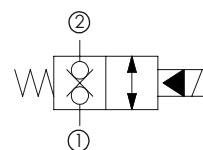
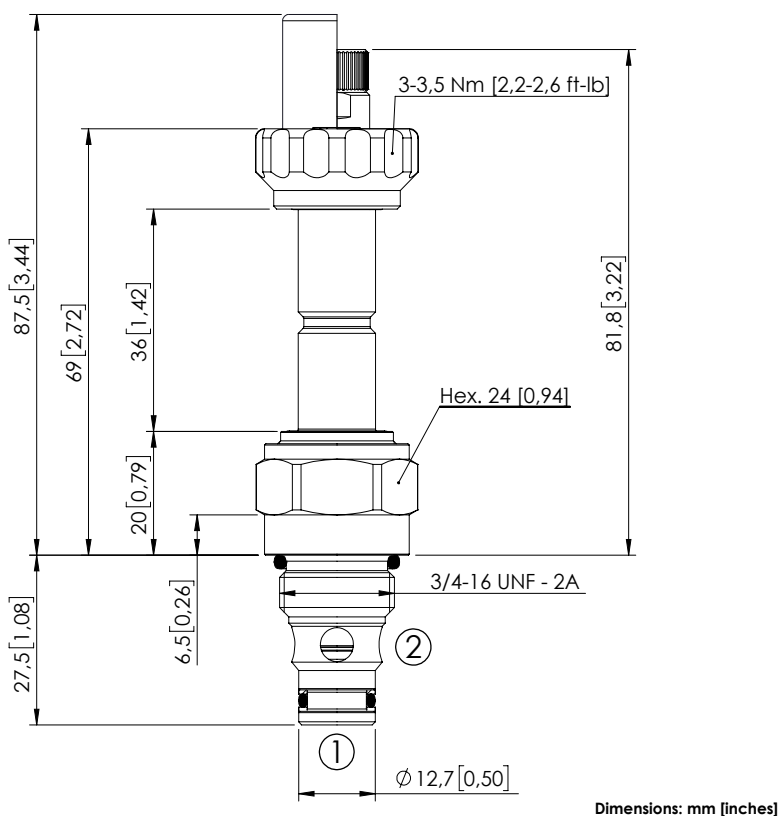
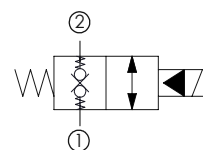


SOLENOID OPERATED CARTRIDGE

CEBN-060-NCFN-31PILOT OPERATED
POPPET TYPE

With extra spring

**SPECIFICATIONS**

Max. operating pressure:	350/500 bar (5000/7200 psi)
Rated flow:	60 l/min (16 gpm)
Cavity:	SAE-08-2N
Weight:	0,15 kg (0,33 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 or M3 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB900081
Installation torque:	45 - 50 Nm (33 - 37 ft.-lb)
MTF _d :	150 - 1200 years: See technical spec.

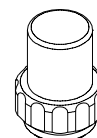
NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

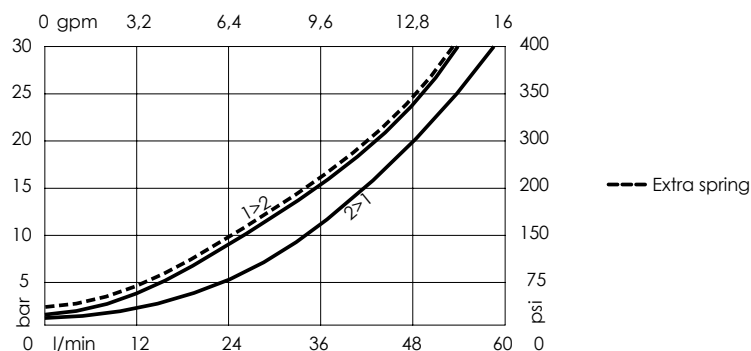
PATENT PENDING

OPTIONS

Standard

Knob style
override**SEALING CAP**

Ordering code:
AT000113

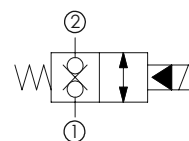
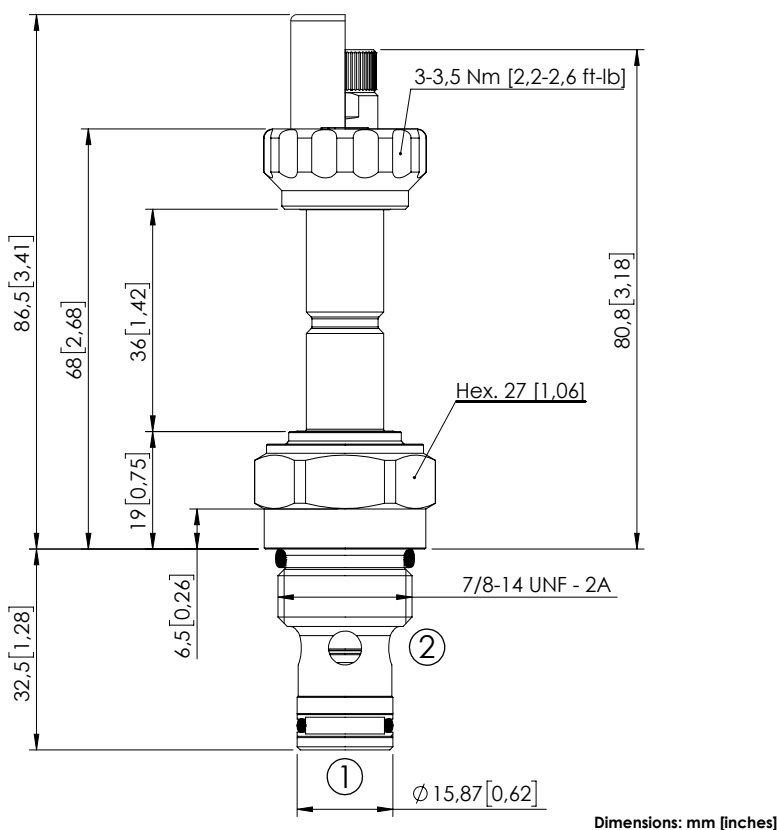
CURVES**ORDERING CODES**

Quick code	Description	Options	Max operating pressure	Extra Spring
CE000226	CEBN-060-NCFN-31-S08-N350	Standard	350 bar (5000 psi)	No
CE000228	CEBN-060-NCFK-31-S08-N350	Knob style override	350 bar (5000 psi)	No
CE000227	CEBN-060-XCFN-31-S08-N350	Standard	350 bar (5000 psi)	Yes
CE000229	CEBN-060-XCFK-31-S08-N350	Knob style override	350 bar (5000 psi)	Yes
CE000526	CEBN-060-NCFN-31-S08-N500	Standard	500 bar (7200 psi)	No
CE000528	CEBN-060-NCFK-31-S08-N500	Knob style override	500 bar (7200 psi)	No

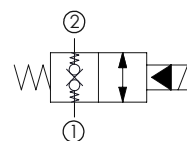
Revision H1

SOLENOID OPERATED CARTRIDGE

CEBN-080-NCFN-31

PILOT OPERATED
POPPET TYPE

With extra spring



SPECIFICATIONS

Max. operating pressure:	350/500 bar (5000/7200 psi)
Rated flow:	80 l/min (21 gpm)
Cavity:	SAE-10-2N
Weight:	0,18 kg (0,40 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 or M3 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB900082
Installation torque:	55 - 62 Nm (41 - 46 ft-lb)
MTF _d :	150 - 1200 years: See technical spec.

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

PATENT PENDING

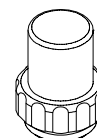
CURVES

OPTIONS

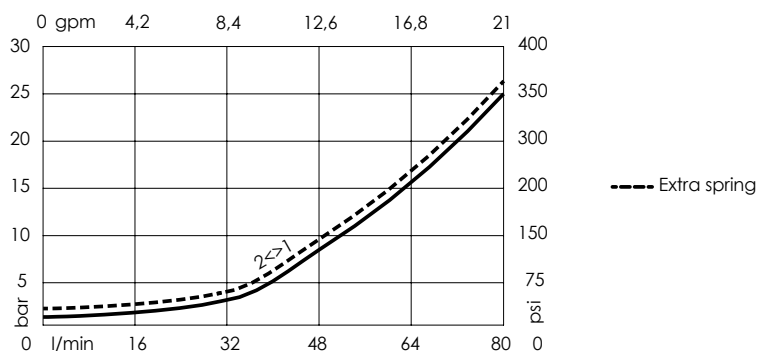
Standard

Knob style
override

SEALING CAP



Ordering code:
AT000113

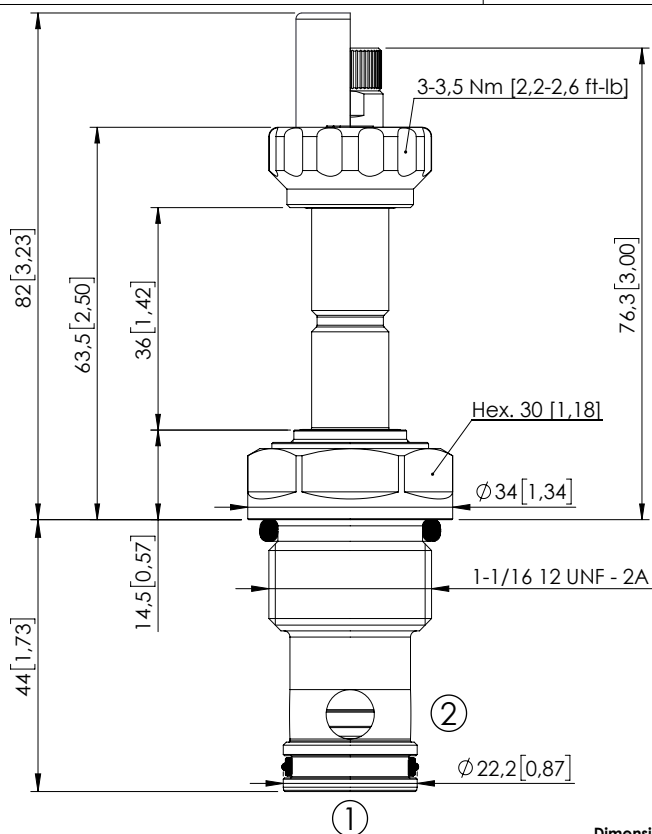


ORDERING CODES

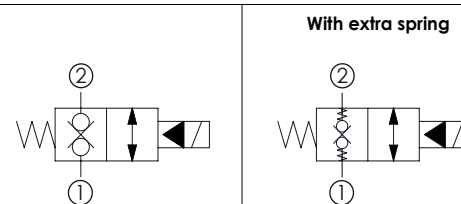
Quick code	Description	Options	Max operating pressure	Extra Spring
CE000261	CEBN-080-NCFN-31-S10-N350	Standard	350 bar (5000 psi)	No
CE000263	CEBN-080-NCFK-31-S10-N350	Knob style override	350 bar (5000 psi)	No
CE000262	CEBN-080-XCFN-31-S10-N350	Standard	350 bar (5000 psi)	Yes
CE000264	CEBN-080-XCFK-31-S10-N350	Knob style override	350 bar (5000 psi)	Yes
CE000561	CEBN-080-NCFN-31-S10-N500	Standard	500 bar (7200 psi)	No
CE000563	CEBN-080-NCFK-31-S10-N500	Knob style override	500 bar (7200 psi)	No

Revision G1

SOLENOID OPERATED CARTRIDGE

CEBN-190-NCFN-31PILOT OPERATED
POPPET TYPE

Dimensions: mm [inches]

**SPECIFICATIONS**

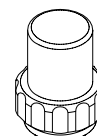
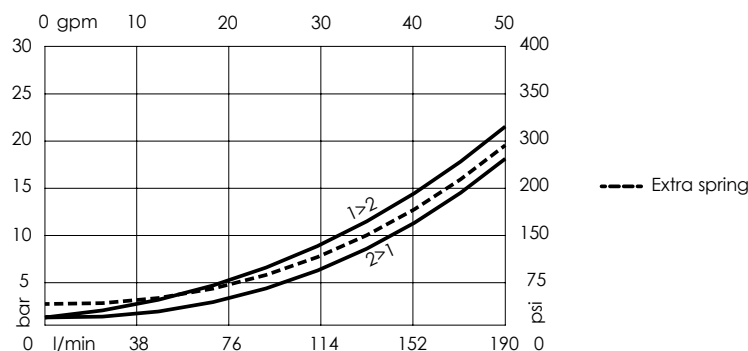
Max. operating pressure:	350/500 bar (5000/7200 psi)
Rated flow:	190 l/min (50 gpm)
Cavity:	SAE-12-2N
Weight:	0.25 kg (0,55 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 or M3 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB600083
Installation torque:	135 - 150 Nm (100 - 111 ft.-lb)
MTF _d :	150 - 1200 years: See technical spec.

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

PATENT PENDING**OPTIONS**

Standard

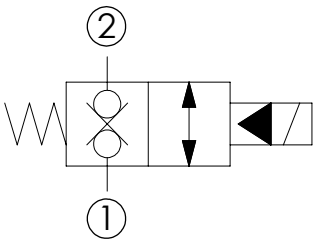
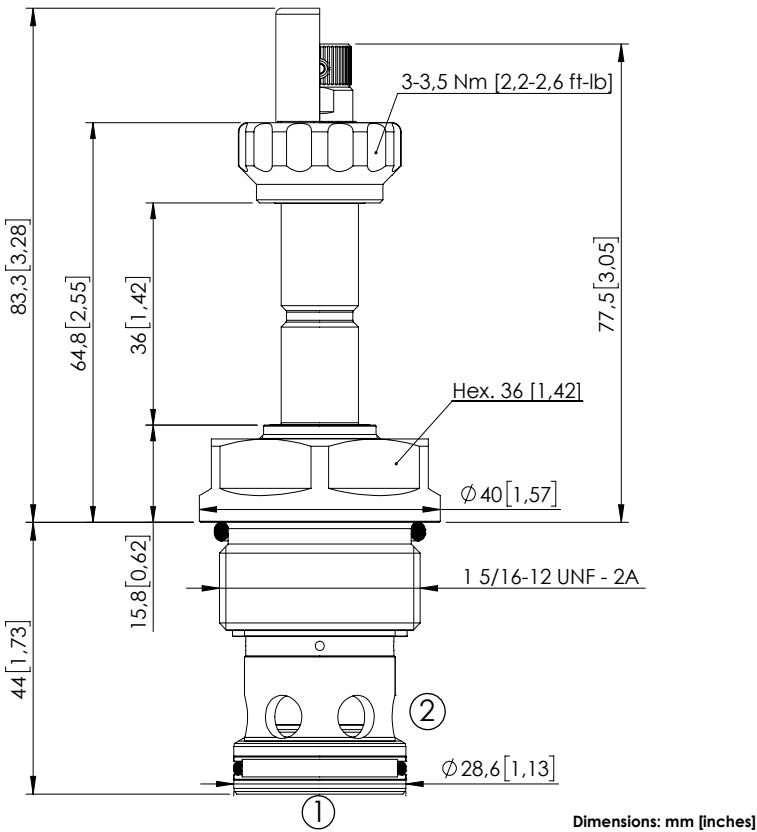
Knob style
override**SEALING CAP**Ordering code:
AT000113**CURVES****ORDERING CODES**

Quick code	Description	Options	Max operating pressure	Extra Spring
CE000331	CEBN-190-NCFN-31-S12-N350	Standard	350 bar (5000 psi)	No
CE000333	CEBN-190-NCFK-31-S12-N350	Knob style override	350 bar (5000 psi)	No
CE000332	CEBN-190-XCFN-31-S12-N350	Standard	350 bar (5000 psi)	Yes
CE000334	CEBN-190-XCFK-31-S12-N350	Knob style override	350 bar (5000 psi)	Yes
CE000631	CEBN-190-NCFN-31-S12-N500	Standard	500 bar (7200 psi)	No
CE000633	CEBN-190-NCFK-31-S12-N500	Knob style override	500 bar (7200 psi)	No

Revision D

SOLENOID OPERATED CARTRIDGE

CEBN-310-NCFN-31 PILOT OPERATED POPPET TYPE



SPECIFICATIONS

Max. operating pressure:	350/500 bar (5000/7200 psi)
Rated flow:	310 l/min (82 gpm)
Cavity:	SAE-16-2N
Weight:	0,36 kg (0,79 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 or M3 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB900084
Installation torque:	200 - 210 Nm (148 - 155 ft.-lb)
MTF _d :	150 - 1200 years: See technical spec.

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory
PATENT PENDING

CURVES

OPTIONS

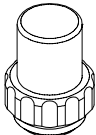
Standard



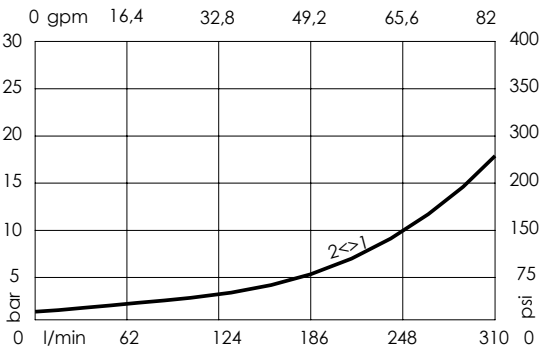
Knob style override



SEALING CAP



Ordering code:
AT000113



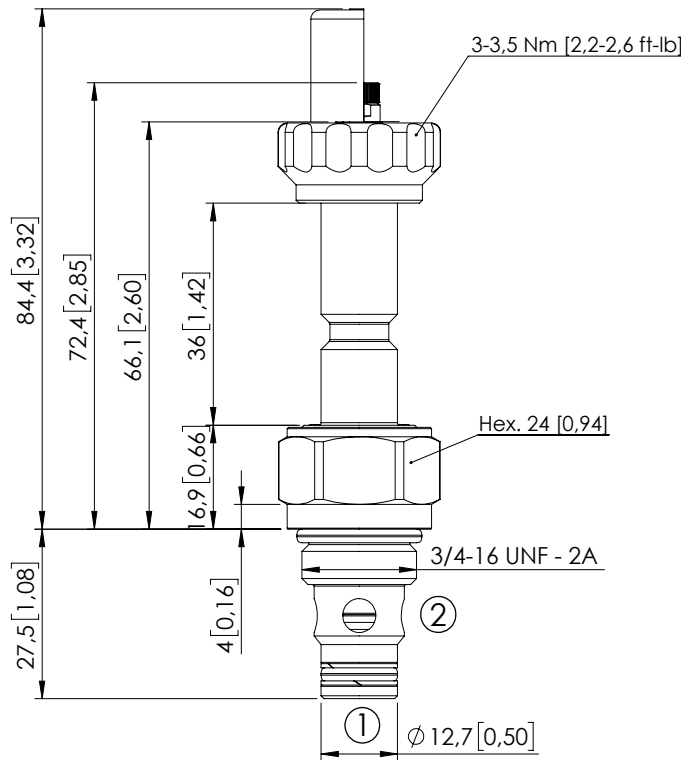
ORDERING CODES

Quick code	Description	Options	Max operating pressure	
CE000401	CEBN-310-NCFN-31-S16-N350	Standard	350 bar (5000 psi)	
CE000403	CEBN-310-NCFK-31-S16-N350	Knob style override	350 bar (5000 psi)	
CE000701	CEBN-310-NCFN-31-S16-N500	Standard	500 bar (7200 psi)	
CE000703	CEBN-310-NCFK-31-S16-N500	Knob style override	500 bar (7200 psi)	

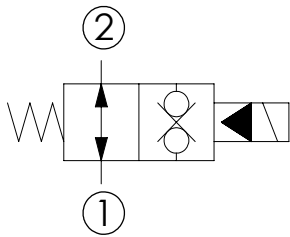
SOLENOID OPERATED CARTRIDGE

CEBE-040-NAFN-32

PILOT OPERATED
POPPET TYPE



Dimensions: mm [inches]



SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Rated flow:	40 l/min (11 gpm)
Cavity:	SAE-08-2N
Weight:	0,13 kg (0,29 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 or M3 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB900081
Installation torque:	45 - 50 Nm (33,2 - 36,9 ft-lb)
MTF _d :	150 - 1200 years: See technical spec.

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

PATENT PENDING

CURVES

OPTIONS

Standard



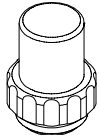
Push style
override



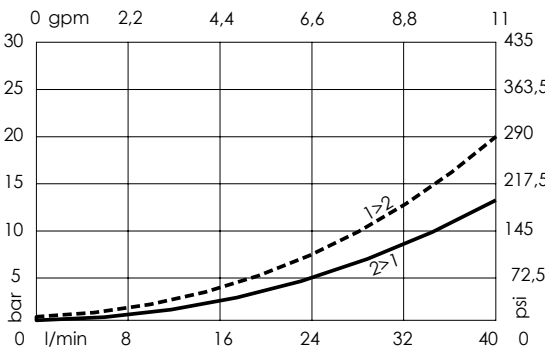
Knob style
override



SEALING CAP



Ordering code:
AT000113

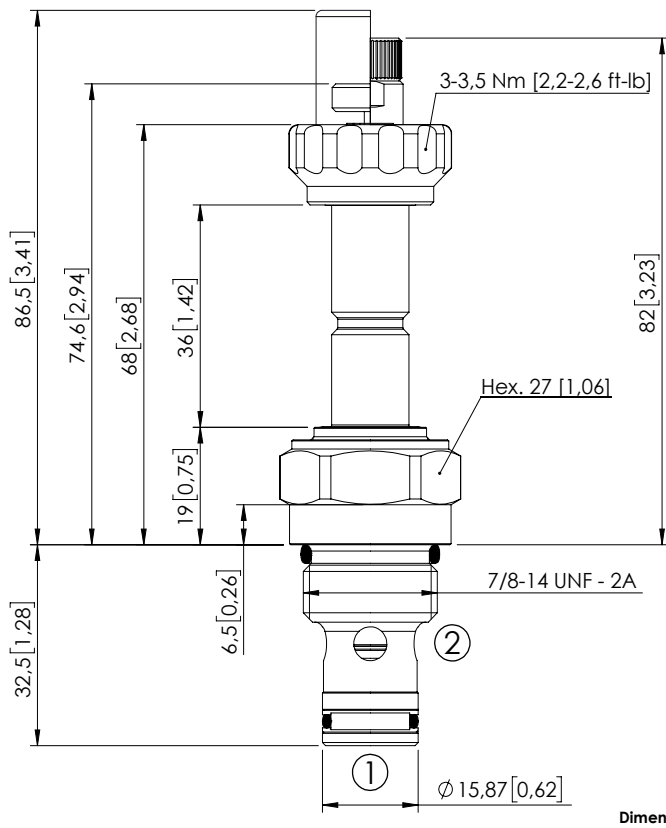


ORDERING CODES

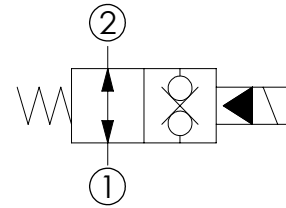
Quick code	Description	Options	Max operating pressure	
CE001877	CEBE-040-NAFN-32-S08-N350	Standard	350 bar (5000 psi)	
CE001878	CEBE-040-NAFP-32-S08-N350	Push style override	350 bar (5000 psi)	
CE001879	CEBE-040-NAFK-32-S08-N350	Knob style override	350 bar (5000 psi)	

Revision B

SOLENOID OPERATED CARTRIDGE

CEBN-080-NAFN-32PILOT OPERATED
POPPET TYPE

Dimensions: mm [inches]

**SPECIFICATIONS**

Max. operating pressure:	350/500 bar (5000/7200 psi)
Rated flow:	80 l/min (21 gpm)
Cavity:	SAE-10-2N
Weight:	0,18 kg (0,40 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 or M3 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB900082
Installation torque:	55 - 62 Nm (41 - 46 ft-lb)
MTFa:	150 - 1200 years: See technical spec.

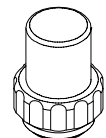
NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

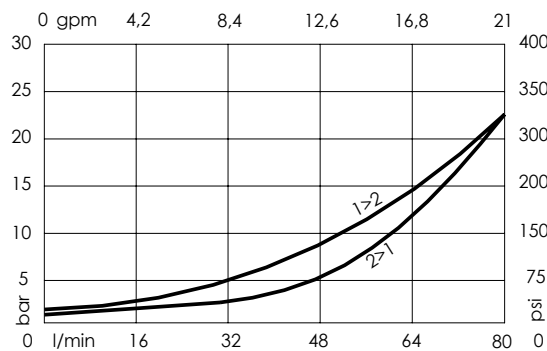
PATENT PENDING

CURVES**OPTIONS**

Standard

Push style
overrideKnob style
override**SEALING CAP**

Ordering code:
AT000113

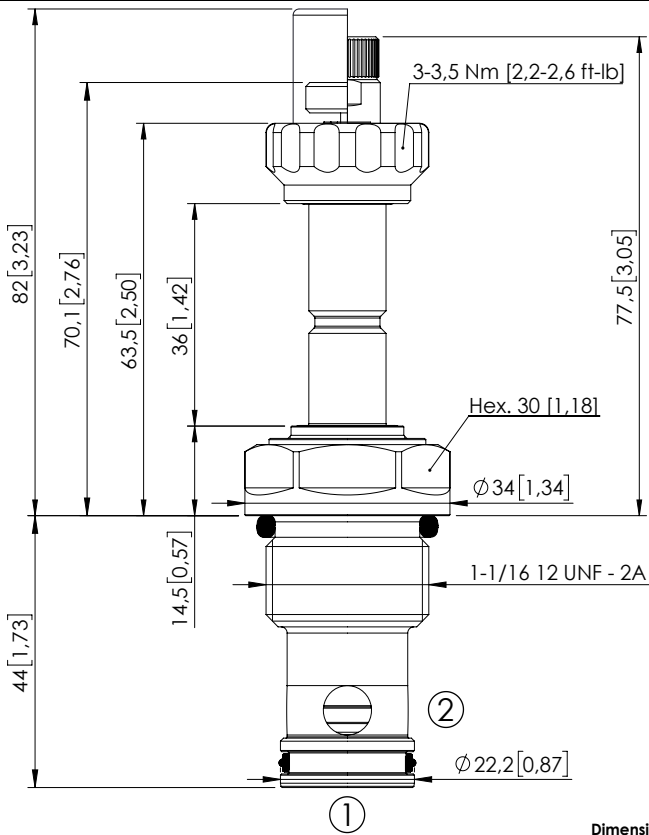
**ORDERING CODES**

Quick code	Description	Options	Max operating pressure	
CE000277	CEBN-080-NAFN-32-S10-N350	Standard	350 bar (5000 psi)	
CE000278	CEBN-080-NAFP-32-S10-N350	Push style override	350 bar (5000 psi)	
CE000279	CEBN-080-NAFK-32-S10-N350	Knob style override	350 bar (5000 psi)	
CE000577	CEBN-080-NAFN-32-S10-N500	Standard	500 bar (7200 psi)	
CE000578	CEBN-080-NAFP-32-S10-N500	Push style override	500 bar (7200 psi)	
CE000579	CEBN-080-NAFK-32-S10-N500	Knob style override	500 bar (7200 psi)	

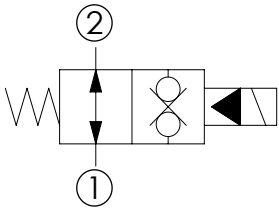
Revision G1

SOLENOID OPERATED CARTRIDGE

CEBN-190-NAFN-32 PILOT OPERATED POPPET TYPE



Dimensions: mm [inches]



SPECIFICATIONS

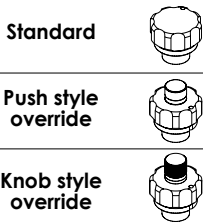
Max. operating pressure:	350/500 bar (5000/7200 psi)
Rated flow:	190 l/min (50 gpm)
Cavity:	SAE-12-2N
Weight:	0.25 kg (0.55 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 or M3 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB900083
Installation torque:	135 - 150 Nm (100 - 111 ft-lb)
MTF _d :	150 - 1200 years: See technical spec.

NOTES

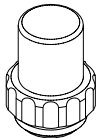
For other configurations/quick codes not available in this catalogue page please consult factory
PATENT PENDING

CURVES

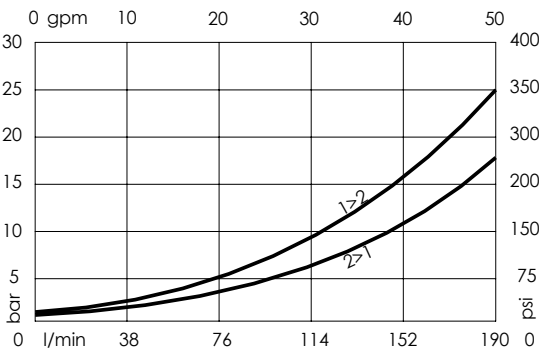
OPTIONS



SEALING CAP



Ordering code:
AT000113

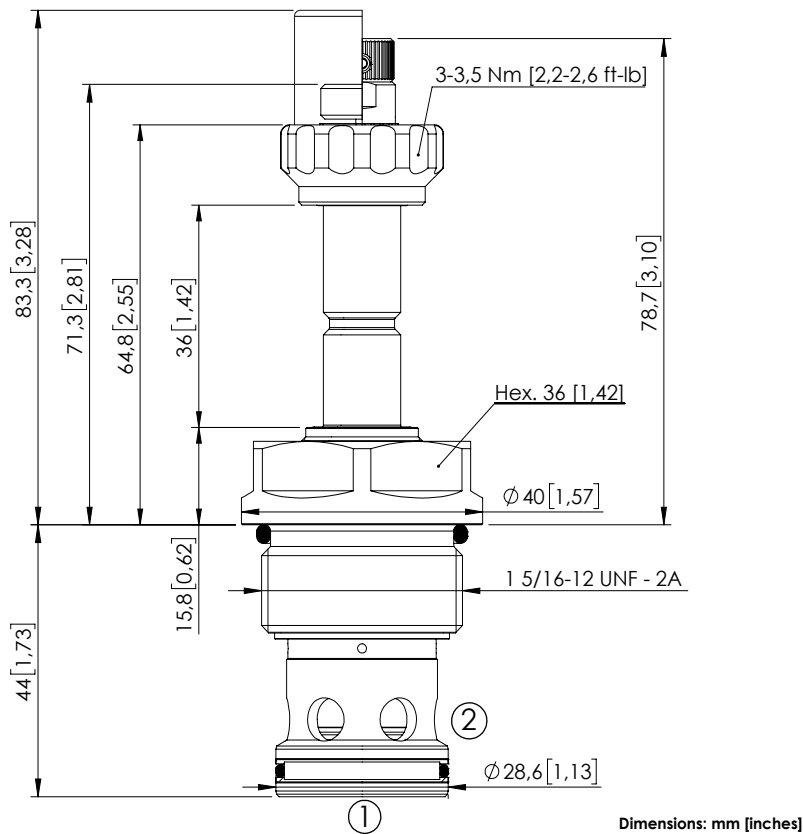


ORDERING CODES

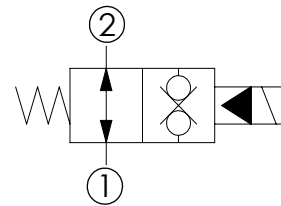
Quick code	Description	Options	Max operating pressure	
CE000347	CEBN-190-NAFN-32-S12-N350	Standard	350 bar (5000 psi)	
CE000348	CEBN-190-NAFP-32-S12-N350	Push style override	350 bar (5000 psi)	
CE000349	CEBN-190-NAFK-32-S12-N350	Knob style override	350 bar (5000 psi)	
CE000647	CEBN-190-NAFN-32-S12-N500	Standard	500 bar (7200 psi)	
CE000648	CEBN-190-NAFP-32-S12-N500	Push style override	500 bar (7200 psi)	
CE000649	CEBN-190-NAFK-32-S12-N500	Knob style override	500 bar (7200 psi)	

SOLENOID OPERATED CARTRIDGE

CEBN-310-NAFN-32

PILOT OPERATED
POPPET TYPE

Dimensions: mm [inches]



SPECIFICATIONS

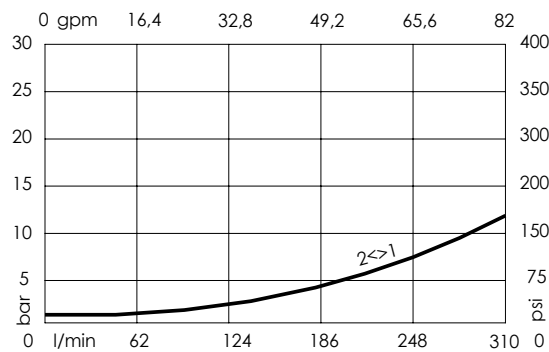
Max. operating pressure:	350/500 bar (5000/7200 psi)
Rated flow:	310 l/min (82 gpm)
Cavity:	SAE-16-2N
Weight:	0,36 kg (0,79 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 or M3 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB900084
Installation torque:	200 - 210 Nm (148 - 155 ft-lb)
MTF _d :	150 - 1200 years: See technical spec.

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

PATENT PENDING

CURVES

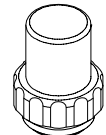


OPTIONS

Standard

Push style
overrideKnob style
override

SEALING CAP



Ordering code:
AT000113

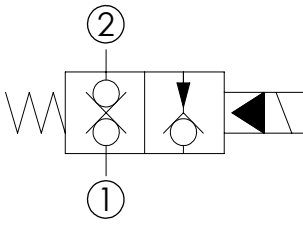
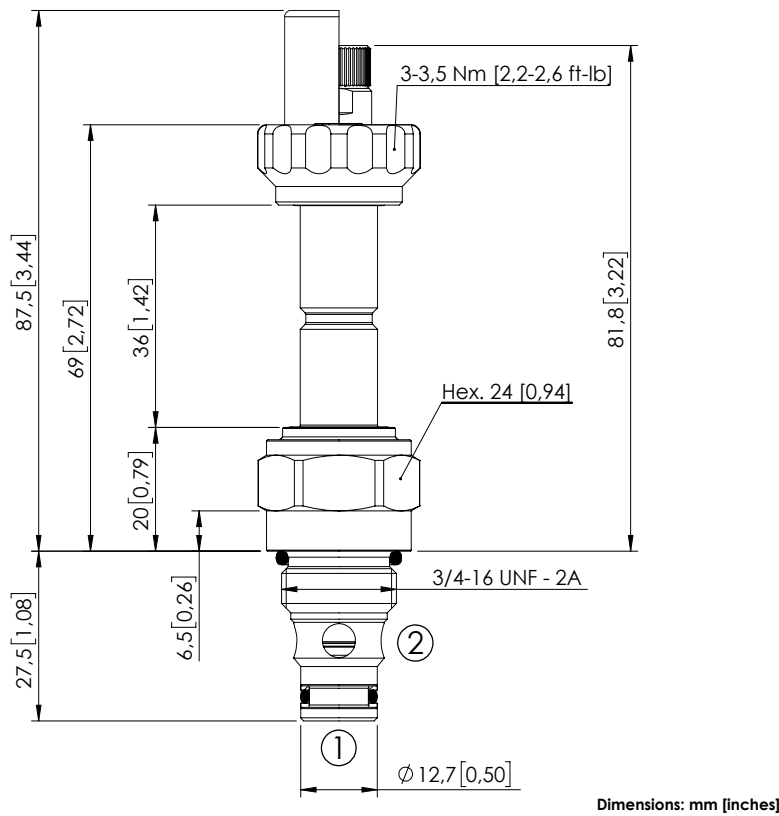
ORDERING CODES

Quick code	Description	Options	Max operating pressure	
CE000417	CEBN-310-NAFN-32-S16-N350	Standard	350 bar (5000 psi)	
CE000418	CEBN-310-NAFP-32-S16-N350	Push style override	350 bar (5000 psi)	
CE000419	CEBN-310-NAFK-32-S16-N350	Knob style override	350 bar (5000 psi)	
CE000717	CEBN-310-NAFN-32-S16-N500	Standard	500 bar (7200 psi)	
CE000718	CEBN-310-NAFP-32-S16-N500	Push style override	500 bar (7200 psi)	
CE000719	CEBN-310-NAFK-32-S16-N500	Knob style override	500 bar (7200 psi)	

Revision F1

SOLENOID OPERATED CARTRIDGE

CEBN-060-NCFN-11 PILOT OPERATED POPPET TYPE

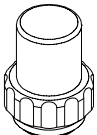


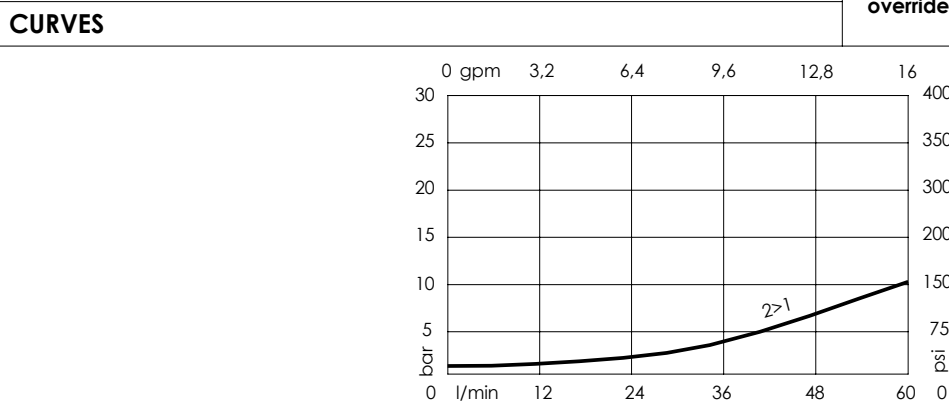
SPECIFICATIONS	
Max. operating pressure:	350/500 bar (5000/7200 psi)
Rated flow:	60 l/min (16 gpm)
Cavity:	SAE-08-2N
Weight:	0,15 kg (0,30 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 or M3 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB900081
Installation torque:	45 - 50 Nm (33 - 37 ft-lb)
MTF _d :	150 - 1200 years: See technical spec.

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

PATENT PENDING

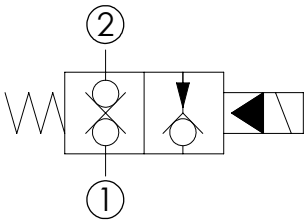
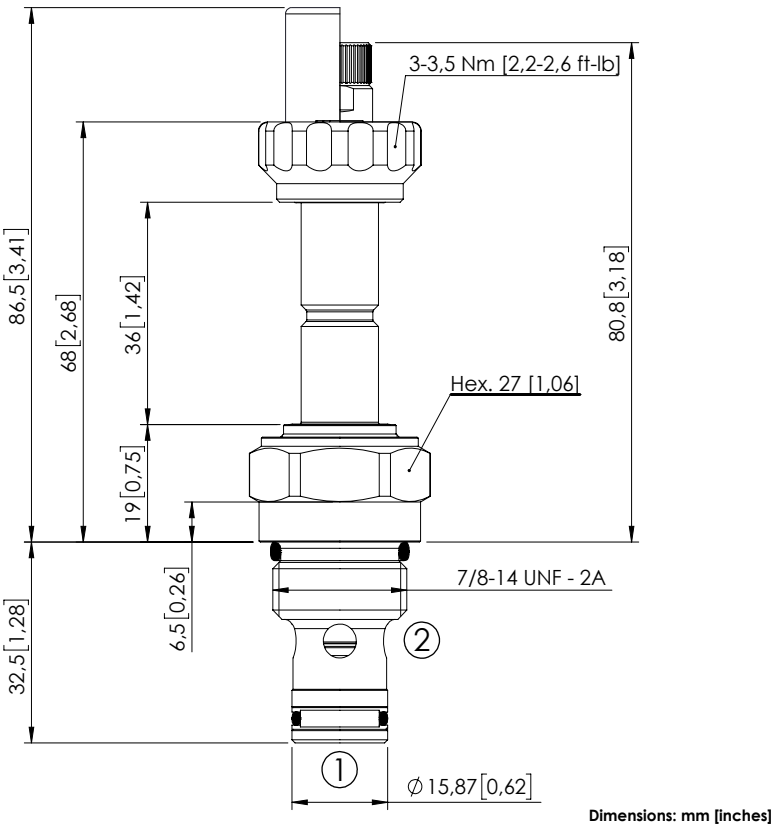
OPTIONS	SEALING CAP
Standard 	 Ordering code: AT000113
Knob style override 	



ORDERING CODES				
Quick code	Description	Options	Max operating pressure	
CE000222	CEBN-060-NCFN-11-S08-N350	Standard	350 bar (5000 psi)	
CE000224	CEBN-060-NCFK-11-S08-N350	Knob style override	350 bar (5000 psi)	
CE000522	CEBN-060-NCFN-11-S08-N500	Standard	500 bar (7200 psi)	
CE000524	CEBN-060-NCFK-11-S08-N500	Knob style override	500 bar (7200 psi)	

SOLENOID OPERATED CARTRIDGE

CEBN-080-NCFN-11 PILOT OPERATED POPPET TYPE



SPECIFICATIONS

Max. operating pressure:	350/500 bar (5000/7200 psi)
Rated flow:	80 l/min (21 gpm)
Cavity:	SAE-10-2N
Weight:	0,18 kg (0,40 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 or M3 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB900082
Installation torque:	55 - 62 Nm (41 - 46 ft-lb)
MTF _d :	150 - 1200 years: See technical spec.

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory
PATENT PENDING

CURVES

OPTIONS

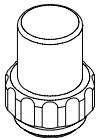
Standard



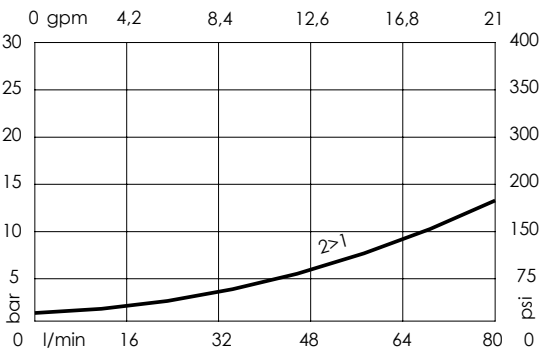
Knob style override



SEALING CAP



Ordering code:
AT000113

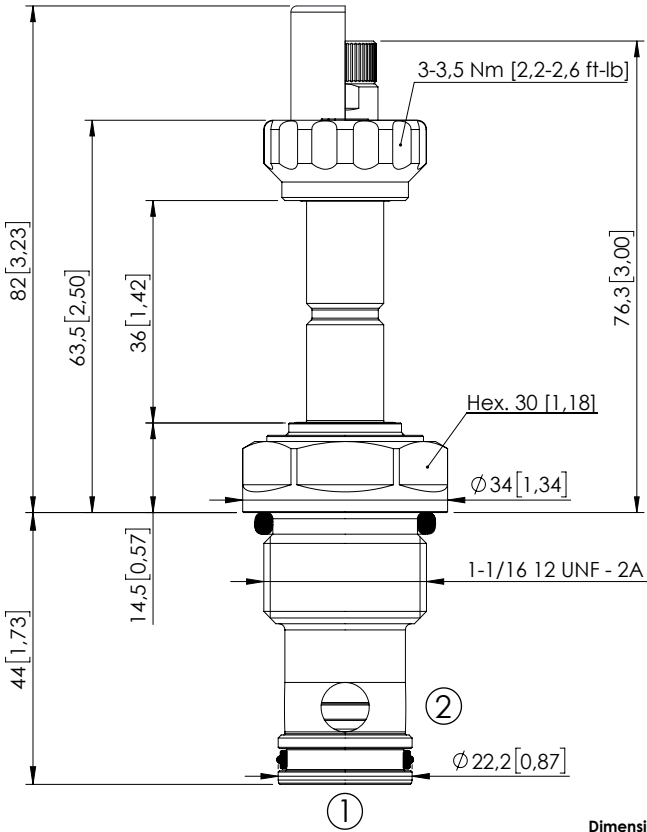


ORDERING CODES

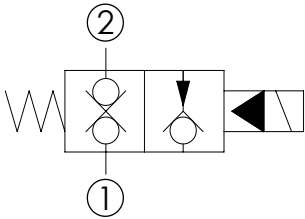
Quick code	Description	Options	Max operating pressure	
CE000257	CEBN-080-NCFN-11-S10-N350	Standard	350 bar (5000 psi)	
CE000259	CEBN-080-NCFK-11-S10-N350	Knob style override	350 bar (5000 psi)	
CE000557	CEBN-080-NCFN-11-S10-N500	Standard	500 bar (7200 psi)	
CE000559	CEBN-080-NCFK-11-S10-N500	Knob style override	500 bar (7200 psi)	

SOLENOID OPERATED CARTRIDGE

CEBN-190-NCFN-11 PILOT OPERATED POPPET TYPE



Dimensions: mm [inches]



SPECIFICATIONS

Max. operating pressure:	350/500 bar (5000/7200 psi)
Rated flow:	190 l/min (50 gpm)
Cavity:	SAE-12-2N
Weight:	0.25 kg (0,55 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 or M3 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB600083
Installation torque:	135 - 150 Nm (100 - 111 ft.-lb)
MTF _d :	150 - 1200 years: See technical spec.

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory
PATENT PENDING

CURVES

OPTIONS

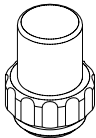
Standard



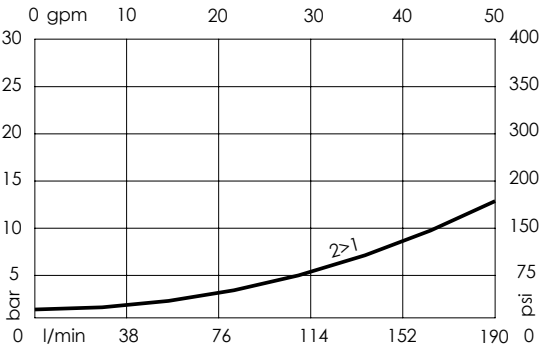
Knob style override



SEALING CAP



Ordering code:
AT000113

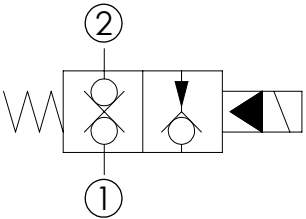
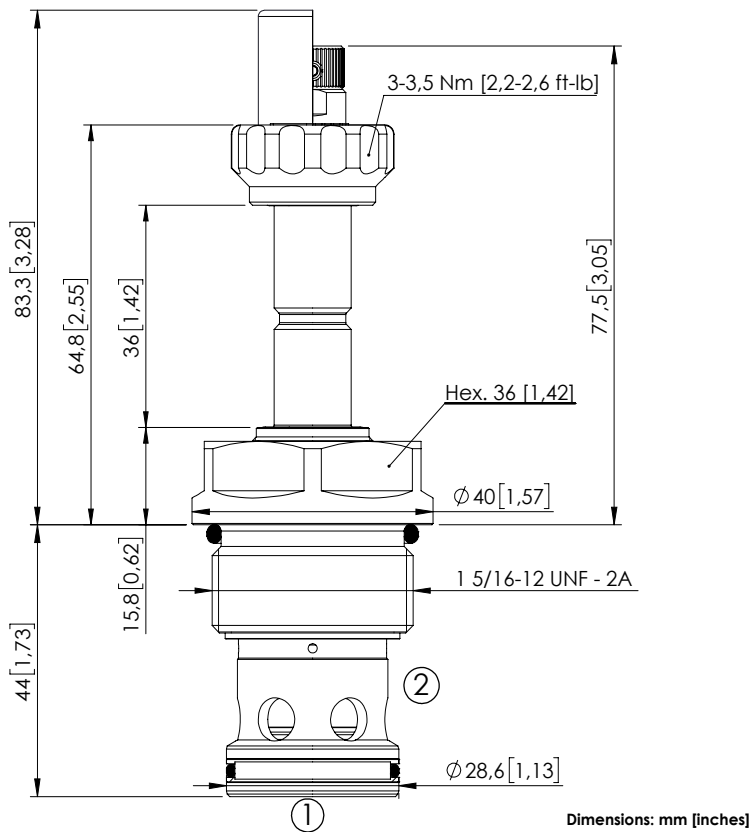


ORDERING CODES

Quick code	Description	Options	Max operating pressure	
CE000327	CEBN-190-NCFN-11-S12-N350	Standard	350 bar (5000 psi)	
CE000329	CEBN-190-NCFK-11-S12-N350	Knob style override	350 bar (5000 psi)	
CE000627	CEBN-190-NCFN-11-S12-N500	Standard	500 bar (7200 psi)	
CE000629	CEBN-190-NCFK-11-S12-N500	Knob style override	500 bar (7200 psi)	

SOLENOID OPERATED CARTRIDGE

CEBN-310-NCFN-11 PILOT OPERATED POPPET TYPE



SPECIFICATIONS

Max. operating pressure:	350/500 bar (5000/7200 psi)
Rated flow:	310 l/min (82 gpm)
Cavity:	SAE-16-2N
Weight:	0,36 kg (0,79 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 or M3 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB900084
Installation torque:	200 - 210 Nm (148 - 156 ft-lb)
MTF _d :	150 - 1200 years: See technical spec.

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

PATENT PENDING

CURVES

OPTIONS

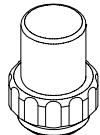
Standard



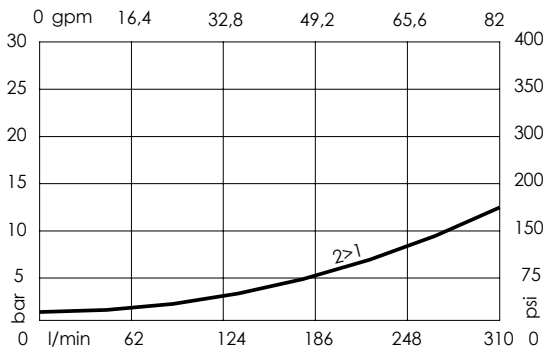
Knob style override



SEALING CAP



Ordering code:
AT000113

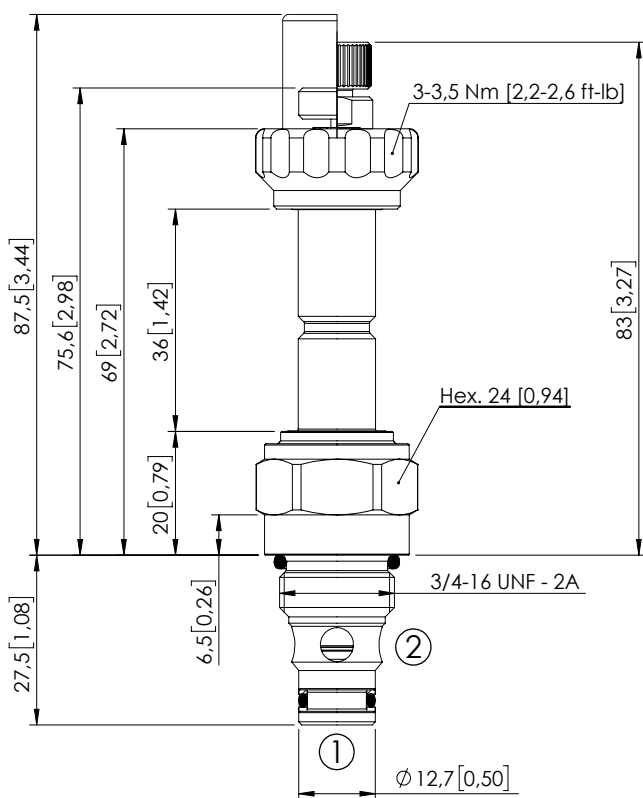


ORDERING CODES

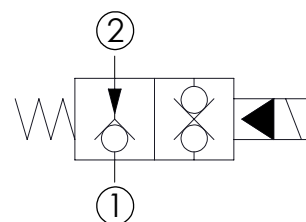
Quick code	Description	Options	Max operating pressure	
CE000397	CEBN-310-NCFN-11-S16-N350	Standard	350 bar (5000 psi)	
CE000399	CEBN-310-NCFK-11-S16-N350	Knob style override	350 bar (5000 psi)	
CE000697	CEBN-310-NCFN-11-S16-N500	Standard	500 bar (7200 psi)	
CE000699	CEBN-310-NCFK-11-S16-N500	Knob style override	500 bar (7200 psi)	

SOLENOID OPERATED CARTRIDGE

CEBN-060-NAFN-12 PILOT OPERATED
POPPET TYPE



Dimensions: mm [inches]



SPECIFICATIONS

Max. operating pressure:	350/500 bar (5000/7200 psi)
Rated flow:	60 l/min (16 gpm)
Cavity:	SAE-08-2N
Weight:	0,15 kg (0,33 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 or M3 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB900081
Installation torque:	45 - 50 Nm (33 - 37 ft-lb)
MTTF_d:	150 - 1200 years: See technical spec.

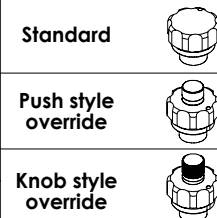
NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

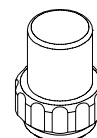
PATENT PENDING

CURVES

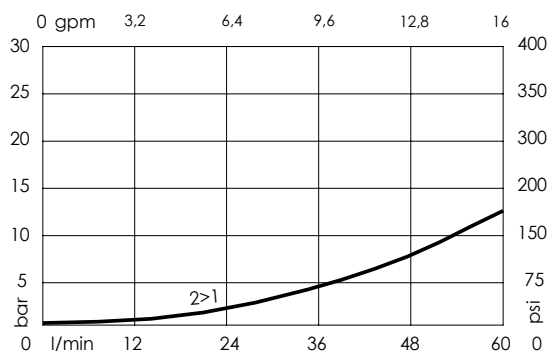
OPTIONS



SEALING CAP



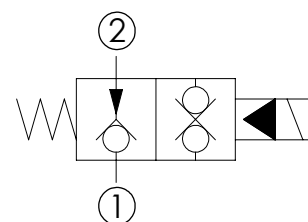
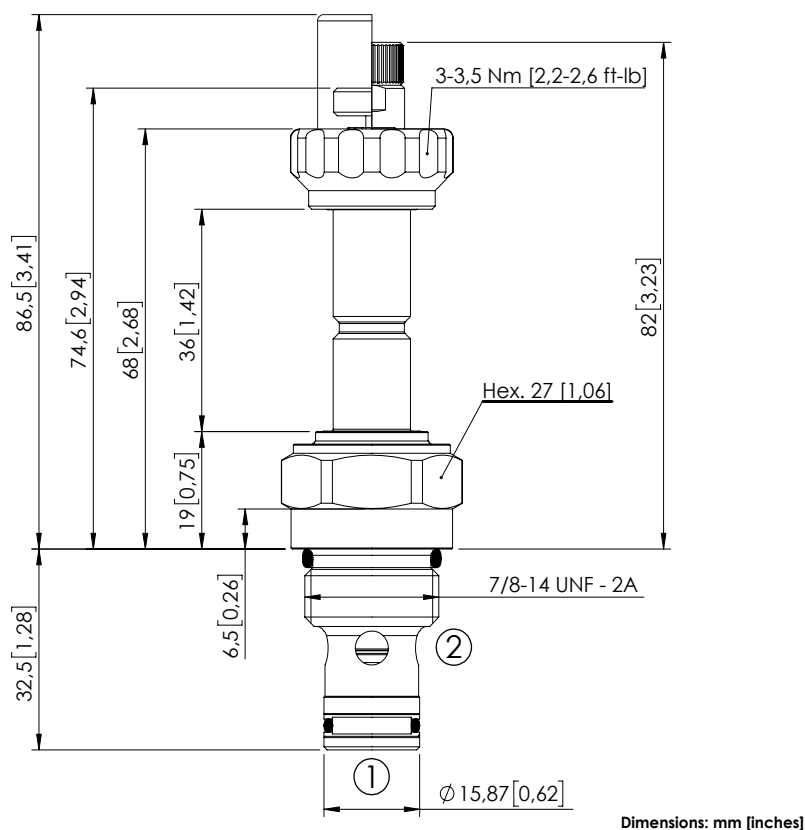
Ordering code:
AT000113



ORDERING CODES

Quick code	Description	Options	Max operating pressure	
CE000239	CEBN-060-NAFN-12-S08-N350	Standard	350 bar (5000 psi)	
CE000240	CEBN-060-NAFP-12-S08-N350	Push style override	350 bar (5000 psi)	
CE000241	CEBN-060-NAFK-12-S08-N350	Knob style override	350 bar (5000 psi)	
CE000539	CEBN-060-NAFN-12-S08-N500	Standard	500 bar (7200 psi)	
CE000540	CEBN-060-NAFP-12-S08-N500	Push style override	500 bar (7200 psi)	
CE000541	CEBN-060-NAFK-12-S08-N500	Knob style override	500 bar (7200 psi)	

SOLENOID OPERATED CARTRIDGE

CEBN-080-NAFN-12 PILOT OPERATED POPPET TYPE**SPECIFICATIONS**

Max. operating pressure:	350/500 bar (5000/7200 psi)
Rated flow:	80 l/min (21 gpm)
Cavity:	SAE-10-2N
Weight:	0,18 kg (0,40 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 or M3 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB900082
Installation torque:	55 - 62 Nm (41 - 46 ft-lb)
MTTFd:	150 - 1200 years: See technical spec.

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

PATENT PENDING

CURVES**OPTIONS**

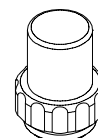
Standard



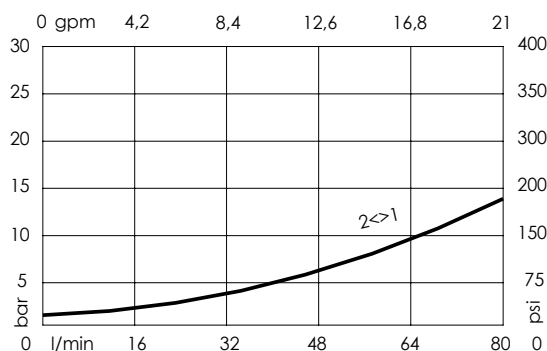
Push style override



Knob style override

**SEALING CAP**

Ordering code:
AT000113

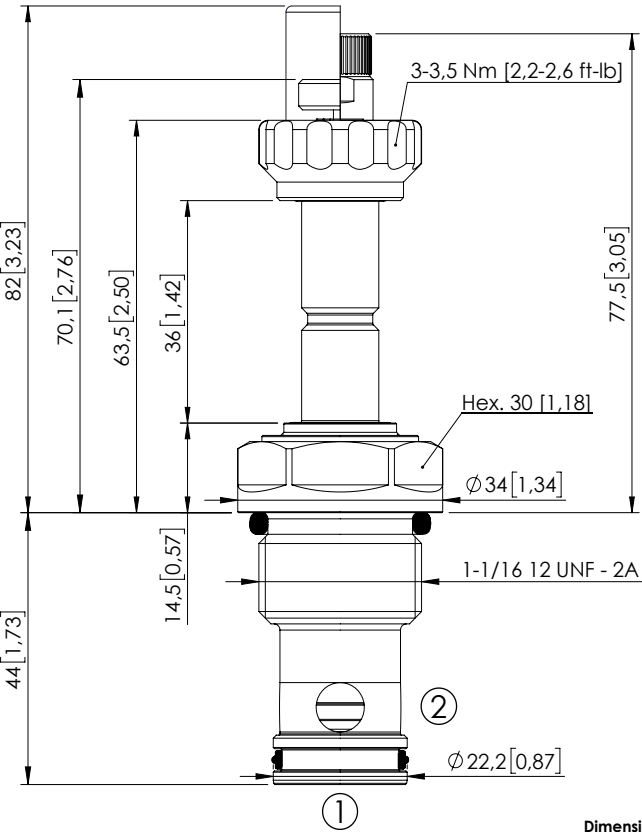
**ORDERING CODES**

Quick code	Description	Options	Max operating pressure	
CE000274	CEBN-080-NAFN-12-S10-N350	Standard	350 bar (5000 psi)	
CE000275	CEBN-080-NAFP-12-S10-N350	Push style override	350 bar (5000 psi)	
CE000276	CEBN-080-NAFK-12-S10-N350	Knob style override	350 bar (5000 psi)	
CE000574	CEBN-080-NAFN-12-S10-N500	Standard	500 bar (7200 psi)	
CE000575	CEBN-080-NAFP-12-S10-N500	Push style override	500 bar (7200 psi)	
CE000576	CEBN-080-NAFK-12-S10-N500	Knob style override	500 bar (7200 psi)	

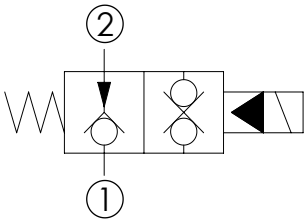
Revision A1

SOLENOID OPERATED CARTRIDGE

CEBN-190-NAFN-12 PILOT OPERATED POPPET TYPE



Dimensions: mm [inches]



SPECIFICATIONS

Max. operating pressure:	350/500 bar (5000/7200 psi)
Rated flow:	190 l/min (50 gpm)
Cavity:	SAE-12-2N
Weight:	0.25 kg (0,55 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 or M3 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB900083
Installation torque:	135 - 150 Nm (100 - 111 ft-lb)
MTTFd:	150 - 1200 years: See technical spec.

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

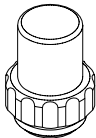
PATENT PENDING

CURVES

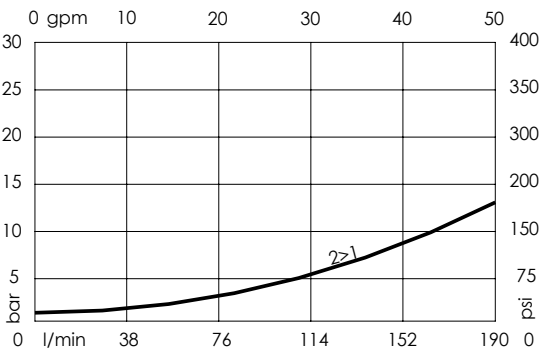
OPTIONS

Standard	
Push style override	
Knob style override	

SEALING CAP



Ordering code:
AT000113

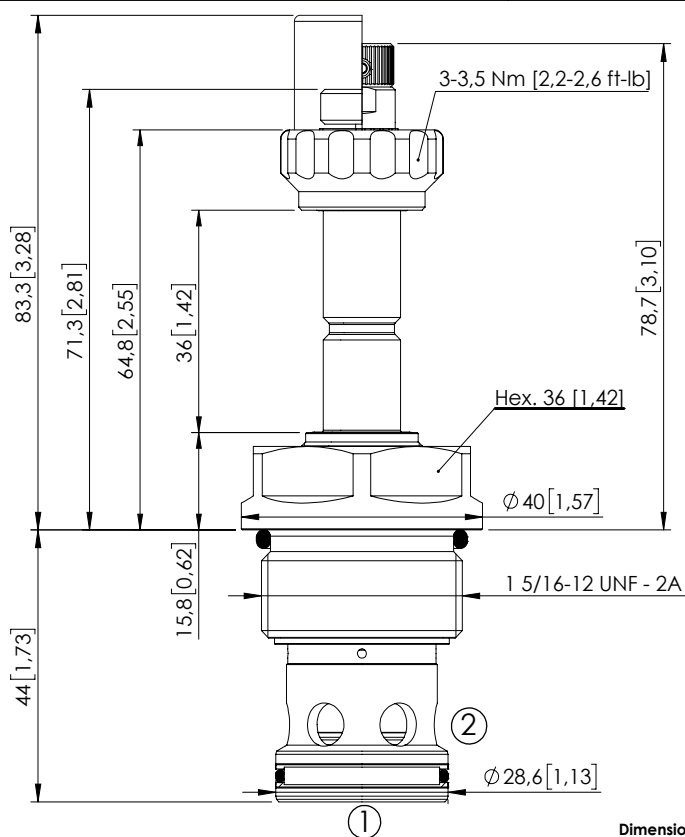


ORDERING CODES

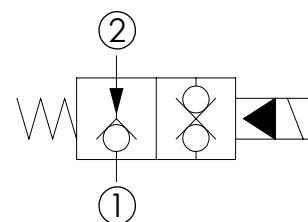
Quick code	Description	Options	Max operating pressure	
CE000344	CEBN-190-NAFN-12-S12-N350	Standard	350 bar (5000 psi)	
CE000345	CEBN-190-NAFP-12-S12-N350	Push style override	350 bar (5000 psi)	
CE000346	CEBN-190-NAFK-12-S12-N350	Knob style override	350 bar (5000 psi)	
CE000644	CEBN-190-NAFN-12-S12-N500	Standard	500 bar (7200 psi)	
CE000645	CEBN-190-NAFP-12-S12-N500	Push style override	500 bar (7200 psi)	
CE000646	CEBN-190-NAFK-12-S12-N500	Knob style override	500 bar (7200 psi)	

SOLENOID OPERATED CARTRIDGE

CEBN-310-NAFN-12

PILOT OPERATED
POPPET TYPE

Dimensions: mm [inches]



SPECIFICATIONS

Max. operating pressure:	350/500 bar (5000/7200 psi)
Rated flow:	310 l/min (82 gpm)
Cavity:	SAE-16-2N
Weight:	0,36 kg (0,79 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 or M3 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB900084
Installation torque:	200 - 210 Nm (148 - 156 ft-lb)
MTTFd:	150 - 1200 years: See technical spec.

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

PATENT PENDING

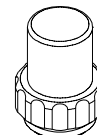
CURVES

OPTIONS

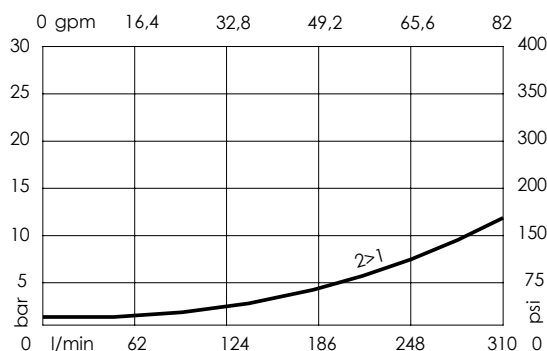
Standard

Push style
overrideKnob style
override

SEALING CAP



Ordering code:
AT000113



ORDERING CODES

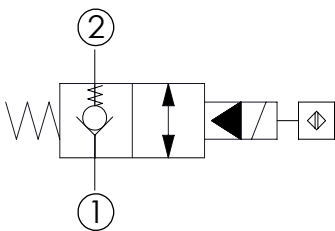
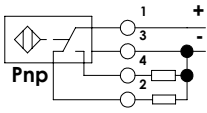
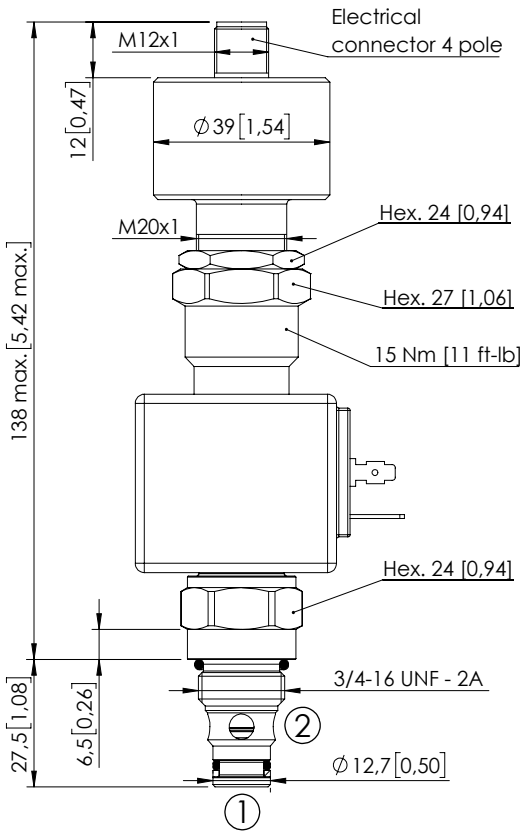
Quick code	Description	Options	Max operating pressure	
CE000414	CEBN-310-NAFN-12-S16-N350	Standard	350 bar (5000 psi)	
CE000415	CEBN-310-NAFP-12-S16-N350	Push style override	350 bar (5000 psi)	
CE000416	CEBN-310-NAFK-12-S16-N350	Knob style override	350 bar (5000 psi)	
CE000714	CEBN-310-NAFN-12-S16-N500	Standard	500 bar (7200 psi)	
CE000715	CEBN-310-NAFP-12-S16-N500	Push style override	500 bar (7200 psi)	
CE000716	CEBN-310-NAFK-12-S16-N500	Knob style override	500 bar (7200 psi)	

Revision A1

SOLENOID OPERATED CARTRIDGE

CEBN-060-XCDR-05

POPPET TYPE
PROXIMITY SENSOR



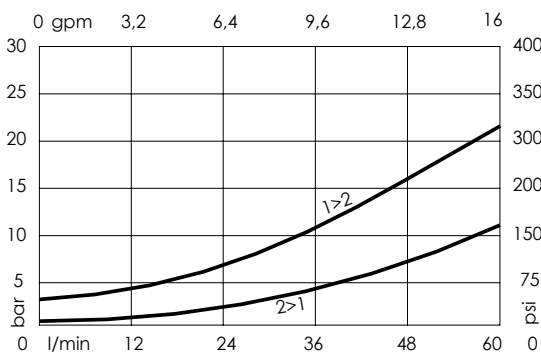
SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Rated flow:	60 l/min (16 gpm)
Cavity:	SAE-08-2N
Weight:	0,5 kg (0,33 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RA100081
Installation torque:	45 - 50 Nm (33 - 37 ft.-lb)
MTF _d :	150 - 1200 years: See technical spec.
Operating temperature:	-25/+80°C (-13/+176 °F)

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

CURVES



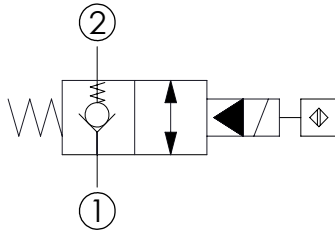
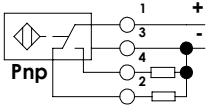
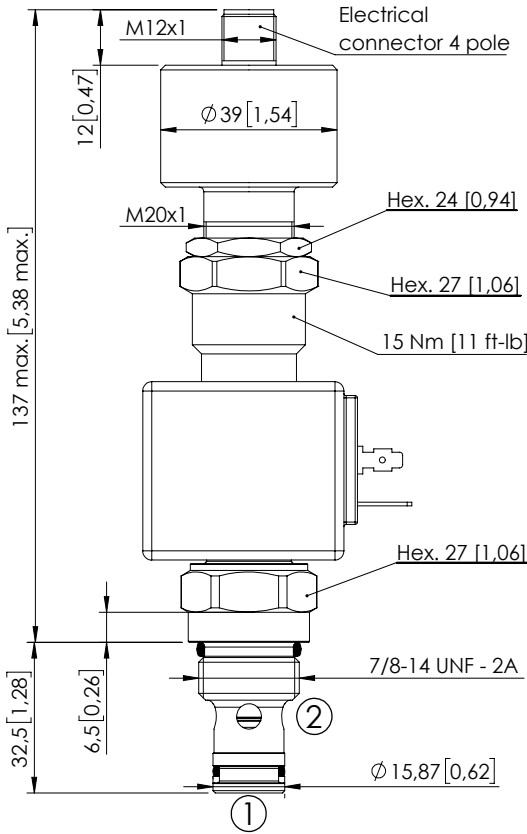
ORDERING CODES

Quick code	Description	Connector	Voltage	Options
CE000472	CEBN-060-XCDR-05-S08-V350-12HR	DIN 43650	12V DC	Proximity sensor
CE000940	CEBN-060-XCDR-05-S08-V350-24HR	DIN 43650	24V DC	Proximity sensor

SOLENOID OPERATED CARTRIDGE

CEBN-080-XCDR-05

POPPET TYPE
PROXIMITY SENSOR



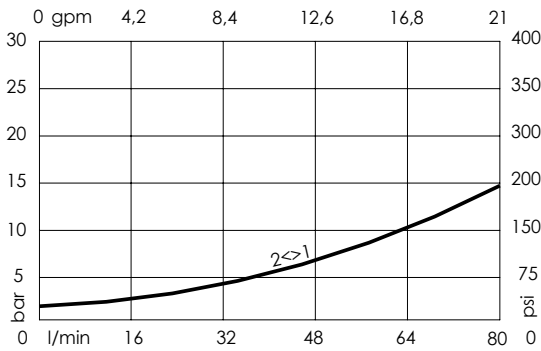
SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Rated flow:	80 l/min (21 gpm)
Cavity:	SAE-10-2N
Weight:	0,5 kg (0,33 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RA100082
Installation torque:	55 - 62 Nm (41 - 46 ft-lb)
MTFa:	150 - 1200 years: See technical spec.
Operating temperature:	-25/+80°C (-13/+176 °F)

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

CURVES



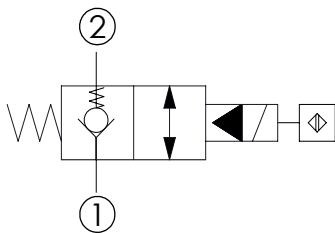
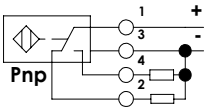
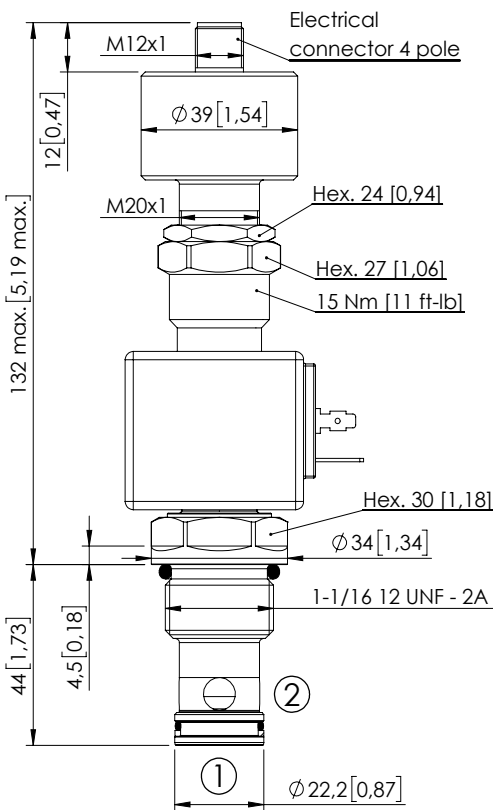
ORDERING CODES

Quick code	Description	Connector	Voltage	Options
CE000473	CEBN-080-XCDR-05-S10-V350-12HR	DIN 43650	12V DC	Proximity sensor
CE000938	CEBN-080-XCDR-05-S10-V350-24HR	DIN 43650	24V DC	Proximity sensor

SOLENOID OPERATED CARTRIDGE

CEBN-190-XCDR-05

POPPET TYPE
PROXIMITY SENSOR



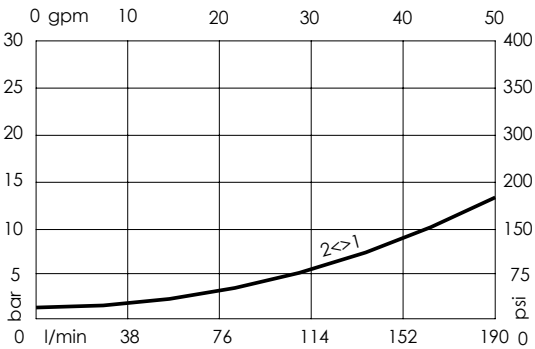
SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Rated flow:	190 l/min (50 gpm)
Cavity:	SAE-12-2N
Weight:	0,61 kg (1,32 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RA100083
Installation torque:	135 - 150 Nm (100 - 111 ft-lb)
MTF _d :	150 - 1200 years: See technical spec.
Operating temperature:	-25/+80°C (-13/+176 °F)

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

CURVES



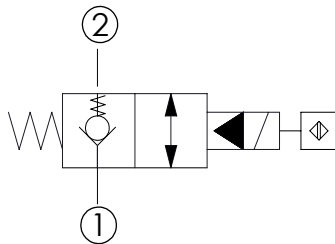
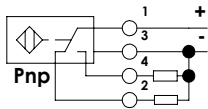
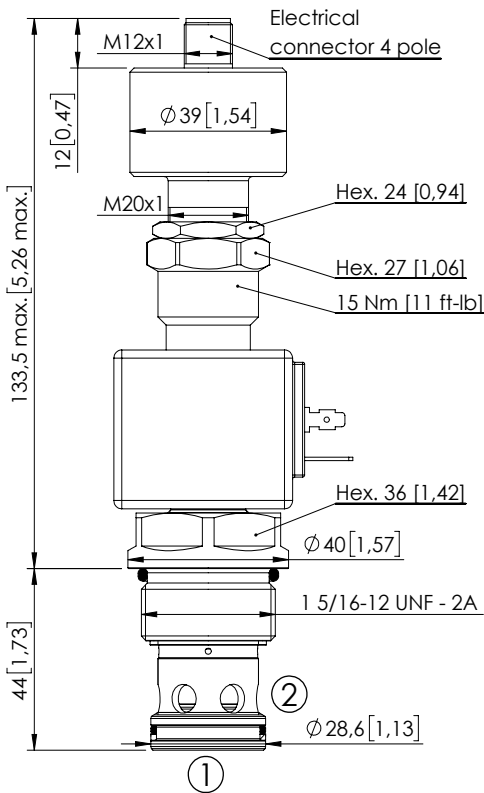
ORDERING CODES

Quick code	Description	Connector	Voltage	Options
CE001090	CEBN-190-XCDR-05-S12-V350-12HR	DIN 43650	12V DC	Proximity sensor
CE001091	CEBN-190-XCDR-05-S12-V350-24HR	DIN 43650	24V DC	Proximity sensor

SOLENOID OPERATED CARTRIDGE

CEBN-310-XCDR-05

POPPET TYPE
PROXIMITY SENSOR



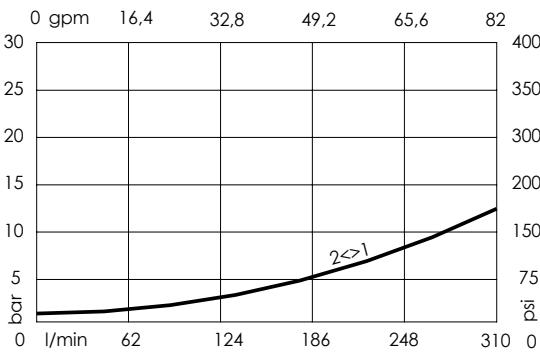
SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Rated flow:	310 l/min (82 gpm)
Cavity:	SAE-16-2N
Weight:	0,7 kg (1,54 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RA100084
Installation torque:	200 - 210 Nm (148 - 155 ft-lb)
MTTFd:	150 - 1200 years: See technical spec.
Operating temperature:	-25/+80°C (-13/+176 °F)

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

CURVES



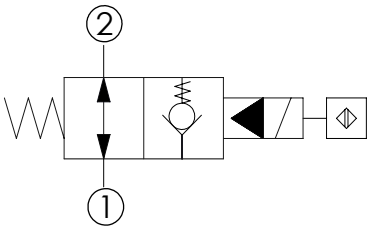
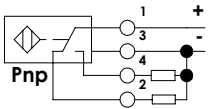
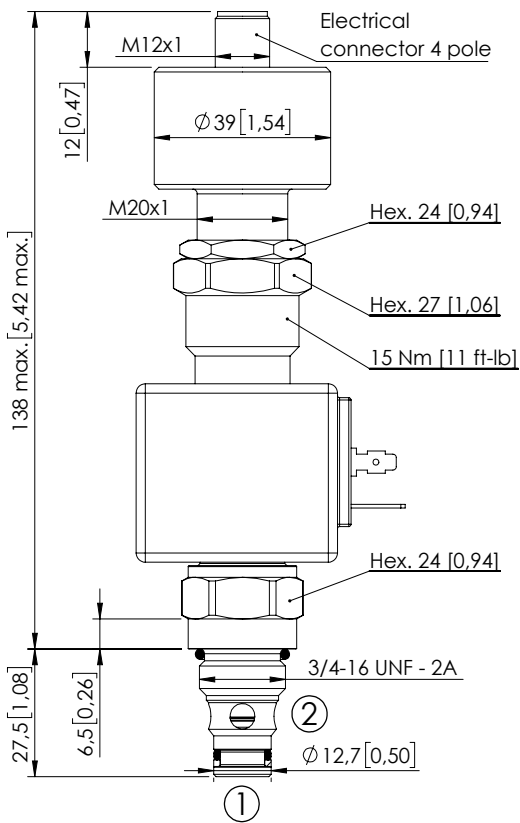
ORDERING CODES

Quick code	Description	Connector	Voltage	Options
CE000475	CEBN-310-XCDR-05-S16-V350-12HR	DIN 43650	12V DC	Proximity sensor
CE000939	CEBN-310-XCDR-05-S16-V350-24HR	DIN 43650	24V DC	Proximity sensor

SOLENOID OPERATED CARTRIDGE

CEBN-060-XADR-06

POPPET TYPE
PROXIMITY SENSOR



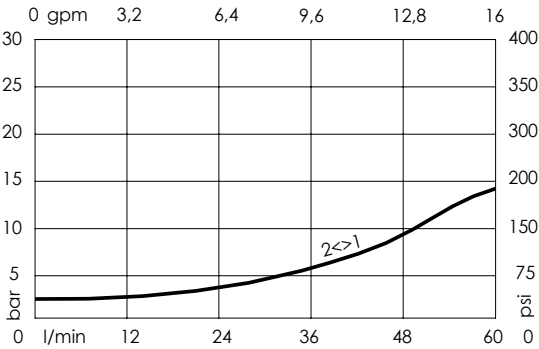
SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Rated flow:	60 l/min (16 gpm)
Cavity:	SAE-08-2N
Weight:	0,5 kg (0,33 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RA100081
Installation torque:	45 - 50 Nm (33 - 37 ft-lb)
MTTFa:	150 - 1200 years: See technical spec.
Operating temperature:	-25/+80°C (-13/+176 °F)

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

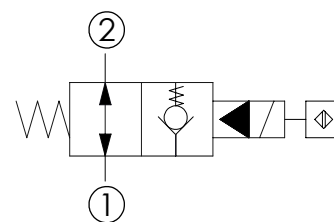
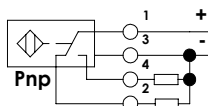
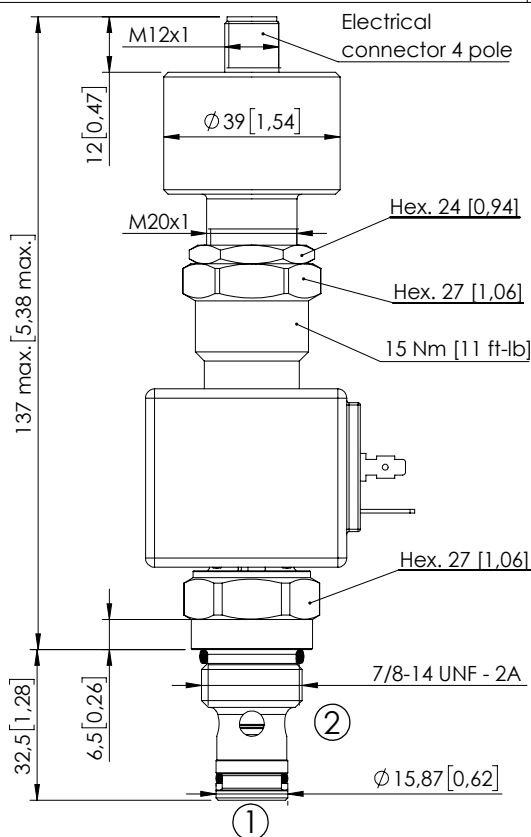
CURVES



ORDERING CODES

Quick code	Description	Connector	Voltage	Options
CE001053	CEBN-060-XADR-06-S08-V350-12HR	DIN 43650	12V DC	Proximity sensor
CE000476	CEBN-060-XADR-06-S08-V350-24HR	DIN 43650	24V DC	Proximity sensor

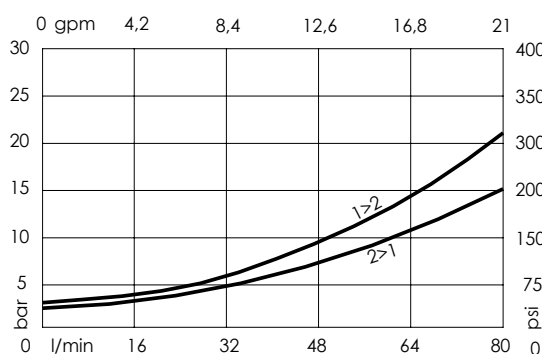
SOLENOID OPERATED CARTRIDGE

CEBN-080-XADR-06POPPET TYPE
PROXIMITY SENSOR**SPECIFICATIONS**

Max. operating pressure:	350 bar (5000 psi)
Rated flow:	80 l/min (21 gpm)
Cavity:	SAE-10-2N
Weight:	0,5 kg (0,33 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RA100082
Installation torque:	55 - 62 Nm (41 - 46 ft-lb)
MTFa:	150 - 1200 years: See technical spec.
Operating temperature:	-25/+80°C (-13/+176 °F)

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

CURVES**ORDERING CODES**

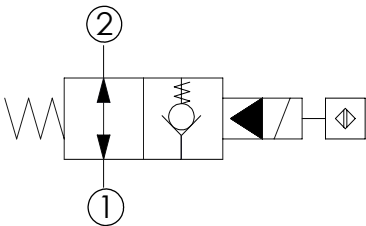
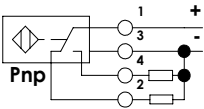
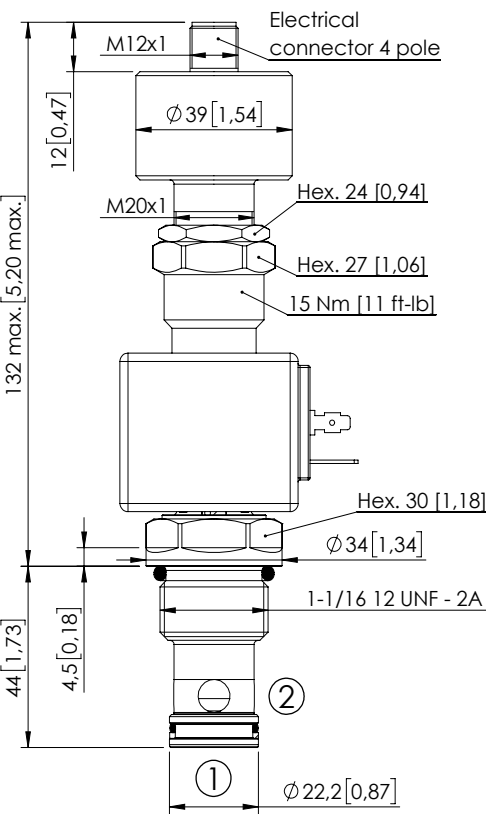
Quick code	Description	Connector	Voltage	Options
CE001043	CEBN-080-XADR-06-S10-V350-12HR	DIN 43650	12V DC	Proximity sensor
CE001065	CEBN-080-XADR-06-S10-V350-24HR	DIN 43650	24V DC	Proximity sensor

Revision A1

SOLENOID OPERATED CARTRIDGE

CEBN-190-XADR-06

POPPET TYPE
PROXIMITY SENSOR



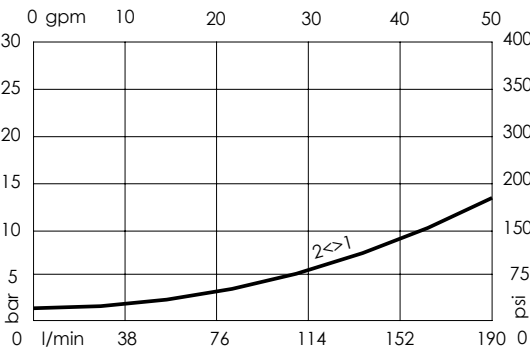
SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Rated flow:	190 l/min (50 gpm)
Cavity:	SAE-12-2N
Weight:	0,61 kg (1,32 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RA100083
Installation torque:	135 - 150 Nm (100 - 111 ft-lb)
MTF _d :	150 - 1200 years: See technical spec.
Operating temperature:	-25/+80°C (-13/+176 °F)

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

CURVES



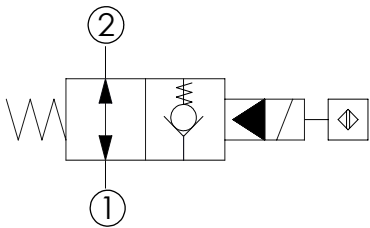
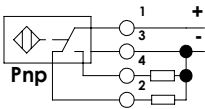
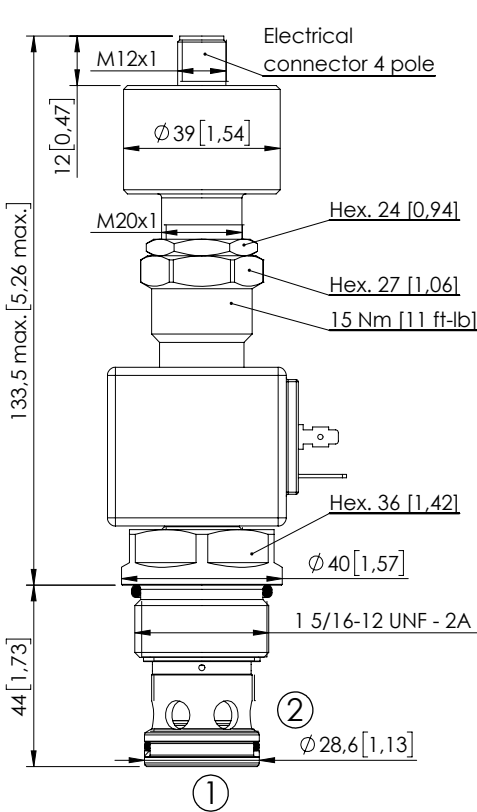
ORDERING CODES

Quick code	Description	Connector	Voltage	Options
CE001096	CEBN-190-XADR-06-S12-V350-12HR	DIN 43650	12V DC	Proximity sensor
CE001097	CEBN-190-XADR-06-S12-V350-24HR	DIN 43650	24V DC	Proximity sensor

SOLENOID OPERATED CARTRIDGE

CEBN-310-XADR-06

POPPET TYPE
PROXIMITY SENSOR



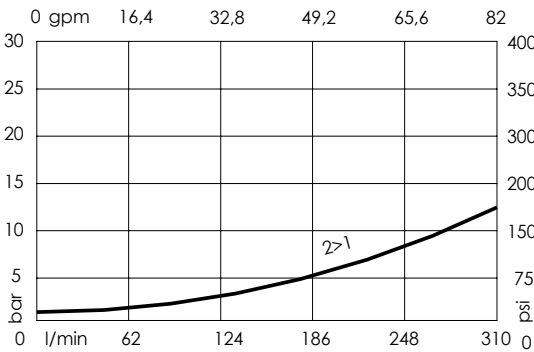
SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Rated flow:	310 l/min (82 gpm)
Cavity:	SAE-16-2N
Weight:	0,7 kg (1,54 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RA100084
Installation torque:	200 - 210 Nm (148 - 155 ft-lb)
MTTFa:	150 - 1200 years: See technical spec.
Operating temperature:	-25/+80°C (-13/+176 °F)

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

CURVES



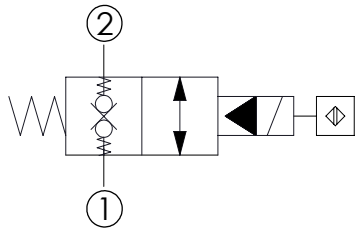
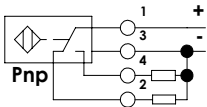
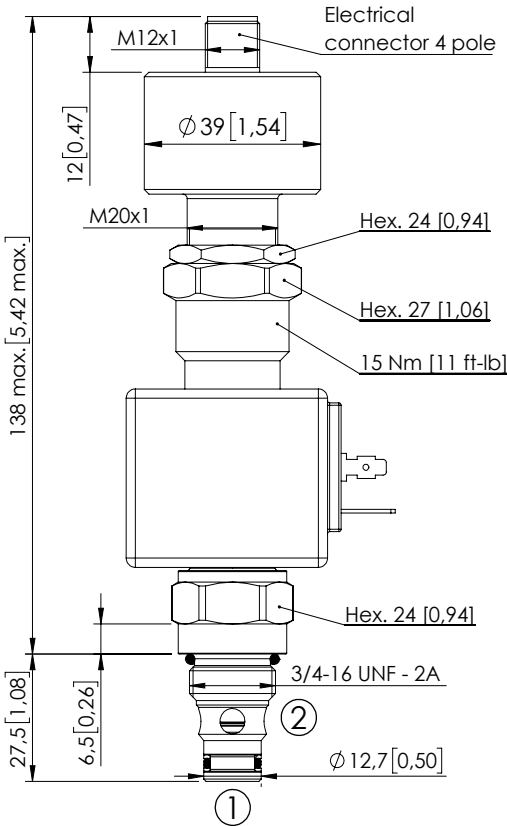
ORDERING CODES

Quick code	Description	Connector	Voltage	Options
CE001044	CEBN-310-XADR-06-S16-V350-12HR	DIN 43650	12V DC	Proximity sensor
CE001066	CEBN-310-XADR-06-S16-V350-24HR	DIN 43650	24V DC	Proximity sensor

SOLENOID OPERATED CARTRIDGE

CEBN-060-XCDR-31

POPPET TYPE
PROXIMITY SENSOR



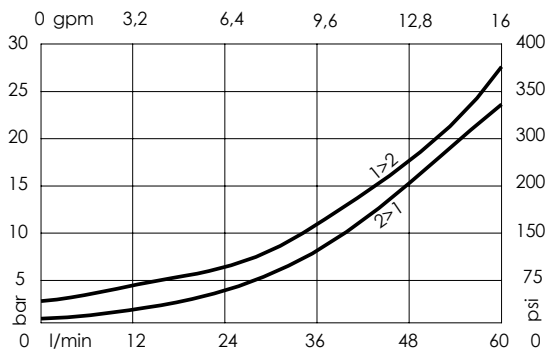
SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Rated flow:	60 l/min (16 gpm)
Cavity:	SAE-08-2N
Weight:	0,51 kg (0,33 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB100081
Installation torque:	45 - 50 Nm (33 - 37 ft.-lb)
MTF _d :	150 - 1200 years: See technical spec.
Operating temperature:	-25/+80°C (-13/+176 °F)

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

CURVES



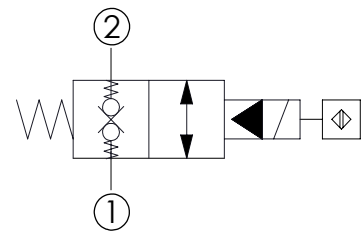
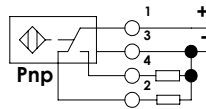
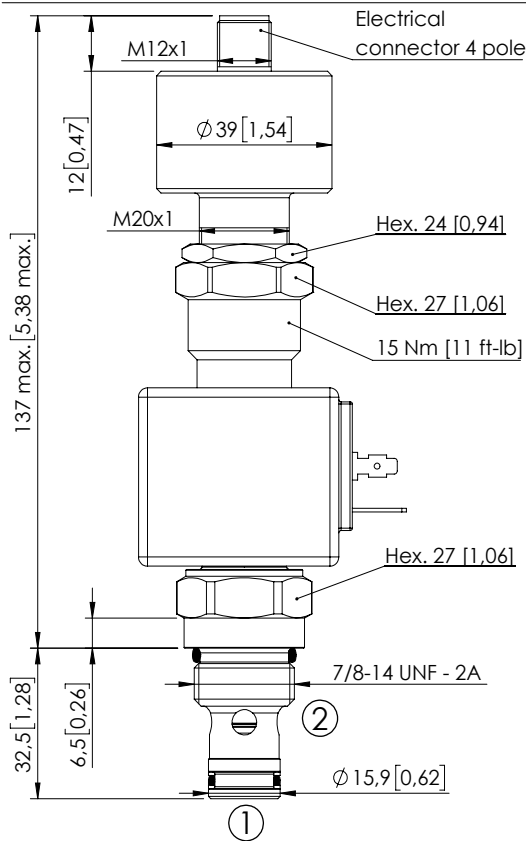
ORDERING CODES

Quick code	Description	Connector	Voltage	Options
CE001035	CEBN-060-XCDR-31-S08-V350-12HR	DIN 43650	12V DC	Proximity sensor
CE001064	CEBN-060-XCDR-31-S08-V350-24HR	DIN 43650	24V DC	Proximity sensor

SOLENOID OPERATED CARTRIDGE

CEBN-080-XCDR-31

POPPET TYPE
PROXIMITY SENSOR



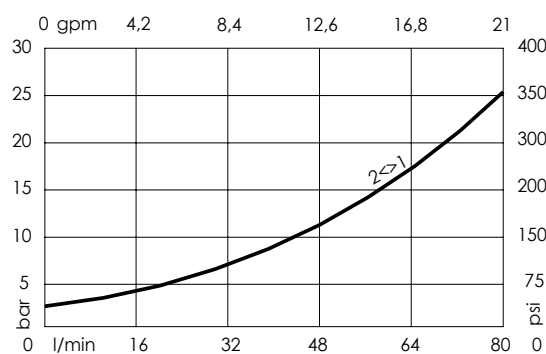
SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Rated flow:	80 l/min (21 gpm)
Cavity:	SAE-10-2N
Weight:	0,54 kg (0,33 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB100082
Installation torque:	55 - 62 Nm (41 - 46 ft-lb)
MTF _d :	150 - 1200 years: See technical spec.
Operating temperature:	-25/+80°C (-13/+176 °F)

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

CURVES



ORDERING CODES

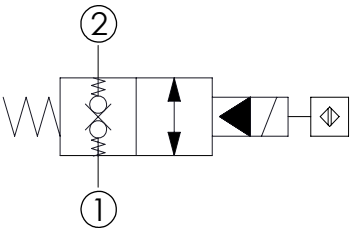
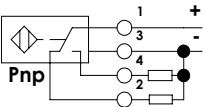
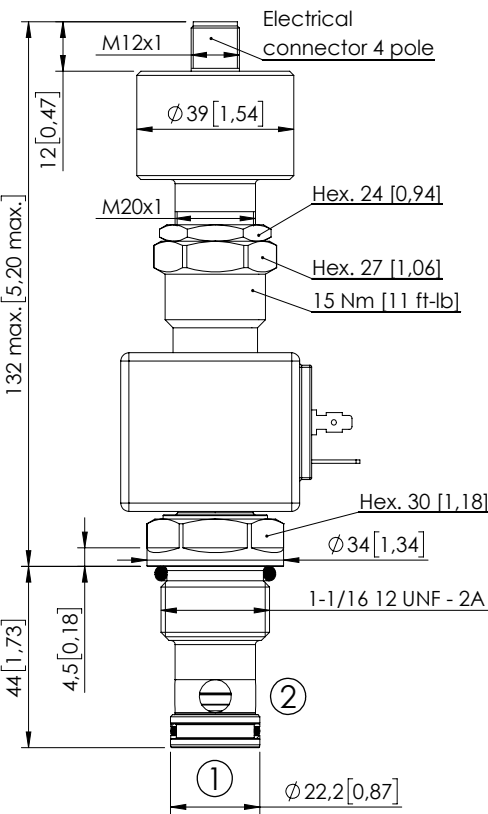
Quick code	Description	Connector	Voltage	Options
CE001045	CEBN-080-XCDR-31-S10-V350-12HR	DIN 43650	12V DC	Proximity sensor
CE001067	CEBN-080-XCDR-31-S10-V350-24HR	DIN 43650	24V DC	Proximity sensor

Revision A1

SOLENOID OPERATED CARTRIDGE

CEBN-190-XCDR-31

POPPET TYPE
PROXIMITY SENSOR



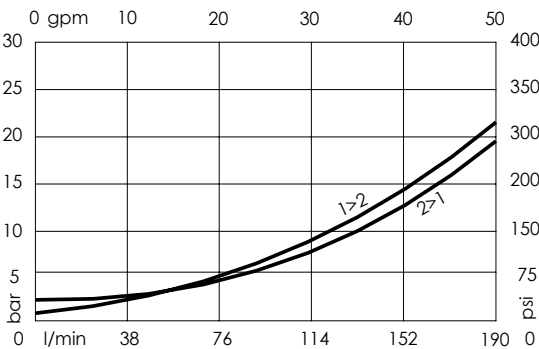
SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Rated flow:	190 l/min (50 gpm)
Cavity:	SAE-12-2N
Weight:	0,61 kg (1,32 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB100083
Installation torque:	135 - 150 Nm (100 - 111 ft-lb)
MTFa:	150 - 1200 years: See technical spec.
Operating temperature:	-25/+80°C (-13/+176 °F)

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

CURVES

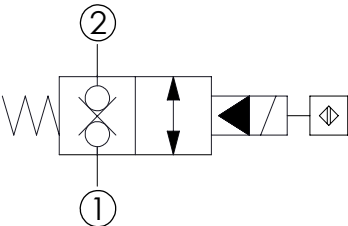
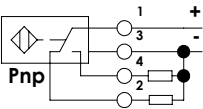
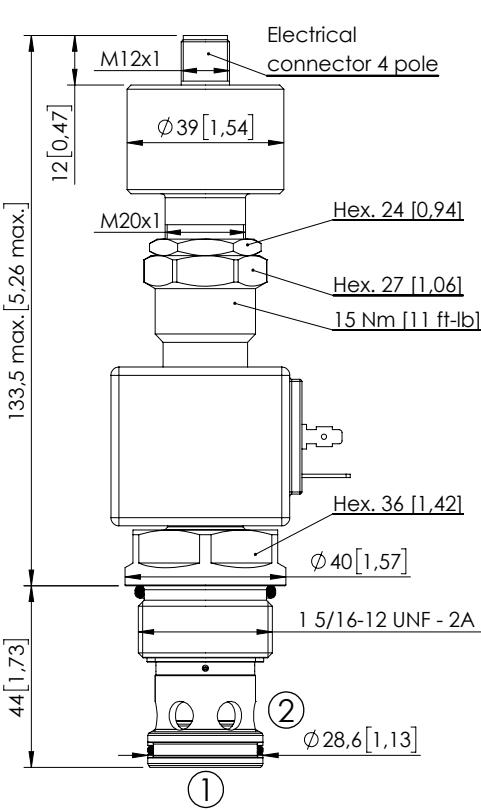


ORDERING CODES

Quick code	Description	Connector	Voltage	Options
CE001102	CEBN-190-XCDR-31-S12-V350-12HR	DIN 43650	12V DC	Proximity sensor
CE001103	CEBN-190-XCDR-31-S12-V350-24HR	DIN 43650	24V DC	Proximity sensor

SOLENOID OPERATED CARTRIDGE

CEBN-310-NCDR-31 POPPET TYPE PROXIMITY SENSOR



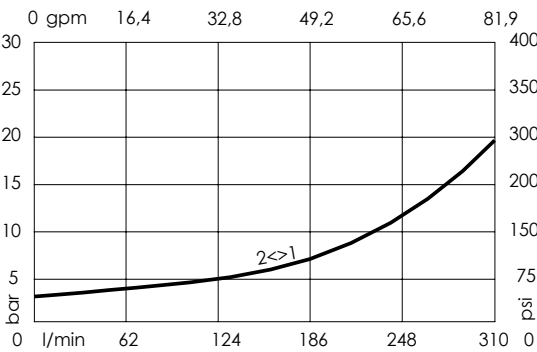
SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Rated flow:	310 l/min (82 gpm)
Cavity:	SAE-16-2N
Weight:	0,7 kg (1,54 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB100084
Installation torque:	200 - 210 Nm (148 - 155 ft-lb)
MTF _d :	150 - 1200 years: See technical spec.
Operating temperature:	-25/+80°C (-13/+176 °F)

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

CURVES



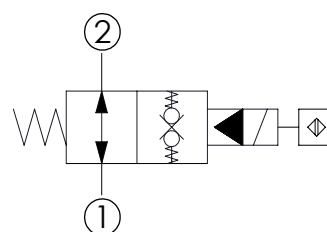
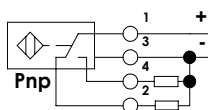
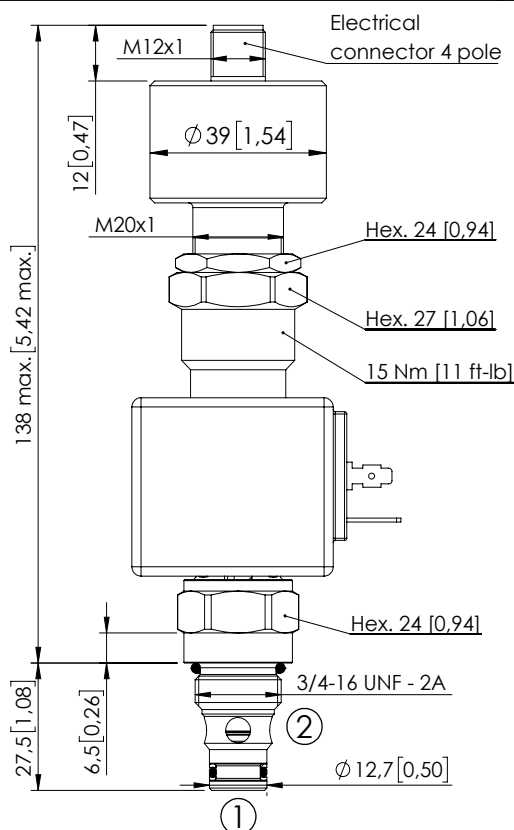
ORDERING CODES

Quick code	Description	Connector	Voltage	Options
CE001046	CEBN-310-NCDR-31-S16-V350-12HR	DIN 43650	12V DC	Proximity sensor
CE001068	CEBN-310-NCDR-31-S16-V350-24HR	DIN 43650	24V DC	Proximity sensor

SOLENOID OPERATED CARTRIDGE

CEBN-060-XADR-32

POPPET TYPE PROXIMITY SENSOR



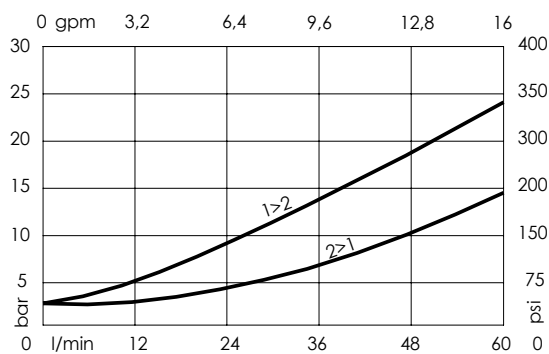
SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Rated flow:	60 l/min (16 gpm)
Cavity:	SAE-08-2N
Weight:	0,51 kg (0,33 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB100081
Installation torque:	45 - 50 Nm (33 - 37 ft.-lb)
MTTFd:	150 - 1200 years: See technical spec.
Operating temperature:	-25/+80°C (-13/+176 °F)

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

CURVES

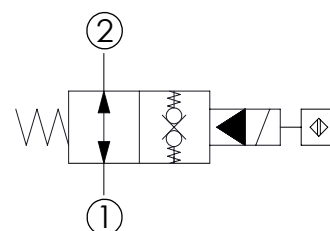
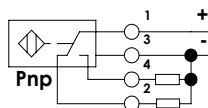
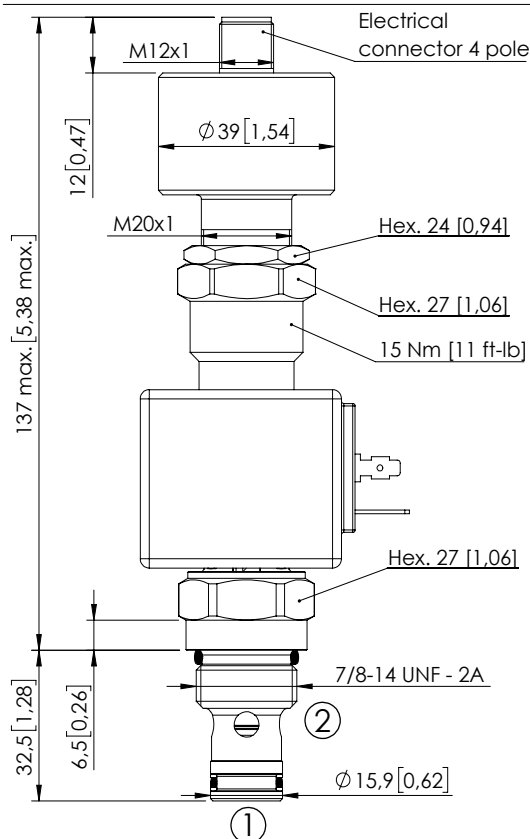


ORDERING CODES

Quick code	Description	Connector	Voltage	Options
CE001047	CEBN-060-XADR-32-S08-V350-12HR	DIN 43650	12V DC	Proximity sensor
CE001069	CEBN-060-XADR-32-S08-V350-24HR	DIN 43650	24V DC	Proximity sensor

SOLENOID OPERATED CARTRIDGE

CEBN-080-XADR-32

POPPET TYPE
PROXIMITY SENSOR

SPECIFICATIONS

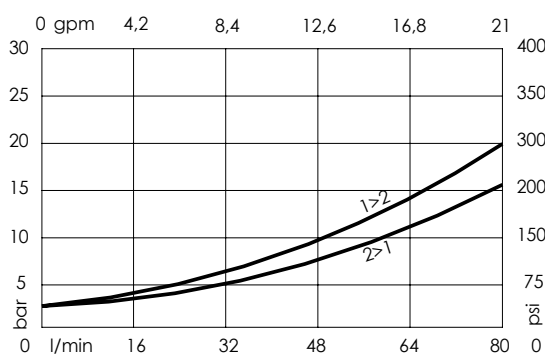
Max. operating pressure:	350 bar (5000 psi)
Rated flow:	80 l/min (21 gpm)
Cavity:	SAE-10-2N
Weight:	0,54 kg (0,33 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB100082
Installation torque:	55 - 62 Nm (41 - 46 ft-lb)
MTFa:	150 - 1200 years: See technical spec.
Operating temperature:	-25/+80°C (-13/+176 °F)

Dimensions: mm [inches]

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

CURVES



ORDERING CODES

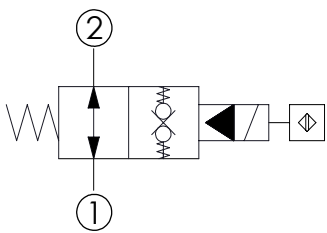
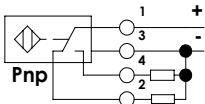
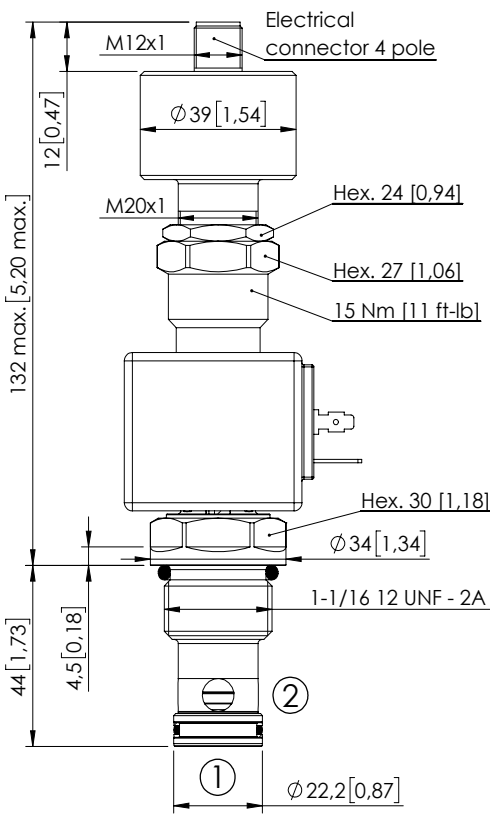
Quick code	Description	Connector	Voltage	Options
CE001048	CEBN-080-XADR-32-S10-V350-12HR	DIN 43650	12V DC	Proximity sensor
CE001070	CEBN-080-XADR-32-S10-V350-24HR	DIN 43650	24V DC	Proximity sensor

Revision A1

SOLENOID OPERATED CARTRIDGE

CEBN-190-XADR-32

POPPET TYPE
PROXIMITY SENSOR



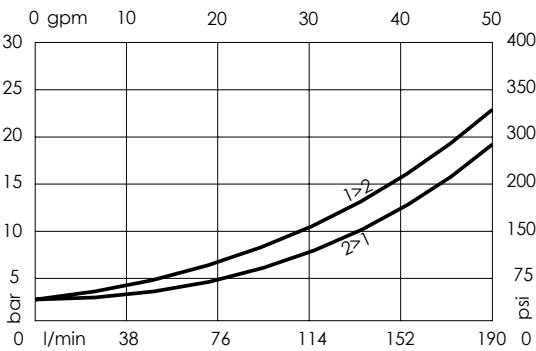
SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Rated flow:	190 l/min (50 gpm)
Cavity:	SAE-12-2N
Weight:	0,61 kg (1,32 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB100083
Installation torque:	135 - 150 Nm (100 - 111 ft-lb)
MTTFd:	150 - 1200 years: See technical spec.
Operating temperature:	-25/+80°C (-13/+176 °F)

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

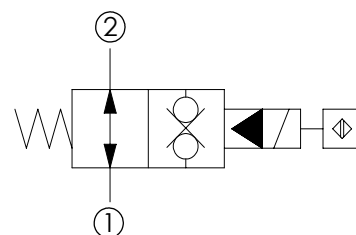
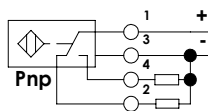
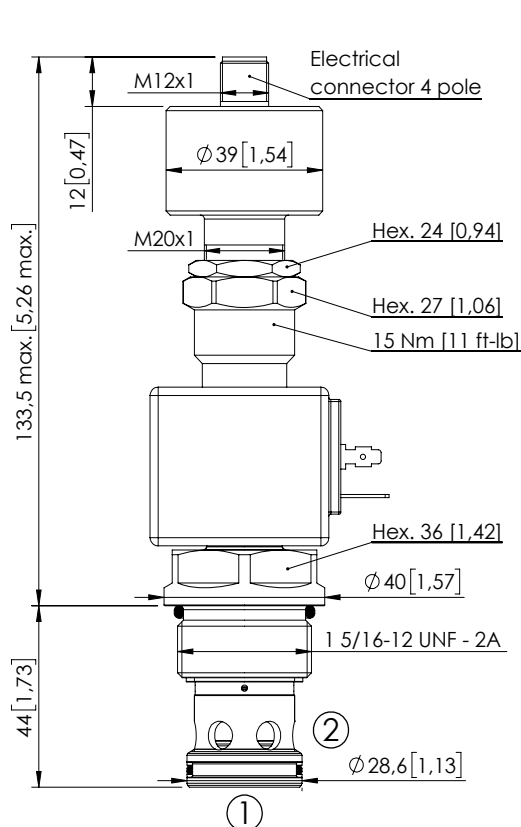
CURVES



ORDERING CODES

Quick code	Description	Connector	Voltage	Options
CE001108	CEBN-190-XADR-32-S12-V350-12HR	DIN 43650	12V DC	Proximity sensor
CE001109	CEBN-190-XADR-32-S12-V350-24HR	DIN 43650	24V DC	Proximity sensor

SOLENOID OPERATED CARTRIDGE

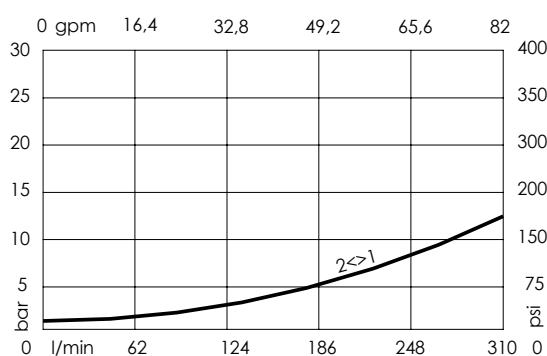
CEBN-310-NADR-32POPPET TYPE
PROXIMITY SENSOR**SPECIFICATIONS**

Max. operating pressure:	350 bar (5000 psi)
Rated flow:	310 l/min (82 gpm)
Cavity:	SAE-16-2N
Weight:	0,73 kg (1.54 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB100084
Installation torque:	200 - 210 Nm (148 - 155 ft-lb)
MTTF:	150 - 1200 years: See technical spec.
Operating temperature:	-25/+80°C (-13/+176 °F)

Dimensions: mm [inches]

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

CURVES**ORDERING CODES**

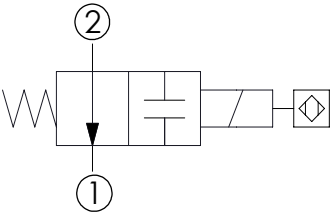
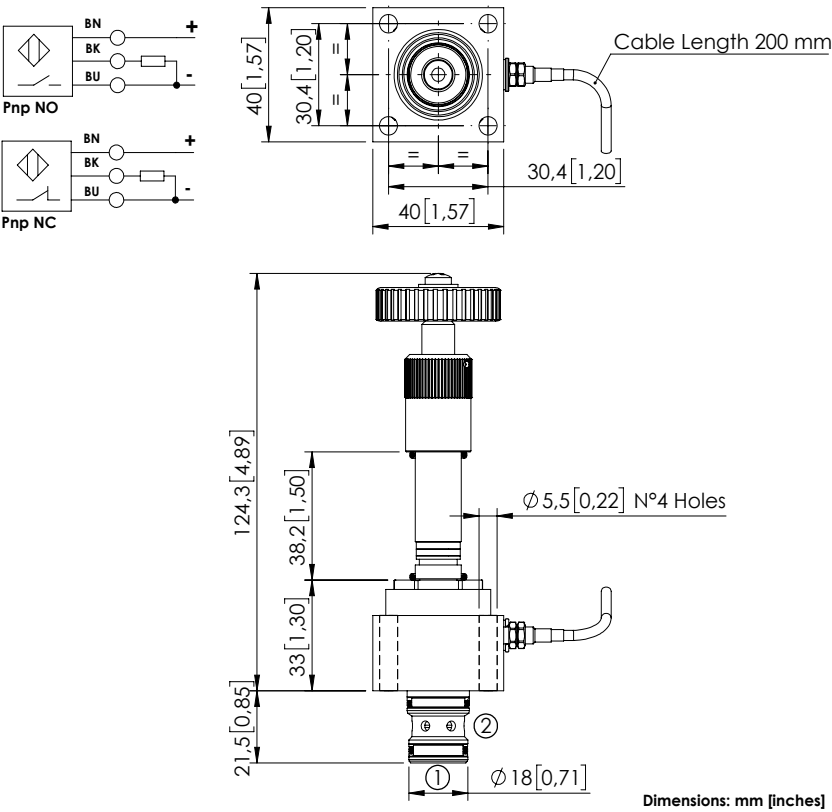
Quick code	Description	Connector	Voltage	Options
CE001049	CEBN-310-NADR-32-S16-V350-12HR	DIN 43650	12V DC	Proximity sensor
CE001071	CEBN-310-NADR-32-S16-V350-24HR	DIN 43650	24V DC	Proximity sensor

Revision A1

SOLENOID OPERATED CARTRIDGE

CEBD-040-NAMV-97

DIRECT OPERATED
POPPET TYPE
POSITION SENSOR



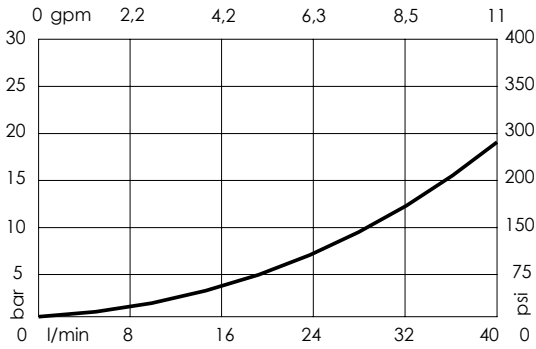
SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Max. operating pressure on port 1:	100 bar (1400 psi)
Rated flow:	40 l/min (11 gpm)
Cavity:	VP000338
Weight:	0,4 kg (0,88 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 or M3 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RD700338
Installation torque:	5 Nm (4 ft.-lb)
MTTFd:	150 - 1200 years: See technical spec.

NOTES

To be mounted with M5x30 [M5x1,18] screws
For other configurations/quick codes not available in this catalogue page please consult factory

CURVES



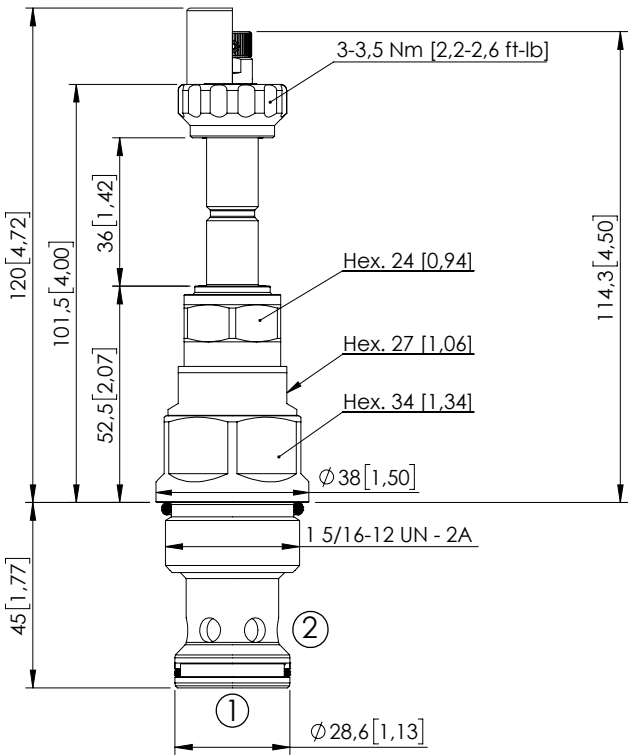
ORDERING CODES

Quick code	Description	Sensor type	Max operating pressure	
CE000818	CEBD-040-NAMV-97-338-N350	Valve not energized Sensor open (PNP-NO)	350 bar (5000 psi)	
CE000819	CEBD-040-NACV-97-338-N350	Valve not energized Sensor closed (PNP-NC)	350 bar (5000 psi)	

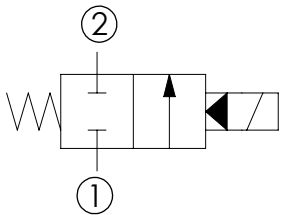
SOLENOID OPERATED CARTRIDGE

CEBT-350-NCFN-98

PILOTED OPERATED
SPOOL TYPE



Dimensions: mm [inches]



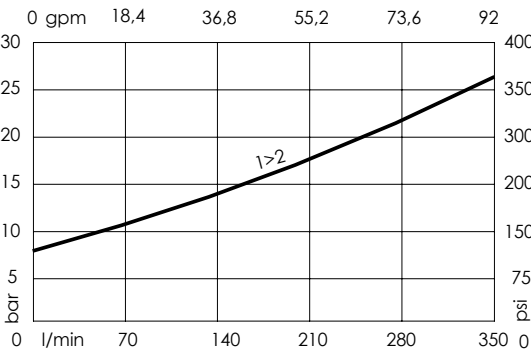
SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Rated flow:	350 l/min (92 gpm)
Cavity:	SAE-16-2N
Weight:	0,5 kg (1,10 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 or M3 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RA900084
Installation torque:	200 - 210 Nm (148 - 155 ft-lb)
MTTFd:	150 - 1200 years: See technical spec.
Max. int. leakage:	350 cm ³ /min (@46 cSt) 21,3 in ³ /min (@46 cSt)

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

CURVES



OPTIONS

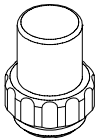
Standard



Knob style
override



SEALING CAP



Ordering code:
AT000113

ORDERING CODES

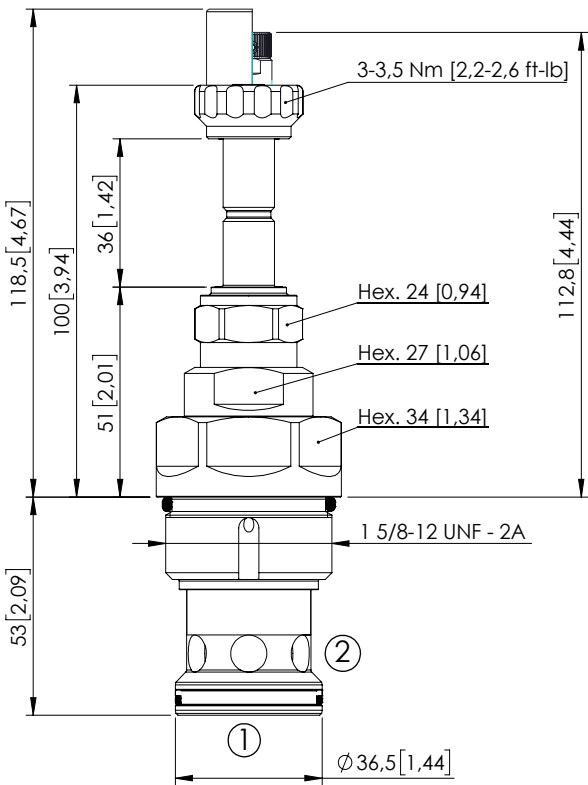
Quick code	Description	Options	Max operating pressure	
CE000913	CEBT-350-NCFN-98-S16-N350	Standard	350 bar (5000 psi)	
CE000914	CEBT-350-NCFE-98-S16-N350	Knob style override	350 bar (5000 psi)	

Revision A1

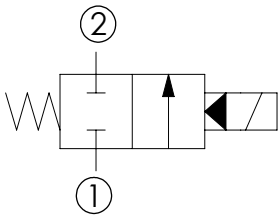
SOLENOID OPERATED CARTRIDGE

CEBT-600-NCFN-98

PILOTED OPERATED
SPOOL TYPE



Dimensions: mm [inches]



SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Rated flow:	600 l/min (158 gpm)
Cavity:	SAE-20-2N
Weight:	0,7 kg (1,54 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 or M3 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RA900085
Installation torque:	140 - 150 Nm (103 - 110 ft.-lb)
MTTF:	150 - 1200 years: See technical spec.
Max. int. leakage:	400 cm ³ /min (@46 cSt) 24,4 in ³ /min (@46 cSt)

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

CURVES

OPTIONS

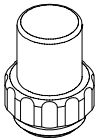
Standard



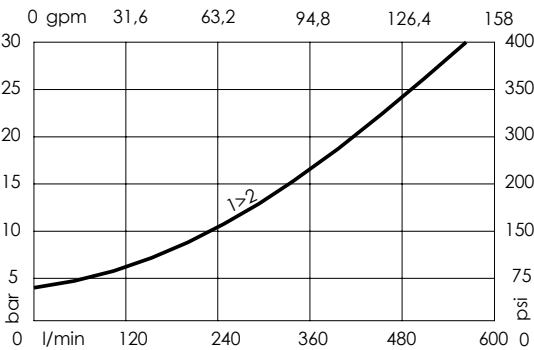
Knob style
override



SEALING CAP



Ordering code:
AT000113



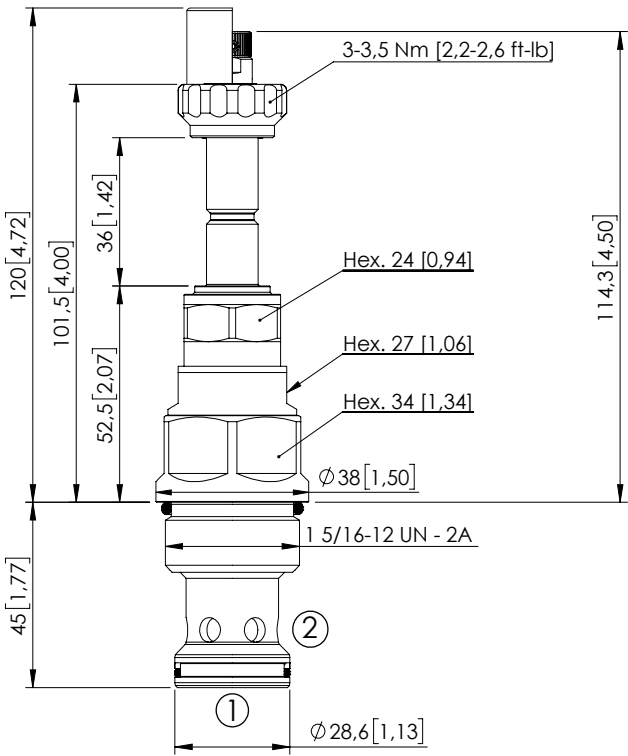
ORDERING CODES

Quick code	Description	Options	Max operating pressure	
CE000763	CEBT-600-NCFN-98-S20-N350	Standard	350 bar (5000 psi)	
CE000764	CEBT-600-NCFK-98-S20-N350	Knob style override	350 bar (5000 psi)	

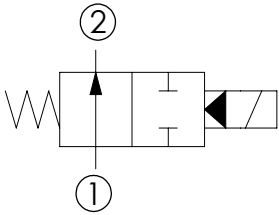
SOLENOID OPERATED CARTRIDGE

CEBT-350-NAFN-99

PILOTED OPERATED
SPOOL TYPE



Dimensions: mm [inches]



SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Rated flow:	350 l/min (92 gpm)
Cavity:	SAE-16-2N
Weight:	0,5 kg (1,10 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 or M3 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RA900084
Installation torque:	200 - 210 Nm (148 - 155 ft-lb)
MTTF:	150 - 1200 years: See technical spec.
Max. int. leakage:	350 cm ³ /min (@46 cSt) 21,3 in ³ /min (@46 cSt)

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

CURVES

OPTIONS

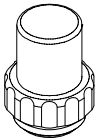
Standard



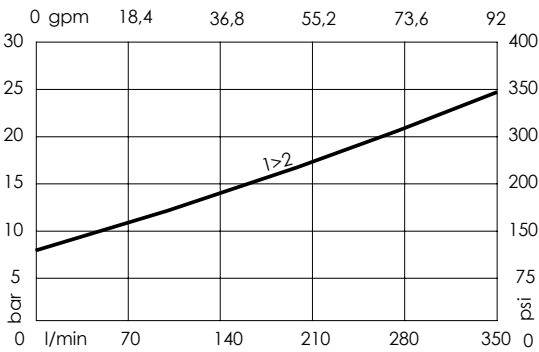
Knob style
override



SEALING CAP



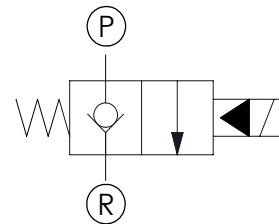
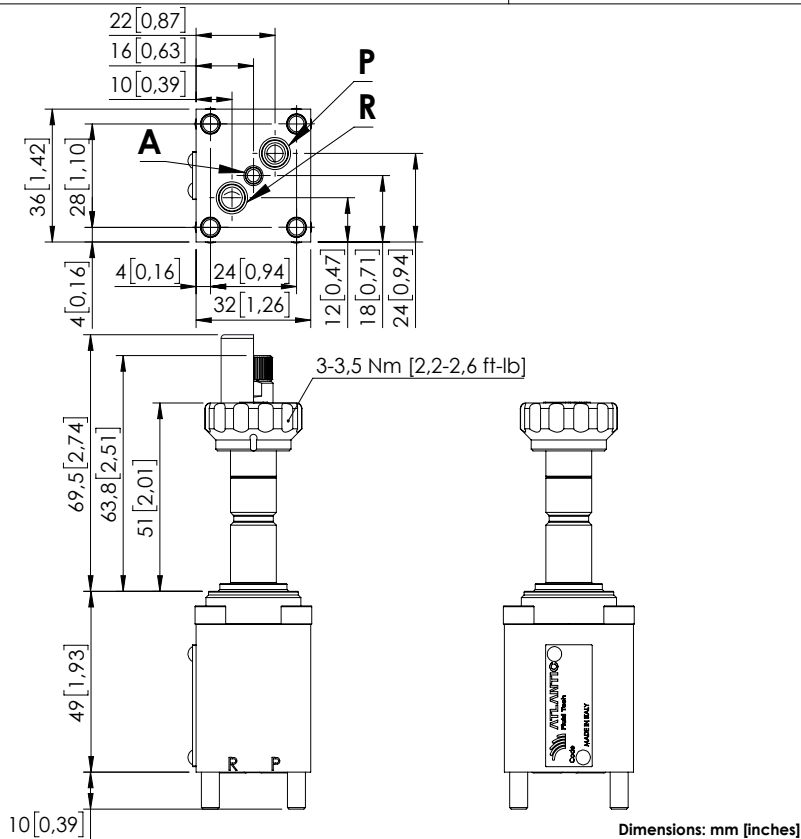
Ordering code:
AT000113



ORDERING CODES

Quick code	Description	Options	Max operating pressure	
CE000861	CEBT-350-NAFN-99-S16-N350	Standard	350 bar (5000 psi)	
CE000888	CEBT-350-NAFE-99-S16-N350	Knob style override	350 bar (5000 psi)	

SOLENOID OPERATED CARTRIDGE

CEBN-015-NCGN-01HIGH PRESSURE
POPPET TYPE
FLANGED BODY**SPECIFICATIONS**

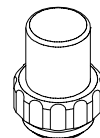
Max. operating pressure:	600 bar (8700 psi)
Rated flow:	15 l/min (4 gpm)
Manifold:	Steel
Weight:	0,44 kg (0,97 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 or M3 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Mounting screw torque:	6,5 Nm (5 ft-lb)
MTTF _d :	150 - 1200 years: See technical spec.

NOTES

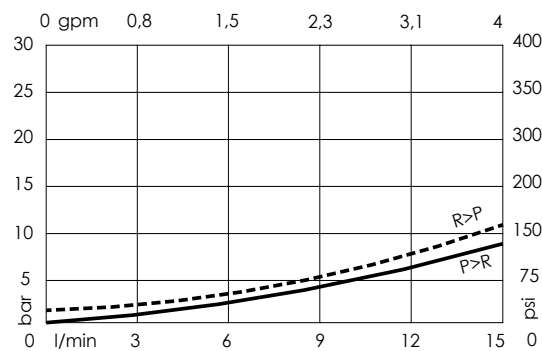
For other configurations/quick codes not available in this catalogue page please consult factory

OPTIONS

Standard

Knob style
override**SEALING CAP**

Ordering code:
AT000113

CURVES**ORDERING CODES**

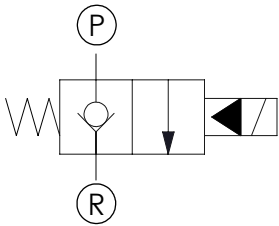
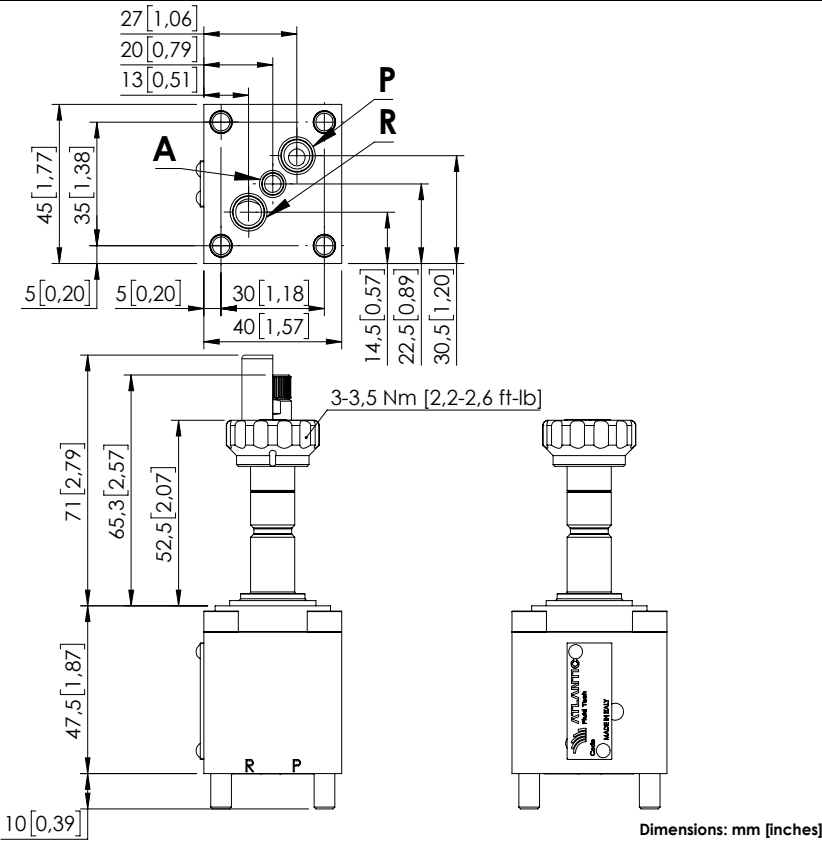
Quick code	Description	Options	Ports size	
CE001077	CEBN-015-NCGN-01-F45-N600	Standard	R,P: Ø4,5 [0,18] A: Ø3 [0,12]	
CE001080	CEBN-015-NCGK-01-F45-N600	Knob style override	R,P: Ø4,5 [0,18] A: Ø3 [0,12]	

Revision D1

SOLENOID OPERATED CARTRIDGE

CEBN-025-NCGN-01

HIGH PRESSURE
POPPET TYPE
FLANGED BODY



SPECIFICATIONS

Max. operating pressure:	600 bar (8700 psi)
Rated flow:	25 l/min (7 gpm)
Manifold:	Steel
Weight:	0,66 kg (1,45 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 or M3 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Mounting screw torque:	9,5 Nm (7 ft-lb)
MTTFd:	150 - 1200 years: See technical spec.

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

OPTIONS

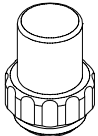
Standard



Knob style
override

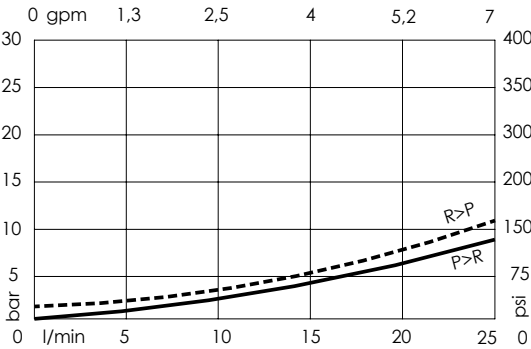


SEALING CAP



Ordering code:
AT000113

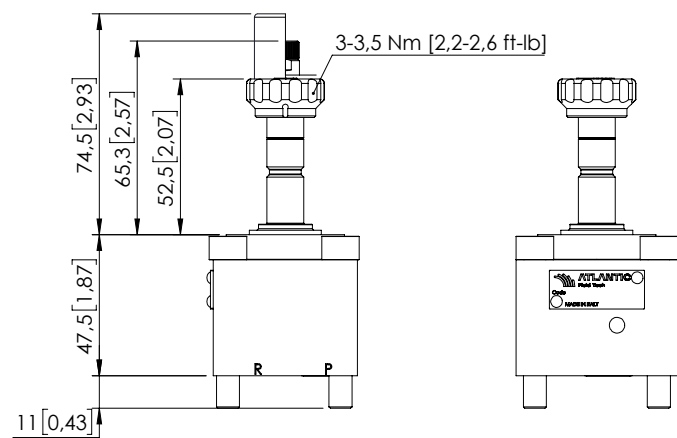
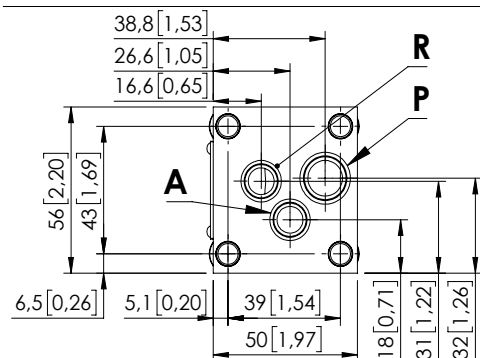
CURVES



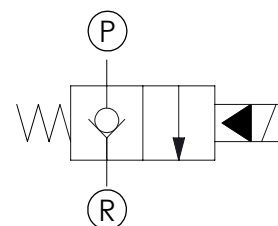
ORDERING CODES

Quick code	Description	Options	Ports size	
CE001078	CEBN-025-NCGN-01-F45-N600	Standard	R,P: Ø7,5 [0,30] A: Ø4,5 [0,18]	
CE001081	CEBN-025-NCGK-01-F45-N600	Knob style override	R,P: Ø7,5 [0,30] A: Ø4,5 [0,18]	

SOLENOID OPERATED CARTRIDGE

CEBN-060-NCGN-01HIGH PRESSURE
POPPET TYPE
FLANGED BODY

Dimensions: mm [inches]

**SPECIFICATIONS**

Max. operating pressure:	600 bar (8700 psi)
Rated flow:	60 l/min (16 gpm)
Manifold:	Steel
Weight:	0,99 kg (2,20 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 or M3 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Mounting screw torque:	23 Nm (17 ft-lb)
MTTF _d :	150 - 1200 years: See technical spec.

NOTES

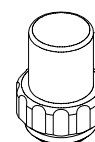
For other configurations/quick codes not available in this catalogue page please consult factory

OPTIONS

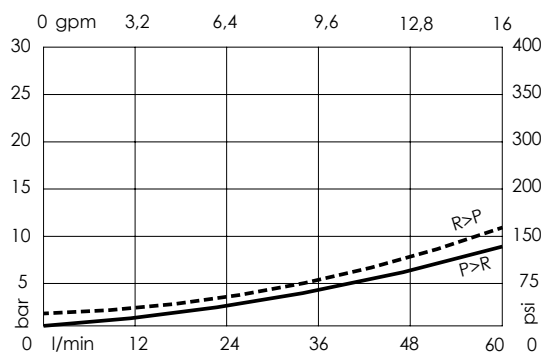
Standard



Knob style override

**SEALING CAP**

Ordering code:
AT000113

CURVES**ORDERING CODES**

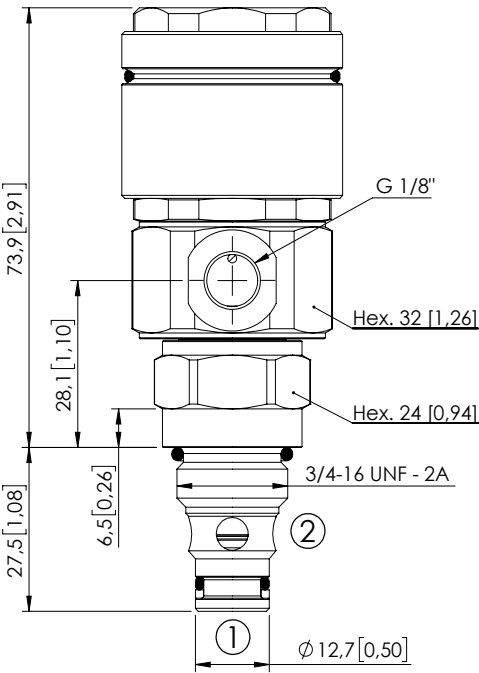
Quick code	Description	Options	Ports size	
CE001079	CEBN-060-NCGN-01-F45-N600	Standard	R,P: Ø9 [0,35] A: Ø9 [0,35]	
CE001082	CEBN-060-NCGK-01-F45-N600	Knob style override	R,P: Ø9 [0,35] A: Ø9 [0,35]	

Revision D1

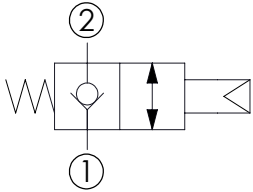
SOLENOID OPERATED CARTRIDGE

CEBN-060-NCAN-123

PNEUMATIC OPERATED
POPPET TYPE



Dimensions: mm [inches]



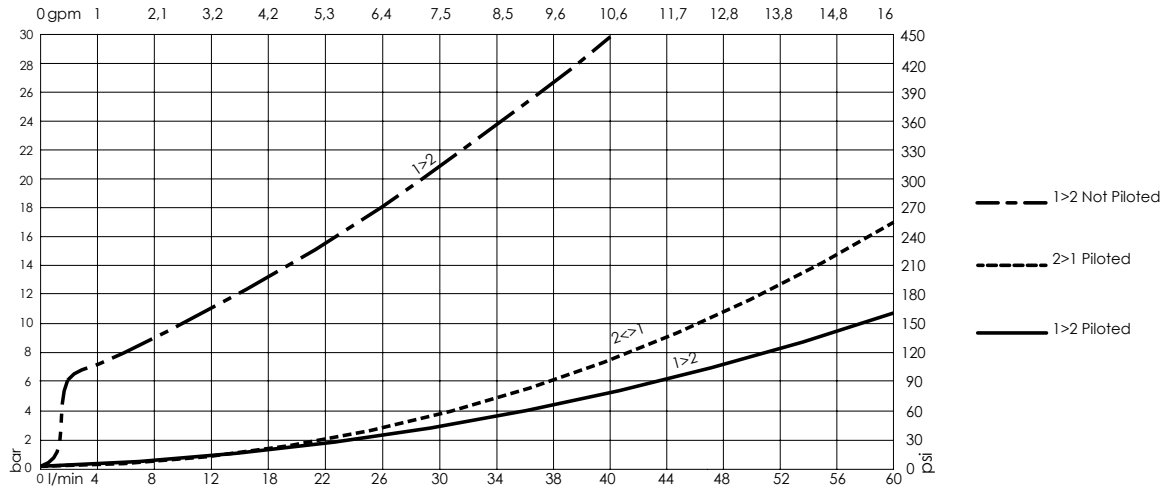
SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Rated flow:	60 l/min (16 gpm)
Cavity:	SAE-08-2N
Weight:	0,31 kg (0,68 lbs)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RA900081
Installation torque:	45 - 50 Nm (33 - 37 ft-lb)
MTTFd:	150 - 1200 years: See technical spec.

NOTES

Airbleed.
For other configurations/quick codes not available in this catalogue page please consult factory

CURVES



ORDERING CODES

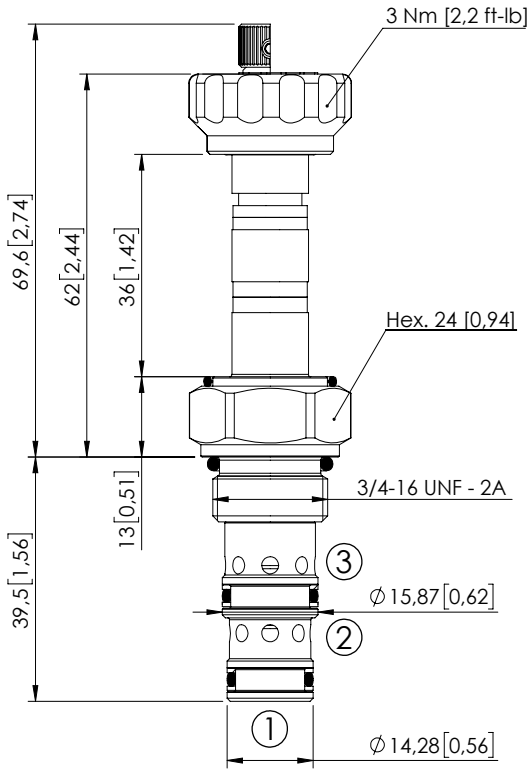
Quick code	Description	Pneumatic pilot pressure	
CE000961	CEBN-060-NCAN-123-S08-N350	Min. 4 bar (Min.58 psi)	Max. 10 bar (Min.145 psi)

Revision A1

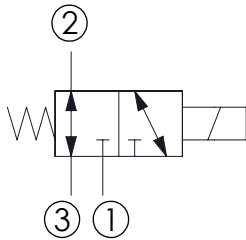
SOLENOID OPERATED CARTRIDGE

CECS-015-SEFN-61

DIRECT OPERATED
SPOOL TYPE



Dimensions: mm [inches]



SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Max. operating pressure on port 1:	280 bar (4000 psi)
Rated flow:	15 l/min (4 gpm)
Cavity:	SAE-08-3N
Weight:	0,14 kg (0.26 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 or M3 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB700091
Installation torque:	45 - 50 Nm (33 - 37 ft-lb)
MTTFd:	150 - 1200 years: See technical spec.
Leakage:	120 cm ³ /min (@46 cSt) 7,3 in ³ /min (@46 cSt)

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

OPTIONS

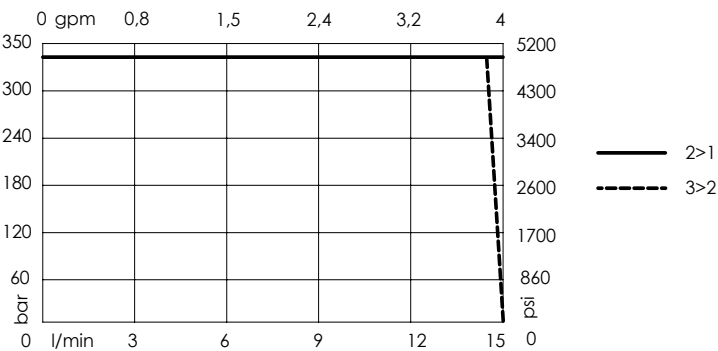
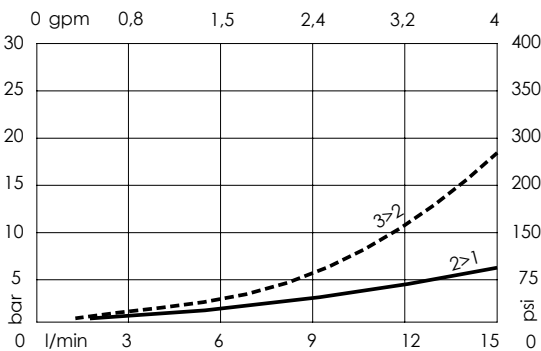
Standard



Knob style
override



CURVES



— 2>1
--- 3>2

ORDERING CODES

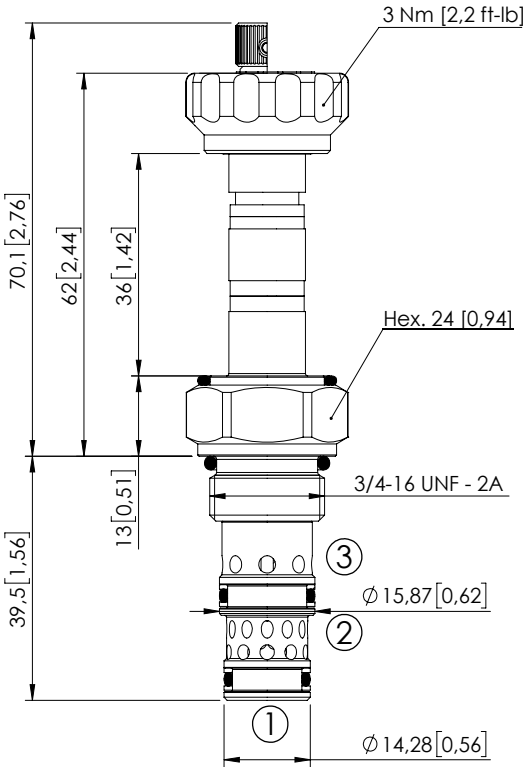
Quick code	Description	Options	
CE000009	CECS-015-SEFN-61-S08-N350	Standard	
CE000066	CECS-015-SEFE-61-S08-N350	Knob style override	

Revision C

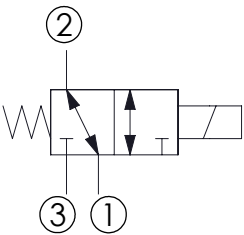
SOLENOID OPERATED CARTRIDGE

CECS-015-SEFN-62

DIRECT OPERATED
SPOOL TYPE



Dimensions: mm [inches]



SPECIFICATIONS

Max. operating pressure:	350 bar(5000 psi)
Max. operating pressure on port 1:	280 bar(4000 psi)
Rated flow:	15 l/min (4 gpm)
Cavity:	SAE-08-3N
Weight:	0,14 kg (0,26 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 or M3 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB700091
Installation torque:	45 - 50 Nm (33 - 37 ft-lb)
MTTFd:	150 - 1200 years: See technical spec.
Leakage:	120 cm ³ /min (@46 cSt) 7,3 in ³ /min (@46 cSt)

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

OPTIONS

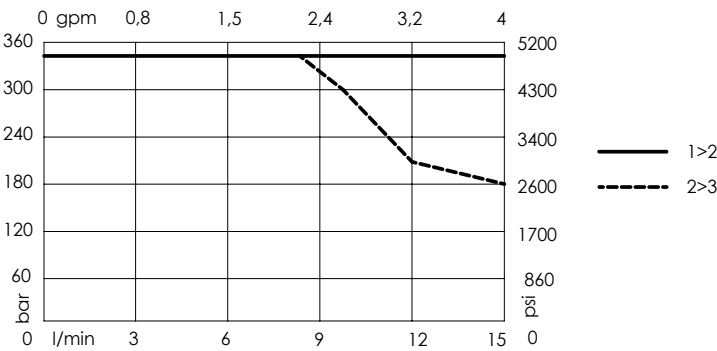
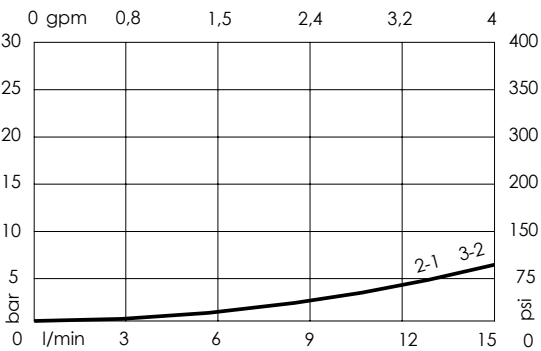
Standard



Knob style
override



CURVES



ORDERING CODES

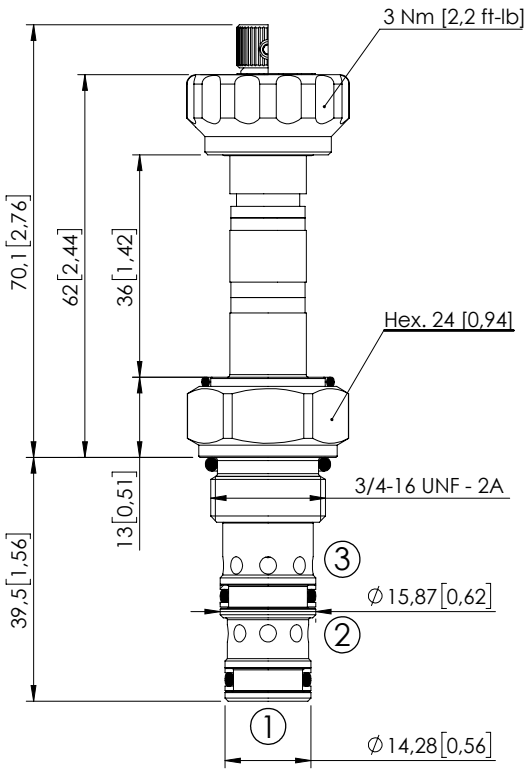
Quick code	Description	Options	
CE000010	CECS-015-SEFN-62-S08-N350	Standard	
CE000067	CECS-015-SEFE-62-S08-N350	Knob style override	

Revision C

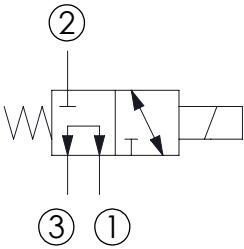
SOLENOID OPERATED CARTRIDGE

CECS-015-SEFN-63

DIRECT OPERATED
SPOOL TYPE



Dimensions: mm [inches]



SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Max. operating pressure on port 1:	280 bar (4000 psi)
Rated flow:	15 l/min (4 gpm)
Cavity:	SAE-08-3N
Weight:	0,14 kg (0,26 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 or M3 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB700091
Installation torque:	45 - 50 Nm (33 - 37 ft-lb)
MTF _d :	150 - 1200 years: See technical spec.
Leakage:	120 cm ³ /min (@46 cSt) 7,3 in ³ /min (@46 cSt)

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

OPTIONS

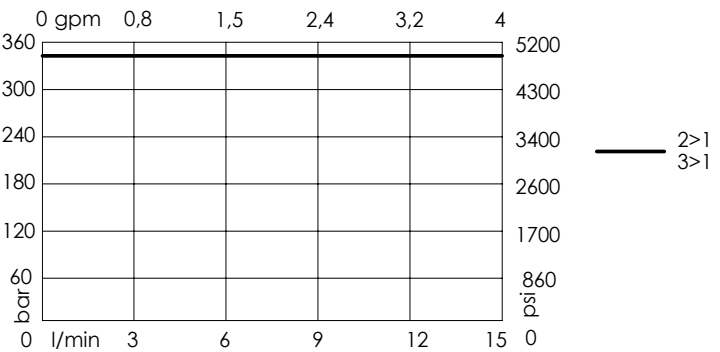
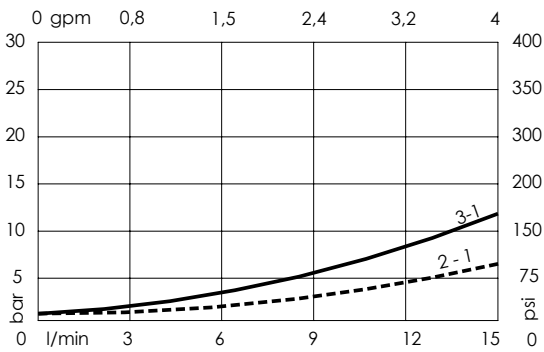
Standard



Knob style
override



CURVES



ORDERING CODES

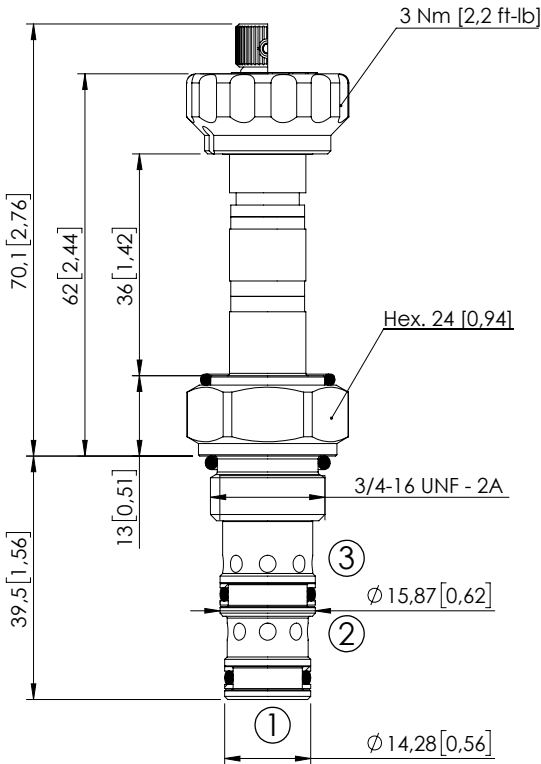
Quick code	Description	Options	
CE000011	CECS-015-SEFN-63-S08-N350	Standard	
CE000068	CECS-015-SEFE-63-S08-N350	Knob style override	

Revision C

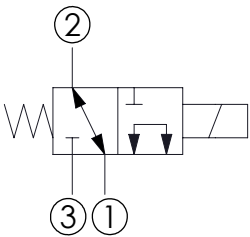
SOLENOID OPERATED CARTRIDGE

CECS-015-SEFN-64

DIRECT OPERATED
SPOOL TYPE



Dimensions: mm [inches]



SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Max. operating pressure on port 1:	280 bar (4000 psi)
Rated flow:	15 l/min (4 gpm)
Cavity:	SAE-08-3N
Weight:	0,14 kg (0.26 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 or M3 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB700091
Installation torque:	45 - 50 Nm (33 - 37 ft-lb)
MTFa:	150 - 1200 years: See technical spec.
Leakage:	120 cm ³ /min (@46 cSt) 7,3 in ³ /min (@46 cSt)

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

OPTIONS

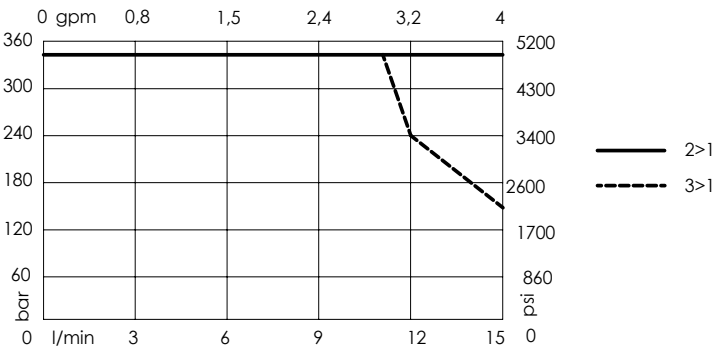
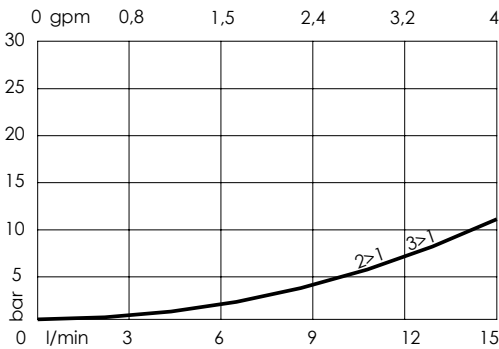
Standard



Knob style
override



CURVES



ORDERING CODES

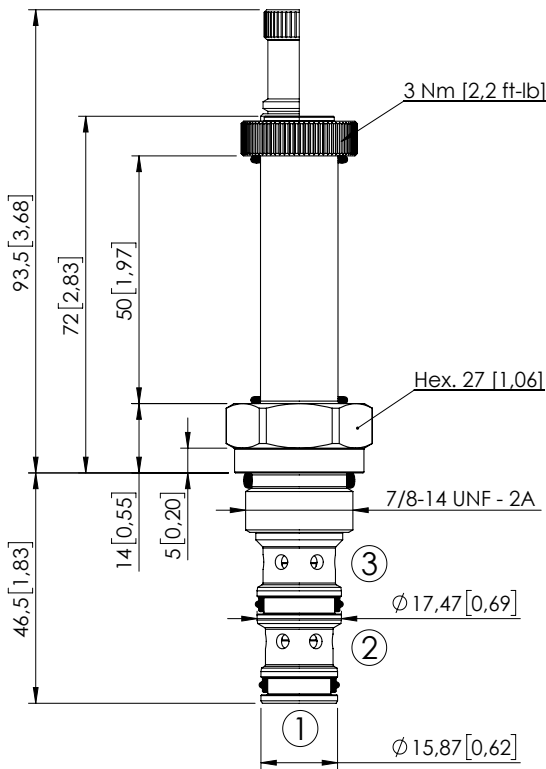
Quick code	Description	Options	
CE000008	CECS-015-SEFN-64-S08-N350	Standard	
CE000070	CECS-015-SEFE-64-S08-N350	Knob style override	

Revision C

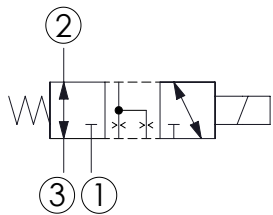
SOLENOID OPERATED CARTRIDGE

CECS-030-SEFN-61

DIRECT ACTING
SPOOL TYPE



Dimensions: mm [inches]



SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Rated flow:	30 l/min (8 gpm)
Cavity:	SAE-10-3N
Weight:	0.20 kg (0.44 lbs)
Min. voltage required:	90% of nominal
Coil type:	M16 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB600092
Installation torque:	55 - 62 Nm (41 - 46 ft-lb)
MTTFa:	150 - 1200 years: See technical spec.
Leakage:	70 cm ³ /min (@46 cSt) 4.2 in ³ /min (@46 cSt)

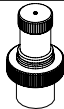
NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

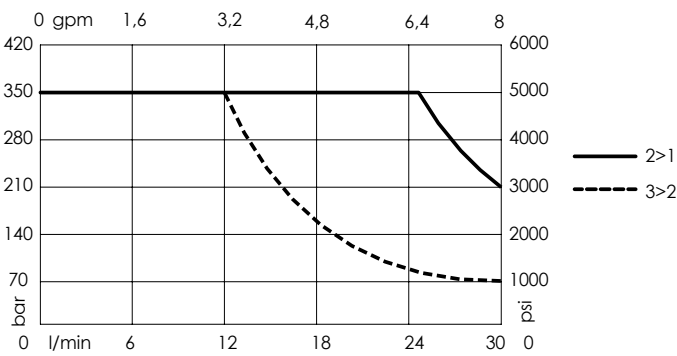
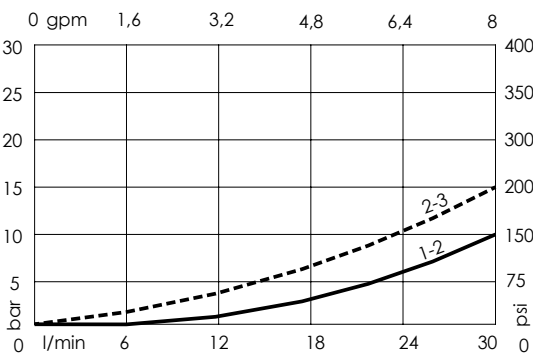
OPTIONS

Standard

Knob style
override



CURVES



ORDERING CODES

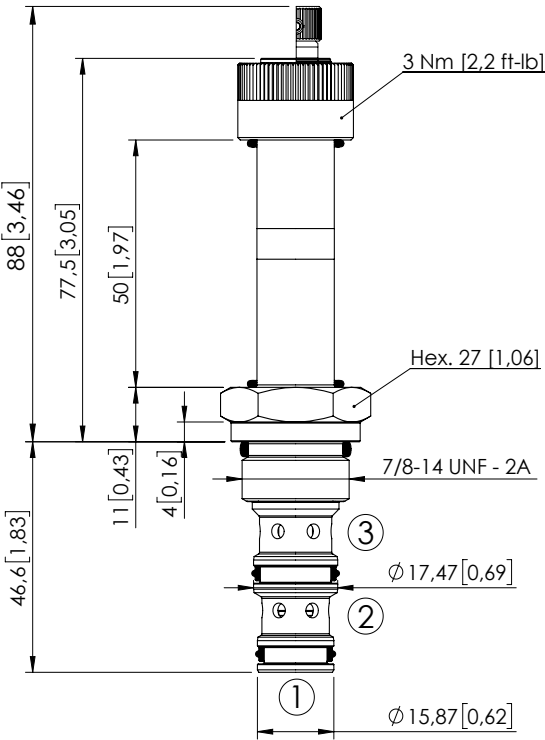
Quick code	Description	Options	
CE000985	CECS-030-SEFN-61-S10-N350	Standard	
CE000986	CECS-030-SEFE-61-S10-N350	Knob style override	

Revision D

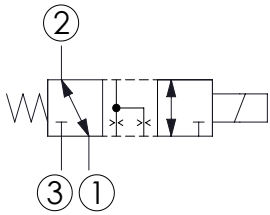
SOLENOID OPERATED CARTRIDGE

CECS-030-SEFN-62

DIRECT ACTING
SPOOL TYPE



Dimensions: mm [inches]



SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Rated flow:	30 l/min (8 gpm)
Cavity:	SAE-10-3N
Weight:	0,26 kg (0,57 lbs)
Min. voltage required:	90% of nominal
Coil type:	M16 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB600092
Installation torque:	50 - 55 Nm (37 - 41 ft-lb)
MTF _a :	150 - 1200 years: See technical spec.
Leakage:	70 cm ³ /min (@46 cSt) 4,2 in ³ /min (@46 cSt)

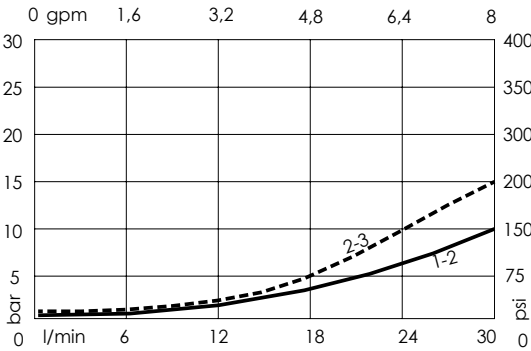
NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

OPTIONS



CURVES



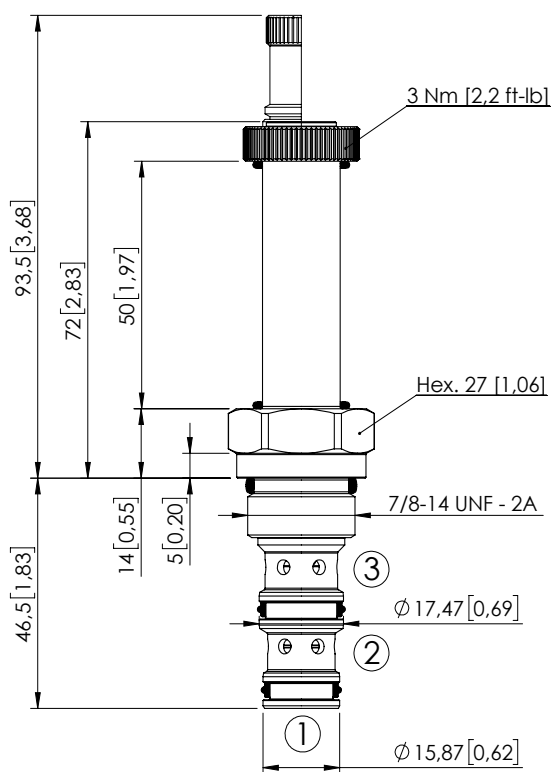
ORDERING CODES

Quick code	Description	Options	
CE000987	CECS-030-SEFN-62-S10-N350	Standard	
CE000988	CECS-030-SEFE-62-S10-N350	Knob style override	

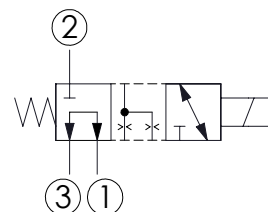
SOLENOID OPERATED CARTRIDGE

CECS-030-SEFN-63

**DIRECT ACTING
SPOOL TYPE**



Dimensions: mm [inches]



SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Rated flow:	30 l/min (8 gpm)
Cavity:	SAE-10-3N
Weight:	0,2 kg (0,44 lbs)
Min. voltage required:	90% of nominal
Coil type:	M16 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406: See technical spec.	
Seal kit:	RB600092
Installation torque:	55 - 62 Nm (41 - 46 ft-lb)
MTTF_d:	150 - 1200 years: See technical spec.
Leakage:	70 cm³/min (@46 cSt) 4,2 in³/min (@46 cSt)

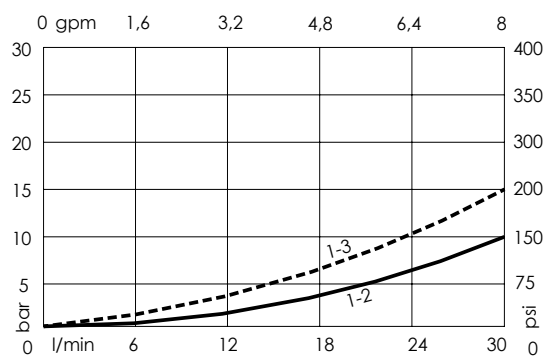
NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

CURVES

OPTIONS

Standard		
Knob style override		



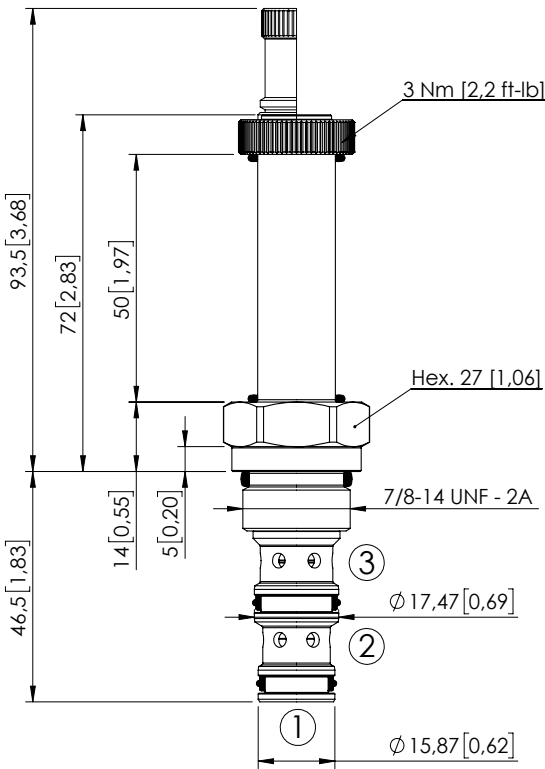
ORDERING CODES

Quick code	Description	Options	
CE000989	CECS-030-SEFN-63-S10-N350	Standard	
CE000990	CECS-030-SEFE-63-S10-N350	Knob style override	

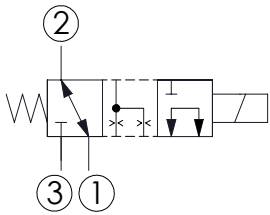
SOLENOID OPERATED CARTRIDGE

CECS-030-SEFN-64

DIRECT ACTING
SPOOL TYPE



Dimensions: mm [inches]



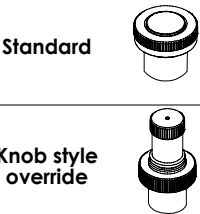
SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Rated flow:	30 l/min (8 gpm)
Cavity:	SAE-10-3N
Weight:	0,2 kg (0,44 lbs)
Min. voltage required:	90% of nominal
Coil type:	M16 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB600092
Installation torque:	55 - 62 Nm (41 - 46 ft-lb)
MTF _d :	150 - 1200 years: See technical spec.
Leakage:	70 cm ³ /min (@46 cSt) 4,2 in ³ /min (@46 cSt)

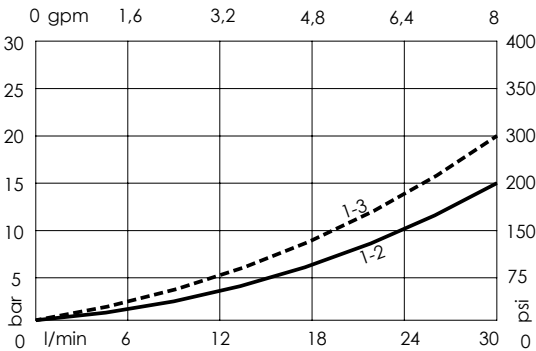
NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

OPTIONS



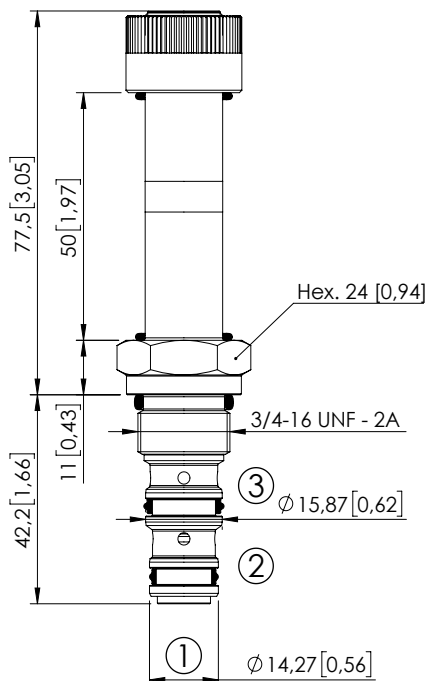
CURVES



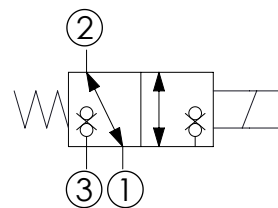
ORDERING CODES

Quick code	Description	Options	
CE000991	CECS-030-SEFN-64-S10-N350	Standard	
CE000992	CECS-030-SEFE-64-S10-N350	Knob style override	

SOLENOID OPERATED CARTRIDGE

CECD-020-SEFN-66DIRECT OPERATED
POPPET TYPE

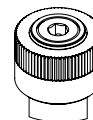
Dimensions: mm [inches]

**SPECIFICATIONS**

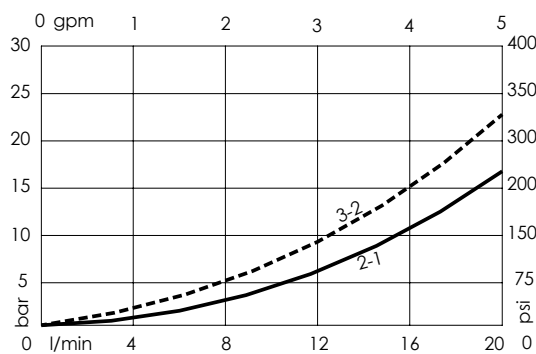
Max. operating pressure:	350 bar (5000 psi)
Rated flow:	20 l/min (5 gpm)
Cavity:	SAE-08-3N
Weight:	0.38 kg (0.55 lbs)
Min. voltage required:	90% of nominal
Coil type:	M16 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB600091
Installation torque:	45 - 50 Nm (33.2 - 36.9 ft-lb)
MTTFd:	150 - 1200 years: See technical spec.
Leakage:	0,15 cm ³ /min (@46 cSt) 0,009 in ³ /min (@46 cSt)

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

OPTIONS

Push style
Manual Override

CURVES**ORDERING CODES**

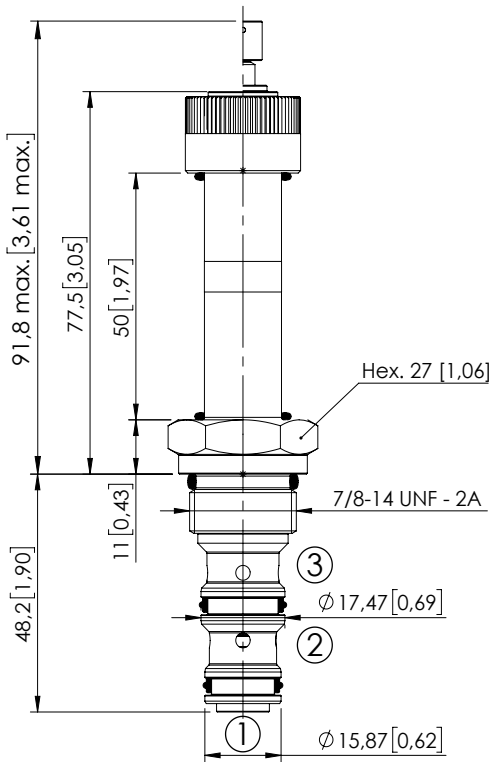
Quick code	Description	Options	
CE001191	CECD-020-SEFN-66-S08-N350	Push style Manual Override	

Revision A

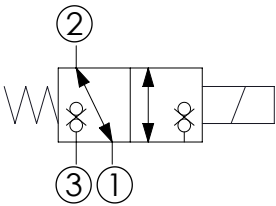
SOLENOID OPERATED CARTRIDGE

CECD-030-SEFP-66

DIRECT OPERATED
POPPET TYPE



Dimensions: mm [inches]



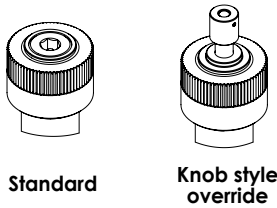
SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Rated flow:	30 l/min (8 gpm)
Cavity:	SAE-10-3N
Weight:	0,26 kg (0,57 lbs)
Min. voltage required:	90% of nominal
Coil type:	M16 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB600092
Installation torque:	55 - 62 Nm (41 - 46 ft-lb)
MTF _a :	150 - 1200 years: See technical spec.
Leakage:	0,15 cm ³ /min (@46 cSt) 0,009 in ³ /min (@46 cSt)

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

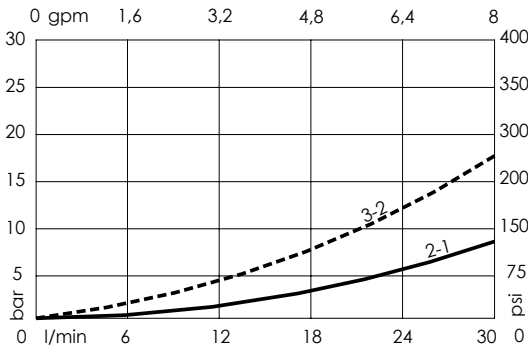
OPTIONS



Standard

Knob style
override

CURVES



ORDERING CODES

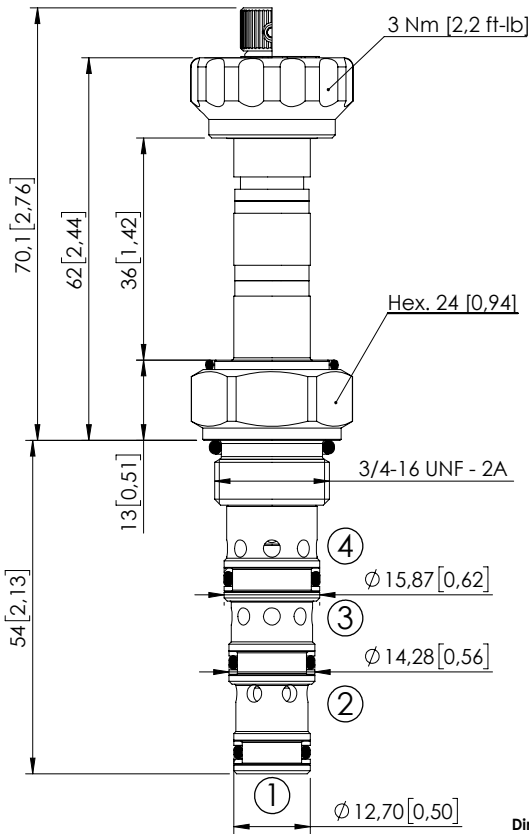
Quick code	Description	Options	
CE001030	CECD-030-SEFN-66-S10-N350	Standard	
CE001918	CECD-030-SEFE-66-S10-N350	Knob style override	

Revision B

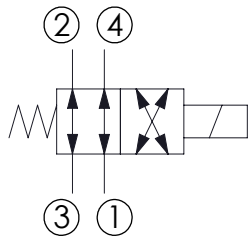
SOLENOID OPERATED CARTRIDGE

CEDS-015-SEFN-40

DIRECT OPERATED
SPOOL TYPE



Dimensions: mm [inches]



SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Max. operating pressure on port 1:	280 bar (4000 psi)
Rated flow:	15 l/min (4 gpm)
Cavity:	SAE-08-4N
Weight:	0,14 kg (0,26 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 or M3 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB700101
Installation torque:	45 - 50 Nm (33 - 37 ft-lb)
MTF _d :	150 - 1200 years: See technical spec.
Leakage:	120 cm ³ /min (@46 cSt) 7,3 in ³ /min (@46 cSt)

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

OPTIONS

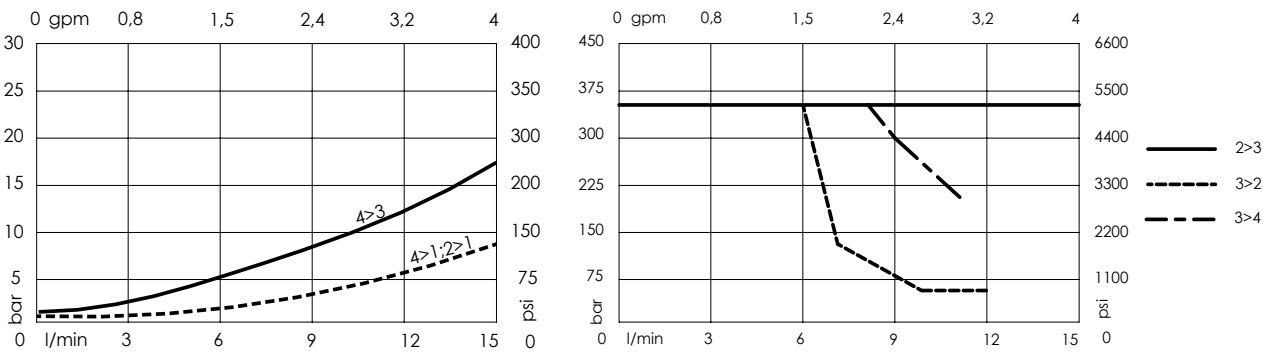
Standard



Knob style
override



CURVES



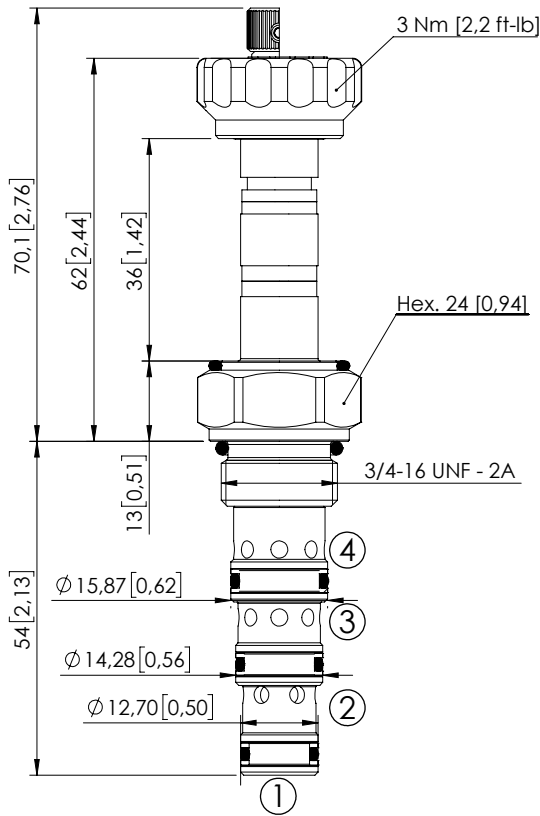
ORDERING CODES

Quick code	Description	Options	
CE000014	CEDS-015-SEFN-40-S08-N350	Standard	
CE000071	CEDS-015-SEFE-40-S08-N350	Knob style override	

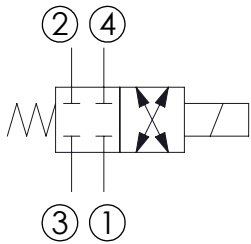
SOLENOID OPERATED CARTRIDGE

CEDS-015-SEFN-41

DIRECT OPERATED
SPOOL TYPE



Dimensions: mm [inches]



SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Max. operating pressure on port 1:	280 bar (4000 psi)
Rated flow:	15 l/min (4 gpm)
Cavity:	SAE-08-4N
Weight:	0,15 kg (0,26 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 or M3 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB700101
Installation torque:	45 - 50 Nm (33 - 37 ft-lb)
MTTFd:	150 - 1200 years: See technical spec.
Leakage:	120 cm ³ /min (@46 cSt) 7,3 in ³ /min (@46 cSt)

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

OPTIONS

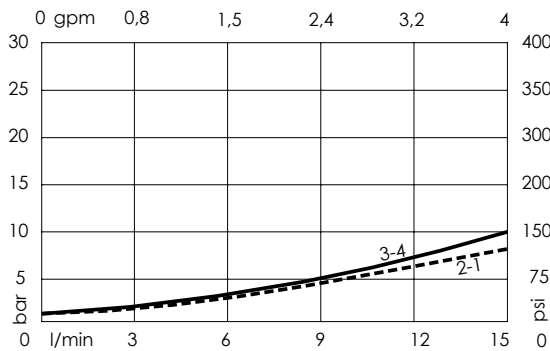
Standard



Knob style
override



CURVES



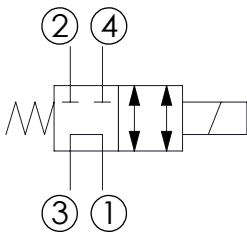
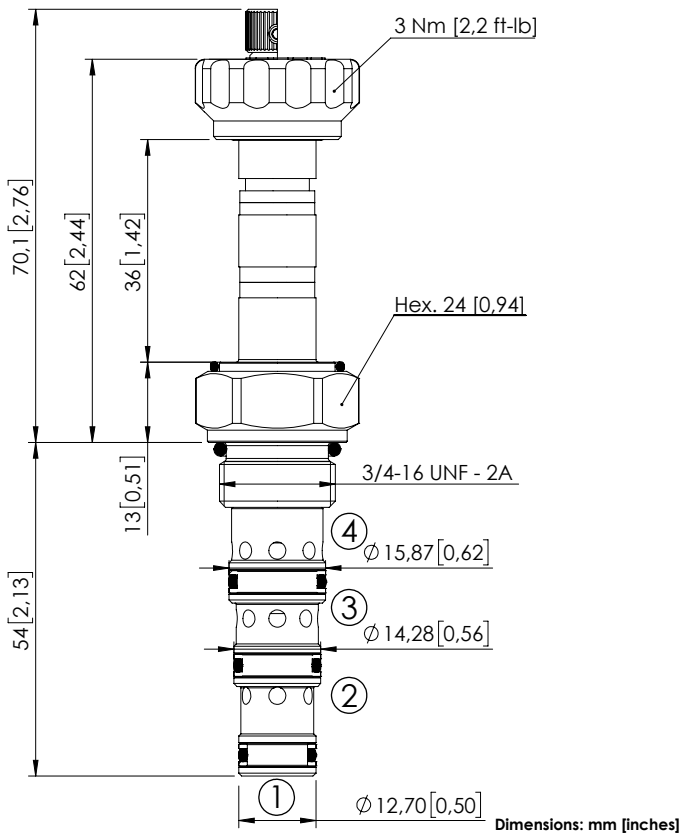
ORDERING CODES

Quick code	Description	Options	
CE000012	CEDS-015-SEFN-41-S08-N350	Standard	
CE000073	CEDS-015-SEFE-41-S08-N350	Knob style override	

SOLENOID OPERATED CARTRIDGE

CEDS-015-SEFN-43

DIRECT OPERATED
SPOOL TYPE



SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Max. operating pressure on port 1:	280 bar (4000 psi)
Rated flow:	15 l/min (4 gpm)
Cavity:	SAE-08-4N
Weight:	0,15 kg (0,26 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 or M3 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB700101
Installation torque:	45 - 50 Nm (33 - 37 ft-lb)
MTTFd:	150 - 1200 years: See technical spec.
Leakage:	120 cm ³ /min (@46 cSt) 7,3 in ³ /min (@46 cSt)

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

OPTIONS

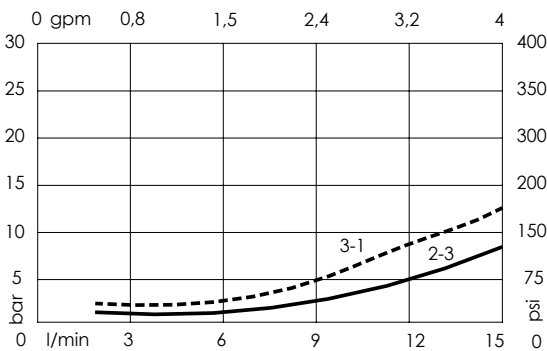
Standard



Knob style
override



CURVES



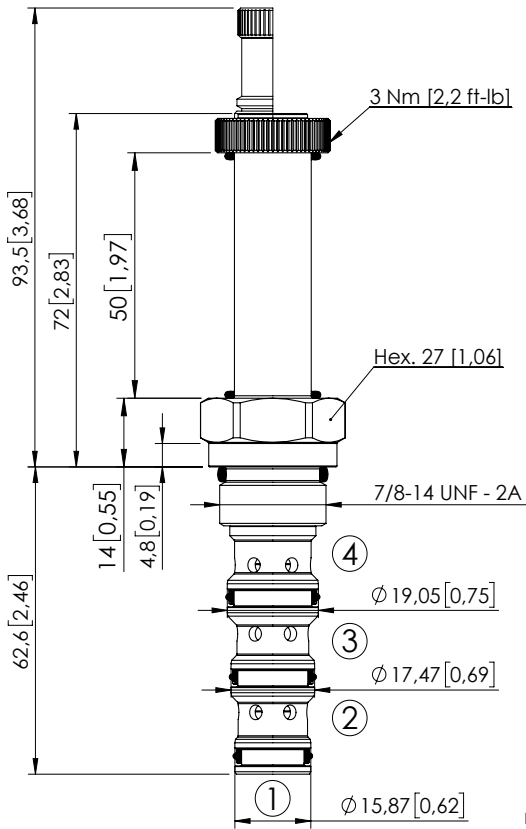
ORDERING CODES

Quick code	Description	Options	
CE000006	CEDS-015-SEFN-43-S08-N350	Standard	
CE000074	CEDS-015-SEFE-43-S08-N350	Knob style override	

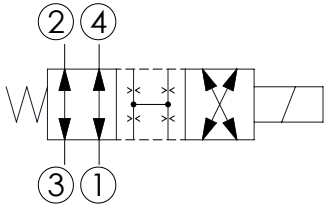
SOLENOID OPERATED CARTRIDGE

CEDS-030-SEFN-40

DIRECT ACTING
SPOOL TYPE



Dimensions: mm [inches]



SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Max. operating pressure on port 1:	210 bar (3000 psi)
Rated flow:	30 l/min (8 gpm)
Cavity:	SAE-10-4N
Weight:	0.22 kg (0.44 lbs)
Min. voltage required:	90% of nominal
Coil type:	M16 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB600102
Installation torque:	55 - 62 Nm (41 - 46 ft-lb)
MTF _d :	150 - 1200 years: See technical spec.
Leakage:	70 cm ³ /min (@46 cSt) 4.2 in ³ /min (@46 cSt)

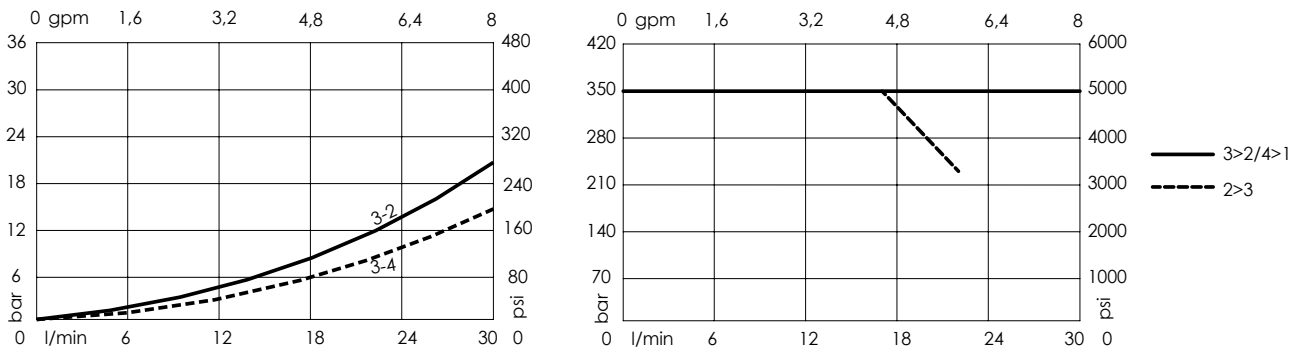
NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

OPTIONS

Standard	
Knob style override	

CURVES



ORDERING CODES

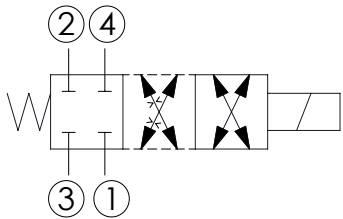
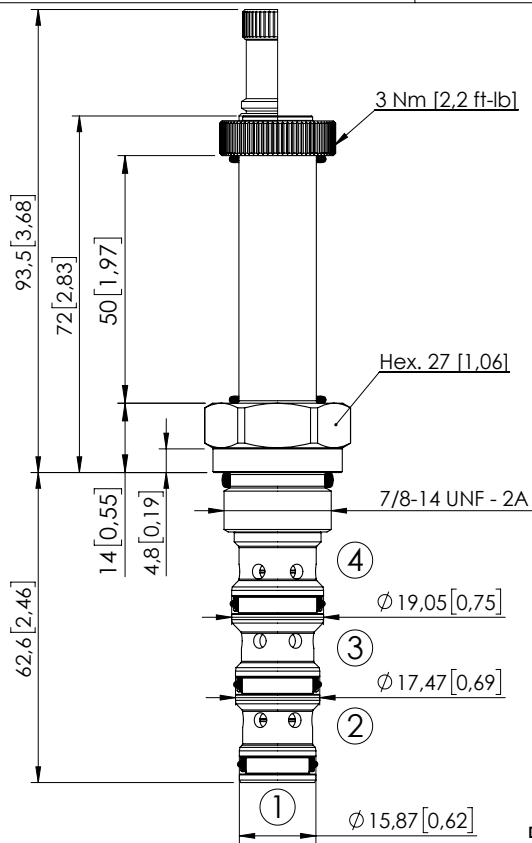
Quick code	Description	Options
CE000951	CEDS-030-SEFN-40-S10-N350	Standard
CE000993	CEDS-030-SEFE-40-S10-N350	Knob style override

Revision E

SOLENOID OPERATED CARTRIDGE

CEDS-030-SEFN-41

DIRECT ACTING
SPOOL TYPE



SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Max. operating pressure on port 1:	210 bar (3000 psi)
Rated flow:	30 l/min (8 gpm)
Cavity:	SAE-10-4N
Weight:	0.23 kg (0.44 lbs)
Min. voltage required:	90% of nominal
Coil type:	M16 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB600102
Installation torque:	55 - 62 Nm (41 - 46 ft-lb)
MTF _a :	150 - 1200 years: See technical spec.
Leakage:	70 cm ³ /min (@46 cSt) 4.2 in ³ /min (@46 cSt)

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

OPTIONS

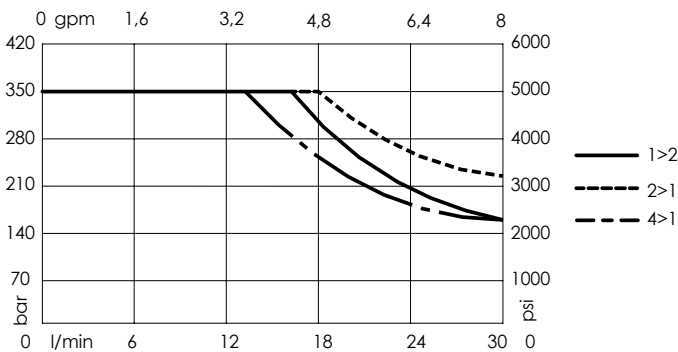
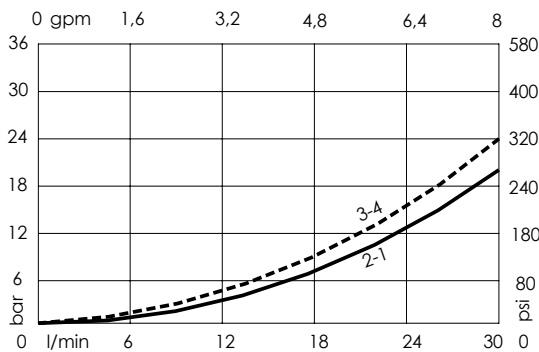
Standard



Knob style
override



CURVES

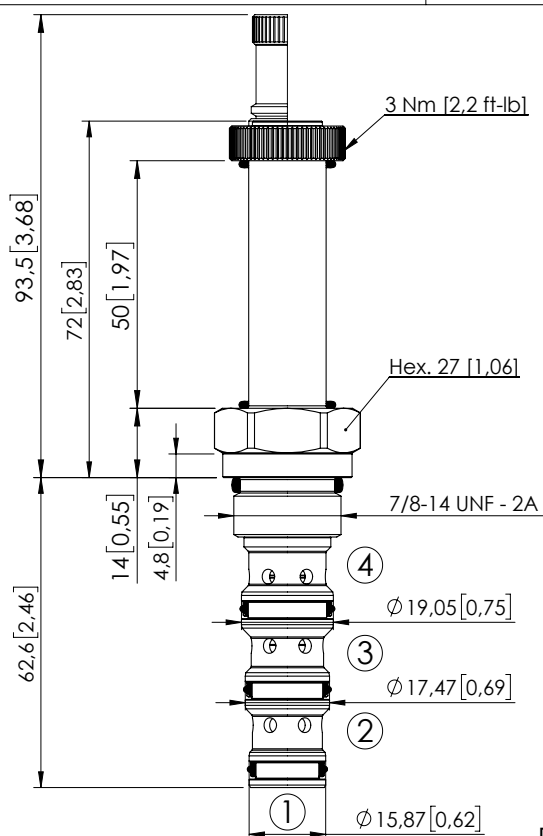


ORDERING CODES

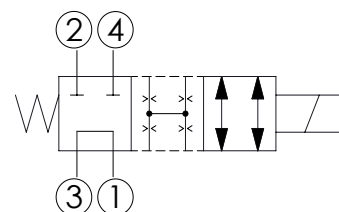
Quick code	Description	Options	
CE000994	CEDS-030-SEFN-41-S10-N350	Standard	
CE000995	CEDS-030-SEFE-41-S10-N350	Knob style override	

SOLENOID OPERATED CARTRIDGE

CEDS-030-SEFN-43

DIRECT ACTING
SPOOL TYPE

Dimensions: mm [inches]



SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Max. operating pressure on port 1:	210 bar (3000 psi)
Rated flow:	30 l/min (8 gpm)
Cavity:	SAE-10-4N
Weight:	0.23 kg (0,44 lbs)
Min. voltage required:	90% of nominal
Coil type:	M16 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB600102
Installation torque:	55 - 62 Nm (41 - 46 ft-lb)
MTTFa:	150 - 1200 years: See technical spec.
Leakage:	70 cm ³ /min (@46 cSt) 4,2 in ³ /min (@46 cSt)

NOTES

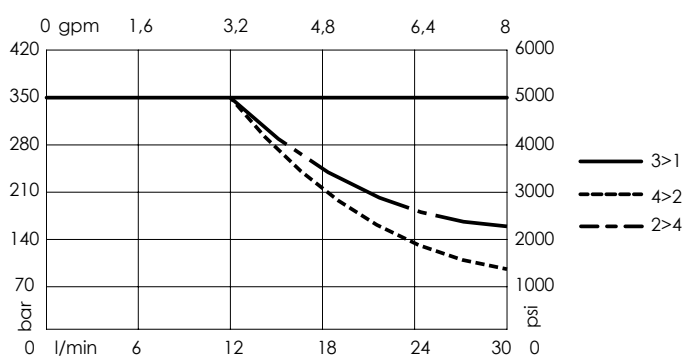
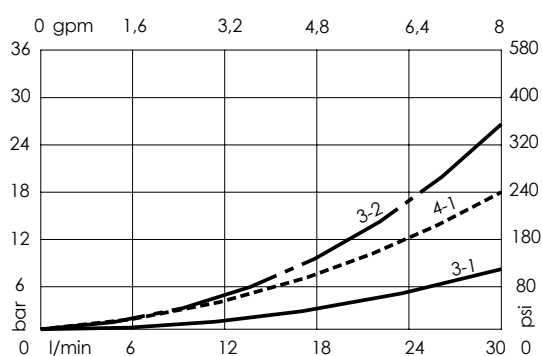
For other configurations/quick codes not available in this catalogue page please consult factory

OPTIONS

Standard

Knob style
override

CURVES



ORDERING CODES

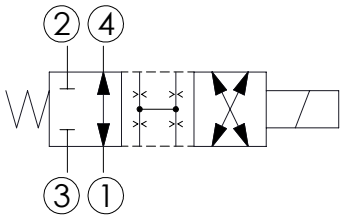
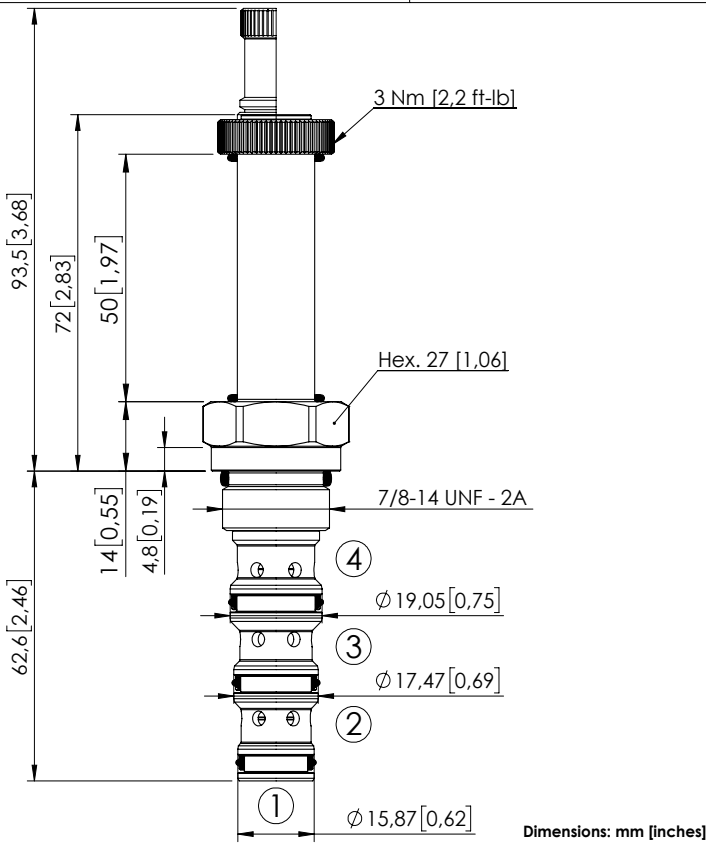
Quick code	Description	Options	
CE000996	CEDS-030-SEFN-43-S10-N350	Standard	
CE000997	CEDS-030-SEFE-43-S10-N350	Knob style override	

Revision D

SOLENOID OPERATED CARTRIDGE

CEDS-030-SEFN-111

DIRECT ACTING
SPOOL TYPE



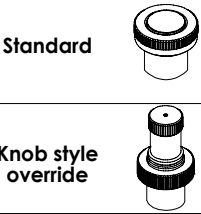
SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Rated flow:	30 l/min (8 gpm)
Cavity:	SAE-10-4N
Weight:	0,22 kg (0,44 lbs)
Min. voltage required:	90% of nominal
Coil type:	M16 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB600102
Installation torque:	55 - 62 Nm (41 - 46 ft-lb)
MTF _d :	150 - 1200 years: See technical spec.
Leakage:	70 cm ³ /min (@46 cSt) 4,2 in ³ /min (@46 cSt)

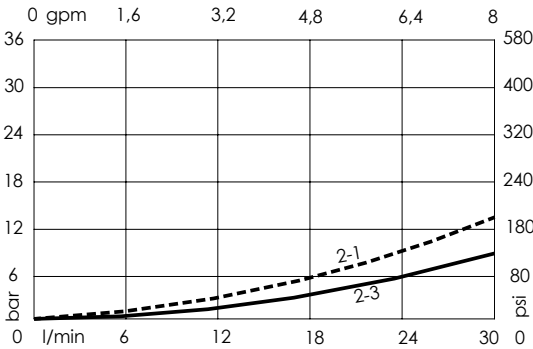
NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

OPTIONS



CURVES



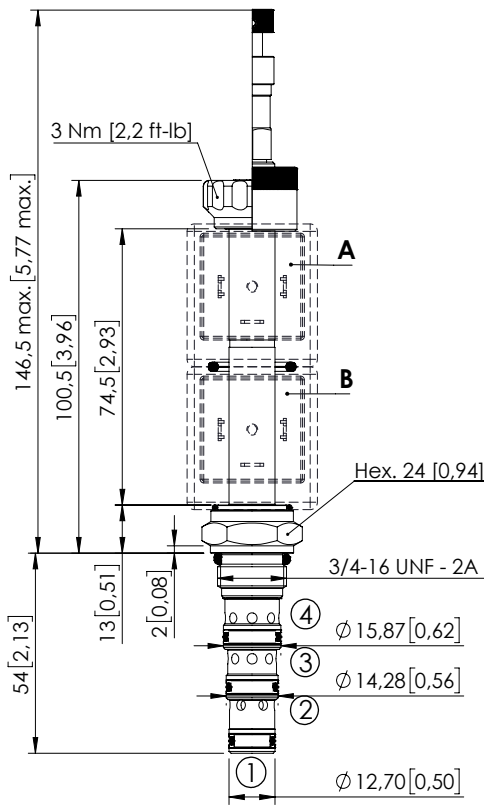
ORDERING CODES

Quick code	Description	Options	
CE000984	CEDS-030-SEFN-111-S10-N350	Standard	
CE000998	CEDS-030-SEFE-111-S10-N350	Knob style override	

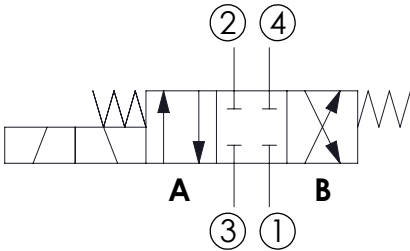
SOLENOID OPERATED CARTRIDGE

CEES-010-SEFN-51

DIRECT OPERATED
SPOOL TYPE



Dimensions: mm [inches]



SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Max. operating pressure on port 1:	210 bar (3000 psi)
Rated flow:	10 l/min (3 gpm)
Cavity:	SAE-08-4N
Weight:	0,18 kg (0,40 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 or M3 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB700101
Installation torque:	45 - 50 Nm (33 - 37 ft-lb)
MTTFd:	150 - 1200 years: See technical spec.
Leakage:	120 cm ³ /min (@46 cSt) 7,3 in ³ /min (@46 cSt)

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

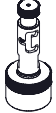
OPTIONS



Standard

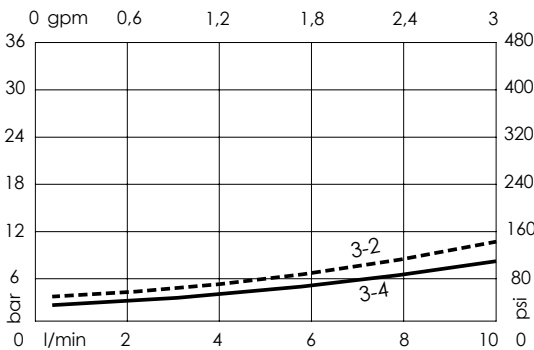


Push and
pull manual
override



Push pull and
twist manual
override

CURVES



ORDERING CODES

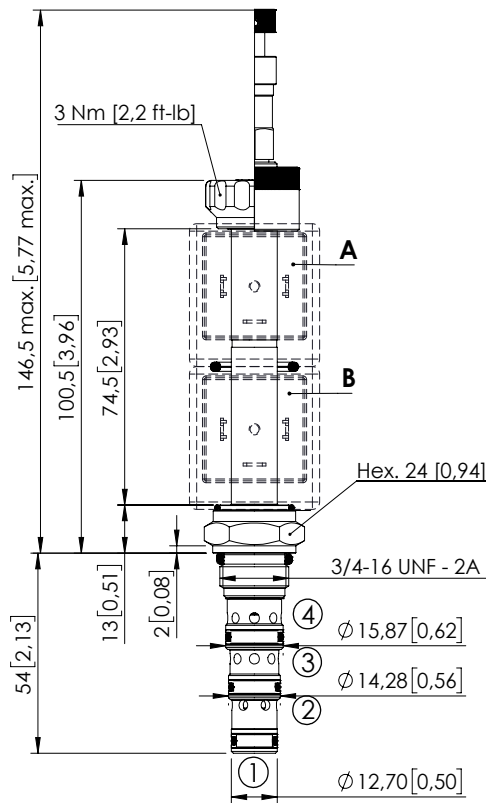
Quick code	Description	Options	
CE000028	CEES-010-SEFN-51-S08-N350	Standard	
CE000098	CEES-010-SEFL-51-S08-N350	Push and pull manual override	
CE000189	CEES-010-SEFG-51-S08-N350	Push pull and twist manual override	

Revision A1

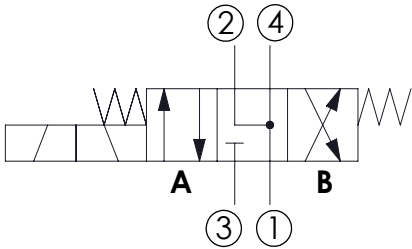
SOLENOID OPERATED CARTRIDGE

CEES-010-SEFN-52

DIRECT OPERATED
SPOOL TYPE



Dimensions: mm [inches]



SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Max. operating pressure on port 1:	210 bar (3000 psi)
Rated flow:	10 l/min (3 gpm)
Cavity:	SAE-08-4N
Weight:	0,18 kg (0,40 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 or M3 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB700101
Installation torque:	45 - 50 Nm (33 - 37 ft-lb)
MTTFd:	150 - 1200 years: See technical spec.
Leakage:	120 cm ³ /min (@46 cSt) 7,3 in ³ /min (@46 cSt)

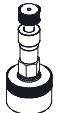
NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

OPTIONS



Standard

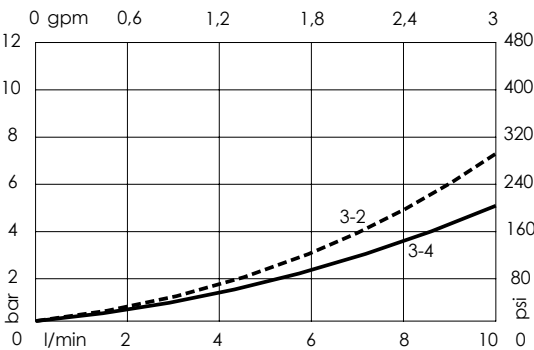


Push and
pull manual
override



Push pull and
twist manual
override

CURVES

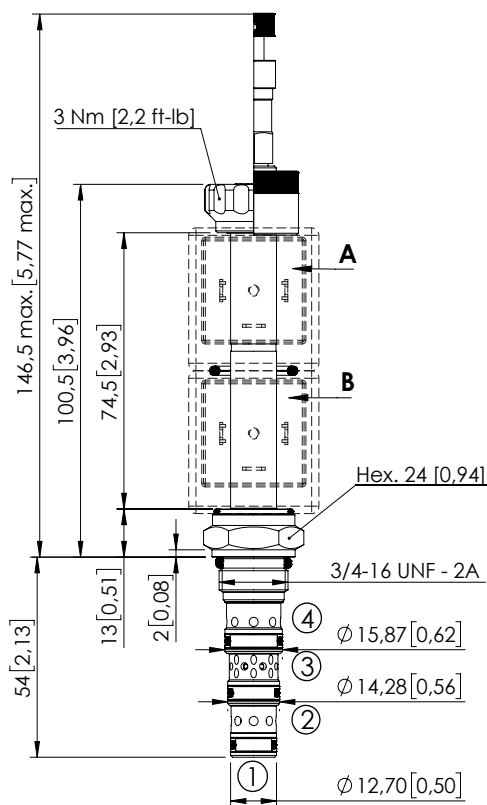


ORDERING CODES

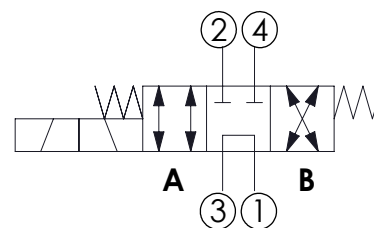
Quick code	Description	Options	
CE000029	CEES-010-SEFN-52-S08-N350	Standard	
CE000095	CEES-010-SEFL-52-S08-N350	Push and pull manual override	
CE000145	CEES-010-SEFG-52-S08-N350	Push pull and twist manual override	

Revision A1

SOLENOID OPERATED CARTRIDGE

CEES-010-SEFN-53DIRECT OPERATED
SPOOL TYPE

Dimensions: mm [inches]

**SPECIFICATIONS**

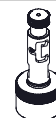
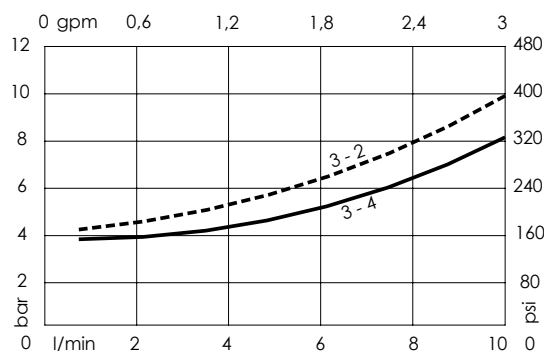
Max. operating pressure:	350 bar (5000 psi)
Max. operating pressure on port 1:	210 bar (3000 psi)
Rated flow:	10 l/min (3 gpm)
Cavity:	SAE-08-4N
Weight:	0,18 kg (0,40 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 or M3 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB700101
Installation torque:	45 - 50 Nm (33 - 37 ft-lb)
MTTFd:	150 - 1200 years: See technical spec.
Leakage:	120 cm ³ /min (@46 cSt) 7,3 in ³ /min (@46 cSt)

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

OPTIONS

Standard

Push and
pull manual
overridePush pull and
twist manual
override**CURVES****ORDERING CODES**

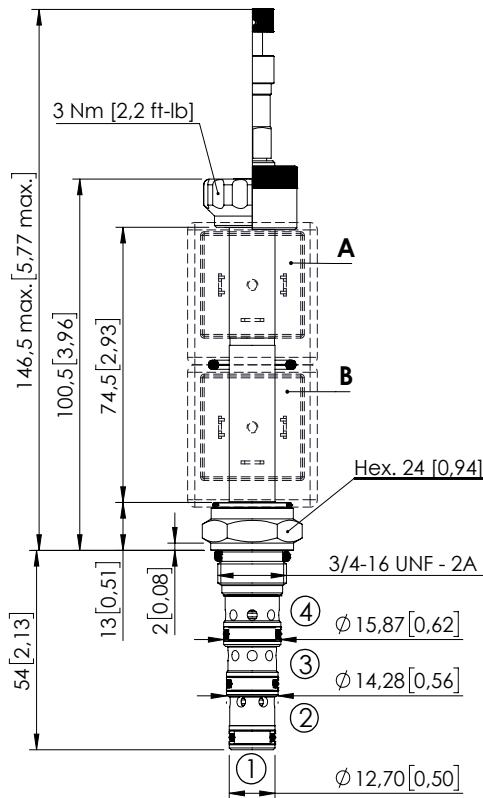
Quick code	Description	Options	
CE000083	CEES-010-SEFN-53-S08-N350	Standard	
CE000097	CEES-010-SEFL-53-S08-N350	Push and pull manual override	
CE000185	CEES-010-SEFG-53-S08-N350	Push pull and twist manual override	

Revision A1

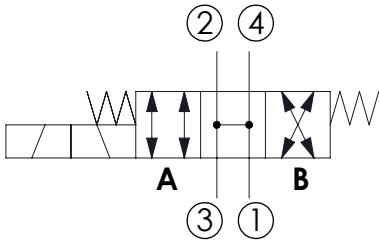
SOLENOID OPERATED CARTRIDGE

CEES-010-SEFN-54

DIRECT OPERATED
SPOOL TYPE



Dimensions: mm [inches]



SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Max. operating pressure on port 1:	210 bar (3000 psi)
Rated flow:	10 l/min (3 gpm)
Cavity:	SAE-08-4N
Weight:	0,18 kg (0,40 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 or M3 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB700101
Installation torque:	45 - 50 Nm (33 - 37 ft-lb)
MTFa:	150 - 1200 years: See technical spec.
Leakage:	120 cm ³ /min (@46 cSt) 7,3 in ³ /min (@46 cSt)

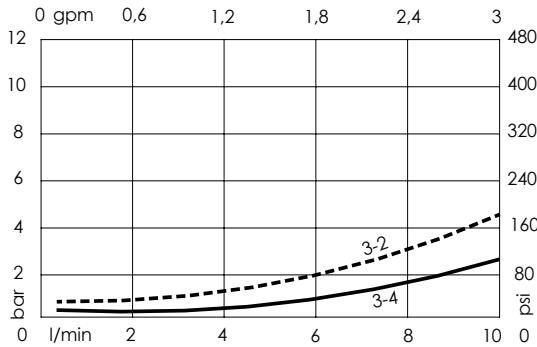
NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

OPTIONS

Standard	Push and pull manual override	Push pull and twist manual override

CURVES



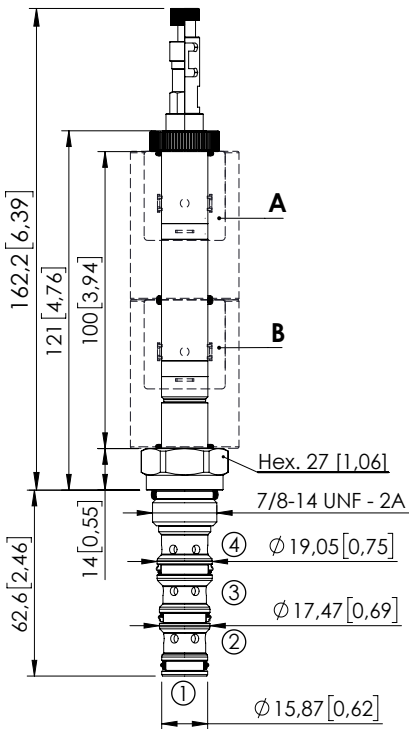
ORDERING CODES

Quick code	Description	Options	
CE000018	CEES-010-SEFN-54-S08-N350	Standard	
CE000099	CEES-010-SEFL-54-S08-N350	Push and pull manual override	
CE000188	CEES-010-SEFG-54-S08-N350	Push pull and twist manual override	

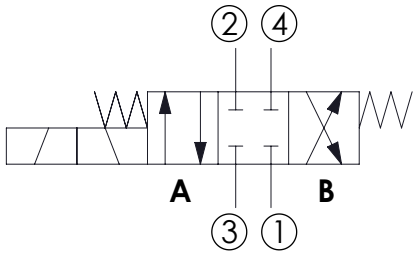
SOLENOID OPERATED CARTRIDGE

CEES-030-SEFN-51

DIRECT OPERATED
SPOOL TYPE



Dimensions: mm [inches]



SPECIFICATIONS

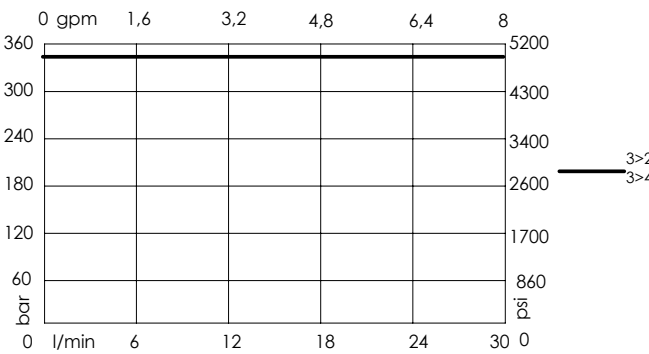
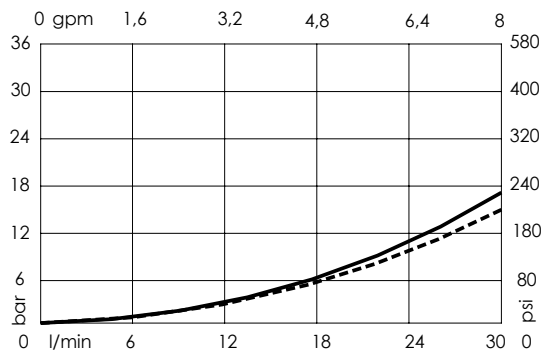
Max. operating pressure:	350 bar (5000 psi)
Max. operating pressure on port 1:	250 bar (3600 psi)
Rated flow:	30 l/min (8 gpm)
Cavity:	SAE-10-4N
Weight:	0,21 kg (0,68 lbs)
Min. voltage required:	90% of nominal
Coil type:	M16 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB600102
Installation torque:	55 - 62 Nm (41 - 46 ft-lb)
MTTFa:	150 - 1200 years: See technical spec.
Leakage:	120 cm ³ /min (@46 cSt) 7,3 in ³ /min (@46 cSt)

OPTIONS

Standard	Push and pull manual override	Push pull and twist manual override

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory



ORDERING CODES

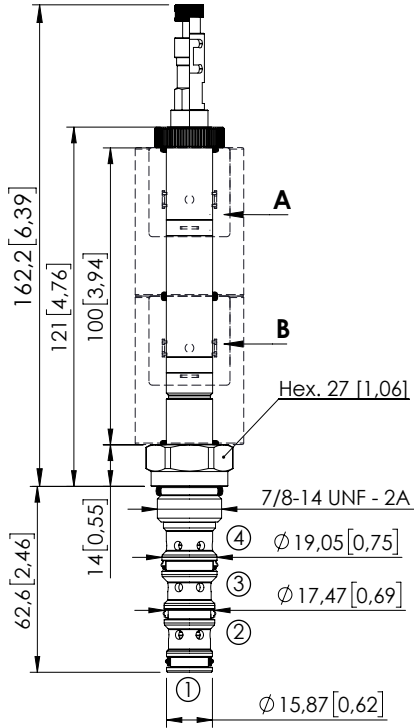
Quick code	Description	Options	
CE000999	CEES-030-SEFN-51-S10-N350	Standard	
CE001000	CEES-030-SEFL-51-S10-N350	Push and pull manual override	
CE001001	CEES-030-SEFG-51-S10-N350	Push pull and twist manual override	

Revision C

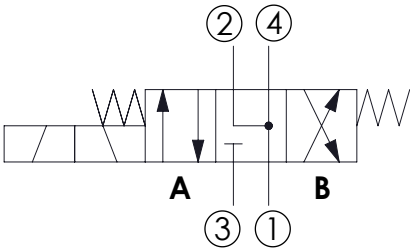
SOLENOID OPERATED CARTRIDGE

CEES-030-SEFN-52

DIRECT OPERATED
SPOOL TYPE



Dimensions: mm [inches]



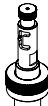
SPECIFICATIONS

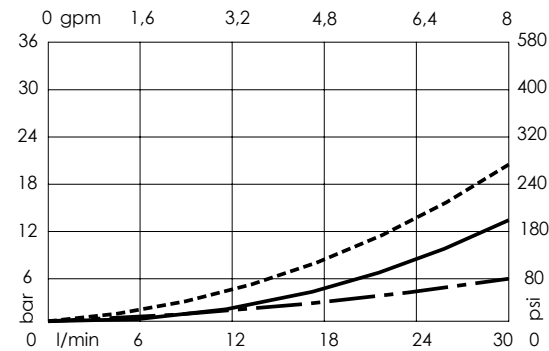
Max. operating pressure:	350 bar (5000 psi)
Max. operating pressure on port 1:	210 bar (3000 psi)
Rated flow:	30 l/min (8 gpm)
Cavity:	SAE-10-4N
Weight:	0,21 kg (0,68 lbs)
Min. voltage required:	90% of nominal
Coil type:	M16 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB600102
Installation torque:	55 - 62 Nm (41 - 46 ft-lb)
MTTFa:	150 - 1200 years: See technical spec.
Leakage:	120 cm ³ /min (@46 cSt) 7,3 in ³ /min (@46 cSt)

NOTES

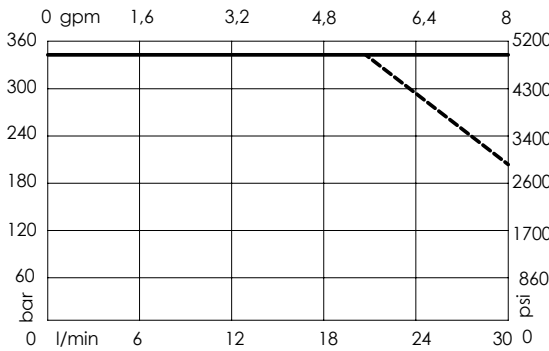
For other configurations/quick codes not available in this catalogue page please consult factory

OPTIONS

 Standard	 Push and pull manual override	 Push pull and twist manual override
---	--	--



--- 3-2
--- 2-1
--- 4-1

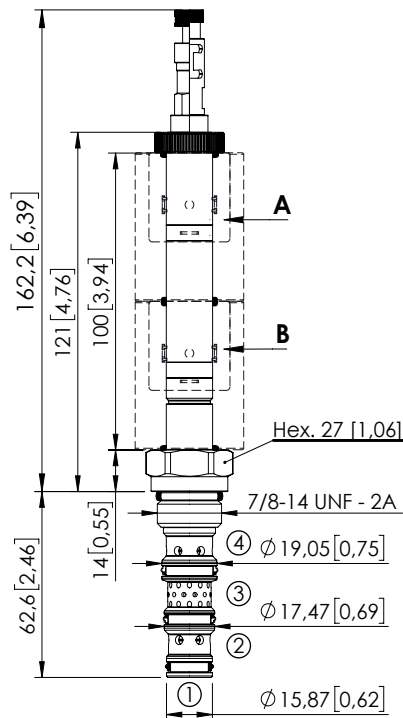


--- 3>4
--- 3>2

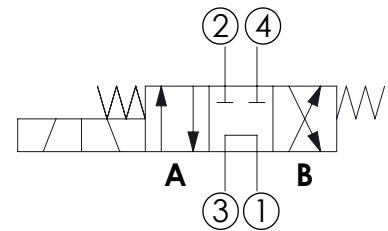
ORDERING CODES

Quick code	Description	Options	
CE001002	CEES-030-SEFN-52-S10-N350	Standard	
CE001003	CEES-030-SEFL-52-S10-N350	Push and pull manual override	
CE001004	CEES-030-SEFG-52-S10-N350	Push pull and twist manual override	

SOLENOID OPERATED CARTRIDGE

CEES-030-SEFN-53DIRECT OPERATED
SPOOL TYPE

Dimensions: mm [inches]

**SPECIFICATIONS**

Max. operating pressure:	350 bar (5000 psi)
Max. operating pressure on port 1:	250 bar (3600 psi)
Rated flow:	30 l/min (8 gpm)
Cavity:	SAE-10-4N
Weight:	0,2 kg (0,68 lbs)
Min. voltage required:	90% of nominal
Coil type:	M16 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB600102
Installation torque:	55 - 62 Nm (41 - 46 ft-lb)
MTTFa:	150 - 1200 years: See technical spec.
Leakage:	120 cm ³ /min (@46 cSt) 7,3 in ³ /min (@46 cSt)

NOTES

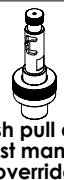
For other configurations/quick codes not available in this catalogue page please consult factory

OPTIONS

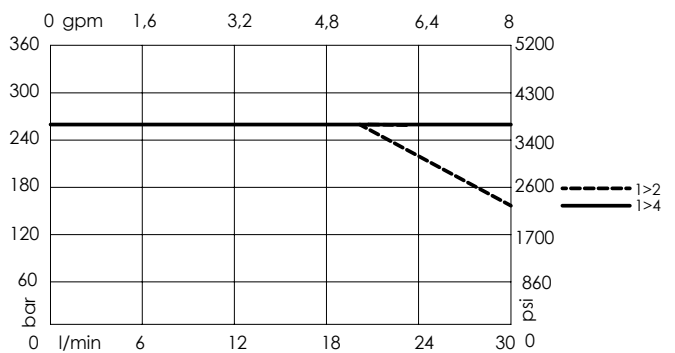
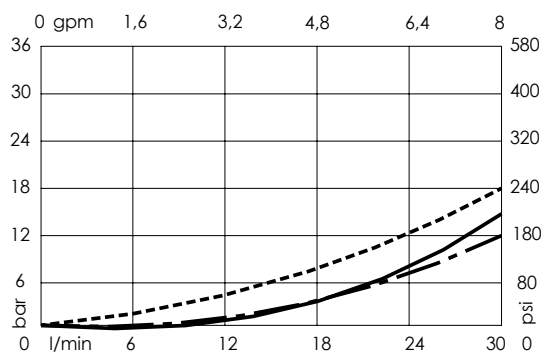
Standard



Push and pull manual override



Push pull and twist manual override

**ORDERING CODES**

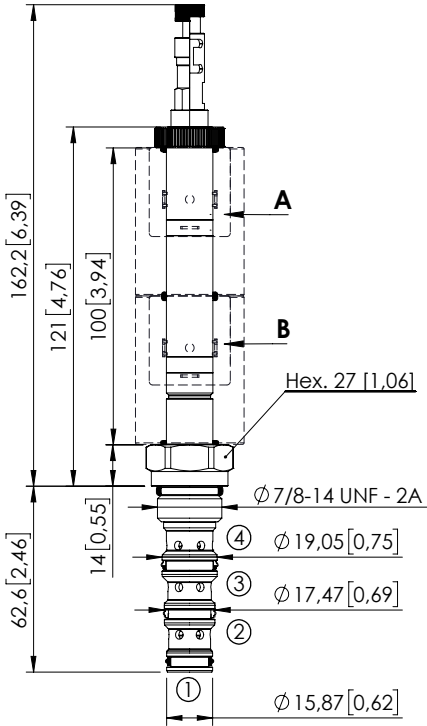
Quick code	Description	Options	
CE001005	CEES-030-SEFN-53-S10-N350	Standard	
CE001006	CEES-030-SEFL-53-S10-N350	Push and pull manual override	
CE001007	CEES-030-SEFG-53-S10-N350	Push pull and twist manual override	

Revision C

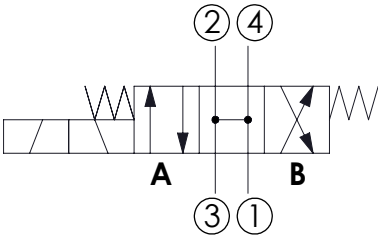
SOLENOID OPERATED CARTRIDGE

CEES-030-SEFN-54

DIRECT OPERATED
SPOOL TYPE



Dimensions: mm [inches]



SPECIFICATIONS

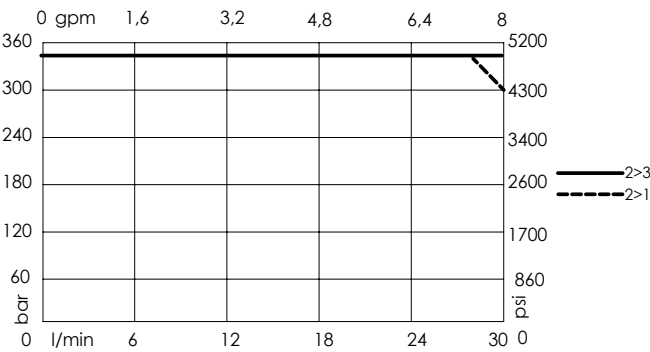
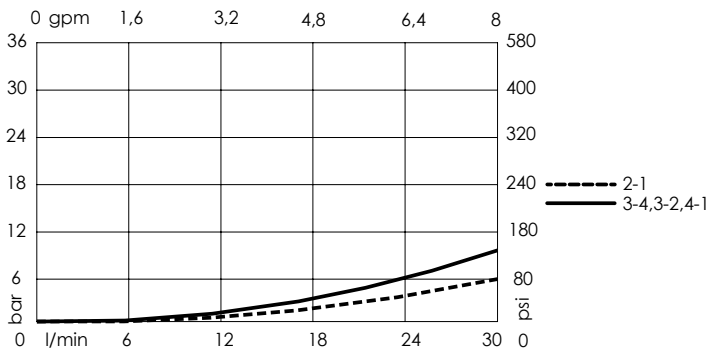
Max. operating pressure:	350 bar (5000 psi)
Max. operating pressure on port 1:	250 bar (3600 psi)
Rated flow:	30 l/min (8 gpm)
Cavity:	SAE-10-4N
Weight:	0,2 kg (0,68 lbs)
Min. voltage required:	90% of nominal
Coil type:	M16 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB600102
Installation torque:	55 - 62 Nm (41 - 46 ft-lb)
MTFa:	150 - 1200 years: See technical spec.
Leakage:	120 cm ³ /min (@46 cSt) 7,3 in ³ /min (@46 cSt)

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

OPTIONS

Standard	Push and pull manual override	Push pull and twist manual override



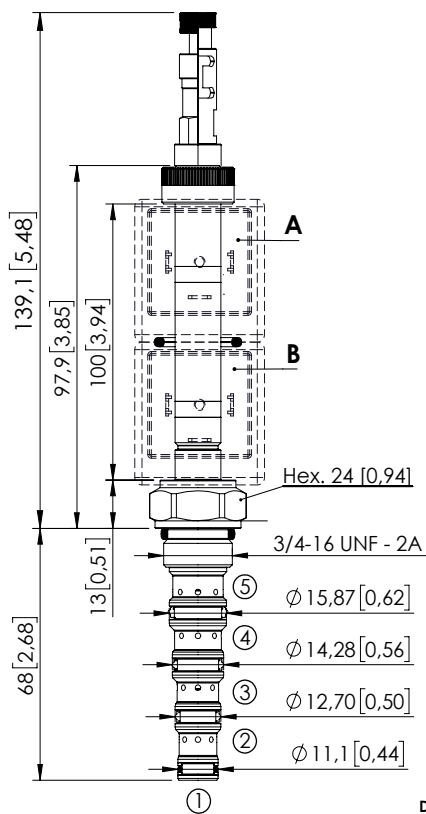
ORDERING CODES

Quick code	Description	Options	
CE001008	CEES-030-SEFN-54-S10-N350	Standard	
CE001009	CEES-030-SEFL-54-S10-N350	Push and pull manual override	
CE001010	CEES-030-SEFG-54-S10-N350	Push pull and twist manual override	

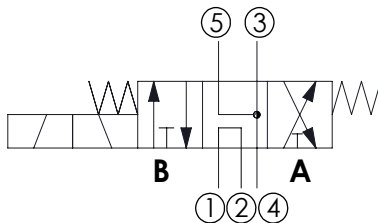
SOLENOID OPERATED CARTRIDGE

CEFS-010-SEFN-104

DIRECT OPERATED
SPOOL TYPE



Dimensions: mm [inches]



SPECIFICATIONS

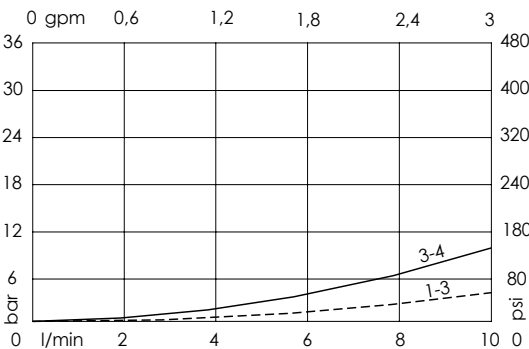
Max. operating pressure:	350 bar (5000 psi)
Max. operating pressure on port 1:	210 bar (3000 psi)
Rated flow:	10 l/min (3 gpm)
Cavity:	SAE-08-5N
Weight:	0,25 kg (0,68 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 or M3 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB900106
Installation torque:	45 - 50 Nm (41 - 46 ft-lb)
MTTFd:	150 - 1200 years: See technical spec.
Leakage:	120 cm ³ /min (@46 cSt) 7,3 in ³ /min (@46 cSt)

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

OPTIONS

Standard	Push and pull manual override	Push pull and twist manual override



ORDERING CODES

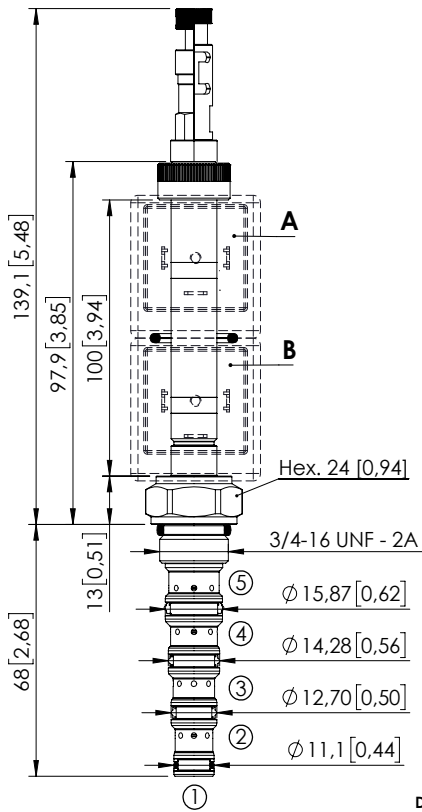
Quick code	Description	Options
CE001808	CEFS-010-SEFN-104-S08-N350	Standard
CE001809	CEFS-010-SEFL-104-S08-N350	Push and pull manual override
CE001810	CEFS-010-SEFG-104-S08-N350	Push pull and twist manual override

Revision A

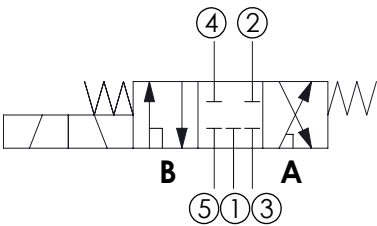
SOLENOID OPERATED CARTRIDGE

CEFS-010-SEFN-106

DIRECT OPERATED
SPOOL TYPE



Dimensions: mm [inches]



SPECIFICATIONS

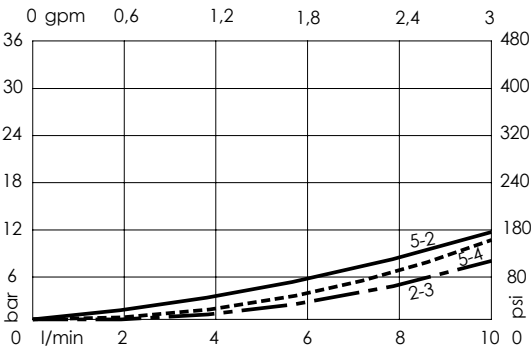
Max. operating pressure:	350 bar (5000 psi)
Max. operating pressure on port 1:	210 bar (3000 psi)
Rated flow:	10 l/min (3 gpm)
Cavity:	SAE-08-5N
Weight:	0,25 kg (0,68 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 or M3 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB900106
Installation torque:	45 - 50 Nm (41 - 46 ft-lb)
MTTFd:	150 - 1200 years: See technical spec.
Leakage:	120 cm ³ /min (@46 cSt) 7,3 in ³ /min (@46 cSt)

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

OPTIONS

Standard	Push and pull manual override	Push pull and twist manual override



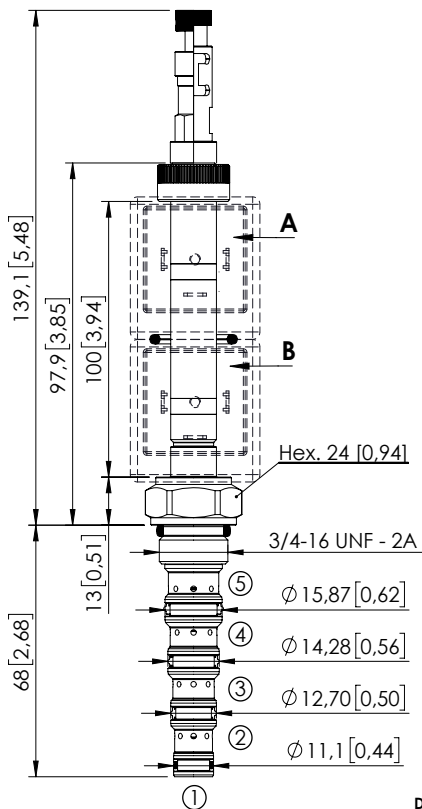
ORDERING CODES

Quick code	Description	Options
CE001814	CEFS-010-SEFN-106-S08-N350	Standard
CE001815	CEFS-010-SEFL-106-S08-N350	Push and pull manual override
CE001816	CEFS-010-SEFG-106-S08-N350	Push pull and twist manual override

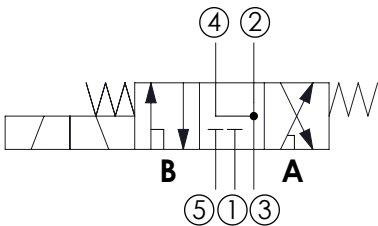
SOLENOID OPERATED CARTRIDGE

CEFS-010-SEFN-107

DIRECT OPERATED
SPOOL TYPE



Dimensions: mm [inches]



SPECIFICATIONS

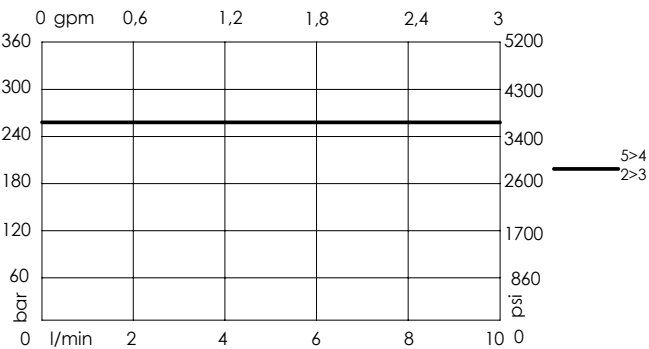
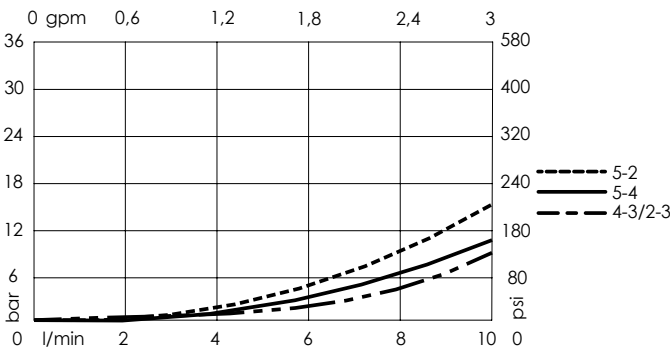
Max. operating pressure:	350 bar (5000 psi)
Max. operating pressure on port 1:	210 bar (3000 psi)
Rated flow:	10 l/min (3 gpm)
Cavity:	SAE-08-5N
Weight:	0.25 kg (0,68 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 or M3 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB900106
Installation torque:	45 - 50 Nm (41 - 46 ft-lb)
MTF _d :	150 - 1200 years: See technical spec.
Leakage:	120 cm ³ /min (@46 cSt) 7,3 in ³ /min (@46 cSt)

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

OPTIONS

 Standard	 Push and pull manual override	 Push pull and twist manual override
---	--	--



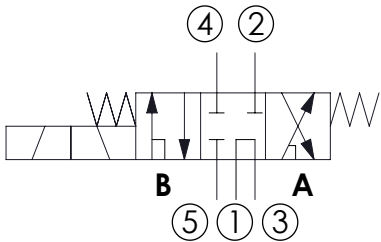
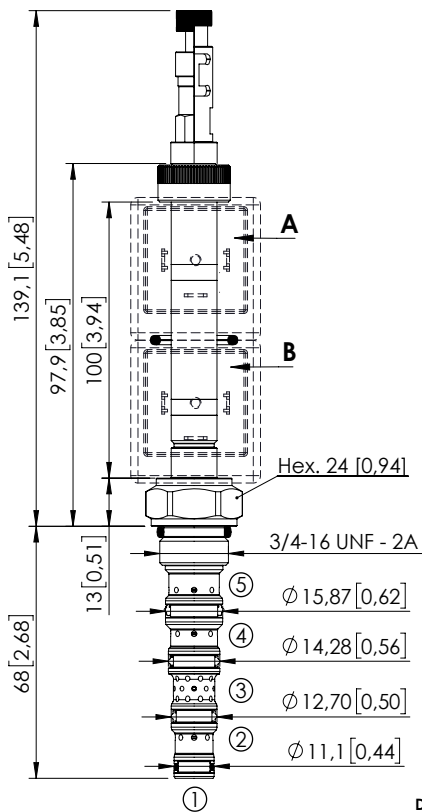
ORDERING CODES

Quick code	Description	Options
CE001817	CEFS-010-SEFN-107-S08-N350	Standard
CE001818	CEFS-010-SEFL-107-S08-N350	Push and pull manual override
CE001819	CEFS-010-SEFG-107-S08-N350	Push pull and twist manual override

SOLENOID OPERATED CARTRIDGE

CEFS-010-SEFN-108

DIRECT OPERATED
SPOOL TYPE



SPECIFICATIONS

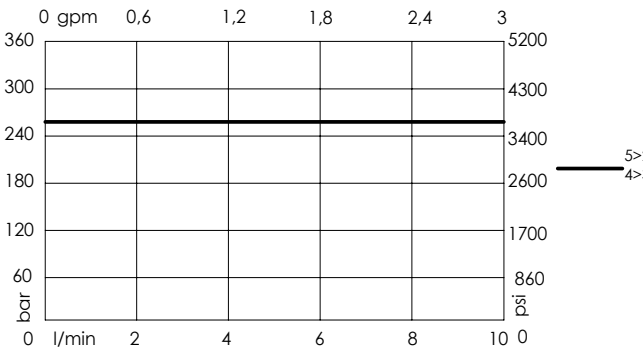
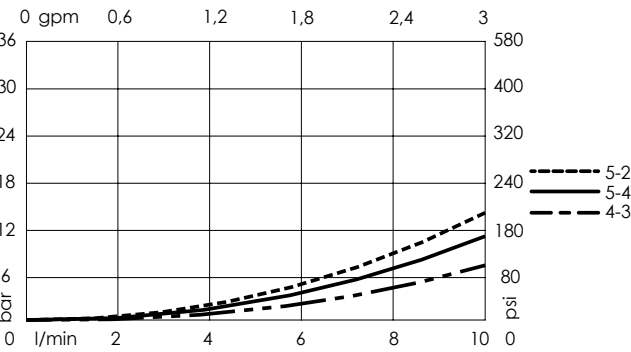
Max. operating pressure:	350 bar (5000 psi)
Max. operating pressure on port 1:	210 bar (3000 psi)
Rated flow:	10 l/min (3 gpm)
Cavity:	SAE-08-5N
Weight:	0.25 kg (0.68 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 or M3 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB900106
Installation torque:	45 - 50 Nm (41 - 46 ft-lb)
MTTFd:	150 - 1200 years: See technical spec.
Leakage:	120 cm ³ /min (@46 cSt) 7,3 in ³ /min (@46 cSt)

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

OPTIONS

Standard	Push and pull manual override	Push pull and twist manual override



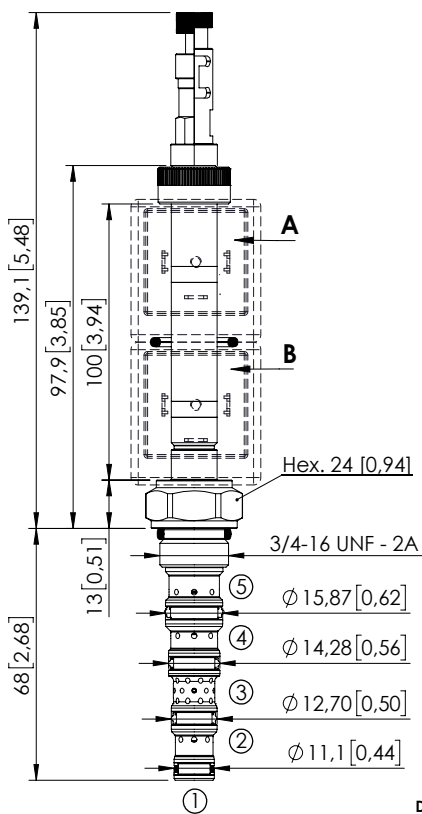
ORDERING CODES

Quick code	Description	Options
CE001820	CEFS-010-SEFN-108-S08-N350	Standard
CE001821	CEFS-010-SEFL-108-S08-N350	Push and pull manual override
CE001822	CEFS-010-SEFG-108-S08-N350	Push pull and twist manual override

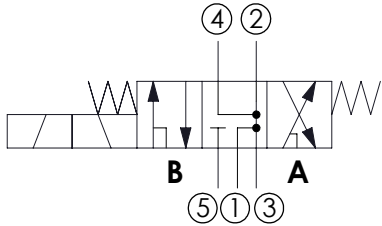
SOLENOID OPERATED CARTRIDGE

CEFS-010-SEFN-115

DIRECT OPERATED
SPOOL TYPE



Dimensions: mm [inches]



SPECIFICATIONS

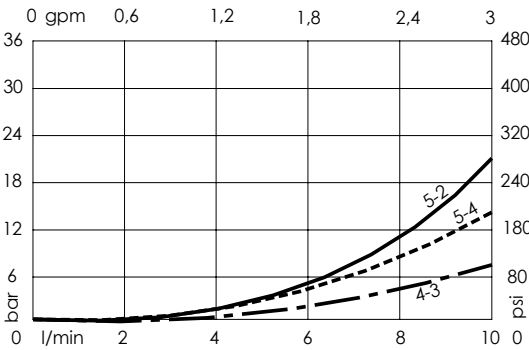
Max. operating pressure:	350 bar (5000 psi)
Max. operating pressure on port 1:	210 bar (3000 psi)
Rated flow:	10 l/min (3 gpm)
Cavity:	SAE-08-5N
Weight:	0,25 kg (0,68 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 or M6 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB900106
Installation torque:	45 - 50 Nm (41 - 46 ft-lb)
MTTFd:	150 - 1200 years: See technical spec.
Leakage:	120 cm ³ /min (@46 cSt) 7,3 in ³ /min (@46 cSt)

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

OPTIONS

Standard	Push and pull manual override	Push pull and twist manual override



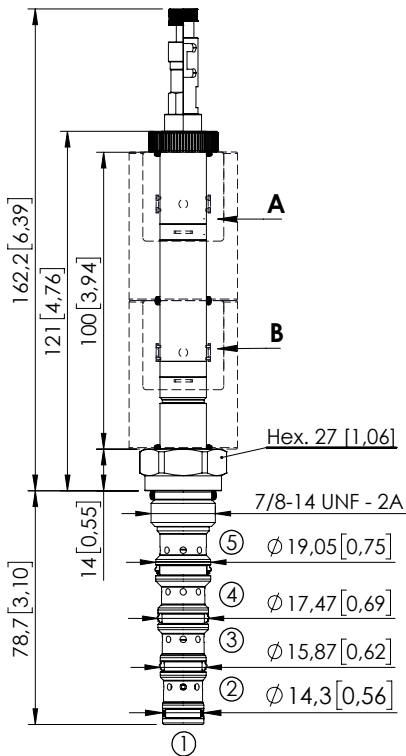
ORDERING CODES

Quick code	Description	Options
CE001823	CEFS-010-SEFN-115-S08-N350	Standard
CE001824	CEFS-010-SEFL-115-S08-N350	Push and pull manual override
CE001825	CEFS-010-SEFG-115-S08-N350	Push pull and twist manual override

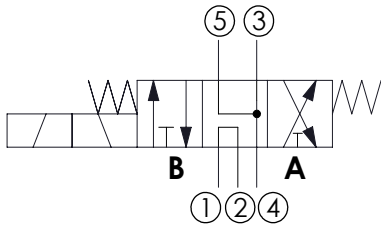
SOLENOID OPERATED CARTRIDGE

CEFS-030-SEFN-104

DIRECT OPERATED
SPOOL TYPE



Dimensions: mm [inches]



SPECIFICATIONS

Max. operating pressure: 350 bar (5000 psi)

Max. operating pressure on port 1: 210 bar (3000 psi)

Rated flow: 30 l/min (8 gpm)

Cavity: SAE-10-5N

Weight: 0,22 kg (0,68 lbs)

Min. voltage required: 90% of nominal

Coil type: M16 type

Ambient temperature: -20/+50 °C (-4/+122 °F)

Contamination class to ISO 4406: See technical spec.

Seal kit: RB900107

Installation torque: 55 - 62 Nm (41 - 46 ft-lb)

MTTFa: 150 - 1200 years: See technical spec.

Leakage: 120 cm³/min (@46 cSt)
7,3 in³/min (@46 cSt)

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

OPTIONS



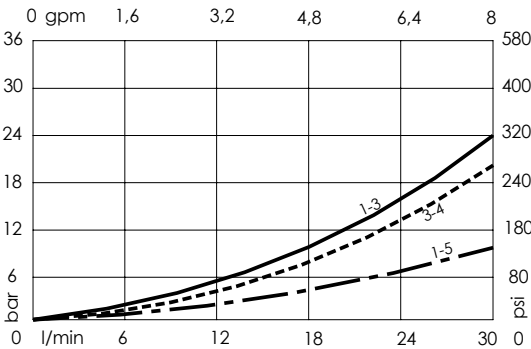
Standard



Push and
pull manual
override



Push pull and
twist manual
override

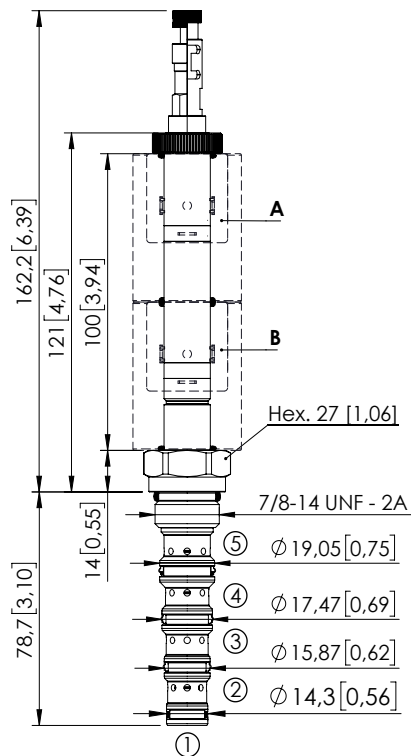


ORDERING CODES

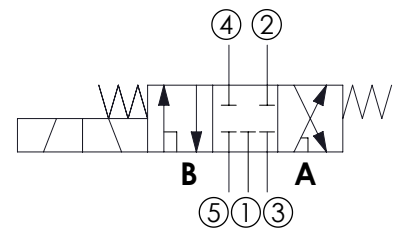
Quick code	Description	Options	
CE000795	CEFS-030-SEFN-104-S10-N350	Standard	
CE001011	CEFS-030-SEFL-104-S10-N350	Push and pull manual override	
CE001012	CEFS-030-SEFG-104-S10-N350	Push pull and twist manual override	

Revision D

SOLENOID OPERATED CARTRIDGE

CEFS-030-SEFN-106DIRECT OPERATED
SPOOL TYPE

Dimensions: mm [inches]

**SPECIFICATIONS**

Max. operating pressure:	350 bar (5000 psi)
Max. operating pressure on port 1:	250 bar (3600 psi)
Rated flow:	30 l/min (8 gpm)
Cavity:	SAE 10 5N
Weight:	0.22 kg (0.68 lbs)
Min. voltage required:	90% of nominal
Coil type:	M16 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB900107
Installation torque:	55 - 62 Nm (41 - 46 ft-lb)
MTF _a :	150 - 1200 years: See technical spec.
Leakage:	120 cm ³ /min (@46 cSt) 7.3 in ³ /min (@46 cSt)

NOTES

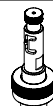
For other configurations/quick codes not available in this catalogue page please consult factory

OPTIONS

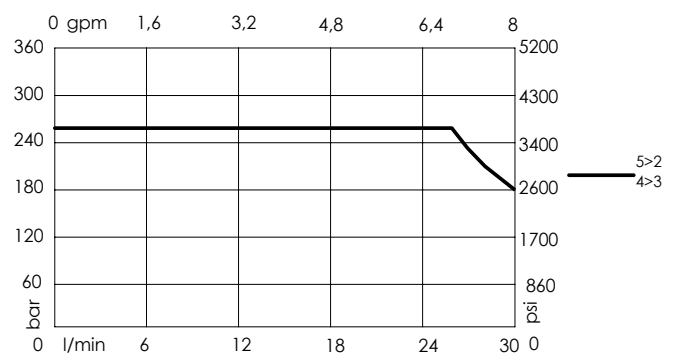
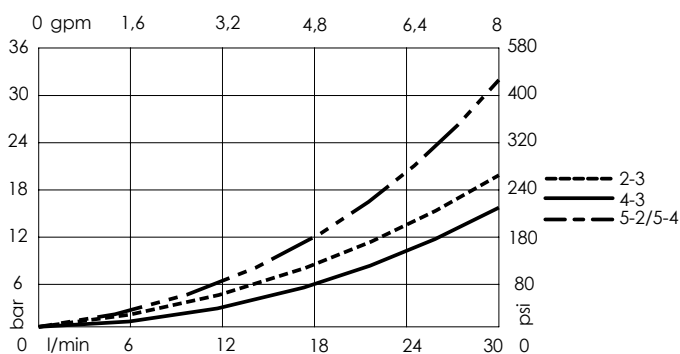
Standard



Push and pull manual override



Push pull and twist manual override

**ORDERING CODES**

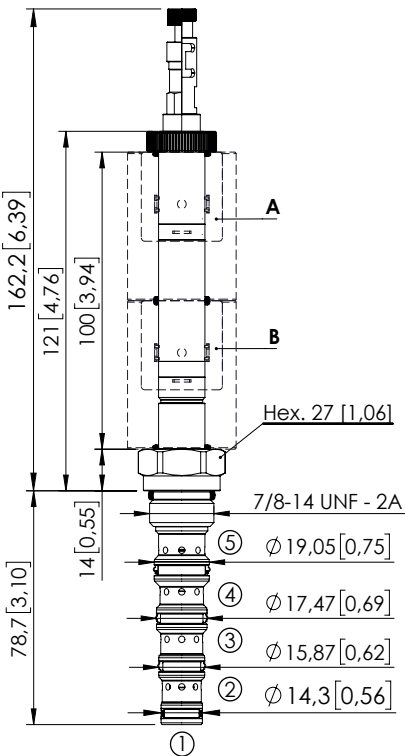
Quick code	Description	Options	
CE000794	CEFS-030-SEFN-106-S10-N350	Standard	
CE001015	CEFS-030-SEFL-106-S10-N350	Push and pull manual override	
CE001016	CEFS-030-SEFG-106-S10-N350	Push pull and twist manual override	

Revision E

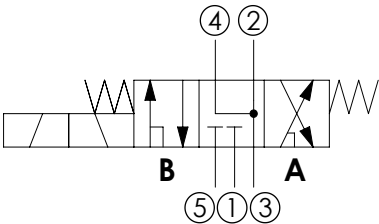
SOLENOID OPERATED CARTRIDGE

CEFS-030-SEFN-107

DIRECT OPERATED
SPOOL TYPE



Dimensions: mm [inches]



SPECIFICATIONS

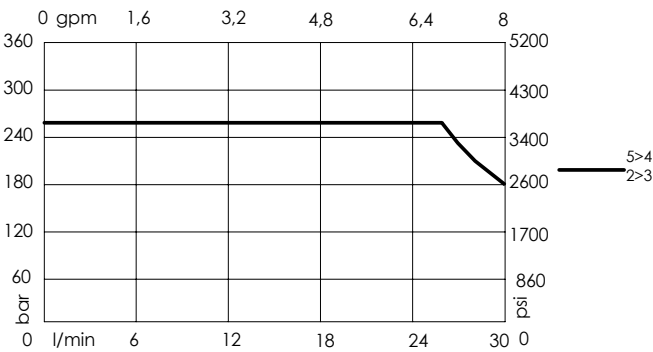
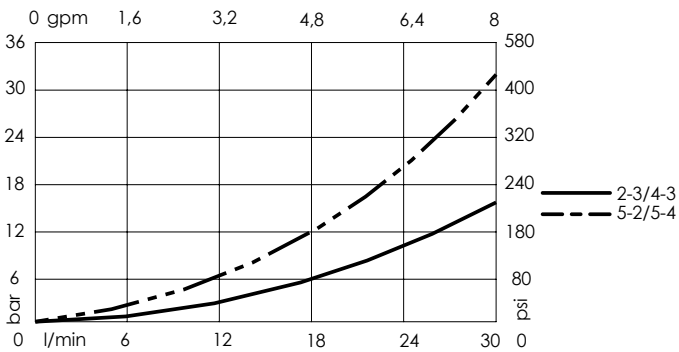
Max. operating pressure:	350 bar (5000 psi)
Max. operating pressure on port 1:	250 bar (3600 psi)
Rated flow:	30 l/min (8 gpm)
Cavity:	SAE 10 5N
Weight:	0.22 kg (0.68 lbs)
Min. voltage required:	90% of nominal
Coil type:	M16 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB900107
Installation torque:	55 - 62 Nm (41 - 46 ft-lb)
MTTFa:	150 - 1200 years: See technical spec.
Leakage:	120 cm ³ /min (@46 cSt) 7,3 in ³ /min (@46 cSt)

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

OPTIONS

Standard	Push and pull manual override	Push pull and twist manual override



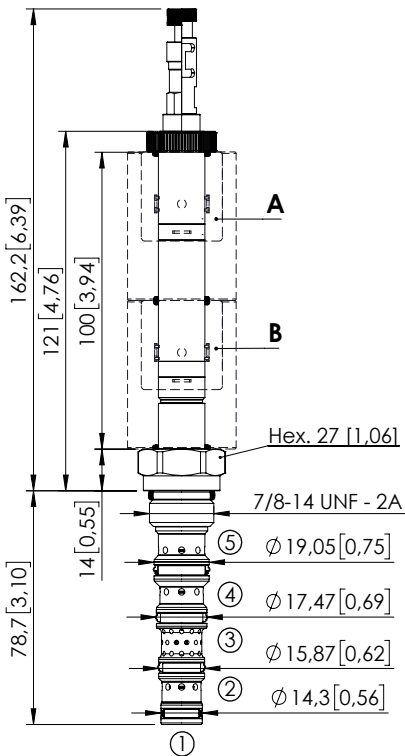
ORDERING CODES

Quick code	Description	Options	
CE000793	CEFS-030-SEFN-107-S10-N350	Standard	
CE001017	CEFS-030-SEFL-107-S10-N350	Push and pull manual override	
CE001018	CEFS-030-SEFG-107-S10-N350	Push pull and twist manual override	

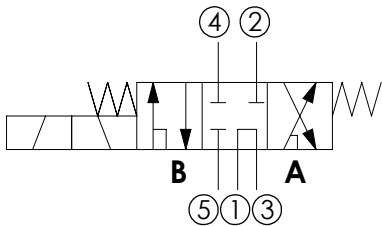
SOLENOID OPERATED CARTRIDGE

CEFS-030-SEFN-108

DIRECT OPERATED
SPOOL TYPE



Dimensions: mm [inches]



SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Max. operating pressure on port 1:	250 bar (3600 psi)
Rated flow:	30 l/min (8 gpm)
Cavity:	SAE 10 5N
Weight:	0,22 kg (0,48 lbs)
Min. voltage required:	90% of nominal
Coil type:	M16 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB900107
Installation torque:	55 - 62 Nm (41 - 46 ft-lb)
MTTFa:	150 - 1200 years: See technical spec.
Leakage:	120 cm ³ /min (@46 cSt) 7,3 in ³ /min (@46 cSt)

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

OPTIONS



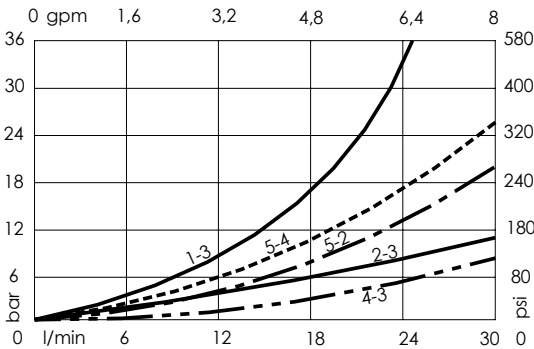
Standard



Push and
pull manual
override



Push pull and
twist manual
override



ORDERING CODES

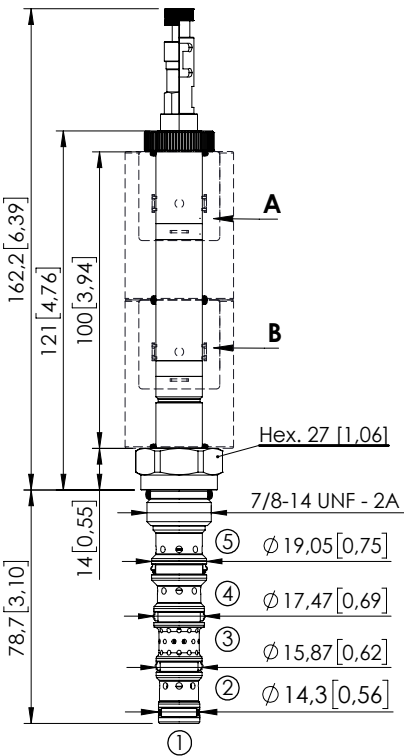
Quick code	Description	Options	
CE000792	CEFS-030-SEFN-108-S10-N350	Standard	
CE001019	CEFS-030-SEFL-108-S10-N350	Push and pull manual override	
CE001020	CEFS-030-SEFG-108-S10-N350	Push pull and twist manual override	

Revision D

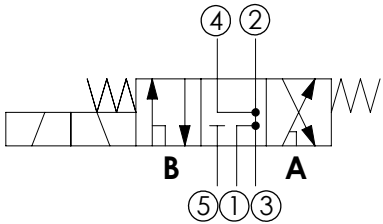
SOLENOID OPERATED CARTRIDGE

CEFS-030-SEFN-115

DIRECT OPERATED
SPOOL TYPE



Dimensions: mm [inches]



SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Max. operating pressure on port 1:	210 bar (3000 psi)
Rated flow:	30 l/min (8 gpm)
Cavity:	SAE 10 5N
Weight:	0,22 kg (0,68 lbs)
Min. voltage required:	90% of nominal
Coil type:	M16 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB900107
Installation torque:	55 - 62 Nm (41 - 46 ft-lb)
MTTFa:	150 - 1200 years: See technical spec.
Leakage:	120 cm ³ /min (@46 cSt) 7,3 in ³ /min (@46 cSt)

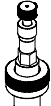
NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

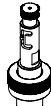
OPTIONS



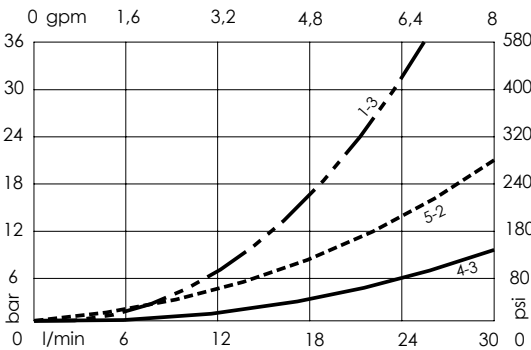
Standard



Push and
pull manual
override



Push pull and
twist manual
override



ORDERING CODES

Quick code	Description	Options
CE001027	CEFS-030-SEFN-115-S10-N350	Standard
CE001028	CEFS-030-SEFL-115-S10-N350	Push and pull manual override
CE001029	CEFS-030-SEFG-115-S10-N350	Push pull and twist manual override

Revision C



ATLANTIC

Fluid Tech
WWW.SUMY.IR

SECTION 9

Proportional
Cartridges

SECTION 9

PROPORTIONAL CARTRIDGES

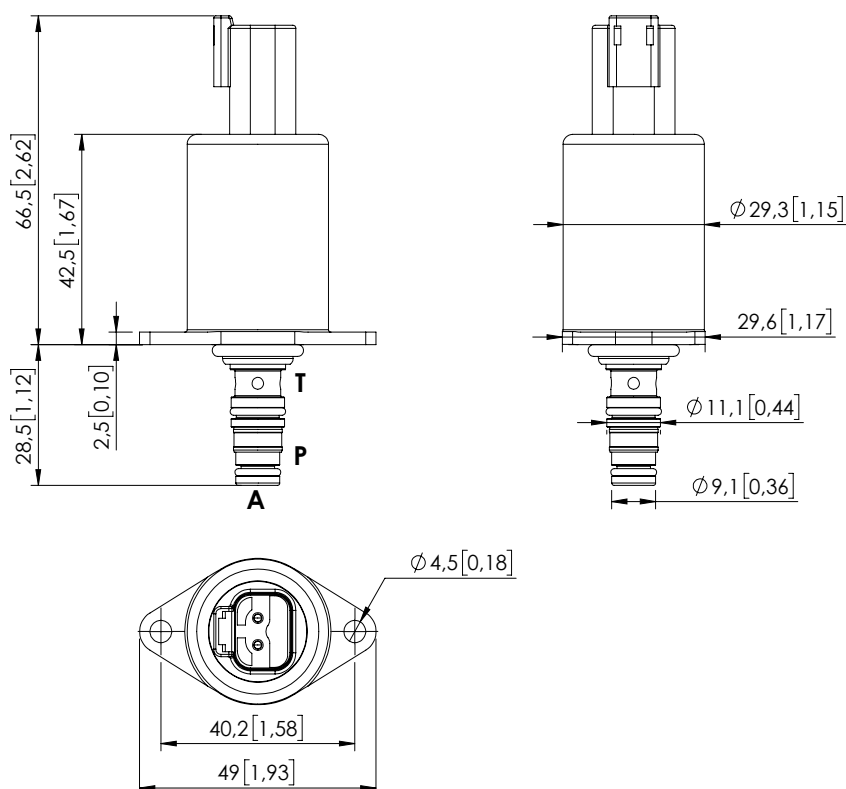


Hydraulic scheme	Valve description	Valve type	Rated flow l/min (gpm)	Max. pressure bar (psi)	Installation	Main port size or cavity type	Page
	CECS-005-PRPN	Proportional, direct operated, pressure reducing	5 (1,3)	50 (700)	DT04-2P	VP000371	9.01. 010
	CECT-080-PRPS	Proportional, pilot operated, reducing and relieving	80 (21)	250 (3600)	Cartridge	SAE-10-3N	9.02. 020
	CEBD-005-PLPS	Proportional, poppet type relief	5 (1,3)	350 (5000)	Cartridge	SAE-08-2N	9.03. 030
	CEBD-001-PMPS	Proportional, poppet type relief, for inverse controlled	0,6 (0,1)	350 (5000)	Cartridge	SAE-08-2N	9.04. 040
	CEBT-120-PMPS	Proportional, pilot operated, relieving, for fan drive	120 (32)	350 (5000)	Cartridge	SAE-10-2N	9.05. 050
	CEBT-120-PLPS	Proportional, pilot operated, relieving	120 (32)	350 (5000)	Cartridge	SAE-10-2N	9.06. 060
	CEBT-300-PLPS	Proportional, pilot operated, relieving	300 (79)	350 (5000)	Cartridge	SAE-16-2N	9.06. 070
	CEBT-500-PLPS	Proportional, pilot operated, relieving	500 (132)	350 (5000)	Cartridge	SAE-20-2N	9.06. 080
	CECS-020-FSPS	Proportional, non compensated, flow regulator	20 (5)	210 (3000)	Cartridge	SAE-10-3N	9.07. 090
	CECS-030-FSPS	Proportional, non compensated, flow regulator	30 (8)	210 (3000)	Cartridge	SAE-10-3N	9.07. 090
	CECS-040-FSPS	Proportional, non compensated, flow regulator	40 (11)	210 (3000)	Cartridge	SAE-10-3N	9.07. 090
	CECS-050-FRPM	Proportional, direct operated, flow regulator	50 (13)	320 (4600)	Cartridge	SAE-10-3N	9.08. 100
	CECS-140-FRPM	Proportional, direct operated, flow regulator	140 (37)	320 (4600)	Cartridge	SAE-16-3N	9.08. 110
	CEBD-020-PEPS	Proportional, normally closed	20 (5)	210 (3000)	Cartridge	SAE-08-2N	9.09. 120
	CEBD-020-PEPS	Proportional, normally closed	20 (5)	210 (3000)	Cartridge	VP000064	9.09. 130
	CEES-010-SEPN-51	Proportional, direct operated	10 (3)	350 (5000)	Cartridge	SAE-08-4N	9.10. 140
	CEES-030-SEPN-51	Proportional, direct operated	30 (8)	350 (5000)	Cartridge	SAE-10-4N	9.10. 190
	CEES-010-SEPN-52	Proportional, direct operated	10 (3)	350 (5000)	Cartridge	SAE-08-4N	9.11. 150
	CEES-030-SEPN-52	Proportional, direct operated	30 (8)	350 (5000)	Cartridge	SAE-10-4N	9.11. 200
	CEES-010-SEPN-106	Proportional, direct operated	10 (3)	350 (5000)	Cartridge	SAE-08-5N	9.12. 160
	CEES-030-SEPN-106	Proportional, direct operated	30 (8)	350 (5000)	Cartridge	SAE-10-5N	9.12. 210
	CEES-010-SEPN-107	Proportional, direct operated	10 (3)	350 (5000)	Cartridge	SAE-08-5N	9.13. 170
	CEES-030-SEPN-107	Proportional, direct operated	30 (8)	350 (5000)	Cartridge	SAE-10-5N	9.13. 220
	CEFS-010-SEPN-115	Proportional, direct operated	10 (3)	350 (5000)	Cartridge	SAE-08-5N	9.14. 180
	CEFS-030-SEPN-108	Proportional, direct operated	30 (8)	350 (5000)	Cartridge	SAE-10-5N	9.15. 230
	ELPC-030-SCCB	Proportional electronic controller	-	-	DIN 43650	-	9.16. 240

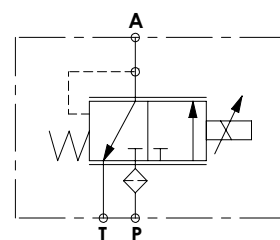
SOLENOID OPERATED CARTRIDGE

CECS-005-PRPN

PROPORTIONAL VALVES
DIRECT OPERATED
PRESSURE REDUCING



Dimensions: mm [inches]



SPECIFICATIONS

Max. P pressure:	50 bar (700 psi)
Max. T pressure:	30 bar (400 psi)
Rated flow:	5 l/min (1.3 gpm)
Cavity:	VP000371
Weight:	0,2 kg (0,44 lbs)
Connector type:	Deutsch DT04-2P
Internal leakage:	15 cc/min @ 25 bar, 46 cSt (0,9 in ³ /min @ 363 psi, 46 cSt)
Protection class:	Up to IP6K6 / IPX9K
PWM range recommended:	100 Hz
Seal kit:	RC100371
Mounting screw torque:	3,5 Nm (2,5 ft-lb)
MTTFd:	150 - 1200 years: See technical spec.
Filter on P port:	125 µm

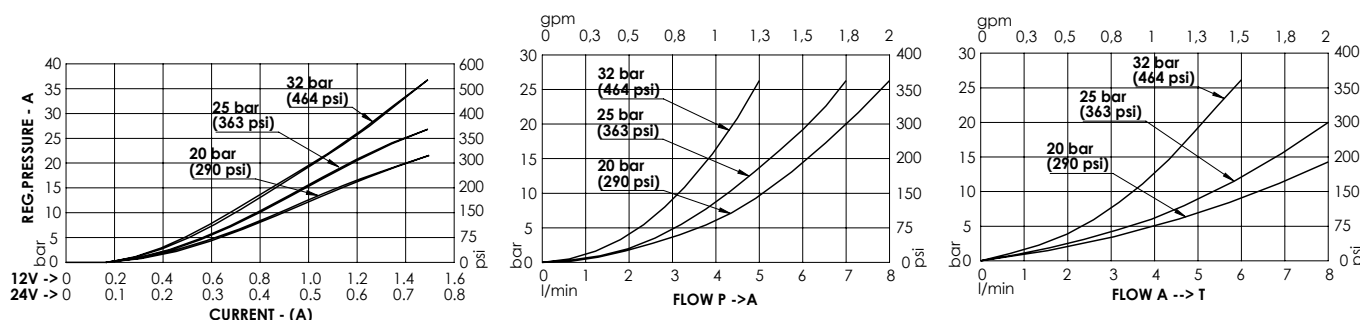
NOTES

Mounting screw not included

Mounting screw: 2 x M4x10 [M4x0,39] class 8.8

For other configurations/quick codes not available in this catalogue page please consult factory

CURVES



ORDERING CODES

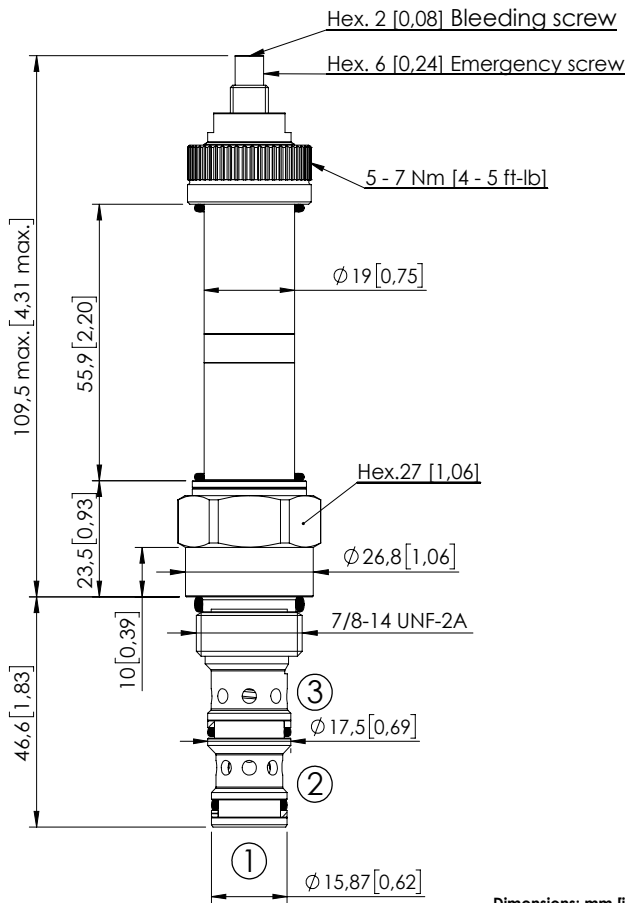
Quick code	Description	Regulated pressure range	Voltage (V)	Current (mA)	Resistance (Ω) ± 5%	Hysteresis pA
CE000850	CECS-005-PRPN-95-371-N020-12DT	0-20 bar (0-290 psi)	12	1500	4.72	< 0.4 bar (< 5,8 psi)
CE000851	CECS-005-PRPN-95-371-N020-24DT	0-20 bar (0-290 psi)	24	750	20.8	< 0.4 bar (< 5,8 psi)
CE000852	CECS-005-PRPN-95-371-N025-12DT	0-25 bar (0-363 psi)	12	1500	4.72	< 0.5 bar (< 7,3 psi)
CE000853	CECS-005-PRPN-95-371-N025-24DT	0-25 bar (0-363 psi)	24	750	20.8	< 0.5 bar (< 7,3 psi)
CE000893	CECS-005-PRPN-95-371-N032-12DT	0-32 bar (0-464 psi)	12	1500	4.72	< 0.7 bar (< 10,2 psi)
CE000862	CECS-005-PRPN-95-371-N032-24DT	0-32 bar (0-464 psi)	24	750	20.8	< 0.7 bar (< 10,2 psi)

Revision A1

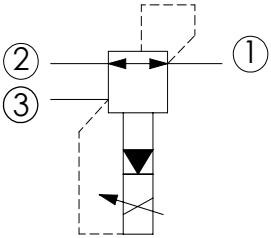
SOLENOID OPERATED CARTRIDGE

CECT-080-PRPS

PROPORTIONAL VALVES
PILOTED OPERATED PRESSURE
REDUCING AND RELIEVING



Dimensions: mm [inches]



SPECIFICATIONS

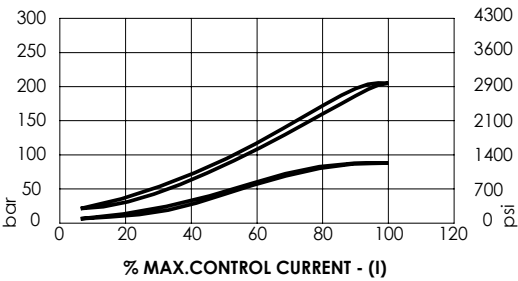
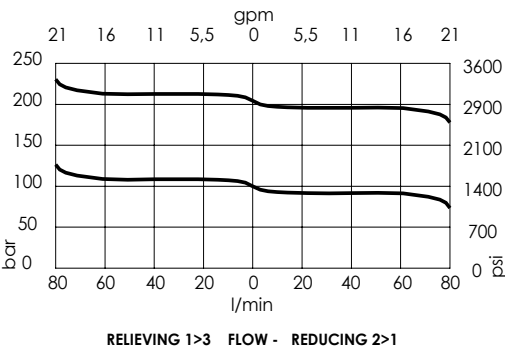
Max. operating pressure:	250 bar (3600 psi)
Rated flow:	80 l/min (32 gpm)
Cavity:	SAE-10-3N
Weight:	0,33 kg (0,46 lbs)
Type hydraulic fluid:	See Technical specif.
Hydraulic fluid temp. range:	-30/+100 °C (-22/+212 °F)
Contamination class to ISO 4406:	See technical spec.
Coil type:	M15 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
PWM range recommended:	120-150 Hz
Installation torque:	55 - 62 Nm (41 - 46 ft-lb)
Seal kit:	RA100092
MTTFd:	150 - 1200 years: See technical spec.

NOTES

Bleed air before use

For other configurations/quick codes not available in this catalogue page please consult factory

CURVES

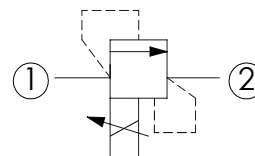
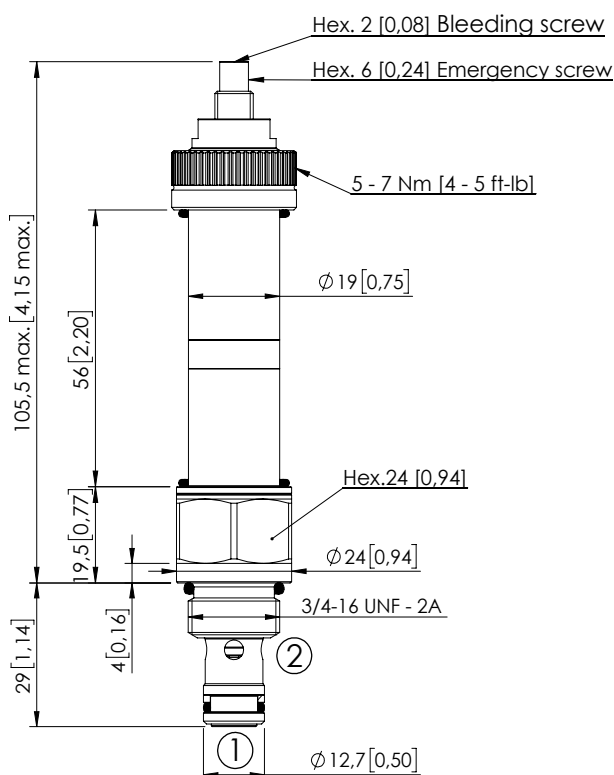


ORDERING CODES

Quick code	Description	Regulated pressure range	Threshold current (with 12VDC coil)	Max control current (with 12V DC coil)	Override
CE000122	CECT-080-PRPS-96-S10-V210	20-220 bar (300-3100 psi)	200 mA (+/-7%)	1700 mA (+/-7%)	Screw style
CE000915	CECT-080-PRPS-96-S10-V080	4-80 bar (60-1200 psi)	200 mA (+/-7%)	1800 mA (+/-7%)	Screw style

SOLENOID OPERATED CARTRIDGE

CEBD-005-PLPS

PROPORTIONAL VALVES
POPPET TYPE RELIEF

SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Rated flow:	5 l/min (1,3 gpm)
Cavity:	SAE-08-2N
Weight:	0,27 kg (0,35 lbs)
Type hydraulic fluid:	See Technical specif.
Hydraulic fluid temp. range:	-30/+100 °C (-22/+212 °F)
Contamination class to ISO 4406:	See technical spec.
Coil type:	M15 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
PWM range recommended:	150-180 Hz
Installation torque:	45 - 50 Nm (33 - 37 ft-lb)
Seal kit:	RA100081
MTF _d :	150 - 1200 years: See technical spec.

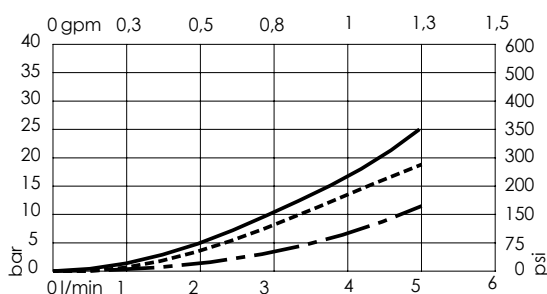
Dimensions: mm [inches]

NOTES

Bleed air before use

For other configurations/quick codes not available in this catalogue page please consult factory

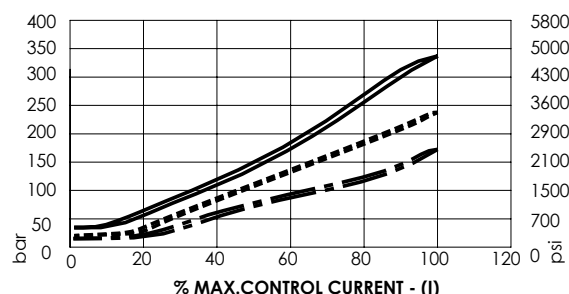
CURVES



CE000910 ———

CE000911 - - - - -

CE000912 - . - . -



ORDERING CODES

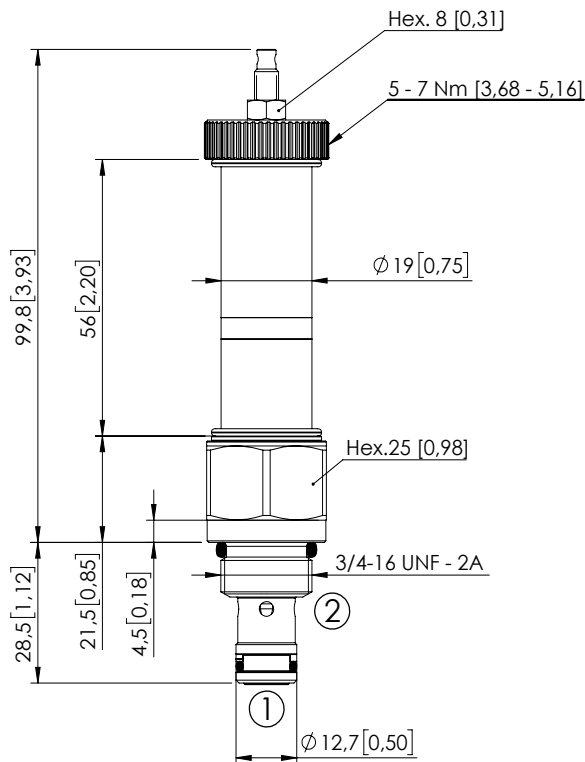
Quick code	Description	Setting range	Threshold current (with 12VDC coil)	Max control current (with 12V DC coil)	Override	
CE000910	CEBD-005-PLPS-92-S08-V350	25-340 bar (350-4500 psi)	250 mA (+/-7%)	1800 mA (+/-7%)	Screw style	
CE000911	CEBD-005-PLPS-92-S08-V200	17-250 bar (250-3600 psi)	200 mA (+/-7%)	1800 mA (+/-7%)	Screw style	
CE000912	CEBD-005-PLPS-92-S08-V100	9-160 bar (130-2300 psi)	200 mA (+/-7%)	1800 mA (+/-7%)	Screw style	

Revision B3

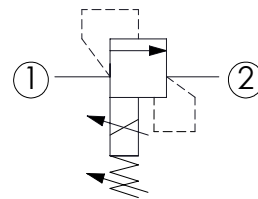
SOLENOID OPERATED CARTRIDGE

CEBD-001-PMPS

PROPORTIONAL VALVES
POPPET TYPE RELIEF
SPOOL TYPE
FOR INVERSE CONTROLLED



Dimensions: mm [inches]



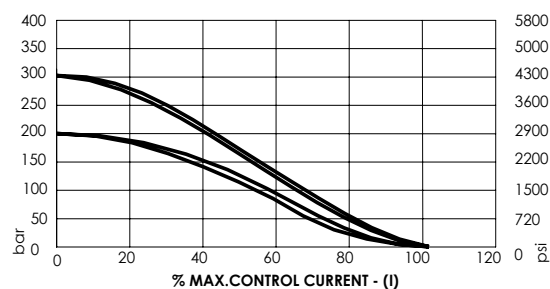
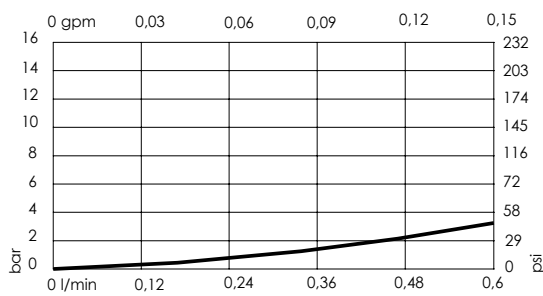
SPECIFICATIONS

Max. operating pressure:	320 bar (4600 psi)
Rated flow:	0,6 l/min (0,15 gpm)
Cavity:	SAE-08-2N
Weight:	0,12 kg (0,44 lbs)
Type hydraulic fluid:	See Technical specif.
Hydraulic fluid temp. range:	-30/+100 °C (-22/+212 °F)
Contamination class to ISO 4406:	See technical spec.
Coil type:	M15 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
PWM range recommended:	150-180 Hz
Installation torque:	45 - 50 Nm (33,2 - 36,9 ft-lb)
Seal kit:	RA100081
MTFa:	150 - 1200 years: See technical spec.

NOTES

Pressure decreasing with current increasing.
Maximum pressure value can be adjusted manually within a range.
For other configurations/quick codes not available in this catalogue page please consult factory

CURVES



ORDERING CODES

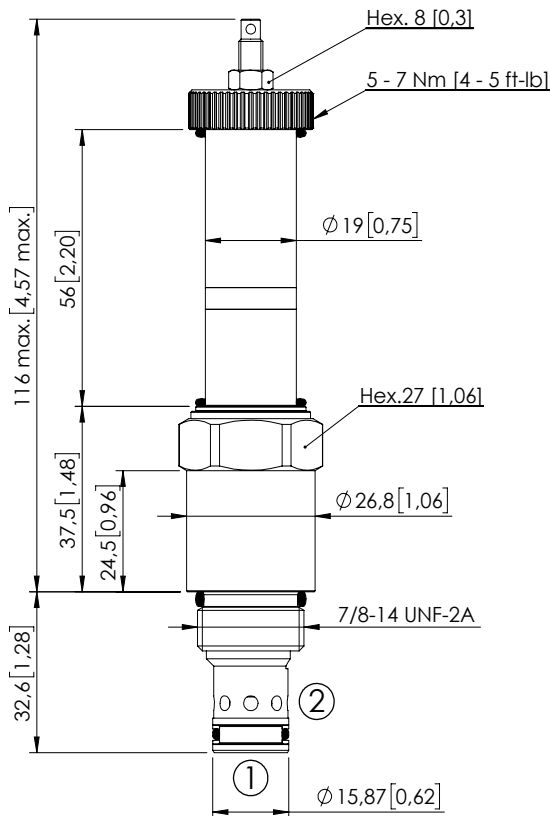
Quick code	Description	Max. pressure setting range	Standard setting	Threshold current (with 12VDC coil)	Max control current (with 12V DC coil)	Override
CE001120	CEBD-001-PMPS-92-S08-V320	200-320 bar (2900-4600 psi)	210 bar (3000 psi)	200 mA (+/-7%)	1600 mA (+/-7%)	Screw style

Revision B

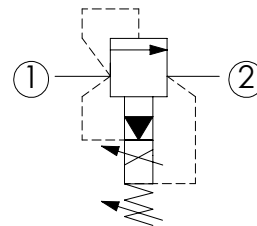
SOLENOID OPERATED CARTRIDGE

CEBT-120-PMPS

PROPORTIONAL VALVES
POPPET TYPE RELIEF
SPOOL TYPE
FOR INVERSE CONTROLLED



Dimensions: mm [inches]



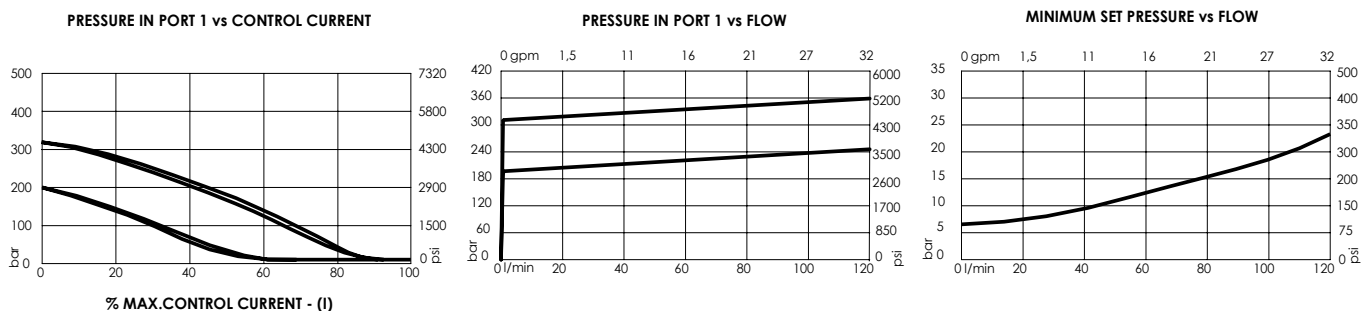
SPECIFICATIONS

Max. operating pressure (port 1):	320 bar (4600 psi)
Max. operating pressure (port 2):	250 bar (3600 psi)
Rated flow:	120 l/min (32 gpm)
Pilot oil:	< 0,8 l/min (<0,2 gpm)
Type hydraulic fluid:	See Technical specif.
Hydraulic fluid temp. range:	-30/+100 °C (-22/+212 °F)
Viscosity range:	10 to 380 mm²/s
Contamination class to ISO 4406:	See technical spec.
Max. int. leakage:	200 cm³/min (@46 cSt, Δp=250 bar) 0,05 in³/min (@46 cSt, Δp=3600 psi)
Step response:	80 ms (Depending on the system)
Cavity:	SAE-10-2N
Weight:	0,21 kg (0,46 lbs)
Coil type:	M15 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Hysteresis:	< 4% of the max. set pressure
PWM range recommended:	150-180 Hz
Installation torque:	55 - 62 Nm (41 - 46 ft-lb)
Seal kit:	RB100082
MTTFd:	150 - 1200 years: See technical spec.

NOTES

Pressure decreasing with current increasing.
Maximum pressure value can be adjusted manually within a range.
For other configurations/quick codes not available in this catalogue page please consult factory

CURVES



ORDERING CODES

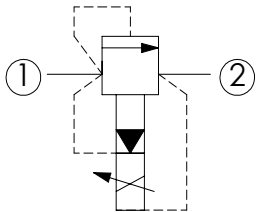
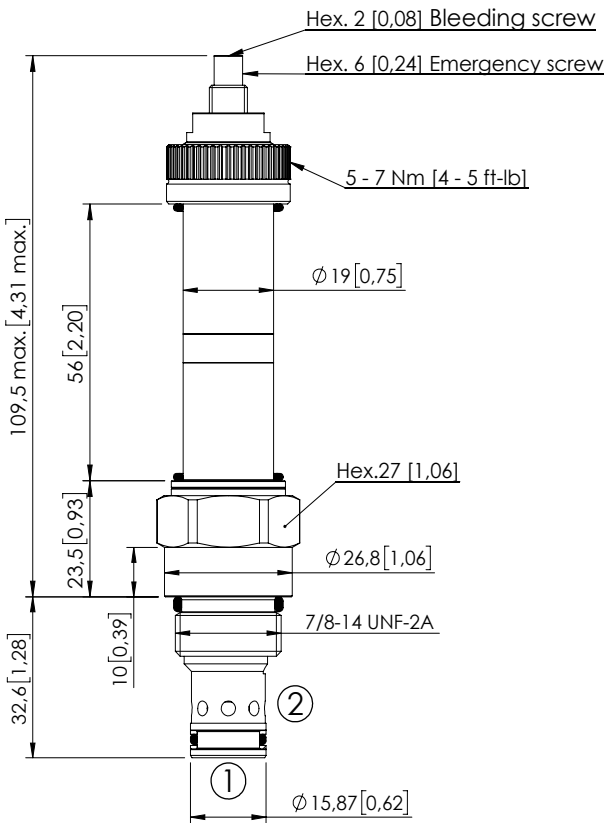
Quick code	Description	Minimum pressure	Max. pressure setting range	Standard setting	Threshold current (with 12VDC coil)	Max control current (with 12V DC coil)
CE000890	CEBT-120-PMPS-91-S10-V320	7 bar (100 psi)	200-320 bar (2900-4600 psi)	210 bar (3000 psi)	200 mA (+/-7%)	1600 mA (+/-7%)

Revision B3

SOLENOID OPERATED CARTRIDGE

CEBT-120-PLPS

PROPORTIONAL VALVES
PILOTED RELIEF
SPOOL TYPE



SPECIFICATIONS

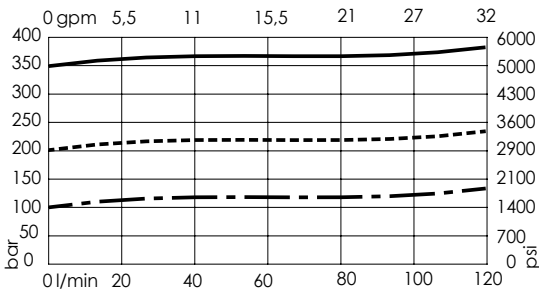
Max. operating pressure:	350 bar (5000 psi)
Rated flow:	120 l/min (32 gpm)
Cavity:	SAE-10-2N
Weight:	0,31 kg (0,44 lbs)
Type hydraulic fluid:	See Technical specif.
Hydraulic fluid temp. range:	-30/+100 °C (-22/+212 °F)
Contamination class to ISO 4406:	See technical spec.
Coil type:	M15 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
PWM range recommended:	150-180 Hz
Installation torque:	55 - 62 Nm (41 - 46 ft-lb)
Max. int. leakage:	200 cm ³ /min (@46 cSt) 12 in ³ /min (@46 cSt)
Seal kit:	RB100082
MTTFd:	150 - 1200 years: See technical spec.

Dimensions: mm [inches]

NOTES

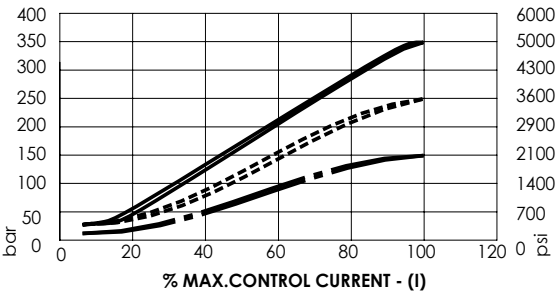
Bleed air before use
For other configurations/quick codes not available in this catalogue page please consult factory

CURVES



CE000119 1>2————

CE000120 1>2-----



CE000121 1>2— — —

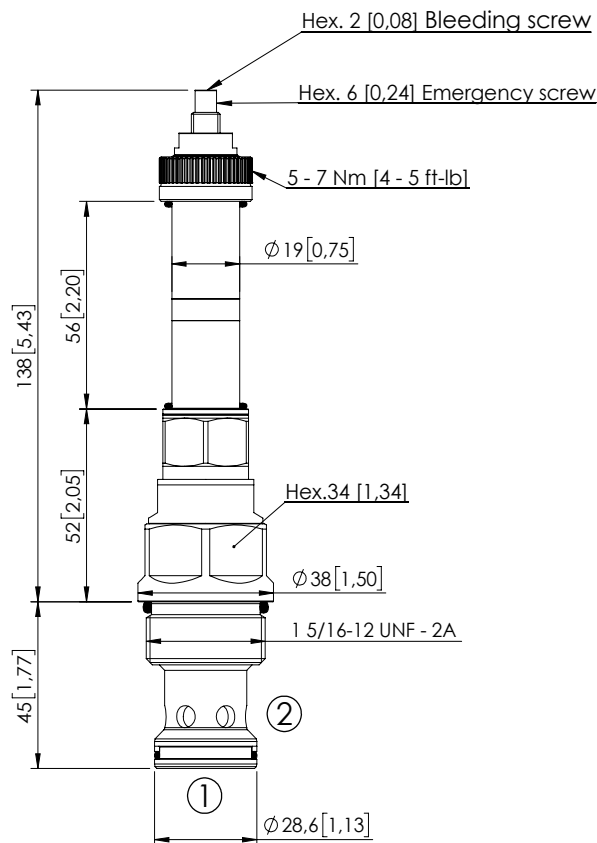
ORDERING CODES

Quick code	Description	Setting range	Threshold current (with 12VDC coil)	Max control current (with 12V DC coil)	Override
CE000119	CEBT-120-PLPS-91-S10-V350	30-350 bar (450-5000 psi)	200 mA (+/-7%)	1600 mA (+/-7%)	Screw style
CE000120	CEBT-120-PLPS-91-S10-V200	20-220 bar (300-3100 psi)	200 mA (+/-7%)	1700 mA (+/-7%)	Screw style
CE000121	CEBT-120-PLPS-91-S10-V100	15-90 bar (200-1300 psi)	200 mA (+/-7%)	1700 mA (+/-7%)	Screw style

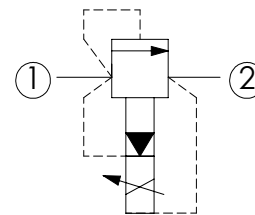
SOLENOID OPERATED CARTRIDGE

CEBT-300-PLPS

PROPORTIONAL VALVES
PILOTED RELIEF
SPOOL TYPE



Dimensions: mm [inches]



SPECIFICATIONS

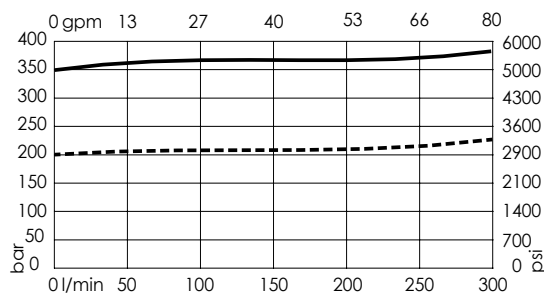
Max. operating pressure:	350 bar (5000 psi)
Rated flow:	300 l/min (80 gpm)
Cavity:	SAE-16-2N
Weight:	0,6 kg (1,10 lbs)
Type hydraulic fluid:	See Technical specif.
Hydraulic fluid temp. range:	-30/+100 °C (-22/+212 °F)
Contamination class to ISO 4406:	See technical spec.
Coil type:	M15 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
PWM range recommended:	150-180 Hz
Installation torque:	118 - 132 Nm (87 - 97 ft-lb)
Max. int. leakage:	200 cm ³ /min (@46 cSt) 12 in ³ /min (@46 cSt)
Seal kit:	RA100084
MTF _d :	150 - 1200 years: See technical spec.

NOTES

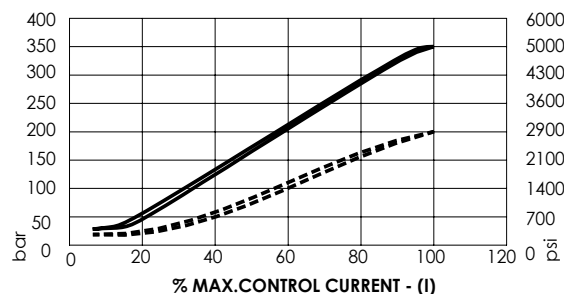
Bleed air before use

For other configurations/quick codes not available in this catalogue page please consult factory

CURVES



CE000880 1>2————



CE000895 1>2-----

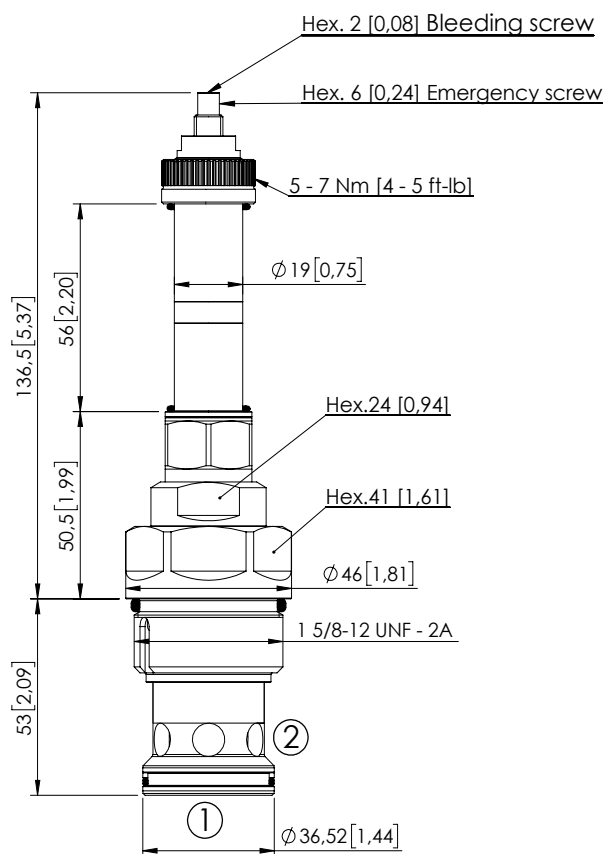
ORDERING CODES

Quick code	Description	Proportional setting range	Threshold current (with 12VDC coil)	Max control current (with 12V DC coil)	Override	
CE000880	CEBT-300-PLPS-91-S16-V350	30-350 bar (450-5000 psi)	200 mA (+/-7%)	1600 mA (+/-7%)	Screw style	
CE000895	CEBT-300-PLPS-91-S16-V200	20-200 bar (300-2900 psi)	200 mA (+/-7%)	1700 mA (+/-7%)	Screw style	

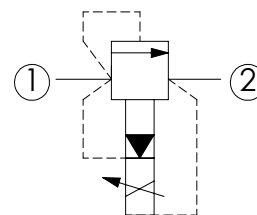
Revision B3

SOLENOID OPERATED CARTRIDGE

CEBT-500-PLPS

PROPORTIONAL VALVES
PILOTED RELIEF
SPOOL TYPE

Dimensions: mm [inches]



SPECIFICATIONS

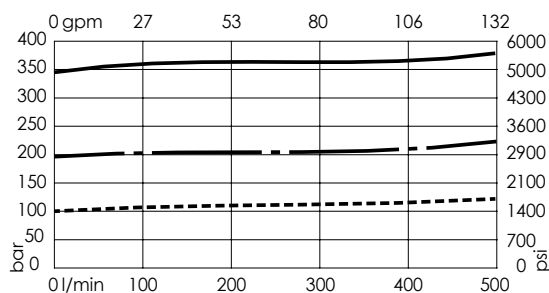
Max. operating pressure:	350 bar (5000 psi)
Rated flow:	500 l/min (132 gpm)
Cavity:	SAE-20-2N
Weight:	0,8 kg (1,76 lbs)
Type hydraulic fluid:	See Technical specif.
Hydraulic fluid temp. range:	-30/+100 °C (-22/+212 °F)
Contamination class to ISO 4406:	See technical spec.
Coil type:	M15 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
PWM range recommended:	150-180 Hz
Installation torque:	230 - 250 Nm (170 - 184 ft-lb)
Max. int. leakage:	200 cm ³ /min (@46 cSt) 12 in ³ /min (@46 cSt)
Seal kit:	RA100085
MTTFa:	150 - 1200 years: See technical spec.

NOTES

Bleed air before use

For other configurations/quick codes not available in this catalogue page please consult factory

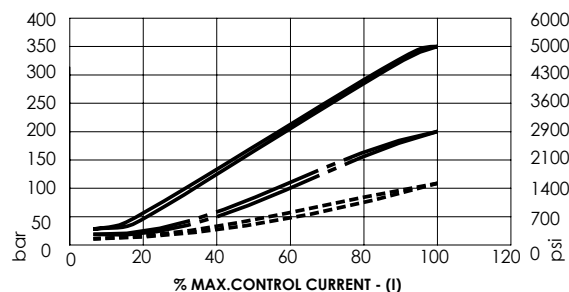
CURVES



CE000770 1>2———

CE000771 1>2———

CE000772 1>2-----



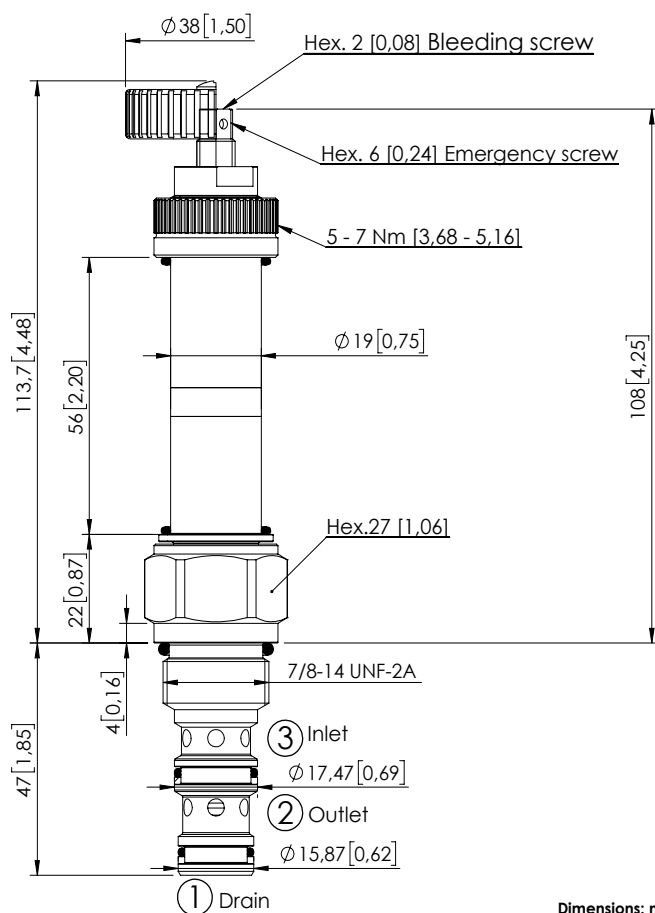
ORDERING CODES

Quick code	Description	Proportional setting range	Threshold current (with 12VDC coil)	Max control current (with 12V DC coil)	Override	
CE000770	CEBT-500-PLPS-91-S20-V350	30-350 bar (450-5000 psi)	200 mA (+/-7%)	1600 mA (+/-7%)	Screw style	
CE000771	CEBT-500-PLPS-91-S20-V200	20-220 bar (300-3100 psi)	200 mA (+/-7%)	1700 mA (+/-7%)	Screw style	
CE000772	CEBT-500-PLPS-91-S20-V100	15-90 bar (200-1300 psi)	200 mA (+/-7%)	1700 mA (+/-7%)	Screw style	

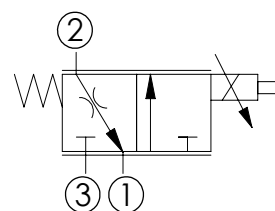
Revision B3

SOLENOID OPERATED CARTRIDGE

CECS-040-FSPS

PROPORTIONAL VALVES
NON COMPENSATED
FLOW REGULATOR

Dimensions: mm [inches]



SPECIFICATIONS

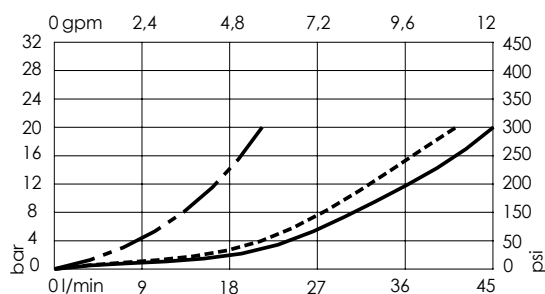
Max. operating pressure:	210 bar (3000 psi)
Rated flow:	40 l/min (11 gpm)
Cavity:	SAE-10-3N
Weight:	0,22 kg (0,49 lbs)
Type hydraulic fluid:	See Technical specif.
Hydraulic fluid temp. range:	-30/+100 °C (-22/+212 °F)
Contamination class to ISO 4406:	See technical spec.
Coil type:	M15 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
PWM range recommended:	150-180 Hz
Installation torque:	55 - 62 Nm (41 - 46 ft-lb)
Max. int. leakage:	150 cm ³ /min (@46 cSt) 9 in ³ /min (@46 cSt)
Seal kit:	RA100092
MTTFd:	150 - 1200 years: See technical spec.

NOTES

Bleed air before use

For other configurations/quick codes not available in this catalogue page please consult factory

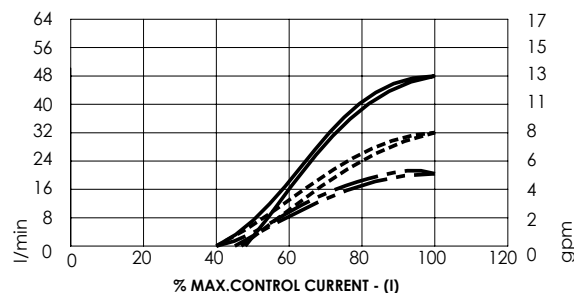
CURVES



CE000111 3>2 —————

CE000112 3>2 - - - - -

CE000113 3>2 - - - - -



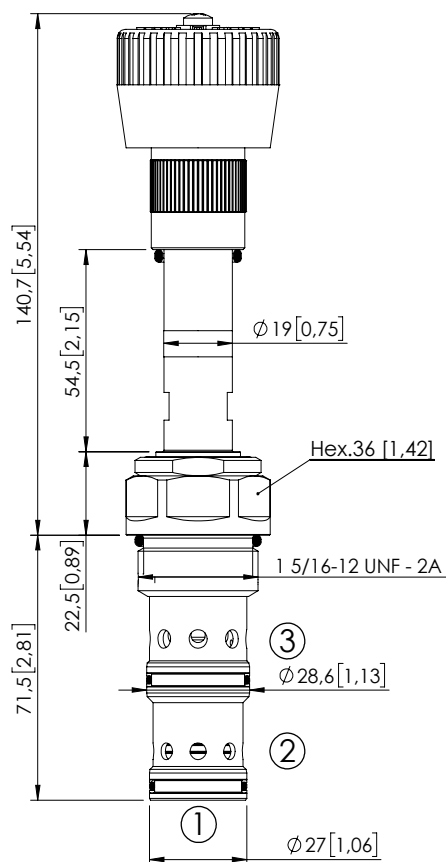
ORDERING CODES

Quick code	Description	Rated flow	Threshold current (with 12VDC coil)	Max control current (with 12V DC coil)	Override	
CE000111	CECS-040-FSPS-85-S10-V210	40 l/min (11 gpm)	800 mA (+/-7%)	1600 mA (+/-7%)	Screw style	
CE000112	CECS-030-FSPS-85-S10-V210	30 l/min (8 gpm)	700 mA (+/-7%)	1500 mA (+/-7%)	Screw style	
CE000113	CECS-020-FSPS-85-S10-V210	20 l/min (6 gpm)	700 mA (+/-7%)	1400 mA (+/-7%)	Screw style	
CE000960	CECS-040-FSPV-85-S10-V210	40 l/min (11 gpm)	800 mA (+/-7%)	1600 mA (+/-7%)	Handknob style	
CE000906	CECS-030-FSPV-85-S10-V210	30 l/min (8 gpm)	700 mA (+/-7%)	1500 mA (+/-7%)	Handknob style	
CE000489	CECS-020-FSPV-85-S10-V210	20 l/min (6 gpm)	700 mA (+/-7%)	1400 mA (+/-7%)	Handknob style	

Revision B3

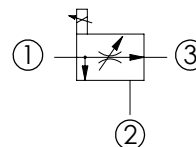
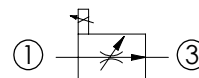
SOLENOID OPERATED CARTRIDGE

CECS-140-FRPM

PROPORTIONAL VALVES
FLOW REGULATOR
PRIORITY TYPE

Dimensions: mm [inches]

3 way application

2 way application,
port 2 not connected

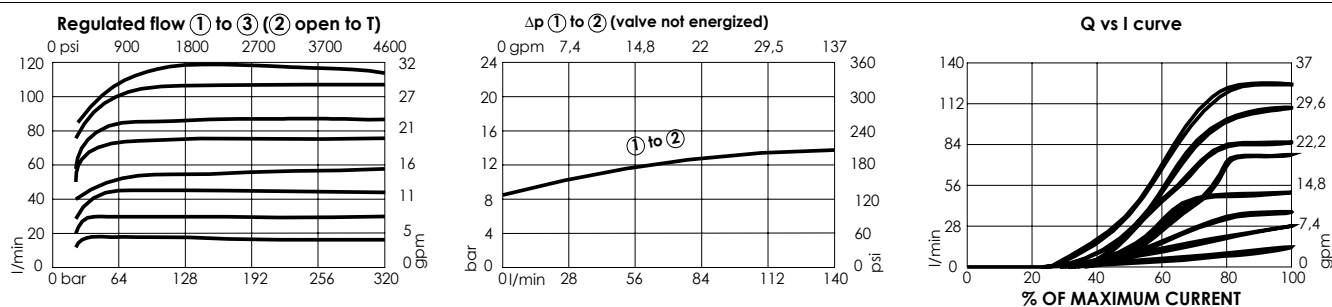
SPECIFICATIONS

Max. operating pressure:	320 bar (4600 psi)
Max. flow (in inlet port ①):	140 l/min (37 gpm)
Max. flow ① to ③:	120 l/min REGULATED (32 gpm)
Cavity:	SAE-16-3N
Weight:	0,6 kg (1.32 lbs)
Type hydraulic fluid:	See Technical specif.
Hydraulic fluid temp. range:	-30/+100 °C (-22/+212 °F)
Contamination class to ISO 4406:	See technical spec.
Coil type:	M15 type
Voltage:	12- 24 V dc
Ambient temperature:	-20/+50 °C (-4/+122 °F)
Pressure differential (① to ③):	7- 11 bar (101 - 159 psi)
Hysteresis (ramp up and down):	1,5 - 3 %
Max current (12 V dc):	1800 mA
Max current (24 V dc):	1200 mA
Coil resistance (12 V dc):	3,3-5,8 Ω
Coil resistance (24 V dc):	7,2-13 Ω
Surface protection proportional solenoid:	Coating DIN 50962 Fe8/ Zi-Ni with passivation
Installation torque:	118 - 132 Nm (160 - 179 ft-lb)
Seal kit:	RB100094
MTF _d :	150 - 1200 years: See technical spec.

NOTES

If port 2 is blocked the valve operates as a two way flow regulator.
Port 2 can be pressurized.
For other configurations/quick codes not available in this catalogue page please
consult factory

CURVES



ORDERING CODES

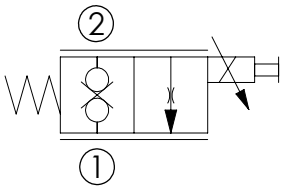
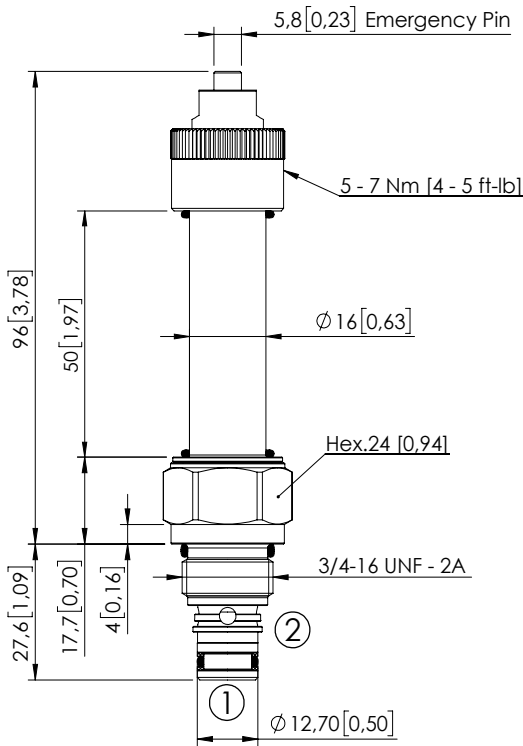
Quick code	Description	Regulated flow range	Adjustment type
CE000831	CECS-140-FRPM-15-S16-V320	0-15 l/min (0-4 gpm)	Handknob
CE000832	CECS-140-FRPM-25-S16-V320	0-25 l/min (0-7 gpm)	Handknob
CE000833	CECS-140-FRPM-40-S16-V320	0-40 l/min (0-11 gpm)	Handknob
CE000834	CECS-140-FRPM-50-S16-V320	0-50 l/min (0-13 gpm)	Handknob
CE000835	CECS-140-FRPM-65-S16-V320	0-65 l/min (0-17 gpm)	Handknob
CE000836	CECS-140-FRPM-80-S16-V320	0-80 l/min (0-21 gpm)	Handknob
CE001034	CECS-140-FRPM-100-S16-V320	0-100 l/min (0-27 gpm)	Handknob
CE001184	CECS-140-FRPM-120-S16-V320	0-120 l/min (0-32 gpm)	Handknob

Revision F

SOLENOID OPERATED CARTRIDGE

CEBD-020-PEPS

PROPORTIONAL VALVE
NORMALLY CLOSED



SPECIFICATIONS

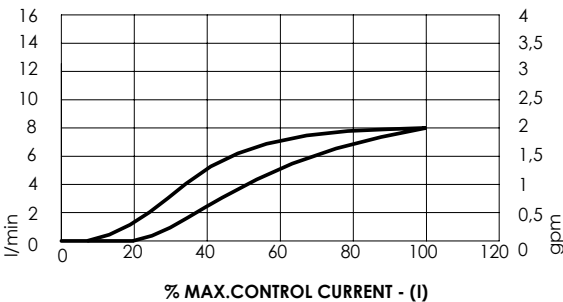
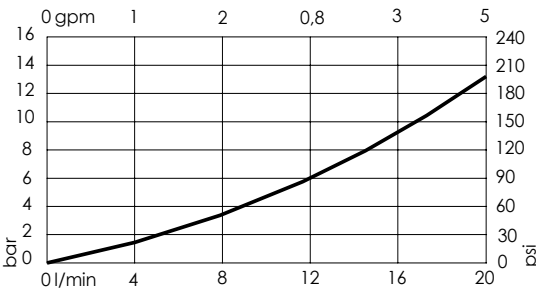
Max. operating pressure:	210 bar (3000 psi)
Rated flow:	20 l/min (5 gpm)
Cavity:	SAE 08-2N
Weight:	0,21 kg (0,33 lbs)
Type hydraulic fluid:	See Technical specif.
Hydraulic fluid temp. range:	-30/+100 °C (-22/+212 °F)
Contamination class to ISO 4406:	See technical spec.
Coil type:	M16 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
PWM range recommended:	120-150 Hz
Installation torque:	45 - 50 Nm (33 - 37 ft-lb)
Seal kit:	RA100081
MTTFd:	150 - 1200 years: See technical spec.

Dimensions: mm [inches]

NOTES

Bleed air before use
For other configurations/quick codes not available in this catalogue page please consult factory

CURVES



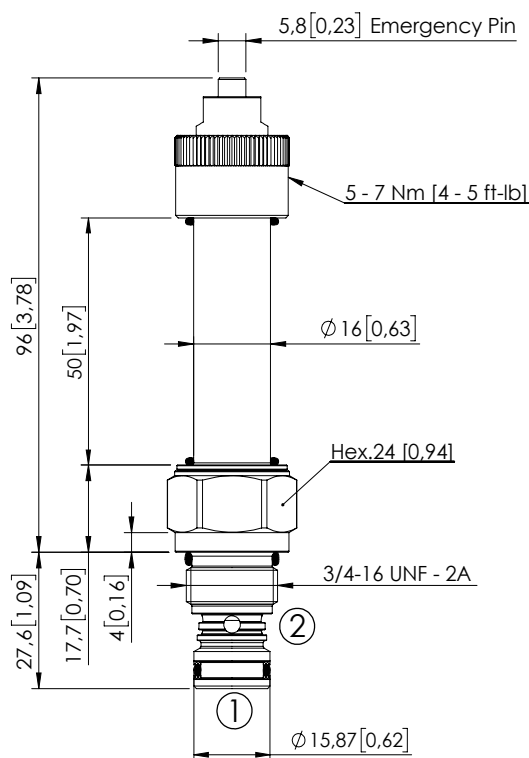
ORDERING CODES

Quick code	Description	Rated flow	Threshold current (with 12VDC coil)	Max control current (with 12V DC coil)	Override	
CE001190	CEBD-020-PEPS-103-S08-V210	20 l/min (5 gpm)	1000 mA (+/-7%)	2000 mA (+/-7%)	Push style	

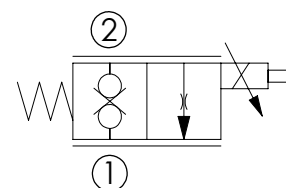
Revision B3

SOLENOID OPERATED CARTRIDGE

CEBD-020-PEPS

PROPORTIONAL VALVE
NORMALLY CLOSED

Dimensions: mm [inches]



SPECIFICATIONS

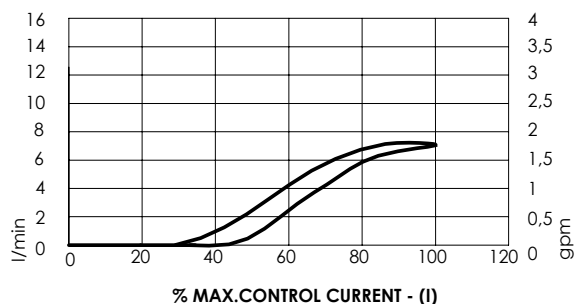
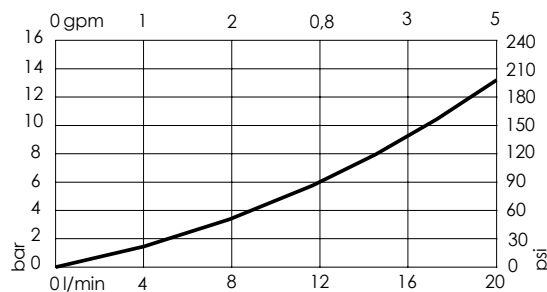
Max. operating pressure:	210 bar (3000 psi)
Rated flow:	20 l/min (5 gpm)
Cavity:	VP000064
Weight:	0,21 kg (0,33 lbs)
Type hydraulic fluid:	See Technical specif.
Hydraulic fluid temp. range:	-30/+100 °C (-22/+212 °F)
Contamination class to ISO 4406:	See technical spec.
Coil type:	M16 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
PWM range recommended:	150-180 Hz
Installation torque:	45 - 50 Nm (33 - 37 ft-lb)
Seal kit:	RA100081
MTFa:	150 - 1200 years: See technical spec.

NOTES

Bleed air before use

For other configurations/quick codes not available in this catalogue page please consult factory

CURVES



ORDERING CODES

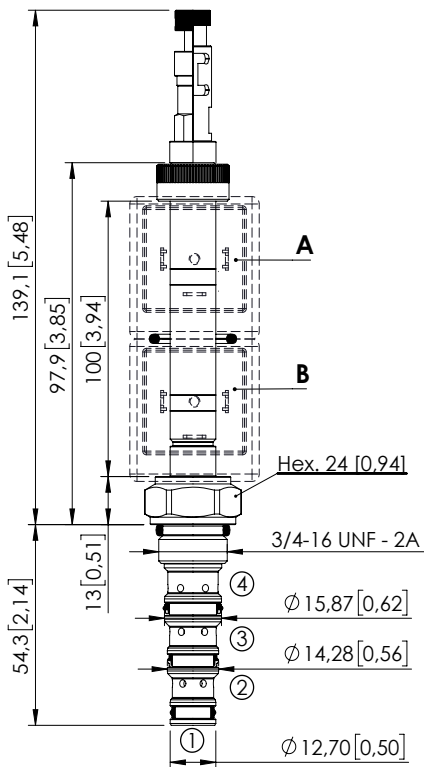
Quick code	Description	Rated flow	Threshold current (with 12VDC coil)	Max control current (with 12V DC coil)	Override	
CE001116	CEBD-020-PEPS-103-064-V210	20 l/min (5 gpm)	1000 mA (+/-7%)	2000 mA (+/-7%)	Push style	

Revision B3

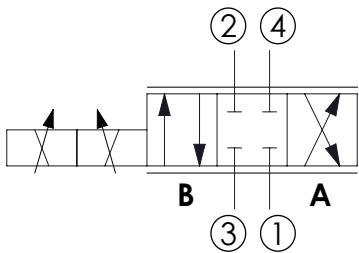
SOLENOID OPERATED CARTRIDGE

CEES-010-SEPN-51

DIRECT OPERATED
SPOOL TYPE



Dimensions: mm [inches]



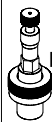
SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Max. operating pressure on port 1:	210 bar (3000 psi)
Rated flow:	10 l/min (3 gpm)
Cavity:	SAE-08-4N
Weight:	0.13 kg (0.68 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 or M3 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
PWM range recommended:	100 Hz
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB600101
Installation torque:	45 - 50 Nm (41 - 46 ft-lb)
MTTFd:	150 - 1200 years: See technical spec.
Leakage:	120 cm ³ /min (@46 cSt) 7,3 in ³ /min (@46 cSt)

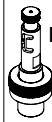
OPTIONS



Standard



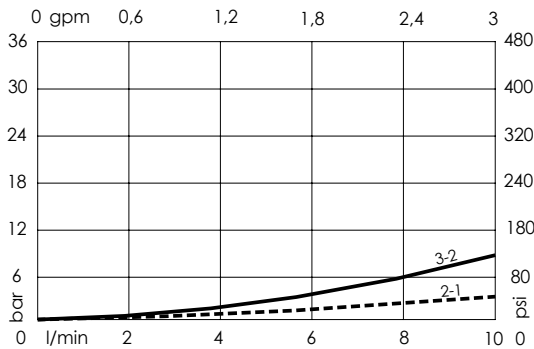
Push and
pull manual
override



Push pull and
twist manual
override

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory



ORDERING CODES

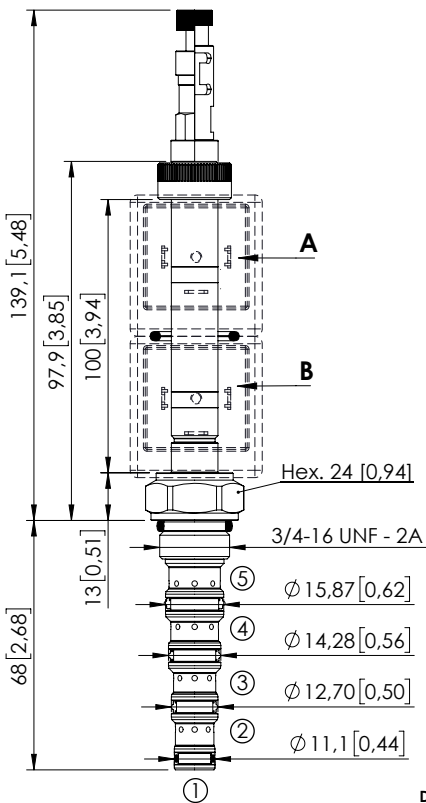
Quick code	Description	Options	
CE001832	CEES-010-SEPN-51-S08-N350	Standard	
CE001833	CEES-010-SEPL-51-S08-N350	Push and pull manual override	
CE001834	CEES-010-SEPG-51-S08-N350	Push pull and twist manual override	

Revision C

SOLENOID OPERATED CARTRIDGE

CEFS-010-SEPN-106

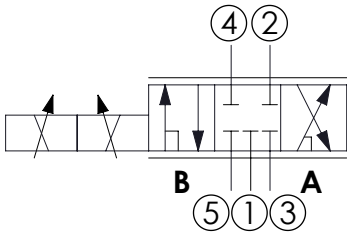
DIRECT OPERATED
SPOOL TYPE



Dimensions: mm [inches]

NOTES

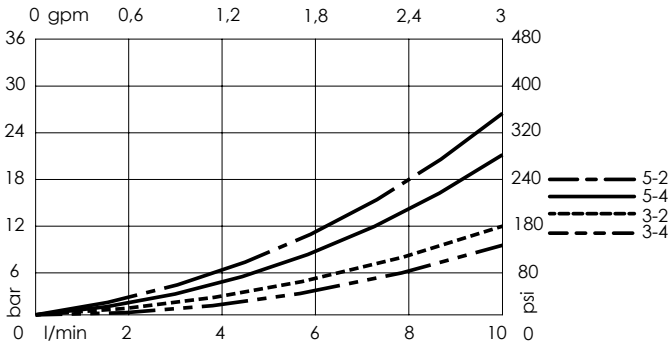
For other configurations/quick codes not available in this catalogue page please consult factory



SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Max. operating pressure on port 1:	210 bar (3000 psi)
Rated flow:	10 l/min (3 gpm)
Cavity:	SAE-08-5N
Weight:	0.25 kg (0.68 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 or M3 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
PWM range recommended:	100 Hz
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB900106
Installation torque:	45 - 50 Nm (41 - 46 ft-lb)
MTTFd:	150 - 1200 years: See technical spec.
Leakage:	120 cm ³ /min (@46 cSt) 7,3 in ³ /min (@46 cSt)

OPTIONS



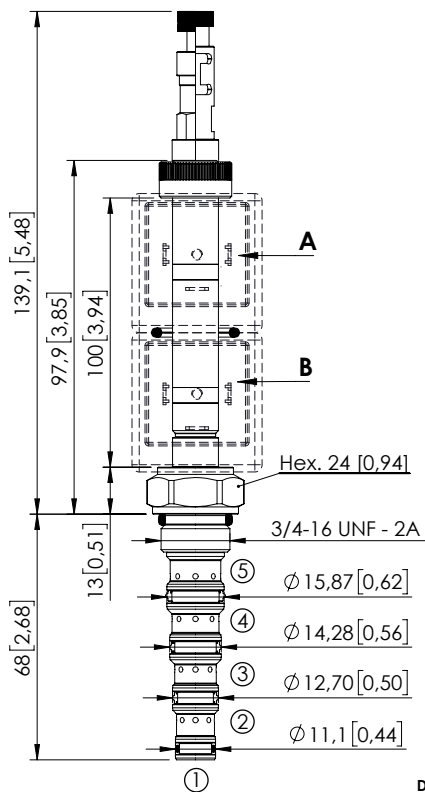
ORDERING CODES

Quick code	Description	Options	
CE001841	CEFS-010-SEPN-106-S08-N350	Standard	
CE001842	CEFS-010-SEPL-106-S08-N350	Push and pull manual override	
CE001843	CEFS-010-SEPG-106-S08-N350	Push pull and twist manual override	

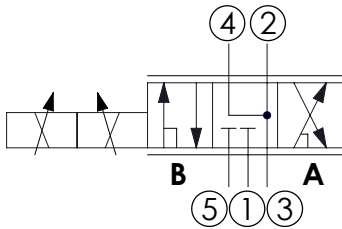
SOLENOID OPERATED CARTRIDGE

CEFS-010-SEPN-107

DIRECT OPERATED
SPOOL TYPE



Dimensions: mm [inches]



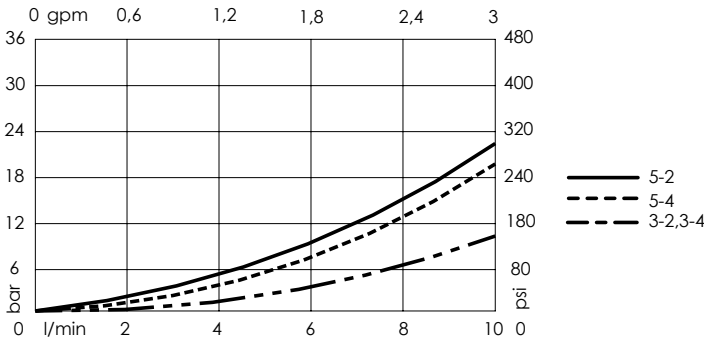
SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Max. operating pressure on port 1:	210 bar (3000 psi)
Rated flow:	10 l/min (3 gpm)
Cavity:	SAE-08-5N
Weight:	0,25 kg (0,68 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 or M3 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
PWM range recommended:	100 Hz
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB900106
Installation torque:	45 - 50 Nm (41 - 46 ft-lb)
MTF _d :	150 - 1200 years: See technical spec.
Leakage:	120 cm ³ /min (@46 cSt) 7,3 in ³ /min (@46 cSt)

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

OPTIONS



ORDERING CODES

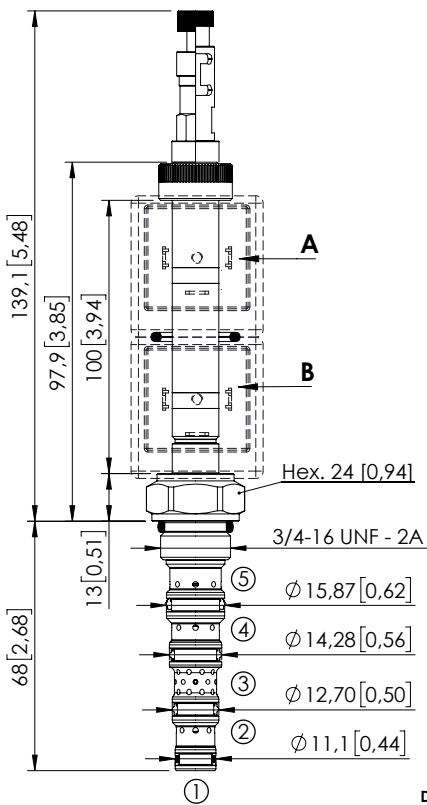
Quick code	Description	Options	
CE001844	CEFS-010-SEPN-107-S08-N350	Standard	
CE001845	CEFS-010-SEPL-107-S08-N350	Push and pull manual override	
CE001846	CEFS-010-SEPG-107-S08-N350	Push pull and twist manual override	

Revision B

SOLENOID OPERATED CARTRIDGE

CEFS-010-SEPN-115

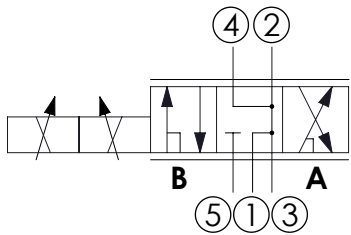
DIRECT OPERATED
SPOOL TYPE



Dimensions: mm [inches]

NOTES

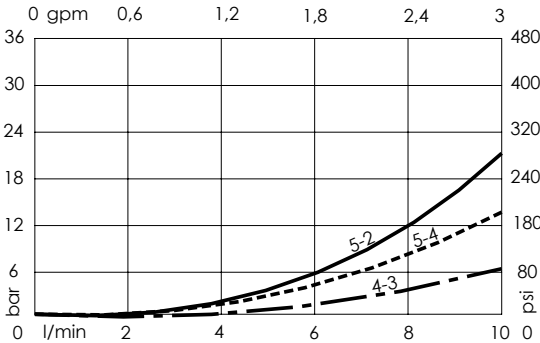
For other configurations/quick codes not available in this catalogue page please consult factory



SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Max. operating pressure on port 1:	210 bar (3000 psi)
Rated flow:	10 l/min (3 gpm)
Cavity:	SAE-08-5N
Weight:	0,25 kg (0,68 lbs)
Min. voltage required:	90% of nominal
Coil type:	M7 or M3 type
Ambient temperature:	-20/+50 °C (-4/+122 °F)
PWM range recommended:	100 Hz
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB900106
Installation torque:	45 - 50 Nm (41 - 46 ft-lb)
MTTF _d :	150 - 1200 years: See technical spec.
Leakage:	120 cm ³ /min (@46 cSt) 7,3 in ³ /min (@46 cSt)

OPTIONS



ORDERING CODES

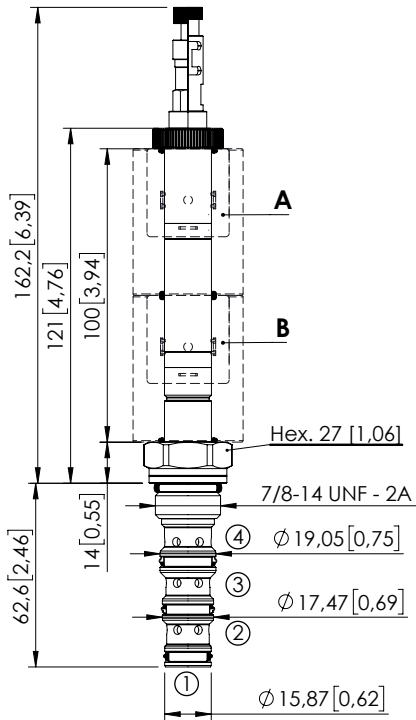
Quick code	Description	Options
CE001850	CEFS-010-SEPN-115-S08-N350	Standard
CE001851	CEFS-010-SEPL-115-S08-N350	Push and pull manual override
CE001852	CEFS-010-SEPG-115-S08-N350	Push pull and twist manual override

Revision A

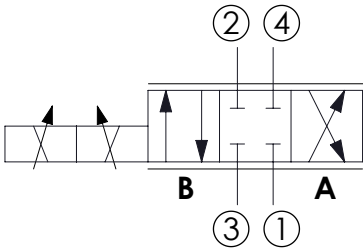
SOLENOID OPERATED CARTRIDGE

CEES-030-SEPN-51

DIRECT OPERATED
SPOOL TYPE



Dimensions: mm [inches]



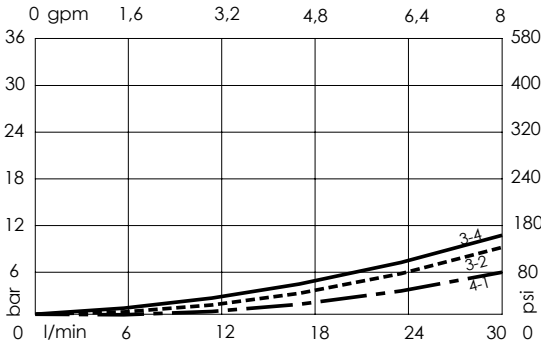
SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Max. operating pressure on port 1:	210 bar (3000 psi)
Rated flow:	30 l/min (8 gpm)
Cavity:	SAE-10-4N
Weight:	0.20 kg (0.68 lbs)
Min. voltage required:	90% of nominal
Coil type:	M16
Ambient temperature:	-20/+50 °C (-4/+122 °F)
PWM range recommended:	100 Hz
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB600102
Installation torque:	55 - 62 Nm (41 - 46 ft-lb)
MTF _d :	150 - 1200 years: See technical spec.
Leakage:	120 cm ³ /min (@46 cSt) 7.3 in ³ /min (@46 cSt)

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

OPTIONS



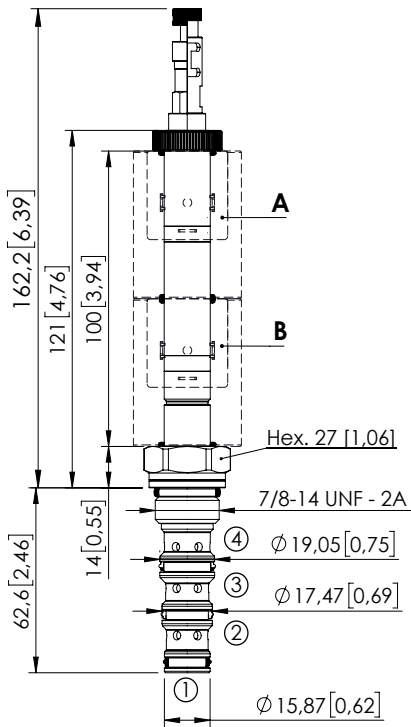
ORDERING CODES

Quick code	Description	Options	
CE001853	CEES-030-SEPN-51-S10-N350	Standard	
CE001854	CEES-030-SEPL-51-S10-N350	Push and pull manual override	
CE001855	CEES-030-SEPG-51-S10-N350	Push pull and twist manual override	

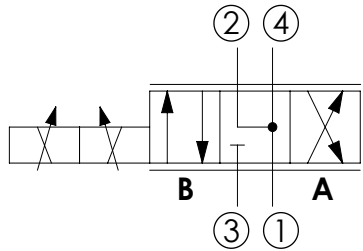
SOLENOID OPERATED CARTRIDGE

CEES-030-SEPN-52

DIRECT OPERATED
SPOOL TYPE



Dimensions: mm [inches]



SPECIFICATIONS

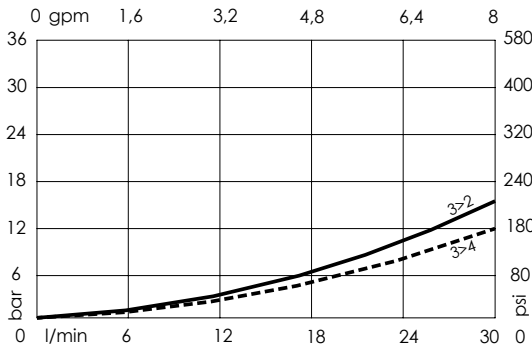
Max. operating pressure:	350 bar (5000 psi)
Max. operating pressure on port 1:	210 bar (3000 psi)
Rated flow:	30 l/min (8 gpm)
Cavity:	SAE-10-4N
Weight:	0.20 kg (0,68 lbs)
Min. voltage required:	90% of nominal
Coil type:	M16
Ambient temperature:	-20/+50 °C (-4/+122 °F)
PWM range recommended:	100 Hz
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB600102
Installation torque:	55 - 62 Nm (41 - 46 ft-lb)
MTTFd:	150 - 1200 years: See technical spec.
Leakage:	120 cm ³ /min (@46 cSt) 7,3 in ³ /min (@46 cSt)

OPTIONS



NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

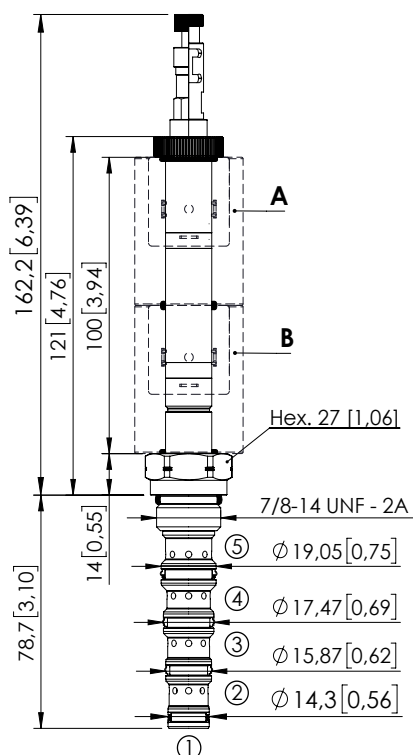


ORDERING CODES

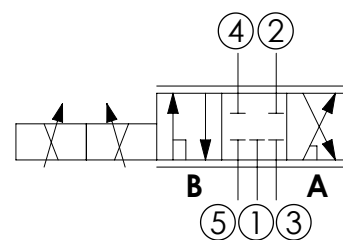
Quick code	Description	Options	
CE001856	CEES-030-SEPN-52-S10-N350	Standard	
CE001857	CEES-030-SEPL-52-S10-N350	Push and pull manual override	
CE001858	CEES-030-SEPG-52-S10-N350	Push pull and twist manual override	

Revision E

SOLENOID OPERATED CARTRIDGE

CEFS-030-SEPN-106DIRECT OPERATED
SPOOL TYPE

Dimensions: mm [inches]

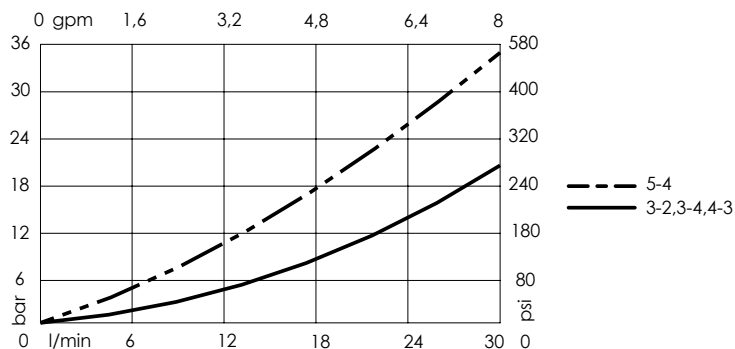
**SPECIFICATIONS**

Max. operating pressure:	350 bar (5000 psi)
Max. operating pressure on port 1:	210 bar (3000 psi)
Rated flow:	30 l/min (8 gpm)
Cavity:	SAE 10 5N
Weight:	0.22 kg (0,68 lbs)
Min. voltage required:	90% of nominal
Coil type:	M16
Ambient temperature:	-20/+50 °C (-4/+122 °F)
PWM range recommended:	100 Hz
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB900107
Installation torque:	55 - 62 Nm (41 - 46 ft-lb)

NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

MTTF _a :	150 - 1200 years: See technical spec.
Leakage:	120 cm ³ /min (@46 cSt) 7,3 in ³ /min (@46 cSt)

OPTIONS**ORDERING CODES**

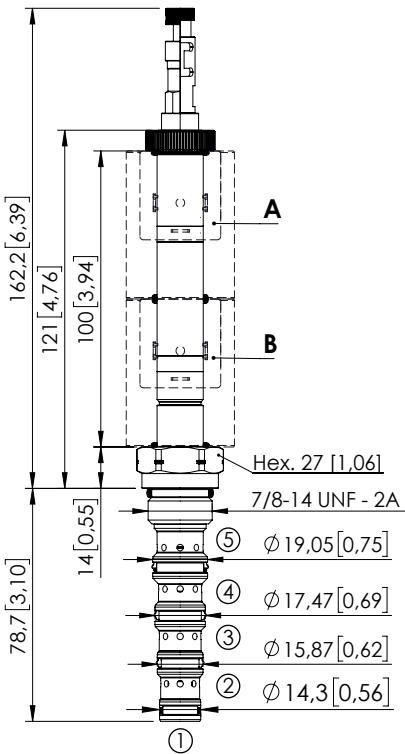
Quick code	Description	Options
CE001862	CEFS-030-SEPN-106-S10-N350	Standard
CE001863	CEFS-030-SEPL-106-S10-N350	Push and pull manual override
CE001864	CEFS-030-SEPG-106-S10-N350	Push pull and twist manual override

Revision C

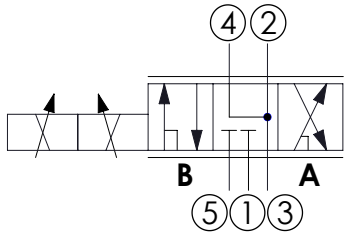
SOLENOID OPERATED CARTRIDGE

CEFS-030-SEPN-107

DIRECT OPERATED
SPOOL TYPE



Dimensions: mm [inches]



SPECIFICATIONS

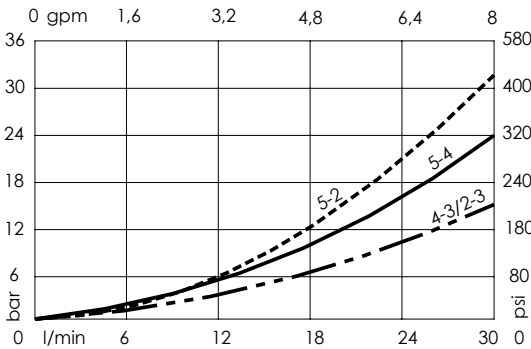
Max. operating pressure:	350 bar (5000 psi)
Max. operating pressure on port 1:	210 bar (3000 psi)
Rated flow:	30 l/min (8 gpm)
Cavity:	SAE 10 5N
Weight:	0.22 kg (0.68 lbs)
Min. voltage required:	90% of nominal
Coil type:	M16
Ambient temperature:	-20/+50 °C (-4/+122 °F)
PWM range recommended:	100 Hz
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB900107
Installation torque:	55 - 62 Nm (41 - 46 ft-lb)
MTF _d :	150 - 1200 years: See technical spec.
Leakage:	120 cm ³ /min (@46 cSt) 7,3 in ³ /min (@46 cSt)

OPTIONS



NOTES

For other configurations/quick codes not available in this catalogue page please consult factory

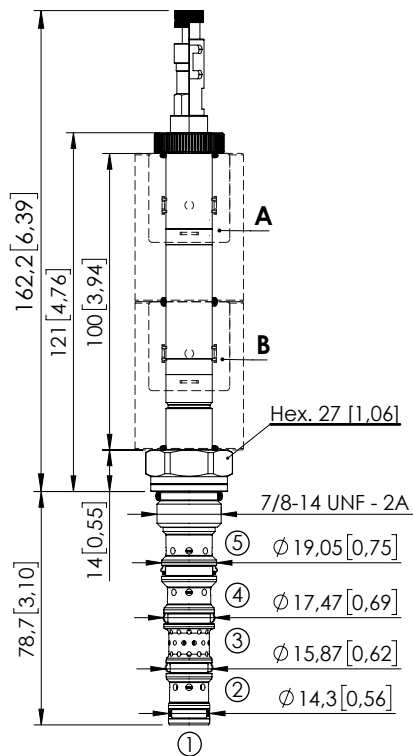


ORDERING CODES

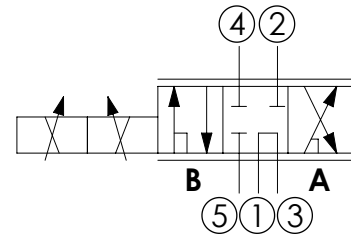
Quick code	Description	Options
CE001865	CEFS-030-SEPN-107-S10-N350	Standard
CE001866	CEFS-030-SEPL-107-S10-N350	Push and pull manual override
CE001867	CEFS-030-SEPG-107-S10-N350	Push pull and twist manual override

Revision C

SOLENOID OPERATED CARTRIDGE

CEFS-030-SEPN-108DIRECT OPERATED
SPOOL TYPE

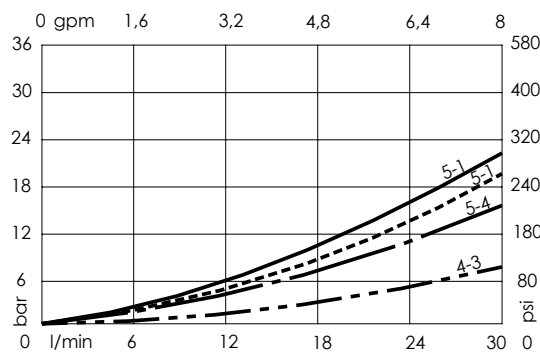
Dimensions: mm [inches]

**SPECIFICATIONS**

Max. operating pressure:	350 bar (5000 psi)
Max. operating pressure on port 1:	210 bar (3000 psi)
Rated flow:	30 l/min (8 gpm)
Cavity:	SAE 10 5N
Weight:	0,22 kg (0,68 lbs)
Min. voltage required:	90% of nominal
Coil type:	M16
Ambient temperature:	-20/+50 °C (-4/+122 °F)
PWM range recommended:	100 Hz
Contamination class to ISO 4406:	See technical spec.
Seal kit:	RB900107
Installation torque:	55 - 62 Nm (41 - 46 ft-lb)
MTFa:	150 - 1200 years: See technical spec.
Leakage:	120 cm ³ /min (@46 cSt) 7,3 in ³ /min (@46 cSt)

OPTIONS**NOTES**

For other configurations/quick codes not available in this catalogue page please consult factory

**ORDERING CODES**

Quick code	Description	Options
CE001868	CEFS-030-SEPN-108-S10-N350	Standard
CE001869	CEFS-030-SEPL-108-S10-N350	Push and pull manual override
CE001870	CEFS-030-SEPG-108-S10-N350	Push pull and twist manual override

Revision A



ATLANTIC

Fluid Tech
WWW.SUMY.IR

SECTION 10

Coils and
Connectors

SECTION 10

COILS AND CONNECTORS

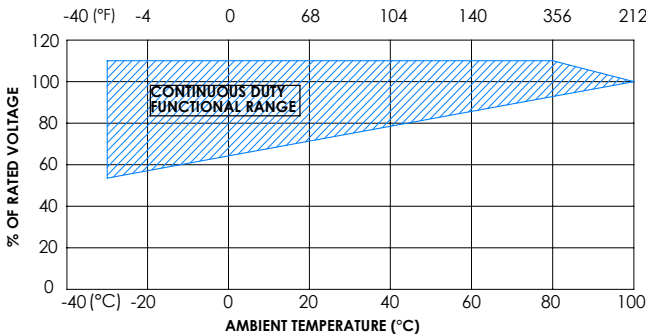
Description	Type	Heat insulation class	Connector	Page
Coil M7 HS	M7 - For solenoid operated cartridge valve	H - 180°C (356 °F)	EN 175301-803 - DIN 43650 - ISO 4400	10.00. 010
Coil M7 HS	M7 - For solenoid operated cartridge valve - RAC	H - 180°C (356 °F)	EN 175301-803 - DIN 43650 - ISO 4400	10.00. 010
Coil M7 AJ	M7 - For solenoid operated cartridge valve	H - 180°C (356 °F)	Amp Junior	10.00. 010
Coil M7 DT	M7 - For solenoid operated cartridge valve	H - 180°C (356 °F)	Deutsch - DT04-2P-L	10.00. 020
Coil M7 DTV	M7 - For solenoid operated cartridge valve	H - 180°C (356 °F)	Deutsch - DT04-2P-V	10.00. 020
Coil M7 DS	M7 - For solenoid operated cartridge valve	H - 180°C (356 °F)	Dual spades	10.00. 020
Coil M7 CV	M7 - For solenoid operated cartridge valve	H - 180°C (356 °F)	Cable	10.00. 020
Coil M3 DTV	M3 - For solenoid operated cartridge valve	H - 180°C (356 °F)	Deutsch - DT04-2P-V	10.00. 030
Coil M14 HS	M14 - For solenoid operated cartridge valve	H - 180°C (356 °F)	EN 175301-803 - DIN 43650 - ISO 4400	10.00. 040
Coil M14 AJ	M14 - For solenoid operated cartridge valve	H - 180°C (356 °F)	Amp Junior	10.00. 040
Coil M14 DT	M14 - For solenoid operated cartridge valve	H - 180°C (356 °F)	Deutsch - DT04-2P-V	10.00. 040
Coil M15 HS	M15 - For proportional solenoid operated cartridge valve	H - 180°C (356 °F)	EN 175301-803 - DIN 43650 - ISO 4400	10.00. 050
Coil M15 AJ	M15 - For proportional solenoid operated cartridge valve	H - 180°C (356 °F)	Amp Junior	10.00. 050
Coil M15 DT	M15 - For proportional solenoid operated cartridge valve	H - 180°C (356 °F)	Deutsch - DT04-2P-V	10.00. 050
Coil M8 HS	M8 - For Ø19 tube diverter valve	H - 180°C (356 °F)	EN 175301-803 - DIN 43650 - ISO 4400	10.00. 060
Coil M8 AJ	M8 - For Ø19 tube diverter valve	H - 180°C (356 °F)	Amp Junior	10.00. 060
Coil M8 DT	M8 - For Ø19 tube diverter valve	H - 180°C (356 °F)	Deutsch - DT04-2P-V	10.00. 060
Coil M16 HS	M16 - For solenoid operated cartridge valve	H - 180°C (356 °F)	EN 175301-803 - DIN 43650 - ISO 4400	10.00. 070
Coil M16 AJ	M16 - For solenoid operated cartridge valve	H - 180°C (356 °F)	Amp Junior	10.00. 070
Coil M16 DT	M16 - For solenoid operated cartridge valve	H - 180°C (356 °F)	Deutsch - DT04-2P-V	10.00. 070
DIN Connector	IP67 - Standard / with VDR / with rectifier	-	EN 175301-803 - DIN 43650 - ISO 4400	10.00. 080

COIL

COIL SERIES M7



CURVES



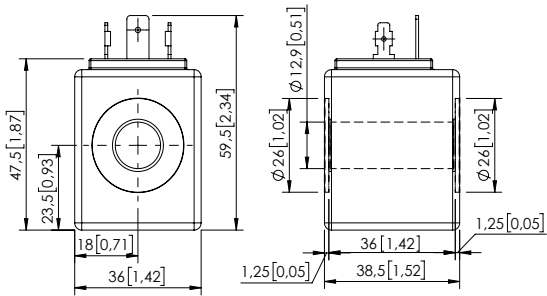
SPECIFICATION - NOTES

Heat insulation	Class H (180°C) (356°F)
Insulation class	See table (with all seals properly mounted)
Weight	See table
Ambient temperature	See graph
Inlet voltage	See graph
Contamination class to ISO 4406:	See technical spec.
MTTF _d :	150 - 1200 years: See technical spec.

ED 100% in the functional range area.
Do not exceed the functional range.
For applications with working range close to graph limit please contact AFT sales network.
The seals supplied with the valve must be properly mounted.
Please refer to catalogue technical chapter for more info.
For other configurations/quick codes not available in this catalogue page please consult factory

DIN 43650 - ISO 4400

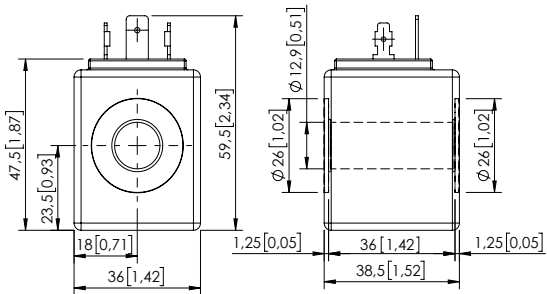
Code parts	Description	Voltage	Resistance (±7%)	Power (W)	Current (A)	Insul. class	Weight
AB000002	M7 HS 12V Class H	12 DC	7,2	20	1,67	IP65	0,217 kg (0,48 lbs)
AB000018	M7 HS 14V Class H	14 DC	9,8	20	1,43		
AB000003	M7 HS 24V Class H	24 DC	28,8	20	0,83		
AB000004	M7 HS 26V Class H	26 DC	33,8	20	0,77		
AB000043	M7 HS 10,5V Class H	10,5 DC	5,5	20	1,90		
AB000046	M7 HS 48V Class H	48 DC	115,2	20	0,42		



Dimensions: mm [inches]

DIN 43650 - ISO 4400 RAC VERSION

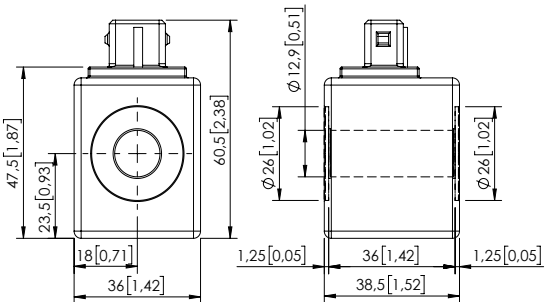
Code parts	Description	Voltage	Resistance (±7%)	Power (W)	Current (A)	Insul. class	Weight
AB000011	M7 HS 24V Class H	24 RAC	23,1	20	0,9	IP65	0,217 kg (0,48 lbs)
AB000012	M7 HS 110V Class H	110 RAC	605	20	0,18		
AB000007	M7 HS 220V Class H	220 RAC	2140	20	0,09		



Dimensions: mm [inches]

AMP JUNIOR

Code parts		Voltage	Resistance (±7%)	Power (W)	Current (A)	Insul. class	Weight
AB000005	M7 AJ 12V Class H	12 DC	7,2	20	1,67	IP67	0,217 kg (0,48 lbs)
AB000014	M7 AJ 24V Class H	24 DC	28,8	20	0,83		
AB000010	M7 AJ 26V Class H	26 DC	33,8	20	0,77		



Dimensions: mm [inches]
Revision B1

COIL

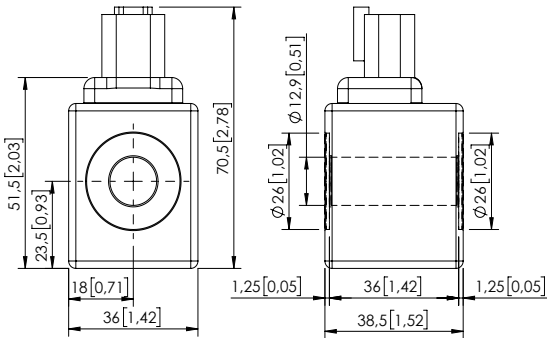
COIL SERIES M7



DEUTSCH DT04-2P-L

Code parts	Description	Voltage	Resistance (±7%)	Power (W)	Current (A)	Insul. class	Weight
AB000001	M7 DT 12V Class H	12 DC	7,2	20	1,67	IP69	0,217 kg (0,48 lbs)
AB000008	M7 DT 24V Class H	24 DC	28,8	20	0,83		

With bi-directional diode.

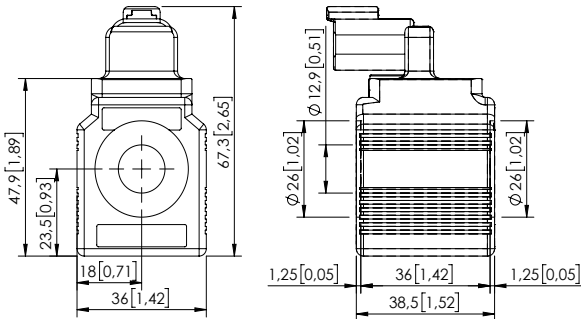


Dimensions: mm [inches]

DEUTSCH DT04-2P-V

Code parts	Description	Voltage	Resistance (±7%)	Power (W)	Current (A)	Insul. class	Weight
AB000022	M7 DTV 12V Class H	12 DC	7,2	20	1,67	IP69	0,217 kg (0,48 lbs)
AB000229	M7 DTV 14V Class H	14 DC	9,8	20	1,43		
AB000023	M7 DTV 24V Class H	24 DC	28,8	20	0,83		
AB000024	M7 DTV 26V Class H	26 DC	33,8	20	0,77		
AB000230	M7 DTV 28V Class H	28 DC	39,4	20	0,71		

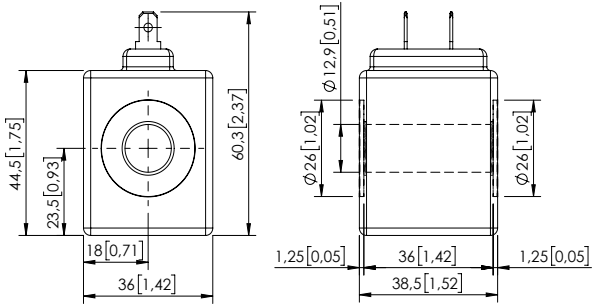
With bi-directional diode.



Dimensions: mm [inches]

DUAL SPADES

Code parts	Description	Voltage	Resistance (±7%)	Power (W)	Current (A)	Insul. class	Weight
AB000259	M7 DS 12V Class H	12 DC	7,2	20	1,67	IP65	0,217 kg (0,48 lbs)
AB000253	M7 DS 10V Class H	10 DC	5	20	2		
AB000260	M7 DS 24V Class H	24 DC	28,8	20	0,83		



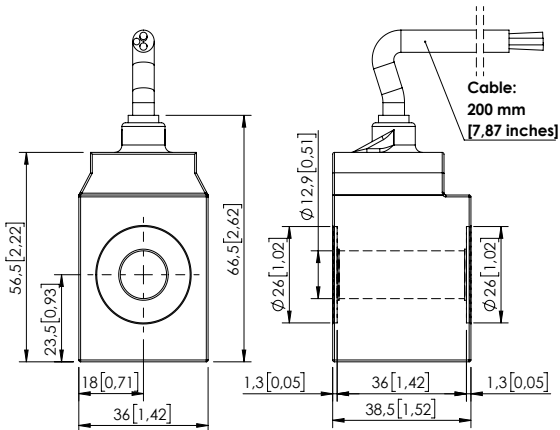
Dimensions: mm [inches]

CABLE

Code parts		Voltage	Resistance (±7%)	Power (W)	Current (A)	Insul. class	Weight
AB000039	M7 CV 12V Class H	12 DC	7,2	20	1,67	IP65	0,217 kg (0,48 lbs)
AB000114	M7 CV 24V Class H	24 DC	28,8	20	0,83		

Code parts		Voltage	Resistance (±7%)	Power (W)	Current (A)	Insul. class	Weight
AB000113	M7 CV 12V Class H	12 DC	7,2	20	1,67	IP65	0,217 kg (0,48 lbs)
AB000103	M7 CV 24V Class H	24 DC	28,8	20	0,83		

With bi-directional diode.



Dimensions: mm [inches]
Revision B1

COIL

COIL SERIES M3



CURVES

SPECIFICATION - NOTES

Heat insulation	Class N (200°C) (392°F)
Insulation class	See table (with all seals properly mounted)
Weight	See table
Ambient temperature	-20° +80° C (-4/+176 °F)
Inlet voltage	±10% tol.
Contamination class to ISO 4406:	See technical spec.
MTTFd:	150 - 1200 years: See technical spec.
UL-certified coil	

For other configurations/quick codes not available in this catalogue page please consult factory

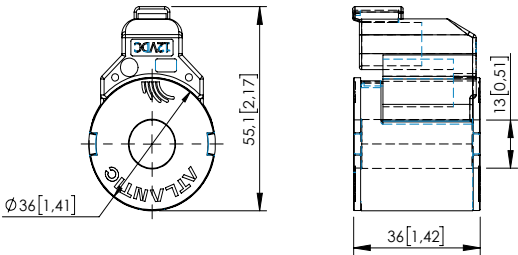
DEUTSCH DT04-2P-V

Code parts	Description	Voltage	Resistance (±7%)	Power (W)	Current (A)	Insul. class	Weight
AB000261	M3 DTV 12V Class H	12 DC	9	16	1,33	IP69K	0,400 kg (0,88 lbs)
AB000262	M3 DTV 24V Class H	24 DC	36	16	0,66		

With bi-directional diode.

Code parts	Description	Voltage	Resistance (±7%)	Power (W)	Current (A)	Insul. class	Weight
AB000269	M3 DTV 12V Class H	12 DC	9	16	1,33	IP69K	0,400 kg (0,88 lbs)
AB000266	M3 DTV 24V Class H	24 DC	36	16	0,66		

Without diode.



Dimensions: mm [inches]

COIL

COIL SERIES M14



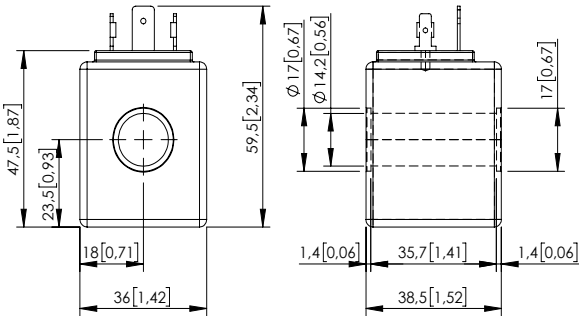
SPECIFICATION - NOTES

Heat insulation	Class H (180°C) (356°F)
Insulation class	See table (with all seals properly mounted)
Weight	See table
Ambient temperature	-20 + 50°C (-4/+122 °F)
Inlet voltage	±10% tol.
Contamination class to ISO 4406:	See technical spec.
MTF _a :	150 - 1200 years: See technical spec.

For other configurations/quick codes not available in this catalogue page please consult factory

DIN 43650 - ISO 4400

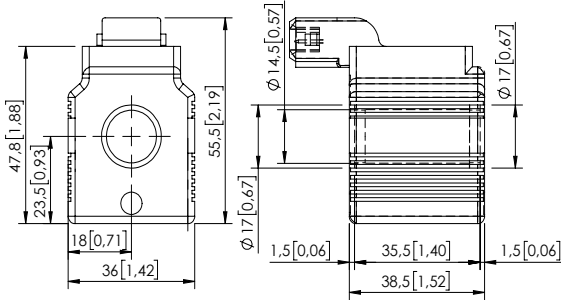
Code parts	Description	Voltage	Resistance (±7%)	Power (W)	Current (A)	Insul. class	Weight
AB000143	M14 HS 12V Class H	12 DC	5,53	26	2,17	IP65	0,200 kg (0,44 lbs)
AB000145	M14 HS 13V Class H	13 DC	6,5	26	2		
AB000144	M14 HS 24V Class H	24 DC	22,15	26	1,08		



Dimensions: mm [inches]

AMP JUNIOR

Code parts		Voltage	Resistance (±7%)	Power (W)	Current (A)	Insul. class	Weight
AB000136	M14 AJ 12V Class H	12 DC	5,53	26	2,17	IP67	0,208 kg (0,46 lbs)
AB000181	M14 AJ 24V Class H	24 DC	22,15	26	1,08		
AB000131	M14 AJ 48V Class H	48 DC	88,6	26	0,54		

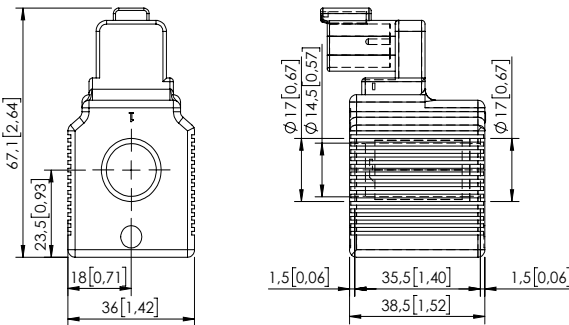


Dimensions: mm [inches]

DEUTSCH DT04-2P-V

Code parts	Description	Voltage	Resistance (±7%)	Power (W)	Current (A)	Insul. class	Weight
AB000132	M14 DTV 12V Class H	12 DC	5,53	26	2,17	IP69	0,217 kg (0,48 lbs)
AB000133	M14 DTV 24V Class H	24 DC	22,15	26	1,08		
AB000211	M14 DTV 26V Class H	26 DC	26	26	1		

With bi-directional diode.



Dimensions: mm [inches]

Revision C

COIL

COIL SERIES M15



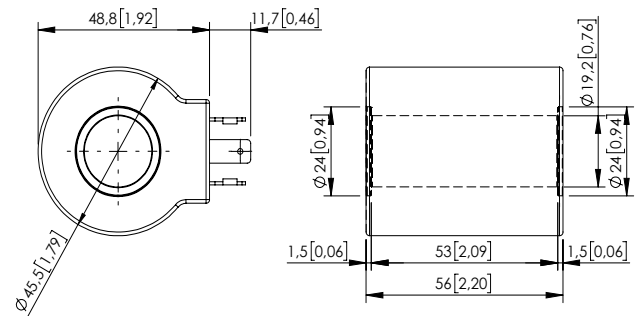
SPECIFICATION - NOTES

Heat insulation	Class H (180°C) (356°F)
Insulation class	See table (with all seals properly mounted)
Weight	See table
Ambient temperature	-20 + 50°C (-4/+122 °F)
Inlet voltage	±10% tol.
Contamination class to ISO 4406:	See technical spec.
MTFa:	150 - 1200 years: See technical spec.

For other configurations/quick codes not available in this catalogue page please consult factory

DIN 43650 - ISO 4400

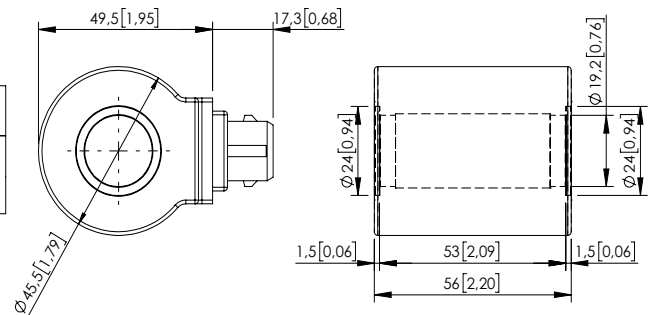
Code parts	Description	Voltage	Resistance (±7%)	Power (W)	Current (A)	Insul. class	Weight
AB000137	M15 HS 12V Class H	12 DC	6,26	23	1,92	IP65	0,361 kg (0,79 lbs)
AB000138	M15 HS 24V Class H	24 DC	25,05	23	0,96		
AB000129	M15 HS 8V Class H	8 DC	2,78	23	2,88		



Dimensions: mm [inches]

AMP JUNIOR

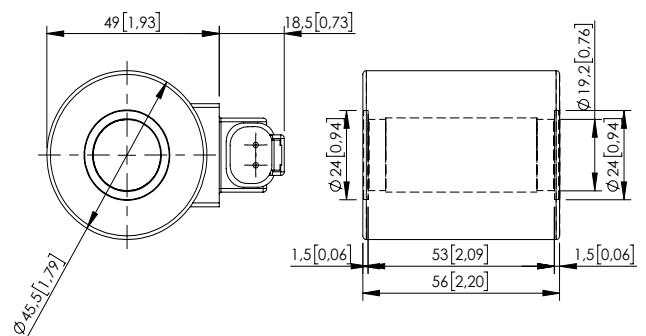
Code parts	Description	Voltage	Resistance (±7%)	Power (W)	Current (A)	Insul. class	Weight
AB000139	M15 AJ 12V Class H	12 DC	6,26	23	1,92	IP67	0,329 kg (0,73 lbs)
AB000140	M15 AJ 24V Class H	24 DC	25,05	23	0,96		



Dimensions: mm [inches]

DEUTSCH DT04-2P-V

Code parts	Description	Voltage	Resistance (±7%)	Power (W)	Current (A)	Insul. class	Weight
AB000141	M15 DTV 12V Class H	12 DC	6,26	23	1,92	IP69	0,329 kg (0,73 lbs)
AB000142	M15 DTV 24V Class H	24 DC	25,05	23	0,96		



Dimensions: mm [inches]

Revision B1

COIL

COIL SERIES M8



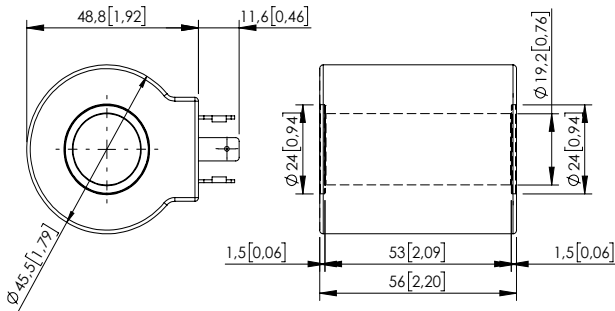
SPECIFICATION - NOTES

Heat insulation	Class H (180°C) (356°F)
Insulation class	See table (with all seals properly mounted)
Weight	See table
Ambient temperature	-20 + 50°C (-4/+122 °F)
Inlet voltage	±10% tol.
Contamination class to ISO 4406:	See technical spec.
MTTFd:	150 - 1200 years: See technical spec.

For other configurations/quick codes not available in this catalogue page please consult factory

DIN 43650 - ISO 4400

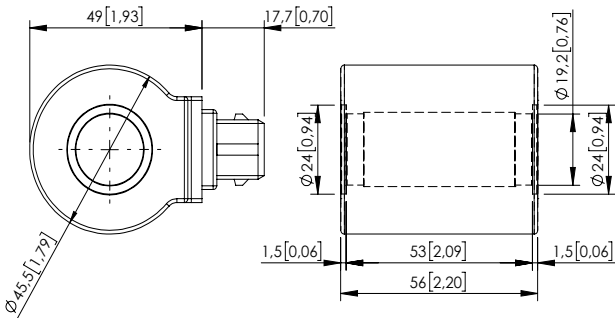
Code parts	Description	Voltage	Resistance (±7%)	Power (W)	Current (A)	Insul. class	Weight
AB000015	M8 HS 12V Class H	12 DC	4,36	33	2,75	IP65	0,38 kg (0,84 lbs)
AB000029	M8 HS 24V Class H	24 DC	17,45	33	1,38		
AB000159	M8 HS 14V Class H	14 DC	5,94	33	2,36		
AB000160	M8 HS 26V Class H	26 DC	20,48	33	1,27		
AB000158	M8 HS 48V Class H	48 DC	69,81	33	0,69		



Dimensions: mm [inches]

AMP JUNIOR

Code parts	Description	Voltage	Resistance (±7%)	Power (W)	Current (A)	Insul. class	Weight
AB000048	M8 AJ 12V Class H	12 DC	4,36	33	2,75	IP67	0,349 kg (0,77 lbs)
AB000224	M8 AJ 24V Class H	24 DC	17,45	33	1,38		

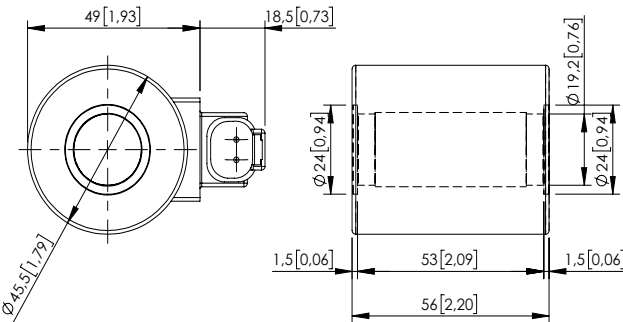


Dimensions: mm [inches]

DEUTSCH DT04-2P-V

Code parts	Description	Voltage	Resistance (±7%)	Power (W)	Current (A)	Insul. class	Weight
AB000104	M8 DTV 12V Class H	12 DC	4,36	33	2,75	IP69	0,348 kg (0,77 lbs)
AB000105	M8 DTV 24V Class H	24 DC	17,45	33	1,38		
AB000200	M8 DTV 26V Class H	26 DC	20,48	33	1,27		

With bi-directional diode.



Dimensions: mm [inches]
Revision C1

COIL

COIL SERIES M16



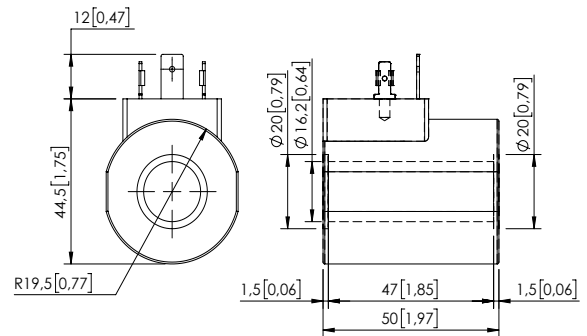
SPECIFICATION - NOTES

Heat insulation	Class H (180°C) (356°F)
Insulation class	See table (with all seals properly mounted)
Weight	See table
Ambient temperature	-20 + 50°C (-4/+122 °F)
Inlet voltage	±10% tol.
Contamination class to ISO 4406:	See technical spec.
MTFa:	150 - 1200 years: See technical spec.

For other configurations/quick codes not available in this catalogue page please consult factory

DIN 43650 - ISO 4400

Code parts	Description	Voltage	Resistance (±7%)	Power (W)	Current (A)	Insul. class	Weight
AB000222	M16 HS 12V Class H	12 DC	5,54	26	2,17	IP65	0,3 kg (0,66 lbs)
AB000236	M16 HS 24V Class H	24 DC	22,15	26	1,08		
AB000234	M16 HS 48V Class H	48 DC	88,62	26	0,54		

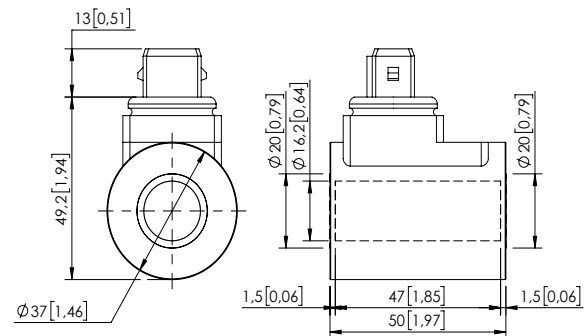


Dimensions: mm [inches]

AMP JUNIOR

Code parts	Description	Voltage	Resistance (±7%)	Power (W)	Current (A)	Insul. class	Weight
AB000218	M16 AJ 12V Class H	12 DC	5,54	26	2,17	IP67	0,3 kg (0,66 lbs)
AB000252	M16 AJ 24V Class H	24 DC	22,15	26	1,08		

With bi-directional diode.



Dimensions: mm [inches]

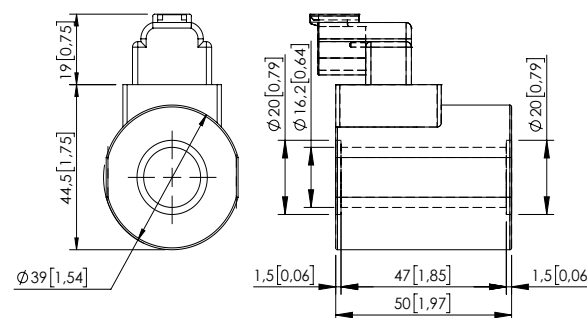
DEUTSCH DT04-2P-V

Code parts	Description	Voltage	Resistance (±7%)	Power (W)	Current (A)	Insul. class	Weight
AB000209	M16 DTV 12V Class H	12 DC	5,54	26	2,17	IP69	0,33 kg (0,66 lbs)
AB000212	M16 DTV 24V Class H	24 DC	22,15	26	1,08		
AB000210	M16 DTV 26V Class H	26 DC	26	26	1		

With bi-directional diode.

Code parts	Description	Voltage	Resistance (±7%)	Power (W)	Current (A)	Insul. class	Weight
AB000274	M16 DTV 12V Class H	12 DC	5,54	26	2,17	IP69	0,33 kg (0,66 lbs)
AB000267	M16 DTV 24V Class H	24 DC	22,15	26	1,08		

Without diode.



Dimensions: mm [inches]

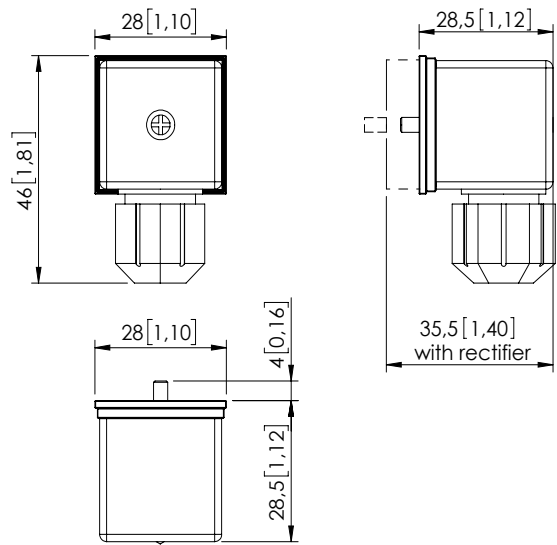
Revision B2

CONNECTOR

DIN CONNECTOR



SPECIFICATION - NOTES

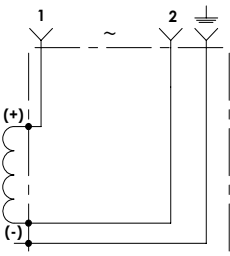


Dimensions: mm [inches]

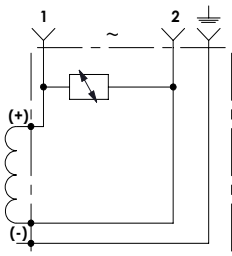
Voltage rating	AC: up to 250V max. DC: up to 300V max.
Max. current	16 A
Contact resistance	≤ 4 mΩ
Max. conductor	1,5 mm2 (1,6 fb2)
Cable range	Ø4,0 to Ø9,0 mm (Ø0,15 to Ø0,35 fb)
Protection class	IP67 EN60529
Seal	Nitrile rubber
Poles	2 + ground
Connector	EN 175301-803 (DIN 43650)
MTTf _d :	150 - 1200 years: See technical spec.

For other configurations/quick codes not available
in this catalogue page please consult factory

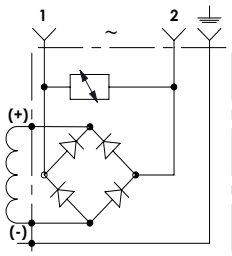
SCHEME



Standard circuit



Circuit with VDR



Circuit with rectifier and VDR

ORDERING CODES

Code parts	Colour	VDR	LED	Rectifier	Voltage
PV000171	Black	No	No	No	12V to 230V
PV000195	Black	Yes	No	No	12V DC
PV000349	Black	Yes	No	No	24V DC
PV000347	Black	Yes	No	Yes	12V RAC
PV000198	Transparent	Yes	Yes	No	12V DC
PV000348	Black	Yes	No	Yes	24V RAC
PV000196	Transparent	Yes	Yes	No	24V DC
PV000199	Black	Yes	No	Yes	230V RAC
PV000243	Transparent	Yes	Yes	No	230V DC



ATLANTIC
Fluid Tech

WWW.SUMY.IR

SECTION 11

Accessories
and Spare

SECTION 11

ACCESSORIES AND SPARE

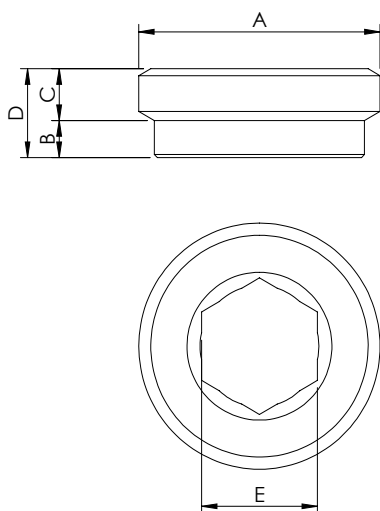


Hydraulic scheme	Valve description	Valve type	Rated flow l/min (gpm)	Max. pressure bar (psi)	Installation	Main port size or cavity type	Page
	Filter G 3/8"	300 micron filtration	50 (13)	Δp 35 (Δp 500)	Insert	G1/4"	11.00.010
	Filter G 1/4"	300 micron filtration	25 (7)		Insert	G3/8"	11.00.010
	Filter G 1/8"	300 micron filtration	10 (3)		Insert	G1/8"	11.00.010
	Manual override	Detent type	-	-	Screw	-	11.00.020
	Sleeve body G 1/4"	For hose burst and check valve	-	350 (5000)	In line	G1/4"	11.00.030
	Sleeve body G 3/8"	For hose burst and check valve	-	350 (5000)	In line	G3/8"	11.00.030
	Sleeve body G 1/2"	For hose burst and check valve	-	350 (5000)	In line	G1/2"	11.00.030
	Sleeve body G 3/4"	For hose burst and check valve	-	350 (5000)	In line	G3/4"	11.00.030
	Sleeve body G 1/4"	For flow control valve	-	350 (5000)	In line	G1/4"	11.00.040
	Sleeve body G 3/8"	For flow control valve	-	350 (5000)	In line	G3/8"	11.00.040
	Sleeve body G 1/2"	For flow control valve	-	350 (5000)	In line	G1/2"	11.00.040
	Sleeve body G 3/4"	For flow control valve	-	350 (5000)	In line	G3/4"	11.00.040
	CFSN-090-PBSR-06	For flow control valve	0 - 6 (0 - 2)	350 (5000)	In line	VP000132	11.00.050
	CFSN-090-PBSR-12	For flow control valve	0 - 12 (0 - 3)	350 (5000)	In line	VP000132	11.00.050
	CFSN-090-PBSR-25	For flow control valve	0 - 25 (0 - 7)	350 (5000)	In line	VP000132	11.00.050
	CFSN-090-PBSR-32	For flow control valve	0 - 32 (0 - 8)	350 (5000)	In line	VP000132	11.00.050
	CFSN-090-PBSR-50	For flow control valve	0 - 50 (0 - 13)	350 (5000)	In line	VP000132	11.00.050
	CFSN-090-PBSR-63	For flow control valve	0 - 63 (0 - 17)	350 (5000)	In line	VP000132	11.00.050
	CFSN-090-PBSR-70	For flow control valve	0 - 70 (0 - 19)	350 (5000)	In line	VP000132	11.00.050
	CFSN-090-PBSR-80	For flow control valve	0 - 80 (0 - 21)	350 (5000)	In line	VP000132	11.00.050
	CFSN-200-BHSR	For flow control valve	-	350 (5000)	In line	VP000096 VP000152	11.00.060
	CFSN-200-BVSR	For flow control valve	-	350 (5000)	In line	VP000096 VP000152	11.00.060
	CFSN-200-BMSR	For flow control valve	-	350 (5000)	In line	VP000096 VP000152	11.00.060
	CFSN-090-BHSR	For flow control valve	-	350 (5000)	In line	VP000132	11.00.060
	CFSN-090-BVSR	For flow control valve	-	350 (5000)	In line	VP000132	11.00.060
	CFSN-090-BMSR	For flow control valve	-	350 (5000)	In line	VP000132	11.00.060
	CFSN-035-BHSR	For flow control valve	-	350 (5000)	In line	VP000132	11.00.060
	CFSN-035-BVSR	For flow control valve	-	350 (5000)	In line	VP000132	11.00.060
	CFSN-035-BMSR	For flow control valve	-	350 (5000)	In line	VP000132	11.00.060
	Seal kit	Cavity Personalized	-	-	-	-	11.00.070
		Cavity SAE	-	-	-	-	11.00.080

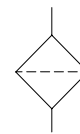
ACCESSORIES

FILTER

SCREW IN FILTER



Dimensions: mm [inches]



SPECIFICATIONS

Max. operating Δp : 35 bar (500 psi)

Rated flow: See table

Weight: 8 g (0,02 lbs)

Cavity: See table

Contamination class to ISO 4406: See technical spec.

MTTFd: 150 - 1200 years: See technical spec.

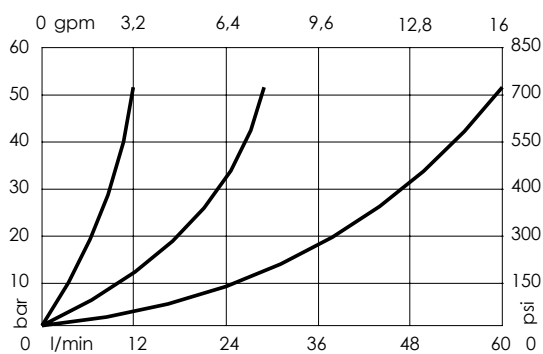
For other configurations/quick codes not available in this catalogue page please consult factory

APPLICATION LIMITATIONS

Not suitable for use with:

- fast acting valve
- cold oil
- high viscosity oil
- other conditions creating pressure bdrop greater than 35 bar (500 psi)
- max. operatig pressure is 350 bar (5000 psi)

CURVES



ORDERING CODES

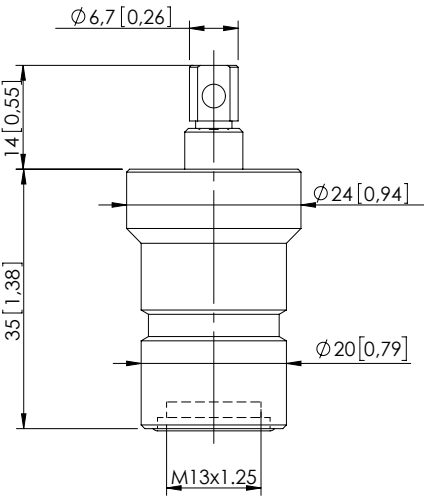
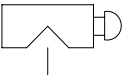
Quick code	Description	Max. flow	Filtration	A	B	C	D	E	Installation torque
CT000002	Filter G 3/8"	50 l/min (13 gpm)	300 micron (0,0118 in)	G 3/8"	2,5 [0,10]	3,5 [0,14]	6 [0,24]	8 [0,31]	10 Nm (7 ft.-lb)
CT000003	Filter G 1/4"	25 l/min (7 gpm)	300 micron (0,0118 in)	G 1/4"	2 [0,08]	3 [0,12]	5 [0,20]	6 [0,24]	5 Nm (4 ft.-lb)
CT000004	Filter G 1/8"	10 l/min (3 gpm)	300 micron (0,0118 in)	G 1/8"	1,6 [0,06]	2,2 [0,09]	3,8 [0,15]	5 [0,20]	3 Nm (2 ft.-lb)

Revision A1

ACCESSORIES

MANUAL OVERRIDE

DETENT TYPE



Dimensions: mm [inches]

NOTES

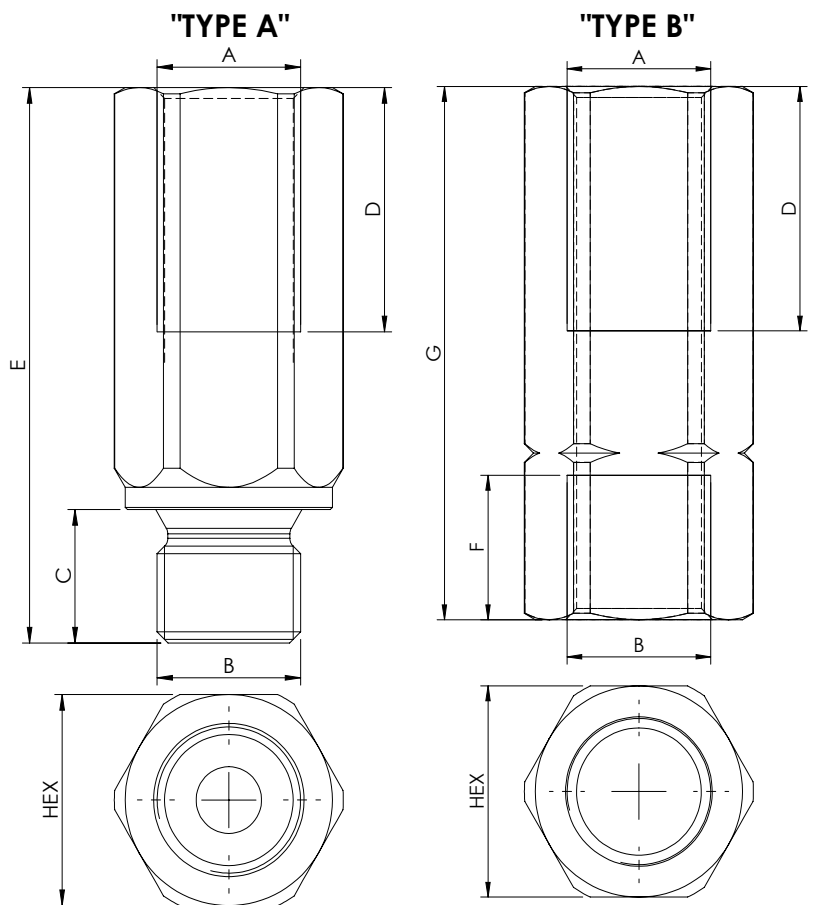
Suitable for push style override solenoid valves.

ORDERING CODES

Quick code	Description	
ST000364	Manula override	

SLEEVE BODY

SLEEVE



Dimensions: mm [inches]

SPECIFICATIONS

Max. operating pressure: 350 bar (5000 psi)

Material: Steel

Contamination class to ISO 4406: See technical spec.

MTFa: 150 - 1200 years: See technical spec.

NOTES

Suitable for:
 -Hose burst valve (CFHN-XXX-MHST)
 For other configurations/quick codes not available in this catalogue page
 please consult factory

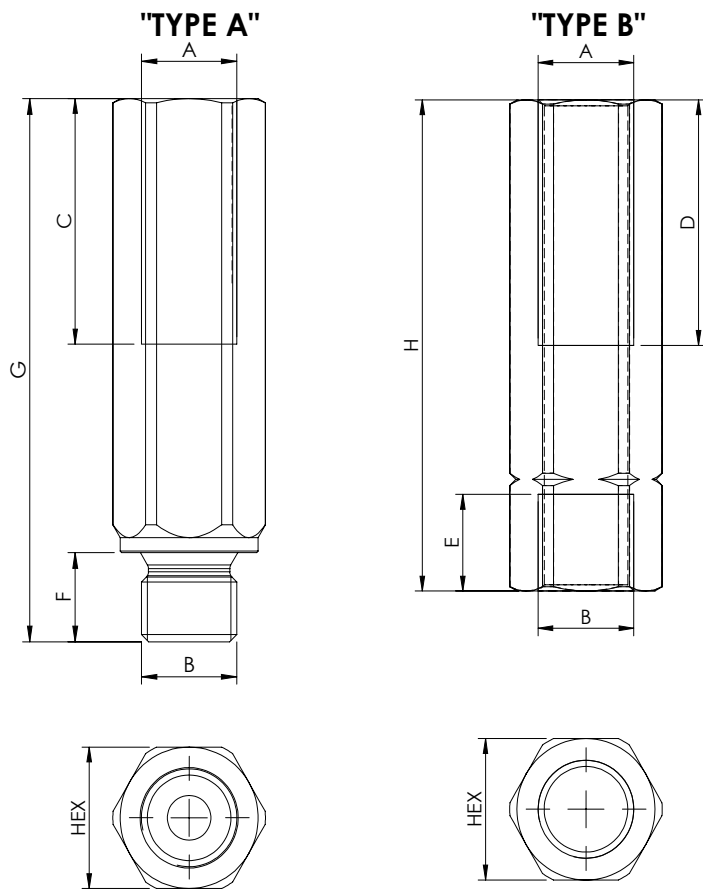
ORDERING CODES

Quick code "TYPE A"	Quick code "TYPE B"	A/B	C	D	E	F	G	Hex.	Weight "TYPE A"	Weight "TYPE B"
PC000127	PC000315	G 1/4"	12 [0,47]	22 [0,86]	50 [1,97]	13 [0,51]	48 [1,89]	19 [0,75]	0,07 kg (0,15 lb)	0,07 kg (0,15 lb)
PC000128	PC000260	G 3/8"	12 [0,47]	26 [1,02]	55 [2,17]	13 [0,51]	52 [2,05]	22 [0,87]	0,09 kg (0,20 lb)	0,09 kg (0,20 lb)
PC000129	PC000349	G 1/2"	14 [0,55]	30 [1,18]	65 [2,55]	15 [0,59]	60 [2,36]	27 [1,06]	0,16 kg (0,35 lb)	0,15 kg (0,33 lb)
PC000130	PC000496	G 3/4"	16 [0,63]	38 [1,49]	78 [3,07]	17 [0,66]	72 [2,83]	32 [1,26]	0,25 kg (0,55 lb)	0,23 kg (0,51 lb)
PC000580	PC000581	G 1"	18 [0,70]	47 [1,85]	92 [3,62]	19 [0,74]	85 [3,34]	41 [1,61]	0,50 kg (1,1 lb)	0,46 kg (1,0 lb)

Revision B

SLEEVE BODY

SLEEVE



Dimensions: mm [inches]

NOTES

Suitable for:
 -Flow control valves (CFST-XXX-MDST)
 For other configurations/quick codes not available in this catalogue page
 please consult factory

SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Material:	Steel
Contamination class to ISO 4406:	See technical spec.
MTF _d :	150 - 1200 years: See technical spec.

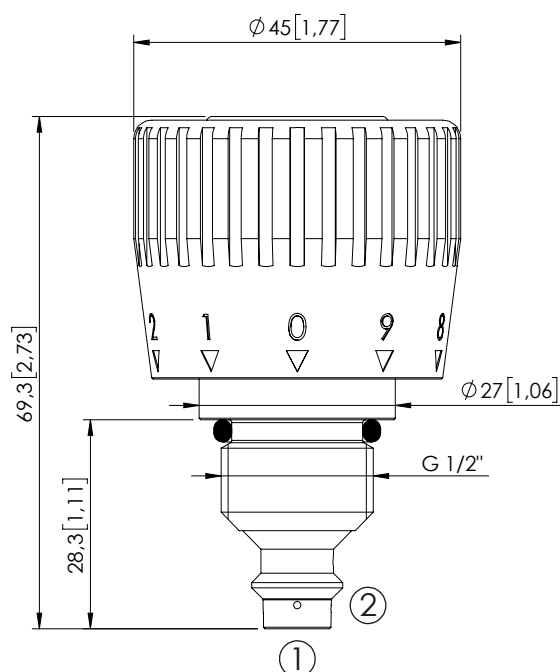
ORDERING CODES

Quick code "TYPE A"	Quick code "TYPE B"	A/B	C	D	E	F	G	H	Hex.	Weight "TYPE A"	Weight "TYPE B"
PC000196	PC000232	G 1/4"	33 [1,30]	33 [1,30]	13 [0,51]	12 [0,47]	73 [2,87]	66 [2,60]	19 [0,75]	0,12 kg (0,26 lb)	0,10 kg (0,22 lb)
PC000197	PC000249	G 3/8"	40 [1,57]	34 [1,34]	13 [0,51]	12 [0,47]	82 [3,23]	70 [2,76]	22 [0,87]	0,15 kg (0,33 lb)	0,13 kg (0,30 lb)
PC000162	PC000462	G 1/2"	45 [1,77]	40 [1,57]	15 [0,59]	14 [0,55]	96 [3,78]	80 [3,15]	27 [1,06]	0,25 kg (0,55 lb)	0,21 kg (0,46 lb)
PC000198	PC000165	G 3/4"	51 [2,01]	51 [2,01]	17 [0,66]	16 [0,63]	105 [4,13]	100 [3,94]	32 [1,26]	0,35 kg (0,77 lb)	0,32 kg (0,70 lb)

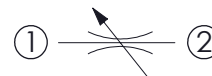
Revision B1

ACCESSORIES

CFSN-090-BPSR

FLOW REGULATOR
SPARE PART

Dimensions: mm [inches]



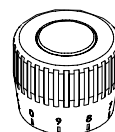
SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Rated flow:	80 l/min (21 gpm)
Cavity:	VP000132
Weight:	0,25 kg 0.55 lbs)
Installation torque:	130 - 140 Nm (96 - 103 ft-lb)
Seal kit:	RC700132
Contamination class to ISO 4406:	See technical spec.
MTF _d :	150 - 1200 years: See technical spec.

NOTES

Components we be supplied partially disassembled.
Contact AFT sales network for assembling instruction
For other configurations/quick codes not available in this catalogue page
please consult factory

OPTIONS



Graduated handknob
for flow regulation
under pressure

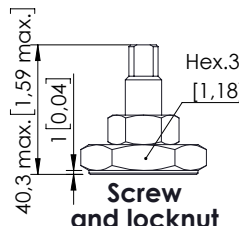
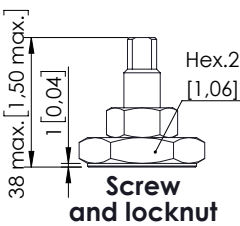
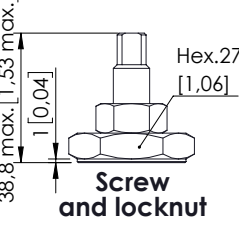
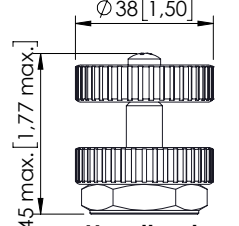
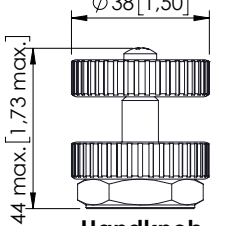
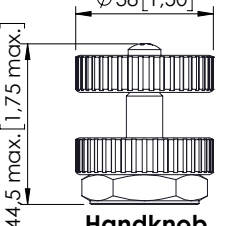
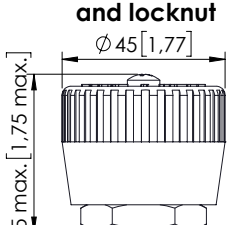
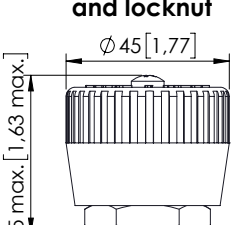
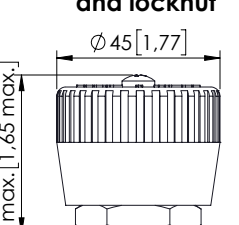
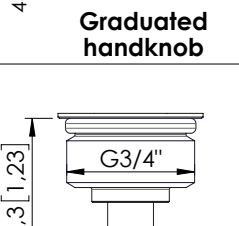
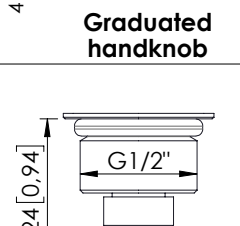
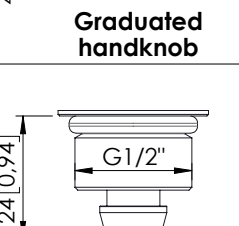
ORDERING CODES

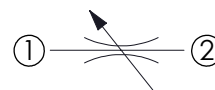
Quick code	Description	Flow range adjustment	Options
CF000237	CFSN-090-BMSR-06-132-N350	0-6 l/min (0-2 gpm)	Graduated handknob
CF000238	CFSN-090-BMSR-12-132-N350	0-12 l/min (0-3 gpm)	Graduated handknob
CF000239	CFSN-090-BMSR-25-132-N350	0-25 l/min (7 gpm)	Graduated handknob
CF000240	CFSN-090-BMSR-32-132-N350	0-32 l/min (0-8 gpm)	Graduated handknob
CF000392	CFSN-090-BMSR-50-132-N350	0-50 l/min (0-13 gpm)	Graduated handknob
CF000242	CFSN-090-BMSR-63-132-N350	0-63 l/min (0-17 gpm)	Graduated handknob
CF000243	CFSN-090-BMSR-70-132-N350	0-70 l/min (0-19 gpm)	Graduated handknob
CF000244	CFSN-090-BMSR-80-132-N350	0-80 l/min (0-21 gpm)	Graduated handknob

Revision C1

ACCESSORIES

FLOW CONTROL

	REGULATION TYPE		
	STANDARD (G 3/4")	STANDARD (G 1/2")	FINE
A D J U S T M E N T T Y P E	 Screw and locknut	 Screw and locknut	 Screw and locknut
	 Handknob and locknut	 Handknob and locknut	 Handknob and locknut
	 Graduated handknob	 Graduated handknob	 Graduated handknob
	 Totally closed	 Totally closed	 Totally closed



SPECIFICATIONS

Max. operating pressure:	350 bar (5000 psi)
Rated flow:	See table
Cavity:	See table
Contamination class to ISO 4406:	See technical spec.
MTF _d :	150 - 1200 years: See technical spec.

NOTES

Dimensions: mm [inches]

- Spare parts for flow regulations parts parts in body.
- Contact AFT sales network for assembling instruction.

For other configurations/quick codes not available in this catalogue page please consult factory

ORDERING CODES

Quick code	Description	Options	Regulated sensivity	Max. flow regulation	Cavity	Installation torque
CF000015	CFSN-200-BHSR-NP-096-N350	Screw and locknut	Standard (G 3/4")	90-190 l/min (24-50 gpm)	VP000096 VP000152	120-150 Nm (89-111 ft-lb)
CF000030	CFSN-200-BVSR-NP-096-N350	Handknob and locknut	Standard (G 3/4")	90-190 l/min (24-50 gpm)	VP000096 VP000152	120-150 Nm (89-111 ft-lb)
CF000042	CFSN-200-BMSR-NP-096-N350	Graduated handknob	Standard (G 3/4")	90-190 l/min (24-50 gpm)	VP000096 VP000152	120-150 Nm (89-111 ft-lb)
CF000029	CFSN-090-BHSR-NP-132-N350	Screw and locknut	Standard (G 1/2")	55 l/min (15 gpm)	VP000132	75-85 Nm (55-63 ft-lb)
CF000019	CFSN-090-BVSR-NP-132-N350	Handknob and locknut	Standard (G 1/2")	55 l/min (15 gpm)	VP000132	75-85 Nm (55-63 ft-lb)
CF000033	CFSN-090-BMSR-NP-132-N350	Graduated handknob	Standard (G 1/2")	55 l/min (15 gpm)	VP000132	75-85 Nm (55-63 ft-lb)
CF000036	CFSN-035-BHSR-NP-132-N350	Screw and locknut	Fine	30 l/min (8 gpm)	VP000132	75-85 Nm (55-63 ft-lb)
CF000037	CFSN-035-BVSR-NP-132-N350	Handknob and locknut	Fine	30 l/min (8 gpm)	VP000132	75-85 Nm (55-63 ft-lb)
CF000034	CFSN-035-BMSR-NP-132-N350	Graduated handknob	Fine	30 l/min (8 gpm)	VP000132	75-85 Nm (55-63 ft-lb)

Revision A1

SEAL KIT

SEAL KIT-STANDARD CAVITIES



ATLANTIC
Fluid Tech
WWW.SUMY.IR

CAVITY	BACKUP RING TYPE	NBR 70	NBR 90	VITON 80
SAE-08-2N	Single backup ring	RA700081	RA900081	
	Double backup ring	RB700081	RB900081	
SAE-10-2N	Single backup ring	RA700082	RA900082	
	Double backup ring	RB700082	RB900082	
SAE-12-2N	Single backup ring	RA700083	RA900083	
	Double backup ring			
SAE-16-2N	Single backup ring	RA700084	RA900084	
	Double backup ring			
SAE-20-2N	Single backup ring		RA900085	
	Double backup ring			
SAE-08-3C	Single backup ring	RA700086		
	Double backup ring			
SAE-10-3C	Single backup ring	RA700087		
	Double backup ring	RB700087		
SAE-12-3C	Single backup ring			
	Double backup ring			
SAE-16-3C	Single backup ring			
	Double backup ring			
SAE-20-3C	Single backup ring			
	Double backup ring		RB900090	
SAE-08-3N	Single backup ring			
	Double backup ring	RB700091		
SAE-10-3N	Single backup ring	RA700092		
	Double backup ring	RB700092		
SAE-12-3N	Single backup ring	RA700093		
	Double backup ring			
SAE-16-3N	Single backup ring			
	Double backup ring	RB700094		
SAE-20-3N	Single backup ring			
	Double backup ring			
SAE-08-4N	Single backup ring			
	Double backup ring	RB700101		
SAE-10-4N	Single backup ring			
	Double backup ring	RB700102		
SAE-12-4N	Single backup ring			
	Double backup ring	RB700103		
SAE-16-4N	Single backup ring			
	Double backup ring	RB700104		
SAE-20-4N	Single backup ring			
	Double backup ring			

SEAL KIT

SEAL KIT-SPECIAL CAVITIES



CAVITY	BACKUP RING TYPE	NBR 70	NBR 90	VITON 80
VP000005	Single backup ring	RC700005		
	Double backup ring			
VP000006	Single backup ring	RC700006		
	Double backup ring			
VP000008	Single backup ring	RC700008		
	Double backup ring			
VP000013	Single backup ring		RC900013	
	Double backup ring		RD900013	
VP000015	Single backup ring	RC700015		
	Double backup ring			
VP000016	Single backup ring	RC700016		
	Double backup ring			
VP000018	Single backup ring	-		
	Double backup ring	-		
VP000028	Single backup ring	RC700028		
	Double backup ring			
VP000038	Single backup ring	RC700038		
	Double backup ring			
VP000057	Single backup ring		RC900057	
	Double backup ring		RD900057	
VP000058	Single backup ring	RC700058		
	Double backup ring			
VP000065	Single backup ring		RC900065	
	Double backup ring		RD900065	
VP000070	Single backup ring	RC700070		
	Double backup ring			
VP000079	Single backup ring	-		
	Double backup ring	-		
VP000080	Single backup ring		RC900080	
	Double backup ring			
VP000086	Single backup ring	RC700086		
	Double backup ring			
VP000096	Single backup ring			
	Double backup ring			
VP000098	Single backup ring	RC700098		
	Double backup ring			
VP000120	Single backup ring			
	Double backup ring	RD700120		
VP000121	Single backup ring			
	Double backup ring	RD700121		

SEAL KIT

SEAL KIT - SPECIAL CAVITIES



ATLANTIC
Fluid Tech
WWW.SUMY.IR

CAVITY	BACKUP RING TYPE	NBR 70	NBR 90	VITON 80
VP000127	Single backup ring			
	Double backup ring		RD900127	
VP000128	Single backup ring			
	Double backup ring		RD900128	
VP000132	Single backup ring			
	Double backup ring	RC700132		
VP000154	Single backup ring		RC900154	
	Double backup ring			
VP000158	Single backup ring	-		
	Double backup ring	-		
VP000161	Single backup ring	RC700161		
	Double backup ring			
VP000165	Single backup ring	RC700165		
	Double backup ring			
VP000166	Single backup ring	RC700166		
	Double backup ring			
VP000174	Single backup ring			
	Double backup ring	RD700174		
VP000178	Single backup ring	RC700178		
	Double backup ring			
VP000180	Single backup ring			
	Double backup ring			
VP000189	Single backup ring	RC700189		
	Double backup ring			
VP000193	Single backup ring	RC700193		
	Double backup ring			
VP000198	Single backup ring			
	Double backup ring	RD700198		
VP000202	Single backup ring	-		
	Double backup ring	-		
VP000204	Single backup ring	RC700204		
	Double backup ring			
VP000216	Single backup ring	RC700216		
	Double backup ring			
VP000249	Single backup ring		RC900249	
	Double backup ring			
VP000250	Single backup ring		RC900250	
	Double backup ring			
VP000263	Single backup ring	RC700263		
	Double backup ring			

SEAL KIT - SPECIAL CAVITIES



CAVITY	BACKUP RING TYPE	NBR 70	NBR 90	VITON 80
VP000307	Single backup ring	-		
	Double backup ring	-		
VP000309	Single backup ring	-		
	Double backup ring	-		
VP000310	Single backup ring	-		
	Double backup ring	-		
VP000311	Single backup ring	-		
	Double backup ring	-		
VP000312	Single backup ring	-		
	Double backup ring	-		
VP000314	Single backup ring	RC700314		
	Double backup ring			
VP000330	Single backup ring	RC700330		
	Double backup ring			
VP000338	Single backup ring			
	Double backup ring	RD700338		
VP000371	Single backup ring	RC700371		
	Double backup ring			
VP000445	Single backup ring	RC700445		
	Double backup ring			



ATLANTIC
Fluid Tech

SECTION 12

Standard
Manifolds

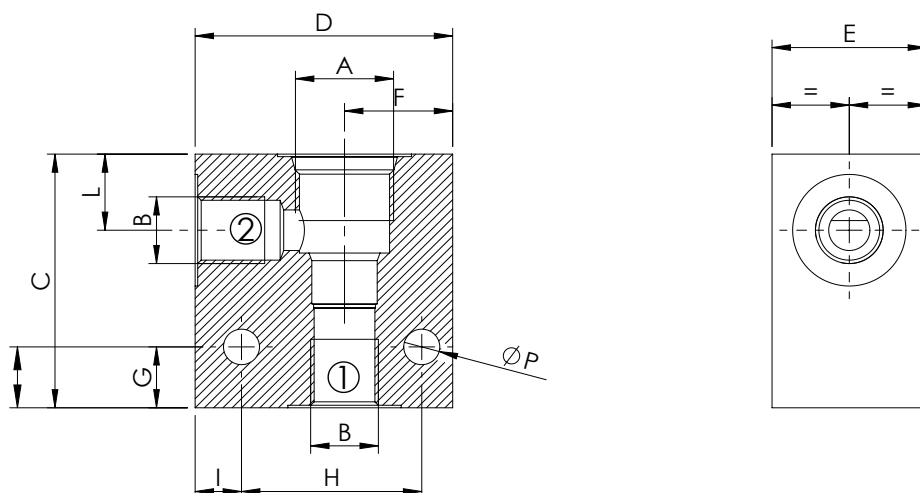
SECTION 12

STANDARD MANIFOLDS

Description	Material	Valve type	Max. pressure bar (psi)	Installation	Port size	Page
SAE-XX-2N	Aluminium	Two way	250 (3600)	In line	See datasheet	12.00. 010
SAE-XX-2N	Steel	Two way	350 (5000)	In line	See datasheet	12.00. 020
SAE-XX-3C	Aluminium	Three way	250 (3600)	In line	See datasheet	12.00. 030
SAE-XX-3C	Steel	Three way	350 (5000)	In line	See datasheet	12.00. 030
SAE-XX-3N	Aluminium	Three way	250 (3600)	In line	See datasheet	12.00. 040
SAE-XX-3N	Steel	Three way	350 (5000)	In line	See datasheet	12.00. 040
SAE-XX-4N-3P	Aluminium	Four way, three ports	250 (3600)	In line	See datasheet	12.00. 050
SAE-XX-4N-3P	Steel	Four way, three ports	350 (5000)	In line	See datasheet	12.00. 050
SAE-XX-4N	Aluminium	Four way	250 (3600)	In line	See datasheet	12.00. 060
SAE-XX-4N	Steel	Four way	350 (5000)	In line	See datasheet	12.00. 060
VP000057	Aluminium	Two way	250 (3600)	In line	See datasheet	12.00. 070
VP000057	Steel	Two way	350 (5000)	In line	See datasheet	12.00. 070
VP000013	Aluminium	Two way	250 (3600)	In line	See datasheet	12.00. 070
VP000013	Steel	Two way	350 (5000)	In line	See datasheet	12.00. 070
VP000180	Aluminium	Two way	250 (3600)	In line	See datasheet	12.00. 070
VP000180	Steel	Two way	350 (5000)	In line	See datasheet	12.00. 070
SAE-XX-2N	Aluminium	Two way, with override screw	250 (3600)	In line	See datasheet	12.00. 080
SAE-XX-2N	Steel	Two way, with override screw	350 (5000)	In line	See datasheet	12.00. 080

STANDARD MANIFOLDS

SAE-XX-2N

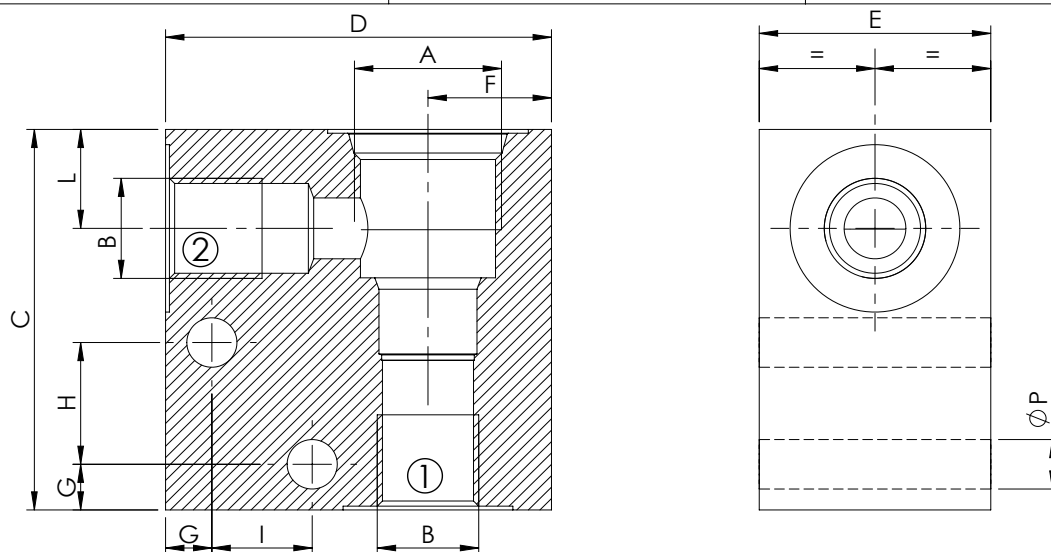


For other configurations/quick codes not available in this catalogue page please consult factory

CAVITY	DIMENSIONS: mm (inches)												QUICK CODE		
	A	B	C	D	E	F	G	H	I	L	M	N	P	Steel	Aluminium
SAE-08-2N	G 1/4"	50 (1,96)	50 (1,96)	30 (1,18)	21 (0,83)	12 (0,47)	35 (1,38)	9 (0,35)	15 (0,59)				7 (0,28)	LK000018	LK000017
	G 3/8"	50 (1,96)	50 (1,96)	30 (1,18)	21 (0,83)	12 (0,47)	35 (1,38)	9 (0,35)	15 (0,59)				7 (0,28)	LK000020	LK000019
	G 1/2"	50 (1,96)	50 (1,96)	35 (1,38)	23 (0,91)	12 (0,47)	35 (1,38)	9 (0,35)	16 (0,63)				7 (0,28)	LK000390	LK000247
	7/16-20	50 (1,96)	50 (1,96)	30 (1,18)	21 (0,83)	12 (0,47)	35 (1,38)	9 (0,35)	15 (0,59)				7 (0,28)		
	9/16-18	50 (1,96)	50 (1,96)	30 (1,18)	21 (0,83)	12 (0,47)	35 (1,38)	9 (0,35)	15 (0,59)				7 (0,28)		
SAE-10-2N	G 3/8"	60 (2,36)	60 (2,36)	35 (1,38)	25 (0,98)	15 (0,59)	45 (1,77)	7 (0,28)	19 (0,75)				7 (0,28)	LK000022	LK000021
	G 1/2"	60 (2,36)	60 (2,36)	35 (1,38)	25 (0,98)	15 (0,59)	45 (1,77)	7 (0,28)	19 (0,75)				7 (0,28)	LK000024	LK000023
	G 3/4"	60 (2,36)	60 (2,36)	40 (1,57)	27,5 (1,08)	15 (0,59)	45 (1,77)	9 (0,35)	20 (0,79)				7 (0,28)	LK000047	LK000046
SAE-12-2N	G 1/2"	75 (2,95)	75 (2,95)	80 (3,15)	40 (1,57)	35 (1,38)	20 (0,79)	60 (2,36)	10 (0,39)	26,5 (1,04)			9 (0,35)	LK000207	LK000208
	G 3/4"	75 (2,95)	75 (2,95)	80 (3,15)	40 (1,57)	35 (1,38)	20 (0,79)	60 (2,36)	10 (0,39)	26,5 (1,04)			9 (0,35)	LK000205	LK000206
SAE-16-2N	G 3/4"	80 (3,15)	80 (3,15)	90 (3,54)	50 (1,96)	37 (1,46)	22 (0,87)	60 (2,36)	20 (0,79)	26 (1,02)			9 (0,35)	LK000156	LK000157
	G 1"	80 (3,15)	80 (3,15)	90 (3,54)	50 (1,96)	37 (1,46)	22 (0,87)	60 (2,36)	20 (0,79)	26 (1,02)			9 (0,35)	LK000154	LK000155
SAE-20-2N															

STANDARD MANIFOLDS

SAE-XX-2N

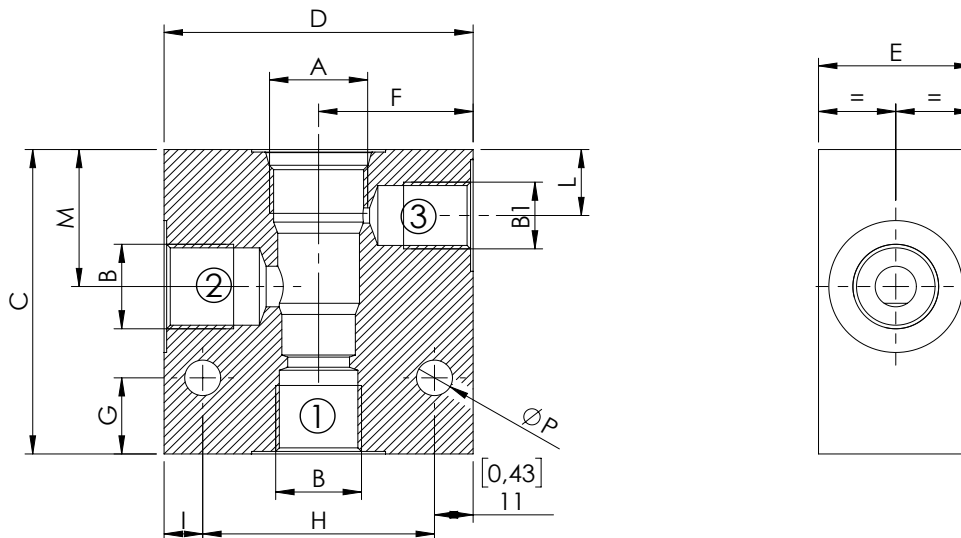


For other configurations/quick codes not available in this catalogue page please consult factory

CAVITY	DIMENSIONS: mm (inches)												QUICK CODE		
	A	B	C	D	E	F	G	H	I	L	M	N	P	Steel	Aluminium
SAE-08-2N	G 1/4"	50 (1,96)	50 (1,96)	30 (1,18)	16 (0,63)	6 (0,24)	16 (0,63)	13 (0,51)	13 (0,51)				6,5 (0,26)	LK000086	LK000005
	G 3/8"	50 (1,96)	50 (1,96)	30 (1,18)	16 (0,63)	6 (0,24)	16 (0,63)	13 (0,51)	13 (0,51)				6,5 (0,26)	LK000085	LK000077
	7/16-20	50 (1,96)	50 (1,96)	30 (1,18)	16 (0,63)	6 (0,24)	16 (0,63)	13 (0,51)	13 (0,51)				6,5 (0,26)	LK000277	LK000148
	9/16-18	50 (1,96)	50 (1,96)	30 (1,18)	16 (0,63)	6 (0,24)	16 (0,63)	13 (0,51)	13 (0,51)				6,5 (0,26)	LK000076	LK000278
SAE-10-2N															
SAE-12-2N															
SAE-16-2N															
SAE-20-2N															

STANDARD MANIFOLDS

SAE-XX-3C

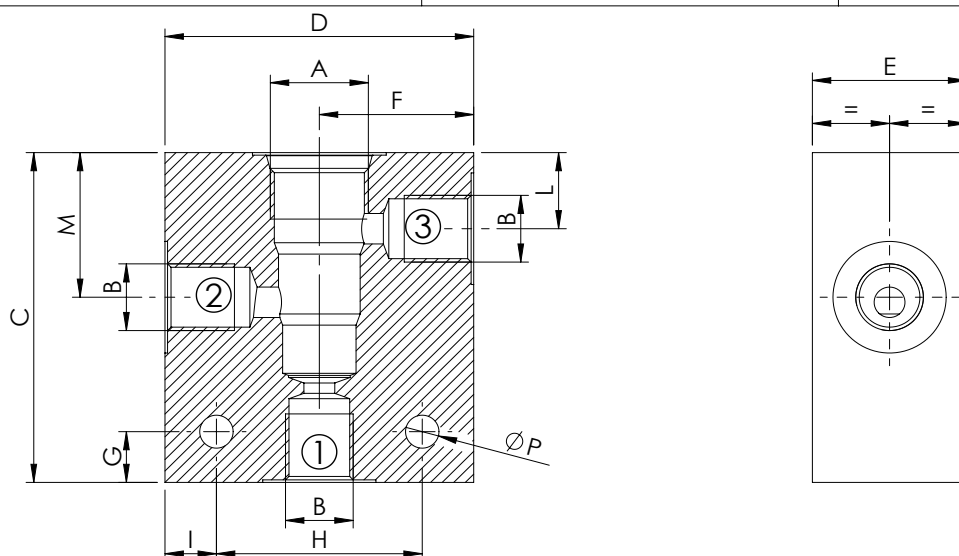


For other configurations/quick codes not available in this catalogue page please consult factory

CAVITY A	DIMENSIONS: mm (inches)												QUICK CODE	
	B	B1	C	D	E	F	G	H	I	L	M	P	Steel	Aluminium
SAE-08-3C	G 3/8"	G 1/4"	60 (2,36)	60 (2,36)	30 (1,18)	30 (1,18)	15 (0,59)	45 (1,77)	7,5 (0,3)	13 (0,51)	27 (1,06)	7 (0,28)	LK000279	LK000033
SAE-10-3C	G 3/8"	G 1/4"	70 (2,76)	60 (2,36)	35 (1,38)	30 (1,18)	15 (0,59)	45 (1,77)	7,5 (0,3)	15 (0,59)	32 (1,26)	7 (0,28)	LK000280	LK000034
SAE-12-3C	G 1/2"	G 1/4"	80 (3,15)	75 (2,95)	40 (1,57)	35 (1,38)	15 (0,59)	55 (2,17)	10 (0,39)	24 (0,94)	42 (1,65)	7 (0,28)	LK000165	LK000164
	G 3/4"	G 1/4"	90 (3,54)	75 (2,95)	40 (1,57)	35 (1,38)	15 (0,59)	55 (2,17)	10 (0,39)	24 (0,94)	42 (1,65)	7 (0,28)	LK000210	LK000211
	7/8-14	9/16-18	80 (3,15)	75 (2,95)	40 (1,57)	35 (1,38)	15 (0,59)	55 (2,17)	10 (0,39)	24 (0,94)	42 (1,65)	9 (0,35)	LK000263	LK000262
SAE-16-3C	G 1"	G 1/4"	90 (3,54)	90 (3,54)	50 (1,96)	40 (1,57)	22 (0,87)	70 (2,76)	10 (0,39)	18,5 (0,73)	39 (1,54)	9 (0,35)	LK000212	LK000213
	G 3/4"	G 1/4"	90 (3,54)	80 (3,15)	50 (1,96)	38 (1,5)	22 (0,87)	60 (2,36)	10 (0,39)	18,5 (0,73)	39 (1,54)	9 (0,35)	LK000264	LK000265
	1 5/16-12	7/16-20	90 (3,54)	90 (3,54)	50 (1,96)	40 (1,57)	22 (0,87)	70 (2,76)	10 (0,39)	18,5 (0,73)	39 (1,54)	9 (0,35)	LK000266	LK000267
SAE-20-3C	G 1"	G 1/4"	110 (4,33)	100 (3,94)	60 (2,36)	45 (1,77)	25 (0,98)	75 (2,95)	12,5 (0,49)	21 (0,83)	51 (2,01)	11 (0,43)	LK000268	LK000269
	G 1-1/4"	G 1/4"	110 (4,33)	100 (3,94)	60 (2,36)	45 (1,77)	25 (0,98)	75 (2,95)	12,5 (0,49)	21 (0,83)	51 (2,01)	11 (0,43)	LK000270	LK000271
	1 5/8-12	7/16-20	110 (4,33)	100 (3,94)	60 (2,36)	45 (1,77)	25 (0,98)	75 (2,95)	12,5 (0,49)	21 (0,83)	51 (2,01)	11 (0,43)	LK000272	LK000273

STANDARD MANIFOLDS

SAE-XX-3N



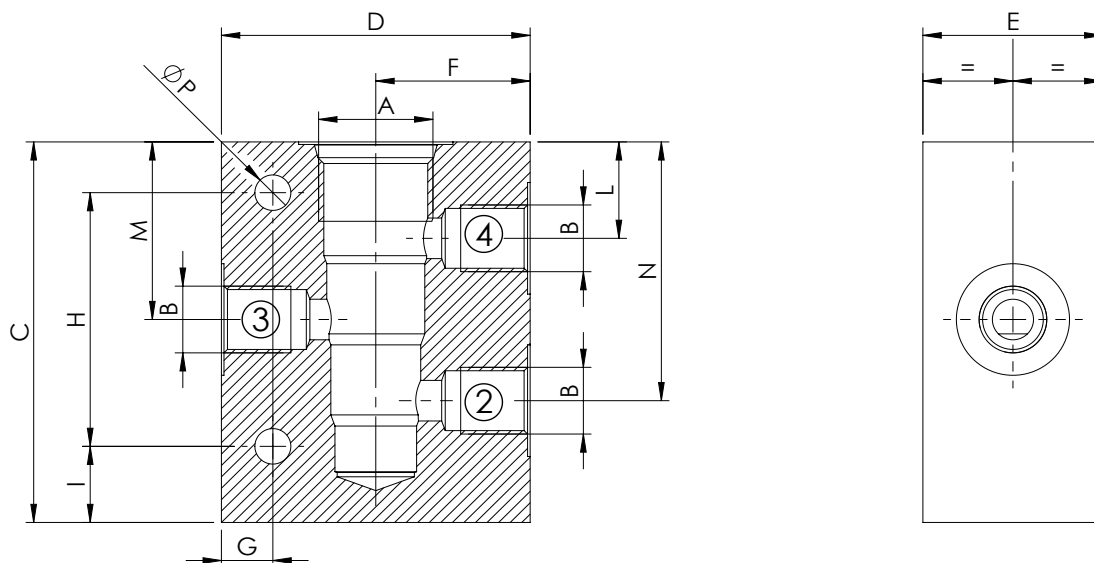
For other configurations/quick codes not available in this catalogue page please consult factory

CAVITY	DIMENSIONS: mm (inches)												QUICK CODE		
	A	B	C	D	E	F	G	H	I	L	M	N	P	Steel	Aluminium
SAE-08-3N	G 1/4"	65 (2,56)	60 (2,36)	30 (1,18)	30 (1,18)	10 (0,39)	40 (1,57)	10 (0,39)	15 (0,59)	28,5 (1,12)			6,5 (0,26)	LK000089	LK000008
	G 3/8"	65 (2,56)	60 (2,36)	30 (1,18)	30 (1,18)	10 (0,39)	40 (1,57)	10 (0,39)	15 (0,59)	28,5 (1,12)			6,5 (0,26)	LK000090	LK000009
SAE-10-3N	G 1/4"	65 (2,56)	65 (2,56)	35 (1,38)	32,5 (1,27)	10 (0,39)	50 (1,96)	7,5 (0,29)	18 (0,71)	35 (1,38)			6,5 (0,26)	LK000035	LK000012
	G 3/8"	65 (2,56)	60 (2,36)	35 (1,38)	30 (1,18)	10 (0,39)	45 (1,77)	7,5 (0,29)	18 (0,71)	34,5 (1,35)			7 (0,28)	LK000027	LK000013
	G 1/2"	70 (2,76)	70 (2,76)	35 (1,38)	35 (1,38)	15 (0,59)	50 (1,96)	10 (0,39)	18 (0,71)	34,5 (1,35)			7 (0,28)	LK000131	LK000057
SAE-12-3N	G 1/2"	100 (3,94)	80 (3,15)	40 (1,57)	42,5 (1,67)	15 (0,59)	55 (2,17)	12,5 (0,49)	29 (1,14)	54 (2,13)			7 (0,28)	LK000100	LK000281
	G 3/4"	100 (3,94)	80 (3,15)	40 (1,57)	40 (1,57)	15 (0,59)	55 (2,17)	12,5 (0,49)	29 (1,14)	54 (2,13)			7 (0,28)	LK000294	LK000295
SAE-16-3N	G 3/4"	100 (3,94)	90 (3,54)	50 (1,96)	45 (1,77)	20 (0,79)	60 (2,36)	15 (0,59)	26 (1,02)	54,5 (2,15)			10,5 (0,41)	LK000256	LK000257
SAE-20-3N															

STANDARD MANIFOLDS

SAE-XX-4N 3P

THREE PORTS

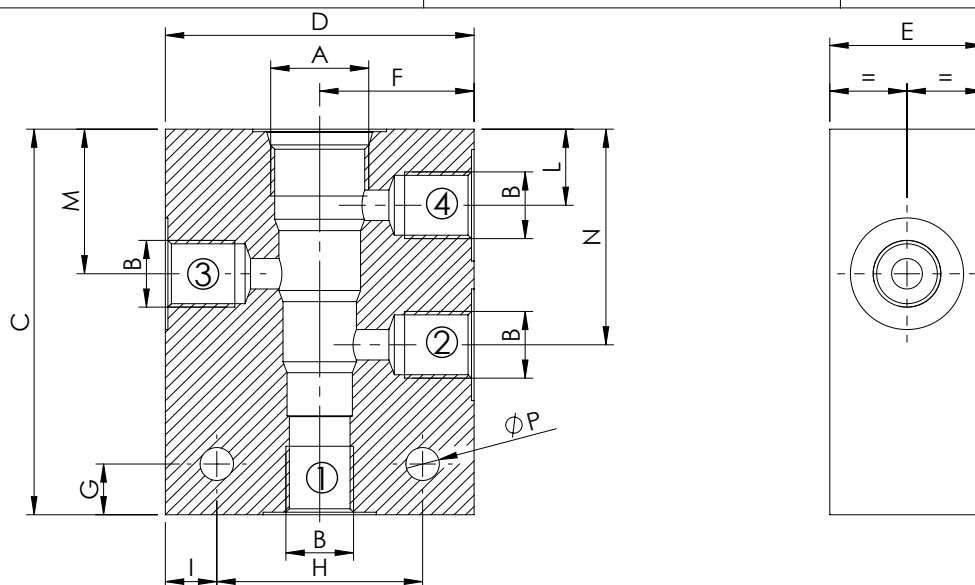


For other configurations/quick codes not available in this catalogue page please consult factory

CAVITY	DIMENSIONS: mm (inches)												QUICK CODE	
	B	C	D	E	F	G	H	I	L	M	N	P	Steel	Aluminium
SAE-08-4N	G 3/8"	75 (2,95)	60 (2,36)	35 (1,38)	30 (1,18)	10 (0,39)	50 (1,96)	15 (0,59)	15 (0,59)	29 (1,14)	43 (1,69)	7 (0,28)	LK000063	LK000376
SAE-10-4N	G 1/4"	75 (2,95)	60 (2,36)	35 (1,38)	30 (1,18)	10 (0,39)	50 (1,96)	15 (0,59)	19 (0,75)	35 (1,38)	51 (2,01)	7 (0,28)	LK000040	LK000038
	G 3/8"	75 (2,95)	60 (2,36)	35 (1,38)	30 (1,18)	10 (0,39)	50 (1,96)	15 (0,59)	19 (0,75)	35 (1,38)	51 (2,01)	7 (0,28)	LK000016	LK000037
	G 1/2"	85 (3,35)	65 (2,56)	35 (1,38)	32,5 (1,28)	10 (0,39)	50 (1,96)	15 (0,59)	19 (0,75)	35 (1,38)	51 (2,01)	7 (0,28)	LK000041	LK000039
	9/16-18	75 (2,95)	60 (2,36)	35 (1,38)	30 (1,18)	10 (0,39)	50 (1,96)	15 (0,59)	19 (0,75)	35 (1,38)	51 (2,01)	7 (0,28)	LK000331	LK000330
	1/4 JIS	75 (2,95)	60 (2,36)	35 (1,38)	30 (1,18)	10 (0,39)	50 (1,96)	15 (0,59)	19 (0,75)	35 (1,38)	51 (2,01)	7 (0,28)	LK000249	LK000367
SAE-12-4N	G 3/4"	120 (4,72)	80 (3,15)	40 (1,57)	40 (1,57)	12 (0,47)	90 (3,54)	15 (0,59)	28,5 (1,12)	53,5 (2,11)	78,5 (3,09)	7 (0,28)	LK000416	LK000417
SAE-16-4N	G 3/4"	120 (4,72)	90 (3,54)	50 (1,96)	45 (1,77)	12 (0,47)	90 (3,54)	15 (0,59)	25,5 (1)	54 (2,13)	82,5 (3,25)	8,5 (0,33)	LK000222	LK000225
	1 1/16 JIS	120 (4,72)	90 (3,54)	50 (1,96)	45 (1,77)	12 (0,47)	90 (3,54)	15 (0,59)	25,5 (1)	54 (2,13)	82,5 (3,25)	8,5 (0,33)	LK000223	LK000224
SAE-20-4N														

STANDARD MANIFOLDS

SAE-XX-4N

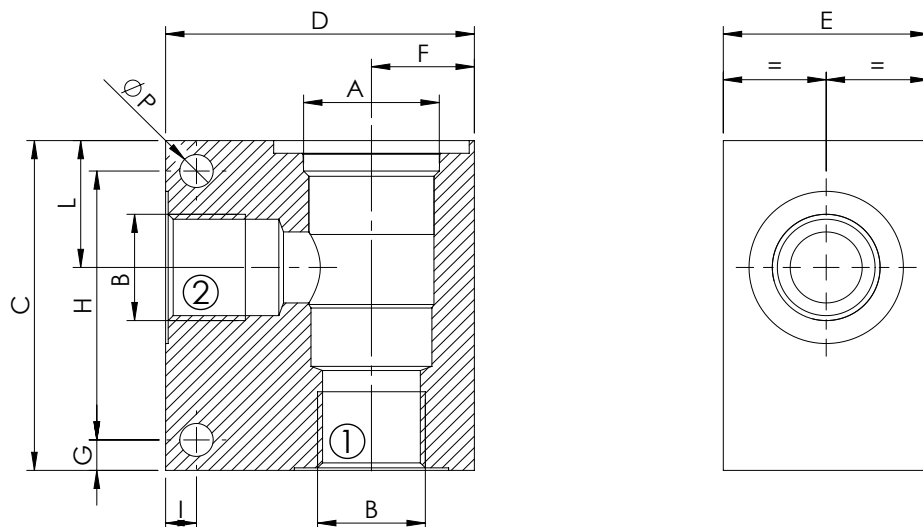


For other configurations/quick codes not available in this catalogue page please consult factory

CAVITY	DIMENSIONS: mm (inches)													QUICK CODE	
	A	B	C	D	E	F	G	H	I	L	M	N	P	Steel	Aluminium
SAE-08-4N	G 1/4"	76 (2,99)	60 (2,36)	30 (1,18)	30 (1,18)	30 (1,18)	10 (0,39)	40 (1,57)	10 (0,39)	15 (0,59)	28,5 (1,12)	42,5 (1,67)	6,5 (0,26)	LK000282	LK000015
	G 3/8"	76 (2,99)	60 (2,36)	30 (1,18)	30 (1,18)	30 (1,18)	10 (0,39)	40 (1,57)	10 (0,39)	15 (0,59)	28,5 (1,12)	42,5 (1,67)	6,5 (0,26)	LK000276	LK000014
SAE-10-4N	G 1/4"	80 (3,15)	65 (2,56)	35 (1,38)	32,5 (1,28)	32,5 (1,28)	10 (0,39)	50 (1,97)	7,5 (0,3)	18 (0,71)	35 (1,38)	50 (1,96)	6,5 (0,26)	LK000231	LK000010
	G 3/8"	80 (3,15)	65 (2,56)	35 (1,38)	32,5 (1,28)	32,5 (1,28)	10 (0,39)	50 (1,97)	7,5 (0,3)	18 (0,71)	35 (1,38)	50 (1,96)	6,5 (0,26)	LK000043	LK000011
SAE-12-4N	G 3/4"	125 (4,92)	80 (3,15)	40 (1,57)	40 (1,57)	40 (1,57)	20 (0,79)	55 (2,17)	12,5 (0,49)	28,5 (1,12)	53,5 (2,11)	79,5 (3,13)	7 (0,28)	LK000418	LK000419
SAE-16-4N															
SAE-20-4N															

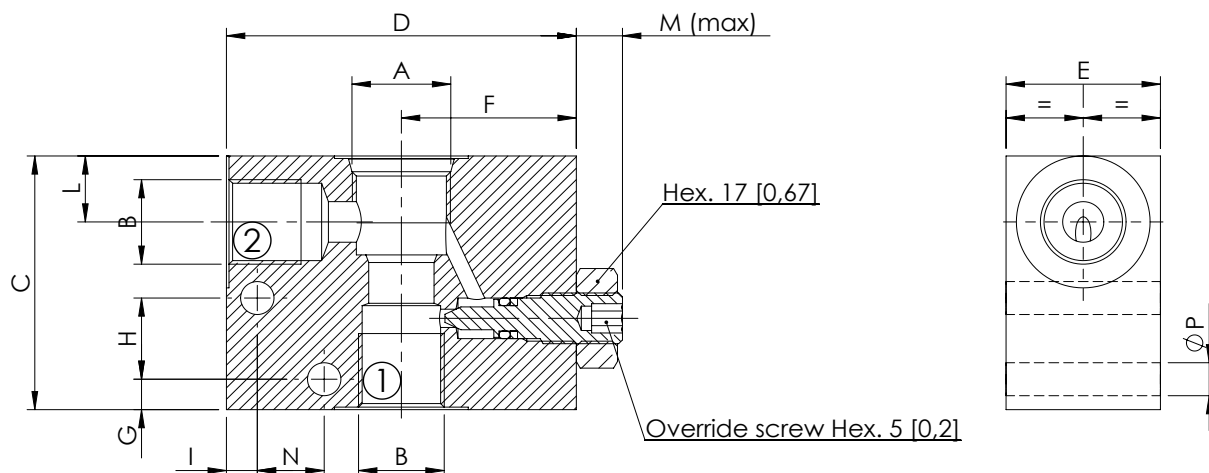
STANDARD MANIFOLDS

VP000XXX


ATLANTIC
 Fluid Tech
 WWW.SUMY.IR


For other configurations/quick codes not available in this catalogue page please consult factory

For other configurations/quick codes not available in this catalogue page please contact factory														
CAVITY	DIMENSIONS: mm (inches)												QUICK CODE	
A	B	C	D	E	F	G	H	I	L	M	N	P	Steel	Aluminium
VP000057	G 1/2"	65 (2,56)	60 (2,36)	40 (1,57)	20 (0,79)	6 (0,24)	53 (2,09)	6 (0,24)	25 (0,98)			6,5 (0,26)	LK000071	LK000055
	G 3/4"	65 (2,56)	60 (2,36)	40 (1,57)	20 (0,79)	6 (0,24)	53 (2,09)	6 (0,24)	25 (0,98)			6,5 (0,26)	LK000075	LK000065
	3/4-16	65 (2,56)	60 (2,36)	40 (1,57)	20 (0,79)	6 (0,24)	53 (2,09)	6 (0,24)	25 (0,98)			6,5 (0,26)	LK000275	LK000283
	7/8-14	65 (2,56)	60 (2,36)	40 (1,57)	20 (0,79)	6 (0,24)	53 (2,09)	6 (0,24)	25 (0,98)			6,5 (0,26)	LK000363	LK000366
	M22x1,5	65 (2,56)	60 (2,36)	40 (1,57)	20 (0,79)	6 (0,24)	53 (2,09)	6 (0,24)	25 (0,98)			6,5 (0,26)	LK000393	LK000392
VP000013	G 3/4"	80 (3,15)	80 (3,15)	50 (1,97)	26 (1,02)	7,5 (0,3)	65 (2,56)	7,5 (0,3)	31 (1,22)			8,5 (0,33)	LK000078	LK000066
	G 1"	80 (3,15)	80 (3,15)	50 (1,97)	26 (1,02)	7,5 (0,3)	65 (2,56)	7,5 (0,3)	31 (1,22)			8,5 (0,33)	LK000061	LK000042
VP000180	G 1-1/4"	100 (3,94)	90 (3,54)	70 (2,76)	35 (1,38)	17 (0,67)	75 (2,95)	15 (0,59)	39 (1,54)			8,5 (0,33)	LK000087	LK000094



For other configurations/quick codes not available in this catalogue page please consult factory

[illegible]



ATLANTIC
Fluid Tech

SECTION 13

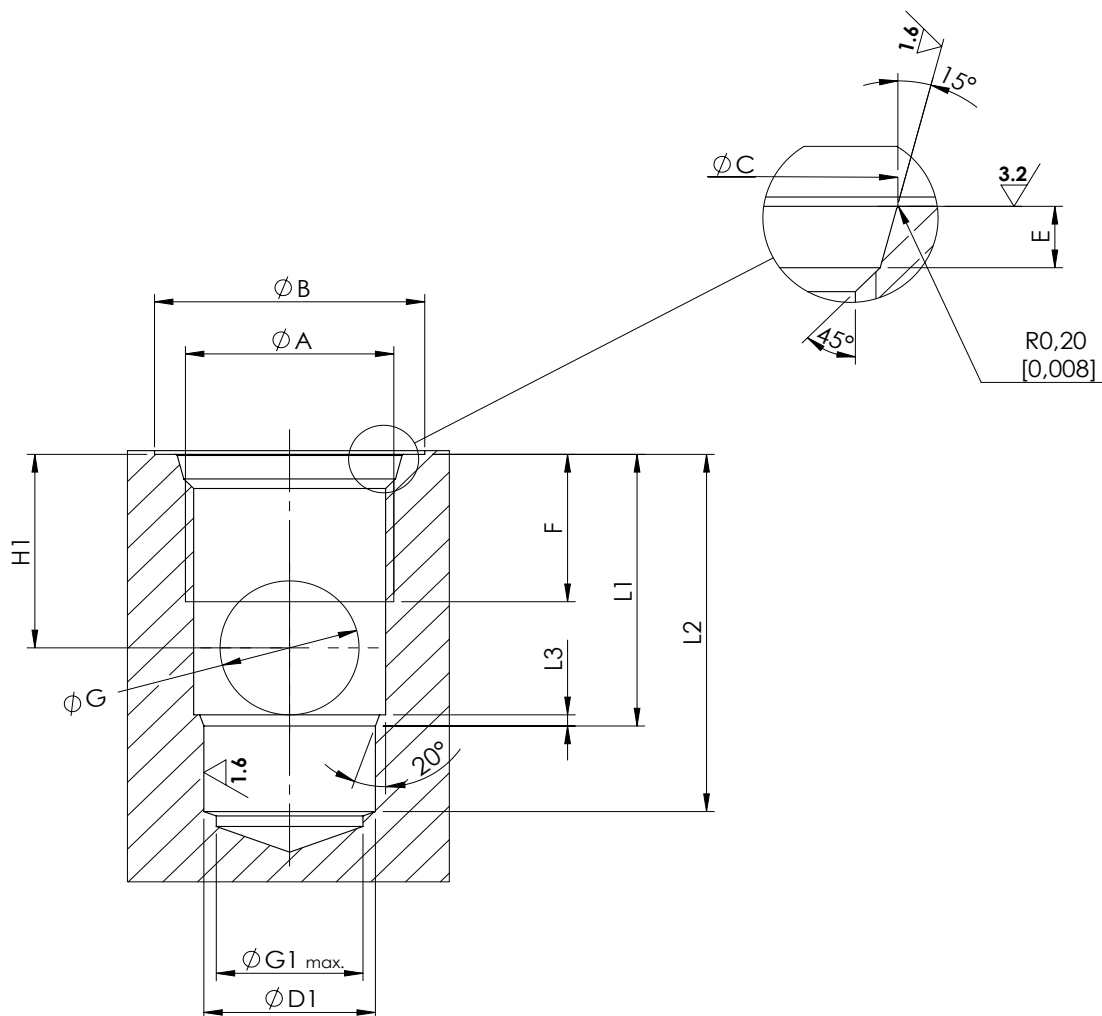
Cavities and
Technical
Drawings

CAVITIES AND TECHNICAL DRAWINGS



ATLANTIC
Fluid Tech
WWW.SUMY.IR

Dimensions: mm [inches]

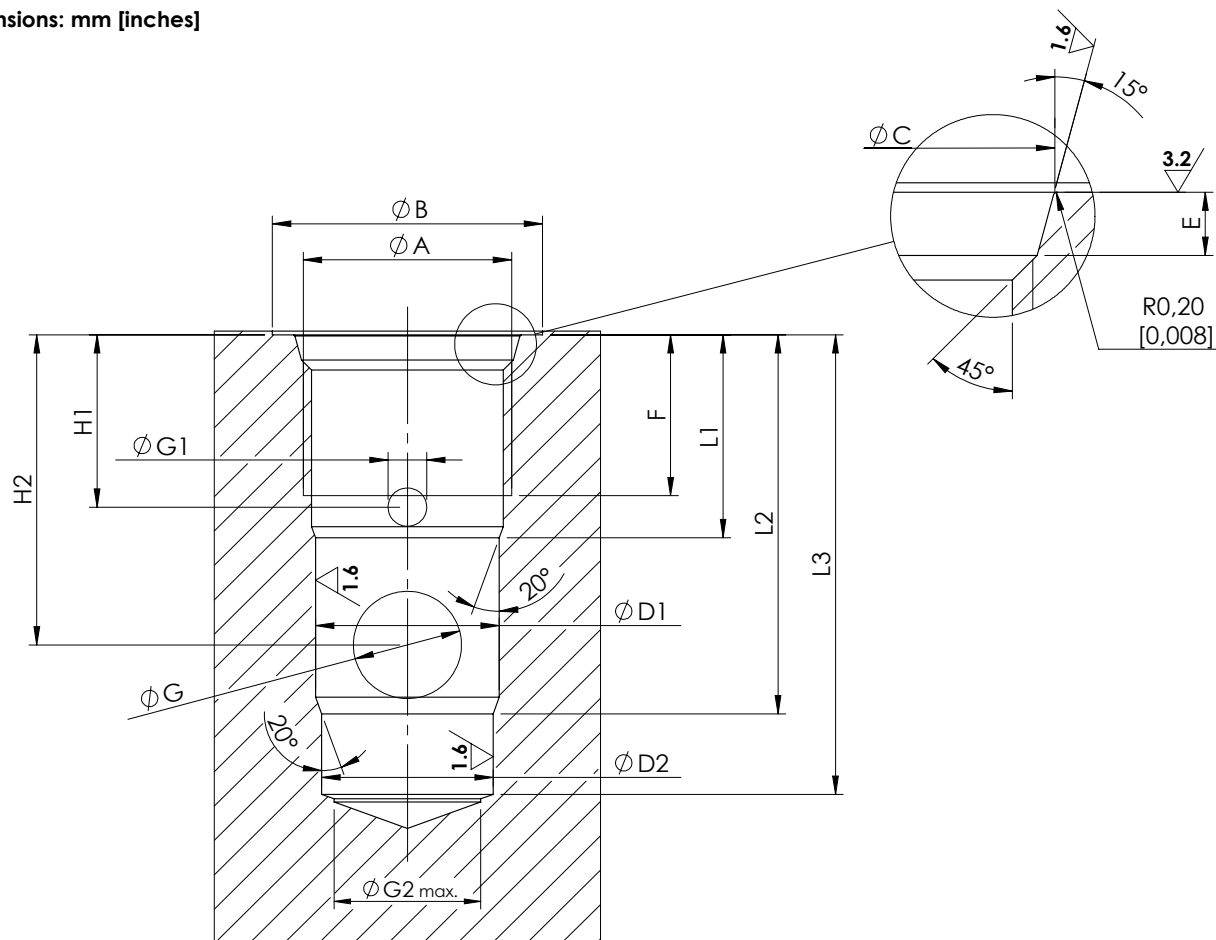


General tolerances : 0.3 mm [0,012 inches]

⊙	0.03[0.0012]
⊥	0.02[0.0008]

	SAE-08-2N	SAE-10-2N	SAE-12-2N	SAE-16-2N	SAE-20-2N
A	3/4-16 UNF	7/8-14 UNF	1-1/16 12 UNF	1-5/16 12 UNF	1-5/8 12 UNF
B	26 [1,02]	30 [1,18]	35 [1,38]	42 [1,65]	48 [1,89]
C	20.6 ^{+0.1} ₀ [0,811 ^{+0.004} ₀]	23.9 ^{+0.1} ₀ [0,941 ^{+0.004} ₀]	29.2 ^{+0.1} ₀ [1,15 ^{+0.004} ₀]	35.5 ^{+0.1} ₀ [1,398 ^{+0.004} ₀]	43.5 ^{+0.1} ₀ [1,713 ^{+0.004} ₀]
D1	12.7 ^{+0.05} ₀ [0,5 ^{+0.002} ₀]	15.87 ^{+0.05} ₀ [0,625 ^{+0.002} ₀]	22.22 ^{+0.05} ₀ [0,875 ^{+0.002} ₀]	28.60 ^{+0.05} ₀ [1,126 ^{+0.002} ₀]	36.52 ^{+0.05} ₀ [1,438 ^{+0.002} ₀]
E	2.6 ^{+0.3} ₀ [0,102 ^{+0.012} ₀]	2.6 ^{+0.3} ₀ [0,102 ^{+0.012} ₀]	3.3 ^{+0.3} ₀ [0,130 ^{+0.012} ₀]	3.3 ^{+0.3} ₀ [0,130 ^{+0.012} ₀]	3.4 ^{+0.3} ₀ [0,134 ^{+0.012} ₀]
F	13 [0,512]	15 [0,591]	20 [0,787]	20 [0,787]	22 [0,866]
G	9 [0,354]	12 [0,472]	18 [0,709]	19 [0,748]	25 [0,984]
G1	12 [0,472]	15 [0,591]	19 [0,748]	24 [0,945]	30 [1,18]
H1	14 [0,551]	18 [0,709]	26 [1,024]	25 [0,984]	30 [1,180]
L1	20.5 [0,807]	25.5 [1,004]	36.5 [1,437]	36 [1,417]	44.5 [1,752]
L2	29 [1,142]	34.5 [1,358]	48 [1,890]	49 [1,929]	59 [2,323]
L3	1,5 [0,06]	1,5 [0,06]	1,5 [0,06]	1,5 [0,06]	1,5 [0,06]

Dimensions: mm [inches]

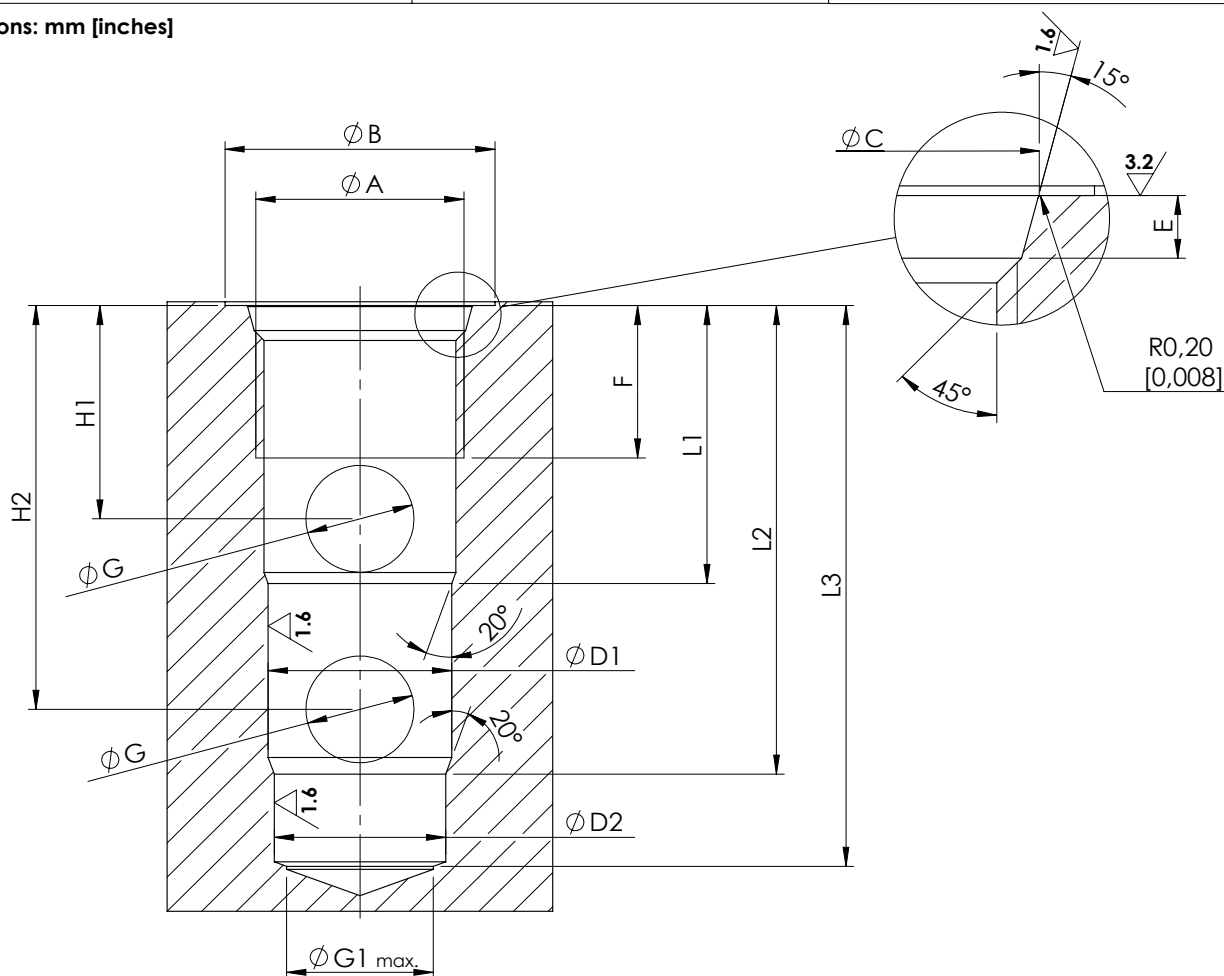


General tolerances : 0.3 mm [0,012 inches]

⊙	0.03[0,0012]
⏏	0.02[0,0008]

	SAE-08-3C	SAE-10-3C	SAE-12-3C	SAE-16-3C	SAE-20-3C
A	3/4-16 UNF	7/8-14 UNF	1-1/16 12 UNF	1-5/16 12 UNF	1-5/8 12 UNF
B	26 [1,024]	30 [1,18]	35 [1,38]	42 [1,65]	48 [1,89]
C	20.6 ^{+0,1} ₀ [0,811 ^{+0,004} ₀]	23.9 ^{+0,1} ₀ [0,941 ^{+0,004} ₀]	29.2 ^{+0,1} ₀ [1,15 ^{+0,004} ₀]	35.5 ^{+0,1} ₀ [1,398 ^{+0,004} ₀]	43.5 ^{+0,1} ₀ [1,713 ^{+0,004} ₀]
D1	15.87 ^{+0,05} ₀ [0,625 ^{+0,002} ₀]	19.05 ^{+0,05} ₀ [0,750 ^{+0,002} ₀]	23.80 ^{+0,05} ₀ [0,937 ^{+0,002} ₀]	28.60 ^{+0,05} ₀ [1,126 ^{+0,002} ₀]	36.52 ^{+0,05} ₀ [1,438 ^{+0,002} ₀]
D2	14.27 ^{+0,05} ₀ [0,562 ^{+0,002} ₀]	17.47 ^{+0,05} ₀ [0,688 ^{+0,002} ₀]	22.22 ^{+0,05} ₀ [0,875 ^{+0,002} ₀]	25.42 ^{+0,05} ₀ [1 ^{+0,002} ₀]	33.35 ^{+0,05} ₀ [1,313 ^{+0,002} ₀]
E	2.6 ^{+0,3} ₀ [0,102 ^{+0,012} ₀]	2.6 ^{+0,3} ₀ [0,102 ^{+0,012} ₀]	3.3 ^{+0,3} ₀ [0,130 ^{+0,012} ₀]	3.3 ^{+0,3} ₀ [0,130 ^{+0,012} ₀]	3.4 ^{+0,3} ₀ [0,134 ^{+0,012} ₀]
F	12 [0,472]	13 [0,512]	21 [0,827]	16.5 [0,650]	20 [0,787]
G	8 [0,315]	14 [0,551]	14 [0,551]	15 [0,591]	28 [1,102]
G1	3 [0,118]	4 [0,158]	5 [0,197]	5 [0,197]	7 [0,276]
G2	12 [0,475]	15 [0,591]	19 [0,748]	24 [0,945]	30 [1,181]
H1	12.5 [0,492]	14 [0,551]	22.5 [0,889]	17.5 [0,689]	20 [0,787]
H2	26.5 [0,807]	31.5 [1,240]	40.5 [1,595]	38 [1,496]	50 [1,969]
L1	16 [0,630]	18 [0,709]	26.5 [1,043]	22 [0,866]	25.5 [1,004]
L2	32 [1,260]	40 [1,575]	49.5 [1,949]	47.5 [1,870]	65.5 [2,579]
L3	40 [1,575]	49 [1,929]	60 [2,363]	58 [2,284]	78 [3,071]

Dimensions: mm [inches]

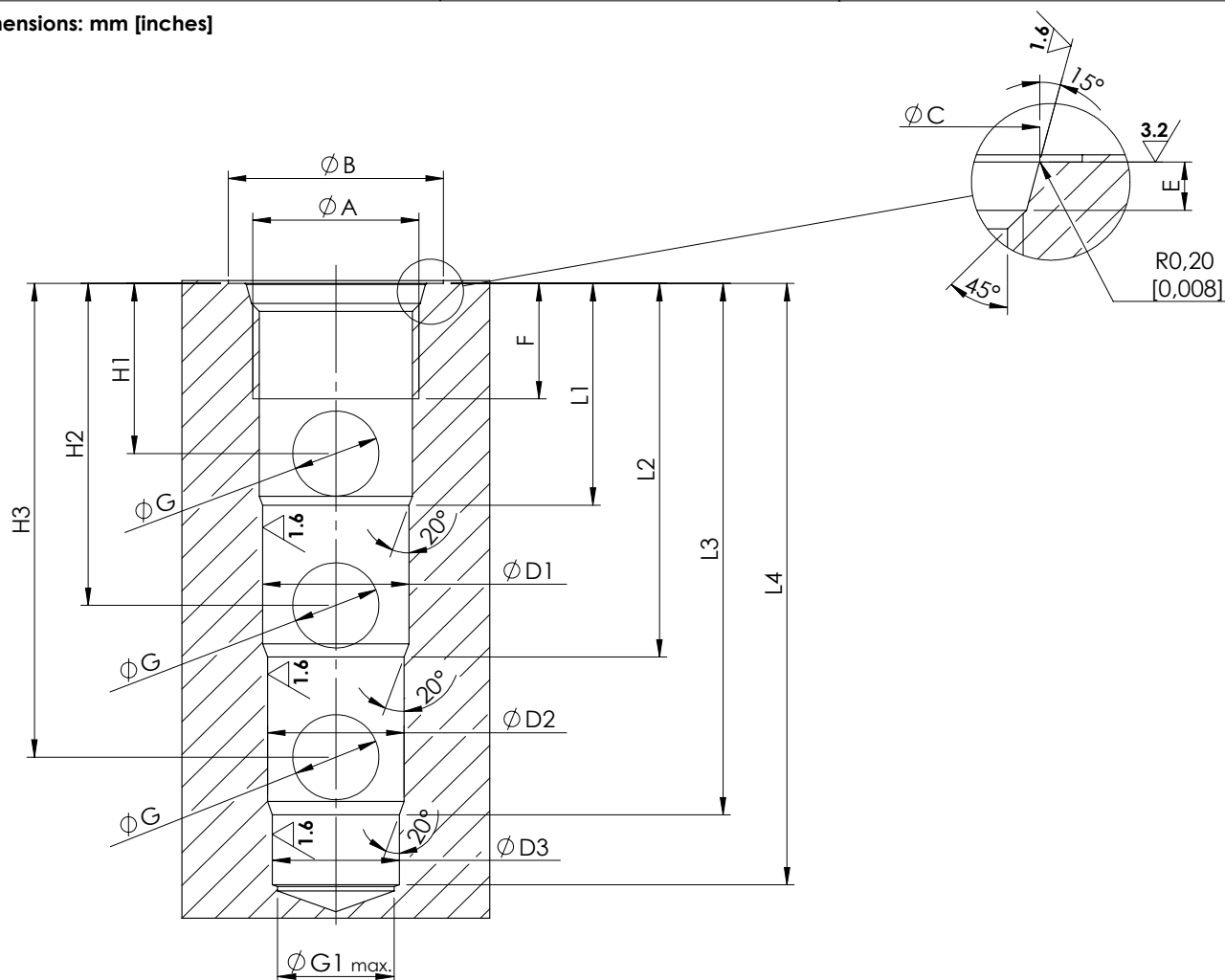


General tolerances : 0.3 mm [0,012 inches]

⊙	0.03[0,0012]
⊥	0.02[0,0008]

	SAE-08-3N	SAE-10-3N	SAE-12-3N	SAE-16-3N	SAE-20-3N
A	3/4-16 UNF	7/8-14 UNF	1-1/16 12 UNF	1-5/16 12 UNF	1-5/8 12 UNF
B	26 [1,02]	30 [1,18]	35 [1,38]	42 [1,65]	48 [1,89]
C	20.6 ^{+0,1} ₀ [0,811 ^{+0,004} ₀]	23.9 ^{+0,1} ₀ [0,941 ^{+0,004} ₀]	29.2 ^{+0,1} ₀ [1,15 ^{+0,004} ₀]	35.5 ^{+0,1} ₀ [1,398 ^{+0,004} ₀]	43.5 ^{+0,1} ₀ [1,713 ^{+0,004} ₀]
D1	15.87 ^{+0,05} ₀ [0,625 ^{+0,002} ₀]	17.47 ^{+0,05} ₀ [0,688 ^{+0,002} ₀]	23.80 ^{+0,05} ₀ [0,937 ^{+0,002} ₀]	28.60 ^{+0,05} ₀ [1,126 ^{+0,002} ₀]	36.52 ^{+0,05} ₀ [1,438 ^{+0,002} ₀]
D2	14.27 ^{+0,05} ₀ [0,562 ^{+0,002} ₀]	15.87 ^{+0,05} ₀ [0,625 ^{+0,002} ₀]	22.22 ^{+0,05} ₀ [0,875 ^{+0,002} ₀]	27.00 ^{+0,05} ₀ [1,063 ^{+0,002} ₀]	33.35 ^{+0,05} ₀ [1,313 ^{+0,002} ₀]
E	2.6 ^{+0,3} ₀ [0,102 ^{+0,012} ₀]	2.6 ^{+0,3} ₀ [0,102 ^{+0,012} ₀]	3.3 ^{+0,3} ₀ [0,130 ^{+0,012} ₀]	3.3 ^{+0,3} ₀ [0,130 ^{+0,012} ₀]	3.4 ^{+0,3} ₀ [0,134 ^{+0,012} ₀]
F	13 [0,512]	14 [0,551]	20 [0,787]	20 [0,787]	22 [0,866]
G	6 [0,236]	8 [0,315]	14 [0,551]	17 [0,669]	25 [0,984]
G1	12 [0,472]	15 [0,591]	19 [0,748]	24 [0,945]	30 [1,181]
-	-	-	-	-	-
H1	15 [0,591]	18 [0,709]	28 [1,102]	25.5 [1,004]	32 [1,260]
H2	29 [1,142]	34 [1,339]	53 [2,087]	54 [2,126]	72 [2,835]
L1	19.50 [0,768]	23.5 [0,925]	36.5 [1,437]	35.5 [1,398]	46 [1,811]
L2	33.50 [1,319]	39.50 [1,555]	61.50 [2,421]	64 [2,520]	86 [3,386]
L3	43 [1,693]	48.50 [1,910]	73 [2,874]	75 [2,953]	100 [3,937]

Dimensions: mm [inches]

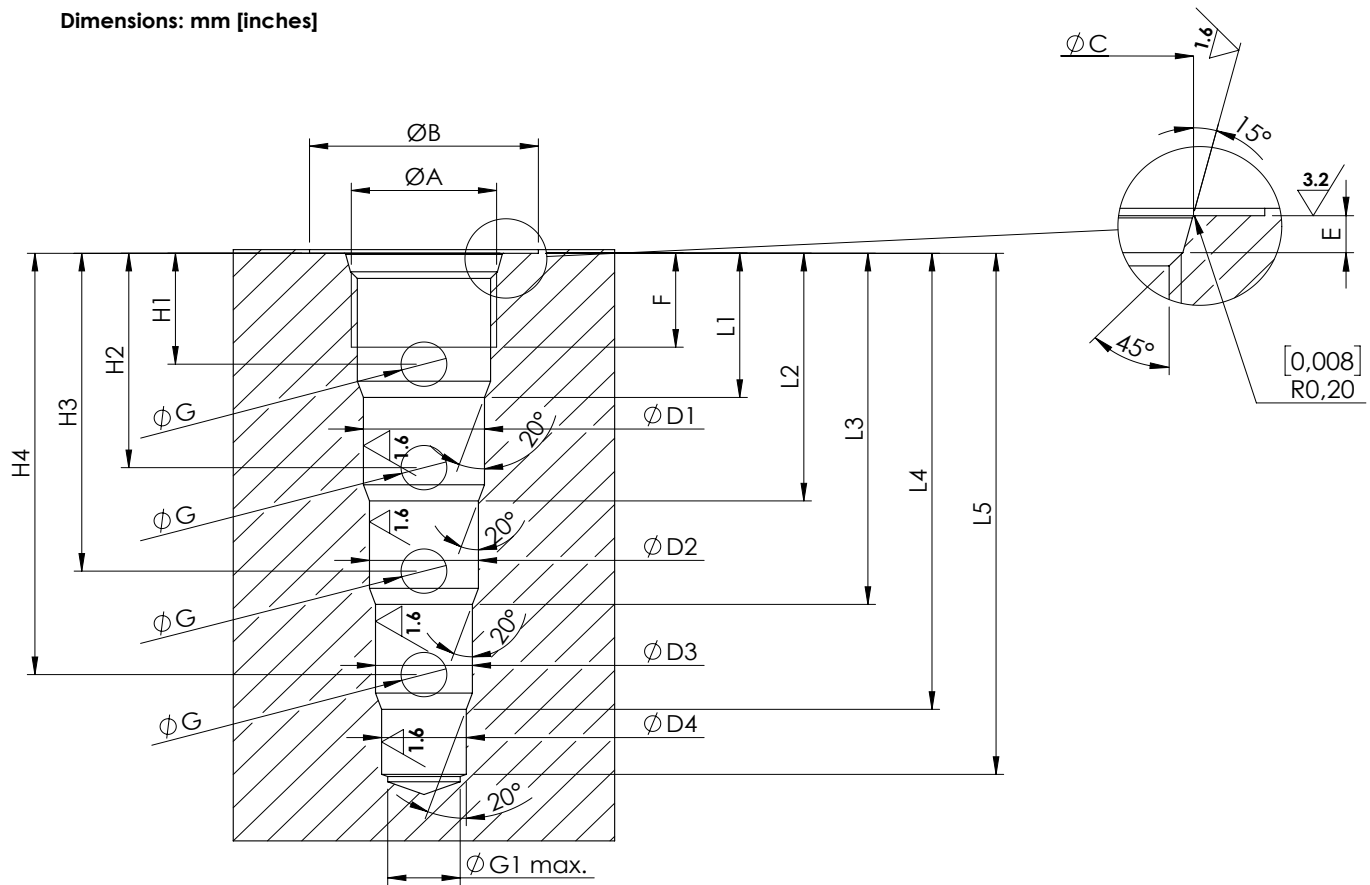


General tolerances : 0.3 mm [0,012 inches]

	0.03[0,0012]
	0.02[0,0008]

	SAE-08-4N	SAE-10-4N	SAE-12-4N	SAE-16-4N	SAE-20-4N
A	3/4-16 UNF	7/8-14 UNF	1-1/16 12 UNF	1-5/16 12 UNF	1-5/8 12 UNF
B	26 [1,02]	30 [1,18]	35 [1,38]	42 [1,65]	48 [1,89]
C	20.6 ^{+0,1} ₀ [0,811 ^{+0,004} ₀]	23.9 ^{+0,1} ₀ [0,941 ^{+0,004} ₀]	29.2 ^{+0,1} ₀ [1,15 ^{+0,004} ₀]	35.5 ^{+0,1} ₀ [1,398 ^{+0,004} ₀]	43.5 ^{+0,1} ₀ [1,713 ^{+0,004} ₀]
D1	15.87 ^{+0,05} ₀ [0,625 ^{+0,002} ₀]	19.05 ^{+0,05} ₀ [0,750 ^{+0,002} ₀]	23.80 ^{+0,05} ₀ [0,937 ^{+0,002} ₀]	28.60 ^{+0,05} ₀ [1,126 ^{+0,002} ₀]	36.52 ^{+0,05} ₀ [1,438 ^{+0,002} ₀]
D2	14.27 ^{+0,05} ₀ [0,562 ^{+0,002} ₀]	17.47 ^{+0,05} ₀ [0,688 ^{+0,002} ₀]	22.22 ^{+0,05} ₀ [0,875 ^{+0,002} ₀]	27.00 ^{+0,05} ₀ [1,063 ^{+0,002} ₀]	33.35 ^{+0,05} ₀ [1,313 ^{+0,002} ₀]
D3	12.7 ^{+0,05} ₀ [0,500 ^{+0,002} ₀]	15.87 ^{+0,05} ₀ [0,625 ^{+0,002} ₀]	20.62 ^{+0,05} ₀ [0,812 ^{+0,002} ₀]	25.42 ^{+0,05} ₀ [1,000 ^{+0,002} ₀]	31.75 ^{+0,05} ₀ [1,250 ^{+0,002} ₀]
E	2.6 ^{+0,3} ₀ [0,102 ^{+0,012} ₀]	2.6 ^{+0,3} ₀ [0,102 ^{+0,012} ₀]	3.3 ^{+0,3} ₀ [0,130 ^{+0,012} ₀]	3.3 ^{+0,3} ₀ [0,130 ^{+0,012} ₀]	3.4 ^{+0,3} ₀ [0,134 ^{+0,012} ₀]
F	13 [0,512]	15 [0,591]	19 [0,748]	20 [0,787]	22 [0,866]
G	6 [0,236]	8 [0,315]	14 [0,551]	16 [0,630]	25 [0,984]
G1	12 [0,472]	15 [0,591]	19 [0,748]	24 [0,945]	30 [1,181]
H1	15 [0,591]	18 [0,709]	28 [1,102]	25 [0,984]	32 [1,260]
H2	29 [1,142]	34 [1,339]	53 [2,087]	53.5 [2,106]	72 [2,835]
H3	43 [1,693]	50 [1,969]	78 [3,071]	82 [3,228]	114 [4,488]
L1	19.50 [0,768]	23.5 [0,925]	36.5 [1,437]	35.5 [1,398]	46 [1,811]
L2	33.50 [1,319]	39.50 [1,555]	61.50 [2,421]	64 [2,520]	87 [3,425]
L3	47.5 [1,870]	55.5 [2,185]	87.5 [3,445]	92.5 [3,642]	128.5 [5,059]
L4	56 [2,205]	64.5 [2,539]	99 [3,898]	104 [4,095]	142 [5,591]

Dimensions: mm [inches]



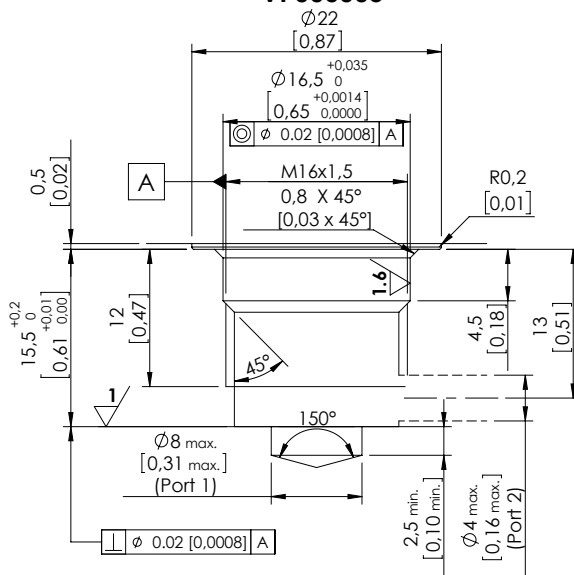
General tolerances : 0.3 mm [0,012 inches]

⊙	0.03[0,0012]
⊥	0.02[0,0008]

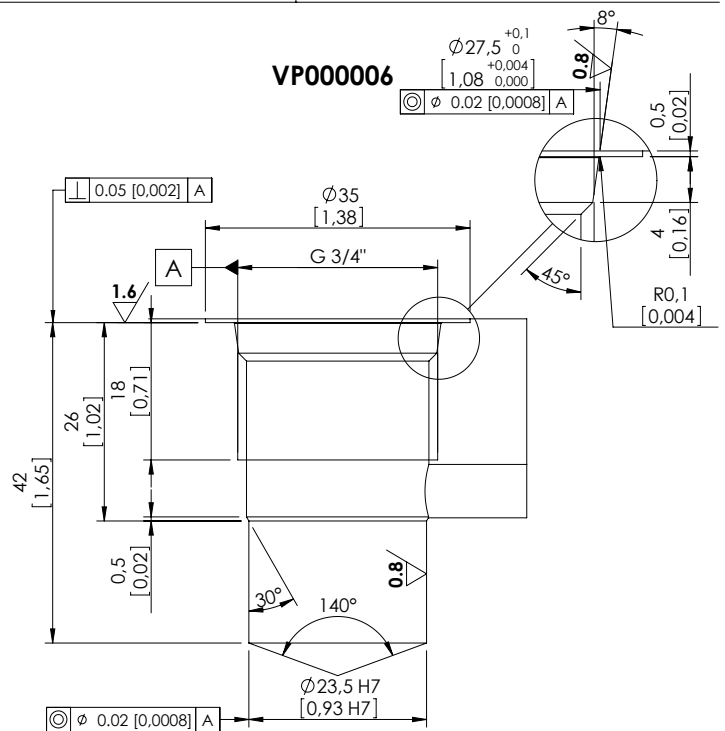
	SAE-08-5N	SAE-10-5N	SAE-12-5N	SAE-16-5N
A	3/4-16 UNF	7/8-14 UNF	1-1/16 12 UN	1-5/16 12 UN
B	30 [1,181]	30 [1,181]	35 [1,378]	42 [1,653]
C	20.6 ^{+0,1} ₀ [0,811 ^{+0,004} ₀]	23.9 ^{+0,1} ₀ [0,941 ^{+0,004} ₀]	29.2 ^{+0,1} ₀ [1,15 ^{+0,004} ₀]	35.5 ^{+0,1} ₀ [1,398 ^{+0,004} ₀]
D1	15.87 ^{+0,05} ₀ [0,625 ^{+0,002} ₀]	19.05 ^{+0,05} ₀ [0,750 ^{+0,002} ₀]	23.80 ^{+0,05} ₀ [0,937 ^{+0,002} ₀]	28.60 ^{+0,05} ₀ [1,126 ^{+0,002} ₀]
D2	14.27 ^{+0,05} ₀ [0,562 ^{+0,002} ₀]	17.47 ^{+0,05} ₀ [0,688 ^{+0,002} ₀]	22.22 ^{+0,05} ₀ [0,875 ^{+0,002} ₀]	27.00 ^{+0,05} ₀ [1,063 ^{+0,002} ₀]
D3	12.70 ^{+0,05} ₀ [0,500 ^{+0,002} ₀]	15.87 ^{+0,05} ₀ [0,625 ^{+0,002} ₀]	20.62 ^{+0,05} ₀ [0,812 ^{+0,002} ₀]	25.42 ^{+0,05} ₀ [1 ^{+0,002} ₀]
D4	11.10 ^{+0,05} ₀ [0,437 ^{+0,002} ₀]	14.27 ^{+0,05} ₀ [0,562 ^{+0,002} ₀]	19.05 ^{+0,05} ₀ [0,750 ^{+0,002} ₀]	23.80 ^{+0,05} ₀ [0,937 ^{+0,002} ₀]
E	2.6 ^{+0,3} ₀ [0,102 ^{+0,012} ₀]	2.6 ^{+0,3} ₀ [0,102 ^{+0,012} ₀]	3.3 ^{+0,3} ₀ [0,130 ^{+0,012} ₀]	3.3 ^{+0,3} ₀ [0,130 ^{+0,012} ₀]
F	13 [0,512]	15 [0,591]	19 [0,748]	20 [0,787]
G	6 [0,236]	7 [0,276]	14 [0,551]	16 [0,630]
G1	10.5[0,413]	13.5 [0,531]	18 [0,708]	23 [0,905]
H1	14,7 [0,44]	18 [0,709]	27.5 [1,082]	24 [0,945]
H2	29 [1,142]	34 [1,339]	52.2 [2,055]	53.5 [2,106]
H3	43 [1,693]	50 [1,969]	78 [3,071]	82.5 [3,250]
H4	57 [2,244]	66 [2,598]	104 [4,094]	110.5 [4,350]
L1	19.50 [0,768]	23.6 [0,929]	36.5 [1,437]	35.5 [1,397]
L2	33.50 [1,319]	40.2 [1,583]	61.50 [2,421]	64 [2,520]
L3	47.5 [1,870]	56.1 [2,209]	87.5 [3,445]	92.5 [3,642]
L4	61.7 [2,429]	72 [2,835]	113.5 [4,468]	121 [4,763]
L5	70.5 [2,776]	79.4 [3,126]	125.2 [4,930]	132.8 [5,228]

Dimensions: mm [inches]

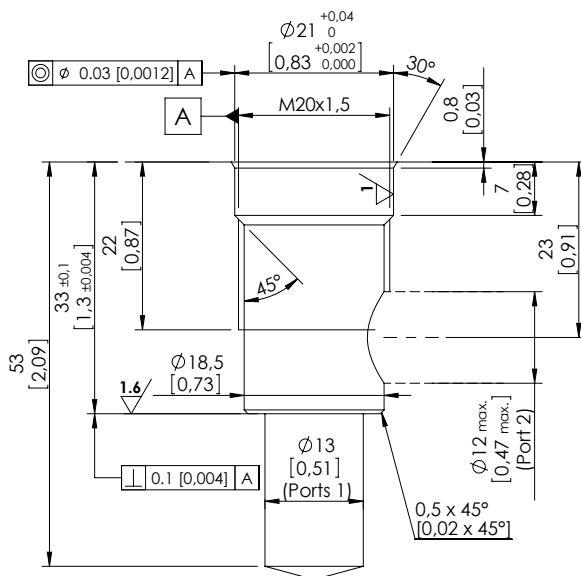
VP000005



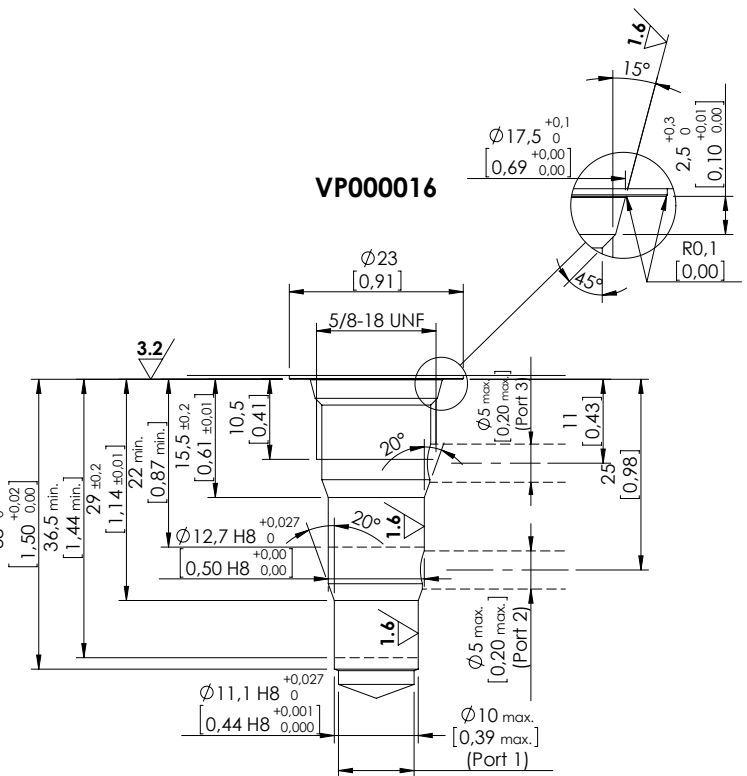
VP000006



VP000008



VP000016

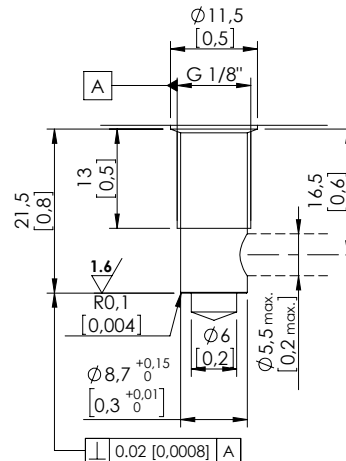


General Tolerances:

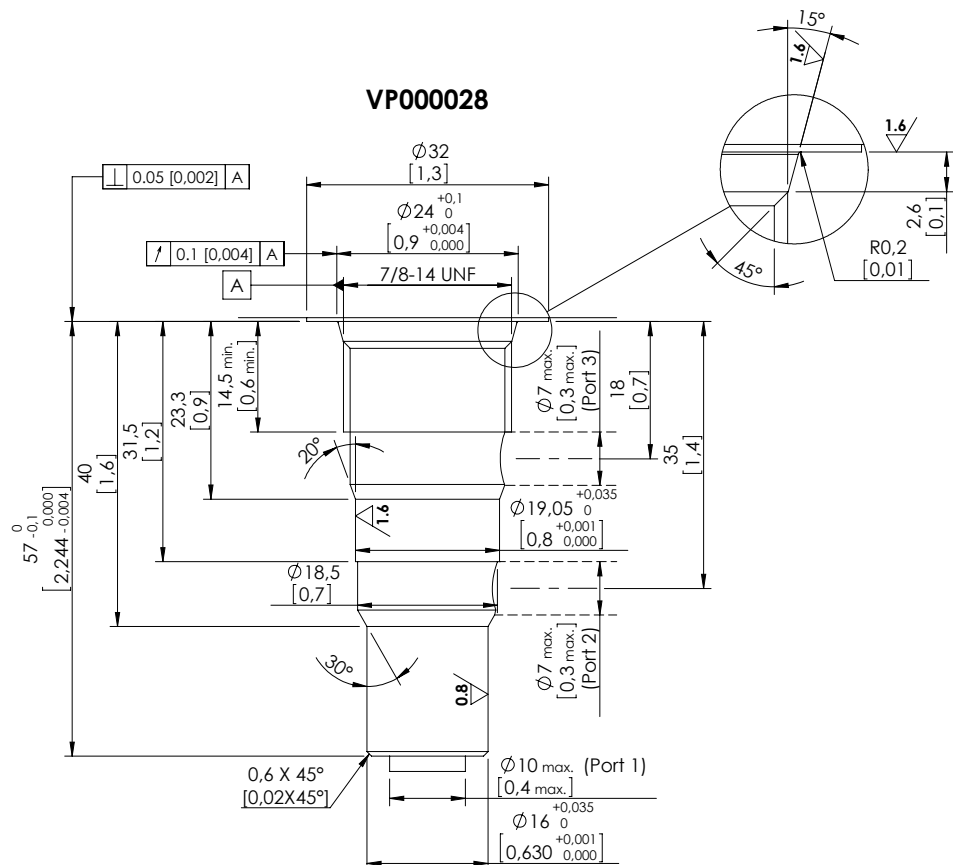
ϕ	0.03 [0,0012]
$\perp$	0.02 [0,0008]

Dimensions: mm [inches]

VP000018



VP000028

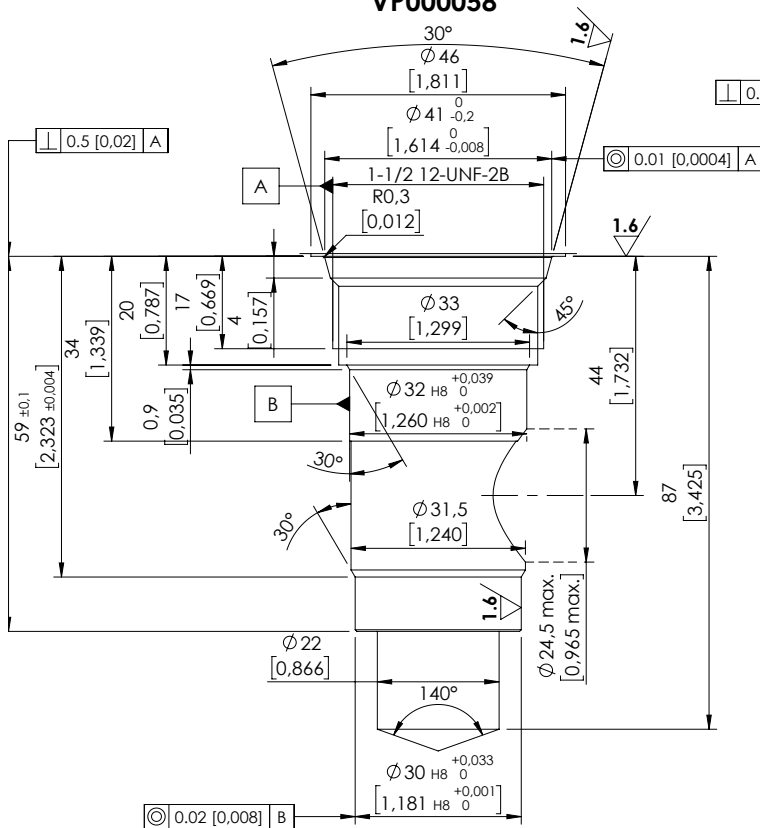


General Tolerances:

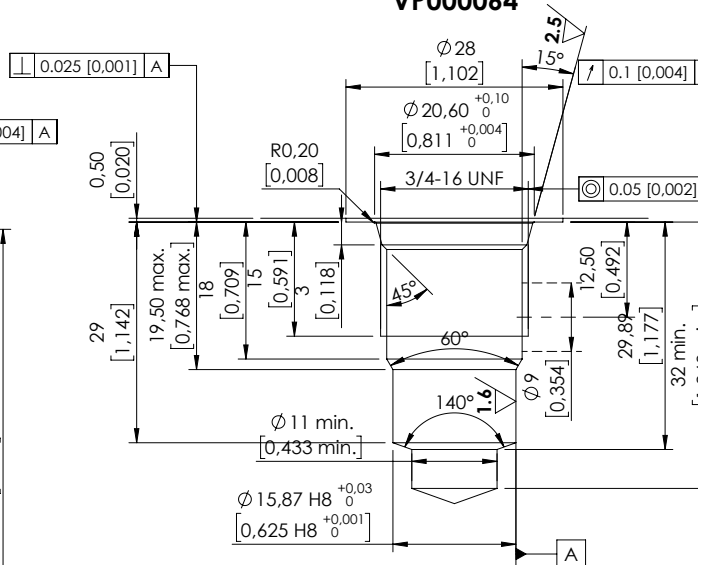
ϕ	0.03 [0,0012]
$\perp$	0.02 [0,0008]

Dimensions: mm [inches]

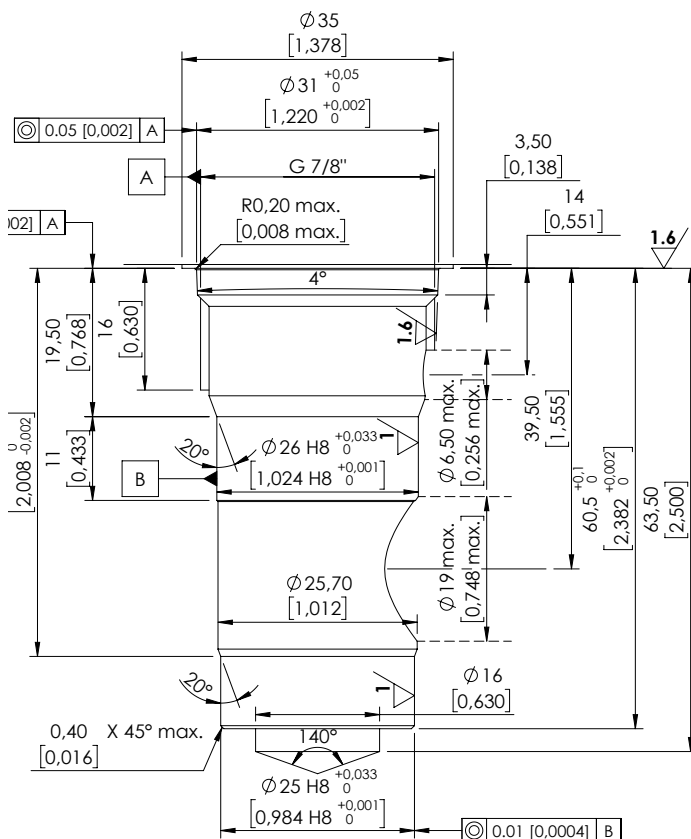
VP000058



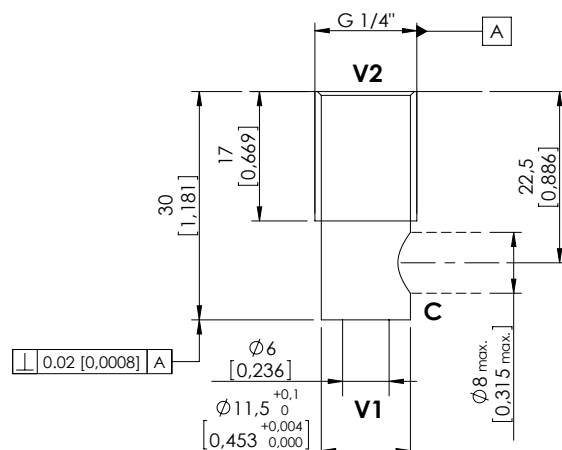
VP000064



VP000065



VP000079

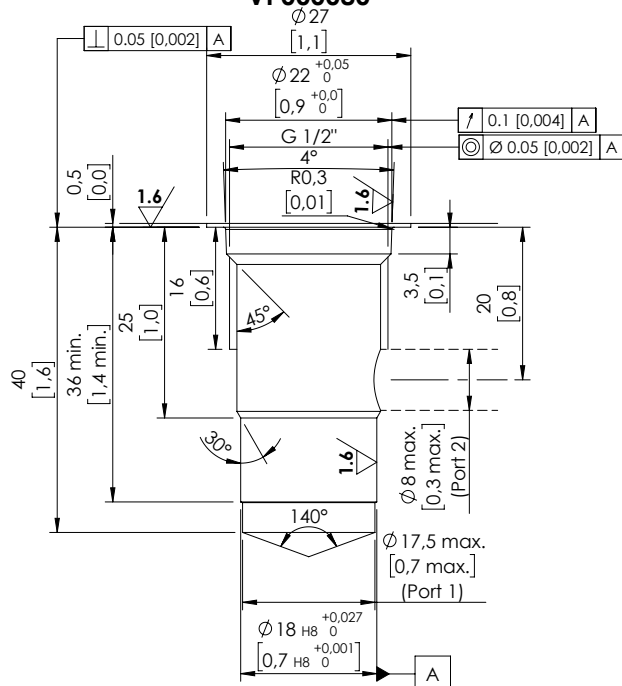


General Tolerances:

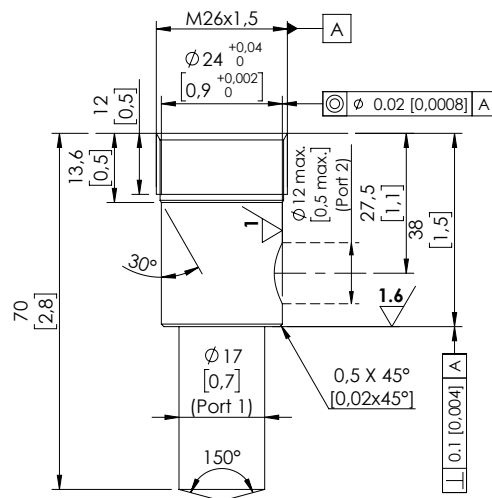
⊙	0.03 [0.0012]
⊥	0.02 [0.0008]

Dimensions: mm [inches]

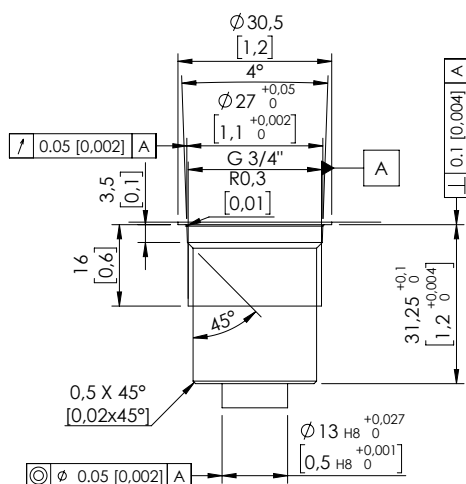
VP000080



VP000086



VP000096



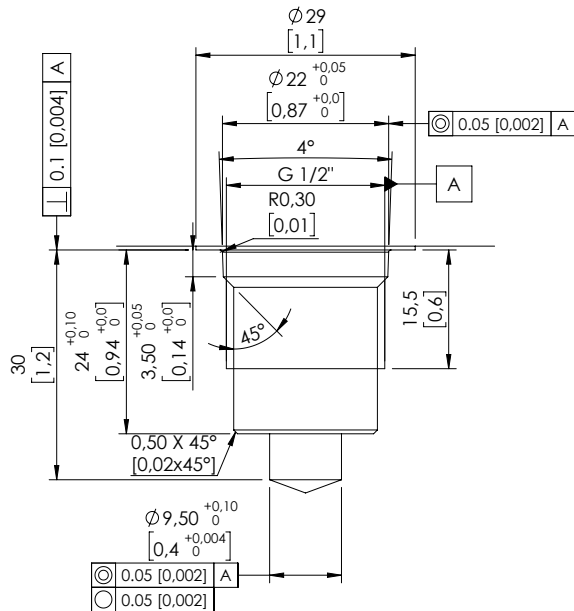
General Tolerances:

$\sqrt{\quad}$	0.03 [0.0012]
$\sqrt{\quad}$	0.02 [0.0008]

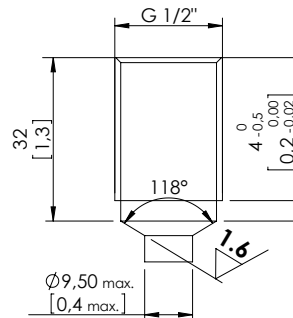


Dimensions: mm [inches]

VP000132



VP000158

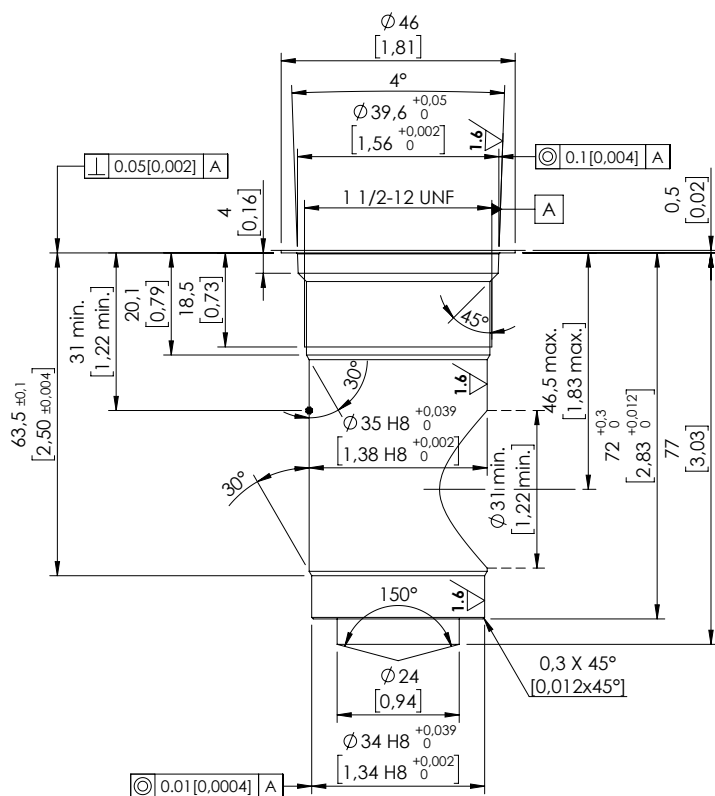


General Tolerances:

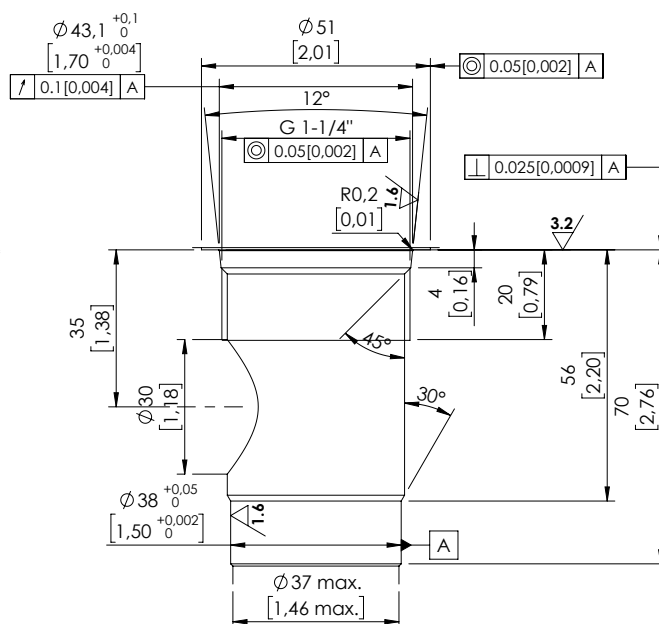
$\varnothing$	0.03 [0,0012]
$\perp$	0.02 [0,0008]

Dimensions: mm [inches]

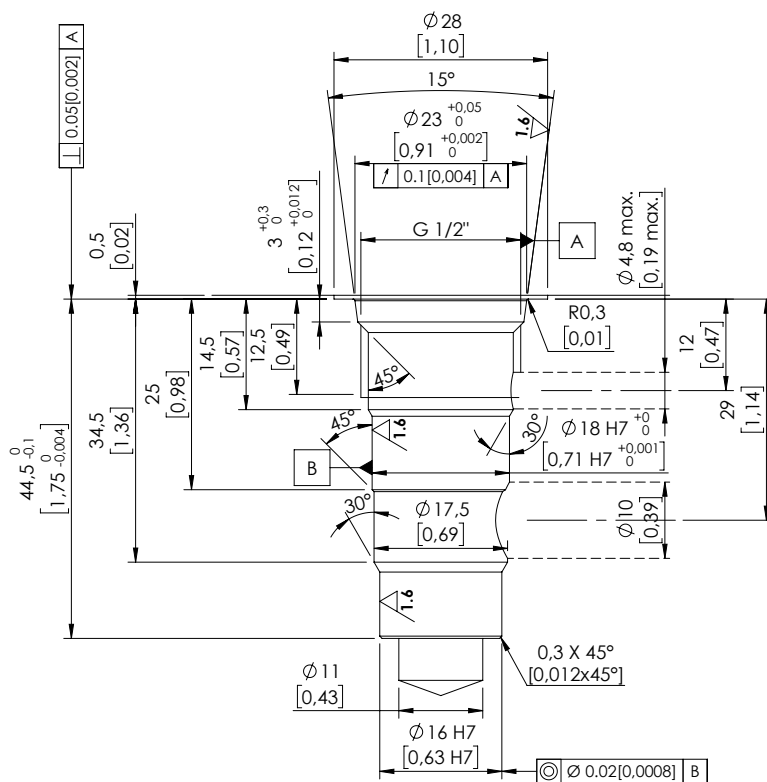
VP000178



VP000180



VP000198

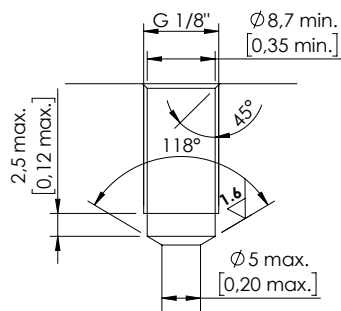


General Tolerances:

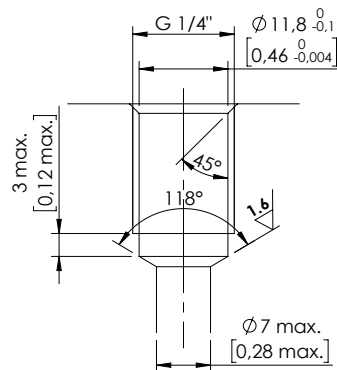
	0.03 [0,0012]
	0.02 [0,0008]

Dimensions: mm [inches]

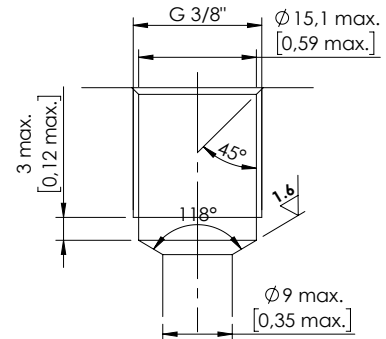
VP000307



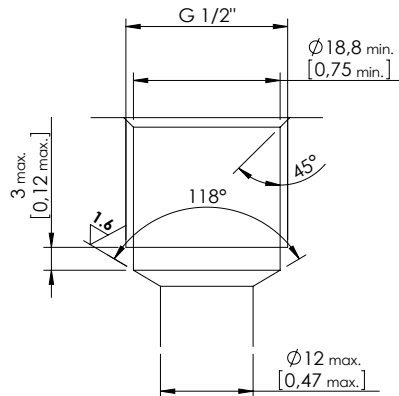
VP000309



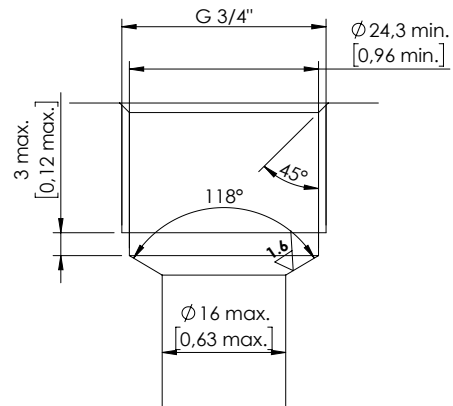
VP000310



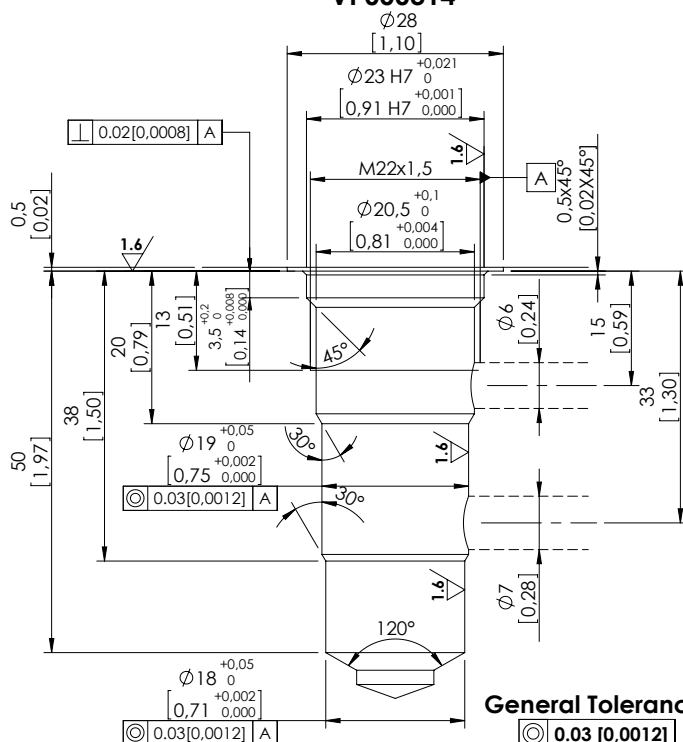
VP000311



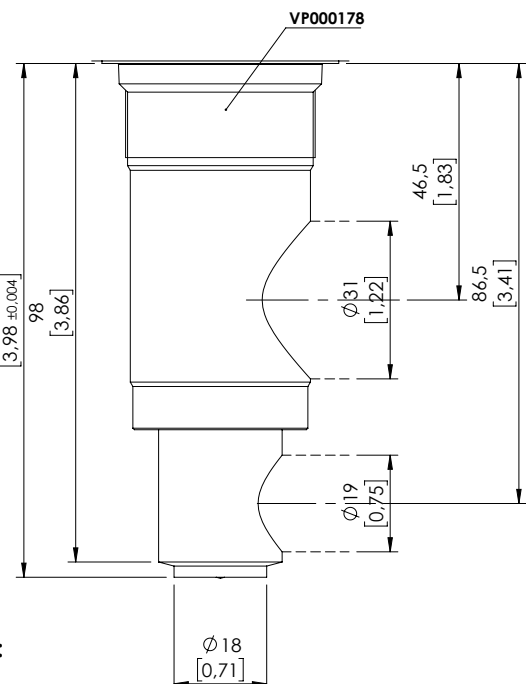
VP000312



VP000314



VP000330

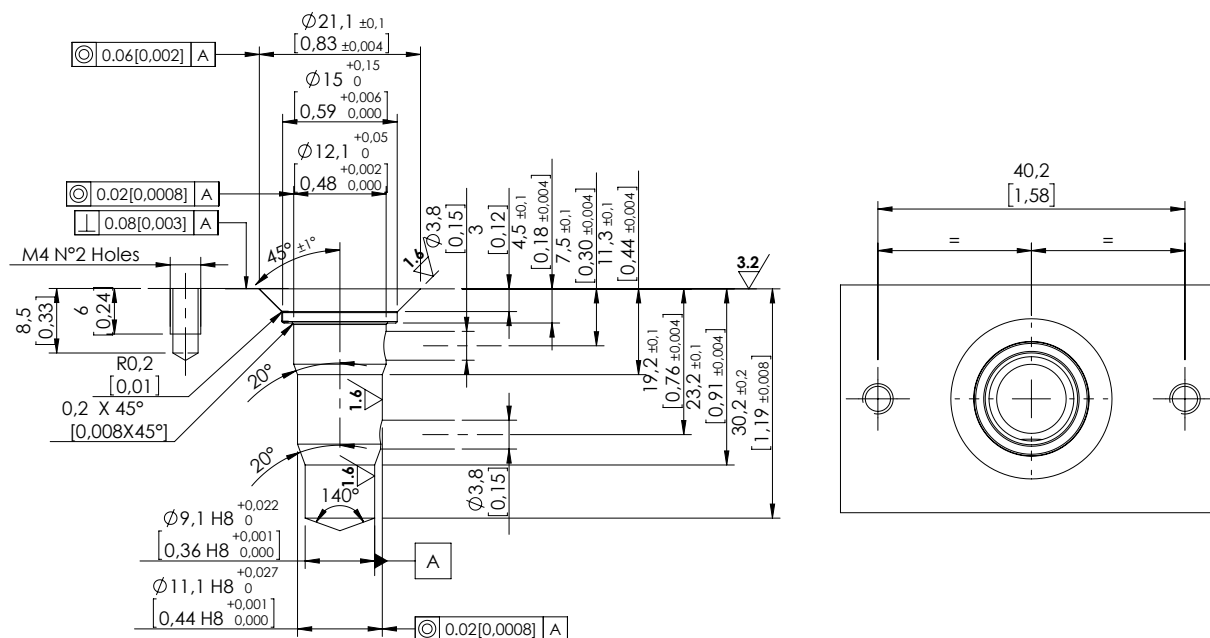


General Tolerances:

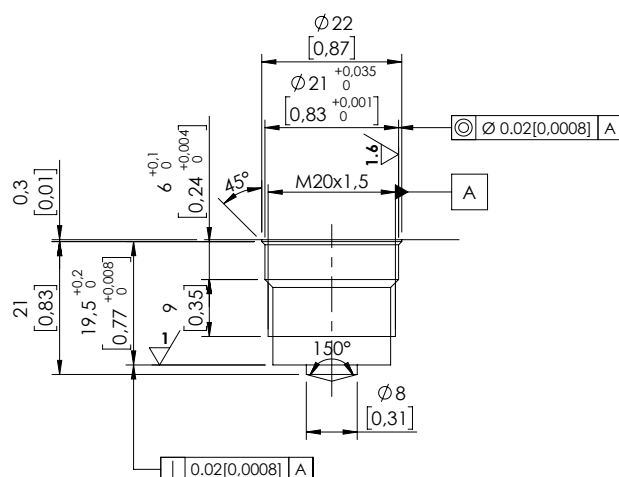
ϕ	0.03 [0,0012]
$\perp$	0.02 [0,0008]

Dimensions: mm [inches]

VP000371



VP000445



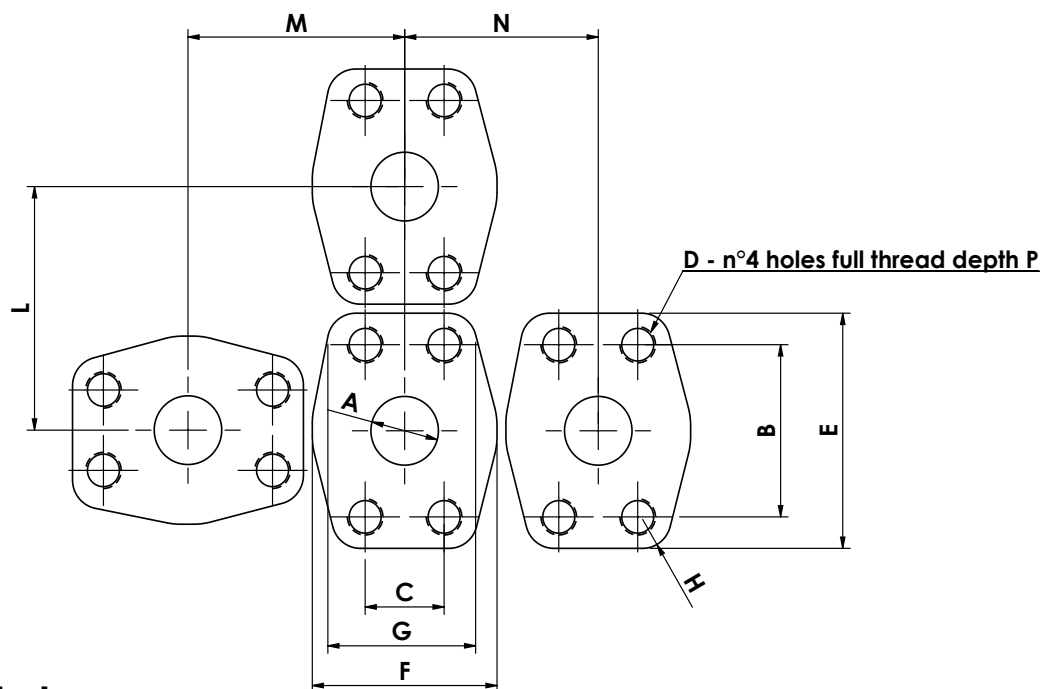
General Tolerances:

Ra	0.03 [0.0012]
Ra	0.02 [0.0008]

Technical drawing of a mechanical part with dimensions and tolerances. The drawing includes the following features:

- Overall Dimensions:**
 - Total length: $76^{+0.05}_{-0}$ [2.99 0]
 - Section A-A length: 73 [2.87]
 - Section B-B length: 50 ± 0.05 [1.97 ± 0.002]
 - Section C-C length: $60.5^{+0.05}_{-0}$ [2.38 0]
 - Section D-D length: 39.5 [1.56]
- Surface Tolerances:**
 - Surface A: $0.05[0.002]$
 - Surface B: $0.01[0.0004]$
 - Surface C: $0.05[0.002]$
- Geometric Features:**
 - Top Flange:**
 - Outer diameter: $\phi 35$ [1.38]
 - Inner diameter: $\phi 31^{+0.05}_{-0}$ [1.22 $^{+0.002}_{-0}$]
 - Thickness: 4°
 - Thread: $7/8$ GAS
 - Radius: $R0.10$ [0.004]
 - Shoulder:**
 - Outer diameter: $\phi 26^{+0.033}_{-0}$ [1.02 $^{+0.001}_{-0}$]
 - Inner diameter: $\phi 25.7$ [1.01]
 - Length: 11 [0.43]
 - Radius: $R0.10$ [0.004]
 - Bottom Flange:**
 - Outer diameter: $\phi 25$ $^{+0.033}_{-0}$ [0.98 $^{+0.001}_{-0}$]
 - Inner diameter: $\phi 13$ [0.51]
 - Thickness: 1 [0.03]
 - Radius: $R0.10$ [0.004]

	0.03 [0,0012]
	0.02 [0,0008]



Dimension: mm [inches]

FLANGE SAE 3000 PSI (MEDIUM PRESSURE)

		1/2	3/4	1"	1" 1/4	1" 1/2
A	Ø max.	13 [0,512]	19 [0,748]	25,5 [1,00]	32 [1,26]	38 [1,496]
B	-	38,1 [1,5]	47,6 [1,874]	52,4 [2,06]	58,7 [2,311]	69,9 [2,752]
C	-	17,5 [0,689]	22,2 [0,874]	26,2 [1,03]	30,2 [1,189]	35,7 [1,406]
D	unc-2B	5/16-18	3/8-16	3/8-16	7/16-14	1/2-13
	metric	M8	M10	M10	M10	M12
E	-	54 [2,13]	65 [2,559]	70 [2,756]	79 [3,110]	94 [3,701]
F	-	46 [1,81]	52 [2,047]	59 [2,323]	73 [2,874]	83
G	min.	33 [1,29]	41 [1,614]	48 [1,889]	54 [2,13]	83 [3,268]
H	radius	8 [0,315]	9 [0,354]	9 [0,354]	10 [0,393]	12 [0,472]
L	min.	56 [2,205]	68 [2,677]	72 [2,835]	82 [3,228]	96 [3,779]
M	min.	52 [2,05]	61 [2,402]	67 [2,638]	78 [3,070]	90 [3,543]
N	min.	49 [1,929]	55 [2,165]	61 [2,402]	75 [2,953]	85 [3,346]
P	min. mm	24 [0,945]	22 [0,866]	22 [0,866]	28 [1,102]	27 [1,063]

FLANGE SAE 6000 PSI (HIGH PRESSURE)

		1/2	3/4	1"	1" 1/4	1" 1/2
A	Ø max.	13 [0,512]	19 [0,748]	25,5 [1,00]	32 [1,26]	38 [1,496]
B	-	40,5 [1,594]	50,8 [2]	57,2 [2,252]	66,7 [2,626]	79,4 [3,126]
C	-	18,2 [0,717]	23,8 [0,937]	27,8 [1,094]	31,8 [1,252]	36,5 [1,437]
D	unc-2B	5/16-18	3/8-16	7/16-14	1/2-13	5/8-11
	metric	M8	M10	M12	M14	M16
E	-	56 [2,205]	71 [2,795]	81 [3,189]	95 [3,740]	113 [4,449]
F	-	48 [1,889]	60 [2,362]	70 [2,756]	78 [3,071]	95 [3,740]
G	min.	38 [1,496]	48 [1,889]	54 [2,126]	60 [2,362]	70 [2,756]
H	radius	8 [0,315]	10 [0,393]	12 [0,472]	14 [0,551]	17 [0,669]
L	min.	59 [2,323]	75 [2,953]	84 [3,307]	99 [3,898]	116 [4,567]
M	min.	56 [2,205]	70 [2,756]	80 [3,149]	90 [3,543]	108 [4,252]
N	min.	53 [2,087]	66 [2,598]	75 [2,953]	83 [3,268]	101 [3,976]
P	min. mm	21 [0,827]	24 [0,945]	27 [1,063]	25 [0,984]	35 [1,378]



ATLANTIC

Fluid Tech
WWW.SUMY.IR

**TECHNICAL
SPECIFICATIONS**

TECHNICAL SPECIFICATIONS

Modena, 22/12/2023

MATERIALS

CARTRIDGES AND INTERNAL COMPONENTS: Cartridge bodies are manufactured from high grade cold drawn steel bar, all of the external parts are zinc plated for longer durability in challenging environments. The valve's internal working parts are hardened and ground (or lapped) for maximum performance and durability.

MANIFOLDS: Cartridges, parts in body valve manifolds and integrated circuit blocks are manufactured from high strength aluminum bars and high quality steel. As a standard, steel manifolds are always zinc plated (Crome 3 treatment) whilst aluminum bodies can be anodized upon request. For complete specifications and compatibilities, please consult our Engineering department.

For pressures above 210 bar we recommend using steel bodies. In most cases the aluminum bodies are strong enough, but if transient peak pressures are frequently encountered, there is the possibility of fatigue cracks.

COILS: the external encapsulating material of our coils is made of class H thermoplastic compound as well as internal copper wire.

PORTS

The standard port dimension on our valves, when not flanged, is BSPP size, ranging normally between G1/4" and G1-14". SAE 'O' Ring and NPT ports are available on request, as well as special flange dimensions.

SEALS, BACK-UP RINGS AND SLIDE RINGS

We use Acryl-Nitrile Butadiene NBR (BUNA-N) seals as standard for temperatures between -30°C and +100°C. Viton seals or other compounds are available on request.

Back-up rings and slide rings are made of reinforced poly-tetrafluoroethylene (PTFE).

STORAGE OF NEW VALVES

The valves must be stored in their original plastic envelopes or cartoon boxes. In a dry, dust-free atmosphere, free of corrosive agents, with a low moisture content and no large variations in temperature. They should not be exposed to direct sun light or sources of heat or ozone (as this could cause the fast wearing of valve seals). Storage temperature must be between -20°C and +50°C.

HANDLING AND INSTALLATION OF VALVES

We recommend the installation and the use of our valves be carried out by expert and qualified people with perfect knowledge of the product. AFT will not be responsible for improper use of its products. For any clarification, please contact AFT sales network.

The valve handling must be done in accordance with the weight of the box and of the valve itself, for more information please refer to your Country rules. Valves over a specific weight are equipped with threads where a hook can be installed; in this way the valve can be attached and lifted using mechanical devices.

FLUIDS AND WORKING TEMPERATURE RANGE

The recommended fluid is mineral oil based fluid, such as HL type (DIN 51524 part 1) or HLP type (DIN 51524 part 2) with an operating viscosity between 10 and 380 cSt. High viscosity and low temperatures may lead to a slower valve response than in warm oil conditions.

For water based fluids, such as 95/5 and 60/40 emulsions, please consult AFT sales network.

Fluid working temperatures should be maintained between -30°C and +100°C. For other working conditions, please consult AFT sales network.

FUNCTIONAL TEST

All the valves we sell are subjected to functional tests. The tests are carried out using ISO VG 46 hydraulic oil (viscosity of 46cSt at 40°C) and with oil temperature between 30 and 40 °C.

FILTRATION

Our valves are precision-machined mechanical components: the majority of valves failures (during normal working conditions) occurs due to hydraulic circuit contamination. We recommend the following filtration levels:

SYSTEM WORKING PRESSURE:	NOM. FILTRATION	CONTAMINATION CLASS:	
> 250 BAR:	10 µm	ISO 4406: 17/14	NAS 1638: 8
BETWEEN 100-250 BAR:	15 µm	ISO 4406: 18/14	NAS 1638: 9
< 100 BAR:	25 µm	ISO 4406: 19/15	NAS 1638: 10-11

INTERNAL LEAKAGE

Many of our valves have a leak proof seat design: this means that the maximum allowed oil leakage value is 1 cc/min (about 15-20 drops/min) measured with 46cSt oil at 40°C at the maximum permitted pressure. However, normal leakage is found to be less than 10 drops/min and tends to decrease or disappear after few seconds of rest. These are within the acceptable limits, note however that each type of valve has different performances depending on its design: please refer to our Engineering dept. for information about each valve type.

VALVE SETTING AND TAMPERPROOF DEVICES

SETTING: Our valves are supplied Factory set as stated on the corresponding catalogue page. The adjustment range and maximum setting figures shown on the catalogue are the safe limits according to each valve specific design: in the majority of cases higher or lower values can be attained. Any setting changes should be approved in writing prior by our Engineering dept. Any setting change must be carried out using an appropriate gauge or pressure/flow measuring equipment.

TAMPERPROOF: The majority of our cartridges and parts in body valves have the possibility to be equipped with a plastic tamperproof cap to prevent any undesired modification of valve setting: please refer to each catalogue page for the choice of the correct cap. On request, valve can be supplied already Factory set and sealed.

CARTRIDGE VALVE INSTALLATION

The correct machining of cavities is critical in ensuring the best performance of our cartridges. Cavity tools are available for sale and cavity drawings can be found in the specific section of our catalogue or requested from our Engineering dept.

To correctly install cartridges into their cavity, please follow this procedure:

- Check that external seals and back-up ring are correctly fitted and without damage;
- Ensure the cavity and cartridge body are clean and without any visible contamination;
- If necessary, immerse cartridge body into clean oil to take away any impurity and to lubricate the seals;
- Screw the cartridge into its cavity by hand, until mechanical contact is reached, being sure that during tightening that there is no abnormal friction between the cartridge and its cavity;
- Tighten the cartridge with a calibrated torque wrench applying the correct torque as specified on the corresponding catalogue page.

TORQUE FIGURES

So as to ensure correct cartridge behavior and to prevent any internal friction the correct torque must always be applied when fitting cartridges into their cavities: the correct torque values can be found on each cartridges' catalogue page.

COILS

ED RATE: All our coils are rated ED 100%, they can remain 100% energized through out the working cycle, provided the nominal voltage and maximum ambient temperatures are not exceeded.

TEMPERATURE CLASS: As standard the encapsulating material and copper wire are rated CLASS H: this means that the ambient temperature + temperature rise due to coil operation cannot exceed 180 °C. Class F coils are available on request (maximum 155 °C). The external surface of the coil can easily reach very high temperatures after long energizing period (80-100°C): Particular care must be taken to avoid accidental injuries to workers and operators. To prevent premature burning of the coils, it is requested that coils are installed in such a way to aid air ventilation around them and thus preventing excessive heating of the surrounding ambient.

IP PROTECTION CLASS: The standard insulation class of our coils is IP65, provided that all the seals between coil and solenoid cartridge tube/nut and between coil and connector are correctly fitted. Coils with Deutsch connector are rated with an IP69K insulation class.

INLET VOLTAGE: Our coils normally accept inlet voltage fluctuations of between $\pm 10\%$ without any compromise to normal functionality (unless specified on the coil catalogue page). If specific inlet voltages are required, please refer to our Engineering dept.

POWER SUPPLY: Our solenoid operated cartridges are designed to operate with DC (direct current) power supply: in case of AC (alternate current) applications, please apply between power supply and coil a current rectifier and use the proper RAC (rectified alternate current) coil.

ENVIRONMENTAL CARE AND PRODUCTS DISPOSAL

AFT products are made mainly with metallic materials; steel, aluminum, cast iron and plastic materials (ABS, PTFE, NBR) that can be recycled after being cleaned of hydraulic fluids if present.

Our packaging materials are made mainly of paper, cardboard, wood, plastic and polyethylene which can be recycled after being cleaned from hydraulic fluids if present.

Hydraulic fluids must be disposed of in accordance with the laws and procedures of each country.

During handling, installation and use it is necessary to avoid the dispersion of hydraulic fluid into the environment, in case of accidental dispersion it is necessary to follow your local rules.

MTTFd CERTIFICATE

The MTTFd value (mean time to dangerous failure) of a component is used to calculate the probability of a potentially dangerous failure of a machine or system.

Hydraulic products from Atlantic Fluid Tech are designed and manufactured in accordance with UNI ISO 13849-2:2012 principles; products technical sheets are showing all the information (maximum pressure, maximum flow, materials, ratings, operations...) that must be observed by designers and users of this products.

For hydraulic components (e.g., valves), a MTTFd value of 150 years can be presumed according to UNI ISO 13849-1:2016 if the fundamental and proven safety principles according to ISO 13849-2:2012 are adhered to as shown in table C.1 & C.2.

The MTTFd value can be estimated higher if the average number of annual operations (nop) is less than 1 million switching cycles.

An MTTFd value can be estimated according to the table below:

	Basic and well-tried safety principles according to ISO 13849-2:2012	Relevant Standards	Typical Values MTTFd (years) B10D (cycles)
Hydraulic components with nop $\geq$ 1,000,000 cycles per year	Tables C.1 and C.2	ISO 4413	MTTFD = 150
Hydraulic components with 1,000,000 cycles per year > nop $\geq$ 500,000 cycles per year	Tables C.1 and C.2	ISO 4413	MTTFD = 300
Hydraulic components with 500,000 cycles per year > nop $\geq$ 250,000 cycles per year	Tables C.1 and C.2	ISO 4413	MTTFD = 600
Hydraulic components with 250,000 cycles per year > nop	Tables C.1 and C.2	ISO 4413	MTTFD = 1200

The customer is responsible for the implementation and operations of the valves according to UNI ISO 13849-1:2016.

The latter is responsible for machine safety, including the correct design and evaluation of hydraulic valves used in safety-related parts of control systems. As a result, the customer is responsible for ensuring compliance with normative and statutory requirements in the countries concerned.



ATLANTIC

Fluid Tech
WWW.SUMY.IR

GENERAL TERMS OF SUPPLY

GENERAL TERMS OF SUPPLY – OUTLINE AGREEMENT

San Cesario Sul Panaro (MO): 31/10/2011

1 SUBJECT

The present general terms of supply (or outline agreement) have been drafted to regulate all the supply relations existing between Vendor and Customer, which will be conducted at the conditions hereinafter described and/or on the basis of any additional agreements specifically entered into between the parties.

If these general terms of supply should contain any clauses or prescriptions that conflict with specific conditions of supply agreed between the parts, these latter shall prevail.

2 CUSTOMER ORDERS

The Customer's orders must be transmitted to the Vendor in written form (also via fax, or using telecommunications and electronic means) and must contain the following information:

- a) date and place of issue of the order;
- b) exact denomination of the Customer company and its complete address;
- c) a reference to the relative offer made by the Vendor company (if such an offer exists);
- d) complete Vendor's identification code, with a description of the product ordered if necessary and the relative technical specifications of all the products to which the order refers;
- e) the required quantities;
- f) the agreed prices (if available);
- g) the quality requirements with which the Vendor must comply in execution of the order;
- h) the signature of an authorised representative;
- i) the required term of delivery;
- l) terms of payment;
- m) shipping agent.

Orders are intended as accepted when the relative order confirmation duly signed by the Vendor arrives at the registered address of the Customer, or if such a document is not forthcoming, orders will be considered to be confirmed by the Vendor at the terms of supply specified herein if they are not explicitly refused in writing within the term of 10 working days from the date of the order in question.

2.1 PRICES

The prices established by the Vendor and/or agreed upon with the Customer shall remain fixed for the entire period of the order or for the agreed period; said period shall not be subject to modification except in the presence of exceptional events and/or causes of force majeure (e.g. uncontrolled price increases of raw materials or energy, etc.); in such cases new agreements will be entered into with customers.

3 EXECUTION OF THE CONTRACT OF SUPPLY - AMENDMENTS

The terms of the contract of Supply are intended as final and executive when:

- the Customer transmits to the Vendor the purchase order in written form relative to the ordered product, specifying the requirements set down in heading 2 above;
- the Vendor has issued its Order confirmation and transmitted it to the Customer, or has failed to refuse the order in writing within 10 working days from the date of the order in question (See heading 2).

Once the contract has been signed, it must be fully and duly executed by the parties. Any amendments or cancellations of the contract can only take place further to the stipulation of agreements between the parties (Vendor and Customer) that take into account, on a reciprocal basis, any possible compensation for reimbursement of expenses sustained (materials, labour, etc.) to be paid to the more diligent party that receives such a request for amendment or cancellation.

In any event, the Customer is entitled to request modifications relative to orders it has already issued in relation to the quantity and/or characteristics of the ordered products, by means of the issue and transmission to the Vendor of a specific order variant, which shall be construed as implicitly accepted by the Vendor if this latter fails to raise any objections within the term of 10 working days from the receipt of such an order variant.

The execution of the contract of supply can be suspended and/or cancelled, also without notice to the customer, due to causes of force majeure (e.g. grave natural disasters, social unrest, epidemics, etc.) that are outside the Vendor's control.

4 TECHNICAL MODIFICATIONS

Except in the presence of contrary agreements with Customers, the Vendor can make technical modifications to the product specifications without notice; in any event, the Vendor undertakes to execute customer orders/contracts that are already confirmed without applying any modifications and/or anyway guaranteeing interchangeability of the relative products.

5 PRODUCT QUALITY AND VERIFICATION OF CONFORMITY

All the products are subject to the necessary checks/tests in the various production phases in order to guarantee conformity with the specifications and calibrations indicated in the catalogues, drawings, and/or technical datasheets; moreover, the Vendor's production process complies with the Quality System requirements defined by UNI EN ISO 9001, certified by an accredited Institute. The Customer is entitled make visits to and to carry out quality audits at the Vendor's plant after arranging an appointment for such occasions.

Because of the large range of technical features and operating conditions of the equipment manufactured by the Customer, the Vendor shall not assume any liability for the results of tests performed by third parties. The Customer is therefore responsible for the final choice of the valve and for the adoption of all the measures required to achieve the required functional and safety specifications on the system in which the valve is to be installed, in addition to the compliance with any specific standards applicable to the system in question.

In the event of nonconforming products the responsibility for which can be attributed to the Vendor, in addition to the warranty actions provided for in the following article 6, the Customer can demand that the Vendor perform the necessary corrective actions in order to improve its level of quality rapidly.

5.1 "FIRST SPECIMENS" CHECK

For new special products made to Customer's specifications or customised to a significant extent with respect to the equivalent standard products, when so requested by the Customer the Vendor can, further to prior agreement with the Customer, carry out checks on "First Specimens"; this procedure entails the supply of "Prototypes or Specimens" of Products accompanied by Test Certificates detailing dimensional checks and functional tests evaluating diverse technical aspects.

In this case the Customer's validation of subsequent supplies must be performed on the basis of the "First Specimens".

6 WARRANTY

The Vendor provides a warranty to the first Customer covering its valves against defects in material or workmanship for a period of 24 months from the time of first assembly, provided said first assembly takes place within 6 months from the date of manufacture as marked on the valve, and provided the valve is installed and utilised in accordance with the conditions of use prescribed by the Vendor and/or in compliance with the standards adopted in accordance with industrial best practices. Seals and O-rings are expressly excluded from the warranty.

This warranty is applicable exclusively to the first Customer/Purchaser of the Vendor's products and is not transferable.

In the event that the Customer considers that the goods or a part of the goods are defective for causes attributable to the Vendor, the Customer shall signal/protest the presence of the alleged defects by sending a detailed written report, thereby allowing the Vendor to verify the effective existence of the claimed defects/flaws by means of inspections performed by its technical personnel.

Having ascertained that the claimed defects are effectively present and having accepted that they are attributable to the fault of the Vendor, this latter undertakes to repair or replace the goods in question in a reasonable time interval and/or inform the Customer of the cause of such defects.

This warranty is not applicable to products that have been subject to conditions of contamination in the customer's hydraulic circuit, or to products that are incorrectly utilised or subject to tampering performed without the Vendor's supervision or authorisation.

The Vendor's warranty does not envisage pecuniary compensation or credit notes in respect of defective material; specifically, the Vendor shall not be held responsible under any circumstances for loss of earnings, costs of disassembly and reassembly of the product, for any damages connected with such an operation, and for any whatsoever cost relative to the installation of the repaired or replaced valves, including the costs arising in relation to system outages.

If the product supplied is to be assembled in plants potentially capable of causing third party damages of a magnitude that is significantly greater than the price of the product, it is the Customer's responsibility to adopt all the possible safety measures to avoid any such damage, since it is aware that series production of valves at market prices leads to the risk, albeit negligible, of the possible presence of defective parts.

If the Customer embarks on a recall or remediation campaign of its own machines, on any whatsoever market, in order to replace or repair parts that have been ascertained to be defective, this action will be undertaken on the basis of bilateral agreements to be defined.

If the Customer is subjected to legal proceedings for "civil product liability" or if it is accused of violation of legal prescriptions connected to the Vendor's products, the Customer must inform the Vendor immediately of such a situation, and the Vendor shall participate in the analysis of the problem in collaboration with the Customer.

Wherever considered necessary, specific agreements can be stipulated between Customer and Vendor as an alternative to the foregoing warranty procedures.

6.1 SUPPLY QUALITY OBJECTIVES

Specific supply quality objectives may be established in certain cases, to be agreed with Customers; in such cases the Vendor undertakes to cooperate with the Customer in order to define all the aspects necessary to fulfil the objectives in question, and the necessary actions that must be undertaken when such objectives are not achieved.

The possibility of economic recourse or penalties applied by the Customer in relation to the value of the supplies is not contemplated under any circumstances.

7 TECHNICAL ASSISTANCE

The Vendor guarantees to the Customer its availability to perform joint analyses, free of charge, of any defects reported by end users, also when such analyses are carried out on the Customer's site; in this case, if the defectiveness is attributable to the responsibility of the Customer, the Vendor will issue a debit note relative to its services rendered. When the Customer requires the assistance of the Vendor's technical personnel on its sites it must make a written request to this effect (which can be transmitted also by e-mail or fax).

8 PRESCRIPTIONS OF INTENDED USE.

The Customer is expressly prohibited from using the products sold by the Vendor for purposes other than those set down in the offer or in the catalogues.

Specifically, the Vendor's Dealers or Agents are not authorised to approve the use of the products supplied for the following applications:

- systems for road vehicles for the transport of passengers or goods and subject to safety Standards and Directives, such as (without limitation) steering systems and brake systems
- aircraft or spacecraft;
- military equipment;
- rescue or emergency equipment or vehicles;
- systems to be used in conjunction with atomic installations;
- systems for use in explosive or otherwise hazardous environments.

If the Customer intends to use the goods supplied for any applications falling into one or more of the above categories or other similar categories, or for any applications other than those expressly described in the documentation, or in the presence of doubts concerning the intended application, it must seek prior specific approval directly from the Manufacturer and await the receipt of written authorisation for the intended application before proceeding.

Any damage suffered by the Customer or third parties arising from failure to comply with the terms of the prescriptions as at the foregoing subsections, or due to the failed observance of the specifications/directions for use supplied by the Vendor in the pages of its catalogue or in the assembly drawings, will be borne entirely by the Customer.

9 OBLIGATION OF DILIGENCE OF THE CUSTOMER IN THE PREVENTION OF DAMAGE IN THE CONTEXT OF ITS OWN PRODUCTION PROCESS.

If the product is utilised in a production process in such a way that any defects in the supplied product could give rise to substantial damages to the Customer or third parties deriving from production plant downtimes, the Customer undertakes to acquire a sufficient number of the parts in question to replace any faulty parts, and further undertakes to engineer the production process in such a way that such replacements can be carried out quickly and easily. In any event, the Vendor undertakes to repair or replace any parts that are found to be defective due to causes for which it is ascertained to be responsible.

10 DISCREPANCIES BETWEEN THE CONTENTS OF THE CUSTOMER OFFER AND THE PRESCRIPTIONS OF THE PRESENT TERMS OF SUPPLY.

Any aspects or conditions specified in the Customer Order that depart from contents of the present of terms of supply will be disregarded and construed as automatically replaced by the terms and conditions stated herein.

11 EXECUTION OF SUPPLIES ARRANGED PRIOR TO THE ACCEPTANCE OF THESE GENERAL TERMS.

If the supply is executed before the present general terms have been accepted by the Customer, the contract of supply shall be construed as having been entered into at the general terms and conditions specified on the back of the invoice and the delivery note, unless the Customer returns the goods to the Vendor, carriage forward, in exactly the same condition in which they were shipped within the term of 5 working days from the date of their receipt.

12 DELIVERY - DOCUMENTATION

Except in the presence of contrary agreements entered into between the parties, reference must be made in respect of the terms of delivery, to the terms specified by the Vendor in its Order Confirmation. At the order confirmation stage the Vendor can propose changes to the requested delivery date on the basis of its internal production requirements. The Customer reserves the right to accept or refuse the proposed modifications on the basis of its own requirements.

Any delivery terms specified in the Customer's orders or in other written documents exchanged between the parties shall not be considered to be binding except in the presence of a specific written agreement to such effect.

If the Customer intends to rescind from the contract and/or advance claims for compensation for damages further to failed observance of the terms of delivery, it must notify the Vendor expressly of such intentions at the time it transmits the order, and it must request an explicit confirmation from the Vendor specifying that it accepts such conditions.

All shipments will be sent with an attached delivery note bearing the following information: the order number, vendor's product code and Customer code (when required and present), description, quantity, identity of the shipping agent, and details concerning the transport means, number of items of packing, gross weight, etc.; the availability of this information serves to allow rapid correlation of the incoming goods with the shipping documents.

The Customer undertakes to inspect the goods delivered within and no later than 10 (ten) days from the time of receipt and it will automatically waive its rights to claim for missing items or manifest defects of the goods if it fails to declare such circumstances within the same 10 (ten) days from the time of receipt.

13 TRANSPORT

Except in the presence of contrary written agreements between the parties, the means of transport and the carrier will be chosen by the Customer.

Transport costs are charged to the Customer, which is required to refund them to the Vendor in the event that this latter party is obliged to pay them in advance on the Customer's account.

If the Customer fails to specify the required carrier and means of transport, these aspects can be chosen freely at the discretion of the Vendor, which will stipulate the transport contract in the name of the Customer and on the account of this latter.

Whether the carrier is chosen by the Customer or whether it is chosen by the Vendor in the name of and on the account of the Customer, the goods will be transported entirely at the risk and responsibility of the Customer, which can recourse directly to the carrier in the event of damage sustained during transport. The Customer is not entitled to make any claims against Vendor in such respects

14 PAYMENT

The terms and methods of payment for the supplies are specified in the Vendor's Offers and in the Customer's orders; when such orders are accepted by means of an order confirmation they become an integral and essential part of the supply contract.

Unless otherwise agreed, payment of the price of the supply must be made using the domicile and methods indicated by the Vendor. In the case of a delayed payment arrears interest will be applied in the measure of the Euribor 365 days rate increased by 4% per annum.

The Customer is not entitled to withhold sums from payments due to the Vendor for any whatsoever reason unless such action has been previously agreed upon and approved in writing by the Vendor.

15 EXTENDED PAYMENT – OWNERSHIP RESERVATION

If the payment is extended, the sale shall be understood to have taken place with reserved ownership pursuant to the terms of articles 1523 et seq. of the Italian civil code without any further provisions having to be taken successively. The costs involved in establishing proof of reserved ownership as specified in art. 1524 of the Italian civil code shall be borne entirely by the Customer.

16 FORM OF THE PROPOSAL, THE ACCEPTANCE AND ANY WHATSOEVER OTHER LEGALLY SUBSTANTIAL COMMUNICATION

The proposal, acceptance, any possible claims, and any other legally substantial communications must be written and signed in a legible manner. Such communications can be transmitted by any means, including fax and e-mail. In this latter eventuality the e-mail message must bear the author's name at the foot of the page.

17 CIVIL LIABILITY INSURANCE

The Vendor undertakes to take out and maintain a "Civil Product Liability Insurance" policy. On the request of the Customer, the Vendor will produce the documents relative to such an insurance policy.

Any accidents resulting in damage to third parties in which the Vendor's products are involved and which could give rise to product civil liability claims for compensation, must be communicated with the maximum promptness to the Vendor so that this latter can participate in the relative inquiry, also through its appointed technical expert, starting from the stage of the initial investigations.

18 CONFIDENTIALITY

The Vendor and the Customer reciprocally guarantee the confidentiality of all the information, data, and all documents that they exchange during the course of their business relations.

In particular documents which are sent to the Customer like drawings, technical specifications, test reports, etc. and containing manufacturing or functional data of the

products, have to be considered property of the Vendor and they cannot be disclosed or passed to third parties without the written consent of Vendor's Management.

19 ACCEPTANCE OF THE GENERAL TERMS OF SUPPLY – AMENDMENTS OR CANCELLATIONS

These General Terms of Supply can be transmitted to the Customer in the following ways:

- DIRECTLY, during the stipulation of a bilateral agreement or contract;
- INDIRECTLY, attached to the Vendor's Order confirmations.

In both cases they are considered to have been TACITLY ACCEPTED by Customers when no contrary communication is received within the term of 15 days from the date of receipt of the terms.

If the Customer intends to amend or rescind from these terms of supply it must provide the Vendor with written notice to this effect at least 3 months before the relative amendments or withdrawal are to take effect.

20 APPLICABLE LAW.

For all matters that are omitted from the present agreement the terms of supply shall be understood as being regulated by the relevant provisions of Italian Law.

If the Customer's domicile is in a foreign country, or in any cases in which the contract includes aspects of an "international nature", the present agreement and any disputes that should arise in relation to the same shall be subject to the provisions of Italian Law, with sole jurisdiction held by the Italian ordinary courts in the competent law court of Modena.

Atlantic Fluid Tech S.r.l. General Management

NOTES:

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

NOTES:

[illegible]

NOTES:

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.