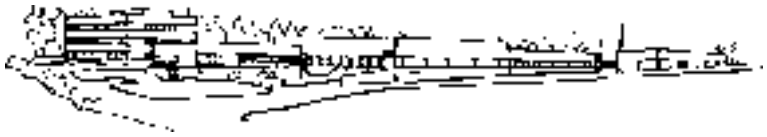

Nordhydraulic

DIRECTIONAL CONTROL VALVE

RS210

-Sectional design

Nordhydraulic AB

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+ 46 612-71 72 15

Nordhydraulic

GET IN TOUCH WITH NORDHYDRAULIC AT AN EARLY STAGE

At Nordhydraulic there are skilled an experienced engineers/designers ready to adapt the valve for your very needs.

RS210 is a sectional valve designed to match your specific requirements.
It can be built in the range one to ten spool sections per valve assembly.
RS210 will cope with a system pressure up to **350 bar** and flows up to **70 l/min**.

The valve can be used in different systems for parallel as well as tandem circuitry.

THE VALVE WITH POSSIBILITIES

Over the years the RS210 has been developed into the very versatile and well-proven valve of today including for example Q-function, el. hydr.prop. remote control versions (see separate data sheets RS210 EHPD and EHPS) and a great variety of different inlet-, outlet- and spool sections, spools and spool controls etc.
The design of this sectional valve offers you as a systems designer and/or operator wide opportunities to optimum function and control.

Q-FUNCTION

Briefly the Q-function may be described in such a way that when the system is idling part of the pump flow is routed directly to tank insted of just circulating in the system. This reduces heat generation and improves control characteristics.

APPLICATIONS

The number of different applications where RS210 has proven useful is extensive. Typical examples are cranes, excavators, backhoe-loaders, skid loaders and tipping gear.

TYPICAL RS210 PROPERTIES AND POSSIBILITIES

-el.hydraulic, hydraulic and pneumatic remote controls and cable control

-several different in- and outlet alternatives offering possibility for electrical unloading, connecting and dimensional flexibility

-Q-function for further improved operating characteristics and lower pressure drop etc

-very wide programme of different spools optimised for various pump flows, applications, system alternatives etc.

-spool controls for external kick-out and spool position sensing

-load checks in each spool section

-high pressure carry-over

-l.h and r.h. side inlet

-feed restriction (meter-in)

-regenerative function

-careful compensation of flow forces

DATA SHEET

This data sheet presents the variety of standard components available, and how to specify these in a valve assembly according to your application requirements.

Contents

TECHNICAL DATA

PRESSURES

Max. system pressure..... 350 bar (35 MPa)
(Depending on application and configuration, valid unless otherwise not stated)

Max. continuous
return line pressure..... 20 bar(2.0Mpa)

FLOWS

Max. recommended pump flow ..... 60 l/min
With Q-inlet..... 70 l/min

FURTHER DATA

Spring force, spool control 910
in neutral position..... 110 N (11 kp)
Spring force, spool control 910
fully selected spool..... 135 N (13,5 kp)

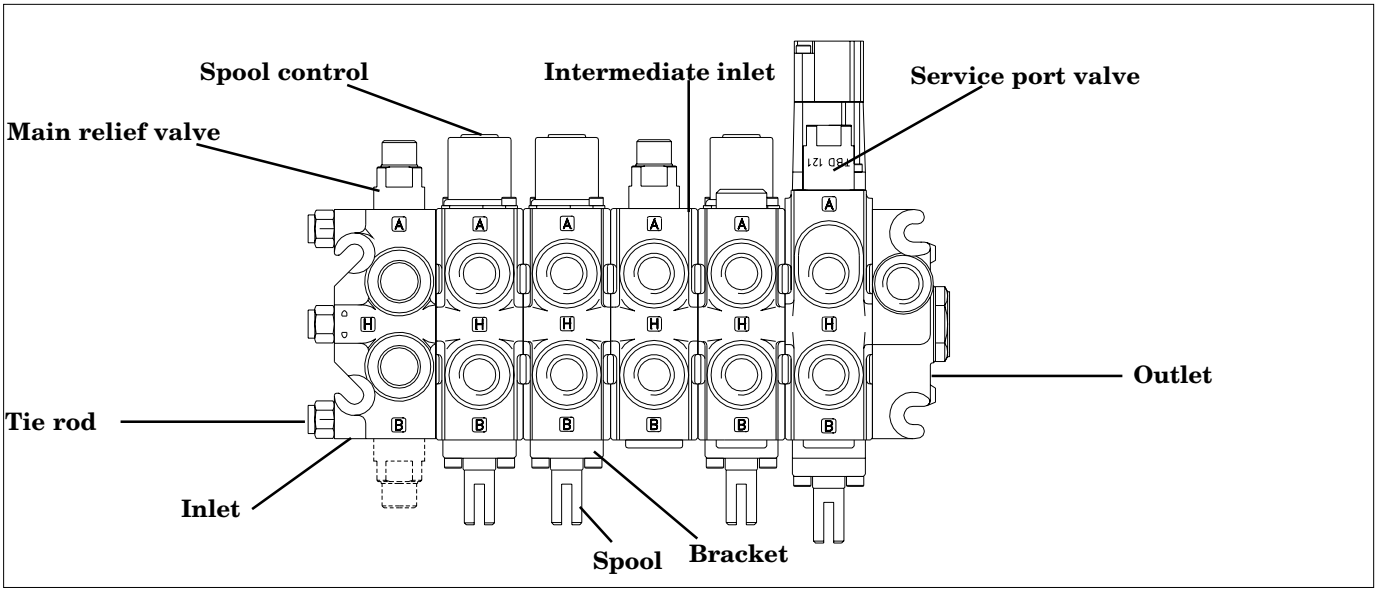
Max. contamination level:

-At normal duty, equal to or better than 18/14 as per ISO 4406
-At high system pressure and/or for remote control equal to or better than 16/13 as per ISO 4406.

Hydraulic fluid
viscosity range.....10-400 mm2/s (cSt)

Hydraulic fluid temperature range for continuous operation...-15°C - +80°C
(Higher temperature - contact us. High temp. seals available)

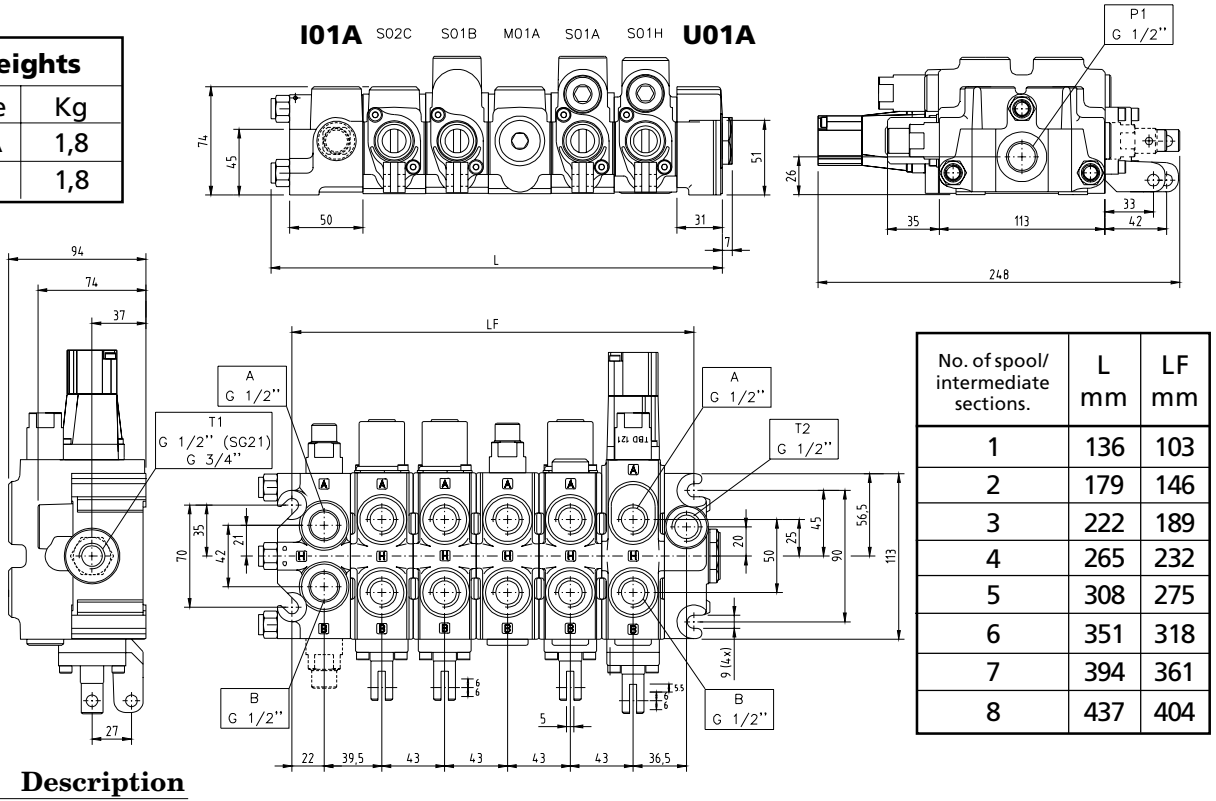
Spool leakage at 100 bar, 32 cSt
and 40°C.....4-9 cm3/min



INLETS AND OUTLETS

—with side connection—

Weights	
Code	Kg
I01A	1,8
I03P	1,8



No. of spool/ intermediate sections.	L mm	LF mm
1	136	103
2	179	146
3	222	189
4	265	232
5	308	275
6	351	318
7	394	361
8	437	404

Code **Description**

I01A Has two pump ports (one side located) and one tank port.

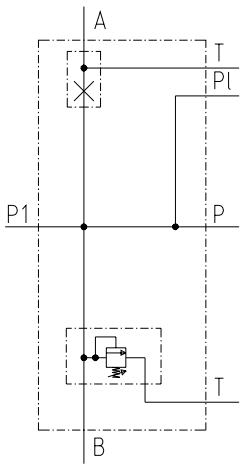
With m.r.v. fitted in A-side cavity, A-port is pump port and B-port is tank port and vice versa when m.r.v. is B-side mounted. For max. **300 bar**.

Port P1-side, A and B face upwards.

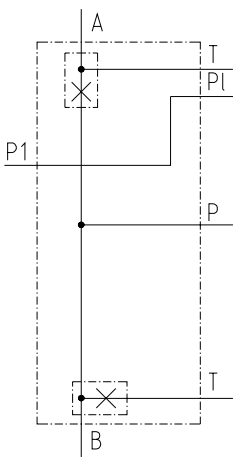
I03P Installation dimensions and port locations as I01A. Side inlet port only connected with parallel gallery. Top inlet port only connected with centre gallery. For max. **300 bar**. Usable to achieve two separate valves in one parallel circuit system, and for use of RS210 in LS-systems.

Port P1-side, A and B face upwards.

I01A

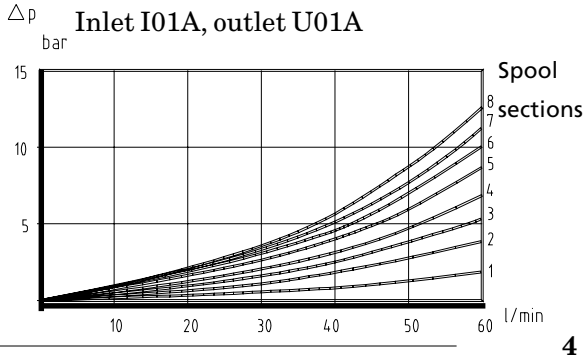


I03P

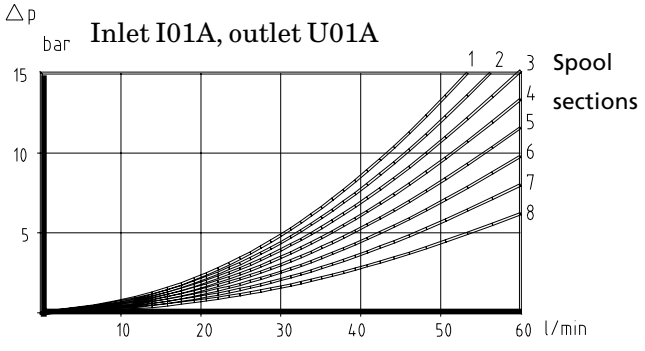


Pressure drop

P1 – T1



A/B -T

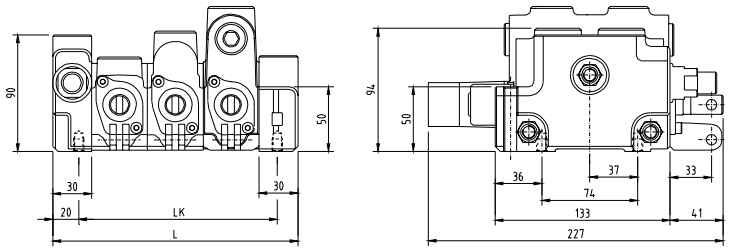


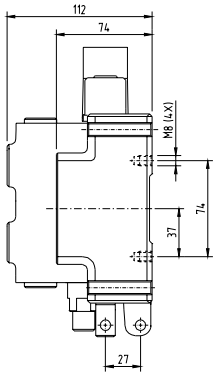
INLETS AND OUTLETS

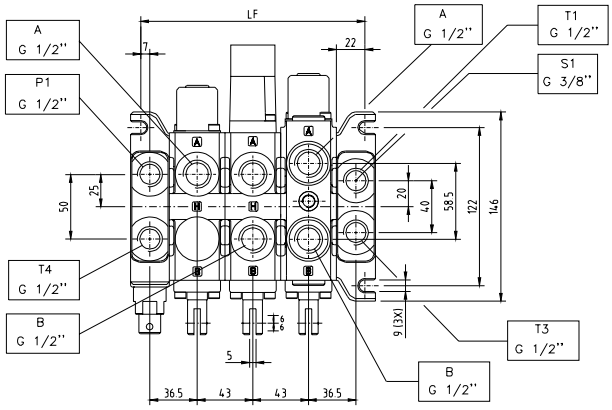
—with top connection—

I01B SO1C SO1B SO1R **U01B**

Weights	
Code	Kg
I01B	1,7
I06G	1,7



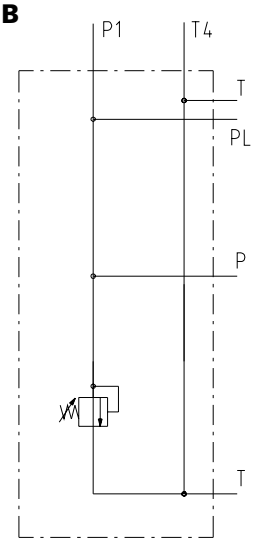




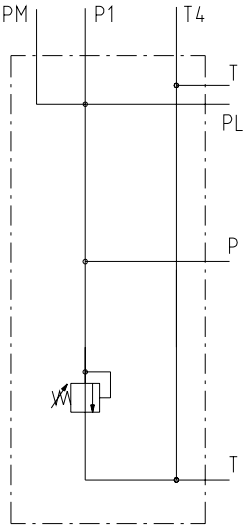
No. of spool/ intermediate sections.	LK mm	L mm	LF mm
1	68	103	87
2	111	146	130
3	154	189	173
4	197	232	216
5	240	275	259
6	283	318	302
7	326	361	345
8	369	404	388

Code	Description
I01B	Has one pump and one tank port, both facing upwards. M.r.v. cavity is on the B-side. For max. **300 bar.** Max. recommended pump flow for tank port (T4): 35 l/min. **Ports P1and T4 face upwards.**
I06B	Same as **I01B** but with pressure gauge port **(PM)**. PM (1/4"BSP) is located adjacent to pump port (P1).

I01B



I06B

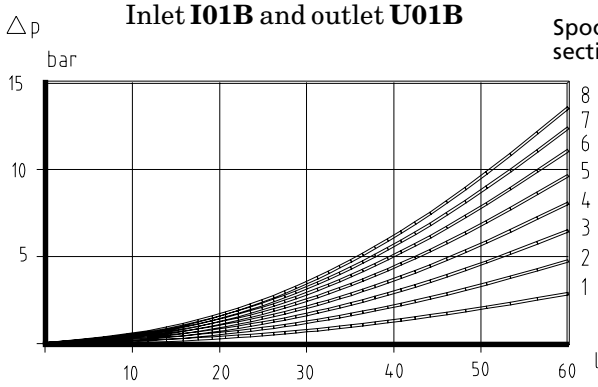


(Note: Inlets of type B offer a connection between tank galleries of the A and B sides.)

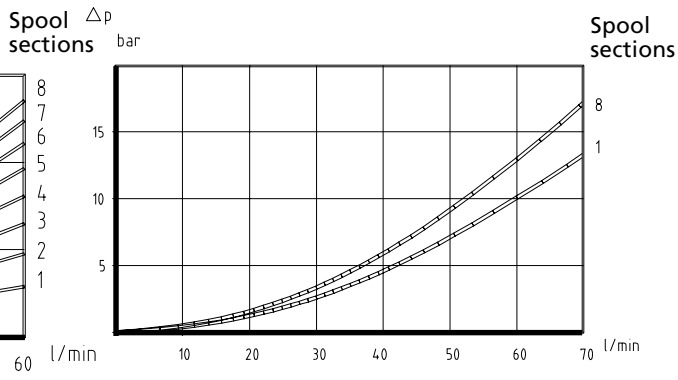
Pressure drop

P1 - T1/T3

Inlet **I01B** and outlet **U01B**

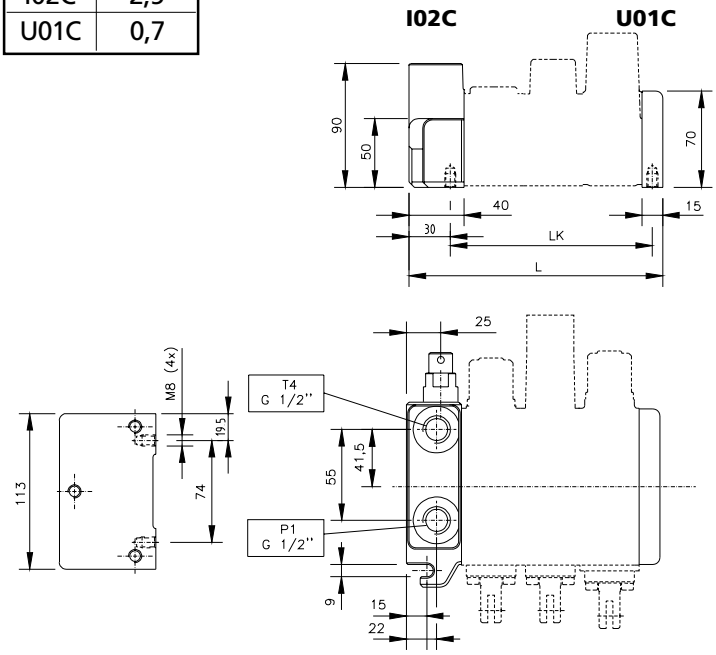


P1 – A/B



"C" INLET AND "C" OUTLET (END PLATE)

Weights	
Code	Kg
I02C	2,5
U01C	0,7



No. of spool/ intermediate sections.	L mm	LK mm
1	98	61
2	141	104
3	184	147
4	227	190
5	270	233
6	313	276
7	356	319
8	399	362

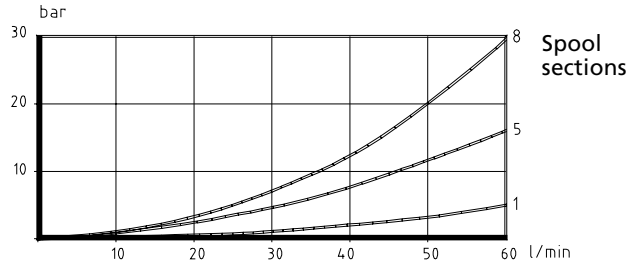
Code	Description
I02C	Has one pump and one tank port, both facing upwards. M.r.v. cavity is on the A-side.
	Ports P1 and T4 face upwards.
U01C	End plate without porting. (See page 11 as well.)

(Note: Inlet of type C offers a connection between tank galleries of the A and B sides.)

Pressure drop

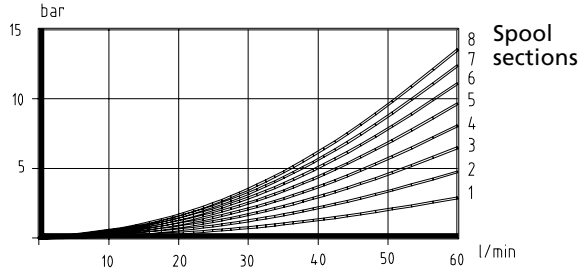
P1 - T4

△p Inlet **I02C**, and end plate **U01C**

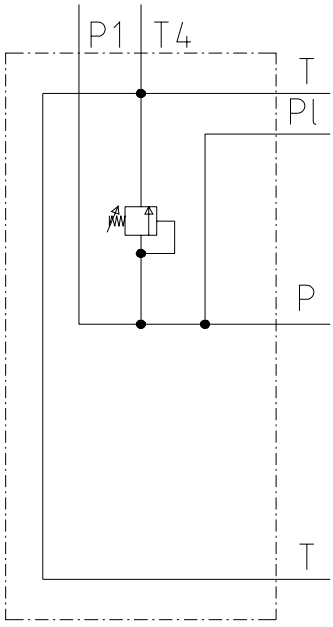


P1 - T1/T3

△p Inlet **I02C** and outlet **U01B**



I02C

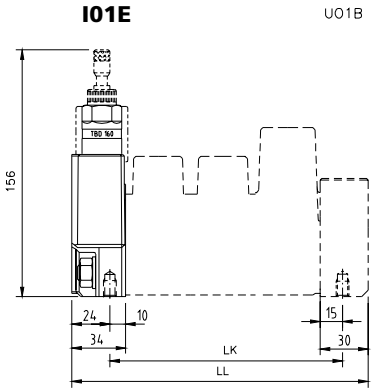


"E" INLET

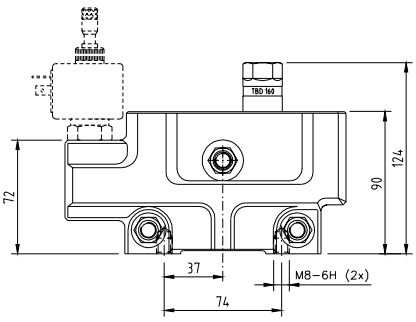
E-inlet offers el. unloading of the pump flow

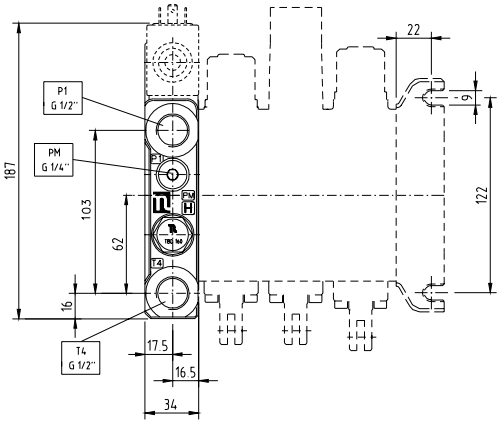
Weights	
Code	Kg
I01E	2,3

I01E



U01B

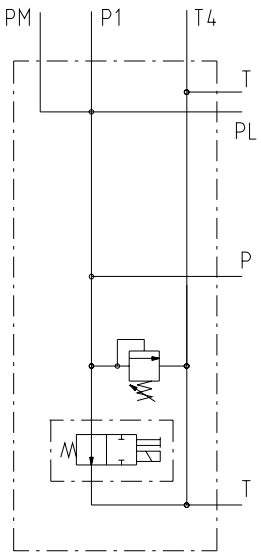




No. of spool/ intermediate sections.	LK mm	LL mm
1	68	107
2	111	150
3	154	193
4	197	236
5	240	279
6	283	322
7	326	365
8	369	408

Code	Description
I01E	Has one pump and one tank port, both facing upwards. M.r.v. cavity facing upwards. Main inlet valve options: **-TBD160** up to **300 bar** **-TBS400** up to **350 bar** With cavity (facing upwards) for optional el. unloading valve. With pressure gauge port (PM). Connects A-B at T. **Ports P1, T4 and PM face upwards.**

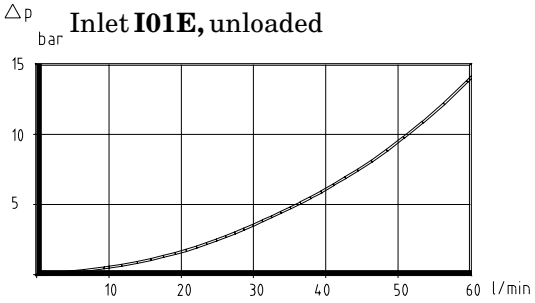
I01E



Pressure drop

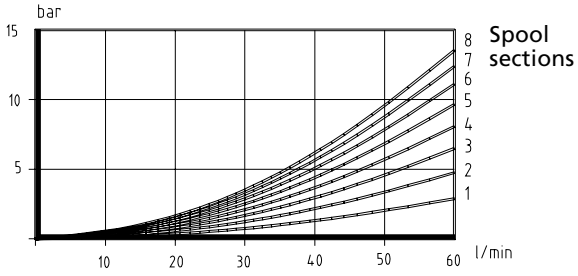
P1 - T4

Inlet **I01E,** unloaded



P1 - T1/T3

Inlet **I01E** and outlet **U01B**

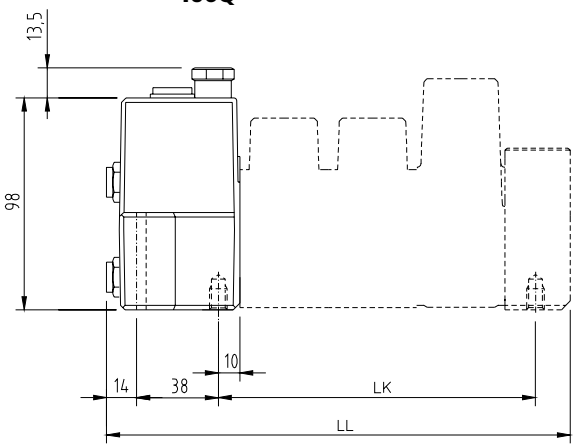


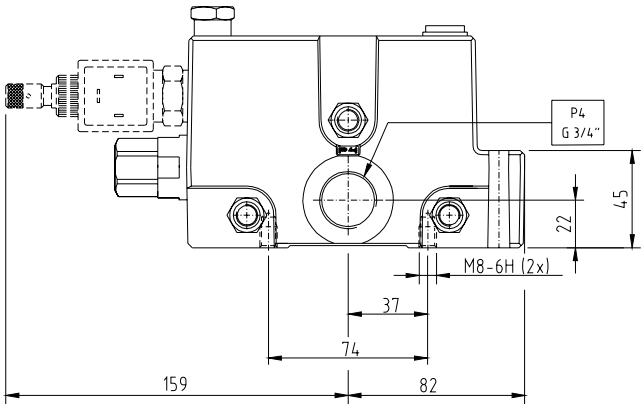
"Q" INLET

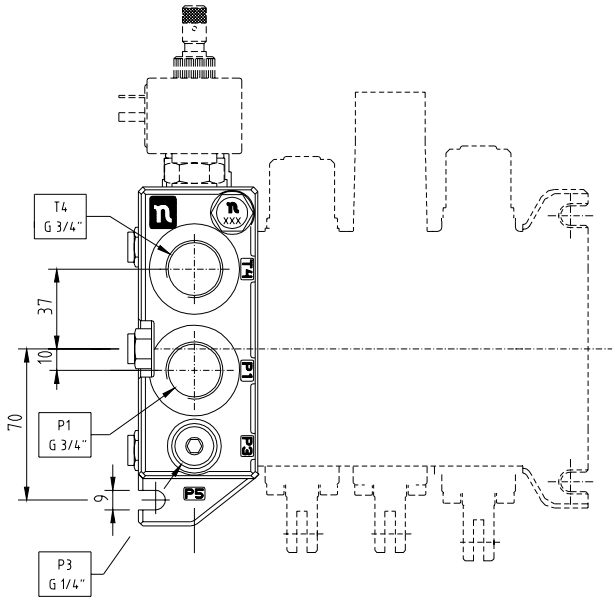
Weights	
Code	Kg
I02Q	4,5
I06Q	4,5

Q-inlet provides by-pass in idling condition and el. unloading of pump flow.

I06Q UO1B







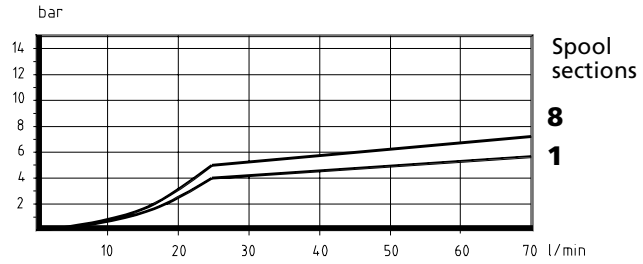
No. of spool/ intermediate sections.	LK mm	LL mm
1	68	135
2	111	178
3	154	221
4	197	264
5	240	307
6	283	350
7	326	393
8	369	436

Note: **I02Q** has no side inlet port (P4) and port P1 is G ½"

"Q" INLET

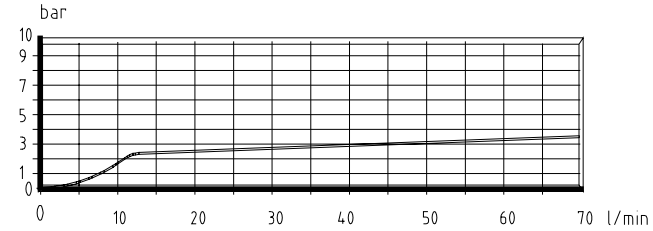
P1 - T4

Inlet **I02Q/I06Q**, with flow control **FKA283/2** and **PF12**,outlet **U01B**.

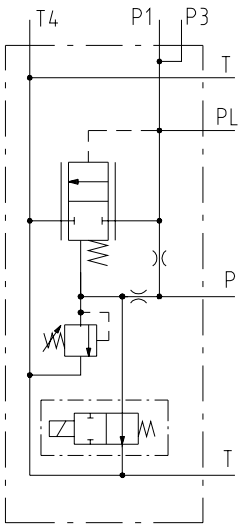


P1 - T4

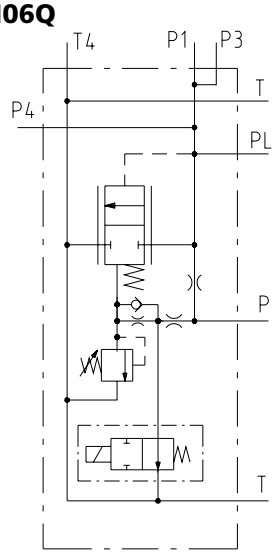
Inlet **I02Q/I06Q**, unloaded.



I02Q



I06Q



I02Q Inlet section with flow control, main relief valve and unloading function.

When the system is idling a small regulated flow passes the centre gallery of the valve. Excess pump flow is routed directly to tank.
The regulated flow is defined by the flow control valve **FKA283** and the metering orifice **PF...**

When a spool is operated the whole pump flow is instantly available for the user. The low center gallery flow during idling conditions reduce pressure drop P- T through the valve body, and facilitates higher pump flow without negative influence on the spool forces and heat generation.

I02Q also is equipped with a main relief valve cartridge **TB11**, which together with flow control valve FKA283 function as pilot operated main relief valve.

Q-inlet can be equipped with a solenoid operated valve for electrical unloading.

Port P1 and T4 face upwards.

I06Q Has the same functions as I02Q but with an added special check valve **FSB3** in the signal gallery to damp the unloading function of the flow control valve FKA. I06Q also provides an additional pump port.

Port P1 and T4 face upwards, P4 to the side.

Available metering orifices for controlled flows. In combination with FKA283/2 they provide:

PF10	21 l/min
PF11	25 l/min
PF12	28 l/min

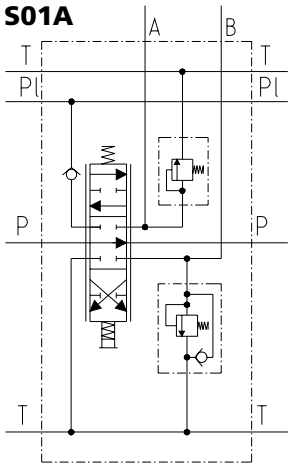
A lower flow creates
less pressure drop P - T.
A spool that matches the flow
improves the operating characteristics

SPOOL SECTIONS

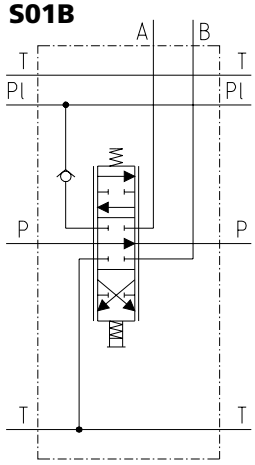
Code is only valid for section body

Code	Description
S01A	High, for service port valves, for 3-pos. spool. Weight 2,4 kg
S01B	High, no port valve cavities, for 3-pos. spool. Weight 2,4 kg
S02C	Low, for 3-pos. spool. Weight 1,9 kg
S01C	Low, only for single acting 3-pos. spool, A-port for user. No B-port provided. Weight 1,9 kg
S11A	High, for service port valves, for 3-pos. spool, allowing meter-in restrictions (one for each cyl.port). Weight 2,4 kg
S10A	High, for service port valves, for 3-pos. spool, for tandem circuit. Weight 2,4 kg
S01R	High, for service port valves, for 3-pos. regenerative spool. Weight 3,0 kg
S01H	High, for service port valves, for 4-pos. float spool. Weight 2,8 kg

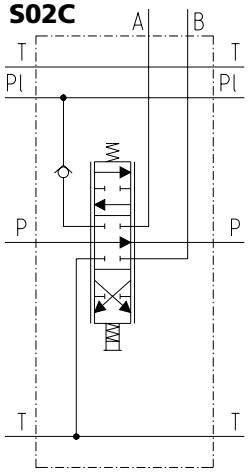
S01A



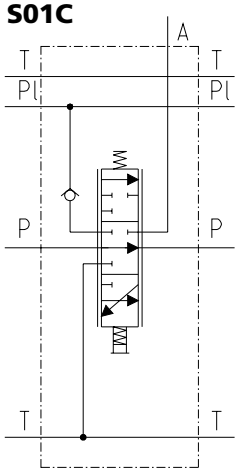
S01B



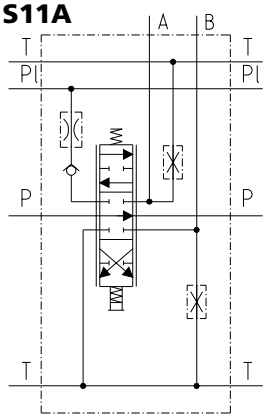
S02C



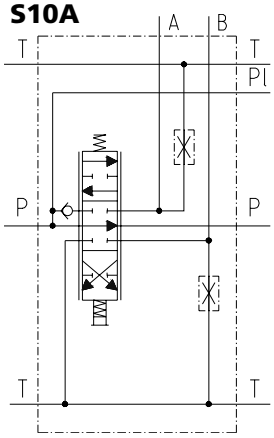
S01C



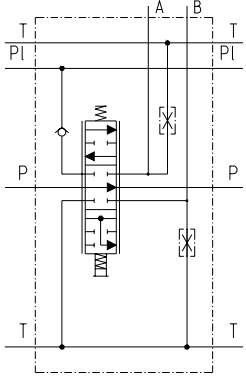
S11A



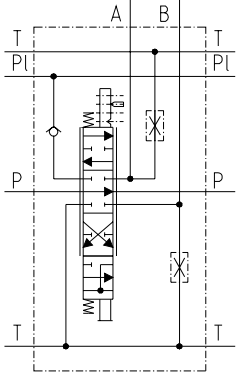
S10A



S01R



S01H



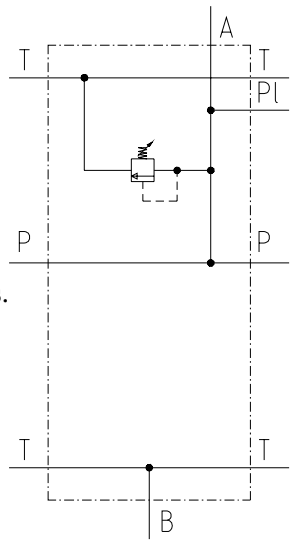
INTERMEDIATE SECTIONS

Code is only valid for section body

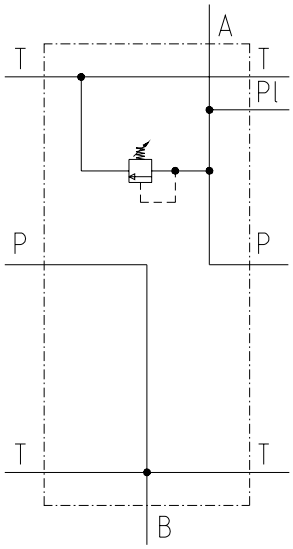
Weights	
Code	kg
M01A	1,7
M01B	1,7

Code	Description
M01A	Intermediate **inlet** section. A-port for pump and B-port for tank connections. M.r.v. cavity on A-side. Used in dual circuit systems. Second circuit pump is connected to port A. If first circuit pump flow, feeding spool sections upstream of **M01A**, is not used, both pump flows are available for use downstream **M01A**. With common tank gallery.
M01B	Intermediate **inlet** section. A-port for pump and B-port for tank connections. M.r.v. cavity on A-side. Used for two completely separated circuits. With common tank gallery.

M01A



M01B

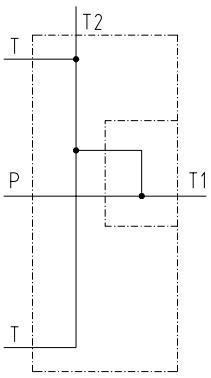


OUTLET SECTIONS

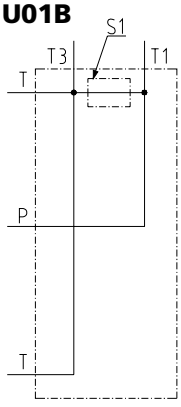
Code	Description
U01A	Has two tank ports, top (**T2**) and side (**T1**). A high pressure carry-over nipple can be fitted in **T1**. If so, an alternative tank port must always be connected to tank.
U01B	Has two tank ports, both facing upwards. Through port **T1** a plug for high pressure carry-over can be fitted in location **S1**. If **T1** is used for series connection of a downstream valve, **T3** (or an alternative tank port) must be connected to tank.
U01C	End plate without porting.

Weights	
Code	kg
U01A	1,0
U01B	1,4
U01C	0,7

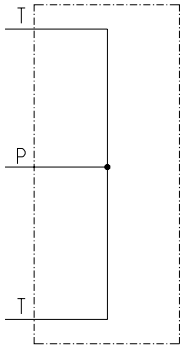
U01A



U01B



U01C



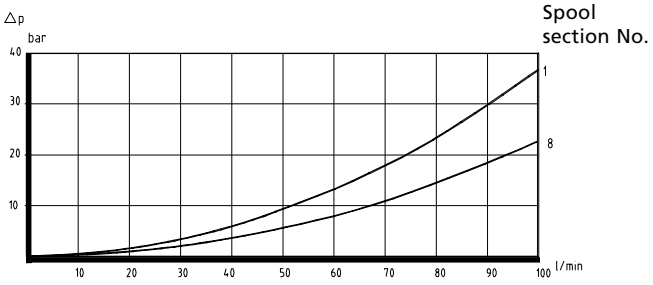
OUTLET SECTIONS

Pressure drop

A/B – T1

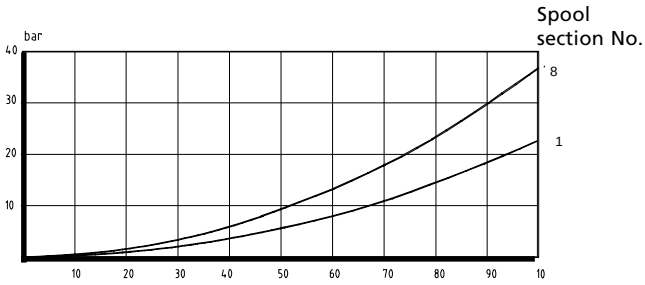
All outlets

(except in combination with inlet I01A)



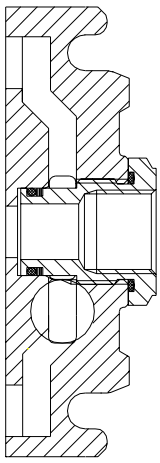
A/B – T4

Inlets I02C, I01E and I02Q/I06Q



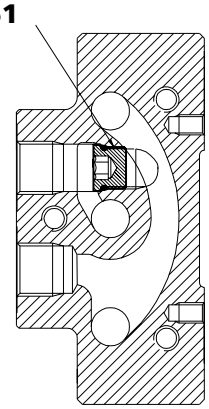
Series connections

Outlet section U01A
High pressure carry-over nipple **SG21** is fitted in port **T1.**



Outlet section U01B
High pressure carry-over plug **PS20** is fitted through port **T1** in location **S1**. **T1** is now port for series connection.

S1

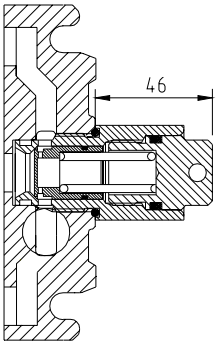


PILOT PRESSURE VALVE TMB200

Adjustment range:
4 - 20 bar

Fits port **T1** in outlet section **U01A.**

TMB 200



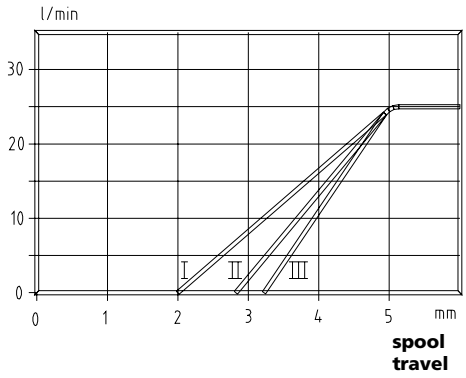
CONTROL CHARACTERISTICS

Graphs show principal functions, valid for manually operated spools.

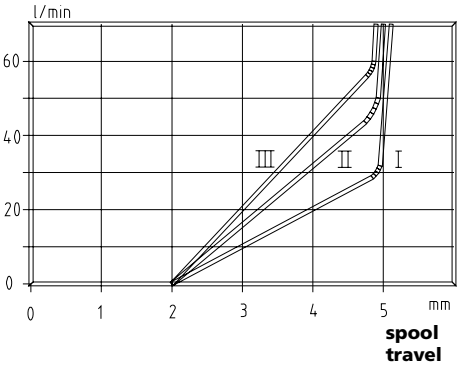
Spool type D

Pump flow 25 l/min
I = load pressure 50 bar
II = load pressure 150 bar
III = load pressure 250 bar

P - A/B



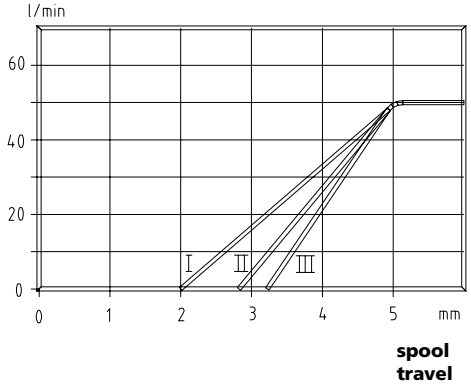
A/B - T



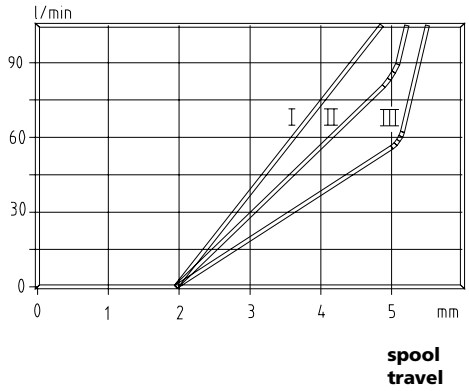
Spool type K

Pump flow 50 l/min
I = load pressure 50 bar
II = load pressure 150 bar
III = load pressure 250 bar

P - A/B



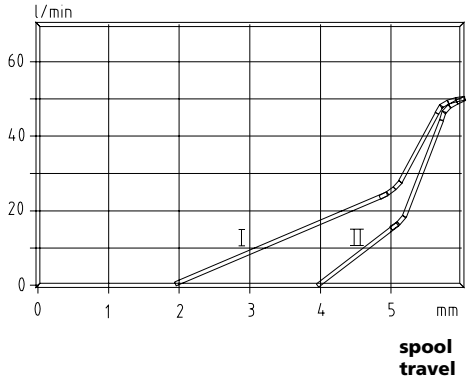
A/B - T



Spool type1KS1

Pump flow 50 l/min
I = load pressure 50 bar
II = load pressure 200 bar

P - A/B -B/A - T

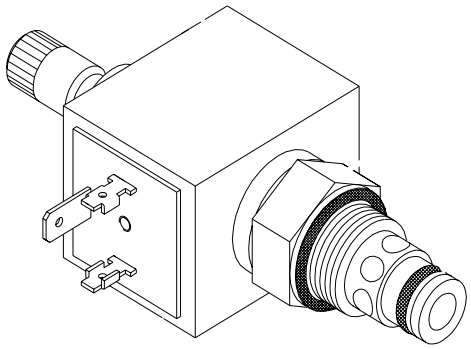


ELECTRICAL UNLOADING VALVE

This 2-way, normally open, solenoid type cartridge valve, code name **EDI**, is an option in inlet sections **I02Q/I06Q** and **I01E**.
It is intended for emergency stop and for pressure drop/heat generation reduction.

In Q-inlets a de-energised **EDI** drains the pilot circuit so that the **FKA283** spool dumps the whole pump flow directly to tank.

In inlet **I01E** a de-energised **EDI** dumps the whole pump flow to tank.



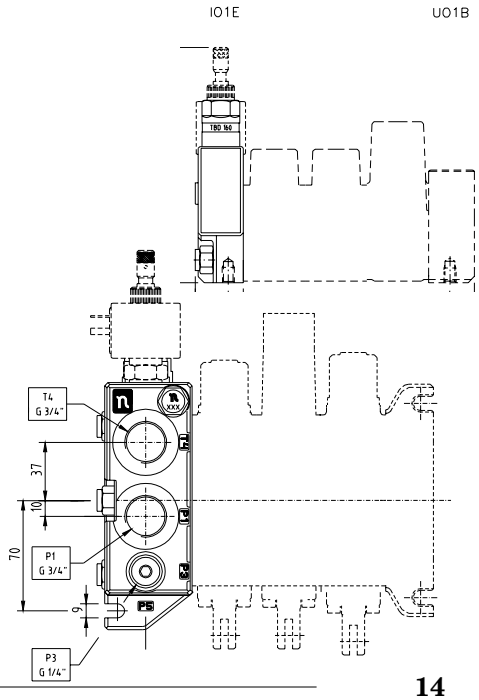
Data

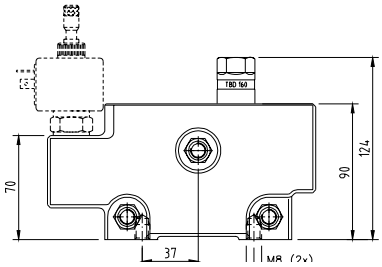
Rated flow:	40 l/min
Power consumption	17W
Rated voltage:	12 och 26V
Max voltage variation:	± 10%
Duty factor:	100 % (sufficient cooling must be secured)

EDI has manual override. Two versions are available
EDI618 has push type pin operation.
EDI619 has push and twist type pin operation. This pin is sealable

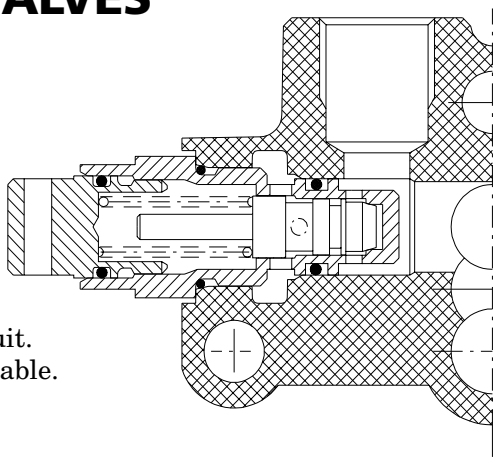
Codes

EDI61812 – push type override 12V
EDI61826 – push type override 26V
EDI61912 – push and twist type override 12V
EDI61926 – push and twist type override 26V





MAIN RELIEF VALVES



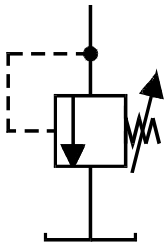
Main relief valve TBB131

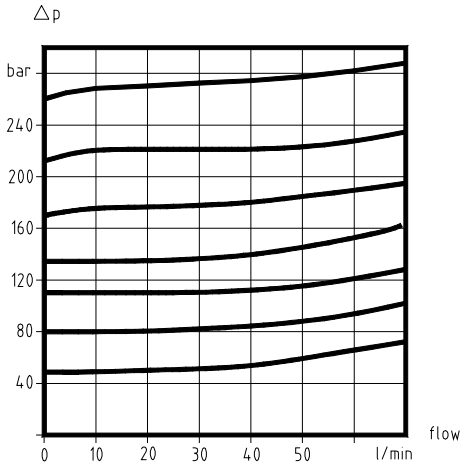
TBB 131 is used in inlet sections **I01A**, **I01B**, **I02C** and in intermediate sections **M01A** and **M01B**.

Differential area, direct acting relief valve for the primary circuit. **TBB** is adjustable. A non-adjustable version, type **TBA**, is available.

Setting ranges:

35 - 65 bar
65 - 95 bar
95 - 125 bar
125 - 160 bar
160 - 200 bar
200 - 240 bar
240 - 300 bar

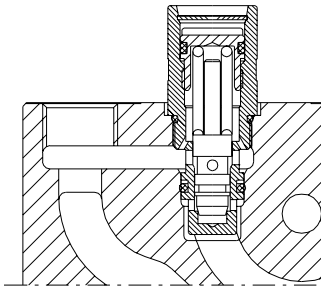


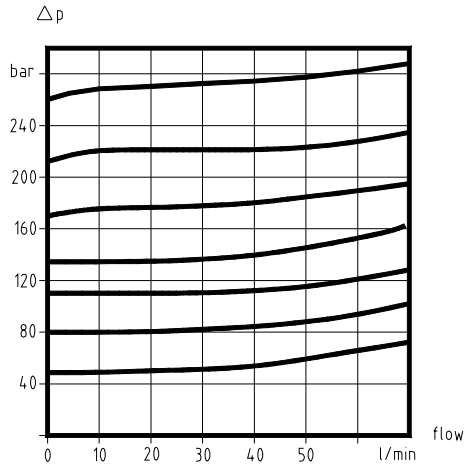


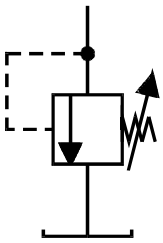
Main relief valve TBD160

TBD160 is used in inlet section **I01E.**

Differential area, direct acting relief valve for the primary circuit. Adjustable and sealable.





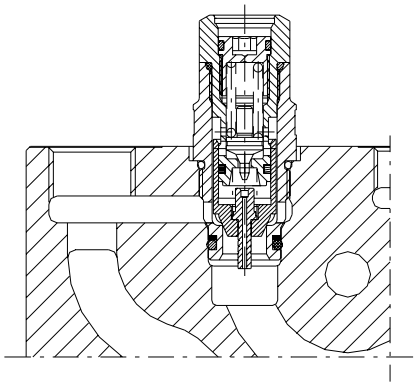


Setting ranges:

35 - 65 bar
65 - 95 bar
95 - 125 bar
125 - 160 bar
160 - 200 bar
200 - 240 bar
240 - 300 bar

MAIN RELIEF VALVES

Main relief valve TBS400

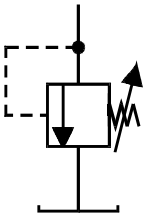


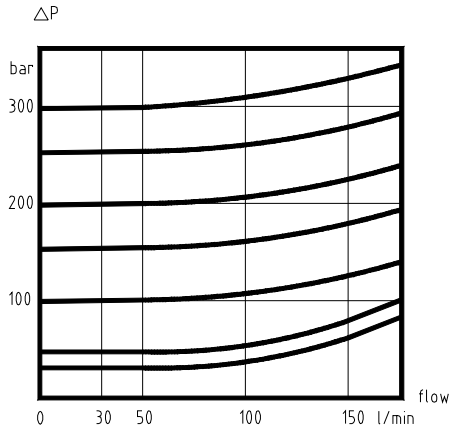
Optional in inlet section **I01E**.

Pilot operated relief valve for the primary circuit. Adjustable and sealable.

Setting range

35 - 350 bar

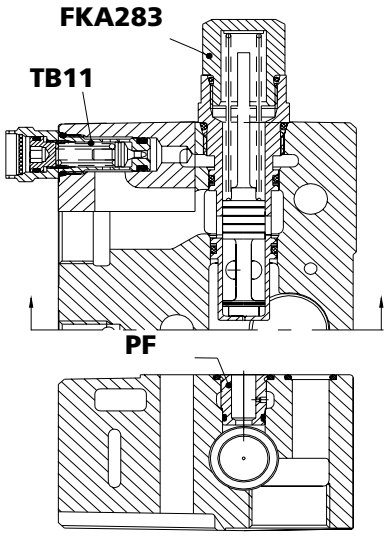




Main relief valve for Q-inlets

The flow control valve **FKA283**, in combination with relief valve cartridge **TB11**, form the pilot operated main relief function of the **Q-inlets**.

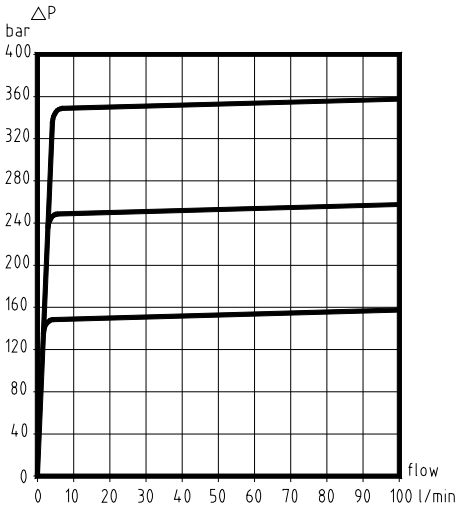
TB11 is adjustable and sealable.



In inlet section **I02Q** and **I06Q.**

Setting range for TB11:

35 - 350 bar



SERVICE PORT VALVES

Port relief valves TB121 and TBD121

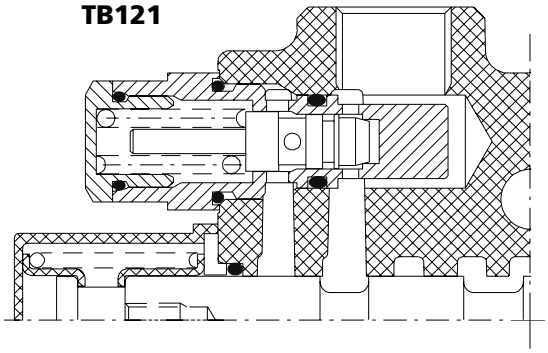
Differential area, direct acting relief valves for the secondary circuit.

TBD121 is adjustable but sealed.

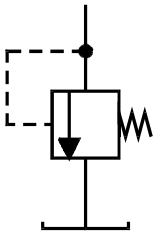
Setting ranges:

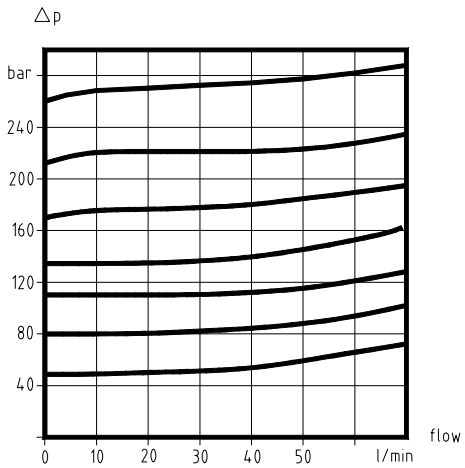
35 - 65 bar
65 - 95 bar
95 - 125 bar
125 - 160 bar
160 - 200 bar
200 - 240 bar
240 - 300 bar

TB121

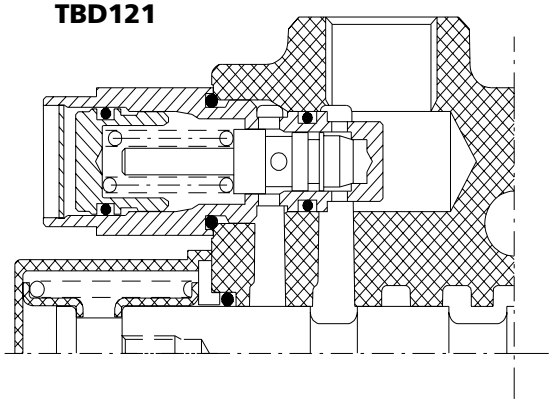


Fits in sections **S01A**, **S10A**, **S11A**, **S01R** and **S01H**.





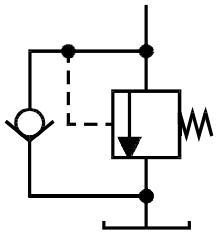
TBD121



SERVICE PORT VALVES

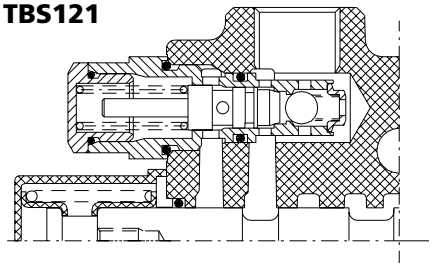
PORT RELIEF AND ANTICAVITATION VALVES TBS121 AND TBSD121

See **TB/TBD121** and **SB160** for functional principles.



TBSD121 is adjustable but sealed.

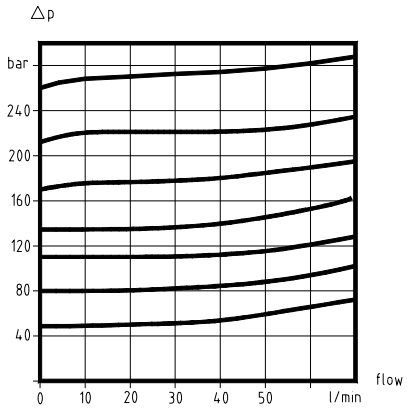
TBS121



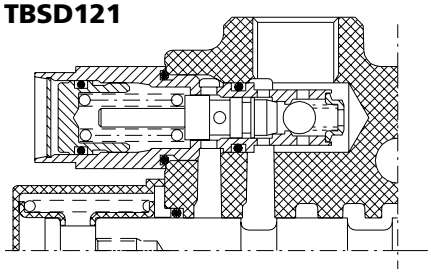
Setting ranges:

35 - 65 bar
65 - 95 bar
95 - 125 bar
125 - 160 bar
160 - 200 bar
200 - 240 bar
240 - 300 bar

Fits in sections **S01A**, **S10A**, **S11A**, **S01R** and **S01H**.

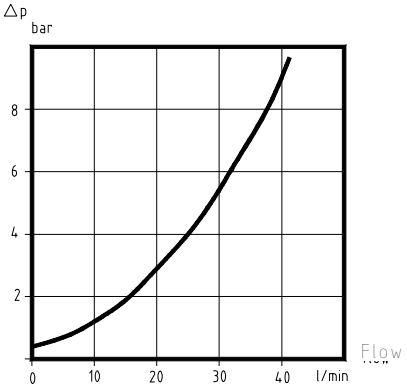


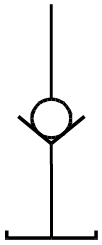
TBSD121



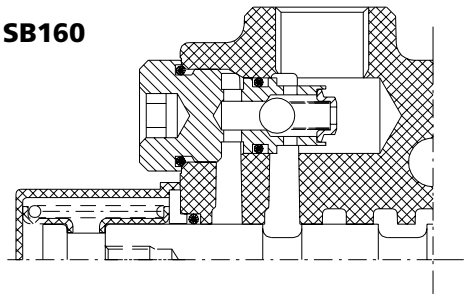
Anticavitation valve SB160

Check valve for equalising vacuum in the secondary circuit.



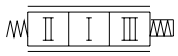
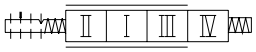
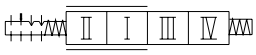
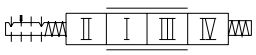


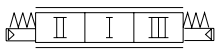
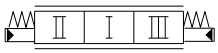
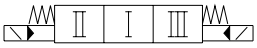
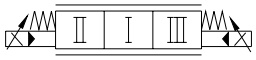
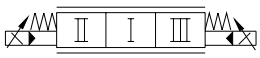
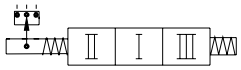
SB160



See **TBS121/TBSD121**

SPOOL CONTROLS

Symbol	Description	Code
	Spring centred. Marine version	910 9M
	Detent in positions I, II and III.	10
	For 4-position spool. Spring centred and with detent in position IV.	11
	Spring centred. Detent in position III and IV.	12
	Spring centred. Detent in position II.	13
	Spring centred. Detent in position III.	14
	Spring centred. Detent in position II and IV.	15
	External hydraulic kick-out from inserted spool.***	L61
	External hydraulic kick-out from extended spool.***	L62
	External hydraulic kick-out from inserted and extended spool.***	L63
	External hydraulic kick-out from inserted and extended spool,locking neutral position.***	L64

Symbol	Description	Code
	P=pneumatic on/off PP=pneumatic proportional. Conn. 1/8" BSP	P/PP
	Electric pneumatic on/off. Rated voltage 12/24 V=*	EP
	Hydr. proportional.*** Pilot pressure 6-16 bar Pilot pressure max 40 bar	HPD
	El.hydr. on/off.*** Flow demand 1 l/min for operation. Pilot pressure min 7 bar. Pilot pressure max 40 bar.Duty factor 100%.**	EH 12/24
	El.hydr. proportional. See separate data sheet.	EHPD 12/24
	El. hydr. proportional. Single-side mounted. See separate data sheet.	EHPS 1601
	Spool position indicator. Operating range 10-30 V. Output voltage, spool centered: < 1 V. External electronics are required. See separate data sheet.	LE11
	Spool position indicator. Operating range 10-36 V. Output voltage, spool centered: ≈ supply voltage. External electronics are required. See separate data sheet.	LE14

* Rated current 350/190mA. Operation output 2,3 W. Min holdingpower 0,15 W. Max voltage variation.±5%. Duty factor 100 %. Conn. M5. For hose 6x1.

** Rated voltage 12/24V =. Rated current 180/90 mA. Voltage variation max ± 16%. Selection time to extreme position 200 ms, spring centering 110 ms.

*** Connection 1/4" BSP.

This is a selection of most frequent spool controls.

In addition following standard spool controls are available:

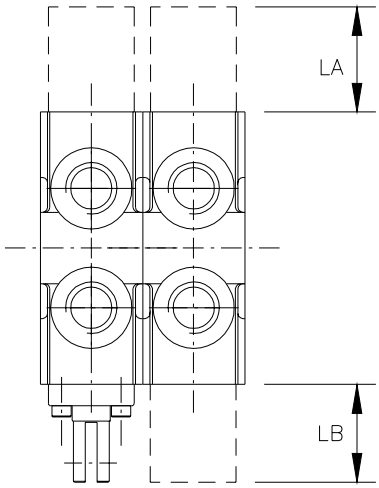
-MM- marine/enclosed hand lever
-HPD4 -hydr. prop. for 4 pos. spool (non standard).
-HPDM -hydr. prop. with hand lever.
-3W, 4W, 9W -spool controls for cable control
(see separate datasheet).

Contact us for further information.

SPOOL CONTROLS

Bracket types and dimensions						
Code	M19	M29	M39	M111	M211	M2
For spool type	3-pos.	4-pos.	3-pos.	3-pos.	4-pos.	3-pos.
Lever ratio. (MV/MH 245)	9:1	9:1	9:1	11:1	11:1	
Notes.			Allows service port valve also when turned 180°. Special lever required			Not for lever (no ear). Only retainer for wiper seal.
Length mm (LB)	41	50	50	41	50	9

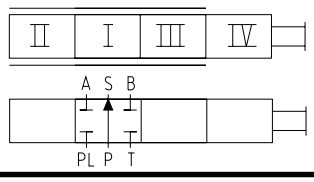
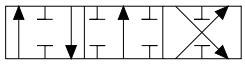
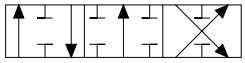
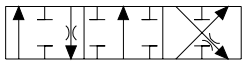
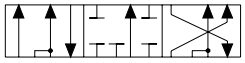
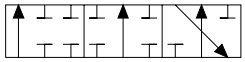
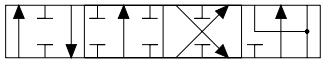
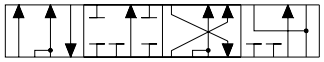
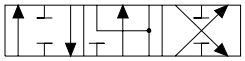
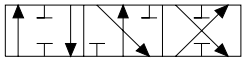
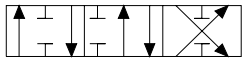
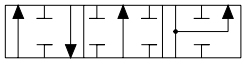
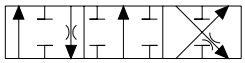
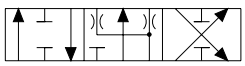
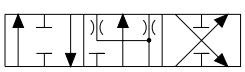
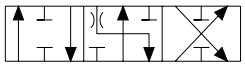
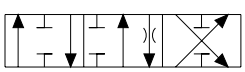
Type of bracket is chosen depending of required lever ratio, type of lever and if 3- or 4- pos. spool.
A range of manual handlevers, linear and joystick versions, are available.



Spool control dimensions											
Code	910	9M	10, 13-14	11-12 15	L61-L63	L64	P/PP EP	MM MPDM	HPD	EH	LE11
Length LA	37	70	74	83	97	101	101		70	180	95
(mm) LB								88	70		

For valves in standard configuration spool controls are mounted on the A-side of the valve and the lever brackets on the B-side.

SPOOLS

	**Spools for general use** Recommended pump flow range, l/min			
	10-30	**25-50**	**40-70**	
	1D	1K	1Q	
	-	1M	-	**For slew function.**
	-	1KS1	-	**For slew function.**
	-	1L	-	**For use in LS-systems**
	2D	2K	-	
	3D	3K	-	**For section S01H.**
	-	3L	-	**For use in LS-systems**
	-	4K	-	
	-	4KA	-	
	-	4KB	-	
	8DB	8KB	-	**Regen. function For section S01R**
	Spools designed for cranes Recommended pump flow range, l/min			**NOTE:Spools for flow range "35-50 l/min" in combination with Q-inlets only.**
	20-30	**30-45**	**35-50**	
	12SA	14SA	124SA	For slew function. In combination with spool control 918 only.
	12ZA	14ZA	124ZA	For use with load holding valves. Asymmetric. B-port to be connected to piston side of cylinder.
	12ZB	14ZB	124ZB	For use with load holding valves.
	12XA	14XA	124XA	For use with load holding valves. Asymmetric. A-port to be connected to piston side of cylinder.
	12YA	14YA	124YA	For use with load holding valves. Asymmetric. B-port to be connected to piston side of cylinder.

MISCELLANEOUS

Load check valves/meter-in restrictions/plugs

Code	Description
MB01	Non-return valve in inlet channel of each spool section. Used in all spool sections with exeptions below
MB02	Function as **MB01**. Used in regen. section (**S01R**).
MB03	Function as **MB01**. Used in A-side of "float" section (**S01H**).
MF...	Meter-in restriction. Used in spool section **S11A**. Contact Nordhydraulic representative for available sizes.
MP01	Plug in check valve cavity. (Without poppet - no non-return valve function).
MP02	Plug in check valve cavity. Blocks connection between parallel gallery and service port.

Various plugs

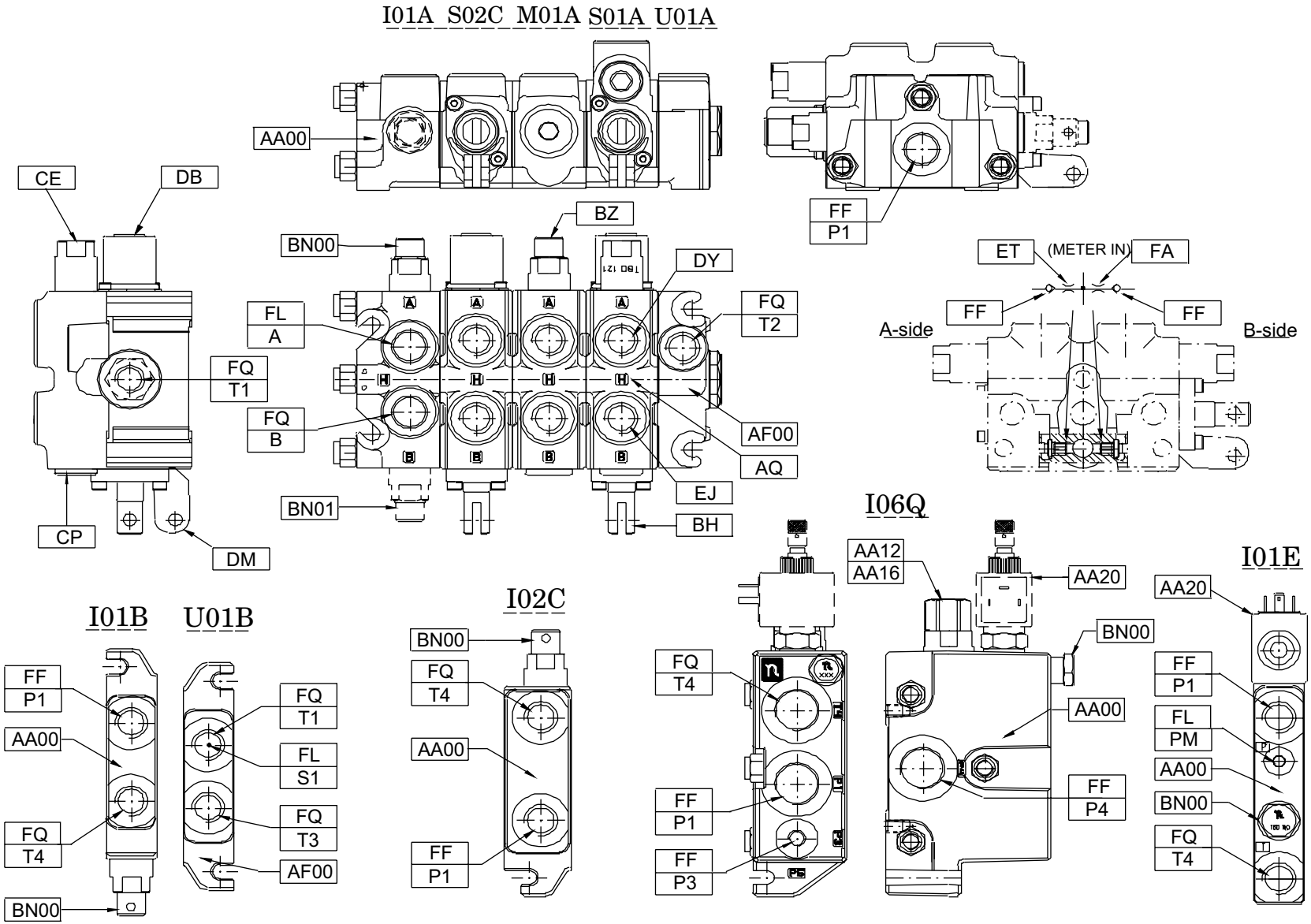
Code	Description
P131	Fits m.r.v. **TBB 131** cavity.
PL131	For cavity opposite m.r.v. in inlet **I01A**.
P400	Fits m.r.v. **TBD 160** cavity.
PE20	Fits el.unloading valve cavity.
P121	Fits service port valve cavity. Blocks connection **A/B -T**.
PK121	Fits service port valve cavity. Connects **A/B - T**.
PGT02	Standard 1/4" BSP plug.
PG04	Standard 1/2" BSP plug.
PG06	Standard 3/4" BSP plug.

Valve specification
RS 210

RS210DATABLAD.xls rev : G

Designations refer to coordinates in specification sheets.

Nordhydraulic



Valve specification

RS210DATABLAD.xls rev :

Valve type: RS216 **RS 210** **Article No:** 1716-01234

Made by : HG Date: 00-11-21 Date of reg : Sign : GC 24 Cust. Art.No:

Inlet section	AA00	Inlet					AA12	Metering orifice
		I06Q						PF12
	BN00	Main relief valve A loc.	AA16	Flow control unit	AA20	El.contr.v. for AA16	BN01	Main relief valve B location
		TB11-290		FKA283/2		EDI61926		
			AA24	Damp/check valve	AA28	Press. reducing valve		
				FSB3				
Outlet section	AF00	Outlet	AF04	Press. reducing valve	AF08	Press.limiting valve	AF12	Pilot pressure device
		U01B						
General	AL00	Tie rod kit			AL08		AL12	Foot
						Stand. [X] High temp. [ ]		

Work sect. Honing, assembly and testing instructions.		Compl. v.	Section No									
		00	01	02	03	04	05	06	07	08	09	10
AQ	Section		S01A	S01A	S01B	S01B	S01A	S01A				
AV	Inter section seal											
BC	Instr. honing	PHAHG										
BH	Spool		124SA	124XA	124YA	124ZA	1K	1K				
	Function:		SWING	LIFT	JIB	EXT.	ROT.	GRAB				
BS	Instr. assembly	PHAMOG										
BZ	Main rel.valve intermed. section											
CE	Service port valve		TBSD121	P121			P121	P121				
	A-side		180									
CK	Check valve A-side		MB01	MB01	MB01	MB01	MB01	MB01				
CP	Service port valve		TBSD121	TBD121			P121	P121				
	B-side		180	120								

1716-01234

Nordhydraulic AB
Box 189 S-872 24 KRAMFORS SWEDEN
Tel. 0612- 71 72 00 Fax 0612-71 72 15

Part number for the valve specification will be assigned by Nordhydraulic

2002-04-24

Valve specification

RS210DATABLAD.xls rev :

Valve type: RS216 — **RS 210** — **Article No:** 1716-01234

	Description	Compl. v.	Section No 01	02	03	04	05	06	07	08	09	10
		00										
CU	Check valve B-side		MB01	MB01	MB01	MB01	MB01	MB01				
DB	Spool control A-side		918	910	910	910	910	910				
DM	Spool control B-side		M19	M19	M19	M19	M19	M19				
DY	Port A											
EJ	Port B											
ET	Accessories A-side											
FA	Accessories B-side											
FF	Pressure ports		P 1		P 3	P 4	P 5					
					PGT02	PG06						
FL	Pressure ports			PM	PPM	PP 1	PP 2			PS	S 1	A
											PS20	
FQ	Tank ports		T 1	T 2	T 3	T 4	T5			TD	TD4	B
					PG04							
FV	Instr. testing	PHAPG										
FY	Instr. testing											

Remain.spec.			GC04	Connecting manifold 1	GC08	Connecting manifold 2	GC12	Instruction marking	
								PHAMG	
Nordhydraulic	GC16	Instruction packing	GC20	Instruction painting	GC28	Customer No			
		PHAEG		PHAMN0					

Ordering exempel

Nordhydraulic

1716-01234

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NOTES

NOTES

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