessories	See page
Intermediate stroke length screw	N **2.3**.017.04
Switch M/40	N **4.3**.041.01
Switches M/41, M/42	N **4.3**.044.01

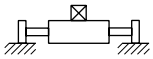


Theoretical Forces • Air Consumption • Weights (kg)

Model	Theoretical forces at 6 bar (N)	Theoretical forces at 6 bar (l/cm stroke)	Weights Stroke (mm) 25	50	75	100	125	150	175	200	225
M/60111/M	60	0,040	0,39	0,40	0,41	0,42	–	–	–	–	–
M/60116/M	147	0,172	0,77	0,80	1,08	1,11	1,39	1,42	–	–	–
M/60125/M	348	0,406	–	1,96	2,00	2,46	2,50	2,96	3,00	–	–
M/60132/M	588	0,686	–	–	3,74	3,80	4,51	4,57	5,28	5,34	–
M/60140/M	918	1,072	–	–	–	6,70	6,80	7,84	7,93	8,97	9,10

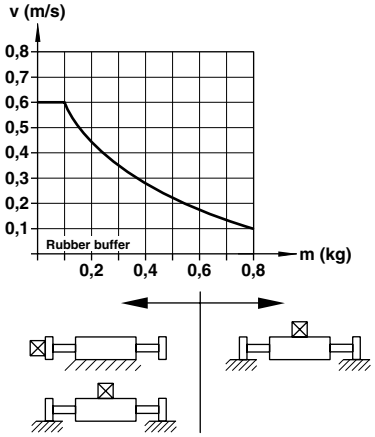
Permissible Cushion Loads

Application: Slide mounting

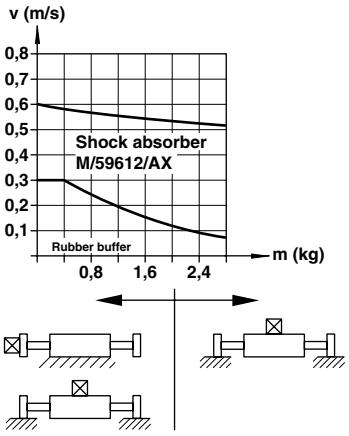


Application: End mounting

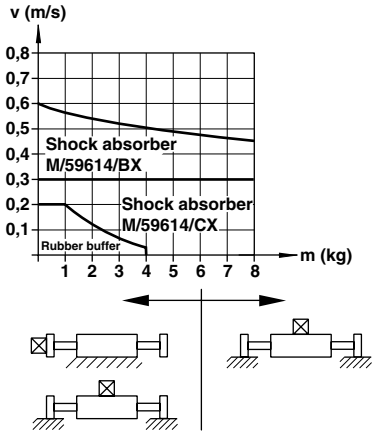
M/60111/M



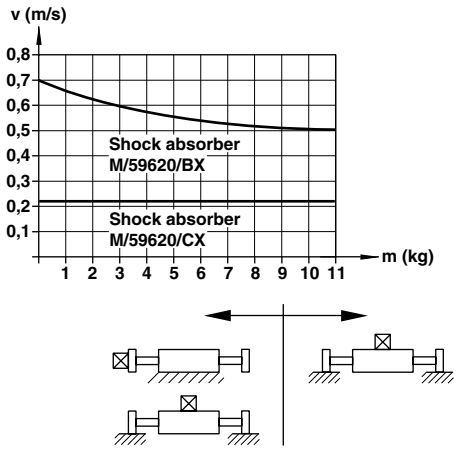
M/60116/M



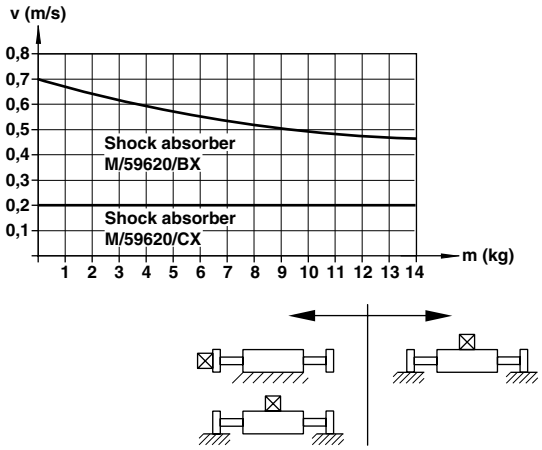
M/60125/M



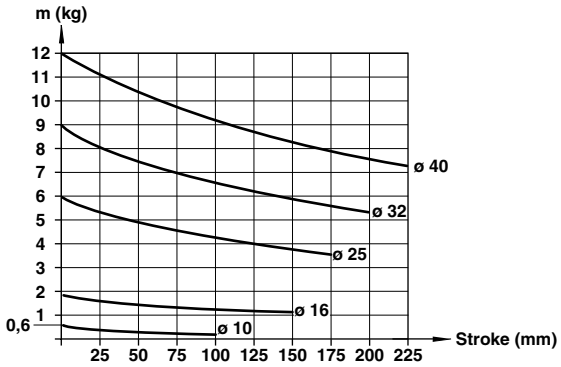
M/60132/M



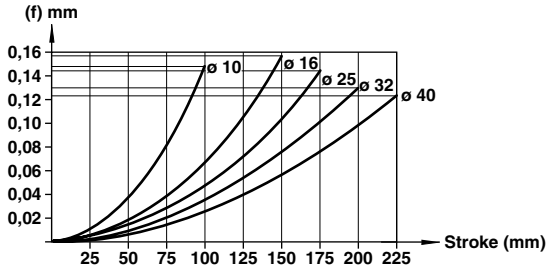
M/60140/M



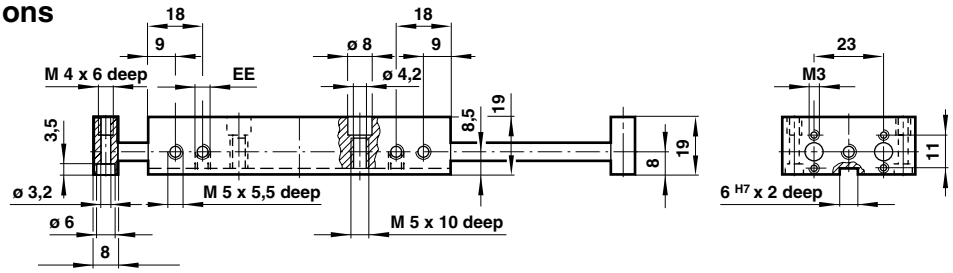
Maximum Loads (with constant bearing load)

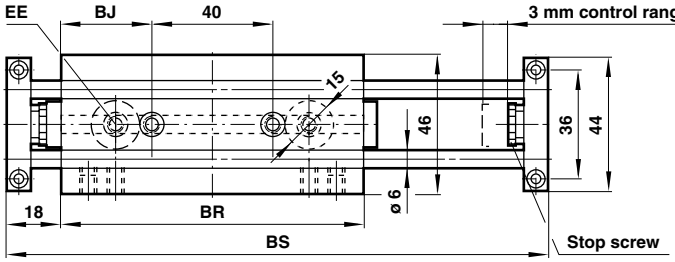


Deflection (with maximum load)



Basic Dimensions M/60111/M

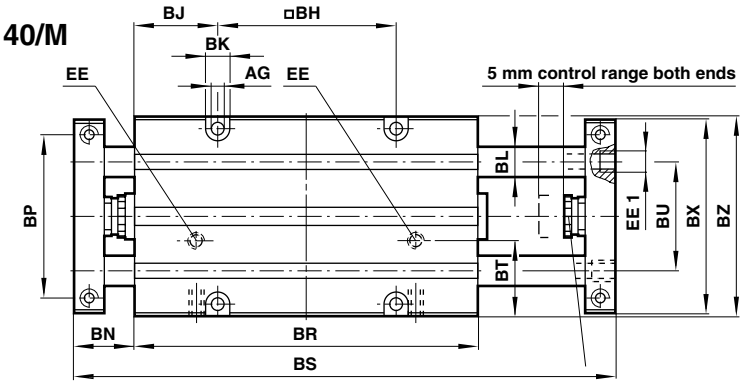


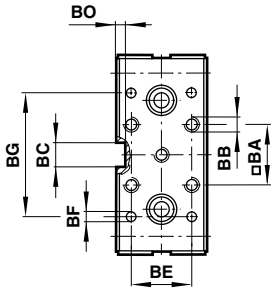


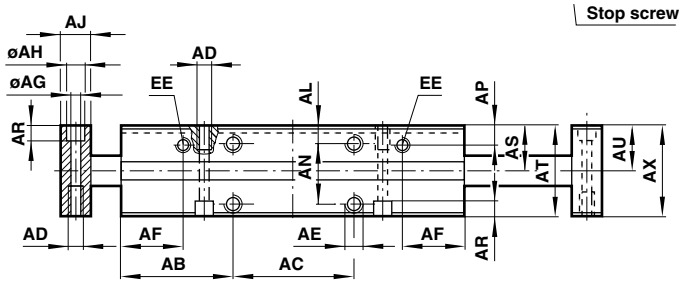
EE = Port size M5

Stroke	25	50	75	100
BJ	30	30	55	55
BR	100	100	150	150
BS	161	186	261	286

Basic Dimensions M/60116/M to M/60140/M







EE = Port size

Model	AB	AC	AD	AE	AF	∅ AG	∅ AH	AJ	AL	AN	AP	AR
M/60116/M	37	40	M5 x 8 deep	M5 x 7 deep	20,5	4,2	8	10	6	20	6,5	5
M/60125/M	46	60	M6 x 12 deep	M6 x 8 deep	22,5	5,3	10	12	9,5	24	7,5	6
M/60132/M	55	80	M8 x 16 deep	M8 x 10 deep	33	6,8	12	15	12,5	30	10	7
M/60140/M	68,5	100	M10 x 18 deep	M10 x 12 deep	36	8,5	15	20	14,5	36	11	9
Model	AS	AT	AU	AX	❑ BA	BB	BC	BD	BE	∅ BF	BG	BH
M/60116/M	16	30	15	30	20	M5	8 H7	3	16	3,2	40	59
M/60125/M	21,5	40	20,5	40	30	M5	8 H7	3	30	5,3	59	82
M/60132/M	27,5	50	26,5	50	36	M6	12 +0,12	5	36	6,4	82	104
M/60140/M	32,5	60	31,5	60	40	M8	12 +0,12	5	40	8,4	104	128
Model	BJ	BK	∅ BL	BN	BP	BT	BU	BX	BZ	EE	EE1	
M/60116/M	27,5	8	10	20	54	25	36	64	66	M 5	M 5	
M/60125/M	35	10	16	22	76	35	48	90	92	M 5	M 5	
M/60132/M	43	11	20	28	102	46	62	116	118	G 1/8	M 5	
M/60140/M	54,5	15	25	31	126	57	74,5	144	146	G 1/8	G 1/8	
Model	Stroke	25	50	75	100	125	150	175	200	225		
M/60116/M	BR	113,5	113,5	163,5	163,5	213,5	213,5	–	–	–		
	BS	179	204	279	304	379	404	–	–	–		
M/60125/M	BR	–	152	152	202	202	252	252	–	–		
	BS	–	246	271	346	371	446	471	–	–		
M/60132/M	BR	–	–	190	190	240	240	290	290	–		
	BS	–	–	321	346	421	446	521	546	–		
M/60140/M	BR	–	–	–	236,5	236,5	286,5	286,5	336,5	336,5		
	BS	–	–	–	398	423	498	523	598	623		

Intermediate Stroke Length Screw

Model	Screw-adjustment range 5	10	15	20	25
M/60111/M	M/P70870/1	M/P70870/2	M/P70870/3	M/P70870/4	M/P70870/5
M/60116/M	M/P70870/1	M/P70870/2	M/P70870/3	M/P70870/4	M/P70870/5
M/60125/M	M/P70870/1	M/P70870/2	M/P70870/3	M/P70870/4	M/P70870/5
M/60132/M	M/P70870/6	M/P70870/7	M/P70870/8	M/P70870/9	M/P70870/10
M/60140/M	M/P70870/6	M/P70870/7	M/P70870/8	M/P70870/9	M/P70870/10

Spares Kit

Model	Spares kit
M/60111/M	QM/60111/M/00
M/60116/M	QM/60116/M/00
M/60125/M	QM/60125/M/00
M/60132/M	QM/60132/M/00
M/60140/M	QM/60140/M/00

Warning

These products are intended for use in industrial compressed air systems only. Do not use these products where pressures and temperatures can exceed those listed under **'Technical Data'**.

Before using these products with fluids other than those specified, for non-industrial applications, life-support systems, or other applications not within published specifications, consult NORGREN.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes.

The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.
System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.
System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.