

Accessories

WBZ - Piston rod locking unit
for cylinders to ISO 6432 standard

series **U**

DESCRIPTION

Piston rod locking unit series “WBZ” is a mechanical device to fit on ISO 6432 cylinders (series “U”); its function is to lock the piston rod in any position. This solution allows to lock the cylinder stroke each time that there’s a pressure fall. Locking force is, in any case, higher than the force given off by the cylinder fed at 10 bar.

ATTENTION: It has static operation (cylinder piston rod not moving); it’s necessary to preliminary stop the cylinder piston rod before proceeding with mechanical locking. It is possible to unblock the rod lock only if the forces in the piston are balanced, otherwise there can be accidents due to the irregular movement of the rod. If the given blocking values are exceeded there can be a sliding on the rod. When it is blocked and the loads are variable on the rod, the rod can have a slight axial play. Piston rod locking unit series “WBZ” must not be considered as a safety device.



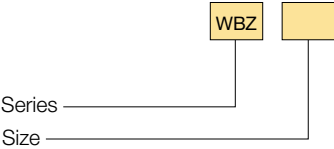
TECHNICAL DATA

Operating pressure	3 ÷ 6 bar with cylinder feed pressure 1 ÷ 10 bar
Working temperature	0 ÷ +80 °C (-5 °C with dry air)
Fluid	Compressed air, filtered, continuous lubricated, unlubricated or dry lubricated
Size	20, 25
Port size	20 - 25 = M5
Locking type	Mechanical - Only axial (bi-directional)
Release	Through pneumatic control
Condition in absence of pressure	Locked
Locking force with static load	Size 20 25 N 490 490

MATERIALS

Body	Anodized aluminium alloy
Blades	Brass
Pistons	Acetal resin
Seals	NBR rubber
Springs	Steel

ORDER KEY



ORDER EXAMPLES

Piston rod locking unit, size 20: **WBZ20**

Piston rod locking unit, size 25 + cylinder series “U” Ø 25, fit for piston rod locking unit, 150 mm stroke, double acting, non-magnetic piston type, ASSEMBLED: **WBZ25 + 25/150 UDCZ + M/WBZ**

ASSEMBLY

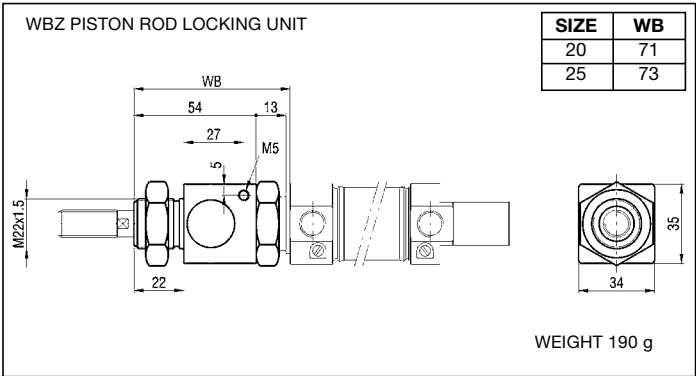
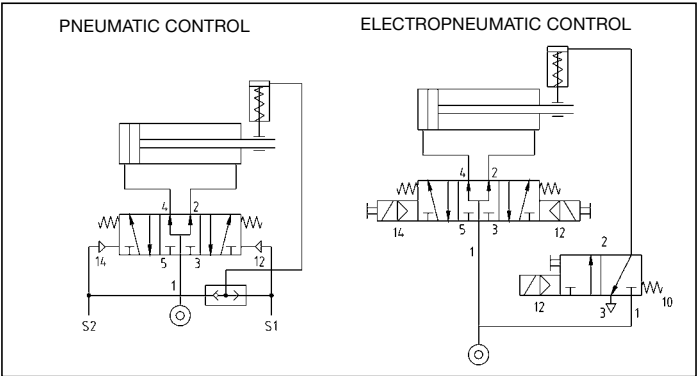
WBZ + cylinders series U, Z version	M/WBZ
-------------------------------------	--------------

SPARE PARTS

BLADES KIT	Size /PM/WBZ
PISTON KIT	Size /SG/WBZ

TECHNICAL INFORMATION

“WBZ” operation is based on the action of two opposed blades. When these blades are opened up by suitably loaded springs, they oppose the sliding movement of the piston rod passing through them. It is advisable to balance the pressure in the cylinder chambers during piston rod locking phase in order to increase its working life with a 5/3 pressure centre valve (see the schemes here below).



WBZ - Piston rod locking unit for cylinders to ISO 15552 standard

DESCRIPTION

Piston rod locking unit series "WBZ" is a mechanical device to fit on ISO 15552 cylinders (series X, XT and XL); its function is to lock the piston rod in any position. This solution allows to lock the cylinder stroke each time that there's a pressure fall. Locking force is, in any case, higher than the force given off by the cylinder fed at 10 bar. **ATTENTION:** It has static operation (cylinder piston rod not moving); it's necessary to preliminary stop the cylinder piston rod before proceeding with mechanical locking. It is possible to unblock the rod lock only if the forces in the piston are balanced, otherwise there can be accidents due to the irregular movement of the rod. If the given blocking values are exceeded there can be a sliding on the rod. When it is blocked and the loads are variable on the rod, the rod can have a slight axial play. Piston rod locking unit series "WBZ" must not be considered as a safety device.

TECHNICAL DATA

Operating pressure	3 ÷ 6 bar with cylinder feed pressure 1 ÷ 10 bar							
Working temperature	0 ÷ +80 °C (-5 °C with dry air)							
Fluid	Compressed air, filtered, continuous lubricated, unlubricated or dry lubricated							
Size	32, 40, 50, 63, 80, 100, 125							
Port size	32 ÷ 63 = G 1/8 80 ÷ 125 = G 1/4							
Locking type	Mechanical – Only axial (bi-directional)							
Release	Through pneumatic control							
Condition in absence of pressure	Locked							
Locking force with static load	Size	32	40	50	63	80	100	125
	N	790	1240	1930	3060	5400	7700	12040

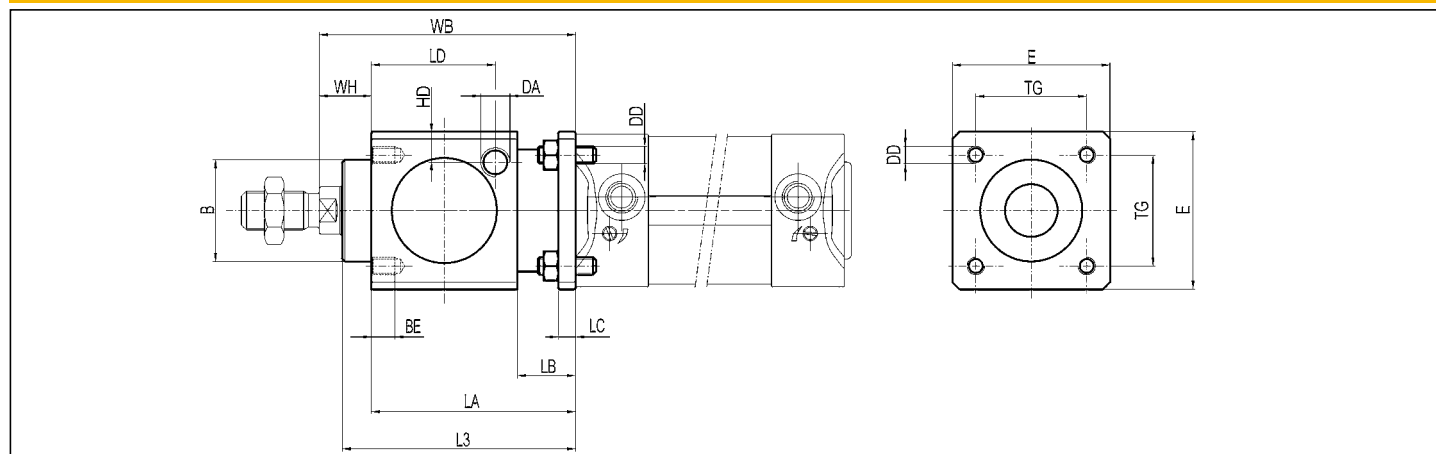
ORDER KEY



ASSEMBLY

"WBZ" + cylinder series "X", "XT" or "XL" (Ø 125), "Z" version	M/WBZ
--	--------------

WBZ PISTON ROD LOCKING UNIT



DIMENSIONS AND WEIGHTS

SIZE	B	BE	E	DA	DD	HD	L3	LA	LB	LC	LD	TG	WB	WH	WEIGHT (g)
32	30	8	47	G 1/8	M6	9	67,5	60	20	6	33,25	32,5	86	26	400
40	34,9	8	54	G 1/8	M6	9	80	70	20	6	42,5	38	100	30	600
50	40	12	65	G 1/8	M8	12,5	100	90	24	8	58	46,5	127	37	1100
63	45	12	75	G 1/8	M8	17,5	100	90	24	8	59	56,5	127	37	1500
80	45	16	95	G 1/4	M10	17,5	120	110	32	12	69	72	156	46	2600
100	55	16	114	G 1/4	M10	20	120	110	32	12	69	89	161	51	3500
125	60	20	138	G 1/4	M12	19	156	140	45	20	84,5	110	205	65	6500

P.S.: TECHNICAL INFORMATION (see the same ones for cylinders series "U" on page 1.7)



MATERIALS

Body	Anodized aluminium alloy
Blades	Brass
Pistons	Acetal resin
Seals	NBR rubber
Springs	Steel

ORDER EXAMPLES

Piston rod locking unit, size 50: **WBZ50**

Piston rod locking unit, size 80 + cylinder series "XT" Ø 80, 150 mm stroke, fit for piston rod locking unit, non-magnetic piston type, ASSEMBLED:

WBZ80 + 80/150 XT/NZ + M/WBZ

SPARE PARTS

BLADES KIT	Size/PM/WBZ
PISTON KIT	Size/SG/WBZ