Zero-point clamping

QUIRI Point Zéro

PZ 20

Pull-in force per unit: 12’500 N
Retention force per unit: 40’000 N

Flanged cylinders	Page 10 – 11
Built-in cylinders	Page 12 – 13
Built-up cylinders	Page 14
Pneumatically activated units	Page 15
Plugs	Page 16 – 19
Accessories	Page 20

QUIRI Point Zéro **PZ 20**

Flanged cylinders
for direct integration into machine tables, pallets and fixtures

PZ 20

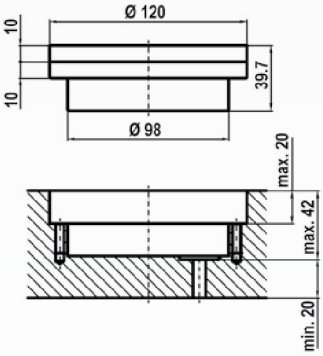
pull-in force: 12'500 N **retention force: 40'000 N**

PZ2160	Standard
PZ2160 L	with air-blast cleaning
PZ2160 LU	with air-blast cleaning and rear side media connection
PZ2160 I	with indexing grooves
PZ2160 LI	with air-blast cleaning and indexing grooves
PZ2160 LIU	with air-blast cleaning, indexing grooves and rear side media connection

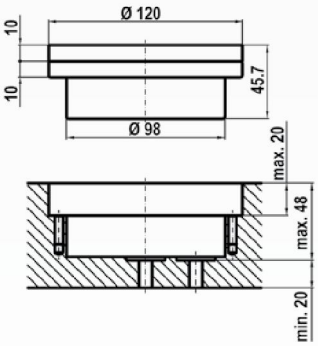
Indexing grooves

Pallets and indexing set screws see page 52

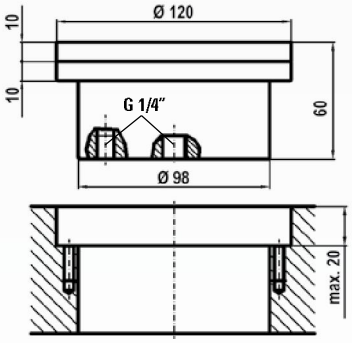
PZ2160
PZ2160 I



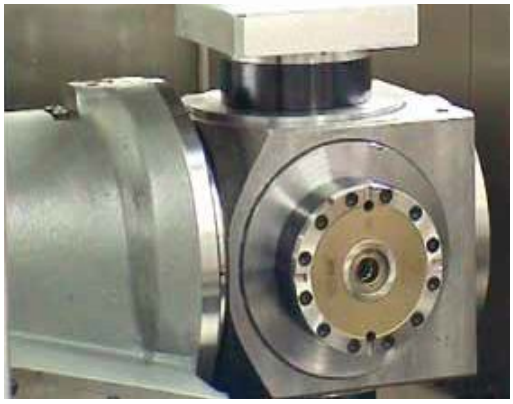
PZ2160 L
PZ2160 LI



PZ2160 LU
PZ2160 LIU



Max. operating pressure 70 bar.



QUIRI Point Zéro **PZ 20**

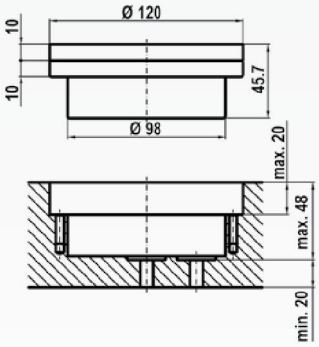
Flanged cylinders
for direct integration into machine tables, pallets and fixtures

PZ 20

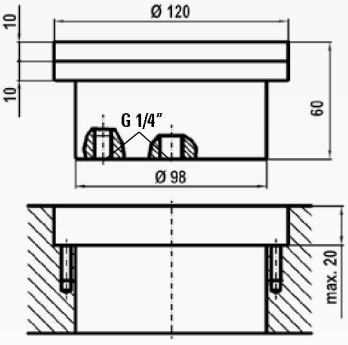
pull-in force: 12'500 N **retention force: 40'000 N**

PZ2160 LA	with air-blast cleaning through center and support isles	**PZ2160 LAK**	with air-blast cleaning through center, support isles and piston position monitoring
PZ2160 LAU	with air-blast cleaning through center and support isles and rear side connection for oil and air		

PZ2160 LA / LAK



PZ2160 LAU



Max. operating pressure 70 bar.

QUIRI Point Zéro **PZ 20**

Built-in cylinders
for base-plates, set-up stations, measuring machines

PZ 20

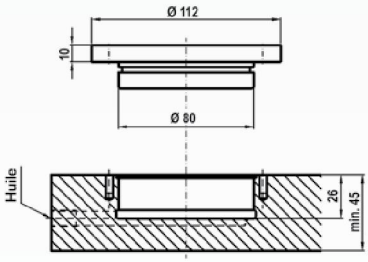
pull-in force: 12'500 N **retention force: 40'000 N**

PZ2150	standard
PZ2150 L	with air-blast cleaning
PZ2150 I	with indexing grooves
PZ2150 LI	with air-blast cleaning and indexing grooves

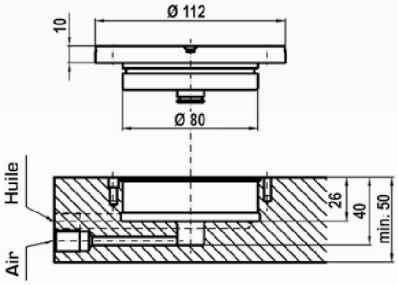
Indexing grooves

Pallets and indexing set screws see page 52

PZ2150
PZ2150 I



PZ2150 L
PZ2150 LI



Max. operating pressure 70 bar.

QUIRI Point Zéro **PZ 20**

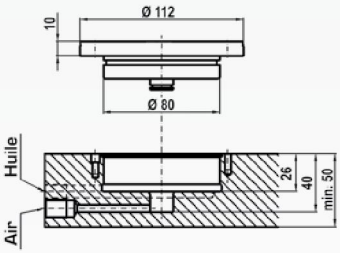
Built-in cylinders
for base-plates, set-up stations, measuring machines

PZ 20

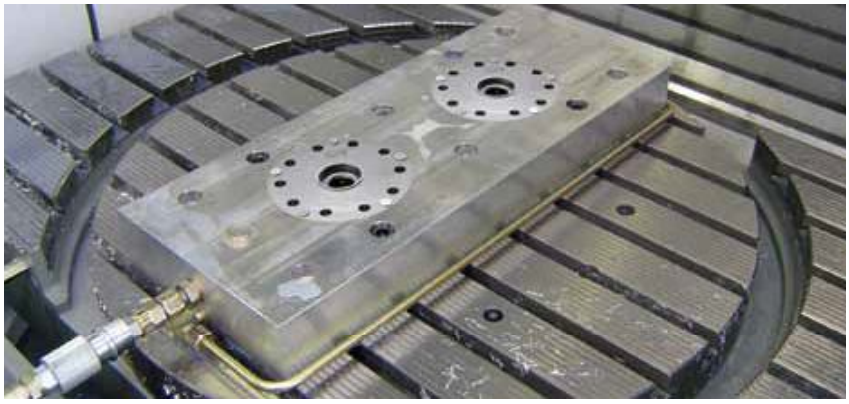
pull-in force: 12'500 N **retention force: 40'000 N**

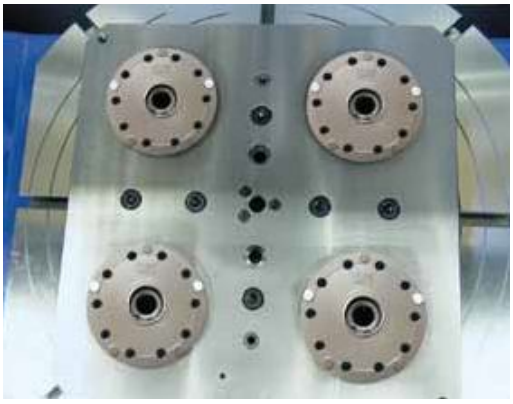
PZ2150 LA with air-blast cleaning through center and support isles

PZ2150 LA



Max. operating pressure 70 bar.





QUIRI Point Zéro **PZ 20**

Built-up cylinders
for flexible configuration

PZ 20

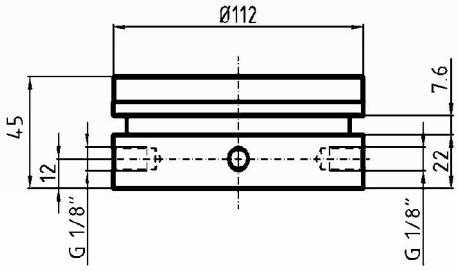
pull-in force: 12'500 N **retention force: 40'000 N**

PZ2110	standard
PZ2110 L	with air-blast cleaning
PZ2110 I	with indexing grooves
PZ2110 LI	with air-blast cleaning and indexing grooves

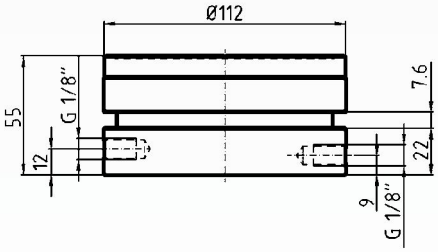
Indexing grooves

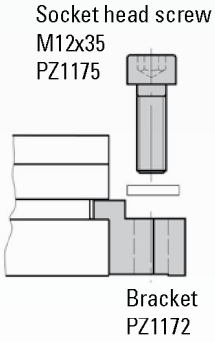
Pallets and indexing set screws see page 52

PZ2110
PZ2110 I

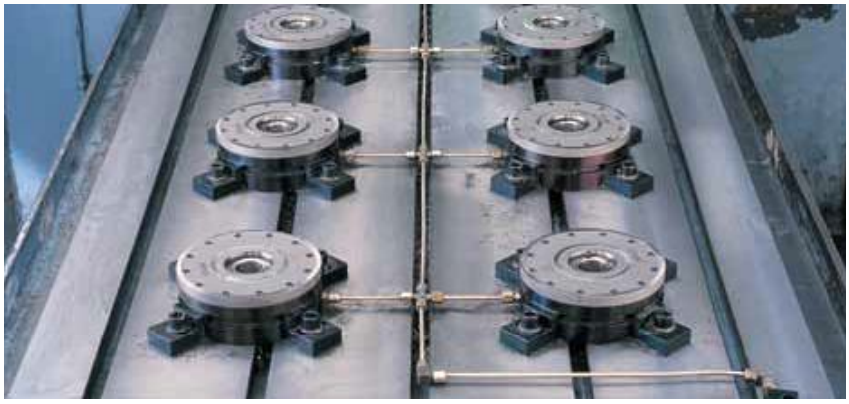


PZ2110 L
PZ2110 LI





Max. operating pressure 70 bar.



QUIRI Point Zéro **PZ 20**

Pneumatically activated units

PZ 20

PZ 30 sur demande
PZ 50 sur demande

Flanged cylinders

PZ2160 P	Standard
PZ2160 LP	with air-blast cleaning
PZ2160 LUP	with air-blast cleaning and rear side media connection
PZ2160 IP	with indexing grooves
PZ2160 LIP	with air-blast cleaning and indexing grooves
PZ2160 LIUP	with air-blast cleaning, indexing grooves and rear side media connection
PZ2160 LAP	with air-blast cleaning through center and support isles
PZ2160 LAUP	with air-blast cleaning, through center and support isles and rear side media connection
PZ2160 LAKP	with air-blast cleaning through center and support isles and piston position monitoring

Built-in cyinders

PZ2150P	Standard
PZ2150 LP	with air-blast cleaning
PZ2150 IP	with indexing grooves
PZ2150 LIP	with air-blast cleaning and indexing grooves
PZ2150 LAP	with air-blast cleaning through center and support isles

Built-up cyinders

PZ2110P	Standard
PZ2110 LP	with air-blast cleaning
PZ2110 IP	with indexing grooves
PZ2110 LIP	with air-blast cleaning and indexing grooves

PZ2160 ... P
Pression de service minimale 5 bar

PZ2150 ... P

PZ2110 ...P

Plugs
recommended plug arrangement

PZ 20

1

Centering plug
- ground Ø 32 $^{+0}_{-0,01}$ mm

The centering plug defines the zero-point.
It centers with the diameter.

2

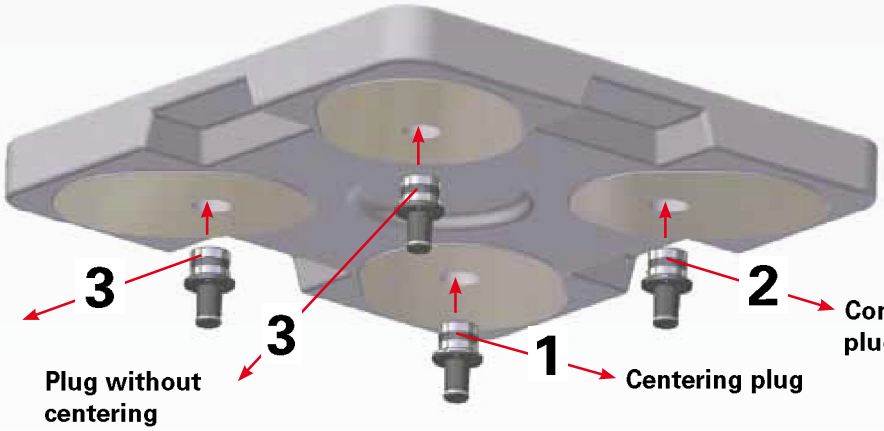
Compensation plug
- two ground raised cams
  Ø 32 $^{+0}_{-0,01}$ mm

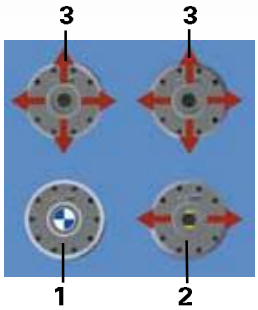
The compensation plug defines the X- or Y-axis.
The cam line must be set 90° to the line connecting with the centering plug. Compensates for variations in temperature.

3

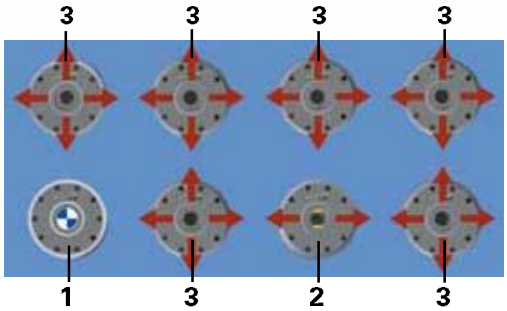
Plug without centering
- Ø 30,0 $^{+0}_{-0,1}$ mm

Plugs without centering only serve for clamping

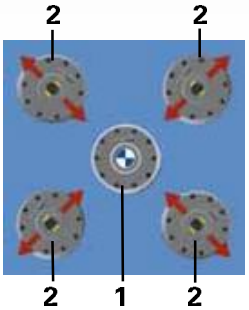




1 The centering plug defines the zero-point.



2 The compensation plug defines the X- or Y-axis.



3 Plugs without centering only serve for clamping.

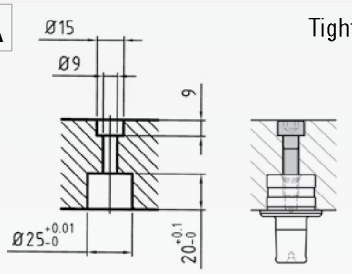
QUIRI Point Zéro **PZ 20**

Plugs
long

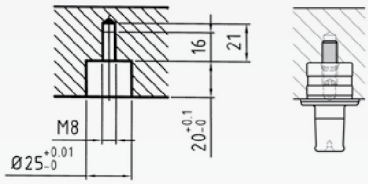
PZ 20

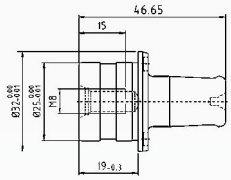
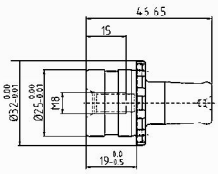
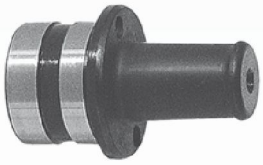
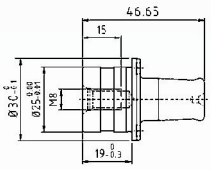
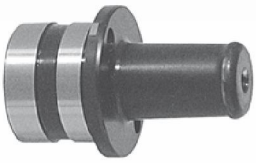
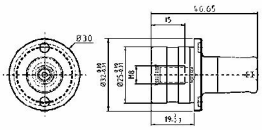
Plug fitting versions (preferably version A)

A Tightening moment: 20 Nm



B Tightening moment: 20 Nm



			without air-blast	with air-blast	fitting version A	fitting version B
PZ2500 Centering plug			x		x	x
PZ2504 Centering plug				x	x	x
PZ2510 Plug without centering			x	x	x	x
PZ2520 Compensation plug			x	x	x	x

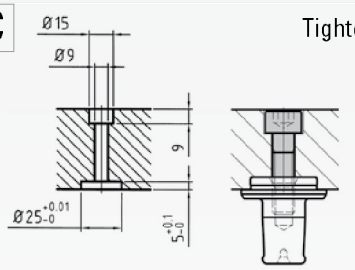
QUIRI Point Zéro **PZ 20**

Plugs
short

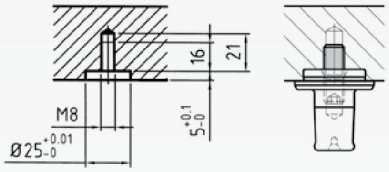
PZ 20

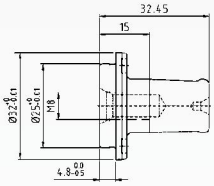
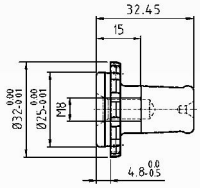
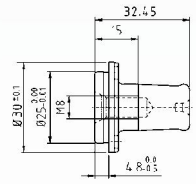
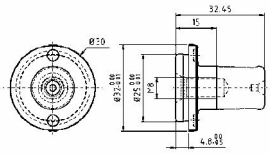
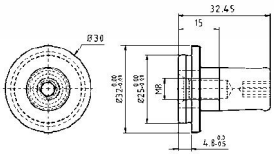
Plug fitting versions (preferably version C)

C Tightening moment: 20 Nm



D Tightening moment: 20 Nm



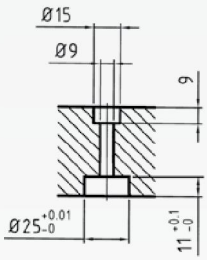
			without air-blast	with air-blast	fitting version C	fitting version D
PZ2502 Centering plug			x		x	x
PZ2505 Centering plug				x	x	x
PZ2512 Plug without centering			x	x	x	x
PZ2522 Compensation plug			x	x	x	x
PZ2523 Two-piece compensation plug			x	x		x

Plugs
Special applications

PZ 20

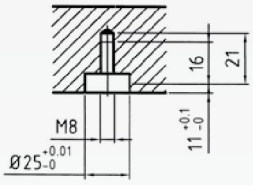
Plug fitting versions (preferably version E)

E

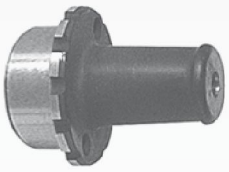
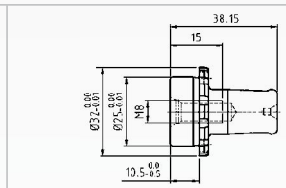
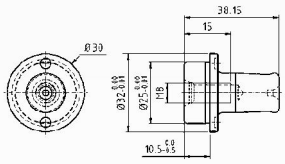
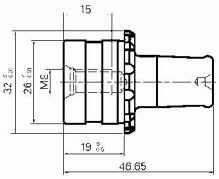
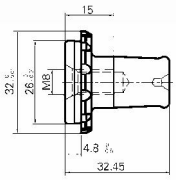


Tightening moment: 20 Nm

F

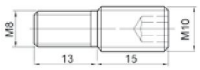


Tightening moment: 20 Nm

			without air-blast	with air-blast	fitting version A/B	fitting version C/D	fitting version E/F
PZ2515 Centering plug medium length e.g. for vises			x	x			x
PZ2516 Compensation plug medium length e.g. for vises			x	x			x
PZ2501 Oversize Centering plug long Bore size Ø 26 $^{0}_{-0,01}$ mm				x	x		
PZ2503 Oversize Centering plug short Bore size Ø 26 $^{0}_{-0,01}$ mm				x		x	

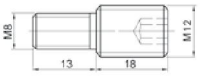
Special fitting of plugs

PZ1552



Stud screw to clamp
DockLock plug into
M10 blind hole

PZ1548



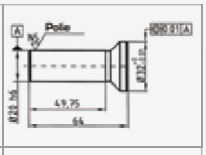
Stud screw to clamp
DockLock plug into
M12 blind hole

Accessories

PZ 20

PZ1590

Setup plug
for built-up cylinder

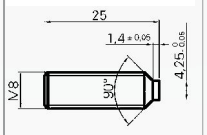


PZ1550

stud bolt M8 x 30
for blind hole mounting
of plugs

PZ1580

Indexing set-screw M8 (12.9)
hardened, for Mini basic pallet
PZ1601



PZ1551

Socket head screw M8 x 25 (12.9)
for through hole plug mounting

PZ199.

Brass coverdisc

PZ1998	Ø 10,5 $^{-0}_{+0,05}$ mm	thickness 1 mm
PZ1999	Ø 8,55 $^{-0}_{+0,10}$ mm	thickness 1 mm

Swarf protection of counterbores on QUIRI units.

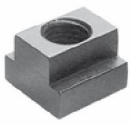
Attention:
most important for automated applications

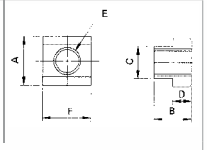
Fitting:
fit flush by using a plastic faced hammer

Removal:
Strike the center with a small punch and pull out with a scriber or similar tool.

775 ...

T-Slot Nuts

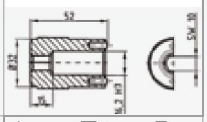




	A	B	C	D	E	F	kg
775 PT06 1412	22,0	16.0	13,8	8,0	M12	28	0,048
775 PT06 1816	28,0	20,0	17,7	10,5	M16	30	0,085

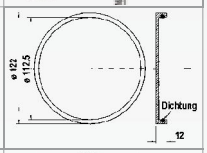
PZ1570

Mounting adapter for
plugs



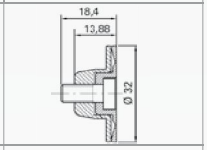
PZ1159

Aluminium cover



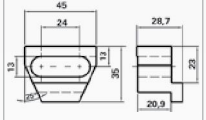
PZ2534

Cover plug



PZ1172

Bracket



PZ1175

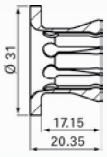
Socket head screw M12 x 35
to bracket PZ1 172

PZ2 00090

Collet

PZ1 00094

circular spring

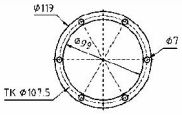


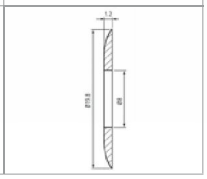
PZ1 00091

Circlip

PZ2165K

Spacers used to compensate
height variations on flanged
cylinder cavities PZ 20. Thickness
2 mm



PZ2004-1.2

Washer for inclined lifting