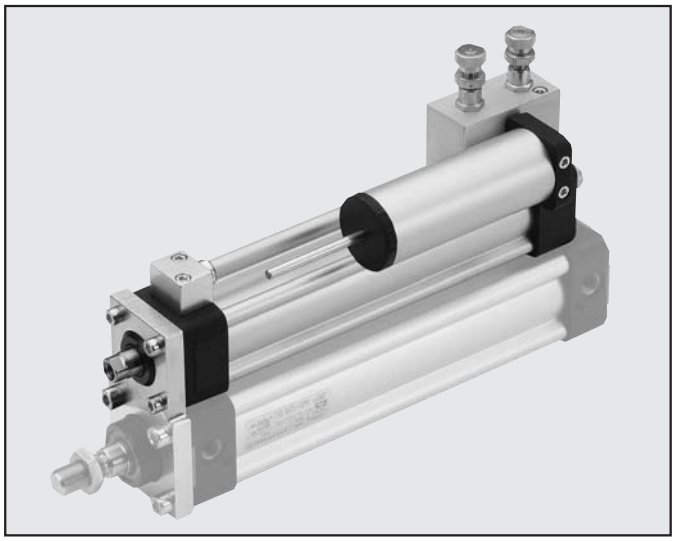
HYDRAULIC BRAKE SERIES BRK FOR ISO 15552 (EX ISO 6431) CYLINDER Ø 40-80 mm

The hydraulic brake is the closed loop type without its own power source. It is normally linked to an ISO 15552 pneumatic cylinder. It consists of a cylinder full of oil, one or more flow regulation valves and a top-up tank to compensate for any oil leakage.
The following versions are available:
• With piston rod adjustment in either direction or both;
• With SKIP valve (slow-fast) or stop valve or both.
The compensation tank needs to be topped up from time to time. This should be done when the oil reaches the minimum level marked on the rod. With the piston rod right out, the stick must project not less than 20 mm from the tank cap. COMLUBE-DEXRON ATF oil should be used. During the first few cycles, any excess oil is ejected through a hole in the tank.

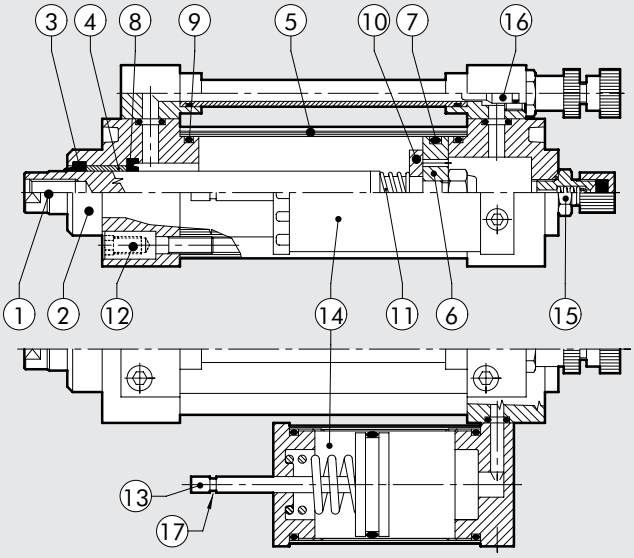


TECHNICAL DATA

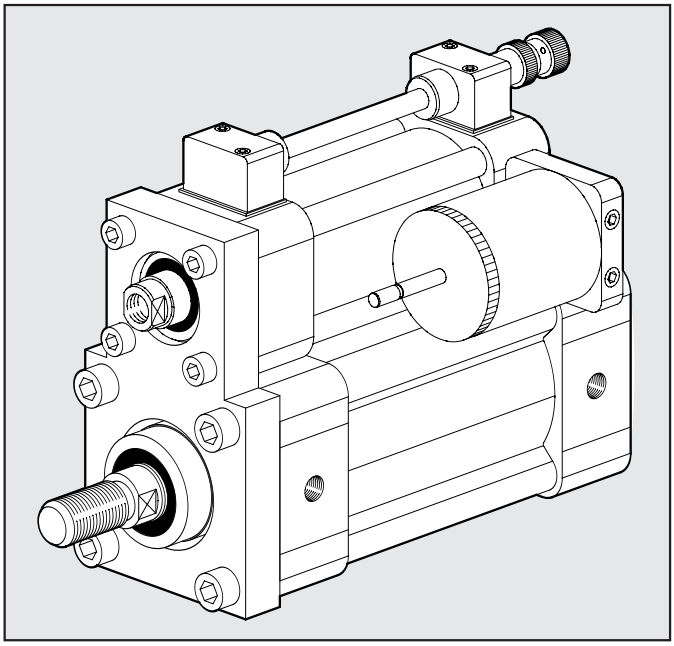
Gaskets		NBR
Temperature range	T	–10°C to +70°C
Fluid		Filtered lubricated or unlubricated air.
		Lubrication, if used, must be continuous.
Adjustable load	F	6000N standard version
		5000N with valves
Speed	V	10 mm/min. to 6000 mm/min.
Standard strokes	mm	50, 100, 150, 200, 250, 300, 350, 400, 450, 500
		On request other special strockes, up to 1000
Configurations		Piston rod thrust adjustment; Piston rod retract adjustment
		Adjustment on both strokes; Thrust adjustment + skip valve
		Retract adjustment + skip valve; Double adjustment + double skip valve
		Thrust adjustment + stop valve; Retract adjustment + stop valve
		Twin adjustment + double stop valve; Thrust adjustment + skip/stop valve
		Retract adjustment + skip/stop valve
Fixing to cylinder		with flange kit
Connectable cylinders	mm	ISO 15552 cylinders with bores Ø 40 to Ø 80
Weights		See GENERAL TECHNICAL DATA PAGE 1.1/07

COMPONENTS

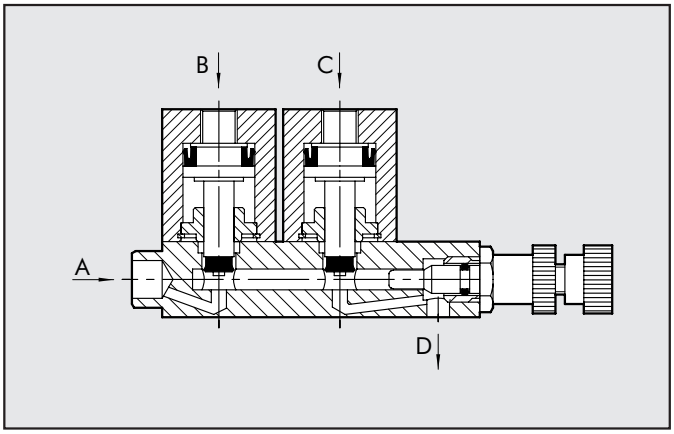
① PISTON ROD: thick chromed steel
② HEADS: die cast aluminium alloy
③ PISTON ROD GASKET: NBR rubber
④ PISTON ROD GUIDE BUSHING: steel strip with bronze and PTFE insert
⑤ JACKET: drawn anodised aluminium alloy
⑥ PISTON: aluminium alloy
⑦ PISTON GASKET: NBR rubber
⑧ OIL SEAL GASKET: polyurethane
⑨ Static O-rings: NBR rubber
⑩ SEALING DISK: plastic
⑪ SPRINGS: zinc-plated steel
⑫ SECURING/ASSEMBLY SCREW: Tap Tite screw
⑬ OIL LEVEL STICK: zinc-plated steel
⑭ OIL RECOVERY TANK
⑮ VALVE for OIL FILLING
⑯ FLOW REGULATION NEEDLE
⑰ MINIMUM LEVEL



HYDRAULIC BRAKE + ISO 6431 CYLINDER Ø 40-80



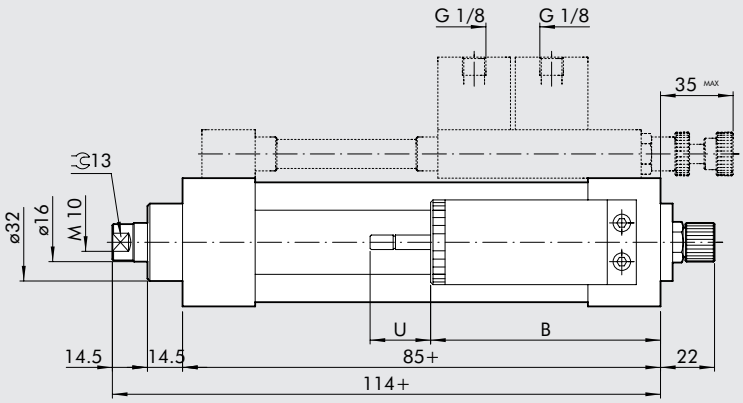
SKIP-STOP VALVE



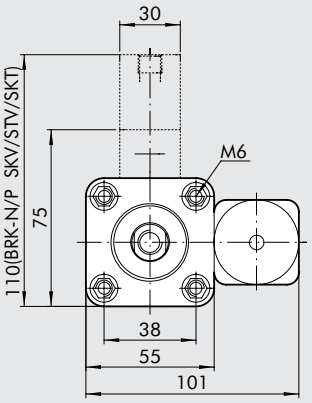
Both the skip valve and the stop valve are normally open and the fluid flows freely from A to D.
With supply from port C, the skip valve is controlled and the fluid is forced to pass through a choke generated by the regulation pin.
With supply from port B, the stop valve is controlled and the flow of fluid is interrupted.

DIMENSIONS OF HYDRAULIC BRAKE

TYPE: BRK-P STD/SKV/STV/SKT

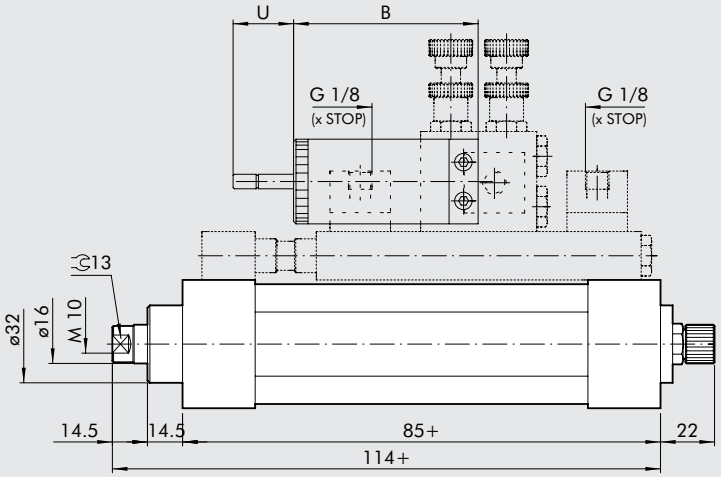


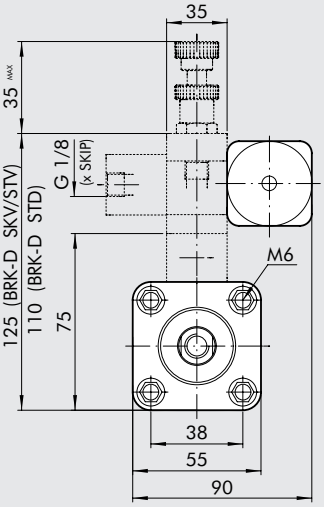
BRK-N STD/SKV/STV/SKT



Stroke	B	U
1÷50	90	28
51÷100	110	37
101÷150	110	44
151÷200	135	52
201÷250	135	60
251÷300	155	68
301÷350	155	77
351÷400	185	85
401÷450	185	92
451÷500	205	100

TYPE: BRK-D STD/STV/SKT

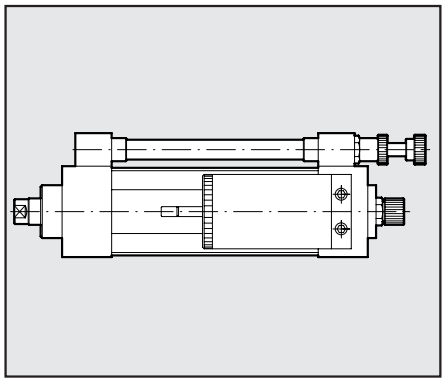


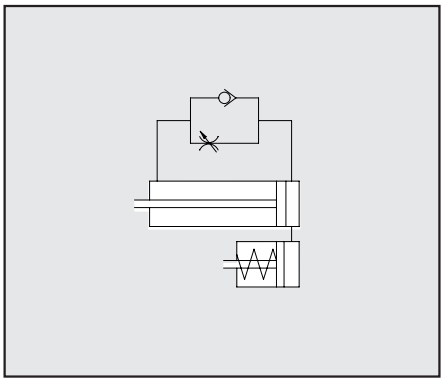


+ = ADD THE STROKE

HYDRAULIC BRAKE BRK-P STD.

Code

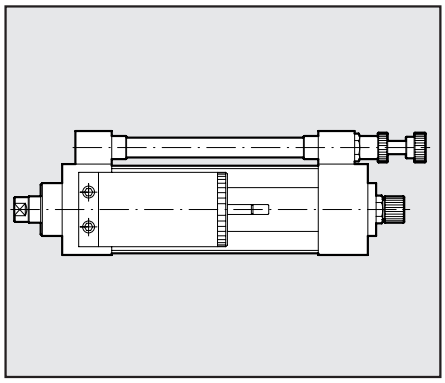


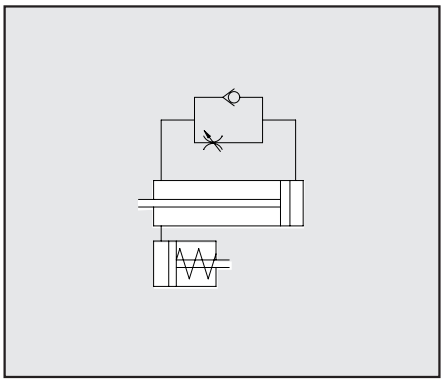


PISTON ROD THRUST ADJUSTMENT
W170001 . . . . ENTER THE STROKE

HYDRAULIC BRAKE BRK-N STD.

Code

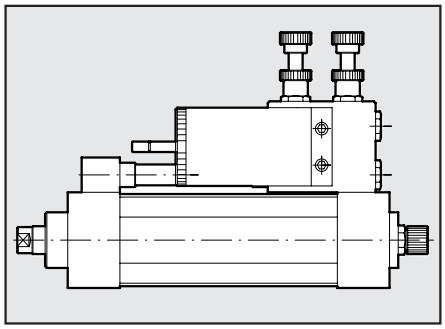


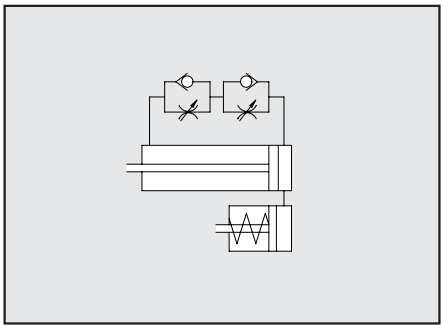


PISTON ROD RETRACT ADJUSTMENT
W170011 . . . . ENTER THE STROKE

HYDRAULIC BRAKE BRK-D STD

Code

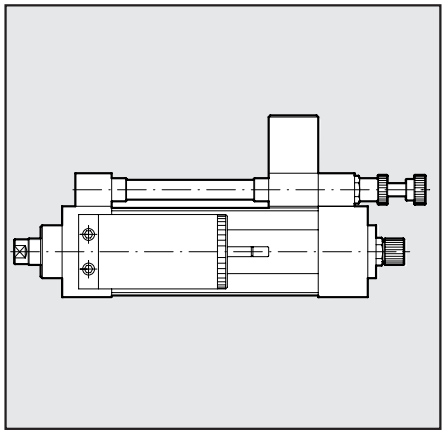


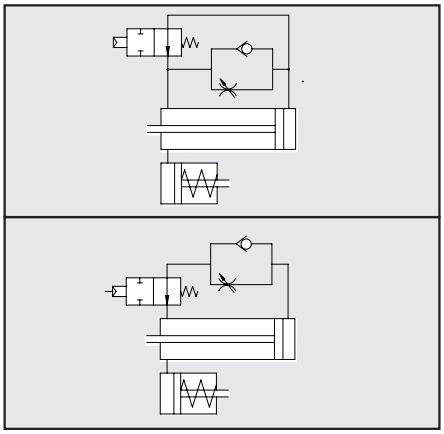


PISTON ROD RETRACT ADJUSTMENT
W170021 . . . . ENTER THE STROKE

HYDRULIAC BRAKE BRK-N SKV/BRK-N STV

Code

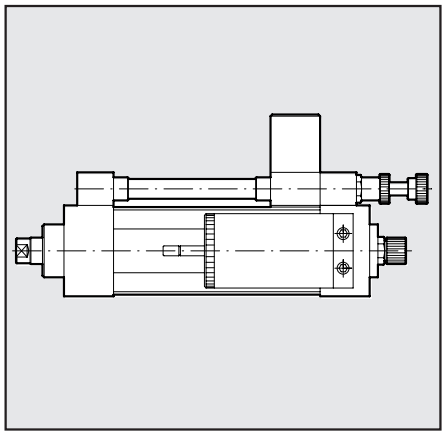


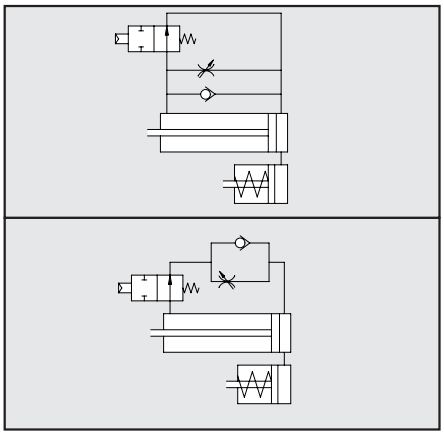


RETRACT ADJUSTMENT + SKIP VALVE
W170111 . . . . ENTER THE STROKE

RETRACT ADJUSTMENT + STOP VALVE
W170211 . . . . ENTER THE STROKE

HYDRAULIC BRAKE BRK-P SKV/BRK-P STV



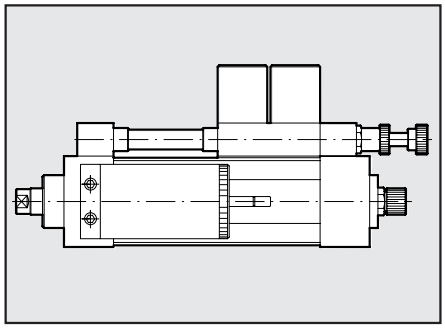


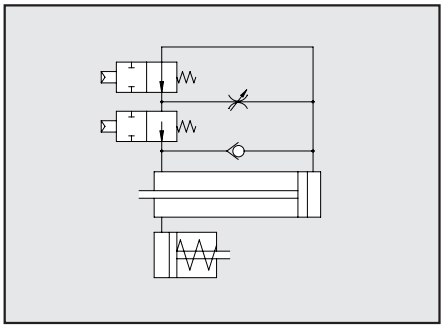
Code

THRUST ADJUSTMENT + SKIP VALVE
W170101 . . . . ENTER THE STROKE

THRUST ADJUSTMENT+STOP VALVE
W170201 . . . . ENTER THE STROKE

HYDRAULIC BRAKE BRK-N SKT

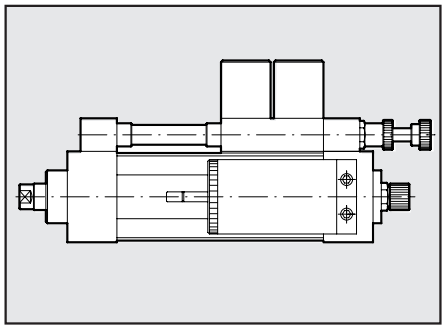


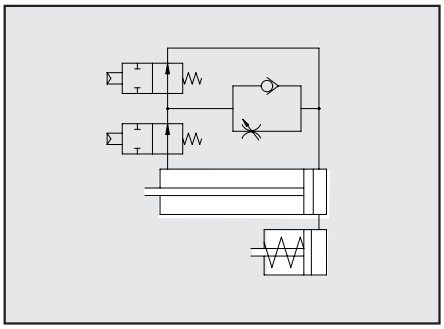


Code

RETRACT ADJUSTMENT + SKIP/STOP VALVES
W170311 . . . . ENTER THE STROKE

HYDRAULIC BRAKE BRK-P SKT

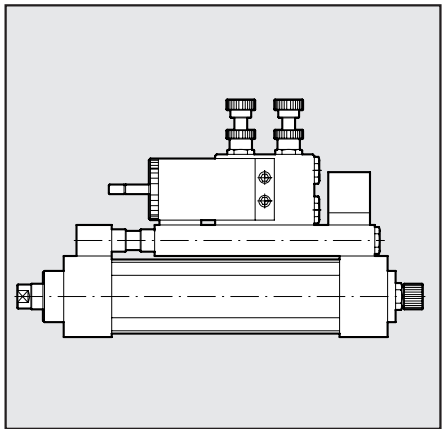


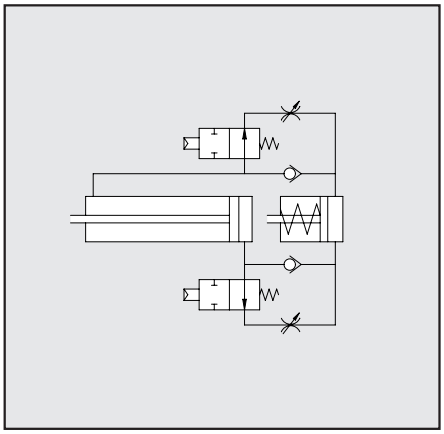


Code

THRUST ADJUSTMENT + SKIP/STOP VALVE
W170301 . . . . ENTER THE STROKE

HYDRAULIC BRAKE BRK-D STV





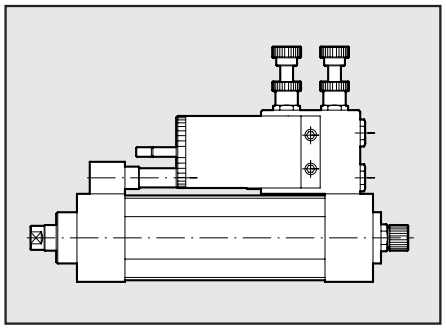
Code

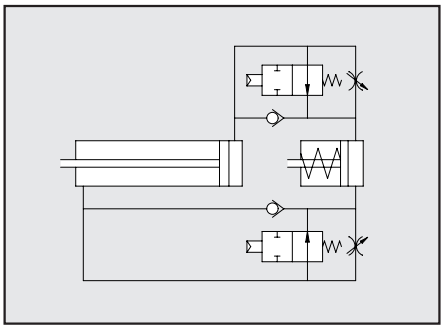
PISTON ROD THRUST RETRACT ADJUSTMENT
+ DOUBLE STOP VALVE
W170221 . . . . ENTER THE STROKE

NOTE: minimum stroke 150 mm

HYDRAULIC BRAKE BRK-D SKV

Code





PISTON ROD THRUST RETRACT ADJUSTMENT
+ DOUBLE SKIP VALVE
W170121 . . . . ENTER THE STROKE

KEY TO CODES

W	1	7	0		0	0	1		0	2	0	0

W170	Hydraulic brake	001	Piston rod thrust adjustment
		011	Piston rod retract adjustment
		021	Piston rod retract/thrust adjustment
		101	Thrust adjustment + SKIP VALVE
		111	Retract adjustment + SKIP VALVE
		121	Double adjustment + DOUBLE SKIP VALVE
		201	Thrust adjustment + STOP VALVE
		211 ✚	Retract adjustment + STOP VALVE
		221	Double adjustment + DOUBLE STOP VALVE
		301	Thrust adjustment + SKIP/STOP VALVE
		311	Retract adjustment + SKIP/STOP VALVE

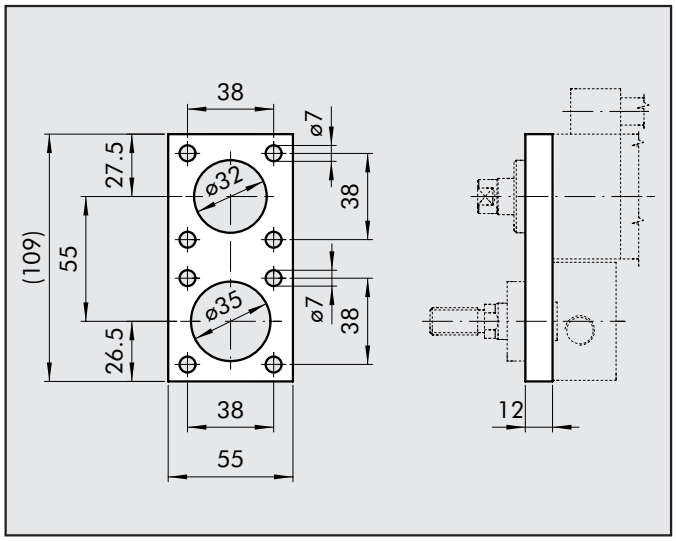
Enter the desired stroke in 4 digits. Example: for a 50mm-stroke cylinder enter 0050.

✚ Minimum stroke 150 mm

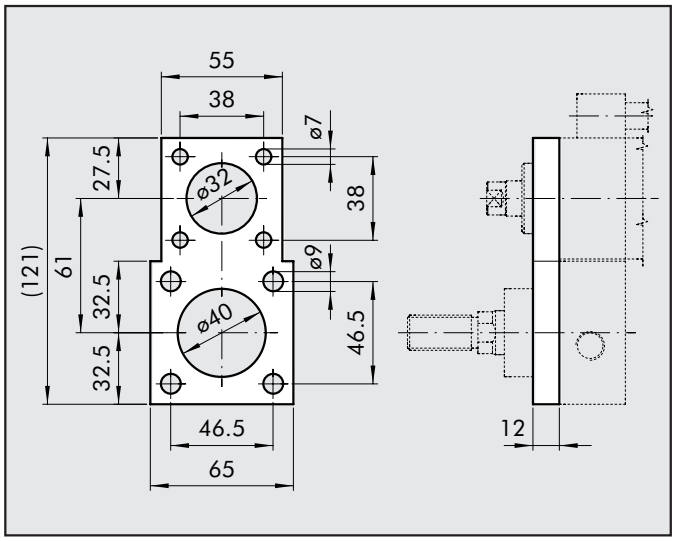
NOTES

ACCESSORIES: FLANGE

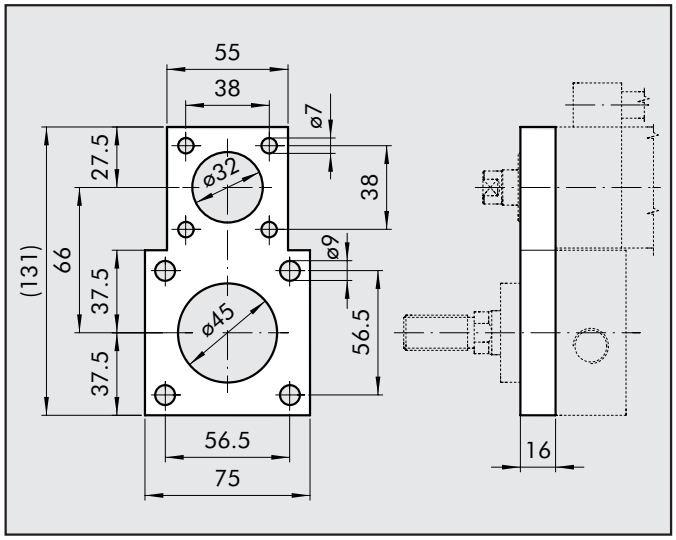
FLANGE Ø 40



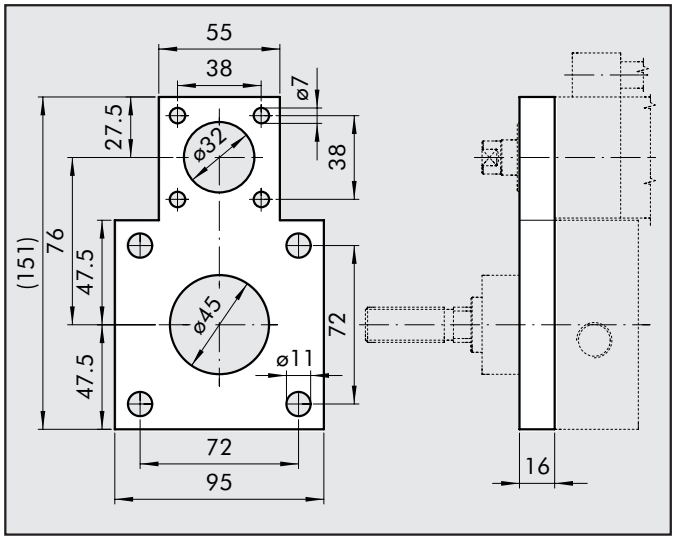
FLANGE Ø 50



FLANGE Ø 63



FLANGE Ø 80



ORDERING CODES

Code	Description	Weight [g]
BRAKE CYLINDER CONNECTING FLANGE		
W0950402012	FLANGE ACC. MODEL CF-040	418
W0950502012	FLANGE ACC. MODEL CF-050	540
W0950632012	FLANGE ACC. MODEL CF-063	792
W0950802012	FLANGE ACC. MODEL CF-080	1216

Note: Supplied complete with 4+4 screws.

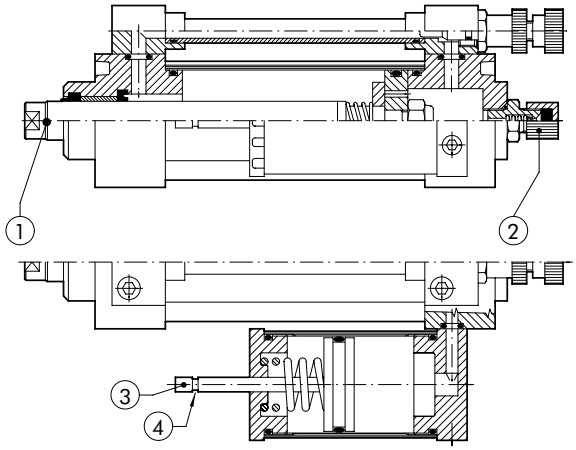
SET OF SCREWS FOR FLANGE		
W0950402111	KIT BRK-P/C-040	58
W0950502111	KIT BRK-P/C-050	93
W0950632111	KIT BRK-P/C-063	97
W0950802111	KIT BRK-P/C-080	151

Note: the code corresponds to 4+4 screws.

NOTES

Istruzioni freno idraulico serie "BRK" per cilindri ISO 15552 Ø40÷ø80

Instructios hydraulic brake series BRK for ISO 15552 Ø40-80 cylinders



DESCRIZIONE

Il freno idraulico è un circuito chiuso privo di una propria sorgente di forza.
Normalmente viene abbinato ad un cilindro pneumatico serie ISO 15552.
Il freno idraulico è composto da un cilindro riempito d'olio, un gruppo di regolazione del flusso ed un serbatoio per la compensazione dei trafilamenti di olio.

- Versione con regolazione in uscita stelo, in rientro o entrambe
- Valvola di SKIP (NC/NA) in uscita stelo, in rientro o entrambe
- Valvola di STOP (NC/NA) in uscita stelo, in rientro o entrambe
- Valvole di SKIP+STOP (NC/NA) in uscita stelo o in rientro

Nei primi cicli di lavoro l'olio in eccesso viene espulso da un forellino posto sul serbatoio.
Dopo un certo periodo di lavoro, il serbatoio di compensazione del freno deve essere ricaricato dell'olio perso durante il funzionamento
L' eventuale insufficienza è indicata dalla tacca di minimo livello (pos. 4) posta sull' astina del serbatoio (pos. 3): con lo stelo (pos.1) completamente estratto, la tacca di minimo deve sempre essere all'esterno del tappo nero del serbatoio.

DESCRIPTION

The hydraulic brake is a closed-loop device without any own source of power.
It is normally combined with an ISO 15552 pneumatic cylinder.
The hydraulic brake is comprised of an oil-filled cylinder, a flow regulation unit and an oil leak compensation tank.
The following versions are available:

- *Version with regulation with piston rod extending, retracting or both*
- *SKIP(NC/NO) valve with piston rod extending, retracting or both*
- *STOP (NC/NO) valve with piston rod extending, retracting or both*
- *SKIP+STOP(NC/NO) valves with piston rod extending or retracting*

In the first operating cycles, any excess oil is discharged through a hole in the tank.
After a certain time of operation, the brake compensation tank must be topped up with the amount of oil lost during operation.
The possible lack is shown by the low level mark (posn. 4) on the dipstick of the tank (posn. 3): with the piston rod (posn. 1) fully extended, the minimum mark on the dipstick must be always ouside the black cap af the tank

MANUTENZIONE

Caricamento normale

- fare uscire tutto lo stelo (pos.1)
- svitare il tappo zigrinato della valvola di caricamento (pos. 2)
- riempire il freno con olio idraulico Comlube DEXRON ATF (oppure con olio compatibile) fino a quando l'asta (pos. 3) sporge di 20 mm dal tappo del serbatoio
- l'olio in eccesso verrà espulso automaticamente nei primi cicli di lavoro

...se il freno rimane senza olio

- posizionare il freno in verticale con lo stelo (pos.1) tutto fuori e rivolto verso il basso
- riempire fino a che dal foro posto sul serbatoio comincia ad uscire olio
- attendere 30-40 minuti per consentire alle bolle d'aria di portarsi verso1'alto
- scaricare l'aria agendo con uno spillo sulla sfera della valvola di caricamento (pos. 2)
- fare rientrare lo stelo e ripetere l'operazione 2 o 3 volte fino a quando l'asta (pos. 3) sporge di 20 mm dal tappo del serbatoio
- l'olio in eccesso verrà espulso automaticamente nei primi cicli di lavoro

Per il caricamento o il rabbocco utilizzare solamente i seguenti olii:

- COMLUBE-DEXRON ATF
- MOBIL-ATF 220-32°
- BP-AUTRAN GM-MP34°
- AGIP-ATF DEXRON 35°
- API-APILUBE ATF DEXRON IID
- ESSO-AUTOMATIC TRASMISSION FLUID D
- FIAT-TUTELA GI/A
- FINA-FINAMATIC II
- IP-TRASMISSION FLUID DX
- ROLOIL-HYDROMATIC-DEX
- SHELL-ATF DEXRON 11
- TOTAL-FLUIDE ATX

MAINTENANCE

Normal filling

- *Fully retract the piston rod (posn. 1).*
- *Unscrew the knurled cap on the filling valve (posn. 2).*
- *Fill the brake with Comlube DEXRON ATF hydraulic oil (or other compatible oil) until the mark on the dipstick (posn. 3) projects 20 mm from the cap of the tank.*
- *Excess oil will be ejected automatically during the first operating cycles.*

If the brake runs out of oil

- *Position the brake vertically, with the piston rod (posn. 1) fully extracted and facing downwards.*
- *Fill until oil starts to come out of the hole in the tank.*
- *Wait 30-40 minutes to allow the bubbles of air to rise.*
- *Release air by pressing on the ball of the filling valve with a pin (posn. 2).*
- *Retract the piston rod and repeat the operation 2 or 3 times, until the dipstick (posn. 3) projects 20 mm from the tank cap.*
- *Excess oil will be ejected automatically during the first operating cycles.*

Only the following grades of oil must be used for filling or topping up:

- *COMLUBE-DEXRON ATF*
- *MOBIL-ATF 220-32°*
- *BP-AUTRAN GM-MP34°*
- *AGIP-ATF DEXRON 35°*
- *API-APILUBE ATF DEXRON IID*
- *ESSO-AUTOMATIC TRANSMISSION FLUID D*
- *FIAT-TUTELA GI/A*
- *FINA-FINAMATIC II*
- *IP-TRANSMISSION FLUID DX*
- *ROLOIL-HYDROMATIC-DEX*
- *SHELL-ATF DEXRON 11*
- *TOTAL-FLUIDE ATX*