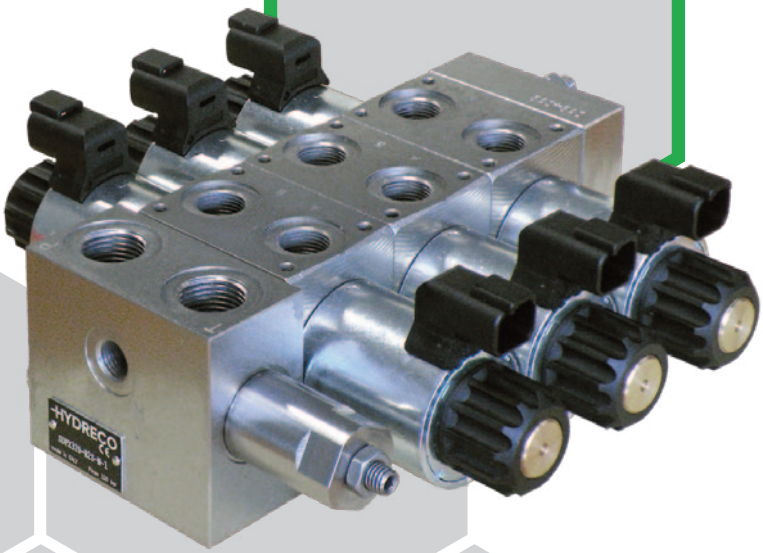
HYDRECO

SD*

SECTIONAL DIRECTIONAL VALVE

SDL	280 bar	40 l/min
SDM	320 bar	50 l/min
SDS	320 bar	60 l/min
SDSE	320 bar	26 l/min



TECHNICAL CATALOGUE

SD_EN_2026_01

INTRODUCTION

SDL, SDM and SDS are sectional directional control valves. They can be assembled in parallel with up to 10 working sections. The same components allow creating series circuits by inserting plugs in order to modify the oil path.

Working elements are available in two thicknesses with working ports 3/8" BSP, 1/2" BSP, SAE-06 or SAE-08 threads.

Specific components for series circuits are available upon request.

FLUIDS

Use mineral oil-based hydraulic fluids HL or HM type, according to ISO 6743-4. For these fluids, use NBR seals. For fluids HFDR type (phosphate esters) use FPM seals (code V). For other fluid types, such as HFA, HFB, or HFC, please consult our technical department.

Operation with fluids at temperatures above 80°C (180°F) may cause accelerated seal degradation, as well as deterioration of the physical and chemical properties of the fluid.

Temperatures above 55°C (130°F) are not recommended for safety reasons,

SDL OPERATING PARAMETERS

MAXIMUM OPERATING PRESSURE	P - A - B ports	280 bar	4000 psi
	T and T1 ports	280 bar	4000 psi
FLOW CAPACITY	parallel	40 l/min	10.6 gpm
	series	40 l/min	10.6 gpm

SDM OPERATING PARAMETERS

MAXIMUM OPERATING PRESSURE	P - A - B ports	320 bar	4600 psi
	T and T1 ports	250 bar	3600 psi
FLOW CAPACITY	parallel	50 l/min	13.2 gpm
	series	40 l/min	10.6 gpm

SDS OPERATING PARAMETERS

MAXIMUM OPERATING PRESSURE	P - A - B ports	320 bar	4600 psi
	T and T1 ports	250 bar	3600 psi
FLOW CAPACITY	parallel	60 l/min	15.9 gpm
	series	50 l/min	13.2 gpm

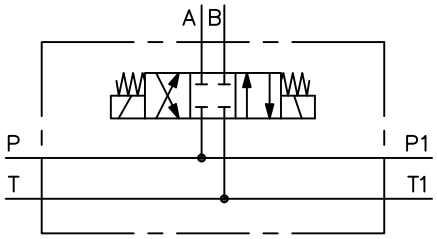
SDSE OPERATING PARAMETERS

MAXIMUM OPERATING PRESSURE	P - A - B ports	320 bar	4600 psi
	T and T1 ports	250 bar	3600 psi
FLOW CAPACITY		26 l/min	15.9 gpm

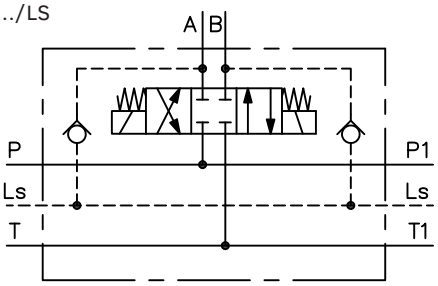
RANGE TEMPERATURES:	ambient	-20 to +60 °C	-4 to +140 °F
	fluid	-20 to +82 °C	-4 to +180 °F
FLUID VISCOSITY	range	10 - 400 cSt	60 - 1900 SUS
	recommended	25 cSt	120 SUS
FLUID CONTAMINATION		ISO 4406:1999 class 18/16/13	

WORKING SECTION HYDRAULIC SYMBOLS

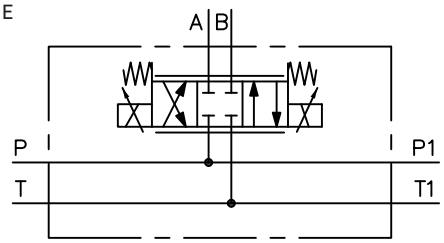
SD*



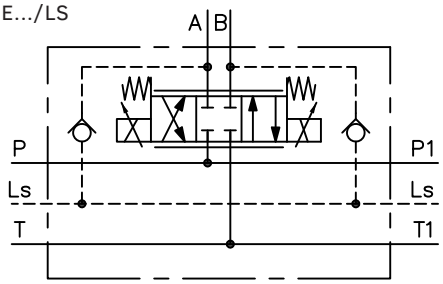
SDS.../LS



SDSE



SDSE.../LS



HYDRECO

ON-OFF WORKING SECTIONS

SD [ ] - [ ] [ ] [ ] - [ ] [ ] - [ ] [ ] - [ ] -1 —— design mark

MAX FLOW RATE	
L	40 l/min
M	50 l/min
S	60 l/min

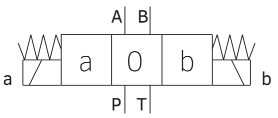
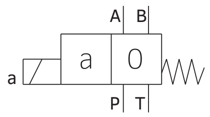
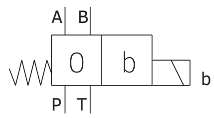
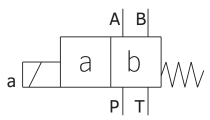
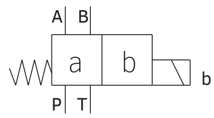
PORTS SIZE	
B15	3/8" BSPP
S15	9/16 - 18 UNF
B2	1/2" BSPP (SDS only)
S2	3/4"-16 UNF (SDS only)

SPOOL
see table at page 5

SEAL	
N	NBR
V	Viton

LOAD SENSING	
LS	with load sensing (SDS only)
N	without load sensing

MANUAL OVERRIDE	
M	pin, integrated in the tube, **standard** for SDM and SDS (not available for SDL and SDS with coils type WK*)
B	pin, integrated in the tube, boot protected (standard for SDL and SDS with coils type WK*)
L	hand lever
K	knob, turning

FUNCTION	
D	 double solenoid 3 positions - spring centred
A	 single solenoid at side A 2 positions - spring return
B	 single solenoid at side B 2 positions - spring return
TA	 single solenoid at side A 2 positions - spring return
TB	 single solenoid at side B 2 positions - spring return

VOLTAGE	
D12	12 V DC solenoid
D24	24 V DC solenoid
D28	28 V DC solenoid
D48	48 V DC solenoid
D00	without coil

COIL see availability table below	
K1	EN 175301-803
K7	DT04-2P 'Deutsch'
WK1	EN 175301-803 zinc-nickel plated
WK7	DT04-2P 'Deutsch' zinc-nickel plated
WK7D	DT04-2P 'Deutsch' zinc-nickel plated with diode
K2	AMP Junior

Working sections with Load Sensing feature require the proper inlet section SDX-QPLS.

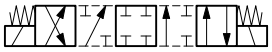
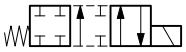
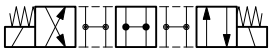
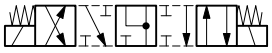
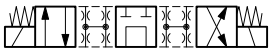
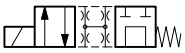
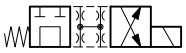
CODE EXAMPLES:

SDL - B15D1 - D12K7 - NB - N - 1
SDM - S15D4 - D12K7 - NL - 1
SDS - B2D4 - D12K7 - NL - LS - 1

COILS AVAILABILITY

	SDL			SDM			SDS					
	K1	K2	WK7	K1	K2	K7	K1	K2	K7	WK1	WK7	WK7D
D12	■	■	■	■	■	■	■	□	■	■	■	■
D24	■	■	■	■	■	■	■	□	■	■	■	■
D28	■	-	-	-	-	-	■	-	-	-	-	-
D48	■	-	-	-	-	-	■	-	-	-	-	-

■ available
□ upon request

FUNCTION D	FUNCTION A	FUNCTION B
1 	1 	1 
2 	2 	2 
3 	3 	3 
4 	4 	4 

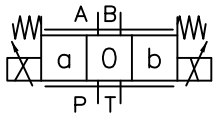
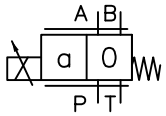
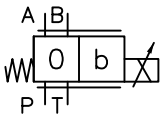
FUNCTION TA	FUNCTION TB
1 	1 
2 	2 

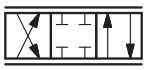
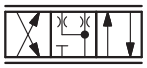
PROPORTIONAL WORKING SECTION

SDSE- □ - □□□ - □□ - □□ - □□ - □ - 1 — design mark

MAX FLOW RATE	
S	40 l/min

PORTS SIZE	
B15	3/8" BSPP
S15	9/16 - 18 UNF
B2	1/2" BSPP
S2	3/4"-16 UNF

FUNCTION	
D	 double solenoid spring centred
A	 single solenoid at side A spring return
B	 single solenoid at side B spring return

SPOOLS	
C	 closed centre
A	 open centre

NOMINAL FLOW with Δp P-T 10 bar (145 psi)	
08	8 l/min (2.1 gpm)
16	16 l/min (4.2 gpm)
16-08	16/08 l/min asymmetric
26	26 l/min (7.0 gpm)
26-13	26/13 l/min asymmetric

LOAD SENSING	
LS	with load sensing
N	without load sensing

SEAL	
N	NBR
V	Viton

VOLTAGE	
D12	12 V DC solenoid
D24	24 V DC solenoid
D00	without coil

MANUAL OVERRIDE	
M	pin, integrated in the tube. (**standard**)
B	pin, integrated in the tube, boot protected (**standard** with WK* coils)
K	knob, turning
L	hand lever

COIL	
K1	EN 175301-803
K7	DT04-2P 'Deutsch'
WK1	EN 175301-803 zinc-nickel plated
WK7	DT04-2P 'Deutsch' zinc-nickel plated

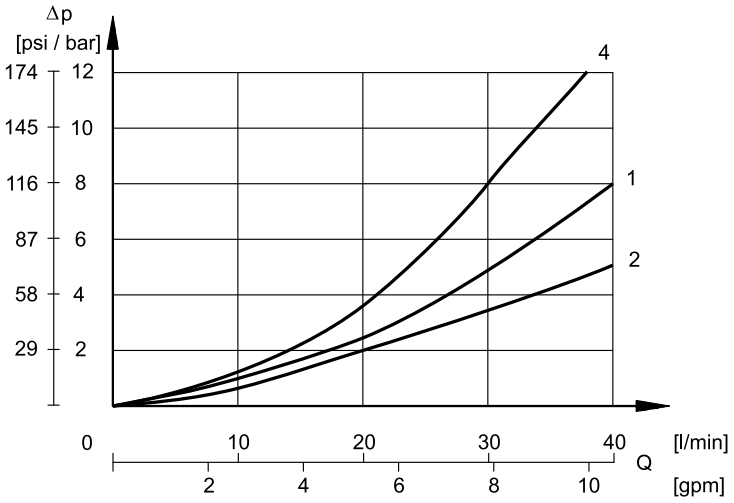
Working sections with Load Sensing feature need the proper inlet section SDX-QPLS.

On-off and proportional working sections can be combined in a single assembly.

CODE EXAMPLES:

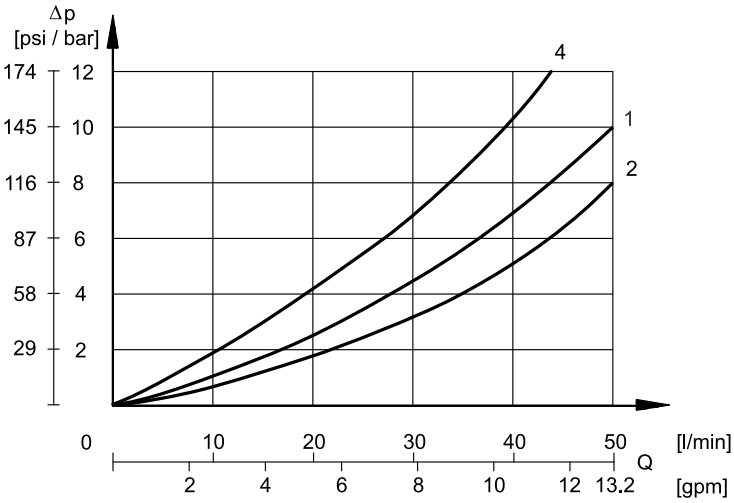
SDSE - B15-D26C - D12K7 - NM - LS - 1
SDSE - B2-D26C - D12WK7 - NL - N- 1

SDL PRESSURE DROPS Δp-Q



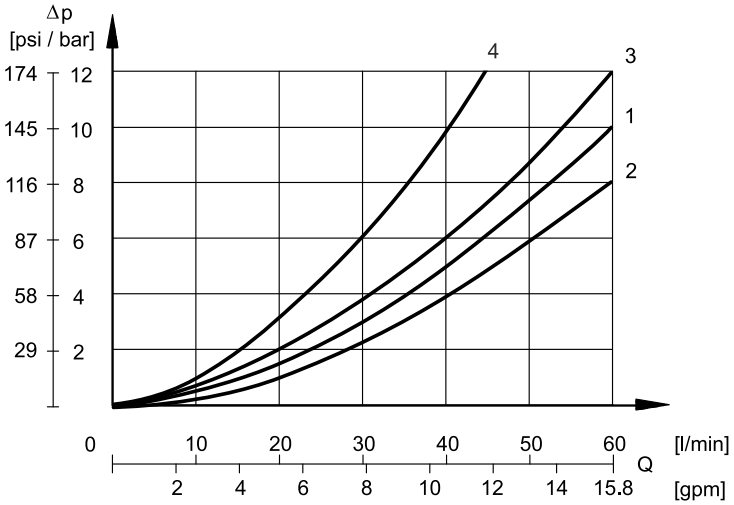
TYPE	CURVE				
	P→A	P→B	A→T	B→T	P→T
D1, A1, B1	1	1	1	1	-
D2, A2, B2	2	2	2	2	2
D3, A3, B3	1	1	2	2	-
D4, A4, B4	4	4	4	4	1
TA1, TB1	1	1	1	1	-
TA2, TB2	1	1	1	1	-

SDM PRESSURE DROPS Δp-Q



TYPE	CURVE				
	P→A	P→B	A→T	B→T	P→T
D1, A1, B1	1	1	1	1	-
D2, A2, B2	2	2	2	2	2
D3, A3, B3	1	1	2	2	-
D4, A4, B4	4	4	4	4	1
TA1, TB1	2	2	2	2	-
TA2, TB2	1	1	1	1	-

SDS PRESSURE DROPS Δp-Q

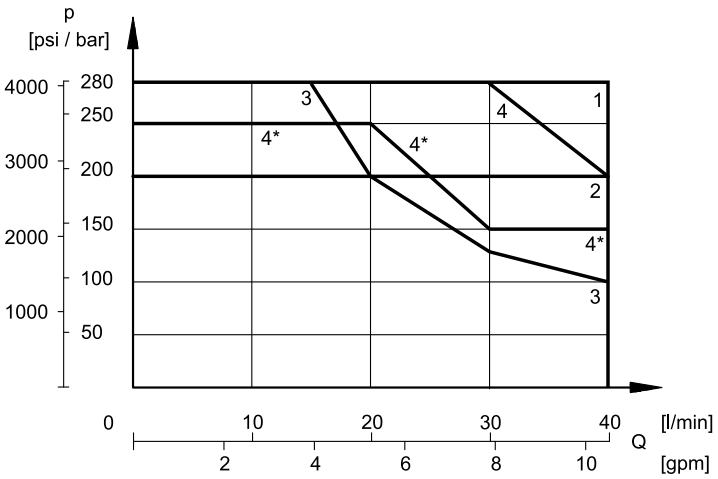


SPOOL TYPE	CURVE				
	P→A	P→B	A→T	B→T	P→T
D1, A1, B1	1	1	3	3	-
D2, A2, B2	2	2	1	1	2
D3, A3, B3	3	3	2	2	-
D4, A4, B4	4	4	4	4	1
TA1, TB1	3	3	3	3	-
TA2, TB2					

The curves define the operating flow rate ranges based on valve pressure.

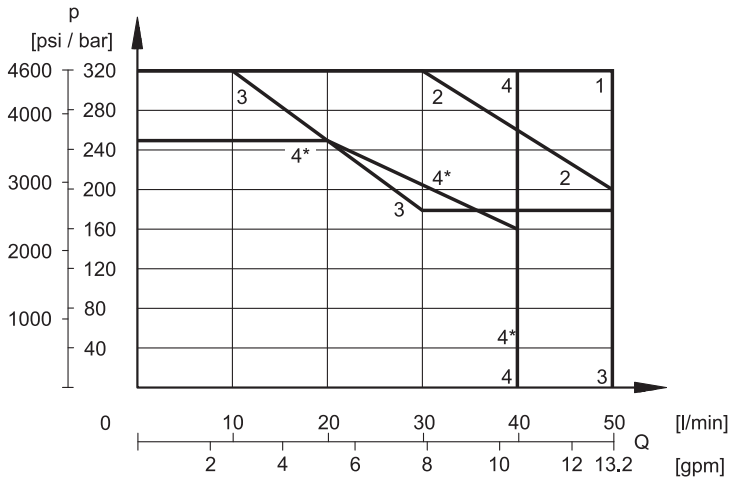
The values were obtained according to ISO 6403 standards, with solenoids at rated temperature and supplied with 90% of the nominal voltage. Values are obtained with mineral oil (viscosity 36 cSt, temperature 50 °C) and filtration in accordance with ISO 4406:1999, class 18/16/13.

SDL PERFORMANCE CURVES



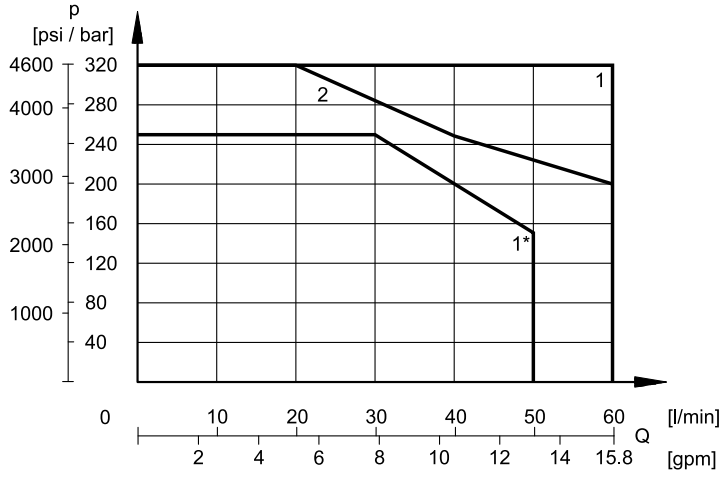
D1, A1, B1	1
D2, A2, B2	2
D3, A3, B3	3
D4, A4, B4	4
D4, A4, B4 reverse flow	4*
TA1, TB1	4
TA2, TB2	1

SDM PERFORMANCE CURVES



D1, A1, B1	1
D2, A2, B2	2
D3, A3, B3	3
D4, A4, B4	4
D4, A4, B4 reverse flow	4*
TA1, TB1	2
TA2, TB2	1

SDS PERFORMANCE CURVES

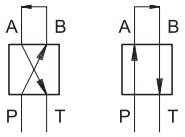


D1, A1, B1	1
D2, A2, B2	1
D3, A3, B3	2
D4, A4, B4	1
D4, A4, B4 reverse flow	1*
TA1, TB1	1
TA2, TB2	1

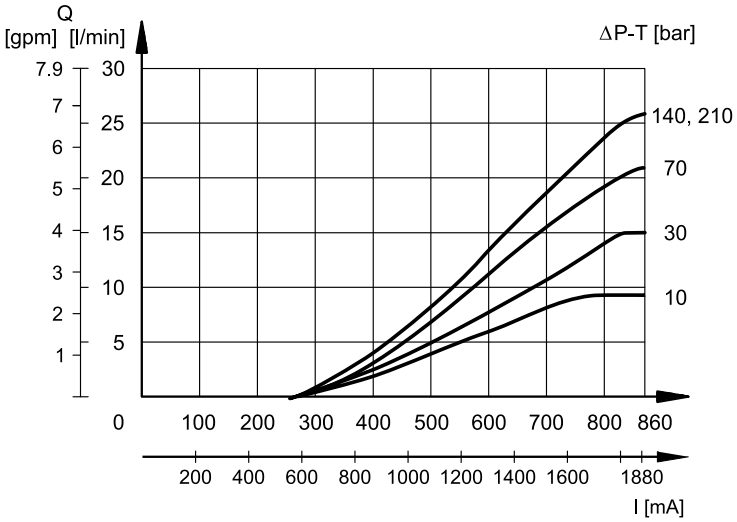
NOTE: The reverse flow condition occurs in series circuits made with elements designed for parallel connection and plugs, and only in even-position elements. See the hydraulic diagram on page 32.

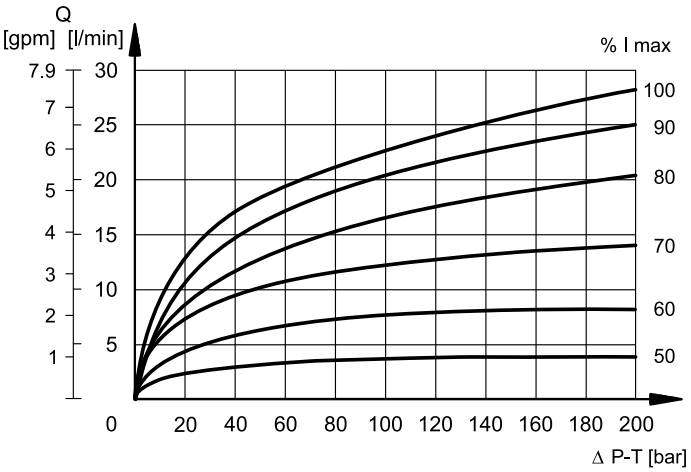
Flow characteristic curves obtained with 24 V DC valve.

The Δp values are measured between P and T (full loop) valve ports.

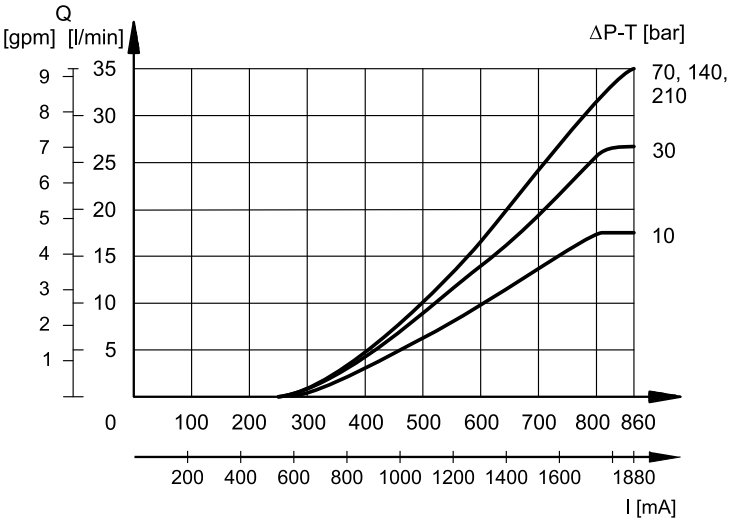


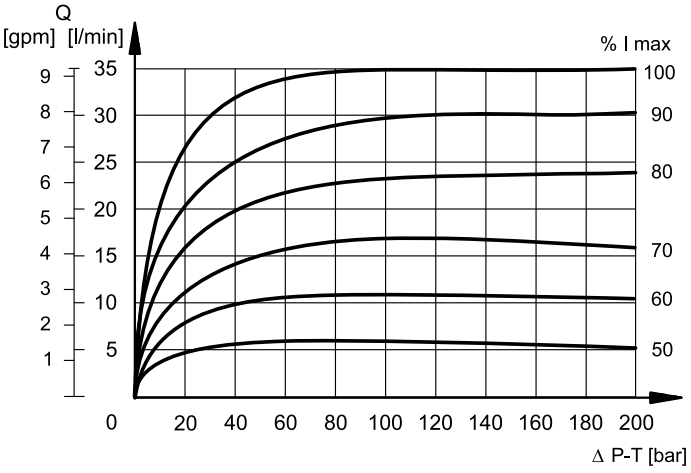
08C / 08A



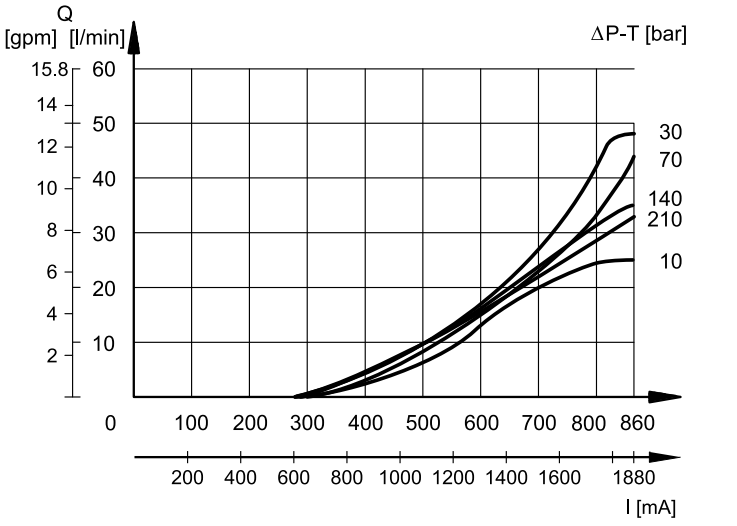


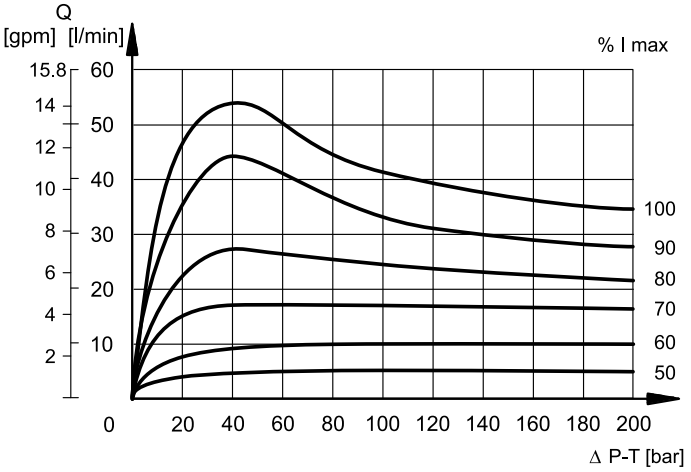
16C / 16A





26C / 26A





The solenoid consists of a tube and a coil. The coil is mounted onto the tube and secured with a retaining ring.

The WK7D coil includes a suppression diode to protect against voltage peaks. During switching, the diode significantly reduces the energy released by the winding, limiting the voltage to 31.4 V for the D12 coil and 58.9 V for the D24 coil.

Contact us to order coils as spare parts.

	Absorbed power [W]	Resistance at 20 °C [Ω]	Current at 20 °C. [A]
SDL WORKING SECTION			
D12	26.5	5.4	2.2
D24	27.8	20.7	1.16
D28	28.5	27.5	1.02
D48	28	82	0.58

SDM WORKING SECTION			
D12	28.9	4.98	2.41
D24	28	21	1.15

SDS WORKING SECTION			
D12	32.7	4.4	2.72
D24	31	18.6	1.29
D28	31	26	1.11
D48	29.5	78.6	0.61

SDSE WORKING SECTION			
D12	12	4.4	1.88
D24	24	18.6	0.86

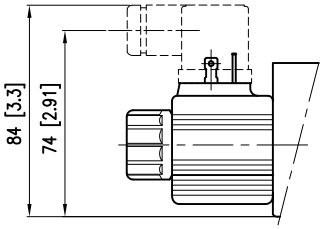
DUTY CYCLE		100%
ELECTROMAGNETIC COMPATIBILITY (EMC)		according to European directive 2014/30/EU
PROTECTION CLASS FOR INSULATION	copper wire	class H (180 °C)
	coil	class F (155 °C)

ELECTRICAL CONNECTIONS AND IP RATING

The declared IP ratings comply with EMC Directive 2014/30/EU and apply only if valve and connectors with matching IP ratings are correctly installed. Connectors are not included with solenoid valves but are always supplied with proportional valves.

WK1, WK7, and WK7D coils offer improved IP ratings over standard metal coils, thanks to zinc-nickel plating and specific design features.

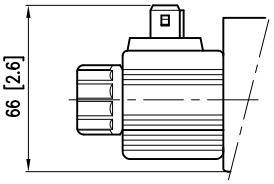
SDL - K1



EN 175301-803 (ex DIN 43650)
Requires mating connectors EN 175301-803 type A

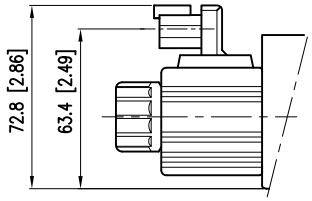
IP degree of electrical connection: IP66
IP degree of whole valve: IP 66

SDL - K2



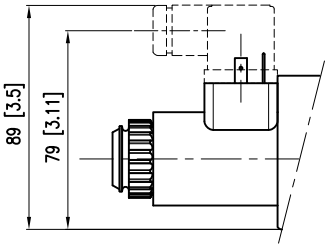
AMP Junior
IP degree of electrical connection: IP65/IP67
IP degree of whole valve: IP65/IP67

SDL - K7



DEUTSCH DT04 MALE
IP degree of electrical connection: IP65/IP68/IP69
IP degree of whole valve: IP65/IP68/IP69
IP degree according to ISO 20653: IP69K

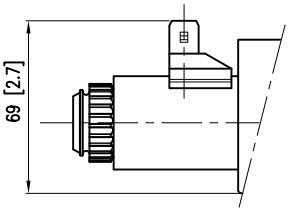
SDM - K1



EN 175301-803 (ex DIN 43650)
Requires mating connectors EN 175301-803 type A

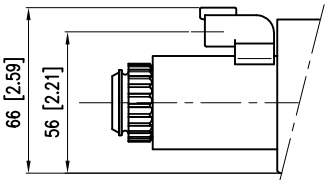
IP degree of electrical connection: IP65
IP degree of whole valve: IP 65

SDM - K2



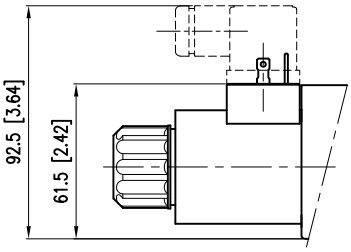
AMP Junior
IP degree of electrical connection: IP65
IP degree of whole valve: IP65

SDM - K7



DEUTSCH DT04 MALE
IP degree of electrical connection: IP65
IP degree of whole valve: IP65

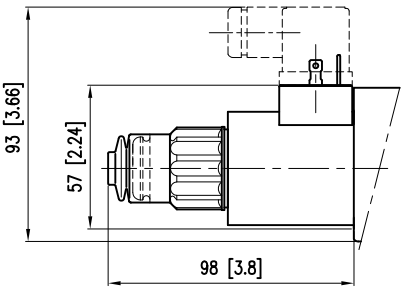
SDS / SDSE - K1



EN 175301-803 (ex DIN 43650)
Mating connectors EN 175301-803 type A

IP degree of electrical connection: IP65
IP degree of whole valve: IP 65

SDS / SDSE - WK1

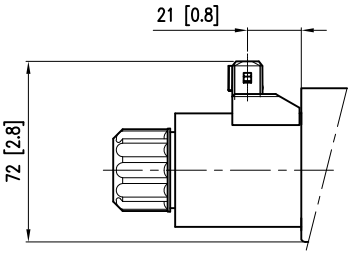


EN 175301-803 (ex DIN 43650)
Zinc-nickel plated coil.

IP degree of electrical connection: IP66
IP degree of whole valve: IP66

The pin for manual override is boot-protected (code B).

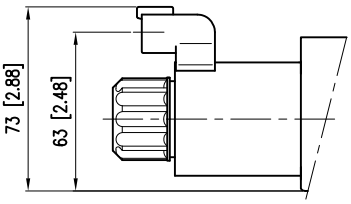
SDS - K2



AMP Junior
Upon request only.

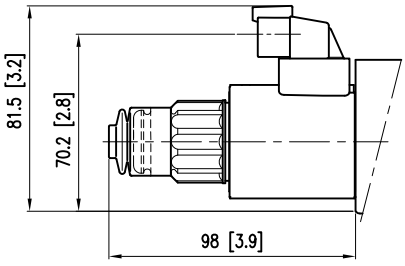
IP degree of electrical connection: IP65/IP67
IP degree of whole valve: IP 65

SDS / SDSE - K7



DEUTSCH DT04 MALE
IP degree of electrical connection: IP65/IP67
IP degree of whole valve: IP 65

SDS / SDSE - WK7 SDS ONLY - WK7D



DEUTSCH DT04 MALE
Zinc-nickel plated coil.

The WK7D coil includes a suppression diode to protect against voltage peaks. More details on page 10.

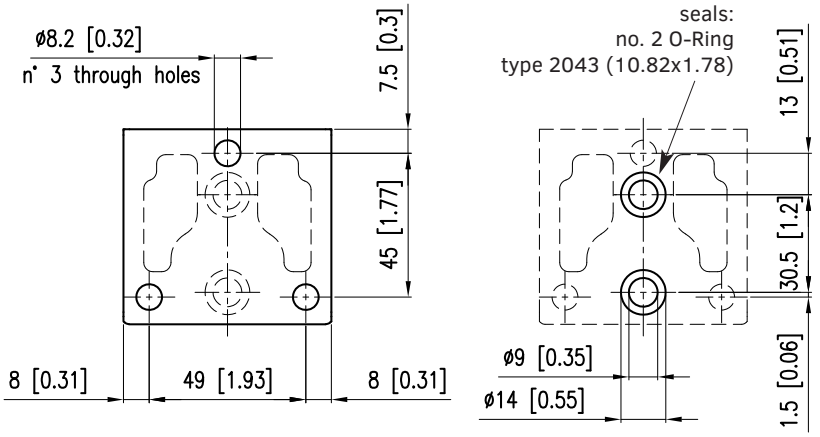
IP degree of electrical connection: IP66/IP68/IP69
IP degree of whole valve: IP66/IP68/IP69
IP degree according to ISO 20653: IP69K

The pin for manual override is boot-protected (code B).

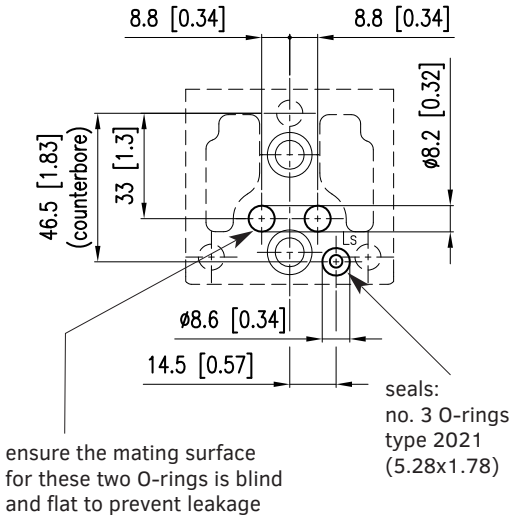
SECTIONAL MOUNTING INTERFACES

dimensions in mm [in]

STANDARD
(Code N)

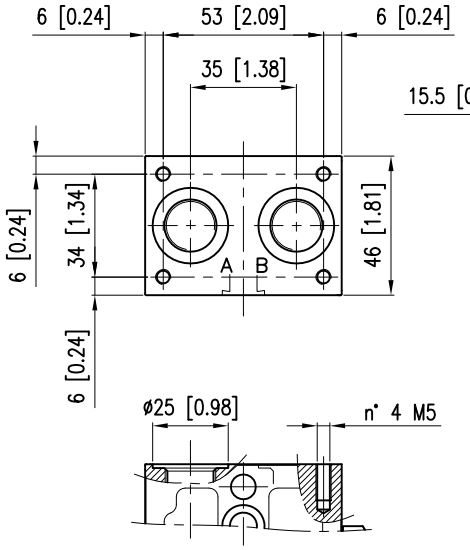


LOAD SENSING PORT
(Code LS)

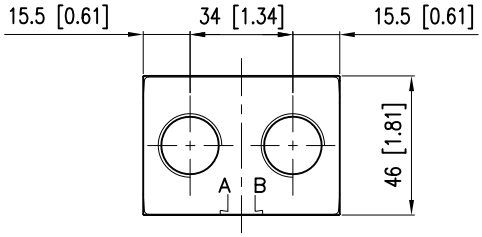


MOUNTING INTERFACE - WORKING PORTS

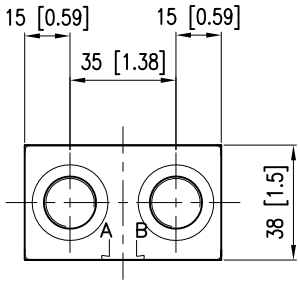
SDS and SDSE
with mounting surface
for flanged module
available ports:
B15 or S15



SDS and SDSE
available ports:
B2 or S2

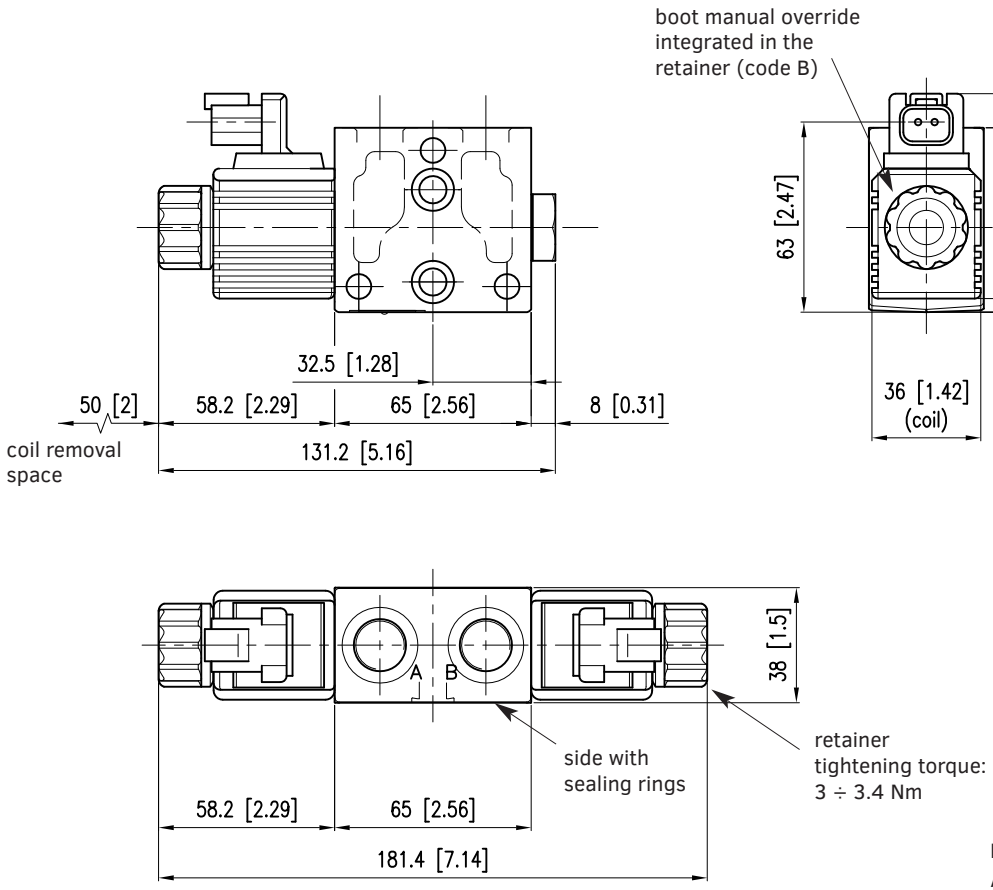


SDL and SDM
available ports:
B15 or S15



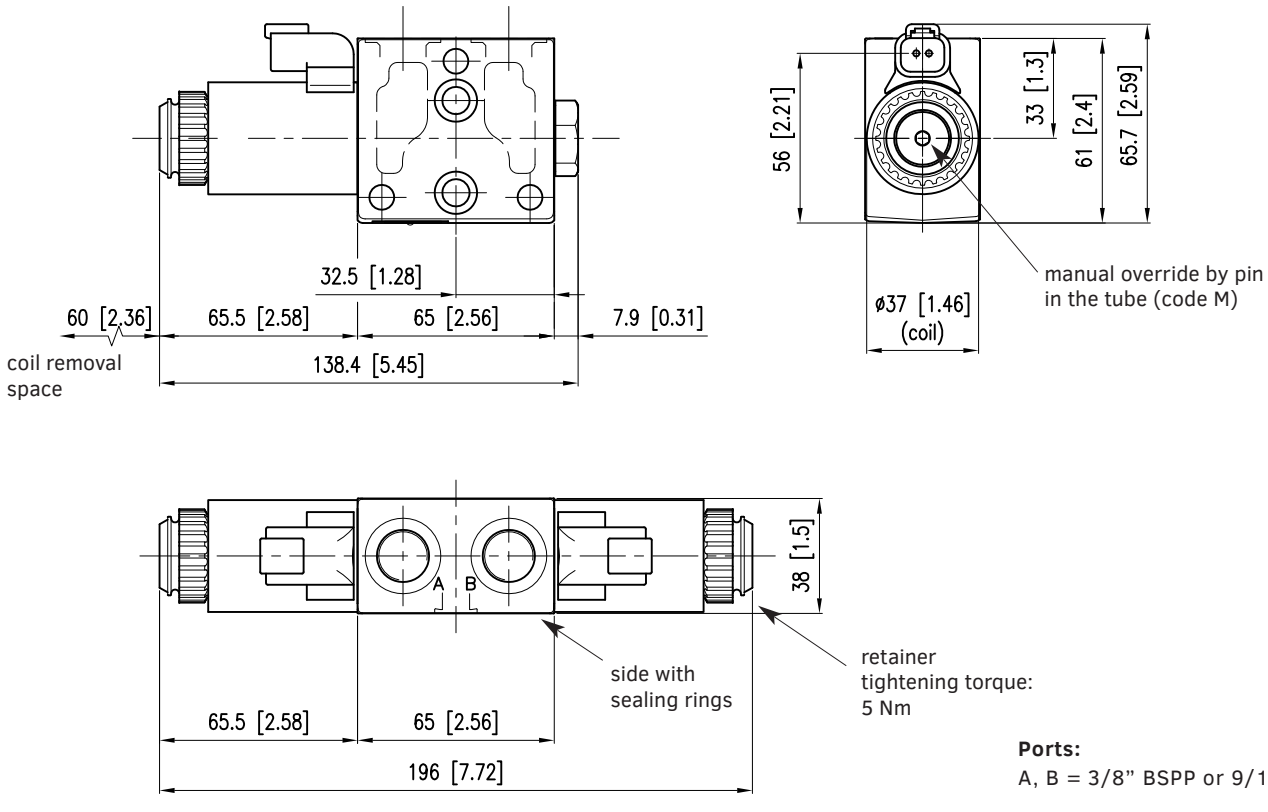
SDL (K7 COIL)

dimensions in mm [in]



Ports:
A, B = 3/8" BSPP or 9/16 - 18 UNF

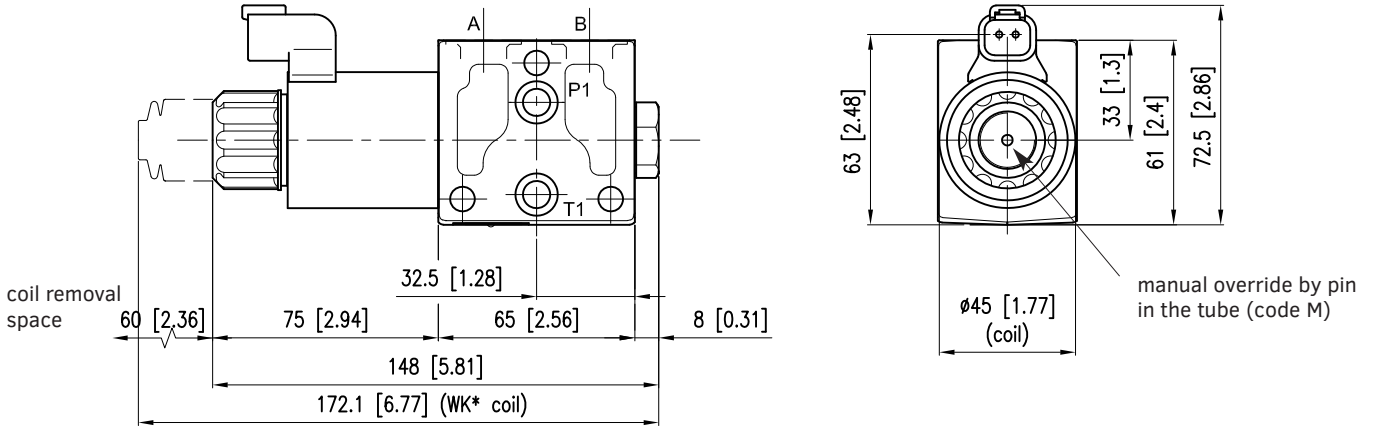
SDM (K7 COIL)

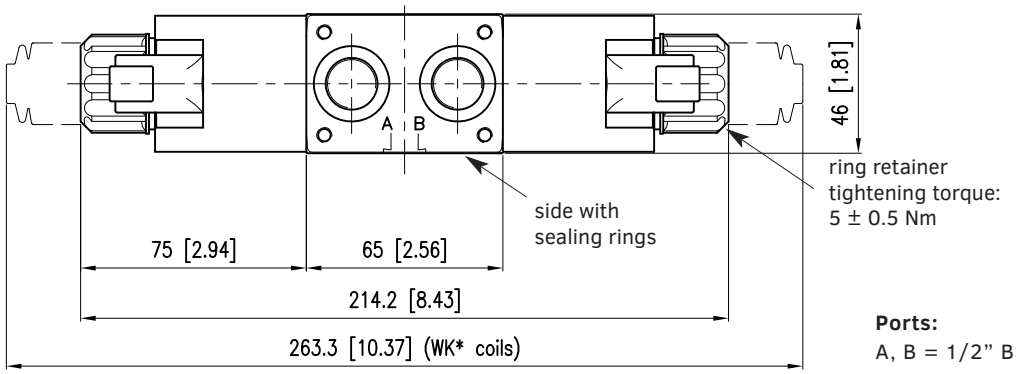


Ports:
A, B = 3/8" BSPP or 9/16 - 18 UNF

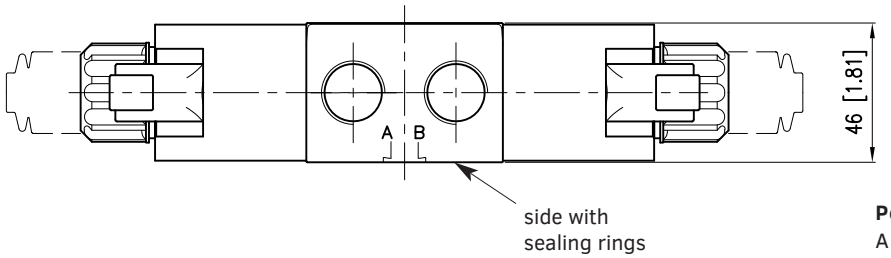
SDS / SDSE (K7 COIL)

dimensions in mm [in]





Ports:
A, B = 1/2" BSPP or 3/4 - 16 UNF



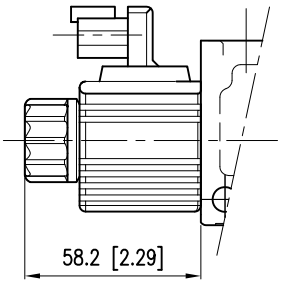
Ports:
A, B = 3/8" BSPP or 9/16 - 18 UNF

OVERRIDE PIN INTEGRATED THE TUBE, BOOT PROTECTED: Code B

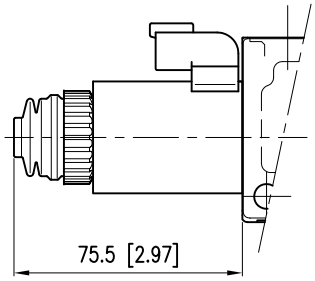
The SDL standard element is already equipped with boot protection for the solenoid tube.

dimensions in mm [in]

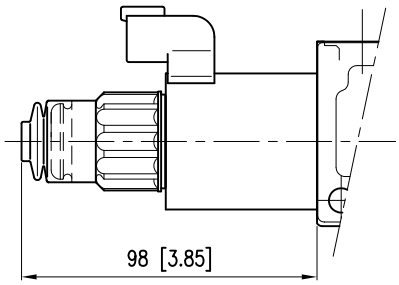
SDL



SDM

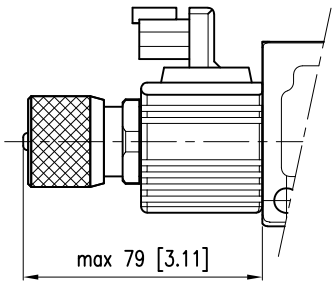


SDS

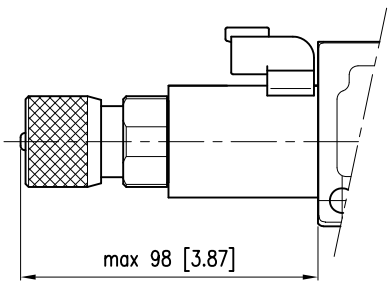


KNOB, TURNING: Code K

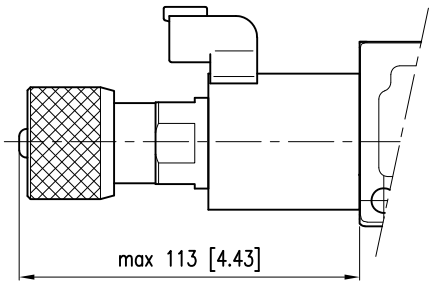
SDL



SDM



SDS



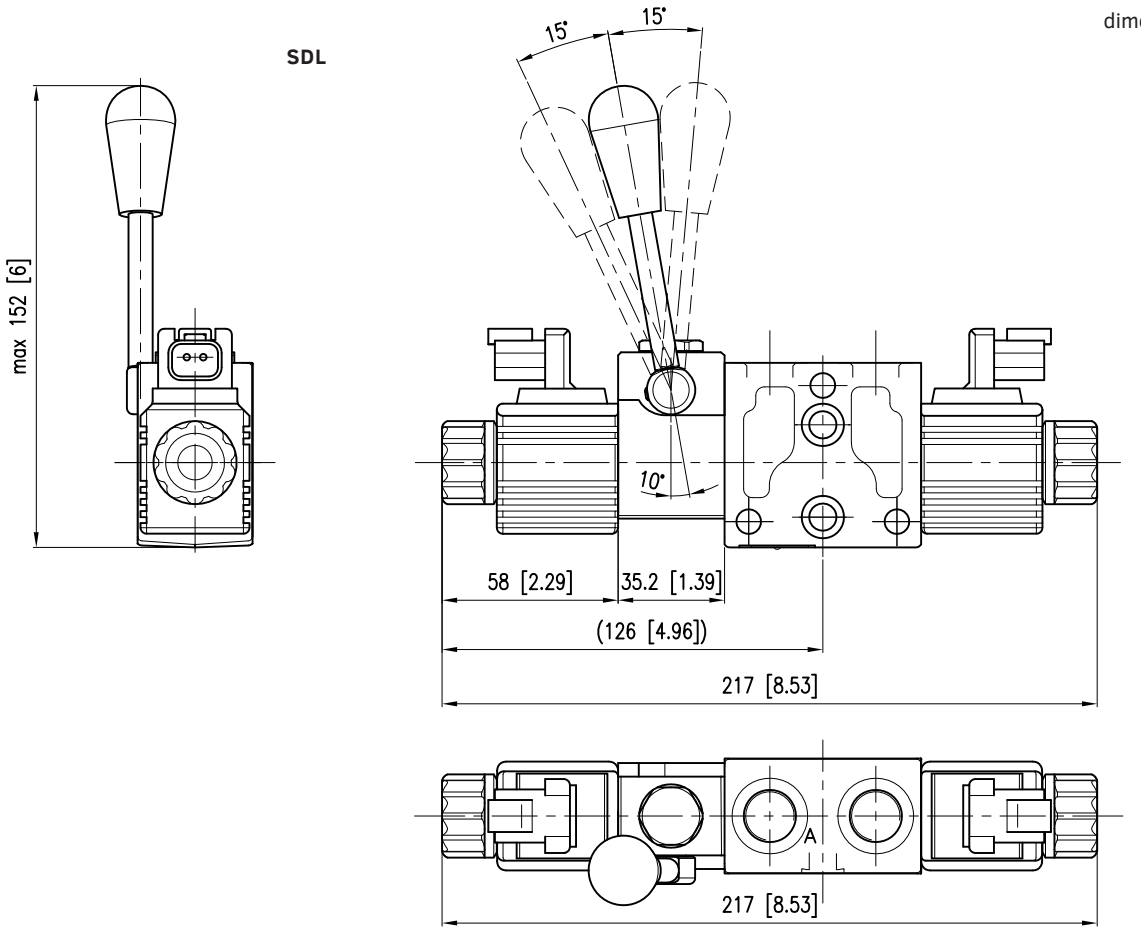
HAND LEVER: Code L

Devices are mounted on side A. For different configurations, please contact our technical department. Refer to the overall drawings on the previous pages for any dimensions not specified here.

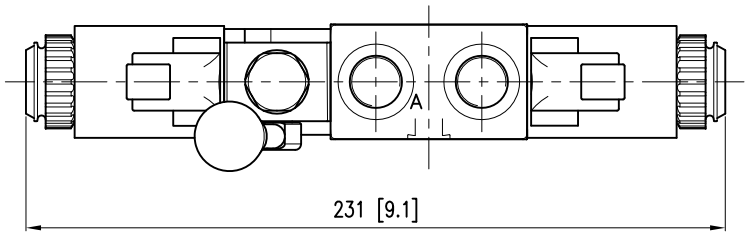
The CHL lever device can operate with a maximum pressure of 50 bar in line T and is therefore not suitable for series circuits.

dimensions in mm [in]

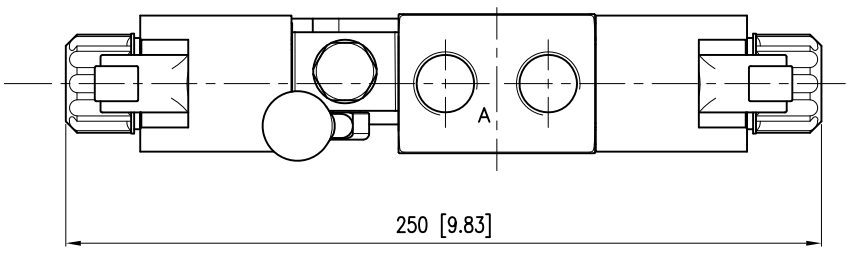
SDL



SDM



SDS



INLET SECTIONS: BASIC

SDX - [ ] S - [ ] - 1 — design mark

PORTS SIZE	
B2	1/2" BSPP
S2	3/4"-16 UNF

MATERIAL	
S	steel (zinc-plated)

SEAL	
N	NBR (**standard**)
V	Viton

INLET SECTIONS: PRESSURE CONTROL

SDX - P [ ] - B2S - [ ] - 1 — design mark

FUNCTION	
P	pressure control

RELIEF VALVE	
140	up to 140 bar
210	up to 210 bar
320	up to 320 bar

PORTS SIZE	
B2	1/2" BSPP

MATERIAL	
S	steel (zinc-plated)

SEAL	
N	NBR (**standard**)
V	Viton

INLET SECTIONS: PRESSURE CONTROL WITH UNLOADING VALVE

SDX - P [ ] - B2S - [ ] [ ] [ ] - [ ] -2 — design mark

FUNCTION	
P	pressure control

RELIEF VALVE	
140	up to 140 bar
210	up to 210 bar
320	up to 320 bar

PORTS SIZE	
B2	1/2" BSPP

MATERIAL	
S	steel (zinc-plated)

SEAL	
N	NBR (**standard**)
V	Viton

VOLTAGE	
D12	12 V DC solenoid
D24	24 V DC solenoid
D28	28 V DC solenoid

COIL	
K1	EN 175301-803
K7	DT04-2P 'Deutsch'
K2	AMP Junior (*)

*K2 coil upon request

MANUAL OVERRIDE	
S	screw
P	push

INLET SECTION: FLOW AND PRESSURE CONTROL, WITH OR WITHOUT UNLOADING VALVE

SDX - QP [ ] - B15S - [ ][ ][ ] - [ ] -1

design mark

FUNCTION	
QP	flow and pressure control

PORTS SIZE	
B15	3/8" BSPP

SEAL	
N	NBR (**standard**)
V	Viton

UNLOADING (omit if not required)

RELIEF VALVE	
140	up to 140 bar
210	up to 210 bar
320	up to 320 bar

MATERIAL	
S	steel (zinc-plated)

VOLTAGE	
D12	12 V DC solenoid
D24	24 V DC solenoid
D28	28 V DC solenoid

COIL	
K1	EN 175301-803
K7	DT04-2P 'Deutsch'
K2	AMP Junior (*)

*K2 coil upon request

MANUAL OVERRIDE	
K2	knob, twist and lock
P	push

INLET SECTION FOR VALVES WITH LS PORT: FLOW AND PRESSURE CONTROL, WITH OR WITHOUT UNLOADING VALVE

Inlet section designed for stacked valve assemblies supplied by fixed-displacement pumps.

It features a pressure relief valve and a compensator set at approximately 11 bar, ensuring stable upstream pressure. This provides a constant flow to the working port currently under the highest pressure.

When a working port is idle (in neutral), the compensator diverts the flow to tank, optimising efficiency and minimising losses. Versions with the unloading valve allow further pressure reduction when the valve assembly is idle.

These inlet sections are intended for use with sectional valves of types SDS-LS-1 and SLSE-LS-1.

SDX - QPLS [ ] - B2A - [ ][ ][ ] - [ ] -1

design mark

FUNCTION	
QPLS	flow and pressure control

PORTS SIZE	
B2	1/2" BSPP
S2	3/4"-16 UNF

UNLOADING (omit if not required)

SEAL	
N	NBR (**standard**)
V	Viton

RELIEF VALVE	
135	up to 140 bar
220	up to 220 bar

MATERIAL	
A	aluminium

VOLTAGE	
D12	12 V DC solenoid
D24	24 V DC solenoid
D00	without coil

COIL	
K1	EN 175301-803
K7	DT04-2P 'Deutsch'
K2	AMP Junior (*)

*K2 coil upon request

MANUAL OVERRIDE	
P	push

Aluminium
p max = 230 bar
Q max = 40 l/min

OUTLET SECTIONS

SDX- [ ] - [ ] S - 1 ——— design mark

OUTLET PORT	
00	blind section (*)
01	line P
02	line T
03	both line P and T

* section not suitable for series configuration

PORTS SIZE (omit for 00 blind plate)	
B15	3/8" BSPP
S15	9/16 - 18 UNF

MATERIAL	
S	steel (zinc-plated)

ELECTRICAL DATA FOR INLET AND OUTLET SECTIONS

Below are the electrical specifications of the unloading valves installed in the inlet sections. The type of unloading valve varies depending on the inlet section type.

For spare parts, please contact our Sales Department.

	Absorbed power [W]	Resistance at 20 °C [Ω]	Current at 20 °C. [A]
UNLOADING VALVE FOR SDX-P INLET (see page 23)			
D12	20	7.2	1.67
D24	20	28.8	0.83

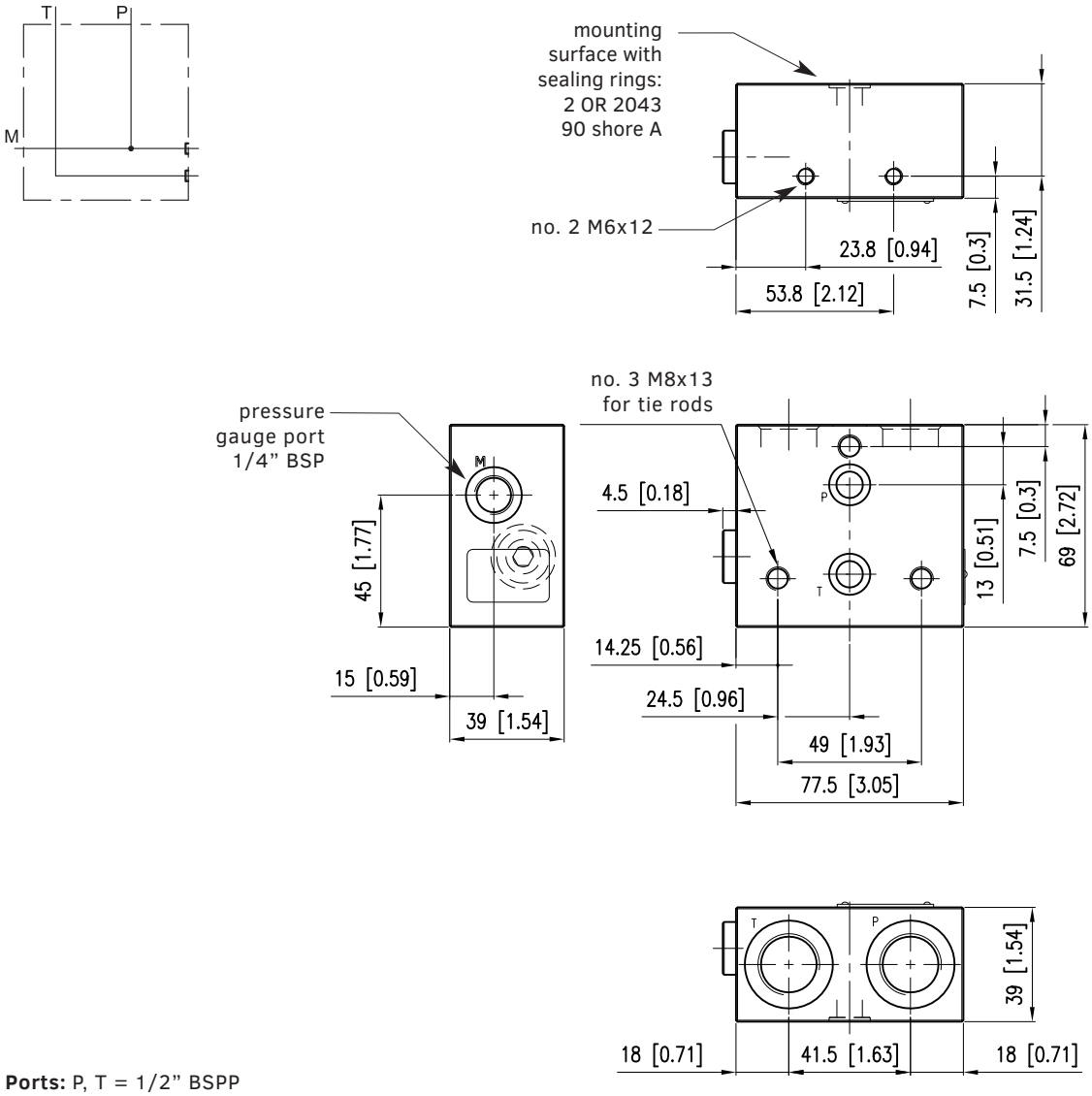
UNLOADING VALVE FOR SDX-QP INLET (see page 24)			
D12	20.5	7	1.2
D24	20.5	28	0.6

UNLOADING VALVE FOR SDX-QPLS INLET (see page 25)			
D12	18	8	1.5
D24	18	3.2	0.75

DUTY CYCLE		100%
ELECTROMAGNETIC COMPATIBILITY (EMC)		according to European directive 2014/30/EU
PROTECTION CLASS FOR INSULATION	copper wire	class H (180 °C)
	coil	class F (155 °C)

BASIC INLET SDX-B2S-*-1

dimensions in mm [in]

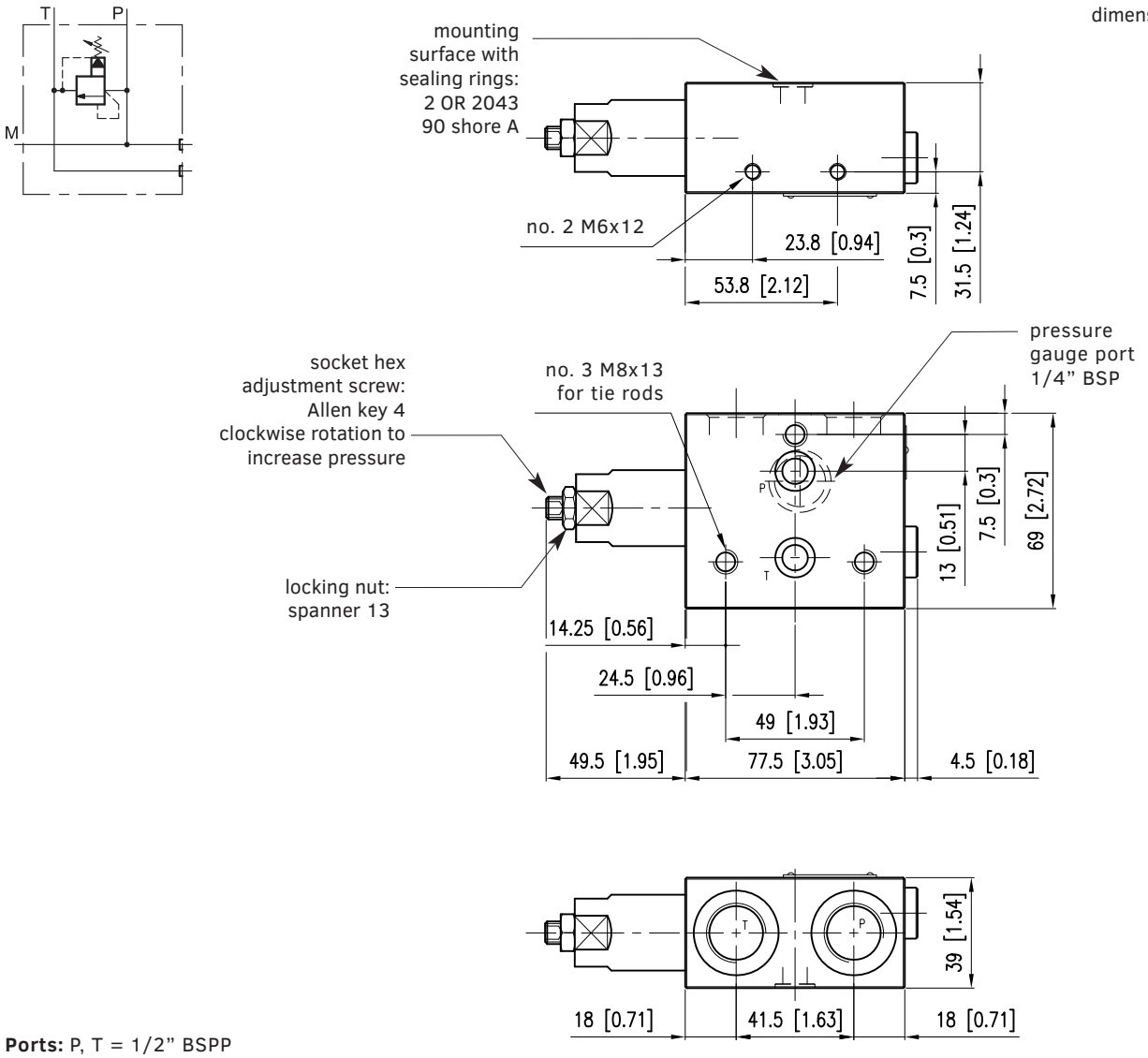


Ports: P, T = 1/2" BSPP

NOTE: See page 12 for missing mounting interface dimensions.

INLET WITH PRESSURE CONTROL VALVE SDX-P***-B2S-*-1

dimensions in mm [in]

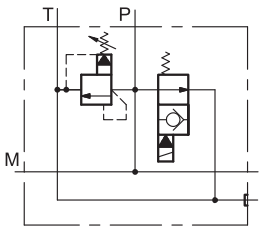


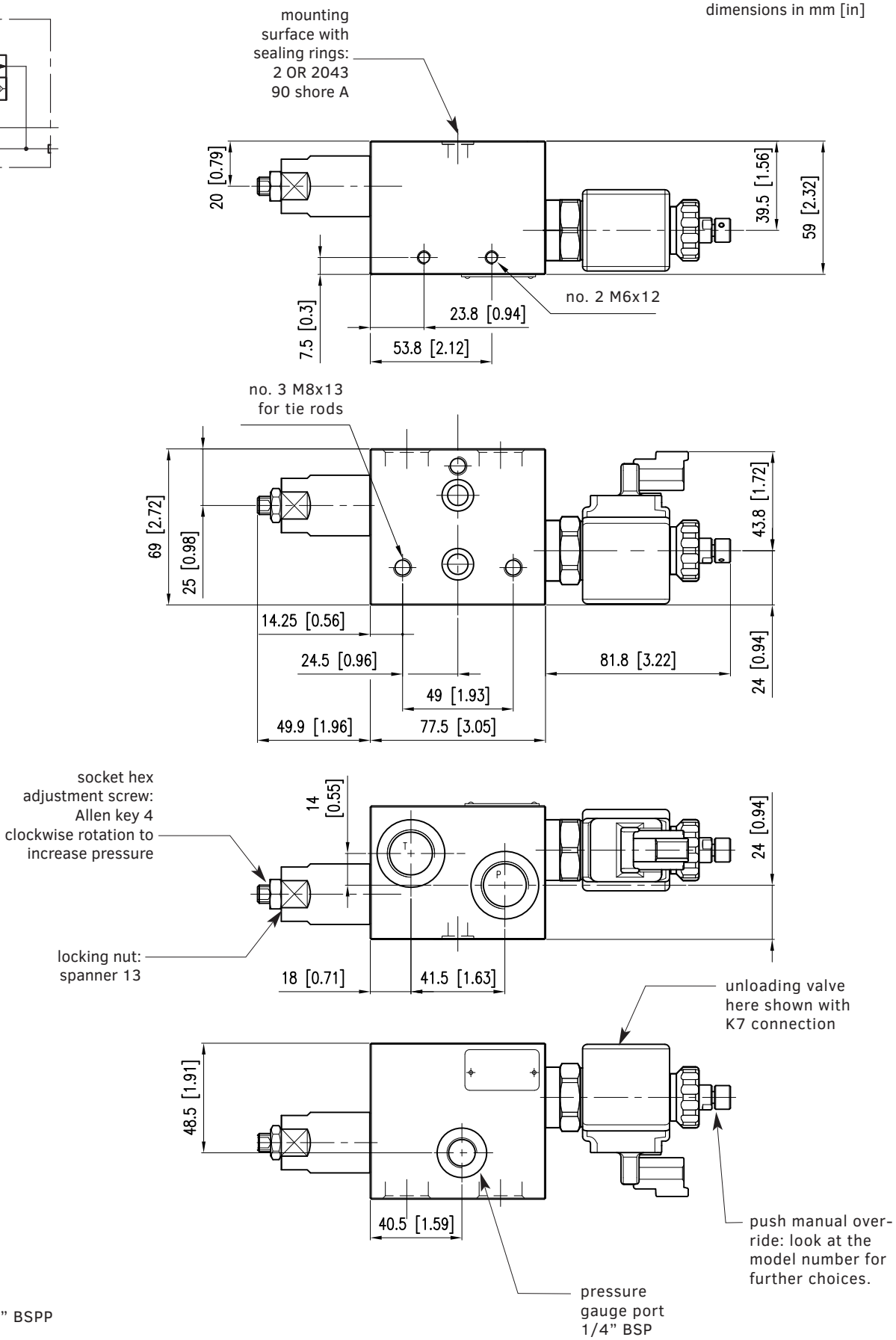
Ports: P, T = 1/2" BSPP

NOTE: See page 12 for missing mounting interface dimensions.

INLET WITH PRESSURE CONTROL VALVE AND UNLOADING SDX-P***-B2S-D**K7P-*-2

dimensions in mm [in]



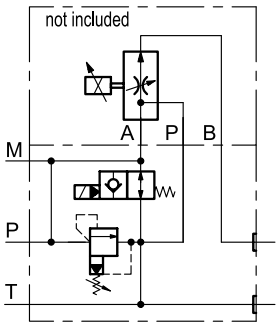


Ports: P, T = 1/2" BSPP

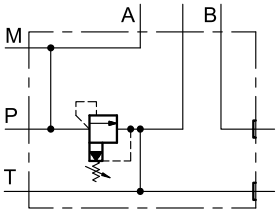
NOTE: See page 12 for missing mounting interface dimensions.

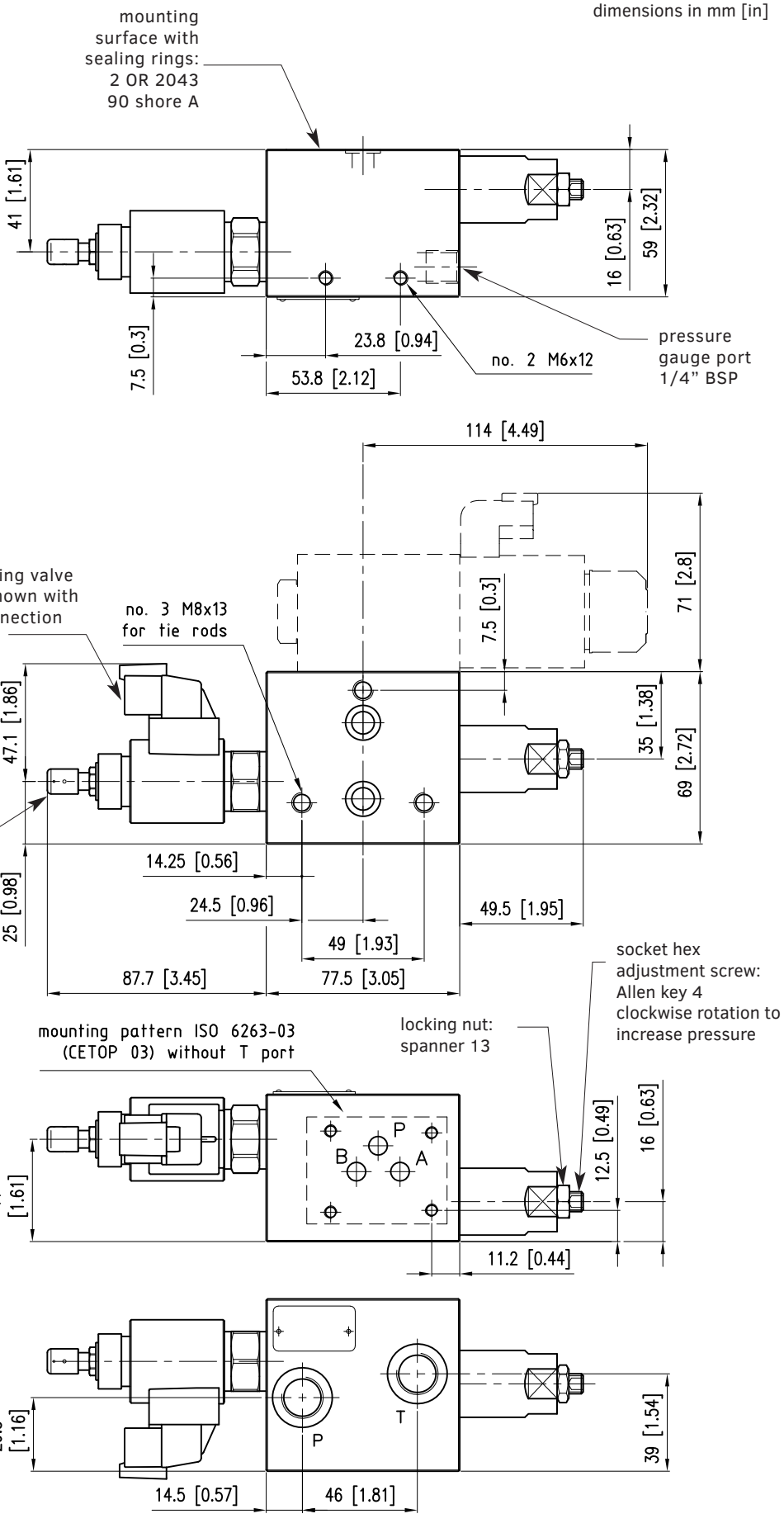
INLET WITH PRESSURE CONTROL VALVE AND UNLOADING SDX-QP***-B15S-D**K7P-*-1

dimensions in mm [in]



NOTE: The same component without the unloading valve is: SDX-PQ***-B15S-*-1

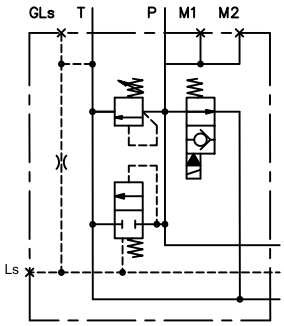




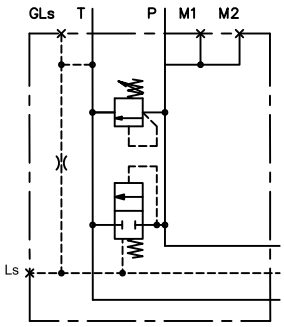
Ports: P, T = 3/8" BSPP

NOTE: See page 12 for missing mounting interface dimensions.

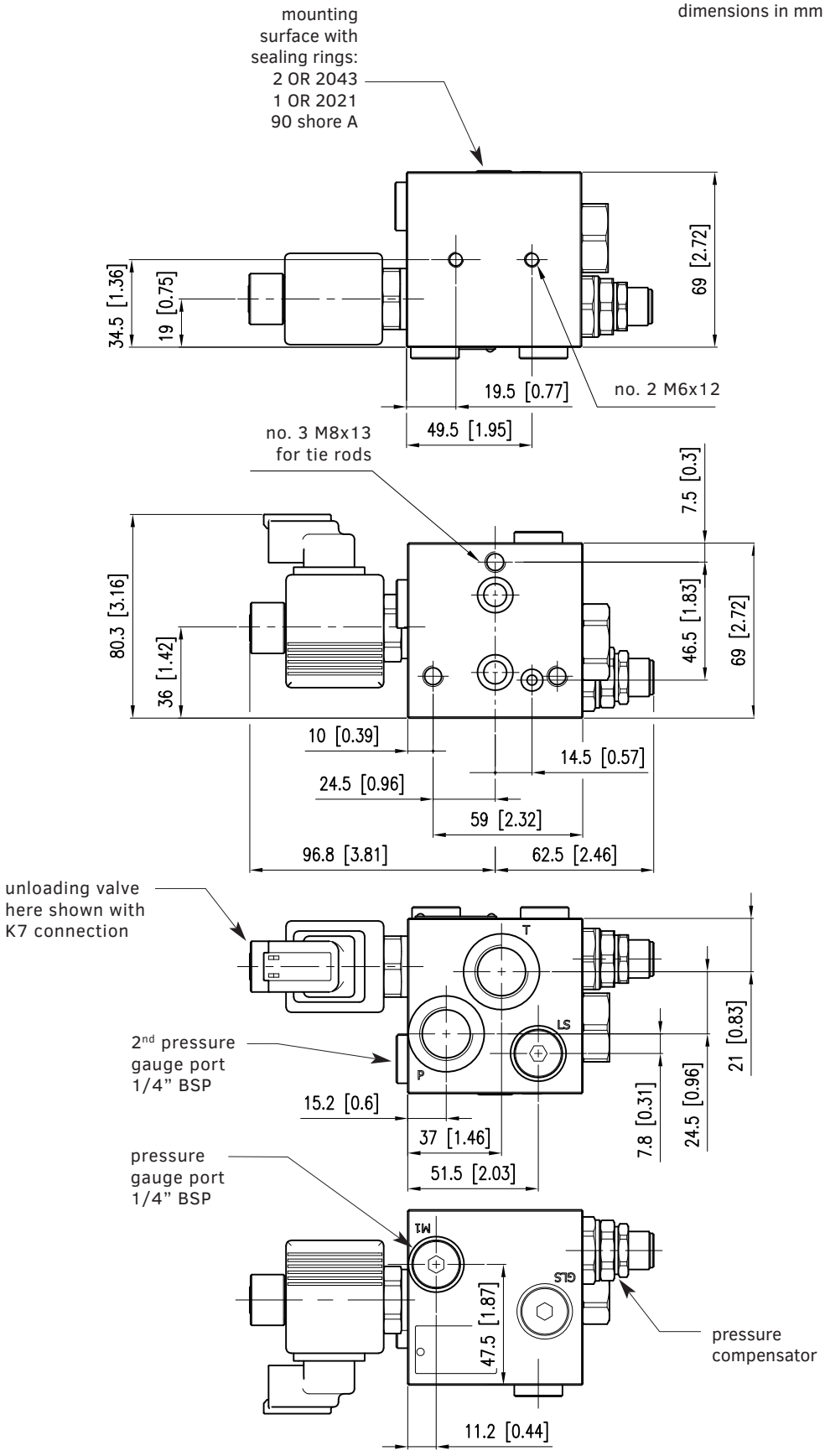
INLET SECTION FOR VALVES WITH LOAD SENSING PORT SDX-QPLS



without unloading valve



dimensions in mm [in]

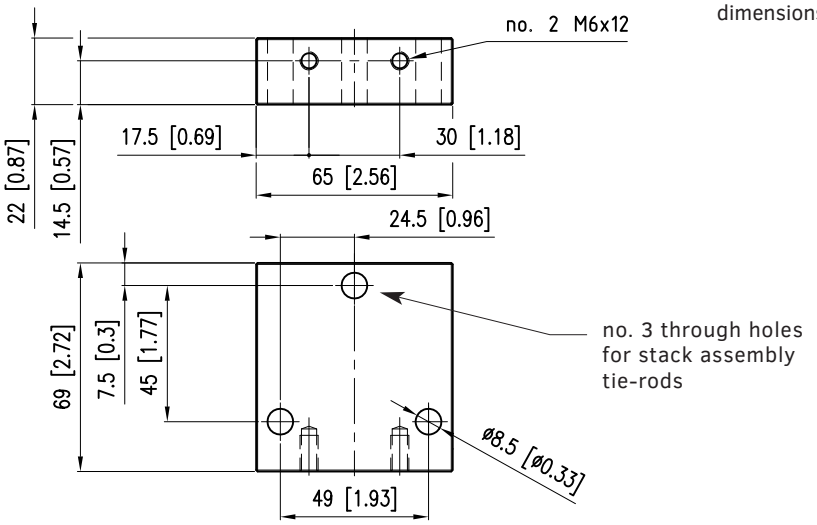


Ports: P, T =1/2" BSPP or 3/4 - 16 UNF

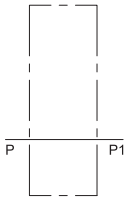
NOTE: See page 12 for missing mounting interface dimensions.

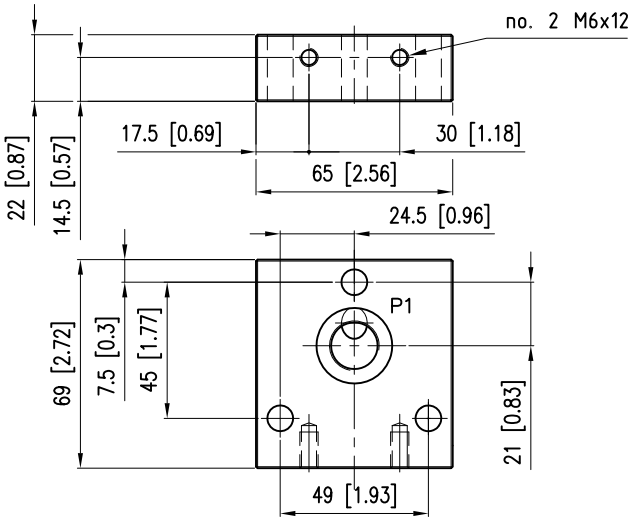
OUTLET SECTION 00: BLIND

dimensions in mm [in]



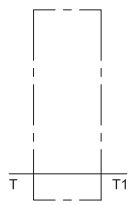
OUTLET SECTION 01: P PORT

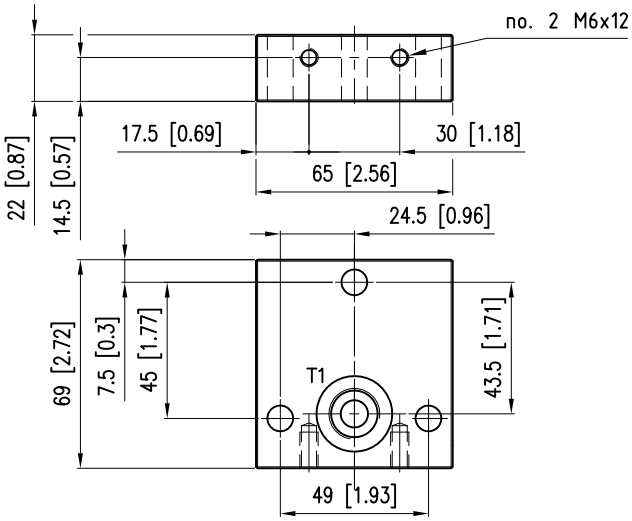




Port: P1 = 3/8" BSPP

OUTLET SECTION 02: T PORT

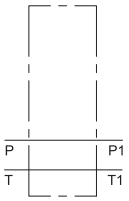




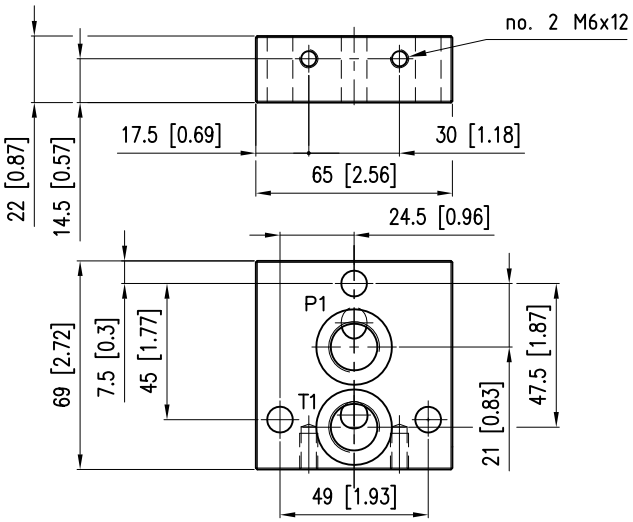
Port: T1 = 3/8" BSPP

NOTE: See page 12 for missing mounting interface dimensions.

OUTLET SECTION 03: BOTH P AND T PORTS



dimensions in mm [in]



Ports: P1, T1 = 3/8" BSPP

NOTE: See page 12 for missing mounting interface dimensions.

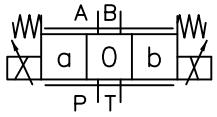
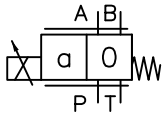
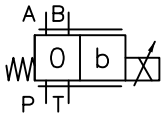
PROPORTIONAL WORKING SECTIONS WITH ANTI-SHOCK + ANTI-CAVITATION FEATURE

These special working elements are equipped with anti-shock and anti-cavitation valves. These features protect the system from pressure peaks and flow disruptions, enhancing reliability and smooth operation.

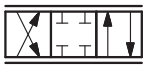
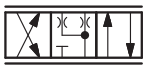
SDSE- □ - □ □ □ - □ □ - □ □ - □ □ -N-1 ← design mark

MAX FLOW RATE	
S	40 l/min

PORTS SIZE	
B15	3/8" BSPP
S15	9/16 - 18 UNF

FUNCTION	
D	 double solenoid spring centred
A	 single solenoid at side A spring return
B	 single solenoid at side B spring return

NOMINAL FLOW with Δp P-T 10 bar (145 psi)	
08	8 l/min (2.1 gpm)
16	16 l/min (4.2 gpm)
16-08	16/08 l/min asymmetric
26	26 l/min (7.0 gpm)
26-13	26/13 l/min asymmetric

SPOOLS	
C	 closed centre
A	 open centre

VOLTAGE	
D12	12 V DC solenoid
D24	24 V DC solenoid
D00	without coil

SEAL	
N	NBR
V	Viton

MANUAL OVERRIDE	
M	pin, integrated in the tube. (**standard**)
B	pin, integrated in the tube, boot protected (**standard** with WK* coils)
K	knob, turning
L	hand lever

COIL	
K1	EN 175301-803
K7	DT04-2P 'Deutsch'
WK1	EN 175301-803 zinc-nickel plated
WK7	DT04-2P 'Deutsch' zinc-nickel plated

AUXILIARY VALVE side A	
A..	anti-cavitation + antishock

AUXILIARY VALVE side B	
B..	anti-cavitation + antishock

A.. and **B..** add the desired set pressure value to the letter: available pressures: 100, 150, 190, 235, 280, 300, 350.

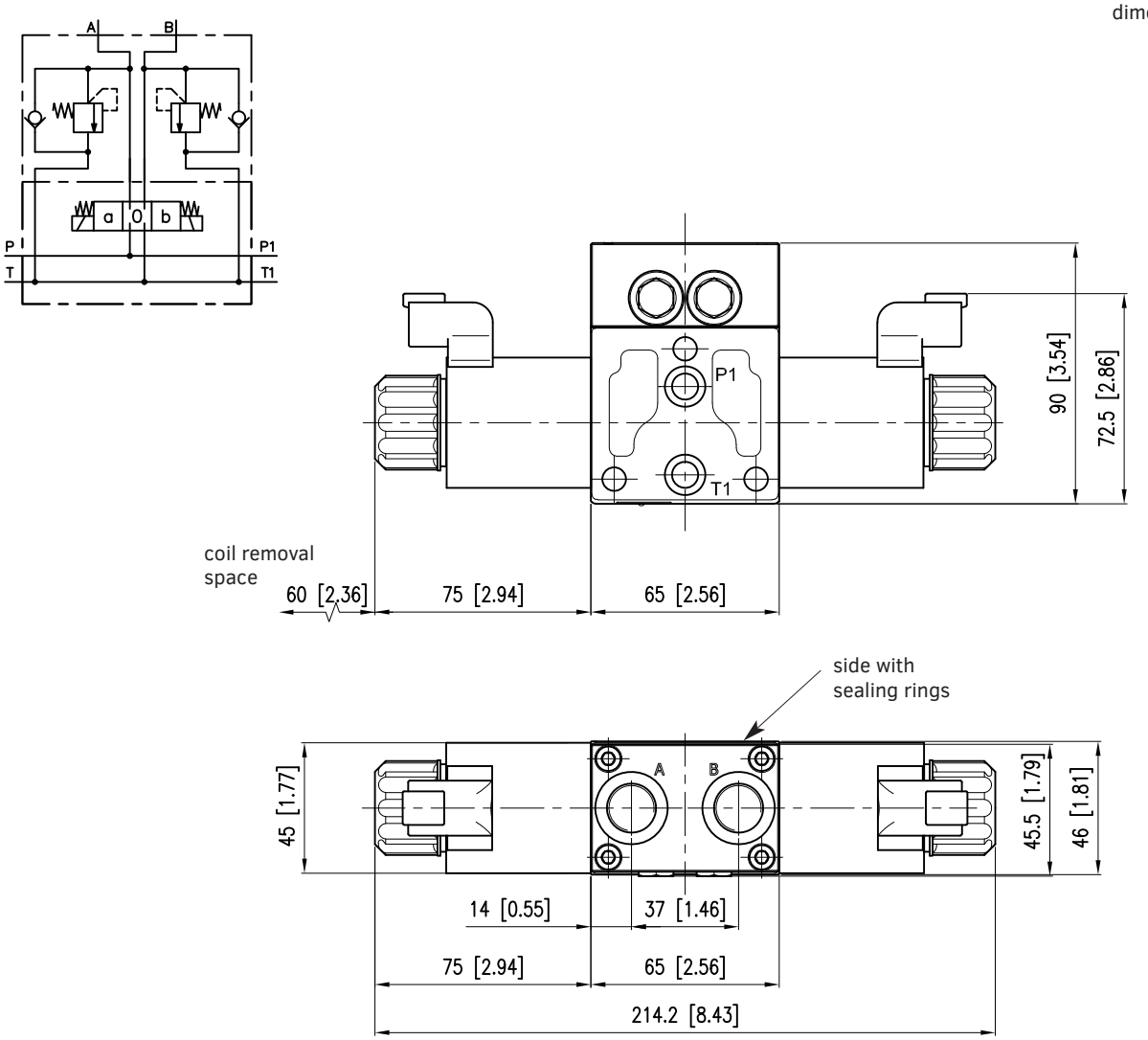
On-off and proportional working sections can be combined in a single assembly.

CODE EXAMPLE:

SDSE - S15 - D26A - A300B300 - D12WK7 - NM - 1

SDSE WITH ANTI-SHOCK + ANTI-CAVITATION FEATURE

dimensions in mm [in]



Ports:
A, B = 3/8" BSPP or 9/16 - 18 UNF

NOTE: See page 12 for missing mounting interface dimensions.

INLET ELEMENT WITH PRESSURE-COMPENSATED PROPORTIONAL FLOW CONTROL

This inlet element allows supplying the active on/off working element in the assembly with a proportional, pressure-compensated flow, and is also equipped with a pressure relief valve.

The SDX-QLS inlet section can be used in circuits with fixed-displacement pumps or with variable-displacement pumps, where the compensation function is managed by the pump. In this case, the local compensator must be deactivated by tightening the knob. The pressure signal is transmitted to the pump via the Ls port.

SDX - QLS [ ] - [ ] S - [ ] [ ] - [ ] -1 — design mark

FUNCTION	
QLS	Load sensing

PORTS SIZE	
B15	3/8" BSPP
S15	9/16 - 18 UNF

SEAL	
N	NBR (**standard**)
V	Viton

RELIEF VALVE	
140	up to 140 bar
210	up to 210 bar
320	up to 320 bar

MATERIAL	
S	steel (zinc-plated)

VOLTAGE	
D12	12 V DC solenoid
D24	24 V DC solenoid

COIL	
K1	EN 175301-803
K7	DT04-2P 'Deutsch'
WK1	EN 175301-803 zinc-nickel plated
WK7	DT04-2P 'Deutsch' zinc-nickel plated

ELECTRICAL DATA

The proportional solenoid consists of a tube and a coil.

The coil is mounted on the tube and secured with a retaining ring. The coil can be rotated to any position, allowing flexible orientation of the electrical connector to suit installation requirements.

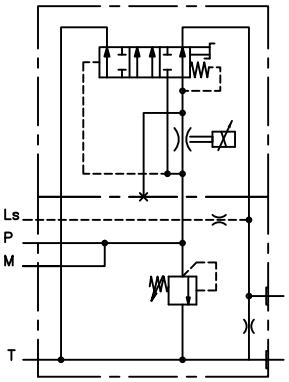
For spare parts or replacements, please contact the Sales Department.

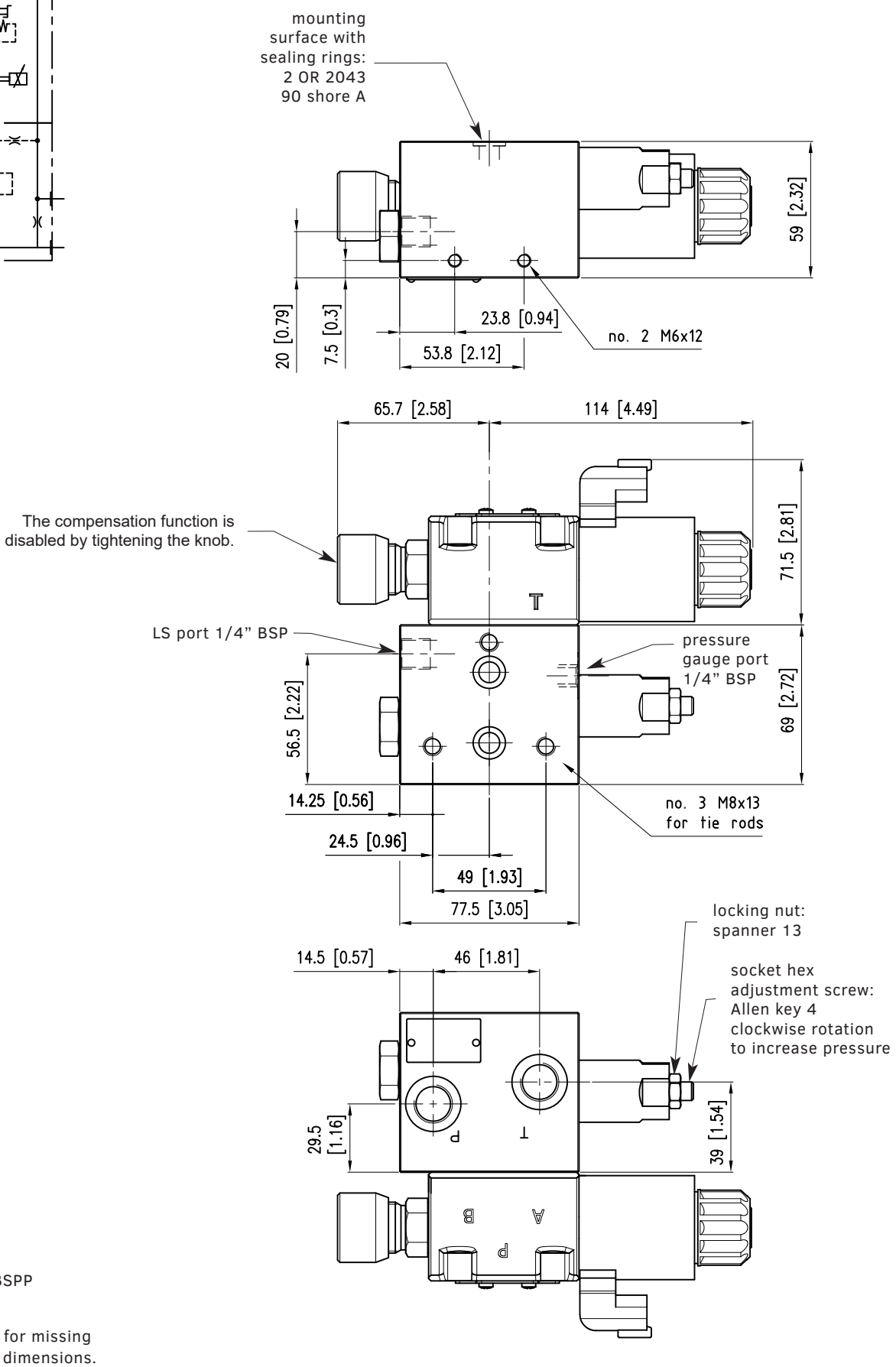
DUTY CYCLE		100%
ELECTROMAGNETIC COMPATIBILITY (EMC)		according to European directive 2014/30/EU
PROTECTION CLASS FOR INSULATION	copper wire	class H (180 °C)
	coil	class F (155 °C)

	Absorbed power [W]	Resistance at 20 °C [Ω]	Nominal current [A]
COMPENSATOR COIL			
D12	12	4.4	1.88
D24	24	18.6	0.86

DIMENSIONS

dimensions in mm [in]





Ports: P, T = 3/8" BSPP

NOTE: See page 12 for missing mounting interface dimensions.

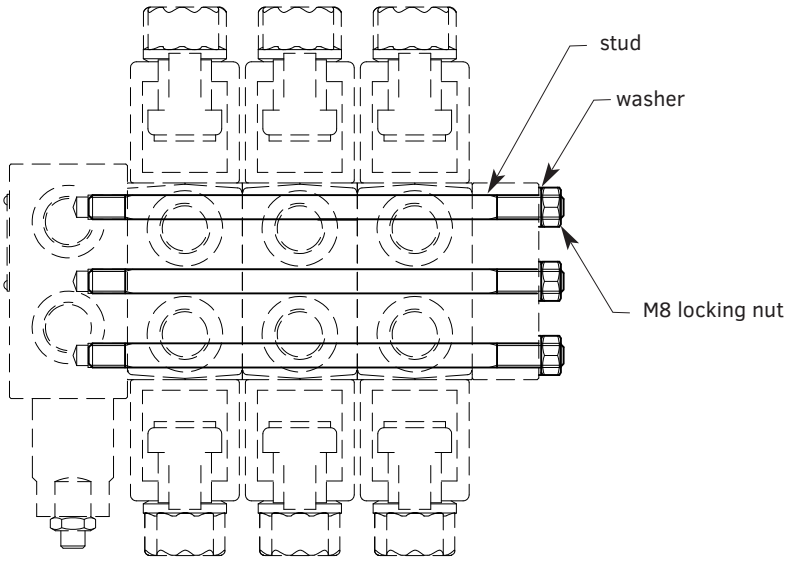
INSTALLATION

The stacked valve assembly can be installed in any position without impairing proper functioning.

Ensure that there is no air in the hydraulic circuit.

Assembly kits are available and can be ordered using the codes provided in the tables below.

For special assemblies, please contact the technical department to verify dimensions before placing an order.



ASSEMBLY KIT

The assembly kit includes:

no. 3 studs,
no. 3 self locking nuts
no. 3 washers

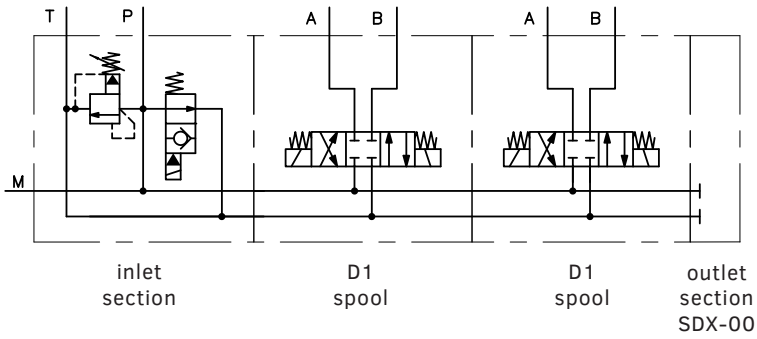
All parts are zinc-coated.

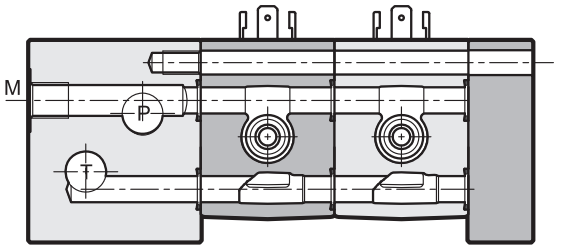
Please use these codes to order the kit:

Valve type	Sectional valves	Code
SDL-B15 SDL-S15 SDM-B15 SDM-S15	**3**	3404100100
	4	3404100101
	5	3404100102
	6	3404100103
	7	3404100104
	8	3404100105
	9	3404100106
SDS-B15 SDS-S15 SDS-B2 SDS-S2	**3**	3404100108
	4	3404100109
	5	3404100110
	6	3404100111

Tightening torque: 20 (0...+3) Nm

CIRCUIT EXAMPLE: PARALLEL CIRCUIT



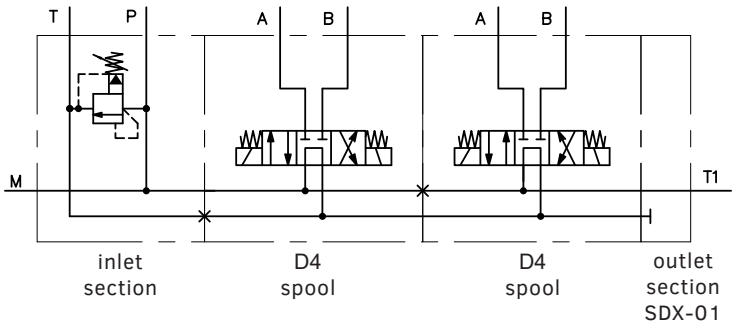


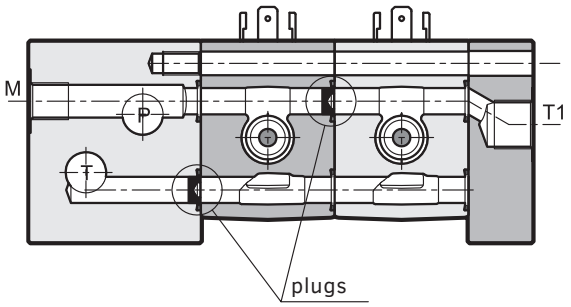
CIRCUIT EXAMPLES : SERIES CIRCUITS

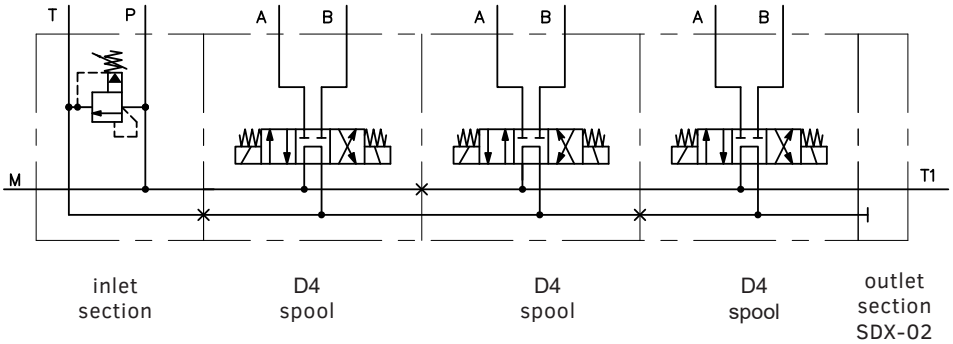
Series circuits are created using sectional valves with D4 spools by inserting plugs between the elements.

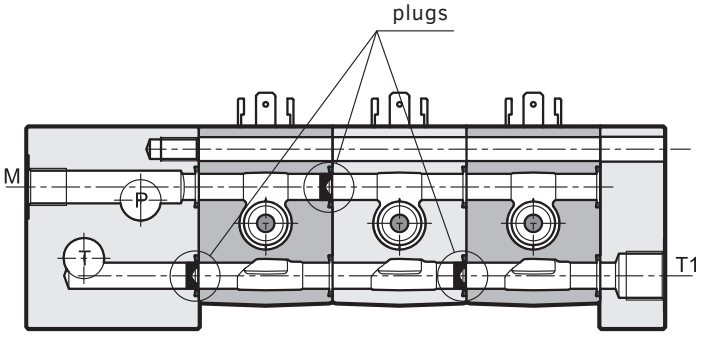
The oil flow is diverted alternately from the P line to the T line.

Please note that this type of configuration requires a different outlet section depending on whether the assembly contains an even or odd number of sectional directional valves.









plug Ø9 - ordering code: **0612253**

ASSEMBLED VALVE

SD □ - □□□ - □□ - □ - H □□

project code (5 digits) assigned by Hydreco

MAX FLOW RATE	
L	40 l/min
M	50 l/min
S	60 l/min

CIRCUIT TYPE	
P	parallel
S	series, by plugs

SLICES
No. of directional valves

VOLTAGE	
D12	12 V DC solenoid
D24	24 V DC solenoid
D28	28 V DC solenoid
D48	48 V DC solenoid
D00	without coil

PORTS SIZE	
B15	3/8” BSPP
S15	9/16 - 18 UNF
B2	1/2” BSPP (SDS only)
S2	3/4”-16 UNF (SDS only)

SEAL	
N	NBR
V	Viton

COIL see availability table below	
K1	EN 175301-803
K7	DT04-2P ‘Deutsch’
WK1	EN 175301-803 zinc-nickel plated
WK7	DT04-2P ‘Deutsch’ zinc-nickel plated
WK7D	DT04-2P ‘Deutsch’ zinc-nickel plated with diode
K2	AMP Junior (upon request)

CODE EXAMPLE:

SDL-P4B15-D12K7-N-H20520

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QUALITY SYSTEM CERTIFICATION DNV ISO 9001

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