

Pneumatic cylinder

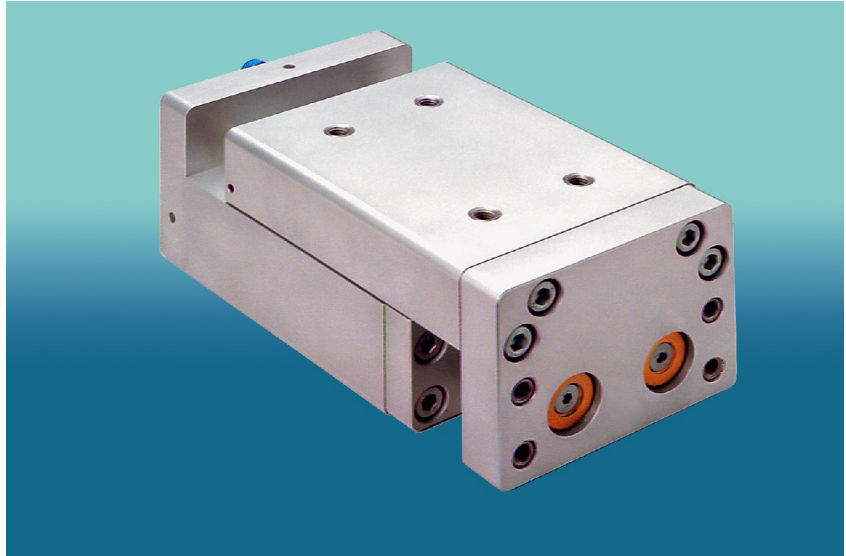
Type B, Twin

double-acting

Linear roll guide

Ø 32, Hub 50

(twin piston)



This heavy-duty cylinder is especially suited for extreme stresses due to the linear roll guide and the double piston drive.

Technical data:

Type	32 - B, Twin
Design type	Pneumatic cylinder with linear ball guide
Stroke length [mm]	50
Fitting position	any (provided that extended position can always be attained)
Adm. temperature range [°C]	-10 to +70
Medium	Filtered, oiled or non-oiled compressed-air (min. fineness 40 µm)
Compressed-air supply	Front
Compressed-air [bar]	min. 2 ... max. 6
Piston rod Ø [mm]	2 x 12
Materials	Base body, upper part, mounting plate, cover, piston plate: Al Guides: 100 Cr 6, piston rod: Ck 45 SL f7 Piston, seals: NBR Cylinder barrel: Ms 63
Weight [gramme]	4900
Equivalent piston - Ø [mm]	45

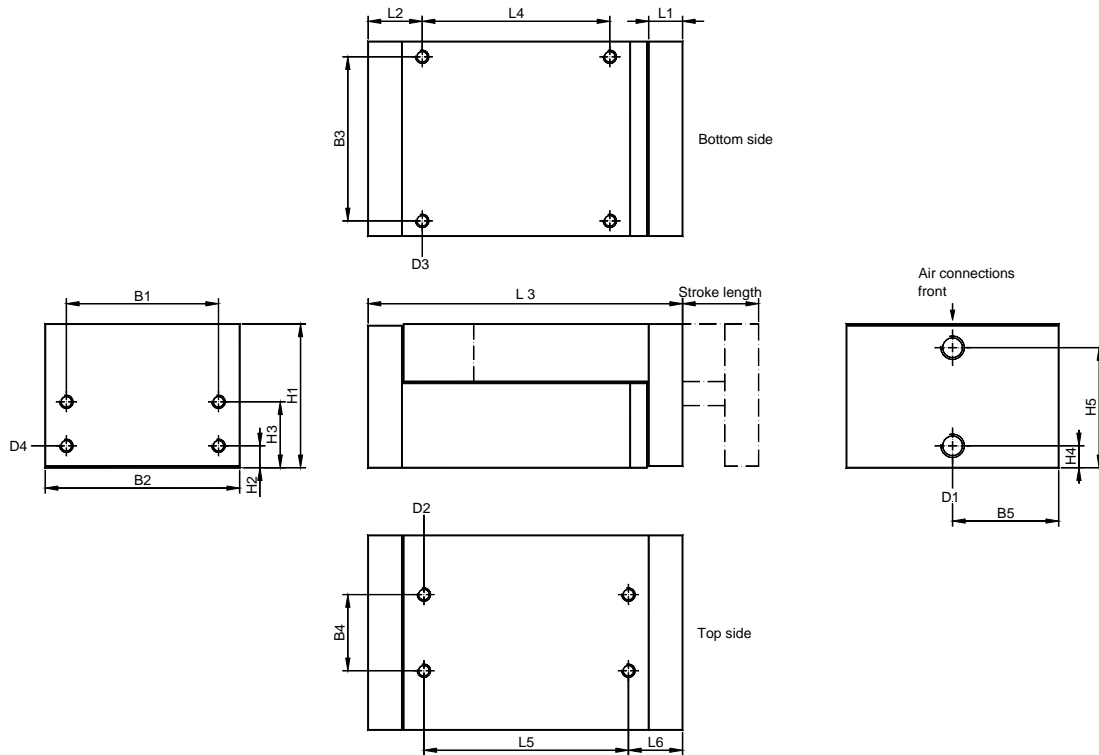
Delivery time on request

Pneumatic cylinder



Type B, Twin 32/50

Heavy-duty cylinder



Dimensions:

Piston ∅ [mm]	Piston rod ∅ [mm]	B1 [mm]	B2 [mm]	B3 [mm]	B4 [mm]	B5 [mm]	D1	D2/depth [mm]	D3/depth [mm]	D4/depth [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]
32 (2x)	12 (2x)	90	115	97	45	57,5	G1/4	M8 / 10,5	M8 / 25	M8 / 19	85	13	39	12,5	70,5

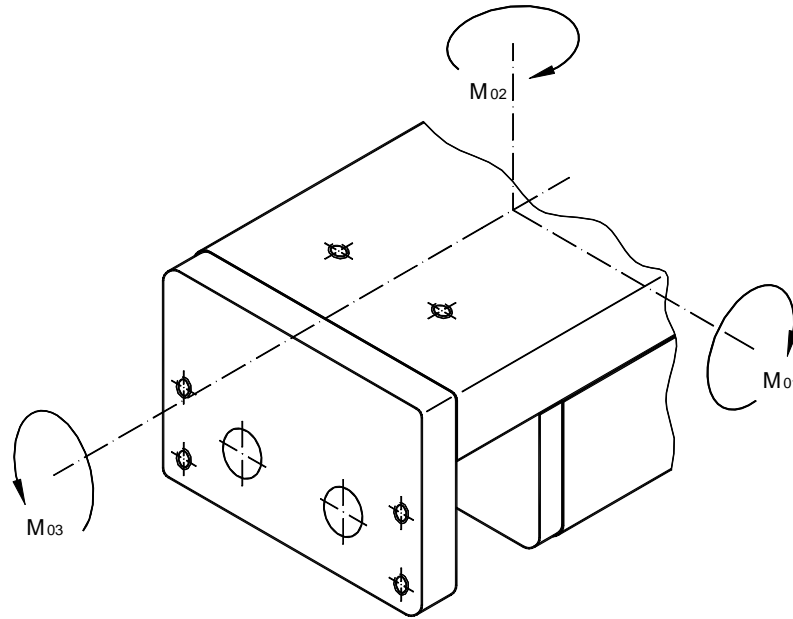
Stroke length [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]
50	20	45	186	80	90	47,5

Pneumatic cylinder

Admissible stress

Type B, Twin 32/50

Heavy-duty cylinder



Longitudinal torque	Lateral torque	Transverse torque
$F_{01} \leq \frac{M_{01} \text{ zul.}}{L_1 + A}$	$F_{02} \leq \frac{M_{02} \text{ zul.}}{L_2 + A}$	$F_{03} \leq \frac{M_{03} \text{ zul.}}{L_3 + B}$
$F_{01} \leq \frac{M_{01} \text{ zul.}}{L_1 + C}$	$F_{02} \leq \frac{M_{02} \text{ zul.}}{L_2 + B}$	$F_{03} \leq \frac{M_{03} \text{ zul.}}{L_3 + C}$

Admissible stress

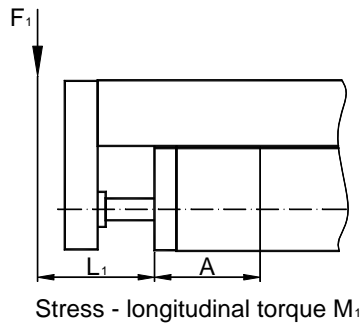
Pneumatic cylinder

Stroke length [mm]	50	
∅ / Type	M1/M2 Nm	M3 Nm
32 - B, Twin	17,5	14,5

Correction factors:

∅ / Type	Stroke length	A	B	C
	[mm]	[mm]	[mm]	[mm]
32 - B, Twin	50	96	57	26,8

Example of calculation:



Given qty: 32 - B, Twin with a stroke length of 50 mm
 Lever arm $L_1 = 40 \text{ mm} = 0,04 \text{ m}$
 Longitudinal torque $M_1 = 17,5 \text{ Nm}$
 Correction factor $A = 96 \text{ mm} = 0,096 \text{ m}$

$$\text{Required qty: } F_1 \leq \frac{M_1}{L_1 + A} = \frac{17,5 \text{ Nm}}{0,04 \text{ m} + 0,096 \text{ m}} = 129 \text{ N}$$